GRE JAN 2015

PROJECT ID: 1133-10-71

WITH:

COUNTY: BROWN

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 1310

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DE PERE - SUAMICO

(MEMORIAL DRIVE - CTH M)

USH 41
BROWN COUNTY

(MEMORIAL DR-DUCK CRK NB/IH43 INTCHG)

STATE PROJECT NUMBER
1133-10-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1133-10-71	WISC 2015008	1

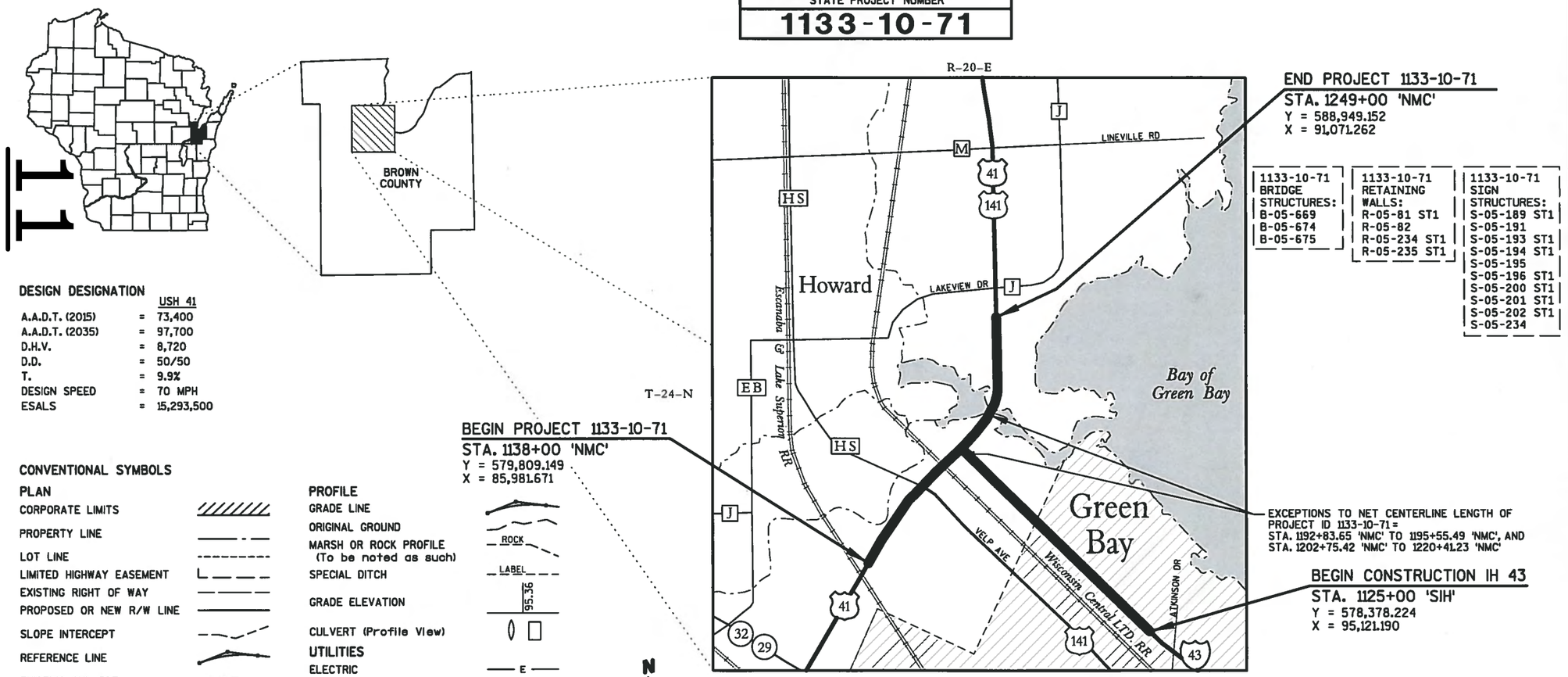
CONNECTING WISCONSIN

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES

WISCONSIN
WILLIAM C. ROTH
E-29838
BLACK EARTH
WI
7-14-14
PROFESSIONAL ENGINEER

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES

WISCONSIN
PHILLIP J. VERVILLE III
E-36386
GREEN BAY, WI
7/14/14
PROFESSIONAL ENGINEER



END PROJECT 1133-10-71
STA. 1249+00 'NMC'
Y = 588,949.152
X = 91,071.262

BEGIN PROJECT 1133-10-71
STA. 1138+00 'NMC'
Y = 579,809.149
X = 85,981.671

EXCEPTIONS TO NET CENTERLINE LENGTH OF PROJECT ID 1133-10-71 =
STA. 1192+83.65 'NMC' TO 1195+55.49 'NMC', AND
STA. 1202+75.42 'NMC' TO 1220+41.23 'NMC'

BEGIN CONSTRUCTION IH 43
STA. 1125+00 'SIH'
Y = 578,378.224
X = 95,121.190

1133-10-71 BRIDGE STRUCTURES:	1133-10-71 RETAINING WALLS:	1133-10-71 SIGN STRUCTURES:
B-05-669	R-05-81 ST1	S-05-189 ST1
B-05-674	R-05-82	S-05-191
B-05-675	R-05-234 ST1	S-05-193 ST1
	R-05-235 ST1	S-05-194 ST1
		S-05-195
		S-05-196 ST1
		S-05-200 ST1
		S-05-201 ST1
		S-05-202 ST1
		S-05-234

DESIGN DESIGNATION

	USH 41
A.A.D.T. (2015)	= 73,400
A.A.D.T. (2035)	= 97,700
D.H.V.	= 8,720
D.D.	= 50/50
T.	= 9.9%
DESIGN SPEED	= 70 MPH
ESALS	= 15,293,500

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

LAYOUT

SCALE 0 0.5 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.716 MI. PROJECT ID 1133-10-71

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), NAD 83 (1991) BROWN COUNTY.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTCAL DATUM OF 1988, NAVD88 (1991).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WisDOT
Designer	AYRES ASSOCIATES
Project Manager	PAUL VRANEY
Regional Examiner	
Regional Supervisor	CHAD DEGRAVE
C.O. Examiner	

APPROVED FOR REGIONAL OFFICE
DATE: 07/25/14 Paul Vraney (Signature)

E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_010101_ti.dgn

PLOT BY : dm253 PLOT DATE : 7/14/2014 PLOT SCALE : 1:200

2

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

A SAW JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING HMA PAVEMENT.

THE EXACT LOCATIONS OF PRIVATE ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE PLANS. BASE AGGREGATE DENSE 3/4-INCH WILL BE USED UNDER ALL DRIVEWAYS.

SAW CUT ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCHLINE AS SHOWN ON THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WETLANDS, WITH THE EXCEPTION OF EXCAVATION FOR BRIDGE PIER FOOTINGS. THIS EXCAVATED MATERIAL IS TO BE RETURNED TO ITS ORIGINAL LOCATION AFTER CONSTRUCTION.

PLACE EROSION CONTROL DEVICES IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER. EROSION CONTROL FEATURES ARE SHOWN AT APPROXIMATE LOCATIONS, WITH EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER. REMOVAL OF ITEMS ARE INCIDENTAL TO THE RESPECTIVE EROSION CONTROL BID ITEM COSTS.

DO NOT USE FERTILIZER WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

PLACE SALVAGED TOPSOIL OR TOPSOIL IN ALL GRADED AREAS AS DESIGNATED BY THE ENGINEER IMMEDIATELY AFTER GRADING HAS BEEN COMPLETED. SEED, MULCH AND FERTILIZE ALL AREAS 5 DAYS AFTER PLACEMENT OF SALVAGED TOPSOIL OR TOPSOIL.

CLEAR AND GRUB TO THE RIGHT-OF-WAY, UNLESS OTHERWISE NOTED.

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL BY THE ENGINEER. FINAL LIMITS OF FENCE REMOVAL TO BE DETERMINED BY THE ENGINEER.

STATIONING, DISTANCES, AND OFFSETS FOR SIGNS AND TRAFFIC CONTROL DEVICES SHOWN IN THE PLANS ARE APPROXIMATE. EXACT LOCATIONS ARE DETERMINED BY THE ENGINEER.

COVER ALL SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

RESHAPE AND SEEDING OF ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS OUTSIDE OF THE ENGINEER DETERMINED CONSTRUCTION LIMITS ARE INCIDENTAL TO THE CONTRACT.

ANY DOWEL BARS, TIE BARS, REINFORCEMENT, OR TERMINAL ANCHORS, FOUND IN EXISTING PAVEMENT WILL BE INCIDENTAL TO THE ITEM "REMOVING PAVEMENT".

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
ET AL	AND OTHERS
?	ANGLE
BK	BACK
BLDG	BUILDING
BLK	BLOCK
BR	BRIDGE
CB	CATCH BASIN
CL OR C/L	CENTER LINE
?	CENTRAL ANGLE OR DELTA
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CPCA	CULVERT PIPE CORRUGATED ALUMINUM
CPCS	CULVERT PIPE CORRUGATED STEEL
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CP	CULVERT PIPE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DWY	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
EL OR ELEV	ELEVATION
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXIST	EXISTING
FF	FACE TO FACE
FE	FIELD ENTRANCE
FG	FINISHED GRADE
FT	FOOT
INL	INLET
INV	INVERT
IP	IRON PIPE OR PIN
LT	LEFT
L	LENGTH OF CURVE
LIN FT OR LF	LINEAR FOOT
MH	MANHOLE
NC	NORMAL CROWN
NW OR N/W	NORMAL WATER
N	NORTH
Y	NORTH GRID COORDINATE
NB	NORTHBOUND
PCC	POINT OF COMPOUND CURVE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PGL	PROFILE GRADE LINE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
POC	POINT ON CURVE
POT	POINT ON TANGENT
RR	RAILROAD
RL OR R/L	REFERENCE LINE
REBAR	REINFORCEMENT BAR
REQD	REQUIRED
R/W	RIGHT-OF-WAY
R	RADIUS
S	SOUTH
SB	SOUTHBOUND
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
SE	SUPERELEVATION
SURF	SURFACE
SL OR S/L	SURVEY LINE
T	TANGENT
TYP	TYPICAL
WB	WESTBOUND

PROJECT AND UTILITY CONTACTS

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION HEADQUARTERS
ATTN: JIM DOPERALSKI JR.
2984 SHAWANO AVENUE
P.O. BOX 10488
GREEN BAY, WI 54307-0448
PHONE: 920-662-5119
EMAIL: james.doperalski@wisconsin.gov

WIS. DEPT OF TRANSPORTATION
NORTHEAST REGION - PRIMARY CONTACT
ATTN: PAUL VRANEY, P.E.
PROJECT MANAGER - US 41 BROWN COUNTY
US 41 BROWN COUNTY PROJECT OFFICE
1940 WEST MASON STREET
GREEN BAY, WI 54303
PHONE: 920-492-2232
EMAIL: paul.vraney@dot.wi.gov

AYRES ASSOCIATES
ATTN: WILLIAM ROTH
1802 PANKRATZ STREET
MADISON, WI 53704
PHONE: 608-443-1200
FAX: 608-443-1250
EMAIL: rothb@ayresassociates.com

AMERICAN TRANSMISSION COMPANY, LLC
MIKE OLSEN
801 O'KEEFE ROAD
PO BOX 6113
DE PERE, WI 54115-6113
PHONE: 920-338-6582
MOBILE: 920-660-2390
EMAIL: molsen@atcllc.com

AT&T WISCONSIN
KAREN WELLS
205 S JEFFERSON STREET
GREEN BAY, WI 54301
PHONE: 920-433-4226
EMAIL: kw9272@att.com

BROWN COUNTY IT DEPARTMENT
JOEL MIKULSKY
PO BOX 11064
GREEN BAY, WI 54307
PHONE: 920-676-0494
EMAIL: jmikulsk@mcae.biz

BROWN COUNTY SURVEYOR
PAT FORD
PO BOX 23600
GREEN BAY, WI 54305-3600
PHONE: 920-448-4493
EMAIL: ford_pj@co.brown.wi.us

CITY OF GREEN BAY - SANITARY
KRISTIN ROMANOWICZ, P.E.
100 N. JEFFERSON ST, ROOM 300
GREEN BAY, WI 54301
PHONE: 920-448-3100
EMAIL: kristinro@greenbaywi.gov

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

CITY OF GREEN BAY - WATER
JIM DAUBNER
PO BOX 1210
GREEN BAY, WI 54305
PHONE: 920-448-3480
EMAIL: jimda@greenbaywi.gov

GREEN BAY METROPOLITAN SEWERAGE DISTRICT
ROBERT REINHART
2231 NORTH QUINCY STREET
GREEN BAY, WI 54302
PHONE: 920-438-1035
EMAIL: rreinhart@newwater.us

MERIT NETWORK - COMMUNICATION
PETE EMPIE
1000 OAKWOOD DRIVE, SUITE 200
ANN ARBOR, MI 48104
PHONE: 517-420-1600
EMAIL: pempie@merit.edu

NET LEC LLC - COMMUNICATION
DENNIS LaFAVE
1700 INDUSTRIAL DRIVE
GREEN BAY, WI 54302
PHONE: 920-619-9774
EMAIL: dlafave@mi-tech.us

QWEST - COMMUNICATION
KEVIN HUFF
13057 S. MONITOR AVENUE
PALOS HEIGHTS, IL 60463
PHONE: 708-837-7927
EMAIL: Kevin.huff@centurylink.com

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRIC
RANDY STEIER
2850 SOUTH ASHLAND AVENUE
PO BOX 19001
GREEN BAY, WI 54307
PHONE: 920-617-5167
MOBILE: 920-655-1596
EMAIL: rdsteier@wisconsinpublicservice.com

WISCONSIN PUBLIC SERVICE CORPORATION - GAS
DENA ANDRE
2850 SOUTH ASHLAND AVENUE
PO BOX 19001
GREEN BAY, WI 54307
PHONE: 920-617-5092
MOBILE: 231-649-1486
EMAIL:djandre@wisconsinpublicservice.com

TIME WARNER CABLE
VINCE ALBIN
3520 DESTINATION DR
APPLETON, WI 54915
PHONE: 920-831-9249
MOBILE: 920-378-0444
EMAIL: vince.albin@twcable.com

VILLAGE OF HOWARD - WATER & SANITARY
MIKE KASTER
1336 CORNELL RD
GREEN BAY, WI 54313
PHONE: 920-434-4060
EMAIL: mkaster@villageofhoward.com

WINDSTREAM KDL, INC. - COMMUNICATION
JIM KOSTUCH
13935 BISHOPS DRIVE
BROOKFIELD, WI 53005
PHONE: 262-792-7938
EMAIL: james.kostuch@windstream.com

RAILROAD CONTACT

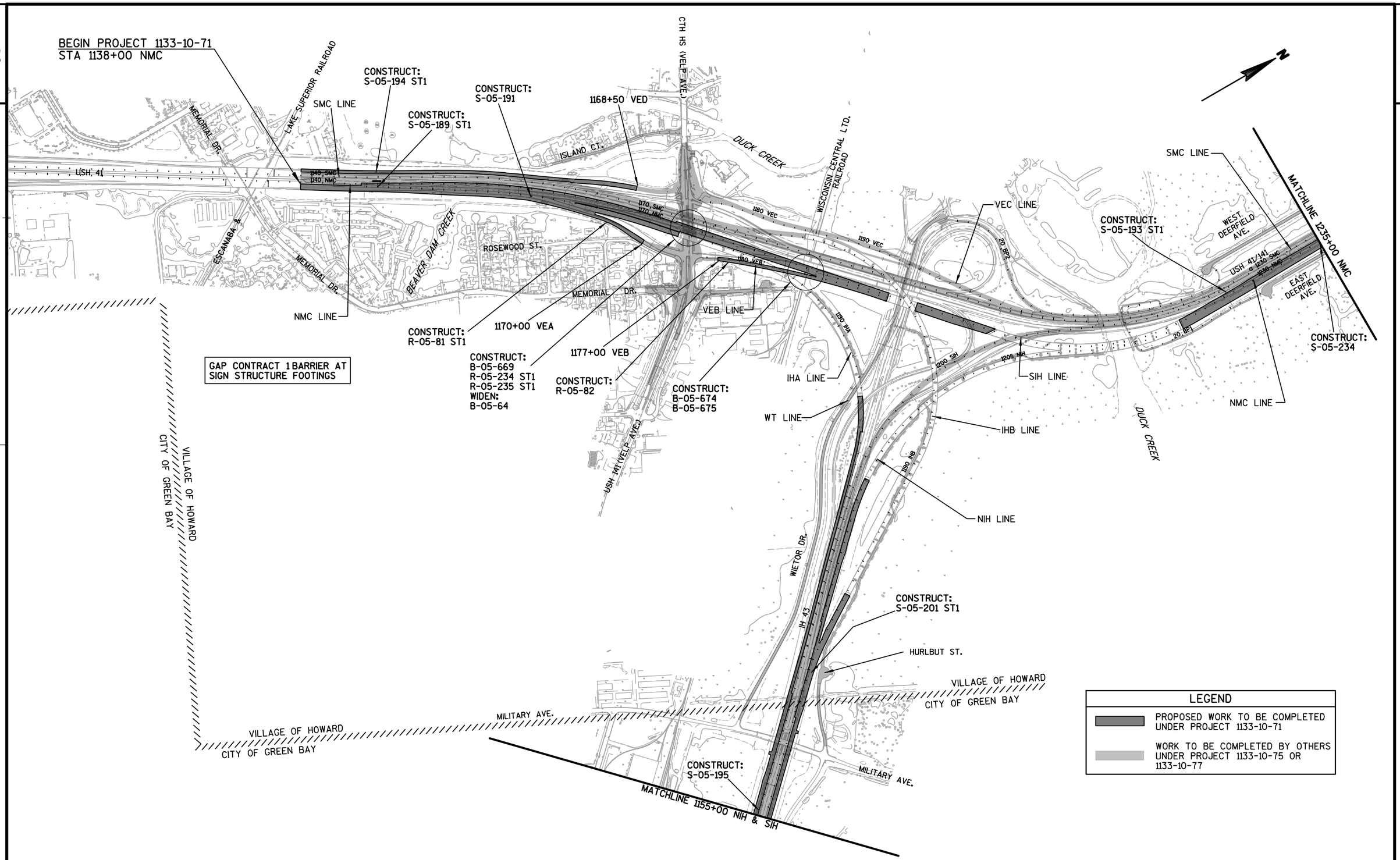
CANADIAN NATIONAL RAILROAD
JACKIE MACEWICZ
MANAGER PUBLIC WORKS
1625 DEPOT STREET
STEVENS POINT, WI 54481
MOBILE: 715-572-7803
OFFICE: 715-345-2503
FAX: 715-345-2507
jackie.macewicz@cn.ca

CALL BEFORE YOU DIG!

CANADIAN NATIONAL RAILWAY IS NOT PART OF DIGGERS HOTLINE
CALL CHRISTINE GRZESIAK, 715-345-2506, WHEN DIGGING ON RAILROAD R/W

ORDER OF SECTION 2 SHEETS

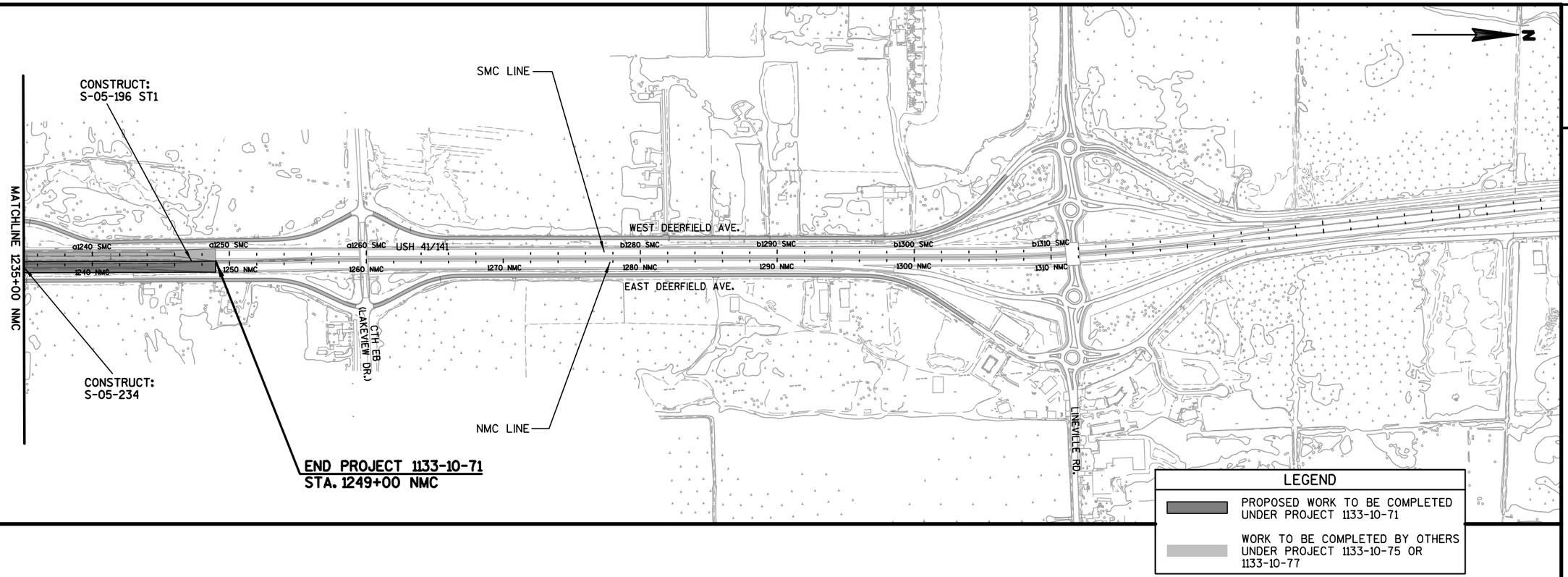
GENERAL NOTES & CONTACTS
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PAVING DETAILS
PLAN DETAILS
SOIL MITIGATION DETAILS
FREEWAY MANAGEMENT SYSTEM
DRAINAGE OVERVIEW
CROSS SECTION MATCHLINES
EROSION CONTROL
STORM SEWER
PIPE UNDERDRAIN
PERMANENT SIGNING
LIGHTING PLAN
PAVEMENT MARKING
PERMANENT DELINEATORS
TRAFFIC CONTROL
STAGE CONSTRUCTION
DETOUR PLAN
FENCING
ALIGNMENT DIAGRAMS

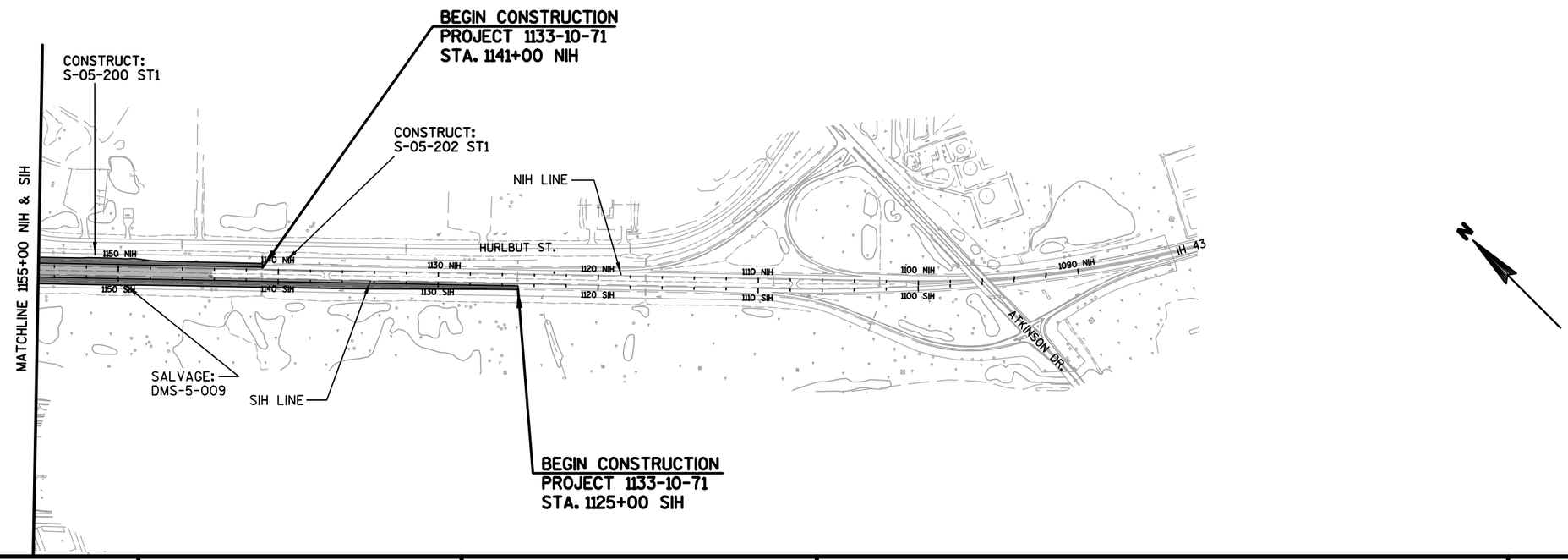


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PROJECT OVERVIEW 1133-10-71	SCALE, FEET 0 400 800	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_020201_po.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42





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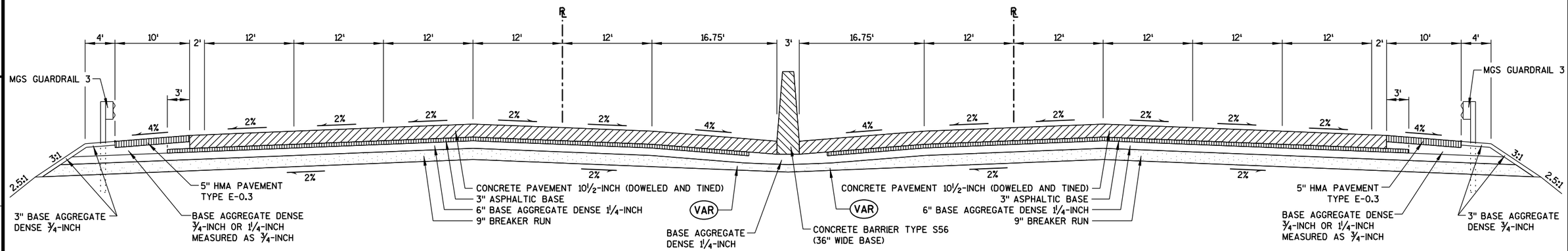
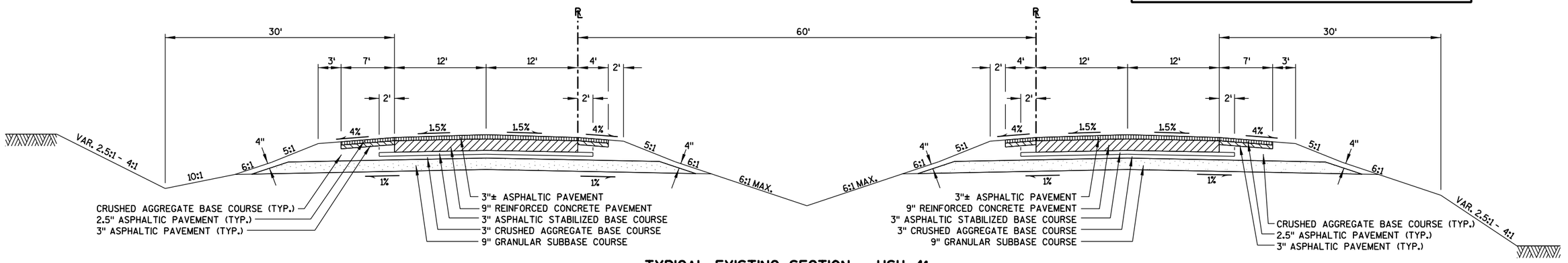


TYPICAL EXISTING SECTION - USH 41

(STA 1135+00 NMC DR TO STA 1138+00 NMC)

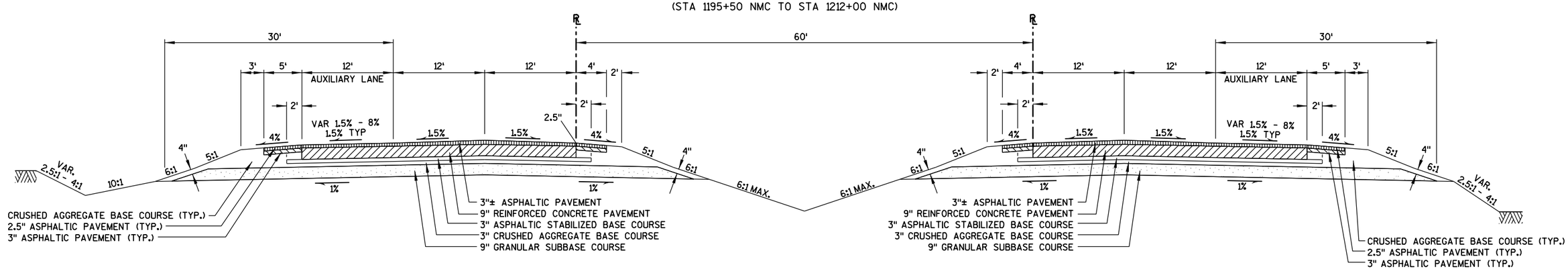
(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL IN TYPICAL FINISHED SECTIONS OF PLAN

NOTE:
EXISTING ROADWAY STA 1138+00 NMC TO 1141+00 NMC IS IN TRANSITION AND IS NOT TYPICAL: 5" HMA PAVEMENT TYPE E-10 OVER 11.5" BASE AGGREGATE DENSE 1¼-INCH OVER 12" BREAKER RUN.



TYPICAL EXISTING SECTION - USH 41

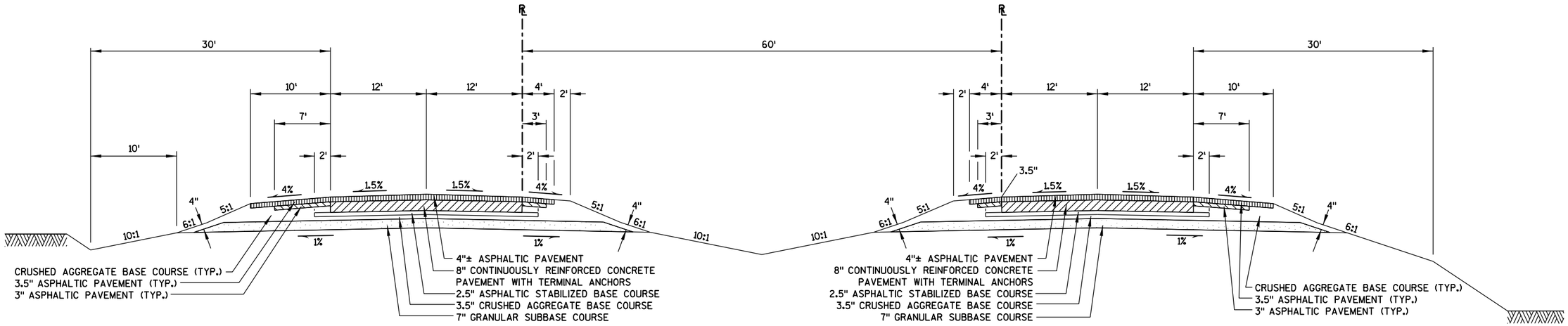
(STA 1141+00 NMC TO STA 1173+00 NMC)
(STA 1195+50 NMC TO STA 1212+00 NMC)



TYPICAL EXISTING SECTION - USH 41

(STA 1174+00NMC TO STA 1193+00 NMC)

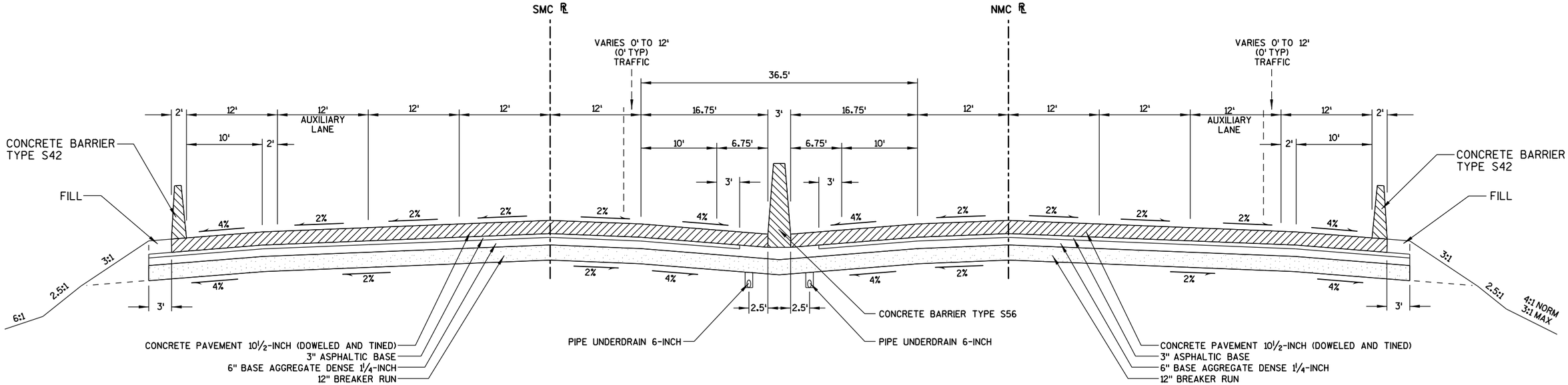
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 5	E



TYPICAL EXISTING SECTION - USH 41

(STA 1214+50 NMC TO STA 1246+00 NMC)

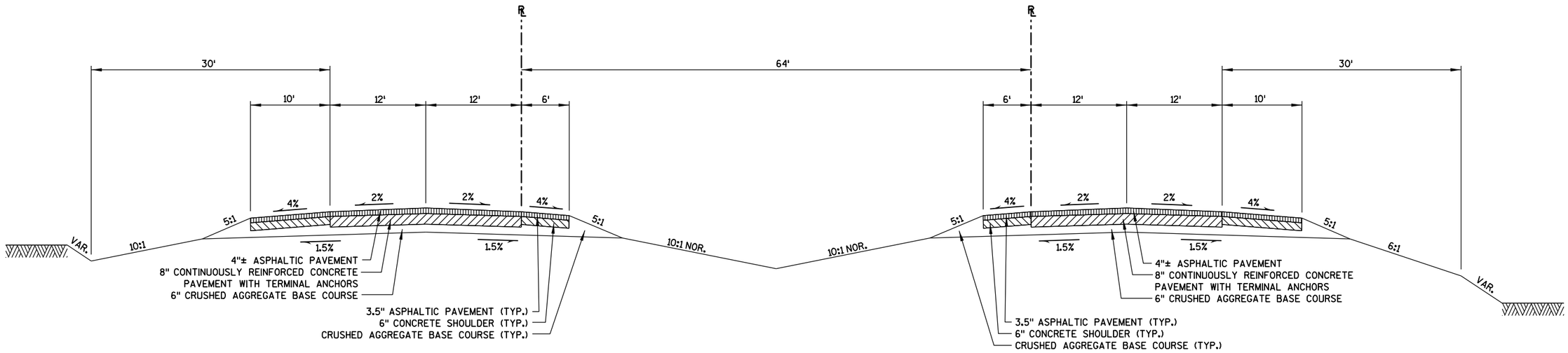
NOTE:
EXISTING ROADWAY STA 1246+00 NMC TO STA 1249+00 NMC IS IN TRANSITION AND IS NOT TYPICAL: 5" HMA PAVEMENT TYPE E-10, OVER 13" BASE AGGREGATE DENSE 1¼-INCH, OVER 12" BREAKER RUN.



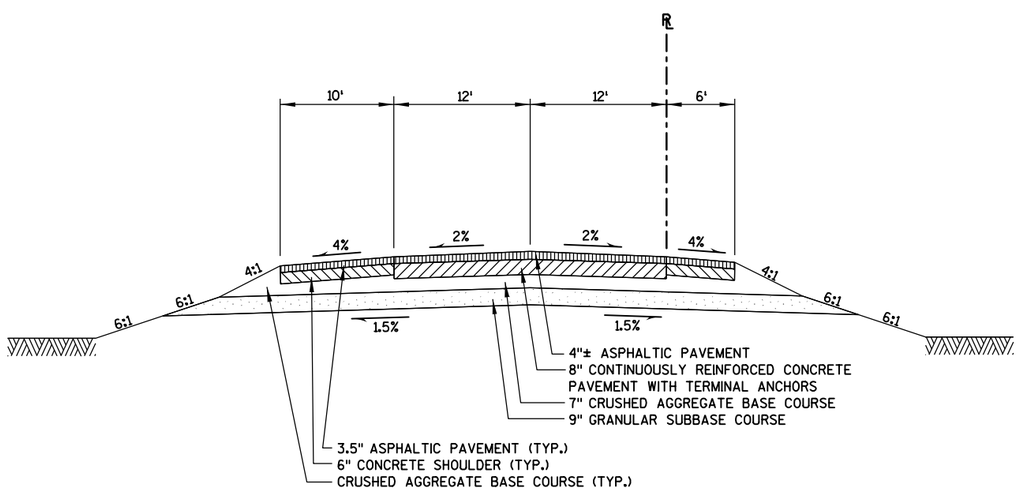
TYPICAL EXISTING SECTION - USH 41

(NORTH OF STA 1249+00 NMC)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 6	E

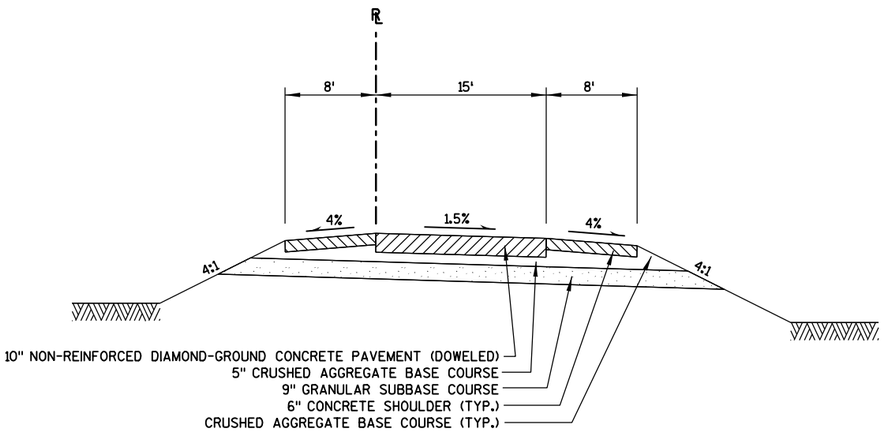


TYPICAL EXISTING SECTION - IH 43



TYPICAL EXISTING SECTION - USH 41 SB OFF-RAMP TO IH 43

(SOUTH OF USH 41)



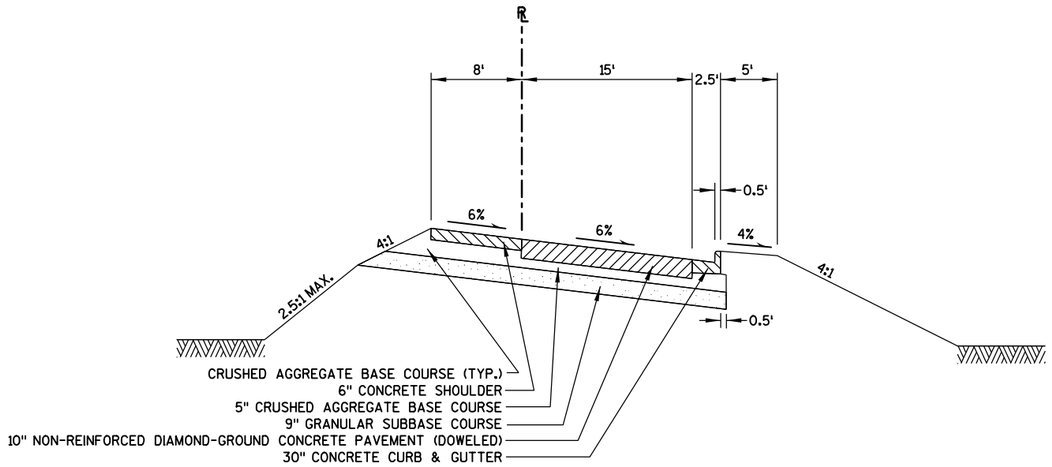
TYPICAL EXISTING SECTION - USH 41 RAMPS AT IH 43

✳ USH 41 SB OFF-RAMP TO IH 43
USH 41 NB OFF-RAMP TO IH 43
✳✳ IH 43 NB RAMP TO NB USH 41
IH 43 NB RAMP TO SB USH 41

✳✳ BETWEEN GORE AREAS AT IH 43 NB AND USH 41 NB, TRAFFIC FOR IH 43 NB RAMP TO NB USH 41 IS MOVED TO LONG-TERM TEMPORARY PAVEMENT ALONG WEST SIDE OF RAMP CONSISTING OF 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE 1¼-INCH OVER 12" BREAKER RUN.

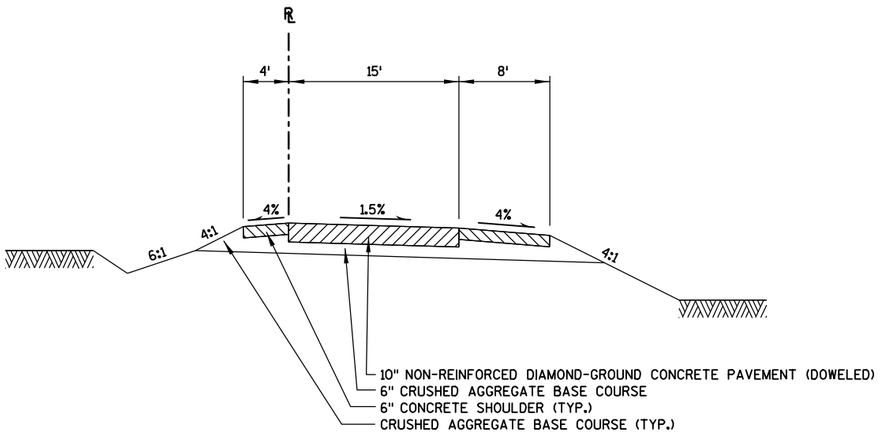
✳ UNDERNEATH USH 41, TRAFFIC FOR USH 41 SB OFF-RAMP TO IH 43 IS MOVED TO LONG-TERM TEMPORARY PAVEMENT ALONG IH 43 NB RAMP SIDE OF MEDIAN. PAVEMENT STRUCTURE 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1¼-INCH OVER 12" BREAKER RUN.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 7	E

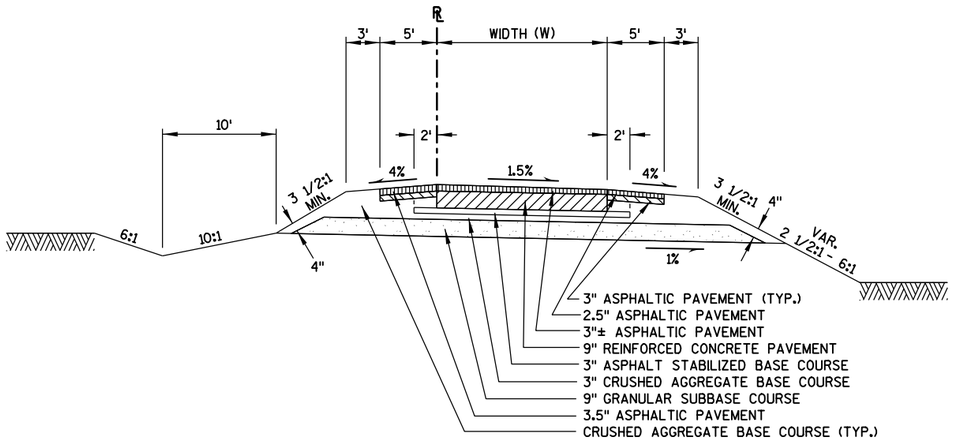


TYPICAL EXISTING SECTION - USH 41 RAMPS AT IH 43 (CURB & GUTTER ON INSIDE OF SHARP CURVES)

USH 41 SB OFF-RAMP TO IH 43
USH 41 NB OFF-RAMP TO IH 43
IH 43 NB RAMP TO SB USH 41

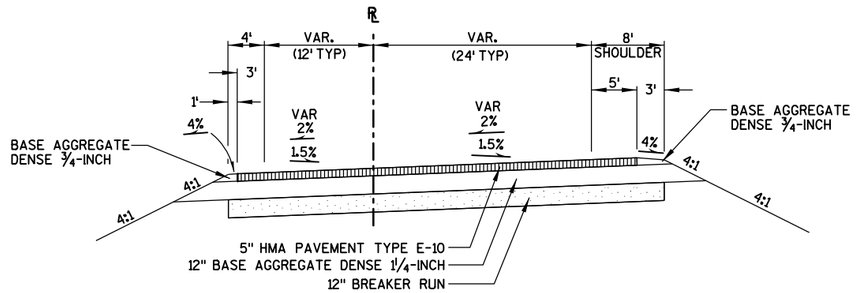


TYPICAL EXISTING SECTION - IH 43 NB ON-RAMP AT ATKINSON DR

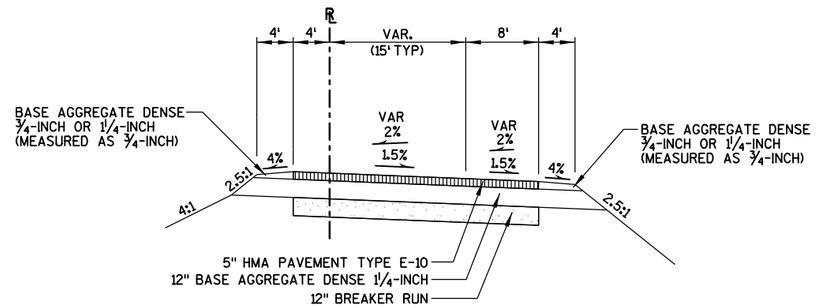


TYPICAL EXISTING SECTION - USH 41 SB RAMPS AT VELP AVE

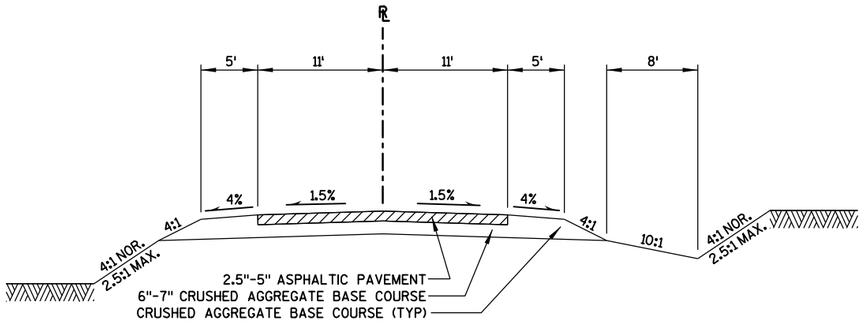
RAMP	WIDTH (W)
SB ON	15'
SB OFF	VAR. 15' - 24'



TYPICAL EXISTING SECTION - USH 41 NB OFF-RAMP AT VELP AVE

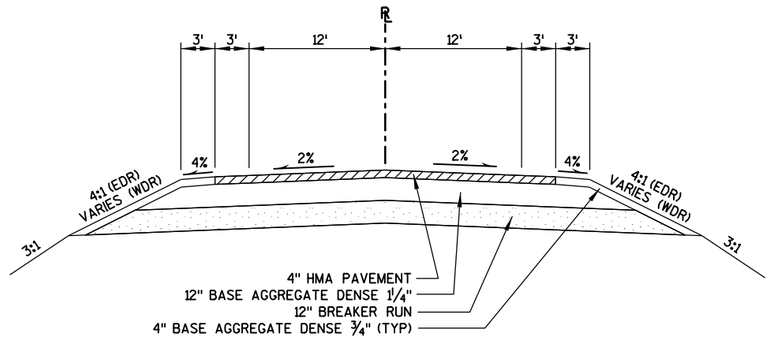


TYPICAL EXISTING SECTION - USH 41 NB ON-RAMP AT VELP AVE



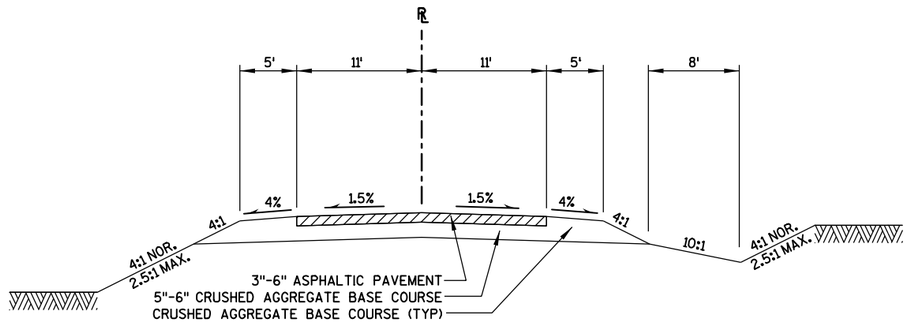
TYPICAL EXISTING SECTION - USH 41 AND IH 43 FRONTAGE ROADS

EAST DEERFIELD AVE (STA. 28+25 EDR TO STA. 106+00 EDR)
WEST DEERFIELD AVE (STA. 24+38 WDR TO STA. a9+86 WDR)
WIETER DR (STA. 73+00 WT TO STA. 113+00 WT)



TYPICAL EXISTING SECTION - USH 41 FRONTAGE ROADS

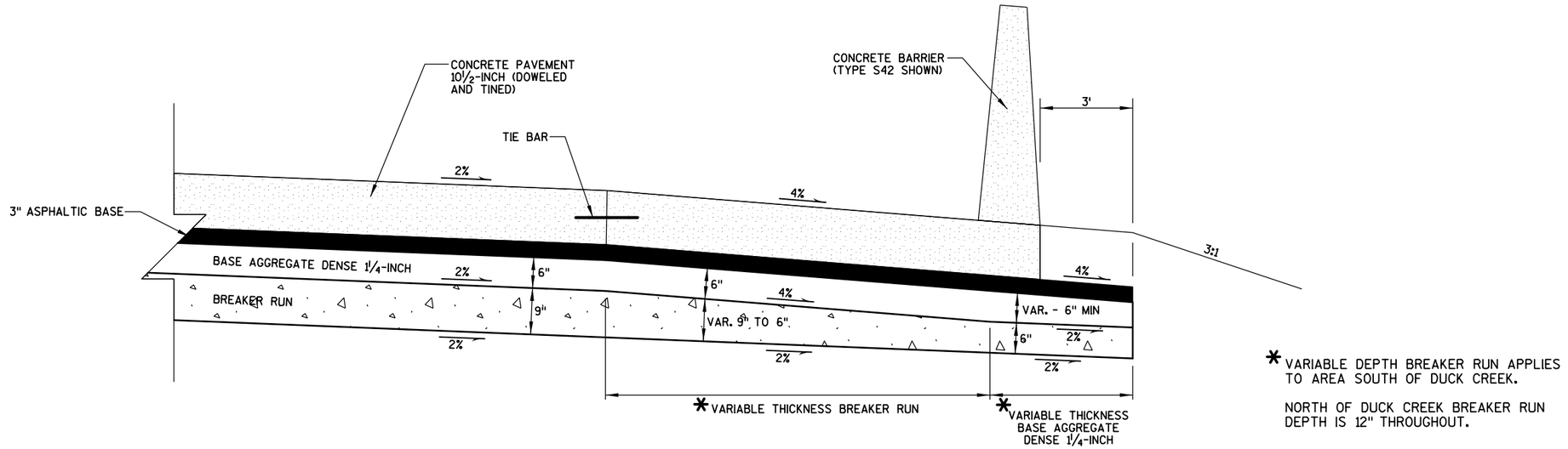
EAST DEERFIELD AVE (STA. 106+00 EDR TO STA. a41+00 EDR)
WEST DEERFIELD AVE (STA. a9+86 WDR TO STA. a11+00 WDR)



TYPICAL EXISTING SECTION - IH 43 FRONTAGE ROADS

HURLBUT ST. (NORTH OF MILITARY AVE)
WIETOR DR (STA. 62+00 WT TO STA. 73+00 WT)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 9	E

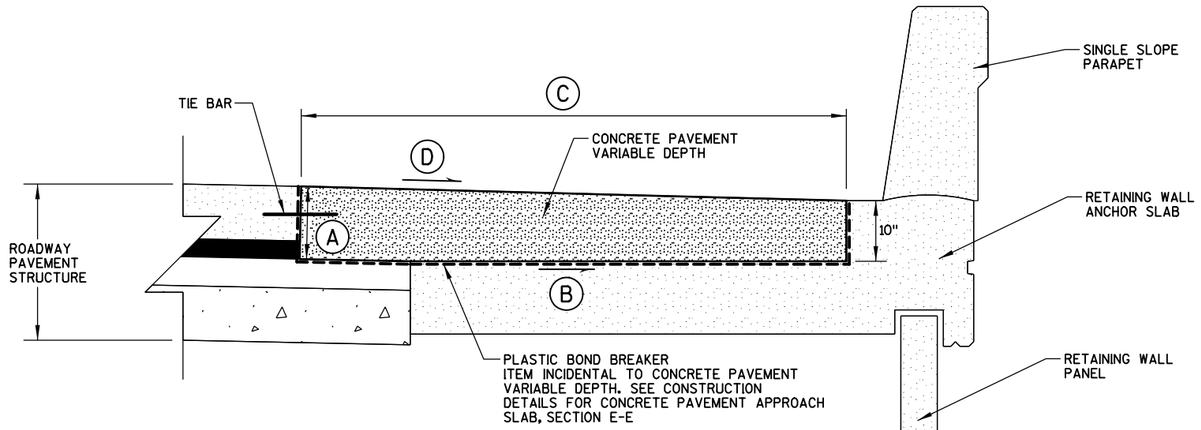


* VARIABLE DEPTH BREAKER RUN APPLIES TO AREA SOUTH OF DUCK CREEK.

NORTH OF DUCK CREEK BREAKER RUN DEPTH IS 12" THROUGHOUT.

TYPICAL FINISHED SECTIONS - VARIABLE THICKNESS SUBGRADE DETAIL

(VAR) WILL DENOTE THE APPLICATION OF THIS DETAIL TO THE TYPICAL SECTIONS TO FOLLOW



(A) VARIABLE DEPTH CONCRETE AT ROADWAY IS DICTATED BY ROADWAY AND ANCHOR SLAB CROSS-SLOPES

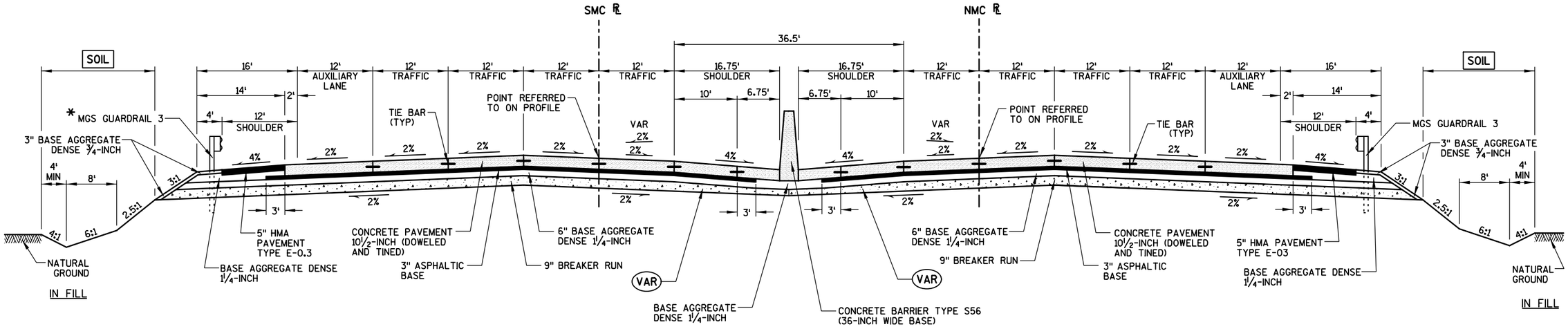
(B) ANCHOR SLAB CROSS-SLOPE SHOWN IN RETAINING WALL PLANS

(C) VARIABLE DEPTH CONCRETE WIDTH SHOWN IN PAVING DETAILS

(D) VARIABLE DEPTH CONCRETE CROSS-SLOPE SHOWN IN PAVING DETAILS

TYPICAL FINISHED SECTIONS - VARIABLE DEPTH CONCRETE PAVEMENT AT RETAINING WALLS

SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS

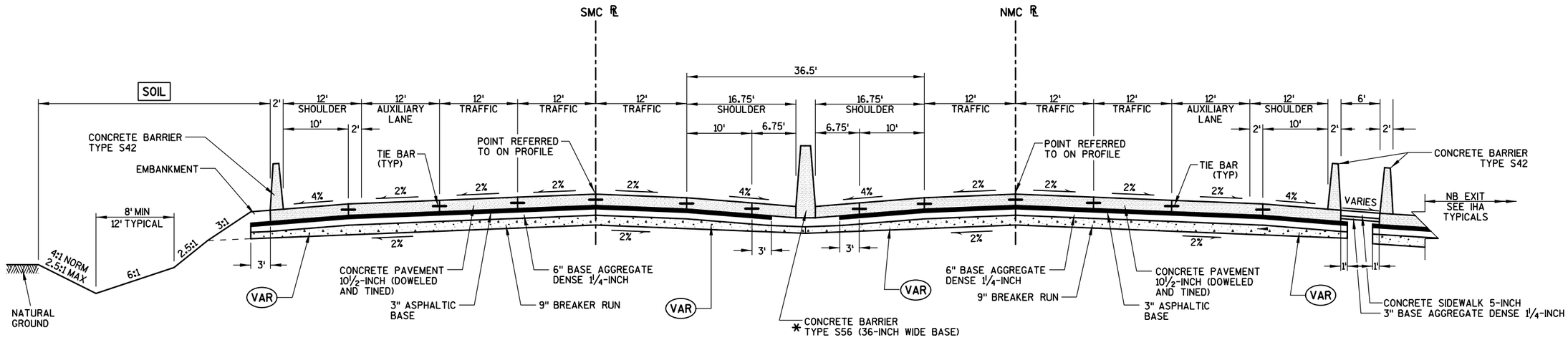


TYPICAL FINISHED SECTION - USH 41 (NMC & SMC)

STA. 1138+00 NMC TO STA. 1153+66 NMC

(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL

* - MGS GUARDRAIL STA 1138+00 NMC TO STA 1156+54 NMC



TYPICAL FINISHED SECTION - USH 41 (NMC & SMC)

STA. 1153+66 NMC TO STA. 1172+97 NMC

(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL

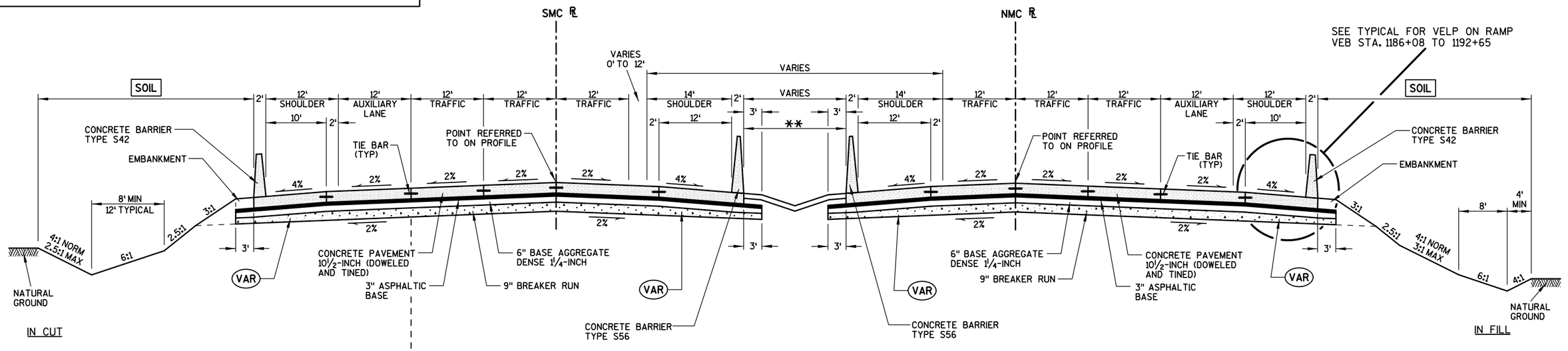
* - DOUBLE RUN OF CONCRETE BARRIER SINGLE SLOPE TYPE S56, MEDIAN WIDTH VARIABLE (STA. 1169+16 NMC TO STA. 1172+97 NMC LT)

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	5"	1¾" UPPER LAYER 3¼" LOWER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 11	E

SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT



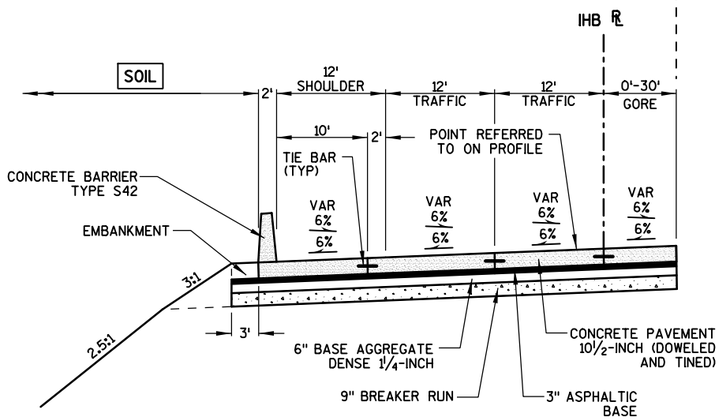
TYPICAL FINISHED SECTION - USH 41 (NMC & SMC)

STA. 1174+70 NMC TO STA. 1203+00 NMC

** STA. 1174+70 NMC TO STA. 1184+06 NMC - CONCRETE SIDEWALK 5-INCH OVER 3" BASE AGGREGATE DENSE 1¼-INCH
STA. 1185+00 NMC TO STA. 1203+00 NMC - SEED

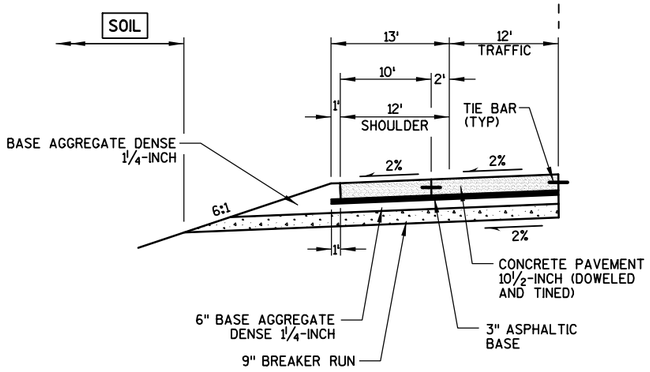
(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
ASPHALTIC BASE	3"	3"	N/A



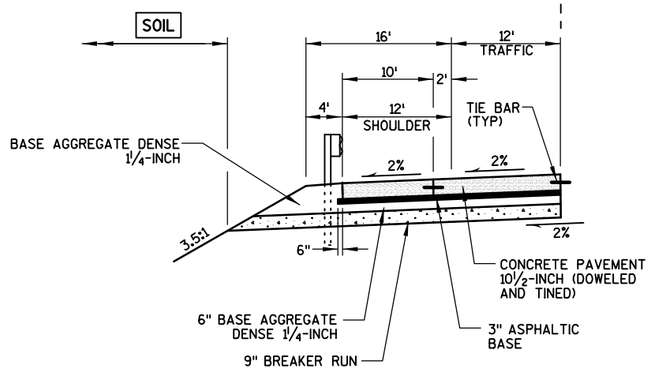
CONNECTION TYPICAL FOR ON RAMP FROM NB IH 43 TO SB USH 41

STA. 1174+45 SMC TO 1179+92 SMC
(ALSO SEE TYPICAL FOR IHB 1216+75 IHB TOI 1221+20 IHB)



CONCRETE OUTSIDE SHOULDER

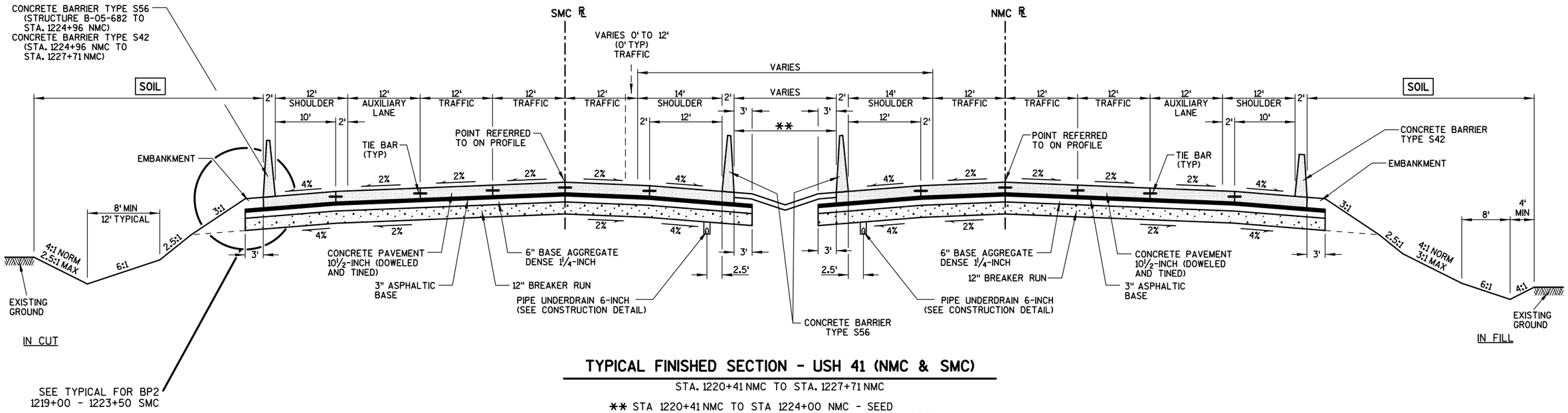
STA. 1179+92 SMC TO 1184+33 SMC
STA 1197+65 SMC TO 1201+75 SMC



GUARDRAIL ON CONCRETE OUTSIDE SHOULDER

STA. 1194+90 SMC TO 1197+65 SMC

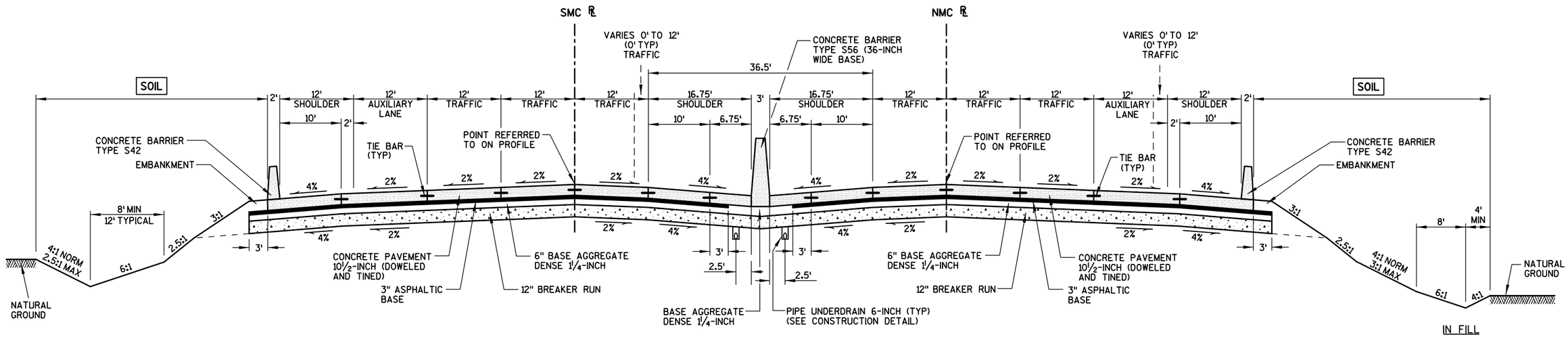
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION - USH 41 (NMC & SMC)

STA. 1220+41 NMC TO STA. 1227+71 NMC

** STA 1220+41 NMC TO STA 1224+00 NMC - SEED
STA 1224+00 NMC TO STA 1227+71 - CONCRETE SIDEWALK OVER 3" BAD 1 1/4-INCH



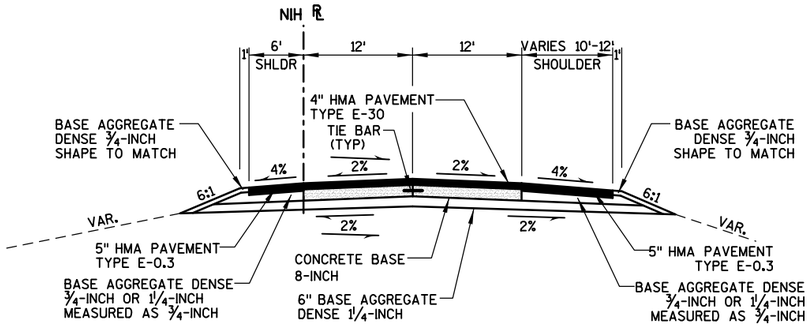
TYPICAL FINISHED SECTION - USH 41 (NMC & SMC)

STA. 1227+71 NMC TO STA. 1249+00 NMC

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
ASPHALTIC BASE	3"	3"	N/A

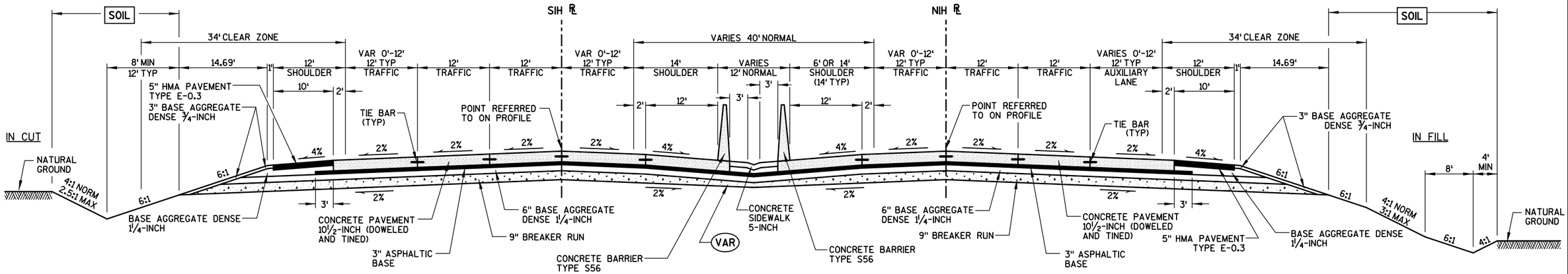
SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 13	E



TYPICAL FINISHED HALF SECTION - IH 43 NB (NIH)

STA. 1141+00 NIH TO STA. 1142+75 NIH

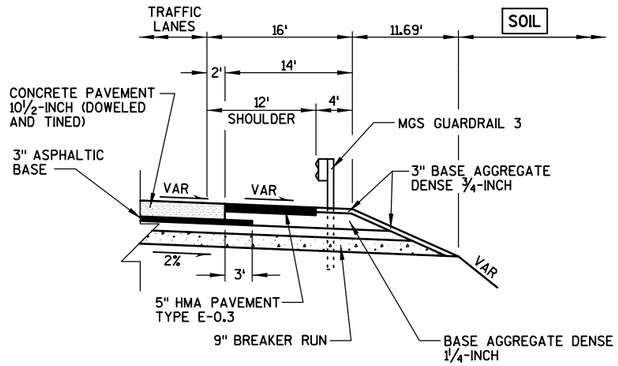


TYPICAL FINISHED SECTION - IH 43 (NIH & SIH)

STA. 1148+80 NIH TO STA. 1187+00 NIH

(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	5"	1¾" UPPER LAYER 3¼" LOWER LAYER	PG. 58-28
E-30	4"	1¾" UPPER LAYER 2¼" LOWER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

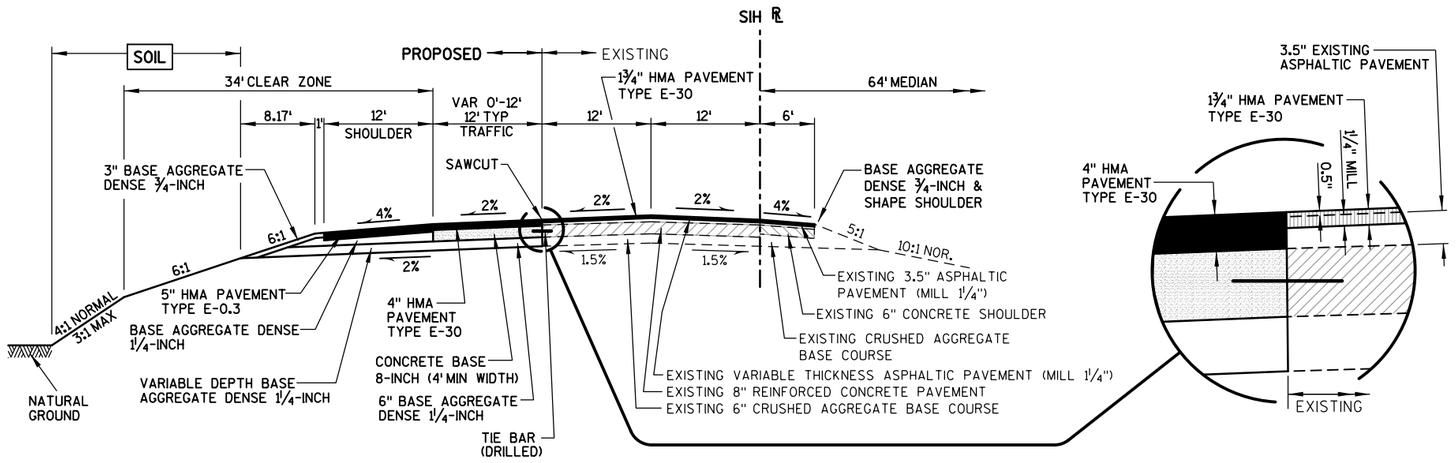


SHOULDER WITH GUARDRAIL

STA 1136+89 NIH TO STA 1139+79 NIH
STA 1149+01 NIH TO STA 1151+79 NIH
STA 1180+24 NIH TO STA 1187+06 NIH
STA 1149+38 SIH TO STA 1158+11 SIH

SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 14	E

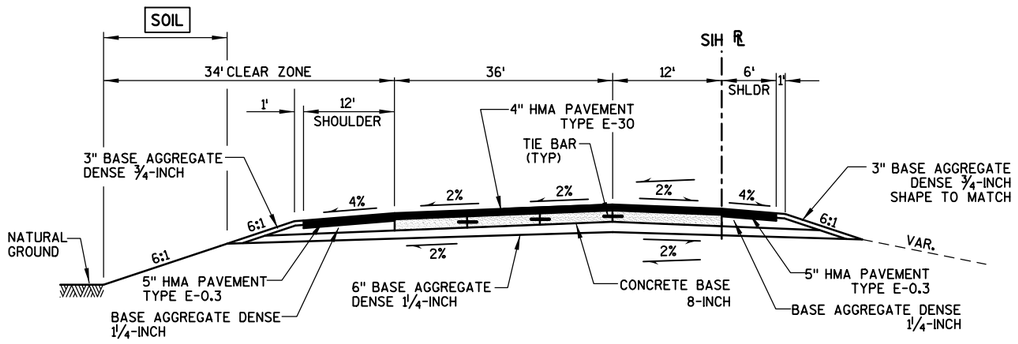


TYPICAL FINISHED HALF SECTION - IH 43 SB (SIH)

STA. 1125+00 SIH TO STA. 1141+00 SIH

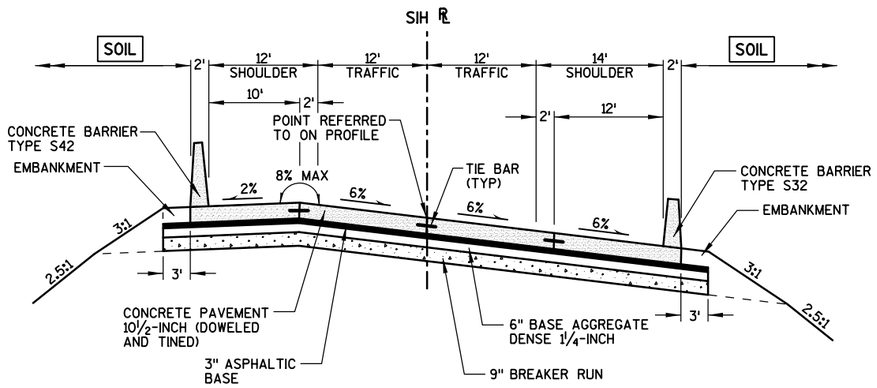
PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	5"	1¾" UPPER LAYER 3¼" LOWER LAYER	PG. 58-28
E-30	4"	1¾" UPPER LAYER 2¼" LOWER LAYER	PG. 58-28

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-30	1¾"	1¾" SURFACE LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A



TYPICAL FINISHED HALF SECTION - IH 43 SB (SIH)

STA. 1141+00 SIH TO STA. 1142+75 SIH

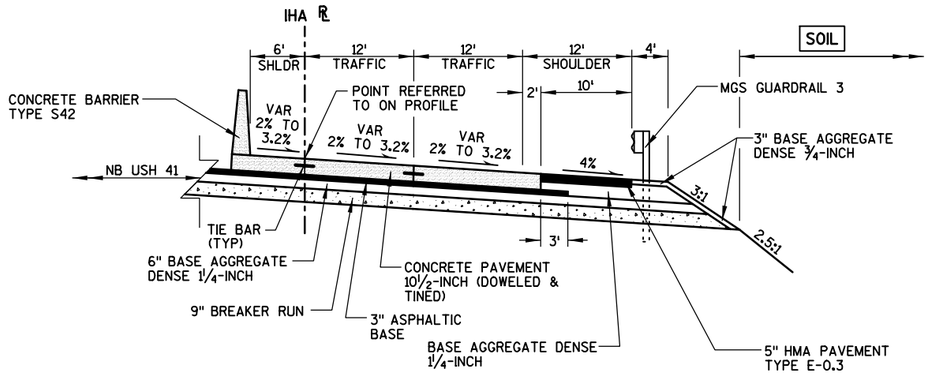


TYPICAL FINISHED SECTION - SUPERELEVATION WITH CONCRETE BARRIER WALL (SIH)

STA. 1187+00 SIH TO STA. 1213+00 SIH

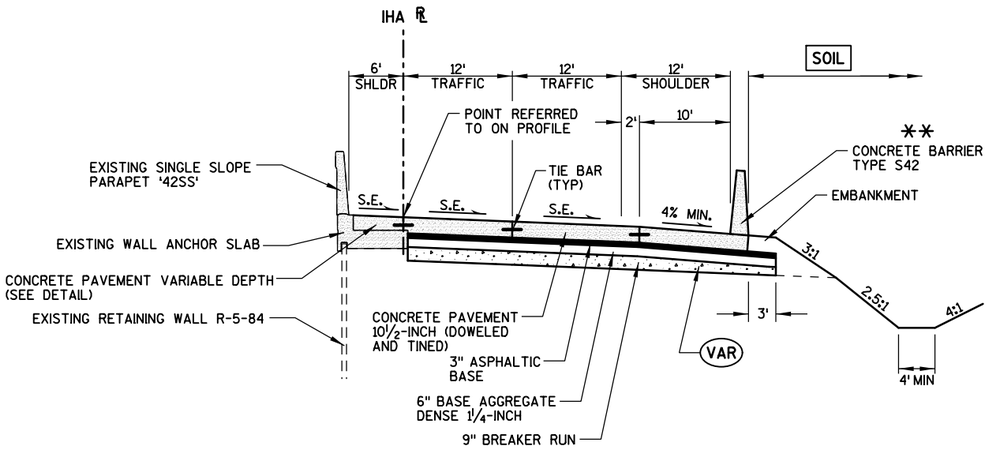
SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 15	E



GUARDRAIL ON OUTSIDE SHOULDER
CONCRETE BARRIER AT INSIDE SHOULDER

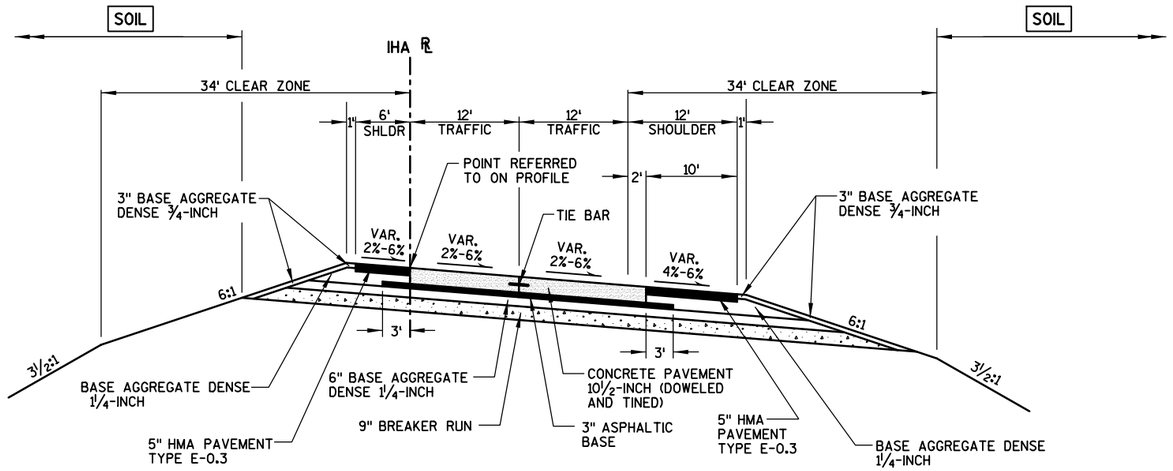
STA. 1153+66 IHA TO STA. 1158+00 IHA



CONCRETE BARRIER ON BOTH SHOULDERS, OVER RETAINING WALL AT INSIDE SHOULDER

STA. 1163+00 IHA TO STA. 1172+82 IHA

** SINGLE SLOPE PARAPET TYPE 32SS OVER RETAINING WALL (STA. 1171+92 IHA TO STA. 1172+82 IHA RT)



NO BARRIER ON SHOULDERS

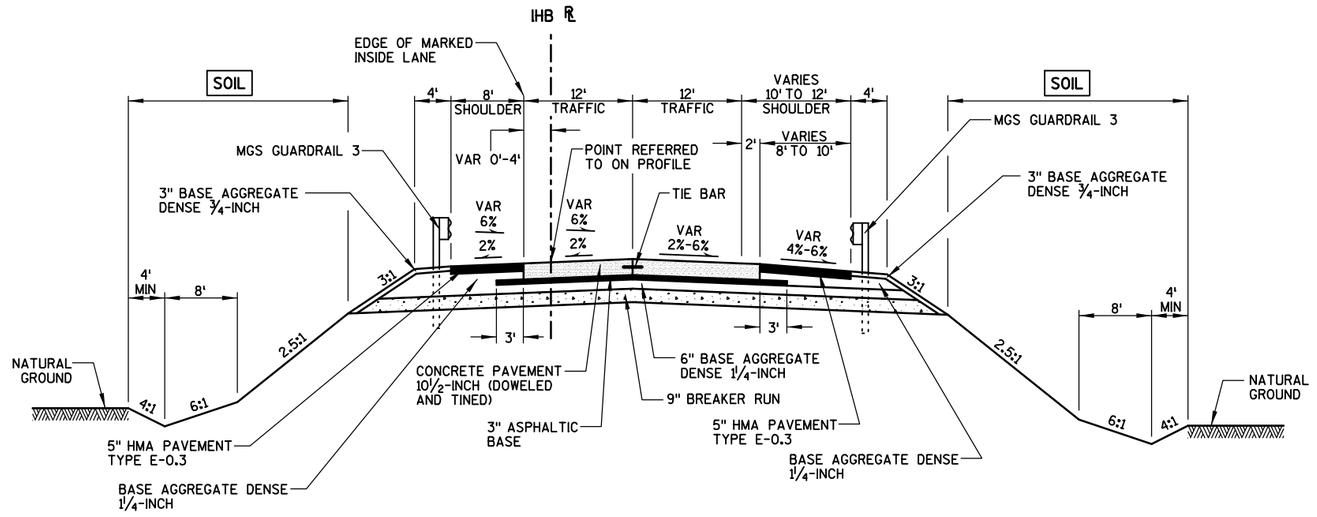
STA. 1198+00 IHA TO STA. 1206+50 IHA

TYPICAL FINISHED SECTIONS - NB USH 41 TO SB IH 43 (IHA)

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	5"	1¾" UPPER LAYER 3¼" LOWER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

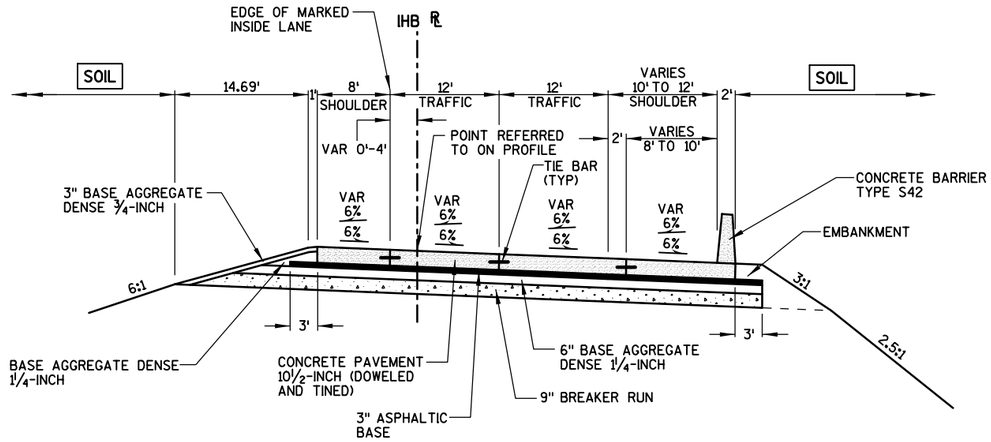
SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 16	E



GUARDRAIL ON BOTH SHOULDERS

STA. 1171+50 IHB TO STA. 1176+85 IHB



CONCRETE BARRIER ON OUTSIDE SHOULDER

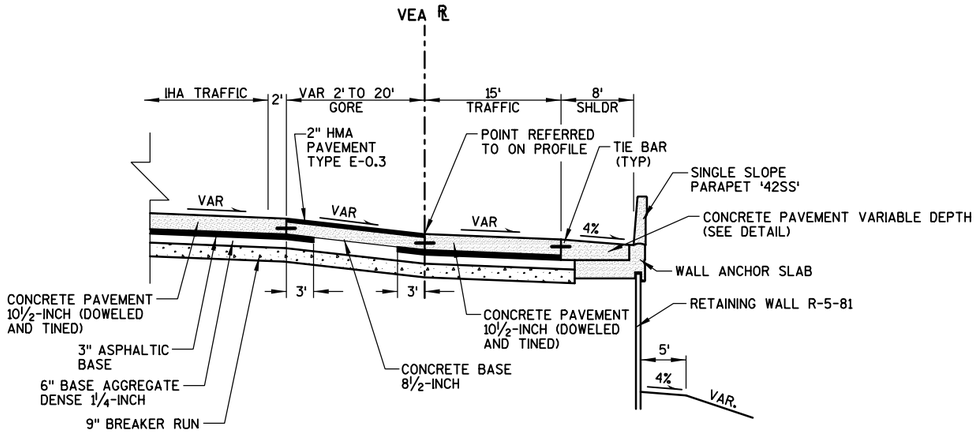
STA. 1216+75 IHB TO STA. 1221+20 IHB

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	5"	1¾" UPPER LAYER 3¼" LOWER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

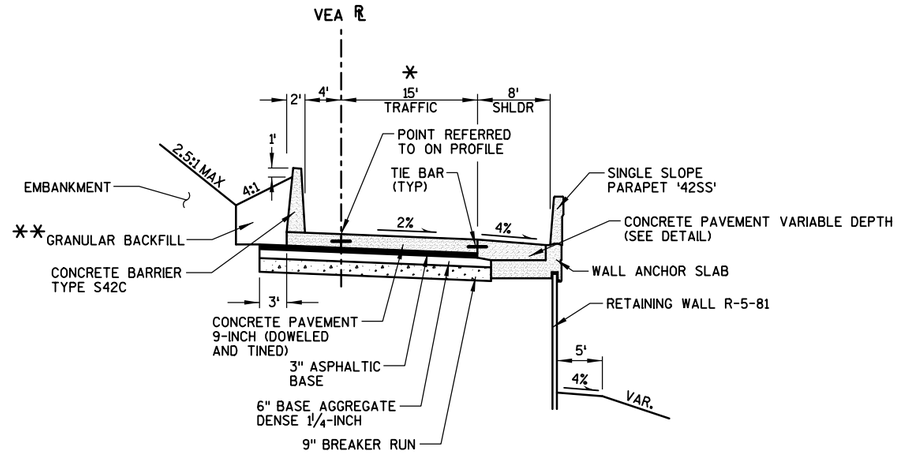
TYPICAL FINISHED SECTION - NB IH 43 TO SB USH 41 (IHB)

SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 17	E



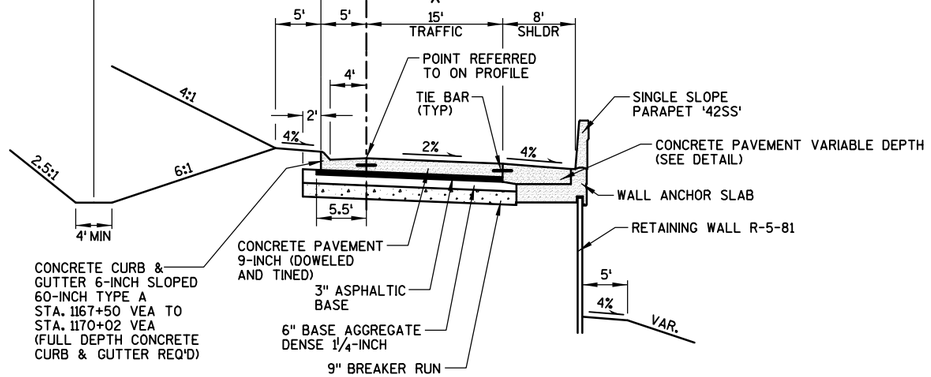
STA. 1160+50 VEA TO STA. 1162+75 VEA



STA. 1162+75 VEA TO STA. 1167+50 VEA

* 15' LANE SPLITS INTO FOUR 12' LANES AS TRAFFIC APPROACHES THE RAMP TERMINUS ROUNDABOUT (STA. 1167+00 VEA TO STA. 1171+50 VEA)

** ITEM INCIDENTAL TO CONCRETE BARRIER TYPE S42C



STA. 1167+50 VEA TO STA. 1172+00 VEA

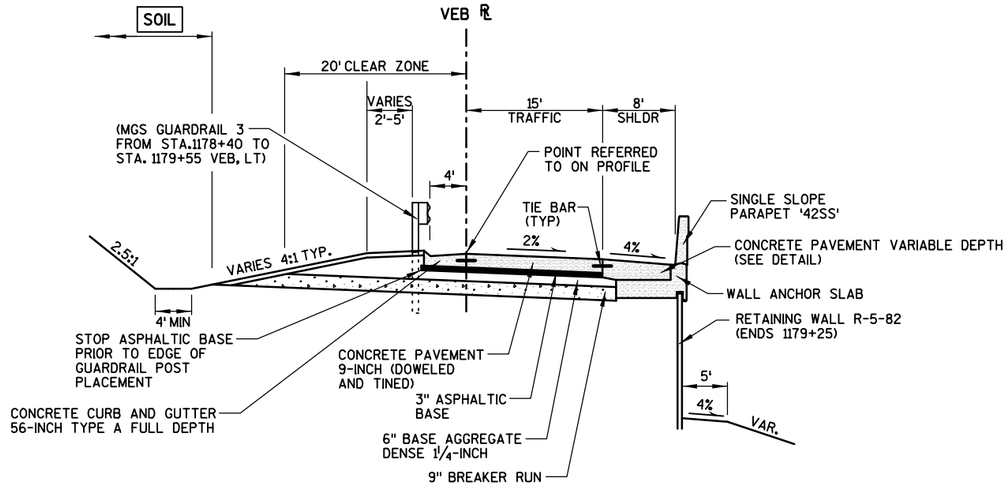
* 15' LANE SPLITS INTO TWO 12' LANES AND ONE 15' LANE AS TRAFFIC APPROACHES THE RAMP TERMINUS ROUNDABOUT (STA. 1167+00 VEA TO STA. 1171+50 VEA)

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

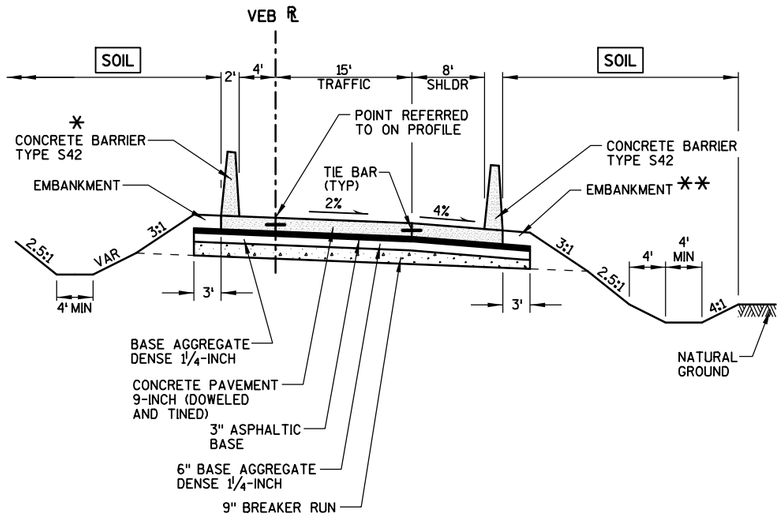
TYPICAL FINISHED SECTIONS - NB USH 41 TO VELP AVENUE RAMP (VEA)

SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 18	E



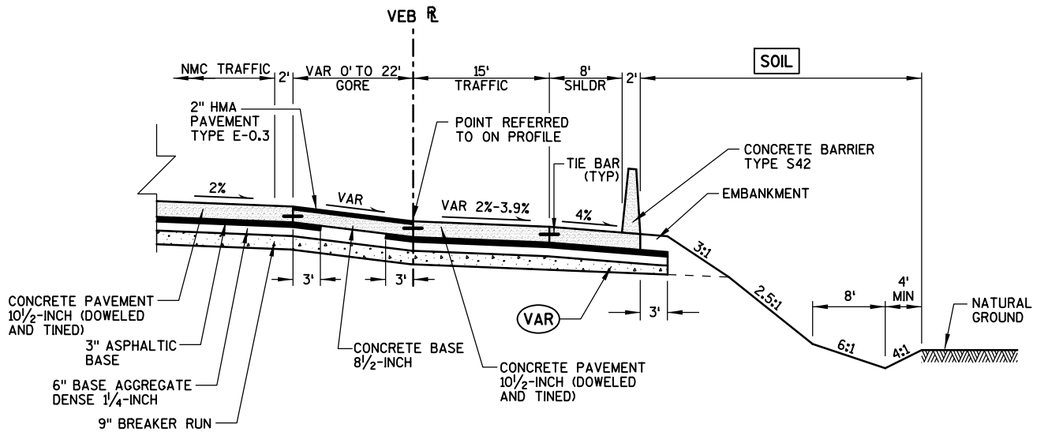
STA. 1177+00 VEB TO STA. 1179+55 VEB



STA. 1179+55 VEB TO STA. 1184+21 VEB

* - MGS GUARDRAIL 3 FROM 1178+40 TO 1179+55 VEB, LT (MGS GUARDRAIL OVER CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A)

** - BEGIN EMBANKMENT AT 1179+55



STA. 1186+08 VEB TO STA. 1189+72 VEB

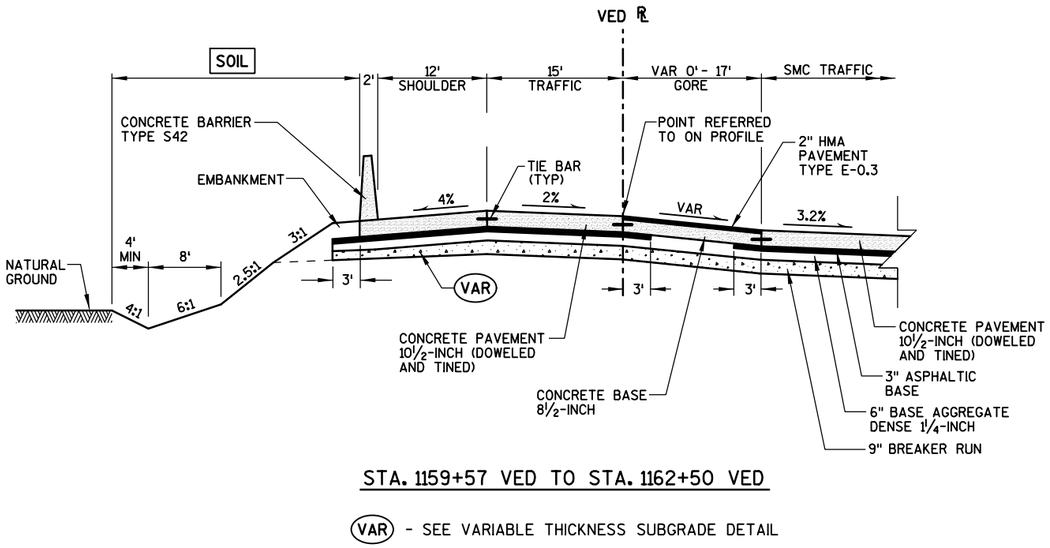
(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

TYPICAL FINISHED SECTIONS - VELP AVENUE TO NB USH 41 RAMP (VEB)

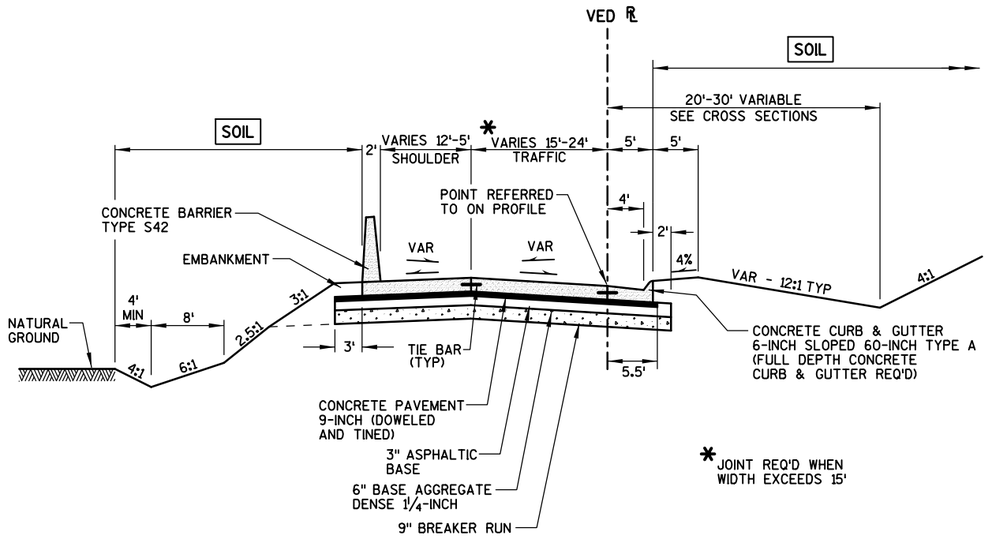
SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 19	E



STA. 1159+57 VED TO STA. 1162+50 VED

(VAR) - SEE VARIABLE THICKNESS SUBGRADE DETAIL



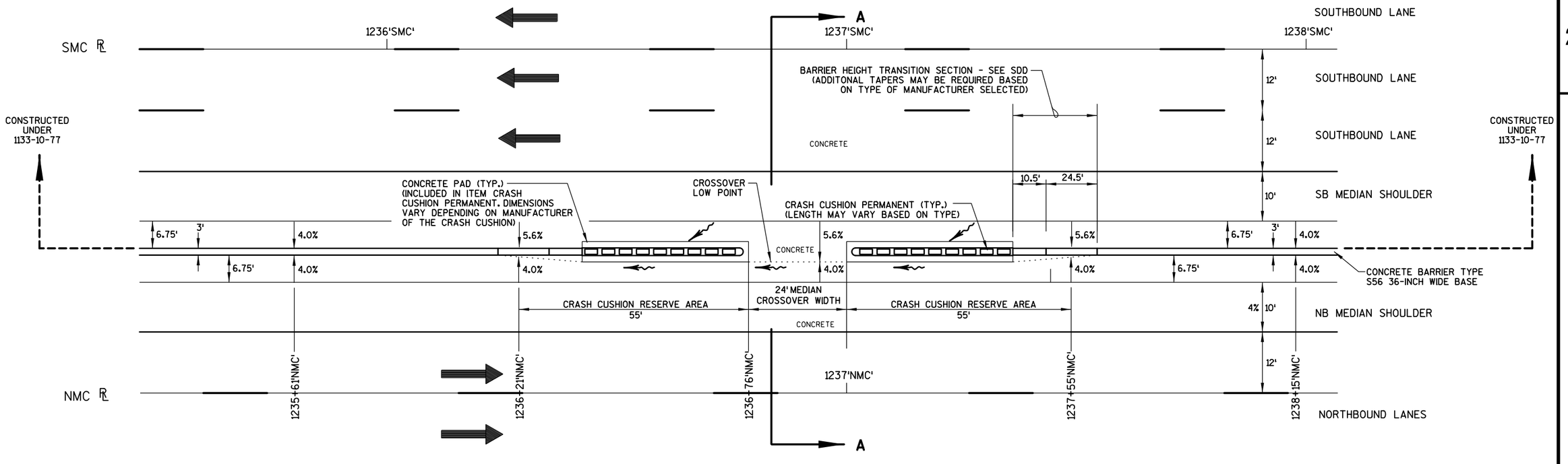
STA. 1162+50 VED TO STA. 1168+50 VED

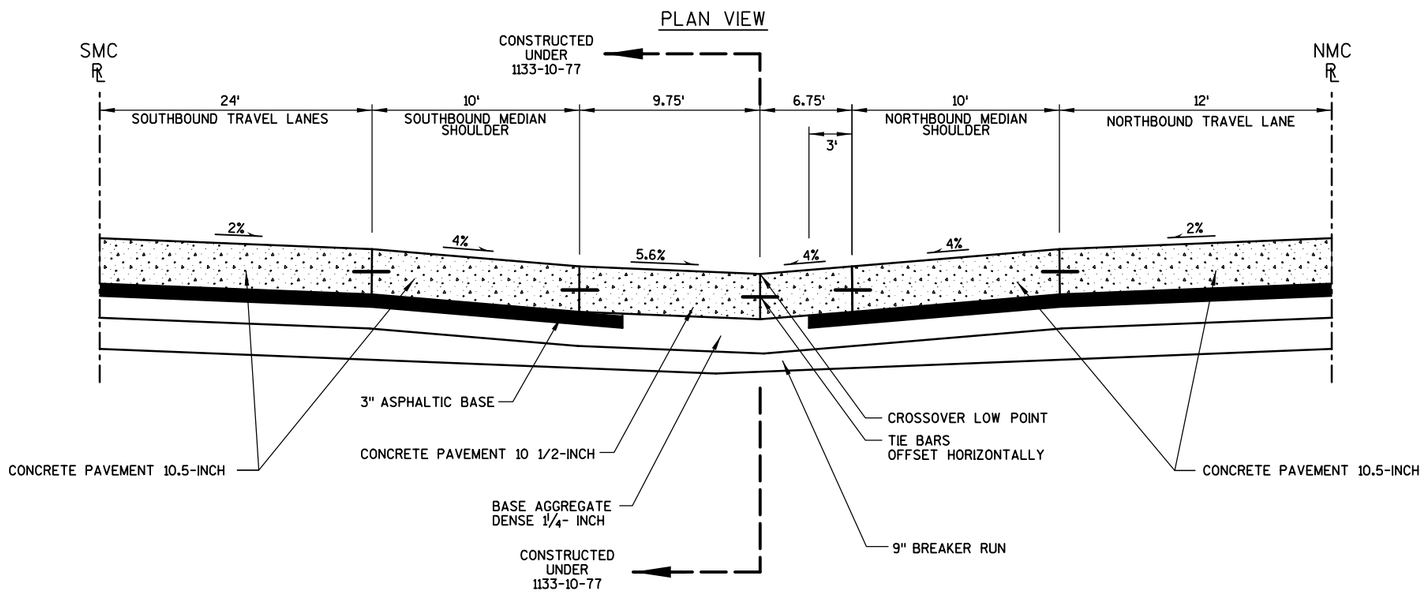
TYPICAL FINISHED SECTIONS - VELP AVENUE TO SB USH 41 RAMP (VED)

PAVEMENT TYPE	TOTAL LAYER PAVE. THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG. 58-28
ASPHALTIC BASE	3"	3"	N/A

SOIL - SALVAGED TOPSOIL, SEED, FERTILIZE AND MULCH, OR EROSION MAT

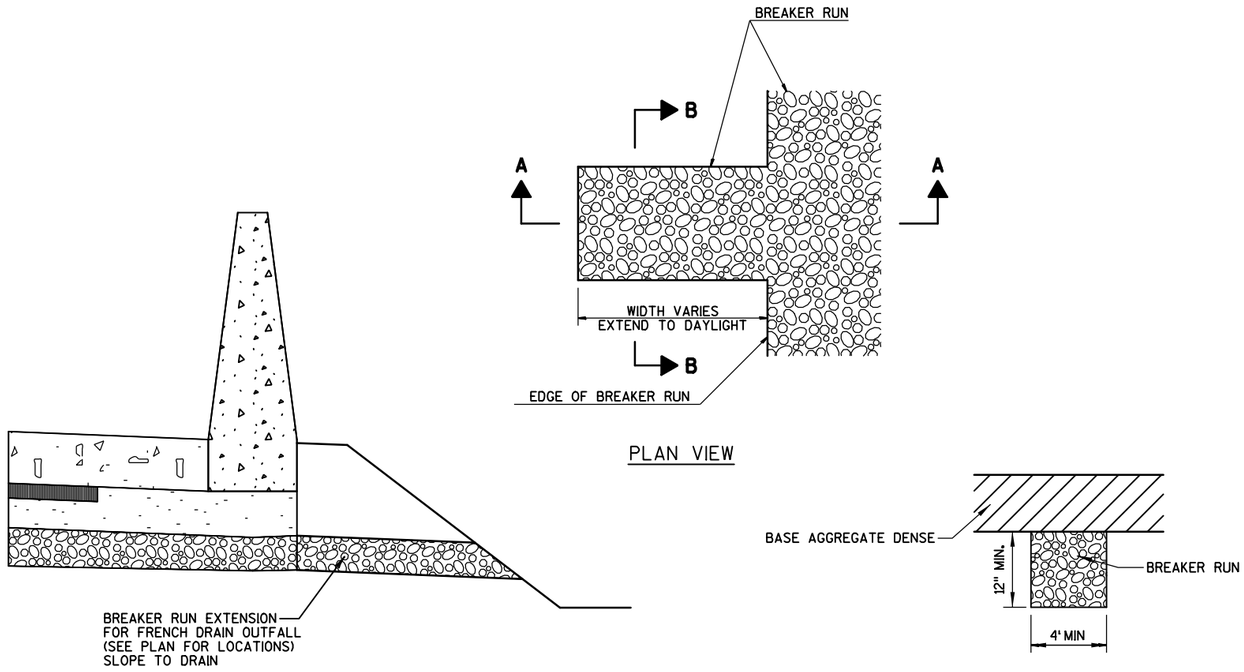
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 20	E





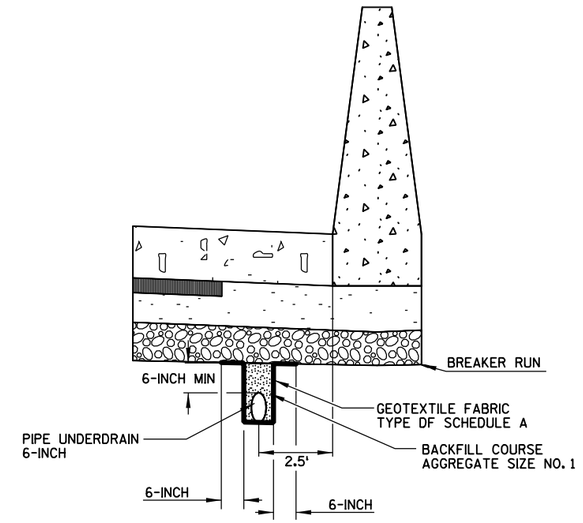
CRASH CUSHION & MAINTENANCE CROSSOVER DETAIL

STATION 1236+76'NMC'



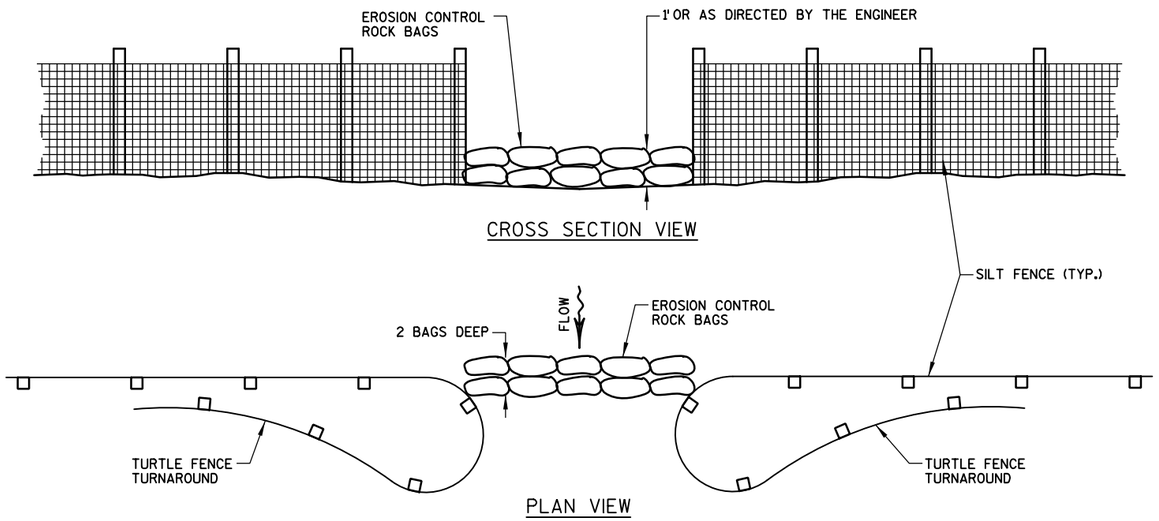
DETAIL FOR FRENCH DRAINS AT LOW POINTS

EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM BREAKER RUN.

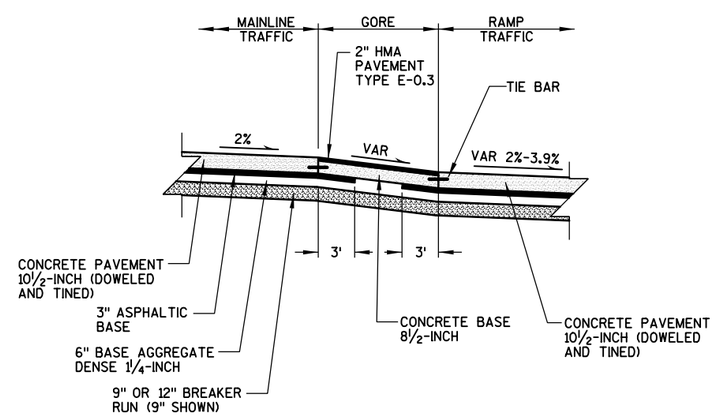


UNDERDRAIN PLACEMENT DETAIL

STA 1227+70 NMC TO STA 1249+00 NMC

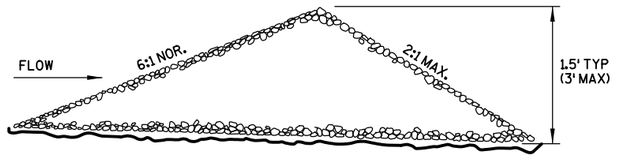


DETAIL FOR EROSION CONTROL ROCK BAG OPENING IN SILT FENCE

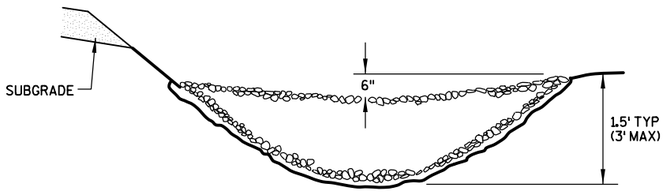


DETAIL FOR OVERLAID CONCRETE AT RAMP GORES

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 22	E

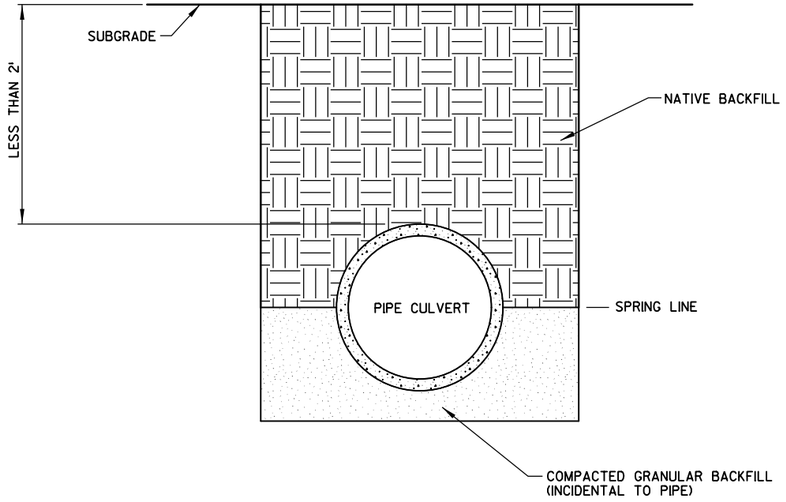


PROFILE VIEW



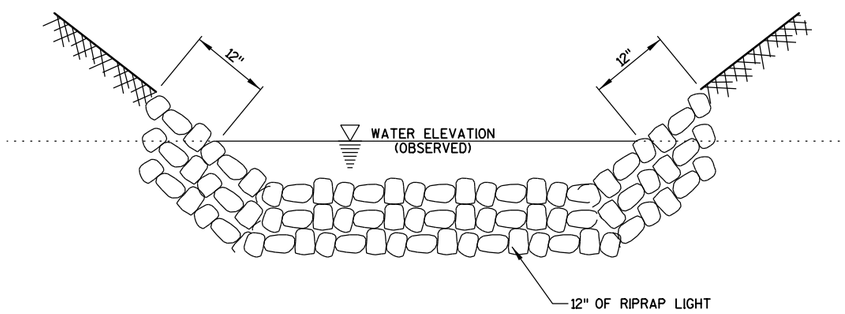
CROSS SECTIONAL VIEW

DETAIL FOR TEMPORARY STONE DITCH CHECK



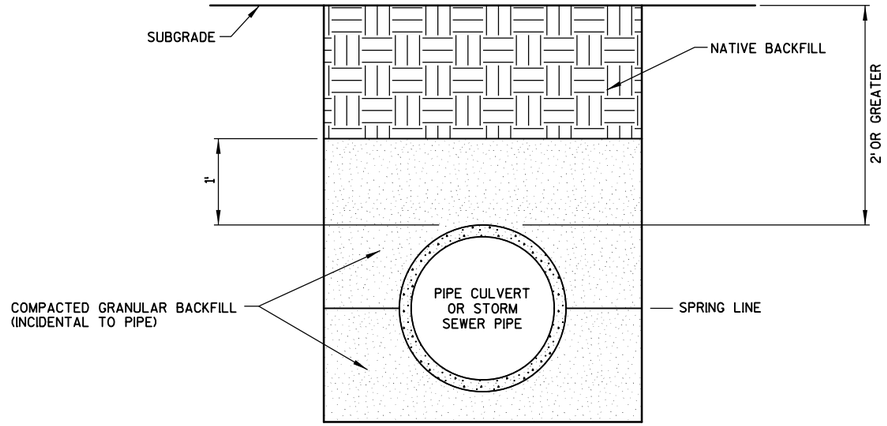
TRENCH BACKFILL DETAIL FOR SHALLOW PIPE CULVERTS

NOTE:
NATIVE BACKFILL SHALL BE FREE
OF LARGE LUMPS, CLODS, OR ROCK.



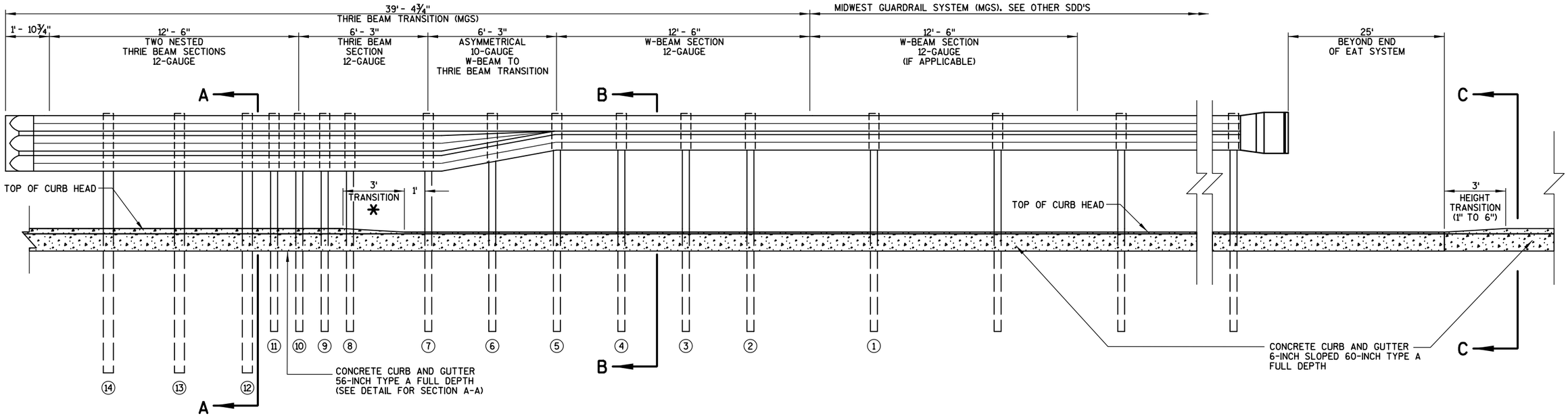
DETAIL FOR EXISTING WET DITCH

STA. 1229+50 NMC TO STA. 1235+00 NMC (1133-11-74)
STA. 1235+00 NMC TO STA. 1249+00 NMC (1133-10-81)
STA. 1235+00 SMC TO STA. 1249+00 SMC (1133-10-81)



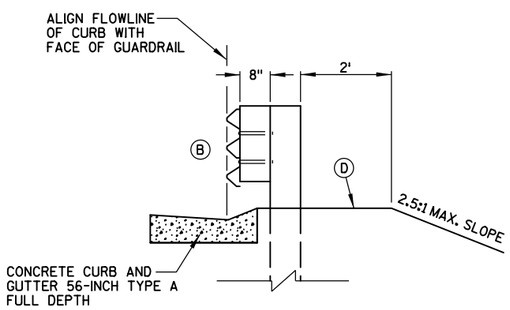
TRENCH BACKFILL DETAIL FOR NORMAL DEPTH PIPE CULVERTS AND STORM SEWER PIPE INSTALLATIONS

NOTE:
NATIVE BACKFILL SHALL BE FREE
OF LARGE LUMPS, CLODS, OR ROCK.

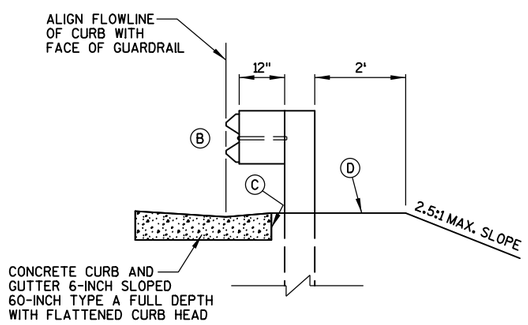


PROFILE VIEW

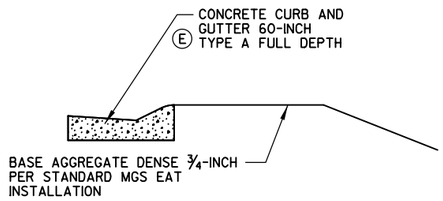
✱ CURB HEAD HEIGHT TRANSITION FROM 4" TO 1", AND CURB HEAD WIDTH TRANSITION FROM 8" TO 12"



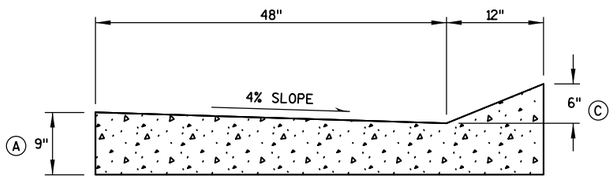
SECTION A-A



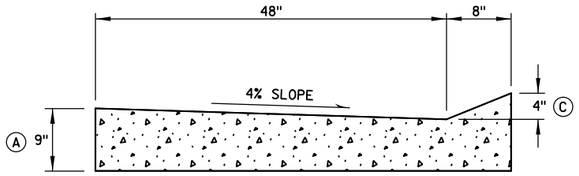
SECTION B-B



SECTION C-C



CONCRETE CURB AND GUTTER 6-INCH
SLOPED 60-INCH TYPE A FULL DEPTH



CONCRETE CURB AND GUTTER
56-INCH TYPE A FULL DEPTH

NOTES:

Ⓐ CONSTRUCT CURB AND GUTTER TO MATCH FULL DEPTH PAVEMENT THICKNESS.

Ⓑ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1".

Ⓒ DEPRESS 6-INCH CURB HEAD TO 1-INCH AT THE ASYMMETRICAL SECTION OF THRIE BEAM TRANSITION.

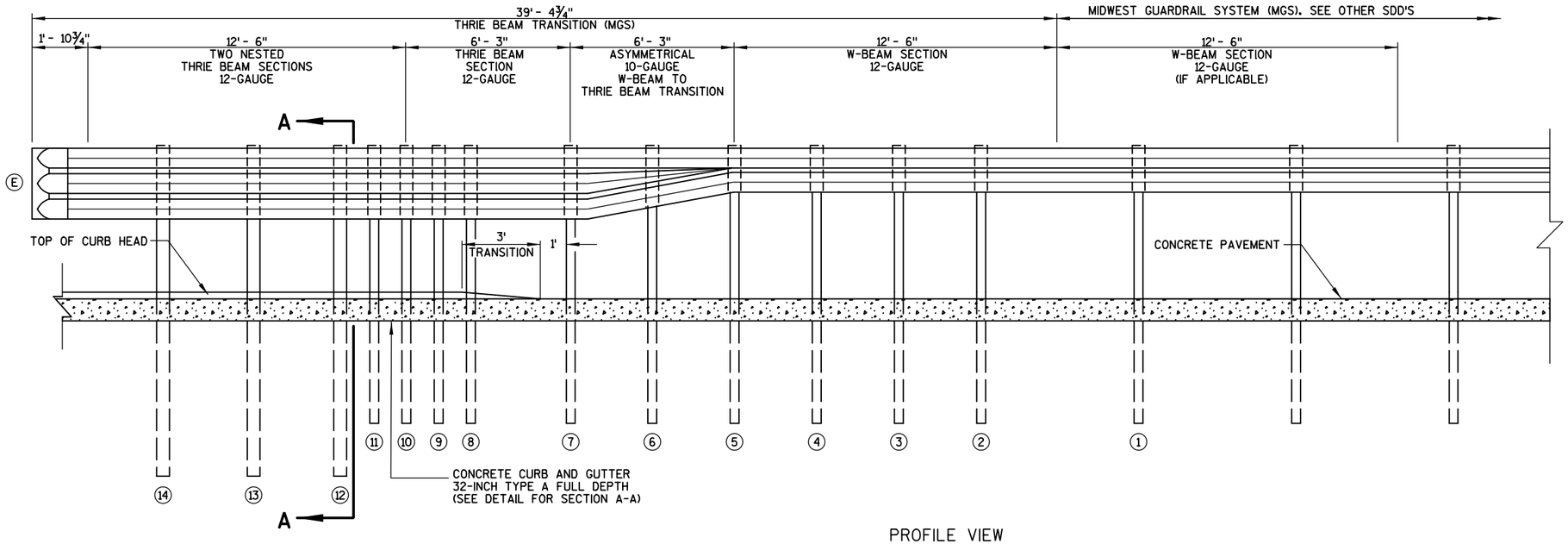
Ⓓ BASE AGGREGATE DENSE 3/4-INCH WITH SPRAYED ASPHALTIC SHOULDER TREATMENT

Ⓔ SEE OTHER SDDs: 8D1, 14B42, 14B44, 14B45

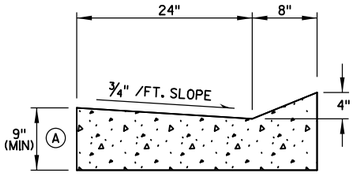
CONCRETE CURB AND GUTTER TRANSITION WITH MIDWEST GUARDRAIL SYSTEM THRIE BEAM AND EAT

1176+62 VEB TO 1179+55 VEB

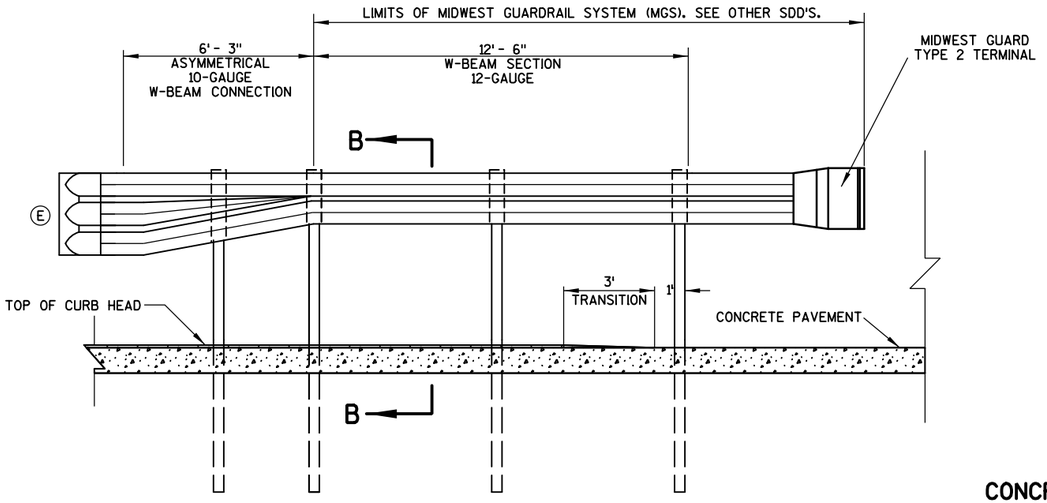
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 24	E



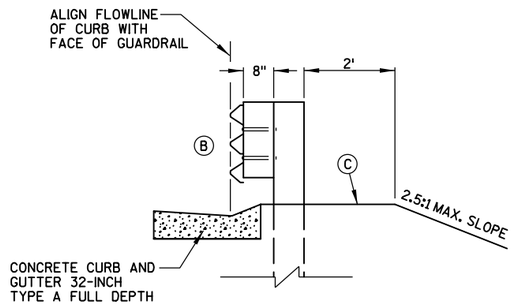
PROFILE VIEW



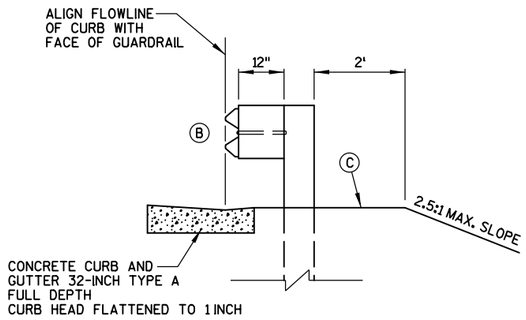
CONCRETE CURB AND GUTTER
32-INCH TYPE A FULL DEPTH



PROFILE VIEW



SECTION A-A



SECTION B-B

CONCRETE CURB AND GUTTER WITH MIDWEST GUARDRAIL SYSTEM THRIE BEAM AT LONG STRUCTURE INLETS

1197+42 IHA

NOTES:

(A) CONSTRUCT CURB AND GUTTER TO MATCH FULL DEPTH PAVEMENT THICKNESS.

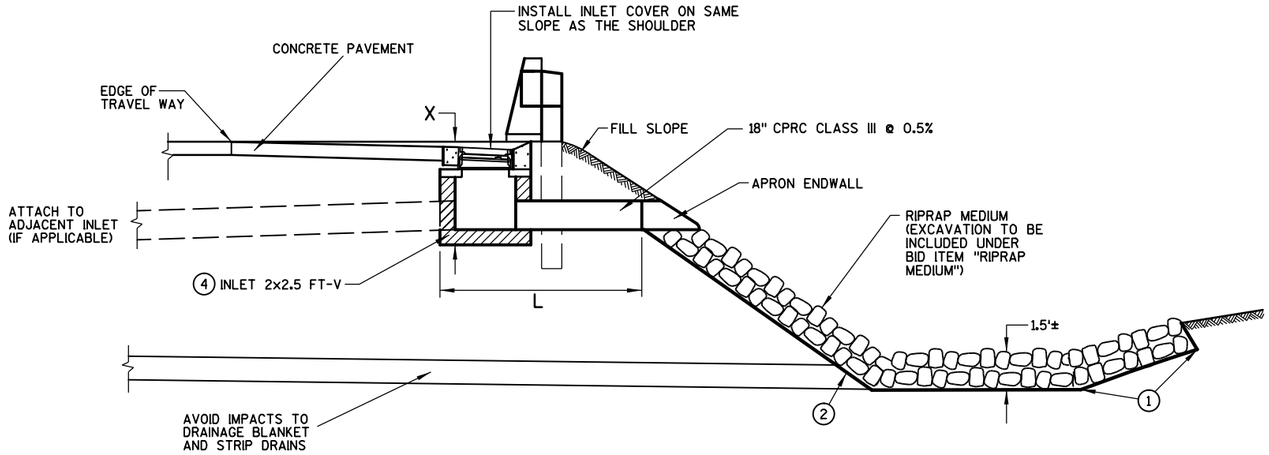
(B) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1".

(C) BASE AGGREGATE DENSE 3/4-INCH WITH SPRAYED ASPHALTIC SHOULDER TREATMENT

(D) SEE OTHER SDDs: 8D1, 14B42, 14B44, 14B45

(E) ONLY INSTALL GUARDRAIL WHERE SHOWN IN PLANS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 25	E



SECTION A-A

STRUCTURE					*PIPE OUTFALL*					
STATION	ALG	O/S	INVERT	X	STATION	O/S	DISC. INVERT	SLOPE	L	PIPE SIZE
1197+42	IHA	35.0' RT	603.90	5'	1197+42	51.5' RT	603.82	0.50%	16'	18"
1186+98	NIH	23.0' RT	600.94	5'	1186+98	37.8' RT	600.86	0.50%	18'	18"
1176+58	IHB	29.0' RT	589.28	5'	1176+58	INL	589.01	0.50%	40'	18"
1176+58	IHB	11.0' LT	588.51	5.75'	1176+58	27.2' LT	588.42	0.50%	16'	24"

NOTES

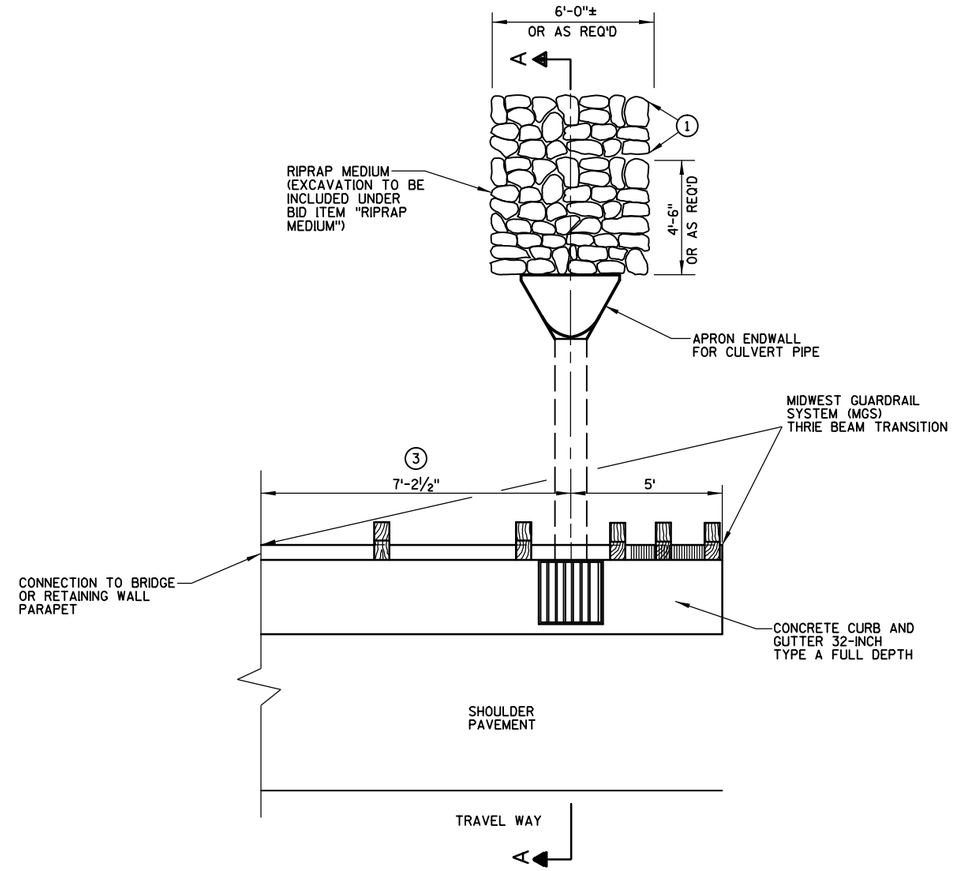
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(2) GEOTEXTILE FABRIC, TYPE HR.

(3) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE MGS THRIE BEAM TRANSITION. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½". LAYOUT POSTS BEFORE INLET INSTALLATION.

(4) SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C7 FOR DETAILS.

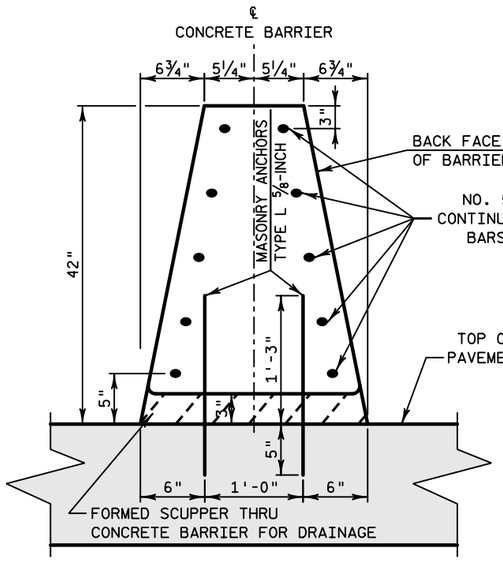


PLAN VIEW

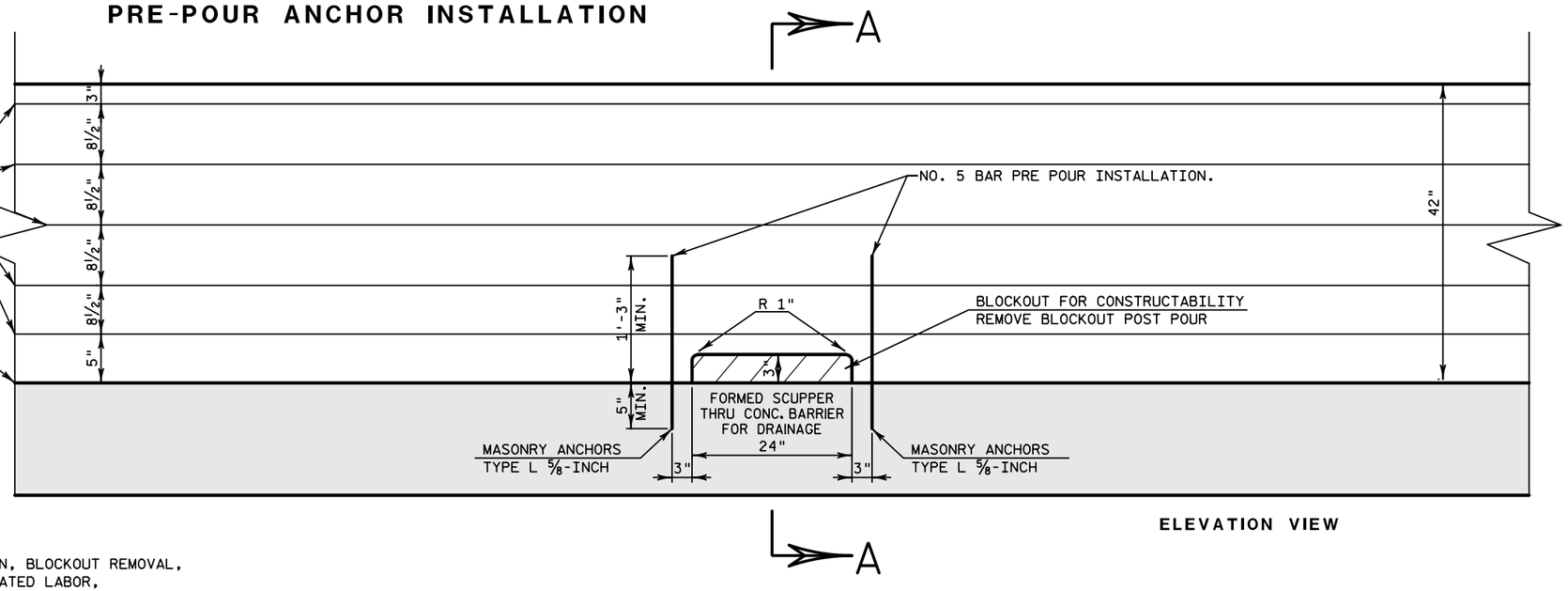
DETAIL FOR LONG STRUCTURE INLETS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 26	E

PRE-POUR ANCHOR INSTALLATION



SECTION A-A



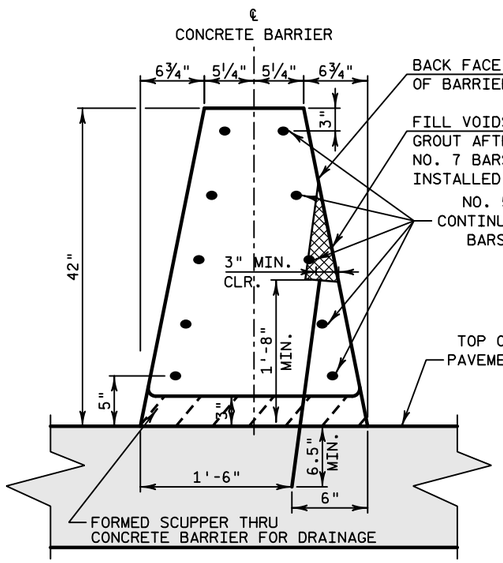
ELEVATION VIEW

NOTES:

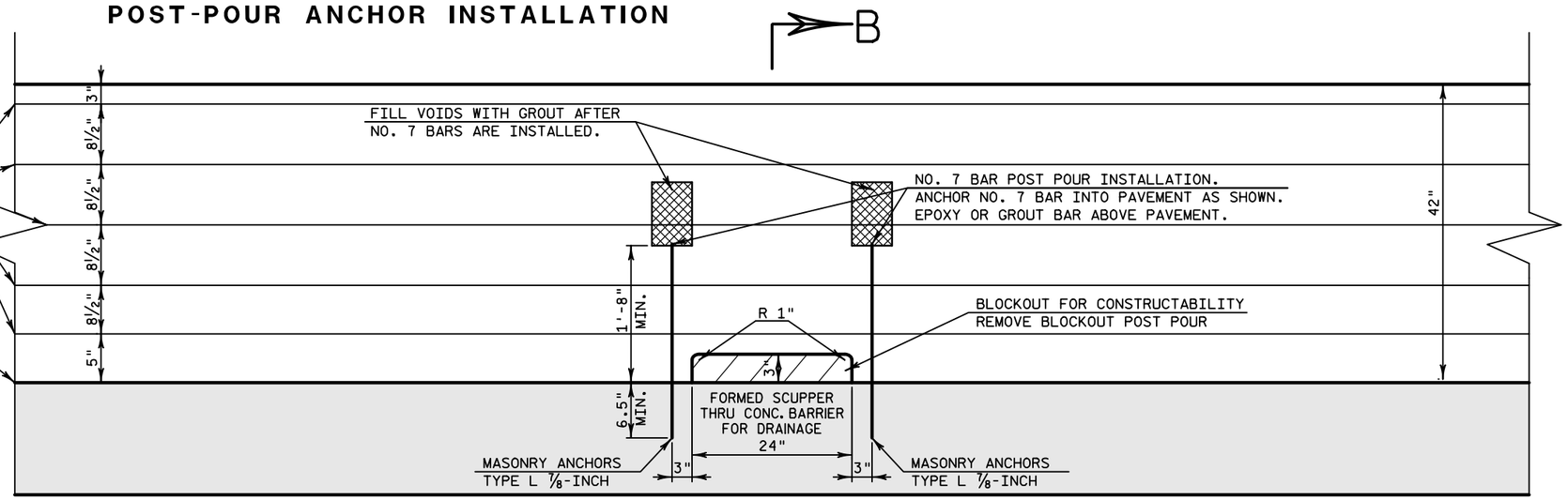
ALL COSTS ASSOCIATED WITH SCUPPER, INCLUDING BLOCKOUT INSTALLATION, BLOCKOUT REMOVAL, ADDITIONAL REBAR, MASONRY ANCHORS, DRILLING, GROUTING, AND ASSOCIATED LABOR, ARE INCIDENTAL TO CONCRETE BARRIER TYPE S42.

PRE-POUR ANCHOR INSTALLATION OR POST-POUR INSTALLATION SHALL BE CONTRACTOR OPTION.

POST-POUR ANCHOR INSTALLATION



SECTION B-B



ELEVATION VIEW

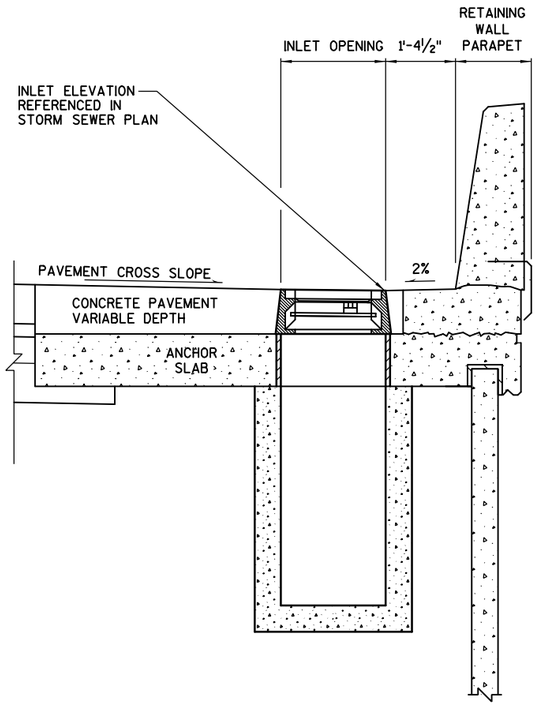
NOTES:

ALL COSTS ASSOCIATED WITH SCUPPER, INCLUDING BLOCKOUT INSTALLATION, BLOCKOUT REMOVAL, ADDITIONAL REBAR, MASONRY ANCHORS, DRILLING, GROUTING, AND ASSOCIATED LABOR, ARE INCIDENTAL TO CONCRETE BARRIER TYPE S42.

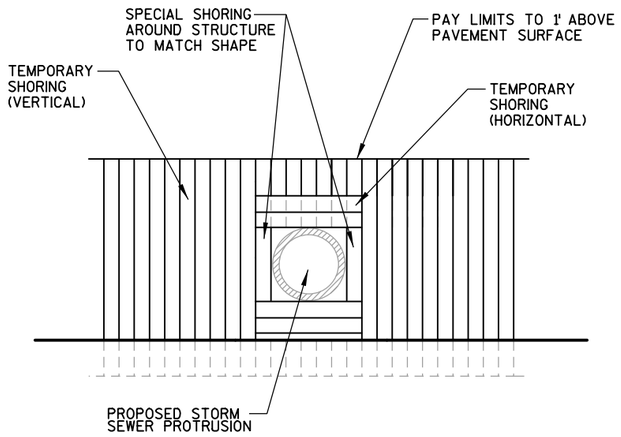
PRE-POUR ANCHOR INSTALLATION OR POST-POUR INSTALLATION SHALL BE CONTRACTOR OPTION.

CONCRETE BARRIER TYPE S42 SCUPPER

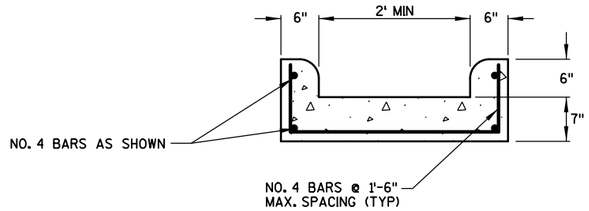
REFER TO PLAN SHEETS FOR LOCATIONS



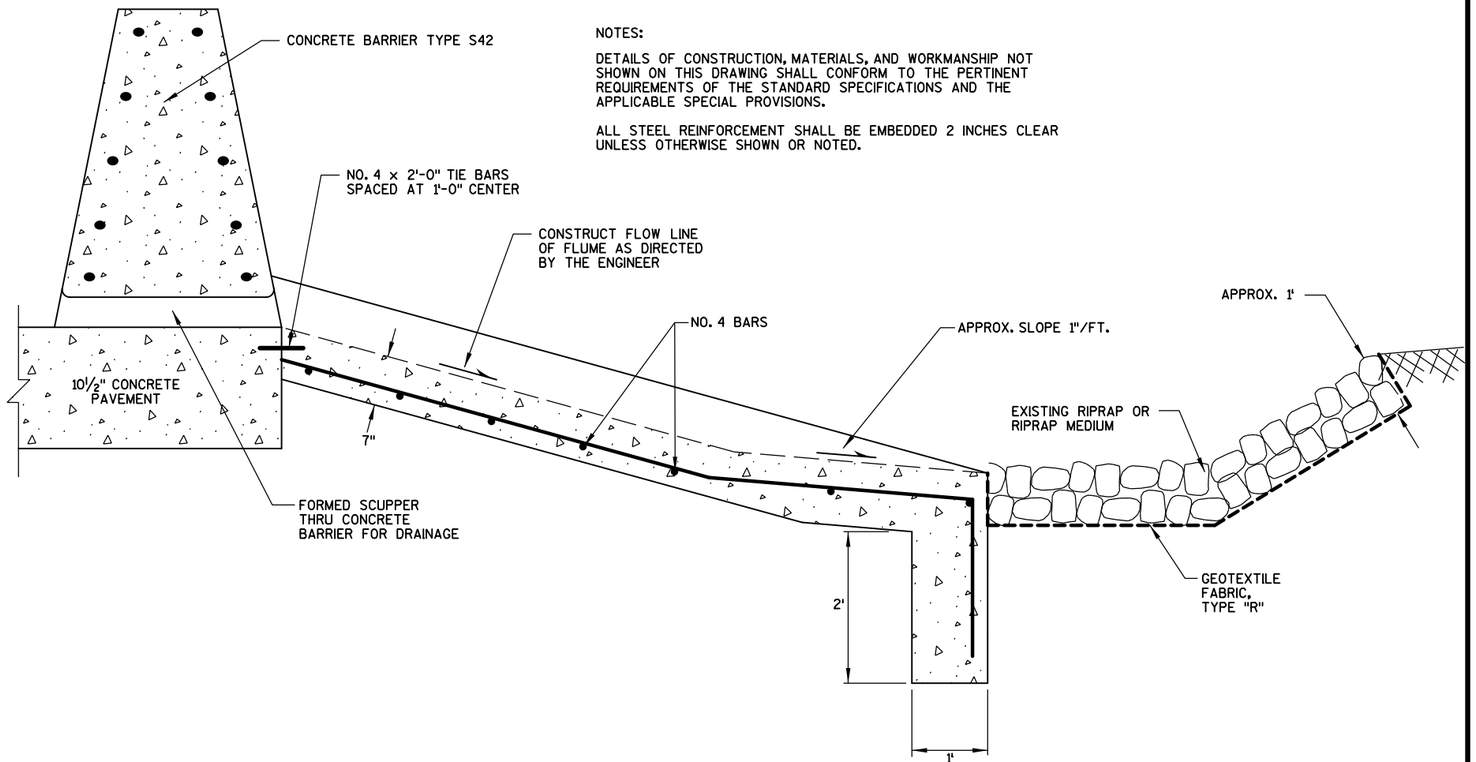
INLETS AT RETAINING WALL



TEMPORARY SHORING AT STORM SEWER STAGING



FLUME SECTION



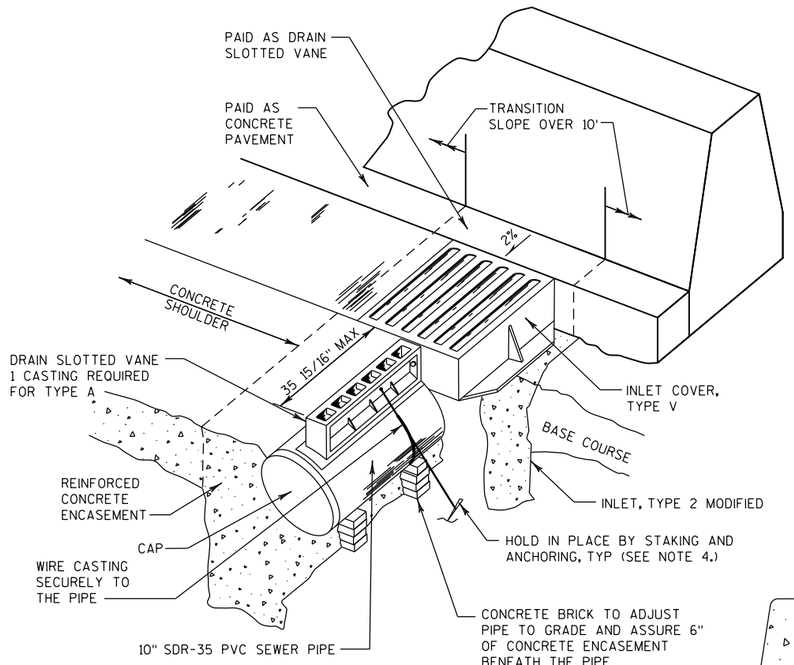
PROFILE

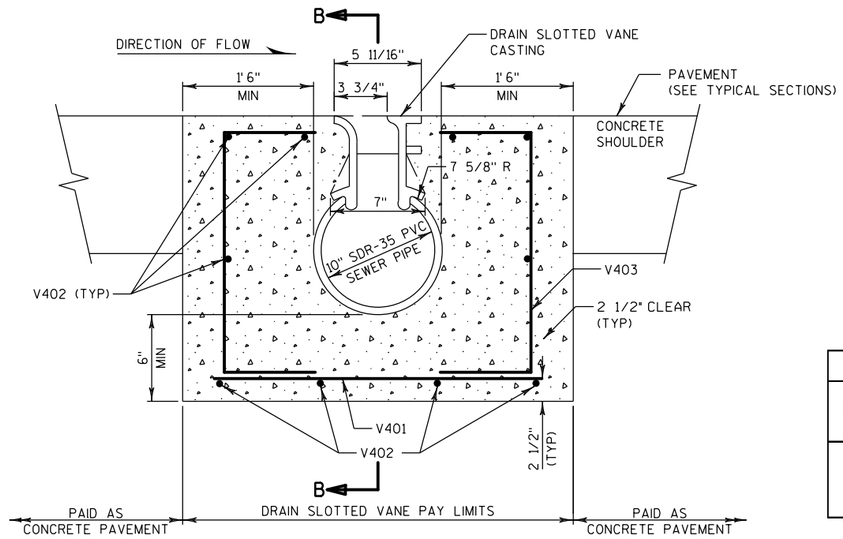
NOTES:

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE SURFACE DRAIN FLUME TYPE AT CONCRETE BARRIER SCUPPER





SECTION A-A

NOTES

1. THE FIRST DIGIT OF BAR MARK SIGNIFIES THE BAR SIZE.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
3. ALL REINFORCEMENT BARS SHALL BE EPOXY-COATED.
4. APPROXIMATE WEIGHT OF DRAIN SLOTTED VANE CASTING = 87 POUNDS.
5. THE CASTING AND PVC PIPE SHALL BE SECURELY STAKED AND ANCHORED INTO PLACE DURING THE PLACEMENT OF THE CONCRETE ENCASEMENT.
6. VERIFY JOINTING WITH FIELD ENGINEER PRIOR TO PLACEMENT OF PERMANENT PAVEMENT.

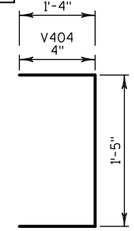
BILL OF BARS *

MARK	NO. REQUIRED TYPE A (3')	NO. REQUIRED TYPE B (6')	LENGTH TYPE A (3')	LENGTH TYPE B (6')	BENT	COAT	LOCATION
V401	6	12	3'-11"	3'-11"		X	HORIZ.. - END/BOTTOM
V402	10	10	**	**		X	HORIZ.. - SIDES/TOP/BOTTOM
V403	4	16	4'-1"	4'-1"	X	X	VERTICAL - SIDES
V404	3	3	2'-1"	2'-1"	X	X	VERTICAL - END

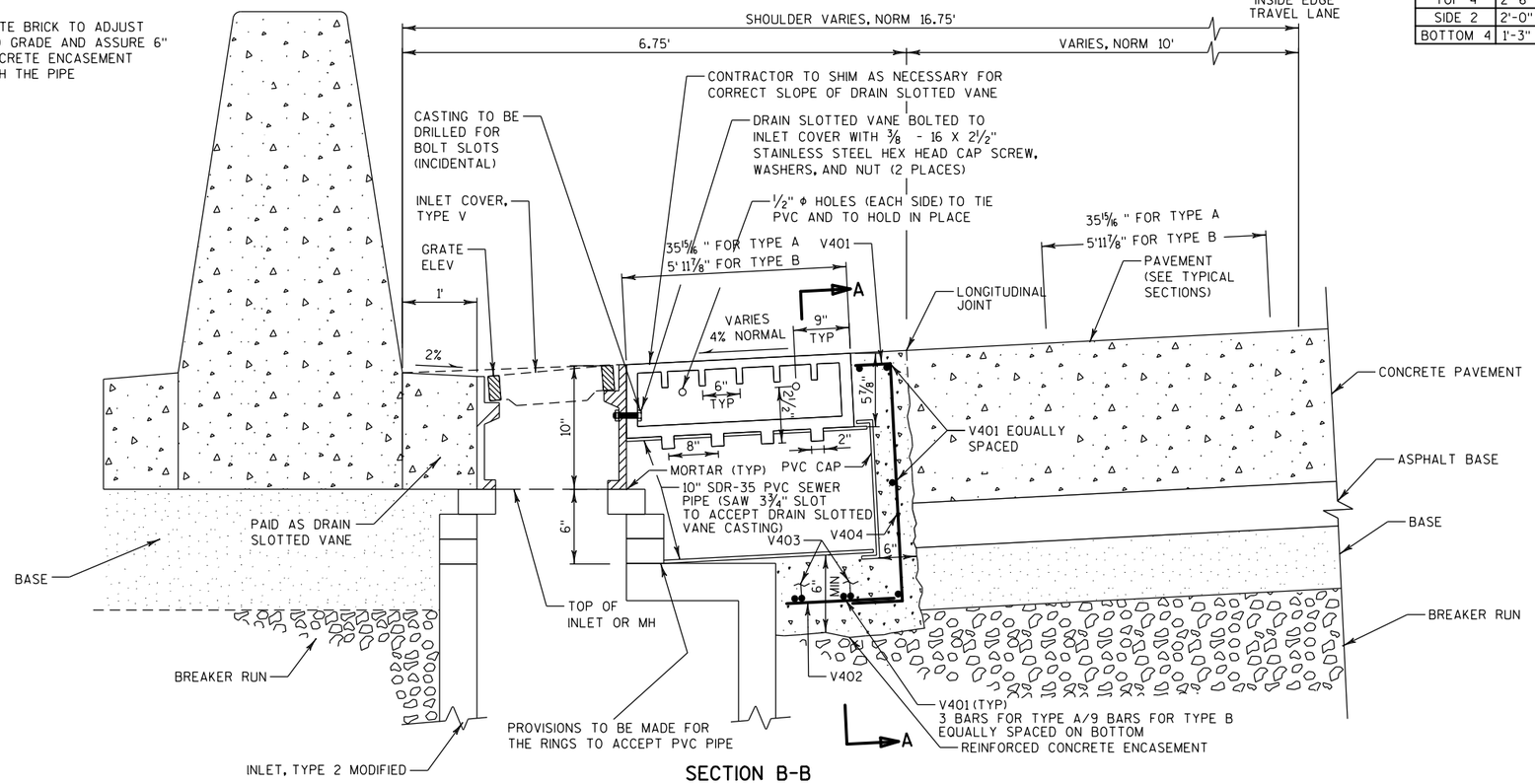
* INCIDENTAL TO THE ITEM OF DRAIN SLOTTED VANE

**

	A (3')	B (6')
TOP 4	2'-6"	5'-6"
SIDE 2	2'-0"	5'-0"
BOTTOM 4	1'-3"	4'-3"



V403, V404



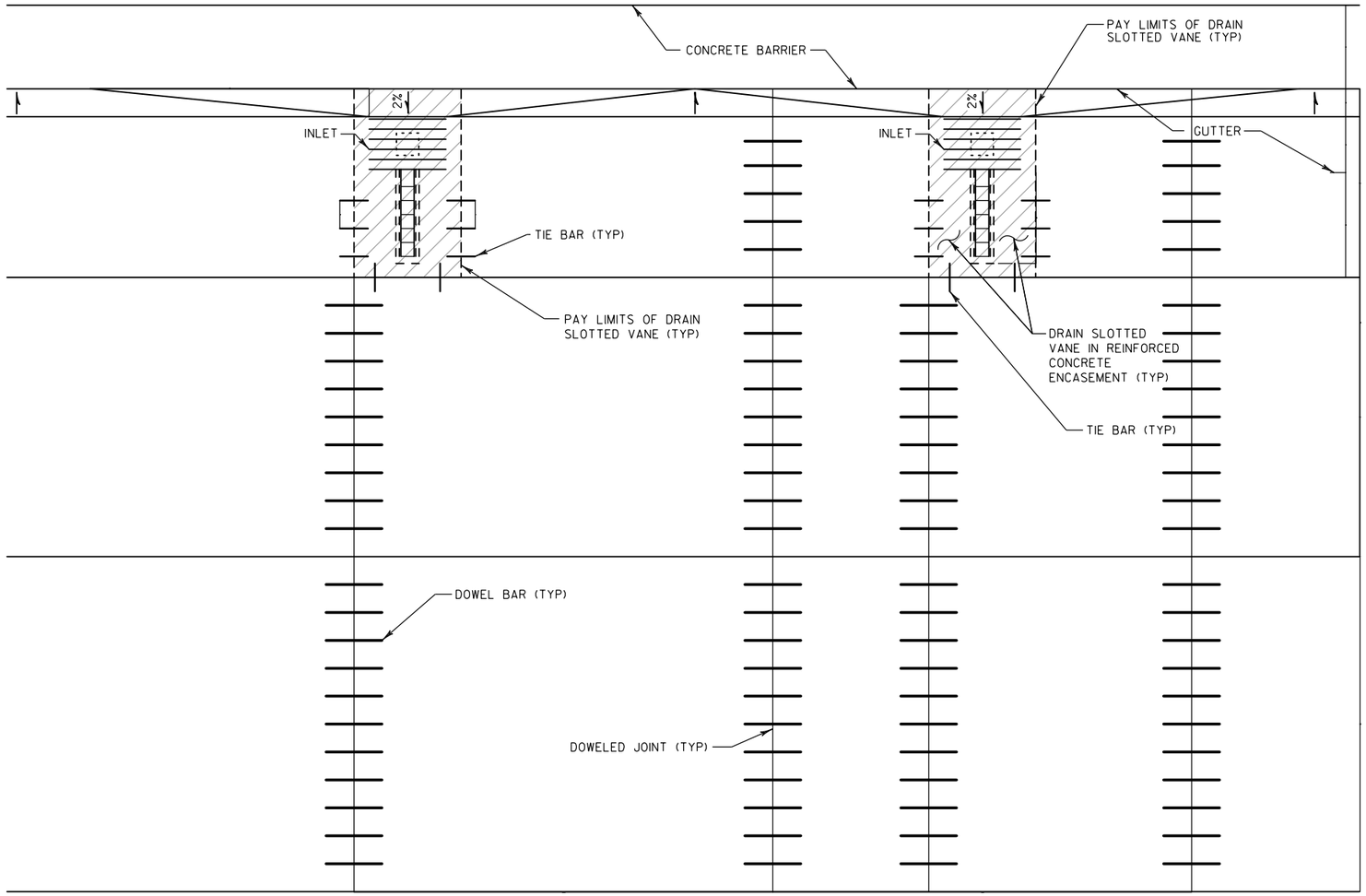
SECTION B-B

DRAIN SLOTTED VANE, TYPE A AND B

SHOULDER INSTALLATION
SHEET 1 OF 2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021009_cd.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42



DRAIN SLOTTED VANE
AT DOWELED JOINT

DRAIN SLOTTED VANE
IN CENTER OF CONCRETE PANEL

PAVEMENT JOINTING AT DRAIN SLOTTED VANE INSTALLATIONS

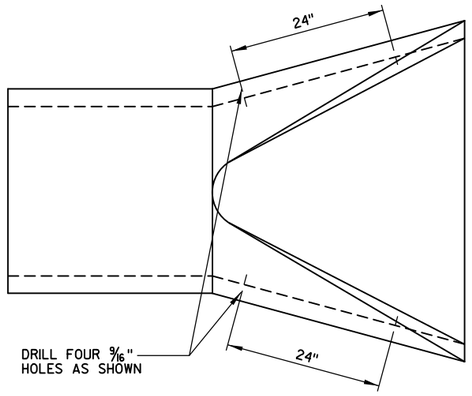
DRAIN SLOTTED VANE, TYPE A

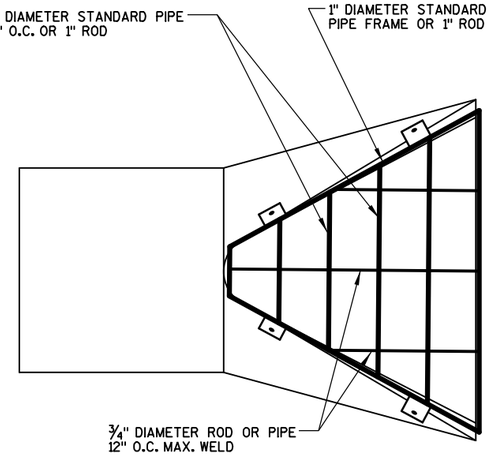
SHOULDER INSTALLATION
SHEET 2 OF 2

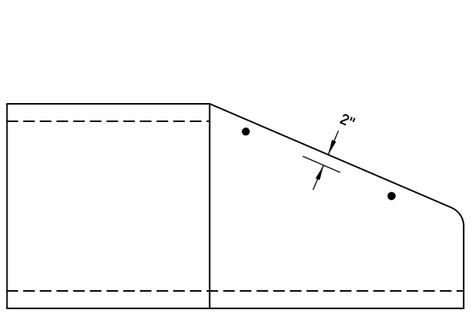
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 30	E

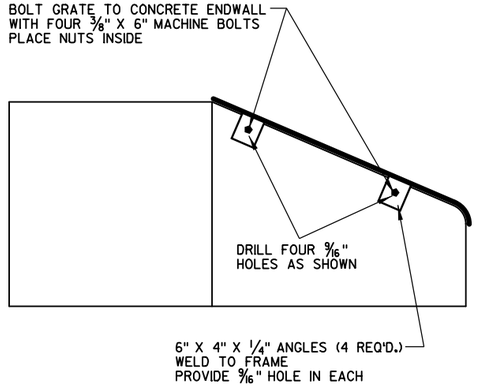
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021010_cd.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

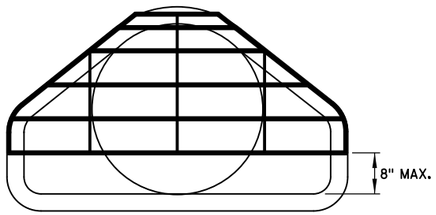
WISDOT/CADDS SHEET 42





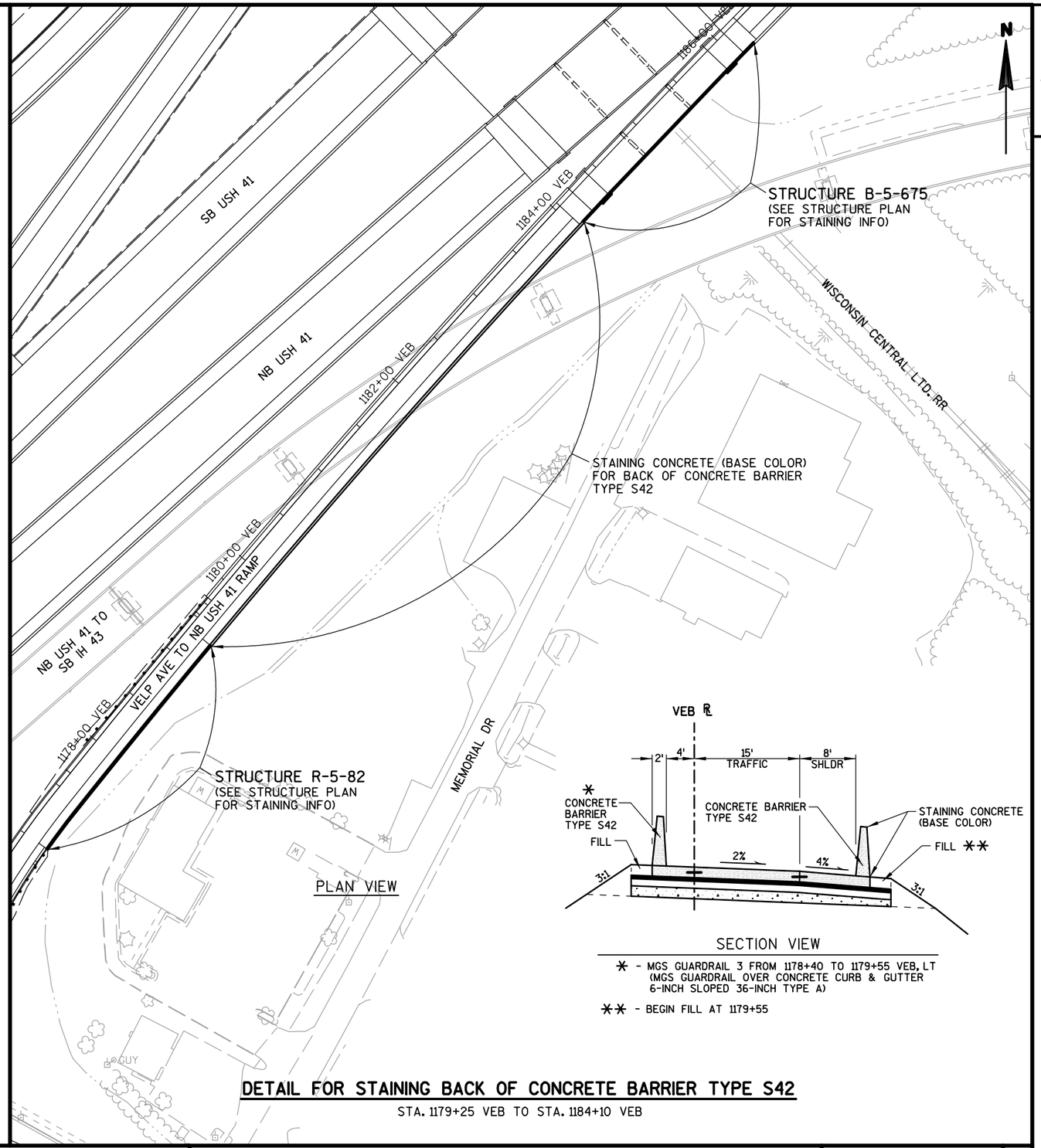






PIPE GRATE DETAIL

(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)



PLAN VIEW

SECTION VIEW

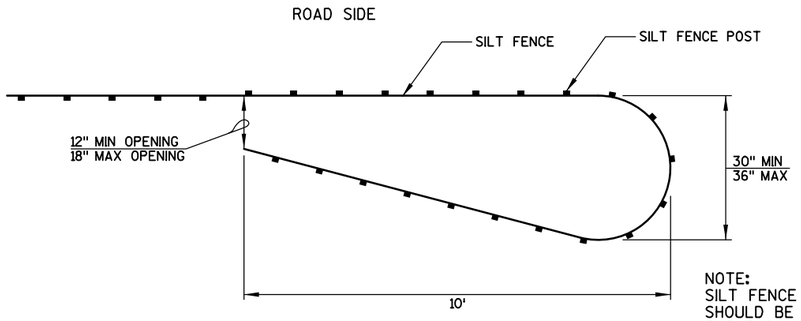
* - MGS GUARDRAIL 3 FROM 1178+40 TO 1179+55 VEB, LT (MGS GUARDRAIL OVER CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A)

** - BEGIN FILL AT 1179+55

DETAIL FOR STAINING BACK OF CONCRETE BARRIER TYPE S42

STA. 1179+25 VEB TO STA. 1184+10 VEB

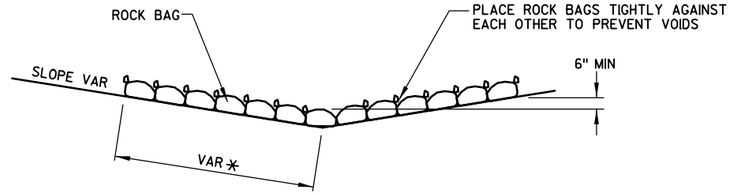
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 31	E



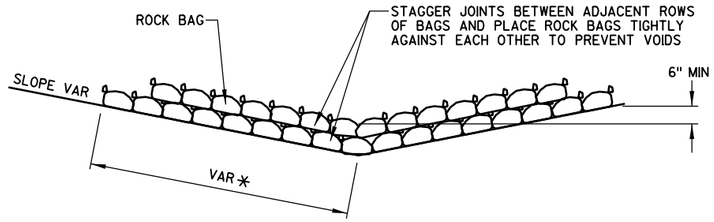
NOTE:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE PLACED ON THE OUTSIDE OF THE TURN-AROUND

SILT FENCE TURN-AROUND DETAIL

TO BE PLACED AT ALL ENDS OF SILT FENCE



SIDE VIEW (SINGLE LAYER)

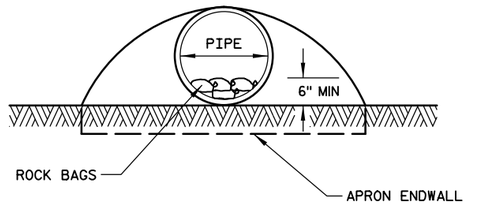


*LENGTH AND NUMBER OF BAGS MAY VARY DEPENDING ON DESIRED DEPTH OF WATER POOL

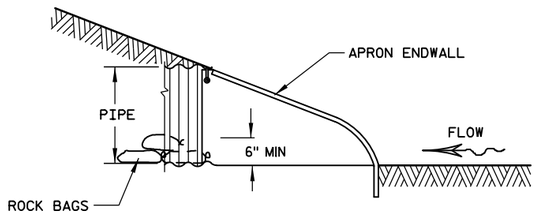
SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS



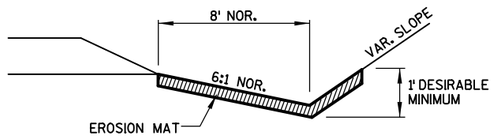
END VIEW



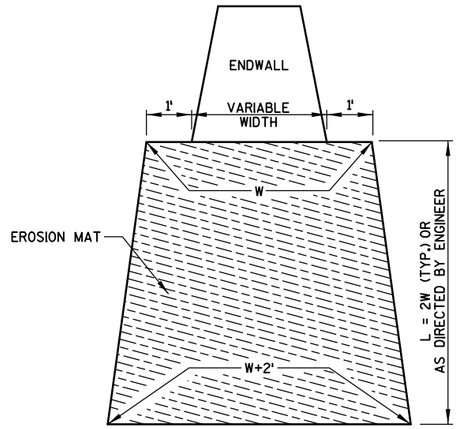
SIDE VIEW

CULVERT PIPE DITCH CHECK

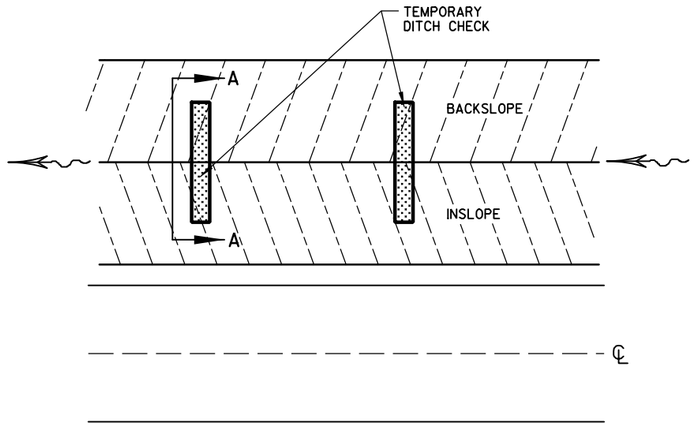
PLACE AT INLET END ONLY



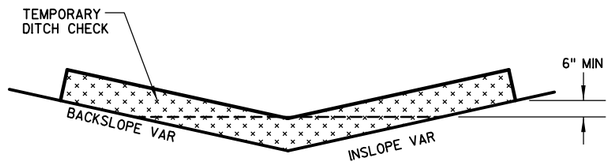
EROSION MAT DETAIL FOR DITCHES



EROSION MAT TREATMENT AT CULVERTS

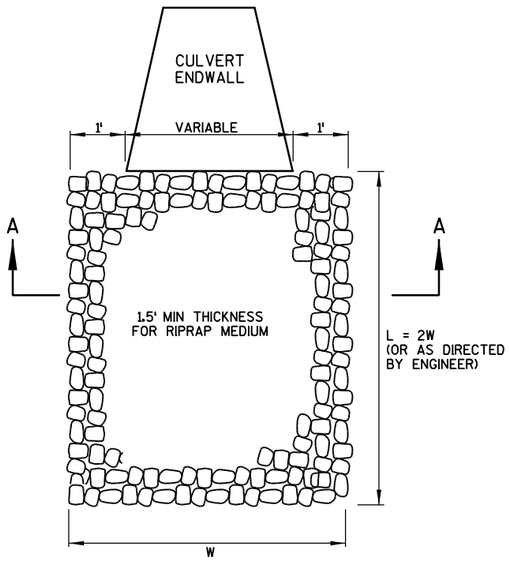


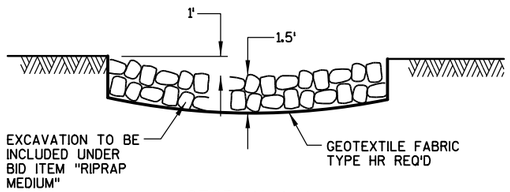
PLAN VIEW



SECTION A-A

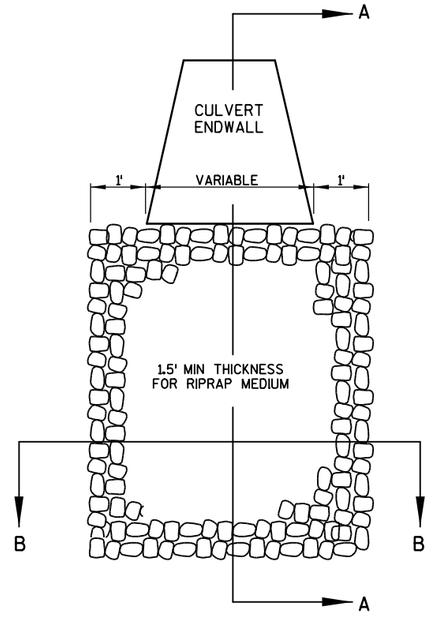
DETAIL FOR TEMPORARY DITCH CHECKS



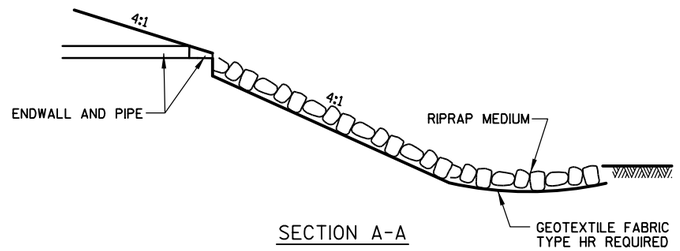


SECTION A-A

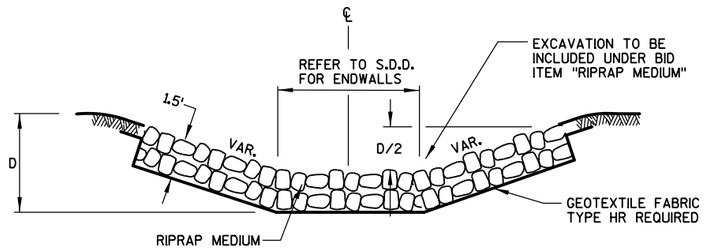
RIPRAP TREATMENT (MEDIUM) AT CULVERTS



PLAN VIEW

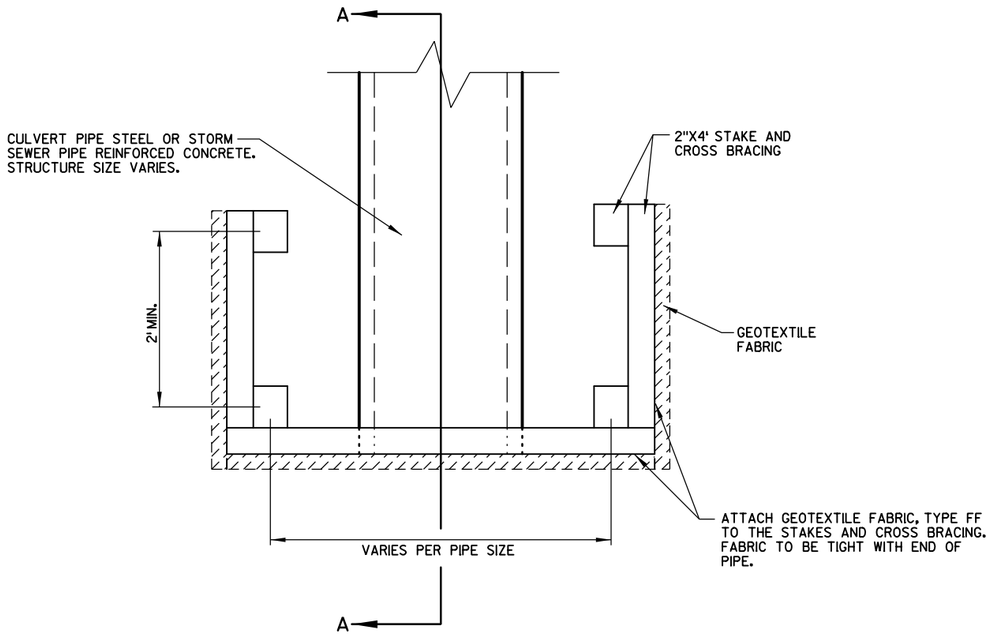


SECTION A-A



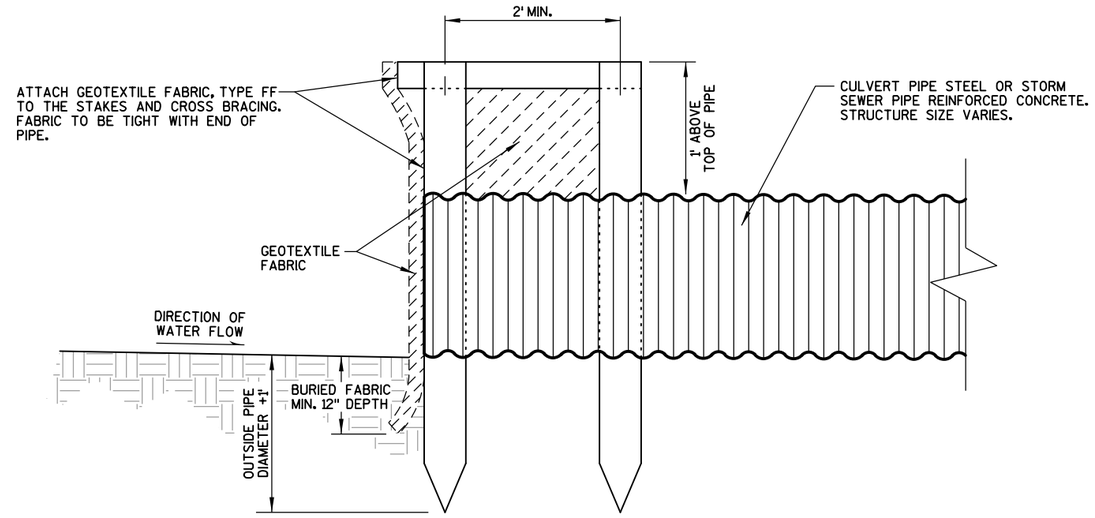
SECTION B-B

EROSION CONTROL DETAIL FOR DRAIN OUT ON HIGH FILL SECTION



PLAN VIEW

STORM SEWER PIPE REINFORCE CONCRETE SHOWN



SECTION A-A

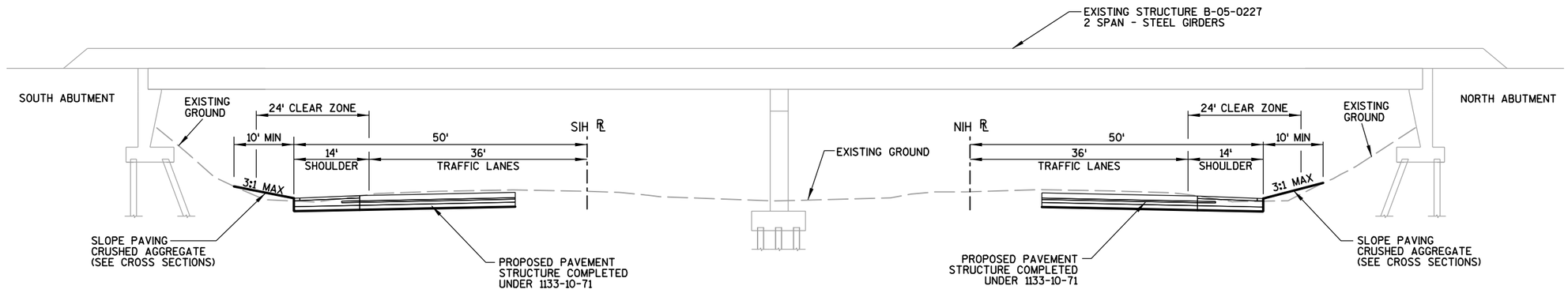
CULVERT PIPE STEEL SHOWN

DETAIL FOR INLET PROTECTION TYPE A SPECIAL FOR PIPE END

REFER TO EROSION CONTROL PLAN FOR LOCATIONS

NOTES:

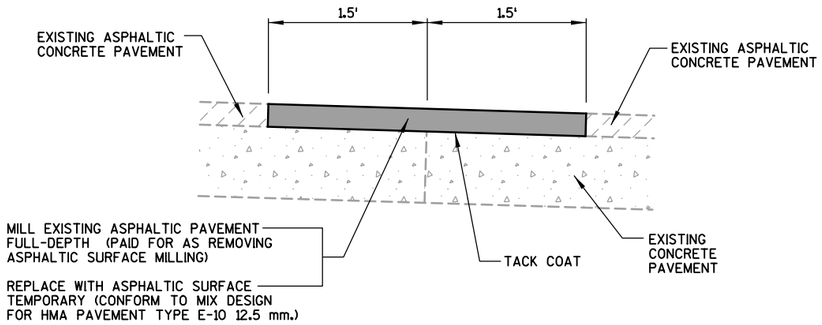
1. ITEM TO BE PAID FOR AS INLET PROTECTION TYPE A SPECIAL
2. MAINTENANCE, SEDIMENT DEPOSIT REMOVAL, AND REPLACEMENT INCIDENTAL TO ITEM INLET PROTECTION TYPE A SPECIAL



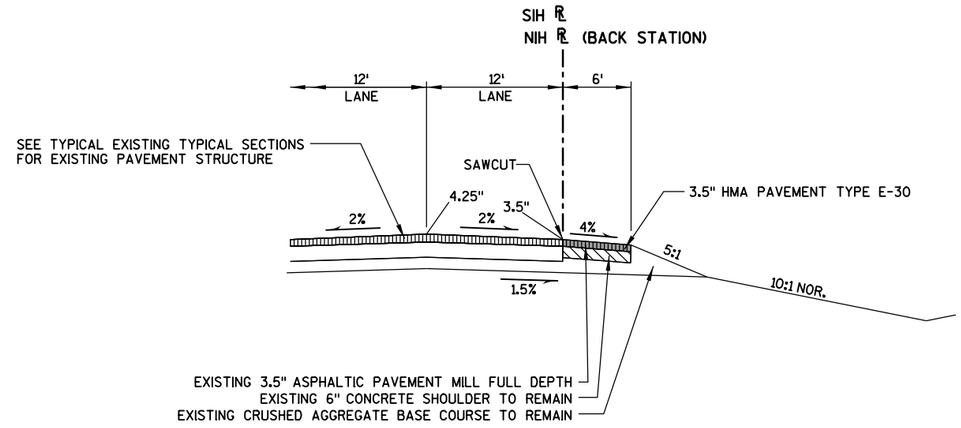
PROPOSED SLOPE PAVING UNDER EXISTING STRUCTURE B-05-0227

LOOKING WEST (NTS)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 34	E

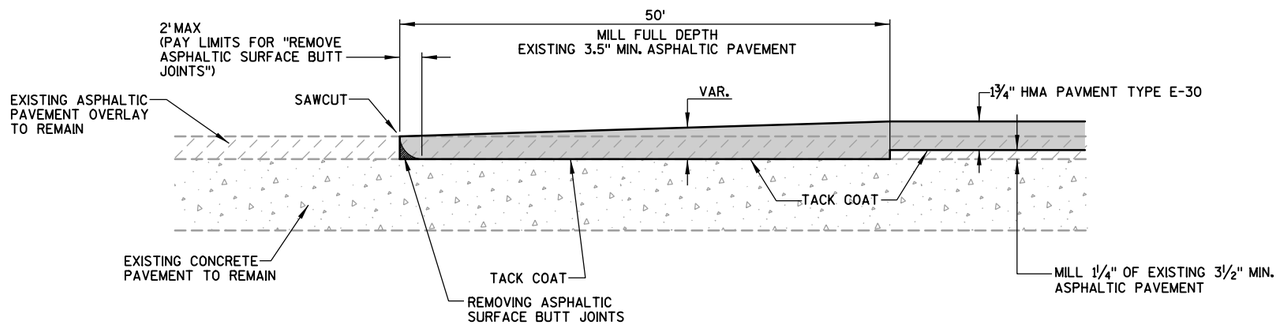


DETAIL FOR MILL & OVERLAY - 3' EXISTING JOINT OR RUMBLE STRIP



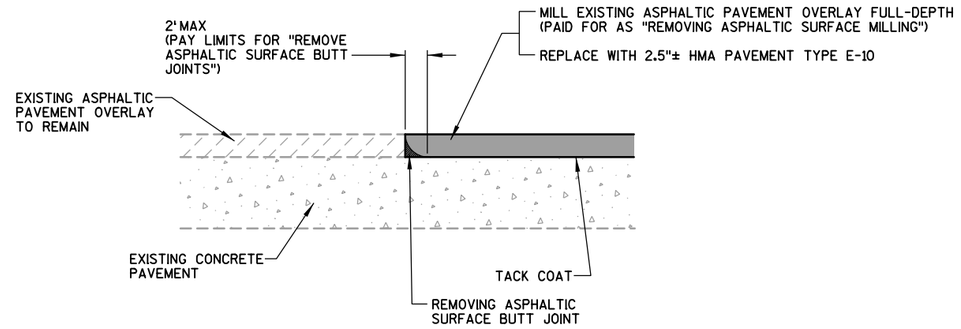
DETAIL FOR MILLING & OVERLAYING IH 43 MEDIAN SHOULDERS OUTSIDE CONSTRUCTION LIMITS FOR STAGED TRAFFIC

STA. 1122+00 SIH TO 1125+00 SIH RT
STA. 1135+50 NIH TO STA. 1141+00 NIH RT (BACK STATION)



DETAIL FOR IH 43 BUTT JOINTS FOR MILLING ASPHALTIC PAVEMENT AND HMA OVERLAY

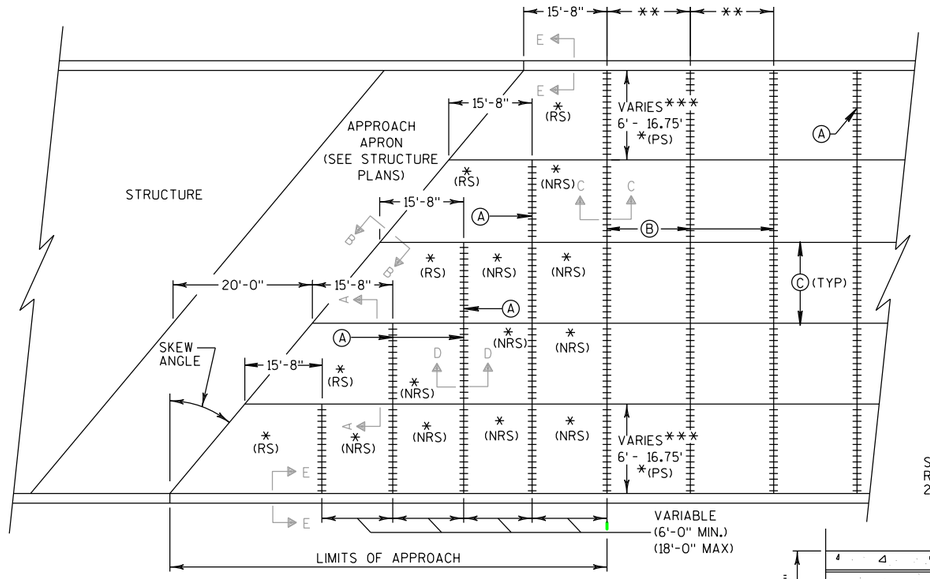
STA. 1125+00 SIH
STA. 1141+00 SIH



DETAIL FOR BUTT JOINTS FOR MILLING ASPHALTIC PAVEMENT AND HMA OVERLAY

STA. 1122+00 SIH RT
STA. 1135+50 NIH LT
TERMINIS OF MILL AND OVERLAY 3' EXISTING JOINT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 35	E



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)

*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)

*** IF > 12' ADD STANDARD LONGITUDINAL JOINT AND TIE BARS (C) 10' OFF ADJACENT LONGITUDINAL JOINT

(A) STANDARD CONTRACTION JOINT NORMAL TO R/L OR C/L
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO R/L OR C/L
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.

GENERAL NOTES

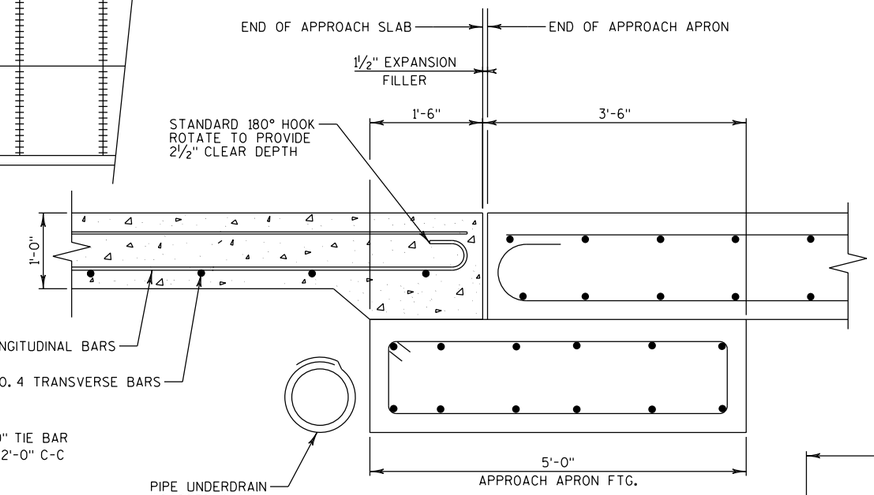
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS ARE NOT REQUIRED WHEN THE APPROACH SLAB ABUTS AN ASPHALT PAVEMENT OVER BASE COURSE.

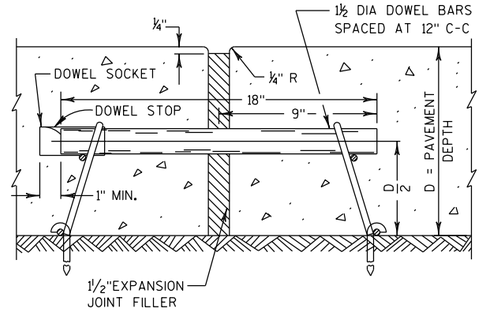
SPLICING OF NO. 6 BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP SHALL BE 20 INCHS.

(1) NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS MAY BE USED FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

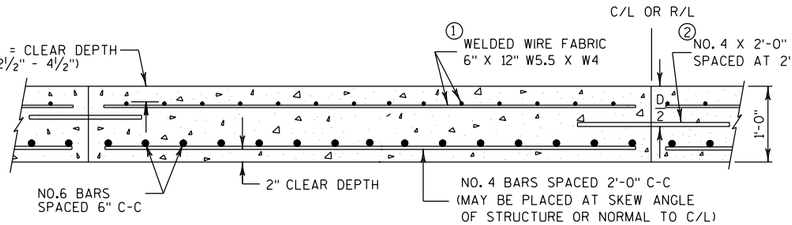
(2) TIE BARS BETWEEN REINFORCED SLABS MAY BE OMITTED WHERE SLAB REINFORCEMENT EXTEND ACCROSS THE CENTERLINE OR REFERENCE LINE.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT

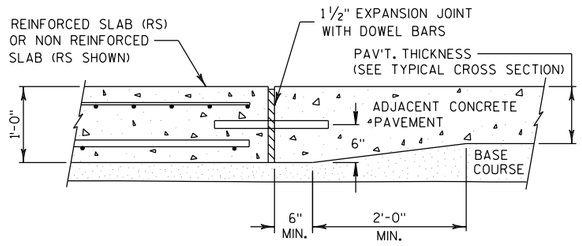


EXPANSION JOINT

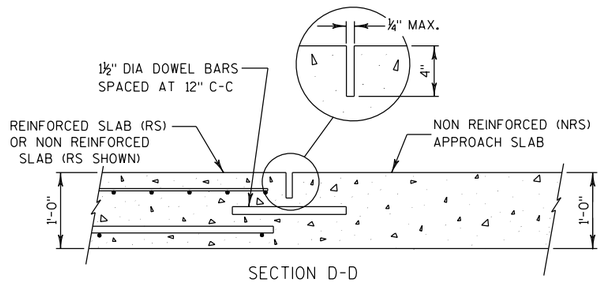


SECTION A-A

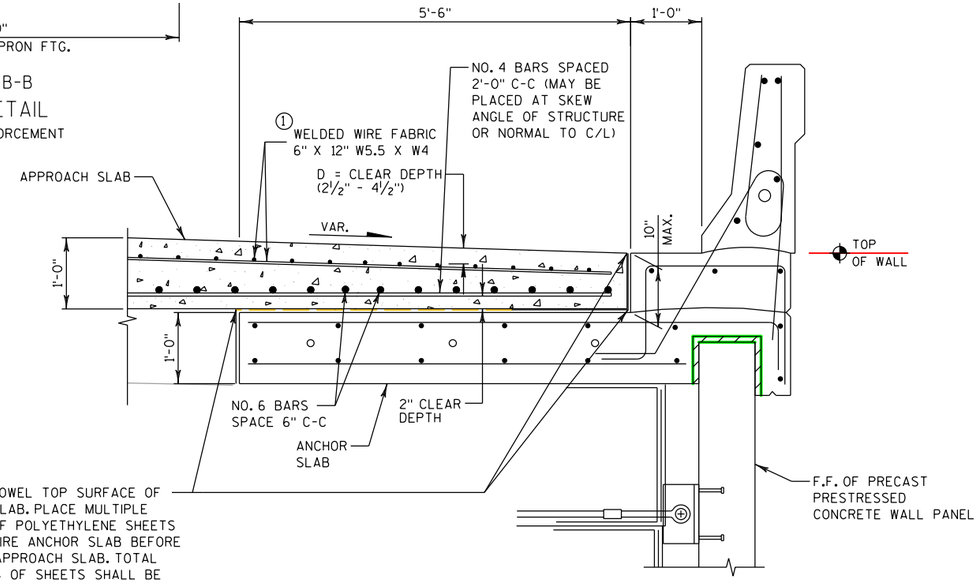
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

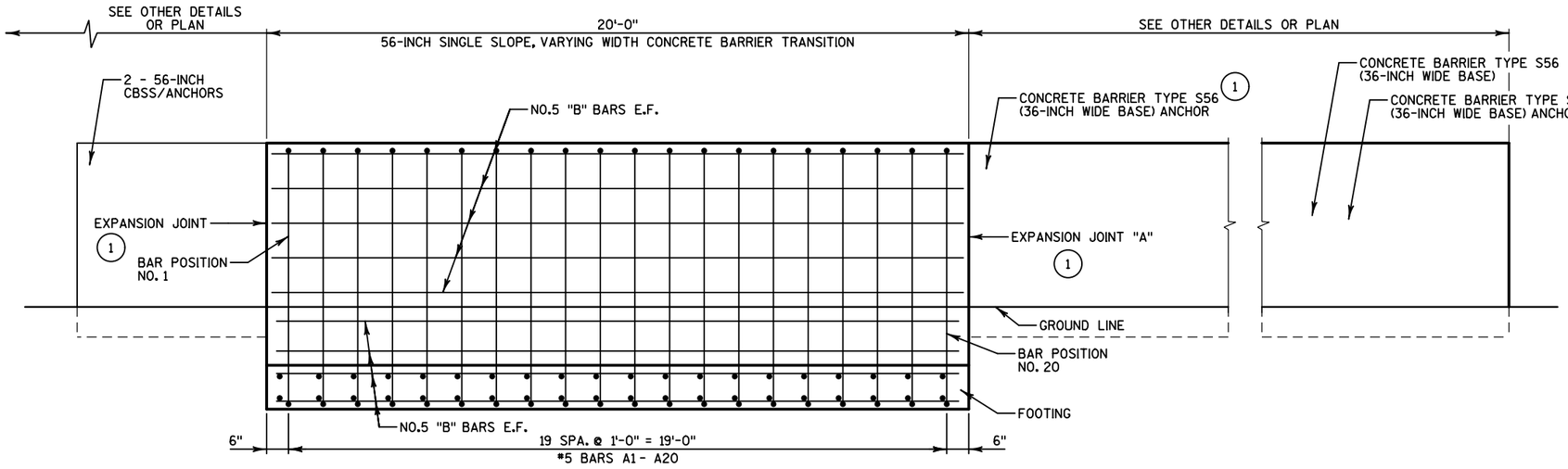


SECTION D-D
CONTRACTION JOINT

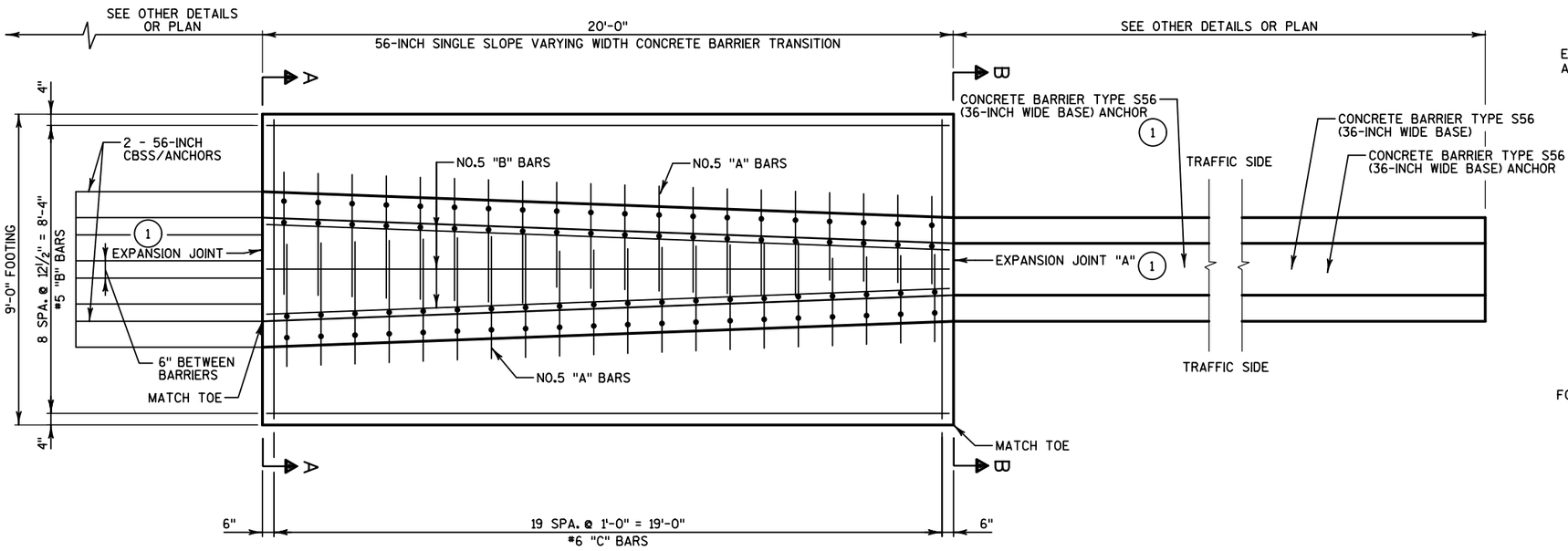


STEEL TROWEL TOP SURFACE OF ANCHOR SLAB. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ANCHOR SLAB BEFORE PLACING APPROACH SLAB. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

SECTION E-E
ADJACENT TO RETAINING WALL ANCHOR SLAB
(FIELD ADJUST TO MEET OTHER CONDITIONS SUCH AS SSCB, BARRIER TRANSITIONS, SIGN STRUCTURES, ETC. AS APPROVED BY THE ENGINEER)



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'-6" LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

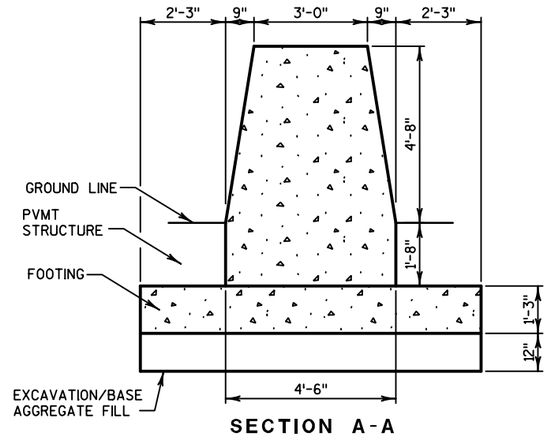
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

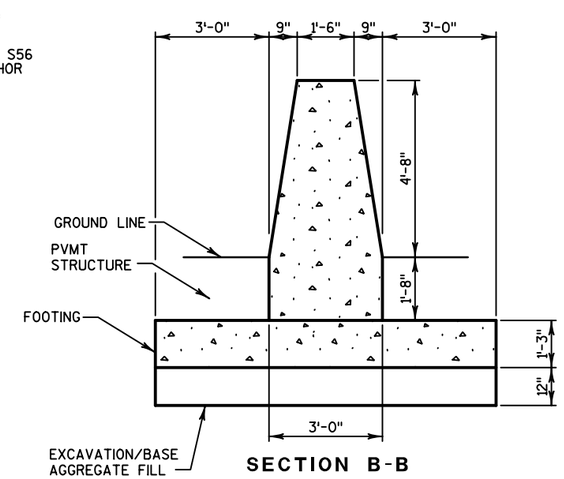
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BAR LOCATION.

3" CLEAR COVER AT BOTTOM OF FOOTING, 2" CLEAR COVER ALL OTHER FACES.

(1) EXPANSION JOINT "A" MAYBE REPLACED WITH A COLD-JOINT PROVIDED THAT 3-FEET OF LAP JOINT OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



SECTION A-A



SECTION B-B

CONCRETE BARRIER TRANSITION TYPE S56 (54-INCH WIDE BASE) TO TYPE S56 (36-INCH WIDE BASE)

56-INCH SINGLE SLOPE (54-INCH WIDE BASE) CONCRETE BARRIER TO 56-INCH SINGLE SLOPE (36-INCH WIDE BASE) CONCRETE BARRIER TRANSITION

DETAIL OF (1 OF 2)

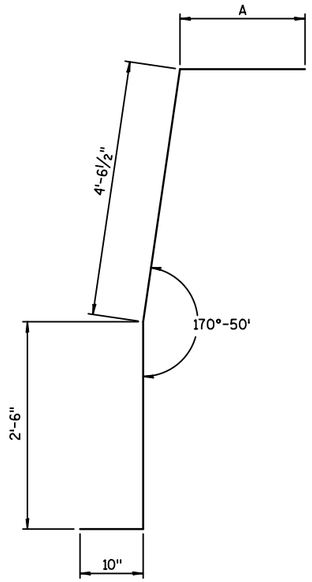
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 37	E

2

BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	40
"B"	#5	19'-8"	33
"C"	#6	8"-8"	40

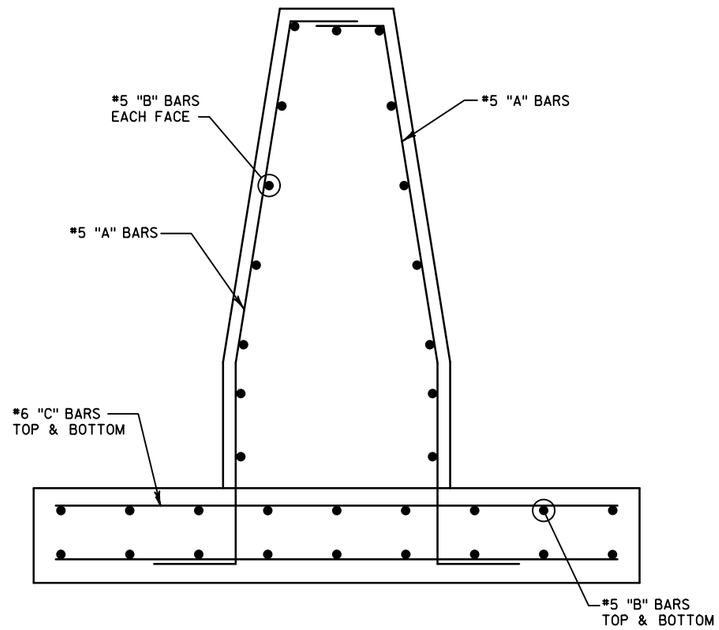
* SEE BENDING DETAIL



"A" BAR
BENDING DETAIL

"A" BAR CHART
BAR POSITIONS NO. 1 - NO. 20

BAR	A
A1 - A8	2'-0"
A9 - A16	1'-6"
A17 - A20	1'-0"



BAR DETAIL
BAR POSTIONS NO. 1 - NO. 20

CONCRETE BARRIER TRANSITION
TYPE S56 (54-INCH WIDE BASE)
TO TYPE S56 (36-INCH WIDE BASE)

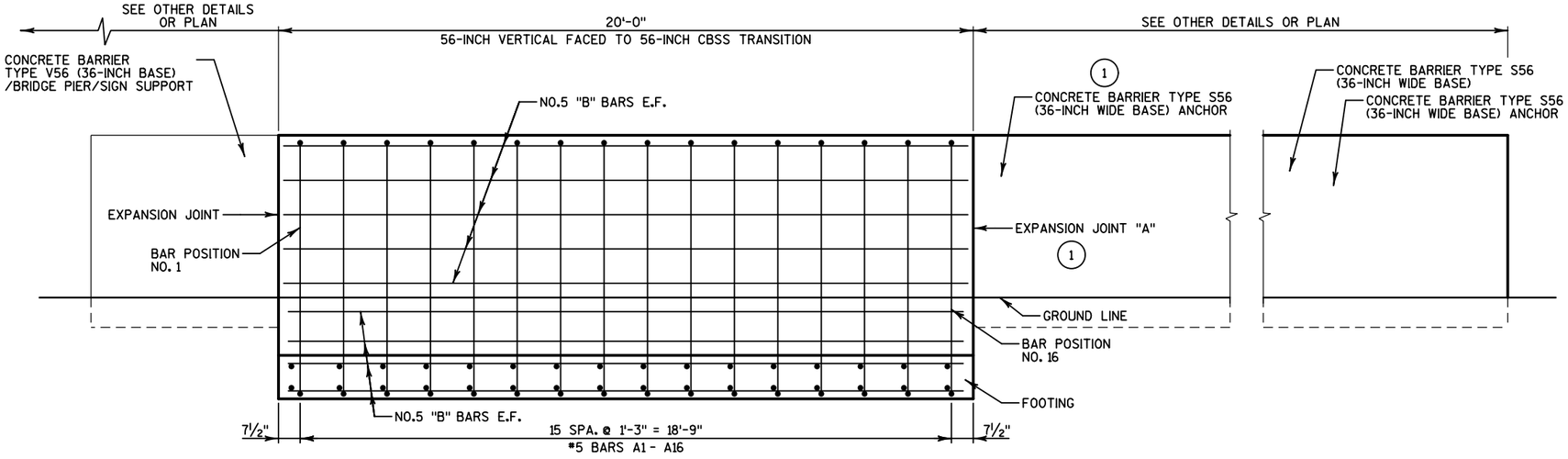
56-INCH SINGLE SLOPE (54-INCH WIDE BASE)
CONCRETE BARRIER TO
56-INCH SINGLE SLOPE (36-INCH WIDE BASE)
CONCRETE BARRIER TRANSITION

DETAIL OF (2 OF 2)

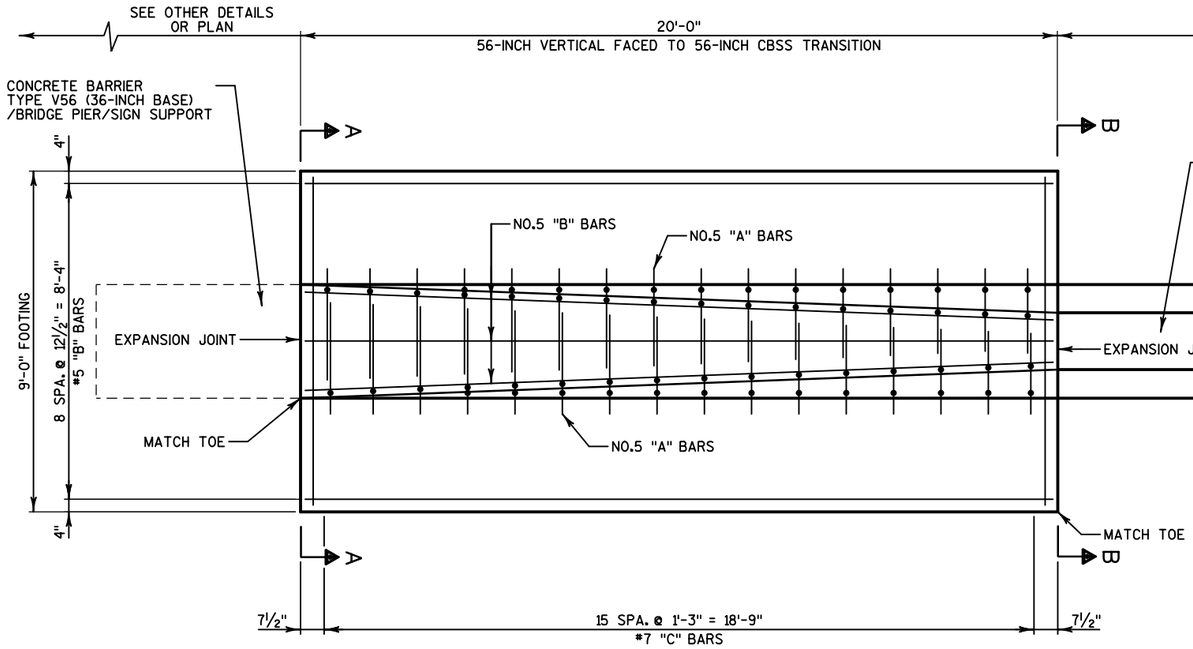
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 38	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021020_cd.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:48

WISDOT/CADDS SHEET 42



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'-6" LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

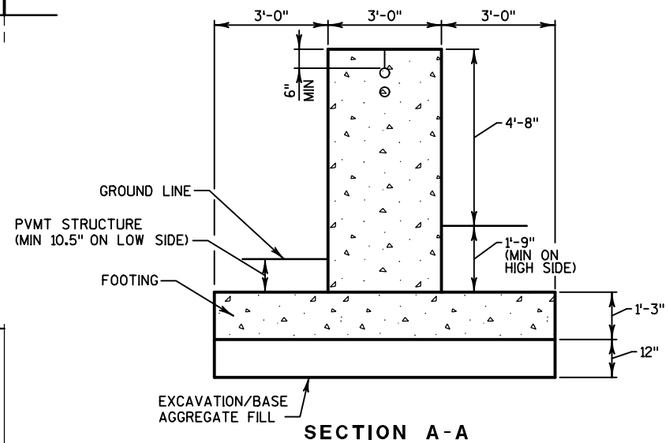
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

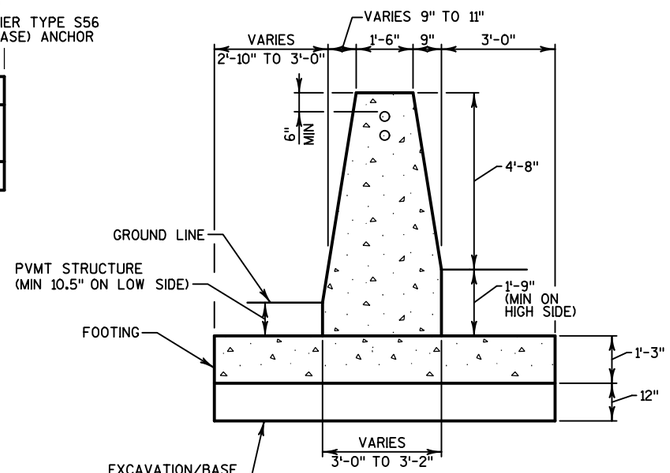
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BAR LOCATION.

3" CLEAR COVER AT BOTTOM OF FOOTING, 2" CLEAR COVER ALL OTHER FACES.

(1) EXPANSION JOINT "A" MAYBE REPLACED WITH A COLD-JOINT PROVIDED THAT 3-FEET OF LAP JOINT OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



SECTION A-A



SECTION B-B

CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (36-INCH WIDE BASE)

56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER (36-INCH WIDE BASE) TRANSITION

DETAIL OF (1 OF 2)

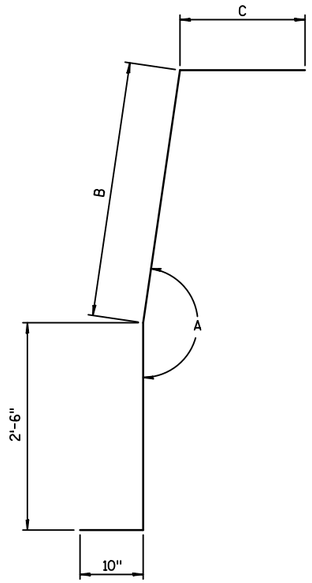
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 39	E

2

BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	32
"B"	#5	19'-8"	33
"C"	#7	8"-8"	32

* SEE BENDING DETAIL

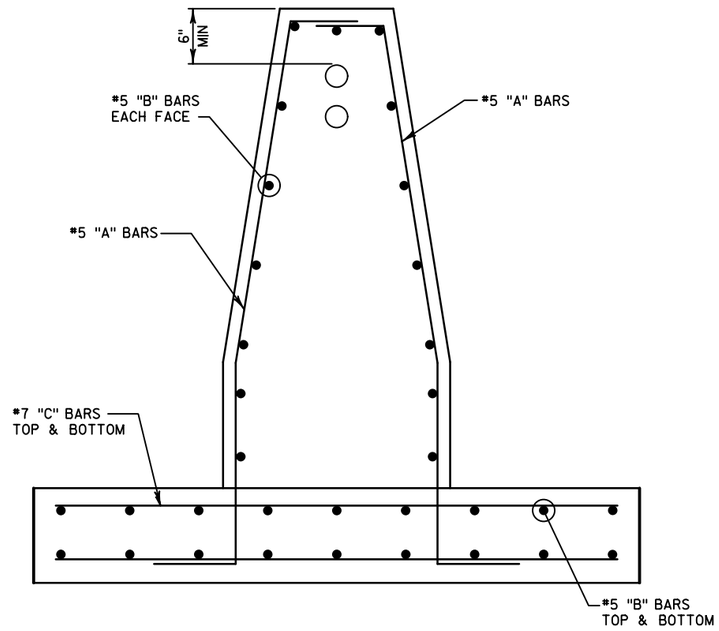


"A" BAR
BENDING DETAIL

"A" BAR CHART
BAR POSITIONS NO. 1 - NO. 16

BAR	A	B	C
A1	179°-45'	4'-6	2'-0"
A2	179°-10'	4'-6	2'-0"
A3	178°-35'	4'-6	2'-0"
A4	178°-00'	4'-6	2'-0"
A5	177°-25'	4'-6	2'-0"
A6	177°-50'	4'-6	2'-0"
A7	176°-15'	4'-6	2'-0"
A8	175°-40'	4'-6"	1'-6"

BAR	A	B	C
A9	175°-05'	4'-6	1'-6"
A10	174°-35'	4'-6	1'-6"
A11	174°-00'	4'-6	1'-6"
A12	173°-25'	4'-6	1'-6"
A13	172°-50'	4'-6½"	1'-0"
A14	172°-15'	4'-6½"	1'-0"
A15	171°-45'	4'-6½"	1'-0"
A16	171°-10'	4'-6½"	1'-0"



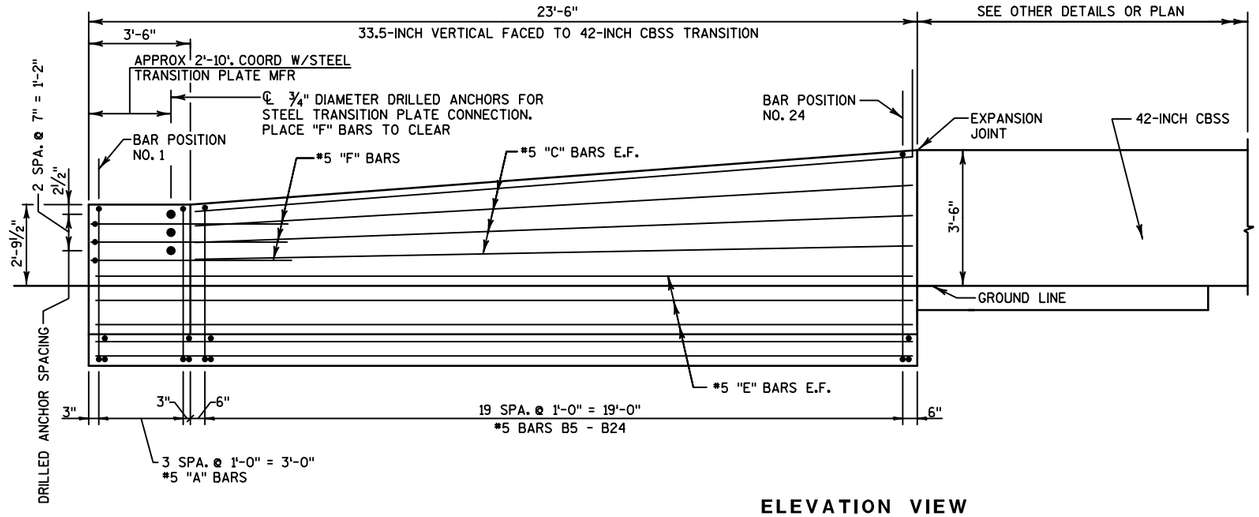
BAR DETAIL
BAR POSTIONS NO. 1 - NO. 16

CONCRETE BARRIER TRANSITION
TYPE V56 TO S56 (36-INCH WIDE BASE)

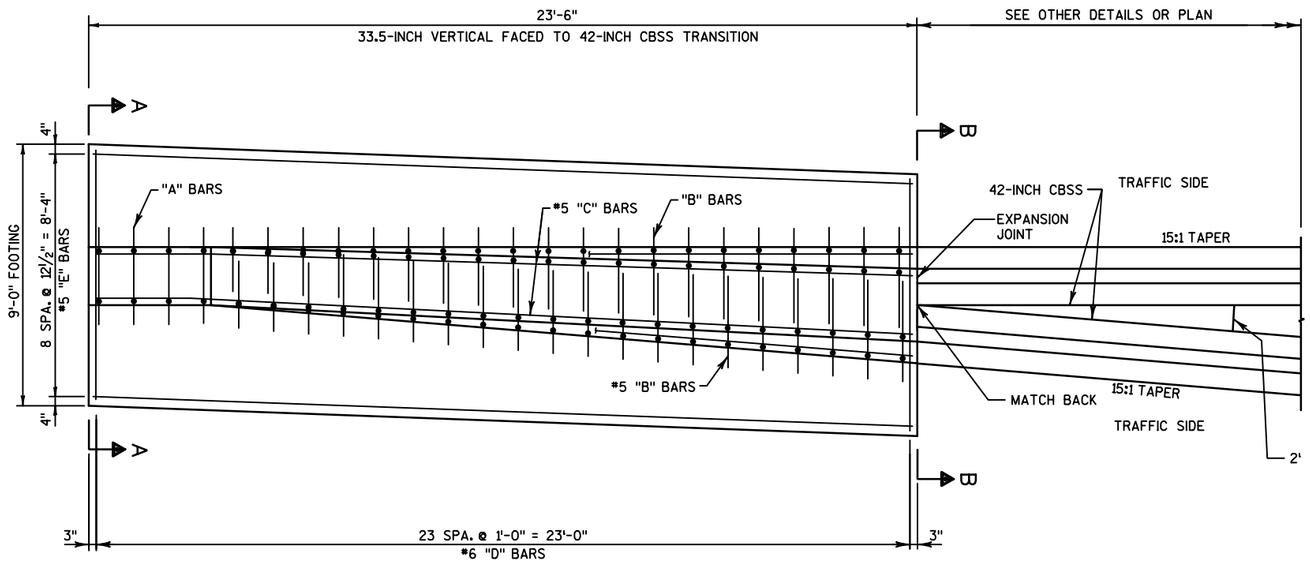
56-INCH VERTICAL SHAPE
CONCRETE BARRIER TO 56-INCH
SINGLE SLOPE CONCRETE
BARRIER (36-INCH WIDE BASE) TRANSITION

DETAIL OF (2 OF 2)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 40	E



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'-6" LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

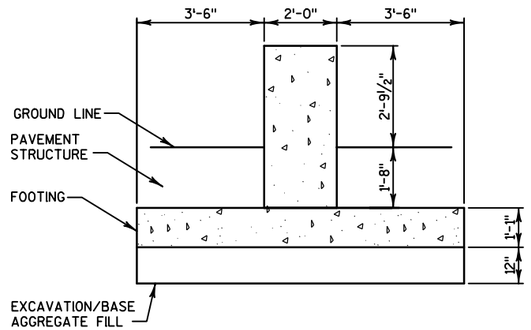
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

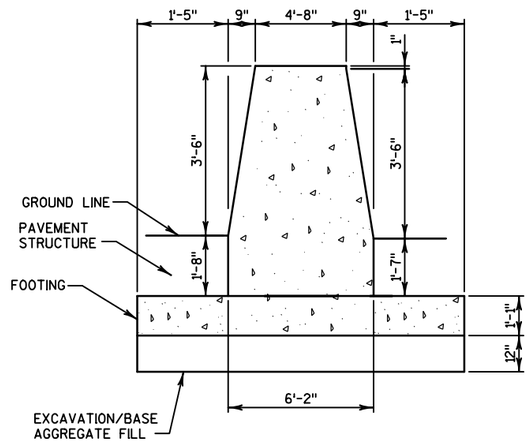
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BAR LOCATION.

3" CLEAR COVER AT BOTTOM OF FOOTING, 2" CLEAR COVER ALL OTHER FACES.

TAPER RATES ARE GIVEN IN RELATION TO THE ROADWAY REFERENCE LINE.



SECTION A-A



SECTION B-B

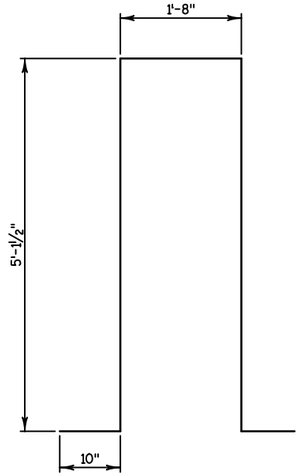
CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 41	E

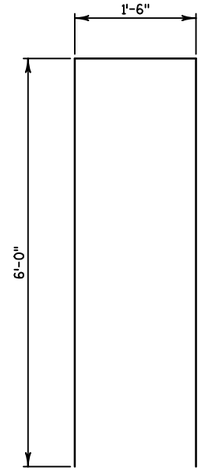
BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	4
"B"	#5	*	40
"C"	#5	19'-8"	8
"D"	#6	8"-8"	48
"E"	#5	23'-2"	24
"F"	#5	*	3

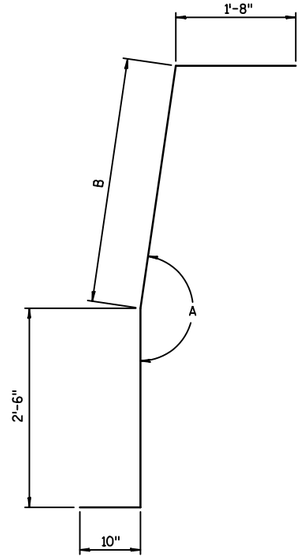
* SEE BENDING DETAIL



"A" BAR
BENDING DETAIL



"F" BAR
BENDING DETAIL



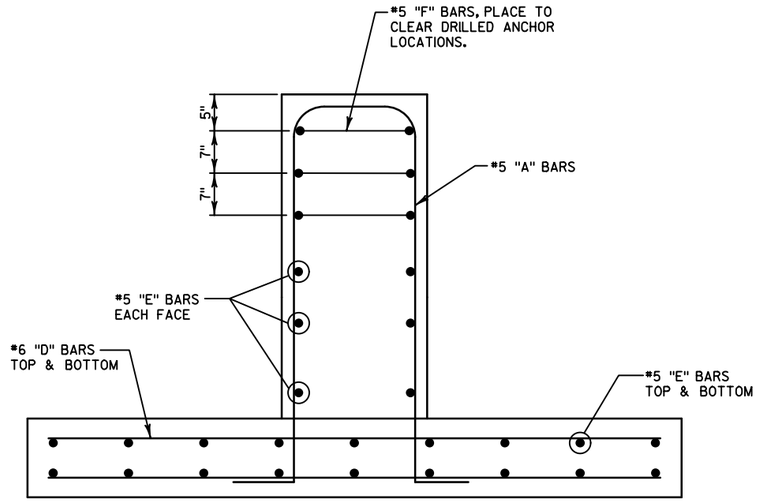
"B" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS NO. 5 - NO. 24

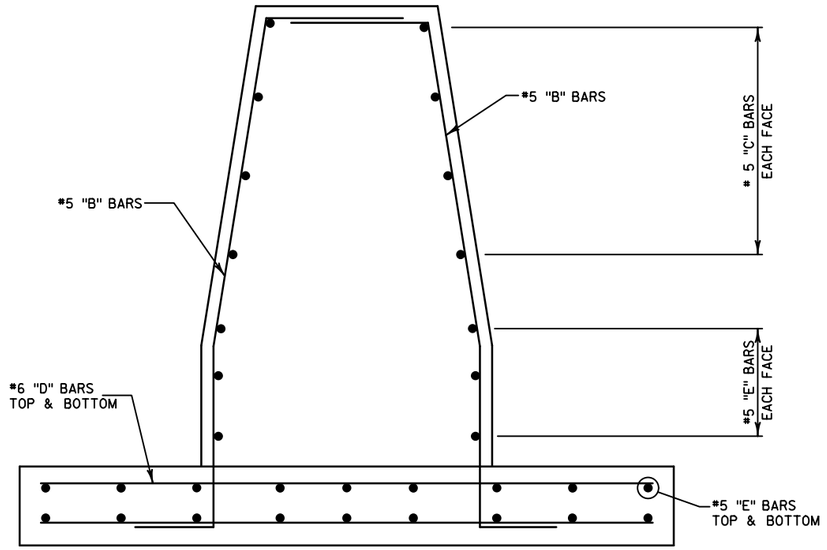
BAR	A	B
B5	179°-40'	2'-8"
B6	179°-05'	2'-8"
B7	178°-30'	2'-8½"
B8	177°-55'	2'-9"
B9	177°-15'	2'-9½"
B10	176°-40'	2'-10"
B11	176°-05'	2'-10½"
B12	175°-30'	2'-11"

BAR	A	B
B13	174°-50'	2'-11½"
B14	174°-15'	3'-0"
B15	173°-40'	3'-0½"
B16	173°-00'	3'-1"
B17	172°-25'	3'-1½"
B18	171°-50'	3'-2"
B19	171°-15'	3'-2½"
B20	170°-40'	3'-3"

BAR	A	B
B21	170°-00'	3'-3½"
B22	169°-25'	3'-4"
B23	168°-50'	3'-4½"
B24	168°-10'	3'-5"



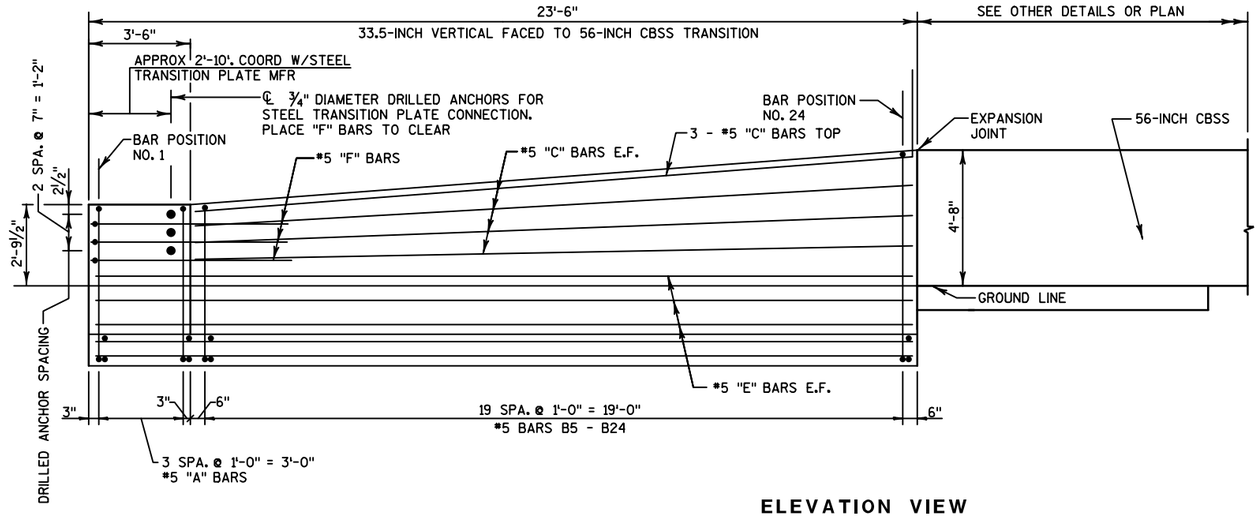
BAR DETAIL
BAR POSTIONS NO. 1 - NO. 4



BAR DETAIL
BAR POSTIONS NO. 5 - NO. 24

CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 42	E



ELEVATION VIEW

PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'-6" LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

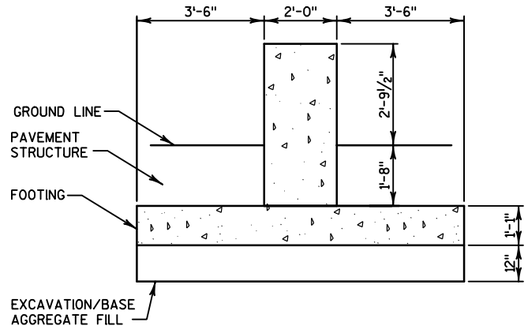
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

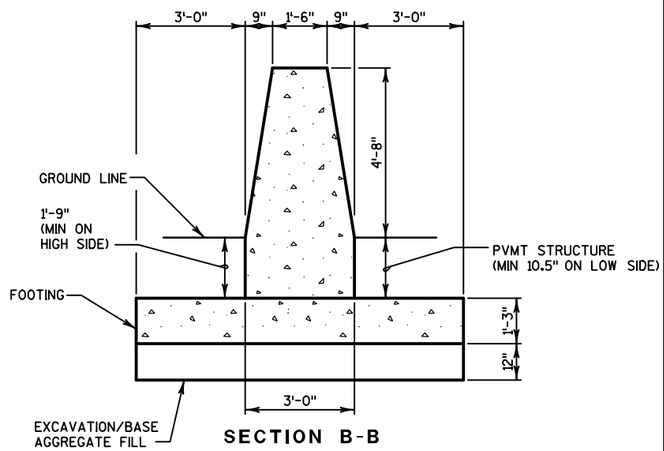
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BAR LOCATION.

3" CLEAR COVER AT BOTTOM OF FOOTING, 2" CLEAR COVER ALL OTHER FACES.

TAPER RATES ARE GIVEN IN RELATION TO THE ROADWAY REFERENCE LINE.



SECTION A-A



SECTION B-B

CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 43	E

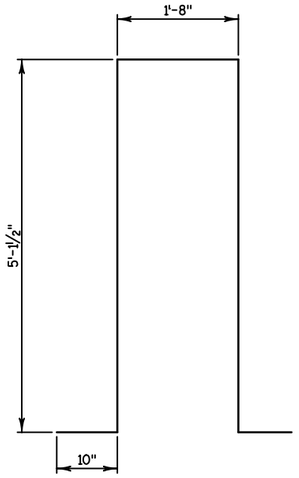
2

2

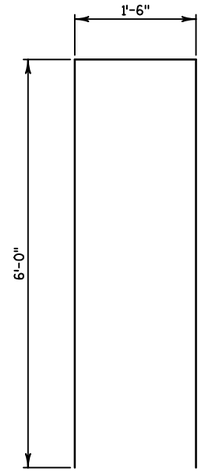
BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	4
"B"	#5	*	40
"C"	#5	19'-8"	8
"D"	#6	8"-8"	48
"E"	#5	23'-2"	24
"F"	#5	*	3

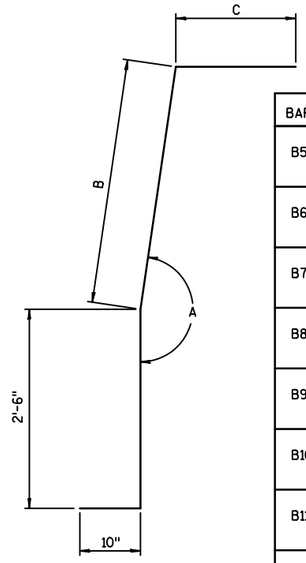
* SEE BENDING DETAIL



"A" BAR
BENDING DETAIL



"F" BAR
BENDING DETAIL



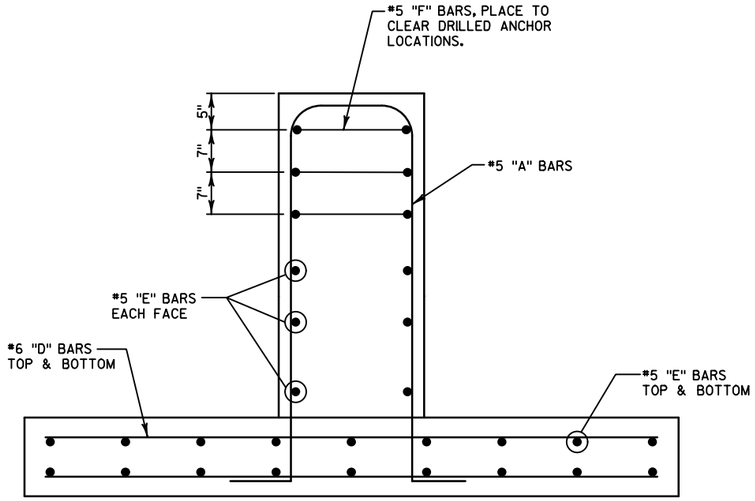
"B" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS NO. 5 - NO. 24

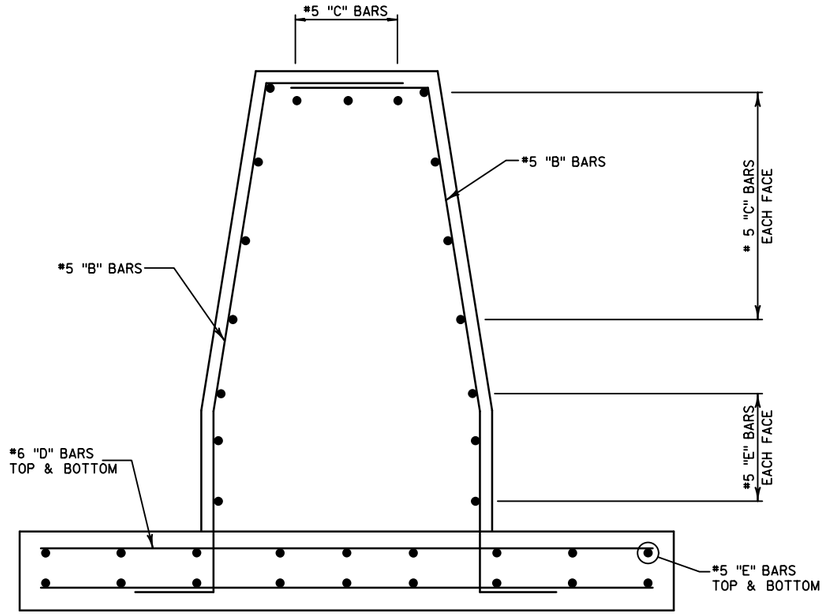
BAR	A	B	C
B5	179°-40'	2'-8"	1'-8"
B6	179°-05'	2'-8"	1'-8"
B7	178°-30'	2'-9"	1'-8"
B8	177°-55'	2'-10½"	1'-8"
B9	177°-15'	2'-11½"	1'-6"
B10	176°-40'	3'-1"	1'-6"
B11	176°-05'	3'-2"	1'-6"
B12	175°-30'	3'-3½"	1'-6"

BAR	A	B	C
B13	174°-50'	3'-4½"	1'-6"
B14	174°-15'	3'-6"	1'-6"
B15	173°-40'	3'-7"	1'-4"
B16	173°-00'	3'-8½"	1'-4"
B17	172°-25'	3'-9½"	1'-4"
B18	171°-50'	3'-11"	1'-4"
B19	171°-15'	4'-0"	1'-4"
B20	170°-40'	4'-1½"	1'-0"

BAR	A	B	C
B21	170°-00'	4'-2½"	1'-0"
B22	169°-25'	4'-4"	1'-0"
B23	168°-50'	4'-5"	1'-0"
B24	168°-10'	4'-6½"	1'-0"

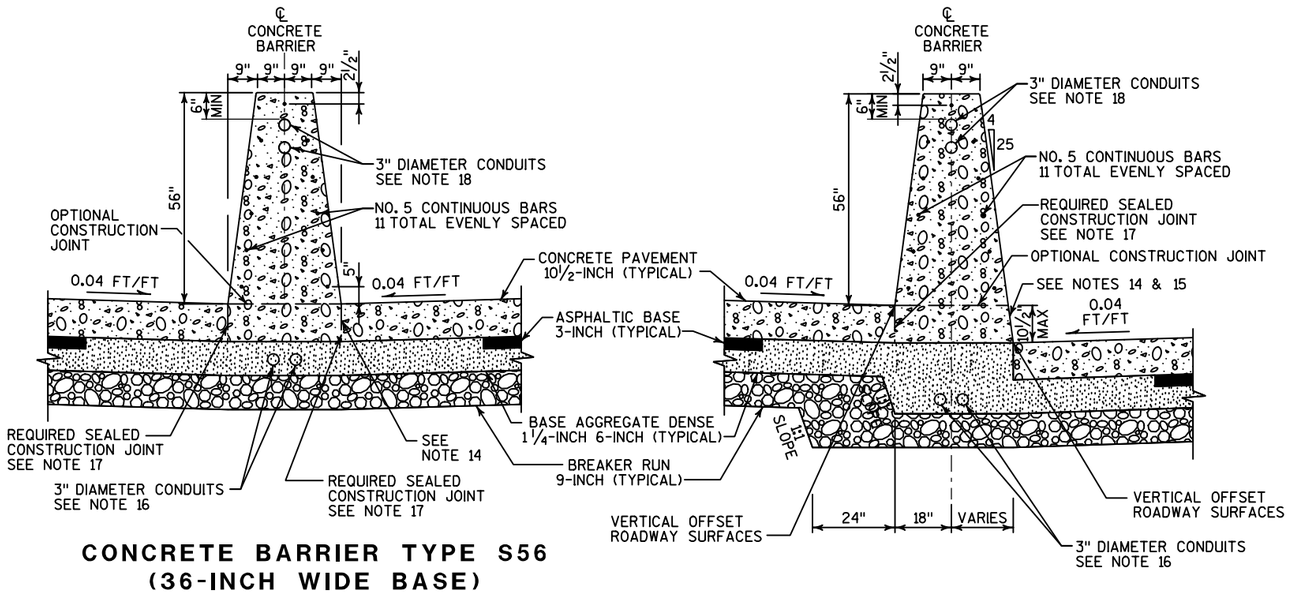


BAR DETAIL
BAR POSTIONS NO. 1 - NO. 4



BAR DETAIL
BAR POSTIONS NO. 5 - NO. 24

CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK

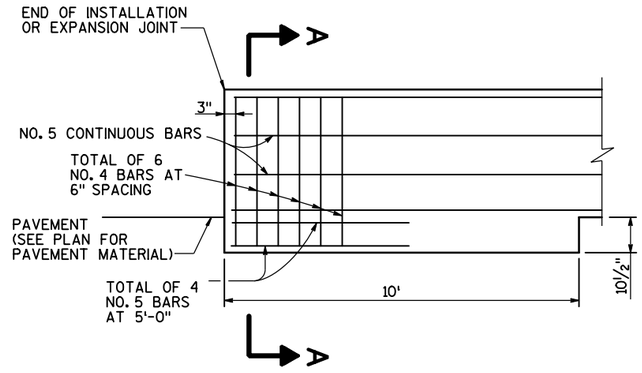


CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE)

(BETWEEN ADJACENT ROADWAYS)

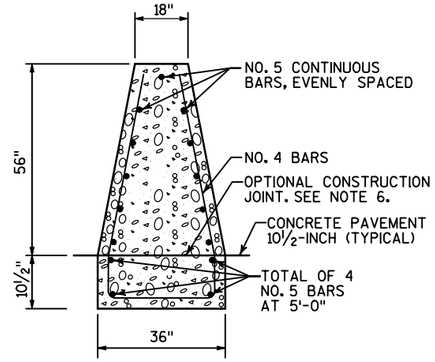
CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE)

(IN SPLIT PROFILE LOCATIONS)
(BETWEEN ADJACENT ROADWAYS)
(DRAWN AT MAXIMUM ELEVATION DIFFERENCE LOCATION)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT
(ELEVATION VIEW)



SECTION A-A

MONOLITHIC CONCRETE BARRIER END ANCHOR

NOTES

1) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE CONCRETE BARRIER SINGLE SLOPE SDD.

2) EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.

3) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 10½" CONCRETE BARRIER TYPE S56A REQUIRED, SEE DETAIL.

4) PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

5) EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED.

6) FOR TYPE S56 (36-INCH WIDE BASE) MONOLITHIC BASE OR DOWELED BASE WITH 2-#8 X 8" @ 2'-0".

7) STAGGER LAPPING OF LONGITUDINAL STEEL, MINIMUM OVERLAP OF STEEL 2 FEET, BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

8) 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

9) WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PAST OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSE STEEL INTO NEXT POURS REINFORCEMENT, LAPS TO BE FIRMLY TIED.

10) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

11) 2" CLEAR COVER TYPICAL.

12) COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED, LAPS TO BE FIRMLY TIED.

13) ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHORS INCIDENTAL TO CONCRETE BARRIER TYPE S56.

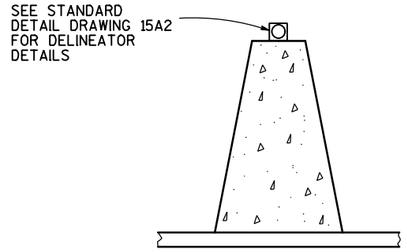
14) CONCRETE PAVEMENT BELOW BARRIER IS INCIDENTAL TO CONCRETE BARRIER TYPE S56.

15) EDGE OF CONCRETE IN SPLIT PROFILE LOCATIONS SHALL BE SLOPED @ 4/25 SLOPE.

16) SEE PLANS FOR CONDUIT(S) LOCATION, PROVIDE CONDUIT(S) WHEN CALLED FOR IN THE PLAN. CENTER CONDUIT(S) HORIZONTALLY ON BARRIER CENTERLINE. ENSURE THAT CONDUIT(S) ARE ENCAPSULATED IN THE BASE AGGREGATE DENSE (BAD) LAYER SO THAT THERE IS BAD MATERIAL BOTH ABOVE AND BELOW THE CONDUIT(S).

17) SEE SPECIFICATIONS FOR CONSTRUCTION JOINT OPTION. SAW CUTTING AND SEALING IS INCIDENTAL TO BARRIER ITEM.

18) SEE LIGHTING PLANS FOR LOCATIONS OF CONDUIT(S) EMBEDDED IN BARRIER. THIS IS FOR SPECIAL SITUATIONS ONLY. TYPICAL CONDUIT(S) LOCATION IS IN THE BASE AGGREGATE DENSE LAYER AS SHOWN. GAP BETWEEN CONDUIT(S) EMBEDDED IN BARRIER IS AT CONTRACTOR PREFERENCE.



DELINEATION

DELINEATOR SPACING ON HORIZONTAL CURVES

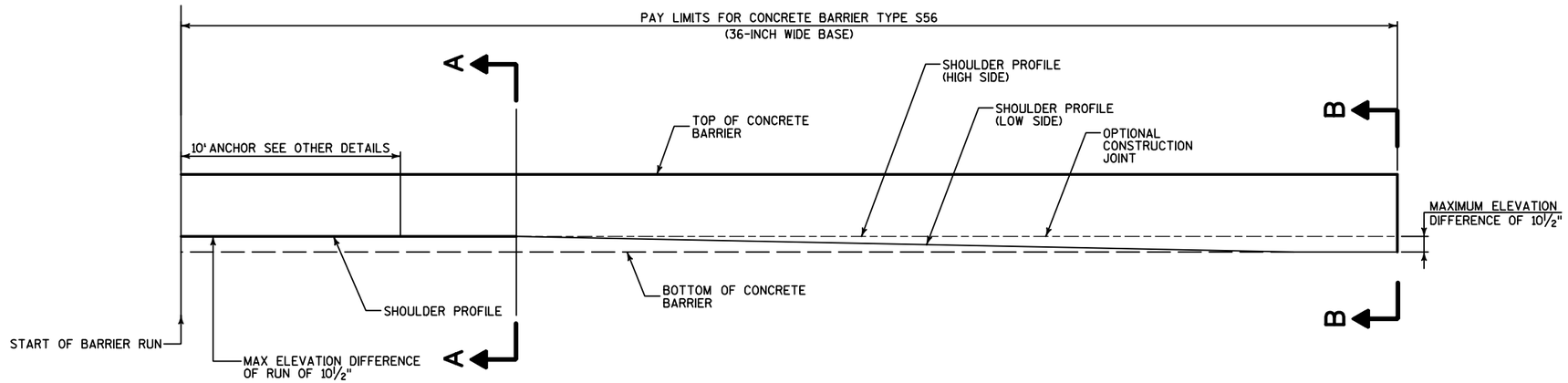
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

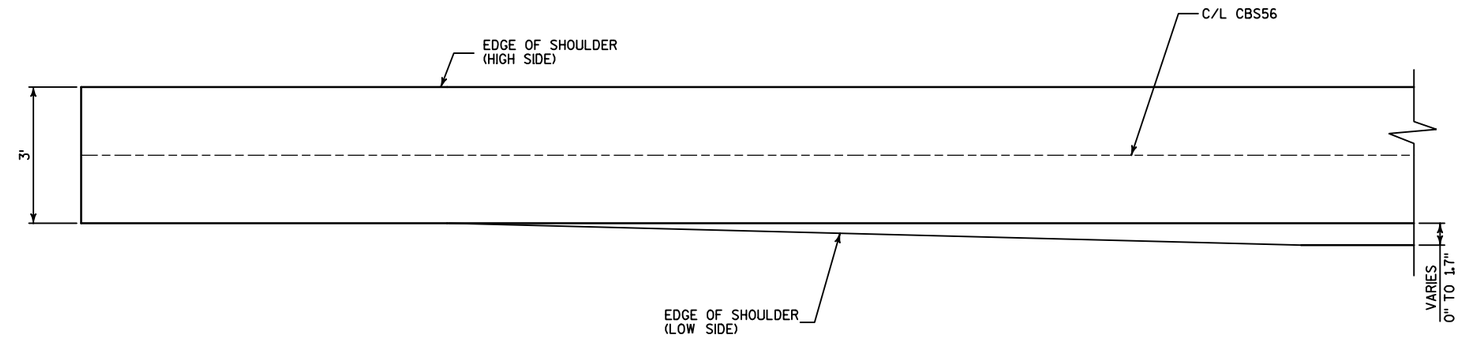
	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

IF BARRIER RUN IS LONGER THAN 1000' USE 200' DELINEATOR SPACING.

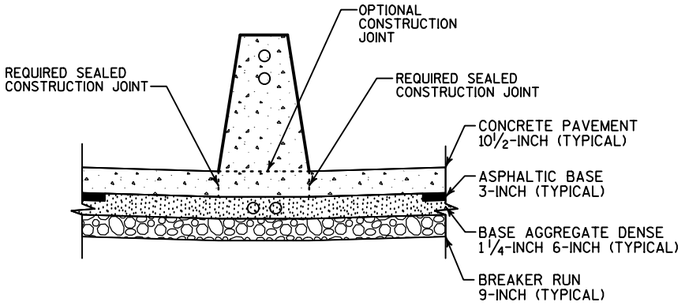
DETAIL (1 OF 2)



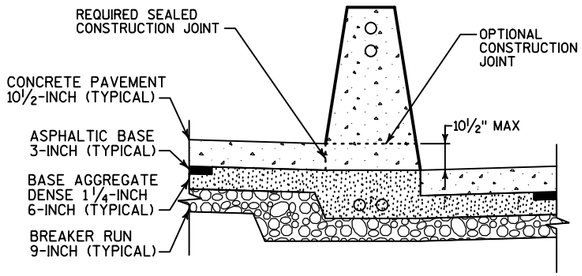
ELEVATION VIEW



PLAN VIEW



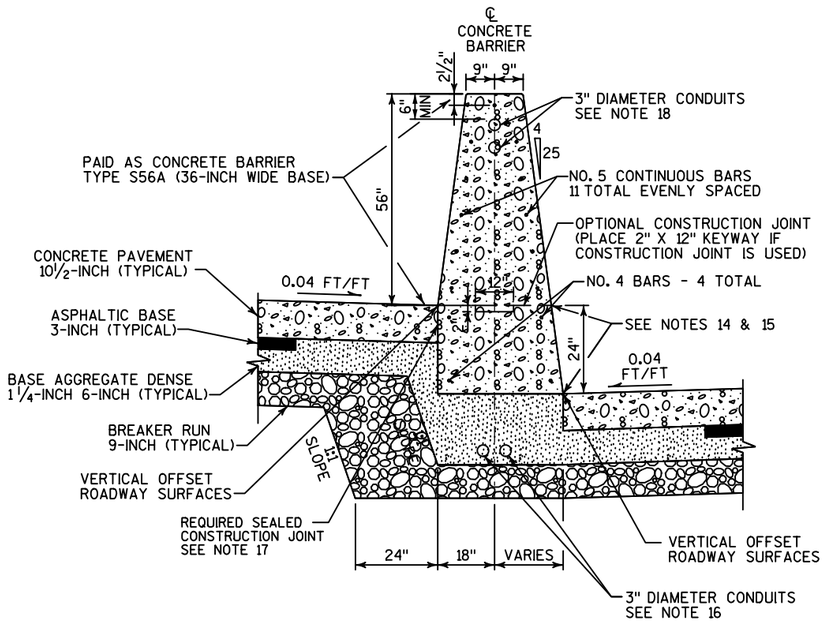
SECTION A-A



SECTION B-B

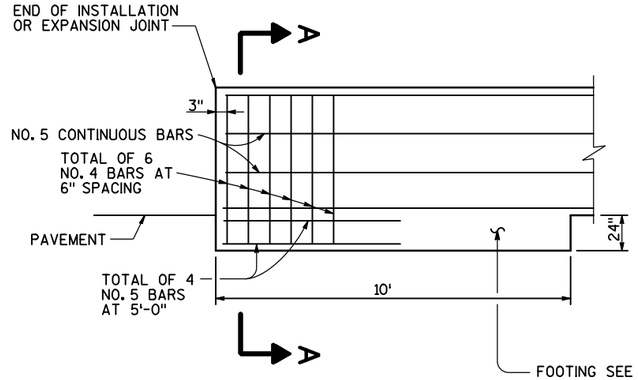
CONCRETE BARRIER TYPE S56
(36-INCH WIDE BASE)
(IN SPLIT PROFILE LOCATIONS)

DETAIL (2 OF 2)



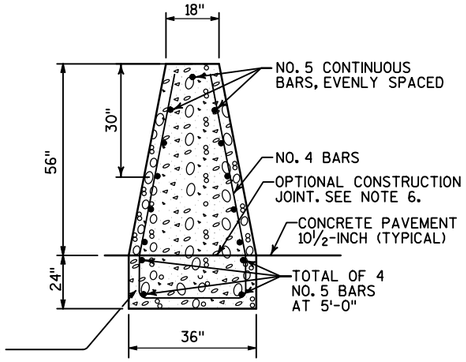
CONCRETE BARRIER TYPE S56A (36-INCH WIDE BASE)

(SPLIT PROFILE - RETAINING WALL)
(BETWEEN ADJACENT ROADWAYS)
(DRAWN AT MAXIMUM ELEVATION DIFFERENCE LOCATION)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT
(ELEVATION VIEW)



SECTION A-A

MONOLITHIC CONCRETE
BARRIER END ANCHOR

NOTES

1) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE CONCRETE BARRIER SINGLE SLOPE SDD.

2) EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.

3) PLACE WHERE VERTICAL ROADWAY OFFSET IS BETWEEN 10½" AND 24".

4) PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

5) EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRUP NOT REQUIRED.

6) FOR TYPE S56A (36-INCH WIDE BASE) MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 X 8" @ 2'-0".

7) STAGGER LAPPING OF LONGITUDINAL STEEL, MINIMUM OVERLAP OF STEEL 2 FEET, BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

8) 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

9) WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PAST OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSE STEEL INTO NEXT POURS REINFORCEMENT, LAPS TO BE FIRMLY TIED.

10) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

11) 2" CLEAR COVER TYPICAL.

12) COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED, LAPS TO BE FIRMLY TIED.

13) ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHORS INCIDENTAL TO CONCRETE BARRIER TYPE S56A.

14) CONCRETE FOOTING AT BASE OF BARRIER IS INCIDENTAL TO CONCRETE BARRIER TYPE S56A.

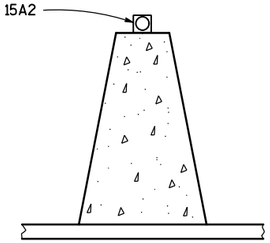
15) EDGE OF CONCRETE SHALL BE SLOPED @ 4/25 SLOPE.

16) SEE PLANS FOR CONDUIT(S) LOCATION. PROVIDE CONDUIT(S) WHEN CALLED FOR IN THE PLAN. CENTER CONDUIT(S) HORIZONTALLY ON BARRIER CENTERLINE. ENSURE THAT CONDUIT(S) ARE ENCAPSULATED IN THE BASE AGGREGATE DENSE (BAD) LAYER SO THAT THERE IS BAD MATERIAL BOTH ABOVE AND BELOW THE CONDUIT(S)

17) SEE SPECIFICATIONS FOR CONSTRUCTION JOINT OPTION. SAW CUTTING AND SEALING IS INCIDENTAL TO BARRIER ITEM.

18) SEE LIGHTING PLAN FOR LOCATIONS OF CONDUIT(S) EMBEDDED IN BARRIER. THIS IS FOR SPECIAL SITUATIONS ONLY. TYPICAL CONDUIT(S) LOCATION IS IN THE BASE AGGREGATE DENSE LAYER AS SHOWN. GAP BETWEEN CONDUIT(S) EMBEDDED IN BARRIER IS AT CONTRACTOR PREFERENCE.

SEE STANDARD
DETAIL DRAWING 15A2
FOR DELINEATOR
DETAILS



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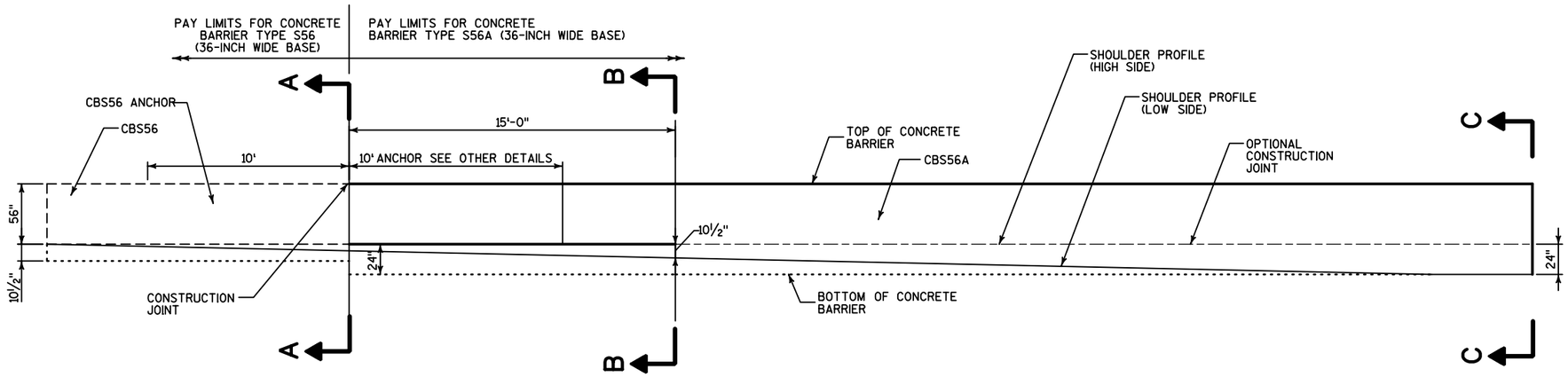
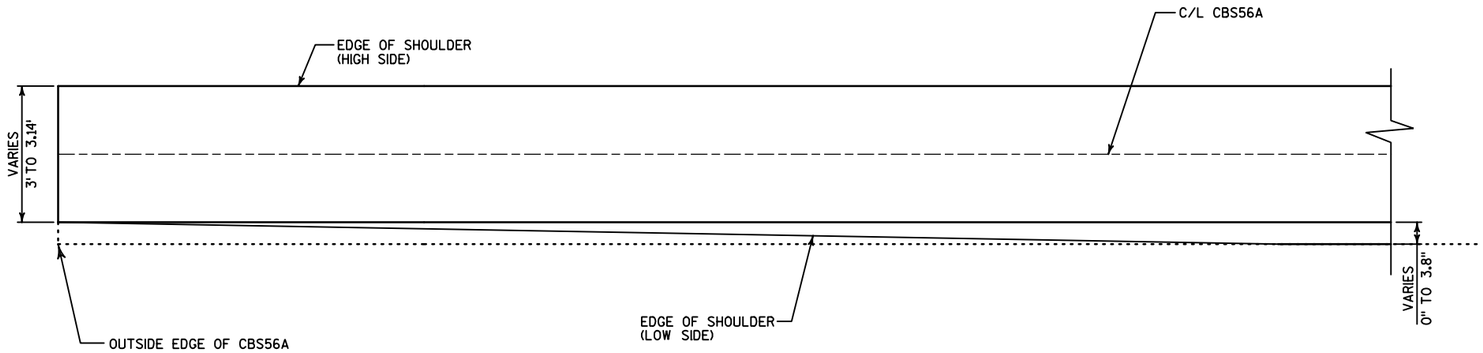
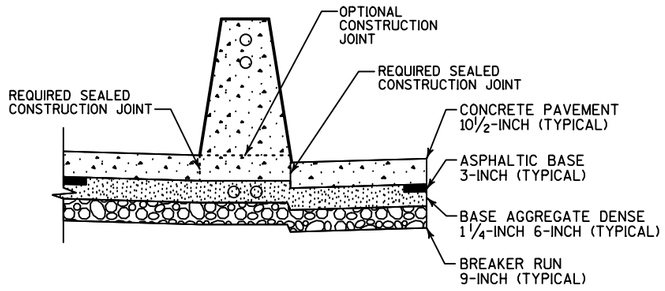
DETAIL (1 OF 2)



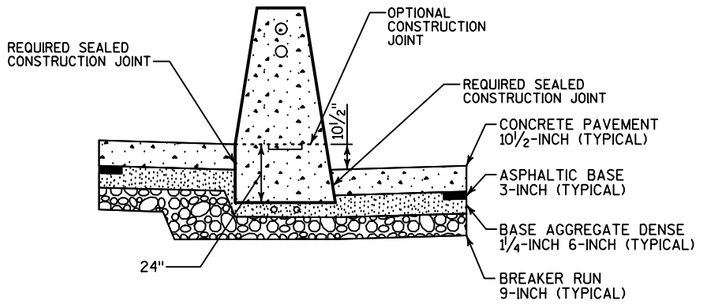
ELEVATION VIEW



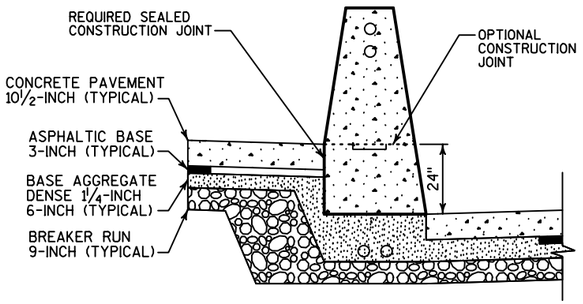
PLAN VIEW



SECTION A-A



SECTION B-B



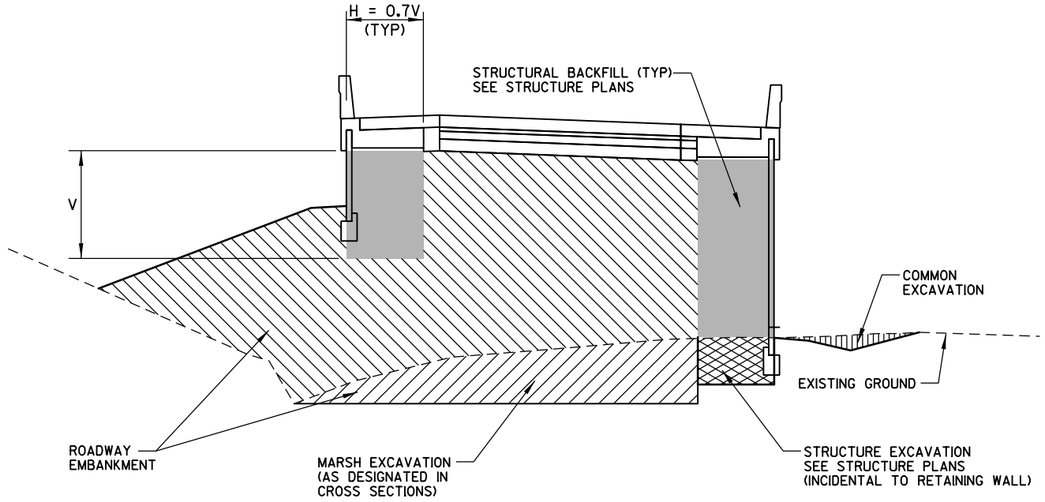
SECTION C-C

TRANSITION TO CBSS CLASS A
(TYPE S56A)(36-INCH WIDE BASE)

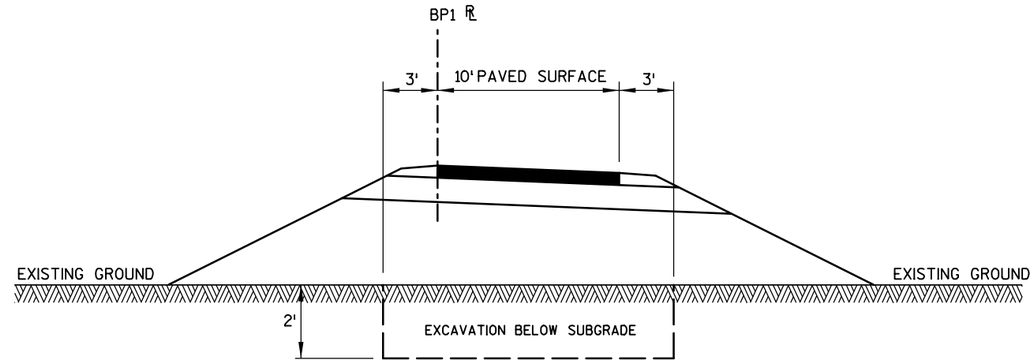
DETAIL (2 OF 2)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 48	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021030_cd.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:20



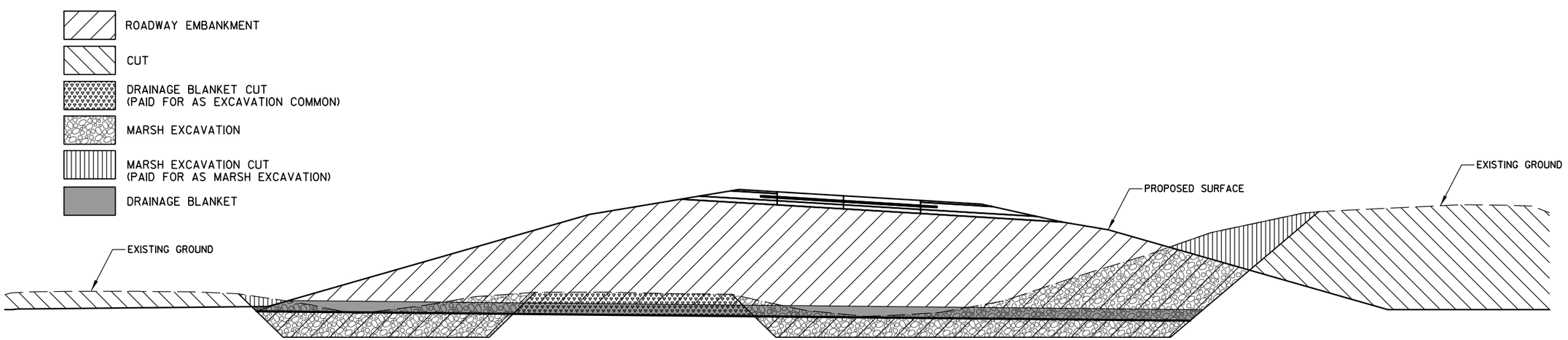
DETAIL FOR EARTHWORK MEASUREMENT AT FILL AREAS WITH RETAINING WALLS



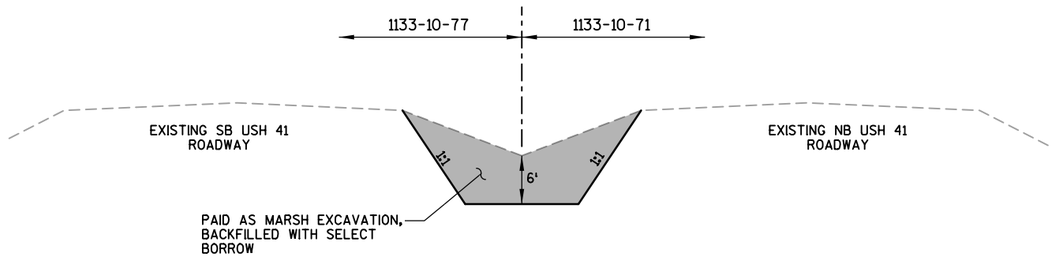
EXCAVATION BELOW SUBGRADE ON SHARED USE PATH

STA. 13+50 BP1 TO STA. 14+50 BP1

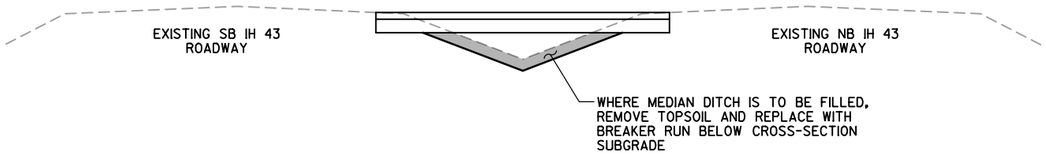
2



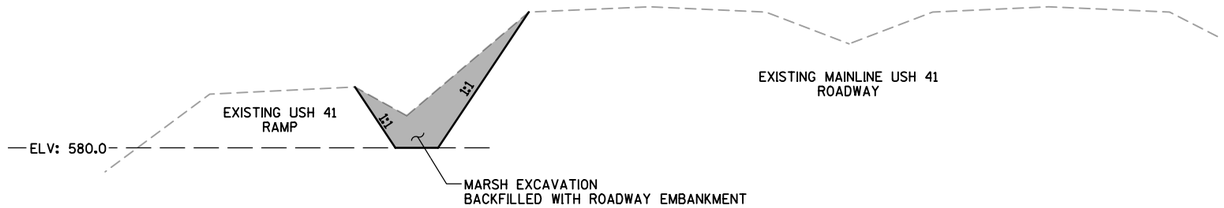
DETAIL FOR EARTHWORK MEASUREMENT AT FILL AREAS WITH STRIP DRAINS



USH 41 NORTH OF DUCK CREEK - MEDIAN

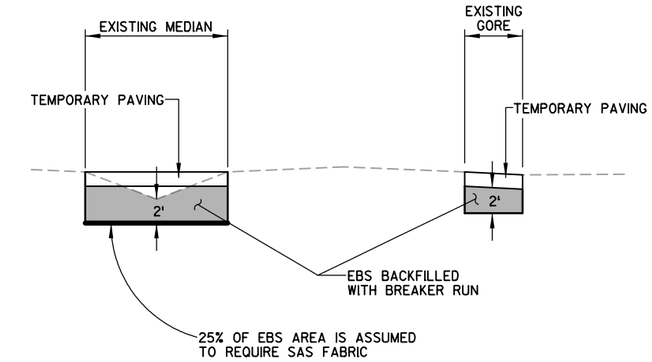


IH 43 - MEDIAN

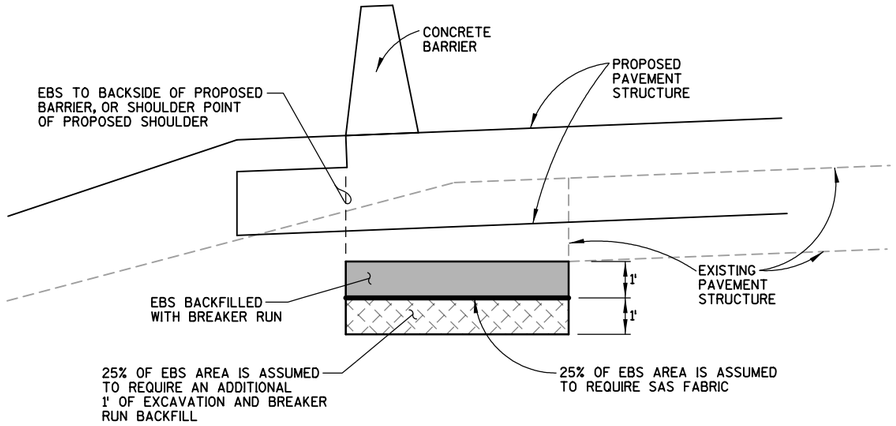


USH 41 - MARSH EXCAVATION AT EXISTING RAMP INFIELD

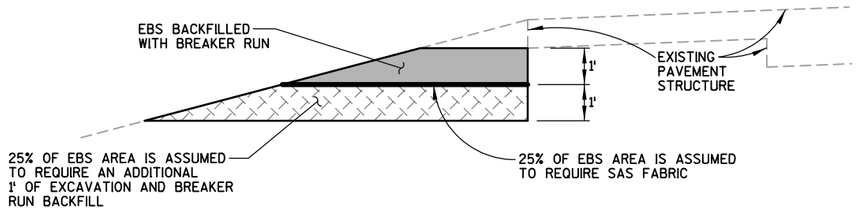
1174+50 - 1181+00 VEC
1166+50 - 1172+50 VED



USH 41 MEMORIAL DR TO DUCK CREEK -
TEMPORARY WIDENING/CROSSOVERS AND EXISTING GORES



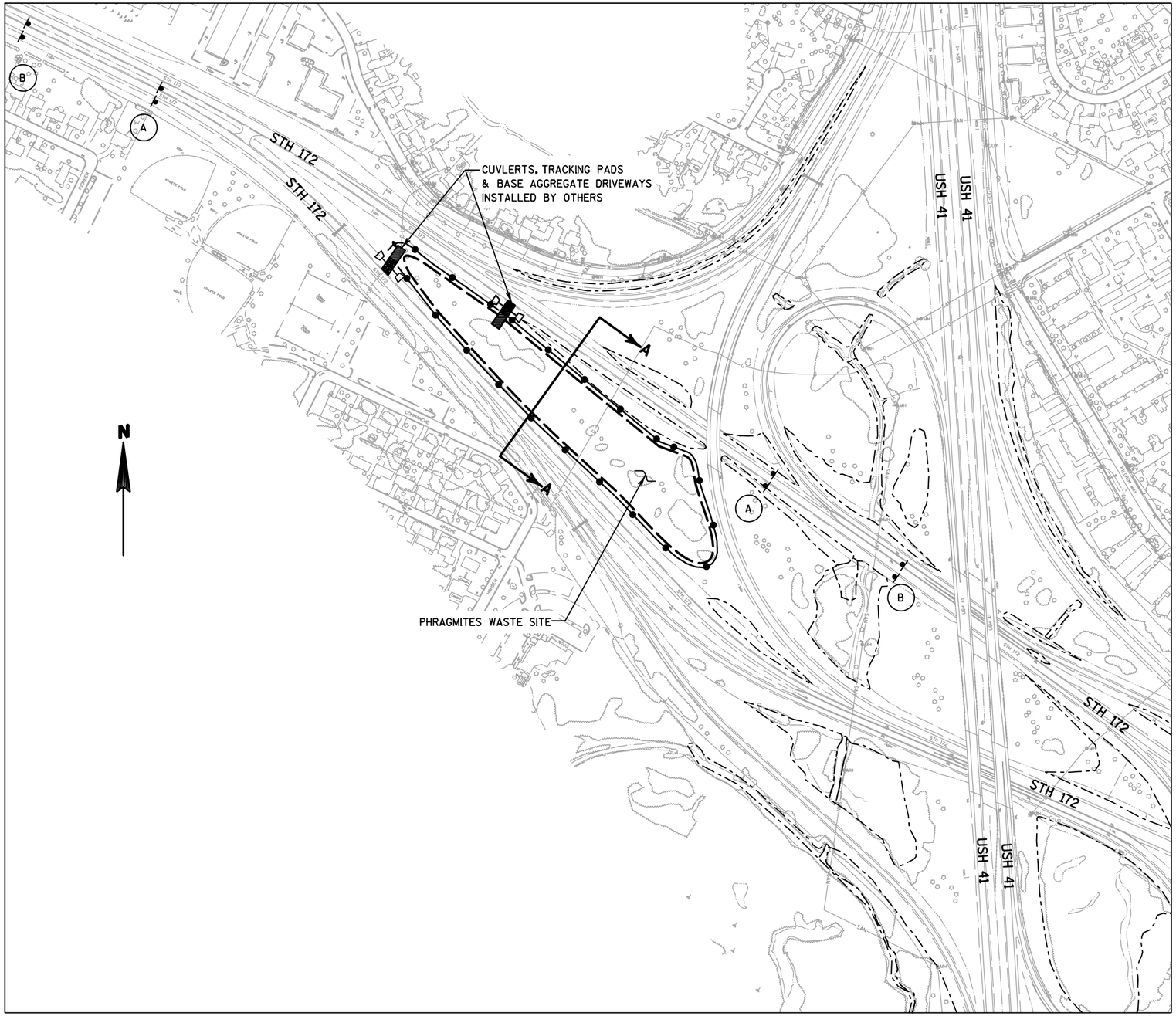
USH 41 NORTH OF DUCK CREEK - SOUTHBOUND OUTSIDE SHOULDER



IH 43 - OUTSIDE SHOULDERS

DETAILS FOR MISCELLANEOUS SOIL MITGATION EARTHWORK

NOTE:
EXACT DEPTHS AND LOCATIONS TO BE
DETERMINED BY ENGINEER IN THE FIELD



NOTE: PHRAGMITES WASTE SITE HAS BEEN CLEARED AND GRUBBED BY OTHERS

LEGEND

DELINEATED WETLAND BOUNDARY

SILT FENCE INSTALLED BY OTHERS/MAINTAINED BY CONTRACTOR **

SIGN SUPPORT

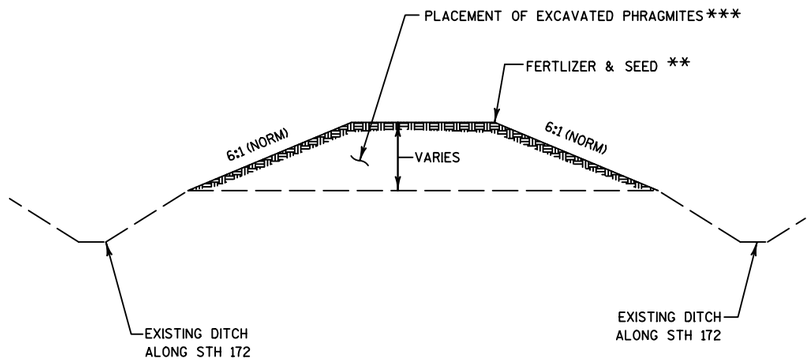
A — TRUCKS ENTERING & LEAVING W08-6A

B — ROAD WORK AHEAD W20-1

NOTES:
REMOVE SIGNS WHEN NOT IN USE

CONFORM TO THE TRAFFIC REQUIREMENTS IN THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER WHEN ACCESSING THE SITE

*** BURY ANY PHRAGMITES MATERIAL AT LEAST 18-INCHES BELOW THE FINISHED SURFACE



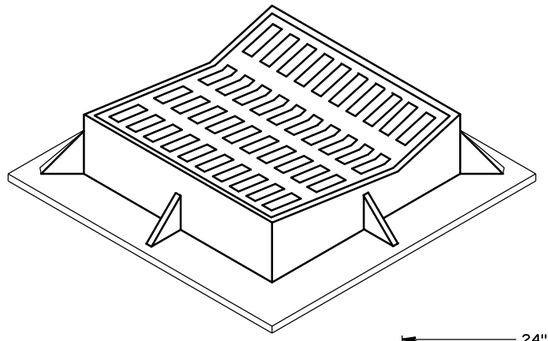
SECTION A-A

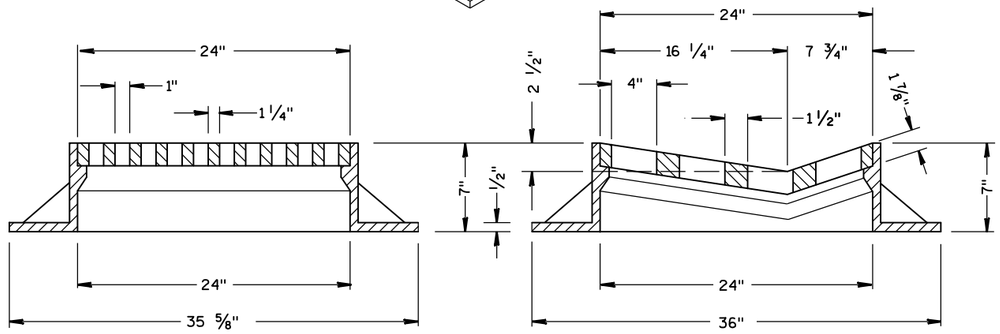
** PAID FOR UNDER THE PERTINENT ITEMS PROVIDED IN THE CONTRACT

BROWN COUNTY PHRAGMITES WASTE SITE DETAIL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION DETAIL	SHEET 51	E

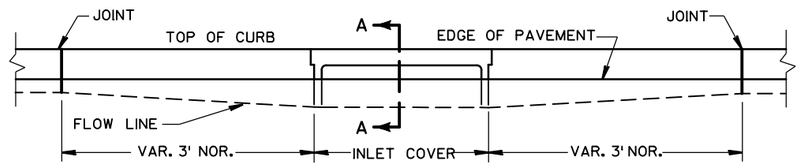
2



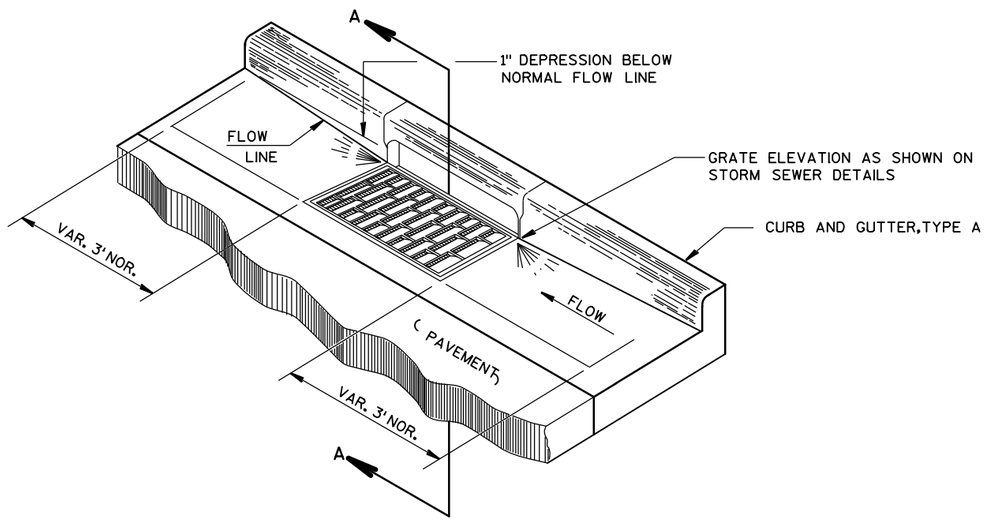


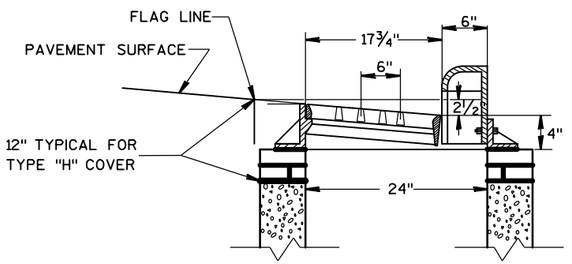
INLET COVER TYPE DW

(APPROXIMATE WEIGHT 455#)
FRAME WEIGHT 285#
GRATE WEIGHT 170#



ELEVATION





SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

(INLET 2'X 3'- H SHOWN)

2

2

GOLF GREEN

GOLF GREEN

GOLF GREEN

GOLF GREEN

ESCANABA AND LAKE SUPERIOR RR

MEMORIAL DR

USH 41

USH 41

1134+00 SMC
1136+00 SMC
1138+00 SMC
1140+00 SMC
1142+00 SMC
1144+00 SMC
1146+00 SMC
1148+00 SMC

MATCH LINE 1148+25 NMC

1134+00 NMC
1136+00 NMC
1138+00 NMC
1140+00 NMC
1142+00 NMC
1144+00 NMC
1146+00 NMC
1148+00 NMC

1144+00 IHA
1146+00 IHA
1148+00 IHA

① REMOVING TEMPORARY SHORING

① REMOVE CULVERT PIPES

REMOVAL OCCURS IN THE STAGE LISTED:

① STAGE 1
② STAGE 2
③ STAGE 3
④ STAGE 4
⑤ STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021171_rm.dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
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2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

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MATCH LINE 1148+25 NMC

DUCK CREEK

58+00 IS

60+00 IS

62+00 IS

ISLAND CT

③ REMOVING ASPHALTIC SURFACE BUTT JOINTS

MH

SIGN

1150+00 SMC

1152+00 SMC

1154+00 SMC

1156+00 SMC

1158+00 VED

1158+00 SMC

1160+00 VED

1160+00 SMC

1162+00 VED

1162+00 SMC

USH 41

1150+00 NMC

1152+00 NMC

1154+00 NMC

1156+00 NMC

1158+00 NMC

1160+00 NMC

1162+00 NMC

RM

② REMOVE CULVERT PIPES

1150+00 IHA

1152+00 IHA

1154+00 IHA

1156+00 IHA

1158+00 IHA

1160+00 IHA

1160+00 VEA

1162+00 IHA

1162+00 VEA

① REMOVE CULVERT PIPES

② REMOVE CULVERT PIPE

② REMOVE CRASH CUSHION

① SEE TEMPORARY DRAINAGE STAGE 1

BEAVER DAM CREEK

LONE GROVE AVE

MATCH LINE 1163+00 NMC

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 54	E

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

1. STAGE 1
2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

MATCH LINE 1163+00 NMC

MATCH LINE 1177+75 NMC

STORMWATER POND

VELP AVE (CTH HS)

1164+00 VED
1166+00 VED
1168+00 VED
1170+00 VED
1172+00 VED
1174+00 VEC
1176+00 VEC

1164+00 SMC
1166+00 SMC
1168+00 SMC
1170+00 SMC
1172+00 SMC
1174+00 SMC
1176+00 SMC
1224+00 IHB
1226+00 IHB
1228+00 IHB

1164+00 NMC
1166+00 NMC
1168+00 NMC
1170+00 NMC
1172+00 NMC
1174+00 NMC
1176+00 NMC

1164+00 IHA
1166+00 IHA
1168+00 IHA
1170+00 IHA
1172+00 IHA
1174+00 IHA
1176+00 IHA

1164+00 VEA
1166+00 VEA
1168+00 VEA
1170+00 VEA
1172+00 VEA
1176+00 VEB

USH 41

1166 SY

REMOVE STRUCTURE B-05-0064

REMOVE STRUCTURE B-05-0065

REMOVE SURFACE DRAIN

TEMPORARY SHORING TO REMAIN

REMOVE CRASH CUSHION

ROSEWOOD ST

PLAYGROUND

BASKETBALL COURT

VELP AVE (USH 141)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021173_rm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

WISCONSIN CENTRAL LTD. RR

436 SY

3194 SY

206 SY

1178+00 VEC
1184+00 VEC
1186+00 VEC
1188+00 VEC
1190+00 VEC
1192+00 VEC

REMOVE SIGN STRUCTURE S-05-2 (UNDER 1133-10-71) ③

REMOVE STRUCTURE B-05-0066 ③

1212+00 IHB
1214+00 IHB
1216+00 IHB
1218+00 IHB
1220+00 IHB
1222+00 IHB

1178+00 SMC
1180+00 SMC
1182+00 SMC
1184+00 SMC
1186+00 SMC
1188+00 SMC
1190+00 SMC
1192+00 SMC

USH 41

MATCH LINE 1177+75 NMC

1178+00 NMC
1180+00 NMC
1182+00 NMC
1184+00 NMC
1186+00 NMC
1188+00 NMC
1190+00 NMC
1192+00 NMC

MATCH LINE 1192+50 NMC

ABANDON CULVERT PIPES ③

REMOVE TEMP SHORING ③

REMOVE SURFACE DRAINS ②③

REMOVE WEST PORTION OF STRUCTURE B-05-0067 (SEE DETAIL) ③

REMOVE EAST PORTION OF STRUCTURE B-05-0067 ②

① REMOVE SIGN STRUCTURE S-05-3

1178+00 IHA
1180+00 IHA
1182+00 IHA
1184+00 IHA
1186+00 IHA
1188+00 IHA

REMOVE CRASH CUSHION ②

512+00 MMN
514+00 MMN
516+00 MMN

MEMORIAL DR

REMOVING SMALL CULVERT PIPE ③

REMOVAL OCCURS IN THE STAGE LISTED:
① STAGE 1
② STAGE 2
③ STAGE 3
④ STAGE 4
⑤ STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021174_rm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

1. STAGE 1
2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

N

DUCK CREEK

FOOTBRIDGE

MATCH LINE 1192+50 NMC

MATCH LINE 1207+50 NMC

WIETOR DR

IH 43

USH 41

114+00 WT

16+00 BP2

18+00 BP2

20+00 BP2

22+00 BP2

24+00 BP2

26+00 BP2

110+00 WT

112+00 WT

194 SY

4307 SY

145 SY

242 SY

REMOVE CRASH CUSHION

REMOVE STRUCTURE B-05-0069

REMOVE SURFACE DRAIN

REMOVE SURFACE DRAIN

REMOVE STRUCTURE B-05-0068

1192+00 NMC

1194+00 NMC

1196+00 NMC

1198+00 NMC

1200+00 NMC

1202+00 NMC

1204+00 NMC

1206+00 NMC

1208+00 SIH

1194+00 SMC

1196+00 SMC

1198+00 SMC

1200+00 SMC

1202+00 SMC

1204+00 SMC

1206+00 SMC

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 57	E

2

2

WIETOR DR

IH 43

USH 41

BP2

26+00 BP2

1194+00 SMC

1196+00 SMC

1198+00 SMC

1200+00 SMC

1202+00 SMC

1204+00 SMC

1206+00 SMC

MATCH LINE 1192+50 NMC

MATCH LINE 1207+00 NMC

1208+00 NHB

1204+00 NHB

1202+00 NHB

1200+00 NHB

1194+00 NMC

1196+00 NMC

1198+00 NMC

1200+00 NMC

1202+00 NMC

1204+00 NMC

1206+00 NMC

1208+00 SIH

1206+00 SIH

1204+00 SIH

1202+00 SIH

1200+00 SIH

TEMPORARY RETAINING WALL TO REMAIN

REMOVALS SHOWN ON PREVIOUS SHEET

ABANDON CULVERT PIPES

REMOVE CRASH CUSHION ③

REMOVE CRASH CUSHION ②

REMOVE CRASH CUSHION ①

339 SY

RM

REMOVAL OCCURS IN THE STAGE LISTED:

① STAGE 1

② STAGE 2

③ STAGE 3

④ STAGE 4

⑤ STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

N

LEGEND

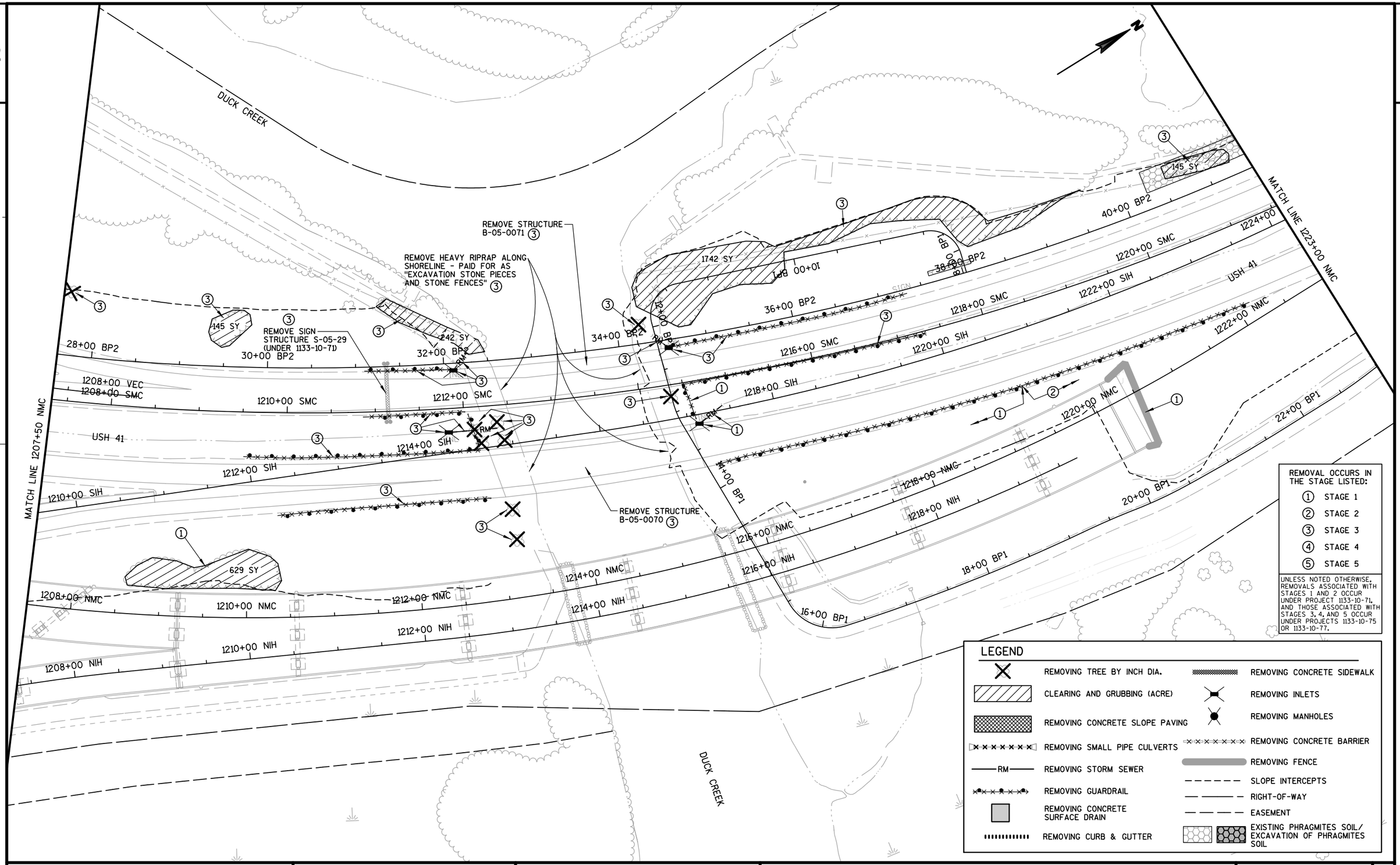
- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 58	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021176_rm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



REMOVAL OCCURS IN THE STAGE LISTED:

1. STAGE 1
2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 59	E

2

2

WEST DEERFIELD AVE

EAST DEERFIELD AVE

MATCH LINE 1223+00 NMC

MATCH LINE 1238+00 NMC

USH 41

SIH

SIGN

97 SY

42+00 BP2

44+00 BP2

24+00 BP1

26+00 BP1

28+00 BP1

1222+00 SMC

1224+00 SMC

1226+00 SIH

a1228+00 SMC

a1230+00 SMC

a1232+00 SMC

a1234+00 SMC

a1236+00 SMC

a1238+

1224+00 NMC

1226+00 NMC

1228+00 NMC

1230+00 NMC

1232+00 NMC

1234+00 NMC

1236+00 NMC

1238+0

RM

REMOVE MAINTENANCE CROSSOVER (1)

REMOVAL OCCURS IN THE STAGE LISTED:

(1) STAGE 1
(2) STAGE 2
(3) STAGE 3
(4) STAGE 4
(5) STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021178_rm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

WEST DEERFIELD AVE

EAST DEERFIELD AVE

USH 41

MATCH LINE 1238+00 NMC

a1240+00 SMC

a1242+00 SMC

a1244+00 SMC

a1246+00 SMC

a1248+00 SMC

a1250+00 SMC

a1252+00 SMC

1240+00 NMC

1242+00 NMC

1244+00 NMC

1246+00 NMC

1248+00 NMC

1250+00 NMC

1252+00 NMC

RM

SIGN

④ REMOVE SLOTTED DRAIN TO NORTH (1256+50± NMC)

REMOVAL OCCURS IN THE STAGE LISTED:

① STAGE 1
② STAGE 2
③ STAGE 3
④ STAGE 4
⑤ STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021179_rm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

SIGN

EXCAVATION OF PHRAGMITES SOIL TO STA 1122+00 NIH

1124+00 SIH 1126+00 SIH 1128+00 SIH 1130+00 SIH 1132+00 SIH 1134+00 SIH 1136+00 SIH 1138+00 SIH

1124+00 NIH 1126+00 NIH 1128+00 NIH 1130+00 NIH 1132+00 NIH 1134+00 NIH 1136+00 NIH 1138+00 NIH

INL INL

IH 43 IH 43

REMOVE MAINTENANCE CROSSOVER (1)

MATCH LINE 1138+50 NIH

HURLBUT ST

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

(1) STAGE 1
(2) STAGE 2
(3) STAGE 3
(4) STAGE 4
(5) STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 62	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021180_rm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

1. STAGE 1
2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

MATCH LINE 1138+50 NIH

1140+00 SIH
1142+00 SIH
1144+00 SIH
1146+00 SIH
1148+00 SIH
1150+00 SIH
1152+00 SIH

IH 43

1140+00 NIH
1142+00 NIH
1144+00 NIH
1146+00 NIH
1148+00 NIH
1150+00 NIH
1152+00 NIH

IH 43

SIGN
SIGN
IN
INL
RM

HURLBUT ST

TOWER

W

MATCH LINE 1153+50 NIH

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 63	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021181_rm.dgn
PLOT BY : dm253
PLOT DATE : 11/4/2014
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

1. STAGE 1
2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

MATCH LINE 1153+50 NIH

MATCH LINE 1168+50 NIH

MILITARY AVE

WIETOR DR

HURLBUT ST

IH 43

1154+00 SIH
1156+00 SIH
1158+00 SIH
1160+00 SIH
1162+00 SIH
1164+00 SIH
1166+00 SIH
1168+00 SIH

1154+00 NIH
1156+00 NIH
1158+00 NIH
1160+00 NIH
1162+00 NIH
1164+00 NIH
1166+00 NIH
1168+00 NIH

REMOVE MAINTENANCE CROSSOVER ①

REMOVE SAND BARREL ARRAY AND CONCRETE PAD ①

REMOVE SIGN STRUCTURE S-05-27 ①

SIGN

INL

RM

MH

AMW

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET 64	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021182_rm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

WIETOR DR

WIETOR DR

MATCH LINE 1168+50 NIH

MATCH LINE 1183+50 NIH

IH 43

IH 43

1170+00 SIH
1172+00 SIH
1174+00 SIH
1176+00 SIH
1178+00 SIH
1180+00 SIH
1182+00 SIH

1170+00 NIH
1172+00 NIH
1174+00 NIH
1176+00 NIH
1178+00 NIH
1180+00 NIH
1182+00 NIH

1170+00 IHB
1172+00 IHB
1174+00 IHB
1176+00 IHB
1178+00 IHB
1180+00 IHB
1182+00 IHB

ABANDON ③ CULVERT PIPES

REMOVE CRASH CUSHION ②

REMOVE CRASH CUSHION ②

RM

SIGN

HURLBUT ST

PERMANENT MAINTENANCE RD

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

① STAGE 1
② STAGE 2
③ STAGE 3
④ STAGE 4
⑤ STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021183_rm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

MATCH LINE 1183+50 NIH

WIETOR DR

IH 43

1184+00 SIH
1186+00 SIH
1188+00 SIH
1190+00 SIH
1192+00 SIH
1194+00 SIH
1196+00 SIH
1198+00 SIH

1184+00 NIH
1186+00 NIH
1188+00 NIH
1190+00 NIH
1192+00 NIH
1194+00 NIH
1196+00 NIH
1198+00 NIH

1192+00 IHB
1194+00 IHB
1196+00 IHB
1198+00 IHB

1204+00 IHA
1202+00 IHA
1200+00 IHA
1198+00 IHA
1196+00 IHA
1194+00 IHA

② REMOVE CRASH CUSHION

② REMOVE STRUCTURE B-05-0133

① REMOVE SAND BARREL ARRAY AND CONCRETE PAD

① REMOVE SIGN STRUCTURE S-05-28

③ REMOVE CRASH CUSHION

145 SY
134 SY
920 SY
1549 SY

SIGN

1200+0

LEGEND

- REMOVING TREE BY INCH DIA.
- CLEARING AND GRUBBING (ACRE)
- REMOVING CONCRETE SLOPE PAVING
- REMOVING SMALL PIPE CULVERTS
- RM — REMOVING STORM SEWER
- REMOVING GUARDRAIL
- REMOVING CONCRETE SURFACE DRAIN
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING INLETS
- REMOVING MANHOLES
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- SLOPE INTERCEPTS
- RIGHT-OF-WAY
- EASEMENT
- EXISTING PHRAGMITES SOIL/ EXCAVATION OF PHRAGMITES SOIL

REMOVAL OCCURS IN THE STAGE LISTED:

1. STAGE 1
2. STAGE 2
3. STAGE 3
4. STAGE 4
5. STAGE 5

UNLESS NOTED OTHERWISE, REMOVALS ASSOCIATED WITH STAGES 1 AND 2 OCCUR UNDER PROJECT 1133-10-71, AND THOSE ASSOCIATED WITH STAGES 3, 4, AND 5 OCCUR UNDER PROJECTS 1133-10-75 OR 1133-10-77.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	REMOVAL PLAN	SHEET	E

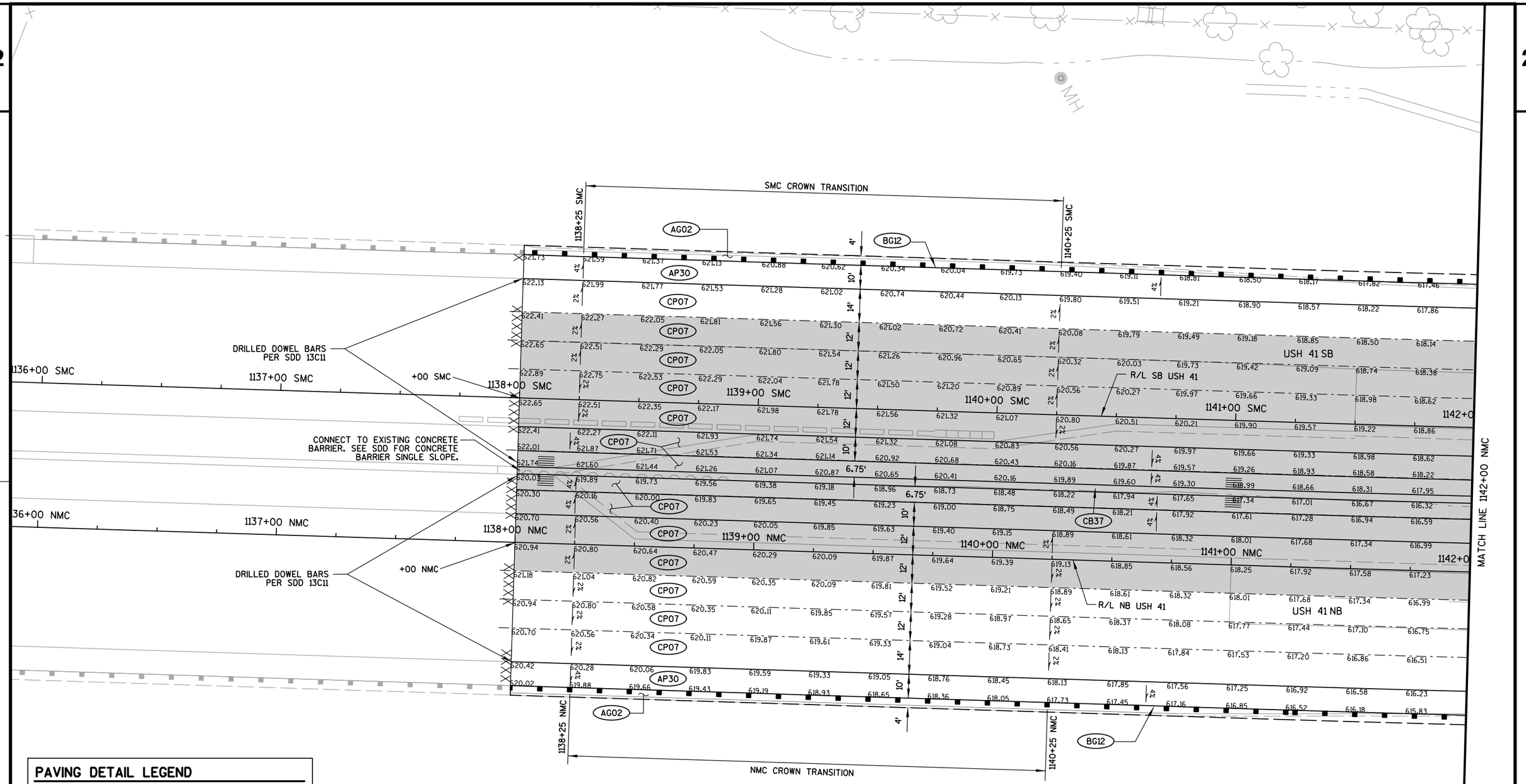
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021184_rm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AG03	LIMESTONE SCREENINGS
AP01	HMA PAVEMENT TYPE E-1
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE 8 1/2-INCH
AP05	HMA PAVEMENT TYPE E-30 1-¾" (MILL 1¼")
AP06	HMA PAVEMENT TYPE E-30 4" OVER CONCRETE BASE 8-INCH
AP07	4" ASPHALTIC SURFACE
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG05	CRASH CUSHION
BG12	MGS GUARDRAIL 3
BG13	MGS GUARDRAIL TERMINAL TYPE 2
BG15	MGS THRIE BEAM TRANSITION
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB01	CONCRETE BARRIER SINGLE SLOPE TYPE S32
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CB08	CONCRETE BARRIER SINGLE SLOPE TYPE S42C
CB09	CONCRETE BARRIER SINGLE SLOPE TYPE S56C
CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
CB39	CONCRETE BARRIER TRANSITION TYPE S56 (54-INCH WIDE BASE) TO TYPE S56 (36-INCH WIDE BASE)
CB42	CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (36 INCH WIDE BASE)
CB44	CONCRETE BARRIER TRANSITION TYPE S32 TO S36
CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CB47	CONCRETE BARRIER TRANSITION TYPE F51SF TO S56
CB48	CONCRETE BARRIER TRANSITION TYPE S42 TO F51SF
CB49	CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK
CB50	CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK
CG04	CONCRETE CURB AND GUTTER 30-INCH TYPE A FULL DEPTH
CG06	CONCRETE CURB AND GUTTER 32-INCH TYPE A FULL DEPTH
CG08	CONCRETE CURB AND GUTTER 56-INCH TYPE A FULL DEPTH
CG09	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A FULL DEPTH
CG35	CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH
CM01	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CM05	CONCRETE SIDEWALK 5-INCH
CM13	CONCRETE SIDEWALK 6-INCH COLORED & STAMPED
CP01	CONCRETE PAVEMENT 9-INCH
CP07	CONCRETE PAVEMENT 10½-INCH
CP10	CONCRETE PAVEMENT VARIABLE DEPTH
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV03	CONCRETE PAVEMENT APPROACH APRON
RS02	CONCRETE RUMBLE STRIP SHOULDER
SD02	CONCRETE SURFACE DRAINS
XXXXX	SAWCUT

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

2



PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE 3/4-INCH
CP07	CONCRETE PAVEMENT 10 1/2-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
BG12	MGS GUARDRAIL 3
XXXXX	SAWCUT

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021200A_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

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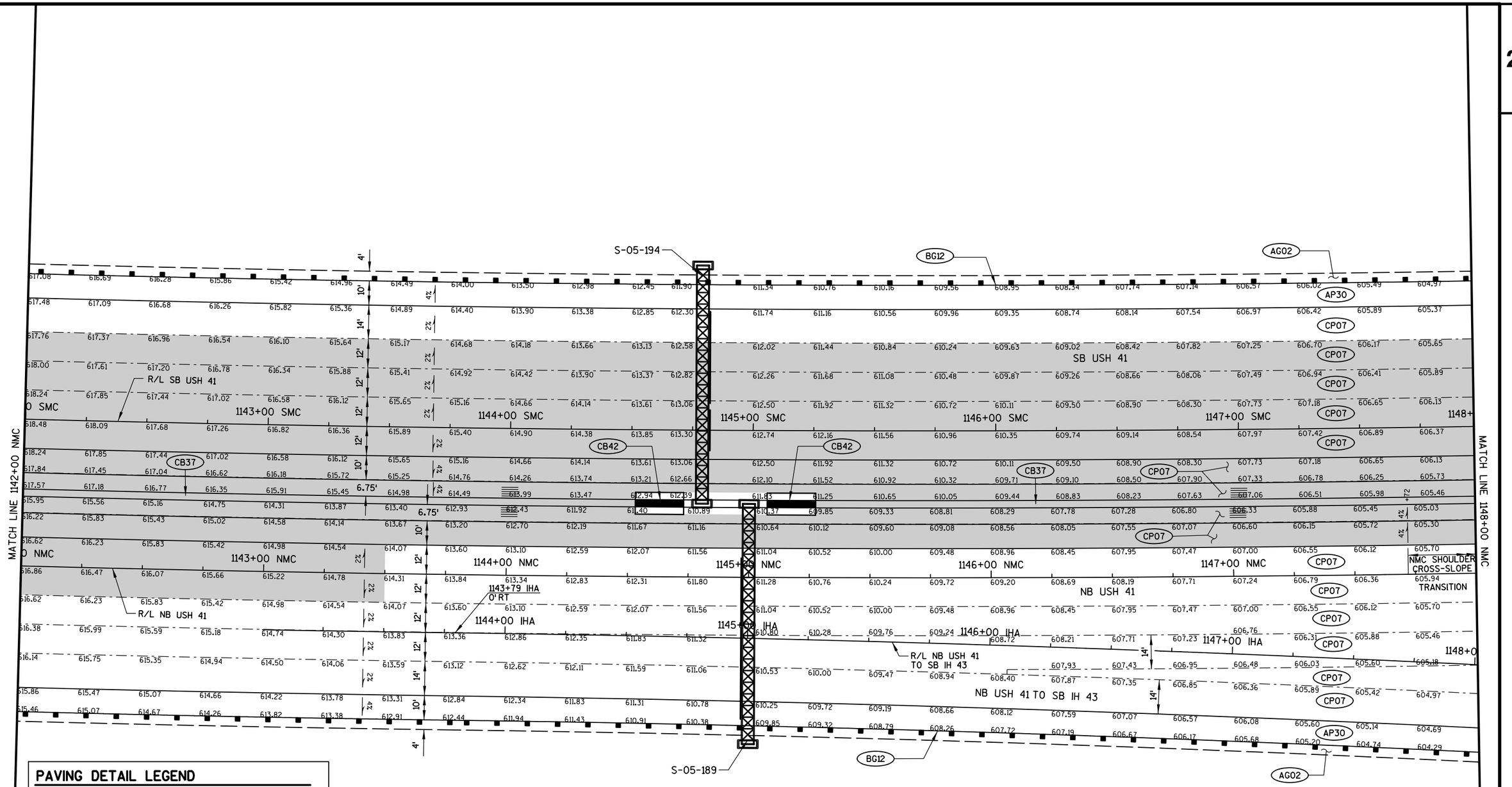


PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
CB42	CONCRETE BARRIER TRANSITION TYPE V56 TO S56
CP07	CONCRETE PAVEMENT 10½-INCH

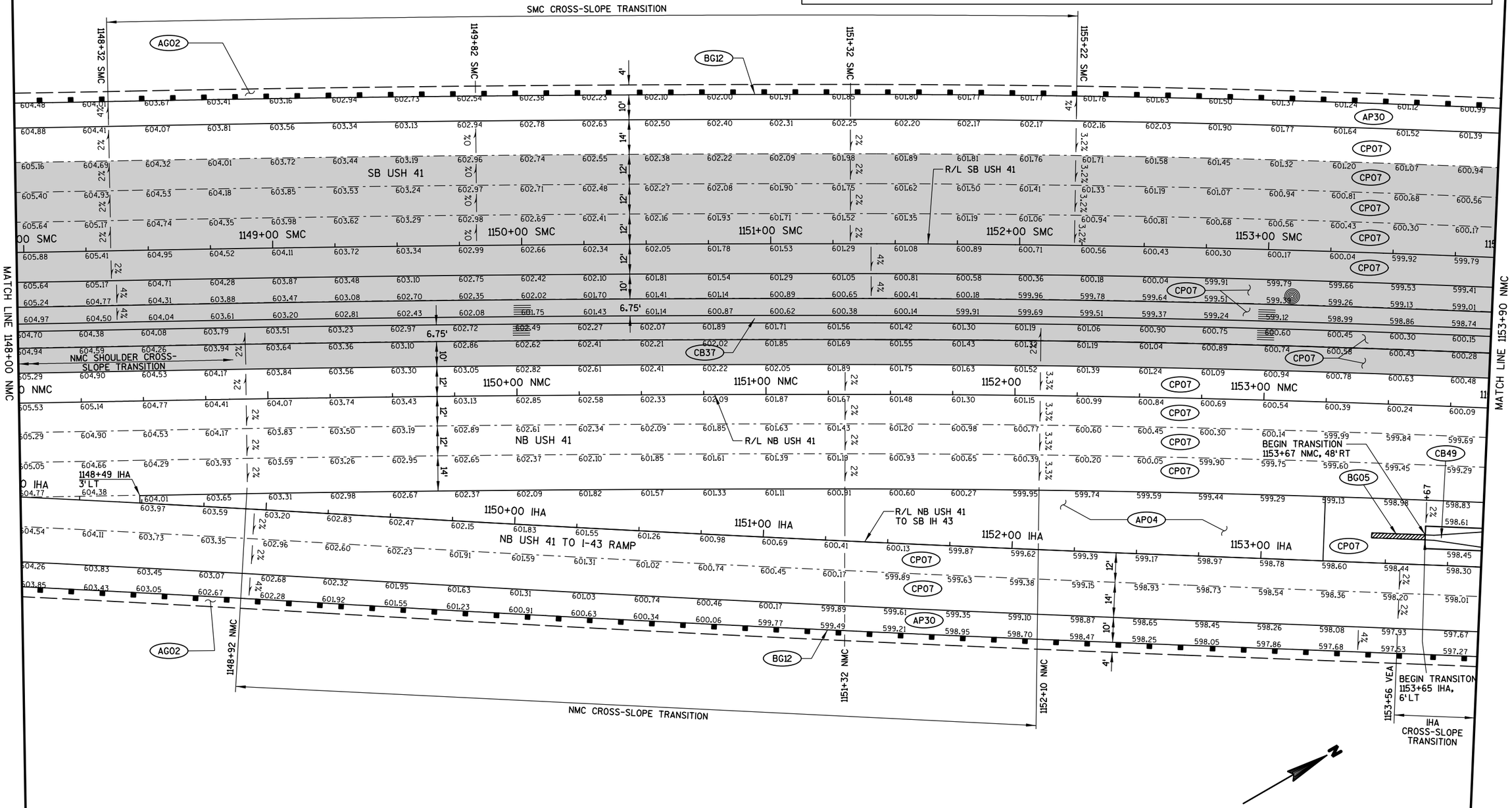
SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 69	E

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH	CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE	CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
AP30	HMA PAVEMENT TYPE E-0.3 5"	CB49	CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK
BG05	CRASH CUSHION	CP07	CONCRETE PAVEMENT 10½-INCH
BG12	MGS GUARDRAIL 3		

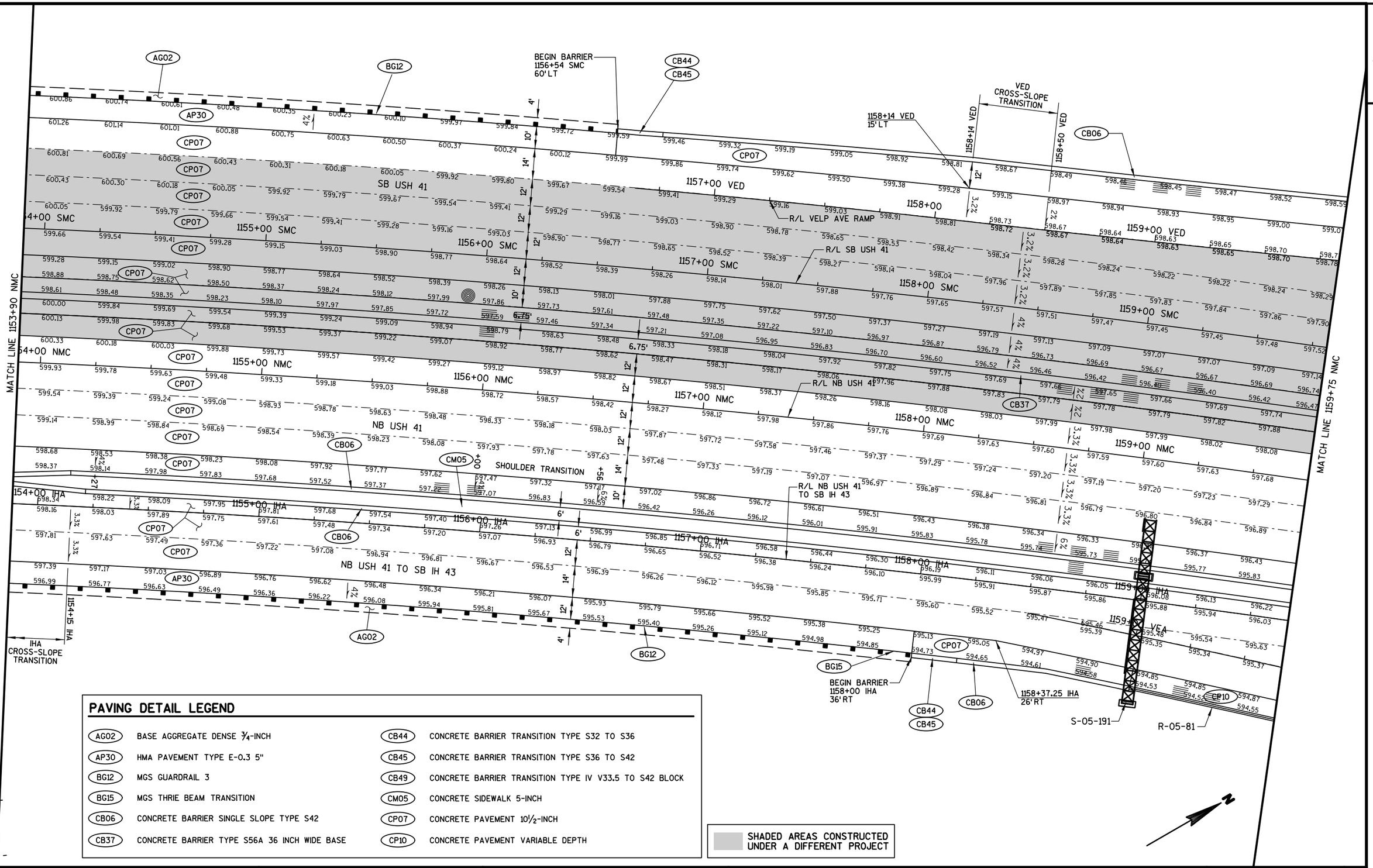


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 70	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021200C_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

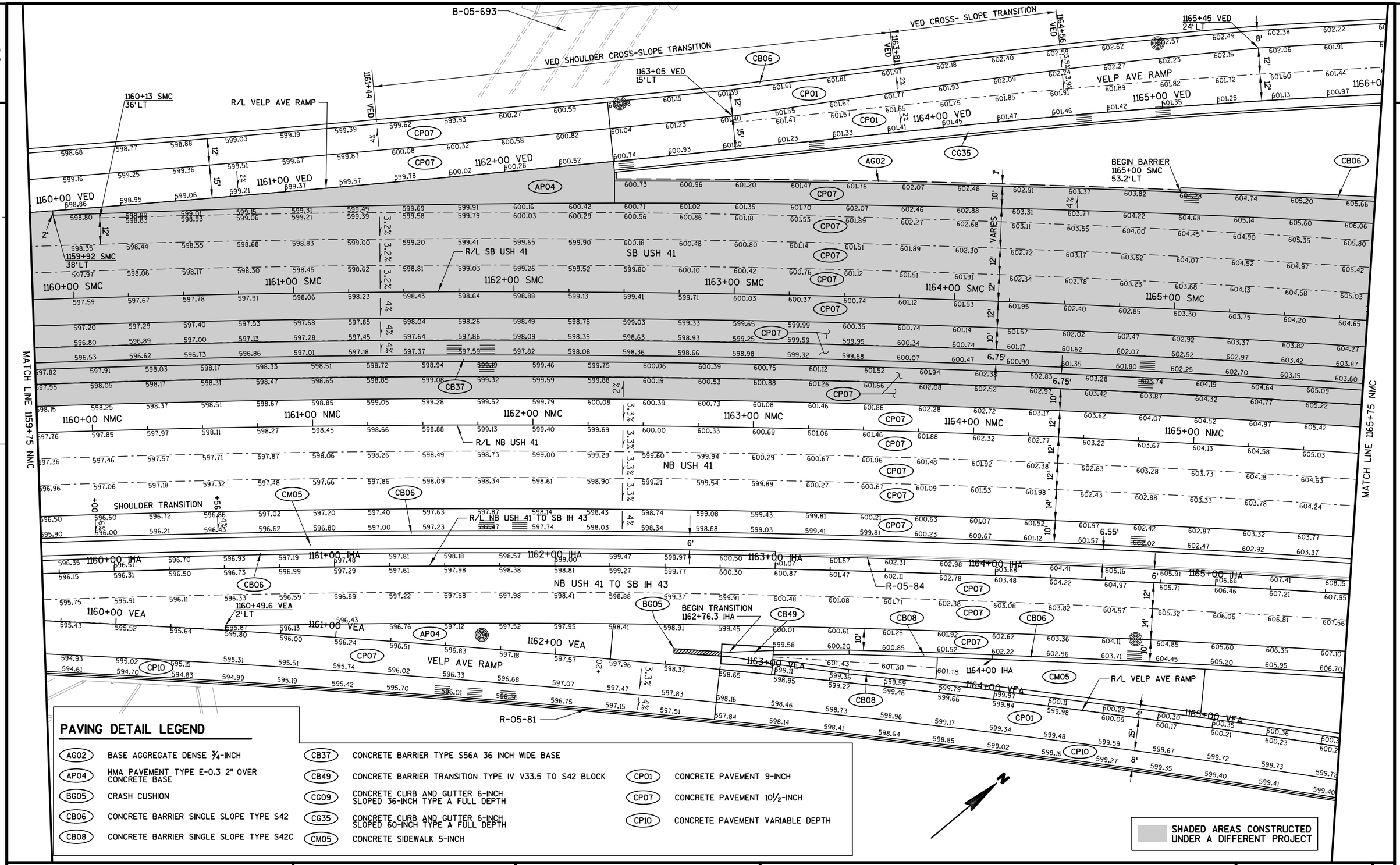


PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH	CB44	CONCRETE BARRIER TRANSITION TYPE S32 TO S36
AP30	HMA PAVEMENT TYPE E-0.3 5"	CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
BG12	MGS GUARDRAIL 3	CB49	CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK
BG15	MGS THRIE BEAM TRANSITION	CM05	CONCRETE SIDEWALK 5-INCH
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42	CP07	CONCRETE PAVEMENT 10½-INCH
CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE	CP10	CONCRETE PAVEMENT VARIABLE DEPTH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 71	E



PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH	CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE		
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE	CB49	CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK	CP01	CONCRETE PAVEMENT 9-INCH
BG05	CRASH CUSHION	CG09	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A FULL DEPTH	CP07	CONCRETE PAVEMENT 10½-INCH
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42	CG35	CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH	CP10	CONCRETE PAVEMENT VARIABLE DEPTH
CB08	CONCRETE BARRIER SINGLE SLOPE TYPE S42C	CM05	CONCRETE SIDEWALK 5-INCH		

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021200E_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

2

MATCH LINE 1165+75 NMC

MATCH LINE 117+85 NMC

R/L VELP AVE RAMP

1167+00 VED

VELP AVE RAMP

SMC CROSS-SLOPE TRANSITION

SMC SHOULDER CROSS-SLOPE TRANSITION

1167+44 SMC

1168+34 SMC

1170+84 SMC

1171+34 SMC

1171+44 SMC

1171+32.2 SMC 50' LT

R/L SB USH 41

SB USH 41

1166+00 SMC

1167+00 SMC

1168+00 SMC

1169+00 SMC

1170+00 SMC

1171+00 SMC

1172+00

1169+23.5 SMC 22' RT

1169+31.2 SMC 30' RT

1169+50.0 SMC 29' RT

1170+15.4 NMC 14' LT

1170+21 NMC

1170+99 NMC

1171+50 NMC

1171+59 NMC

1171+67 SMC

NMC CROSS-SLOPE TRANSITION

NMC CROWN TRANSITION

1166+00 NMC

1167+00 NMC

1168+00 NMC

1169+00 NMC

1170+00 NMC

NB USH 41

R/L NB USH 41

R/L NB USH 41 TO SB IH 43

NB USH 41 TO SB IH 43

1166+00 IHA

1167+00 IHA

1168+00 IHA

1169+00 IHA

1171+00 IHA

R-05-84

1169+87 IHA

1170+19 IHA

1170+78 IHA

IHA CROSS-SLOPE TRANSITION

IHA SHOULDER CROSS-SLOPE TRANSITION

CB06 CB37 CB39 CB09 CB07 CM05 CP07

PAVING DETAIL LEGEND

CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CB09	CONCRETE BARRIER SINGLE SLOPE TYPE S56C
CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
CB39	CONCRETE BARRIER TRANSITION TYPE S56 (54-INCH WIDE BASE) TO TYPE S56 (36-INCH WIDE BASE)
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 73	E

2

S-05-257
R-05-234
CP10
R-05-235
CB06
IHB CROSS-SLOPE TRANSITION
1225+73 IHB
1224+83 IHB
1224+70 IHB
IHB SHOULDER TRANSITION
1223+93 IHB
1224+50 IHB
CP07
PV01
PV03
1228+00 IHB
B-5-668
1227+00 IHB
1226+00 IHB
1225+00 IHB
1224+00 IHB
R/L NB IH 43
TO SB USH 41
1223+39.7 IHB
3'LT
SMC
1173+00 SMC
1174+00 SMC
1175+00 SMC
1176+00 SMC
SB USH 41
1177+00 SMC
R/L SB USH 41
SEE CONSTRUCTION DETAILS
FOR SLOPE PAVING
R-05-235
MATCH LINE 1171+85 NMC
NMC CROWN
TRANSITION
CM05
VELP AVE
SEE CONSTRUCTION DETAILS
FOR SLOPE PAVING
CB07
R-05-234
1172+00 NMC
1173+00 NMC
1174+00 NMC
1175+00 NMC
1176+00 NMC
1177+00 NMC
R/L NB USH 41
B-5-669
PV03
PV01
NB USH 41
1175+29.8 NMC
38' RT BEGIN TAPER
CB06
VARIES
10'
12'
14'
CP10
R-05-84
1172+00 IHA
1173+00 IHA
1174+00 IHA
1175+00 IHA
1176+00 IHA
1177+00 IHA
SHOULDER TRANSITION
R-05-235
S-05-256
B-05-671
R/L NB USH 41
TO SB IH 43
CB46
R-05-257
1172+00 VEA
1173+00 VEA
MATCH LINE 1177+75 NMC

N

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH
CP10	CONCRETE PAVEMENT VARIABLE DEPTH
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV03	CONCRETE PAVEMENT APPROACH APRON

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 74	E

2

N

IHB CROSS-SLOPE TRANSITION

1220+60 IHB

1220+00 IHB

1220+14 IHB
34.9' RT

1218+64 IHB
31.1' RT

CB06

CP07

NB IH 43 TO SB USH 41

1222+00 IHB

AP04

1223+00 IHB

SHOULDER CROSS-SLOPE TRANSITION

1221+20.4 IHB
8' LT

1179+92 SMC
36' LT

1219+00 IHB

1218+40 IHB

1219+20 IHB

AG02

R/L NB IH 43 TO SB USH 41

1217+67.6 IHB
4' LT

IHB CROSS-SLOPE TRANSITION

R/L SB USH 41

1179+00 SMC

1180+00 SMC

1181+00 SMC

1182+00 SMC

1183+00 SMC

1184+00

SB USH 41

1178+00 SMC
22' RT

1179+00 SMC
14' RT

CB07

SHOULDER CROSS-SLOPE TRANSITION

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE STA 1177+75 NMC

MATCH LINE STA 1183+85 NMC

+00 SHOULDER TRANSITION +60

1178+00 NMC

1179+00 NMC

1180+00 NMC

1181+00 NMC

1182+00 NMC

1183+00 NMC

NB USH 41

CM05

R/L NB USH 41

+79 SHOULDER TRANSITION +39

1183+69.9 NMC
26' RT

CB06

1178+00 IHA

1179+00 IHA

1180+00 IHA

1181+00 IHA

1182+00 IHA

1183+00 IHA

B-05-671

1180+00 VEB

1181+00 VEB

1182+00 VEB

1183+00 VEB

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021202_pd (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CG09	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A FULL DEPTH
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV03	CONCRETE PAVEMENT APPROACH APRON

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

WISCONSIN CENTRAL LTD. RR

B-05-678

1213+00 IHB

R/L SB USH 41

R/L NB USH 41

R/L VELP AVE RAMP

SEED & MULCH

SHOULDER TRANSITION

MATCH LINE STA 1183+85 NMC

MATCH LINE STA 1189+85 NMC

1184+00 IHA

B-05-671

B-05-673

B-05-674

B-05-675

SB USH 41

NB USH 41

VELP AVE RAMP

1184+00 NMC

1185+00 NMC

1186+00 NMC

1187+00 NMC

1188+00 NMC

1189+00 NMC

1184+00 VEB

1185+00 VEB

1186+00 VEB

1187+00 VEB

1188+00 VEB

1185+00 SMC

1186+00 SMC

1187+00 SMC

1188+00 SMC

1189+00 SMC

1190+00

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021203_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

MATCH LINE STA 1189+85 NMC

MATCH LINE STA 1195+75 NMC

R/L SB USH 41

R/L NB USH 41

R/L VELP AVE RAMP

R/L WIETOR DR

SB USH 41

NB USH 41

VELP AVE RAMP

SB IH 43

NB IH 43

WIETOR DR

B-05-676

B-05-678

B-05-677

1208+00 IHB

1207+00 IHB

1206+00 IHB

1205+00 IHB

NB IH 43 TO SB USH 41

1191+00 SMC

1192+00 SMC

1193+00 SMC

1194+00 SMC

1195+00 SMC

1190+00 NMC

1191+00 NMC

1192+00 NMC

1193+00 NMC

1194+00 NMC

1195+00 NMC

1190+00 VEB

1191+00 VEB

1192+00 VEB

1190+03 VEB
2'LT

1191+34 VEB
23'RT

1192+65.3 VEB
15'RT

106+00 WT

105+00 WT

104+00 WT

103+00 WT

SHOULDER TRANSITION

CP07 CB06 CB07 PV01 PV03 BG15 AG02 BG12 AP30

PAVING DETAIL LEGEND

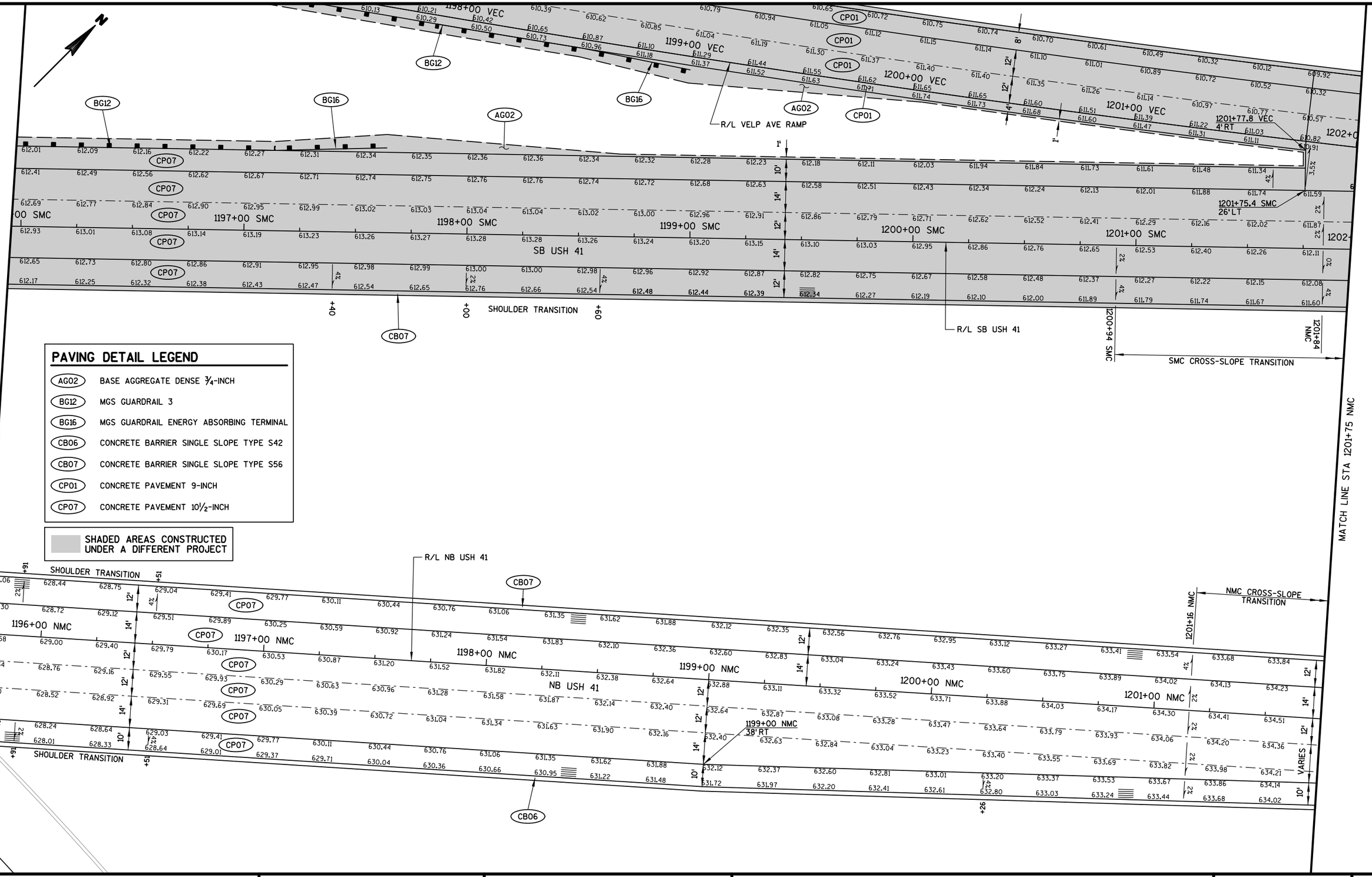
AG02	BASE AGGREGATE DENSE ¾-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MIDWEST GUARDRAIL SYSTEM GUARDRAIL 3
BG15	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CP07	CONCRETE PAVEMENT 10½-INCH
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV03	CONCRETE PAVEMENT APPROACH APRON

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 77	E

2



PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
BG12	MGS GUARDRAIL 3
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CP01	CONCRETE PAVEMENT 9-INCH
CP07	CONCRETE PAVEMENT 10½-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021205_pd (USH 41).dgn
PLOT BY : dm253
PLOT DATE : 11/4/2014
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

PAVING DETAIL LEGEND

AP07	4" ASPHALTIC SURFACE	CB44	CONCRETE BARRIER TRANSITION TYPE S32 TO S36
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE 8 1/2-INCH	CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
BG12	MGS GUARDRAIL 3	CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
BG15	MGS THRIE BEAM TRANSITION	CB47	CONCRETE BARRIER TRANSITION TYPE F51SF TO S56
CB01	CONCRETE BARRIER SINGLE SLOPE TYPE S32	CP07	CONCRETE PAVEMENT 10½-INCH
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42	PV01	CONCRETE PAVEMENT APPROACH SLAB
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56		

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021206_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

2

R/L SHARED USE PATH

28+00 BP2

29+00 BP2

30+00 BP2

31+09 BP2

BP2 CROSS-SLOPE TRANSITION

31+34 BP2

25'

32+00 BP2

R-05-259

CB07

AG02

AP07

CP10

R/L VELP AVE RAMP

1208+00 VEC

1208+29.7 VEC
0' LT

1208+00 SMC

1209+00 SMC

1210+00 SMC

SB USH 41

1211+52.1 SMC
14' RT

1212+00 SMC

1214+01 SIH
14' LT

B-05-682

R/L SB USH 41

BG12

BG16

SMC SHOULDER CROSS-SLOPE TRANSITION

PV01

PV03

SHOULDER TRANSITION

1213+00 SIH

1214+00 SIH

SB IH 43

1211+00 SIH

1210+00 SIH

MATCH LINE STA 1207+75 NMC

MATCH LINE STA 1215+00 NMC

SIH CROSS-SLOPE TRANSITION

1210+36 SIH

1211+90 SIH

1213+70 SIH

CB01

CB44

CB45

CB46

R/L SB USH 41 TO SB IH 43

R/L NB USH 41

B-05-679

B-05-681

1208+00 NMC

1209+00 NMC

1210+00 NMC

NB USH 41

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH	CB44	CONCRETE BARRIER TRANSITION TYPE S32 TO S36
AP07	4" ASPHALTIC SURFACE	CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
BG05	CRASH CUSHION	CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
BG12	MGS GUARDRAIL 3	CP07	CONCRETE PAVEMENT 10½-INCH
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL	CP10	CONCRETE PAVEMENT VARIABLE DEPTH
CB01	CONCRETE BARRIER SINGLE SLOPE TYPE S32	PV01	CONCRETE PAVEMENT APPROACH SLAB
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42	PV03	CONCRETE PAVEMENT APPROACH APRON
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56		

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 80	E

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AG03	LIMESTONE SCREENINGS
AP07	4" ASPHALTIC SURFACE
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH
CP10	CONCRETE PAVEMENT VARIABLE DEPTH
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV03	CONCRETE PAVEMENT APPROACH APRON
SD02	CONCRETE SURFACE DRAINS

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PEDESTRIAN RAILING

R/L BIKE PATH

R/L SB USH 41

R/L SB USH 41 TO SB IH 43

R-05-260

B-05-682

VARIES

SB IH 43

SB USH 41

SB USH 41 TO SB IH 43

R/L NB IH 43 TO NB USH 41

R/L NB USH 41

NB USH 41

BP2 CROSS-SLOPE TRANSITION

SIH CROSS-SLOPE TRANSITION

SIH SHOULDER CROSS-SLOPE TRANSITION

DUCK CREEK

MATCH LINE STA 1215+00 NMC

MATCH LINE STA 1219+00 NMC

9+00 BP1 · 10+00 BP1 · 11+00 BP1 · 12+00 BP1 · 13+00 BP1 · 14+00 BP1

33+00 BP2 · 34+00 BP2 · 35+00 BP2 · 36+00 BP2 · 36+46 BP2 · 36+71 BP2

1213+00 SMC · 1214+00 SMC · 1215+00 SMC · 1216+00 SMC · 1217+00 SMC

1215+09 SIH · 1216+00 SIH · 1216+71 SIH · 1217+00 SIH · 1218+00 SIH · 1219+00 SIH · 1220+00 SIH

1216+00 NMC · 1217+00 NMC · 1218+00 NMC · 1219+00 NIH

1218+00 NIH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 81	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021208_pd (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

DECORATIVE RAILING
SEE FENCING PLANS

R/L BIKE PATH

R-05-258

CM05 CB07 AG02 AP07 CP07

38+00 BP2 39+00 BP2 40+00 BP2 41+00 BP2 42+00 BP2

1218+00 SMC 1219+00 SMC 1220+00 SMC 1221+00 SMC 1222+00 SMC

R/L SB USH 41

SB USH 41

1219+72.1 SMC
12' RT

1221+00 SIH 1222+00 SIH 1223+00 SIH 1224+00 SIH 1225+00 SIH

R/L SB USH 41 TO SB IH 43

SIH SHOULDER CROSS-SLOPE TRANSITION

1221+60 SIH

MATCH LINE STA 1219+00 NMC

MATCH LINE STA 1224+25 NMC

SEED & MULCH

CB47 PV01 CB06

R/L NB USH 41

R/L NB IH 43 TO NB USH 41

B-05-681

1220+00 NMC 1221+00 NMC 1222+00 NMC 1223+00 NMC 1224+00 NMC

NB USH 41

1220+26 NMC

1221+76 NMC

1223+26 NMC

NMC CROSS-SLOPE TRANSITION

19+00 BP1 20+00 BP1 21+00 BP1 22+00 BP1

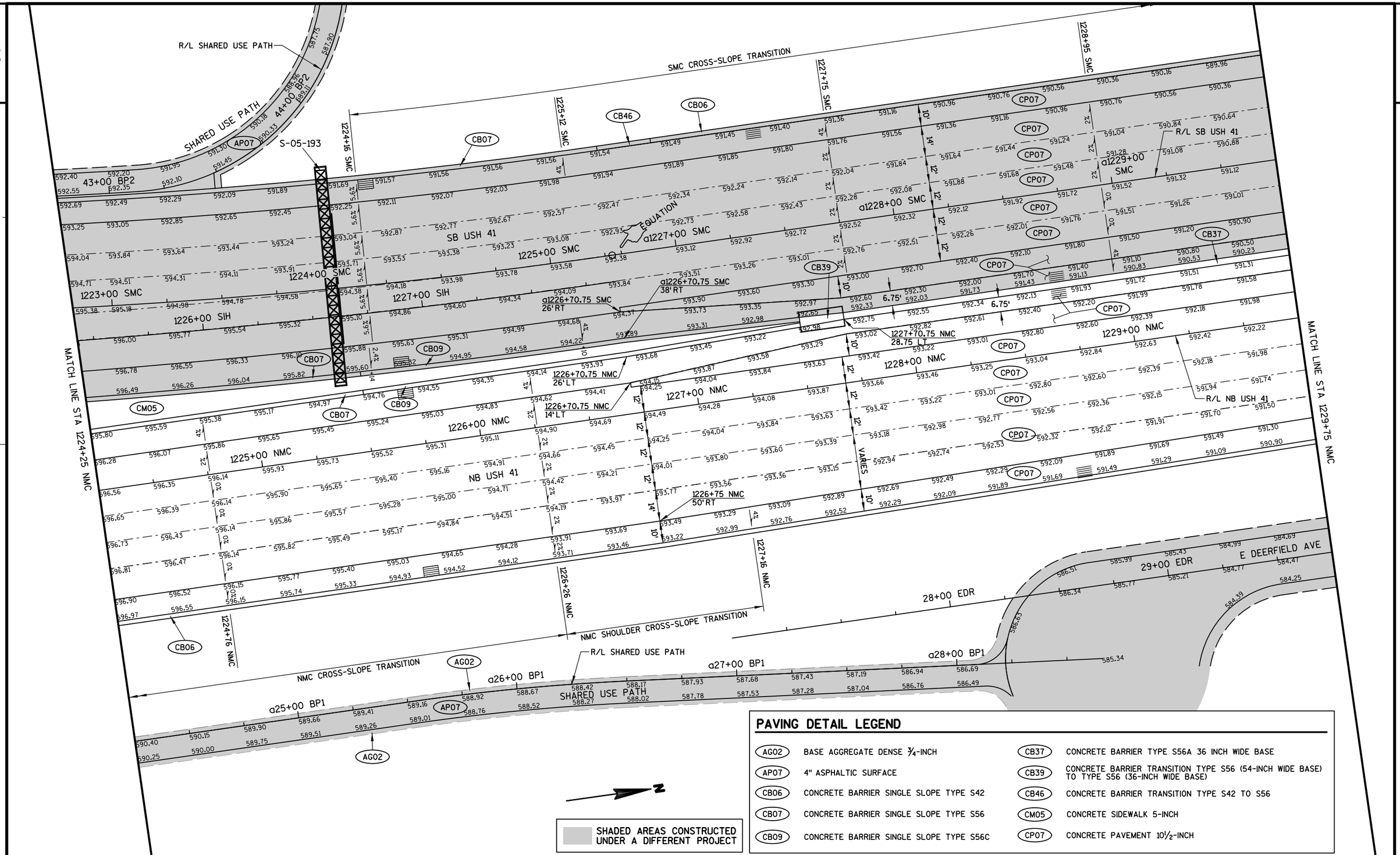
R/L BIKE PATH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE 3/4-INCH
AP07	4" ASPHALTIC SURFACE
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CB47	CONCRETE BARRIER TRANSITION TYPE F51SF TO S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10 1/2-INCH
PV01	CONCRETE PAVEMENT APPROACH SLAB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 82	E



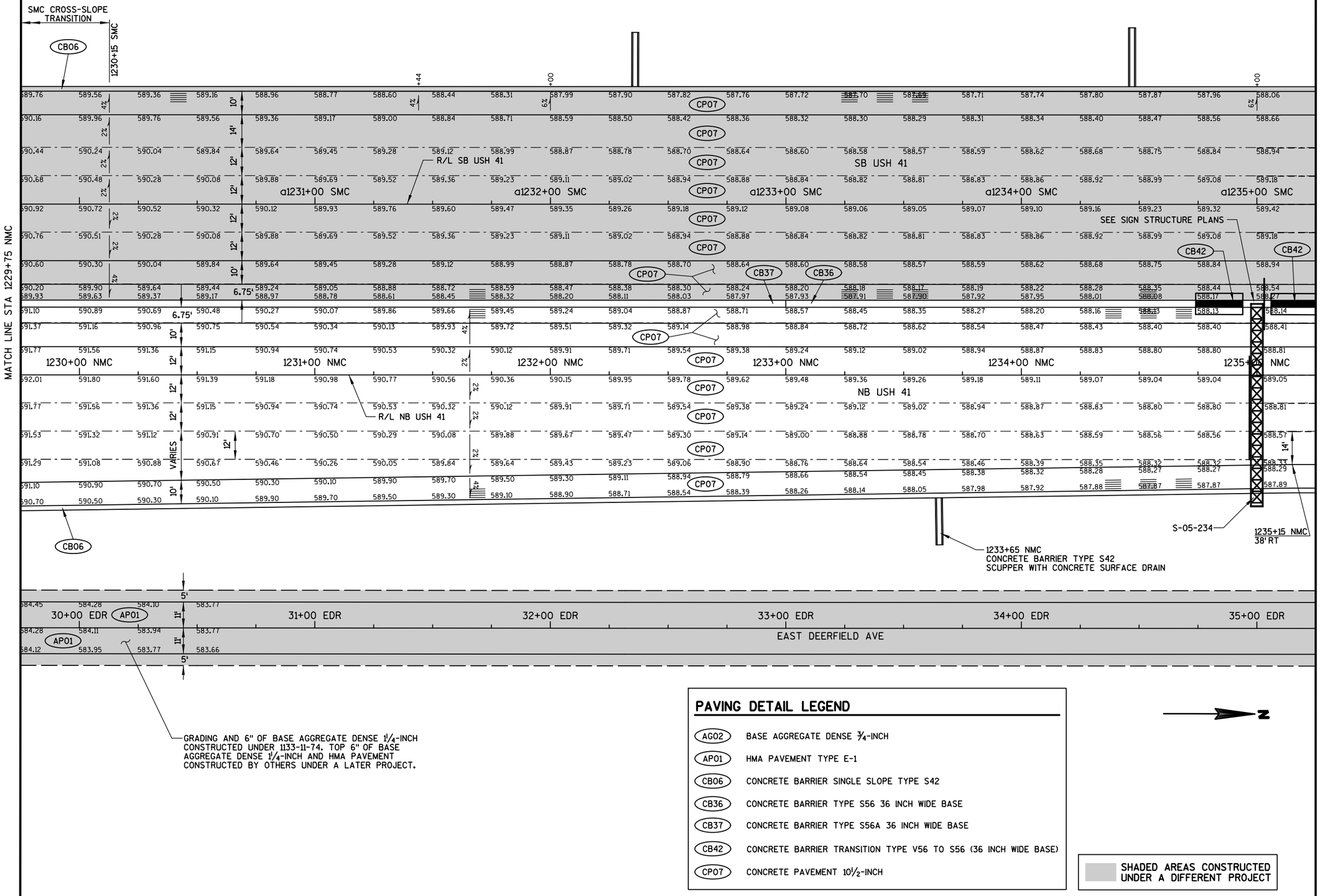
SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH	CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
AP07	4" ASPHALTIC SURFACE	CB39	CONCRETE BARRIER TRANSITION TYPE S56 (54-INCH WIDE BASE) TO TYPE S56 (36-INCH WIDE BASE)
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42	CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56	CM05	CONCRETE SIDEWALK 5-INCH
CB09	CONCRETE BARRIER SINGLE SLOPE TYPE S56C	CP07	CONCRETE PAVEMENT 10½-INCH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021210_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40



PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP01	HMA PAVEMENT TYPE E-1
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CB37	CONCRETE BARRIER TYPE S56A 36 INCH WIDE BASE
CB42	CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (36 INCH WIDE BASE)
CP07	CONCRETE PAVEMENT 10½-INCH

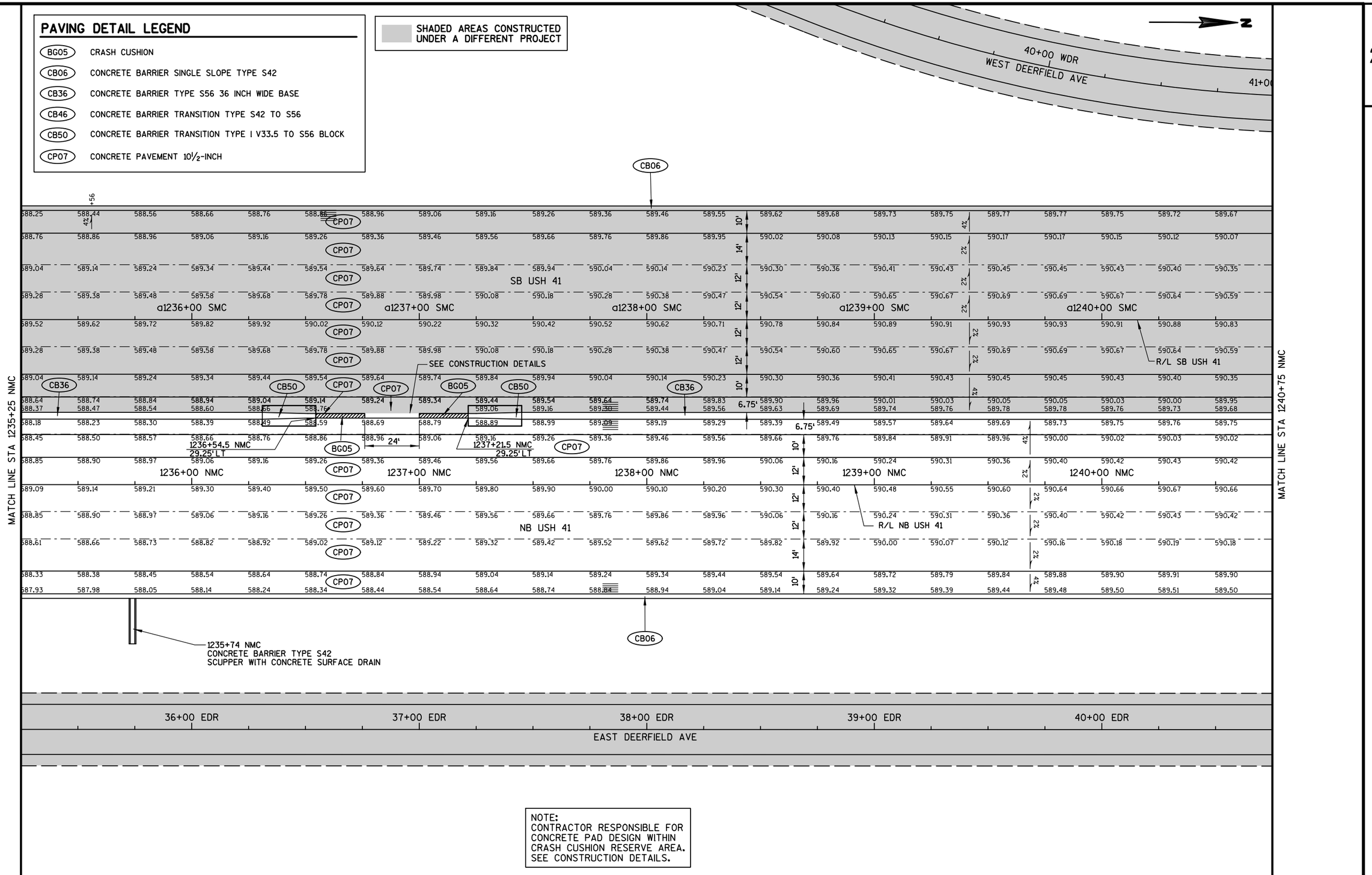
SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 84	E

PAVING DETAIL LEGEND

BG05	CRASH CUSHION
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CB50	CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK
CP07	CONCRETE PAVEMENT 10½-INCH

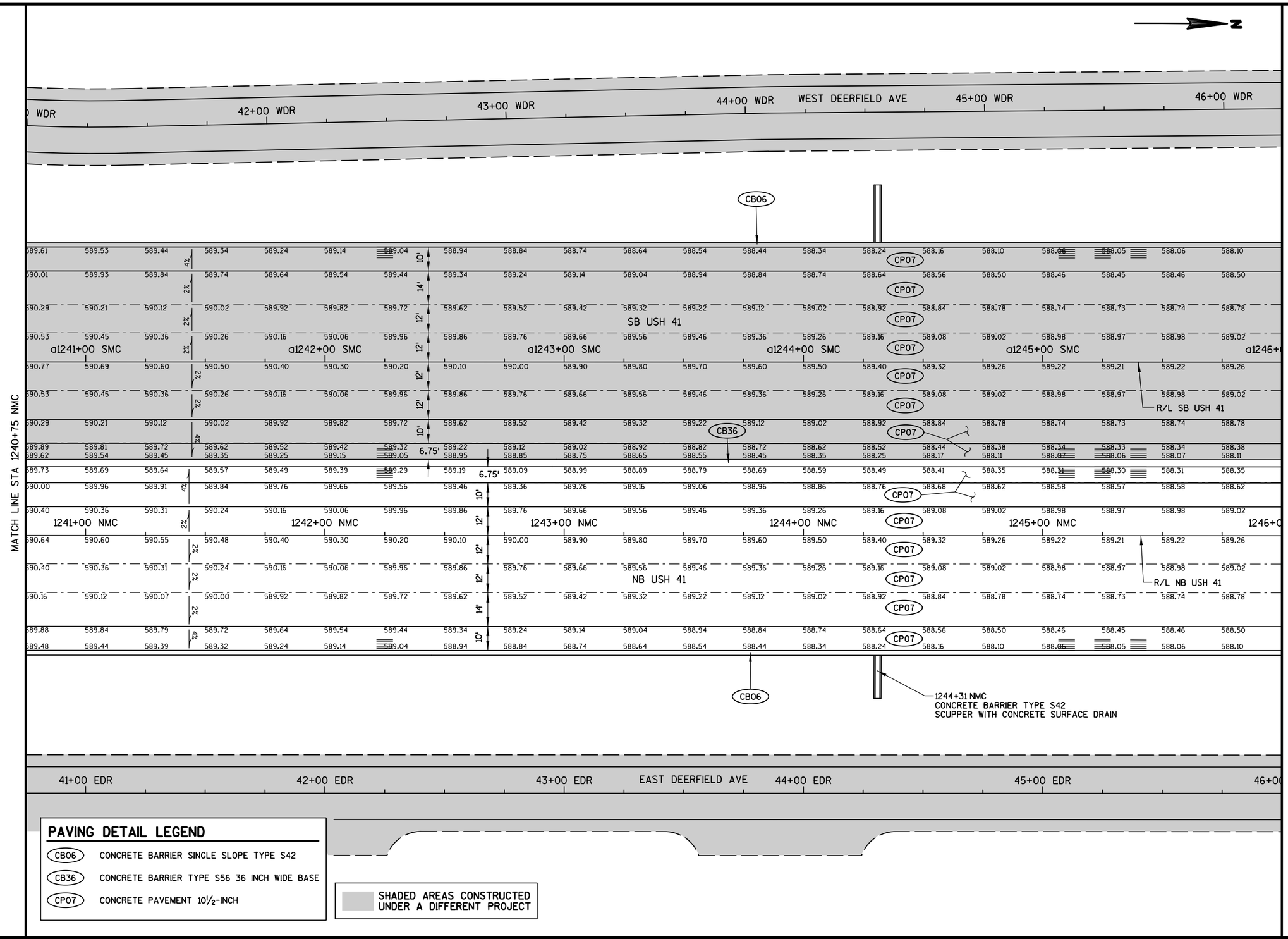
SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT



NOTE:
CONTRACTOR RESPONSIBLE FOR CONCRETE PAD DESIGN WITHIN CRASH CUSHION RESERVE AREA. SEE CONSTRUCTION DETAILS.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 85	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021212_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40



PAVING DETAIL LEGEND

CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CP07	CONCRETE PAVEMENT 10½-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021213_pd (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

47+00 WDR | 48+00 WDR | 49+00 WDR | 50+00 WDR | 51+00 WDR | 52+00 WDR

WEST DEERFIELD AVE

PAVING DETAIL LEGEND

CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CB42	CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (36 INCH WIDE BASE)
CP07	CONCRETE PAVEMENT 10½-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

CB06 — S-05-196

SB USH 41

NB USH 41

R/L SB USH 41

R/L NB USH 41

DRILLED DOWEL BARS PER SDD 13C11

DRILLED TIE BARS PER SDD 13C1

a1247+00 SMC | a1248+00 SMC | a1249+00 SMC | +00 SMC | a1250+00 SMC | a1251+00 SMC | a1252+

1247+00 NMC | 1248+00 NMC | 1249+00 NMC | +00 NMC | 1250+00 NMC | 1251+00 NMC | 1252+0

MATCH LINE STA 1246+00 NMC

MATCH LINE STA 1252+00 NMC

1246+19 NMC
CONCRETE BARRIER TYPE S42
SCUPPER WITH CONCRETE SURFACE DRAIN

47+00 EDR | 48+00 EDR | 49+00 EDR | 50+00 EDR | 51+00 EDR | 52+00

EAST DEERFIELD AVE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021214_pd (USH 41).dgn | PLOT BY : dm253 | PLOT DATE : 11/4/2014 | PLOT SCALE : 1:40

2

N

53+00 WDR
54+00 WDR
55+00 WDR
56+00 WDR
WEST DEERFIELD AVE

SB USH 41

MATCH LINE STA 1252+00 NMC

a1253+00 SMC
a1254+00 SMC
a1255+00 SMC
a1256+00 SMC
a1257+00 SMC
a1258+00 SMC

CB36
CP07
CB36
CONNECT TO EXISTING CONCRETE BARRIER. SEE SDD FOR CONCRETE BARRIER SINGLE SLOPE.
+25 NMC
CP07
DRILLED TIE BARS PER SDD 13C1

1253+00 NMC
1254+00 NMC
1255+00 NMC
1256+00 NMC
1257+00 NMC
1258+00 NMC

NB USH 41

EDR
53+00 EDR
EAST DEERFIELD AVE
54+00 EDR
55+00 EDR
56+00

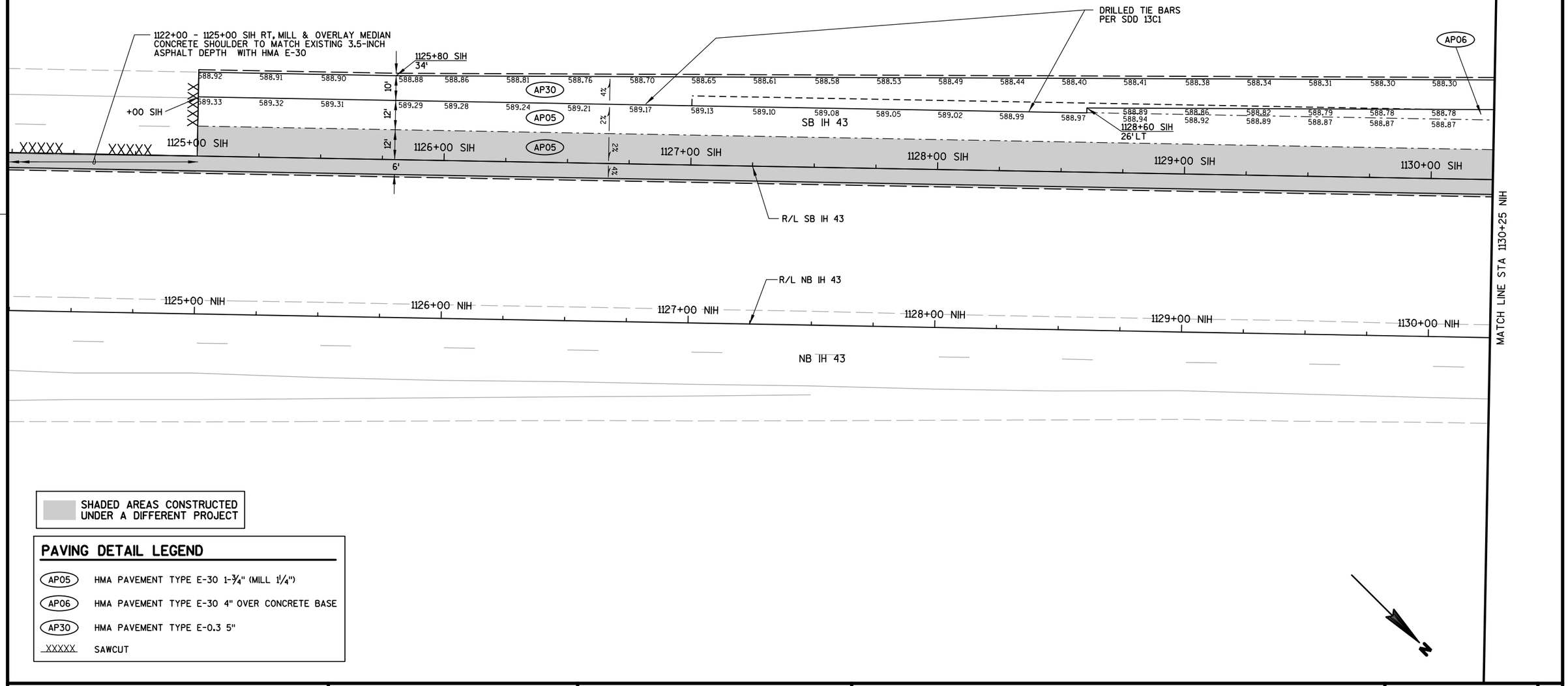
SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CP07	CONCRETE PAVEMENT 10½-INCH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - USH 41	SHEET 88	E

2



SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

AP05	HMA PAVEMENT TYPE E-30 1-¾" (MILL 1¼")
AP06	HMA PAVEMENT TYPE E-30 4" OVER CONCRETE BASE
AP30	HMA PAVEMENT TYPE E-0.3 5"
XXXXX	SAWCUT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 89	E

2

DRILLED TIE BARS PER SDD 13C1

DRILLED TIE BARS PER SDD 13C1

1135+60 SIH 36'LT

AG02

AP30

AP06

AP05

AP05

AG02

MILL & OVERLAY MEDIAN SHOULDER

AG02

588.27 588.23 588.20 588.18 588.16 588.14 588.10 588.07 588.05 588.05 588.03 588.01 587.98 587.95 587.93 587.93 587.93 587.92 587.91 587.90 587.90 587.91 587.91

588.75 588.71 588.68 588.66 588.64 588.61 588.59 588.55 588.53 588.53 588.51 588.49 588.47 588.43 588.41 VAR 588.41 588.40 588.40 588.39 588.38 588.38 588.39 588.39

588.84 588.82 588.80 588.78 588.76 588.75 588.73 588.70 588.69 588.69 588.68 588.67 588.65 588.62 588.61 588.62 588.62 588.62 588.62 588.62 588.62 588.64 588.64

SB IH 43

1131+00 SIH 1132+00 SIH 1133+00 SIH 1134+00 SIH 1135+00 SIH 1136+0

4% 2% 2% 2% 2% 4% 12' 12' 12' 12' 6' 1' 1'

R/L SB IH 43

R/L NB IH 43

MATCH LINE STA 1130+25 NIH

1131+00 NIH 1132+00 NIH 1133+00 NIH 1134+00 NIH 1135+00 NIH 1136+0

+50 NIH

NB IH 43

MATCH LINE STA 1136+00 NIH

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP05	HMA PAVEMENT TYPE E-30 1-¾" (MILL 1¼")
AP06	HMA PAVEMENT TYPE E-30 4" OVER CONCRETE BASE
AP30	HMA PAVEMENT TYPE E-0.3 5"

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

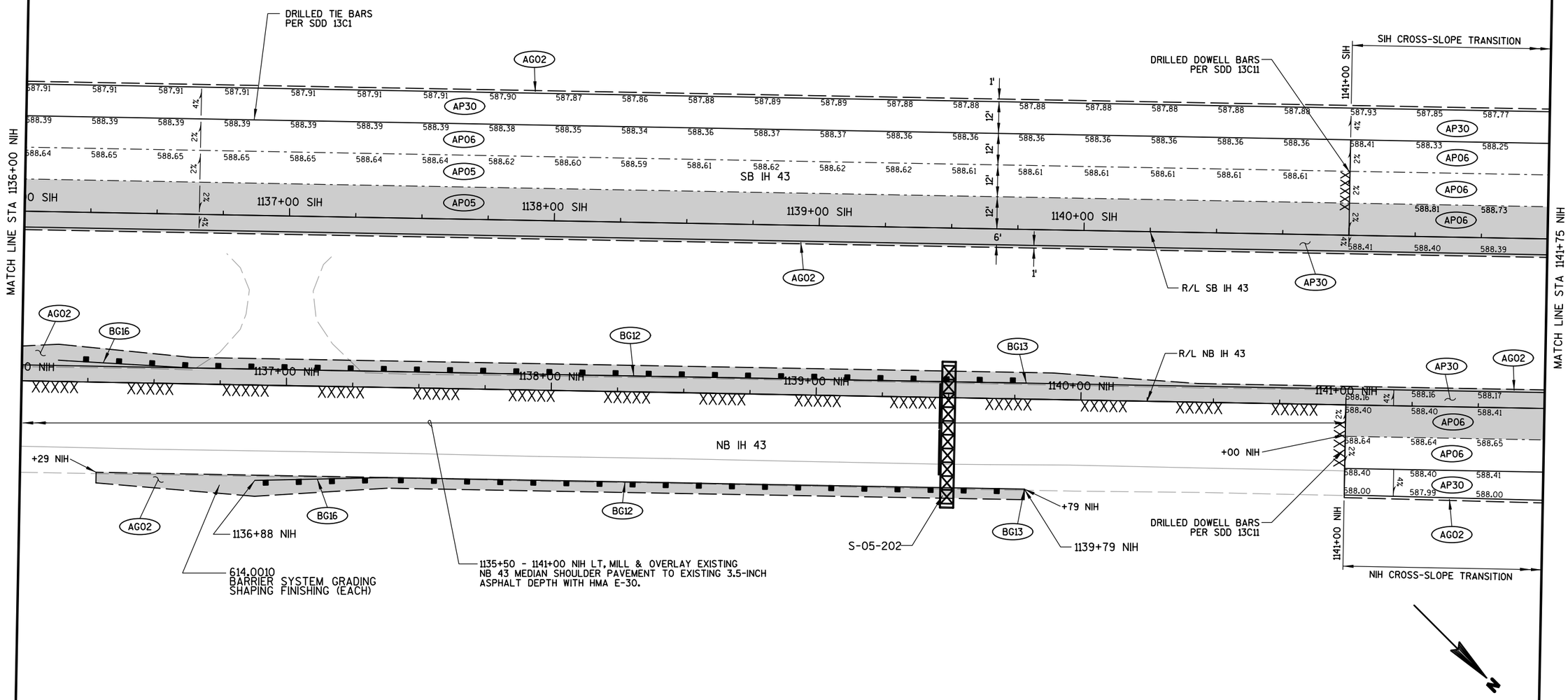
N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 90	E

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP05	HMA PAVEMENT TYPE E-30 1-¾" (MILL 1¼")
AP06	HMA PAVEMENT TYPE E-30 4" OVER CONCRETE BASE 8-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG13	MGS GUARDRAIL TERMINAL TYPE 2
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 91	E

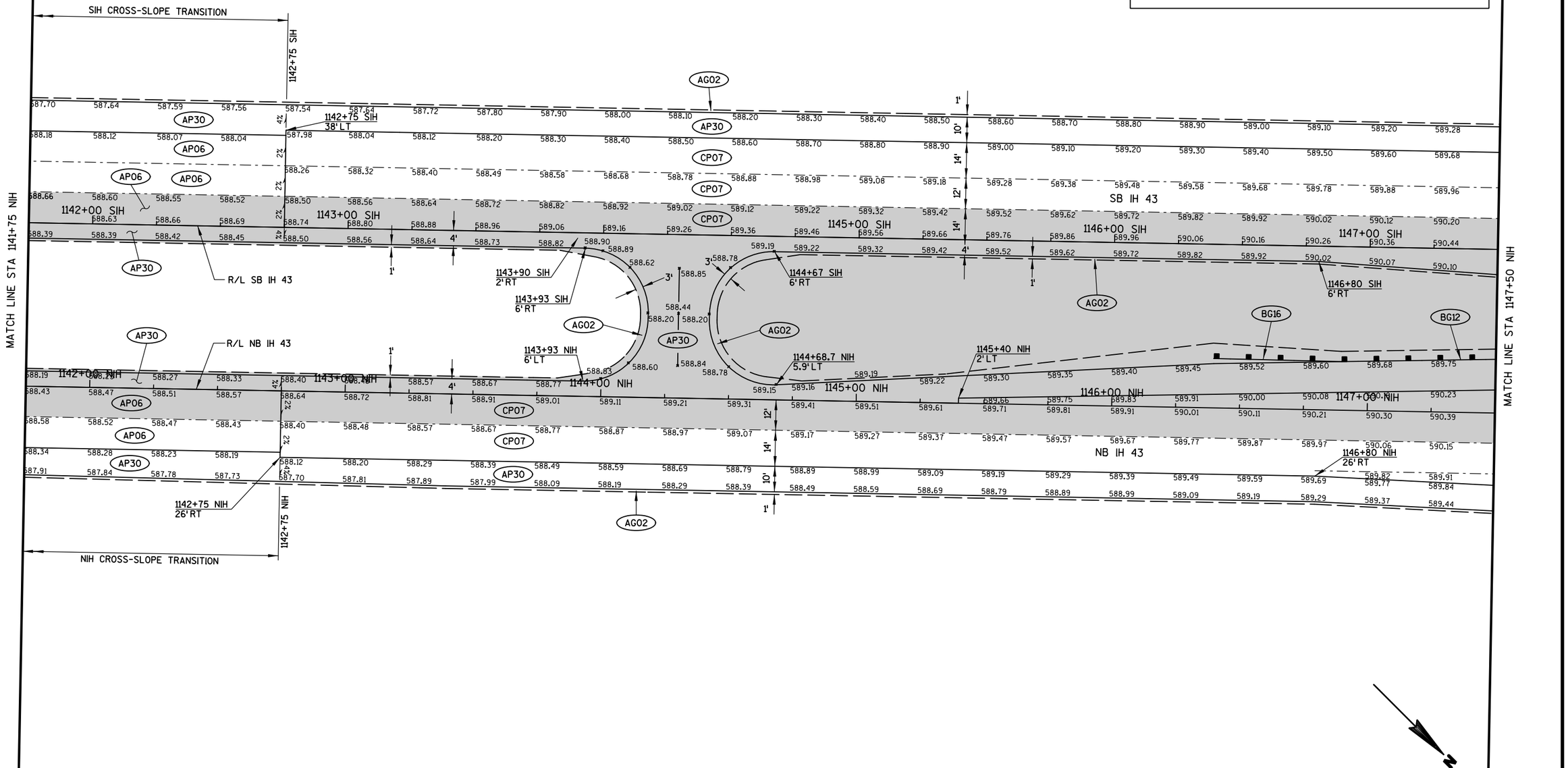
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021218_pd (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

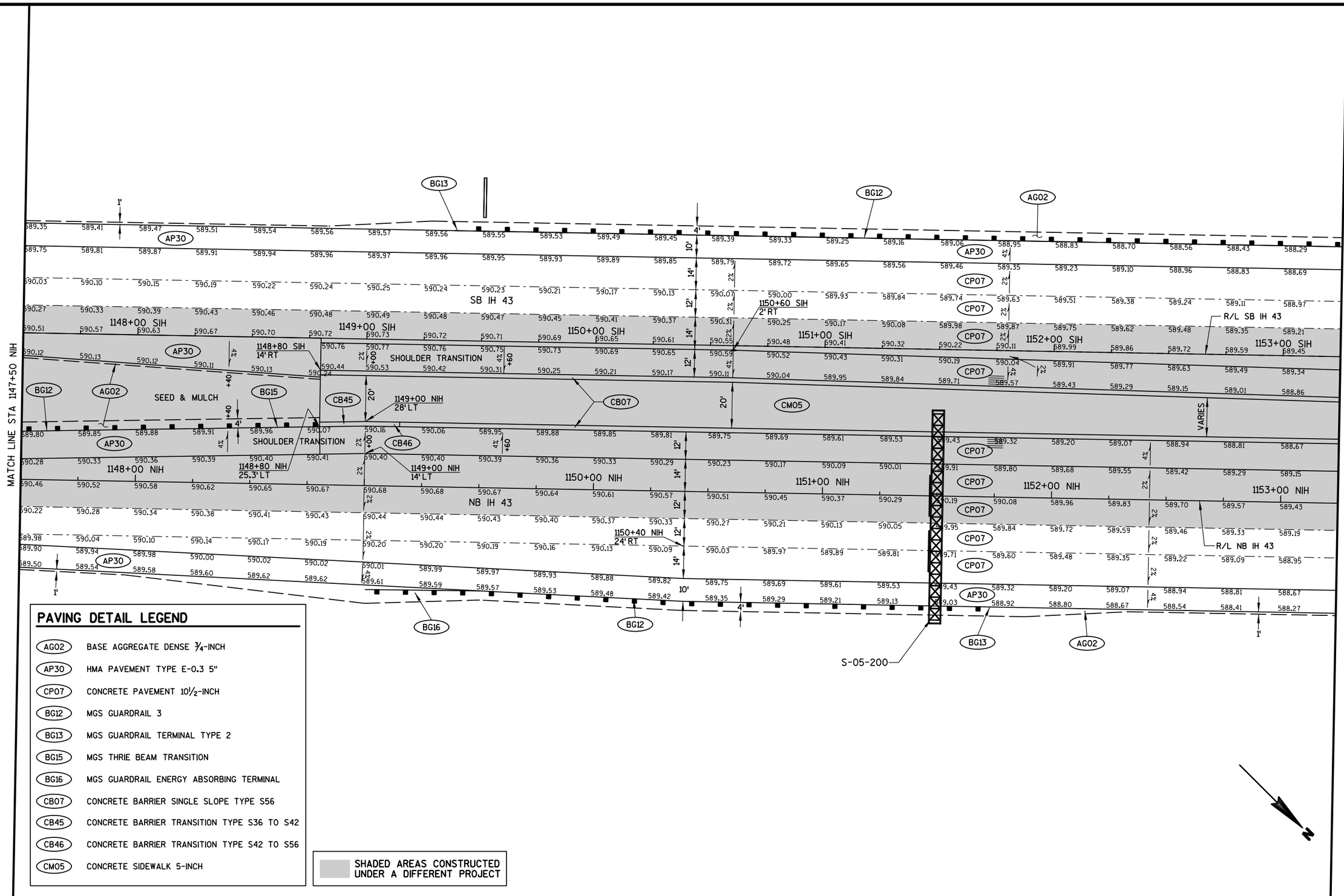
PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP06	HMA PAVEMENT TYPE E-30 4" OVER CONCRETE BASE 8-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CP07	CONCRETE PAVEMENT 10½-INCH



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021219_pd (IH 43).dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42



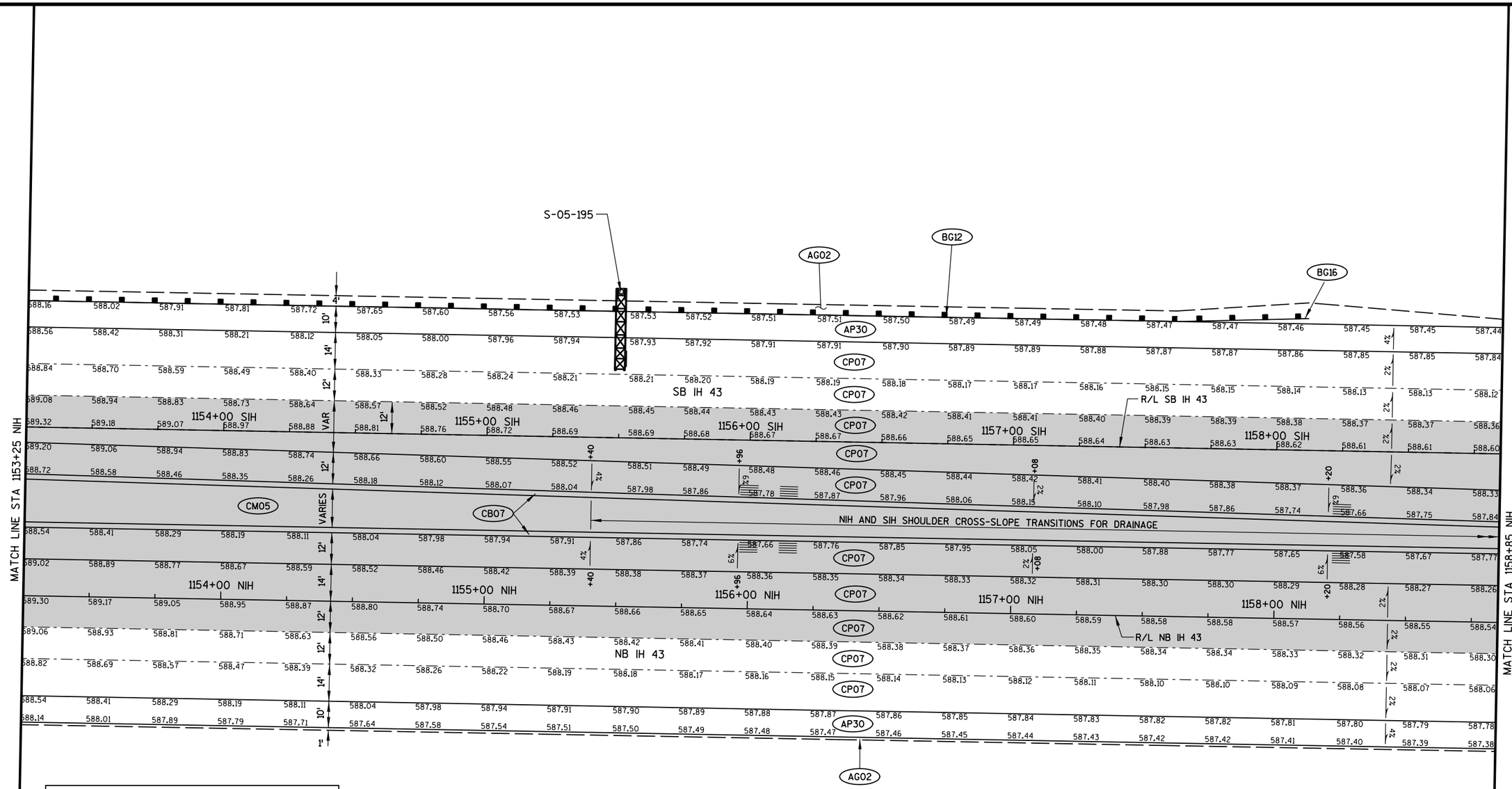
PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
CP07	CONCRETE PAVEMENT 10½-INCH
BG12	MGS GUARDRAIL 3
BG13	MGS GUARDRAIL TERMINAL TYPE 2
BG15	MGS THRIE BEAM TRANSITION
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CM05	CONCRETE SIDEWALK 5-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 93	E

2



PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE 3/4-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10 1/2-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021221_pd (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

2

MILITARY AVE

SIH SHOULDER CROSS-SLOPE TRANSITION FOR DRAINAGE

1160+44 SIH

12'

5:1R (TYP)

21'

1160+75 SIH
LAW ENFORCEMENT PAD,
6" BAD 3/4-INCH

AG02

1163+56 SIH

SB IH 43

1159+00 SIH | 1160+00 SIH | 1161+00 SIH | 1162+00 SIH | 1163+00 SIH | 1164+00 SIH

R/L SB IH 43

NIH AND SIH SHOULDER CROSS-SLOPE TRANSITIONS FOR DRAINAGE

R/L NB IH 43

1159+00 NIH | 1160+00 NIH | 1161+00 NIH | 1163+00 NIH | 1164+00 NIH

NB IH 43

1160+44 NIH

1163+00 NIH

NIH CROSS-SLOPE SHOULDER TRANSITION FOR DRAINAGE

1163+25 NIH
LAW ENFORCEMENT PAD,
6" BAD 3/4-INCH

MILITARY AVE

MATCH LINE STA 1158+85 NIH

MATCH LINE STA 1164+75 NIH

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021222_pd (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10½-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE STA 1164+75 NIH

MATCH LINE STA 1170+75 NIH

1165+00 SIH

1166+00 SIH

1167+00 SIH

1168+00 SIH

1169+00 SIH

1170+00 SIH

SB IH 43

R/L SB IH 43

NB IH 43

R/L NB IH 43

1165+00 NIH

1166+00 NIH

1167+00 NIH

1168+00 NIH

1169+00 NIH

1170+00 NIH

R/L NB IH 43 TO SB USH 41

1166+00 IHB

1167+00 IHB

1168+00 IHB

1169+00 IHB

1169+46.3 IHB 3' LT

1167+13 IHB

1168+03 IHB

1168+93 IHB

IHB CROSS-SLOPE TRANSITION

SHOULDER TRANSITION

+60

+20

S-05-201

68+00 HB

67+00 HB

69+00 HB

HURLBUT ST

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 96	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021223_pd (IH 43).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA 1170+75 NIH

MATCH LINE STA 1176+65 NIH

SB IH 43

NB IH 43

NB IH 43 TO SB USH 41

R/L SB IH 43

R/L NB IH 43

R/L NB IH 43 TO SB USH 41

1171+00 NIH

1172+00 NIH

1173+00 NIH

1174+00 NIH

1175+00 NIH

1176+00 NIH

1171+59.4 NIH
14' RT

1175+00 NIH
28' LT

1171+60.8 IHB
26' RT

1174+81.5 IHB
4' LT

1174+81.5 IHB
22' RT

1216+57.7 IHA
3' LT

1171+00 IHB

1171+35 IHB

1171+00 IHA

1172+00 IHA

1173+00 IHA

1174+00 IHA

1175+00 IHA

1176+00 IHA

1220+00 IHA

1219+00 IHA

1218+00 IHA

1215+00 IHA

1172+25 IHB

1173+15 IHB

1174+25 IHB

1174+85 IHB

1175+65 IHB

1176+45 IHB

1175+20 IHB

1176+00 IHB

IHB CROSS-SLOPE TRANSITION

IHB SHOULDER CROSS-SLOPE TRANSITION

10,300' R

AG02 AP30 CP07 AP04 CB07 CM05 BG12 BG16 AP30 BG15 CG06 PV01

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH	CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE	CG06	CONCRETE CURB AND GUTTER 32-INCH TYPE A FULL DEPTH
AP30	HMA PAVEMENT TYPE E-0.3 5"	CM05	CONCRETE SIDEWALK 5-INCH
BG12	MGS GUARDRAIL 3	CP07	CONCRETE PAVEMENT 10½-INCH
BG15	MGS THRIE BEAM TRANSITION	PV01	CONCRETE PAVEMENT APPROACH SLAB
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL		

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

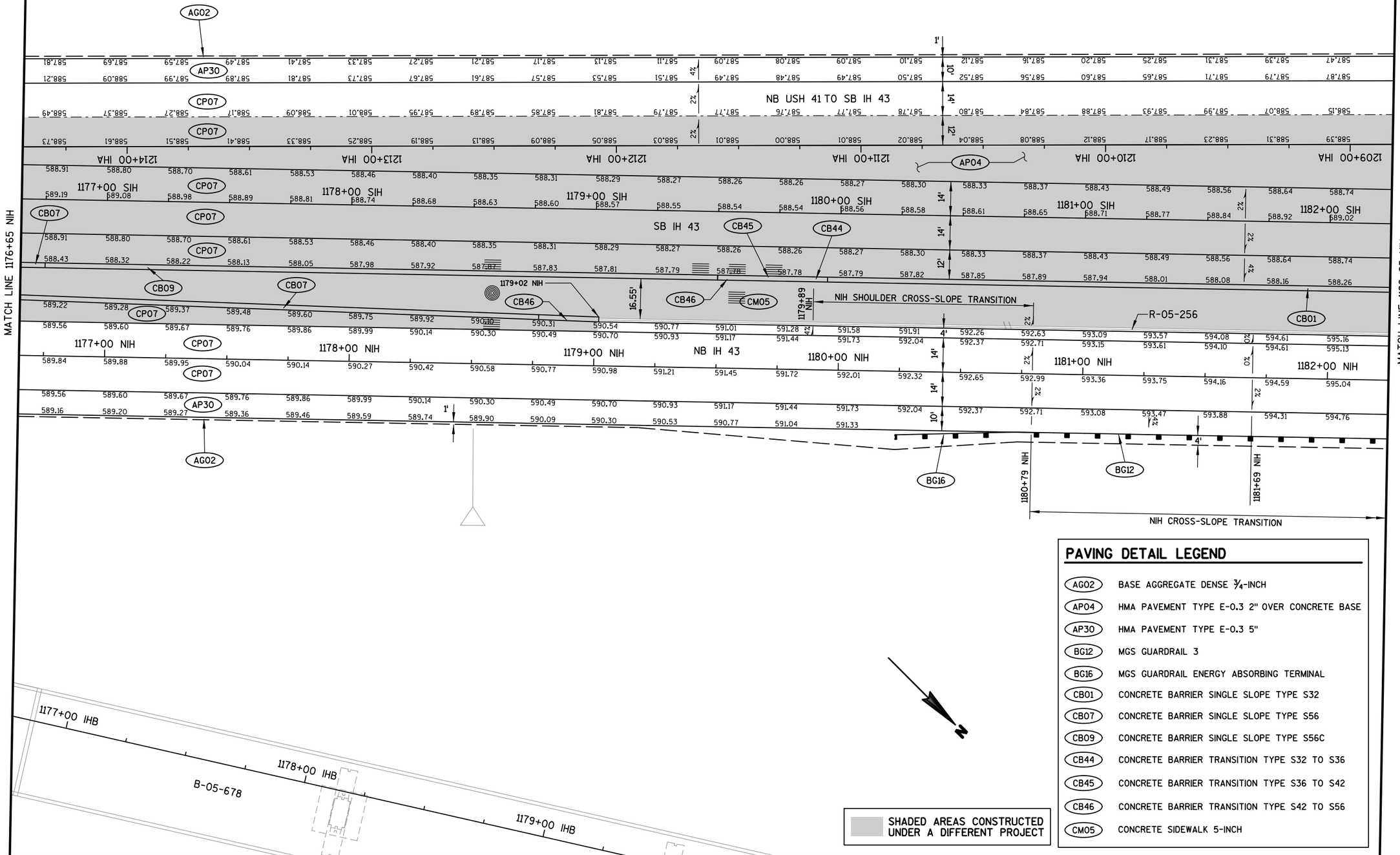
B-05-678

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021224_pd (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB01	CONCRETE BARRIER SINGLE SLOPE TYPE S32
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CB09	CONCRETE BARRIER SINGLE SLOPE TYPE S56C
CB44	CONCRETE BARRIER TRANSITION TYPE S32 TO S36
CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
CB46	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CM05	CONCRETE SIDEWALK 5-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 98	E

2

2

MATCH LINE 1182+25 NIH

MATCH LINE 1188+25 SIH

IHA CROSS-SLOPE TRANSITION

1203+02 IHA

AG02

AP30

CP07

NB USH 41 TO SB IH 43

1207+00 IHA

1208+00 IHA

1204+00 IHA

1205+00 IHA

AP04

1182+59 SIH

1183+00 SIH

1184+00 SIH

1185+00 SIH

1186+00 SIH

1187+00 SIH

1188+00 SIH

SB IH 43

1186+19 SIH

CM05

SIH CROSS-SLOPE TRANSITION

SEED & MULCH

CB01

R-05-256

1183+00 NIH

1184+00 NIH

1185+00 NIH

1186+00 NIH

1187+00 NIH

1188+00 NIH

NB IH 43 TO NB USH 41

1182+59 NIH

BG12

1183+69 NIH

1184+39 NIH

B-05-679

CG06

BG15

PV01

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE 3/4-INCH
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG15	MGS THRIE BEAM TRANSITION
CG06	CONCRETE CURB AND GUTTER 32-INCH TYPE A FULL DEPTH
CB01	CONCRETE BARRIER SINGLE SLOPE TYPE S32
CM05	CONCRETE SIDEWALK 5-INCH
CP07	CONCRETE PAVEMENT 10 1/2-INCH
SD02	CONCRETE SURFACE DRAINS

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET	E

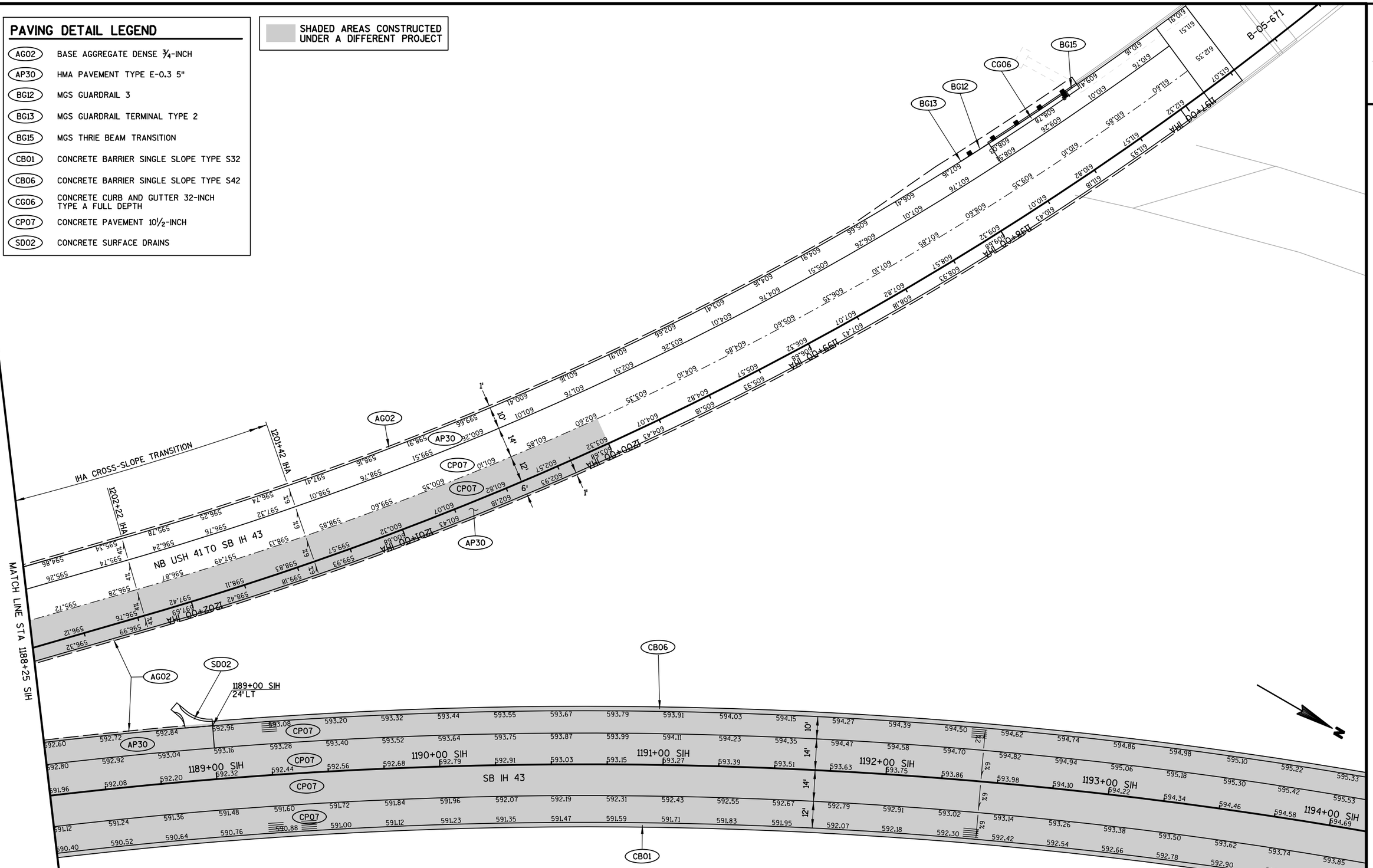
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021226_pd (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP30	HMA PAVEMENT TYPE E-0.3 5"
BG12	MGS GUARDRAIL 3
BG13	MGS GUARDRAIL TERMINAL TYPE 2
BG15	MGS THRIE BEAM TRANSITION
CB01	CONCRETE BARRIER SINGLE SLOPE TYPE S32
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CG06	CONCRETE CURB AND GUTTER 32-INCH TYPE A FULL DEPTH
CP07	CONCRETE PAVEMENT 10½-INCH
SD02	CONCRETE SURFACE DRAINS

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

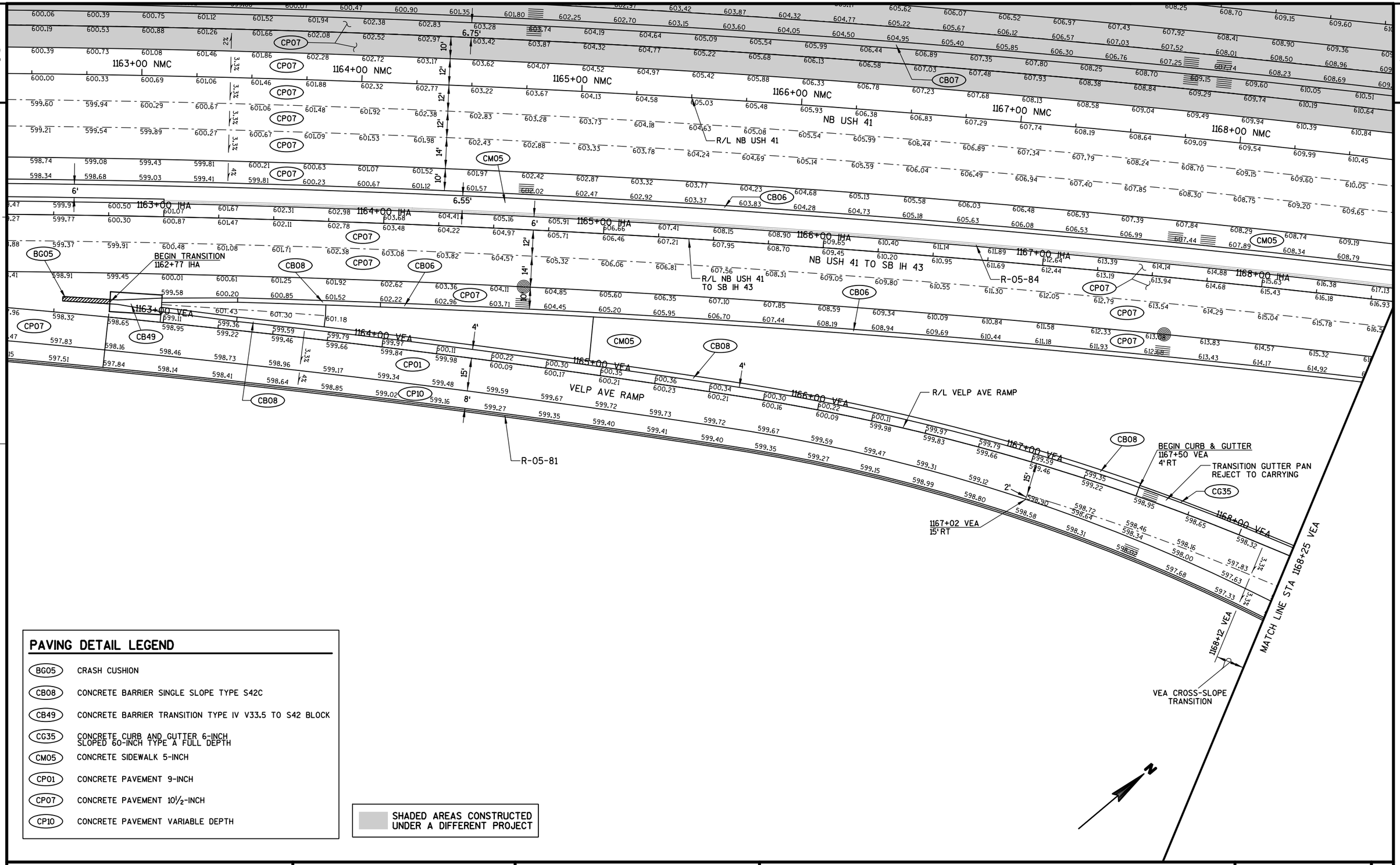


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - IH 43	SHEET 100	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021227_pd (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



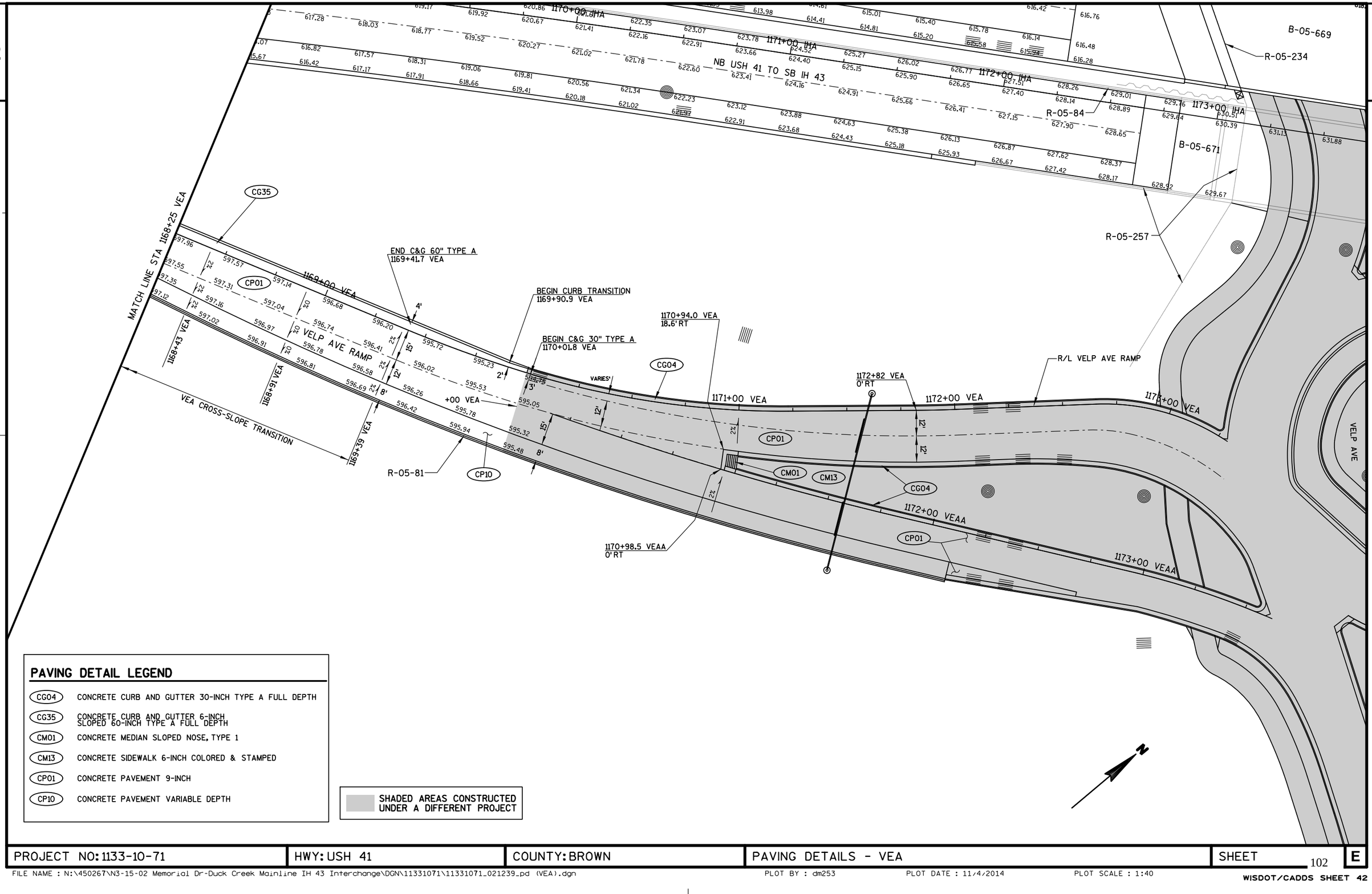
PAVING DETAIL LEGEND

BG05	CRASH CUSHION
CB08	CONCRETE BARRIER SINGLE SLOPE TYPE S42C
CB49	CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK
CG35	CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH
CM05	CONCRETE SIDEWALK 5-INCH
CP01	CONCRETE PAVEMENT 9-INCH
CP07	CONCRETE PAVEMENT 10½-INCH
CP10	CONCRETE PAVEMENT VARIABLE DEPTH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - VEA	SHEET 101	E

2



PAVING DETAIL LEGEND

CG04	CONCRETE CURB AND GUTTER 30-INCH TYPE A FULL DEPTH
CG35	CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH
CM01	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CM13	CONCRETE SIDEWALK 6-INCH COLORED & STAMPED
CP01	CONCRETE PAVEMENT 9-INCH
CP10	CONCRETE PAVEMENT VARIABLE DEPTH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - VEA	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021239_pd (VEA).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

1175+00 NMC
1176+00 NMC
1177+00 NMC
1178+00 NMC
1179+00 NMC
1180+00 NMC
NB USH 41
R/L NB USH 41
1175+00 IHA
1176+00 IHA
1177+00 IHA
1178+00 IHA
1179+00 IHA
1180+00 IHA
B-05-671
VELP AVE
TRANSITION GUTTER PAN CARRYING TO REJECT
1179+55 VEB 4'LT
R/L VELP AVE RAMP
+00 VEB
1176+00 VEB
1177+00 VEB
1178+00 VEB
1179+00 VEB
1180+00 VEB
VELP AVE TO NB USH 41
R-05-82
1177+00 VEB 23'RT
MATCH LINE STA 1180+75 VEB

CB07 CP07 CB06 CP07 CP07 CP07 CP07 CG35 BG16 CG35 BG12 CG08 BG15 CB44 CB45 CB06 CP01 CP01 CP10 CB44 CB45

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
BG12	MGS GUARDRAIL 3
BG15	MGS THRIE BEAM TRANSITION
BG16	MGS GUARDRAIL ENERGY ABSORBING TERMINAL
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB44	CONCRETE BARRIER TRANSITION TYPE S32 TO S36
CB45	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
CG08	CONCRETE CURB AND GUTTER 56-INCH TYPE A FULL DEPTH
CG35	CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH
CP01	CONCRETE PAVEMENT 9-INCH
CP10	CONCRETE PAVEMENT VARIABLE DEPTH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - VEB	SHEET 103	E

2

2

R/L NB USH 41

CB07

1181+00 NMC

1182+00 NMC

1183+00 NMC

1184+00 NMC

1185+00 NMC

1186+00 NMC

NB USH 41

VARIES

12'

14'

10'

+79

+39

4%

2%

PV01

PV03

CG09

B-05-674

1183+69.7 NMC
26' RT

CB06

R/L NB USH 41 TO SB IH 43

R/L VELP AVE RAMP

1181+00 IHA

1182+00 IHA

1183+00 IHA

1184+00 IHA

1185+00 IHA

1186+00 IHA

1181+00 VEB

1182+00 VEB

1183+00 VEB

1184+00 VEB

1185+00 VEB

1186+00 VEB

CP01

CP07

B-05-675

VELP AVE TO NB USH 41

4'

8'

15'

SHOULDER TRANSITION

MATCH LINE 1180+75 VEB

B-05-671

MEMORIAL DR

WISCONSIN CENTRAL LTD. RR

87+0

1187+00

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PAVING DETAIL LEGEND

CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB07	CONCRETE BARRIER SINGLE SLOPE TYPE S56
CG09	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A FULL DEPTH
CP01	CONCRETE PAVEMENT 9-INCH
CP07	CONCRETE PAVEMENT 10½-INCH
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV03	CONCRETE PAVEMENT APPROACH APRON

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - VEB	SHEET 104	E

PAVING DETAIL LEGEND

AG02	BASE AGGREGATE DENSE ¾-INCH
AP04	HMA PAVEMENT TYPE E-0.3 2" OVER CONCRETE BASE
CB06	CONCRETE BARRIER SINGLE SLOPE TYPE S42
CB36	CONCRETE BARRIER TYPE S56 36 INCH WIDE BASE
CG35	CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH
CP01	CONCRETE PAVEMENT 9-INCH
CP07	CONCRETE PAVEMENT 10½-INCH

2

62+00 IS

ISLAND CT

63+00 IS

585

580

BEAVER DAM CREEK

580

585

STORMWATER POND

N

B-05-693

VED SHOULDER CROSS-SLOPE TRANSITION

VED CROSS-SLOPE TRANSITION

1164+56 VED

1163+81 VED

1165+45.1 VED
24' LT

VED CROSS-SLOPE TRANSITION

1167+09 VED

1167+50.0 VED
24' LT

CB06

CP07

CP01

1163+05.3 VED
15' LT

1162+00 VED

1163+00 VED

1164+00 VED

VELP AVE RAMP

1165+00 VED

1166+00 VED

1167+00 VED

R/L VELP AVE RAMP

MATCH LINE STA 1167+75 VED

AG02

CG35

END BARRIER
1165+00 SMC
53.2' LT

CB06

AP04

1162+49.5 VED
4' RT

SB USH 41

1162+00 SMC

1163+00 SMC

1164+00 SMC

1165+00 SMC

1166+00 SMC

1167+00 SMC

R/L SB USH 41

CB36

1162+00 NMC

1163+00 NMC

1164+00 NMC

1165+00 NMC

1166+00 NMC

1167+00 NMC

R/L NB USH 41

NB USH 41

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - VED	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021250_pd (VED).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

PAVING DETAIL LEGEND

- CB06 — CONCRETE BARRIER SINGLE SLOPE TYPE S42
- CG04 — CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG35 — CONCRETE CURB AND GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH
- CM05 — CONCRETE SIDEWALK 5-INCH
- CP01 — CONCRETE PAVEMENT 9-INCH

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

STORMWATER POND

575 580 585 590

VELP AVE

1173+00 VEDA

1171+50.0 VEDA
27.6'LT

CM05

CB06

1172+00 VEDA

1170+70 VEDA
20'LT

VED CROSS-SLOPE TRANSITION

1167+85 VED

1168+00.0 VED
12'LT

1168+65 VED

1169+45 VED

MATCH LINE STA 1167+75 VED

599.41 599.23 598.96 598.69 598.79 598.68 598.47 598.27 598.15 598.08 597.95 597.83 597.48 597.45 597.40 597.36

2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%

12' 12' 5' 15' 4' VARIES 15' 15' 2'

CG04

1171+00 VEDA

1172+00 VED

CP01 CP01

VELP AVE RAMP

1169+00 VED

1170+00 VEDA

1170+00 VED

END C&G 36" TYPE A
1171+51.9 VED
0'RT

BEGIN C&G 36" TYPE A
1170+64 VED
0'RT

CG35

+50 VED

R/L VELP AVE RAMP

END C&G 60" TYPE A
1169+55.9 VED
4'RT

1169+61 VEDA
0'RT

S-05-257

R-05-234

B-05-668

1228+00 IHB

SB USH 41

1168+00 SMC 1169+00 SMC 1170+00 SMC 1171+00 SMC 1172+00 SMC 1173+00 SMC

1168+00 NMC

609.14 609.44 609.74 610.04 610.34 610.63 610.93 611.22 611.51 611.80 612.08 612.37 612.65 612.98 613.32 613.73 614.13 614.51 614.88

609.54 609.84 610.14 610.44 610.74 611.03 611.33 611.62 611.91 612.20 612.48 612.77 613.05 613.32 613.58 613.93 614.33 614.71

609.25 609.58 609.91 610.24 610.57 610.90 611.23 611.56 611.89 612.22 612.55 612.88 613.21 613.54 613.84 614.21 614.61 614.99

608.92 609.29 609.66 610.03 610.40 610.77 611.14 611.51 611.88 612.25 612.62 612.99 613.36 613.72 614.07 614.45 614.85 615.23

608.58 608.99 609.40 609.81 610.22 610.63 611.04 611.45 611.86 612.27 612.68 613.09 613.50 613.91 614.29 614.69 615.09 615.47

608.25 608.70 609.15 609.60 610.05 610.50 610.95 611.40 611.85 612.30 612.75 613.20 613.65 614.09 614.52 614.93 615.33 615.71 616.08 616.43

607.92 608.41 608.90 609.36 609.81 610.26 610.71 611.16 611.61 612.06 612.51 612.96 613.41 613.85 614.28 614.69 615.09 615.47

607.52 608.01 608.50 608.96 609.41 609.86 610.31 610.76 611.21 611.66 612.11 612.56 613.01 613.51 614.02 614.49 614.89

607.25 607.74 608.23 608.69 609.13 609.57 610.01 610.46 610.92 611.38 611.84 612.29 612.74 613.27

609.15 609.60 610.05 610.51 610.96 611.41 611.87

609.29 609.74 610.19 610.64 611.09 611.54 612.01

609.49 609.94 610.39 610.84 611.29 612.33 612.80

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVING DETAILS - VED	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021251_pd (VED).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

MEMORIAL DR

USH 41

R/W

WISCONSIN CENTRAL LTD RAILROAD

12+00 RR

14+00 RR

16+00 RR

18+00 RR

20+00 RR

22+00 RR

EXISTING TRACK

SLOPE INTERCEPTS

KDL

B-05-678

B-05-679

1182+00 VEB

1182+00 NWC

1182+00 SWC

1182+00 VEC

1184+00 VEB

1184+00 NWC

1184+00 SWC

1184+00 VEC

1186+00 VEB

1186+00 NWC

1186+00 SWC

1186+00 VEC

1188+00 VEB

1188+00 NWC

1188+00 SWC

1188+00 VEC

1190+00 VEB

1190+00 NWC

1190+00 SWC

1190+00 VEC

1210+00 IHB

1212+00 IHB

1214+00 IHB

1220+00 IHB

SHEET LOCATION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	RAILROAD SITE DEVELOPMENT PLAN	SCALE, FEET 0 50 100	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021259_RR.dgn

PLOT BY : dm253

PLOT DATE : 11/4/2014

PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

ROSEWOOD ST

EXISTING TOE TRENCH

MEMORIAL DR

VELP AVE (USH 141)

WISCONSIN CENTRAL LTD. RR

IH 43

WEST DEERFIELD AVE

DUCK CREEK

1170 NMC
1170 IHA
1170 VEA
1220 IHB
1180 NMC
1180 IHA
1180 VEB
1210 IHB
1190 NMC
1190 VEB
1180 OB2
1200 NMC
1210 NMC
1210 NIH
1220 NMC
1200 IHB
1190 OB2
1200 NIH
1200 IHA
1190 NIH
1190 IHB
1210 HIN OB2
1180 OB1
1180 IHB
1220 IHA

20 BP2
40 BP2
30 BP2
10 BP1
25 BP1
20 BP1
15 BP1

GEOTEXTILE
1182+00 - 1186+00 OB2

MARSH EXCAVATION
1197+00 - 1202+00 IHA

N

2.5' TYP.

STRIP DRAIN TYP.

5' TYP.

5' TYP.

STRIP DRAIN PLACEMENT DETAIL

LEGEND

EXISTING STRIP DRAINS (1133-11-74)

PROPOSED STRIP DRAINS (1133-10-71)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SOIL MITIGATION OVERVIEW	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021270A_sd_ov.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:400

LEGEND

LOCATIONS OF GEOTEXTILE ES NEEDED FOR EMBANKMENT STABILITY

LOCATIONS OF GEOTEXTILE ES INSTALLED UNDER PREVIOUS PROJECTS

NOTES:

GEOTEXTILE MUST HAVE 8 INCHES GRANULAR MATERIAL ABOVE AND BELOW. WHERE DRAINAGE BLANKET IMMEDIATELY BELOW GEOTEXTILE, 8 INCHES GRANULAR MATERIAL ONLY REQUIRED ABOVE.

WHERE PROPOSED GEOTEXTILE PLACED ADJACENT TO EXISTING GEOTEXTILE, LAYERS MUST OVERLAP BY AT LEAST 4 FEET.

ONLY PERTINENT ALIGNMENTS TO GEOTEXTILE AREAS ARE SHOWN ON THIS DRAWING. SEE PROJECT OVERVIEW AND ALIGNMENT DIAGRAMS FOR PROJECT LIMITS AND ALL PROJECT ALIGNMENT INFORMATION.

GEOTECHNICAL REPORTS BY GESTRA & HNTB

41

1180+00 OB2

1196+00 NMC

STA 1181+65 OB2
OFF 42'RT

STA 1181+65 OB2
OFF 16'RT

1182+00 OB2

STA 1182+40 OB2
OFF 11'LT

STA 1183+05 OB2
OFF 50'LT

℄ SMC
(SB USH 41)

1198+00 NMC

STA 1182+36 OB2
OFF 40'RT

B-5-678

STA 1183+09 OB2
OFF 23'LT

STA 1183+05 OB2
OFF 40'RT

STA 1183+85 OB2
OFF 23'LT

℄ NMC
(NB USH 41)

1184+00 OB2

STA 1183+94 OB2
OFF 34'RT

ORIENT MACHINE DIRECTION
PERPENDICULAR TO NMC ALIGNMENT

1202+00 NMC

STA 1185+00 OB2
OFF 31'RT

STA 1184+95 OB2
OFF 22'LT

1204+00 NMC

STA 1185+80 OB2
OFF 31'RT

STA 1185+80 OB2
OFF 23'LT

1186+00 OB2

1206+00 NMC

1208+00 NMC

1188+00 OB2

1190+00 OB2

1192+00 OB2

1194+00

1198+00 NIH

1202+00 NIH

1204+00 NIH

1206+00 NIH

1208+00 NIH

1200+00 NIH

B-5-681

B-5-679

WIETOR DRIVE

IH 43 - NB USH 41

1200+00 IHB

1202+00 IHB

1198+00 IHB

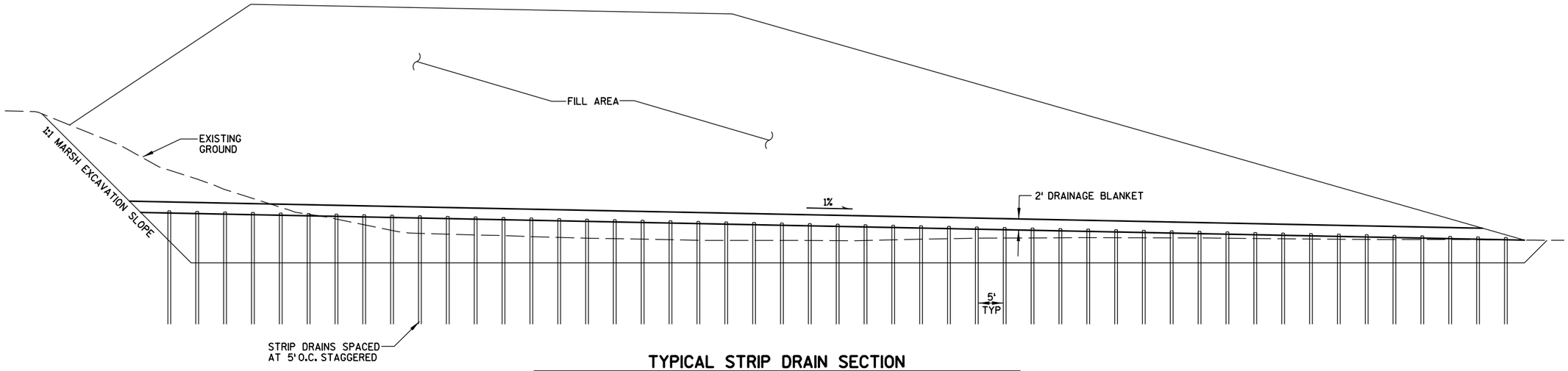
NB IH 43 - SB USH 41

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: GEOTEXTILE MAP	SHEET 109	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021270B_gt.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



TYPICAL STRIP DRAIN SECTION

STA. 1197+00 IHA TO STA. 1202+00 IHA
STA. 1182+00 OB2 TO STA. 1186+00 OB2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STRIP DRAIN DETAILS	SHEET 110	E

2

2

N

USH 41

SB 41 ON-RAMP

SB 41 OFF-RAMP

NB 41 OFF-RAMP

NB 41 ON-RAMP

WIETOR DR

MEMORIAL DR

STRUCTURE
B-05-677

1166+00 VED
1168+00 VED
1170+00 VED
1172+00 VED
1166+00 NMC
1168+00 NMC
1170+00 NMC
1172+00 NMC
1174+00 NMC
1176+00 NMC
1178+00 NMC
1166+00 IHA
1168+00 IHA
1170+00 IHA
1172+00 IHA
1174+00 IHA
1176+00 IHA
1178+00 IHA
1166+00 VEA
1168+00 VEA
1170+00 VEA
1172+00 VEA
1176+00 VEB
1178+00 VEB
1222+00 IHB
1224+00 IHB
1226+00 IHB
1228+00 IHB

INC
PM (1)
SG

LEGEND

- INC — INCLINOMETER
- PM (X) — PIEZOMETER (X DENOTES NUMBER OF METERS PLACED AT LOCATION)
- SG — SETTLEMENT GAUGE
- EXISTING INSTRUMENTATION
- STRIP DRAINS
- EXISTING STRIP DRAINS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: STRIP DRAINS	SHEET 111	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021271A1_sd.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA 1206+00.00 NMC

USH 41

STRUCTURE B-05-678

STRUCTURE B-05-677

WIETOR DR

IH 43

1178+00 OB2

1180+00 OB2

1182+00 OB2

STA 1181+65 OB2
OFF 3'RT

STA 1182+58 OB2
OFF 31'LT

STA 1181+65 OB2
OFF 46'RT

STA 1183+74 OB2
OFF 30'LT

STA 1183+41 OB2
OFF 45'RT

STA 1184+84 OB2
OFF 42'RT

STA 1184+99 OB2
OFF 30'LT

STA 1185+68 OB2
OFF 30'LT

STA 1185+75 OB2
OFF 43'RT

STA 1186+27 OB2
OFF 90'RT

STA 1185+90 OB2
OFF 24'LT

1186+00 OB2

1192+00 NMC

1192+00 VEB

1194+00 NMC

1196+00 NMC

1198+00 NMC

1200+00 NMC

1202+00 NMC

1204+00 NMC

1206+00 NMC

1202+00 NIH

1204+00 NIH

1206+00 NIH

1208+00 IHB

1206+00 IHB

1204+00 IHB

1202+00 IHB

1188+00 IHB

IHB

INC

SG

PM (1)

PM (2)

SIGN

NOIS

INL

C

LEGEND

- INC — INCLINOMETER
- PM (X) — PIEZOMETER (X DENOTES NUMBER OF METERS PLACED AT LOCATION)
- SG — SETTLEMENT GAUGE
- EXISTING INSTRUMENTATION
- STRIP DRAINS
- EXISTING STRIP DRAINS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: STRIP DRAINS	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021271B_sd.dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2

WIETOR DR

STA 1197+65IHA
OFF 126' RT

STA 1197+50IHA
OFF 127' RT

STA 1198+03IHA
OFF 118' RT

STA 1197+25IHA
OFF 102' RT

STA 1198+03IHA
OFF 105' RT

STA 1197+25IHA
OFF 43' RT

STA 1200+45IHA
OFF 105' RT

STA 1199+64IHA
OFF 109' RT

STA 1201+05IHA
OFF 96' RT

STA 1198+50IHA
OFF 44' RT

STA 1202+02IHA
OFF 89' RT

STA 1197+40IHA
OFF 63' LT

STA 1202+02IHA
OFF 6' LT

STA 1201+50IHA
OFF 8' LT

STA 1200+50IHA
OFF 14' LT

STA 1199+50IHA
OFF 53' LT

STA 1200+00IHA
OFF 48' LT

IH 43

1202+00 OB2
1204+00 OB2
1206+00 OB2
1208+00 OB2
1210+00 OB2
1212+00 I

1202+00 IHA
1204+00 IHA
1206+00 IHA
1208+00 IHA
1210+00 IHA

1194+00 IHA
1200+00 IHA

1194+00 OB2

1180+00 NIH
1182+00 NIH
1184+00 NIH
1186+00 NIH
1188+00 NIH
1190+00 NIH
1192+00 NIH

SIGN

SG
PM (1)

STRUCTURE B-05-679

1180+00 IHB
1182+00 IHB
1184+00 IHB
1186+00 IHB
1188+00 IHB
1190+00 IHB
1192+00 IHB

STRUCTURE B-05-678

MATCH LINE STA 1194+50 SIH

LEGEND

- INC — INCLINOMETER
- PM (X) — PIEZOMETER (X DENOTES NUMBER OF METERS PLACED AT LOCATION)
- SG — SETTLEMENT GAUGE
- EXISTING INSTRUMENTATION
- STRIP DRAINS
- EXISTING STRIP DRAINS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: STRIP DRAINS	SHEET 113	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021271E_sd.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

CN RAILROAD

STRUCTURE B-05-678

STA. 1185+50 VEB TO 1186+20 VEB
-ESTIMATED SETTLEMENT = 6 TO 16 INCHES
-2 SOIL LIFTS REQ'D
-2 SETTLEMENT PERIODS (2 MONTHS EACH)
-1ST PERIOD AFTER 1ST LIFT PLACED
-2ND PERIOD AFTER 2ND LIFT PLACED

STA. 1184+20 VEB TO 1185+00 VEB
-ESTIMATED SETTLEMENT = 9 INCHES
-2 SOIL LIFTS REQ'D
-2 SETTLEMENT PERIODS (2 MONTHS EACH)
-1ST PERIOD AFTER 1ST LIFT PLACED
-2ND PERIOD AFTER 2ND LIFT PLACED

USH 41

MATCH LINE STA 1191+50.00 NMC

STRUCTURE B-05-671

1178+00 NMC
1180+00 NMC
1182+00 NMC
1184+00 NMC
1186+00 NMC
1188+00 NMC
1190+00 NMC
1178+00 IHA
1180+00 IHA
1182+00 IHA
1184+00 IHA
1186+00 IHA
1188+00 IHA
1210+00 IHB
1214+00 IHB
1216+00 IHB
1218+00 IHB
1220+00 IHB
1222+00 IHB

LEGEND

STRIP DRAINS

EXISTING STRIP DRAINS

NOTES:

ONLY PERTINENT ALIGNMENTS TO SETTLEMENT ISSUES ARE SHOWN ON THIS DRAWING. SEE PROJECT OVERVIEW AND ALIGNMENT DIAGRAMS FOR PROJECT LIMITS AND ALL PROJECT ALIGNMENT INFORMATION.

GEOTECHNICAL REPORTS BY GESTRA & HNTB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: STRIP DRAIN / SETTLEMENT MAP	SHEET 114	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021272A_st.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

STA. 1196+00 NMC TO 1200+00 NMC
-ESTIMATED SETTLEMENT = 20 TO 26 INCHES
-STRIP DRAIN TIP ELEVATION = 550.00'
-APPROX. 27,758 LF OF STRIP DRAINS REQ'D
-4 SOIL LIFTS REQ'D
-3 SETTLEMENT PERIODS (2 MONTHS EACH)
-1ST PERIOD AFTER 2ND LIFT PLACED
-2ND PERIOD AFTER 3RD LIFT PLACED
-3RD PERIOD AFTER 4TH LIFT PLACED

STA. 1200+00 NMC TO 1203+00 NMC
-ESTIMATED SETTLEMENT = 15 TO 20 INCHES
-STRIP DRAIN TIP ELEVATION = 550.00'
-APPROX. 32,997 LF OF STRIP DRAINS REQ'D
-4 SOIL LIFTS REQ'D
-3 SETTLEMENT PERIODS (2 MONTHS EACH)
-1ST PERIOD AFTER 2ND LIFT PLACED
-2ND PERIOD AFTER 3RD LIFT PLACED
-3RD PERIOD AFTER 4TH LIFT PLACED

MATCH LINE STA 1191+50.00 NMC

MATCH LINE STA 1206+00.00 NMC

USH 41

STRUCTURE B-05-676

STRUCTURE B-05-678

STRUCTURE B-05-677

WIETOR DR

IH 43

1178+00 OB2

1180+00 OB2

1182+00 OB2

1184+00 OB2

1186+00 OB2

1188+00 OB2

1192+00 NMC

1194+00 NMC

1196+00 NMC

1198+00 NMC

1200+00 NMC

1202+00 NMC

1204+00 NMC

1206+00 NMC

1202+00 NIH

1204+00 NIH

1206+00 NIH

1208+00 IHB

1204+00 IHB

1202+00 IHB

IHB

SIGN

INL

LEGEND

STRIP DRAINS

EXISTING STRIP DRAINS

NOTES:

ONLY PERTINENT ALIGNMENTS TO SETTLEMENT ISSUES ARE SHOWN ON THIS DRAWING. SEE PROJECT OVERVIEW AND ALIGNMENT DIAGRAMS FOR PROJECT LIMITS AND ALL PROJECT ALIGNMENT INFORMATION.

GEOTECHNICAL REPORTS BY GESTRA & HNTB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: STRIP DRAIN / SETTLEMENT MAP	SHEET 115	E

STA. 1197+00 IHA TO 1202+00 IHA
-ESTIMATED SETTLEMENT = 6 TO 24 INCHES
-STRIP DRAIN TIP ELEVATION = 545.00'
-APPROX. 113,463 LF OF STRIP DRAINS REQ'D
-2 SOIL LIFTS REQ'D
-2 SETTLEMENT PERIODS (2 MONTHS EACH)
-1ST PERIOD AFTER 1ST LIFT PLACED
-2ND PERIOD AFTER 2ND LIFT PLACED

WIETOR DR

1210+00 OB2
1208+00 OB2
1206+00 OB2
1204+00 OB2
1202+00 OB2
1200+00 OB2
1198+00 OB2
1194+00 IHA
1200+00 IHA
1212+00 IHA
1210+00 IHA
1208+00 IHA
1206+00 IHA
1204+00 IHA
1202+00 IHA

IH 43

1180+00 NIH
1182+00 NIH
1184+00 NIH
1186+00 NIH
1188+00 NIH
1190+00 NIH
1192+00 NIH
1194+00 NIH

SIGN

STRUCTURE B-05-679

1180+00 IHB
1182+00 IHB
1184+00 IHB
1186+00 IHB
1188+00 IHB
1190+00 IHB
1192+00 IHB

STRUCTURE B-05-678

MATCH LINE STA 1194+50 SIH

LEGEND

STRIP DRAINS

EXISTING STRIP DRAINS

NOTES:

ONLY PERTINENT ALIGNMENTS TO SETTLEMENT ISSUES ARE SHOWN ON THIS DRAWING. SEE PROJECT OVERVIEW AND ALIGNMENT DIAGRAMS FOR PROJECT LIMITS AND ALL PROJECT ALIGNMENT INFORMATION.

GEOTECHNICAL REPORTS BY GESTRA & HNTB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: STRIP DRAIN / SETTLEMENT MAP	SHEET 116	E

LEGEND:

- ALIGNMENT
- SLOPE INTERCEPTS
- WETLAND BOUNDRY
- WOODED SWAMP WETLAND
- WETLAND IMPACTS

N

DUCK CREEK

BEAVER DAM CREEK

ISLAND CT

65' IS

60' IS

MATCH LINE 1165+00 NMC

1165 VED

1165 SMC

1165 NMC

1165 IHA

1165 VEA

1160 VED

1160 SMC

1160 NMC

1160 IHA

1160 VEA

1155 SMC

1155 NMC

1155 IHA

1150 SMC

1150 NMC

1150 IHA

1145 SMC

1145 NMC

1145 IHA

1140 SMC

1140 NMC

1135 SMC

1135 NMC

41

ESCANABA & LAKE SUPERIOR RR

SUBSTATION

MINI GOLF COURSE

GOLF GREEN

PLAYGROUND

ROSEWOOD ST

LONE GROVE AVE

DARWIN AVE

MEMORIAL DR

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: WETLAND IMPACTS	SCALE, FEET 0 100 200	SHEET 117	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021281_wi.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

2

COUNTY HS

DUCK CREEK

BEAVER DAM CREEK

ISLAND CT

VELP AVE

WIETOR DR

ROSEWOOD ST

MEMORIAL DR

WISCONSIN CENTRAL LTD. RR

MATCH LINE 1165+00 NMC

MATCH LINE 1195+00 NMC

1170 VED
1170 VEA
1175 VEC
1180 VEB
1185 VEB
1190 VEC
1185 IHA
1190 IHA
1195 IHB
1210 IHB
1220 IHB
1225 IHB
1170 SMC
1175 SMC
1180 SMC
1185 SMC
1190 SMC
1195 S
1170 NMC
1175 NMC
1180 NMC
1185 NMC
1190 NMC
1190 VEB
1170 IHA
1175 IHA
1180 IHA
70 IS
110 WT
100 WT
105 IHB

41
141
43
INTERSTATE

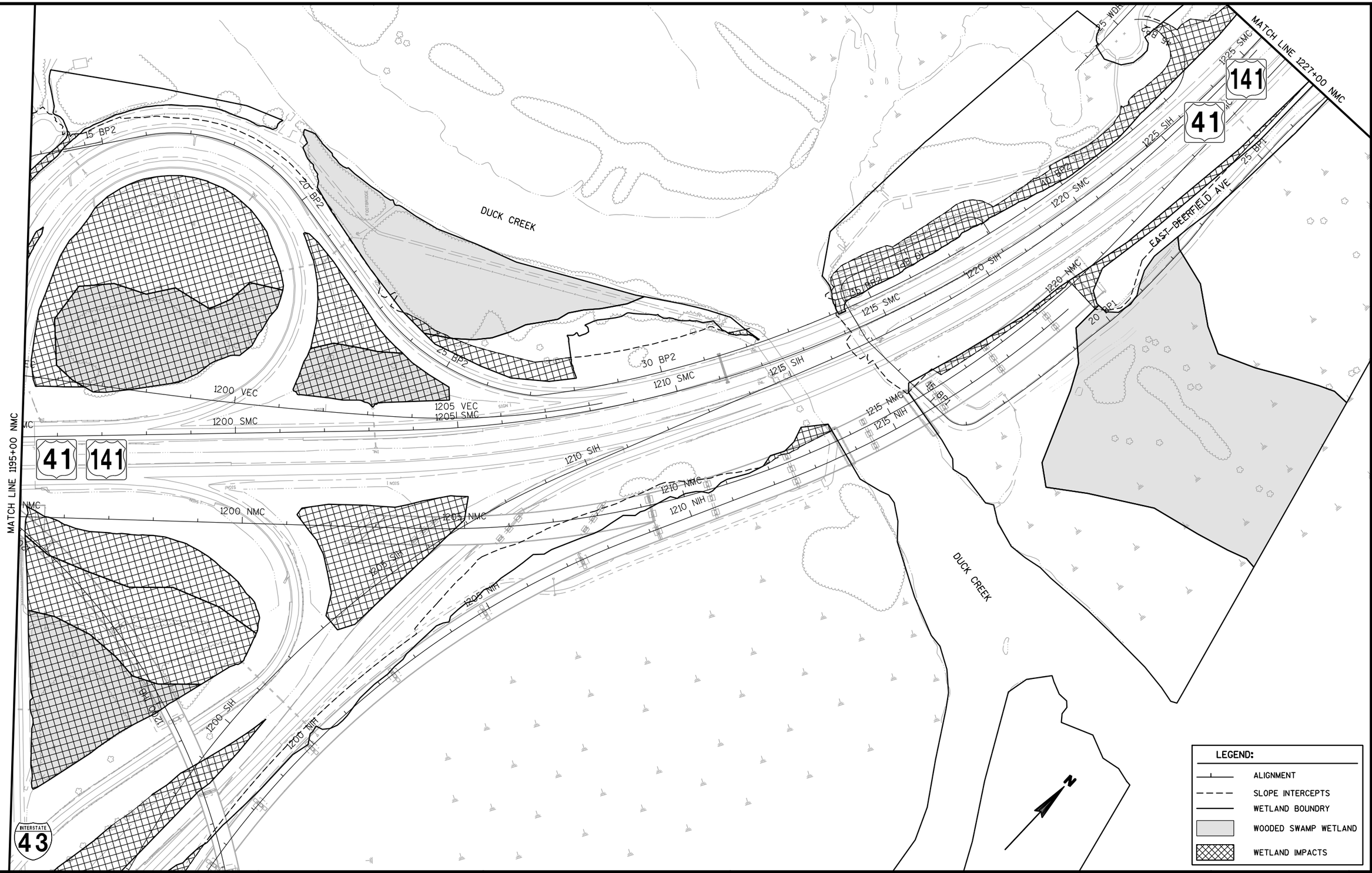
LEGEND:
- ALIGNMENT
- SLOPE INTERCEPTS
- WETLAND BOUNDRY
- WOODED SWAMP WETLAND
- WETLAND IMPACTS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: WETLAND IMPACTS	SCALE, FEET 0 100 200	SHEET 118	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021282_wi.dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: WETLAND IMPACTS SCALE, FEET 0 100 200	SHEET 119	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021283_wi.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1227+00 NMC

LEGEND:

- ALIGNMENT
- SLOPE INTERCEPTS
- WETLAND BOUNDRY
- WOODED SWAMP WETLAND
- WETLAND IMPACTS

30 WDR WEST DEERFIELD AVE 35 WDR 40 WDR 45 WDR 50 WDR 55 WDR

a1230 SMC a1235 SMC a1240 SMC a1245 SMC a1250 SMC a1255 SMC

1230 NMC 1235 NMC 1240 NMC 1245 NMC 1250 NMC 1255 NMC

41 141

30 EDR 35 EDR 40 EDR 45 EDR 50 EDR 55 EDR

EAST DEERFIELD AVE

RUINS

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: WETLAND IMPACTS SCALE, FEET 0 100 200	SHEET 120	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021284_wi.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

LEGEND:

- ALIGNMENT
- SLOPE INTERCEPTS
- WETLAND BOUNDRY
- WOODED SWAMP WETLAND
- WETLAND IMPACTS

WISCONSIN CENTRAL LTD.

MILITARY AVE

65 WT

70 WT

WIETOR DR

MATCH LINE 1171+00 NIH

INTERSTATE 43

1145 SIH

1145 NIH

1150 SIH

1150 NIH

1155 SIH

1155 NIH

1160 SIH

1160 NIH

1165 SIH

1165 NIH

1170 SIH

1170 NIH

1170 IHB

IHA

MATCH LINE 1142+00 NIH

HURLBUT ST

65 HB

70 HB

TOWER

MILITARY AVE

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: WETLAND IMPACTS SCALE, FEET 0 100 200	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021285_wi.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

2

2

LEGEND:

ALIGNMENT

SLOPE INTERCEPTS

WETLAND BOUNDRY

WOODED SWAMP WETLAND

WETLAND IMPACTS

N

MATCH LINE 1171+00 NIH

INTERSTATE 43

WIETOR DR

75 WT

80 WT

85 WT

90 WT

95 WT

100 WT

1175 SIH

1175 NIH

1175 IHB

1180 SIH

1180 NIH

1180 IHB

1185 SIH

1185 NIH

1185 IHB

1190 SIH

1190 NIH

1190 IHB

1195 SIH

1195 NIH

1195 IHB

1200 SIH

1200 NIH

1200 IHA

1205 IHA

1210 IHA

1215 IHA

1190 IHA

95 IHA

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN DETAILS: WETLAND IMPACTS SCALE, FEET 0 100 200	SHEET 122	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021286_wi.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

2

ITS GENERAL NOTES

THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS, AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

BE AWARE THAT NO TEST BORINGS WERE MADE WHERE COMMUNICATIONS VAULTS, CONDUIT, PULL BOXES, POLES, FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

AREAS WITHIN RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR ITS CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, AND SEED AND MULCH. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS, BUT ALSO CONTAINING ITS CONSTRUCTION, WILL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS. NO PAYMENT WILL BE MADE FOR RESTORING AREAS DISTURBED FOR ITS CONSTRUCTION OPERATIONS.

BE ADVISED THAT DUE TO RAMP, LANE, AND SHOULDER CLOSURE RESTRICTIONS AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

NOTIFY THE REGIONAL TRAFFIC UNIT (920-492-7719) A MINIMUM OF TWO (2) WEEKS PRIOR TO THE NEED TO STAKE THE FOLLOWING ITEMS: CCTV CAMERAS, COMMUNICATIONS VAULTS, CONDUIT, DYNAMIC MESSAGE SIGNS, ITS FIELD CABINETS, MICROWAVE DETECTORS, PULL BOXES, AND WOOD POLES.

NOTIFY THE REGIONAL TRAFFIC UNIT (920-492-5651), OR SECONDARY CONTACT (920-492-7719), A MINIMUM OF TWO (2) WEEKS PRIOR TO THE NEED TO STAKE THE FOLLOWING ITEMS: RAMP CLOSURE GATES AND RAMP CLOSURE GATE CONTROLLER CABINETS.

HAND DIG TRENCHES NEAR EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE. VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE.

ITS LEGEND

DESCRIPTION	SYMBOL
JUNCTION BOX	▬
CCTV CAMERA	◀▬
BASE MOUNTED CABINET	▯
POLE MOUNTED CABINET	▭
TYPE 5 OR CAMERA POLE	●
COMMUNICATIONS PULL BOX 24X36	◑
ELECTRICAL PULL BOX 24X36	◍
COMMUNICATIONS VAULT	V
COMMUNICATIONS MANHOLE	Ⓜ
MICROWAVE DETECTOR	◆
ITS CONDUIT	- - -
ITS CONDUIT DIRECTIONAL BORE	——
ITS CONDUIT ON STRUCTURE	—·—
DYNAMIC MESSAGE SIGN	▬
PORTABLE CHANGEABLE MESSAGE SIGN	PCMS
ROAD WEATHER INFORMATION SYSTEM	T
METER BREAKER PEDESTAL	⊠
METER SOCKET	⊗
BREAKER DISCONNECT BOX	⊞
BARRICADE RACK	⊦⊦
RAMP GATE	●—
SOLAR RAMP GATE CONTROLLER CABINET	⊠
AUTOMATIC TRAFFIC RECORDER	ATR
TRANSFORMER	⏢

ITS STANDARD ABBREVIATIONS

AF(A)	-----	ADVANCE FLASHER (ASSEMBLY)
AP	-----	ANTENNA POLE
ATR	-----	AUTOMATIC TRAFFIC RECORDER
CB	-----	CONTROLLER CABINET
CCTV	-----	CLOSED CIRCUIT TELEVISION
CP	-----	CAMERA POLE
CS	-----	COUNT STATION
CV	-----	COMMUNICATIONS VAULT
DMS	-----	DYNAMIC MESSAGE SIGN
DP	-----	DETECTOR POLE
DS	-----	DRAINAGE STRUCTURE (ON ITS PLANS ONLY)
FO	-----	FIBER OPTIC
MD	-----	MICROWAVE DETECTOR
MH	-----	MANHOLE
MM	-----	MULTIMODE
PB	-----	PULL BOX
PCMS	-----	PORTABLE CHANGEABLE MESSAGE SIGN
PF	-----	POLE FOUNDATION
RM	-----	RAMP METER
RWIS	-----	ROAD WEATHER INFORMATION SYSTEM
S	-----	OVERHEAD SIGNAL SUPPORT
SB	-----	SIGNAL BASE
SDS	-----	SYSTEM DETECTOR STATION
SM	-----	SINGLE MODE
SWEF	-----	SAFETY AND WEIGHT ENFORCEMENT FACILITY
TAR	-----	TRAVELER ADVISORY RADIO
TTS	-----	TRACER TEST STATION
VDC	-----	VIDEO DETECTION CAMERA
VDCS	-----	VEHICLE DETECTION CLASSIFICATION SENSOR
WIM	-----	WEIGH IN MOTION

ITS CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION
NE REGION
MR. RANDY ASMAN
920-492-7719
MR. SCOTT NELSON
920-492-5651
944 VANDERPERREN WAY
GREEN BAY, WI 54304

WISCONSIN DEPARTMENT OF TRANSPORTATION
STATEWIDE TRAFFIC OPERATIONS CENTER
MR. DEAN BEEKMAN
414-227-2154
MR. DON SCHELL
414-227-2148
433 W. ST. PAUL AVENUE, SUITE 300
MILWAUKEE, WI 53203

SRF CONSULTING GROUP
INTELLIGENT TRANSPORTATION SYSTEMS
MR. JACOB FOLKERINGA
763-452-4730
MR. NICK GRAGE
763-452-4834
1 CARLSON PARKWAY NORTH, SUITE 150
MINNEAPOLIS, MN 55447

ORIGINAL PLANS PREPARED BY

SRF Consulting Group, Inc. — Engineers Planners Designers

ITS SHEETS 1-3, 5-6

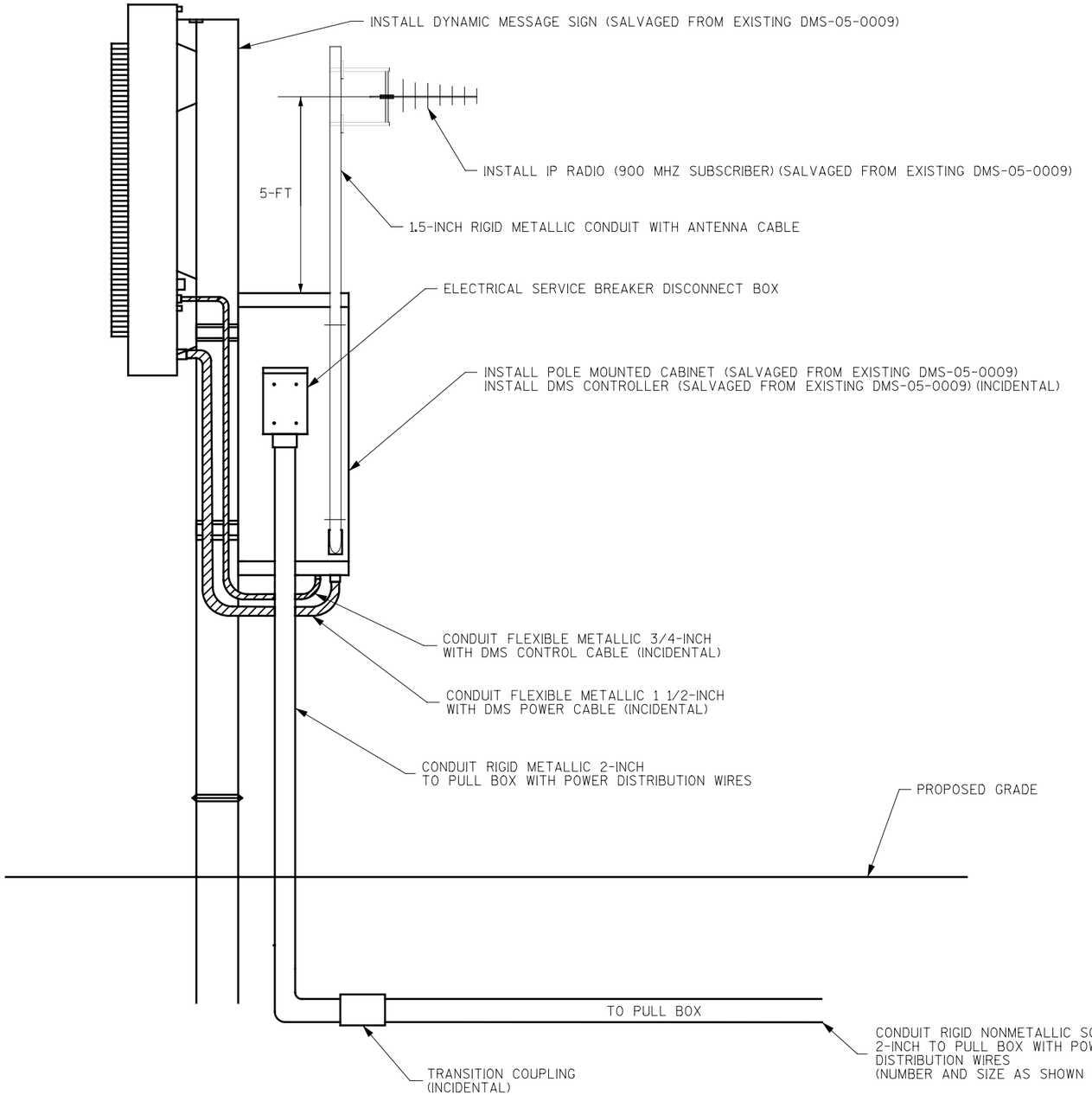
WISCONSIN
JACOB HW FOLKERINGA
E-43224
MINNEAPOLIS, MN
PROFESSIONAL ENGINEER

6/26/2014 (Date) (Signature)

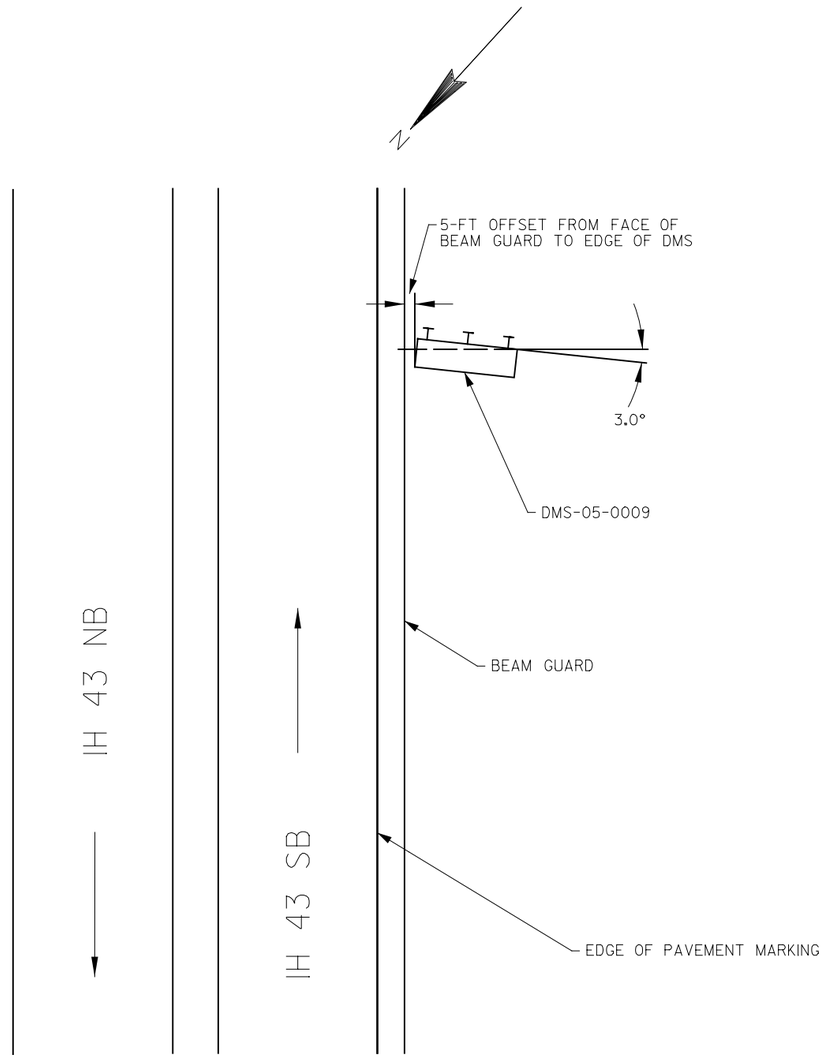
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ITS GENERAL NOTES	SHEET 123	E

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ITS PROJECT OVERVIEW	SHEET 124	E

NOT TO SCALE



SECTION VIEW



PLAN VIEW

DMS-05-0009

IH 43 SOUTH OF MILITARY AVENUE

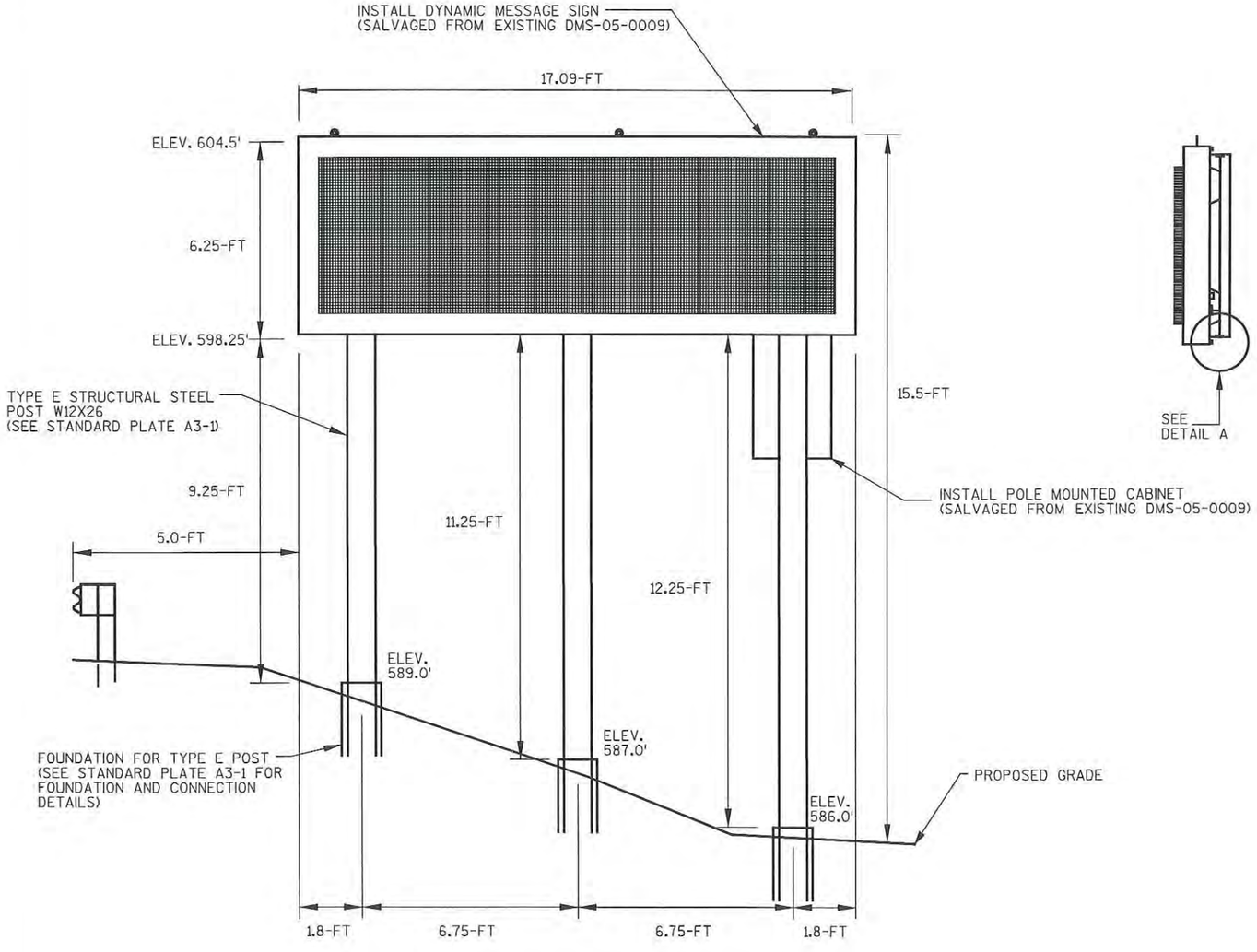
STATION 1149+55 SIH LT

NOTES

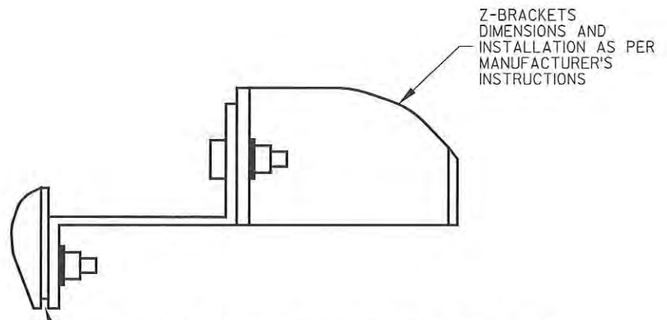
MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

CONDUIT FLEXIBLE METALLIC SHALL BE LIQUID TIGHT AND SECURED TO DMS STRUCTURE AT 5-FOOT INTERVALS.

NOT TO SCALE



ELEVATION VIEW



DETAIL A

NOTES

ELEVATIONS AND STRUCTURE HEIGHTS FROM BOTTOM OF SIGN TO PROPOSED GRADE ARE APPROXIMATE BASED ON PROPOSED CROSS SECTION.

DMS-05-0009

IH 43 SOUTH OF MILITARY AVENUE

STATION 1149+55 SIH LT

ORIGINAL PLANS PREPARED BY

SRF Consulting Group, Inc. | Engineers Planners Designers

ITS SHEET 4

WISCONSIN
JAMISON M. BEISSWENGER
E-40664
MINNEAPOLIS, MN
PROFESSIONAL ENGINEER

6/26/14
(Date)

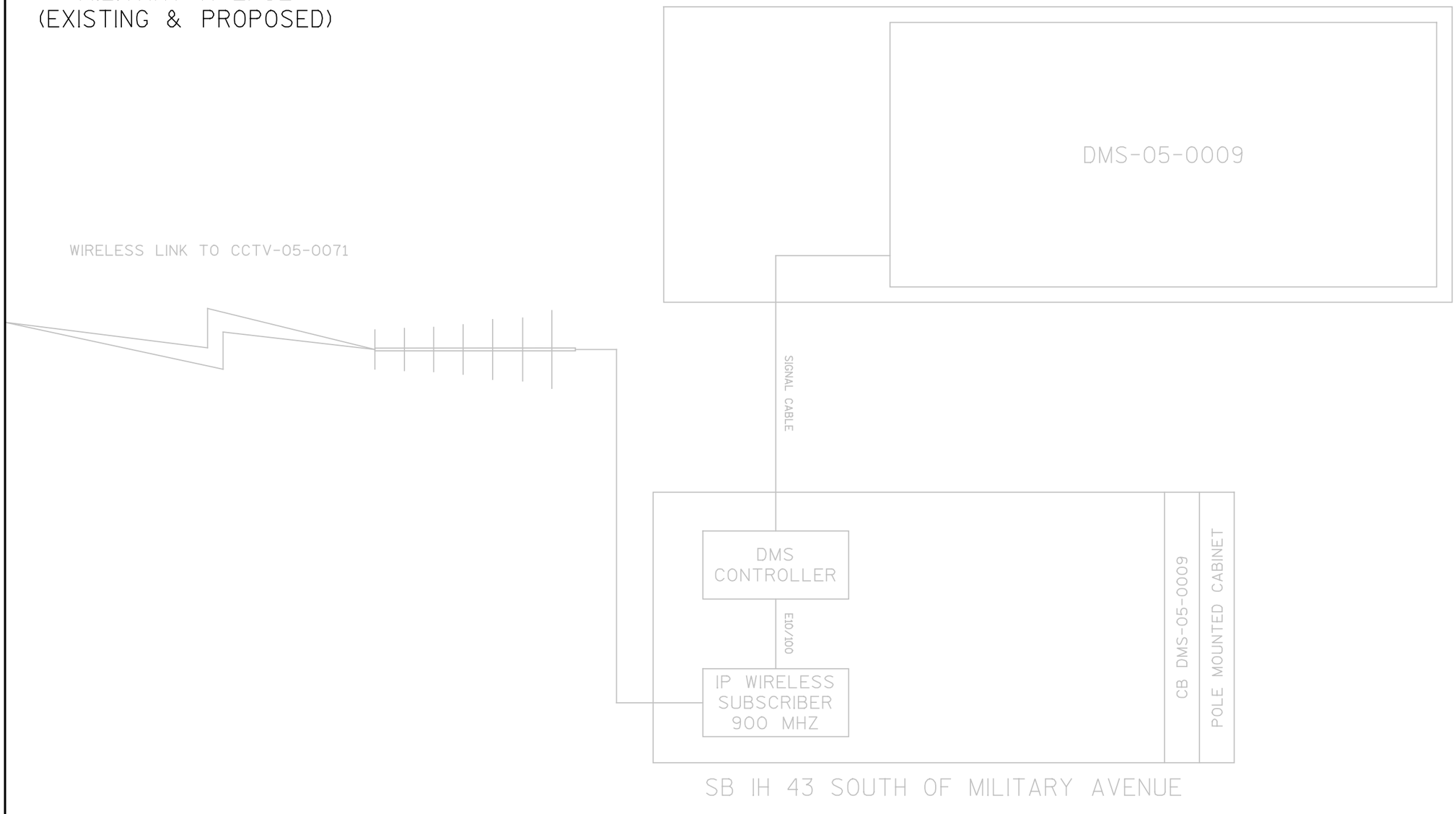
(Signature)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ITS CONSTRUCTION DETAILS	SHEET 126	E

NOT TO SCALE

INPLACE COMPONENTS (GRAY)

IH 43 SOUTH OF MILITARY AVENUE (EXISTING & PROPOSED)



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ITS COMMUNICATIONS SCHEMATIC	SHEET 127	E

2

2

THE LOCATION AND STATIONING OF THE INPLACE DMS IS APPROXIMATE BASED ON DESIGN FILES.

THE DMS WILL BE RELOCATED LATERALLY, AND SHOULD REMAIN AT THE SAME STATIONING.

CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
REROUTE EXISTING POWER DISTRIBUTION CABLES
(INCIDENTAL TO INSTALL DYNAMIC MESSAGE SIGN)

DMS-05-0009 (RELOCATED BEHIND PROPOSED BEAM GUARD)
INSTALL DYNAMIC MESSAGE SIGN (SALVAGED FROM EXISTING DMS-05-0009)
INSTALL POLE MOUNTED CABINET (SALVAGED FROM EXISTING DMS-05-0009)
INSTALL DMS CONTROLLER (SALVAGED FROM EXISTING DMS-05-0009) (INCIDENTAL)
INSTALL IP RADIO (900 MHZ SUBSCRIBER) (SALVAGED FROM EXISTING DMS-05-0009)

EXISTING DMS-05-0009 (1220-15-71)
SALVAGE DYNAMIC MESSAGE SIGN
SALVAGE DMS CONTROLLER (INCIDENTAL)
SALVAGE POLE MOUNTED CABINET
SALVAGE IP RADIO (900 MHZ SUBSCRIBER)
SALVAGE ANTENNA RISER (INCIDENTAL)
3-REMOVING STRUCTURAL STEEL SIGN SUPPORTS

PB-E2

REROUTE EXISTING POWER DISTRIBUTION CABLES (1220-15-71) (INCIDENTAL TO INSTALL DYNAMIC MESSAGE SIGN)

1145 SIH

1150 SIH

1155 SIH

IH 43 SB

1145 NIH

1150 NIH

1155 NIH

IH 43 NB

EXISTING 2-INCH NONMETALLIC CONDUIT (1220-15-71)
EXISTING POWER DISTRIBUTION CABLES (1220-15-71)

PB-E1

EXISTING METER BREAKER PEDESTAL (1220-15-71)

TOWER

NOTIFY THE REGIONAL TRAFFIC UNIT (920-492-7719) A MINIMUM OF TWO (2) WEEKS PRIOR TO THE NEED TO STAKE THE FOLLOWING ITEMS: CCTV CAMERAS, COMMUNICATIONS VAULTS, CONDUIT, DYNAMIC MESSAGE SIGNS, ITS FIELD CABINETS, MICROWAVE DETECTORS, PULL BOXES, AND WOOD POLES.

N

0 50 100
SCALE IN FEET

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ITS PLANS	SHEET 128	E

2

2

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

GOLF GREEN

GOLF GREEN

GOLF GREEN

SIGN

MH

W

1138+00 SMC

1140+00 SMC

1142+00 SMC

1144+00 SMC

1146+00 SMC

1148+00 SMC

1150+00 SMC

1152+00 SMC

USH 41

1138+00 NMC

1140+00 NMC

1142+00 NMC

1144+00 NMC

1146+00 NMC

1148+00 NMC

1150+00 NMC

1152+00 NMC

1144+00 IHA

1146+00 IHA

1148+00 IHA

1150+00 IHA

1152+00 IHA

MATCH LINE 1152+50 NMC

USH 41

SIGN

INL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 129	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021601_dr.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

DUCK CREEK

58+00 IS

60+00 IS

62+00 IS

64+00 IS

66+00 IS

ISLAND CT

BEAVER DAM CREEK

MATCH LINE 1152+50 NMC

1154+00 SMC

1156+00 SMC

1158+00 SMC

1160+00 SMC

1162+00 SMC

1164+00 SMC

1166+00 SMC

1154+00 NMC

1156+00 NMC

1158+00 NMC

1160+00 NMC

1162+00 NMC

1164+00 NMC

1166+00 NMC

USH 41

1154+00 IHA

1156+00 IHA

1158+00 IHA

1160+00 IHA

1162+00 IHA

1164+00 IHA

1166+00 IHA

1158+00 VED

1160+00 VED

1162+00 VED

1164+00 VED

1166+00 VED

1160+00 VEA

1162+00 VEA

1164+00 VEA

1166+00 VEA

MATCH LINE 1167+00 NMC

USH 41

BEAVER DAM CREEK

LONE GROVE AVE

PLAYGROUND

BASKETBALL COURT

SIGN

MH

W

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 130	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021602_dr.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

BEAVER DAM CREEK

CTH HS (VELP AVE)

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

SEE CONSTRUCTION DETAILS FOR SLOPE PAVING AND DRAINAGE BETWEEN BRIDGES B-05-0668 & B-05-0669

B-05-0668

B-05-0669

B-05-0671 PREVIOUSLY CONSTRUCTED

1168+00 VED
1170+00 VEDA
1170+00 VED
1172+00 VEDA
1172+00 VED
1174+00 VECA
1174+00 VEC
1176+00 VECA
1176+00 VEC
1178+00 VEC
1180+00 VEC

1168+00 SMC
1170+00 SMC
1172+00 SMC
1174+00 SMC
1176+00 SMC
1178+00 SMC
1180+00 SMC
1220+00 IHB
1222+00 IHB
1224+00 IHB
1226+00 IHB
1228+00 IHB

1158+00 NMC
1168+00 NMC
1170+00 NMC
1172+00 NMC
1174+00 NMC
1176+00 NMC
1178+00 NMC
1180+00 NMC

1168+00 IHA
1170+00 IHA
1172+00 IHA
1174+00 IHA
1176+00 IHA
1178+00 IHA
1180+00 IHA

1168+00 VEA
1170+00 VEA
1172+00 VEA
1172+00 VEAA
1176+00 VEB
1178+00 VEB
1180+00 VEB

12+00 ROS
14+00 ROS

MATCH LINE 1167+00 NMC
USH 41

MATCH LINE 1181+50 NMC
USH 41

USH 141 (VELP AVE)

MEMORIAL DR

CONNECT RTRP DOWNSPOUT PREVIOUSLY CONSTRUCTED TO STORM SEWER. SEE CONSTRUCTION DETAILS.

CONNECT STORM SEWER INTO EXISTING MEDIAN INLET

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 131	E

2

2

MATCH LINE 109+00 WT

WISCONSIN CENTRAL LTD.

20+00 RR

B-05-0672

1182+00 VEC
1184+00 VEC
1186+00 VEC
1188+00 VEC
1190+00 VEC
1192+00 VEC
1194+00 VEC
1196+00 V

R-05-0086

38+00 MR3
36+00 MR3
34+00 MR3
32+00 MR3

1214+00 IHB
1218+00 IHB

B-05-0678
PREVIOUSLY
CONSTRUCTED

18+00 RR

1210+00 IHB

B-05-0673

1182+00 SMC
1184+00 SMC
1186+00 SMC
1188+00 SMC
1190+00 SMC
1192+00 SMC
1194+00 SMC
1196+00 S

B-05-0676

1208+00 IHB

MATCH LINE 1181+50 NMC

USH 41

MATCH LINE 1196+00 NMC

USH 41

16+00 RR

1182+00 NMC
1184+00 NMC
1186+00 NMC
1188+00 NMC
1190+00 NMC
1192+00 NMC
1194+00 NMC

B-05-0674

1188+00 VEB
1190+00 VEB
1192+00 VEB

1186+00 VEB
1184+00 VEB

B-05-0675

1182+00 VEB IHA
1184+00 IHA

B-05-0677
PREVIOUSLY
CONSTRUCTED

1204+00 IHB

WIETOR DR

104+00 WT

IH 43

14+00 RR

1186+00 IHA

B-05-0671
PREVIOUSLY
CONSTRUCTED

1188+00 IHA

1190+00 IHA

102+00 WT

PROVIDE SMALL CHANNEL
BETWEEN BRIDGE PIERS
TO DITCH ALONG WIETOR.

MEMORIAL DR

I SIGN

GUY

WISCONSIN CENTRAL LTD.

12+00 RR

MATCH LINE 100+00 WT

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 132	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021604_dr.dgn

PLOT BY : dm253

PLOT DATE : 11/4/2014

PLOT SCALE : 1:100

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

2

2

MATCH LINE 109+00 WT

MATCH LINE 1196+00 NMC

MATCH LINE 1207+00 NMC

WETOR DR

USH 41

FOOTBRIDGE

SIGN

TNI

SIH

114+00 WT

112+00 WT

110+00 WT

16+00 BP2

18+00 BP2

20+00 BP2

22+00 BP2

24+00 BP2

26+00 BP2

1218+00 OB1

1220+00 OB1

1198+00 VEC

1200+00 VEC

1202+00 VEC

1204+00 VEC

1206+00 VEC

1206+00 SMC

1204+00 SMC

1202+00 SMC

1200+00 SMC

1198+00 SMC

1198+00 NMC

1200+00 NMC

1202+00 NMC

1204+00 NMC

1206+00 NMC

1208+00 SIH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 133	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021605_dr.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

WIETOR DR

MATCH LINE 1196+00 NMC

B-05-0678
PREVIOUSLY
CONSTRUCTED

SIH 00+2021

1200+00 IHB

1198+00 NMC

1200+00 NMC

1202+00 NMC

1200+00 SMC

1202+00 VEC

1202+00 SMC

1204+00 VEC

1204+00 SMC

24+00 BP2

26+00 BP2

1206+00 VEC

1206+00 SMC

MATCH LINE 1207+00 NMC

1204+00 NMC

USH 41

1206+00 SIH

1208+00 SIH

1204+00 SIH

1202+00 SIH

1200+00 SIH

B-05-0681
PREVIOUSLY
CONSTRUCTED

0 SIH

1198+00 IHB

MATCH LINE 1198+00 NIH

1202+00 NIH

B-05-0679
PREVIOUSLY
CONSTRUCTED

1204+00 NIH

1206+00 NIH

1200+00 NIH

1198+00 NIH

MATCH LINE 1207+00 NIH

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 134	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021606_dr.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

DUCK CREEK

USH 41

MATCH LINE 120T+00 NMC

MATCH LINE 1207+00 NIH

MATCH LINE 1221+50 NMC

USH 41

28+00 BP2

30+00 BP2

32+00 BP2

34+00 BP2

36+00 BP2

38+00 BP2

40+00 BP2

42+00 BP2

10+00 BP1

14+00 BP1

16+00 BP1

18+00 BP1

20+00 BP1

1208+00 VEC

1208+00 SMC

1210+00 SMC

1212+00 SMC

1214+00 SMC

1216+00 SMC

1218+00 SMC

1220+00 SMC

1210+00 SIH

1212+00 SIH

1214+00 SIH

1216+00 SIH

1218+00 SIH

1220+00 SIH

1222+00 SIH

B-05-0682

1208+00 NMC

1210+00 NMC

1212+00 NMC

1214+00 NMC

1216+00 NMC

1218+00 NMC

1220+00 NMC

1208+00 NIH

1210+00 NIH

1212+00 NIH

1214+00 NIH

1216+00 NIH

1218+00 NIH

B-05-0681
PREVIOUSLY
CONSTRUCTED

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 135	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021607_dr.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

N

W. DEERFIELD AVE.

24+00 WDR

26+00 WDR

28+00 WDR

30+00 WDR

32+00 WDR

34+00 WDR

36+00 WDR

SIGN

SIGN

SIGN

PORTION OF CULVERT TO BE REPLACED
UNDER PROJECT 1133-10-77

42+00 BP2

41+00 BP2

SMC

1222+00 SMC

1224+00 SIH

1226+00 SIH

1224+00 SMC

a1228+00 SMC

a1230+00 SMC

a1232+00 SMC

a1234+00 SMC

a1236+00 SMC

USH 41

MATCH LINE 1221+50 NMC

1222+00 NMC

1224+00 NMC

1226+00 NMC

1228+00 NMC

1230+00 NMC

1232+00 NMC

1234+00 NMC

1236+00 NMC

USH 41

MATCH LINE 1236+50 NMC

22+00 BP1

24+00 BP1

26+00 BP1

28+00 EDR

28+00 BP1

30+00 EDR

32+00 EDR

34+00 EDR

36+00 EDR

E. DEERFIELD AVE.

REMOVE & REPLACE PORTION OF CULVERT
STA 1235+21 NMC,
100'X36" CPRC REQ'D
MAINTAIN FLOW THOUGHOUT CONSTRUCTION
VERIFY INVERTS PRIOR TO REPLACEMENT

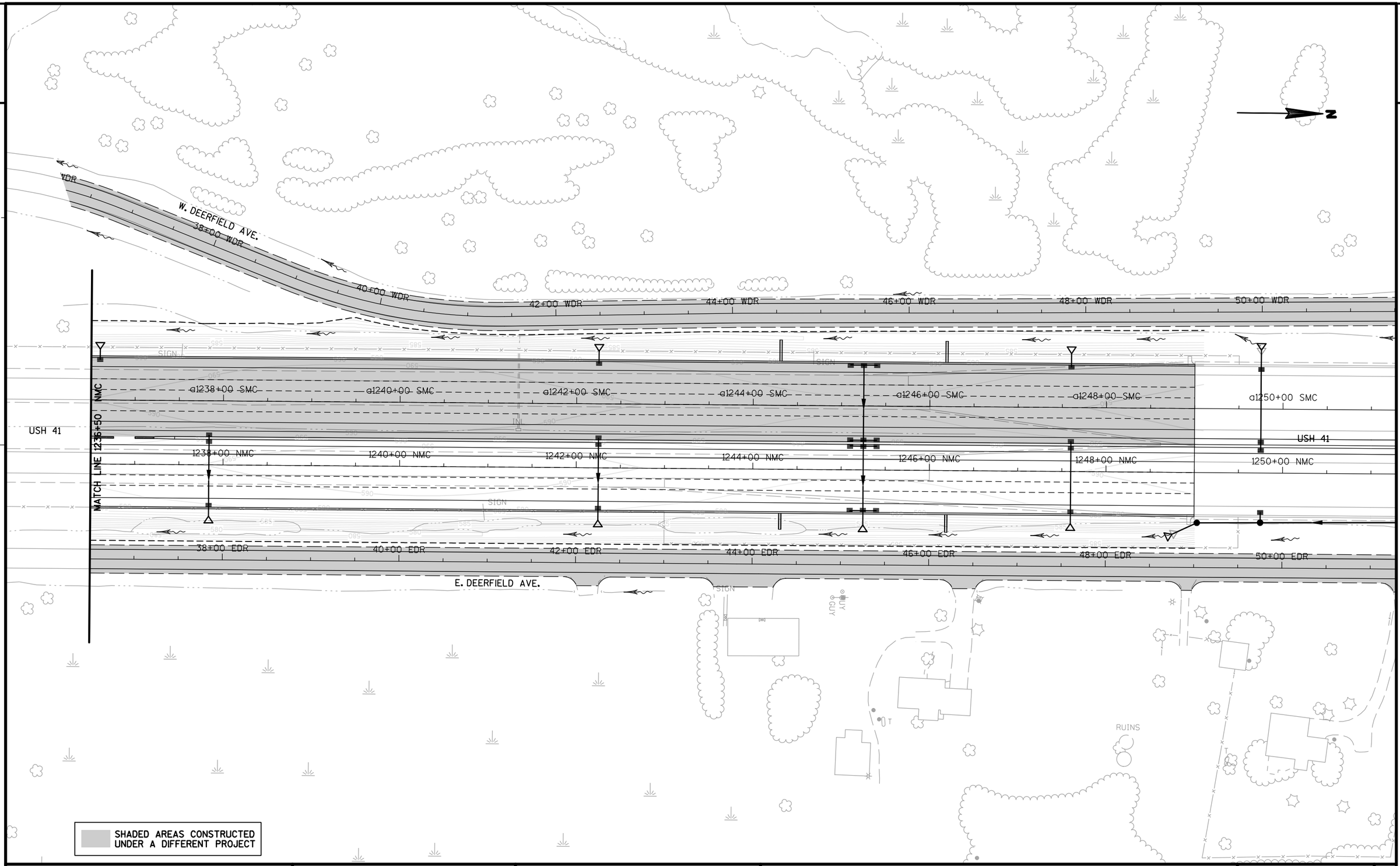
AE01 STA 1235+21 NMC, 67' RT
INV: 578.97

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021608_dr.dgn
PLOT BY : dm253
PLOT DATE : 11/4/2014
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 137	E

2

2

N

SIH

1144+00 SIH

1146+00 SIH

1148+00 SIH

1150+00 SIH

1152+00 SIH

1154+00 SIH

1156+00 SIH

SIGN

IH 43

NIH

1144+00 NIH

1146+00 NIH

1148+00 NIH

1150+00 NIH

1152+00 NIH

1154+00 NIH

1156+00 NIH

MATCH LINE 1157+00 NIH

IH 43

HWY

MH

INL

585

590

HURLBUT ST

TOWER

W

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 138	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021610_dr.dgn

PLOT BY : dm253

PLOT DATE : 11/4/2014

PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

62+00 WT
64+00 WT
66+00 WT
68+00 WT
70+00 WT
WIETOR DR
MILITARY AVE
118+00 MIL
120+00 MIL
122+00 MIL
124+00 MIL
126+00 MIL
87-INCH X 136-INCH RCHECP TO REMAIN
MATCH LINE 157+00 NIH
IH 43
1158+00 SIH
1160+00 SIH
1162+00 SIH
1164+00 SIH
1166+00 SIH
1168+00 SIH
1170+00 SIH
1220+00 IHA
1158+00 NIH
1160+00 NIH
1162+00 NIH
1164+00 NIH
1166+00 NIH
1166+00 IHB
1168+00 NIH
1168+00 IHB
1170+00 NIH
1170+00 IHB
MATCH LINE 171+50 NIH
IH 43
68+00 HB
66+00 HB
64+00 HB
62+00 HB
HURLBUT ST
TWIN 113-INCH X 72-INCH RCHECP TO REMAIN
70+00 HB
MILITARY AVE
HURLBUT ST
MH
SIGN
INL
585
590

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 139	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021611_dr.dgn
PLOT BY : dm253
PLOT DATE : 11/4/2014
PLOT SCALE : 1:100

2

2

WIETOR DR

72+00 WT
74+00 WT
76+00 WT
78+00 WT
80+00 WT
82+00 WT
84+00 WT

1172+00 SIS
1174+00 SIS
1176+00 SIS
1178+00 SIS
1180+00 SIS
1182+00 SIS
1184+00 SIS
1208+00 IHA
1210+00 IHA
1212+00 IHA
1214+00 IHA
1216+00 IHA
1218+00 IHA

IH 43

MATCH LINE 1171+50 NIH

1172+00 NIH
1174+00 NIH
1176+00 NIH
1178+00 NIH
1180+00 NIH
1182+00 NIH
1184+00 NIH

MATCH LINE 1185+00 NIH

1172+00 IHB
1174+00 IHB
1176+00 IHB
1178+00 IHB
1180+00 IHB
1182+00 IHB
1184+00 IHB

SIGN

LONG STRUCTURE INLETS REQ'D
STA 1176+57.8 IHB, RT & LT
TWO INLETS CONNECTED
FLOW RT TO LT

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 140	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021612_dr.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

WIETOR DR

LONG STRUCTURE INLET REQ'D
STA 1197+41.8 IHA, RT

B-05-0671
PREVIOUSLY
CONSTRUCTED

MATCH LINE 1185+00 NIH

MATCH LINE 100+00 WT

IH 43

LONG STRUCTURE INLET REQ'D
STA 1186+98.5 NIH, RT

B-05-0679
PREVIOUSLY
CONSTRUCTED

B-05-0678
PREVIOUSLY
CONSTRUCTED

MATCH LINE 1198+00 NIH

SIGN

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DRAINAGE OVERVIEW	SCALE, FEET 0 50 100	SHEET 141	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021613_dr.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

SLOPE LIMITS – – – –

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

GOLF GREEN

GOLF GREEN

GOLF GREEN

SIGN

W

W

MH

MH

MH

SIGN

SIGN

INL

INL

INL

INL

1138+00 SMC

1140+00 SMC

1142+00 SMC

1144+00 SMC

1146+00 SMC

1148+00 SMC

1150+00 SMC

1152+00 SMC

USH 41

M/L NMC-SMC

M/L NMC-SMC

1138+00 NMC

1140+00 NMC

1142+00 NMC

1144+00 NMC

1146+00 NMC

1148+00 NMC

1150+00 NMC

1152+00 NMC

1144+00 IHA

1146+00 IHA

1148+00 IHA

1150+00 IHA

1152+00 IHA

M/L NMC-IHA

MATCH LINE 1152+50 NMC

USH 41

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 142	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021701_xm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

SLOPE LIMITS – – – –

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

DUCK CREEK

58+00 IS

60+00 IS

62+00 IS

64+00 IS

66+00 IS

ISLAND CT

BEAVER DAM CREEK

MATCH LINE 1152+50 NMC

1154+00 SMC

1156+00 SMC

1158+00 VED

M/L SMC-VED

1158+00 SMC

1160+00 VED

MH

1160+00 SMC

1162+00 VED

1162+00 SMC

1164+00 VED

1164+00 SMC

1166+00 VED

M/L SMC-VED

1166+00 SMC

M/L NMC-SMC

1154+00 NMC

1156+00 NMC

1158+00 NMC

1160+00 NMC

1162+00 NMC

1164+00 NMC

M/L NMC-SMC

1166+00 NMC

USH 41

1154+00 IHA

M/L NMC-IHA

1156+00 IHA

1158+00 IHA

1160+00 IHA

SIGN

1160+00 VEA

M/L IHA-VEA

1162+00 IHA

1162+00 VEA

1164+00 IHA

M/L NMC-IHA

1166+00 IHA

1164+00 VEA

M/L IHA-VEA

1166+00 VEA

MATCH LINE 1167+00 NMC

USH 41

BEAVER DAM CREEK

LONE GROVE AVE

PLAYGROUND

BASKETBALL COURT

W

MH

MH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 143	E

2

2

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

LEGEND

SLOPE LIMITS – – – –

BEAVER DAM CREEK

CTH HS (VELP AVE)

PROJECT 1133-10-71

PROJECT 1133-10-75

PROJECT 1133-10-77

1174+00 VECA

1176+00 VECA

1176+00 VEC

1178+00 VEC

1180+00 VEC

1174+00 VEC

M/L IHB-VEC

1220+00 IHB

1222+00 IHB

1172+00 VEDA

1172+00 VED

1170+00 VEDA

1170+00 VED

1168+00 VED

M/L SMC-VED

B-05-0668

1168+00 SMC

1170+00 SMC

1172+00 SMC

1228+00 IHB

1174+00 SMC

1226+00 IHB

1176+00 SMC

1224+00 IHB

1178+00 SMC

M/L SMC-IHB

1180+00 SMC

MATCH LINE 1167+00 NMC

USH 41

M/L NMC-SMC

1168+00 NMC

1170+00 NMC

1172+00 NMC

1174+00 NMC

1176+00 NMC

1178+00 NMC

1180+00 NMC

B-05-0669

1168+00 IHA

M/L NMC-IHA

1170+00 IHA

1172+00 IHA

1174+00 IHA

1176+00 IHA

1178+00 IHA

1180+00 IHA

B-05-0671
PREVIOUSLY
CONSTRUCTED

M/L NMC-VEB

1180+00 VEB

1178+00 VEB

1176+00 VEB

1168+00 VEA

M/L IHA-VEA

1170+00 VEA

1172+00 VEA

M/L VEA-VEAA

1172+00 VEAA

12+00 ROS

14+00 ROS

PROJECT 1133-10-71

PROJECT 1133-10-75

USH 141 (VELP AVE)

MEMORIAL DR

MATCH LINE 1181+50 NMC

USH 41

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 144	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021703_xm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

MATCH LINE 109+00 WT

WISCONSIN CENTRAL LTD.

20+00 RR

B-05-0672

1182+00 VEC

1184+00 VEC

1186+00 VEC

1188+00 VEC

1190+00 VEC

1192+00 VEC

1194+00 VEC

1196+00 V

M/L IHB-VEC

R-05-0086

38+00 MR3

36+00 MR3

34+00 MR3

32+00 MR3

B-05-0678
PREVIOUSLY
CONSTRUCTED

1214+00 IHB

1218+00 IHB

18+00 RR

M/L SMC-VEC

M/L SMC-IHB

1210+00 IHB

B-05-0673

1182+00 SMC

1184+00 SMC

1186+00 SMC

1188+00 SMC

1190+00 SMC

1192+00 SMC

1194+00 SMC

1196+00 S

B-05-0676

1208+00 IHB

MATCH LINE 1181+50 NMC

USH 41

M/L NMC-SMC

16+00 RR

1182+00 NMC

1184+00 NMC

1186+00 NMC

1188+00 NMC

1190+00 NMC

1192+00 NMC

1194+00 NMC

1196+0

B-05-0674

1188+00 VEB

M/L NMC-VEB

1190+00 VEB

1192+00 VEB

1186+00 VEB

M/L NMC-VEB

1184+00 VEB

B-05-0675

1182+00 VEB IHA

1182+00

1184+00 IHA

14+00 RR

1186+00 IHA

B-05-0671
PREVIOUSLY
CONSTRUCTED

1188+00 IHA

1190+00 IHA

12+00 RR

WISCONSIN CENTRAL LTD.

MEMORIAL DR

SIGN

GUY

N

LEGEND

SLOPE LIMITS – – – –

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

B-05-0677
PREVIOUSLY
CONSTRUCTED

1204+00 IHB

104+00 WT

102+00 WT

WIETOR DR

IH 43

MATCH LINE 100+00 WT

MATCH LINE 1196+00 NMC

USH 41

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 145	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021704_xm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

SLOPE LIMITS

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE 109+00 WT

WIETOR DR

112+00 WT

109+00 WT

114+00 WT

M/L WT-BP2

16+00 BP2

18+00 BP2

20+00 BP2

22+00 BP2

24+00 BP2

26+00 BP2

FOOTBRIDGE

M/L OB1-BP2

121+00 OB1

120+00 OB1

M/L VEC-OB1

M/L VEC-BP2

M/L SMC-BP2

1198+00 VEC

1200+00 VEC

1202+00 VEC

1204+00 VEC

1206+00 VEC

M/L SMC-VEC

1198+00 SMC

1200+00 SMC

1202+00 SMC

1204+00 SMC

1206+00 SMC

MATCH LINE 1196+00 NMC

MATCH LINE 1207+00 NMC

USH 41

M/L SMC-SIH

1208+00 SIH

M/L NMC-SMC

1198+00 NMC

1200+00 NMC

1202+00 NMC

1204+00 NMC

1206+00 NMC

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021705_xm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

WIETOR DR

MATCH LINE 1196+00 NMC

1198+00 NMC

1200+00 SMC

1202+00 VEC

1202+00 SMC

M/L NMC-SMC

M/L SMC-VEC

1204+00 VEC

1204+00 SMC

M/L VEC-BP2

24+00 BP2

M/L SMC-BP2

26+00 BP2

1206+00 VEC

1206+00 SMC

MATCH LINE 1207+00 NMC

1200+00 NMC

1202+00 NMC

M/L SMC-SIH

1204+00 NMC

USH 41

1202+00 SIH

B-05-0678
PREVIOUSLY
CONSTRUCTED

1200+00 SIH

M/L NMC-SIH

1206+00 SIH

1204+00 SIH

B-05-0681
PREVIOUSLY
CONSTRUCTED

1208+00 SIH

1206+00 NMC

M/L SIH-OB2

1202+00 SIH

1200+00 SIH

1190+00 OB2

1198+00 SIH

MATCH LINE 1198+00 NIH

1198+00 NIH

1200+00 NIH

1202+00 NIH

B-05-0679
PREVIOUSLY
CONSTRUCTED

1204+00 NIH

1206+00 NIH

MATCH LINE 1207+00 NIH

N

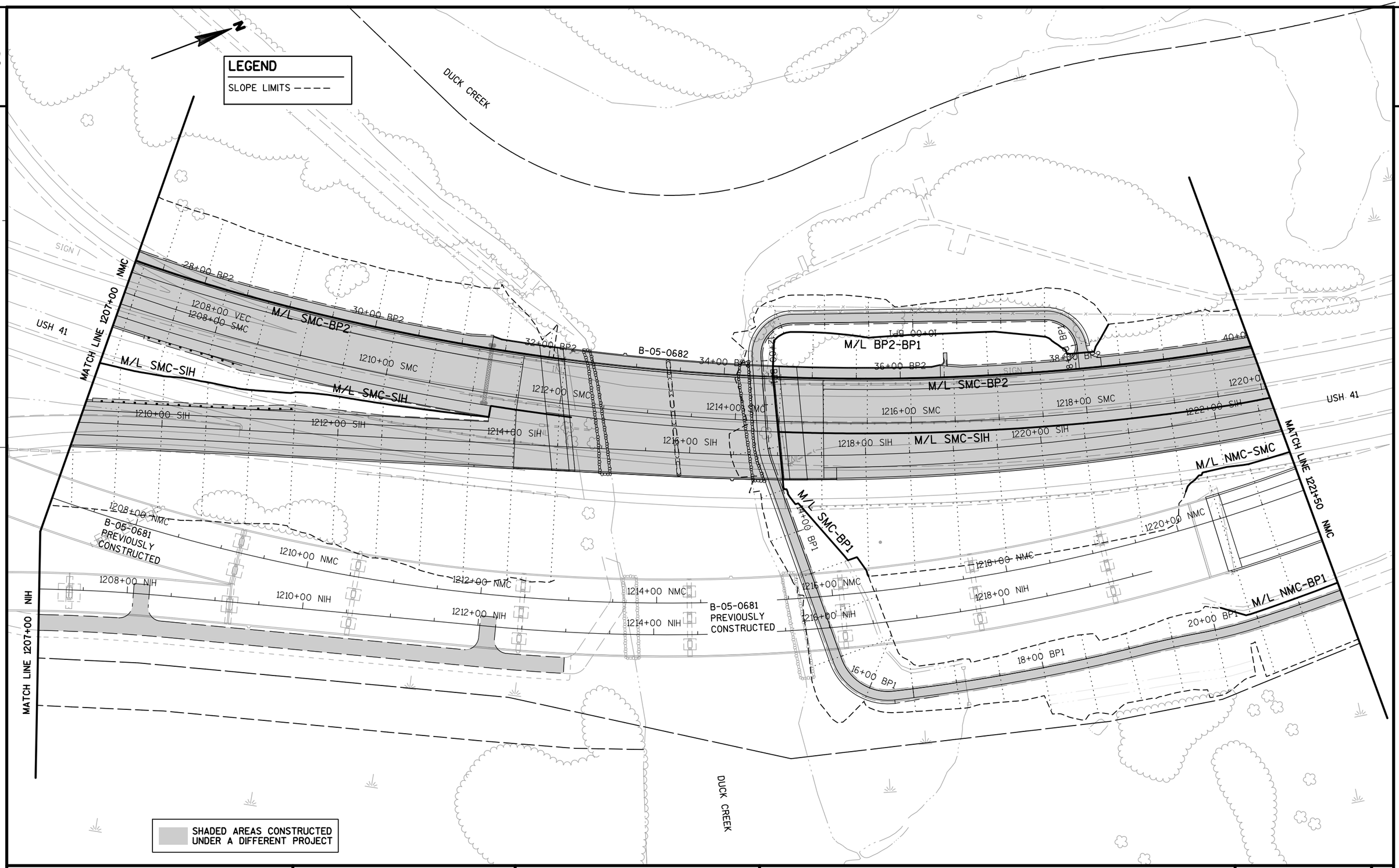
LEGEND

SLOPE LIMITS – – – –

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 147	E

2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 148	E

2

2

LEGEND

SLOPE LIMITS – – – –

N

W. DEERFIELD AVE.

24+00 WDR | 26+00 WDR | 28+00 WDR | 30+00 WDR | 32+00 WDR | 34+00 WDR | 36+00 WDR

SIGN

SIGN

SIGN

42+00 BP2 M/L SMC-BP2 41+00 BP2

M/L SMC-SIH

1222+00 SMC | 1224+00 SIH | 1224+00 SMC | 1226+00 SIH | a1228+00 SMC | a1230+00 SMC | a1232+00 SMC | a1234+00 SMC | a1236+00 SMC

M/L NMC-SMC

M/L NMC-SMC

USH 41

MATCH LINE 1221+50 NMC

1222+00 NMC | 1224+00 NMC | 1226+00 NMC | 1228+00 NMC | 1230+00 NMC | 1232+00 NMC | 1234+00 NMC | 1236+00 NMC

USH 41

MATCH LINE 1236+50 NMC

22+00 BP1 M/L NMC-BP1 24+00 BP1 | 26+00 BP1 M/L NMC-BP1 28+00 BP1 | 28+00 EDR | 30+00 EDR | 32+00 EDR | 34+00 EDR | 36+00 EDR

E. DEERFIELD AVE.

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 149	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021708_xm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

LEGEND

SLOPE LIMITS – – – –

W. DEERFIELD AVE.

WDR

38+00 WDR

40+00 WDR

42+00 WDR

44+00 WDR

46+00 WDR

48+00 WDR

50+00 WDR

SIGN

a1238+00 SMC

a1240+00 SMC

a1242+00 SMC

a1244+00 SMC

a1246+00 SMC

a1248+00 SMC

a1250+00 SMC

USH 41

M/L NMC-SMC

M/L NMC-SMC

USH 41

MATCH LINE 1235+50

1238+00 NMC

1240+00 NMC

1242+00 NMC

1244+00 NMC

1246+00 NMC

1248+00 NMC

1250+00 NMC

SIGN

38+00 EDR

40+00 EDR

42+00 EDR

44+00 EDR

46+00 EDR

48+00 EDR

50+00 EDR

E. DEERFIELD AVE.

SIGN

GUY

GUY

T

RUINS

T

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 150	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021709_xm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

SLOPE LIMITS – – – –

N

SIH

1144+00 SIH

1146+00 SIH

1148+00 SIH

1150+00 SIH

1152+00 SIH

1154+00 SIH

1156+00 SIH

SIGN

IH 43

M/L NIH-SIH

NIH

1144+00 NIH

1146+00 NIH

1148+00 NIH

1150+00 NIH

1152+00 NIH

1154+00 NIH

1156+00 NIH

M/L NIH-SIH

IH 43

MATCH LINE 1157+00 NIH

HWY

MH

SIGN

SIGN

HURLBUT ST

TOWER

W

W

W

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 151	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021710_xm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

SLOPE LIMITS - - - -

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

62+00 WT
64+00 WT
66+00 WT
68+00 WT
70+00 WT
WIETOR DR

MILITARY AVE

118+00 MIL
120+00 MIL
122+00 MIL
124+00 MIL
126+00

MATCH LINE 157+00 NIH
IH 43

1158+00 SIH
1160+00 SIH
1162+00 SIH
1164+00 SIH
1166+00 SIH
1168+00 SIH
1170+00 SIH
1220+00 IHA

M/L NIH-SIH

1158+00 NIH
1160+00 NIH
1162+00 NIH
1164+00 NIH
1166+00 NIH
1166+00 IHB
1168+00 NIH
1168+00 IHB
1170+00 NIH
1170+00 IHB

M/L NIH-IHB

MATCH LINE 171+50 NIH
IH 43

62+00 HB
64+00 HB
66+00 HB
68+00 HB
70+00 HB
HURLBUT ST

MH
SIGN
INL
MMW
WY
AW
DWY

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 152	E

2

2

LEGEND

SLOPE LIMITS – – – –

N

WIETOR DR

72+00 WT
74+00 WT
76+00 WT
78+00 WT
80+00 WT
82+00 WT
84+00 WT

M/L SIH-OB2

1208+00 OB2
1210+00 OB2
+00 OB2

SIGN

M/L SIH-IHA

1172+00 SIH
1174+00 SIH
1176+00 SIH
1178+00 SIH
1180+00 SIH
1182+00 SIH
1184+00 SIH
1208+00 IHA
1210+00 IHA
1212+00 IHA
1214+00 IHA
1216+00 IHA
1218+00 IHA

IH 43

M/L NIH-SIH

1172+00 NIH
1174+00 NIH
1176+00 NIH
1178+00 NIH
1180+00 NIH
1182+00 NIH
1184+00 NIH

MATCH LINE 1171+50 NIH

MATCH LINE 1185+00 NIH

M/L NIH-IHB

1172+00 IHB
1174+00 IHB
1176+00 IHB
1178+00 IHB
1180+00 IHB
1182+00 IHB
1184+00 IHB

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 153	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021712_xm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

WIETOR DR

LEGEND

SLOPE LIMITS

B-05-0671 PREVIOUSLY CONSTRUCTED

M/L IHA-OB2

M/L SIH-IHA

M/L NIH-SIH

M/L SIH-OB2

M/L OB2-WT

MATCH LINE 1185+00 NIH

MATCH LINE 1198+00 NIH

MATCH LINE 100+00 WT

IH 43

B-05-0679 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTION MATCHLINE	SCALE, FEET 0 50 100	SHEET 154	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_021713_xm.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

1125 SIH

1130 SIH

1135 SIH

1140 SIH

1125 NIH

1130 NIH

1135 NIH

1140 NIH

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

2) EROSION CONTROL ITEMS THAT ARE SHOWN SCREENED ARE PLACED IN PREVIOUS STAGES OR CONTRACTS, AND ARE DISPLAYED FOR REFERENCE ONLY.

3) CONTRACTOR SHALL PROVIDE 24" DEPTH OF PLANTING MIXTURE IN ALL PLANTING BEDS, AND 24" DEPTH OF TOPSOIL SPECIAL FOR TREES PLANTED IN LAWN AREAS, SEE LANDSCAPE PLANS FOR MORE INFORMATION.

WISCONSIN
7/24/14
KAREN S.
SPRINGOB
E-36010
LISBON, -
PROFESSIONAL ENGINEER

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE1\1071_EC1.dgn PLOT DATE : 7/23/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

2

N

2

1140 SIH
1145 SIH
1150 SIH
1155 SIH
1140 NIH
1145 NIH
1150 NIH
1155 NIH
SAN
HO
SIGN
TOWER
RB
W

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

2) EROSION CONTROL ITEMS THAT ARE SHOWN SCREENED ARE PLACED IN PREVIOUS STAGES OR CONTRACTS, AND ARE DISPLAYED FOR REFERENCE ONLY.

3) CONTRACTOR SHALL PROVIDE 24" DEPTH OF PLANTING MIXTURE IN ALL PLANTING BEDS, AND 24" DEPTH OF TOPSOIL SPECIAL FOR TREES PLANTED IN LAWN AREAS, SEE LANDSCAPE PLANS FOR MORE INFORMATION.

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 156	E

2

2

1155 SIH
1160 SIH
1165 SIH
1170 SIH
1155 NIH
1160 NIH
1165 NIH
1170 NIH
1170 IHB
120 MIL
125 MIL
68+00 HB
66+00 HB
64+00 HB
62+00 HB
70+00 HB

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

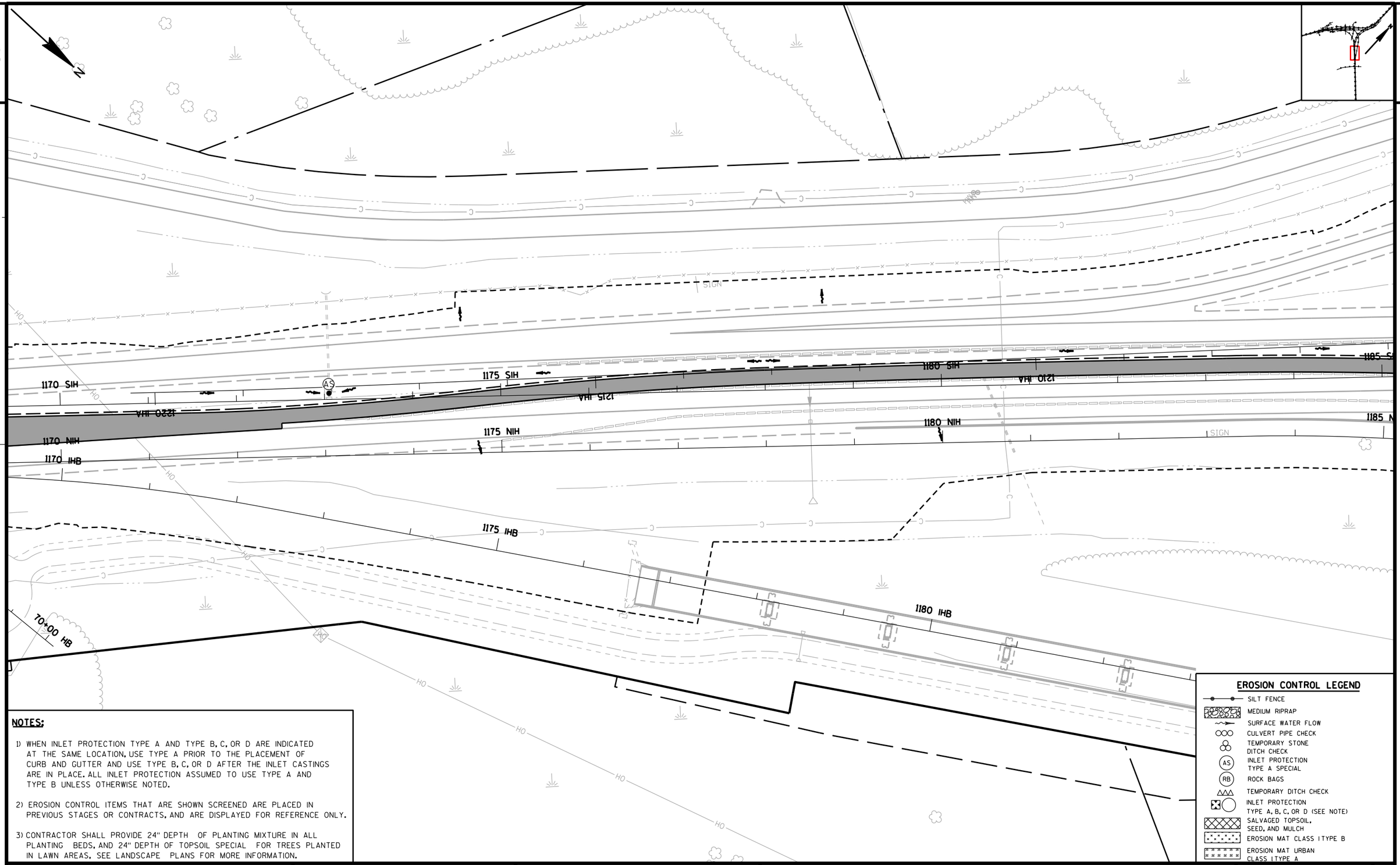
2) EROSION CONTROL ITEMS THAT ARE SHOWN SCREENED ARE PLACED IN PREVIOUS STAGES OR CONTRACTS, AND ARE DISPLAYED FOR REFERENCE ONLY.

3) CONTRACTOR SHALL PROVIDE 24" DEPTH OF PLANTING MIXTURE IN ALL PLANTING BEDS, AND 24" DEPTH OF TOPSOIL SPECIAL FOR TREES PLANTED IN LAWN AREAS, SEE LANDSCAPE PLANS FOR MORE INFORMATION.

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 157	E



NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

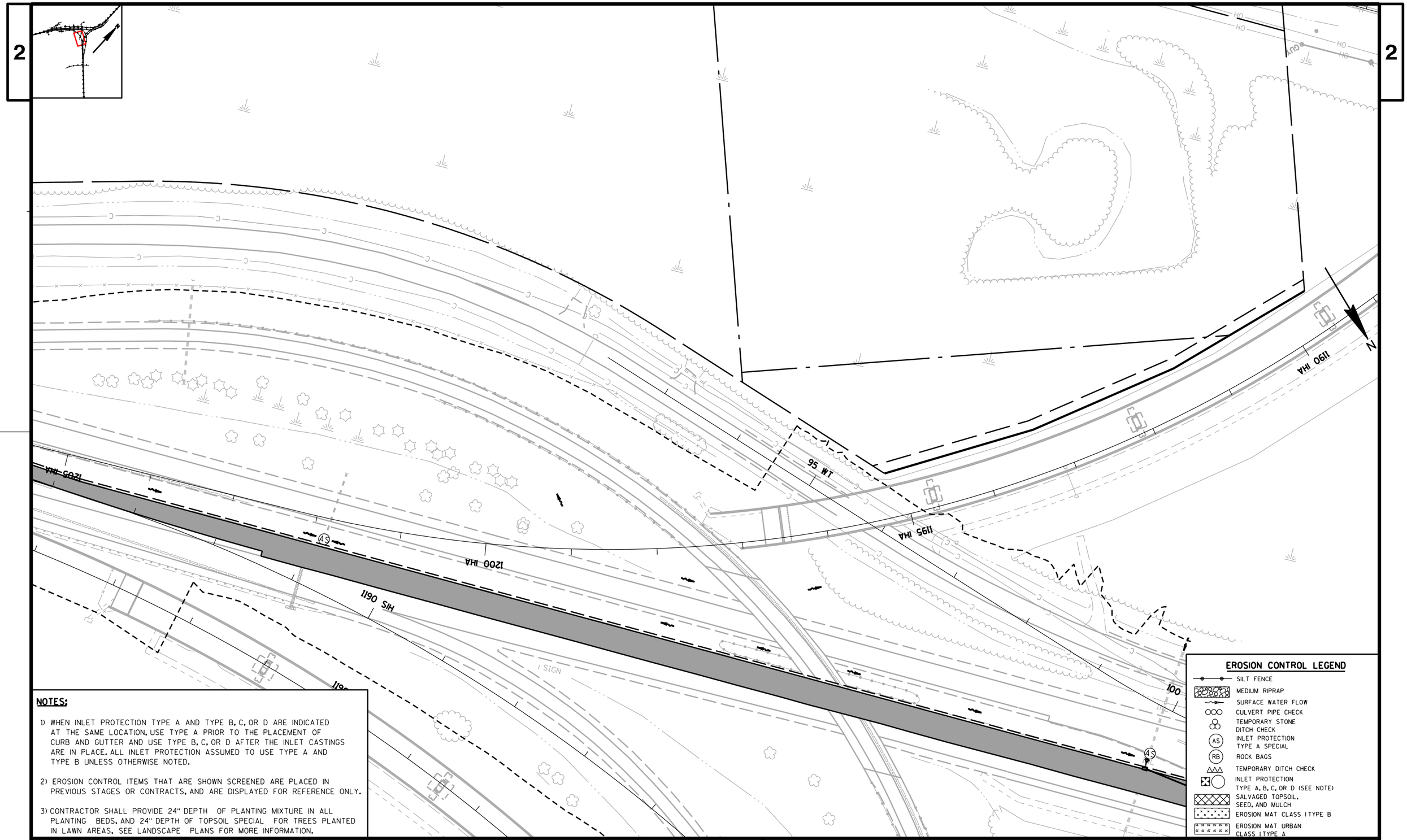
2) EROSION CONTROL ITEMS THAT ARE SHOWN SCREENED ARE PLACED IN PREVIOUS STAGES OR CONTRACTS, AND ARE DISPLAYED FOR REFERENCE ONLY.

3) CONTRACTOR SHALL PROVIDE 24" DEPTH OF PLANTING MIXTURE IN ALL PLANTING BEDS, AND 24" DEPTH OF TOPSOIL SPECIAL FOR TREES PLANTED IN LAWN AREAS, SEE LANDSCAPE PLANS FOR MORE INFORMATION.

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 158	E



NOTES:

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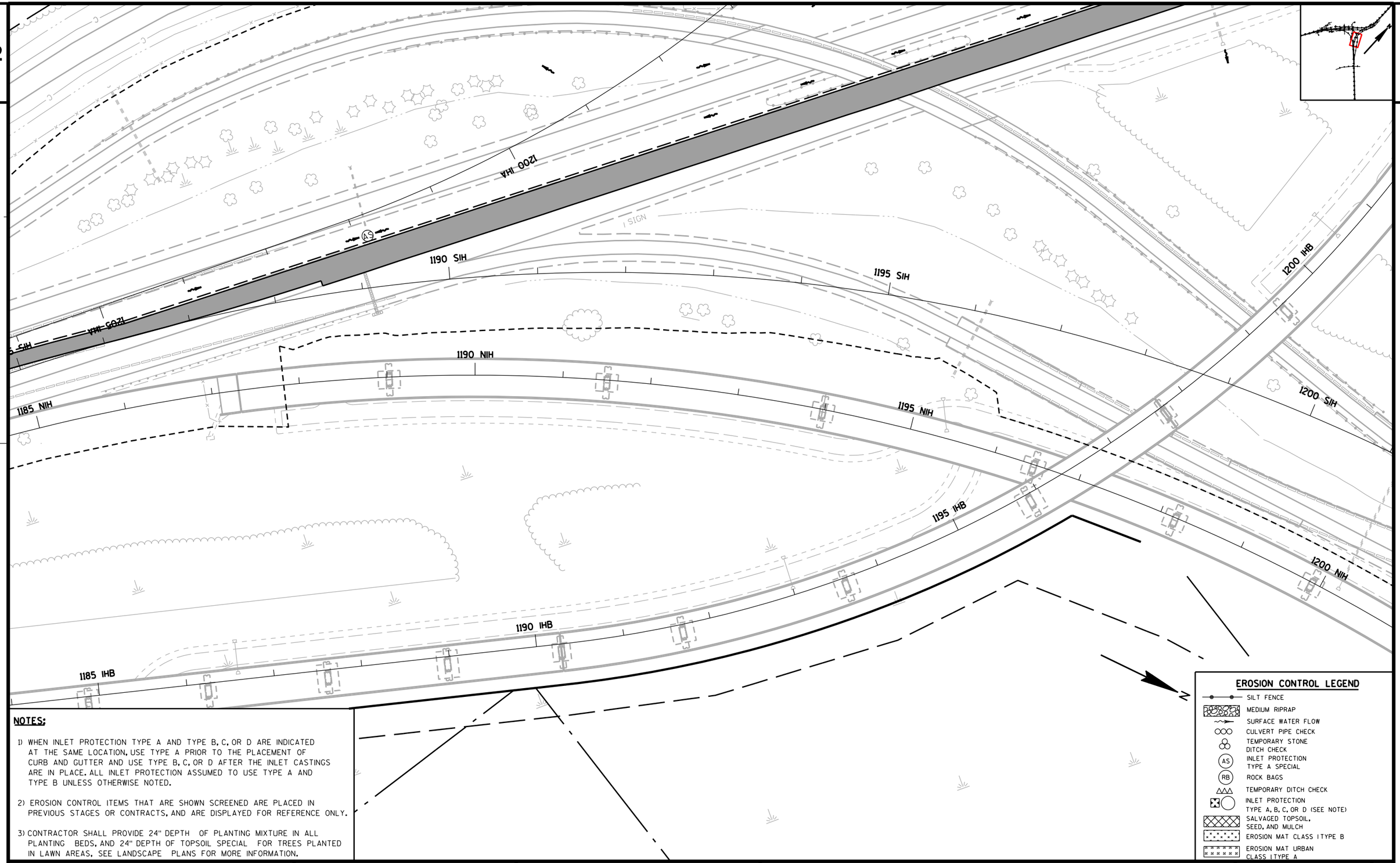
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 159	E



2

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EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 160	E

2

2

1135 SMC

1140 SMC

1145 SMC

1150 SMC

1135 NMC

1140 NMC

1145 NMC

1150 NMC

1145 IHA

1150 IHA

GOLF GREEN

GOLF GREEN

GOLF GREEN

GOLF GREEN

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

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EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 161	E

2

2

N

1150 SMC
1155 SMC
1160 SMC
1150 NMC
1155 NMC
1160 NMC
1150 IHA
1155 IHA
1160 IHA
1160 VED
1160 VEA
210 BDC
215 BDC
60 IS
10 LG
13 LG
SAN
SIGN
MH
RB
AS
A
B
D

NOTES:

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- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 162	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE1\1071_EC8.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

1160 VED
1160 SMC
1160 NMC
1160 IHA
1160 VEA
1165 VED
1165 SMC
1165 NMC
1165 IHA
1165 VEA
1170 VED
1170 SMC
1170 NMC
1170 IHA
1170 VEA
1171 VEAA
10' ROS
1175 SMC
1175 NM
1175

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 163 E

2

2

1175 VECA

1175 VEC

1180 VEC

1185 VEC

20' RR

1215 IHB

1220 IHB

1225 IHB

1175 SMC

1180 SMC

1185 SMC

1175 NMC

1180 NMC

1185 NMC

1175 IHA

1180 IHA

1185 IHA

1180 VEB

1185 VEB

15' RR

GUY

SIGN

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

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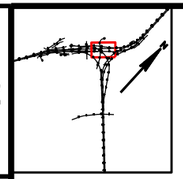
- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 164	E

2



1190 VEC

1195 VEC

1200 VEC

1200 SMC

1195 SMC

1190 SMC

1210 IHB

105 WT

110

SIGN

INL

1190 NMC

1190 VEB

1195 NMC

1200 NMC

8HI S021

1205 SIH

1190 IHB

N

NOTES;

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- SILT FENCE
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- CULVERT PIPE CHECK
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- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 165	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE1\1071_EC11.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

NOTES:

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15 BP2

110 WT

1195 VEC

1195 SMC

1200 VEC

1200 SMC

1205 VEC

1205 SMC

FOOTBRIDGE

I SIGN

INL

A

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE1\1071_EC12.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

1205 VEC
1205 SMC
1200 NMC
1210 SMC
1210 SIH
1215 SIH
1205 NMC
1205 SIH
1210 NMC
1210 NIH
1205 NIH
1200 NIH
SIGN
INL
HO

N

NOTES:

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- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS ITYPE B
- EROSION MAT URBAN CLASS ITYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 167	E

2

2

N

34+00 BP2

10 BP1

36+00 BP2

1215 SMC

38+00 BP2

40+00 BP2

42+00 BP2

44+00 BP2

1220 SIH

1220 SMC

1225 SMC

1225 SIH

1230

1215 NMC

1215 NIH

15 BP1

1220 NMC

1225 NMC

20 BP1

25 BP1

SIGN

OH

HO

C

NOTES:

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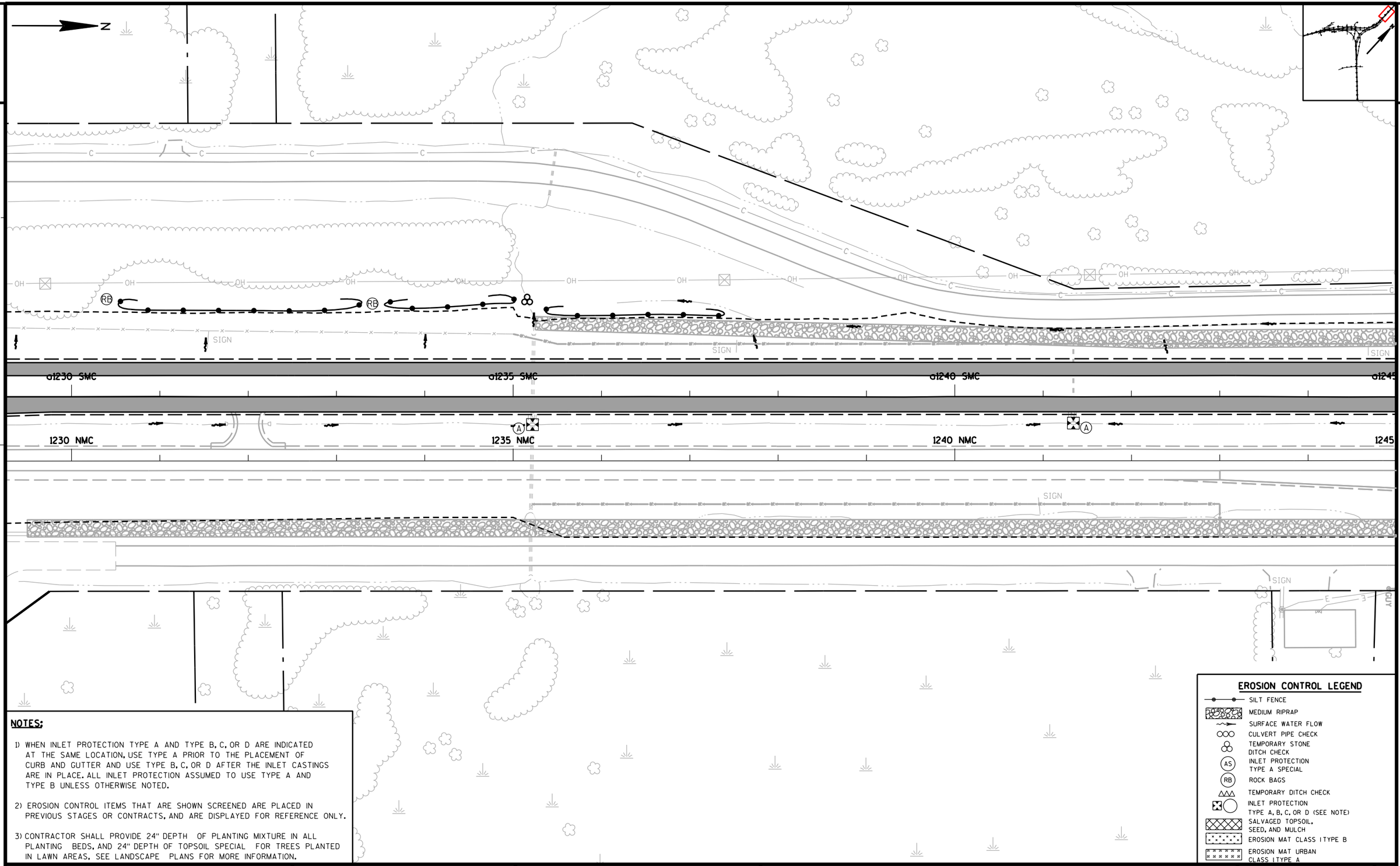
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 168	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE1\1071_EC14.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100



2

NOTES:

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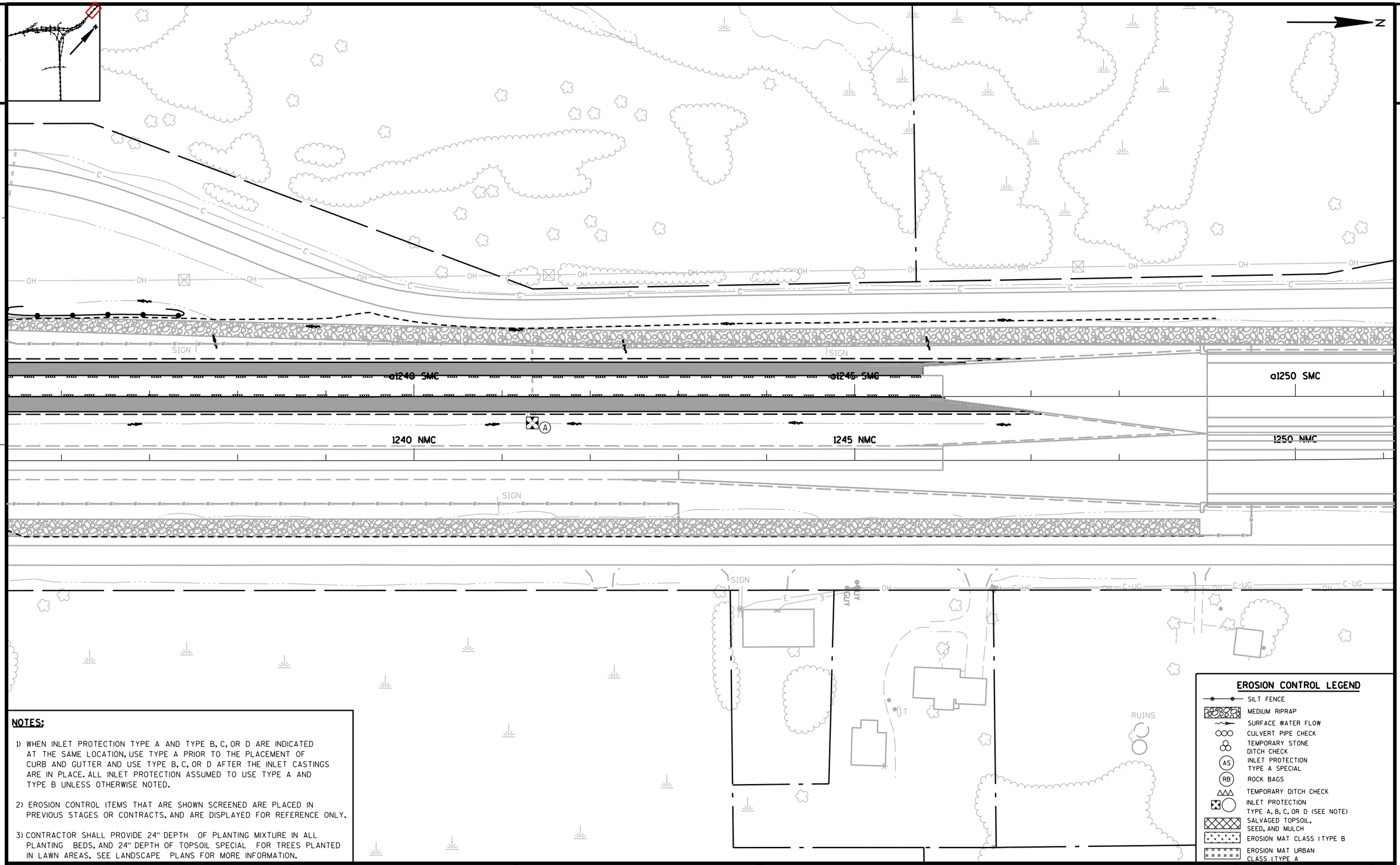
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 169	E



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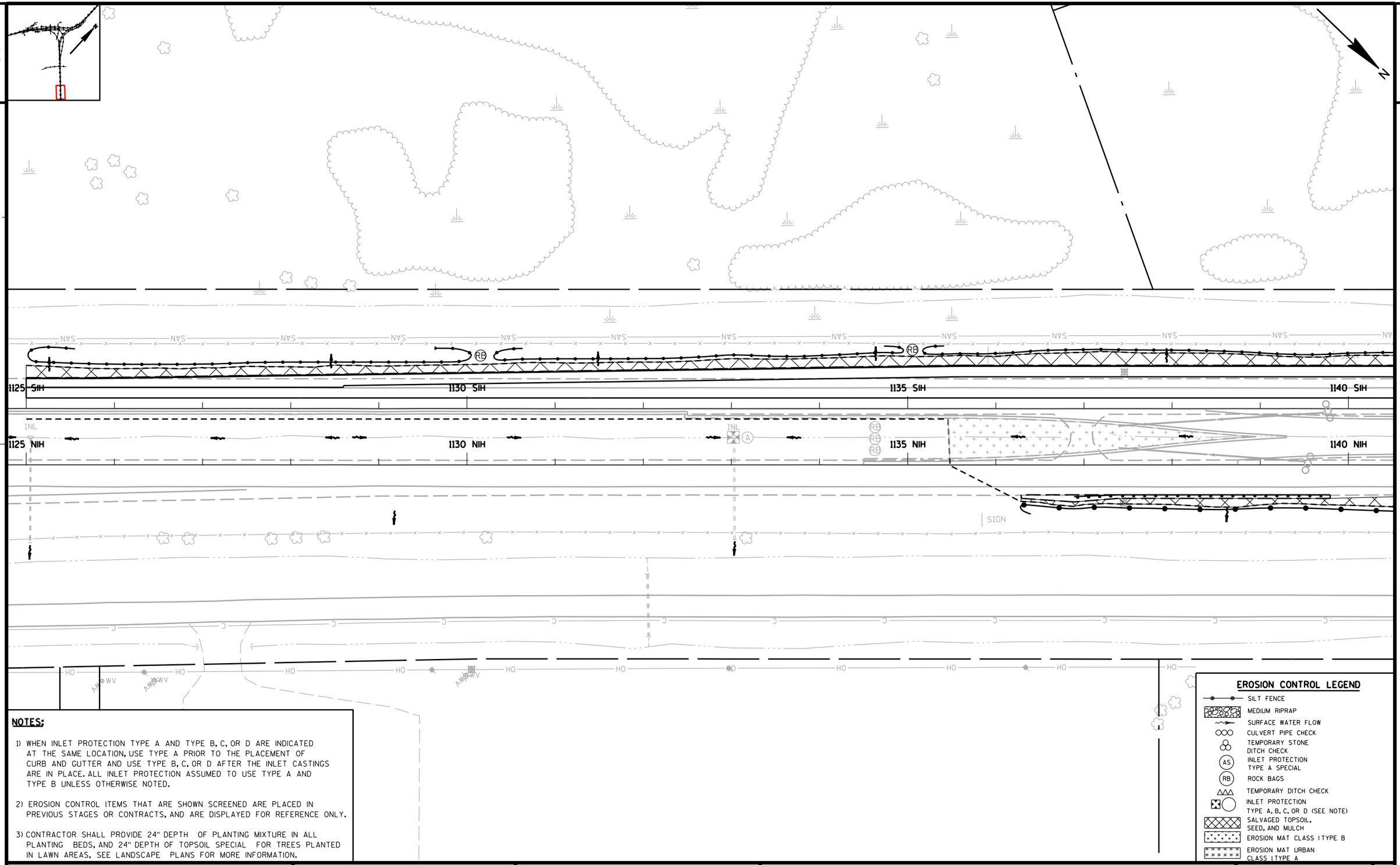
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 1	SHEET 170	E



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EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 171	E

2

N

2

1140 SIH

1145 SIH

1150 SIH

1155 SIH

1140 NIH

1145 NIH

1150 NIH

1155 NIH

SAN

RB

INL

SIGN

MH

HO

TOWER

W

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

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- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 172	E

2

2

1155 SIH
1160 SIH
1165 SIH
1170 SIH
1155 NIH
1160 NIH
1165 NIH
1170 NIH
1170 IHB
120 MIL
125 MIL
62+00 HB
64+00 HB
66+00 HB
68+00 HB
70+00 HB

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

2) EROSION CONTROL ITEMS THAT ARE SHOWN SCREENED ARE PLACED IN PREVIOUS STAGES OR CONTRACTS, AND ARE DISPLAYED FOR REFERENCE ONLY.

3) CONTRACTOR SHALL PROVIDE 24" DEPTH OF PLANTING MIXTURE IN ALL PLANTING BEDS, AND 24" DEPTH OF TOPSOIL SPECIAL FOR TREES PLANTED IN LAWN AREAS, SEE LANDSCAPE PLANS FOR MORE INFORMATION.

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 173	E

2

2

N

1170 SIH
1220 IHA
1170 NIH
1170 IHB
1175 SIH
1215 IHA
1175 NIH
1175 IHB
1180 SIH
1210 IHA
1180 NIH
1180 IHB
1185 S
1185 N
70+00 HB
SIGN

NOTES:

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- SURFACE WATER FLOW
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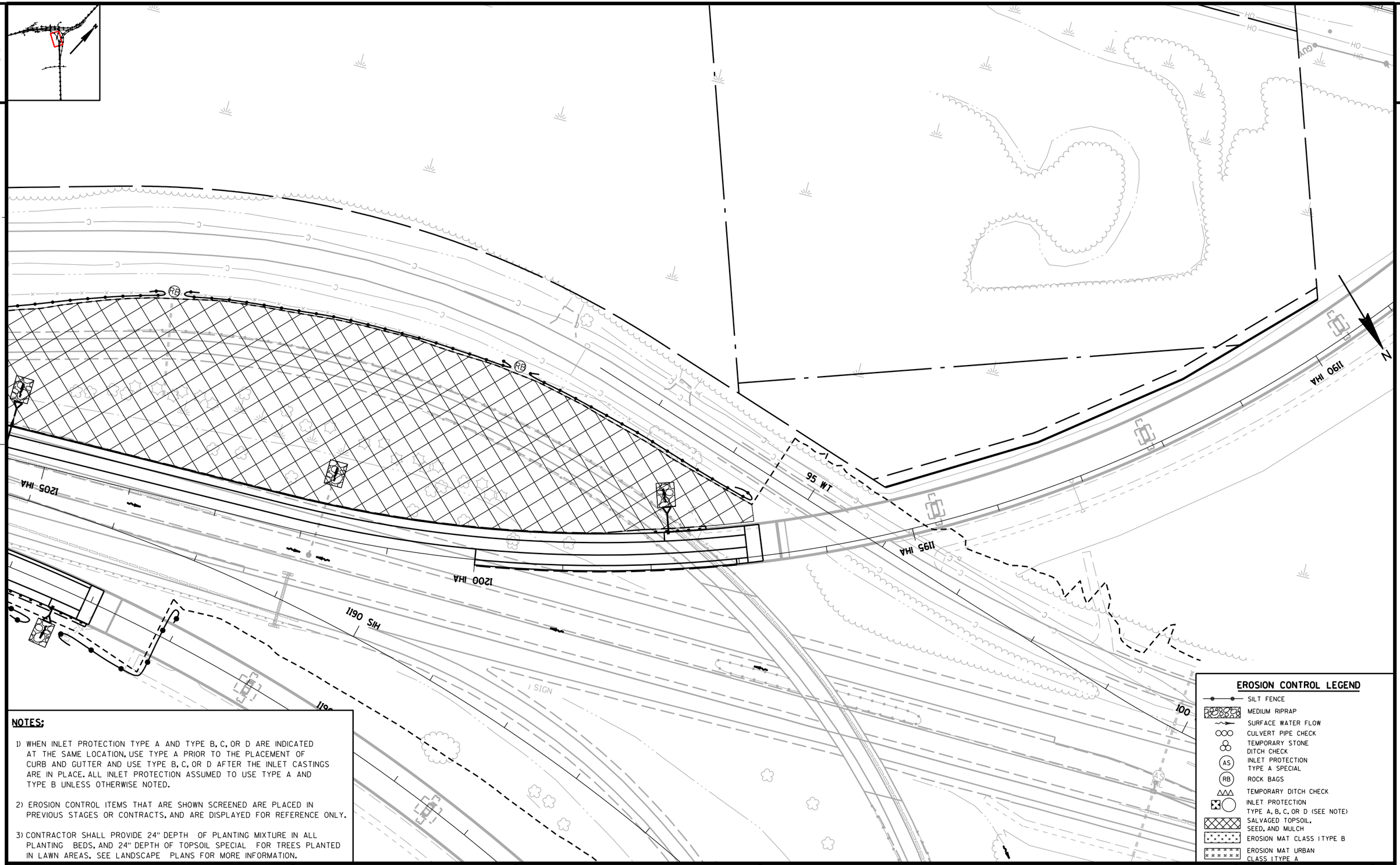
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 174	E

2

2



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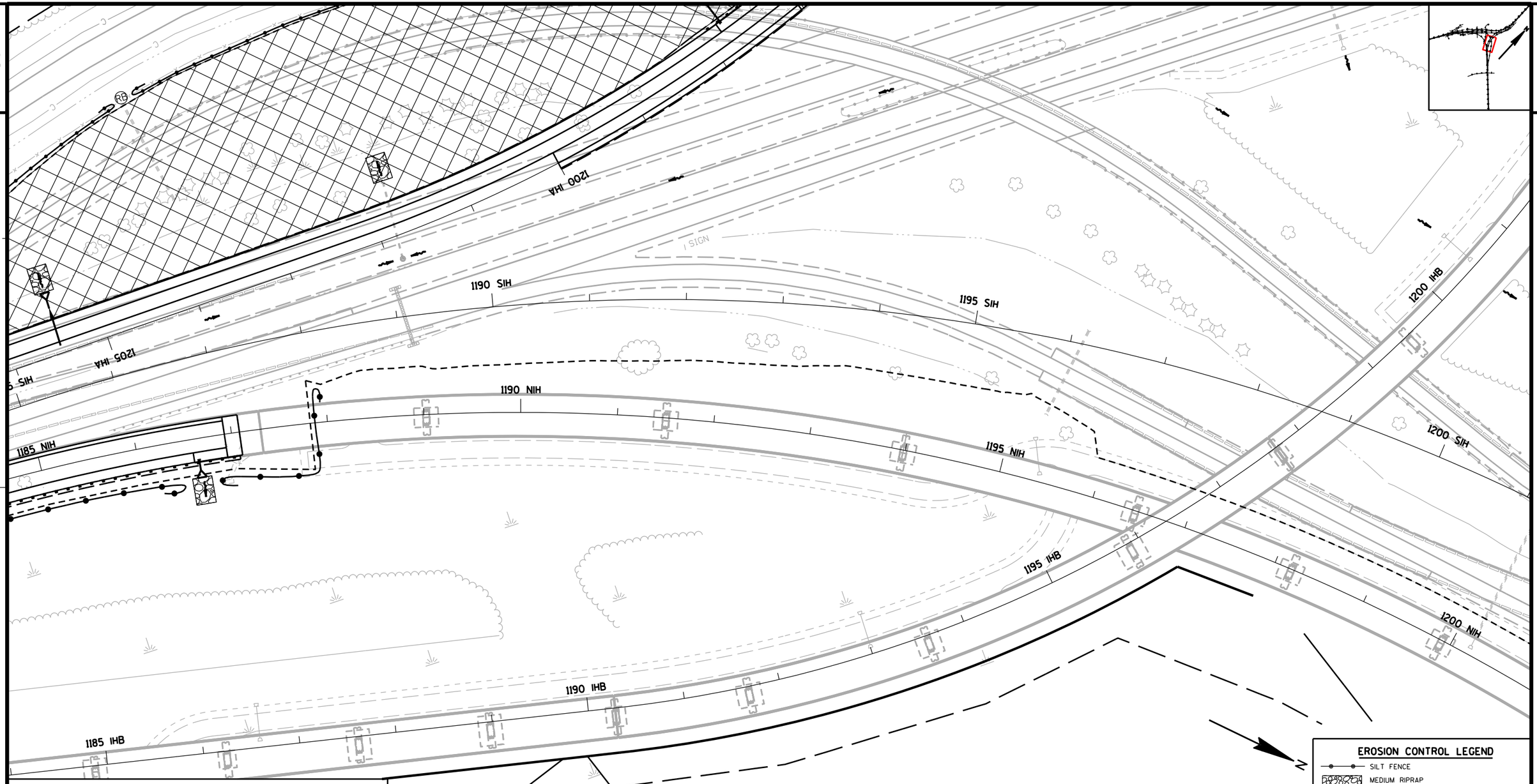
- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 175	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE2\1071_EC5.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



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EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 176	E

2

2

1135 SMC

1140 SMC

1145 SMC

1150 SMC

1135 NMC

1140 NMC

1145 NMC

1145 IHA

1150 IHA

GOLF GREEN

GOLF GREEN

GOLF GREEN

NOTES:

1) WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE. ALL INLET PROTECTION ASSUMED TO USE TYPE A AND TYPE B UNLESS OTHERWISE NOTED.

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- MEDIUM RIPRAP
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- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 177	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE2\1071_EC7.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

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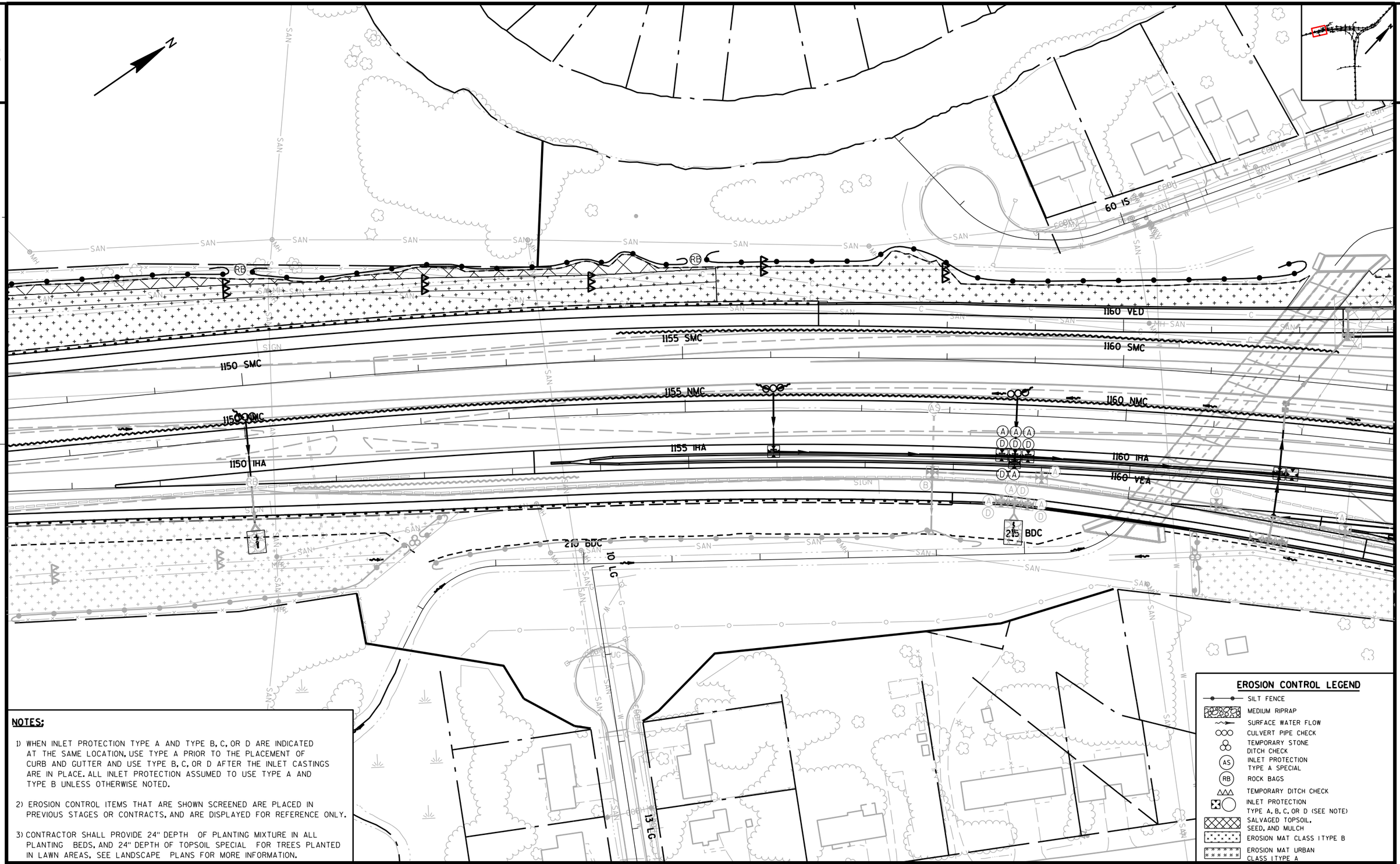

NOTES:

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EROSION CONTROL LEGEND

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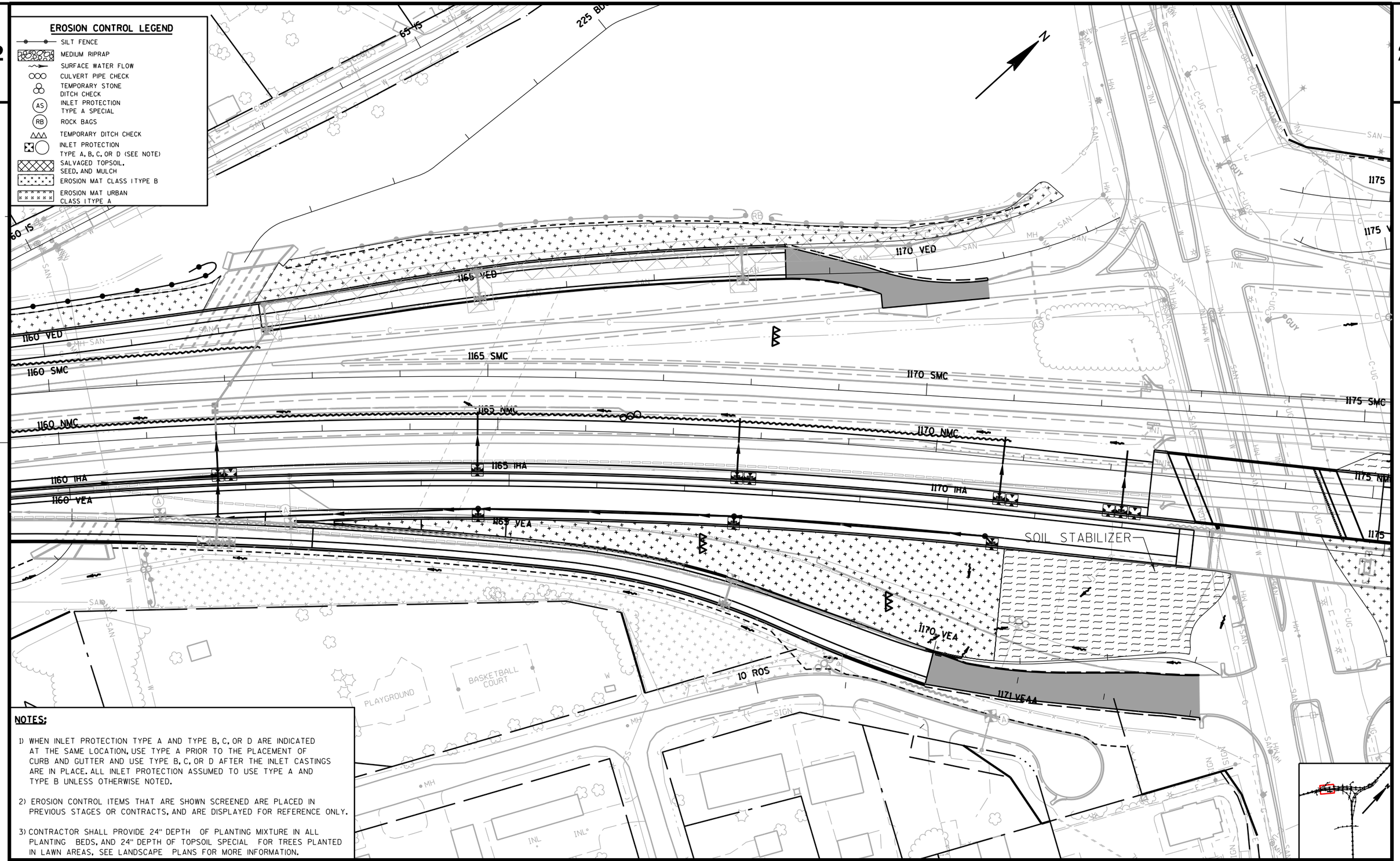
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 178	E

EROSION CONTROL LEGEND

- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 179	E

2

2

1175 VECA

1175 VEC

1180 VEC

1185 VEC

20' RR

1215 IHB

1220 IHB

1225 IHB

1175 SMC

1180 SMC

1185 SMC

SOIL STABILIZER

1175 NMC

1180 NMC

1185 NMC

1175 IHA

1180 IHA

1180 VEB

1185 VEB

15' RR

1185 IHA

GUY

SIGN

NOTES:

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EROSION CONTROL LEGEND

- SILT FENCE
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- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS ITYPE B
- EROSION MAT URBAN CLASS ITYPE A

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 180	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE2\1071_EC10.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

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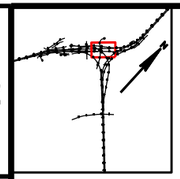

1190 VEC

1195 VEC

1200 VEC

1190 SMC

1210 IHB

1195 SMC

1200 SMC

105 WT

110

SIGN

1190 NMC

1190 VEB

1195 NMC

1200 NMC

8HI S021

1205 SIH

1190 IHB

N

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- SILT FENCE
- MEDIUM RIPRAP
- SURFACE WATER FLOW
- CULVERT PIPE CHECK
- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS ITYPE B
- EROSION MAT URBAN CLASS ITYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 181	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\SSE-ProjBase\EC\STAGE2\1071_EC11.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

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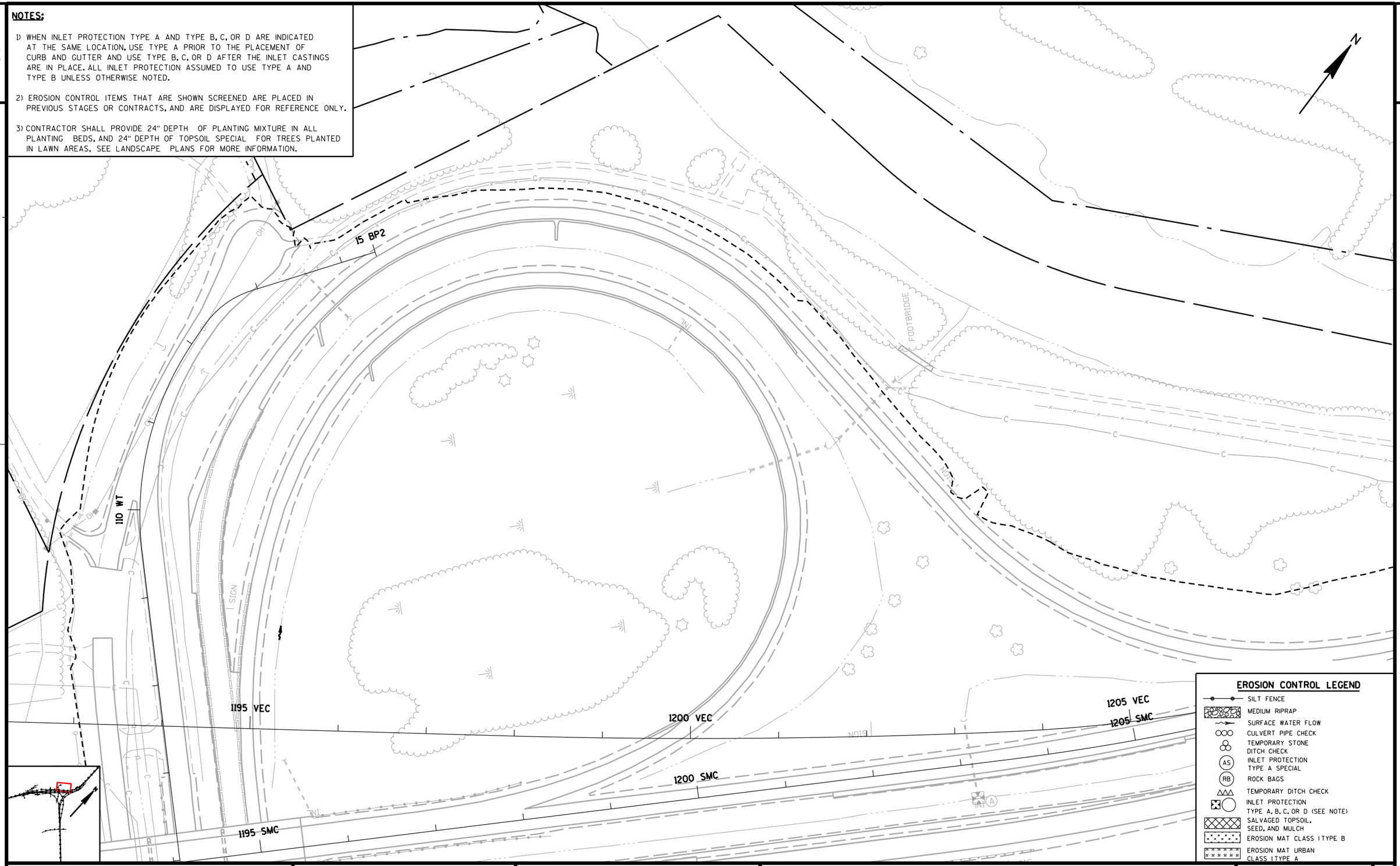

EROSION CONTROL LEGEND

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- SURFACE WATER FLOW
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- TEMPORARY STONE DITCH CHECK
- (AS) INLET PROTECTION TYPE A SPECIAL
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 182 E

2

2

1205 VEC
1205 SMC
1210 SMC
1200 NMC
1205 NMC
1210 SIH
1215 SIH
1205 SIH
1205 NIH
1210 NMC
1210 NIH
1200 NIH
SIGN
INL
HO

N

NOTES:

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- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS ITYPE B
- EROSION MAT URBAN CLASS ITYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 183	E

2

N

34+00 BP2
10 BP1
36+00 BP2
38+00 BP2
40+00 BP2
42+00 BP2
44+00 BP2
1215 SMC
1220 SIH
1220 SMC
1225 SIH
1225 SMC
1230
1215 NMC
1215 NIH
15 BP1
1220 NMC
1225 NMC
25 BP1
20 BP1
SIGN
OH
HO
C

NOTES:

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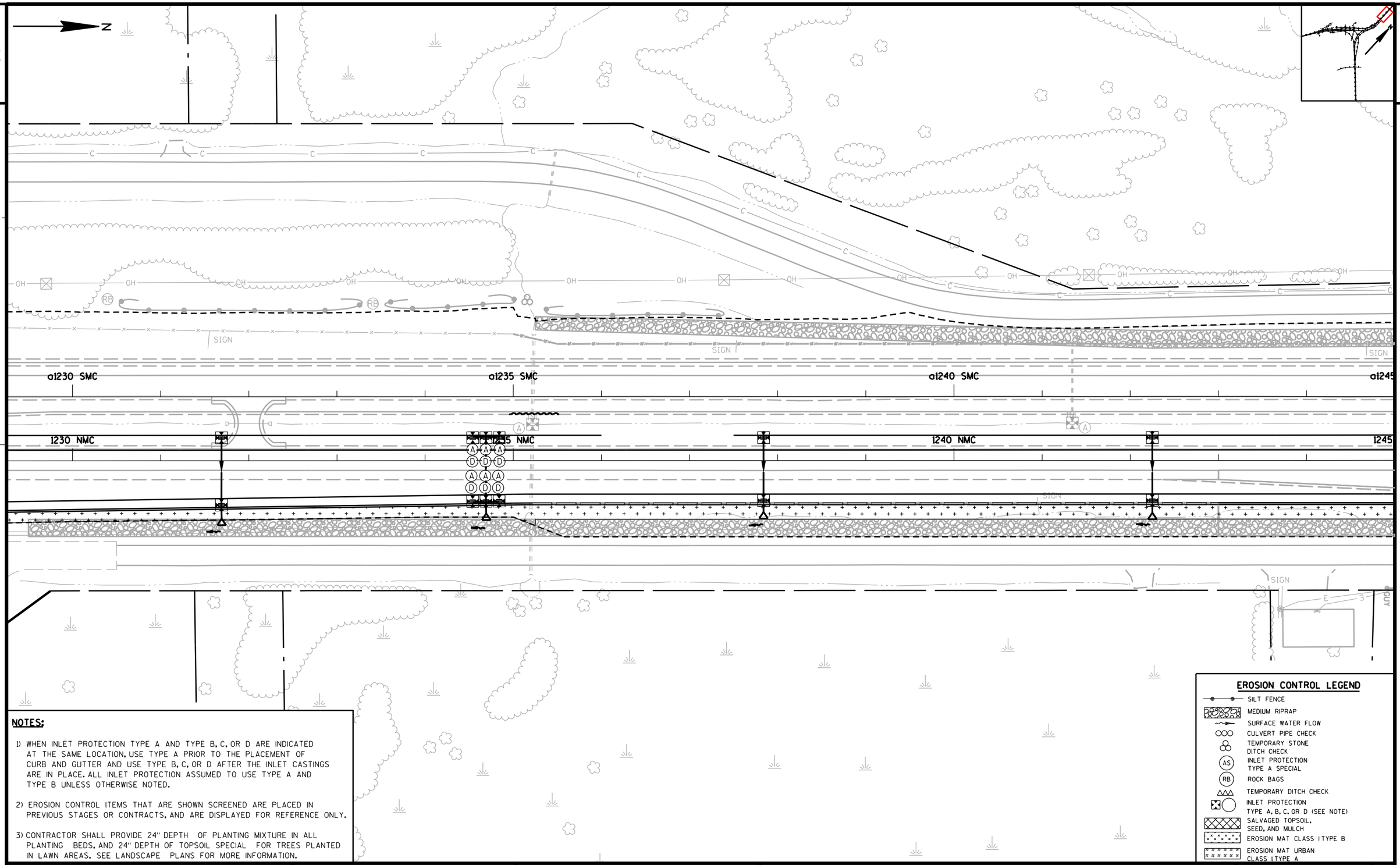
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 184	E



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 185	E

2

2

N

a1240 SMC

a1245 SMC

a1250 SMC

1240 NMC

1245 NMC

1250 NMC

SIGN

OH

C

E

GUY

C-UG

RUINS

NOTES:

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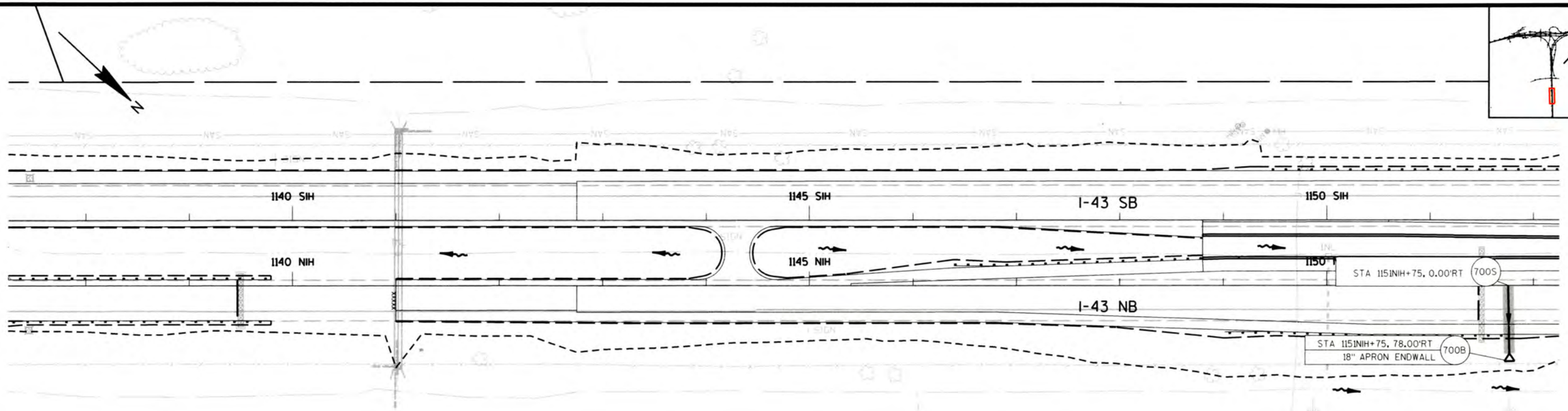
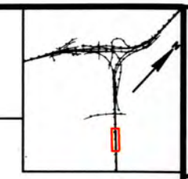
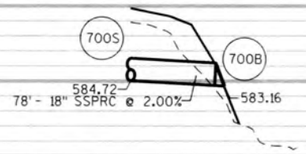
- (RB) ROCK BAGS
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A, B, C, OR D (SEE NOTE)
- SALVAGED TOPSOIL, SEED, AND MULCH
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	EROSION CONTROL - STAGE 2	SHEET 186	E



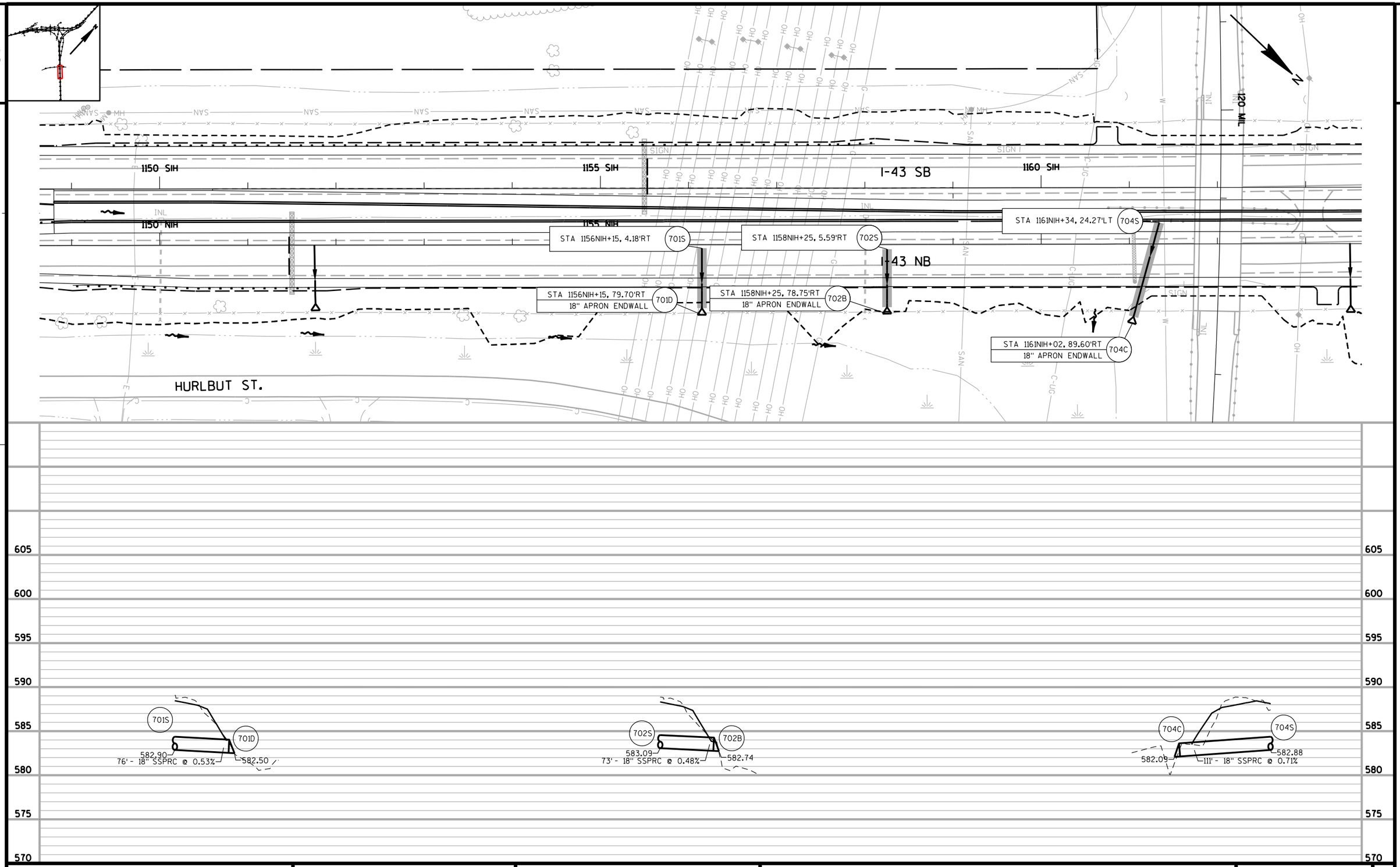




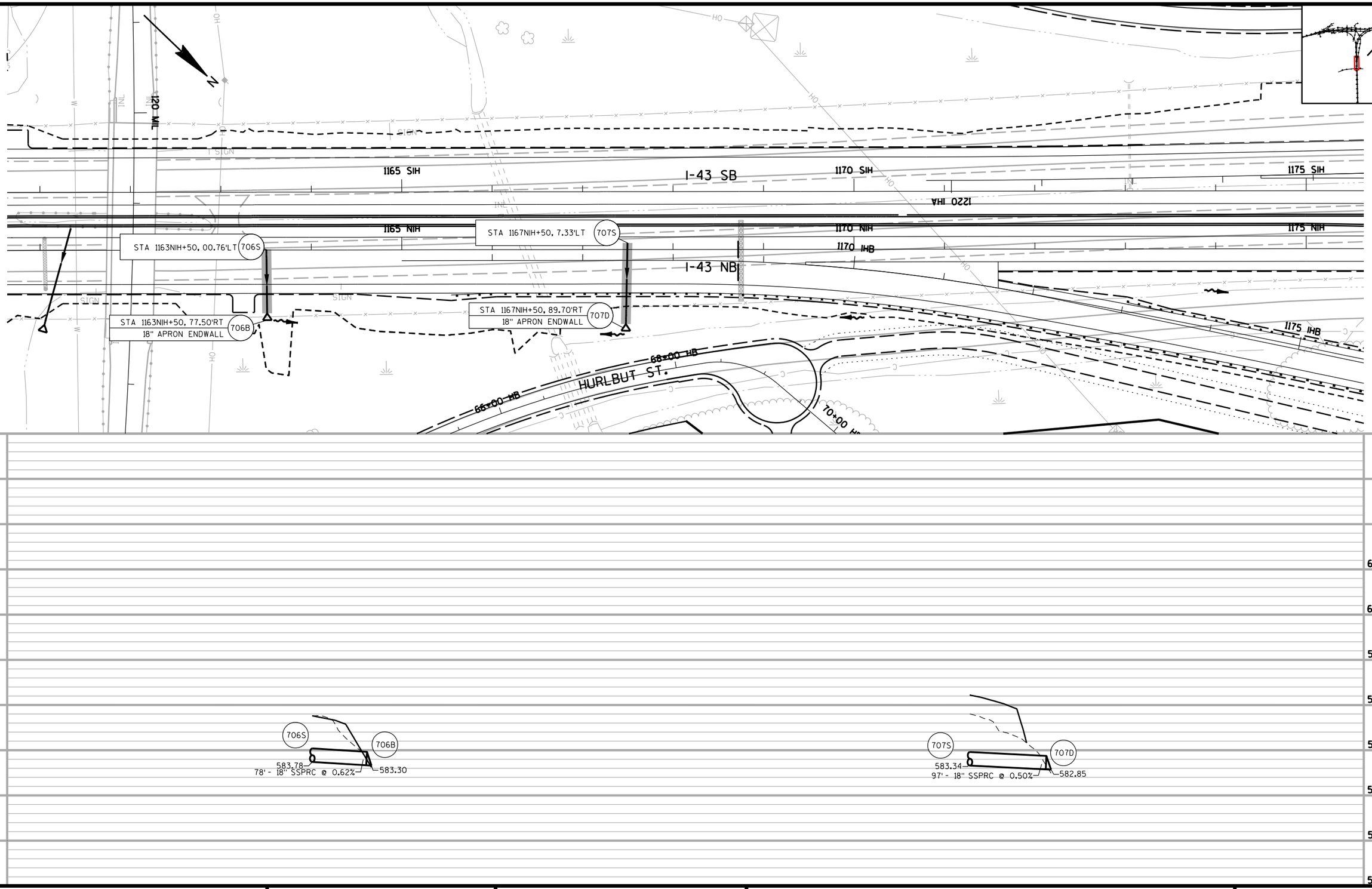
605 600 595 590 585 580 575 570

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022502ss.dgn PLOT DATE : 7/28/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100 WISDOT/CAD



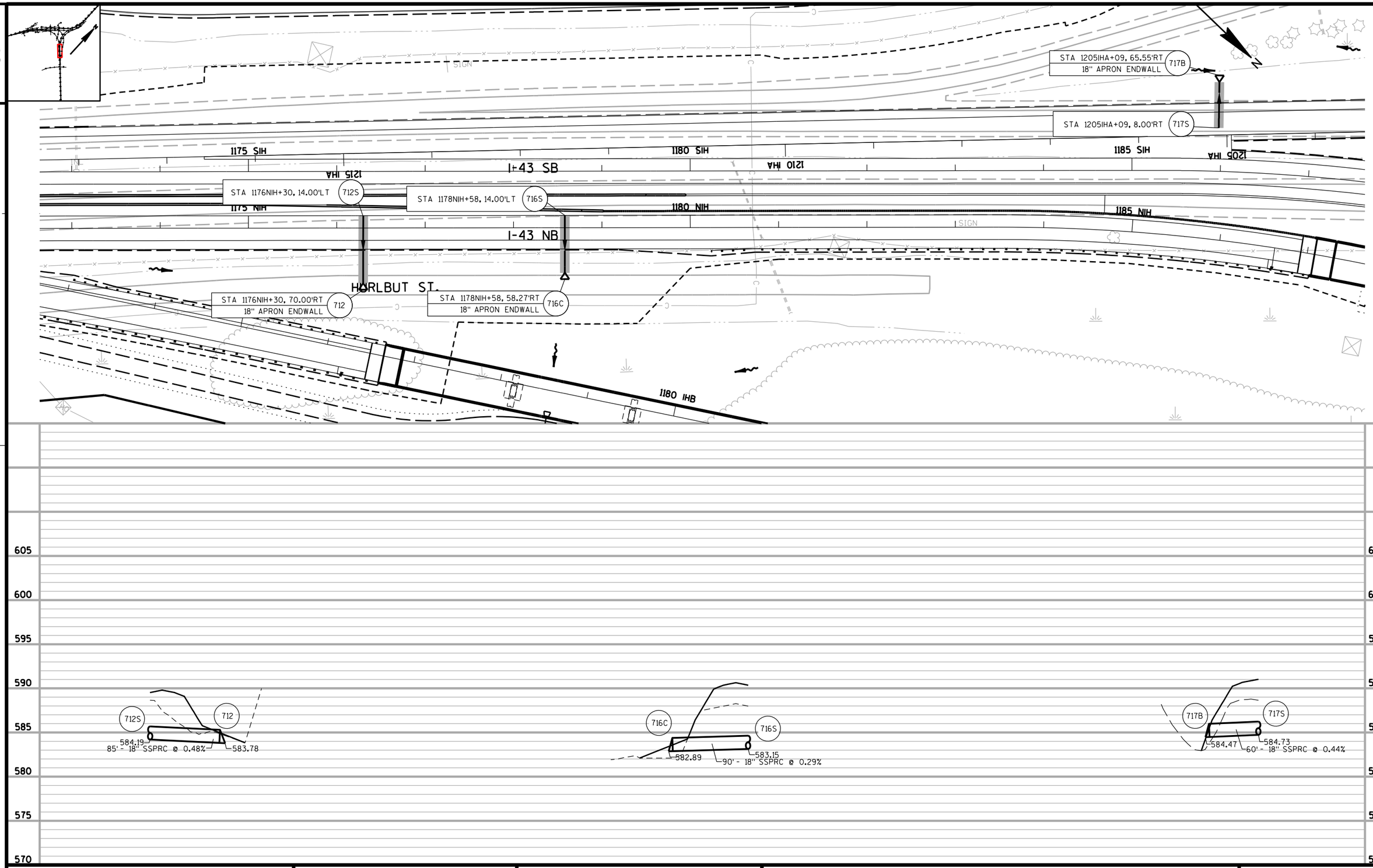
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 188	E



605 600 595 590 585 580 575 570

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 189	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022504ss.dgn
PLOT DATE : 7/31/2014
PLOT BY : Harlan
PLOT NAME :
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 41



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 190 E

2

STA 1200NMC+90, 25.00'LT
INLET 2'x2.5' - V
810

STA 1200NMC+90, 40.65'RT
INLET 4' DIA. - V
810A

STA 1200NMC+90, 60.26'RT
18" APRON ENDWALL
810B

1200 IHB

1200 SIH

1205 SIH

1205 NMC

1205 VEC

1205 SMC

1210 SIH

USH 41 SB

1200 NIH

1205 NIH

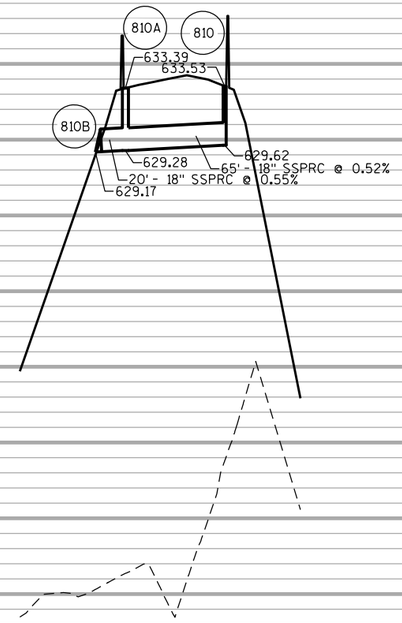
USH 41 NB

USH

N

2

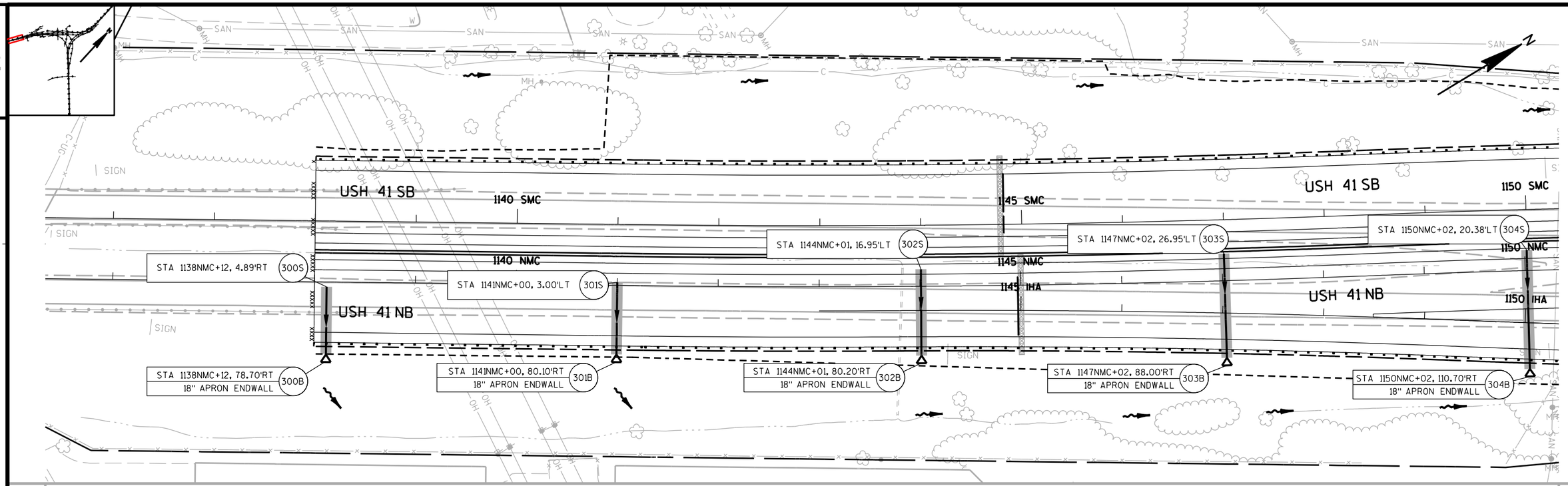
635
630
625
620
615
610
605
600
595

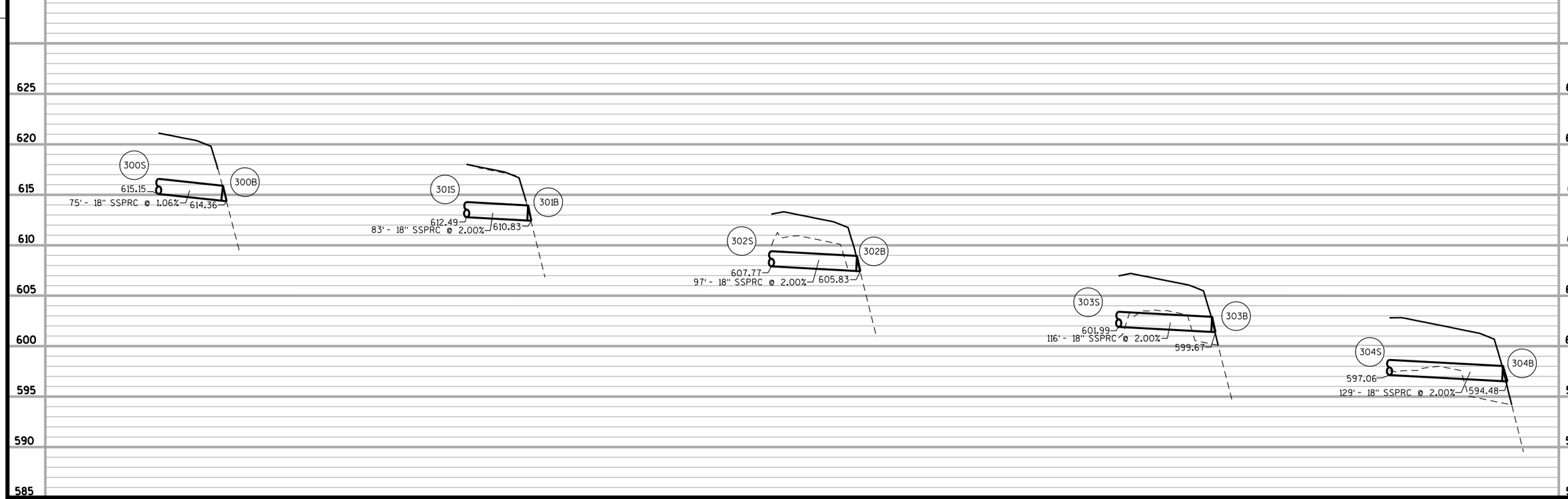


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 191	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022507ss.dgn
PLOT DATE : 7/31/2014
PLOT BY : Harlan
PLOT NAME :
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 41

2

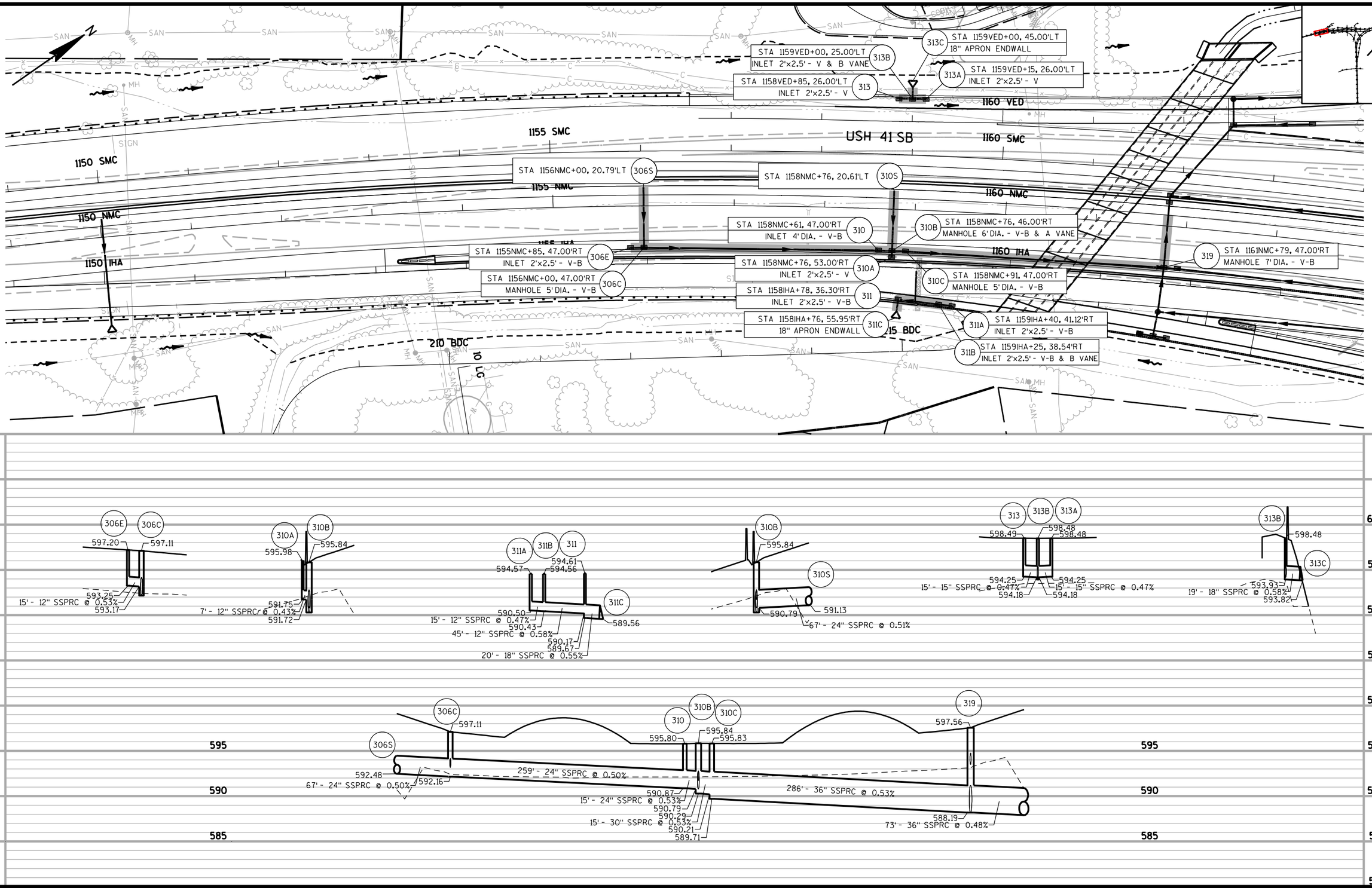




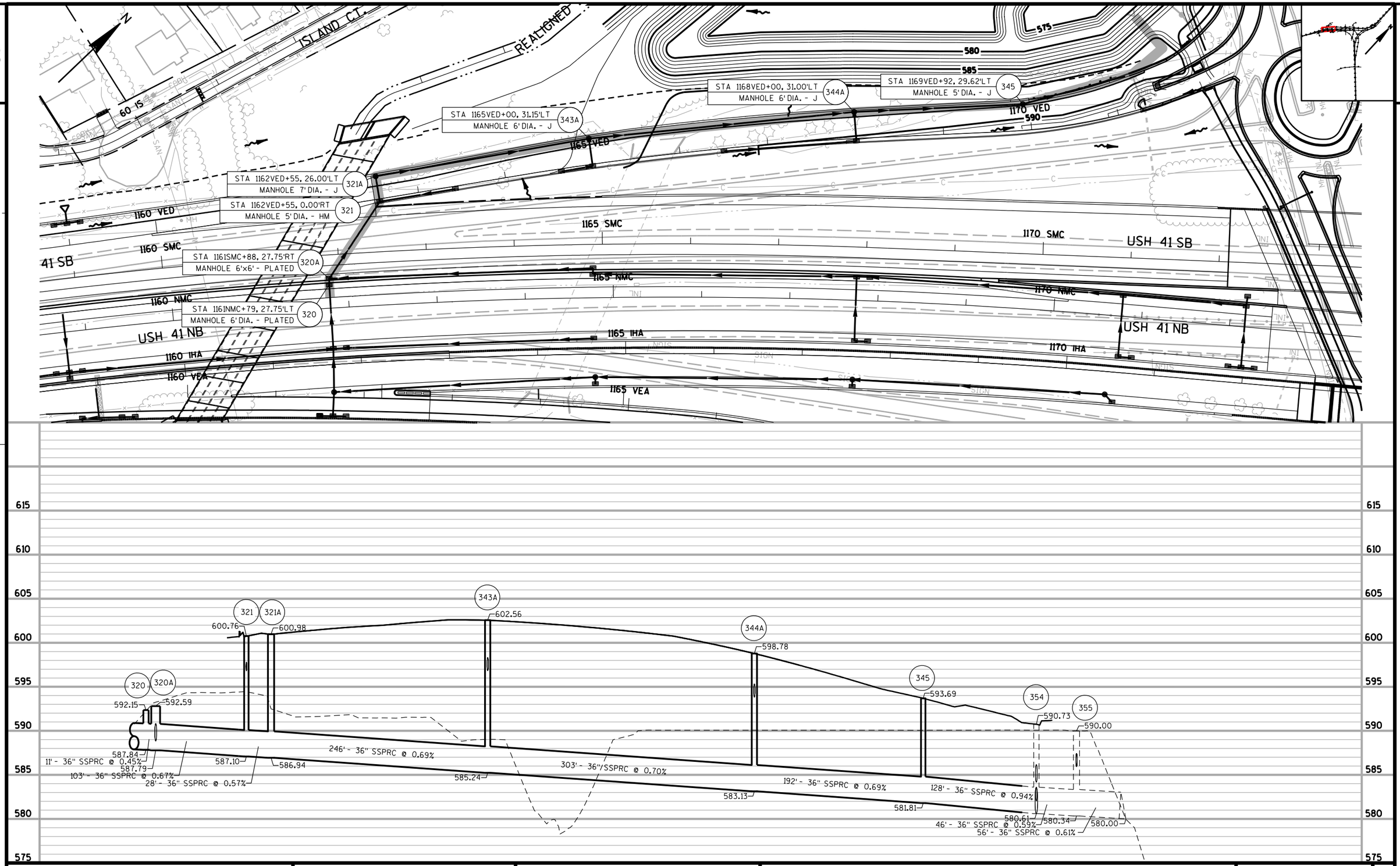
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 192	E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022508ss.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

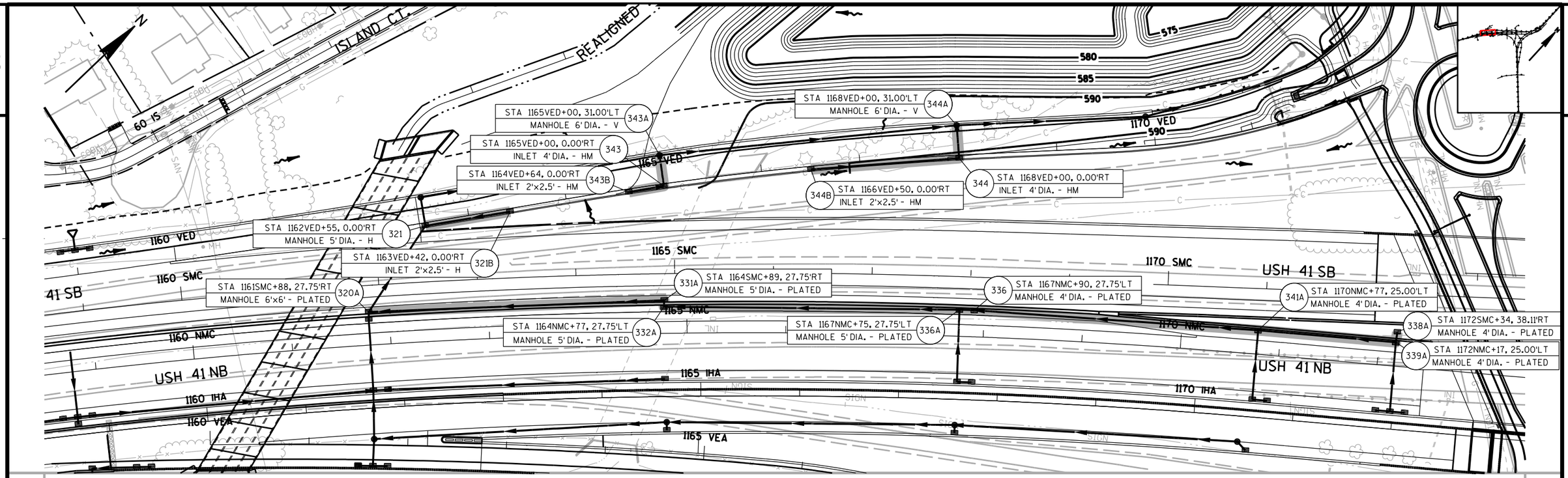
WISDOT/CADDS SHEET 41

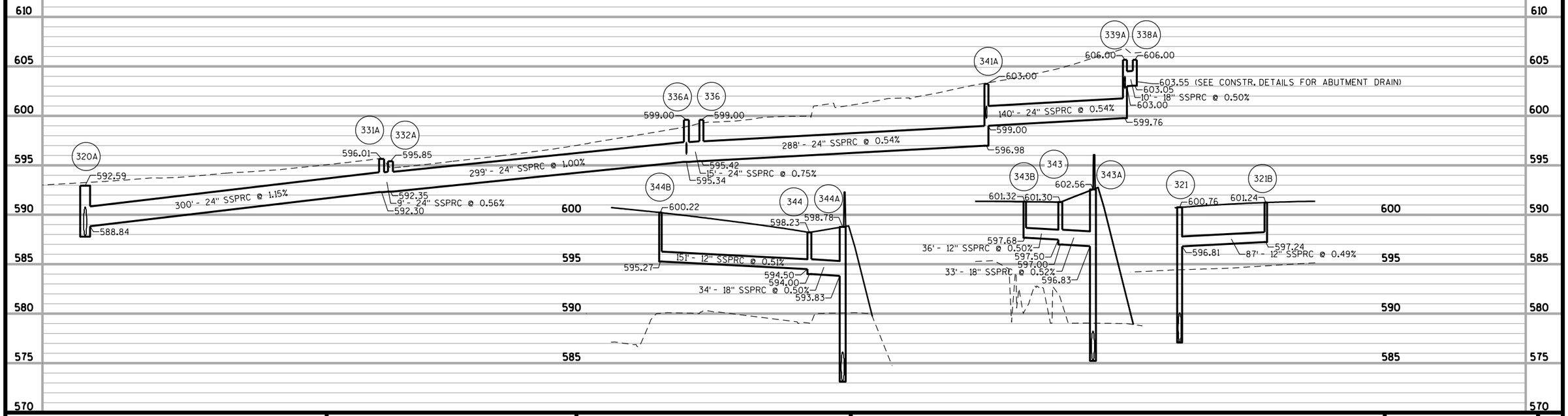


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 193 E



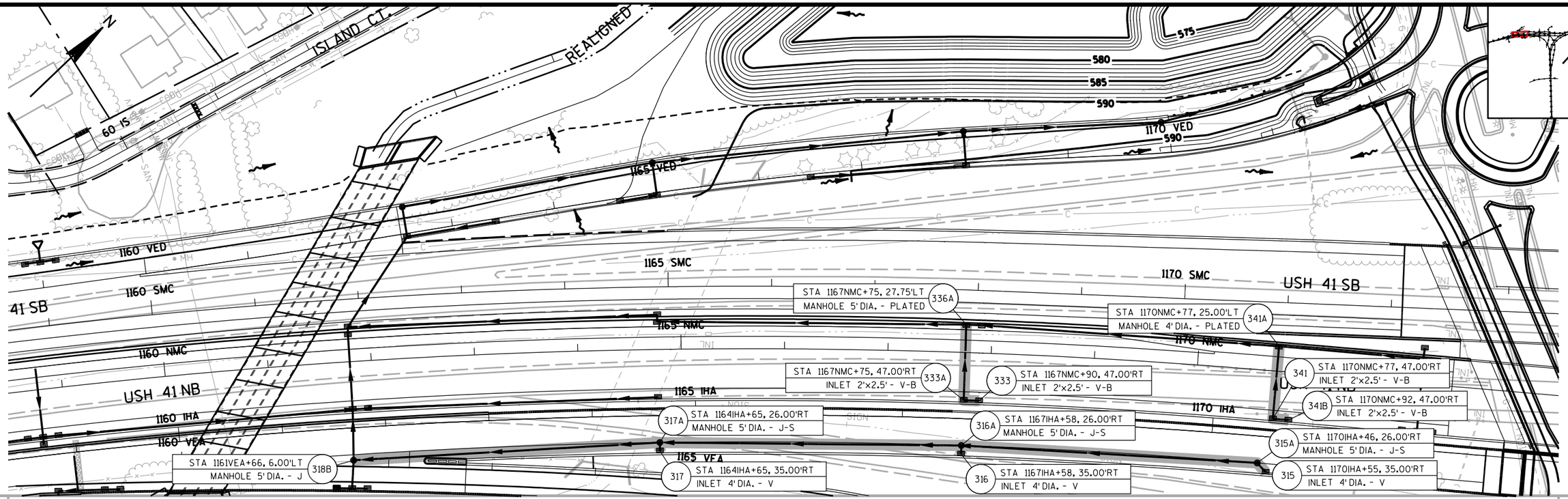
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 194 E

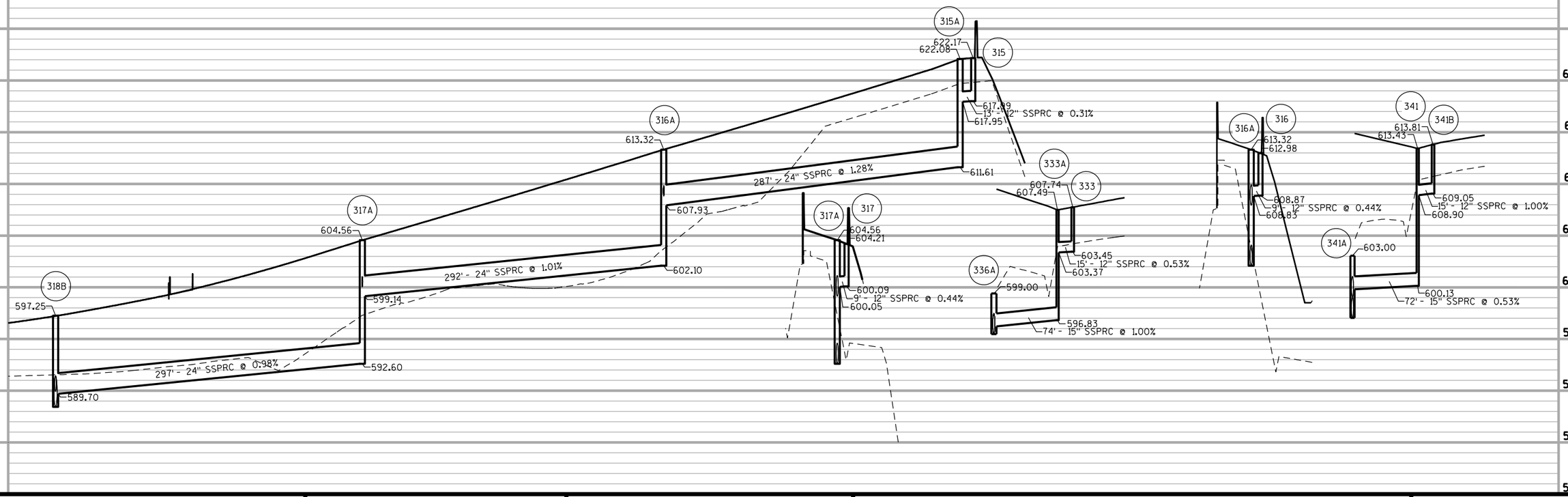




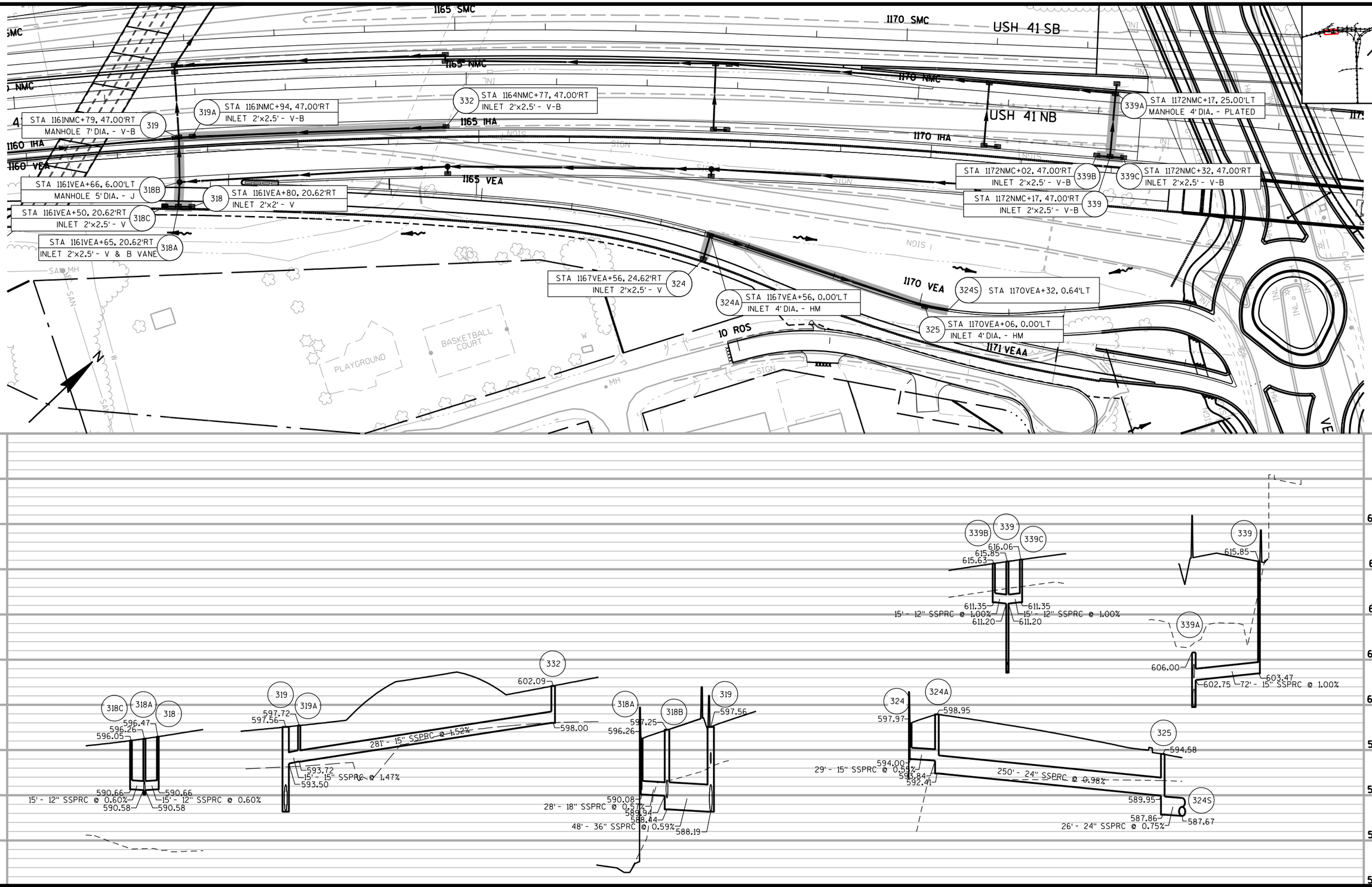
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 195 E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022511ss.dgn | PLOT DATE : 7/31/2014 | PLOT BY : Harlan | PLOT NAME : | PLOT SCALE : 1:100

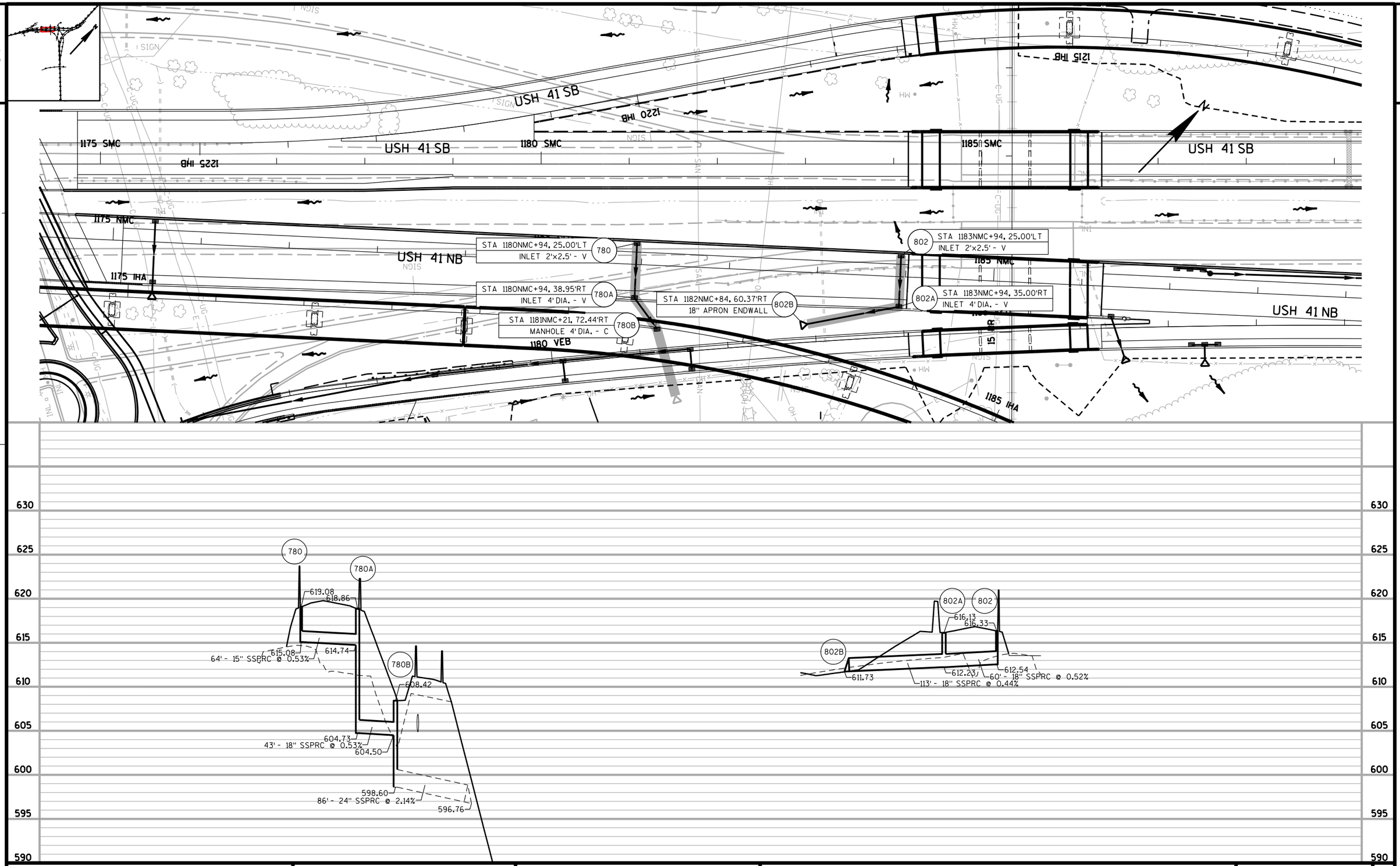




PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 196 E

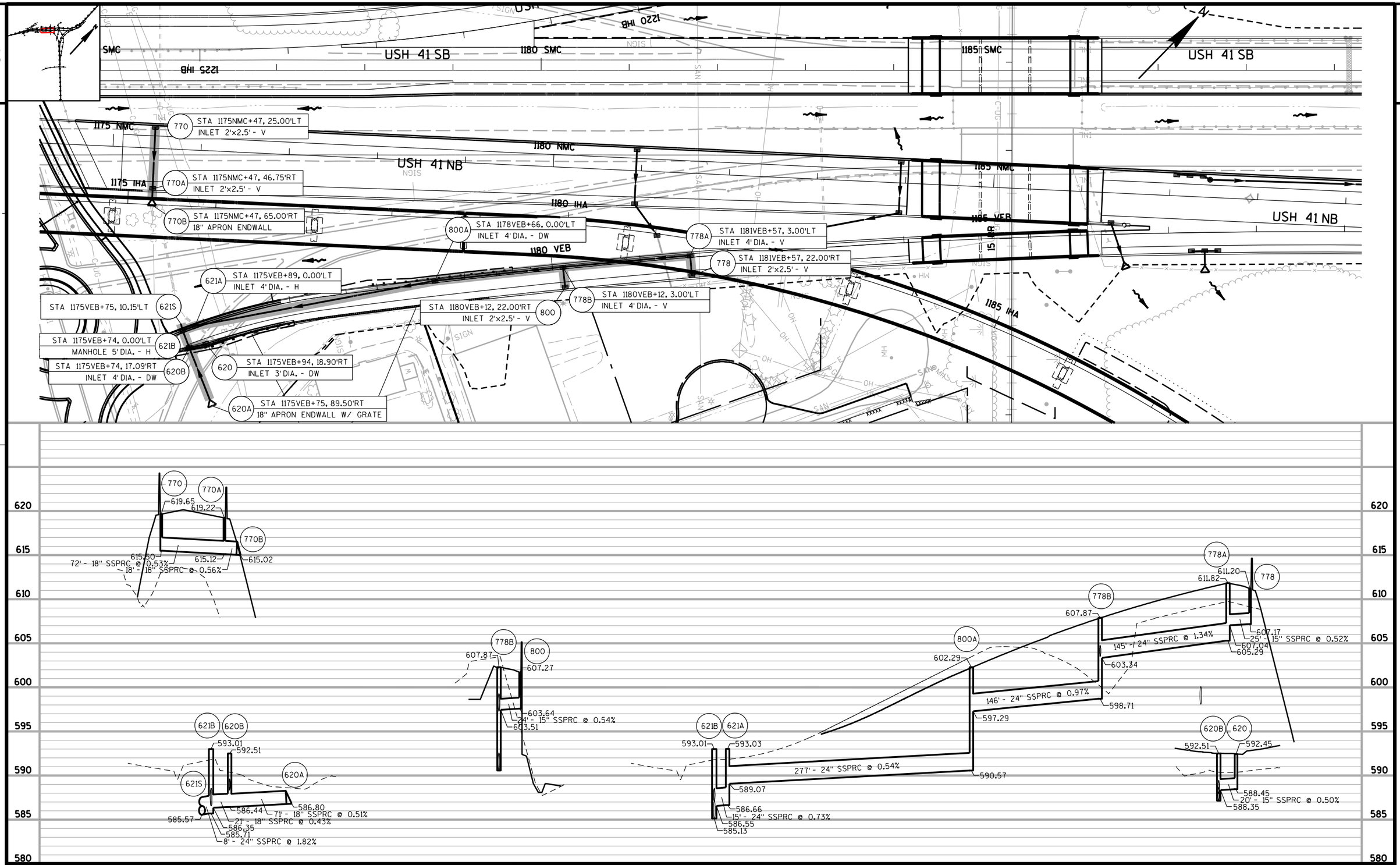


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 197 E



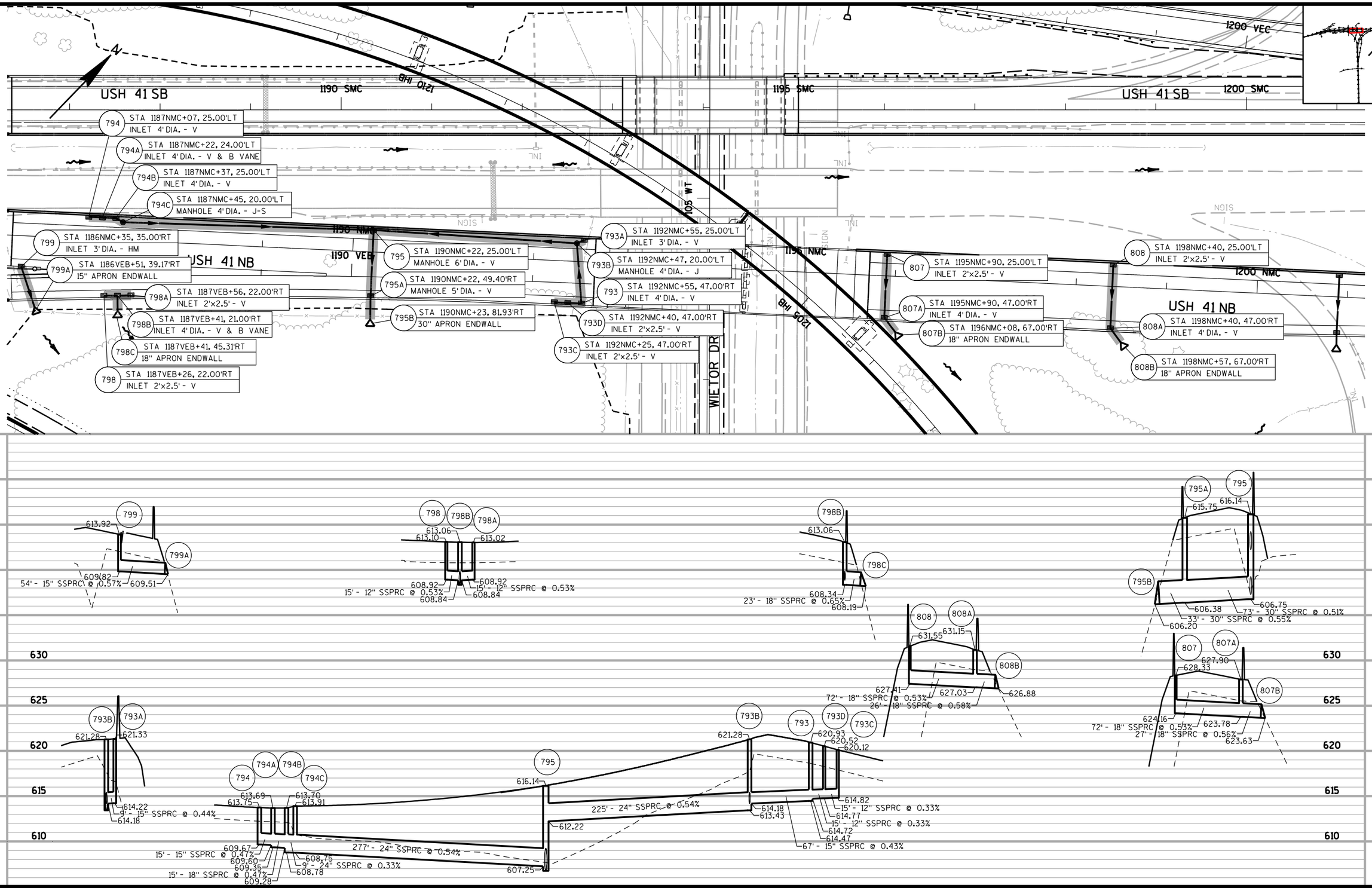
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 198 E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022515ss.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100

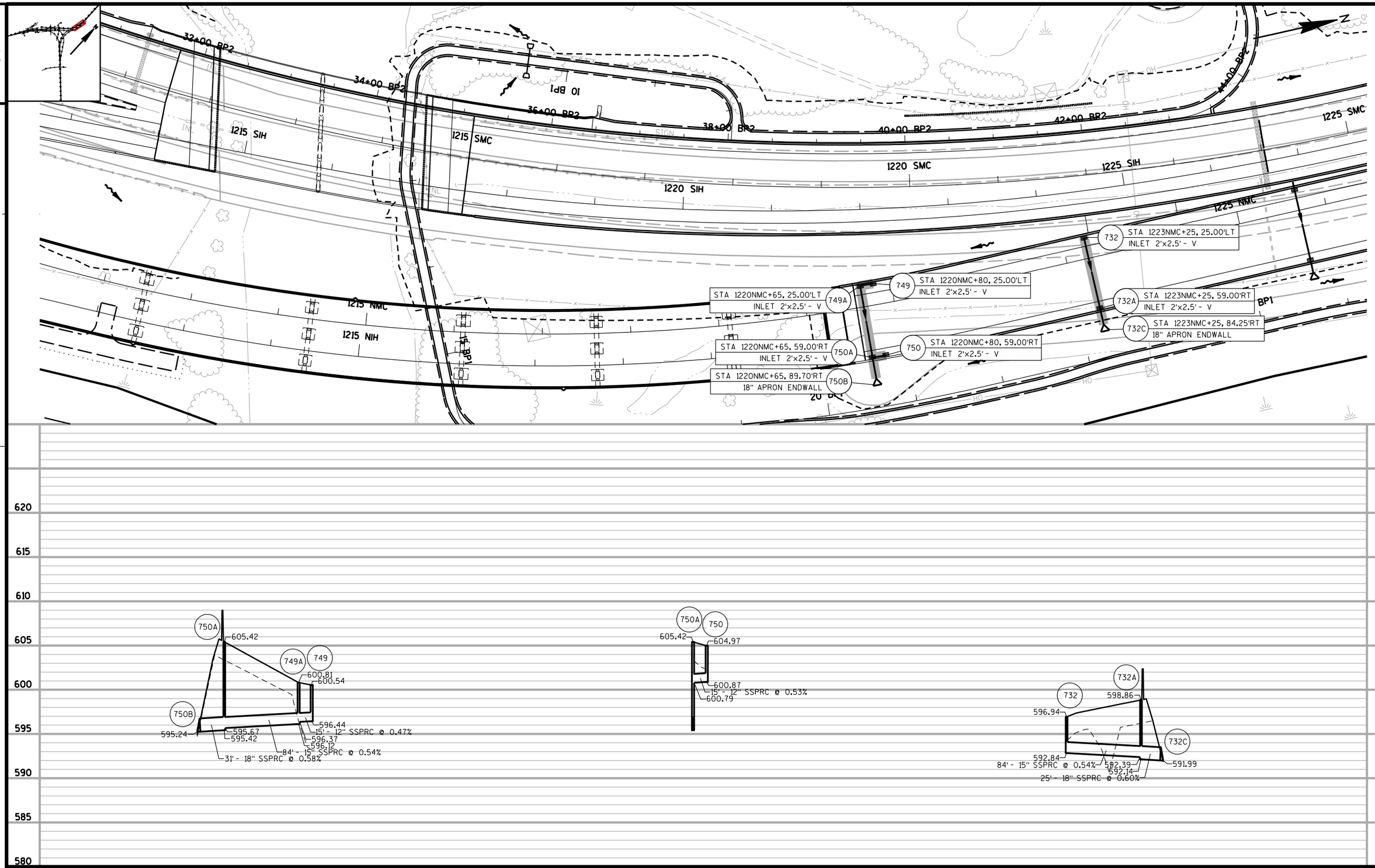


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 199 E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022516ss.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100



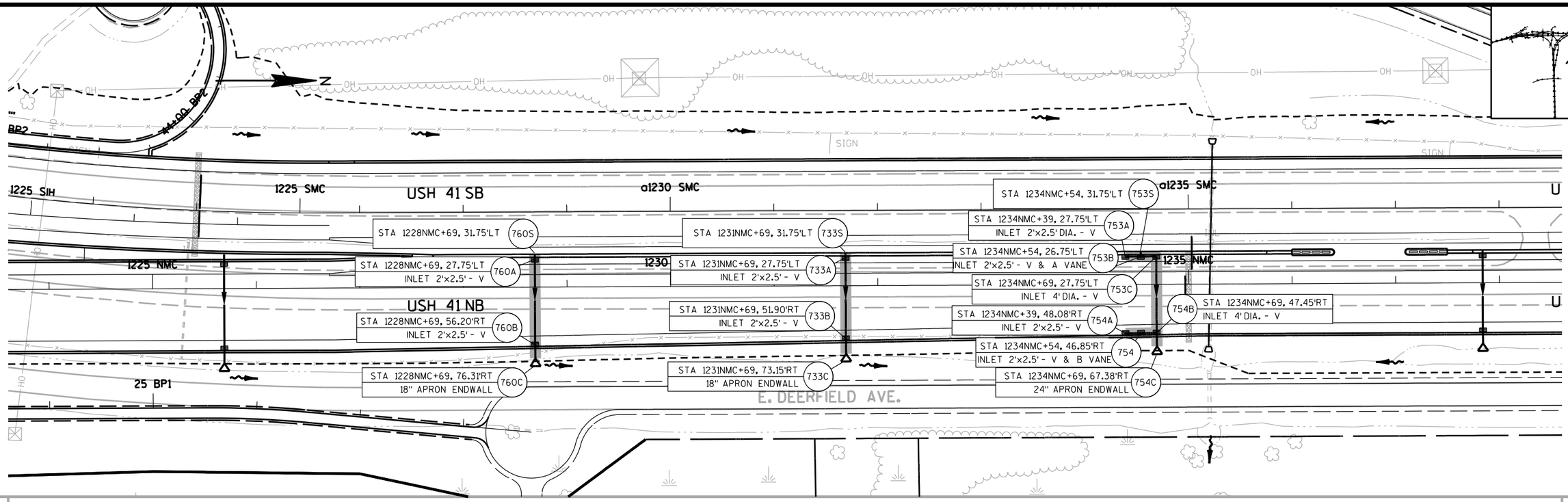
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 200 E

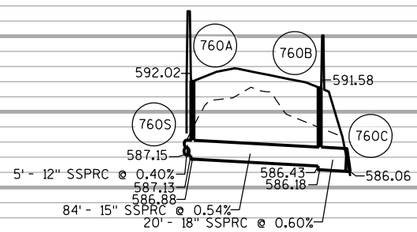


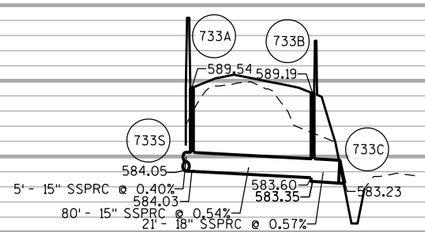
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 201 E

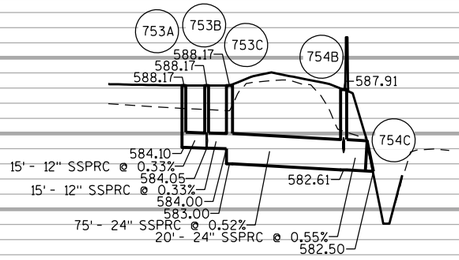
FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022520ss.dgn | PLOT DATE : 7/31/2014 | PLOT BY : Harlan | PLOT NAME : | PLOT SCALE : 1:100

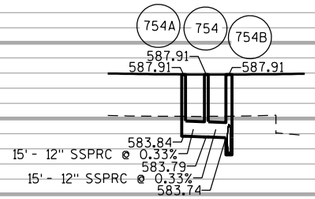
WISDOT/CADDS SHEET 41

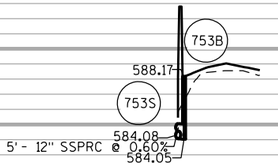








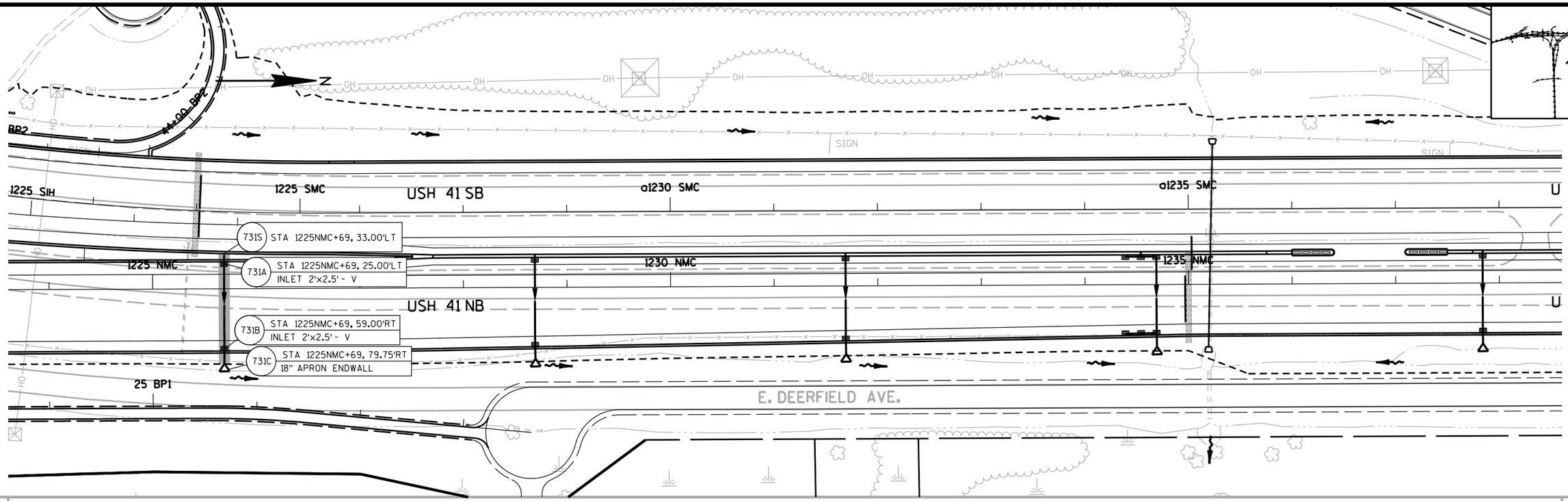


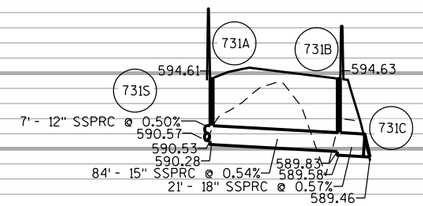


605 600 595 590 585 580 575 570

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 202 E

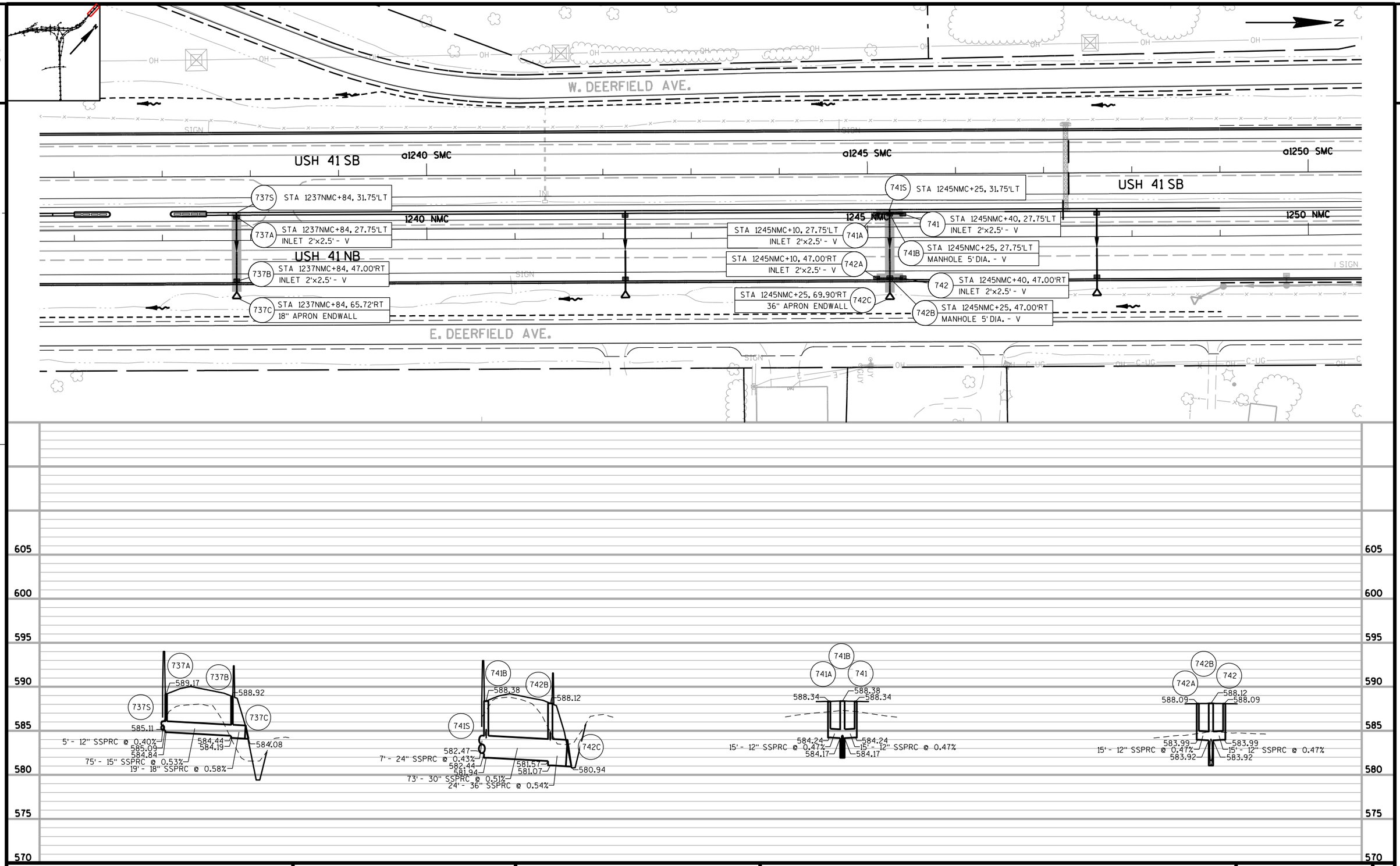
FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022521ss.dgn PLOT DATE : 7/31/2014 PLOT BY : Harlan PLOT NAME : PLOT SCALE : 1:100





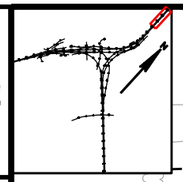
605 600 595 590 585 580 575 570

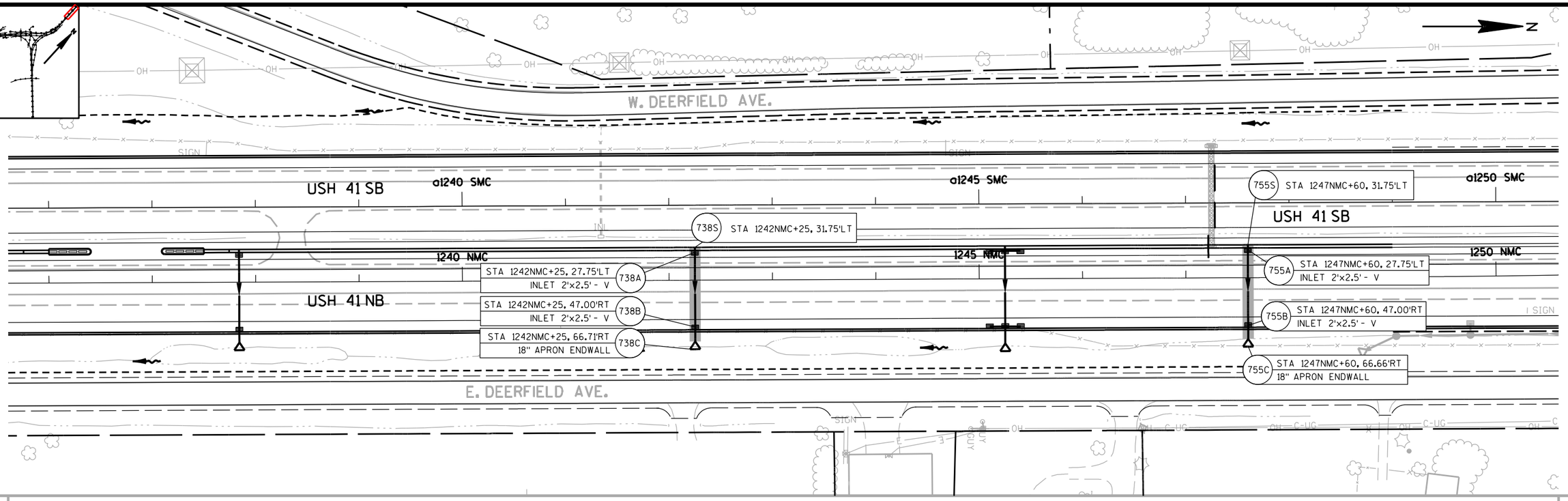
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 203 E

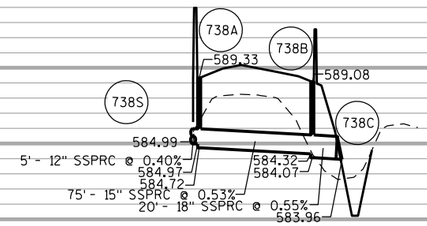


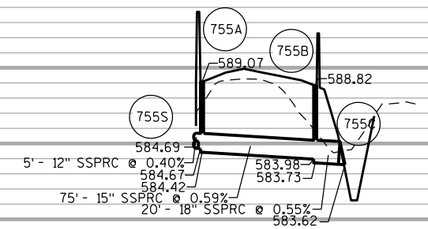
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 204 E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071(post-split)\022523ss.dgn | PLOT DATE : 7/31/2014 | PLOT BY : Harlan | PLOT NAME : | PLOT SCALE : 1:100









605 600 595 590 585 580 575 570

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	STORM SEWER	SHEET 205 E

FILE NAME : S:\2011\WisDOT\US-41\1071 Velp to Duck\CADD files\CDS\1071 (post-split)\022524ss.dgn
PLOT DATE : 7/31/2014
PLOT BY : Harlan
PLOT NAME :
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 41

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

MATCH LINE 1229+50 NMC

DIRECT UNDERDRAIN AROUND LIGHT BASES

R/L USH 41 SB

R/L USH 41 NB

USH 41 SB

USH 41 NB

USH 41

SMC+70

NMC+70

LEGEND

PIPE UNDER DRAIN 6-INCH

PIPE UNDER DRAIN 6-INCH UNPERFORATED WITH ENDWALL

PIPE UNDER DRAIN CAP

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PIPE UNDERDRAIN	SCALE, FEET 0 50 100	SHEET 206	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_022601_pu.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 1229+50 NMC

MATCH LINE 1244+00 NMC

30+00 WDR

32+00 WDR

34+00 WDR

36+00 WDR

38+00 WDR

40+00 WDR

42+00 WDR

44+00 WD

DIRECT UNDERDRAIN AROUND LIGHT BASES AND FOOTINGS FOR SIGN STRUCTURES

R/L USH 41 SB

R/L USH 41 NB

SIGN

a1230+00 SMC

USH 41 SB

a1232+00 SMC

a1234+00 SMC

a1236+00 SMC

USH 41

a1238+00 SMC

a1240+00 SMC

a1242+00 SMC

a1244+

1230+00 NMC

USH 41 NB

1232+00 NMC

1234+00 NMC

1236+00 NMC

1238+00 NMC

1240+00 NMC

1242+00 NMC

1244+0

SMC+60

NMC+25

USH 41

INL

30+00 EDR

32+00 EDR

34+00 EDR

36+00 EDR

38+00 EDR

40+00 EDR

42+00 EDR

44+0

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

LEGEND

PIPE UNDER DRAIN 6-INCH

PIPE UNDER DRAIN 6-INCH UNPERFORATED WITH ENDWALL

PIPE UNDER DRAIN CAP

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PIPE UNDERDRAIN	SCALE, FEET 0 50 100	SHEET 207	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_022602_pu.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 1244+00 NMC

R/L USH 41 SB

R/L USH 41 NB

DIRECT UNDERDRAIN AROUND LIGHT BASES AND SIGN STRUCTURE FOOTINGS

SMC+00

NMC+00

USH 41

USH 41 SB

USH 41 NB

SIGN

RUINS

GUY

46+00 WDR

48+00 WDR

50+00 WDR

52+00 WDR

54+00 WDR

56+00 WDR

58+00 WDR

46+00 EDR

48+00 EDR

50+00 EDR

52+00 EDR

54+00 EDR

56+00 EDR

58+00 EDR

a1246+00 SMC

a1248+00 SMC

a1250+00 SMC

a1252+00 SMC

a1254+00 SMC

a1256+00 SMC

a1258+00 SMC

1246+00 NMC

1248+00 NMC

1250+00 NMC

1252+00 NMC

1254+00 NMC

1256+00 NMC

1258+00 NMC

LEGEND

PIPE UNDER DRAIN 6-INCH

PIPE UNDER DRAIN 6-INCH UNPERFORATED WITH ENDWALL

PIPE UNDER DRAIN CAP

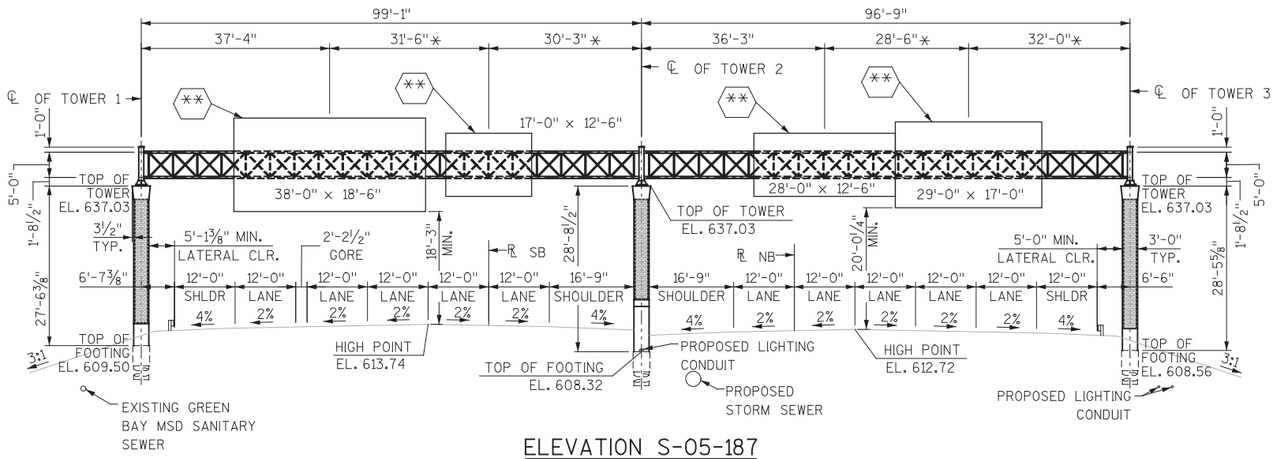
SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PIPE UNDERDRAIN	SCALE, FEET 0 50 100	SHEET 208	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_022603_pu.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



ELEVATION S-05-187

(LOOKING NORTH)

STA. 1126NB+50

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** SEE SIGNING PLAN FOR SIGN PLATE.

2

2

SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE SIGN PLATES WITHIN THIS PLAN SET WERE DELIVERED BASED ON THE INTERSTATE CONVERSION OF USH 41 TO I-41. PRIOR TO ORDERING THE SIGNS, PLEASE CALL MIKE FREWERD (920) 492-5653, AT LEAST 2 WEEKS IN ADVANCE. THE RATIONAL BEHIND THIS ADVANCE PHONE CALL IS BASED ON THE CHANCE THAT THE ACTUAL MANUFACTURED SIGNS FOR THIS PROJECT MAY NEED TO DEPICT A U.S. SHIELD RATHER THAN THE INTERSTATE SHIELD AS SHOWN.

N

DUCK CREEK

RAMP 30 M.P.H.
W13-3
1A

W5-52L
1

W5-52R
2

RAMP 30 M.P.H.
W13-3
4

Duck Creek
I3-1
3

M1-93
MG5-2R
7

1205 SMC
1205 SIH
1205 NMC
1210 SIH
1210 SMC
1205 NIH
1210 NMC
1210 NIH
1215 SIH
1215 SMC
1220 SIH
1220 SMC
1225 SMC
1225 SIH
1215 NMC
1215 NIH
1220 NMC
1225 NMC
1230 SMC
1235 SMC
1230 NMC
1235 NMC

STA. 1207+35
SIGN BRIDGE
S-05-286

W. DEERFIELD AVE.

USH 41 SOUTHBOUND

USH 41 NORTHBOUND

E. DEERFIELD AVE.

DUCK CREEK

5
EMERGENCY STOPPING ONLY
R8-7

5A
W4-2R
48" X 48"

8
NORTH 41 NORTH 141 END 41 INTERSTATE
J4-3

6
M1-93

9
SLOWER TRAFFIC KEEP RIGHT
R4-3

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 210	E

2

SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

N

CTH EB (LAKEVIEW DR)

W. DEERFIELD AVE.

1235 SMC | 1240 SMC | 1245 SMC | 1250 SMC | 1255 SMC | 1260 SMC | 1265 SMC

1235 NMC | 1240 NMC | 1245 NMC | 1250 NMC | 1255 NMC | 1260 NMC | 1265 NMC

USH 41 SOUTHBOUND

USH 41 NORTHBOUND

E. DEERFIELD AVE.

SIGN

CTH EB (LAKEVIEW DR)

15 — R3-4 EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES — R3-4A

16 — MILE 172 — D10-3

14 — R3-4 EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES — R3-4A

17 — MILE 172 — D10-3

18 — SPEED LIMIT 65 — R2-1 48" X 60"

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 211 E

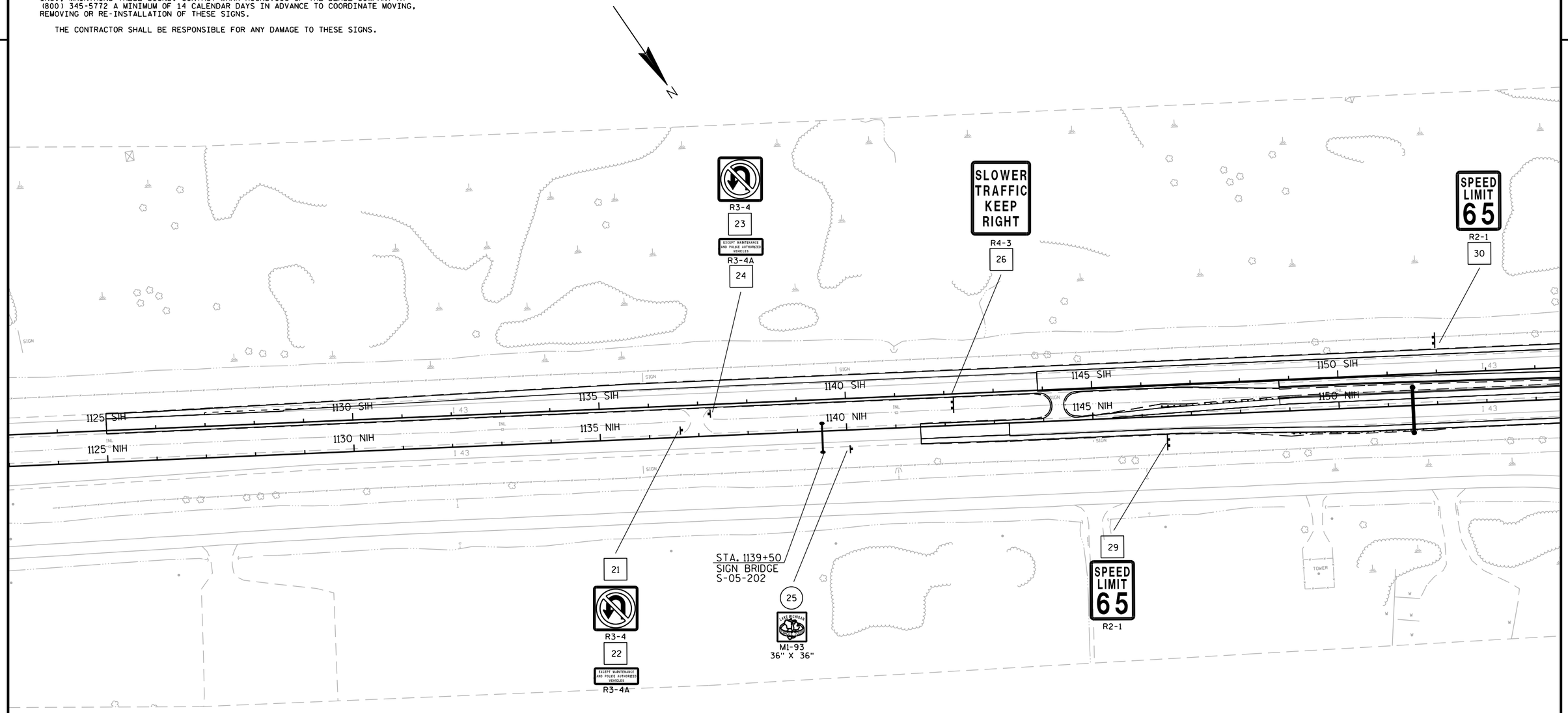
FILE NAME : N:\spo\traffic\SIGNING\Projects\USH 41 Brown County\1133-10-71 Velp - Duck Creek\023202_ps.dgn PLOT DATE : 19-JUN-2014 11:14 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 200:1

2

SIGNING NOTES

DO NOT MOVE OR REMOVE ANY SPECIFIC INFORMATION SIGNS (BLUE GAS, FOOD, LODGING, CAMPING OR ATTRACTION SIGNS) OR THEIR ASSOCIATED POSTS. A SEPARATE CONTRACTOR, DERSE, INC., MAINTAINS THESE SIGNS. CONTACT MARK ROGNSVOOG OF THE DERSE COMPANY AT (800) 345-5772 A MINIMUM OF 14 CALENDAR DAYS IN ADVANCE TO COORDINATE MOVING, REMOVING OR RE-INSTALLATION OF THESE SIGNS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THESE SIGNS.



SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 212	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\USH 41 Brown County\1133-10-71 Velp - Duck Creek\023210_ps.dgn PLOT DATE : 13-MAY-2014 12:33 dotjlf PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

2

SIGNING NOTES

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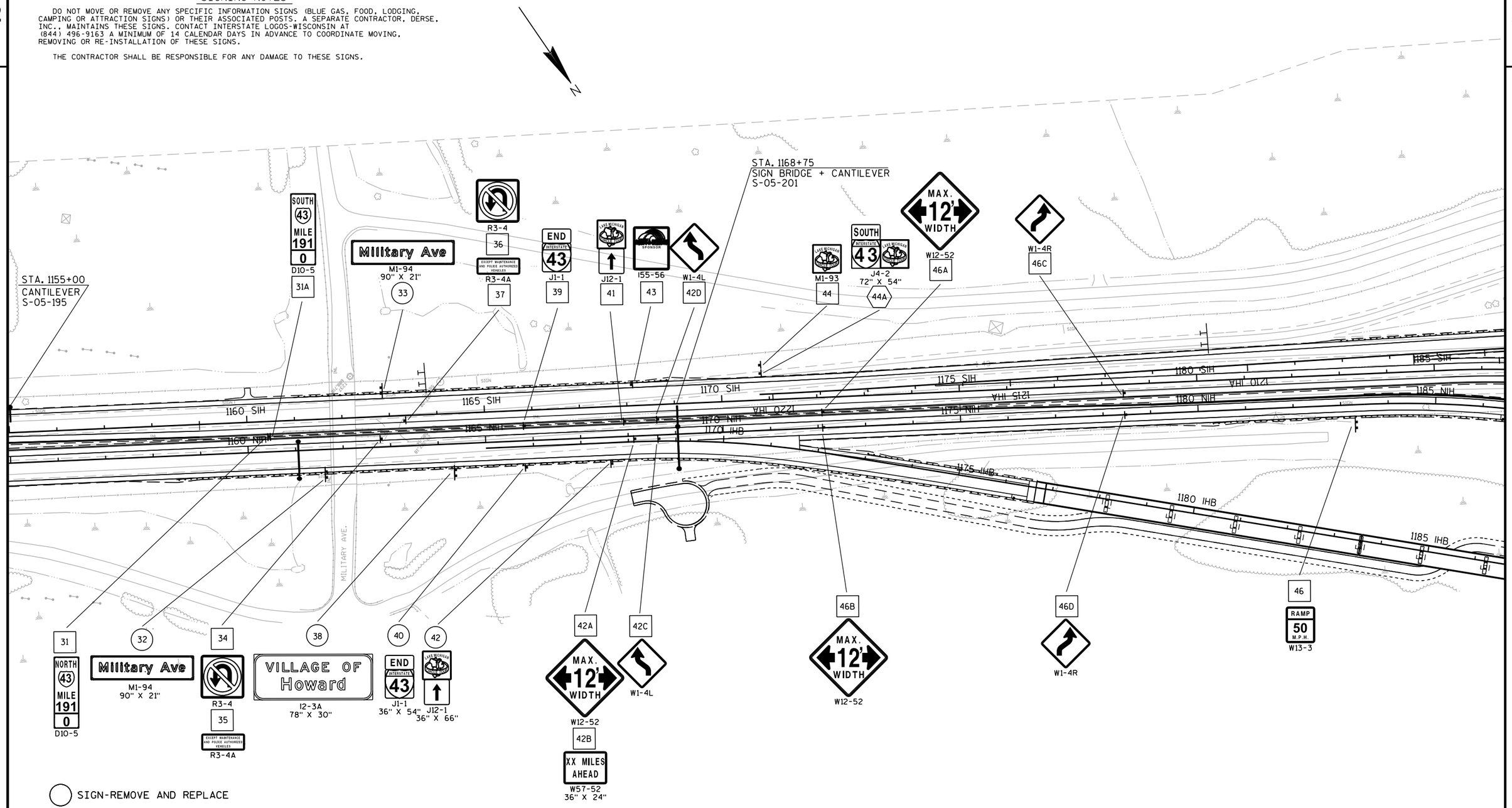

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 213 E

SIGNING NOTES

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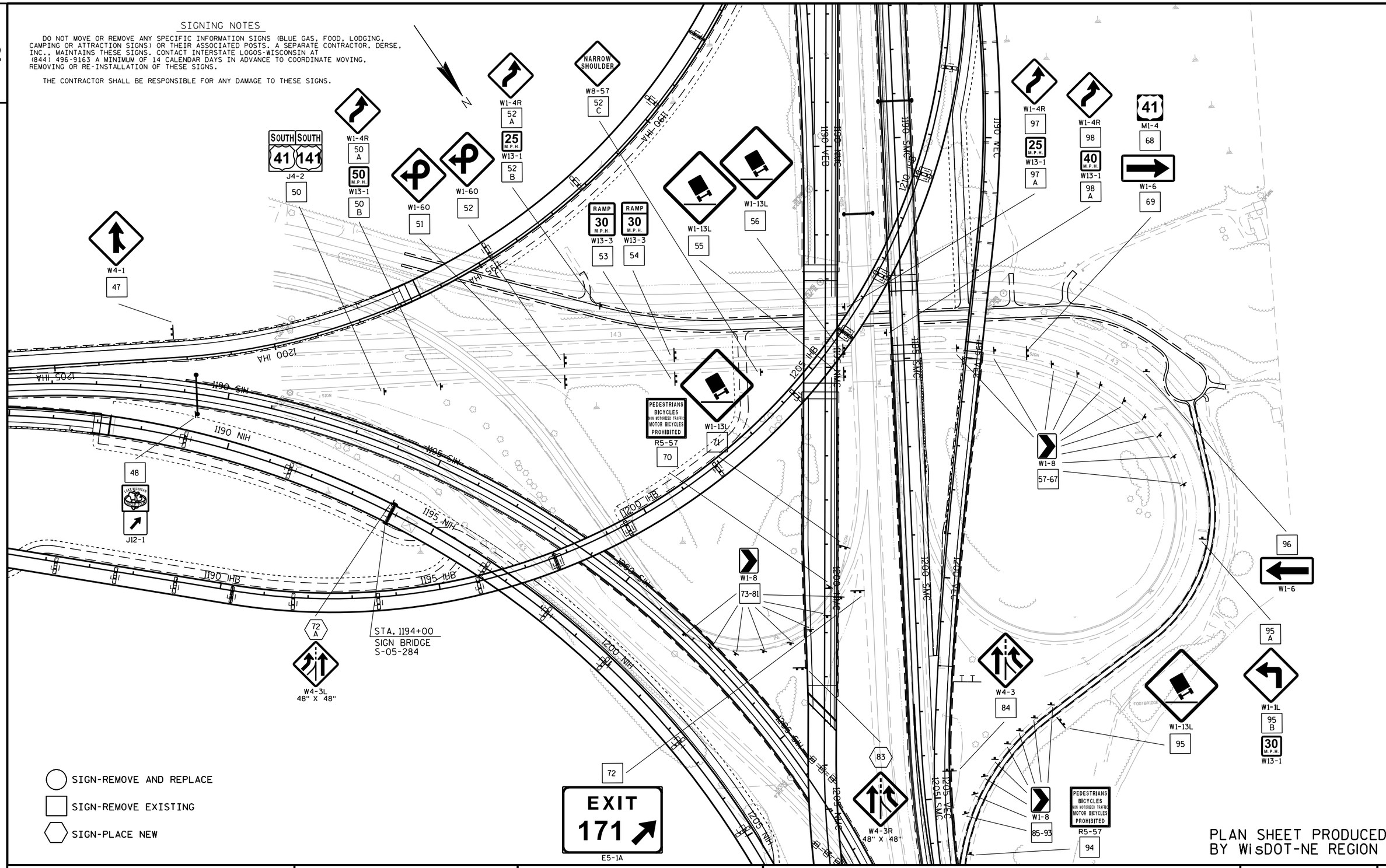

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 214	E

2

2

SIGNING NOTES

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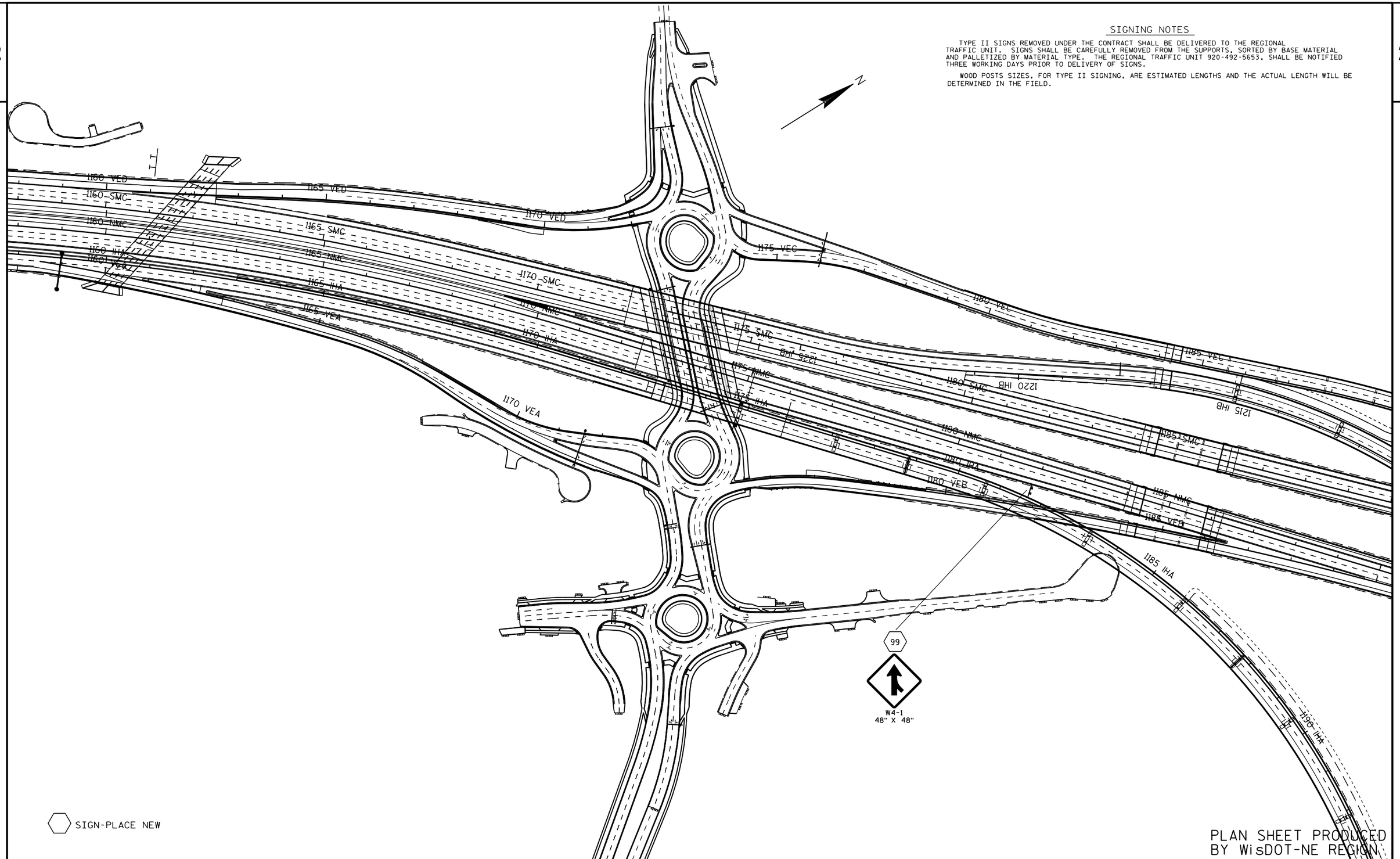
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

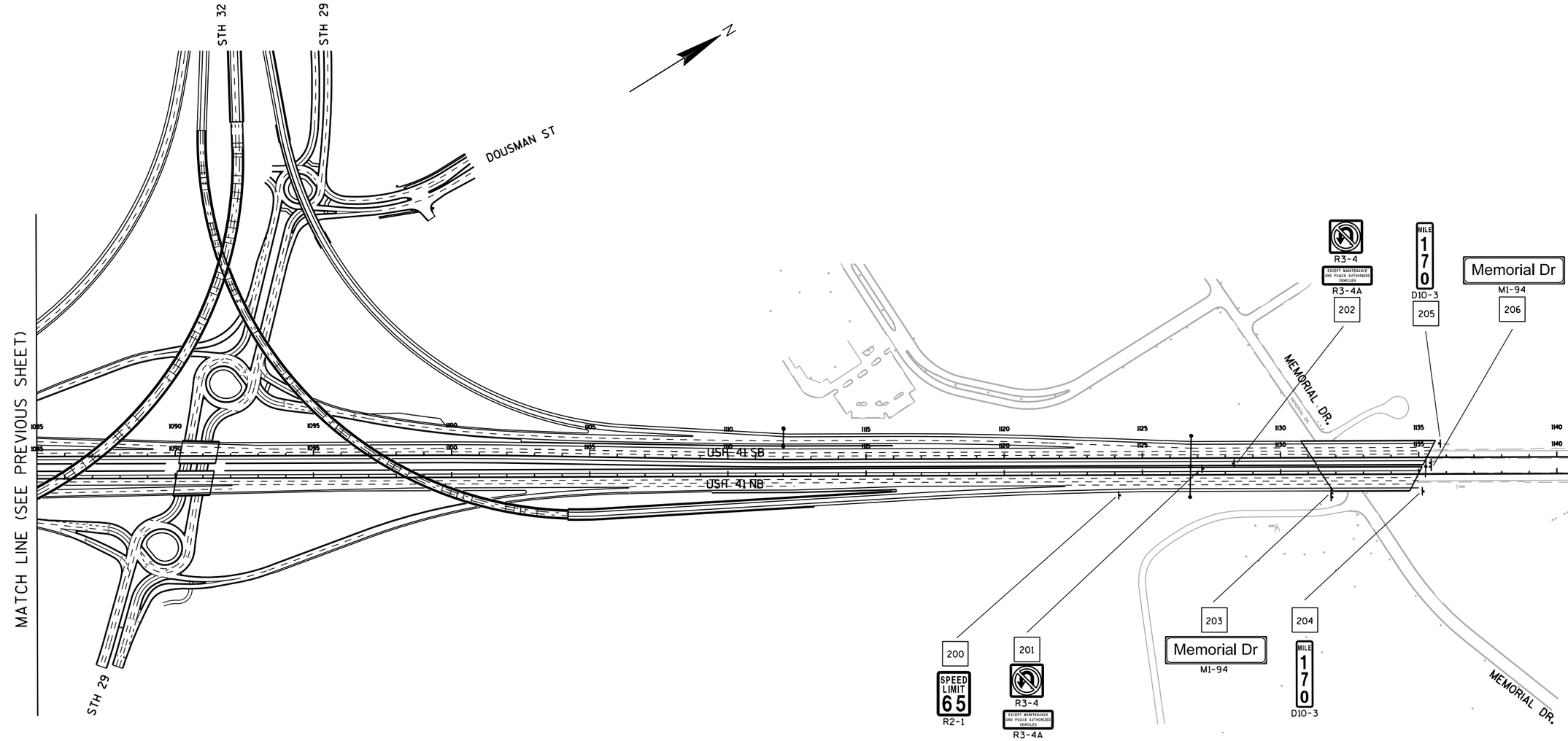


SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 215 E

2



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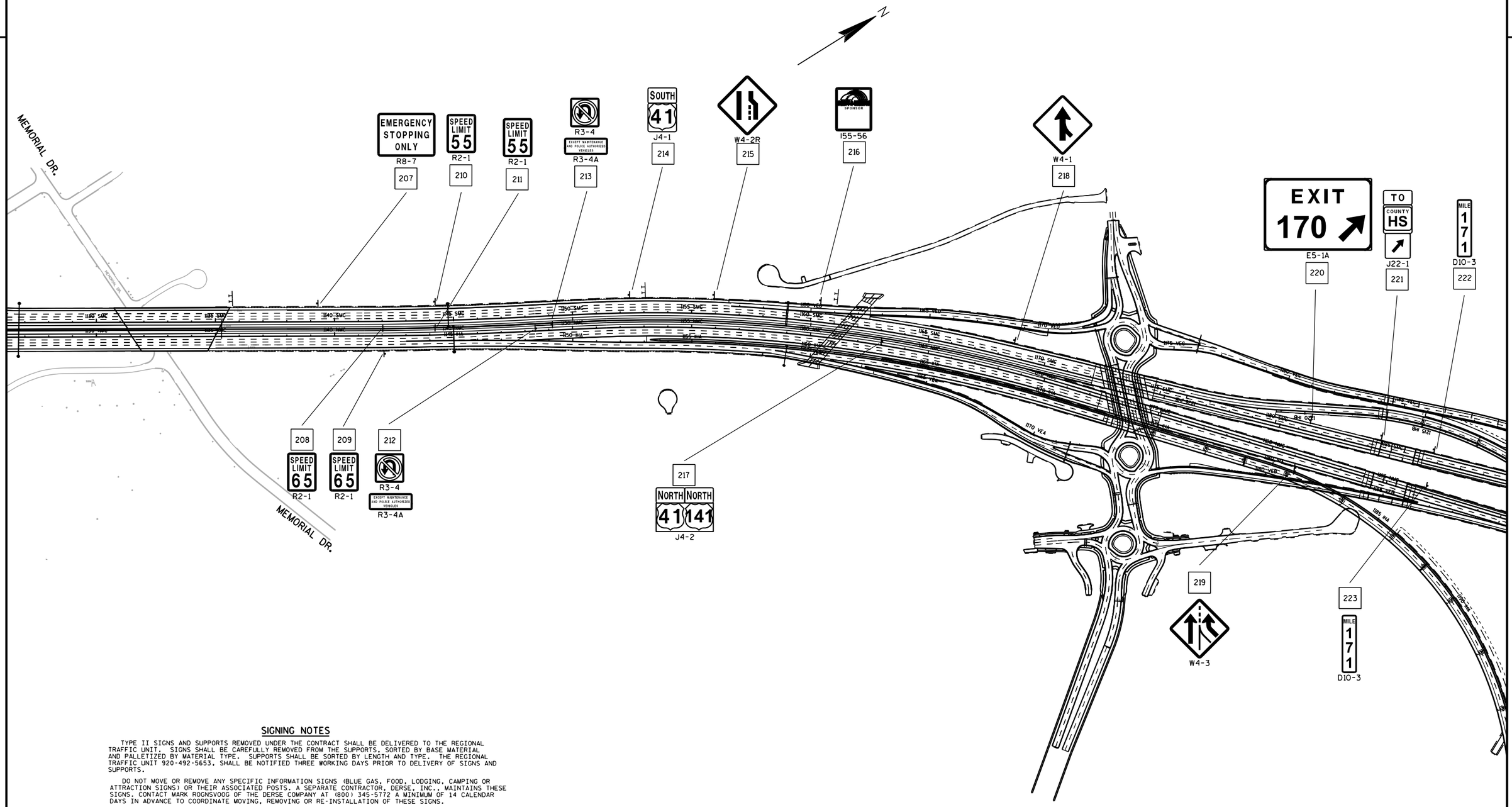
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THESE SIGNS.

☐ SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SIGN REMOVALS-TYPE II	SHEET 216	E

2



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☐ SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SIGN REMOVALS-TYPE II	SHEET 217	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\USH 41 Brown County\1133-10-71 Velp - Duck Creek\1133-10-77 to 1133-10-71\023230_ps.dgn PLOT DATE : 13-MAY-2014 12:35 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 400:1

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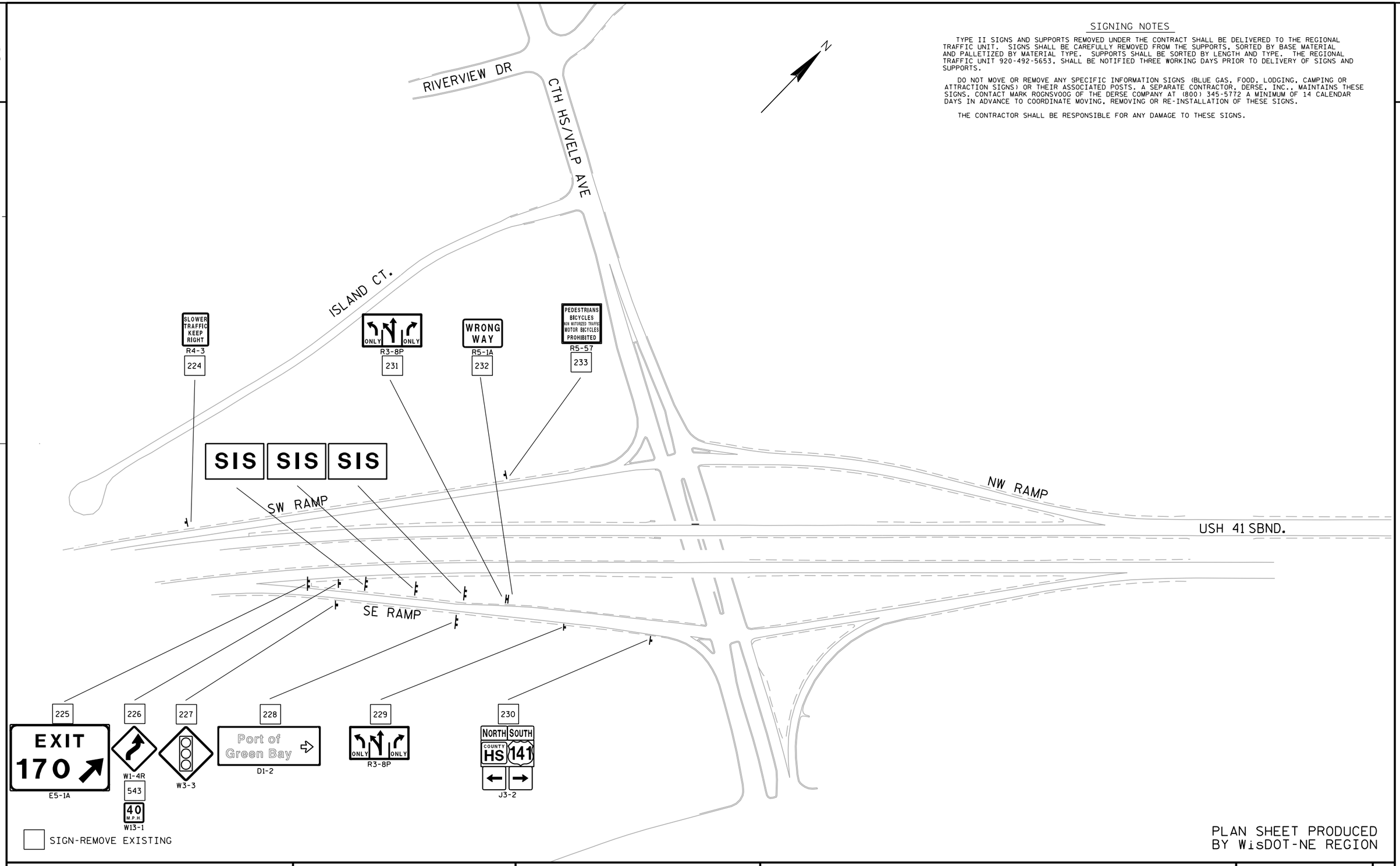
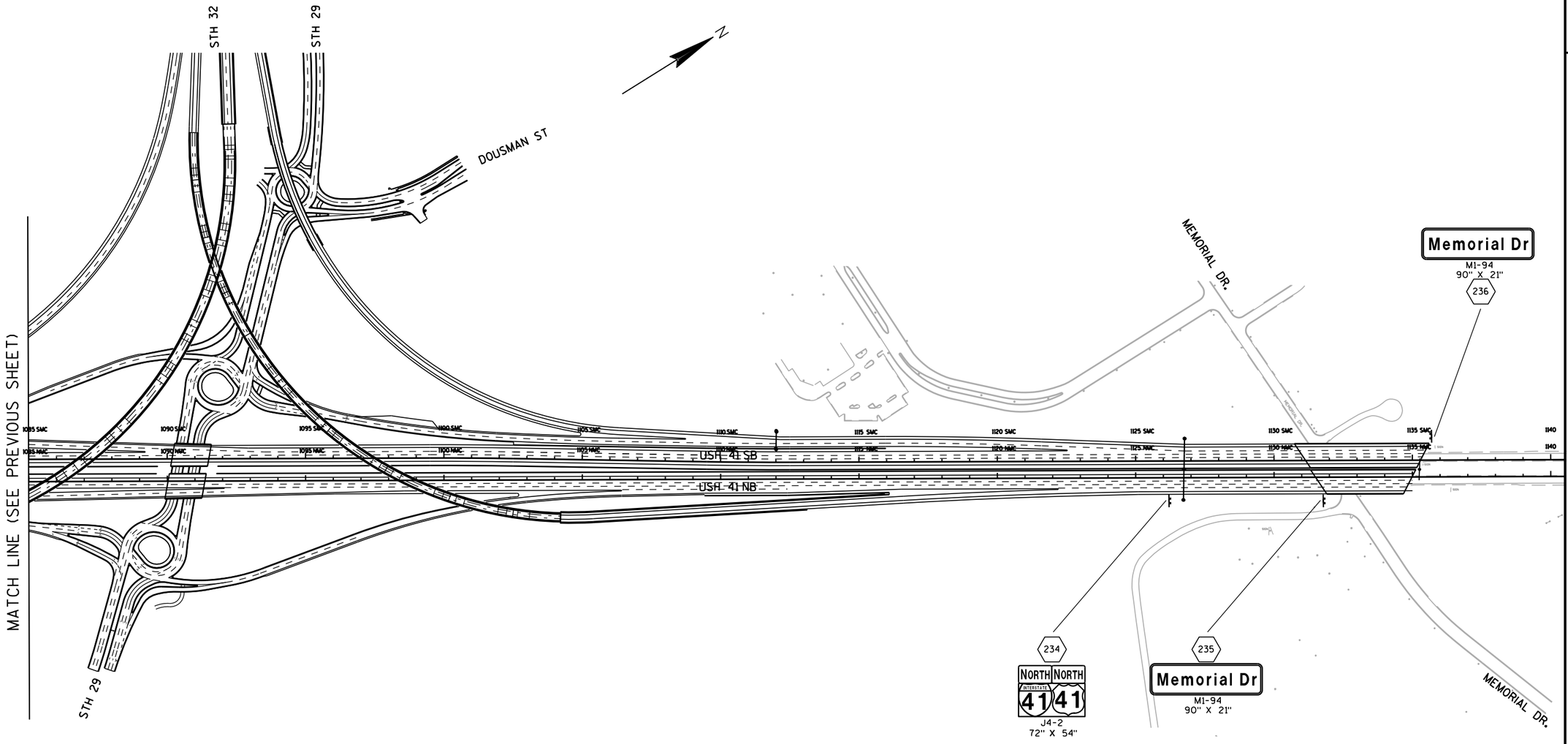


PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SIGN REMOVALS-TYPE II	SHEET 218	E

2



SIGNING NOTES

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

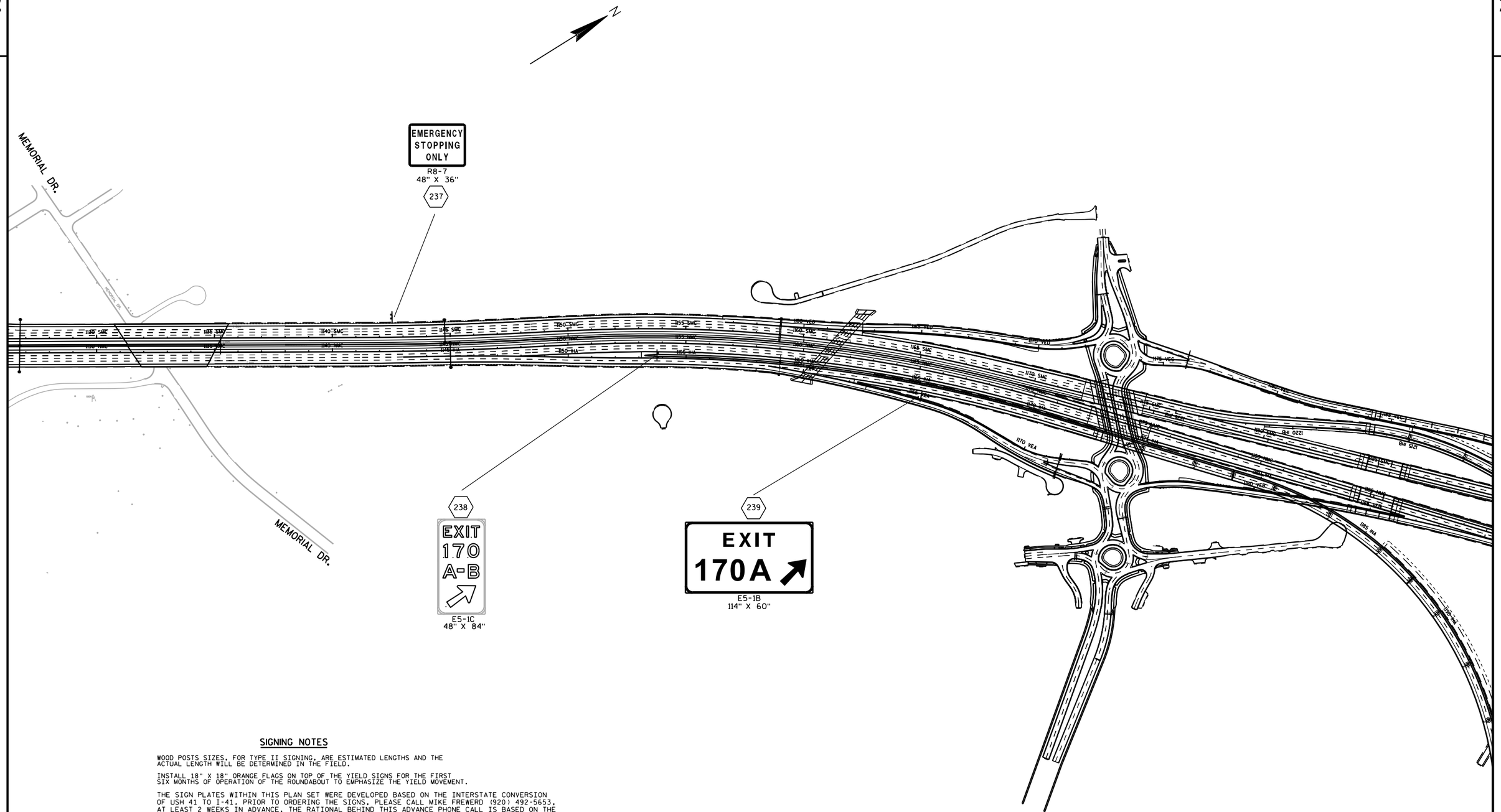
THE SIGN PLATES WITHIN THIS PLAN SET WERE DEVELOPED BASED ON THE INTERSTATE CONVERSION OF USH 41 TO I-41. PRIOR TO ORDERING THE SIGNS, PLEASE CALL MIKE FREWERD (920) 492-5653, AT LEAST 2 WEEKS IN ADVANCE. THE RATIONAL BEHIND THIS ADVANCE PHONE CALL IS BASED ON THE CHANCE THAT THE ACTUAL MANUFACTURED SIGNS FOR THIS PROJECT MAY NEED TO DEPICT A U.S. SHIELD RATHER THAN THE INTERSTATE SHIELD AS SHOWN.

⬡ SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 219	E

2



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⬡ SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE II	SHEET 220	E

2

N

STA. 1206+75
SIGN BRIDGE
S-05-192

REMOVE EXISTING
SIGN BRIDGE 100

REMOVE EXISTING
E7-2, E6-1 & E1-5 101

STA. 1224+00
SIGN BRIDGE
S-05-193

W. DEERFIELD AVE.

USH 41 SOUTHBOUND

USH 41 NORTHBOUND

E. DEERFIELD AVE.

STA. 1235+00
SIGN BRIDGE
CANTILEVER LT.
S-05-234
102

DUCK CREEK

1205 SMC
1205 SIH
1205 NMC
1210 SIH
1210 SMC
1205 NIH
1210 NMC
1210 NIH
1215 SIH
1215 SMC
1220 SIH
1220 SMC
1225 SIH
1225 SMC
1220 NMC
1215 NMC
1215 NIH
1225 NMC
1230 SMC
1235 SMC
1230 NMC
1235 NMC

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SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE I	SHEET 221 E

2

SIGNING NOTES

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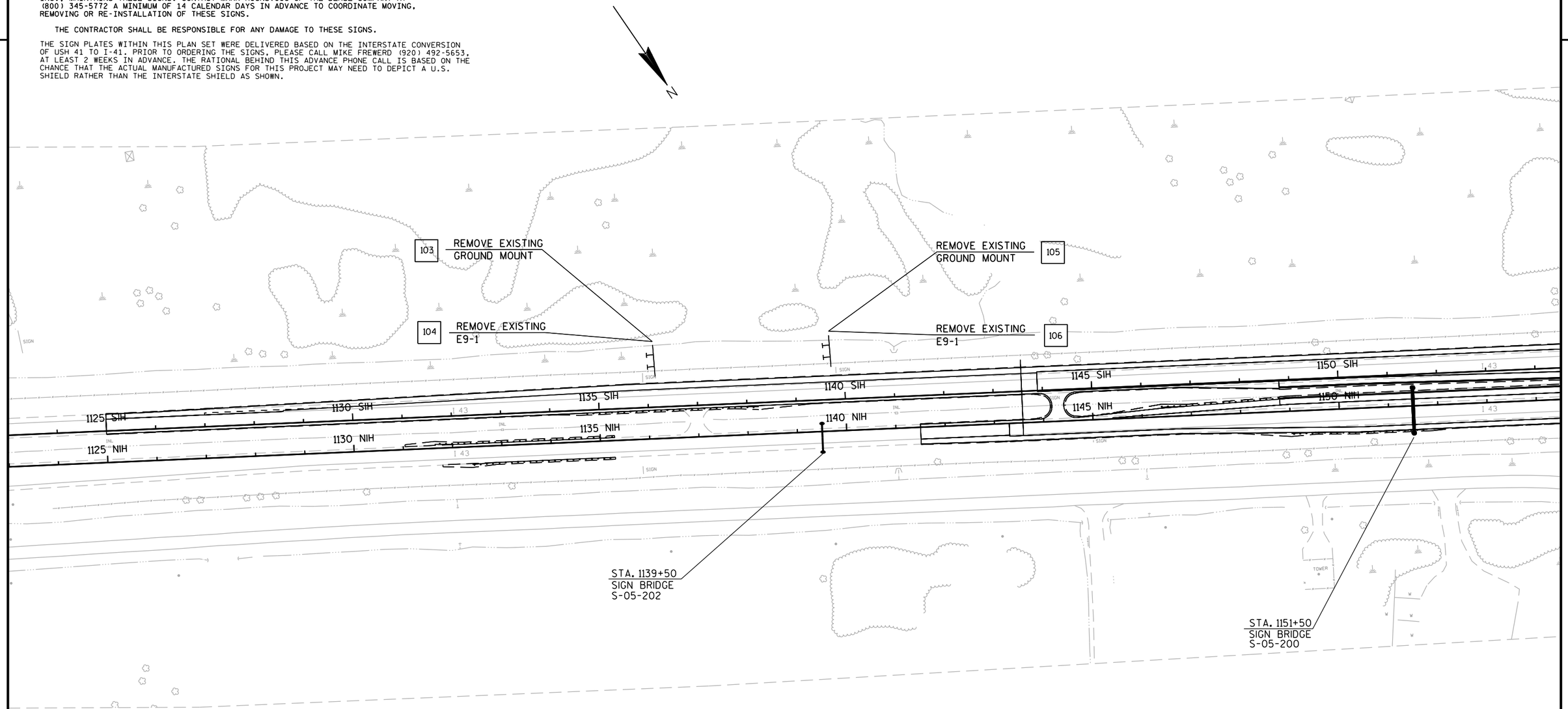

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE I	SHEET 222	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\USH 41 Brown County\1133-10-71 Velp - Duck Creek\023207_ps.dgn PLOT DATE : 13-MAY-2014 12:36 dotj1f PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

SIGNING NOTES

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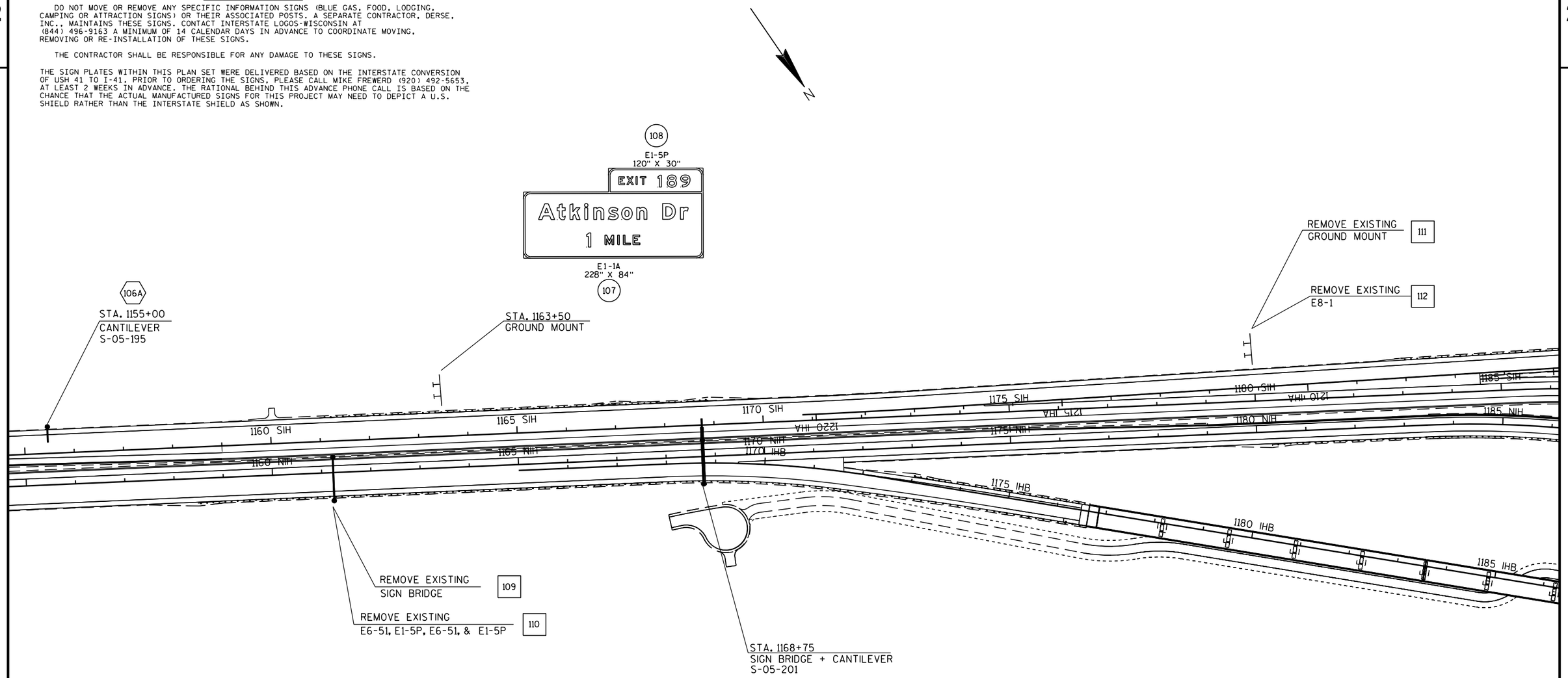

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE I	SHEET 223	E

SIGNING NOTES

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N

REMOVE EXISTING SIGN BRIDGE 113

REMOVE EXISTING E6-51, E1-5P, E6-51, & E1-5P 114

REMOVE EXISTING SIGN BRIDGE 115

REMOVE EXISTING E7-2, E6-1, & E1-5P 116

REMOVE EXISTING SIGN BRIDGE 117

REMOVE EXISTING E7-2, E6-51, & E1-5P 118

REMOVE EXISTING GROUND MOUNT 119

REMOVE EXISTING E1-1A & E1-5P 120

1200 IHA
1205 IHA
1190 NIH
1195 NIH
1190 IHB
1195 IHB
1200 NIH
1205 NIH
1200 IHB
1205 IHB
1190 IHA
1195 IHA
1190 VEB
1190 NME
1190 SME
1190 VEC
1200 SME
1200 VEC
1205 SME
1205 VEC
1200 NME
1205 NME

SIGN-REMOVE AND REPLACE

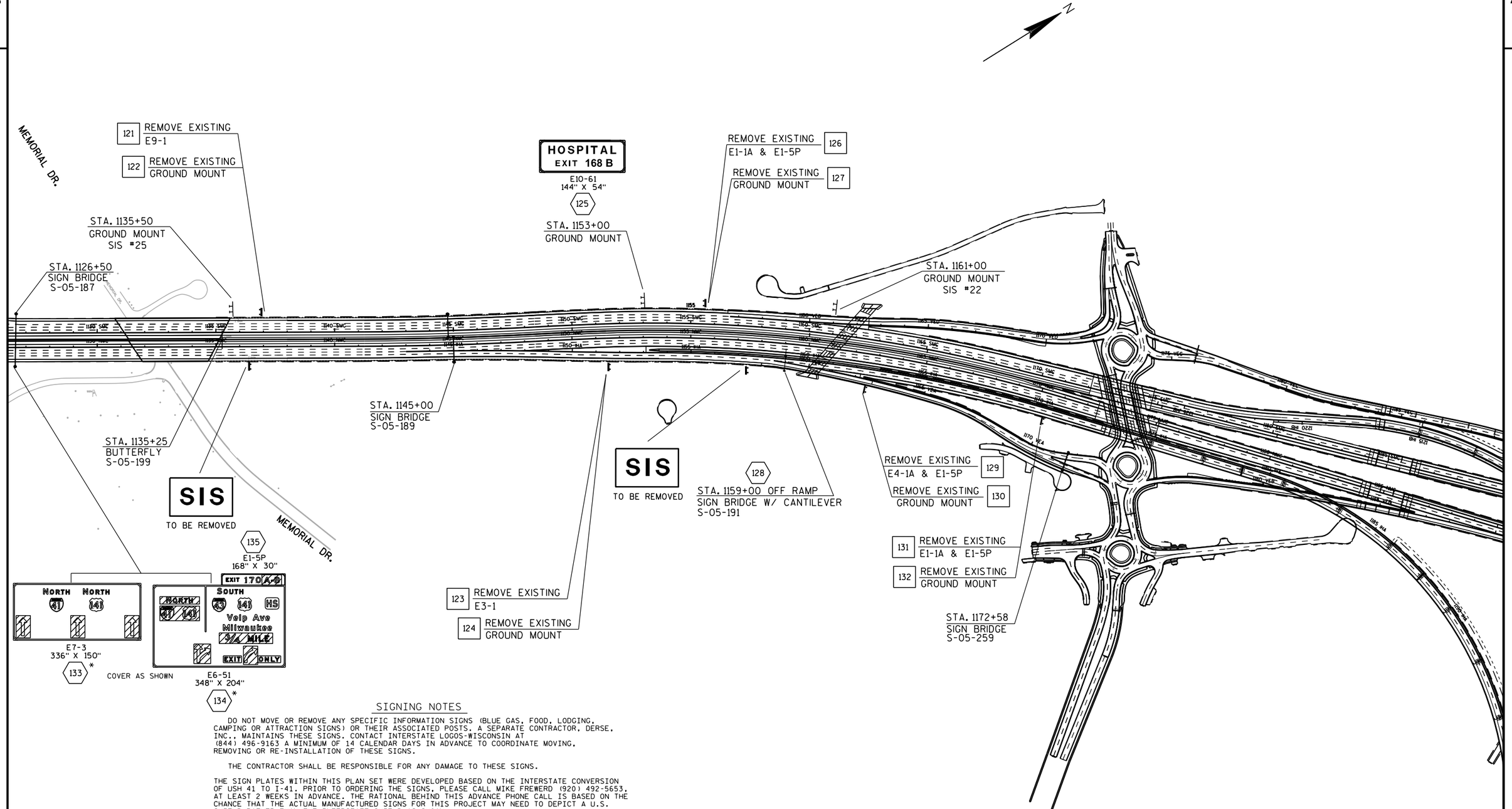
SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE I	SHEET 224	E

2



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* REMOVAL OF EXISTING MOUNTED SIGN BLANK SHALL BE INCIDENTIAL TO THE ERECTION OF THE NEW SIGN ON GIVEN SIGN STRUCTURE.

⬡ SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING-TYPE I	SHEET 225	E

STREET LIGHTING PLANS PREPARED BY

8-1-2014
(DATE)

(SIGNATURE)

NOTES:

1) WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO INSTALLATION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5654 OR (920) 492-5628.

2) PITCH ALL CONDUIT TOWARD PULLBOXES. A 2" DRAIN DUCT TO DITCH OR STORM SEWER REQUIRED FOR ALL PULL BOXES IN LOW POINTS. REFER TO THE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF DRAIN DUCT.

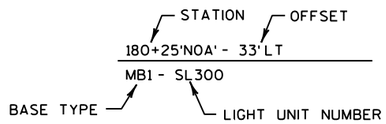
3) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

4) CONDUIT RIGID METALLIC MAY BE REQUIRED ACROSS STRUCTURE JOINTS AT CERTAIN LOCATIONS. FIVE FEET (MINIMUM) ON EITHER SIDE OF THE JOINT REQ'D. APPLY ASPHALTIC SEALANT TO ANY EXPOSED METALLIC CONDUIT. EXPANSION FITTING BONDING JUMPER & ASPHALTIC SEALANT TO BE CONSIDERED INCIDENTAL TO THE CONDUIT. REFER TO LOCATIONS SHOWN IN THE PLANS FOR RIGID METALLIC CONDUIT LOCATIONS.

5) REFER TO PLANS AND CONSTRUCTION DETAILS FOR THE LOCATION OF CONDUIT IN THE USH 41 MEDIANS. COORDINATE CONDUIT PLACEMENT WITH BARRIER WALL CONSTRUCTION AS REQ'D.

6) ALL CONCRETE BASE MEDIAN BARRIER SHALL BE CONDUIT INSTALLATION CASE ONE UNLESS NOTED OTHERWISE.

LIGHTING PLAN LEGEND



CONCRETE BASE MEDIAN BARRIER

LIGHTING CONDUIT (REFER TO PLANS & MISC. QUANTITIES FOR SIZE, TYPE AND WIRING.)

ABBREVIATIONS

MB1 - CONCRETE BASE MEDIAN BARRIER TYPE 1 - STATE FURNISHED JUNCTION BOX
MB2 - CONCRETE BASE MEDIAN BARRIER TYPE 2

GENERAL NOTES

1) BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

2) CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

3) MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

4) CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4-INCHES, PRIOR TO INSTALLING END BELL.

5) ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE PLUGGED IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN PLUGGED.

6) BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

7) A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR ALL BASES.

8) THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE IN THE JUNCTION BOXES. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE CONTINUOUS AND NEATLY COILED AND THE COIL TIED TOGETHER.

9) ANCHOR BOLTS SHALL BE THREADED 12-INCHES IN LENGTH ON THE END OF THE BOLT. ANCHOR BOLTS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 654.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A307, ASTM 4-449, OR ASTM A-687 (GRADE 105). ALTERNATE "L"-BEND (MIN. 4") IS ACCEPTABLE.

10) WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR BOLTS.

11) VERIFY COMPATIBILTY OF ANCHOR BOLT SIZE AND PATTERN PRIOR TO FORMING THE CONCRETE BASE.

12) ANCHOR BOLTS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3 AASTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

13) GALVANIZED STEEL MESH WITH ¾" STAINLESS STEEL BANDING USED FOR RODENT SCREEN REQUIRED FOR ALL POLES. MESH AND BANDING SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM.

14) WELDING OF THE ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

15) BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

16) MIRROR THE CONDITIONS DEPICTED ON THESE DETAILS WHEN CONDUIT ENTRANCES ARE OPPOSITE FROM THE CASES SHOWN.

17) THE DIMENSIONS OF THE CONCRETE BASES WILL VARY FROM WHAT IS SHOWN ON THIS DETAIL DEPENDING ON THE VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE NORTHBOUND AND SOUTHBOUND TRAVEL LANES. THIS DETAIL PROVIDES TYPICAL DIMENSIONS FOR THE MAJORITY OF BASES. QUANTITIES OF BAR STEEL REINFORCEMENT AND CONCRETE AS SHOWN ARE APPROXIMATE. DIMENSIONS OF BAR STEEL REINFORCEMENT WILL VARY IN TRANSITION SECTIONS. MAKE FIELD ADJUSTMENTS AS REQUIRED.

18) ADDITIONAL QUANTITIES AND STAKING REQUIRED IN TRANSITION SECTIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASE MEDIAN BARRIER BID ITEM.

19) THE CONCRETE SURFACE SHALL MATCH THE PROPOSED MEDIAN BARRIER WALL FINISH.

20) ALL STEEL CONDUIT SHALL BE GROUNDED. FURNISH AND INSTALL GROUNDING BUSHING WITH LAY-IN TYPE GROUND LUG AND COPPER GROUNDING JUMPER.

21) ADJUST THE JUNCTION BOX LOCATION AS REQUIRED TO FIT FIELD CONDITIONS AND TO AVOID CONFLICTS WITH REINFORCEMENT STEEL. MAINTAIN A MINIMUM OF 2-INCHES OF CONCRETE BETWEEN REINFORCEMENT STEEL ALONG ALL SIDES OF THE JUNCTION BOXES.

ESTIMATED QUANTITIES PER BASE (APPROX.)

ITEM	UNIT	TYPE 1 QUANTITY
CONCRETE MASONRY	C.Y.	5.5*
BAR STEEL REINFORCEMENT	LB.	570*
ANCHOR BOLTS	EACH	4
12X24X8-INCH JUNCTION BOX	EACH	1****
3" CONDUIT ***	LF	7**
2" CONDUIT	LF	3
1" CONDUIT	LF	8

ALL QUANTITIES INCIDENTAL TO "CONCRETE BASE MEDIAN BARRIER TYPE 1 - STATE FURNISHED JUNCTION BOX" BID ITEM SPV.0060.351

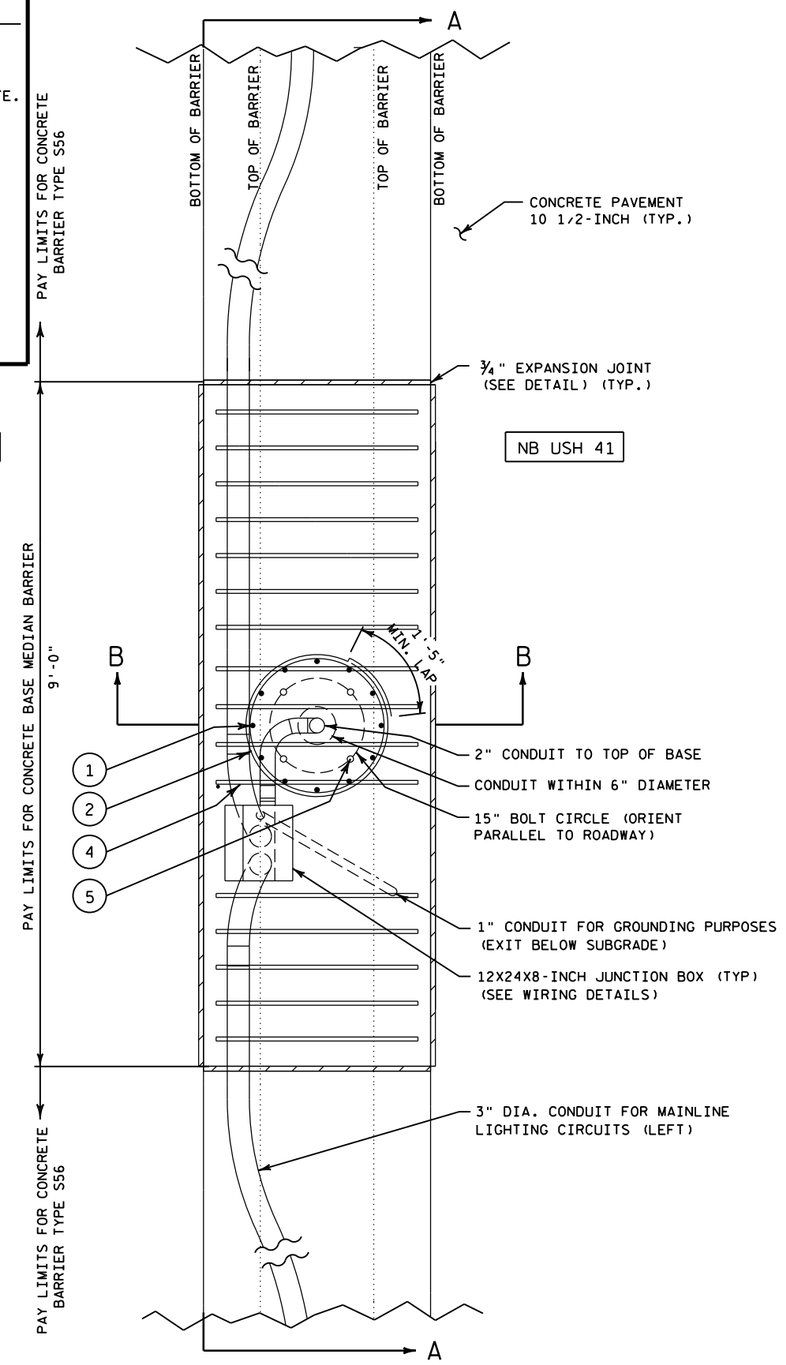
* AMOUNT VARIES IN GRADE SEPARATED AREAS
** AMOUNT VARIES DEPENDING ON NUMBER OF CONDUITS ENTERING BASE (SEE PLANS)
*** SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF RIGID METALLIC CONDUIT
**** STATE FURNISHED JUNCTION BOX

CONCRETE BASE MEDIAN BARRIER TYPE 1 - STATE FURNISHED JUNCTION BOX

(SHEETS 2-11) NO SCALE

SB USH 41

NB USH 41



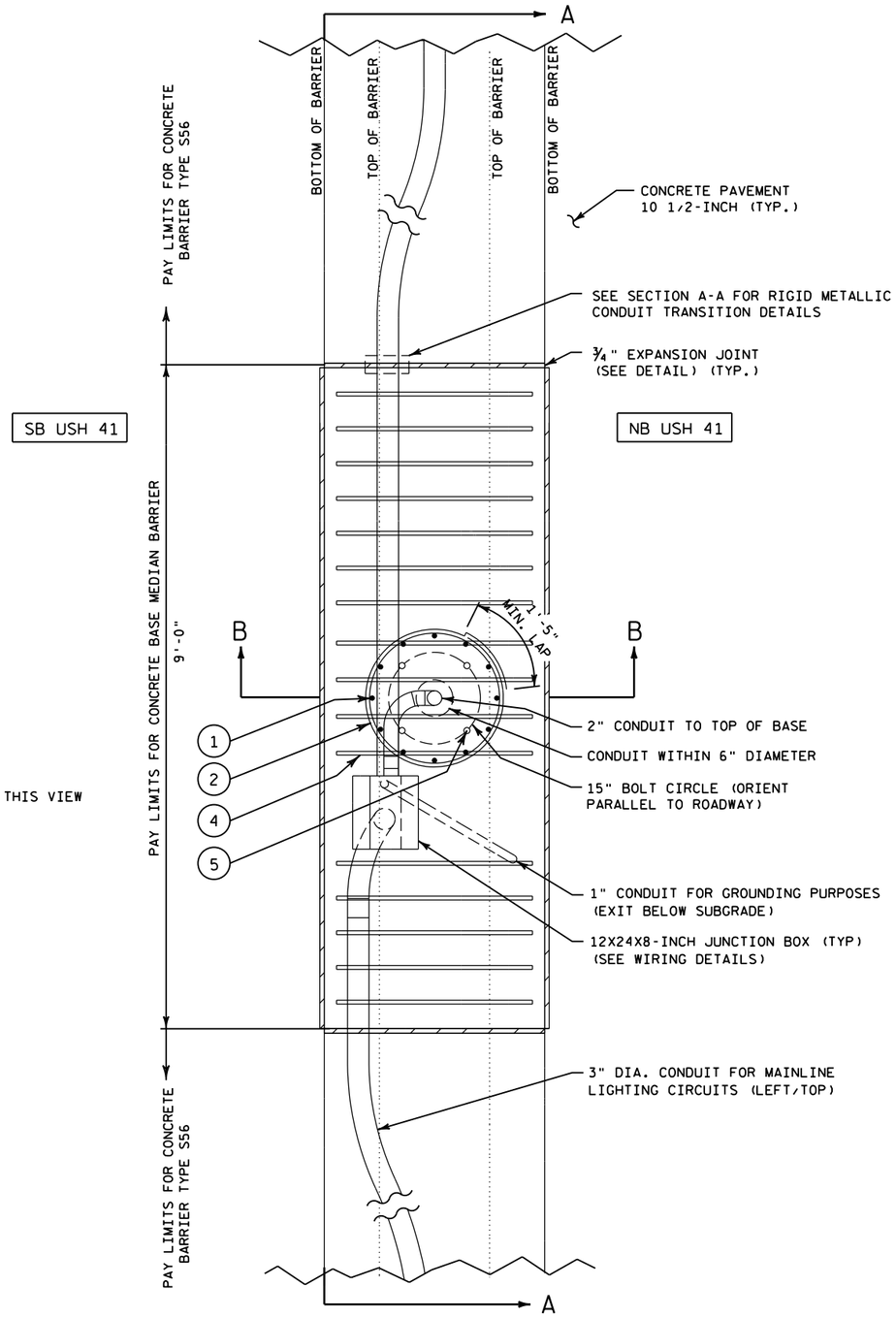
(3) NOT SHOWN ON THIS VIEW

PLAN VIEW

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 227	E

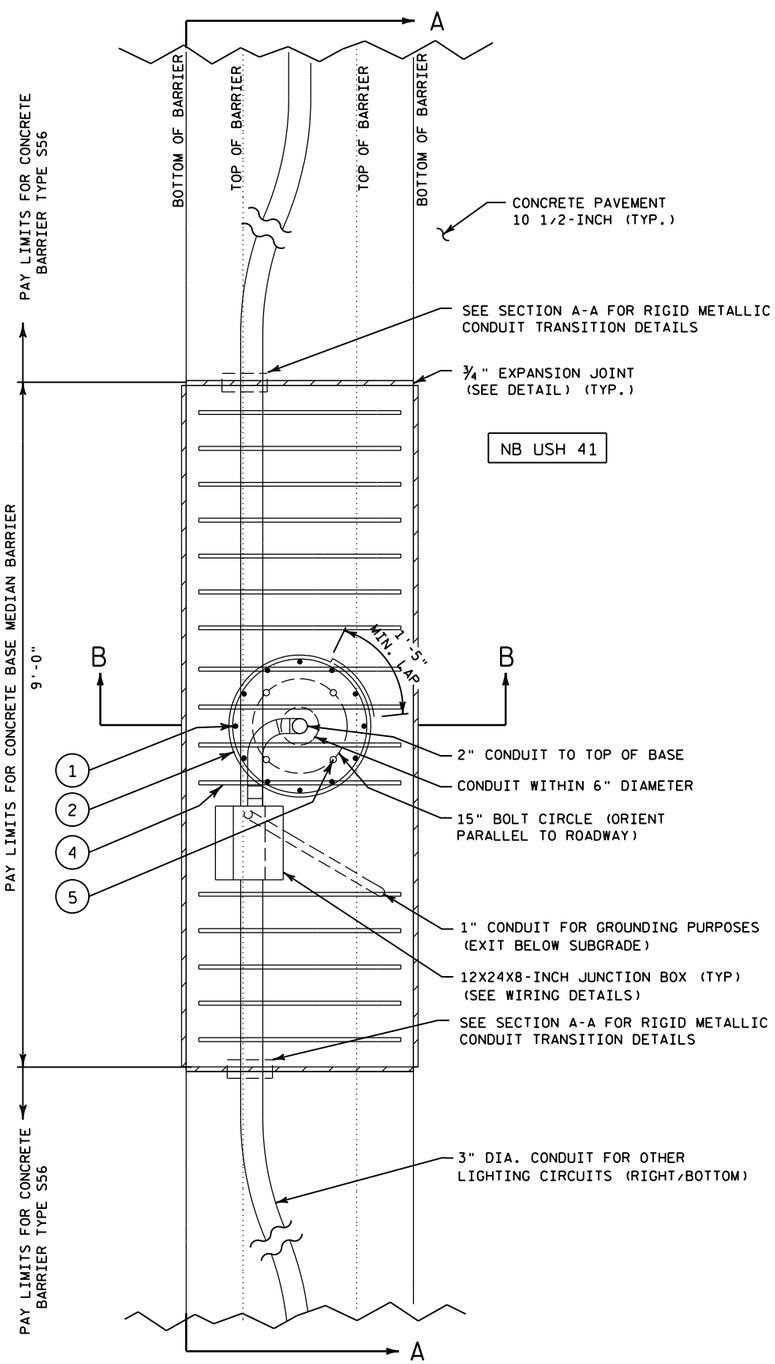
FILE NAME : G:\WDOTNE\WNE30-0739\BROWN COUNTY - 02\1133-10-77 (USH 41 _IH 43_VELP)\DGN\PLAN SHEETS\021002_cd_71_MB1.dgn PLOT DATE : 9/16/2014 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



3 NOT SHOWN ON THIS VIEW

PLAN VIEW

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE



3 NOT SHOWN ON THIS VIEW

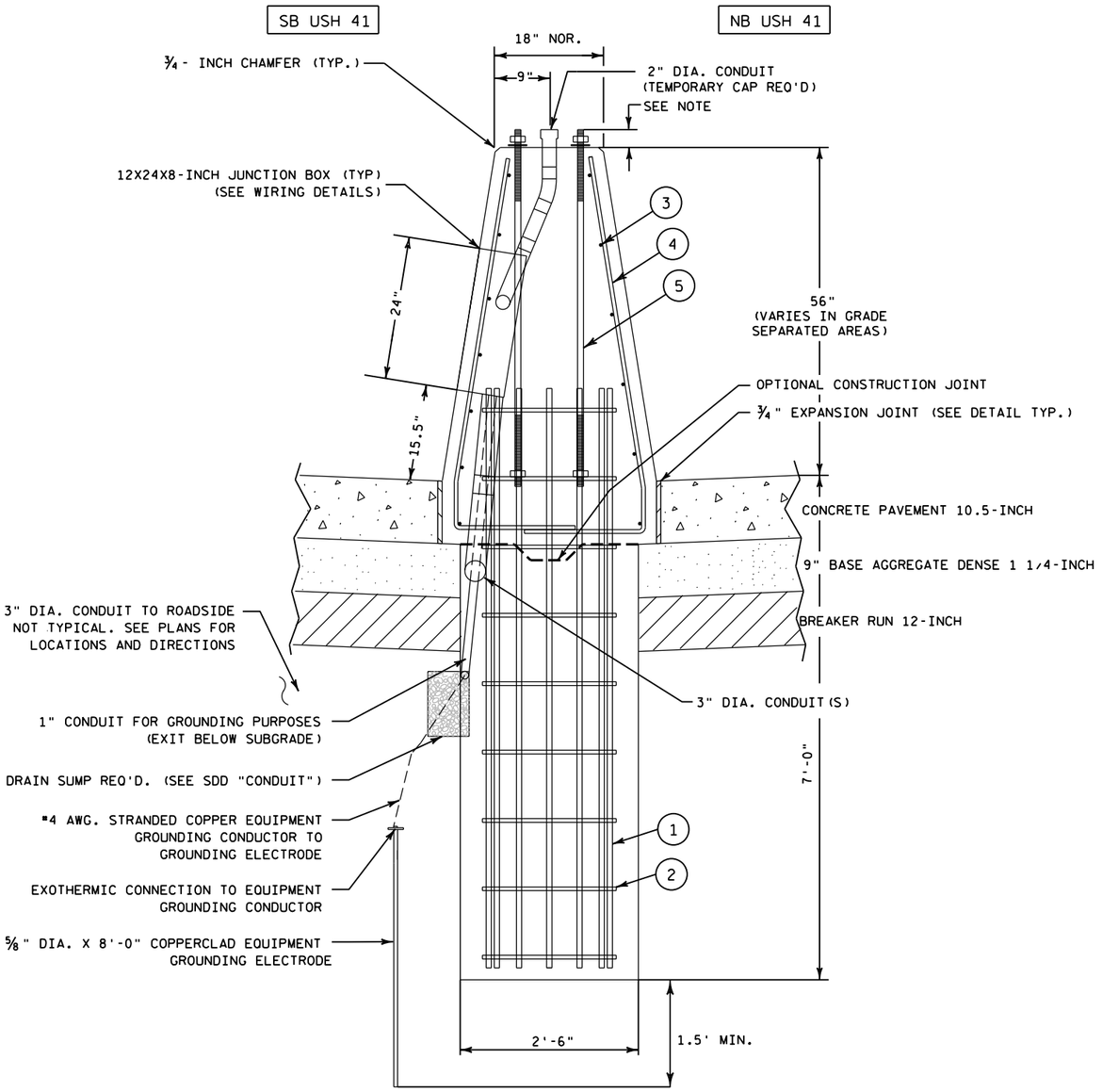
PLAN VIEW

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

2

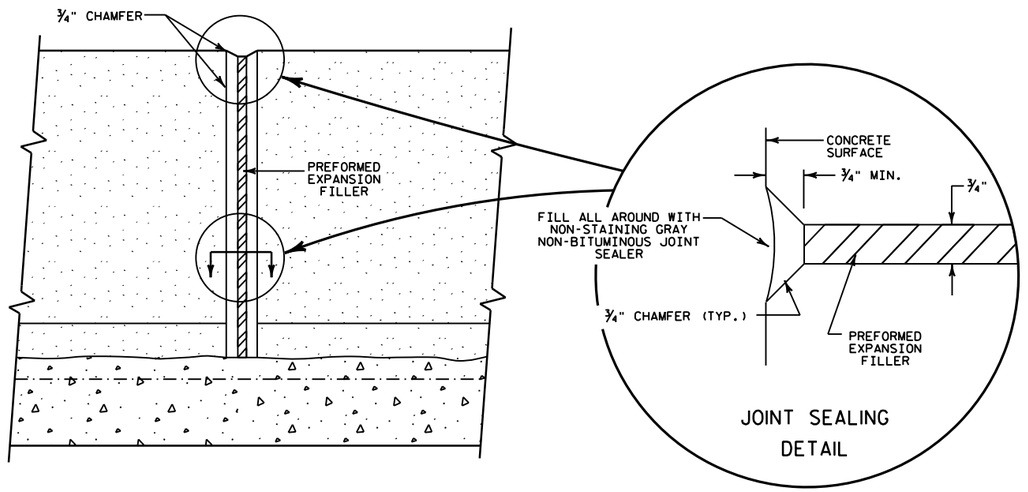
SHEET 3 OF 25

NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.

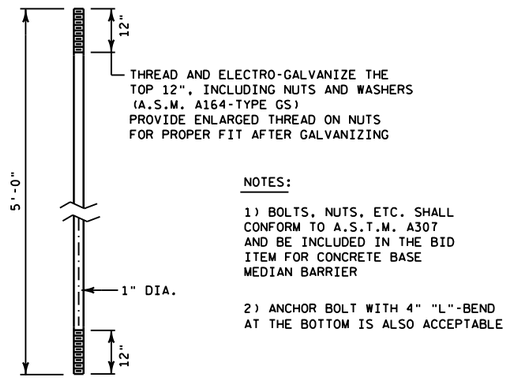


SECTION B-B

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES



EXPANSION JOINT DETAIL



NOTES:

1) BOLTS, NUTS, ETC. SHALL CONFORM TO A.S.T.M. A307 AND BE INCLUDED IN THE BID ITEM FOR CONCRETE BASE MEDIAN BARRIER

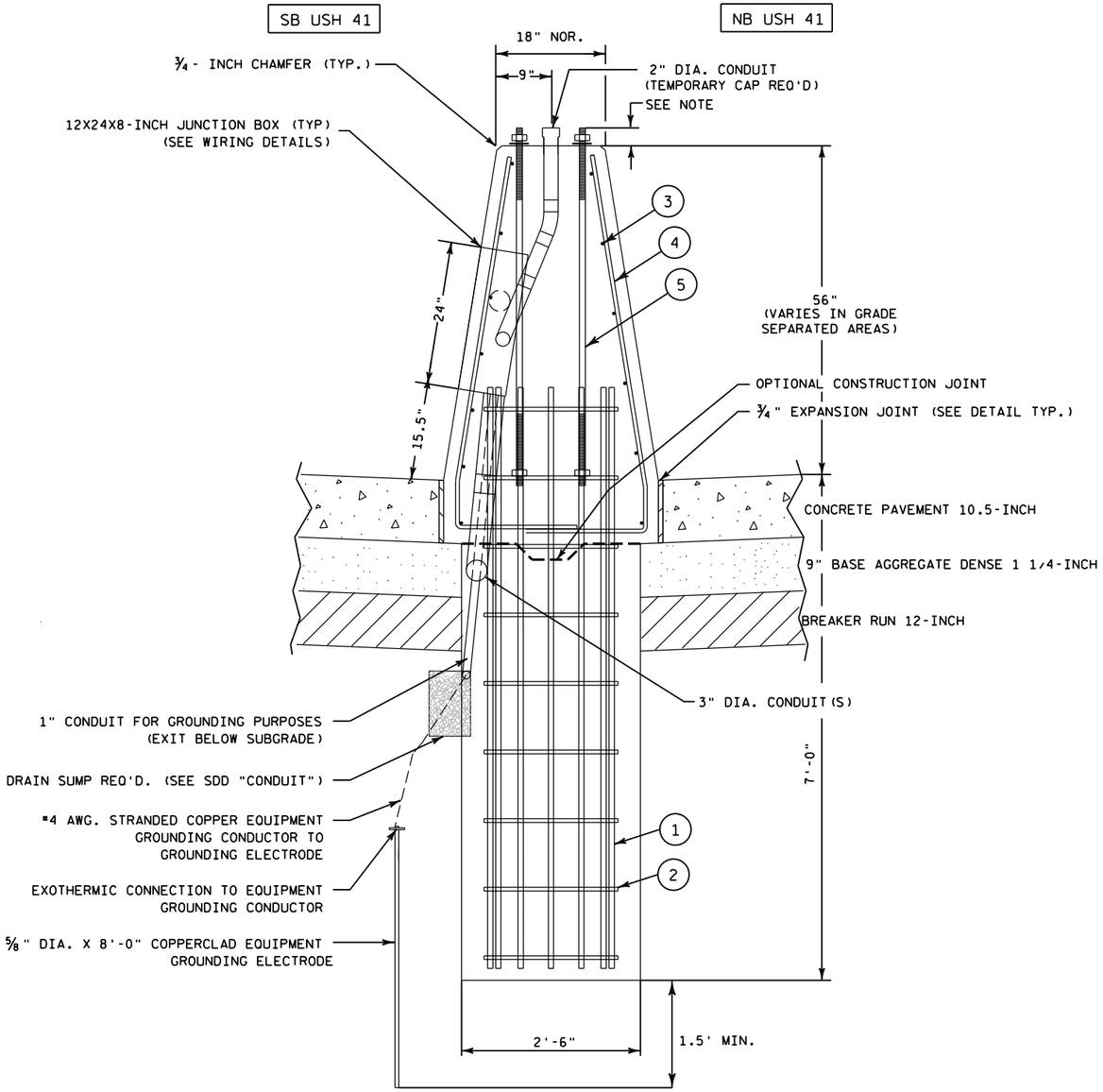
2) ANCHOR BOLT WITH 4" "L"-BEND AT THE BOTTOM IS ALSO ACCEPTABLE

ANCHOR BOLT DETAIL (5)

SL #	STATION	SB-NB DIFFERENCE
SL327	1231+19 'NMC'	-1.05
SL329	1237+79 'NMC'	+0.52

VERTICAL TRANSITION AREA GRADE SEPARATION CHART

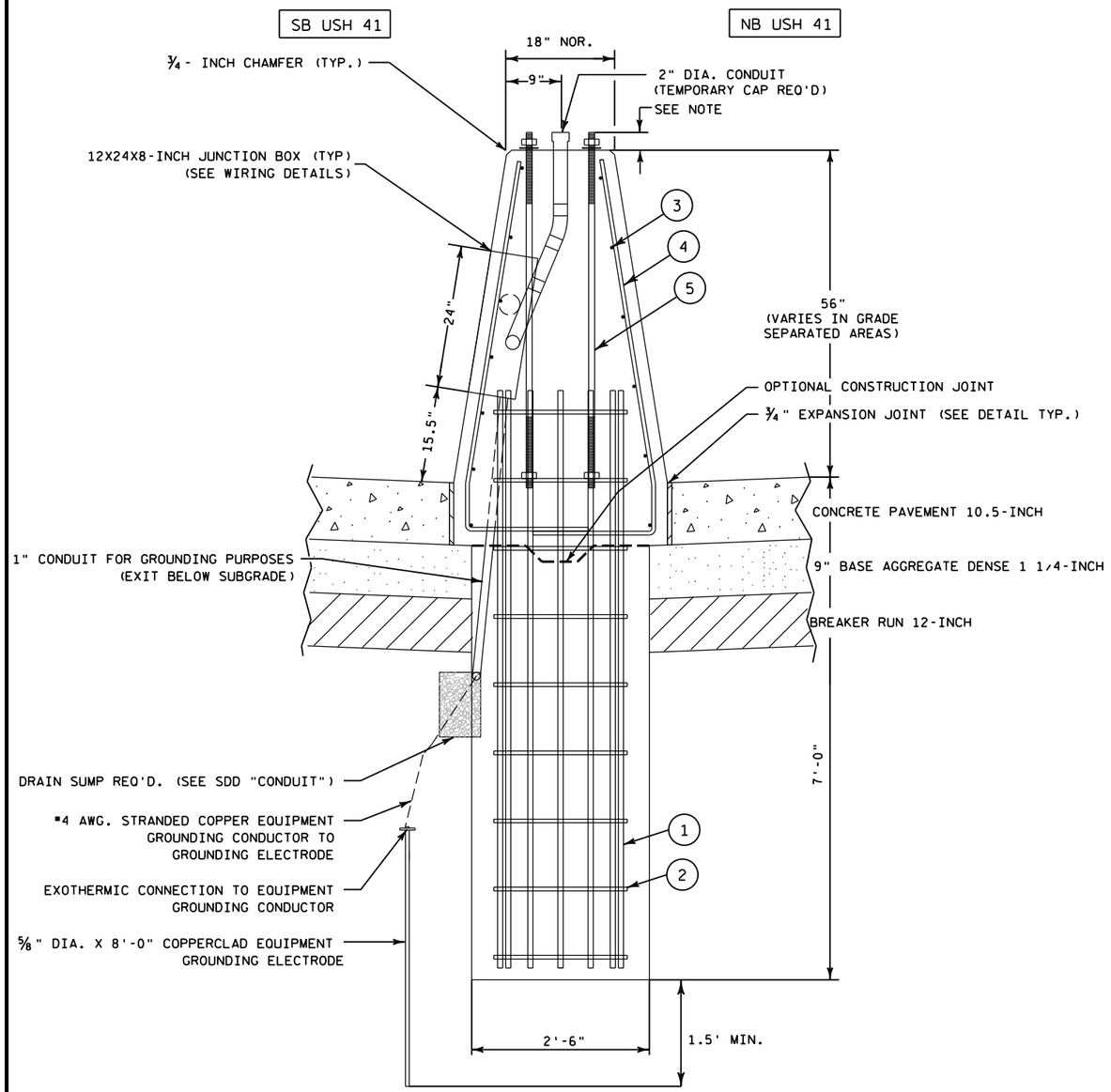
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION B-B

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

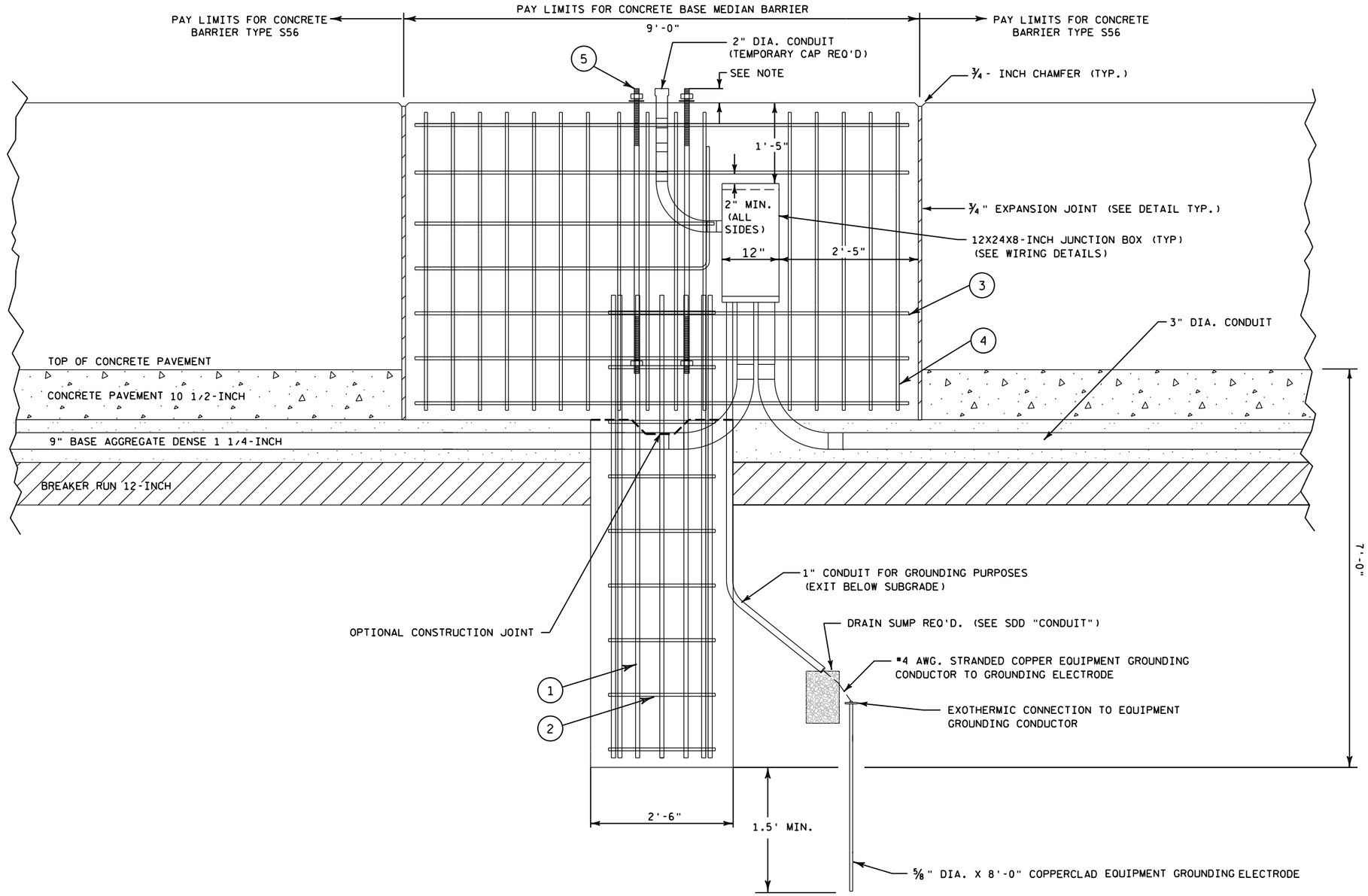
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION B-B

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

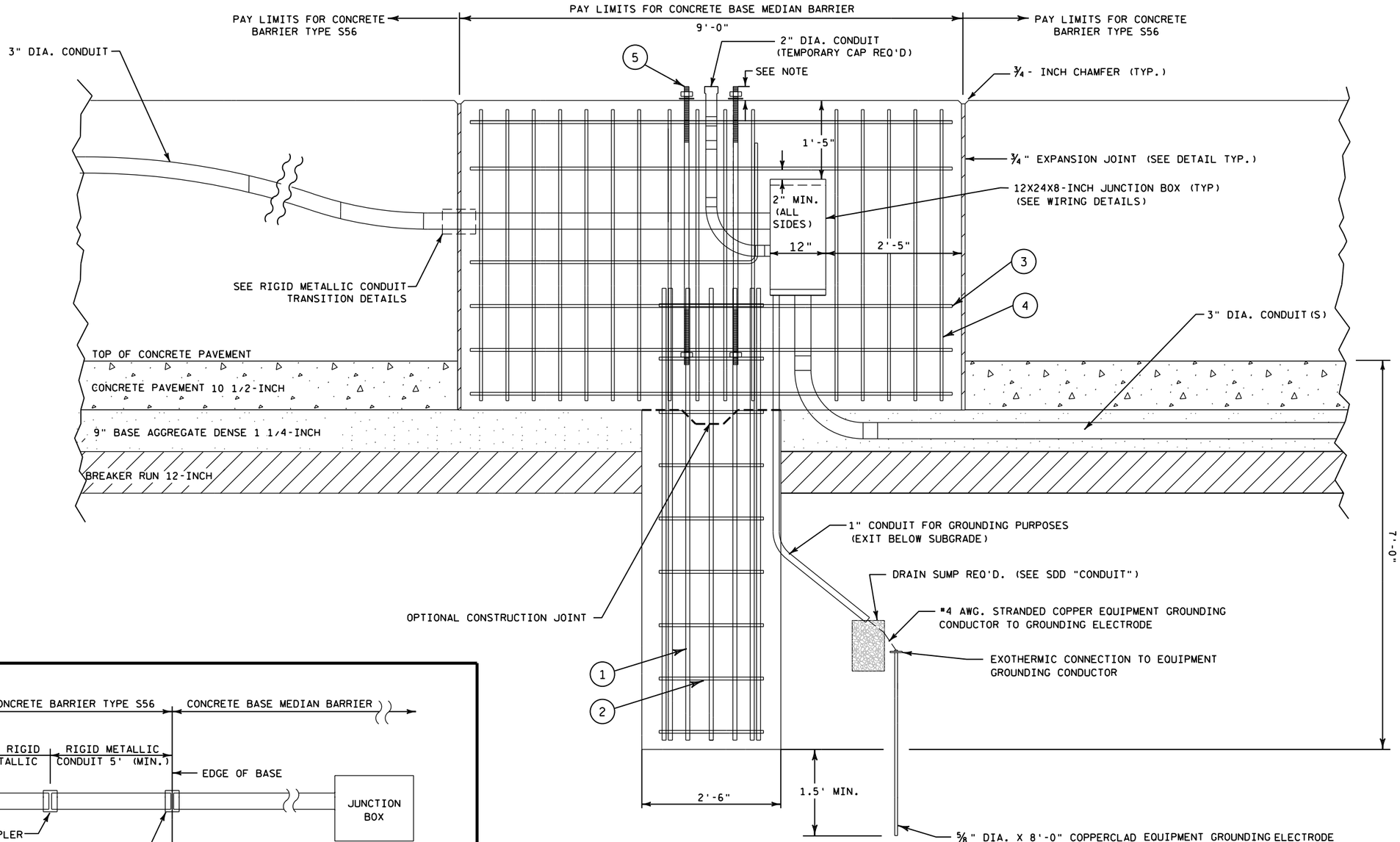
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION A-A
SIDE VIEW (FACING EAST)

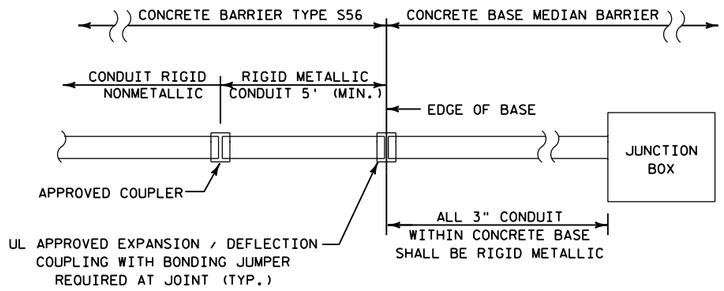
CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION A-A
SIDE VIEW (FACING EAST)

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

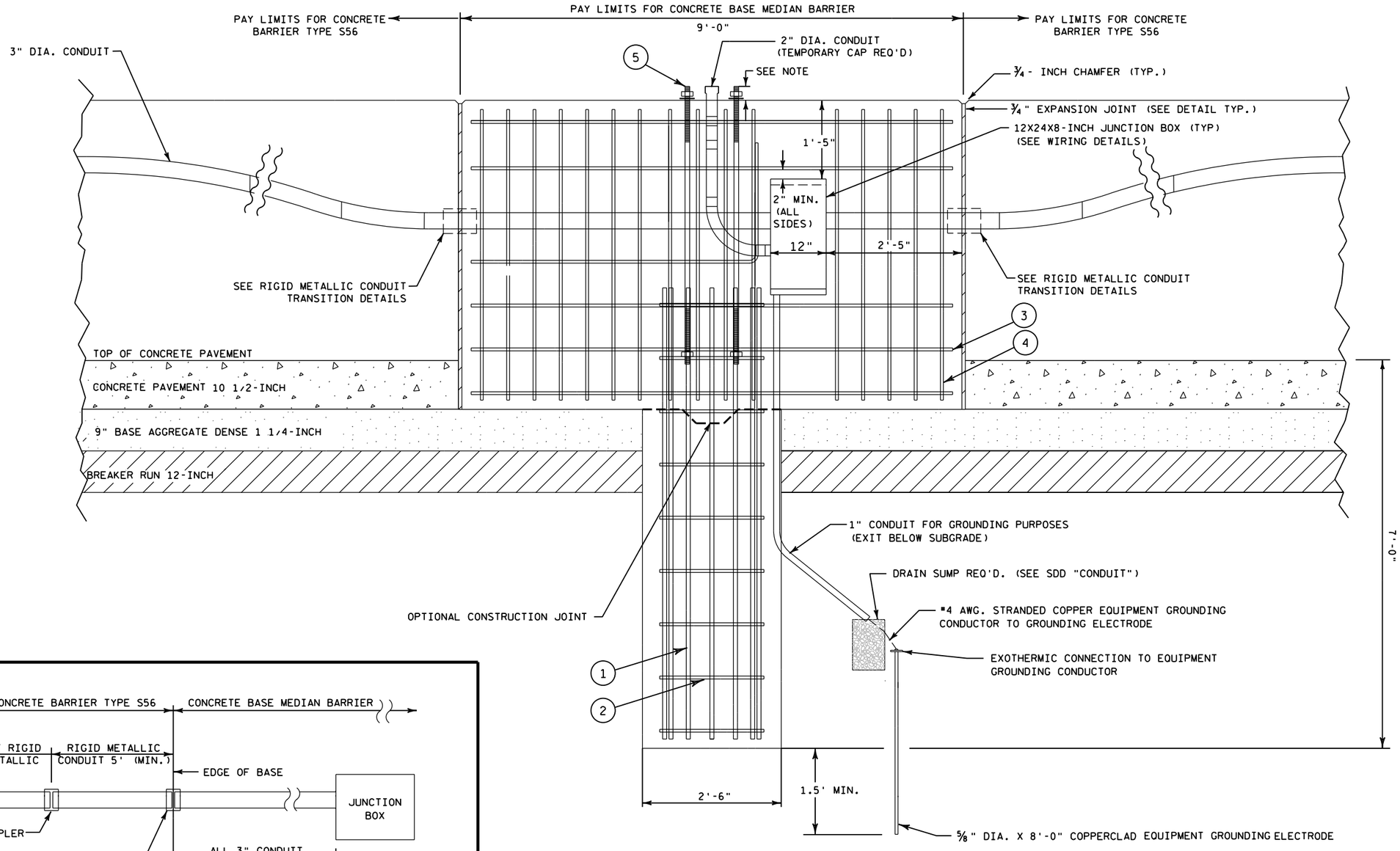


RIGID METALLIC CONDUIT TRANSITION DETAIL

SHEET 7 OF 25

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 232	E

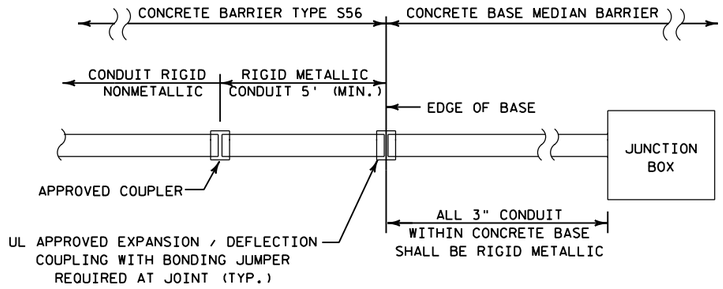
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION A-A

SIDE VIEW (FACING EAST)

CASE 3 - CONDUIT IN BARRIER BOTH SIDES



RIGID METALLIC CONDUIT TRANSITION DETAIL

BILL OF BARS

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
1	12	8.12'		FOOTING VERTICAL
2	9	5.89'	X	FOOTING HOOPS
3	14*	8.67'	X	WALL - HORIZONTAL**
4	20	6.95'*	X	WALL - STIRRUPS

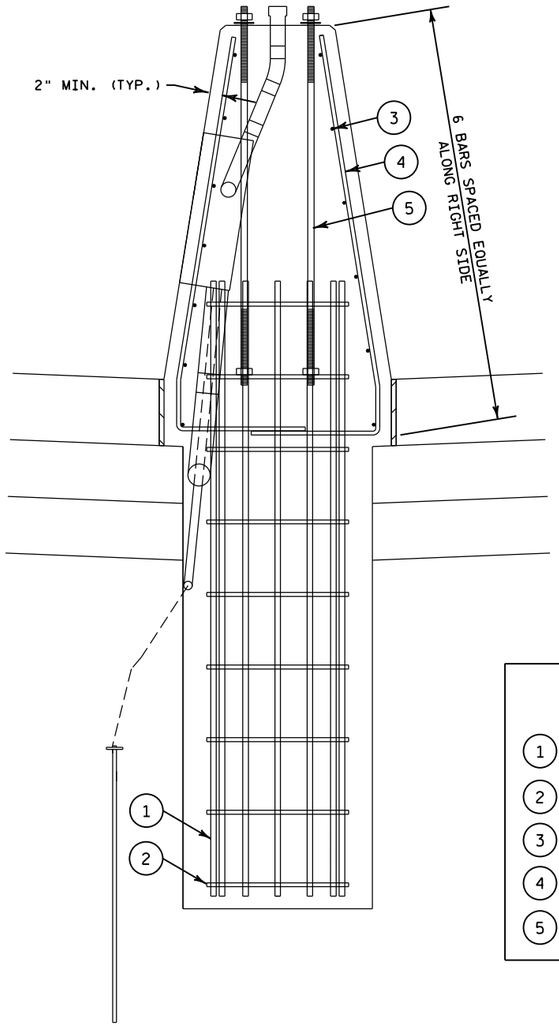
* VARIES IN GRADE SEPARATED AREAS

** 90° HOOKED BARS ARE 7.20' EACH

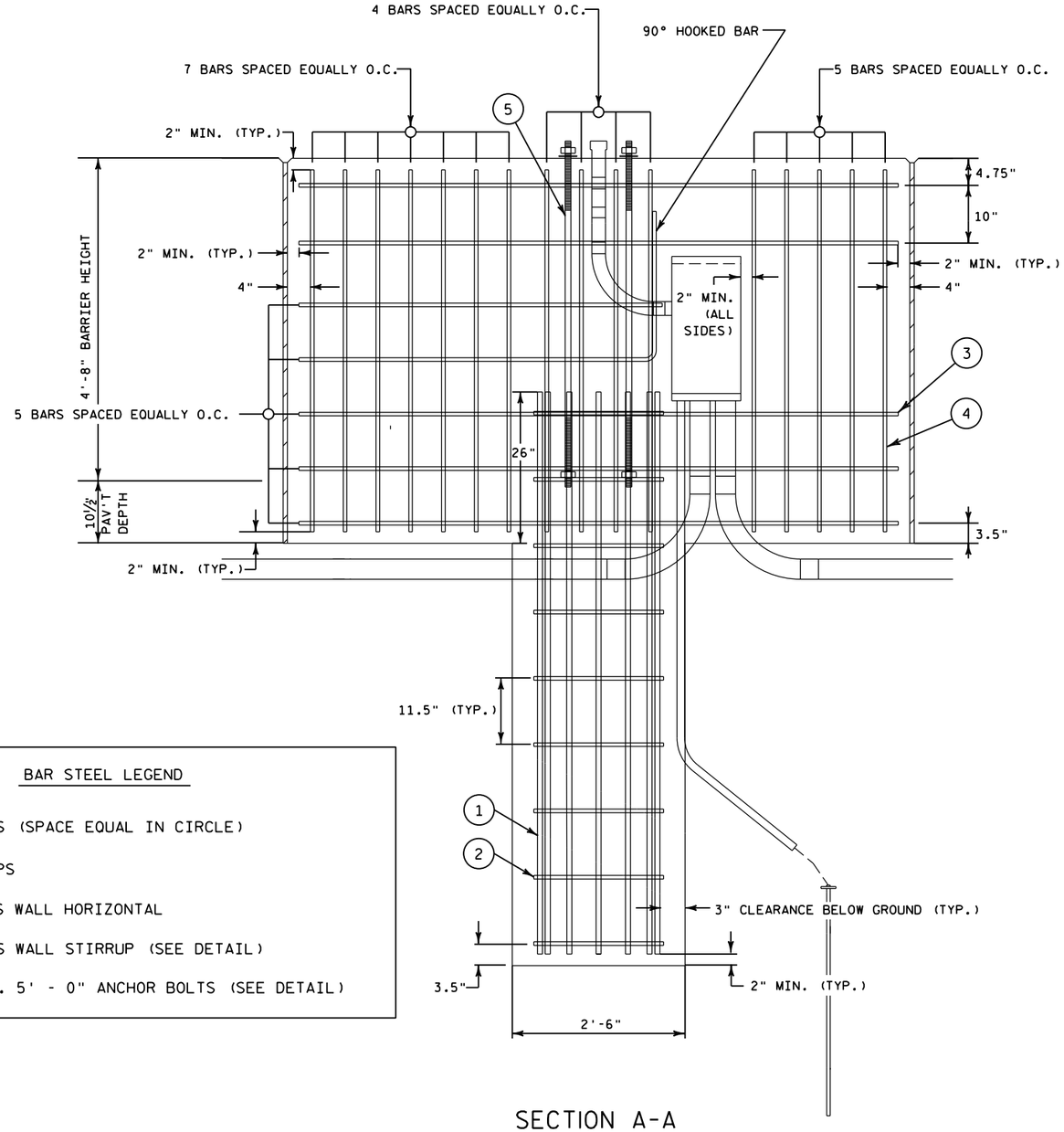
CONCRETE MASONRY - f'c 3,500 PSI

BAR STEEL REINFORCEMENT - f'c 60,000 PSI

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.



SECTION B-B

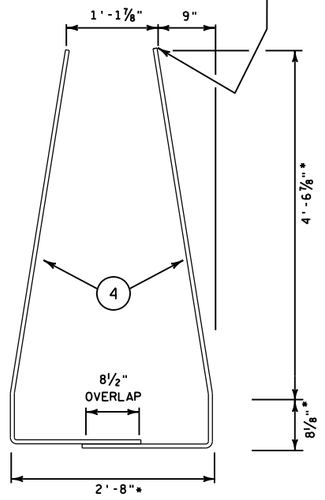


SECTION A-A

BAR STEEL LEGEND

1. #7 BARS (SPACE EQUAL IN CIRCLE)
2. #5 HOOPS
3. #5 BARS WALL HORIZONTAL
4. #5 BARS WALL STIRRUP (SEE DETAIL)
5. 1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)

VERTICAL BEND SECTION REQ'D IN GRADE SEPARATED AREAS



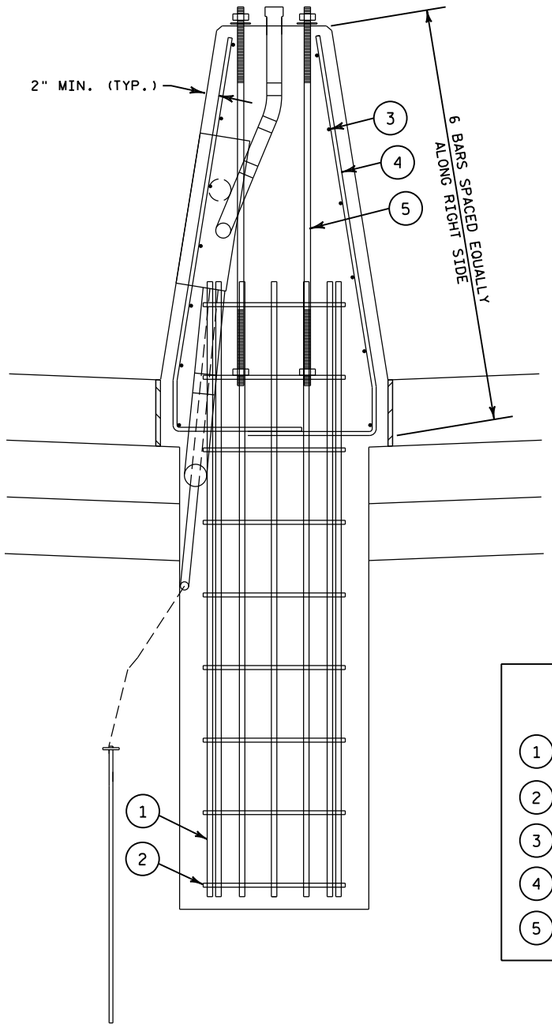
* DIMENSIONS VARY IN GRADE SEPARATED AREAS

WALL STIRRUP DETAIL

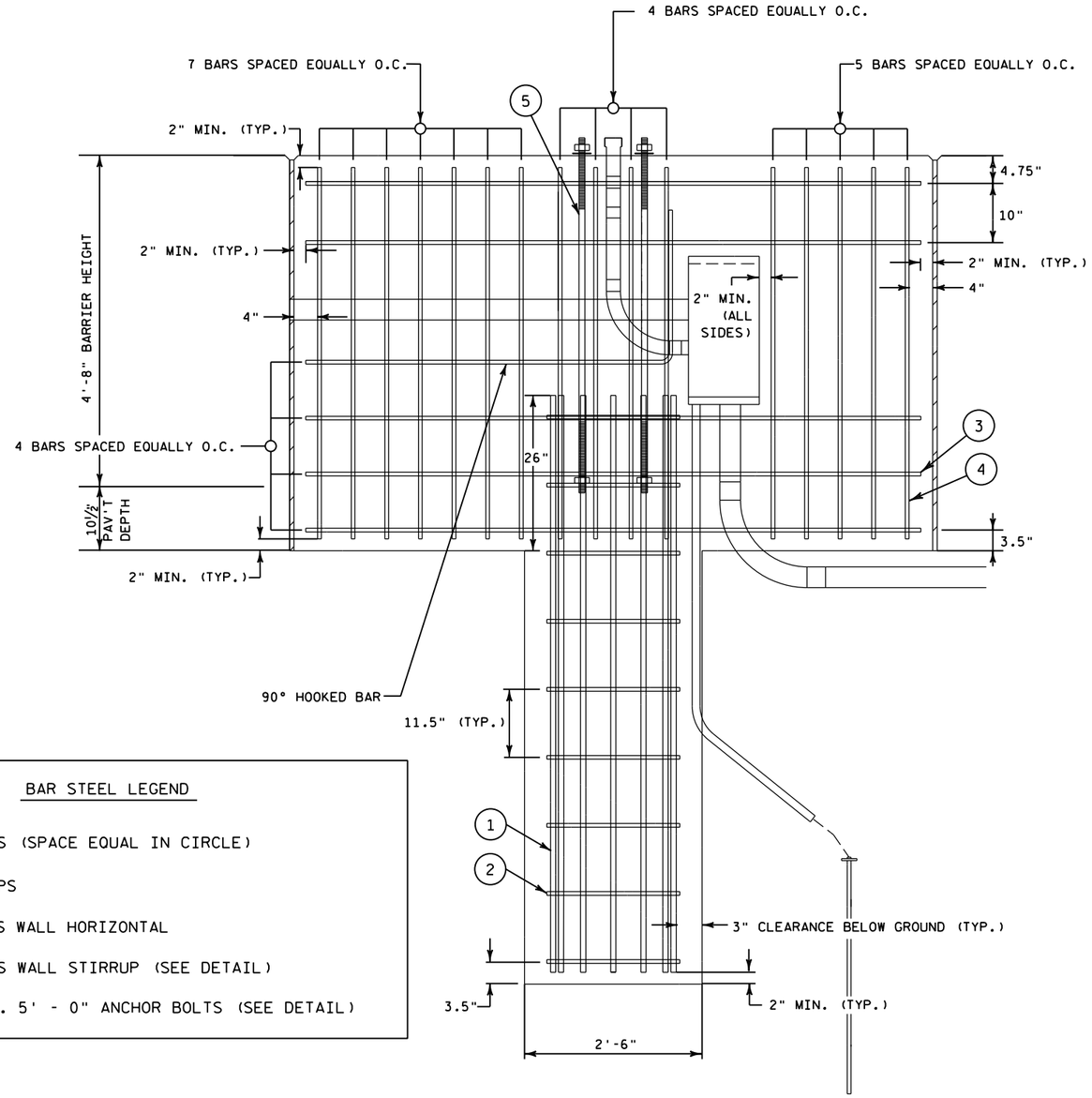
REBAR DETAILS

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.



SECTION B-B



SECTION A-A

BAR STEEL LEGEND

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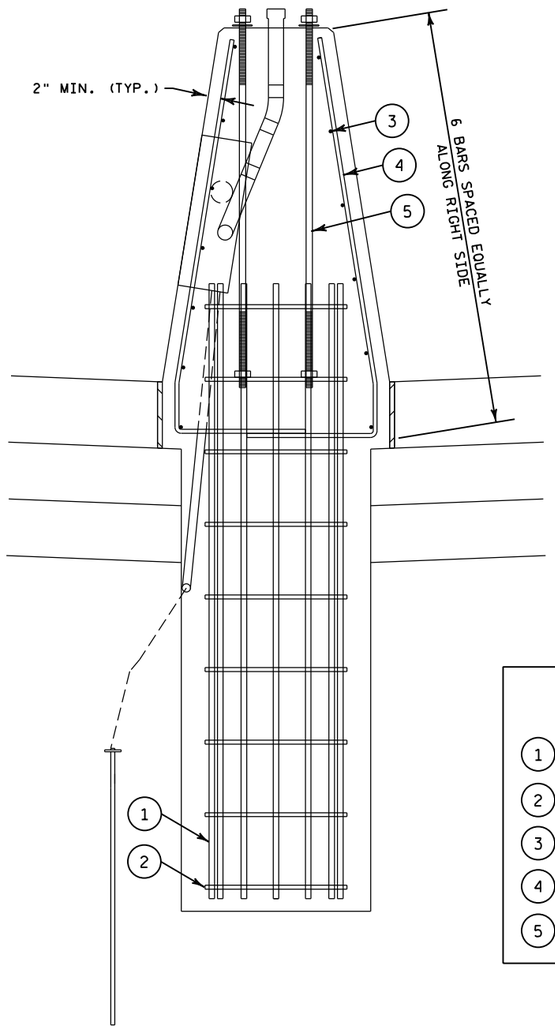
2. #5 HOOPS
3. #5 BARS WALL HORIZONTAL
4. #5 BARS WALL STIRRUP (SEE DETAIL)
5. 1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)

REBAR DETAILS

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.



SECTION B-B

BAR STEEL LEGEND

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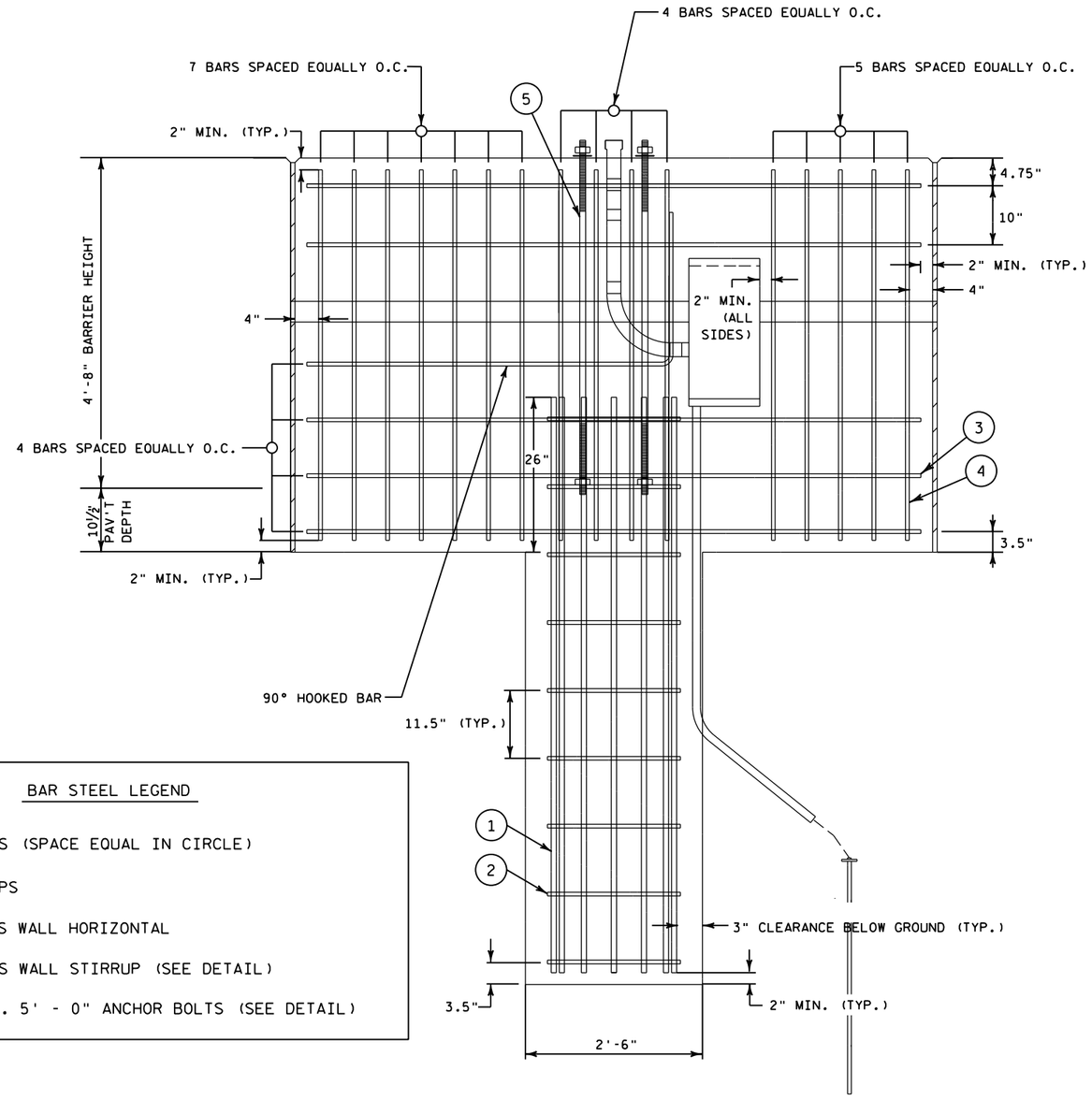

SECTION A-A

REBAR DETAILS

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

2

GENERAL NOTES

1) BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

2) CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

3) MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

4) CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4-INCHES, PRIOR TO INSTALLING END BELL.

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7) A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR ALL BASES.

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12) ANCHOR BOLTS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3 AASTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

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17) THE DIMENSIONS OF THE CONCRETE BASES WILL VARY FROM WHAT IS SHOWN ON THIS DETAIL DEPENDING ON THE VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE NORTHBOUND AND SOUTHBOUND TRAVEL LANES. THIS DETAIL PROVIDES TYPICAL DIMENSIONS FOR THE MAJORITY OF BASES. QUANTITIES OF BAR STEEL REINFORCEMENT AND CONCRETE AS SHOWN ARE APPROXIMATE. DIMENSIONS OF BAR STEEL REINFORCEMENT WILL VARY IN TRANSITION SECTIONS. MAKE FIELD ADJUSTMENTS AS REQUIRED.

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19) THE CONCRETE SURFACE SHALL MATCH THE PROPOSED MEDIAN BARRIER WALL FINISH.

20) ALL STEEL CONDUIT SHALL BE GROUNDED. FURNISH AND INSTALL GROUNDING BUSHING WITH LAY-IN TYPE GROUND LUG AND COPPER GROUNDING JUMPER.

21) ADJUST THE JUNCTION BOX LOCATION AS REQUIRED TO FIT FIELD CONDITIONS AND TO AVOID CONFLICTS WITH REINFORCEMENT STEEL. MAINTAIN A MINIMUM OF 2-INCHES OF CONCRETE BETWEEN REINFORCEMENT STEEL ALONG ALL SIDES OF THE JUNCTION BOXES.

ESTIMATED QUANTITIES PER BASE (APPROX.)

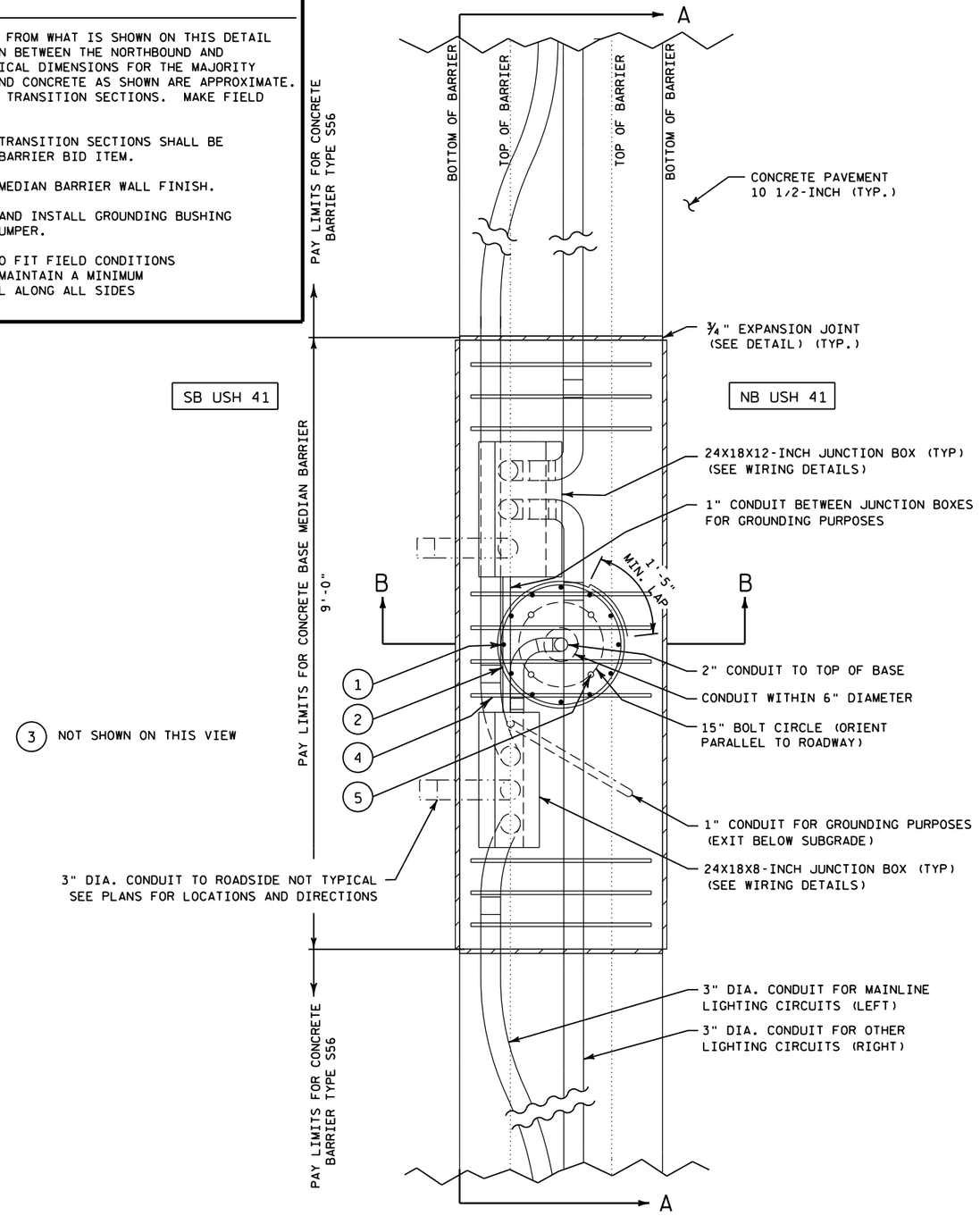
ITEM	UNIT	TYPE 2 QUANTITY
CONCRETE MASONRY	C.Y.	5.5*
BAR STEEL REINFORCEMENT	LB.	525*
ANCHOR BOLTS	EACH	4
24X18X8-INCH JUNCTION BOX	EACH	1
24X18X12-INCH JUNCTION BOX	EACH	1****
3" CONDUIT ***	LF	14**
2" CONDUIT	LF	3
1" CONDUIT	LF	10

ALL QUANTITIES INCIDENTAL TO "CONCRETE BASE MEDIAN BARRIER TYPE 2"
BID ITEM SPV.0060.352

* AMOUNT VARIES IN GRADE SEPARATED AREAS
** AMOUNT VARIES DEPENDING ON NUMBER OF CONDUITS ENTERING BASE (SEE PLANS)
*** SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF RIGID METALLIC CONDUIT
**** STATE FURNISHED JUNCTION BOX

CONCRETE BASE MEDIAN BARRIER TYPE 2

(SHEETS 12-21) NO SCALE

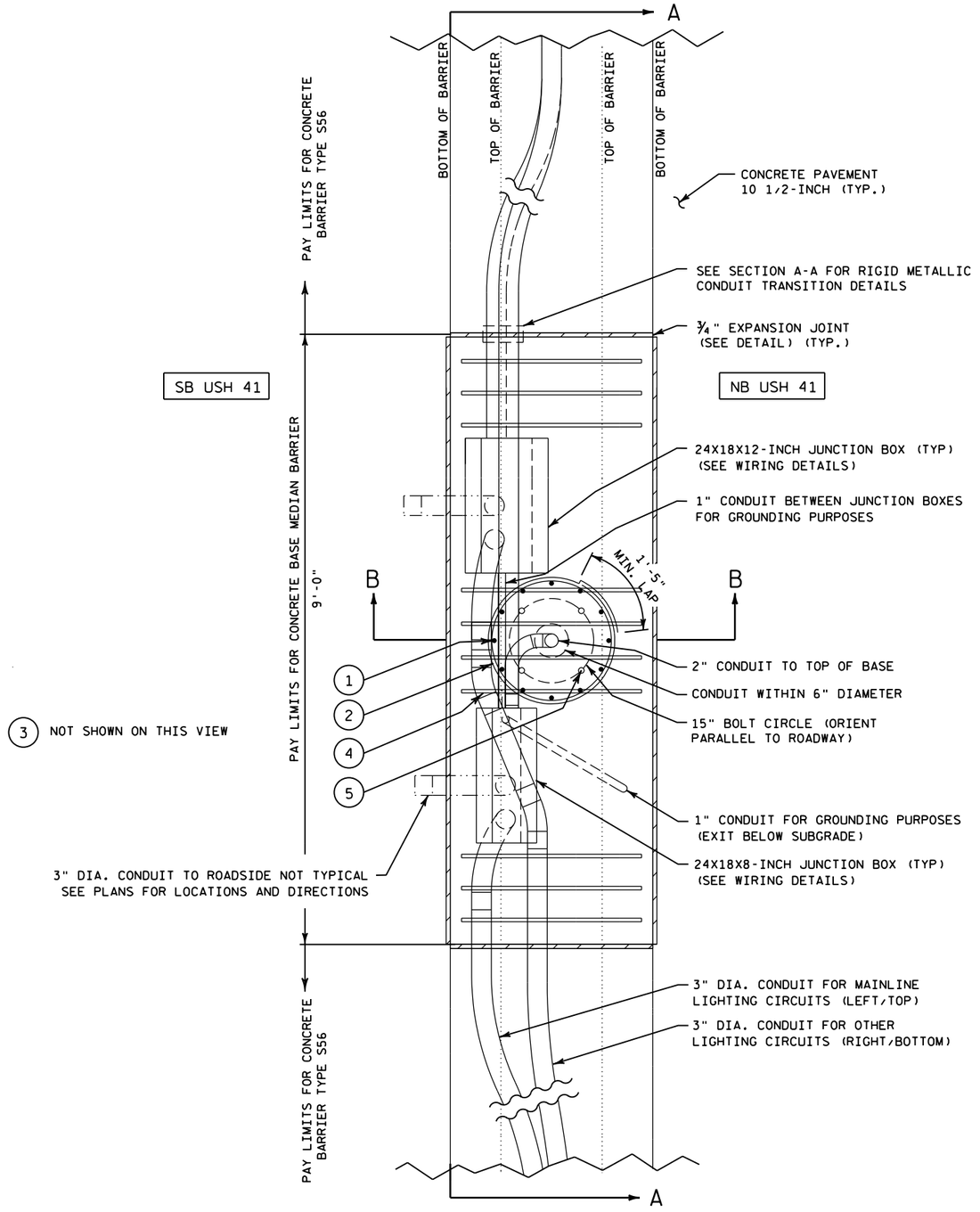


PLAN VIEW

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

SHEET 12 OF 25

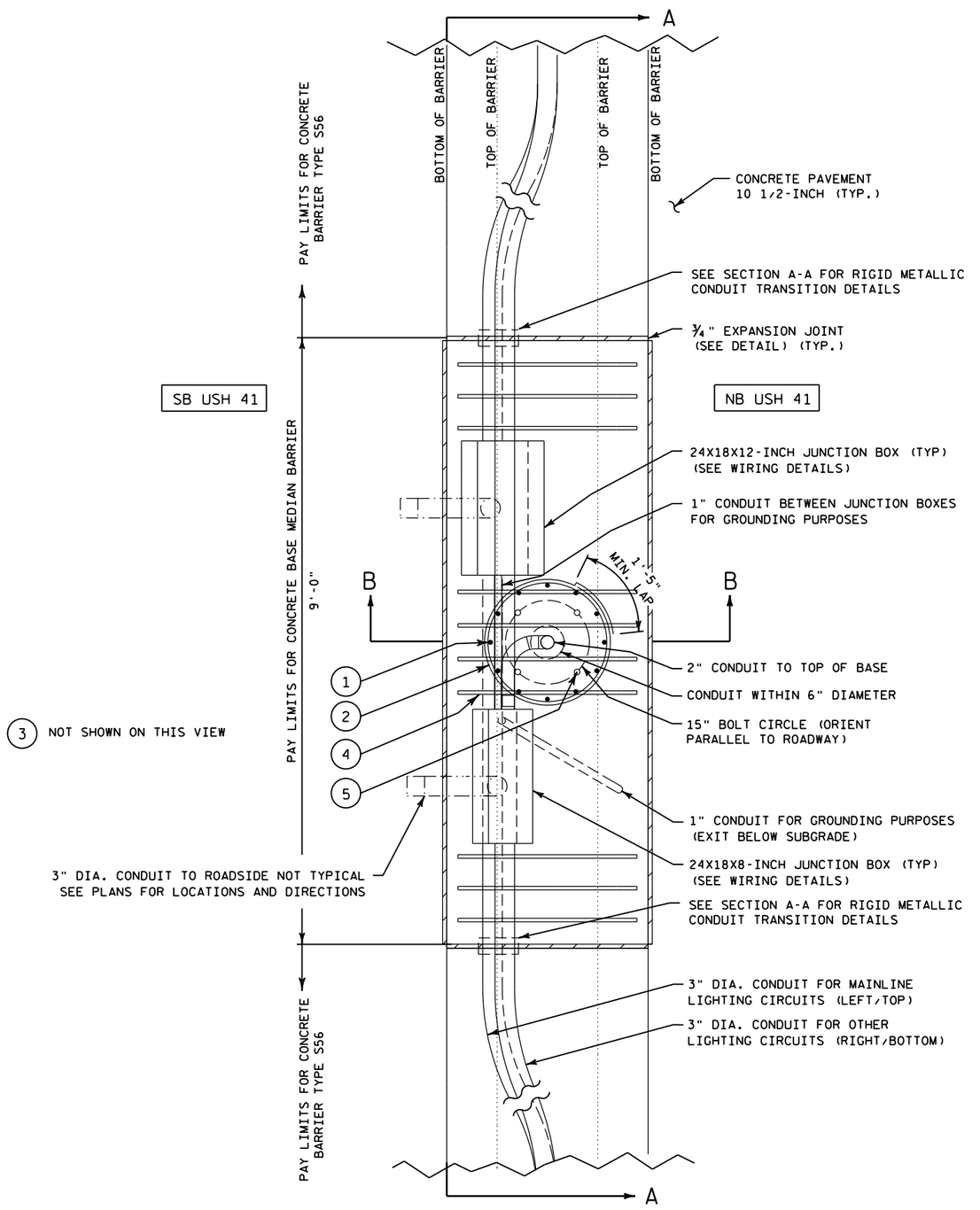
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 237	E



3 NOT SHOWN ON THIS VIEW

PLAN VIEW

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE



3 NOT SHOWN ON THIS VIEW

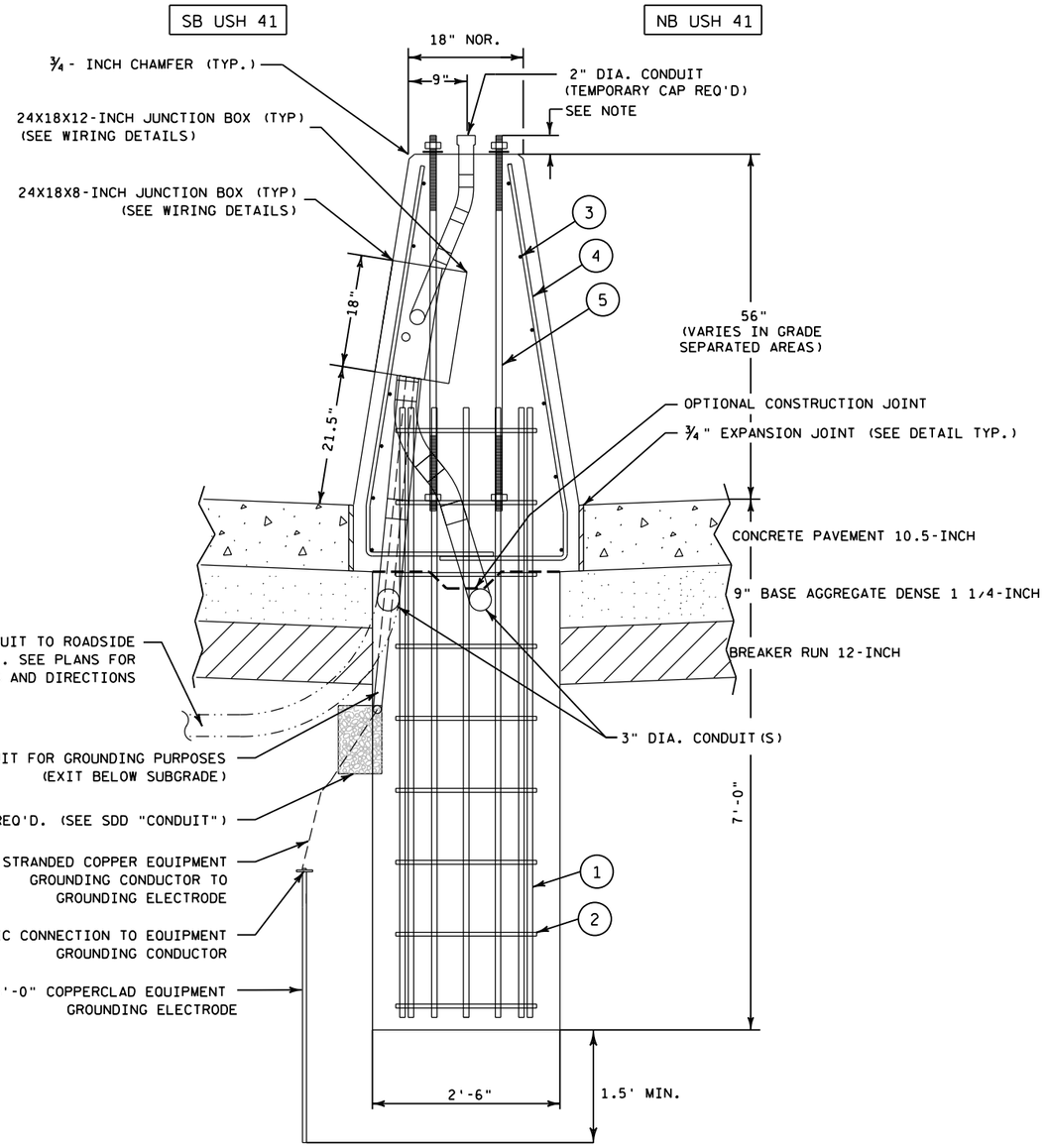
PLAN VIEW

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

2

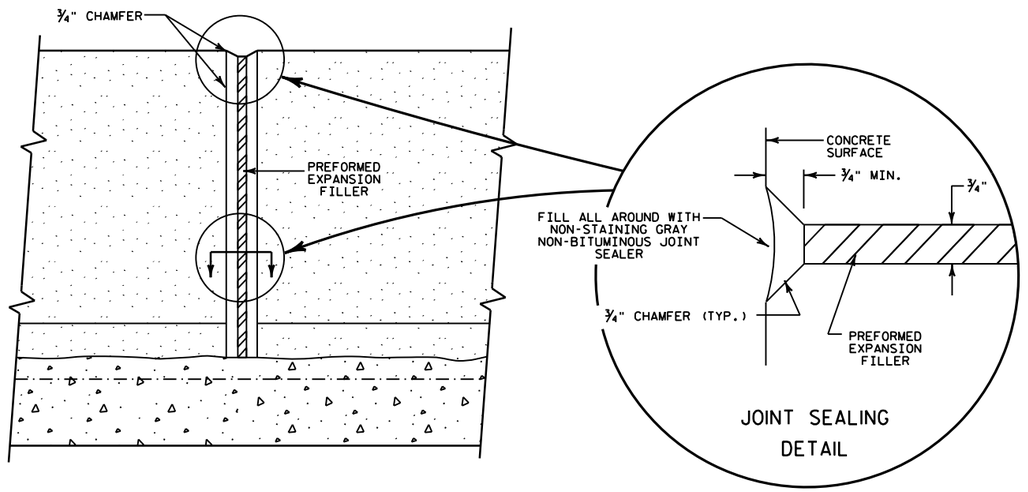
SHEET 13 OF 25

NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.

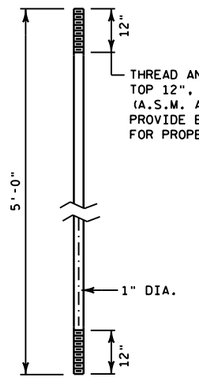


SECTION B-B

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES



EXPANSION JOINT DETAIL



NOTES:

1) BOLTS, NUTS, ETC. SHALL CONFORM TO A.S.T.M. A307 AND BE INCLUDED IN THE BID ITEM FOR CONCRETE BASE MEDIAN BARRIER

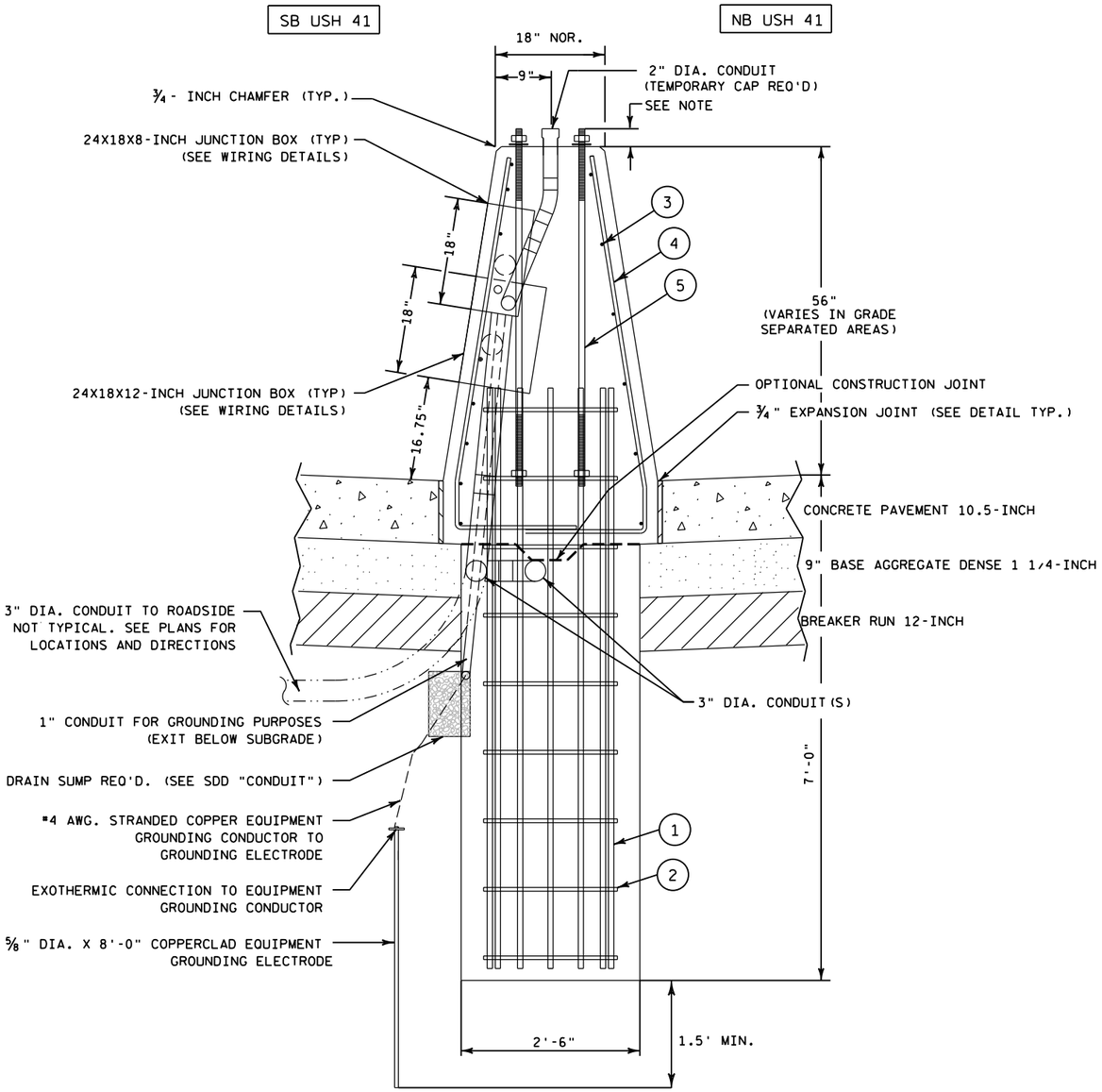
2) ANCHOR BOLT WITH 4" "L"-BEND AT THE BOTTOM IS ALSO ACCEPTABLE

ANCHOR BOLT DETAIL (5)

SL #	STATION	SB-NB DIFFERENCE
SL326	1228+21 'NMC'	-1.14

VERTICAL TRANSITION AREA GRADE SEPARATION CHART

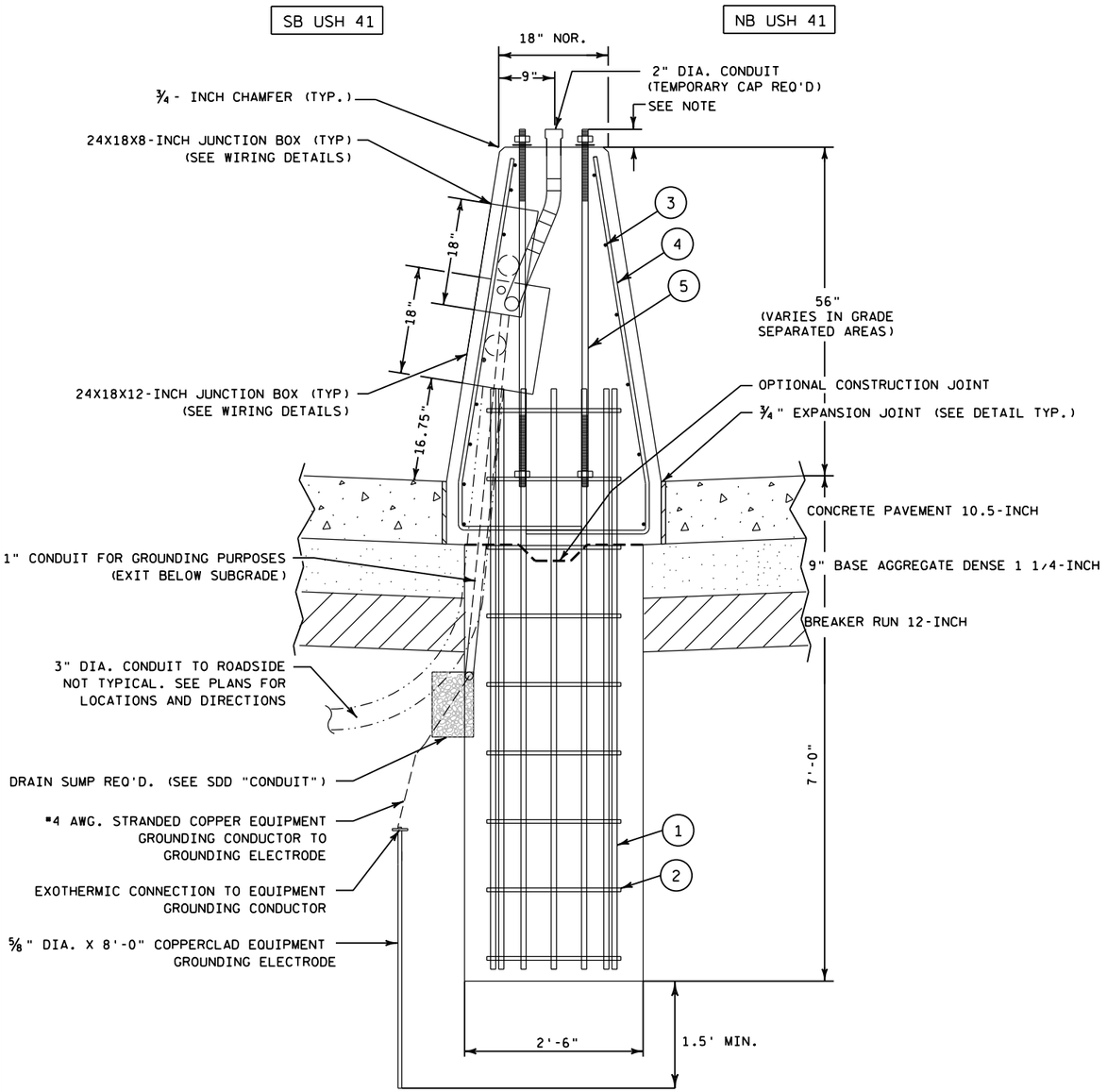
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION B-B

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

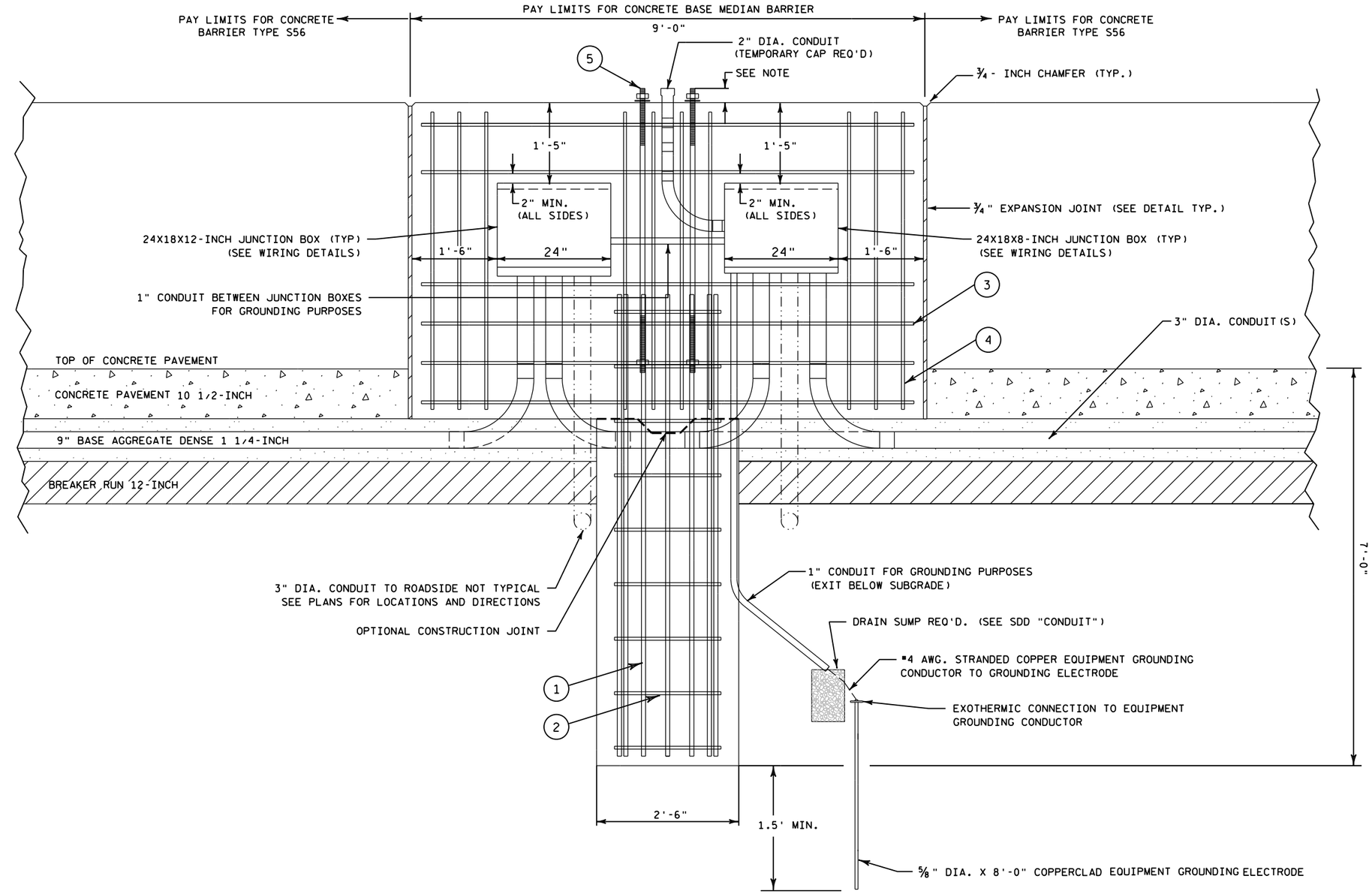
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION B-B

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.

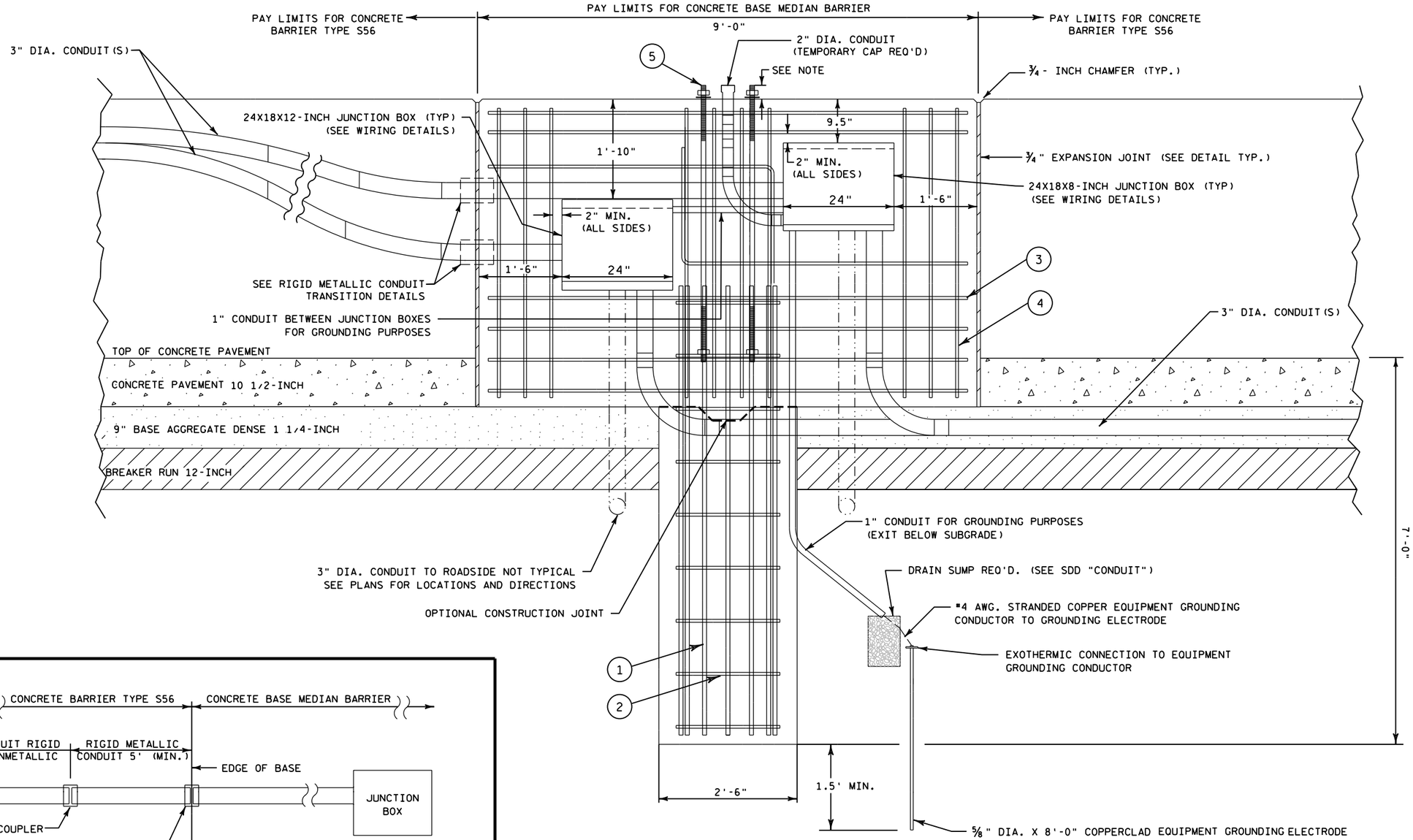


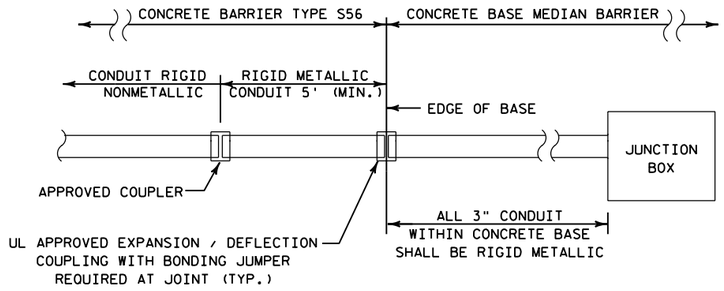
SECTION A-A
SIDE VIEW (FACING EAST)

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.

X





RIGID METALLIC CONDUIT TRANSITION DETAIL

SECTION A-A

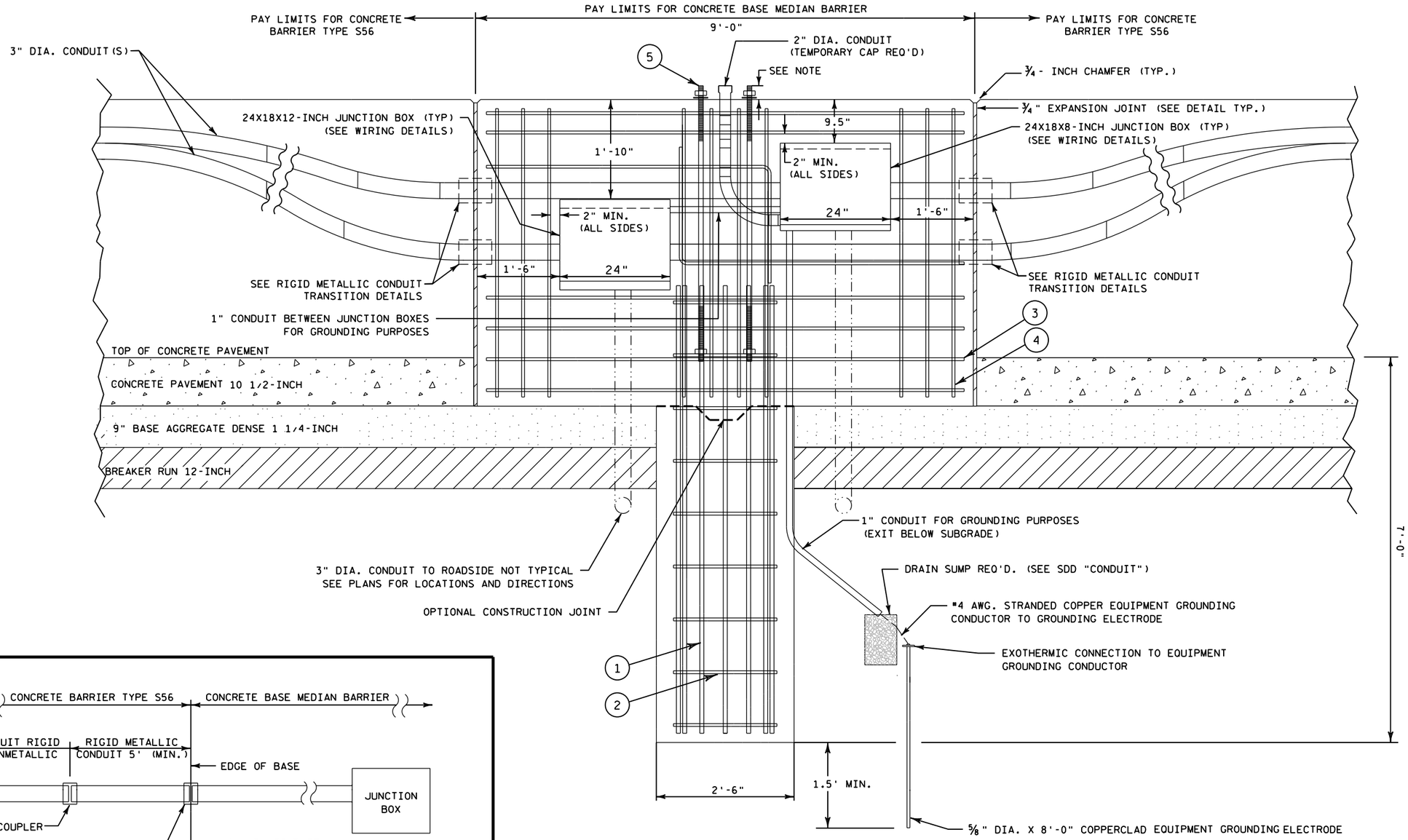
SIDE VIEW (FACING EAST)

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

SHEET 17 OF 25

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 242	E

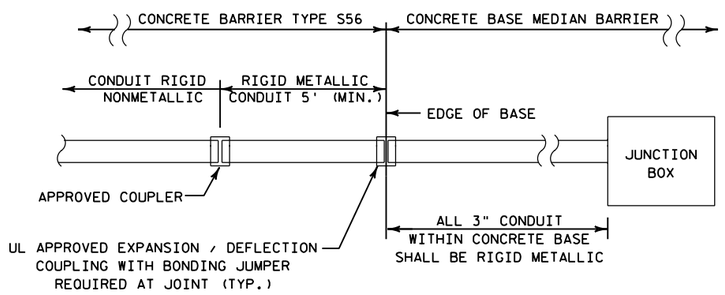
NOTE: SET ANCHOR BOLT PROJECTION FOR NON-BREAKAWAY INSTALLATION PER SDD.



SECTION A-A

SIDE VIEW (FACING EAST)

CASE 3 - CONDUIT IN BARRIER BOTH SIDES



RIGID METALLIC CONDUIT TRANSITION DETAIL

BILL OF BARS

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
1	12	8.12'		FOOTING VERTICAL
2	9	5.89'	X	FOOTING HOOPS
3	14*	8.67'	X	WALL - HORIZONTAL**
4	20	6.95'*	X	WALL - STIRRUPS

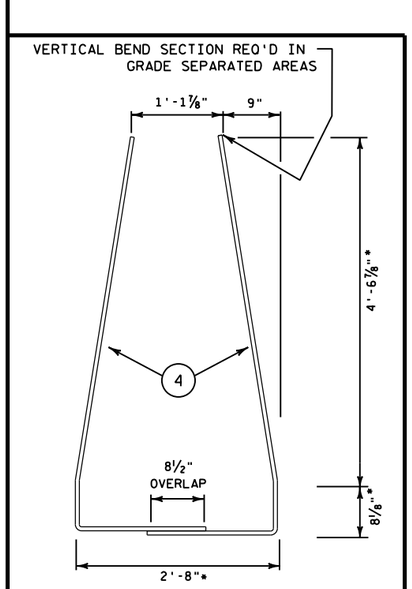
* VARIES IN GRADE SEPARATED AREAS

** 90° HOOKED BARS ARE 7.20' EACH

CONCRETE MASONRY - f'c 3,500 PSI

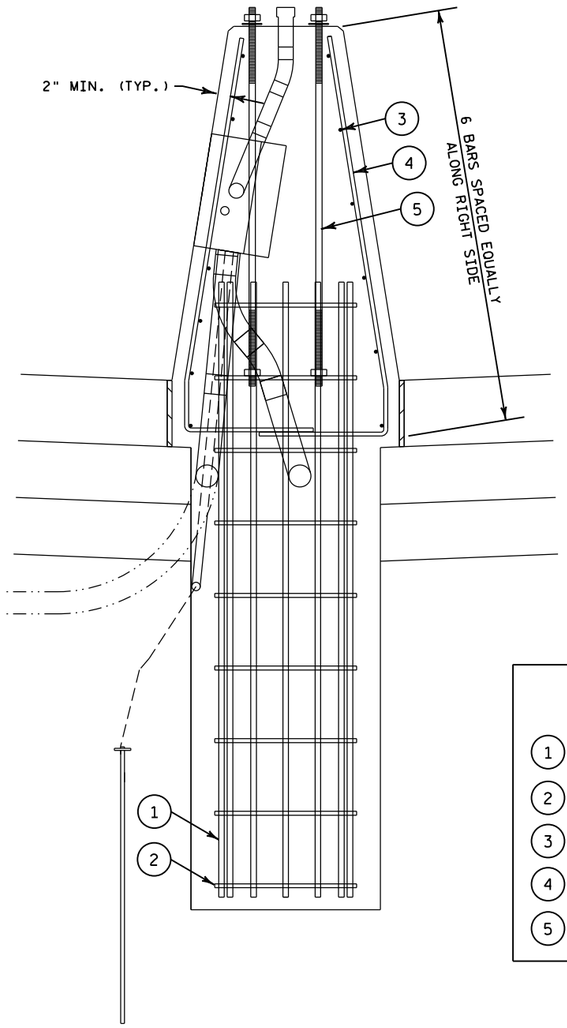
BAR STEEL REINFORCEMENT - f'c 60,000 PSI

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.

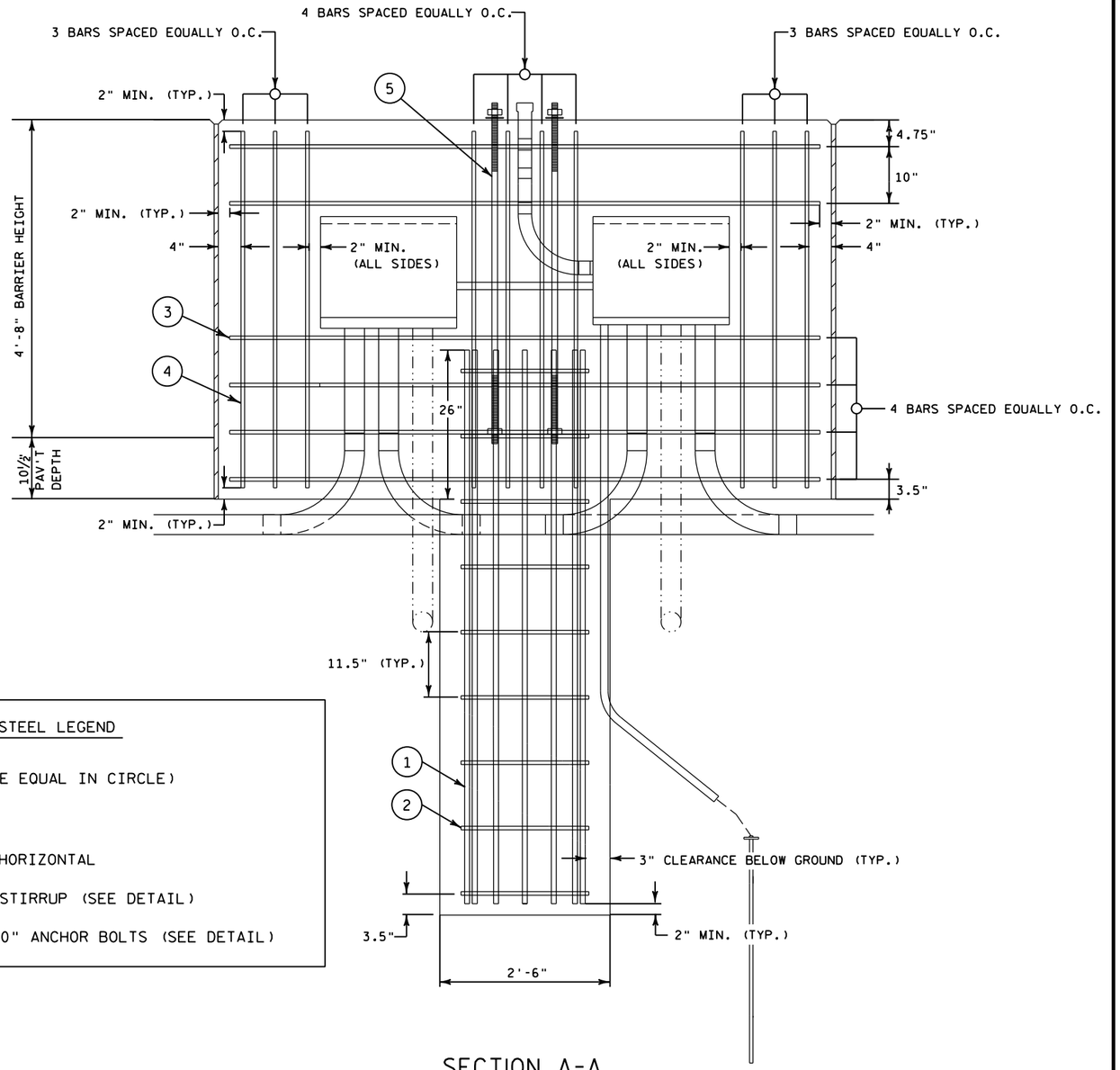


* DIMENSIONS VARY IN GRADE SEPARATED AREAS

WALL STIRRUP DETAIL



SECTION B-B



SECTION A-A

BAR STEEL LEGEND

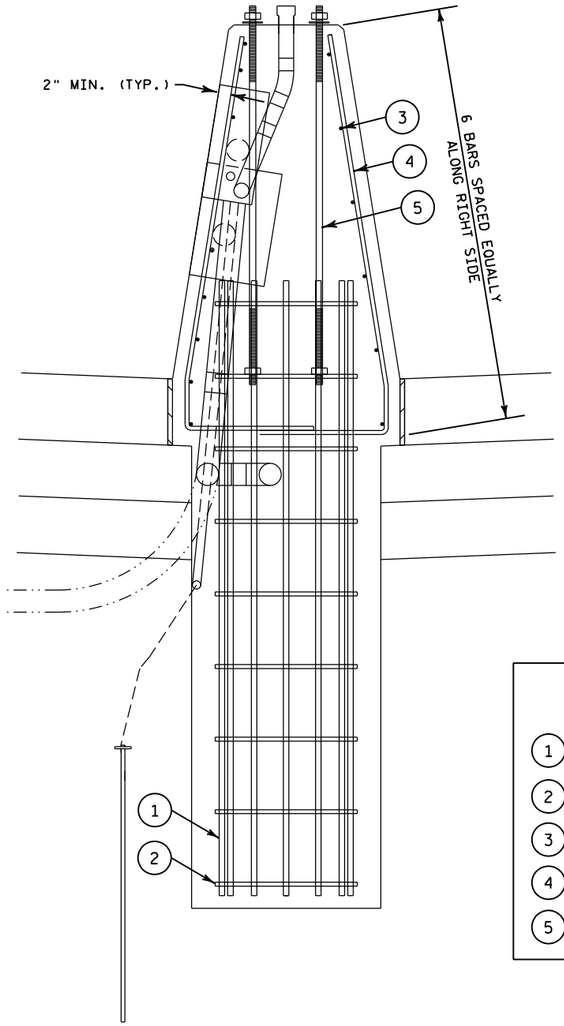
1. #7 BARS (SPACE EQUAL IN CIRCLE)
2. #5 HOOPS
3. #5 BARS WALL HORIZONTAL
4. #5 BARS WALL STIRRUP (SEE DETAIL)
5. 1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)

REBAR DETAILS

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

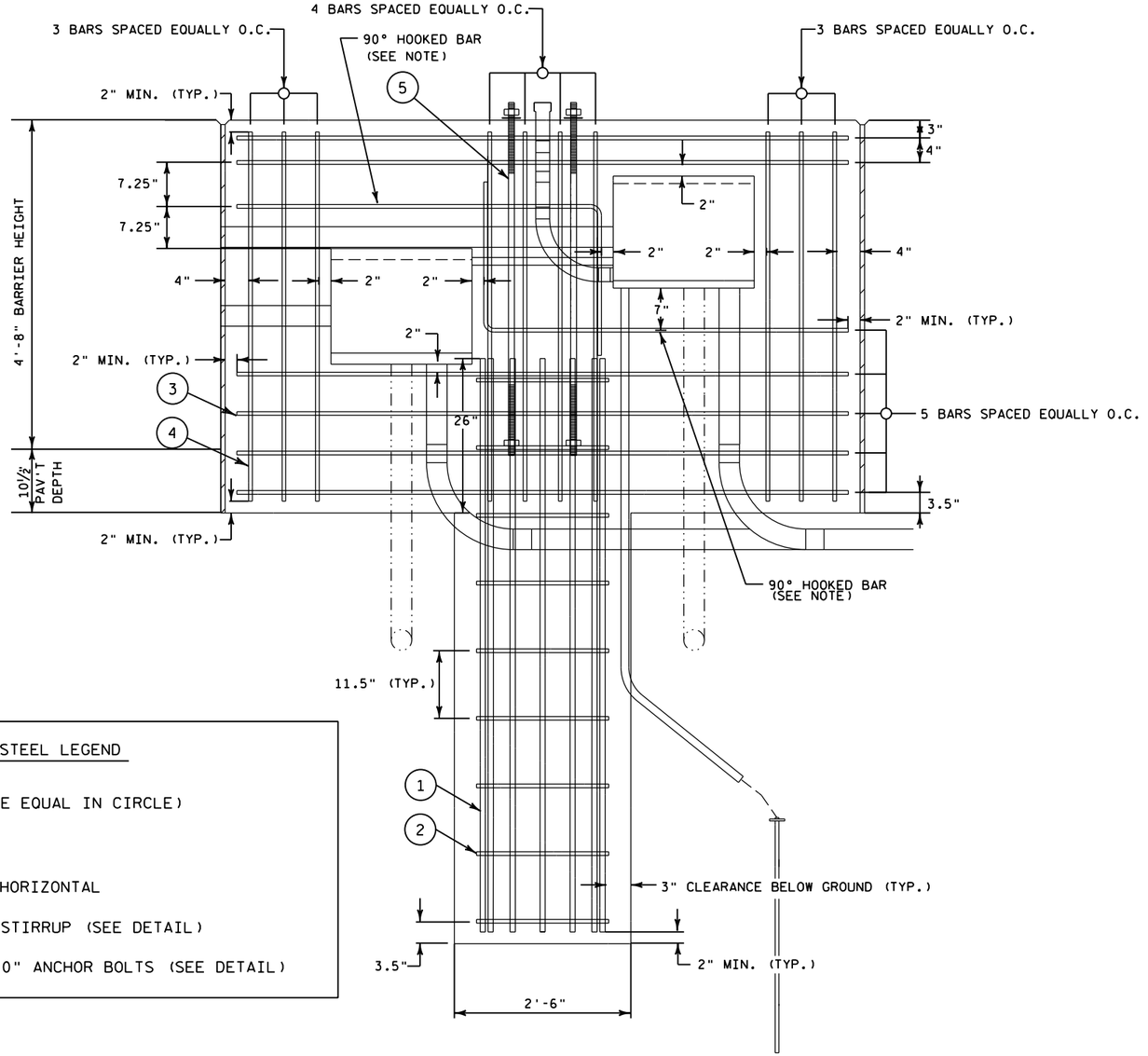
NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.

NOTE: ONE 90° BENT BAR SHALL BE STRAIGHT



SECTION B-B

BAR STEEL LEGEND	
1	#7 BARS (SPACE EQUAL IN CIRCLE)
2	#5 HOOPS
3	#5 BARS WALL HORIZONTAL
4	#5 BARS WALL STIRRUP (SEE DETAIL)
5	1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)



SECTION A-A

REBAR DETAILS

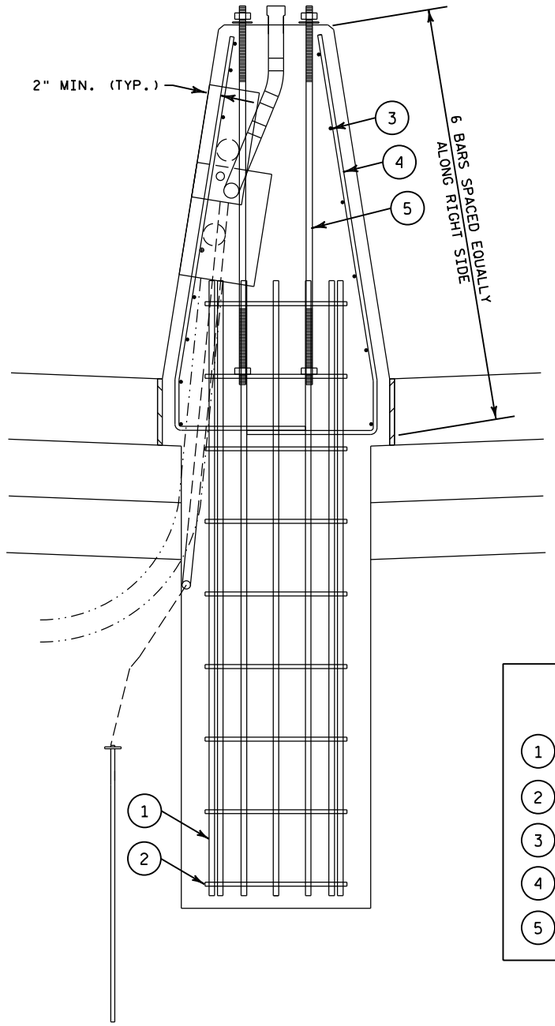
CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

SHEET 20 OF 25

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 245	E

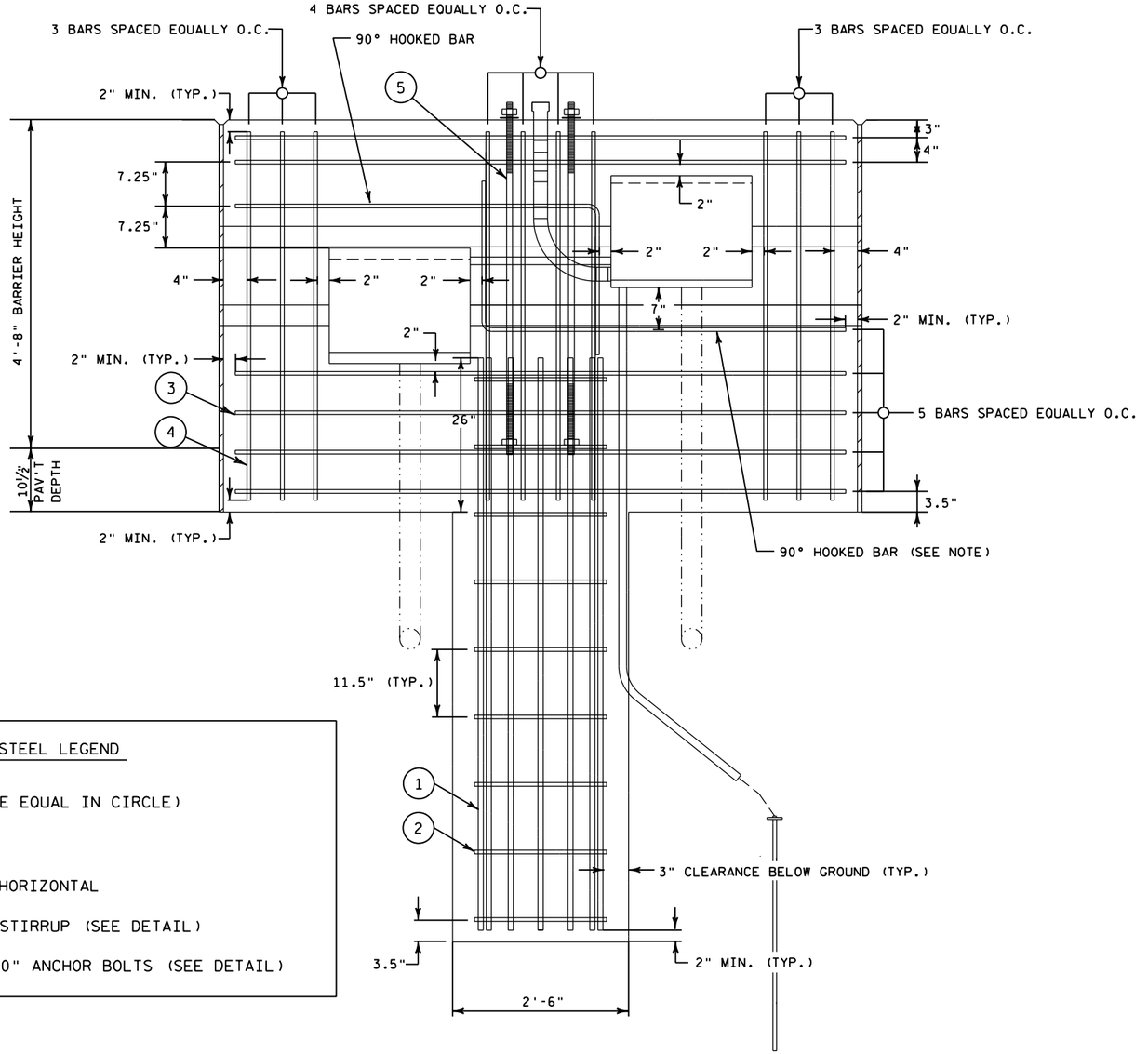
NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.

NOTE: ONE 90° BENT BAR SHALL BE STRAIGHT



SECTION B-B

BAR STEEL LEGEND	
1	#7 BARS (SPACE EQUAL IN CIRCLE)
2	#5 HOOPS
3	#5 BARS WALL HORIZONTAL
4	#5 BARS WALL STIRRUP (SEE DETAIL)
5	1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)



SECTION A-A

REBAR DETAILS

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

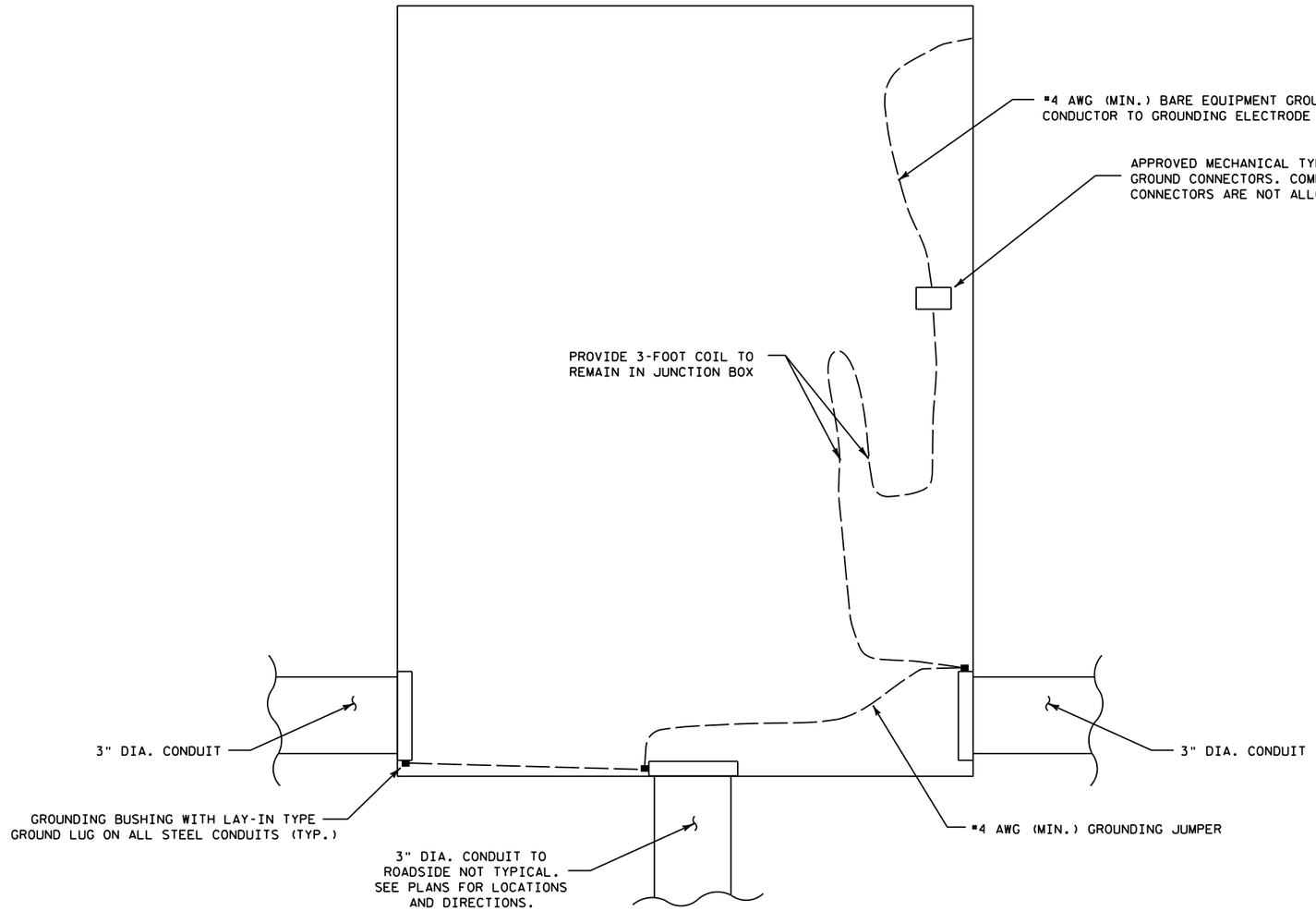
SHEET 21 OF 25

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 246	E

SEE SDD "FREEWAY LIGHTING UNIT POLE WIRING" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL

NOTE:

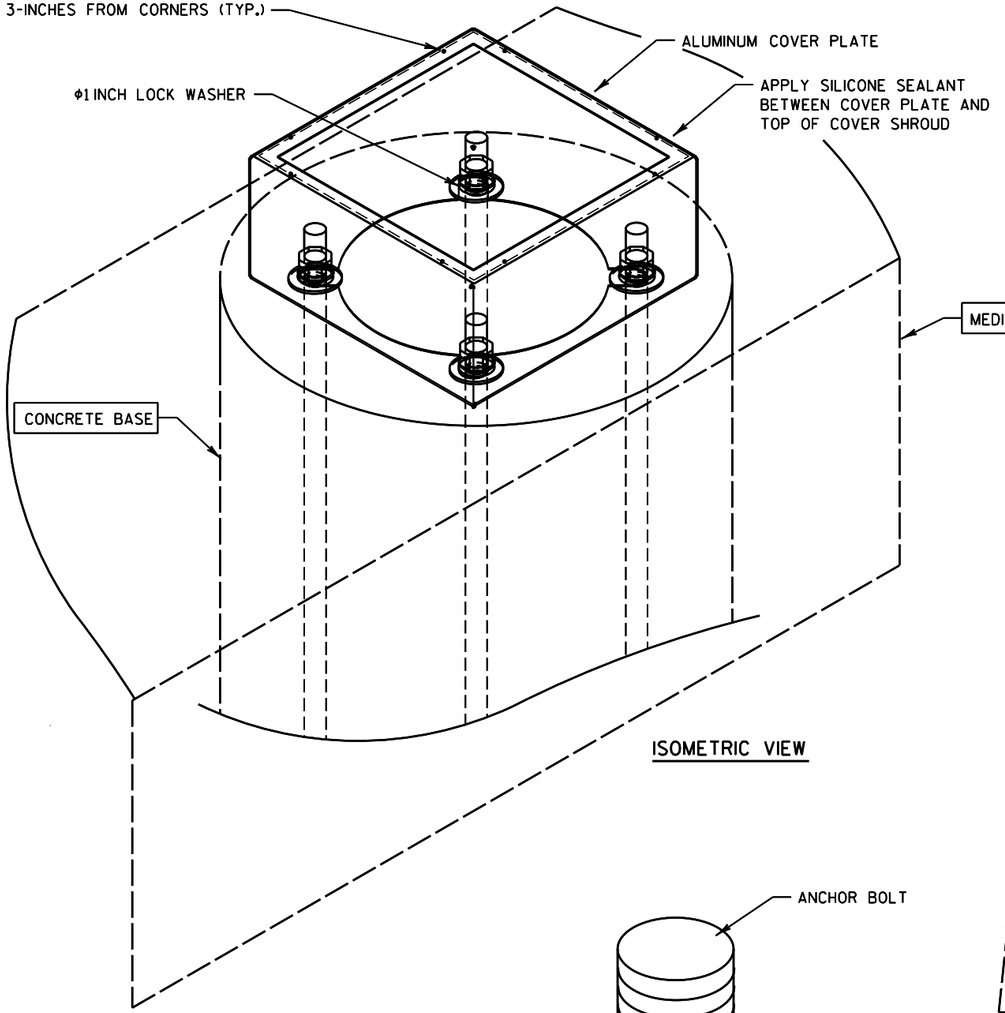
ALL EQUIPMENT SHOWN SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASE MEDIAN BARRIER (TYPE) BID ITEM.



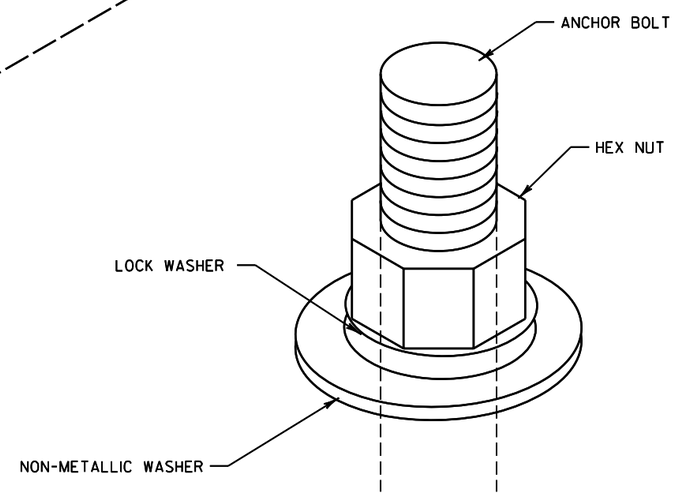
CONCRETE BASE MEDIAN BARRIER JUNCTION BOX WIRING DETAIL A

NO SCALE

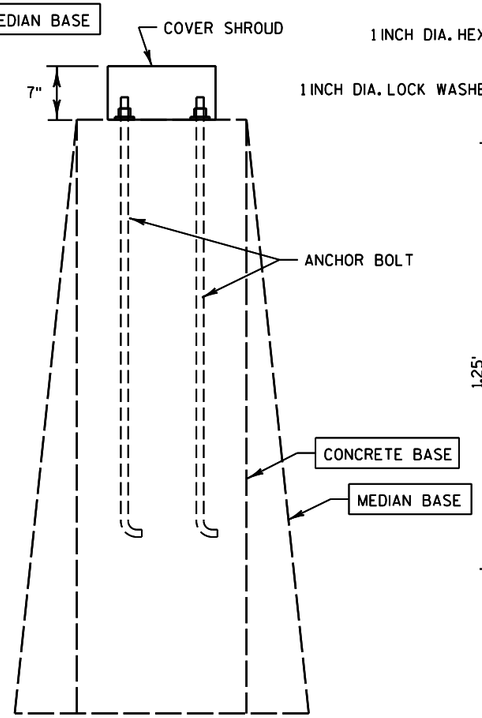
FUTURE CIRCUITS - CONDUCTORS NOT INSTALLED WITH PROJECT



ISOMETRIC VIEW



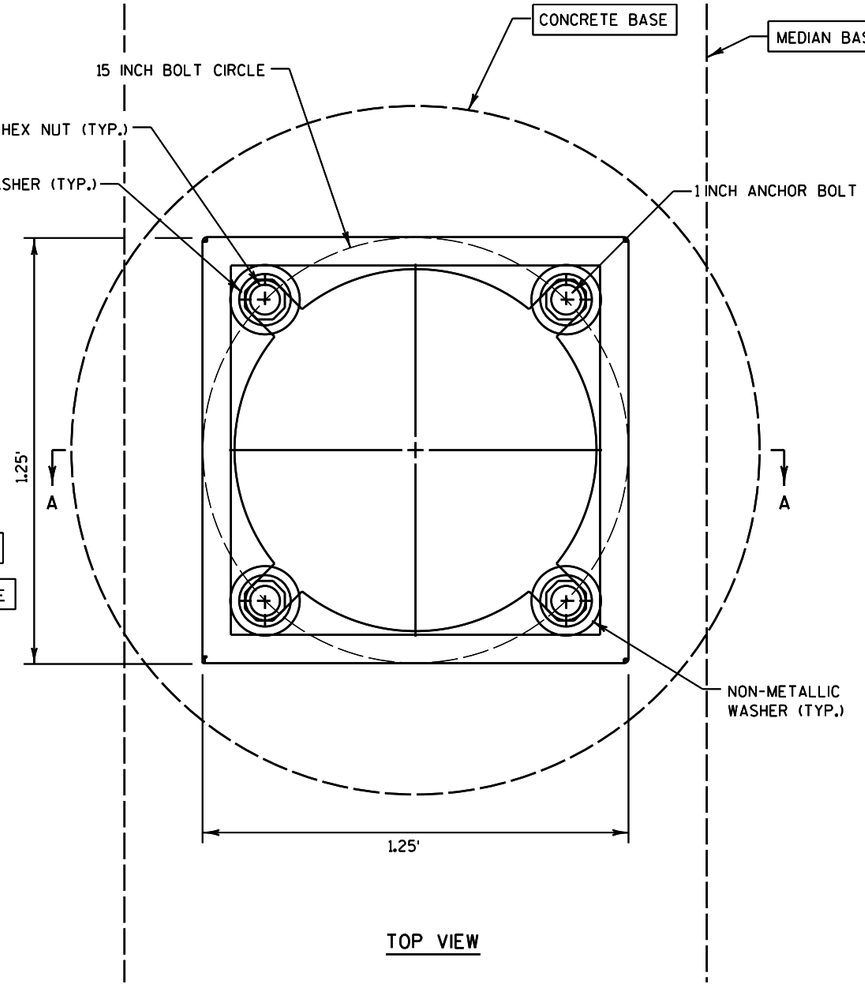
ANCHOR BOLT DETAIL



SECTION A-A

NOTE:

ANCHOR BOLTS/NUTS NOT INCLUDED WITH COVER SHROUD ITEM.



TOP VIEW

ANCHOR BOLT COVER SHROUD SPV.0060.353

NO SCALE

SHEET 23 OF 25

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING - CONSTRUCTION DETAILS	SHEET 248	E

2

2

R/W

W. DEERFIELD AVE

SIGN

OH

40+00 BP2

42+00 BP2

44+00 BP2

1220+00 SMC

1222+00 SMC

1224+00 SMC

1226+00 SIH

1224+00 SIH

1222+00 NMC

1224+00 NMC

1226+00 NMC

1228+00 NMC

1230+00 NMC

1232+00 NMC

1234+00 NMC

REFER TO PROJECT 1133-10-77 PLANS
FOR ADDITIONAL ELECTRICAL WORK

1228'NMC'+21 - 30.3'LT
MB2 - SL326

1231+19'NMC' - 30.3'LT
MB1 - SL327

1234+47'NMC' - 30.3'LT
MB1 - SL328

a1228+00 SMC

a1230+00 SMC

USH 41 SB

a1232+00 SMC

a1234+00 SMC

a1236+

MATCH LINE
STA. 1236+00 SMC

PROJECT 1133-10-71

USH 41 NB

SEE NOTE A

22+00 BP1

24+00 BP1

26+00 BP1

28+00 BP1

28+00 EDR

30+00 EDR

32+00 EDR

34+00 EDR

36+0

E. DEERFIELD AVE

R/W

N

NOTE A:
ROUTE CONDUIT AROUND SIGN FOOTING

SHEET 24 OF 25

USH 41 & IH 43 SYSTEM INTERCHANGE
NORTH LEG
EAST DEERFIELD DRIVE CUL DE SAC - 480V
VILLAGE OF HOWARD, BROWN COUNTY

LIGHTING NO. L05-0870

DESIGNER: KL ENGINEERING, INC.

DATE: 8-01-2014

SHEET 5 OF 8

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING PLANS	SHEET 249	E

FILE NAME : G:\WDOTNE\WNE30-0739\BROWN COUNTY - 02\1133-10-77 (USH 41 _IH 43_VELP)\DGN\PLAN SHEETS\023507_lp_71.dgn PLOT DATE : 7/30/2014 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

* REFER TO PROJECT ID 1133-10-77 PLANS
FOR ADDITIONAL ELECTRICAL WORK ON THIS SHEET

N

R/W

1241'NMC'+09 - 30.2'LT
MB1 - LB330

1244'NMC'+39 - 30.2'LT
MB1 - LB331

1239'NMC'+79 - 30.1'LT
MB1 - SL329

SEE NOTE B

W. DEERFIELD AVE

MATCH LINE
STA. 1236+00 SMC

a1238+00 SMC | a1240+00 SMC | a1242+00 SMC | a1244+00 SMC | USH 41 SB | a1246+00 SMC | a1248+00 SMC | a1250+00 SMC

1238+00 NMC | 1240+00 NMC | 1242+00 NMC | 1244+00 NMC | 1246+00 NMC | 1248+00 NMC | 1250+00 NMC

USH 41 NB

SEE NOTE A

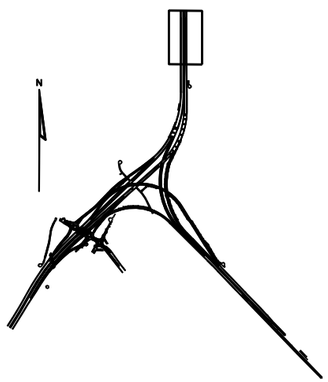
MATCH LINE
STA. 1250+50 SMC

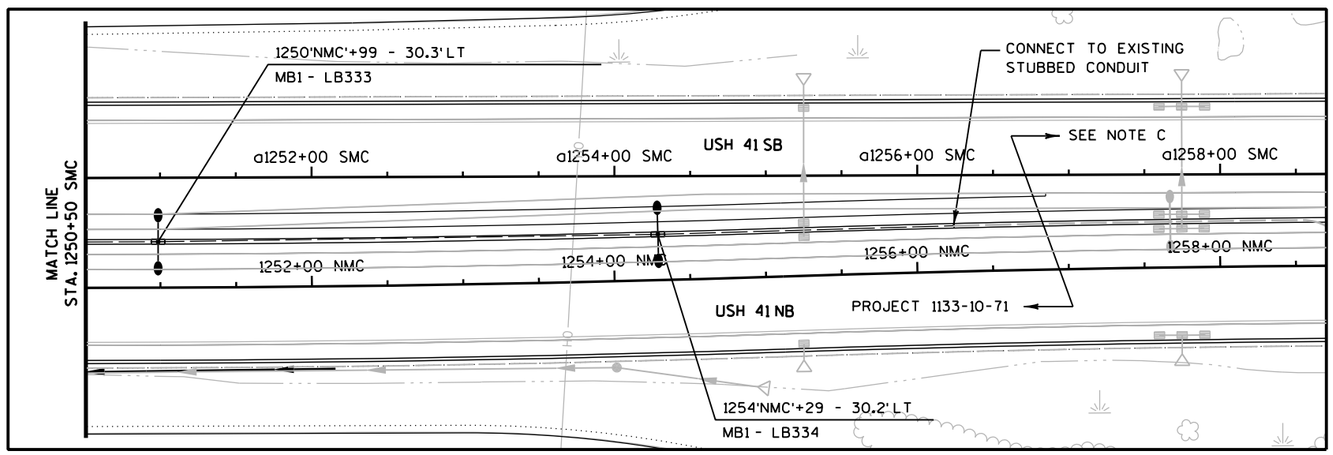
EDR

E. DEERFIELD AVE

R/W

1247'NMC'+69 - 30.2'LT
MB1 - LB332





NOTE A:
ROUTE CONDUIT AROUND SIGN FOOTING

NOTE B:
ROUTE CONDUIT AROUND BARRIER FOOTING

NOTE C:
REFER TO AS-BUILT PLANS FOR PROJECT 1133-10-81
FOR EXISTING CONDUIT & CONCRETE BASE LOCATIONS

SHEET 25 OF 25

USH 41 & IH 43 SYSTEM INTERCHANGE
NORTH LEG
EAST DEERFIELD DRIVE CUL DE SAC - 480V
VILLAGE OF HOWARD, BROWN COUNTY

LIGHTING NO. L05-0870

DESIGNER: KL ENGINEERING, INC.

DATE: 8-01-2014 | SHEET 6 OF 8

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	LIGHTING PLANS	SHEET 250 E

2

2

MATCH LINE 1167+50 VED

VELP AVE TO SB USH 41

1162+00 VED

+50 VED

1163+00 VED

1164+00 VED

1165+00 VED

1166+00 VED

1167+00 VED

1162+00 SMC

1163+00 SMC

1164+00 SMC

SB USH 41

1165+00 SMC

1166+00 SMC

1167+00 SMC

1162+00 NMC

1163+00 NMC

1164+00 NMC

NB USH 41

1165+00 NMC

1166+00 NMC

1167+00 NMC

MATCH LINE 1167+25 NMC

1162+00 IHA

1163+00 IHA

1164+00 IHA

1165+00 IHA

1166+00 IHA

1167+00 IH

+50 IHA

NB USH 41 TO SB IH 43

12'

12'

1162+00 VEA

1163+00 VEA

1164+00 VEA

1165+00 VEA

1166+00 VEA

NB USH 41 TO VELP AVE

MATCH LINE 1166+50 VEA

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
40. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024515_pm (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

1168+00 VED

1

+50 VED

1169+00 VED

1170+00 VED

N

VELP AVE

1168+00 SMC

1169+00 SMC

1170+00 SMC

SB USH 41

1171+00 SMC

1172+00 SMC

1173+00 SMC

MATCH LINE 1167+25 NMC

1168+00 NMC

1169+00 NMC

1170+00 NMC

NB USH 41

1171+00 NMC

1172+00 NMC

MATCH LINE 1173+00 NMC

1168+00 IHA

1169+00 IHA

1170+00 IHA

NB USH 41 TO SB IH 43

1171+00 IHA

1172+00 IHA

1

40

2

12'

12'

1168+00 VFA

LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 252	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024516_pm (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

MATCH LINE 1173+00 NMC

MATCH LINE 1179+00 NMC

1227+00 IHB
1226+00 IHB
1225+00 IHB
1224+00 IHB
1223+00 IHB

1174+00 SMC
1175+00 SMC
1176+00 SMC
1177+00 SMC
1178+00 SMC
1179+00 SMC

SB USH 41

VELP AVE

1174+00 NMC
1175+00 NMC
1176+00 NMC
1177+00 NMC
1178+00 NMC

NB USH 41

SIGN

1173+00 IHA
1174+00 IHA
1175+00 IHA
1176+00 IHA
1177+00 IHA
1178+00 IHA

1
40
2

12'
12'

NB USH 41 TO SB IH 43

LEGEND

1 PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

2 PAVEMENT MARKING EPOXY 4-INCH (WHITE)

40 PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

1178+00 VEA

VELP AVE

1176+00 VEB
1177+00 VEB
1178+00 VEB
+00 VEB

SIGN

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 253	E

2

2

MATCH LINE 1220+00 IHB

NB IH 43 TO SB USH 41

0 IHB

221+00 IHB

12

1180+00 SMC

1181+00 SMC

1182+00 SMC

1183+00 SMC

1184+00 SMC

1185+00 SMC

SB USH 41

LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

MATCH LINE 1179+00 NMC

0 NMC

1180+00 NMC

1181+00 NMC

1182+00 NMC

1183+00 NMC

1184+00 NMC

1185+0

NB USH 41

MATCH LINE 1185+00 NMC

1179+00 IHA

1180+00 IHA

1181+00 IHA

1182+00 IHA

1183+00 IHA

1184+00 IHA

1185+0

NB USH 41 TO SB IH 43

1180+00 VEB

1181+00 VEB

1182+00 VEB

1183+00 VEB

1184+00 VEB

VELP AVE TO NB USH 41

15'

12'

12'

40

1

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 254	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024518_pm (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1185+00 NMC

WISCONSIN CENTRAL LTD RR

18+00 RR

17+00 RR

16+00 RR

15+00 RR

1186+00 SMC

1187+00 SMC

1188+00 SMC

SB USH 41

1189+00 SMC

1190+00 SMC

1191+00 SMC

NB IH 43 TO SB USH 41

1211+00 IHB

1210+00 IHB

0 NMC

1186+00 NMC

1187+00 NMC

1188+00 NMC

1189+00 NMC

1190+00 NMC

1191+00 NMC

NB USH 41

0 VEB

1186+00 VEB

+29 VEB

1187+00 VEB

29

1188+00 VEB

1189+00 VEB

1190+00 VEB

1191+00 VEB

+00 VEB

15'

VELP AVE TO NB USH 41

1

2

LEGEND

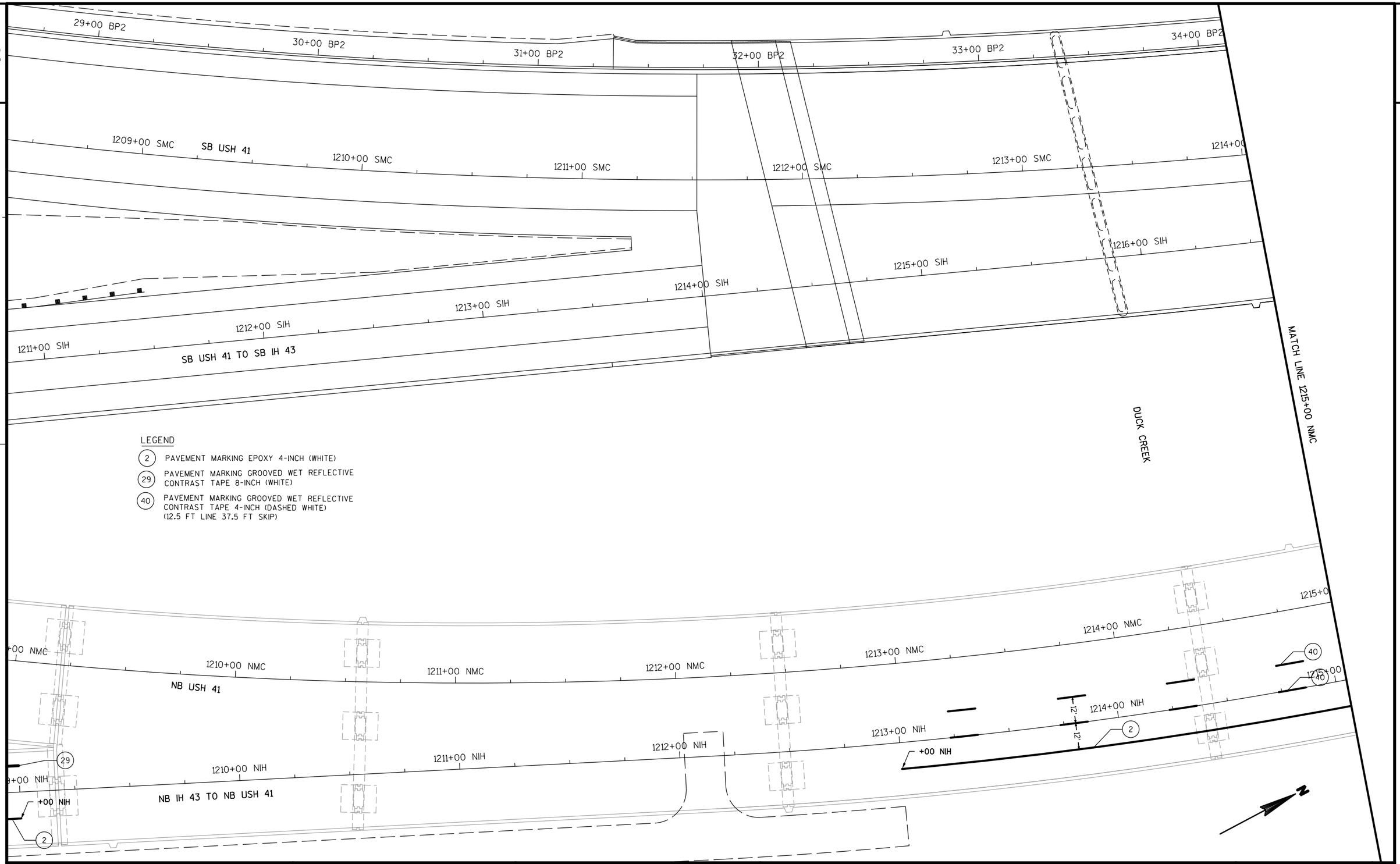
(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(29) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 255	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024523_pm (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

2

2

10+00 BP1

9+00 BP1

12+00 BP1

8+00 BP1

35+00 BP2

36+00 BP2

37+00 BP2

SIGN

38+00 BP2

39+00 BP2

SMC

1215+00 SMC

1216+00 SMC

1217+00 SMC

1218+00 SMC

1219+00 SMC

13+00 BP1

1217+00 SIH

SB USH 41

1218+00 SIH

1219+00 SIH

1220+00 SIH

1221+00 SIH

1222+00 SIH

MATCH LINE 1215+00 NMC

MATCH LINE 1221+00 NMC

DUCK CREEK

14+00 BP1

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

1221+0

1220+00 NMC

1219+00 NMC

1218+00 NMC

1217+00 NMC

1216+00 NMC

NB USH 41

15+00 BP1

1219+00 NIH

12'

12'

NIH

1218+00 NIH

1217+00 NIH

1216+00 NIH

40

2

20+00 BP1

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 257	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024524_pm (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

N

40+00 BP2

41+00 BP2

42+00 BP2

43+00 BP2

44+00 BP2

1220+00 SMC

1221+00 SMC

1222+00 SMC

1223+00 SMC

1224+00 SMC

1225+00 SMC

1226+00 SIH

1227+00 SIH

1223+00 SIH

1224+00 SIH

1225+00 SIH

SB USH 41

MATCH LINE 1221+00 NMC

MATCH LINE 1227+00 NMC

1222+00 NMC

1223+00 NMC

1224+00 NMC

1225+00 NMC

1226+00 NMC

12'

12'

12'

NB USH 41

40

40

2

+36 NMC

22+00 BP1

23+00 BP1

24+00 BP1

25+00 BP1

26+00 BP1

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 258	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024525_pm (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

00 SMC | a1228+00 SMC | a1229+00 SMC | a1230+00 SMC | a1231+00 SMC | a1232+00 SMC | a1233+

SB USH 41

MATCH LINE 1227+00 NMC

0 NMC | 1228+00 NMC | 1229+00 NMC | 1230+00 NMC | 1231+00 NMC | 1232+00 NMC | 1233+0

12' 12' 12'

NB USH 41

MATCH LINE 1232+00 NMC

40

2

28+00 EDR | 29+00 EDR | 30+00 EDR | 31+00 EDR | 32+00 EDR | 33+00

0 BP1 | a28+00 BP1

EAST DEERFIELD AVE

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 259	E

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

N

MATCH LINE 1232+00 NMC

)0 SMC a1234+00 SMC a1235+00 SMC a1236+00 SMC a1237+00 SMC a1238+00 SMC a1239+

SB USH 41

0 NMC 1234+00 NMC 1235+00 NMC 1236+00 NMC 1237+00 NMC 1238+00 NMC 1239+0

NB USH 41

12'

12'

12'

40

2

MATCH LINE 1239+00 NMC

EDR 34+00 EDR 35+00 EDR 36+00 EDR 37+00 EDR 38+00 EDR 39+0

EAST DEEFIELD AVE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 260	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024527_pm (USH 41).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

MATCH LINE 39+25 WDR

40+00 WDR

41+00 WDR

42+00 WDR

43+00 WDR

44+00 WDR

45+00 WDR

WEST DEERFIELD AVE

N

00 SMC

a1240+00 SMC

a1241+00 SMC

a1242+00 SMC

a1243+00 SMC

a1244+00 SMC

a1245+

SB USH 41

MATCH LINE 1239+00 NMC

0 NMC

1240+00 NMC

12'

12'

12'

12'

1241+00 NMC

1242+00 NMC

1243+00 NMC

1244+00 NMC

1245+0

NB USH 41

MATCH LINE 1245+00 NMC

40

2

0 EDR

40+00 EDR

41+00 EDR

42+00 EDR

43+00 EDR

44+00 EDR

45+0

EAST DEERFIELD AVE

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 261	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024528_pm (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

46+00 WDR | 47+00 WDR | 48+00 WDR | 49+00 WDR | 50+00 WDR | 51+00 WDR

WEST DEERFIELD AVE

SB USH 41

)0 SMC | a1246+00 SMC | a1247+00 SMC | a1248+00 SMC | a1249+00 SMC | a1250+00 SMC | a1251+00 SMC

MATCH LINE 1245+00 NMC

0 NMC | 1246+00 NMC | 1247+00 NMC | 1248+00 NMC | 1249+00 NMC | 1250+00 NMC | 1251+00 NMC

12' 12' 12'

40

2

+00 NMC

NB USH 41

) EDR | 46+00 EDR | 47+00 EDR | 48+00 EDR | 49+00 EDR | 50+00 EDR | 51+00 EDR

EAST DEERFIELD AVE

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - USH 41	SHEET 262	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024529_pm (USH 41).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

+00 SIH

1122+00 SIH

1123+00 SIH

1124+00 SIH

SB IH 43

1125+00 SIH

1126+00 SIH

1127+00 SIH

2

12'

12'

1122+00 NIH

1123+00 NIH

1124+00 NIH

1125+00 NIH

1126+00 NIH

1127+00 NIH

NB IH 43

MATCH LINE 1127+50 NIH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 263	E

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

N

(2)

SB IH 43

1128+00 SIH

1129+00 SIH

1130+00 SIH

1131+00 SIH

1132+00 SIH

1133+00 SIH

MATCH LINE 1127+50 NIH

1128+00 NIH

1129+00 NIH

1130+00 NIH

1131+00 NIH

1132+00 NIH

1133+00 NIH

NB IH 43

MATCH LINE 1133+50 NIH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 264	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024547_pm (IH 43).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

SIGN

+60 SIH

(2)

12'

12'

12'

1134+00 SIH

1135+00 SIH

1136+00 SIH

SB IH 43

1137+00 SIH

1138+00 SIH

1139+00 SIH

MATCH LINE 1133+50 NIH

1134+00 NIH

1135+00 NIH

1136+00 NIH

NB IH 43

1137+00 NIH

1138+00 NIH

1139+00 NIH

MATCH LINE 1139+50 NIH

SIGN

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024548_pm (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

N

2

12'

12'

12'

SB IH 43

1140+00 SIH

1141+00 SIH

1142+00 SIH

1143+00 SIH

1144+00 SIH

1145+00 SIH

MATCH LINE 1139+50 NIH

MATCH LINE 1145+50 NIH

1140+00 NIH

1141+00 NIH

1142+00 NIH

1143+00 NIH

1144+00 NIH

1145+00 NIH

NB IH 43

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024549_pm (IH 43).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

N

MATCH LINE 1145+50 NIH

1146+00 SIH

1147+00 SIH

1148+00 SIH

SB IH 43

1149+00 SIH

1150+00 SIH

1151+00 SIH

12'

12'

12'

MATCH LINE 1151+50 NIH

1146+00 NIH

1147+00 NIH

1148+00 NIH

1149+00 NIH

1150+00 NIH

1151+00 NIH

NB IH 43

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024550_pm (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

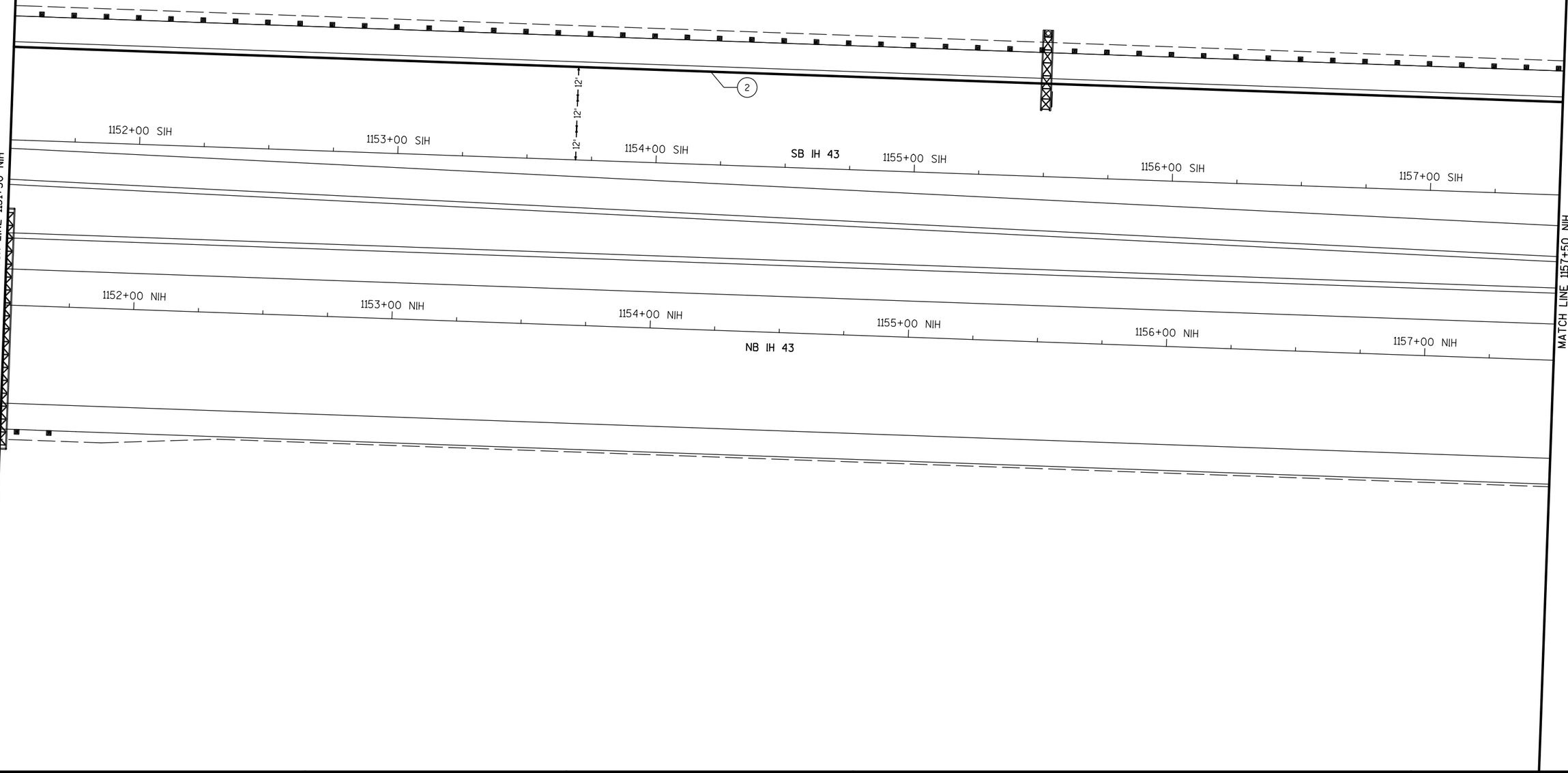
2

2

N

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 268	E

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

MILITARY AVE

N

MATCH LINE 1157+50 NIH

1158+00 SIH

1159+00 SIH

1160+00 SIH

12'

12'

SB IH 43

1161+00 SIH

1162+00 SIH

1163+00 SIH

+62.5 SIH

2

1158+00 NIH

1159+00 NIH

1160+00 NIH

1161+00 NIH

1162+00 NIH

1163+00 NIH

NB IH 43

MILITARY AVE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 269	E

2

2

N

1210+00

1209+00 IHA

1208+00 IHA

1207+00 IHA

1206+00 IHA

NB USH 41 TO SB IH 43

1205+00 IHA

IH

1182+00 SIH

SB IH 43

1183+00 SIH

1184+00 SIH

1185+00 SIH

1186+00 SIH

MATCH LINE 1187+25 SIH

1182+00 NIH

1183+00 NIH

NB IH 43

1

1184+00 NIH

40

+00 NIH

2

1185+00 NIH

12'

12'

1186+00 NIH

LEGEND

1 PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

2 PAVEMENT MARKING EPOXY 4-INCH (WHITE)

40 PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 270	E

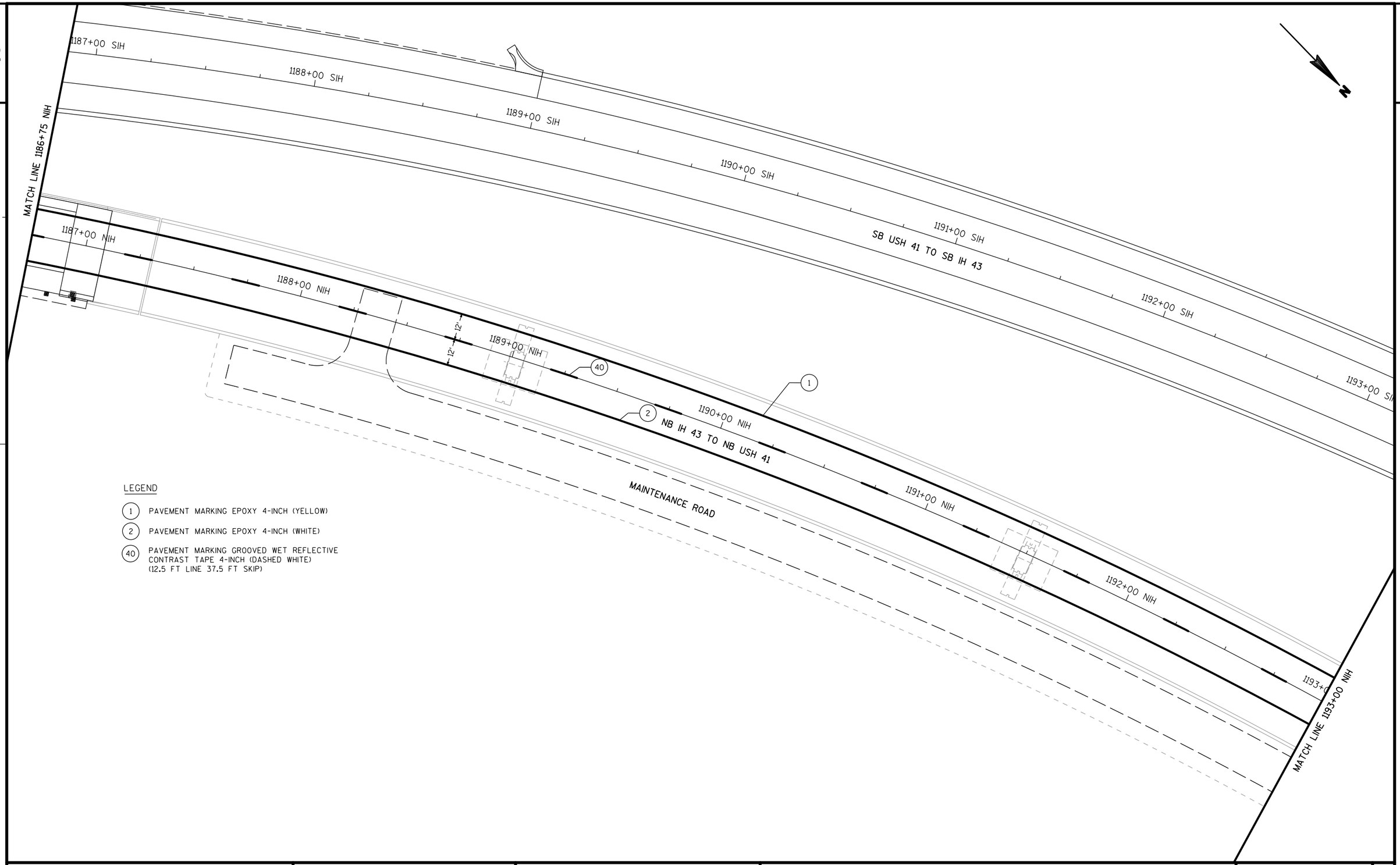
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024556_pm (IH 43).dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2



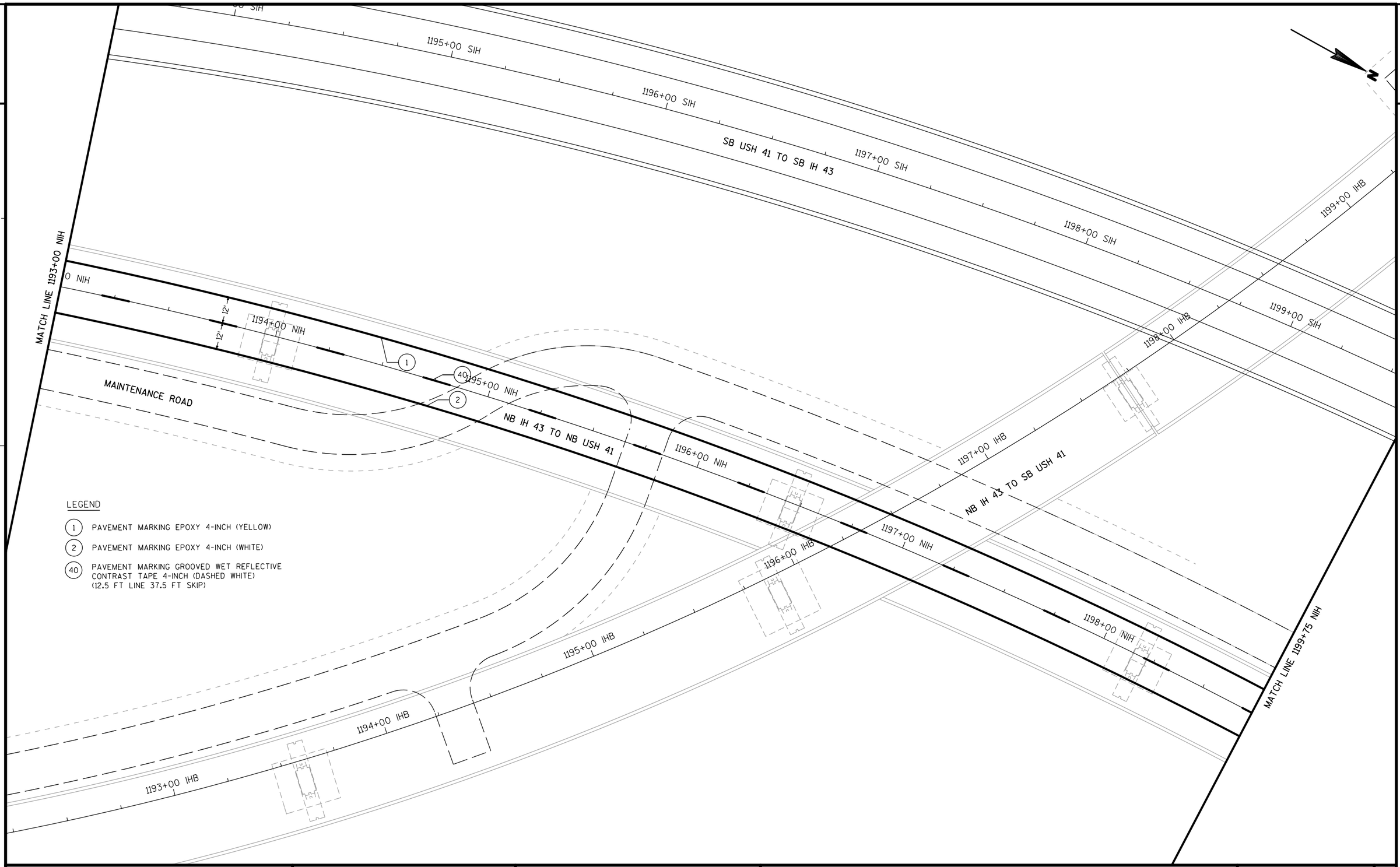
LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 271	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 272	E

2

2

SB USH 41 TO SB IH 43

1203+00 SIH

1204+00 SIH

1205+00 SIH

MATCH LINE 1199+75 NIH

1199+00 NIH

1200+00 NIH

40

NB IH 43 TO NB USH 41

2

1201+00 NIH

1

12'

12'

1202+00 NIH

1203+00 NIH

1204+00 NIH

1205+00 NIH

MATCH LINE 1205+00 NIH

LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 273	E

2

MATCH LINE 1205+00 NIH

1205+00 NIH

1206+00 NIH

1207+00 NIH

1208+00 NIH

+00 NIH

+66 NIH

NB IH 43 TO NB USH 41

1207+00 NMC

1208+00 NMC

1209+00 NMC

1210+00 NMC

NB USH 41

1209+00 SIH

1210+00 SIH

1211+00 SIH

1212+00 SIH

SB USH 41 TO SB IH 43

1208+00 VEC

1208+00 SMC

SB USH 41

1209+00 S

12'

12'

73

1

40

2

29

N

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
29. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
40. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
73. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5

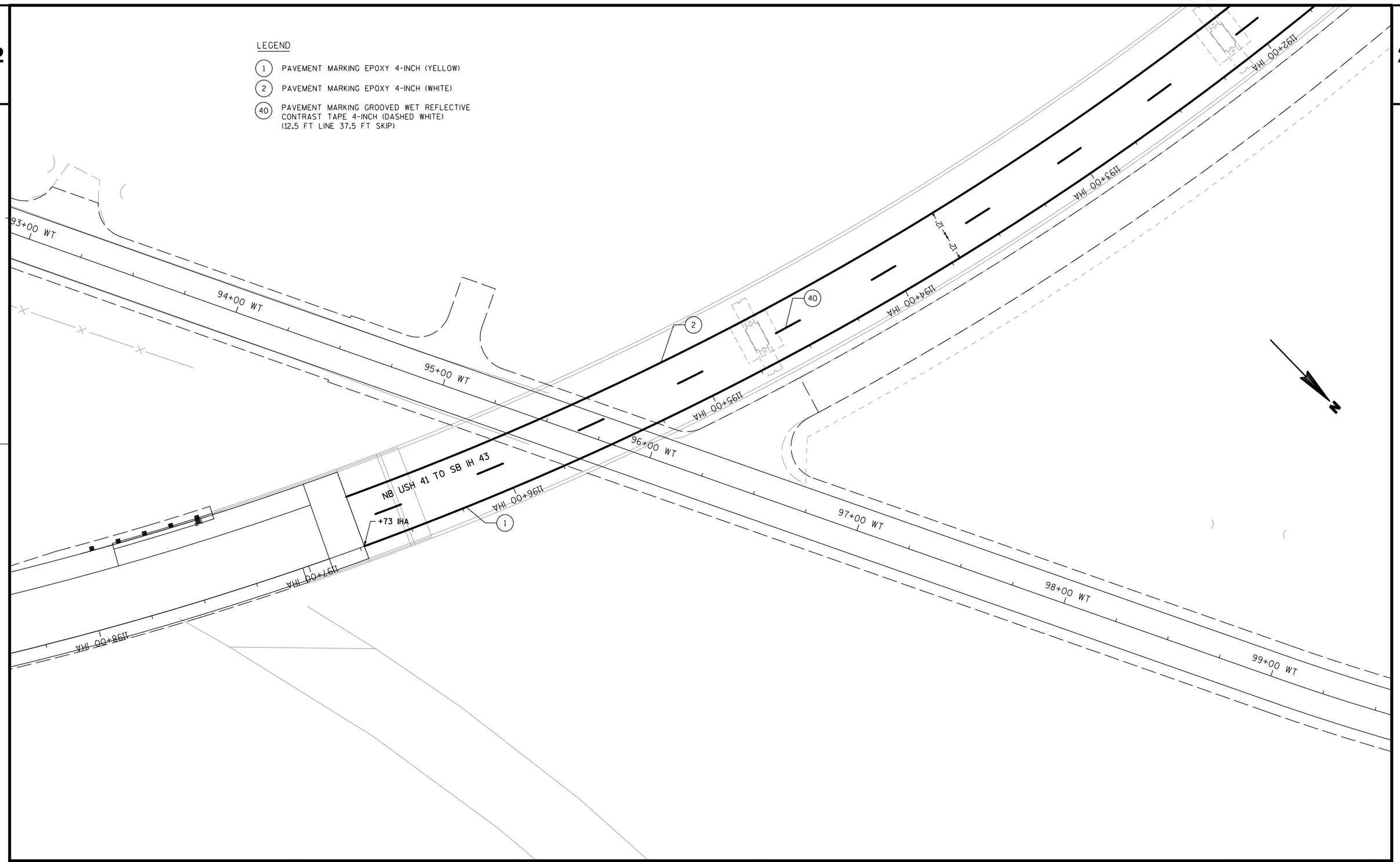
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 274	E

LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PAVEMENT MARKING - IH 43	SHEET 275	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024561_pm (IH 43).dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

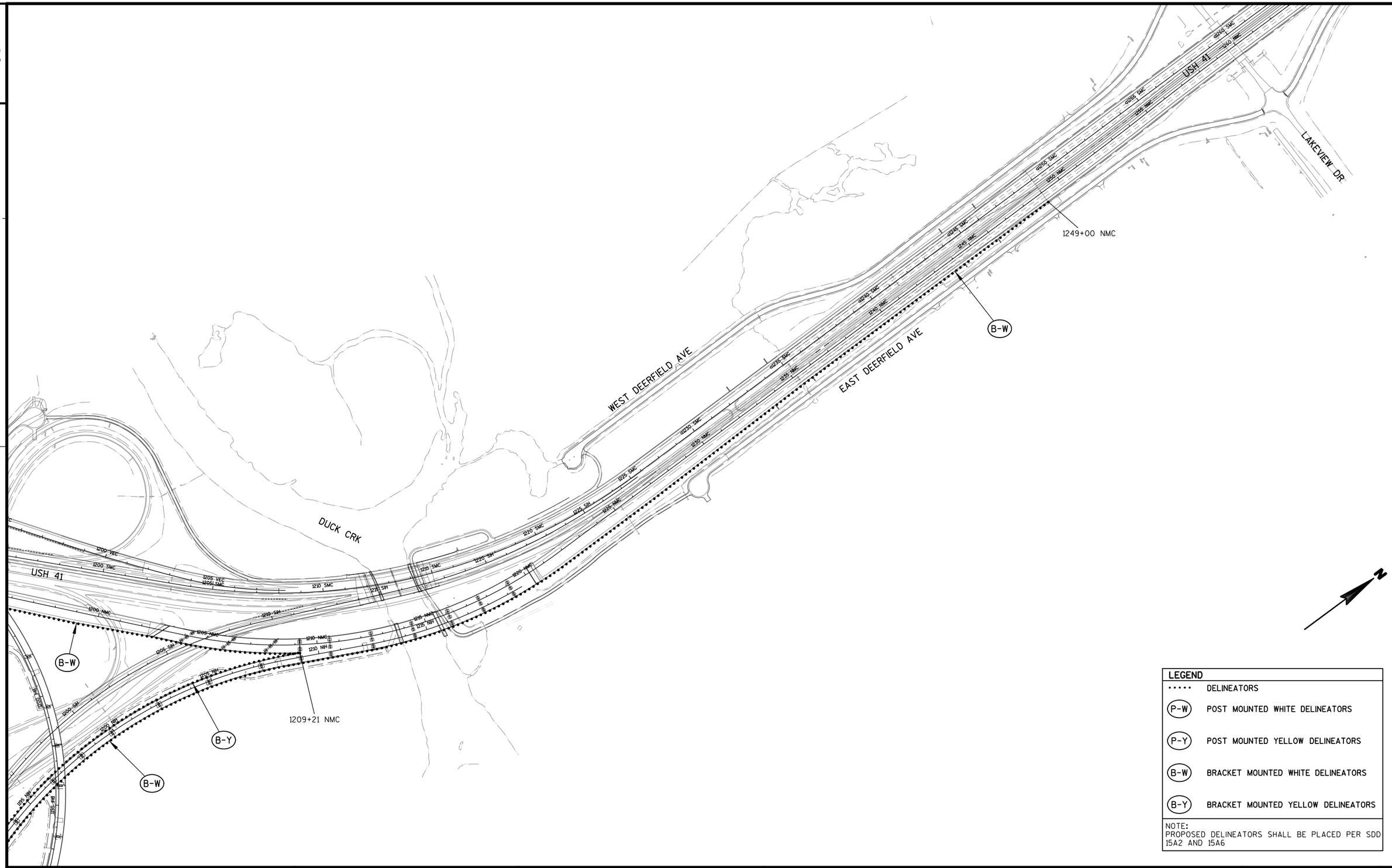
LEGEND	
·····	DELINEATORS
P-W	POST MOUNTED WHITE DELINEATORS
P-Y	POST MOUNTED YELLOW DELINEATORS
B-W	BRACKET MOUNTED WHITE DELINEATORS
B-Y	BRACKET MOUNTED YELLOW DELINEATORS

NOTE:
PROPOSED DELINEATORS SHALL BE PLACED PER SDD 15A2 AND 15A6

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT DELINEATORS	SHEET 276	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_024580_d1.dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:400
WISDOT/CADDS SHEET 42

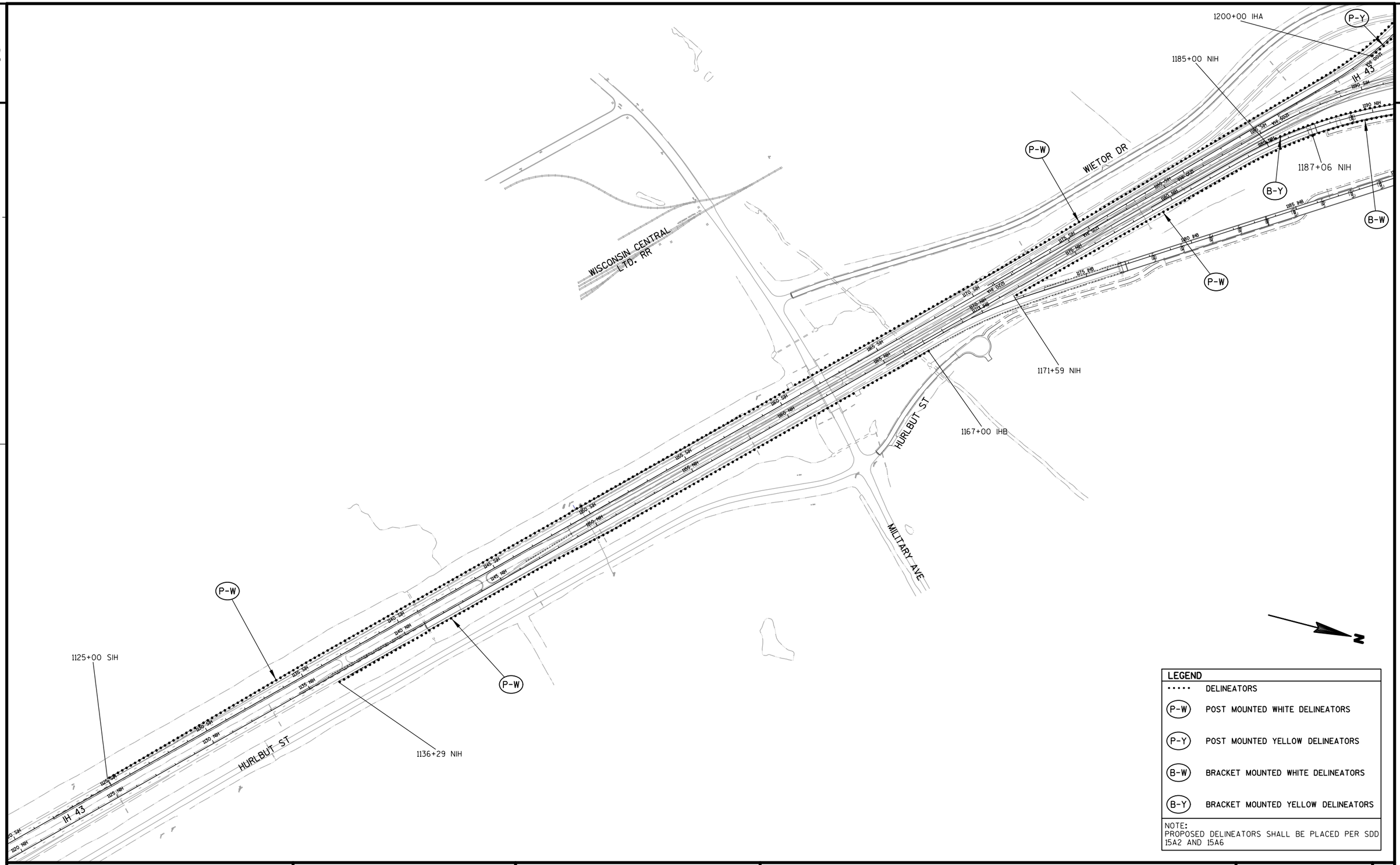
2



LEGEND	
·····	DELINEATORS
P-W	POST MOUNTED WHITE DELINEATORS
P-Y	POST MOUNTED YELLOW DELINEATORS
B-W	BRACKET MOUNTED WHITE DELINEATORS
B-Y	BRACKET MOUNTED YELLOW DELINEATORS

NOTE:
PROPOSED DELINEATORS SHALL BE PLACED PER SDD 15A2 AND 15A6

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT DELINEATORS	SHEET 277	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT DELINEATORS	SHEET 278	E

2

GENERAL NOTES

ALL SIGNS ARE 48" x 48", UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W", EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD LOCATIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

INDEX OF TRAFFIC CONTROL SHEETS

TRAFFIC CONTROL SEQUENCE AND NOTES
TRAFFIC CONTROL DETAILS
ADVANCED WARNING SIGNING
LEGEND FOR TRAFFIC CONTROL PLANS
STAGE 1 TRAFFIC CONTROL PLANS INCLUDING OVERVIEW & TYPICAL SECTIONS
STAGE 2 TRAFFIC CONTROL PLANS INCLUDING OVERVIEW & TYPICAL SECTIONS
STAGE 3 TRAFFIC CONTROL PLANS INCLUDING OVERVIEW & TYPICAL SECTIONS

TRAFFIC CONTROL SEQUENCE - STAGE 1

OVERVIEW

FOR USH 41, CONSTRUCT TEMPORARY PAVEMENT FOR SHIFT OF NB USH 41 TRAFFIC TO ALLOW FOR RECONSTRUCTION OF NB USH 41 IN STAGE 2. FOR IH 43, CONSTRUCT TEMPORARY PAVEMENT IN MEDIAN FOR SHIFT OF IH 43 TRAFFIC TO ALLOW FOR RECONSTRUCTION OF THE OUTSIDE PORTIONS OF NB IH 43 AND SB IH 43 IN STAGE 2. FOR VELP NB OFF-RAMP, CONSTRUCT THE PERMANENT ROADWAY. BEGIN CLOSURE OF THE NB USH 41 RAMP TO SB IH 43.

TRAFFIC:

USH 41:

MAINTAIN TWO-LANE THRU TRAFFIC ON NB USH 41, AND ON SB USH 41, ON THEIR EXISTING ROADWAYS, EXCEPT FOR INTERMITTENT PERMITTED OVERNIGHT SINGLE-LANE CLOSURES AS NEEDED FOR TEMPORARY CONSTRUCTION OPERATIONS, SUCH AS CBTP, TEMPORARY PAVING, TRAFFIC SHIFTS, ETC.

AT A MINIMUM, PROVIDE A PARALLEL LANE SEGMENT AT LEAST 400'-LONG DOWNSTREAM OF ON-RAMPS, AND UPSTREAM OF OFF-RAMPS.

AT THE BEGINNING OF STAGE 1, CLOSE A SINGLE LANE FOR NB USH 41 SOUTH OF VELP AVENUE OVERNIGHT TO TEMPORARILY PAVE THE MEDIAN SHOULDER. AFTERWARD, SHIFT NB USH 41 TRAFFIC 6' WEST, MAINTAINING 12'-WIDE LANES, BUT NARROWING THE OUTSIDE SHOULDER TO 1'.

FULLY CLOSE THE SB USH 41 ROADWAY AT THE VELP INTERCHANGE OVERNIGHT FOR ONE NIGHT TO CONSTRUCT STORM SEWER. DETOUR THE TRAFFIC ONTO THE SB VELP AVENUE RAMPS.

FOR NB USH 41, PROVIDE ROLLING CLOSURE TO INSTALL PARTIALLY COVERED PERMANENT SIGNS ON EXISTING SIGN STRUCTURE S-5-187.

FOR NB USH 41, PROVIDE ROLLING CLOSURE TO REMOVE SIGN STRUCTURE S-5-3.

IH 43 INTERCHANGE:

FOR EXISTING NB IH 43, CONTINUOUSLY CLOSE THE MEDIAN LANE, PROVIDING FOR THE LANE DROP JUST SOUTH OF MERGE POINT WITH THE ON-RAMP FROM ATKINSON DRIVE.

FOR NB IH 43, PROVIDE A PARALLEL LANE SEGMENT DOWNSTREAM OF THE MERGE WITH THE RAMP FROM ATKINSON DRIVE, AND UPSTREAM OF THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41.

FULLY CLOSE NB IH 43 OVERNIGHT FOR AS MANY AS TWO NIGHTS TO CONSTRUCT STORM SEWER - DETOUR ONTO ATKINSON DRIVE AND VELP AVENUE.

FOR NB IH 43, PROVIDE ROLLING CLOSURE TO REMOVE SIGN STRUCTURES S-5-27 AND S-5-28.

TRAFFIC CONTROL SEQUENCE - STAGE 1 (cont.)

DOWNSTREAM OF NB IH 43, KEEP THE RAMPS TO NB USH 41 AND TO SB USH 41 OPEN TO TRAFFIC ON THEIR EXISTING ROADWAYS.

DOWNSTREAM OF NB IH 43, CLOSE THE RAMP TO SB USH 41 OVERNIGHT TO REMOVE EXISTING BRIDGE B-5-133.

FOR EXISTING SB IH 43, CONTINUOUSLY CLOSE THE MEDIAN LANE THROUGH THE WORK ZONE. IMMEDIATELY SOUTH OF THE WORK ZONE, OPEN BOTH EXISTING LANES TO TRAFFIC.

UPSTREAM OF SB IH 43, CONTINUOUSLY CLOSE THE RAMP FROM NB USH 41, AND PROVIDE DETOUR SIGNING.

UPSTREAM OF SB IH 43, TRAFFIC FOR THE RAMP FROM SB USH 41 IS ON ITS EXISTING ROADWAY.

UPSTREAM OF SB IH 43, CLOSE THE RAMP FROM SB USH 41 OVERNIGHT TO REMOVE EXISTING BRIDGE B-5-133.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, RESTRICT THE LATERAL CLEARANCE TO 13', HAVING AN 11' LANE AND 1' SHOULDERS, AND PROVIDE ADVANCE SIGNING FOR THE WIDTH RESTRICTION. PROVIDE INTERMITTENT PERMITTED OVERNIGHT CLOSURE AS NEEDED FOR CBTP, AND TRAFFIC SHIFTS.

AT THE END OF STAGE 1, CLOSE THE NB OFF-RAMP OVERNIGHT TO PAVE THE CONNECTION BETWEEN THE NEW AND EXISTING RAMP, AND TO SHIFT TRAFFIC ONTO THE NEW RAMP.

FOR NB ON-RAMP AND SB OFF-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT.

FOR THE SB ON-RAMP, PROVIDE INTERMITTENT PERMITTED OVERNIGHT CLOSURE AS NEEDED FOR TEMPORARY PAVING, TRAFFIC SHIFTS, ETC. ALSO, CLOSE THE SB ON-RAMP OVERNIGHT FOR ONE NIGHT TO CONSTRUCT STORM SEWER.

FOR NB OFF-RAMP AND SB OFF-RAMP, CLOSE LEFT TURN LANES OVERNIGHT WHEN VELP AVENUE IS FULLY CLOSED UNDERNEATH USH 41.

VELP AVENUE:

MAINTAIN TWO-LANE THRU TRAFFIC ON EB VELP AVENUE, AND ON WB VELP AVENUE, EXCEPT FOR INTERMITTENT PERMITTED OVERNIGHT SINGLE-LANE CLOSURES AS NEEDED FOR TEMPORARY CONSTRUCTION OPERATIONS.

TO WIDEN EXISTING BRIDGE B-5-64, FULLY CLOSE EB AND WB VELP AVENUE OVERNIGHT FOR ACCESSING EQUIPMENT, AND FOR SUPERSTRUCTURE WORK.

CONTINUOUSLY CLOSE THE MAJORITY OF LENGTH OF LEFT TURN LANES FOR EB AND WB VELP AVENUE, FOR UP TO 14 DAYS, TO WIDEN EXISTING BRIDGE B-5-64.

VELP AVENUE SIDEWALKS:

CLOSE WB VELP AVENUE SIDEWALK OVERNIGHT TO WIDEN EXISTING BRIDGE B-5-64.

CONSTRUCTION:

USH 41:

CONSTRUCT PERMANENT OUTSIDE LANE AND SHOULDER FOR NB USH 41 FROM MEMORIAL DRIVE TO THE OFF-RAMP TO VELP AVENUE.

BEGIN GRADING FOR NB USH 41 FILL EMBANKMENT BETWEEN EXISTING BRIDGES B-5-677 AND B-5-681, INCLUDING ACROSS THE EXISTING VACATED NB USH 41 LOOP RAMP TO SB IH 43.

AT THE BEGINNING OF STAGE 1, PROVIDE TEMPORARY PAVING FOR THE MEDIAN SHOULDER ALONG NB USH 41 SOUTH OF VELP AVENUE.

IN THE MEDIAN SOUTH OF VELP AVENUE, CONSTRUCT TEMPORARY WIDENING ALONG SB USH 41, AND INSTALL TEMPORARY CROSSOVER JUST NORTH OF MEMORIAL DRIVE.

FOR SB USH 41, CONSTRUCT TEMPORARY WIDENING ALONG OUTSIDE SHOULDER JUST SOUTH OF VELP AVENUE.

RECONFIGURE EXISTING TEMPORARY MEDIAN CROSSOVER BETWEEN VELP AVENUE AND THE RAILROAD.

CONSTRUCT TEMPORARY PAVING ALONG NB USH 41 MEDIAN SHOULDER JUST NORTH OF WIETOR DRIVE.

IN THE MEDIAN NORTH OF DUCK CREEK, CONSTRUCT TEMPORARY WIDENING ALONG SB USH 41, AND INSTALL TEMPORARY CROSSOVER IMMEDIATELY NORTH OF THE CREEK.

NORTH OF DUCK CREEK, CONSTRUCT TEMPORARY PAVEMENT ALONG OUTSIDE SHOULDER FOR SB USH 41, AND FOR NB USH 41.

NOTE: CBTP = CONCRETE BARRIER TEMPORARY PRECAST

TRAFFIC CONTROL SEQUENCE - STAGE 1 (cont.)

PLACE CBTP, AND TEMPORARY MARKING AND SIGNING FOR THE TEMPORARY MEDIAN CROSSOVER, JUST NORTH OF THE STA 1249 PROJECT LIMIT.

IH 43 INTERCHANGE:

CONSTRUCT TEMPORARY PAVEMENT IN IH 43 MEDIAN FROM START OF RECONSTRUCTION AREA AT STA 1141 TO MILITARY AVENUE.

CONSTRUCT TEMPORARY WIDENING ALONG INSIDE OF NB IH 43 BETWEEN MILITARY AVENUE AND USH 41.

FOR NB IH 43 SOUTH OF THE START OF RECONSTRUCTION AT STA 1141, CONSTRUCT A TRANSITION FROM THE EXISTING NB IH 43 PAVEMENT TO THE TEMPORARY MEDIAN PAVEMENT.

FOR SB IH 43 FROM JUST NORTH OF ATKINSON DRIVE TO THE START OF RECONSTRUCTION AT STA 1141, REMOVE THE EXISTING MEDIAN SHOULDER STRIP WITH A MILL AND OVERLAY.

FOR SB IH 43 AT THE START OF RECONSTRUCTION AT STA 1141, CONSTRUCT A TRANSITION FROM THE SB IH 43 MEDIAN SHOULDER TO THE TEMPORARY MEDIAN PAVEMENT.

FOR NB USH 41 RAMP TO SB IH 43, BEGIN GRADING FOR FILL EMBANKMENT AT THE NORTH END OF EXISTING BRIDGE B-5-671, INCLUDING ACROSS THE VACATED EXISTING NB USH 41 RAMP TO SB IH 43.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, CONSTRUCT THE PERMANENT TRAFFIC LANE AND OUTSIDE SHOULDER, AND PROVIDE A TEMPORARY CONNECTION TO THE EXISTING RAMP JUST SOUTH OF THE RAMP TERMINAL.

FOR THE SB ON-RAMP, PROVIDE TEMPORARY PAVING ALONG BOTH SHOULDERS AT THE FREEWAY GORE AREA.

STRUCTURE CONSTRUCTION & REMOVAL:

WIDEN EXISTING BRIDGE B-564.

CONSTRUCT RETAINING WALL R-5-81ST1.

CONSTRUCT FOOTING ON OUTSIDE SHOULDER FOR SIGN STRUCTURE S-5-189ST1.

BEGIN CONSTRUCTION OF SIGN STRUCTURE S-5-191.

REMOVE EXISTING BRIDGE B-5-133.

REMOVE EXISTING SIGN STRUCTURES S-5-3, S-5-27, AND S-5-28.

TRAFFIC CONTROL SEQUENCE - STAGE 2

OVERVIEW

RECONSTRUCT NB USH 41. RECONSTRUCT OUTSIDE PORTIONS OF NB IH 43 AND SB IH 43. RECONSTRUCT NB USH 41 RAMP TO SB IH 43. RECONSTRUCT NB IH 43 RAMP TO SB USH 41 BETWEEN NB IH 43 AND EXISTING STRUCTURE B-5-678.

SUBSTAGE 2A (NB USH 41 RAMP TO SB IH 43 CLOSED):

TRAFFIC:

USH 41:

PROVIDE TWO-LANE THRU TRAFFIC FOR NB USH 41 AND FOR SB USH 41, EXCEPT FOR PERMITTED OVERNIGHT SINGLE-LANE CLOSURES FOR TEMPORARY CONSTRUCTION OPERATIONS.

SOUTH OF VELP AVENUE, PLACE TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THE TEMPORARILY-WIDENED EXISTING SB USH 41 ROADWAY, SEPARATED BY CBTP. SHIFT TRAFFIC FOR NB USH 41 ACROSS THE MEDIAN USING TEMPORARY CROSSOVERS JUST NORTH OF MEMORIAL DRIVE, AND JUST NORTH OF VELP AVENUE. FOR BOTH DIRECTIONS, PROVIDE LATERAL CLEARANCE OF 24', CONSISTING OF 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE SHOULDER ON EITHER SIDE.

BETWEEN VELP AVENUE AND DUCK CREEK, RUN TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THEIR RESPECTIVE EXISTING ROADWAYS, BUT SHIFT TRAFFIC FOR NB USH 41 ONTO THE MEDIAN SHOULDER. FOR NB USH 41, PROVIDE MIN. LATERAL CLEARANCE OF 24', CONSISTING OF 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE SHOULDER ON EITHER SIDE.

NORTH OF DUCK CREEK, PLACE TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THE TEMPORARILY-WIDENED EXISTING SB USH 41 ROADWAY, SEPARATED BY CBTP. SHIFT TRAFFIC FOR NB USH 41 ACROSS THE MEDIAN USING TEMPORARY CROSSOVERS JUST NORTH OF DUCK CREEK, AND JUST NORTH OF THE PROJECT LIMIT AT STA 1249. FOR BOTH DIRECTIONS, PROVIDE 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE INSIDE SHOULDER. FOR NB USH 41, THE LATERAL CLEARANCE IS 24', INCLUDING A 1'-WIDE OUTSIDE SHOULDER.

AT A MINIMUM, PROVIDE A PARALLEL LANE SEGMENT AT LEAST 400'-LONG DOWNSTREAM OF ON-RAMPS, AND UPSTREAM OF OFF-RAMPS.

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TRAFFIC CONTROL SEQUENCE - STAGE 2 (cont.)

NB USH 41 PROVIDES AN AUXILIARY LANE BETWEEN THE ON-RAMP FROM STH 29 AND THE OFF-RAMP TO VELP AVENUE. THE OFF-RAMP TO VELP AVENUE SPLITS AWAY FROM NB USH 41 AT MEMORIAL DRIVE. PROVIDE LATERAL CLEARANCE OF 18', CONSISTING OF A 12'-WIDE TRAFFIC LANE, A 4'-WIDE INSIDE SHOULDER, AND A 2'-WIDE OUTSIDE SHOULDER.

IH 43 INTERCHANGE

NB IH 43 IS OPEN TO ONE LANE FOR TRAFFIC ON TEMPORARY PAVEMENT IN THE MEDIAN, HAVING TRAFFIC SHIFTED OFF OF THE EXISTING ROADWAY IMMEDIATELY SOUTH OF THE RECONSTRUCTION LIMIT. TRAFFIC FOR NB IH 43 IS SEPARATED FROM TRAFFIC FOR SB IH 43 BY CBTP. PROVIDE A 1' INSIDE SHOULDER THROUGHOUT. FOR THE SECTION BETWEEN THE RECONSTRUCTION LIMIT AND THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41, PROVIDE LATERAL CLEARANCE OF 16' FOR NB IH 43, HAVING A 12'-WIDE TRAFFIC LANE, AND A 3'-WIDE OUTSIDE SHOULDER. PROVIDE FOR THE NB IH 43 LANE DROP JUST SOUTH OF THE MERGE POINT WITH THE ON-RAMP FROM ATKINSON DRIVE. PROVIDE ADVANCE SIGNING FOR VERTICAL CLEARANCE RESTRICTION OF 15'-3" UNDERNEATH THE MILITARY AVENUE BRIDGE.

FOR NB IH 43, PROVIDE A PARALLEL LANE SEGMENT DOWNSTREAM OF THE MERGE WITH THE RAMP FROM ATKINSON DRIVE, AND UPSTREAM OF THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41.

DOWNSTREAM OF NB IH 43, KEEP THE RAMPS TO NB USH 41 AND TO SB USH 41 OPEN TO TRAFFIC ON THEIR EXISTING ROADWAYS.

SB IH 43 IS OPEN TO ONE LANE FOR TRAFFIC ON TEMPORARY PAVEMENT IN THE MEDIAN THROUGHOUT THE RECONSTRUCTION LIMIT, HAVING TRAFFIC SEPARATED FROM NB IH 43 BY CBTP. PROVIDE A 1' INSIDE SHOULDER THROUGHOUT. FOR THE SECTION BETWEEN THE RECONSTRUCTION LIMIT AND THE SPLIT OF THE NB IH 43 RAMPS TO NB USH 41 AND SB USH 41, PROVIDE LATERAL CLEARANCE OF 16' FOR SB IH 43, HAVING A 12'-WIDE TRAFFIC LANE, AND A 3'-WIDE OUTSIDE SHOULDER. PROVIDE ADVANCE SIGNING FOR VERTICAL CLEARANCE RESTRICTION OF 15'-3" UNDERNEATH THE MILITARY AVENUE BRIDGE.

WHERE EXISTING SB IH 43 TRAFFIC LANES ARE TO BE MILLED AND OVERLAID, ONE-LANE SB IH 43 TRAFFIC IS LOCATED PARTLY ON THE MEDIAN SHOULDER. THE LANE IS 12'- WIDE, AND THE INSIDE SHOULDER IS 2'-WIDE. FOR THE OUTSIDE SHOULDER, PLACE TRAFFIC CONTROL DRUMS TO PROVIDE A MINIMUM WIDTH OF 1'. TRAFFIC FOR SB IH 43 TRANSITIONS FROM THE TEMPORARY PAVEMENT IN THE MEDIAN TO THE SB IH 43 MEDIAN SHOULDER AT THE NORTH END OF THE MILL AND OVERLAY SECTION. AT THE SOUTH END OF THE MILL AND OVERLAY SECTION, TRAFFIC FOR SB IH 43 TAPERS OVER FROM THE MEDIAN SHOULDER TO THE EXISTING MEDIAN LANE. SOUTH OF THE WORK ZONE, OPEN BOTH EXISTING SB IH 43 LANES TO TRAFFIC.

UPSTREAM OF SB IH 43, CONTINUE TO CLOSE THE RAMP FROM NB USH 41, AND PROVIDE DETOUR SIGNING.

UPSTREAM OF SB IH 43, TRAFFIC FOR THE RAMP FROM SB USH 41 IS SHIFTED ACROSS THE MEDIAN, TO TEMPORARY PAVEMENT ALONG THE LEFT SHOULDER OF THE NB IH 43 RAMP TO SB USH 41.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, TRAFFIC STRADDLES THE PERMANENT TRAFFIC LANE AND OUTSIDE SHOULDER, TYING INTO THE EXISTING RAMP JUST SOUTH OF THE RAMP TERMINAL. PROVIDE LATERAL CLEARANCE OF 17', CONSISTING OF A 12'-WIDE TRAFFIC LANE, A 1'-WIDE INSIDE SHOULDER, AND A 4'-WIDE OUTSIDE SHOULDER.

FOR NB ON-RAMP AND SB OFF-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT.

FOR SB ON-RAMP, AT THE BEGINNING OF SUBSTAGE 2A, PROVIDE OVERNIGHT CLOSURE AS NEEDED FOR CBTP, AND TRAFFIC SHIFT.

FOR SB ON-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT, TRANSITIONING TO TEMPORARY PAVEMENT AT THE FREEWAY GORE AREA.

FOR NB OFF-RAMP AND SB OFF-RAMP, CLOSE LEFT TURN LANES OVERNIGHT WHEN VELP AVENUE IS FULLY CLOSED UNDERNEATH USH 41.

VELP AVENUE:

MAINTAIN TWO-LANE THRU TRAFFIC ON EB VELP AVENUE, AND ON WB VELP AVENUE, EXCEPT FOR INTERMITTENT PERMITTED OVERNIGHT SINGLE-LANE CLOSURES AS NEEDED FOR TEMPORARY CONSTRUCTION OPERATIONS.

EARLY IN SUBSTAGE 2A, FULLY CLOSE EB AND WB VELP AVENUE OVERNIGHT TO REMOVE BRIDGE B-5-65.

LATE IN SUBSTAGE 2A, CONTINUOUSLY CLOSE THE EB VELP AVENUE OUTSIDE LANE FOR UP TO 21 DAYS TO CONSTRUCT ABUTMENT FOR BRIDGE B-5-669, AND RETAINING WALL R-5-235ST1. TEMPORARILY PROVIDE THRU/LT DESIGNATION FOR THE INSIDE LANE AT THE NB RAMP TERMINAL.

VELP AVENUE SIDEWALKS:

EARLY IN SUBSTAGE 2A, CLOSE WB VELP AVENUE SIDEWALK OVERNIGHT TO REMOVE BRIDGE B-5-65.

LATE IN SUBSTAGE 2A, CONTINUOUSLY CLOSE WB VELP AVENUE SIDEWALK FOR UP TO 21 DAYS TO CONSTRUCT ABUTMENT FOR BRIDGE B-5-669, AND RETAINING WALL R-5-235ST1.

TRAFFIC CONTROL SEQUENCE - STAGE 2 (cont.)

CONSTRUCTION:

USH 41:

FOR NB USH 41 SOUTH OF VELP AVENUE, BEGIN CONSTRUCTION OF A PORTION OF THE OUTSIDE LANES, AND THE ENTIRE OUTSIDE SHOULDER, FOR THE PERMANENT NB USH 41 ROADWAY. FROM STA 1138+00NMC TO STA 1143+50NMC, CONSTRUCT THE THREE OUTSIDE PERMANENT LANES. FROM STA 1143+50NMC TO VELP AVENUE, CONSTRUCT ALL PERMANENT LANES FOR NB USH 41, BUT NOT THE MEDIAN SHOULDER.

FOR NB USH 41 NORTH OF VELP AVENUE, BEGIN CONSTRUCTION OF THE ENTIRE PERMANENT NB USH 41 ROADWAY, INCLUDING ALL LANES, SHOULDERS, AND 56" CONCRETE MEDIAN BARRIER.

CONTINUE GRADING FOR NB USH 41 FILL EMBANKMENT BETWEEN EXISTING BRIDGES B-5-677 AND B-5-681, INCLUDING ACROSS THE EXISTING VACATED NB USH 41 LOOP RAMP TO SB IH 43.

FOR SB USH 41 FROM MEMORIAL DRIVE TO THE VELP AVENUE ON-RAMP, BEGIN CONSTRUCTION OF THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER FOR SB USH 41.

IH 43 INTERCHANGE:

FOR NB IH 43, BEGIN CONSTRUCTION OF THE PERMANENT ROADWAY FOR THE OUTSIDE SHOULDER, AND FOR VAR. ONE TO TWO OUTSIDE TRAFFIC LANES, EXTENDING TO EXISTING BRIDGE B-5-679.

FOR SB IH 43, BEGIN CONSTRUCTION OF THE PERMANENT ROADWAY FOR THE OUTSIDE SHOULDER, AND FOR VAR. ONE TO TWO OUTSIDE TRAFFIC LANES, EXTENDING TO THE NB USH 41 RAMP TO SB IH 43.

FOR SB IH 43 SOUTH OF THE RECONSTRUTION LIMIT, BEGIN TO MILL AND OVERLAY THE OUTSIDE LANE, AND TO CONSTRUCT A NEW PARALLEL LANE ON OUTSIDE, CONSISTING OF OVERLAID CONCRETE BASE.

BEGIN RECONSTRUCTION OF NB USH 41 RAMP TO SB IH 43. CONSTRUCT ENTIRE ROADWAY SOUTH OF EXISTING BRIDGE B-5-671, AND CONSTRUCT OUTSIDE LANE AND OUTSIDE SHOULDER NORTH OF B-5-671.

FOR NB USH 41 RAMP TO SB IH 43, CONTINUE GRADING FOR FILL EMBANKMENT AT THE NORTH END OF EXISTING BRIDGE B-5-671.

BEGIN CONSTRUCTION OF NB IH 43 RAMP TO SB USH 41 BETWEEN NB IH 43 AND EXISTING BRIDGE B-5-678.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, BEGIN CONSTRUCTING THE INSIDE SHOULDER.

FOR THE NB ON-RAMP, BEGIN CONSTRUCTING THE PORTION OF THE NEW RAMP OFF-ALIGNMENT.

FOR THE SB ON-RAMP, BEGIN CONSTRUCTING THE PERMANENT RAMP.

VELP AVENUE SIDEWALKS:

LATE IN SUBSTAGE 2A, REPAVE WB VELP AVENUE SIDEWALK, TO REPAIR DAMAGE CAUSED BY CONSTRUCTION OF ABUTMENT FOR BRIDGE B-5-669, AND RETAINING WALL R-5-235ST1.

STRUCTURE CONSTRUCTION & REMOVAL:

BEGIN CONSTRUCTION OF BRIDGES B-5-669, B-5-674, AND B-5-675.

BEGIN CONSTRUCTION OF RETAINING WALLS R-5-234ST1 AND R-5-235ST1.

BEGIN CONSTRUCTION OF FOOTING ON OUTSIDE SHOULDER FOR SIGN STRUCTURES S-5-194ST1, S-5-200ST1, S-5-201ST1, AND S-5-202ST1.

BEGIN CONSTRUCTION OF FOOTING ON MEDIAN SHOULDER FOR SIGN STRUCTURES S-5-193ST1 AND S-5-196ST1.

CONTINUE CONSTRUCTION OF SIGN STRUCTURE S-5-191.

BEGIN CONSTRUCTION OF SIGN STRUCTURES S-5-195 AND S-5-234.

SALVAGE DMS STRUCTURE DMS-5-009.

REMOVE EXISTING BRIDGE B-5-65.

REMOVE THE EAST PORTION OF EXISTING BRIDGE B-5-67.

SUBSTAGE 2B (NB USH 41 RAMP TO SB IH 43 CLOSED & NB USH 41 ON-RAMP FROM VELP CLOSED):

TRAFFIC:

USH 41:

PROVIDE TWO-LANE THRU TRAFFIC FOR NB USH 41 AND FOR SB USH 41, EXCEPT FOR PERMITTED OVERNIGHT

TRAFFIC CONTROL SEQUENCE - STAGE 2 (cont.)

SINGLE-LANE CLOSURES FOR TEMPORARY CONSTRUCTION OPERATIONS.

SOUTH OF VELP AVENUE, PLACE TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THE TEMPORARILY-WIDENED EXISTING SB USH 41 ROADWAY, SEPARATED BY CBTP. SHIFT TRAFFIC FOR NB USH 41 ACROSS THE MEDIAN USING TEMPORARY CROSSOVERS JUST NORTH OF MEMORIAL DRIVE, AND JUST NORTH OF VELP AVENUE. FOR BOTH DIRECTIONS, PROVIDE LATERAL CLEARANCE OF 24', CONSISTING OF 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE SHOULDER ON EITHER SIDE.

BETWEEN VELP AVENUE AND DUCK CREEK, RUN TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THEIR RESPECTIVE EXISTING ROADWAYS, BUT SHIFT TRAFFIC FOR NB USH 41 ONTO THE MEDIAN SHOULDER. FOR NB USH 41, PROVIDE MIN. LATERAL CLEARANCE OF 24', CONSISTING OF 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE SHOULDER ON EITHER SIDE.

NORTH OF DUCK CREEK, PLACE TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THE TEMPORARILY-WIDENED EXISTING SB USH 41 ROADWAY, SEPARATED BY CBTP. SHIFT TRAFFIC FOR NB USH 41 ACROSS THE MEDIAN USING TEMPORARY CROSSOVERS JUST NORTH OF DUCK CREEK, AND JUST NORTH OF THE PROJECT LIMIT AT STA 1249. FOR BOTH DIRECTIONS, PROVIDE 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE INSIDE SHOULDER. FOR NB USH 41, THE LATERAL CLEARANCE IS 24', INCLUDING A 1'-WIDE OUTSIDE SHOULDER.

AT A MINIMUM, PROVIDE A PARALLEL LANE SEGMENT AT LEAST 400'-LONG DOWNSTREAM OF ON-RAMPS, AND UPSTREAM OF OFF-RAMPS.

NB USH 41 PROVIDES AN AUXILIARY LANE BETWEEN THE ON-RAMP FROM STH 29 AND THE OFF-RAMP TO VELP AVENUE. THE OFF-RAMP TO VELP AVENUE SPLITS AWAY FROM NB USH 41 AT MEMORIAL DRIVE. PROVIDE LATERAL CLEARANCE OF 18', CONSISTING OF A 12'-WIDE TRAFFIC LANE, A 4'-WIDE INSIDE SHOULDER, AND A 2'-WIDE OUTSIDE SHOULDER.

IH 43 INTERCHANGE:

NB IH 43 IS OPEN TO ONE LANE FOR TRAFFIC ON TEMPORARY PAVEMENT IN THE MEDIAN, HAVING TRAFFIC SHIFTED OFF OF THE EXISTING ROADWAY IMMEDIATELY SOUTH OF THE RECONSTRUCTION LIMIT. TRAFFIC FOR NB IH 43 IS SEPARATED FROM TRAFFIC FOR SB IH 43 BY CBTP. PROVIDE A 1' INSIDE SHOULDER THROUGHOUT. FOR THE SECTION BETWEEN THE RECONSTRUCTION LIMIT AND THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41, PROVIDE LATERAL CLEARANCE OF 16' FOR NB IH 43, HAVING A 12'-WIDE TRAFFIC LANE, AND A 3'-WIDE OUTSIDE SHOULDER. PROVIDE FOR THE NB IH 43 LANE DROP JUST SOUTH OF THE MERGE POINT WITH THE ON-RAMP FROM ATKINSON DRIVE. PROVIDE ADVANCE SIGNING FOR VERTICAL CLEARANCE RESTRICTION OF 15'-3" UNDERNEATH THE MILITARY AVENUE BRIDGE.

FOR NB IH 43, PROVIDE A PARALLEL LANE SEGMENT DOWNSTREAM OF THE MERGE WITH THE RAMP FROM ATKINSON DRIVE, AND UPSTREAM OF THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41.

DOWNSTREAM OF NB IH 43, KEEP THE RAMPS TO NB USH 41 AND TO SB USH 41 OPEN TO TRAFFIC ON THEIR EXISTING ROADWAYS.

SB IH 43 IS OPEN TO ONE LANE FOR TRAFFIC ON TEMPORARY PAVEMENT IN THE MEDIAN THROUGHOUT THE RECONSTRUCTION LIMIT, HAVING TRAFFIC SEPARATED FROM NB IH 43 BY CBTP. PROVIDE A 1' INSIDE SHOULDER THROUGHOUT. FOR THE SECTION BETWEEN THE RECONSTRUCTION LIMIT AND THE SPLIT OF THE NB IH 43 RAMPS TO NB USH 41 AND SB USH 41, PROVIDE LATERAL CLEARANCE OF 16' FOR SB IH 43, HAVING A 12'-WIDE TRAFFIC LANE, AND A 3'-WIDE OUTSIDE SHOULDER. PROVIDE ADVANCE SIGNING FOR VERTICAL CLEARANCE RESTRICTION OF 15'-3" UNDERNEATH THE MILITARY AVENUE BRIDGE.

WHERE EXISTING SB IH 43 TRAFFIC LANES ARE TO BE MILLED AND OVERLAID, ONE-LANE SB IH 43 TRAFFIC IS LOCATED PARTLY ON THE MEDIAN SHOULDER. THE LANE IS 12'- WIDE, AND THE INSIDE SHOULDER IS 2'-WIDE. FOR THE OUTSIDE SHOULDER, PLACE TRAFFIC CONTROL DRUMS TO PROVIDE A MINIMUM WIDTH OF 1'. TRAFFIC FOR SB IH 43 TRANSITIONS FROM THE TEMPORARY PAVEMENT IN THE MEDIAN TO THE SB IH 43 MEDIAN SHOULDER AT THE NORTH END OF THE MILL AND OVERLAY SECTION. AT THE SOUTH END OF THE MILL AND OVERLAY SECTION, TRAFFIC FOR SB IH 43 TAPERS OVER FROM THE MEDIAN SHOULDER TO THE EXISTING MEDIAN LANE. SOUTH OF THE WORK ZONE, OPEN BOTH EXISTING SB IH 43 LANES TO TRAFFIC.

FOR SB IH 43, PROVIDE ROLLING CLOSURE TO INSTALL FRAME AND SIGN BLANK FOR SIGN STRUCTURE S-5-195.

UPSTREAM OF SB IH 43, CONTINUE TO CLOSE THE RAMP FROM NB USH 41, AND PROVIDE DETOUR SIGNING.

UPSTREAM OF SB IH 43, TRAFFIC FOR THE RAMP FROM SB USH 41 IS SHIFTED ACROSS THE MEDIAN, TO TEMPORARY PAVEMENT ALONG THE LEFT SHOULDER OF THE NB IH 43 RAMP TO SB USH 41.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, TRAFFIC STRADDLES THE PERMANENT TRAFFIC LANE AND OUTSIDE SHOULDER, TYING INTO THE EXISTING RAMP JUST SOUTH OF THE RAMP TERMINAL. PROVIDE LATERAL CLEARANCE OF 17', CONSISTING OF A 12'-WIDE TRAFFIC LANE, A 1'-WIDE INSIDE SHOULDER, AND A 4'-WIDE OUTSIDE SHOULDER.

FOR NB OFF-RAMP, PROVIDE ROLLING CLOSURE TO INSTALL FRAME AND SIGN BLANKS FOR SIGN STRUCTURE S-5-191.

CLOSE NB ON-RAMP, AND PROVIDE DETOUR SIGNING.

NOTE: CBTP = CONCRETE BARRIER TEMPORARY PRECAST

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL STAGING SEQUENCE AND NOTES	SHEET 280	E

2

TRAFFIC CONTROL SEQUENCE - STAGE 2 (cont.)

FOR SB OFF-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT.

FOR SB ON-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT, TRANSITIONING TO TEMPORARY PAVEMENT AT THE FREEWAY GORE AREA.

FOR NB OFF-RAMP AND SB OFF-RAMP, CLOSE LEFT TURN LANES OVERNIGHT WHEN VELP AVENUE IS FULLY CLOSED UNDERNEATH USH 41.

VELP AVENUE:

MAINTAIN TWO-LANE THRU TRAFFIC ON EB VELP AVENUE, AND ON WB VELP AVENUE, EXCEPT FOR INTERMITTENT PERMITTED OVERNIGHT SINGLE-LANE CLOSURES AS NEEDED FOR TEMPORARY CONSTRUCTION OPERATIONS.

FULLY CLOSE EB AND WB VELP AVENUE OVERNIGHT TO SET GIRDERS FOR BRIDGE B-5-669.

VELP AVENUE SIDEWALKS:

CLOSE WB VELP AVENUE SIDEWALK OVERNIGHT TO SET GIRDERS FOR BRIDGE B-5-669.

CONSTRUCTION:

USH 41:

FOR NB USH 41 SOUTH OF VELP AVENUE, CONTINUE CONSTRUCTION OF A PORTION OF THE OUTSIDE LANES, AND THE ENTIRE OUTSIDE SHOULDER, FOR THE PERMANENT NB USH 41 ROADWAY. FROM STA 1138+00NMC TO STA 1143+50NMC, CONSTRUCT THE THREE OUTSIDE PERMANENT LANES. FROM STA 1143+50NMC TO VELP AVENUE, CONSTRUCT ALL PERMANENT LANES FOR NB USH 41, BUT NOT THE MEDIAN SHOULDER.

FOR NB USH 41 NORTH OF VELP AVENUE, CONTINUE CONSTRUCTION OF THE ENTIRE PERMANENT NB USH 41 ROADWAY, INCLUDING ALL LANES, SHOULDERS, AND 56" CONCRETE MEDIAN BARRIER.

FOR SB USH 41 FROM MEMORIAL DRIVE TO THE VELP AVENUE ON-RAMP, CONTINUE CONSTRUCTION OF THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER FOR SB USH 41.

IH 43 INTERCHANGE:

FOR NB IH 43, CONTINUE CONSTRUCTION OF THE PERMANENT ROADWAY FOR THE OUTSIDE SHOULDER, AND FOR VAR. ONE TO TWO OUTSIDE TRAFFIC LANES, EXTENDING TO EXISTING BRIDGE B-5-679.

FOR SB IH 43, COMPELETE CONSTRUCTION OF THE PERMANENT ROADWAY FOR THE OUTSIDE SHOULDER, AND FOR VAR. ONE TO TWO OUTSIDE TRAFFIC LANES, EXTENDING TO THE NB USH 41 RAMP TO SB IH 43.

FOR SB IH 43 SOUTH OF THE RECONSTRUCTION LIMIT, COMPLETE THE MILL AND OVERLAY OF THE OUTSIDE LANE, AND THE NEW PARALLEL LANE ON OUTSIDE, CONSISTING OF OVERLAID CONCRETE BASE.

COMPLETE RECONSTRUCTION OF NB USH 41 RAMP TO SB IH 43, INCLUDING THE ENTIRE ROADWAY SOUTH OF EXISTING BRIDGE B-5-671, AND THE OUTSIDE LANE AND OUTSIDE SHOULDER NORTH OF B-5-671.

CONTINUE CONSTRUCTION OF NB IH 43 RAMP TO SB USH 41 BETWEEN NB IH 43 AND EXISTING BRIDGE B-5-678.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, CONTINUE CONSTRUCTING THE INSIDE SHOULDER.

FOR THE NB ON-RAMP, CONSTRUCT THE PERMANENT RAMP.

FOR THE SB ON-RAMP, CONTINUE CONSTRUCTING THE PERMANENT RAMP.

STRUCTURE CONSTRUCTION & REMOVAL:

CONTINUE CONSTRUCTION OF BRIDGES B-5-669, B-5-674, AND B-5-675.

CONTINUE CONSTRUCTION OF RETAINING WALLS R-5-234ST1 AND R-5-235ST1.

BEGIN CONSTRUCTION OF RETAINING WALL R-5-82.

COMPLETE CONSTRUCTION OF SIGN STRUCTURES S-5-191 AND S-5-195.

CONTINUE CONSTRUCTION OF FOOTING ON OUTSIDE SHOULDER FOR SIGN STRUCTURES S-5-194ST1, S-5-200ST1, S-5-201ST1, AND S-5-202ST1.

CONTINUE CONSTRUCTION OF FOOTING ON MEDIAN SHOULDER FOR SIGN STRUCTURES S-5-193ST1 AND S-5-196ST1.

CONTINUE CONSTRUCTION OF SIGN STRUCTURE S-5-234.

NOTE: CBTP = CONCRETE BARRIER TEMPORARY PRECAST

TRAFFIC CONTROL SEQUENCE - STAGE 2 (cont.)

SUBSTAGE 2C (OPEN NB USH 41 RAMP TO SB IH 43 TO TRAFFIC. CONTINUE CLOSURE OF NB USH 41 ON-RAMP FROM VELP.):

TRAFFIC:

USH 41:

PROVIDE TWO-LANE THRU TRAFFIC FOR NB USH 41 AND FOR SB USH 41, EXCEPT FOR PERMITTED OVERNIGHT SINGLE-LANE CLOSURES FOR TEMPORARY CONSTRUCTION OPERATIONS, SUCH AS CBTP, TEMPORARY PAVING, TRAFFIC SHIFTS, ETC.

SOUTH OF VELP AVENUE, PLACE TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THE TEMPORARILY-WIDENED EXISTING SB USH 41 ROADWAY, SEPARATED BY CBTP. SHIFT TRAFFIC FOR NB USH 41 ACROSS THE MEDIAN USING TEMPORARY CROSSOVERS JUST NORTH OF MEMORIAL DRIVE, AND JUST NORTH OF VELP AVENUE. FOR BOTH DIRECTIONS, PROVIDE LATERAL CLEARANCE OF 24', CONSISTING OF 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE SHOULDER ON EITHER SIDE.

BETWEEN VELP AVENUE AND DUCK CREEK, RUN TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THEIR RESPECTIVE EXISTING ROADWAYS, BUT SHIFT TRAFFIC FOR NB USH 41 ONTO THE MEDIAN SHOULDER. FOR NB USH 41, PROVIDE MIN. LATERAL CLEARANCE OF 24', CONSISTING OF 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE SHOULDER ON EITHER SIDE.

NORTH OF DUCK CREEK, PLACE TRAFFIC FOR BOTH DIRECTIONS OF USH 41 ON THE TEMPORARILY-WIDENED EXISTING SB USH 41 ROADWAY, SEPARATED BY CBTP. SHIFT TRAFFIC FOR NB USH 41 ACROSS THE MEDIAN USING TEMPORARY CROSSOVERS JUST NORTH OF DUCK CREEK, AND JUST NORTH OF THE PROJECT LIMIT AT STA 1249. FOR BOTH DIRECTIONS, PROVIDE 11'-WIDE TRAFFIC LANES, AND A 1'-WIDE INSIDE SHOULDER. FOR NB USH 41, THE LATERAL CLEARANCE IS 24', INCLUDING A 1'-WIDE OUTSIDE SHOULDER.

AT A MINIMUM, PROVIDE A PARALLEL LANE SEGMENT AT LEAST 400'-LONG DOWNSTREAM OF ON-RAMPS, AND UPSTREAM OF OFF-RAMPS.

NB USH 41 PROVIDES AN AUXILIARY LANE BETWEEN THE ON-RAMP FROM STH 29 AND THE OFF-RAMP TO VELP AVENUE. THE OFF-RAMP TO VELP AVENUE SPLITS AWAY FROM NB USH 41 AT MEMORIAL DRIVE. PROVIDE LATERAL CLEARANCE OF 18', CONSISTING OF A 12'-WIDE TRAFFIC LANE, A 4'-WIDE INSIDE SHOULDER, AND A 2'-WIDE OUTSIDE SHOULDER.

FOR NB USH 41, PROVIDE ROLLING CLOSURE TO INSTALL CANTILEVER ELEMENT OF FRAME FOR SIGN STRUCTURE S-5-234.

AT THE END OF SUBSTAGE 2C, WHEN NB USH 41 IS ON THE NEW NB ROADWAY WHILE SB USH 41 TRAFFIC IS STILL ON THE EXISTING SB ROADWAY, ADJUST TEMPORARY MEDIAN CROSSOVERS TO ACCOMMODATE TRAFFIC FOR SB USH 41 DURING STAGE 3. REPAVE AND RECONFIGURE THE TEMPORARY MEDIAN CROSSOVER AT MEMORIAL DRIVE, AND ADJUST TRAFFIC CONTROL FEATURES FOR THE TEMPORARY MEDIAN CROSSOVER NORTH OF THE STA 1249 PROJECT LIMIT.

IH 43 INTERCHANGE:

NB IH 43 IS OPEN TO ONE LANE FOR TRAFFIC ON TEMPORARY PAVEMENT IN THE MEDIAN, HAVING TRAFFIC SHIFTED OFF OF THE EXISTING ROADWAY IMMEDIATELY SOUTH OF THE RECONSTRUCTION LIMIT. TRAFFIC FOR NB IH 43 IS SEPARATED FROM TRAFFIC FOR SB IH 43 BY CBTP. PROVIDE A 1' INSIDE SHOULDER THROUGHOUT. FOR THE SECTION BETWEEN THE RECONSTRUCTION LIMIT AND THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41, PROVIDE LATERAL CLEARANCE OF 16' FOR NB IH 43, HAVING A 12'-WIDE TRAFFIC LANE, AND A 3'-WIDE OUTSIDE SHOULDER. PROVIDE FOR THE NB IH 43 LANE DROP JUST SOUTH OF THE MERGE POINT WITH THE ON-RAMP FROM ATKINSON DRIVE. PROVIDE ADVANCE SIGNING FOR VERTICAL CLEARANCE RESTRICTION OF 15'-3" UNDERNEATH THE MILITARY AVENUE BRIDGE.

FOR NB IH 43, PROVIDE A PARALLEL LANE SEGMENT DOWNSTREAM OF THE MERGE WITH THE RAMP FROM ATKINSON DRIVE, AND UPSTREAM OF THE SPLIT OF THE RAMPS TO NB USH 41 AND SB USH 41.

DOWNSTREAM OF NB IH 43, KEEP THE RAMPS TO NB USH 41 AND TO SB USH 41 OPEN TO TRAFFIC ON THEIR EXISTING ROADWAYS.

SB IH 43 IS OPEN TO ONE LANE FOR TRAFFIC ON TEMPORARY PAVEMENT IN THE MEDIAN THROUGHOUT THE RECONSTRUCTION LIMIT, HAVING TRAFFIC SEPARATED FROM NB IH 43 BY CBTP. PROVIDE A 1' INSIDE SHOULDER THROUGHOUT. FOR THE SECTION BETWEEN THE RECONSTRUCTION LIMIT AND THE SPLIT OF THE NB IH 43 RAMPS TO NB USH 41 AND SB USH 41, PROVIDE LATERAL CLEARANCE OF 16' FOR SB IH 43, HAVING A 12'-WIDE TRAFFIC LANE, AND A 3'-WIDE OUTSIDE SHOULDER. PROVIDE ADVANCE SIGNING FOR VERTICAL CLEARANCE RESTRICTION OF 15'-3" UNDERNEATH THE MILITARY AVENUE BRIDGE.

WHERE EXISTING SB IH 43 TRAFFIC LANES ARE TO BE MILLED AND OVERLAID, ONE-LANE SB IH 43 TRAFFIC IS LOCATED PARTLY ON THE MEDIAN SHOULDER. THE LANE IS 12'- WIDE, AND THE INSIDE SHOULDER IS 2'-WIDE. FOR THE OUTSIDE SHOULDER, PLACE TRAFFIC CONTROL DRUMS TO PROVIDE A MINIMUM WIDTH OF 1'. TRAFFIC FOR SB IH 43 TRANSITIONS FROM THE TEMPORARY PAVEMENT IN THE MEDIAN TO THE SB IH 43 MEDIAN SHOULDER AT THE NORTH END OF THE MILL AND OVERLAY SECTION. AT THE SOUTH END OF THE MILL AND OVERLAY SECTION, TRAFFIC FOR SB IH 43 TAPERS OVER FROM THE MEDIAN SHOULDER TO THE EXISTING MEDIAN LANE. SOUTH OF THE WORK ZONE, OPEN BOTH EXISTING SB IH 43 LANES TO TRAFFIC, MERGING SINGLE-LANE TRAFFIC FOR THE RAMP FROM SB USH 41 WITH SINGLE-LANE TRAFFIC FOR THE RAMP FROM NB USH 41.

TRAFFIC CONTROL SEQUENCE - STAGE 2 (cont.)

UPSTREAM OF SB IH 43, PROVIDE FOR SINGLE LANE TRAFFIC ON THE RAMP FROM NB USH 41. ON EXISTING BRIDGE B-5-671, AND SOUTH OF THE BRIDGE, TRAFFIC IS ON PERMANENT OUTSIDE LANE OF RECONSTRUCTED ROADWAY. BETWEEN BRIDGE B-5-671 AND MILITARY AVENUE, TRAFFIC STRADDLES THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER. SOUTH OF MILITARY AVENUE, TRAFFIC IS ON THE PERMANENT OUTSIDE LANE.

UPSTREAM OF SB IH 43, TRAFFIC FOR THE RAMP FROM SB USH 41 IS SHIFTED ACROSS THE MEDIAN, TO TEMPORARY PAVEMENT ALONG THE LEFT SHOULDER OF THE NB IH 43 RAMP TO SB USH 41.

VELP AVENUE RAMPS:

FOR NB OFF-RAMP, TRAFFIC STRADDLES THE PERMANENT TRAFFIC LANE AND OUTSIDE SHOULDER, TYING INTO THE EXISTING RAMP JUST SOUTH OF THE RAMP TERMINAL. PROVIDE LATERAL CLEARANCE OF 17', CONSISTING OF A 12'-WIDE TRAFFIC LANE, A 1'-WIDE INSIDE SHOULDER, AND A 4'-WIDE OUTSIDE SHOULDER.

CONTINUE TO CLOSE THE NB ON-RAMP, AND PROVIDE DETOUR SIGNING.

FOR SB OFF-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT.

FOR SB ON-RAMP, MAINTAIN TRAFFIC ON EXISTING RAMP PAVEMENT, TRANSITIONING TO TEMPORARY PAVEMENT AT THE FREEWAY GORE AREA.

AT THE END OF SUBSTAGE 2C, CLOSE THE SB ON-RAMP OVERNIGHT TO PAVE THE CONNECTION BETWEEN THE NEW AND EXISTING RAMP, AND TO SHIFT TRAFFIC ONTO THE NEW RAMP.

CONSTRUCTION:

USH 41:

FOR NB USH 41 SOUTH OF VELP AVENUE, COMPLETE CONSTRUCTION OF A PORTION OF THE OUTSIDE LANES, AND THE ENTIRE OUTSIDE SHOULDER, FOR THE PERMANENT NB USH 41 ROADWAY. FROM STA 1138+00NMC TO STA 1143+50NMC, CONSTRUCT THE THREE OUTSIDE PERMANENT LANES. FROM STA 1143+50NMC TO VELP AVENUE, CONSTRUCT ALL PERMANENT LANES FOR NB USH 41, BUT NOT THE MEDIAN SHOULDER.

FOR NB USH 41 NORTH OF VELP AVENUE, COMPLETE CONSTRUCTION OF THE ENTIRE PERMANENT NB USH 41 ROADWAY, INCLUDING ALL LANES, SHOULDERS, AND 56" CONCRETE MEDIAN BARRIER.

FOR SB USH 41 FROM MEMORIAL DRIVE TO THE VELP AVENUE ON-RAMP, COMPLETE CONSTRUCTION OF THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER FOR SB USH 41.

AT THE END OF SUBSTAGE 2C, RECONFIGURE AND REPAVE THE TEMPORARY MEDIAN CROSSOVER AT MEMORIAL DRIVE.

AT THE END OF SUBSTAGE 2C, ADJUST TRAFFIC CONTROL FEATURES AT THE TEMPORARY MEDIAN CROSSOVER NORTH OF THE STA 1249 PROJECT LIMIT.

IH 43 INTERCHANGE:

FOR NB IH 43, COMPLETE CONSTRUCTION OF THE PERMANENT ROADWAY FOR THE OUTSIDE SHOULDER, AND FOR VAR. ONE TO TWO OUTSIDE TRAFFIC LANES, EXTENDING TO EXISTING BRIDGE B-5-679.

COMPLETE CONSTRUCTION OF NB IH 43 RAMP TO SB USH 41 BETWEEN NB IH 43 AND EXISTING BRIDGE B-5-678.

VELP AVENUE RAMPS:

FOR THE NB OFF-RAMP, FINISH CONSTRUCTING THE INSIDE SHOULDER.

FOR THE NB ON-RAMP, COMPLETE CONSTRUCTION OF THE PERMANENT RAMP, AND PROVIDE A TEMPORARY CONNECTION TO THE EXISTING RAMP JUST NORTH OF THE RAMP TERMINAL.

FOR THE SB ON-RAMP, COMPLETE CONSTRUCTION OF THE PERMANENT RAMP, AND PROVIDE A TEMPORARY CONNECTION TO THE EXISTING RAMP JUST SOUTH OF THE RAMP TERMINAL.

STRUCTURE CONSTRUCTION & REMOVAL:

COMPLETE CONSTRUCTION OF BRIDGES B-5-669, B-5-674, AND B-5-675.

COMPLETE CONSTRUCTION OF RETAINING WALLS R-5-234ST1 AND R-5-235ST1.

COMPLETE CONSTRUCTION OF RETAINING WALL R-5-82.

COMPLETE CONSTRUCTION OF FOOTING ON OUTSIDE SHOULDER FOR SIGN STRUCTURES S-5-194ST1, S-5-200ST1, S-5-201ST1, AND S-5-202ST1.

COMPLETE CONSTRUCTION OF FOOTING ON MEDIAN SHOULDER FOR SIGN STRUCTURES S-5-193ST1 AND S-5-196ST1.

COMPLETE CONSTRUCTION OF SIGN STRUCTURE S-5-234

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL STAGING SEQUENCE AND NOTES	SHEET 281	E

TRAFFIC CONTROL SEQUENCE - STAGE 3

OVERVIEW

MOVE TRAFFIC FOR NB USH 41 AND SB USH 41 ONTO RECONSTRUCTED NB USH 41 ROADWAY. MOVE TRAFFIC FOR THE NB IH 43 RAMP TO NB USH 41 ONTO RECONSTRUCTED ROADWAY. CLOSE SB USH 41 RAMP TO SB IH 43, AND NB IH 43 RAMP TO SB USH 41, AND SB USH 41 OFF-RAMP TO VELP. INSTALL SIGN STRUCTURE FOOTINGS IN MEDIAN OF USH 41, AND IN MEDIAN OF IH 43. REMOVE EXISTING SIGNS AND SIGN STRUCTURES ALONG VACATED ROADWAYS.

TRAFFIC:

USH 41:

NB USH 41 AND SB USH 41 ARE BOTH RUN ON THE NEWLY-CONSTRUCTED NB USH 41 ROADWAY, EACH OPEN TO TWO LANES, SEPARATED BY CBTP. NORTH OF DUCK CREEK, TRAFFIC FOR NB USH 41 IS RUN ON THE TWO PERMANENT 12'-WIDE OUTSIDE LANES. SB USH 41 TRAFFIC IS RUN ON TWO 11'-WIDE LANES. FOR THE SEGMENT SOUTH OF DUCK CREEK, FOR BOTH DIRECTIONS, ALL TRAFFIC LANES ARE 11'-WIDE. MEDIAN SHOULDER WIDTH THROUGHOUT FOR BOTH DIRECTIONS IS 2'. OUTSIDE SHOULDER WIDTH FOR BOTH DIRECTIONS IS 2' SOUTH OF VELP AVENUE, 6' BETWEEN VELP AVENUE AND DUCK CREEK, AND 10' MIN. NORTH OF DUCK CREEK. LATERAL CLEARANCE FOR BOTH DIRECTIONS IS 26' SOUTH OF VELP AVENUE, AND 30' BETWEEN VELP AVENUE AND DUCK CREEK.

SB USH 41 TRAFFIC TRANSITIONS BETWEEN RECONSTRUCTED NB USH 41 ROADWAY AND EXISTING SB USH 41 PAVEMENT VIA TEMPORARY MEDIAN CROSSOVER AT EITHER END OF THE PROJECT.

AT A MINIMUM, PROVIDE A PARALLEL LANE SEGMENT AT LEAST 400'-LONG DOWNSTREAM OF ON-RAMPS, AND UPSTREAM OF OFF-RAMPS.

NB USH 41 PROVIDES AN AUXILIARY LANE BETWEEN THE ON-RAMP FROM THE STH 29 INTERCHANGE, AND THE OFF-RAMP TO VELP AVENUE.

AT MEMORIAL DRIVE, SB USH 41 PICKS UP AN AUXILIARY LANE FROM THE VELP AVENUE ON-RAMP, IN ADVANCE OF THE OFF-RAMP TO STH 29.

IH 43 INTERCHANGE

ONE-LANE TRAFFIC FOR NB IH 43 IS MOVED TO PERMANENT OUTSIDE PORTION OF NEW NB IH 43. TRAFFIC STRADDLES THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER. THE LANE IS 12'-WIDE, THE INSIDE SHOULDER IS 1'-WIDE, AND THE OUTSIDE SHOULDER IS 5'-WIDE. PROVIDE FOR THE NB IH 43 LANE DROP JUST SOUTH OF THE MERGE POINT WITH THE ON-RAMP FROM ATKINSON DRIVE.

FOR NB IH 43, PROVIDE A PARALLEL LANE SEGMENT DOWNSTREAM OF THE MERGE WITH THE RAMP FROM ATKINSON DRIVE.

DOWNSTREAM OF NB IH 43, FOR THE RAMP TO NB USH 41, PROVIDE SINGLE LANE TRAFFIC ON PERMANENT OUTSIDE LANE OF RECONSTRUCTED ROADWAY.

DOWNSTREAM OF NB IH 43, CLOSE THE RAMP TO SB USH 41. DETOUR SIGNING WILL BE PROVIDED BY THE CONTRACTOR FOR ID 1133-10-77 - NOTIFY THAT CONTRACTOR TWO WEEKS IN ADVANCE OF THE CLOSURE OF THE RAMP.

ONE-LANE TRAFFIC FOR SB IH 43 IS MOVED TO PERMANENT OUTSIDE PORTION OF NEW SB IH 43. SOUTH OF MILITARY AVENUE, TRAFFIC IS ON THE PERMANENT OUTSIDE LANE, WITH A 1'-WIDE INSIDE SHOULDER. NORTH OF MILITARY AVENUE, TRAFFIC STRADDLES THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER, HAVING A 12'-WIDE LANE, A 1'-WIDE INSIDE SHOULDER, AND A 5'-WIDE OUTSIDE SHOULDER. SOUTH OF THE WORK ZONE, BOTH EXISTING SB IH 43 LANES ARE OPEN TO TRAFFIC.

UPSTREAM OF SB IH 43, FOR THE RAMP FROM NB USH 41, PROVIDE FOR SINGLE LANE TRAFFIC. ON AND SOUTH OF EXISTING BRIDGE B-5-671, TRAFFIC IS ON PERMANENT OUTSIDE LANE OF RECONSTRUCTED ROADWAY. NORTH OF B-5-671, TRAFFIC STRADDLES THE PERMANENT OUTSIDE LANE AND OUTSIDE SHOULDER, HAVING A 12'-WIDE LANE, A 1'-WIDE INSIDE SHOULDER, AND A 5'-WIDE OUTSIDE SHOULDER.

UPSTREAM OF SB IH 43, CLOSE THE RAMP FROM SB USH 41. DETOUR SIGNING WILL BE PROVIDED BY THE CONTRACTOR FOR ID 1133-10-77 - NOTIFY THAT CONTRACTOR TWO WEEKS IN ADVANCE OF THE CLOSURE OF THE RAMP.

VELP AVENUE RAMP

CLOSE SB OFF-RAMP. POWER WILL BE TURNED OFF FOR THE TRAFFIC SIGNAL AT THE RAMP TERMINAL. REMOVAL OF THE TRAFFIC SIGNAL, AND INSTALLATION OF DETOUR SIGNING, WILL BOTH BE PROVIDED BY THE CONTRACTOR FOR ID 1133-10-77. NOTIFY THE CONTRACTOR FOR ID 1133-10-77 TWO WEEKS IN ADVANCE OF THE CLOSURE OF THE RAMP.

MAINTAIN TRAFFIC ON RECONSTRUCTED NB OFF-RAMP AND NB ON-RAMP, BOTH RAMPS TYING INTO EXISTING PAVEMENT JUST OUTSIDE THE RAMP TERMINAL.

TRAFFIC CONTROL SEQUENCE - STAGE 3 CONT.

FOR SB ON-RAMP, MAINTAIN TRAFFIC ON PERMANENT PAVEMENT ALONG THE RAMP ITSELF, AND SOUTH OF THE RAMP ALONG THE OUTSIDE OF SB USH 41. PROVIDE AN INSIDE SHOULDER WIDTH OF 1' THROUGHOUT. FOR THE SEGMENT ALONG THE OUTSIDE OF SB USH 41, SOUTH OF THE PERMAMENT RAMP, PROVIDE A LATERAL CLEARANCE OF 18', WHICH INCLUDES A 12'-WIDE LANE, AND A 5'-WIDE OUTSIDE SHOULDER. AT THE NORTH END NEAR THE RAMP TERMINAL, TIE THE NEW PAVEMENT INTO THE EXISTING PAVEMENT.

CONSTRUCTION:

USH 41:

INSTALL SIGN STRUCTURE FOOTINGS IN THE MEDIAN SOUTH OF DUCK CREEK, AND ALONG THE SB USH 41 OUTSIDE SHOULDER NORTH OF DUCK CREEK. TO ACCOMMODATE MEDIAN FOOTINGS FOR SIGN STRUCTURES S-5-189ST1 AND S-5-194ST1, CONSTRUCT PERMANENT 56" CONCRETE BARRIER IN THE MEDIAN FROM STA 1144+50NMC TO STA 1145+25NMC LT.

REMOVE EXISTING SIGNS ALONG VACATED SB USH 41 ROADWAY.

IH 43 INTERCHANGE:

INSTALL SIGN STRUCTURE FOOTINGS IN THE MEDIAN.

REMOVE EXISTING SIGNS ALONG VACATED ROADWAYS.

STRUCTURE CONSTRUCTION & REMOVAL:

CONSTRUCT FOOTING ON OUTSIDE SHOULDER FOR SIGN STRUCTURES S-5-193ST1 AND S-5-196ST1.

CONSTRUCT FOOTING ON MEDIAN SHOULDER FOR SIGN STRUCTURES S-5-189ST1, S-5-194ST1, S-5-200ST1, S-5-201ST1, S-5-202ST1.

REMOVE EXISTING SIGN STRUCTURES S-5-2 AND S-5-29.

NOTE: CBTP = CONCRETE BARRIER TEMPORARY PRECAST

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL STAGING SEQUENCE AND NOTES	SHEET 282	E

REFERENCED STANDARD DETAIL DRAWINGS

15C2-a (C)	BARRICADES AND SIGNS FOR MAINLINE CLOSURES (DETAIL C)
15C2-b (D)	BARRICADES AND SIGNS FOR MAINLINE CLOSURES (DETAIL D)
15C2-b (E)	BARRICADES AND SIGNS FOR MAINLINE CLOSURES (DETAIL E)
15C3-3	BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES (DETAIL 3)
15C5	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C12	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D12	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D15	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H.
15D28	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D29	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D30	TRAFFIC CONTROL, SIDEWALK CLOSURE

REFERENCED SPECIAL TRAFFIC CONTROL DETAIL DRAWINGS

LC WOB	LANE CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER
SC WOB	SHOULDER CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER

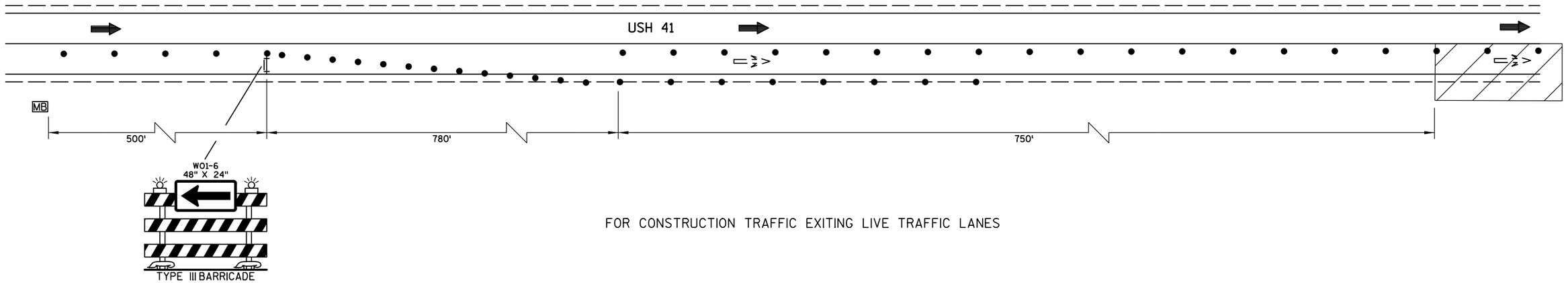
TEMPORARY PAVEMENT MARKING

T-4W	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
T-4Y	TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
T-8W	TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
T-LL	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
TE-4W	TEMPORARY PAVEMENT MARKING EPOXY 4-INCH (WHITE)
TE-4Y	TEMPORARY PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
TE-LL	TEMPORARY PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
TE-8W	TEMPORARY PAVEMENT MARKING EPOXY 8-INCH (WHITE)
TE ARROWS	TEMPORARY PAVEMENT MARKING EPOXY ARROWS (TYPES)
TE WORDS	TEMPORARY PAVEMENT MARKING EPOXY WORDS (WORDS)
RT-4W	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
RT-4Y	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
RT-LL	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE) (LANE LINE)
RT-8W	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
RT ARROWS	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE ARROWS (TYPES)
RT WORDS	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE WORDS (WORDS)
E-4W	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
E-4Y	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
E-LL	PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
E-8W	PAVEMENT MARKING EPOXY 8-INCH (WHITE)
REM	REMOVE CONFLICTING PAVEMENT MARKING

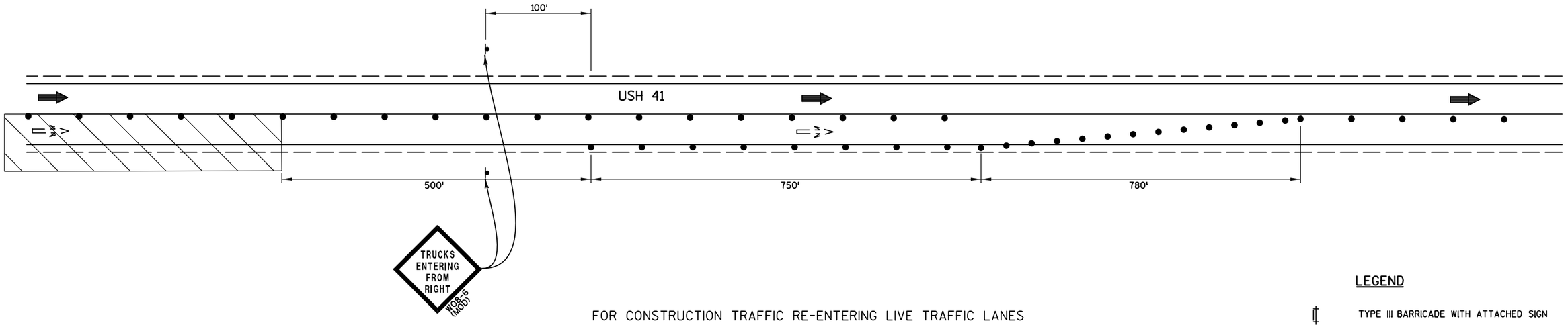
OTHER SYMBOLS

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- XXXXX SAWCUT
- BRIDGE UNDER CONSTRUCTION
- TRAFFIC CONTROL DRUMS LEFT IN PLACE BY OTHERS
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS
- CRASH CUSHION
- SPEED LIMIT 65 EXISTING SIGN
- EXISTING SIGN ON PERMANENT SUPPORT
- SPEED LIMIT 65 PROPOSED SIGN
- COVERING SIGNS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE I SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN
- MB PORTABLE CHANGABLE MESSAGE BOARD
- 16" X 16" ORANGE WARNING FLAGS

2



FOR CONSTRUCTION TRAFFIC EXITING LIVE TRAFFIC LANES



FOR CONSTRUCTION TRAFFIC RE-ENTERING LIVE TRAFFIC LANES

NOTE:
SPACING AND LOCATIONS OF DEVICES IN THE FIELD SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER

SEE OTHER TRAFFIC CONTROL DETAILS AND STANDARD DETAIL DRAWINGS FOR LANE CLOSURE DETAILS

PORTABLE MESSAGE SIGN MESSAGES SHOULD READ:

FRAME 1	FRAME 2
TRUCKS EXITING RIGHT	TRAFFIC STAY LEFT

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL SIGN
- USH 41 TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

TRAFFIC CONTROL DETAIL FOR CONSTRUCTION ACCESS AT LANE CLOSURES

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, 500 FEET DESIRABLE, DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REDUCED SPEED AHEAD AND SPEED LIMIT 55 SIGNS MUST BE POST MOUNTED.

SPEED LIMIT SIGNS SHALL ALSO BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND AT 0.5 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

THE LOCATION OF THE FIRST SIGN INDICATING THE 55 MPH REGULATORY SPEED LIMIT IS REFERENCED FROM BEGINNING OF LANE CLOSURE TAPER. THE 55 MPH REGULATORY SPEED LIMIT SIGN LOCATION MUST BE ADJUSTED WHEN CONSTRUCTION ACTIVITIES REQUIRE THE LANE CLOSURE START LOCATION TO CHANGE.

TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAYED DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 CONTINUOUS DAYS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

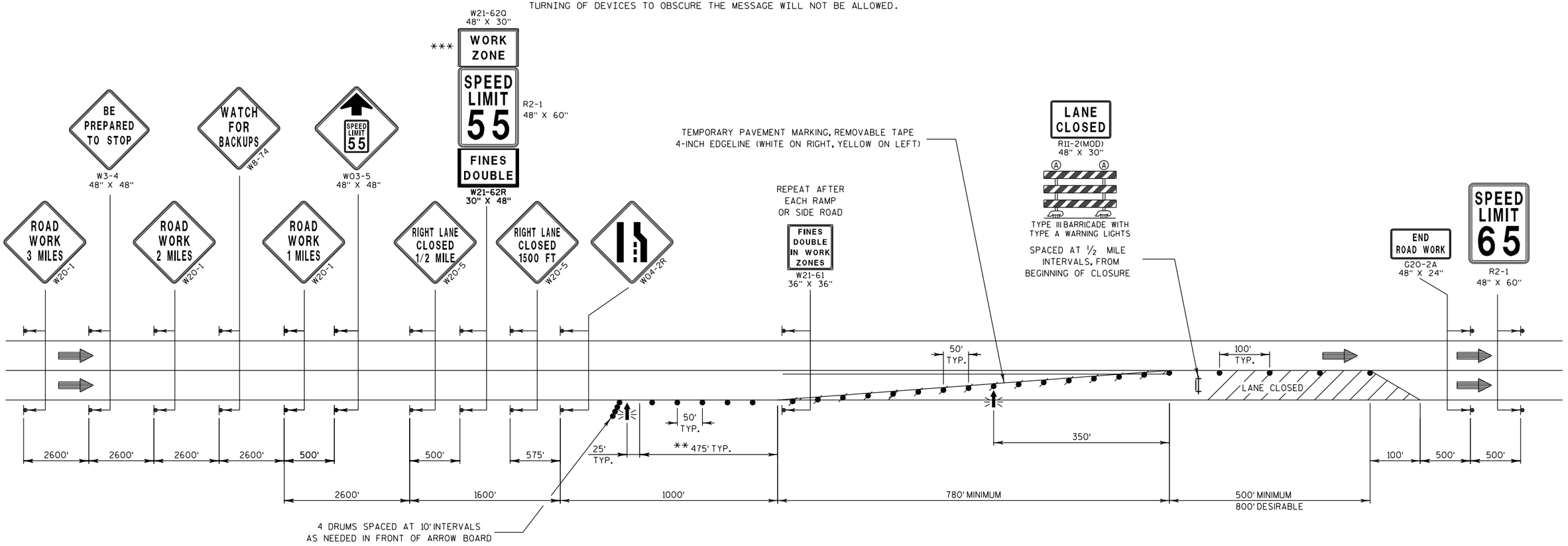
IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY ½ MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ½ THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

** CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.

*** SEE REQUIREMENT FOR TEMPORARY REGULATORY SPEED REDUCTION IN THE SPECIAL PROVISIONS.

COVERING AND REMOVAL OF MATERIAL COVERING TEMPORARY REGULATORY SPEED LIMIT SIGNS AND EXISTING SPEED LIMIT SIGNS RELATED TO TEMPORARY AND/OR PERIODIC LANE CLOSURES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.



LANE CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER

LC WOB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SHEET 285	E

LEGEND

- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, 500 FEET DESIRABLE, DISTANCE TO EXISTING SIGNS.

THIS SHOULDER CLOSURE IS TYPICAL FOR CLOSING RIGHT SHOULDER - REVERSE FOR CLOSING LEFT SHOULDER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

FOR A SHOULDER CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE CRASHWORTHY SUPPORTS.

REDUCED SPEED AHEAD AND SPEED LIMIT 55 SIGNS MUST BE POST MOUNTED.

SPEED LIMIT SIGNS SHALL ALSO BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND AT 0.5 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

THE LOCATION OF THE FIRST SIGN INDICATING THE 55 MPH REGULATORY SPEED LIMIT IS REFERENCED FROM BEGINNING OF SHOULDER CLOSURE TAPER. THE 55 MPH REGULATORY SPEED LIMIT SIGN LOCATION MUST BE ADJUSTED WHEN CONSTRUCTION ACTIVITIES REQUIRE THE SHOULDER CLOSURE START LOCATION TO CHANGE.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE SHOULDER CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE SHOULDER CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

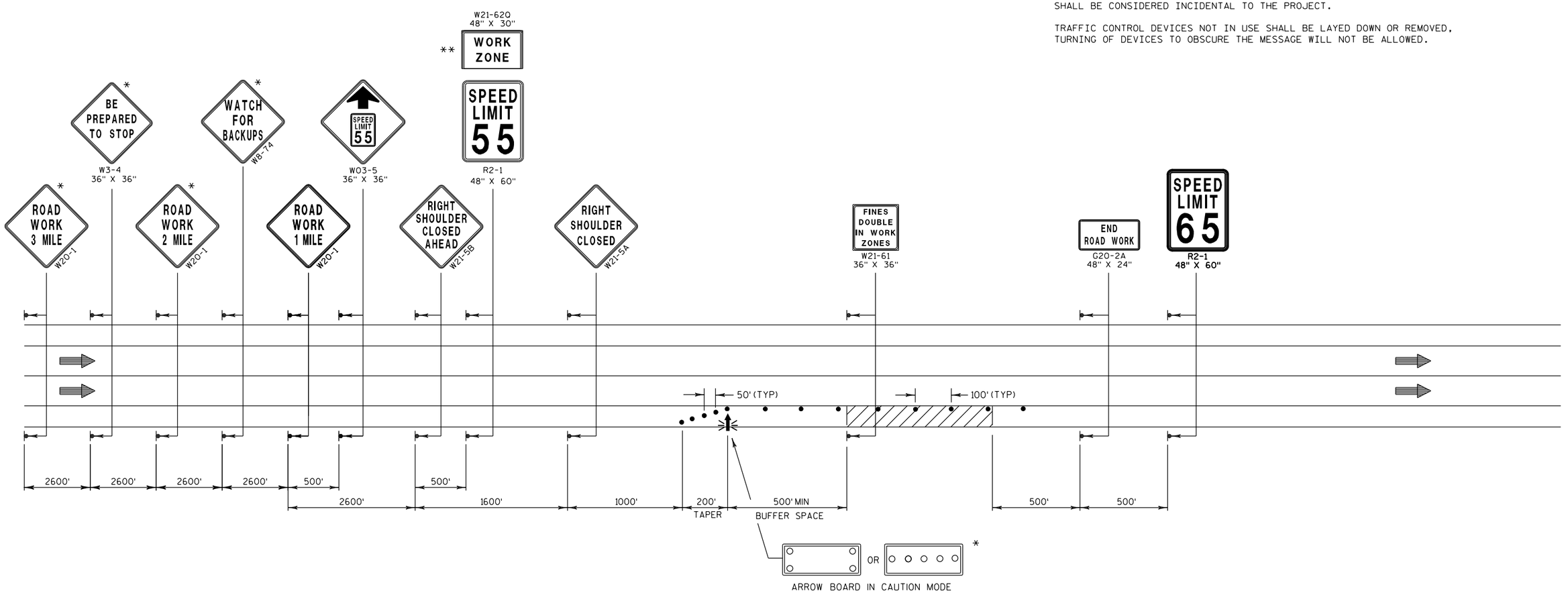
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND SHOULDER CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.

* PROVIDE ITEM WHEN SPECIFIED IN MISCELLANEOUS QUANTITIES OR SPECIAL PROVISIONS.

** SEE REQUIREMENT FOR TEMPORARY REGULATORY SPEED REDUCTION IN THE SPECIAL PROVISIONS.

COVERING AND REMOVAL OF MATERIAL COVERING TEMPORARY REGULATORY SPEED LIMIT SIGNS AND EXISTING SPEED LIMIT SIGNS RELATED TO TEMPORARY AND/OR PERIODIC SHOULDER CLOSURES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAYED DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.



SHOULDER CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER

SC WOB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SHEET 286	E

2

LEGEND

- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PRECAST CONCRETE BARRIER
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, 500 FEET DESIRABLE, DISTANCE TO EXISTING SIGNS.

THIS SHOULDER CLOSURE IS TYPICAL FOR CLOSING RIGHT SHOULDER - REVERSE FOR CLOSING LEFT SHOULDER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

FOR A SHOULDER CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE CRASHWORTHY SUPPORTS.

REDUCED SPEED AHEAD, SPEED LIMIT 55 AND SPEED LIMIT 65 SIGNS MUST BE POST MOUNTED.

SPEED LIMIT SIGNS SHALL ALSO BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND AT 0.5 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

THE LOCATION OF THE FIRST SIGN INDICATING THE 55 MPH REGULATORY SPEED LIMIT IS REFERENCED FROM BEGINNING OF SHOULDER CLOSURE TAPER. THE 55 MPH REGULATORY SPEED LIMIT SIGN LOCATION MUST BE ADJUSTED WHEN CONSTRUCTION ACTIVITIES REQUIRE THE SHOULDER CLOSURE START LOCATION TO CHANGE.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE SHOULDER CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE SHOULDER CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ½ THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND SHOULDER CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.

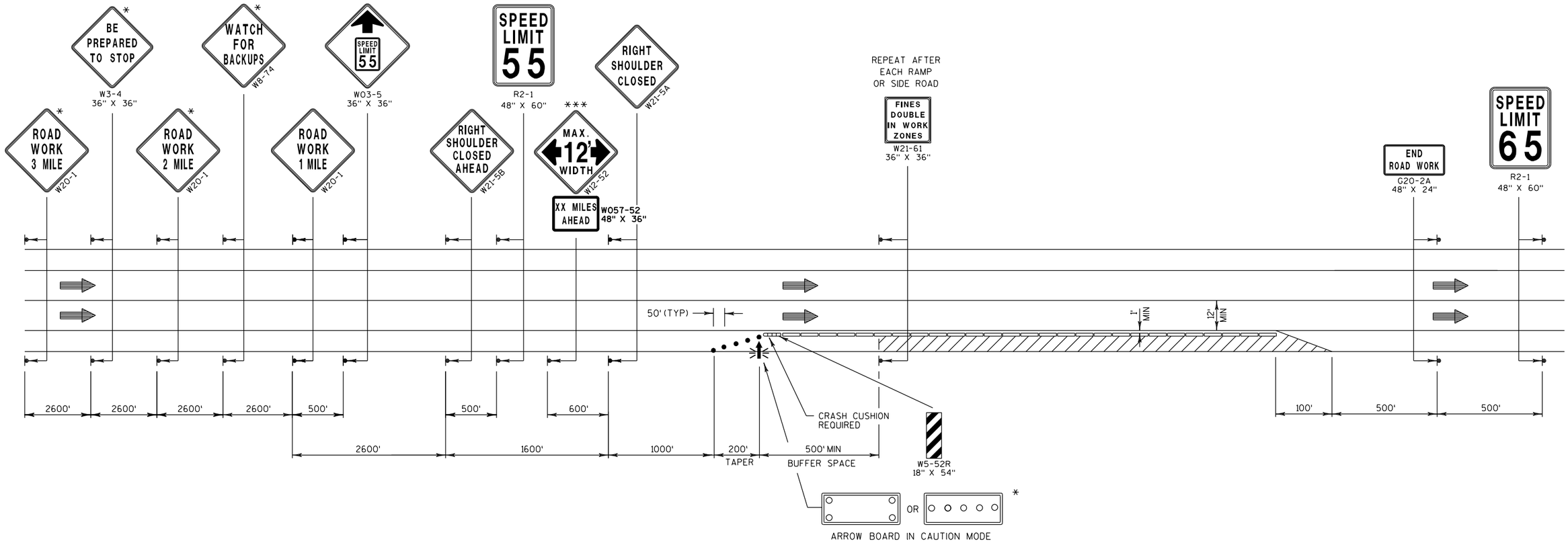
* PROVIDE ITEM WHEN SPECIFIED IN MISCELLANEOUS QUANTITIES OR SPECIAL PROVISIONS.

** SEE REQUIREMENT FOR TEMPORARY REGULATORY SPEED REDUCTION IN THE SPECIAL PROVISIONS.

*** SEE ELSEWHERE IN PLANS FOR LOCATIONS THAT THIS SIGN PAIR IS REQUIRED

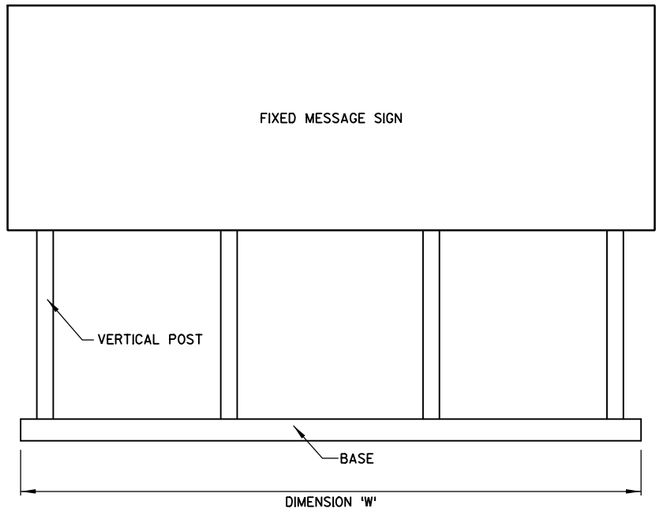
COVERING AND REMOVAL OF MATERIAL COVERING TEMPORARY REGULATORY SPEED LIMIT SIGNS AND EXISTING SPEED LIMIT SIGNS RELATED TO TEMPORARY AND/OR PERIODIC SHOULDER CLOSURES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAYED DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.

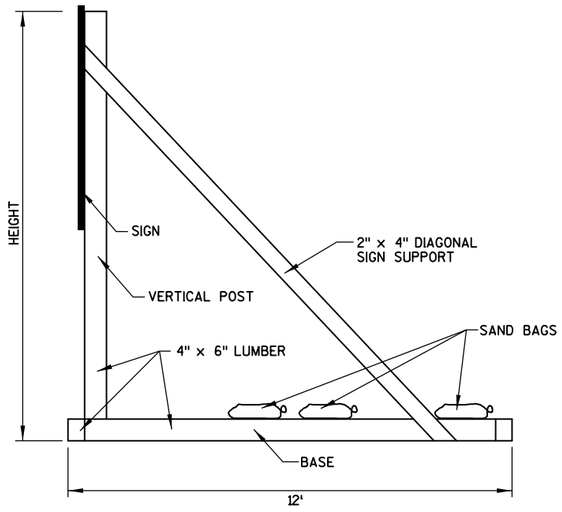


SHOULDER CLOSURE - REGULATORY SPEED REDUCTION WITH BARRIER

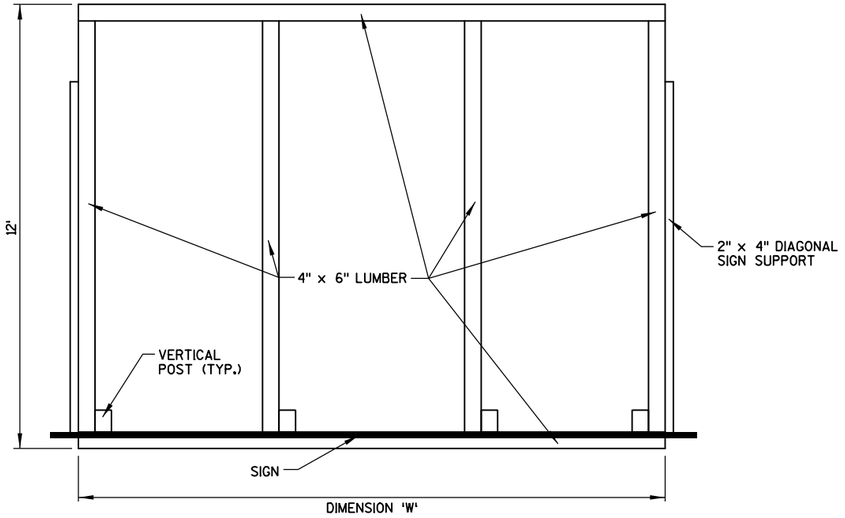
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SHEET 287	E



FRONT VIEW



SIDE VIEW



BASE PLAN VIEW

ANTICIPATED DIMENSIONS & POSTS REQUIRED
(FOR INFORMATION ONLY, CONTRACTOR IS TO VERIFY)

'W' (FT)	NO. OF VERTICAL POSTS
4'	2
5'	2
6'	2
7'	2
8'	2
9'	3
10'	3
11'	3
12'	3
13'	3
14'+	4 (FIELD VERIFY)

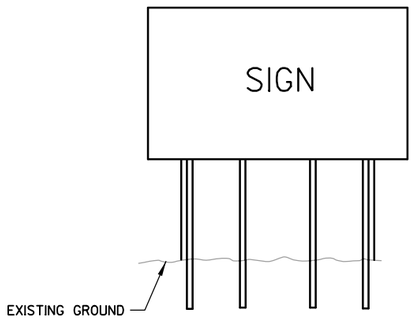
NOTES:
1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.

2. TWO DIAGONAL SUPPORTS SHALL BE INCLUDED AND AFFIXED TO THE OUTSIDE SUPPORTS.

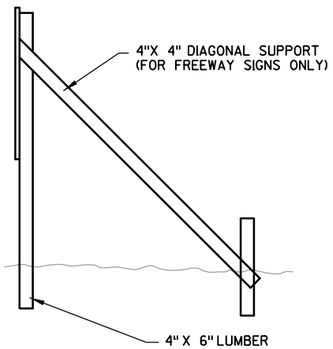
3. DIAGONAL SUPPORTS, VERTICAL POSTS, AND BASE LUMBER ARE ALL INCLUDED IN EITHER THE "TRAFFIC CONTROL SIGNS FIXED MESSAGE SIGNS" ITEM, OR THE "TEMPORARILY MOUNT AND LOCATE TYPE 1 SIGNS" ITEM.

4. PROVIDE AN ADEQUATE NUMBER OF SAND BAGS TO HOLD THE SIGN IN PLACE. SAND BAGS ARE INCLUDED IN EITHER THE "TRAFFIC CONTROL SIGNS FIXED MESSAGE SIGNS" ITEM, OR THE "TEMPORARILY MOUNT AND LOCATE TYPE 1 SIGNS" ITEM.

PORTABLE SUPPORT DETAIL FOR FIXED MESSAGE SIGNS OR TEMPORARILY MOUNT AND LOCATE TYPE 1 SIGNS



FRONT VIEW



SIDE VIEW

NOTES:
1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.

2. TWO DIAGONAL SUPPORTS TO BE INCLUDED FOR EACH EXISTING SIGN. DIAGONAL SUPPORTS TO BE AFFIXED TO THE OUTSIDE SUPPORTS AND TO BE INCIDENTAL TO "FIXED MESSAGE SIGNS" OR "TEMPORARILY MOUNT AND LOCATED TYPE I SIGNS".

3. SEE "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS" SIGN PLATE FOR ADDITIONAL REQUIREMENTS.

MOUNTING DETAIL FOR FIXED MESSAGE SIGNS OR MOVING TYPE I SIGNS

LEGEND:

- TRAFFIC FLOW ARROW
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH TYPE C STEADY BURN LIGHTS
- 16" X 16" ORANGE WARNING FLAGS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADE TYPE III WITH TRAFFIC CONTROL SIGN
- (RT-4Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (RT ARROWS) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE ARROWS (TYPES)
- (RT WORDS) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE WORDS (WORDS)

NOTE:
SEE SEPARATE DETAILS FOR TRAFFIC SIGNALS AND FINAL PAVEMENT MARKING AND SIGNING.

TEMPORARY SB USH 41 OFF-RAMP
NB USH 41
TEMPORARY NB USH 41 ON-RAMP
PROPOSED EXPANSION OF STRUCTURE B-5-64
BEGIN LEFT TURN LANE
R3-20LL
24" X 36"
CLOSE WB TURN LANE
LEFT TURN LANE
COVER
RT-4Y
LANE CLOSED
R11-2(MOD)
48" X 30"
25' (TYP)
EXISTING SKIP-DASH LANE LINE TO REMAIN
(10')
12'
(TYPE 3)
EXISTING PAVEMENT MARKINGS TO REMAIN
VELP AVE (CTH HS)
VELP AVE (USH 141)
EXISTING SKIP-DASH LANE LINE TO REMAIN
CLOSE EB TURN LANE
CONSTRUCT FOOTING AND PIER FOR EXPANSION OF STRUCTURE B-5-64
SB USH 41
TEMPORARY SB USH 41 ON-RAMP
TEMPORARY NB USH 41 OFF-RAMP
ROSEWOOD ST

CONTINUOUS CLOSURE OF TURN LANES - EB & WB VELP AVE

(STAGE 1)

TURN CLOS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SCALE, FEET 0 30 60	SHEET 289	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025016A_TC_cd.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:60

WISDOT/CADDS SHEET 42

LEGEND:

- TRAFFIC FLOW ARROW
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH TYPE C STEADY BURN LIGHTS
- 16" X 16" ORANGE WARNING FLAGS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADE TYPE III WITH TRAFFIC CONTROL SIGN

NOTES:
FOR WB TURN LANE CLOSURE SEE "CONTINUOUS CLOSURE OF TURN LANES - EB & WB VELP AVE" DETAIL

SEE SEPARATE DETAILS FOR TRAFFIC SIGNALS AND FINAL PAVEMENT MARKING AND SIGNING.

TEMPORARY SB USH 41 OFF-RAMP

NB USH 41

TEMPORARY NB USH 41 ON-RAMP

PROPOSED EXPANSION OF STRUCTURE B-5-64

VELP AVE (CTH HS)

W01-6
48" X 24"

(10')

EXISTING SKIP-DASH LANE LINE TO REMAIN

LANE CLOSED
R11-2(MOD)
48" X 30"

LEFT LANE CLOSED AHEAD
W20-5

LEFT TURN LANE
COVER

CLOSE EB LANES

CONSTRUCT FOOTING AND PIER FOR EXPANSION OF STRUCTURE B-5-64

ONLY
R3-8H
36" X 30"

VELP AVE (USH 141)

EXISTING PAVEMENT MARKINGS TO REMAIN

SB USH 41

TEMPORARY SB USH 41 ON-RAMP

TEMPORARY NB USH 41 OFF-RAMP

ROSEWOOD ST

CLOSURE OF THRU LANES - EB VELP AVE

(STAGE 1)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SCALE, FEET 0 30 60	SHEET 290	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025016B_TC_cd.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:60

LEGEND:

- TRAFFIC FLOW ARROW
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH TYPE C STEADY BURN LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- 16" X 16" ORANGE WARNING FLAGS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADE TYPE III WITH TRAFFIC CONTROL SIGN
- (RT-4W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- (RT-4Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- ** (RT-LL) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE) (LANE LINE)
- (RT-8W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- (RT ARROWS) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE ARROWS (TYPES)
- (RT WORDS) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE WORDS (WORDS)
- (REM) REMOVE CONFLICTING PAVEMENT MARKING

** 12.5' DASH/37.5' SKIP PER SDD FOR "PAVEMENT MARKING (MAINLINE)", DETAIL FOR "PERMANENT PAVEMENT MARKING"

NOTE:
SEE SEPARATE DETAILS FOR TRAFFIC SIGNALS AND FINAL PAVEMENT MARKING AND SIGNING.

NOTE:
APPLY CONCEPTS ON THIS DETAIL TO CONTINUOUS CLOSURE OF OUTSIDE LANE FOR WB VELP AVE TO CONSTRUCT NORTH ABUTMENT OF STRUCTURE B-05-668 AND HANG RETAINING WALL PANELS

CONTINUOUS CLOSURE OF OUTSIDE LANE - EB VELP AVE

(STAGE 2A)

CONT CLOS

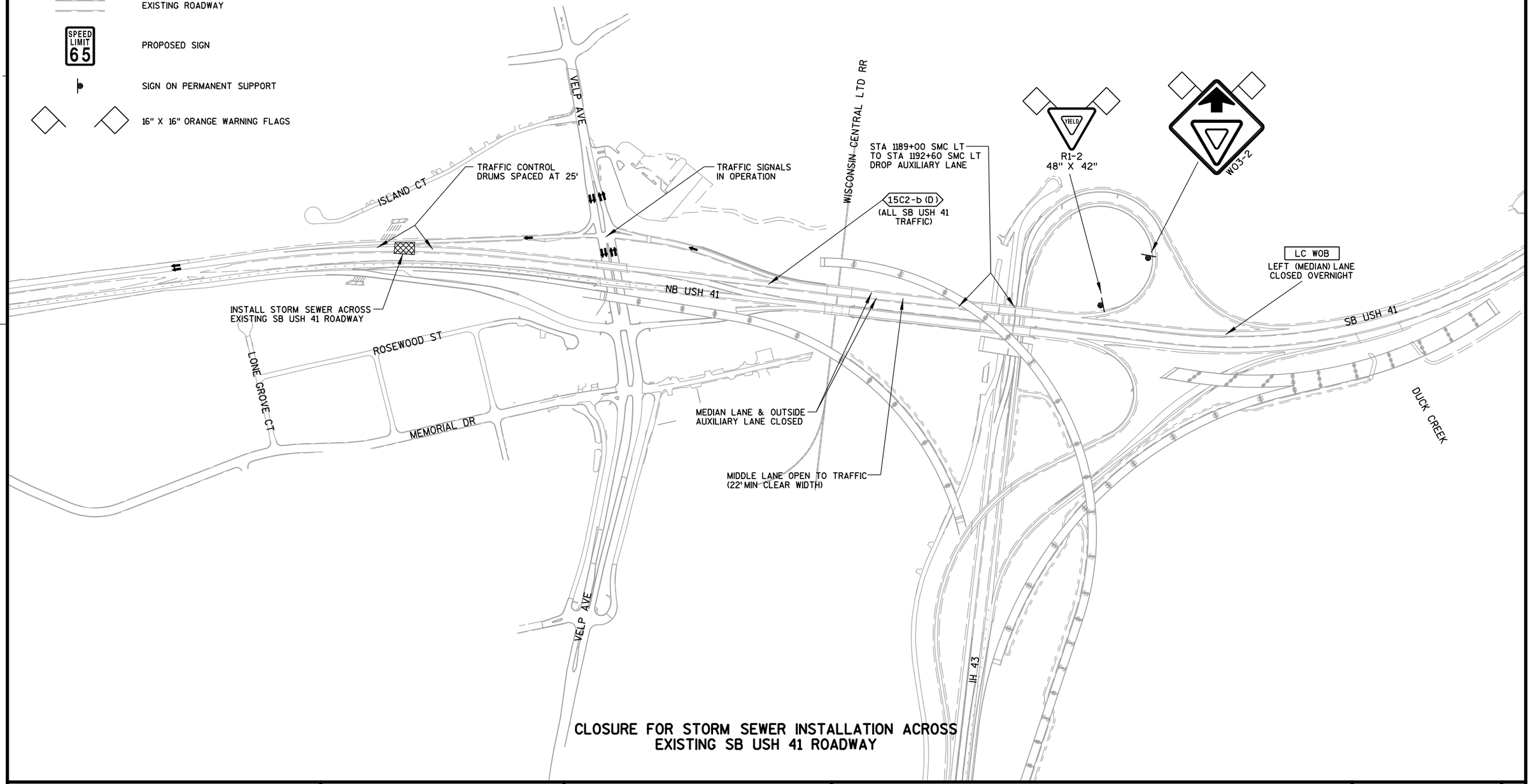
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SCALE, FEET 0 30 60	SHEET 291	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025017_TC_cd.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:60

WISDOT/CADDS SHEET 42

LEGEND

- 15C2-b (D) — BARRICADES AND SIGNS FOR MAINLINE CLOSURES (DETAIL D)
- LC WOB — LANE CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- SPEED LIMIT 65 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- 16" X 16" ORANGE WARNING FLAGS



CLOSURE FOR STORM SEWER INSTALLATION ACROSS EXISTING SB USH 41 ROADWAY

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS - STAGE 1	SHEET 292	E

2

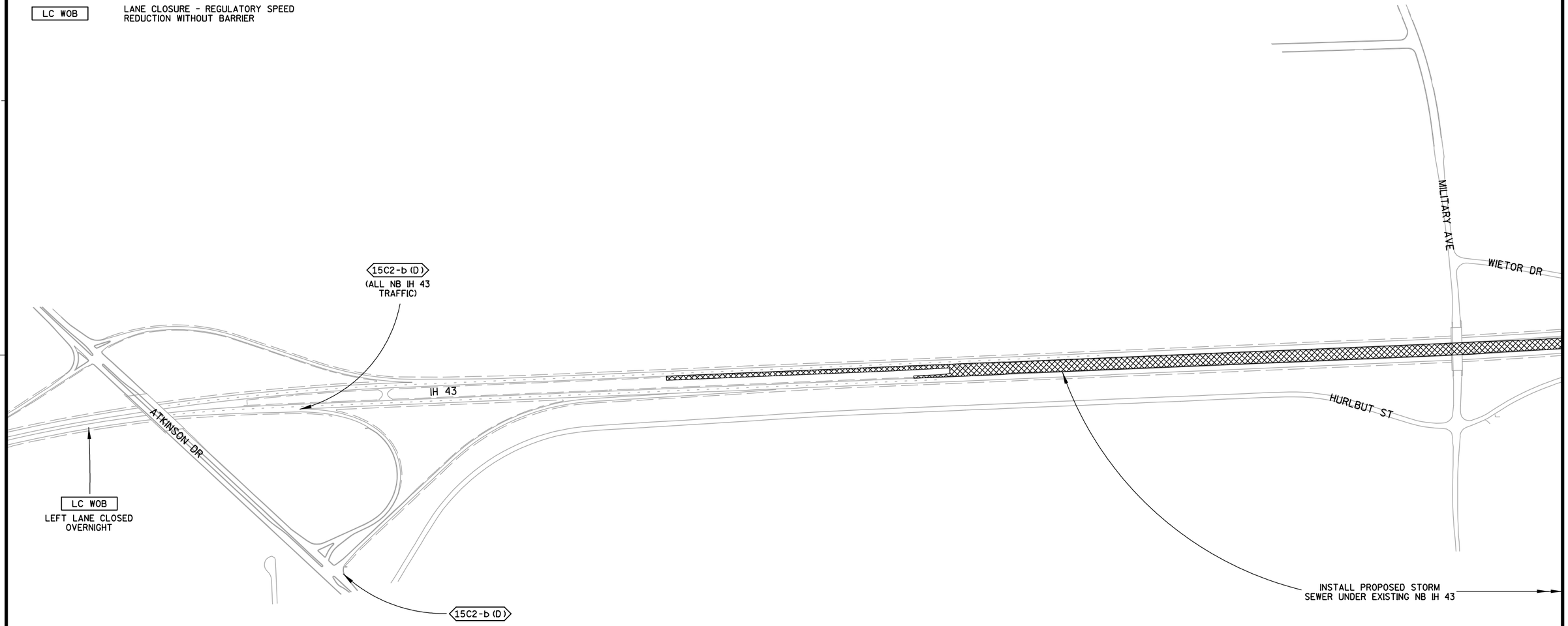
LEGEND

GENERAL WORK AREA

EXISTING ROADWAY

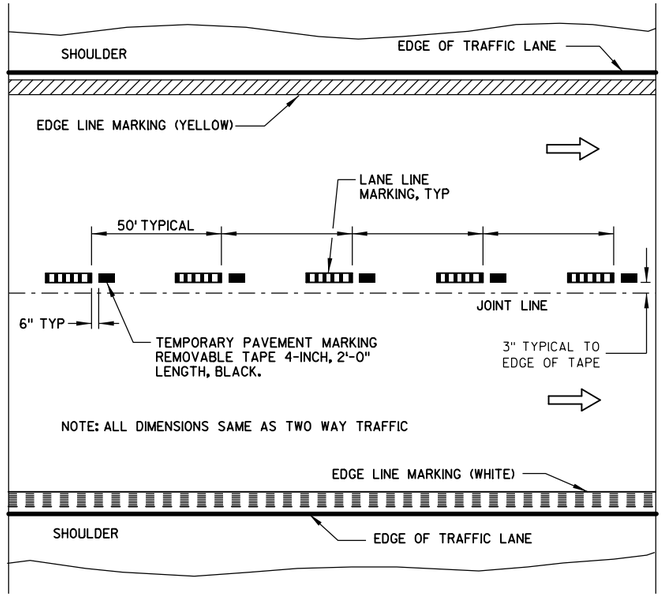
15C2-b (D) — BARRICADES AND SIGNS FOR MAINLINE CLOSURES (DETAIL D)

LC WOB — LANE CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER

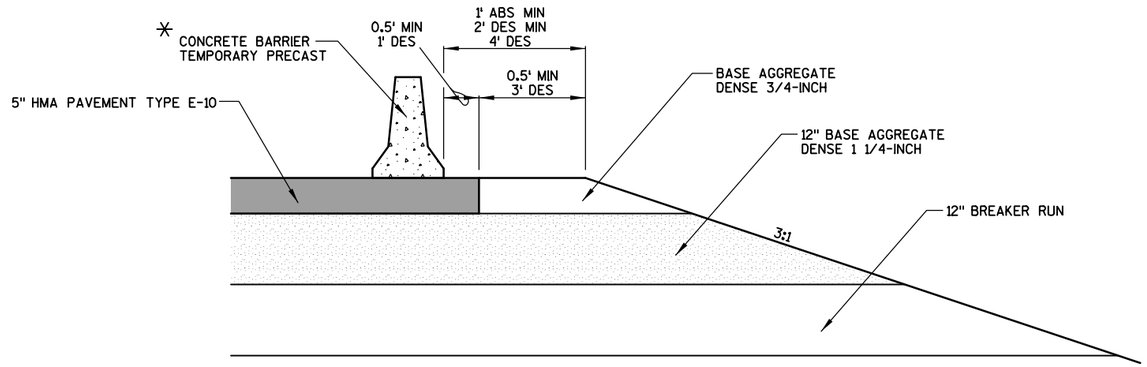


CLOSURE FOR STORM SEWER INSTALLATION ACROSS EXISTING NB IH 43 ROADWAY

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS - STAGE 1	SHEET 293	E



TEMPORARY PAVEMENT MARKING



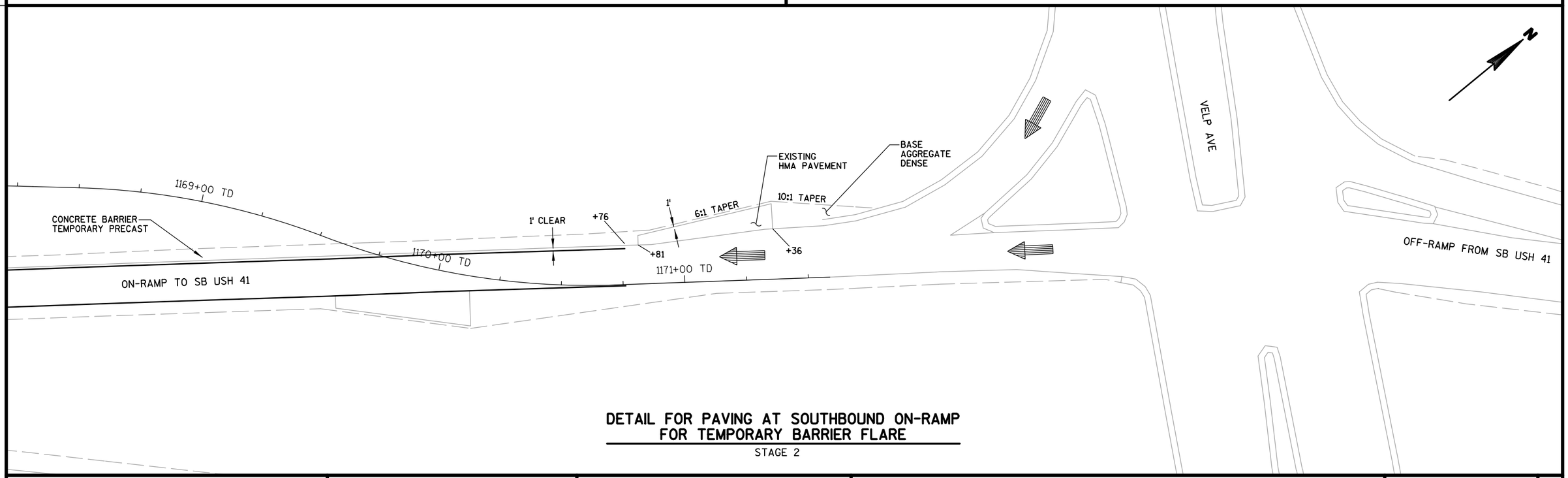
✳ ANCHOR WHEN:
1) CBTP <4' FROM TEMPORARY SHORING

2) CBTP <2' FROM ANY DROP-OFF

3) CBTP <4' FROM DROP STEEPER THAN 3:1, AT LEAST 2' HIGH

DETAIL FOR PAVING BEHIND CONCRETE BARRIER TEMPORARY PRECAST

2

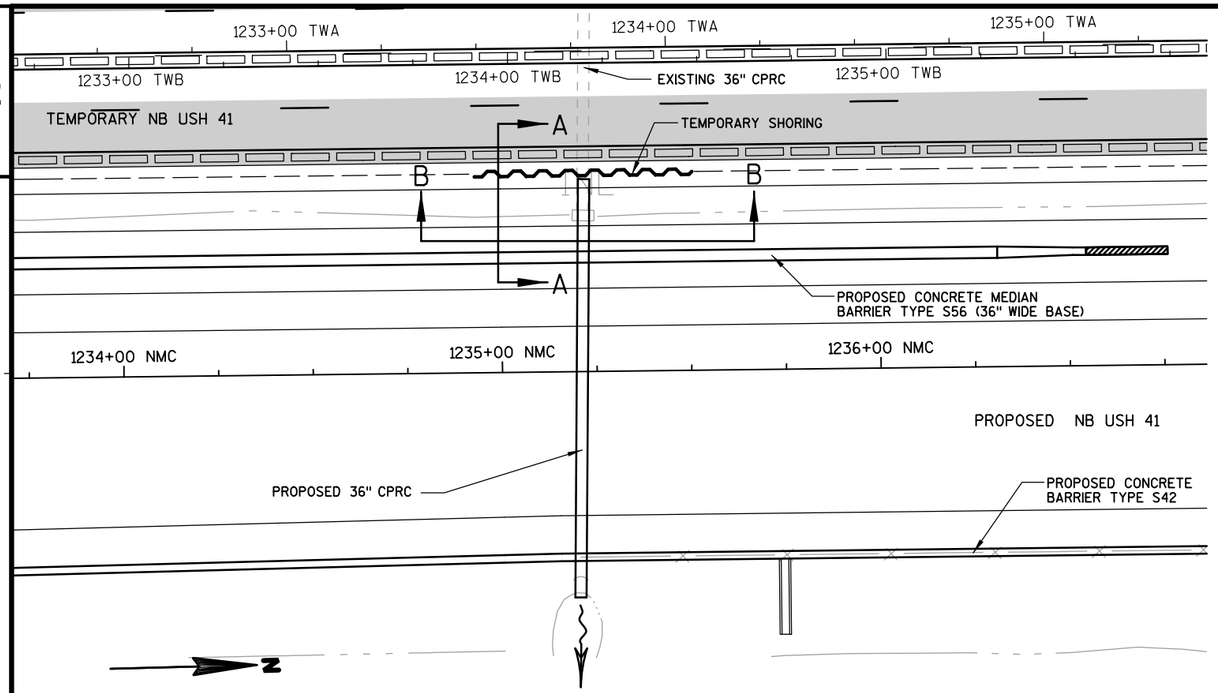


DETAIL FOR PAVING AT SOUTHBOUND ON-RAMP FOR TEMPORARY BARRIER FLARE

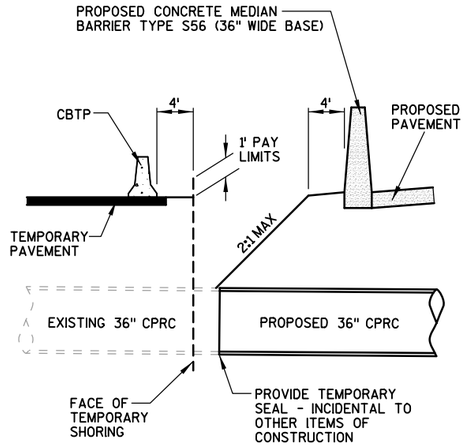
STAGE 2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SHEET 294	E

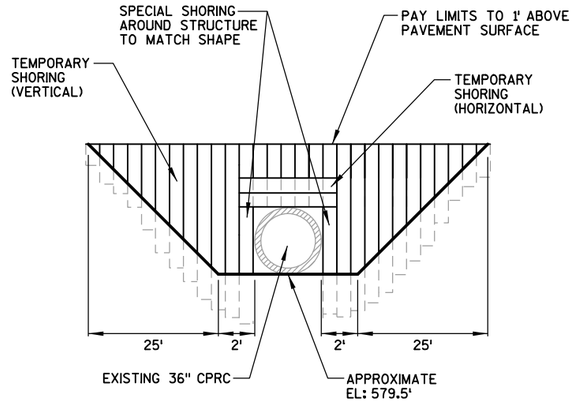
2



PLAN VIEW



SECTION A-A

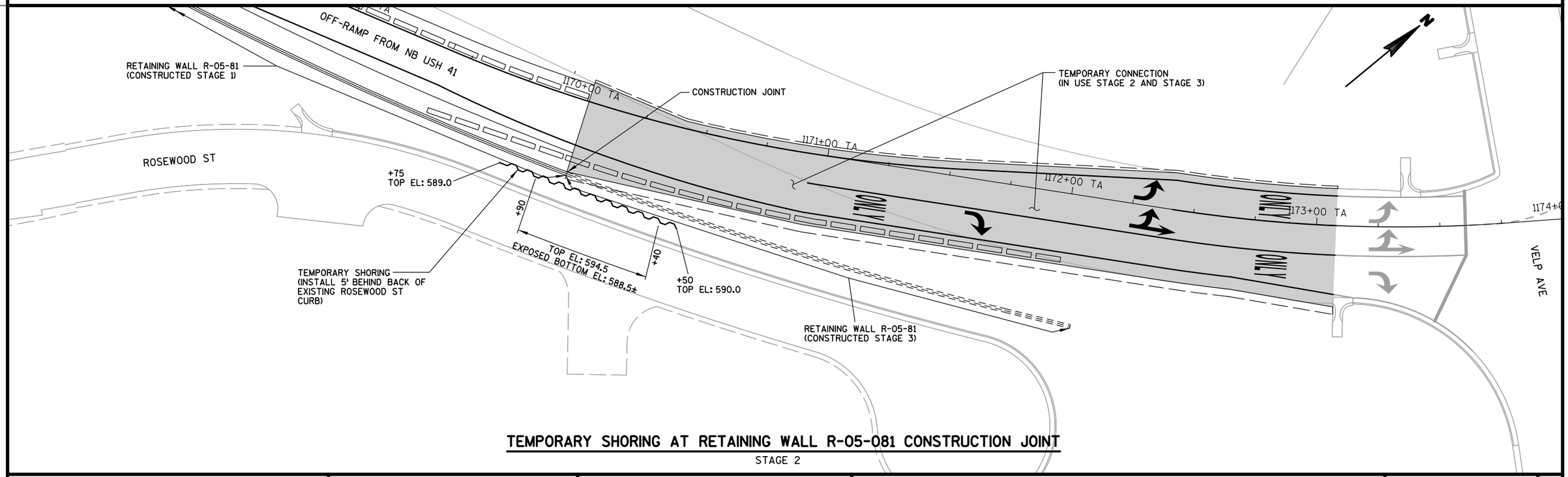


SECTION B-B

NOTE:
ALL SHORING DESIGN MATERIALS, AND INSTALLATION, INCLUDING HORIZONTAL BRACING, SPECIAL SHORING, OR ANY OTHER MATERIALS, ARE INCIDENTAL TO THE BID ITEM TEMPORARY SHORING.

TEMPORARY SHORING AT REPLACEMENT OF CULVERT

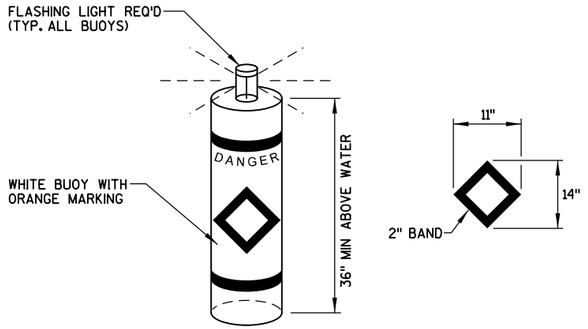
STAGE 2 - STA 1235+20 NMC



TEMPORARY SHORING AT RETAINING WALL R-05-081 CONSTRUCTION JOINT

STAGE 2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SHEET 295	E



TYPICAL EXISTING HAZARD WARNING BUOY DETAIL

ALL BUOYS ARE 7" DIAMETER WITH
RED FLASHING LIGHTS AT 30 FLASHES/MIN

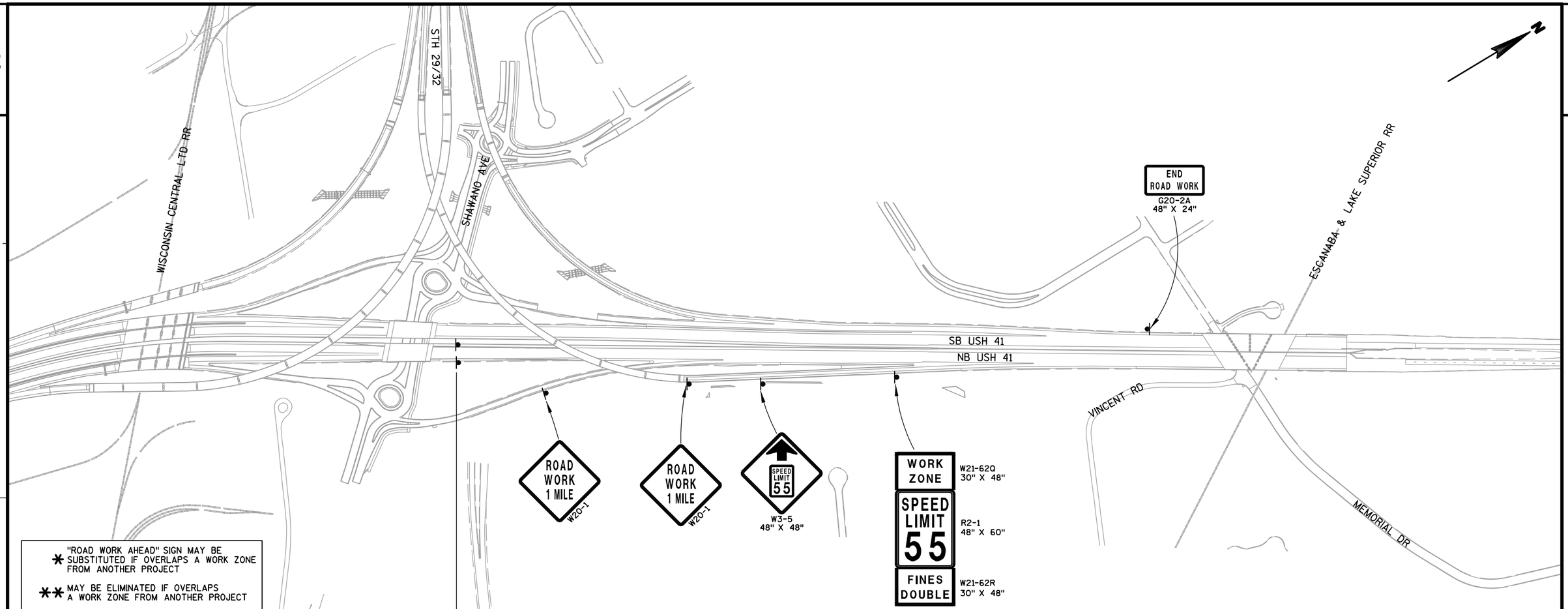
2

BUOY ALONG BANK
EXISTING NORTH BRIDGE PIER
EXISTING NORTH BRIDGE PIER
EXISTING STRUCTURE B-05-681
BUOY ALONG BANK
EXISTING SOUTH BRIDGE PIER
BUOY ALONG BANK
EXISTING BRIDGE PIER
EXISTING SOUTH BRIDGE PIER
DUCK CREEK
DUCK CREEK
NB USH 41
SB USH 41
INL
BUOY ALONG BANK
N

MAINTAIN TRAFFIC CONTROL FOR RECREATIONAL VEHICLES ON DUCK CREEK

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL DETAILS	SCALE, FEET 0 30 60	SHEET 296	E

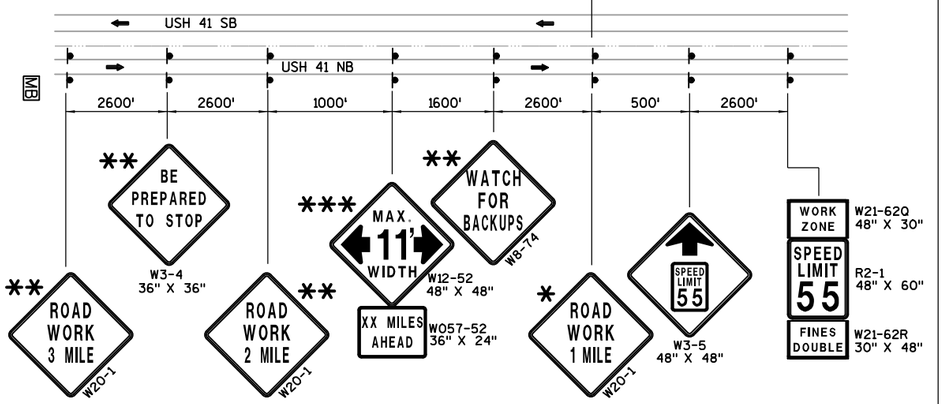
2



* "ROAD WORK AHEAD" SIGN MAY BE SUBSTITUTED IF OVERLAPS A WORK ZONE FROM ANOTHER PROJECT

** MAY BE ELIMINATED IF OVERLAPS A WORK ZONE FROM ANOTHER PROJECT

*** REQUIRED WHENEVER THERE ARE NO TRAFFIC LANES HAVING A CLEAR WIDTH OF AT LEAST 16', INCLUDING THE ADJOINING SHOULDER



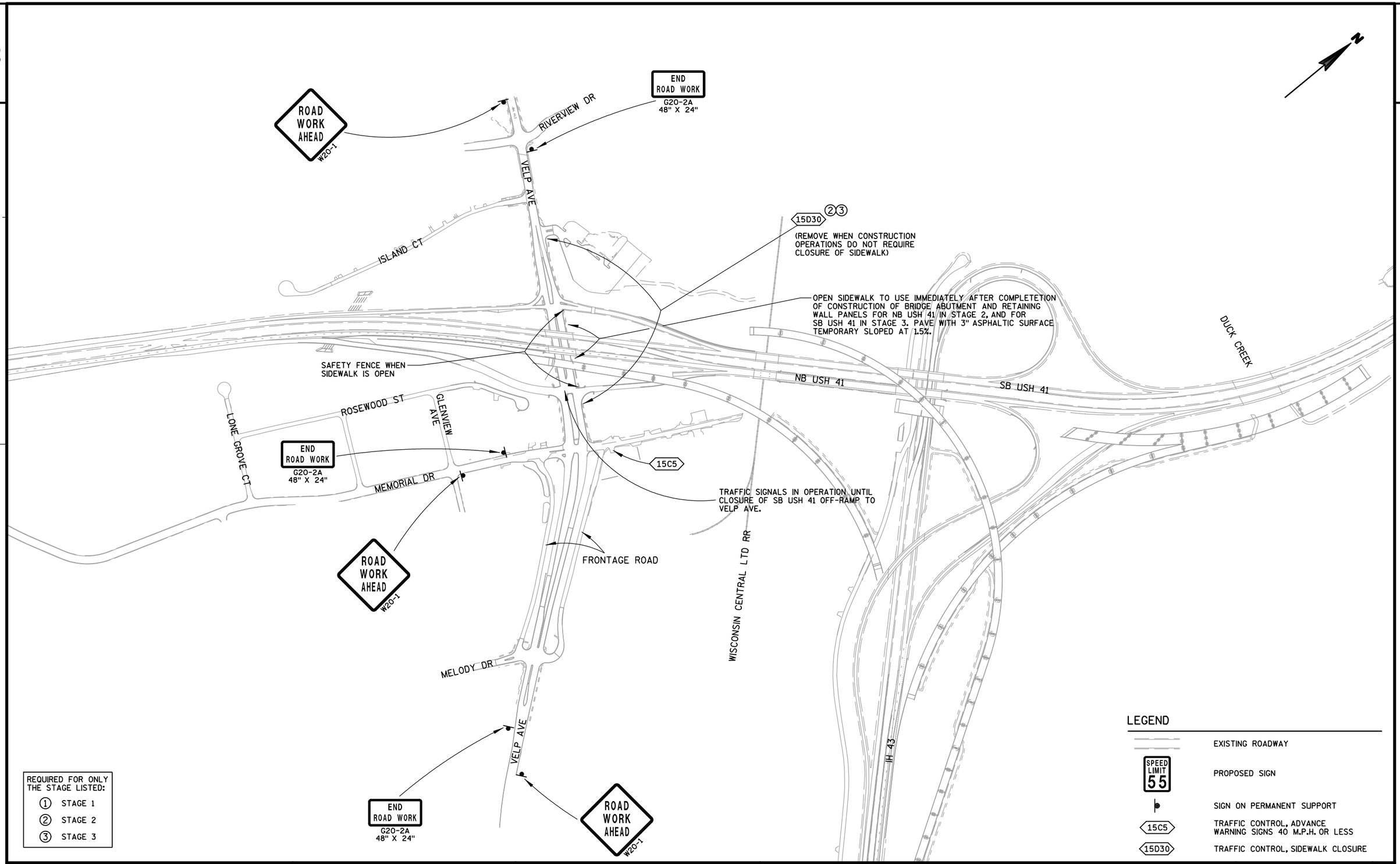
REQUIRED FOR ONLY THE STAGE LISTED:

① STAGE 1
② STAGE 2
③ STAGE 3

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- MB — PORTABLE CHANGABLE MESSAGE BOARD

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ADVANCED WARNING SIGNING - ALL STAGES	SHEET 297	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ADVANCED WARNING SIGNING - ALL STAGES	SHEET 298	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025051_TC_AWS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

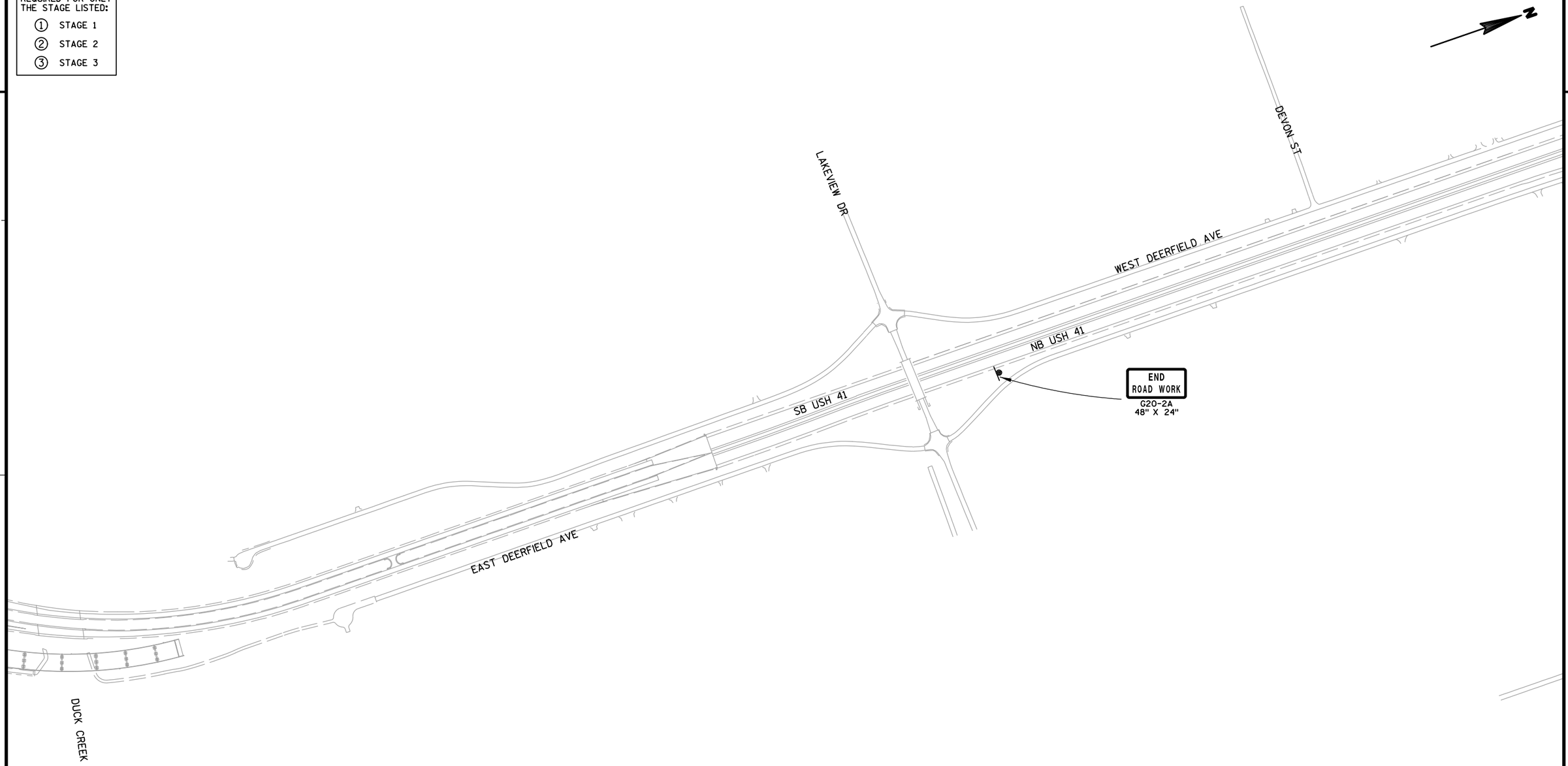
WISDOT/CADDS SHEET 42

REQUIRED FOR ONLY THE STAGE LISTED:

① STAGE 1

② STAGE 2

③ STAGE 3



LEGEND

EXISTING ROADWAY

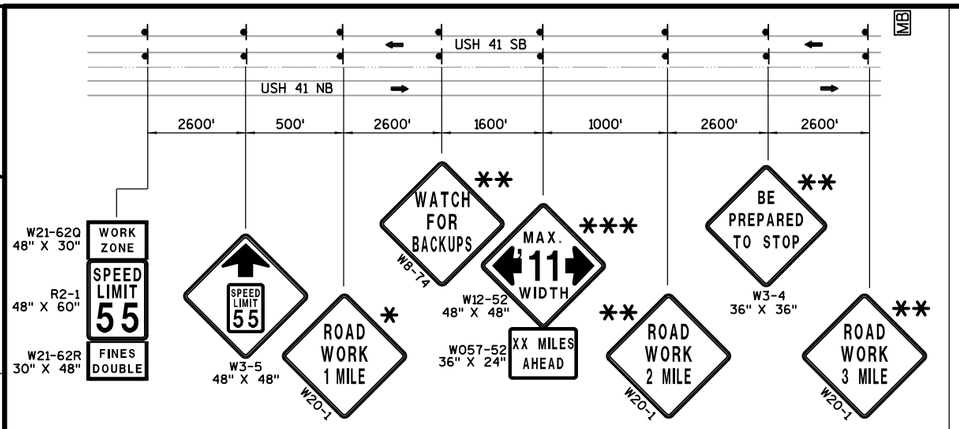
SPEED LIMIT 55 — PROPOSED SIGN

SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ADVANCED WARNING SIGNING - ALL STAGES	SHEET 299	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025052_TC_AWS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42



* "ROAD WORK AHEAD" SIGN MAY BE SUBSTITUTED IF OVERLAPS A WORK ZONE FROM ANOTHER PROJECT

** MAY BE ELIMINATED IF OVERLAPS A WORK ZONE FROM ANOTHER PROJECT

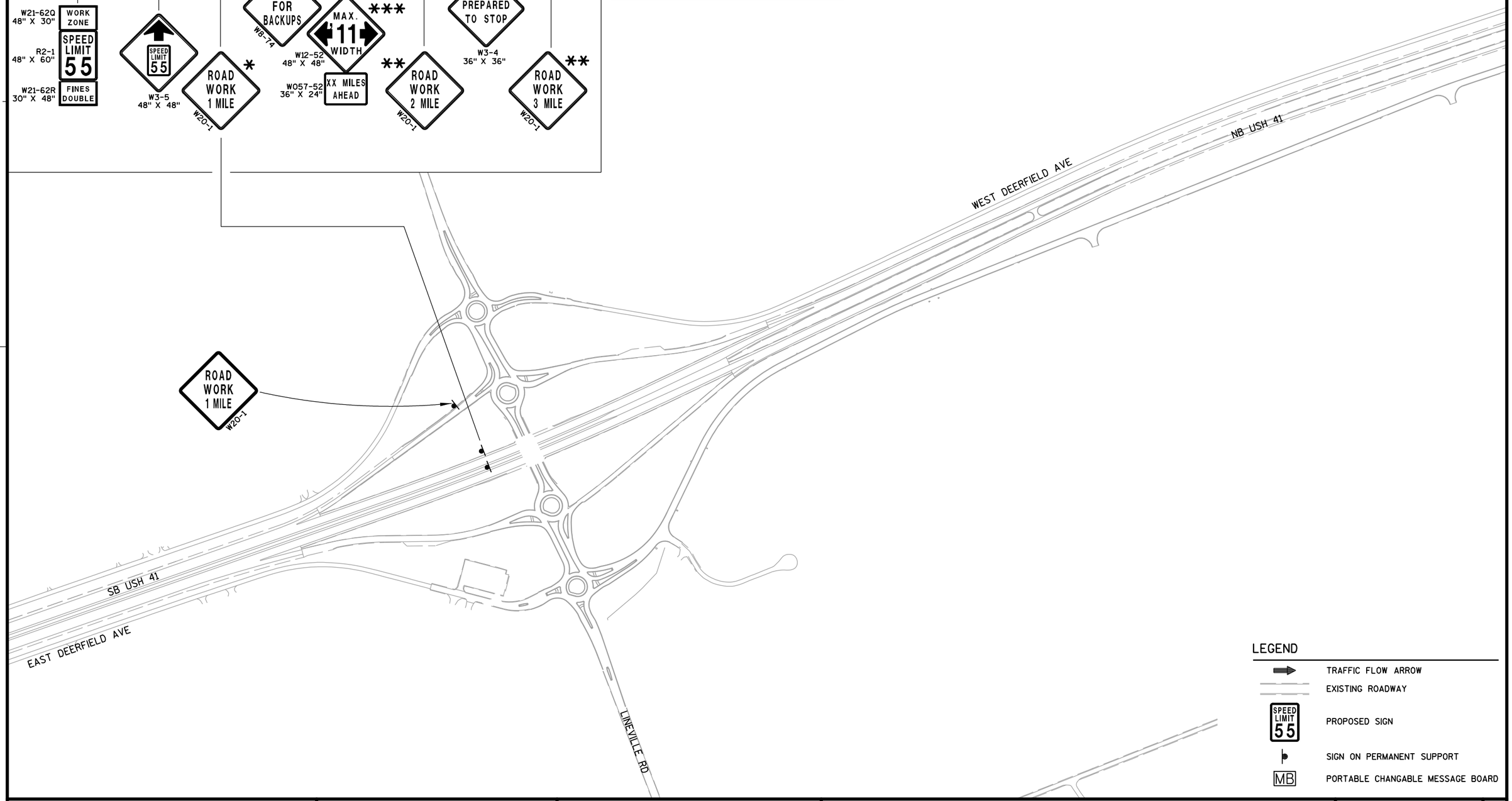
*** REQUIRED WHENEVER THERE ARE NO TRAFFIC LANES HAVING A CLEAR WIDTH OF AT LEAST 16', INCLUDING THE ADJOINING SHOULDER

REQUIRED FOR ONLY THE STAGE LISTED:

① STAGE 1

② STAGE 2

③ STAGE 3

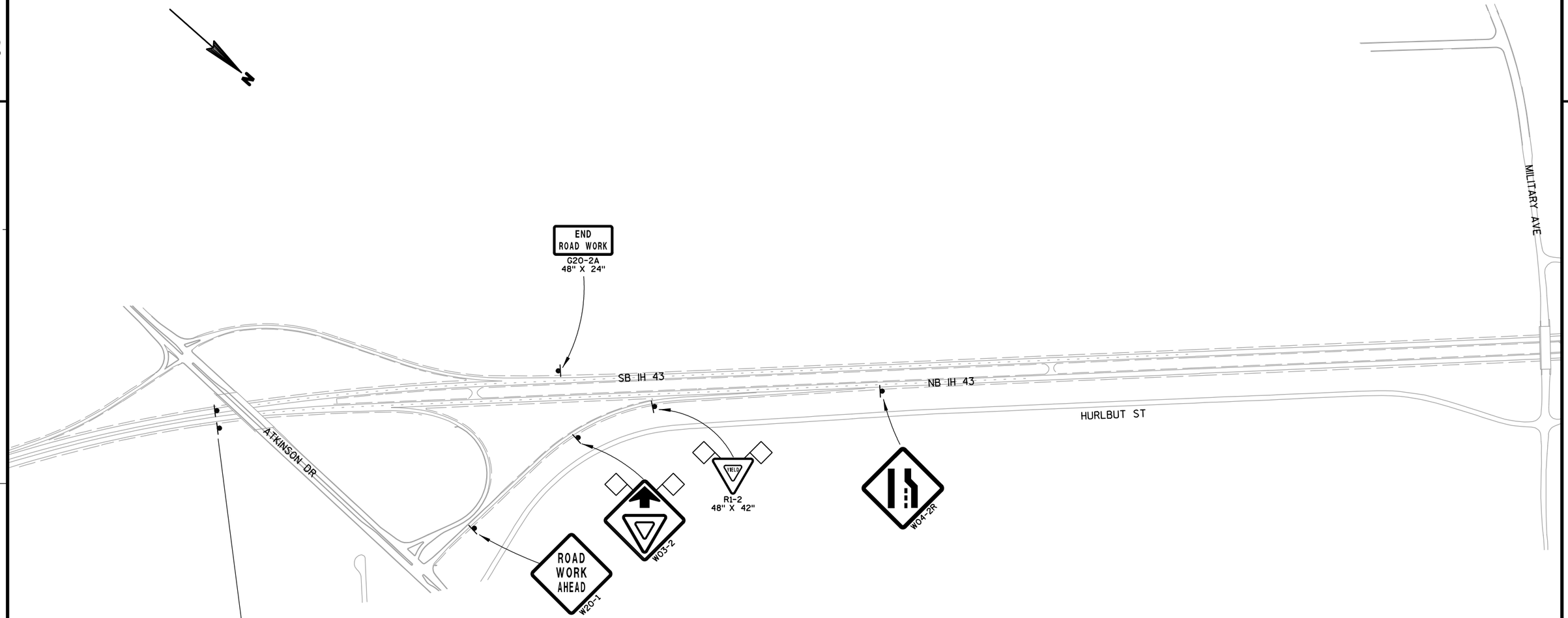


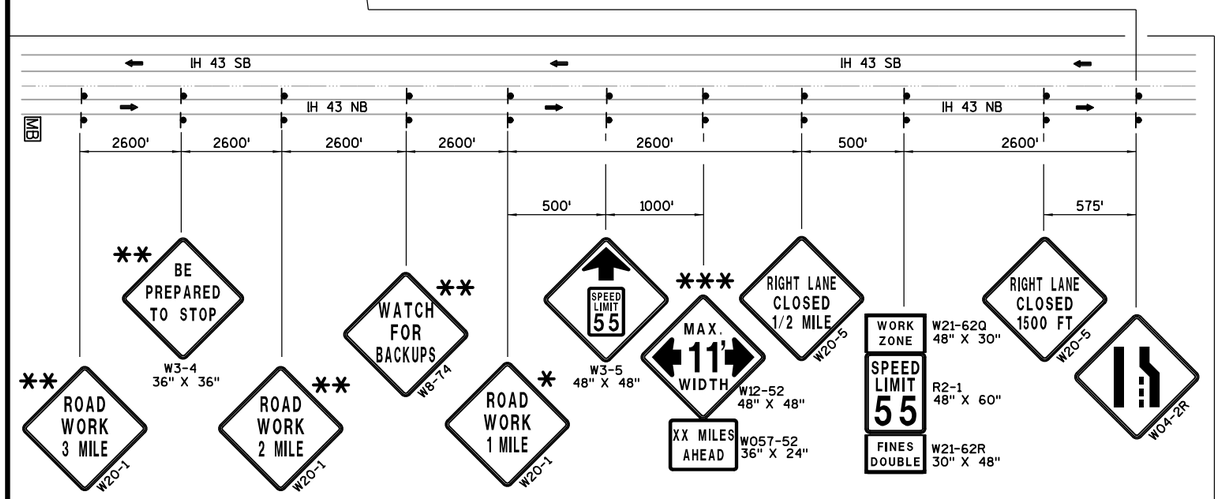
LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- MB — PORTABLE CHANGABLE MESSAGE BOARD

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ADVANCED WARNING SIGNING - ALL STAGES	SHEET 300	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025053_TC_AWS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500





* "ROAD WORK AHEAD" SIGN MAY BE SUBSTITUTED IF OVERLAPS A WORK ZONE FROM ANOTHER PROJECT

** MAY BE ELIMINATED IF OVERLAPS A WORK ZONE FROM ANOTHER PROJECT

*** REQUIRED WHENEVER THERE ARE NO TRAFFIC LANES HAVING A CLEAR WIDTH OF AT LEAST 16', INCLUDING THE ADJOINING SHOULDER

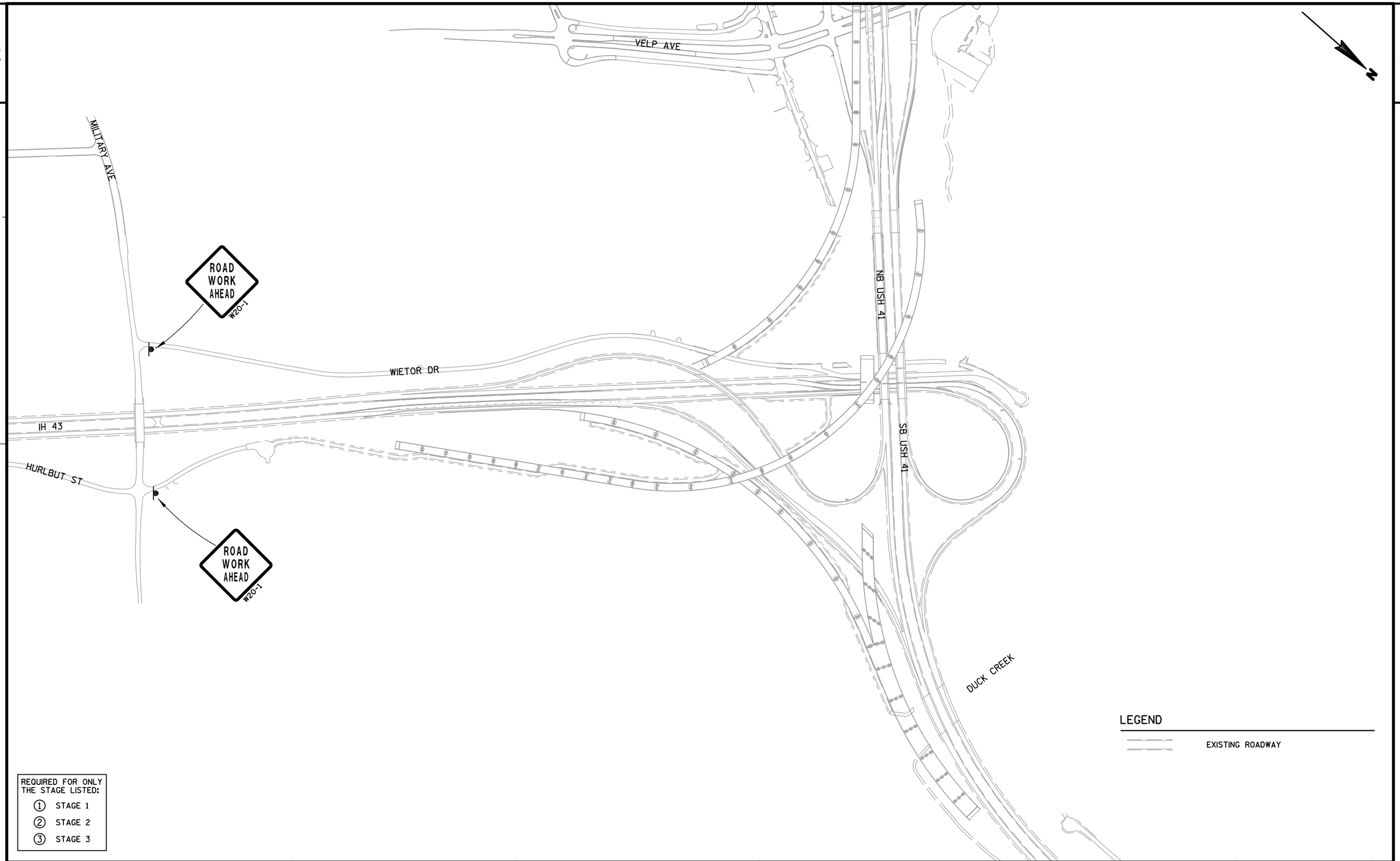
REQUIRED FOR ONLY THE STAGE LISTED:

① STAGE 1
② STAGE 2
③ STAGE 3

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- MB — PORTABLE CHANGABLE MESSAGE BOARD
- 16" X 16" ORANGE WARNING FLAGS

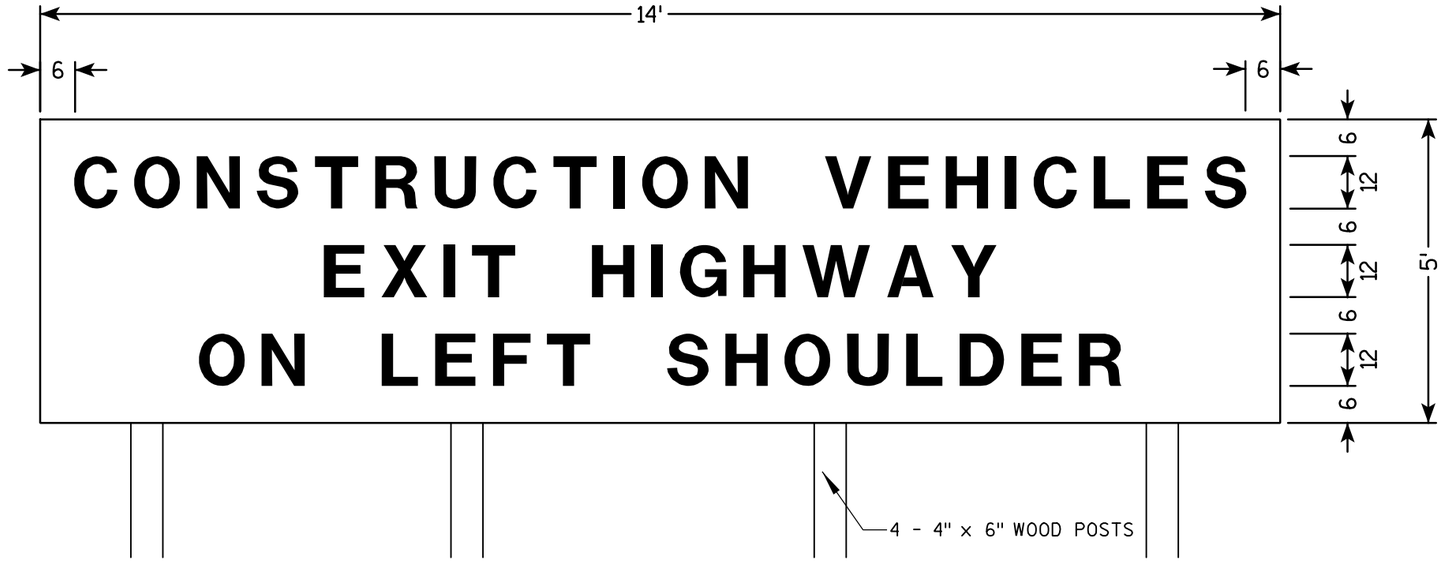
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ADVANCED WARNING SIGNING - ALL STAGES	SHEET 301	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ADVANCED WARNING SIGNING - ALL STAGES	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_025055_TC_AWS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42



NOTES:
1) AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE SIGNING AND MARKING SUPERVISOR SHALL VERIFY EACH SIGN LOCATION.

2) ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4" X 6") MAY BE USED FOR SIGNS ON SURFACE STREETS. SIGNS WHERE NO POSTS ARE SHOWN TO BE MOUNTED ON EXISTING SIGNS. FOR SIGNS MOUNTED ON POSTS, USE POSTS FROM FHWA LIST OF ACCEPTED BREAKAWAY SUPPORTS.

3) POSTS SHALL MEAT BREAKAWAY REQUIREMENTS OF SECTION 643.2.9.1 OF THE STANDARD SPECIFICATIONS AND SIGN PLATE A4-11.

4) UNLESS OTHERWISE NOTED, SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".

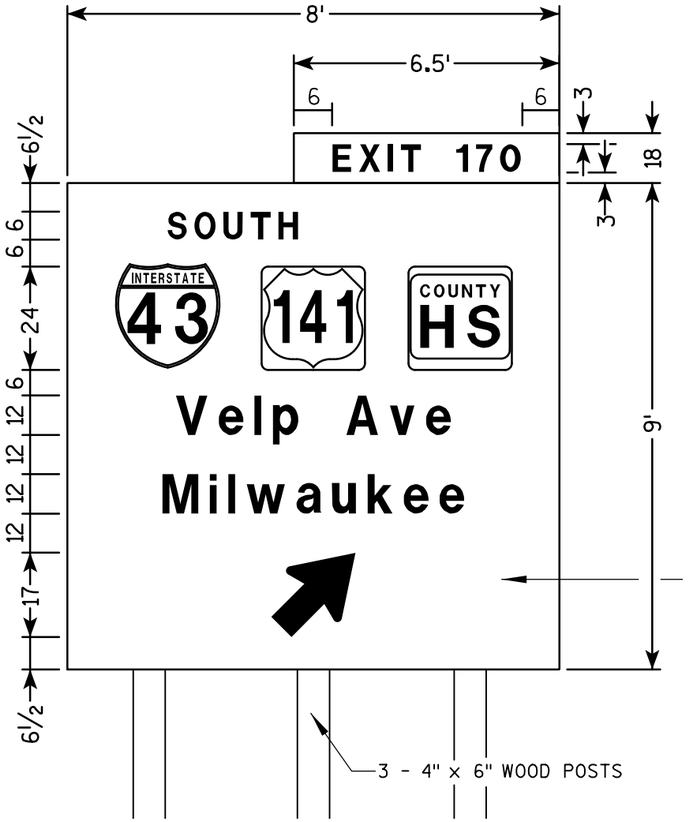
5) UNLESS OTHERWISE NOTED, SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE BACKGROUND PER STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

6) ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS: 12" CAPS SHALL BE SERIES "D", 6" CAPS SHALL BE SERIES "C".

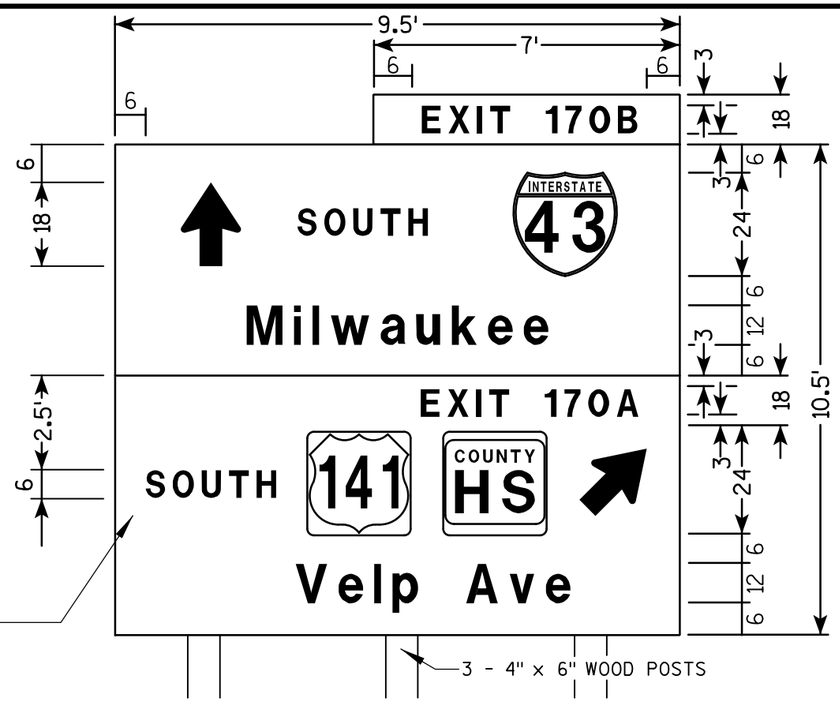
7) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.

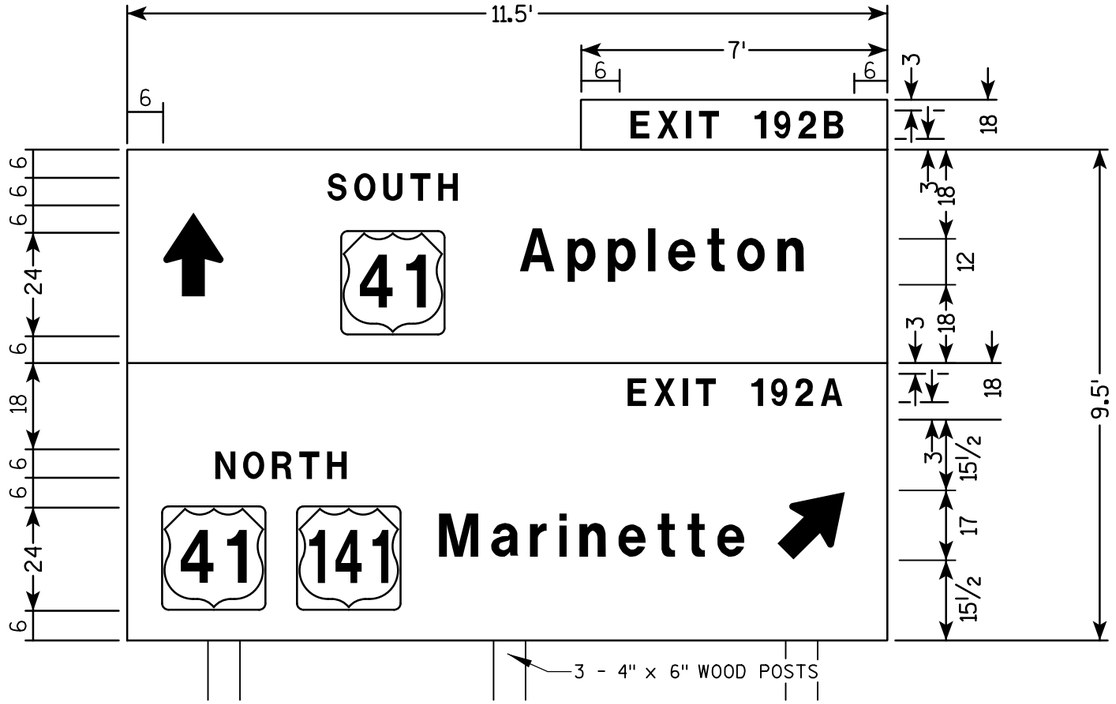
8) SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTIONS 637.2.1.2 AND 643.2.9.3.

9) UNLESS OTHERWISE NOTED, DIMENSIONS ARE IN INCHES.



PAID FOR AS "TRAFFIC CONTROL SIGNS FIXED MESSAGE LEFT IN PLACE"





NOTES:
1) AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE SIGNING AND MARKING SUPERVISOR SHALL VERIFY EACH SIGN LOCATION.

2) ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4" X 6") MAY BE USED FOR SIGNS ON SURFACE STREETS. SIGNS WHERE NO POSTS ARE SHOWN TO BE MOUNTED ON EXISTING SIGNS. FOR SIGNS MOUNTED ON POSTS, USE POSTS FROM FHWA LIST OF ACCEPTED BREAKAWAY SUPPORTS.

3) POSTS SHALL MEAT BREAKAWAY REQUIREMENTS OF SECTION 643.2.9.1 OF THE STANDARD SPECIFICATIONS AND SIGN PLATE A4-11.

4) UNLESS OTHERWISE NOTED, SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".

5) UNLESS OTHERWISE NOTED, SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE BACKGROUND PER STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

6) ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS: 12" CAPS SHALL BE SERIES "D", 6" CAPS SHALL BE SERIES "C".

7) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.

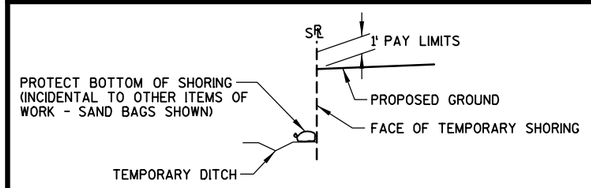
8) SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTIONS 637.2.1.2 AND 643.2.9.3.

9) UNLESS OTHERWISE NOTED, DIMENSIONS ARE IN INCHES.

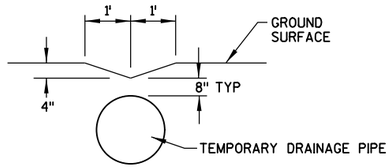
2

LEGEND

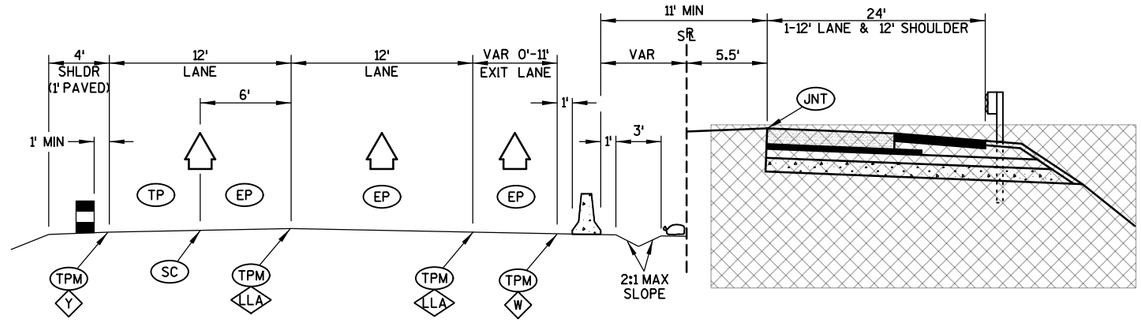
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

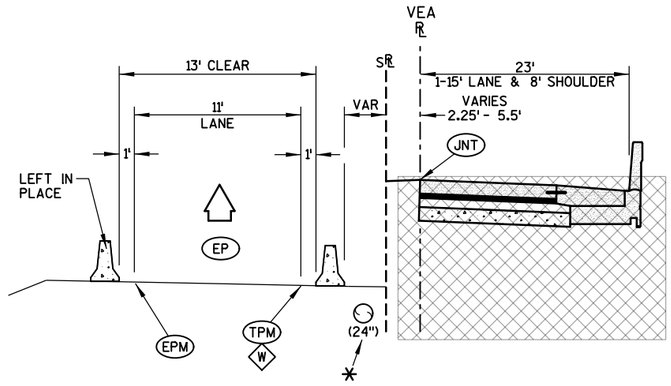


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



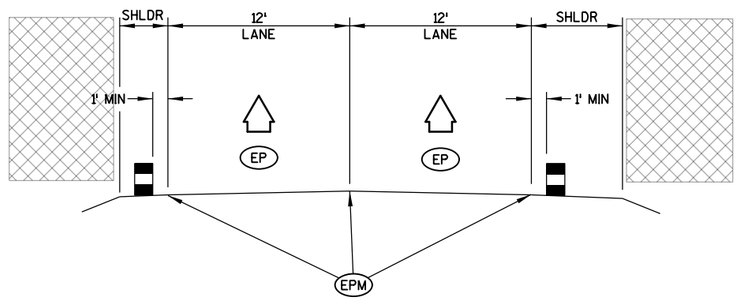
NB USH 41

STA 1138+00 NMC TO STA 1159+00 NMC

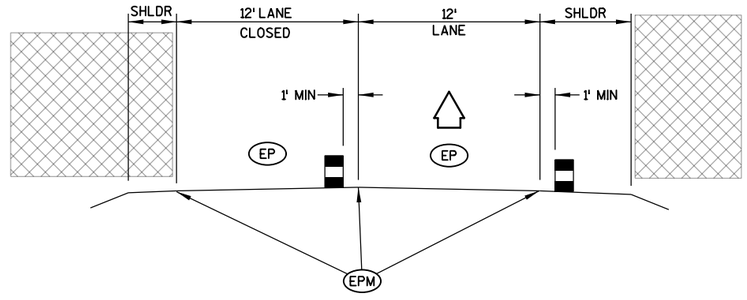


NB USH 41 OFF-RAMP TO VELP AVE

STA 1159+00 VEA TO STA 1170+00 VEA



NB OR SB USH 41 - BOTH LANES OPEN



NB OR SB USH 41 - OVERNIGHT LANE CLOSURE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 1	SHEET 305	E

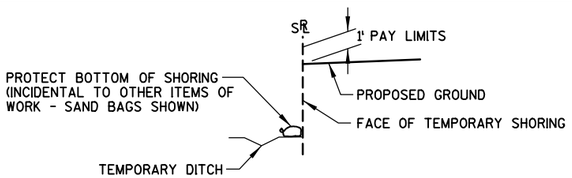
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026101_S1_TS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

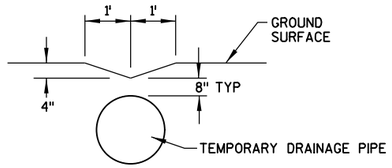
2

LEGEND

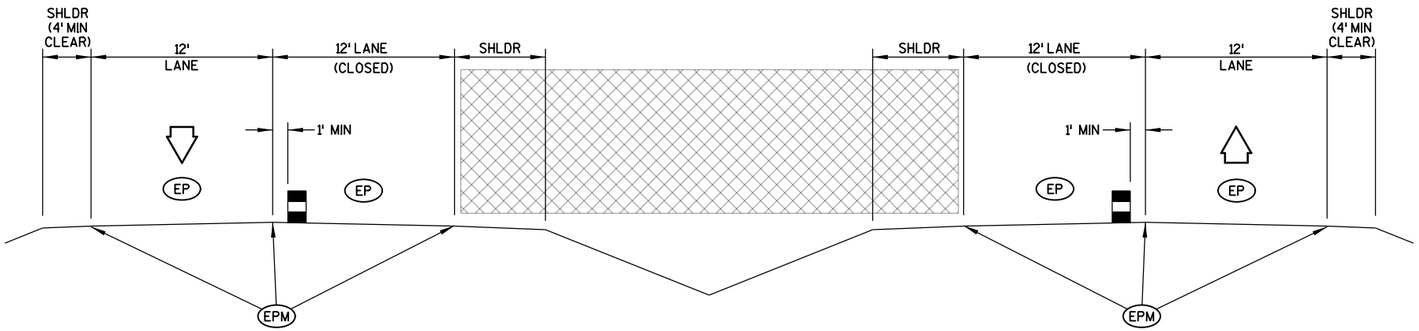
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

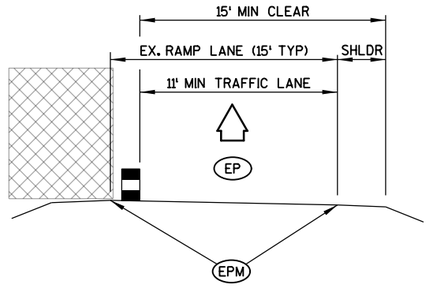


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE

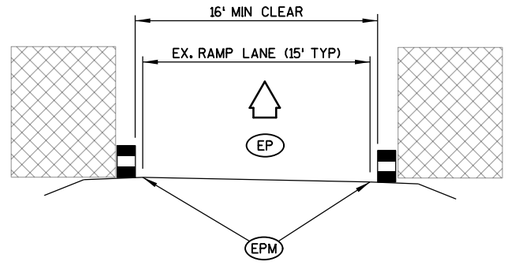


IH 43

MAINTAIN MIN 16' CLEAR WIDTH IN BOTH DIRECTIONS

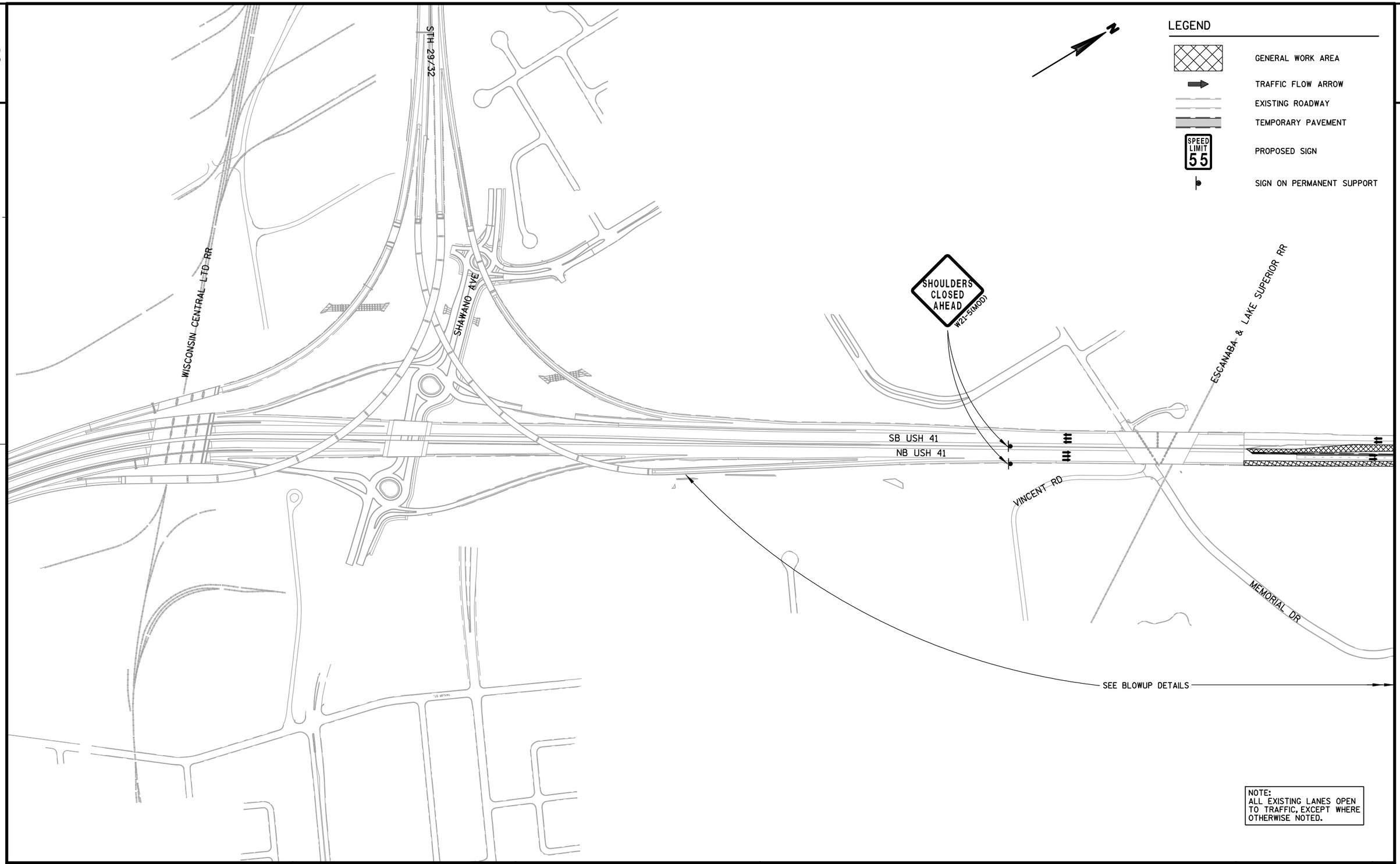


RAMPS - DRUMS ON ONE SIDE OF TRAFFIC



RAMPS - DRUMS ON BOTH SIDES OF TRAFFIC

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 1	SHEET 306 E



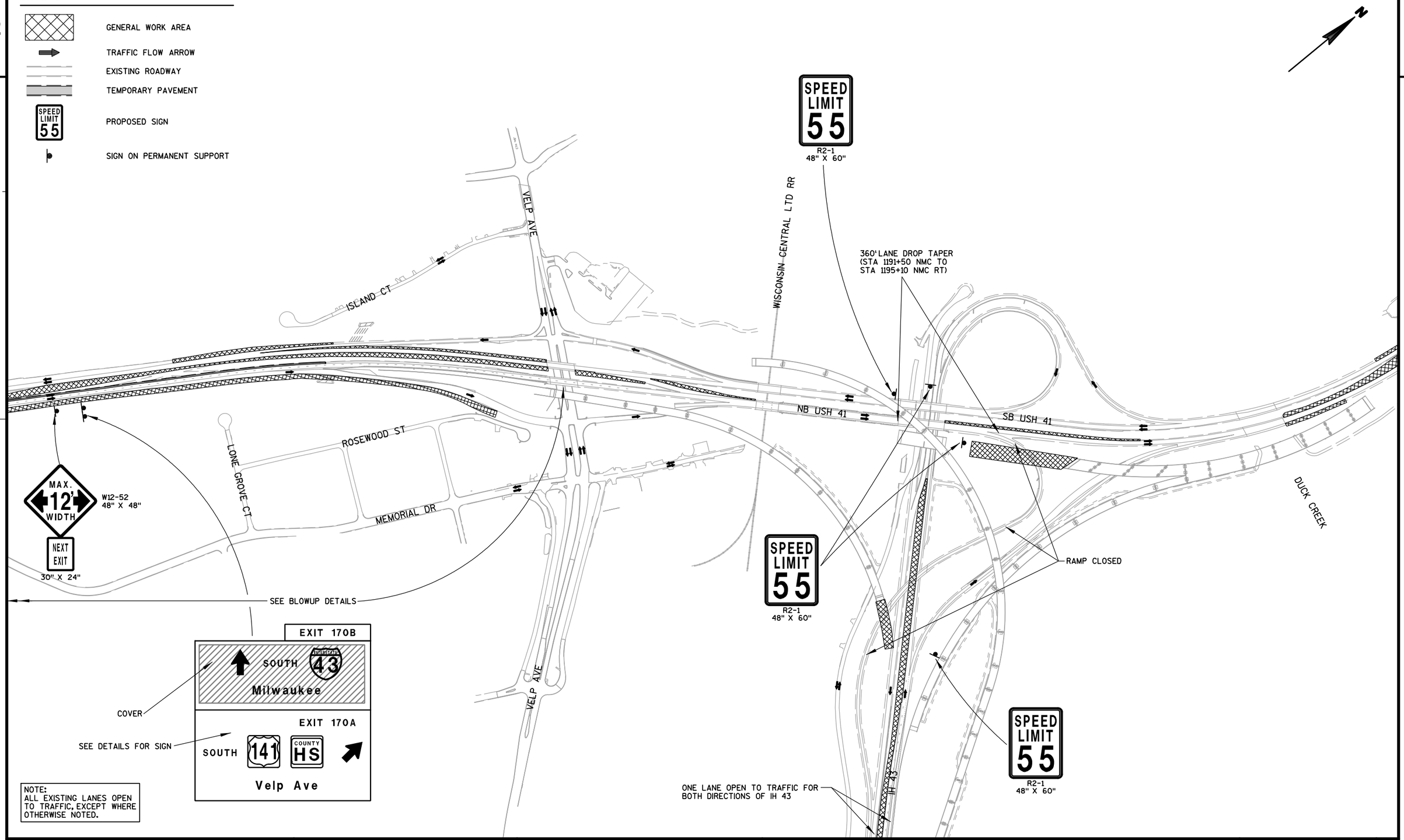
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1 OVERVIEW - PAGE 1 OF 6	SHEET 307	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026103_S1_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT



NOTE:
ALL EXISTING LANES OPEN TO TRAFFIC, EXCEPT WHERE OTHERWISE NOTED.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1 OVERVIEW - PAGE 2 OF 6	SHEET 308 E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026104_S1_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

2

LEGEND

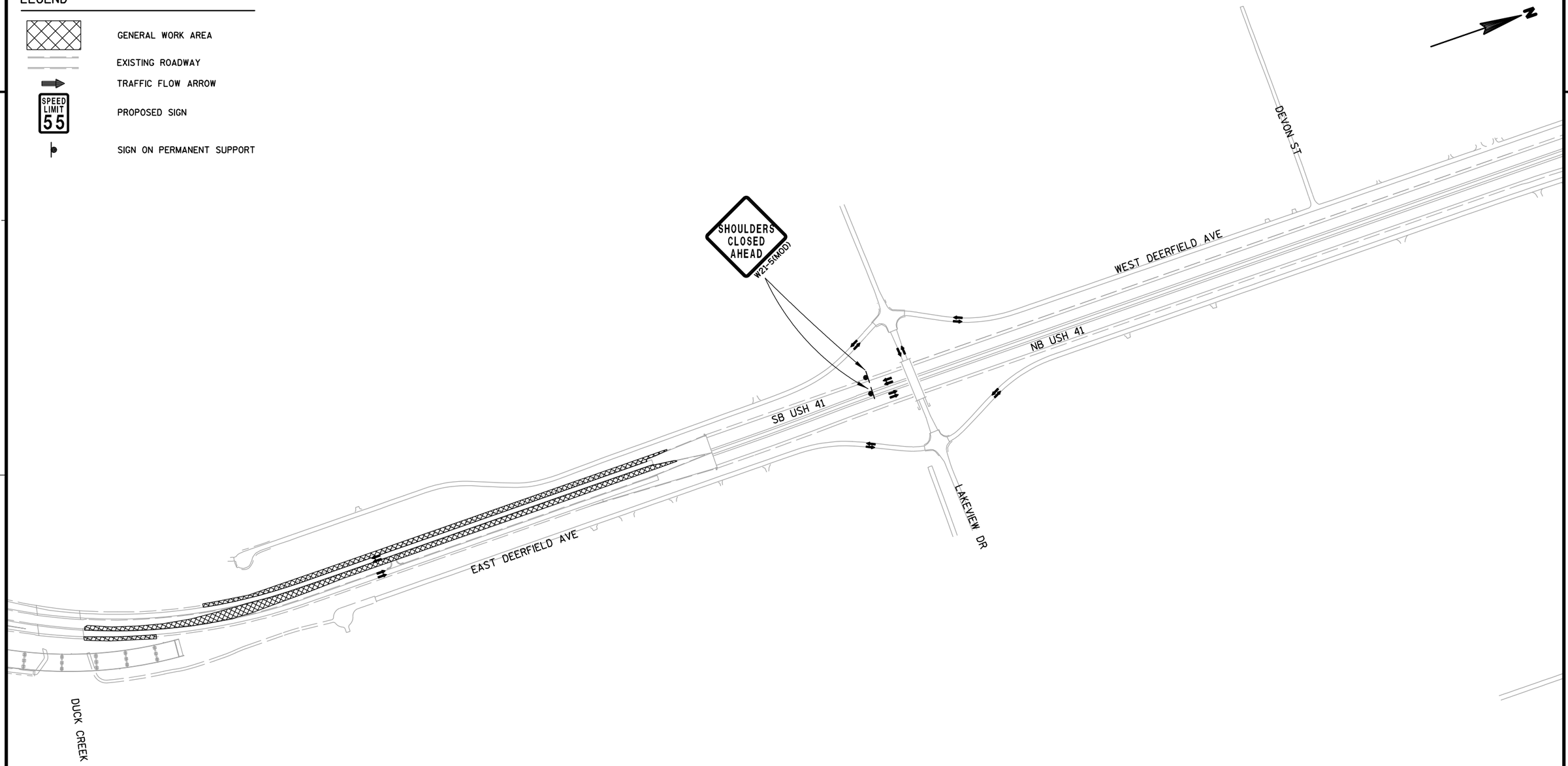
GENERAL WORK AREA

EXISTING ROADWAY

TRAFFIC FLOW ARROW

PROPOSED SIGN

SIGN ON PERMANENT SUPPORT



NOTE:
ALL EXISTING LANES OPEN TO TRAFFIC, EXCEPT WHERE OTHERWISE NOTED.

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1 OVERVIEW - PAGE 3 OF 6	SHEET 309	E

2

2

N

LINEVILLE RD

WEST DEERFIELD AVE

NB USH 41

SB USH 41

EAST DEERFIELD AVE

LEGEND

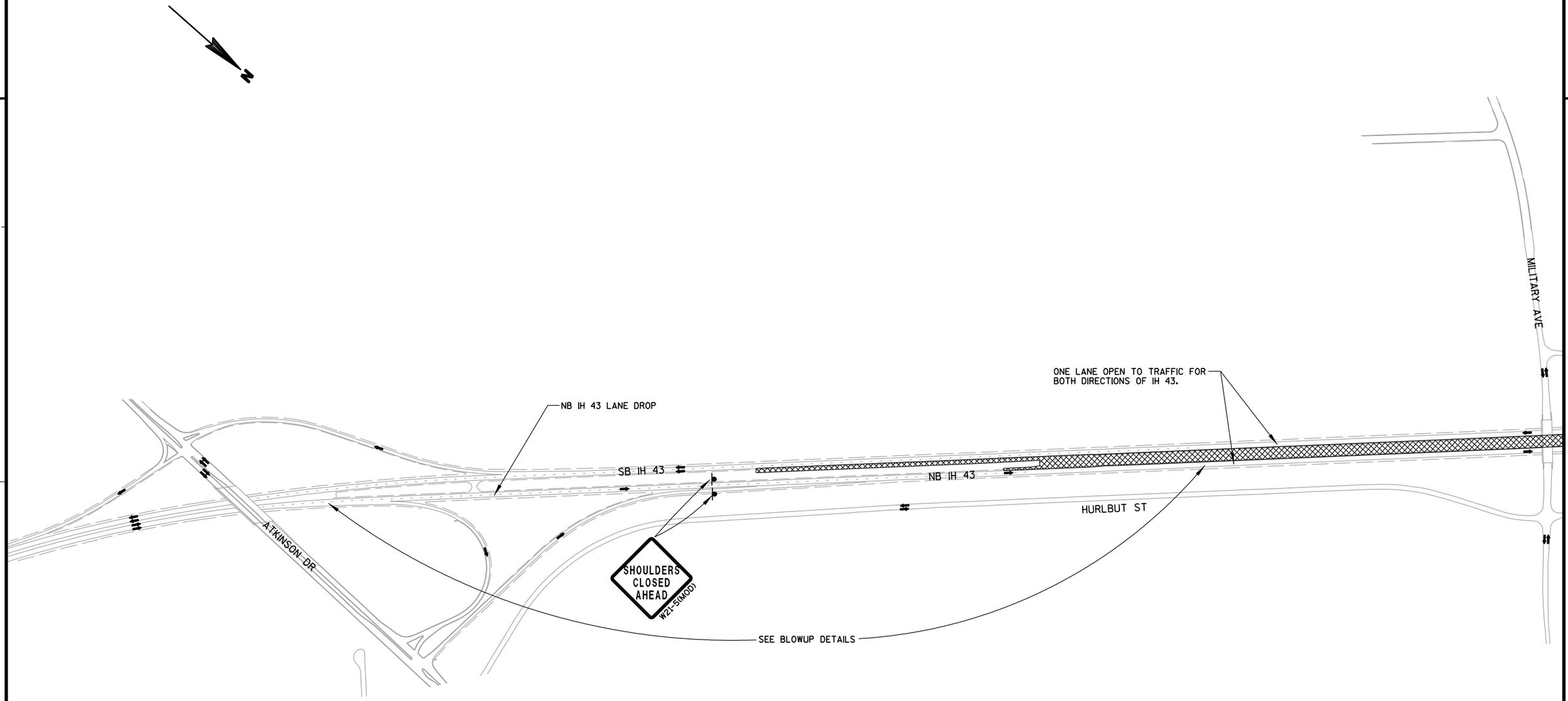
EXISTING ROADWAY

TRAFFIC FLOW ARROW

NOTE:
ALL EXISTING LANES OPEN TO TRAFFIC, EXCEPT WHERE OTHERWISE NOTED.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1 OVERVIEW - PAGE 4 OF 6	SHEET 310	E

2



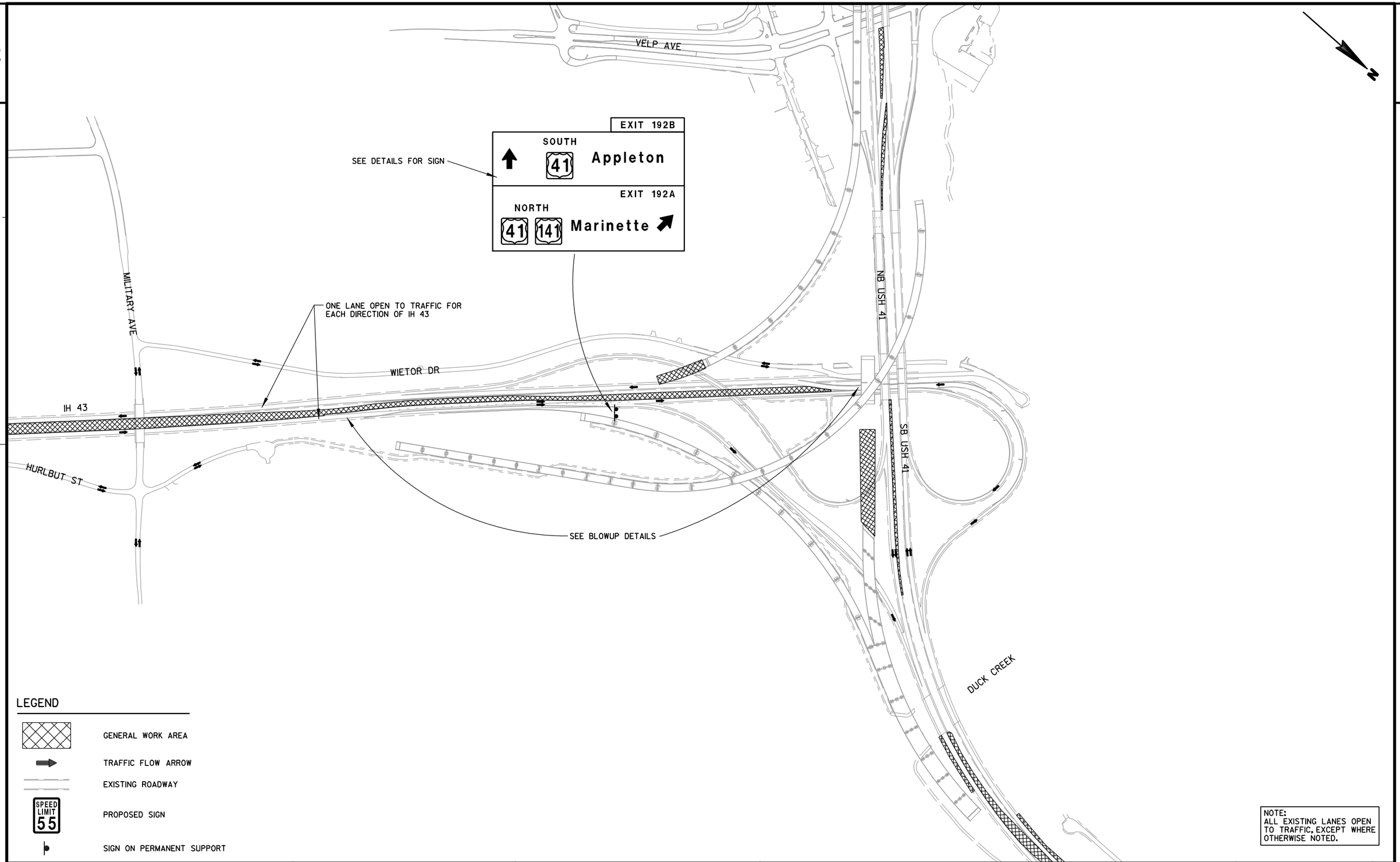
LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT

NOTE:
ALL EXISTING LANES OPEN TO TRAFFIC, EXCEPT WHERE OTHERWISE NOTED.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1 OVERVIEW - PAGE 5 OF 6	SHEET 311	E

2



LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT

NOTE:
ALL EXISTING LANES OPEN TO TRAFFIC, EXCEPT WHERE OTHERWISE NOTED.

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1 OVERVIEW - PAGE 6 OF 6	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026108_S1_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

2

2

WOODMAN DR

MEMORIAL DR

SB USH 41 TO STH 29

SB USH 41

1116+00 SMC | 1118+00 SMC | 1120+00 SMC | 1122+00 SMC | 1124+00 SMC | 1126+00 SMC | 1128+00 SMC | 1130+0

1116+00 NMC | 1118+00 NMC | 1120+00 NMC | 1122+00 NMC | 1124+00 NMC | 1126+00 NMC | 1128+00 NMC | 1130+0

NB USH 41

STH 29 TO USH 41

2400' R

15'

+19 NMC

E-8W

2400' R

REM

+70

150' LANE TAPER
(15' TO 12')

+20

RT-LL

E-4W

+00

500' LANE SHIFT

12'

+90

360' LANE
DROP TAPER

MATCH LINE 1130+00 NMC

W1-6
48" X 24"

W04-2R

VINCENT RD

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- RT-LL — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE) (LANE LINE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026109_S1.dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- XXXXX SAWCUT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- SPEED LIMIT 55 PROPOSED SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- RT-4W TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- RT-4Y TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- RT-LL TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE) (LANE LINE)
- REM REMOVE CONFLICTING PAVEMENT MARKING

N

ESCANABA & LAKE SUPERIOR RR

MEMORIAL DR

VILLAGE CT

MATCH LINE 1130+00 NMC

MATCH LINE 1145+00 NMC

SB USH 41

NB USH 41

0 SMC 1132+00 SMC 1134+00 SMC 1136+00 SMC 1138+00 SMC 1140+00 SMC 1142+00 SMC 1144+00 SMC

0 NMC 1132+00 NMC 1134+00 NMC 1136+00 NMC 1138+00 NMC 1140+00 NMC 1142+00 NMC 1144+00 NMC

500' LANE SHIFT

100'

6'

24'

8:1 TAPER

1' CLEAR

+50

360' LANE DROP TAPER

VINCENT RD

REM

RT-LL

RT-4W

RT-4Y

REM

T-4W

T-LL

T-4Y

W5-52R
12" X 36"
(BRACKET MOUNT
TO BARRIER)

W01-6
48" X 24"

W01-6
48" X 24"

CONSTRUCT 10' SHOULDER WIDENING
(7' PAVED, 3' UNPAVED) WITH NIGHT
CLOSURE AT BEGINNING OF STAGE 1

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET	E

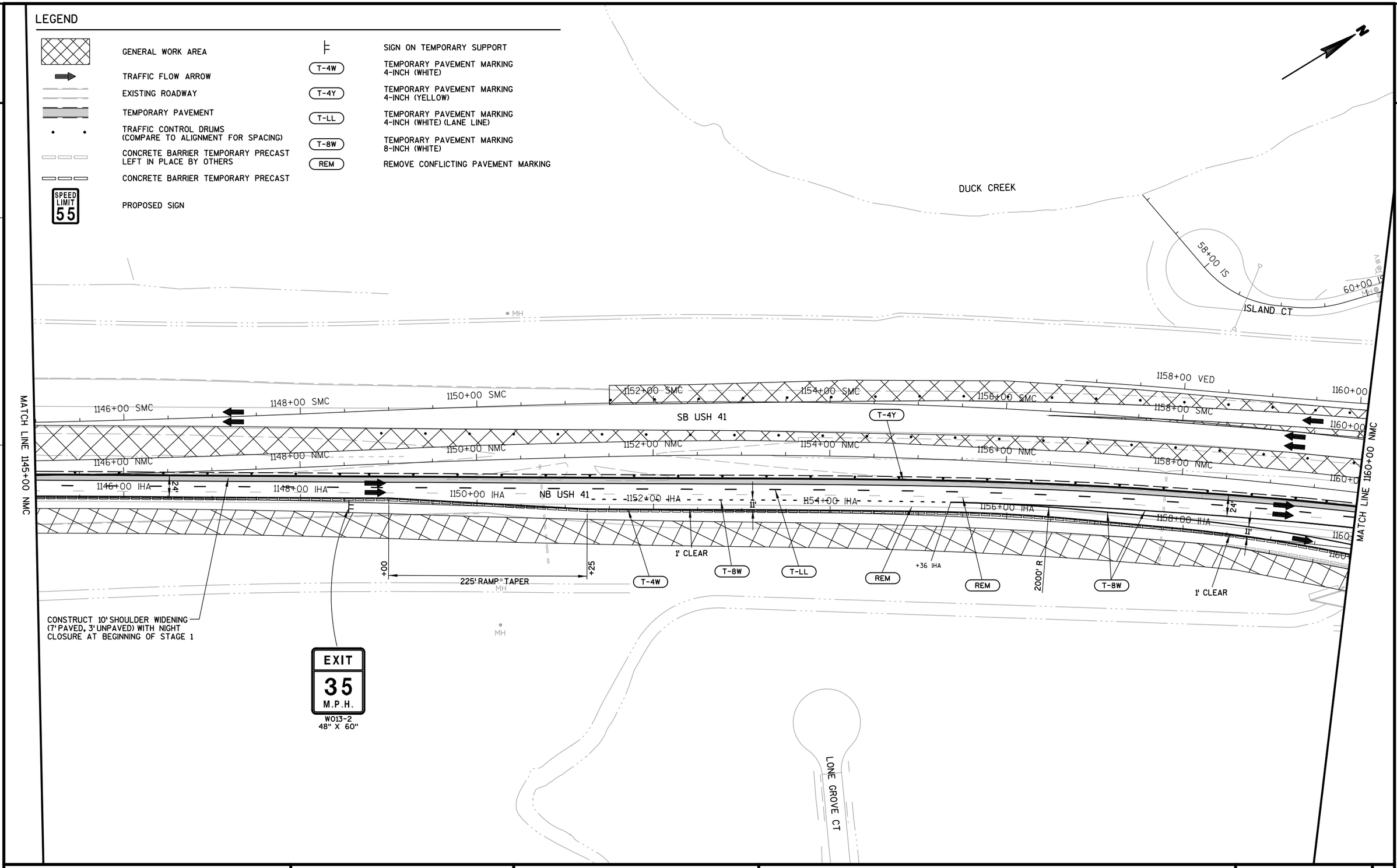
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026110_S1.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- T-8W — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET 315	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026111_S1.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

ISLAND CT

BEAVER DAM CREEK

MH

W04-1

VELP AVE

N

SMC 1162+00 SMC 1164+00 SMC 1166+00 SMC 1168+00 SMC 1170+00 SMC 1172+00 SMC 1174+00 SMC

1' CLEAR

SB USH 41

T-LL T-4Y

NMC 1162+00 NMC 1164+00 NMC 1166+00 NMC 1168+00 NMC 1170+00 NMC 1172+00 NMC 1174+00 NMC

T-4W

NB USH 41

IHA 1162+00 IHA 1164+00 IHA 1166+00 IHA 1168+00 IHA 1170+00 IHA 1172+00 IHA 1174+00 IHA

VEA 1162+00 VEA 1164+00 VEA 1166+00 VEA 1168+00 VEA 1170+00 VEA 1172+00 VEA

T-4Y

REM

13' MIN CLEAR
(11' LANE)

T-4W

MATCH LINE 1160+00 NMC

MATCH LINE 1175+00 NMC

ROSEWOOD ST

GLENVIEW AVE

VELP AVE

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026112_S1.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

LEGEND

GENERAL WORK AREA

TRAFFIC FLOW ARROW

EXISTING ROADWAY

TRAFFIC CONTROL DRUMS
(COMPARE TO ALIGNMENT FOR SPACING)

CONCRETE BARRIER TEMPORARY PRECAST

N

WISCONSIN CENTRAL LTD. RR

SB USH 41 TO VELP AVE

MATCH LINE 1175+00 NMC

1176+00 SMC

1178+00 SMC

1180+00 SMC

1182+00 SMC

1184+00 SMC

1186+00 SMC

1188+00 SMC

1190+00 SMC

8:1 TAPER

SB USH 41

1176+00 NMC

1178+00 NMC

1180+00 NMC

1182+00 NMC

1184+00 NMC

1186+00 NMC

1188+00 NMC

1190+00 NMC

NB USH 41

1176+00 IHA

1178+00 IHA

1180+00 IHA

1182+00 IHA

1184+00 IHA

1186+00 IHA

1188+00 IHA

VELP AVE TO NB USH 41

MEMORIAL DR

MH

POST

PROJECT NO: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | CONSTRUCTION STAGING - STAGE 1 | SHEET 317 | E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026112A_S1.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- SPEED LIMIT 55 — PROPOSED SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN
- TE-4W — TEMPORARY PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

SB IH 43 TO ATKINSON DR

1102+00 SIH 1104+00 SIH 1106+00 SIH SB IH 43 1108+00 SIH 1110+00 SIH 1112+00 SIH 1114+00 SIH 1116+00 SIH

REM

1102+00 NIH 1104+00 NIH 1106+00 NIH 1108+00 NIH 1110+00 NIH 1112+00 NIH 1114+00 NIH 1116+00 NIH

NB IH 43

NB IH 43 TO ATKINSON DR

+00

TE-4W

780' OUTSIDE LANE DROP TAPER

W01-6
48" X 24"

HURLBUT ST

MATCH LINE 1116+50 NIH

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET 318	E

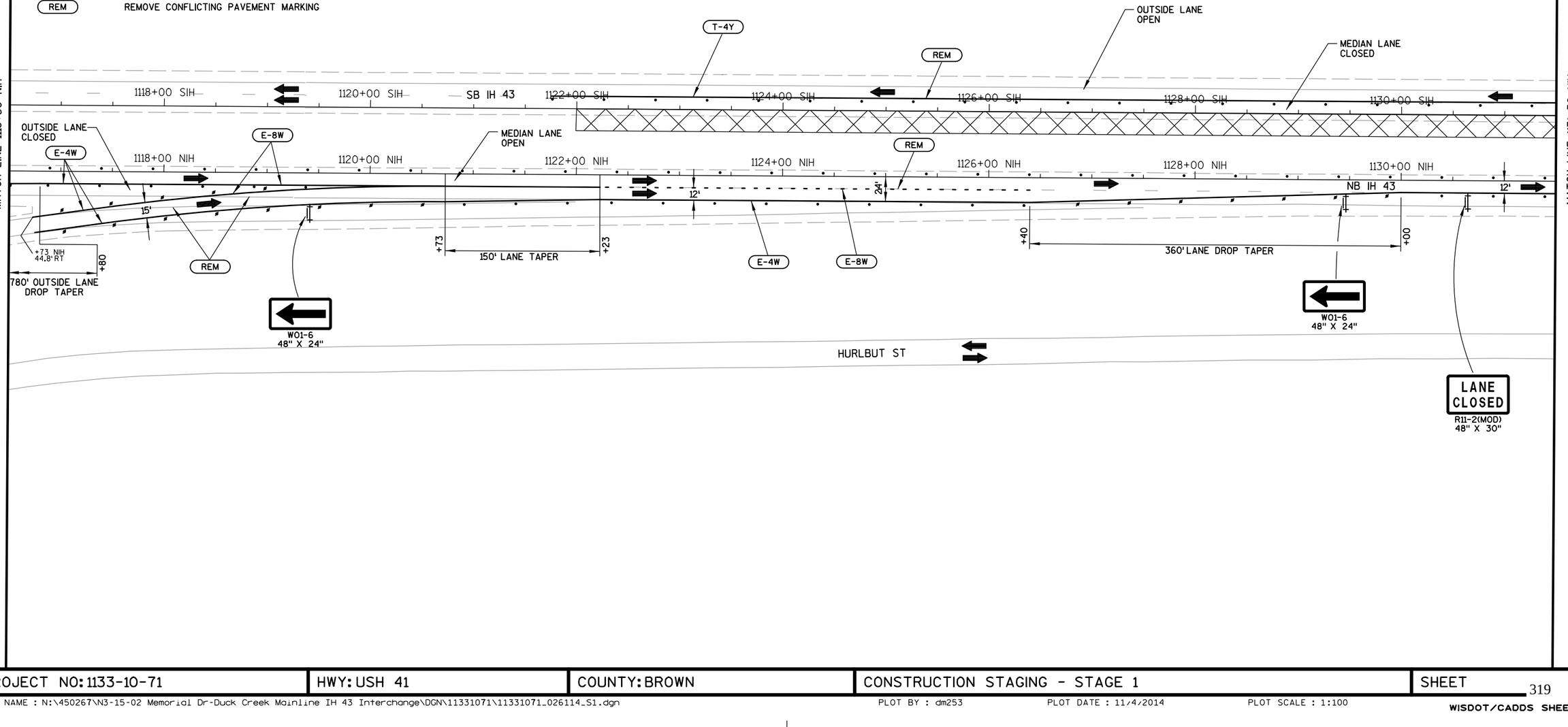
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026113_S1.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- SPEED LIMIT 55 — PROPOSED SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET E

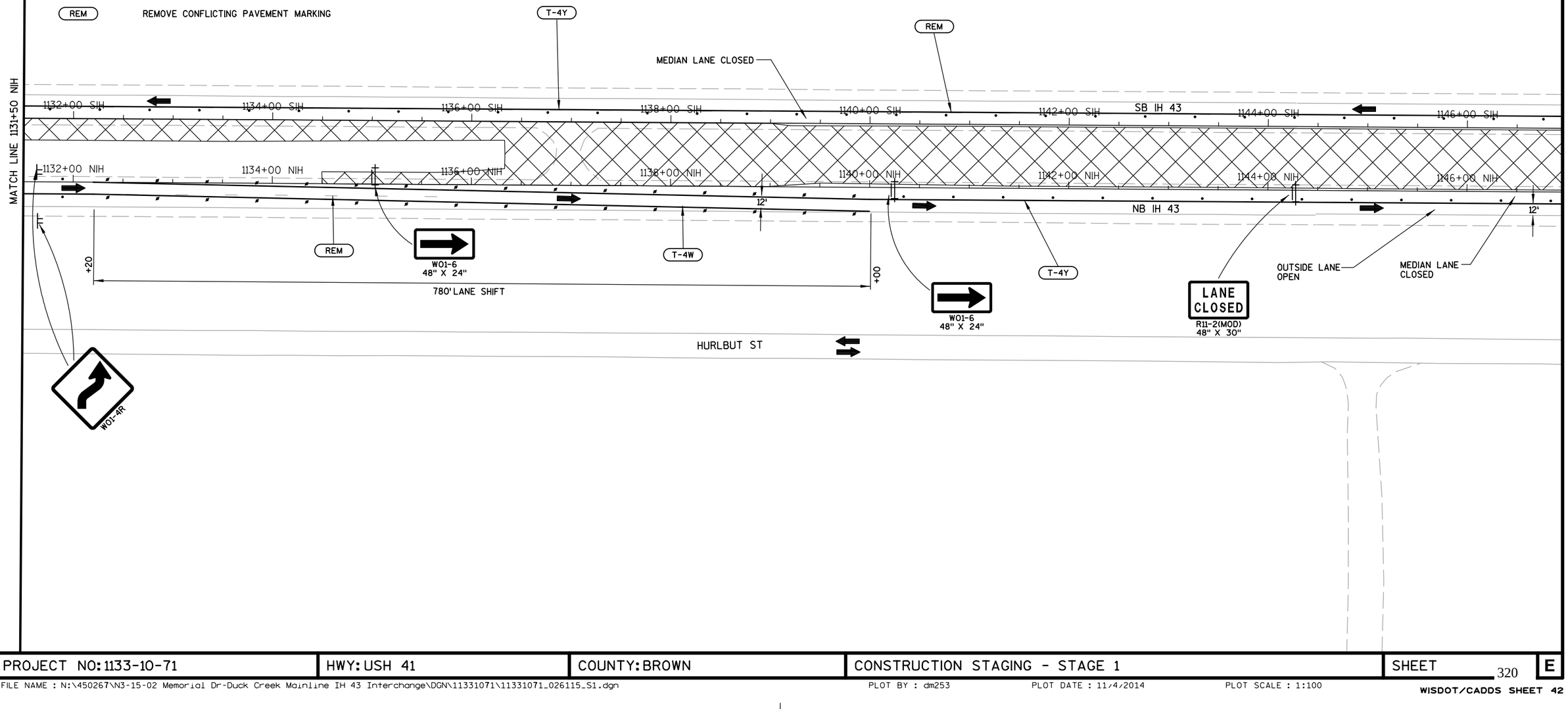
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026114_S1.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

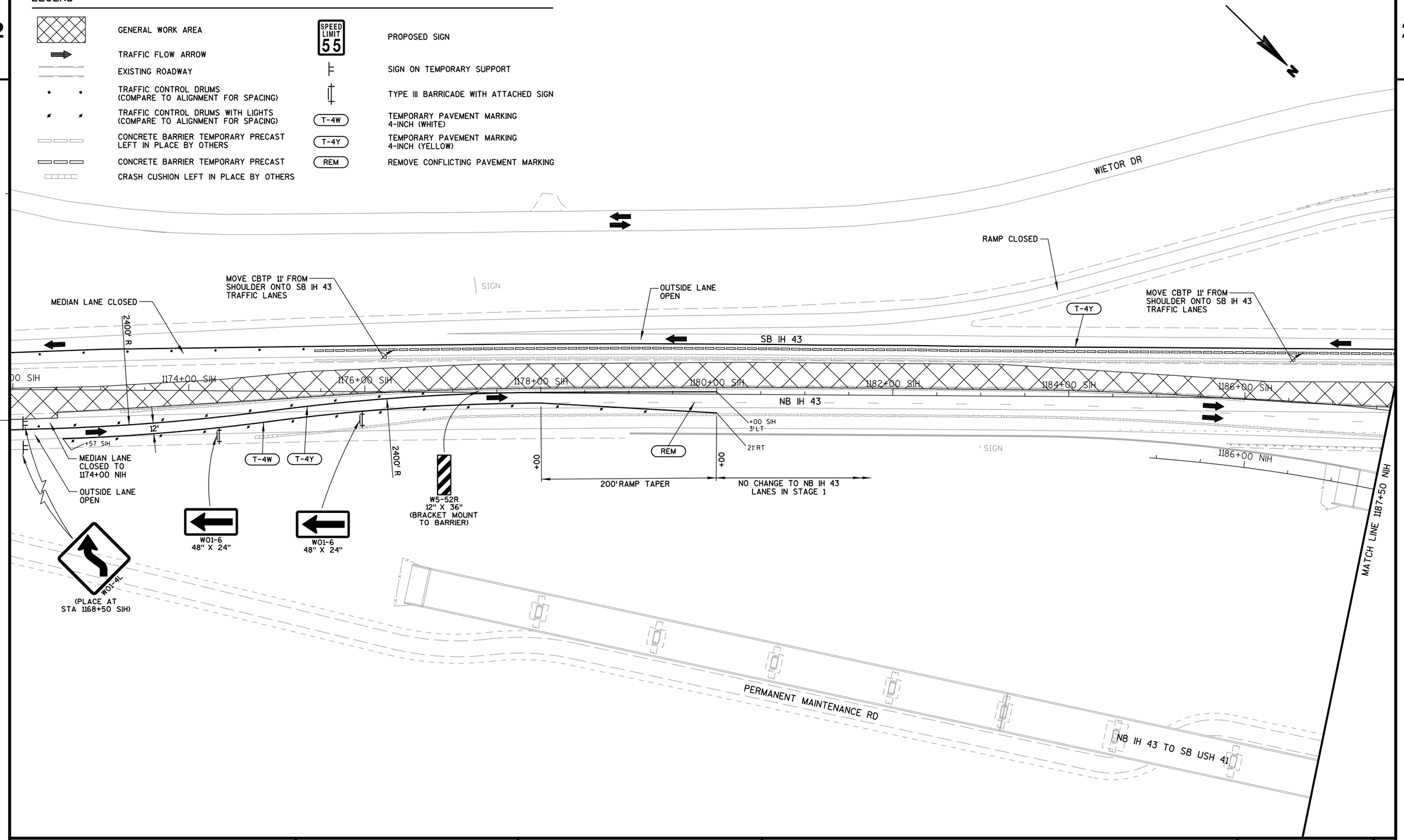
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- REM — REMOVE CONFLICTING PAVEMENT MARKING



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET 320	E

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- REM — REMOVE CONFLICTING PAVEMENT MARKING



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET 321	E

2

2

RAMP CLOSED

NB USH 41 TO SB IH 43

1192+00 IHA

1194+00 IHA

1196+00 IHA

WIETOR DR

W01-4R

(PLACE UNDER
SB USH 41 STRUCTURE)

OUTSIDE LANE
OPEN

MEDIAN LANE
CLOSED

STA. 1197+53 TWC
66'LT

1' CLEAR

T-4Y

T-4W

REMOVE CBTP
LEFT IN PLACE

PI 1188+00 NIH

8:1 TAPER

SB IH 43

12'

14'

PI 1202+28 TWC

MATCH LINE 1187+50 NIH

1188+00 TWC

1190+00 TWC

1192+00 TWC

1194+00 TWC

1196+00 TWC

1198+00 TWC

1200+00 TWC

1202+00 TWC

N 43°55'36" W

NB IH 43

SIGN

1060' R
L = 245'

STA. 1199+94 TWC
38'LT

W01-6
48" X 24"

W01-6
48" X 24"

1188+00 NIH

1190+00 NIH

1192+00 NIH

1194+00 NIH

NB IH 43 TO NB USH 41

1196+00 NIH

RAMP CLOSED

1188+00 IHB

1190+00 IHB

1196+00 IHB

1198+00 IHB

1200+00 IHB

NB IH 43 TO SB USH 41

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 1	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026117_S1.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

N

TSS
SLOTTED CORRUGATED SURFACE DRAIN (SEE TEMPORARY DRAINAGE DETAILS - STAGE 1)

1138+00 TWB
1140+00 TWB
1142+00 TWA
1142+00 TWB
1144+00 TWA
1144+00 TWB
1146+00 TWA
1146+00 TWB
1148+00 TWA
1148+00 TWB
1150+00 TWA
1150+00 TWB
1152+00 TWB

SB USH 41
NB USH 41
NB USH 41 TO VELP AVE

1144+00 IHA
1146+00 IHA
1148+00 IHA
1150+00 IHA

TEMP SHORING (SH1)

PSS
SIGN
MH
BEAVER DAM CREEK

MATCH LINE 1152+00 TWB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 323	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026150_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

N

ISLAND CT

BEAVER DAM CREEK

MH

MH

MH

PSS

VELP AVE TO SB USH 41

SB USH 41

NB USH 41

1154+00 TWA

1156+00 TWA

1158+00 TWA

1160+00 TWA

1162+00 TWA

1164+00 TWA

1166+00 TWA

1154+00 TWB

1156+00 TWB

1158+00 TWB

1160+00 TWB

1162+00 TWB

1164+00 TWB

1166+00 TWB

MATCH LINE 1152+00 TWB

MATCH LINE 1167+00 TWB

COVER PLATES TEMPORARY

1154+00 IHA

1156+00 IHA

1158+00 IHA

1160+00 IHA

1162+00 IHA

1164+00 IHA

1166+00 IHA

1160+00 VEA

1162+00 VEA

1164+00 VEA

1166+00 VEA

NB USH 41 TO VELP AVE

TEMP SHORING (SH1)

BEAVER DAM CREEK

TSS

PSS

TSS

(SEE TEMPORARY DRAINAGE DETAILS - STAGE 1)

PSS

REMOVE PORTION OF SS AND ENDWALL

TEMP SHORING (SH2)

LONE GROVE CT

ROSEWOOD ST

MH

MH

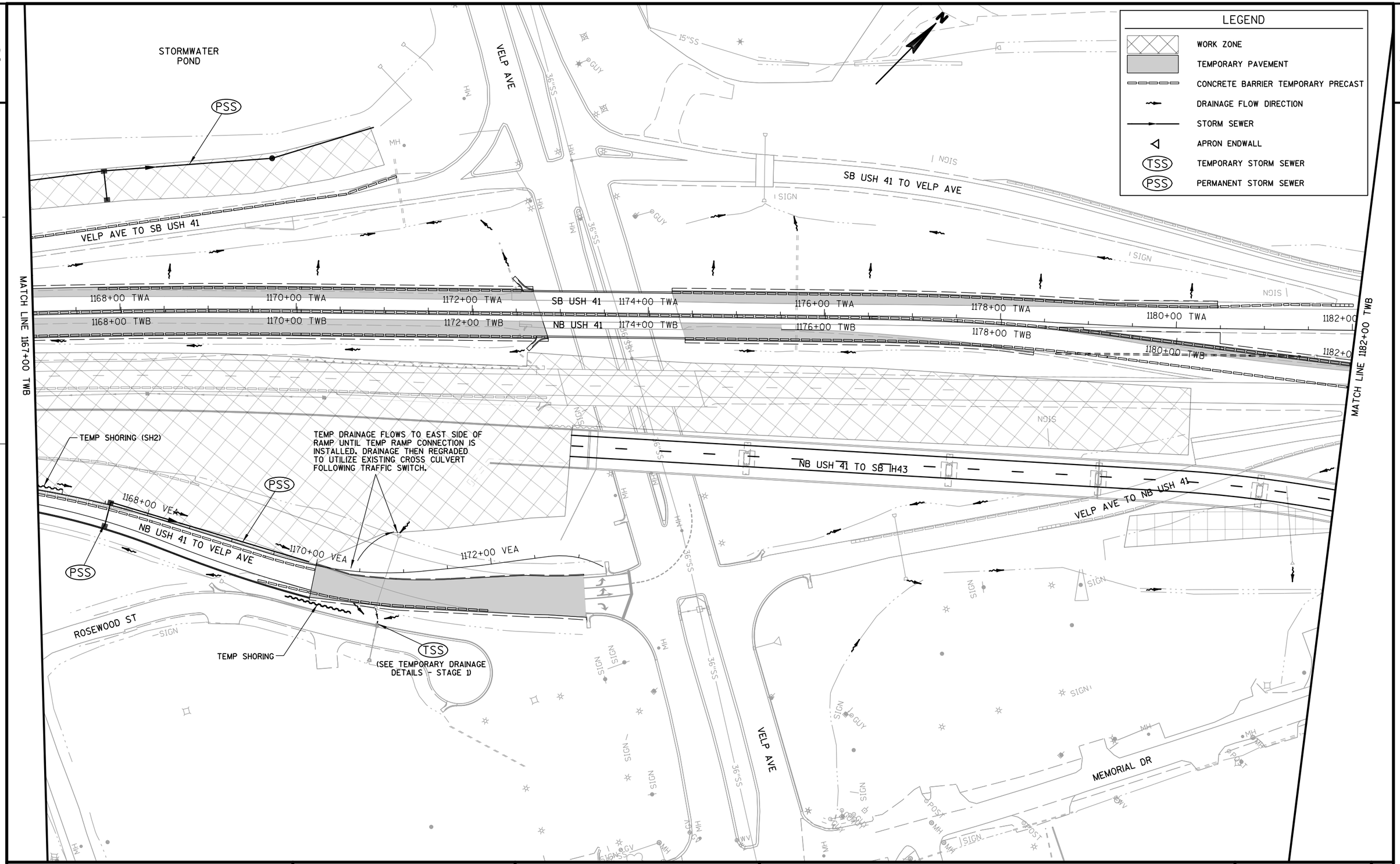
MH

MH

24"SS

SS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 324	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 325	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026152_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

WISCONSIN CENTRAL LTD RR

NB IH 43 TO SB USH 41 (CLOSED)

MATCH LINE 1182+00 TWB

MATCH LINE 1197+00 TWB

TWA 1184+00 TWA 1186+00 TWA 1188+00 TWA 1190+00 TWA SB USH 41 1192+00 TWA 1194+00 TWA 1196+00 TWA

TWB 1184+00 TWB 1186+00 TWB 1188+00 TWB 1190+00 TWB 1192+00 TWB 1194+00 TWB 1196+00 TWB

NB USH 41

N

HW MH

NB USH 41 TO SB IH 43

MEMORIAL DR

MH

WV

SIGN

GUY

SB USH 41 TO SB IH 43

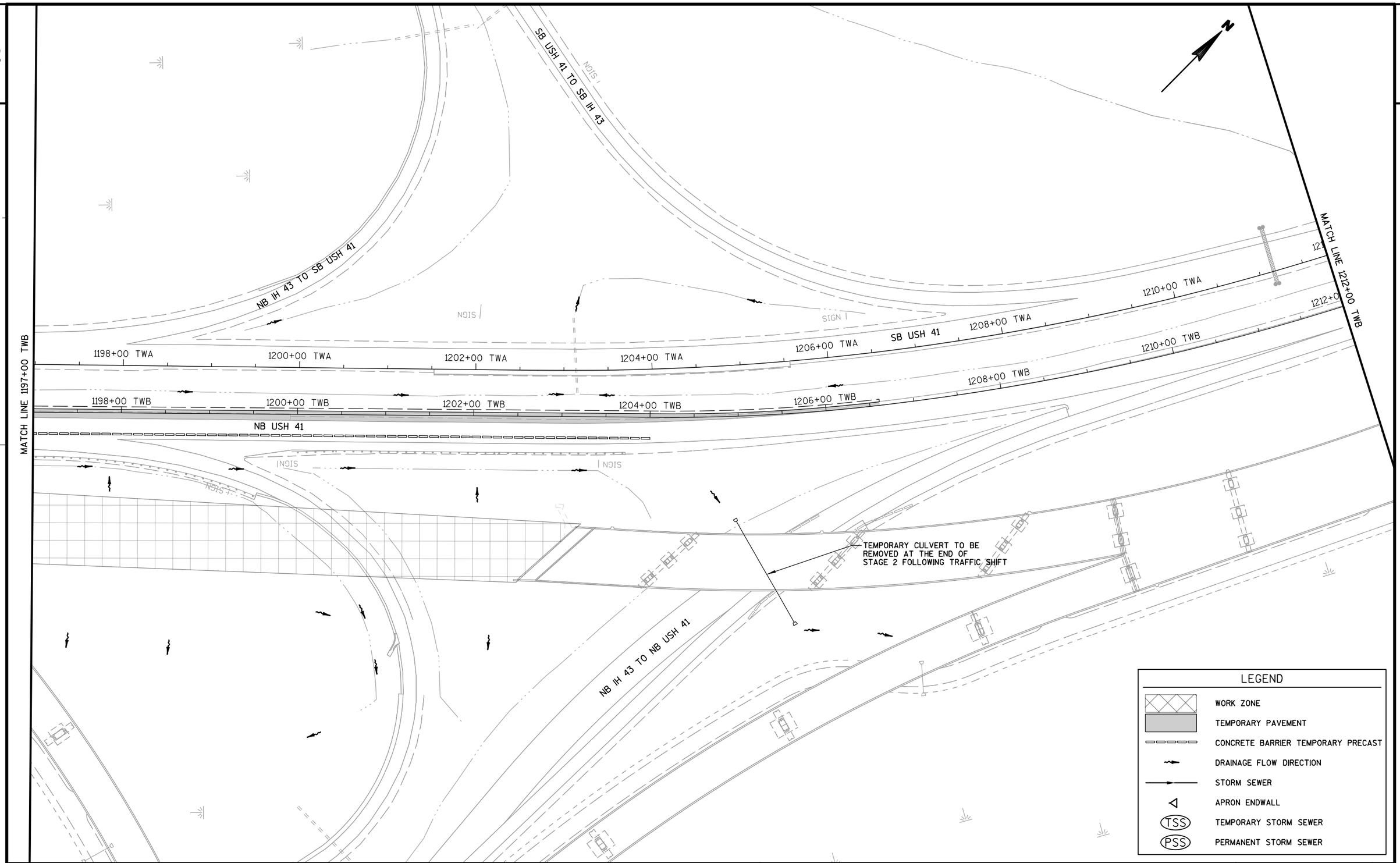
NB IH 43 TO SB USH 41

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026153_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 327	E

2

N

DUCK CREEK

WEST DEERFIELD AVE

SIGN

SIGN

SIGN

SIGN

MATCH LINE 1212+00 TWB

MATCH LINE 122+00 TWB

2+00 TWA

1214+00 TWA

1216+00 TWA

1218+00 TWA

SB USH 41

1220+00 TWA

1222+00 TWA

1224+00 TWA

1226+0

0 TWB

1214+00 TWB

1216+00 TWB

1218+00 TWB

1220+00 TWB

1222+00 TWB

1224+00 TWB

NB USH 41

TSS
SLOTTED CORRUGATED
SURFACE DRAIN
(SEE TEMPORARY DRAINAGE
DETAILS - STAGE 1)

TSS
(SEE TEMPORARY DRAINAGE
DETAILS - STAGE 1)

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS TEMPORARY STORM SEWER
- PSS PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 328	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026155_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

N

WEST DEERFIELD AVE

TSS
SLOTTED CORRUGATED
SURFACE DRAIN
(SEE TEMPORARY DRAINAGE
DETAILS - STAGE 1)

SIGN

SIGN

SIGN

1226+00 TWA
1228+00 TWA
1230+00 TWA
1232+00 TWA
1234+00 TWA
SB USH 41
1236+00 TWA
1238+00 TWA
1240+00 TWA

TWB
1228+00 TWB
1230+00 TWB
1232+00 TWB
1234+00 TWB
NB USH 41
1236+00 TWB
1238+00 TWB
1240+00 TWB

MATCH LINE 122+00 TWB

MATCH LINE 1241+00 TWB

EAST DEERFIELD AVE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026156_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

MATCH LINE 1241+00 TWB

WEST DEERFIELD AVE

SIGN

1242+00 TWA

1244+00 TWA

SB USH 41

1246+00 TWA

1248+00 TWA

1250+00 TWA

1242+00 TWB

1244+00 TWB

NB USH 41

1246+00 TWB

1248+00 TWB

1250+00 TWB

1252+00 TWB

1254+00 TWB

1256+00 TWB

GUY

EAST DEERFIELD AVE

SIGN

GUY

GUY

GUY

GUY

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 330	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026157_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

SIGN

MH

HW

SB IH 43

1124+00 TWC

1126+00 TWC

1128+00 TWC

1130+00 TWC

1132+00 TWC

1134+00 TWC

1136+00 TWC

SIGN

MATCH LINE 1137+00 TWC

1132+00 TWD

1134+00 TWD

1136+00 TWD

NB IH 43

SIGN

MATCH LINE 1137+00 TWD

HURLBUT ST

AM WV

AM WV

AM WV

AM WV

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 331	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026158_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

MATCH LINE 1137+00 TWC

MATCH LINE 1137+00 TWD

MATCH LINE 1152+00 TWD

TSS
SLOTTED CORRUGATED
SURFACE DRAIN
(SEE TEMPORARY DRAINAGE
DETAILS - STAGE 1)

TSS
SLOTTED CORRUGATED
SURFACE DRAIN
(SEE TEMPORARY DRAINAGE
DETAILS - STAGE 1)

TSS
60'LF OF TEMP 18-INCH
STORM SEWER @ 0.3%

PSS

SIGN

SIGN

1138+00 TWC
1140+00 TWC
1142+00 TWC
1144+00 TWC
1146+00 TWC
1148+00 TWC
1150+00 TWC
1152+00

1138+00 TWD
1140+00 TWD
1142+00 TWD
1144+00 TWD
1146+00 TWD
1148+00 TWD
1150+00 TWD
1152+00

SB IH 43
NB IH 43

HURLBUT ST

HWY
MH

TOWER

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS TEMPORARY STORM SEWER
- PSS PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 332	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026159_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1152+00 TWD

MATCH LINE 1167+00 TWD

WIETOR DR

MILITARY AVE

TSS
68'LF OF TEMP 18-INCH
STORM SEWER @ 0.3%

TSS
66'LF OF TEMP 18-INCH
STORM SEWER @ 0.3%

SIGN

1154+00 TWC

1156+00 TWC

SB IH 43

1158+00 TWC

1160+00 TWC

1162+00 TWC

1164+00 TWC

1166+00 TWC

1154+00 TWD

1156+00 TWD

NB IH 43

1158+00 TWD

1160+00 TWD

1162+00 TWD

1164+00 TWD

1166+00 TWD

PSS

PSS

PSS

HURLBUT ST

MH

MH

MILITARY AVE

HURLBUT ST

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

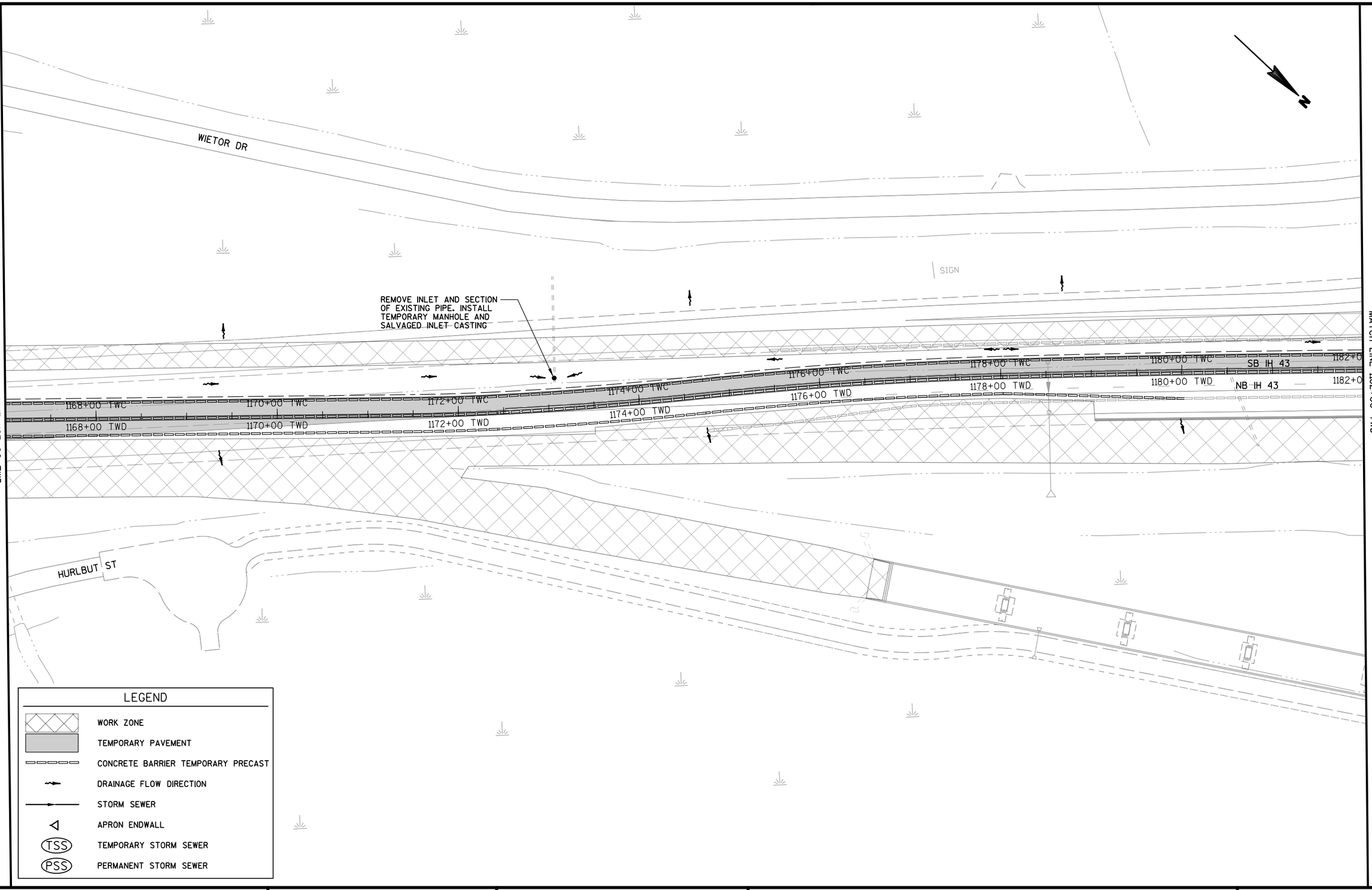
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 333	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026160_S1_dr_OV.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 334	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026161_S1_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

WIETOR DR

REMOVE EXISTING APRON ENDWALL

MATCH LINE 1182+00 TWD

MATCH LINE 1197+00 TWD

1184+00 TWC
1186+00 TWC
1188+00 TWC
1190+00 TWC
1192+00 TWC
1194+00 TWC
1196+00 TWC

NB IH 43
1184+00 TWD
1186+00 TWD
1188+00 TWD
1190+00 TWD
1192+00 TWD
1194+00 TWD
1196+00 TWD

SB IH 43

SIGN

SIGN

NB IH 43 TO NB USH 41

2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 335	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026162_S1_dr_OV.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

INSTALL TEMP 18" PIPE AND APRON ENDWALL

TSS (SEE TEMPORARY DRAINAGE DETAILS - STAGE 1)

MATCH LINE 1197+00 TWD

SB IH 43

NB IH 43

1198+00 TWC

1198+00 TWD

1200+00 TWD

1202+00 TWC

1202+00 TWD

1204+00 TWC

1204+00 TWD

1206+00 TWC

1206+00 TWD

1208+00 TWC

1208+00 TWD

NB USH 41

SB USH 41

1192+00 TWB

1192+00 TWA

1194+00 TWB

1194+00 TWA

1196+00 TWB

1196+00 TWA

1198+00 TWB

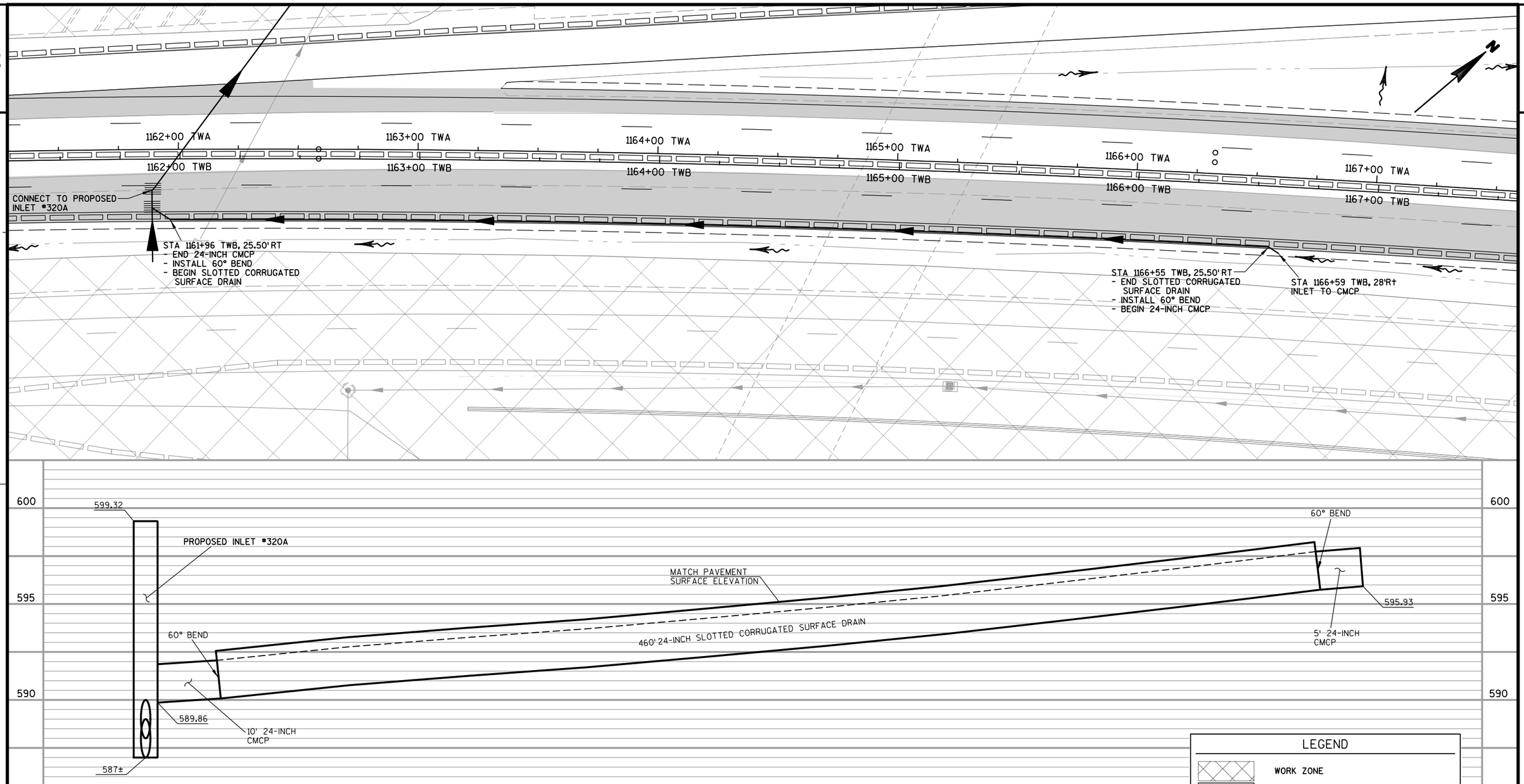
1198+00 TWA

1200+

WIETOR DR

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 1	SHEET 336	E

2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 337	E

2

SB USH 41

STA. 1141+00 TWB, 12.5'L†
BEGIN CMCP

1140+00 TWB
1141+00 TWB
1142+00 TWB
1143+00 TWB
1144+00 TWB
1145+00 TWB

1142+00 TWA
1143+00 TWA
1144+00 TWA
1145+00 TWA
1146+00 TWA

618.67 618.33 617.97 617.58 617.16 616.71 616.24 615.73 615.20 614.64 614.05 613.46 612.87 612.28 611.69 611.10 610.50 609.91 609.36 608.80

NB USH 41

619.15 618.82 618.49 618.13 617.75 617.23 616.76 616.25 615.72 615.00 614.25 613.50 612.74 611.99 611.23 610.58 609.98 609.39 608.84 608.28 607.73 607.18 606.62 606.07 605.51

STA. 1142+00 TWB, 3'L†
BEGIN SLOTTED CORRUGATED
SURFACE DRAIN

STA. 1144+00 TWB, 23.5'R†
END SLOTTED CORRUGATED
SURFACE DRAIN

STA. 1145+00 TWB, 36'R†
CMCP OUTFALL

1144+00 IHA
1145+00 IHA
1146+00 IHA

TEMPORARY NB USH 41 TO
VELP AVE RAMP

615
610
605

MATCH PAVEMENT
SURFACE ELEVATION

614.48

100' 18-INCH CMCP

202' 18-INCH SLOTTED CORRUGATED SURFACE DRAIN

MATCH PAVEMENT
SURFACE ELEVATION

100' 18-INCH CMCP

606.04

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026169_S1_dr_DET.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

2

STORM SEWER MUST BE INSTALLED PRIOR TO CONSTRUCTION OF R-05-0081

STA. 1161+01 IHA, 23' R†
MANHOLE 4' DIA - C
1-23

CONNECT EXISTING STORM SEWER TO MANHOLE

TEMPORARY SHORING (SH2)

7+00 IHA
1158+00 IHA
1159+00 IHA
1160+00 IHA
1161+00 IHA
1162+00 IHA
1163+00 IHA

1160+00 VEA
1161+00 VEA
1162+00 VEA
1163+00 VEA

TEMPORARY NB USH 41 TO VELP AVE RAMP

R-05-0081

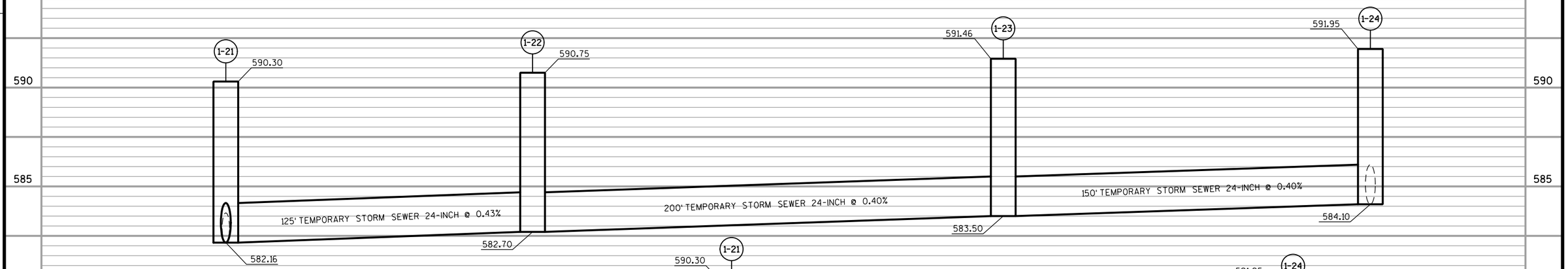
STA. 1157+76 IHA, 4' R†
MANHOLE 4' DIA - C
1-21

STA. 1157+76 IHA, 69' R†
APRON ENDWALL

1-22
STA. 1159+01 IHA, 5' R†
MANHOLE 4' DIA - C

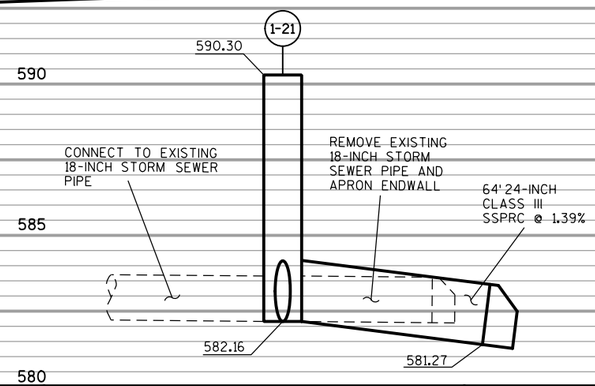
STA. 1162+49 IHA, 4' L†
MANHOLE 4' DIA - C
1-24

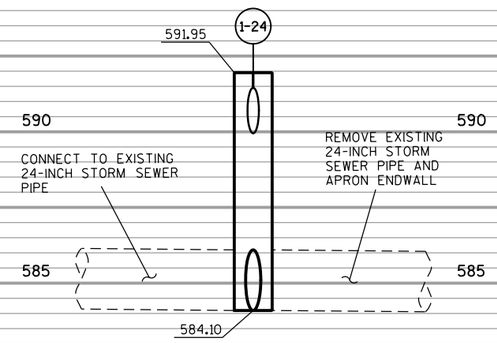
BEAVER DAM CREEK



LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 339	E

2

TEMP DRAINAGE FLOWS TO EAST SIDE OF RAMP UNTIL TEMP RAMP CONNECTION IS INSTALLED. REGRADE TO FORCE DRAINAGE TO UTILIZE EXISTING CROSS CULVERT FOLLOWING TRAFFIC SWITCH.

1167+00 VEA

1168+00 VEA

1169+00 VEA

1170+00 VEA

1171+00 VEA

1172+00 VEA

1173+00

NB USH 41 TO VELP AVE RAMP

R-05-0081

TSS

ROSEWOOD ST

CONNECT STORM SEWER INTO EXISTING INLET

N

590

585

580

5' 18-INCH SSPRC CLASS III @ 1.0%

588.07

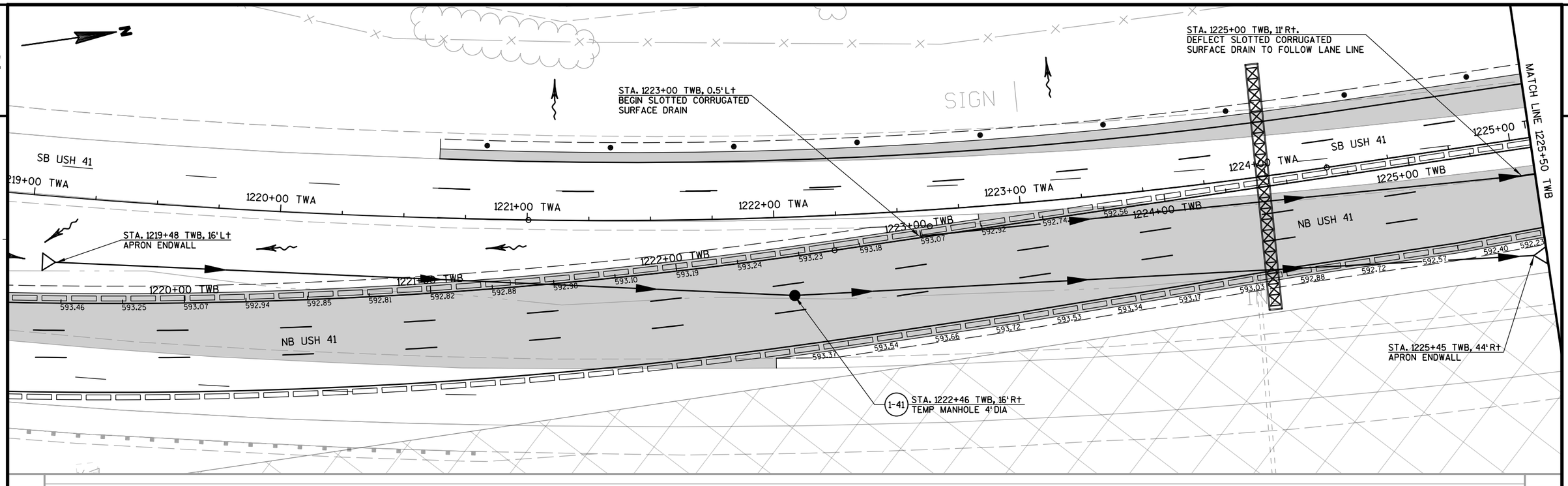
585.05

584.99

LEGEND

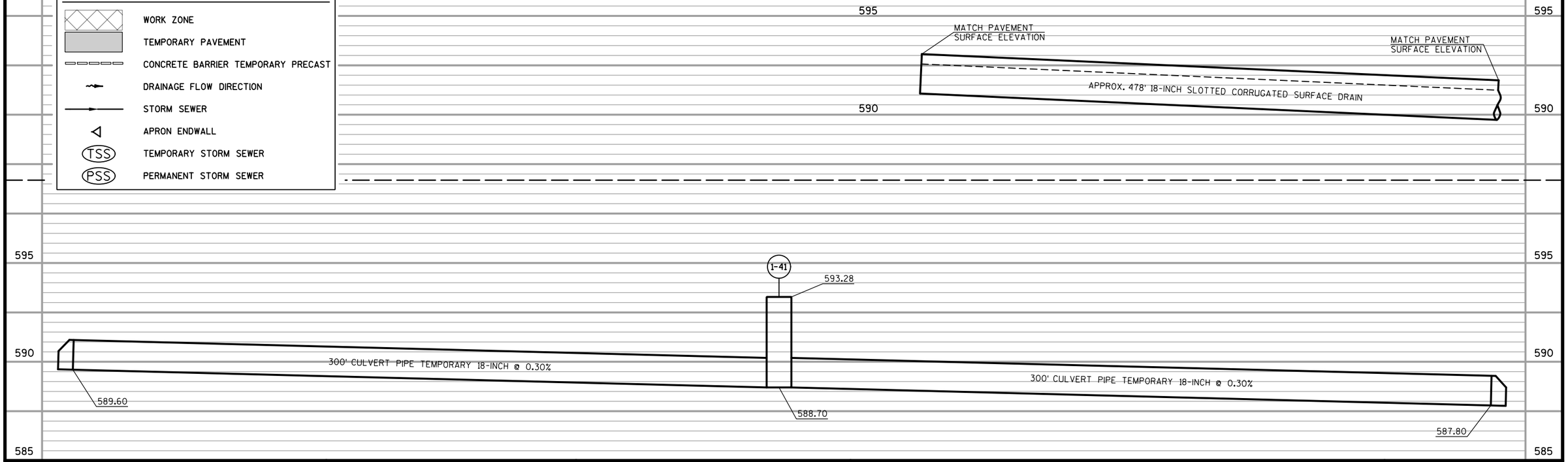
- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 340	E

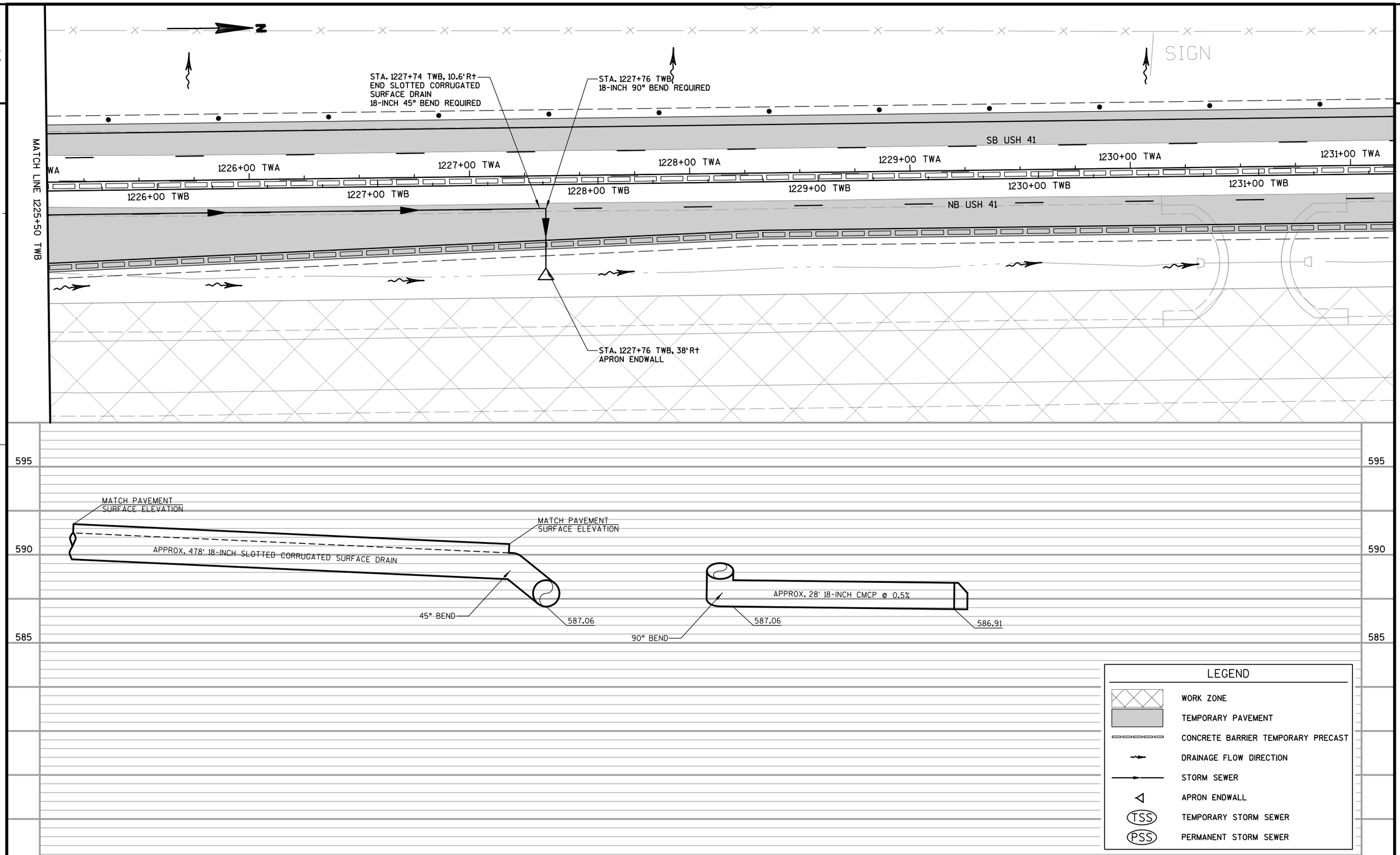


LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

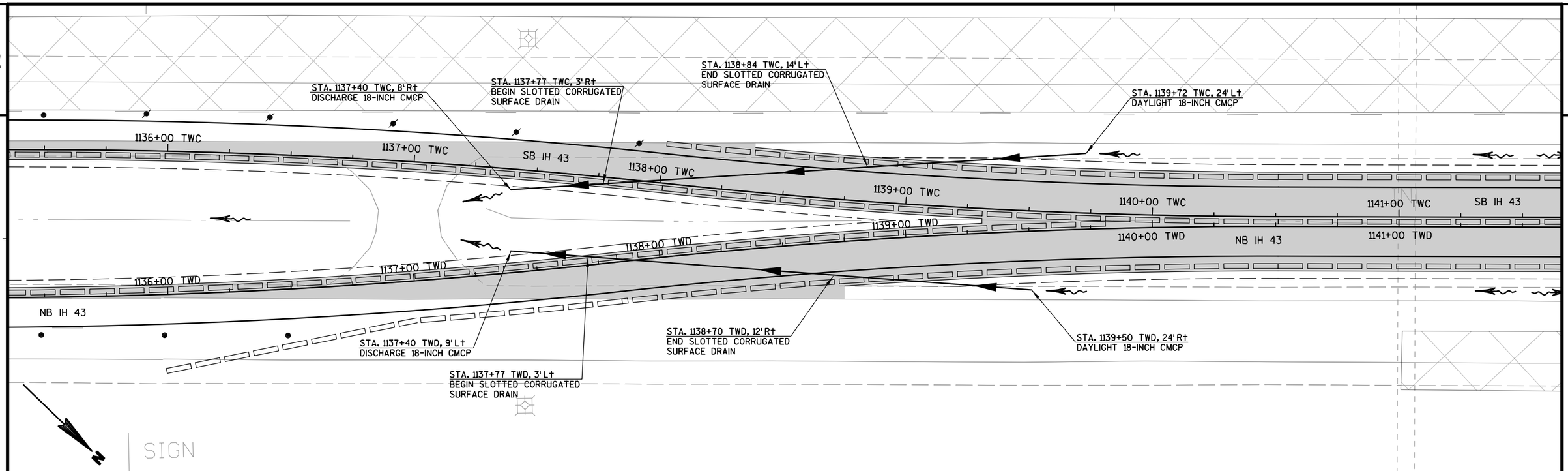


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 341	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 342	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026173_S1_dr_DET.dgn
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40
WISDOT/CADDS SHEET 41



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 343	E

2

2

STA. 1199+20 TWC, 26'L†
ADJUST EXISTING INLET
1-51

STA. 1199+20 TWC, 36'L†
APRON ENDWALL

INL

INL

WIETOR DR

NB USH 41

TWC 1198+00 TWC 1199+00 TWC 1200+00 TWC 1201+00 TWC 1202+00 TWC 1203+00 TWC

SB IH 43

TWD 1198+00 TWD 1199+00 TWD 1200+00 TWD 1201+00 TWD 1202+00 TWD 1203+00 TWD

NB IH 43

WIETOR DR

STA. 1200+26 TWC, 13'L†
REMOVE APRON ENDWALL
CONNECT TO EXISTING CPRC
CONCRETE COLLAR REQ'D

MAINTENANCE RD MR2

N

1-51

587.47

10' CULVERT PIPE
TEMPORARY 18-INCH

TO BE REMOVED UNDER STAGE 3

585

585

EXISTING
STRUCTURE

584.16

583.21

EXISTING 24-INCH RCP

EXISTING 24-INCH RCP

EXISTING 24-INCH RCP

580

580

EXISTING
APRON ENDWALL

580.86

EXISTING
APRON ENDWALL

REMOVE SECTION OF EXISTING
24-INCH RCP AND SEAL PIPES
LEFT IN PLACE

1-51

587.47

CONCRETE
COLLAR REQ'D

EXISTING 18-INCH
CPRC

585

585

104' 18-INCH CLASS III SSPRC @ 0.86%

583.21

580

580

580.86

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 1	SHEET 344	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026175_S1_dr_DET.dgn

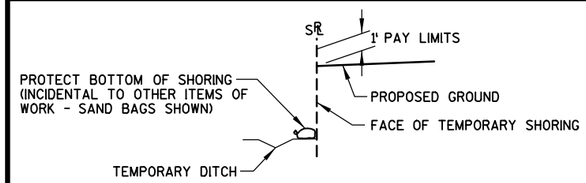
PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:40

WISDOT/CADDS SHEET 41

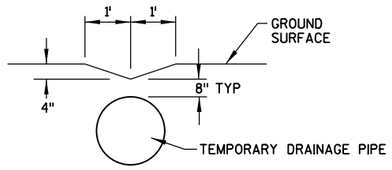
2

LEGEND

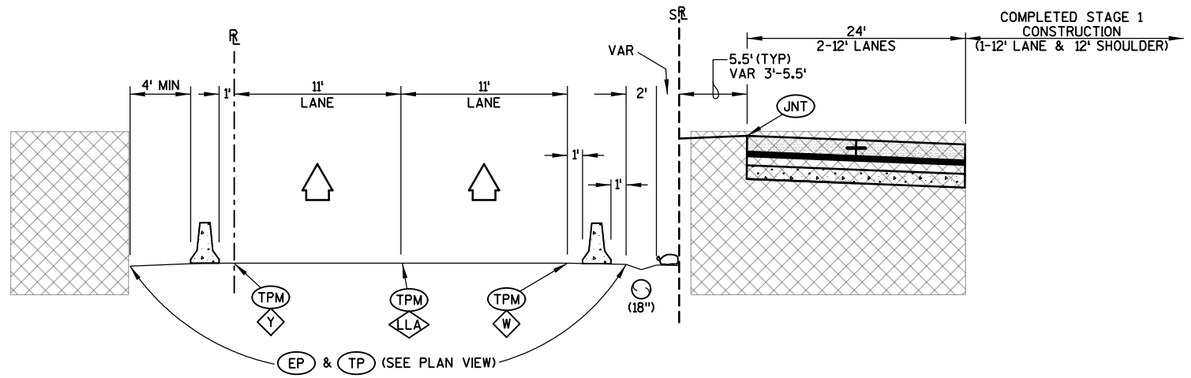
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

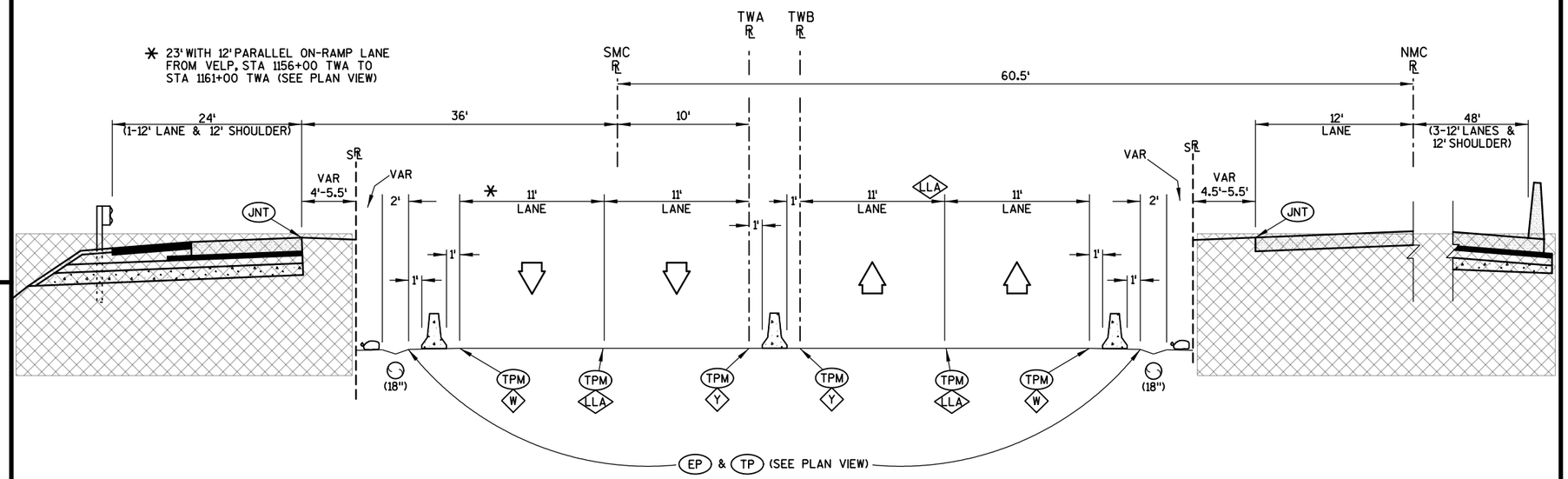


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



USH 41

NB USH 41 - STA 1138+00 TWB TO STA 1146+50 TWB - SHOWN ABOVE
SB USH 41 - STA 1138+00 TWA TO STA 1146+50 TWA (BACK STATION) - CONSTRUCT 12' OUTSIDE LANE & 12' SHOULDER
NB USH 41 - STA 1179+00 TWB TO STA 1185+00 TWB - CONSTRUCT ENTIRE PROPOSED NB USH 41 ROADWAY



USH 41

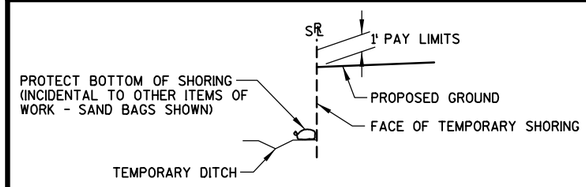
STA 1146+50 TWB TO STA 1179+00 TWB

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 345	E

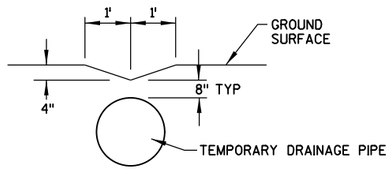
2

LEGEND

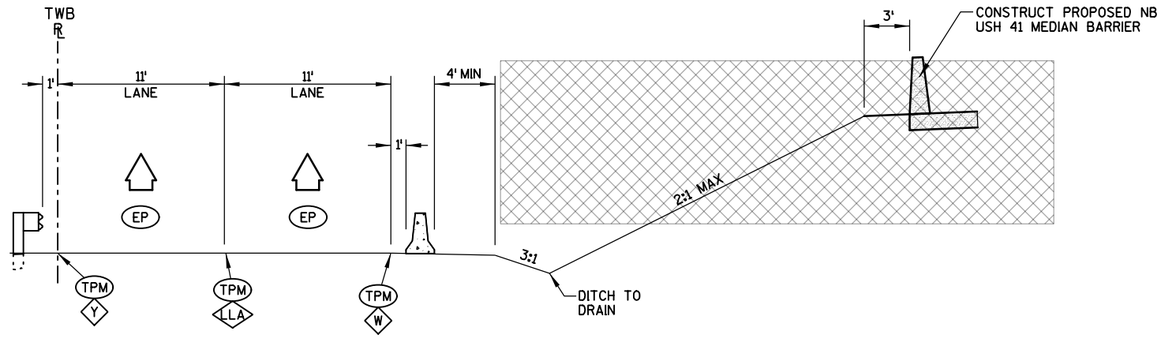
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

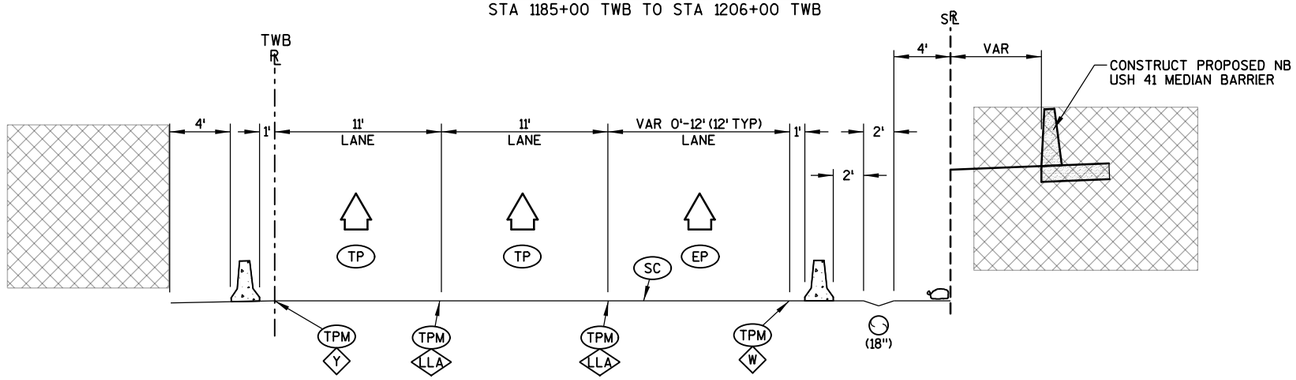


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



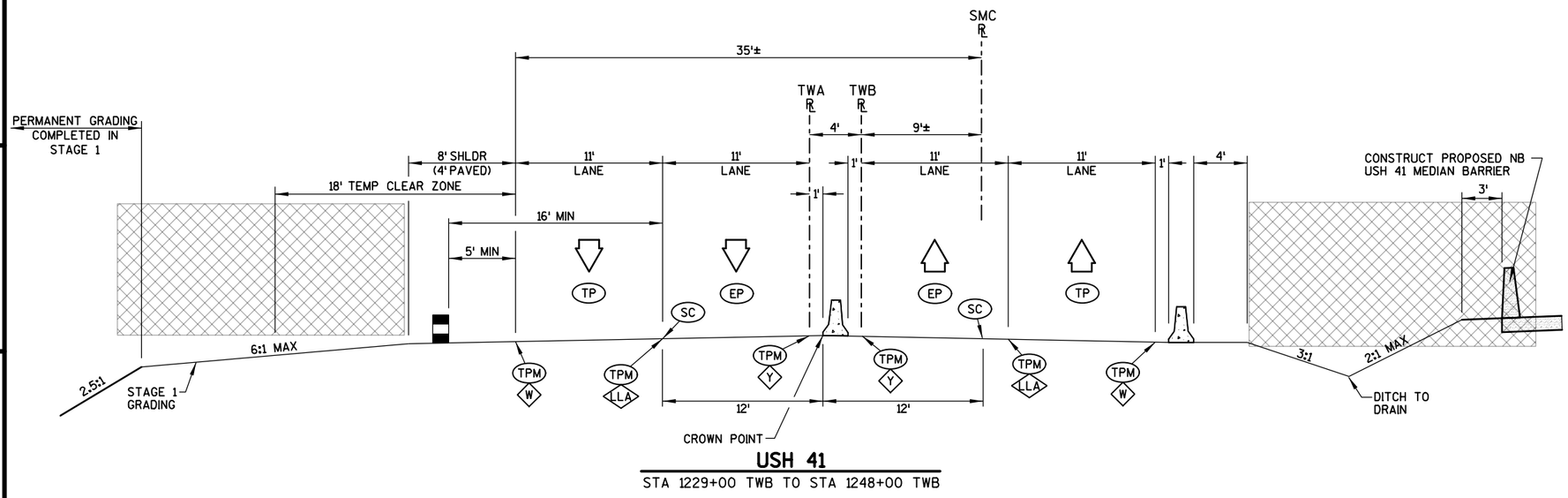
NB USH 41

STA 1185+00 TWB TO STA 1206+00 TWB



NB USH 41

STA 1215+00 TWB TO STA 1229+00 TWB



USH 41

STA 1229+00 TWB TO STA 1248+00 TWB

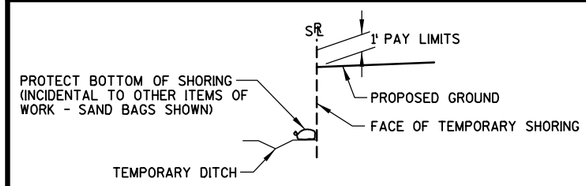
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026202_S2_TS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42

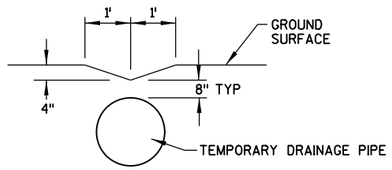
2

LEGEND

	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE

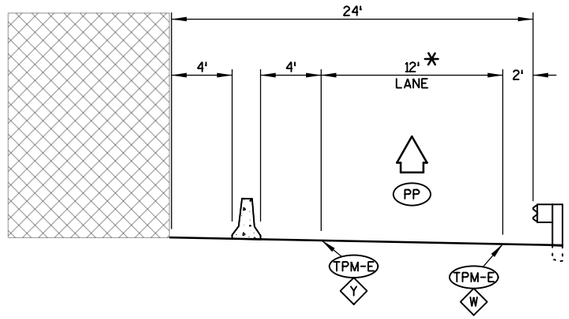


TYPICAL TEMPORARY SHORING DETAILS

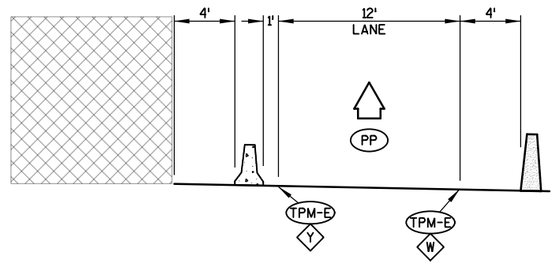


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE

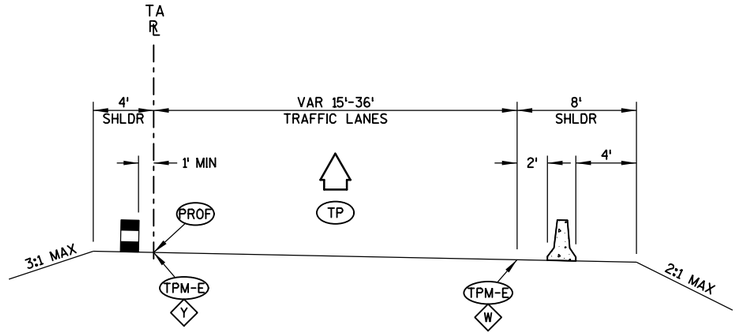
* SUBSTAGE 2C - ADD 12' LANE FOR NB USH 41 TO SB IH 43 RAMP, STA 1150+50 NMC TO STA 1159+00 NMC (SEE PLAN VIEW)



NB USH 41 OFF-RAMP TO VELP AVE
STA 1138+00 NMC TO STA 1159+00 NMC



NB USH 41 OFF-RAMP TO VELP AVE
STA 1159+00 VEA TO STA 1170+00 VEA



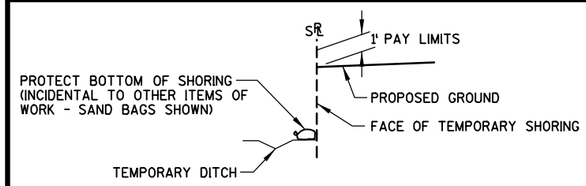
NB USH 41 OFF-RAMP TO VELP AVE
STA 1170+00 TA TO STA 1173+00 TA

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 347	E

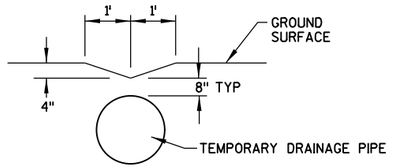
2

LEGEND

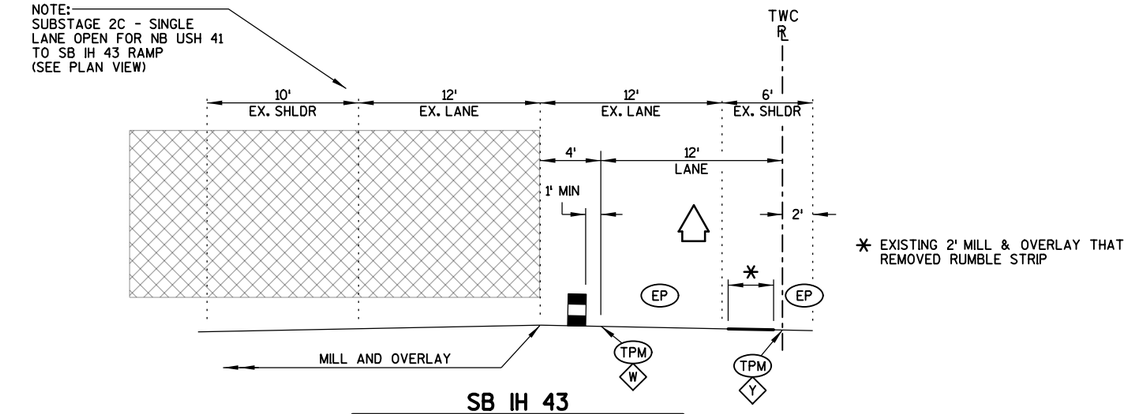
- WORK ZONE
- TRAFFIC DIRECTION
- CONCRETE BARRIER TEMPORARY PRECAST
- (ANC) BARRIER ANCHORED
- TRAFFIC CONTROL DRUMS
- EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
- (XX") TEMPORARY DRAINAGE PIPE (SIZE)
- (JNT) CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
- (EP) EXISTING PAVEMENT
  - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
- (PP) PROPOSED PAVEMENT
  - SEE TYPICAL FINISHED SECTIONS
- (TP) TEMPORARY PAVEMENT
  - 5" HMA PAVEMENT TYPE E-10 OVER
  - 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER
  - 12" BREAKER RUN
- (BAD) BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
- (SC) SAWCUT AT EDGE OF EXISTING TRAVEL LANE
- (EPM) EXISTING PAVEMENT MARKING
- (PPM) PROPOSED PAVEMENT MARKING
  - SEE PAVEMENT MARKING PLAN
- (TPM) TEMPORARY PAVEMENT MARKING
- (TPM-RT) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
- (TPM-E) TEMPORARY PAVEMENT MARKING (EPOXY)
- (Y) YELLOW EDGELINE
- (W) WHITE EDGELINE
- (LLA) WHITE LANE LINE SKIP-DASH (ASPHALT)
- (LLC) WHITE LANE LINE SKIP-DASH (CONCRETE)
  - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
- (PROF) POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

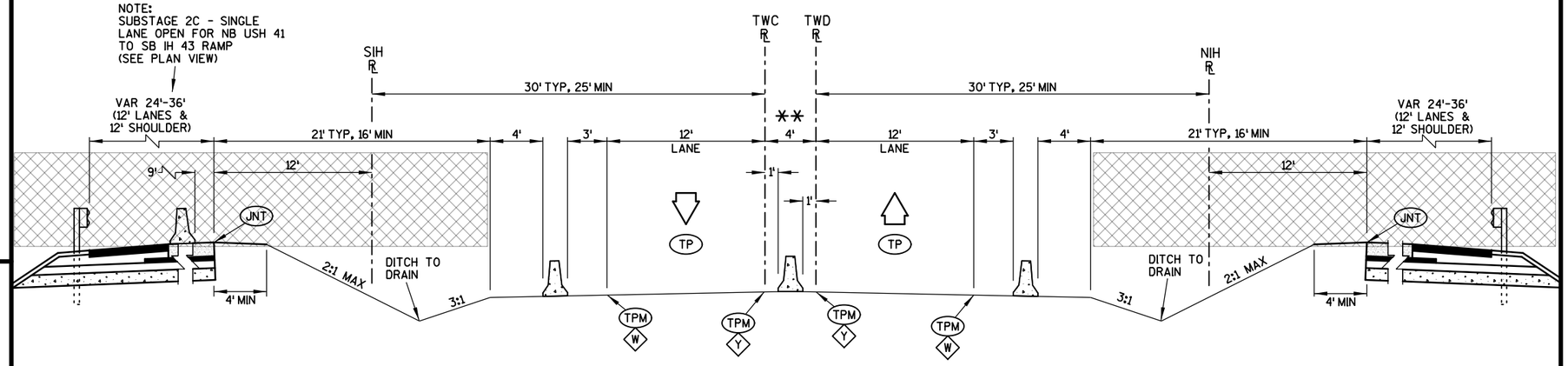


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



SB IH 43

STA 1122+00 TWC TO STA 1136+00 TWC



IH 43

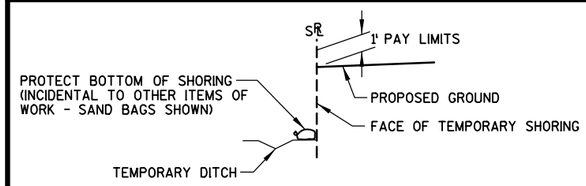
STA 1136+00 TWD TO STA 1164+50 TWD

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 348	E

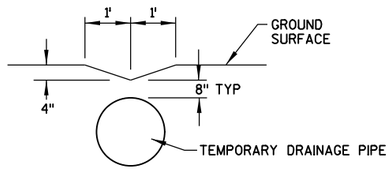
2

LEGEND

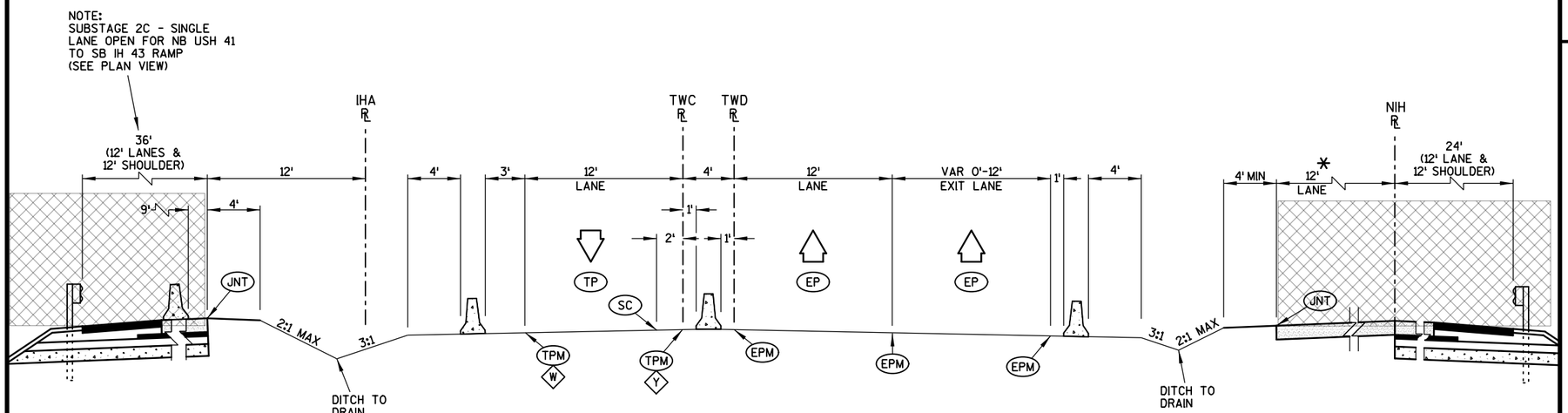
- WORK ZONE
- TRAFFIC DIRECTION
- CONCRETE BARRIER TEMPORARY PRECAST
- (ANC) BARRIER ANCHORED
- TRAFFIC CONTROL DRUMS
- EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
- (XX") TEMPORARY DRAINAGE PIPE (SIZE)
- (JNT) CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
- (EP) EXISTING PAVEMENT
  - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
- (PP) PROPOSED PAVEMENT
  - SEE TYPICAL FINISHED SECTIONS
- (TP) TEMPORARY PAVEMENT
  - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
- (BAD) BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
- (SC) SAWCUT AT EDGE OF EXISTING TRAVEL LANE
- (EPM) EXISTING PAVEMENT MARKING
- (PPM) PROPOSED PAVEMENT MARKING
  - SEE PAVEMENT MARKING PLAN
- (TPM) TEMPORARY PAVEMENT MARKING
- (TPM-RT) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
- (TPM-E) TEMPORARY PAVEMENT MARKING (EPOXY)
- (Y) YELLOW EDGELINE
- (W) WHITE EDGELINE
- (LLA) WHITE LANE LINE SKIP-DASH (ASPHALT)
- (LLC) WHITE LANE LINE SKIP-DASH (CONCRETE)
  - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
- (PROF) POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

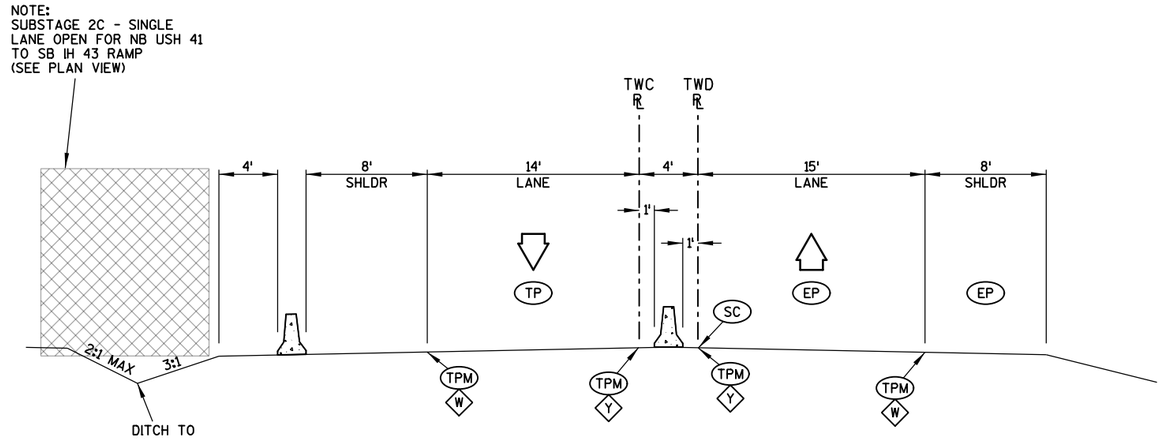


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



IH 43

STA 1164+50 TWD TO STA 1190+00 TWD



IH 43

STA 1190+00 TWD TO STA 1201+00 TWD

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 349	E

2

2

STH 29/32

WISCONSIN CENTRAL LTD RR

SHAWANO AVE

ESCANABA & LAKE SUPERIOR RR

SHOULDERS CLOSED AHEAD
W21-5(MOD)

RIGHT LANE MUST EXIT
R3-33R
78" X 36"

SB USH 41
NB USH 41

VINCENT RD

MEMORIAL DR

NORTH 41
SOUTH INTERSTATE 43
141

J2-2
72" x 120"

COVER SUBSTAGES 2A & 2B

EXIT 170
SOUTH
INTERSTATE 43
141
COUNTY HS
Velp Ave
Milwaukee

COVER SUBSTAGES 2A & 2B

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- PROPOSED SIGN (SPEED LIMIT 55)
- COVERING SIGNS
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2 OVERVIEW - PAGE 1 OF 6	SHEET 350	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026206_S2_OV.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

2

SPEED LIMIT 55
R2-1
48" X 60"

SPEED LIMIT 55
R2-1
48" X 60"

RIGHT SHOULDER CLOSED
W21-5AR

WISCONSIN CENTRAL LTD RR

VELP AVE

ISLAND CT

NB USH 41

SB USH 41

ROSEWOOD ST

LONE GROVE CT

MEMORIAL DR

DUCK CREEK

SOUTH INTERSTATE 43
J4-1
36" X 54"

15'-3"
W12-2
36" X 36"

1.5 MILES AHEAD
W57-52
36" X 24"

RAMP CLOSED
SUBSTAGES 2B & 2C

RAMP CLOSED

COVER
SUBSTAGES 2A & 2B

RAMP CLOSED
SUBSTAGES 2A & 2B

ALL TRAFFIC LANES
OPEN ON VELP

EXIT 170B
SOUTH INTERSTATE 43
Milwaukee

EXIT 170A
SOUTH 141 COUNTY HS
Velp Ave

MOVED FROM STAGE 1 LOCATION
INCIDENTAL TO OTHER ITEMS OF WORK

SOUTH INTERSTATE 43
J4-1
36" X 54"
(SUBSTAGE 2C)

SPEED LIMIT 55
R2-1
48" X 60"
(SUBSTAGE 2C)

SPEED LIMIT 55
R2-1
48" X 60"

RIGHT SHOULDER CLOSED
W21-5A
(SUBSTAGE 2C)

SPEED LIMIT 55
R2-1
48" X 60"

VELP AVE

IH 43

LEGEND

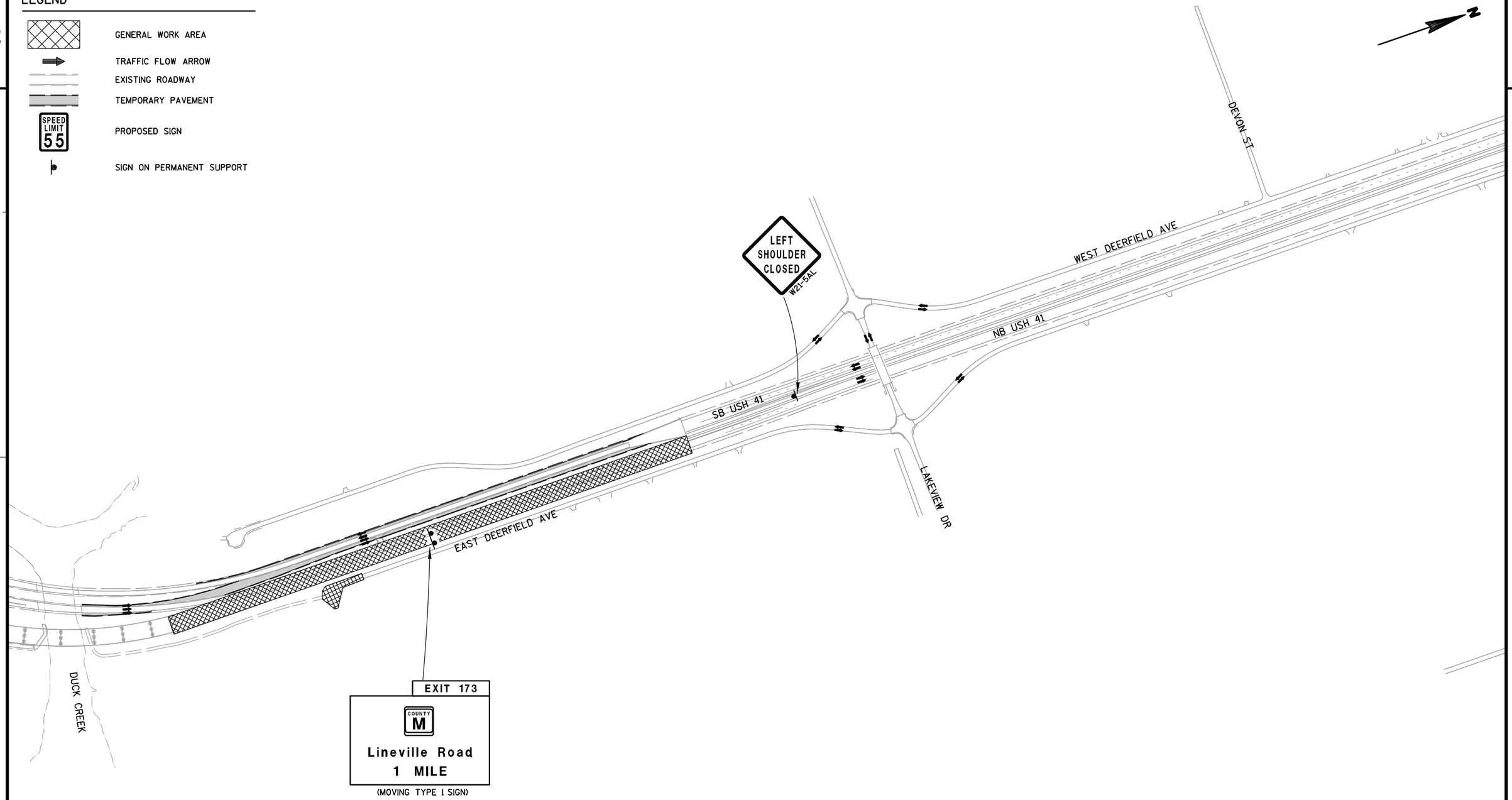
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- PROPOSED SIGN (SPEED LIMIT 55)
- COVERING SIGNS
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2 OVERVIEW - PAGE 2 OF 6	SHEET 351 E

2

LEGEND

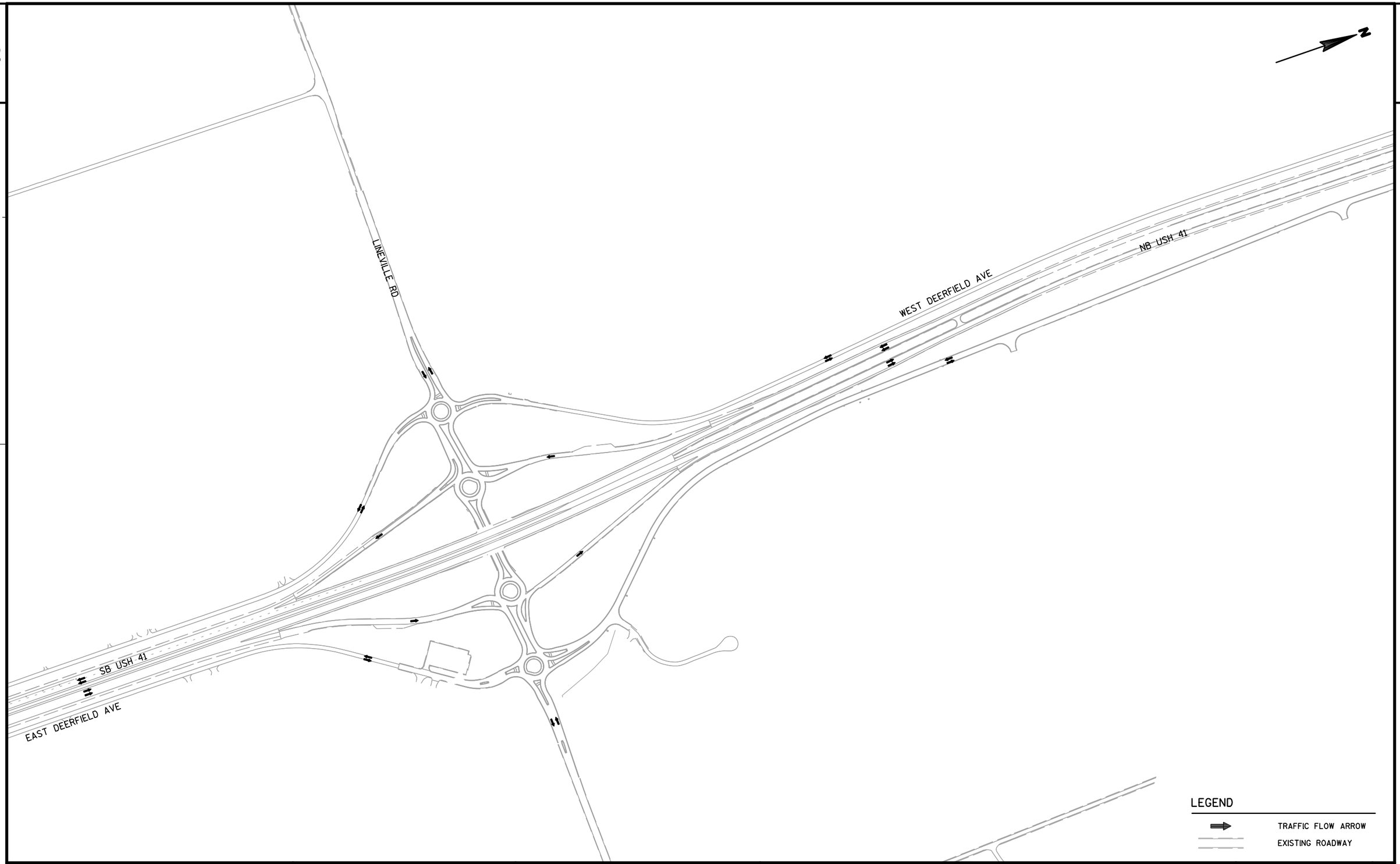
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT



2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2 OVERVIEW - PAGE 3 OF 6	SHEET 352	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026208_S2_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2 OVERVIEW - PAGE 4 OF 6	SHEET 353	E

2

2

N

NB IH 43 LANE DROP

NB USH 41 TO SB IH 43 RAMP
CLOSED SUBSTAGES 2A & 2B

SB IH 43

NB IH 43

HURLBUT ST

MILITARY AVE

ATKINSON DR

NB IH 43 LANE DROP

SHOULDERS CLOSED AHEAD
W21-5(MOD)

15'-3"
W012-2

15'-3"
W012-2

1.5 MILES AHEAD
W057-52
36" X 24"

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2 OVERVIEW - PAGE 5 OF 6	SHEET 354	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026210_S2_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

2

VELP AVE

EXIT 192B

SOUTH

41 Appleton

SEE DETAILS FOR SIGN

EXIT 192A

NORTH

41 141 Marinette

EXIT 189

Atkinson Dr

1 MILE

(SUBSTAGES 2A & 2B)
(MOVING TYPE I SIGN)

15'-3" W012-2

RIGHT SHOULDER CLOSED W21-5AR

RAMP CLOSED
SUBSTAGES 2A & 2B

MILITARY AVE

WIETOR DR

IH 43

HURLBUT ST

NB USH 41

SB USH 41

RAMP CLOSED

DUCK CREEK

SOUTH
INTERSTATE
43
J4-1
24" X 36"

15'-3" W012-2

1 MILE AHEAD
W057-52
36" X 24"

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2 OVERVIEW - PAGE 6 OF 6	SHEET 355	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026211_S2_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

2

WOODMAN DR

MEMORIAL DR

SB USH 41 TO STH 29

1116+00 SMC | 1118+00 SMC | 1120+00 SMC | 1122+00 SMC | 1124+00 SMC | 1126+00 SMC | 1128+00 SMC | 1130+0

SB USH 41

1116+00 NMC | 1118+00 NMC | 1120+00 NMC | 1122+00 NMC | 1124+00 NMC | 1126+00 NMC | 1128+00 NMC | 1130+0

NB USH 41

8:1 TAPER

STH 29 TO USH 41

E-8W

W01-4R

VINCENT RD

MATCH LINE 1130+00 NMC

LEGEND

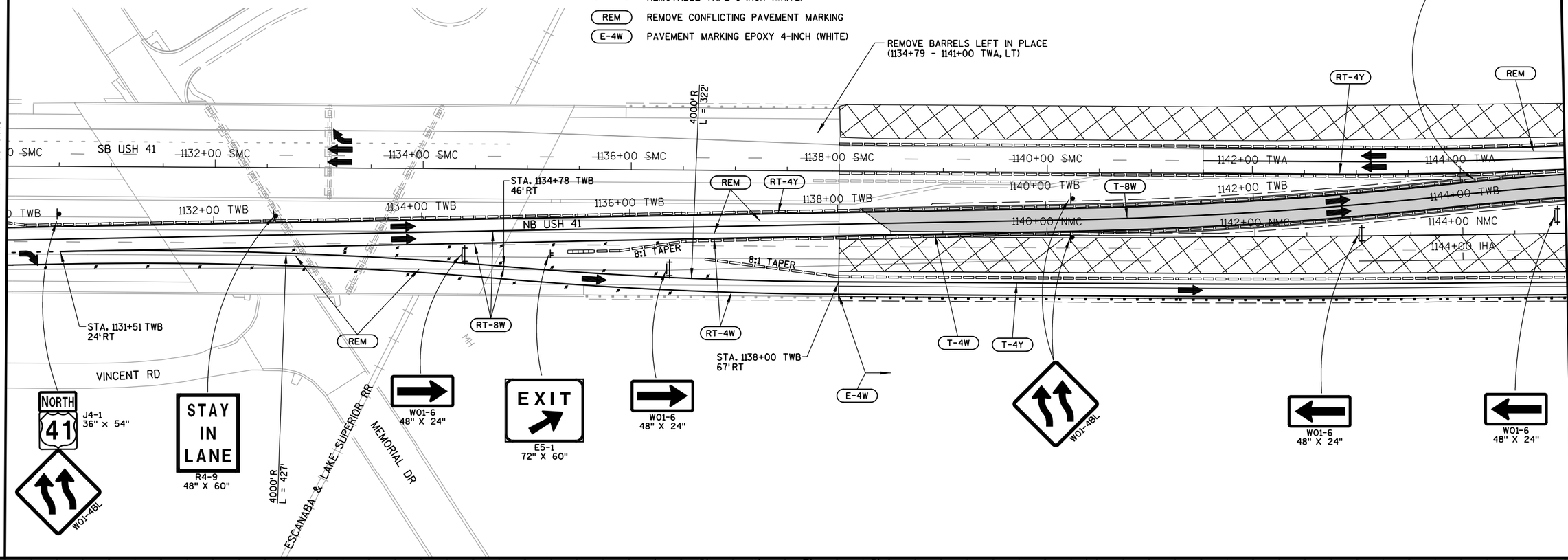
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- MB — PORTABLE CHANGABLE MESSAGE BOARD
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)

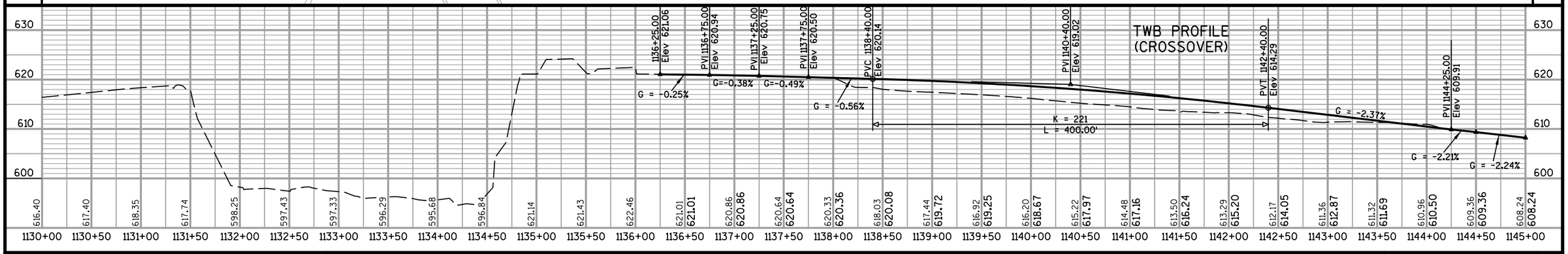
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026212_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-8W — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- RT-4W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- RT-4Y — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- RT-8W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 357	E

2

2

GLARE SCREEN
TEMPORARY

STAY
IN
LANE
R4-9
48" X 60"

T-4W

T-4Y

DUCK CREEK

W01-4BR

T-LL

T-8W

ISLAND CT

REM

T-8W

360' LANE DROP TAPER

+40

+00

MATCH LINE 1145+00 TWB

1146+00 TWA

1148+00 TWA

SB USH 41

1150+00 TWA

1152+00 TWA

1154+00 TWA

1156+00 TWA

1158+00 TWA

1146+00 TWB

1148+00 TWB

1150+00 TWB NB USH 41

1152+00 TWB

1154+00 TWB

1156+00 TWB

1158+00 TWB

1160+0

1160+00 TWB

MATCH LINE 1160+00 TWB

1148+00 IHA

1150+00 IHA

1152+00 IHA

1154+00 IHA

1156+00 IHA

1158+00 IHA

SIGN

E-4W

T-4Y

OMIT CBTP
SUBSTAGE 2C

1158+66 VEA
21' RT

BEAVER DAM CREEK

1159+10 VEA
19' RT

E-4Y

500' R
L = 44'

LOVE GROVE CT

LEGEND

GENERAL WORK AREA	PROPOSED SIGN
TRAFFIC FLOW ARROW	SIGN ON PERMANENT SUPPORT
EXISTING ROADWAY	T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
TEMPORARY PAVEMENT	T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
COMPLETED ROAD WORK	T-8W — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)	T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS	E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
CONCRETE BARRIER TEMPORARY PRECAST	E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
	REM — REMOVE CONFLICTING PAVEMENT MARKING

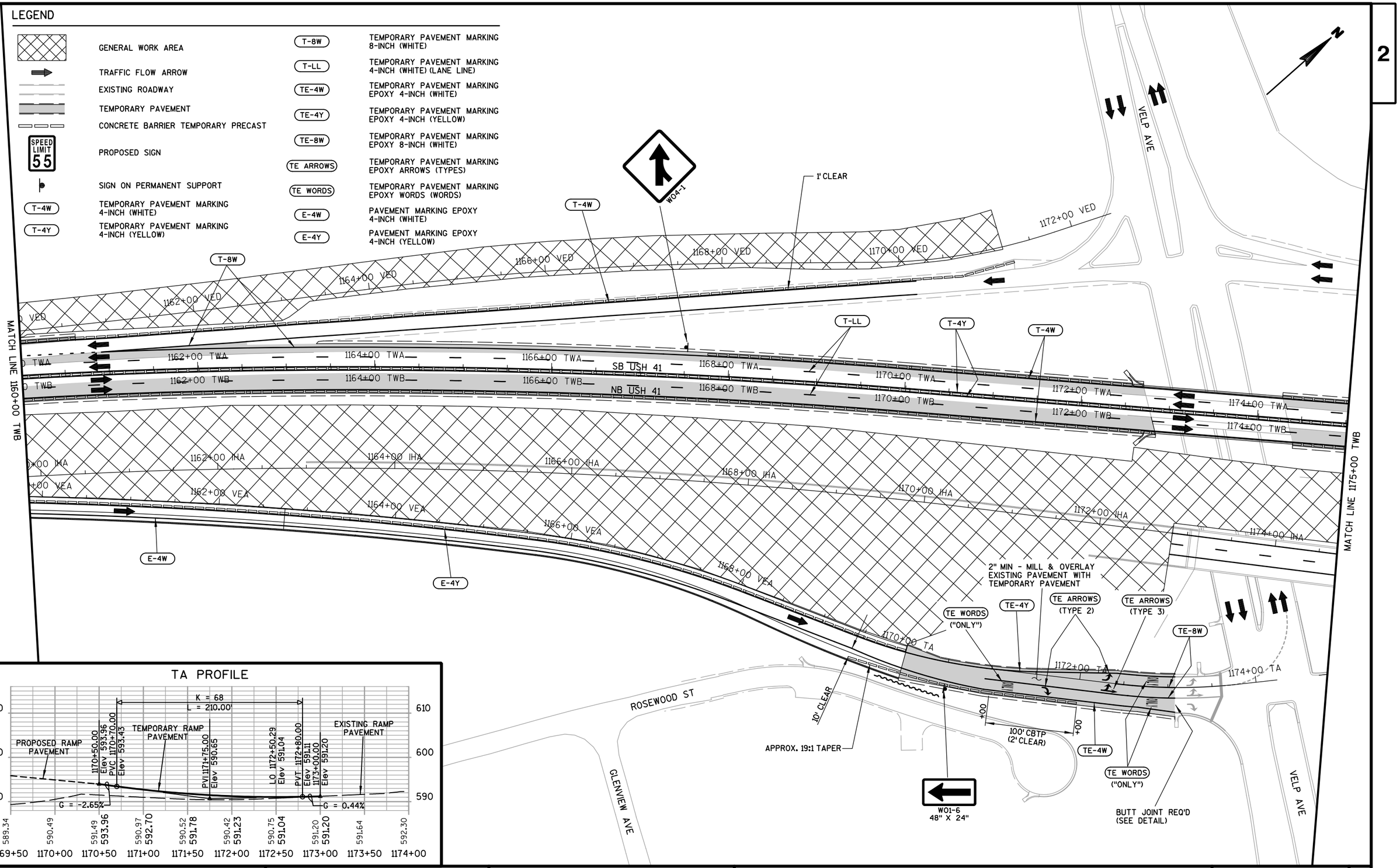
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026214_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

LEGEND

	GENERAL WORK AREA	T-8W	TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
	TRAFFIC FLOW ARROW	T-LL	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
	EXISTING ROADWAY	TE-4W	TEMPORARY PAVEMENT MARKING EPOXY 4-INCH (WHITE)
	TEMPORARY PAVEMENT	TE-4Y	TEMPORARY PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
	CONCRETE BARRIER TEMPORARY PRECAST	TE-8W	TEMPORARY PAVEMENT MARKING EPOXY 8-INCH (WHITE)
SPEED LIMIT 55	PROPOSED SIGN	TE ARROWS	TEMPORARY PAVEMENT MARKING EPOXY ARROWS (TYPES)
	SIGN ON PERMANENT SUPPORT	TE WORDS	TEMPORARY PAVEMENT MARKING EPOXY WORDS (WORDS)
T-4W	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)	E-4W	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
T-4Y	TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)	E-4Y	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)



TA PROFILE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 359	E

2

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- T-8W — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

MATCH LINE 1175+00 TWB

MATCH LINE 1190+00 TWB

STAY IN LANE R4-9 48" X 60"

W04-1 (SUBSTAGE 2A ONLY)

W01-6 48" X 24"

DRUMS PLACED AT 10' SPACING TO CHANNEL TRAFFIC

100' CBTP TAPER (1' TO 4' CLEAR)

50' CBTP (4' CLEAR)

+22

+22

+72

T-LL

T-4Y

T-4W

T-8W

REM

1176+00 TWA

1178+00 TWA

1180+00 TWA

1182+00 TWA

1184+00 TWA

SB USH 41

1186+00 TWA

1176+00 TWB

1178+00 TWB

1180+00 TWB

1182+00 TWB

1184+00 TWB

NB USH 41

1186+00 TWB

1188+00 TWB

1190+0

1' CLEAR

15'

12'

150' TAPER

00+

360' LANE DROP TAPER

(SUBSTAGE 2B ONLY)

RAMP CLOSED SUBSTAGES 2B & 2C

T-8W (SUBSTAGE 2A ONLY)

1176+00 IHA

1178+00 IHA

1180+00 IHA

1182+00 IHA

1184+00 IHA

1186+00 IHA

1188+00 IHA

OMIT NB USH 41 OUTSIDE CBTP SUBSTAGE 2A

W01-4BR

STAY IN LANE R4-9 48" X 60"

RAMP CLOSED SUBSTAGES 2B & 2C

W01-6 48" X 24"

VELP AVE

MEMORIAL DR

WISCONSIN CENTRAL LTD. RR

RAMP CLOSED SUBSTAGE 2A & 2B

N

TWB PROFILE (CROSSOVER)

PVI	Elev	G
1177+00.00	614.36	G = 0.28%
1178+00.00	614.64	G = 0.12%
1179+00.00	614.76	G = -0.50%
1180+00.00	614.27	G = -0.06%
1181+00.00	614.20	G = -0.19%
1182+00.00	614.02	G = -0.19%
1183+00.00	613.83	G = -0.22%
1184+00.00	613.61	

630 620 610 600

1175+00	1175+50	1176+00	1176+50	1177+00	1177+50	1178+00	1178+50	1179+00	1179+50	1180+00	1180+50	1181+00	1181+50	1182+00	1182+50	1183+00	1183+50	1184+00	1184+50	1185+00	1185+50	1186+00	1186+50	1187+00	1187+50	1188+00	1188+50	1189+00	1189+50	1190+00
612.98	612.99	613.45	613.43	613.85	613.86	614.13	614.11	614.37	614.36	614.53	614.50	614.70	614.64	614.81	614.70	614.85	614.76	614.59	614.51	614.29	614.27	613.93	614.23	612.96	614.20	613.04	614.11	613.39	614.02	613.77	613.92	613.72	613.83	613.67	613.72	613.59	613.61	613.46	613.50	599.01	613.38	586.54	613.25	606.95	613.12	612.96	612.95	612.78	612.78	612.62	612.62	612.46	612.46	612.28	612.28	612.10	612.10	611.94	611.89	611.67	611.67

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 360	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026216_S2.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

N

WIETOR DR

W01-6
48" X 24"
(SUBSTAGE 2A)

W5-52R
12" X 36"
(BRAKET MOUNT
TO BARRIER)
(SUBSTAGE 2A)

1208+00 TWD
1206+00 TWC
1206+00 TWD
1204+00 TWC
1204+00 TWD
1202+00 TWC
1202+00 TWD

SB IH 43 TO SB USH 41

NB IH 43 TO SB USH 41

MATCH LINE 1190+00 TWB

MATCH LINE 1205+00 TWB

1192+00 TWA
1194+00 TWA
1196+00 TWA
1198+00 TWA
SB USH 41
1200+00 TWA
1202+00 TWA
1204+00 TWA

REM

1192+00 TWB
1194+00 TWB
1196+00 TWB
1198+00 TWB
1200+00 TWB
1202+00 TWB
1204+00 TWB

T-4Y

REM

NB USH 41

8:1 TAPER
(SUBSTAGE 2A)

T-4W

T-LL

360' LANE DROP TAPER

OMIT CBTP SUBSTAGE 2A AND
TAPER END OF CBTP AT 8:1
OUTSIDE CLEAR ZONE

RAMP CLOSED

NB IH 43 TO NB USH 41

2

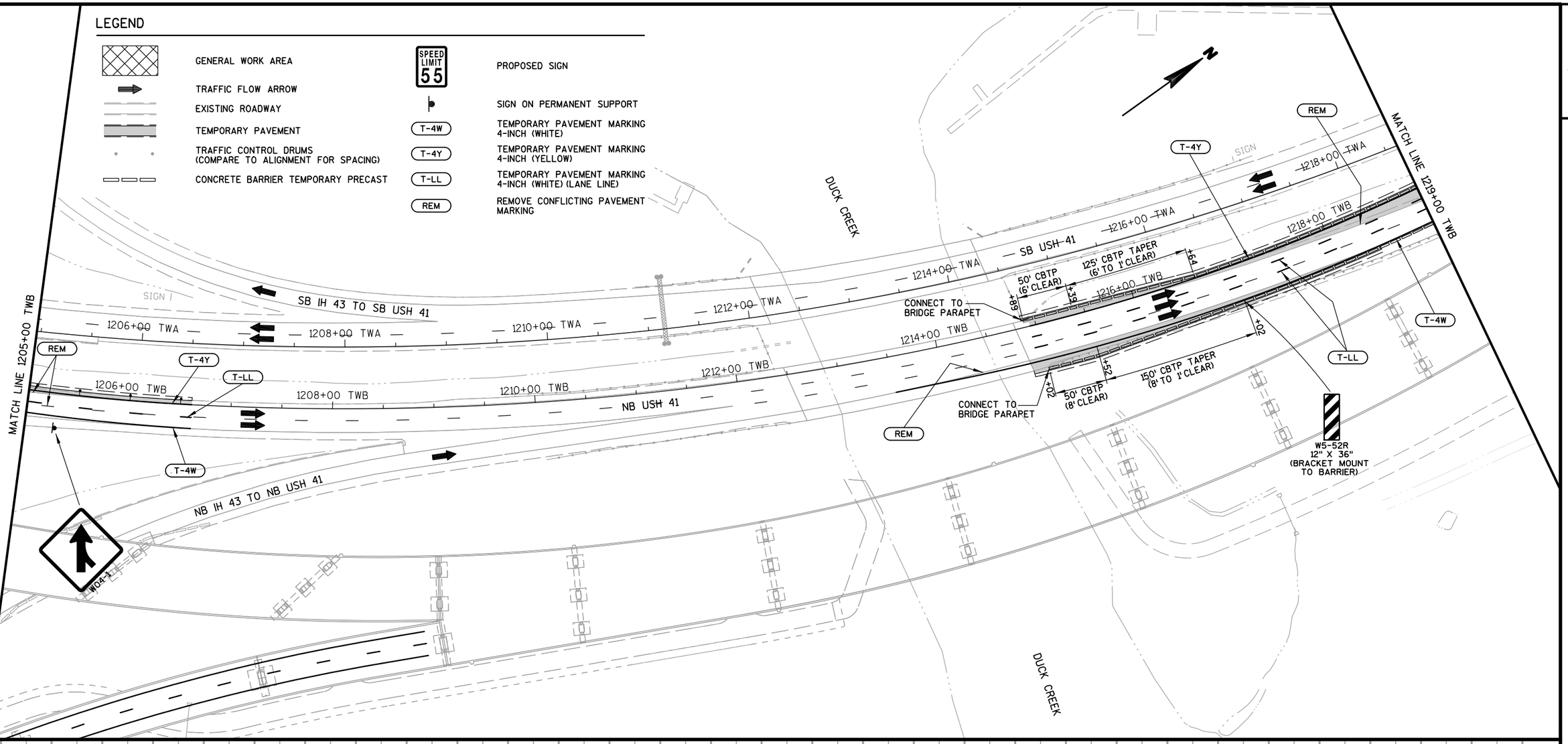
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 361	E

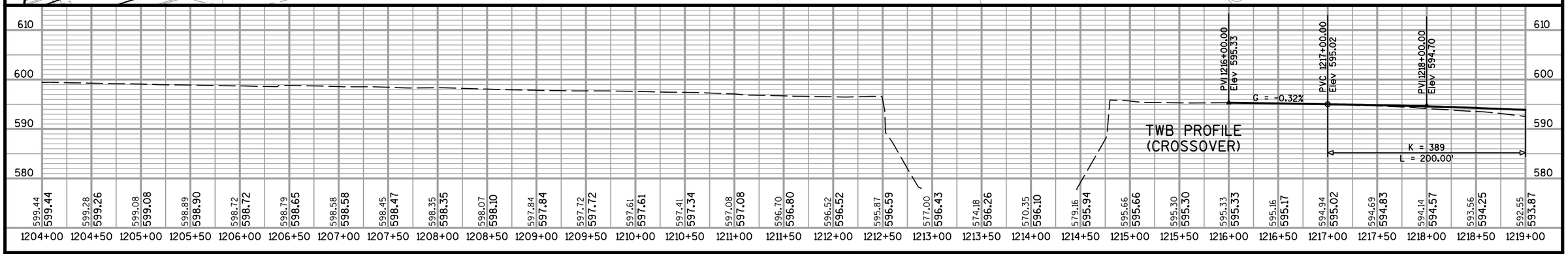
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026217_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 362 E

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

N

WEST DEERFIELD AVE

SIGN

SIGN

GLARE SCREEN TEMPORARY

MATCH LINE 1219+00 TWB

REM

REM

T-LL

T-4W

T-4Y

W5-52R 12" X 36" (BRACKET MOUNT TO BARRIER)

5' CLEAR (TYP)

SIGN

1220+00 TWA

1220+00 TWB

1222+00 TWA

1222+00 TWB

1224+00 TWA

1224+00 TWB

1226+00 TWA

1226+00 TWB

SB USH 41

1228+00 TWA

1228+00 TWB

1230+00 TWA

1230+00 TWB

NB USH 41

1232+00 TWA

1232+00 TWB

1234+00

MATCH LINE 1234+00 TWB

+15

+75

360' LANE DROP TAPER

EAST DEERFIELD AVE

W04-2R

W01-6 48" X 24"

W01-6 48" X 24"

TWB PROFILE (CROSSOVER)

PVT 1219+00.00 Elev 593.87
G = -0.83%
PVC 1219+72.50 Elev 593.27
K = 133
L = 175.00'
PVI 1220+60.00 Elev 592.54
LO 1220+83.19 Elev 592.81
PVT 1221+47.50 Elev 592.97
PVC 1221+75.00 Elev 593.10
PVI 1222+50.00 Elev 593.46
PVT 1223+25.00 Elev 592.92
PVI 1224+00.00 Elev 592.38
G = -0.72%
G = 0.48%
HI 1222+35.04 Elev 593.24
K = 125
L = 150.00'

610	600	590	580
592.55	593.87	1219+00
591.49	593.46	1219+50
590.97	593.07	1220+00
590.05	592.85	1220+50
589.40	592.82	1221+00
590.07	592.98	1221+50
590.99	593.19	1222+00
592.01	593.23	1222+50
592.76	593.07	1223+00
592.80	592.74	1223+50
592.38	592.38	1224+00
591.96	591.97	1224+50
591.57	591.57	1225+00
591.28	591.33	1225+50
591.10	591.10	1226+00
591.02	591.01	1226+50
590.92	590.92	1227+00
590.79	590.77	1227+50
590.62	590.62	1228+00
590.49	590.48	1228+50
590.34	590.34	1229+00
590.12	590.10	1229+50
589.86	589.86	1230+00
589.66	589.67	1230+50
589.49	589.49	1231+00
589.29	589.31	1231+50
589.12	589.12	1232+00
588.89	588.89	1232+50
588.66	588.66	1233+00
588.51	588.52	1233+50
588.38	588.38	1234+00

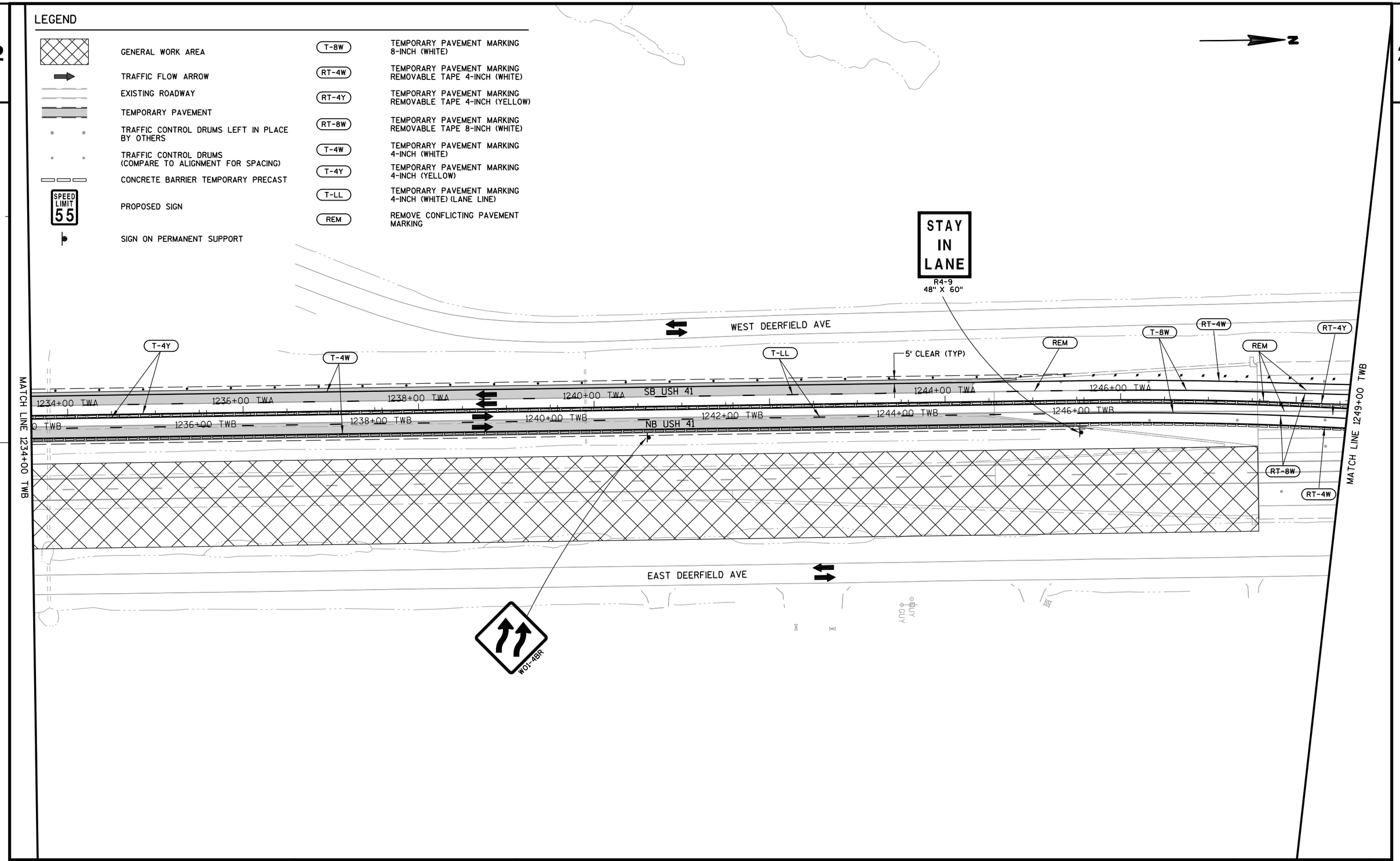
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 363 E

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS LEFT IN PLACE BY OTHERS
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT

- T-8W — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- RT-4W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- RT-4Y — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- RT-8W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- T-LL — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE) (LANE LINE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 364	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026220_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

STAY IN LANE
R4-9
48" X 60"

REM
5' CLEAR (TYP)
RT-4Y
WEST DEERFIELD AVE
RT-8W
RT-4W

W01-4BR

LAKEVIEW DR

MATCH LINE 1249+00 TWB

1250+00 TWA
a1254+00 SMC
a1256+00 SMC
SB USH 41
a1258+00 SMC
a1260+00 SMC
b1264+00 SMC

1250+00 TWB
1252+00 TWB
1254+00 TWB
1256+00 TWB
NB USH 41
1260+00 NMC
1262+00 NMC
1264+00 NMC

RT-8W
RT-4W
RT-4Y
REM
REM

EAST DEERFIELD AVE

W5-52L
12" X 36"
(BRACKET MOUNT
TO BARRIER)

W01-6
48" X 24"

W01-6
48" X 24"

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS LEFT IN PLACE BY OTHERS
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- RT-4W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- RT-4Y — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- RT-8W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

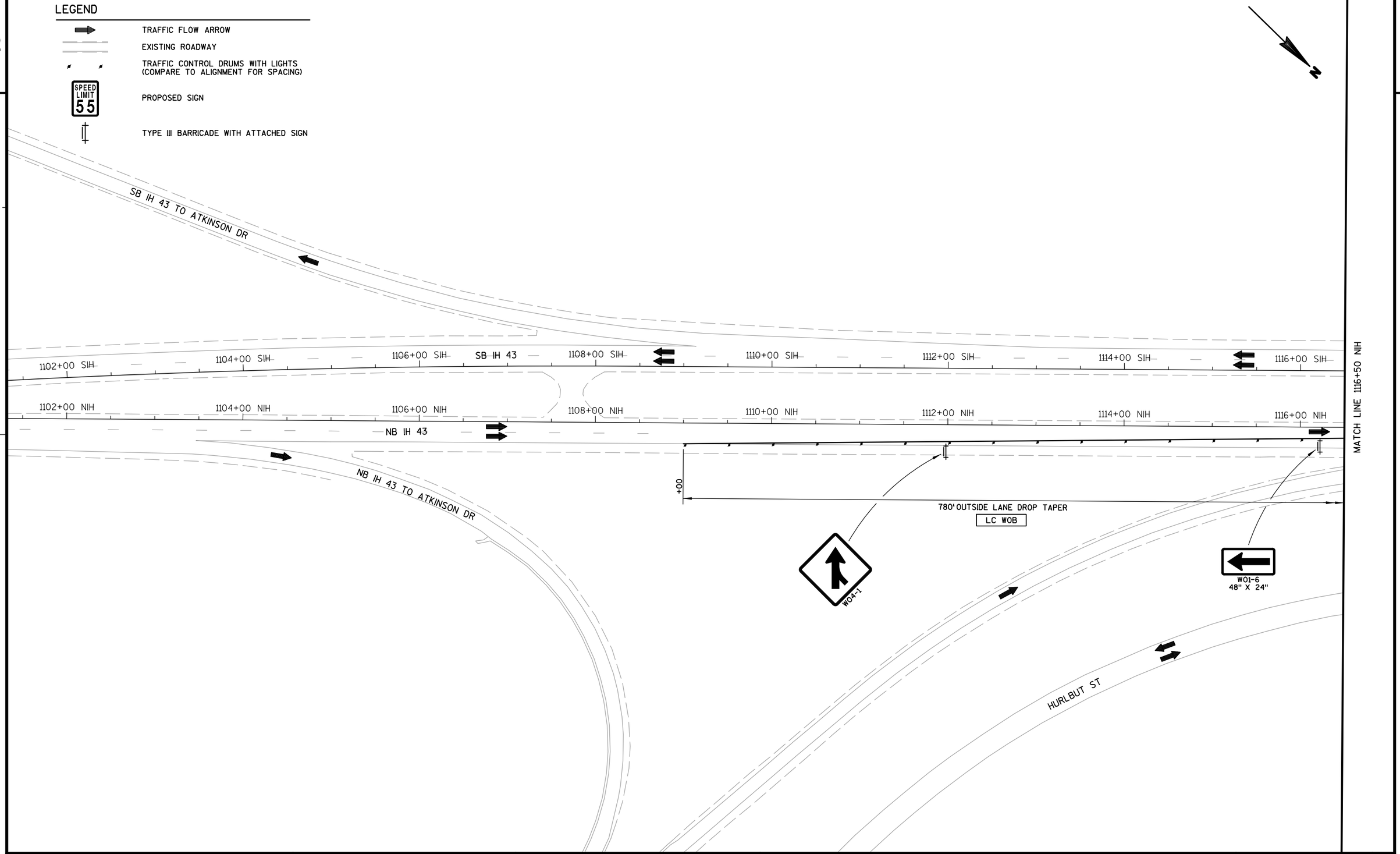
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026221_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- PROPOSED SIGN (SPEED LIMIT 55)
- TYPE III BARRICADE WITH ATTACHED SIGN



2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026222_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

GENERAL WORK AREA

TRAFFIC FLOW ARROW

EXISTING ROADWAY

TEMPORARY PAVEMENT

TRAFFIC CONTROL DRUMS
(COMPARE TO ALIGNMENT FOR SPACING)

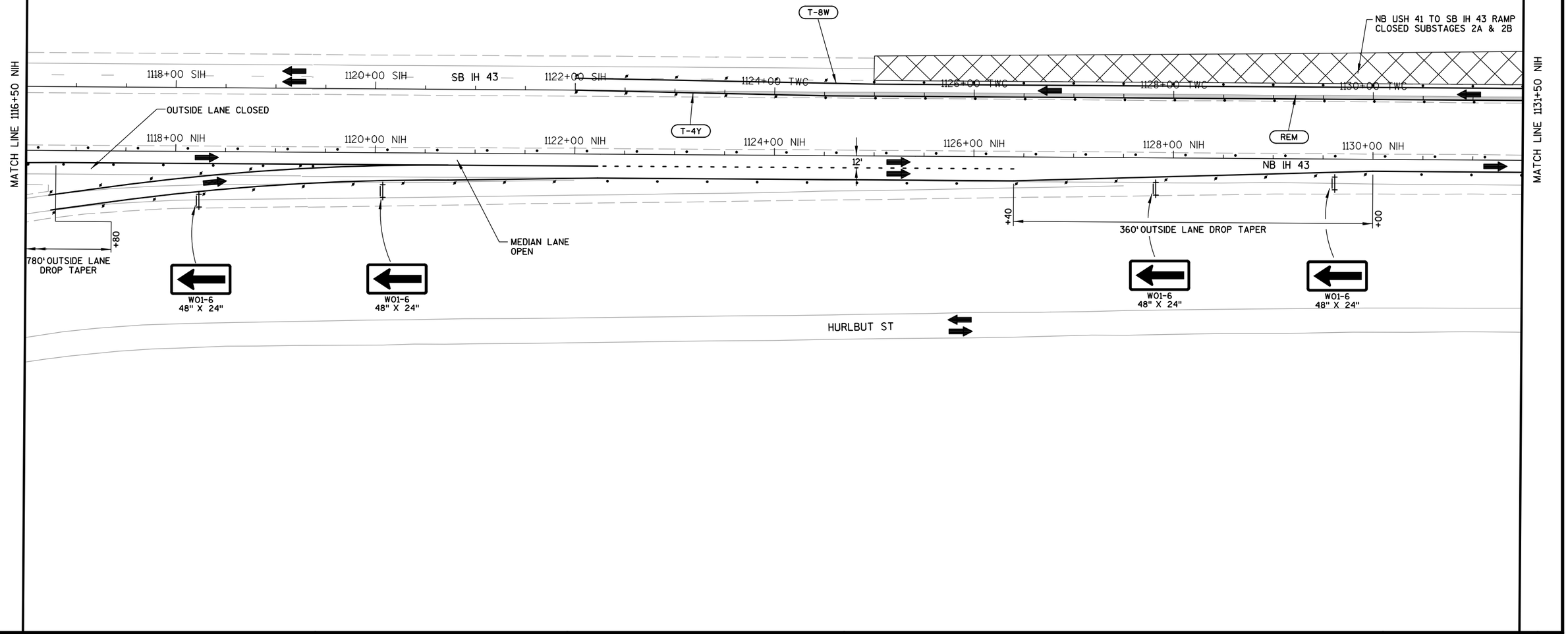
SPEED LIMIT 55
PROPOSED SIGN

TYPE III BARRICADE WITH ATTACHED SIGN

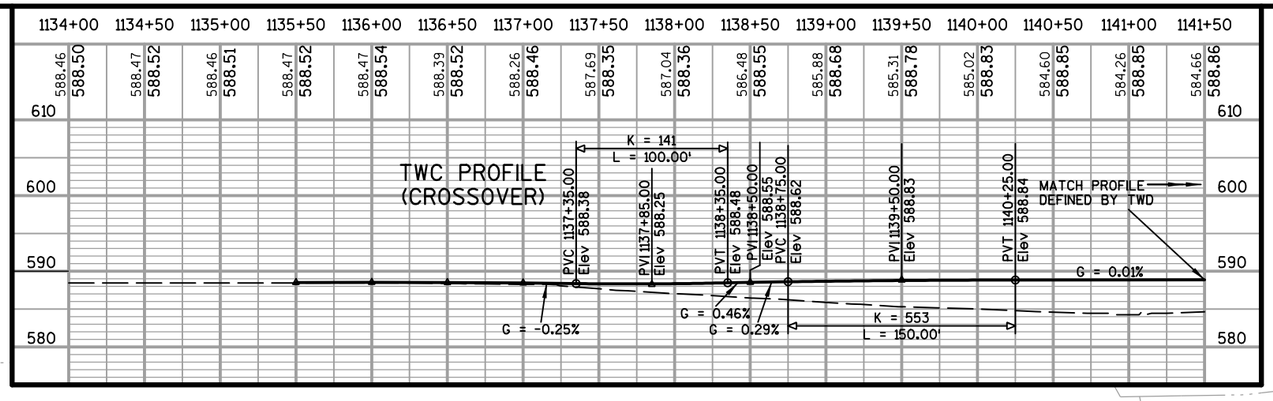
T-4Y
TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

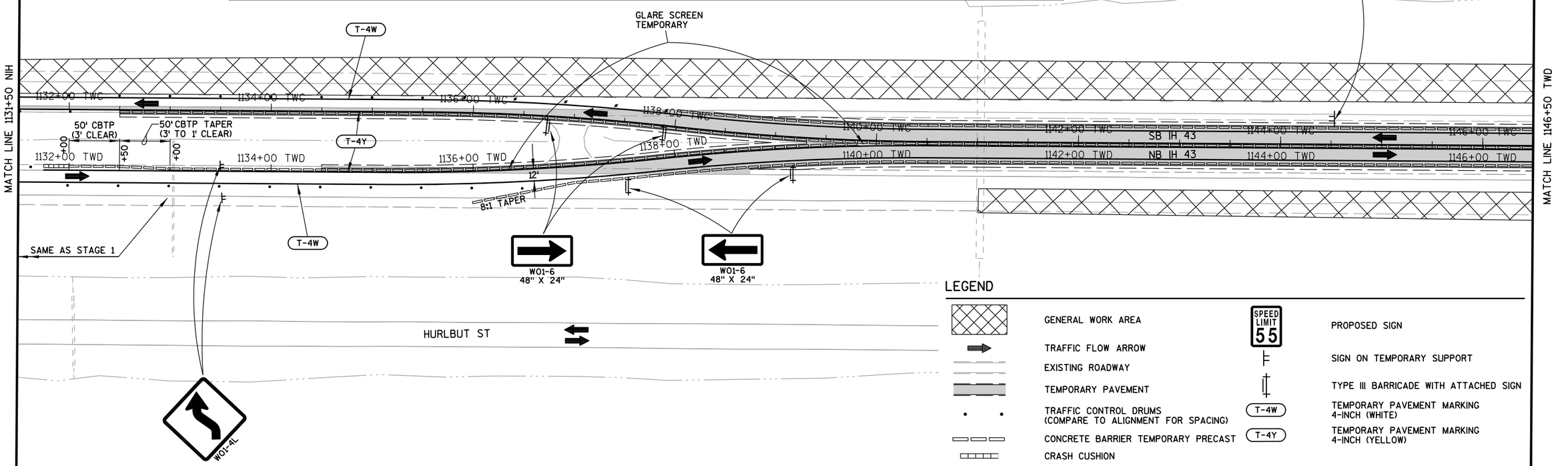
T-8W
TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

REM
REMOVE CONFLICTING PAVEMENT MARKING



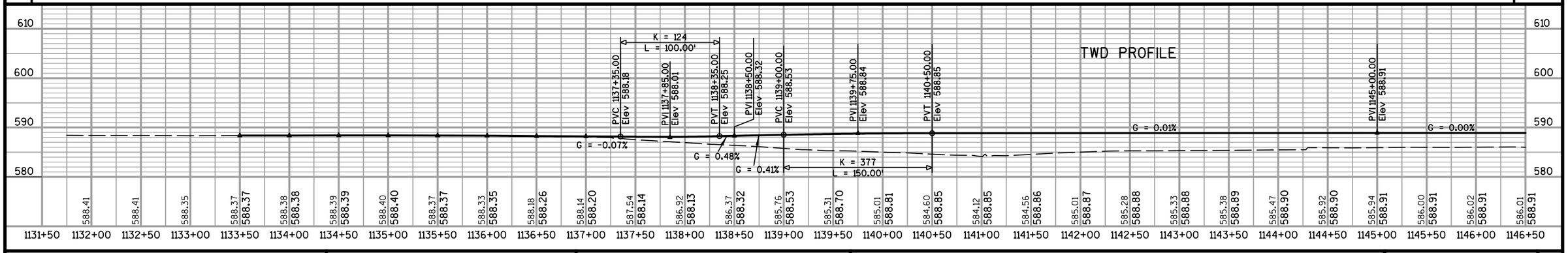
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 367 E





LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

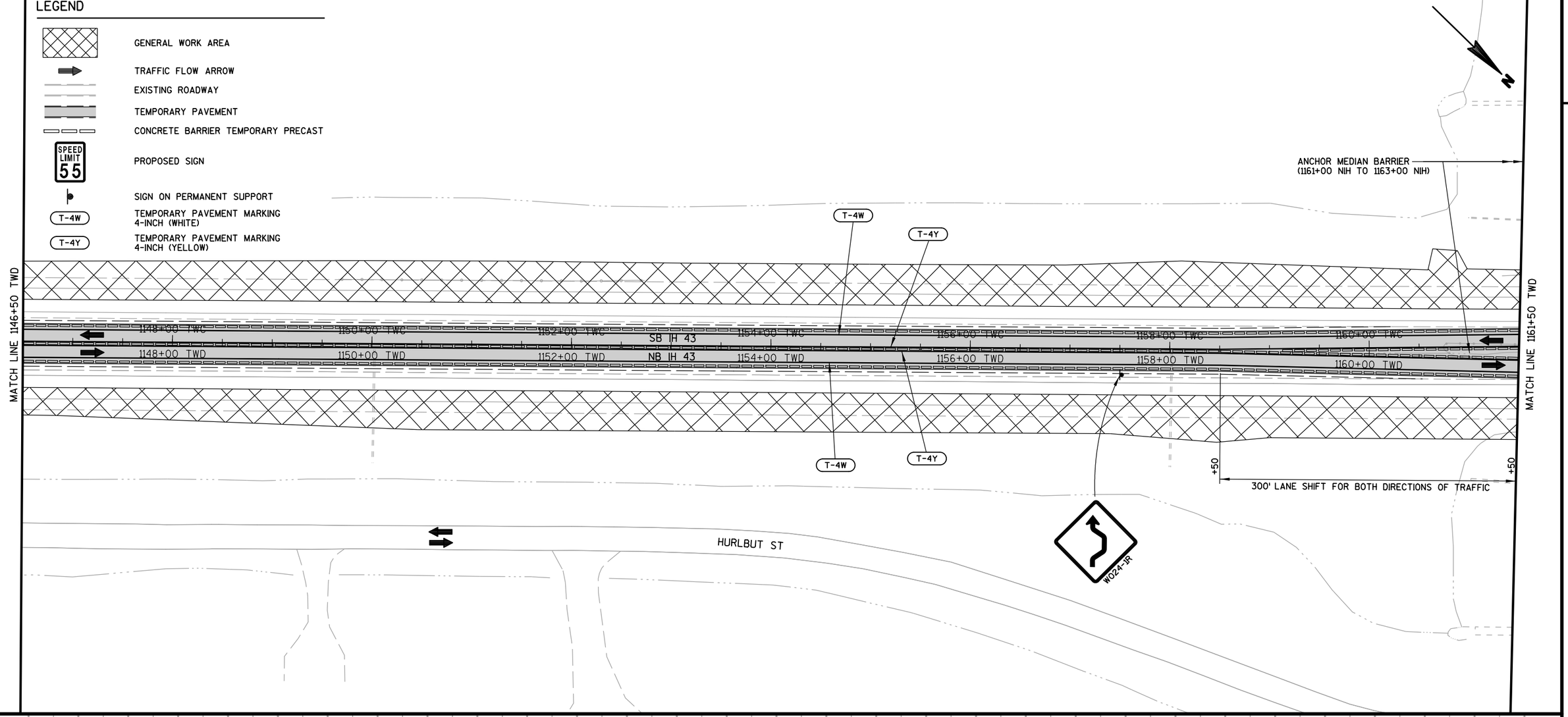


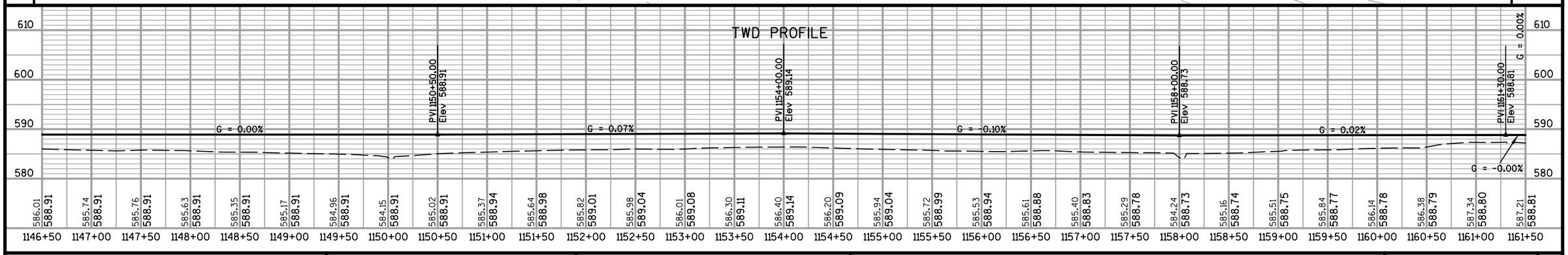
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 368	E

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 369	E

2

2

LEGEND

GENERAL WORK AREA
TRAFFIC FLOW ARROW
EXISTING ROADWAY
TEMPORARY PAVEMENT
CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
CONCRETE BARRIER TEMPORARY PRECAST
CRASH CUSHION LEFT IN PLACE BY OTHERS
PROPOSED SIGN
SIGN ON PERMANENT SUPPORT
T-4W TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
T-4Y TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

MILITARY AVE
WIETOR DR
HURLBUT ST
PERMANENT MAINTENANCE RD
ANCHOR MEDIAN BARRIER (1161+00 NIH TO 1163+00 NIH)
W024-1R
T-4W
T-4Y
SIGN
MATCH LINE 1161+50 TWD
MATCH LINE 1176+50 TWD
1162+00 TWC
1164+00 TWC
1166+00 TWC
1168+00 TWC
1170+00 TWC
1172+00 TWC
1174+00 TWC
1176+00 TWC
1162+00 TWD
1164+00 TWD
1166+00 TWD
NB IH 43
1168+00 TWD
SB IH 43
1170+00 TWD
1172+00 TWD
1174+00 TWD
1176+00 TWD
REMOVE CBTP LEFT IN PLACE (1174+75 TO 1180+00 TWD, RT)
+50
+50
300' LANE SHIFT FOR BOTH DIRECTIONS OF TRAFFIC

TWD PROFILE

PVI 1164+00.00 Elev 588.80
PVC 1165+25.00 Elev 588.83
PVI 1166+00.00 Elev 588.85
PVT 1166+75.00 Elev 588.57
PVC 1167+25.00 Elev 588.58
K = 278
L = 150.00'
PVI 1168+00.00 Elev 588.10
PVT 1168+75.00 Elev 588.22
PVI 1169+50.00 Elev 588.35
PVI 1170+00.00 Elev 588.39
PVI 1170+50.00 Elev 588.37
PVI 1171+00.00 Elev 588.43
G = -0.00%
G = 0.02%
HI 1165+34.05 Elev 588.83
K = 376
L = 150.00'
G = -0.37%
G = 0.17%
LO 1168+29.16 Elev 588.19
G = 0.08%
G = -0.04%
G = 0.11%

610 600 590 580

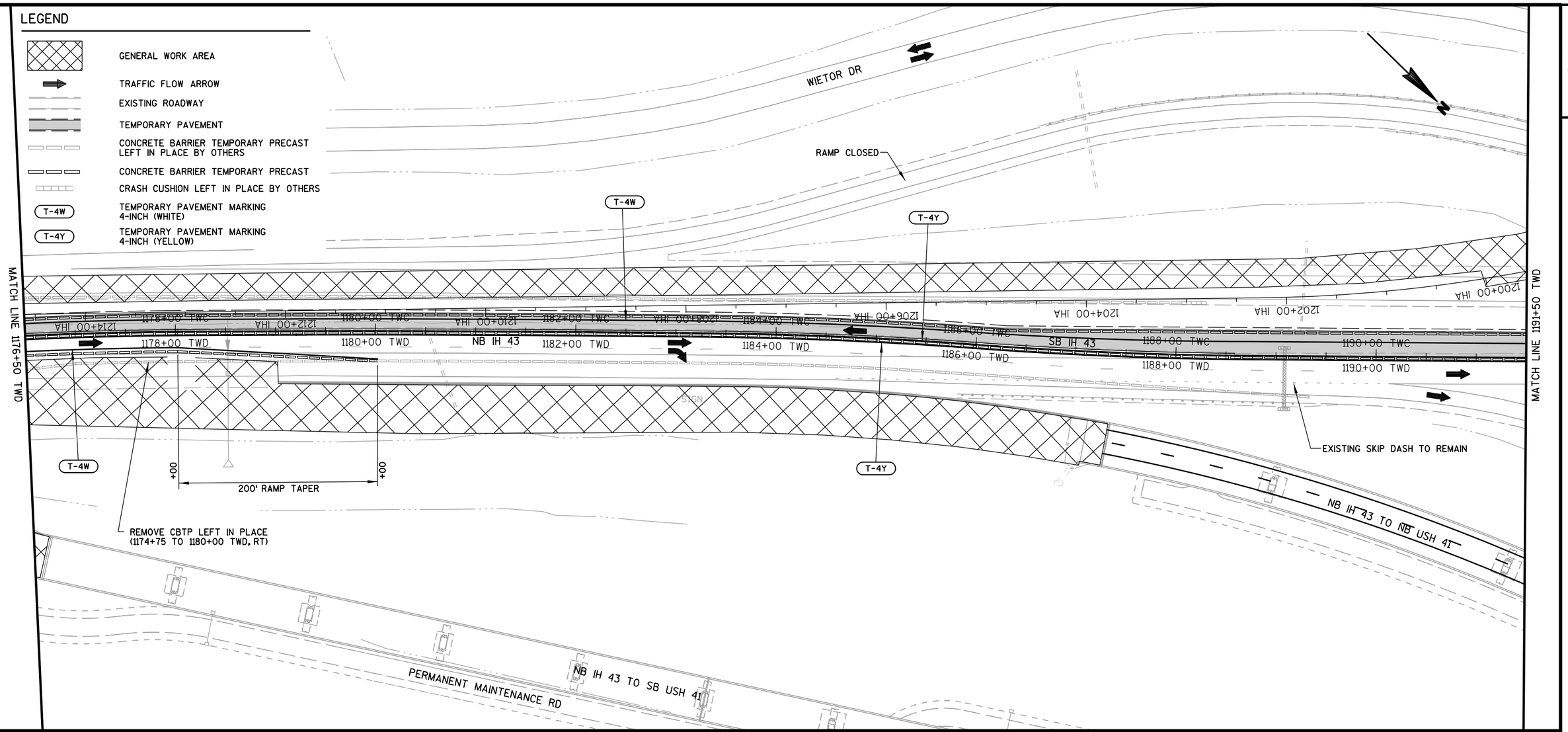
587.21 588.81 | 587.10 588.81 | 587.34 588.81 | 588.15 588.81 | 586.49 588.80 | 586.49 588.80 | 586.37 588.81 | 586.18 588.83 | 586.27 588.83 | 586.05 588.78 | 586.19 588.65 | 586.58 588.48 | 586.80 588.30 | 586.92 588.20 | 587.31 588.19 | 587.72 588.27 | 588.00 588.35 | 588.05 588.39 | 588.15 588.37 | 588.42 588.43 | 588.46 588.49 | 588.50 588.51 | 588.50 588.50 | 588.45 588.46 | 588.45 588.46 | 588.43 588.43 | 588.31 588.38 | 588.05 588.31 | 587.76 588.30 | 587.57 588.30 | 587.34 588.23

1161+50 1162+00 1162+50 1163+00 1163+50 1164+00 1164+50 1165+00 1165+50 1166+00 1166+50 1167+00 1167+50 1168+00 1168+50 1169+00 1169+50 1170+00 1170+50 1171+00 1171+50 1172+00 1172+50 1173+00 1173+50 1174+00 1174+50 1175+00 1175+50 1176+00 1176+50

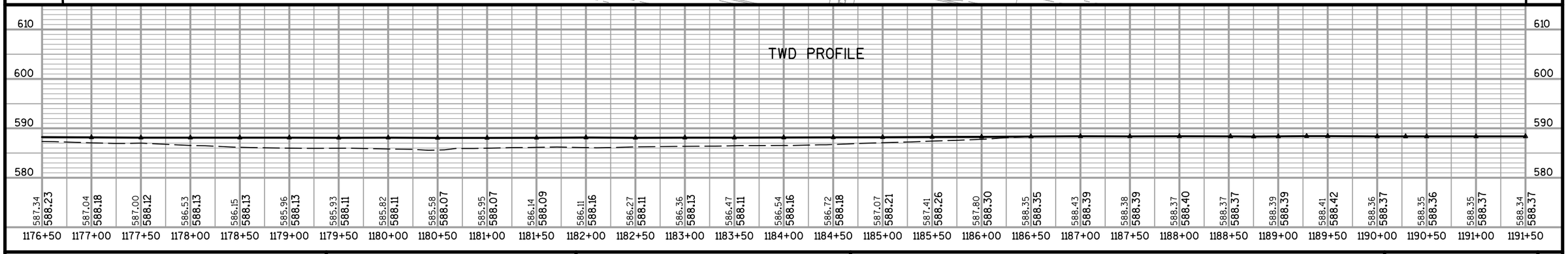
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 370 E

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)



TWD PROFILE



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 371 E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026227_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

2

MATCH LINE 1191+50 TWD

PERMANENT PAVEMENT MARKING

NB USH 41 TO SB IH 43

1194+00 IHA

1196+00 IHA

1198+00 IHA

WIETOR DR

REMOVE CBTP LEFT IN PLACE

T-4W

T-4Y

1192+00 TWC

1194+00 TWC

1196+00 TWC

SB IH 43

1198+00 TWC

1200+00 TWC

1202+00 TWC

1204+00 TWC

1206+00 TWC

1192+00 TWD

1194+00 TWD

1196+00 TWD

NB IH 43

1198+00 TWD

1200+00 TWD

1204+00 TWD

1206+00 TWD

SIGN

REMOVE CBTP LEFT IN PLACE

T-4Y

RAMP CLOSED

NB IH 43 TO SB USH 41

1192+00 TWB

1192+00 TWA

1194+00 TWB

1194+00 TWA

1196+00 TWB

1196+00 TWA

NB USH 41

SB USH 41

INL

MATCH LINE 1206+50 TWD

2

TWD PROFILE

610 / 600 / 590 / 580

1191+50	1192+00	1192+50	1193+00	1193+50	1194+00	1194+50	1195+00	1195+50	1196+00	1196+50	1197+00	1197+50	1198+00	1198+50	1199+00	1199+50	1200+00	1200+50	1201+00	1201+50	1202+00	1202+50	1203+00	1203+50	1204+00	1204+50	1205+00	1205+50	1206+00	1206+50
588.34	588.27	588.16	588.13	588.21	588.32	588.24	588.13	588.13	588.16	588.13	588.13	588.13	588.16	588.14	588.11	588.07	587.99	587.92	587.83	587.68	587.47	587.34	587.17	587.07	587.40	587.25	587.14	587.22	587.35	587.65
588.37	588.31	588.16	588.13	588.21	588.32	588.24	588.13	588.13	588.15	588.13	588.13	588.13	588.15	588.13	588.11	588.07	588.00	587.92	587.83	587.67										

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 372	E

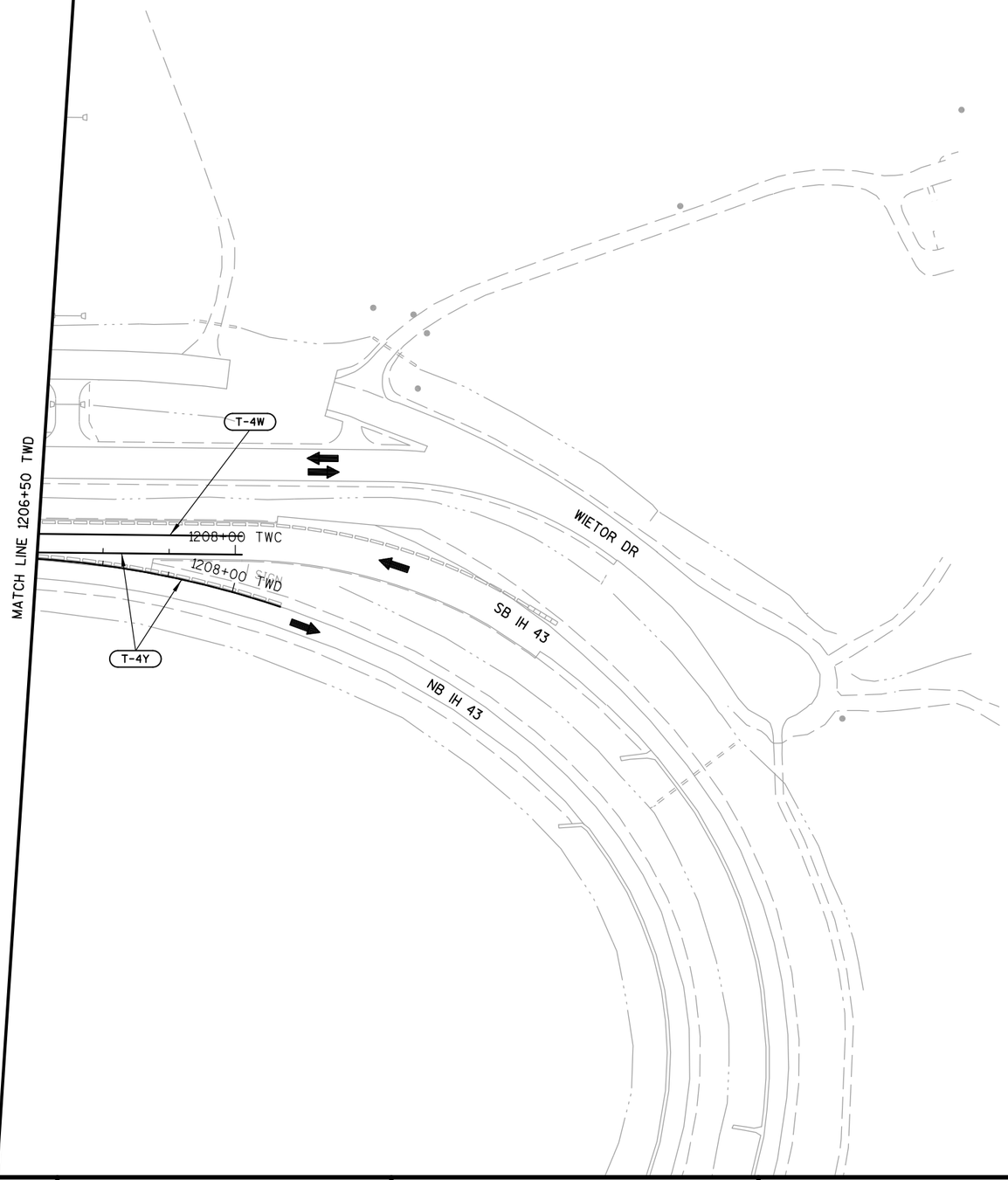
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026228_S2.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2



LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- T-4W — TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- T-4Y — TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 2	SHEET 373	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026229_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

DUCK CREEK

ISLAND CT

STAY IN LANE
R4-9
48" X 60"

W01-6
48" X 24"

W01-4BR

360' LANE DROP TAPER

+40

+00

SB USH 41

NB USH 41

1146+00 TWA

1148+00 TWA

1150+00 TWA

1152+00 TWA

1154+00 TWA

1156+00 TWA

1158+00 TWA

1160+00 TWA

1146+00 TWB

1148+00 TWB

1150+00 TWB

1152+00 TWB

1154+00 TWB

1156+00 TWB

1158+00 TWB

1160+00 TWB

MATCH LINE 1160+00 TWB

REMOVE CBTP LEFT IN PLACE
(NB USH 41 OUTSIDE SHOULDER
TO VELP AVE)

1148+00 IHA

1150+00 IHA

1152+00 IHA

1154+00 IHA

1156+00 IHA

1158+00 IHA

SIGN

12'

+50

+50

+50

200' LANE SHIFT

300' TAPER - 12' TO 24'

E-4W

E-4Y

E-8W

LANE CLOSED
R11-2L
48" X 30"

OFF-RAMP SAME
AS STAGE 2

OFF-RAMP TO VELP AVE
SAME AS STAGE 2

BEAVER DAM CREEK

LOVE GROVE CT

LEGEND

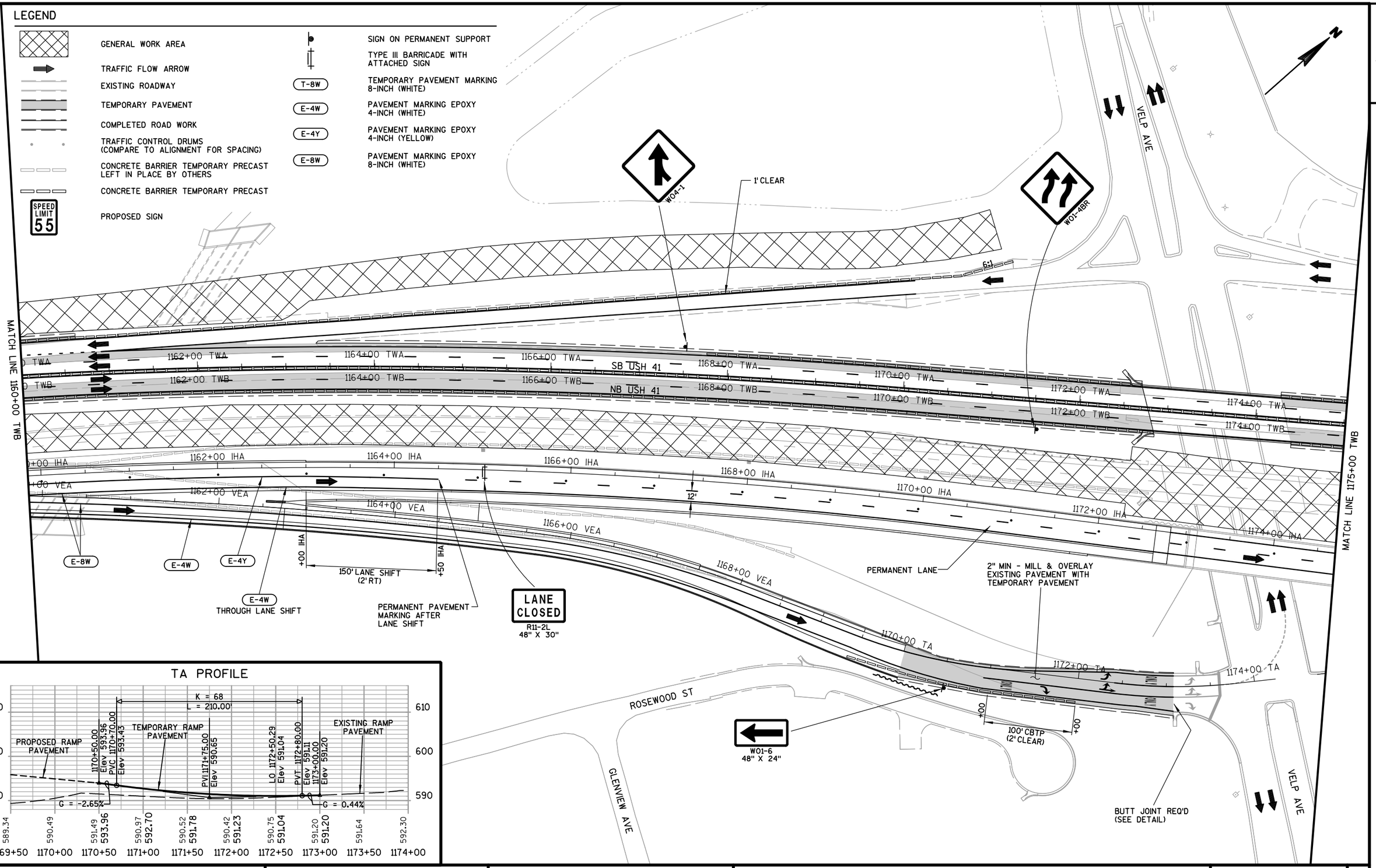
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS

- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 374	E

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- T-8W — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)



TA PROFILE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 375 E

2

2

MATCH LINE 1175+00 TWB

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN

DRUMS PLACED AT 10' SPACING TO CHANNEL TRAFFIC

100' CBTP TAPER (1' TO 4' CLEAR)

50' CBTP (4' CLEAR)

+26

+26

+16

1176+00 TWA

1178+00 TWA

1180+00 TWA

1182+00 TWA

1184+00 TWA

SB USH 41

1186+00 TWA

1188+00 TWA

1190+00 TWA

1176+00 TWB

1178+00 TWB

1180+00 TWB

1182+00 TWB

1184+00 TWB

1186+00 TWB

1188+00 TWB

1190+00 TWB

1' CLEAR

NB USH 41

1176+00 IHA

1178+00 IHA

1180+00 IHA

1182+00 IHA

1184+00 IHA

PERMANENT PAVEMENT MARKING (SUBSTAGE 2C)

PERMANENT LANE

1186+00 IHA

12'

1188+00 IHA

LANE CLOSED
R11-2L
48" X 30"

STAY IN LANE
R4-9
48" X 60"

VEB RAMP CLOSED
SUBSTAGE 2B & 2C

RAMP CLOSED
SUBSTAGES 2A & 2B

VELP AVE

MEMORIAL DR

WISCONSIN CENTRAL LTD. RR

N

TWB PROFILE (CROSSOVER)

PVI	Elev	G
1177+00.00	614.36	G = 0.28%
1178+00.00	614.64	G = 0.12%
1179+00.00	614.76	G = -0.50%
1180+00.00	614.27	G = -0.06%
1181+00.00	614.20	G = -0.19%
1182+00.00	614.02	G = -0.19%
1183+00.00	613.83	G = -0.22%
1184+00.00	613.61	

630 620 610 600

1175+00	1175+50	1176+00	1176+50	1177+00	1177+50	1178+00	1178+50	1179+00	1179+50	1180+00	1180+50	1181+00	1181+50	1182+00	1182+50	1183+00	1183+50	1184+00	1184+50	1185+00	1185+50	1186+00	1186+50	1187+00	1187+50	1188+00	1188+50	1189+00	1189+50	1190+00
612.98	612.99	613.45	613.43	613.85	613.86	614.13	614.11	614.37	614.36	614.53	614.50	614.70	614.64	614.81	614.70	614.85	614.76	614.59	614.51	614.29	614.27	613.93	614.23	612.96	614.20	613.04	614.11	613.39	614.02	613.77	613.92	613.72	613.83	613.67	613.72	613.59	613.61	613.46	613.50	599.01	613.38	586.54	613.25	606.95	613.12	612.96	612.95	612.78	612.78	612.62	612.62	612.46	612.46	612.28	612.28	612.10	612.10	611.94	611.89	611.67	611.67

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET	E

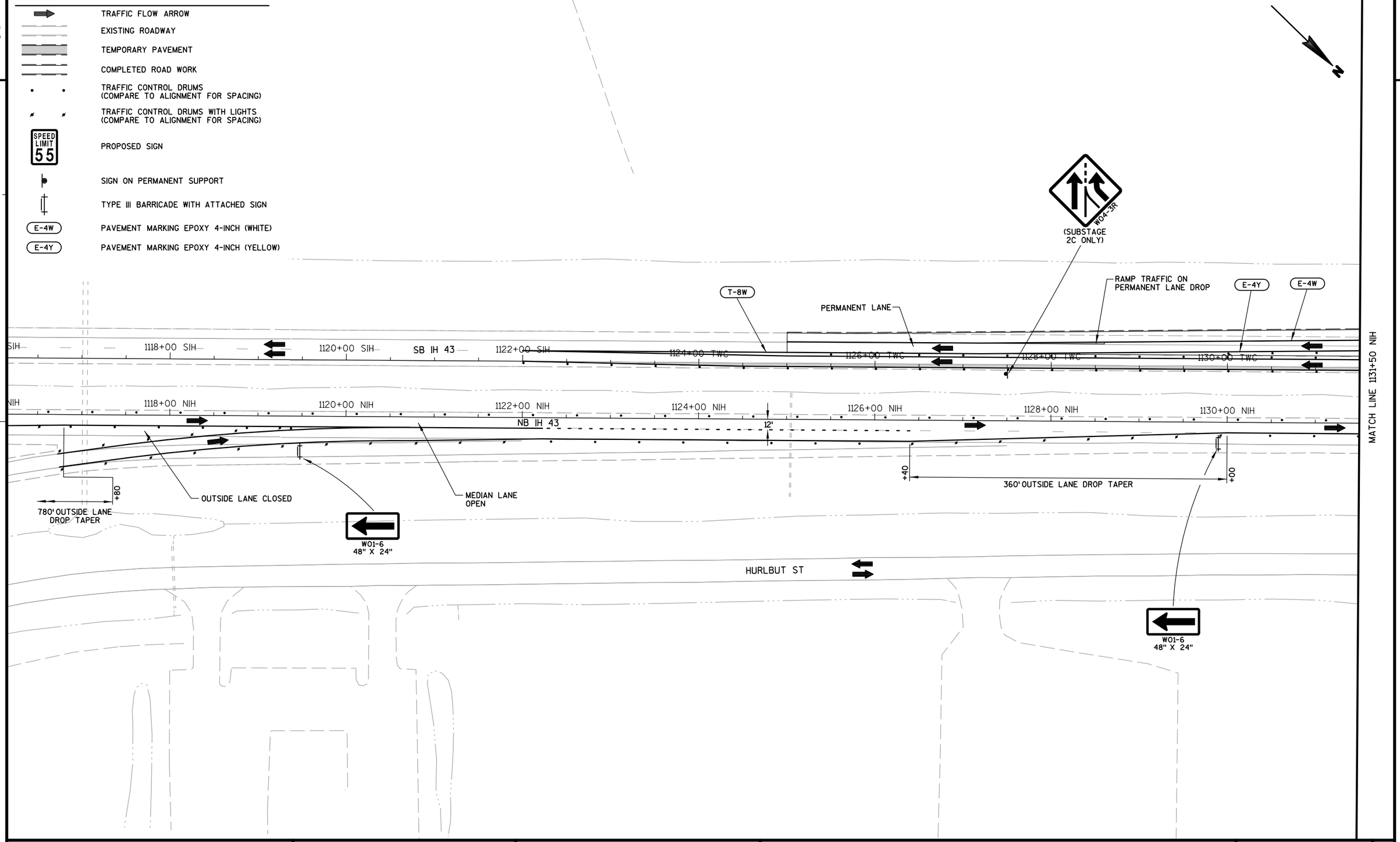
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026232_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

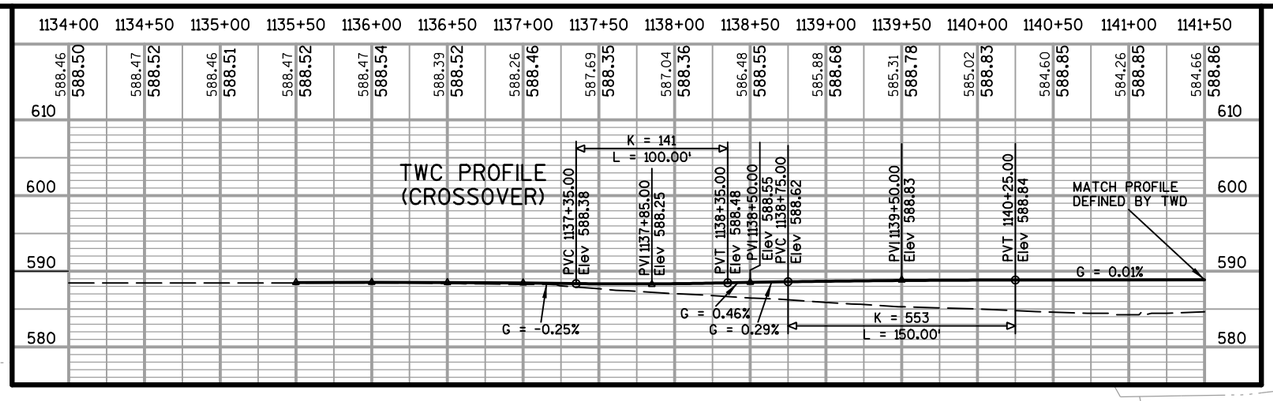
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

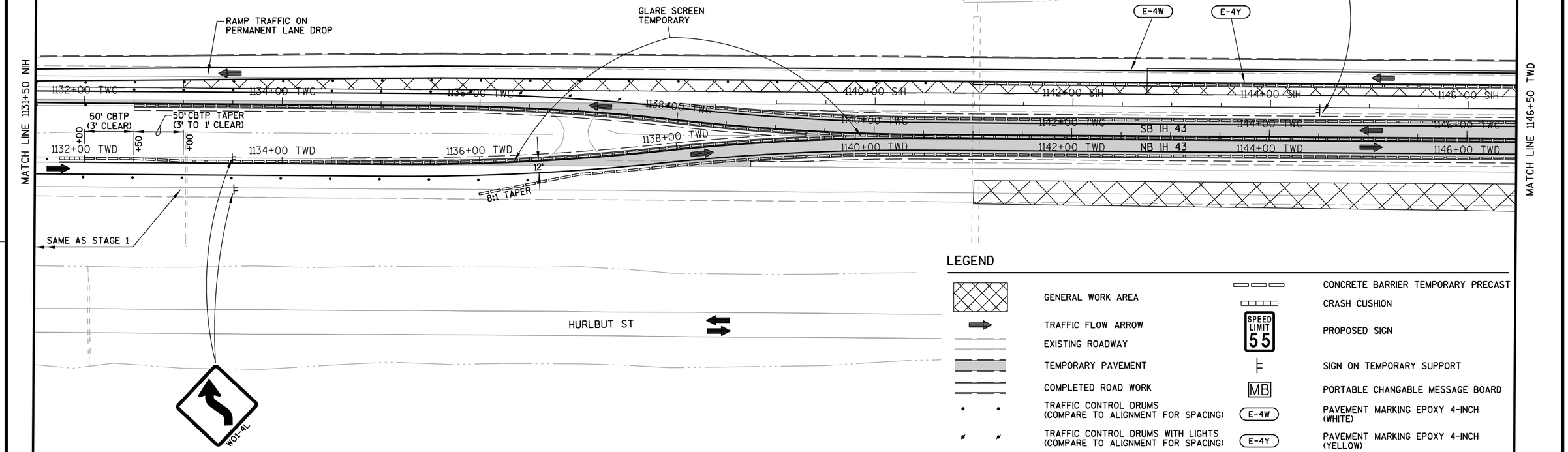


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 377	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026233_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

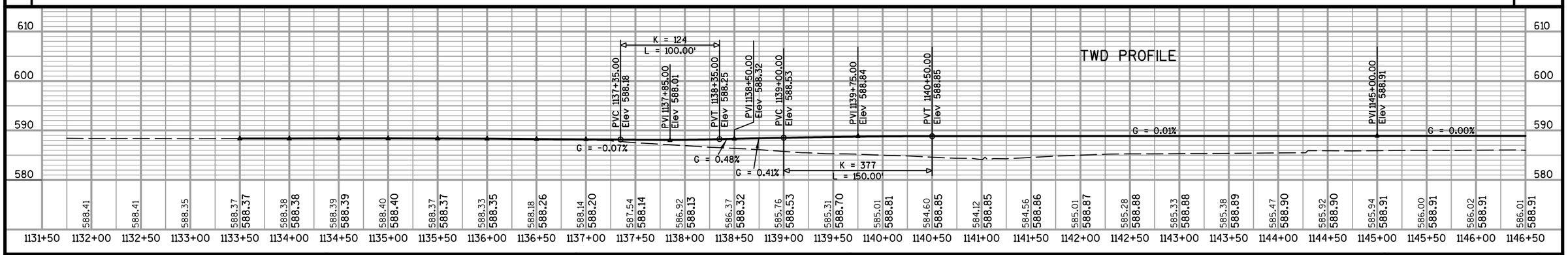
WISDOT/CADDS SHEET 42





LEGEND

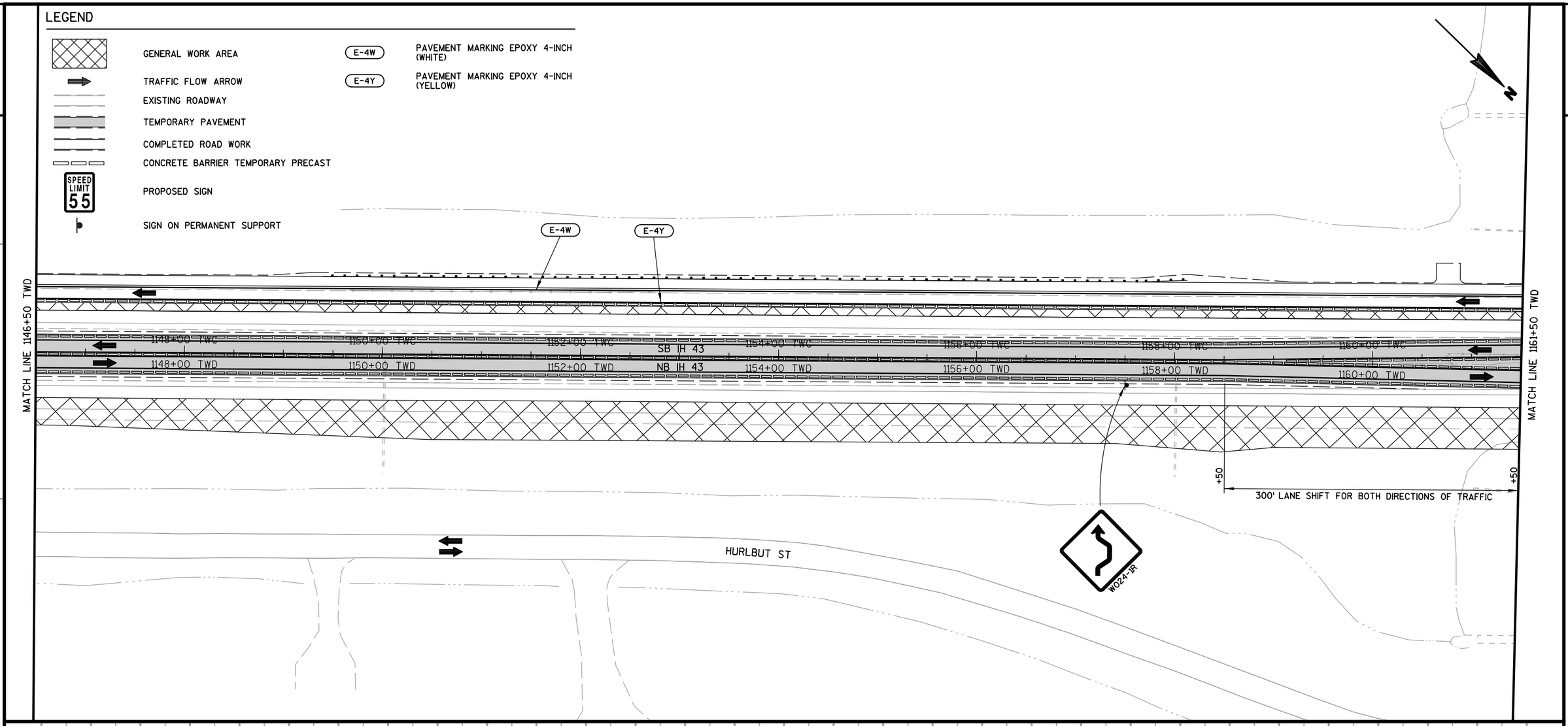
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON TEMPORARY SUPPORT
- PORTABLE CHANGABLE MESSAGE BOARD (MB)
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

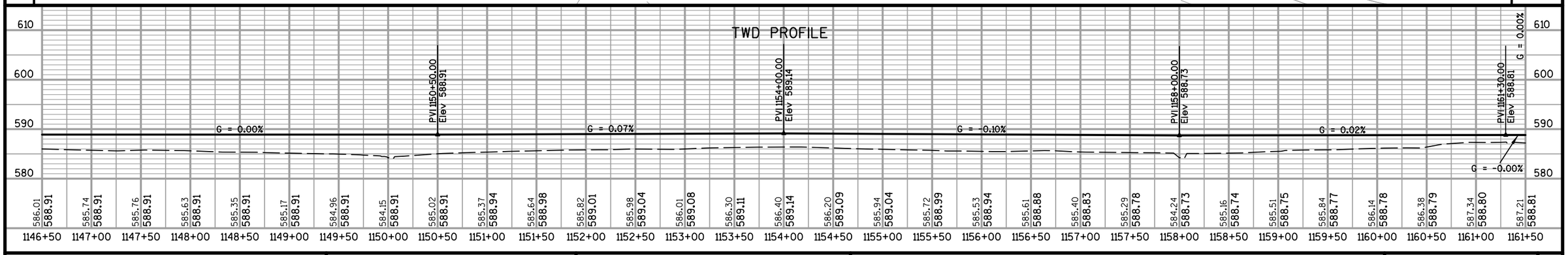


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 378	E

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- E-4W PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y PAVEMENT MARKING EPOXY 4-INCH (YELLOW)





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 379 E

2

2

LEGEND

GENERAL WORK AREA

TRAFFIC FLOW ARROW

EXISTING ROADWAY

TEMPORARY PAVEMENT

COMPLETED ROAD WORK

CONCRETE BARRIER TEMPORARY PRECAST

PROPOSED SIGN

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE WITH ATTACHED SIGN

E-4W PAVEMENT MARKING EPOXY 4-INCH (WHITE)

E-4Y PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

MILITARY AVE

WIETOR DR

W024-1R

W01-6
48" X 24"

400' LANE SHIFT

300' LANE SHIFT FOR BOTH DIRECTIONS OF TRAFFIC

MATCH LINE 1161+50 TWD

MATCH LINE 1176+50 TWD

SB IH 43

NB IH 43

PERMANENT MAINTENANCE RD

HURLBUT ST

MILITARY AVE

TWD PROFILE

PROJECT NO: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | CONSTRUCTION STAGING - SUBSTAGE 2C | SHEET 380 E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026236_S2.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- CONCRETE BARRIER TEMPORARY PRECAST
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

MATCH LINE 1176+50 TWD

MATCH LINE 1191+50 TWD

WIETOR DR

RAMP CLOSED

500' LANE SHIFT

E-4W

E-4Y

7'

19'

NB IH 43

SB IH 43

1178+00 TWD

1180+00 TWD

1182+00 TWD

1184+00 TWD

1186+00 TWD

1188+00 TWC

1188+00 TWD

1190+00 TWC

1190+00 TWD

1178+00 IHA

1180+00 IHA

1182+00 IHA

1184+00 IHA

1186+00 IHA

1188+00 IHA

1190+00 IHA

1192+00 IHA

1194+00 IHA

1196+00 IHA

1198+00 IHA

1200+00 IHA

1202+00 IHA

1204+00 IHA

1206+00 IHA

1208+00 IHA

1210+00 IHA

1212+00 IHA

1214+00 IHA

+00

+00

EXISTING SKIP DASH TO REMAIN

1188+00 NIH

1190+00 NIH

NB IH 43 TO NB USH 41

1178+00 IHB

1180+00 IHB

1182+00 IHB

1184+00 IHB

1186+00

NB IH 43 TO SB USH 41

PERMANENT MAINTENANCE RD

TWD PROFILE

610	600	590	580

1176+50	1177+00	1177+50	1178+00	1178+50	1179+00	1179+50	1180+00	1180+50	1181+00	1181+50	1182+00	1182+50	1183+00	1183+50	1184+00	1184+50	1185+00	1185+50	1186+00	1186+50	1187+00	1187+50	1188+00	1188+50	1189+00	1189+50	1190+00	1190+50	1191+00	1191+50
587.34	587.04	587.00	586.53	586.15	585.96	585.93	585.82	585.58	585.95	586.14	586.11	586.27	586.36	586.47	586.54	586.72	587.07	587.41	587.80	588.35	588.43	588.38	588.37	588.37	588.39	588.41	588.36	588.35	588.35	588.34
588.23	588.18	588.12	588.13	588.13	588.13	588.11	588.11	588.07	588.07	588.09	588.16	588.11	588.13	588.11	588.16	588.18	588.21	588.26	588.30	588.35	588.39	588.39	588.40	588.37	588.39	588.42	588.37	588.36	588.37	588.37

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 381	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026237_S2.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

PERMANENT LANE

PERMANENT PAVEMENT MARKING

12'

NB USH 41 TO SB IH 43

1194+00 IHA

LANE CLOSED
R11-2L
48" X 30"

TEMPORARY PAVEMENT MARKING

PERMANENT PAVEMENT MARKING

500' LANE SHIFT

+00

12'

E-4Y

E-4W

1196+00 IHA

1198+00 IHA

8H TAPER

WIETOR DR

MATCH LINE 1191+50 TWD

1192+00 TWC
1192+00 TWD
1194+00 TWC
1194+00 TWD
1196+00 TWC
1196+00 TWD
SB IH 43
NB IH 43
1198+00 TWC
1198+00 TWD
1200+00 TWC
1200+00 TWD
1202+00 TWC
1204+00 TWC
1204+00 TWD
1206+00 TWC
1206+00 TWD

SIGN

RAMP CLOSED

1204+00 IHB

NB IH 43 TO SB USH 41

1206+00 IHB

1208+00 IHB

1210+00 IHB

1200+00 TWB
1198+00 TWB
1196+00 TWB
1194+00 TWB
1192+00 TWB

1200+00 TWA
1198+00 TWA
1196+00 TWA
1194+00 TWA
1192+00 TWA

NB USH 41

SB USH 41

INL

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION LEFT IN PLACE BY OTHERS
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

TWD PROFILE

610
600
590
580

1191+50	1192+00	1192+50	1193+00	1193+50	1194+00	1194+50	1195+00	1195+50	1196+00	1196+50	1197+00	1197+50	1198+00	1198+50	1199+00	1199+50	1200+00	1200+50	1201+00	1201+50	1202+00	1202+50	1203+00	1203+50	1204+00	1204+50	1205+00	1205+50	1206+00	1206+50
588.34	588.27	588.16	588.13	588.21	588.32	588.24	588.13	588.13	588.16	588.13	588.13	588.13	588.16	588.14	588.11	588.07	587.99	587.92	587.83	587.68	587.47	587.34	587.17	587.07	587.40	587.25	587.14	587.22	587.35	587.65
588.37	588.31	588.16	588.13	588.21	588.32	588.24	588.13	588.13	588.15	588.13	588.13	588.13	588.15	588.13	588.11	588.07	588.00	587.92	587.83	587.67										

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - SUBSTAGE 2C	SHEET 382	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026238_S2.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

VELP AVE TO SB USH 41

TEMP SHORING (SH3)

TEMP SHORING (SH5)

1138+00 TWE

1140+00 TWE

1142+00 TWE

1144+00 TWE

1146+00 TWE

1148+00 TWE

1150+00 TWE

1152+00

SB USH 41

NB USH 41

NB USH 41 TO VELP AVE

1138+00 TWF

1140+00 TWF

1142+00 TWF

1144+00 TWF

1146+00 TWF

1148+00 TWF

1150+00 TWF

1152+00 TWF

MATCH LINE 1152+00 TWF

PSS

SIGN

MH

BEAVER DAM CREEK

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 383	E

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

ISLAND CT

BEAVER DAM CREEK

N

PSS

VELP AVE TO SB USH 41

MH

TEMP SHORING (SH4)

TEMP SHORING (SH5)

MATCH LINE 1152+00 TWF

1154+00 TWE

1154+00 TWF

1156+00 TWE

1156+00 TWF

1158+00 TWE

1158+00 TWF

1160+00 TWE

1160+00 TWF

SB USH 41

NB USH 41

1162+00 TWE

1162+00 TWF

1164+00 TWE

1164+00 TWF

1166+00 TWE

1166+00 TWF

MATCH LINE 1167+00 TWF

SIGN

1160+00 VEA

1162+00 VEA

1164+00 VEA

1166+00 VEA

NB USH 41 TO SB IH 43

NB USH 41 TO VELP AVE

TSS

(ABANDON)

PSS

BEAVER DAM CREEK

LONE GROVE CT

ROSEWOOD ST

MH

24"SS

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 384	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026251_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

STORMWATER POND

VELP AVE

15"SS

36"SS

GUY

SIGN

SB USH 41 TO VELP AVE

1168+00 TD

1170+00 TD

VELP AVE TO SB USH 41

MATCH LINE 1167+00 TWF

PSS

TEMP SHORING (SH5)

1168+00 TWE

1168+00 TWF

1170+00 TWE

1170+00 TWF

1172+00 TWE

1172+00 TWF

1174+00 TWE

1174+00 TWF

1176+00 TWE

1176+00 TWF

SB USH 41

NB USH 41

1178+00 TWE

1178+00 TWF

1180+00 TWE

1180+00 TWF

1182+00

MATCH LINE 1182+00 TWF

NB USH 41 TO SB IH43

NB USH 41 TO VELP AVE

1170+00 TA

1172+00 TA

1174+00 TA

1176+00 TB

VELP AVE TO NB USH 41

ROSEWOOD ST

VELP AVE

TSS

TEMPORARY STORM SEWER

PERMANENT STORM SEWER

MEMORIAL DR

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 385	E

2

2

WISCONSIN CENTRAL LTD RR

NB IH 43 TO SB USH 41 (CLOSED)

SB USH 41 TO SB IH 43

NB IH 43 TO SB USH 41

I SIGN

N

MATCH LINE 1182+00 TWF

1184+00 TWE

1184+00 TWF

1186+00 TWE

1186+00 TWF

1188+00 TWE

1188+00 TWF

1190+00 TWE

1190+00 TWF

SB USH 41

NB USH 41

1192+00 TWE

1192+00 TWF

1194+00 TWE

1194+00 TWF

1196+00 TWE

1196+00 TWF

MATCH LINE 1197+00 TWF

PSS

MEMORIAL DR

NB USH 41 TO SB IH 43

I SIGN

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026253_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 1212+00 TWF

MATCH LINE 1197+00 TWF

1198+00 TWE
1198+00 TWF
1200+00 TWE
1200+00 TWF
1202+00 TWE
1202+00 TWF
1204+00 TWE
1204+00 TWF
1206+00 TWE
1206+00 TWF
SB USH 41
NB USH 41
1208+00 TWE
1208+00 TWF
1210+00 TWE
1210+00 TWF
1212+0
1212+0

PSS
PSS

TEMPORARY CULVERT TO BE REMOVED AT END OF STAGE 2 FOLLOWING TRAFFIC SWITCH

NB IH 43 TO NB USH 41

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS TEMPORARY STORM SEWER
- PSS PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 387	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026254_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

DUCK CREEK

WEST DEERFIELD AVE

SIGN

SIGN

SIGN

SIGN

MATCH LINE 1212+00 TWF

MATCH LINE 1227+00 TWF

1214+00 TWE

1214+00 TWF

1216+00 TWE

1216+00 TWF

SB USH 41

NB USH 41

1218+00 TWE

1218+00 TWF

1220+00 TWE

1220+00 TWF

1222+00 TWE

1222+00 TWF

1224+00 TWE

1224+00 TWF

1226+00 TWE

1226+00 TWF

PSS

PSS

PSS

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026255_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

N

WEST DEERFIELD AVE

MATCH LINE 1227+00 TWF

MATCH LINE 1242+00 TWF

SIGN

SIGN

SIGN

1228+00 TWE
1228+00 TWF

1230+00 TWE
1230+00 TWF

1232+00 TWE
1232+00 TWF

SB USH 41
NB USH 41

1234+00 TWE
1234+00 TWF

1236+00 TWE
1236+00 TWF

1238+00 TWE
1238+00 TWF

1240+00 TWE
1240+00 TWF

1242+00

PSS

PSS

PSS

PSS

EAST DEERFIELD AVE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026256_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

N

WEST DEERFIELD AVE

EAST DEERFIELD AVE

MATCH LINE 1242+00 TWF

SIGN

GUY

1244+00 TWE

1244+00 TWF

1246+00 TWE

1246+00 TWF

SB USH 41

NB USH 41

1248+00 TWE

1248+00 TWF

1250+00 TWE

1250+00 TWF

1252+00 TWE

1252+00 TWF

1254+00 TWE

1256+00 TWE

PSS

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 390	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026257_S2_dr_OV.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

SIGN

MH

SIGN

SB IH 43

122+00 SIH

124+00 SIH

126+00 SIH

128+00 SIH

130+00 SIH

132+00 SIH

134+00 SIH

136+00 SIH

MATCH LINE 1137+00 NIH

122+00 NIH

124+00 NIH

126+00 NIH

128+00 NIH

130+00 NIH

132+00 NIH

134+00 NIH

136+00 NIH

NB IH 43

SIGN

HURLBUT ST

AM GWV

AM GWV

AM GWV

AM GWV

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS TEMPORARY STORM SEWER
- PSS PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026258_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

MATCH LINE 1137+00 NIH

MATCH LINE 1152+00 NIH

SB IH 43

NB IH 43

1138+00 SIH
1140+00 SIH
1142+00 SIH
1144+00 SIH
1146+00 SIH
1148+00 SIH
1150+00 SIH
1152+00

1138+00 NIH
1140+00 NIH
1142+00 NIH
1144+00 NIH
1146+00 NIH
1148+00 NIH
1150+00 NIH
1152+00

SIGN
SIGN
SIGN

HWY MH
HWY MH

PSS

HURLBUT ST

TOWER

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 392	E

2

2

MATCH LINE 1152+00 NIH

MATCH LINE 1167+00 NIH

WIETOR DR

MILITARY AVE

SB IH 43
NB IH 43

1154+00 NIH
1156+00 NIH
1158+00 NIH
1160+00 NIH
1162+00 NIH
1164+00 NIH
1166+00 NIH

1154+00 SIH
1156+00 SIH
1158+00 SIH
1160+00 SIH
1162+00 SIH
1164+00 SIH
1166+00 SIH

PSS

SIGN

MH

HURLBUT ST

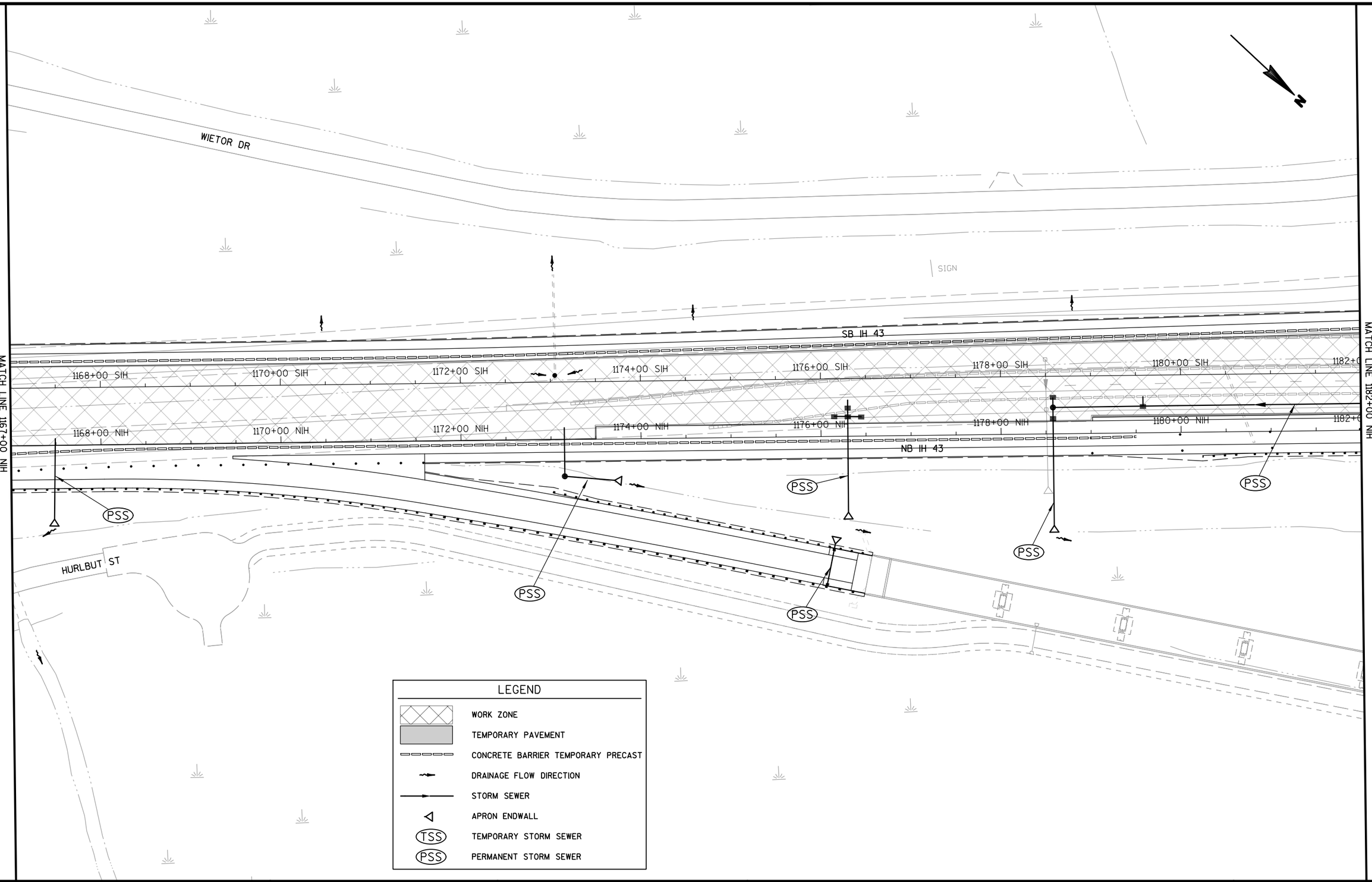
MILITARY AVE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 393	E

2



LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

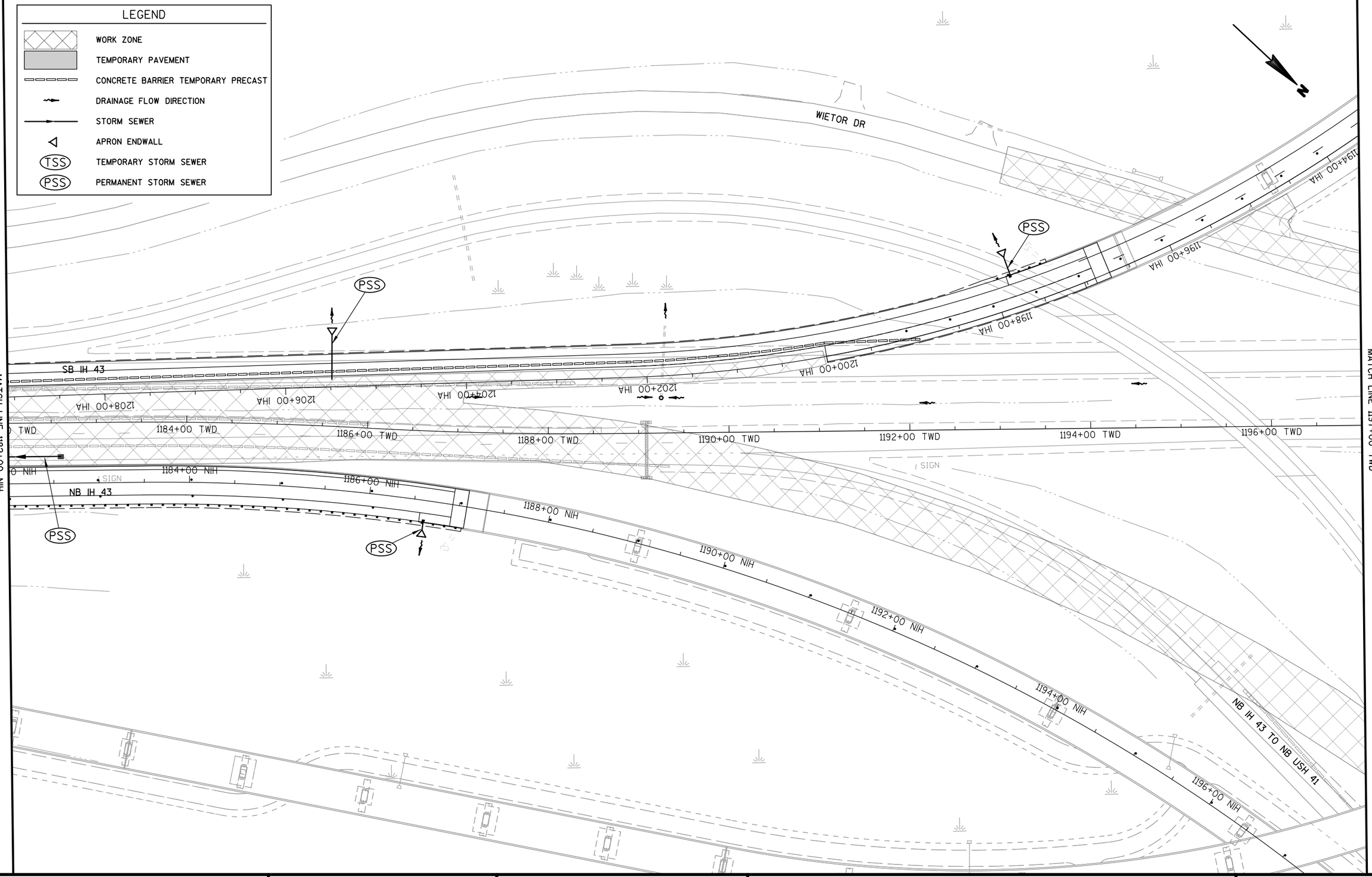
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 394	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026261_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 395	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026262_S2_dr_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

NB USH 41 TO SB IH 43

MATCH LINE 1197+00 TWD

NB USH 41

SB USH 41

NB IH 43

1198+00 TWD

1200+00 TWD

1202+00 TWD

1204+00 TWD

1206+00 TWD

1208+00 TWD

PSS

PSS

PSS

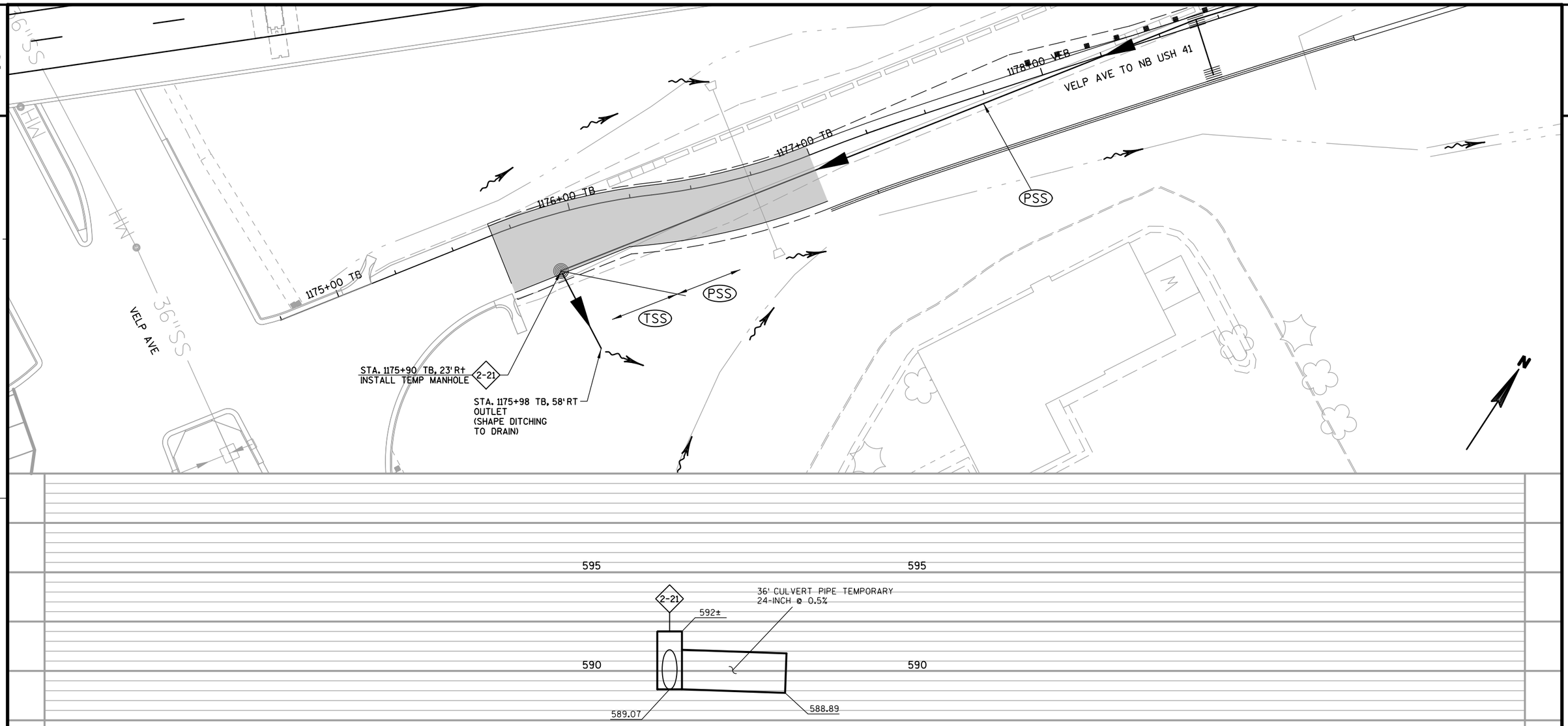
PSS

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- TSS — TEMPORARY STORM SEWER
- PSS — PERMANENT STORM SEWER

N

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE OVERVIEW - END OF STAGE 2	SHEET 396	E



LEGEND

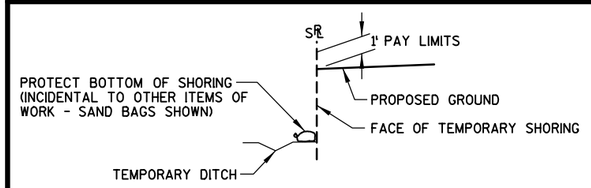
- WORK ZONE
- TEMPORARY PAVEMENT
- CONCRETE BARRIER TEMPORARY PRECAST
- DRAINAGE FLOW DIRECTION
- STORM SEWER
- APRON ENDWALL
- (TSS) TEMPORARY STORM SEWER
- (PSS) PERMANENT STORM SEWER

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY DRAINAGE DETAIL - STAGE 2	SHEET 397	E

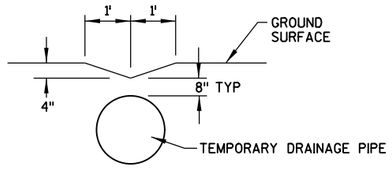
2

LEGEND

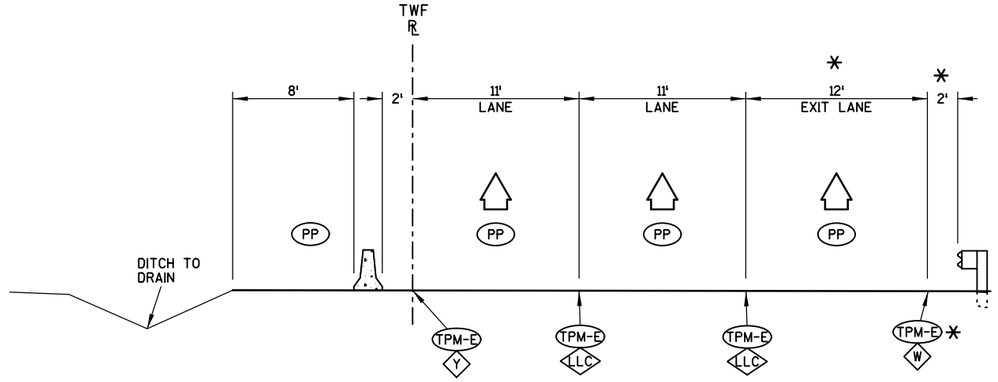
- WORK ZONE
- TRAFFIC DIRECTION
- CONCRETE BARRIER TEMPORARY PRECAST
- (ANC) BARRIER ANCHORED
- TRAFFIC CONTROL DRUMS
- EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
- (XX") TEMPORARY DRAINAGE PIPE (SIZE)
- (JNT) CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
- (EP) EXISTING PAVEMENT
  - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
- (PP) PROPOSED PAVEMENT
  - SEE TYPICAL FINISHED SECTIONS
- (TP) TEMPORARY PAVEMENT
  - 5" HMA PAVEMENT TYPE E-10 OVER
  - 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER
  - 12" BREAKER RUN
- (BAD) BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
- (SC) SAWCUT AT EDGE OF EXISTING TRAVEL LANE
- (EPM) EXISTING PAVEMENT MARKING
- (PPM) PROPOSED PAVEMENT MARKING
  - SEE PAVEMENT MARKING PLAN
- (TPM) TEMPORARY PAVEMENT MARKING
- (TPM-RT) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
- (TPM-E) TEMPORARY PAVEMENT MARKING (EPOXY)
- (Y) YELLOW EDGELINE
- (W) WHITE EDGELINE
- (LLA) WHITE LANE LINE SKIP-DASH (ASPHALT)
- (LLC) WHITE LANE LINE SKIP-DASH (CONCRETE)
  - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
- (PROF) POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS



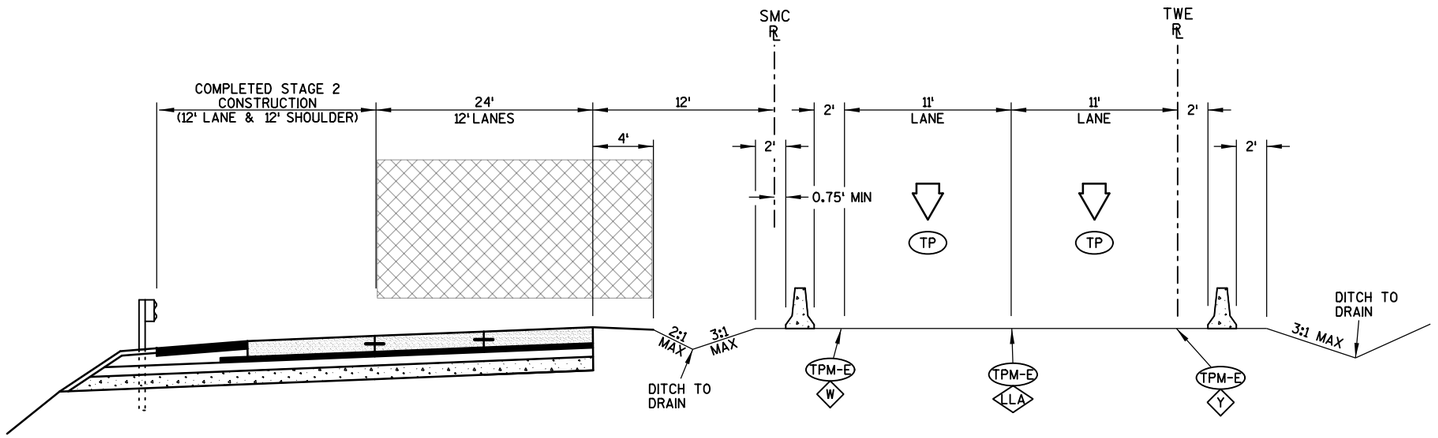
TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



✱ SAME AS STAGE 2

NB USH 41

STA 1138+00 TWF TO STA 1146+50 TWF



SB USH 41

STA 1138+00 TWE TO STA 1146+50 TWE

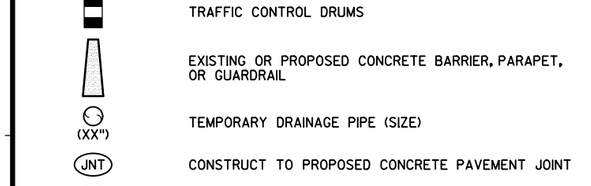
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 398	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026301_S3_TS.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

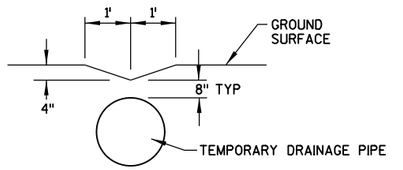
2

LEGEND

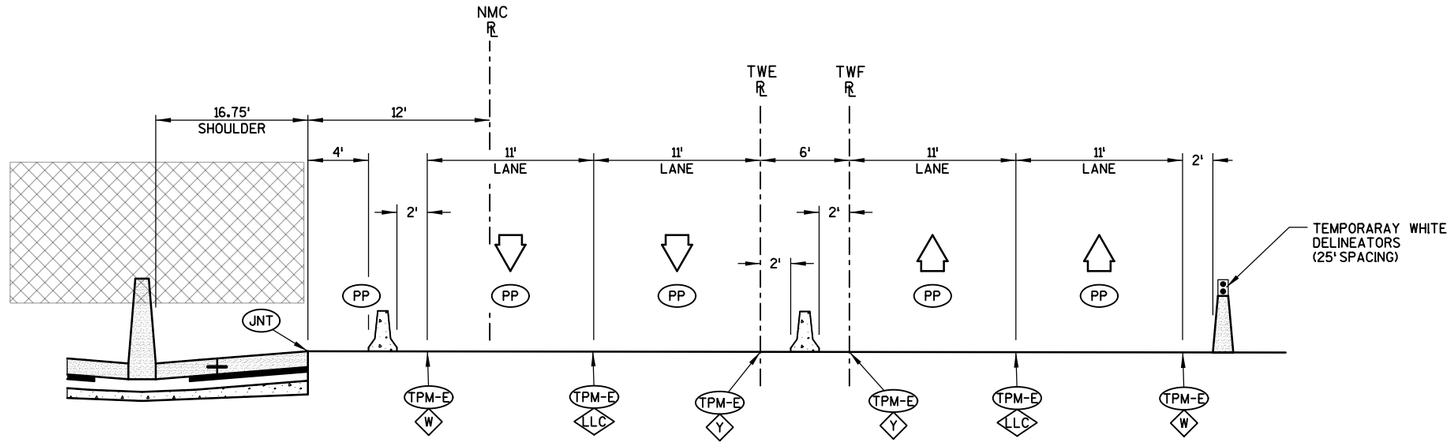
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

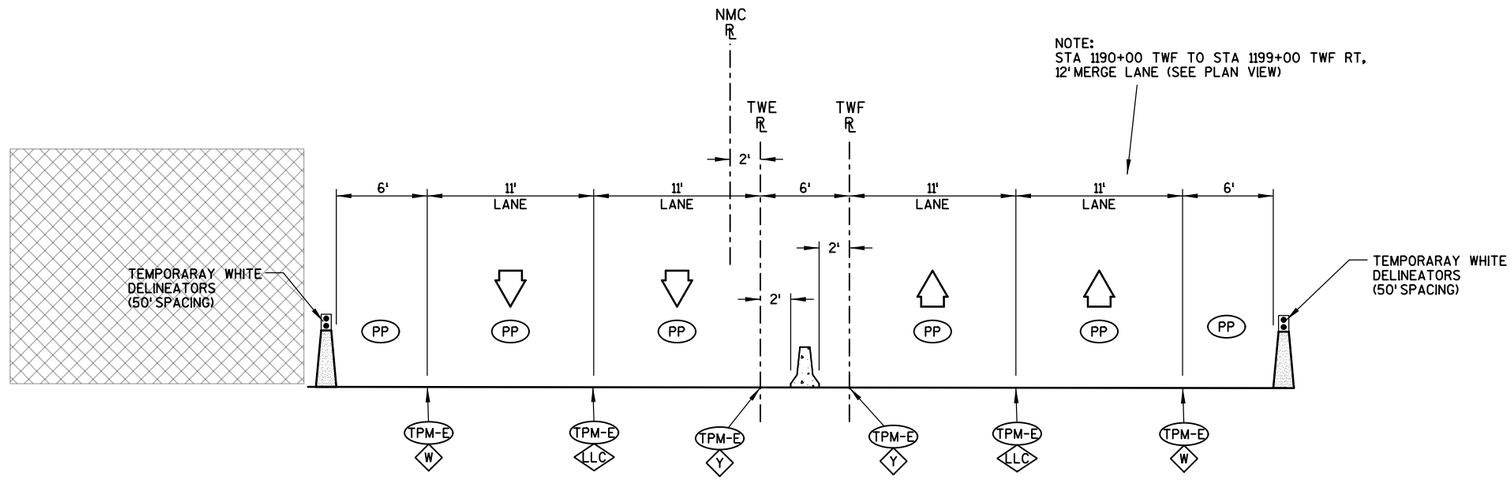


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



USH 41

STA 1146+50 TWF TO STA 1173+00 TWF



USH 41

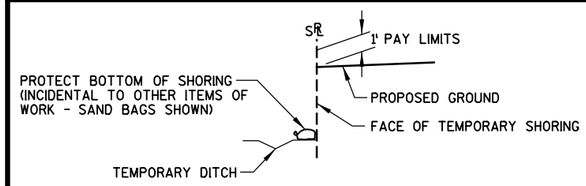
STA 1173+00 TWF TO STA 1209+00 TWF

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 399	E

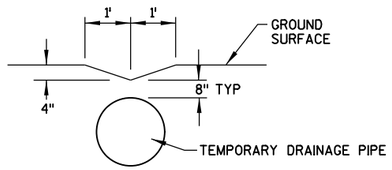
2

LEGEND

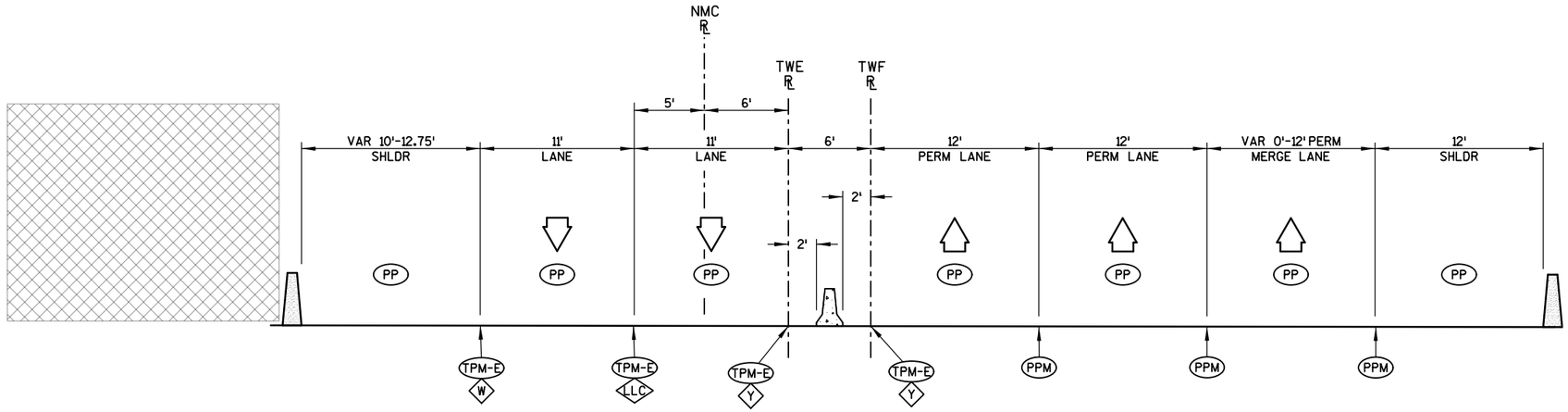
- WORK ZONE
- TRAFFIC DIRECTION
- CONCRETE BARRIER TEMPORARY PRECAST
- (ANC) BARRIER ANCHORED
- TRAFFIC CONTROL DRUMS
- EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
- (XX") TEMPORARY DRAINAGE PIPE (SIZE)
- (JNT) CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
- (EP) EXISTING PAVEMENT
  - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
- (PP) PROPOSED PAVEMENT
  - SEE TYPICAL FINISHED SECTIONS
- (TP) TEMPORARY PAVEMENT
  - 5" HMA PAVEMENT TYPE E-10 OVER
  - 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER
  - 12" BREAKER RUN
- (BAD) BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
- (SC) SAWCUT AT EDGE OF EXISTING TRAVEL LANE
- (EPM) EXISTING PAVEMENT MARKING
- (PPM) PROPOSED PAVEMENT MARKING
  - SEE PAVEMENT MARKING PLAN
- (TPM) TEMPORARY PAVEMENT MARKING
- (TPM-RT) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
- (TPM-E) TEMPORARY PAVEMENT MARKING (EPOXY)
- (Y) YELLOW EDGELINE
- (W) WHITE EDGELINE
- (LLA) WHITE LANE LINE SKIP-DASH (ASPHALT)
- (LLC) WHITE LANE LINE SKIP-DASH (CONCRETE)
  - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
- (PROF) POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS



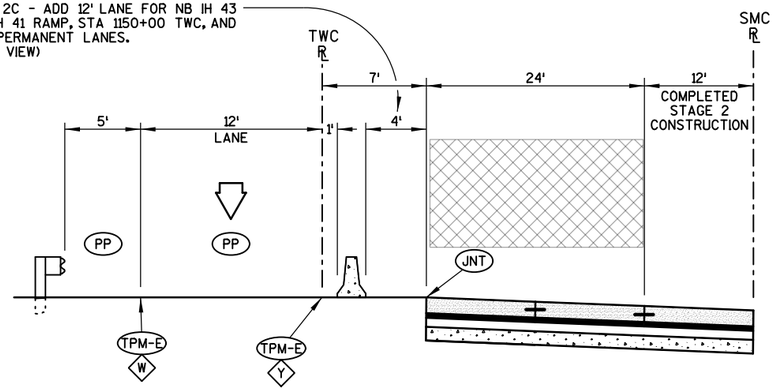
TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



USH 41

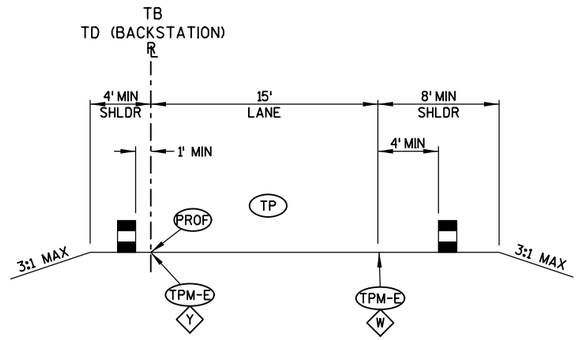
STA 1209+00 TWF TO STA 1249+00 TWF

NOTE:
SUBSTAGE 2C - ADD 12' LANE FOR NB IH 43 TO SB USH 41 RAMP, STA 1150+00 TWC, AND MOVE TO PERMANENT LANES. (SEE PLAN VIEW)



SB USH 41 ON-RAMP FROM VELP AVE

STA 1138+00 TWC TO STA 1160+00 TWC



VELP AVE RAMPS

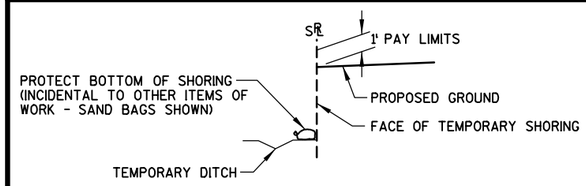
NB USH 41 ON-RAMP (TB ℄)
SB USH 41 ON-RAMP (TD ℄)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 400	E

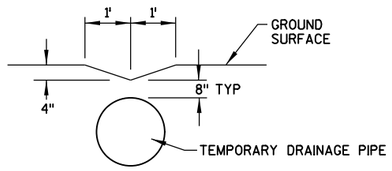
2

LEGEND

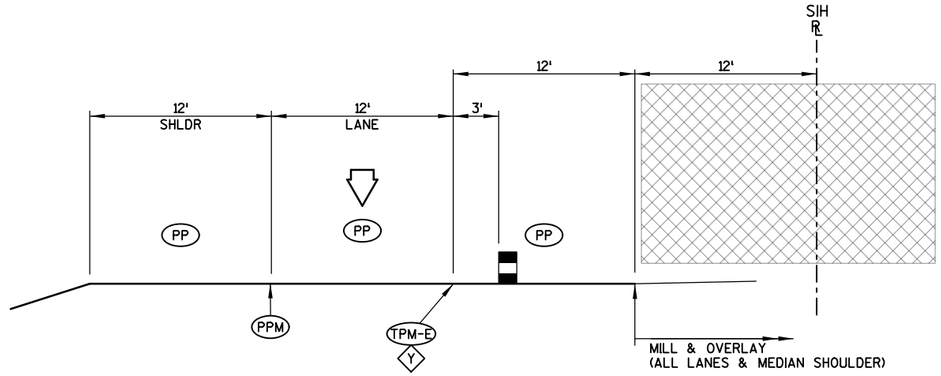
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS

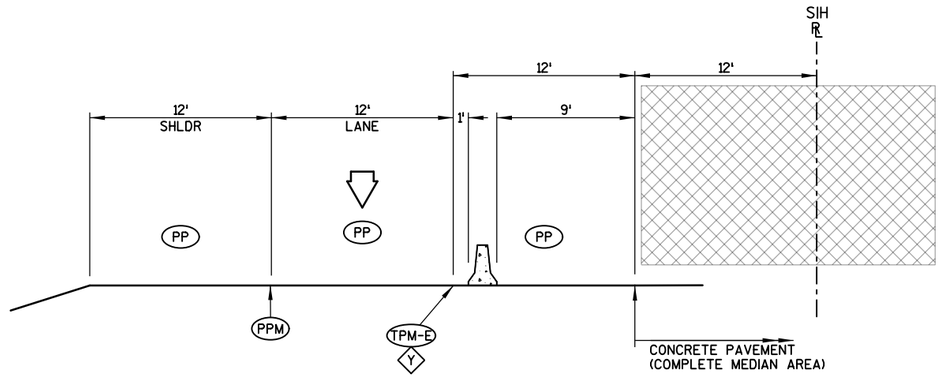


TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



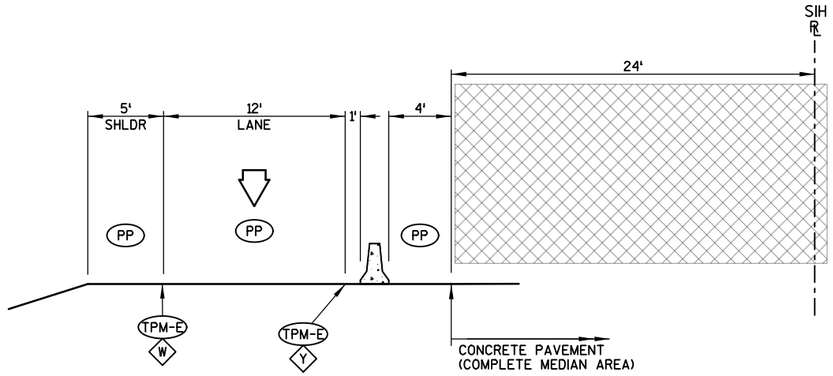
NB USH 41 TO SB IH 43 RAMP

STA 1125+00 SIH TO STA 1141+00 SIH



NB USH 41 TO SB IH 43 RAMP

STA 1141+00 SIH TO STA 1162+50 SIH



NB USH 41 TO SB IH 43 RAMP

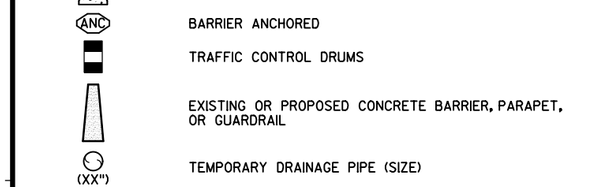
STA 1162+50 SIH TO STA 1197+00 IHA

2

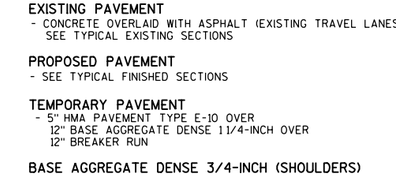
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 401	E

LEGEND

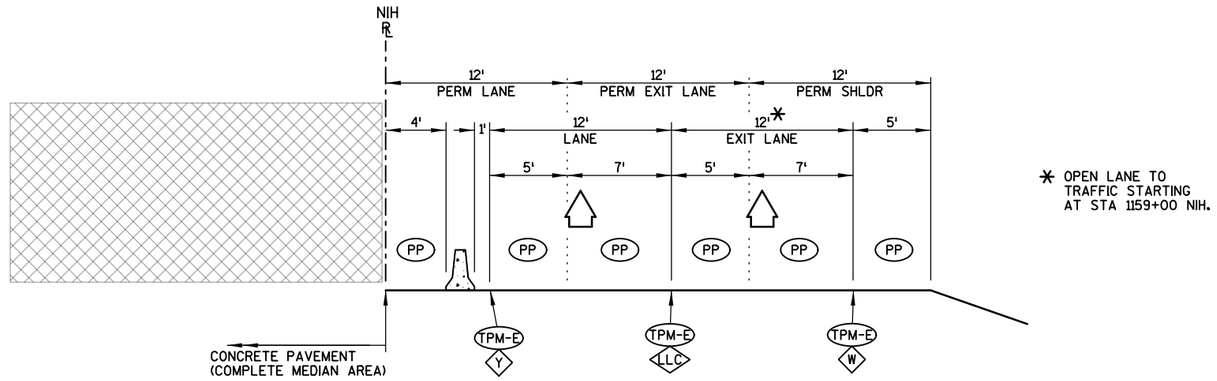
	WORK ZONE
	TRAFFIC DIRECTION
	CONCRETE BARRIER TEMPORARY PRECAST
ANC	BARRIER ANCHORED
	TRAFFIC CONTROL DRUMS
	EXISTING OR PROPOSED CONCRETE BARRIER, PARAPET, OR GUARDRAIL
(XX")	TEMPORARY DRAINAGE PIPE (SIZE)
JNT	CONSTRUCT TO PROPOSED CONCRETE PAVEMENT JOINT
EP	EXISTING PAVEMENT - CONCRETE OVERLAID WITH ASPHALT (EXISTING TRAVEL LANES) SEE TYPICAL EXISTING SECTIONS
PP	PROPOSED PAVEMENT - SEE TYPICAL FINISHED SECTIONS
TP	TEMPORARY PAVEMENT - 5" HMA PAVEMENT TYPE E-10 OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH OVER 12" BREAKER RUN
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDERS)
SC	SAWCUT AT EDGE OF EXISTING TRAVEL LANE
EPM	EXISTING PAVEMENT MARKING
PPM	PROPOSED PAVEMENT MARKING - SEE PAVEMENT MARKING PLAN
TPM	TEMPORARY PAVEMENT MARKING
TPM-RT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TPM-E	TEMPORARY PAVEMENT MARKING (EPOXY)
Y	YELLOW EDGELINE
W	WHITE EDGELINE
LLA	WHITE LANE LINE SKIP-DASH (ASPHALT)
LLC	WHITE LANE LINE SKIP-DASH (CONCRETE) - IF MARKING IS TEMPORARY, INCLUDE 2' BLACK REMOVABLE TAPE EVERY OTHER SKIP
PROF	POINT REFERRED TO ON PROFILE



TYPICAL TEMPORARY SHORING DETAILS



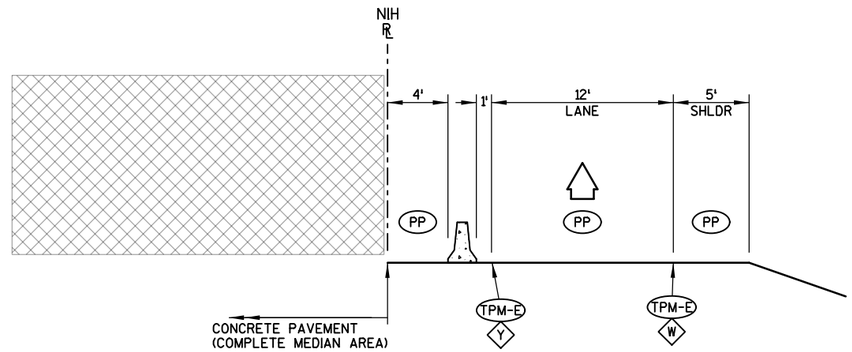
TYPICAL SWALE ABOVE TEMPORARY DRAINAGE PIPE



* OPEN LANE TO TRAFFIC STARTING AT STA 1159+00 NIH.

NB IH 43

STA 1141+00 NIH TO STA 1164+00 NIH



NB IH 43

STA 1164+00 NIH TO STA 1183+00 NIH

2

STH 29/32

WISCONSIN CENTRAL LTD RR

SHAWANO AVE

SHOULDERS CLOSED AHEAD
W21-5(MOD)

NORTH 41
SOUTH INTERSTATE 43
141

J2-2
72" x 120"

RIGHT LANE MUST EXIT
R3-33R
78" X 36"

SB USH 41
NB USH 41

VINCENT RD

ESCANABA & LAKE SUPERIOR RR

MEMORIAL DR

EXIT 170
SOUTH
INTERSTATE 43
141
COUNTY HS
Velp Ave
Milwaukee

MOVED FROM STAGE 2 LOCATION
INCIDENTAL TO OTHER ITEMS OF WORK

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3 OVERVIEW - PAGE 1 OF 6	SHEET 403	E

2

SPEED LIMIT 55
R2-1
48" X 60"

SPEED LIMIT 55
R2-1
48" X 60"

RIGHT SHOULDER CLOSED
W21-5A

RAMP CLOSED SUBSTAGE 3B

CLOSED SUBSTAGE 3B

VELP AVE

ISLAND CT

RAMP CLOSED

WISCONSIN CENTRAL LTD RR

RAMP CLOSED

NB USH 41

SB USH 41

ROSEWOOD ST

LONE GROVE CT

MEMORIAL DR

DUCK CREEK

USE REMOVABLE TAPE FOR NON-PERMANENT MARKINGS ON NEW BRIDGE

RAMPS CLOSED SUBSTAGE 3B

CLOSED SUBSTAGE 3B

PERMANENT PAVEMENT MARKINGS

USE REMOVABLE TAPE FOR NON-PERMANENT MARKINGS ON NEW BRIDGE

PERMANENT PAVEMENT MARKINGS

SOUTH INTERSTATE 43
J4-1
24" X 36"

EXIT 170B

SOUTH INTERSTATE 43
Milwaukee

EXIT 170A

SOUTH 141 COUNTY HS
Velp Ave

RIGHT SHOULDER CLOSED
W21-5A

SPEED LIMIT 55
R2-1
48" X 60"

IH 43

VELP AVE

LEGEND

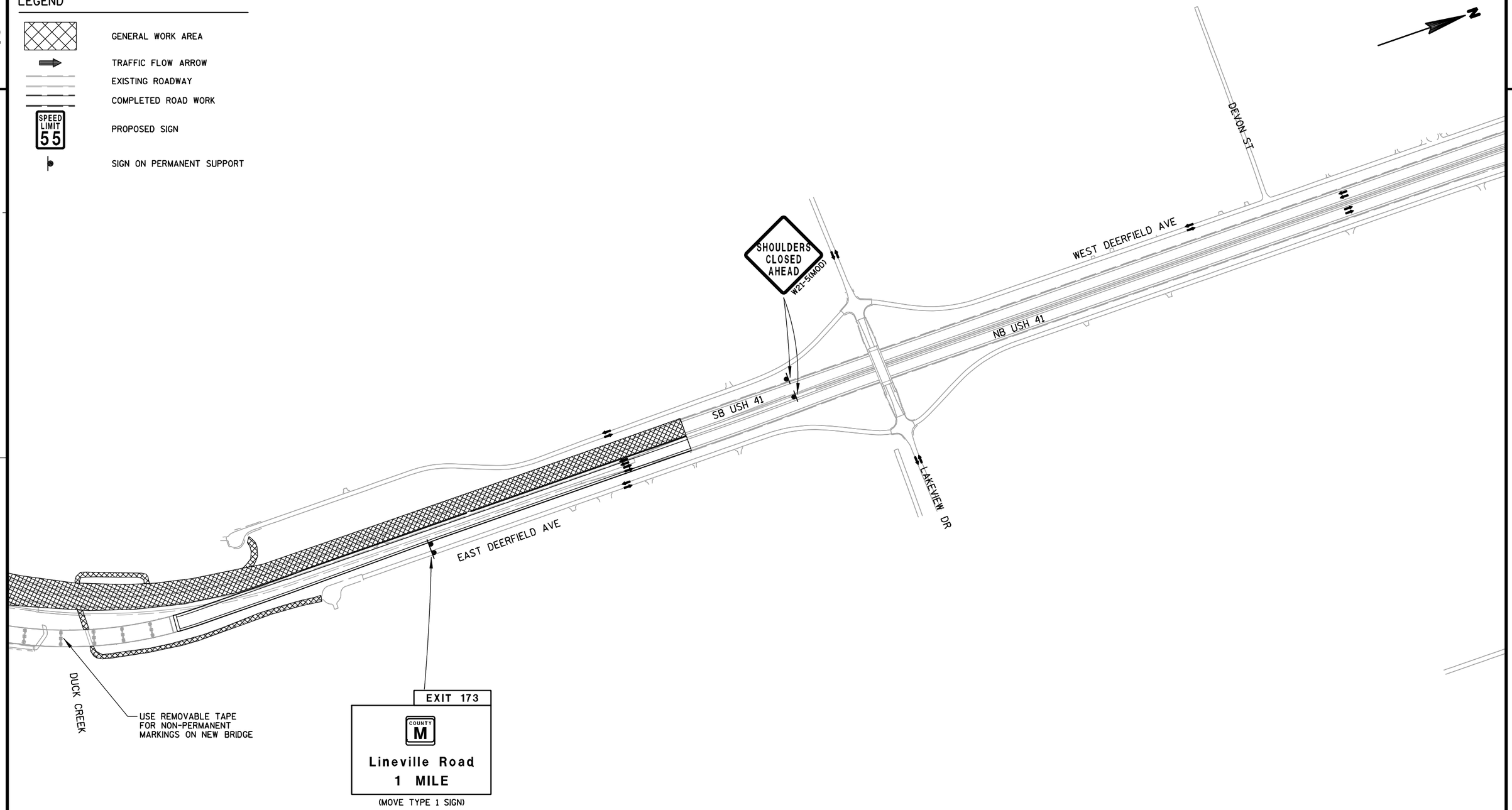
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3 OVERVIEW - PAGE 2 OF 6	SHEET 404	E

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT



2

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3 OVERVIEW - PAGE 3 OF 6	SHEET 405	E

2

2

VELP AVE
RAMP CLOSED
LOCAL ACCESS
NEXT RIGHT

SEE DETAILS FOR SIGN

N

LINEVILLE RD

WEST DEERFIELD AVE

NB USH 41

SB USH 41

EAST DEERFIELD AVE

LEGEND

TRAFFIC FLOW ARROW

EXISTING ROADWAY

SPEED LIMIT 55 — PROPOSED SIGN

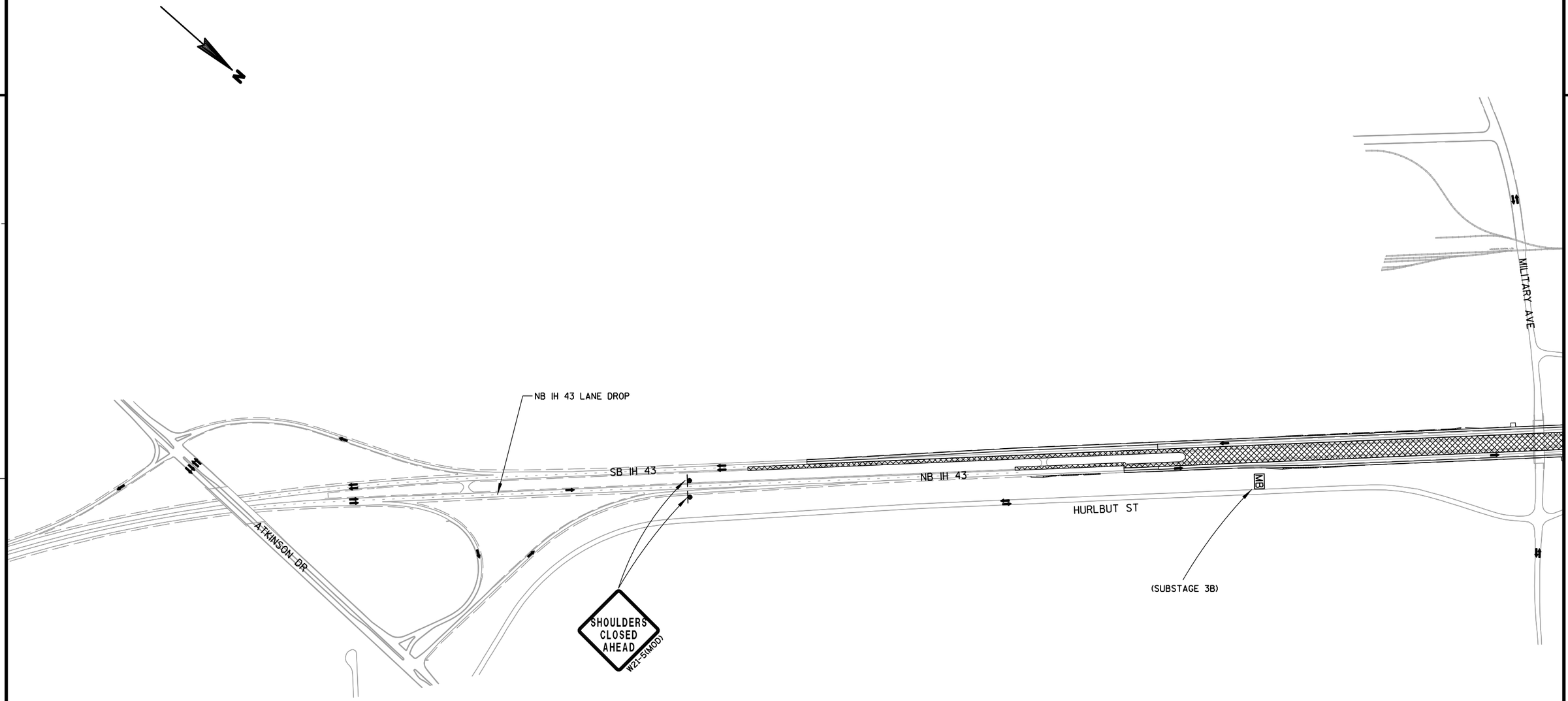
SIGN ON PERMANENT SUPPORT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3 OVERVIEW - PAGE 4 OF 6	SHEET 406	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026309_S3_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

2

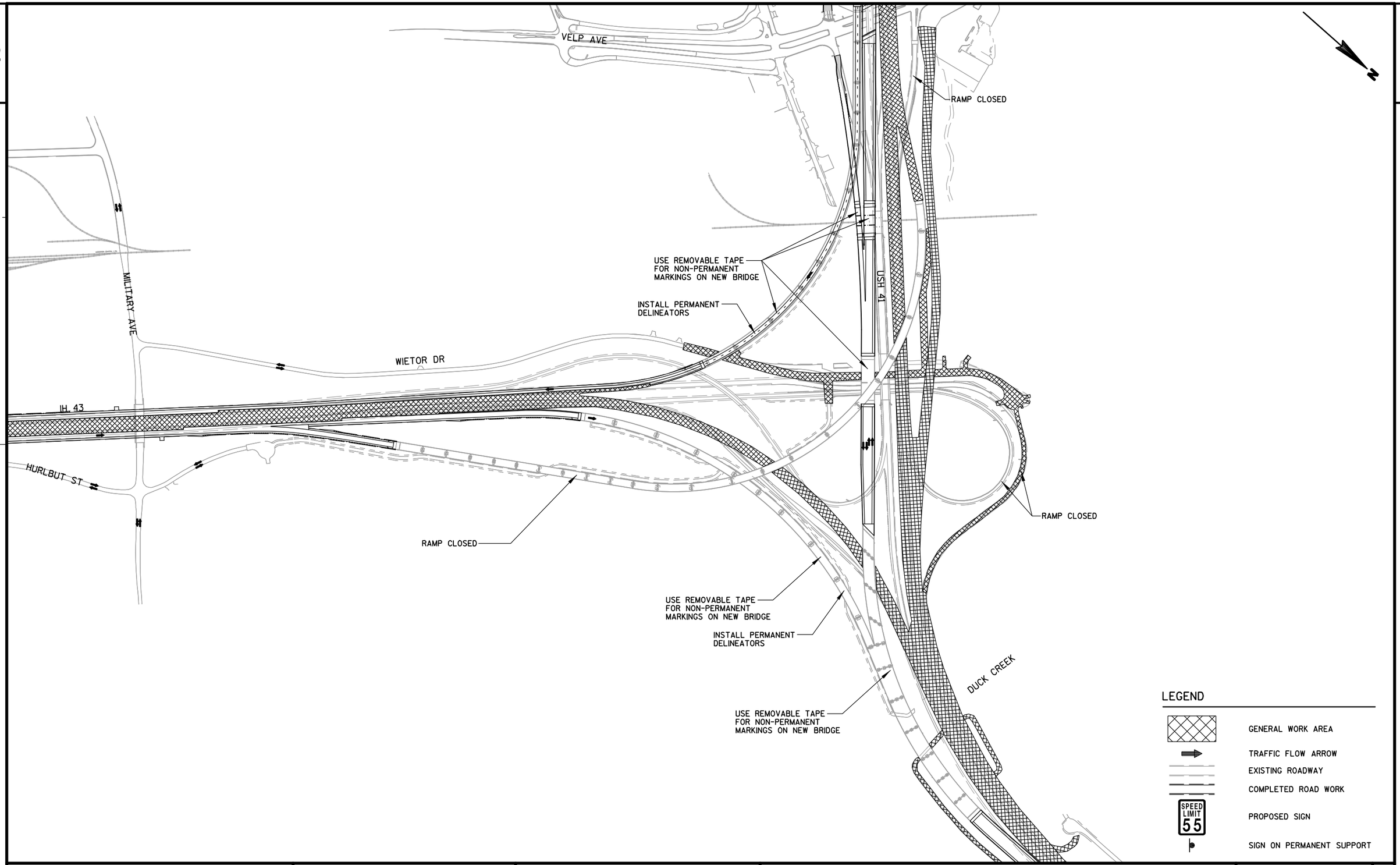


2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- PORTABLE CHANGABLE MESSAGE BOARD (MB)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3 OVERVIEW - PAGE 5 OF 6	SHEET 407	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3 OVERVIEW - PAGE 6 OF 6	SHEET 408	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026311_S3_OV.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:500

WISDOT/CADDS SHEET 42

2

2

WOODMAN DR

MEMORIAL DR

SB USH 41 TO STH 29

1116+00 SMC | 1118+00 SMC | 1120+00 SMC | 1122+00 SMC | 1124+00 SMC | 1126+00 SMC | 1128+00 SMC | 1130+0

SB USH 41

1116+00 NMC | 1118+00 NMC | 1120+00 NMC | 1122+00 NMC | 1124+00 NMC | 1126+00 NMC | 1128+00 NMC | 8:1 TAPER | 1130+0

NB USH 41

STH 29 TO USH 41

MATCH LINE 1130+00 NMC

W04-3R
48" X 48"

W01-6
48" X 24"

W01-4CR

E-8W

VINCENT RD

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026312_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

SPEED LIMIT 55

N

MEMORIAL DR

VILLAGE CT

ESCANABA & LAKE SUPERIOR RR

VINCENT RD

MEMORIAL DR

MATCH LINE 1130+00 NMC

MATCH LINE 1145+00 TWF

SB USH 41

NB USH 41

1132+00 SMC

1132+00 NMC

1132+00 TWF

1134+00 TWC

1134+00 TWE

1134+00 TWF

1136+00 TWC

1136+00 TWE

1136+00 TWF

1138+00 TWC

1138+00 TWE

1138+00 TWF

1140+00 TWC

1140+00 TWE

1140+00 TWF

1142+00 TWC

1142+00 TWE

1142+00 TWF

1144+00 TWC

1144+00 TWE

E-4W

E-8W

REM

E-4Y

E-LL

WO1-6
48" X 24"

WO4-5R

STAY IN LANE
R4-9
48" X 60"

TWE PROFILE (CROSSOVER)

1137+75.00
Elev 622.29

PVC 1139+50.00
Elev 620.79

PVI 1140+75.00
Elev 619.72

PVT 1142+00.00
Elev 617.21

G = -0.85%

G = -2.01%

K = 216

L = 250.00'

640 / 630 / 620 / 610

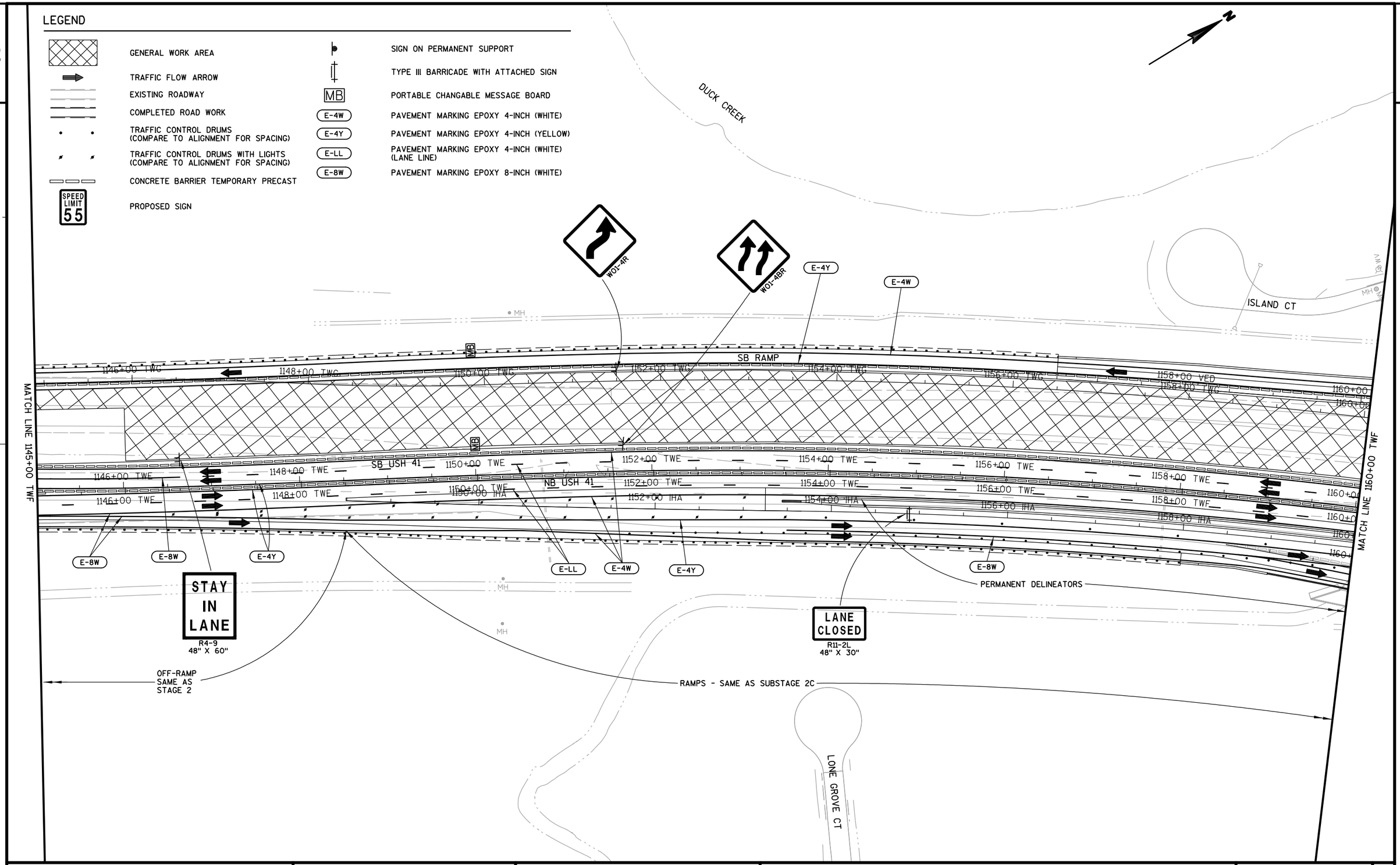
1130+00	1130+50	1131+00	1131+50	1132+00	1132+50	1133+00	1133+50	1134+00	1134+50	1135+00	1135+50	1136+00	1136+50	1137+00	1137+50	1138+00	1138+50	1139+00	1139+50	1140+00	1140+50	1141+00	1141+50	1142+00	1142+50	1143+00	1143+50	1144+00	1144+50	1145+00
								595.94	594.68	622.80	623.17	623.13	623.02	622.84	622.50	622.07	621.46	617.56	616.90	616.71	616.89	616.98	616.78	615.90	614.72	613.61	612.39	611.04	609.76	608.38
																622.07	621.65	621.22	620.79	620.31	619.71	618.99	618.16	617.21	616.20	615.20	614.19	613.18	612.11	611.04

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 410	E

2

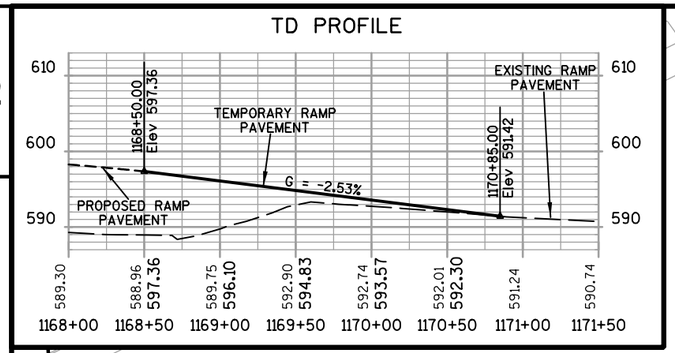
LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- MB — PORTABLE CHANGABLE MESSAGE BOARD
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 411	E

2



LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- SAWCUT (XXXXX)
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 412	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026315_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

RAMP CLOSED

N

25' SPACING

50' SPACING

TEMPORARY DELINEATORS ON PERMANENT BARRIER (WHITE)

1000' LANE SHIFT

TEMPORARY DELINEATORS ON PERMANENT BARRIER (WHITE) (50' SPACING)

MATCH LINE 1175+00 TWF

MATCH LINE 1190+00 TWF

1176+00 TWE
1178+00 TWE
1180+00 TWE
SB USH 41
1182+00 TWE
1184+00 TWE
1186+00 TWE
1188+00 TWE
1190+00

1176+00 TWF
1178+00 TWF
1180+00 TWF
NB USH 41
1182+00 TWF
1184+00 TWE
1186+00 TWF
1188+00 TWF
1190+00

1176+00 IHA
1178+00 IHA
1180+00 IHA
1182+00 VEB IHA
1182+00 VEB
1184+00 VEB
1186+00 VEB

1178+00 VEB
1180+00 VEB
1184+00 IHA
1186+00 IHA
1188+00 IHA

E-LL
+94
E-4W
E-4Y
E-8W
PC +99
2000'R
+84
00+

W01-6
48" X 24"

PERMANENT PAVEMENT MARKING

150' LANE WIDTH TAPER (15' TO 12')

PERMANENT PAVEMENT MARKING ON RAMP

TEMPORARY PAVEMENT MARKING

LANE CLOSED
R11-2L
48" X 30"

W04-1

VELP AVE & RAMP CLOSED

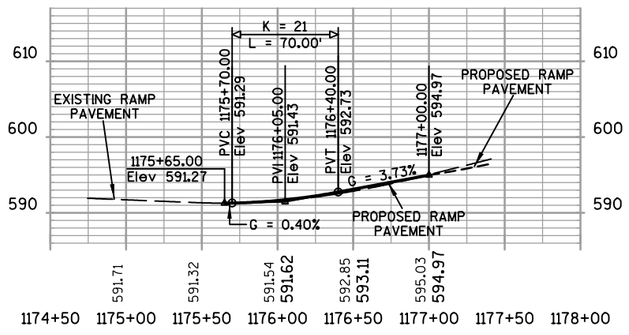
VELP AVE

MEMORIAL DR

WISCONSIN CENTRAL LTD. RR

SAME AS STAGE 2C

TB PROFILE



LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TEMPORARY PAVEMENT
- COMPLETED ROAD WORK
- SAWCUT (XXXXX)
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE BY OTHERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- PROPOSED SIGN (SPEED LIMIT 55)
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 413	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026316_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

MATCH LINE 1190+00 TWF

MATCH LINE 1205+00 TWF

RAMP CLOSED

RAMP CLOSED

NB IH 43 TO SB USH 41

1210+00 IHB

1208+00 IHB

1206+00 IHB

1204+00 IHB

1202+00 IHB

1200+00 IHB

SB USH 41

NB USH 41

1190+00 TWF

1192+00 TWE

1192+00 TWF

1194+00 TWE

1194+00 TWF

1196+00 TWE

1196+00 TWF

1198+00 TWE

1198+00 TWF

1200+00 TWE

1200+00 TWF

1202+00 TWE

1202+00 TWF

1204+00 TWE

1204+00 TWF

E-LL

E-4Y

E-4W

E-8W

TEMPORARY DELINEATORS
ON PERMANENT BARRIER
(WHITE) (50' SPACING)

150' LANE WIDTH TAPER
(15' TO 12')

6' SHOULDER

+00

360' LANE DROP TAPER

+60

RAMP CLOSED

RAMP CLOSED

LANE
CLOSED
R11-2L
48" X 30"

PERMANENT LANE

PERMANENT PAVEMENT
MARKING

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 414	E

2

DUCK CREEK

RAMP CLOSED

MATCH LINE 1205+00 TWF

MATCH LINE 1220+50 TWF

TEMPORARY DELINEATORS ON PERMANENT BARRIER (WHITE) (100' SPACING)

TEMPORARY DELINEATORS ON PERMANENT BARRIER (WHITE) (50' SPACING)

E-4W

E-LL

E-4Y

1206+00 TWE

1206+00 TWF

1208+00 TWE

1208+00 TWF

1210+00 TWE

1210+00 TWF

1212+00 TWE

1212+00 TWF

1214+00 TWE

1214+00 TWF

1216+00 TWE

1216+00 TWF

1218+00 TWE

1218+00 TWF

1220+00 TWE

1220+00 TWF

SB USH 41

NB USH 41

1210+00 NIH

1208+00 NIH

1206+00 NIH

12'

NB IH 43 TO NB USH 41

+00 NIH

+50 TWF

RT-8W

RT-4W

PERMANENT PAVEMENT MARKING

PERMANENT LANE

PERMANENT NB USH 41 LANES

TEMPORARY PAVEMENT MARKING

PERMANENT PAVEMENT MARKING (OUTSIDE THREE LANE LINES)

DUCK CREEK

N

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- RT-4W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- RT-8W — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 415	E

2

2

N

WEST DEERFIELD AVE

SIGN

SIGN

SIGN

SIGN

TEMPORARY DELINEATORS
ON PERMANENT BARRIER
(WHITE) (100' SPACING)

E-LL

E-4W

E-4Y

MATCH LINE 1220+50 TWF

MATCH LINE 1235+00 TWF

1222+00 TWE

1224+00 TWE

1226+00 TWE

1228+00 TWE

1230+00 TWE

SB USH 41

1232+00 TWE

1234+00 TWE

1222+00 TWF

1224+00 TWF

1226+00 TWF

1228+00 TWF

1230+00 TWF

NB USH 41

1232+00 TWF

1234+00 TWF

PERMANENT 840' LANE DROP

PERMANENT NB USH 41 LANES

PERMANENT PAVEMENT MARKING

EAST DEERFIELD AVE

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- CONCRETE BARRIER TEMPORARY PRECAST
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-LL — PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026319_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

WEST DEERFIELD AVE

TEMPORARY DELINEATORS ON PERMANENT BARRIER (WHITE) (100' SPACING)

E-4W

E-LL

E-4Y

E-4Y

MATCH LINE 1235+00 TWF

MATCH LINE 1250+00 TWF

1236+00 IWE

1238+00 IWE

1240+00 IWE

1242+00 IWE

SB USH 41

1244+00 IWE

1246+00 IWE

1248+00 IWE

1236+00 TWF

1238+00 TWF

1240+00 TWF

1242+00 TWF

NB USH 41

1244+00 TWF

1246+00 TWF

1248+00 TWF

1250+0

PERMANENT NB USH 41 LANES

PERMANENT PAVEMENT MARKING

E-8W

EAST DEERFIELD AVE

STAY IN LANE
R4-9
48" X 60"

+50 TWF

W01-6
48" X 24"

W01-4BL

PERMANENT PAVEMENT MARKING (OUTSIDE TWO LINES)

TEMPORARY PAVEMENT MARKING (THROUGH CROSSOVER)

LEGEND

	GENERAL WORK AREA		SIGN ON PERMANENT SUPPORT
	TRAFFIC FLOW ARROW		TYPE III BARRICADE WITH ATTACHED SIGN
	EXISTING ROADWAY	E-4W	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
	COMPLETED ROAD WORK	E-4Y	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
	TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)	E-LL	PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LANE LINE)
	CONCRETE BARRIER TEMPORARY PRECAST	E-8W	PAVEMENT MARKING EPOXY 8-INCH (WHITE)
SPEED LIMIT 55	PROPOSED SIGN		

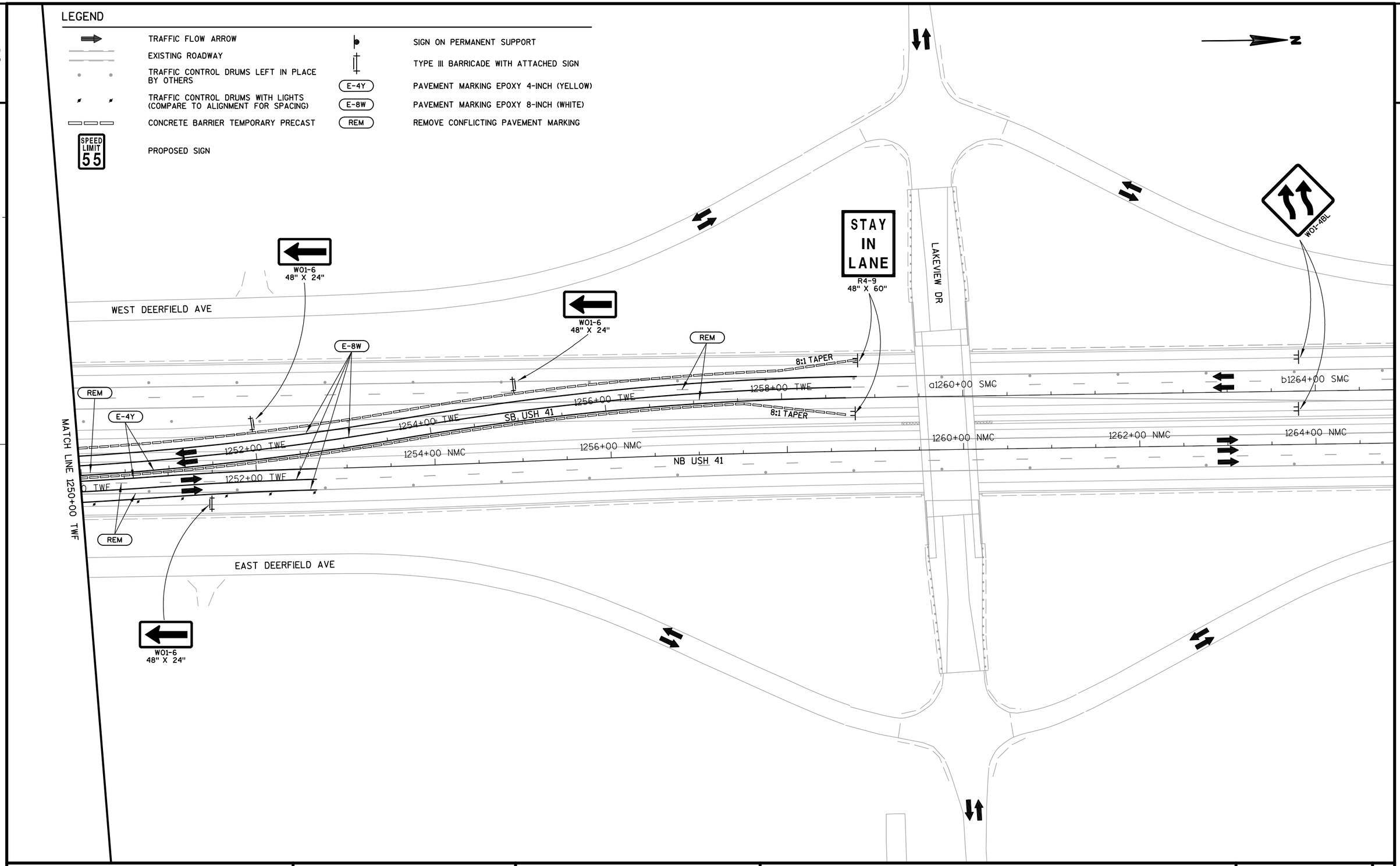
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 417	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026320_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

LEGEND

- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- TRAFFIC CONTROL DRUMS LEFT IN PLACE BY OTHERS
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- SPEED LIMIT 55 — PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- E-8W — PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- REM — REMOVE CONFLICTING PAVEMENT MARKING



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026321_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

TRAFFIC FLOW ARROW

EXISTING ROADWAY

TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)

TYPE III BARRICADE WITH ATTACHED SIGN

SB IH 43 TO ATKINSON DR

SIGN

SIGN

SIGN

MH

1102+00 SIH 1104+00 SIH 1106+00 SIH SB IH 43 1108+00 SIH 1110+00 SIH 1112+00 SIH 1114+00 SIH 1116+00 SIH

1102+00 NIH 1104+00 NIH 1106+00 NIH 1108+00 NIH 1110+00 NIH 1112+00 NIH 1114+00 NIH 1116+00 NIH

NB IH 43

SIGN

NB IH 43 TO ATKINSON DR

SAME AS STAGE 1 & 2

W01-6
48" X 24"

MATCH LINE 1116+50 NIH

HURLBUT ST

AMBWV

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 419	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026322_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

N

MATCH LINE 1116+50 NIH

MATCH LINE 1131+50 NIH

REM

E-4Y

PERMANENT PAVEMENT MARKING

MATCH SUBSTAGE 2C

1118+00 SIH

1120+00 SIH

SB IH 43

1122+00 SIH

1124+00 SIH

1126+00 SIH

1128+00 SIH

1130+00 SIH

1118+00 NIH

1120+00 NIH

1122+00 NIH

1124+00 NIH

1126+00 NIH

1128+00 NIH

1130+00 NIH

NB IH 43

SAME AS STAGES 1 & 2

W01-6
48" X 24"

W01-6
48" X 24"

ROAD
CLOSED
R11-2
48" X 30"

HURLBUT ST

LEGEND

GENERAL WORK AREA

TRAFFIC FLOW ARROW

EXISTING ROADWAY

COMPLETED ROAD WORK

TRAFFIC CONTROL DRUMS
(COMPARE TO ALIGNMENT FOR SPACING)

TRAFFIC CONTROL DRUMS WITH LIGHTS
(COMPARE TO ALIGNMENT FOR SPACING)

SPEED LIMIT 55

PROPOSED SIGN

TYPE III BARRICADE WITH ATTACHED SIGN

E-4Y

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

REM

REMOVE CONFLICTING PAVEMENT MARKING

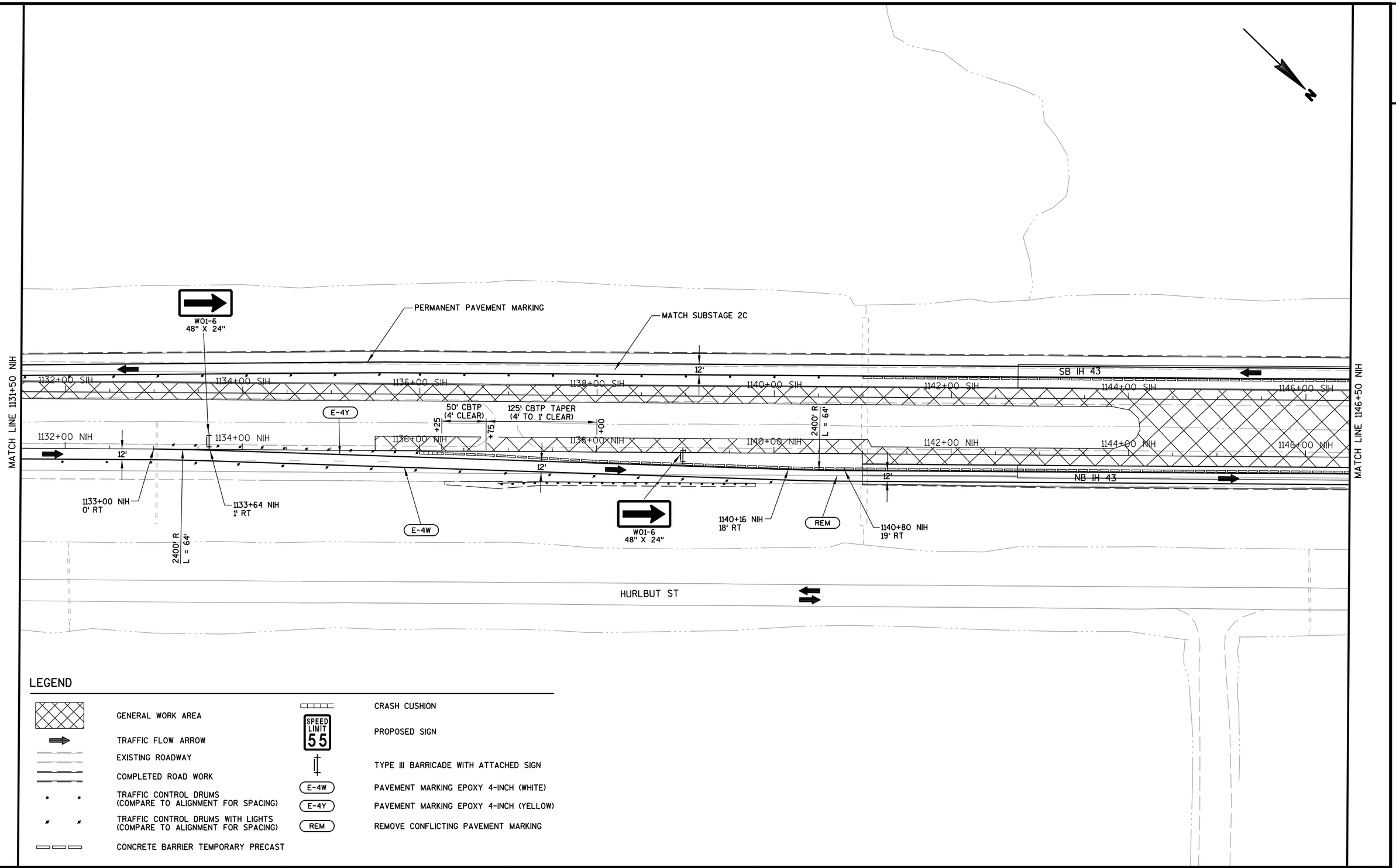
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 420	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026323_S3.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



LEGEND

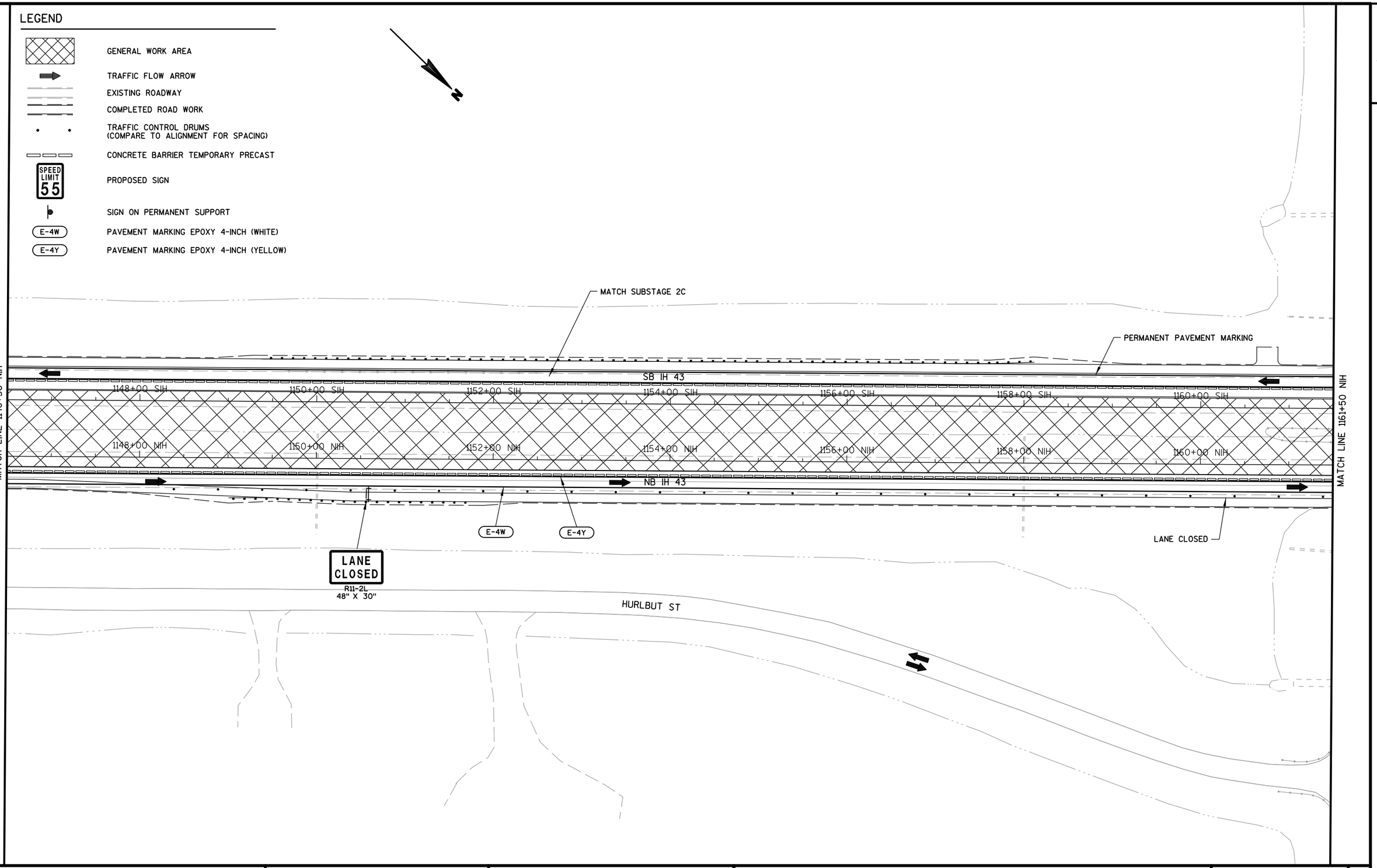
- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION
- SPEED LIMIT 55 — PROPOSED SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- REM — REMOVE CONFLICTING PAVEMENT MARKING

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 421	E

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- E-4W — PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y — PAVEMENT MARKING EPOXY 4-INCH (YELLOW)



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 422	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026325_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- TRAFFIC CONTROL DRUMS WITH LIGHTS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

MILITARY AVE

WIETOR DR

PERMANENT PAVEMENT MARKING (OUTSIDE LINE)

TEMPORARY PAVEMENT MARKING

MATCH SUBSTAGE 2C

SIGN

SB IH 43

1162+00 SIH
1164+00 SIH
1166+00 SIH
1168+00 SIH
1170+00 SIH
1220+00 IHA
1218+00 IHA
1216+00 IHA

MATCH LINE 1161+50 NIH

1162+00 NIH
1164+00 NIH
1166+00 NIH
1166+00 IHB
1168+00 NIH
1168+00 IHB
1170+00 NIH
1170+00 IHA
1172+00 NIH
1174+00 NIH
1176+00 NIH

MATCH LINE 1176+50 NIH

NB IH 43

1172+00 IHB
1174+00 IHB
1176+00 IHB

7'

E-4Y

E-4W

E-4W

LANE SHIFT (4000' RADIUS REVERSE CURVES)

LANE CLOSED

W01-4L

W01-6
48" X 24"

NB IH 43 TO SB USH 41

RAMP CLOSED

PERMANENT MAINTENANCE RD

5 BARRICADES

HURLBUT ST

RAMP CLOSED
R11-2R
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

MILITARY AVE

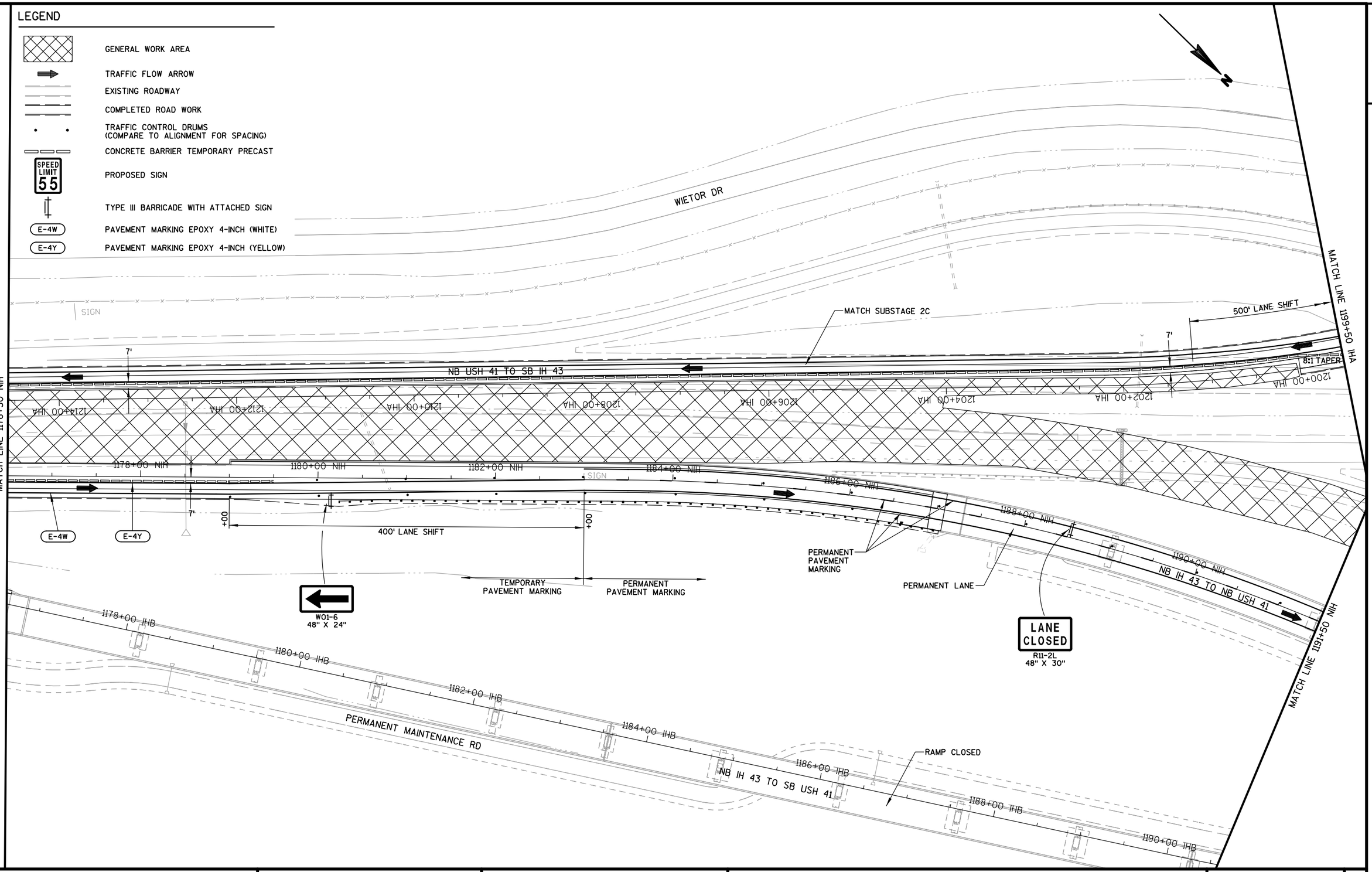
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 423	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026326_S3.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

LEGEND

- GENERAL WORK AREA
- TRAFFIC FLOW ARROW
- EXISTING ROADWAY
- COMPLETED ROAD WORK
- TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)
- CONCRETE BARRIER TEMPORARY PRECAST
- PROPOSED SIGN (SPEED LIMIT 55)
- TYPE III BARRICADE WITH ATTACHED SIGN
- E-4W PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- E-4Y PAVEMENT MARKING EPOXY 4-INCH (YELLOW)



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 424	E

2

LEGEND

GENERAL WORK AREA

TRAFFIC FLOW ARROW

EXISTING ROADWAY

COMPLETED ROAD WORK

TRAFFIC CONTROL DRUMS (COMPARE TO ALIGNMENT FOR SPACING)

CONCRETE BARRIER TEMPORARY PRECAST

TYPE III BARRICADE WITH ATTACHED SIGN

N

PERMANENT PAVEMENT MARKING

MATCH SUBSTAGE 2C

NB USH 41 TO SB IH 43

1192+00 IHA

1194+00 IHA

1196+00 IHA

LANE CLOSED
R11-2L
48" X 30"

500' LANE SHIFT

1198+00 IHA

+00 IHA

PERMANENT PAVEMENT MARKING

TEMPORARY PAVEMENT MARKING

8:1 TAPER

MATCH LINE 1199+50 IHA

WIETOR DR

RAMP CLOSED

SIGN

MATCH LINE 1191+50 NIH

1192+00 NIH

1194+00 NIH

NB IH 43 TO NB USH 41

1196+00 NIH

1196+00 IHB

1198+00 IHB

1200+00 IHB

1202+00 IHB

1204+00 IHB

NB IH 43 TO SB USH 41

RAMP CLOSED

1190+00 TWF

1190+00 TWE

1192+00 TWF

1192+00 TWE

NB USH 41

SB USH 41

1194+00 TWF

1194+00 TWE

1196+00 TWF

1196+00 TWE

1198+00 TWF

1198+00 TWE

1206+00 IHB

1208+00 IHB

1210+00 IHB

INL

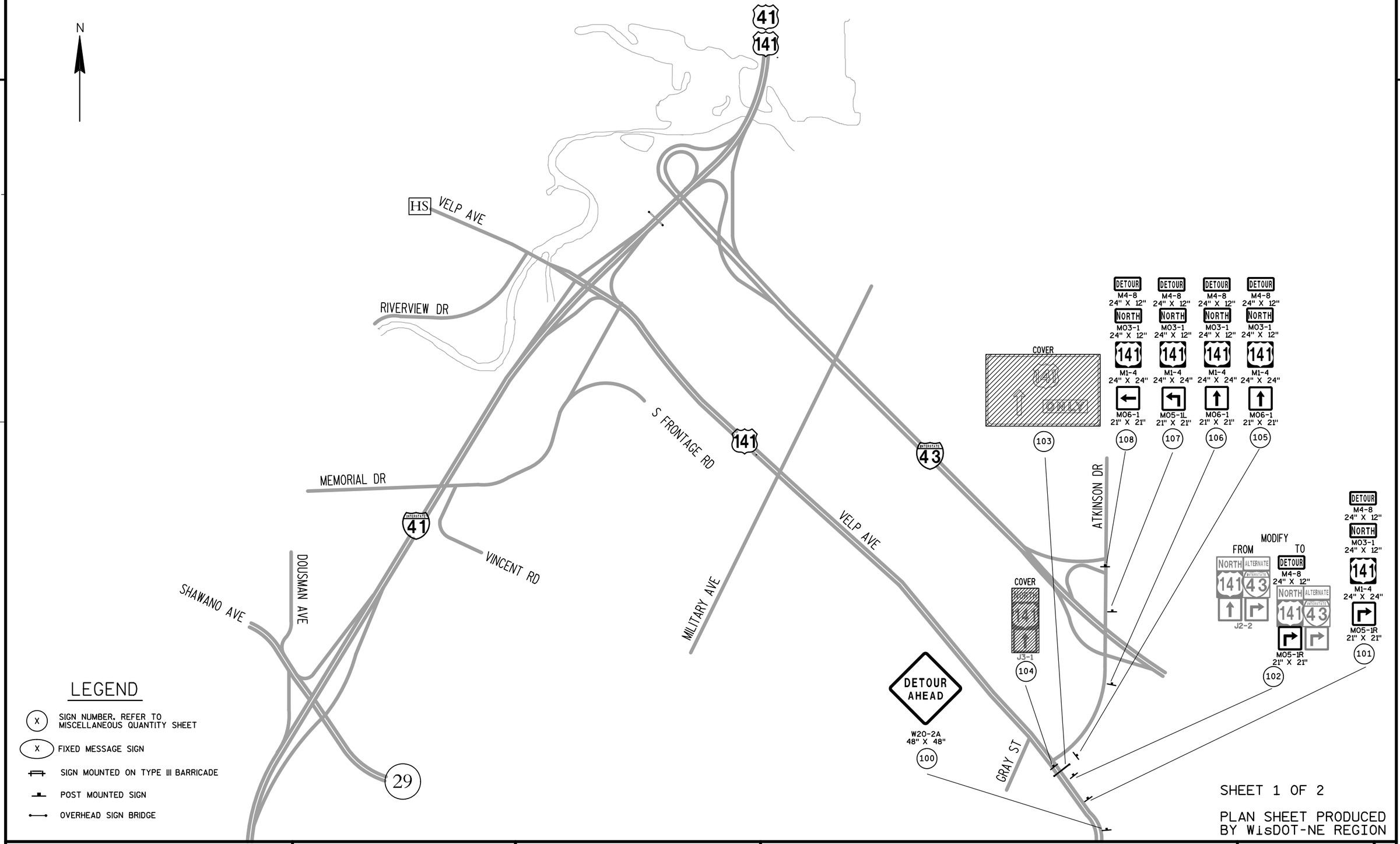
SIGN

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CONSTRUCTION STAGING - STAGE 3	SHEET 425	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_026328_S3.dgn

PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

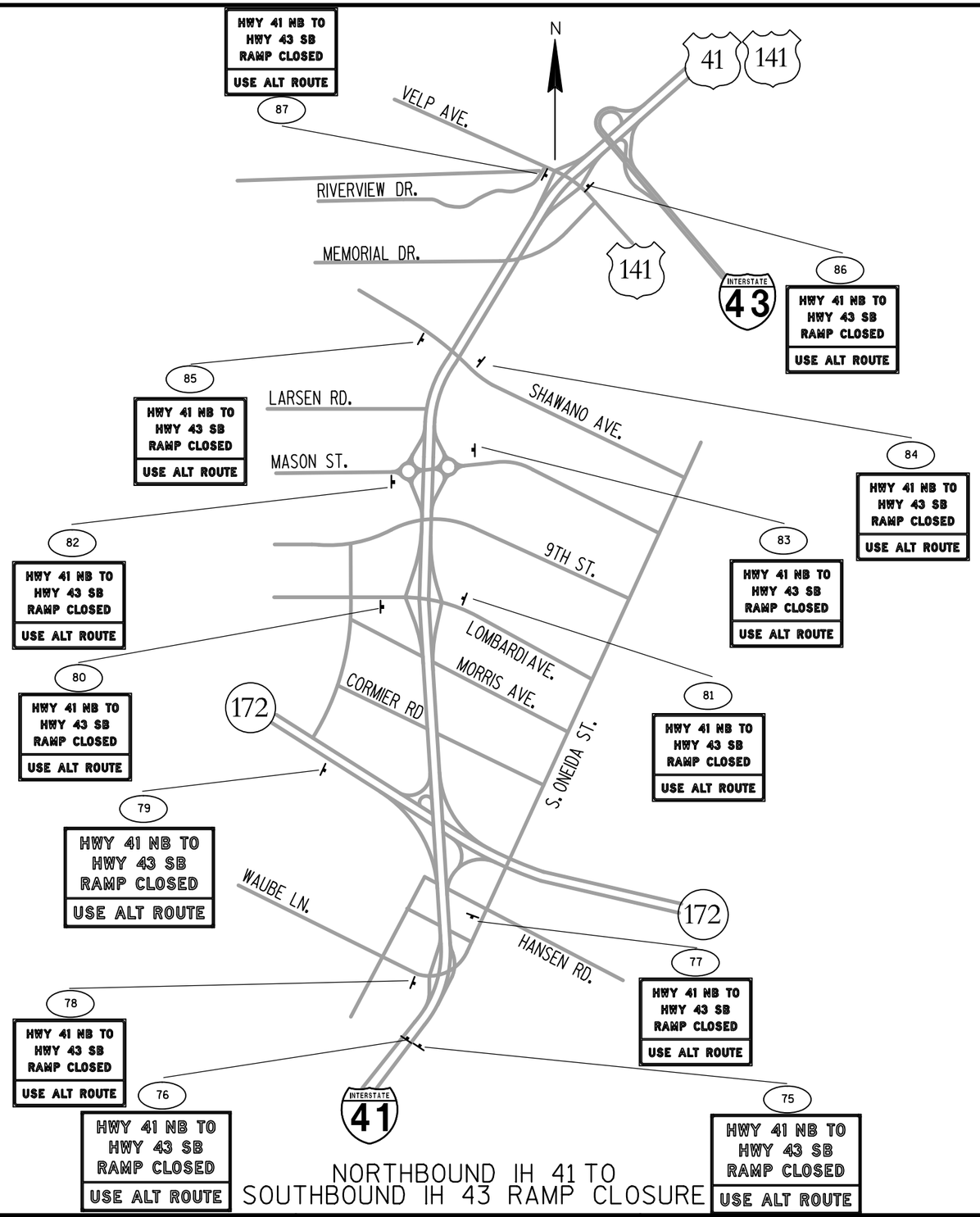
WISDOT/CADDS SHEET 42



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DETOUR SIGNING DETAIL-NB HWY 141 (ON RAMP) CLOSED	SHEET E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027001_dt.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:400
WISDOT/CADDS SHEET 42

2



LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- (X) FIXED MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN
- OVERHEAD SIGN BRIDGE

NORTHBOUND IH 41 TO SOUTHBOUND IH 43 RAMP CLOSURE

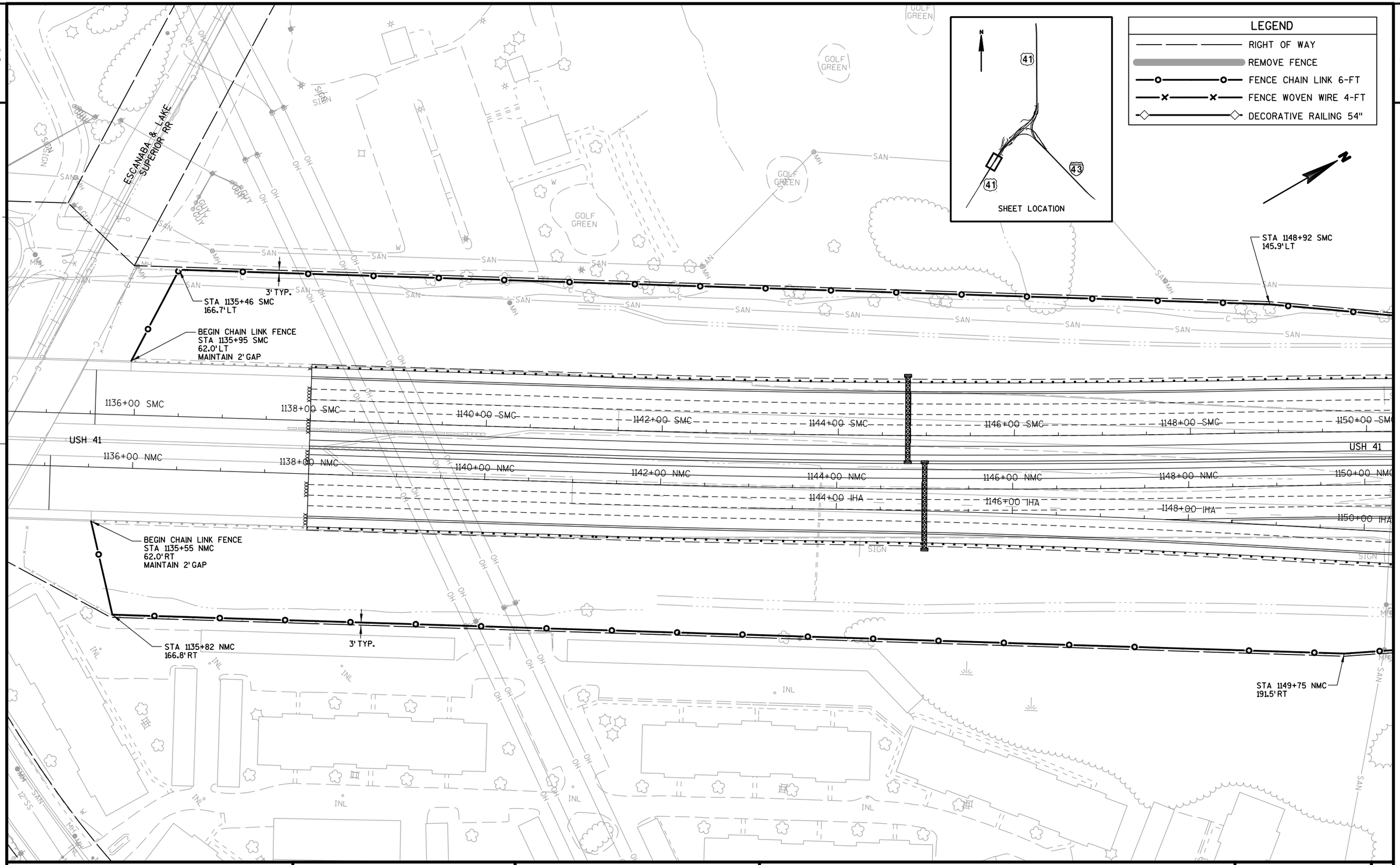
SHEET 2 OF 2

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	DETOUR SIGNING DETAIL-FIXED MESSAGE SIGN LOCATIONS	SHEET 427	E

2

2



PROJECT NO: 1133-10-71	HWY: USH41	COUNTY: BROWN	FENCING PLAN	SHEET 428	E

2

LEGEND

- RIGHT OF WAY
- REMOVE FENCE
- FENCE CHAIN LINK 6-FT
- FENCE WOVEN WIRE 4-FT
- DECORATIVE RAILING 54"

SHEET LOCATION

DUCK CREEK

ISLAND CT

64+00 IS

62+00 IS

60+00 IS

58+00 IS

222+00 BDC

BEAVER DAM CREEK

END 6' CHAIN LINK FENCE
STA 1156+54 SMC
62.5' LT
MAINTAIN 2' GAP

STA 1156+54 SMC
99.0' LT

3' TYP.

USH 41

1150+00 SMC
1152+00 SMC
1154+00 SMC
1156+00 SMC
1158+00 SMC
1160+00 SMC
1162+00 SMC
1164+00 SMC

1150+00 NMC
1152+00 NMC
1154+00 NMC
1156+00 NMC
1158+00 NMC
1160+00 NMC
1162+00 NMC
1164+00 NMC

1150+00 IHA
1152+00 IHA
1154+00 IHA
1156+00 IHA
1158+00 IHA
1160+00 IHA
1162+00 IHA
1164+00 IHA

1158+00 VED
1160+00 VED
1162+00 VED
1164+00 VED

1160+00 VEA
1162+00 VEA
1164+00 VEA

210+00 BDC
212+00 BDC
214+00 BDC
216+00 BDC
208+00 BDC

STA 1151+21 IHA
124.3' RT

STA 1149+85 IHA
141.1' RT

END CHAIN LINK FENCE
STA 1151+30 IHA
182.5' RT

INSTALL 3.5' PEDESTRIAN GATE
IN EXISTING FENCE BY OTHERS
(APPROXIMATE LOCATION)

EXISTING 6' CHAIN LINK FENCE
INSTALLED BY OTHERS

NOTE: CONTACT DNR TO PLACE FENCE
AS CLOSE AS POSSIBLE TO CREEK

LONE GROVE AVE

END CHAIN LINK FENCE
STA 1160+57 VEA
25.0' RT
MAINTAIN 2' GAP

STA 1160+42 VEA
99.1' RT

STA 1159+79 VEA
101.5' RT
END EXISTING CHAIN LINK
BEGIN WOVEN WIRE FENCE REMOVAL
BEGIN 6' CHAIN LINK FENCE INSTALLATION

PLAYGROUND

BASKETBALL COURT

ROSEWOOD ST

PROJECT NO: 1133-10-77	HWY: USH41	COUNTY: BROWN	FENCING PLAN	SHEET 429	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027102_fn.dgn
PLOT BY : dm253
PLOT DATE : 11/4/2014
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2

LEGEND

- RIGHT OF WAY
- REMOVE FENCE
- FENCE CHAIN LINK 6-FT
- FENCE WOVEN WIRE 4-FT
- DECORATIVE RAILING 54"

SHEET LOCATION

DUCK CREEK

ISLAND CT

BEAVER DAM CREEK

YELP AVE (CTH HSJ)

TEMPORARY CONNECTION BETWEEN EXISTING FENCE AND BACK OF CONCRETE BARRIER

USH 41

USH 41

PROJECT NO: 1133-10-77	HWY: USH41	COUNTY: BROWN	FENCING PLAN	SHEET 430	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027103_fn.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:100

2

2

SMC LINE

CURVE SMC1	CURVE SMC2
PC = 1099+49.83 SMC	PC = 1109+49.89 SMC
X = 83884.258	X = 84425.665
Y = 576579.636	Y = 577420.445
PI = 1100+99.84 SMC	PI = 1110+99.89 SMC
X = 83963.312	X = 84507.254
Y = 576707.118	Y = 577546.321
PT = 1102+49.83 SMC	PT = 1112+49.89 SMC
X = 84044.901	X = 84586.308
Y = 576832.994	Y = 577673.803
R = 15000.00'	R = 15000.00'
Delta = 1°08'45" RT	Delta = 1°08'45" LT
D = 0°22'55"	D = 0°22'55"
L = 300.00'	L = 300.00'
T = 150.00'	T = 150.00'
BK = N 31°48'14" E	BK = N 32°57'00" E
AH = N 32°57'00" E	AH = N 31°48'14" E

N

STH 29/STH 32

DOUSMAN ST

WOODMAN DR

MATCH LINE 1128+00 NMC

SOUTHBOUND USH 41

CURVE SMC2

CURVE SMC1

1120 SMC

1120 NMC

1110 SMC

1110 NMC

1100 SMC

1100 NMC

1090 SMC

1090 NMC

1080 SMC

1080 NMC

1070 SMC

1070 NMC

NORTHBOUND USH 41

STA 1082+19.56 SMC
X=82972.380
Y=575109.154

STA 1081+43.20 NMC
X=83000.455
Y=575001.681

USH 41/STH 32

STH 29

DOUSMAN ST

TAYLOR ST

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - NMC & SMC	SCALE, FEET 0 200 400	SHEET 431	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027201_AD.dgn | PLOT DATE : 9/2/2014 | PLOT BY : kk226 | PLOT NAME : | PLOT SCALE : 1:400

WISDOT/CADDS SHEET 42

SMC LINE

CURVE SMC3
PC = 1141+24.94 SMC
X = 86101.504
Y = 580117.187
PI = 1144+84.58 SMC
X = 86291.035
Y = 580422.822
PRC = 1148+44.05 SMC
X = 86464.739
Y = 580737.722
R = 14100.00'
Delta = 2°55'20" LT
D = 0°24'23"
L = 719.11'
T = 359.63'
BK = N 31°48'14" E
AH = N 28°52'55" E

CURVE SMC4
PRC = 1148+44.05 SMC
X = 86464.739
Y = 580737.722
PI = 1149+93.25 SMC
X = 86536.803
Y = 580868.364
PCC = 1151+42.44 SMC
X = 86611.615
Y = 580997.451
R = 14100.00'
Delta = 1°12'45" RT
D = 0°24'23"
L = 298.39'
T = 149.20'
BK = N 28°52'55" E
AH = N 30°05'40" E

CURVE SMC5
PCC = 1151+42.44 SMC
X = 86611.615
Y = 580997.451
PI = 1159+88.39 SMC
X = 87035.794
Y = 581729.364
PT = 1168+23.47 SMC
X = 87644.180
Y = 582317.148
R = 6060.50'
Delta = 15°53'33" RT
D = 0°56'43"
L = 1681.03'
T = 845.95'
BK = N 30°05'40" E
AH = N 45°59'12" E

Superelevation Data for Curve PI at 1159+88.39 SMC			
Station	LEFT	Description	RIGHT
1148+32.00 SMC	-2.00%	Normal Crown	-2.00%
1149+82.00 SMC	FLAT	Remove Crown	-2.00%
1151+32.00 SMC	2.00%	Reverse Crown	-2.00%
1152+22.00 SMC	3.20%	Full Super	-3.20%
1167+44.00 SMC	3.20%	Full Super	-3.20%
1168+34.00 SMC	2.00%	Reverse Crown	-2.00%
1169+84.00 SMC	FLAT	Remove Crown	-2.00%
1171+34.00 SMC	-2.00%	Normal Crown	-2.00%

IS LINE

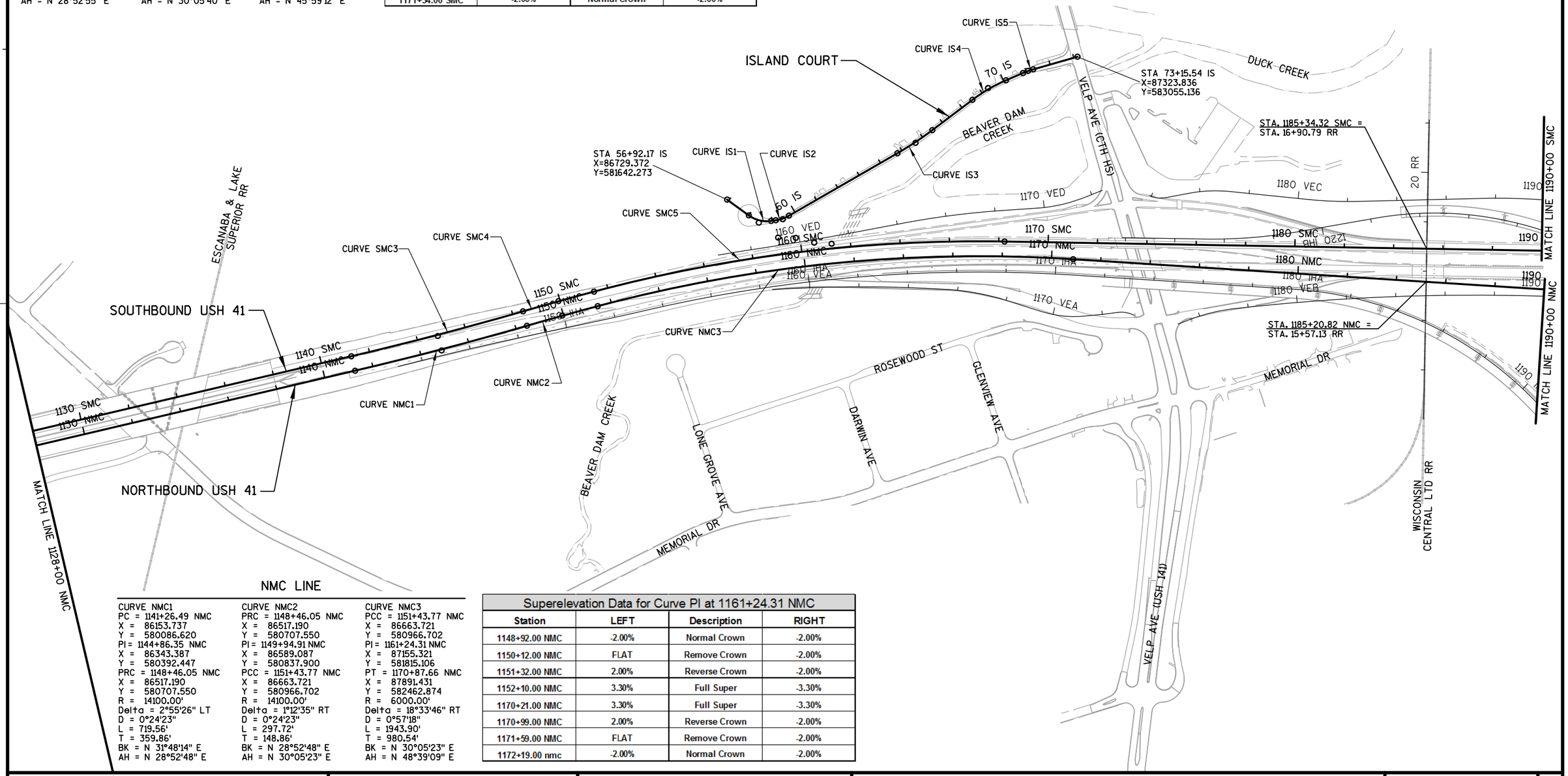
CURVE IS1
PC = 58+00.81 IS
X = 86836.677
Y = 581659.252
PI = 58+50.99 IS
X = 86886.241
Y = 581667.094
PT = 58+96.14 IS
X = 86916.288
Y = 581707.284
R = 123.50'
Delta = 44°13'32" LT
D = 46°23'36"
L = 95.33'
T = 50.18'
BK = N 81°00'31" E
AH = N 36°46'59" E

CURVE IS2
PC = 59+15.49 IS
X = 86927.875
Y = 581722.782
PI = 59+44.23 IS
X = 86945.083
Y = 581745.799
PT = 59+72.28 IS
X = 86952.566
Y = 581773.546
R = 150.00'
Delta = 21°41'31" LT
D = 38°11'50"
L = 56.79'
T = 28.74'
BK = N 36°46'59" E
AH = N 15°05'28" E

CURVE IS3
PC = 64+79.15 IS
X = 87084.532
Y = 582262.938
PI = 65+64.06 IS
X = 87106.639
Y = 582344.918
PT = 66+48.75 IS
X = 87118.299
Y = 582429.023
R = 1350.00'
Delta = 7°11'52" LT
D = 4°14'39"
L = 169.59'
T = 84.91'
BK = N 15°05'28" E
AH = N 7°53'36" E

CURVE IS4
PC = 68+52.41 IS
X = 87146.268
Y = 582630.754
PI = 69+31.59 IS
X = 87157.143
Y = 582709.192
PT = 70+10.01 IS
X = 87186.532
Y = 582782.725
R = 650.00'
Delta = 13°53'31" RT
D = 8°48'53"
L = 157.60'
T = 79.19'
BK = N 7°53'36" E
AH = N 21°47'07" E

CURVE IS5
PC = 70+84.94 IS
X = 87214.342
Y = 582852.305
PI = 71+07.19 IS
X = 87222.602
Y = 582872.972
PT = 71+29.39 IS
X = 87233.413
Y = 582892.426
R = 350.00'
Delta = 7°16'37" RT
D = 16°22'13"
L = 44.45'
T = 22.26'
BK = N 21°47'07" E
AH = N 29°03'44" E



NMC LINE

CURVE NMC1
PC = 1141+26.49 NMC
X = 86153.737
Y = 580086.620
PI = 1144+86.35 NMC
X = 86343.387
Y = 580392.447
PRC = 1148+46.05 NMC
X = 86517.190
Y = 580707.550
R = 14100.00'
Delta = 2°55'26" LT
D = 0°24'23"
L = 719.56'
T = 359.86'
BK = N 31°48'14" E
AH = N 28°52'48" E

CURVE NMC2
PRC = 1148+46.05 NMC
X = 86517.190
Y = 580707.550
PI = 1149+94.91 NMC
X = 86589.087
Y = 580837.900
PCC = 1151+43.77 NMC
X = 86663.721
Y = 580966.702
R = 14100.00'
Delta = 1°12'35" RT
D = 0°24'23"
L = 297.72'
T = 148.86'
BK = N 28°52'48" E
AH = N 30°05'23" E

CURVE NMC3
PCC = 1151+43.77 NMC
X = 86663.721
Y = 580966.702
PI = 1161+24.31 NMC
X = 87155.321
Y = 581815.106
PT = 1170+87.66 NMC
X = 87891.431
Y = 582462.874
R = 6000.00'
Delta = 18°33'46" RT
D = 0°57'18"
L = 1943.90'
T = 980.54'
BK = N 30°05'23" E
AH = N 48°39'09" E

Superelevation Data for Curve PI at 1161+24.31 NMC			
Station	LEFT	Description	RIGHT
1148+92.00 NMC	-2.00%	Normal Crown	-2.00%
1150+12.00 NMC	FLAT	Remove Crown	-2.00%
1151+32.00 NMC	2.00%	Reverse Crown	-2.00%
1152+10.00 NMC	3.30%	Full Super	-3.30%
1170+21.00 NMC	3.30%	Full Super	-3.30%
1170+99.00 NMC	2.00%	Reverse Crown	-2.00%
1171+59.00 NMC	FLAT	Remove Crown	-2.00%
1172+19.00 nmc	-2.00%	Normal Crown	-2.00%

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - NMC, SMC, & IS SCALE, FEET 0 200 400	SHEET 432	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027202_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:400
WISDOT/CADDS SHEET 42

Superelevation Data for Curve PI at 1215+03.25 SMC			
Station	LEFT	Description	RIGHT
1200+94.00 SMC	-2.00%	Normal Crown	-2.00%
1201+84.00 SMC	-2.00%	Remove Crown	FLAT
1202+74.00 SMC	-2.00%	Reverse Crown	2.00%
1204+36.00 SMC	-5.60%	Full Super	5.60%
1224+16.00 SMC	-5.60%	Full Super	5.60%
a 1227+74.76 SMC	-2.00%	Reverse Crown	2.00%
a 1228+94.88 SMC	-2.00%	Remove Crown	FLAT
a 1230+15.00 SMC	-2.00%	Normal Crown	-2.00%

SMC LINE

CURVE SMC6
PC = 1203+52.34 SMC
X = 90182.071
Y = 584769.096
PI= 1215+03.25 SMC
X = 91009.782
Y = 585568.777
PT = 1225+28.22 SMC
X = 91006.030
Y = 586719.682
R = 2700.00'
Delta = 46°10'25" LT
D = 2°07'19"
L = 2175.88'
T = 1150.91'
BK = N 45°59'12" E
AH = N 0°11'12" W

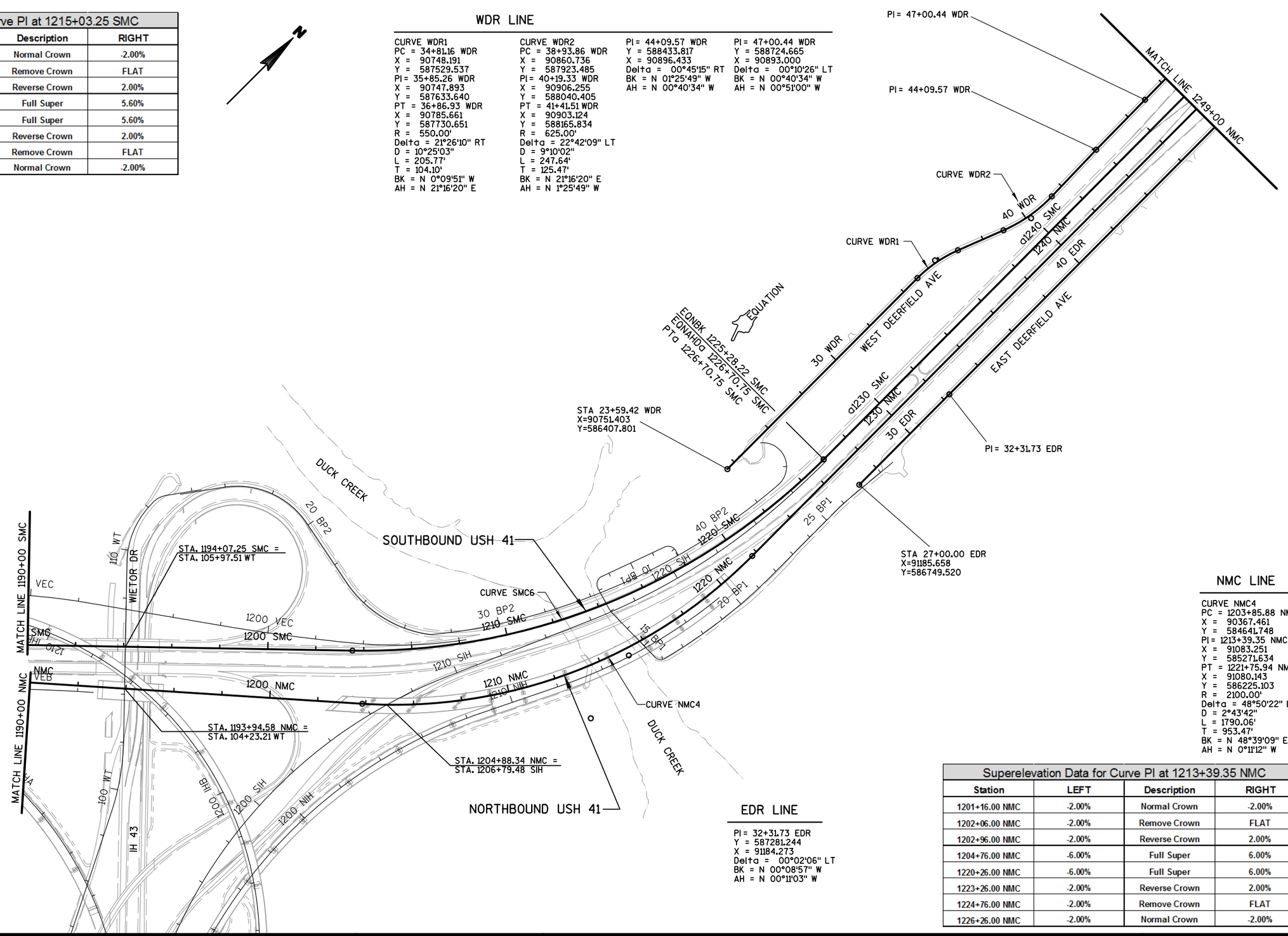
WDR LINE

CURVE WDR1
PC = 34+81.16 WDR
X = 90748.191
Y = 587529.537
PI= 35+85.26 WDR
X = 90747.893
Y = 587633.640
PT = 36+86.93 WDR
X = 90785.661
Y = 587730.651
R = 550.00'
Delta = 21°26'10" RT
D = 10°25'03"
L = 205.77'
T = 104.10'
BK = N 0°09'51" W
AH = N 21°16'20" E

CURVE WDR2
PC = 38+93.86 WDR
X = 90860.736
Y = 587923.485
PI= 40+19.33 WDR
X = 90906.255
Y = 588040.405
PT = 41+41.51 WDR
X = 90903.124
Y = 588165.834
R = 625.00'
Delta = 22°42'09" LT
D = 9°10'02"
L = 247.64'
T = 125.47'
BK = N 21°16'20" E
AH = N 1°25'49" W

PI= 44+09.57 WDR
Y = 588433.817
X = 90896.433
Delta = 00°45'15" RT
BK = N 01°25'49" W
AH = N 00°40'34" W

PI= 47+00.44 WDR
Y = 588724.665
X = 90893.000
Delta = 00°10'26" LT
BK = N 00°40'34" W
AH = N 00°51'00" W



NMC LINE

CURVE NMC4
PC = 1203+85.88 NMC
X = 90367.461
Y = 584641.748
PI= 1213+39.35 NMC
X = 91083.251
Y = 585271.634
PT = 1221+75.94 NMC
X = 91080.143
Y = 586225.103
R = 2100.00'
Delta = 48°50'22" LT
D = 2°43'42"
L = 1790.06'
T = 953.47'
BK = N 48°39'09" E
AH = N 0°11'12" W

EDR LINE

PI= 32+31.73 EDR
Y = 587281.244
X = 91184.273
Delta = 00°02'06" LT
BK = N 00°08'57" W
AH = N 00°11'03" W

Superelevation Data for Curve PI at 1213+39.35 NMC			
Station	LEFT	Description	RIGHT
1201+16.00 NMC	-2.00%	Normal Crown	-2.00%
1202+06.00 NMC	-2.00%	Remove Crown	FLAT
1202+96.00 NMC	-2.00%	Reverse Crown	2.00%
1204+76.00 NMC	-6.00%	Full Super	6.00%
1220+26.00 NMC	-6.00%	Full Super	6.00%
1223+26.00 NMC	-2.00%	Reverse Crown	2.00%
1224+76.00 NMC	-2.00%	Remove Crown	FLAT
1226+26.00 NMC	-2.00%	Normal Crown	-2.00%

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - NMC, SMC, EDR, & WDR	SCALE, FEET 0 200 400	SHEET 433	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027203_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:400

WISDOT/CADDS SHEET 42

WDR LINE

CURVE WDR3
PC = 53+85.55 WDR
X = 90881.467
Y = 589409.672
PI= 55+77.43 WDR
X = 90876.660
Y = 589601.492
PT = 57+62.20 WDR
X = 90785.367
Y = 589770.262
R = 800.00'
Delta = 26°58'31" LT
D = 7°09'43"
L = 376.64'
T = 191.88'
BK = N 1°26'07" W
AH = N 28°24'38" W

CURVE WDR4
PC = 59+41.87 WDR
X = 90699.883
Y = 589928.292
PI= 60+22.64 WDR
X = 90661.451
Y = 589999.339
PCC = 60+94.62 WDR
X = 90685.947
Y = 590076.310
R = 190.00'
Delta = 46°03'50" RT
D = 30°09'20"
L = 152.75'
T = 80.78'
BK = N 28°24'38" W
AH = N 17°39'12" E

CURVE WDR5
PCC = 60+94.62 WDR
X = 90685.947
Y = 590076.310
PI= 61+36.00 WDR
X = 90698.494
Y = 590115.739
PT = 61+77.14 WDR
X = 90718.022
Y = 590152.218
R = 450.00'
Delta = 10°30'25" RT
D = 12°43'57"
L = 82.52'
T = 41.38'
BK = N 17°39'12" E
AH = N 28°09'37" E

CURVE WDR6
PC = 62+98.77 WDR
X = 90775.425
Y = 590259.453
PI= 64+99.25 WDR
X = 90870.040
Y = 590436.201
PT = 66+91.64 WDR
X = 90870.121
Y = 590636.681
R = 800.00'
Delta = 28°08'14" LT
D = 7°09'43"
L = 392.87'
T = 200.48'
BK = N 28°09'37" E
AH = N 0°01'24" E

PI= 83+54.48 WDR
Y = 592299.514
X = 90870.797
Delta = 00°01'44" LT
BK = N 00°01'24" E
AH = N 00°00'20" W

PI= 97+97.39 WDR
Y = 593742.429
X = 90870.654
Delta = 00°52'53" LT
BK = N 00°00'20" W
AH = N 00°53'14" W

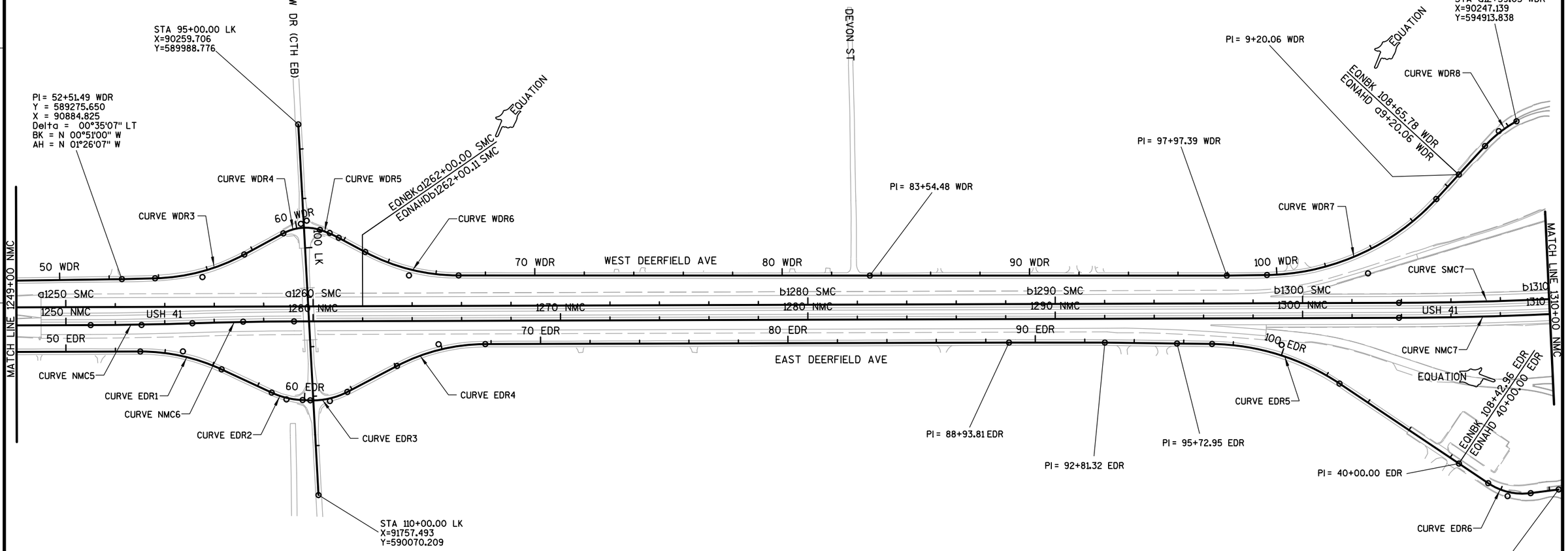
CURVE WDR7
PC = 99+60.08 WDR
X = 90868.135
Y = 593905.095
PI= 103+68.34 WDR
X = 90861.814
Y = 594313.312
PT = 107+31.27 WDR
X = 90561.296
Y = 594589.664
R = 950.00'
Delta = 46°30'42" LT
D = 6°01'52"
L = 771.19'
T = 408.27'
BK = N 0°53'14" W
AH = N 47°23'56" W

PI= 9+20.06 WDR
Y = 594680.716
X = 90462.282
Delta = 00°01'58" LT
BK = N 47°23'56" W
AH = N 47°25'54" W

CURVE WDR8
PC = a 10+76.63 WDR
X = 90346.974
Y = 594786.630
PI= a 11+58.56 WDR
X = 90286.634
Y = 594842.054
PT = a 12+39.05 WDR
X = 90247.139
Y = 594913.838
R = 500.00'
Delta = 18°36'43" RT
D = 11°27'33"
L = 162.42'
T = 81.93'
BK = N 47°25'54" W
AH = N 28°49'11" W

SMC LINE

CURVE SMC7
PC = b 1303+89.82 SMC
X = 90980.866
Y = 594438.587
PI= b 1311+48.97 SMC
X = 90978.391
Y = 595197.736
PT = b 1319+06.67 SMC
X = 90894.647
Y = 595952.256
R = 14139.50'
Delta = 6°08'48" LT
D = 0°24'19"
L = 1516.85'
T = 759.15'
BK = N 0°11'12" W
AH = N 6°20'00" W



NMC LINE

CURVE NMC5
PC = 1251+00.00 NMC
X = 91070.610
Y = 589149.147
PI= 1253+05.69 NMC
X = 91069.940
Y = 589354.837
PRC = 1255+11.35 NMC
X = 91063.269
Y = 589560.421
R = 14100.00'
Delta = 1°40'18" LT
D = 0°24'23"
L = 411.35'
T = 205.69'
BK = N 0°11'12" W
AH = N 1°51'30" W

CURVE NMC6
PRC = 1255+11.35 NMC
X = 91063.269
Y = 589560.421
PI= 1257+17.04 NMC
X = 91056.599
Y = 589766.004
PT = 1259+22.70 NMC
X = 91055.928
Y = 589971.694
R = 14100.00'
Delta = 1°40'18" RT
D = 0°24'23"
L = 411.35'
T = 205.69'
BK = N 1°51'30" W
AH = N 0°11'12" W

CURVE NMC7
PC = 1303+89.82 NMC
X = 91041.365
Y = 594438.785
PI= 1311+52.22 NMC
X = 91038.880
Y = 595201.182
PT = 1319+13.16 NMC
X = 90954.778
Y = 595958.930
R = 14200.00'
Delta = 6°08'48" LT
D = 0°24'13"
L = 1523.34'
T = 762.40'
BK = N 0°11'12" W
AH = N 6°20'00" W

EDR LINE

CURVE EDR1
PC = 53+00.65 EDR
X = 91177.618
Y = 589350.154
PI= 54+72.96 EDR
X = 91177.064
Y = 589522.469
PT = 56+39.76 EDR
X = 91249.578
Y = 589678.784
R = 775.00'
Delta = 25°04'15" RT
D = 7°23'35"
L = 339.12'
T = 172.32'
BK = N 0°11'03" W
AH = N 24°53'12" E

CURVE EDR2
PC = 58+63.06 EDR
X = 91343.548
Y = 589881.349
PI= 59+28.61 EDR
X = 91371.133
Y = 589940.812
PT = 59+92.43 EDR
X = 91373.512
Y = 590006.319
R = 325.00'
Delta = 22°48'23" LT
D = 17°37'46"
L = 129.37'
T = 65.55'
BK = N 24°53'12" E
AH = N 2°04'49" E

CURVE EDR3
PC = 60+23.30 EDR
X = 91374.633
Y = 590037.171
PI= 61+02.79 EDR
X = 91377.518
Y = 590116.611
PT = 61+78.72 EDR
X = 91340.687
Y = 590187.057
R = 300.00'
Delta = 29°40'55" LT
D = 19°05'55"
L = 155.41'
T = 79.49'
BK = N 2°04'49" E
AH = N 27°36'07" W

CURVE EDR4
PC = 64+05.42 EDR
X = 91235.647
Y = 590387.964
PI= 65+94.62 EDR
X = 91147.990
Y = 590555.624
PT = 67+76.55 EDR
X = 91147.447
Y = 590744.814
R = 775.00'
Delta = 27°26'14" RT
D = 7°23'35"
L = 371.12'
T = 189.19'
BK = N 27°36'07" W
AH = N 0°09'53" W

PI= 88+93.81 EDR
Y = 592862.070
X = 91141.365
Delta = 00°10'45" RT
BK = N 00°09'53" W
AH = N 00°00'53" E

PI= 92+81.32 EDR
Y = 593249.572
X = 91141.465
Delta = 00°41'19" RT
BK = N 00°00'53" E
AH = N 00°42'12" E

PI= 95+72.95 EDR
Y = 593541.185
X = 91145.045
Delta = 00°03'50" RT
BK = N 00°42'12" E
AH = N 00°46'02" E

CURVE EDR5
PC = 97+14.69 EDR
X = 91146.943
Y = 593682.917
PI= 99+96.16 EDR
X = 91150.712
Y = 593964.356
PT = 102+61.97 EDR
X = 91307.183
Y = 594198.319
R = 950.00'
Delta = 33°00'25" RT
D = 6°01'52"
L = 547.27'
T = 281.46'
BK = N 0°46'02" E
AH = N 33°46'27" E

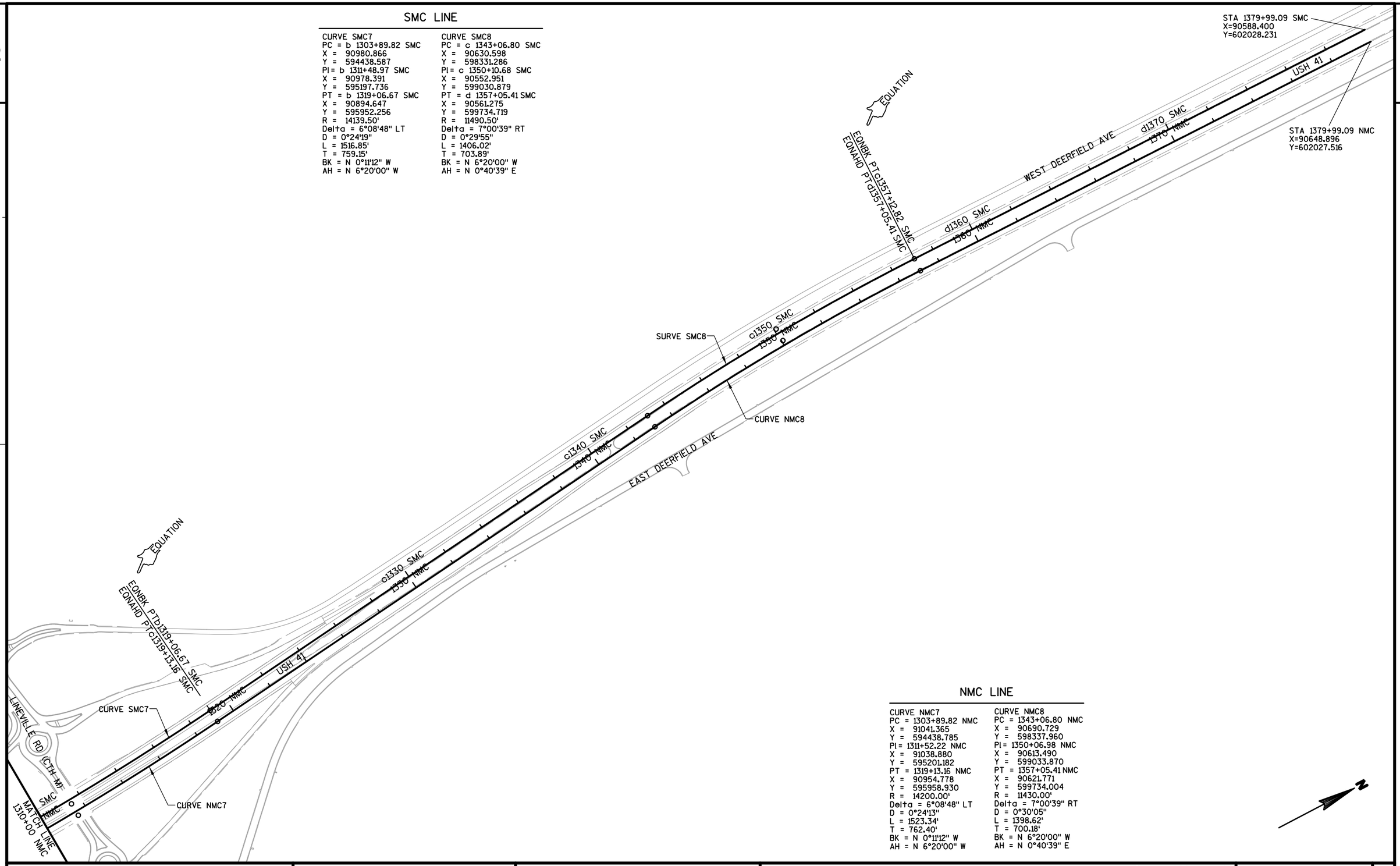
PI= 40+00.00 EDR
Y = 594681.263
X = 91630.169
Delta = 00°04'23" RT
BK = N 33°46'27" E
AH = N 33°50'49" E

CURVE EDR6
PC = a 41+42.30 EDR
X = 91709.429
Y = 594799.450
PI= a 42+36.55 EDR
X = 91761.920
Y = 594877.722
PT = a 43+22.55 EDR
X = 91749.679
Y = 594971.167
R = 250.00'
Delta = 41°18'37" LT
D = 22°55'06"
L = 180.25'
T = 94.24'
BK = N 33°50'49" E
AH = N 7°27'48" W

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - NMC, SMC, EDR, WDR, & LK SCALE, FEET 0 200 400	SHEET 434	E

SMC LINE

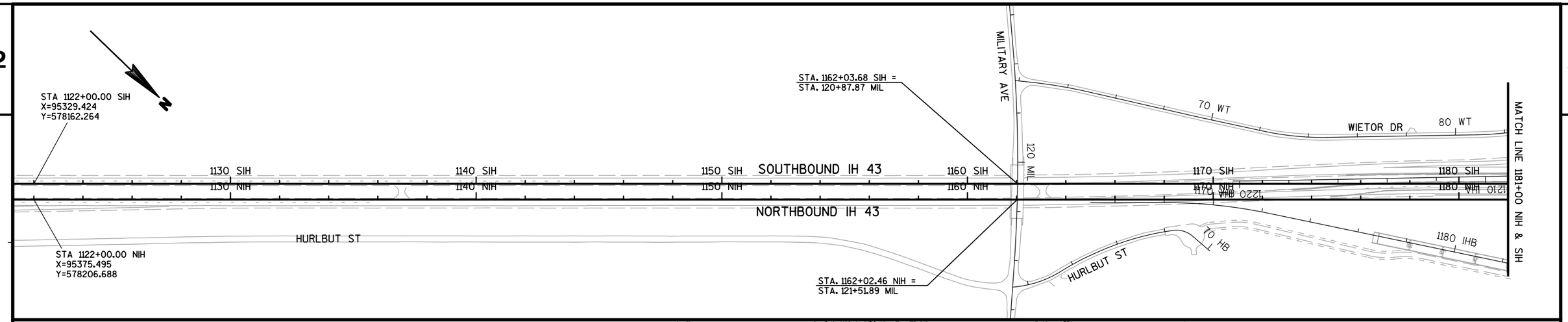
CURVE SMC7	CURVE SMC8
PC = b 1303+89.82 SMC	PC = c 1343+06.80 SMC
X = 90980.866	X = 90630.598
Y = 594438.587	Y = 598331.286
PI = b 1311+48.97 SMC	PI = c 1350+10.68 SMC
X = 90978.391	X = 90552.951
Y = 595197.736	Y = 599030.879
PT = b 1319+06.67 SMC	PT = d 1357+05.41 SMC
X = 90894.647	X = 90561.275
Y = 595952.256	Y = 599734.719
R = 14139.50'	R = 11490.50'
Delta = 6°08'48" LT	Delta = 7°00'39" RT
D = 0°24'19"	D = 0°29'55"
L = 1516.85'	L = 1406.02'
T = 759.15'	T = 703.89'
BK = N 0°11'12" W	BK = N 6°20'00" W
AH = N 6°20'00" W	AH = N 0°40'39" E

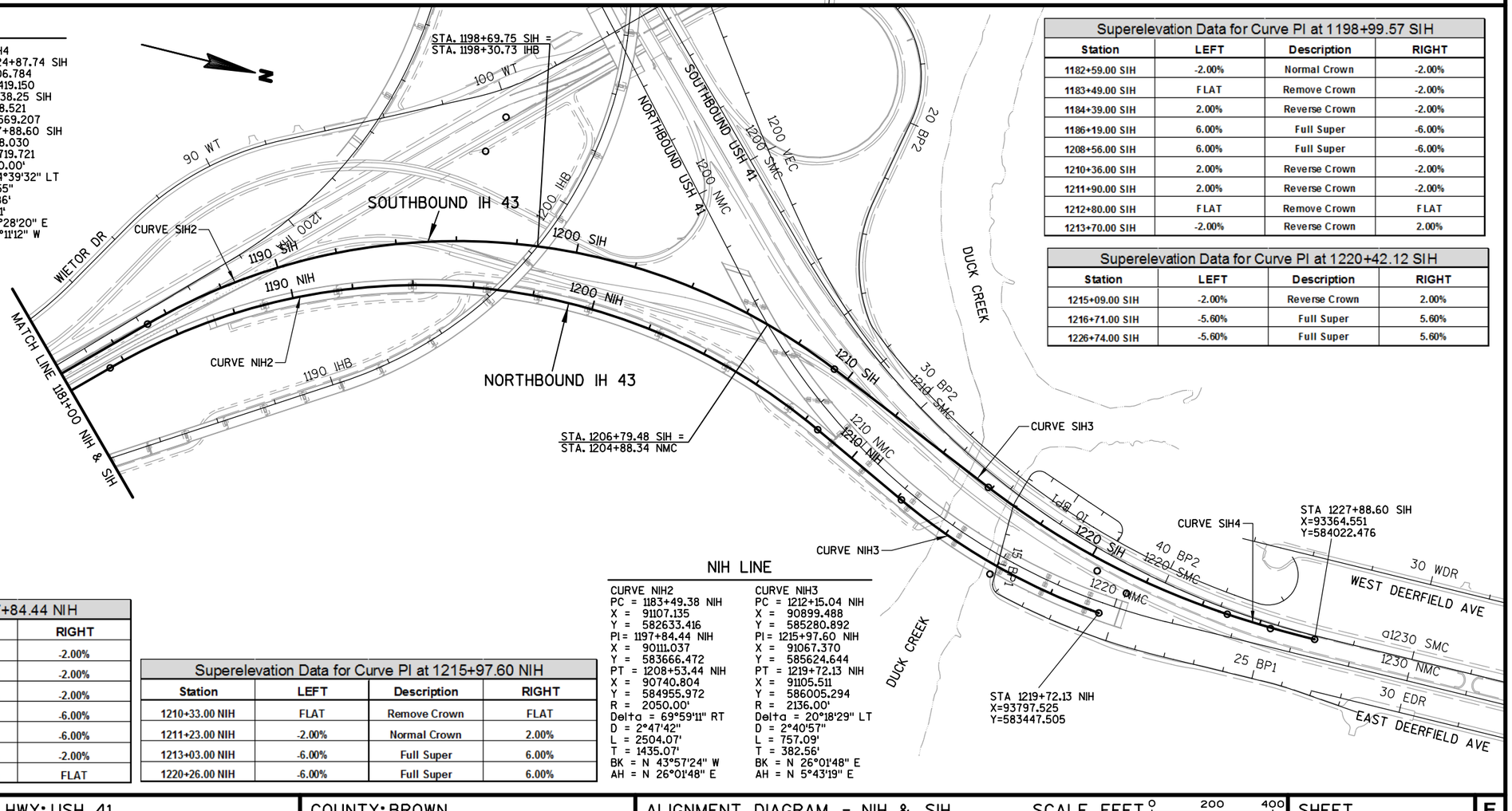


NMC LINE

CURVE NMC7	CURVE NMC8
PC = 1303+89.82 NMC	PC = 1343+06.80 NMC
X = 91041.365	X = 90690.729
Y = 594438.785	Y = 598337.960
PI = 1311+52.22 NMC	PI = 1350+06.98 NMC
X = 91038.880	X = 90613.490
Y = 595201.182	Y = 599033.870
PT = 1319+13.16 NMC	PT = 1357+05.41 NMC
X = 90954.778	X = 90621.771
Y = 595958.930	Y = 599734.004
R = 14200.00'	R = 11430.00'
Delta = 6°08'48" LT	Delta = 7°00'39" RT
D = 0°24'13"	D = 0°30'05"
L = 1523.34'	L = 1398.62'
T = 762.40'	T = 700.18'
BK = N 0°11'12" W	BK = N 6°20'00" W
AH = N 6°20'00" W	AH = N 0°40'39" E

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - NMC & SMC SCALE, FEET 0 200 400	SHEET 435	E





SIH LINE

CURVE SIH2	CURVE SIH3	CURVE SIH4
PC = 1185+29.29 SIH	PC = 1215+88.10 SIH	PCC = 1224+87.74 SIH
X = 90936.180	X = 90789.879	X = 91006.784
Y = 582718.510	Y = 585550.332	Y = 586419.150
PI = 1198+99.57 SIH	PI = 1220+42.12 SIH	PI = 1226+38.25 SIH
X = 89985.054	X = 90971.381	X = 91018.521
Y = 583704.926	Y = 585966.504	Y = 586569.207
PT = 1209+45.10 SIH	PCC = 1224+87.74 SIH	PT = 1227+88.60 SIH
X = 90532.835	X = 91006.784	X = 91018.030
Y = 584960.949	Y = 586419.150	Y = 586719.721
R = 2050.00'	R = 2700.00'	R = 3700.00'
Delta = 67°31'11" RT	Delta = 19°05'27" LT	Delta = 4°39'32" LT
D = 2°47'43"	D = 2°07'20"	D = 1°32'55"
L = 2415.80'	L = 899.64'	L = 300.86'
T = 1370.28'	T = 454.03'	T = 150.51'
BK = N 43°57'24" W	BK = N 23°33'47" E	BK = N 4°28'20" E
AH = N 23°33'47" E	AH = N 4°28'20" E	AH = N 0°11'12" W

Superelevation Data for Curve PI at 1198+99.57 SIH			
Station	LEFT	Description	RIGHT
1182+59.00 SIH	-2.00%	Normal Crown	-2.00%
1183+49.00 SIH	FLAT	Remove Crown	-2.00%
1184+39.00 SIH	2.00%	Reverse Crown	-2.00%
1186+19.00 SIH	6.00%	Full Super	-6.00%
1208+56.00 SIH	6.00%	Full Super	-6.00%
1210+36.00 SIH	2.00%	Reverse Crown	-2.00%
1211+90.00 SIH	2.00%	Reverse Crown	-2.00%
1212+80.00 SIH	FLAT	Remove Crown	FLAT
1213+70.00 SIH	-2.00%	Reverse Crown	2.00%

Superelevation Data for Curve PI at 1220+42.12 SIH			
Station	LEFT	Description	RIGHT
1215+09.00 SIH	-2.00%	Reverse Crown	2.00%
1216+71.00 SIH	-5.60%	Full Super	5.60%
1226+74.00 SIH	-5.60%	Full Super	5.60%

NIH LINE

CURVE NIH2	CURVE NIH3
PC = 1183+49.38 NIH	PC = 1212+15.04 NIH
X = 91107.135	X = 90899.488
Y = 582633.416	Y = 585280.892
PI = 1197+84.44 NIH	PI = 1215+97.60 NIH
X = 90111.037	X = 91067.370
Y = 583666.472	Y = 585624.644
PT = 1208+53.44 NIH	PT = 1219+72.13 NIH
X = 90740.804	X = 91105.511
Y = 584955.972	Y = 586005.294
R = 2050.00'	R = 2136.00'
Delta = 69°59'11" RT	Delta = 20°18'29" LT
D = 2°47'42"	D = 2°40'57"
L = 2504.07'	L = 757.09'
T = 1435.07'	T = 382.56'
BK = N 43°57'24" W	BK = N 26°01'48" E
AH = N 26°01'48" E	AH = N 5°43'19" E

Superelevation Data for Curve PI at 1197+84.44 NIH			
Station	LEFT	Description	RIGHT
1180+79.00 NIH	-2.00%	Normal Crown	-2.00%
1181+69.00 NIH	FLAT	Remove Crown	-2.00%
1182+59.00 NIH	2.00%	Reverse Crown	-2.00%
1184+39.00 NIH	6.00%	Full Super	-6.00%
1207+63.00 NIH	6.00%	Full Super	-6.00%
1209+43.00 NIH	2.00%	Reverse Crown	-2.00%
1210+33.00 NIH	FLAT	Remove Crown	FLAT

Superelevation Data for Curve PI at 1215+97.60 NIH			
Station	LEFT	Description	RIGHT
1210+33.00 NIH	FLAT	Remove Crown	FLAT
1211+23.00 NIH	-2.00%	Normal Crown	2.00%
1213+03.00 NIH	-6.00%	Full Super	6.00%
1220+26.00 NIH	-6.00%	Full Super	6.00%

PROJECT NO: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | ALIGNMENT DIAGRAM - NIH & SIH | SCALE, FEET 0 200 400 | SHEET 436 | E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027206_AD.dgn | PLOT DATE : 9/2/2014 | PLOT BY : kk226 | PLOT NAME : | PLOT SCALE : 1:400

WISDOT/CADDS SHEET 42

Superelevation Data for Curve PI at 1211+36.20 IHB*			
Station	**LEFT**	**Description***	**RIGHT**
1187+88.00 IHB	-2.00%	Normal Crown	-2.00%
1188+68.00 IHB	-2.00%	Remove Crown	FLAT
1189+48.00 IHB	-2.00%	Reverse Crown	2.00%
1191+08.00 IHB	-6.00%	Full Super	6.00%
1216+80.00 IHB	-6.00%	Full Super	6.00%
1218+40.00 IHB	-2.00%	Reverse Crown	2.00%
1219+20.00 IHB	FLAT	Remove Crown	FLAT

* Centerline is right of the reference line. Description refers to slopes from centerline.

Superelevation Data for Curve PI at 1222+86.55 IHB*			
Station	**LEFT**	**Description***	**RIGHT**
1219+20.00 IHB	FLAT	Remove Crown	FLAT
1220+00.00 IHB	2.00%	Normal Crown	-2.00%
1221+60.00 IHB	6.00%	Full Super	-6.00%
1223+93.00 IHB	6.00%	Full Super	-6.00%
1225+73.00 IHB	2.00%	Reverse Crown	-2.00%

* Centerline is right of the reference line. Description refers to slopes from centerline.

IHB LINE

CURVE IHB2
PC = 1190+27.78 IHB
X = 90969.238
Y = 583386.029
PI = 1211+36.20 IHB
X = 89846.307
Y = 585170.533
PT = 1217+84.77 IHB
X = 88637.335
Y = 583443.160
R = 1400.00'
Delta = 112°49'53" LT
D = 4°05'33"
L = 2756.99'
T = 2108.42'
BK = N 32°10'51" W
AH = S 34°59'16" W

CURVE IHB3
PC = 1220+89.18 IHB
X = 88462.785
Y = 583193.765
PI = 1222+86.55 IHB
X = 88349.611
Y = 583032.062
PT = 1224+82.71 IHB
X = 88207.664
Y = 582894.922
R = 2050.00'
Delta = 10°59'56" RT
D = 2°47'42"
L = 393.53'
T = 197.37'
BK = S 34°59'16" W
AH = S 45°59'12" W

STA. 1215+68.75 IHB =
STA. 18+35.25 RR

STA 1228+12.88 IHB
X=87970.212
Y=582665.511

STA. 1185+21.54 IHA =
STA. 13+90.55 RR

STA 1143+00.00 IHA
X=86264.820
Y=580222.240

STA 1220+27.76 IHA
X=91933.507
Y=581666.891

STA 1165+00.00 IHB
X=92399.449
Y=581310.442

IHA LINE

CURVE IHA1
PC = 1143+00.00 IHA
X = 86264.820
Y = 580222.240
PI = 1143+39.72 IHA
X = 86285.335
Y = 580256.250
PRC = 1143+79.44 IHA
X = 86305.659
Y = 580290.375
R = 14124.00'
Delta = 0°19'20" LT
D = 0°24'20"
L = 79.44'
T = 39.72'
BK = N 31°05'56" E
AH = N 30°46'36" E

CURVE IHA2
PRC = 1143+79.44 IHA
X = 86305.659
Y = 580290.375
PI = 1146+52.53 IHA
X = 86445.400
Y = 580525.010
PRC = 1149+25.53 IHA
X = 86595.671
Y = 580753.046
R = 12000.00'
Delta = 2°36'27" RT
D = 0°28'39"
L = 546.10'
T = 273.10'
BK = N 30°46'36" E
AH = N 33°23'03" E

CURVE IHA3
PRC = 1149+25.53 IHA
X = 86595.671
Y = 580753.046
PI = 1150+98.19 IHA
X = 86690.675
Y = 580897.215
PT = 1152+70.84 IHA
X = 86782.732
Y = 581043.284
R = 17000.00'
Delta = 1°09'50" LT
D = 0°20'13"
L = 345.30'
T = 172.66'
BK = N 33°23'03" E
AH = N 32°13'13" E

CURVE IHA4
PC = 1153+65.65 IHA
X = 86833.284
Y = 581123.496
PI = 1162+22.75 IHA
X = 87290.269
Y = 581848.607
PT = 1170+68.09 IHA
X = 87933.711
Y = 582414.828
R = 5936.00'
Delta = 16°25'56" RT
D = 0°57'55"
L = 1702.44'
T = 857.10'
BK = N 32°13'13" E
AH = N 48°39'09" E

CURVE IHA5
PC = 1179+64.06 IHA
X = 88606.332
Y = 583006.725
PI = 1193+68.84 IHA
X = 89660.927
Y = 583934.756
PT = 1202+21.95 IHA
X = 90656.030
Y = 582943.201
R = 1500.00'
Delta = 86°14'42" RT
D = 3°49'11"
L = 2257.89'
T = 1404.78'
BK = N 48°39'09" E
AH = S 45°06'08" E

CURVE IHA6
PC = 1217+87.79 IHA
X = 91765.226
Y = 581837.959
PI = 1219+07.78 IHA
X = 91850.222
Y = 581753.267
PT = 1220+27.76 IHA
X = 91933.507
Y = 581666.891
R = 12000.00'
Delta = 1°08'45" RT
D = 0°28'39"
L = 239.97'
T = 119.99'
BK = S 45°06'08" E
AH = S 43°57'24" E

Superelevation Data for Curve PI at 1162+22.75 IHA			
Station	**LEFT**	**Description**	**RIGHT**
1153+56.00 IHA	NA	Normal Crown	-2.00%
1154+15.00 IHA	NA	Full Super	-3.30%
1170+19.00 IHA	NA	Full Super	-3.30%
1170+78.00 IHA	NA	Normal Crown	-2.00%

Superelevation Data for Curve PI at 1193+68.84 IHA			
Station	**LEFT**	**Description**	**RIGHT**
1178+84.00 IHA	NA	Normal Crown	-2.00%
1180+43.00 IHA	NA	Full Super	-6.00%
1201+42.00 IHA	NA	Full Super	-6.00%
1203+02.00 IHA	NA	Normal Crown	-2.00%

Superelevation Data for Curve PI at 1170+14.72 IHB*			
Station	**LEFT**	**Description***	**RIGHT**
1167+13.00 IHB	2.00%	Reverse Crown	-2.00%
1168+93.00 IHB	6.00%	Full Super	-6.00%
1171+35.00 IHB	6.00%	Full Super	-6.00%
1173+15.00 IHB	2.00%	Reverse Crown	-2.00%
1174+85.00 IHB	2.00%	Reverse Crown	-2.00%
1175+65.00 IHB	FLAT	Remove Crown	-2.00%
1176+45.00 IHB	-2.00%	Normal Crown	-2.00%

* Centerline is right of the reference line. Description refers to slopes from centerline.

IHB LINE

CURVE IHB1
PC = 1168+03.31 IHB
X = 92188.916
Y = 581528.787
PI = 1170+14.72 IHB
X = 92042.176
Y = 581680.971
PT = 1172+24.64 IHB
X = 91929.581
Y = 581859.900
R = 2050.00'
Delta = 11°46'32" RT
D = 2°47'42"
L = 421.32'
T = 211.41'
BK = N 43°57'24" W
AH = N 32°10'51" W

PROJECT NO: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | ALIGNMENT DIAGRAM - IHA & IHB | SCALE, FEET 0 200 400 | SHEET 437 | E

VED LINE

CURVE VED1
PC = 1156+64.06 VED
X = 86862.776
Y = 581457.614
PI = 1157+39.06 VED
X = 86905.824
Y = 581519.034
PRC = 1158+14.06 VED
X = 86950.370
Y = 581579.377
R = 6096.50'
Delta = 1°24'35" RT
D = 0°56'23"
L = 150.00'
T = 75.00'
BK = N 35°01'33" E
AH = N 36°26'08" E

CURVE VED2
PRC = 1158+14.06 VED
X = 86950.370
Y = 581579.377
PI = 1160+59.73 VED
X = 87096.277
Y = 581777.025
PT = 1163+05.33 VED
X = 87233.973
Y = 581980.478
R = 12000.00'
Delta = 2°20'44" LT
D = 0°28'39"
L = 491.27'
T = 245.67'
BK = N 36°26'08" E
AH = N 34°05'23" E

CURVE VED3
PC = 1164+04.93 VED
X = 87289.799
Y = 582062.965
PI = 1166+18.36 VED
X = 87409.421
Y = 582239.714
PT = 1168+31.25 VED
X = 87549.633
Y = 582400.619
R = 3500.00'
Delta = 6°58'44" RT
D = 1°38'13"
L = 426.32'
T = 213.42'
BK = N 34°05'23" E
AH = N 41°04'08" E

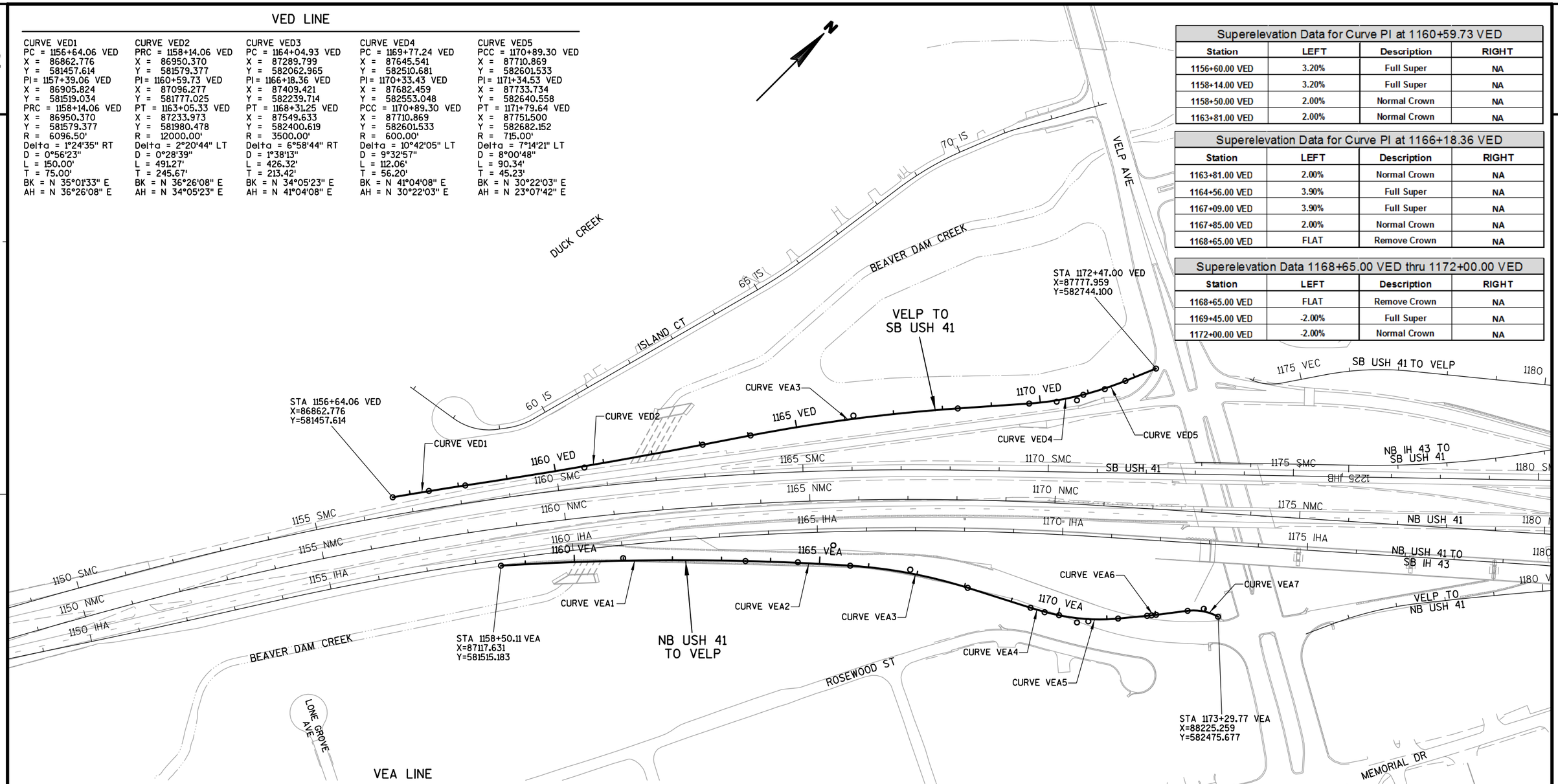
CURVE VED4
PC = 1169+77.24 VED
X = 87645.541
Y = 582510.681
PI = 1170+33.43 VED
X = 87682.459
Y = 582553.048
PCC = 1170+89.30 VED
X = 87710.869
Y = 582601.533
R = 600.00'
Delta = 10°42'05" LT
D = 9°32'57"
L = 112.06'
T = 56.20'
BK = N 41°04'08" E
AH = N 30°22'03" E

CURVE VED5
PCC = 1170+89.30 VED
X = 87710.869
Y = 582601.533
PI = 1171+34.53 VED
X = 87733.734
Y = 582640.558
PT = 1171+79.64 VED
X = 87751.500
Y = 582682.152
R = 715.00'
Delta = 7°14'21" LT
D = 8°00'48"
L = 90.34'
T = 45.23'
BK = N 30°22'03" E
AH = N 23°07'42" E

Superelevation Data for Curve PI at 1160+59.73 VED			
Station	LEFT	Description	RIGHT
1156+60.00 VED	3.20%	Full Super	NA
1158+14.00 VED	3.20%	Full Super	NA
1158+50.00 VED	2.00%	Normal Crown	NA
1163+81.00 VED	2.00%	Normal Crown	NA

Superelevation Data for Curve PI at 1166+18.36 VED			
Station	LEFT	Description	RIGHT
1163+81.00 VED	2.00%	Normal Crown	NA
1164+56.00 VED	3.90%	Full Super	NA
1167+09.00 VED	3.90%	Full Super	NA
1167+85.00 VED	2.00%	Normal Crown	NA
1168+65.00 VED	FLAT	Remove Crown	NA

Superelevation Data 1168+65.00 VED thru 1172+00.00 VED			
Station	LEFT	Description	RIGHT
1168+65.00 VED	FLAT	Remove Crown	NA
1169+45.00 VED	-2.00%	Full Super	NA
1172+00.00 VED	-2.00%	Normal Crown	NA



VEA LINE

CURVE VEA1
PC = 1158+50.11 VEA
X = 87117.631
Y = 581515.183
PI = 1160+99.65 VEA
X = 87282.946
Y = 581702.100
PCC = 1163+48.88 VEA
X = 87463.423
Y = 581874.422
R = 5912.00'
Delta = 4°50'02" RT
D = 0°58'09"
L = 498.77'
T = 249.53'
BK = N 41°29'25" E
AH = N 46°19'27" E

CURVE VEA2
PCC = 1163+48.88 VEA
X = 87463.423
Y = 581874.422
PI = 1164+55.81 VEA
X = 87540.757
Y = 581948.262
PCC = 1165+62.70 VEA
X = 87621.177
Y = 582018.728
R = 5000.00'
Delta = 2°27'01" RT
D = 1°08'45"
L = 213.82'
T = 106.92'
BK = N 46°19'27" E
AH = N 48°46'28" E

CURVE VEA3
PCC = 1165+62.70 VEA
X = 87621.177
Y = 582018.728
PI = 1166+85.51 VEA
X = 87713.542
Y = 582099.660
PT = 1168+07.12 VEA
X = 87822.542
Y = 582156.228
R = 1015.00'
Delta = 13°47'51" RT
D = 5°38'42"
L = 244.42'
T = 122.81'
BK = N 48°46'28" E
AH = N 62°34'18" E

CURVE VEA4
PC = 1169+41.74 VEA
X = 87942.029
Y = 582218.239
PI = 1169+71.79 VEA
X = 87968.700
Y = 582232.081
PCC = 1170+01.79 VEA
X = 87993.859
Y = 582248.509
R = 602.00'
Delta = 5°42'54" LT
D = 9°31'03"
L = 60.05'
T = 30.05'
BK = N 62°34'18" E
AH = N 56°51'25" E

CURVE VEA5
PCC = 1170+01.79 VEA
X = 87993.859
Y = 582248.509
PI = 1170+62.78 VEA
X = 88044.926
Y = 582281.854
PT = 1171+22.85 VEA
X = 88083.805
Y = 582328.846
R = 402.00'
Delta = 17°15'14" LT
D = 14°15'10"
L = 121.06'
T = 60.99'
BK = N 56°51'25" E
AH = N 39°36'11" E

CURVE VEA6
PC = 1171+82.17 VEA
X = 88121.620
Y = 582374.551
PI = 1171+91.47 VEA
X = 88127.550
Y = 582381.718
PT = 1172+00.77 VEA
X = 88133.251
Y = 582389.067
R = 593.00'
Delta = 1°47'50" LT
D = 9°39'43"
L = 18.60'
T = 9.30'
BK = N 39°36'11" E
AH = N 37°48'21" E

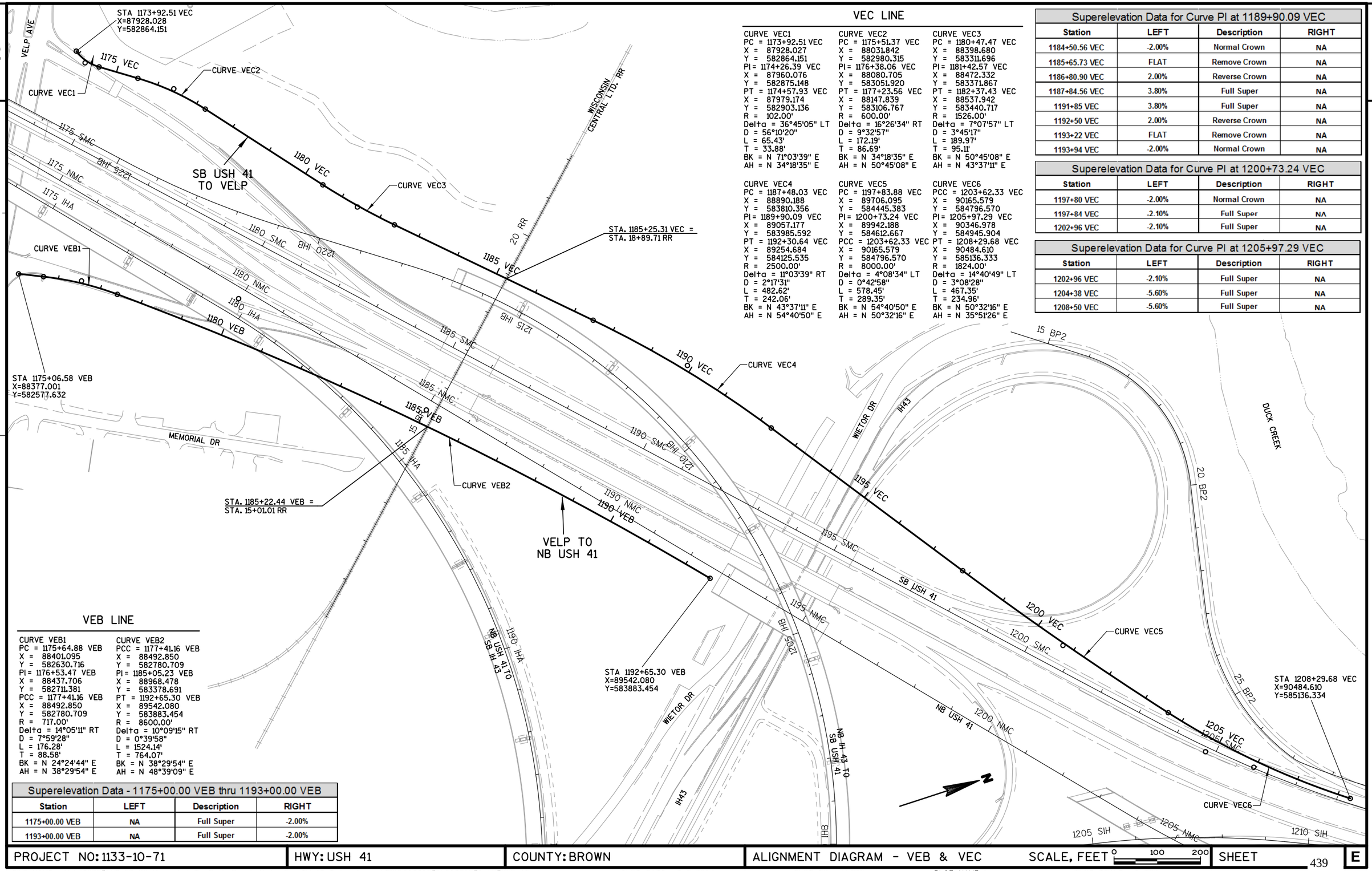
CURVE VEA7
PC = 1172+65.48 VEA
X = 88172.915
Y = 582440.191
PI = 1172+98.73 VEA
X = 88193.302
Y = 582466.468
PT = 1173+29.77 VEA
X = 88225.259
Y = 582475.677
R = 102.00'
Delta = 36°07'04" RT
D = 56°10'20"
L = 64.30'
T = 33.26'
BK = N 37°48'21" E
AH = N 73°55'25" E

Superelevation Data - 1158+50.11 VEA thru 1169+39.20 VEA			
Station	LEFT	Description	RIGHT
1159+50.00 VEA	NA	Full Super	-3.30%
1168+12.00 VEA	NA	Full Super	-3.30%
1168+43.20 VEA	NA	Reverse Crown	-2.00%
1168+91.20 VEA	NA	Remove Crown	FLAT
1169+39.20 VEA	NA	Normal Crown	2.00%

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - VEA & VED	SCALE, FEET 0 100 200	SHEET 438	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027208_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42



VEC LINE

CURVE VEC1	CURVE VEC2	CURVE VEC3
PC = 1173+92.51 VEC	PC = 1175+51.37 VEC	PC = 1180+47.47 VEC
X = 87928.027	X = 88031.842	X = 88398.680
Y = 582864.151	Y = 582980.315	Y = 583311.696
PI= 1174+26.39 VEC	PI= 1176+38.06 VEC	PI= 1181+42.57 VEC
X = 87960.076	X = 88080.705	X = 88472.332
Y = 582875.148	Y = 583051.920	Y = 583371.867
PT = 1174+57.93 VEC	PT = 1177+23.56 VEC	PT = 1182+37.43 VEC
X = 87979.174	X = 88147.839	X = 88537.942
Y = 582903.136	Y = 583106.767	Y = 583440.717
R = 102.00'	R = 600.00'	R = 1526.00'
Delta = 36°45'05" LT	Delta = 16°26'34" RT	Delta = 7°07'57" LT
D = 56°10'20"	D = 9°32'57"	D = 3°45'17"
L = 65.43'	L = 172.19'	L = 189.97'
T = 33.88'	T = 86.69'	T = 95.11'
BK = N 71°03'39" E	BK = N 34°18'35" E	BK = N 50°45'08" E
AH = N 34°18'35" E	AH = N 50°45'08" E	AH = N 43°37'11" E

CURVE VEC4	CURVE VEC5	CURVE VEC6
PC = 1187+48.03 VEC	PC = 1197+83.88 VEC	PCC = 1203+62.33 VEC
X = 88890.188	X = 89706.095	X = 90165.579
Y = 583810.356	Y = 584445.383	Y = 584796.570
PI= 1189+90.09 VEC	PI= 1200+73.24 VEC	PI= 1205+97.29 VEC
X = 89057.177	X = 89942.188	X = 90346.978
Y = 583985.592	Y = 584612.667	Y = 584945.904
PT = 1192+30.64 VEC	PCC = 1203+62.33 VEC	PT = 1208+29.68 VEC
X = 89254.684	X = 90165.579	X = 90484.610
Y = 584125.535	Y = 584796.570	Y = 585136.333
R = 2500.00'	R = 8000.00'	R = 1824.00'
Delta = 11°03'39" RT	Delta = 4°08'34" LT	Delta = 14°40'49" LT
D = 2°17'31"	D = 0°42'58"	D = 3°08'28"
L = 482.62'	L = 578.45'	L = 467.35'
T = 242.06'	T = 289.35'	T = 234.96'
BK = N 43°37'11" E	BK = N 54°40'50" E	BK = N 50°32'16" E
AH = N 54°40'50" E	AH = N 50°32'16" E	AH = N 35°51'26" E

Superelevation Data for Curve PI at 1189+90.09 VEC

Station	LEFT	Description	RIGHT
1184+50.56 VEC	-2.00%	Normal Crown	NA
1185+65.73 VEC	FLAT	Remove Crown	NA
1186+80.90 VEC	2.00%	Reverse Crown	NA
1187+84.56 VEC	3.80%	Full Super	NA
1191+85 VEC	3.80%	Full Super	NA
1192+50 VEC	2.00%	Reverse Crown	NA
1193+22 VEC	FLAT	Remove Crown	NA
1193+94 VEC	-2.00%	Normal Crown	NA

Superelevation Data for Curve PI at 1200+73.24 VEC

Station	LEFT	Description	RIGHT
1197+80 VEC	-2.00%	Normal Crown	NA
1197+84 VEC	-2.10%	Full Super	NA
1202+96 VEC	-2.10%	Full Super	NA

Superelevation Data for Curve PI at 1205+97.29 VEC

Station	LEFT	Description	RIGHT
1202+96 VEC	-2.10%	Full Super	NA
1204+38 VEC	-5.60%	Full Super	NA
1208+50 VEC	-5.60%	Full Super	NA

VEB LINE

CURVE VEB1	CURVE VEB2
PC = 1175+64.88 VEB	PCC = 1177+41.16 VEB
X = 88401.095	X = 88492.850
Y = 582630.716	Y = 582780.709
PI= 1176+53.47 VEB	PI= 1185+05.23 VEB
X = 88437.706	X = 88968.478
Y = 582711.381	Y = 583378.691
PCC = 1177+41.16 VEB	PT = 1192+65.30 VEB
X = 88492.850	X = 89542.080
Y = 582780.709	Y = 583883.454
R = 717.00'	R = 8600.00'
Delta = 14°05'11" RT	Delta = 10°09'15" RT
D = 7°59'28"	D = 0°39'58"
L = 176.28'	L = 1524.14'
T = 88.58'	T = 764.07'
BK = N 24°24'44" E	BK = N 38°29'54" E
AH = N 38°29'54" E	AH = N 48°39'09" E

Superelevation Data - 1175+00.00 VEB thru 1193+00.00 VEB

Station	LEFT	Description	RIGHT
1175+00.00 VEB	NA	Full Super	-2.00%
1193+00.00 VEB	NA	Full Super	-2.00%

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - VEB & VEC	SCALE, FEET 0 100 200	SHEET 439	E

2

WT LINE

CURVE WT1
PC = 62+46.87 WT
X = 92216.299
Y = 580795.010
PI = 63+66.66 WT
X = 92142.740
Y = 580889.553
PT = 64+86.16 WT
X = 92080.992
Y = 580992.200
R = 2000.00'
Delta = 6°51'19" RT
D = 2°51'53"
L = 239.29'
T = 119.79'
BK = N 37°53'05" W
AH = N 31°01'46" W

PI = 69+46.82 WT
Y = 581386.937
X = 91843.534
Delta = 00°44'15" LT
BK = N 31°01'46" W
AH = N 31°46'01" W

CURVE WT2
PC = 72+12.81 WT
X = 91703.498
Y = 581613.083
PI = 73+45.62 WT
X = 91633.579
Y = 581725.996
PT = 74+77.26 WT
X = 91539.763
Y = 581820.001
R = 1150.00'
Delta = 13°10'31" LT
D = 4°58'56"
L = 264.45'
T = 132.81'
BK = N 31°46'01" W
AH = N 44°56'32" W

CURVE WT3
PC = 80+87.48 WT
X = 91108.703
Y = 582251.930
PI = 82+43.99 WT
X = 90998.151
Y = 582362.705
PT = 83+98.87 WT
X = 90863.701
Y = 582442.806
R = 1250.00'
Delta = 14°16'22" LT
D = 4°35'01"
L = 311.38'
T = 156.50'
BK = N 44°56'32" W
AH = N 59°12'54" W

STA 110+00.00 MIL
X=91812.851
Y=580245.466

STA 116+67.52 MIL =
STA 61+84.92 WT
X=92254.341
Y=580746.116

STA 125+08.41 MIL =
STA 61+35.63 HB
X=92866.755
Y=581321.361

STA 128+30.91 MIL
X=93114.236
Y=581528.140

STA 70+11.90 HB
X=92203.812
Y=581797.525

MIL LINE

CURVE MIL1
PC = 115+11.10 MIL
X = 92149.699
Y = 580629.853
PI = 119+69.80 MIL
X = 92452.018
Y = 580974.835
PT = 124+26.66 MIL
X = 92804.023
Y = 581268.947
R = 5900.00'
Delta = 8°53'28" RT
D = 0°58'16"
L = 915.57'
T = 458.70'
BK = N 41°13'44" E
AH = N 50°07'13" E

HB LINE

CURVE HB1
PC = 61+35.63 HB
X = 92866.755
Y = 581321.361
PI = 62+42.35 HB
X = 92787.249
Y = 581392.559
PRC = 63+44.85 HB
X = 92683.679
Y = 581418.318
R = 430.00'
Delta = 27°52'41" LT
D = 13°19'29"
L = 209.22'
T = 106.73'
BK = N 48°09'20" W
AH = N 76°02'01" W

CURVE HB2
PRC = 63+44.85 HB
X = 92683.679
Y = 581418.318
PI = 64+08.74 HB
X = 92621.676
Y = 581433.738
PT = 64+72.46 HB
X = 92562.141
Y = 581456.923
R = 1000.00'
Delta = 7°18'41" RT
D = 5°43'46"
L = 127.61'
T = 63.89'
BK = N 76°02'01" W
AH = N 68°43'20" W

CURVE HB3
PC = 65+04.77 HB
X = 92532.033
Y = 581468.649
PI = 66+46.79 HB
X = 92399.691
Y = 581520.188
PCC = 67+87.25 HB
X = 92284.780
Y = 581603.650
R = 1100.00'
Delta = 14°42'50" RT
D = 5°12'31"
L = 282.48'
T = 142.02'
BK = N 68°43'20" W
AH = N 54°00'30" W

CURVE HB4
PCC = 67+87.25 HB
X = 92284.780
Y = 581603.650
PI = 68+09.55 HB
X = 92266.742
Y = 581616.751
PCC = 68+31.84 HB
X = 92248.961
Y = 581630.197
R = 2310.00'
Delta = 1°06'21" RT
D = 2°28'49"
L = 44.58'
T = 22.29'
BK = N 54°00'30" W
AH = N 52°54'09" W

CURVE HB5
PCC = 68+31.84 HB
X = 92248.961
Y = 581630.197
PI = 68+77.89 HB
X = 92212.234
Y = 581657.971
PT = 69+18.14 HB
X = 92209.460
Y = 581703.935
R = 100.00'
Delta = 49°26'57" RT
D = 57°17'45"
L = 86.30'
T = 46.05'
BK = N 52°54'09" W
AH = N 3°27'12" W

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - MIL, WT, & HB	SCALE, FEET 0 100 200	SHEET 440	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027210_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:200

WT LINE

CURVE WT4
PC = 86+72.44 WT
X = 90628.674
Y = 582582.826
PI = 89+70.14 WT
X = 90372.922
Y = 582735.194
PT = 92+51.60 WT
X = 90239.986
Y = 583001.564
R = 1015.00'
Delta = 32°41'34" RT
D = 5°38'42"
L = 579.16'
T = 297.70'
BK = N 59°12'54" W
AH = N 26°31'20" W

PI = 94+11.51 WT
Y = 583144.642
X = 90168.580
Delta = 00°06'43" LT
BK = N 26°31'20" W
AH = N 26°38'03" W

CURVE WT5
PC = 99+03.71 WT
X = 89947.929
Y = 583584.618
PI = 100+55.69 WT
X = 89879.796
Y = 583720.473
PT = 102+05.37 WT
X = 89774.378
Y = 583829.951
R = 1000.00'
Delta = 17°17'01" LT
D = 5°43'46"
L = 301.66'
T = 151.98'
BK = N 26°38'03" W
AH = N 43°55'04" W

CURVE WT6
PC = 109+51.38 WT
X = 89256.928
Y = 584367.328
PI = 110+83.37 WT
X = 89165.375
Y = 584462.407
PT = 112+03.82 WT
X = 89159.404
Y = 584594.264
R = 350.00'
Delta = 41°19'30" RT
D = 16°22'13"
L = 252.44'
T = 131.99'
BK = N 43°55'04" W
AH = N 2°35'34" W

CURVE WT7
PC = 112+25.46 WT
X = 89158.425
Y = 584615.891
PI = 112+60.19 WT
X = 89156.855
Y = 584650.576
PT = 112+92.30 WT
X = 89177.117
Y = 584678.771
R = 100.00'
Delta = 38°17'42" RT
D = 57°17'45"
L = 66.84'
T = 34.72'
BK = N 2°35'34" W
AH = N 35°42'08" E

Superelevation Data for Curve PI at 100+55.69 WT			
Station	LEFT	Description	RIGHT
97+97.12	-2.00%	Normal Crown	-2.00%
98+38.37	-2.00%	Remove Crown	Flat
98+79.62	-2.00%	Reverse Crown	2.00%
99+37.37	-4.80%	Full Super	4.80%
101+71.71	-4.80%	Full Super	4.80%
102+29.46	-2.00%	Reverse Crown	2.00%
102+70.71	-2.00%	Remove Crown	Flat
103+11.96	-2.00%	Normal Crown	-2.00%

MR3 LINE

CURVE MR3-1
PC = 34+43.87 MR3
X = 89090.530
Y = 583900.214
PI = 34+56.24 MR3
X = 89081.618
Y = 583891.632
PRC = 34+68.48 MR3
X = 89070.884
Y = 583885.482
R = 100.00'
Delta = 14°06'18" RT
D = 57°17'45"
L = 24.62'
T = 12.37'
BK = S 46°04'56" W
AH = S 60°11'14" W

CURVE MR3-2
PRC = 34+68.48 MR3
X = 89070.884
Y = 583885.482
PI = 36+60.37 MR3
X = 88904.390
Y = 583790.080
PT = 38+50.00 MR3
X = 88768.811
Y = 583654.285
R = 1435.00'
Delta = 15°13'59" LT
D = 3°59'34"
L = 381.52'
T = 191.89'
BK = S 60°11'14" W
AH = S 44°57'15" W

MR2 LINE

CURVE MR2-1
PC = 98+50.00 MR2
X = 90351.674
Y = 583901.665
PI = 100+19.45 MR2
X = 90197.143
Y = 583971.178
PCC = 101+87.21 MR2
X = 90030.401
Y = 584001.328
R = 1383.00'
Delta = 13°58'13" LT
D = 4°08'34"
L = 337.21'
T = 169.45'
BK = N 65°46'49" W
AH = N 79°45'02" W

CURVE MR2-2
PCC = 101+87.21 MR2
X = 90030.401
Y = 584001.328
PI = 102+37.69 MR2
X = 89980.723
Y = 584010.311
PT = 102+80.71 MR2
X = 89943.996
Y = 583975.673
R = 100.00'
Delta = 53°34'23" LT
D = 57°17'45"
L = 93.50'
T = 50.48'
BK = N 79°45'02" W
AH = S 46°40'35" W

STA 10+00.00 RR
X=89353.949
Y=583008.499

STA 22+12.12 RR
X=88512.810
Y=583881.263

STA 38+07.73 MR3
X=88768.811
Y=583654.285

STA 101+95.00 WT =
STA 105+04.04 MR2
X=89781.530
Y=583822.446

STA 107+30.31 WT =
STA 30+00.00 MR3
X=89410.262
Y=584208.090

STA 114+39.89 WT
X=89263.243
Y=584798.619

WISCONSIN CENTRAL LTD. RR
N43°56'34"W
WIETOR DR
MATCH LINE 86+00 WT
SHARED USE PATH BP2
DUCK CREEK
EXISTING NB IH 43 TO SB USH 41
EXISTING NB USH 41 TO SB IH 43
NB USH 41 TO SB IH 43
NB IH 43 TO SB USH 41
SB USH 41 TO SB IH 43
SB USH 41 TO VELP
NB USH 41
SB USH 41

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - WT, MR2, MR3, & RR	SCALE, FEET 0 100 200	SHEET 441	E

OB1 LINE

CURVE OB1-1
PC = 1206+06.17 OB1
X = 89506.721
Y = 584225.274
PI= 1208+37.84 OB1
X = 89345.969
Y = 584392.090
PCC = 1210+53.40 OB1
X = 89317.457
Y = 584621.994
R = 695.00'
Delta = 36°52'11" RT
D = 8°14'38"
L = 447.23'
T = 231.67'
BK = N 43°56'22" W
AH = N 7°04'11" W

CURVE OB1-2
PCC = 1210+53.40 OB1
X = 89317.457
Y = 584621.994
PI= 1212+38.68 OB1
X = 89294.653
Y = 584805.866
PCC = 1213+85.36 OB1
X = 89448.851
Y = 584908.589
R = 300.00'
Delta = 63°23'57" RT
D = 19°05'55"
L = 331.96'
T = 185.28'
BK = N 7°04'11" W
AH = N 56°19'46" E

CURVE OB1-3
PCC = 1213+85.36 OB1
X = 89448.851
Y = 584908.589
PI= 1222+11.97 OB1
X = 90136.787
Y = 585366.873
PT = 1220+91.46 OB1
X = 89877.473
Y = 584581.993
R = 285.00'
Delta = 141°57'12" RT
D = 20°06'14"
L = 706.10'
T = 826.61'
BK = N 56°19'46" E
AH = S 18°16'58" W

OB2 LINE

CURVE OB2-1
PC = 1180+74.78 OB2
X = 89846.888
Y = 584311.572
PI= 1181+21.18 OB2
X = 89883.840
Y = 584339.640
PCC = 1181+67.47 OB2
X = 89923.913
Y = 584363.035
R = 765.00'
Delta = 6°56'32" RT
D = 7°29'23"
L = 92.69'
T = 46.40'
BK = N 52°46'51" E
AH = N 59°43'23" E

CURVE OB2-2
PCC = 1181+67.47 OB2
X = 89923.913
Y = 584363.035
PI= 1182+30.31 OB2
X = 89978.182
Y = 584394.718
PCC = 1182+92.49 OB2
X = 90038.604
Y = 584411.987
R = 500.00'
Delta = 14°19'37" RT
D = 11°27'33"
L = 125.03'
T = 62.84'
BK = N 59°43'23" E
AH = N 74°03'00" E

CURVE OB2-3
PCC = 1182+92.49 OB2
X = 90038.604
Y = 584411.987
PI= 1187+17.58 OB2
X = 90447.330
Y = 584528.801
PT = 1188+12.08 OB2
X = 90350.768
Y = 584114.822
R = 250.00'
Delta = 119°04'47" RT
D = 22°55'06"
L = 519.58'
T = 425.09'
BK = N 74°03'00" E
AH = S 13°07'47" W

CURVE OB2-4
PC = 1192+19.27 OB2
X = 90258.272
Y = 583718.273
PI= 1199+20.35 OB2
X = 90099.016
Y = 583035.518
PT = 1204+27.22 OB2
X = 90704.473
Y = 582682.051
R = 950.00'
Delta = 72°51'12" LT
D = 6°01'52"
L = 1207.95'
T = 701.08'
BK = S 13°07'47" W
AH = S 59°43'25" E

CURVE OB2-5
PC = 1206+79.00 OB2
X = 90921.912
Y = 582555.110
PI= 1208+41.78 OB2
X = 91062.489
Y = 582473.041
PT = 1210+02.74 OB2
X = 91177.360
Y = 582357.707
R = 1250.00'
Delta = 14°50'21" RT
D = 4°35'01"
L = 323.74'
T = 162.78'
BK = S 59°43'25" E
AH = S 44°53'04" E

STA 1177+80.69 OB2
X=89635.830
Y=584106.774

STA 1190+38.07 OB1
X=90594.821
Y=583096.125

STA 1210+02.74 OB2
X=91177.360
Y=582357.707

STA 1220+91.46 OB1
X=89877.473
Y=584581.993

WISCONSIN CENTRAL LTD. RR
WIETOR DR
EXISTING NB IH 43 TO SB USH 41
EXISTING NB USH 41 TO SB IH 43
NB IH 43 TO NB USH 41
SB USH 41 TO SB IH 43
NB USH 41 TO SB IH 43
SB USH 41 TO VELP
SHARED USE PATH BP2
CURVE OB1-1
CURVE OB1-2
CURVE OB1-3
CURVE OB2-1
CURVE OB2-2
CURVE OB2-3
CURVE OB2-4

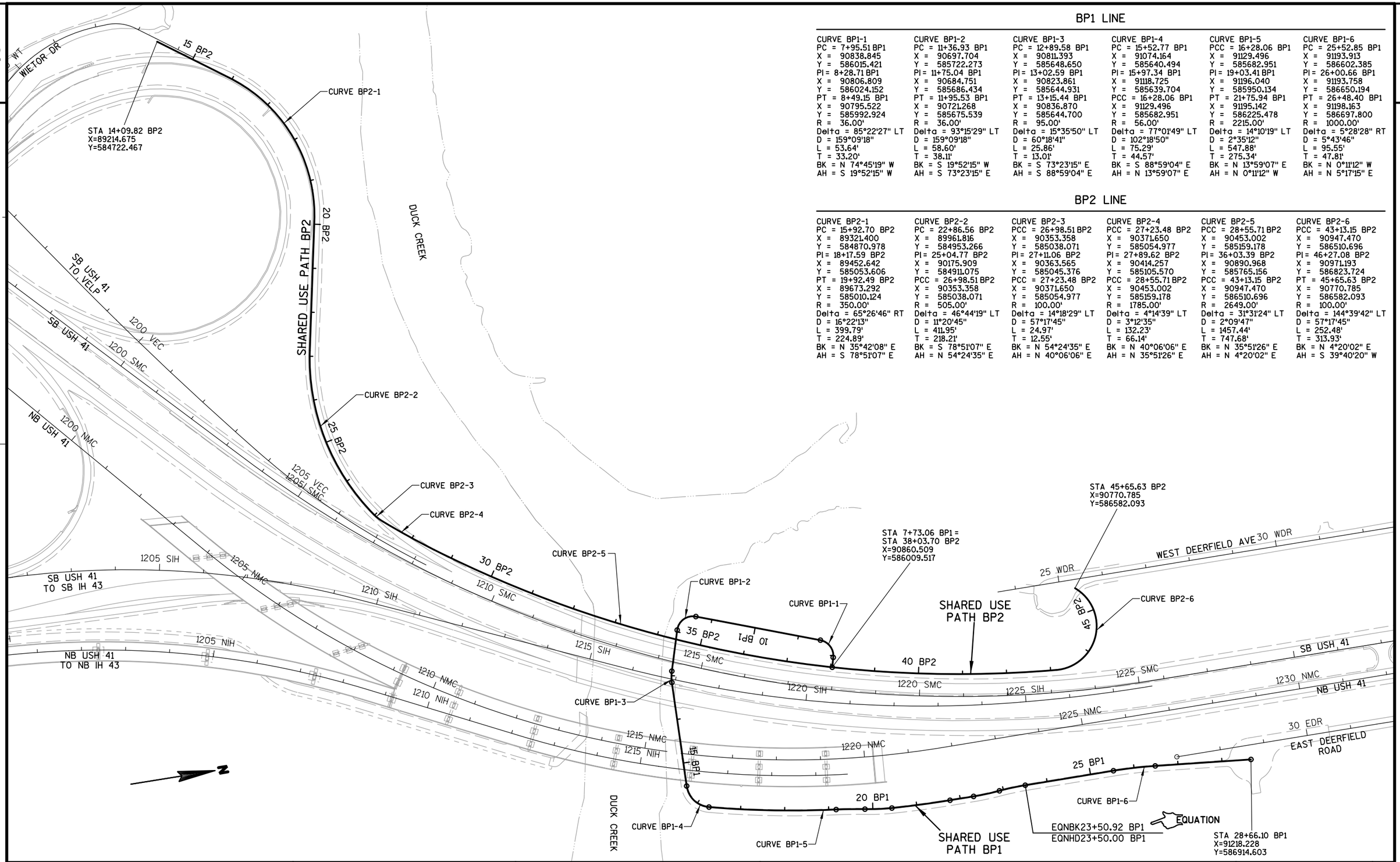
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - OB1 & OB2	SCALE, FEET 0 100 200	SHEET 442	E

BP1 LINE

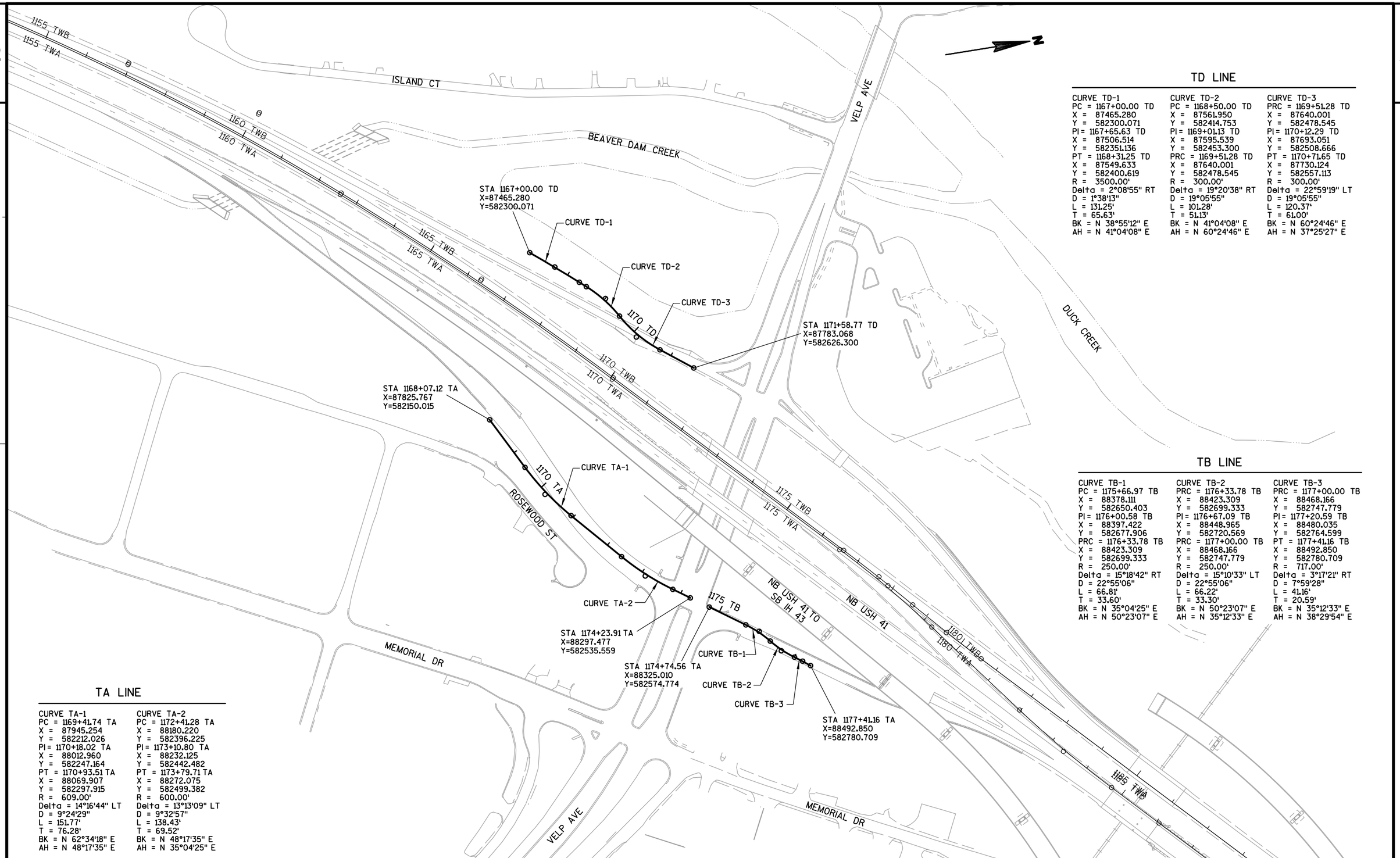
CURVE BP1-1	CURVE BP1-2	CURVE BP1-3	CURVE BP1-4	CURVE BP1-5	CURVE BP1-6
PC = 7+95.51 BP1	PC = 11+36.93 BP1	PC = 12+89.58 BP1	PC = 15+52.77 BP1	PCC = 16+28.06 BP1	PC = 25+52.85 BP1
X = 90838.845	X = 90697.704	X = 90811.393	X = 91074.164	X = 91129.496	X = 91193.913
Y = 586015.421	Y = 585722.273	Y = 585648.650	Y = 585640.494	Y = 585682.951	Y = 586602.385
PI = 8+28.71 BP1	PI = 11+75.04 BP1	PI = 13+02.59 BP1	PI = 15+97.34 BP1	PI = 19+03.41 BP1	PI = 26+00.66 BP1
X = 90806.809	X = 90684.751	X = 90823.861	X = 91118.725	X = 91196.040	X = 91193.758
Y = 586024.152	Y = 585686.434	Y = 585644.931	Y = 585639.704	Y = 585950.134	Y = 586650.194
PT = 8+49.15 BP1	PT = 11+95.53 BP1	PT = 13+15.44 BP1	PCC = 16+28.06 BP1	PT = 21+75.94 BP1	PT = 26+48.40 BP1
X = 90795.522	X = 90721.268	X = 90836.870	X = 91129.496	X = 91195.142	X = 91198.163
Y = 585992.924	Y = 585675.539	Y = 585644.700	Y = 585682.951	Y = 586225.478	Y = 586697.800
R = 36.00'	R = 36.00'	R = 95.00'	R = 56.00'	R = 2215.00'	R = 1000.00'
Delta = 85°22'27" LT	Delta = 93°15'29" LT	Delta = 15°35'50" LT	Delta = 77°01'49" LT	Delta = 14°10'19" LT	Delta = 5°28'28" RT
D = 159°09'18"	D = 159°09'18"	D = 60°18'41"	D = 102°18'50"	D = 2°35'12"	D = 5°43'46"
L = 53.64'	L = 58.60'	L = 25.86'	L = 75.29'	L = 547.88'	L = 95.55'
T = 33.20'	T = 38.11'	T = 13.01'	T = 44.57'	T = 275.34'	T = 47.81'
BK = N 74°45'19" W	BK = S 19°52'15" W	BK = S 73°23'15" E	BK = S 88°59'04" E	BK = N 13°59'07" E	BK = N 0°11'12" W
AH = S 19°52'15" W	AH = S 73°23'15" E	AH = S 88°59'04" E	AH = N 13°59'07" E	AH = N 0°11'12" W	AH = N 5°17'15" E

BP2 LINE

CURVE BP2-1	CURVE BP2-2	CURVE BP2-3	CURVE BP2-4	CURVE BP2-5	CURVE BP2-6
PC = 15+92.70 BP2	PC = 22+86.56 BP2	PCC = 26+98.51 BP2	PCC = 27+23.48 BP2	PCC = 28+55.71 BP2	PCC = 43+13.15 BP2
X = 89321.400	X = 89961.816	X = 90353.358	X = 90371.650	X = 90453.002	X = 90947.470
Y = 584870.978	Y = 584953.266	Y = 585038.071	Y = 585054.977	Y = 585159.178	Y = 586510.696
PI = 18+17.59 BP2	PI = 25+04.77 BP2	PI = 27+11.06 BP2	PI = 27+89.62 BP2	PI = 36+03.39 BP2	PI = 46+27.08 BP2
X = 89452.642	X = 90175.909	X = 90363.565	X = 90414.257	X = 90890.968	X = 90971.193
Y = 585053.606	Y = 584911.075	Y = 585045.376	Y = 585105.570	Y = 585765.156	Y = 586823.724
PT = 19+92.49 BP2	PCC = 26+98.51 BP2	PCC = 27+23.48 BP2	PCC = 28+55.71 BP2	PCC = 43+13.15 BP2	PT = 45+65.63 BP2
X = 89673.292	X = 90353.358	X = 90371.650	X = 90453.002	X = 90947.470	X = 90770.785
Y = 585010.124	Y = 585038.071	Y = 585054.977	Y = 585159.178	Y = 586510.696	Y = 586582.093
R = 350.00'	R = 505.00'	R = 100.00'	R = 1785.00'	R = 2649.00'	R = 100.00'
Delta = 65°26'46" RT	Delta = 46°44'19" LT	Delta = 14°18'29" LT	Delta = 4°14'39" LT	Delta = 31°31'24" LT	Delta = 144°39'42" LT
D = 16°22'13"	D = 11°20'45"	D = 57°17'45"	D = 3°12'35"	D = 2°09'47"	D = 57°17'45"
L = 399.79'	L = 411.95'	L = 24.97'	L = 132.23'	L = 1457.44'	L = 252.48'
T = 224.89'	T = 218.21'	T = 12.55'	T = 66.14'	T = 747.68'	T = 313.93'
BK = N 35°42'08" E	BK = S 78°51'07" E	BK = N 54°24'35" E	BK = N 40°06'06" E	BK = N 35°51'26" E	BK = N 4°20'02" E
AH = S 78°51'07" E	AH = N 54°24'35" E	AH = N 40°06'06" E	AH = N 35°51'26" E	AH = N 4°20'02" E	AH = S 39°40'20" W



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	ALIGNMENT DIAGRAM - BP1 & BP2	SCALE, FEET 0 100 200	SHEET 443	E



TD LINE

CURVE TD-1	CURVE TD-2	CURVE TD-3
PC = 1167+00.00 TD	PC = 1168+50.00 TD	PRC = 1169+51.28 TD
X = 87465.280	X = 87561.950	X = 87640.001
Y = 582300.071	Y = 582414.753	Y = 582478.545
PI= 1167+65.63 TD	PI= 1169+01.13 TD	PI= 1170+12.29 TD
X = 87506.514	X = 87595.539	X = 87693.051
Y = 582351.136	Y = 582453.300	Y = 582508.666
PT = 1168+31.25 TD	PRC = 1169+51.28 TD	PT = 1170+71.65 TD
X = 87549.633	X = 87640.001	X = 87730.124
Y = 582400.619	Y = 582478.545	Y = 582557.113
R = 3500.00'	R = 300.00'	R = 300.00'
Delta = 2°08'55" RT	Delta = 19°20'38" RT	Delta = 22°59'19" LT
D = 1°38'13"	D = 19°05'55"	D = 19°05'55"
L = 131.25'	L = 101.28'	L = 120.37'
T = 65.63'	T = 51.13'	T = 61.00'
BK = N 38°55'12" E	BK = N 41°04'08" E	BK = N 60°24'46" E
AH = N 41°04'08" E	AH = N 60°24'46" E	AH = N 37°25'27" E

TB LINE

CURVE TB-1	CURVE TB-2	CURVE TB-3
PC = 1175+66.97 TB	PRC = 1176+33.78 TB	PRC = 1177+00.00 TB
X = 88378.111	X = 88423.309	X = 88468.166
Y = 582650.403	Y = 582699.333	Y = 582747.779
PI= 1176+00.58 TB	PI= 1176+67.09 TB	PI= 1177+20.59 TB
X = 88397.422	X = 88448.965	X = 88480.035
Y = 582677.906	Y = 582720.569	Y = 582764.599
PRC = 1176+33.78 TB	PRC = 1177+00.00 TB	PT = 1177+41.16 TB
X = 88423.309	X = 88468.166	X = 88492.850
Y = 582699.333	Y = 582747.779	Y = 582780.709
R = 250.00'	R = 250.00'	R = 717.00'
Delta = 15°18'42" RT	Delta = 15°10'33" LT	Delta = 3°17'21" RT
D = 22°55'06"	D = 22°55'06"	D = 7°59'28"
L = 66.81'	L = 66.22'	L = 41.16'
T = 33.60'	T = 33.30'	T = 20.59'
BK = N 35°04'25" E	BK = N 50°23'07" E	BK = N 35°12'33" E
AH = N 50°23'07" E	AH = N 35°12'33" E	AH = N 38°29'54" E

TA LINE

CURVE TA-1	CURVE TA-2
PC = 1169+41.74 TA	PC = 1172+41.28 TA
X = 87945.254	X = 88180.220
Y = 582212.026	Y = 582396.225
PI= 1170+18.02 TA	PI= 1173+10.80 TA
X = 88012.960	X = 88232.125
Y = 582247.164	Y = 582442.482
PT = 1170+93.51 TA	PT = 1173+79.71 TA
X = 88069.907	X = 88272.075
Y = 582297.915	Y = 582499.382
R = 609.00'	R = 600.00'
Delta = 14°16'44" LT	Delta = 13°13'09" LT
D = 9°24'29"	D = 9°32'57"
L = 151.77'	L = 138.43'
T = 76.28'	T = 69.52'
BK = N 62°34'18" E	BK = N 48°17'35" E
AH = N 48°17'35" E	AH = N 35°04'25" E

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TA, TB. & TD	SCALE, FEET 0 100 200	SHEET 444	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027214_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:200

TWA LINE

CURVE TWA-1
PC = 1142+80.71 TWA
X = 86182.107
Y = 580247.168
PI = 1144+16.09 TWA
X = 86253.455
Y = 580362.222
PRC = 1145+51.36 TWA
X = 86316.859
Y = 580481.836
R = 4000.00'
Delta = 3°52'37" LT
D = 1°25'57"
L = 270.66'
T = 135.38'
BK = N 31°48'14" E
AH = N 27°55'37" E

CURVE TWA-2
PRC = 1145+51.36 TWA
X = 86316.859
Y = 580481.836
PI = 1147+24.13 TWA
X = 86397.774
Y = 580634.484
PRC = 1148+96.68 TWA
X = 86491.550
Y = 580779.586
R = 4000.00'
Delta = 4°56'47" RT
D = 1°25'57"
L = 345.32'
T = 172.77'
BK = N 27°55'37" E
AH = N 32°52'24" E

CURVE TWA-3
PRC = 1148+96.68 TWA
X = 86491.550
Y = 580779.586
PI = 1149+93.16 TWA
X = 86543.914
Y = 580860.611
PCC = 1150+89.59 TWA
X = 86592.311
Y = 580944.067
R = 4000.00'
Delta = 2°45'48" LT
D = 1°25'57"
L = 192.91'
T = 96.47'
BK = N 32°52'24" E
AH = N 30°06'37" E

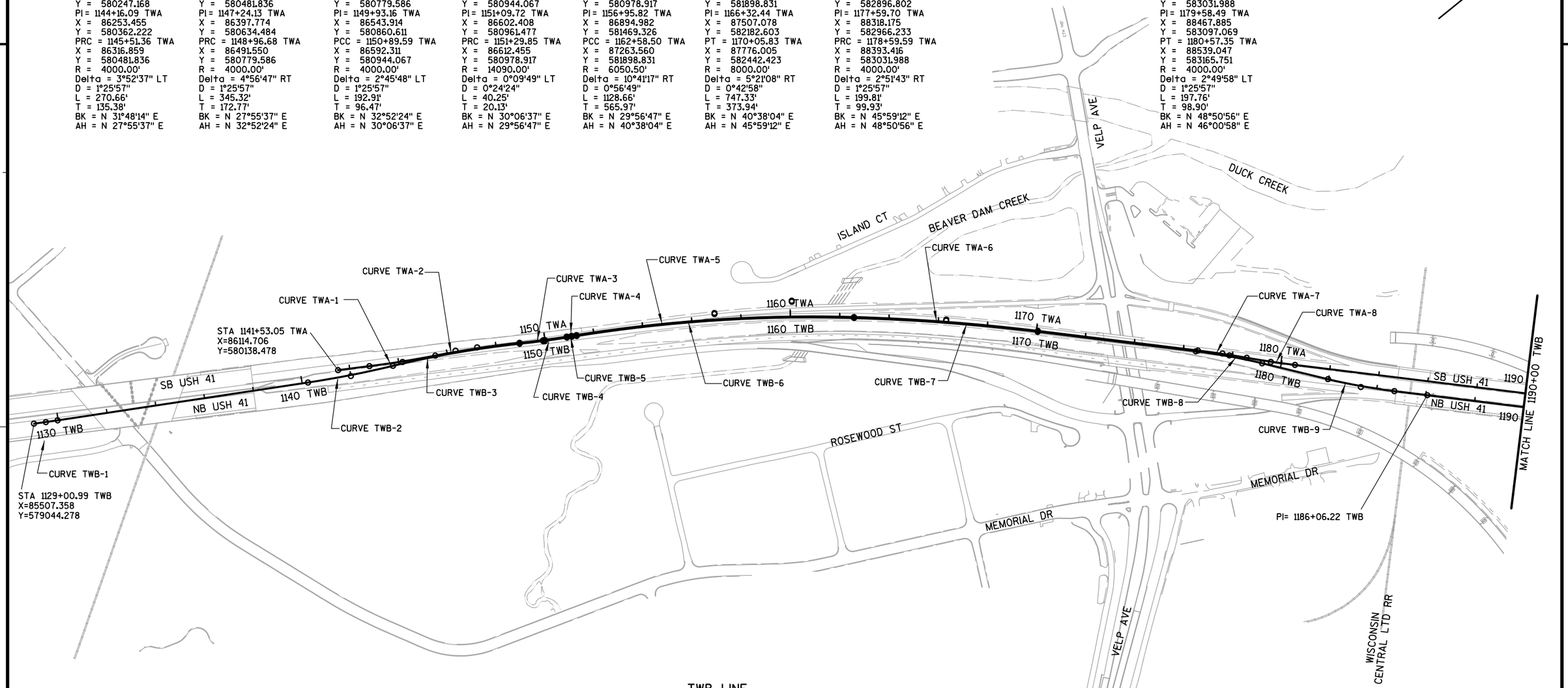
CURVE TWA-4
PCC = 1150+89.59 TWA
X = 86592.311
Y = 580944.067
PI = 1151+09.72 TWA
X = 86602.408
Y = 580961.477
PRC = 1151+29.85 TWA
X = 86612.455
Y = 580978.917
R = 14090.00'
Delta = 0°09'49" LT
D = 0°24'24"
L = 40.25'
T = 20.13'
BK = N 30°06'37" E
AH = N 29°56'47" E

CURVE TWA-5
PRC = 1151+29.85 TWA
X = 86612.455
Y = 580978.917
PI = 1156+95.82 TWA
X = 86894.982
Y = 581469.326
PCC = 1162+58.50 TWA
X = 87263.560
Y = 581898.831
R = 6050.50'
Delta = 10°41'17" RT
D = 0°56'49"
L = 1128.66'
T = 565.97'
BK = N 29°56'47" E
AH = N 40°38'04" E

CURVE TWA-6
PCC = 1162+58.50 TWA
X = 87263.560
Y = 581898.831
PI = 1166+32.44 TWA
X = 87507.078
Y = 582182.603
PT = 1170+05.83 TWA
X = 87776.005
Y = 582442.423
R = 8000.00'
Delta = 5°21'08" RT
D = 0°42'58"
L = 747.33'
T = 373.94'
BK = N 40°38'04" E
AH = N 45°59'12" E

CURVE TWA-7
PC = 1176+59.78 TWA
X = 88246.310
Y = 582896.802
PI = 1177+59.70 TWA
X = 88318.175
Y = 582966.233
PRC = 1178+59.59 TWA
X = 88393.416
Y = 583031.988
R = 4000.00'
Delta = 2°51'43" RT
D = 1°25'57"
L = 199.81'
T = 99.93'
BK = N 45°59'12" E
AH = N 48°50'56" E

CURVE TWA-8
PRC = 1178+59.59 TWA
X = 88393.416
Y = 583031.988
PI = 1179+58.49 TWA
X = 88467.885
Y = 583097.069
PT = 1180+57.35 TWA
X = 88539.047
Y = 583165.751
R = 4000.00'
Delta = 2°49'58" LT
D = 1°25'57"
L = 197.76'
T = 98.90'
BK = N 48°50'56" E
AH = N 46°00'58" E



TWB LINE

CURVE TWB-1
PC = 1129+00.99 TWB
X = 85507.358
Y = 579044.278
PI = 1129+49.36 TWB
X = 85532.852
Y = 579085.389
PT = 1129+97.73 TWB
X = 85557.343
Y = 579127.103
R = 4000.00'
Delta = 1°23'09" LT
D = 1°25'57"
L = 96.74'
T = 48.37'
BK = N 31°48'14" E
AH = N 30°25'06" E

CURVE TWB-2
PC = 1140+24.14 TWB
X = 86077.023
Y = 580012.230
PI = 1141+99.63 TWB
X = 86165.875
Y = 580163.564
PRC = 1143+74.89 TWB
X = 86241.132
Y = 580322.098
R = 4000.00'
Delta = 5°01'27" LT
D = 1°25'57"
L = 350.75'
T = 175.49'
BK = N 30°25'06" E
AH = N 25°23'39" E

CURVE TWB-3
PRC = 1143+74.89 TWB
X = 86241.132
Y = 580322.098
PI = 1146+36.08 TWB
X = 86353.140
Y = 580558.050
PRC = 1148+96.53 TWB
X = 86494.909
Y = 580777.414
R = 3996.00'
Delta = 7°28'46" RT
D = 1°26'02"
L = 521.63'
T = 261.19'
BK = N 25°23'39" E
AH = N 32°52'24" E

CURVE TWB-4
PRC = 1148+96.53 TWB
X = 86494.909
Y = 580777.414
PI = 1149+93.09 TWB
X = 86547.323
Y = 580858.517
PCC = 1150+89.62 TWB
X = 86595.767
Y = 580942.053
R = 4004.00'
Delta = 2°45'47" LT
D = 1°25'51"
L = 193.09'
T = 96.57'
BK = N 32°52'24" E
AH = N 30°06'37" E

CURVE TWB-5
PCC = 1150+89.62 TWB
X = 86595.767
Y = 580942.053
PI = 1151+09.76 TWB
X = 86605.869
Y = 580959.472
PRC = 1151+29.89 TWB
X = 86615.920
Y = 580976.919
R = 14086.00'
Delta = 0°09'50" LT
D = 0°24'24"
L = 40.27'
T = 20.14'
BK = N 30°06'37" E
AH = N 29°56'47" E

CURVE TWB-6
PRC = 1151+29.89 TWB
X = 86615.920
Y = 580976.919
PI = 1156+95.49 TWB
X = 86898.261
Y = 581467.005
PCC = 1162+57.80 TWB
X = 87266.595
Y = 581896.226
R = 6046.50'
Delta = 10°41'17" RT
D = 0°56'51"
L = 1127.91'
T = 565.60'
BK = N 29°56'47" E
AH = N 40°38'04" E

CURVE TWB-7
PCC = 1162+57.80 TWB
X = 87266.595
Y = 581896.226
PI = 1166+31.55 TWB
X = 87509.992
Y = 582179.856
PT = 1170+04.76 TWB
X = 87778.784
Y = 582439.546
R = 7996.00'
Delta = 5°21'08" RT
D = 0°43'00"
L = 746.95'
T = 373.75'
BK = N 40°38'04" E
AH = N 45°59'12" E

CURVE TWB-8
PC = 1176+50.43 TWB
X = 88243.141
Y = 582888.178
PI = 1177+87.27 TWB
X = 88341.552
Y = 582983.256
PT = 1179+23.81 TWB
X = 88450.132
Y = 583066.533
R = 2400.00'
Delta = 6°31'35" RT
D = 2°23'14"
L = 273.38'
T = 136.84'
BK = N 45°59'12" E
AH = N 52°30'48" E

CURVE TWB-9
PC = 1181+98.30 TWB
X = 88667.938
Y = 583233.582
PI = 1183+35.16 TWB
X = 88776.535
Y = 583316.871
PT = 1184+71.73 TWB
X = 88874.959
Y = 583411.965
R = 2400.00'
Delta = 6°31'39" LT
D = 2°23'14"
L = 273.42'
T = 136.86'
BK = N 52°30'48" E
AH = N 45°59'09" E

PI= 1186+06.22 TWB
X= 88971.680
Y= 583505.415
Delta= 00°00'42" RT
BK = N 45°59'09" E
AH = N 45°47'37" E

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TWA & TWB	SCALE, FEET 0 200 400	SHEET 445	E

TWA LINE

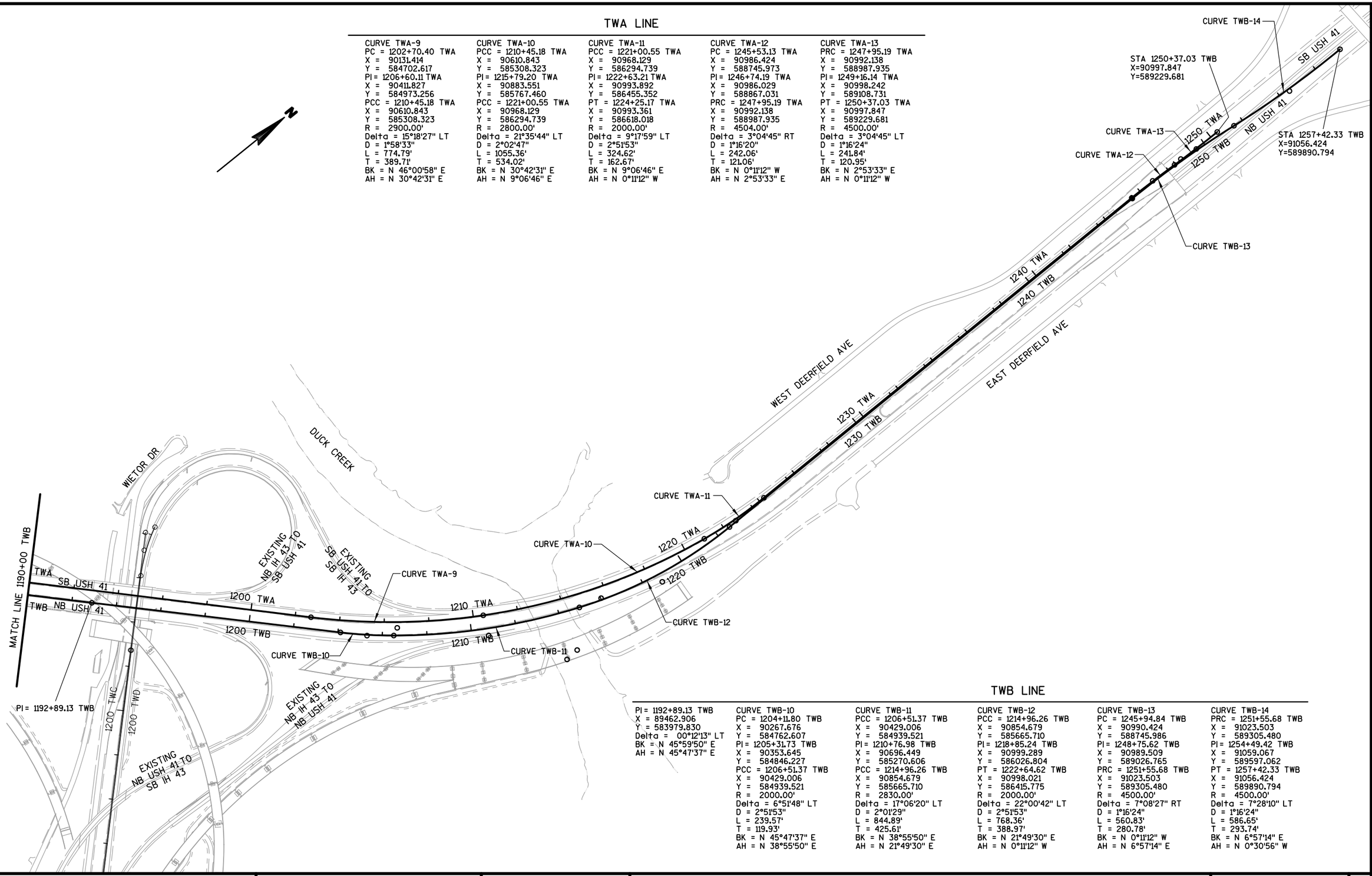
CURVE TWA-9
PC = 1202+70.40 TWA
X = 90131.414
Y = 584702.617
PI = 1206+60.11 TWA
X = 90411.827
Y = 584973.256
PCC = 1210+45.18 TWA
X = 90610.843
Y = 585308.323
R = 2900.00'
Delta = 15°18'27" LT
D = 1°58'33"
L = 774.79'
T = 389.71'
BK = N 46°00'58" E
AH = N 30°42'31" E

CURVE TWA-10
PCC = 1210+45.18 TWA
X = 90610.843
Y = 585308.323
PI = 1215+79.20 TWA
X = 90883.551
Y = 585767.460
PCC = 1221+00.55 TWA
X = 90968.129
Y = 586294.739
R = 2800.00'
Delta = 21°35'44" LT
D = 2°02'47"
L = 1055.36'
T = 534.02'
BK = N 30°42'31" E
AH = N 9°06'46" E

CURVE TWA-11
PCC = 1221+00.55 TWA
X = 90968.129
Y = 586294.739
PI = 1222+63.21 TWA
X = 90993.892
Y = 586455.352
PT = 1224+25.17 TWA
X = 90993.361
Y = 586618.018
R = 2000.00'
Delta = 9°17'59" LT
D = 2°51'53"
L = 324.62'
T = 162.67'
BK = N 9°06'46" E
AH = N 0°11'12" W

CURVE TWA-12
PC = 1245+53.13 TWA
X = 90986.424
Y = 588745.973
PI = 1246+74.19 TWA
X = 90986.029
Y = 588867.031
PRC = 1247+95.19 TWA
X = 90992.138
Y = 588987.935
R = 4504.00'
Delta = 3°04'45" RT
D = 1°16'20"
L = 242.06'
T = 121.06'
BK = N 0°11'12" W
AH = N 2°53'33" E

CURVE TWA-13
PRC = 1247+95.19 TWA
X = 90992.138
Y = 588987.935
PI = 1249+16.14 TWA
X = 90998.242
Y = 589108.731
PT = 1250+37.03 TWA
X = 90997.847
Y = 589229.681
R = 4500.00'
Delta = 3°04'45" LT
D = 1°16'24"
L = 241.84'
T = 120.95'
BK = N 2°53'33" E
AH = N 0°11'12" W



TWB LINE

PI = 1192+89.13 TWB
X = 89462.906
Y = 583979.830
Delta = 00°12'13" LT
BK = N 45°59'50" E
AH = N 45°47'37" E

CURVE TWB-10
PC = 1204+11.80 TWB
X = 90267.676
Y = 584762.607
PI = 1205+31.73 TWB
X = 90353.645
Y = 584846.227
PCC = 1206+51.37 TWB
X = 90429.006
Y = 584939.521
R = 2000.00'
Delta = 6°51'48" LT
D = 2°51'53"
L = 239.57'
T = 119.93'
BK = N 45°47'37" E
AH = N 38°55'50" E

CURVE TWB-11
PCC = 1206+51.37 TWB
X = 90429.006
Y = 584939.521
PI = 1210+76.98 TWB
X = 90696.449
Y = 585270.606
PCC = 1214+96.26 TWB
X = 90854.679
Y = 585665.710
R = 2830.00'
Delta = 17°06'20" LT
D = 2°01'29"
L = 844.89'
T = 425.61'
BK = N 38°55'50" E
AH = N 21°49'30" E

CURVE TWB-12
PCC = 1214+96.26 TWB
X = 90854.679
Y = 585665.710
PI = 1218+85.24 TWB
X = 90999.289
Y = 586026.804
PT = 1222+64.62 TWB
X = 90998.021
Y = 586415.775
R = 2000.00'
Delta = 22°00'42" LT
D = 2°51'53"
L = 768.36'
T = 388.97'
BK = N 21°49'30" E
AH = N 0°11'12" W

CURVE TWB-13
PC = 1245+94.84 TWB
X = 90990.424
Y = 588745.986
PI = 1248+75.62 TWB
X = 90989.509
Y = 589026.765
PRC = 1251+55.68 TWB
X = 91023.503
Y = 589305.480
R = 4500.00'
Delta = 7°08'27" RT
D = 1°16'24"
L = 560.83'
T = 280.78'
BK = N 0°11'12" W
AH = N 6°57'14" E

CURVE TWB-14
PRC = 1251+55.68 TWB
X = 91023.503
Y = 589305.480
PI = 1254+49.42 TWB
X = 91059.067
Y = 589597.062
PT = 1257+42.33 TWB
X = 91056.424
Y = 589890.794
R = 4500.00'
Delta = 7°28'10" LT
D = 1°16'24"
L = 586.65'
T = 293.74'
BK = N 6°57'14" E
AH = N 0°30'56" W

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TWA & TWB SCALE, FEET 0 200 400	SHEET 446	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027216_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:400

TWC LINE

PI= 1124+50.12
Y = 578345.007
X = 95158.775
Delta = 00°55'00" LT
BK = N 43°02'24" W
AH = N 43°57'24" W

CURVE TWC-1
PC = 1135+51.20 TWC
X = 94394.503
Y = 579137.636
PI= 1136+76.26 TWC
X = 94307.691
Y = 579227.669
PRC = 1138+01.11 TWC
X = 94230.707
Y = 579326.238
R = 2400.00'
Delta = 5°57'58" RT
D = 2°23'14"
L = 249.91'
T = 125.07'
BK = N 43°57'24" W
AH = N 37°59'25" W

CURVE TWC-2
PRC = 1138+01.11 TWC
X = 94230.707
Y = 579326.238
PI= 1139+26.18 TWC
X = 94153.723
Y = 579424.807
PT = 1140+51.02 TWC
X = 94066.911
Y = 579514.840
R = 2400.00'
D = 2°23'14"
L = 249.91'
T = 125.07'
BK = N 37°59'25" W
AH = N 43°57'24" W

PI= 1158+51.02 TWC
X = 92817.508
Y = 580810.600
Delta = 00°57'17" LT
BK = N 43°57'24" W
AH = N 44°54'41" W

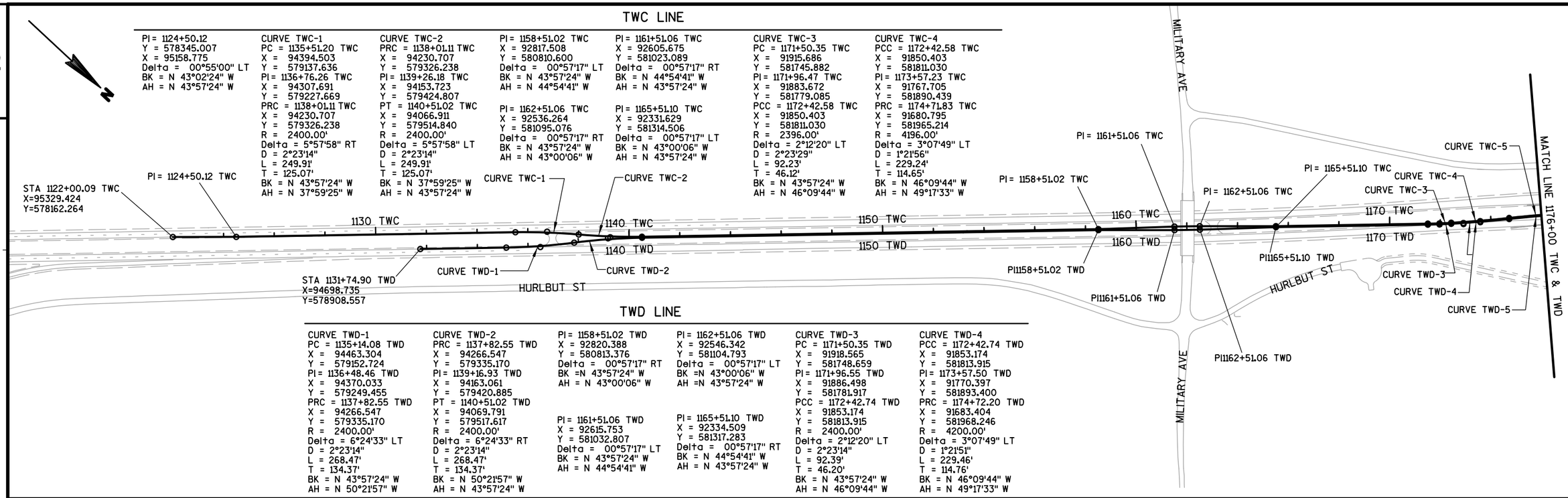
PI= 1162+51.06 TWC
X = 92536.264
Y = 581095.076
Delta = 00°57'17" RT
BK = N 43°57'24" W
AH = N 43°00'06" W

PI= 1161+51.06 TWC
X = 92605.675
Y = 581023.089
Delta = 00°57'17" RT
BK = N 44°54'41" W
AH = N 43°57'24" W

PI= 1165+51.10 TWC
X = 92331.629
Y = 581314.506
Delta = 00°57'17" LT
BK = N 43°00'06" W
AH = N 43°57'24" W

CURVE TWC-3
PC = 1171+50.35 TWC
X = 91915.686
Y = 581745.882
PI= 1171+96.47 TWC
X = 91883.672
Y = 581779.085
PCC = 1172+42.58 TWC
X = 91850.403
Y = 581811.030
R = 2396.00'
Delta = 2°12'20" LT
D = 2°23'29"
L = 92.23'
T = 46.12'
BK = N 43°57'24" W
AH = N 46°09'44" W

CURVE TWC-4
PCC = 1172+42.58 TWC
X = 91850.403
Y = 581811.030
PI= 1173+57.23 TWC
X = 91767.705
Y = 581890.439
PRC = 1174+71.83 TWC
X = 91680.795
Y = 581965.214
R = 4196.00'
Delta = 3°07'49" LT
D = 1°21'56"
L = 229.24'
T = 114.65'
BK = N 46°09'44" W
AH = N 49°17'33" W



TWD LINE

CURVE TWD-1
PC = 1135+14.08 TWD
X = 94463.304
Y = 579152.724
PI= 1136+48.46 TWD
X = 94370.033
Y = 579249.455
PRC = 1137+82.55 TWD
X = 94266.547
Y = 579335.170
R = 2400.00'
Delta = 6°24'33" LT
D = 2°23'14"
L = 268.47'
T = 134.37'
BK = N 43°57'24" W
AH = N 50°21'57" W

CURVE TWD-2
PRC = 1137+82.55 TWD
X = 94266.547
Y = 579335.170
PI= 1139+16.93 TWD
X = 94163.061
Y = 579420.885
PT = 1140+51.02 TWD
X = 94069.791
Y = 579517.617
R = 2400.00'
Delta = 6°24'33" RT
D = 2°23'14"
L = 268.47'
T = 134.37'
BK = N 50°21'57" W
AH = N 43°57'24" W

PI= 1158+51.02 TWD
X = 92820.388
Y = 580813.376
Delta = 00°57'17" RT
BK =N 43°57'24" W
AH = N 43°00'06" W

PI= 1161+51.06 TWD
X = 92615.753
Y = 581032.807
Delta = 00°57'17" LT
BK = N 43°57'24" W
AH = N 44°54'41" W

PI= 1162+51.06 TWD
X = 92546.342
Y = 581104.793
Delta = 00°57'17" LT
BK =N 43°00'06" W
AH =N 43°57'24" W

PI= 1165+51.10 TWD
X = 92334.509
Y = 581317.283
Delta = 00°57'17" RT
BK = N 44°54'41" W
AH = N 43°57'24" W

CURVE TWD-3
PC = 1171+50.35 TWD
X = 91918.565
Y = 581748.659
PI= 1171+96.55 TWD
X = 91886.498
Y = 581781.917
PCC = 1172+42.74 TWD
X = 91853.174
Y = 581813.915
R = 2400.00'
Delta = 2°12'20" LT
D = 2°23'14"
L = 92.39'
T = 46.20'
BK = N 43°57'24" W
AH = N 46°09'44" W

CURVE TWD-4
PCC = 1172+42.74 TWD
X = 91853.174
Y = 581813.915
PI= 1173+57.50 TWD
X = 91770.397
Y = 581893.400
PRC = 1174+72.20 TWD
X = 91683.404
Y = 581968.246
R = 4200.00'
Delta = 3°07'49" LT
D = 1°21'51"
L = 229.46'
T = 114.76'
BK = N 46°09'44" W
AH = N 49°17'33" W

TWC LINE

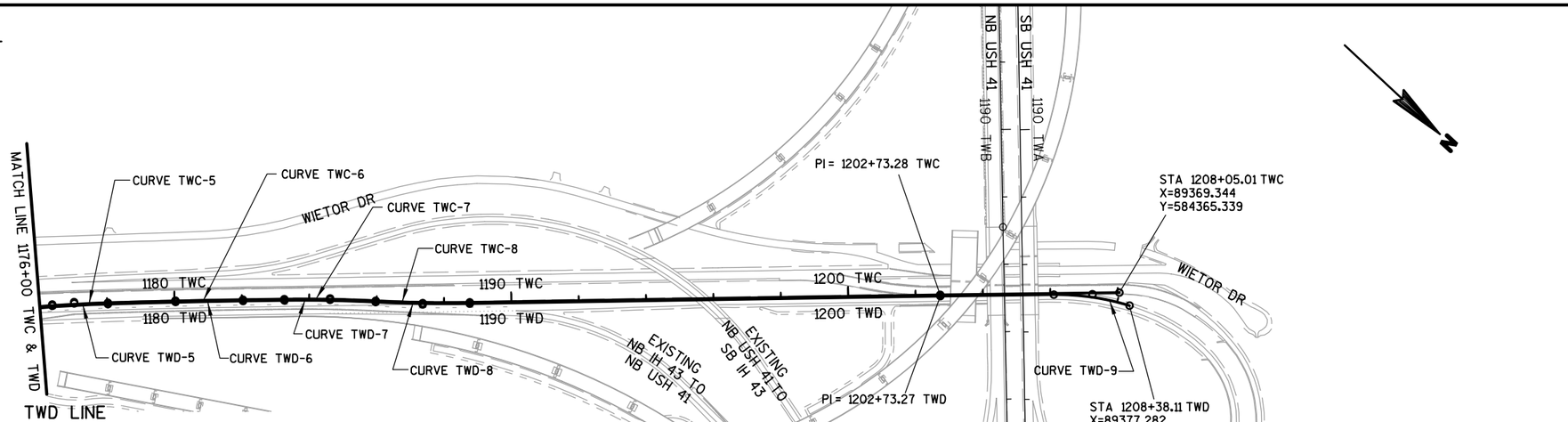
CURVE TWC-5
PRC = 1174+71.83 TWC
X = 91680.795
Y = 581965.214
PI= 1176+37.08 TWC
X = 91555.527
Y = 582072.990
PCC = 1178+02.16 TWC
X = 91439.106
Y = 582190.266
R = 4204.00'
Delta = 4°30'07" RT
D = 1°21'46"
L = 330.33'
T = 165.25'
BK = N 49°17'33" W
AH = N 44°47'26" W

CURVE TWC-6
PCC = 1178+02.16 TWC
X = 91439.106
Y = 582190.266
PI= 1180+02.71 TWC
X = 91297.817
Y = 582332.593
PT = 1182+03.24 TWC
X = 91158.981
Y = 582477.313
R = 23470.86'
Delta = 0°58'45" RT
D = 0°14'39"
L = 401.09'
T = 200.55'
BK = N 44°47'26" W
AH = N 43°48'41" W

CURVE TWC-7
PC = 1183+26.07 TWC
X = 91073.951
Y = 582565.946
PI= 1184+61.77 TWC
X = 90980.007
Y = 582663.871
PRC = 1185+97.38 TWC
X = 90892.573
Y = 582767.651
R = 4204.00'
Delta = 3°41'51" RT
D = 1°21'46"
L = 271.31'
T = 135.70'
BK = N 43°48'41" W
AH = N 40°06'49" W

CURVE TWC-8
PRC = 1185+97.38 TWC
X = 90892.573
Y = 582767.651
PI= 1187+37.05 TWC
X = 90802.580
Y = 582874.470
PT = 1188+76.62 TWC
X = 90705.682
Y = 582975.068
R = 4196.00'
Delta = 3°48'47" LT
D = 1°21'56"
L = 279.25'
T = 139.67'
BK = N 40°06'49" W
AH = N 43°55'36" W

PI= 1202+73.28 TWC
X = 89736.769
Y = 583980.978
Delta = 00°13'02" RT
BK = N 43°55'36" W
AH = N 43°42'34" W



TWD LINE

CURVE TWD-5
PRC = 1174+72.20 TWD
X = 91683.404
Y = 581968.246
PI= 1176+37.29 TWD
X = 91558.255
Y = 582075.920
PCC = 1178+02.22 TWD
X = 91441.945
Y = 582193.084
R = 4200.00'
Delta = 4°30'07" RT
D = 1°21'51"
L = 330.02'
T = 165.09'
BK = N 49°17'33" W
AH = N 44°47'26" W

CURVE TWD-6
PCC = 1178+02.22 TWD
X = 91441.945
Y = 582193.084
PI= 1180+02.73 TWD
X = 91300.680
Y = 582335.386
PT = 1182+03.23 TWD
X = 91161.867
Y = 582480.082
R = 23466.86'
Delta = 0°58'45" RT
D = 0°14'39"
L = 401.02'
T = 200.51'
BK = N 44°47'26" W
AH = N 43°48'41" W

CURVE TWD-7
PC = 1183+26.06 TWD
X = 91076.837
Y = 582568.715
PI= 1184+61.63 TWD
X = 90982.982
Y = 582666.547
PRC = 1185+97.11 TWD
X = 90895.632
Y = 582770.228
R = 4200.00'
Delta = 3°41'51" RT
D = 1°21'51"
L = 271.05'
T = 135.57'
BK = N 43°48'41" W
AH = N 40°06'49" W

CURVE TWD-8
PRC = 1185+97.11 TWD
X = 90895.632
Y = 582770.228
PI= 1187+36.92 TWD
X = 90805.553
Y = 582877.149
PT = 1188+76.62 TWD
X = 90708.563
Y = 582977.842
R = 4200.00'
Delta = 3°48'47" LT
D = 1°21'51"
L = 279.51'
T = 139.81'
BK = N 40°06'49" W
AH = N 43°55'36" W

PI= 1202+73.27 TWD
X = 89739.655
Y = 583983.747
Delta = 00°13'02" RT
BK = N 43°55'36" W
AH = N 43°42'34" W

CURVE TWD-9
PC = 1206+10.30 TWD
X = 89506.766
Y = 584227.371
PI= 1207+25.13 TWD
X = 89427.416
Y = 584310.379
PT = 1208+38.11 TWD
X = 89377.282
Y = 584413.689
R = 732.34'
Delta = 17°49'23" RT
D = 7°49'25"
L = 227.81'
T = 114.83'
BK = N 43°42'34" W
AH = N 25°53'11" W

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TWC & TWD	SCALE, FEET 0 200 400	SHEET 447	E

TWE LINE

CURVE TWE-1
PC = 1133+94.24 TWE
X = 85716.281
Y = 579495.983
PI = 1135+91.19 TWE
X = 85820.078
Y = 579663.365
PT = 1137+87.83 TWE
X = 85939.817
Y = 579819.740
R = 4000.00'
Delta = 5°38'16" RT
D = 1°25'57"
L = 393.59'
T = 196.95'
BK = N 31°48'14" E
AH = N 37°26'30" E

CURVE TWE-2
PC = 1141+19.15 TWE
X = 86141.242
Y = 580082.797
PI = 1143+92.11 TWE
X = 86307.191
Y = 580299.522
PCC = 1146+64.23 TWE
X = 86442.159
Y = 580536.782
R = 4000.00'
Delta = 7°48'28" LT
D = 1°25'57"
L = 545.08'
T = 272.96'
BK = N 37°26'30" E
AH = N 29°38'02" E

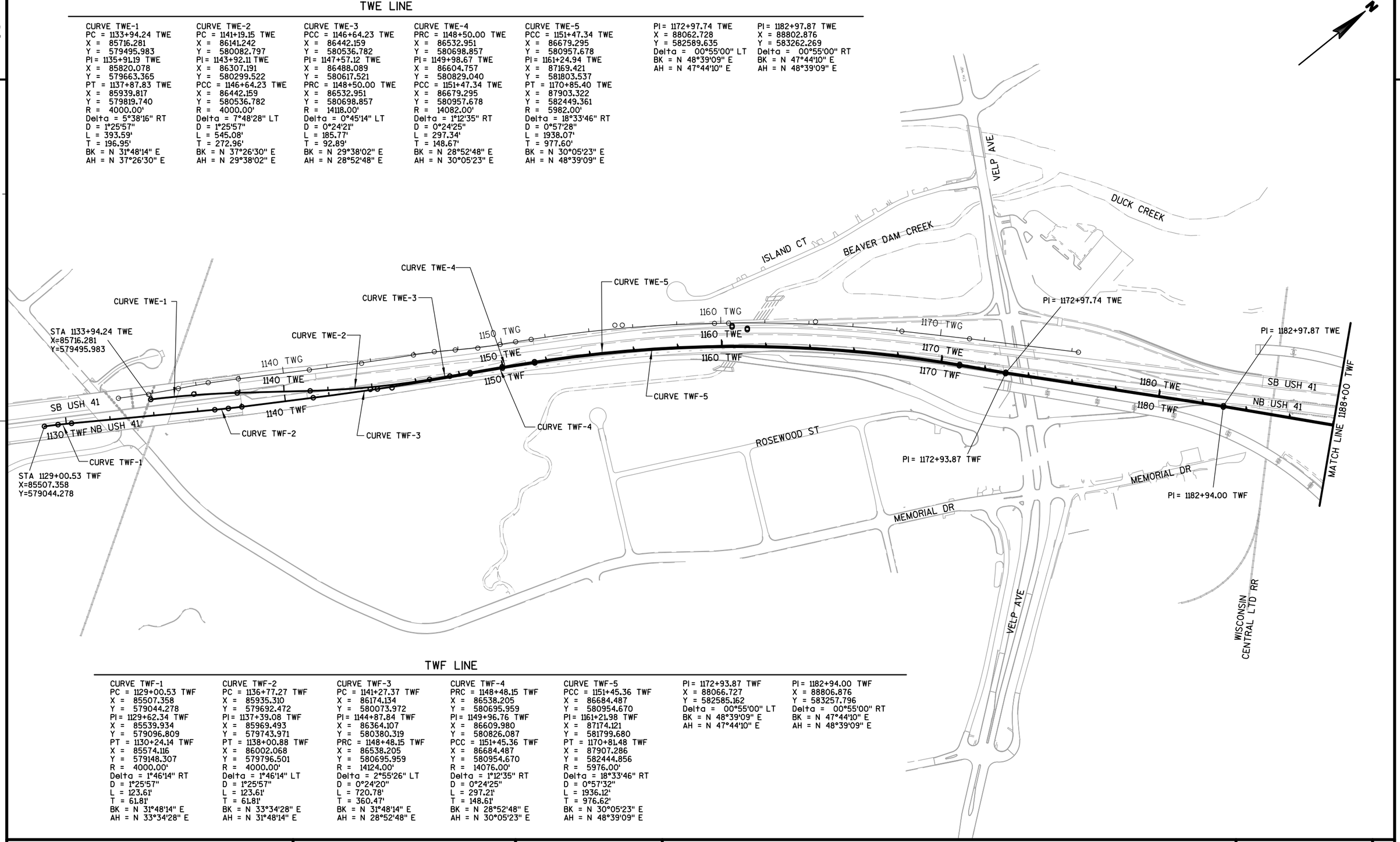
CURVE TWE-3
PCC = 1146+64.23 TWE
X = 86442.159
Y = 580536.782
PI = 1147+57.12 TWE
X = 86488.089
Y = 580617.521
PRC = 1148+50.00 TWE
X = 86532.951
Y = 580698.857
R = 14118.00'
Delta = 0°45'14" LT
D = 0°24'21"
L = 185.77'
T = 92.89'
BK = N 29°38'02" E
AH = N 28°52'48" E

CURVE TWE-4
PRC = 1148+50.00 TWE
X = 86532.951
Y = 580698.857
PI = 1149+98.67 TWE
X = 86604.757
Y = 580829.040
PCC = 1151+47.34 TWE
X = 86679.295
Y = 580957.678
R = 14082.00'
Delta = 1°12'35" RT
D = 0°24'25"
L = 297.34'
T = 148.67'
BK = N 28°52'48" E
AH = N 30°05'23" E

CURVE TWE-5
PCC = 1151+47.34 TWE
X = 86679.295
Y = 580957.678
PI = 1161+24.94 TWE
X = 87169.421
Y = 581803.537
PT = 1170+85.40 TWE
X = 87903.322
Y = 582449.361
R = 5982.00'
Delta = 18°33'46" RT
D = 0°57'28"
L = 1938.07'
T = 977.60'
BK = N 30°05'23" E
AH = N 48°39'09" E

PI = 1172+97.74 TWE
X = 88062.728
Y = 582589.635
Delta = 00°55'00" LT
BK = N 48°39'09" E
AH = N 47°44'10" E

PI = 1182+97.87 TWE
X = 88802.876
Y = 583262.269
Delta = 00°55'00" RT
BK = N 47°44'10" E
AH = N 48°39'09" E



TWF LINE

CURVE TWF-1
PC = 1129+00.53 TWF
X = 85507.358
Y = 579044.278
PI = 1129+62.34 TWF
X = 85539.934
Y = 579096.809
PT = 1130+24.14 TWF
X = 85574.116
Y = 579148.307
R = 4000.00'
Delta = 1°46'14" RT
D = 1°25'57"
L = 123.61'
T = 61.81'
BK = N 31°48'14" E
AH = N 33°34'28" E

CURVE TWF-2
PC = 1136+77.27 TWF
X = 85935.310
Y = 579692.472
PI = 1137+39.08 TWF
X = 85969.493
Y = 579743.971
PT = 1138+00.88 TWF
X = 86002.068
Y = 579796.501
R = 4000.00'
Delta = 1°46'14" LT
D = 1°25'57"
L = 123.61'
T = 61.81'
BK = N 33°34'28" E
AH = N 31°48'14" E

CURVE TWF-3
PC = 1141+27.37 TWF
X = 86174.134
Y = 580073.972
PI = 1144+87.84 TWF
X = 86364.107
Y = 580380.319
PRC = 1148+48.15 TWF
X = 86538.205
Y = 580695.959
R = 14124.00'
Delta = 2°55'26" LT
D = 0°24'20"
L = 720.78'
T = 360.47'
BK = N 31°48'14" E
AH = N 28°52'48" E

CURVE TWF-4
PRC = 1148+48.15 TWF
X = 86538.205
Y = 580695.959
PI = 1149+96.76 TWF
X = 86609.980
Y = 580826.087
PCC = 1151+45.36 TWF
X = 86684.487
Y = 580954.670
R = 14076.00'
Delta = 1°12'35" RT
D = 0°24'25"
L = 297.21'
T = 148.61'
BK = N 28°52'48" E
AH = N 30°05'23" E

CURVE TWF-5
PCC = 1151+45.36 TWF
X = 86684.487
Y = 580954.670
PI = 1161+21.98 TWF
X = 87174.121
Y = 581799.680
PT = 1170+81.48 TWF
X = 87907.286
Y = 582444.856
R = 5976.00'
Delta = 18°33'46" RT
D = 0°57'32"
L = 1936.12'
T = 976.62'
BK = N 30°05'23" E
AH = N 48°39'09" E

PI = 1172+93.87 TWF
X = 88066.727
Y = 582585.162
Delta = 00°55'00" LT
BK = N 48°39'09" E
AH = N 47°44'10" E

PI = 1182+94.00 TWF
X = 88806.876
Y = 583257.796
Delta = 00°55'00" RT
BK = N 47°44'10" E
AH = N 48°39'09" E

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TWE & TWF	SCALE, FEET 0 200 400	SHEET 448	E

TWE LINE

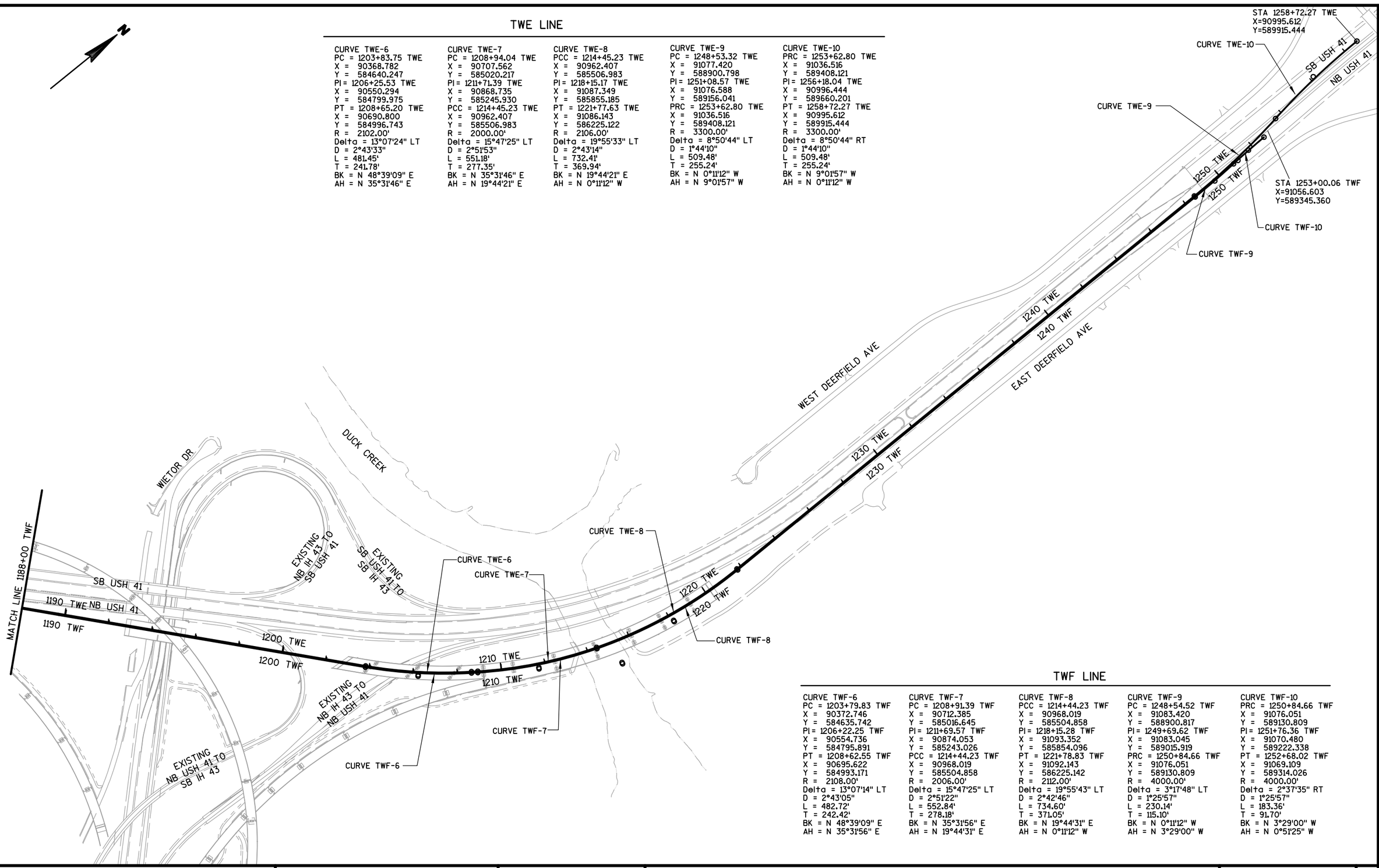
CURVE TWE-6
PC = 1203+83.75 TWE
X = 90368.782
Y = 584640.247
PI = 1206+25.53 TWE
X = 90550.294
Y = 584799.975
PT = 1208+65.20 TWE
X = 90690.800
Y = 584996.743
R = 2102.00'
Delta = 13°07'24" LT
D = 2°43'33"
L = 481.45'
T = 241.78'
BK = N 48°39'09" E
AH = N 35°31'46" E

CURVE TWE-7
PC = 1208+94.04 TWE
X = 90707.562
Y = 585020.217
PI = 1211+71.39 TWE
X = 90868.735
Y = 585245.930
PCC = 1214+45.23 TWE
X = 90962.407
Y = 585506.983
R = 2000.00'
Delta = 15°47'25" LT
D = 2°51'53"
L = 551.18'
T = 277.35'
BK = N 35°31'46" E
AH = N 19°44'21" E

CURVE TWE-8
PCC = 1214+45.23 TWE
X = 90962.407
Y = 585506.983
PI = 1218+15.17 TWE
X = 91087.349
Y = 585855.185
PT = 1221+77.63 TWE
X = 91086.143
Y = 586225.122
R = 2106.00'
Delta = 19°55'33" LT
D = 2°43'14"
L = 732.41'
T = 369.94'
BK = N 19°44'21" E
AH = N 0°11'12" W

CURVE TWE-9
PC = 1248+53.32 TWE
X = 91077.420
Y = 588900.798
PI = 1251+08.57 TWE
X = 91076.588
Y = 589156.041
PRC = 1253+62.80 TWE
X = 91036.516
Y = 589408.121
R = 3300.00'
Delta = 8°50'44" LT
D = 1°44'10"
L = 509.48'
T = 255.24'
BK = N 0°11'12" W
AH = N 9°01'57" W

CURVE TWE-10
PRC = 1253+62.80 TWE
X = 91036.516
Y = 589408.121
PI = 1256+18.04 TWE
X = 90996.444
Y = 589660.201
PT = 1258+72.27 TWE
X = 90995.612
Y = 589915.444
R = 3300.00'
Delta = 8°50'44" RT
D = 1°44'10"
L = 509.48'
T = 255.24'
BK = N 9°01'57" W
AH = N 0°11'12" W



TWF LINE

CURVE TWF-6
PC = 1203+79.83 TWF
X = 90372.746
Y = 584635.742
PI = 1206+22.25 TWF
X = 90554.736
Y = 584795.891
PT = 1208+62.55 TWF
X = 90695.622
Y = 584993.171
R = 2108.00'
Delta = 13°07'14" LT
D = 2°43'05"
L = 482.72'
T = 242.42'
BK = N 48°39'09" E
AH = N 35°31'56" E

CURVE TWF-7
PC = 1208+91.39 TWF
X = 90712.385
Y = 585016.645
PI = 1211+69.57 TWF
X = 90874.053
Y = 585243.026
PCC = 1214+44.23 TWF
X = 90968.019
Y = 585504.858
R = 2006.00'
Delta = 15°47'25" LT
D = 2°51'22"
L = 552.84'
T = 278.18'
BK = N 35°31'56" E
AH = N 19°44'31" E

CURVE TWF-8
PCC = 1214+44.23 TWF
X = 90968.019
Y = 585504.858
PI = 1218+15.28 TWF
X = 91093.352
Y = 585854.096
PT = 1221+78.83 TWF
X = 91092.143
Y = 586225.142
R = 2112.00'
Delta = 19°55'43" LT
D = 2°42'46"
L = 734.60'
T = 371.05'
BK = N 19°44'31" E
AH = N 0°11'12" W

CURVE TWF-9
PC = 1248+54.52 TWF
X = 91083.420
Y = 588900.817
PI = 1249+69.62 TWF
X = 91083.045
Y = 589015.919
PRC = 1250+84.66 TWF
X = 91076.051
Y = 589130.809
R = 4000.00'
Delta = 3°17'48" LT
D = 1°25'57"
L = 230.14'
T = 115.10'
BK = N 0°11'12" W
AH = N 3°29'00" W

CURVE TWF-10
PRC = 1250+84.66 TWF
X = 91076.051
Y = 589130.809
PI = 1251+76.36 TWF
X = 91070.480
Y = 589222.338
PT = 1252+68.02 TWF
X = 91069.109
Y = 589314.026
R = 4000.00'
Delta = 2°37'35" RT
D = 1°25'57"
L = 183.36'
T = 91.70'
BK = N 3°29'00" W
AH = N 0°51'25" W

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TWE & TWF	SCALE, FEET 0 200 400	SHEET 449	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027219_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:400

2

TWG LINE

CURVE TWG-1
PC = 1132+42.59 TWG
X = 85619.455
Y = 579385.382
PI = 1133+80.51 TWG
X = 85692.142
Y = 579502.596
PRC = 1135+18.32 TWG
X = 85756.583
Y = 579624.538
R = 4000.00'
Delta = 3°56'59" LT
D = 1°25'57"
L = 275.74'
T = 137.92'
BK = N 31°48'14" E
AH = N 27°51'16" E

CURVE TWG-2
PRC = 1135+18.32 TWG
X = 85756.583
Y = 579624.538
PI = 1136+56.24 TWG
X = 85821.024
Y = 579746.481
PT = 1137+94.06 TWG
X = 85893.711
Y = 579863.695
R = 4000.00'
Delta = 3°56'59" RT
D = 1°25'57"
L = 275.74'
T = 137.92'
BK = N 27°51'16" E
AH = N 31°48'14" E

CURVE TWG-3
PC = 1141+19.00 TWG
X = 86064.960
Y = 580139.848
PI = 1143+57.71 TWG
X = 86190.762
Y = 580342.716
PRC = 1145+96.37 TWG
X = 86309.604
Y = 580549.737
R = 14057.00'
Delta = 1°56'45" LT
D = 0°24'27"
L = 477.37'
T = 238.71'
BK = N 31°48'14" E
AH = N 29°51'30" E

CURVE TWG-4
PRC = 1145+96.37 TWG
X = 86309.604
Y = 580549.737
PI = 1146+91.95 TWG
X = 86357.188
Y = 580632.628
PRC = 1147+87.42 TWG
X = 86411.213
Y = 580711.472
R = 2400.00'
Delta = 4°33'40" RT
D = 2°23'14"
L = 191.05'
T = 95.58'
BK = N 29°51'30" E
AH = N 34°25'09" E

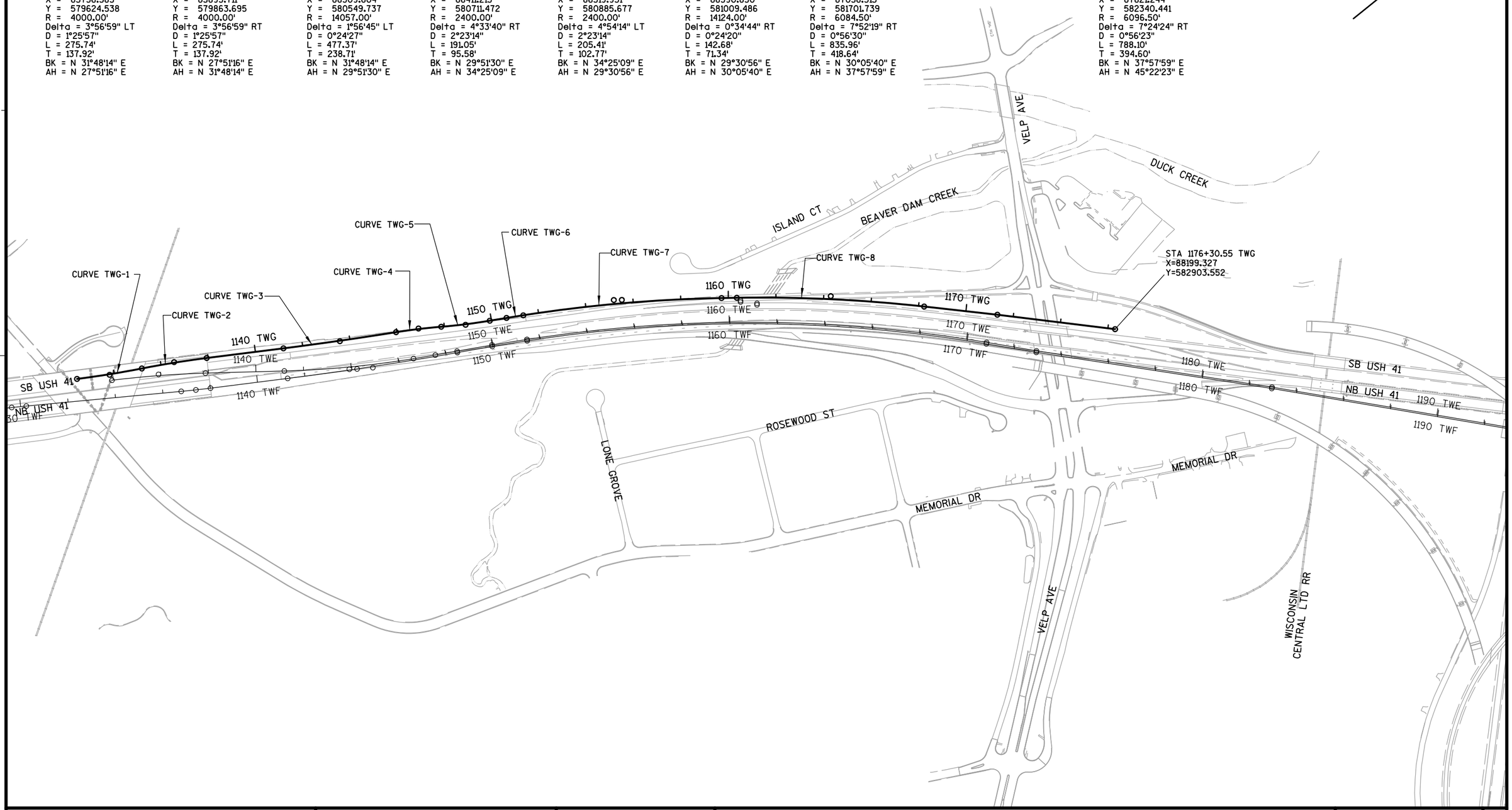
CURVE TWG-5
PRC = 1147+87.42 TWG
X = 86411.213
Y = 580711.472
PI = 1148+90.19 TWG
X = 86469.301
Y = 580796.247
PRC = 1149+92.83 TWG
X = 86519.931
Y = 580885.677
R = 2400.00'
Delta = 4°54'14" LT
D = 2°23'14"
L = 205.41'
T = 102.77'
BK = N 34°25'09" E
AH = N 29°30'56" E

CURVE TWG-6
PRC = 1149+92.83 TWG
X = 86519.931
Y = 580885.677
PI = 1150+64.17 TWG
X = 86555.078
Y = 580947.760
PCC = 1151+35.51 TWG
X = 86590.850
Y = 581009.486
R = 14124.00'
Delta = 0°34'44" RT
D = 0°24'20"
L = 142.68'
T = 71.34'
BK = N 29°30'56" E
AH = N 30°05'40" E

CURVE TWG-7
PCC = 1151+35.51 TWG
X = 86590.850
Y = 581009.486
PI = 1155+54.15 TWG
X = 86800.768
Y = 581371.694
PT = 1159+71.48 TWG
X = 87058.315
Y = 581701.739
R = 6084.50'
Delta = 7°52'19" RT
D = 0°56'30"
L = 835.96'
T = 418.64'
BK = N 30°05'40" E
AH = N 37°57'59" E

CURVE TWG-8
PC = 1160+35.42 TWG
X = 87097.650
Y = 581752.146
PI = 1164+30.02 TWG
X = 87340.408
Y = 582063.239
PT = 1168+23.52 TWG
X = 87621.244
Y = 582340.441
R = 6096.50'
Delta = 7°24'24" RT
D = 0°56'23"
L = 788.10'
T = 394.60'
BK = N 37°57'59" E
AH = N 45°22'23" E

PI = 1171+32.75 TWE
X = 87841.322
Y = 582557.672
Delta = 00°36'50" RT
BK = N 45°22'23" E
AH = N 45°59'13" E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY ALIGNMENT DIAGRAM - TWG	SCALE, FEET 0 200 400	SHEET 450	E

SH3 LINE

PI= 1142+49.90 SH3
Y= 580240.654
X= 86139.176
Delta= 00°12'12" LT

PI= 1142+99.80 SH3
Y= 580283.342
X= 86165.022
Delta= 00°12'12" LT

PI= 1143+49.71 SH3
Y= 580326.121
X= 86190.717
Delta= 00°12'12" LT

PI= 1143+99.61 SH3
Y= 580368.990
X= 86216.260
Delta= 00°12'12" LT

PI= 1144+49.51 SH3
Y= 580411.950
X= 86241.650
Delta= 00°11'19" LT

PI= 1145+00.21 SH3
Y= 580455.676
X= 86267.300
Delta= 00°15'34" LT

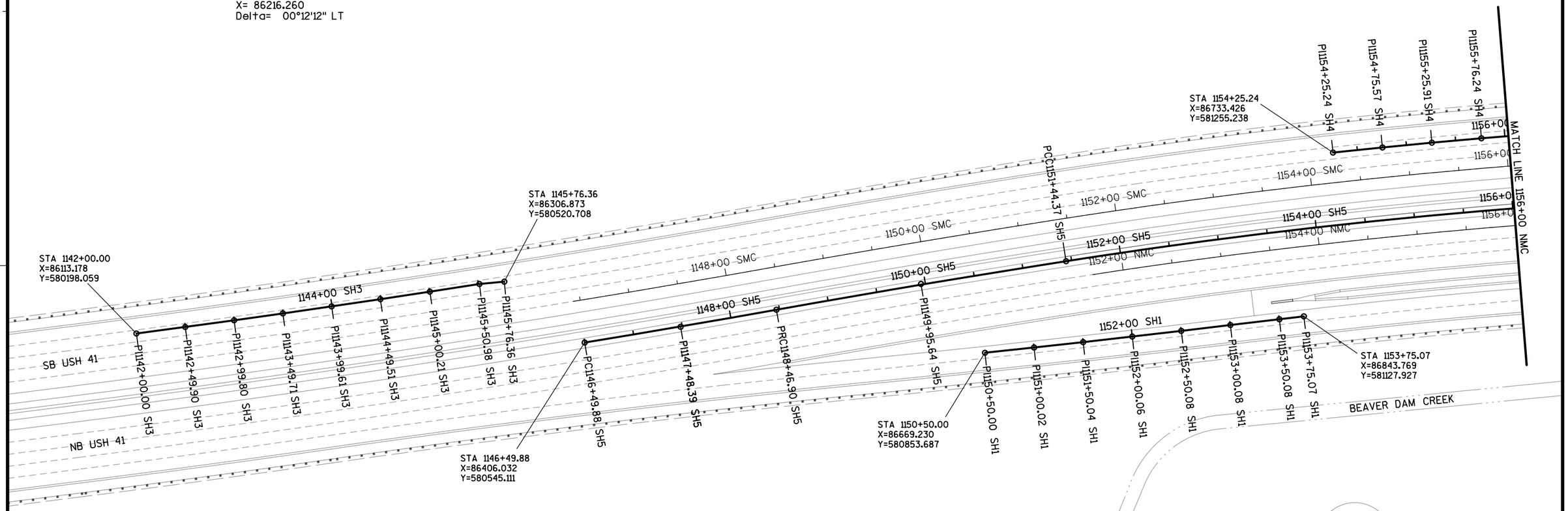
PI= 1145+50.98 SH3
Y= 580499.592
X= 86292.794
Delta= 03°33'26" RT

SH4 LINE

PI= 1154+75.57 SH4
Y= 581297.421
X= 86760.887
Delta= 00°24'51" RT

PI= 1155+25.91 SH4
Y= 581339.405
X= 86788.652
Delta= 00°28'25" RT

PI= 1155+76.24 SH4
Y= 581381.158
X= 86816.763
Delta= 00°28'25" RT



SH1 LINE

PI= 1151+00.02 SH1
Y= 580895.694
X= 86696.385
Delta= 00°10'07" LT

PI= 1151+50.04 SH1
Y= 580937.780
X= 86723.416
Delta= 00°10'07" LT

PI= 1152+00.06 SH1
Y= 580979.945
X= 86750.323
Delta= 00°10'07" LT

PI= 1152+50.08 SH1
Y= 581022.189
X= 86777.106
Delta= 00°08'23" LT

PI= 1153+00.08 SH1
Y= 581064.490
X= 86803.780
Delta= 00°00'53" LT

PI= 1153+50.08 SH1
Y= 581106.790
X= 86830.438
Delta= 00°01'01" RT

SH5 LINE

CURVE SH5-1
PC = 1146+49.88 SH5
X = 86406.032
Y = 580545.111
PI= 1147+48.39 SH5
X = 86454.810
Y = 580630.696
PRC = 1148+46.90 SH5
X = 86502.390
Y = 580716.953
R = 14143.00'
Delta = 0°47'53" LT
D = 0°24'18"
L = 197.02'
T = 98.51'
BK = N 29°40'48" E
AH = N 28°52'55" E

CURVE SH5-2
PRC = 1148+46.90 SH5
X = 86502.390
Y = 580716.953
PI= 1149+95.64 SH5
X = 86574.235
Y = 580847.196
PCC = 1151+44.37 SH5
X = 86648.819
Y = 580975.890
R = 14057.00'
Delta = 1?12'45" RT
D = 0?24'27"
L = 297.48'
T = 148.74'
BK = N 28?52'55" E
AH = N 30?05'40" E

CURVE SH5-3
PCC = 1151+44.37 SH5
X = 86648.819
Y = 580975.890
PI= 1156+99.43 SH5
X = 86927.136
Y = 581456.122
PCC = 1162+51.35 SH5
X = 87288.603
Y = 581877.340
R = 6017.50'
Delta = 10°32'24" RT
D = 0°57'08"
L = 1106.97'
T = 555.05'
BK = N 30°05'40" E
AH = N 40°38'04" E

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SHORING ALIGNMENT DIAGRAM - SH1, SH3, SH4, SH5	SCALE, FEET 0 200 400	SHEET 451	E

SH4 LINE

PI= 1156+26.58 SH4
Y= 581422.676
X= 86845.219
Delta= 00°28'25" RT

PI= 1156+76.91 SH4
Y= 581463.959
X= 86874.016
Delta= 00°28'25" RT

PI= 1157+27.24 SH4
Y= 581505.002
X= 86903.154
Delta= 00°28'25" RT

PI= 1157+77.58 SH4
Y= 581545.803
X= 86932.629
Delta= 00°28'25" RT

PI= 1158+27.91 SH4
Y= 581586.358
X= 86962.441
Delta= 00°12'34" LT

PI= 1158+78.25 SH4
Y= 581627.029
X= 86992.109
Delta= 00°00'33" RT

PI= 1159+03.43 SH4
Y= 581647.364
X= 87006.948
Delta= 00°12'32" LT

PI= 1159+53.80 SH4
Y= 581688.159
X= 87036.489
Delta= 02°31'17" RT

PI= 1160+04.15 SH4
Y= 581727.604
X= 87067.788
Delta= 00°26'12" LT

PI= 1160+54.50 SH4
Y= 581767.287
X= 87098.786
Delta= 00°21'35" RT

PI= 1161+04.86 SH4
Y= 581806.778
X= 87130.034
Delta= 00°21'35" RT

PI= 1161+55.23 SH4
Y= 581846.076
X= 87161.534
Delta= 01°41'06" LT

PI= 1162+05.66 SH4
Y= 581886.340
X= 87191.907
Delta= 03°16'02" RT

SH5 LINE

CURVE SH5-3
PCC = 1151+44.37 SH5
X = 86648.819
Y = 580975.890
PI= 1156+99.43 SH5
X = 86927.136
Y = 581456.122
PCC = 1162+51.35 SH5
X = 87288.603
Y = 581877.340
R = 6017.50'
Delta = 10°32'24" RT
D = 0°57'08"
L = 1106.97'
T = 555.05'
BK = N 30°05'40" E
AH = N 40°38'04" E

CURVE SH5-4
PCC = 1162+51.35 SH5
X = 87288.603
Y = 581877.340
PI= 1162+72.76 SH5
X = 87302.550
Y = 581893.593
PT = 1162+94.18 SH5
X = 87316.585
Y = 581909.770
R = 7967.00'
Delta = 0°18'29" RT
D = 0°43'09"
L = 42.83'
T = 21.42'
BK = N 40°38'04" E
AH = N 40°56'33" E

PI= 1163+44.00 SH5
Y= 581947.168
X= 87349.498
Delta= 00°21'30" RT

PI= 1163+93.82 SH5
Y= 581984.357
X= 87382.645
Delta= 00°31'51" RT

PI= 1164+43.63 SH5
Y= 582021.237
X= 87416.134
Delta= 00°28'24" RT

PI= 1164+93.45 SH5
Y= 582057.839
X= 87449.925
Delta= 00°24'57" RT

PI= 1165+43.26 SH5
Y= 582094.192
X= 87483.979
Delta= 00°35'18" RT

PI= 1165+93.07 SH5
Y= 582130.192
X= 87518.404
Delta= 00°21'30" RT

PI= 1166+42.87 SH5
Y= 582165.974
X= 87553.050
Delta= 00°32'33" RT

PI= 1166+92.68 SH5
Y= 582201.424
X= 87588.031
Delta= 00°27'02" RT

PI= 1167+42.48 SH5
Y= 582236.595
X= 87623.288
Delta= 00°29'06" RT

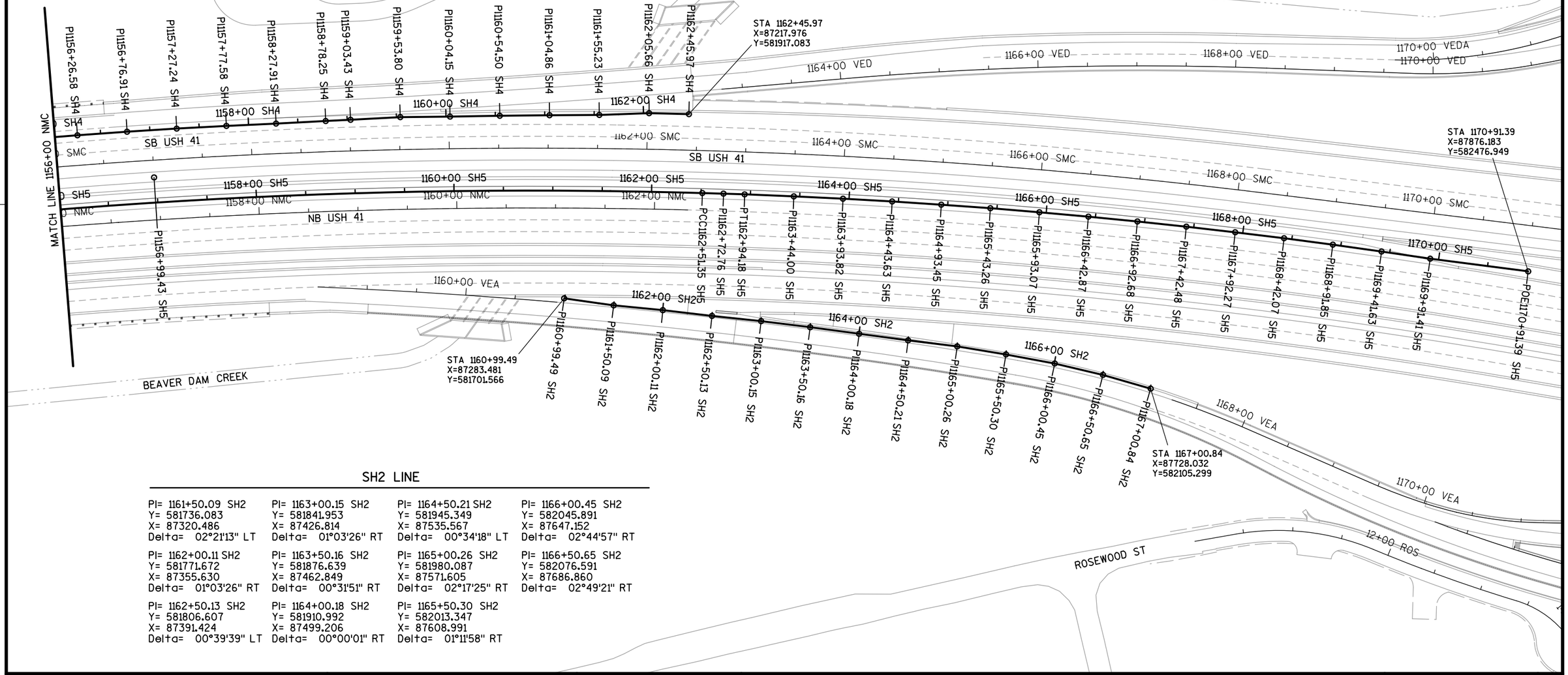
PI= 1167+92.27 SH5
Y= 582271.464
X= 87658.838
Delta= 00°28'25" RT

PI= 1168+42.07 SH5
Y= 582306.034
X= 87694.671
Delta= 00°24'58" RT

PI= 1168+91.85 SH5
Y= 582340.339
X= 87730.750
Delta= 00°35'19" RT

PI= 1169+41.63 SH5
Y= 582374.270
X= 87767.178
Delta= 00°21'31" RT

PI= 1169+91.41 SH5
Y= 582407.966
X= 87803.810
Delta= 01°01'04" LT



SH2 LINE

PI= 1161+50.09 SH2
Y= 581736.083
X= 87320.486
Delta= 02°21'13" LT

PI= 1162+00.11 SH2
Y= 581771.672
X= 87355.630
Delta= 01°03'26" RT

PI= 1162+50.13 SH2
Y= 581806.607
X= 87391.424
Delta= 00°39'39" LT

PI= 1163+00.15 SH2
Y= 581841.953
X= 87426.814
Delta= 01°03'26" RT

PI= 1163+50.16 SH2
Y= 581876.639
X= 87462.849
Delta= 00°31'51" RT

PI= 1164+00.18 SH2
Y= 581910.992
X= 87499.206
Delta= 00°00'01" RT

PI= 1164+50.21 SH2
Y= 581945.349
X= 87535.567
Delta= 00°34'18" LT

PI= 1165+00.26 SH2
Y= 581980.087
X= 87571.605
Delta= 02°17'25" RT

PI= 1165+50.30 SH2
Y= 582013.347
X= 87608.991
Delta= 01°11'58" RT

PI= 1166+00.45 SH2
Y= 582045.891
X= 87647.152
Delta= 02°44'57" RT

PI= 1166+50.65 SH2
Y= 582076.591
X= 87686.860
Delta= 02°49'21" RT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SHORING ALIGNMENT DIAGRAM - SH2, SH4, SH5	SCALE, FEET 0 200 400	SHEET 452	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_027222_AD.dgn PLOT DATE : 9/2/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
0010	201.0110	CLEARING	SY	1,929.000	1,929.000
0020	201.0120	CLEARING	ID	432.000	432.000
0030	201.0210	GRUBBING	SY	1,919.000	1,919.000
0040	201.0220	GRUBBING	ID	432.000	432.000
0050	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	7.000	7.000
0060	203.0200	REMOVING OLD STRUCTURE (STATION) 001. 1192+00 NMC	LS	1.000	1.000
0070	203.0200	REMOVING OLD STRUCTURE (STATION) 002. 1173+73.21 NB	LS	1.000	1.000
0080	203.0200	REMOVING OLD STRUCTURE (STATION) 002. 1192+50 SMC	LS	1.000	1.000
0090	203.0200	REMOVING OLD STRUCTURE (STATION) 003. 1189+25 SIH	LS	1.000	1.000
0100	203.0200	REMOVING OLD STRUCTURE (STATION) 004. 1161+15 NIH	LS	1.000	1.000
0110	203.0200	REMOVING OLD STRUCTURE (STATION) 005. 1210+60 SMC	LS	1.000	1.000
0120	203.0200	REMOVING OLD STRUCTURE (STATION) 006. 1197+00 IHA LT	LS	1.000	1.000
0130	203.0200	REMOVING OLD STRUCTURE (STATION) 007. 325+35	LS	1.000	1.000
0140	203.0200	REMOVING OLD STRUCTURE (STATION) 008. 1185+25 NMC, 43' LT	LS	1.000	1.000
0150	203.0225.S	DEBRIS CONTAINMENT (STRUCTURE) 700. B-5-64	LS	1.000	1.000
0160	203.0225.S	DEBRIS CONTAINMENT (STRUCTURE) 702. B-05-674	LS	1.000	1.000
0170	203.0225.S	DEBRIS CONTAINMENT (STRUCTURE) 703. B-05-669	LS	1.000	1.000
0180	203.0225.S	DEBRIS CONTAINMENT (STRUCTURE) 704. B-05-675	LS	1.000	1.000
0190	204.0100	REMOVING PAVEMENT **P**	SY	34,990.000	34,990.000
0200	204.0110	REMOVING ASPHALTIC SURFACE **P**	SY	120.000	120.000
0210	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS **P**	SY	169.000	169.000
0220	204.0120	REMOVING ASPHALTIC SURFACE MILLING **P**	SY	3,569.000	3,569.000
0230	204.0165	REMOVING GUARDRAIL **P**	LF	5,305.000	5,305.000
0240	204.0170	REMOVING FENCE **P**	LF	19,031.000	19,031.000
0250	204.0175	REMOVING CONCRETE SLOPE PAVING	SY	264.000	264.000
0260	204.0180	REMOVING DELINEATORS AND MARKERS	EACH	80.000	80.000
0270	204.0190	REMOVING SURFACE DRAINS	EACH	6.000	6.000
0280	204.0210	REMOVING MANHOLES	EACH	1.000	1.000
0290	204.0220	REMOVING INLETS	EACH	17.000	17.000
0300	204.0245	REMOVING STORM SEWER (SIZE) 002. 12-INCH **P**	LF	144.000	144.000
0310	204.0245	REMOVING STORM SEWER (SIZE) 003. 18-INCH **P**	LF	1,356.000	1,356.000
0320	204.0245	REMOVING STORM SEWER (SIZE) 004. 24-INCH **P**	LF	326.000	326.000
0330	204.0245	REMOVING STORM SEWER (SIZE) 005. 36-INCH **P**	LF	110.000	110.000
0340	204.9090.S	REMOVING (ITEM DESCRIPTION) 001. TEMPORARY SHORING LEFT IN PLACE	LF	150.000	150.000
0350	204.9090.S	REMOVING (ITEM DESCRIPTION) 002. CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE	LF	9,000.000	9,000.000
0360	205.0100	EXCAVATION COMMON **P**	CY	127,053.000	127,053.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
0370	205.0400	EXCAVATION MARSH	CY	38,213.000	38,213.000
0380	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 002. B-05-669	LS	1.000	1.000
0390	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 005. B-05-674	LS	1.000	1.000
0400	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 006. B-05-675	LS	1.000	1.000
0410	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 700. B-5-64	LS	1.000	1.000
0420	208.1100	SELECT BORROW	CY	7,300.000	7,300.000
0430	209.0300.S	BACKFILL COARSE AGGREGATE (SIZE) 001. NO 1	CY	160.000	160.000
0440	210.0100	BACKFILL STRUCTURE **P**	CY	1,670.000	1,670.000
0450	213.0100	FINISHING ROADWAY (PROJECT) 001. 1133-10-71	EACH	1.000	1.000
0460	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	20,670.000	20,670.000
0470	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	87,290.000	87,290.000
0480	311.0110	BREAKER RUN	TON	165,608.000	165,608.000
0490	315.0100	ASPHALTIC BASE	TON	20,926.000	20,926.000
0500	320.0145	CONCRETE BASE 8-INCH **P**	SY	2,478.000	2,478.000
0510	320.0150	CONCRETE BASE 8 1/2-INCH **P**	SY	1,315.000	1,315.000
0520	415.0090	CONCRETE PAVEMENT 9-INCH **P**	SY	6,412.000	6,412.000
0530	415.0105	CONCRETE PAVEMENT 10 1/2-INCH **P**	SY	109,525.000	109,525.000
0540	415.0410	CONCRETE PAVEMENT APPROACH SLAB **P**	SY	1,856.000	1,856.000
0550	416.0610	DRILLED TIE BARS	EACH	566.000	566.000
0560	416.0620	DRILLED DOWEL BARS	EACH	144.000	144.000
0570	416.1010	CONCRETE SURFACE DRAINS	CY	11.800	11.800
0580	416.1110	CONCRETE SHOULDER RUMBLE STRIPS	LF	16,722.000	16,722.000
0590	440.4410.S	INCENTIVE IRI RIDE	DOL	26,000.000	26,000.000
0600	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,131.000	1,131.000
0610	455.0605	TACK COAT	GAL	912.000	912.000
0620	460.1100	HMA PAVEMENT TYPE E-0.3	TON	5,270.000	5,270.000
0630	460.1110	HMA PAVEMENT TYPE E-10	TON	14,058.000	14,058.000
0640	460.1130	HMA PAVEMENT TYPE E-30	TON	1,034.000	1,034.000
0650	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	16,400.000	16,400.000
0660	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	19.000	19.000
0670	465.0400	ASPHALTIC SHOULDER RUMBLE STRIPS **P**	LF	10,909.000	10,909.000
0680	502.0100	CONCRETE MASONRY BRIDGES **P**	CY	158.000	158.000
0690	502.2000	COMPRESSION JOINT SEALER PREFORMED ELASTOMERIC (WIDTH) 700. 3-INCH **P**	LF	34.000	34.000
0700	502.3100	EXPANSION DEVICE (STRUCTURE) 700. B-5-64 **P**	LS	1.000	1.000
0710	502.3200	PROTECTIVE SURFACE TREATMENT **P**	SY	25,837.000	25,837.000
0720	502.5002	MASONRY ANCHORS TYPE L NO. 4 BARS **P**	EACH	4.000	4.000
0730	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	3.000	3.000
0740	502.5010	MASONRY ANCHORS TYPE L NO. 6 BARS **P**	EACH	40.000	40.000
0750	502.6110	MASONRY ANCHORS TYPE S 3/4-INCH **P**	EACH	10.000	10.000
0760	503.0128	PRESTRESSED GIRDER TYPE I 28-INCH **P**	LF	2,044.000	2,044.000
0770	503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH **P**	LF	302.000	302.000
0780	503.0172	PRESTRESSED GIRDER TYPE I 72W-INCH **P**	LF	1,824.000	1,824.000
0790	504.0500	CONCRETE MASONRY RETAINING WALLS **P**	CY	695.000	695.000
0800	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	54,260.000	54,260.000
0810	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	344,940.000	344,940.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE 1133-10-71

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0820	505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	81,240.000	81,240.000
0830	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED **P**	EACH	114.000	114.000
0840	506.2610	BEARING PADS ELASTOMERIC LAMINATED **P**	EACH	2.000	2.000
0850	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 002. B-05-669 **P**	EACH	22.000	22.000
0860	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 005. B-05-674 **P**	EACH	24.000	24.000
0870	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 006. B-05-675 **P**	EACH	12.000	12.000
0880	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 700. B-5-64 **P**	EACH	4.000	4.000
0890	511.1200	TEMPORARY SHORING (STRUCTURE) 002. B-05-669	SF	600.000	600.000
0900	511.1200	TEMPORARY SHORING (STRUCTURE) 005. B-05-674	SF	1,420.000	1,420.000
0910	511.1200	TEMPORARY SHORING (STRUCTURE) 700. B-5-64	SF	480.000	480.000
0920	511.1300	TEMPORARY SHORING (LOCATION) 001. STA 1150+50 - STA 1153+75 IHA	SF	1,950.000	1,950.000
0930	511.1300	TEMPORARY SHORING (LOCATION) 002. STA 1161+00 - STA 1167+00 VEA	SF	4,515.000	4,515.000
0940	511.2200	TEMPORARY SHORING LEFT IN PLACE (STRUCTURE) 005. B-05-674	SF	855.000	855.000
0950	511.2200	TEMPORARY SHORING LEFT IN PLACE (STRUCTURE) 700. B-5-64	SF	342.000	342.000
0960	511.2300	TEMP SHORING LEFT IN PLACE (LOCATION) 001. STA 1169+76 - STA 1170+21 VEA	SF	560.000	560.000
0970	511.2300	TEMP SHORING LEFT IN PLACE (LOCATION) 002. STA 1142+00 - STA 1145+75 SMC	SF	1,885.000	1,885.000
0980	511.2300	TEMP SHORING LEFT IN PLACE (LOCATION) 003. STA 1146+50 - STA 1171+35 NMC	SF	19,600.000	19,600.000
0990	511.2300	TEMP SHORING LEFT IN PLACE (LOCATION) 004. STA 1154+25 - STA 1162+41 SMC	SF	4,950.000	4,950.000
1000	511.2300	TEMP SHORING LEFT IN PLACE (LOCATION) 005. STA 1234+92 - STA 1235+49 NMC	SF	259.000	259.000
1010	516.0500	RUBBERIZED MEMBRANE WATERPROOFING **P**	SY	175.000	175.000
1020	520.8000	CONCRETE COLLARS FOR PIPE	EACH	1.000	1.000
1030	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	464.000	464.000
1040	521.0124	CULVERT PIPE CORRUGATED STEEL 24-INCH	LF	15.000	15.000
1050	521.2005.S	SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED (INCH) 001. 18-INCH	LF	990.000	990.000
1060	521.2005.S	SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED (INCH) 002. 24-INCH	LF	460.000	460.000
1070	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	100.000	100.000
1080	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	1.000	1.000
1090	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	34.000	34.000
1100	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	3.000	3.000
1110	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	1.000	1.000
1120	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	2.000	2.000
1130	550.0500	PILE POINTS	EACH	193.000	193.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE 1133-10-71

NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1140	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	108.000	108.000
1150	550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	17,495.000	17,495.000
1160	602.0410	CONCRETE SIDEWALK 5-INCH **P**	SF	13,430.000	13,430.000
1170	603.1142	CONCRETE BARRIER TYPE S42 **P**	LF	10,798.000	10,798.000
1180	603.1156	CONCRETE BARRIER TYPE S56 **P**	LF	2,843.000	2,843.000
1190	603.1442	CONCRETE BARRIER TYPE S42C **P**	LF	553.000	553.000
1200	603.1456	CONCRETE BARRIER TYPE S56C **P**	LF	201.000	201.000
1210	603.3279	CONCRETE BARRIER TRANSITION TYPE F51SF TO S56	EACH	2.000	2.000
1220	603.3513	CONCRETE BARRIER TRANSITION TYPE S32 TO S36	EACH	3.000	3.000
1230	603.3535	CONCRETE BARRIER TRANSITION TYPE S36 TO S42	EACH	3.000	3.000
1240	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	55,200.000	55,200.000
1250	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	85,188.000	85,188.000
1260	604.0400	SLOPE PAVING CONCRETE **P**	SY	44.000	44.000
1270	604.0500	SLOPE PAVING CRUSHED AGGREGATE **P**	SY	200.000	200.000
1280	604.0600	SLOPE PAVING SELECT CRUSHED MATERIAL **P**	SY	1,364.000	1,364.000
1290	606.0200	RIPRAP MEDIUM	CY	414.000	414.000
1300	606.0300	RIPRAP HEAVY	CY	2.000	2.000
1310	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	719.000	719.000
1320	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	1,497.000	1,497.000
1330	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	2,499.000	2,499.000
1340	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	3,921.000	3,921.000
1350	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	194.000	194.000
1360	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	1,442.000	1,442.000
1370	611.0430	RECONSTRUCTING INLETS	EACH	2.000	2.000
1380	611.0530	MANHOLE COVERS TYPE J	EACH	6.000	6.000
1390	611.0535	MANHOLE COVERS TYPE J-SPECIAL	EACH	4.000	4.000
1400	611.0612	INLET COVERS TYPE C	EACH	1.000	1.000
1410	611.0624	INLET COVERS TYPE H	EACH	3.000	3.000
1420	611.0627	INLET COVERS TYPE HM	EACH	8.000	8.000
1430	611.0654	INLET COVERS TYPE V	EACH	74.000	74.000
1440	611.2004	MANHOLES 4-FT DIAMETER	EACH	7.000	7.000
1450	611.2005	MANHOLES 5-FT DIAMETER	EACH	15.000	15.000
1460	611.2006	MANHOLES 6-FT DIAMETER	EACH	5.000	5.000
1470	611.2007	MANHOLES 7-FT DIAMETER	EACH	2.000	2.000
1480	611.2066	MANHOLES 6X6-FT	EACH	1.000	1.000
1490	611.3003	INLETS 3-FT DIAMETER	EACH	3.000	3.000
1500	611.3004	INLETS 4-FT DIAMETER	EACH	25.000	25.000
1510	611.3220	INLETS 2X2-FT	EACH	1.000	1.000
1520	611.3225	INLETS 2X2.5-FT	EACH	66.000	66.000
1530	611.9800.S	PIPE GRATES	EACH	3.000	3.000
1540	612.0106	PIPE UNDERDRAIN 6-INCH	LF	2,130.000	2,130.000
1550	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	140.000	140.000
1560	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	2,825.000	2,825.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
1570	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1.000	1.000
1580	614.0397	GUARDRAIL MOW STRIP EMULSIFIED ASPHALT	SY	3,100.000	3,100.000
1590	614.0805	CRASH CUSHIONS PERMANENT LOW MAINTENANCE	EACH	4.000	4.000
1600	614.0905	CRASH CUSHIONS TEMPORARY	EACH	4.000	4.000
1610	614.2300	MGS GUARDRAIL 3	LF	6,737.500	6,737.500
1620	614.2500	MGS THRIE BEAM TRANSITION	LF	237.000	237.000
1630	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	5.000	5.000
1640	614.2620	MGS GUARDRAIL TERMINAL TYPE 2	EACH	3.000	3.000
1650	616.0100	FENCE WOVEN WIRE (HEIGHT) 001. 4-FT	LF	7,772.000	7,772.000
1660	616.0206	FENCE CHAIN LINK 6-FT	LF	1,721.000	1,721.000
1670	616.0329	GATES CHAIN LINK (WIDTH) 001. 3.5-FT	EACH	1.000	1.000
1680	616.0700.S	FENCE SAFETY	LF	500.000	500.000
1690	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 001. 1133-10-71	EACH	1.000	1.000
1700	619.1000	MOBILIZATION	EACH	1.000	1.000
1710	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	12.000	12.000
1720	623.0200	DUST CONTROL SURFACE TREATMENT	SY	5,000.000	5,000.000
1730	624.0100	WATER	MGAL	1,750.000	1,750.000
1740	625.0500	SALVAGED TOPSOIL	SY	136,925.000	136,925.000
1750	627.0200	MULCHING	SY	64,950.000	64,950.000
1760	628.1504	SILT FENCE	LF	24,200.000	24,200.000
1770	628.1520	SILT FENCE MAINTENANCE	LF	24,200.000	24,200.000
1780	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	15.000	15.000
1790	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	10.000	10.000
1800	628.2004	EROSION MAT CLASS I TYPE B	SY	75,000.000	75,000.000
1810	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	1,000.000	1,000.000
1820	628.6510	SOIL STABILIZER TYPE B	ACRE	13.000	13.000
1830	628.7005	INLET PROTECTION TYPE A	EACH	145.000	145.000
1840	628.7010	INLET PROTECTION TYPE B	EACH	95.000	95.000
1850	628.7020	INLET PROTECTION TYPE D	EACH	40.000	40.000
1860	628.7504	TEMPORARY DITCH CHECKS	LF	915.000	915.000
1870	628.7555	CULVERT PIPE CHECKS	EACH	105.000	105.000
1880	628.7560	TRACKING PADS	EACH	12.000	12.000
1890	628.7570	ROCK BAGS	EACH	925.000	925.000
1900	629.0210	FERTILIZER TYPE B	CWT	86.000	86.000
1910	630.0120	SEEDING MIXTURE NO. 20	LB	3,400.000	3,400.000
1920	630.0160	SEEDING MIXTURE NO. 60	LB	75.000	75.000
1930	630.0200	SEEDING TEMPORARY	LB	3,400.000	3,400.000
1940	633.0100	DELINEATOR POSTS STEEL	EACH	64.000	64.000
1950	633.0500	DELINEATOR REFLECTORS	EACH	208.000	208.000
1960	633.1000	DELINEATOR BRACKETS	EACH	144.000	144.000
1970	633.1100	DELINEATORS TEMPORARY	EACH	255.000	255.000
1980	633.5200	MARKERS CULVERT END	EACH	33.000	33.000
1990	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	8.000	8.000
2000	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	12.000	12.000
2010	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	6.000	6.000
2020	634.0810	POSTS TUBULAR STEEL 2X2-INCH X 10-FT	EACH	1.000	1.000
2030	635.0200	SIGN SUPPORTS STRUCTURAL STEEL HS	LB	3,649.000	3,649.000
2040	636.0100	SIGN SUPPORTS CONCRETE MASONRY **P**	CY	221.800	221.800
2050	636.0500	SIGN SUPPORTS STEEL REINFORCEMENT	LB	352.000	352.000
2060	636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	7,490.000	7,490.000
2070	636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	30,920.000	30,920.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
2080	637.1220	SIGNS TYPE I REFLECTIVE SH	SF	1,090.000	1,090.000
2090	637.2210	SIGNS TYPE II REFLECTIVE H	SF	258.750	258.750
2100	637.2230	SIGNS TYPE II REFLECTIVE F	SF	64.000	64.000
2110	638.2102	MOVING SIGNS TYPE II	EACH	2.000	2.000
2120	638.2601	REMOVING SIGNS TYPE I	EACH	32.000	32.000
2130	638.2602	REMOVING SIGNS TYPE II	EACH	129.000	129.000
2140	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	152.000	152.000
2150	638.3100	REMOVING STRUCTURAL STEEL SIGN SUPPORTS	EACH	23.000	23.000
2160	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	4.000	4.000
2170	641.1200	SIGN BRIDGE CANTILEVERED (STRUCTURE) 956. S-05-195	LS	1.000	1.000
2180	641.6600	SIGN BRIDGE (STRUCTURE) 952. S-05-191	LS	1.000	1.000
2190	641.6600	SIGN BRIDGE (STRUCTURE) 961. S-05-234	LS	1.000	1.000
2200	642.5401	FIELD OFFICE TYPE D	EACH	1.000	1.000
2210	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 001. 1133-10-71	DAY	250.000	250.000
2220	643.0300	TRAFFIC CONTROL DRUMS	DAY	197,315.000	197,315.000
2230	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	8,636.000	8,636.000
2240	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	16,148.000	16,148.000
2250	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	35,553.000	35,553.000
2260	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	1,110.000	1,110.000
2270	643.0900	TRAFFIC CONTROL SIGNS	DAY	43,687.000	43,687.000
2280	643.0910	TRAFFIC CONTROL COVERING SIGNS TYPE I	EACH	6.000	6.000
2290	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	16.000	16.000
2300	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	1,409.250	1,409.250
2310	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	723.000	723.000
2320	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 001. 1133-10-71	EACH	1.000	1.000
2330	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	2,530.000	2,530.000
2340	645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A **P**	SY	1,185.000	1,185.000
2350	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	852.000	852.000
2360	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	13,107.000	13,107.000
2370	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	116,190.000	116,190.000
2380	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	13,120.000	13,120.000
2390	646.0600	REMOVING PAVEMENT MARKINGS	LF	26,720.000	26,720.000
2400	646.0841.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH	LF	2,650.000	2,650.000
2410	646.0843.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH	LF	220.000	220.000
2420	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	2.000	2.000
2430	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	1.000	1.000
2440	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	3.000	3.000
2450	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	91,220.000	91,220.000
2460	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	9,840.000	9,840.000
2470	649.0701	TEMPORARY PAVEMENT MARKING 8-INCH	LF	7,280.000	7,280.000
2480	649.0801	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH	LF	3,150.000	3,150.000
2490	649.1800	TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE	EACH	14.000	14.000
2500	649.2000	TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE	EACH	2.000	2.000
2510	652.0125	CONDUIT RIGID METALLIC 2-INCH **P**	LF	1,208.000	1,208.000

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
2520	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH **P**	LF	572.000	572.000
2530	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH **P**	LF	2,805.000	2,805.000
2540	653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	7.000	7.000
2550	657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	6.000	6.000
2560	670.0100	FIELD SYSTEM INTEGRATOR	LS	1.000	1.000
2570	670.0200	ITS DOCUMENTATION	LS	1.000	1.000
2580	673.0225.S	INSTALL POLE MOUNTED CABINET	EACH	1.000	1.000
2590	678.0500	COMMUNICATION SYSTEM TESTING	LS	1.000	1.000
2600	690.0150	SAWING ASPHALT	LF	877.000	877.000
2610	690.0250	SAWING CONCRETE	LF	13,920.000	13,920.000
2620	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	2,100.000	2,100.000
2630	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	5,760.000	5,760.000
2640	SPV.0035	SPECIAL 001. DRAINAGE BLANKET	CY	5,436.000	5,436.000
2650	SPV.0035	SPECIAL 002. ROADWAY EMBANKMENT	CY	229,296.000	229,296.000
2660	SPV.0035	SPECIAL 003. EXCAVATION OF PHRAGMITES SOIL	CY	760.000	760.000
2670	SPV.0035	SPECIAL 004. GRANULAR MATERIAL FOR ES FABRIC	CY	816.000	816.000
2680	SPV.0035	SPECIAL 700. HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES **P**	CY	2,368.000	2,368.000
2690	SPV.0060	SPECIAL 001. CPM BASELINE SCHEDULE	EACH	1.000	1.000
2700	SPV.0060	SPECIAL 002. CPM SCHEDULE MONTHLY UPDATES	EACH	8.000	8.000
2710	SPV.0060	SPECIAL 003. VIBRATING WIRE PIEZOMETER INSTRUMENTATION SYSTEM, DELIVERED	EACH	1.000	1.000
2720	SPV.0060	SPECIAL 004. SETTLEMENT GAUGES	EACH	1.000	1.000
2730	SPV.0060	SPECIAL 005. CONCRETE BARRIER TRANSITION TYPE S56 (54-INCH BASE) TO S56 (36-INCH BASE)	EACH	1.000	1.000
2740	SPV.0060	SPECIAL 006. CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (36-INCH WIDE BASE)	EACH	6.000	6.000
2750	SPV.0060	SPECIAL 007. CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK	EACH	2.000	2.000
2760	SPV.0060	SPECIAL 008. CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK	EACH	2.000	2.000
2770	SPV.0060	SPECIAL 010. SECTION SURVEY MONUMENTS, RECONSTRUCT PROJECT	EACH	3.000	3.000
2780	SPV.0060	SPECIAL 011. REMOVING SAND BARREL ARRAY AND CONCRETE PAD AT SIGN STRUCTURE SUPPORT	EACH	3.000	3.000
2790	SPV.0060	SPECIAL 102. STORM SEWER TAP	EACH	1.000	1.000
2800	SPV.0060	SPECIAL 103. INLET COVER TYPE DW	EACH	3.000	3.000
2810	SPV.0060	SPECIAL 104. DRAIN SLOTTED VANE TYPE A 3-FOOT	EACH	1.000	1.000
2820	SPV.0060	SPECIAL 105. DRAIN SLOTTED VANE TYPE B 6-FOOT	EACH	9.000	9.000
2830	SPV.0060	SPECIAL 107. TEMPORARY DRAINAGE MANHOLE 4-FT DIAMETER	EACH	6.000	6.000
2840	SPV.0060	SPECIAL 108. TEMPORARY INLET COVER	EACH	4.000	4.000
2850	SPV.0060	SPECIAL 109. TEMPORARY MANHOLE COVER	EACH	2.000	2.000
2860	SPV.0060	SPECIAL 111. INLET COVERS BOLTED	EACH	18.000	18.000
2870	SPV.0060	SPECIAL 114. STORM SEWER PLUG	EACH	24.000	24.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
2880	SPV.0060	SPECIAL 115. COVER PLATES	EACH	8.000	8.000
2890	SPV.0060	SPECIAL 150. INLET PROTECTION TYPE A SPECIAL	EACH	5.000	5.000
2900	SPV.0060	SPECIAL 151. SEDIMENTATION BASIN	EACH	10.000	10.000
2910	SPV.0060	SPECIAL 152. TEMPORARY STONE DITCH CHECKS	EACH	25.000	25.000
2920	SPV.0060	SPECIAL 153. TRACKING PAD MAINTENANCE	EACH	2.000	2.000
2930	SPV.0060	SPECIAL 200. MAINTENANCE AND REMOVAL OF CRASH CUSHIONS TEMP LEFT IN PLACE BY OTHERS	EACH	10.000	10.000
2940	SPV.0060	SPECIAL 201. TEMPORARY THRIE BEAM CONNECTION	EACH	2.000	2.000
2950	SPV.0060	SPECIAL 205. TEMPORARILY MOUNT AND LOCATE TYPE I SIGNS	EACH	3.000	3.000
2960	SPV.0060	SPECIAL 206. LEFT IN PLACE DELINEATOR TEMPORARY	EACH	255.000	255.000
2970	SPV.0060	SPECIAL 207. CRASH CUSHION TEMPORARY LEFT IN PLACE	EACH	1.000	1.000
2980	SPV.0060	SPECIAL 310. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5	EACH	1.000	1.000
2990	SPV.0060	SPECIAL 355. CONCRETE BASE MEDIAN BARRIER TYPE 2	EACH	1.000	1.000
3000	SPV.0060	SPECIAL 372. CONCRETE BASE MEDIAN BARRIER TYPE 1 - STATE FURNISHED JUNCTION BOX	EACH	8.000	8.000
3010	SPV.0060	SPECIAL 373. ANCHOR BOLT COVER SHROUD	EACH	9.000	9.000
3020	SPV.0060	SPECIAL 400. INSTALL DYNAMIC MESSAGE SIGN	EACH	1.000	1.000
3030	SPV.0060	SPECIAL 401. INSTALL IP RADIO	EACH	1.000	1.000
3040	SPV.0060	SPECIAL 402. SALVAGE DYNAMIC MESSAGE SIGN	EACH	1.000	1.000
3050	SPV.0060	SPECIAL 403. SALVAGE POLE MOUNTED CABINET	EACH	1.000	1.000
3060	SPV.0060	SPECIAL 404. SALVAGE IP RADIO	EACH	1.000	1.000
3070	SPV.0060	SPECIAL 950. BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 7	EACH	60.000	60.000
3080	SPV.0060	SPECIAL 951. BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	366.000	366.000
3090	SPV.0075	SPECIAL 150. STREET SWEEPING	HRS	500.000	500.000
3100	SPV.0075	SPECIAL 200. TRUCK MOUNTED ATTENUATOR WITH OPERATOR	HRS	150.000	150.000
3110	SPV.0075	SPECIAL 201. TRUCK MOUNTED ATTENUATOR WITHOUT OPERATOR	HRS	150.000	150.000
3120	SPV.0085	SPECIAL 700. BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	5,930.000	5,930.000
3130	SPV.0090	SPECIAL 003. CONCRETE CURB & GUTTER 32-INCH TYPE A FULL DEPTH **P**	LF	111.000	111.000
3140	SPV.0090	SPECIAL 005. CONCRETE CURB & GUTTER 56-INCH TYPE A FULL DEPTH **P**	LF	16.000	16.000
3150	SPV.0090	SPECIAL 008. CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A FULL DEPTH **P**	LF	48.000	48.000
3160	SPV.0090	SPECIAL 009. CONCRETE CURB & GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH **P**	LF	1,090.000	1,090.000
3170	SPV.0090	SPECIAL 012. STRIP DRAINS	LF	134,096.000	134,096.000
3180	SPV.0090	SPECIAL 014. CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE) **P**	LF	1,350.000	1,350.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
3190	SPV.0090	SPECIAL 015. CONCRETE BARRIER TYPE S56A (36-INCH WIDE BASE) **P**	LF	515.000	515.000
3200	SPV.0090	SPECIAL 016. CONCRETE CURB & GUTTER AND BARRIER, COLD WEATHER COVERING, PLASTIC 1 LAYER	LF	200.000	200.000
3210	SPV.0090	SPECIAL 017. CONCRETE CURB & GUTTER AND BARRIER, COLD WEATHER COVERING, PLASTIC 2 LAYERS	LF	200.000	200.000
3220	SPV.0090	SPECIAL 018. CONC C&G AND BARRIER, COLD WEATHER COVERING, PLASTIC/HAY/PLASTIC OR BLANKET	LF	200.000	200.000
3230	SPV.0090	SPECIAL 100. STORM SEWER TEMPORARY 18-INCH	LF	1,075.000	1,075.000
3240	SPV.0090	SPECIAL 101. STORM SEWER TEMPORARY 24-INCH	LF	132.000	132.000
3250	SPV.0090	SPECIAL 200. CONCRETE BARRIER TEMPORARY PRECAST ANCHORING	LF	1,000.000	1,000.000
3260	SPV.0090	SPECIAL 201. GLARE SCREENS TEMPORARY	LF	1,070.000	1,070.000
3270	SPV.0090	SPECIAL 202. CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE	LF	30,975.000	30,975.000
3280	SPV.0090	SPECIAL 700. DOWNSPOUT RTRP 6-INCH	LF	8.000	8.000
3290	SPV.0105	SPECIAL 001. SURVEY PROJECT 1133-10-71	LS	1.000	1.000
3300	SPV.0105	SPECIAL 004. GEOTECHNICAL INSTRUMENTATION	LS	1.000	1.000
3310	SPV.0105	SPECIAL 007. CONCRETE PAVEMENT JOINT LAYOUT	LS	1.000	1.000
3320	SPV.0105	SPECIAL 201. MAINTAINING TRAFFIC CONTROL FOR DUCK CREEK RECREATIONAL VEHICLES	LS	1.000	1.000
3330	SPV.0165	SPECIAL 200. TRAFFIC CONTROL SIGNS FIXED MESSAGE LEFT IN PLACE	SF	192.000	192.000
3340	SPV.0165	SPECIAL 250. PERMANENT COVERING SIGNS TYPE I	SF	82.000	82.000
3350	SPV.0165	SPECIAL 700. ARCHITECTURAL SURFACE TREATMENT	SF	8,083.000	8,083.000
3360	SPV.0165	SPECIAL 701. STAINING CONCRETE	SF	43,502.000	43,502.000
3370	SPV.0165	SPECIAL 702. STAINING CONCRETE BRICK	SF	6,753.000	6,753.000
3380	SPV.0165	SPECIAL 703. LONGITUDINAL GROOVING BRIDGE DECK	SF	184,534.000	184,534.000
3390	SPV.0165	SPECIAL 705. TEMPORARY SHORING RAILROAD B-05-674	SF	590.000	590.000
3400	SPV.0165	SPECIAL 706. TEMPORARY SHORING RAILROAD B-05-675	SF	280.000	280.000
3410	SPV.0165	SPECIAL 850. WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP PILOT **P**	SF	19,463.000	19,463.000
3420	SPV.0165	SPECIAL 851. PRESTRESSED PRECAST CONCRETE WALL PANEL **P**	SF	19,463.000	19,463.000
3430	SPV.0165	SPECIAL 950. SIGN BLANKS LEFT-IN-PLACE	SF	297.000	297.000
3440	SPV.0180	SPECIAL 008. CONCRETE PAVEMENT VARIABLE DEPTH	SY	1,173.000	1,173.000
3450	SPV.0180	SPECIAL 009. GEOGRID REINFORCEMENT	SY	5,000.000	5,000.000
3460	SPV.0180	SPECIAL 011. CONCRETE PAVEMENT, COLD WEATHER COVERING, PLASTIC 1 LAYER	SY	5,000.000	5,000.000
3470	SPV.0180	SPECIAL 012. CONCRETE PAVEMENT, COLD WEATHER COVERING, PLASTIC 2 LAYER	SY	3,000.000	3,000.000

3

DATE 14NOV14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1133-10-71 QUANTITY
3480	SPV.0180	SPECIAL 013. CONCRETE PAVEMENT, COLD WEATHER COVERING, PLASTIC/HAY/PLASTIC OR BLANKET	SY	2,000.000	2,000.000
3490	SPV.0180	SPECIAL 014. INSTALL GEOTEXTILE FABRIC TYPE ES	SY	2,448.000	2,448.000
3500	SPV.0195	SPECIAL 005. COLD PATCH	TON	10.000	10.000
3510	SPV.0195	SPECIAL 006. MILL AND PAVE JOINT	TON	108.000	108.000
3520	SPV.0195	SPECIAL 007. MILL AND PAVE RUMBLE STRIP	TON	50.000	50.000

3

CLEARING AND GRUBBING

STATION	-	STATION	ROADWAY	RT/LT	201.0110 CLEARING SY	201.0120 CLEARING ID	201.0210 GRUBBING SY	201.0220 GRUBBING ID
STAGE 1								
1141+13			SMC	LT	--	12	--	12
1141+81			SMC	LT	--	12	--	12
1142+10			SMC	LT	--	12	--	12
1143+41			SMC	LT	--	12	--	12
1143+54			SMC	LT	--	12	--	12
1143+84			SMC	LT	--	12	--	12
1144+40			SMC	LT	--	12	--	12
1145+09			SMC	LT	--	12	--	12
1145+22			SMC	LT	--	12	--	12
1171+00	-	1172+75	SMC	LT	1166	--	1166	--
1208+58		1210+40	NMC	LT	629	--	619	--
STAGE 1 SUBTOTALS					**1,795**	**108**	**1,785**	**108**
STAGE 2								
1144+74			SIH	LT	--	12	--	12
1148+87			NIH	RT	--	12	--	12
1149+33			NIH	RT	--	12	--	12
1150+72			NIH	RT	--	12	--	12
1154+04			SIH	LT	--	12	--	12
1155+37			SIH	LT	--	12	--	12
1154+08			NIH	RT	--	12	--	12
1184+81			NIH	RT	--	12	--	12
1197+28			IHA	RT	134	--	134	--
1198+94			IHA	RT	--	12	--	12
1199+50			IHA	RT	--	12	--	12
1199+58			IHA	RT	--	12	--	12
1199+76			IHA	RT	--	12	--	12
1199+83			IHA	RT	--	12	--	12
1199+91			IHA	RT	--	12	--	12
1200+00			IHA	RT	--	12	--	12
1200+17			IHA	RT	--	12	--	12
1200+22			IHA	RT	--	12	--	12
1200+49			IHA	RT	--	12	--	12
1200+58			IHA	RT	--	12	--	12
1200+76			IHA	RT	--	12	--	12
1202+25			IHA	RT	--	12	--	12
1202+86			IHA	RT	--	12	--	12
1202+99			IHA	RT	--	12	--	12
1203+20			IHA	RT	--	12	--	12
1203+70			IHA	RT	--	12	--	12
1203+79			IHA	RT	--	12	--	12
1203+98			IHA	RT	--	12	--	12
STAGE 2 SUBTOTALS					**134**	**324**	**134**	**324**
PROJECT 1133-10-71 TOTALS					**1,929**	**432**	**1,919**	**432**

REMOVING PAVEMENTS

STATION	-	STATION	LOCATION	OFFSET	204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
STAGE 1									
1160+26		1162+74	SMC	LT-RT	--	--	34	1556	BUTT JOINT FOR SAG IN PATCH
1159+89		1161+62	NMC	RT	--	--	47	389	BUTT JOINT FOR SAG IN PATCH
1199+67		1200+97	NMC	LT-RT	270	--	--	--	
1152+00		1162+00	TWD	RT	250	--	--	--	STORM SEWER CROSSINGS
120+50		120+65	MIL	LT-RT	--	60	--	--	
121+50		121+65	MIL	LT-RT	--	60	--	--	
STAGE 1 SUBTOTALS					**520**	**120**	**81**	**0**	
STAGE 2									
1141+00		1172+85	NMC	LT-RT	8,350	--	--	--	
1174+40		1181+41	NMC	LT-RT	1,830	--	--	--	
1221+00		1246+00	NMC	LT-RT	6,380	--	--	--	
1180+06		1184+11	NMC	LT-RT	680	--	--	--	ORIGINAL NB ON RAMP FROM VELP
1141+00		1172+00	NIH	LT-RT	4,100	--	--	--	
1173+50		1179+00	NIH	LT	910	--	--	--	
1125+00		1142+75	SIH - IHA	LT	--	--	67	2,367	
1141+00		1200+50	SIH - IHA	LT-RT	8,240	--	--	--	
1195+75		1220+10	IHA	RT	4,030	--	--	--	OB2 ALIGNMENT, OLD SB 41 TO SB 43
1170+50		1173+10	VEA	RT	--	--	10	656	TEMP CONNECTION TO VELP
1175+70		1177+00	VEB	LT-RT	--	--	7	300	TEMP CONNECTION TO VELP
1169+55		1170+75	VED	RT	--	--	4	247	TEMP CONNECTION TO VELP
STAGE 2 SUBTOTALS					34,520	0	88	3,569	
PROJECT 1133-10-71 TOTALS					**35,040**	**120**	**169**	**3,569**	

REMOVING CONCRETE SLOPE PAVING

STATION	-	STATION	LOCATION	OFFSET	204.0175 SY
STAGE 2					
1172+83	-	1173+25	NMC	LT-RT	130
1174+08	-	1174+52	NMC	LT-RT	134
PROJECT 1133-10-71 TOTALS					**264**

REMOVING OLD STRUCTURE

STATION	LOCATION	OFFSET	DESCRIPTION	203.0200.006 LS
STAGE 1				
1197+00	IHA	LT	B-05-0133 , 2 SPAN HAUNCED PLATE GIRDERS, 35-FT X 300-FT	1
PROJECT 1133-10-71 TOTALS				**1**

3

REMOVING FENCE

STATION	-	STATION	LOCATION	OFFSET	204.0170 LF	REMARKS
STAGE 1						
1134+82	-	1151+31	NMC	RT	1710	
1135+00	-	1168+28	SMC	LT	3440	
1159+79	-	1169+00	VEA	RT	970	
1171+80	-	1172+20	IHA	RT	76	TEMP FENCING AT END OF STRUCTURE
1178+46	-	1184+62	VEB - NMC	RT	775	
1192+72	-	1192+92	NMC	RT	135	TEMP FENCING AT END OF STRUCTURE
1195+49	-	1195+58	NMC	RT-LT	95	TEMP FENCING AT END OF STRUCTURE
1202+28	-	1203+15	NMC	RT-LT	140	TEMP FENCING AT END OF STRUCTURE
1220+30	-	1220+56	NMC	RT-LT	140	TEMP FENCING AT END OF STRUCTURE
1224+00	-	1249+50	SMC	LT	2420	
1235+20	-	1249+50	NMC	RT	1505	
STAGE 1 SUBTOTALS					**11,406**	
STAGE 2						
1141+50	-	1166+61	NIH	RT	2500	
1143+70	-	93+89	SIH - WT	LT	4950	
1176+53	-	1176+73	IHB	RT-LT	100	TEMP FENCING AT END OF STRUCTURE
1186+93	-	1187+15	NIH	RT-LT	75	TEMP FENCING AT END OF STRUCTURE
STAGE 2 SUBTOTALS					**7625**	
PROJECT 1133-10-71					**19,031**	

REMOVING CONCRETE BARRIER

STATION	-	STATION	LOCATION	OFFSET	204.9090.S.002 REMOVING CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF	SPV.0060.200 MAINTENANCE AND REMOVAL OF CRASH CUSHIONS TEMP LEFT IN PLACE BY OTHERS EACH	REMARKS
STAGE 1							
1158+50		1167+85	IHA - VEA	RT	950	1	
1202+80		1205+65	IHA	LT-RT	1,275	1	
99+78		102+78	WT	RT	300	1	EXISTING NB 43 TO SB 41, LT SIDE
101+09		103+40	WT	RT	250	--	EXISTING SB 41 TO SB 43, LT SIDE
100+21		100+36	WT	RT	325	--	EXISTING SB 41 TO SB 43, RT SIDE
STAGE 1 SUBTOTALS					**3,100**	**3**	
STAGE 2							
1159+97		1172+72	NMC	RT	1,250	1	
1160+27		1168+50	VEA	LT	850	1	
1176+25		1179+50	VEB	LT	350	1	
1177+65		1181+80	VEB	LT-RT	400	1	
1173+22		1186+00	NIH	LT	1,275	1	
1174+76		1180+00	NIH	LT	500	1	
1202+80		1215+64	IHA	RT	1,275	1	
STAGE 2 SUBTOTALS					5,900	7	
PROJECT 1133-10-71 TOTALS					**9,000**	**10**	

REMOVING GUARDRAIL

STATION	-	STATION	LOCATION	OFFSET	204.0165 LF	REMARKS
STAGE 1						
1172+52		1172+65	NMC	LT	40	RAIL BETWEEN STRUCTURES
1174+36		1174+49	NMC	LT	40	
1174+38		1175+51	SMC	RT	115	
1174+26		1176+73	SMC	LT	250	
1193+40		1195+00	SIH	LT	500	BULLNOSE TERMINALS IN MEDIAN
1217+25		1220+50	SIH	RT	350	
1217+03		1217+10	SIH	LT	40	
1160+74		1162+90	NIH	LT	450	BULLNOSE TERMINALS IN MEDIAN
STAGE 1 SUBTOTALS					**1,785**	
STAGE 2						
1169+84		1172+34	NMC	LT	260	
1190+00		1192+72	NMC	LT	275	
1185+87		1188+75	NMC	LT	285	
1195+58		1203+60	SIH	LT	950	EXISTING NB 41 TO SB 43
1185+77		1189+05	NIH	LT	345	
1188+63		1200+81	IHA	RT	350	EXISTING NB 41 TO SB 43
1197+07		1204+46	IHA	RT	765	EXISTING NB 41 TO SB 43
1220+50		1223+42	SIH	RT	290	
STAGE 2 SUBTOTALS					**3,520**	
PROJECT 1133-10-71 TOTALS					**5,305**	

REMOVING DELINEATORS AND MARKERS

STATION	-	STATION	LOCATION	OFFSET	204.0180 EACH
STAGE 1					
1217+25	-	1220+75	SIH	RT	4
1220+50	-	1247+00	SMC	LT	16
STAGE 1 SUBTOTAL					**20**
STAGE 2					
1186+00	-	1193+00	NMC	LT	5
1220+50	-	1249+00	NMC	LT-RT	15
1125+00		1193+00	SIH	LT	25
1140+00		1172+00	NIH	RT	15
STAGE 2 SUBTOTAL					**60**
PROJECT 1133-10-71 TOTALS					**80**

REMOVING AND ABANDONING DRAINAGE ITEMS

STATION	LOCATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH	204.0245.002 REMOVING STORM SEWER (12-INCH) LF	204.0245.003 REMOVING STORM SEWER (18-INCH) LF	204.0245.004 REMOVING STORM SEWER (24-INCH) LF	204.0245.005 REMOVING STORM SEWER (36-INCH) LF	REMARKS
STAGE 1										
1143+82	NMC	LT-RT	1	--	--	--	--	--	--	18-INCH CMCP
1150+75	IHA	RT	1	--	--	--	--	--	--	HALF OF PIPE REM. IN STAGE 2, 12-INCH RCP
1157+77	IHA	LT-RT	1	--	--	--	--	--	--	HALF OF PIPE REM. IN STAGE 2, 18-INCH CMCP
1162+50	VEA	LT-RT	--	--	--	--	--	22	--	
1172+50	SMC	LT-RT	--	--	1	60	--	--	--	
1172+65	SMC	RT	--	--	1	20	--	--	--	
1175+68	SMC	RT	--	--	1	--	24	--	--	
1217+12	SIH	RT	--	--	1	34	--	--	--	
1225+34	NMC	LT	--	--	1	--	16	--	--	
1232+00	NMC	LT	1	--	--	--	--	--	--	18-INCH CMCP
1238+00 - 1246+10	NMC	LT	--				810			18-INCH CMCP & ATTACHED SLOTTED DRAIN
1241+34	NMC	LT	--	1	--	--	--	--	--	--
1246+10	NMC	LT	--		1					
1150+02	NIH	LT	--	--	1	--	36	--	--	
1158+01	NIH	LT	--	--	1	--	36	--	--	
11743+08	SIH	LT	--	--	1	--	8	--	--	REMOVAL FOR TEMPORARY DRAINAGE
1178+50	SIH	LT-RT	--	--	1	--	48	--	--	PIPE IS 14X23-INCH HE SSPRC
1180+65	NIH	LT-RT	1	--	--	--	--	--	--	HALF OF PIPE REM. IN STAGE 2, 18-INCH RCP
1189+25	TWC	LT	--	--	--	--	8	--	--	REMOVAL FOR TEMPORARY DRAINAGE
STAGE 1 SUBTOTALS			**5**	**1**	**10**	**114**	**986**	**22**	**0**	
STAGE 2										
1148+25 - 1150+70	NMC	LT	--	--	1	--	--	250	--	
1162+00	NMC	LT	--	--	1	--	--	--	--	
1162+00	IHA	LT-RT	--	1	--	--	--	54	--	
1162+00 - 1170+00	IHA	LT	--	--	3	--	752	--	--	
1172+63	NMC	LT	--	--	1	30	--	--	--	
1225+34	NMC	RT	--	--	--	--	178	--	--	
1235+22	NMC	LT-RT	--	--	1	--	--	--	110	
1150+02	NIH	RT	--	--	--	--	80	--	--	
1158+01	NIH	RT	--	--	--	--	80	--	--	
1178+52	NIH	LT-RT	--	--	1	--	90	--	--	PIPE IS 14X23-INCH HE SSPRC
87+02	WT	RT	1	--	--	--	--	--	--	24-INCH RCP
1201+31	IHA	LT-RT	1	--	--	--	--	--	--	18-INCH RCP
STAGE 2 SUBTOTALS			**2**	**1**	**8**	**30**	**1,180**	**304**	**110**	
PROJECT 1133-10-71 TOTALS			**7**	**2**	**18**	**144**	**2,166**	**326**	**110**	

REMOVING SURFACE DRAINS

STATION	LOCATION	OFFSET	204.0190 EACH
STAGE1			
1195+53	NMC	LT	1
STAGE 1 SUBTOTAL			**1**
STAGE 2			
1172+67	NMC	RT	1
1186+07	NMC	RT	1
1195+53	NMC	LT	1
1201+00	NMC	RT	1
1248+50	NMC	RT	1
STAGE 2 SUBTOTAL			**5**
PROJECT 1133-10-71 TOTALS			**6**

Category	Stage	From/To Station	Location	Excavation Common (CY) (1) 205.0100			Excavation Marsh (CY) (5) 205.0400			Fill (CY) (8)	Select Borrow (CY) (9) 208.1100 Factor 1.15	Breaker Run (TON) (10) 311.0110	Drainage Blanket (CY) (11) SPV.0035.001	Granular Material for ES Fabric (CY) (12) SPV.0035.004	Roadway Embankment (CY) (13) SPV.0035.002	Mass Ordinate +/- (14)
				Cut (CY) (2)	EBS (CY) (3)	Drainage Blanket Cut (CY) (4)	General Marsh Excavation (CY)	Marsh Excavation Median (CY) (6)	Marsh Excavation Cut (CY) (7)							
1000	1 & 2	1148+50 - 1216+50 IHA	NB 41 - SB 43 flyover ramp	10,832	0	0	15,141	0	1,475	48,202	0	0	3,934	0	57,934	-47,103
	2	1167+50 - 1176+65 IHB	NB 43 - SB 41 flyover ramp	4	0	0	0	0	0	980	0	0	0	0	980	-975
	2	1141+00 - 1187+08 NIH	NB 43 - NB 41 ramp	6,951	10,913	0	0	0	0	3,321	0	19,643	0	0	3,321	3,630
	1 & 2	1138+00 - 1249+00 NMC	NB USH 41	14,161	3,479	0	0	6,350	0	105,276	7,300	6,263	0	0	105,276	-91,116
	1 & 2	1198+50 - 1206+50 OB2	Obliterate NB 41 - SB 43 loop ramp	18,858	0	13,611	7,623	0	7,623	0	0	0	1,502	816	11,293	20,360
	2	1125+00 - 1174+50 SIH	SB 41 - SB 43 ramp	9,716	8,336	0	0	0	0	609	0	15,005	0	0	609	9,107
	2	1138+00 - 1158+00 SMC	SB USH 41	2,883	760	0	0	0	0	16,352	0	1,367	0	0	16,352	-13,470
	2	1152+00 - 1180+00 TWA	SB USH 41 Temporary	3,886	0	0	0	0	0	217	0	0	0	0	217	3,669
	2	1138+60 - 1245+75 TWB	NB USH 41 Temporary	10,835	0	0	0	0	0	2,107	0	0	0	0	2,107	8,728
	2	1123+50 - 1168+00 TWC	SB IH 43 Temporary	3,366	0	0	0	0	0	637	0	0	0	0	637	2,729
	2	1135+00 - 1201+15 TWD	NB IH 43 Temporary	6,185	0	0	0	0	0	1,490	0	0	0	0	1,490	4,695
	2	1138+00 - 1144+50 TWE	SB USH 41 Temporary	472	0	0	0	0	0	904	0	0	0	0	904	-433
	1	1160+50 - 1170+00 VEA	NB 41 off-ramp to Velp Ave	277	0	0	0	0	0	8,527	0	0	0	0	8,527	-8,250
	2	1177+00 - 1190+00 VEB	NB 41 on-ramp from Velp Ave	1,501	0	0	0	0	0	1,603	0	0	0	0	1,603	-102
	2	1158+00 - 1168+50 VED	SB 41 on-ramp from Velp Ave	29	0	0	0	0	0	18,046	0	0	0	0	18,046	-18,017
Project 1133-10-71 Sub-Total				89,955	23,488	13,611	22,765	6,350	9,098	208,271						-126,547
Project 1133-10-71 Total				127,053			38,213				7,300	42,278	5,436	816	229,296	

1) Excavation Common = Cut + EBS Excavation + Drainage Blanket Cut. Item number 205.0100. Additional 1500 CY added to NMC Cut for removal of Temporary Median Crossover (STA. 1236+00-1248+00 NMC).

2) Cut volume includes concrete and asphaltic surface material.

3) EBS Excavation to be backfilled with Breaker Run at field engineer's discretion.

4) Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

5) Excavation Marsh limits as identified in the cross sections. The material designated as Excavation Marsh is planned to be wasted offsite. Any areas designated as Excavation Marsh in the plans will be paid for as Excavation Marsh, regardless of the type of material encountered. Additionally, if the contractor's operations allow for the marsh excavation to be used as fill onsite, then its excavation will be paid as Excavation Marsh. Unless otherwise specified in plans, all General Marsh Excavation is assumed to be backfilled with Roadway Embankment.

6)Material excavated as Marsh Excavation from Median North of Duck Creek and backfilled with Select Borrow. (see construction details) (Not shown in Computer Earthwork Tables).

7) Portion of material excavated as Marsh Excavation, but not to be backfilled. (see construction details).

8) Measured from existing ground to top of proposed fill.

9) To be used north of Duck Creek to backfill poor soil in the existing medians. Used at the field engineer's discretion.

10) Used at field engineer's discretion to backfill EBS.

11) Volume occupied by drainage blanket has been removed from Roadway Embankment quantity.

12) Granular Material for ES Fabric necessary to protect Geotextile Fabric. See Geotextile Map for further details.

13) Roadway Embankment = (Drainage Blanket Cut + {General Marsh Excavation - Marsh Excavation Cut} + Fill - Drainage Blanket) - Granular Material for ES Fabric

14) The Mass Ordinate: A positive quantity indicates an excess of material within the project and a negative quantity indicates a shortage of material within the project. Structure Excavation is not included in this calculation.
Mass Ordinate = (Cut + Drainage Blanket Cut) - Roadway Embankment - Granular Material for ES Fabric. The Mass Ordinate is for information purposes only as Common Excavation and Roadway Embankment are not balanced for quantity purposes and does not guarantee the quality of Common Excavation, and if it can be reused onsite.

3

REMOVING TEMPORARY SHORING LEFT IN PLACE

	STATION	-	STATION	LOCATION	204.9090.S.001 LF
STAGE 1					
	113800		1139+50	NMC, LT	150
PROJECT 1133-10-71 TOTALS					**150**

AGGREGATE ITEMS

	STATION	-	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110* BREAKER RUN TON	REMARKS
STAGE 1								
	1138+00	-	1143+00	NMC, RT	440	760	1070	
	1143+00	-	1158+50	IHA, RT	1360	2350	3310	
	1158+50	-	1170+00	VEA	--	720	970	
	1138+20	-	1172+86	TWB	--	4750	4280	TEMPORARY WIDENING
	1138+50	-	1144+00	TWB, LT	70	--	--	TEMPORARY WIDENING
	1141+00	-	1172+85	TWB, RT	380	--	--	TEMPORARY WIDENING
	1151+50	-	1160+65	TWA, LT	110	--	--	TEMPORARY WIDENING
	1151+54	-	1160+63	TWB	--	1030	920	TEMPORARY WIDENING
	1156+48	-	1172+72	TWB	--	1110	1000	TEMPORARY WIDENING
	1174+26	-	1180+49	TWA, LT	80	470	420	TEMPORARY WIDENING
	1174+41	-	1178+39	TWB, RT	50	330	300	TEMPORARY WIDENING
	1178+93	-	1184+72	TWB, LT	70	340	310	TEMPORARY WIDENING
	1195+80	-	1206+61	TWB, LT	130	780	700	TEMPORARY WIDENING
	1214+88	-	1218+44	TWB, RT	50	260	240	TEMPORARY WIDENING
	1214+87	-	1223+07	TWB, LT	100	--	--	TEMPORARY WIDENING
	1214+87	-	1246+02	TWB, RT	--	4640	4180	TEMPORARY WIDENING
	1220+64	-	1245+45	TWA, LT	300	2370	2130	TEMPORARY WIDENING
	1222+35	-	1246+10	TWB, RT	290	--	--	TEMPORARY WIDENING
	1123+30	-	1201+33	TWC	--	15720	14150	TEMPORARY WIDENING
	1123+30	-	1139+31	TWC, RT	190	--	--	TEMPORARY WIDENING
	1134+50	-	1139+31	TWD, LT	60	--	--	TEMPORARY WIDENING
	1138+37	-	1160+22	TWC, LT	260	--	--	TEMPORARY WIDENING
	1138+74	-	1160+54	TWD, RT	260	170	--	TEMPORARY WIDENING & STORM PATCHES
	1163+30	-	1200+27	TWC, LT	440	--	--	TEMPORARY WIDENING
	1162+10		1162+60	SMC	--	100	110	STORM SEWER PATCH
	1170+00		1173+08	TA	40	430	390	TEMP. RAMP CONNECTION
STAGE 1 SUBTOTALS					**4,680**	**36,330**	**34,480**	

AGGREGATE ITEMS CONT.

	STATION	-	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110* BREAKER RUN TON	REMARKS
STAGE 2								
	1138+00	-	1148+48	NMC	--	1520	2660	
	1138+00	-	1157+00	SMC	1670	1910	3440	
	1148+48	-	1172+47	NMC	--	5330	9580	
	1148+49	-	1172+66	IHA	--	2760	4970	
	1162+25	-	1170+00	VEA	--	110	200	
	1157+00	-	1162+50	VED	--	550	980	
	1162+50	-	1168+50	VED	--	860	1550	
	1172+47	-	1172+55	NMC	--	100	180	
	1172+66	-	1172+82	IHA	--	30	50	
	1174+56	-	1175+11	NMC	--	100	180	
	1175+11	-	1184+03	NMC	--	2380	4280	
	1184+03	-	1184+21	NMC	--	40	70	
	1177+00	-	1184+05	VEB	780	680	1210	
	1184+05	-	1184+21	VEB	--	20	30	
	1186+06	-	1186+24	NMC	--	40	70	
	1186+08	-	1186+24	VEB	--	20	30	
	1186+24	-	1192+68	NMC	--	1290	2320	
	1186+24	-	1192+68	VEB	--	610	1090	
	1192+68	-	1192+84	NMC	--	50	80	
	1195+55	-	1195+71	NMC	--	50	80	
	1195+71	-	1202+36	NMC	--	1860	3350	
	1202+36	-	1203+02	NMC	--	90	150	
	1200+41	-	1200+58	NMC	--	60	100	
	1200+58	-	1249+00	NMC	--	8900	16020	
	1125+00	-	1142+75	SIH	1660	2080	3740	
	1141+00	-	1148+00	NIH	660	360	640	
	1142+75	-	1149+00	SIH	590	680	1150	
	1142+75	-	1169+46	NIH	--	2550	5250	
	1142+75	-	1171+00	SIH	--	2530	5340	
	1148+00	-	1152+25	NIH	470	340	550	
	1149+00	-	1159+00	SIH	1100	1180	1290	
	1152+25	-	1164+50	NIH	1150	870	1430	
	1159+00	-	1171+00	SIH	1120	1290	1400	
	1164+50	-	1169+46	NIH	550	400	640	
	1169+46	-	1171+59	NIH	--	120	210	ASPHALT GORE
	1169+46	-	1186+92	NIH	--	1740	3120	
	1169+46	-	1176+49	IHB	1380	680	1220	
	1171+59	-	1179+50	NIH	1170	560	920	
	1179+50	-	1186+92	NIH	1380	600	960	
	1196+90	-	1220+08	IHA	2170	3820	6630	
	1176+49	-	1176+65	IHB	--	30	50	
	1186+92	-	1187+08	NIH	--	30	50	
	1196+73	-	1196+90	IHA	--	30	50	
	1138+00	-	1144+77	TWB	90	1340	1210	TEMPORARY WIDENING
	1168+50		1170+85	TD	30	240	210	TEMP. RAMP CONNECTION
	1175+67		1177+00	TB	20	130	120	TEMP. RAMP CONNECTION
	LOW POINTS W/ BARRIER				--	--	50	
STAGE 2 SUBTOTALS					**15,990**	**50,960**	**88,900**	
PROJECT 1133-10-71 TOTALS					**20,670**	**87,290**	**123,380**	

PAVEMENT ITEMS

STATION		STATION	LOCATION	315.0100 ASPHALTIC BASE TON	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0105 CONCRETE PAVEMENT 10.5-INCH SY	415.0410 APPROACH SLAB SY	SPV.0180.008 VARIABLE DEPTH SY
STAGE 1								
1138+00	-	1143+00	NMC	159	--	779	--	--
1143+00	-	1158+50	IHA	476	--	2,464	--	--
1158+50	-	1162+75	VEA	231	--	753	--	--
1162+75	-	1170+00	VEA	234	1,493	--	--	--
1159+00	-	1170+00	VEA	163	--	--	--	973
SUBTOTALS STAGE 1				**1,264**	**1,493**	**3,996**	**--**	**973**
STAGE 2								
1138+00	-	1148+48	NMC	745	--	4,433	--	--
1138+00		1157+00	SMC	614	--	3,656	--	--
1148+48	-	1172+47	NMC	2,707	--	15,967	--	--
1148+49	-	1172+66	IHA	1,419	--	8,278	--	--
1162+25	-	1170+00	VEA	119	330	--	--	--
1157+00	-	1162+50	VED	327	--	1,633	--	--
1162+50	-	1168+50	VED	508	2,578	--	--	--
1172+47	-	1172+55	NMC	--	--	--	292	--
1172+66	-	1172+82	IHA	--	--	--	77	--
1174+56	-	1175+11	NMC	--	--	--	291	--
1175+11	-	1184+03	NMC	1,312	--	7,122	--	--
1184+03	-	1184+21	NMC	--	--	--	113	--
1177+00	-	1184+05	VEB	409	2,011	--	--	--
1177+00	-	1179+25	VEB	--	--	--	--	200
1184+05	-	1184+21	VEB	--	--	--	48	--
1186+06	-	1186+24	NMC	--	--	--	111	--
1186+08	-	1186+24	VEB	--	--	--	47	--
1186+24	-	1192+68	NMC	713	--	3,861	--	--
1186+24	-	1192+68	VEB	364	--	1,802	--	--
1192+68	-	1192+84	NMC	--	--	--	129	--
1195+55		1195+71	NMC	--	--	--	129	--
1195+71		1202+36	NMC	1,008	--	5,572	--	--
1202+36		1203+02	NMC	--	--	--	241	--
1220+41		1220+58	NMC	--	--	--	152	--
1220+58		1249+00	NMC	4,342	--	26,695	--	--
1142+75		1169+46	NIH	1,431	--	7,626	--	--
1142+75		1171+00	SIH	1,429	--	7,561	--	--
1169+46		1186+92	NIH	968	--	5,200	--	--
1169+46		1176+49	IHB	417	--	2,023	--	--
1196+90		1220+08	IHA	831	--	4,100	--	--
1176+49		1176+65	IHB	--	--	--	74	--
1186+92		1187+08	NIH	--	--	--	74	--
1196+73		1196+90	IHA	--	--	--	78	--
SUBTOTALS STAGE 2				**19,662**	**4,919**	**105,529**	**1,856**	**200**
PROJECT 1133-10-71 TOTALS				**20,926**	**6,412**	**109,525**	**1,856**	**1,173**

REMOVING SAND BARREL ARRAY AND CONCRETE PAD AT SIGN STRUCTURE SUPPORT

	LOCATION	STATION	ROADWAY	RT/LT	SPV.0060.011 EACH
STAGE 1					
	I-43 NB	1161+05	NIH	LT/RT	2
	I-43 SB	1189+02	SIH	LT	1
SUBTOTAL STAGE 1					**3**
PROJECT 1133-10-71 TOTALS					**3**

DRILLED TIE AND DOWEL BARS

STATION		STATION	LOCATIO	OFFSET	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
STAGE 1						
1138+00			RT	NMC	--	13
STAGE 1 SUBTOTAL					**0**	**13**
STAGE 2						
1138+00			RT	NMC	--	22
1138+00			LT	SMC	--	13
1128+60	-	1142+75	LT	SIH	566	--
1249+00			LT-RT	NMC	--	70
1142+75			LT	SIH	--	13
1142+75			RT	NIH	--	13
STAGE 2 SUBTOTAL					**566**	**131**
PROJECT 1133-10-71 TOTALS					**566**	**144**

SHOULDER RUMBLE STRIP

STATION		STATION	OFFSET	LOCATION	416.1110 CONCRETE SHOULDER RUMBLE STRIPS LF	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	REMARKS
STAGE 2							
1156+54		1158+49	VED	LT	195	--	
1220+57		1295+45	NMC	RT	7488	--	NORTH OF 1249+00 NMC PREV. CONSTRUCTED
1257+00		1323+00	NMC	LT	6600	--	PAVEMENT PREVIOUSLY COSNTRUCTED
1298+55		1322+94	NMC	RT	2439	--	PAVEMENT PREVIOUSLY COSNTRUCTED
1323+00		1365+00	NMC	LT	--	4200	PAVEMENT PREVIOUSLY COSNTRUCTED
1325+41		1355+00	NMC	RT	--	2959	PAVEMENT PREVIOUSLY COSNTRUCTED
1125+00		1162+50	SIH	LT	--	3750	
PROJECT 1133-10-71 TOTALS					**16,722**	**10,909**	

3

ASPHALTIC PAVEMENTS

STATION	-	STATION	LOCATION	320.0145 CONCRETE BASE 8-INCH SY	320.0150 CONCRETE BASE 8.5-INCH SY	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	460.1130 HMA PAVEMENT TYPE E-30 TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
STAGE 1												
1138+00	-	1158+00	NMC-IHA	--	--	34	56	622	--	--	--	SHOULDER
1138+21	-	1172+85	TWB	--	--	110	50	--	1,994	--	--	NB 41 CROSSOVER
1156+53	-	1160+64	TWA	--	--	24	11	--	429	--	--	TEMP SB 41 WIDENING
1158+00	-	1172+72	TWA	--	--	25	12	--	464	--	--	TEMP SB 41 WIDENING
1174+27	-	1180+46	TWA	--	--	11	5	--	194	--	--	TEMP SB 41 WIDENING
1174+41	-	1178+39	TWB	--	--	8	3	--	138	--	--	TEMP NB 41 WIDENING
1178+66	-	1184+72	TWB	--	--	8	4	--	142	--	--	NB 41 CROSSOVER
1195+50		1206+61	TWB	--	--	18	8	--	327	--	--	TEMP NB 41 WIDENING
1214+85		1218+45	TWB	--	--	6	3	--	110	--	--	TEMP NB 41 WIDENING
1214+86		1246+02	TWB	--	--	107	49	--	1,948	--	--	NB 41 CROSSOVER
1223+31		1201+33	TWC	--	--	390	177	--	7,098	--	--	TEMP 43 MEDIAN PAVING
1170+00		1173+08	TA	--	--	20	9	--	359	--	--	TEMP VELP CONNECTION
109+50		110+00	VEW	--	--	--	--	--	--	--	5	TEMP. VELP SIDEWALK REPLACEMENT
1152+00		1162+00	TWD	--	--	5	2	--	82	--	--	TEMP ASPHALT PATCHING FOR STORM CROSSINGS
1159+89		1161+61	NMC	--	--	4	2	--	75	--	--	ASPHALT FOR SAG OVER BEAVER DAM BOX
1162+10		1162+60	SMC	--	--	2	--	--	32	--	--	ASPHALT FOR STORM SEWER PATCH
SUBTOTALS STAGE 1				**--**	**--**	**771**	**390**	**622**	**13,392**	**--**	**5**	
STAGE 2												
1138+00	-	1156+55	SMC	--	--	32	52	579	--	--	--	SHOULDER
1148+49	-	1153+25	IHA	--	913	6	--	102	--	--	--	GORE
1186+24	-	1190+03	NMC	--	402	2	--	45	--	--	--	GORE
1125+00	-	1197+83	SIH - IHA	-	--	122	199	2,226	--	--	--	SHOULDER NB 41 TO SB 43
1125+00	-	1141+00	SIH	--	--	33	53	--	--	596	--	MAINLINE
1128+60	-	1142+75	SIH	1725	--	21	43	--	--	386	--	MAINLINE
1141+00	-	1142+75	NIH	235	--	3	6	--	--	52	--	MAINLINE
1141+00	-	1176+18	NIH - IHB	--	--	59	96	1,078	--	--	--	SHOULDER NB 43 TO SB 41
1160+50		1162+75	VEA	180	--	--	--	--	--	--	--	GORE
1169+46	-	1171+61	IHB	338	--	2	--	38	--	--	--	GORE
1171+59	-	1186+58	NIH	--	--	26	42	467	--	--	--	SHOULDER NB 43 TO NB 41
1171+61	-	1176+18	IHB	--	--	6	10	114	--	--	--	LEFT SHOULDER
1138+00		1144+75	TWB	--	--	31	14	--	560	--	--	TEMP SB 41 CROSSOVER
1168+50		1170+85	TD	--	--	11	5	--	--	--	--	TEMP SB VELP ON RAMP
1175+67		1177+00	TB	--	--	6	3	--	106	--	--	TEMP NB VELP ON RAMP
109+75		111+25	VEW	--	--	--	--	--	--	--	14	SIDEWALK REPLACEMENT UNDER BRIDGE
SUBTOTALS STAGE 2				**2,478**	**1,315**	**360**	**522**	**4,648**	**666**	**1,034**	**14**	
PROJECT 1133-10-71 TOTALS				**2,478**	**1,315**	**1,131**	**912**	**5,270**	**14,058**	**1,034**	**19**	

3

3

CONCRETE SURFACE DRAINS

	STATION	LOCATION	OFFSET	416.1010 CY
STAGE 2				
	1233+65	NMC	RT	2.4
	1235+74	NMC	RT	2.4
	1244+31	NMC	RT	2.0
	1246+19	NMC	RT	2.0
	1189+00	SIH	LT	3.0
PROJECT 1133-10-71 TOTALS				**11.8**

PROTECTIVE SURFACE TREATMENT AND LONGITUDINAL GROOVING

STRUCTURE	502.3200* PROTECTIVE SURFACE TREATMENT SY	SPV.0165.703* LONGITUDINAL GROOVING BRIDGE DECK SF
STAGE 2		
B-05-0677	2530	20120
B-05-0681	17370	134656
PROJECT 1133-10-71 TOTALS	**19,900**	**154,776**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STORM SEWER AND CULVERTS

			521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH	521.0124 CULVERT PIPE CORRUGATED STEEL 24-INCH	521.2005.S.001 SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED 18-INCH *	521.2005.S.002 SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED 24-INCH*	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	608.0318** STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	608.0324** STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	SPV.0090.100 STORM SEWER TEMPORARY 18-INCH	SPV.0090.101 STORM SEWER TEMPORARY 24-INCH	
LOCATION	ROADWAY	OFFSET	LF	LF	LF	LF	LF	LF	LF	LF	LF	REMARKS
STAGE 1												
1141+00 - 1145+00	TWB	LT-RT	200	--	202	--	--	--	--	--	--	
1157+76	IHA	RT	--	--	--	--	--	--	54	--	--	TEMP STORM SEWER
1157+76 - 1159+01	IHA	RT	--	--	--	--	--	--	--	125	--	TEMP STORM SEWER
1159+01 - 1161+01	IHA	RT	--	--	--	--	--	--	--	200	--	TEMP STORM SEWER
1161+01 - 1162+49	IHA	RT	--	--	--	--	--	--	--	150	--	TEMP STORM SEWER
1161+90 - 1166+60	TWB	RT	--	15	--	460	--	--	--	--	--	
1170+71	VEA	RT	--	--	--	--	--	5	--	--	--	
1180+44 - 1181+42	TWB	RT	--	--	100	--	--	--	--	--	--	EXTEND EXISTING
1219+48 - 1225+45	TWB	LT-RT	--	--	--	--	--	--	--	600	--	
1223+00 - 1227+76	TWB	RT	28	--	478	--	--	--	--	--	--	
1137+40 - 1139+72	TWC	RT-LT	126	--	102	--	--	--	--	--	--	
1137+40 - 1139+50	TWD	LT-RT	110	--	108	--	--	--	--	--	--	
1199+20 - 1200+26	TWC	LT	--	--	--	--	--	114	--	--	--	
1204+96 - 1205+49	TWB	RT	--	--	--	--	--	--	--	--	132	
STAGE 1 SUBTOTALS			**464**	**15**	**990**	**460**	**0**	**119**	**54**	**1,075**	**132**	
STAGE 2												
1235+20	NMC	LT-RT	--		--	--	100	--	--	--	--	REMAINDER OF CULVERT INSTALLED UNDER SEPARATE CONTRACT
1175+89	VEB	RT	--		--	--	--	--	36	--	--	
STAGE 2 SUBTOTALS			**0**	**0**	**0**	**0**	**100**	**0**	**36**	**0**	**0**	
PROJECT 1133-10-71 TOTALS			**464**	**15**	**990**	**460**	**100**	**119**	**90**	**1,075**	**132**	

*ALL SURFACE DRAIN INSTALLATIONS INTO INLETS SHALL BE TYPE B

**ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

MISC. DRAINAGE ITEMS

LOCATION	ROADWAY	OFFSET	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1024* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1036* 36-INCH EACH	611.0430 RECONSTRUCTING INLETS EACH	SPV.0060.108 TEMPORARY INLET COVER EACH	SPV.0060.107 TEMPORARY DRAINAGE MANHOLE 4-FT DIAMETER EACH	SPV.0060.102 STORM SEWER TAP EACH	SPV.0060.109 TEMPORARY MANHOLE COVER EACH	REMARKS
STAGE 1											
1157+76	IHA	RT	--	1	--	--	1	1	--	--	TEMP STORM SEWER
1159+01	IHA	RT	--	--	--	--	1	1	--	--	TEMP STORM SEWER
1161+01	IHA	RT	--	--	--	--	1	1	--	--	TEMP STORM SEWER
1162+49	IHA	RT	--	--	--	--	1	1	--	--	TEMP STORM SEWER
1170+71	VEA	RT	--	--	--	--	--	--	1	--	
1222+46	TWB	LT-RT	--	--	--	--	--	1	--	1	
1199+20	TWC	LT	--	--	--	1	--	--	--	--	
1199+20 - 1200+26	TWC	LT	1	--	--	--	--	--	--	--	
STAGE 1 SUBTOTALS			**1**	**1**	**0**	**1**	**4**	**5**	**1**	**1**	
STAGE 2											
1235+20	NMC	LT-RT	--	--	1	--	--	--	--	--	REMAINDER OF CULVERT INSTALLED UNDER SEPARATE CONTRACT
1175+89	VEB	RT	--	--	--	--	--	1	--	1	
1181+22	VEB	LT-RT	--	--	--	1	--	--	--	--	
STAGE 2 SUBTOTALS			**0**	**0**	**1**	**1**	**0**	**1**	**0**	**1**	
PROJECT 1133-10-71 TOTALS			**1**	**1**	**1**	**2**	**4**	**6**	**1**	**2**	

*ADDITIONAL QUANTITES SHOWN ELSEWHERE

3

TEMPORARY SHORING

STATION	-	STATION	O/S	LOCATION	511.1300.001 TEMPORARY SHORING SF	511.1300.002 TEMPROARY SHORING SF	511.2300.001 TEMPORARY SHORING LEFT IN PLACE SF	511.2300.002 TEMPORARY SHORING LEFT IN PLACE SF	511.2300.003 TEMPORARY SHORING LEFT IN PLACE SF	511.2300.004 TEMPORARY SHORING LEFT IN PLACE SF	511.2300.005 TEMPORARY SHORING LEFT IN PLACE SF
STAGE 1											
1150+50	-	1153+75	RT	IHA	1,950	--	--	--	--	--	--
1161+00	-	1167+00	LT	VEA	--	4,515	--	--	--	--	--
1169+76	-	1170+21	RT	VEA	--	--	560	--	--	--	--
								--	--	--	--
STAGE 1 SUBTOTALS					**1,950**	**4,515**	**560**	**--**	**--**	**--**	**--**
STAGE 2											
1142+00	-	1145+75	LT	SMC	--	--	--	1,885	--	--	--
1146+50	-	1171+35	LT	NMC	--	--	--	--	19,600	--	--
1154+25	-	1162+41	LT	SMC	--	--	--	--	--	4,950	--
1234+92	-	1235+49	LT	NMC	--	--	--	--	--	--	259
STAGE 2 SUBTOTALS					**--**	**--**	**--**	**1,885**	**19,600**	**4,950**	**259**
PROJECT 1133-10-71 TOTALS					**1,950**	**4,515**	**560**	**1,885**	**19,600**	**4,950**	**259**

PIPE UNDERDRAIN 6-INCH

STATION	-	STATION	O/S	LOCATION	612.0106 PIPE UNDERDRAIN 6-INCH LF	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY	209.0300.S BACKFILL COARSE AGGREGATE SIZE NO. 1 CY
STAGE 2							
1227+71	-	1249+00	LT	US 41 NB (NMC)	2,130	1,185	160
PROJECT 1133-10-71 TOTALS					**2,130**	**1,185**	**160**

3

LONG STRUCTURE INLETS **

.

STATION	OFFSET	LOCATION	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	606.0200* RIPRAP MEDIUM CY	608.0318* STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324* STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	611.0654* INLET COVERS TYPE V EACH	611.3225* INLETS 2X2.5-FT EACH	645.0120* GEOTEXTILE FABRIC TYPE HR SY	REMARKS
STAGE 1											
1197+42	35.0' RT	IHA	1	--	12	16	--	1	1	38	
STAGE 1 SUBTOTALS			**1**	**0**	**12**	**16**	**0**	**1**	**1**	**38**	
STAGE 2											
1186+98	23.0' RT	NIH	1	--	12	18	--	1	1	32	
1176+58	29.0' RT	IHB	1	--	--	40	--	1	1	--	
1176+58	11.0' LT	IHB	--	1	9	--	16	1	1	12	CONNECTS TO LT STRUCTURE
STAGE 2 SUBTOTALS			**2**	**1**	**21**	**58**	**16**	**3**	**3**	**44**	
PROJECT 1133-10-71 TOTALS			**3**	**1**	**33**	**74**	**16**	**4**	**4**	**82**	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** SEE CONSTRUCTION DETAILS FOR PIPE SCHEDULE

SLOPE PAVING CRUSHED AGGREGATE

STATION	-	STATION	O/S	LOCATION	604.0500 SY
STAGE 2					
1161+73	-	1162+26	RT	NIH	100
1161+76	-	1162+30	LT	SIH	100
PROJECT 1133-10-71 TOTALS					**200**

3

CONCRETE SIDEWALK

STATION	-	STATION	LOCATION	OFFSET	602.0410 CONCRETE SIDEWALK 5-INCH SF	
STAGE 2						
1153+39		1172+82	IHA	LT	12500	BETWEEN MEDIAN BARRIER
1162+49		1163+73	VEA	LT	500	BETWEEN MEDIAN BARRIER
1186+08		1186+79	VEB	LT	430	
					--	
PROJECT 1133-10-71 TOTALS					**13,430**	

CONCRETE BARRIER

					603.1142	603.1156	603.1442	603.1456	SPV.0090.014	SPV.0090.015
					CONCRETE BARRIER TYPE				CONCRETE BARRIER 36-INCH WIDE BASE TYPE	
STATION	-	STATION	LOCATION	OFFSET	S42 LF	S56 LF	S42C LF	S56C LF	S56 LF	S56A LF
STAGE 2										
1154+16	-	1173+02	NMC	RT	1873	--	--	--	--	--
1154+21	-	1163+00	IHA	LT	880	--	--	--	--	--
1156+75	-	1168+50	VED	LT	1180	--	--	--	--	--
1158+21		1159+00	IHA	RT	80	--	--	--	--	--
1163+00	-	1164+00	IHA	RT	--	--	100	--	--	--
1162+98	-	1167+50	VEA	LT	--	--	453	--	--	--
1164+00	-	1171+72	IHA	RT	744	--	--	--	--	--
1174+56	-	1184+06	NMC	RT	--	950	--	--	--	--
1175+35	-	1184+21	NMC	RT	886	--	--	--	--	--
1179+25	-	1184+09	VEB	RT	482	--	--	--	--	--
1179+76	-	1184+21	VEB	LT	467	--	--	--	--	--
1186+18	-	1192+84	NMC	LT	--	666	--	--	--	--
1186+20	-	1192+84	VEB	RT	666	--	--	--	--	--
1195+56	-	1202+35	NMC	RT	680	--	--	--	--	--
1195+56	-	1202+87	NMC	LT	--	735	--	--	--	--
1220+46	-	1249+00	NMC	RT	2860	--	--	--	--	--
1220+56	-	1225+50	NMC	LT	--	492	--	--	--	--
1225+50	-	1227+50	NMC	LT	--	--	--	201	--	--
1227+70	-	1233+00	NMC	LT	--	--	--	--	--	515
1233+00		1234+74	NMC	LT	--	--	--	--	174	--
1235+25	-	1236+31	NMC	LT	--	--	--	--	106	--
1237+45	-	1246+95	NMC	LT	--	--	--	--	925	--
1247+55	-	1249+00	NMC	LT	--	--	--	--	145	--
PROJECT 1133-10-71 TOTALS					**10,798**	**2,843**	**553**	**201**	**1,350**	**515**

3

CONCRETE BARRIER TRANSITIONS

STATION	-	STATION	LOCATION	OFFSET	603.3279 CONCRETE BARRIER TRANSITION TYPE F51SF TO S56 EACH	603.3513 CONCRETE BARRIER TRANSITION TYPE S32 TO S36 EACH	603.3535 CONCRETE BARRIER TRANSITION TYPE S36 TO S42 EACH	SPV.0060.005 CONCRETE BARRIER TRANSITION TYPE S56(54-INCH BASE) TO S56 (36-INCH BASE) EACH	SPV.0060.006 CONCRETE BARRIER TRANSITION TYPE V56 TO S56 36-INCH WIDE BASE EACH	SPV.0060.007 CONCRETE BARRIER TRANSITION TYPE IV V33.5 TO S42 BLOCK EACH	SPV.0060.008 CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK EACH	REMARKS
STAGE 1												
1144+53	-	1145+28	NMC	LT	--	--	--	--	2	--	--	SIGN STRUCTURES S-05-0194 & S-05-0189
1158+00	-	1158+21	IHA	RT	--	1	1	--	--	--	--	
STAGE 1 SUBTOTALS					**0**	**1**	**1**	**0**	**2**	**0**	**0**	
STAGE 2												
1153+47	-	1153+89	NMC	RT	--	--	--	--	--	1	--	
1156+54	-	1156+75	SMC	LT	--	1	1	--	--	--	--	
1162+57	-	1162+97	IHA	RT	--	--	--	--	--	1	--	
1202+87	-	1203+02	NMC	LT	1	--	--	--	--	--	--	
1220+41	-	1220+56	NMC	LT	1	--	--	--	--	--	--	
1227+50	-	1227+70	NMC	LT	--	--	--	1	--	--	--	
1234+74	-	1235+25	NMC	LT	--	--	--	--	2	--	--	SIGN STRUCTURE S-05-0234
1236+71	-	1237+76	NMC	LT	--	--	--	--	--	--	1	
1237+00	-	1237+45	NMC	LT	--	--	--	--	--	--	1	
1246+95	-	1247+55	NMC	LT	--	--	--	--	2	--	--	SIGN STRUCTURE S-05-0196
1179+55	-	1179+76	VEB	LT	--	1	1	--	--	--	--	
STAGE 2 SUBTOTALS					**2**	**2**	**2**	**1**	**4**	**2**	**2**	
PROJECT 1133-10-71 TOTALS					**2**	**3**	**3**	**1**	**6**	**2**	**2**	

CONCRETE BARRIER TEMPORARY PRECAST AND ANCILLARY ITEMS

STATION		STATION	OFFSET	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHIONS TEMPORARY EACH	SPV.0060.207 CRASH CUSHION TEMPORARY LEFT IN PLACE EACH	SPV.0060.201 TEMPORARY THRIE BEAM CONNECTION EACH	SPV.0090.200 CONCRETE BARRIER TEMPORARY PRECAST ANCHORING LF	SPV.0090.202 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF
STAGE 1											
1135+75	-	1145+00	RT	NMC	940	940	--	--	--	--	--
1145+00	-	1160+00	RT	IHA	1,500	1,500	--	--	--	--	--
1159+00	-	1170+30	LT	VEA	1,040	1,040	--	--	--	--	--
1172+00	-	1178+55	RT	SMC	655	655	--	--	--	--	--
1175+50	-	1187+70	LT	SIH	1,620	1,620	--	--	--	--	--
STAGE 1 SUBTOTALS					5,763	5,763	0	0	0	0	0
STAGE 2A											
1129+00	-	1130+00	LT	NMC	100	100	--	--	--	--	100
1130+00	-	1184+70	LT	TWB	4,810	5,470	--	--	--	--	--
1136+70	-	1159+90	RT	IHA	--	2,330	--	--	--	--	--
1135+70	-	1184+00	RT	TWB	4,830	4,830	1	--	--	25	--
1138+00	-	SB VELP RMP	LT	TWA	3,180	3,180	--	--	--	--	--
1138+00	-	1144+60	RT	TWA	660	660	--	--	--	--	--
1167+80	-	1181+72	LT	TWA	1,400	1,400	1	--	--	25	--
1159+90	-	1170+00	LT	VEA	--	1,010	--	--	--	--	--
1191+25	-	1204+00	RT	TWB	1,280	1,280	--	--	--	--	--
1215+00	-	1254+30	RT	TWB	3,930	3,930	--	--	--	--	--
1214+90		1257+40	LT	TWB	4,250	4,250	--	--	2	--	--
1132+50		1202+70	RT	TWC	7,020	7,020	--	--	--	--	--
1138+00		1202+70	LT	TWC	4,840	6,470	--	--	--	200	--
1132+00		1139+80	LT	TWD	780	780	1	--	--	25	--
1136+00		1180+00	RT	TWD	4,400	4,400	--	--	--	200	--
1159+10		1165+00	LT	TWD	590	590	--	--	--	--	--
STAGE 2A SUBTOTALS					42,075	47,700	3	0	2	475	100
STAGE 2B											
1184+00	-	1192+50	RT	TWB	725	850	--	--	--	--	--
STAGE 2B SUBTOTALS					725	850	0	0	0	0	0
STAGE 2C											
1141+00	-	1177+10	LT	SIH	3,610	3,610	--	--	--	--	3,610
1199+00	-	1214+00	LT	IHA	1,500	1,500	--	--	--	--	1,500
STAGE 2C SUBTOTALS					5,113	5,113	0	0	0	0	5,113
STAGE 3											
1130+00	-	1145+00	LT	TWF	--	1,500	--	--	--	--	1,500
1137+50	-	1258+80	RT	TWE	1,090	12,050	--	--	--	--	12,050
1137+50	-	1173+90	LT	TWE	--	3,640	--	--	--	--	3,640
1137+90	-	1160+00	LT	TWG	--	2,210	--	--	--	--	2,210
1160+00	-	1168+50	RT	VED	--	850	--	--	--	--	850
1168+50	-	1170+00	RT	TD	--	150	--	--	--	--	150
1248+50	-	1258+80	LT	TWE	430	1,030	--	--	--	--	1,030
1136+25	-	1179+50	RT	NIH	--	4,330	1	1		25	4,330
STAGE 3 SUBTOTALS					1,525	25,763	1	1	0	25	25,763
UNDISTRIBUTED					--	--	--	--	--	500	--
PROJECT 1133-10-71 TOTALS					**55,200**	**85,188**	**4**	**1**	**2**	**1,000**	**30,975**

3

STORM SEWER ITEMS

NOTES

1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
2) STATIONS ARE TO THE CENTER OF INLET OR MANHOLE COVERS OR TO THE APRON END OF ENDWALLS. OFFSETS ARE TO THE FLOW LINE FOR STRUCTURES IN THE ROADWAY WITH INLET GRATES, AND TO THE CENTER OF CASTING FOR FIELD INLETS AND MANHOLES WITH SOLID LIDS.
3) PIPE LENGTHS AND SLOPES ARE MEASURED TO THE CENTER OF STRUCTURE OR THE APRON END OF ENDWALLS (INCLUDES LENGTH OF AEW)
4) RIM ELEVATIONS ARE GIVEN AT THE FLOWLINE FOR INLET GRATES IN THE ROADWAY, THE FLOWLINE ELEVATION FOR MEDIAN GRATE INLETS, OR THE CENTER OF THE MANHOLE COVER FOR MANHOLES
5) STRUCTURE DEPTH = RIM ELEVATION - INVERT
   CASTING HEIGHT = 0.75 FT FOR J COVERS; 0.83 FT FOR TYPE V; 0 FT FOR TYPE MS COVERS
   ADJUSTMENT (RINGS) = 0.33 FT FOR V; 0 FT FOR TYPE MS COVERS
6) FLAT TOP SLAB WITH 21" X 24" RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE V INLET COVERS
7) FLAT TOP SLAB WITH 21" X 24" RECTANGULAR OPENING REQUIRED ON ALL CIRCULAR INLETS WITH TYPE V INLET COVERS
8) STORM SEWER PLUG IS TO BE USED AT BELL/TONGUE END OF PIPE WITH NO CUTTING OF THE PIPE. FUTURE CONTRACT WILL REQUIRE REMOVAL OF THE PLUG FOR CONNECTION TO UPSTREAM SEGMENT OF PIPE.
9) STRUCTURE TO BE PLATED. TO BE RECONSTRUCTED TO FULL DEPTH AT LATER CONTRACT

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

STORM SEWER ITEMS

						611.2004	611.2005	611.2006	611.2007	611.2066	611.3003	611.3004	611.3220	611.3225	611.0530	611.0535	611.0612	611.0624	611.0627	611.0654				
						MANHOLES	MANHOLES	MANHOLES	MANHOLES	MANHOLES	INLETS	INLETS	INLETS	INLETS	MANHOLE COVERS	MANHOLE COVERS	INLET COVERS	INLET COVERS	INLET COVERS	INLET COVERS	RIM OR	STR		
	STRUCTURE		OFFSET			4-FT Dia	5-FT Dia	6-FT Dia	7-FT Dia	6x6-FT	3-FT Dia	4-FT Dia	2x2-FT	2x2.5-FT	TYPE J	TYPE JS	TYPE C	TYPE H	TYPE HM	TYPE V	FLANGE	DEPTH	FROM	TO
STAGE	NUMBER	STATION	FT		LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	ELEV	FT	STR	STR
1	311	1158+78.00	36.30	RT	IHA	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	594.61	4.94	311	311C
1	311A	1159+40.00	41.12	RT	IHA	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	594.57	4.07	311A	311B
1	311B	1159+25.00	38.54	RT	IHA	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	594.56	4.13	311B	311
1	311C	1158+76.00	55.95	RT	IHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	311C	OUTFALL
1	300B	1138+12.00	78.70	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	300B	OUTFALL
1	301B	1141+00.00	80.10	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	301B	OUTFALL
1	302B	1144+01.00	80.20	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	302B	OUTFALL
1	303B	1147+02.00	88.00	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	303B	OUTFALL
1	304B	1150+02.00	110.70	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	304B	OUTFALL
1	306C	1156+00.00	47.00	RT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	597.11	4.95	306C	310
1	306E	1155+85.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	597.20	3.95	306E	306C
1	310	1158+61.00	47.00	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	595.80	4.93	310	310B
1	310A	1158+76.00	53.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	595.98	4.23	310A	310B
1	310B	1158+76.00	46.00	RT	NMC	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	595.84	5.55	310B	310C
1	310C	1158+91.00	47.00	RT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	595.83	6.12	310C	319
1	318	1161+80.00	20.62	RT	VEA	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	596.47	5.81	318	318A
1	318A	1161+65.00	20.62	RT	VEA	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	596.26	6.18	318A	318B
1	318B	1161+66.00	6.00	LT	VEA	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	597.25	8.81	318B	319
1	318C	1161+50.00	20.62	RT	VEA	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	596.05	5.39	318C	318A
1	324	1167+56.00	24.62	RT	VEA	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	597.97	3.97	324	324A
1	324A	1167+56.00	0.00	LT	VEA	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	598.95	6.54	324A	325
1	325	1170+06.00	0.00	LT	VEA	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	594.58	6.72	325	324S
1	321	1162+55.00	0.00	RT	VED	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	600.76	13.66	321	321A
1	321A	1162+55.00	26.00	LT	VED	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	600.98	14.04	321A	343A
1	321B	1163+42.00	0.00	RT	VED	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--	601.24	4.00	321B	321
1	343	1165+00.00	0.00	RT	VED	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	601.30	4.30	343	343A
1	343A	1165+00.00	31.15	LT	VED	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	602.56	17.32	343A	344A
1	343B	1164+64.00	0.00	RT	VED	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	601.32	3.64	343B	343
1	344	1168+00.00	0.00	RT	VED	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	598.23	4.23	344	344A
1	344A	1168+00.00	31.00	LT	VED	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	598.78	15.65	344A	345
1	344B	1166+50.00	0.00	RT	VED	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	600.22	4.95	344B	344
1	345	1169+92.00	29.62	LT	VED	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	593.69	11.88	345	354
2	315	1170+55.00	35.00	RT	IHA	--	--	--	--	--	--	1	--	`	--	--	--	--	--	1	622.17	4.18	315	315A
2	315A	1170+46.00	26.00	RT	IHA	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	622.08	10.47	315A	316A
2	316	1167+58.00	35.00	RT	IHA	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	612.98	4.11	316	316A
2	316A	1167+58.00	26.00	RT	IHA	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	613.32	11.22	316A	317A
2	317	1164+65.00	35.00	RT	IHA	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	604.21	4.12	317	317A
2	317A	1164+65.00	26.00	RT	IHA	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	604.56	11.96	317A	318B
2	717B	1205+09.00	65.55	RT	IHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	717B	OUTFALL
2	717S	1205+09.00	8.00	RT	IHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	717S	717B
2	700B	1151+75.00	78.00	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	700B	OUTFALL
2	700S	1151+75.00	0.00	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	700S	700B
2	701D	1156+15.00	79.70	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	701D	OUTFALL
2	701S	1156+15.00	4.18	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	701S	701D
2	702B	1158+25.00	78.75	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	702B	OUTFALL

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

STORM SEWER ITEMS

						611.2004	611.2005	611.2006	611.2007	611.2066	611.3003	611.3004	611.3220	611.3225	611.0530	611.0535	611.0612	611.0624	611.0627	611.0654				
STAGE	STRUCTURE NUMBER	STATION	OFFSET FT		LOCATION	MANHOLES 4-FT Dia EACH	MANHOLES 5-FT Dia EACH	MANHOLES 6-FT Dia EACH	MANHOLES 7-FT Dia EACH	MANHOLES 6x6-FT EACH	INLETS 3-FT Dia EACH	INLETS 4-FT Dia EACH	INLETS 2x2-FT EACH	INLETS 2x2.5-FT EACH	MANHOLE COVERS TYPE J EACH	MANHOLE COVERS TYPE JS EACH	INLET COVERS TYPE C EACH	INLET COVERS TYPE H EACH	INLET COVERS TYPE HM EACH	INLET COVERS TYPE V EACH	RIM OR FLANGE ELEV	STR DEPTH FT	FROM STR	TO STR
2	702S	1158+25.00	5.59	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	702S	702B
2	704C	1161+02.00	89.60	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	704C	OUTFALL
2	704S	1161+34.00	24.27	LT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	704S	704C
2	706B	1163+50.00	77.50	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	706B	OUTFALL
2	706S	1163+50.00	0.76	LT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	706S	706B
2	707D	1167+50.00	89.70	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	707D	OUTFALL
2	707S	1167+50.00	7.33	LT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	707S	707D
2	712	1176+30.00	70.00	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	712	OUTFALL
2	712S	1176+30.00	14.00	LT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	712S	712
2	716C	1178+58.00	58.27	RT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	716C	OUTFALL
2	716S	1178+58.00	14.00	LT	NIH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	716S	716C
2	300S	1138+12.00	4.89	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	300S	300B
2	301S	1141+00.00	3.00	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	301S	301B
2	302S	1144+01.00	16.95	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	302S	302B
2	303S	1147+02.00	26.95	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	303S	303B
2	304S	1150+02.00	20.38	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	304S	304B
2	306S	1156+00.00	20.79	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	306S	306C
2	310S	1158+76.00	20.61	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	310S	310B
2	319	1161+79.00	47.00	RT	NMC	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	597.56	9.37	319	320
2	319A	1161+94.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	597.72	4.00	319A	319
2	320	1161+79.00	27.75	LT	NMC	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	592.15	4.31	320	320A
2	332	1164+77.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	602.09	4.09	332	319A
2	332A	1164+77.00	27.75	LT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	595.85	3.50	332A	331A
2	333	1167+90.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	607.74	4.29	333	333A
2	333A	1167+75.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	607.49	10.66	333A	336A
2	336	1167+90.00	27.75	LT	NMC	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	599.00	3.58	336	336A
2	336A	1167+75.00	27.75	LT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	599.00	3.66	336A	332A
2	339	1172+17.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	615.85	12.38	339	339A
2	339A	1172+17.00	25.00	LT	NMC	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	606.00	6.24	339A	341A
2	339B	1172+02.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	615.63	4.28	339B	339
2	339C	1172+32.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	616.06	4.71	339C	339
2	341	1170+77.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	613.43	13.30	341	341A
2	341A	1170+77.00	25.00	LT	NMC	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	603.00	6.02	341A	336
2	341B	1170+92.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	613.81	4.76	341B	341
2	731A	1225+69.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	594.61	4.33	731A	731B
2	731B	1225+69.00	59.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	594.63	5.05	731B	731C
2	731C	1225+69.00	79.75	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	731C	OUTFALL
2	731S	1225+69.00	33.00	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	731S	731A
2	732	1223+25.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	596.94	4.10	732	732A
2	732A	1223+25.00	59.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	598.86	6.72	732A	732C
2	732C	1223+25.00	84.25	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	732C	OUTFALL
2	733A	1231+69.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	589.54	5.51	733A	733B
2	733B	1231+69.00	51.90	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	589.19	5.84	733B	733C
2	733C	1231+69.00	73.15	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	733C	OUTFALL
2	733S	1231+69.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	733S	733A

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

STORM SEWER ITEMS

						611.2004	611.2005	611.2006	611.2007	611.2066	611.3003	611.3004	611.3220	611.3225	611.0530	611.0535	611.0612	611.0624	611.0627	611.0654				
	STRUCTURE		OFFSET			MANHOLES 4-FT Dia	MANHOLES 5-FT Dia	MANHOLES 6-FT Dia	MANHOLES 7-FT Dia	MANHOLES 6x6-FT	INLETS 3-FT Dia	INLETS 4-FT Dia	INLETS 2x2-FT	INLETS 2x2.5-FT	MANHOLE COVERS TYPE J	MANHOLE COVERS TYPE JS	INLET COVERS TYPE C	INLET COVERS TYPE H	INLET COVERS TYPE HM	INLET COVERS TYPE V	RIM OR FLANGE	STR DEPTH	FROM	TO
STAGE	NUMBER	STATION	FT		LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	ELEV	FT	STR	STR
2	737A	1237+84.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	589.17	4.33	737A	737B
2	737B	1237+84.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.92	4.73	737B	737C
2	737C	1237+84.00	65.72	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	737C	OUTFALL
2	737S	1237+84.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	737S	737A
2	738A	1242+25.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	589.33	4.61	738A	738B
2	738B	1242+25.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	589.08	5.01	738B	738C
2	738C	1242+25.00	66.71	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	738C	OUTFALL
2	738S	1242+25.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	738S	738A
2	741	1245+40.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.34	4.10	741	741B
2	741A	1245+10.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.34	4.10	741A	741B
2	741B	1245+25.00	27.75	LT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	588.38	6.44	741B	742B
2	741S	1245+25.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	741S	741B
2	742	1245+40.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.09	4.10	742	742B
2	742A	1245+10.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.09	4.10	742A	742B
2	742B	1245+25.00	47.00	RT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	588.12	7.05	742B	742C
2	742C	1245+25.00	69.90	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	742C	OUTFALL
2	749	1220+80.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	600.54	4.10	749	749A
2	749A	1220+65.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	600.81	4.69	749A	750A
2	750	1220+80.00	59.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	604.97	4.10	750	750A
2	750A	1220+65.00	59.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	605.42	10.00	750A	750B
2	750B	1220+65.00	89.70	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	750B	OUTFALL
2	753A	1234+39.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.17	4.07	753A	753B
2	753B	1234+54.00	26.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.17	4.12	753B	753C
2	753C	1234+69.00	27.75	LT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	588.17	5.17	753C	754B
2	753S	1234+54.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	753S	753B
2	754	1234+54.00	46.85	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	587.91	4.12	754	754B
2	754A	1234+39.00	48.08	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	587.91	4.07	754A	754
2	754B	1234+69.00	47.45	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	587.91	5.30	754B	754C
2	754C	1234+69.00	67.38	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	754C	OUTFALL
2	755A	1247+60.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	589.07	4.65	755A	755B
2	755B	1247+60.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	588.82	5.09	755B	755C
2	755C	1247+60.00	66.66	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	755C	OUTFALL
2	755S	1247+60.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	755S	755A
2	760A	1228+69.00	27.75	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	592.02	5.14	760A	760B
2	760B	1228+69.00	56.20	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	591.58	5.40	760B	760C
2	760C	1228+69.00	76.31	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	760C	OUTFALL
2	760S	1228+69.00	31.75	LT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	760S	760A
2	770	1175+47.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	619.65	4.15	770	770A
2	770A	1175+47.00	46.75	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	619.22	4.10	770A	770B
2	770B	1175+47.00	65.00	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	770B	OUTFALL
2	780	1180+94.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	619.08	4.00	780	780A
2	780A	1180+94.00	38.95	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	618.86	14.13	780A	780B
2	780B	1181+21.00	72.44	RT	NMC	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	608.42	9.82	780B	EXISTING
2	793	1192+55.00	47.00	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	620.93	6.46	793	793B
2	793A	1192+55.00	25.00	LT	NMC	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	621.33	7.11	793A	793B

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

STORM SEWER ITEMS

						611.2004	611.2005	611.2006	611.2007	611.2066	611.3003	611.3004	611.3220	611.3225	611.0530	611.0535	611.0612	611.0624	611.0627	611.0654				
STAGE	STRUCTURE NUMBER	STATION	OFFSET FT		LOCATION	MANHOLES 4-FT Dia EACH	MANHOLES 5-FT Dia EACH	MANHOLES 6-FT Dia EACH	MANHOLES 7-FT Dia EACH	MANHOLES 6x6-FT EACH	INLETS 3-FT Dia EACH	INLETS 4-FT Dia EACH	INLETS 2x2-FT EACH	INLETS 2x2.5-FT EACH	MANHOLE COVERS TYPE J EACH	MANHOLE COVERS TYPE JS EACH	INLET COVERS TYPE C EACH	INLET COVERS TYPE H EACH	INLET COVERS TYPE HM EACH	INLET COVERS TYPE V EACH	RIM OR FLANGE ELEV	STR DEPTH FT	FROM STR	TO STR
2	793B	1192+47.00	20.00	LT	NMC	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	621.28	7.85	793B	795
2	793C	1192+25.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	620.12	5.30	793C	793D
2	793D	1192+40.00	47.00	RT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	620.52	5.75	793D	793
2	794	1187+07.00	25.00	LT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	613.75	4.08	794	794A
2	794A	1187+22.00	24.00	LT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	613.69	4.34	794A	794B
2	794B	1187+37.00	25.00	LT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	613.70	4.92	794B	794C
2	794C	1187+45.00	20.00	LT	NMC	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	613.91	5.16	794C	795
2	795	1190+22.00	25.00	LT	NMC	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	616.14	9.39	795	795A
2	795A	1190+22.00	49.40	RT	NMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	615.75	9.37	795A	795B
2	795B	1190+23.00	81.93	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	795B	OUTFALL
2	799	1186+35.00	35.00	RT	NMC	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	613.92	4.10	799	799A
2	802	1183+94.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	616.33	3.79	802	802A
2	802A	1183+94.00	35.00	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	616.13	3.90	802A	802B
2	802B	1182+84.00	60.37	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	802B	OUTFALL
2	807	1195+90.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	628.33	4.17	807	807A
2	807A	1195+90.00	47.00	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	627.90	4.12	807A	807B
2	807B	1196+08.00	67.00	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	807B	OUTFALL
2	808	1198+40.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	631.55	4.14	808	808A
2	808A	1198+40.00	47.00	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	631.15	4.12	808A	808B
2	808B	1198+57.00	67.00	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	808B	OUTFALL
2	810	1200+90.00	25.00	LT	NMC	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	633.53	3.91	810	810A
2	810A	1200+90.00	40.65	RT	NMC	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	633.39	4.11	810A	810B
2	810B	1200+90.00	60.26	RT	NMC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	810B	OUTFALL
2	320A	1161+88.00	27.75	RT	SMC	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	592.59	4.80	320A	321
2	331A	1164+89.00	27.75	RT	SMC	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	596.01	3.71	331A	320A
2	338A	1172+34.00	38.11	RT	SMC	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	606.00	2.95	338A	339A
2	324S	1170+32.00	0.64	LT	VEA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	324S	OUTFALL
2	620	1175+94.00	18.90	RT	VEB	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	592.45	4.00	620	620B
2	620A	1175+75.00	89.50	RT	VEB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	620A	620B
2	620B	1175+74.00	17.09	RT	VEB	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	592.51	5.36	620B	621B
2	621A	1175+89.00	0.00	LT	VEB	--	--	--	--	--	--	1	--	--	--	--	--	1	--	--	593.03	6.37	621A	621B
2	621B	1175+74.00	0.00	LT	VEB	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	593.01	7.80	621B	621S
2	621S	1175+75.00	10.15	LT	VEB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	621S	STUB
2	778	1181+57.00	22.00	RT	VEB	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	611.20	4.03	778	778A
2	778A	1181+57.00	3.00	LT	VEB	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	611.82	6.53	778A	778B
2	778B	1180+12.00	3.00	LT	VEB	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	607.87	9.16	778B	800A
2	798	1187+26.00	22.00	RT	VEB	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	613.10	4.18	798	798B
2	798A	1187+56.00	22.00	RT	VEB	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	613.02	4.10	798A	798B
2	798B	1187+41.00	21.00	RT	VEB	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	613.06	4.72	798B	798C
2	798C	1187+41.00	45.31	RT	VEB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	798C	OUTFALL
2	799A	1186+51.00	39.17	RT	VEB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	799A	OUTFALL
2	800	1180+12.00	22.00	RT	VEB	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	607.27	3.63	800	778B
2	800A	1178+66.00	0.00	LT	VEB	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	602.29	11.72	800A	621A
2	313	1158+85.00	26.00	LT	VED	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	598.49	4.24	313	313B
2	313A	1159+15.00	26.00	LT	VED	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	598.48	4.23	313A	313B
2	313B	1159+00.00	25.00	LT	VED	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	598.48	4.55	313B	313C
2	313C	1159+00.00	45.00	LT	VED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	313C	OUTFALL
TOTALS I.D. 1133-10-71						7	15	5	2	1	3	25	1	62	6	4	1	3	8	70				

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

STORM SEWER ITEMS

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	SPV.0060.103 INLET COVER TYPE DW EACH	SPV.0060.104 DRAIN SLOTTED VANE TYPE A 3-FOOT EACH	SPV.0060.105 TYPE B 6-FOOT EACH	SPV.0060.111 INLET COVERS BOLTED EACH	SPV.0060.114 STORM SEWER PLUG EACH	SPV.0060.115 COVER PLATES EACH	611.9800.S PIPE GRATES EACH	633.5200 MARKERS CULVERT END EACH	NOTES
311	311C	589.67	589.56	0.55%	--	--	20	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
311A	311B	590.50	590.43	0.47%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
311B	311	590.43	590.17	0.58%	45	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	
311C	OUTFALL	589.56	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
300B	OUTFALL	614.36	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
301B	OUTFALL	612.43	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
302B	OUTFALL	607.43	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
303B	OUTFALL	601.39	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
304B	OUTFALL	596.51	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
306C	310	592.16	590.87	0.50%	--	--	--	259	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
306E	306C	593.25	593.17	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
310	310B	590.87	590.79	0.53%	--	--	--	15	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
310A	310B	591.75	591.72	0.43%	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
310B	310C	590.29	590.21	0.53%	--	--	--	--	15	--	--	--	--	--	--	--	--	1	1	--	--	--	--	
310C	319	589.71	588.19	0.53%	--	--	--	--	--	286	--	--	--	--	--	--	--	--	1	--	--	--	--	
318	318A	590.66	590.58	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
318A	318B	590.08	589.94	0.50%	--	--	28	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	
318B	319	588.44	588.19	0.52%	--	--	--	--	--	48	--	--	--	--	--	--	--	--	--	--	--	--	--	
318C	318A	590.66	590.58	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
324	324A	594.00	593.84	0.55%	--	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
324A	325	592.41	589.95	0.98%	--	--	--	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
325	324S	587.86	587.67	0.75%	--	--	--	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	SEE NOTE 8
321	321A	587.10	586.94	0.57%	--	--	--	--	--	28	--	--	--	--	--	--	--	--	--	--	--	--	--	
321A	343A	586.94	585.24	0.69%	--	--	--	--	--	246	--	--	--	--	--	--	--	--	--	--	--	--	--	
321B	321	597.24	596.81	0.49%	87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
343	343A	597.00	596.83	0.52%	--	--	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
343A	344A	585.24	583.13	0.70%	--	--	--	--	--	303	--	--	--	--	--	--	--	--	--	--	--	--	--	
343B	343	597.68	597.50	0.50%	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
344	344A	594.00	593.83	0.50%	--	--	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
344A	345	583.13	581.81	0.69%	--	--	--	--	--	192	--	--	--	--	--	--	--	--	--	--	--	--	--	
344B	344	595.27	594.50	0.51%	151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
345	354	581.81	580.61	0.94%	--	--	--	--	--	128	--	--	--	--	--	--	--	--	--	--	--	--	--	CONNECTS TO EXISTING MH 354
315	315A	617.99	617.95	0.31%	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
315A	316A	611.61	607.93	1.28%	--	--	--	287	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
316	316A	608.87	608.83	0.44%	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
316A	317A	602.10	599.14	1.01%	--	--	--	292	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
317	317A	600.09	600.05	0.44%	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
317A	318B	592.60	589.70	0.98%	--	--	--	297	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
717B	OUTFALL	584.47	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
717S	717B	584.73	584.47	0.44%	--	--	60	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
700B	OUTFALL	584.68	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
700S	700B	584.72	583.16	2.00%	--	--	78	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
701D	OUTFALL	582.50	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
701S	701D	582.90	582.50	0.53%	--	--	76	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
702B	OUTFALL	582.74	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

STORM SEWER ITEMS

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	SPV.0060.103 INLET COVER TYPE DW EACH	SPV.0060.104 DRAIN SLOTTED VANE TYPE A 3-FOOT EACH	SPV.0060.105 TYPE B 6-FOOT EACH	SPV.0060.111 INLET COVERS BOLTED EACH	SPV.0060.114 STORM SEWER PLUG EACH	SPV.0060.115 COVER PLATES EACH	611.9800.S PIPE GRATES EACH	633.5200 MARKERS CULVERT END EACH	NOTES
702S	702B	583.09	582.74	0.48%	--	--	73	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
704C	OUTFALL	582.09	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
704S	704C	582.88	582.09	0.71%	--	--	111	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
706B	OUTFALL	583.30	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
706S	706B	583.78	583.30	0.62%	--	--	78	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
707D	OUTFALL	582.85	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
707S	707D	583.34	582.85	0.50%	--	--	97	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
712	OUTFALL	583.78	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1		
712S	712	584.19	583.78	0.48%	--	--	85	--	--	--	--	--	--	--	--			1	--	--	--	--		
716C	OUTFALL	582.89	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--			--	--	1		
716S	716C	583.15	582.89	0.29%	--	--	90	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--		
300S	300B	615.15	614.36	1.06%	--	--	75	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
301S	301B	612.49	610.83	2.00%	--	--	83	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
302S	302B	607.77	605.83	2.00%	--	--	97	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
303S	303B	601.99	599.67	2.00%	--	--	116	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE8
304S	304B	597.06	594.48	2.00%	--	--	129	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
306S	306C	592.48	592.16	0.50%	--	--	--	67	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
310S	310B	591.13	590.79	0.51%	--	--	--	67	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
319	320	588.19	587.84	0.48%	--	--	--	--	--	73	--	--	--	--	--	--	--	--	1	--	--	--	--	
319A	319	593.72	593.50	1.47%	--	15	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
320	320A	587.84	587.79	0.45%	--	--	--	--	--	11	--	--	--	--	--	--	--	--	--	--	1	--	--	CONNECT TO TEMP DRAIN TO NORTH AND SEE NOTE 9
332	319A	598.00	593.72	1.52%	--	281	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
332A	331A	592.35	592.30	0.56%	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
333	333A	603.45	603.37	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
333A	336A	596.83	596.09	1.00%	--	74	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
336	336A	595.42	595.34	0.75%	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
336A	332A	595.34	592.35	1.00%	--	--	--	299	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
339	339A	603.47	602.75	1.00%	--	72	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
339A	341A	599.76	599.00	0.54%	--	--	--	140	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
339B	339	611.35	611.20	1.00%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
339C	339	611.35	611.20	1.00%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
341	341A	600.13	599.75	0.53%	--	72	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
341A	336	596.98	595.42	0.54%	--	--	--	288	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
341B	341	609.05	608.90	1.00%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	
731A	731B	590.28	589.83	0.54%	--	84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
731B	731C	589.58	589.46	0.57%	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
731C	OUTFALL	589.46	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
731S	731A	590.57	590.53	0.50%	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
732	732A	592.84	592.39	0.54%	--	84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
732A	732C	592.14	591.99	0.60%	--	--	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
732C	OUTFALL	591.99	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
733A	733B	584.03	583.60	0.54%	--	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
733B	733C	583.35	583.23	0.57%	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
733C	OUTFALL	583.23	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
733S	733A	584.05	584.03	0.40%	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

STORM SEWER ITEMS

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	SPV.0060.103 INLET COVER TYPE DW EACH	SPV.0060.104 DRAIN SLOTTED VANE TYPE A 3-FOOT EACH	SPV.0060.105 TYPE B 6-FOOT EACH	SPV.0060.111 INLET COVERS BOLTED EACH	SPV.0060.114 STORM SEWER PLUG EACH	SPV.0060.115 COVER PLATES EACH	611.9800.S PIPE GRATES EACH	633.5200 MARKERS CULVERT END EACH	NOTES
737A	737B	584.84	584.44	0.53%	--	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
737B	737C	584.19	584.08	0.58%	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
737C	OUTFALL	584.08	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
737S	737A	585.11	585.09	0.40%	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
738A	738B	584.72	584.32	0.53%	--	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
738B	738C	584.07	583.96	0.55%	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
738C	OUTFALL	583.96	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
738S	738A	584.99	584.97	0.40%	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
741	741B	584.24	584.17	0.47%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
741A	741B	584.24	584.17	0.47%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
741B	742B	581.94	581.57	0.51%	--	--	--	--	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
741S	741B	582.47	582.44	0.43%	--	--	--	7	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
742	742B	583.99	583.92	0.47%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
742A	742B	583.99	583.92	0.47%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
742B	742C	581.07	580.94	0.54%	--	--	--	--	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	
742C	OUTFALL	580.94	--	0.00%	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	
749	749A	596.44	596.37	0.47%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
749A	750A	596.12	595.67	0.54%	--	84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
750	750A	600.87	600.79	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
750A	750B	595.42	595.24	0.58%	--	--	31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
750B	OUTFALL	595.24	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
753A	753B	584.10	584.05	0.33%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
753B	753C	584.05	584.00	0.33%	15	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	
753C	754B	583.00	582.61	0.52%	--	--	--	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
753S	753B	584.08	584.05	0.60%	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
754	754B	583.79	583.74	0.33%	15	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	
754A	754	583.84	583.79	0.33%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
754B	754C	582.61	582.50	0.55%	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
754C	OUTFALL	582.50	--	0.00%	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	
755A	755B	584.42	583.98	0.59%	--	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
755B	755C	583.73	583.62	0.55%	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
755C	OUTFALL	583.62	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
755S	755A	584.69	584.67	0.40%	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
760A	760B	586.88	586.43	0.54%	--	84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
760B	760C	586.18	586.06	0.60%	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
760C	OUTFALL	586.06	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
760S	760A	587.15	587.13	0.40%	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
770	770A	615.50	615.12	0.53%	--	--	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
770A	770B	615.12	615.02	0.56%	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
770B	OUTFALL	615.02	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
780	780A	615.08	614.74	0.53%	--	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
780A	780B	604.73	604.50	0.53%	--	--	43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
780B	EXISTING	598.60	EXISTING	0.00%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	CONNECT TO EXISTING 24" SSPRC
793	793B	614.47	614.18	0.43%	--	67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
793A	793B	614.22	614.18	0.44%	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

STORM SEWER ITEMS

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	SPV.0060.103 INLET COVER TYPE DW EACH	SPV.0060.104 DRAIN SLOTTED VANE TYPE A 3-FOOT EACH	SPV.0060.105 TYPE B 6-FOOT EACH	SPV.0060.111 INLET COVERS BOLTED EACH	SPV.0060.114 STORM SEWER PLUG EACH	SPV.0060.115 COVER PLATES EACH	611.9800.S PIPE GRATES EACH	633.5200 MARKERS CULVERT END EACH	NOTES
793B	795	613.43	612.22	0.54%	--	--	--	225	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
793C	793D	614.82	614.77	0.33%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
793D	793	614.77	614.72	0.33%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
794	794A	609.67	609.60	0.47%	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
794A	794B	609.35	609.28	0.47%	--	--	15	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	
794B	794C	608.78	608.75	0.33%	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
794C	795	608.75	607.25	0.54%	--	--	--	277	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
795	795A	606.75	606.38	0.51%	--	--	--	--	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
795A	795B	606.38	606.20	0.55%	--	--	--	--	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
795B	OUTFALL	606.20	--	0.00%	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	
799	799A	609.82	609.51	0.57%	--	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
802	802A	612.54	612.23	0.52%	--	--	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
802A	802B	612.23	611.73	0.44%	--	--	113	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
802B	OUTFALL	611.73	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
807	807A	624.16	623.78	0.53%	--	--	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
807A	807B	623.78	623.63	0.56%	--	--	27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
807B	OUTFALL	623.63	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
808	808A	627.41	627.03	0.53%	--	--	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
808A	808B	627.03	626.88	0.58%	--	--	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
808B	OUTFALL	626.88	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
810	810A	629.62	629.28	0.52%	--	--	65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
810A	810B	629.28	629.17	0.55%	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
810B	OUTFALL	629.17	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
320A	321	587.79	587.10	0.67%	--	--	--	--	--	103	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
331A	320A	592.30	588.84	1.15%	--	--	--	300	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	SEE NOTE 9
338A	339A	603.05	603.00	0.50%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
324S	OUTFALL	587.67	--	0.00%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
620	620B	588.45	588.35	0.50%	--	20	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	
620A	620B	586.80	586.44	0.51%	--	--	71	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	1	
620B	621B	586.44	586.35	0.43%	--	--	21	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	
621A	621B	586.66	586.55	0.73%	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
621B	621S	585.71	585.57	1.82%	--	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	SEE NOTE 8
621S	STUB	585.57	--	0.00%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	SEE NOTE 8
778	778A	607.17	607.04	0.52%	--	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
778A	778B	605.29	603.34	1.34%	--	--	--	145	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
778B	800A	598.71	597.29	0.97%	--	--	--	146	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
798	798B	608.92	608.84	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
798A	798B	608.92	608.84	0.53%	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
798B	798C	608.34	608.19	0.65%	--	--	23	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	
798C	OUTFALL	608.19	--	0.00%	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
799A	OUTFALL	609.51	--	0.00%	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	
800	778B	603.64	603.51	0.54%	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
800A	621A	590.57	589.07	0.54%	--	--	--	277	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	
313	313B	594.25	594.18	0.47%	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
313A	313B	594.25	594.18	0.47%	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
313B	313C	593.93	593.82	0.58%	--	--	19	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	
313C	OUTFALL	593.82	--	0.00%	--	--	19	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
TOTALS I.D. 1133-10-71					719	1,497	2,306	3,815	194	1,442	1	31	1	1	1	3	1	9	18	24	8	3	33	

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

3

GUARDRAIL MOW STRIP EMULSIFIED APSHALT

STATION	-	STATION	LOCATION	OFFSET	614.0397 SY
STAGE 1					
1138+00	-	1158+00	NMC-IHA	RT	890
STAGE 1 SUBTOTALS					**890**
STAGE 2					
1138+00		1156+54	SMC	LT	829
1149+01		1151+80	NIH	RT	100
1149+38		1158+11	SIH	LT	367
1165+55		1176+65	IHB	RT	468
1173+04		1176+15	IHB	LT	140
1180+24		1187+06	NIH	RT	279
1197+35		1197+99	IHA	RT	29
STAGE 2 SUBTOTALS					**2,210**
PROJECT 1133-10-71					**3,100**

GUARDRAIL ITEMS

STATION	-	STATION	LOCATION	OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
STAGE 1								
1138+00	-	1158+00	NMC-IHA	RT	1962.5	39.5	--	--
STAGE 1 SUBTOTALS					**1962.5**	**39.5**	**0**	**0**
STAGE 2								
1138+00		1156+54	SMC	LT	1825	39.5	--	--
1149+01		1151+80	NIH	RT	225	--	1	1
1149+38		1158+11	SIH	LT	825	--	1	1
1153+44		1153+65	IHA	LT	--	--	--	--
1162+54		1162+75	VEA	LT	--	--	--	--
1165+55		1176+65	IHB	RT	1012.5	39.5	1	--
1173+04		1176+15	IHB	LT	275	39.5	1	--
1180+24		1187+06	NIH	RT	587.5	39.5	1	--
1197+35		1197+99	IHA	RT	25	39.5	--	1
STAGE 2 SUBTOTALS					**4775**	**197.5**	**5**	**3**
PROJECT 1133-10-71					**6737.5**	**237**	**5**	**3**

3

FENCING

STATION	-	STATION	LOCATION	OFFSET	616.0100.001 FENCE WOVEN WIRE 4-FT LF	616.0206 FENCE CHAIN LINK 6-FT LF	616.0329.S.001 GATES CHAIN LINK 3.5-FT EACH	REMARKS
STAGE 1								
1135+55	-	1151+30	NMC-IHA	RT	--	1705	--	
1153+90		1153+95	IHA	RT	--	--	1	INSTALL INTO EXISTING, AT END OF LONE GROVE CT
1159+79		1160+57	IHA	RT	--	16	--	
STAGE 1 SUBTOTALS					**0**	**1,721**	**1**	
STAGE 2								
1141+50		1161+73	NIH	RT	2022	--	--	
1143+70		1161+76	SIH	LT	1810	--	--	
1162+25		1169+87	NIH	RT	760	--	--	
1162+30		1197+25	SIH-IHA	LT-RT	3180	--	--	
STAGE 2 SUBTOTALS					**7,772**	**0**	**0**	
PROJECT 1133-10-71 TOTALS					**7,772**	**1,721**	**1**	

FENCE SAFETY

LOCATION	616.0700.S LF
STAGE 1	
BEHIND SIDEWALK, WB VELP AVE	100
SUBTOTAL STAGE 1	100
STAGE 2	
BEHIND SIDEWALK, WB VELP AVE	200
STAGE 2 SUBTOTAL	200
ALL	
UNDISTRIBUTED	200
PROJECT TOTAL	**500**

3

PERMANENT CRASH CUSHIONS

STATION	-	STATION	LOCATION	OFFSET	614.0805 CRASH CUSHIONS PERMANENT LOW MAINTENANCE EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
STAGE 2											
1153+47	-	1153+89	NMC	RT	1	2	OM-3C	TL-3	UNIDIRECTIONAL	L & R	PERM. CONC. BARRIER IN MEDIAN
1162+57	-	1162+97	IHA	RT	1	2	OM-3C	TL-3	UNIDIRECTIONAL	L & R	PERM. CONC. BARRIER IN MEDIAN
1236+71	-	1237+76	NMC	LT	1	2	OM-3R	TL-3	BIDIRECTIONAL	L & R	PERM. CONC. BARRIER IN MEDIAN
1237+00	-	1237+45	NMC	LT	1	2	OM-3L	TL-3	BIDIRECTIONAL	L & R	PERM. CONC. BARRIER IN MEDIAN
STAGE 2 SUBTOTALS					**4**						
PROJECT 1133-10-71 TOTALS					**4**						

SURVEY MONUMENT ITEMS

ROADWAY	LOCATION	OFFSET	621.0100 LANDMARK REFERENCE MONUMENTS EACH	SPV.0060.010 SECTION SURVEY MONUMENTS, RECONSTRUCT PROJECT EACH
STAGE 4				
US 41 NB (NMC)	1111+79	150' RT	4	1
US 41 NB (NMC)	1149+96	103' RT	4	1
VELP AVE. (VEA)	1166+31	43' RT	4	1
PROJECT 1133-10-77 TOTALS			12	3

TEMPORARY DELINEATORS

STATION TO STATION	OFFSET	LOCATION	633.1100 DELINEATORS TEMPORARY EACH	SPV.0060.206 LEFT IN PLACE DELINEATOR TEMPORARY EACH
STAGE 3				
1154+00 - 1186+70	RT	TWF	125	125
1191+30 - 1209+20	RT	TWF	37	37
1182+94 - 1249+00	LT	TWE	93	93
SUBTOTALS STAGE 3			255	255
PROJECT 1133-10-71 TOTALS			**255**	**255**

DUST CONTROL SURFACE TREATMENT

LOCATION	623.0200 SY
UNDISTRIBUTED	5,000
PROJECT TOTAL	**5,000**

MOVING AND REMOVING SIGNS

STATION	SIGN DESCR.	OS	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
STAGE 1					
1171+20	LEFT ARROW "ONLY", THRU/LEFT, RIGHT ARROW "ONLY"	RT	TA	2	4
PROJECT 1133-10-71 TOTALS				**2**	**4**

3

RESTORATION ITEMS

STATION	- STATION	OFFSET	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	NOTES
STAGE 1										
1138+00	1159+80	RT	NMC	5,630	--	3.5	140	--	140	
1159+80	1170+00	RT	VEA	4,840	--	3.0	120	--	120	
SUBTOTALS STAGE 1				**10,470**	**0**	**7**	**260**	**0**	**260**	
STAGE 2										
1138+00	1162+00	LT	SMC	15,780	--	9.9	390	--	390	
1162+15	1168+50	LT	VED	2,820	--	1.8	70	--	70	
1163+75	1172+75	RT	IHA	6,600	--	4.2	165	--	165	GORE BETWEEN IHA & VEA
1174+75	1184+25	RT	NMC	6,800	--	4	170	--	170	GORE BETWEEN NMC & VEB
1177+00	1192+80	RT	VEB	4,270	--	3	105	--	105	
1195+55	1202+30	RT	NMC	4,400	--	3	110	--	110	
1220+03	1249+00	RT	NMC	6,440	--	4	160	--	160	
1125+00	1174+00	LT	SIH	11,130	11,130	7	275	--	275	
1141+00	1169+50	RT	NIH	9,660	9,660	6	240	--	240	
1169+50	1177+40	RT	IHB	1,080	1,080	1	30	--	30	
1171+60	1187+80	RT	NIH	8,070	8,070	5	200	--	200	
1196+50	1216+50	RT	IHA	22,020	22,020	14	545	60	545	
				0	0	0	0	--	0	
SUBTOTALS STAGE 2				**99,070**	**51,960**	**62**	**2,460**	**60**	**2,460**	
UNDISTRIBUTED				27,385	12,990	17	680	15	680	
PROJECT 1133-10-71 TOTALS				**136,925**	**64,950**	**86**	**3,400**	**75**	**3,400**	

WATER

STATION	LOCATION	O/S	624.0100 WATER MGAL
STAGE 1			
1138+00 - 1170+00	NMC-IHA	RT	150
1138+00 - 1172+50	NMC	LT	100
1151+50 - 1173+00	SMC	LT	100
1174+50 - 1184+50	SMC	RT	50
1122+00 - 1202+00	SIH - TWC	RT - LT	250
SUBTOTALS STAGE 1			**650**
STAGE 2			
1138+00 - 1202+50	NMC	RT-LT	350
1138+00 - 1171+00	SMC - VED	LT	100
1219+00 - 1248+00	TWB	RT-LT	200
1225+00 - 1194+00	TWC	LT	250
1141+00 - 1187+50	TWD	RT-LT	200
SUBTOTALS STAGE 2			**1100**
PROJECT 1133-10-71 TOTALS			**1750**

RIPRAP & FABRIC

STAGE	LOCATION	STRUCTURE	STATION	OFFSET	606.0200* RIPRAP MEDIUM CY	645.0120* GEOTEXTILE FABRIC TYPE HR SY
1	NIH	700B	1151+75	74.00'RT	3	6
1	NIH	701D	1155+00	79.70'RT	3	6
1	NIH	702B	1158+16	78.75'RT	3	6
1	NIH	704C	1161+02	89.60'RT	3	6
1	NMC	300B	1138+12	78.70'RT	18	36
1	NMC	301B	1141+00	76.10'RT	17	33
1	NMC	302B	1144+01	76.20'RT	15	30
1	IHA	303B	1147+02	84.00'RT	13	25
1	IHA	304B	1150+02	106.70'RT	10	19
1	IHA	311C	1158+71	55.20'RT	11	22
1	VED	313C	1159+00	45'LT	12	24
STAGE 1 SUBTOTALS					**107**	**213**
2	NIH	706B	1163+50	77.50'RT	3	6
2	NIH	707D	1167+50	89.70'RT	3	6
2	NIH	--	1186+98	37.80'RT	14	28
2	NIH	712	1176+30	27.20'RT	3	6
2	NIH	716C	1178+58	26.44'RT	6	11
2	IHA	--	1197+42	51.50' RT	19	37
2	IHA	717B	1205+47	65.55'RT	3	6
2	IHB	--	1176+58	27.20'LT	5	10
2	NMC	731C	1225+69	79.75'RT	3	6
2	NMC	732C	1223+25	84.25'RT	3	6
2	NMC	750B	1220+65	89.70'RT	5	9
2	NMC	760C	1228+69	76.31'RT	3	6
2	NMC	770B	1175+47	65.00'RT	18	36
2	NMC	795B	1190+23	81.93'RT	28	55
2	VEB	798C	1187+41	45.31'RT	18	35
2	VEB	799A	1186+51	39.17'RT	17	34
2	NMC	802B	1182+84	60.37'RT	3	6
2	NMC	807B	1196+08	67.00'RT	41	81
2	NMC	808B	1198+57	67.00'RT	44	88
2	NMC	810B	1200+90	60.26'RT	38	76
STAGE 2 SUBTOTALS					**274**	**548**
TOTALS 1133-10-71					**381**	**761**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EROSION CONTROL ITEMS

CATEGORY						1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
						628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6510	628.7005	628.7010	628.7020	628.7504	628.7555	628.7560	628.7570	SPV.0060.150	SPV.0060.152
						SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT, CLASS I, TYPE B	EROSION MAT, URBAN CLASS I, TYPE B	SOIL STABILIZER TYPE B	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	INLET PROTECTION TYPE D	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECK	TRACKING PADS	ROCK BAGS	INLET PROTECTION TYPE A-SPECIAL	TEMPORARY STONE DITCH CHECKS
STAGE	LOCATION	STRUCTURE	STATION	TO STATION	OFFSET	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
1	US-41	--	UNDISTRIBUTED	--	--	--	--	3	2	--	200	1	--	--	--	--	--	4	--	--	5
1	I-43	--	UNDISTRIBUTED	--	--	--	--	2	1	--	200	1	--	--	--	--	--	2	--	--	2
1	--	--	UNDISTRIBUTED	--	--	749	749	--	--	5,101	100	1	9	6	2	60	11	--	55	1	4
1	NMC	--	1135+50	1141+00	150'RT	579	579	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	NMC	--	1141+00	1147+00	150'RT	626	626	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	NMC	--	1147+00	1151+50	150'RT	498	498	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	NMC	--	1151+87	1152+19	120'RT	66	66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	VEA	--	1160+80	1160+94	120'RT	100	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	VED	--	1163+14	1168+10	80'LT	539	539	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	VED	--	1168+36	1171+47	55'LT	343	343	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	SMC	--	a1230+53	a1233+26	110'LT	300	300	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	SMC	--	a1233+57	a1235+02	110'LT	150	150	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	SMC	--	a1235+37	a1237+39	93'LT	250	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	NIH	--	1135+50	1139+00	LT	--	--	--	--	1,072	--	--	--	--	--	--	--	--	--	--	--
1	NMC	--	1134+90	1152+25	35'RT	--	--	--	--	18,313	--	--	--	--	--	--	--	--	--	--	--
1	VEA	--	1160+74	1169+10	25'RT	--	--	--	--	5,514	--	--	--	--	--	--	--	--	--	--	--
1	NIH	EX./TEMP INL	1133+03	--	33'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	NMC	EX./TEMP INL	1157+78	--	69'RT	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
1	IHA	311	1158+56	--	35.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
1	IHA	311A	1158+86	--	36.81'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
1	IHA	311B	1158+71	--	34.61'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
1	NMC	EX./TEMP INL	1159+05	--	69'RT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	VEA	EX./TEMP INL	1161+00	--	9'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	VEA	318	1161+80	--	22.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VEA	318A	1161+65	--	21.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VEA	318C	1161+50	--	22.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	321	1162+55	--	0.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	321B	1163+42	--	1.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VEA	EX./TEMP INL	1162+49	--	4'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	VEA	324	1167+56	--	26.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VEA	324A	1167+56	--	3.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VEAA	EX./TEMP INL	1170+81	--	59'RT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	VED	343	1165+00	--	1.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	343A	1165+00	--	31.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	343B	1164+64	--	1.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	344	1168+00	--	1.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	344A	1168+00	--	31.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	VED	344B	1166+50	--	1.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
1	NMC	EX./TEMP INL	1175+51	--	46'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	NMC	EX./TEMP INL	1183+00	--	80'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	SMC	EX./TEMP INL	1203+13	--	40'RT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	NMC	EX./TEMP INL	1235+21	--	43'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	NMC	EX./TEMP INL	1241+34	--	43'LT	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
1	SIH	--	1173+05	--	7'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
1	NMC	--	1157+82	--	5'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

EROSION CONTROL ITEMS

CATEGORY						1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
						628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6510	628.7005	628.7010	628.7020	628.7504	628.7555	628.7560	628.7570	SPV.0060.150	SPV.0060.152
						SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT, CLASS I, TYPE B	EROSION MAT, URBAN CLASS I, TYPE B	SOIL STABILIZER TYPE B	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	INLET PROTECTION TYPE D	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECK	TRACKING PADS	ROCK BAGS	INLET PROTECTION TYPE A-SPECIAL	TEMPORARY STONE DITCH CHECKS
STAGE	LOCATION	STRUCTURE	STATION	TO STATION	OFFSET	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
1	IHA	--	1201+87	--	25'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
1	WT	--	99+97	--	55'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
1	IHA	--	1152+00	--	77'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
1	VEA	--	1160+66	--	57'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
1	SMC	--	a1235+25	--	110'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
1	VEA	--	1160+77	--	53'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
1	NMC	--	1136+50	--	145'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	NMC	--	1139+00	--	145'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	NMC	--	1141+25	--	145'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	NMC	--	1143+75	--	135'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	NMC	--	1146+00	--	135'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	IHA	--	1147+75	--	95'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	IHA	--	1149+70	--	95'RT	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--
1	NIH	--	1139+50	--	4'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1139+77	--	3'RT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1151+74	--	0'RT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1155+00	--	7'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1158+16	--	2'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SMC	--	1140+94	--	19'RT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	VEA	--	1168+87	--	51'RT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	VEA	--	1170+85	--	44'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	VEB	--	1176+77	--	43'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	VEC	--	1175+02	--	77'RT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1207+00	--	46'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1221+56	--	6'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	SIH	--	1221+15	--	11'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
1	NIH	--	1134+61	--	30'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
1	NIH	--	1151+75	--	5'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	NIH	--	1154+99	--	5'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	NIH	--	1158+16	--	0'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	NMC	--	1138+13	--	22'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	NMC	--	1141+00	--	160'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
1	NMC	--	1141+00	--	18'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	NMC	--	1144+01	--	23'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	NMC	--	1147+02	--	32'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	IHA	--	1147+25	--	145'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
1	IHA	--	1150+03	--	3'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
1	IHA	--	1151+88	--	71'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
1	VED	--	1168+20	--	68'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
1	SMC	--	a1230+40	--	111'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
STAGE 1 SUBTOTAL						4,200	4,200	5	3	30,000	500	3	35	20	5	340	50	6	275	5	15

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

EROSION CONTROL ITEMS

CATEGORY						1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
						628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6510	628.7005	628.7010	628.7020	628.7504	628.7555	628.7560	628.7570	SPV.0060.150	SPV.0060.152
						SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT, CLASS I, TYPE B	EROSION MAT, URBAN CLASS I, TYPE B	SOIL STABILIZER TYPE B	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	INLET PROTECTION TYPE D	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECK	TRACKING PADS	ROCK BAGS	INLET PROTECTION TYPE A-SPECIAL	TEMPORARY STONE DITCH CHECKS
STAGE	LOCATION	STRUCTURE	STATION	TO STATION	OFFSET	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
2	US-41	--	UNDISTRIBUTED	--	--	--	--	3	2	--	200	1	--	--	--	--	--	4	--	--	5
2	I-43	--	UNDISTRIBUTED	--	--	--	--	2	1	--	200	1	--	--	--	--	--	2	--	--	2
2	--	--	UNDISTRIBUTED	--	--	3,798	3,798	--	--	7,772	100	3	21	15	6	115	12	--	135	--	2
2	SIH	--	1125+00	1130+00	65'LT	611	611	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1130+00	1135+00	65'LT	528	528	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1135+00	1141+00	65'LT	625	625	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1136+28	1140+92	50'RT	512	512	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1141+00	1146+00	65'LT	539	539	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1141+00	1146+00	100'RT	534	534	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1146+00	1151+00	65'LT	545	545	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1146+00	1150+00	100'RT	429	429	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1150+00	1151+75	100'RT	194	194	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1151+00	1156+00	110'LT	536	536	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1152+00	1155+00	100'RT	364	364	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1156+00	1161+00	110'LT	482	482	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1155+00	1157+75	100'RT	353	353	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1157+75	1161+00	100'RT	335	335	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1163+00	1163+50	125'RT	108	108	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1163+00	1166+00	95'LT	354	354	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1163+75	1166+50	90'RT	339	339	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1166+00	1171+00	110'LT	540	540	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1166+75	1167+50	100'RT	101	101	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1167+70	1170+50	100'RT	326	326	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1171+00	1173+00	110'LT	234	234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	IHB	--	1172+00	1177+50	45'RT	635	635	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1173+00	1178+00	110'LT	553	553	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1177+50	1178+50	110'RT	136	136	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1178+50	1186+50	40'RT	831	831	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1178+00	1183+00	120'LT	523	523	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SIH	--	1183+00	1187+00	150'LT	538	538	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NIH	--	1186+80	1187+95	0'LT	226	226	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	IHA	--	1200+00	1204+00	225'RT	412	412	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	IHA	--	1197+00	1199+50	65'RT	327	327	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SMC	--	1138+00	1143+00	80'LT	660	660	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SMC	--	1143+50	1150+00	150'LT	693	693	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SMC	--	1150+00	1155+00	110'LT	540	540	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	SMC	--	1155+25	1162+00	95'LT	753	753	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	VEB	--	1186+00	1186+25	50'RT	106	106	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	VEB	--	1186+70	1187+25	40'RT	92	92	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	VEB	--	1187+60	1190+20	40'RT	309	309	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	VEB	--	1190+25	1192+50	40'RT	245	245	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	NMC	--	1192+66	--	35'LT	34	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	IHB	--	1173+75	1177+40	30'LT		--	--	--	607	--	--	--	--	--	--	--	--	--	--	--
2	NMC	--	1134+90	1155+30	50'LT	--	--	--	--	10,118	--	--	--	--	--	--	--	--	--	--	--
2	NMC	--	1155+30	1162+00	50'LT	--	--	--	--	2,328	--	--	--	--	--	--	--	--	--	--	--
2	VED	--	1162+50	1171+25	30'LT	--	--	--	--	2,999	--	--	--	--	--	--	--	--	--	--	--
2	VEA	--	1163+00	1170+70	5'LT	--	--	--	--	4,689	--	--	--	--	--	--	--	--	--	--	--
2	NMC	--	1174+50	1184+20	40'RT	--	--	--	--	7,769	--	--	--	--	--	--	--	--	--	--	--
2	VEB	--	1177+00	1192+80	23'RT	--	--	--	--	3,796	--	--	--	--	--	--	--	--	--	--	--
2	NMC	--	1220+00	a1249+00	23'RT	--	--	--	--	4,922	--	--	--	--	--	--	--	--	--	--	--

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

EROSION CONTROL ITEMS

CATEGORY						1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
						628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6510	628.7005	628.7010	628.7020	628.7504	628.7555	628.7560	628.7570	SPV.0060.150	SPV.0060.152
						SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT, CLASS I, TYPE B	EROSION MAT, URBAN CLASS I, TYPE B	SOIL STABILIZER TYPE B	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	INLET PROTECTION TYPE D	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECK	TRACKING PADS	ROCK BAGS	INLET PROTECTION TYPE A-SPECIAL	TEMPORARY STONE DITCH CHECKS
STAGE	LOCATION	STRUCTURE	STATION	TO STATION	OFFSET	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
2	VEA	--	1170+75	1173+00	0'LT	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
2	NMC	--	1175+00	1184+25	28'LT	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
2	IHA	--	1174+50	1177+00	40'RT	--	--	--	--	--	--	0	--	--	--	--	--	--	--	--	--
2	NMC	306C	1156+00	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	306E	1155+85	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	310	1158+61	--	47.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	310A	1158+76	--	53.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	310B	1158+76	--	46.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	310C	1158+91	--	47.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	VED	313	1158+85	--	26.00'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	VED	313A	1159+15	--	26.00'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	VED	313B	1159+00	--	25.00'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	315	1170+55	--	35.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	IHA	316	1167+58	--	35.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	IHA	317	1164+65	--	35.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	319	1161+79	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	319A	1161+94	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEA	325	1170+06	--	3.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	332	1164+77	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	333	1167+90	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	333A	1167+75	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	SMC	336A	1167+75	--	26.75'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	339	1172+17	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	339B	1172+02	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	339C	1172+32	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	341	1170+77	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	341B	1170+92	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	EX./TEMP INL	1181+02	--	2'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	620	1175+94	--	22.00'RT	--	--	--	--	--	--	1	1	--	1	--	--	--	--	--	--
2	VEB	620B	1175+74	--	19.35'RT	--	--	--	--	--	--	1	1	--	1	--	--	--	--	--	--
2	VEB	621A	1175+89	--	3.00'LT	--	--	--	--	--	--	1	1	--	1	--	--	--	--	--	--
2	VEB	621B	1175+74	--	3.00'LT	--	--	--	--	--	--	1	1	--	1	--	--	--	--	--	--
2	NMC	731A	1225+69	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	731B	1225+69	--	59.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	732	1223+25	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	732A	1223+25	--	59.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	733A	1231+69	--	27.75'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	733B	1231+69	--	51.90'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	737A	1237+84	--	27.75'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	737B	1237+84	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	SMC	738A	1242+25	--	27.75'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	SMC	738B	1242+25	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	741	1245+40	--	27.75'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	741A	1245+10	--	27.75'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	741B	1245+25	--	27.75'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	742	1245+40	--	47.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	742A	1245+10	--	47.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	742B	1245+25	--	46.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	749	1220+80	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	749A	1220+65	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

3

EROSION CONTROL ITEMS

CATEGORY						1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
						628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6510	628.7005	628.7010	628.7020	628.7504	628.7555	628.7560	628.7570	SPV.0060.150	SPV.0060.152
						SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT, CLASS I, TYPE B	EROSION MAT, URBAN CLASS I, TYPE B	SOIL STABILIZER TYPE B	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	INLET PROTECTION TYPE D	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECK	TRACKING PADS	ROCK BAGS	INLET PROTECTION TYPE A-SPECIAL	TEMPORARY STONE DITCH CHECKS
STAGE	LOCATION	STRUCTURE	STATION	TO STATION	OFFSET	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
2	NMC	750	1220+80	--	59.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	750A	1220+65	--	59.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	753A	1234+39	--	27.75'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	753B	1234+54	--	26.75'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	753C	1234+69	--	27.75'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	754	1234+54	--	46.85'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	754A	1234+39	--	48.08'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	754B	1234+69	--	47.45'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	755A	1247+60	--	27.75'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	755B	1247+60	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	760A	1228+69	--	27.75'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	760B	1228+69	--	56.20'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	770	1175+47	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	770A	1175+47	--	46.75'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	778	1181+57	--	22.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	778A	1181+57	--	3.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	778B	1180+12	--	3.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	780	1180+94	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	780A	1180+94	--	38.95'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	793	1192+55	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	793A	1192+55	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	793C	1192+25	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	793D	1192+40	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	794	1187+07	--	25.00'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	794A	1187+22	--	24.00'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	794B	1187+37	--	25.00'LT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	795	1190+22	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	795A	1190+22	--	49.40'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	798	1187+26	--	22.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	VEB	798A	1187+56	--	22.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	VEB	798B	1187+41	--	21.00'RT	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
2	NMC	799	1186+35	--	35.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	800	1178+66	--	22.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	VEB	800A	1178+66	--	3.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	802	1183+94	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	802A	1183+94	--	35.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	807	1195+90	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	807A	1195+90	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	808	1198+40	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	808A	1198+40	--	47.00'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	810	1200+90	--	25.00'LT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NMC	810A	1200+90	--	40.65'RT	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--
2	NIH	--	1166+88	--	105'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
2	IHB	--	1176+00	--	40'LT	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--
2	SMC	--	1141+00	--	70'RT	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

EROSION CONTROL ITEMS

CATEGORY						1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
						628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6510	628.7005	628.7010	628.7020	628.7504	628.7555	628.7560	628.7570	SPV.0060.150	SPV.0060.152
						SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT, CLASS I, TYPE B	EROSION MAT, URBAN CLASS I, TYPE B	SOIL STABILIZER TYPE B	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	INLET PROTECTION TYPE D	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECK	TRACKING PADS	ROCK BAGS	INLET PROTECTION TYPE A-SPECIAL	TEMPORARY STONE DITCH CHECKS
STAGE	LOCATION	STRUCTURE	STATION	TO STATION	OFFSET	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
2	SMC	--	1143+50	--	145'LT	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--
2	SMC	--	1145+50	--	135'LT	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--
2	SMC	--	1147+50	--	135'LT	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--
2	SMC	--	1150+00	--	115'LT	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--
2	SMC	--	1152+00	--	100'LT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	SMC	--	1154+00	--	90'LT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	SMC	--	1156+00	--	105'LT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	SMC	--	1158+00	--	100'LT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	NMC	--	1176+00	--	60'LT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	NMC	--	1222+00	--	90'RT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	NMC	--	1224+50	--	95'RT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	NMC	--	1227+00	--	90'RT	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--
2	VEA	--	1167+00	--	35'LT	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--
2	VEA	--	1169+30	--	35'LT	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--
2	VEB	--	1177+50	--	35'LT	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--
2	VEB	--	1179+50	--	25'LT	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--
2	NIH	--	1141+00	--	85'RT	--	--	--	--	--	--	--	--	--	--	--	10	--	--	--	--
2	NIH	--	1167+50	--	10'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1144+00	--	21'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1147+00	--	31'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1150+00	--	24'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1156+00	--	25'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1158+75	--	25'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1164+75	--	22'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1167+75	--	25'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1170+77	--	28'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	NMC	--	1172+17	--	26'LT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	VEB	--	1175+75	--	43'RT	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
2	SIH	--	1130+10	--	60'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1135+00	--	60'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1141+00	--	70'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	NIH	--	1146+00	--	62'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1146+10	--	78'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1151+10	--	68'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1156+15	--	90'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1165+90	--	75'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1171+00	--	74'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1173+00	--	94'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SIH	--	1178+15	--	136'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	IHA	--	1208+02	--	122'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	IHA	--	1204+07	--	233'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	IHA	--	1199+55	--	222'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SMC	--	1143+40	--	175'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SMC	--	1150+10	--	132'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SMC	--	1155+17	--	113'LT	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--
2	SMC	--	1177+50	--	44'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--
STAGE 2 SUBTOTAL						20,000	20,000	5	3	45,000	500	10	110	75	35	575	55	6	650	0	10
TOTALS (I.D. 1133-10-71)						24,200	24,200	10	6	75,000	1,000	13	145	95	40	915	105	12	925	5	25

NOTE: ALL ITEMS ON THIS SHEET ARE PAID UNDER CATEGORY 1000

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DELINEATOR POSTS, REFLECTORS AND BRACKETS

PROJECT ID 1133-10-71				633.0100 DELINEATOR POSTS STEEL	633.0500 DELINEATOR REFLECTORS		633.1000 DELINEATOR BRACKETS	
STATION	TO STATION	OFFSET	LOCATION	EACH	EACH WHITE	EACH YELLOW	EACH	NOTE
STAGE 1								
1138+00	1156+54	RT	SMC	5	5	--	--	400' SPACING ON ML
1192+15	1209+21	RT	NMC	--	9	--	9	200' SPACING B/W RAMPS
1219+60	1249+00	RT	NMC	--	8	--	8	400' SPACING ON ML
1138+00	1143+00	RT	NMC	2	2	--	--	400' SPACING ON ML
1143+00	1158+00	RT	IHA	15	15	--	--	100' SPACING ON RAMP
1158+50	1163+00	RT	VEA	--	5	--	5	100' SPACING ON RAMP
1163+00	1170+00	RT	VEA	--	7	--	7	100' SPACING ON RAMP
1153+90	1186+09	RT	NMC	--	17	--	17	200' SPACING B/W RAMPS
SUBTOTALS STAGE 1				**22**	**68**	**0**	**46**	
					68			
STAGE 2								
1153+78	1197+03	LT	IHA	--	--	22	22	200' SPACING ON NB 41 to SB 43 RAMP
1197+03	1200+00	LT	IHA	2	--	2	--	200' SPACING ON NB 41 to SB 43 RAMP
1163+00	1197+35	RT	IHA	--	18	--	18	200' SPACING ON NB 41 to SB 43 RAMP
1197+35	1220+28	RT	IHA	12	12	--	--	200' SPACING ON NB 41 to SB 43 RAMP
1125+00	1170+80	LT	SIH	12	12	--	--	400' SPACING ON ML
1136+29	1167+00	RT	NIH	8	8	--	--	400' SPACING ON ML
1171+59	1187+06	RT	NIH	8	8	--	--	200' SPACING ON NB 43 to NB 41 RAMP
1187+06	1219+72	RT	NIH	--	17	--	17	200' SPACING ON NB 43 to NB 41 RAMP
1185+00	1209+17	LT	NIH	--	--	13	13	200' SPACING ON NB 43 to NB 41 RAMP
1156+64	1162+50	LT	VED	--	6	--	6	100' SPACING ON RAMP
1162+50	1168+50	LT	VED	--	6	--	6	100' SPACING ON RAMP
1177+00	1186+79	RT	VEB	--	10	--	10	100' SPACING ON RAMP
1186+79	1192+65	RT	VEB	--	6	--	6	100' SPACING ON RAMP
SUBTOTALS STAGE 2				**42**	**103**	**37**	**98**	
					140			
PROJECT 1133-10-71 TOTALS				**64**	**171**	**37**	**144**	
					208			

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ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0810 POSTS TUBULAR STEEL 2x2x10 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
200	USH 41 NB, N. OF STH 29	R2-1	---	---	---	---	---	---	---	1	1	
201	"	R3-4	---	---	---	---	---	---	---	1	1	ALSO REMOVE R3-4A
202	USH 41 SB, N. OF STH 29	R3-4	---	---	---	---	---	---	---	1	1	ALSO REMOVE R3-4A
203	USH 41 NB, N. OF STH 29	M1-94	---	---	---	---	---	---	---	1	2	
204	"	D10-3	---	---	---	---	---	---	---	1	1	
205	USH 41 SB, N. OF STH 29	D10-3	---	---	---	---	---	---	---	1	1	
206	"	M1-94	---	---	---	---	---	---	---	1	2	
207	"	R8-7	---	---	---	---	---	---	---	1	1	
208	USH 41 NB, N. OF STH 29	R2-1	---	---	---	---	---	---	---	1	1	
209	"	R2-1	---	---	---	---	---	---	---	1	1	
210	USH 41 SB, N. OF STH 29	R2-1	---	---	---	---	---	---	---	1	1	
211	"	R2-1	---	---	---	---	---	---	---	1	1	
212	USH 41 NB, N. OF STH 29	R3-4	---	---	---	---	---	---	---	1	1	ALSO REMOVE R3-4A
213	USH 41 SB, N. OF STH 29	R3-4	---	---	---	---	---	---	---	1	1	ALSO REMOVE R3-4A
214	"	J4-1	---	---	---	---	---	---	---	1	1	
215	"	W4-2R	---	---	---	---	---	---	---	1	1	
216	"	I55-56	---	---	---	---	---	---	---	1	1	
217	USH 41 NB, N. OF STH 29	J4-2	---	---	---	---	---	---	---	1	1	
218	USH 41 SB, N. OF STH 29	W4-1	---	---	---	---	---	---	---	1	1	
219	USH 41 NB, N. OF VELP AVE	W4-3	---	---	---	---	---	---	---	1	2	
220	USH 41 SB, N. OF VELP AVE	E5-1A	---	---	---	---	---	---	---	1	2	
221	"	J22-1	---	---	---	---	---	---	---	1	1	
222	"	D10-3	---	---	---	---	---	---	---	1	1	
223	USH 41 NB, N. OF VELP AVE	D10-3	---	---	---	---	---	---	---	1	1	
224	USH 41 SB ON-RAMP FROM VELP AVE	R4-3	---	---	---	---	---	---	---	1	1	
225	USH 41 NB OFF-RAMP TO VELP AVE	E5-1A	---	---	---	---	---	---	---	1	2	
226	"	W1-4R	---	---	---	---	---	---	---	1	1	
227	"	W3-3	---	---	---	---	---	---	---	1	1	
228	"	D1-2	---	---	---	---	---	---	---	1	2	
229	"	R3-8P	---	---	---	---	---	---	---	1	1	
230	"	J3-2	---	---	---	---	---	---	---	1	1	
	PAGE SUBTOTALS			0.00	0.00	0	0	0	0	31	37	

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

3

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0810 POSTS TUBULAR STEEL 2x2x10 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
231	USH 41 NB OFF-RAMP TO VELP AVE	R3-8P	---	---	---	---	---	---	---	1	1	
232	"	R5-1A	---	---	---	---	---	---	---	1	---	
233	USH 41 SB ON-RAMP FROM VELP AVE	R5-57	---	---	---	---	---	---	---	1	1	
234	USH 41 NB, N. OF STH 29	J4-2	72" X 54"	27.00	---	---	2	---	---	---	---	NORTH I-41, NORTH USH 41, SEE PLAN SHEET
235	"	M1-94	90" X 21"	13.13	---	2	---	---	---	---	---	MEMORIAL DR, SEE SIGN DETAIL SHEET
236	USH 41 SB, N. OF STH 29	M1-94	90" X 21"	13.13	---	2	---	---	---	---	---	MEMORIAL DR, SEE SIGN DETAIL SHEET
237	"	R8-7	48" X 36"	12.00	---	2	---	---	---	---	---	
238	USH 41 NB, AT EXIT GORE FOR I-43/VELP AVE	E5-1C	48" X 84"	28.00	---	---	---	---	1	---	---	MOUNT ON TOP OF BARRIER WALL USING BRACKET SHOWN IN PLATE A4-10, SEE SIGN DETAIL SHEET
239	CD ROADWAY, EXIT GORE TO VELP AVE	E5-1B	114" X 60"	47.50	---	---	---	2	---	---	---	EXIT 170A
	PAGE SUBTOTALS			140.75	0.00	6	2	2	1	3	2	
	SIGN #200-239 TOTALS			**140.75**	**0.00**	**6**	**2**	**2**	**1**	**34**	**39**	

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ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	USH 41 SB, S. OF CTH EB	W5-52L	---	---	---	---	---	---	1	1	
1A	"	W13-3	---	---	---	---	---	---	1	---	
2	USH 41 SB, S. OF CTH EB	W5-52R	---	---	---	---	---	---	1	1	
3	"	---	---	---	---	---	---	---	1	1	DUCK CREEK
4	"	W13-3	---	---	---	---	---	---	1	2	
5	USH 41 NB, S. OF CTH EB	R8-7	---	---	---	---	---	---	1	1	
5A	"	W4-2R	48" X 48"	---	16.00	---	---	2	---	---	
6	"	M1-93	---	---	---	---	---	---	1	1	
7	USH 41 SB, S. OF CTH EB	M1-93	---	---	---	---	---	---	1	1	REMOVE MG5-2R ALSO
8	USH 41 NB, S. OF CTH EB	---	---	---	---	---	---	---	1	2	
9	USH 41 MEDIAN, S OF CTH EB	---	---	---	---	---	---	---	1	2	
10--13	VACANT	---	---	---	---	---	---	---	---	---	
14	"	R3-4	---	---	---	---	---	---	1	1	REMOVE R3-4A ALSO
15	"	R3-4	---	---	---	---	---	---	1	1	REMOVE R3-4A ALSO
16	USH 41 SB, S. OF CTH EB	D10-3	---	---	---	---	---	---	1	1	
17	USH 41 NB, S. OF CTH EB	D10-3	---	---	---	---	---	---	1	1	
18	"	R2-1	---	---	---	---	---	---	1	1	
19-20	VACANT	---	---	---	---	---	---	---	---	---	
21	I-43 NB, S. OF MILITARY AVE	R3-4	---	---	---	---	---	---	1	1	
22	"	R3-4A	---	---	---	---	---	---	---	---	PART OF SIGN #21 REMOVAL
23	I-43 SB, S. OF MILITARY AVE	R3-4	---	---	---	---	---	---	1	1	
24	"	R3-4A	---	---	---	---	---	---	---	---	PART OF SIGN #23 REMOVAL
25	I-43 NB, S. OF MILITARY AVE	M1-93	36" X 36"	9.00	---	---	1	---	1	1	
26	I-43 SB, S. OF MILITARY AVE	R4-3	48" X 60"	20.00	---	---	---	---	1	2	
27-28	VACANT	---	---	---	---	---	---	---	---	---	
29	I-43 NB, S. OF MILITARY AVE	R2-1	---	---	---	---	---	---	1	2	
30	I-43 SB, S. OF MILITARY AVE	R2-1	---	---	---	---	---	---	1	2	
31	I-43 NB, S. OF MILITARY AVE	D10-5	---	---	---	---	---	---	1	1	
31A	"	D10-5	---	---	---	---	---	---	1	1	
32	I-43 NB, N. OF MILITARY AVE	M1-94	90" X 21"	13.13	---	---	2	---	1	2	MILITARY AVE, SEE SIGN DETAIL
33	I-43 SB, N. OF MILITARY AVE	M1-94	90" X 21"	13.13	---	---	2	---	1	2	MILITARY AVE, SEE SIGN DETAIL
	PAGE SUBTOTALS			55.25	16.00	0	5	2	25	32	

PLAN SHEET PRODUCED BY WisDOT - NE REGION

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
34	I-43 NB, N. OF MILITARY AVE	R3-4	---	---	---	---	---	---	1	1	
35	"	R3-4A	---	---	---	---	---	---	---	---	PART OF SIGN #34 REMOVAL
36	I-43 SB, N. OF MILITARY AVE	R3-4	---	---	---	---	---	---	1	1	
37	"	R3-4A	---	---	---	---	---	---	---	---	PART OF SIGN #36 REMOVAL
38	I-43 NB, N. OF MILITARY AVE	I2-3A	78" X 30"	16.25	---	2	---	---	1	2	VILLAGE OF HOWARD
39	"	J1-1	---	---	---	---	---	---	1	1	END I-43
40	"	J1-1	36" X 54"	13.50	---	---	1	---	1	1	END I-43
41	"	J12-1	36" X 66"	16.50	---	---	---	1	1	1	
42	"	J12-1	36" X 66"	16.50	---	---	---	1	1	1	
42A	"	W12-52	---	---	---	---	---	---	1	1	
42B	"	W57-52	---	---	---	---	---	---	---	---	PART OF SIGN #42A REMOVAL
42C	"	W1-4L	---	---	---	---	---	---	1	1	
42D	"	W1-4L	---	---	---	---	---	---	1	1	
43	I-43 SB, N. OF MILITARY AVE	I55-56	---	---	---	---	---	---	1	1	
44-45	VACANT	---	---	---	---	---	---	---	---	---	
46	"	W13-3	---	---	---	---	---	---	1	2	
46A	I-43 NB, N. OF MILITARY AVE	W12-52	---	---	---	---	---	---	1	1	
46B	"	W12-52	---	---	---	---	---	---	1	1	
46C	"	W1-4R	---	---	---	---	---	---	1	1	
46D	"	W1-4R	---	---	---	---	---	---	1	1	
47	OLD I-43 SB & USH 41 NB RAMP	W4-1	---	---	---	---	---	---	1	2	
48	I-43 NB, AT USH 41 NB/SB SPLIT	J12-1	---	---	---	---	---	---	1	---	ATTACHED CURRENTLY TO SIGN BRIDGE S-05-28
49	VACANT	---	---	---	---	---	---	---	---	---	
50	OLD I-43 NB & USH 41 SB RAMP	J4-2	---	---	---	---	---	---	1	1	
50A	"	W1-4R	---	---	---	---	---	---	1	1	
50B	"	W13-1	---	---	---	---	---	---	---	---	PART OF SIGN #50A REMOVAL
51	"	W1-60	---	---	---	---	---	---	1	2	
52	"	W1-60	---	---	---	---	---	---	1	2	
52A	WIETOR DRIVE	W1-4R	---	---	---	---	---	---	1	1	
52B	"	W13-1	---	---	---	---	---	---	1	---	
52C	OLD I-43 NB & USH 41 SB RAMP	W8-57	---	---	---	---	---	---	1	1	
53	"	W13-3	---	---	---	---	---	---	1	2	
54	"	W13-3	---	---	---	---	---	---	1	2	
55	"	W1-13L	---	---	---	---	---	---	1	2	
56	"	W1-13L	---	---	---	---	---	---	1	2	
57	"	W1-8	---	---	---	---	---	---	1	1	
58	"	W1-8	---	---	---	---	---	---	1	1	
59	"	W1-8	---	---	---	---	---	---	1	1	
60	"	W1-8	---	---	---	---	---	---	1	1	
61	"	W1-8	---	---	---	---	---	---	1	1	
62	"	W1-8	---	---	---	---	---	---	1	1	
63	"	W1-8	---	---	---	---	---	---	1	1	
64	"	W1-8	---	---	---	---	---	---	1	1	
65	"	W1-8	---	---	---	---	---	---	1	1	
66	"	W1-8	---	---	---	---	---	---	1	1	
67	"	W1-8	---	---	---	---	---	---	1	1	
	PAGE SUBTOTALS			62.75	0.00	2	1	2	40	47	

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

3

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
68	OLD I-43 NB & USH 41 SB RAMP	M1-4	---	---	---	---	---	---	1	---	ATTACHED TO SIGN #69
69	"	W1-6	---	---	---	---	---	---	1	2	
70	OLD USH 41 NB & I-43 SB RAMP	R5-57	---	---	---	---	---	---	1	1	
71	"	W1-13L	---	---	---	---	---	---	1	2	
72	"	E5-1A	---	---	---	---	---	---	1	2	
72A	I-43 NB RAMP TO USH 41 NB	W4-3L	48" X 48"	---	16.00	---	---	---	---	---	MOUNT TO LEFT VERTICAL UPRIGHT ON S-05-284
73	OLD USH 41 NB & I-43 SB RAMP	W1-8	---	---	---	---	---	---	1	1	
74	"	W1-8	---	---	---	---	---	---	1	1	
75	"	W1-8	---	---	---	---	---	---	1	1	
76	"	W1-8	---	---	---	---	---	---	1	1	
77	"	W1-8	---	---	---	---	---	---	1	1	
78	"	W1-8	---	---	---	---	---	---	1	1	
79	"	W1-8	---	---	---	---	---	---	1	1	
80	"	W1-8	---	---	---	---	---	---	1	1	
81	"	W1-8	---	---	---	---	---	---	1	1	
82	VACANT	---	---	---	---	---	---	---	---	---	
83	USH 41 SB, N. OF I-43	W4-3R	48" X 48"	---	16.00	---	2	---	---	---	
84	"	W4-3	---	---	---	---	---	---	1	2	
85	OLD USH 41 SB & I-43 SB RAMP	W1-8	---	---	---	---	---	---	1	1	
86	"	W1-8	---	---	---	---	---	---	1	1	
87	"	W1-8	---	---	---	---	---	---	1	1	
88	"	W1-8	---	---	---	---	---	---	1	1	
89	"	W1-8	---	---	---	---	---	---	1	1	
90	"	W1-8	---	---	---	---	---	---	1	1	
91	"	W1-8	---	---	---	---	---	---	1	1	
92	"	W1-8	---	---	---	---	---	---	1	1	
93	"	W1-8	---	---	---	---	---	---	1	1	
94	"	R5-57	---	---	---	---	---	---	1	1	
95	"	W1-13L	---	---	---	---	---	---	1	2	
95A	"	W1-1L	---	---	---	---	---	---	1	1	
95B	"	W13-1	---	---	---	---	---	---	---	---	PART OF SIGN #95A REMOVAL
96	"	W1-6	---	---	---	---	---	---	1	1	
97	OLD USH 41 SB & I-43 SB RAMP	W1-4R	---	---	---	---	---	---	1	1	
97A	"	W13-1	---	---	---	---	---	---	---	---	PART OF SIGN #97 REMOVAL
98	OLD USH 41 SB & I-43 SB RAMP	W1-4R	---	---	---	---	---	---	1	1	
98A	"	W13-1	---	---	---	---	---	---	---	---	PART OF SIGN #98 REMOVAL
99	USH 41 NB, N. OF VELP AVE	W4-1	48" X 48"	---	16.00	---	2	---	---	---	
	PAGE SUBTOTALS			0.00	48.00	0	4	0	30	34	
	SIGN #1-99 TOTALS			**118.00**	**64.00**	**2**	**10**	**4**	**95**	**113**	

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ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0810 POSTS TUBULAR STEEL 2x2x10 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
64.00	**8**	**12**	**6**	**1**	**129**	**152**

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE I
ERECTING STRUCTURAL STEEL SIGN SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	637.1220 SIGNS, TYPE I REFLECTIVE SH W X H	637.1220 S.F.	203.0200 REMOVING OLD STRUCTURE (STA) LS	635.0200 SIGN SUPPORTS STRUCT. STEEL HIGH-STRENGTH LB	636.0100 SIGN SUPPORTS CONCRETE MASONRY CY	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT LB	TYPE/SIZE OF STEEL	638.2601 REMOVING SIGNS TYPE I EACH	638.3100 REMOVING STRUCT. STEEL SIGN SUPPORTS EACH	SPV.0165.950 SIGN BLANKS LEFT-IN-PLACE S.F.	REMARKS
100	USH 41/141 SB, S. OF DUCK CREEK	---	---	---	1 (1210+60 SMC)	---	---	---	---	---	---	---	SIGN STRUCTURE S-05-29 TO BE REMOVED
101	"	E7-2	---	---	---	---	---	---	---	3	---	---	ALSO REMOVE E6-1 AND E1-5
102	USH 41/141 NB, N. OF DUCK CREEK	---	---	---	---	---	---	---	---	---	---	150.5	INSTALLATION OF SIGN BRIDGE - CANTILEVER S-05-234
103	I-43 SB, S. OF MILITARY RD	---	---	---	---	---	---	---	---	---	2	---	
104	"	E9-1	---	---	---	---	---	---	---	1	---	---	
105	"	---	---	---	---	---	---	---	---	---	2	---	
106	"	E9-1	---	---	---	---	---	---	---	1	---	---	
106A	I-43 SB, N. OF MILITARY RD	---	---	---	---	---	---	---	---	---	---	45.0	INSTALLATION OF CANTILEVER S-05-195
107	"	E1-1A	228" X 84"	133.00	---	931	1.6	98	2-TYPE B	1	2	---	ATKINSON DR, 1 MILE, SEE SIGN DETAIL SHEET
108	"	E1-5P	120" X 30"	25.00	---	---	---	---	---	1	---	---	EXIT 189, MOUNT ABOVE SIGN #107
109	I-43 NB, N. OF MILITARY RD	---	---	---	1 (1161+15 NIH)	---	---	---	---	---	---	---	SIGN STRUCTURE S-05-27 TO BE REMOVED
110	"	E6-51	---	---	---	---	---	---	---	4	---	---	ALSO REMOVE E1-5P, E6-51 AND E1-5P
111	I-43 SB, N. OF MILITARY RD	---	---	---	---	---	---	---	---	---	2	---	
112	"	E8-1	---	---	---	---	---	---	---	1	---	---	
113	I-43 NB, AT EXISTING SPLIT FOR USH 41	---	---	---	1	---	---	---	---	---	---	---	SIGN STRUCTURE S-05-28 TO BE REMOVED
114	"	E6-51	---	---	---	---	---	---	---	4	---	---	ALSO REMOVE E1-5P, E6-51 AND E1-5P
115	USH 41/141 NB, S. OF DUCK CREEK	---	---	---	1 (1192+00 NMC)	---	---	---	---	---	---	---	SIGN STRUCTURE S-05-03 TO BE REMOVED
116	"	E7-2	---	---	---	---	---	---	---	3	---	---	ALSO REMOVE E6-1 AND E1-5P
117	USH 41/141 SB, S. OF DUCK CREEK	---	---	---	1 (1192+50 SMC)	---	---	---	---	---	---	---	SIGN STRUCTURE S-05-02 TO BE REMOVED
118	"	E7-2	---	---	---	---	---	---	---	3	---	---	ALSO REMOVE E6-51 AND E1-5P
119	"	---	---	---	---	---	---	---	---	---	2	---	
120	"	E1-1A	---	---	---	---	---	---	---	2	---	---	ALSO REMOVE E1-5P
121	USH 41 SB, S. OF VELP AVE	E9-1	---	---	---	---	---	---	---	1	---	---	
122	"	---	---	---	---	---	---	---	---	---	2	---	
123	USH 41 NB, S. OF VELP AVE	E3-1	---	---	---	---	---	---	---	1	---	---	
124	"	---	---	---	---	---	---	---	---	---	2	---	
125	USH 41 SB, S. OF VELP AVE	E10-61	144" X 54"	54.00	---	500	1.2	68	2-TYPE A	---	---	---	
126	"	E1-1A	---	---	---	---	---	---	---	2	---	---	ALSO REMOVE E1-5P
127	"	---	---	---	---	---	---	---	---	---	2	---	
128	USH 41 NB, S. OF VELP AVE	---	---	---	---	---	---	---	---	---	---	101.5	INSTALLATION OF SIGN BRIDGE - CANTILEVER S-05-191
129	"	E4-1A	---	---	---	---	---	---	---	2	---	---	ALSO REMOVE E1-5P
130	"	---	---	---	---	---	---	---	---	---	2	---	
131	"	E1-1A	---	---	---	---	---	---	---	2	---	---	ALSO REMOVE E1-5P
132	"	---	---	---	---	---	---	---	---	---	2	---	
	PROJECT TOTALS			**212.00**	**5**	**1431**	**2.8**	**166**		**32**	**20**	**297.0**	

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TRAFFIC CONTROL

STAGE	LOCATION	DURATION DAY	643.0200.001 SURVEILLANCE & MAINTENANCE 1133-10-71 DAY	643.0300 DRUMS NO.	643.0300 DRUMS DAY	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C DAY	643.0800 ARROW BOARDS NO.	643.0800 ARROW BOARDS DAY	643.0900 SIGNS NO.	643.0900 SIGNS DAY
STAGE 1															
	ENTIRE STAGE	86	86	500	43,000	14	1,204	26	2,236	105	9,030	2	172	20	1,720
	LANE CLOSURE - EB & WB VELP AVENUE	14	--	33	462	2	28	4	56	7	98	--	--	6	84
	LANE CLOSURES	200	--	210	42,000	6	1,200	12	2,400	16	3,200	2	400	16	3,200
	RAMP CLOSURES	60	--	20	1,200	4	240	6	360	--	--	--	--	6	360
SUBTOTALS STAGE 1			86		86,662		2,672		5,052		12,328		572		5,364
STAGE 1A															
	LANE CLOSURES - SB USH 41	1	1	100	100	13	13	18	18	16	16	2	2	31	31
	LANE CLOSURES - NB IH 43	2	2	90	180	21	42	32	64	32	64	3	6	37	74
SUBTOTAL STAGE 1A			**3**		**280**		**55**		**82**		**80**		**8**		**105**
STAGE 2A															
	ENTIRE STAGE	42	42	380	15,960	25	1,050	46	1,932	115	4,830	2	--	213	8,946
	LANE CLOSURE - EB VELP AVENUE	21	--	33	693	4	84	8	168	20	420	0	0	14	294
	LANE CLOSURES	60	--	210	12,600	6	360	12	720	16	960	2	120	16	960
	RAMP CLOSURES	30	--	20	600	4	120	6	180	--	--	--	--	6	180
SUBTOTALS STAGE 2A			**42**		**29,853**		**1,614**		**3,000**		**6,210**		**120**		**10,380**
STAGE 2B															
	ENTIRE STAGE	54	54	380	20,520	25	1,350	46	2,484	115	6,210	2	--	212	11,448
	LANE CLOSURES	35	--	210	7,350	6	210	12	420	16	560	2	70	16	560
	RAMP CLOSURES	35	--	20	700	4	140	6	210	--	--	--	--	6	210
SUBTOTALS STAGE 2B			**54**		**28,570**		**1,700**		**3,114**		**6,770**		**70**		**12,218**
STAGE 2C															
	ENTIRE STAGE	55	55	420	23,100	29	1,595	54	2,970	115	6,325	2	110	218	11,990
	LANE CLOSURES	75	--	210	15,750	6	450	12	900	16	1,200	2	150	16	1,200
	RAMP CLOSURES	35	--	20	700	4	140	6	210	--	--	--	--	6	210
SUBTOTALS STAGE 2C			**55**		**39,550**		**2,185**		**4,080**		**7,525**		**260**		**13,400**
STAGE 3															
	ENTIRE STAGE	10	10	400	4,000	17	170	34	340	200	2,000	--	--	158	1,580
	LANE CLOSURES	40	--	210	8,400	6	240	12	480	16	640	2	80	16	640
SUBTOTALS STAGE 3			**10**		**12,400**		**410**		**820**		**2,640**		**80**		**2,220**
PROJECT 1133-10-71 TOTALS			**250**		**197,315**		**8,636**		**16,148**		**35,553**		**1,110**		**43,687**

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TRAFFIC CONTROL COVERING SIGNS TYPE I

STAGE	LOCATION	DESCRIPTION	643.0910* EACH	REMARKS
STAGE 1				
	NB USH 41, SOUTH OF VELP AVENUE	"I-43"	1	
	NB USH 41, SOUTH OF VELP AVENUE	"MILWAUKEE"	1	
STAGE 1 SUBTOTALS			2	
STAGE 2				
	NB USH 41, NORTH OF MEMORIAL DRIVE	"I-43"	1	SUBSTAGES 2A & 2B
	NB USH 41, NORTH OF MEMORIAL DRIVE	"MILWAUKEE"	1	SUBSTAGES 2A & 2B
	NB USH 41, SOUTH OF VELP AVENUE	"SOUTH, I-43, MILWAUKEE" WITH ARROW	1	SUBSTAGES 2B & 2C
STAGE 2 SUBTOTALS			3	
PROJECT 1133-10-71 TOTALS			**5**	

*ADDITIONAL QUANTITY LISTED ELSEWHERE
**ONE CYCLE

TRAFFIC CONTROL COVERING SIGNS TYPE II

STAGE	LOCATION	DESCRIPTION	643.0920* EACH	REMARKS
STAGE 1				
	WB VELP AVE - MEDIAN UNDER USH 41	"LEFT TURN LANE" WITH ARROW	1	
	EB VELP AVE - MEDIAN UNDER USH 41	"LEFT TURN LANE" WITH ARROW	1	
STAGE 1 SUBTOTALS			2	
STAGE 2				
	NB USH 41, SOUTH OF MEMORIAL DRIVE	"SOUTH I-43"	2	
	EB VELP AVE - MEDIAN UNDER USH 41	"LEFT TURN LANE" WITH ARROW	1	SUBSTAGE 2A
STAGE 2 SUBTOTALS			3	
UNDISTRIBUTED			10	
PROJECT 1133-10-71 TOTALS			**15**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** ONCE CYCLE

3

TRAFFIC CONTROL SIGNS PCMS

STAGE	LOCATION	APPLICATION	# OF CLOSURES	# OF DAYS PER CLOSURE	643.1050 DAY
STAGE 1					
	VELP AVENUE	LANE CLOSURE	2	5	10
	ENTIRE STAGE	OVERNIGHT SINGLE LANE CLOSURE	200	1	200
	ENTIRE STAGE	OVERNIGHT RAMP CLOSURE	60	1	60
	PROJECT LIMITS	TRAFFIC PATTERN CHANGE	3	5	15
STAGE 1 SUBTOTALS					**285**
STAGE 1A					
	SB USH 41	OVERNIGHT FULL ROADWAY CLOSURE	2	2	4
	NB IH 43	OVERNIGHT FULL ROADWAY CLOSURE	2	7	14
STAGE 1A SUBTOTALS					**18**
STAGE 2A					
	VELP AVENUE	LANE CLOSURE	2	5	10
	ENTIRE STAGE	OVERNIGHT SINGLE LANE CLOSURE	60	1	60
	ENTIRE STAGE	OVERNIGHT RAMP CLOSURE	30	1	30
	PROJECT LIMITS	TRAFFIC PATTERN CHANGE	3	5	15
STAGE 2A SUBTOTALS					**115**
STAGE 2B					
	ENTIRE STAGE	OVERNIGHT SINGLE LANE CLOSURE	75	1	75
	ENTIRE STAGE	OVERNIGHT RAMP CLOSURE	35	1	35
	PROJECT LIMITS	TRAFFIC PATTERN CHANGE	3	5	15
STAGE 2B SUBTOTALS					**125**
STAGE2C					
	ENTIRE STAGE	OVERNIGHT SINGLE LANE CLOSURE	75	1	75
	ENTIRE STAGE	OVERNIGHT RAMP CLOSURE	35	1	35
	PROJECT LIMITS	TRAFFIC PATTERN CHANGE	3	5	15
STAGE 2C SUBTOTALS					**125**
STAGE 3					
	ENTIRE STAGE	OVERNIGHT SINGLE LANE CLOSURE	40	1	40
	PROJECT LIMITS	TRAFFIC PATTERN CHANGE	3	5	15
STAGE 3 SUBTOTALS					**55**
PROJECT 1133-10-71 TOTALS					**723**

TRAFFIC CONTROL SIGNS FIXED MESSAGE

	ROADWAY	MESSAGE	SIZE	LOCATION	643.1000* SF
STAGE 1					
	USH 41, I-43, AND RAMPS	CONSTRUCTION VEHICLES EXIT HIGHWAY ON LEFT/RIGHT SHOULDER	14' X 5'	UNDISTRIBUTED	280
	SUBTOTALS STAGE 1				**280**
STAGE 2					
	USH 41, I-43, AND RAMPS	CONSTRUCTION VEHICLES EXIT HIGHWAY ON LEFT/RIGHT SHOULDER	11.5' X 8'	UNDISTRIBUTED	280
	SUBTOTALS STAGE 2				**280**
STAGE 3					
	USH 41, I-43, AND RAMPS	CONSTRUCTION VEHICLES EXIT HIGHWAY ON LEFT/RIGHT SHOULDER	14' X 5'	UNDISTRIBUTED	280
	SB USH 41, NORTH OF LINEVILLE RD	VELP AVE RAMP CLOSED LOCAL ACCESS NEXT RIGHT	11' X 6.5'	OUTSIDE SHOULDER	71.5
	GORE AREA, EXIST NB I-43 RAMPS	SOUTH 41 APPLETON/NORTH 41-141 MARINETTE & EXIT PLAQUE	11.5' X 9.5' 7' X 1.5'	STA 1189+00 TWC	119.75
	SUBTOTALS STAGE 3				**471.25**
PROJECT 1133-10-71 TOTALS					**1031.25**

*ADDITIONAL QUANTITY LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 150 DAYS	643.3000 DETOUR SIGNS DAYS	643.1000* SIGNS FIXED MESSAGE S.F.	643.0910* COVERING SIGNS** TYPE I EACH	643.0920* COVERING SIGNS** TYPE II EACH	REMARKS
	NB US 41 to SB I 43 - CLOSED									
	GAP IN SIGN NUMBERING (65-74)									
75	FIELD LOCATED - ON HWY 41 (NB) - 1000' (MIN) SOUTH OF ONEIDA ST OFF RAMP	FMS	10'-6"x 7'-0"	1			73.50			SEE SIGN DETAIL
76	ACROSS FROM SIGN # 75 (MEDIAN SIDE)	FMS	10'-6"x 7'-0"	1			73.50			SEE SIGN DETAIL
77	200' N OF RAMADA WAY ON SB ONEIDA ST	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
78	200' S OF 41 SB OVERPASS ON NB WAUBE LN (MEDIAN SIDE)	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
79	200' W OFF RAMP TO HWY 41 SB ON HWY 172 EB	FMS	10'-6"x 7'-0"	1			73.50			SEE SIGN DETAIL
80	150' E OF SHADY LANE ON EB HAZLEWOOD LANE	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
81	250' E OF D1-1 (SOUTH-41-NORTH, KEEP LEFT, KEEP RIGHT) ON LOMBARDI AVE	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
82	100' E OF ADVANCE RAB SIGN ON EB MASON ST	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
83	50' W OF TAYLOR ST RAB (N LEG) - BEHIND SIDEWALK - ON WB MASON ST	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
84	275' E OF J 2-4 (S-41-AH, W-29-AH, N-32-AH, N-41-AH RT) ON WB SHAWANO AVE	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
85	FIELD LOCATE WEST OF DUCK CREEK STRUCTURE	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
86	100' W OF J 2-3 (S-41-AH, N-HS-AH, N-41-AH RT) ON WB VELP AVE	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
87	75' W OF KEEP RT SIGN - IN MEDIAN ISLAND - ON SB VELP AVE	FMS	4'-6"x 3'-6"	1			15.75			SEE SIGN DETAIL
	NB US 41 to SB I 43 SUBTOTAL			**13**			**378.00**			

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 110 DAYS	643.3000 DETOUR SIGNS DAYS	643.1000* SIGNS FIXED MESSAGE S.F.	643.0910* COVERING SIGNS** TYPE I EACH	643.0920* COVERING SIGNS** TYPE II EACH	REMARKS
	NB US 141 (ON-RAMP) CLOSED									
	GAP IN SIGN NUMBERING (88-99)									
100	250' W OF J1-2 (ALT-43; N-141)	W 20-2-A	48"x48"	1	110	110				
101	600' W OF J1-2 (ALT-43; N-141)	MO 4-8	24"x12"	1	110	110				
	"	MO 3-1	24"x12"	1	110	110				
	"	M 1-4	24"x24"	1	110	110				141
	"	MO 5-1-R	21"x21"	1	110	110				
102	MODIFY J2-2 (N-141-AH; ALT-43-AH RT)	MO 4-8	24"x12"	1	110	110				
	"	MO 3-1	EXISTING							
	"	M 1-4	EXISTING							141
	"	MO 5-1-R	21"x21"	1	110	110				
103	TYPE 1 (141- AH ONLY)							1		141 AHEAD ONLY
104	J3-1 (N-141-AH) (LEFT SIDE)								1	NORTH 141 AHEAD
105	RT LEG OF SIGN BRIDGE	MO 4-8	24"x12"	1	110	110				
	"	MO 3-1	24"x12"	1	110	110				
	"	M 1-4	24"x24"	1	110	110				141
	"	MO 6-1	21"x21"	1	110	110				AHEAD
106	RT OF J2-2 (N-43-AH; S-43-AH RT)	MO 4-8	24"x12"	1	110	110				
	"	MO 3-1	24"x12"	1	110	110				
	"	M 1-4	24"x24"	1	110	110				141
	"	MO 6-1	21"x21"	1	110	110				AHEAD
107	RT OF J2-1 (N-43-AH LT)	MO 4-8	24"x12"	1	110	110				
	"	MO 3-1	24"x12"	1	110	110				
	"	M 1-4	24"x24"	1	110	110				141
	"	MO 5-1-L	21"x21"	1	110	110				
108	ABOVE J3-1 (N-43-LT)	MO 4-8	24"x12"	1	110	110				
	"	MO 3-1	24"x12"	1	110	110				
	"	M 1-4	24"x24"	1	110	110				141
	"	MO 6-1	21"x21"	1	110	110				LEFT
	NB US 141 (ON-RAMP) SUBTOTAL			**23**		**2,530**		**1**	**1**	
	PROJECT 1133-10-71 TOTAL			**36**		**2,530**	**378.00**	**1**	**1**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

PERMANENT MARKING

					646.0106		646.0126	647.0166	647.0176	647.0356
					PAVEMENT MARKING EPOXY 4-INCH		PAVEMENT MARKING EPOXY 8-INCH	PAVEMENT MARKING ARROWS EPOXY TYPE 2	PAVEMENT MARKING ARROWS EPOXY TYPE 3	PAVEMENT MARKING WORDS EPOXY
STATION		STATION	OFFSET	LOCATION	WHITE LF	YELLOW LF	LF	EACH	EACH	EACH
STAGE 1										
1122+15	-	1138+00	RT	NMC	430	--	710	--	--	--
1109+00	-	1140+00	RT	NIH	2600	--	630	--	--	--
STAGE 1 SUBTOTALS					**3,030**	**0**	**1,340**	**0**	**0**	**0**
STAGE 2										
1125+40	-	1130+00	RT	NMC	100	--	460	--	--	--
1138+00		1158+70	RT	NMC	2,100	--	--	--	--	--
1162+50		1168+50	-	VED	--	600	--	--	--	--
1172+82		1196+73	-	IHA	--	2,400	--	--	--	--
1172+82		1196+73	RT	IHA	2,400	--	--	--	--	--
1177+00		1186+29	-	VEB	--	930	--	--	--	--
1177+00		1188+00	RT	VEB	1,100	--	--	--	--	--
1125+00		1162+63	RT	SIH	3,770	--	--	--	--	--
1183+00		1208+66	LT	NIH	--	2,570	--	--	--	--
1183+00		1209+00	RT	NIH	2600	--	--	--	--	--
1213+00		1249+00	RT	NMC	3600	--	--	--	--	--
1158+50	-	1170+00	RT	VEA	--	900	--	--	--	--
1170+00	-	1173+10	RT	TA	310	310	285	2	1	3
1150+50	-	1172+80	RT	IHA	1,180	2,230	440	--	--	--
1122+00	-	1177+10	LT	SIH	5,240	5,240	--	--	--	--
1196+50	-	1214+00	LT	IHA	1,750	1,750	--	--	--	--
STAGE 2 SUBTOTALS					**24,150**	**16,930**	**1,185**	**2**	**1**	**3**
STAGE 3										
1129+00	-	1252+70	RT	TWF	13,610	11,570	4,850	--	--	--
1134+00	-	1258+80	LT	TWE	13,890	12,490	3,530	--	--	--
1130+00	-	1134+00	LT	SMC	--	--	575	--	--	--
1132+50	-	1160+00	LT	TWG	2,660	2,510	250	--	--	--
1153+50	-	1159+00	RT	IHA	--	--	550	--	--	--
1160+10	-	1168+00	LT	VED	790	790	--	--	--	--
1168+00	-	1170+85	LT	TD	285	285	--	--	--	--
1175+65	-	1177+00	RT	VEB	135	135	--	--	--	--
1122+00	-	1125+00	LT	SIH	--	300	--	--	--	--
1131+50	-	1186+90	RT	NIH	5,340	5,390	840	--	--	--
1166+00		1176+50	RT	IHB	1,050	850	--	--	--	--
CONTINUOUS CLOSURE OF OUTSIDE LANE - WB VELP AVE.							--	--	--	--
STAGE 3 SUBTOTALS					**37,760**	**34,320**	**10,595**	**0**	**0**	**0**
PROJECT 1133-10-71 TOTALS					**64,940**	**51,250**	**13,120**	**2**	**1**	**3**
					116,190					

REMOVING PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS

STATION		STATION	OFFSET	LOCATION	646.0600 REMOVING PAVEMENT MARKINGS LF	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH WHITE LF	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH YELLOW LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW LF	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH WHITE LF	649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH WHITE LF	649.1800 TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE EACH	649.2000 TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE EACH
STAGE 1													
1122+15	-	1138+00	RT	NMC	2,620	--	--	1,140	900		--	--	--
1138+00	-	1161+50	LT	IHA	1,590	2,790	2,340	--	--	1,170	--	--	--
1160+00	-	1170+50	LT	VEA	--	1,030	--	--	--	630	--	--	--
1109+00	-	1140+00	RT	NIH	640	780	780	--	--	--	--	--	--
1121+70	-	1140+00	RT	SIH	460	--	1,830	--	--	--	--	--	--
1140+00	-	1147+00	RT	NIH	180	--	700	--	--	--	--	--	--
1140+00	-	1187+70	RT	SIH	380	1,020	8,360	--	--	--	--	--	--
CONTINUOUS CLOSURE OF TURN LANES - EB & WB VELP AVE.					--	--	--	--	550	--	--	4	--
				SB USH 41	--	--	--	--	780	--	--	--	--
				NB IH 43	--	--	--	--	780	--	--	--	--
STAGE 1 SUBTOTALS					**5,870**	**5,620**	**14,010**	**1,140**	**3,010**	**1,800**	**0**	**4**	**0**
STAGE 2													
1130+00	-	1138+00	RT	TWB	--	--	--	1,200	800	--	1,170	--	--
1138+00	-	1184+70	RT	TWB	1,770	5,190	4,670	--	--	2,090	--	--	--
NB VELP RMP	-	1184+70	RT	TWB	--	390	230	--	--	150	--	--	--
1141+50	-	1182+22	LT	TWA	1,120	4,220	3,920	--	--	1,590	--	--	--
1160+00	-	SB VELP RMP	LT	TWA	--	990	690	--	--	200	--	--	--
1148+50		1153+50	RT	IHA	1,000	--	--	--	--	--	--	--	--
1138+00	-	1158+50	RT	IHA	--	--	2,050	--	--	--	--	--	--
1158+50	-	1170+00	RT	VEA	--	--	250	--	--	--	--	--	--
1184+70	-	1206+60	RT	TWB	2,640	2,700	2,190	--	--	430	--	--	--
1213+50	-	1257+50	RT	TWB	2,940	4,470	3,300	950	940	210	950	--	--
1220+60	-	1254+30	LT	TWA	3,670	3,320	2,700	240	280	210	260	--	--
1122+00	-	1208+05	LT	TWC	1,540	8,300	8,500	--	--	300	--	--	--
1131+50		1208+35	RT	TWD	50	4,850	7,660	--	--	--	--	--	--
CONTINUOUS CLOSURE OF OUTSIDE LANE - EB VELP AVE.					--	--	--	310	250	--	150	5	1
1183+00	-	1190+00	RT	TWB	600	1,000	--	--	--	--	--	--	--
1150+50	-	1172+80	RT	IHA	1,050	--	--	--	--	--	510	--	--
1122+00	-	1177+10	LT	SIH	--	--	--	--	--	300	--	--	--
STAGE 2 SUBTOTALS					**16,380**	**35,430**	**36,160**	**2,700**	**2,270**	**5,480**	**3,040**	**5**	**1**
STAGE 3													
1129+00	-	1252+70	RT	TWF	940	--	--	--	--	--	--	--	--
1134+00	-	1258+80	LT	TWE	1,530	--	--	--	--	--	--	--	--
1130+00	-	1134+00	LT	SMC	400	--	--	--	--	--	--	--	--
1132+50	-	1160+00	LT	TWG	300	--	--	--	--	--	--	--	--
1122+00	-	1125+00	LT	SIH	300	--	--	--	--	--	--	--	--
1131+50	-	1186+90	RT	NIH	900	--	--	--	--	--	--	--	--
CONTINUOUS CLOSURE OF OUTSIDE LANE - WB VELP AVE.					100	--	--	310	410		110	5	1
STAGE 3 SUBTOTALS					**4,470**	**0**	**0**	**310**	**410**	**0**	**110**	**5**	**1**
PROJECT 1133-10-71 TOTALS					**26,720**	**41,050**	**50,170**	**4,150**	**5,690**	**7,280**	**3,150**	**14**	**2**
						91,220		**9,840**					

GEOTEXTILE FABRIC

STATION	-	STATION	ROADWAY	LOCATION	645.0140 GEOTEXTILE FABRIC TYPE SAS SY	SPV.0035.004 GRANULAR MATERIAL FOR ES FABRIC CY	SPV.0180.014 INSTALL GEOTEXTILE FABRIC TYPE ES SY
STAGE 1							
1182+00	-	1185+50	OB2	EMBANKMENT	--	816	2,448
1138+00	-	1148+00	NMC	MEDIAN	540	--	--
1153+50	-	1172+50	NMC	MEDIAN	590	--	--
1174+50	-	1177+50	NMC	MEDIAN	83	--	--
1178+75	-	1183+50	NMC	MEDIAN	60	--	--
1195+75	-	1206+00	SMC	MEDIAN	121	--	--
STAGE 1 SUBTOTALS					**1,394**	**816**	**2,448**
STAGE 2							
1138+00	-	1144+75	SMC	MEDIAN	164	--	--
1142+75	-	1179+00	NIH	OUTSIDE SHOULDER	6,548	--	--
1142+75	-	1189+00	SIH	OUTSIDE SHOULDER	4,742	--	--
1189+00	-	1191+00	SIH	OUTSIDE SHOULDER	260	--	--
STAGE 2 SUBTOTALS					**11,713**	**0**	**0**
PROJECT 1133-10-71 TOTALS					**13,107**	**816**	**2,448**

SAWCUTS

STATION	-	STATION	LOCATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
STAGE 1						
1138+00	-	1149+00	NMC	RT	--	1100
1160+08			NMC	RT	7	--
1150+50	-	1156+00	IHA	RT	--	550
1151+50	-	1160+65	SMC	LT	--	950
1161+50	-	1168+00	VEA	RT	650	--
1162+30			SMC	LT-RT	150	--
1178+40			SMC	RT	8	--
1206+50			SMC	RT	8	--
1220+68			SIH	RT	--	12
1220+65			SMC	LT	--	10
1122+00	-	1125+00	SIH	RT	--	318
SUBTOTALS STAGE 1					**823**	**2,940**
STAGE 2						
1138+00		1141+00	NMC	RT	--	300
1138+00		1148+50	SMC	LT	--	1050
1175+65			VEB	LT	30	--
30+50			EDR	LT-RT	24	--
1125+00		1181+00	SIH	LT	--	5800
1141+00		1179+00	NIH	RT	--	3830
SUBTOTALS STAGE 2					**54**	**10,980**
PROJECT 1133-10-71 TOTALS					**877**	**13,920**

PAVEMENT MARKING

STATION	-	STATION	OFFSET	LOCATION	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH DASHED WHITE LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH WHITE LF	SPV.0060.310 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5 WHITE EACH	NOTE
STAGE 2								
1164+50	-	1196+73	RT	IHA	810	--	--	LANE LINES / 12.5-FOOT SKIPS
1186+29	-	1188+00	-	VEB	--	180	--	LEFT EDGE LINE
1183+00	-	1209+00	-	NIH	650	--	--	LANE LINES / 12.5-FOOT SKIPS
1208+66	-	1209+00	LT	NIH	--	40	--	LEFT EDGE LINE
		1207+42	RT	NIH	--	--	1	ARROW
1213+00	-	1249+00	RT	NMC	900	--		LANE LINES / 12.5-FOOT SKIPS
1213+00	-	1224+36	RT	NMC	290	--	--	LANE LINES / 12.5-FOOT SKIPS
STAGE 2 SUBTOTALS					**2,650**	**220**	**1**	
PROJECT 1133-10-71 TOTALS					**2,650**	**220**	**1**	

EXCAVATION OF PHRAGMITES SOIL

ROADWAY	STATION	-	STATION	LOCATION	SPV.0035.003 CY
STAGE 1					
SB43 (SIH)	1122+00	-	1126+25	MEDIAN	160
NB43 (NIH)	1148+50	-	1149+75	MEDIAN	50
NB43 (NIH)	1153+25	-	1156+75	MEDIAN	130
NB43 (NIH)	1163+75	-	1164+50	MEDIAN	25
NB43 (NIH)	1178+75	-	1181+75	MEDIAN	110
OB2	1194+00	-	1195+25	MEDIAN	50
SB41 (SMC)	1185+50	-	1186+00	MEDIAN	15
SB41 (SMC)	1201+50	-	1204+50	MEDIAN	220
PROJECT 1133-10-71 TOTAL					**760**

3

3

LIGHTING CONDUIT

652.0235*
CONDUIT RIGID NONMETALLIC
SCHEDULE 40
3-INCH

FROM	-	TO	LF	REMARKS
ALL ITEMS ARE CATEGORY 1100				
EXISTING	-	LB 334	195	PULLWIRE ONLY
LB 334	-	LB 333	330	PULLWIRE ONLY
LB 333	-	LB 332	330	PULLWIRE ONLY
LB 332	-	LB 331	330	PULLWIRE ONLY
LB 331	-	LB 330	330	PULLWIRE ONLY
LB 330	-	SL 329	330	PULLWIRE ONLY
SL 329	-	SL 328	330	PULLWIRE ONLY
SL 328	-	SL 327	330	PULLWIRE ONLY
SL 327	-	SL 326	300	PULLWIRE ONLY
PROJECT TOTAL			2805	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING BASES

LIGHT NUMBER	STATION	OFFSET	R/L	SPV.0060.372 CONCRETE BASE MEDIAN BARRIER TYPE 1 STATE FURNISHED JUNCTION BOX EACH	SPV.0060.355 CONCRETE BASE MEDIAN BARRIER TYPE 2 EACH	SPV.0060.373 ANCHOR BOLT COVER SHROUD EACH
ALL ITEMS ARE CATEGORY 1100						
SL 326	1228'NMC'+21	30.3'	LT	--	1	1
SL 327	1231'NMC'+19	30.3'	LT	1	--	1
SL 328	1234'NMC'+47	30.3	LT	1	--	1
SL 329	1239'NMC'+79	30.1'	LT	1	--	1
LB 330	1241'NMC'+09	30.2'	LT	1	--	1
LB 331	1244'NMC'+39	30.2'	LT	1	--	1
LB 332	1247'NMC'+69	30.2'	LT	1	--	1
LB 333	1250'NMC'+99	30.3'	LT	1	--	1
LB 334	1254'NMC'+2	30.2'	LT	1	--	1
PROJECT TOTAL				8	1	9

ITS PULL BOX, COMMUNICATIONS VAULT & MANHOLE ITEMS

STATION	LOCATION	ITEM ID	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0180 PULL BOXES STEEL COMMUNICATIONS (24X36-INCH) EACH
CATEGORY 1200				
1149+50 NIH	RT	PB-E1	EXISTING PULL BOX (1220-15-71)	
1149+35 SIH	LT	PB-E2	EXISTING PULL BOX (1220-15-71)	
TOTALS			0	0

ITS CONDUIT ITEMS

FROM	TO	LINEAR DISTANCE	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF
CATEGORY 1200			
EXISTING METER BREAKER PEDESTAL	PB-E1	15	EXISTING 2-INCH NONMETALLIC CONDUIT (1220-15-71)
PB-E1	PB-E2	260	EXISTING 2-INCH NONMETALLIC CONDUIT (1220-15-71)
PB-E2	DMS-05-0009	15	15
TOTALS			15

ITS CABLE ITEMS

FROM	TO	LINEAR DISTANCE	NUMBER OF ELECTRICAL WIRES LIGHTING 10 AWG	NUMBER OF ELECTRICAL WIRES LIGHTING 6 AWG	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF
CATEGORY 1200						
EXISTING METER BREAKER PEDESTAL	PB-E1	15	EXISTING POWER DISTRIBUTION CABLES (1220-15-71)			
PB-E1	PB-E2	260	EXISTING POWER DISTRIBUTION CABLES (1220-15-71)			
PB-E2	DMS-05-0009	15	REROUTE EXISTING POWER DISTRIBUTION CABLES (1220-15-71)			
TOTALS					0	0

ITS CCTV, DMS & COMMUNICATION ITEMS

STATION	LOCATION	ITEM ID	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	636.0100 SIGN SUPPORTS CONCRETE MASONRY CY	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT LB	670.0100 FIELD SYSTEM INTEGRATOR LS	670.0200 ITS DOCUMENTATION LS	673.0225.S INSTALL POLE MOUNTED CABINET EACH	678.0500 COMMUNICATION SYSTEM TESTING LS	SPV.0060.400 INSTALL DYNAMIC MESSAGE SIGN EACH	SPV.0060.401 INSTALL IP RADIO EACH
CATEGORY 1200											
1149+55 SIH	LT	DMS-05-0009	2218	3	186	---	---	1	---	1	1
UNDISTRIBUTED	---	---	---	---	---	1	1	---	1	---	---
TOTALS			2218	3	186	1	1	1	1	1	1

ITS REMOVE & SALVAGE ITEMS

STATION	LOCATION	ITEM ID	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	SPV.0060.402 SALVAGE DYNAMIC MESSAGE SIGN EACH	SPV.0060.403 SALVAGE POLE MOUNTED CABINET EACH	SPV.0060.404 SALVAGE IP RADIO EACH
CATEGORY 1200						
1149+55 SIH	LT	DMS-05-0009	3	1	1	1
TOTALS			3	1	1	1

3

SEDIMENTATION BASIN

LOCATION	SPV.0060.151 EACH
STAGES 1-3	
UNDISTRIBUTED	10
PROJECT TOTAL	**10**

TRACKING PAD MAINTENANCE

LOCATION	SPV.0060.153 EACH
ALL STAGES	
PHRAGMITES WASTE SITE, USH 41-STH 172 INTERCHANGE	2
PROJECT TOTAL	**2**

TEMPORARILY MOUNT AND LOCATE TYPE I SIGNS

STAGE	LOCATION	SPV.0060.205 EACH	REMARKS
STAGE 2			
	NB USH 41, SOUTH OF LAKEVIEW DRIVE	1	
	SB IH 43, NORTH OF MILITARY AVENUE	1	SUBSTAGES 2A & 2B
STAGE 2 SUBTOTALS		**2**	
STAGE 3			
	NB USH 41, SOUTH OF LAKEVIEW DRIVE	1	
STAGE 3 SUBTOTALS		**1**	
PROJECT 1133-10-71 TOTALS		**3**	

STREET SWEEPING

STAGE	LOCATION	SPV.0075.150 HRS
STAGE 1	VARIOUS	130
SUBTOTAL STAGE 1		**130**
STAGE 2		
	VARIOUS	350
SUBTOTAL STAGE 2		**350**
STAGE 3		
	VARIOUS	20
SUBTOTAL STAGE 3		**20**
PROJECT TOTALS		**500**

3

TRUCK MOUNTED ATTENUATOR

STAGE	LOCATION	SPV.0075.200 WITH OPERATOR HRS	SPV.0075.201 WITHOUT OPERATOR HRS
1	UNDISTRIBUTED	45	45
SUBTOTALS STAGE 1		**45**	**45**
2	UNDISTRIBUTED	95	95
SUBTOTALS STAGE 2		**95**	**95**
3	UNDISTRIBUTED	10	10
SUBTOTALS STAGE 3		**10**	**10**
PROJECT TOTALS		**150**	**150**

GLARE SCREENS TEMPORARY

STAGE	STATION		STATION	OFFSET	LOCATION	SPV.0090.201 LF
STAGE 2						
	1144+00	-	1148+00	LT	TWB TEMP MEDIAN BARRIER	400
	1220+00	-	1223+00	LT	TWB TEMP MEDIAN BARRIER	300
	1136+30	-	1140+00	LT	TWD TEMP MEDIAN BARRIER	370
PROJECT 1133-10-71 TOTAL						**1,070**

CONCRETE CURB & GUTTER

STATION	-	STATION	LOCATION	OFFSET	SPV.0090.003 CONCRETE CURB & GUTTER 32-INCH TYPE A FULL DEPTH LF	SPV.0090.005 CONCRETE CURB & GUTTER 56-INCH TYPE A FULL DEPTH LF	SPV.0090.008 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A FULL DEPTH LF	SPV.0090.009 CONCRETE CURB & GUTTER 6-INCH SLOPED 60-INCH TYPE A FULL DEPTH LF
STAGE 2								
119734		1197+83	IHA	RT	48	--	--	--
1176+49		1146+65	IHB	LT	16	--	--	--
1176+49		1146+65	IHB	RT	16	--	--	--
1162+50		1168+50	VED	RT	--	--	--	600
1186+08		1186+57	NMC	RT	--	--	48	--
1186+93		1197+08	NIH	RT	16	--	--	--
1167+50		1170+00	VEA	LT	--	--	--	250
1177+00		1179+55	VEB	LT	--	--	--	240
1179+39		1179+55	VEB	LT	15	16	--	--
PROJECT 1133-10-71 TOTALS					**111**	**16**	**48**	**1,090**

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3

PLASTIC COVERING

	SPV.0090.016	SPV.0090.017	SPV.0090.018	SPV.0180.011	SPV.0180.012	SPV.0180.013
	CONCRETE CURB & GUTTER & BARRIER COLD WEATHER COVERING			CONCRETE PAVEMENT COLD WEATHER COVERING		
	PLASTIC 1 LAYER	PLASTIC 2 LAYERS	PLASTIC/HAY PLASTIC OR BLANKETS	PLASTIC 1 LAYER	PLASTIC 2 LAYERS	PLASTIC/HAY PLASTIC OR BLANKETS
LOCATION	LF	LF	LF	SY	SY	SY
UNDISTRIBUTED	200	200	200	5000	3000	2000
PROJECT 1133-10-71 TOTALS	**200**	**200**	**200**	**5000**	**3000**	**2000**

TRAFFIC CONTROL SIGNS FIXED MESSAGE LEFT IN PLACE

STAGES	LOCATION	OFFSET	MESSAGE	SIZE	SPV.0165.200** SF
1	STA 1131+00 NMC	RT	SOUTH 43-41/HS/VELP AVE -	8' X 9' &	81.75
1	1145+00 NMC	RT	MILWAUKEE & EXIT PLAQUE	6.5' X 1.5'	
2	STA 1146+00 IHA	RT	SOUTH 43 MILWAUKEE/SOUTH 141 HS	9.5' X 10.5'	110.25
2	STA 1157+00 IHA	RT	VELP AVE & EXIT PLAQUE	7' X 1.5'	
PROJECT 1133-10-71 TOTALS					**192**

**RELOCATING SIGN IS INCIDENTAL TO OTHER ITEMS OF WORK

COLD PATCH

STAGE	LOCATION	SPV.0195.005 TON
STAGE 1	UNDISTRIBUTED	5
STAGE 2	UNDISTRIBUTED	5
PROJECT 1133-10-71 TOTALS		**10**

STAINING CONCRETE

STATION	-	STATION	LOCATION	SPV.0165.701 SF
STAGE 2C				
1179+25 VEC	-	1158+00 VEC	BACKS OF CONC. BARRIER TYPE S42	1730
PROJECT 1133-10-71				**1,730**

RUMBLE STRIP AND JOINT MILLING

			SPV.0195.006 MILL AND PAVE	SPV.0195.007 MILL AND PAVE
STATION	LOCATION	OFFSET	JOINT TON	RUMBLE STRIP TON
STAGE 1				
1125+00 - 1139+00	NIH	LT	--	38
1134+50 - 1139+00	SIH	RT	--	12
UNDISTRIBUTED	SMC	LT - RT	81	--
UNDISTRIBUTED	NIH	LT-RT	14	--
UNDISTRIBUTED	SIH	LT - RT	14	--
PROJECT 1133-10-71			**108**	**50**

3

STRIP DRAINS

STATION	-	STATION	LOCATION	SPV.0090.012 STRIP DRAINS LF
STAGE 1				
1182+00	-	1185+50	OB2	47,415
SUBTOTALS STAGE 1				**47,415**
STAGE 2				
1197+00	-	1202+00	IHA	86,681
SUBTOTALS STAGE 2				**86,681**
PROJECT 1133-10-71 TOTALS				**134,096**

GEOTECHNICAL INSTRUMENTATION

LOCATION	SPV.0105.004 LS
STAGE 1	
	1
PROJECT TOTAL	**1**

VIBRATING WIRE PIEZOMETER INSTRUMENTATION SYSTEM, DELIVERED

FEATURE	STATION	O/S	SPV.0060.003 EACH
STAGE 2			
TOP OF EMBANKMENT	1198+50 IHA	20' LT	1
PROJECT 1133-10-71 TOTALS			**1**

SETTLEMENT GAUGES

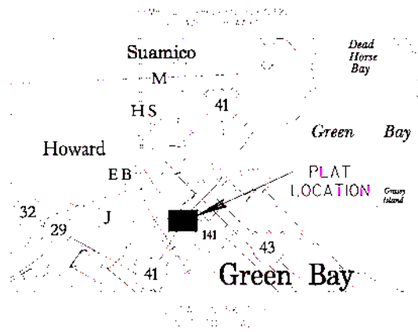
FEATURE	STATION	O/S	SPV.0060.004 EACH
STAGE 2			
TOP OF EMBANKMENT	1198+50 IHA	20' LT	1
PROJECT TOTAL 1133-10-71			**1**

GEOGRID REINFORCEMENT

STAGE	LOCATION	SPV.0180.009 SY
STAGE 1	UNDISTRIBUTED	2500
STAGE 2	UNDISTRIBUTED	2500
PROJECT 1133-10-71 TOTALS		**5000**

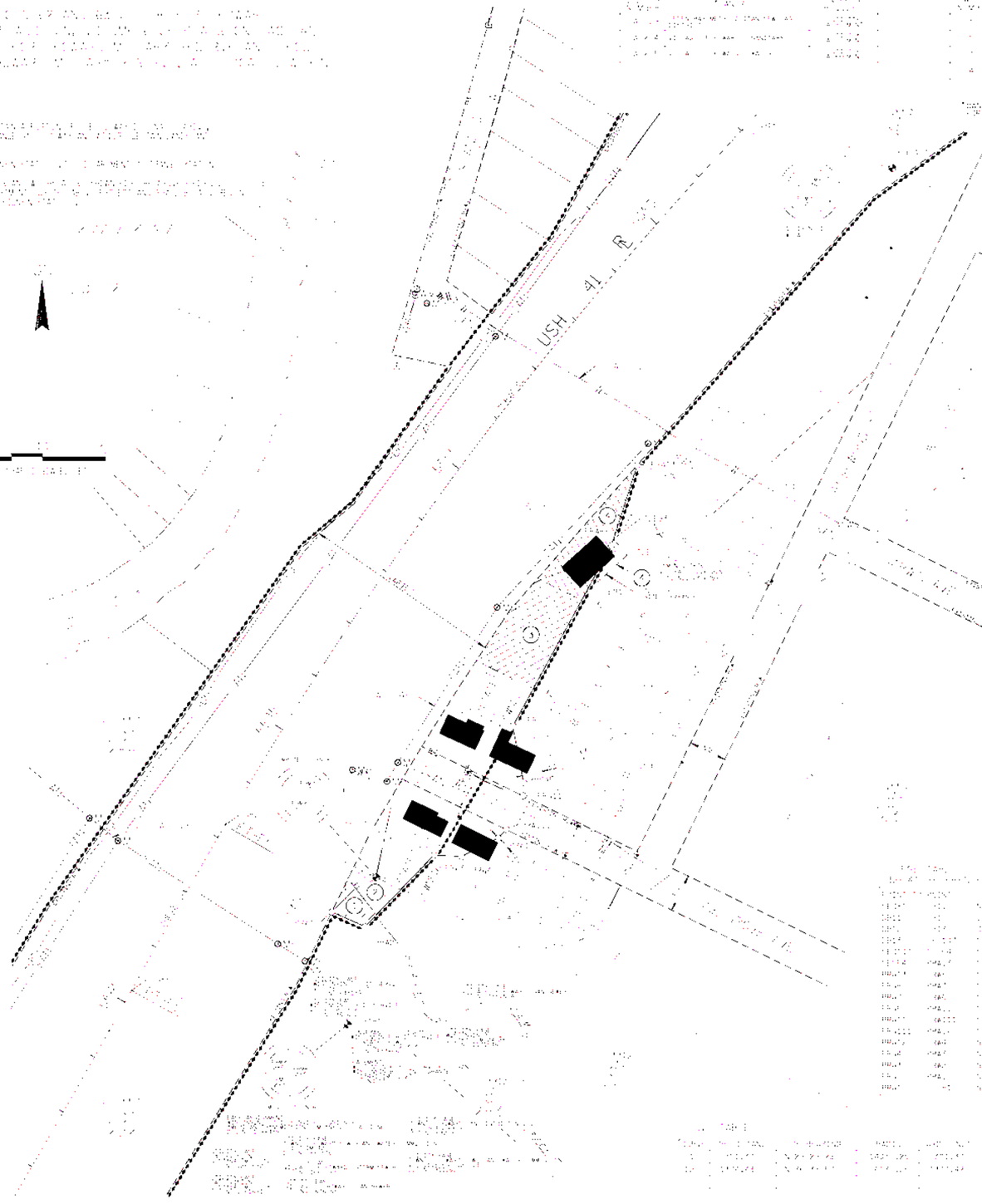
2545460
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
11/02/2011 4:15 PM
REC FEE: 25.00
EXEMPT #
PAGES: 1

NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.



Jeffrey T. Bohlig

Norman W. Powlowski



TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.02

BEING PART OF LOT 1 OF CSM NO. 5989, PART OF PARCEL B OF CSM NO. 94, PART OF LOT 1 OF CSM NO. 5232 AND PART OF LOT 1, BLOCK 2, OF MICHAELS ADDITION, VOLUME 6 OF PLATS ON PAGE 41, AS DOCUMENT NO. 380449, LOCATED WITHIN LOT 37 OF THE FORT HOWARD MILITARY RESERVE, ALSO PART OF PARCEL A OF CSM NO. 580, LOCATED WITHIN LOT 36 OF THE FORT HOWARD MILITARY RESERVE AND ALSO PART OF LOT 1 OF CSM NO. 6869, PART OF LOT 1 OF CSM NO. 2289 AND UNPLATTED LANDS OF LOT 34 OF THE FORT HOWARD MILITARY RESERVE, ALL LOCATED WITHIN THE VILLAGE OF HOWARD, BROWN COUNTY, WISCONSIN.

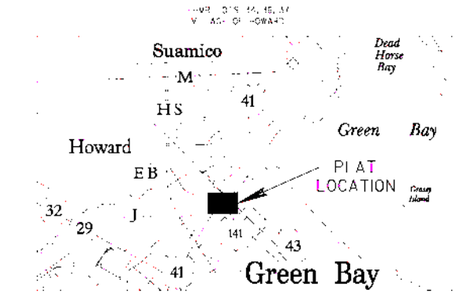
RELOCATION ORDER USH 41 BROWN COUNTY

THE PROPERTY ESTABLISHED, LAW, OUTLINED IN, AND FOR CONSTRUCTION, ROADS AND, MAINTENANCE AND IMPROVEMENT OF HIGHWAY SYSTEM OF THE STATE OF WISCONSIN, PARTICULARLY TRANSPORTATION PROJECTS AND ASSESSMENT OF BENEFITS AND DAMAGES AND ACQUISITION OF LANDS AND INTERESTS IN LANDS FOR HIGHWAY PURPOSES.

THE DEPARTMENT OF TRANSPORTATION HAS AUTHORITY GRANTED UNDER SECTION 84.09, WISCONSIN STATUTES, TO DETERMINE THE LOCATION AND WIDTH OF HIGHWAYS AND ACCESS RIGHTS ALONG HIGHWAYS.

THE LOCATION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS ADOPTED AND STATE HIGHWAY 41 AND WIS 54 AS SO SHOWN FOR THE ABOVE PROJECT AND ALL ACCESS RIGHTS ALONG SAID HIGHWAYS AS SHOWN ON THIS PLAT ARE ACQUIRED BY THE DEPARTMENT OF TRANSPORTATION FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09, WISCONSIN STATUTES.

VILLAGE OF HOWARD



LOCATION SKETCH
NOT TO SCALE

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS RIGHTS	AR	MONUMENT FOUND	●
ACRES	AC	MONUMENT TO BE SET	○
BASE OF BEARING		CENTERLINE	
BENCH MARK	BM	RIGHT OF WAY LINE	
CENTERLINE		PROPERTY LINE	
CHORD BEARING	CH BRG	SECTION LINE	
CHORD LENGTH	CH	MEANDER LINE	
CONCRETE	CONC	CURVE NUMBER	C1
CORNER	COR	ANGLE POINT	A
COUNTY	CO	ACCESS RIGHTS	AR
CURVE	C	ACCESS RIGHTS TO BE ACQUIRED	ARBA
DEGREE		CONSTRUCTION LIMITS	
DELTA	Δ	EASEMENT LINE	
DOCUMENT	DOC	EXISTING ROW	
EAST	E	PROPOSED ROW	
EASEMENT	ESMT	ROW TO BE ACQUIRED	
EXISTING	EXIST	SURVEY LINE	
FOUND	FD	TEMPORARY LIMITED EASEMENT	TLE
HIGHWAY	HWY	TEMPORARY LIMITED EASEMENT TO BE ACQUIRED	TLEBA
INCORPORATED	INC	WETLANDS	
LENGTH	L	WETLANDS TO BE ACQUIRED	
MAINTAIN	MAINT	ASSESSED INTEREST	
MEASURED	M	By Fee Owner	
MINIMUM	MIN	By Lessee	
NORTH	N	By Agricultural Agreement	
NORTHEAST	NE	By Easement for Improvements	
NORTHWEST	NW	By Other Interest	
PLAT		By Condemnation Commissioners	
POINT OF BEGINNING	POB	By Easement for Utilities	
POINT OF COMMENCEMENT	POC	By Easement for Gas	
PLAT			
RADIUS	R		
RECORDED	REC		
RIGHT OF WAY	ROW		
SOUTH	S		
SOUTHEAST	SE		
SOUTHWEST	SW		
STATION	STA		
TANGENT	TAN		
TOWNSHIP	T		
WEST	W		

NOTES:

COORDINATES AND BEARINGS ON THIS PLAT ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, WISCONSIN STATE PLANE COORDINATE SYSTEM, EASTERN ZONE (1983/2011) AND ARE REFERENCED TO GRID NORTH.

RIGHT OF WAY BOUNDARIES ARE SHOWN CONSISTENT WITH EXISTING RIGHT OF WAY HIGHWAY MONUMENTS AND ARE REFERENCED TO MONUMENTS FOUND AND SURVEYED OR OTHERWISE SURVEYED OF RECORD.

BEARINGS OR DISTANCES NOT ALONG RIGHT OF WAY LINES ARE RADIAL OR NON-RADIAL AS INDICATED.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA RECEIVED FROM MUNICIPALITIES AND COUNTIES AND ARE APPROXIMATE AND NOT SURVEYED. THEY MAY NOT BE ACTUAL BOUNDARIES AND EXISTING PROPERTY LINES MAY NOT BE SHOWN AS A RESULT OF AN ADJUSTMENT BOUNDARY.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING RIGHT OF WAY WAS ESTABLISHED UNDER PROJECT ID 1133-10-21.

LIMITED ACCESS HIGHWAY WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.295 OF THE WISCONSIN STATUTES BY THE HIGHWAY COMMISSION ON JUNE 6, 1972.

ANY REFERENCE TO SHOWN ON THIS PLAT MAY NOT BE SAME AS REFERENCE SHOWN ON THE CONSTRUCTION PLANS.

A TEMPORARY LIMITED EASEMENT IS A GRANT OF CONSTRUCTION RIGHTS SIMILAR IN NATURE TO A PERMANENT EASEMENT, INCLUDING THE RIGHT TO GRADE AND MAKE NECESSARY SLOPE CUTS AND FILLS AND THE RIGHT OF INGRESS AND EGRESS, BUT LIMITED FOR SUCH PURPOSES, INCLUDING THE RIGHT TO REMOVE, PROTECT, OR MOVE OR PREVENT ANY VEGETATION THAT THE HIGHWAY AUTHORITY DEEMS NECESSARY OR DESIRABLE TO REMOVE IN CONNECTION WITH THE CONSTRUCTION PROJECT FOR WHICH THIS TEMPORARY EASEMENT IS GIVEN.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	EXISTING ROW ACRES	NEW ACRES	TOTAL ACRES
4	[illegible]	FEE	0.042		0.061
5	[illegible]	[illegible]	0.078		0.088
9	[illegible]	FEE			0.102
11	[illegible]	FEE			0.092
12	[illegible]				0.096

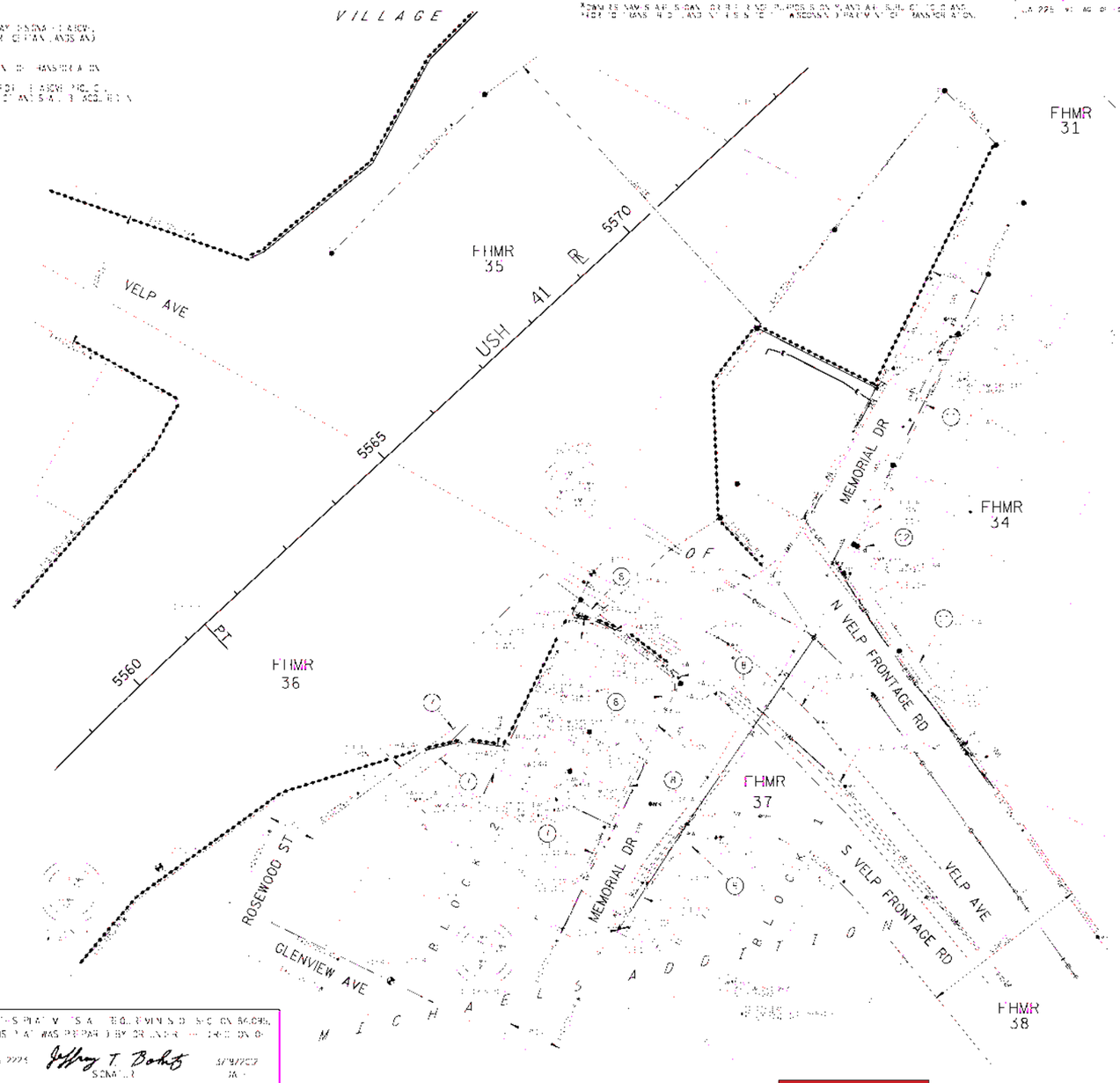
EXISTING RIGHTS ARE SHOWN ON THE BASIS OF RECORDS AND ARE APPROXIMATE. THE EXACT EXTENT OF EXISTING RIGHTS MAY BE DETERMINED BY A FIELD SURVEY.

SCHEDULE OF UTILITIES & OTHER INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED
100	WISCONSIN BELL INC D/B/A/ CENTURYLINK	PERMANENT UTILITY EASEMENT
101	AT&T WISCONSIN	PERMANENT UTILITY EASEMENT
108	NEW HORIZONS CAT	PERMANENT UTILITY EASEMENT
116	WISCONSIN AM KC	PERMANENT UTILITY EASEMENT
LA 203	EARL JAY MICHAELS ET AL	ABANDON WELL
LA 222	WE AGL OF HOWARD	SANITARY ABANDON
LA 225	WE AGL OF HOWARD	WATER ABANDON

2564856
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
03/20/2012 1:59 PM
REC FEE: 25.00
EXEMPT #
PAGES: 1

THIS SHEET IS RECORDED AS
TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.02
AMENDMENT NO:



0 100 200
GRAPHIC SCALE

BEARINGS ARE REFERENCED TO GRID NORTH OF THE WISCONSIN COORDINATE REFERENCE SYSTEM, EASTERN ZONE (1983/2011). THE LAMBERT CONFORMAL CONIC PROJECTION, NORTH AMERICAN DATUM OF 1983 (2011) WAS USED TO DEVELOP THE BEARINGS SHOWN HEREON. THE EARTH FIXED GRID COORDINATES ARE EXPRESSED IN U.S. SURVEY FEET.

THE COMBINED SCALE FACTOR FOR THIS PROJECT IS 0.99996.

COORDINATES

POINT NUMBER	POINT CODE	NORTHING	EASTING
S 264	SECO	N 254126.327	E 889,104
S 265	SECO	N 254752.731	E 881,195
3117	MMK12	N 247067.517	W 104,027
PAMC10	MMK12	N 255758.361	E 90,276
PAMC11	MMK13	N 255967.121	W 19,594
PAMC12	MMK14	N 247958.271	W 85,668
PAMC13	MMK15	N 247909.111	W 90,547
PAMC14	MMK16	N 247701.039	W 94,480
PAMC15	MMK17	N 256126.027	E 924,568
PAMC16	MMK18	N 256126.027	E 10,000
PAMC17	MMK19	N 247158.261	W 84,429
PAMC18	MMK20	N 247752.276	W 448,449
S 266	SECO	N 247753.161	W 495,558
3119	3119	N 247115.251	E 477,174
3120	3120	N 247118.161	E 1155,158
3121	SECO	N 247108.471	W 765,888

STATION AND OFFSETS

POINT NUMBER	STATION	OFFSET	X	Y
S 1004			886938.547	582226.497
S 266			886246.388	581866.348
3119	5567+31.69	.00 R	887268.449	582497.294
3120	5567+64.44	149.00 R	887267.303	582347.570
3121	5567+81.66	164.01 R	887268.854	582331.547
PAMC65	5567+45.17	360.95 R	887231.628	582201.645
1	5567+74.28	747.45 R	887184.422	581840.624
PAMC66	5567+82.70	771.43 R	887187.380	581809.918
1002	5567+87.28	660.09 R	887311.944	582247.209
PAMC67	5567+94.67	664.69 R	887315.704	582211.784
PAMC68	5568+07.49	992.74 R	887215.422	582216.374
PAMC69	5568+01.45	992.74 R	887155.422	582216.374
PAMC44	5568+47.28	442.24 R	887278.946	582206.912
PAMC43	5568+50.84	438.67 R	887274.582	582215.964
98	5568+58.30	429.14 R	887268.440	582205.152
PAMC42	5568+00.47	432.16 R	887265.512	582243.184
1001	5568+14.64	548.54 R	887251.268	582184.758
PAMC41	5568+18.48	588.32 R	887213.260	582189.564
97	5568+18.70	760.32 R	887213.868	582214.388
1003	5568+36.57	366.24 R	887211.423	582238.947
PAMC16	5568+44.46	364.35 R	887211.765	582247.812
PAMC40	5568+45.87	821.76 R	887213.812	582269.422
1004	5568+57.14	497.32 R	887168.362	582302.774
PAMC15	5568+61.98	389.61 R	887168.276	582338.587
1004	5568+74.11	410.54 R	887176.209	582351.492
PAMC17	5568+81.74	553.73 R	887171.304	582376.124
PAMC14	5568+81.17	445.26 R	887181.214	582345.778
PAMC39	5568+94.67	537.54 R	887165.568	582317.357
PAMC37	5568+98.77	549.08 R	887171.449	582307.062
PAMC38	5568+97.60	570.55 R	887164.413	582376.584
S 267	5568+72.81	448.14 R	887168.245	582761.583
1005	5568+98.88	517.83 R	887178.534	582360.751
1006	5568+82.88	808.90 R	887011.925	582797.109
1007	5568+77.74	810.77 R	887014.423	582799.751
1008	5568+98.66	644.97 R	887165.560	582735.684
1009	5569+58.58	567.36 R	887151.594	582931.502
1010	5570+51.47	446.10 R	887036.775	582826.663
1011	5570+61.74	450.78 R	887021.744	582824.458
3122	5573+20.00	.00 R	886874.114	584182.284

NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.

BY DIRECTION OF THIS PLAT WAS SURVEYED IN SECTION 84.095, WISCONSIN STATUTES, IS THAT WAS PREPARED BY OR UNDER THE DIRECTION OF:

Jeffrey T. Bohts — 3/9/2012
PRINTED NAME — SIGNATURE — DATE

THIS PLAT AND RIGHT OF WAY DEDICATION ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Norman H. Pawlegh — 3/19/2012
PRINTED NAME — SIGNATURE — DATE

8 0 1 2 2 0 6 6
Tx:40084810

2595934
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
10/10/2012 11:34 AM
REC FEE: 30.00
EXEMPT #
PAGES: 1

Document Number
VACATION ORDER
TRANSPORTATION PROJECT PLAT PARCEL

Wisconsin Department of Transportation
s.84.095(3)(b) Wis. Stats.
DT2222 2006

This Vacation Order applies to Transportation Project Plat 1133-10-21-4.03 Amendment No. 1, recorded on 03/20/2012 as Document Number 2564857 in the Office of the Register of Deeds for Brown County.

Whereas, parcel 14 of the above-described Transportation Project Plat has been determined to be unnecessary for transportation improvement project purposes, said parcel is vacated and rescinded.

This space is reserved for recording data

Return to

Wisconsin Department of Transportation
Northeast Region
944 Vanderperren Way
Green Bay, WI 54304

Attn: Carolyn Sampson

Parcel Identification Number/Tax Key Number
VH 528-1

This Vacation Order has been approved by the Wisconsin Department of Transportation.

Jeffrey T. Bohrtz
(Signature)

10-8-12
(Date)

Jeffrey T. Bohrtz
(Print Name)

R/W Plat Preparer
(Title)

Teresa R. McClung
Notary Public
(Seal)
State of Wisconsin

State of Wisconsin)
) ss.
Brown County)

On the above date, this instrument was acknowledged before me by the named person(s).

Teresa R. McClung
(Signature, Notary Public, State of Wisconsin)

Teresa R. McClung
(Print or Type Name, Notary Public, State of Wisconsin)

7-19-15
(Date Commission Expires)

Project ID 1133-10-21-4.03
Amendment No.1

This instrument was drafted by Jeffrey T. Bohrtz

TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.03
AMENDMENT NO. 1

AMENDS PARCELS 14, 15, 16, 18, AND 19, REMOVES PARCEL 17 OF TRANSPORTATION PROJECT PLAT 1133-10-21-4.03, RECORDED AS DOCUMENT NO. 2545461.

BEING PART OF LOT 1, ALL OF LOT 2 AND ALL OF LOT 3 OF CSM NO. 1422, PART OF UNIT 1, UNIT 2 AND UNIT 3 OF RUSTIC RAIL CONDOMINIUM AND PART OF LOTS 5, 6, 7, 26, 27, 28, 30, 31, AND 32 OF THE FORT HOWARD MILITARY RESERVE, VILLAGE OF HOWARD, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER USH 41 BROWN COUNTY

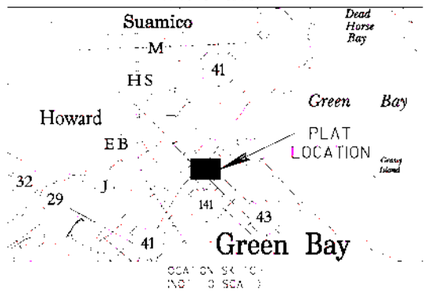
[illegible] PROPERTY [illegible] AS SHOWN ON THIS PLAT [illegible] ACCESS RIGHTS [illegible] HIGHWAY DESIGNATED ABOVE, [illegible] STATE OF WISCONSIN, DEPARTMENT OF TRANSPORTATION, [illegible] ASSUMPTION OF THE LOCATION AND LAYOUT OF SAID HIGHWAY AND ACCESS RIGHTS AS SHOWN ON THIS PLAT [illegible] ABOVE PROJECT.

[illegible] THIS CHANGE HAS BEEN [illegible] ORDER SECTION 84.02 (2) (a) AND 84.09, WISCONSIN STATUTES, BY THE DEPARTMENT OF TRANSPORTATION [illegible] HIGHWAY AS SHOWN ON THIS PLAT [illegible] ACCESS RIGHTS AS SHOWN FOR [illegible] ABOVE PROJECT AND [illegible] ACCESS RIGHTS AS SHOWN ON THIS PLAT ARE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09, WISCONSIN STATUTES.

CURVE DATA

CURVE	DELTA ANGLE	CHORD BEARING	RADIUS	ARC LENGTH	POINT OF CURVATURE
C1	559.26	N 40°47'20"	2400.00	560.67	POINT OF CURVATURE
C2	65°41'30"	N 40°47'20"	1466.44	61°.84	POINT OF CURVATURE

FHMR 5TS 35, 30, 29, 28, 32, 31, 26, 27, 7, 6, 5
VILLAGE OF HOWARD



LOCATION SKETCH
NOT TO SCALE

COURSE DATA

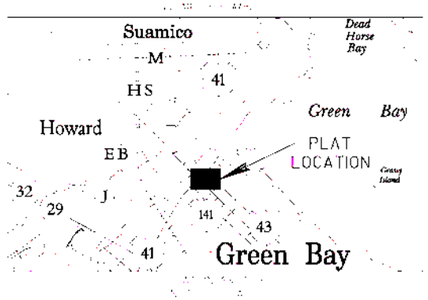
COURSE	FROM POINT	TO POINT	BEARING	DISTANCE
	SE 1/4	SW 1/4	S 00°27'00" W	2644.98
	SW 1/4	W 1/4	S 89°58'00" W	1320.00
	W 1/4	NW 1/4	N 00°27'00" E	2644.98
	NW 1/4	NE 1/4	N 89°58'00" E	1320.00
	NE 1/4	SE 1/4	S 00°27'00" W	2644.98
	SE 1/4	SW 1/4	S 89°58'00" W	1320.00

TRANSPORTATION PROJECT PLAT NO: 1333-10-21/403

LOCATION ORDERED BY BROWN COUNTY

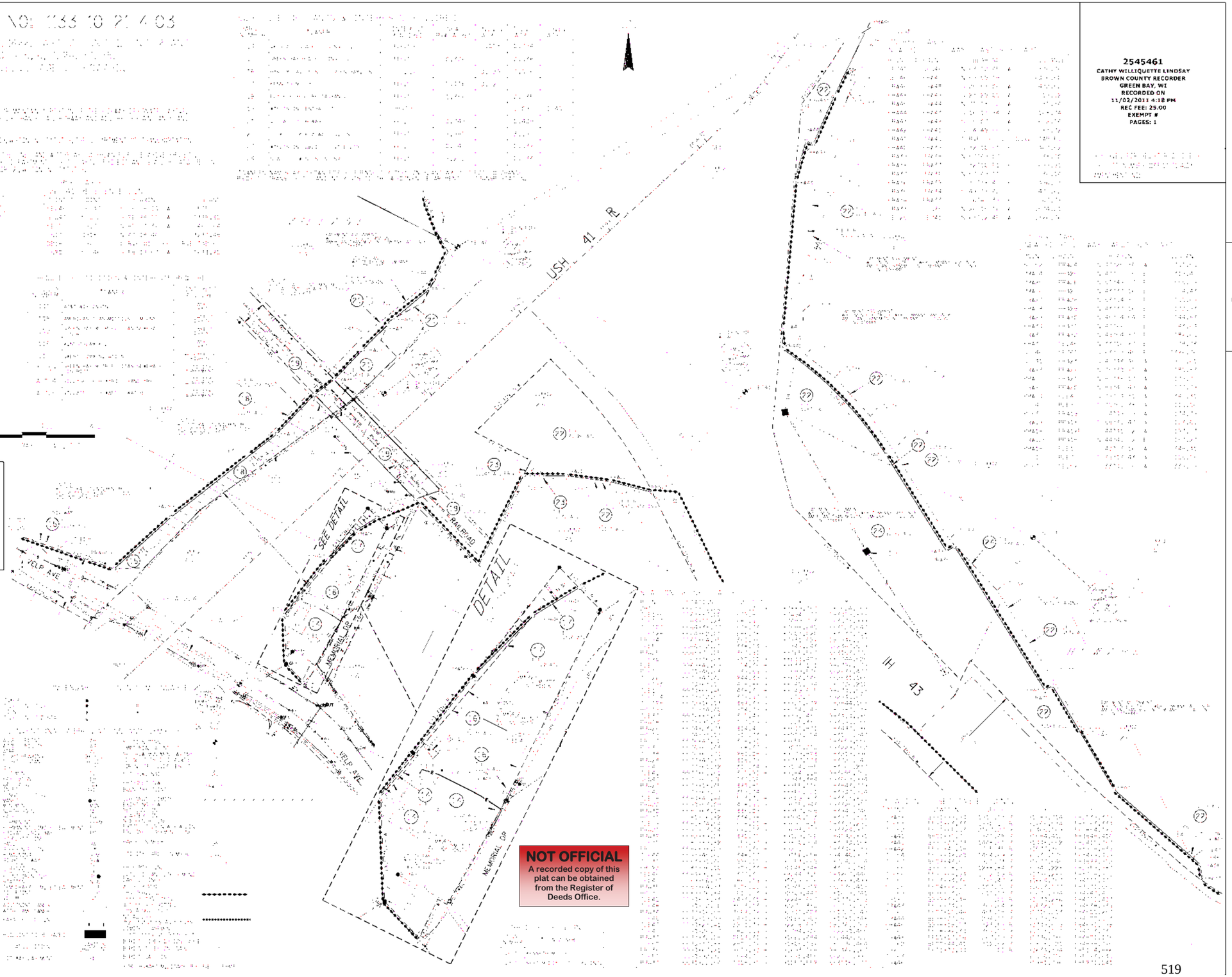
2545461
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
11/02/2011 4:18 PM
REC FEE: 25.00
EXEMPT #
PAGES: 1

4



Jeffrey T. Bohtz

Norman K. Pawlowski



NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.

4

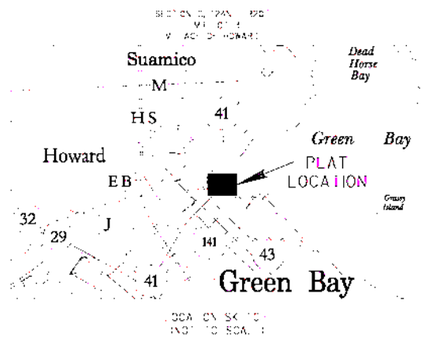
TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.04

BEING PART OF LOT 3 OF THE FORT HOWARD MILITARY RESERVE, AND ALSO PART OF GOVERNMENT LOT 3 OF SECTION 11, T24N R20E, VILLAGE OF HOWARD, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER USH 41 BROWN COUNTY

[illegible]

[illegible]



LOCATION SKETCH
NOT TO SCALE

VILLAGE

GOV'T LOT 1

GOV'T LOT 3

0 100 200
GRAPHIC SCALE: 1"

[illegible]

SURVEYOR'S CERTIFICATE

I, [illegible], REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT THIS PLAT WAS PREPARED BY OR UNDER MY DIRECTION.

[illegible] S-2223 — Jeffrey T. Bohlig — 3/19/2012
PRINTED NAME — SIGNATURE — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN W. PAVELEYGH — 3/19/2012
PRINTED NAME — SIGNATURE — DATE

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	ACRES	ACRES
22	[illegible]	[illegible]	0.672		0.546
25	[illegible]	[illegible]	0.519		

*OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE. NOTE: BASIS OF OWNERSHIP IS WISCONSIN DEPARTMENT OF TRANSPORTATION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED
100	WISCONSIN POWER AND LIGHT COMPANY	[illegible]

2564860
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
03/20/2012 2:18 PM
REC FEE: 25.00
EXEMPT #
PAGES: 1

RETURN TO REGISTER OF DEEDS
TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.04
AMENDMENT NO:

COORDINATE TABLE
USH 41 RIGHT OF WAY CONTROL & NEW R/W

POINT TO POINT	BEARING	DISTANCE
[illegible]	S 22°11'40.05" W	745.84
[illegible]	S 44°15'59.59" E	888.86
[illegible]	S 08°35'49.42" W	137.41
[illegible]	S 14°58'48.40" W	472.86
[illegible]	S 14°58'48.40" W	91.00
[illegible]	S 57°54'48.45" W	226.59
[illegible]	S 57°53'48.45" W	171.89
[illegible]	S 26°58'48.00" W	422.87
[illegible]	S 19°56'48.03" W	1275.84
[illegible]	N 28°44'48.09" W	1264.07
[illegible]	CURVE 01 (SEE CURVE TABLE)	
[illegible]	N 62°26'58.58" W	444.86

CURVE TABLE

CURVE	Δ	DISTANCE	BEARING	RADIUS	ARC LENGTH	PI COORDINATES
01	16°24'40"	N 27°29'48.37" E	2400.00	1660.62	X 82936.0763	Y 565986.8047

STATION OF SPIRALS

POINT	STATION	OFFSET	X	Y
S 0241			82478.6006	563869.4355
[illegible]	5565+83.48	.00 R	82740.2886	564160.4047
[illegible]	5622+27.26	264.00 R	82796.7885	564687.1748
[illegible]	5623+44.41	312.52 R	82858.0721	564668.7251
[illegible]	5624+66.19	278.47 R	82876.7026	564772.5461
[illegible]	5626+88.80	295.64 R	82881.7496	564975.2461
[illegible]	5628+62.59	276.00 R	82869.7855	565237.7455
[illegible]	5629+85.29	240.66 R	82847.9886	565419.1897
[illegible]	5631+50.76	272.15 R	82851.3374	565654.7466
[illegible]	5632+87.36	279.11 R	82860.0868	565796.2851
[illegible]	5634+77.67	264.21 R	82872.3884	565956.1731
[illegible]	5636+28.84	265.35 R	82944.9939	566055.7731
[illegible]	5637+77.44	262.56 R	82969.8463	566178.3463
[illegible]	5639+00.00	.00 R	83021.6229	566344.2510
S 0139			82994.0209	566567.1878
S 0138			82815.8341	566782.3538

NOTES:

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE BROWN COUNTY COORDINATE SYSTEM WHICH IS NAD 1983 (1998) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND DISTANCES.

RIGHT-OF-WAY BOUNDARIES ARE IDENTIFIED AND COURSES DETERMINED FROM RIGHT-OF-WAY PLATS AND ACTUAL FIELD SURVEYS OF PUBLIC RECORDS.

DIMENSIONS FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO SEMI-REFERENCE LINES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA GIVEN BY RIGHT-OF-WAY PLATS AND FIELD SURVEYS AND MAY BE APPROXIMATE. THESE LINES ON THIS PLAT MAY NOT BE ACCURATE ENOUGH FOR PRECISE PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

RIGHT-OF-WAY MONUMENTS ARE 1/4" X 24" STEEL RODS WITH ALUMINUM CAPS UNLESS OTHERWISE NOTED.

EXISTING RIGHT-OF-WAY WAS ESTABLISHED AND REVISED PER CHAPTER 80.07(2) WISCONSIN STATUTES.

ACCESS IS GRANTED TO THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION BY THE RECORDING OF THIS PLAT.

ALL PROPERTY RIGHTS ACQUIRED FOR CONSTRUCTION PURPOSES, AS DESCRIBED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS SHALL BE REQUIRED FOR SUCH PURPOSES, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT IN THE WAY'S JUDGMENT IS NECESSARY OR DESIRABLE TO PROVIDE FOR SAFE OPERATION OF THE HIGHWAY. ALL RIGHTS EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

[illegible]

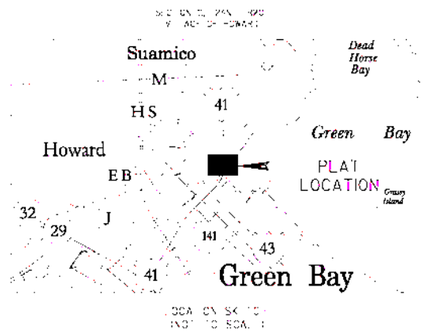
TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.05

BEING PART OF GOVERNMENT LOT 3, SECTION 11, T24N-R20E, VILLAGE OF HOWARD, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER USH 41 BROWN COUNTY

THE DEPARTMENT HEREBY ACQUIRES, AND DECLARES ITS INTENTION TO CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, AS A STATE TRUNK HIGHWAY, BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION. THE NECESSARY RIGHT-OF-WAY AND ACCESS RESTRICTION LINES AND LIMITED ACCESS HIGHWAY ARE SHOWN ON THE ABOVE PLAT.

DUE NOTICE OF THIS ORDER, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.09 (2) AND 84.09 (5), WISCONSIN STATUTES, HAS BEEN GIVEN BY THE DEPARTMENT OF TRANSPORTATION TO EACH OWNER OF LAND AFFECTED BY THE RIGHT-OF-WAY AND ACCESS RESTRICTION LINES AND LIMITED ACCESS HIGHWAY SHOWN ON THIS PLAT. SAID NOTICE WAS GIVEN BY REGISTERED MAIL ON THE DATE SHOWN ON THE RETURN RECEIPT CARD FOR EACH OWNER. PURSUANT TO SECTION 84.09 (5), WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION MAY NOT TAKE POSSESSION OF SECTION 84.09 (2), WISCONSIN STATUTES.



LOCATION SKETCH
NOT TO SCALE

VILLAGE OF HOWARD

THIS PLAT WAS PREPARED BY SURVEYOR, R.L.S. 2225, JEFFREY T. BOHLS, ON 3/9/2009, WISCONSIN STATE PLANE GRID NORTH. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF:

R.L.S. 2225 — PRINTED NAME — SIGNATURE — 3/9/2009 DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN W. PAVLEGH — PRINTED NAME — SIGNATURE — 3/9/2009 DATE

GOVT LOT 3

GOVT LOT 1

GOVT LOT 2

GOVT LOT 5

SE NE

W DEERFIELD AVE

E DEERFIELD AVE

USH 41

R

PT

OT

5620

5615

5610

DUCK CREEK

HOWARD

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST ACQUIRED	FEE ACRES	ACCESS ACRES
24	STATE OF WISCONSIN	FEE	0.554	0.014

*OWNERS AS NAMED ON THE LAST TAX ROLL AS OF THE DATE OF THE RELOCATION ORDER. NOTICE OF THIS ORDER WAS GIVEN TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATION TABLE

POINT	STATION	OFFSET	X	Y
POB	5608+00.00	.00 R	90935.874	586454.061
POAOC	5610+08.61	755.37 R	91241.535	585899.741
POAOT	5611+27.24	757.56 R	91269.862	586029.363
POB	5615+29.14	.00 R	91045.285	586472.391
POAOF	5615+85.23	746.87	90794.020	586531.679
POAOF	5616+01.19	717.59 R	91255.410	586549.455
POAOT	5618+05.80	716.72 R	91254.826	586748.778
POAOT	5619+45.60	745.75 R	91261.577	586889.852
POB	5619+55.80	746.05 R	91261.844	586898.852
POB	5619+55.80	755.30 R	91305.552	586899.917
POB	5619+85.80	746.05 R	91261.867	586929.852
POAOT	5619+85.80	755.30 R	91305.582	586929.917
POAOE	5620+80.80	754.81 R	91299.736	587024.848
POE	5621+00.00	.00	91040.573	587063.277
POE			90814.846	587081.919

COURSE TABLE

POINT TO POINT	BEARING	DISTANCE
POAOE	S 01°17'25" W	498.87
POAOT	S 19°05'55" W	480.85
POB	POB	CURVE DATA
POB	POAOC	N 88°51'12" W	770.86
POB	POE	S 80°27'30" W	999.92
POAOT	POE	S 80°27'30" W	999.92
POB	POAOE	S 80°10'05" E	986.07
POAOC	POAOE	S 80°27'30" W	105.47
POAOC	POAOT	S 00°01'12" E	90.00
POAOC	POAOE	S 19°05'55" W	144.79
POAOT	POAOF	S 00°42'32" W	200.03
POAOT	POAOT	S 01°05'11" W	570.59
POAOT	POAOC	S 09°35'49" W	181.51
POAOT	POAOT	S 64°59'16" W	444.74

CURVE DATA

CURVE	CENTRAL ANGLE	DELTA ANGLE	RADIUS	ARC LENGTH	NE COORDINATES
C1	16°34'34"	N 08°51'00" E	2400.00	129.14	X 91044.284 Y 586104.992

NOTES:

COORDINATES AND BEARINGS ON THIS PLAT ARE GRID VALUES BASED ON BROWN COUNTY COORDINATE SYSTEM, WISCONSIN STATE PLANE COORDINATE SYSTEM, NAD83(2007). ALL DISTANCES ARE GROUND LENGTHS.

RIGHT-OF-WAY MONUMENTS ARE SET AT ALL POINTS OF CURVATURE (PC) AND POINTS OF TANGENCY (PT) OF THE HIGHWAY RIGHT-OF-WAY AND ACCESS RESTRICTION LINES AND SHOWN ON THE PUBLIC LAND SURVEY SYSTEM.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS ASSUMED AT ENGINEERING AND ACCESS RESTRICTION REFERENCE LINES.

WHERE THE NEW RIGHT-OF-WAY IS SHOWN ON THIS PLAT AS BEING COINCIDENT WITH EXISTING RIGHT-OF-WAY, THE ANGLE AND DIMENSIONS OF THE EXISTING RIGHT-OF-WAY ARE BASED ON RECORDED AND/OR EXISTING DESCRIPTIONS, MONUMENTS AND OCCUPATION LINES. THE EXISTING RIGHT-OF-WAY AS SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE RIGHT-OF-WAY ESTABLISHED BY ADVERSE USE OR AN ACCURATE FIELD SURVEY.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND ARE TO BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING RIGHT-OF-WAY WAS ESTABLISHED AS A PUBLIC HIGHWAY AND RECORDED ON BOOK 2 OF DEEDS, PAGE 22.

ADDITIONAL RIGHT-OF-WAY WAS ACQUIRED BY BROWN COUNTY AND RECORDED ON BOOK 2 OF DEEDS, PAGE 22.

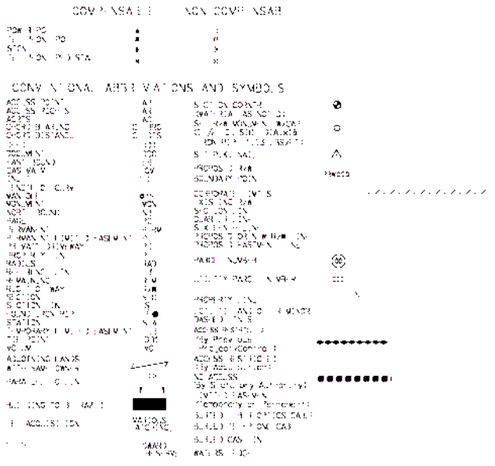
ADDITIONAL RIGHT-OF-WAY WAS ACQUIRED BY THE STATE OF WISCONSIN HIGHWAY COMMISSION ON JUNE 6, 1972.

THE REFERENCE MONUMENTS SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE MONUMENTS SHOWN ON THE CONSTRUCTION PLANS.

ALL HIGHWAY RIGHT-OF-WAY MONUMENTS DISTURBED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED BY A WISCONSIN REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR. ALL MONUMENTS SHALL BE REPLACED BEFORE FINAL ACCEPTANCE OF THE PROJECT. IF ANY MONUMENTS ARE DISTURBED OR REMOVED PRIOR TO THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE HIGHWAY AUTHORITY AT LEAST 3 WORKING DAYS IN ADVANCE OF THE REMOVAL. IF THE MONUMENTS ARE DISTURBED OR REMOVED PRIOR TO THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE HIGHWAY AUTHORITY AT LEAST 3 WORKING DAYS IN ADVANCE OF THE REMOVAL.

GOVERNMENTAL — NON GOVERNMENTAL

CONVENTIONAL ABBREVIATIONS AND SYMBOLS



NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.

2564862
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
03/20/2012 2:26 PM
REC FEE: 25.00
EXEMPT #
PAGES: 1

R.S. NUMBER FOR RECORDING
TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.05
AMENDMENT NO:

4

4

80122067
Tx:40084810

2595935
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
10/10/2012 11:34 AM
REC FEE: 30.00
EXEMPT #
PAGES: 1

Document Number
VACATION ORDER
TRANSPORTATION PROJECT PLAT PARCELS
Wisconsin Department of Transportation
s.84.095(3)(b) Wis. Stats.
DT2222 2006

This Vacation Order applies to Transportation Project Plat 1133-10-21-4.06, recorded on 03/20/2012 as Document Number 2564863 in the Office of the Register of Deeds for Brown County.

Whereas, parcel(s) 28 and 29 of the above-described Transportation Project Plat have been determined to be unnecessary for transportation improvement project purposes, said parcels are vacated and rescinded.

This space is reserved for recording data

Return to

Wisconsin Department of Transportation
Northeast Region
944 Vanderperren Way
Green Bay, WI 54304

Attn: Carolyn Sampson

Parcel Identification Number/Tax Key Number
SU-796-3
SU-784

This Vacation Order has been approved by the Wisconsin Department of Transportation.

Jeffrey T. Bohrtz
(Signature)

10-8-12
(Date)

Jeffrey T. Bohrtz
(Print Name)

R/W Plat Preparer
(Title)

State of Wisconsin)
) ss.
Brown County)

On the above date, this instrument was acknowledged before me by the named person(s).

Teresa R. McClung
(Signature, Notary Public, State of Wisconsin)

Teresa R. McClung
(Print or Type Name, Notary Public, State of Wisconsin)

7-19-15
(Date Commission Expires)

Teresa R. McClung Notary Public State of Wisconsin (Seal)

Project ID 1133-10-21-4.06 This instrument was drafted by Jeffrey T. Bohrtz

TRANSPORTATION PROJECT PLAT NO: 1133-10-21-4.06

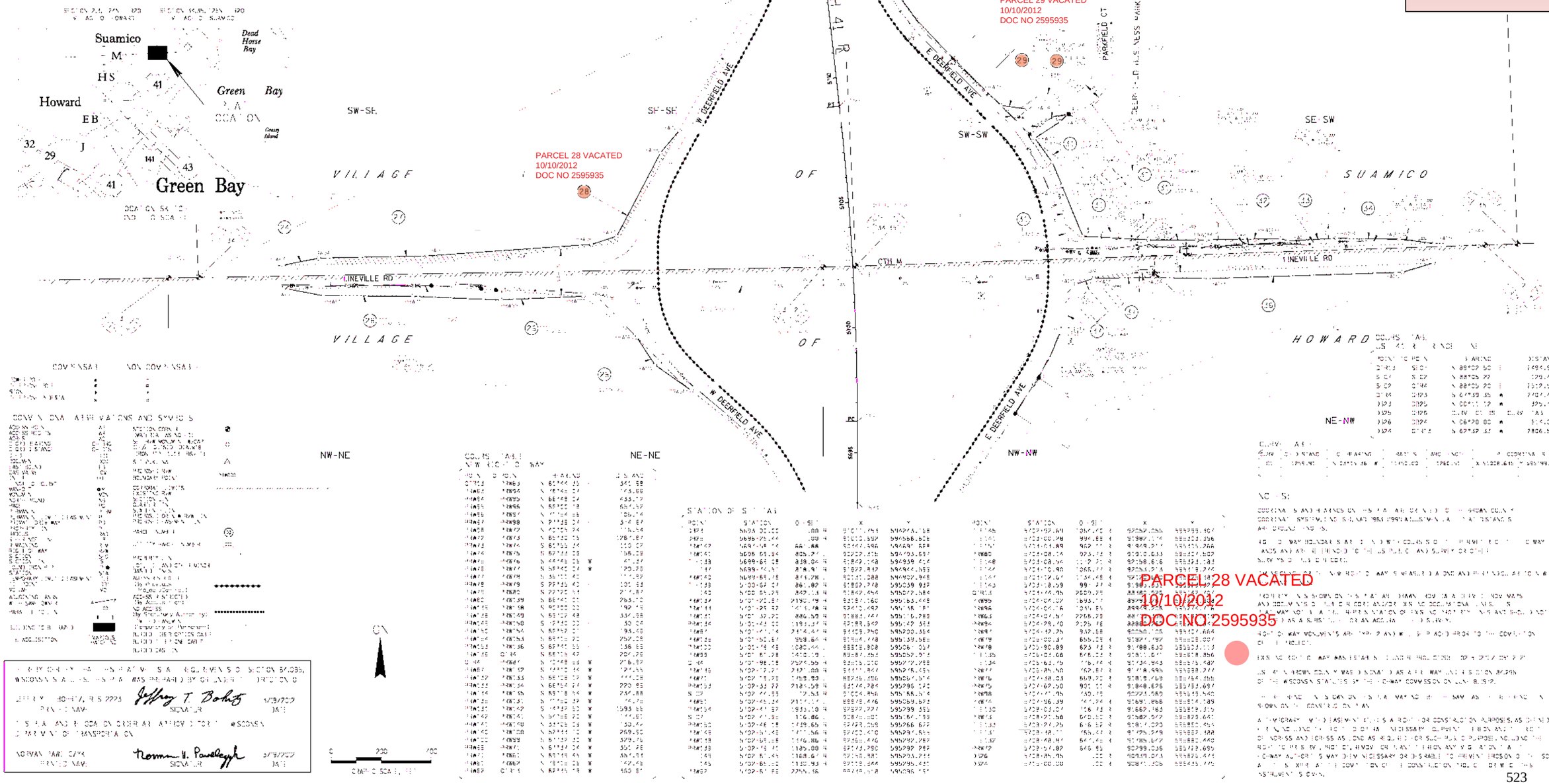
THAT PART OF LOT 1 OF CSM NO. 5142 IN THE NW 1/4 OF THE NW 1/4, THAT PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 2, AND ALSO THAT PART OF LOT 1 OF CSM NO. 7078 IN THE NW 1/4 OF THE NE 1/4, THAT PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 3, VILLAGE OF HOWARD, T24N-R20E, ALSO, THAT PART OF THE SW 1/4 OF THE SE 1/4 AND THE SE 1/4 OF THE SE 1/4 OF SECTION 34, ALSO, THAT PART OF LOT 1 OF CSM NO. 5061, LOT 1 OF CSM NO. 7490 AND UNPLATTED LANDS OF THE SW 1/4 OF THE SW 1/4, THAT PART OF LOT 1 OF CSM NO. 7210 AND UNPLATTED LANDS OF THE SE 1/4 OF THE SW 1/4 OF SECTION 35, VILLAGE OF SUAMICO, T25N-R20E, ALL LOCATED WITHIN BROWN COUNTY, WISCONSIN.

NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.

2564863
CATHY WILLIQUETTE LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
03/20/2012 2:59 PM
REC FEE: 25.00

NOT OFFICIAL
A recorded copy of this plat can be obtained from the Register of Deeds Office.

RELOCATION ORDER USH 41 BROWN COUNTY



PARCEL 28 VACATED
10/10/2012
DOC NO 2595935

4

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9202-07-22

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
9202-07-22	4.0	18
FEDERAL PROJECT NUMBER		

PLAT OF RIGHT OF WAY REQUIRED FOR
CTH J - USH 41
CTH J - PACKERLAND DRIVE
STH 29 BROWN CO./OUTAGAMIE CO.

CONVENTIONAL SIGNS AND ABBREVIATIONS

AC.	ACRES	PED	PEDESTAL
AC. REM.	ACRES REMAINING	●	R/W MONUMENT
A.P.	ACCESS POINT	P.L.	PROPERTY LINE
B.	BARN	P.L.E.	PERMANENT LIMITED EASEMENT
BLDG.	BUILDING	R.	RANGE
CO.	COMPANY	RD.	ROAD
CORP.	CORPORATION	R/W	RIGHT OF WAY
C.T.H.	COUNTY TRUNK HIGHWAY	S.	SHED
D.	DEED	S.T.H.	STATE TRUNK HIGHWAY
E.	EAST	T.	TOWN
ET. AL.	AND OTHERS	TEMP.	TEMPORARY
G.	GARAGE	T.I.	TEMPORARY INTEREST
GN	GRID NORTH	VOL.	VOLUME
H.	HOUSE	W.	WEST
INC.	INCORPORATED	WIS.	WISCONSIN
L.C.	LAND CONTRACT		
N	NORTH		

	COMPENSABLE	NON-COMPENSABLE
POWER POLE		
TELEPHONE POLE		
SIGN		
TELEPHONE PEDESTAL		

NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
NO ACCESS (BY PREVIOUS PROJECT OR COVENANT)

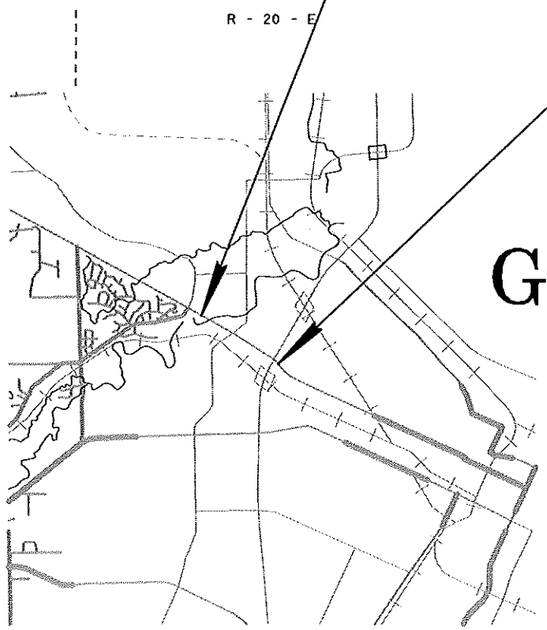
BEGIN RELOCATION ORDER
PROJECT 9202-07-22

END RELOCATION ORDER
PROJECT 9202-07-22

R - 20 - E

GN

T
24
N



Green Bay

LAYOUT
0 1 MI.
SCALE

TOTAL NET LENGTH OF CENTERLINE = MI.

NOTES

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

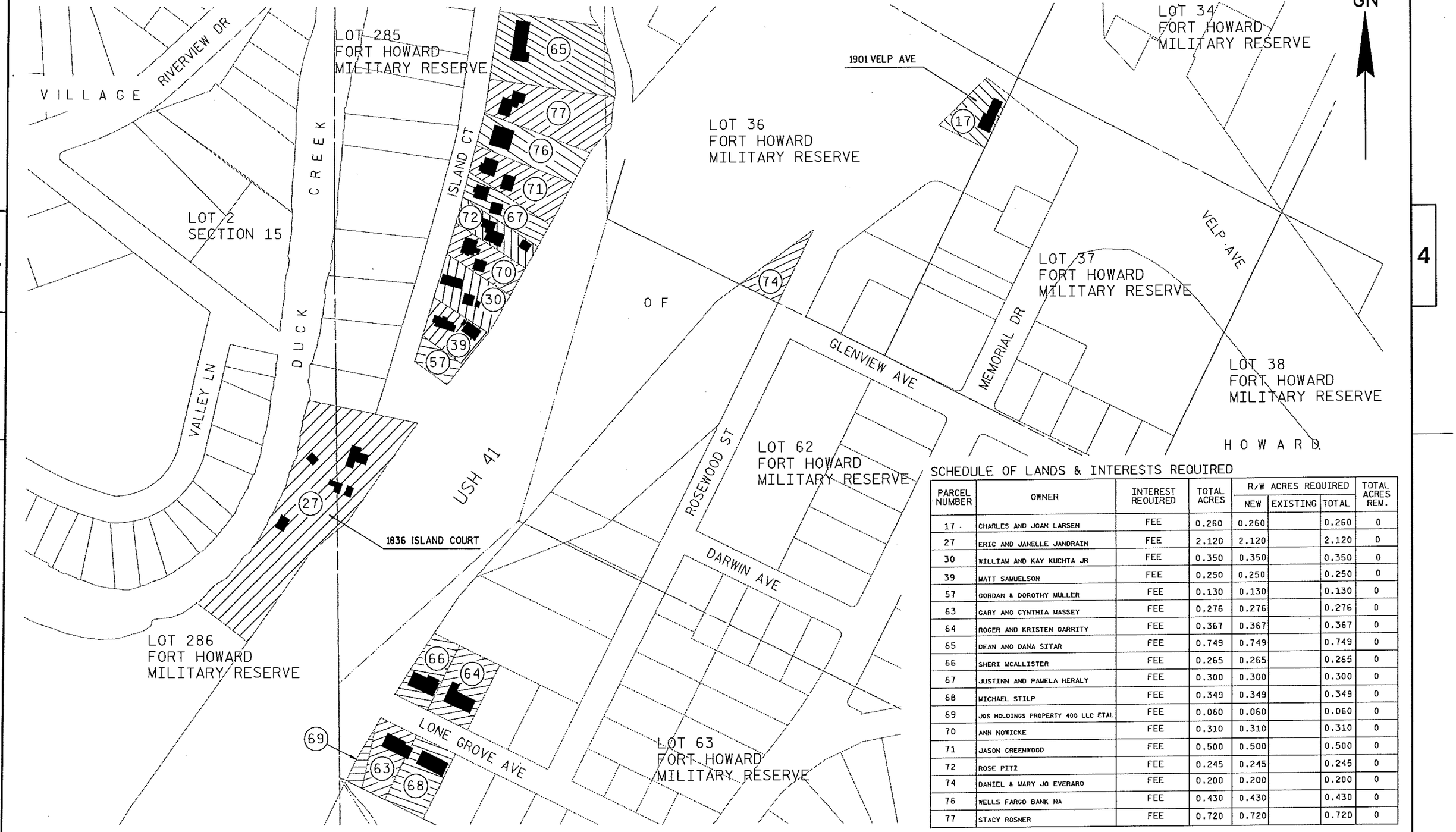
RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

REVISION DATE
7-24-07
4-15-08
9-16-09

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED:

DATE: 8-10-00 MICHAEL FLYNN
FOR DISTRICT 524



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4

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED			TOTAL ACRES REM.
				NEW	EXISTING	TOTAL	
17	CHARLES AND JOAN LARSEN	FEE	0.260	0.260		0.260	0
27	ERIC AND JANELLE JANDRAIN	FEE	2.120	2.120		2.120	0
30	WILLIAM AND KAY KUCHTA JR	FEE	0.350	0.350		0.350	0
39	MATT SAMUELSON	FEE	0.250	0.250		0.250	0
57	GORDAN & DOROTHY MULLER	FEE	0.130	0.130		0.130	0
63	GARY AND CYNTHIA MASSEY	FEE	0.276	0.276		0.276	0
64	ROGER AND KRISTEN GARRITY	FEE	0.367	0.367		0.367	0
65	DEAN AND DANA SITAR	FEE	0.749	0.749		0.749	0
66	SHERI MCALLISTER	FEE	0.265	0.265		0.265	0
67	JUSTINN AND PAMELA HERALY	FEE	0.300	0.300		0.300	0
68	MICHAEL STILP	FEE	0.349	0.349		0.349	0
69	JOS HOLDINGS PROPERTY 400 LLC ETAL	FEE	0.060	0.060		0.060	0
70	ANN NOWICKE	FEE	0.310	0.310		0.310	0
71	JASON GREENWOOD	FEE	0.500	0.500		0.500	0
72	ROSE PITZ	FEE	0.245	0.245		0.245	0
74	DANIEL & MARY JO EVERARD	FEE	0.200	0.200		0.200	0
76	WELLS FARGO BANK NA	FEE	0.430	0.430		0.430	0
77	STACY ROSNER	FEE	0.720	0.720		0.720	0

REVISION DATE 4-15-2008 9-16-2009	DATE 8-10-2000 GRID FACTOR N/A	SCALE, FEET 0 100 200	HWY: STH 29 COUNTY: BROWN	STATE R/W PROJECT NUMBER 9202-07-22 CONSTRUCTION PROJECT NUMBER 9202-07-77	PLAT SHEET NO: 4.8 PS&E SHEET NO: 525 E

GN

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED			TOTAL ACRES REM.
				NEW	EXISTING	TOTAL	
75	LOUIS & CATHRIN BOUGIE	FEE	2.826	2.826		2.826	0
65	SEE SHEET 4.8						
77	SEE SHEET 4.8						

4

4

RAILROAD

N RIVERVIEW DR

VELP AVE

DUCK CREEK

LOT 30
FORT HOWARD
MILITARY RESERVE

LOT 31
FORT HOWARD
MILITARY RESERVE

LOT 35
FORT HOWARD
MILITARY RESERVE

USH 41

NORTH MEMORIAL DR

RAILROAD

RIVERVIEW DR

ISLAND CT

75

75

LOT 285
FORT HOWARD
MILITARY RESERVE

65

77

LOT 36
FORT HOWARD
MILITARY RESERVE

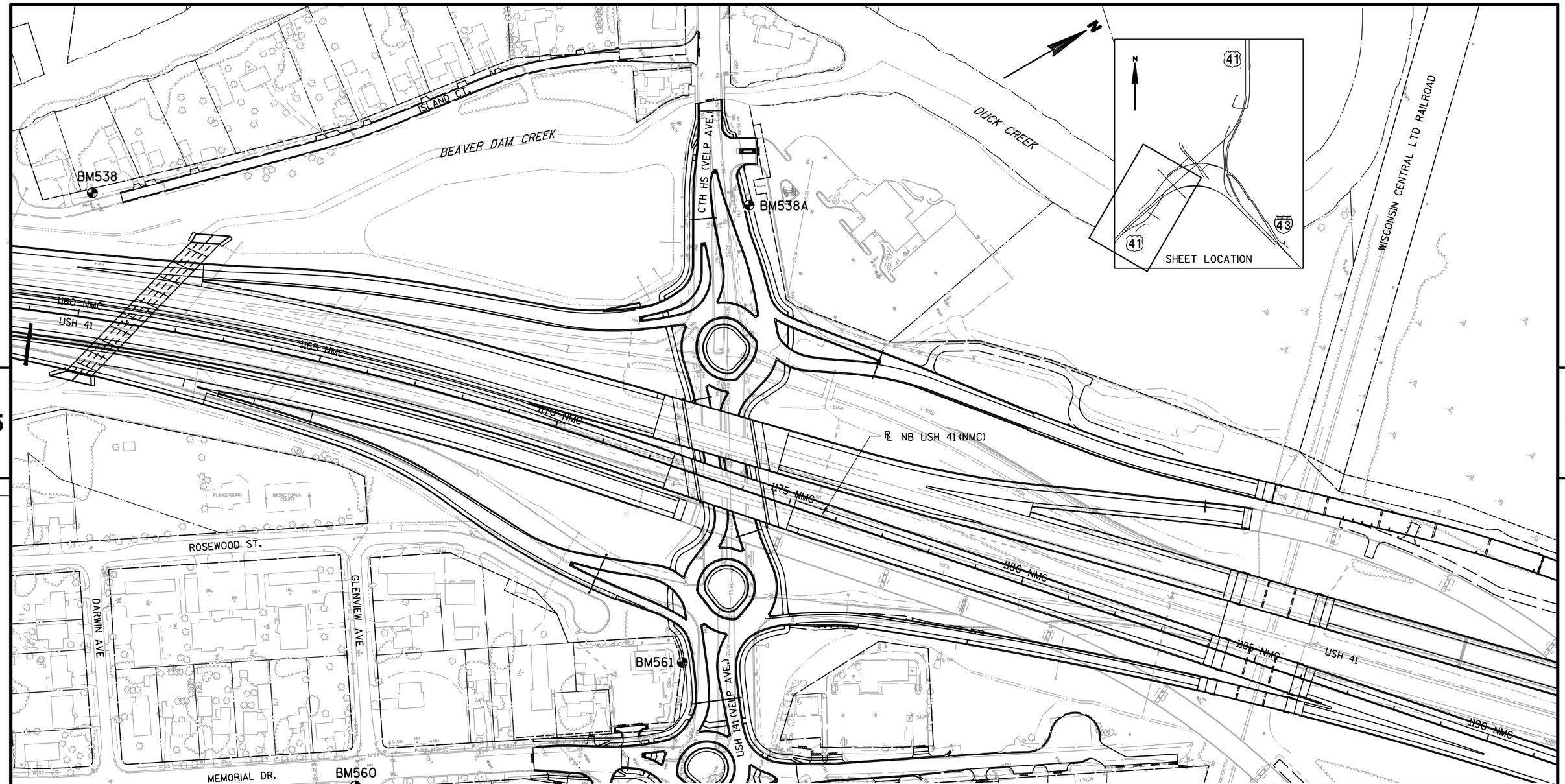
LOT 34
FORT HOWARD
MILITARY RESERVE

VELP AVE

REVISION DATE	DATE 8-10-2000	SCALE, FEET 0 100 200	HWY: STH 29	STATE R/W PROJECT NUMBER 9202-07-22	PLAT SHEET NO: 4.17	
	GRID FACTOR N/A		COUNTY: BROWN	CONSTRUCTION PROJECT NUMBER 9202-07-77	PS&E SHEET NO:	E

FILE NAME : F:\d3_92020722\040117_rw.dgn PLOT DATE : 19-MAY-2011 10:00 PLOT BY : dltjeb PLOT NAME : ORG DATE : Originator : Dist3jmm PLOT SCALE : 200.000000:1.000000

WISDOT/CADDS SHEET 75D



NO.	COORDINATES	DESCRIPTION
BM538	Y 581826.020 X 86940.599 Z 592.82	CHISELED "X" ON A FIRE HYDRANT BURY BOLT AT THE END OF ISLAND CT. 85' SOUTH OF THE CENTERLINE OF PRIVATE ENTRANCE 1822 & 50' NORTH OF THE CENTERLINE OF PRIVATE ENTRANCE #1828.
BM538A	Y 582971.250 X 87631.538 Z 591.70	CHISELED "X" ON A FIRE HYDRANT BURY BOLT IN THE NORTHWEST QUADRANT OF USH 41 AND VELP AVE. 75' NORTH OF THE CENTERLINE OF VELP AVE AND 110' EAST OF THE CENTERLINE OF PRIVATE ENTRANCE TO VENDERVEST HARLEY DEALERSHIP.
BM560	Y 581685.633 X 88254.831 Z 595.15	CHISELED "X" ON A FIRE HYDRANT BOLT. LOCATED IN THE SOUTHEAST QUADRANT OF MEMORIAL DR. & GLENVIEW AVE. 35' EAST OF MEMORIAL DR. & 35' SOUTH OF GLENVIEW AVE.
BM561	Y 582387.974 X 88370.064 Z 595.31	CHISELED SQUARE ON A LIGHT POLE BASE AT TACO BELL IN THE SOUTHWEST QUADRANT OF VELP AVE. & MEMORIAL DR. NEXT TO TACO BELLS DRIVE THRU. 35' SOUTH OF THE EAST BOUND VELP AVE. CURB & 200'WEST OF MEMORIAL DR. CENTERLINE

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	BENCH MARKS	SCALE, FEET 0 100 200	SHEET 527	E

N

BM771

BM770

BM1300

BM1301

BM778

WIE FOR DRIVE

USH 41

NB USH 41 (NMC)

1200 NMC

1205 NMC

1210 NMC

1215

1195 NMC

1190 NMC

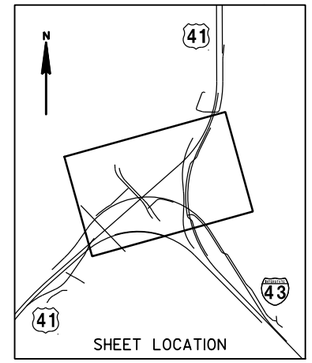
1185 NMC

SB USH 41 - SB IH 43 RAMP

WISCONSIN CENTRAL LTD RAILROAD

5

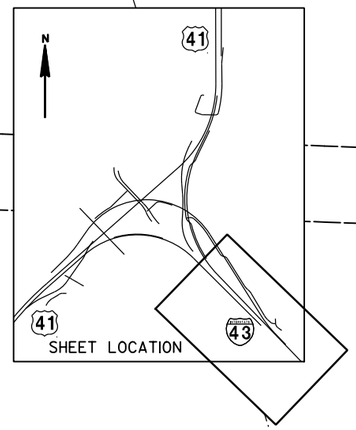
5



NO.	COORDINATES	DESCRIPTION
BM770	Y 585020.300 X 89862.390 Z 589.75	RR SPIKE IN DECIDUOUS TREE
BM771	Y 584613.200 X 88816.910 Z 587.64	TOP OF MONITORING WELL
BM778	Y 583679.600 X 90511.010 Z 586.61	RR SPIKE IN DECIDUOUS TREE
BM1300	Y 585430.500 X 90800.670 Z 601.82	DISK ON PARAPET WALL
BM1301	Y 583943.100 X 89496.910 Z 612.17	DISK ON PARAPET WALL

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	BENCH MARKS	SCALE, FEET 0 100 200	SHEET 528	E

NO.	COORDINATES	DESCRIPTION
BM772	Y 582467.500 X 90717.080 Z 583.76	RR SPIKE IN DECIDUOUS TREE
BM774	Y 581046.200 X 92118.050 Z 582.07	CHISELED "X" ON REINFORCED CONCRETE CULVERT PIPE
BM775	Y 581011.500 X 92479.140 Z 611.49	DISK ON PARAPET WALL
BM776	Y 581371.200 X 92843.580 Z 600.48	CHISELED "X" ON HYDRANT
BM777	Y 582514.700 X 91261.320 Z 585.11	EASTERLY MOST CORNER OF TOWER?



CANADIAN NATIONAL RAILROAD
WISCONSIN CENTRAL LTD.
MILITARY AVE.
BM774
BM772
WIETOR DRIVE
BM775
℄ NB IH 43 - NB USH 41 (NIH)
IH 43
1160 NIH
1165 NIH
1170 NIH
1175 NIH
1180 NIH
1185 NIH
IH 43
BM777
HURLBUT STREET
BM776
MILITARY AVE.

5 5

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	BENCH MARKS	SCALE, FEET 0 100 200	SHEET 529	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050003_bm.dgn PLOT BY : dm253 PLOT DATE : 11/4/2014 PLOT SCALE : 1:200

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE 1135+00.00 NMC

MATCH LINE 1165+00.00 NMC

BEGIN PROJECT 1133-10-71
STA. 1138+00 (NMC)

ATC
GBMSD
SLOPE INTERCEPTS
AT&T
GBMSD (DISCONTINUED)
S-05-0194
S-05-0189
CENTURYLINK
CENTURYLINK (DISCONTINUED)
DUCK CREEK
TIME WARNER (OH) & AT&T (OH)
WPS (OH ELEC)
VILLAGE OF HOWARD
WPS (GAS)
ISLAND CT
USH 41
R/W
SMC
NMC
1140 SMC
1140 NMC
1145 SMC
1145 NMC
1145 IHA
1150 SMC
1150 NMC
1150 IHA
1155 SMC
1155 NMC
1155 IHA
1160 VED
1160 SMC
1160 NMC
1160 IHA
1160 VEA
1165 VE
1165
1165
1170
1170
S-05-0191
B-05-0693 PREVIOUSLY CONSTRUCTED
BEAVER DAM CREEK
R-05-0081 ST1
LONE GROVE AVE
ROSEWOOD ST
PREVIOUSLY ABANDONED BOX CULVERT B-05-0099
PLAYGROUND
BASKETBALL CT

PVI 1137+30.00
Elev 627.28
HI 1135+86.18
Elev 621.50
PROJECT 1133-03-71
K = 406
L = 1400.00'
PVT 1144+30.00
Elev 612.73
G = -2.08%
PVC 1146+00.00
Elev 609.20
K = 407
L = 600.00'
PVI 1149+00.00
Elev 602.96
PVT 1152+00.00
Elev 601.15
PROPOSED PROFILE AT ℄
G = -0.61%
PVC 1157+00.00
Elev 598.12
K = 290
L = 700.00'
LO 1158+75.75
Elev 597.59
PVI 1160+50.00
Elev 596.00
PVT 1164+00.00
Elev 602.32
G = 1.81%
EXISTING PROFILE AT ℄
SPECIAL DITCH RT.
PROPOSED PROFILE ELEVATIONS
EXISTING PROFILE ELEVATIONS

B-05-0693
STA 1161+01.02 NMC
PREVIOUSLY CONSTRUCTED
FOUR CELL BOX CULVERT
371' OVERALL LENGTH
45' OVERALL WIDTH
(SEE PROJECT 1133-11-75
FOR DETAILS)

640	630	620	610	600	590	580	570

1135+00	1136+00	1137+00	1138+00	1139+00	1140+00	1141+00	1142+00	1143+00	1144+00	1145+00	1146+00	1147+00	1148+00	1149+00	1150+00	1151+00	1152+00	1153+00	1154+00	1155+00	1156+00	1157+00	1158+00	1159+00	1160+00	1161+00	1162+00	1163+00	1164+00	1165+00
621.41	621.50	621.34	620.94	620.24	619.20	617.81	615.76	613.43	610.80	608.09	605.48	603.25	600.99	599.29	597.58	596.20	595.16	593.56	592.52	590.51	590.25	590.38	590.57	590.83	591.45	592.20	593.08	594.17	595.46	596.94
621.41	621.50	621.34	620.94	620.29	619.39	618.25	616.86	615.22	613.34	611.28	609.20	607.24	605.53	604.07	602.85	601.87	601.15	600.54	599.93	599.33	598.72	598.12	597.69	597.60	597.85	598.45	599.40	600.69	602.32	604.13

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: NMC	SCALE, FEET 0 100 200	SHEET 530	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050101_pp_NMC.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE 1165+00.00 NMC

MATCH LINE 1195+00.00 NMC

BEAVER DAM CREEK

CTH HS (VELP AVE)

USH 141 (VELP AVE)

USH 41

IH 43

WIETOR DR

ROSEWOOD ST

GLENVIEW AVE

MEMORIAL DR

WISCONSIN CENTRAL LTD.

S-05-0255

S-05-0256

S-05-0257

S-05-0258

S-05-0259

S-05-0260

S-05-0263

R-05-0081 ST1

R-05-0082

R-05-0084 PREVIOUSLY CONSTRUCTED

R-05-0086

R-05-0234 ST1

R-05-0234 ST2

R-05-0235 ST1

R-05-0235 ST2

B-05-0668

B-05-0669

B-05-0671 PREVIOUSLY CONSTRUCTED

B-05-0672

B-05-0673

B-05-0674

B-05-0675

B-05-0677 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

SLOPE INTERCEPTS

TEMPORARY EASEMENT

R/W

GBMSD

GBMSD (DISCONTINUED)

CENTURYLINK

CENTURYLINK (DISCONTINUED)

AT&T (DISCONTINUED)

ATC

KDL

WPS

SAN

SAN FORCE MAIN

STORM

1170 VED

1175 VEC

1180 VEC

1190 VEC

1195 VEC

1170 SMC

1175 SMC

1180 SMC

1185 SMC

1190 SMC

1220 IHB

1225 IHB

1215 IHB

1210 IHB

1170 NMC

1175 NMC

1180 NMC

1185 NMC

1190 NMC

1170 IHA

1175 IHA

1180 IHA

1185 IHA

1190 IHA

1170 VEA

1180 VEB

1185 VEB

1190 VEB

10 ROS

35 MR3

105 WT

100 WT

1195

-STA 1172+97.71 - 1174+48.71 NMC
STRUCTURE B-05-0669 REQUIRED
SINGLE SPAN 72W" PRESTRESSED CONCRETE GIRDERS
SKEW 27°59'36" RHF
MINIMUM VERTICAL CLEARANCE 19'-4"
-REMOVE STRUCTURE B-05-0065
TWO SPAN PRESTRESSED CONCRETE GIRDERS
156' OVERALL LENGTH
42' OVERALL WIDTH

PVC 1170+65.00
Elev 614.33

PVI 1176+40.00
Elev 624.71

HI 1177+93.53
Elev 620.90

PVT 1182+15.00
Elev 618.70

PVC 1185+30.00
Elev 615.41

LO 1187+22.02
Elev 614.41

PVI 1188+50.00
Elev 612.07

PVT 1191+70.00
Elev 619.87

PVC 1192+60.00
Elev 622.06

K = 184
L = 640.00'

K = 403
L = 1150.00'

K = 428
L = 2320.00'

G = 1.81%

G = -1.04%

G = 2.44%

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

B-05-669

B-05-674

B-05-677
(1133-11-74)

SPECIAL DITCH LT.

-STA 1184+39.21 - 1185+86.99 NMC
STRUCTURE B-05-0674 REQUIRED
THREE SPAN 28" PRESTRESSED CONCRETE GIRDERS
SKEW 2°30'00" RHF
MINIMUM VERTICAL CLEARANCE 23'-3½"
-REMOVE STRUCTURE B-05-0067
THREE SPAN CONTINUOUS HAUNCHED SLAB
128' OVERALL LENGTH
53' OVERALL WIDTH

650 640 630 620 610 600 590 580

PROPOSED PROFILE ELEVATIONS

| | | |

MATCH LINE 1195+00 NMC

MATCH LINE 1225+00 NMC

USH 41

B-05-0677 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

B-05-0679 PREVIOUSLY CONSTRUCTED

B-05-0681 PREVIOUSLY CONSTRUCTED

B-05-0682

S-05-0192

R-05-0258

R-05-0260

R-05-0659

BROWN COUNTY IT & MERIT NETWORK

AT&T (DISCONTINUED)

SLOPE INTERCEPTS

ATC

R/W

TEMPORARY EASEMENT

IH 43

DUCK CREEK

1200 VEC

1200 SMC

1205 VEC

1205 SMC

1200 NMC

1205 NMC

1210 NMC

1215 NMC

1220 NMC

1200 SIH

1205 SIH

1210 SIH

1215 SIH

1220 SIH

1225 SIH

1200 NIH

1205 NIH

1210 NIH

1215 NIH

25 BP2

30 BP2

35 BP2

40 BP2

10 BP1

20 BP1

1200 BP1

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

PVI 1204+20.00
Elev 650.33

STA 1202+99 - 1220+18 NMC
STRUCTURE B-05-0681
PREVIOUSLY CONSTRUCTED
ELEVEN SPAN CONTINUOUS STEEL PLATE GIRDERS

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

PI 1203+04.26
Elev 634.79

PVT 1215+80.00
Elev 615.80

PVC 1218+50.00
Elev 607.76

PVI 1221+50.00
Elev 598.82

PVT 1224+50.00
Elev 596.35

K = 279
L = 600.00'

K = 428
L = 2320.00'

G = -2.98%

G = -0.83%

B-05-677

B-05-681
(1133-11-74)

SPECIAL DITCH RT.

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

650 640 630 620 610 600 590 580

587.07 627.24 | 626.62 629.00 | 628.15 630.53 | 629.44 631.82 | 622.42 632.88 | 598.16 633.71 | 605.18 634.30 | 632.29 634.66 | 633.66 634.79 | 593.27 634.68 | 599.06 634.34 | 595.61 633.77 | 589.27 632.96 | 587.10 631.92 | 585.58 630.65 | 584.88 629.14 | 584.72 627.40 | 584.51 625.42 | 583.29 623.22 | 576.27 620.78 | 572.73 618.10 | 582.06 615.20 | 581.04 612.22 | 580.02 609.25 | 578.92 606.31 | 587.00 603.69 | 598.81 601.43 | 592.02 599.53 | 594.99 597.99 | 595.16 596.80 | 594.11 595.93

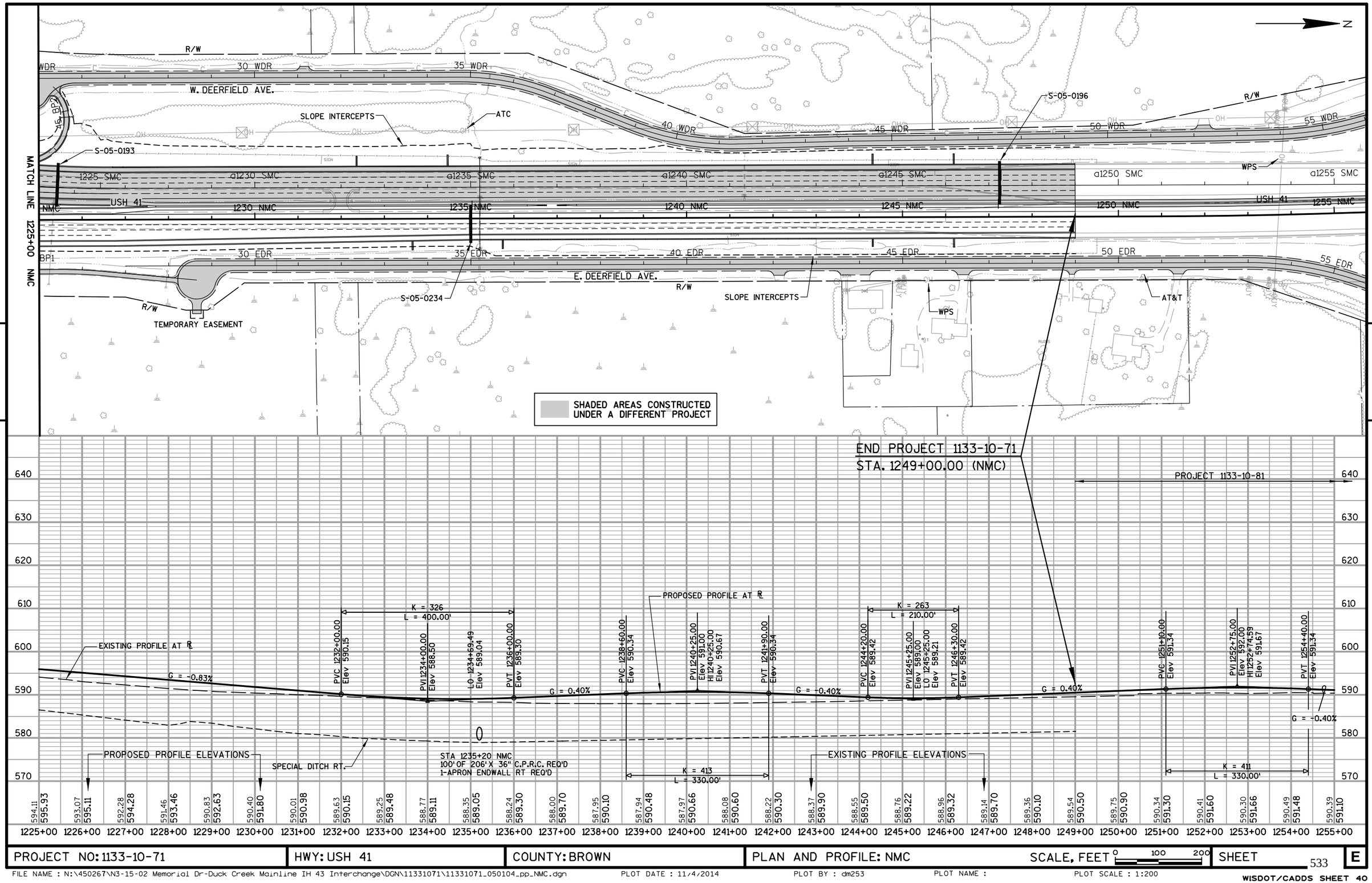
1195+00 1196+00 1197+00 1198+00 1199+00 1200+00 1201+00 1202+00 1203+00 1204+00 1205+00 1206+00 1207+00 1208+00 1209+00 1210+00 1211+00 1212+00 1213+00 1214+00 1215+00 1216+00 1217+00 1218+00 1219+00 1220+00 1221+00 1222+00 1223+00 1224+00 1225+00

5 5

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: NMC	SCALE, FEET 0 100 200	SHEET 532	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050103_pp_NMC.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: NMC	SCALE, FEET 0 100 200	SHEET 533	E

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE 1135+00.00 SMC

MATCH LINE 1165+00.00 SMC

BEGIN CONSTRUCTION 1133-10-71
STA. 1138+00 (SMC)

DUCK CREEK

BEAVER DAM CREEK

ISLAND CT

ROSEWOOD ST

LONE GROVE AVE

USH 41

ATC

GBMSD

GBMSD (DISCONTINUED)

SLOPE INTERCEPTS

CENTURYLINK

CENTURYLINK (DISCONTINUED)

AT&T

TIME WARNER (OH) & AT&T (OH)

WPS (OH ELEC)

WPS (GAS)

VILLAGE OF HOWARD

R/W

60' IS

S-05-0194

S-05-0189

S-05-0191

1140 SMC

1140 NMC

1145 SMC

1145 NMC

1145 IHA

1150 SMC

1150 NMC

1150 IHA

1155 SMC

1155 NMC

1155 IHA

1160 VED

1160 SMC

1160 NMC

1160 IHA

1160 VEA

1165

B-05-0693 PREVIOUSLY CONSTRUCTED

R-05-0081 ST1

PREVIOUSLY ABANDONED BOX CULVERT B-05-0099

PROJECT 1133-03-71

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

HI 1135+82.00 Elev 623.24

PVI 1137+50.00 Elev 630.97

PVT 1145+55.00 Elev 611.44

PVC 1146+45.00 Elev 609.26

PVI 1149+45.00 Elev 601.98

PVT 1152+45.00 Elev 600.45

PVC 1157+60.00 Elev 597.83

LO 1159+09.88 Elev 597.45

PVI 1161+00.00 Elev 596.10

PVT 1164+40.00 Elev 602.22

K = 313
L = 600.00'

K = 295
L = 680.00'

K = 401
L = 1610.00'

G = -2.43%

G = -0.51%

G = 1.80%

SPECIAL DITCH LT.

SPECIAL DITCH LT.

SPECIAL DITCH LT.

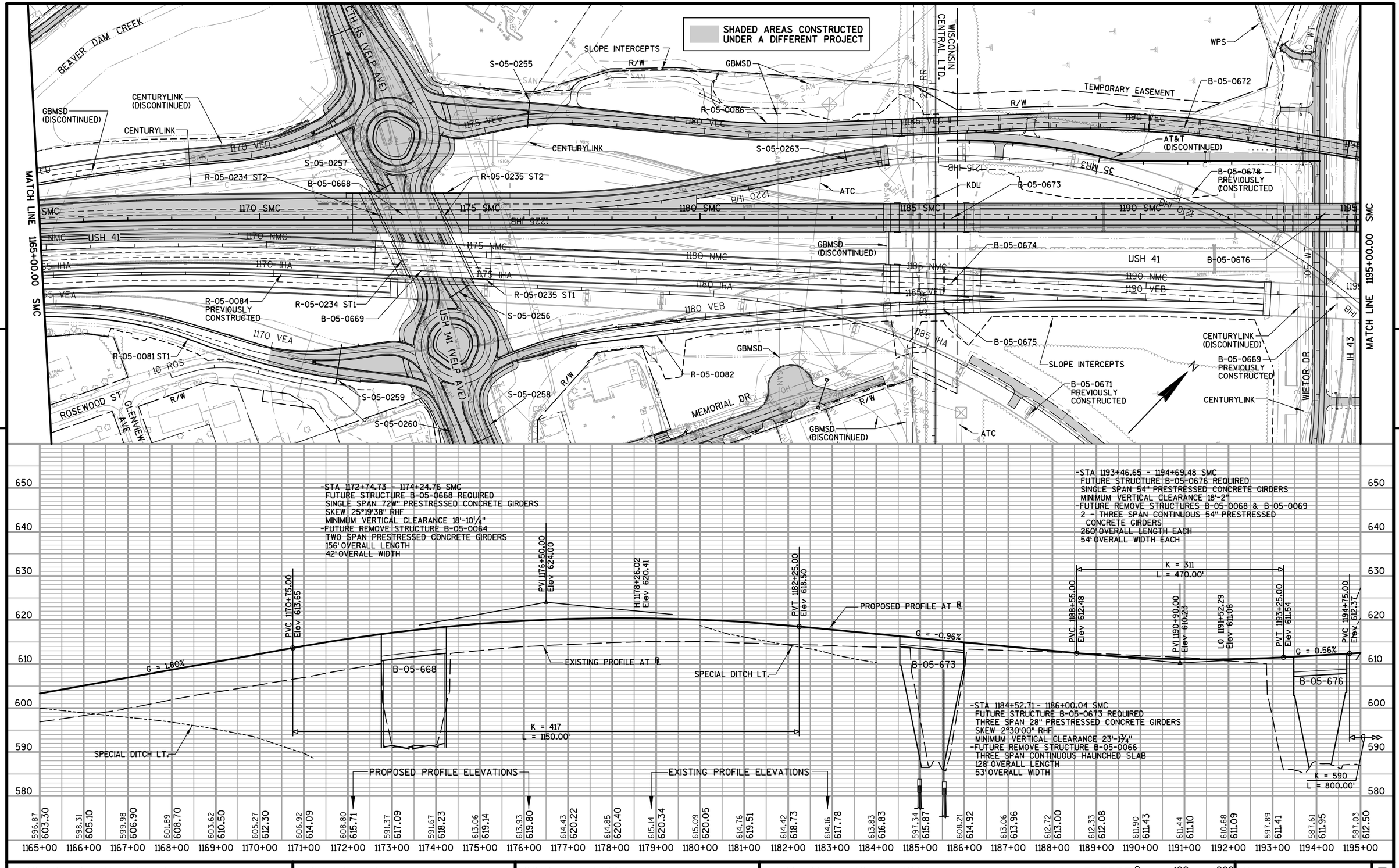
B-05-0693
STA 1161+50.93 SMC
PREVIOUSLY CONSTRUCTED
FOUR CELL BOX CULVERT
371' OVERALL LENGTH
45' OVERALL WIDTH
(SEE PROJECT 1133-11-75 FOR DETAILS)

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

640	630	620	610	600	590	580	570

| | | |



5

5

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SMC	SCALE, FEET 0 100 200	SHEET 535	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050106_pp_SMC.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

MATCH LINE 1195+00 SMC

MATCH LINE 1225+00 SMC

SLOPE INTERCEPTS

DUCK CREEK

BROWN COUNTY IT & MERIT NETWORK

AT&T (DISCONTINUED)

S-05-0192

S-05-0193

R-05-0258

R-05-0259

R-05-0260

B-05-0677 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

B-05-0679 PREVIOUSLY CONSTRUCTED

B-05-0681 PREVIOUSLY CONSTRUCTED

B-05-0682

USH 41

ATC

R/W

TEMPORARY EASEMENT

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

-STA 1212+02.20 - 1214+56.85 SMC
FUTURE STRUCTURE B-05-0682 REQUIRED
TWO SPAN 54W" PRESTRESSED GIRDERS
SKEW 7°26'59" RHF
MINIMUM VERTICAL CLEARANCE 10'-5" (SHARED USE PATH)
-FUTURE REMOVE STRUCTURES B-05-0071 & B-05-0070
2 - THREE SPAN PRESTRESSED GIRDERS
232' OVERALL LENGTH EACH
VARIABLE WIDTH EACH, 48'-32'

PVI 1198+75.00 Elev 614.59

PVT 1202+75.00 Elev 611.39

HI 1198+02.78 Elev 613.28

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

SPECIAL DITCH LT.

SPECIAL DITCH RT.

K = 590

L = 800.00'

G = -0.80%

OBSERVED WATER EL. 577.8'

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

1195+00	1196+00	1197+00	1198+00	1199+00	1200+00	1201+00	1202+00	1203+00	1204+00	1205+00	1206+00	1207+00	1208+00	1209+00	1210+00	1211+00	1212+00	1213+00	1214+00	1215+00	1216+00	1217+00	1218+00	1219+00	1220+00	1221+00	1222+00	1223+00	1224+00	1225+00
Proposed		606.25 / 613.19	605.20 / 613.28	604.08 / 613.20	603.05 / 612.95	601.89 / 612.53	600.69 / 611.94	599.59 / 611.19																						
Existing	587.03 / 612.50	607.30 / 612.93							598.84 / 610.39	598.42 / 609.59	597.88 / 608.79	597.79 / 607.99	597.62 / 607.19	597.19 / 606.39	596.89 / 605.59	596.55 / 604.79	596.35 / 603.99	574.61 / 603.19	574.45 / 602.39	595.54 / 601.58	595.53 / 600.78	595.22 / 599.98	594.57 / 599.18	594.23 / 598.38	594.02 / 597.58	593.66 / 596.78	593.29 / 595.98	592.85 / 595.18	592.38 / 594.38	591.75 / 593.58

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SMC	SCALE, FEET 0 100 200	SHEET 536	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050107_pp_SMC.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

MATCH LINE 1225+00 SMC

5

5

R/W

30 WDR

35 WDR

W. DEERFIELD AVE.

EQNBK 1225+28.22 SMC
EQNAHD a1226+70.75 SMC

EQUATION

ATC

SLOPE INTERCEPTS

40 WDR

45 WDR

50 WDR

55 WDR

S-05-0196

R/W

SMC

a1230 SMC

a1235 SMC

a1240 SMC

a1245 SMC

a1250 SMC

WPS

a1255 SMC

USH 41

1230 NMC

1235 NMC

1240 NMC

1245 NMC

1250 NMC

1255 NMC

USH 41

30 EDR

35 EDR

40 EDR

45 EDR

50 EDR

55 EDR

E. DEERFIELD AVE.

R/W

TEMPORARY EASEMENT

S-05-0234

SLOPE INTERCEPTS

WPS

R/W

AT&T

END CONSTRUCTION 1133-10-71
STA. 1249+00.00 (SMC)

PROJECT 1133-10-81

640
630
620
610
600
590
580
570

EQUATION

G = -0.80%

PVC a1230+75.00
Elev 590.12

K = 333
L = 400.00'

PVI a1232+75.00
Elev 588.52

LO a1233+41.69
Elev 589.05

PVT a1234+75.00
Elev 589.32

G = 0.40%

PVC a1237+95.00
Elev 590.60

PVI a1239+60.00
Elev 591.26
HI a1239+60.02
Elev 590.93

PVT a1241+25.00
Elev 590.60

G = -0.40%

PVC a1244+20.00
Elev 589.42

K = 263
L = 210.00'

PVI a1245+25.00
Elev 589.00
LO a1245+24.99

PVT a1246+30.00
Elev 589.21

G = 0.40%

PROPOSED PROFILE AT R

PVC a1251+10.00
Elev 591.34

PVI a1252+75.00
Elev 592.00
HI a1252+74.59
Elev 591.67

PVT a1254+40.00
Elev 591.34

G = -0.40%

EXISTING PROFILE AT R

591.60
533.36

a1226+71

PROPOSED PROFILE ELEVATIONS

SPECIAL DITCH LT.

STA 1235+21 SMC
FUTURE 106'OF 206'X 36"
C.P.R.C. REQ'D
1-APRON ENDWALL LT REQ'D

K = 413
L = 330.00'

EXISTING PROFILE ELEVATIONS

K = 411
L = 330.00'

591.75 593.58 | 591.11 592.32 | 590.58 591.52 | 590.29 590.72 | 589.74 589.93 | 589.39 589.35 | 589.07 589.08 | 588.54 589.10 | 588.28 589.42 | 587.97 589.82 | 587.82 590.22 | 587.84 590.62 | 587.87 590.89 | 587.82 590.91 | 587.84 590.69 | 588.01 590.30 | 588.18 589.90 | 588.35 589.50 | 588.57 589.22 | 588.75 589.32 | 588.93 589.70 | 589.17 590.10 | 589.34 590.50 | 589.57 590.90 | 590.02 591.30 | 589.95 591.60 | 590.21 591.66 | 590.12 591.48 | 590.23 591.10 | 590.57 590.69

1225+00 a1228+00 a1229+00 a1230+00 a1231+00 a1232+00 a1233+00 a1234+00 a1235+00 a1236+00 a1237+00 a1238+00 a1239+00 a1240+00 a1241+00 a1242+00 a1243+00 a1244+00 a1245+00 a1246+00 a1247+00 a1248+00 a1249+00 a1250+00 a1251+00 a1252+00 a1253+00 a1254+00 a1255+00 a1256+00

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SMC	SCALE, FEET 0 100 200	SHEET 537	E

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

R/W

GBMSD

SLOPE INTERCEPTS

S-05-0195

1140 SIH | 1145 SIH | 1150 SIH | 1155 SIH | 1160 SIH | 1165 SIH | 1170

1140 NIH | IH 43 | 1145 NIH | 1150 NIH | 1155 NIH | 1160 NIH | 1165 NIH | IH 43 | 1170

S-05-0202

S-05-0200

SLOPE INTERCEPTS

CENTURYLINK

HURLBUT ST

WPS

CITY OF GREEN BAY

WPS

65 WT

WIETOR DR

ATC

120 MIL

MATCH LINE 1170+00 NIH

S-05-0201

MAINTAIN MINIMUM VERTICAL CLEARANCE OF 16'-4" UNDER MILITARY AVE

CITY OF GREEN BAY

AT&T

MILITARY AVE

65 HB

HURLBUT ST

R/W

125 MIL

ATC

BEGIN CONSTRUCTION 1133-10-71
STA. 1141+00.00 NIH

BEGIN CONCRETE PAVEMENT
PROJECT 1133-10-71
STA. 1142+75.00 NIH

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

PVI 1140+50.00 Elev 588.40
PVC 1141+20.00 Elev 588.40
PVI 1142+25.00 Elev 588.41
PVT 1143+30.00 Elev 588.83
PVC 1146+75.00 Elev 590.21
PVI 1149+50.00 Elev 591.31
HI 1149+09.81 Elev 590.68
PVT 1152+25.00 Elev 589.83
PVC 1153+30.00 Elev 589.27
PVI 1154+35.00 Elev 588.71
PVT 1155+40.00 Elev 588.67
PVC 1161+19.00 Elev 588.44
LO 1161+33.64 Elev 588.44
PVI 1162+24.00 Elev 588.40
PVT 1163+29.00 Elev 588.94
PVC 1167+15.00 Elev 590.93

K = 537, L = 210.00'
K = 422, L = 210.00'
K = 379, L = 210.00'
K = 587, L = 550.00'
K = 592, L = 600.00'

G = 0.01%
G = 0.40%
G = -0.54%
G = -0.04%
G = 0.52%

PROPOSED PROFILE ELEVATIONS
EXISTING PROFILE ELEVATIONS

640 630 620 610 600 590 580 570

588.44 588.44 | 588.38 588.40 | 588.41 588.47 | 588.40 588.72 | 588.38 589.11 | 588.40 589.51 | 588.40 589.91 | 588.37 590.30 | 588.41 590.58 | 588.42 590.68 | 588.39 590.61 | 588.45 590.37 | 588.43 589.96 | 588.49 589.43 | 588.49 588.95 | 588.55 588.70 | 588.51 588.64 | 588.45 588.60 | 588.40 588.57 | 588.43 588.53 | 588.44 588.49 | 588.49 588.45 | 588.45 588.50 | 588.50 588.80 | 588.55 589.31 | 588.56 589.82 | 588.67 590.34 | 588.91 590.86 | 588.90 591.31 | 588.84 591.60 | 588.60 591.72

1140+00 1141+00 1142+00 1143+00 1144+00 1145+00 1146+00 1147+00 1148+00 1149+00 1150+00 1151+00 1152+00 1153+00 1154+00 1155+00 1156+00 1157+00 1158+00 1159+00 1160+00 1161+00 1162+00 1163+00 1164+00 1165+00 1166+00 1167+00 1168+00 1169+00 1170+00

5 5

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: NIH	SCALE, FEET 0 100 200	SHEET 538	E

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

R/W

90 WT

95 WT

100 WT

BROWN COUNTY IT MERIT NETWORK

B-05-0671 PREVIOUSLY CONSTRUCTED

CENTURYLINK (DISCONTINUED)

CENTURYLINK

CENTURYLINK

IH 43

R-05-0256 PREVIOUSLY CONSTRUCTED

1200 IHA

SLOPE INTERCEPTS

WETOR DR

80 WT

R/W

75 WT

WT

1190 SIH

1185 SIH

1205 IHA

1195 SIH

1190 NIH

1185 NIH

1200 IHB

1210 IHA

1180 SIH

1180 NIH

1195 NIH

1200 SIH

1175 SIH

1215 IHA

1175 NIH

SLOPE INTERCEPTS

B-05-0679 PREVIOUSLY CONSTRUCTED

R-05-0256 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

1220 IHA

SIS

IH 43

1195 IHB

IH 43

NIH

IHB

1175 IHB

1180 IHB

1185 IHB

1190 IHB

MATCH LINE 1170+00 NIH

MATCH LINE 1200+00 NIH

ATC

R/W

R/W

TEMPORARY EASEMENT

5

5

-STA 1187+31.83 - 1209+15.08 NIH
STRUCTURE B-05-0679
PREVIOUSLY CONSTRUCTED UNDER 1133-11-74
TEN SPAN CONTINUOUS STEEL BOX GIRDERS

PVC 1189+50.00
Elev 614.22

PVI 1198+50.00
Elev 638.70

B-05-679
(1133-11-74)

K = 311
L = 1000.00'

PVT 1184+75.00
Elev 601.30

G = 2.72%

PROPOSED PROFILE AT ℄

K = 531
L = 1800.00'

EXISTING PROFILE AT ℄

PVI 1170+15.00
Elev 592.48
HI 1170+20.24
Elev 591.72

PVT 1173+15.00
Elev 590.99

PVC 1174+75.00
Elev 590.19

LO 1176+29.73
Elev 589.80

G = -0.50%

PVI 1179+75.00
Elev 587.70

K = 592
L = 600.00'

PROPOSED PROFILE ELEVATIONS

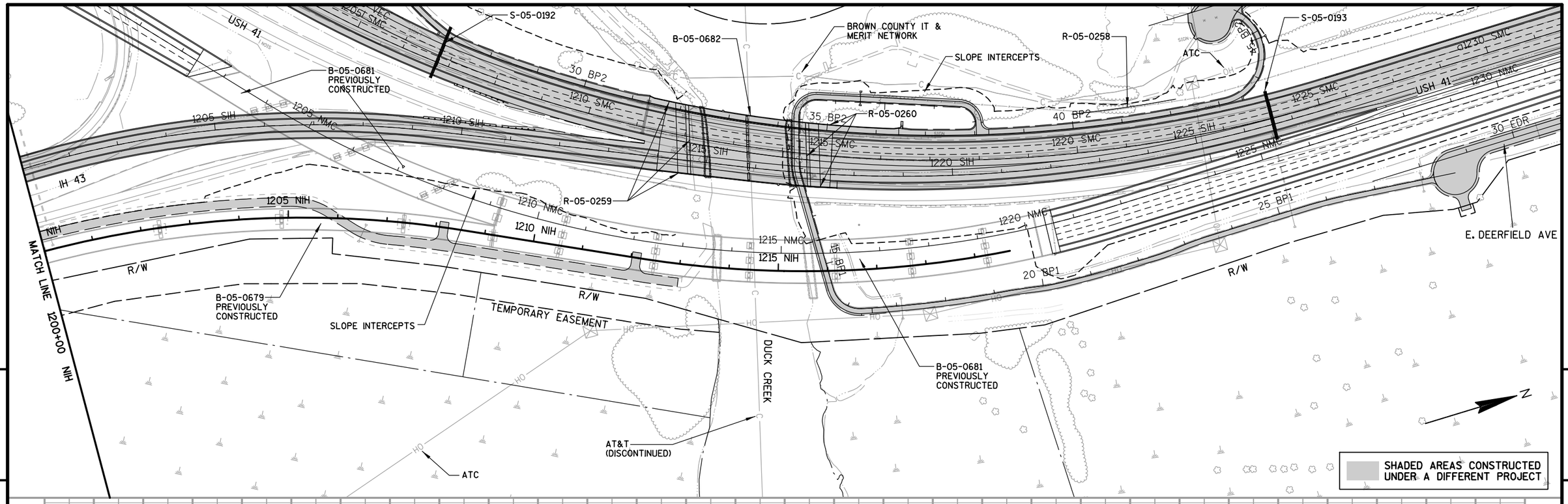
EXISTING PROFILE ELEVATIONS

630 620 610 600 590 580 570 560

588.60 591.72 | 588.61 591.67 | 588.63 591.45 | 588.53 591.06 | 588.26 590.56 | 587.69 590.08 | 587.52 589.82 | 587.39 589.88 | 586.97 590.27 | 588.60 590.98 | 589.63 592.01 | 590.99 593.36 | 592.66 595.04 | 594.66 597.03 | 596.98 599.35 | 599.61 601.98 | 602.32 604.70 | 605.05 607.42 | 582.66 610.14 | 582.50 612.86 | 582.45 615.56 | 582.21 618.09 | 582.32 620.43 | 582.40 622.59 | 582.48 624.55 | 585.07 626.33 | 582.82 627.92 | 582.54 629.32 | 582.67 630.54 | 583.63 631.56 | 584.21 632.40

1170+00 1171+00 1172+00 1173+00 1174+00 1175+00 1176+00 1177+00 1178+00 1179+00 1180+00 1181+00 1182+00 1183+00 1184+00 1185+00 1186+00 1187+00 1188+00 1189+00 1190+00 1191+00 1192+00 1193+00 1194+00 1195+00 1196+00 1197+00 1198+00 1199+00 1200+00

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: NIH	SCALE, FEET 0 100 200	SHEET 539	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: NIH	SCALE, FEET 0 100 200	SHEET 540	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050111_pp_NIH.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

BEGIN CONSTRUCTION 1133-10-71
STA. 1125+00.00 (SIH)

SLOPE INTERCEPTS

GBMSD

R/W

1110 SIH | 1115 SIH | 1120 SIH | 1125 SIH | 1130 SIH | 1135 SIH | 1140

1110 NIH | IH 43 | 1115 NIH | 1120 NIH | 1125 NIH | 1130 NIH | 1135 NIH | IH 43 | 1140

MATCH LINE 1140+00 SIH

S-05-0202

MAINTENANCE CROSSOVER TO BE REMOVED

HURLBUT ST

CITY OF GREEN BAY

CENTURYLINK

WPS

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

5

5

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SIH	SCALE, FEET 0 100 200	SHEET 541	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050112_pp_SIH.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

MATCH LINE 1140+00.00 SIH

MATCH LINE 1170+00 SIH

5

5

CITY OF GREEN BAY

WPS

65 WT WIETOR DR

ATC

WPS

SLOPE INTERCEPTS

GBMSD

S-05-0195

MAINTAIN MINIMUM VERTICAL CLEARANCE OF 16'-4" UNDER MILITARY AVE

120 WT

R/W

R/W

SIH 1145 SIH 1150 SIH 1155 SIH 1160 SIH 1165 SIH 1170

NIH IH 43 1145 NIH 1150 NIH 1155 NIH 1160 NIH 1165 NIH IH 43 1170

S-05-0200

S-05-0201

SLOPE INTERCEPTS

CENTURYLINK

HURLBUT ST

CITY OF GREEN BAY

AT&T

MILITARY AVE

65 HB

HURLBUT ST

R/W

WPS

BEGIN CONCRETE PAVEMENT
PROJECT 1133-10-71
STA. 1142+75.00 (SIH)

TOWER

ATC

R/W

125 WT

N

640 630 620 610 600 590 580 570

K = 475
L = 210.00'

PVC 1141+50.00 Elev 588.63
LO 1141+70.45 Elev 588.63
PVI 1142+55.00 Elev 588.58
PVT 1143+60.00 Elev 589.00

PROPOSED PROFILE AT ℄

PVC 1146+75.00 Elev 590.26
PVI 1149+50.00 Elev 591.36
HI 1149+07.53 Elev 590.73

K = 582
L = 550.00'

PVT 1152+25.00 Elev 589.86

K = 405
L = 210.00'

PVC 1153+30.00 Elev 589.29
PVI 1154+35.00 Elev 588.72
PVT 1155+40.00 Elev 588.69

K = 388
L = 210.00'

PVC 1161+39.00 Elev 588.53
LO 1161+49.12 Elev 588.53
PVI 1162+44.00 Elev 588.50
PVT 1163+49.00 Elev 589.05

PVC 1167+15.00 Elev 590.93

K = 591
L = 600.00'

G = 0.40%

G = -0.55%

G = -0.03%

G = 0.52%

EXISTING PROFILE AT ℄

SPECIAL DITCH RT.

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

1140+00	1141+00	1142+00	1143+00	1144+00	1145+00	1146+00	1147+00	1148+00	1149+00	1150+00	1151+00	1152+00	1153+00	1154+00	1155+00	1156+00	1157+00	1158+00	1159+00	1160+00	1161+00	1162+00	1163+00	1164+00	1165+00	1166+00	1167+00	1168+00	1169+00	1170+00
Existing	588.60	588.60	588.58	588.62	588.63	589.67	588.68	588.60	588.46	588.73	588.79	588.73	588.86	588.90	588.89	588.85	588.54	588.54	588.49	588.69	588.82	588.78	588.52	588.63	588.61	588.37	588.24	587.97	587.54	587.21	586.67
Proposed	588.69	588.65	588.63	588.80	589.16	589.56	589.96	590.36	590.63	590.73	590.65	590.41	589.99	589.45	588.97	588.72	588.67	588.65	588.62	588.59	588.57	588.54	588.56	588.82	589.31	589.82	590.34	590.86	591.31	591.60	591.72

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SIH	SCALE, FEET 0 100 200	SHEET 542	E

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

CENTURYLINK

R/W

SLOPE INTERCEPTS

85 WT

WIETOR DR

80 WT

R/W

75 WT

WT

95 WT

100 WT

BROWN COUNTY IT & MERIT NETWORK

R-05-0255 PREVIOUSLY CONSTRUCTED

B-05-0671 PREVIOUSLY CONSTRUCTED

CENTURYLINK (DISCONTINUED)

IH 43

1200 IHA

EXISTING STRUCTURE B-05-0133

1190 SIH

1185 SIH

1180 SIH

1175 SIH

1195 SIH

1185 NIH

1190 NIH

1180 NIH

1175 NIH

1195 NIH

1200 IHB

1220 IHA

1215 IHA

1210 IHA

1205 IHA

SIH

NIH

IHB

MATCH LINE 1170+00 SIH

MATCH LINE 1200+00 SIH

R-05-0256 PREVIOUSLY CONSTRUCTED

SLOPE INTERCEPTS

B-05-0679 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

1175 IHB

1180 IHB

1185 IHB

1190 IHB

1195 IHB

R/W

TEMPORARY EASEMENT

R/W

TEMPORARY EASEMENT

ATC

HO

5

5

-REMOVE STRUCTURE B-05-0133
2 - SPAN 66" STEEL GIRDERS
299.45' OVERALL LENGTH (END OF DECK)
31' CLEAR WIDTH

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

STA 1196+12 SIH
1 - 150' X 24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D
SKEWED 15° LHF

PVI 1170+15.00 Elev 592.48
HI 1170+19.76 Elev 591.72

PVT 1173+15.00 Elev 590.98

PVC 1176+50.00 Elev 589.31

K = 616
L = 600.00'

PVI 1179+50.00 Elev 587.81
LO 1179+57.60 Elev 588.54

PVT 1182+50.00 Elev 589.23

K = 280
L = 210.00'

PVC 1195+70.00 Elev 595.50

PVI 1196+75.00 Elev 596.00

PVT 1197+80.00 Elev 597.29

K = 591
L = 600.00'

G = -0.50%

G = 0.47%

G = 1.23%

SPECIAL DITCH RT.

SPECIAL DITCH LT.

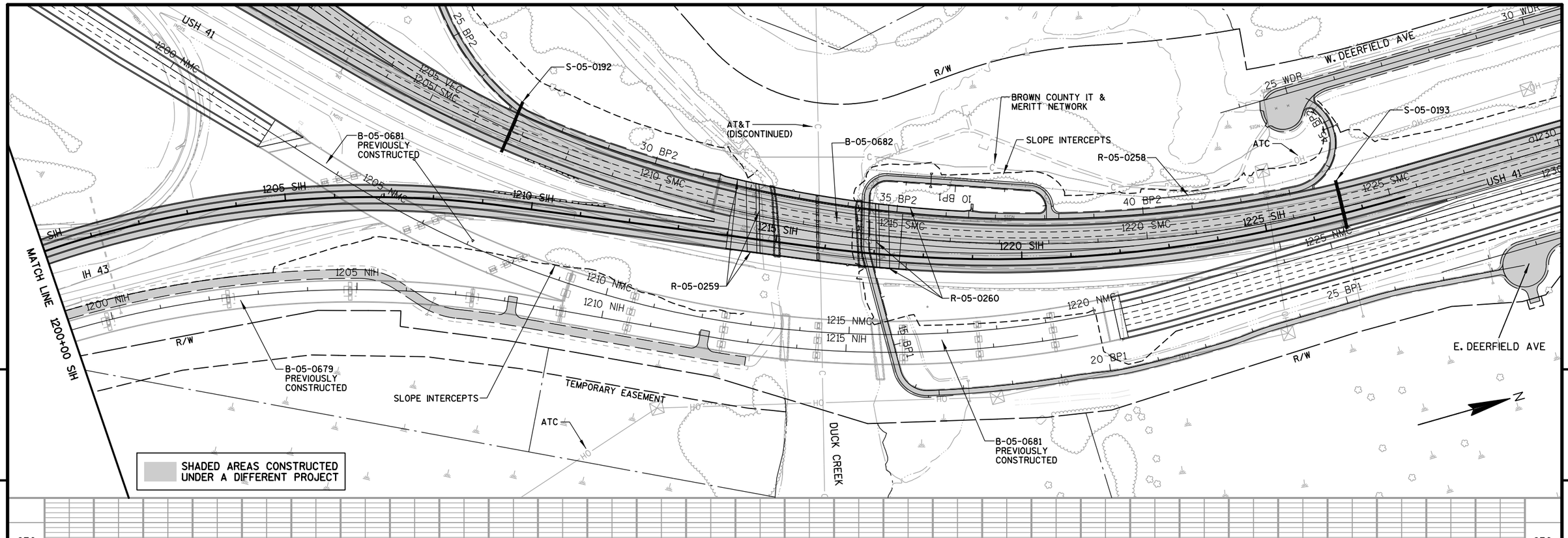
PROPOSED PROFILE ELEVATIONS

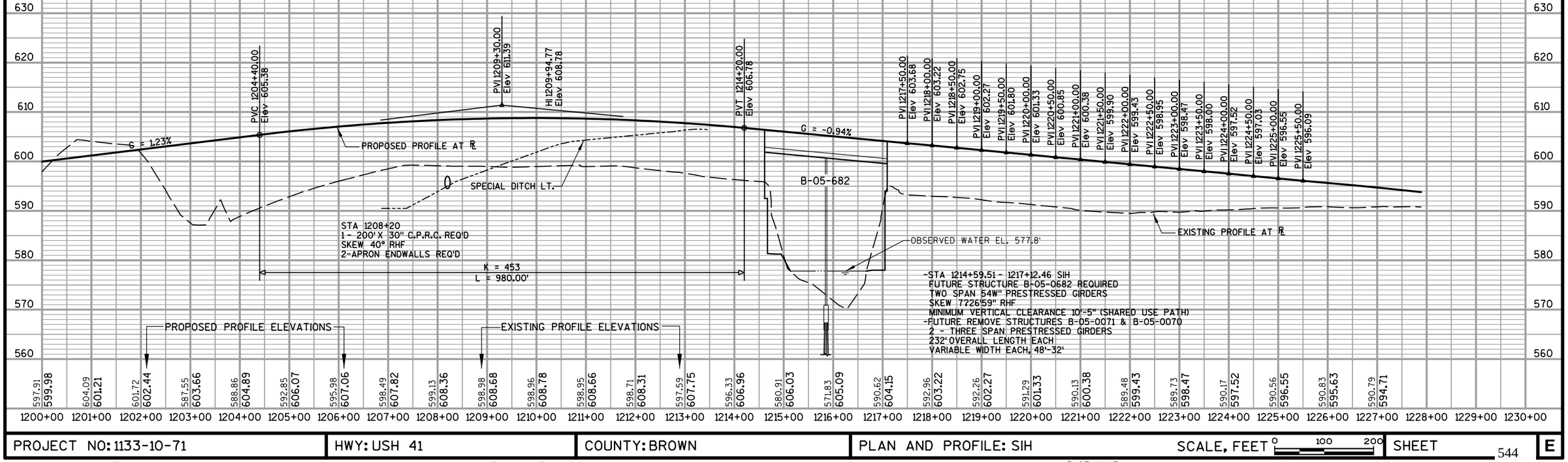
EXISTING PROFILE ELEVATIONS

630 620 610 600 590 580 570 560

586.67 591.72	586.16 591.66	585.61 591.44	583.91 591.05	586.13 590.56	586.37 590.06	588.14 589.56	588.14 589.08	588.15 588.74	588.16 588.57	588.16 588.55	588.13 588.70	588.22 589.02	588.18 589.47	588.20 589.95	588.18 590.42	588.19 590.90	588.29 591.37	588.44 591.85	588.47 592.32	587.61 592.80	585.30 593.27	582.87 593.74	584.07 594.22	586.72 594.69	588.68 595.17	586.72 595.66	583.18 596.42	583.52 597.53	586.61 598.76	597.91 599.98
1170+00	1171+00	1172+00	1173+00	1174+00	1175+00	1176+00	1177+00	1178+00	1179+00	1180+00	1181+00	1182+00	1183+00	1184+00	1185+00	1186+00	1187+00	1188+00	1189+00	1190+00	1191+00	1192+00	1193+00	1194+00	1195+00	1196+00	1197+00	1198+00	1199+00	1200+00

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SIH	SCALE, FEET 0 100 200	SHEET 543	E





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: SIH	SCALE, FEET 0 100 200	SHEET 544	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050115_pp_SIH.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

N

GBMSD

SLOPE INTERCEPTS

CENTURYLINK

R/W

GBMSD (DISCONTINUED)

S-05-0194

S-05-0189

USH 41

1145 SMC

1145 NMC

1145 IHA

1150 SMC

1150 NMC

1150 IHA

1155 SMC

1155 NMC

1155 IHA

1160 VED

1160 SMC

1160 NMC

1160 IHA

1160 VEA

1165 VED

1165 SMC

1165 NMC

1165 IHA

1165 VEA

1170 VED

1170 SMC

1170 NMC

1170 IHA

1170 VEA

DUCK CREEK

CENTURYLINK (DISCONTINUED)

WPS (OH ELEC)

ISLAND CT

60' R/W

TIME WARNER (OH) & AT&T (OH)

VILLAGE OF HOWARD

WPS (GAS)

BEAVER DAM CREEK

B-05-0693 PREVIOUSLY CONSTRUCTED

PREVIOUSLY ABANDONED BOX CULVERT B-05-0099

S-05-0254

VELP AVE (CTH HS)

S-05-0259

B-05-0668

S-05-0191

BEAVER DAM CREEK

VILLAGE OF HOWARD

WPS (GAS)

AT&T

R/W

R-05-0081 ST1

R-05-0084 PREVIOUSLY CONSTRUCTED

B-05-0669

R-05-0234

MATCH LINE 173+00 IHA

SLOPE INTERCEPTS

WPS (OH ELEC) & TIME WARNER (OH)

VILLAGE OF HOWARD

PLAYGROUND

BASKETBALL COURT

10 ROS

VILLAGE OF HOWARD

GBMSD

LONE GROVE AVE

ROSEWOOD ST

GLENVIEW AVE

R-05-0259

5

5

640
630
620
610
600
590
580
570

PVI 1148+50.00 Elev 603.97
PVI 1149+00.00 Elev 603.20
PVI 1149+50.00 Elev 602.47
PVI 1150+00.00 Elev 601.83
PVC 1151+25.00 Elev 600.41
PVI 1152+50.00 Elev 598.99
PVT 1153+75.00 Elev 598.30
PVC 1157+70.00 Elev 596.13
LO 1158+70.80 Elev 595.86
PVI 1160+95.00 Elev 594.35
PVT 1164+20.00 Elev 604.07

G = -1.66%
G = -1.54%
G = -1.46%
G = -1.28%
G = -1.14%
G = -0.55%
G = 2.99%

K = 425
L = 250.00'

K = 184
L = 650.00'

EXISTING PROFILE AT ℄

PROPOSED PROFILE AT ℄

SPECIAL DITCH RT.

SPECIAL DITCH RT.

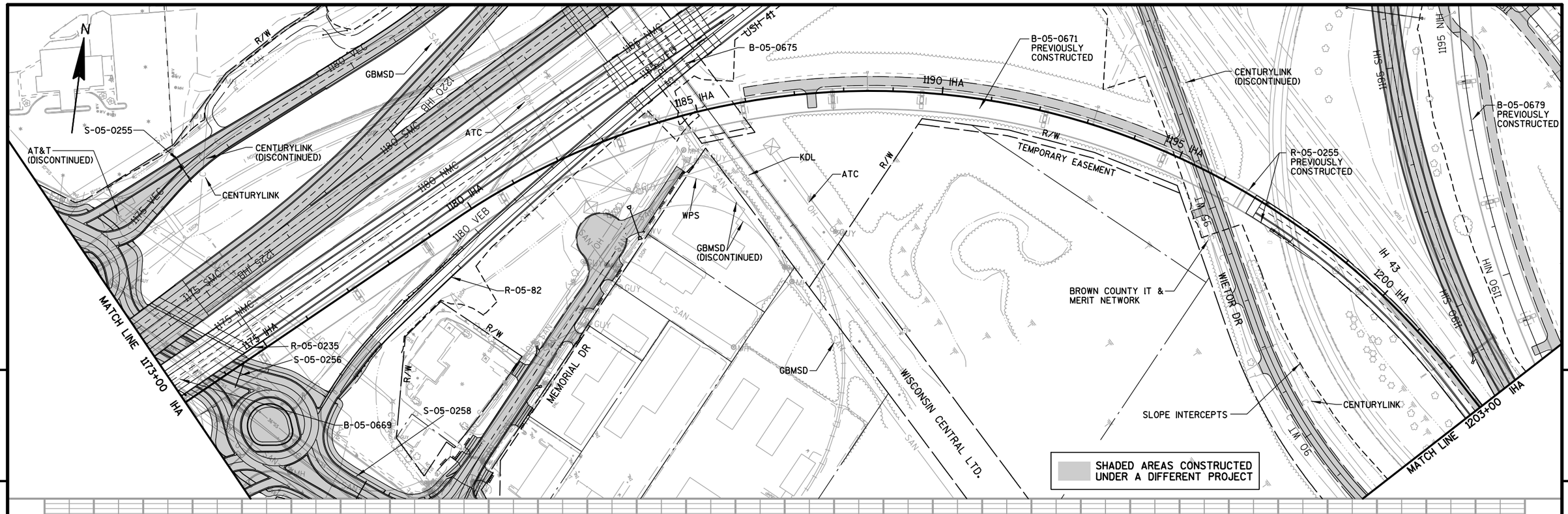
B-05-0693
STA 1160+47.25 IHA
PREVIOUSLY CONSTRUCTED
FOUR CELL BOX CULVERT
371' OVERALL LENGTH
45' OVERALL WIDTH

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

1143+00	1144+00	1145+00	1146+00	1147+00	1148+00	1149+00	1150+00	1151+00	1152+00	1153+00	1154+00	1155+00	1156+00	1157+00	1158+00	1159+00	1160+00	1161+00	1162+00	1163+00	1164+00	1165+00	1166+00	1167+00	1168+00	1169+00	1170+00	1171+00	1172+00	1173+00
613.34	610.79	608.25	605.78	603.56	601.54	599.33	597.77	596.44	595.21	594.32	593.71	592.70	591.85	591.73	591.60	591.60	591.80	592.20	592.54	598.56	601.15	604.09	607.14	610.12	613.06	616.05	619.04	622.05	625.07	628.01
614.74	612.87	610.78	608.66	606.62	604.80	603.20	601.83	600.69	599.62	598.78	598.16	597.61	597.07	596.52	595.99	595.88	596.31	597.29	598.81	600.87	603.48	606.46	609.45	612.44	615.43	618.42	621.41	624.40	627.39	630.39

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: IHA	SCALE, FEET 0 100 200	SHEET 545	E



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: IHA	SCALE, FEET 0 100 200	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050117_pp_IHA.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 40

MATCH LINE 1203+00.00 IHA

5

5

TEMPORARY EASEMENT

R/W

SLOPE INTERCEPTS

B-05-0679 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

S-05-0201

CENTURYLINK

HURLBUT ST

MILITARY AVE

WPS

AT&T

CITY OF GREEN BAY

IH 43

1205 IHA

1210 IHA

1215 IHA

1220 IHA

WIETOR DR

ATC

GBMSD

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

K = 224
L = 500.00'

K = 636
L = 830.00'

PVI 1203+85.00
Elev 591.78

PVCC 1206+35.00
Elev 589.86

PVI 1210+50.00
Elev 586.69

LO 1211+21.58
Elev 588.00

PVT 1214+65.00
Elev 588.93

PVI 1217+50.00
Elev 590.47

G = 0.54%

G = 0.54%

PROPOSED PROFILE AT ℄

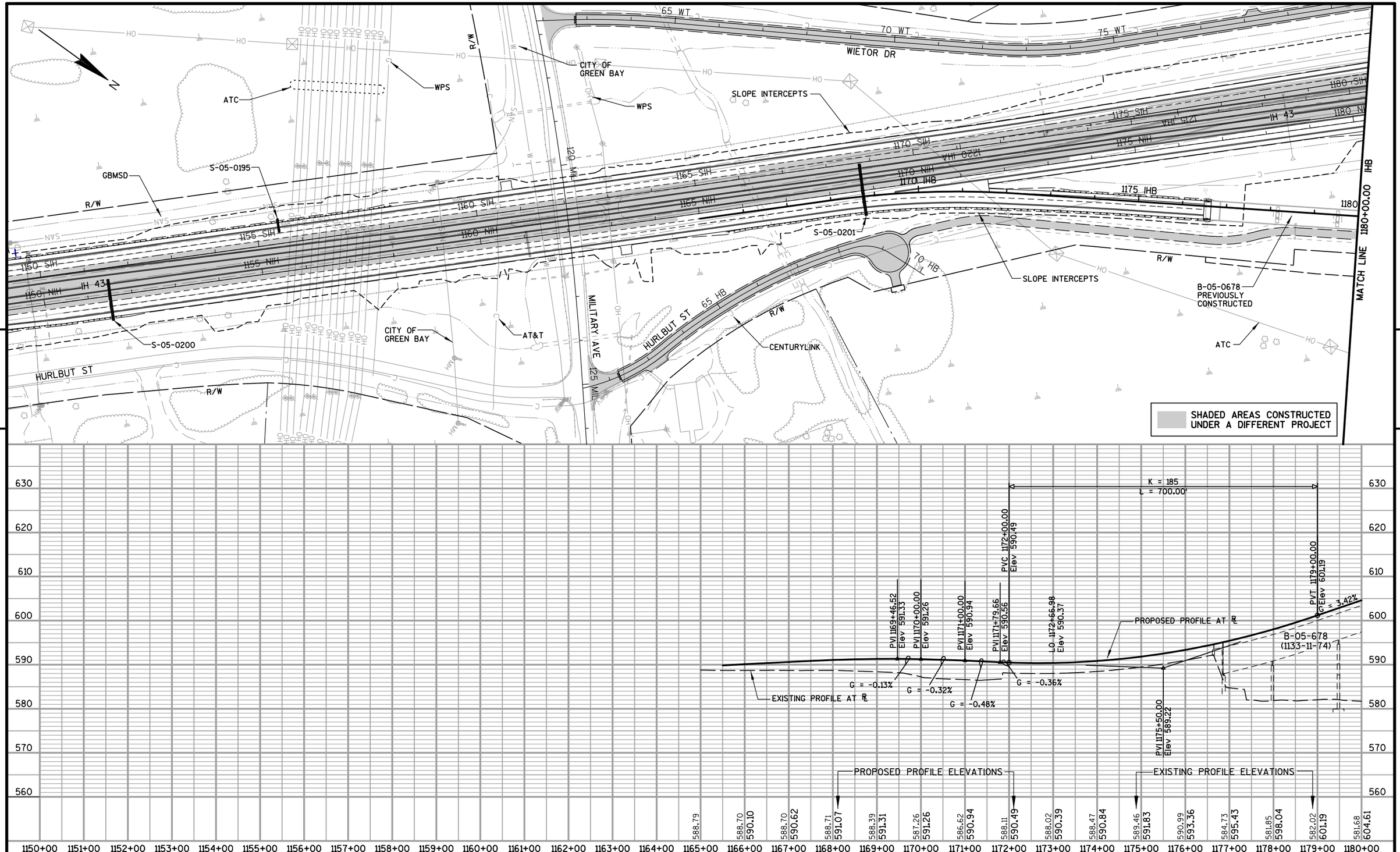
EXISTING PROFILE AT ℄

SPECIAL DITCH LT.

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

| | | |



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: IHB	SCALE, FEET 0 100 200	SHEET 548	E

MATCH LINE 1180+00 IHB

MATCH LINE 1210+00 IHB

IH 43

1185 SIH

1205 IHA

1185 NIH

1200 IHA

1190 SIH

1190 NIH

1195 SIH

1195 NIH

1185 IHB

1190 IHB

1195 IHB

1200 IHB

1205 IHB

95 WT

95 IHA

95 SIH

100 WT

105 WT

110 WT

120 WT

125 NMC

120 NMC

115 NMC

110 NMC

105 NMC

100 NMC

95 NMC

1200 SIH

SLOPE INTERCEPTS

R/W

TEMPORARY EASEMENT

ATC

HO

B-05-0671
PREVIOUSLY
CONSTRUCTED

R-05-0255
PREVIOUSLY
CONSTRUCTED

B-05-0679
PREVIOUSLY
CONSTRUCTED

B-05-0677
PREVIOUSLY
CONSTRUCTED

B-05-0678
PREVIOUSLY
CONSTRUCTED

B-05-0676

B-05-0672

CENTURYLINK

BROWN COUNTY IT &
MERIT NETWORK

CENTURYLINK
(DISCONTINUED)

AT&T
(DISCONTINUED)

WIETOR DR

WPS

USH 41

IH 43

SHADED AREAS CONSTRUCTED
UNDER A DIFFERENT PROJECT

5

5

-STA 1176+87.75 - 1216+52.00 IHB
STRUCTURE B-05-0678
PREVIOUSLY CONSTRUCTED
TWENTY-THREE SPAN CONTINUOUS PRESTRESSED
CONCRETE GIRDERS & CONTINUOUS STEEL BOX
GIRDERS

PVC 1194+50.00
Elev 654.19

PVI 1200+00.00
Elev 673.00

HI 1200+19.23
Elev 663.92

PVT 1205+50.00
Elev 655.46

K = 166
L = 1100.00'

G = 0.00%

G = 3.42%

G = -3.19%

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

B-05-678
(1133-11-74)

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

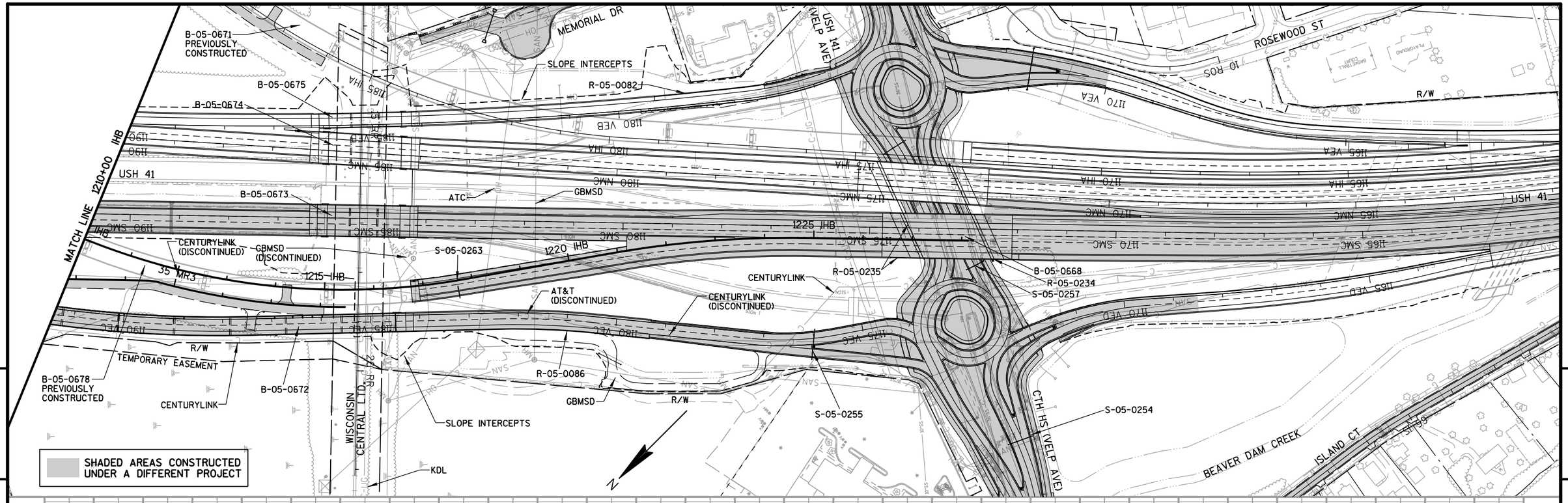
660 650 640 630 620 610 600 590

1180+00	1181+00	1182+00	1183+00	1184+00	1185+00	1186+00	1187+00	1188+00	1189+00	1190+00	1191+00	1192+00	1193+00	1194+00	1195+00	1196+00	1197+00	1198+00	1199+00	1200+00	1201+00	1202+00	1203+00	1204+00	1205+00	1206+00	1207+00	1208+00	1209+00	1210+00
581.68	585.56	586.81	586.11	584.90	581.58	581.64	581.85	581.76	581.77	581.66	581.87	581.82	581.80	581.85	582.71	587.03	588.65	583.55	606.80	583.46	581.33	583.57	596.37	615.70	587.16	587.03	585.87	608.98	610.73	606.40
604.61	608.03	611.45	614.87	618.29	621.71	625.13	628.55	631.96	635.38	638.80	642.22	645.64	649.06	652.48	655.83	658.65	660.86	662.48	663.50	663.91	663.73	664.94	661.56	659.57	656.98	653.87	650.68	647.49	644.30	641.11

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: IHB	SCALE, FEET 0 100 200	SHEET 549	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050120_pp_IHB.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40



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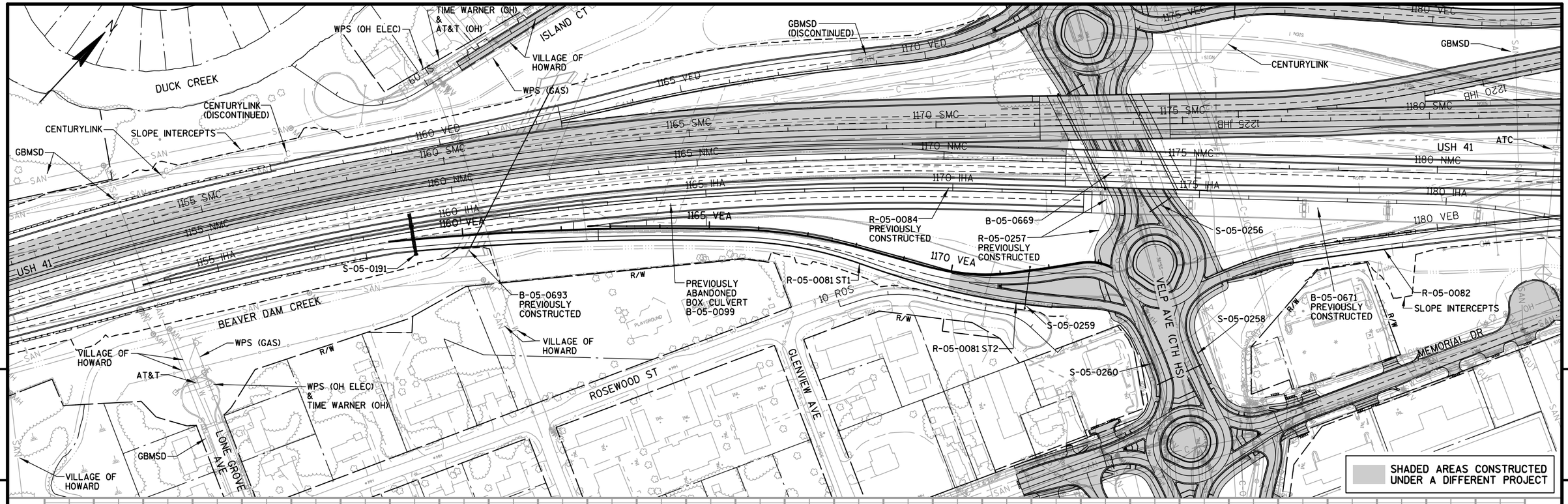
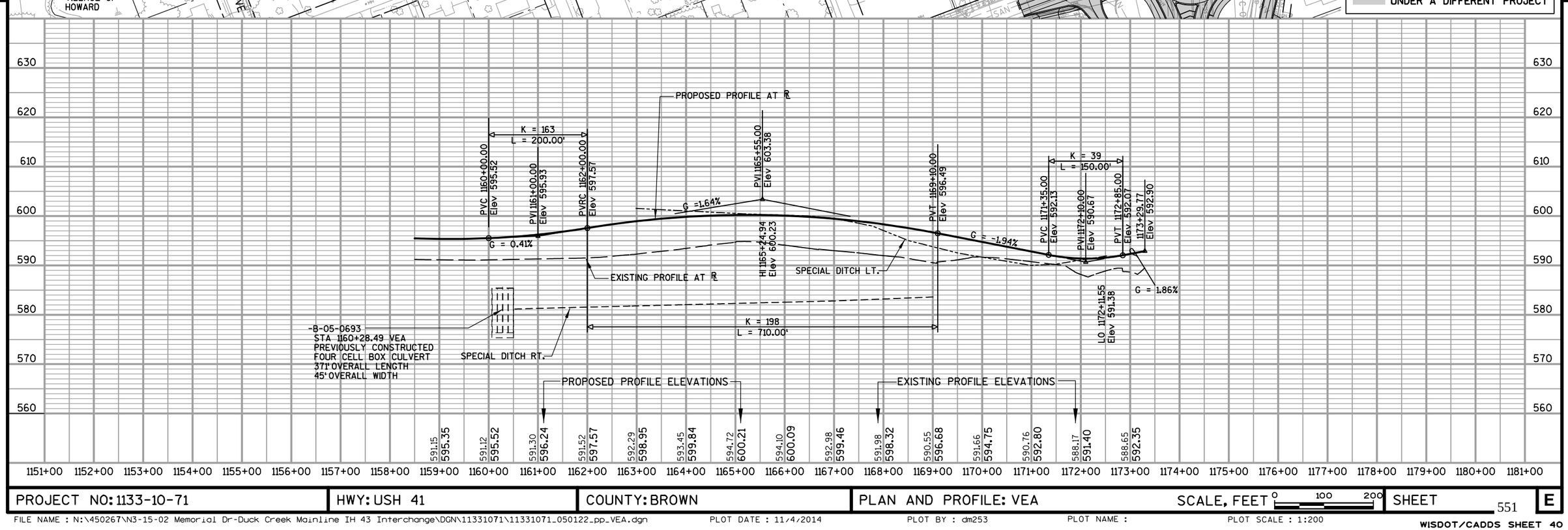
5

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: IHB	SCALE, FEET 0 100 200	SHEET 550	E





PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: VEA	SCALE, FEET 0 100 200	SHEET 551	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050122_pp_VEA.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

USH 41

GBMSD

ATC

GBMSD (DISCONTINUED)

B-05-0672

B-05-0673

B-05-0674

B-05-0675

B-05-0676

B-05-0677 PREVIOUSLY CONSTRUCTED

B-05-0678 PREVIOUSLY CONSTRUCTED

B-05-0671 PREVIOUSLY CONSTRUCTED

SLOPE INTERCEPTS

WPS

S-05-0258

R-05-0082

R/W

USH 141 (VELP AVE)

MEMORIAL DR

TEMPORARY EASEMENT

KDL

WISCONSIN CENTRAL LTD.

BROWN COUNTY IT & MERIT NETWORK

WIETOR DR

IH 43

1170 VED
1180 VEC
1185 VEC
1190 VEC
1195 VEC
1200 VEC
1170 SMC
1175 SMC
1180 SMC
1185 SMC
1190 SMC
1195 SMC
1200 SMC
1170 NMC
1175 NMC
1180 NMC
1185 NMC
1190 NMC
1195 NMC
1200 NMC
1170 IHA
1175 IHA
1180 IHA
1185 IHA
1190 IHA
1170 VEA
1180 VEB
1185 VEB
1190 VEB
1195 WT
100 WT
1215 IHB
1220 IHB
1225 IHB
1210 IHB
1205 IHB
1200 IHB
35 MR3
1200 SHL

PROPOSED PROFILE AT ℄

EXISTING PROFILE AT ℄

PVC 1175+45.00 Elev 593.11

1175+06.59 Elev 593.40

K = 40
L = 220.00'

LO 1175+74.89 Elev 593.00

PVT 1177+65.00 Elev 597.57

PVC 1178+00.00 Elev 599.25

PVI 1176+55.00 Elev 592.28

G = -0.76%

G = 4.81%

PVI 1182+00.00 Elev 618.50

SPECIAL DITCH LT.

SPECIAL DITCH RT.

K = 137
L = 800.00'

HI 1184+57.42 Elev 615.07

PVRC 1186+00.00 Elev 614.33

B-05-675

PVI 1187+75.00 Elev 612.50

LO 1187+41.46 Elev 613.59

G = 1.54%

K = 136
L = 350.00'

PVT 1189+50.00 Elev 615.19

PVI 1189+71.98 Elev 615.53

PVI 1190+00.00 Elev 615.95

PVI 1190+25.00 Elev 616.36

PVI 1190+50.00 Elev 616.80

G = 1.50%
G = 1.64%
G = 1.71%

STA 1184+40.85 - 1185+88.19 VEB
STRUCTURE B-05-0674 REQUIRED
THREE SPAN 28" PRESTRESSED CONCRETE GIRDER
MINIMUM VERTICAL CLEARANCE 23'-0¾"

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

| | | |

SHADED AREAS CONSTRUCTED UNDER A DIFFERENT PROJECT

DUCK CREEK

TIME WARNER (OH) & AT&T (OH)

WPS (OH ELEC)

66' IS

ISLAND CT

BEAVER DAM CREEK

S-05-0254

CTH HS (VELP AVE)

PREVIOUSLY ABANDONED BOX CULVERT B-05-0099

CENTURYLINK (DISCONTINUED)

GBMSD (DISCONTINUED)

R/W

60' IS

VILLAGE OF HOWARD

WPS (GAS)

SLOPE INTERCEPTS

GBMSD

CENTURYLINK

S-05-0255

1160 VED

1165 VED

1170 VED

1175 VEC

1155 SMC

1160 SMC

1165 SMC

1170 SMC

1175 SMC

R-05-0234 ST2

S-05-0257

B-05-0668

R-05-0235 ST2

1150 SMC

1155 NMC

1160 NMC

1165 NMC

1170 NMC

1175 NMC

USH 41

1150 NMC

1155 IHA

1160 IHA

1165 IHA

1170 IHA

1175 IHA

1225 IHB

1160 VEA

1165 VEA

1170 VEA

S-05-0191

B-05-0693 PREVIOUSLY CONSTRUCTED

BEAVER DAM CREEK

R/W

SLOPE INTERCEPTS

R-05-0081 ST1

10 ROS

ROSEWOOD ST

B-05-0669

S-05-0256

USH 41

1180

PVI 1158+00.00 Elev 598.81

PVI 1158+25.00 Elev 598.73

PVI 1158+50.00 Elev 598.67

PVI 1158+75.00 Elev 598.64

PVI 1159+00.00 Elev 598.63

PVI 1159+25.00 Elev 598.65

PVI 1159+50.00 Elev 598.70

PVI 1159+75.00 Elev 598.77

PVI 1159+93.88 Elev 598.84

PVI 1160+25.00 Elev 598.95

PVI 1160+60.00 Elev 599.11

PVC 1160+80.00 Elev 599.24

K = 263
L = 100.00'

PVC 1162+06.00 Elev 600.34

PVT 1161+80.00 Elev 600.07

PVI 1161+30.00 Elev 599.56

G = -0.34%
G = -0.31%
G = -0.23%
G = -0.15%
G = -0.02%
G = 0.08%
G = 0.19%
G = 0.29%
G = 0.38%
G = 0.34%
G = 0.46%
G = 0.64%

G = 1.02%

HI 1164+27.73 Elev 601.47

PVI 1165+56.00 Elev 603.92

PROPOSED PROFILE AT ℄

PVT 1169+06.00 Elev 596.19

G = -2.21%

K = 217
L = 700.00'

-B-05-0693
STA 1161+91.33 VED
PREVIOUSLY CONSTRUCTED
FOUR CELL BOX CULVERT
371' OVERALL LENGTH
45' OVERALL WIDTH

SPECIAL DITCH RT.

EXISTING PROFILE AT ℄

K = 40
L = 150.00'

1172+47.00 Elev 592.15

PVC 1170+80.00 Elev 592.35

PVI 1171+55.00 Elev 590.70

PVT 1172+30.00 Elev 591.88

G = 1.58%

LO 1174+67.47 Elev 591.39

PROPOSED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

593.72 599.29
593.88 598.81
593.90 598.63
593.94 598.86
593.95 599.37
594.19 600.28
594.54 601.10
595.12 601.45
590.94 601.35
586.45 600.79
590.00 599.76
589.30 598.27
588.45 596.33
588.51 594.12
587.26 591.96
585.76 591.52

630 620 610 600 590 580 570 560

1149+00 1150+00 1151+00 1152+00 1153+00 1154+00 1155+00 1156+00 1157+00 1158+00 1159+00 1160+00 1161+00 1162+00 1163+00 1164+00 1165+00 1166+00 1167+00 1168+00 1169+00 1170+00 1171+00 1172+00 1173+00 1174+00 1175+00 1176+00 1177+00 1178+00 1179+00

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PLAN AND PROFILE: VED	SCALE, FEET 0 100 200	SHEET 553	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_050126_pp_VED.dgn PLOT DATE : 11/4/2014 PLOT BY : dm253 PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 40

Standard Detail Drawing List

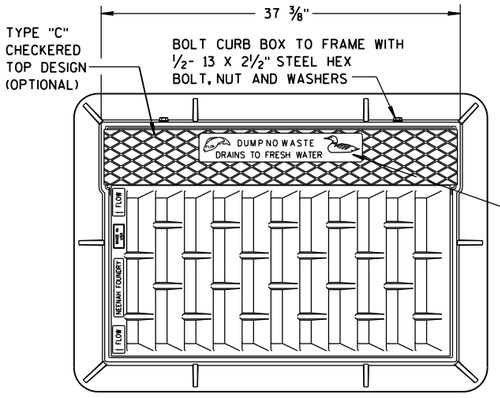
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B10-01	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D13-01	SLOTTED CORRUGATED METAL PIPE SURFACE DRAINS
08D14-01	SLOTTED VANE DRAIN
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F05-01	CLASS "B" BEDDING FOR CULVERT PIPE OR STORM SEWER
09B02-07	CONDUIT
11A01-05	MAINTENANCE CROSSOVER FOR FREEWAYS
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-05	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C15-05A	CONCRETE BASE
13C15-05B	CONCRETE BASE
13C17-01A	CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI
13C17-01B	CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-02E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B28-03	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE
14B32-03A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-01A	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01B	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01C	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B36-01I	51-INCH SINGLE-FACED F SHAPE CONCRETE BARRIER TO 56-INCH SSCB TRANSITION
14B36-01J	51-INCH SINGLE-FACED F SHAPE CONCRETE BARRIER TO 56-INCH SSCB TRANSITION
14B39-01A	32-INCH SSCB TO 36-INCH SSCB HEIGHT TRANSITION
14B39-01C	36-INCH SSCB TO 42-INCH SSCB HEIGHT TRANSITION
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

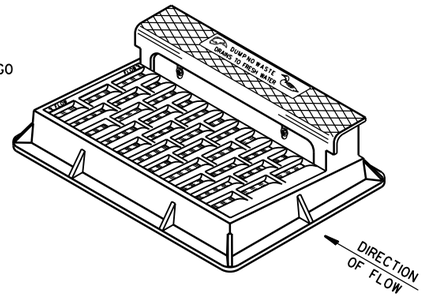
Standard Detail Drawing List

14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A02-08	DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A04-02	FLEXIBLE DELINEATOR POST
15A06-02	DELINEATOR LAYOUT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15B03-13A	FENCE CHAIN LINK
15B03-13B	FENCE CHAIN LINK
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C10-10	PAVEMENT MARKINGS FOR DROP LANES FREEWAY/EXPRESSWAY
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-02B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C26-02	END-OF-ROADWAY SIGNING
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01C	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D12-04	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-02	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-02	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D29-03	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

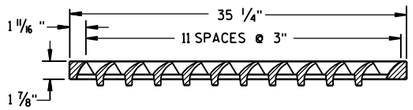
6

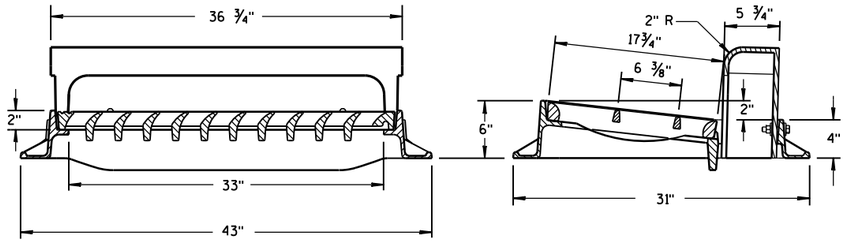


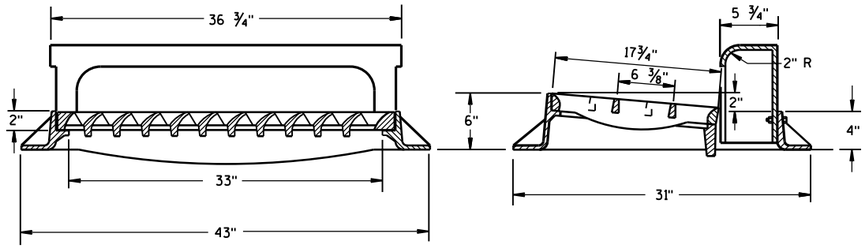
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

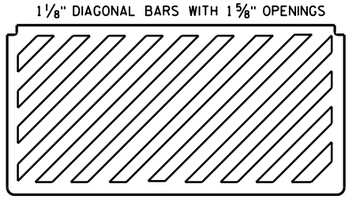






TYPE "H"

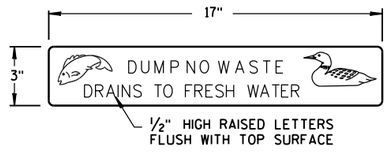
NOTE: EITHER CASTING IS ACCEPTABLE



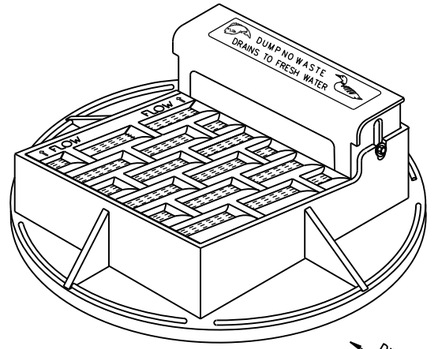
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

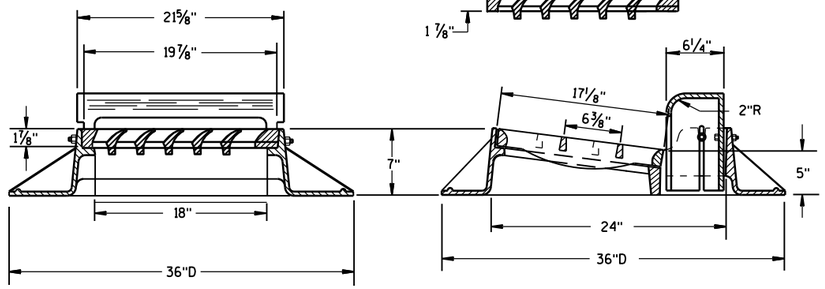


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



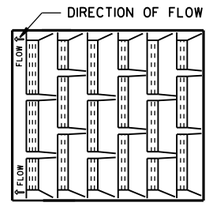
TYPE "A"

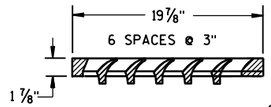
GENERAL NOTES

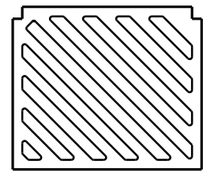
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



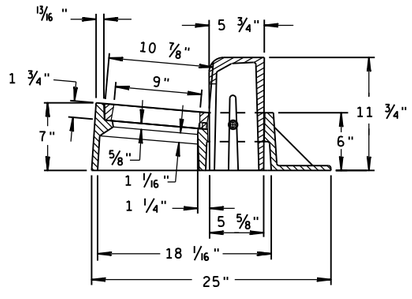


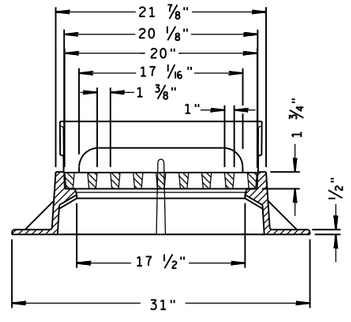


SPECIAL GRATE FOR TYPE "A" COVER

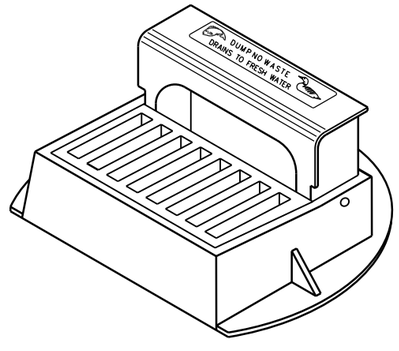
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





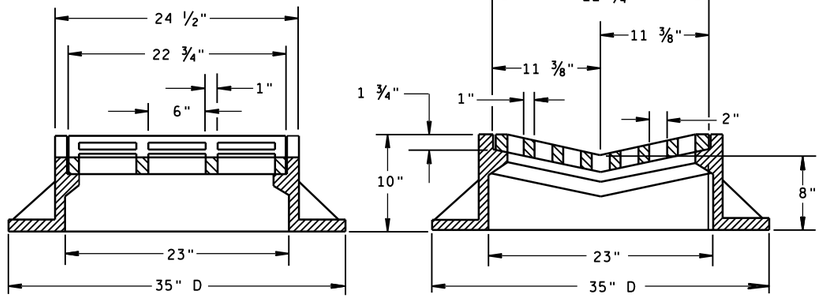
TYPE "Z"

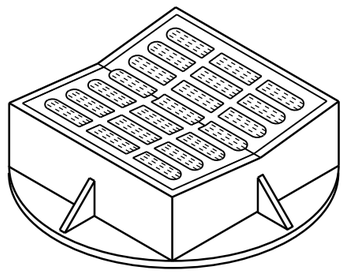


INLET COVERS TYPE A, H, A-S, H-S & Z

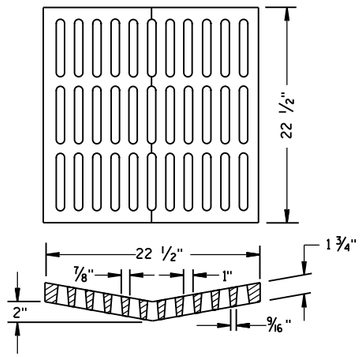
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA



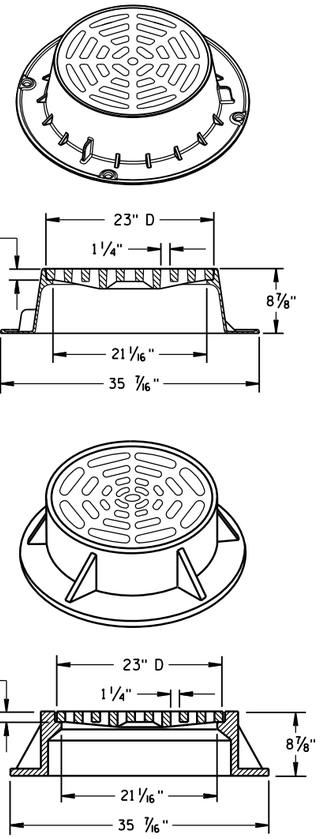


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

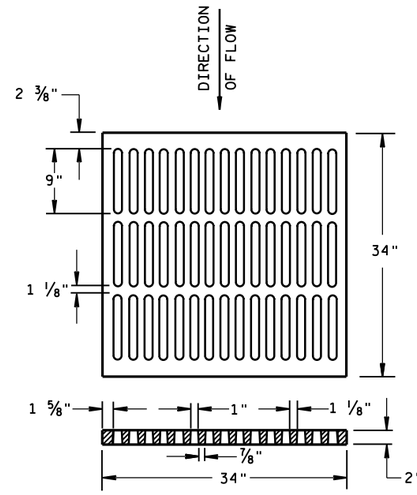
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

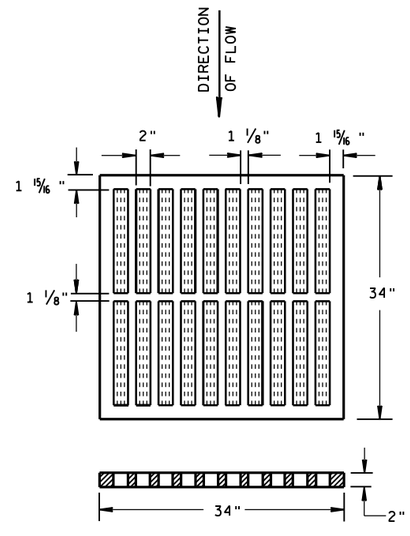
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



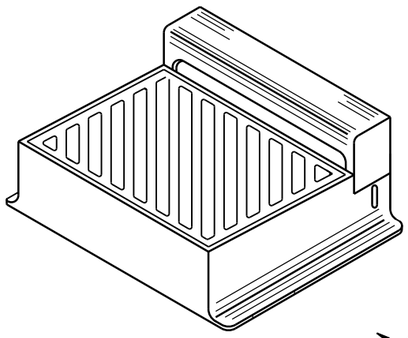
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

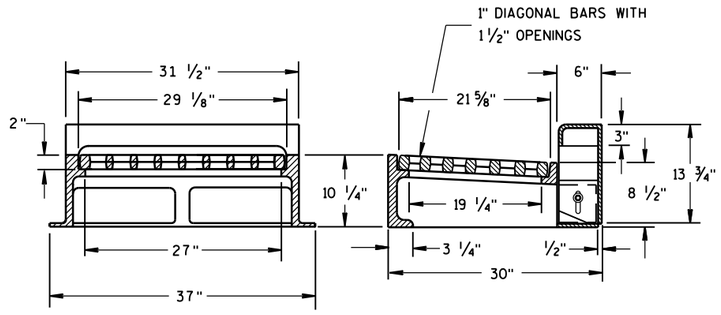


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

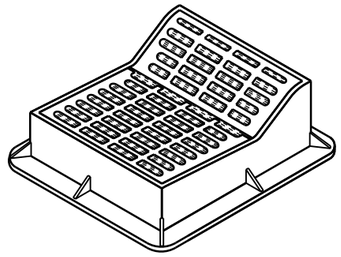
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

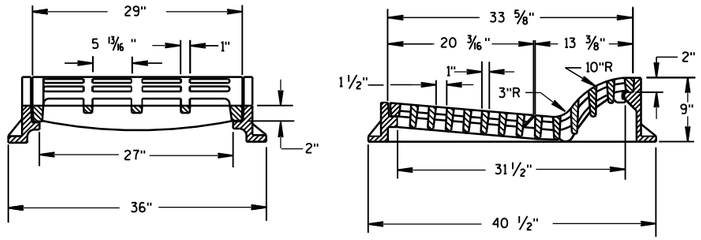
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

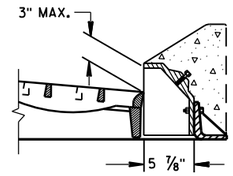
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

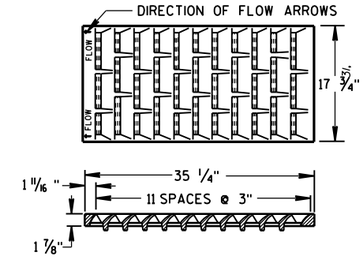
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

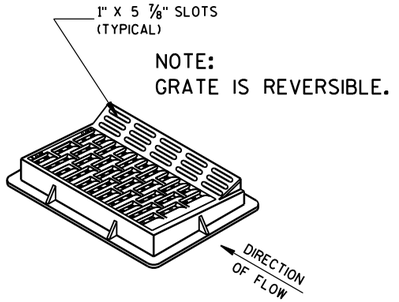
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

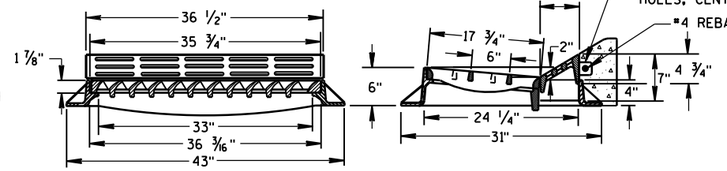
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



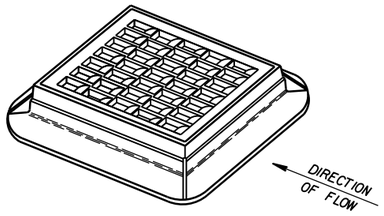


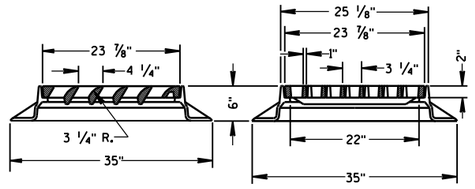


TYPE "HM"

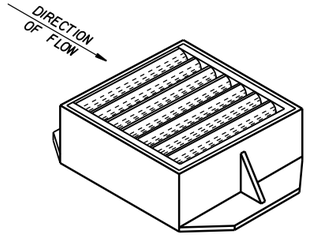
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

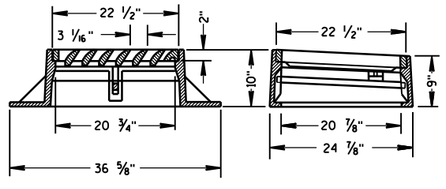
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



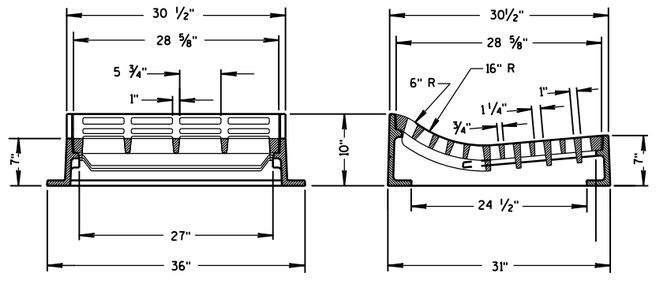


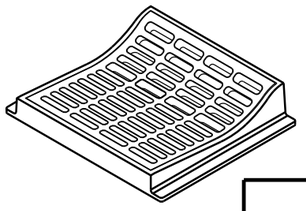
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

558

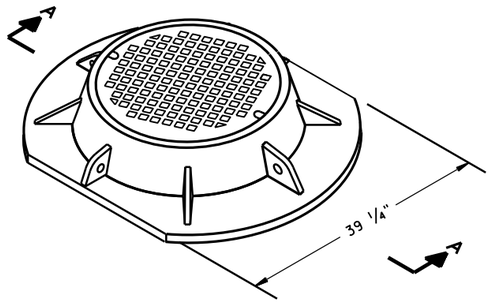
FHWA

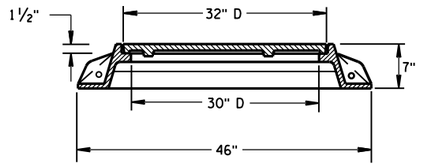
6

S.D.D. 8 A 5-19c

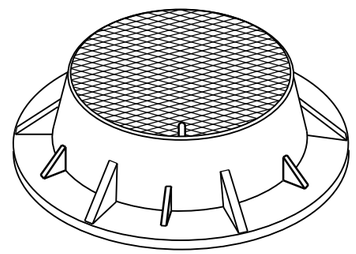
6

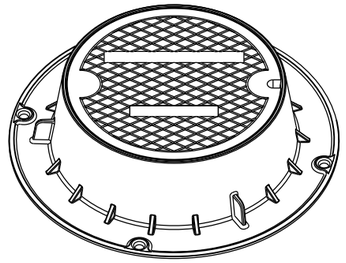
S.D.D. 8 A 5-19c

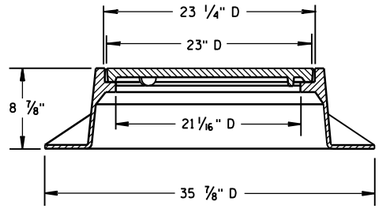


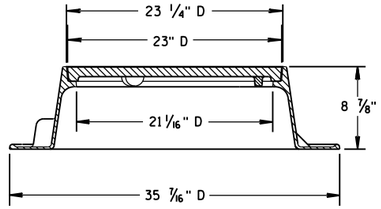


SECTION A-A
TYPE "K"









TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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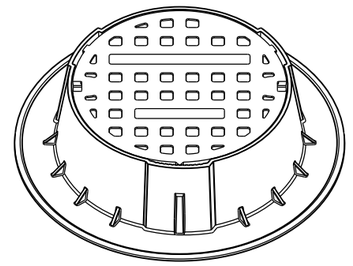
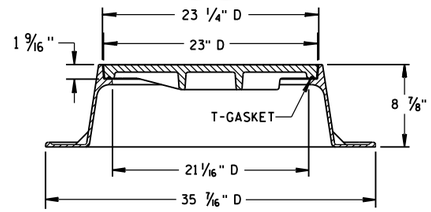
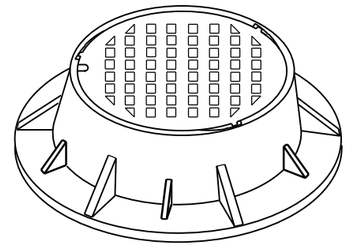
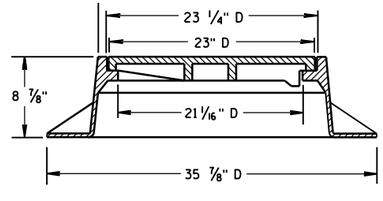
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

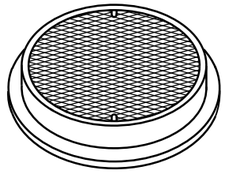


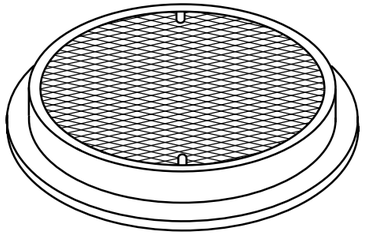


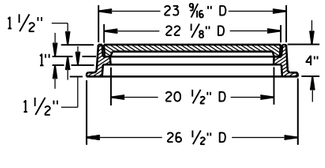




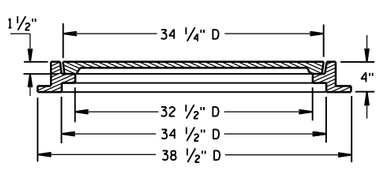
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



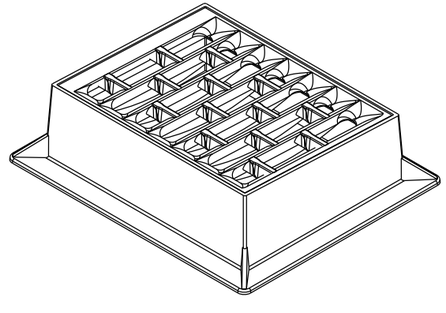


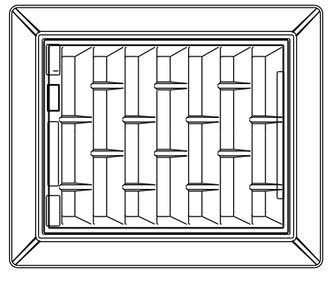


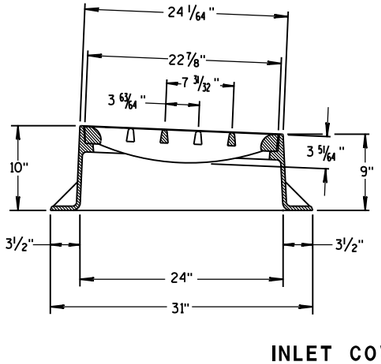
TYPE "L"

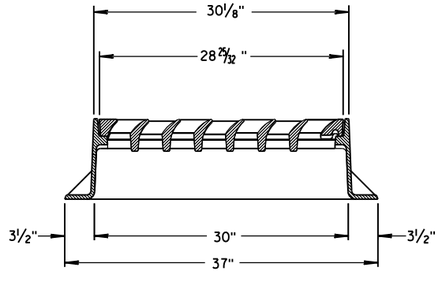


TYPE "M"









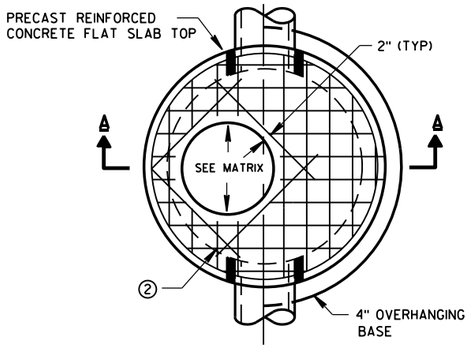
INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

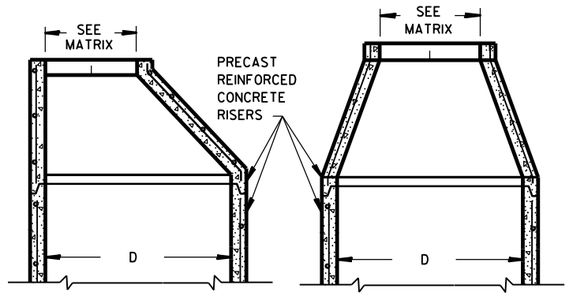
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 A 5-19d

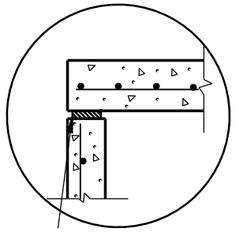


PLAN VIEW CIRCULAR OPENING

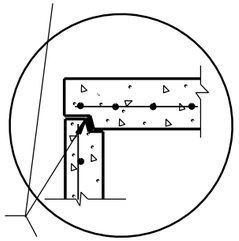


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

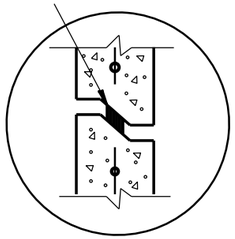


TOP WITH PLAIN END JOINT



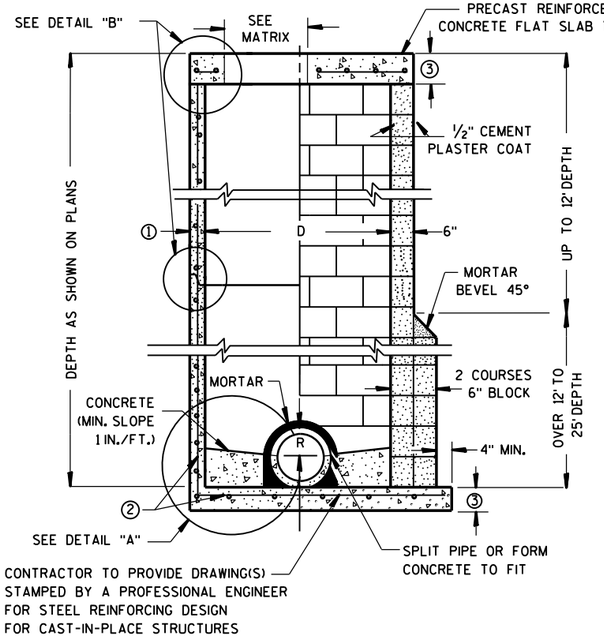
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



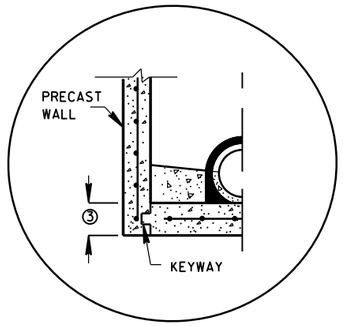
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

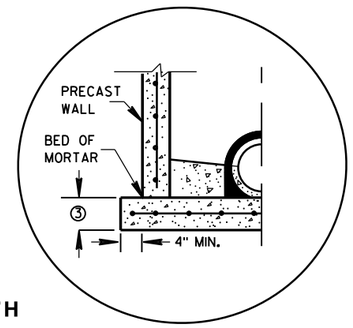


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

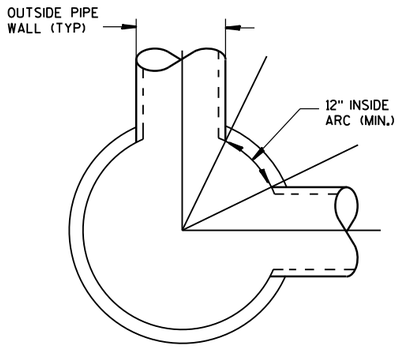


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

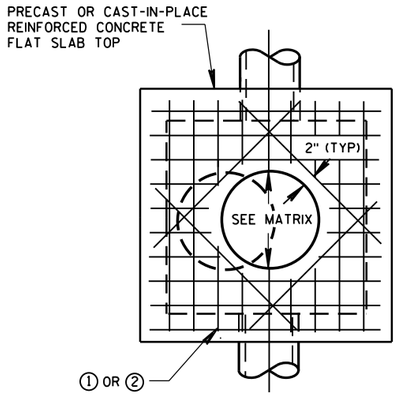
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

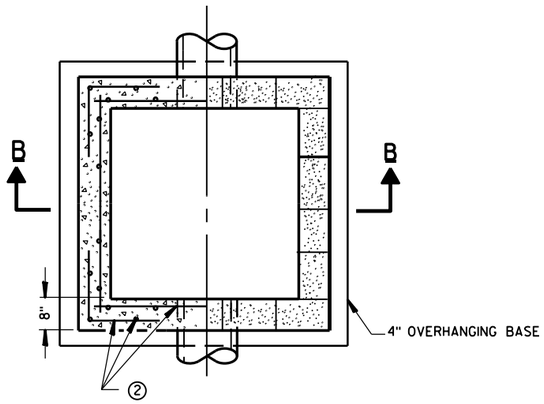
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

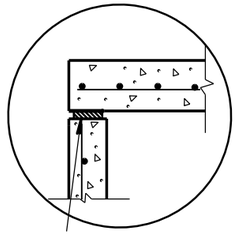
6
S.D.D. 8 B 9-1



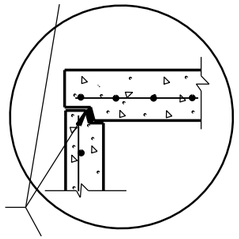
PLAN VIEW
CIRCULAR OPENING



SECTION A-A
PLAN VIEW

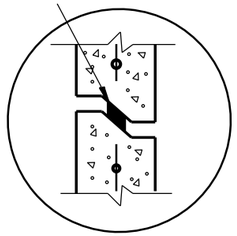


TOP WITH PLAIN END JOINT



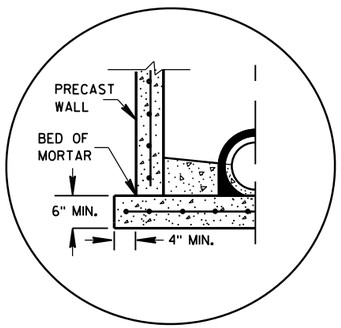
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

SECTION B-B

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN WIDTH.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "C". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

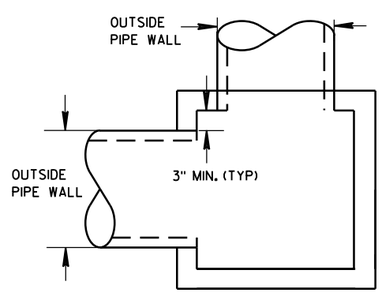
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (W) (IN)	LENGTH (L) (IN)
3X3-FT	24	24
4X4-FT	30	30
5X5-FT	42	42
6X6-FT	54	54



DETAIL "C"

SQUARE MANHOLES W/ FLAT TOP

MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT

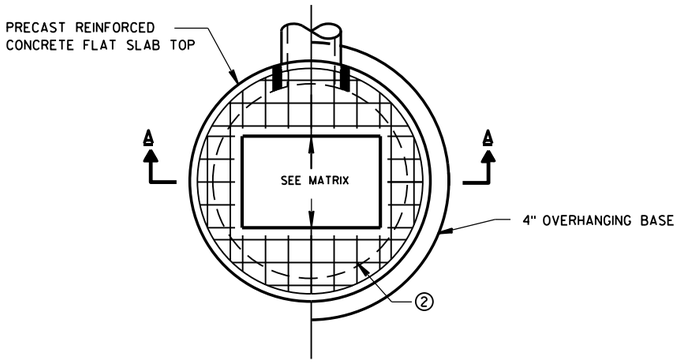
MANHOLES 3X3-FT, 4X4-FT 5X5-FT AND 6X6-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

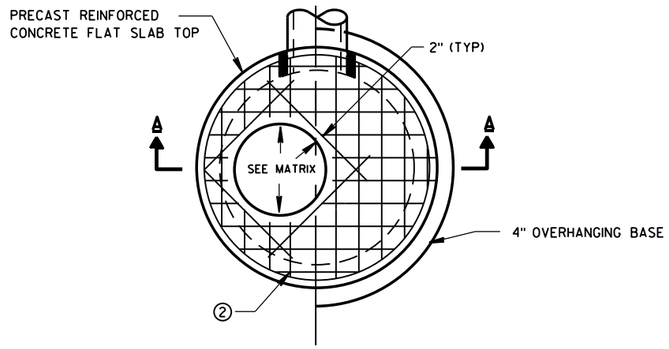
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
FHWA

6

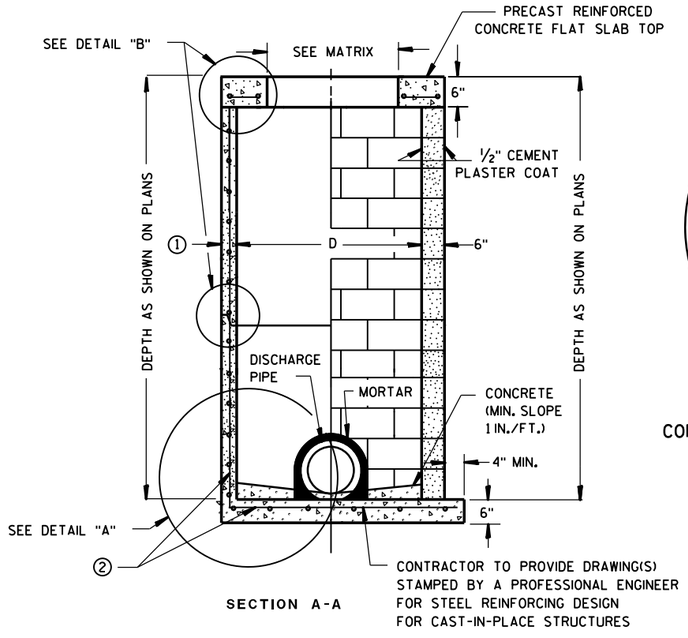
S.D.D. 8 B 10-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

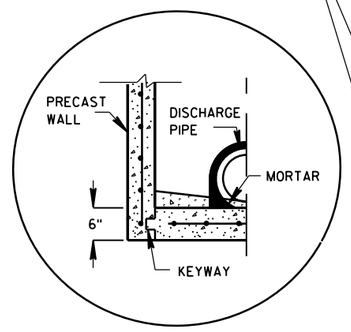


SECTION A-A

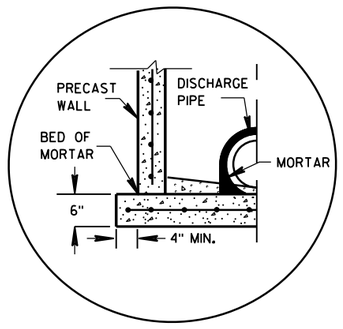
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

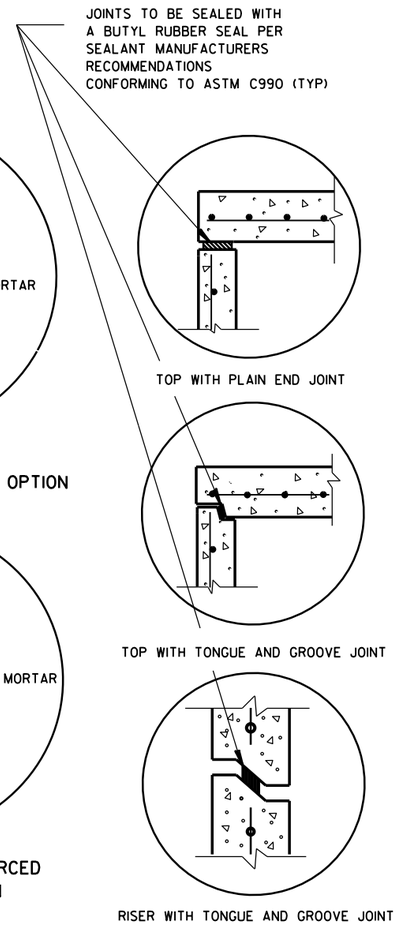


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

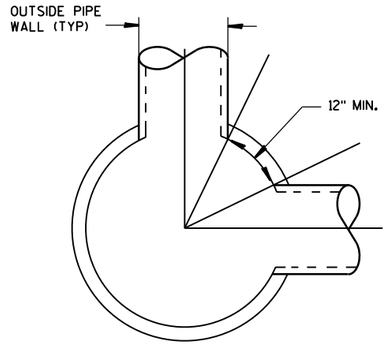
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

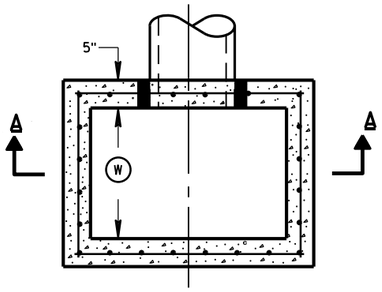
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

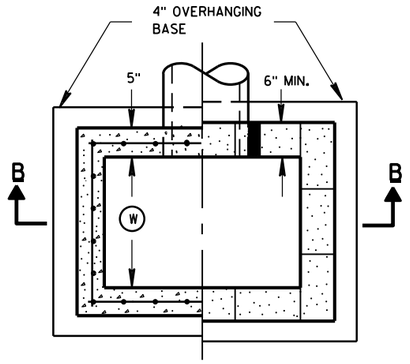
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

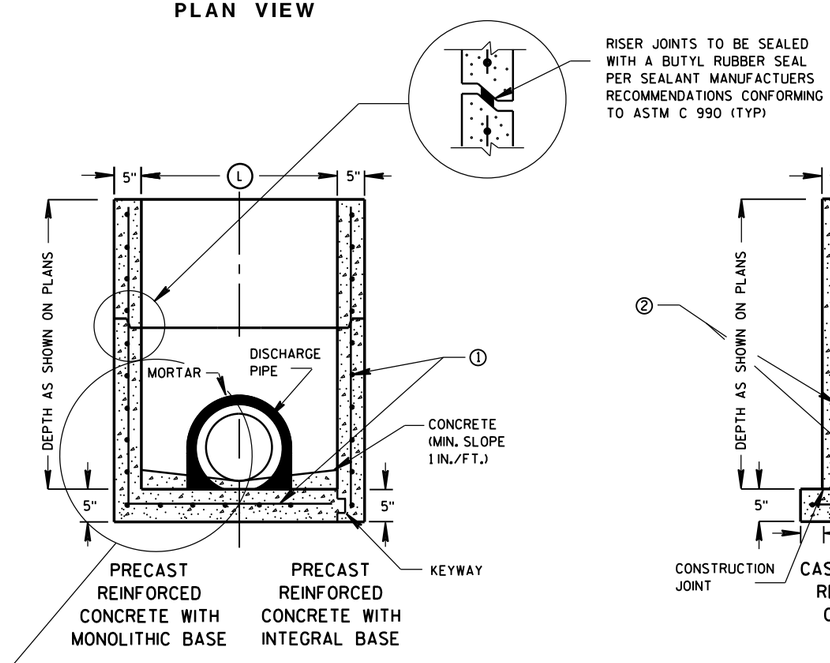
S.D.D. 8 C 6-1



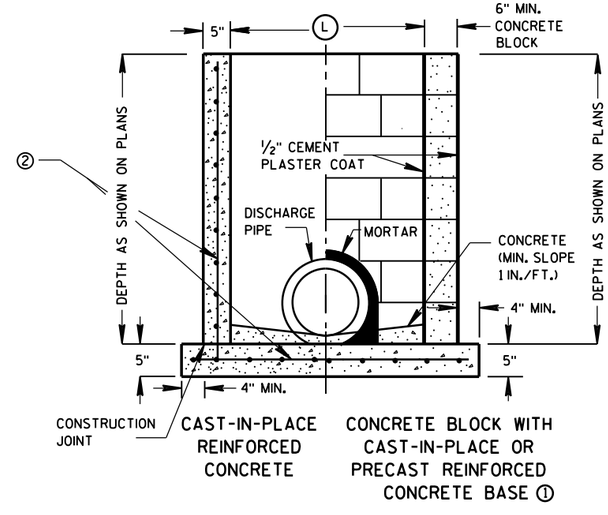
PLAN VIEW



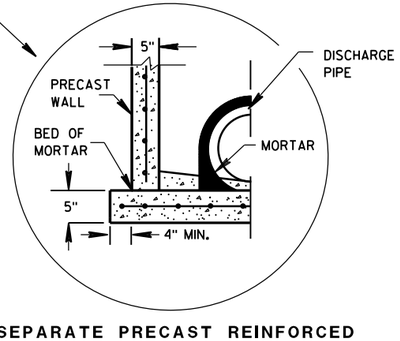
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

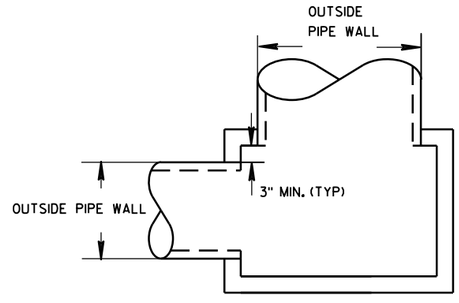
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

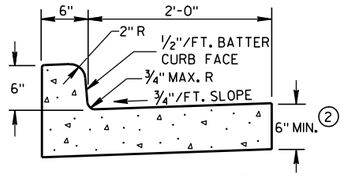
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

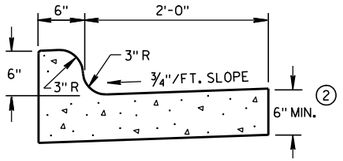
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER
FHWA

6

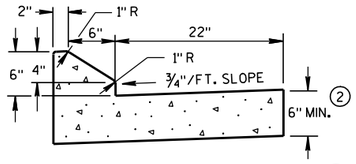
S.D.D. 8 C 7-1



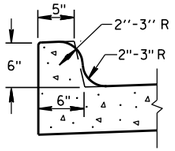
TYPES A & D (1)



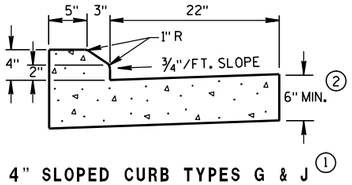
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

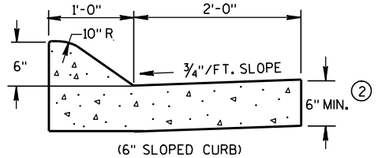


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

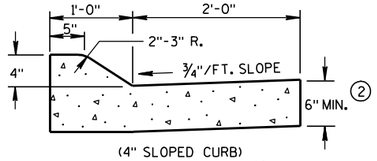


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

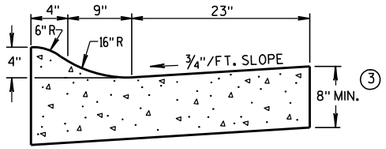


(6" SLOPED CURB)



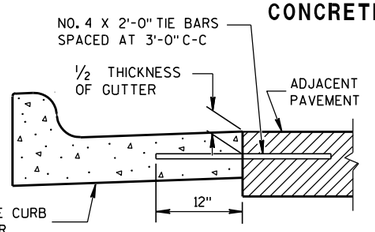
(4" SLOPED CURB)

TYPES A & D (1)

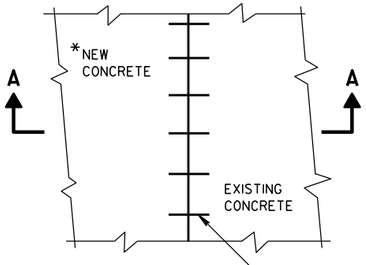


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

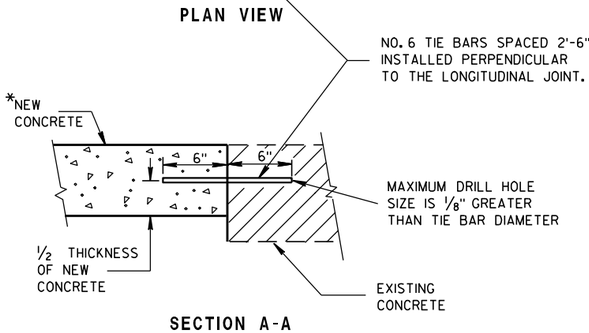


TYPICAL TIE BAR LOCATION (1)



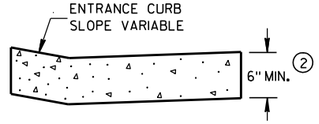
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

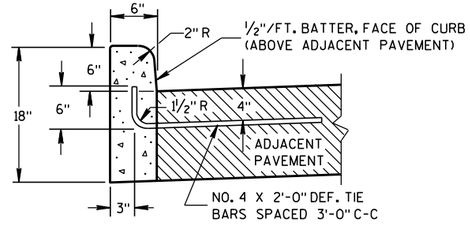


SECTION A-A

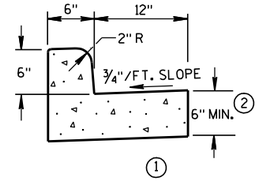
TIE BARS DRILLED INTO EXISTING PAVEMENT



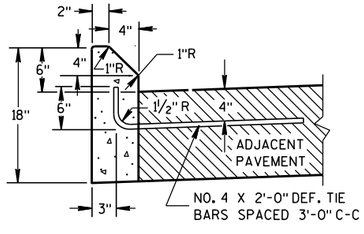
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

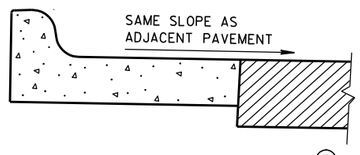


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

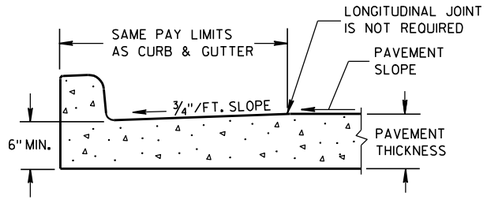
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

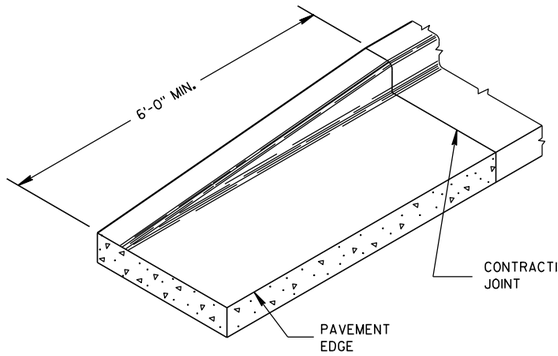
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

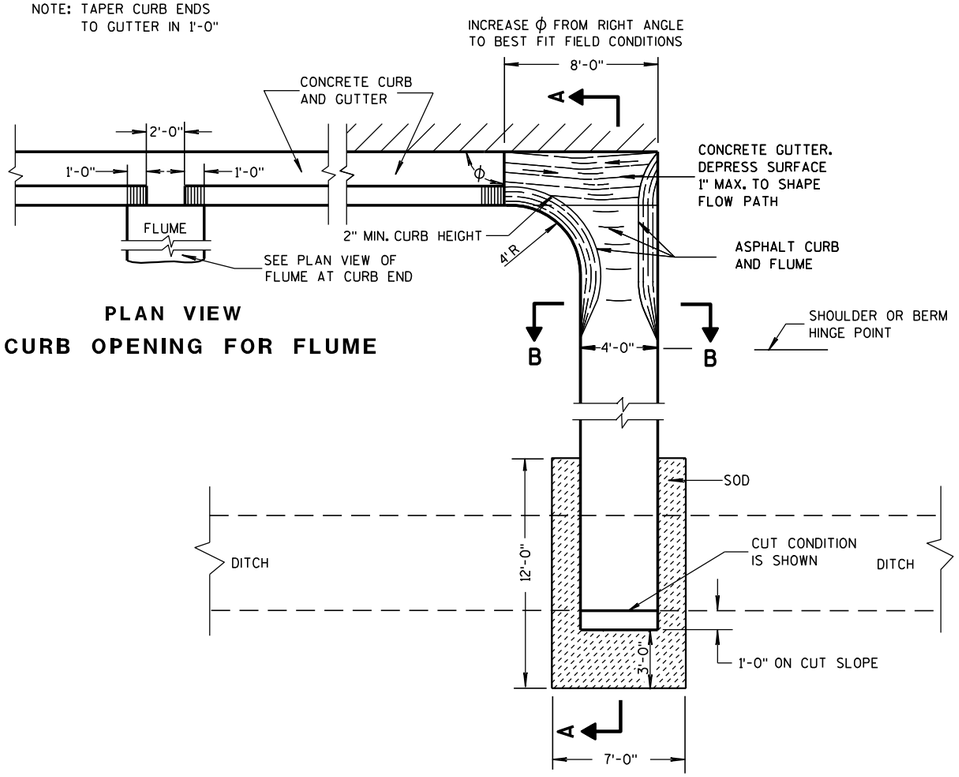
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
564
FHWA
ENT

6

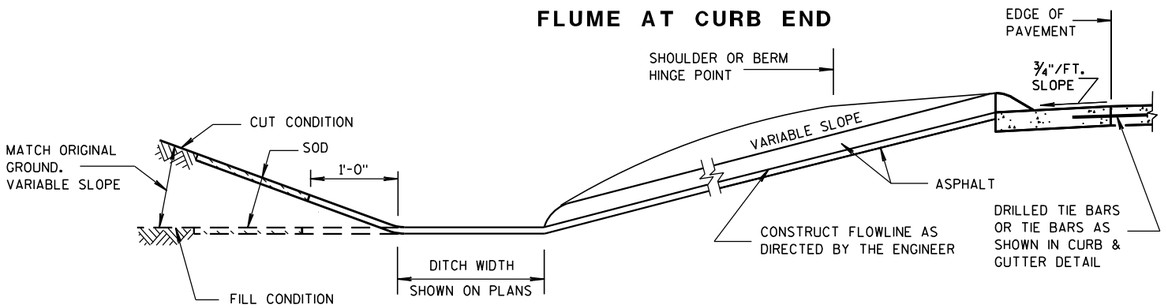
S.D.D. 8 D 1-17

ASPHALTIC FLUME

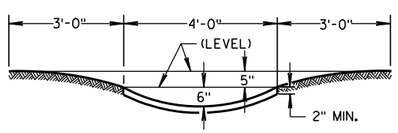


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

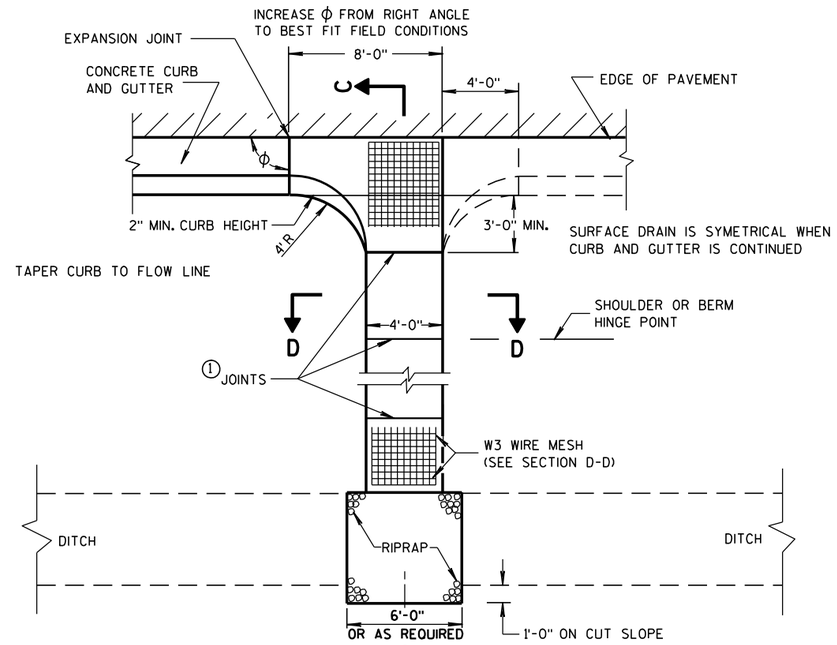
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

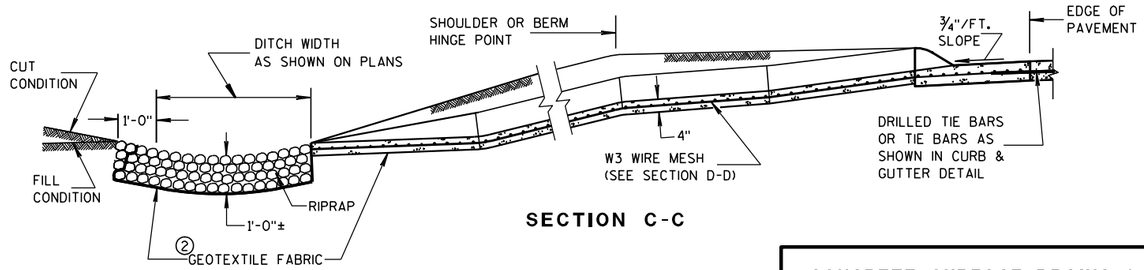
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

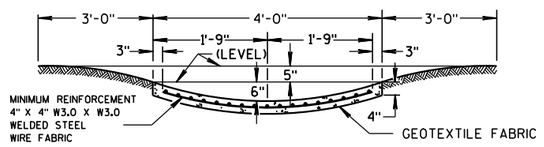
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
565
MENT

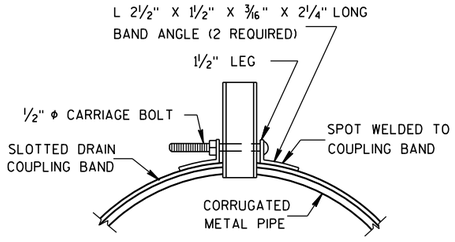
FHWA

6

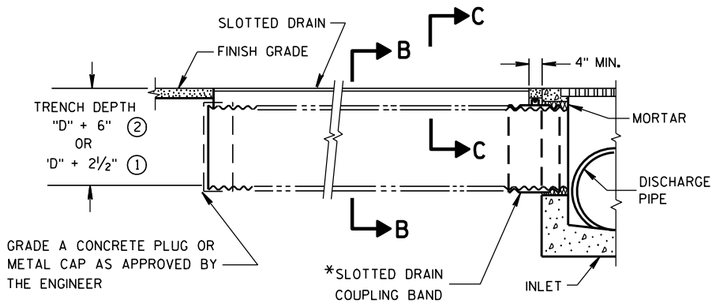
S.D.D. 8 D 4-5

6

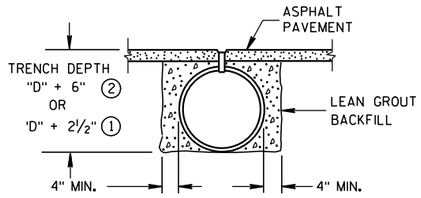
S.D.D. 8 D 4-5



SECTION A-A



SLOTTED DRAIN INSTALLATION TYPE "A"



SECTION B-B

GENERAL NOTES

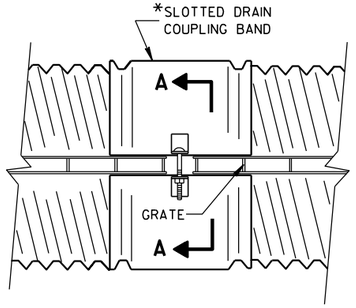
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BACKFILL MATERIAL

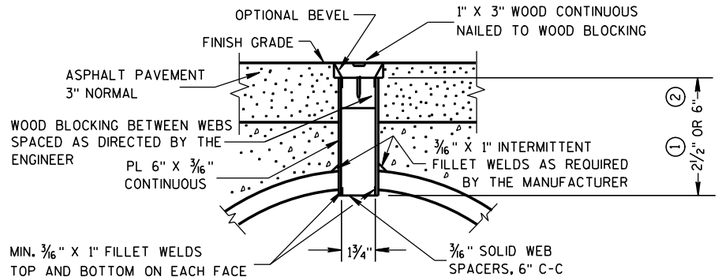
THE LEAN GROUT BACKFILL MATERIAL SHALL BE A FINE AGGREGATE, IN ACCORDANCE WITH SUBSECTION 501.3.6.3.6 OF THE STANDARD SPECIFICATIONS, MIXED WITH 150 POUNDS OF CEMENT AND APPROXIMATELY 30 GALLONS OF WATER FOR EACH 3000 POUNDS OF FINE AGGREGATE.

THE PIPE FOR THE SLOTTED DRAIN SHALL MEET AASHTO DESIGNATION M-36, AND THE GRATE ASSEMBLIES SHALL BE MADE FROM STRUCTURAL STEEL SUITABLY WELDED TO FORM THE OPEN SLOT AND HOT-DIP GALVANIZED TO MEET THE PROVISIONS OF AASHTO DESIGNATION M-111.

NORMAL PIPE SIZES ARE 12-INCH THROUGH 24-INCH DIAMETER IN 0.064 INCH THICKNESS, AND 30-INCH DIAMETER PIPE IN 0.079 INCH THICKNESS.

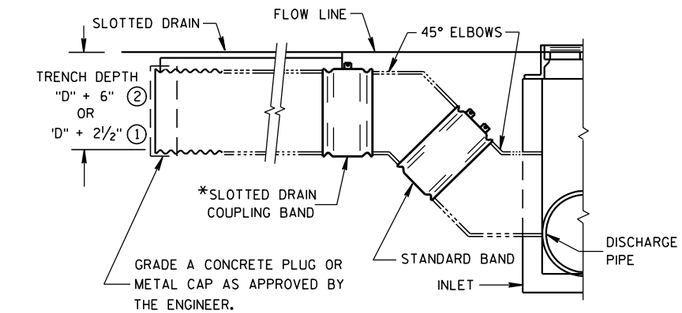


PLAN VIEW



SECTION C-C

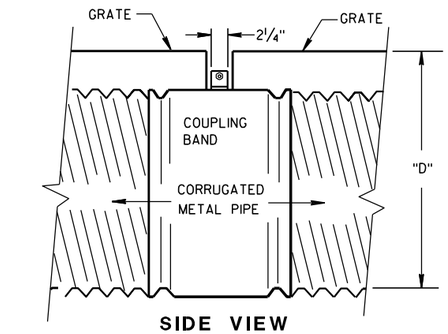
GRATE SLOT DETAIL



SLOTTED DRAIN INSTALLATION TYPE "B"

NOTE:

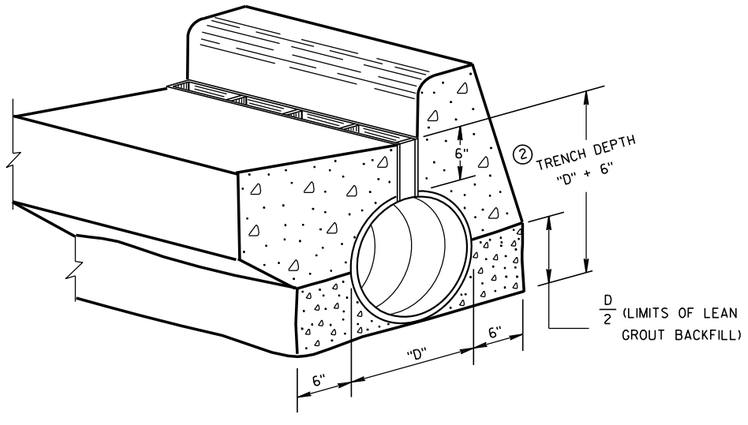
TO PREVENT "FLOATING" OF THE SLOTTED DRAIN DURING BACKFILL OPERATIONS PROVIDE ADEQUATE WEDGES, OR POUR THE LEAN GROUT ON TOP OF THE PLUGGED SLOT ALLOWING IT TO SLOUGH TO THE SIDES OF THE PIPE. THIS WILL PROVIDE ENOUGH WEIGHT ON TOP TO KEEP THE PIPE FROM FLOATING.



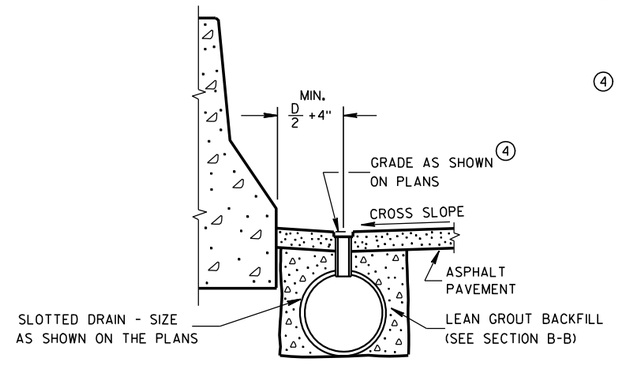
SIDE VIEW

*TYPICAL COUPLING BAND FOR SLOTTED DRAIN

(ALTERNATES PERMITTED AS APPROVED BY THE ENGINEER)



SLOTTED DRAIN INSTALLATION IN FLOW LINE OF CURB & GUTTER TYPE "C"



SLOTTED DRAIN INSTALLATION AT MEDIAN BARRIER TYPE "D"

① 2½" NORMAL GRATE DEPTH.

② 6" SPECIAL GRATE DEPTH, WHEN SPECIFIED ON THE PLANS.

③ FOR SCREEDING DIRECTLY OVER THE SLOTTED DRAIN WITH ASPHALT PAVER. FOR CONCRETE SURFACE USE 3" WIDE TAPE OVER THE SLOT TO KEEP MATERIAL OUT OF THE PIPE.

④ WHEN THE SURFACE IS CONCRETE PAVEMENT THE GRADE AS SHOWN ON THE PLANS WILL BE FLUSH WITH THE TOP OF THE SLOTTED DRAIN.

SLOTTED CORRUGATED METAL PIPE SURFACE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/30/79 — DATE

/S/ D. L. Str--- — CHIEF ROADWAY DEVELOP--- ENGINEER

FHWA

6

S.D.D. 8 D 13-1

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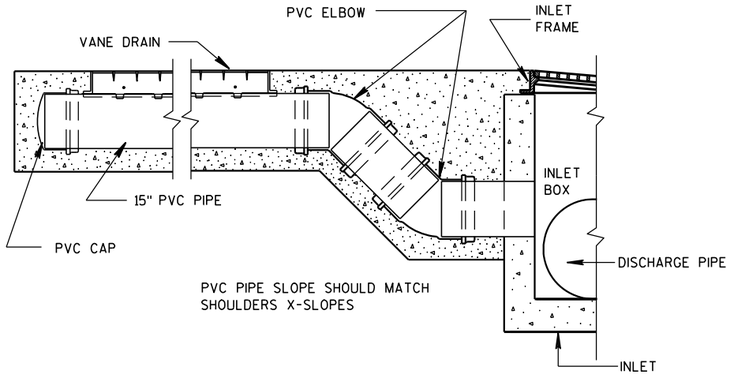
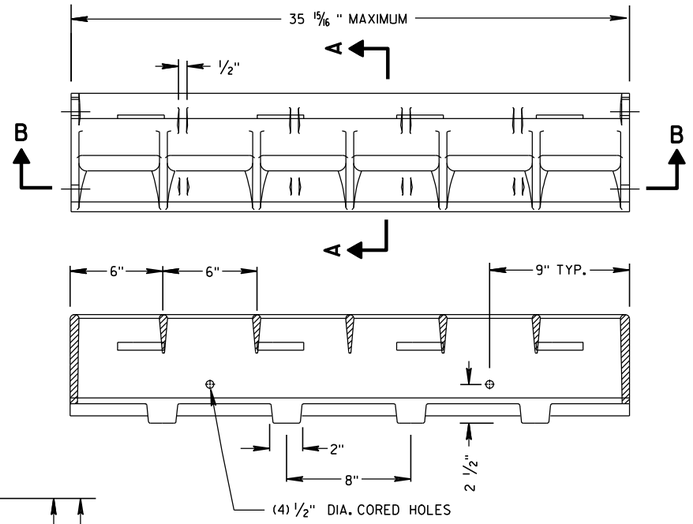
S.D.D. 13 D 13-1



TYPICAL SLOTTED VANE DRAIN CONFIGURATION



SECTION B-B

SLOTTED VANE DRAIN DETAIL

(APPROXIMATE WEIGHT 87 LBS.)

GENERAL NOTES

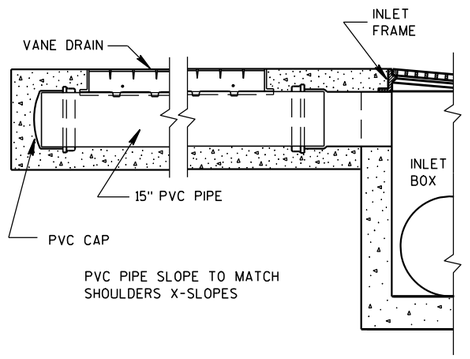
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ENCASEMENT: THE ENCASING MATERIAL AROUND THE PIPE SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF 501.4.3.3 FOR CONCRETE PAVEMENT.

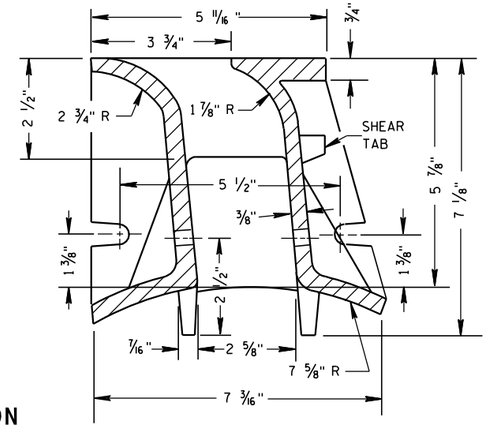
THE PIPE USED SHALL BE A 15" DIAMETER SDR-35 POLYVINYL CHLORIDE SEWER PIPE. THE PIPE SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN STANDARD SPECIFICATION 612.2.6

SURFACE DRAIN: BEFORE PAVING OVER THE DRAIN, COVER THE TOP OF THE DRAIN TO KEEP MATERIAL OUT OF THE PIPE. THE FINISHED GRADE SHOULD BE FLUSH WITH THE TOP OF THE DRAIN.

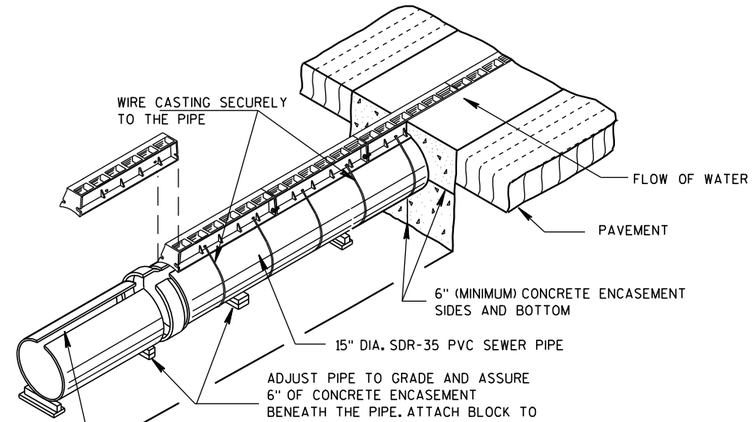
THE ANGLE OF THE DRAIN TO THE FLOW OF WATER SHOULD BE AS CLOSE TO 90° AS POSSIBLE.



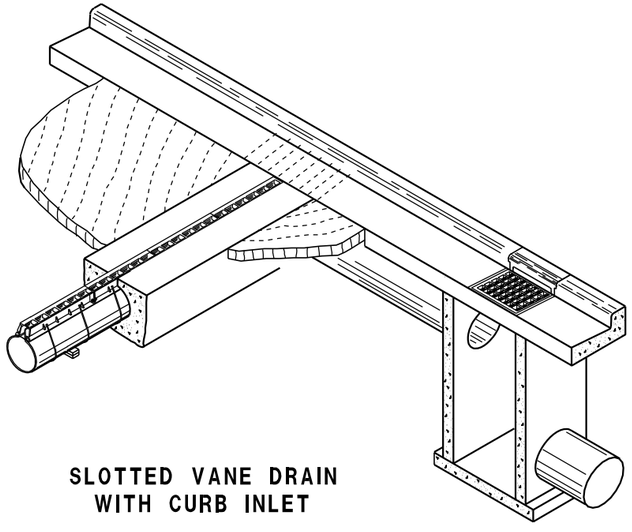
TYPICAL SLOTTED VANE DRAIN CONFIGURATION



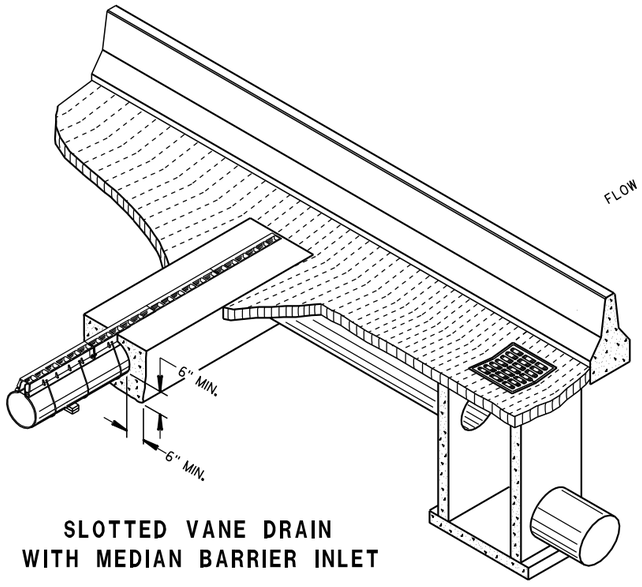
SECTION A-A



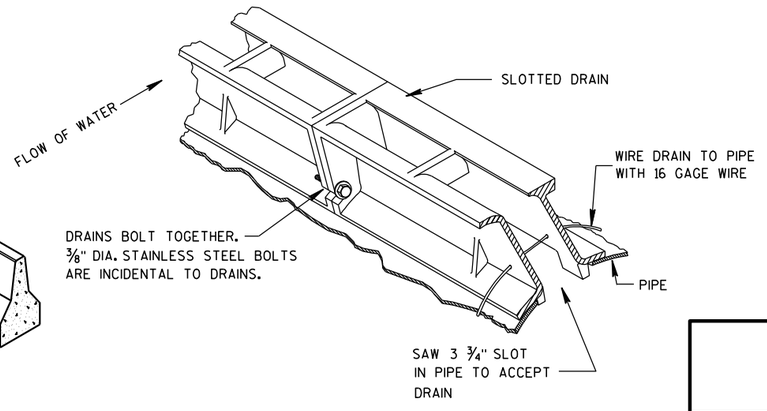
INSTALLATION OF SLOTTED VANE DRAIN



SLOTTED VANE DRAIN WITH CURB INLET



SLOTTED VANE DRAIN WITH MEDIAN BARRIER INLET



ISOMETRIC VIEW

SLOTTED VANE DRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/13/00 DATE

/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 D 14-1

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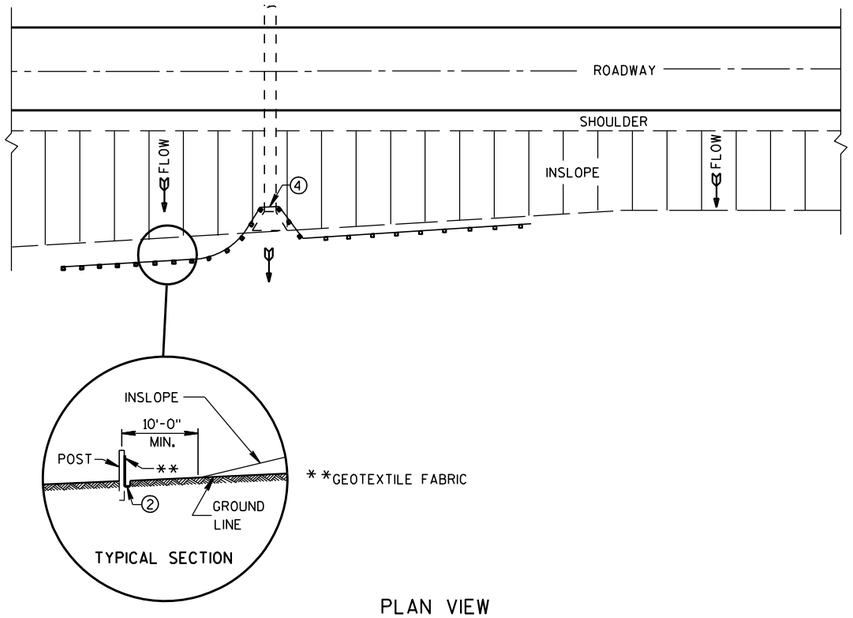
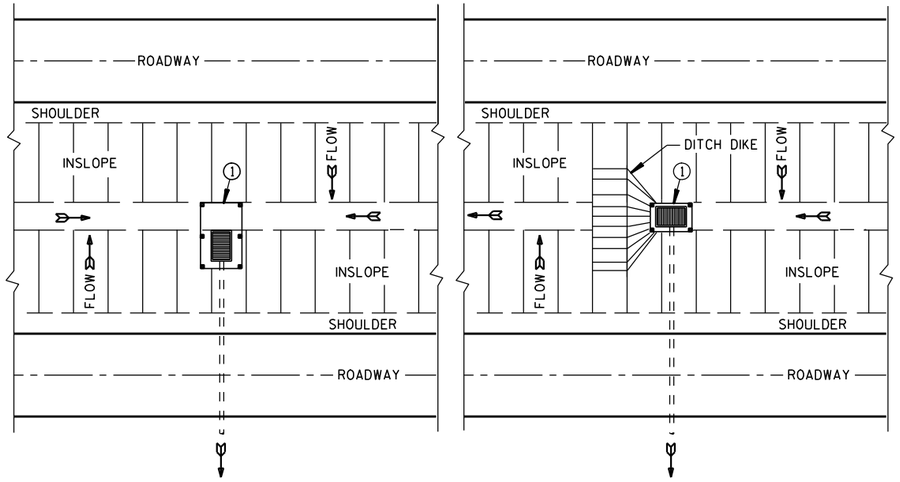


PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



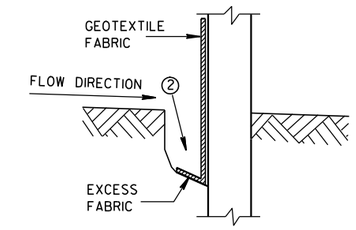
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

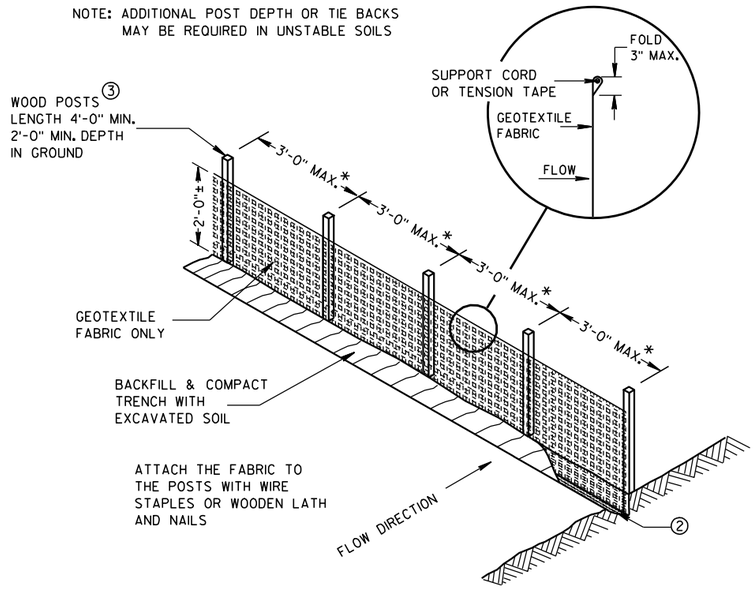
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

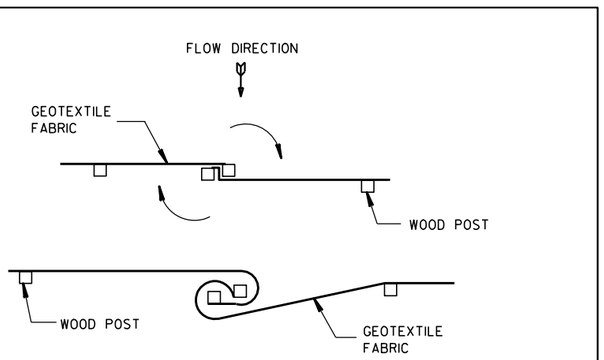
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



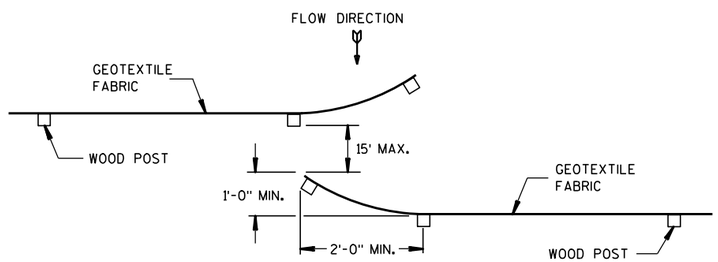
TRENCH DETAIL



SILT FENCE

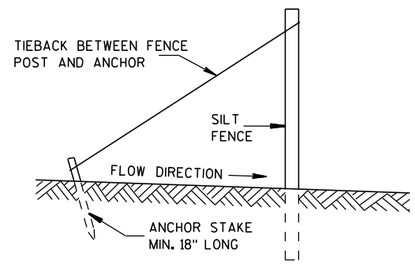


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

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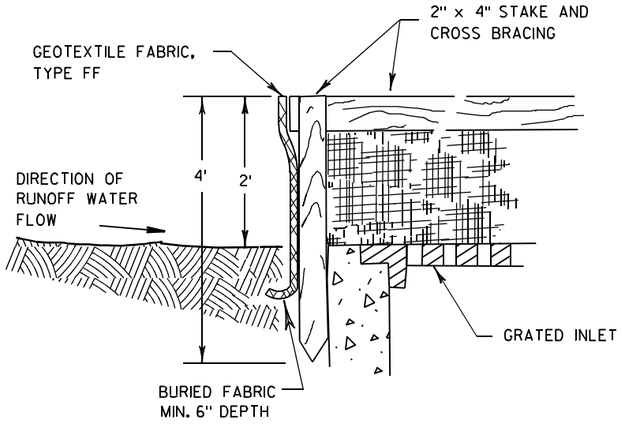
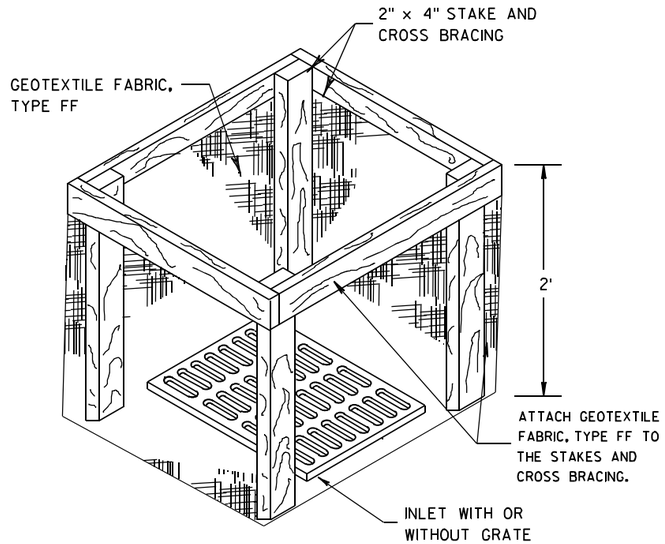
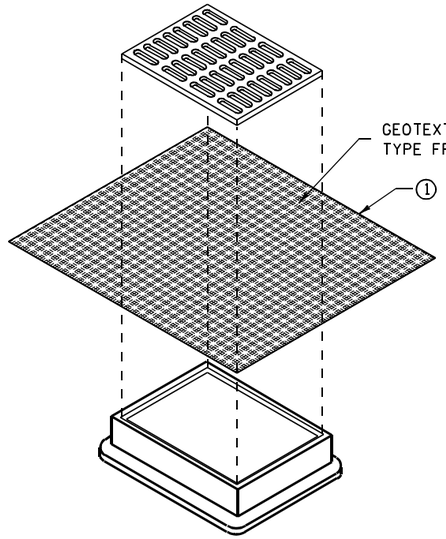
S.D.D. 8 E 9-6



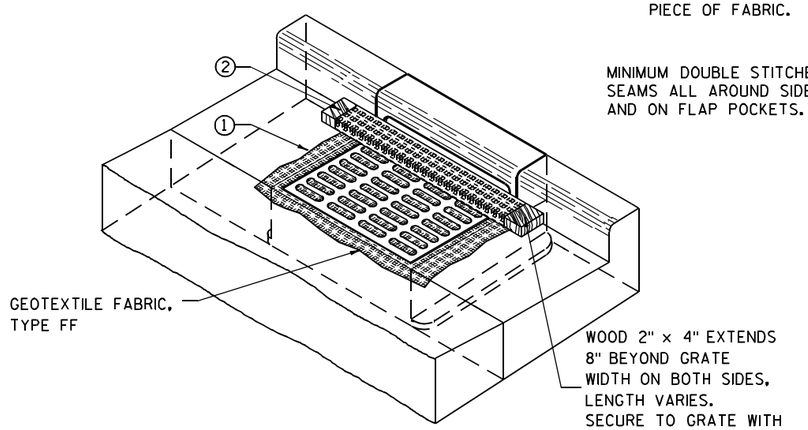


INLET PROTECTION, TYPE A

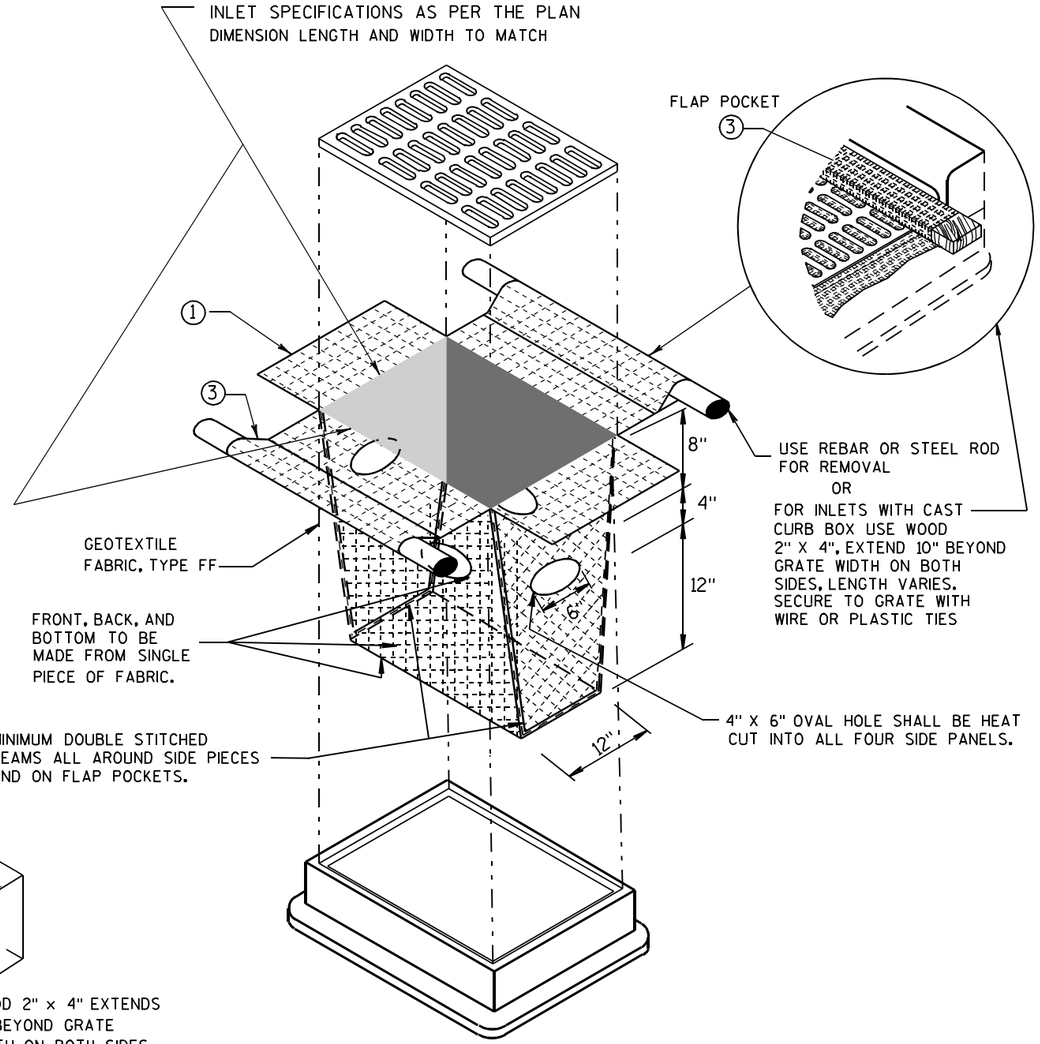


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 10-2

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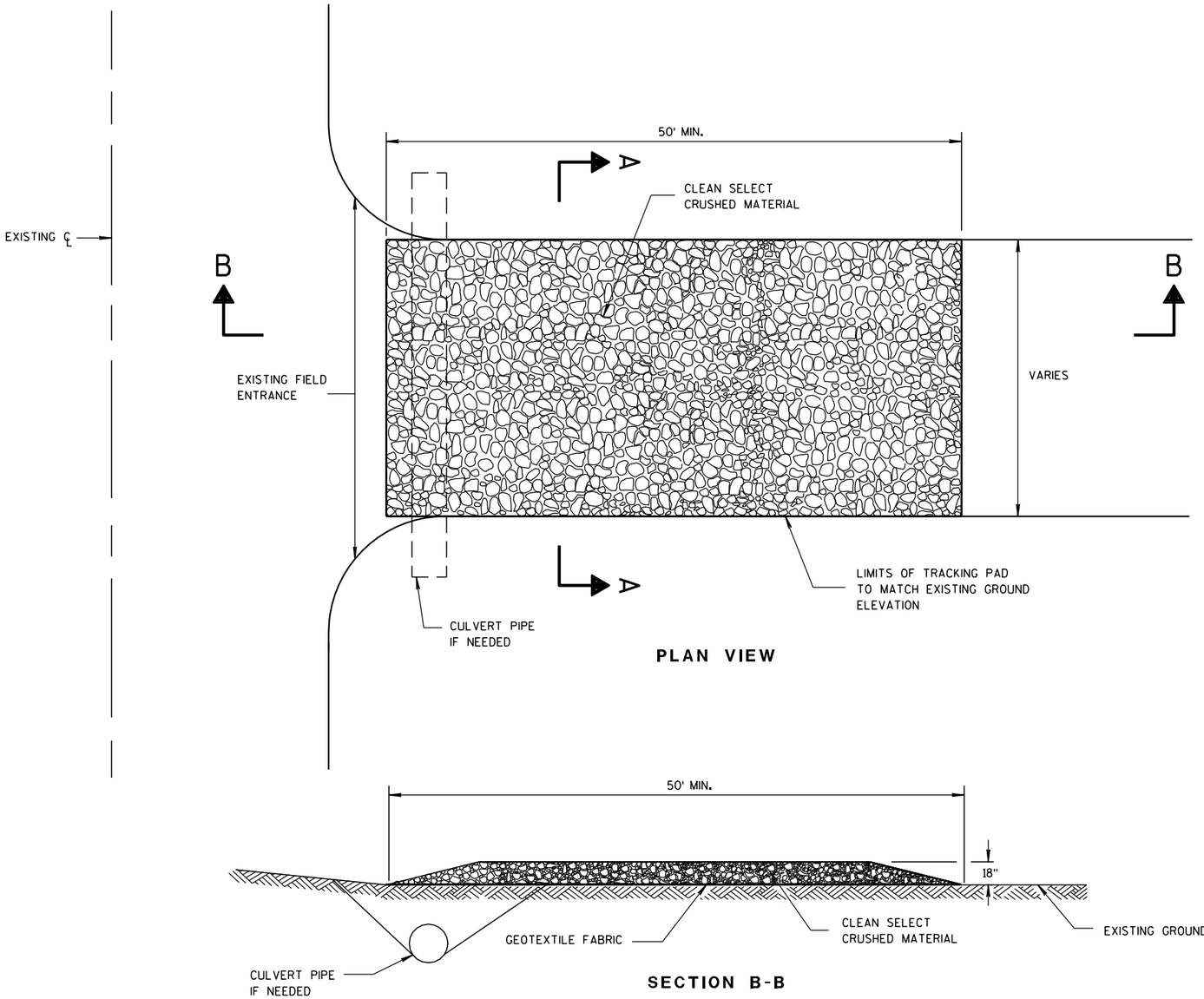
S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

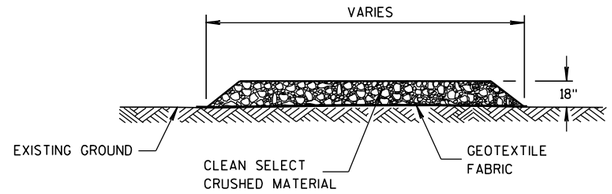
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER	ENT

FHWA

570

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

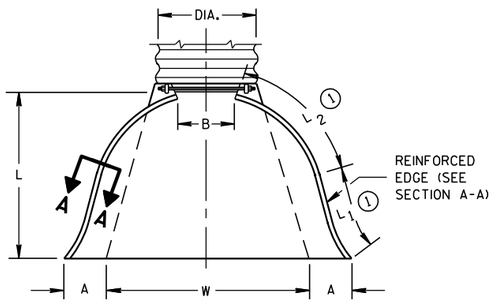
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

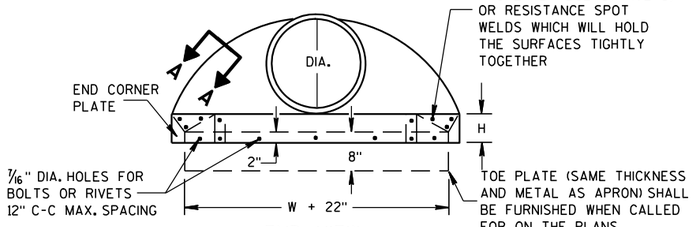
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

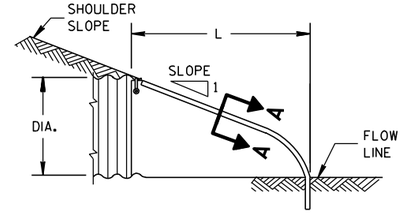
*MINIMUM
**MAXIMUM



PLAN VIEW

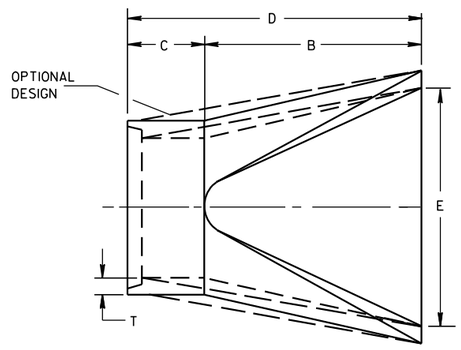


END VIEW

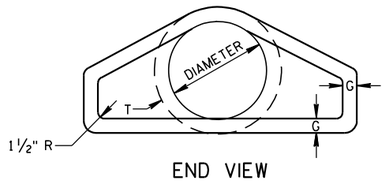


SIDE ELEVATION

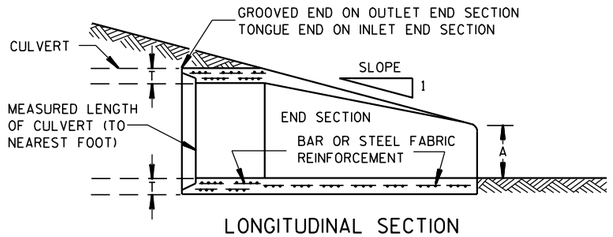
METAL ENDWALLS



PLAN

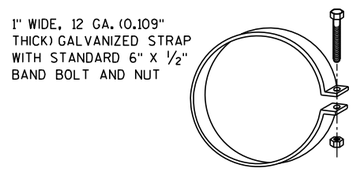


END VIEW



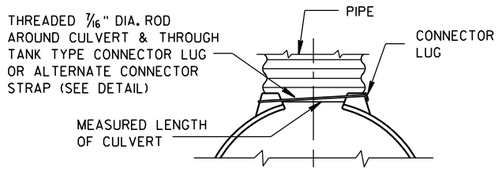
LONGITUDINAL SECTION

CONCRETE ENDWALLS

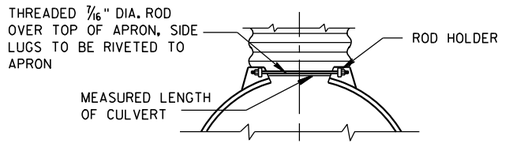


ALTERNATE FOR TYPE 1 CONNECTION

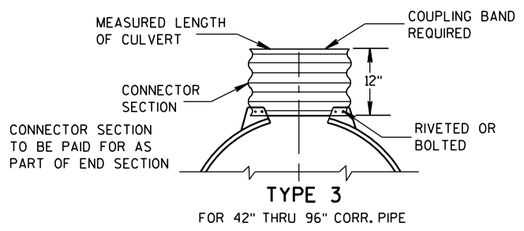
END SECTION CONNECTOR STRAP



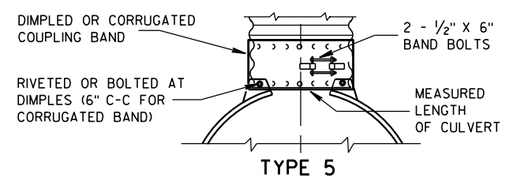
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

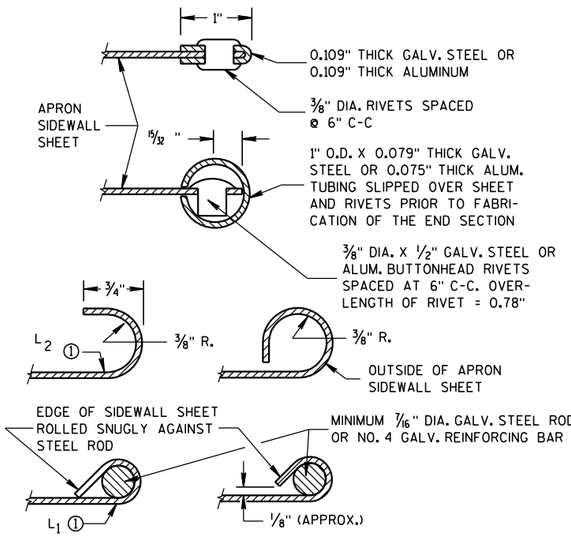
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

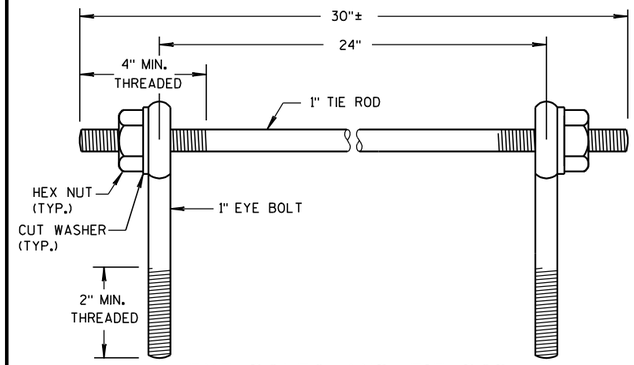
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

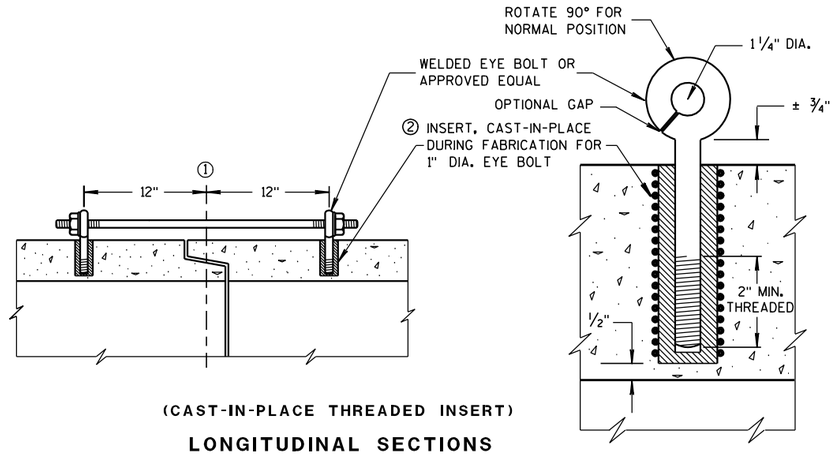
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

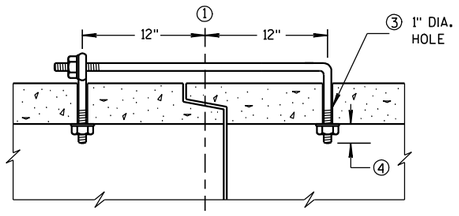
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

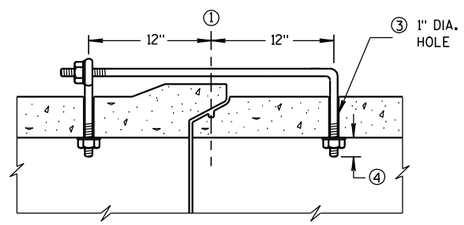
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

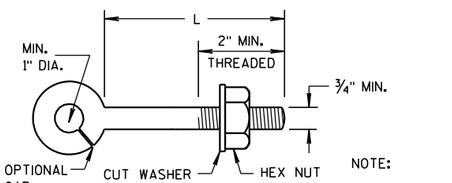


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

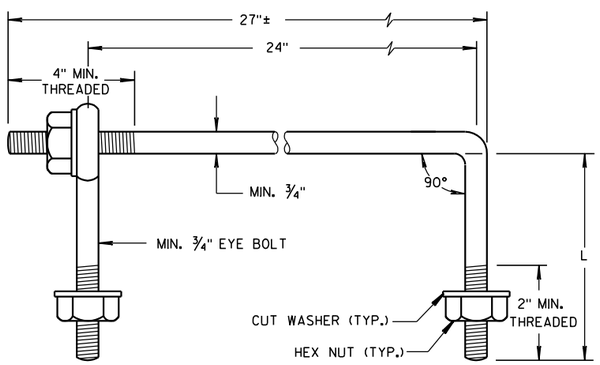
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

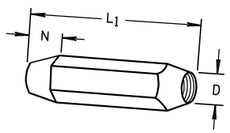
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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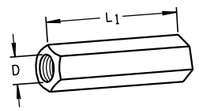
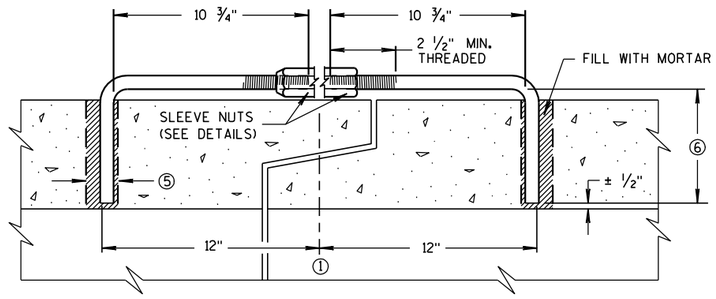


PLAIN

RIGHT AND LEFT THREADS

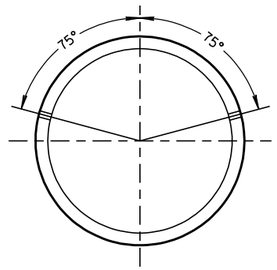
SLEEVE NUTS



LONGITUDINAL SECTION

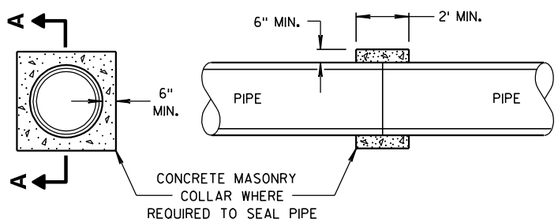
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
572

FHWA

6

S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

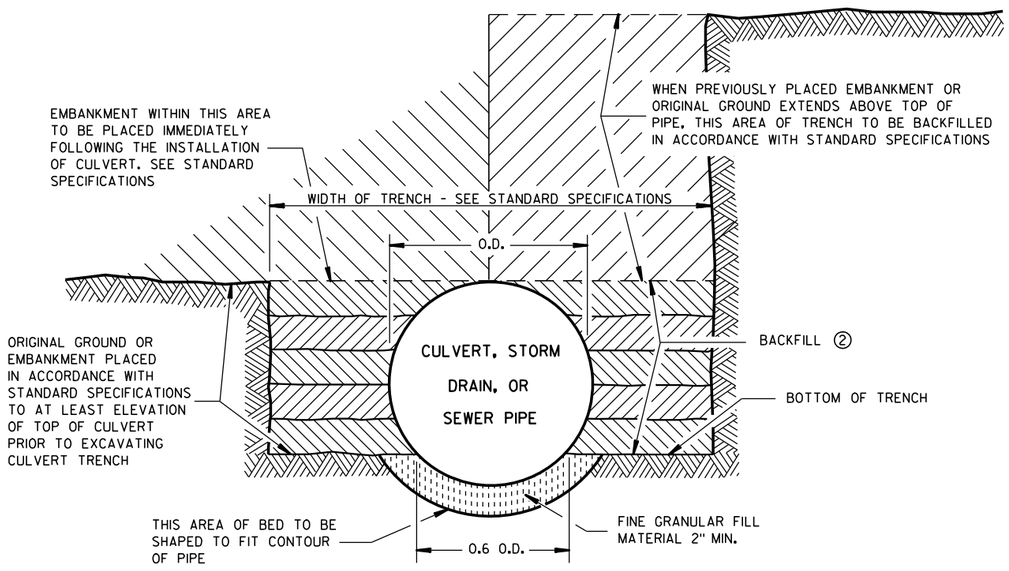
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

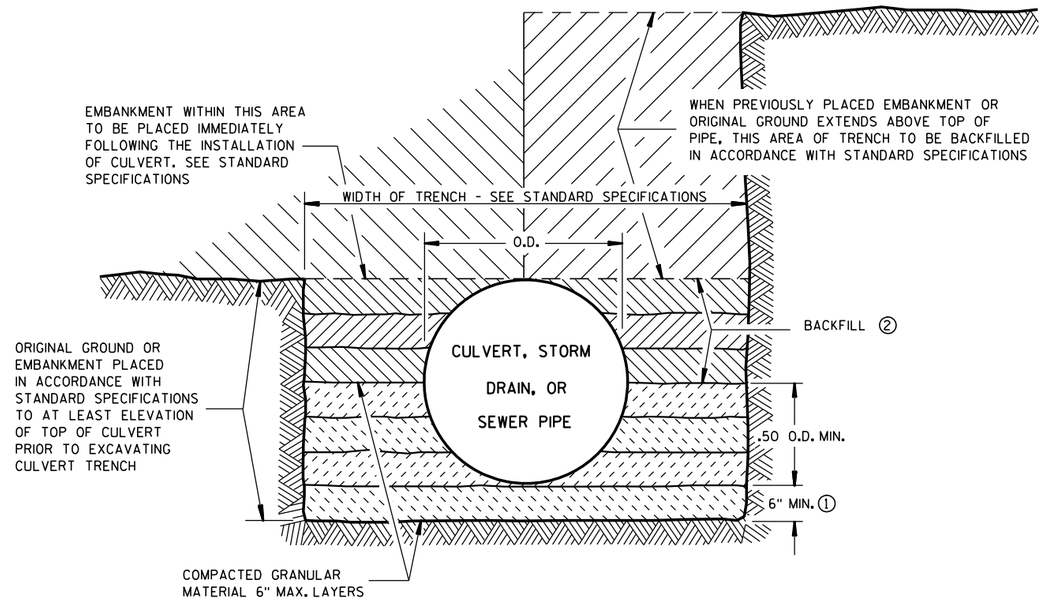
THE SHAPED SUBGRADE WITH GRANULAR FOUNDATION IS AN EQUAL ALTERNATE TO THE GRANULAR FOUNDATION EXCEPT WHERE ROCK IS ENCOUNTERED.

① WHERE ROCK, HARD PAN OR FRAGMENTED MATERIAL IS ENCOUNTERED, THE TRENCH SHALL BE EXCAVATED BELOW THE BOTTOM OF THE PIPE AN AMOUNT EQUAL TO ½ INCH PER FOOT OF PROPOSED EMBANKMENT ABOVE THE TOP OF THE PIPE, BUT NOT LESS THAN 6 INCHES.

② TRENCH SHALL BE BACKFILLED AS REQUIRED BY STANDARD SPECIFICATIONS; SECTION 520 FOR PIPE CULVERTS AND SECTION 607 FOR STORM SEWERS.



SHAPED SUBGRADE WITH GRANULAR FOUNDATION



GRANULAR FOUNDATION

CLASS "B" BEDDING

CLASS "B" BEDDING FOR CULVERT PIPE OR STORM SEWER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
4/7/83 DATE	/S/ D. L. Strand STATE DESIGN ENGINEER
FHWA	573 HWYS

6

S.D.D. 8 F 5-1

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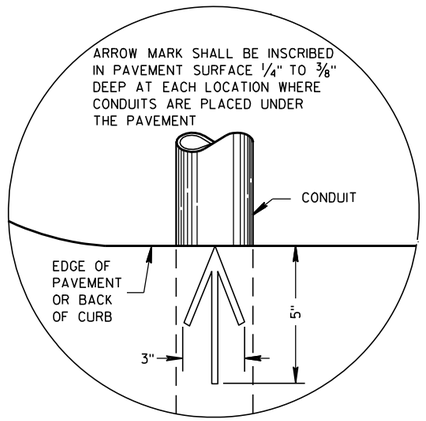
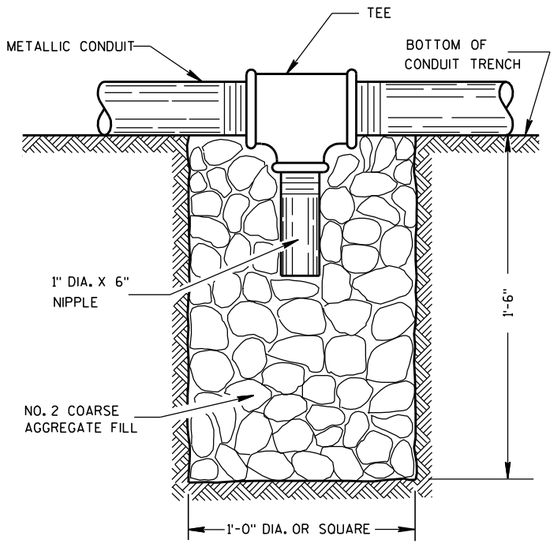
S.D.D. 8 F 5-1



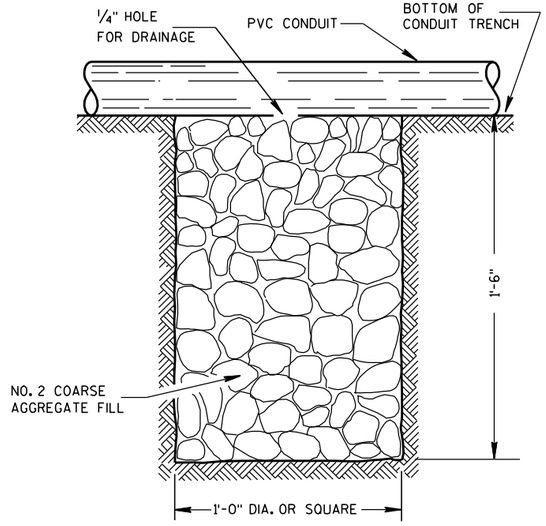
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

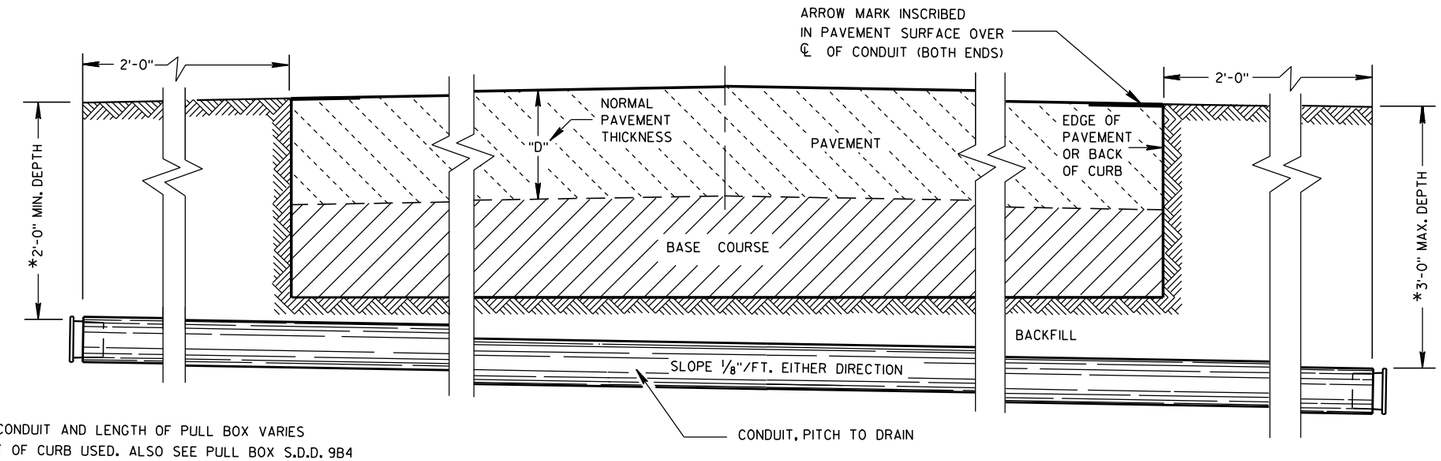
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

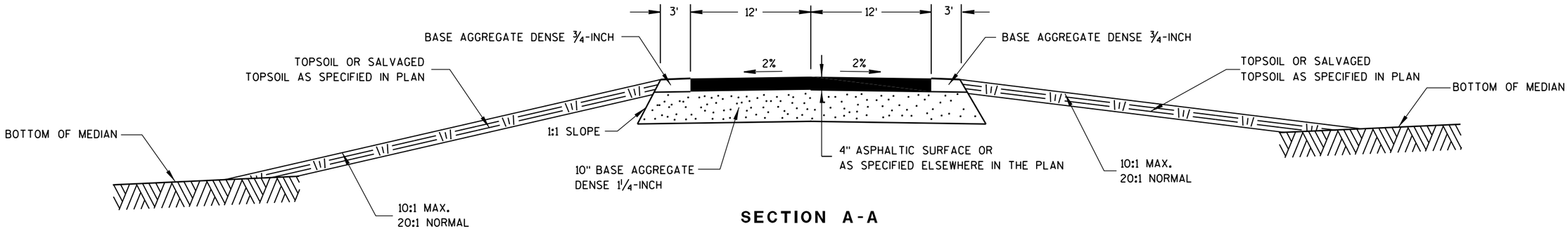
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

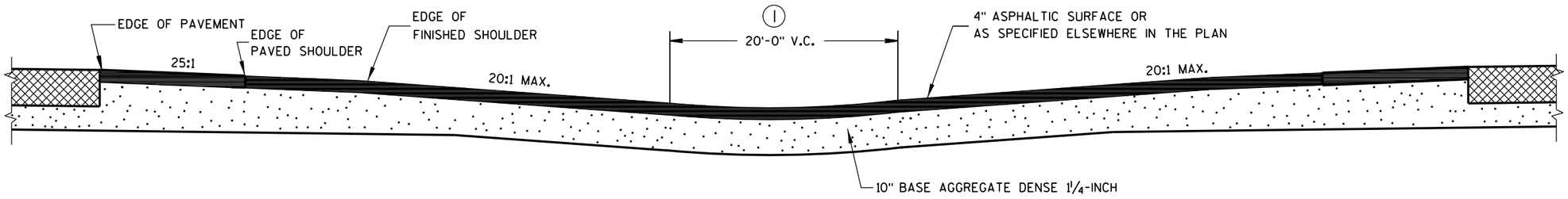
10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI 574 HWYS

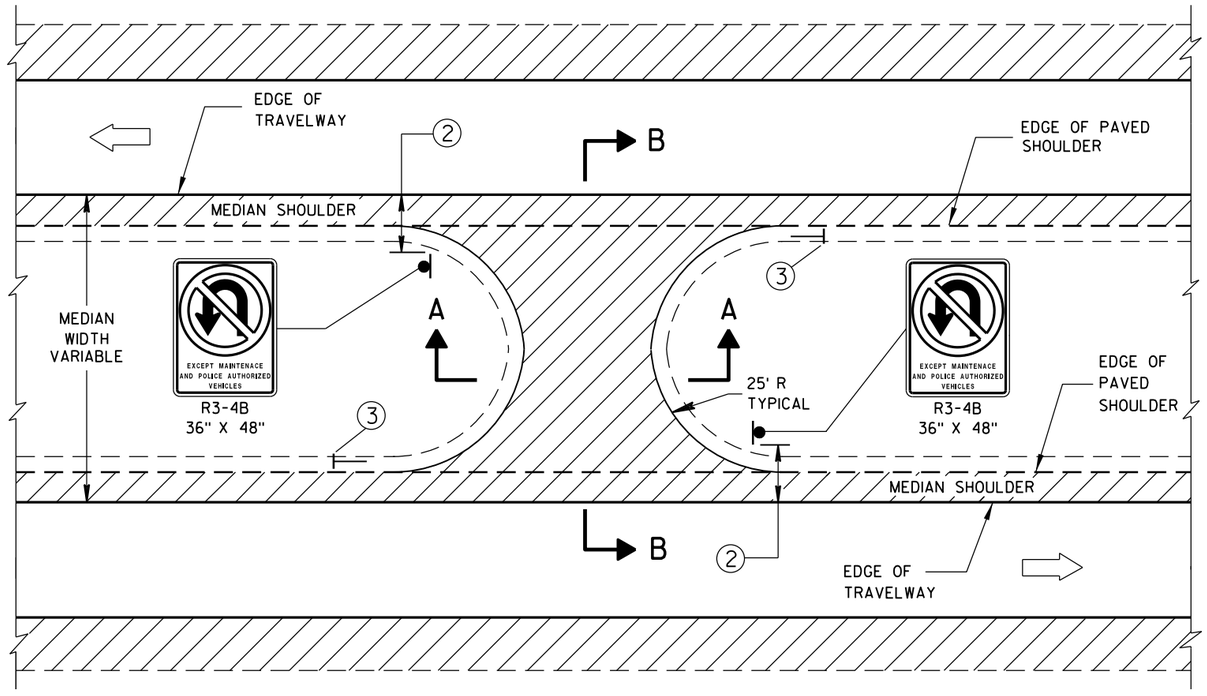
FHWA



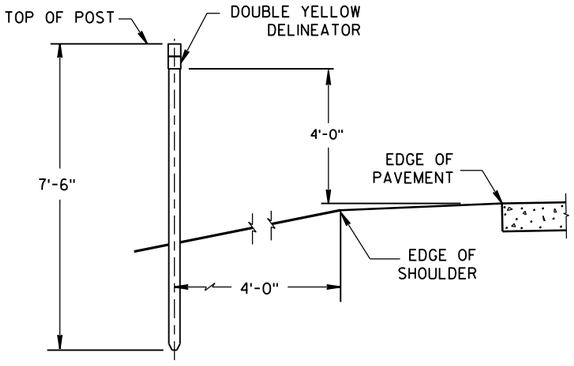
SECTION A-A



SECTION B-B



PLAN VIEW



DOUBLE YELLOW DELINEATOR INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.

(2) SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

(3) INSTALL DOUBLE YELLOW DELINEATOR. SEE STANDARD DETAIL DRAWING 15A2.

MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

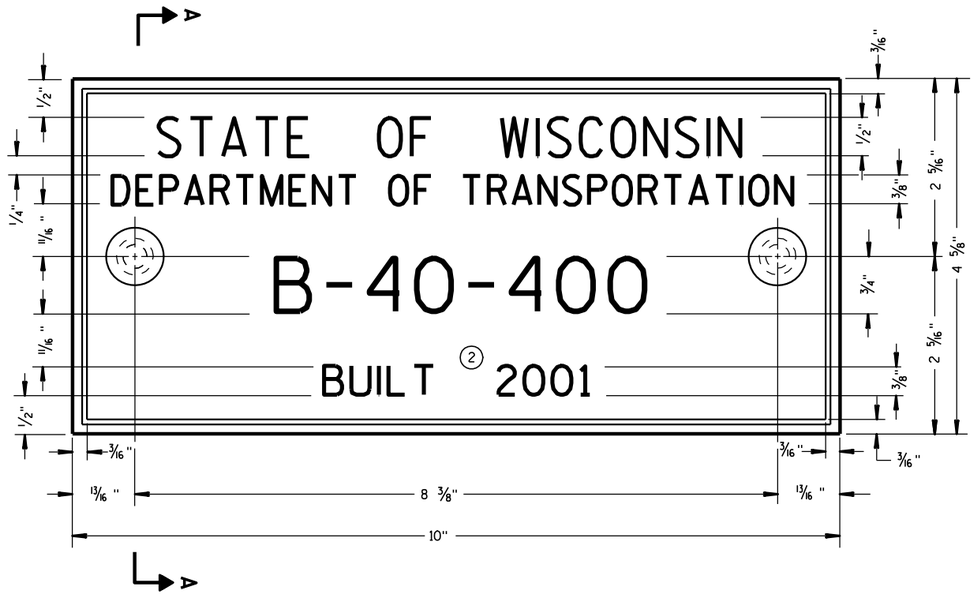
8/2013 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 11 A 1-5



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

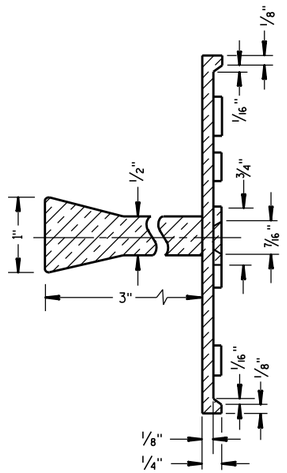
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

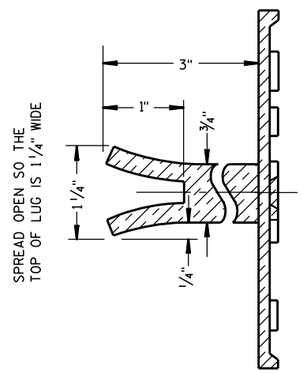
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

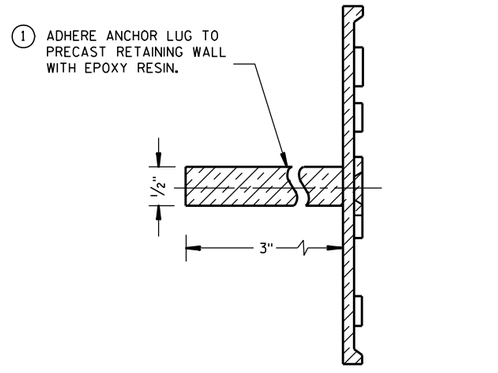
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

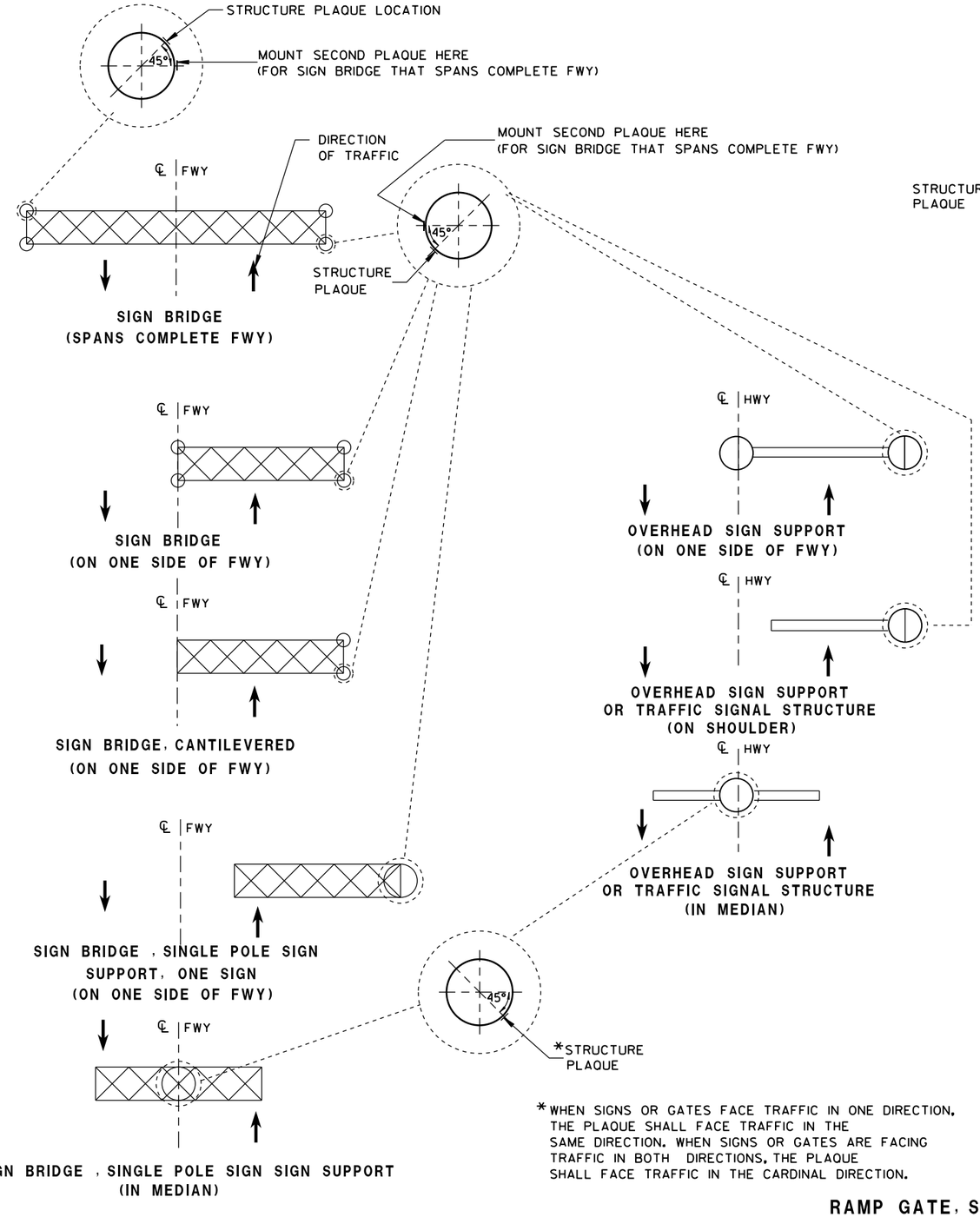
APPROVED

3/26/10 DATE — /S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

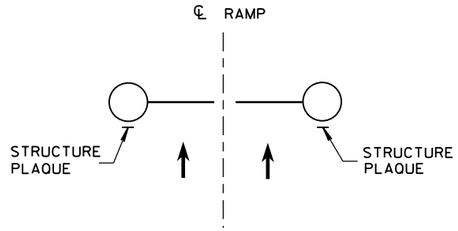
6

S.D.D. 12 A 3-10

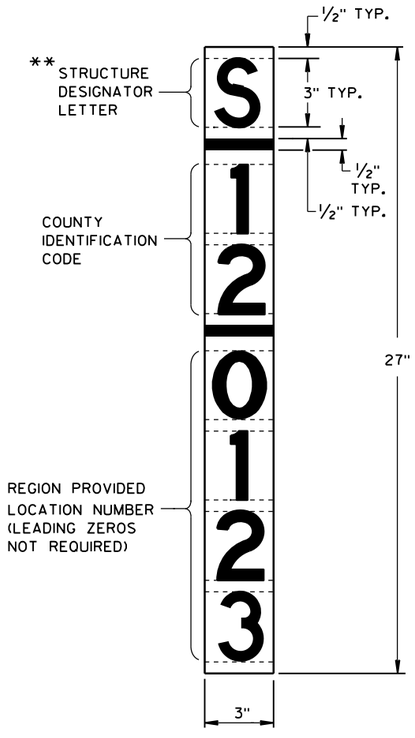


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



**RAMP GATE
(ACROSS FWY ON-RAMP)**



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

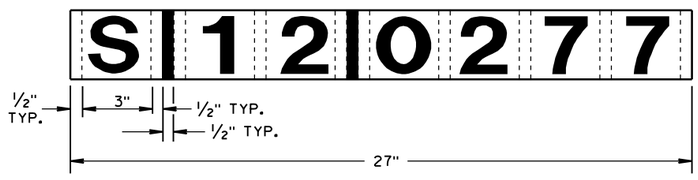
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

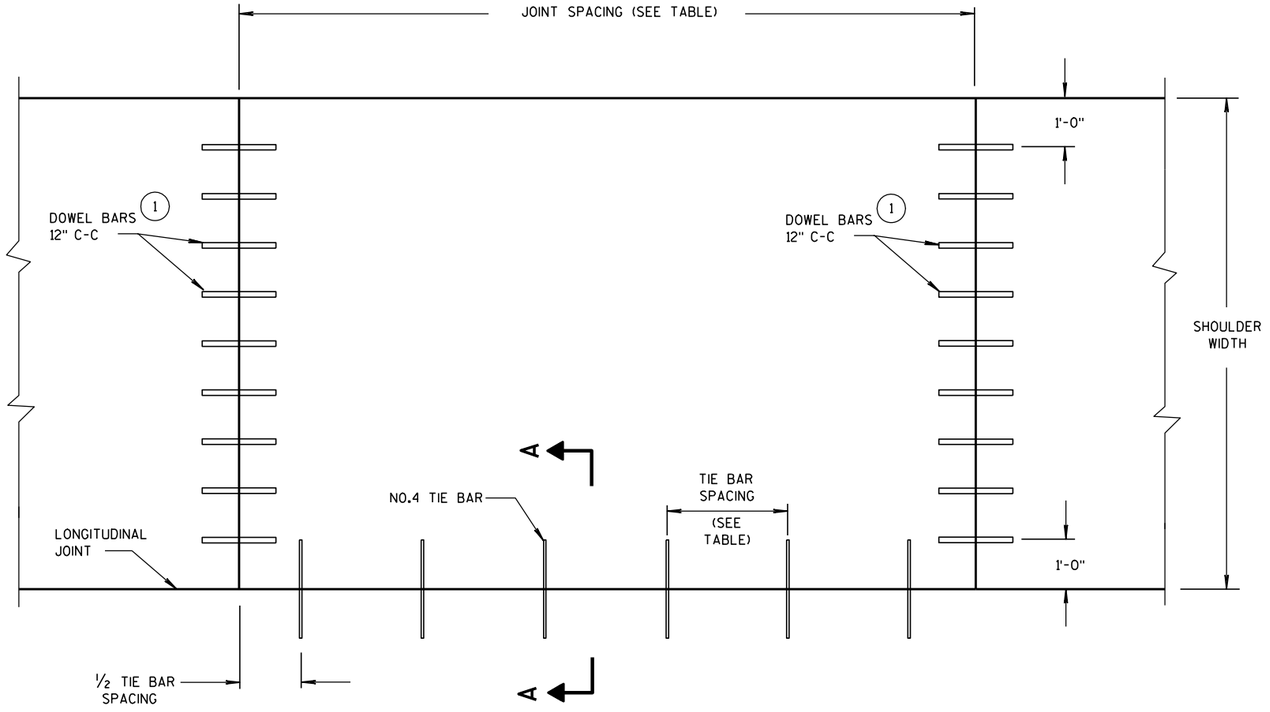
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

PAVEMENT TYPE OF TRAFFIC LANES	TIE BAR SPACING	SHOULDER JOINT SPACING
NON-REINFORCED	30"	MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
CONTINUOUSLY REINFORCED	30"	15' FOR 6' TO 10' WIDE SHOULDERS
CONTINUOUSLY REINFORCED	36"	12' FOR 3' WIDE SHOULDERS

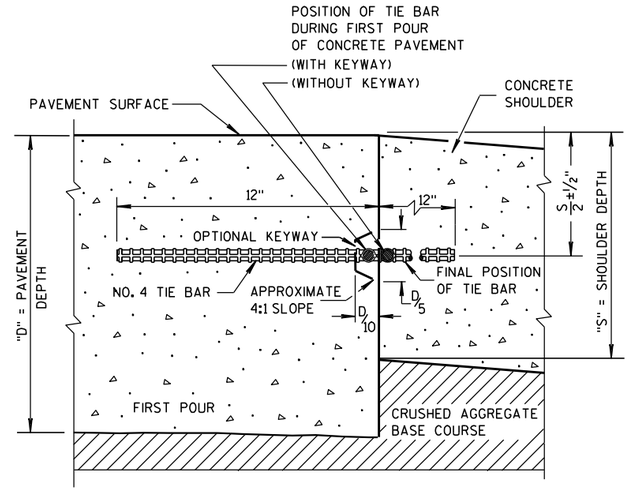
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

(1)

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

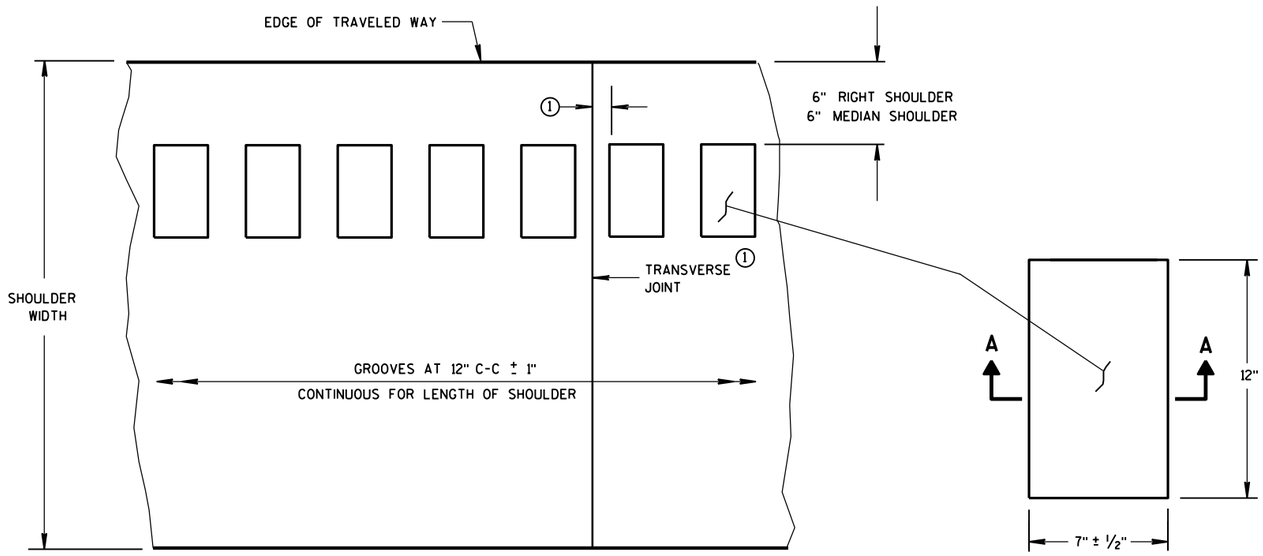
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/15/2011 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D — INEER
FHWA

578

6

S.D.D. 13 A 3-5



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

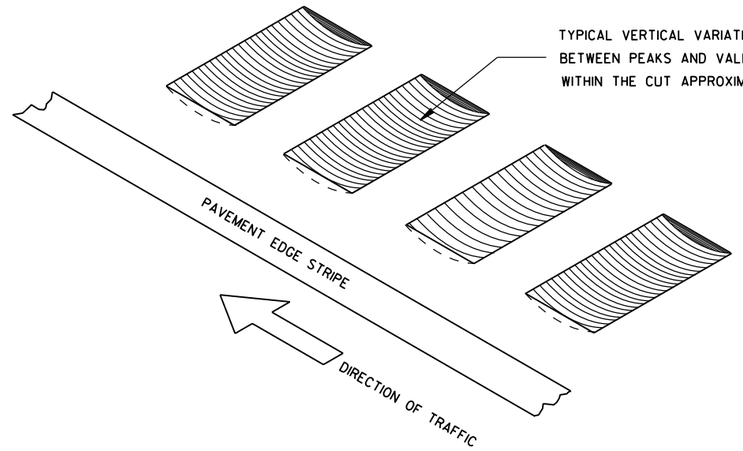
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



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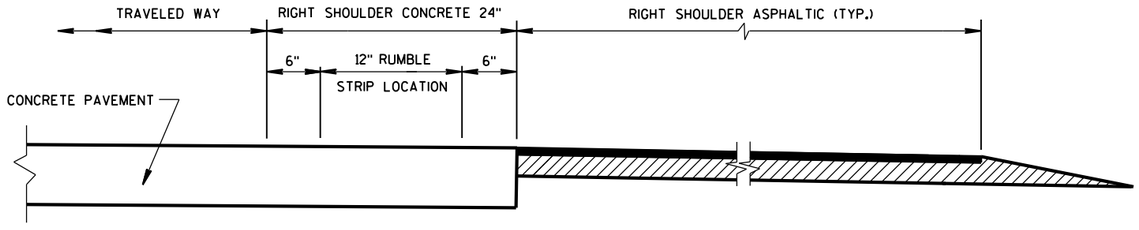
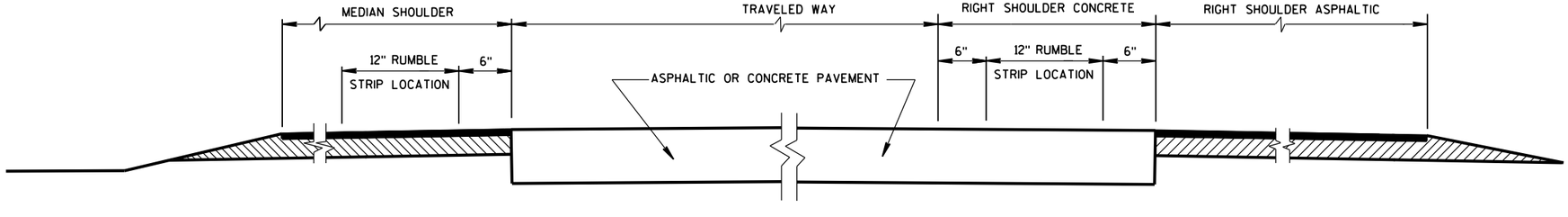


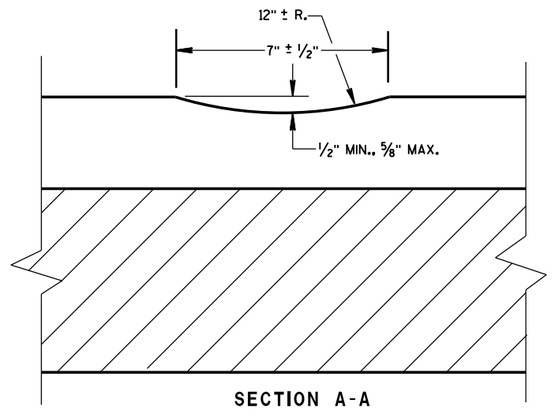
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

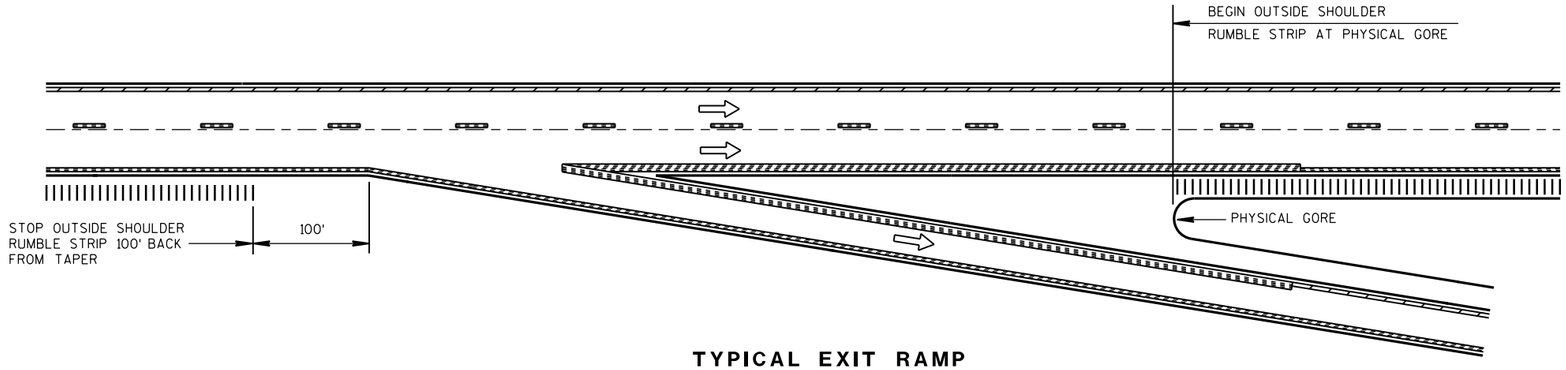
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



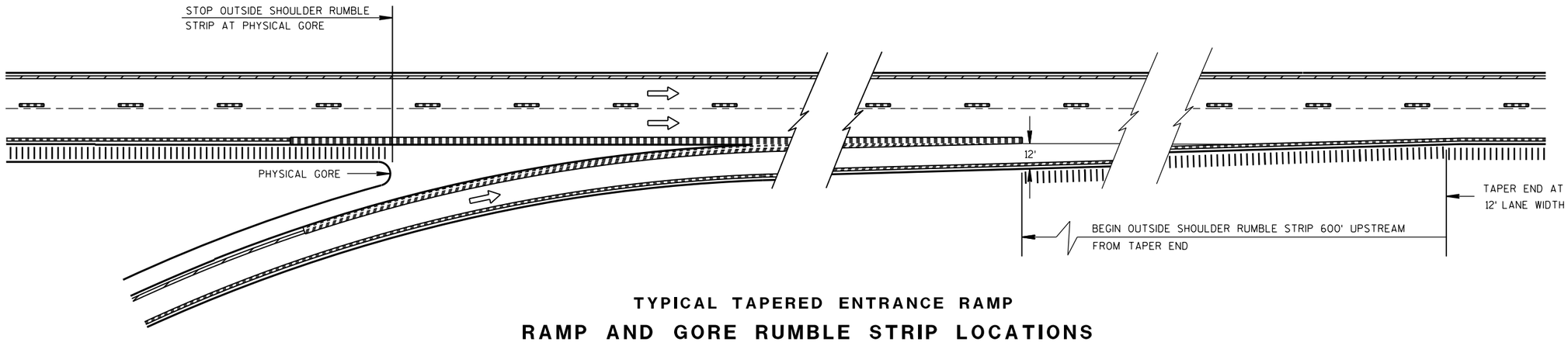
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

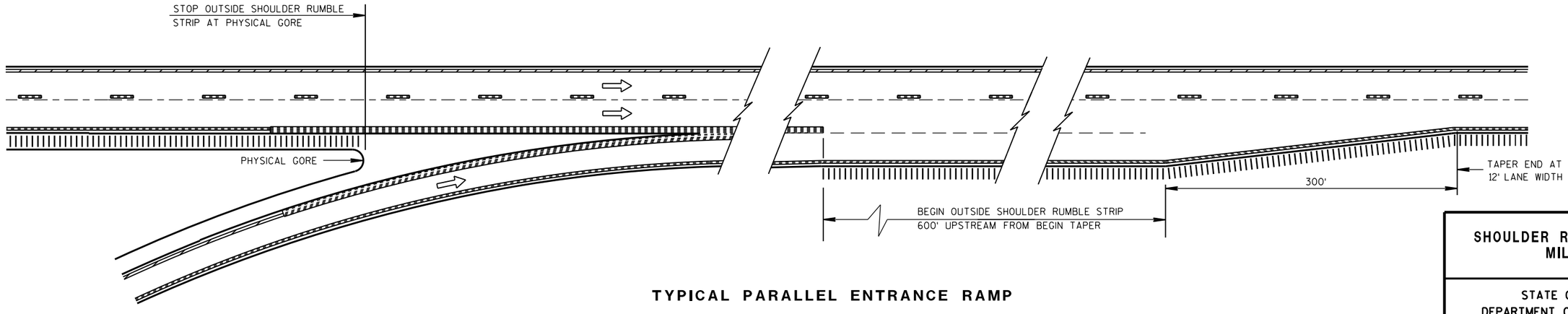
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

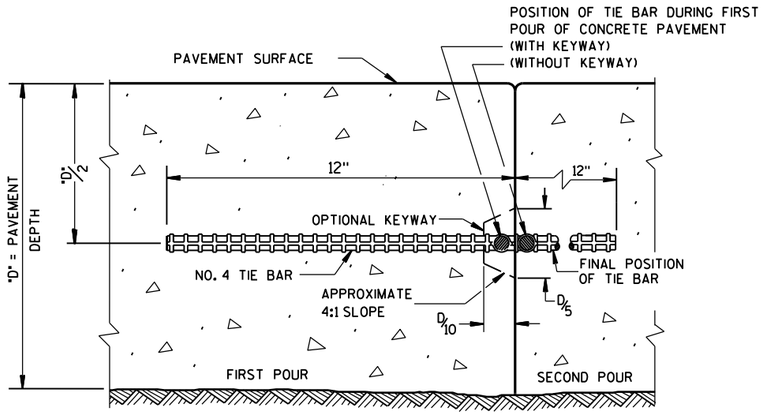
APPROVED
12/17/2012 DATE
/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER
FHWA

6

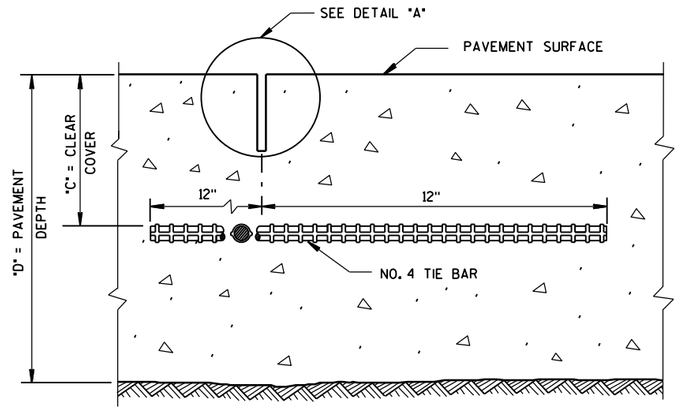
S.D.D. 13 A 5-5b

6

S.D.D. 13 A 5-5b



CONSTRUCTION JOINT



SAWED JOINT

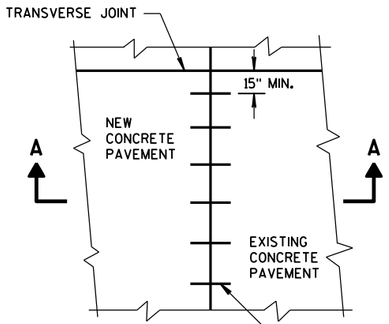
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

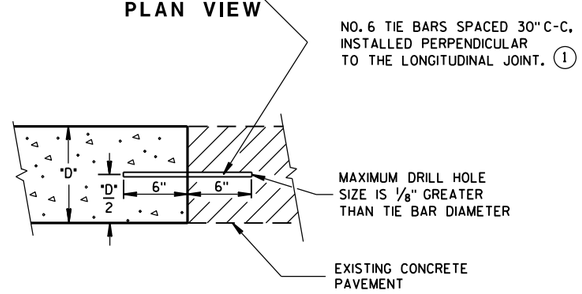
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

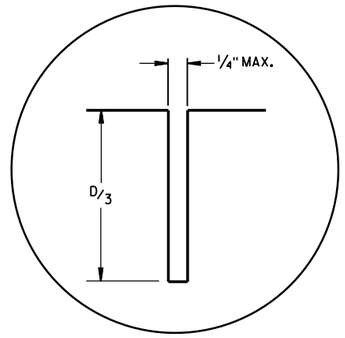


PLAN VIEW



SECTION A-A

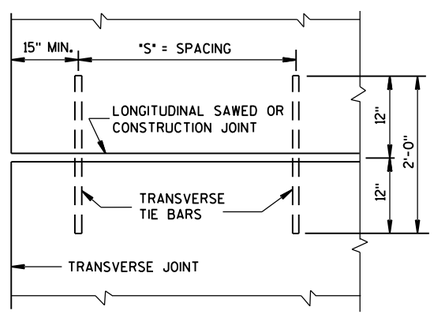
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE

FHWA

6

S.D.D. 13 C 1-16

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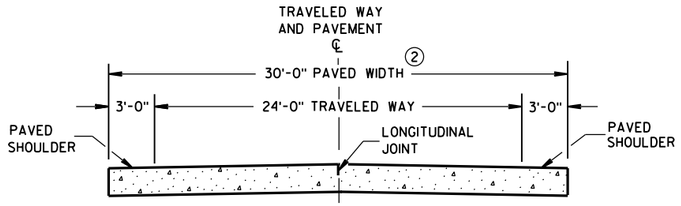
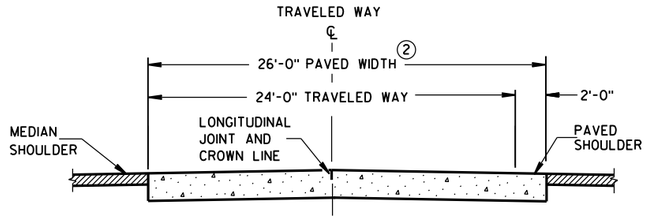
S.D.D. 13 C 1-16

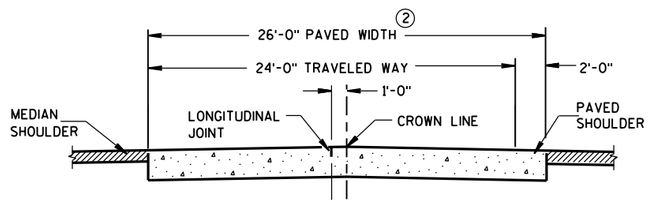


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

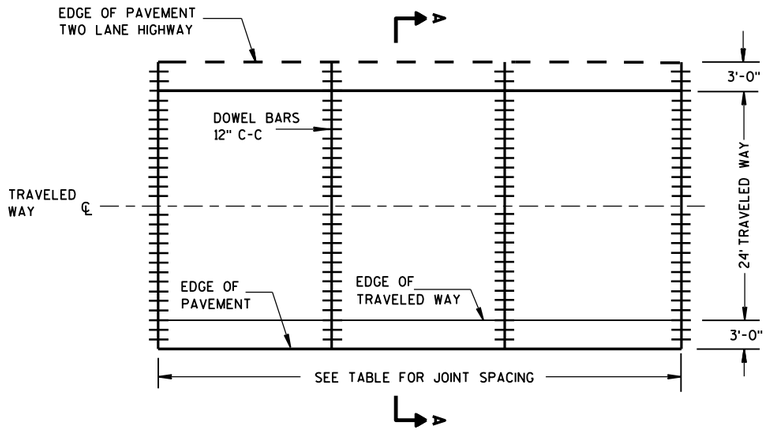
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

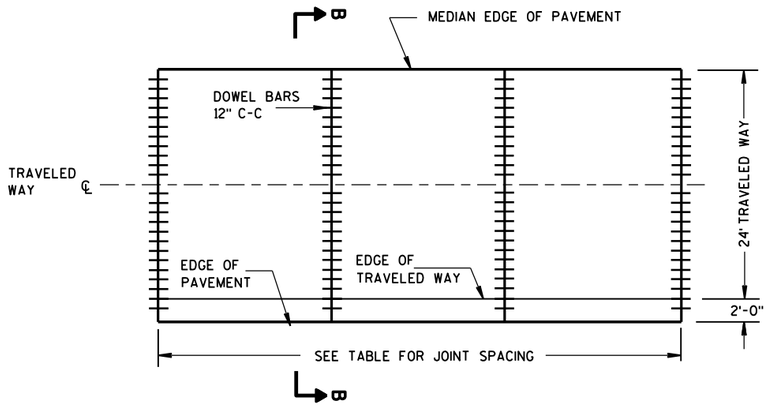
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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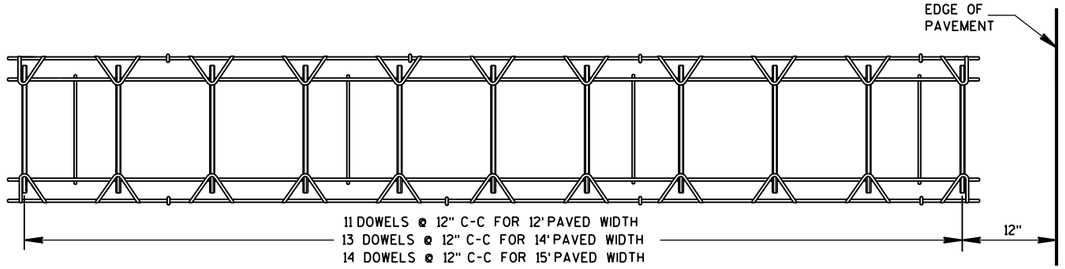
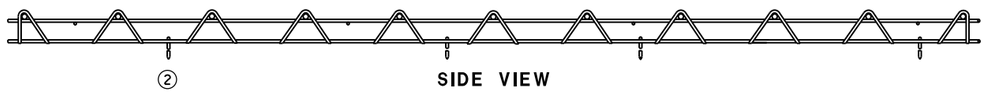
S.D.D. 13 C 11-11a



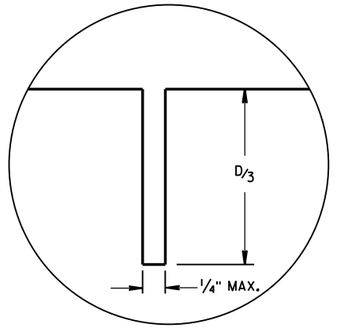
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

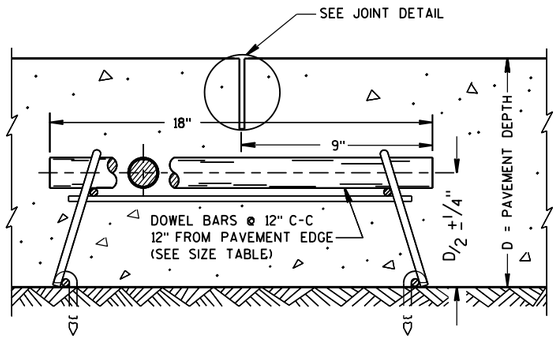
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

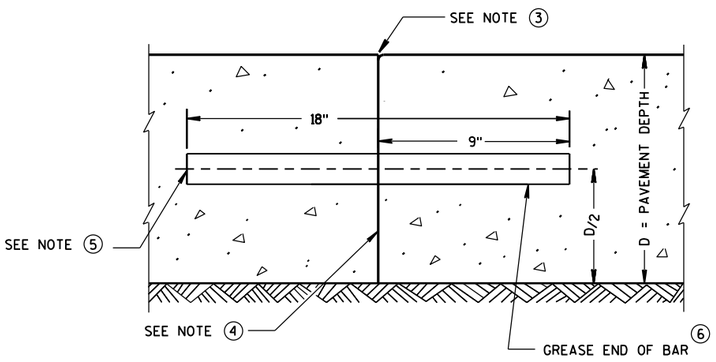
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

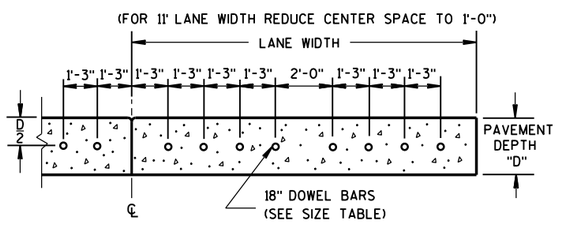
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

6

S.D.D. 13 C 11-11b

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

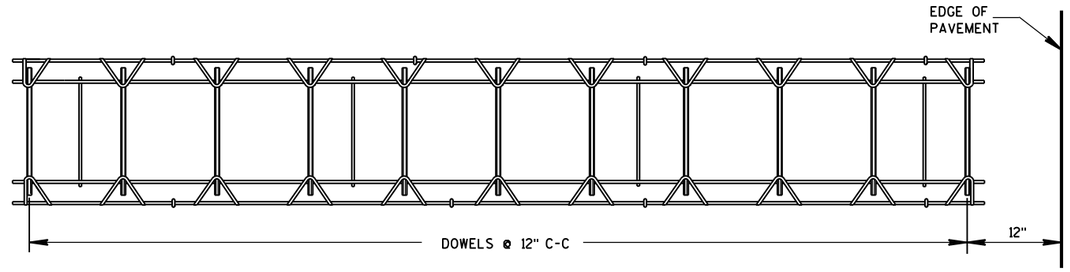
5/3/2013 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER

FHWA

6

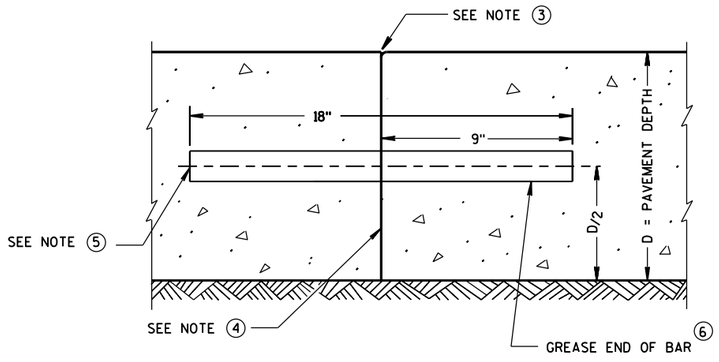
S.D.D. 13 C 11-11b



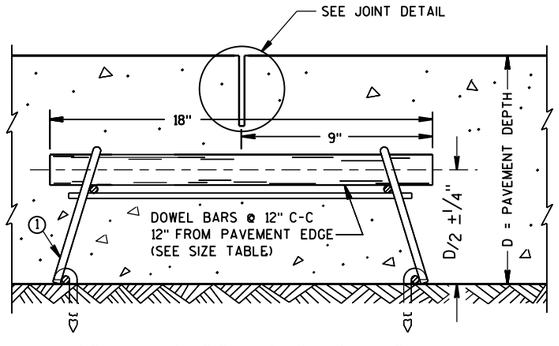
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



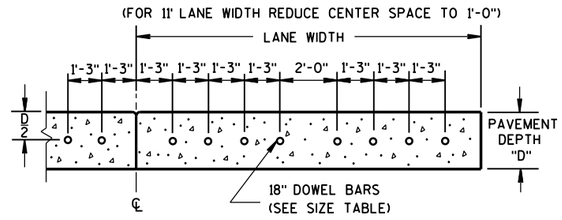
TRANSVERSE CONSTRUCTION JOINT



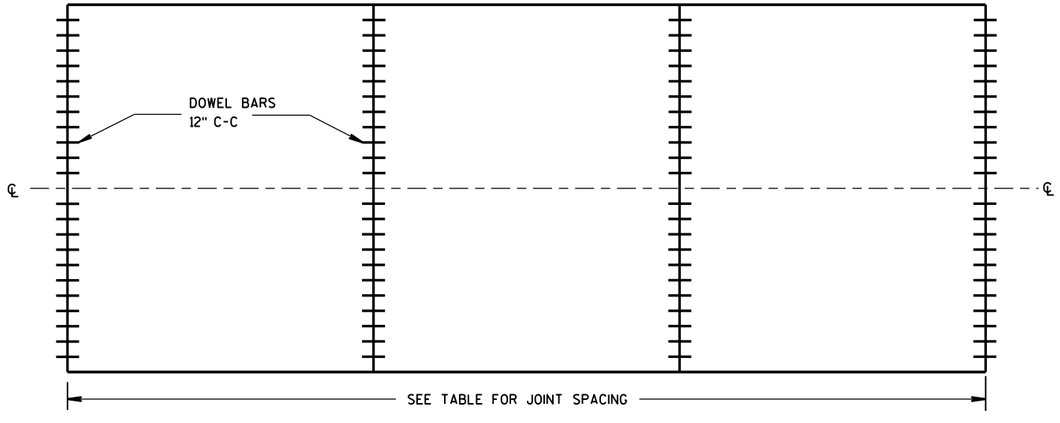
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

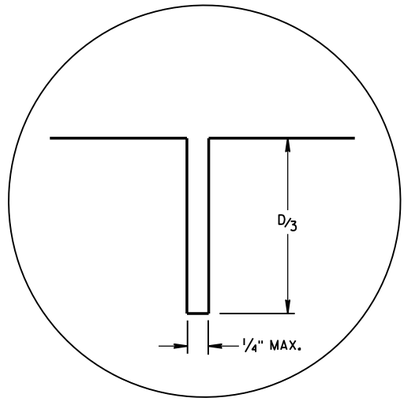
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

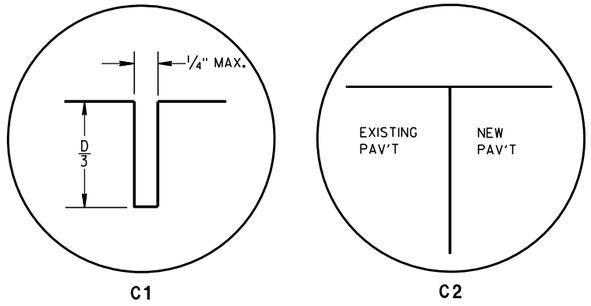
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

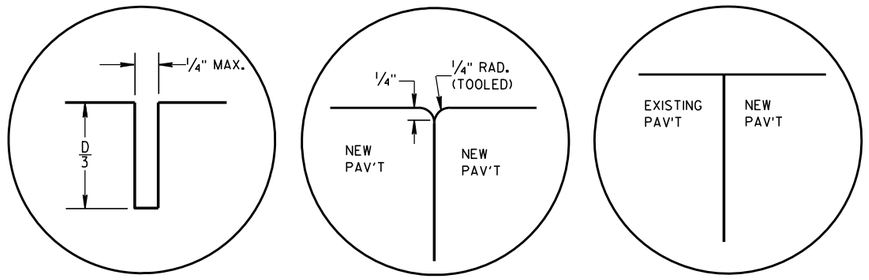
6

S.D.D. 13 C 13-8



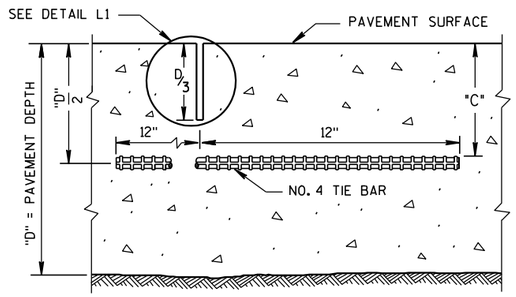
C1 C2

TRANSVERSE JOINTS



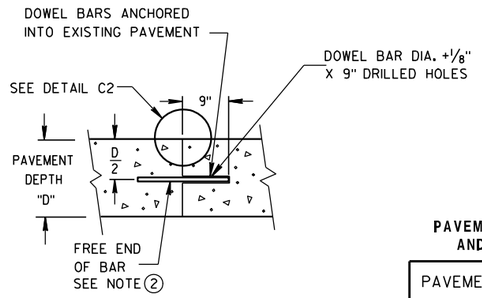
L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

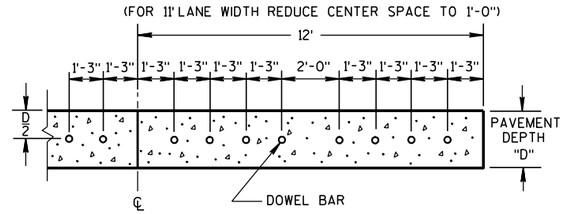
GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 24 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



SECTION E-E

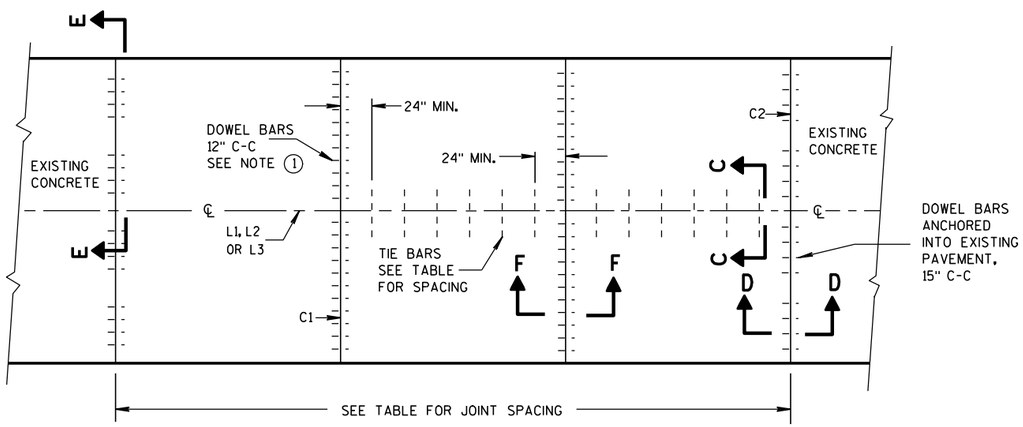
SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH "D"	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6, 6 ½"	NONE	12'
7, 7 ½"	1"	14'
8, 8 ½"	1 ¼"	15'
9, 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

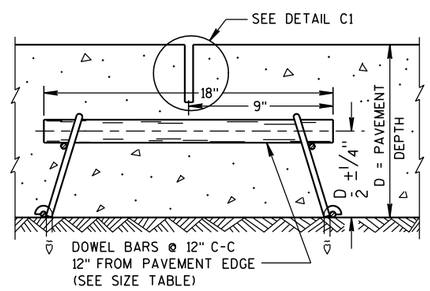
TIE BAR LOCATION TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING C-C	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 ½"	3"±½"	48"	42"
7, 7 ½"	3 ¼"±1"	45"	36"
8, 8 ½"	3 ¾"±1"	39"	30"
9, 9 ½"	4 ¼"±1"	33"	27"
10, 10 ½"	4 ¾"±1"	30"	24"
11, 11 ½"	5 ¼"±1"	27"	21"
12"	5 ¾"±1"	24"	21"



PLAN VIEW

CONCRETE BASE CONTRACTION JOINT LOCATIONS



SECTION F-F

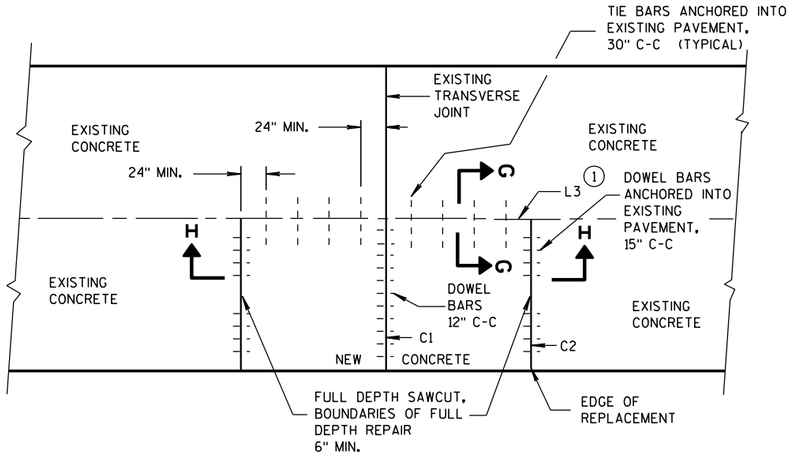
CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 15-5a

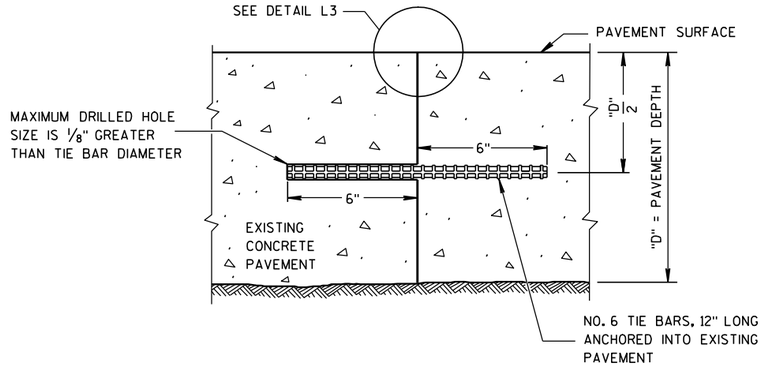


PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR

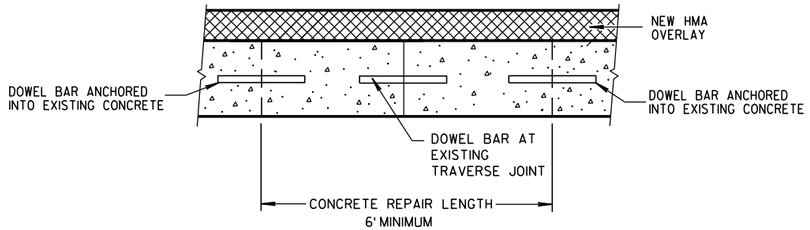
GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.



SECTION G-G

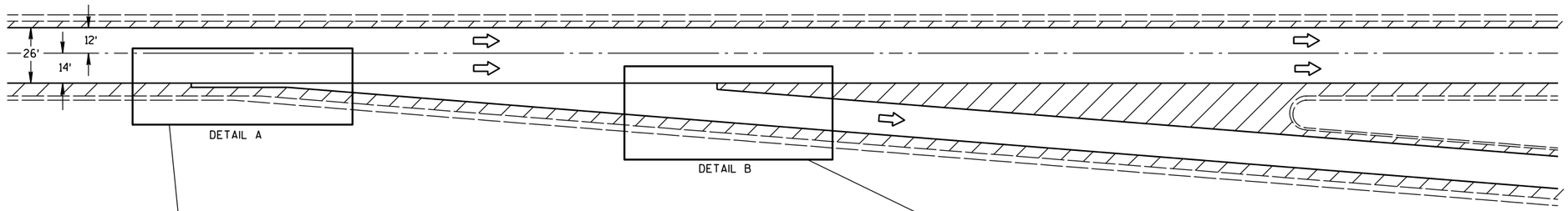
TIE BARS ANCHORED INTO EXISTING PAVEMENT



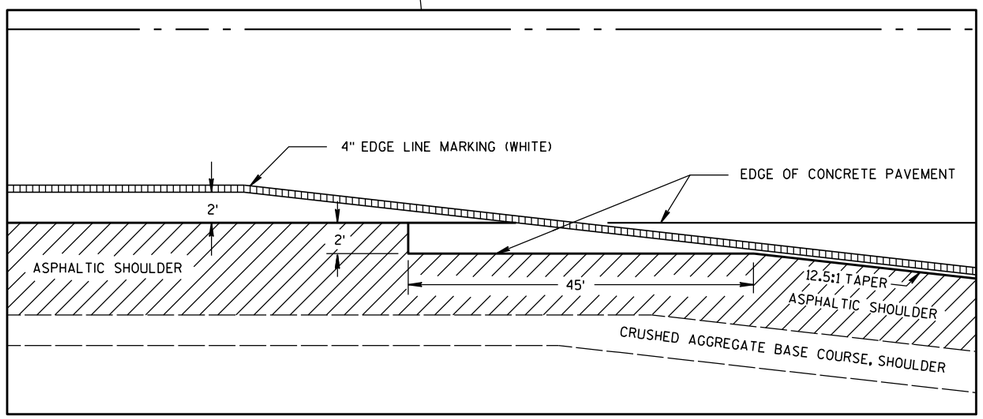
SECTION H-H

CONCRETE BASE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12-11-2009 DATE	/S/ Deb Bischoff PAVEMENT POLICY & D586 ENGINEER
FHWA	

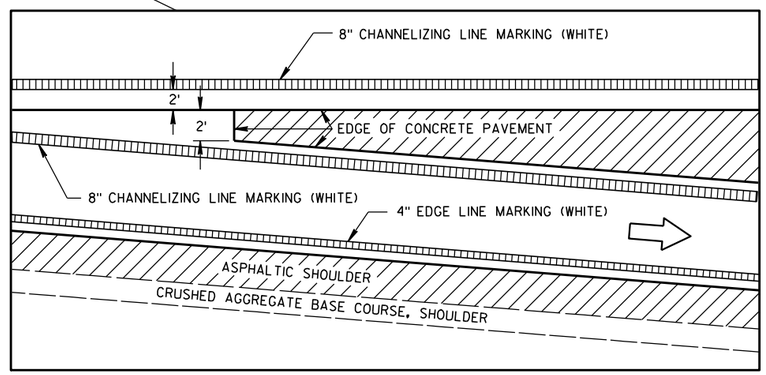
6
S.D.D. 13 C 15-5b



EXIT RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI

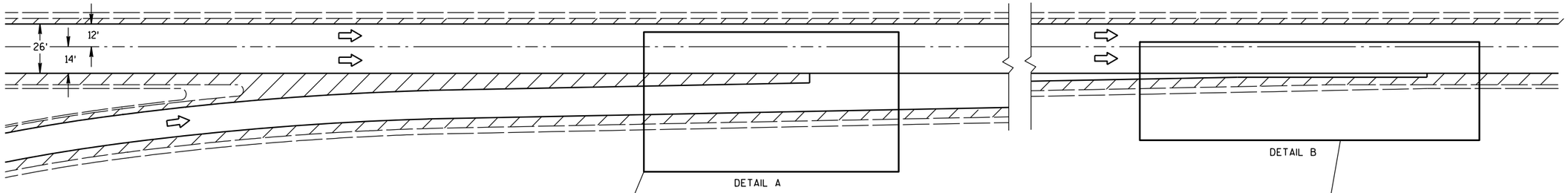
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

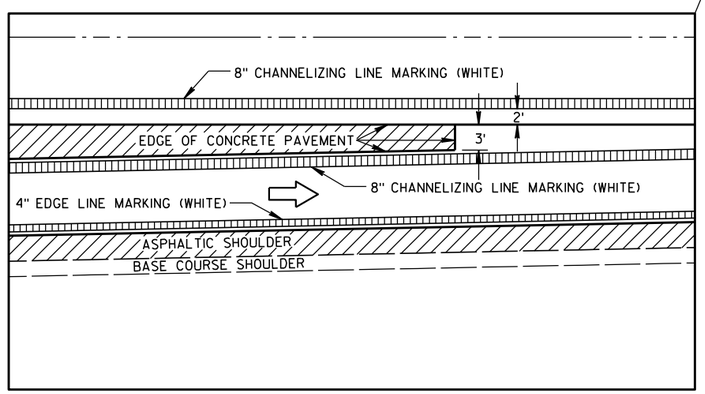
S.D.D. 13 C 17-1a

6

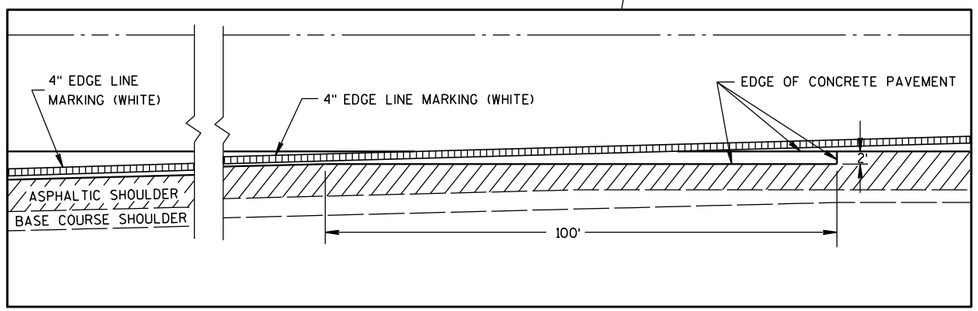
S.D.D. 13 C 17-1a



ENTRANCE RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

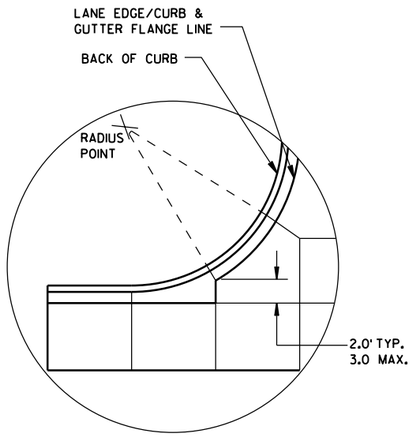
5/27/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

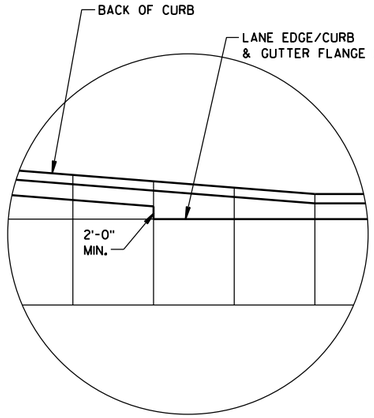
FHWA

6

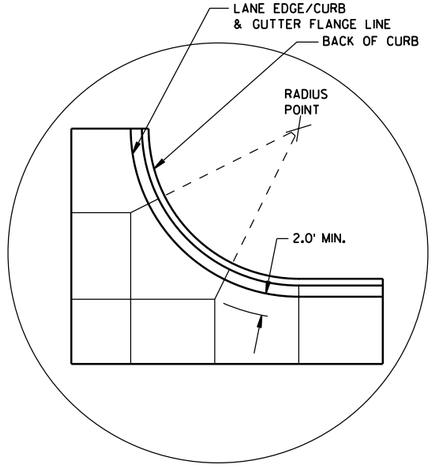
S.D.D. 13 C 17-1b



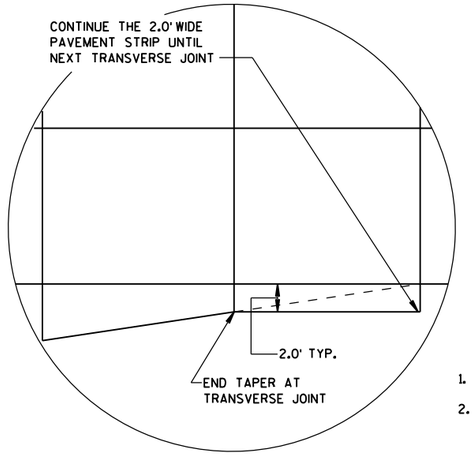
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

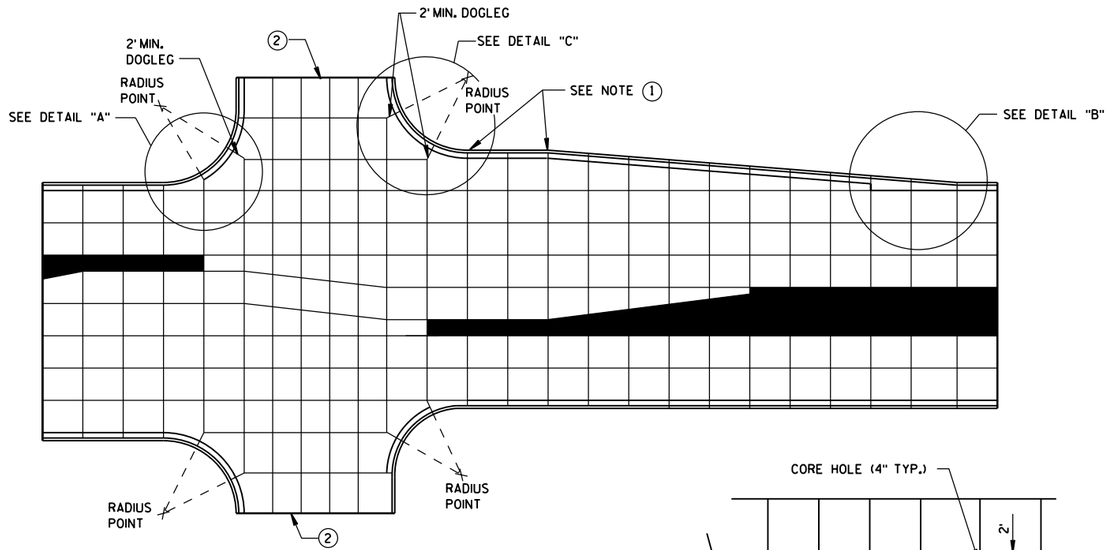
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

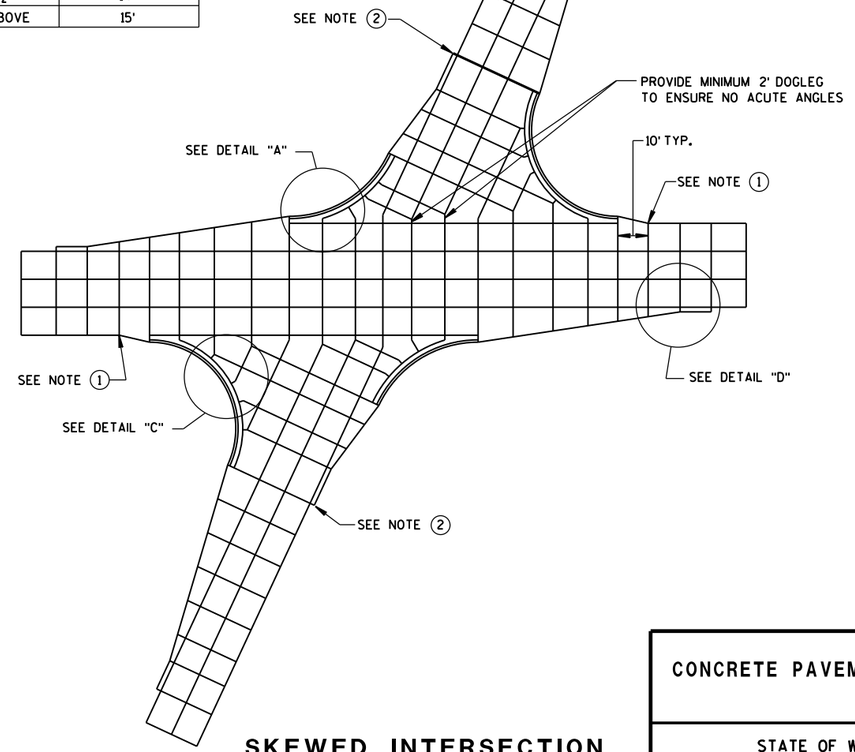
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



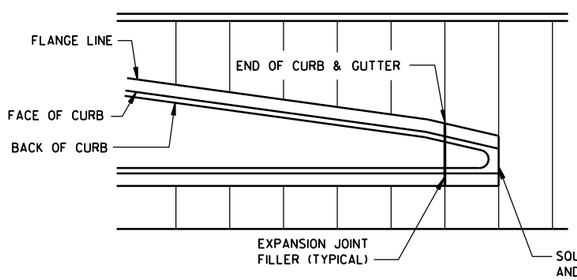
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

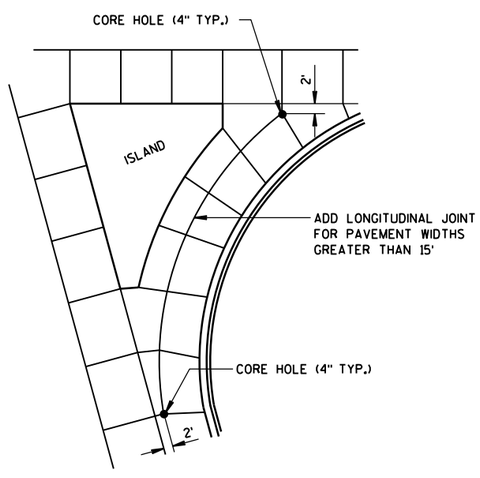
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 589

6

S.D.D. 13 C 18-2a

6

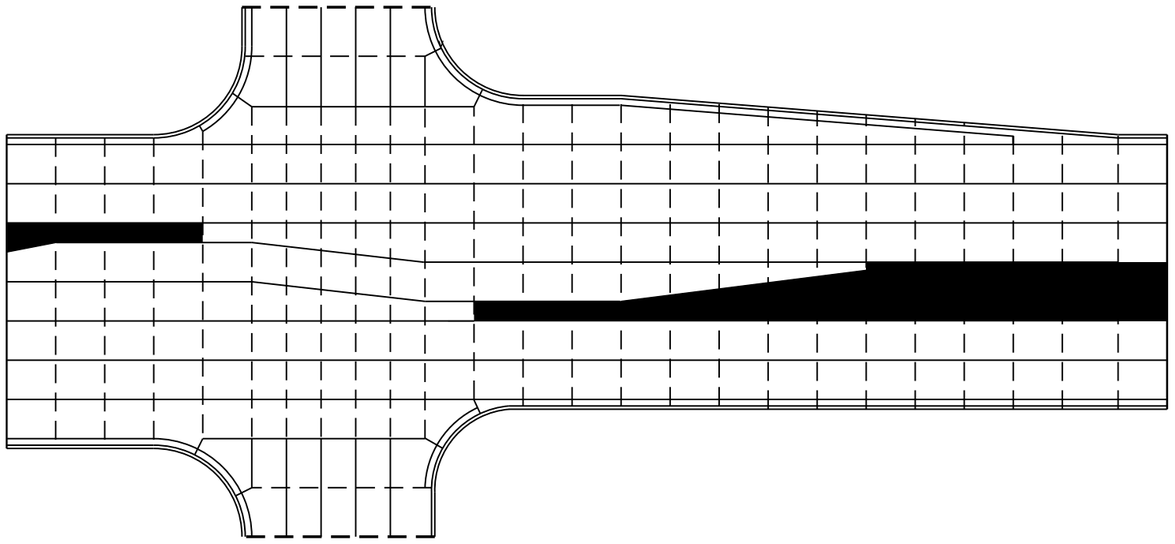
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

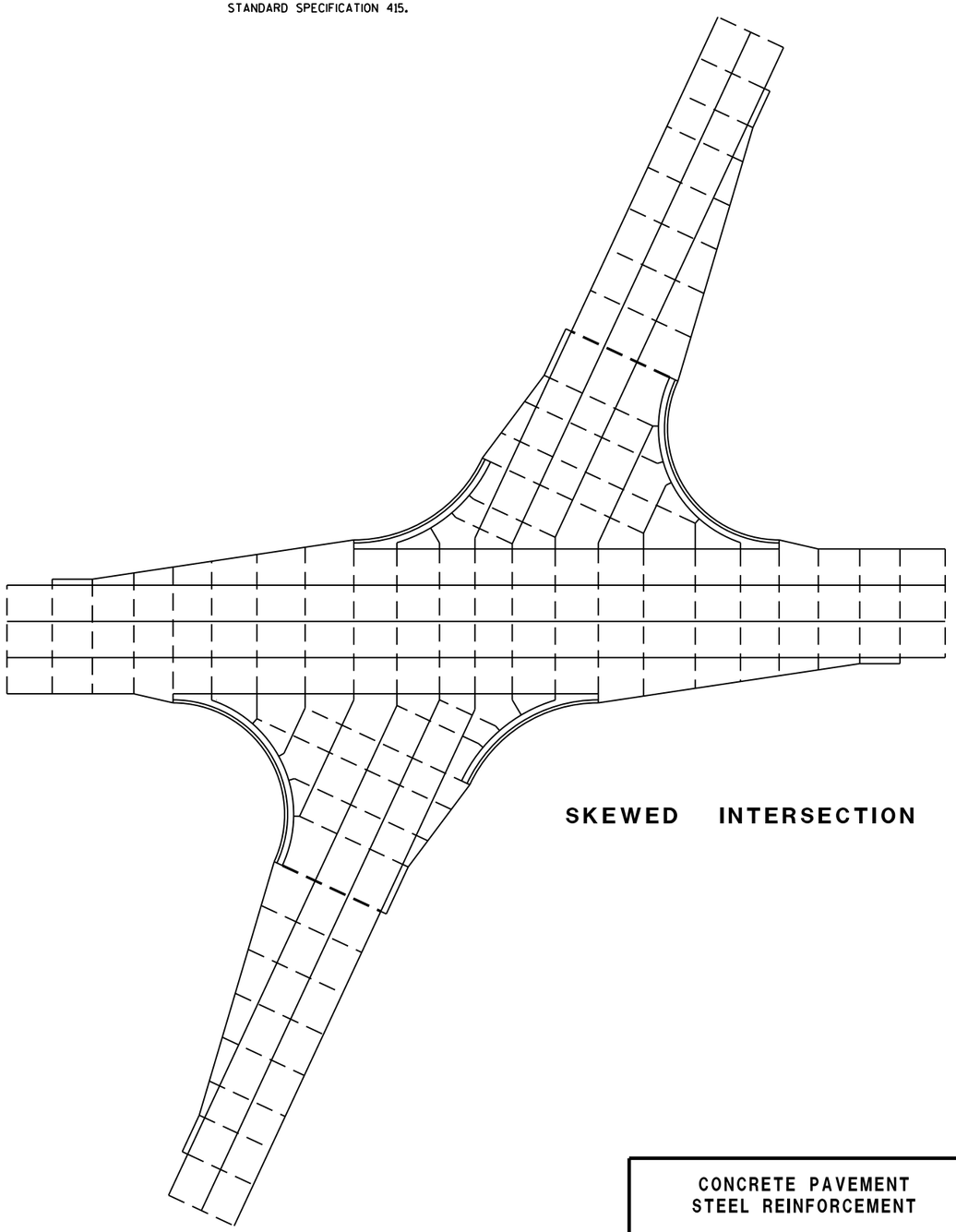
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

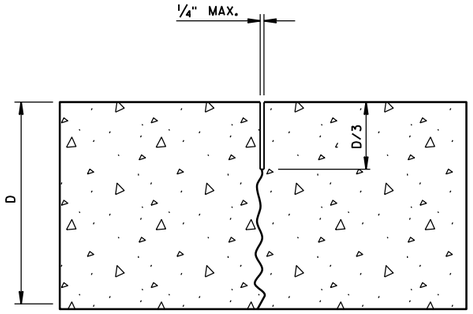
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

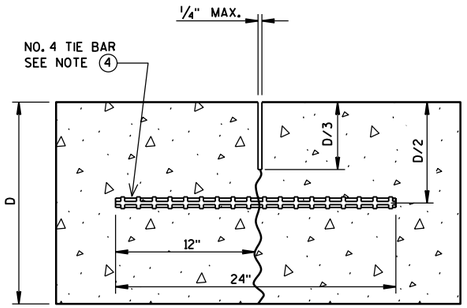
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



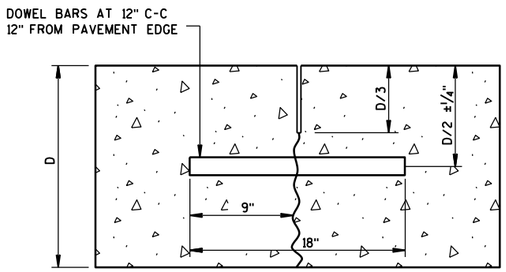
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

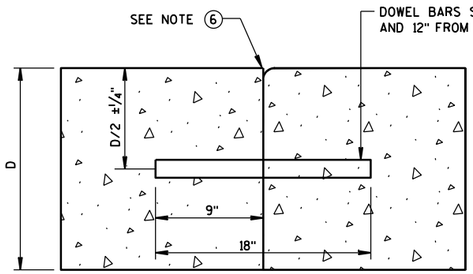
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



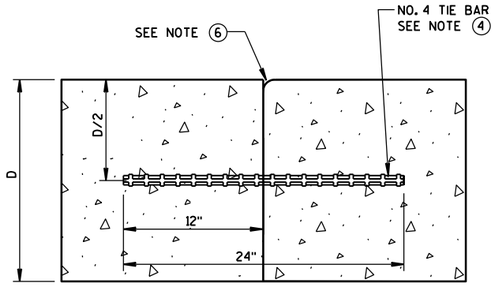
DOWELED-TRANSVERSE

CONTRACTION JOINTS

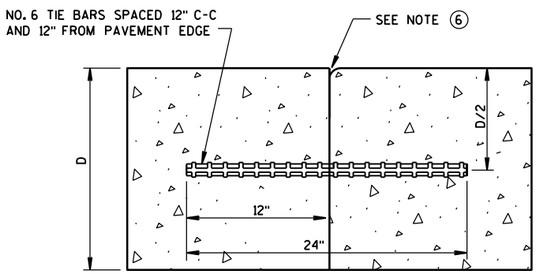
SEE NOTE (2)



DOWELED TRANSVERSE

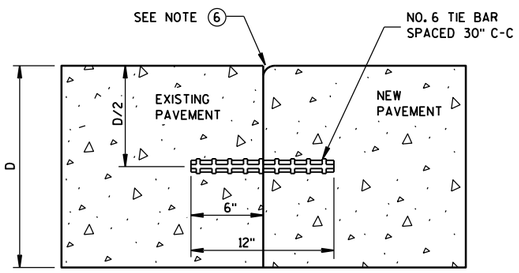


TIED LONGITUDINAL



TIED TRANSVERSE

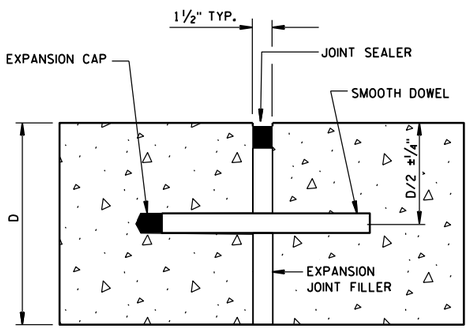
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

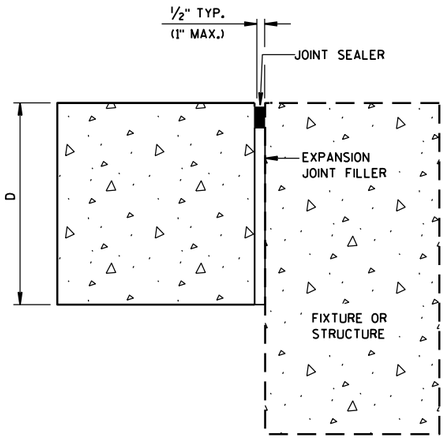
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

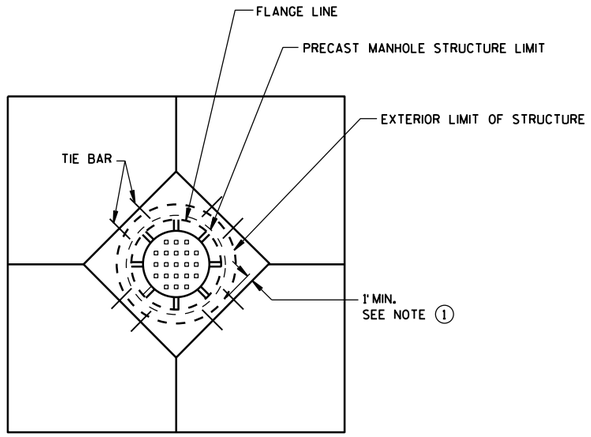
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

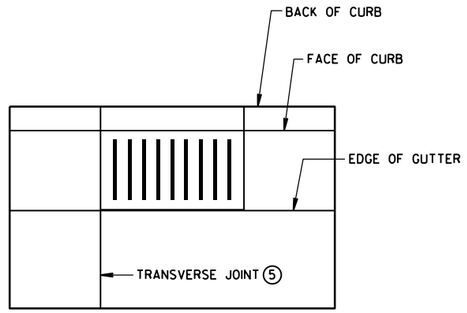
S.D.D. 13 C 18-2c

6

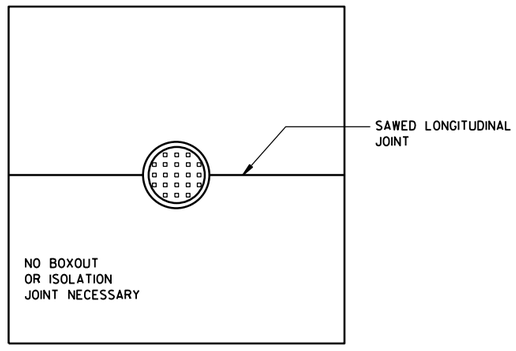
S.D.D. 13 C 18-2c



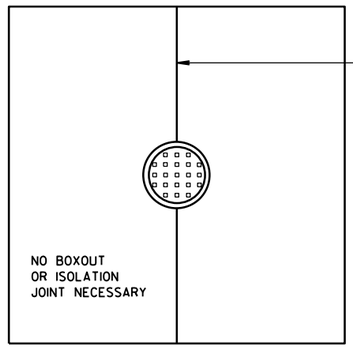
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



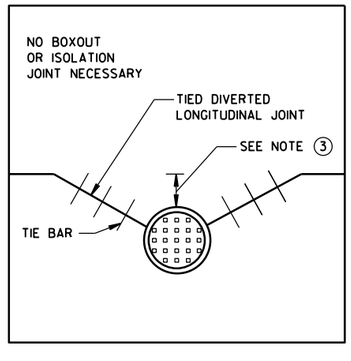
INLET WITH TRANSVERSE JOINT



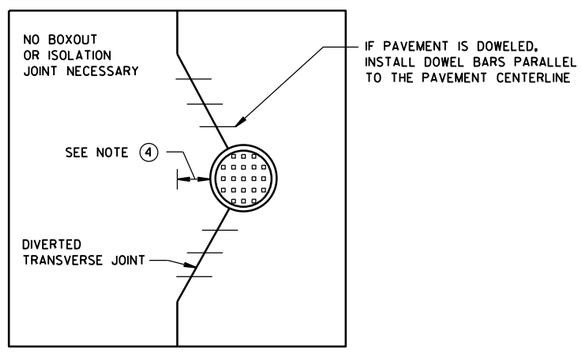
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE

NEER

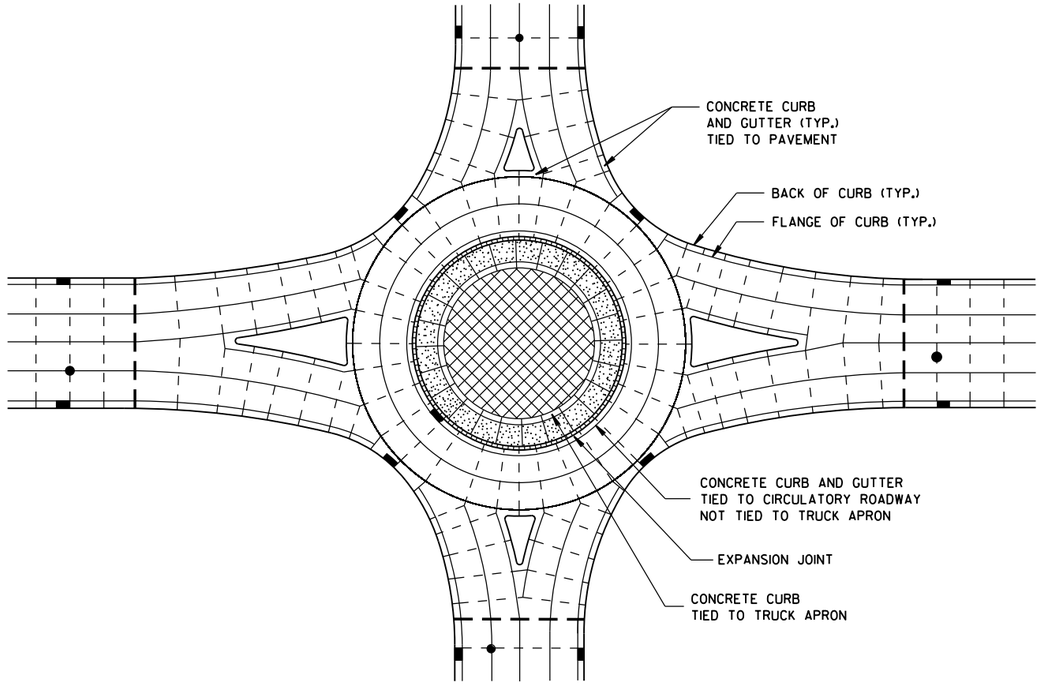
FHWA

6

S.D.D. 13 C 18-2d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES



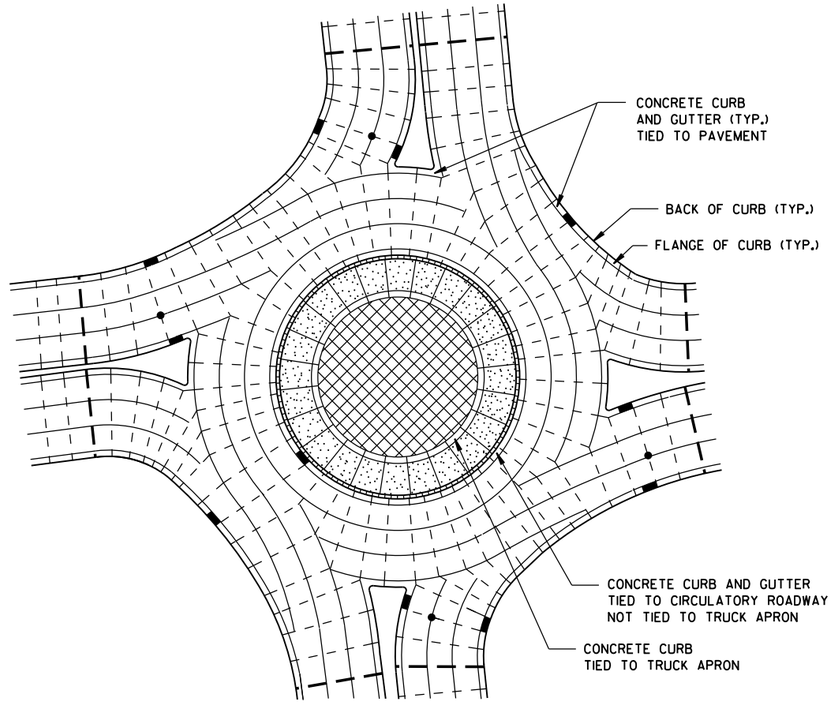
ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

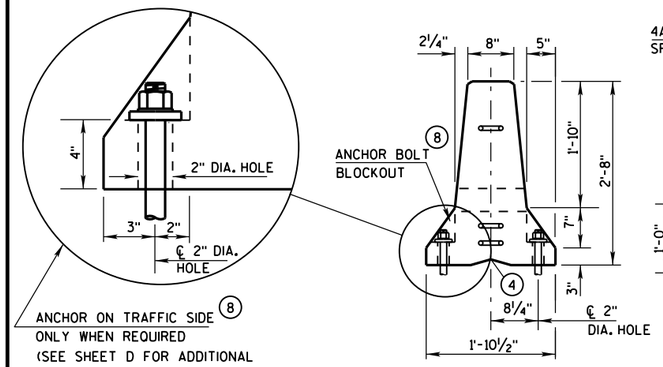


PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

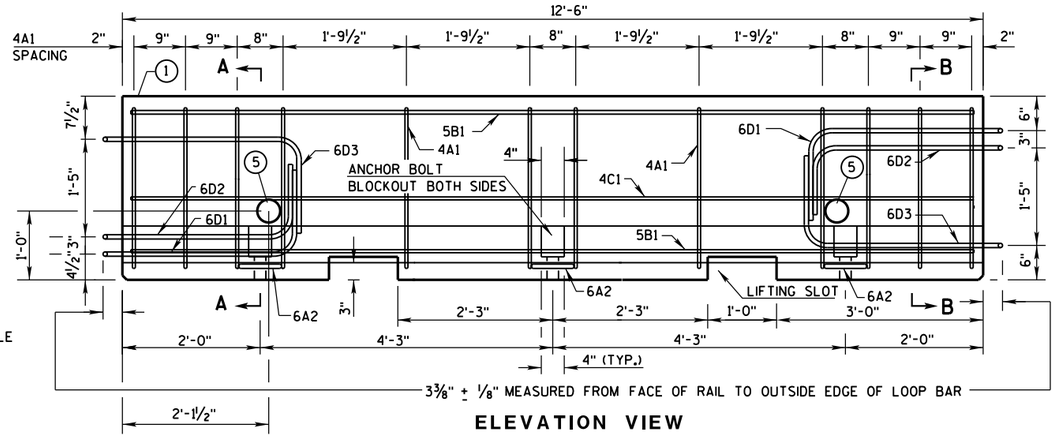
CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 5-3-2013 DATE /S/ Deb Bischoff PAVEMENT POLICY & DE ENGINEER FHWA

6

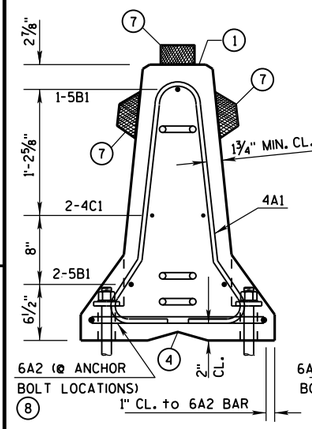
S.D.D. 13 C 18-2e



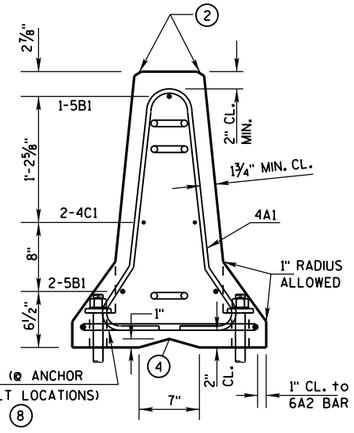
END VIEW



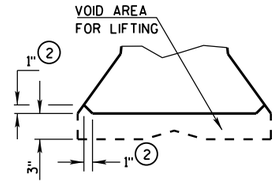
ELEVATION VIEW



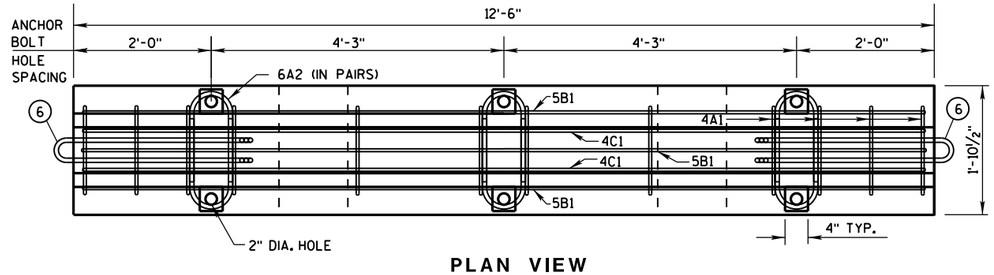
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

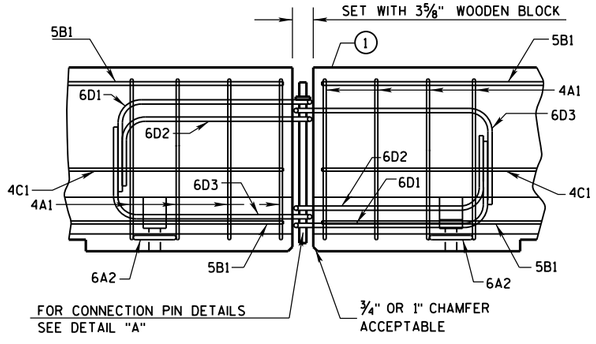


DETAIL "B"
LIFTING SLOT DETAIL

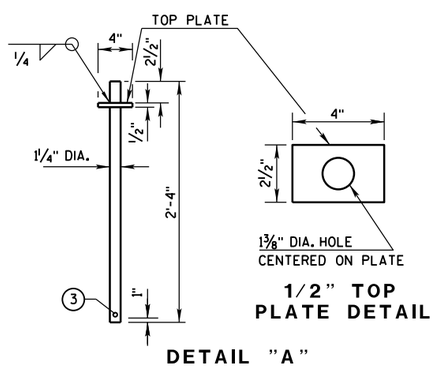


PLAN VIEW

DETAILS OF BARRIER SECTION

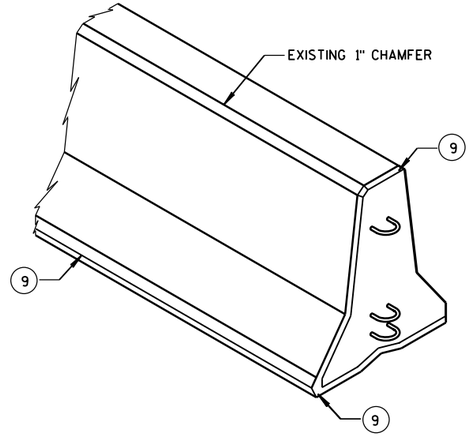


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

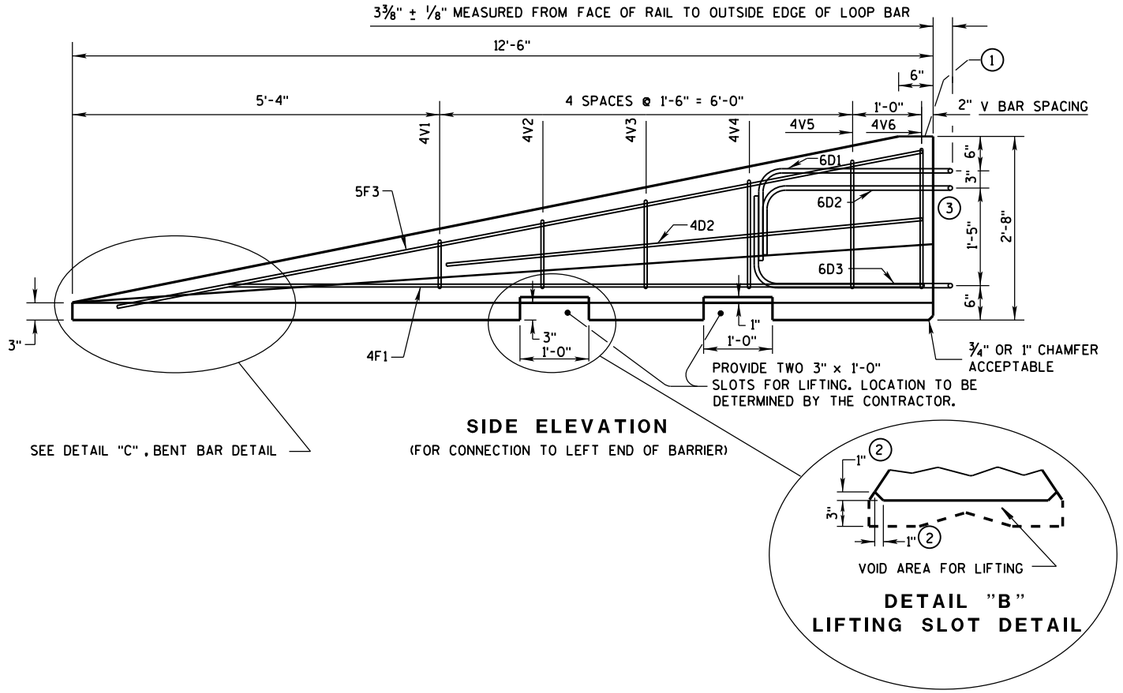
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

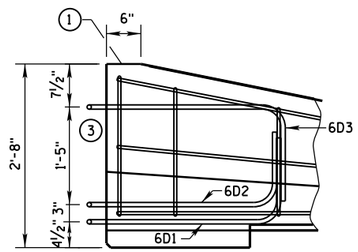
(8) SEE SHEET D FOR ANCHORING CRITERIA.

(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

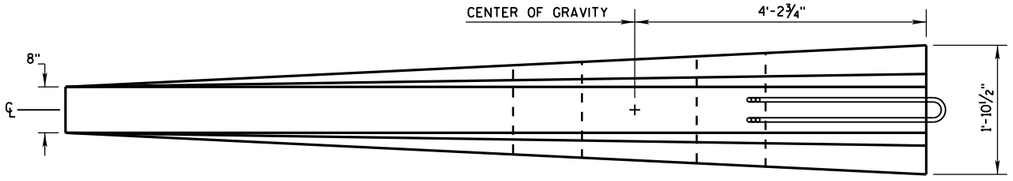
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 594

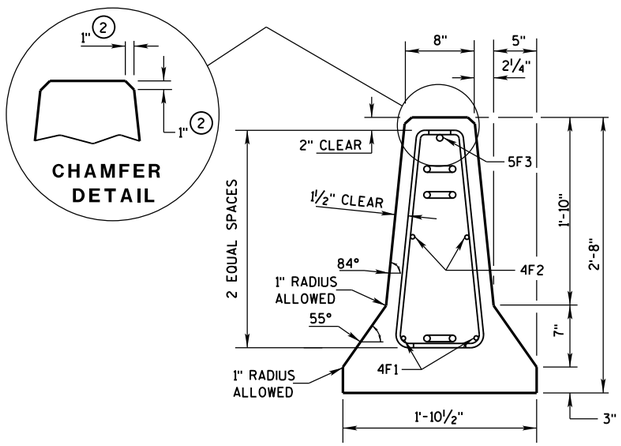


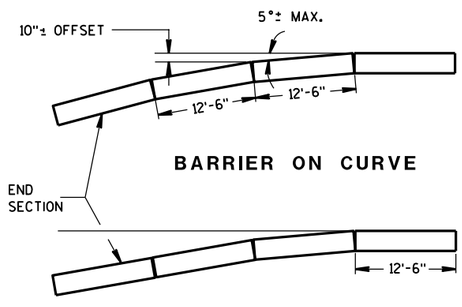


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

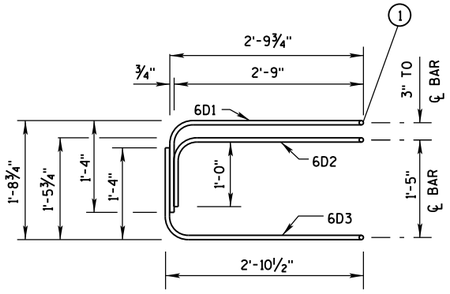
6

S.D.D. 14 B 7-14b

BARRIER TAPER SECTION BILL OF MATERIALS

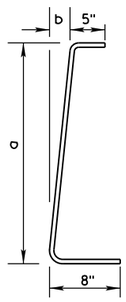
(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"
BENT BAR DETAIL

ELEVATION
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

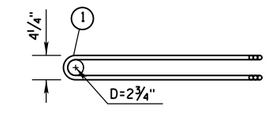
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION BILL OF MATERIALS

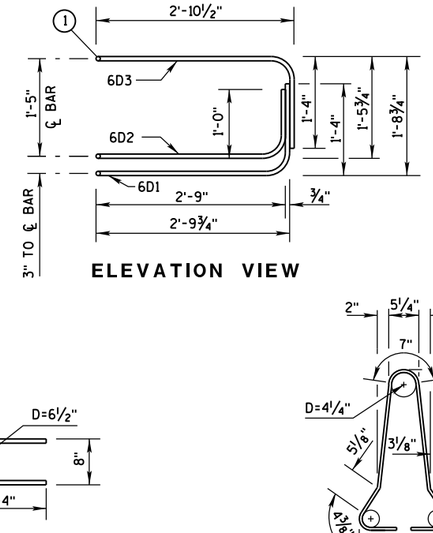
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

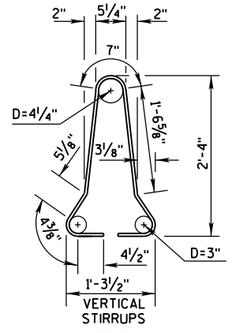


PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)

6A2



ELEVATION VIEW



4A1

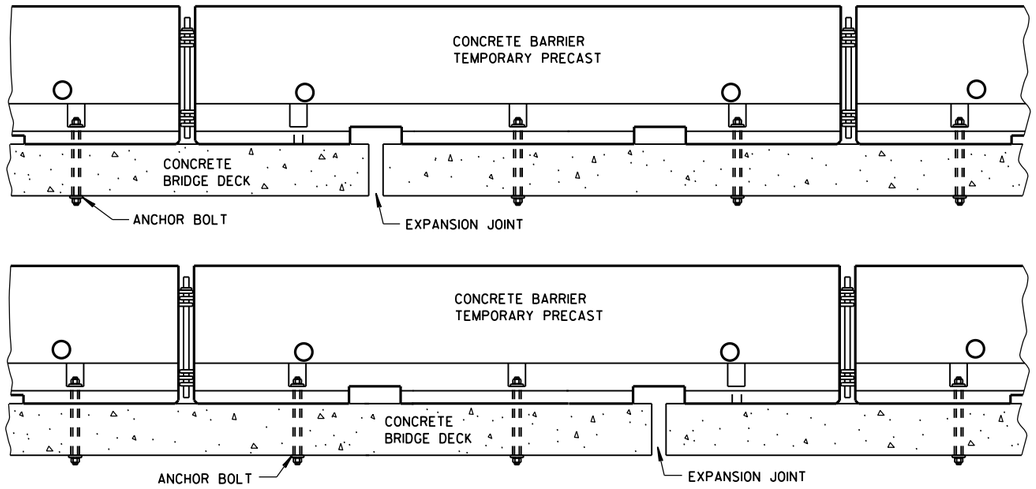
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

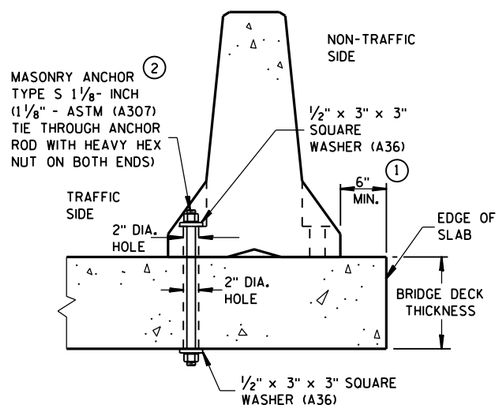
6

S.D.D. 14 B 7-14c



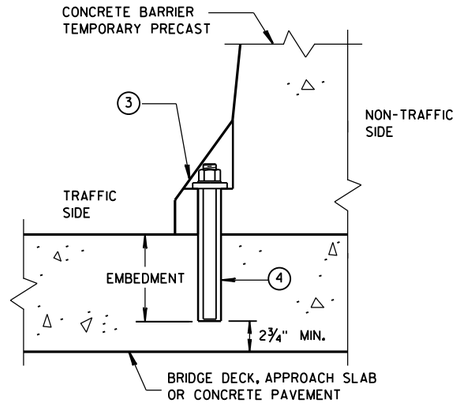
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

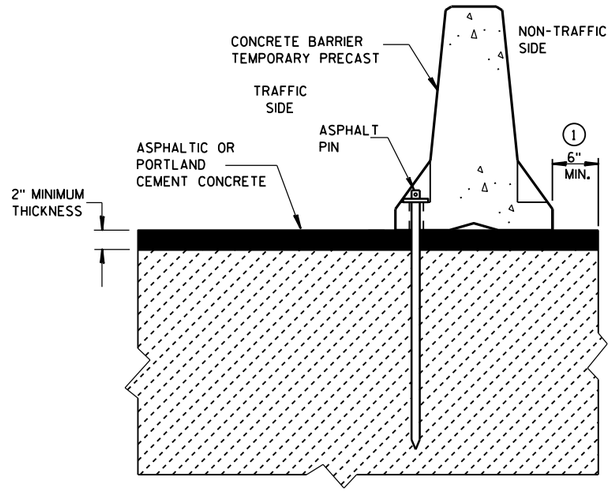
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

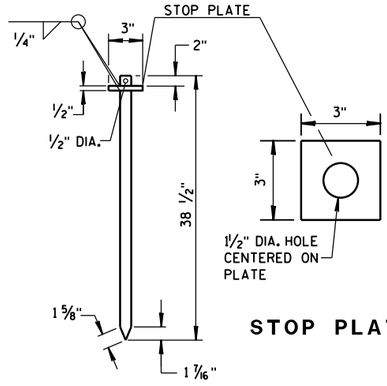
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

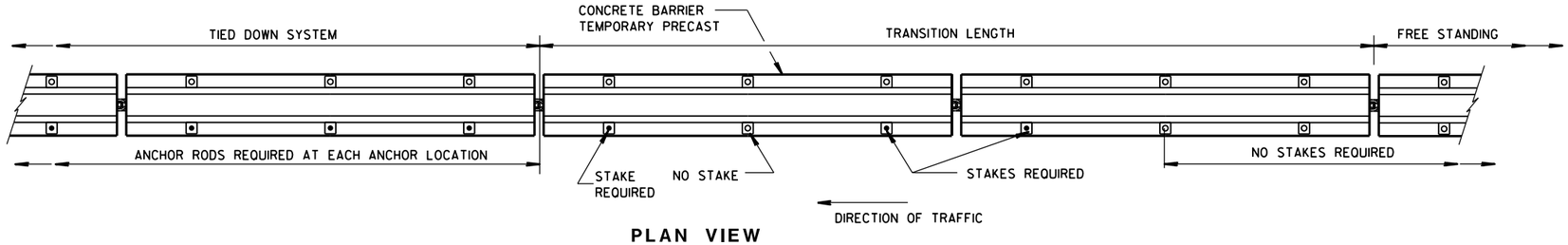
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

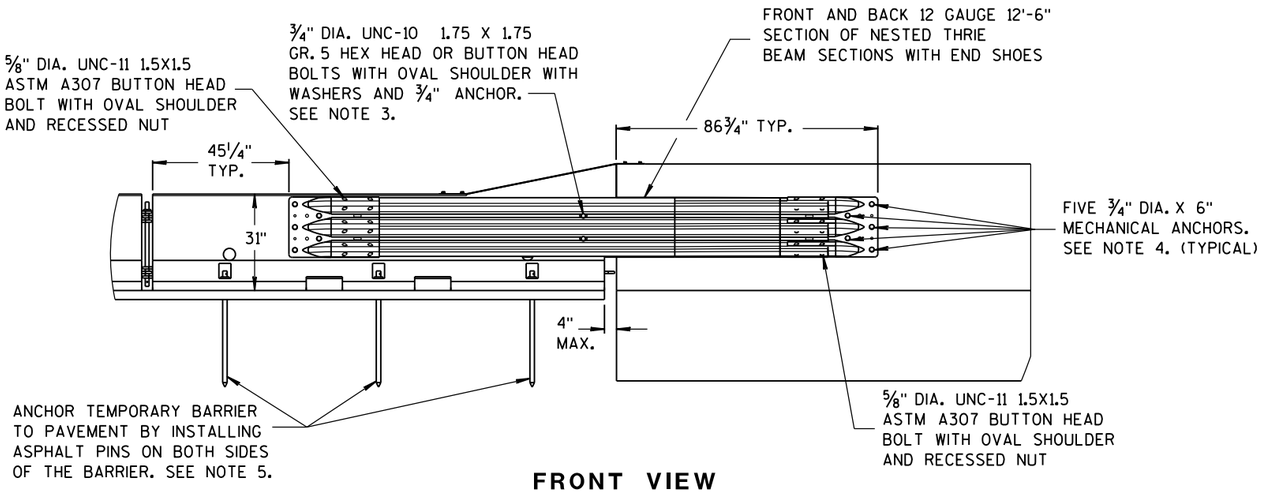
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

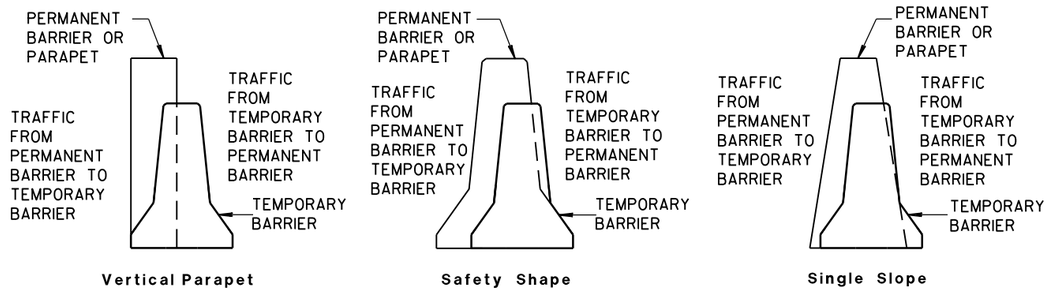
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW



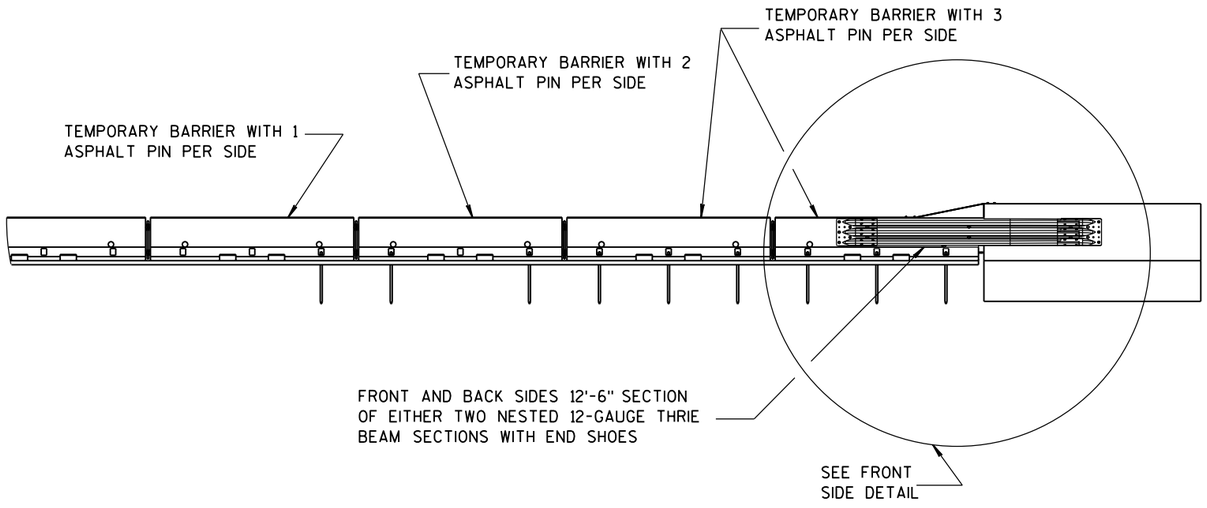
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

NOTES

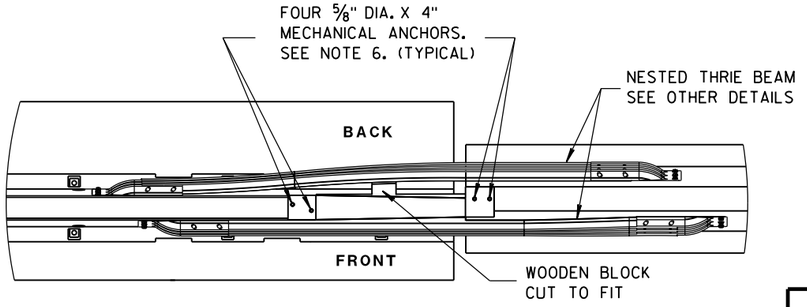
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW



FRONT VIEW



PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO 598

6

S.D.D. 14 B 7-14e

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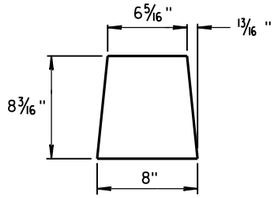
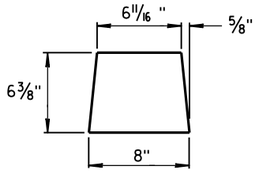
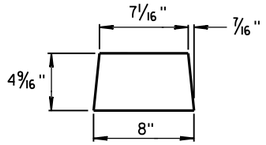
S.D.D. 14 B 7-14e



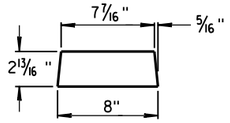
GUSSET 1



GUSSET 2

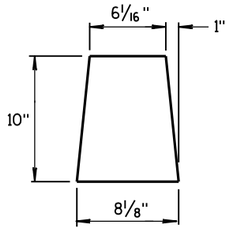


GUSSET 3

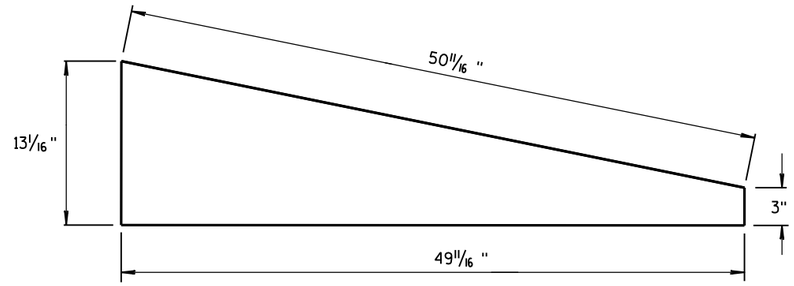


GUSSET 4

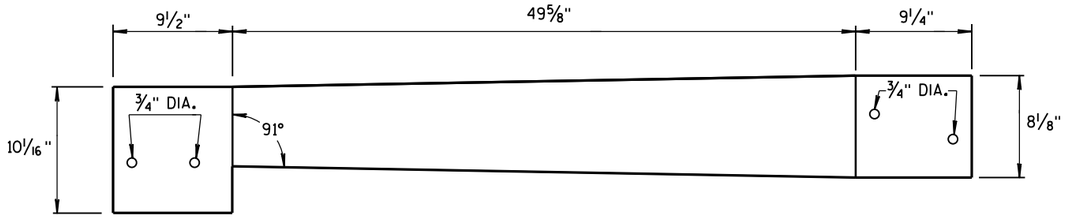
GUSSETS

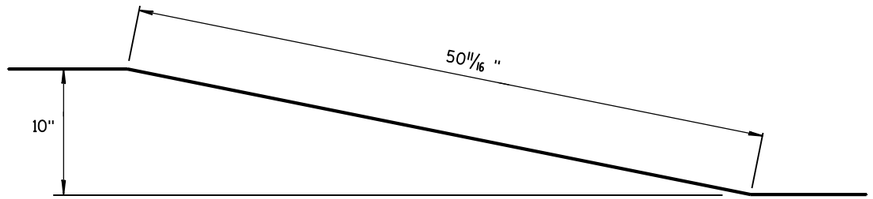


END PLATE



SIDE PLATE

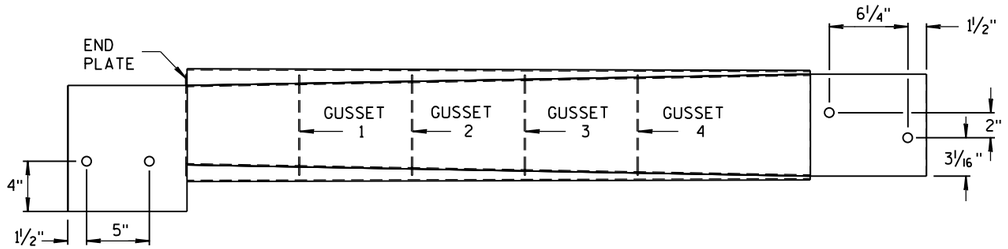


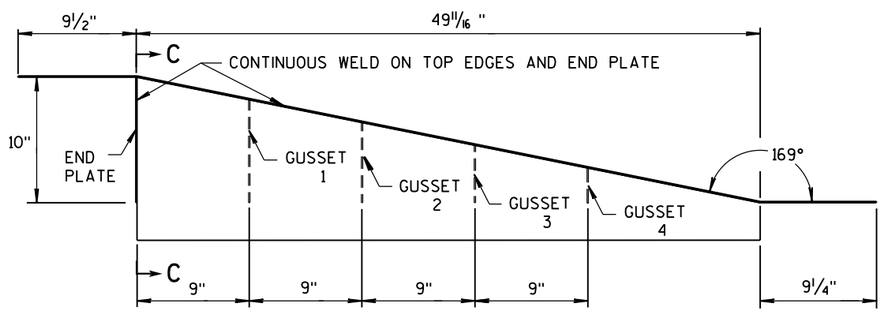


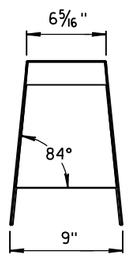
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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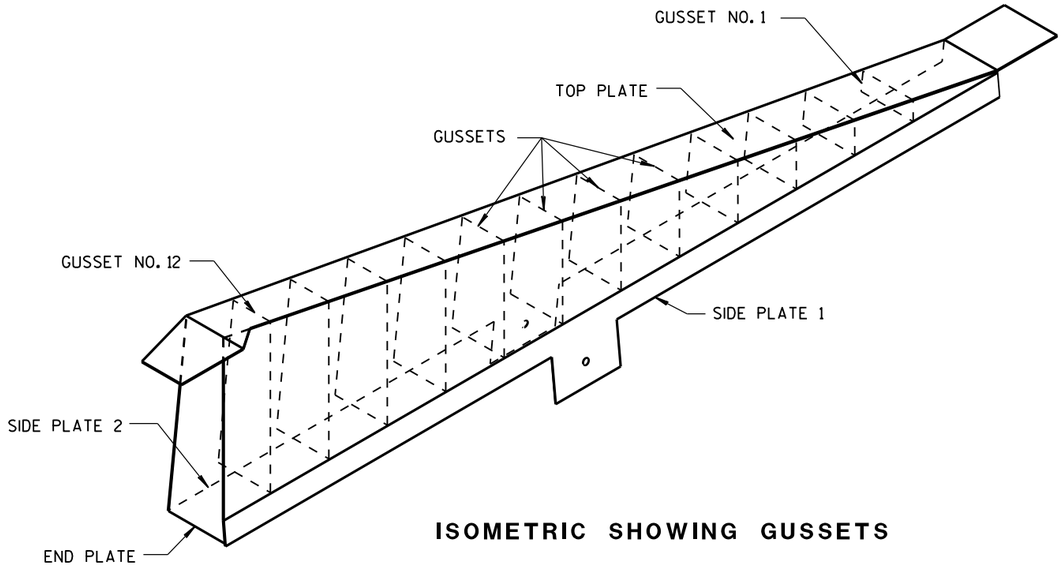
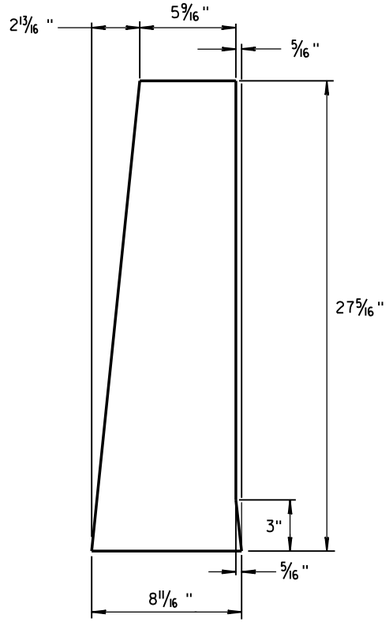
S.D.D. 14 B 7-14f

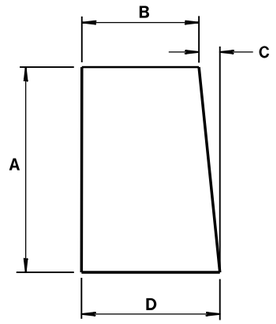


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



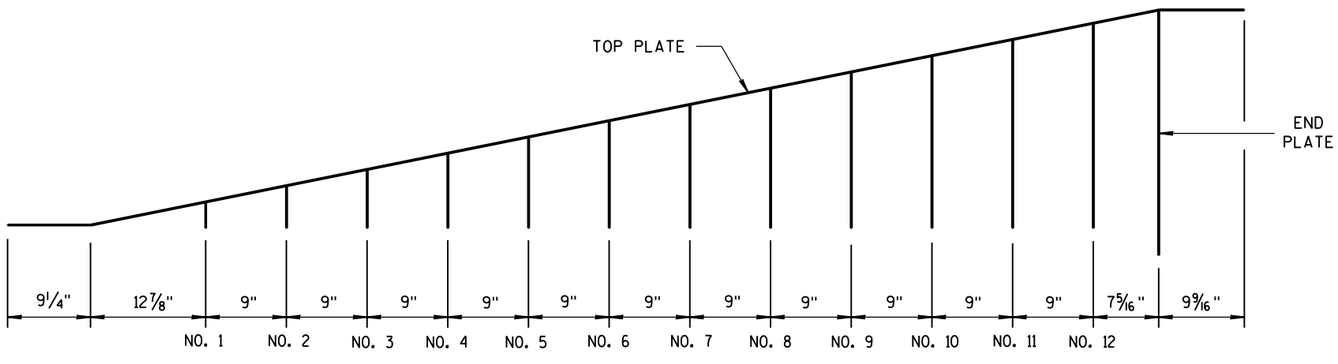
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

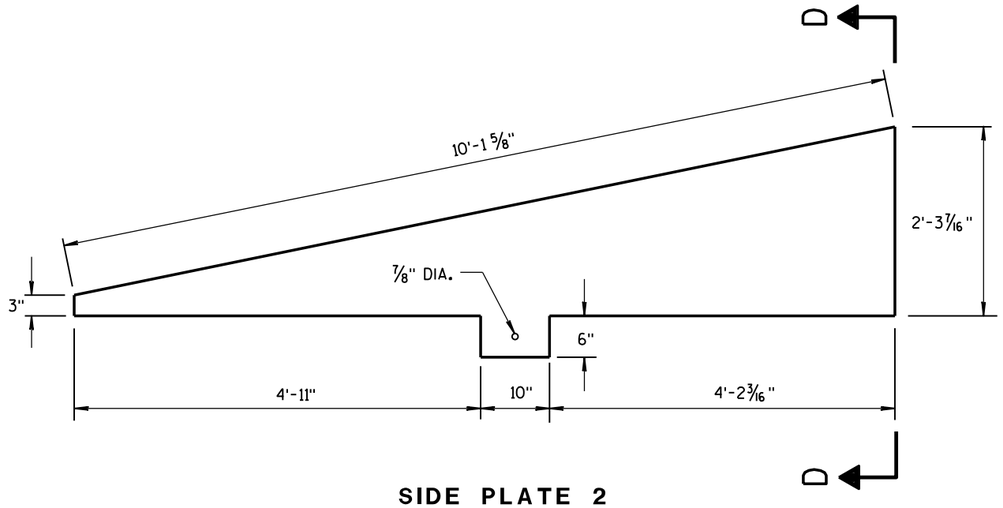
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 600

6

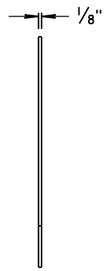
S.D.D. 14 B 7-14g

6

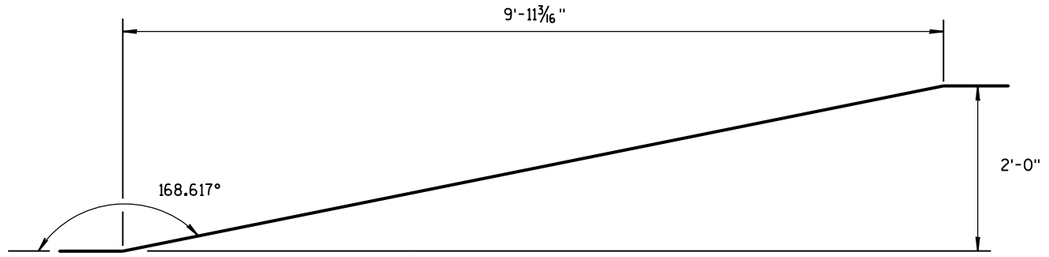
S.D.D. 14 B 7-14g



SIDE PLATE 2

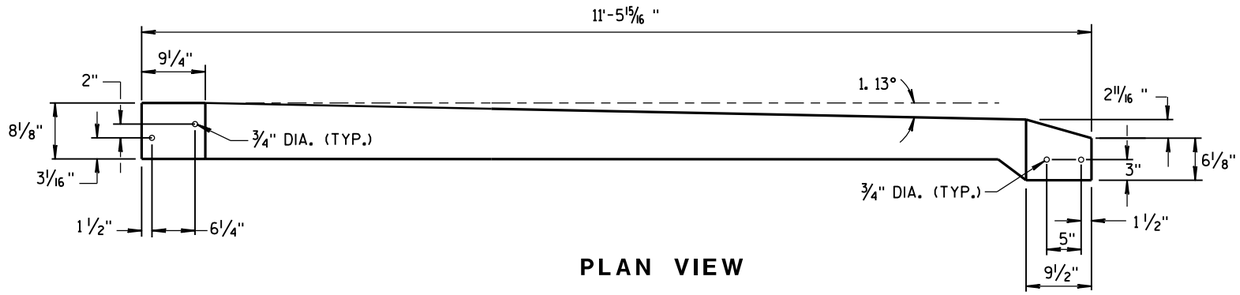


END VIEW



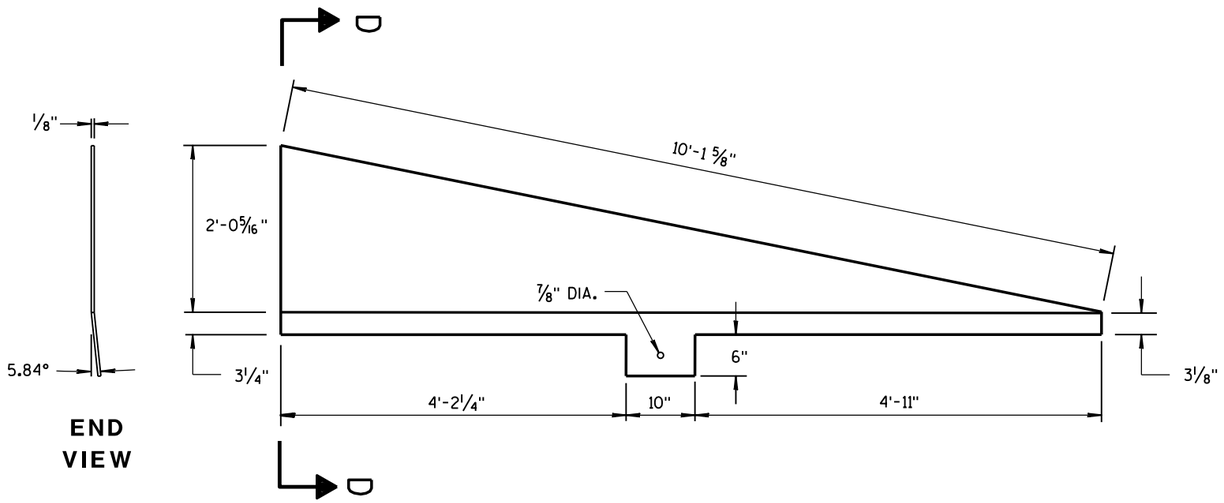
SIDE VIEW

TOP PLATE



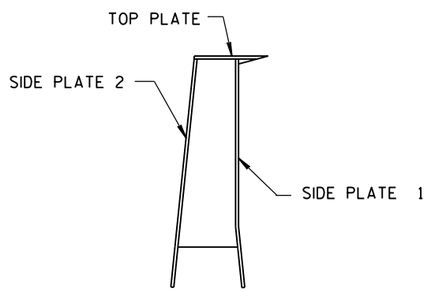
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

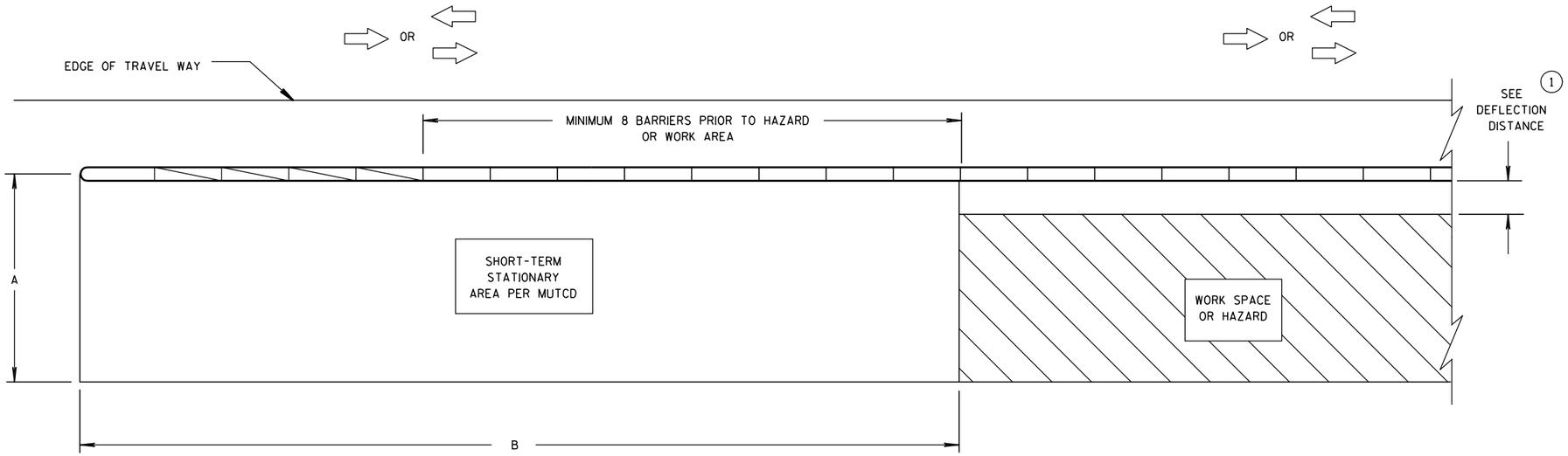
601

6

S.D.D. 14 B 7-14h

6

S.D.D. 14 B 7-14h



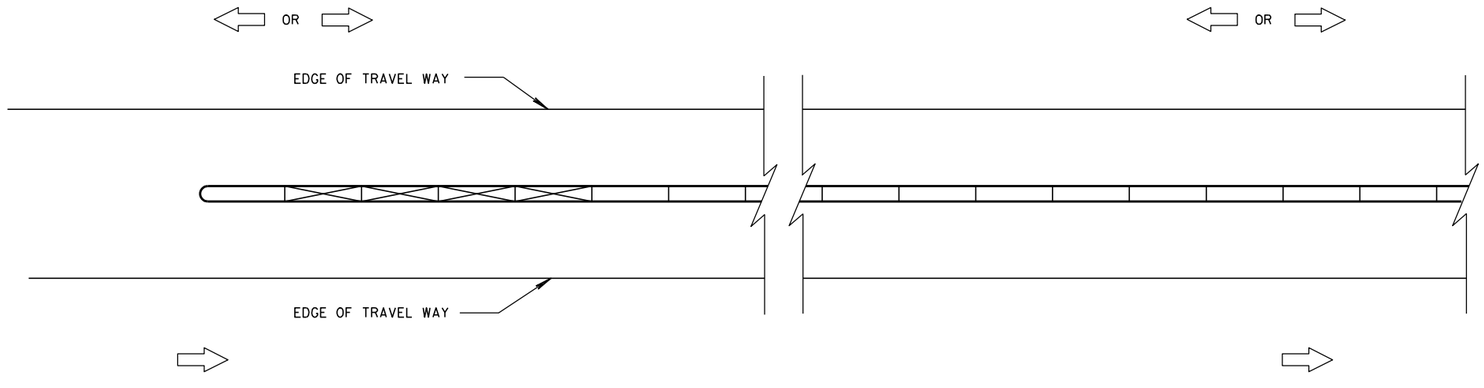
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

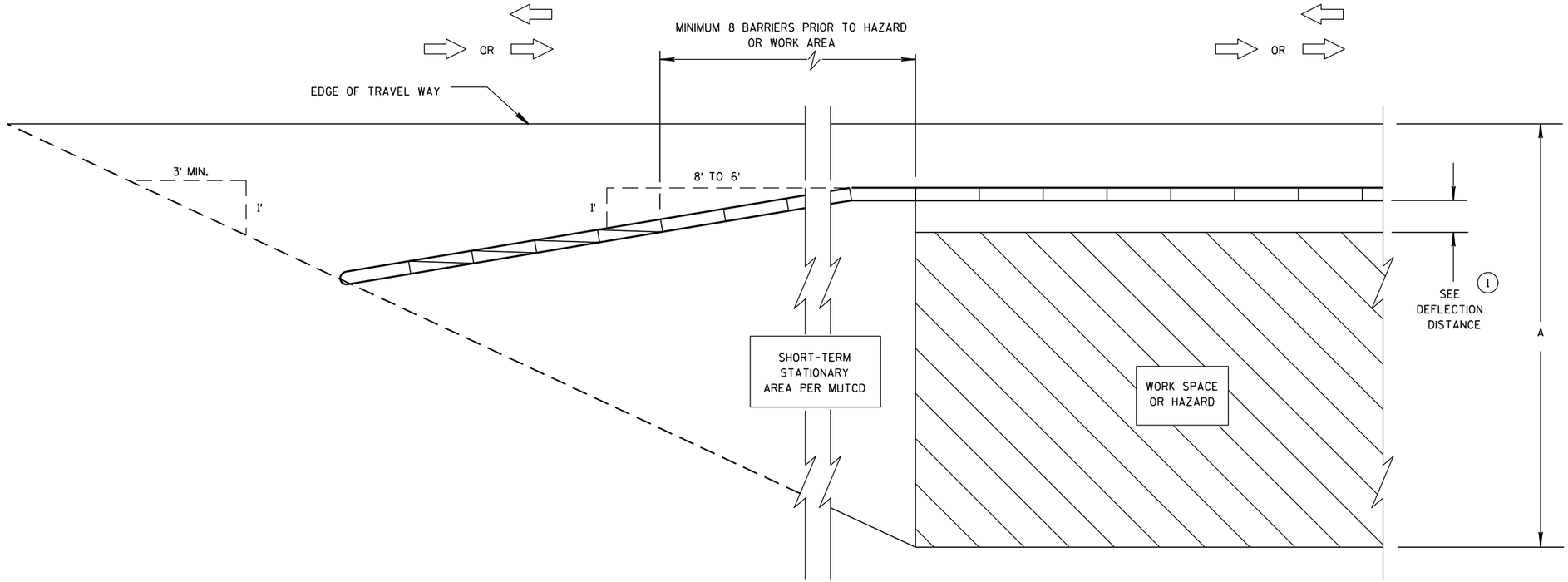
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

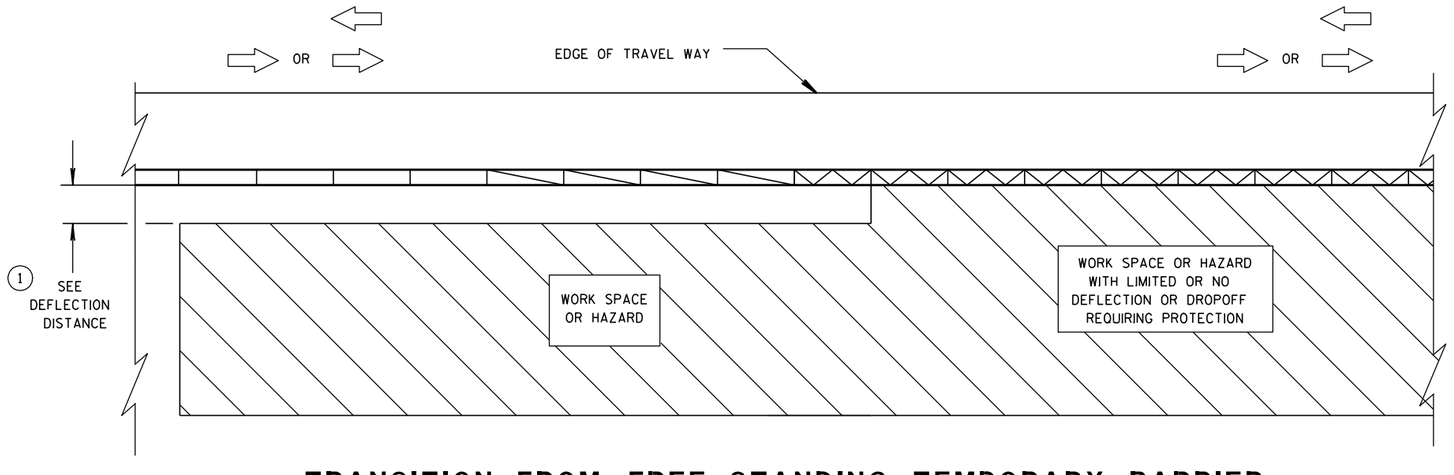
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 8-1a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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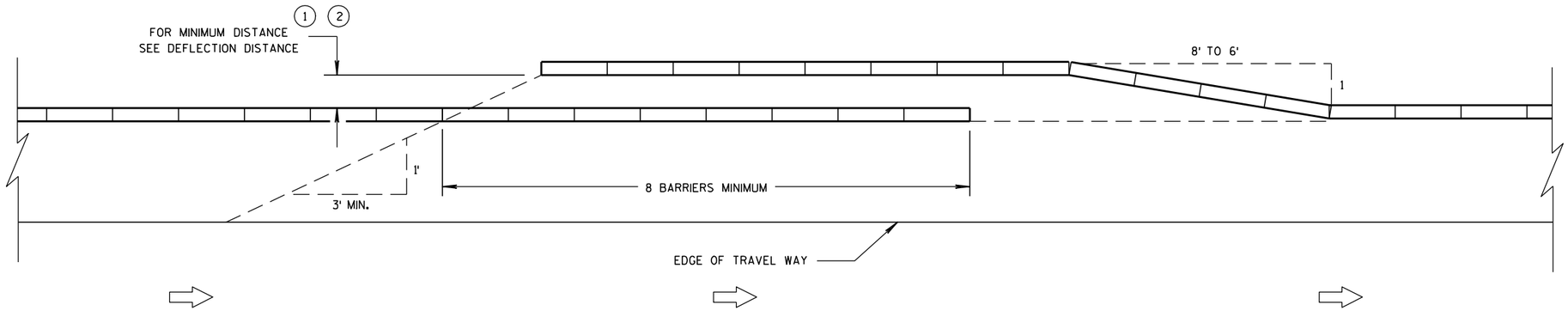
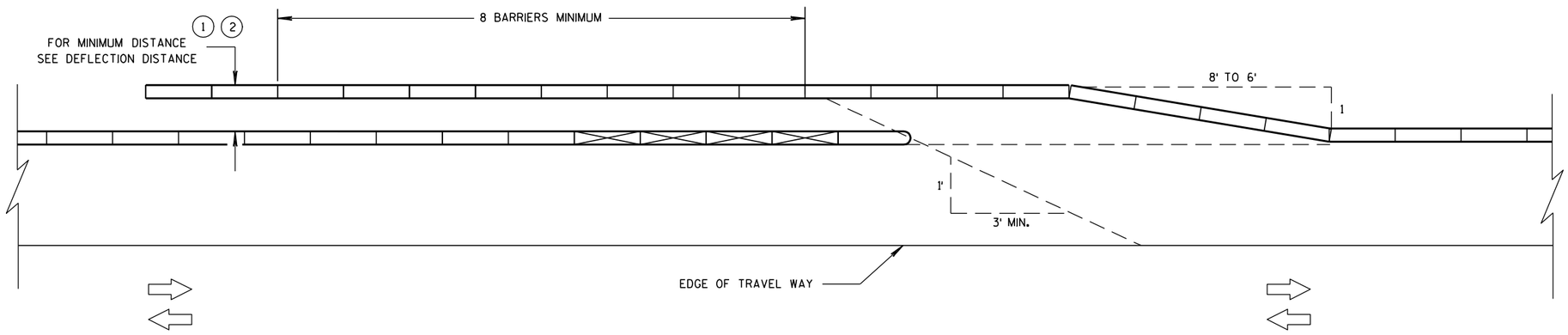
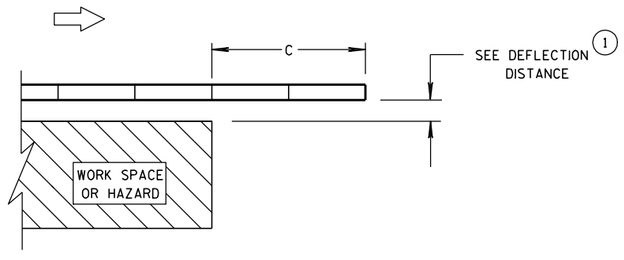
S.D.D. 14 B 8-1b



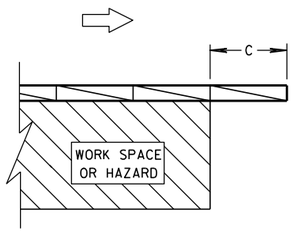
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

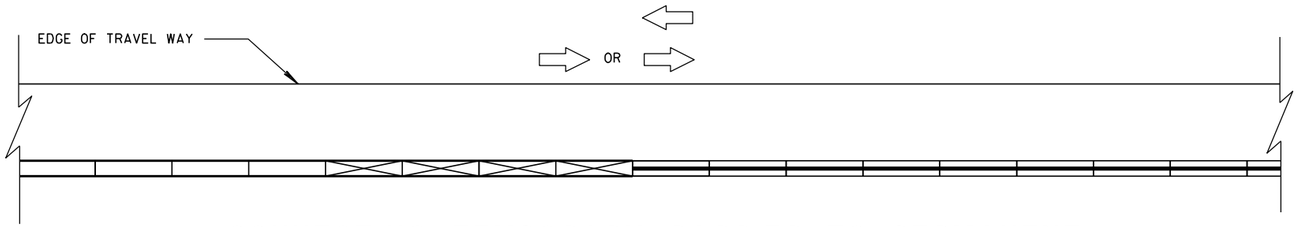
LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

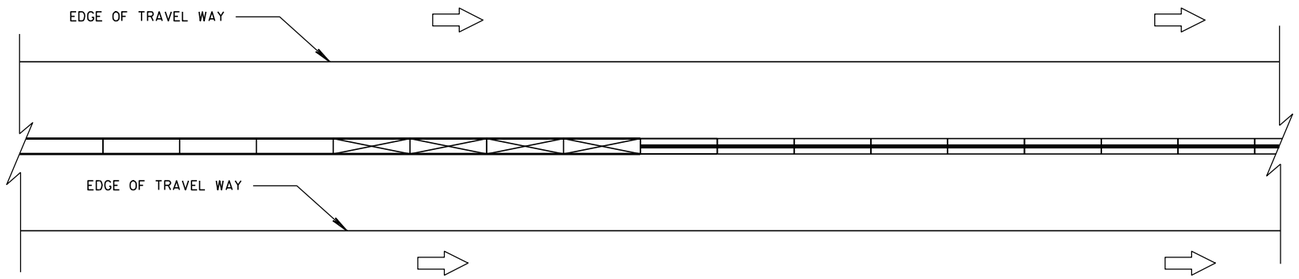
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 8-1c



CONNECTING TEMPORARY BARRIER TO PERMANENT CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

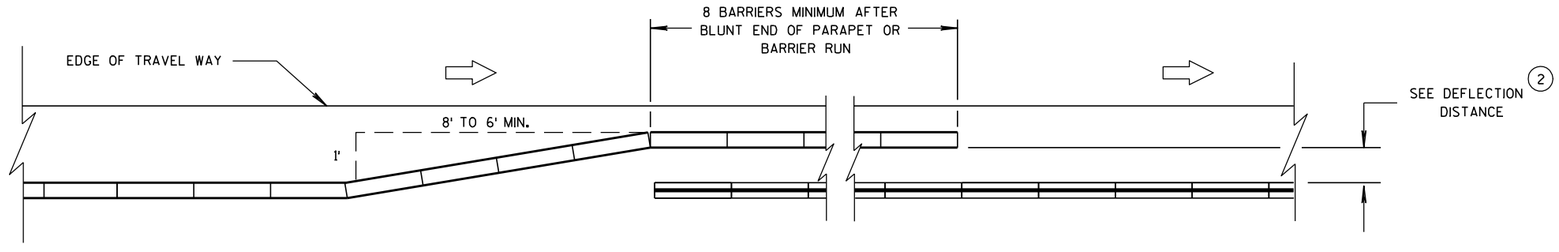
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

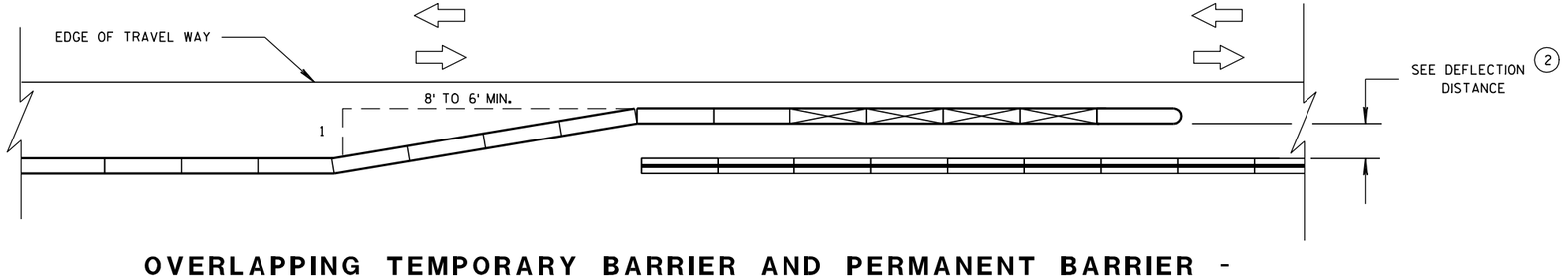
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER - ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER - TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 8-1d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

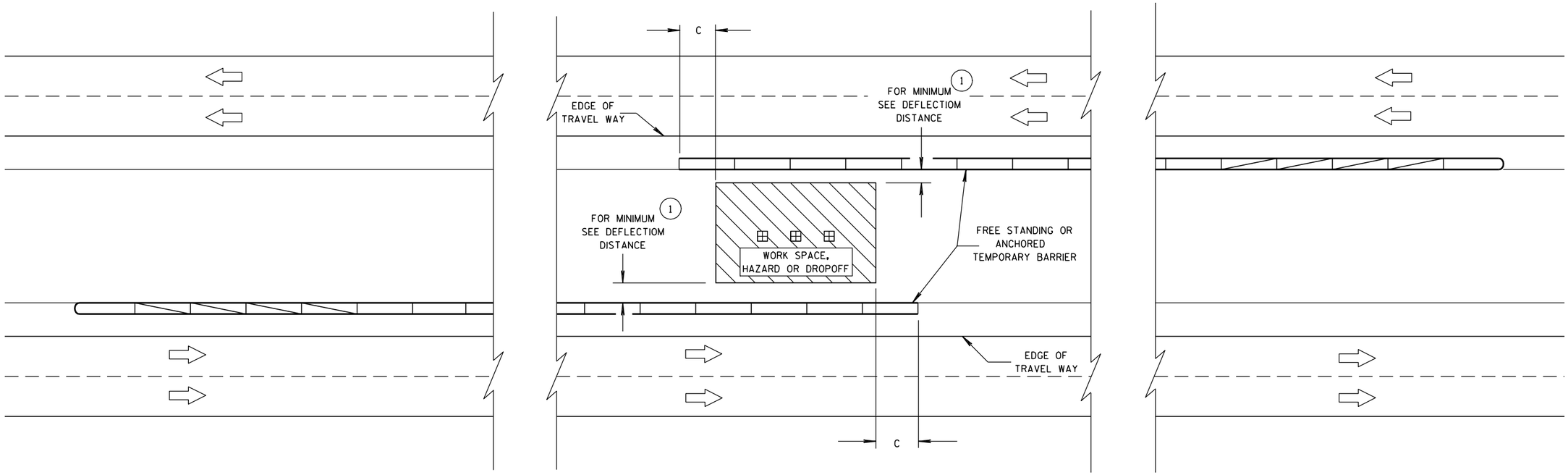
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

606

FHWA

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S.D.D. 14 B 8-1e

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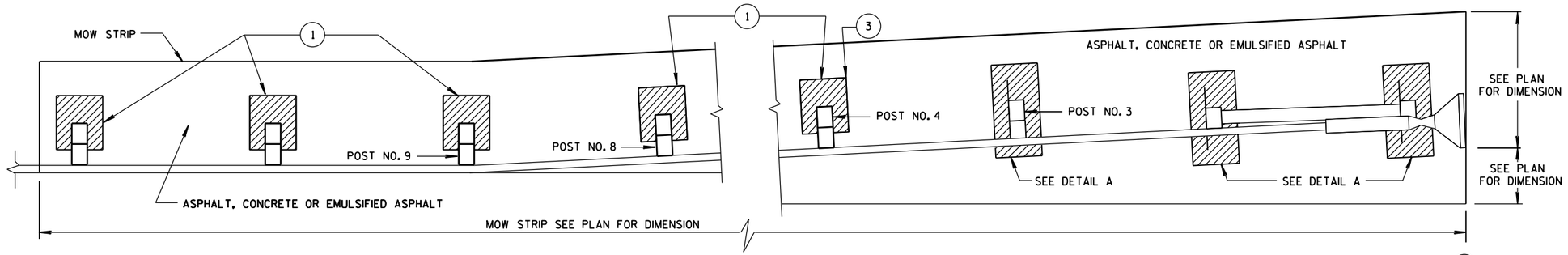
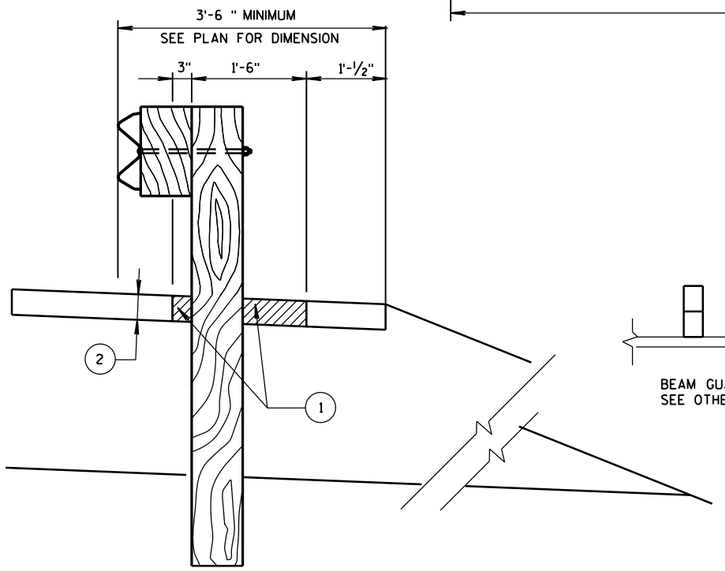
S.D.D. 14 B 8-1e

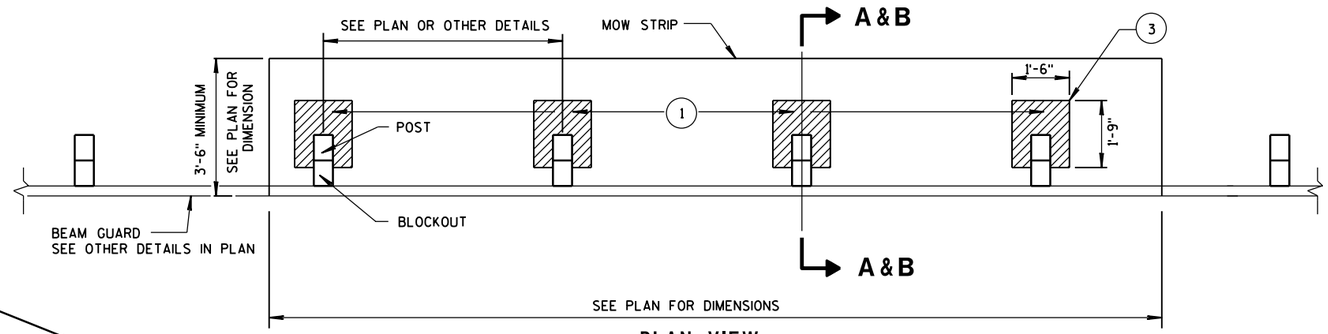


PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

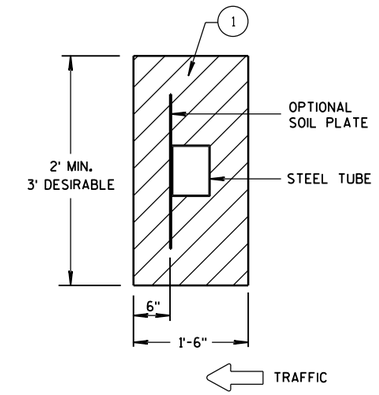


SECTION A-A

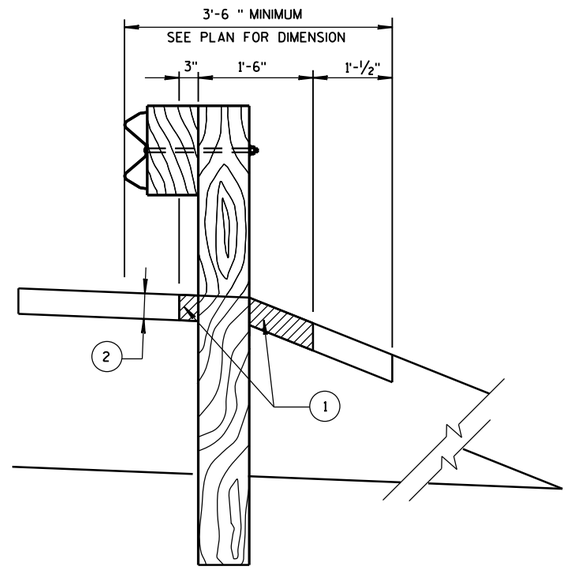


PLAN VIEW

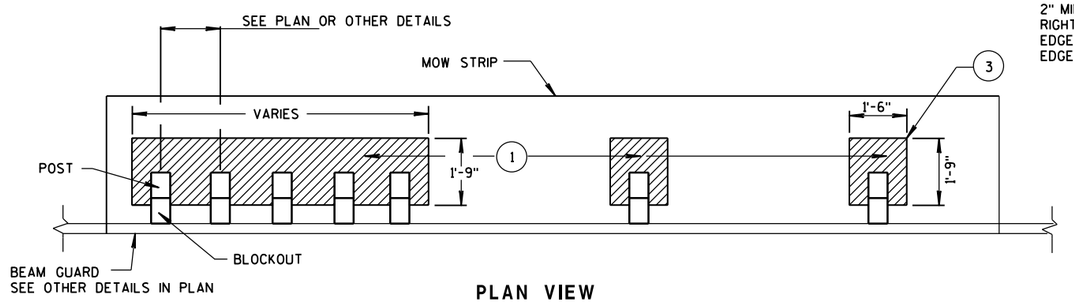
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



DETAIL A

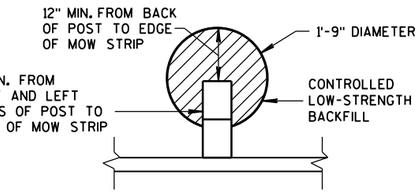


SECTION B-B

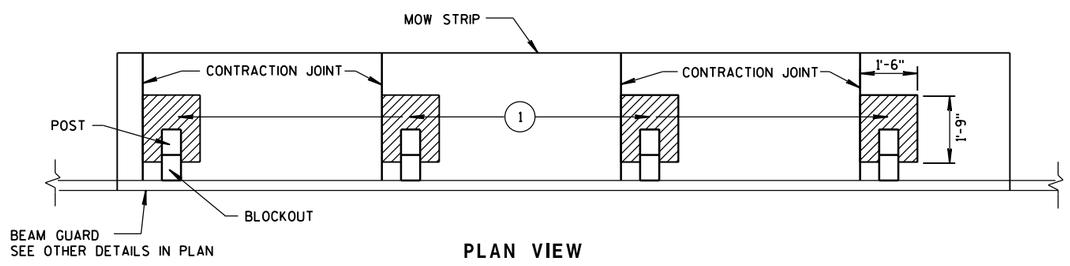


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA
MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

(1) CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.

(2) DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS

(3) FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

NT

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S.D.D. 14 B 28-3

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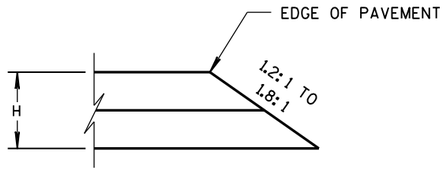
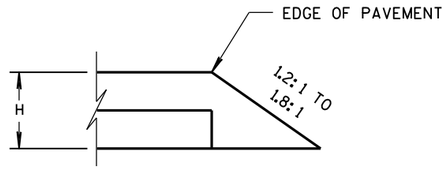
S.D.D. 14 B 28-3



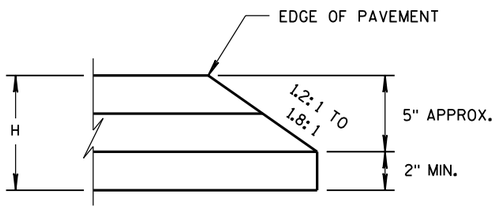
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



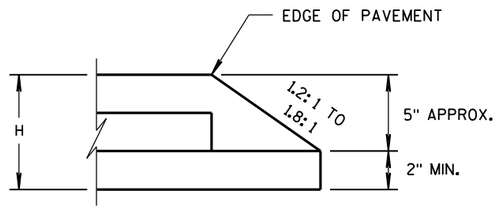
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

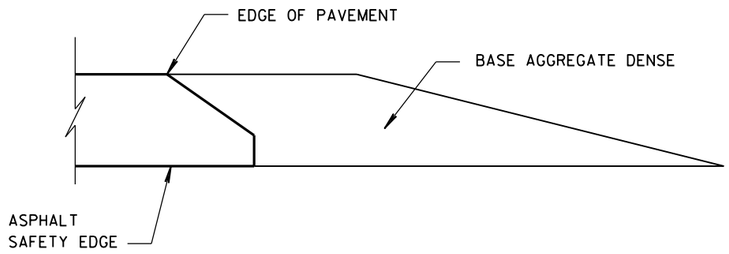
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

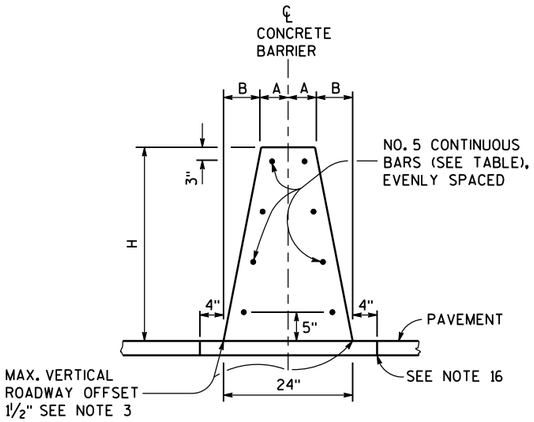
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

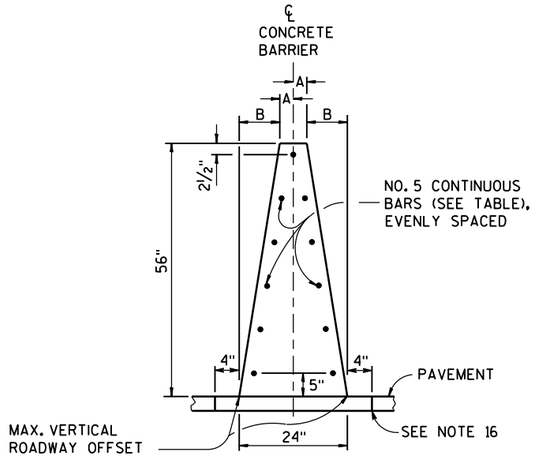
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

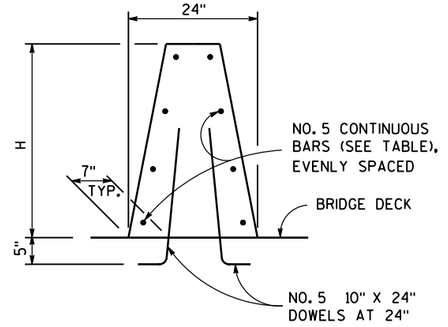
FHWA



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)



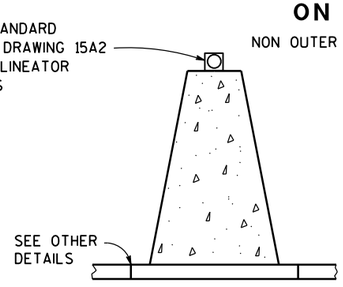
SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

NON OUTER PARAPET APPLICATION

GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1½", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.
16. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



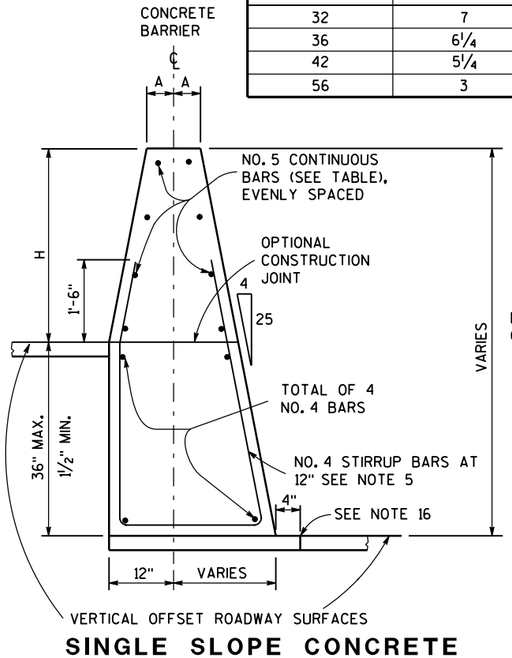
DELINEATION

DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

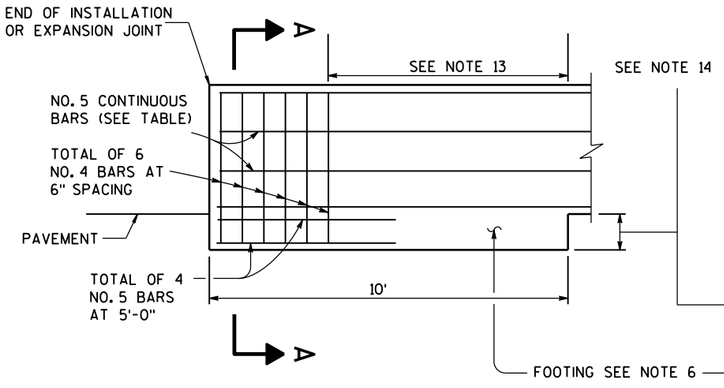
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2	



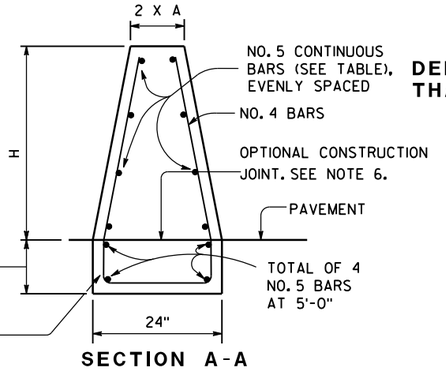
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT



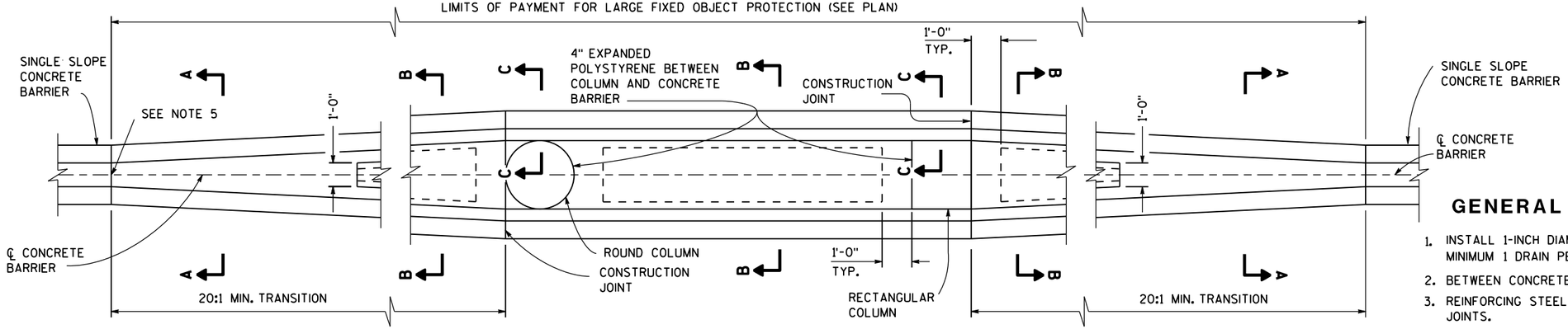
SECTION A-A

CONCRETE BARRIER SINGLE SLOPE (CBSS)

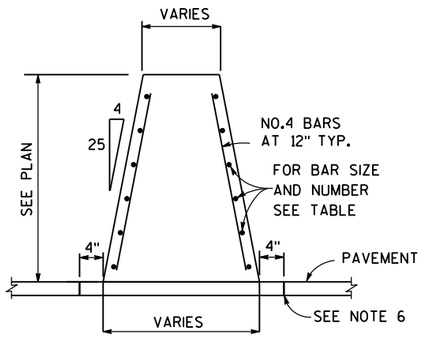
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

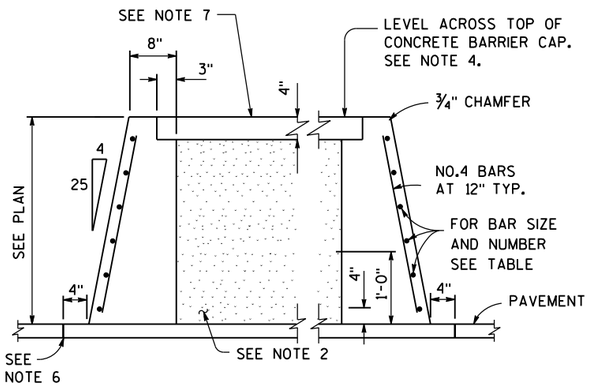
S.D.D. 14 B 32-3a



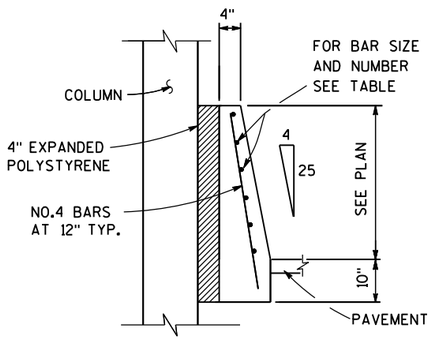
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



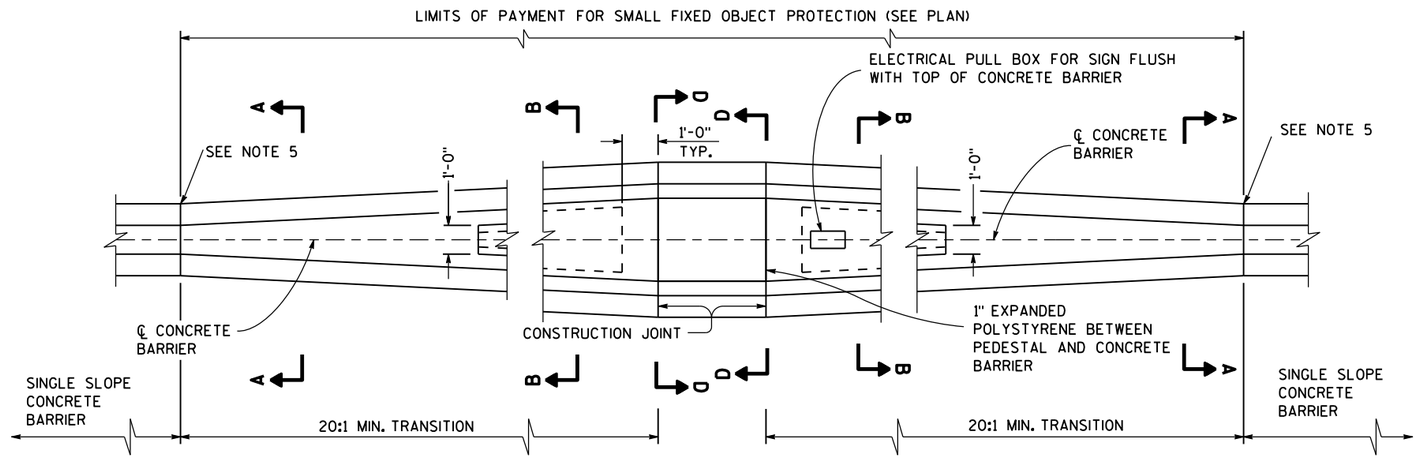
SECTION A-A



SECTION B-B



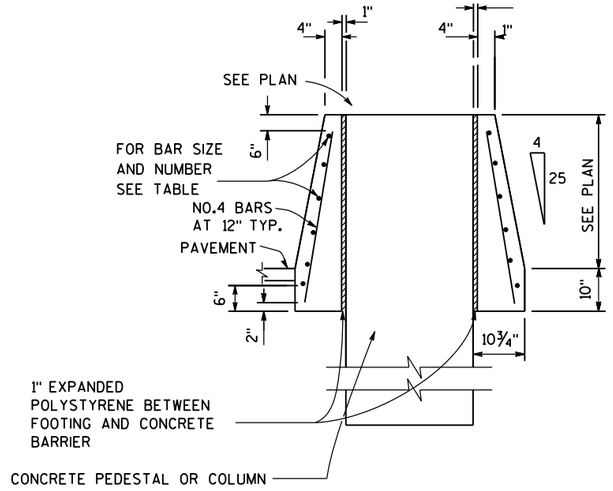
SECTION C-C



SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

GENERAL NOTES

1. INSTALL 1-INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.
6. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
7. USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.



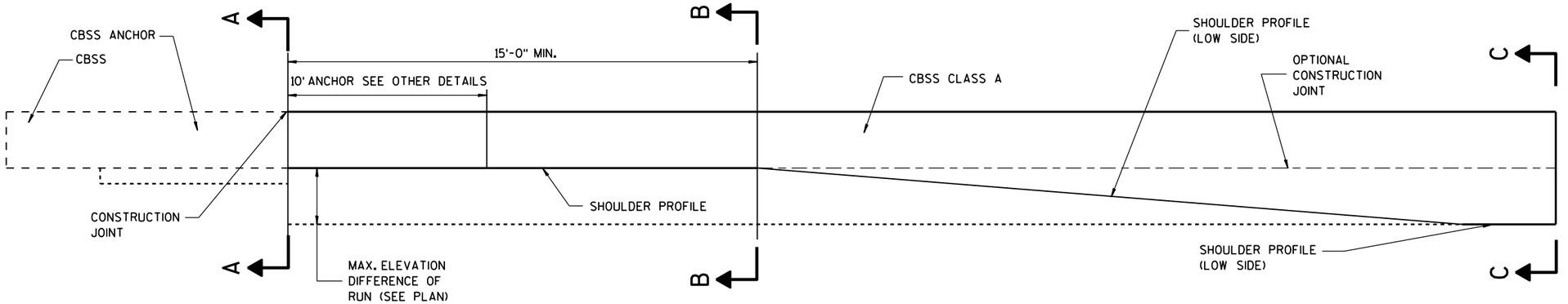
SECTION D-D

BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

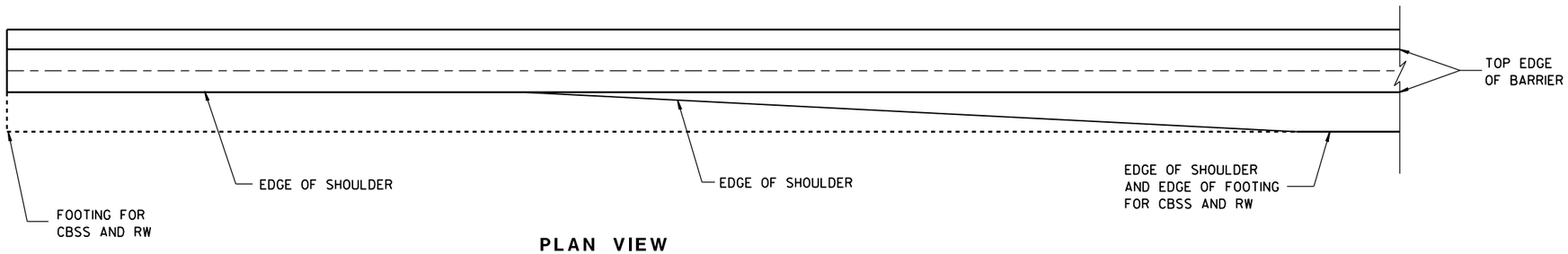
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

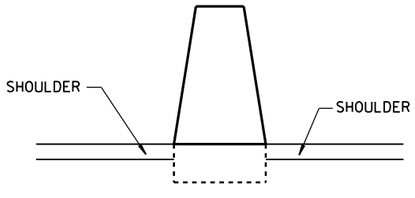
6
S.D.D. 14 B 32-3b



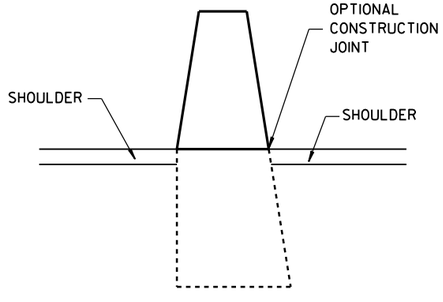
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



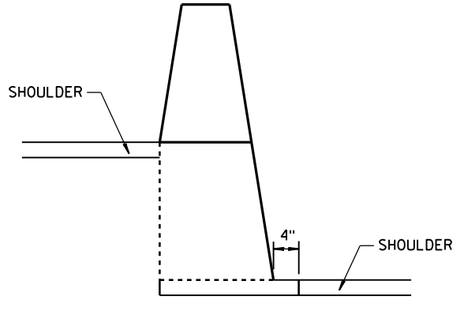
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



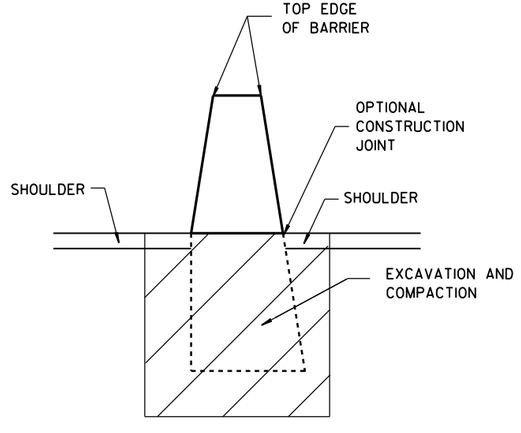
SECTION A-A



SECTION B-B



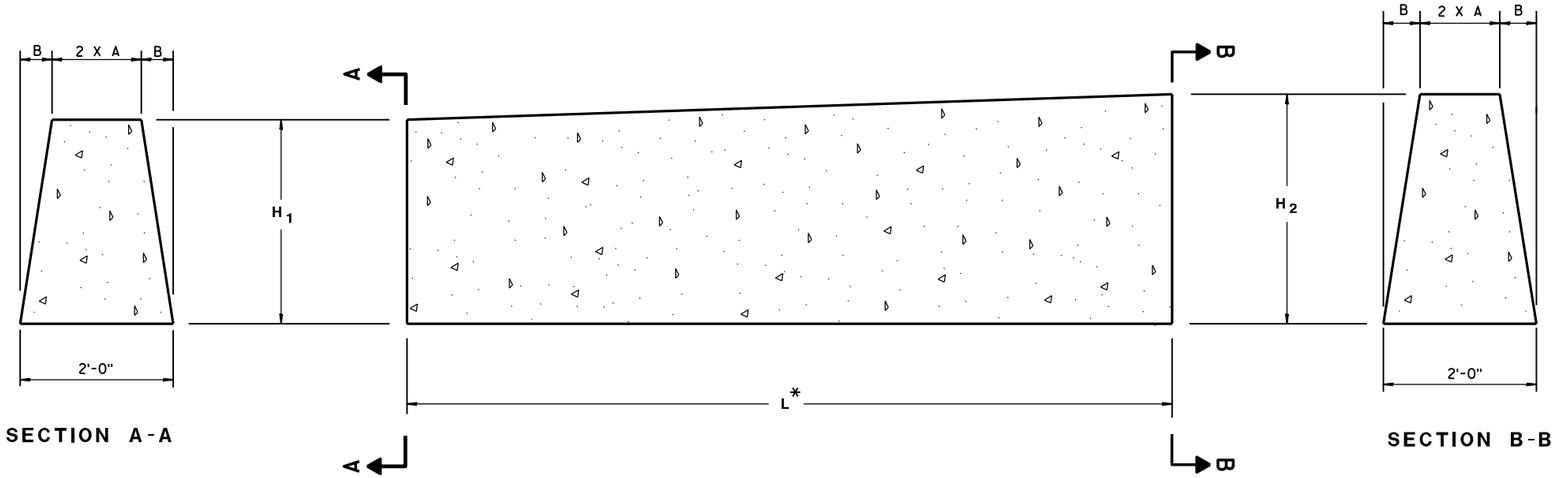
SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 32-3c



SECTION A-A

SECTION B-B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 1/4	5 3/4
42	5 1/4	6 3/4
56	3	9

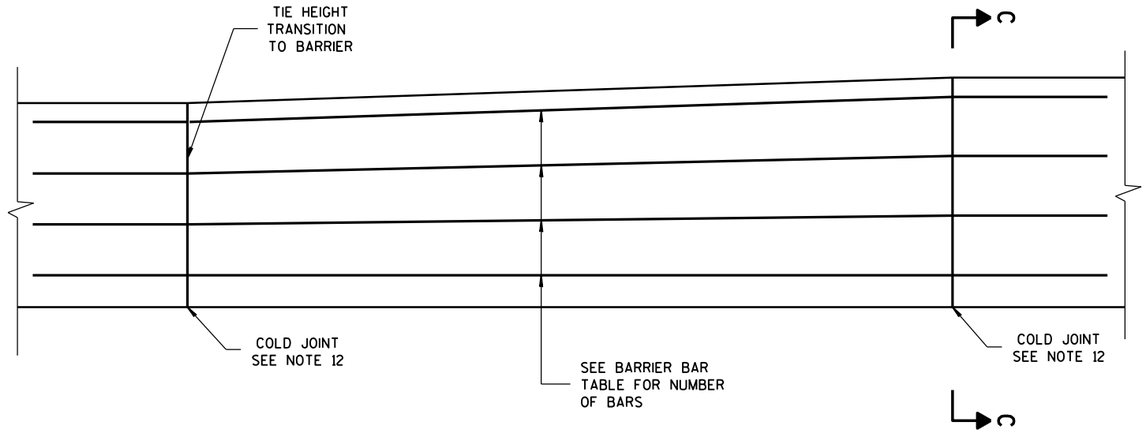
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

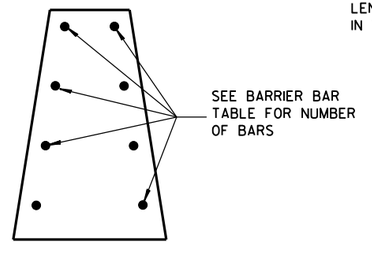
USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

BARRIER BARS

H_1	H_2	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.





SECTION C-C

STEEL REINFORCEMENT DETAIL

CONCRETE BARRIER SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2014 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 14 B 32-3d

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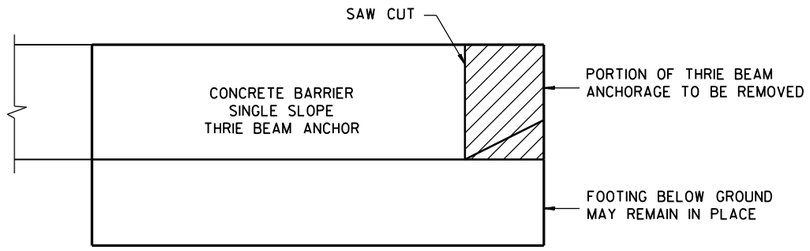
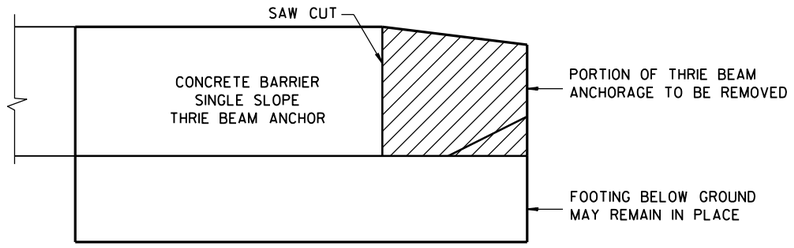
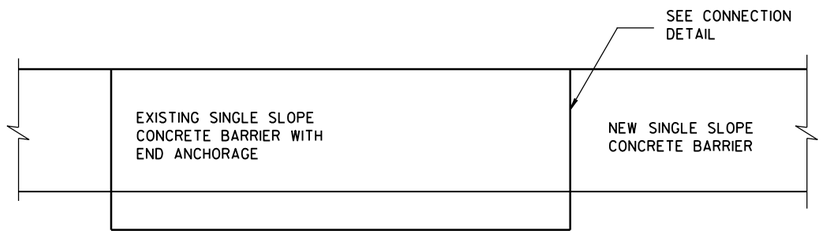
S.D.D. 14 B 32-3d



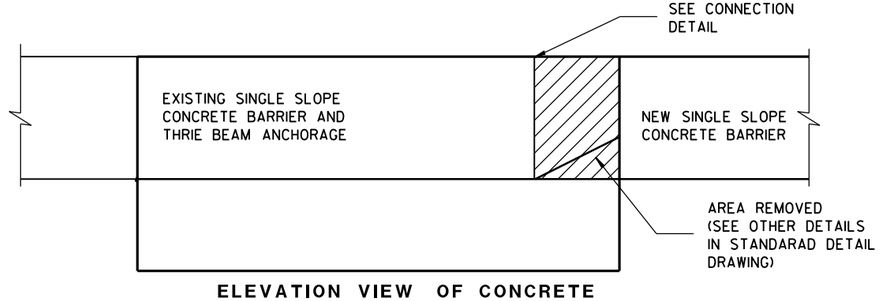
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



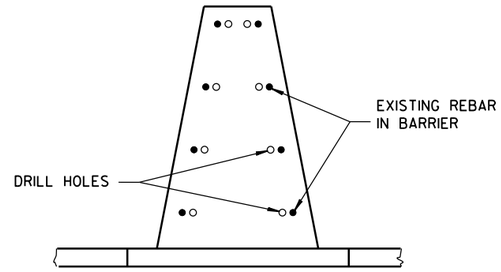
REMOVAL AREA OF CONCRETE THRIE BEAM
ANCHORAGE WITH HEIGHT GREATER THAN 32"



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR END ANCHORAGE



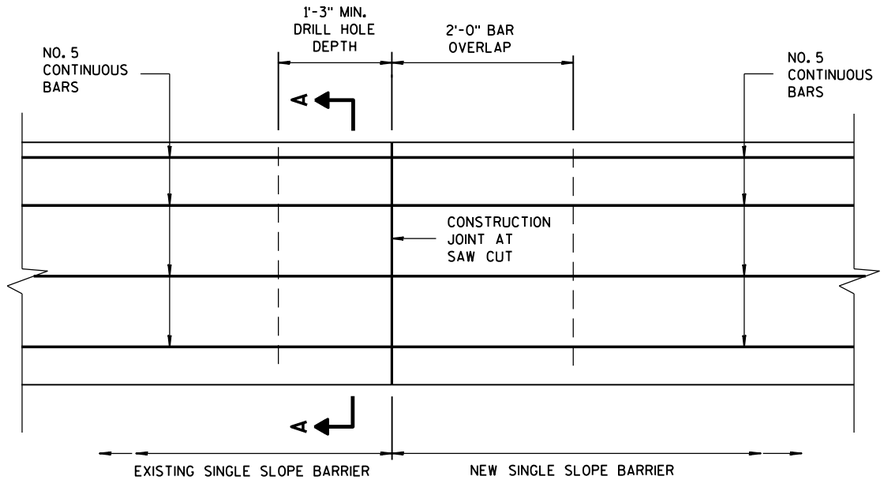
ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR THRIE BEAM TERMINAL



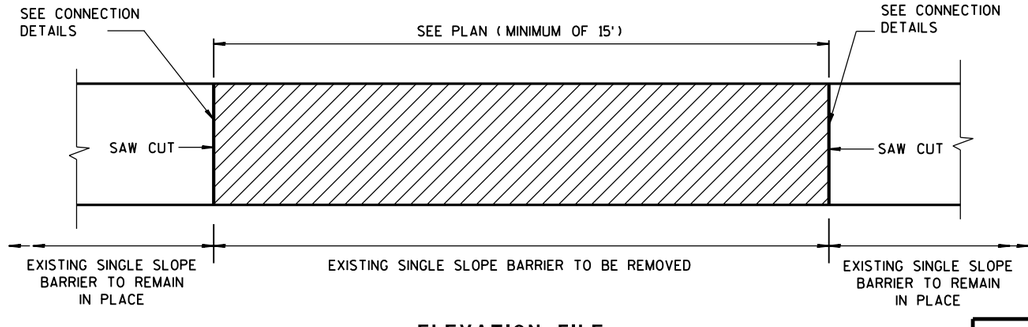
SECTION A-A

GENERAL NOTES

1. THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF REBAR IN BARRIER (SEE OTHER DETAILS).
2. MINIMUM DEPTH OF DRILL HOLES IS 1'-3".
3. DRILL HOLES TO BE A MINIMUM OF 4 INCHES FROM THE EDGE OF CONCRETE.
4. INSTALL EPOXY COATED NO. 5 BARS IN DRILL HOLES.
5. END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.
6. REMOVE THRIE BEAM ANCHORAGE AS SHOWN.



CONNECTION OF EXISTING SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



ELEVATION FILE
BARRIER REMOVAL AND REPLACEMENT

CONCRETE BARRIER
SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

6

S.D.D. 14 B 32-3e

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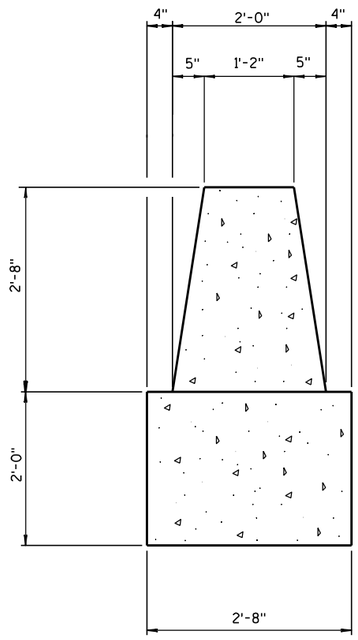
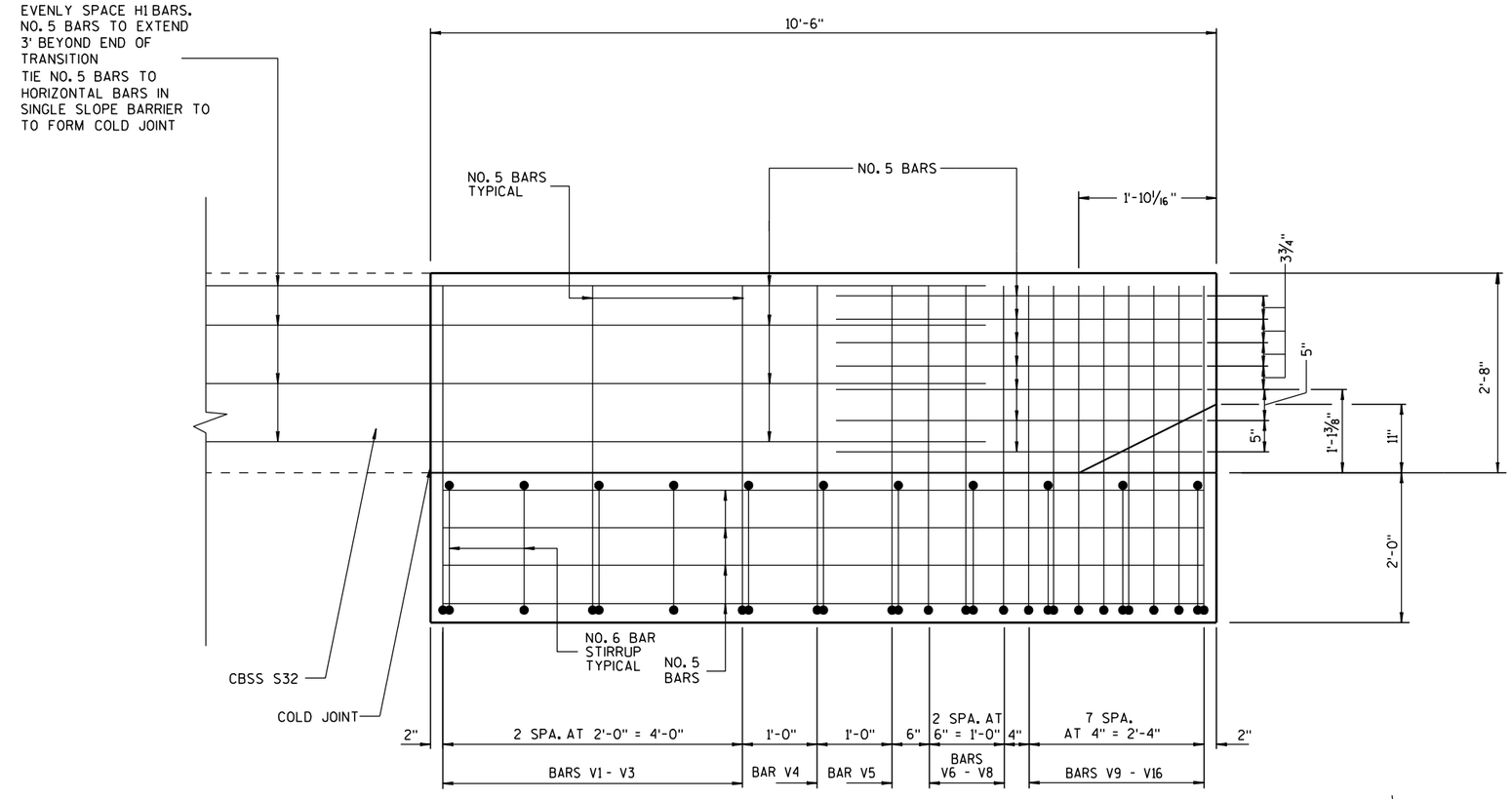
S.D.D. 14 B 32-3e

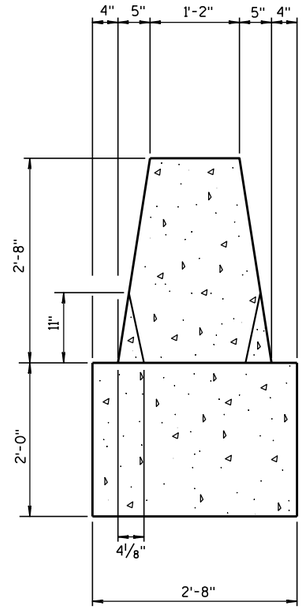


SECTION A-A

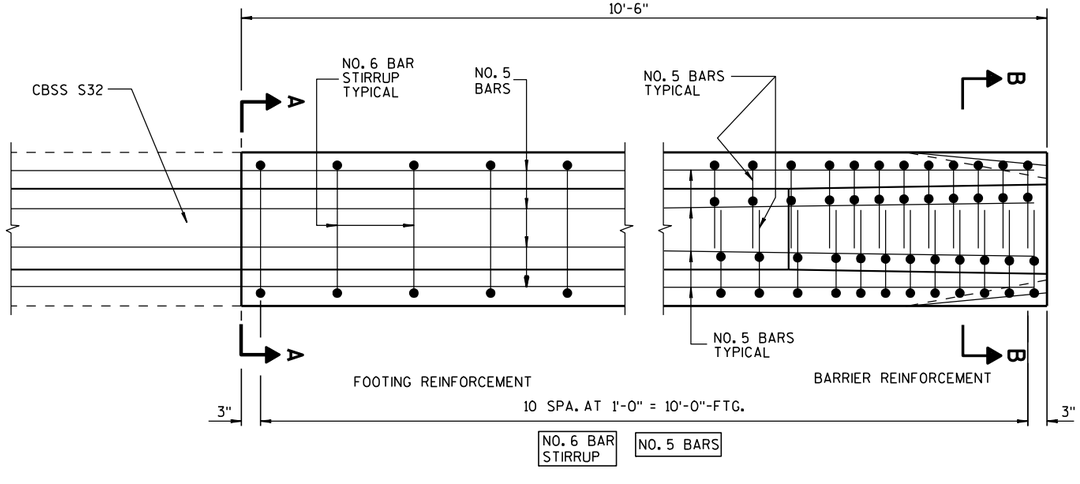


SEE SECTIONS (1) THRU (16)

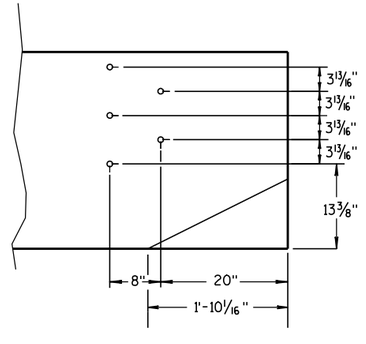
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

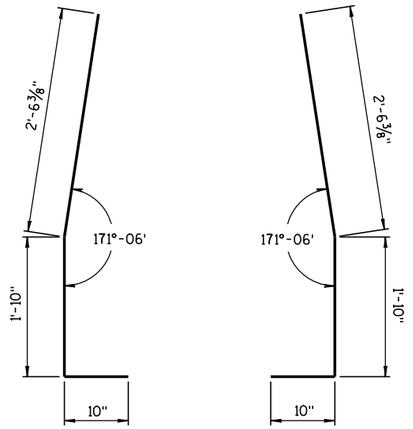
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

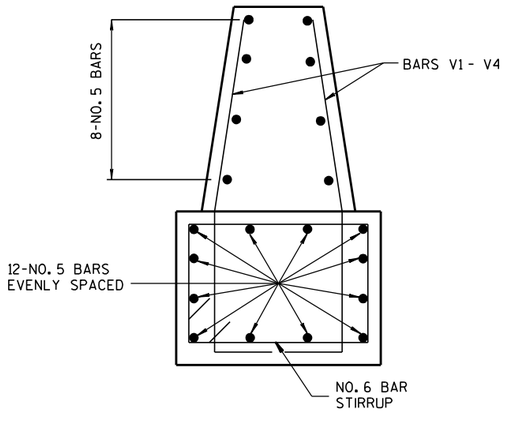
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

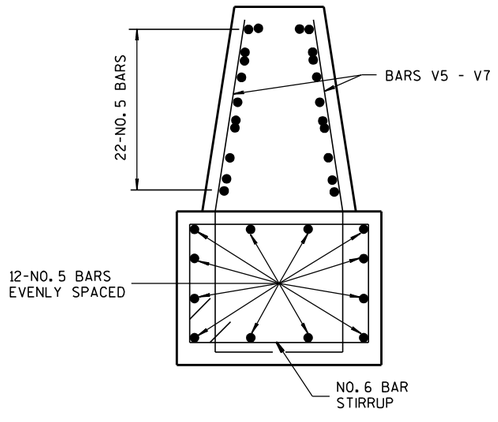
6
S.D.D. 14 B 33-1a



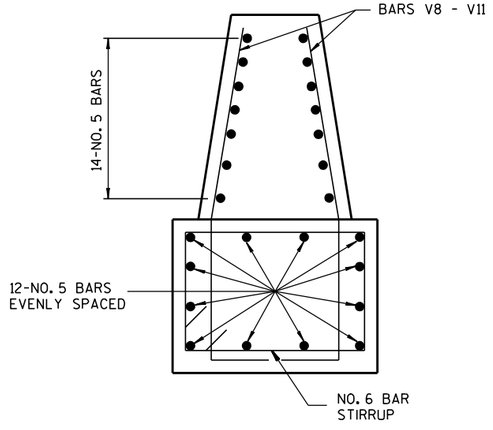
BAR BENDING DETAIL
FOR BARS V1 - V11



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

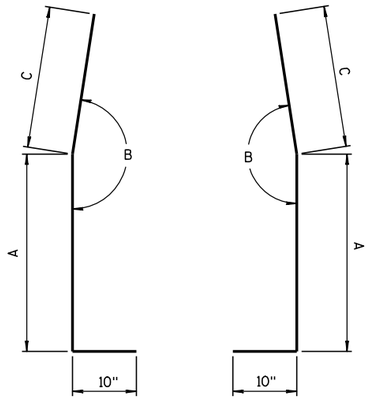
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 33-1b

BAR CHART
SECTIONS V12 - V13

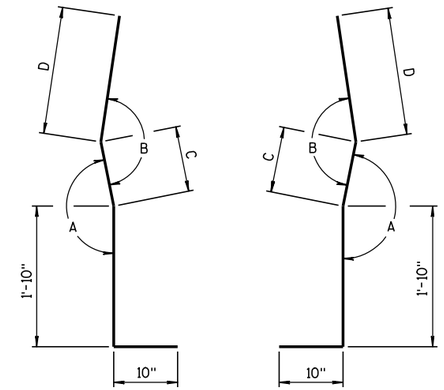
BAR	A	B	C
V12	2'-2"	171°-15'	2'-1 3/4"
V13	2'-7"	171°-05'	1'-9 3/8"



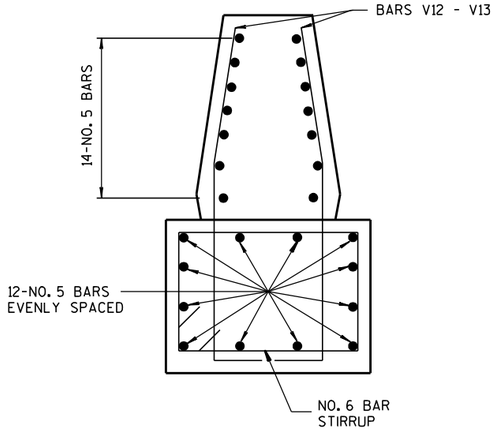
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

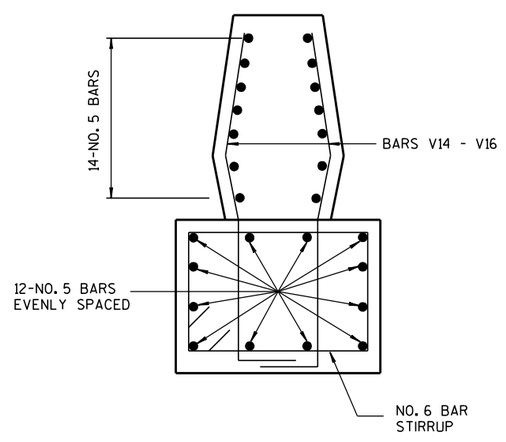
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



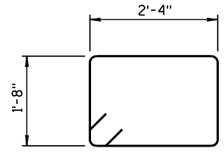
BAR BENDING DETAIL
FOR BARS V14 - V16



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

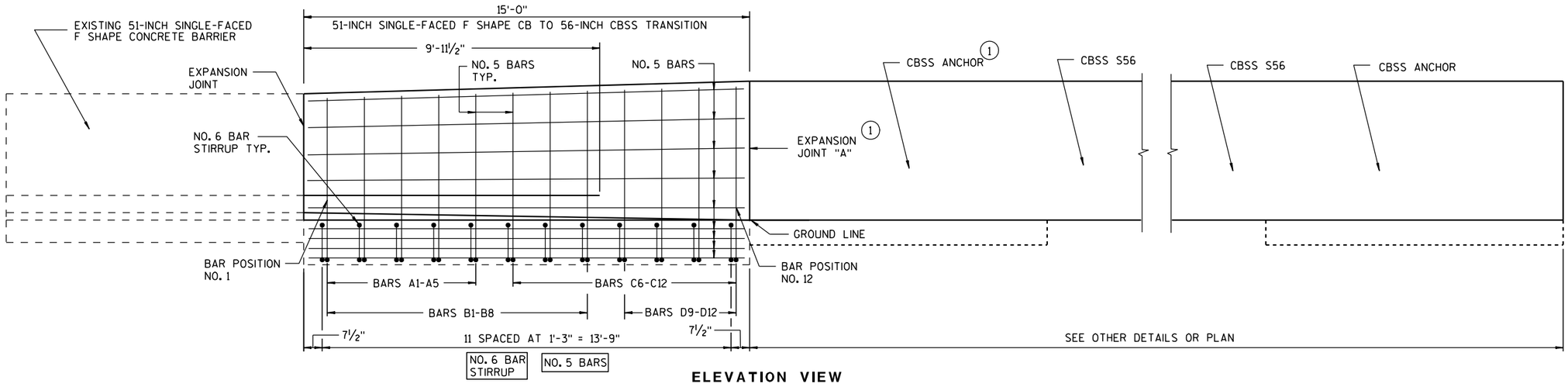
6-3-2010
DATE

/S/ Jerry H. Zoss
ROADWAY STANDARDS ENGINEER

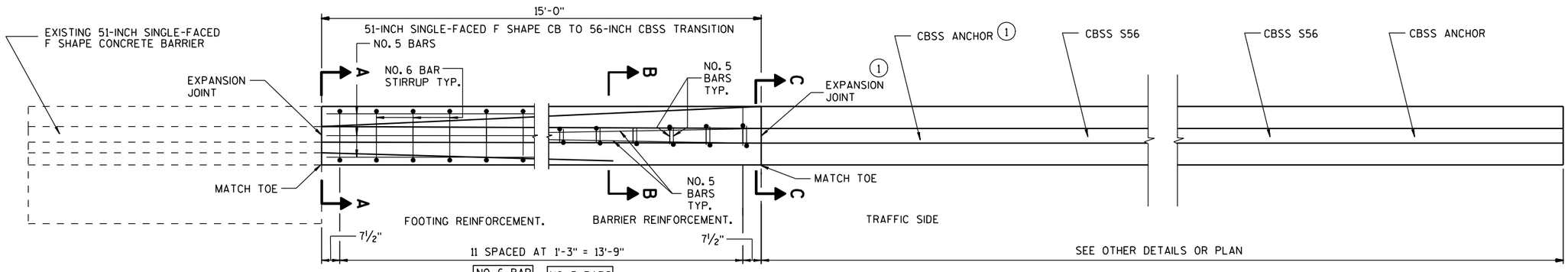
FHWA

6

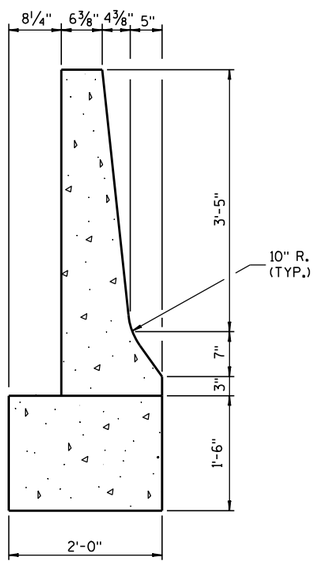
S.D.D. 14 B 33-1c



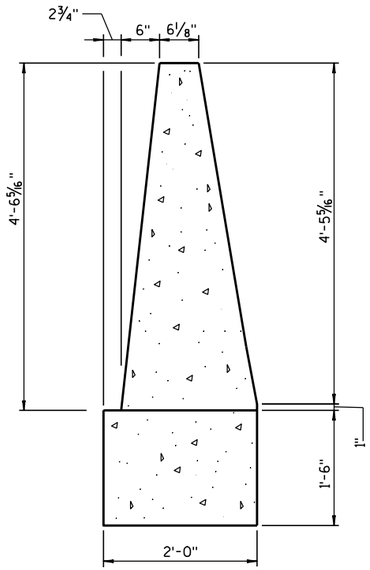
ELEVATION VIEW



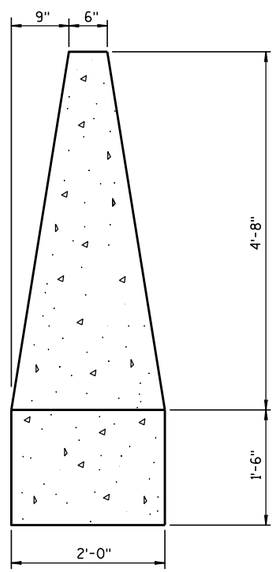
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHORAGE NOT REQUIRED.

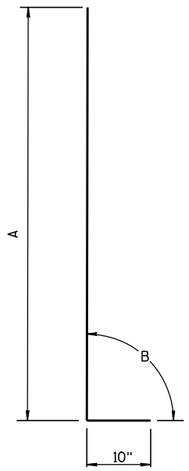
51-INCH SINGLE-FACED F SHAPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 36-1i

"A" BAR CHART
BAR POSITIONS NO.1 - NO.5

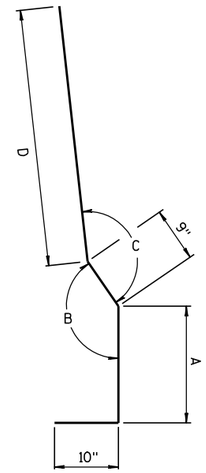
BAR	A	B
A1	5'-4½"	89°-55'
A2	5-4⅞"	89°-08'
A3	5'-5¼"	88°-50'
A4	5'-5¾"	88°-15'
A5	5'-6⅛"	87°-45'



"A" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS NO.1 - NO. 8

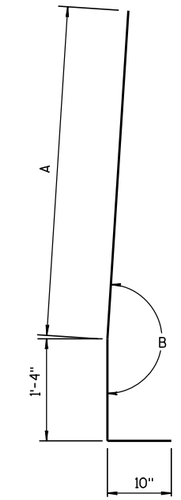
BAR	A	B	C	D
B1	1'-6"	145°-35'	151°-55'	3'-4⅛"
B2	1'-6"	149°-20'	156°-05'	3-4⅝"
B3	1'-5½"	152°-20'	159°-25'	3'-5"
B4	1'-5½"	155°-15'	162°-45'	3-5¼"
B5	1'-5½"	158°-58'	166°-55'	3'-5⅝"
B6	1'-5"	161°-50'	170°-05'	3'-6⅛"
B7	1'-5"	164°-35'	173°-25'	3'-6½"
B8	1'-5"	168°-05'	177°-30'	3'-7"



"B" BAR
BENDING DETAIL

"C" BAR CHART
BAR POSITIONS NO. 6 - NO. 12

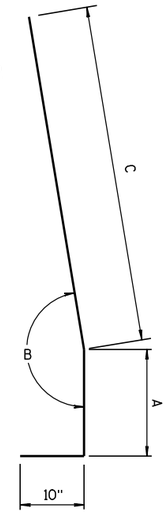
BAR	A	B
C6	4'-3⅜"	176°-20'
C7	4'-3⅞"	175°-30'
C8	4'-4⅜"	174°-40'
C9	4'-5⅛"	173°-55'
C10	4'-5⅜"	173°-10'
C11	4'-5⅞"	172°-15'
C12	4'-6½"	171°-25'



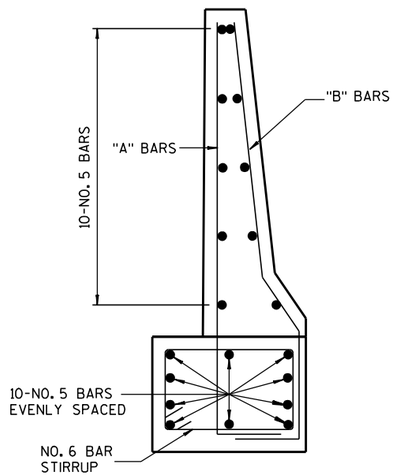
"C" BAR
BENDING DETAIL

"D" BAR CHART
BAR POSITIONS NO. 9 - NO. 12

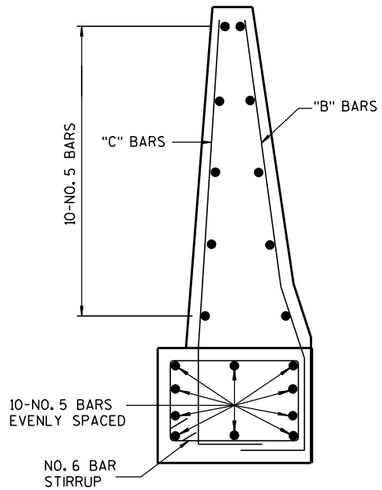
BAR	A	B	C
D9	1'-5"	170°-15'	4'-4¾"
D10	1'-4½"	170°-20'	4'-5⅜"
D11	1'-4"	170°-30'	4-5⅞"
D12	1'-4"	170°-45'	4'-6¾



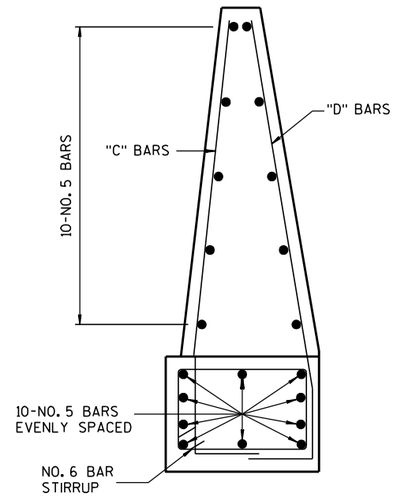
"D" BAR
BENDING DETAIL



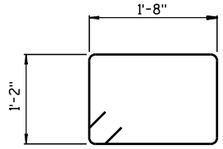
BAR DETAIL
BAR POSITIONS NO. 1 - NO. 5



BAR DETAIL
BAR POSITION NO. 6 - NO. 8



BAR DETAIL
BAR POSITIONS NO. 9 - NO. 12



STIRRUP BAR
BENDING DETAIL

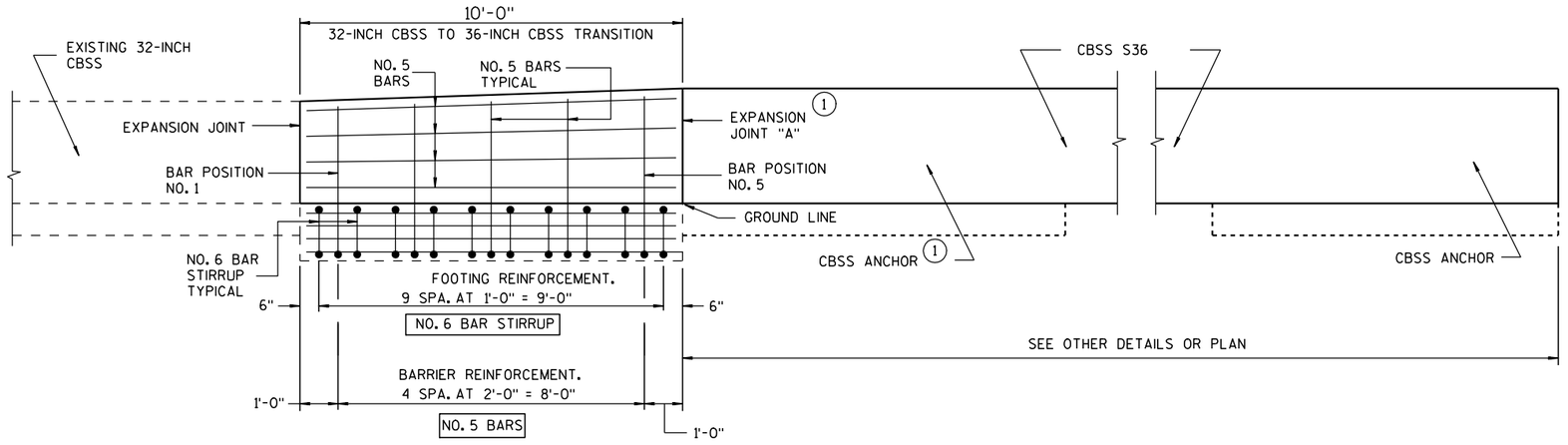
51-INCH SINGLE-FACED F SHAPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

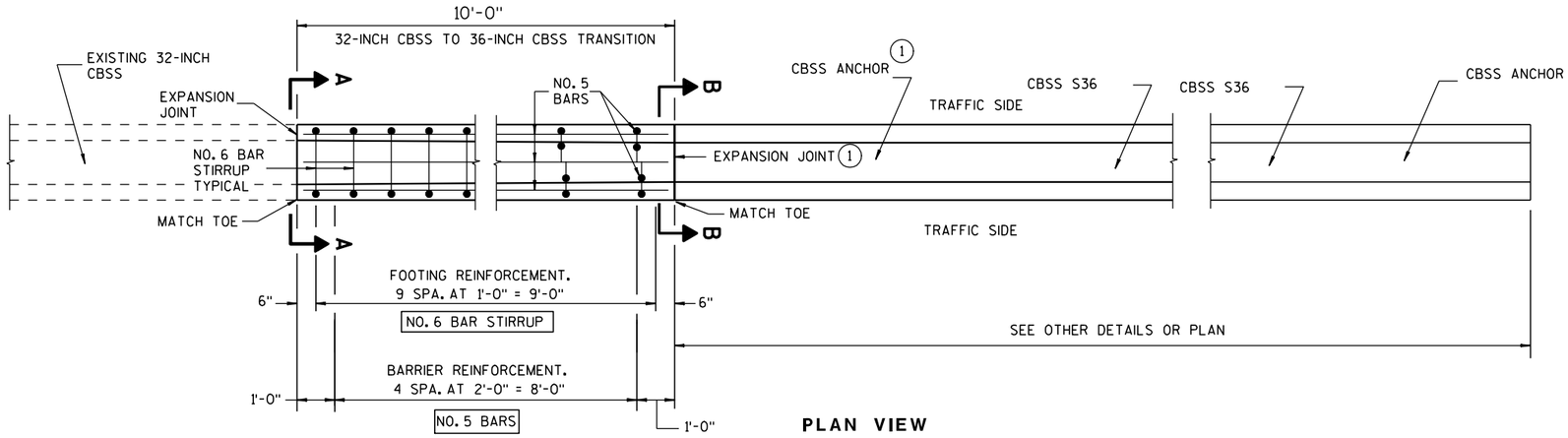
APPROVED
6-3-2010 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
618 ENT
FHWA

6

S.D.D. 14 B 36-1j



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

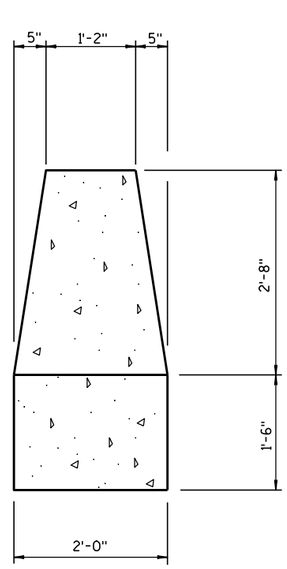
4000 PSICONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

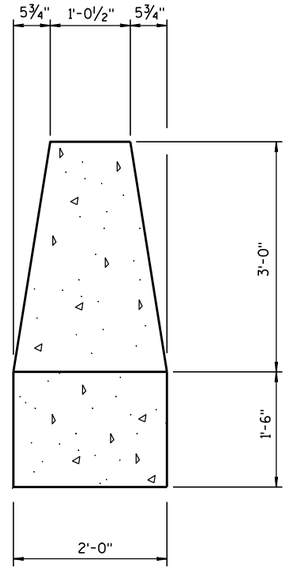
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

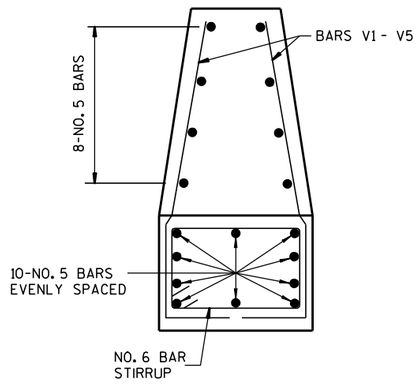
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



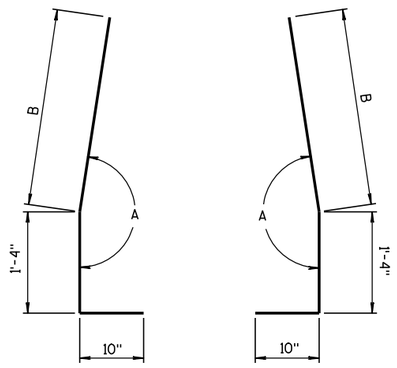
SECTION A-A



SECTION B-B



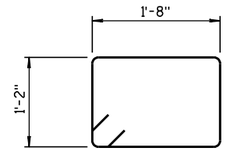
BAR DETAIL
BAR POSITION NO. 1 - NO. 5



BAR BENDING DETAIL
FOR BARS V1 - V5

BAR CHART
SECTIONS V1 - V5

BAR	A	B
V1	171°-10'	2'-6½"
V2	171°-05'	2'-8"
V3	170°-55'	2'-9"
V4	170°-40'	2'-9½"
V5	171°	2'-10"



STIRRUP BAR
BENDING DETAIL

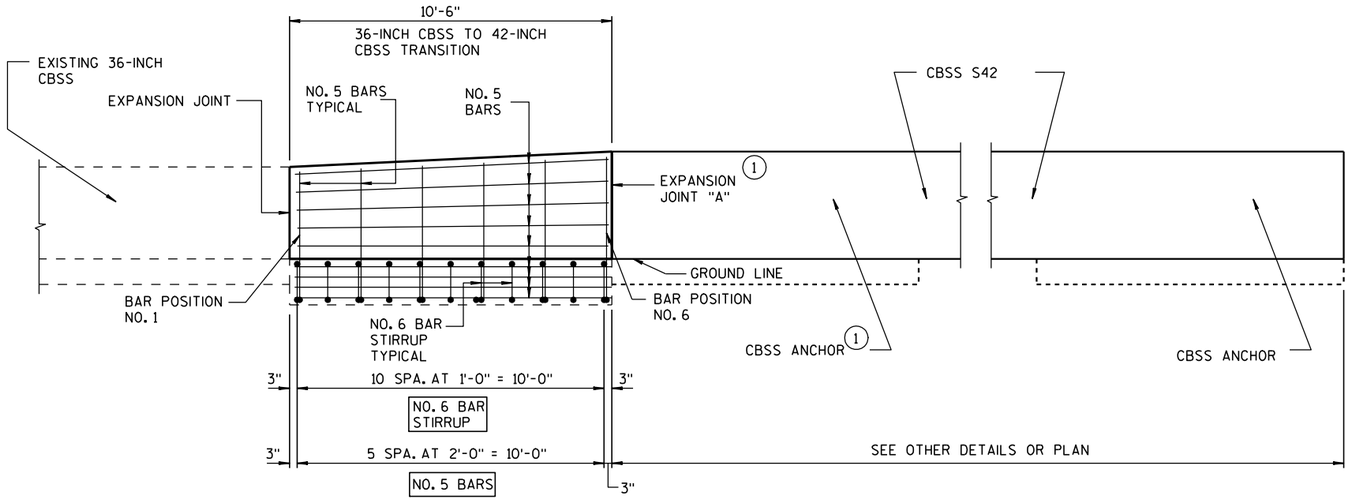
32-INCH SINGLE SLOPE CONCRETE BARRIER TO 36-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

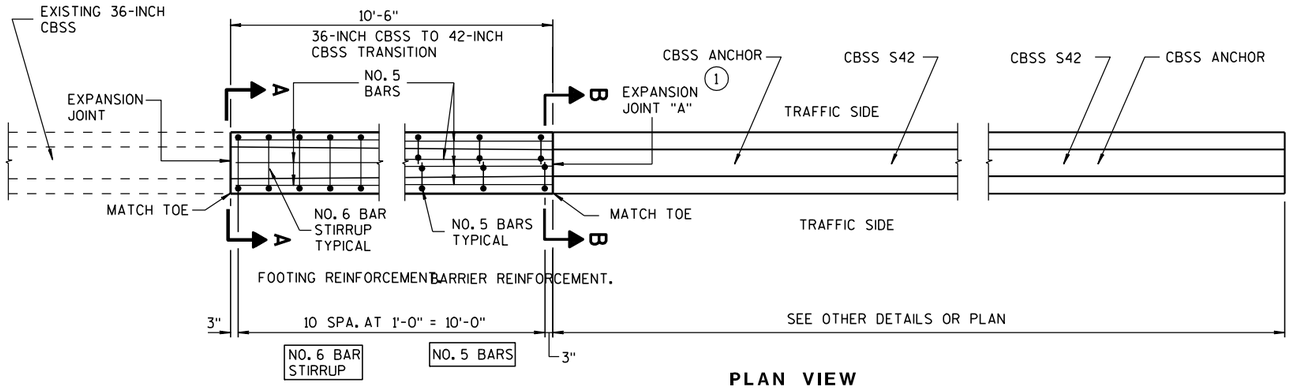
APPROVED
6-3-2010
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

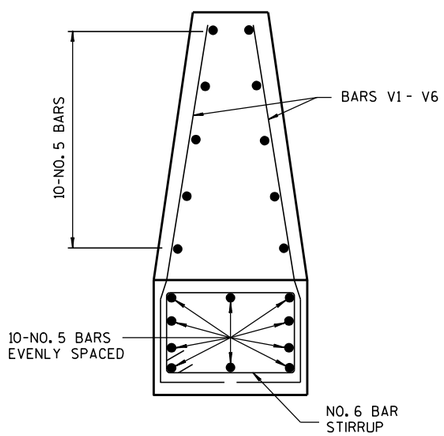
S.D.D. 14 B 39-1a



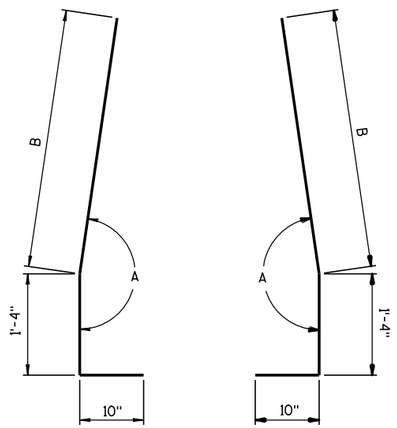
ELEVATION VIEW



PLAN VIEW



BAR DETAIL
BAR POSITION NO. 1 - NO. 6



BAR BENDING DETAIL
FOR BARS V1 - V6

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

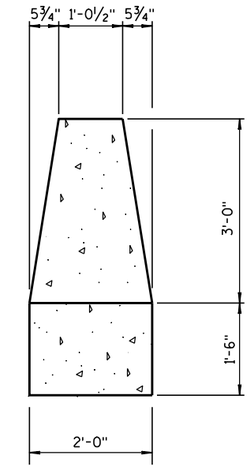
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

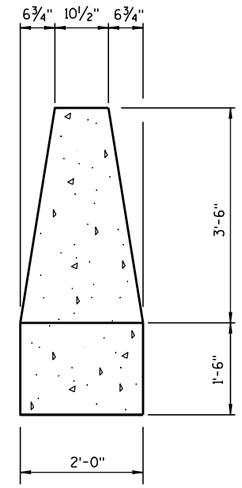
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



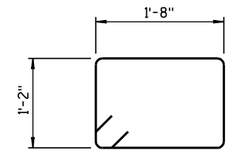
SECTION A-A



SECTION B-B

BAR CHART
SECTIONS V1 - V6

BAR	A	B
V1	170°-55'	2'-10½"
V2	171°-05'	3'-0"
V3	171°-20'	3'-1"
V4	171°-20'	3'-2"
V5	171°-35'	3'-3"
V6	171°-40'	3'-4½"



STIRRUP BAR
BENDING DETAIL

36-INCH SINGLE SLOPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 14 B 39-1c

GENERAL NOTES

1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

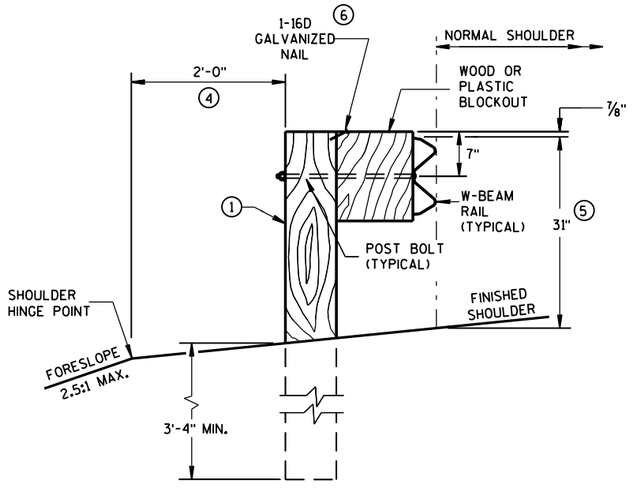
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

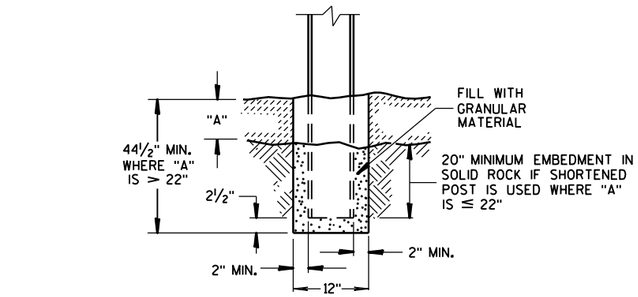
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

6. WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



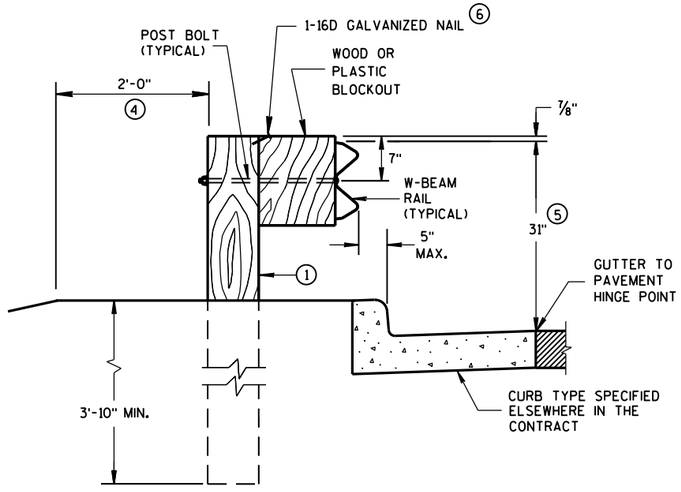
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



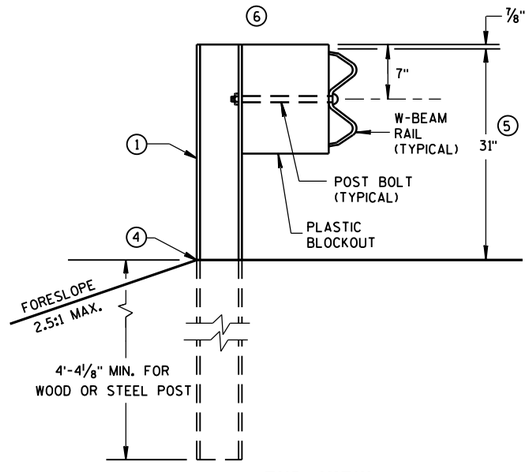
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



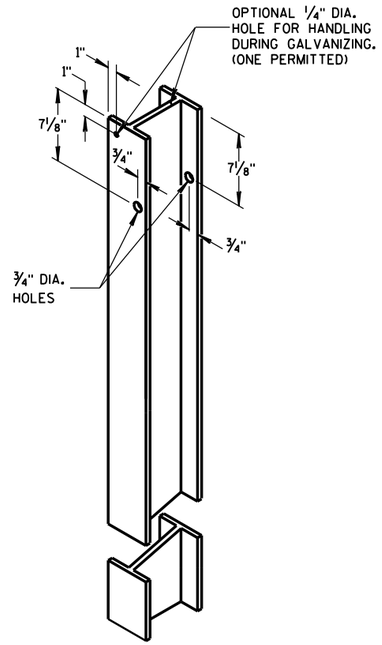
END VIEW

LOCATED ALONG A CURBED ROADWAY

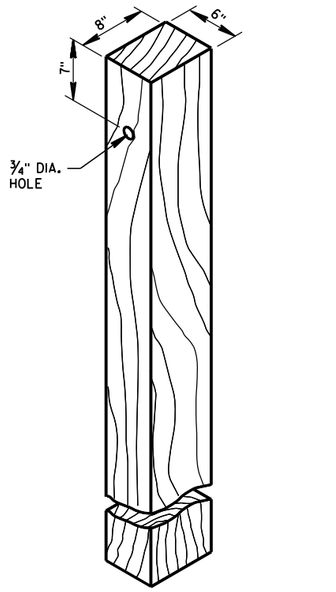


END VIEW

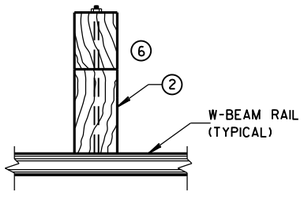
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



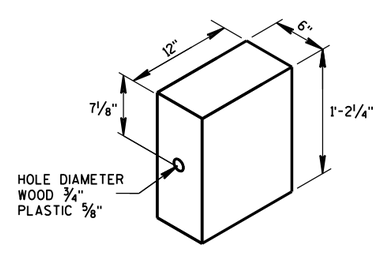
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



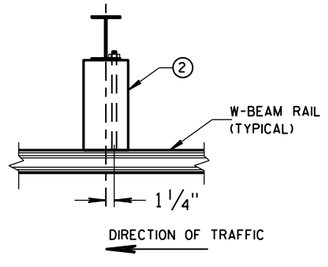
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

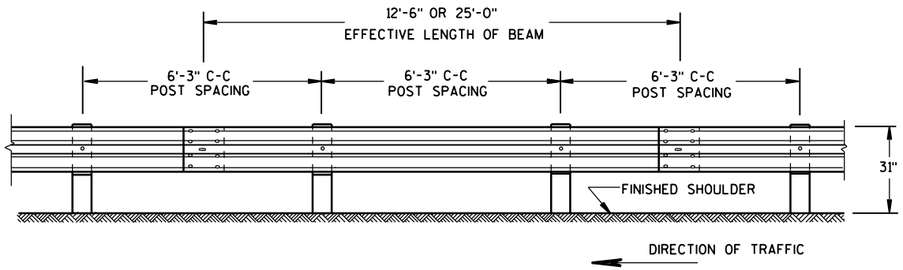


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

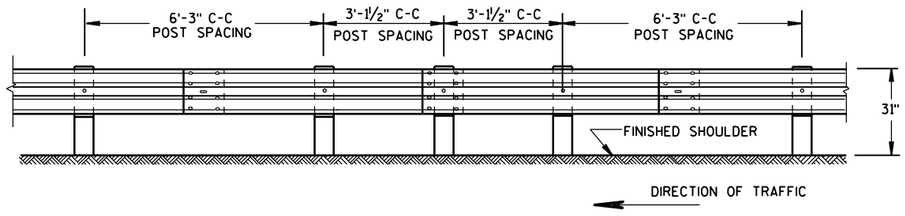
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 42-3a



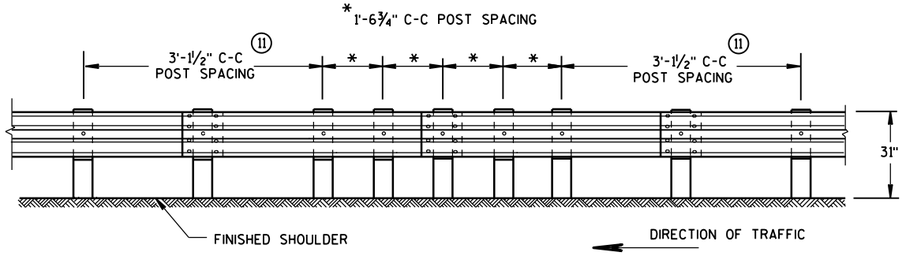
FRONT VIEW

POST SPACING STANDARD INSTALLATION



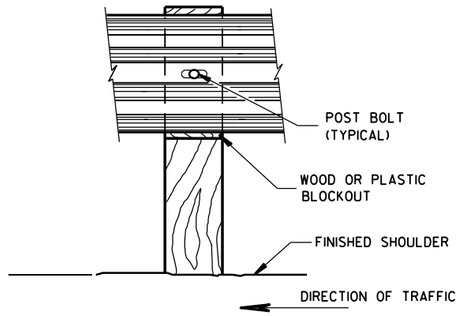
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

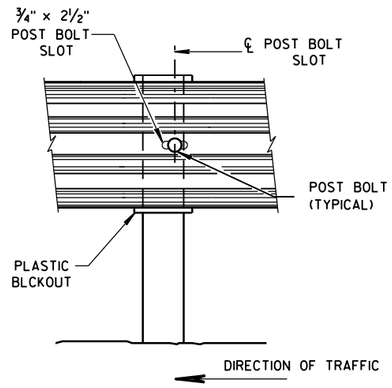


FRONT VIEW

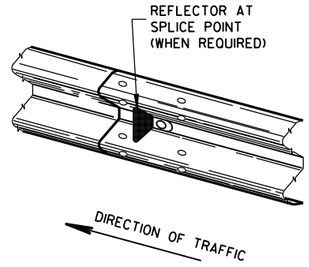
QUARTER POST SPACING (QS)

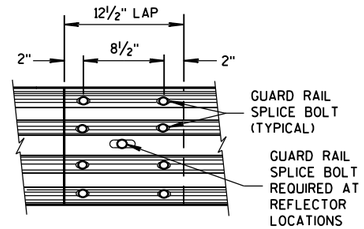


FRONT VIEW AT WOOD POST



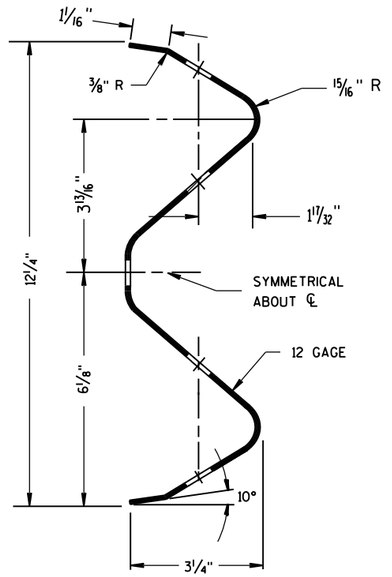
FRONT VIEW AT STEEL POST



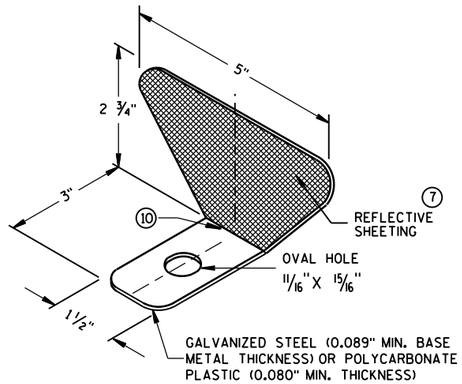


FRONT VIEW

MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



GENERAL NOTES

⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

⑩ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING ⑧

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 ⑩	

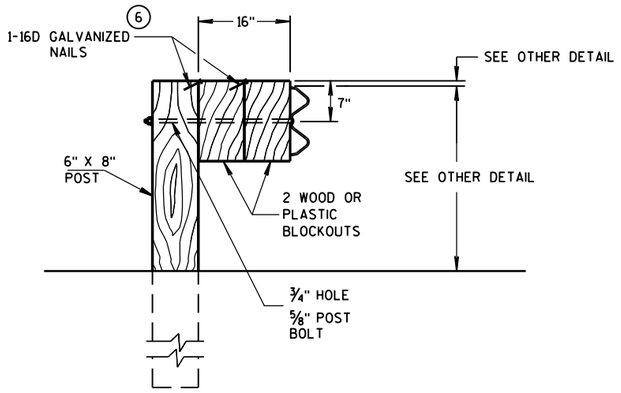
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ⑦

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

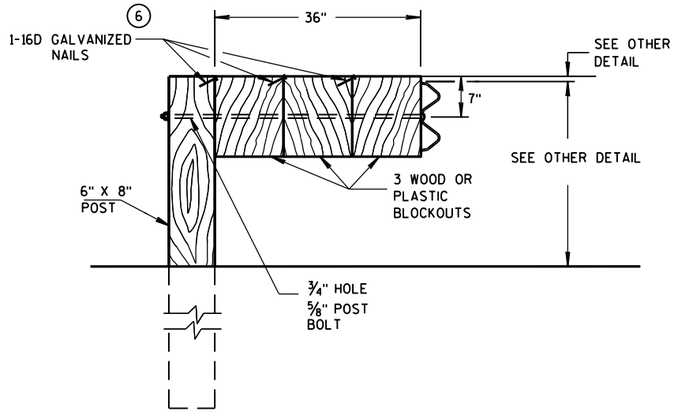
6

S.D.D. 14 B 42-3b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

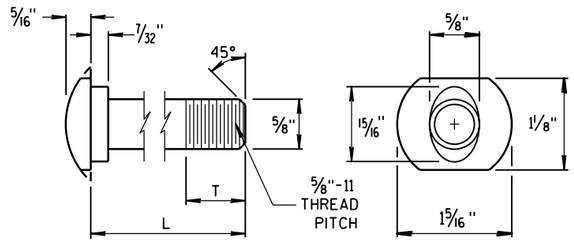


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

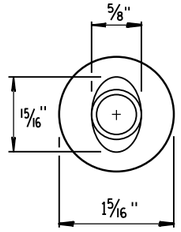
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

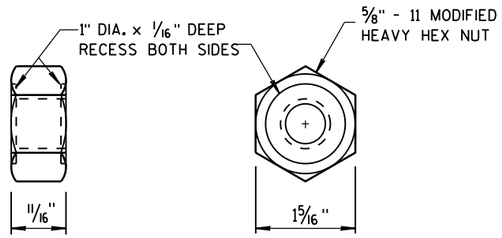


POST BOLT TABLE

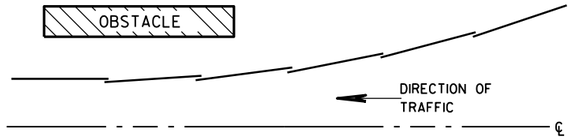
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

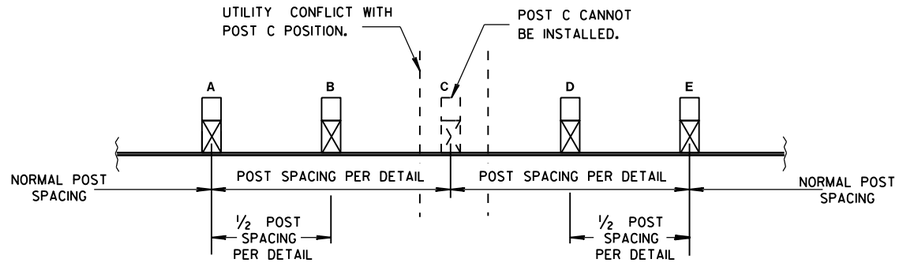


POST BOLT AND RECESS NUT

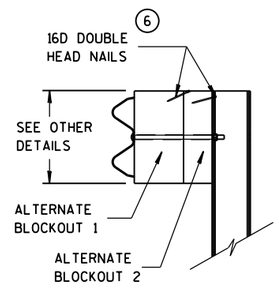


PLAN VIEW

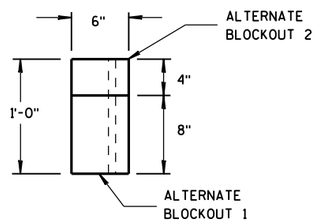
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
623
FHWA

6

S.D.D. 14 B 42-3c

6

S.D.D. 14 B 42-3c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

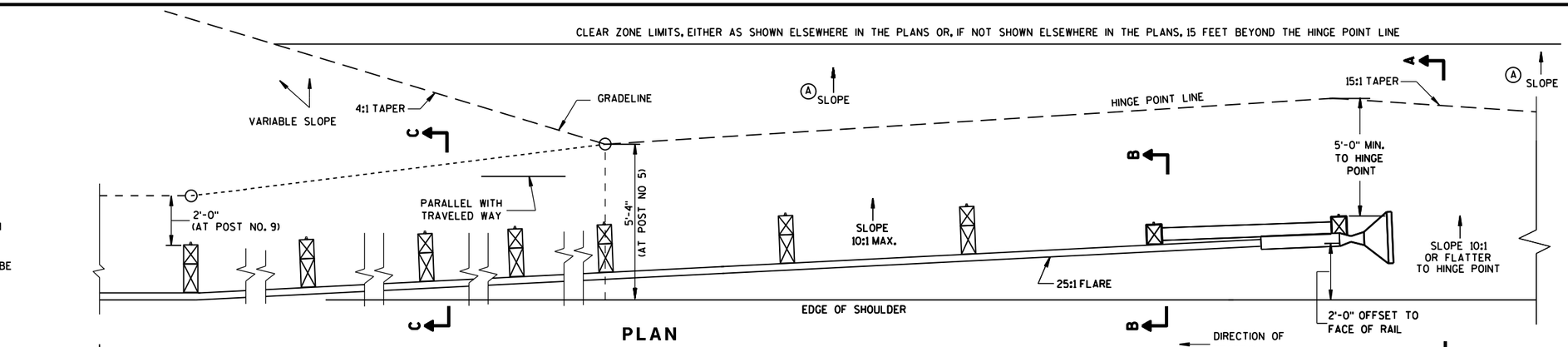
SEE SDD 14B42 FOR MORE INFORMATION.

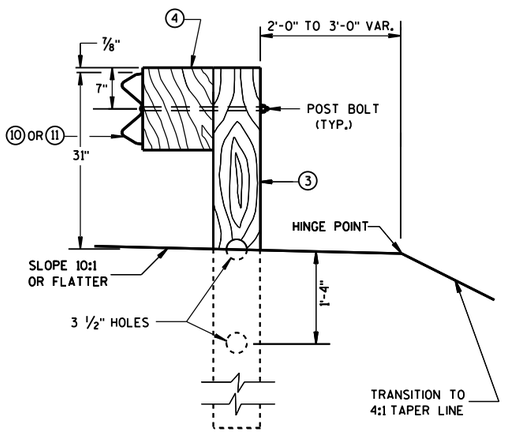
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

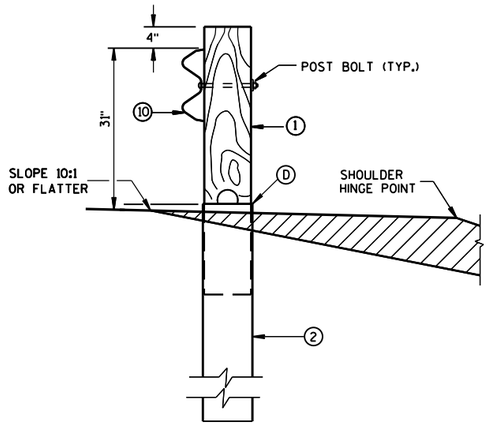
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

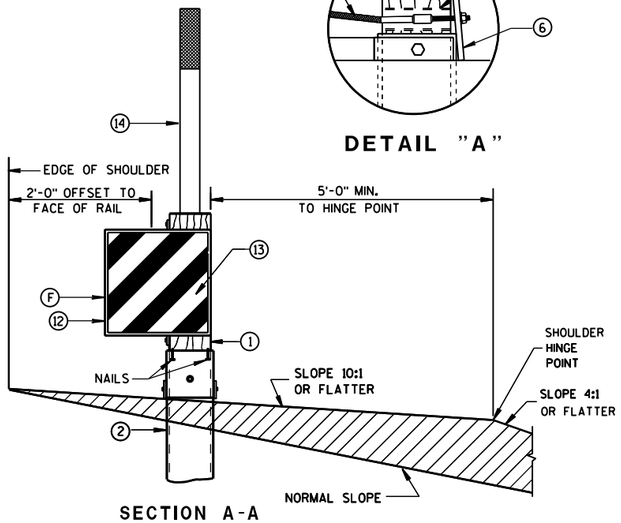




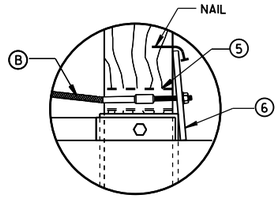
SECTION C-C
TYPICAL AT POST NOS. 3-9



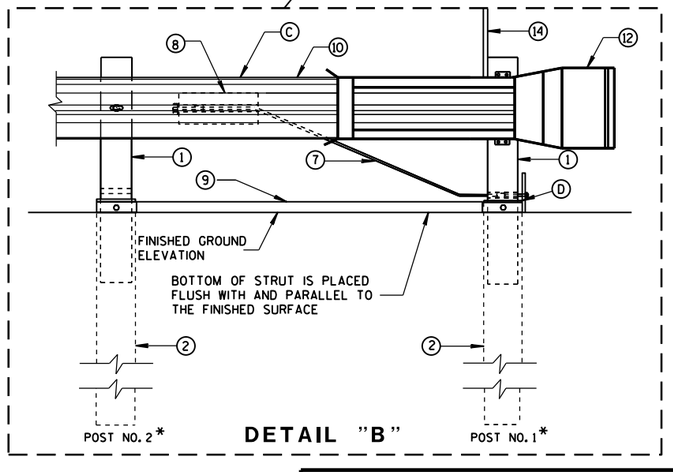
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"

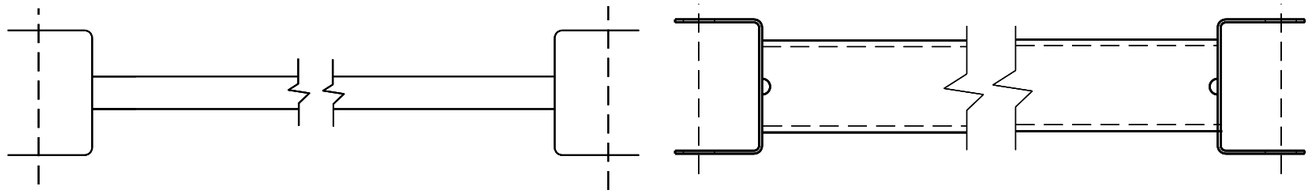


DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

S.D.D. 14 B 44-2a

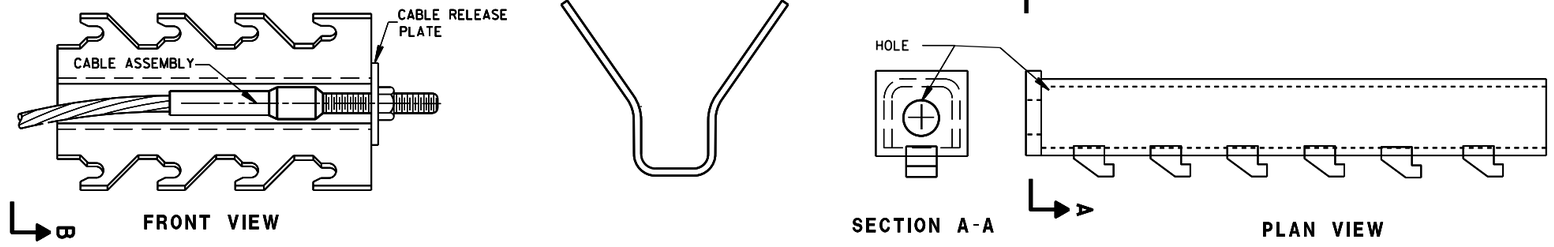


(9) (H)

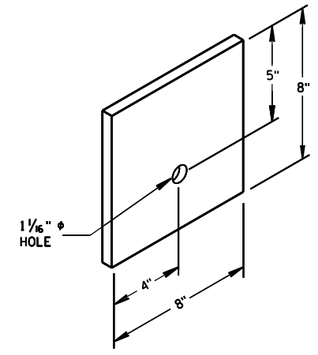
GENERIC GROUND STRUT

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)



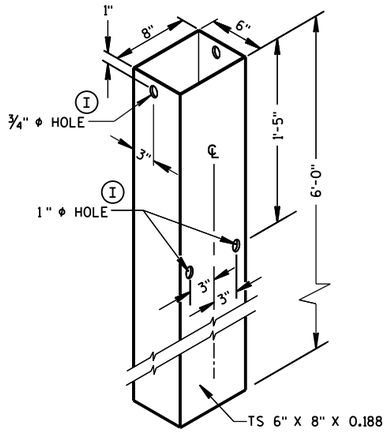
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

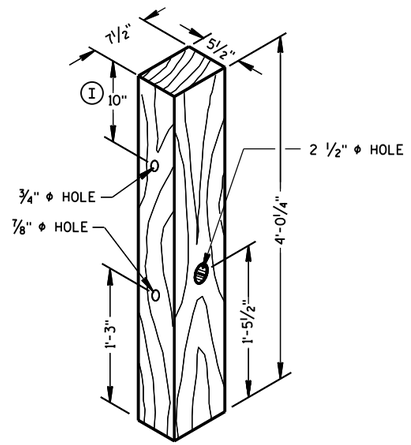
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 44-2b

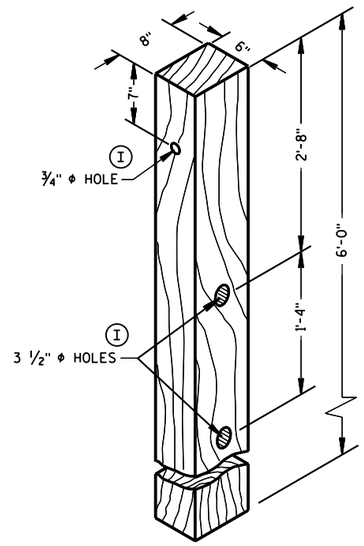


FOUNDATION TUBE (2)



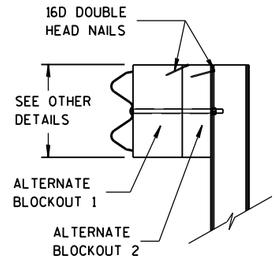
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

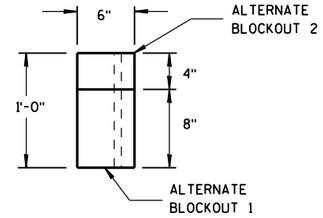


POSTS NUMBER 3-9

WOOD CRT POST (3)

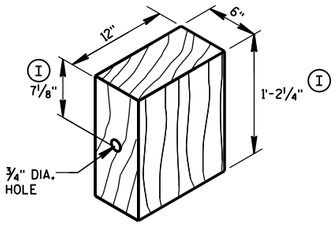


SIDE VIEW



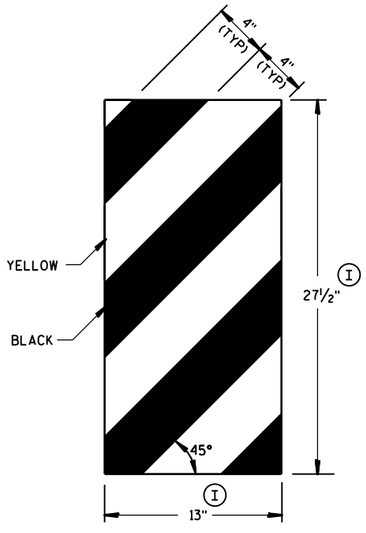
TOP VIEW

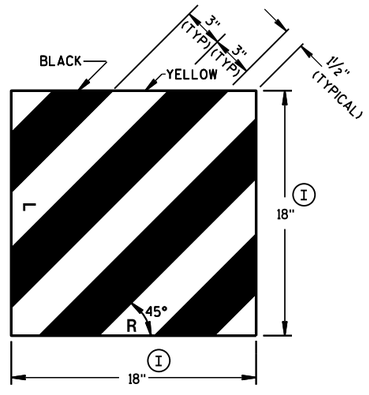
ALTERNATE WOOD BLOCKOUT DETAIL



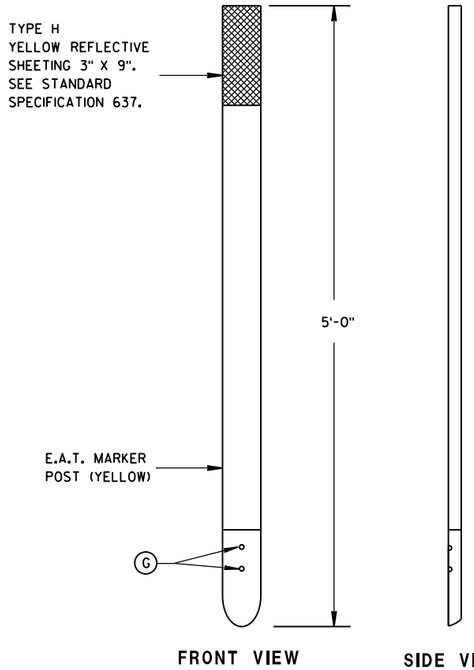
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





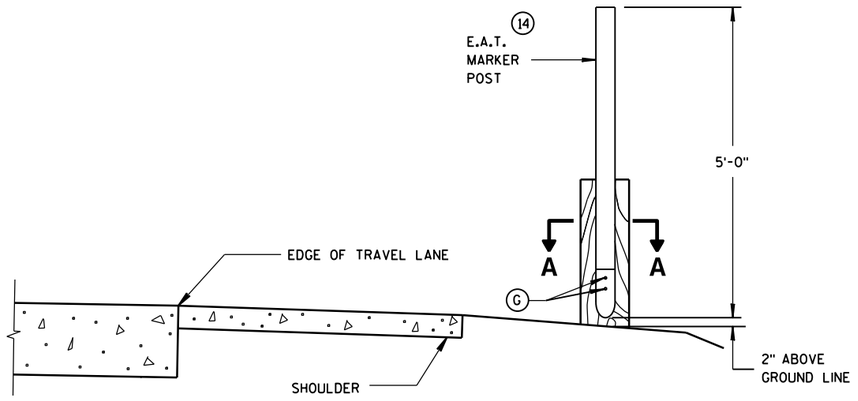
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

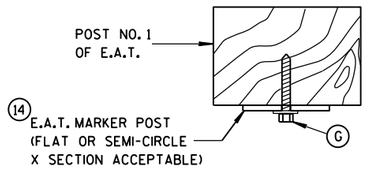
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

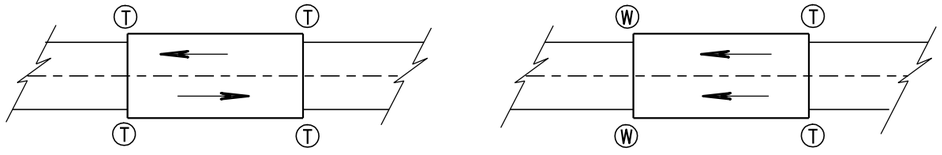
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

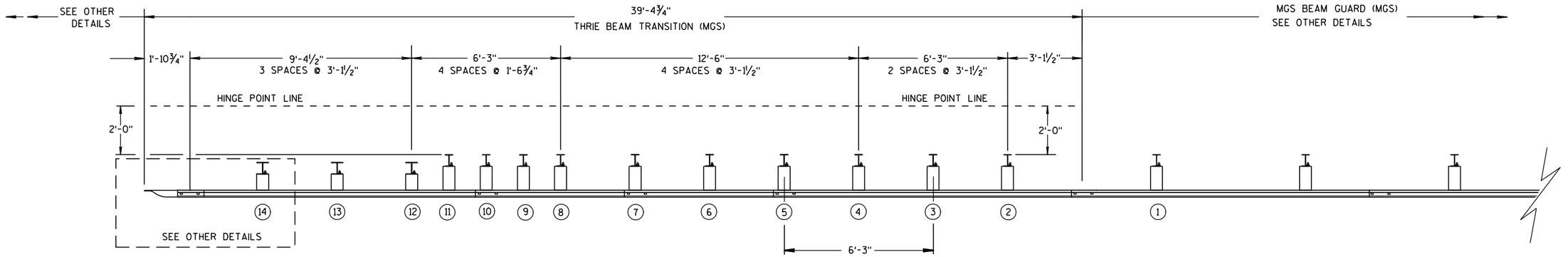
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

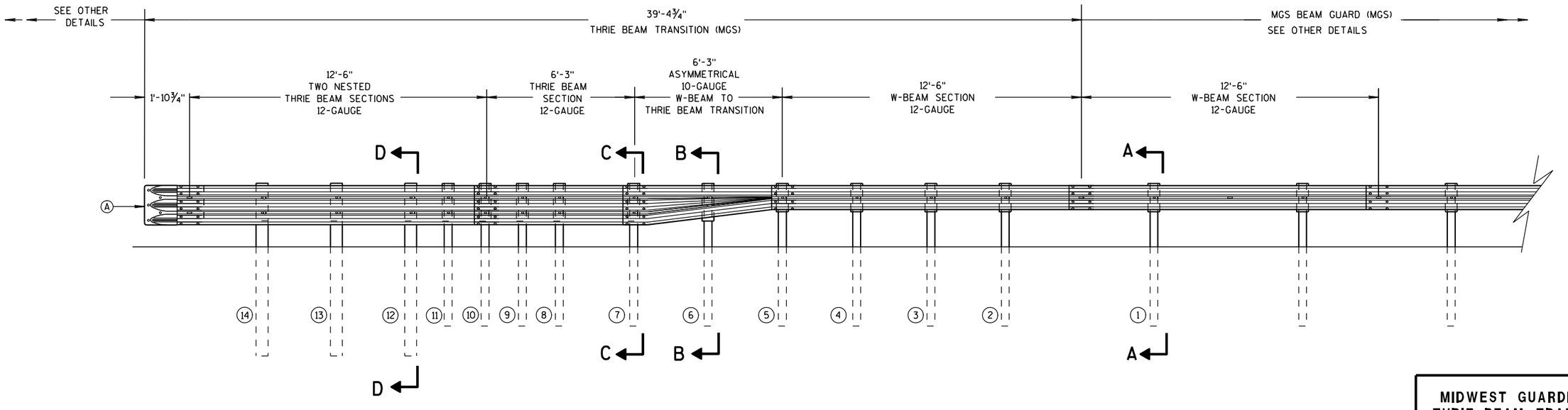
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

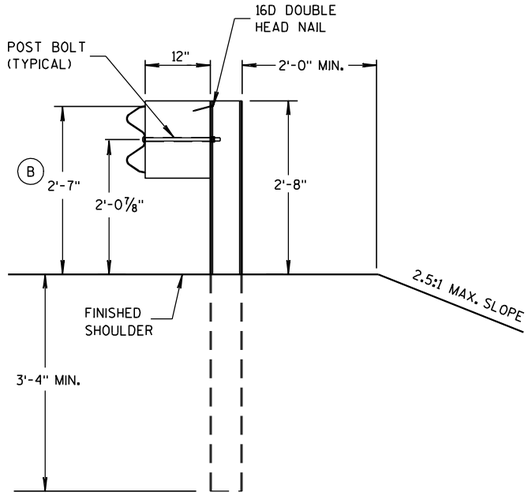
S.D.D. 14 B 45-3a

6

S.D.D. 14 B 45-3a

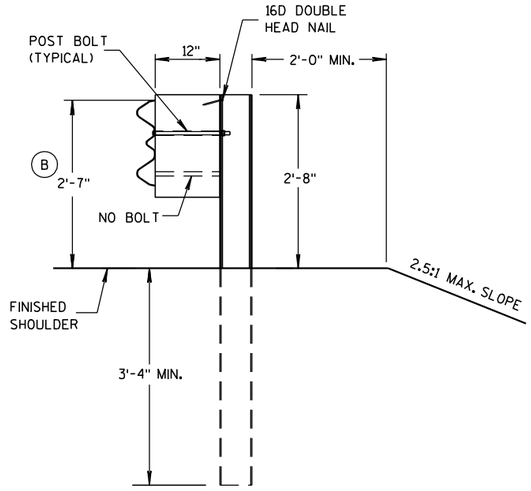
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



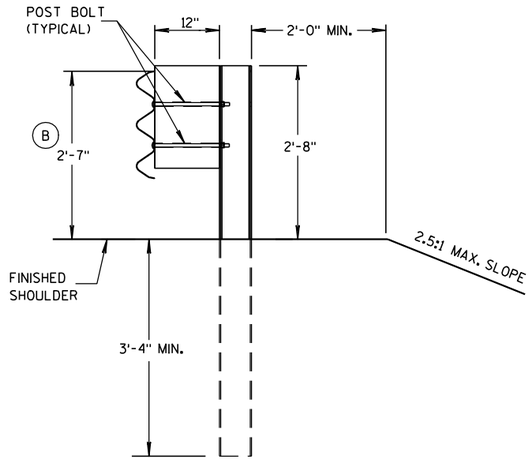
SECTION A-A

POSTS 1-5



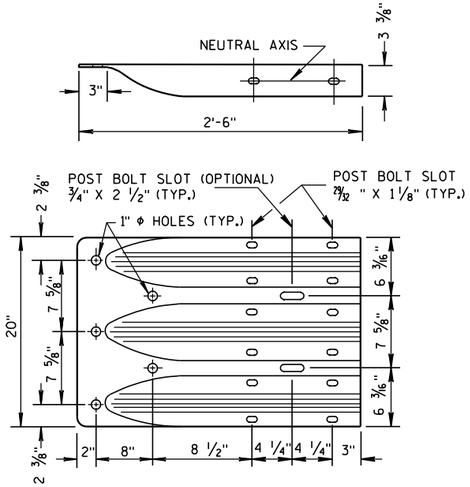
SECTION B-B

POST 6

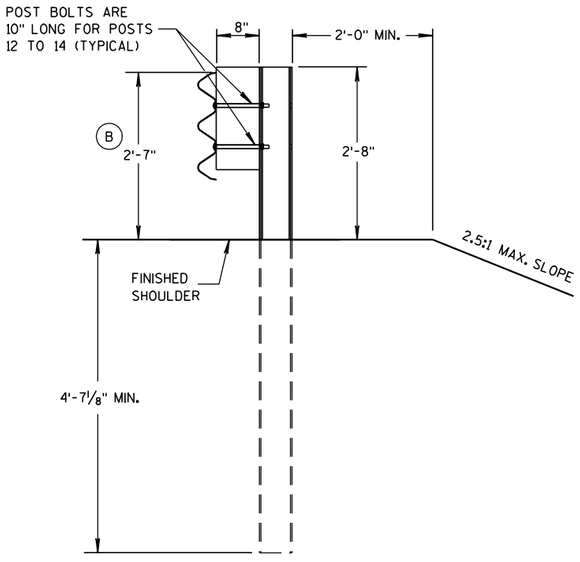


SECTION C-C

POSTS 7-11

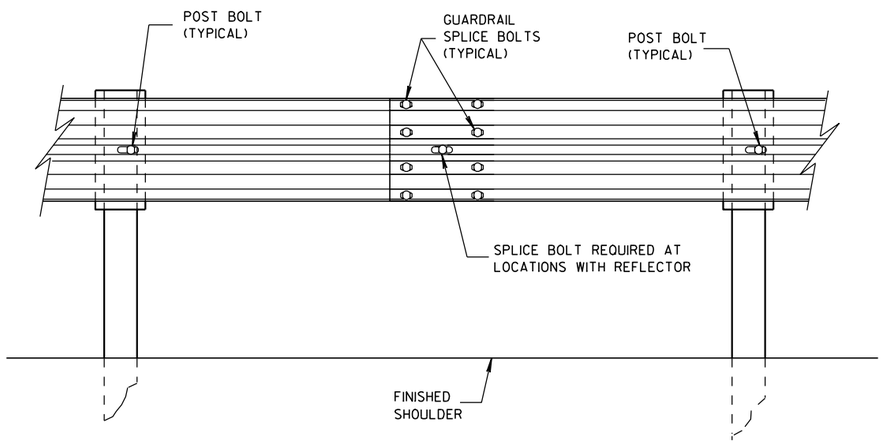


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-14



SPLICE DETAIL

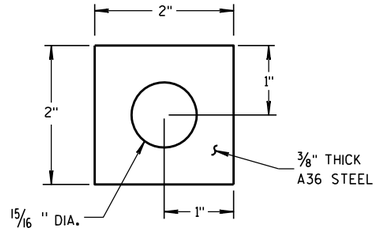
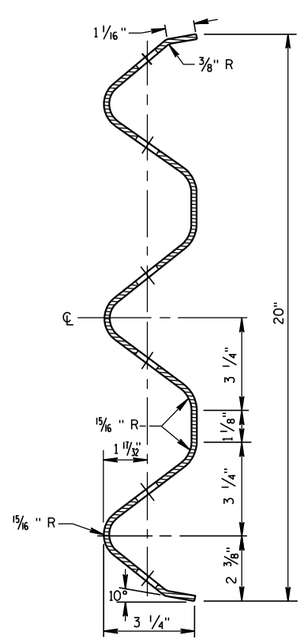


PLATE WASHER DETAIL



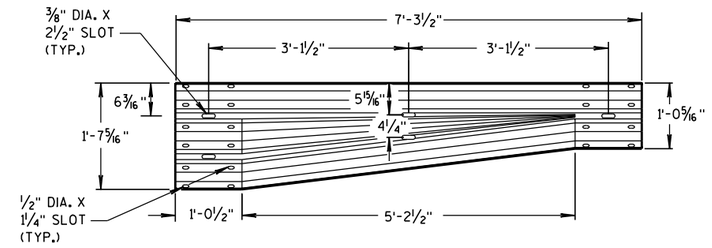
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

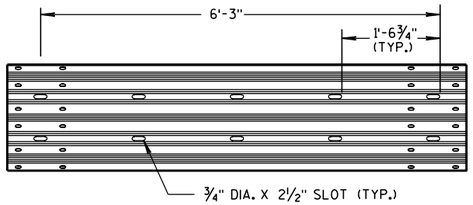
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

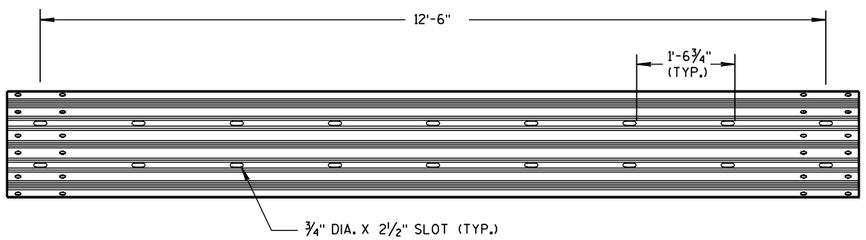
S.D.D. 14 B 45-3b



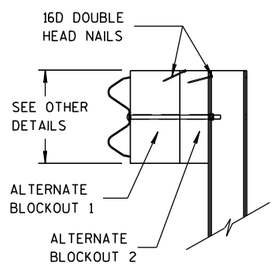
W-BEAM TO THRIE BEAM TRANSITION SECTION



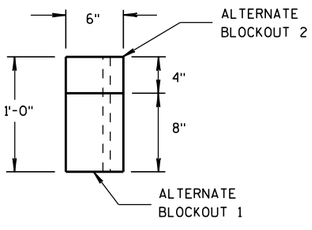
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

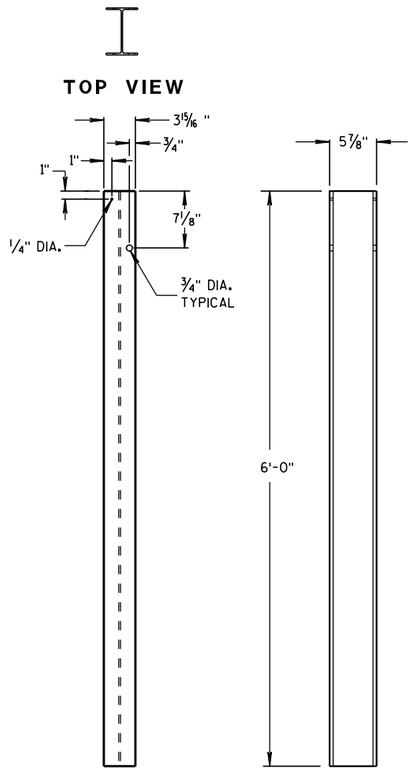


SIDE VIEW

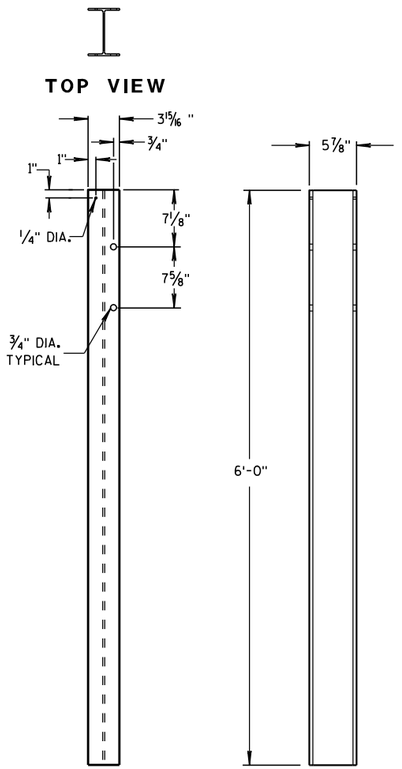


TOP VIEW

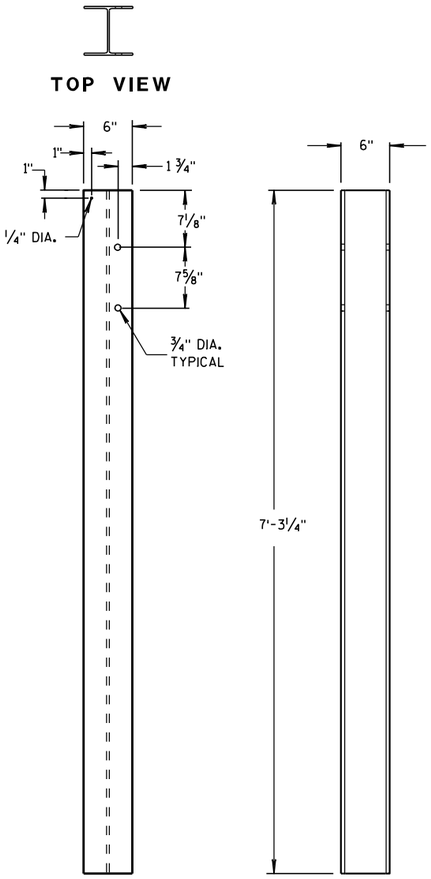
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

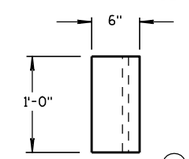


STEEL POSTS 6-11

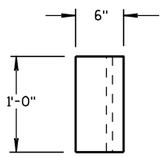


STEEL POSTS 12-14

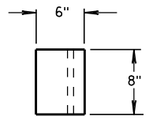
1 WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



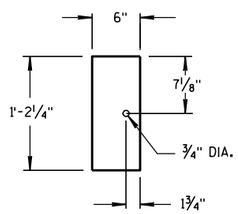
TOP VIEW (1)



TOP VIEW (1)

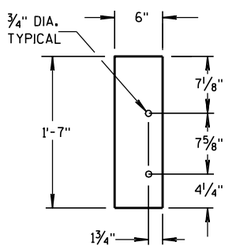


TOP VIEW



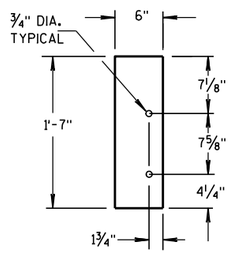
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

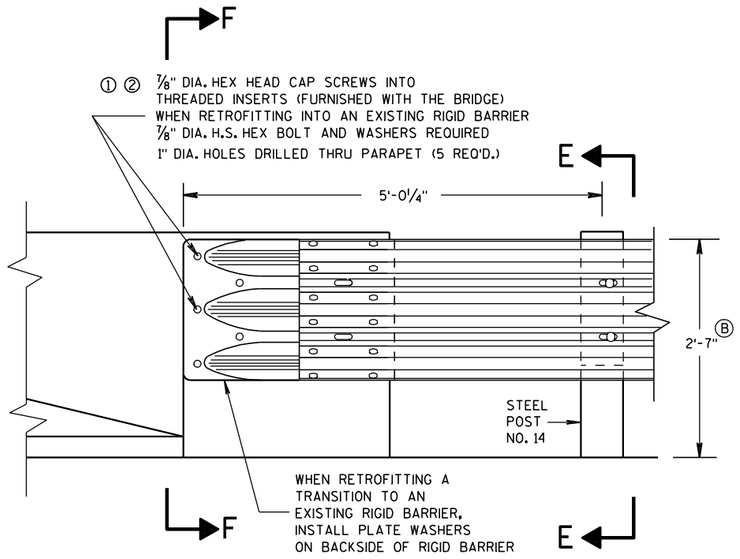
STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
1	W6x9	72"
2	W6x9	72"
3	W6x9	72"
4	W6x9	72"
5	W6x9	72"
6	W6x9	72"
7	W6x9	72"
8	W6x9	72"
9	W6x9	72"
10	W6x9	72"
11	W6x9	72"
12	W6x15	87 1/8"
13	W6x15	87 1/8"
14	W6x15	87 1/8"

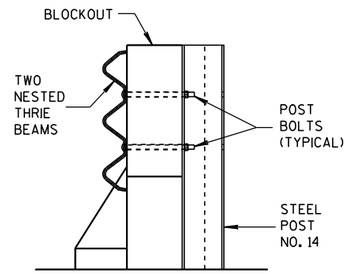
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

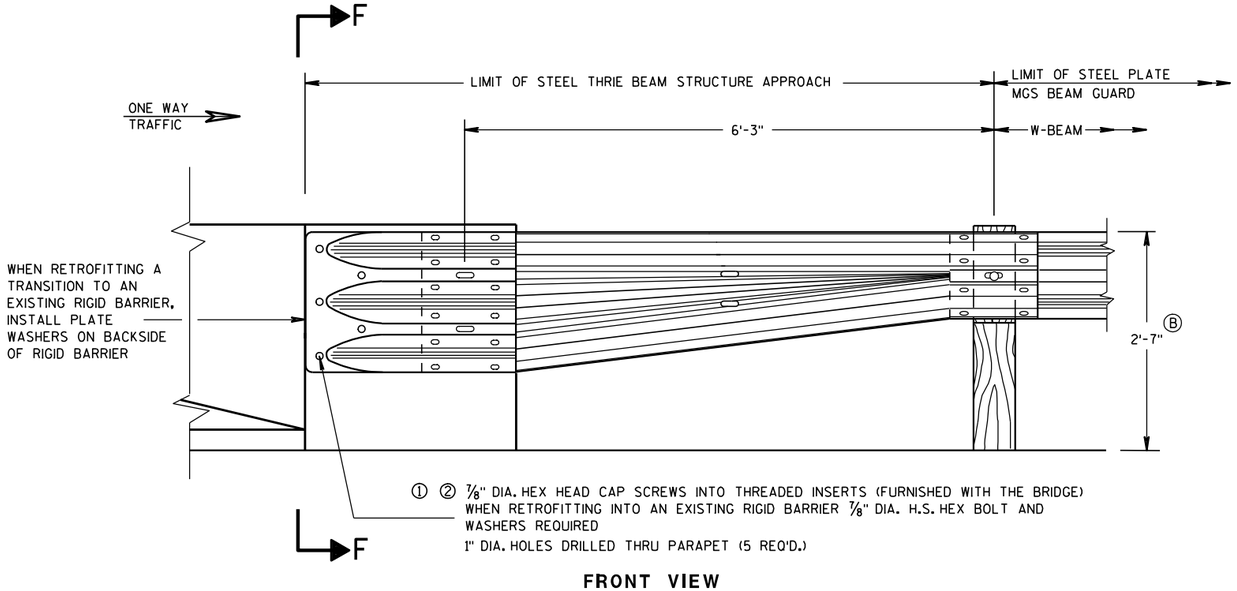
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

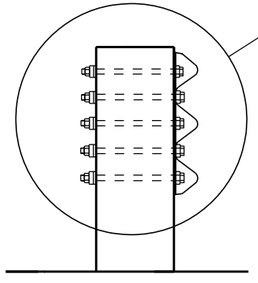
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

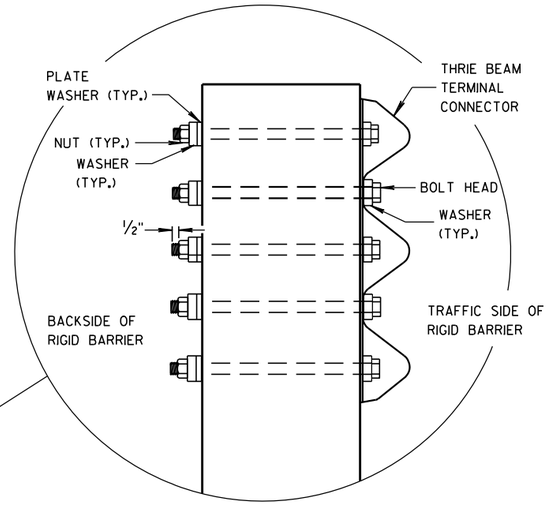
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F



W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS (630)
ENGINEER

FHWA

6

S.D.D. 14 B 45-3d

6

S.D.D. 14 B 45-3d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

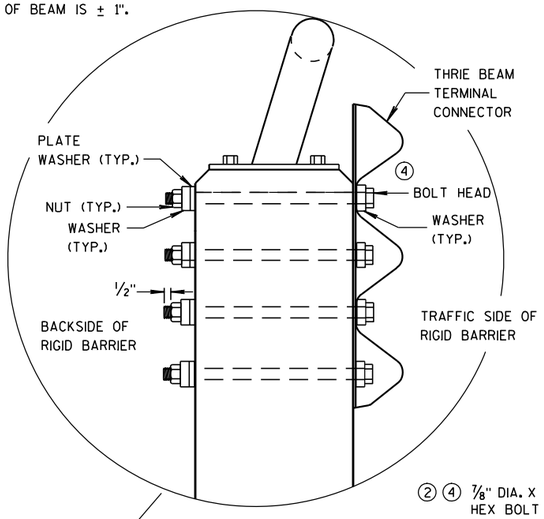
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

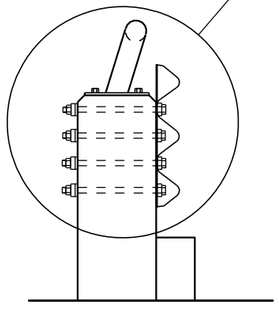
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2". BLOCK IS INCIDENTAL TO THE CONTRACT.

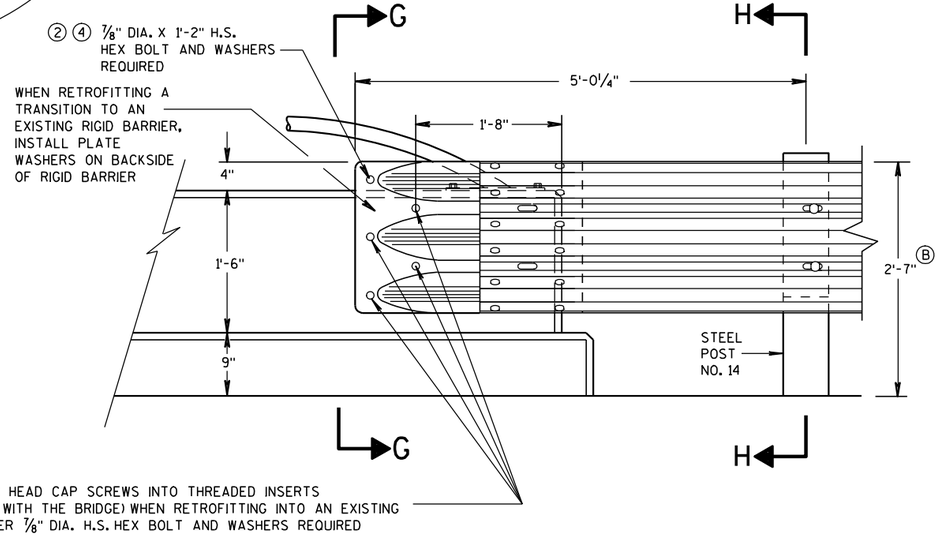
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

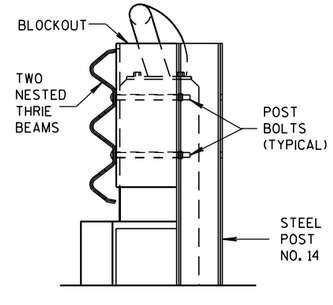




SECTION G-G

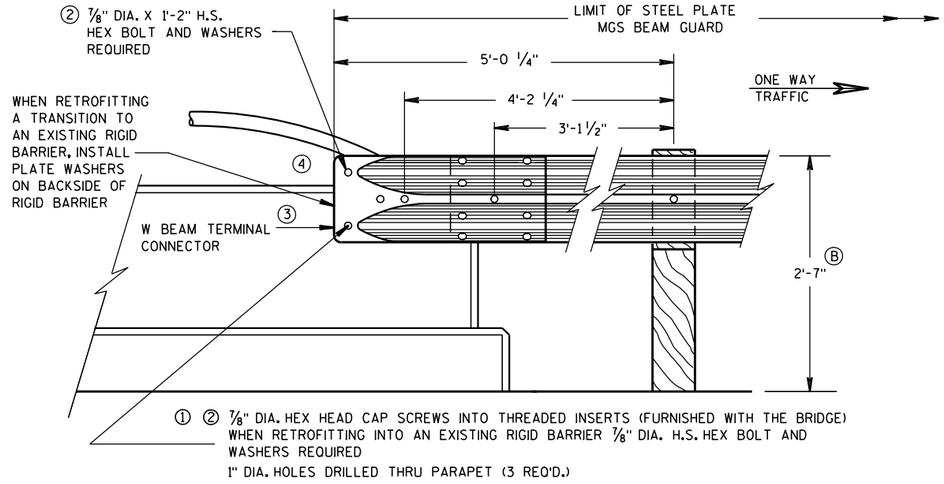


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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S.D.D. 14 B 45-3e

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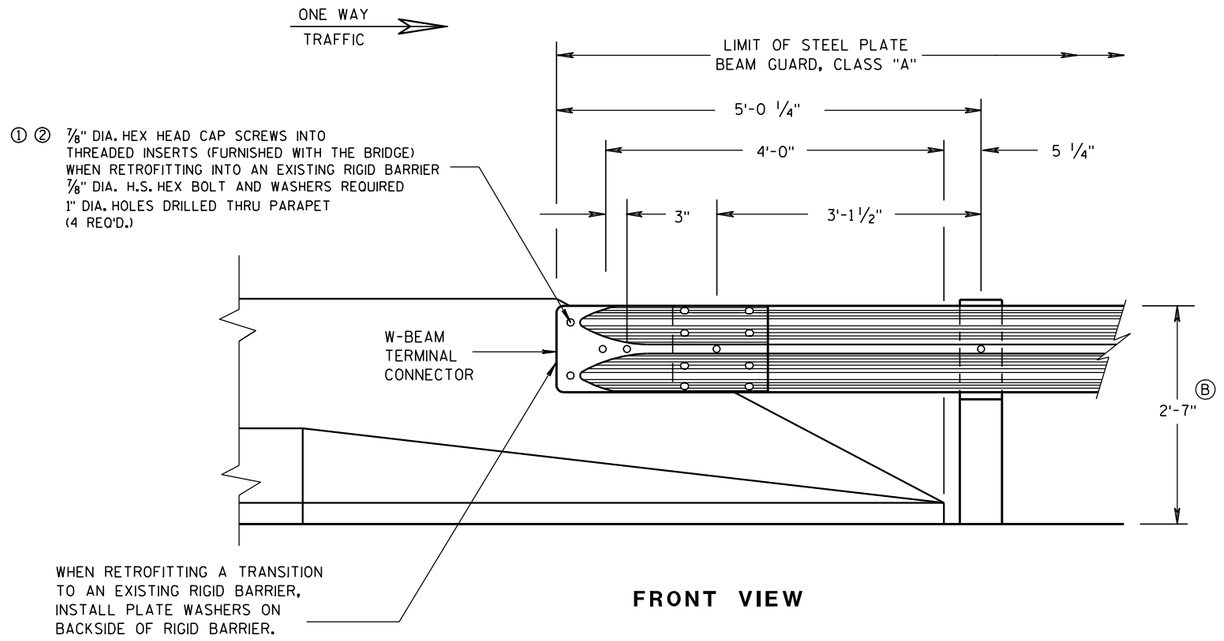
S.D.D. 14 B 45-3e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

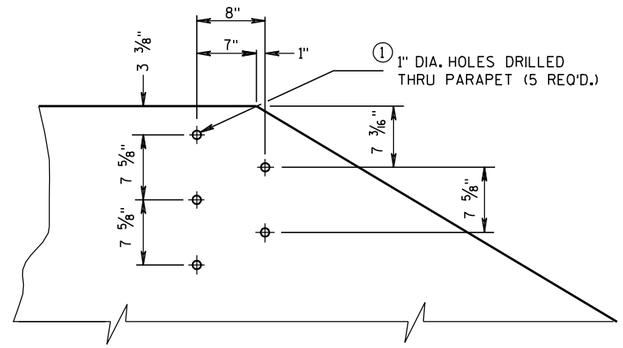
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

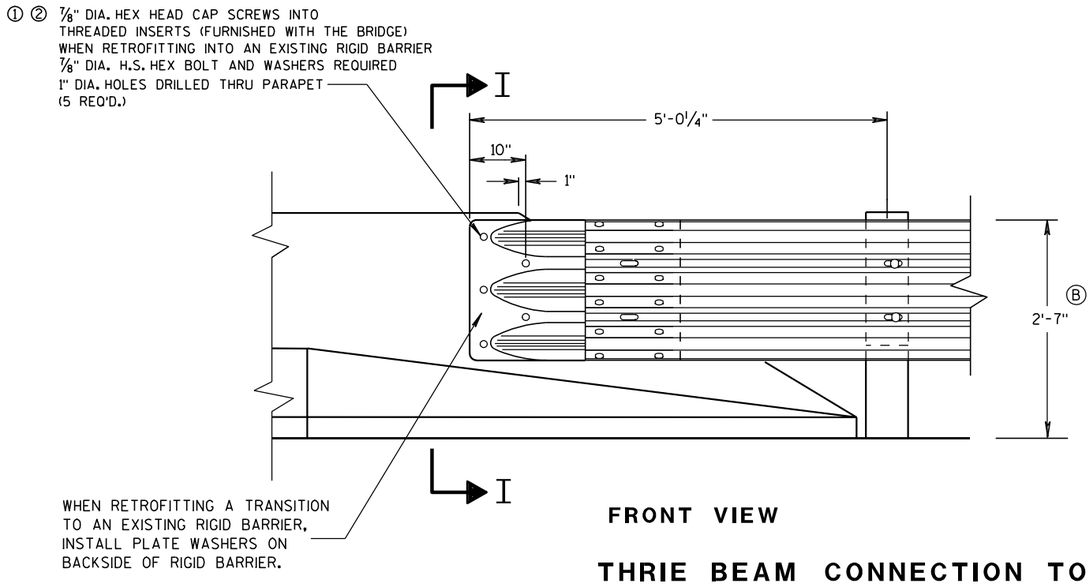
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

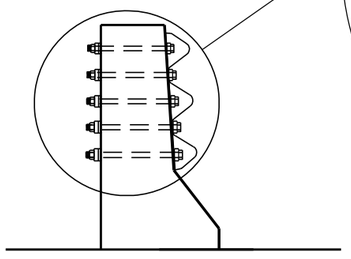
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



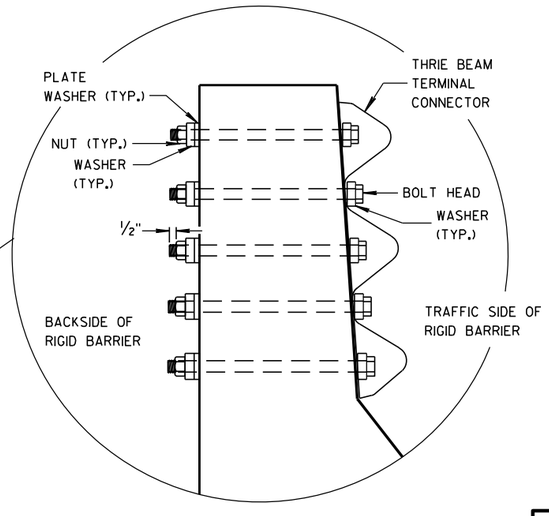
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

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S.D.D. 14 B 45-3f

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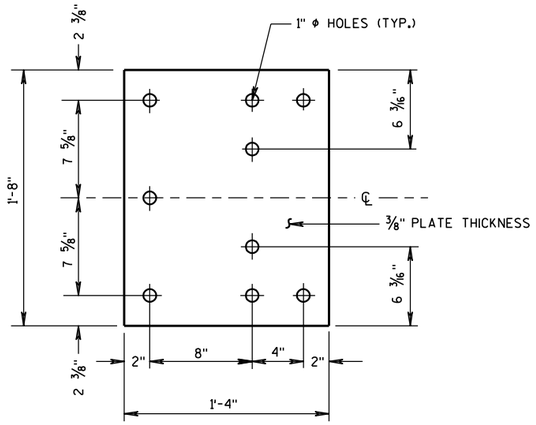
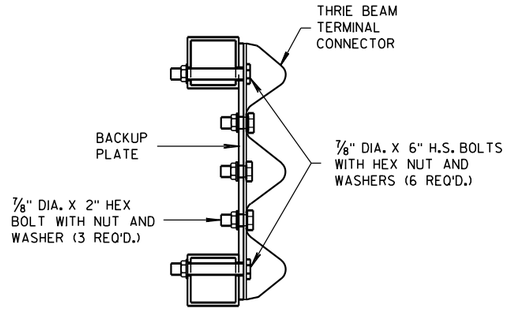
S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

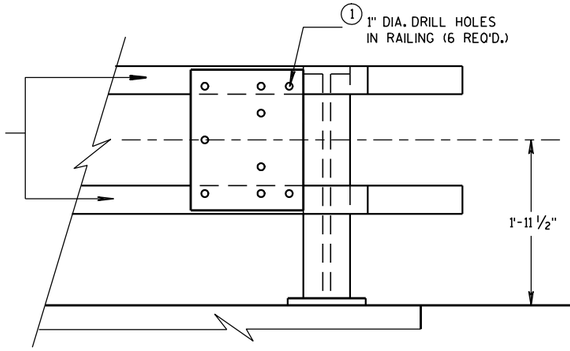


SECTION J-J

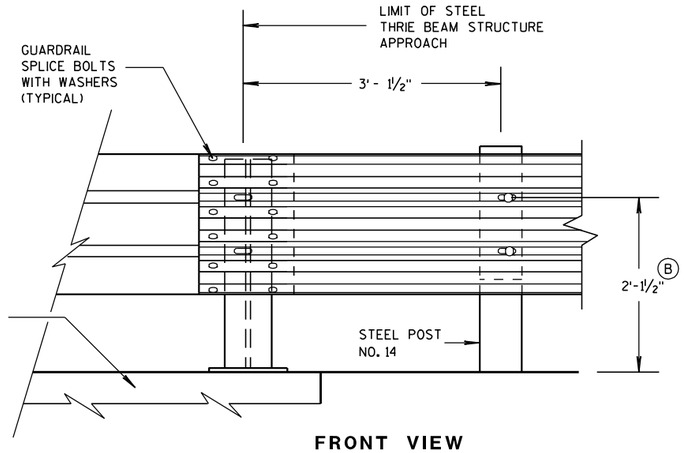
GENERAL NOTES

(1) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

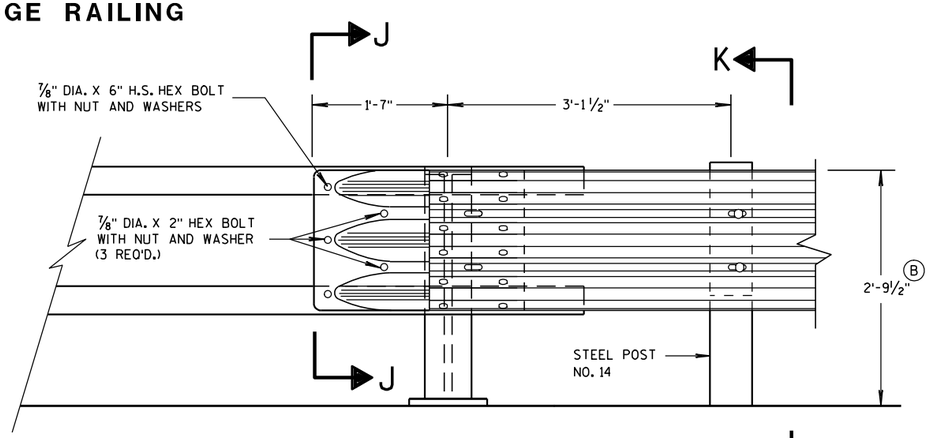


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

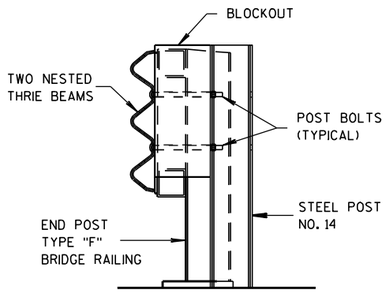


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 8/31/2012 — DATE /S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER 633 FHWA

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S.D.D. 14 B 45-3g

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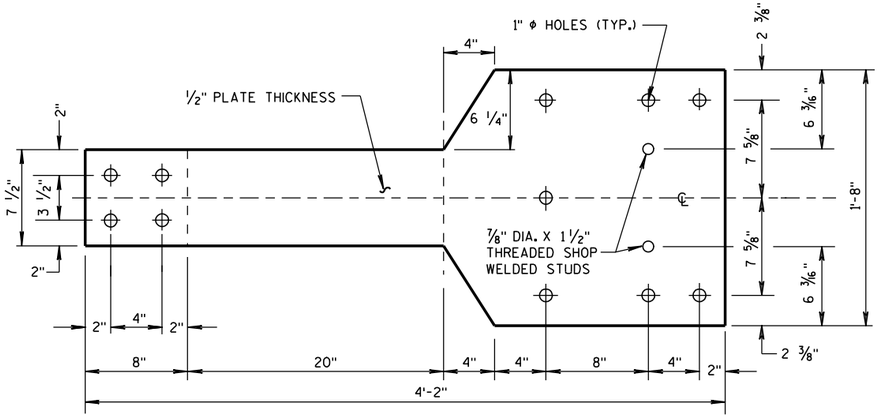
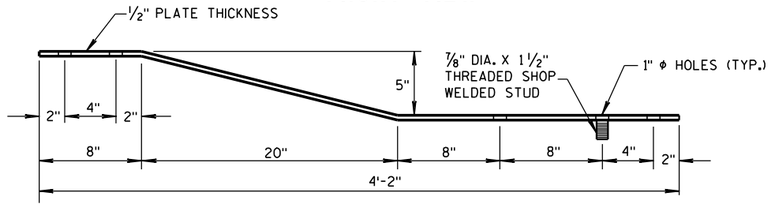
S.D.D. 14 B 45-3g

GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

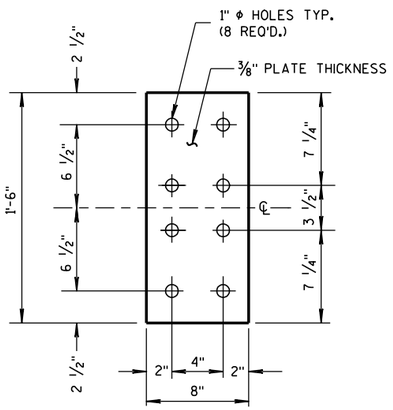


FRONT VIEW



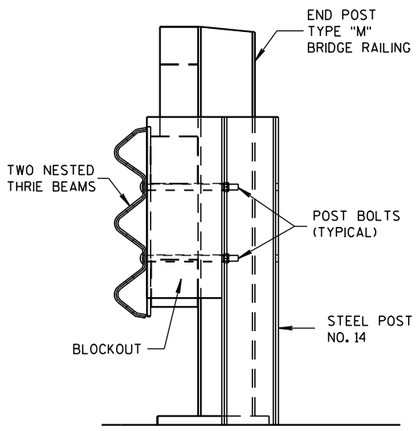
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

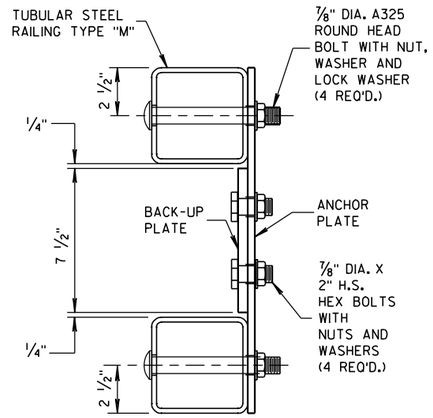


FRONT VIEW

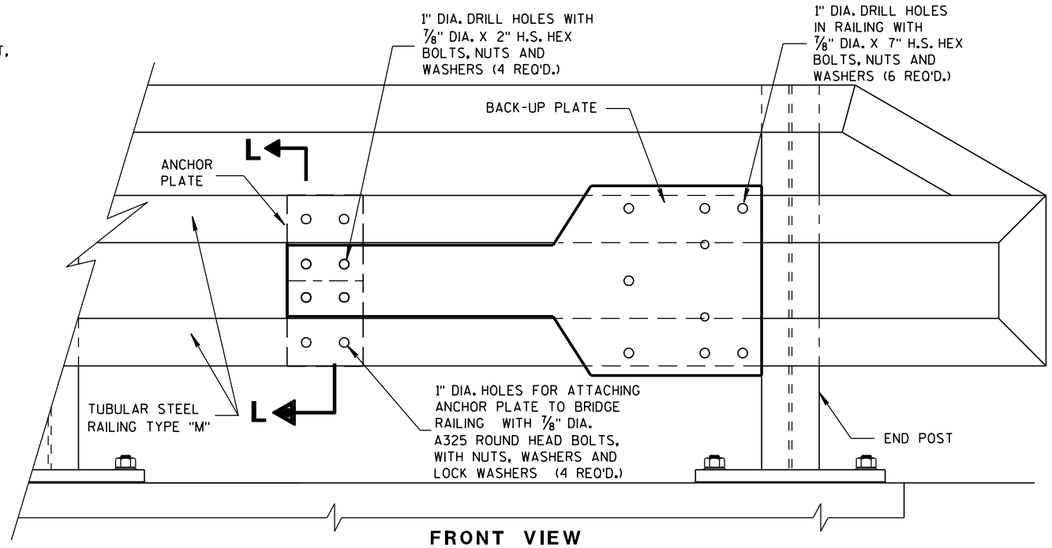
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

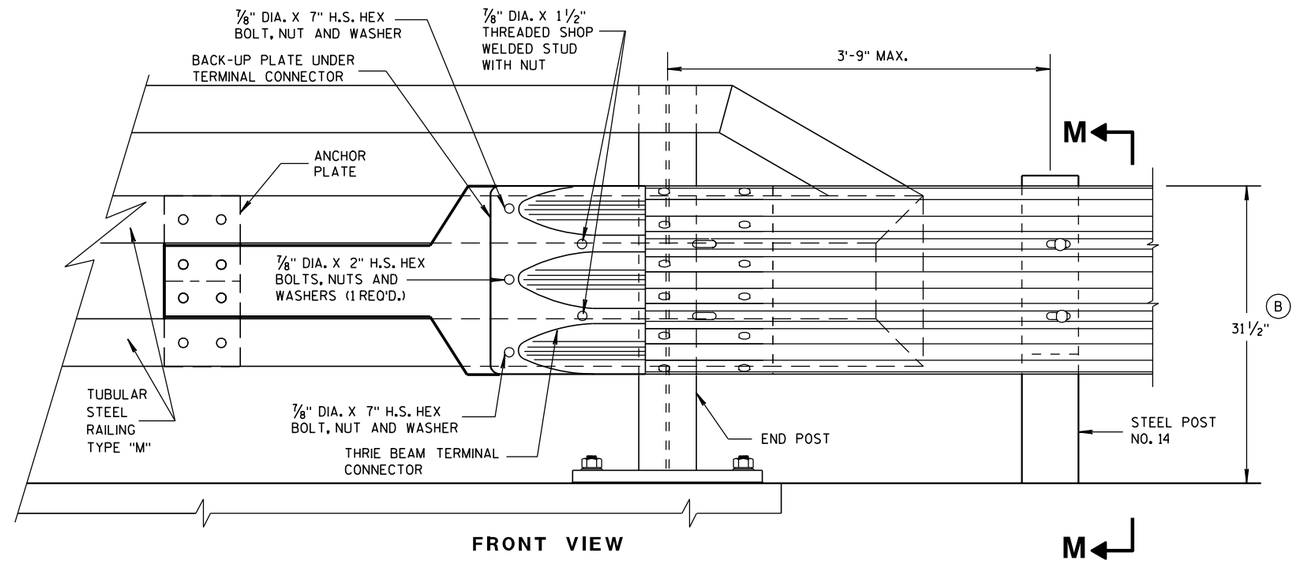


SECTION L-L

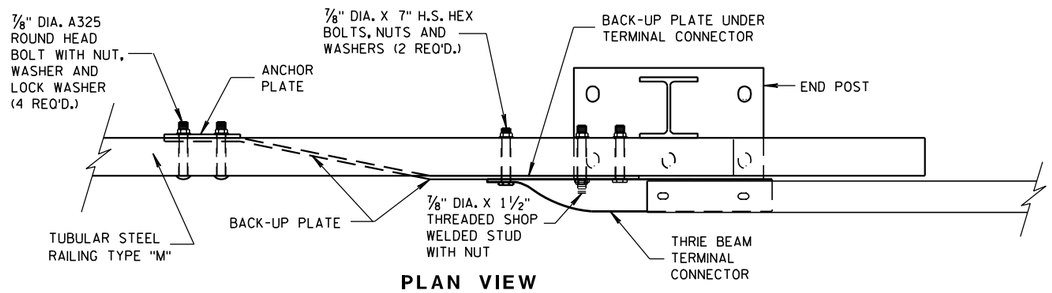


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

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FHWA

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S.D. 14 B 45-3h

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S.D. 14 B 45-3h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

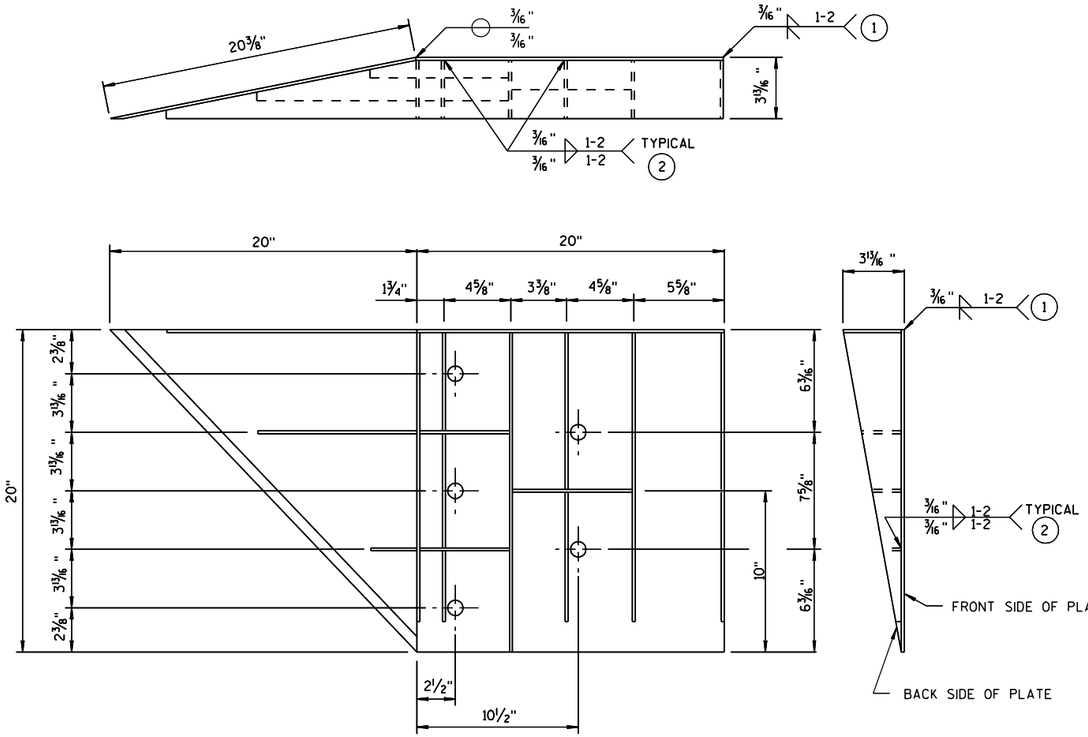
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

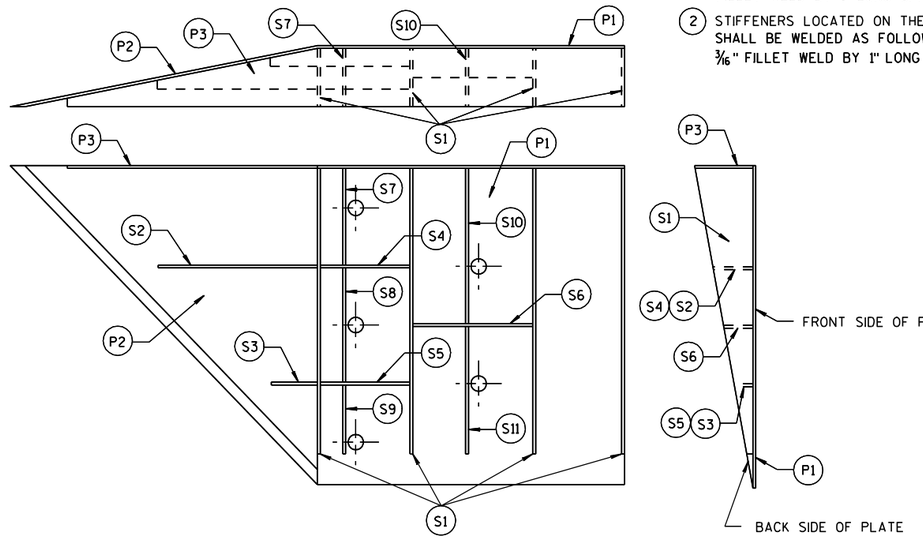


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012
DATE
/S/ Jerry H ----
ROADWAY STANDARDS 635 ENGINEER
FHWA

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S.D.D. 14 B 45-3i

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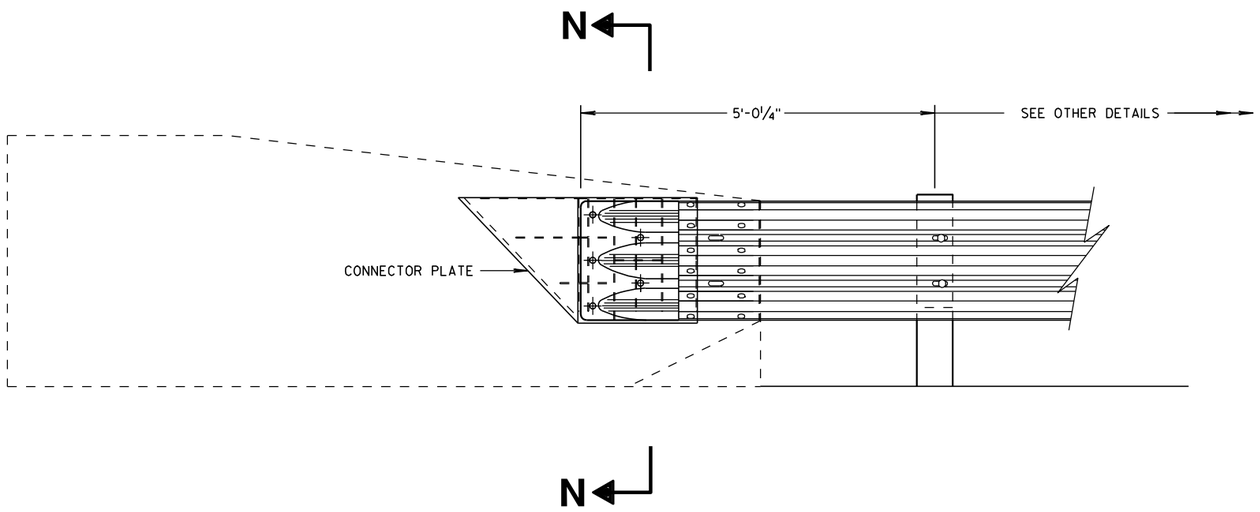
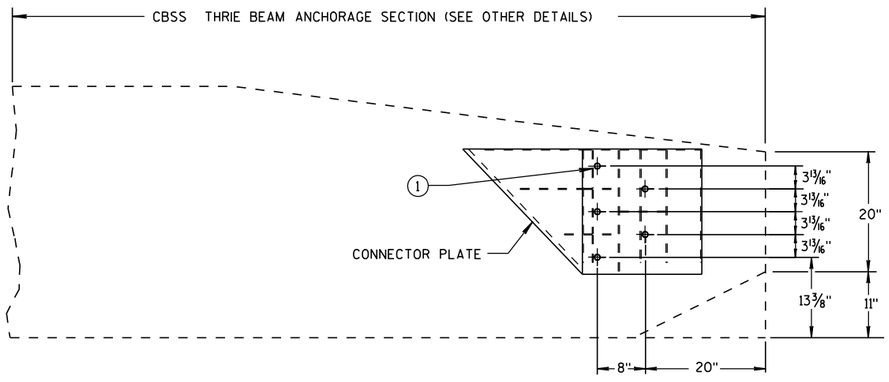
S.D.D. 14 B 45-3i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

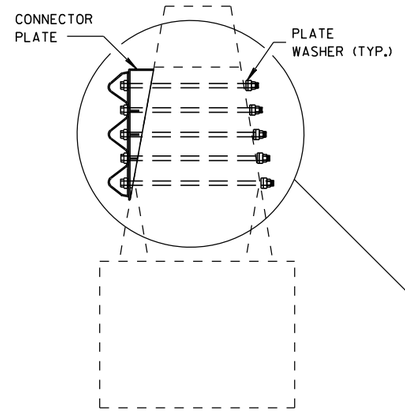


SINGLE SLOPE CONNECTION PLATE PLACEMENT

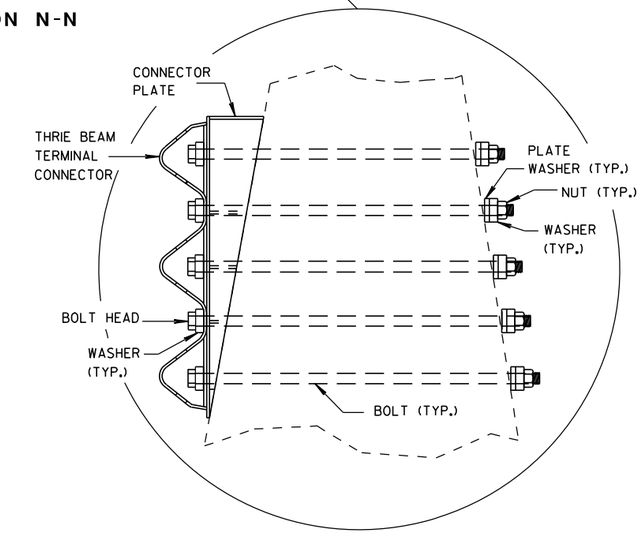
GENERAL NOTES

CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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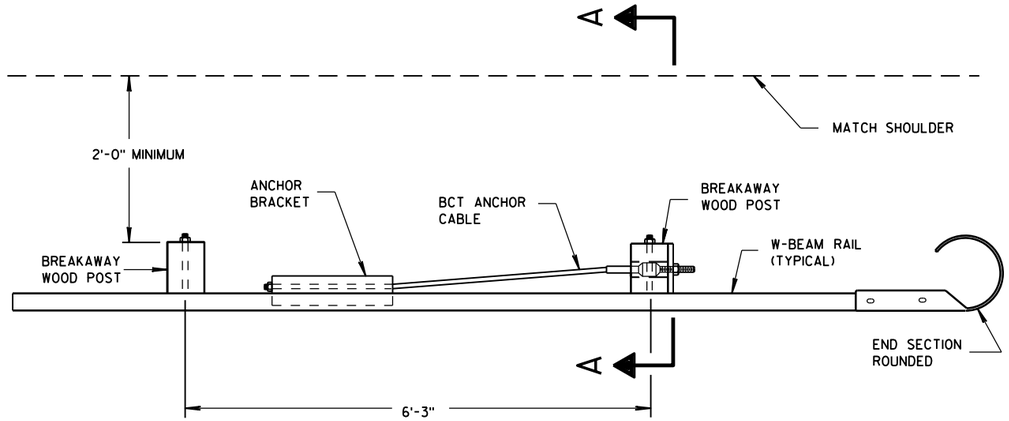
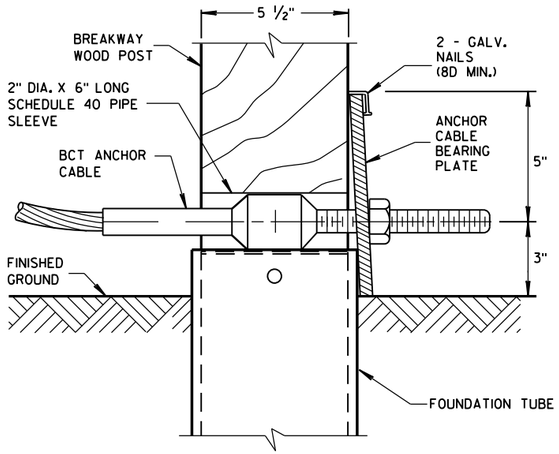
S.D.D. 14 B 45-3j



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

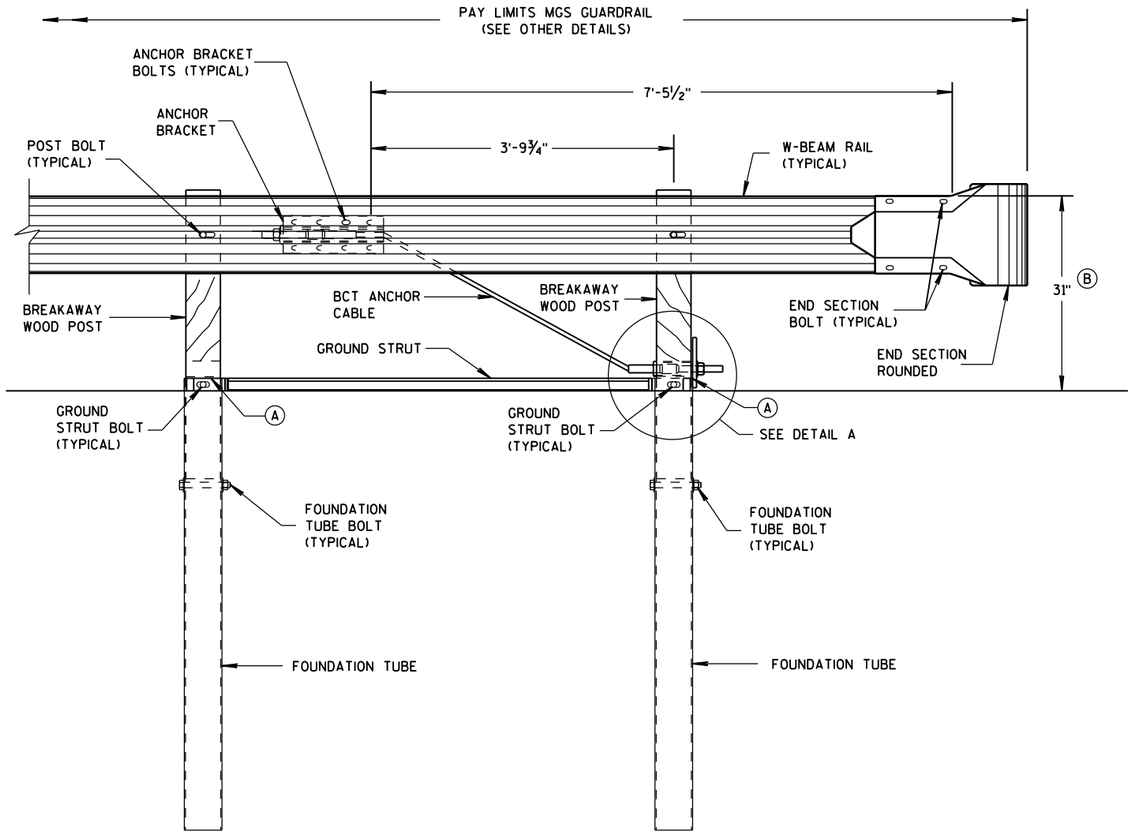
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

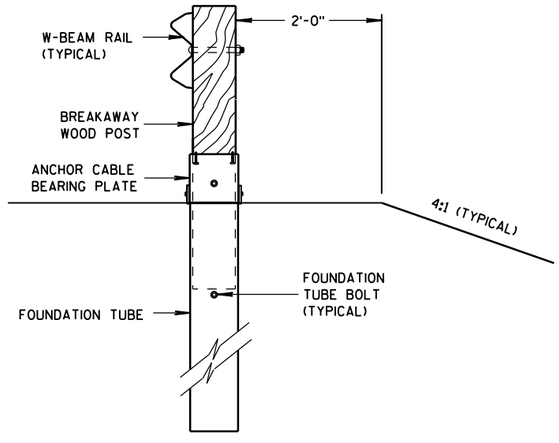
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

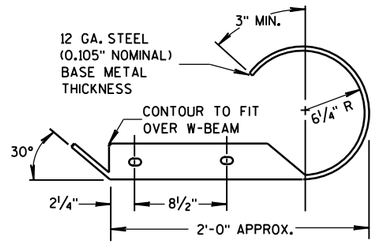


FRONT VIEW

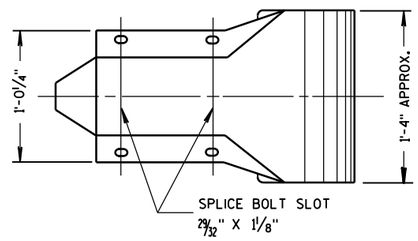
END RAIL DETAIL



SECTION A-A



PLAN VIEW



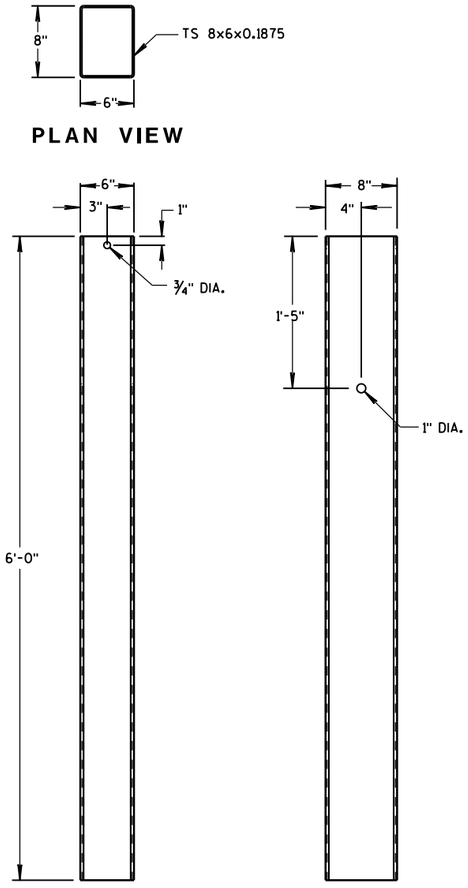
FRONT VIEW

W BEAM END SECTION ROUNDED

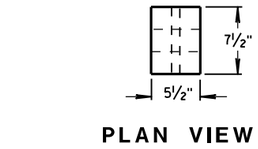
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

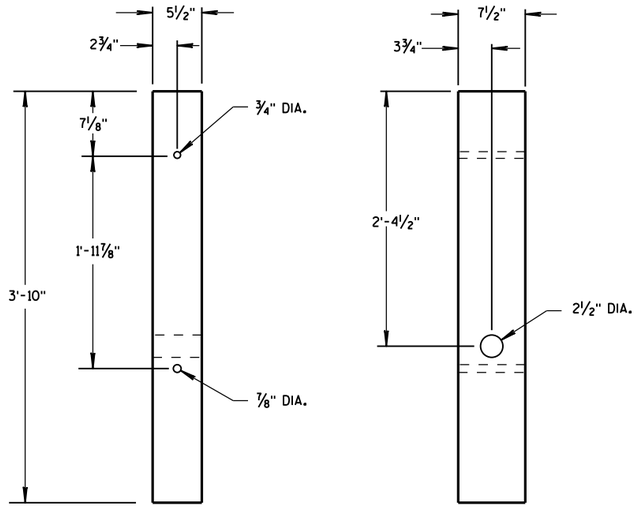
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 47-2a



FOUNDATION TUBE



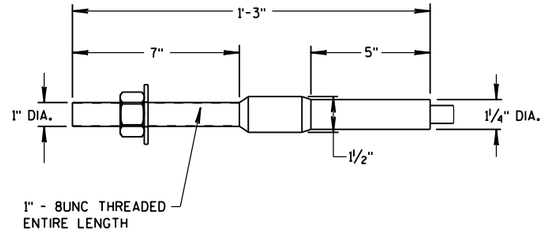


BREAKAWAY WOOD POST

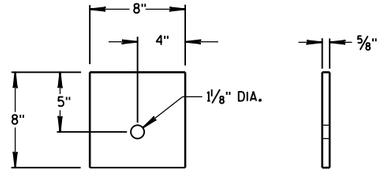
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
STATE OF WISCONSIN DEPARTMENT OF TRANSPOI 638

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S.D.D. 14 B 47-2b

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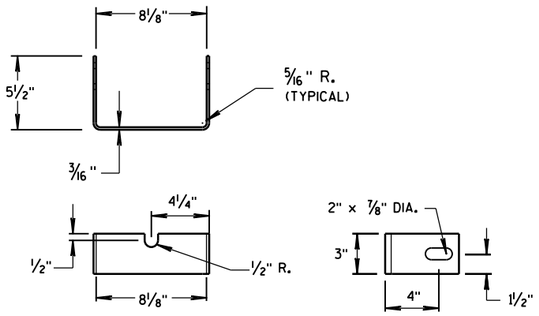
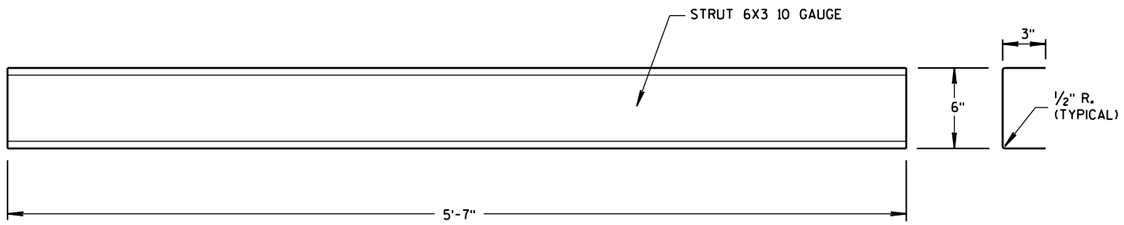
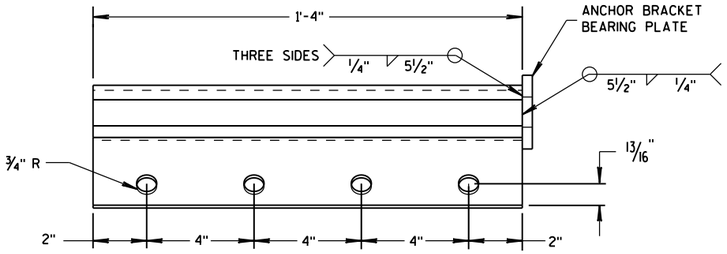
S.D.D. 14 B 47-2b

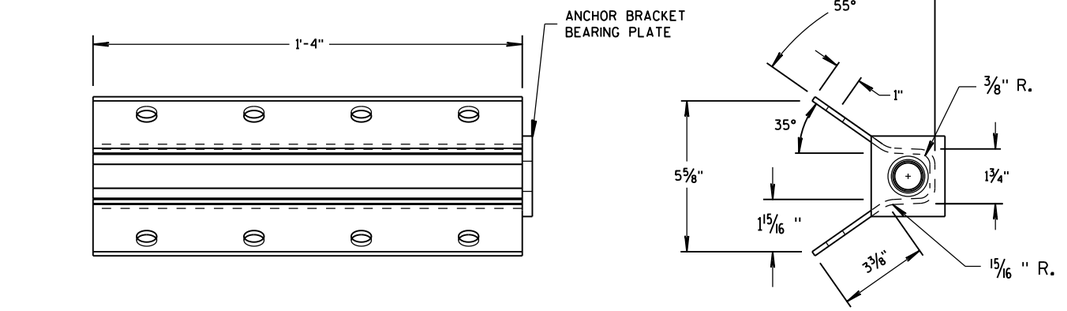


YOKE DETAIL

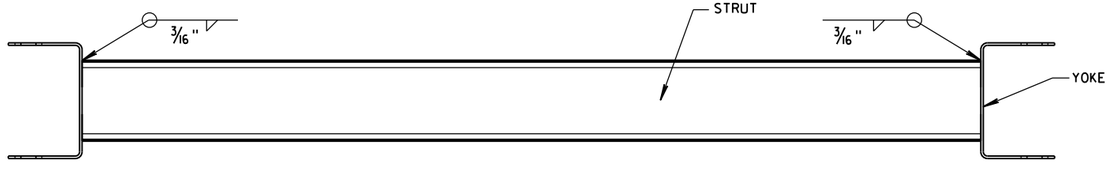


STRUT DETAIL

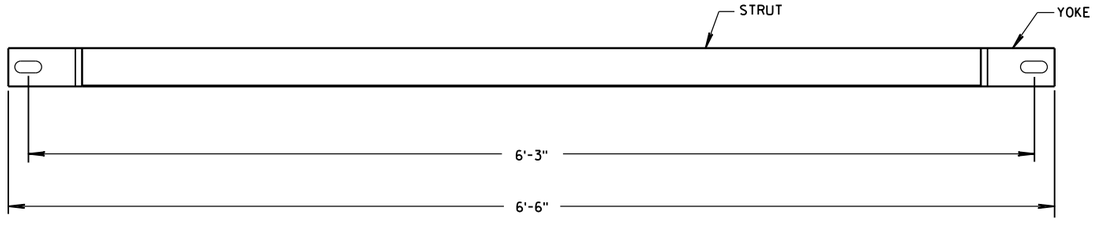




ANCHOR BRACKET

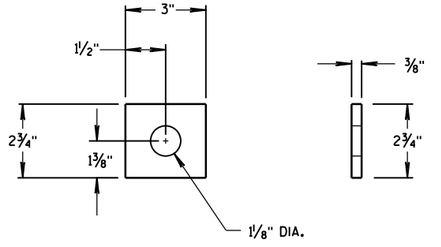


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

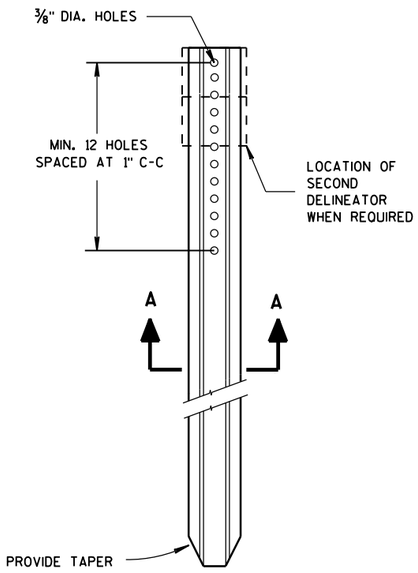
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

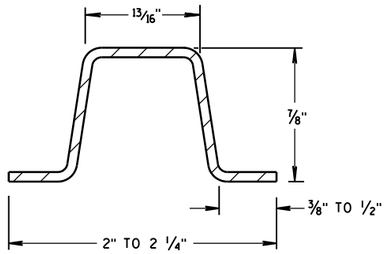
APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 47-2c

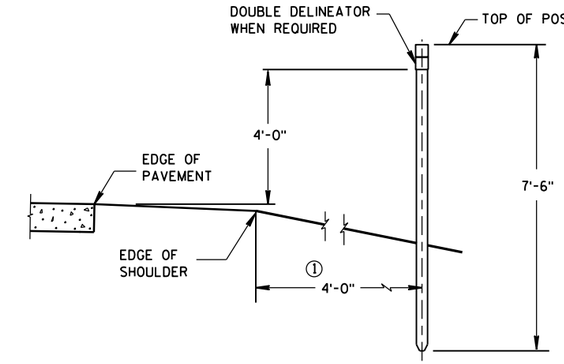


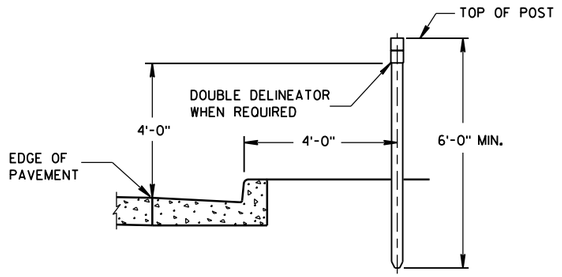
DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



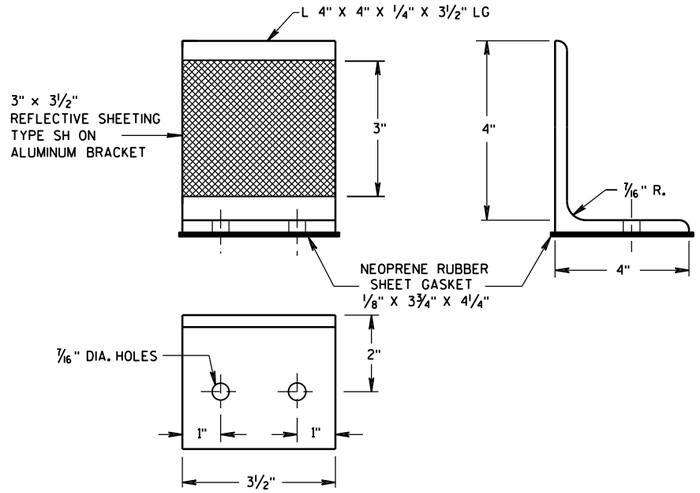


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

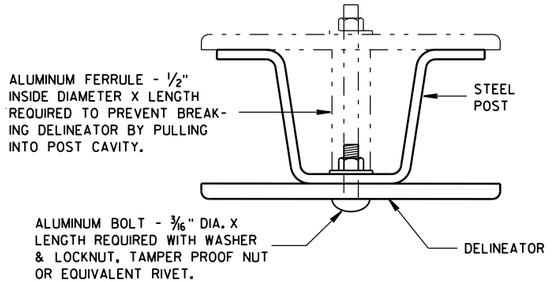
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

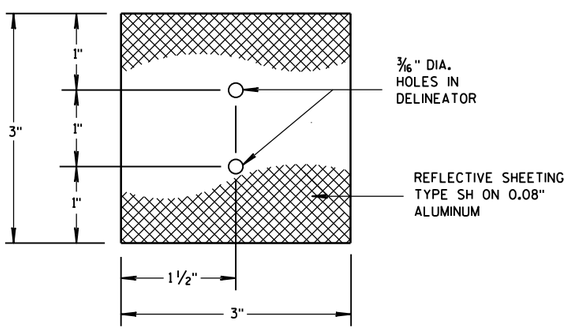
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



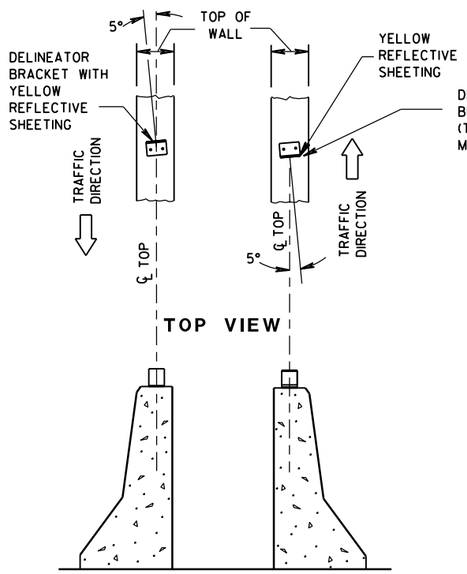
DELINEATOR BRACKET



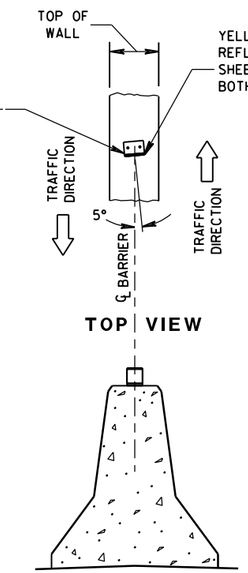
MOUNTING DETAIL FOR DELINEATOR



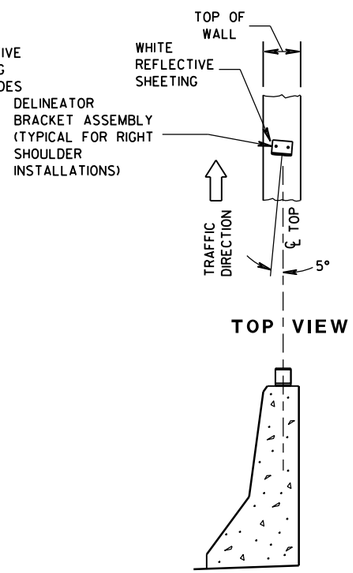
3"x 3" DELINEATOR



DOUBLE BARRIERS IN MEDIAN

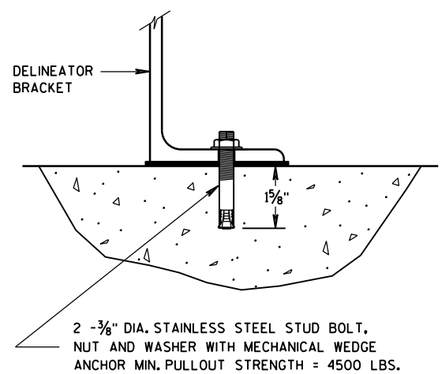


MEDIAN BARRIER



BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC E
FHWA

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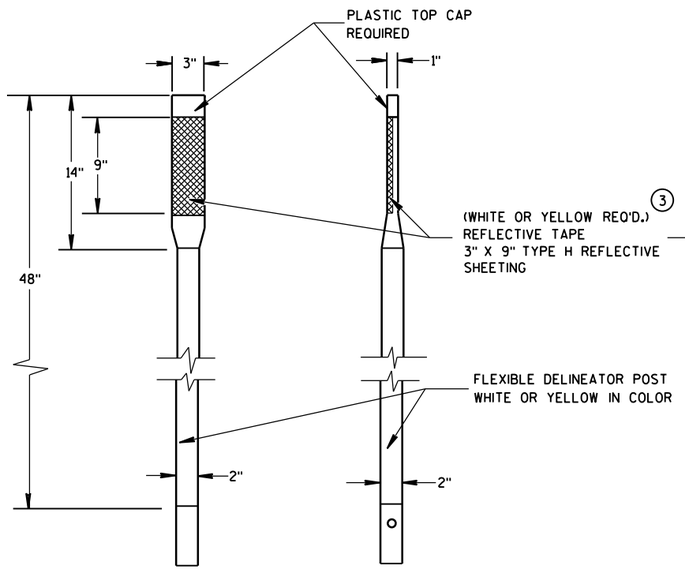
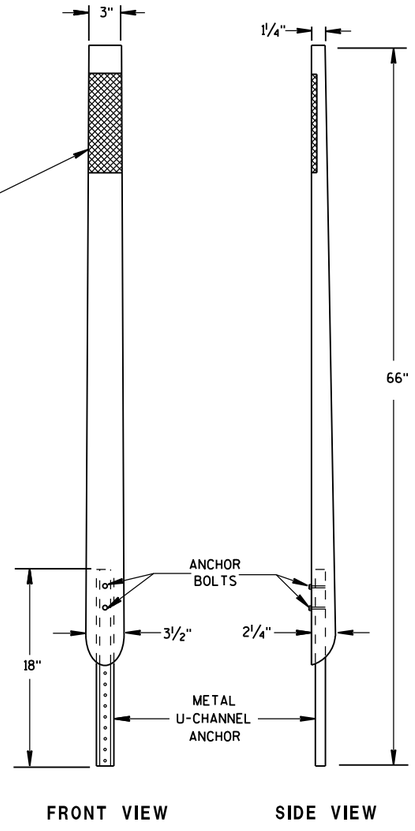
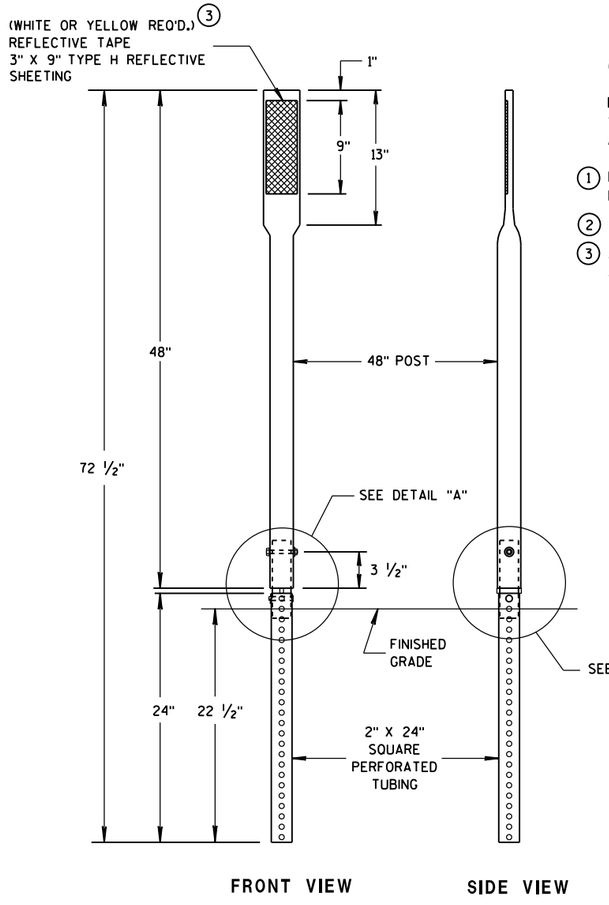


ALTERNATE 1



ALTERNATE 2



ALTERNATE 3

FLEXIBLE DELINEATOR POSTS

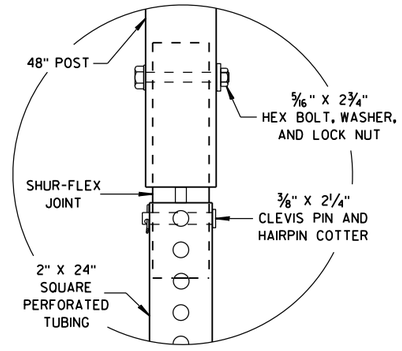
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDATRD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

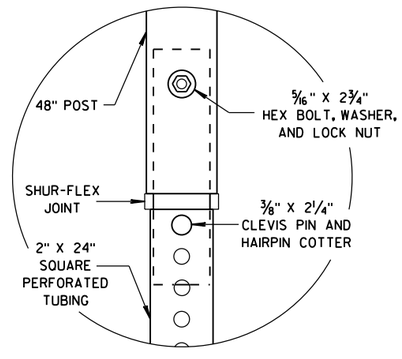
(1) DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

(2) EITHER ALTERNATE NO. 1, NO. 2 OR NO. 3 MAY BE FURNISHED.

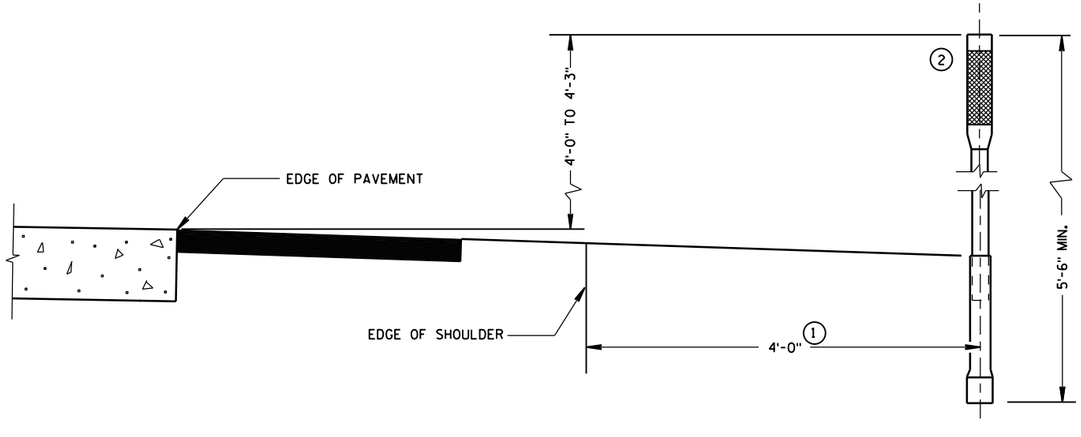
(3) AS PER SECTION 637.2.2.2. OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

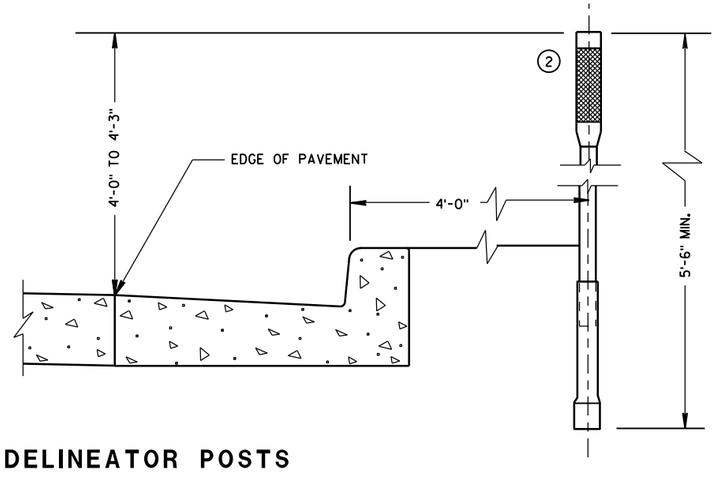


DETAIL A



DETAIL B





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-26-2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

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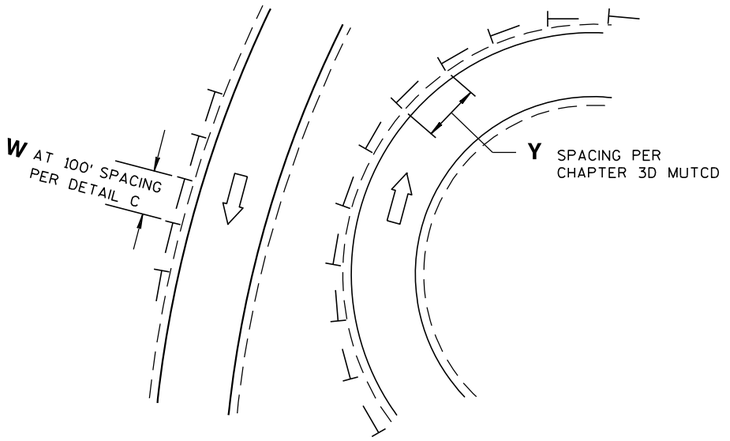
6

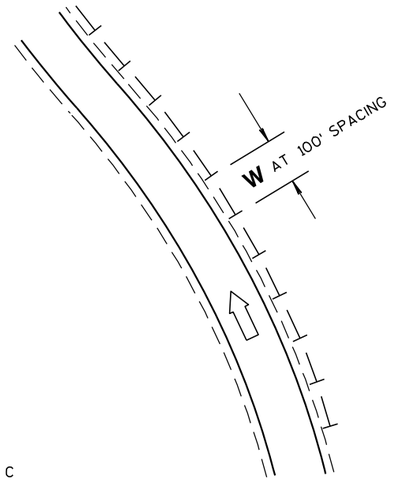
S.D.D. 15 A 4-2

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



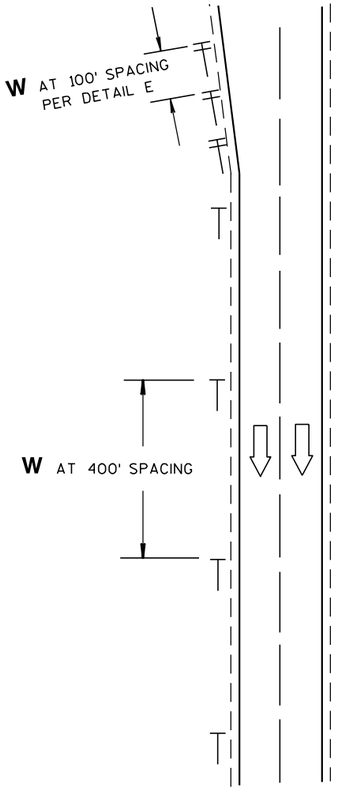
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



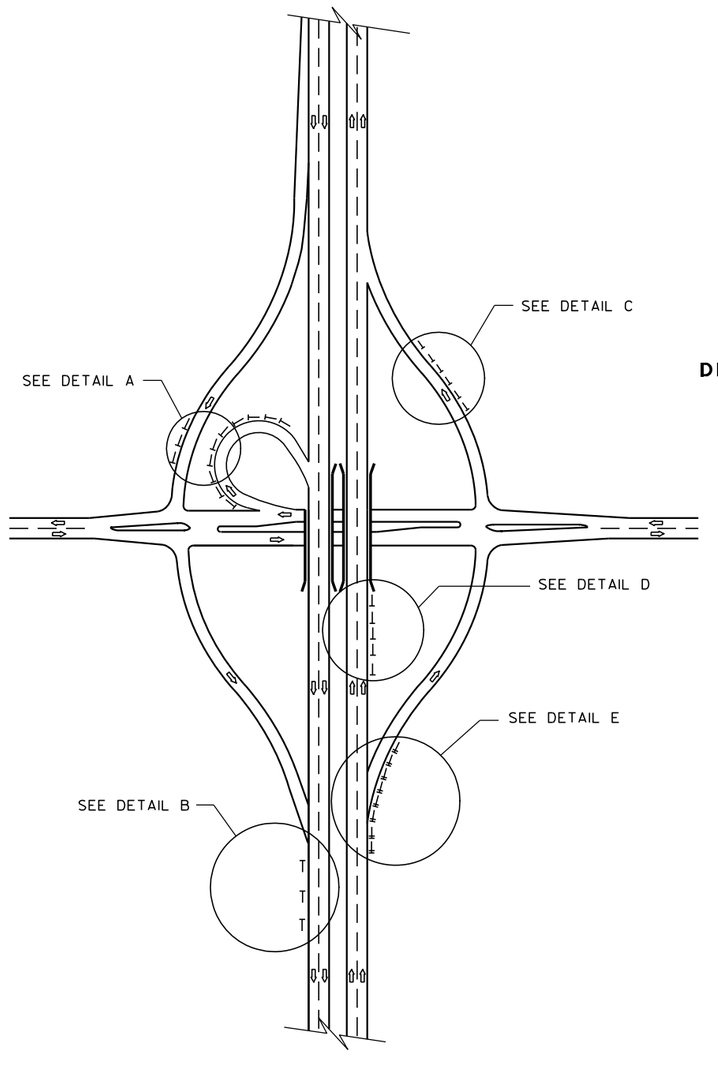
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

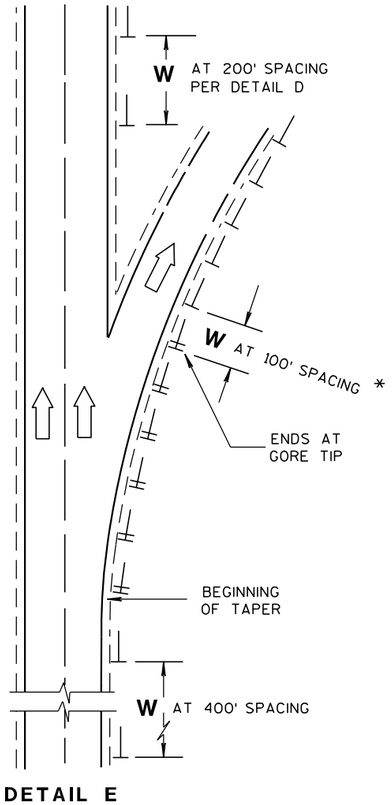
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



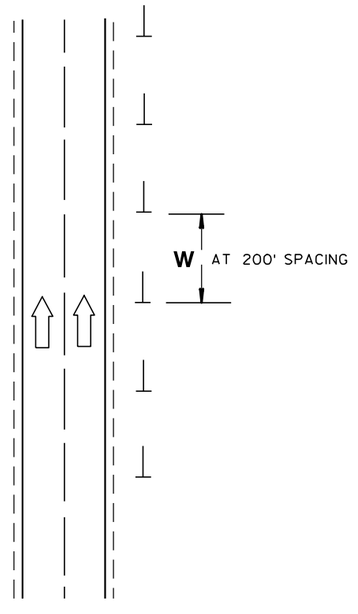
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft
STATE TRAFFIC ENGINEER
FHWA

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6

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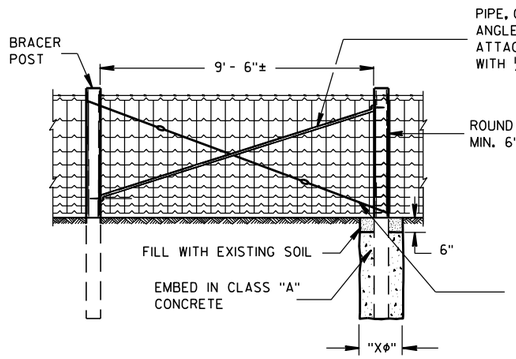
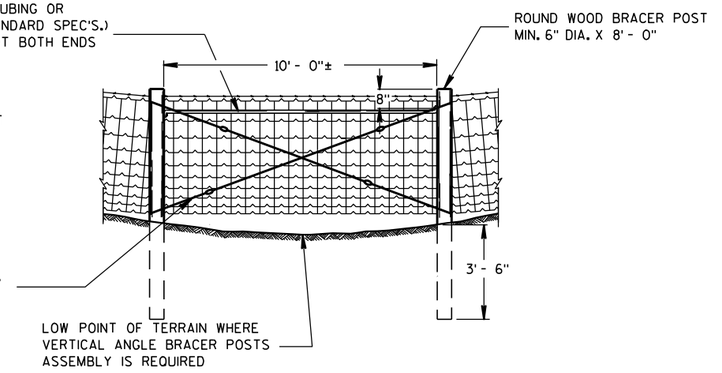
NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

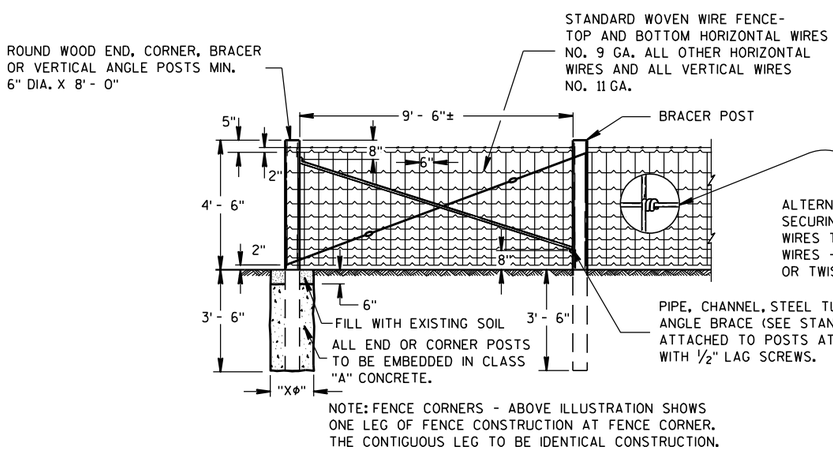
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

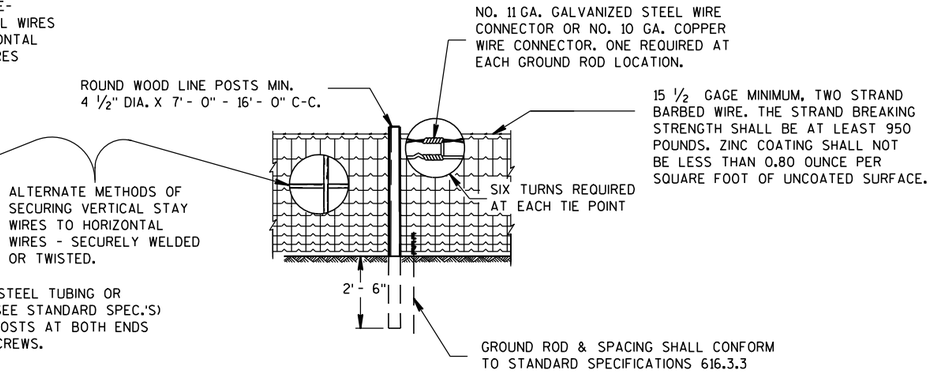
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



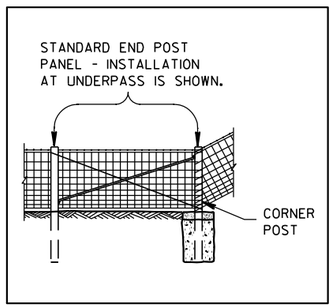
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

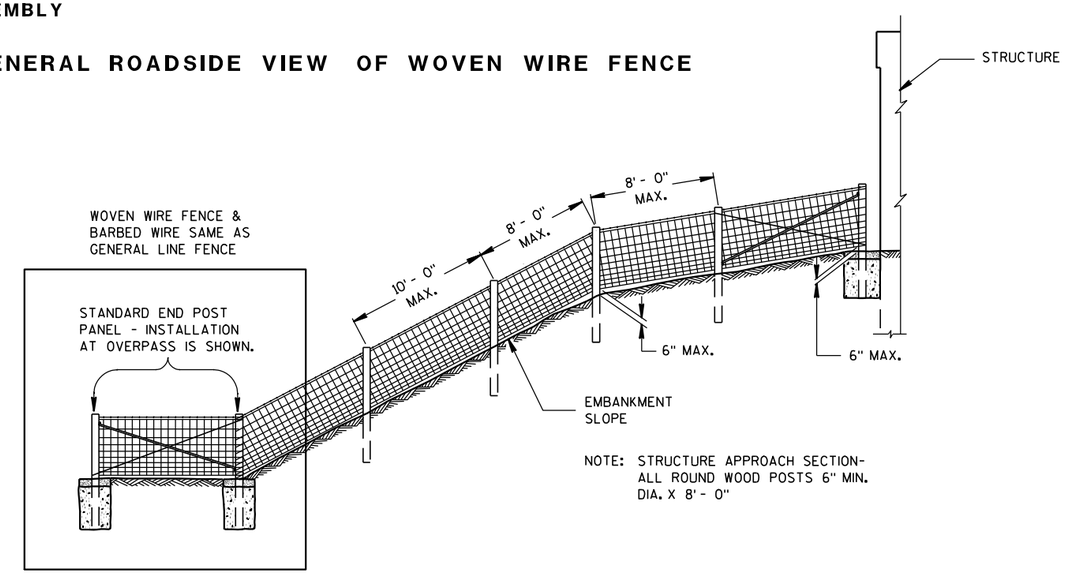


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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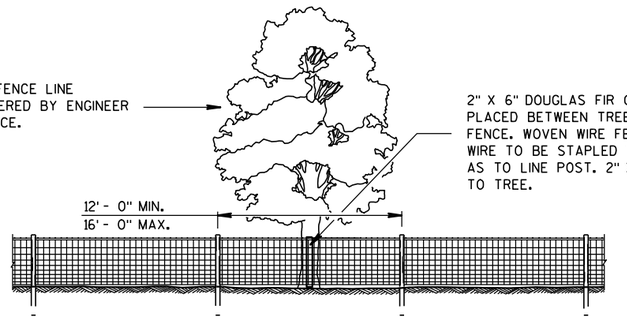
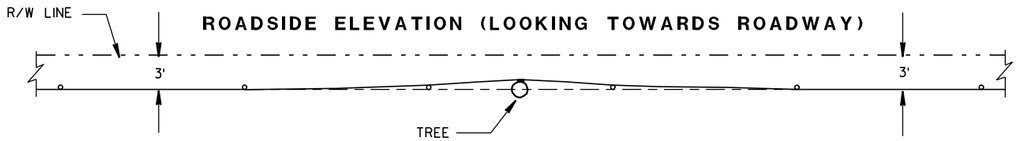
S.D.D. 15 B 1-8a

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.

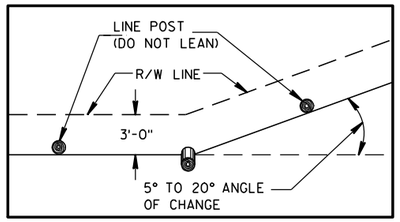


ROADSIDE ELEVATION (LOOKING TOWARDS ROADWAY)

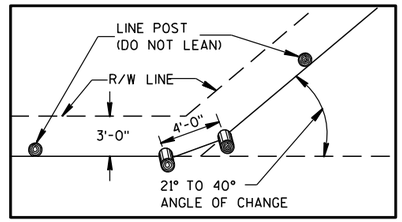


PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



PLAN VIEW
SINGLE POST CORNER

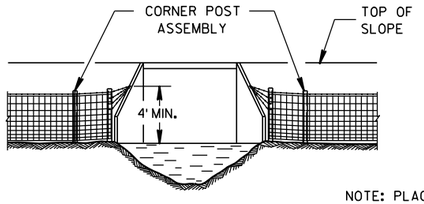


PLAN VIEW
DOUBLE POST CORNER

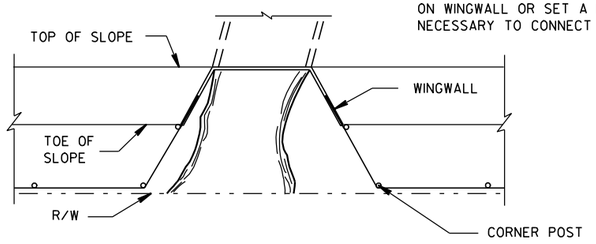
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

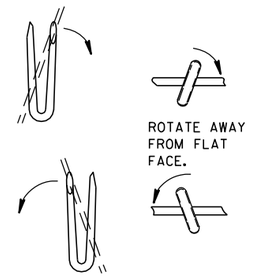
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



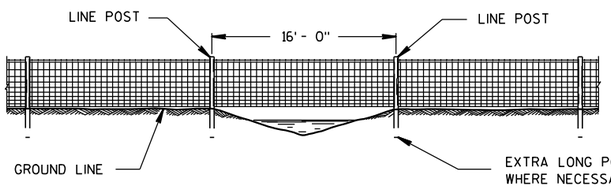
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



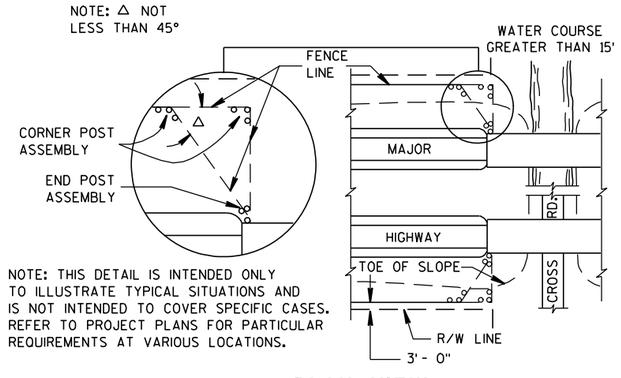
FENCE INSTALLATION TO WINGWALLS



LINE POST



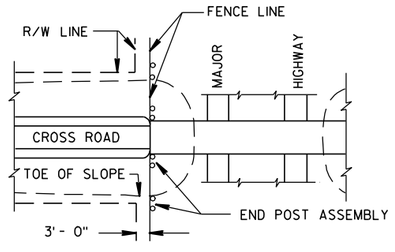
FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH



NOTE: THIS DETAIL IS INTENDED ONLY TO ILLUSTRATE TYPICAL SITUATIONS AND IS NOT INTENDED TO COVER SPECIFIC CASES. REFER TO PROJECT PLANS FOR PARTICULAR REQUIREMENTS AT VARIOUS LOCATIONS.

PLAN VIEW

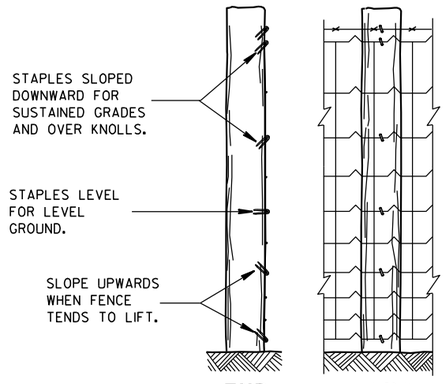
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW

MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION

FARM SIDE ELEVATION

FENCE MOUNTING DETAIL

FENCE LOCATION AT STRUCTURES

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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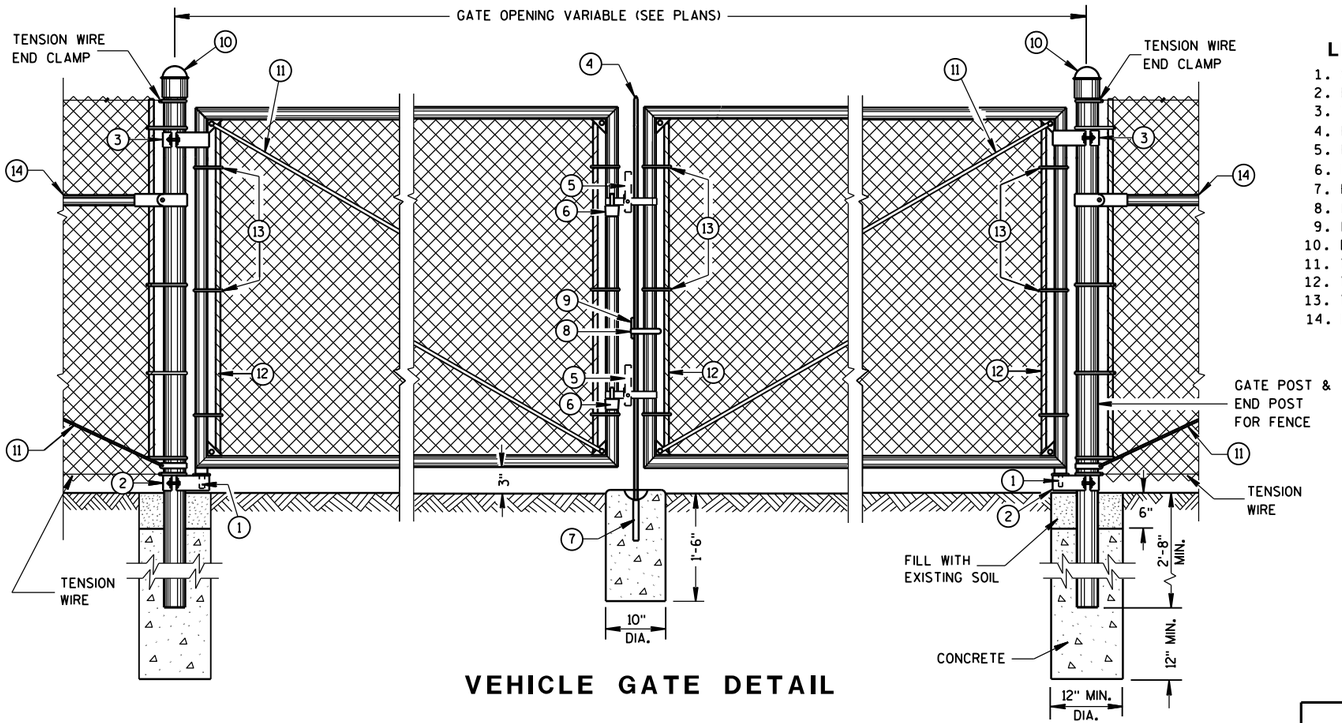
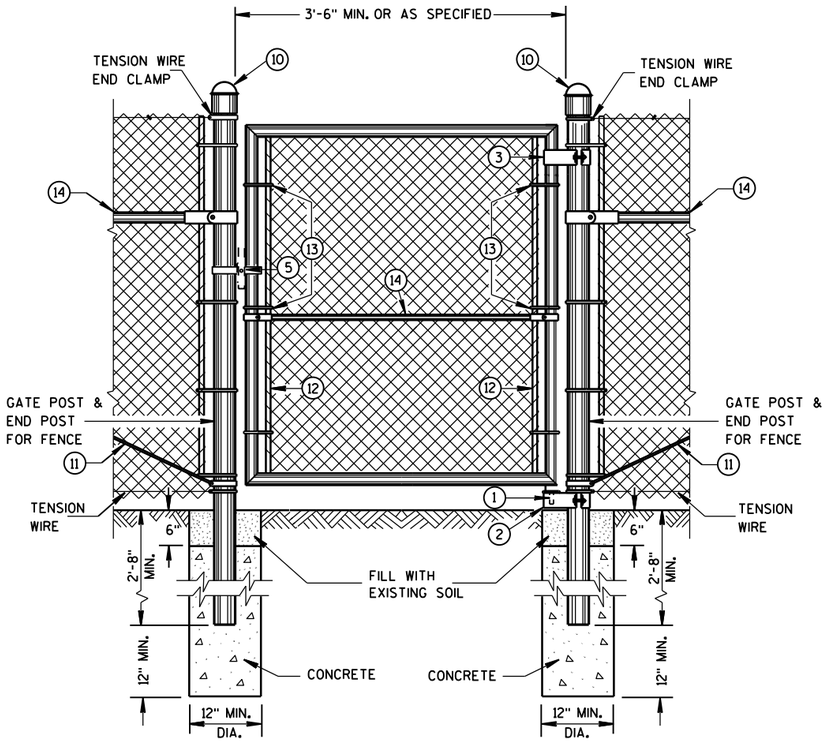
S.D.D. 15 B 1-8b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

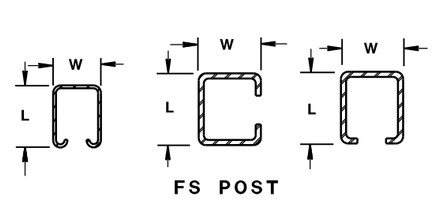
FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

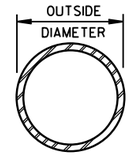
FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.



FS POST



SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FORMED STEEL FENCE POST

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR ROUND STEEL FENCE POST

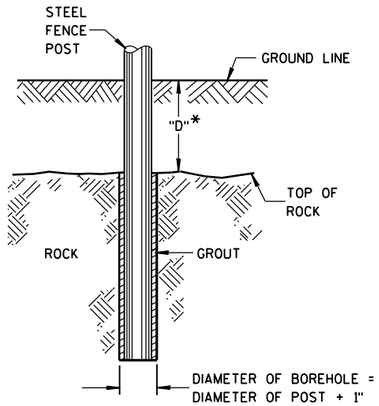
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

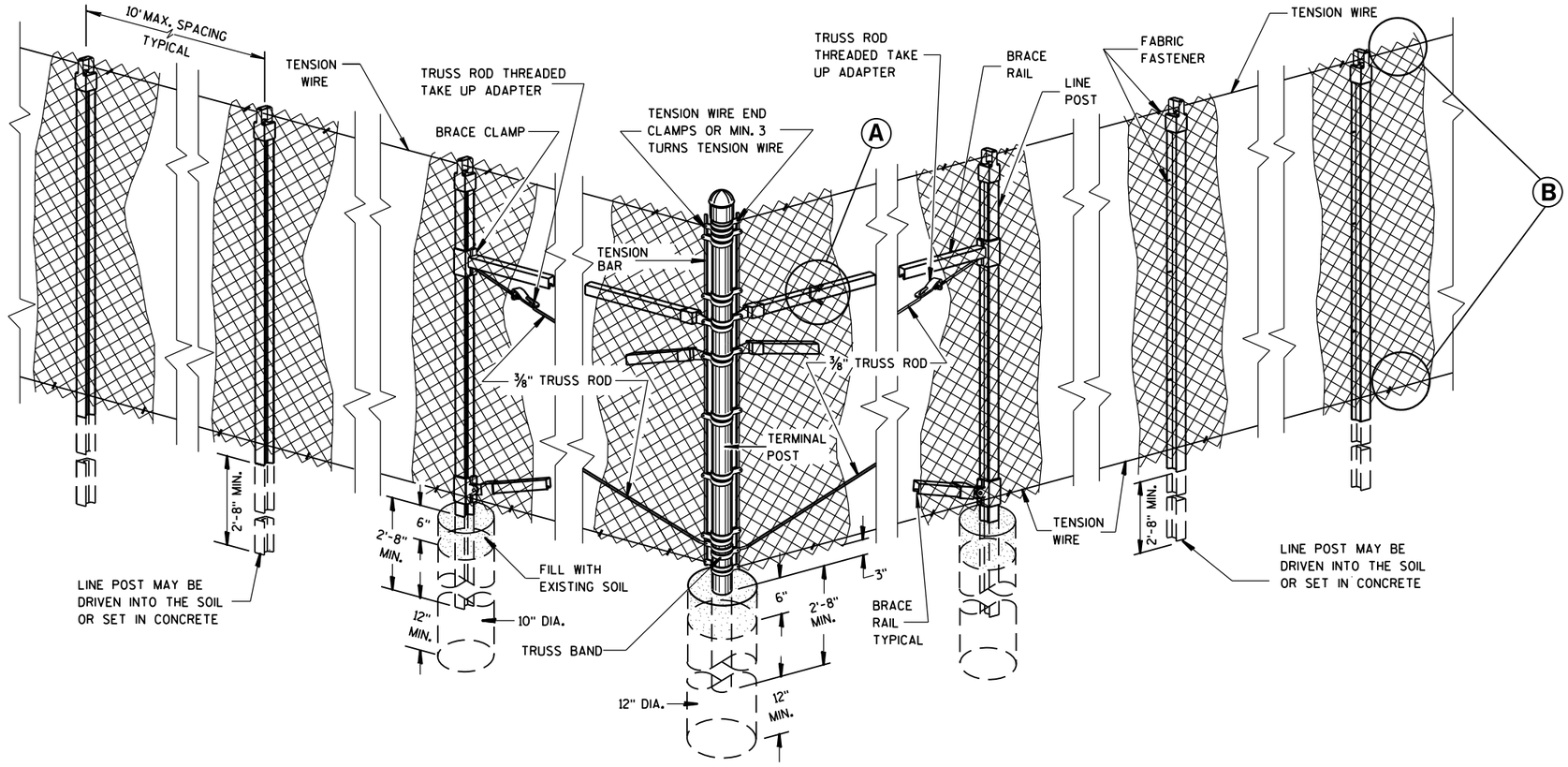
6

S.D.D. 15 B 3-13a

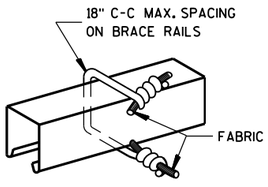


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



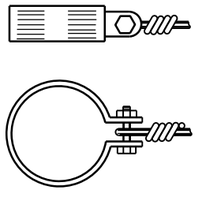
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



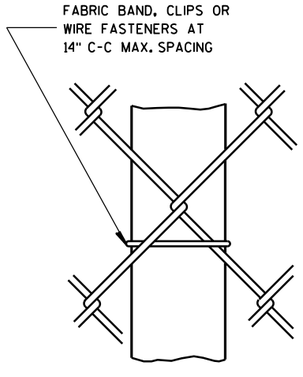
BRACE RAIL

FABRIC FASTENER

Ⓐ



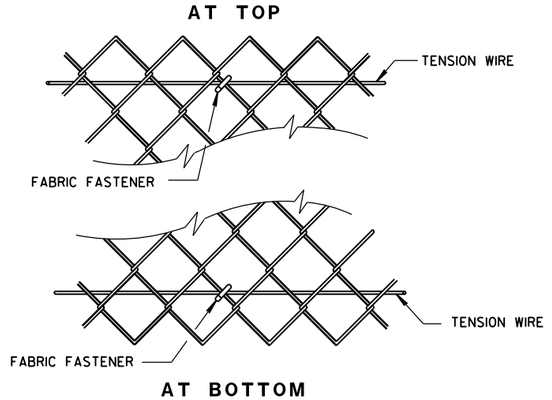
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

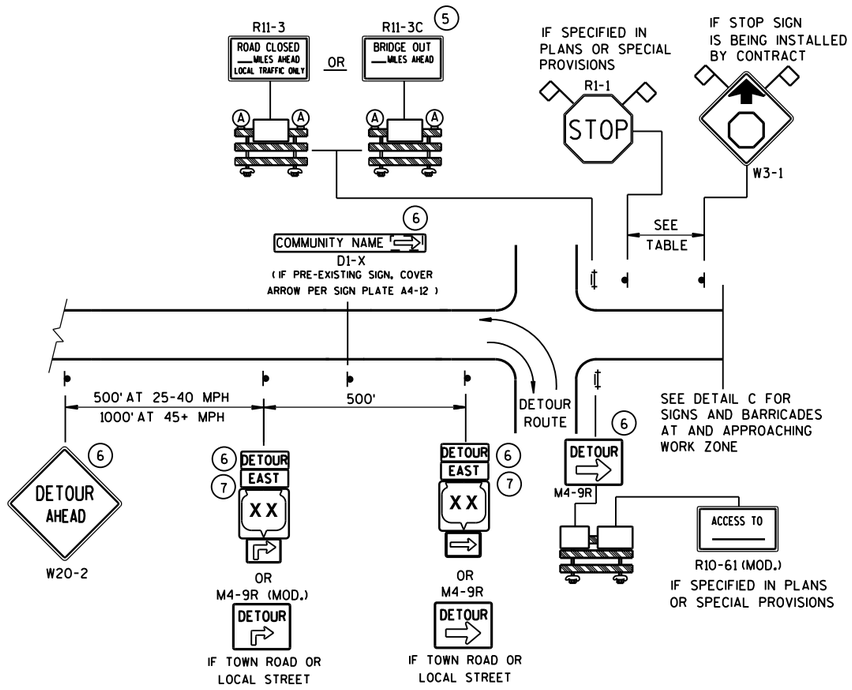
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/16/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

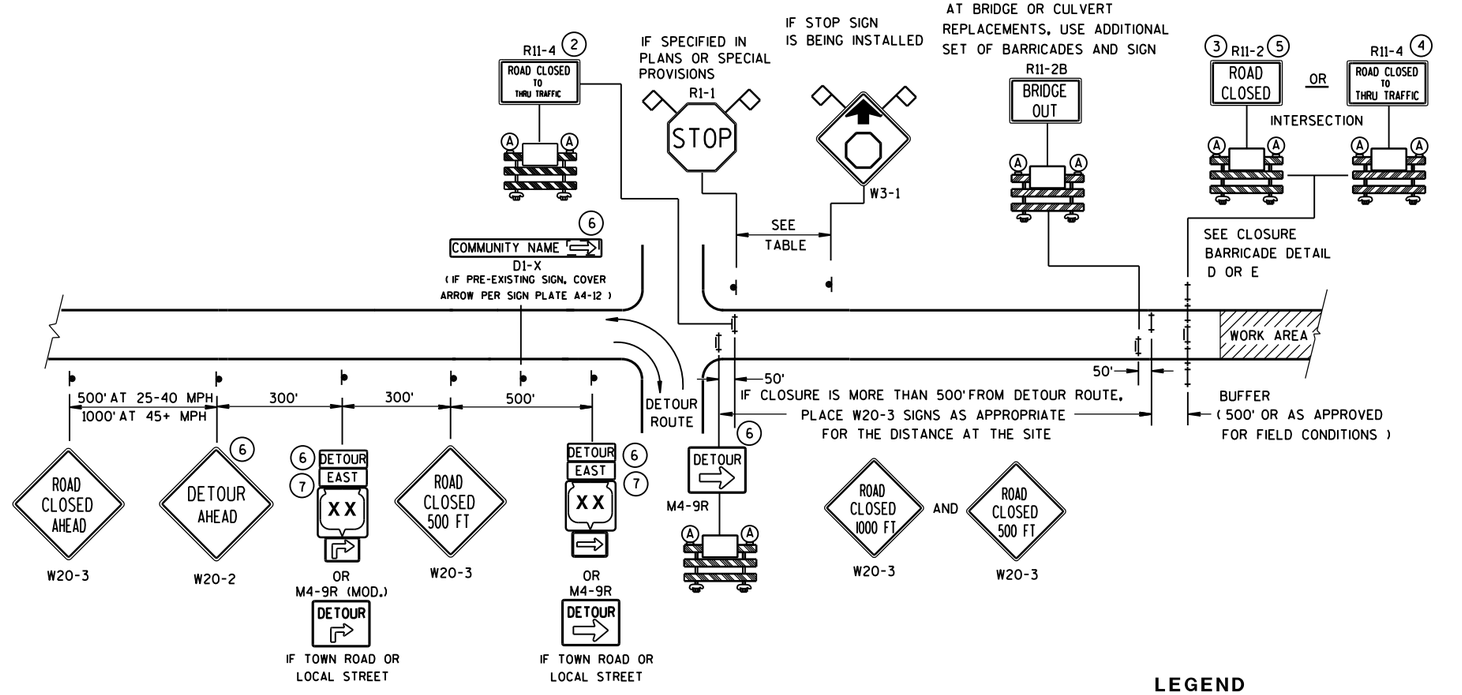
6

S.D.D. 15 B 3-13b



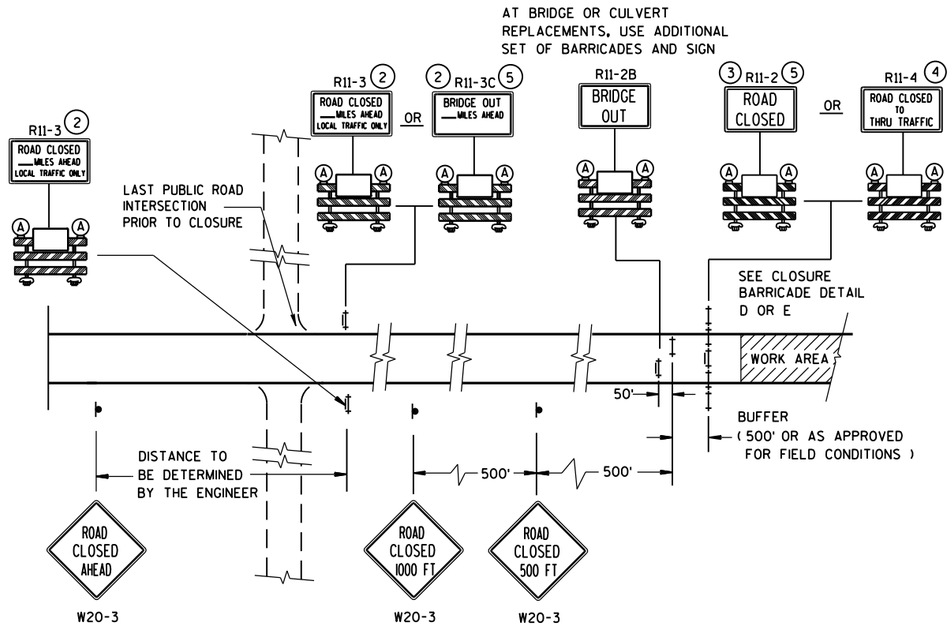
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

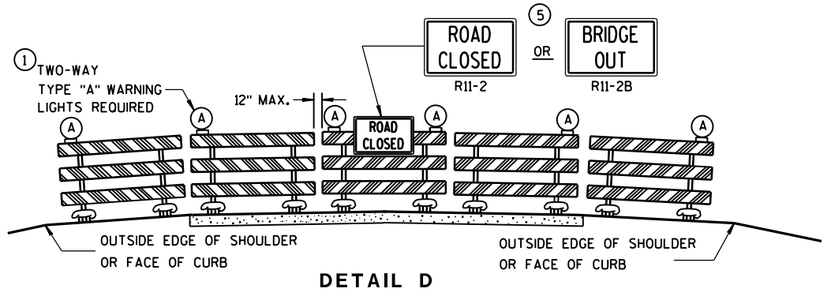
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

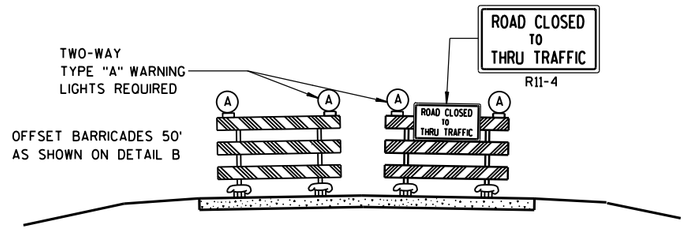
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

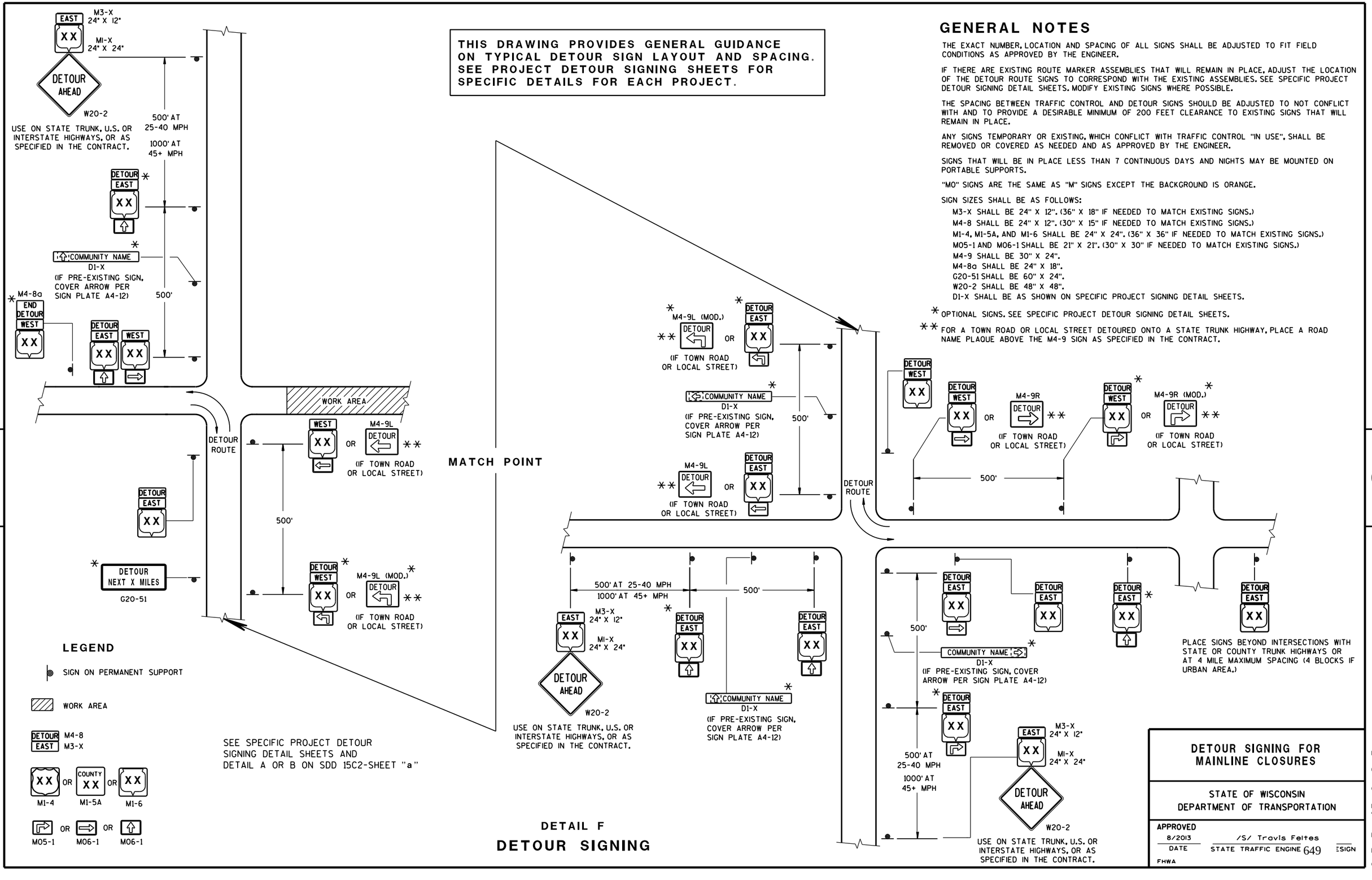
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETAIL F

DETOUR SIGNING

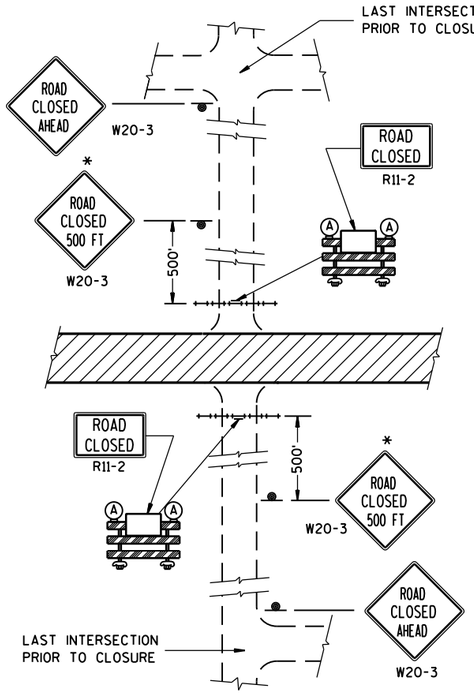
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINE
649
FHWA

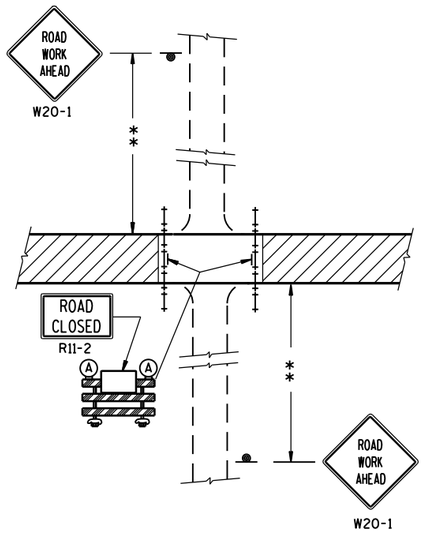
6

S.D.D. 15 C 2-5c



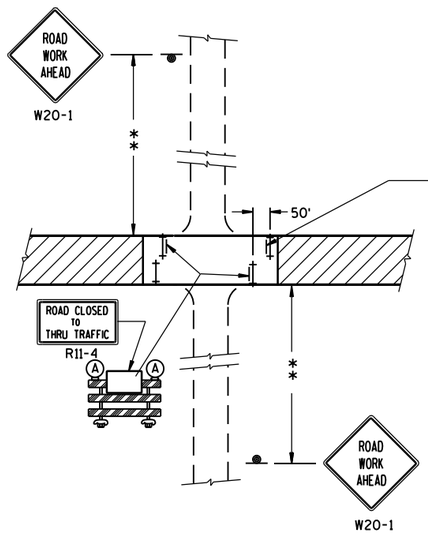
DETAIL 1

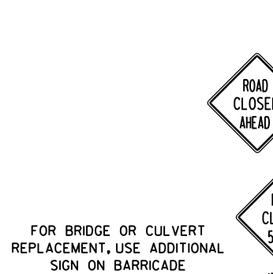
(NO ACCESS TO PROJECT)



DETAIL 2

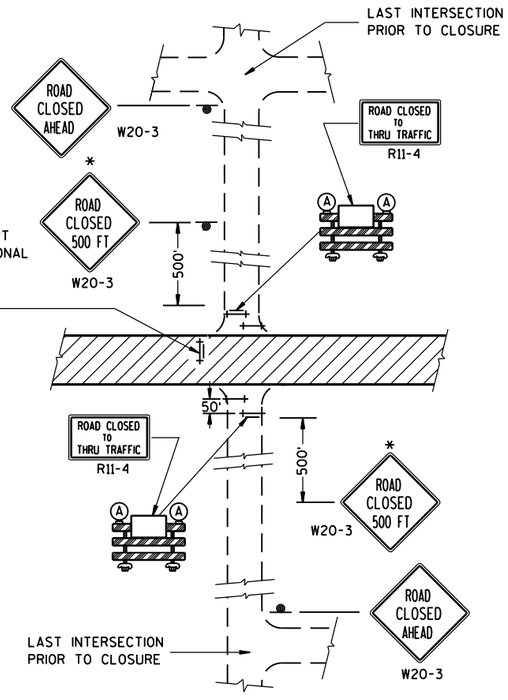
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

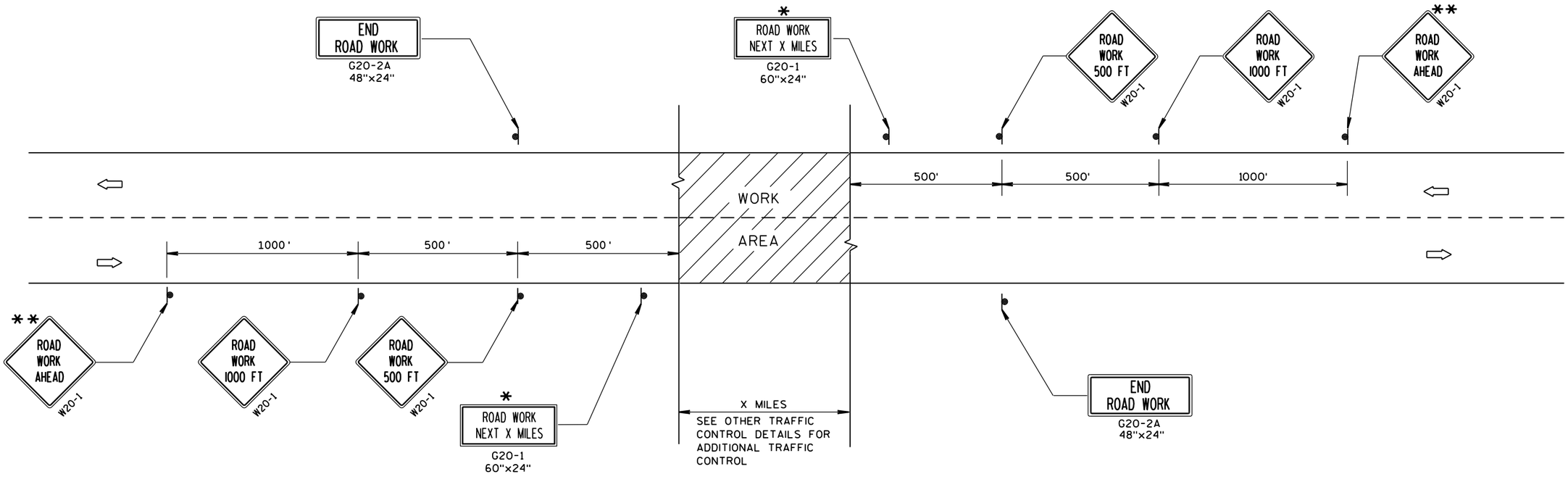
APPROVED
8/2013
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINE 650 ESIGN
FHWA

6

S.D.D. 15 C 3-2

6

S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

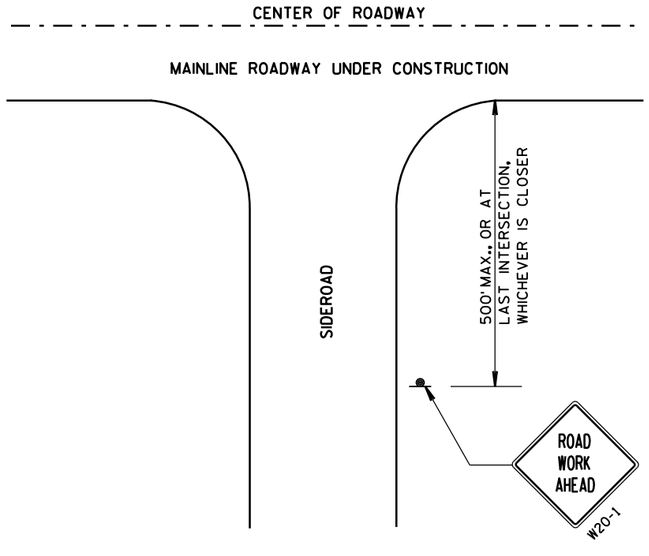
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

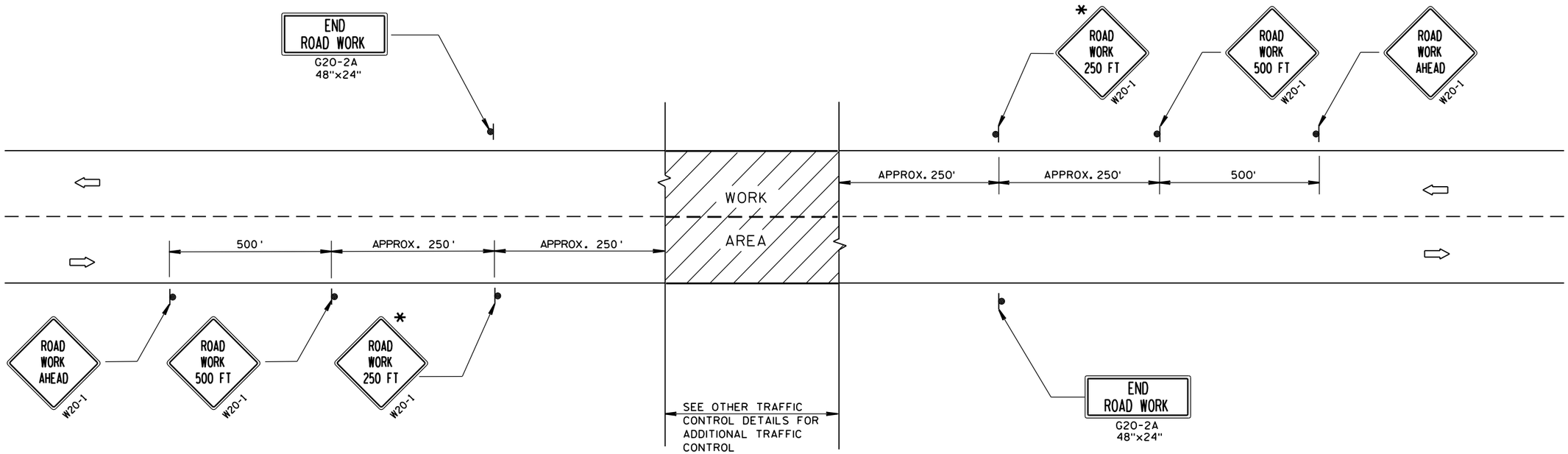
651

SIGN

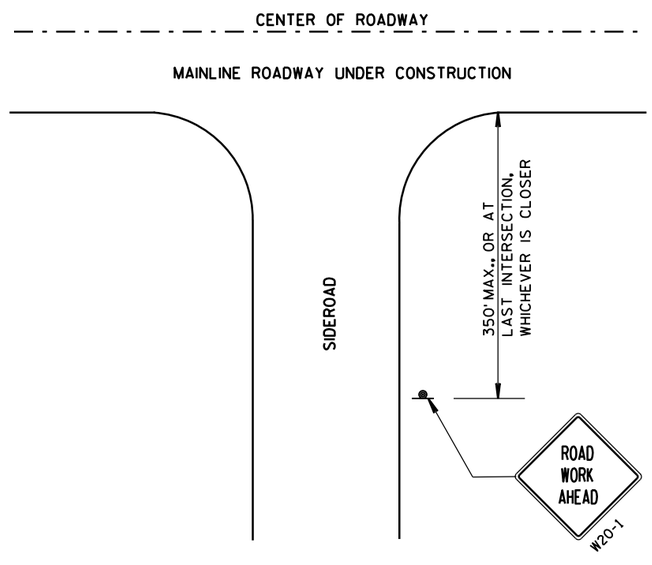
FHWA

6

S.D.D. 15 C 4-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

652

SIGN

FHWA

6

S.D.D. 15 C 5-2

6

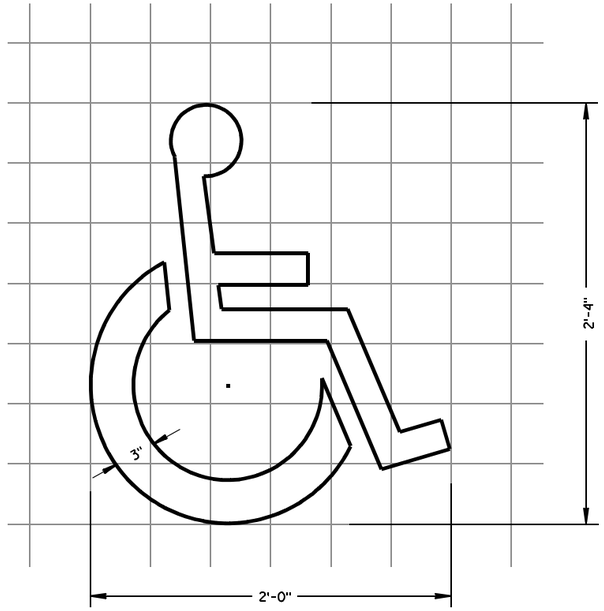
S.D.D. 15 C 5-2

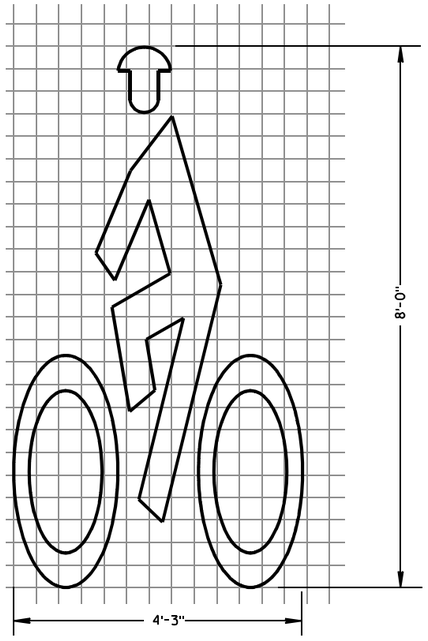
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

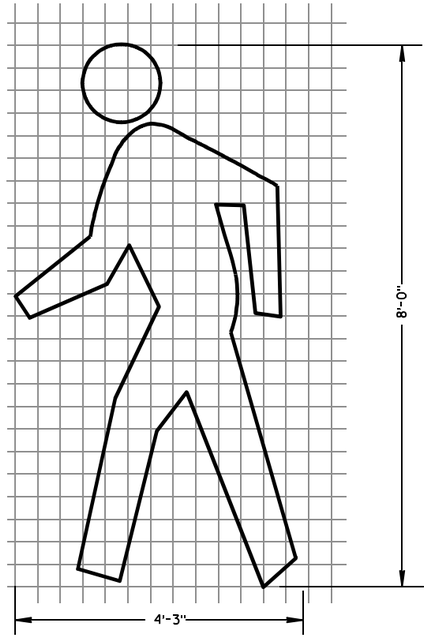
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

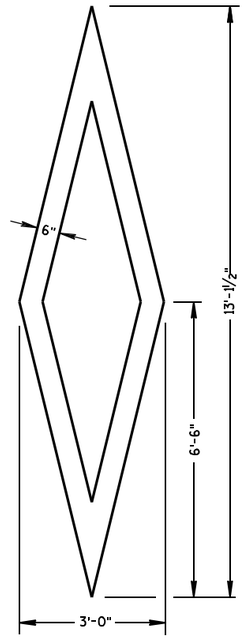




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N Nathan — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12a

6

S.D.D. 15 C 7-12a

GENERAL NOTES

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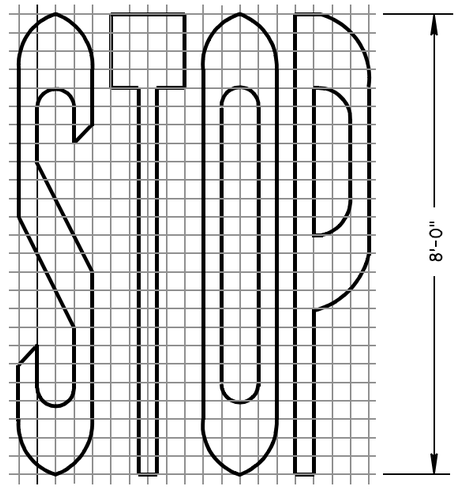
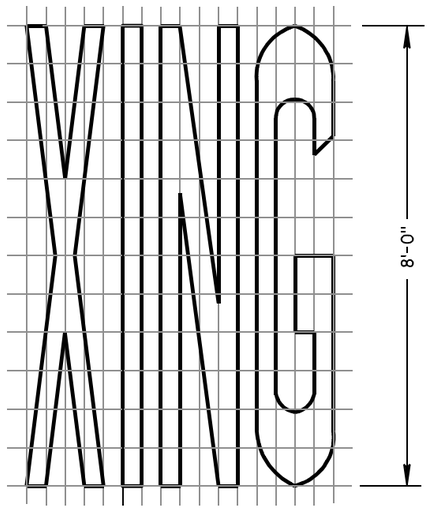
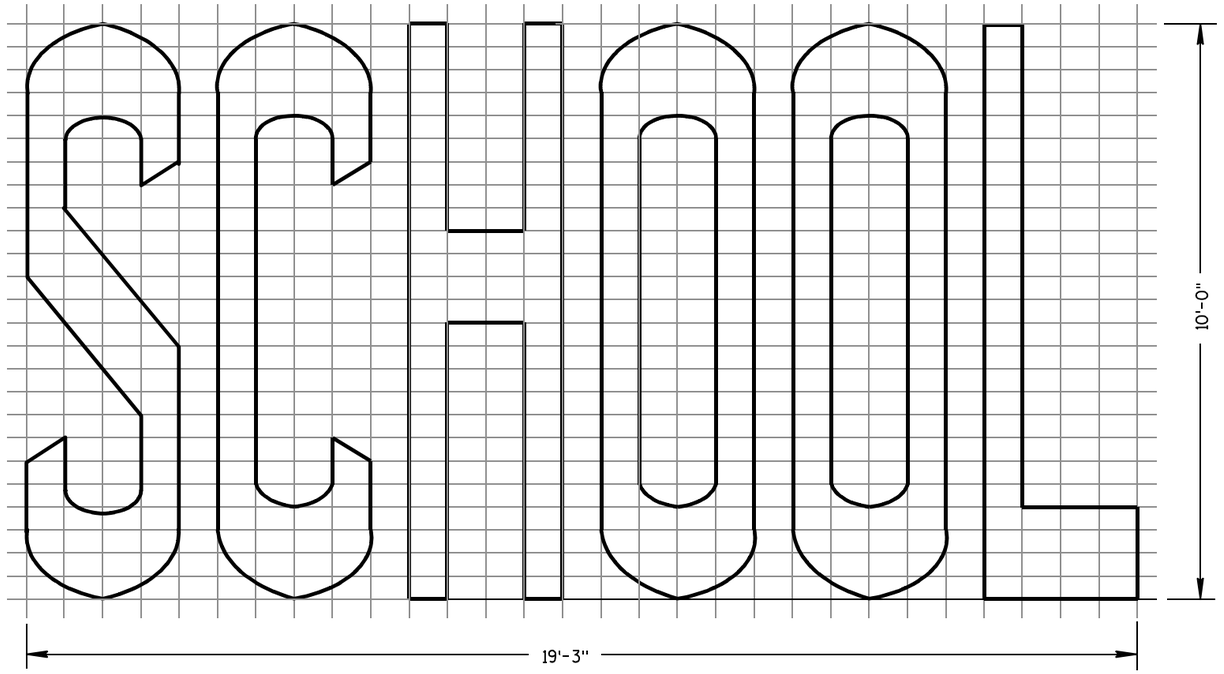
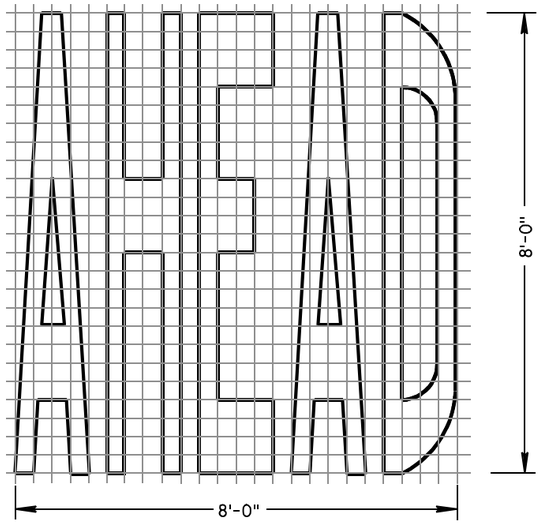
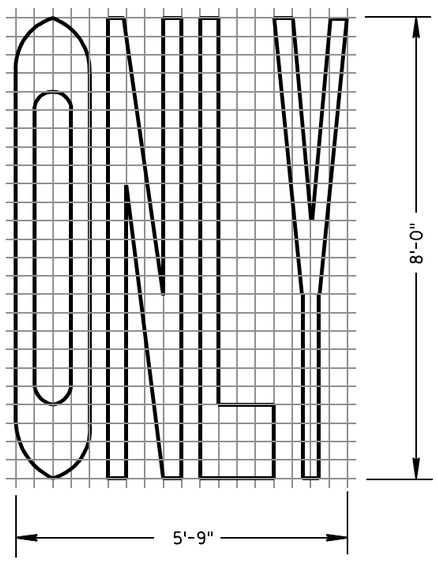


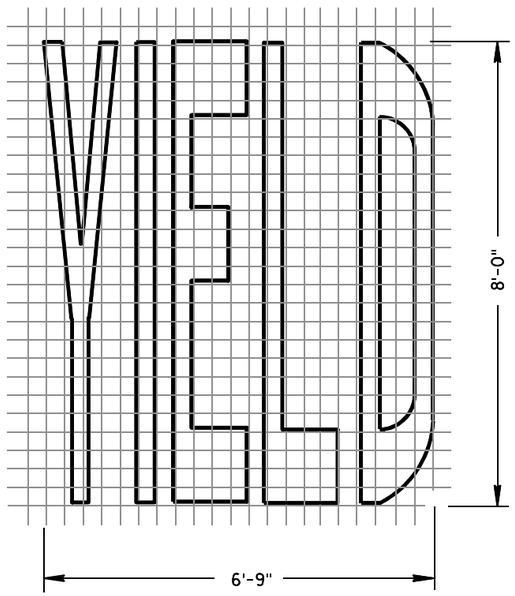


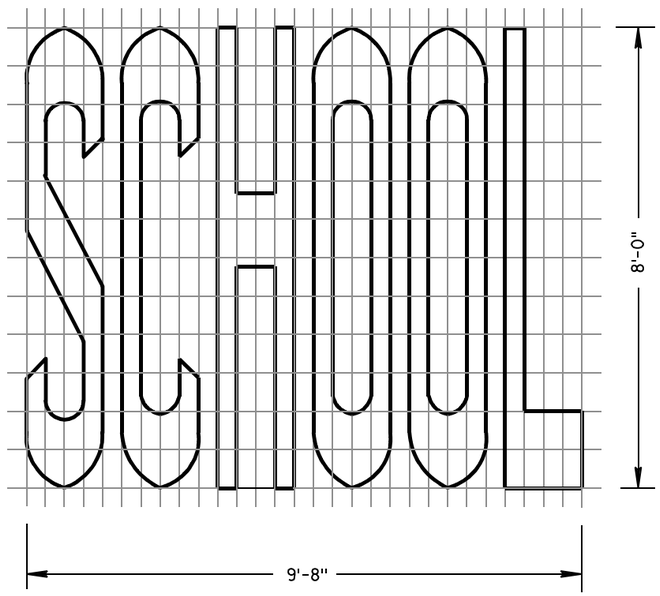


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

654 — IGN

FHWA

6

S.D.D. 15 C 7-12b

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S.D.D. 15 C 7-12b

GENERAL NOTES

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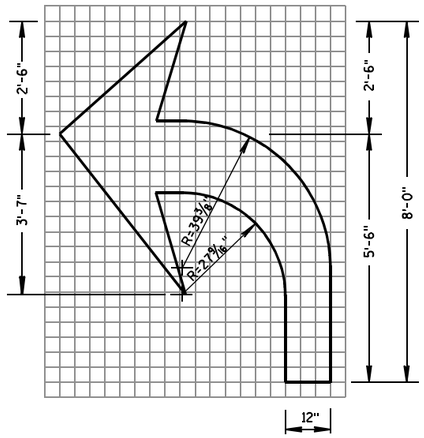
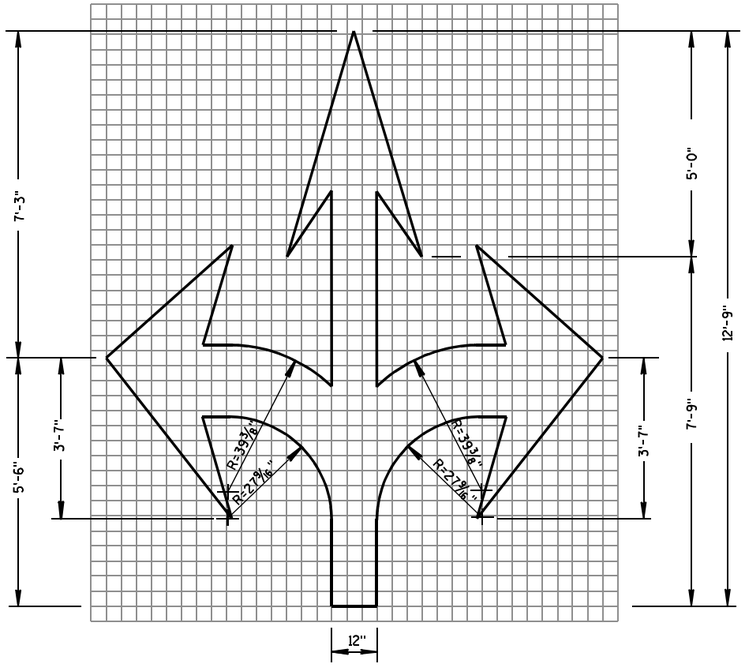
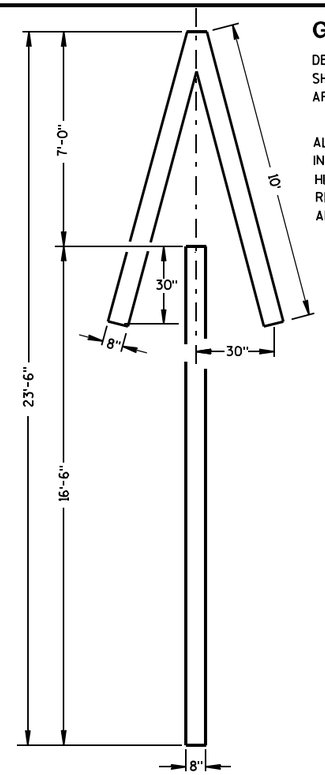


TYPE 2



TYPE 6



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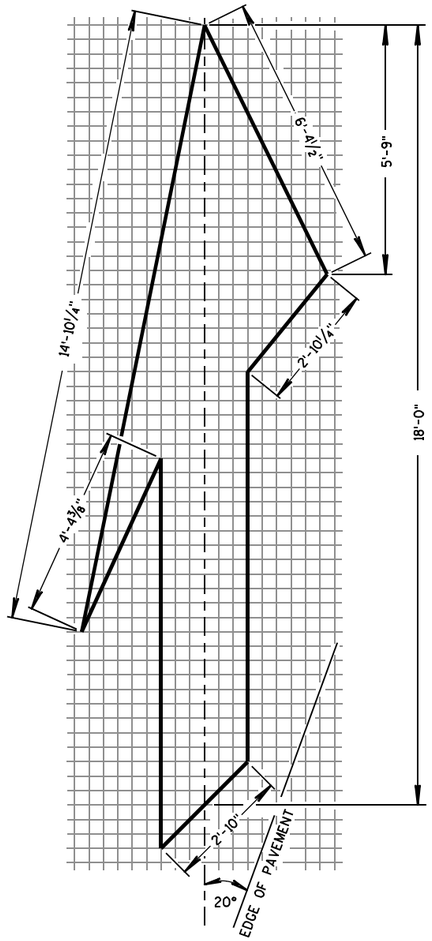
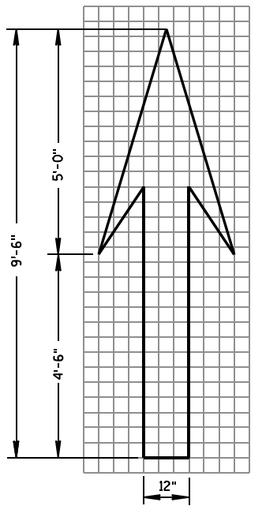
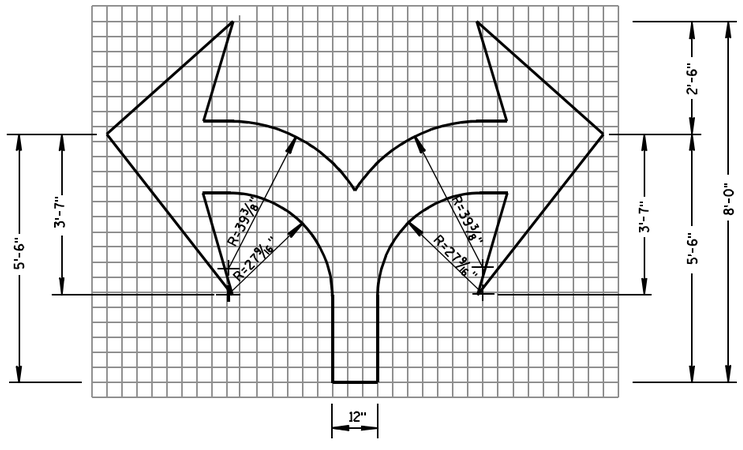


TYPE 5 LANE DROP ARROW



TYPE 1



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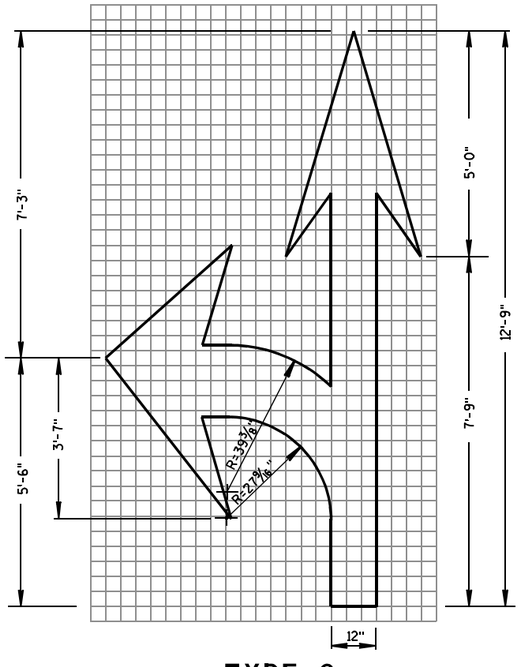

TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

655

FHWA

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S.D.D. 15 C 7-12c

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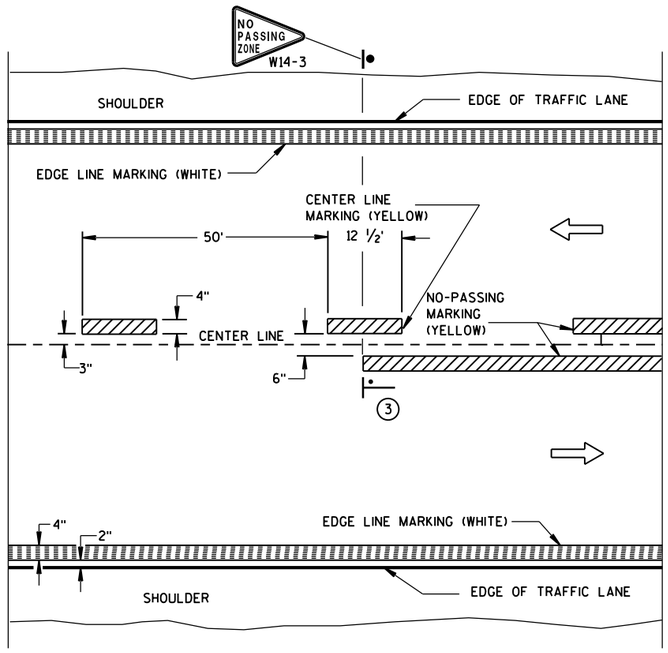
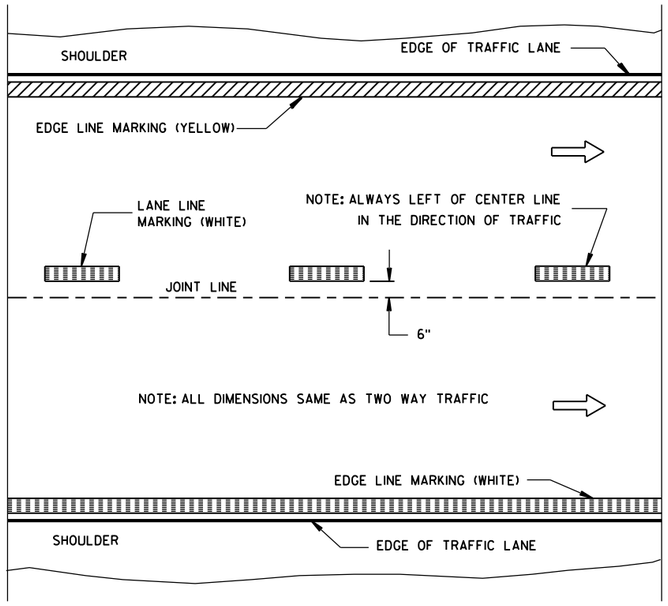
S.D.D. 15 C 7-12c

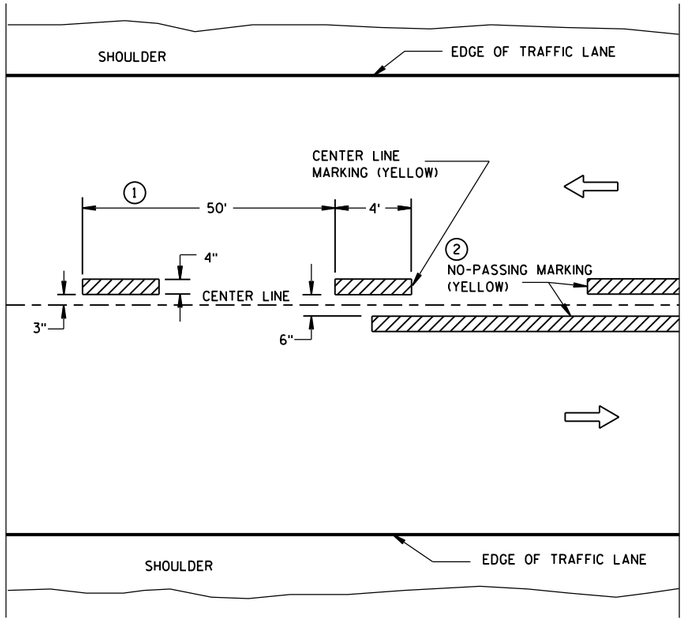


TWO WAY TRAFFIC

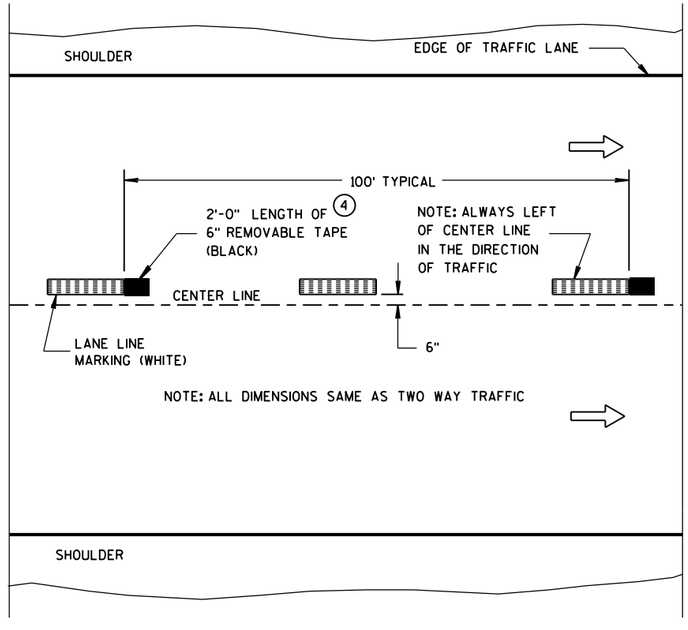


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

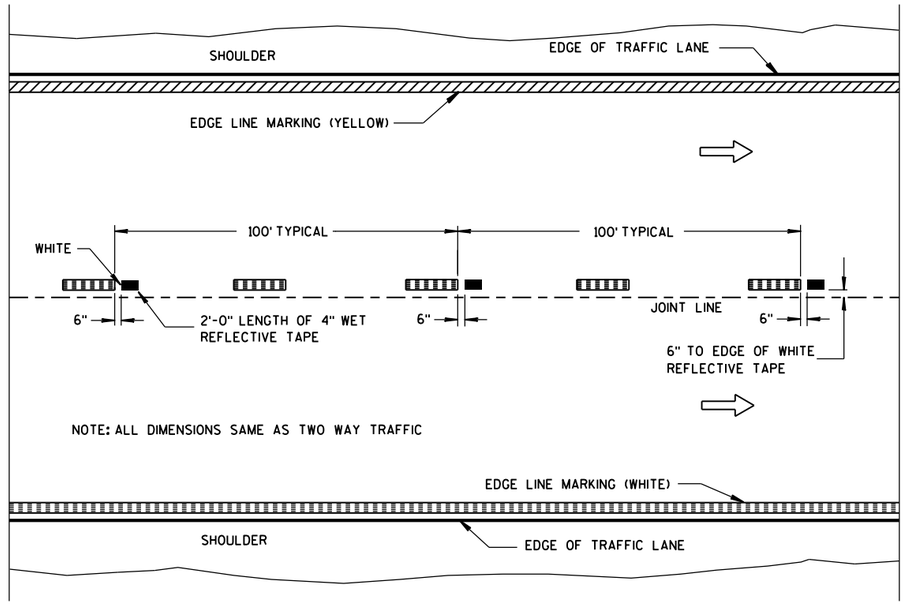
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC E

FHWA

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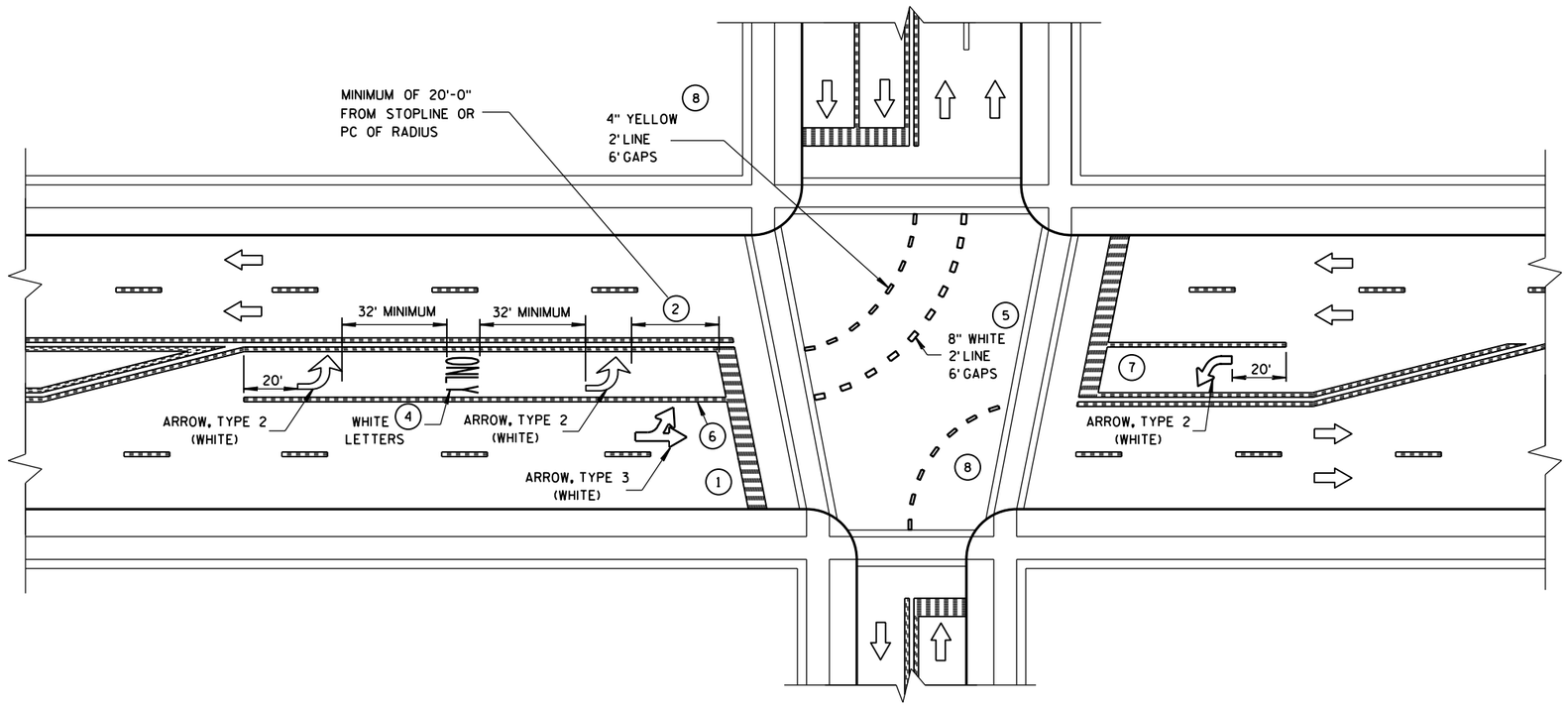
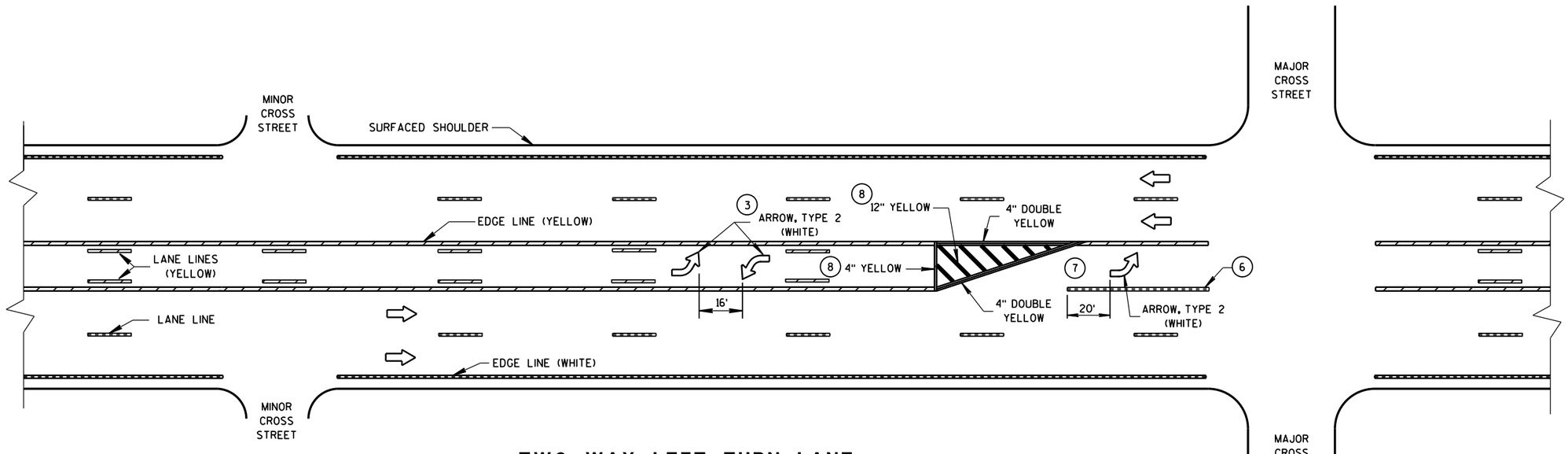
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



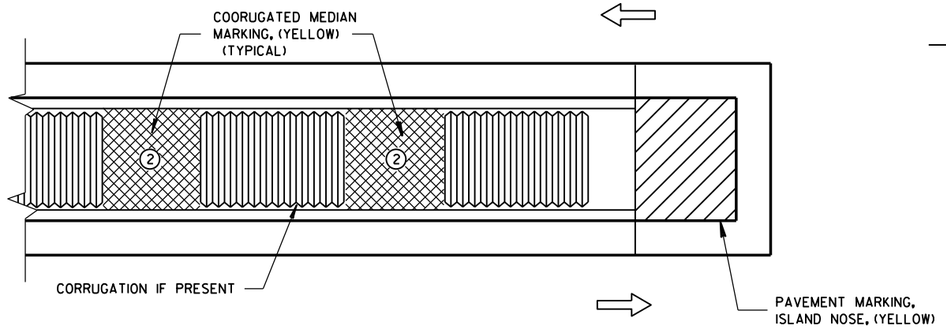
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

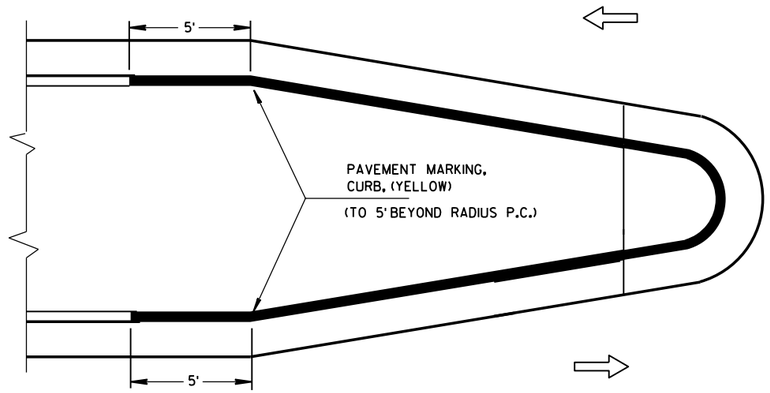
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

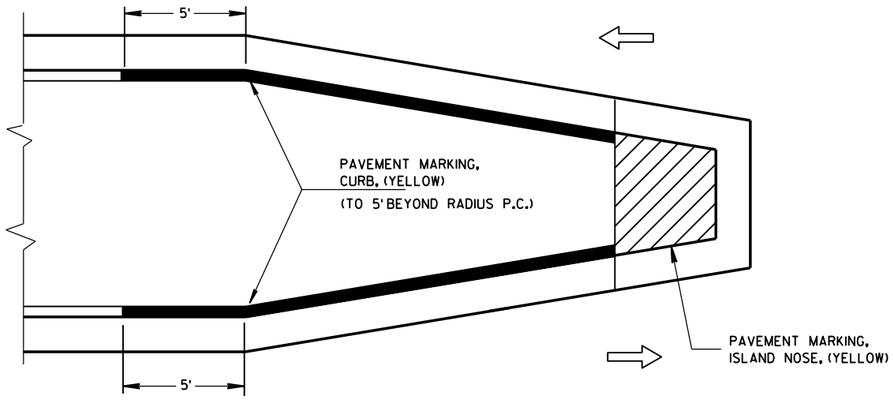
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

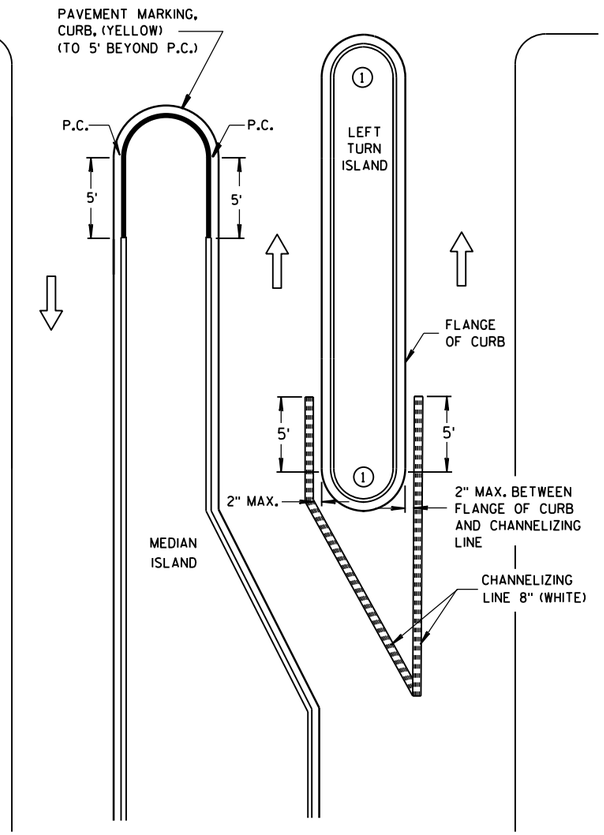


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

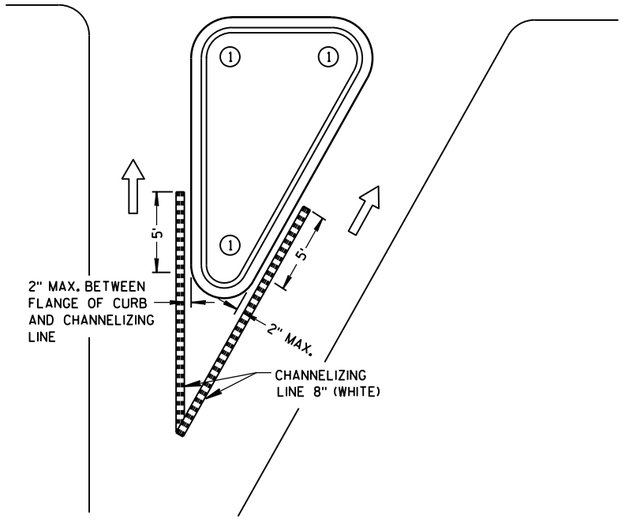


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 658

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S.D.D. 15 C 8-16f

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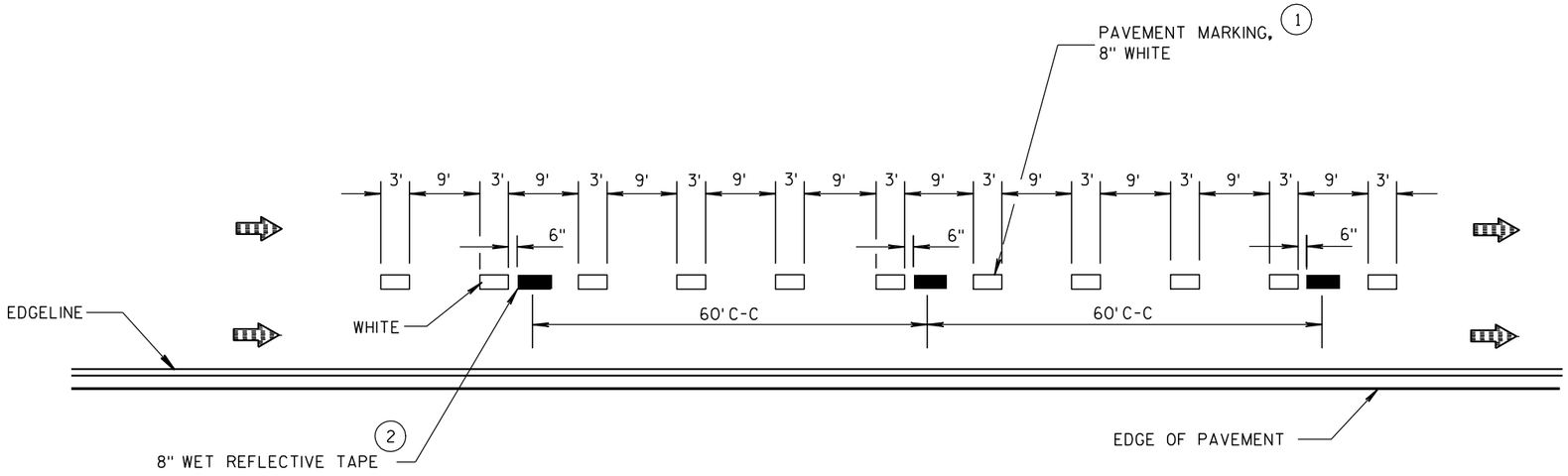
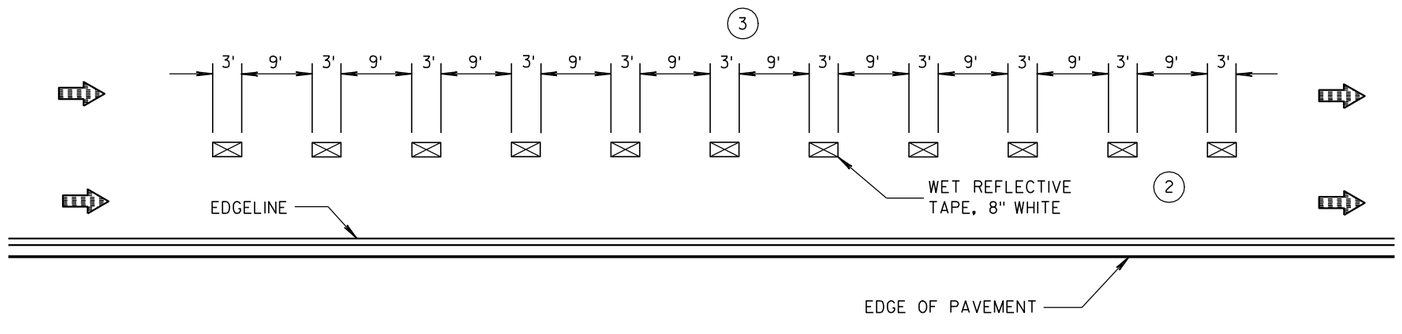
S.D.D. 15 C 8-16f



SPRAYED OR NON WET REFLECTIVE DROP LANE LINE SUPPLEMENTED BY WET REFLECTIVE TAPE SEGMENT

GENERAL NOTES

1. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE. RETRACE EXISTING 4" MARKING WITH 8" MARKING.
2. REPLACE SAME 4" WET REFLECTIVE TAPE WHERE EXISTING 4" TAPE IS IN PLACE.
3. 3' LINE 9' GAP, EXCEPT REPLACE THE EXISTING LINE - GAP PATTERN AND WIDTH OF TAPE WHERE EXISTING TAPE IS IN PLACE.



DROP LANE DETAIL FOR NEW WET REFLECTIVE TAPE INSTALLATIONS

LEGEND

- 2.0' LENGTH OF WET REFLECTIVE TAPE
- 3.0' LENGTH OF WET REFLECTIVE TAPE
- DROP LANE MARKING SPRAYED OR NON WET REFLECTIVE TAPE
- DIRECTION OF TRAFFIC

PAVEMENT MARKINGS FOR DROP LANES FREEWAY/EXPRESSWAY

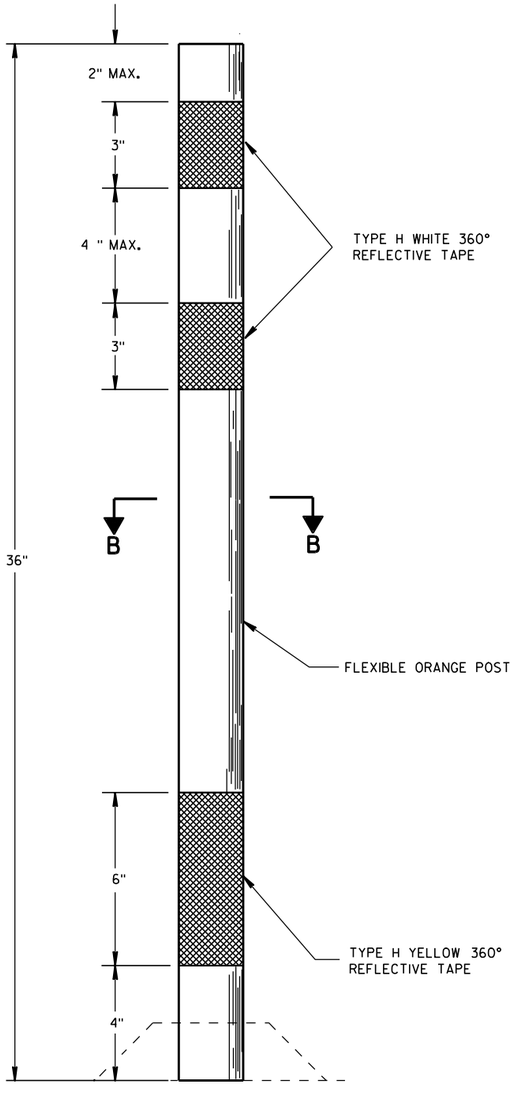
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/13/10 DATE
/S/ Thomas N. Nothnagel
STATE TRAFFIC ENGINEER

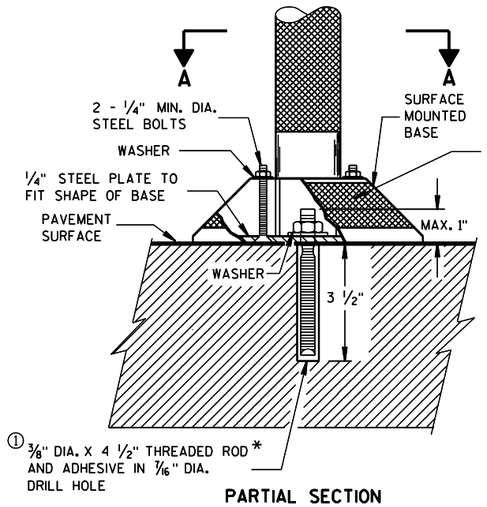
FHWA

6

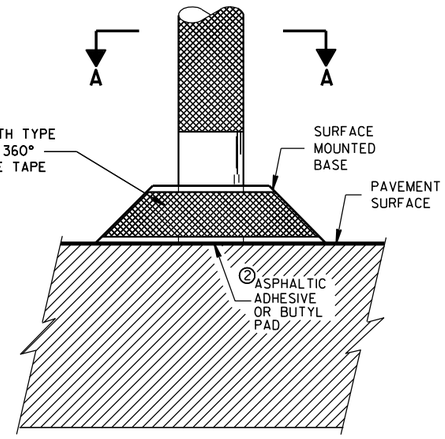
S.D.D. 15 C 10-10



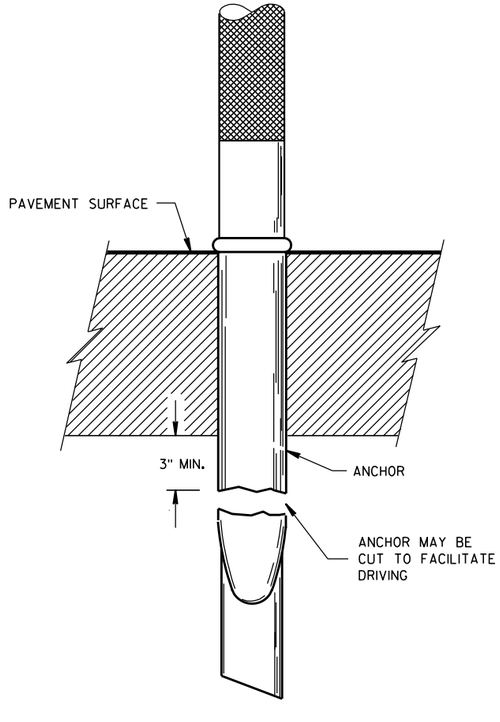
FLEXIBLE TUBULAR MARKER POST



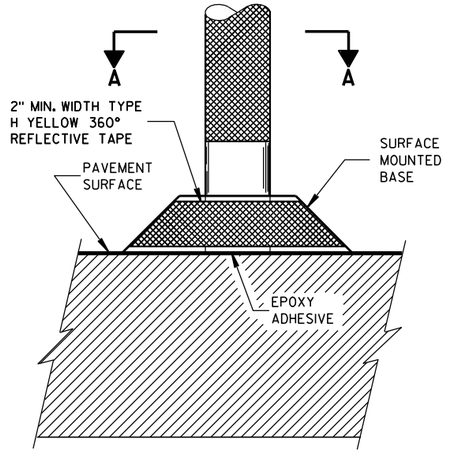
PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT



POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED



GENERAL NOTES

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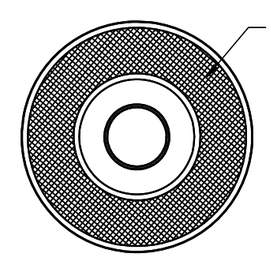
SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

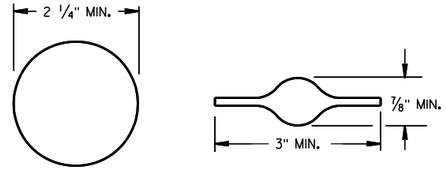
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 2/17/94 DATE /S/ Chester J. [illegible] DIRECTOR, OFFICE O 660 FHWA

6

S.D.D. 15 C 11-5

6

S.D.D. 15 C 11-5

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

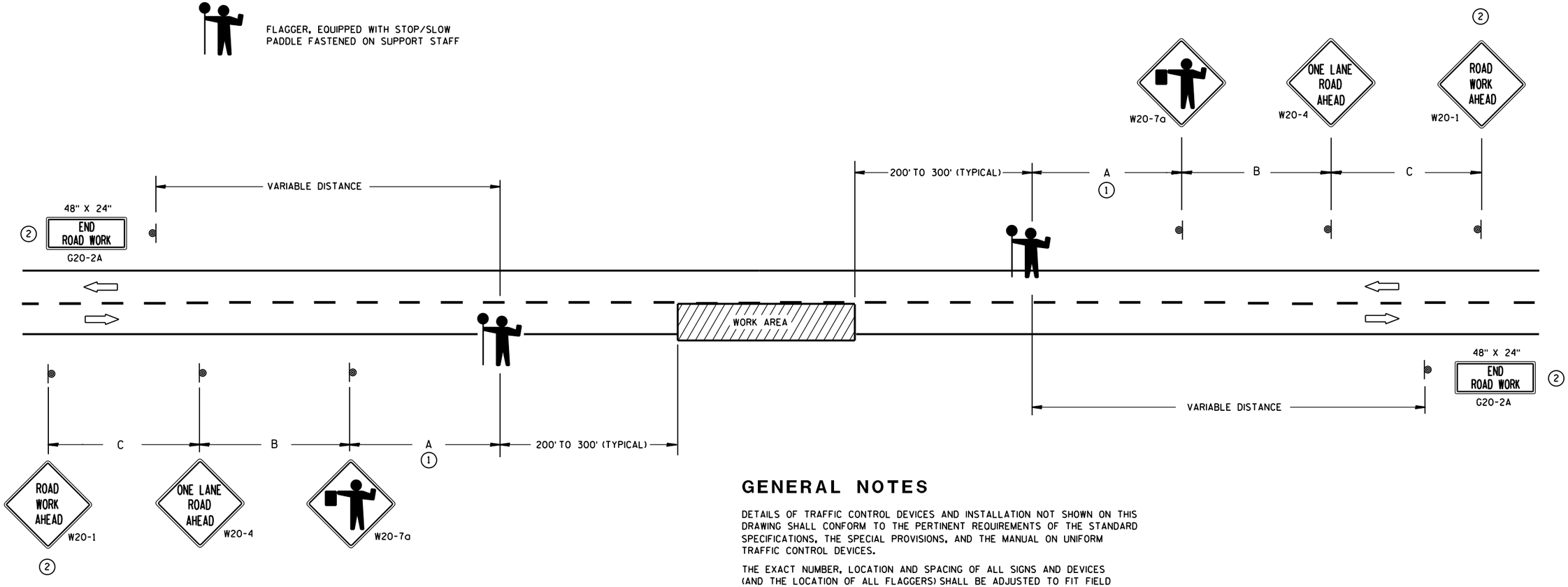
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

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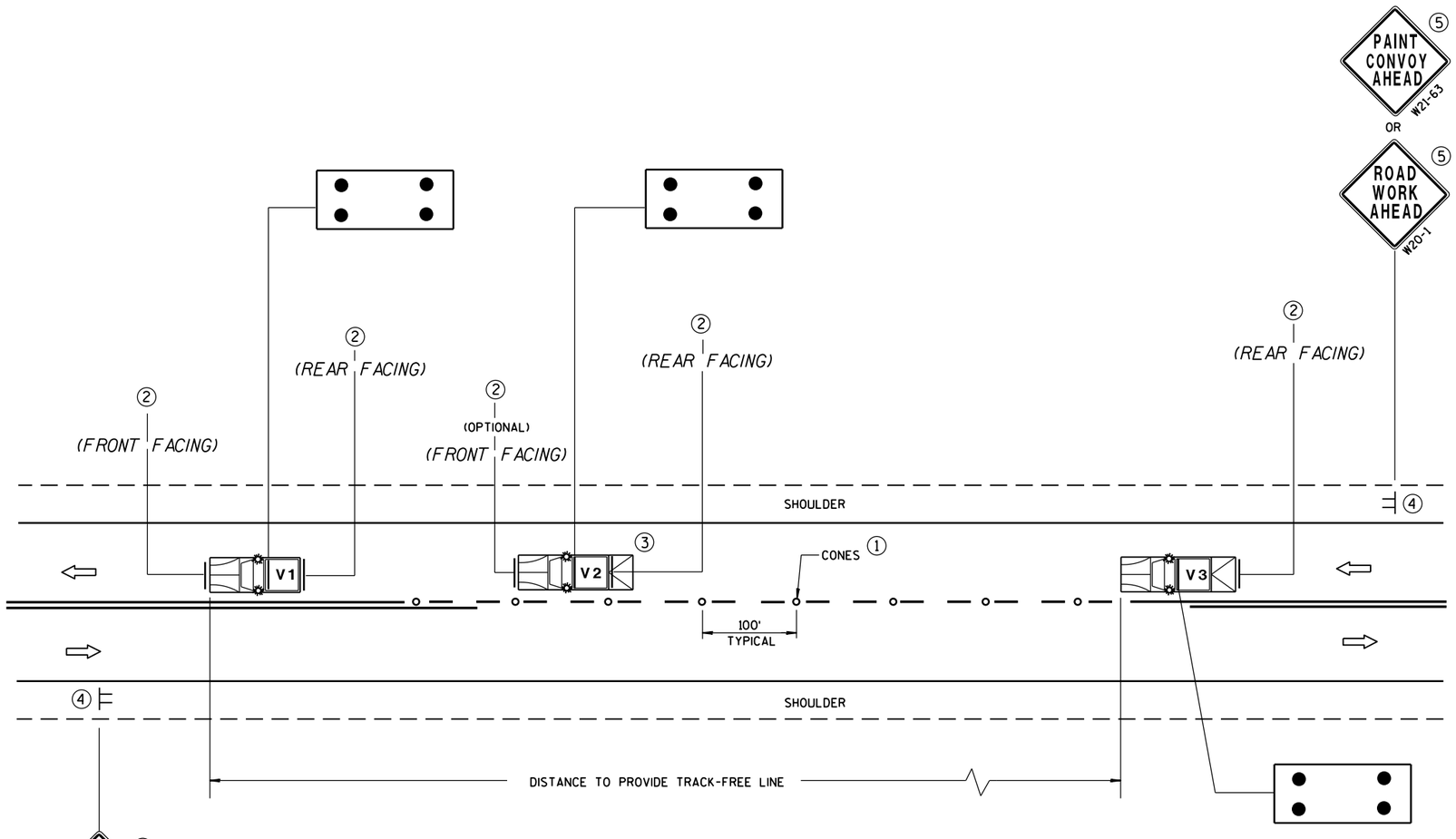
S.D.D. 15 C 12-4



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

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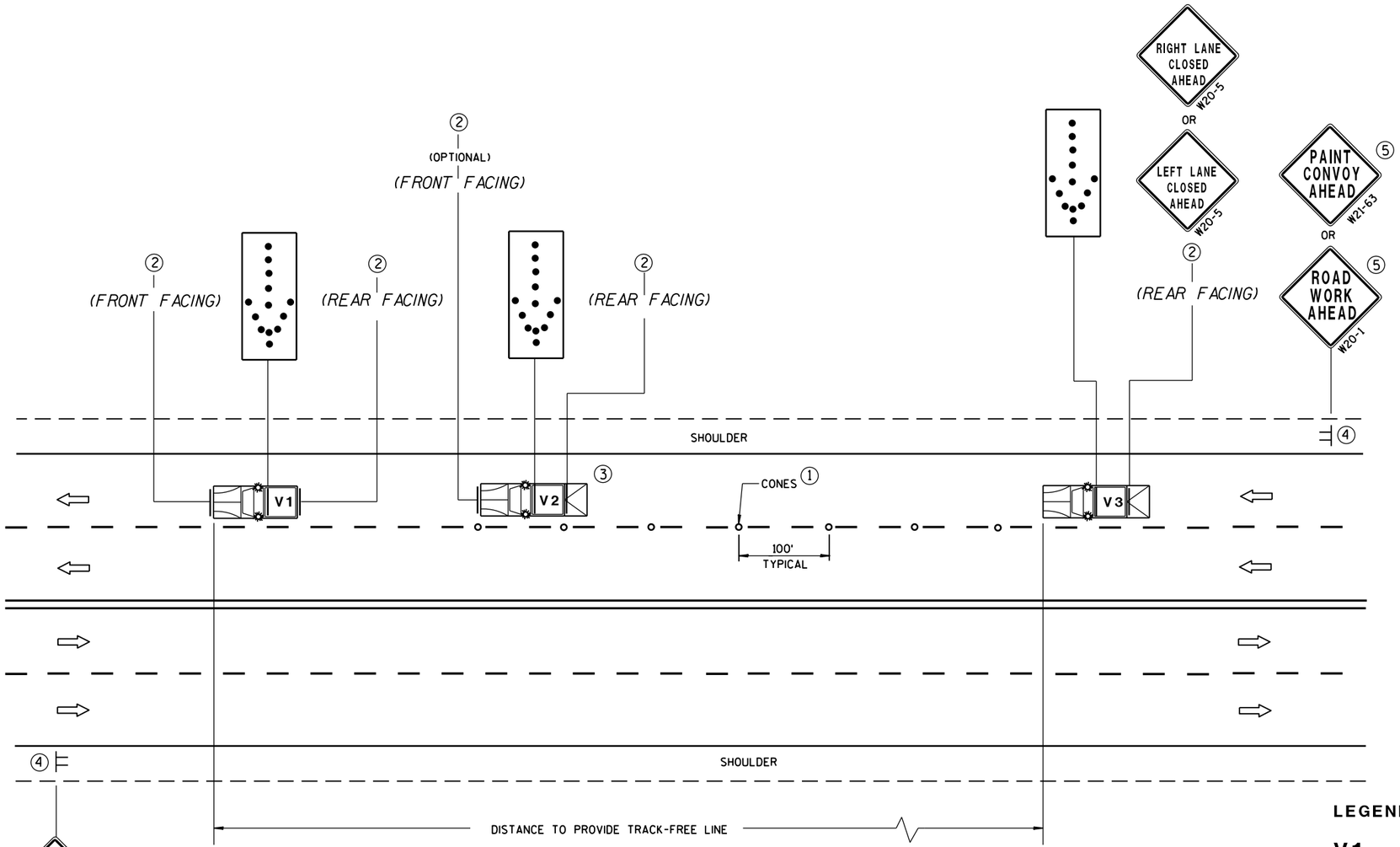
S.D.D. 15 C 19-2a



PAINT CONVOY AHEAD W21-63
OR
ROAD WORK AHEAD W20-1

MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE UNDIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Travis Feltes STATE TRAFFIC EN
FHWA

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S.D.D. 15 C 19-2b

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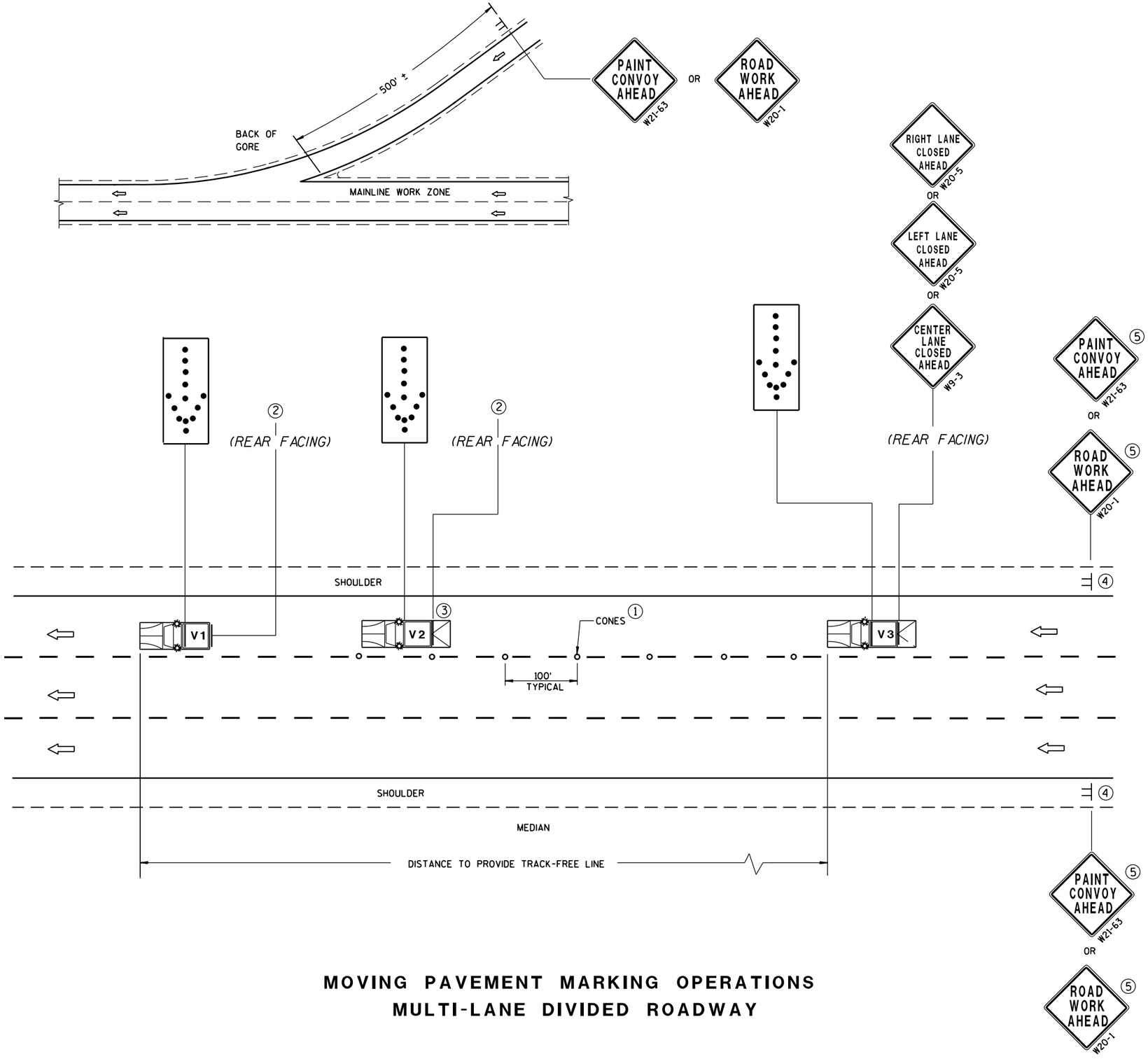
S.D.D. 15 C 19-2b



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC EN

FHWA

6

S.D.D. 15 C 19-2c

6

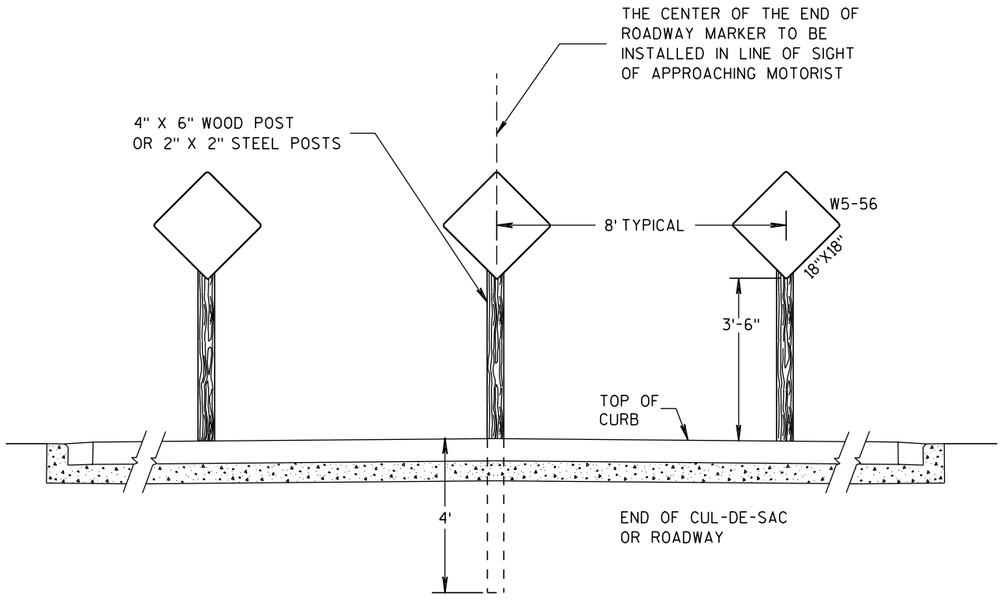
S.D.D. 15 C 19-2c

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

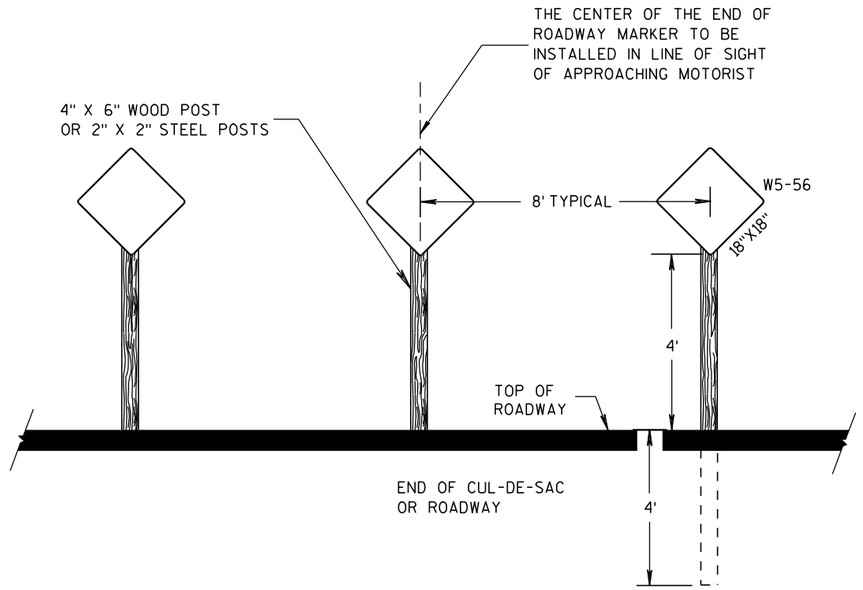
THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL URBAN SIGN INSTALLATION

(WITH CURB & GUTTER)



TYPICAL RURAL SIGN INSTALLATION

(WITHOUT CURB & GUTTER)

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/1/2011 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 26-2

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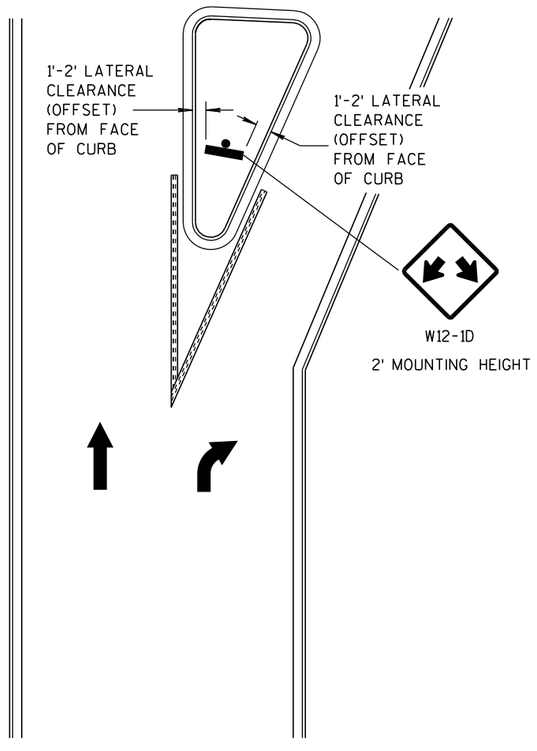
S.D.D. 15 C 26-2

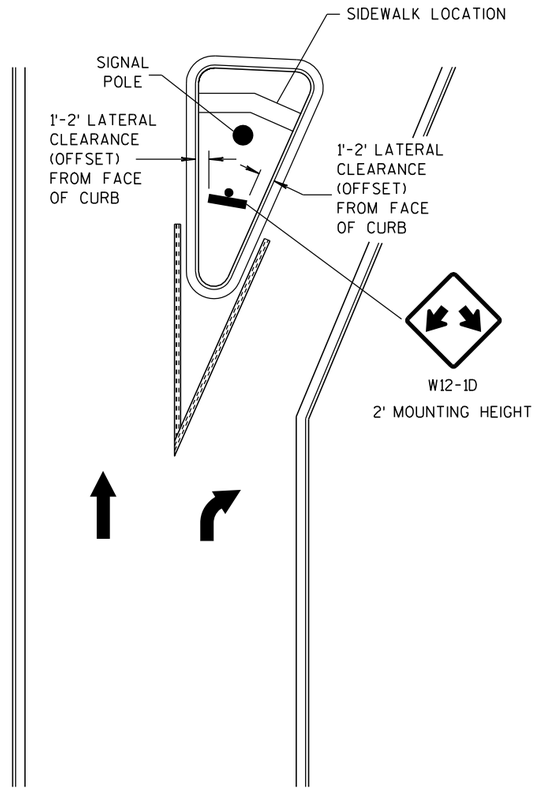
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

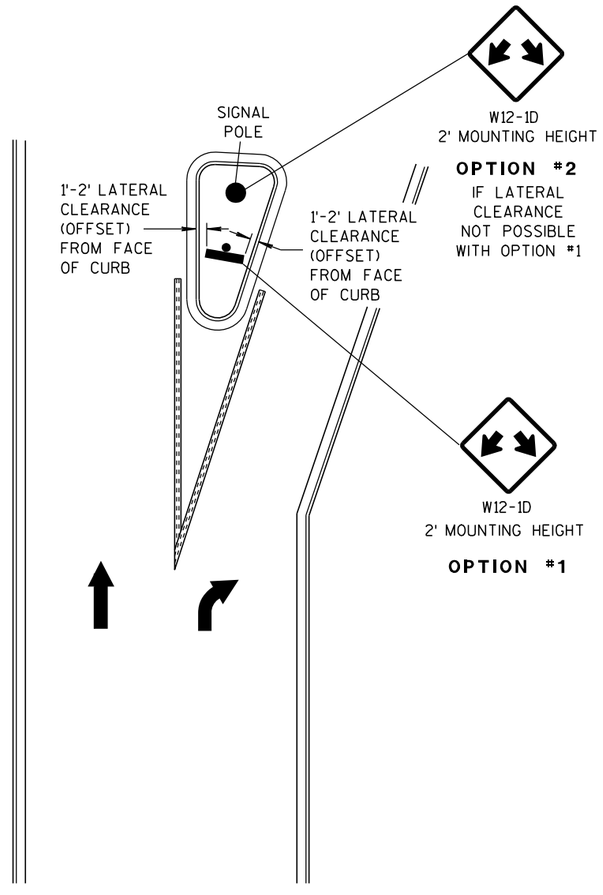
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



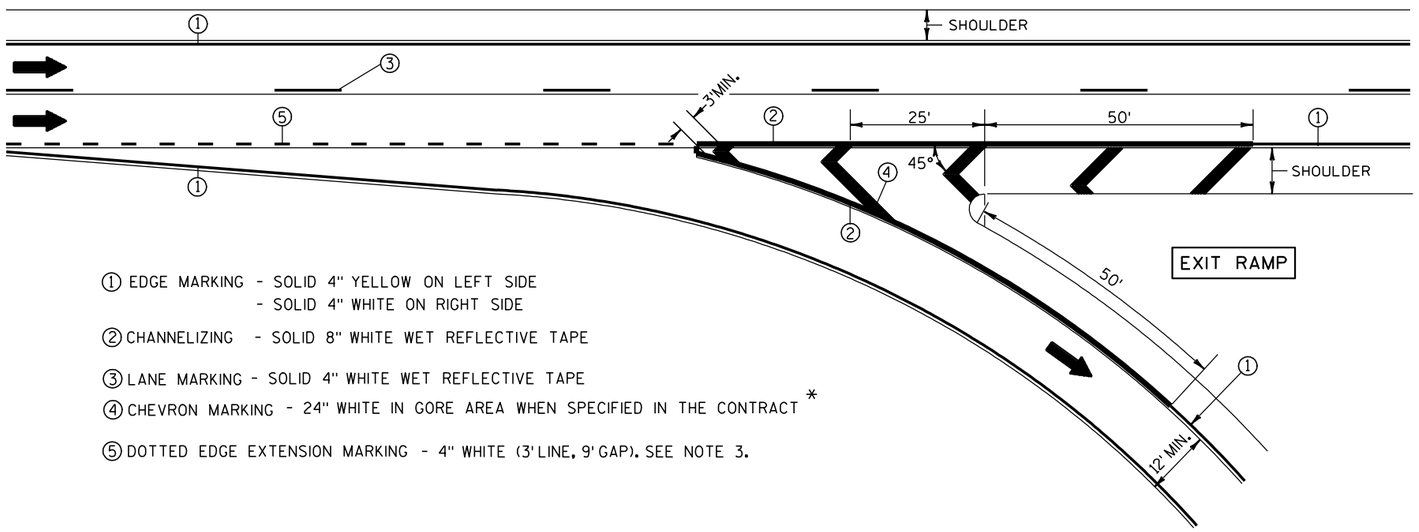
LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothem STATE TRAFFIC ENGINEER 666 IGN
FHWA	



① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE

③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE

④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *

⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

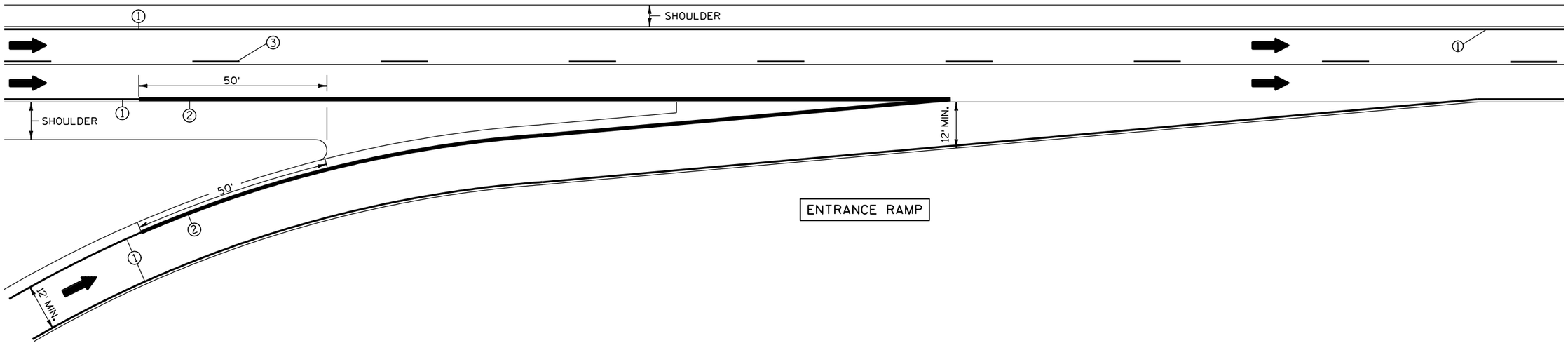
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.

3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



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S.D.D. 15 C 31-1a

S.D.D. 15 C 31-1a

PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

NOTES:

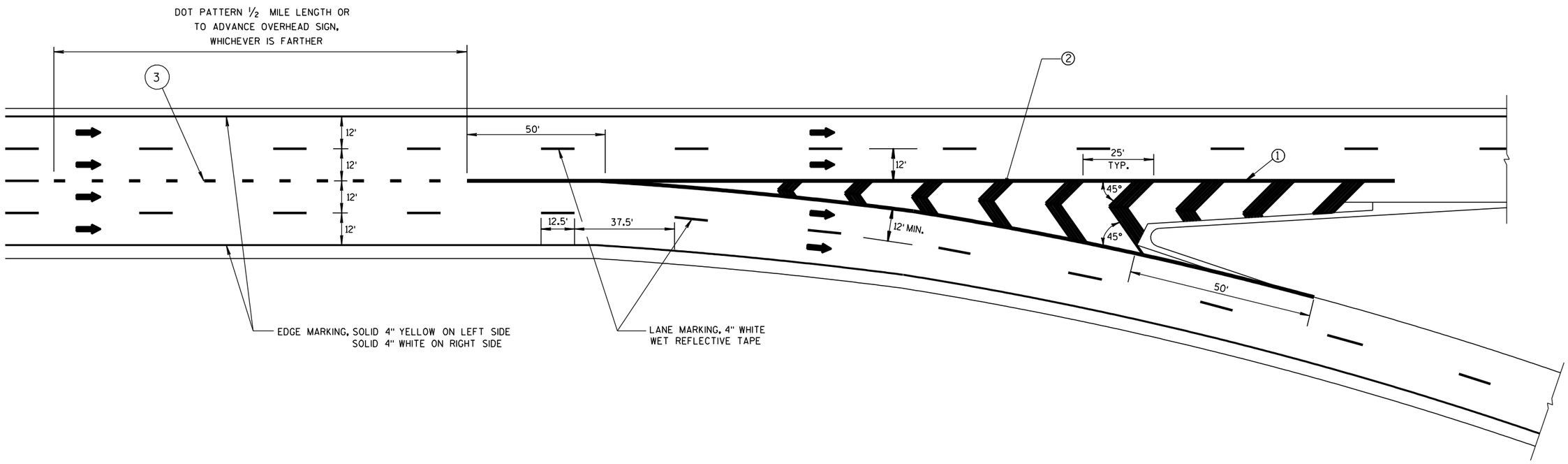
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.

① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE.

② CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.

③ 3' LINE, 9' GAP SOLID 8" WHITE WET REFLECTIVE TAPE.



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S.D.D. 15 C 31-1c

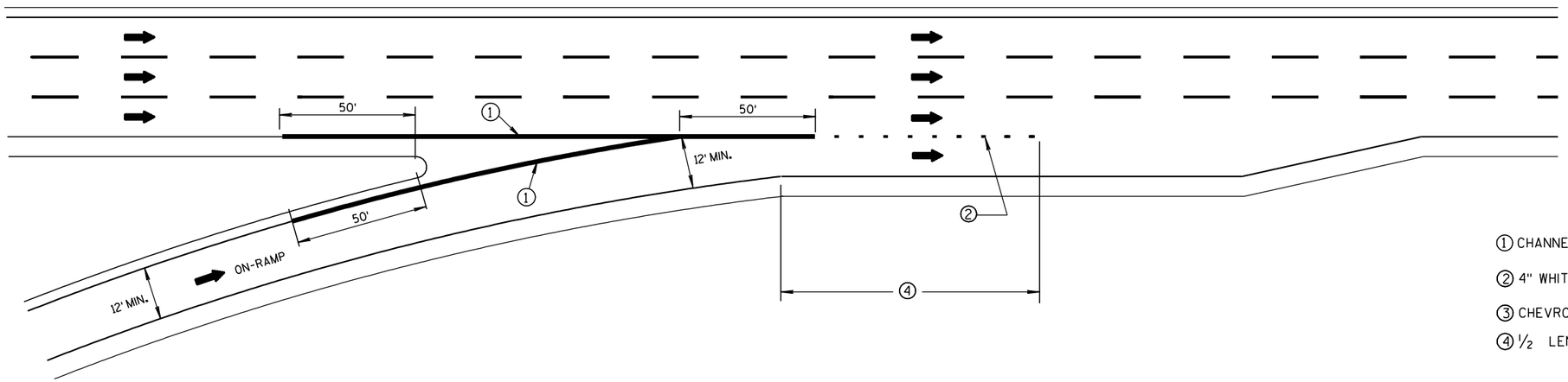
S.D.D. 15 C 31-1c

PAVEMENT MARKING
MAJOR SPLIT
FREEWAY TO FREEWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

NOTES:

1. AHEAD ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
3. RETRACE EXISTING DIAGONAL MARKINGS.



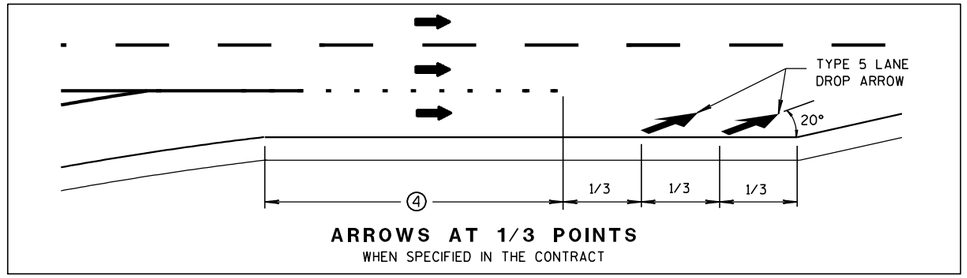
① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.

② 4" WHITE (3' LINE, 9' GAP).

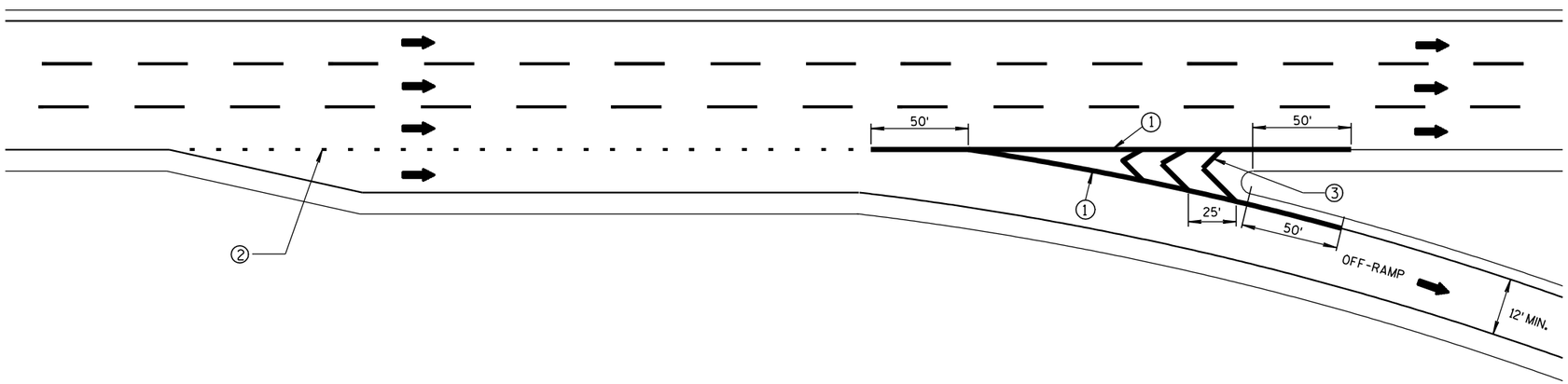
③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.

④ ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP



ARROWS AT 1/3 POINTS
WHEN SPECIFIED IN THE CONTRACT



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/23/2011
DATE

/S/ Thomas N. Nothem
STATE TRAFFIC ENGINE 669 SIGN

FHWA

6
S.D.D. 15 C 31-1d

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

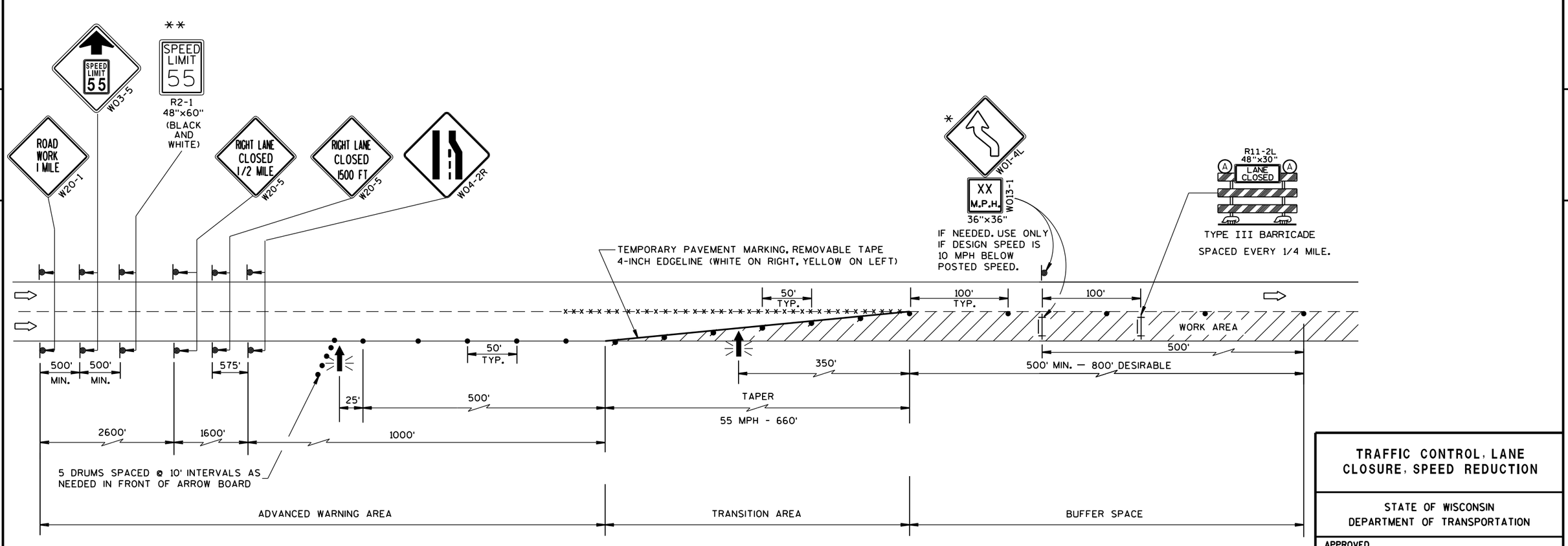
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
670
SIGN
FHWA

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S.D.D. 15 D 12-4

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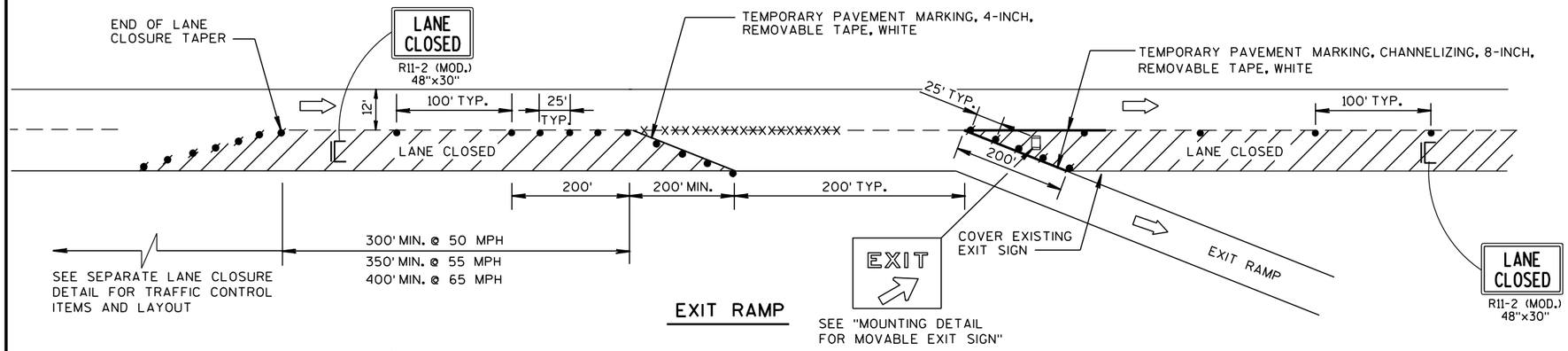
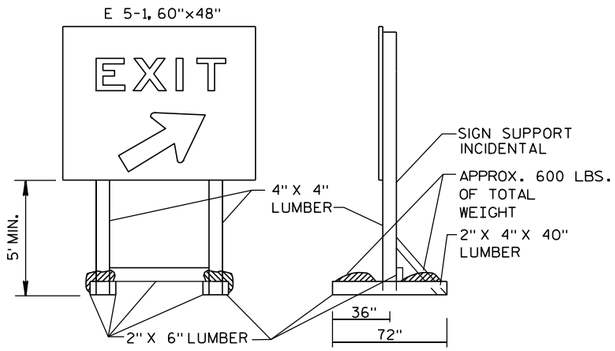
S.D.D. 15 D 12-4

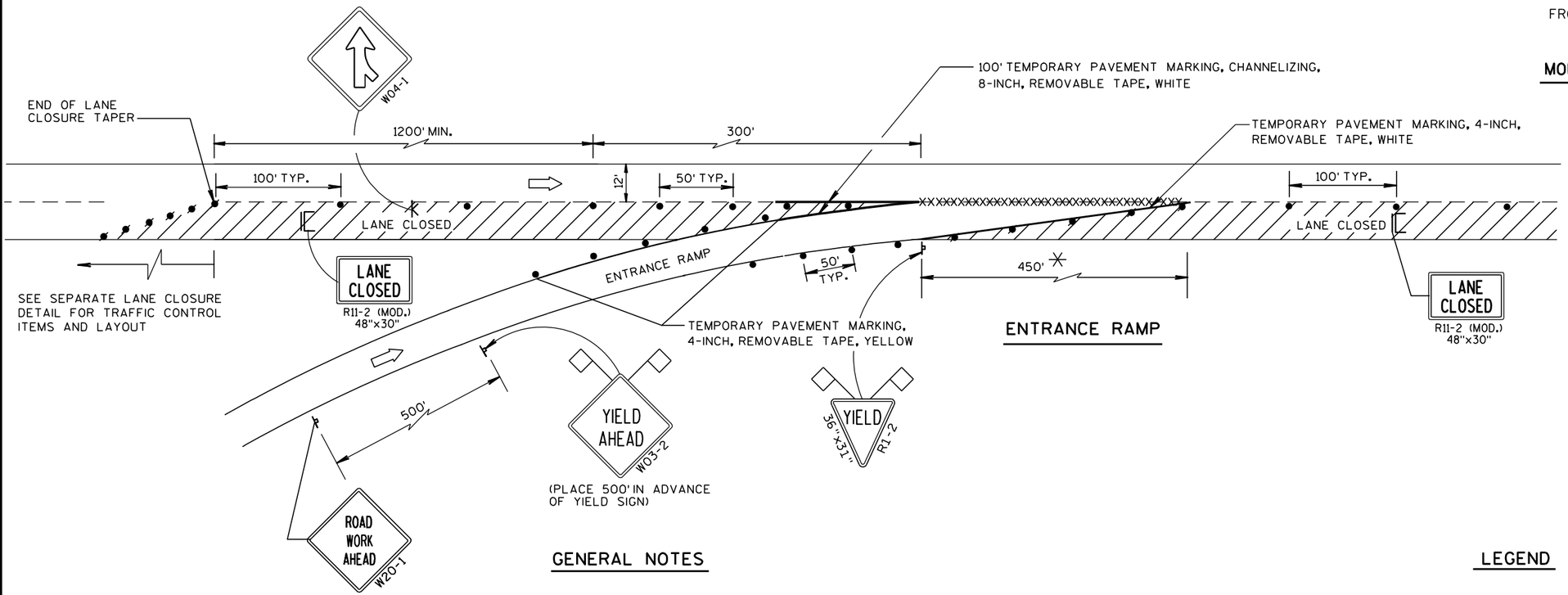


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/24/2000 DATE
/S/ Chester J. [illegible] CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

6
S.D.D. 15 D 15-1

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

SIGN ON PERMANENT SUPPORT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

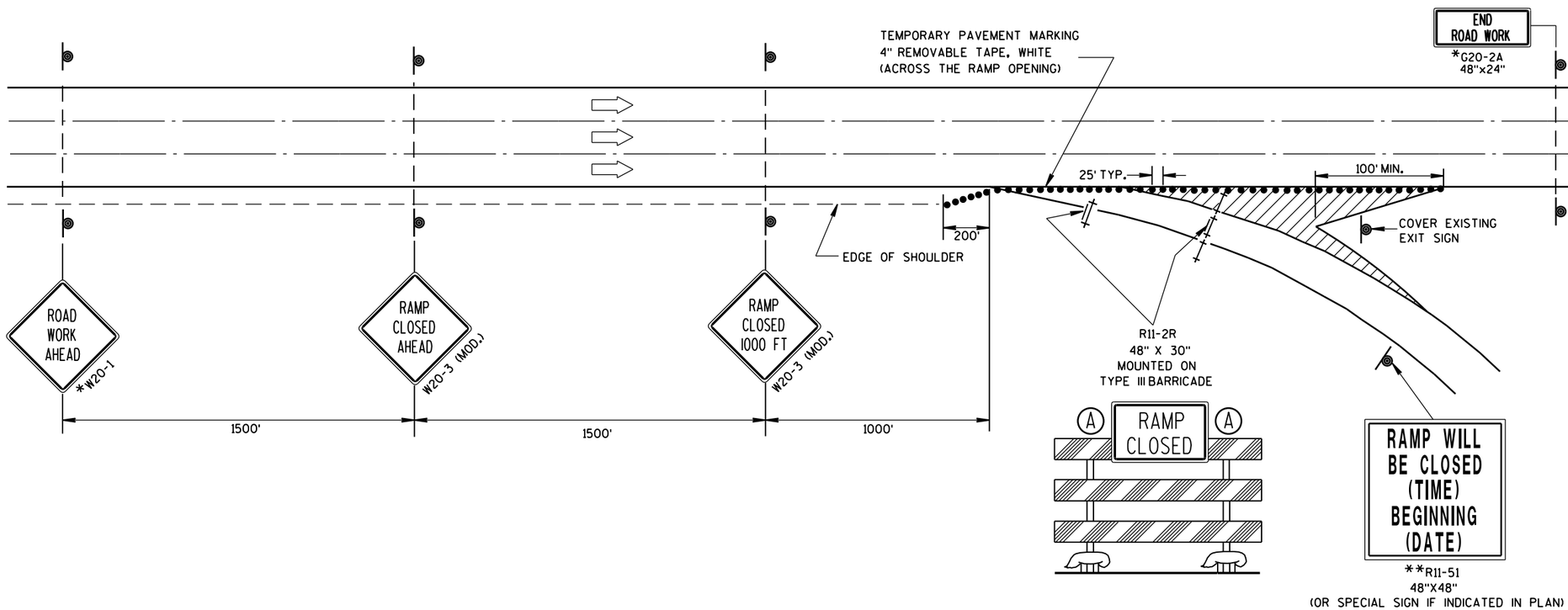
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP WILL BE CLOSED" SIGN 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013
DATE

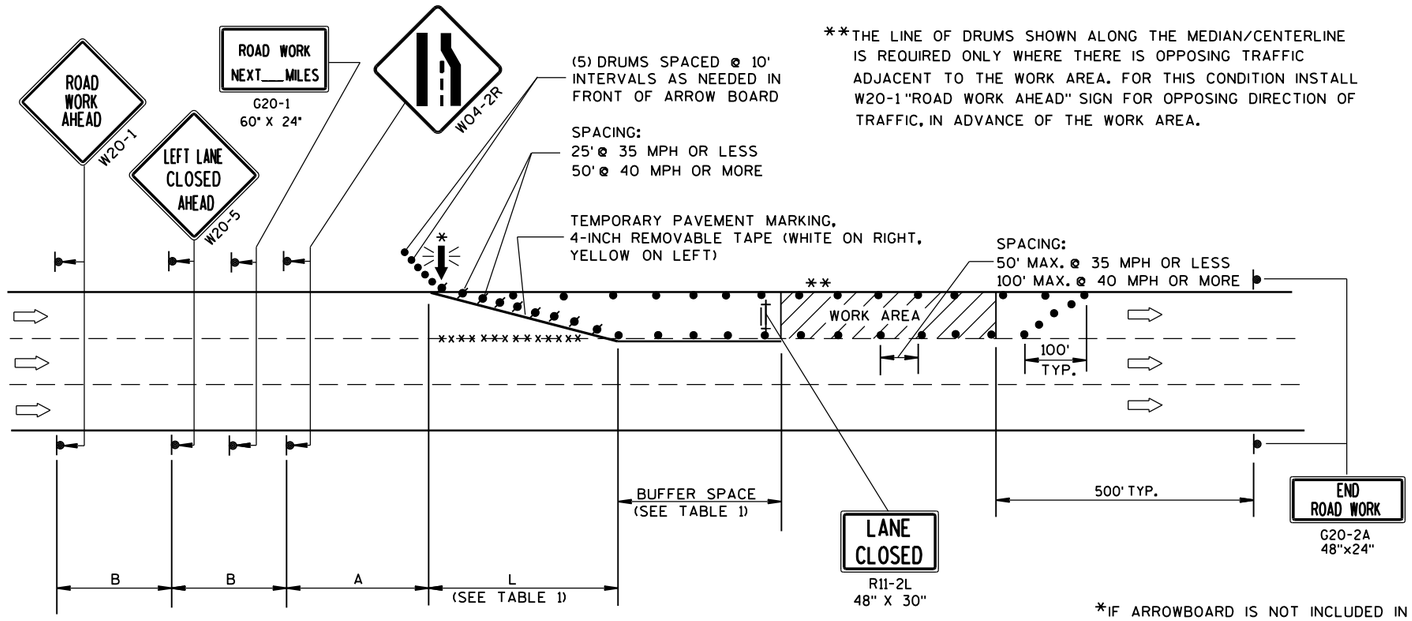
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

DESIGN

FHWA

6

S.D.D. 15 D 16-2



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

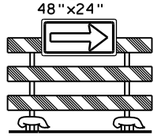


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

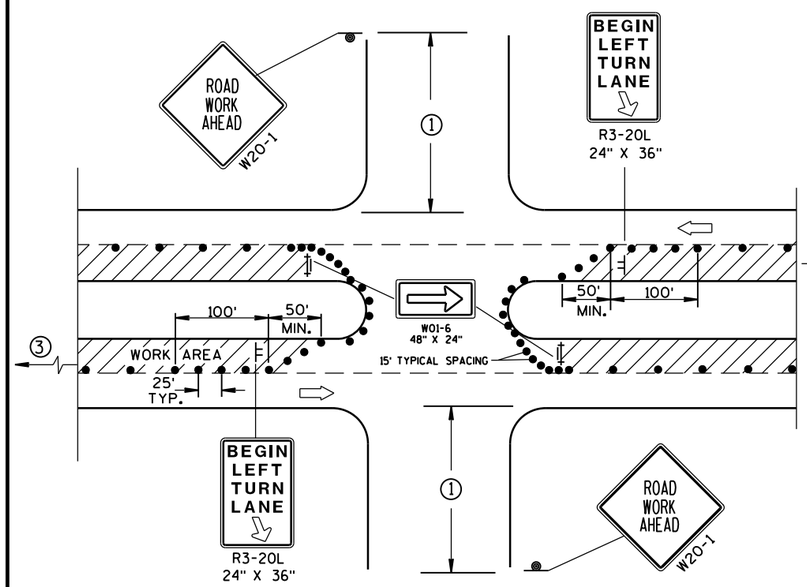
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

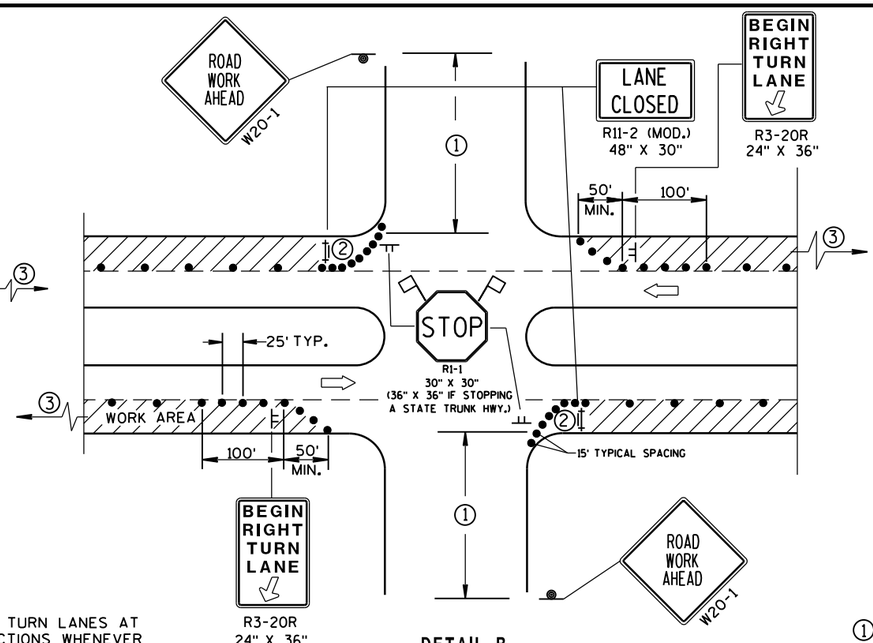
S.D.D. 15 D 20-2



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

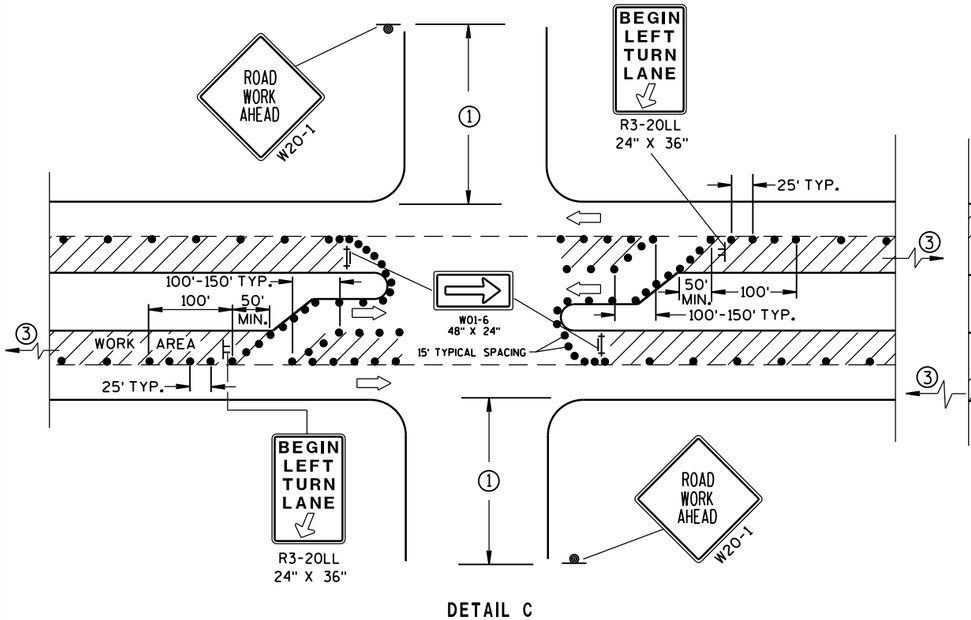
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

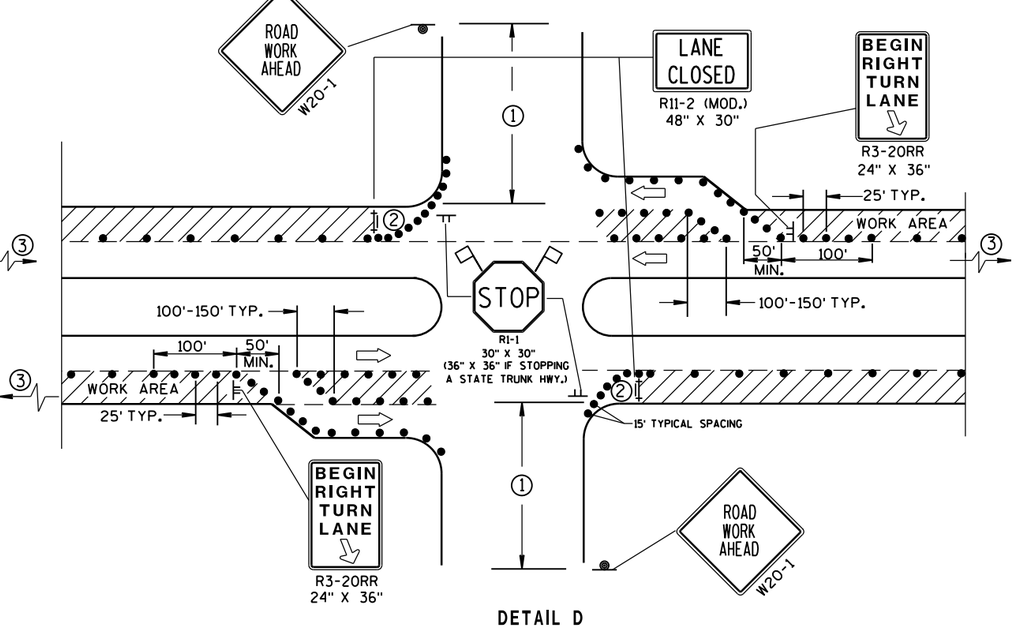
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

DESIGN

FHWA

6

S.D.D. 15 D 21-2

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

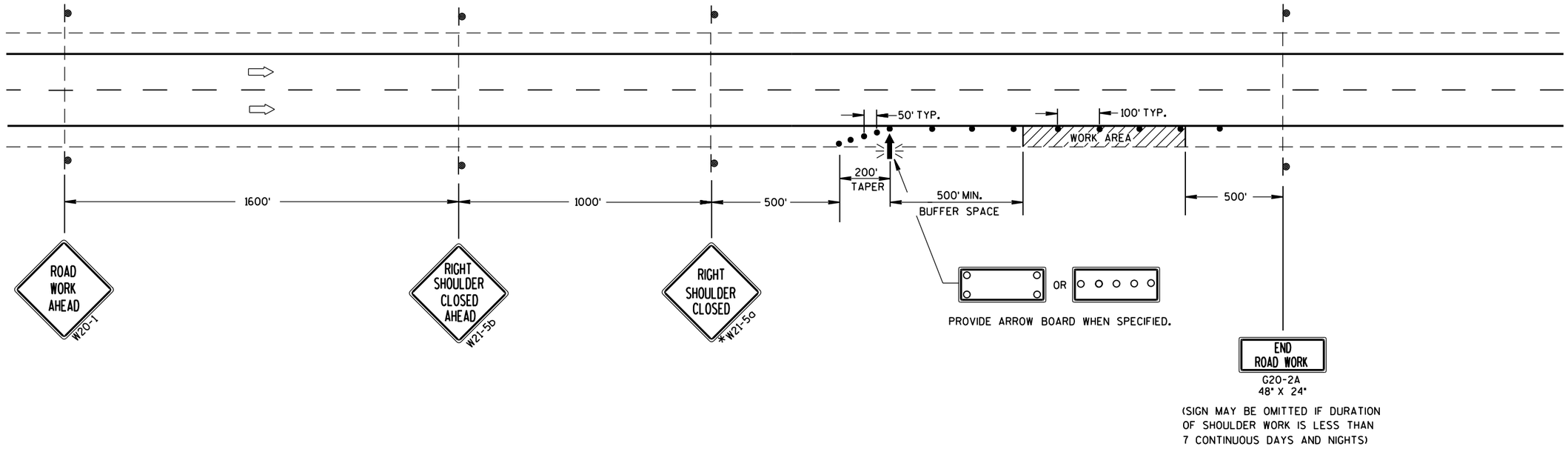
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

675

6

S.D.D. 15 D 27-2

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S.D.D. 15 D 27-2

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

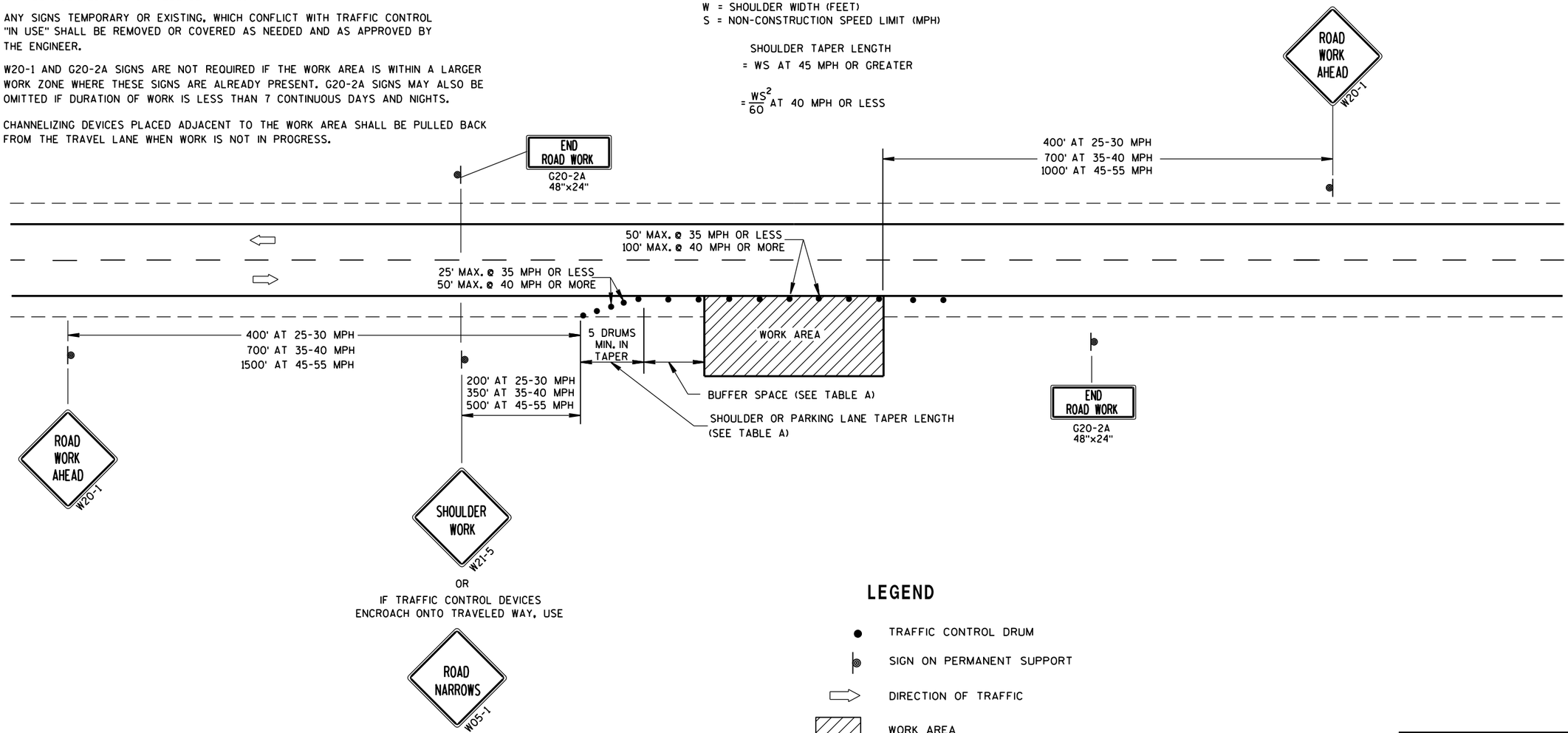
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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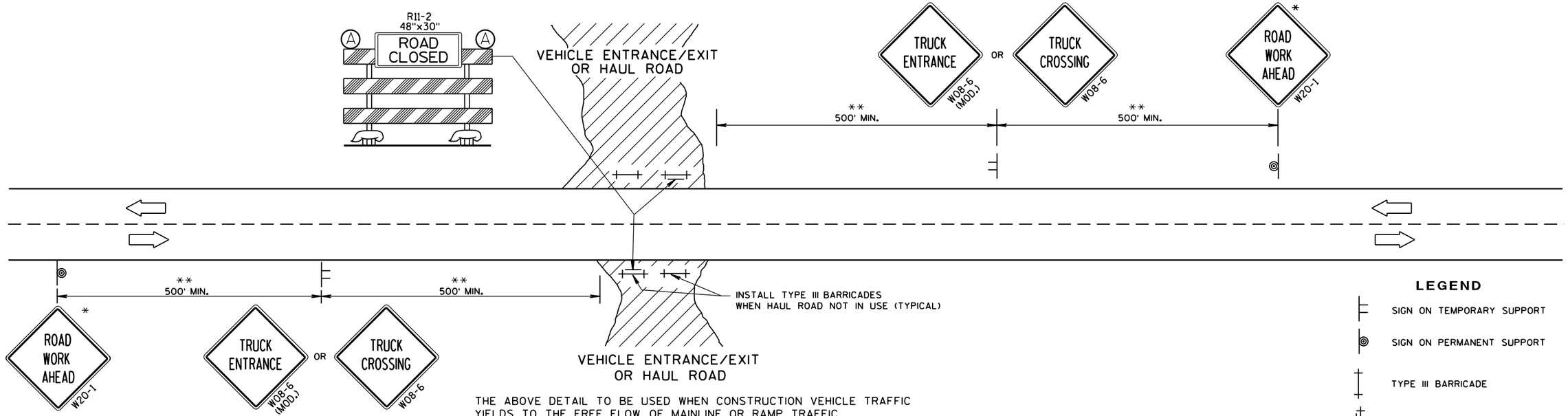


THE ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, DEVICES AND FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE/EXIT CONDITIONS ARE SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000 FEET/1500 FEET FOR EXPRESSWAY/FREEWAY.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

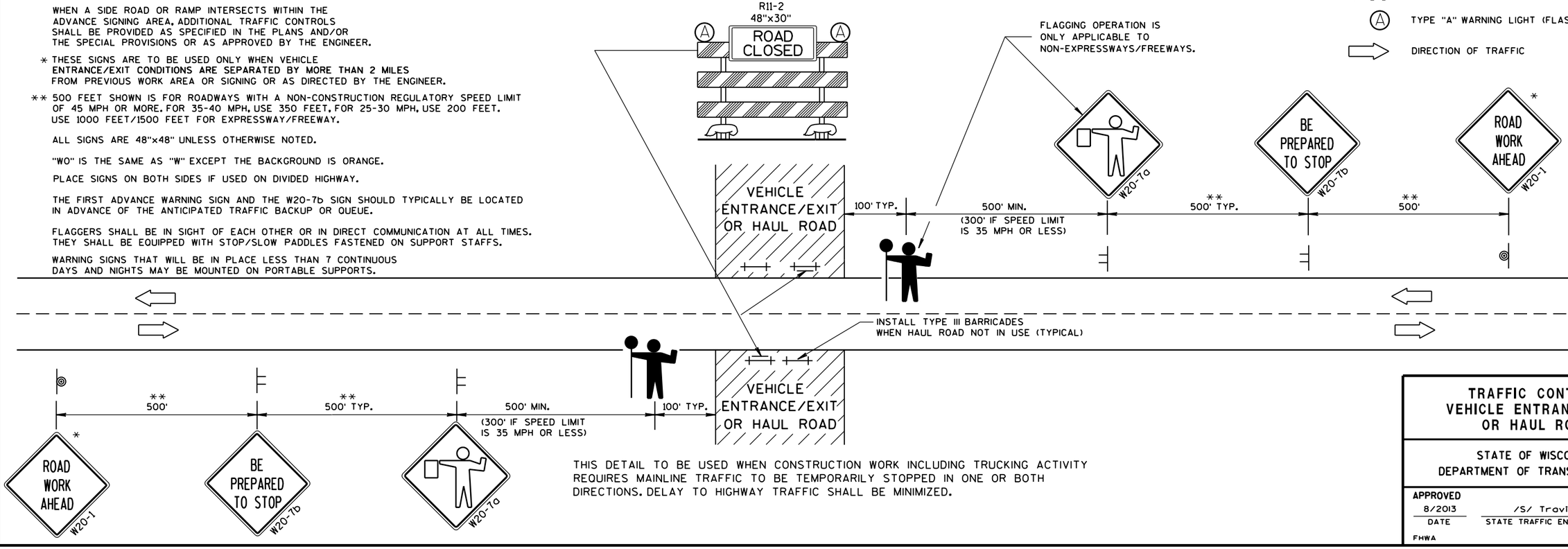
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

THE FIRST ADVANCE WARNING SIGN AND THE W20-7b SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

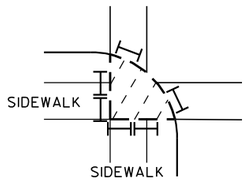
8/2013	/S/ Travis Feltes	
DATE	STATE TRAFFIC ENGINEER	IGN

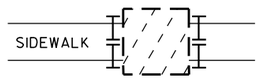
FHWA

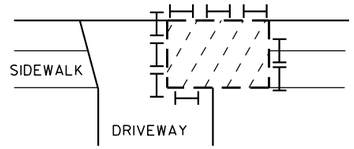
6

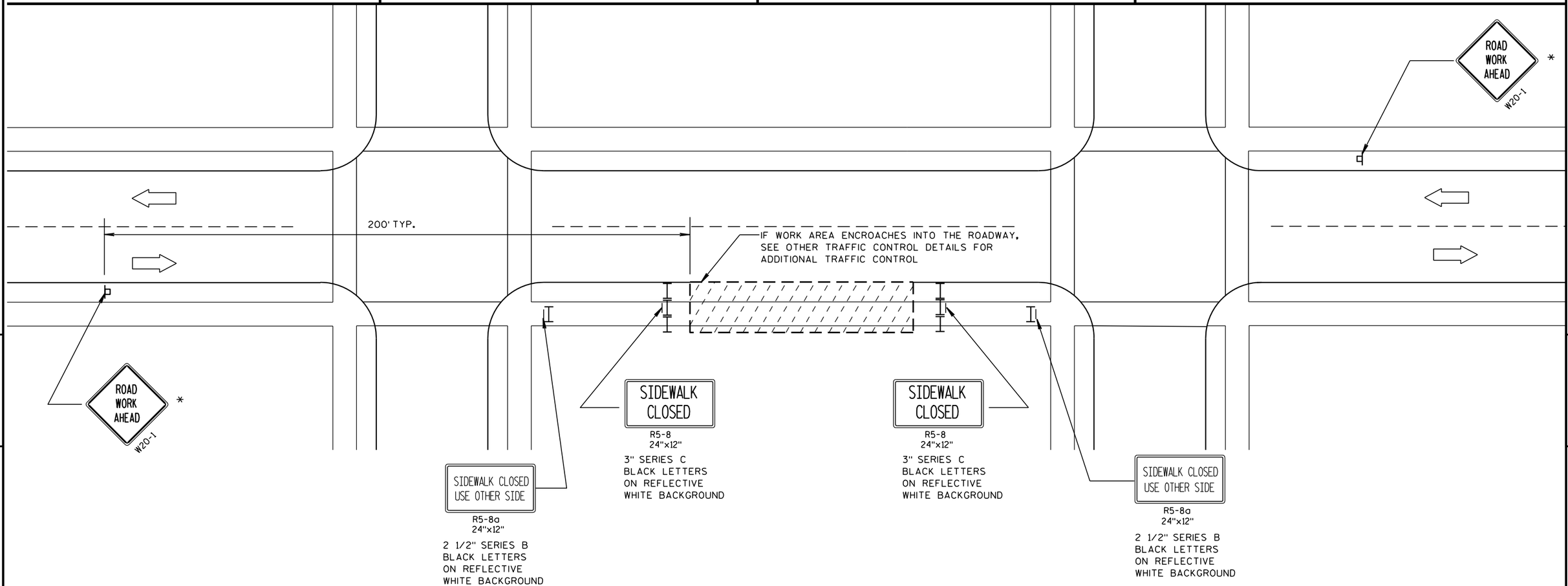
S.D.D. 15 D 29-3

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

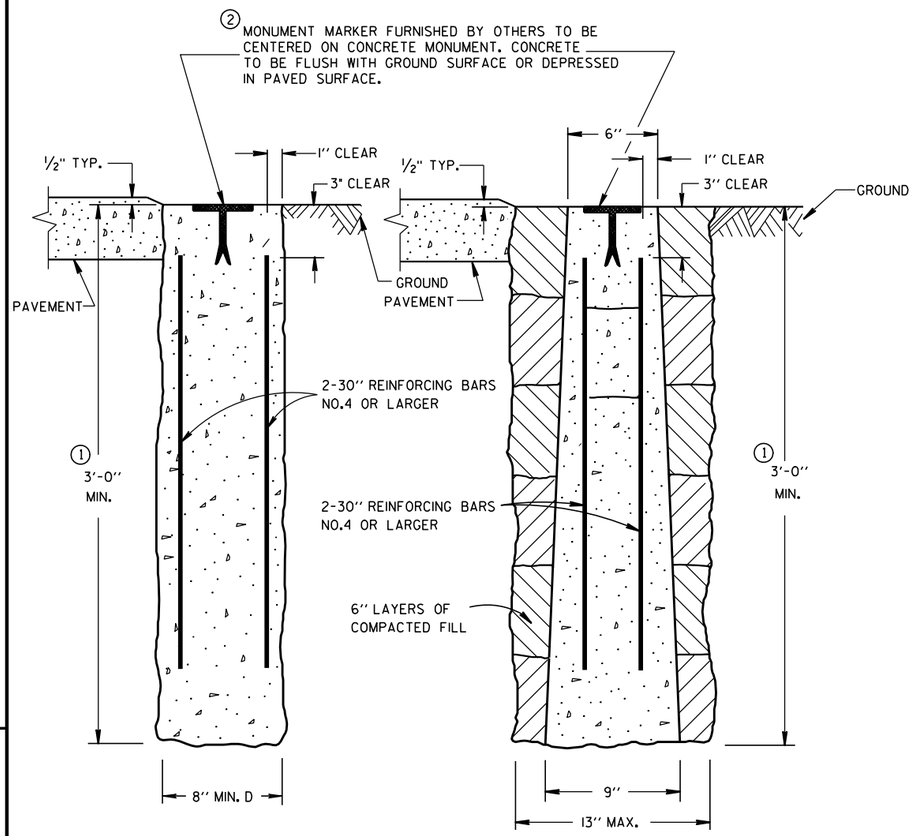
APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK 678 NEER
FHWA

6

S.D.D. 15 D 30-1

6

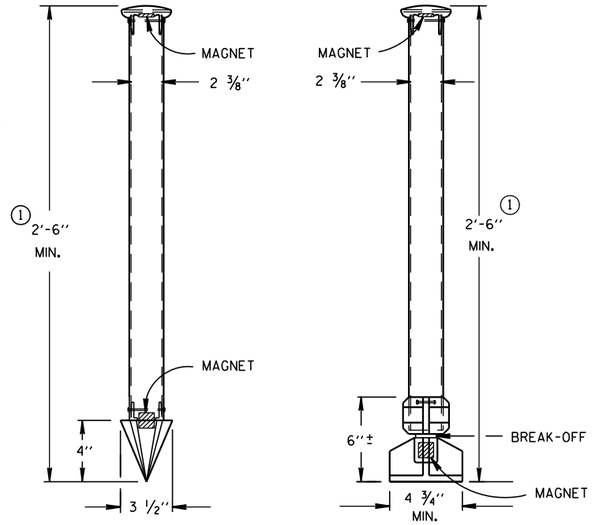
S.D.D. 15 D 30-1



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

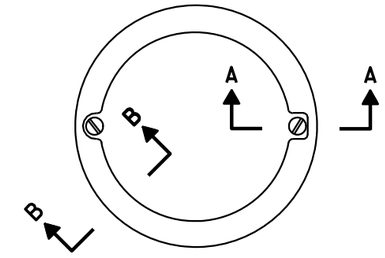
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

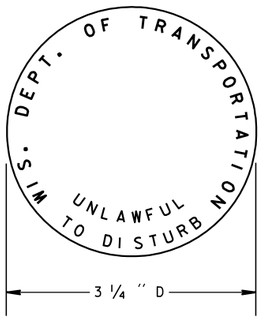
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

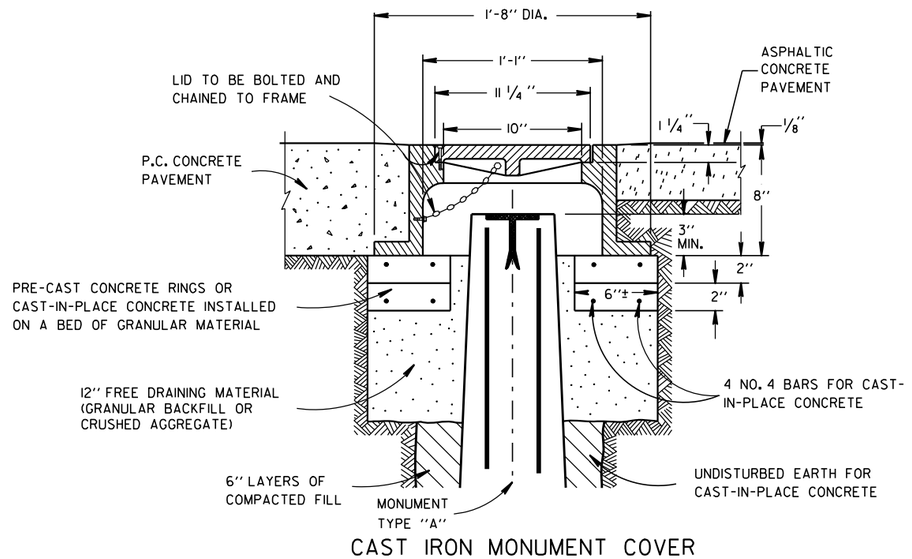
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

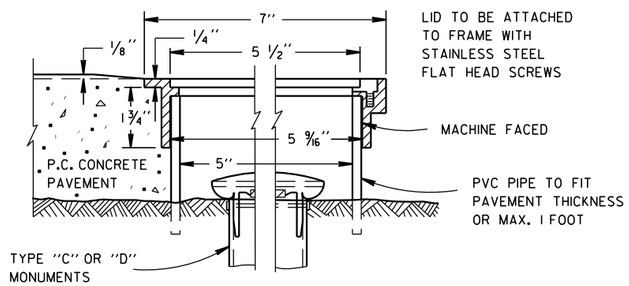


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

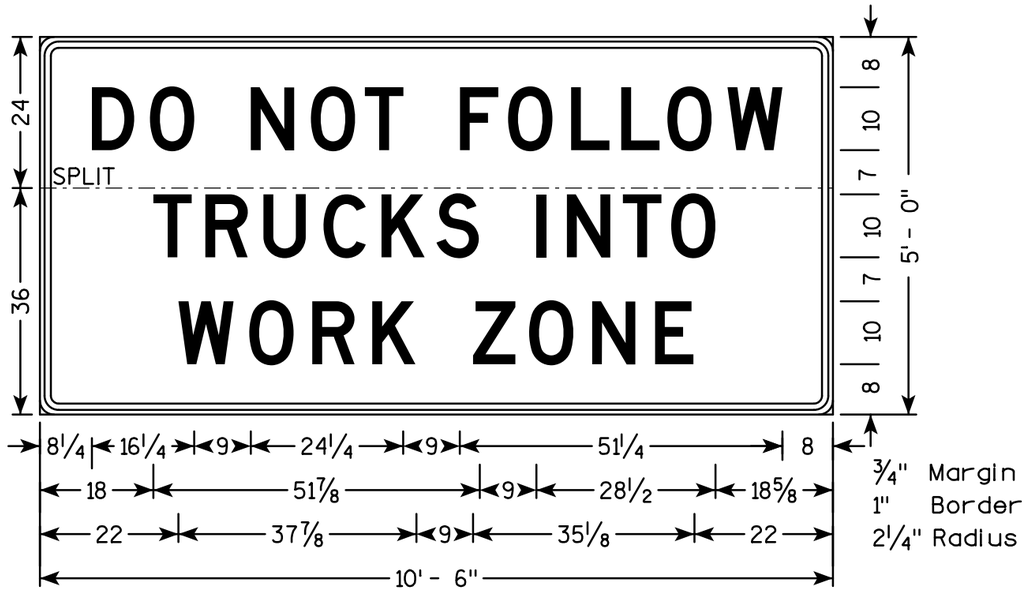
FHWA

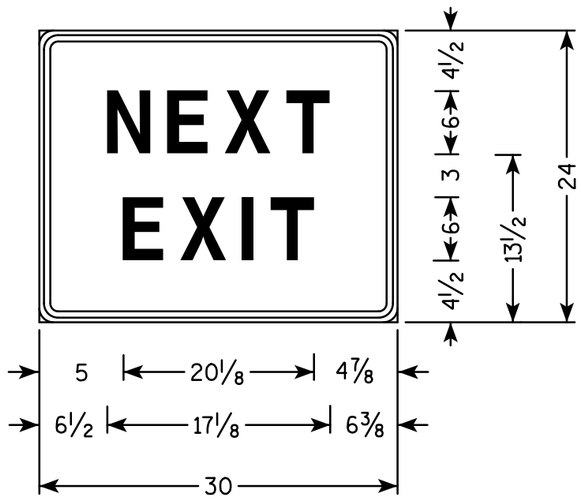
6

S.D.D. 16 A 1-6

6

S.D.D. 16 A 1-6





NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Message - BLACK
3. Message Series - D

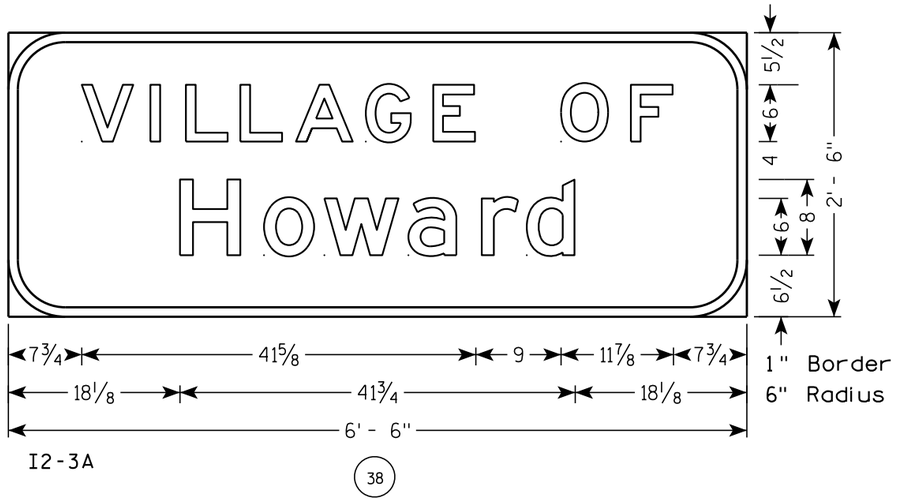
7

7

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	TEMPORARY SIGNING	SHEET 680	E

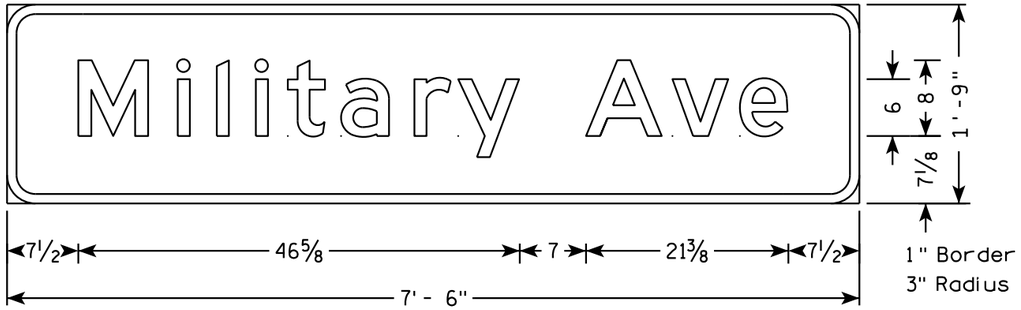
NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



I2-3A

38

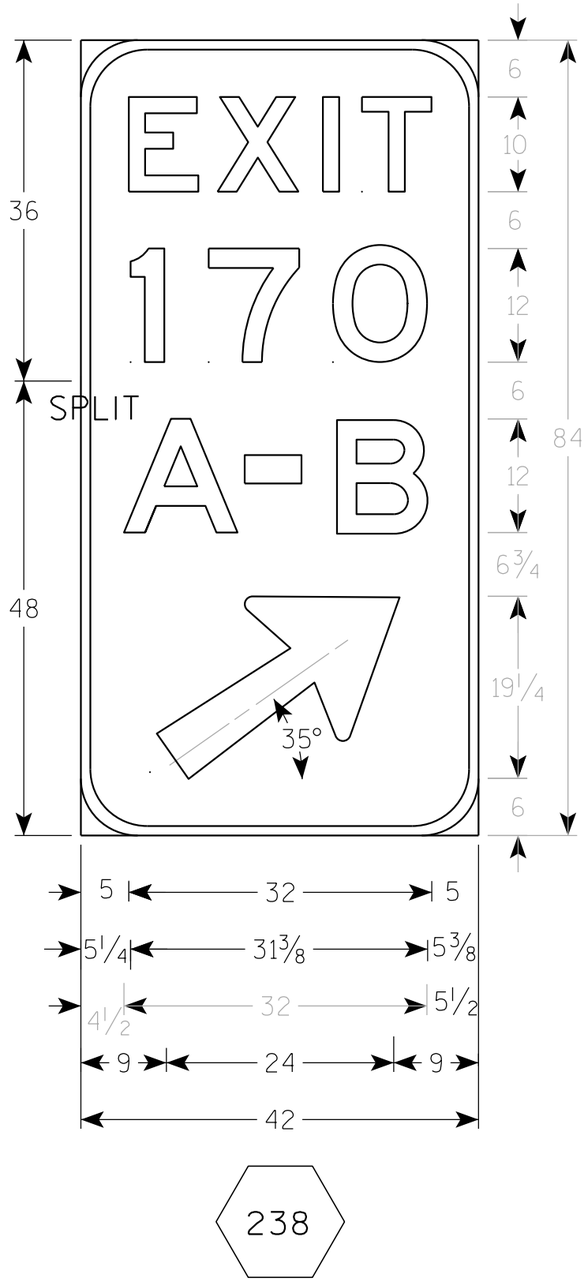


M1-94

32 33

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SIGN DETAILS	SHEET NO: 681	E



238

NOTES

1. All Sign Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E

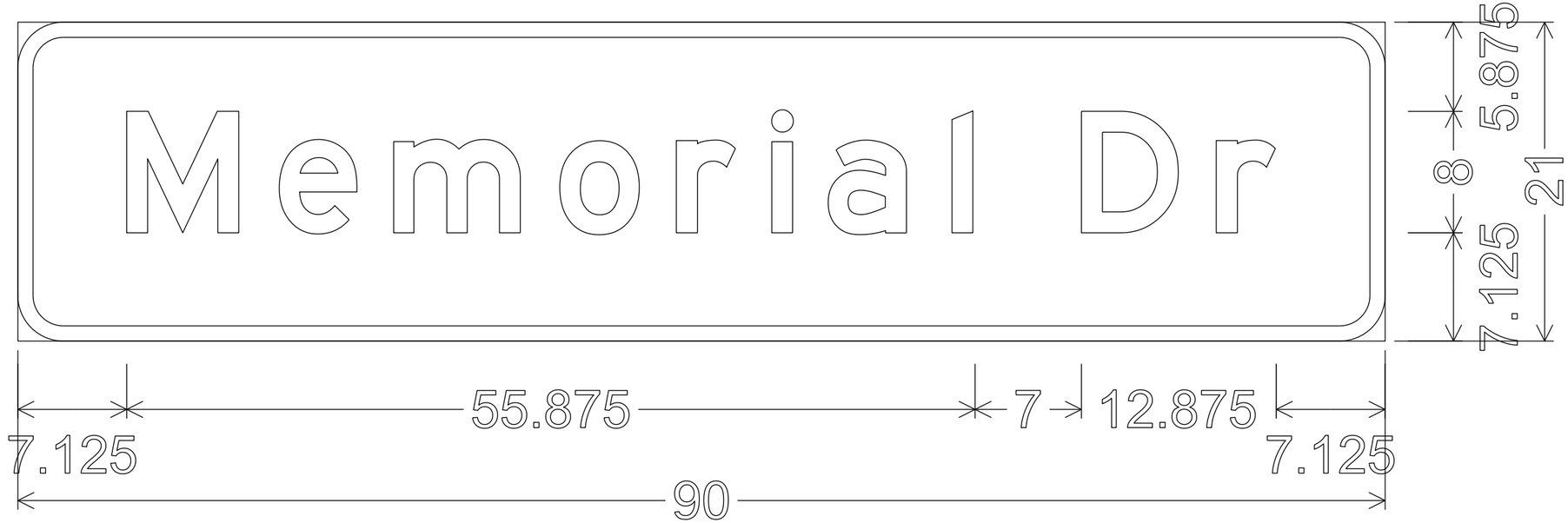
7

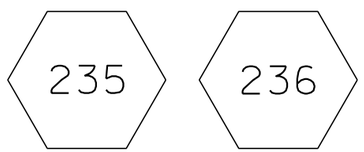
7

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING	SHEET NO: 682	E

NOTES

1. All Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E

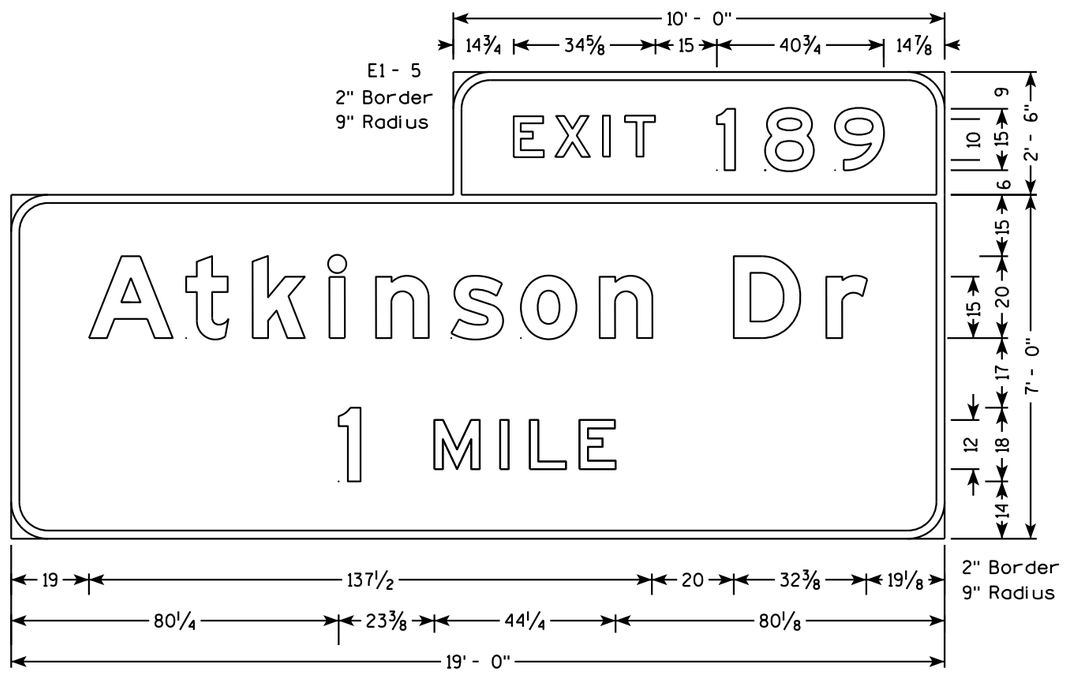




NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green see Note 4
   Message - White see Note 4
3. Message Series - E Modified except all CAP Words are Series E
4. LEFT & ONLY plaques are Yellow background with Black Message

108



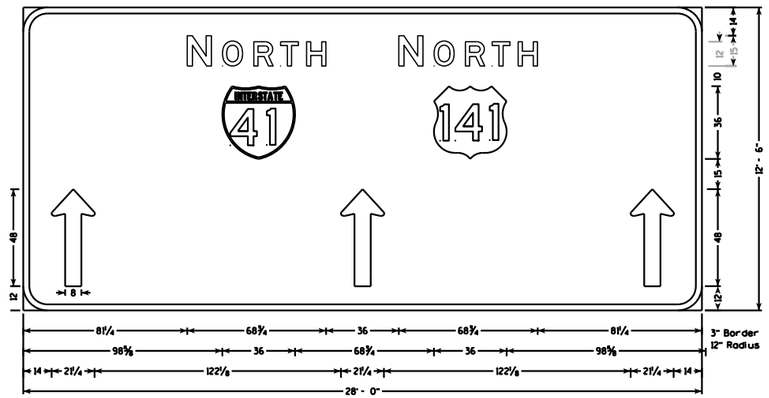
107

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	SIGN DETAILS	SHEET NO: 684	E

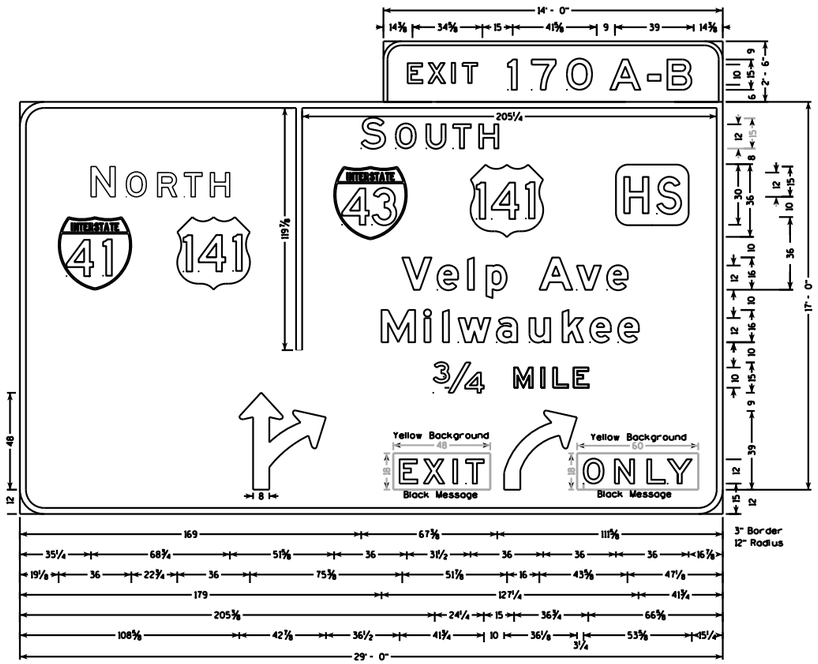
NOTES

1. All Signs areType I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green see Note 4
   Message - White see Note 4
3. Message Series - E Modified except all CAP Words are Series E
4. LEFT & ONLY plaques are Yellow background with Black Message



133

135



134

7

7

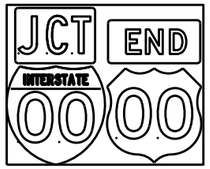
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	PERMANENT SIGNING	SHEET NO: 685	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\USH 41 Brown County\1133-10-71 Velp - Duck Creek\070101_sd.dgn PLOT DATE : 11-SEP-2014 13:40 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 75:1

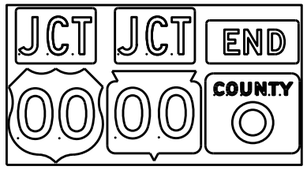
WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

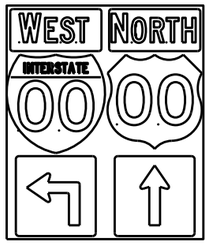


J1-2

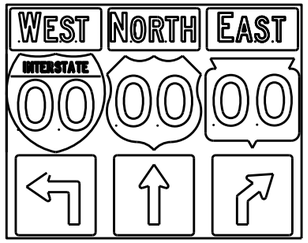


J1-3

J2-1



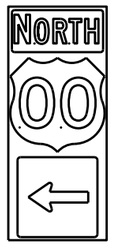
J2-2



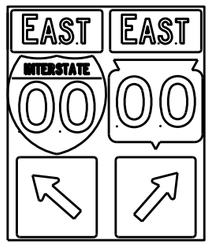
J2-3

JV

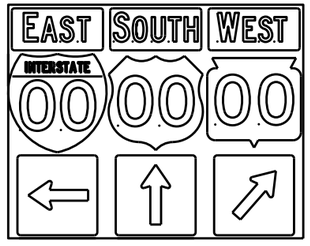
(Typical Vertical J-Assembly
See Note 10 and 11)



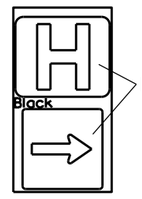
J3-1



J3-2

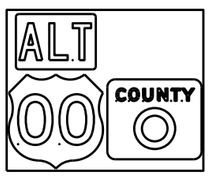


J3-3

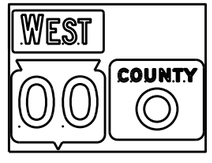


JH-1

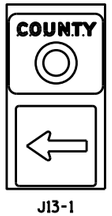
J4-1



J4-2



J4-2



J13-1

J12-1

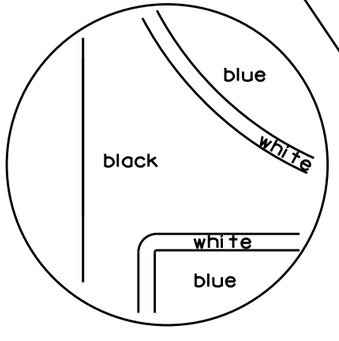
J32-1

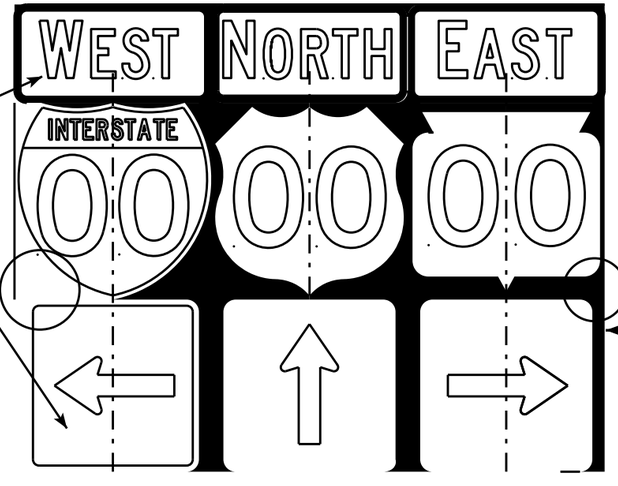
J33-1

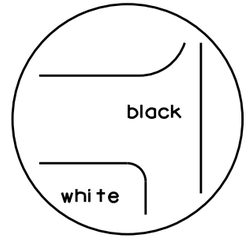
J23-1

J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

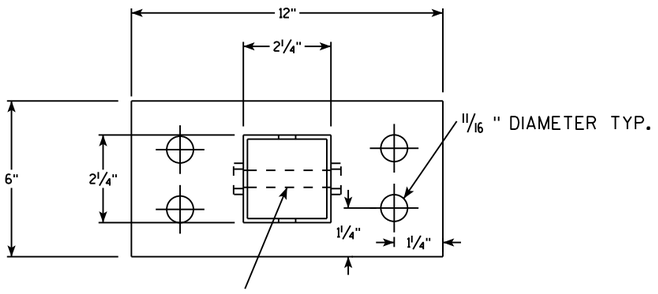
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42

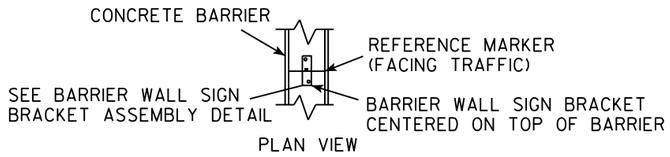
TYPICAL BARRIER WALL SIGN PLACEMENT DETAILS

TYPICAL REFERENCE MARKER MOUNTING DETAILS

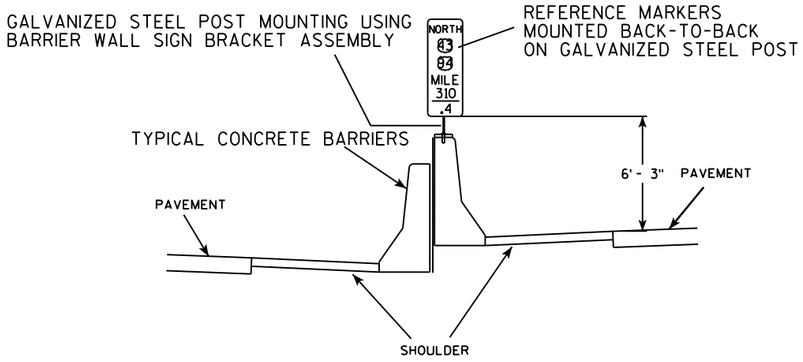
BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE



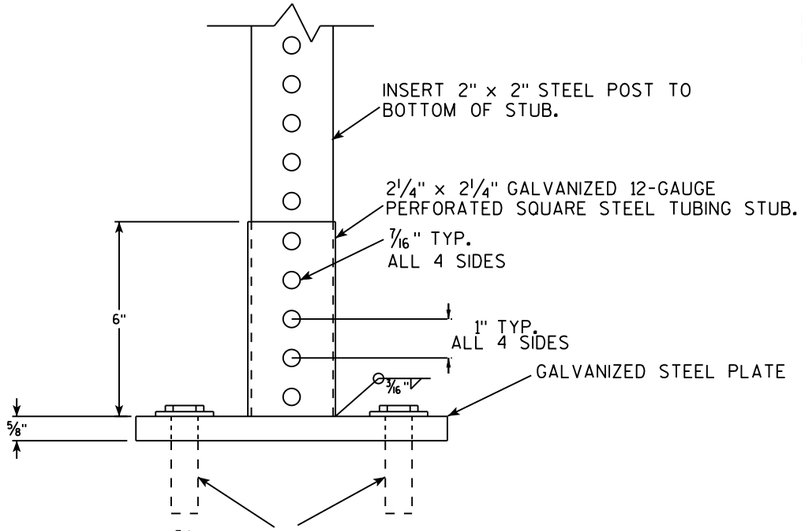
3½" X ⅜" GALVANIZED STEEL BOLT & HARDWARE
PLAN VIEW



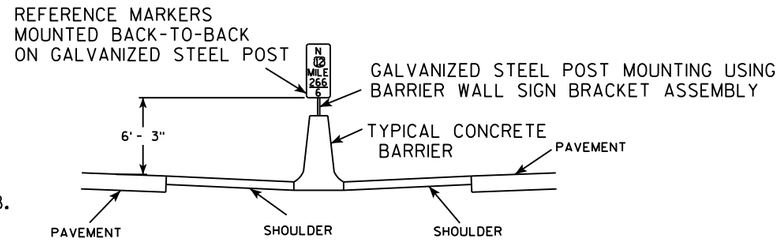
MEDIAN BARRIER MOUNTING DETAIL



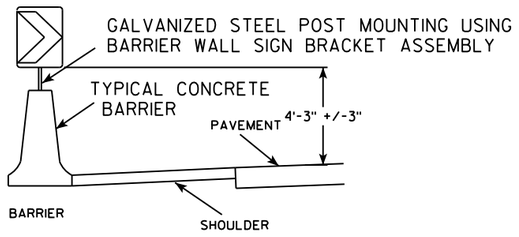
TYPICAL ENHANCED REFERENCE
MARKER PLACEMENT ON DOUBLE MEDIAN BARRIER



SIDE VIEW



TYPICAL ENHANCED REFERENCE
MARKER PLACEMENT ON SINGLE MEDIAN BARRIER



TYPICAL CHEVRON MARKER PLACEMENT

NOTES

1) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
2) SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS.

SIGN MOUNTING ON BARRIER WALL

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE ... A4-10.3

687

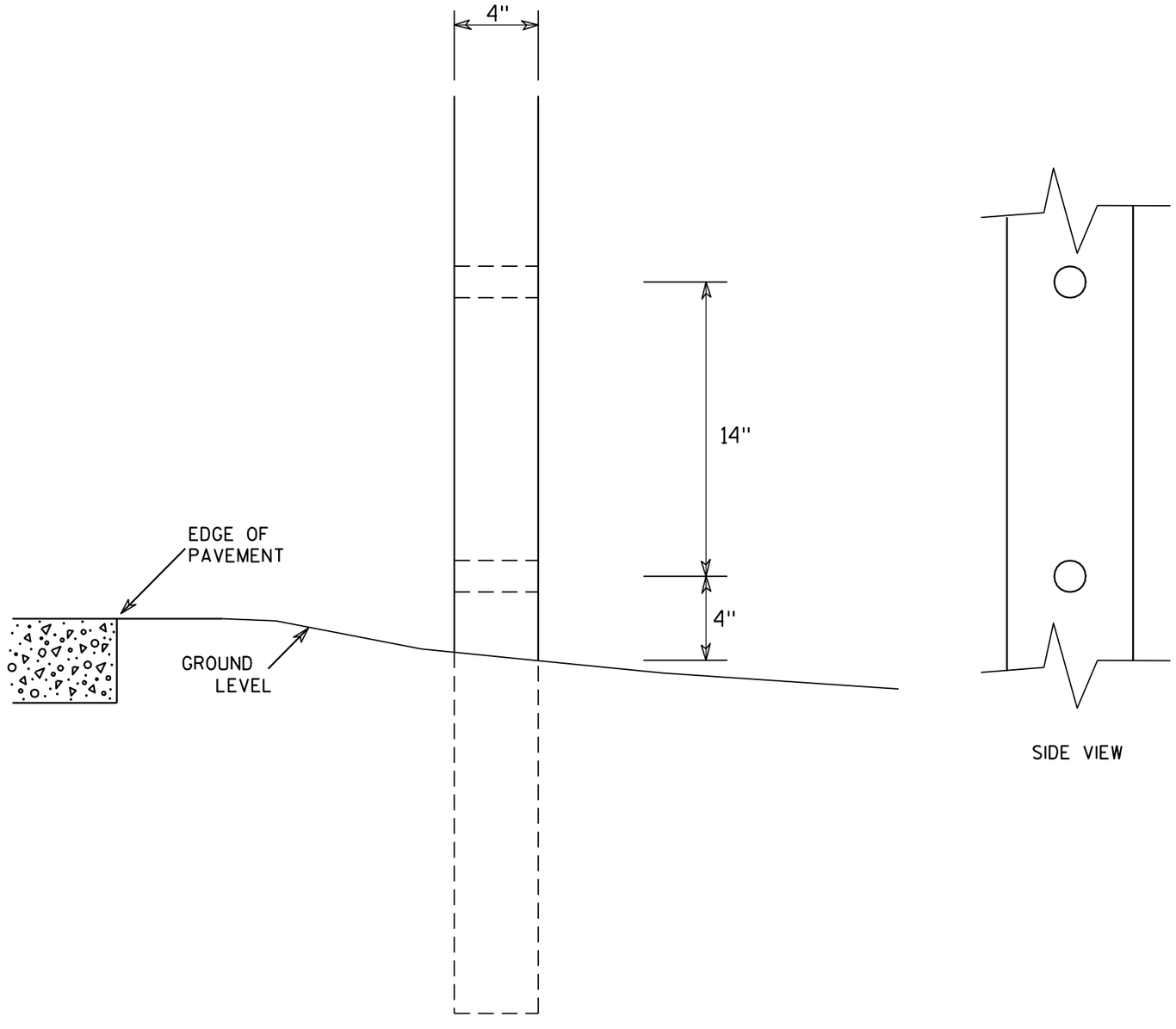
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A410.DGN PLOT DATE : 30-SEP-2013 13:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 14.593816:1.000000

WISDOT/CADDS SHEET 42

7

7



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

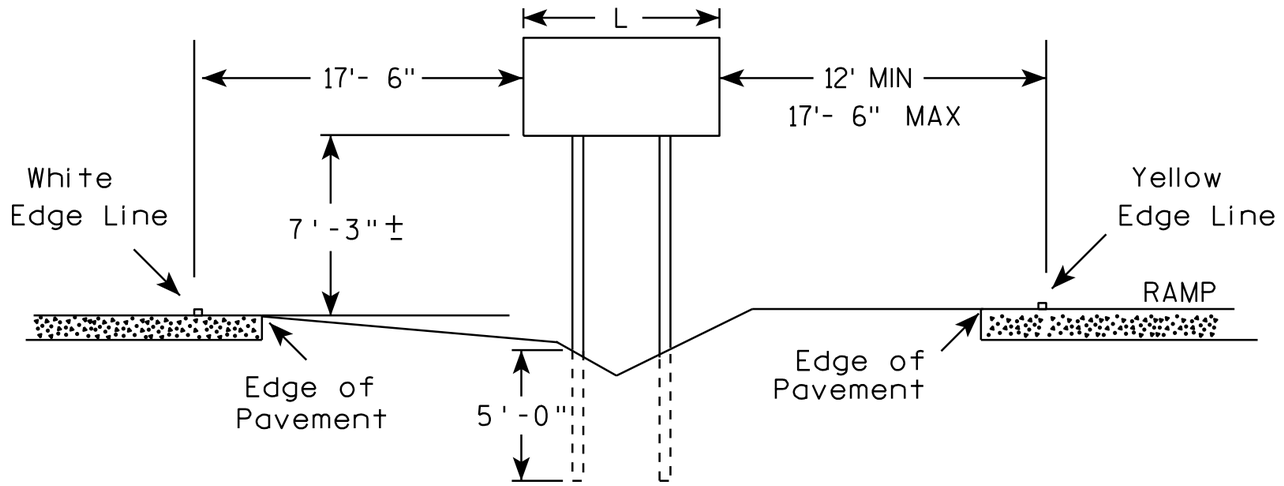
4 X 6 WOOD POST MODIFICATIONS

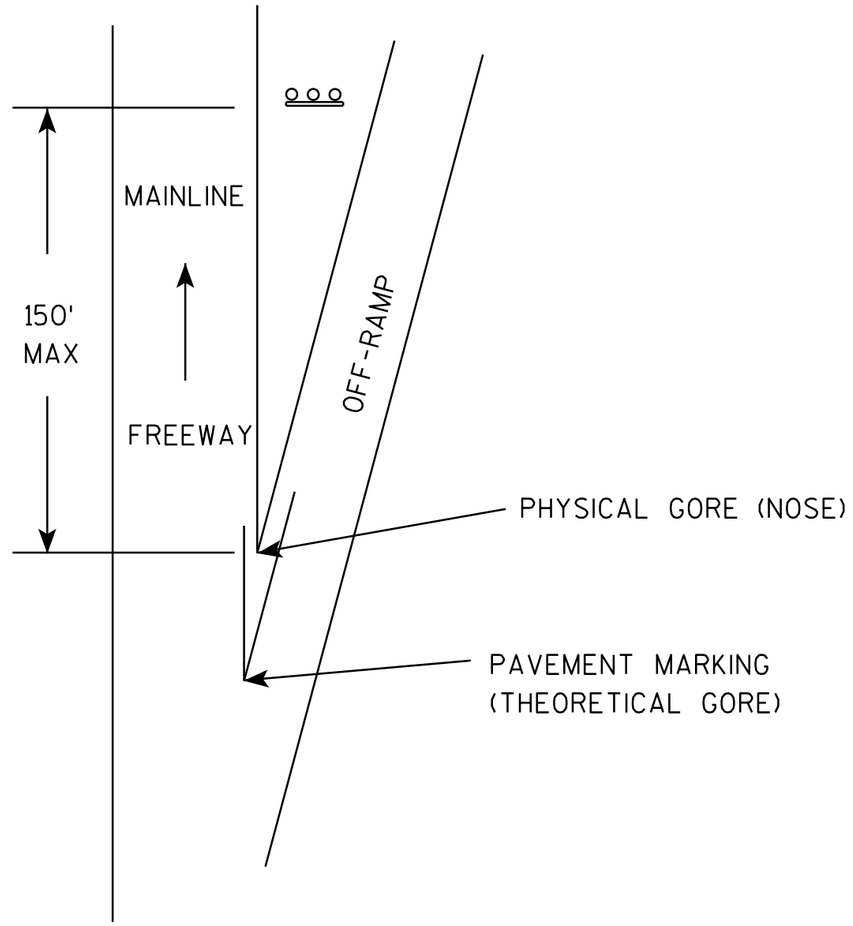
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 688	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

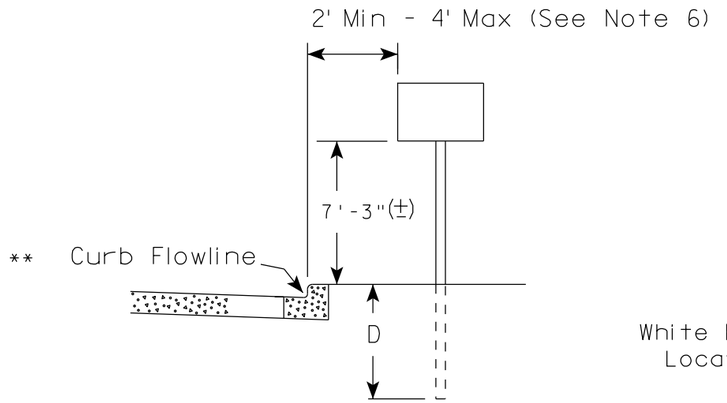
DATE 2/06/14 PLA 689 A4-2.3

PROJECT NO: | SHEET NO: E

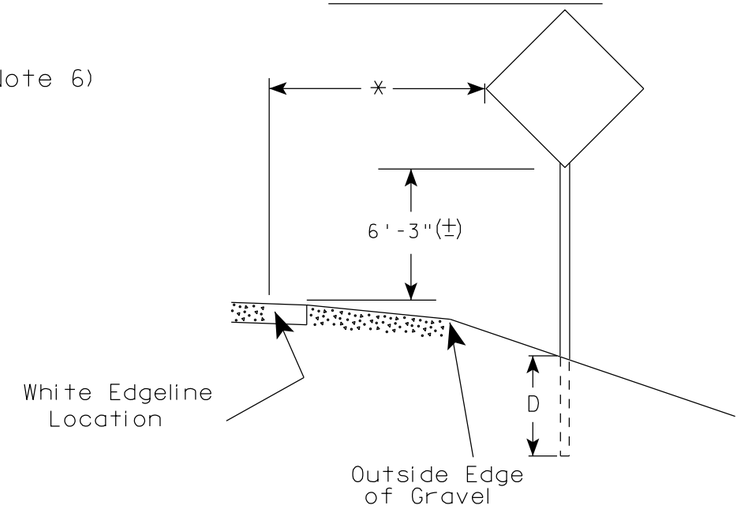
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A42.DGN PLOT DATE : 06-FEB-2014 12:36 PLOT BY : mscsja

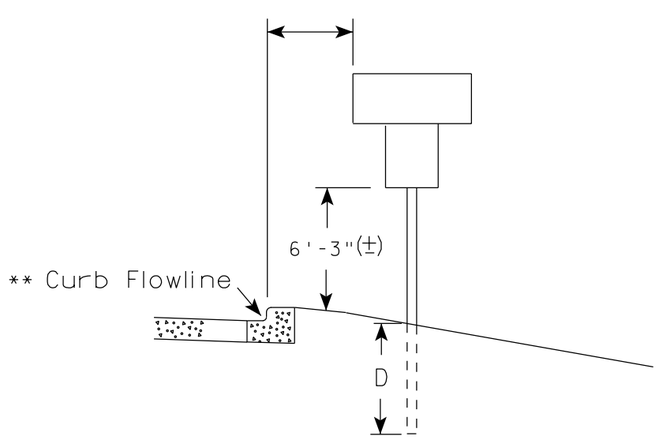
WISDOT/CADDS SHEET 42

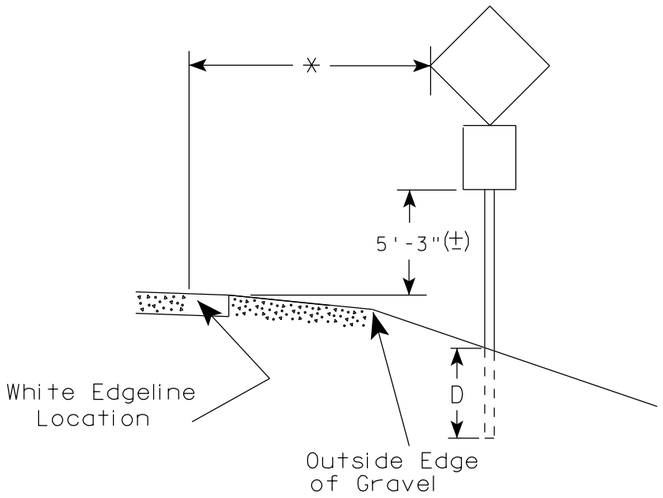
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

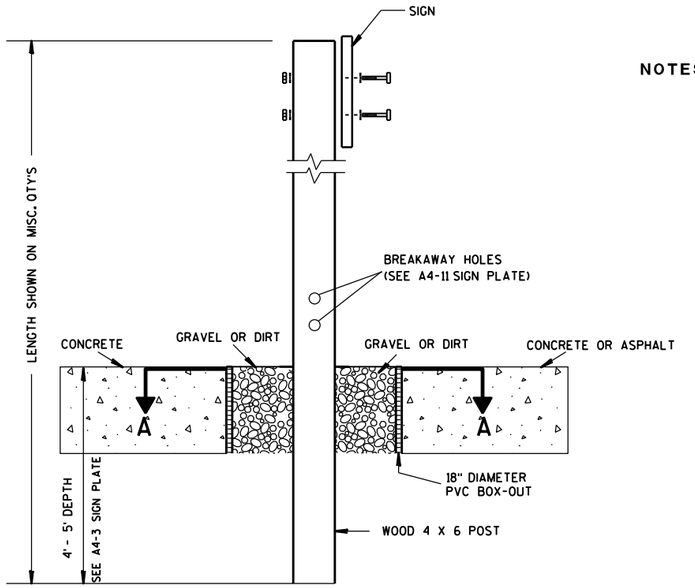
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/13/14 PLATE NO. A4-3.19

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

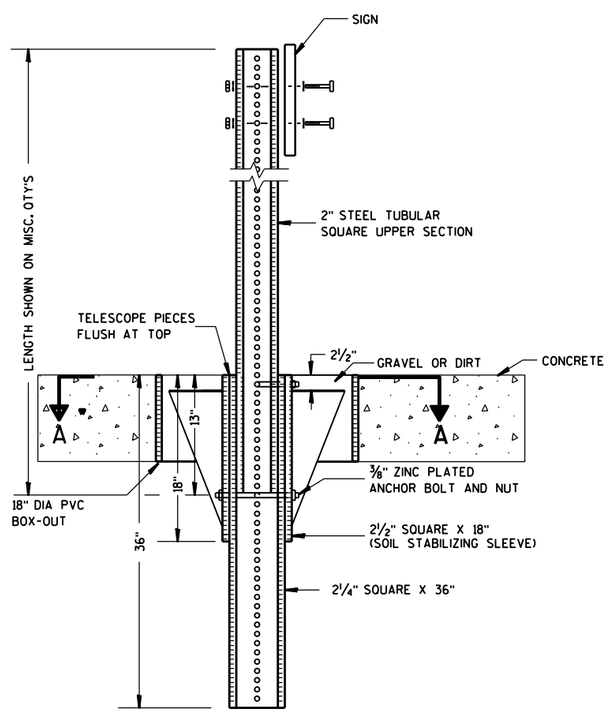
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 13-OCT-2014 16:30 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42



ELEVATION VIEW

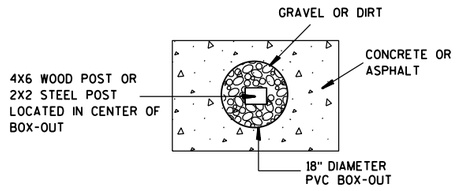
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

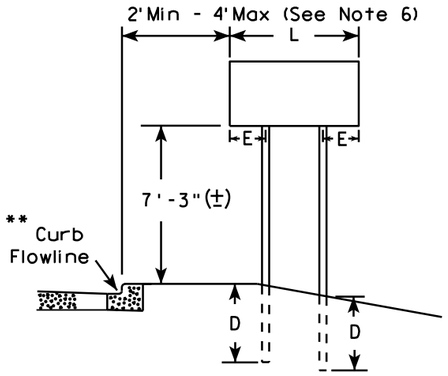
APPROVED Matthew R Rauch
for State Traffic Engineer

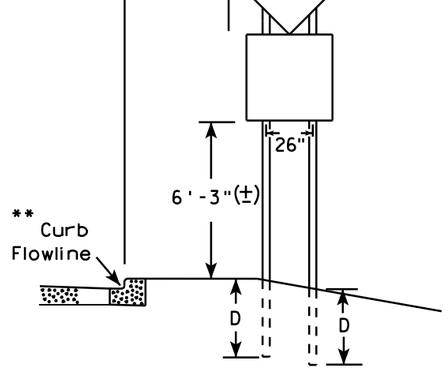
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

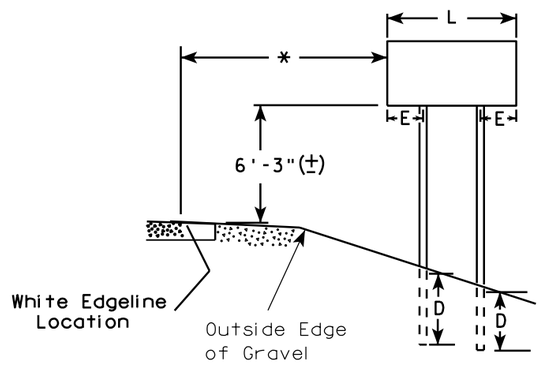
URBAN AREA

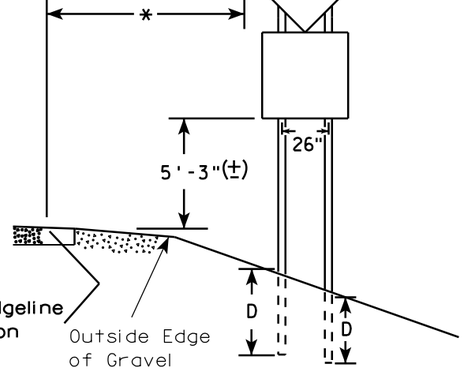




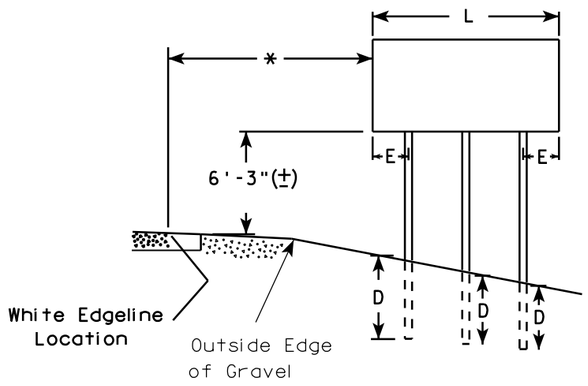
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

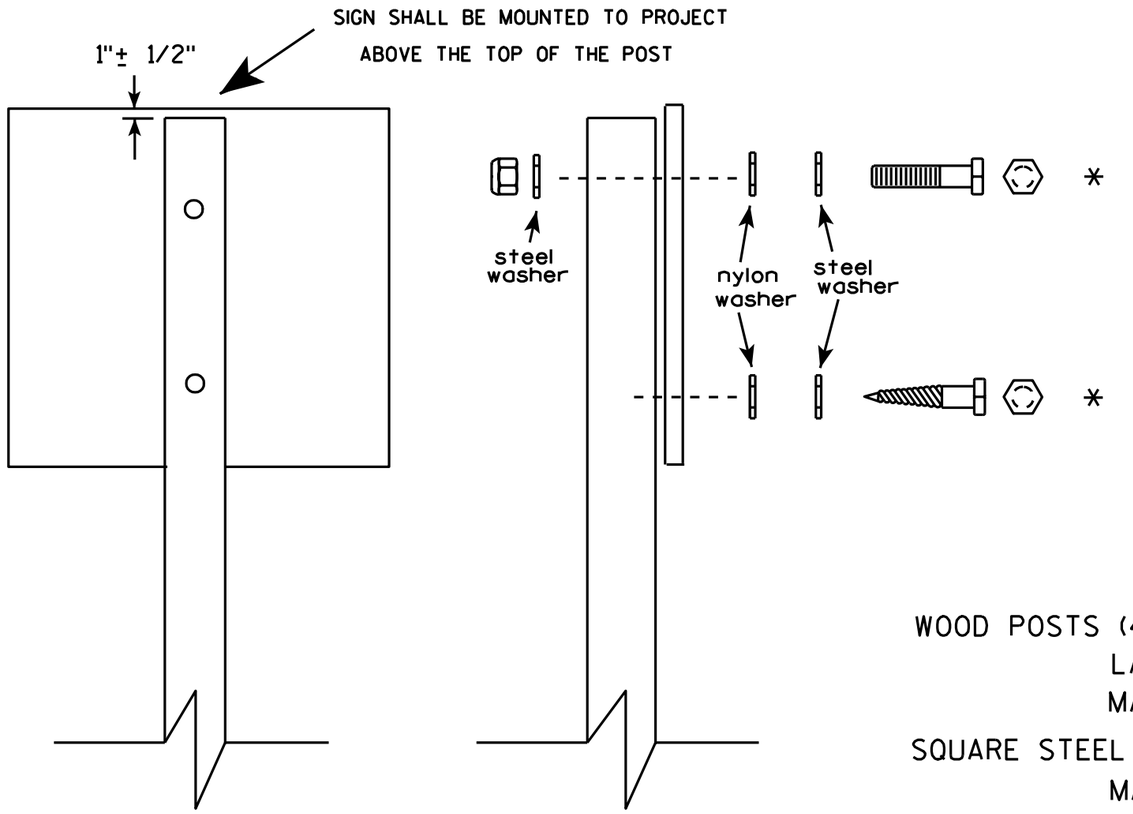
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE NO. AA-A 692 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

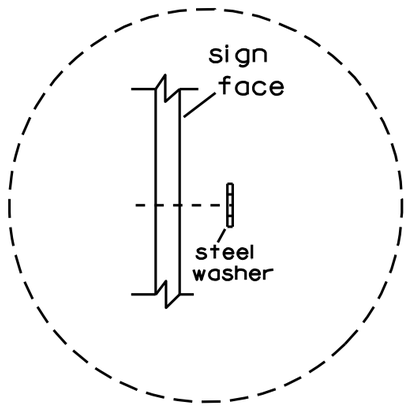
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

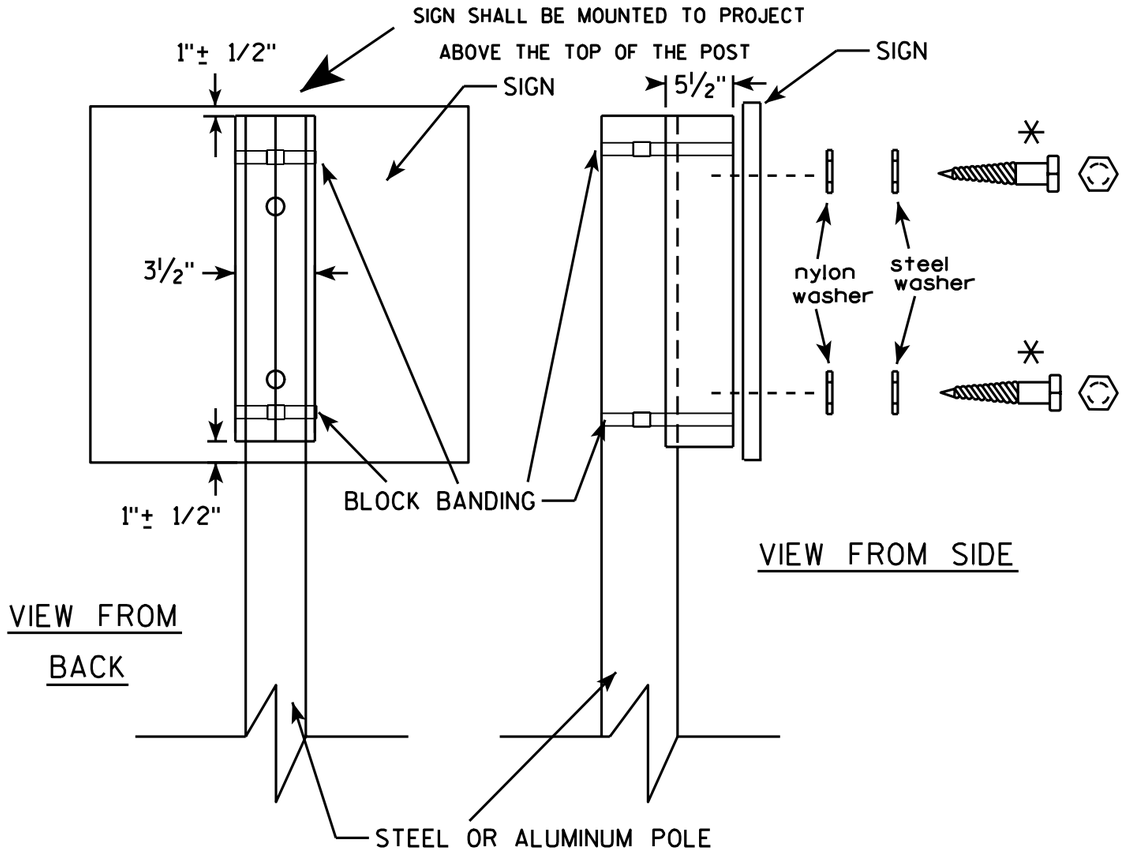
DATE 3/23/10 PLATE NO. A4-8.7

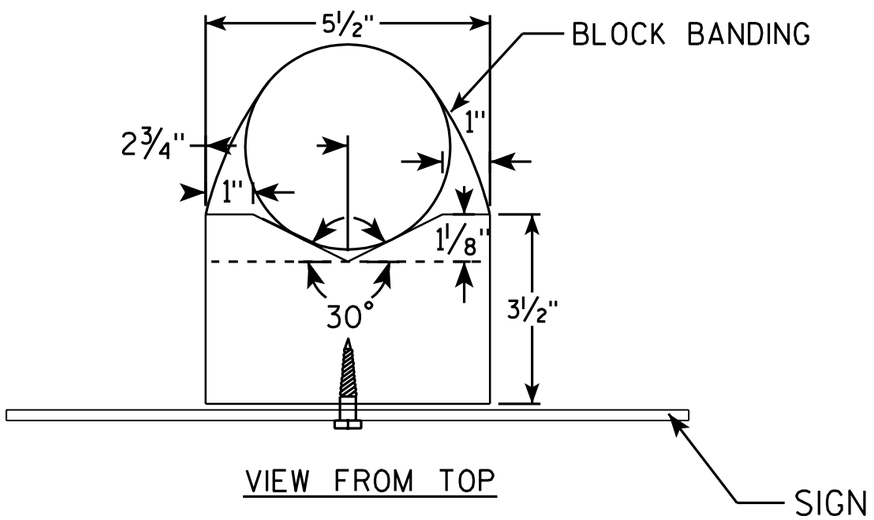
7

7

PROJECT NO:

SHEET NO: 693 E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

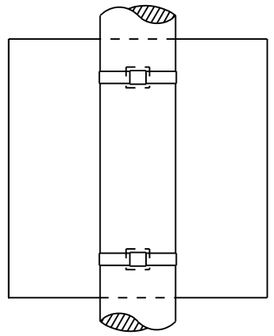
SHEET NO: 694 E

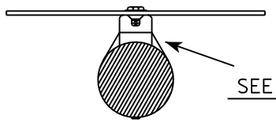
FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

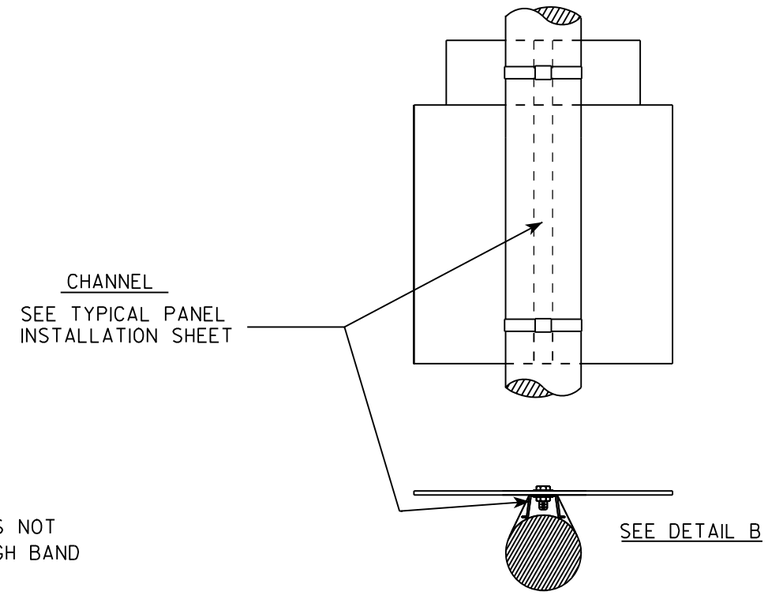
BANDING

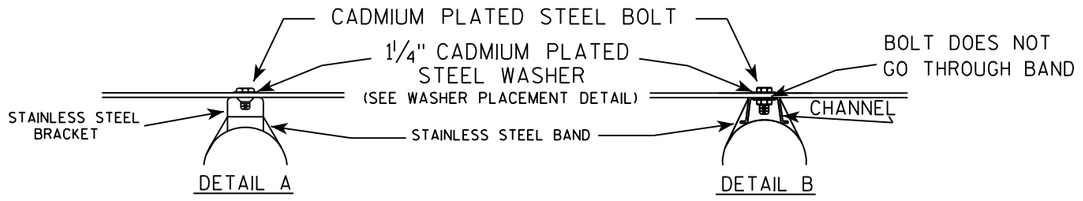
SINGLE SIGN



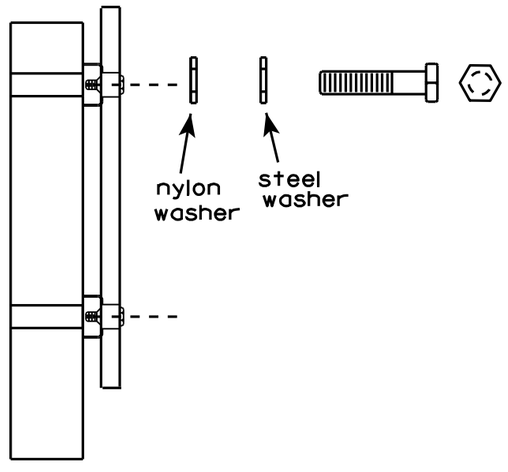


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

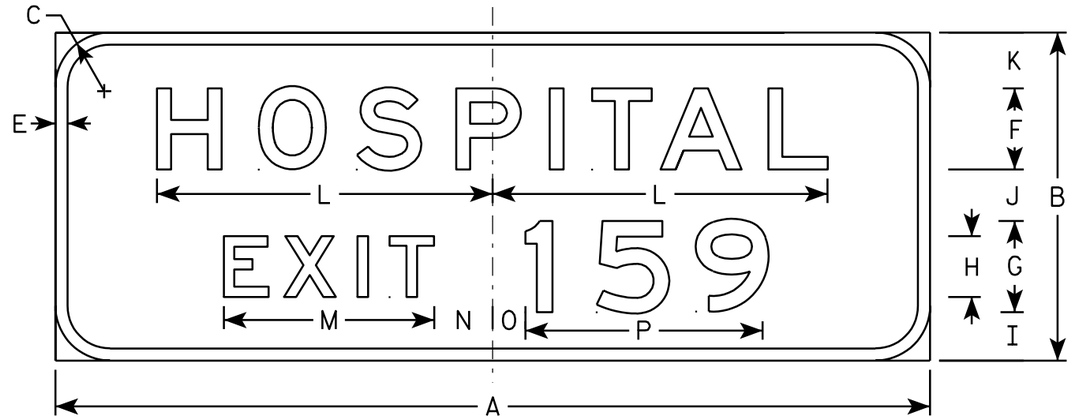
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 695	E



E10-61

NOTES

1. Sign is Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, other than extrusions, the corners and borders shall be rounded.
5. Apply proper Exit Numbers and letters, optically adjust spacing to achieve proper balance.

7

Metric equivalent for this sign is:

SIZE	
1	
2	3600 mm X 1350 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54	4.86
3																												
4																												
5																												

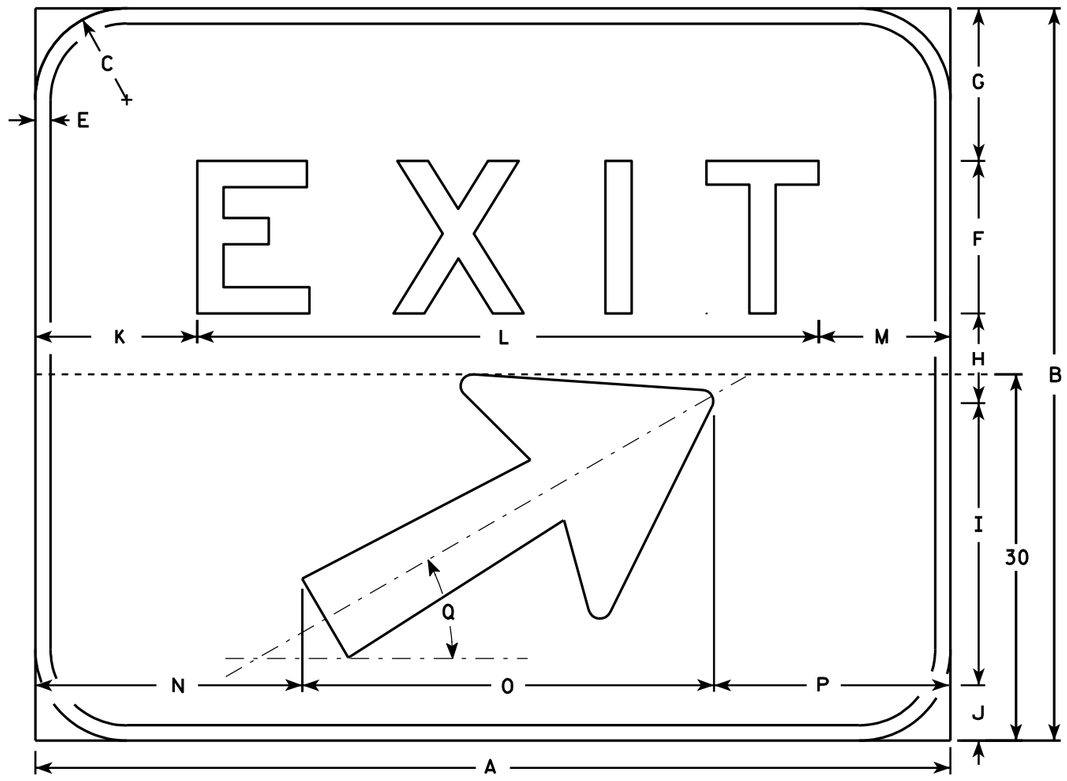
TYPICAL SIGNS
E10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/8/08 PLATE NO. E10-61.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 696	E



E5-1

NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but borders shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces for the 72 x 60 size as shown on the detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. As per the Standard Spec's, this sign shall not have a vertical joint.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	1500 mm X 1200 mm
5	1800 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2																												
3																												
4	60	48	6		1	10	10	5 7/8	18 1/2	3 5/8	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°										20.0	1.80
5	72	60	6		1	12	12	10	18 1/2	7 1/2	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°										30.0	2.70

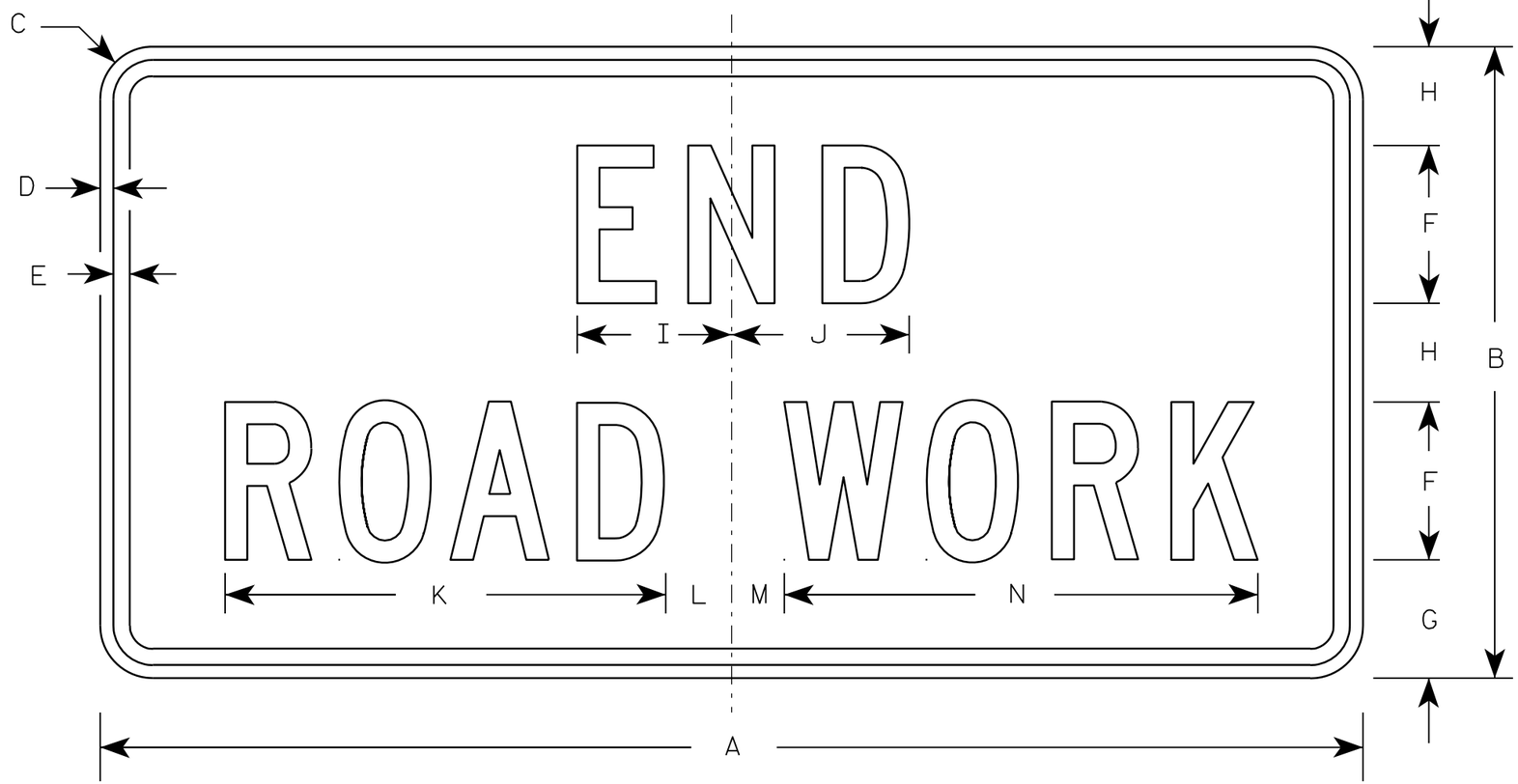
STANDARD SIGN
E5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 6/22/00 PLATE NO. E5-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 697	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

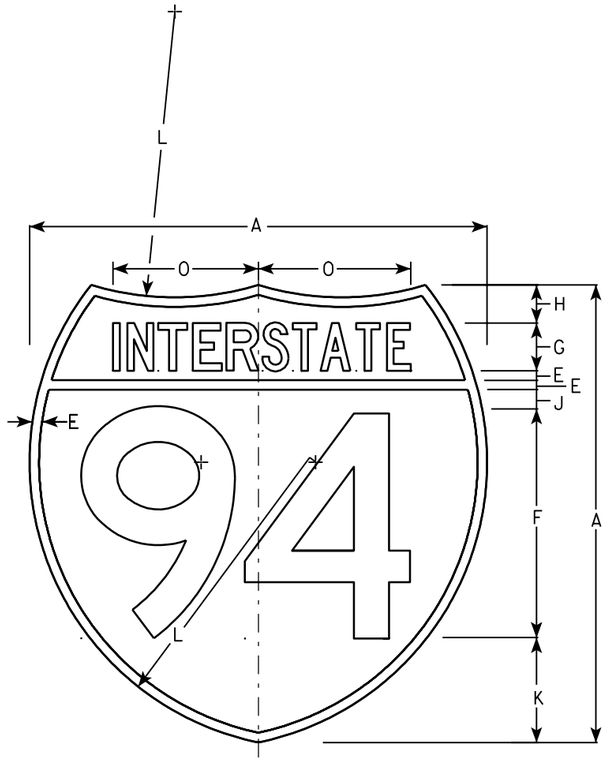
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

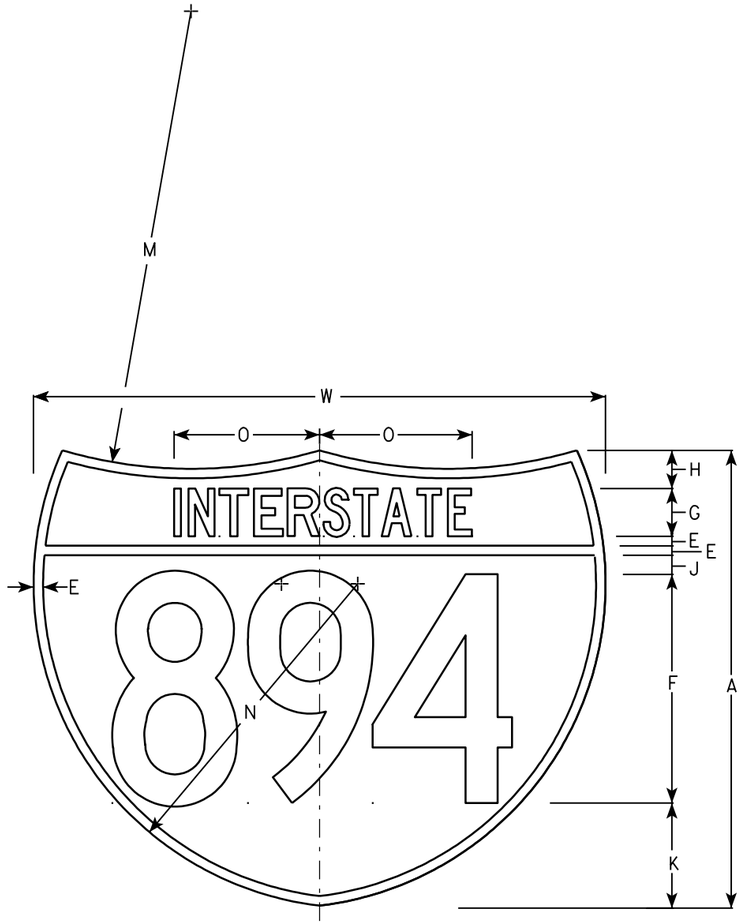
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 698	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

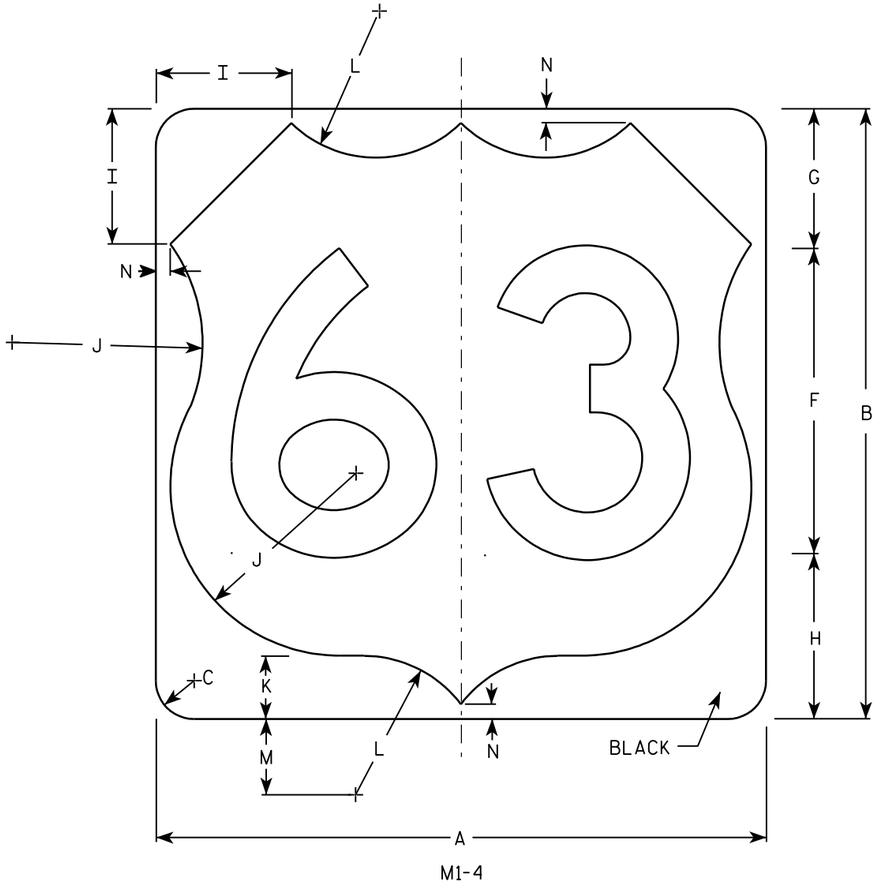
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

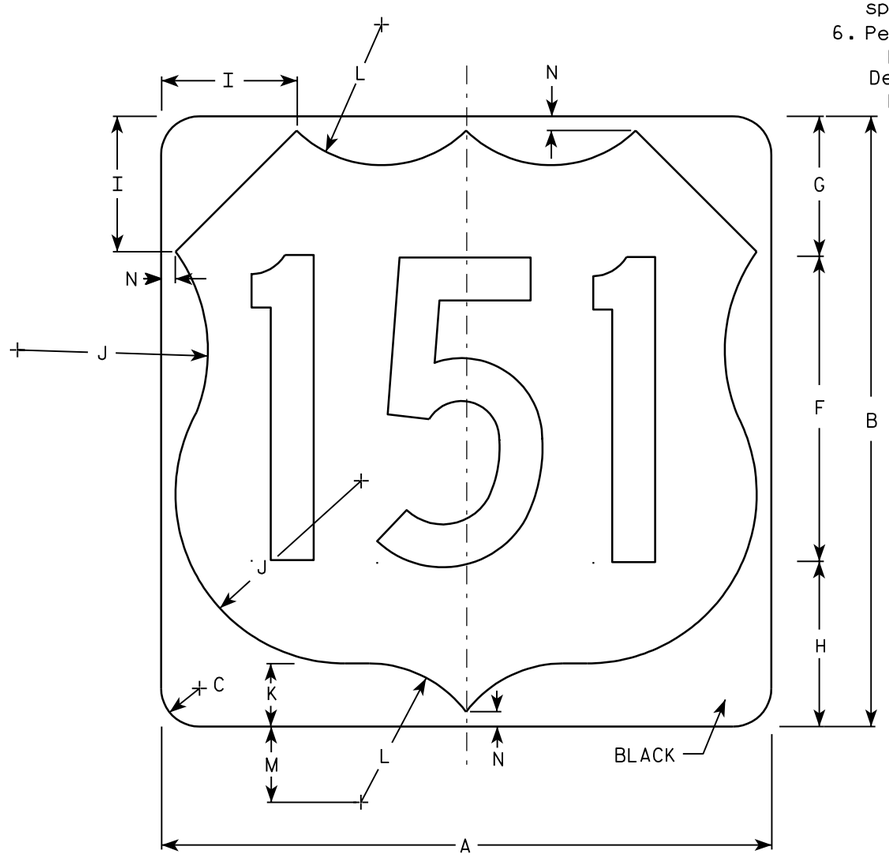
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 699	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq. sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

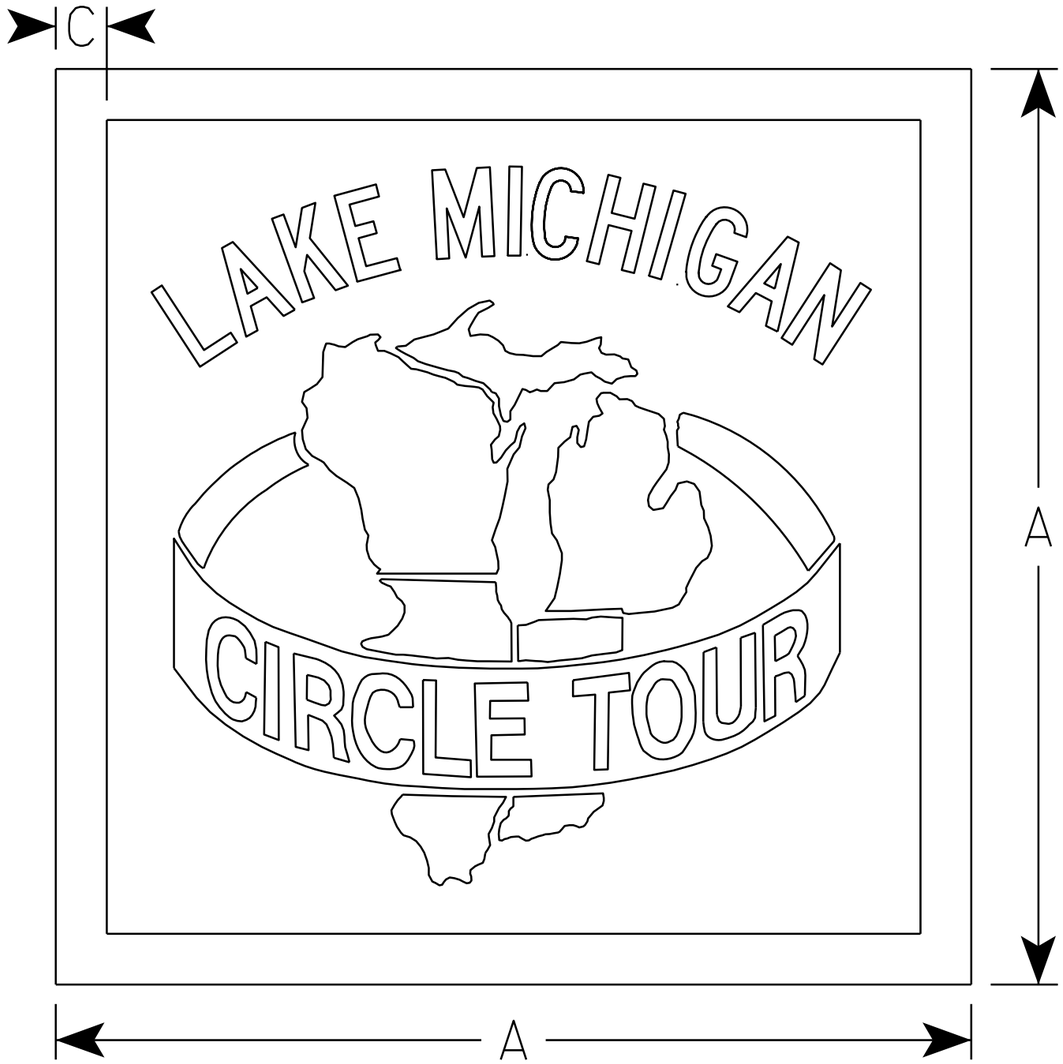
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 700	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Graphics - White
   Circle Tour Message is Green
3. Message Series - Special
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 ½																								4.0	.36
3																												
4	36		2																								9.0	.81
5																												

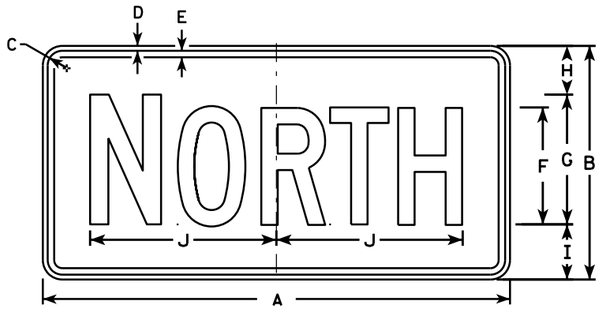
STANDARD SIGN
M1-93

WISCONSIN DEPT OF TRANSPORTATION

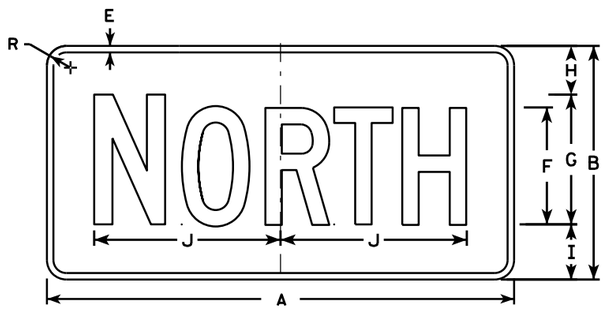
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/05/09 PLATE NO. M1-93.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 701	E

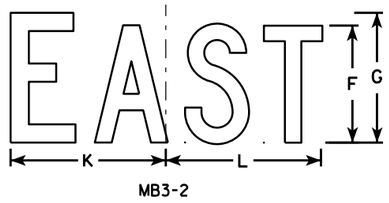


M3-1
MK3-1
MM3-1
MN3-1

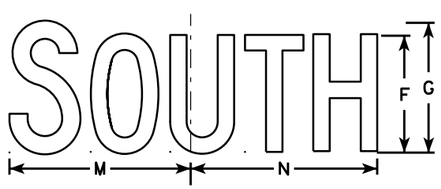


MB3-1

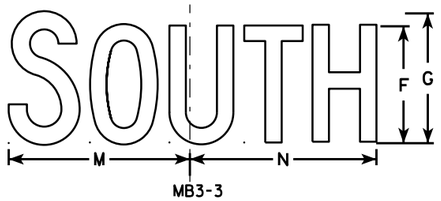
M3-2
MK3-2
MM3-2
MN3-2



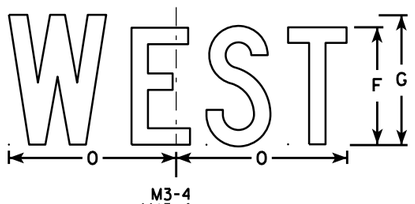
MB3-2



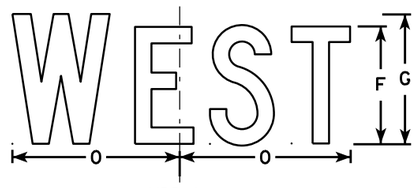
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

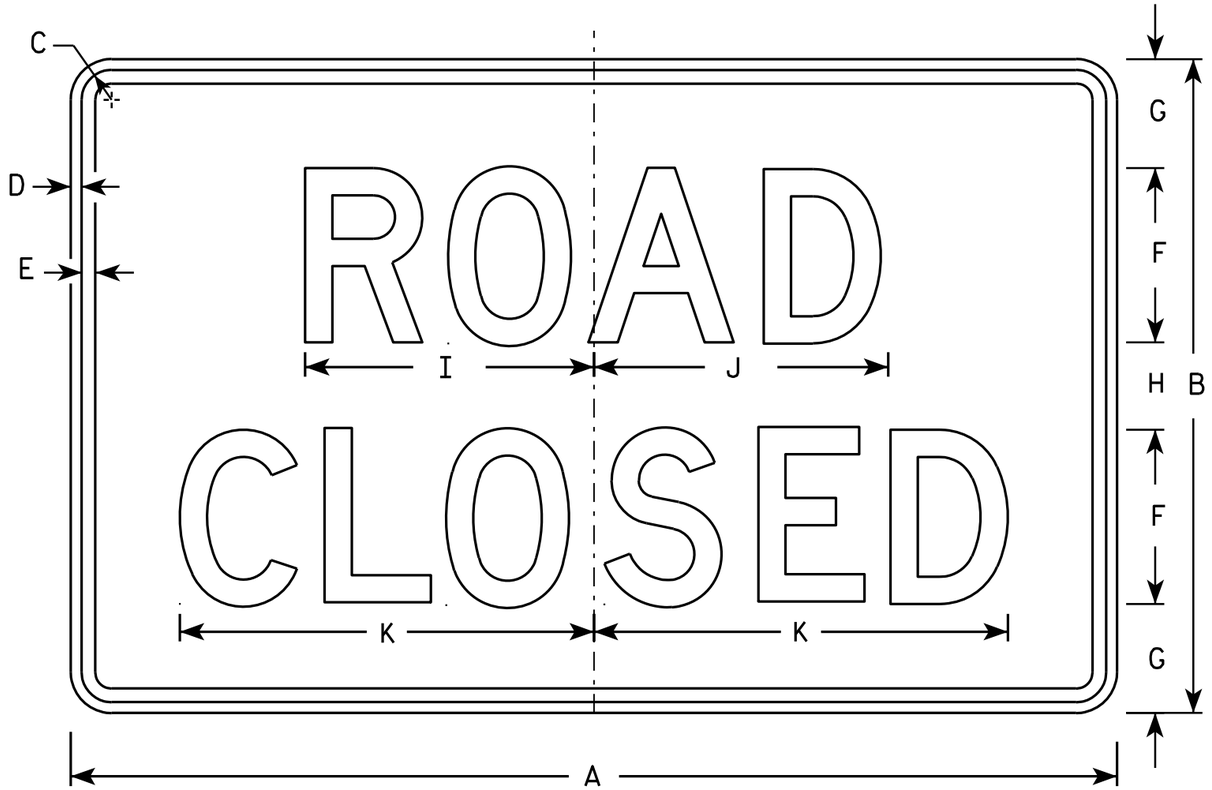
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

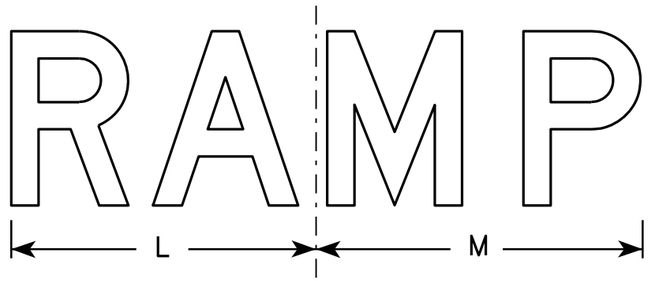
7



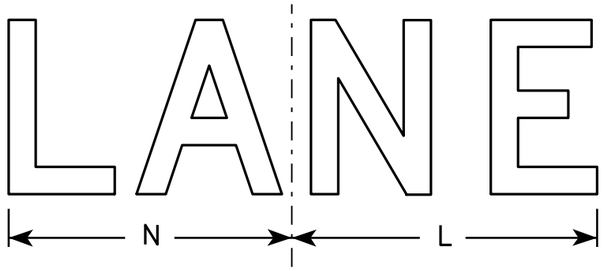
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

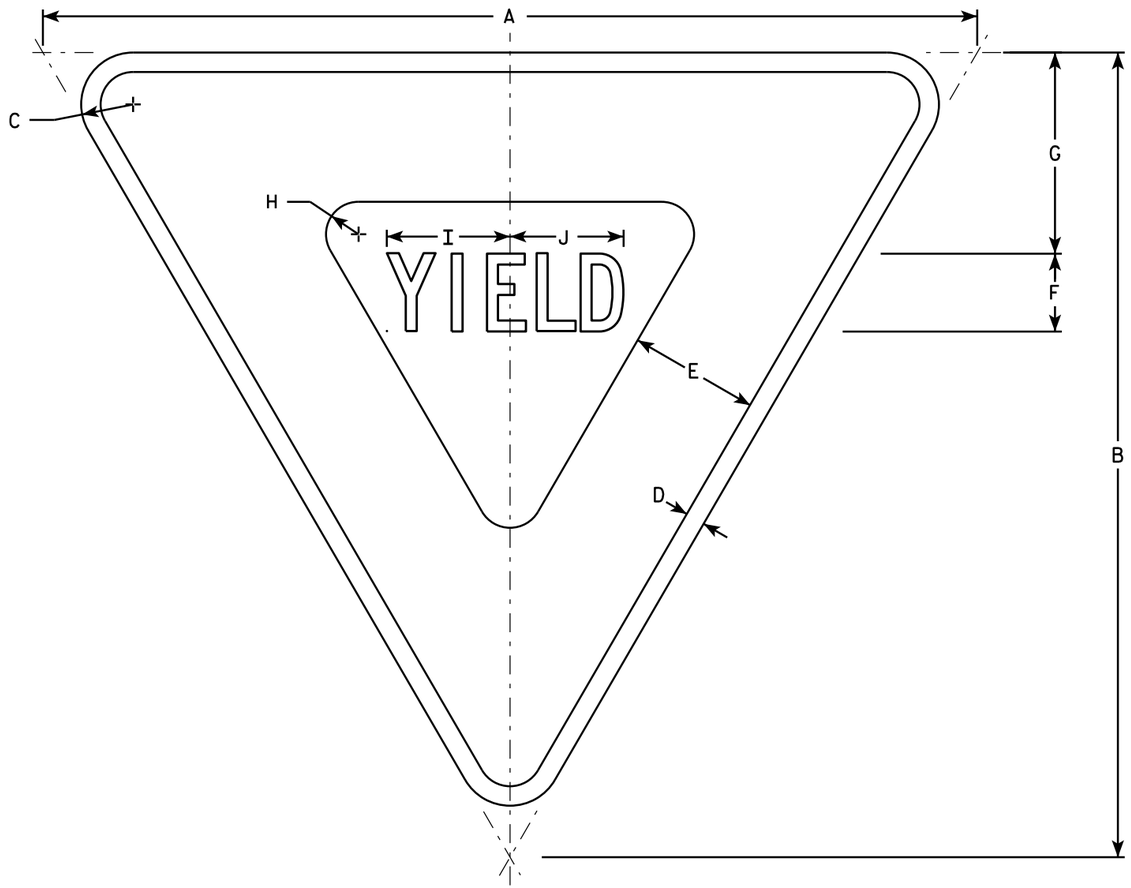
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 703 | E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

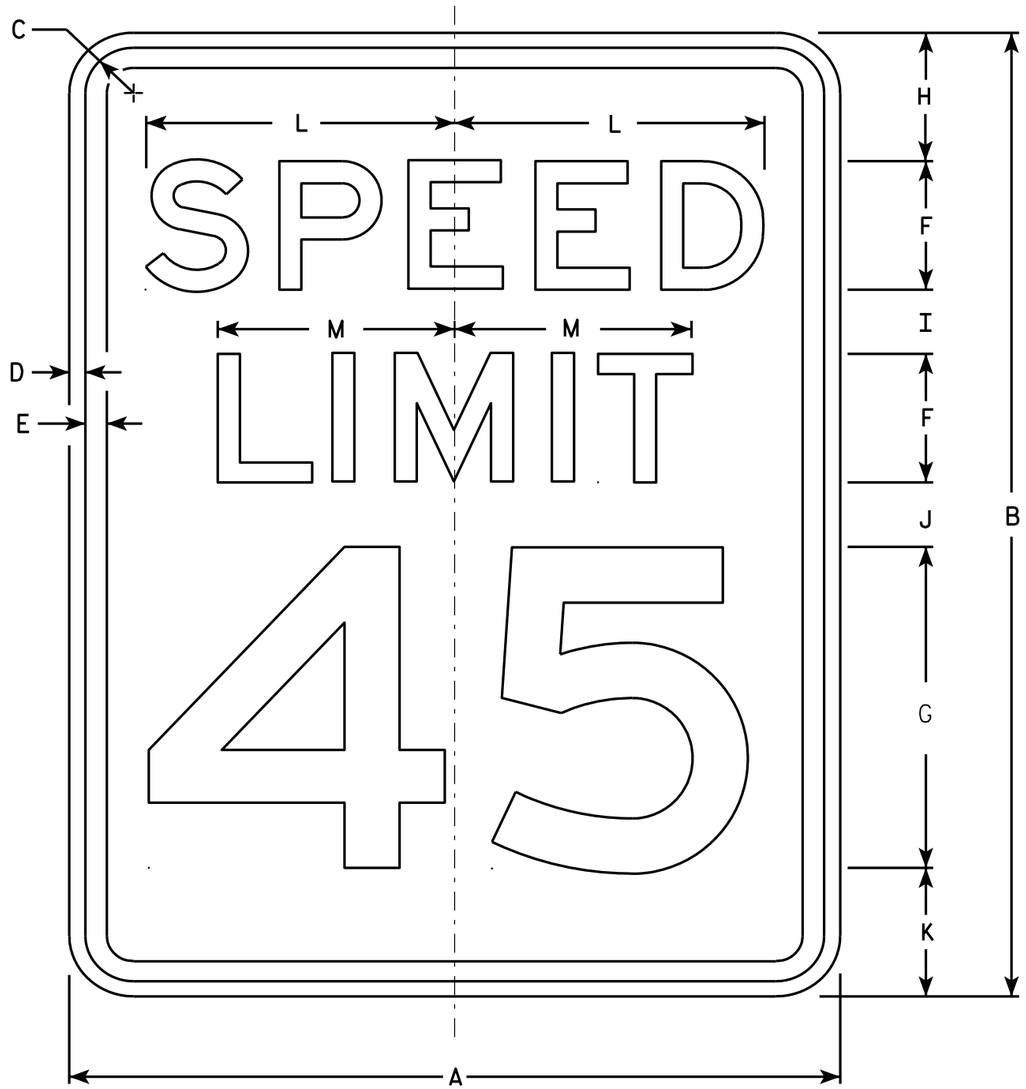
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

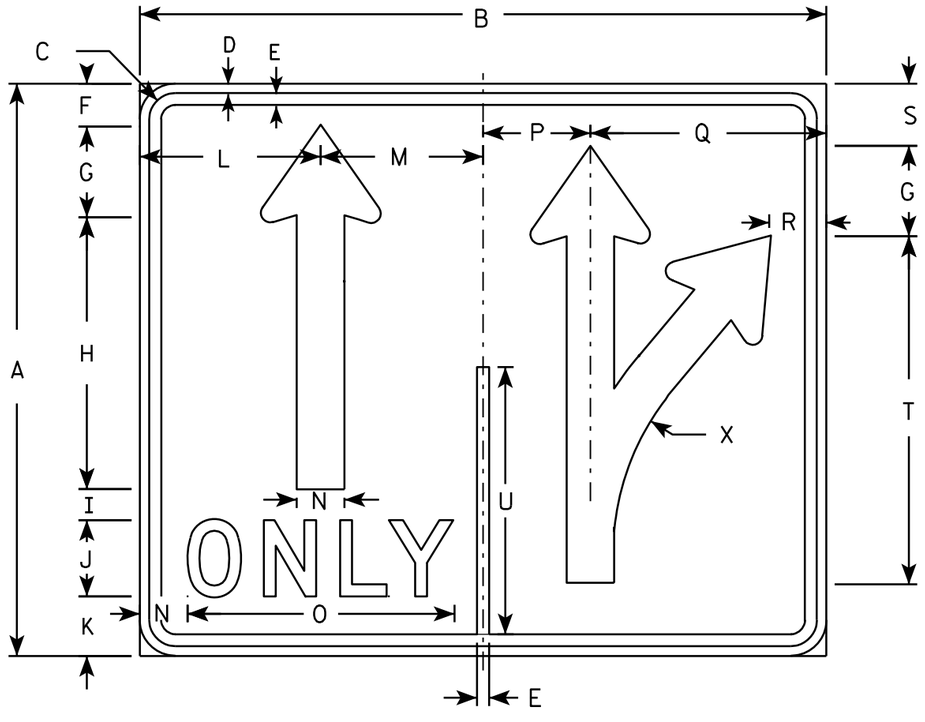
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

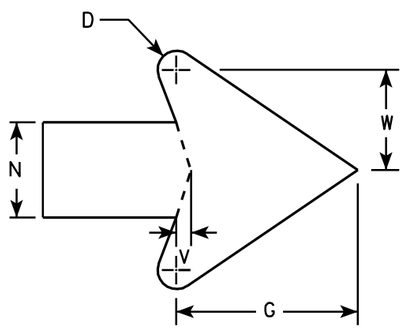
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 705	E



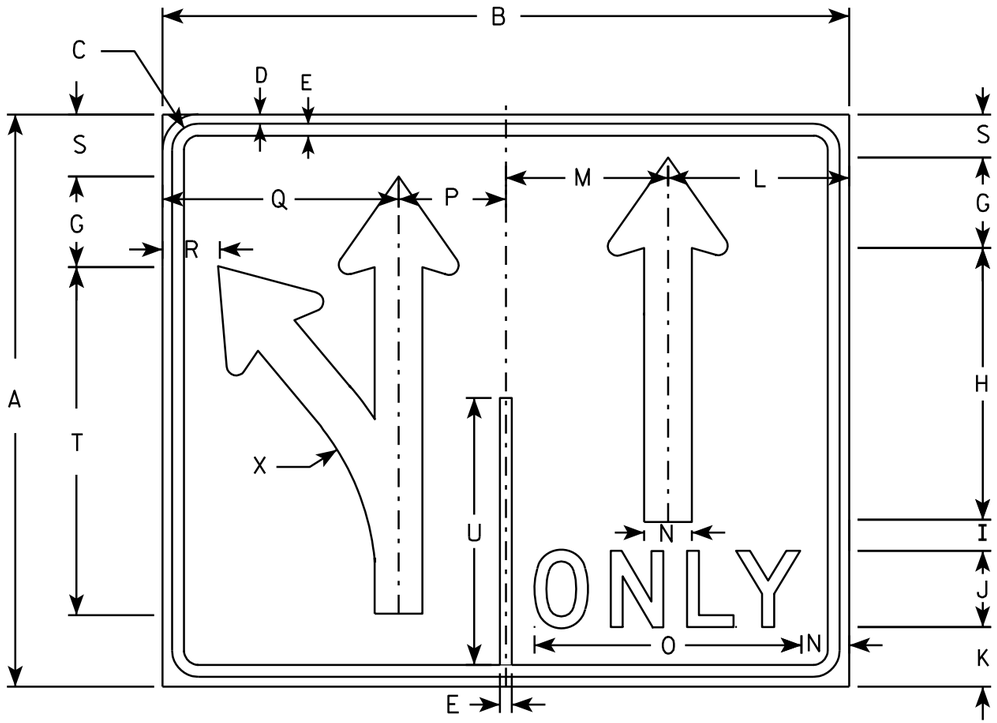
R3-8G



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8H

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4			7.5
2M	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4			7.5
3																											
4	48	54	2 1/4	3/4	1	3 1/2	7 1/8	29 1/8	2 7/8	6	5 1/8	14 1/4	12 3/4	3 3/4	20 5/8	8 3/8	18 5/8	4 3/8	5 1/4	29 1/8	22 3/8	5/8	4	21 7/8			18.0
5	48	54	2 1/4	3/4	1	3 1/2	7 1/8	29 1/8	2 7/8	6	5 1/8	14 1/4	12 3/4	3 3/4	20 5/8	8 3/8	18 5/8	4 3/8	5 1/4	29 1/8	22 3/8	5/8	4	21 7/8			18.0

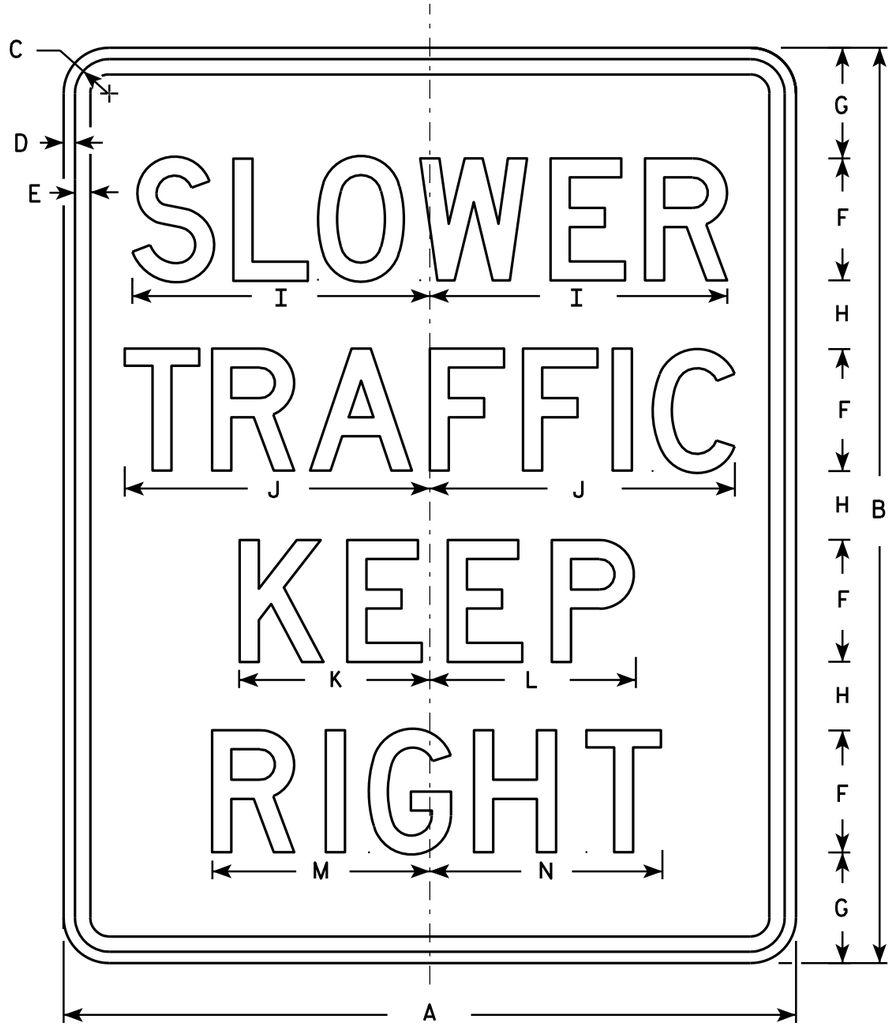
STANDARD SIGN
R3-8G & R3-8H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8G.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 706 | E



R4-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-3.8

PROJECT NO:

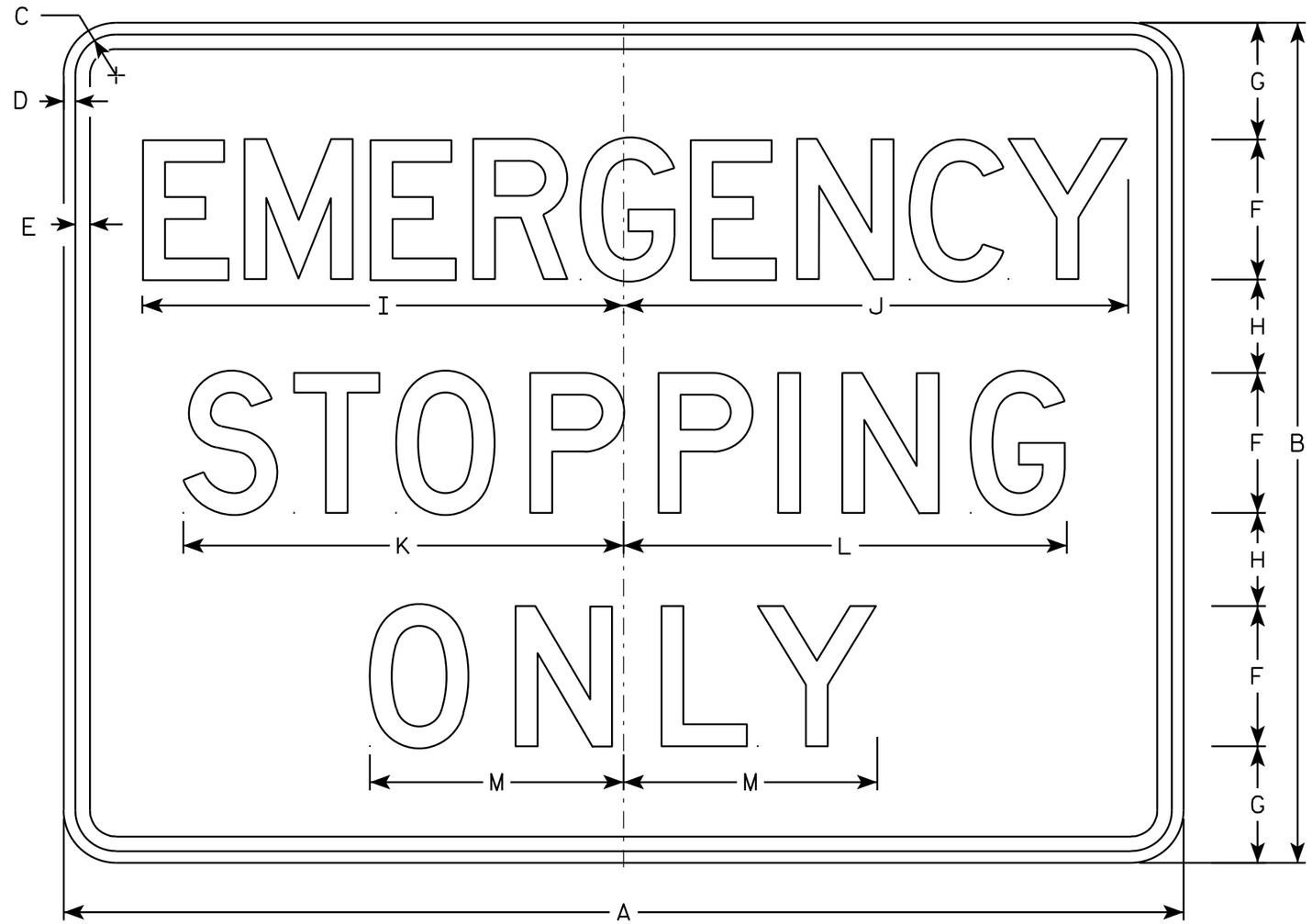
SHEET NO: 707 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R43.DGN PLOT DATE : 25-MAR-2011 13:40 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7



R8-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	48	36	1 3/4	1/2	5/8	6	5	4	20 5/8	21 5/8	18 7/8	19	10 7/8														12.0
5	48	36	1 3/4	1/2	5/8	6	5	4	20 5/8	21 5/8	18 7/8	19	10 7/8														12.0

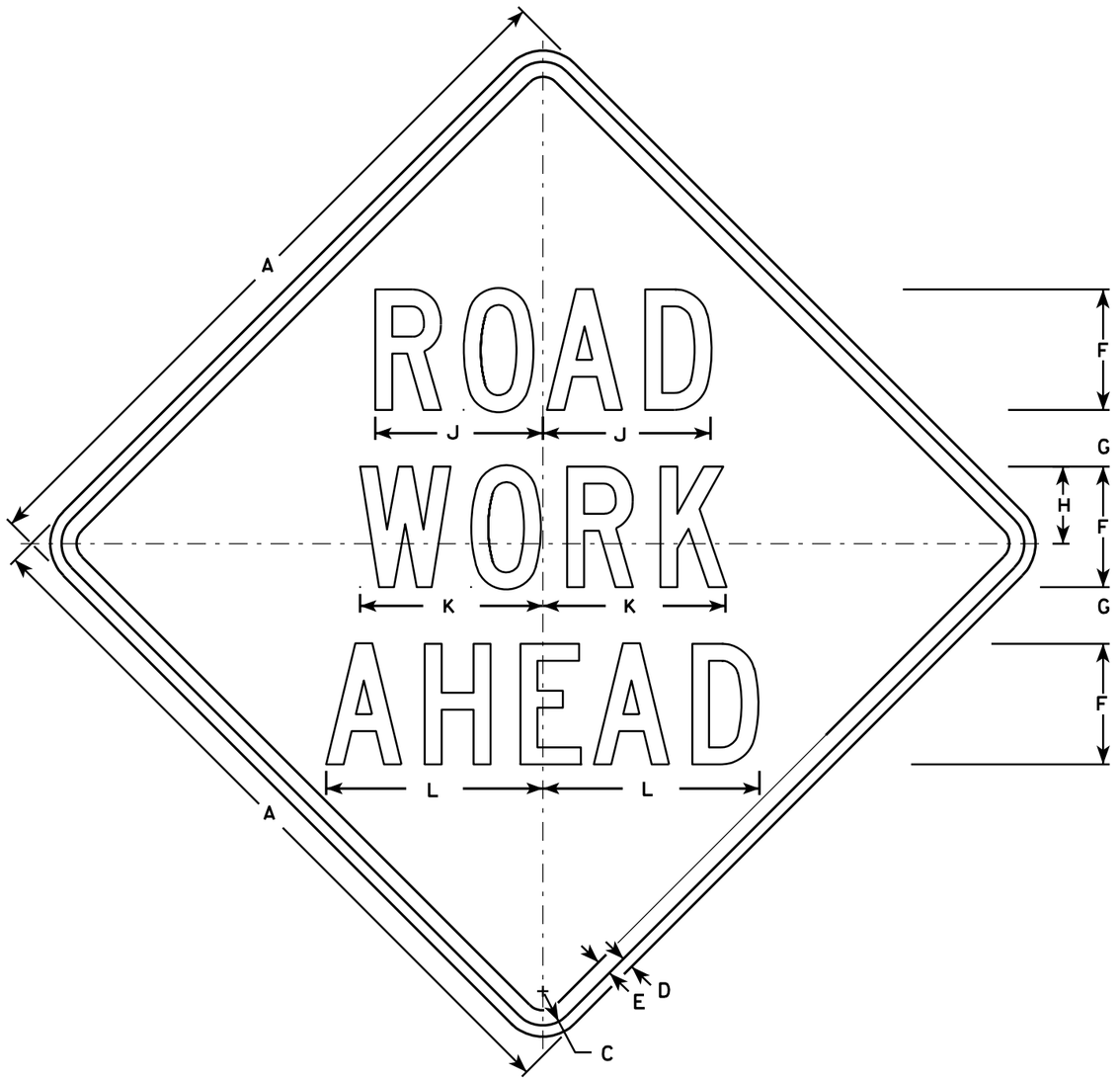
STANDARD SIGN
R8-7

WISCONSIN DEPT OF TRANSPORTATION

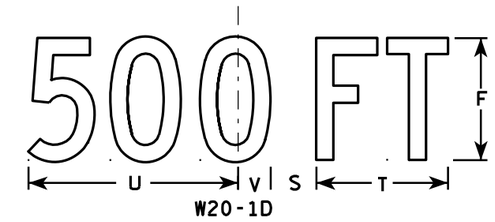
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R8-7.6

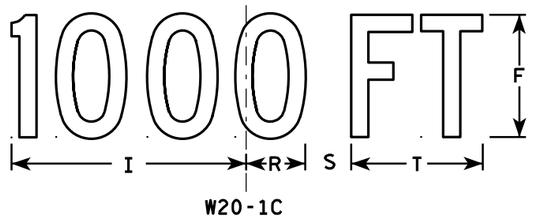
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 708 | E



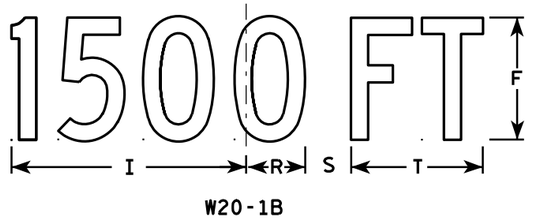
W20-1A



W20-1D

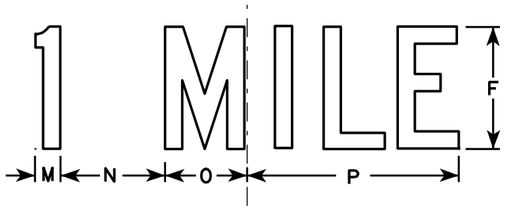


W20-1C



W20-1B

W20-1G



W20-1F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	1 7/8	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-1.9

PROJECT NO:

SHEET NO: 709 E

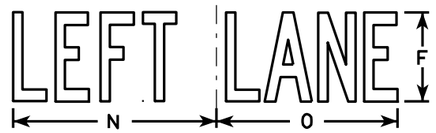
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W201.DGN PLOT DATE : 18-MAR-2011 09:56 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

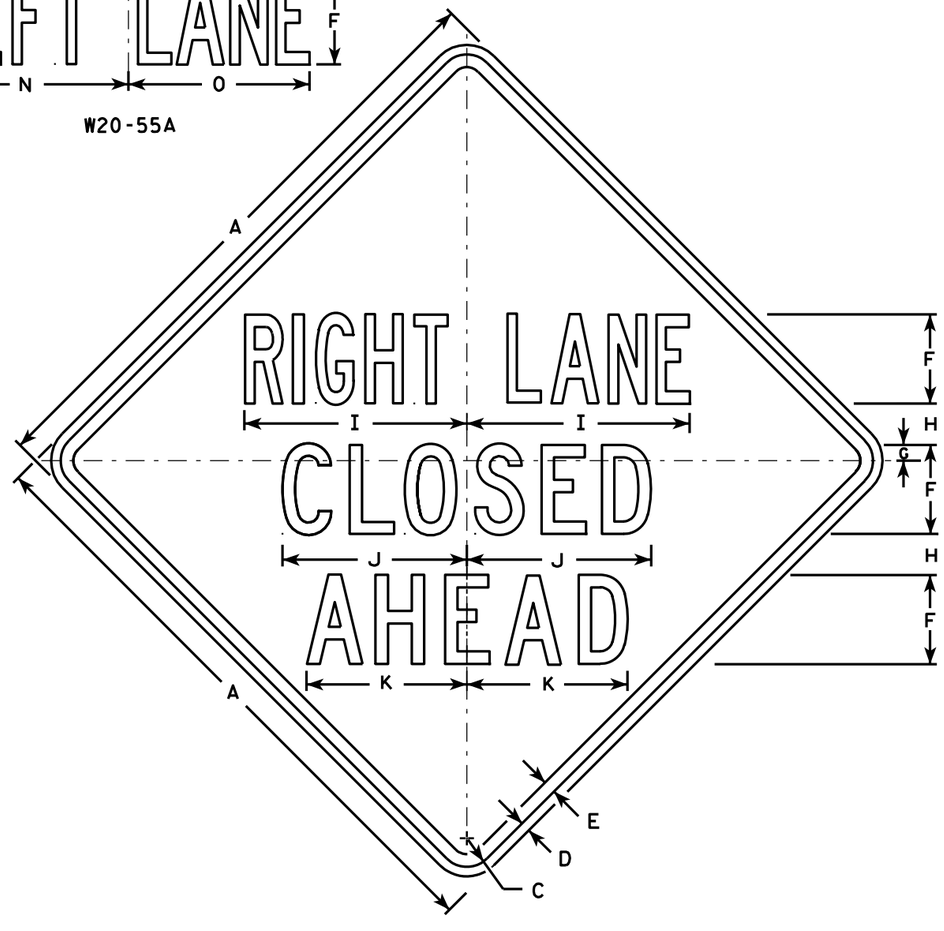
7

7

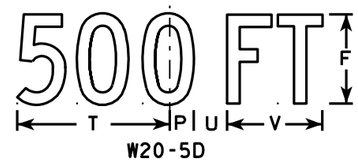
W20-56A



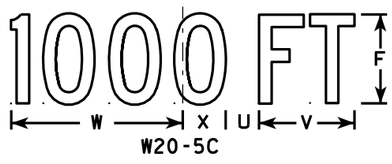
W20-55A



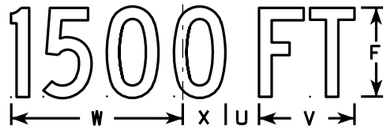
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

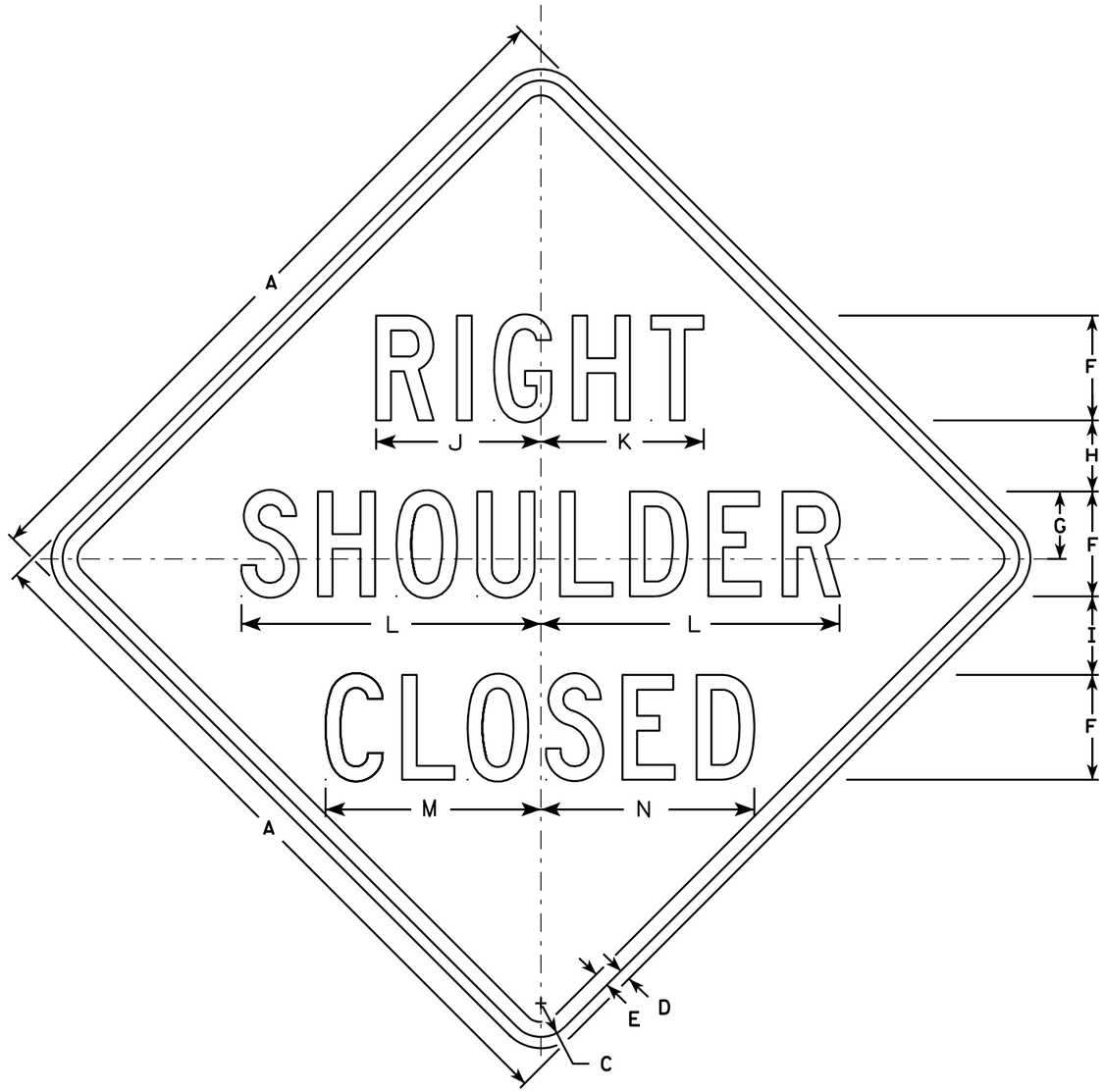
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

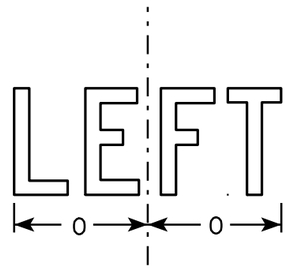
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 710	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W21-5A



W21-5AL

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	4	7 7/8	7 3/4	14 1/4	10 1/4	10 1/8	6 1/4												9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0

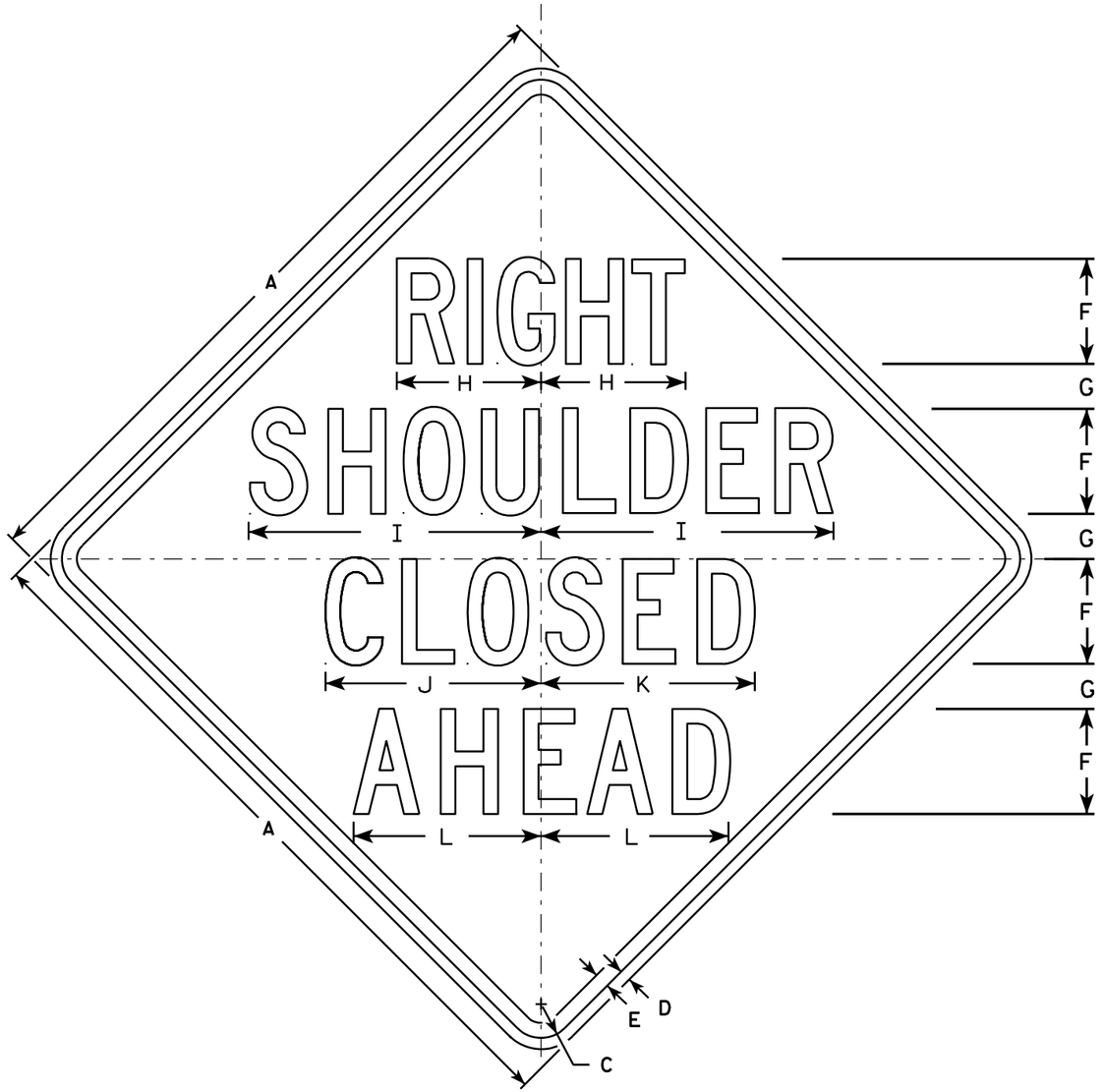
STANDARD SIGN
W21-5A

WISCONSIN DEPT OF TRANSPORTATION

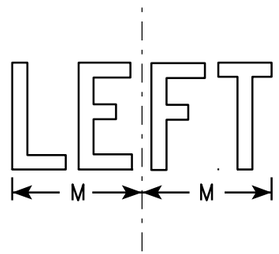
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 711 | E



W21-5B



W21-5BL

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 1/4	7 3/8	14 1/4	10 1/4	10 1/8	8 7/8	6 1/4														9.0
2S	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
2M	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
3	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
4	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
5	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0

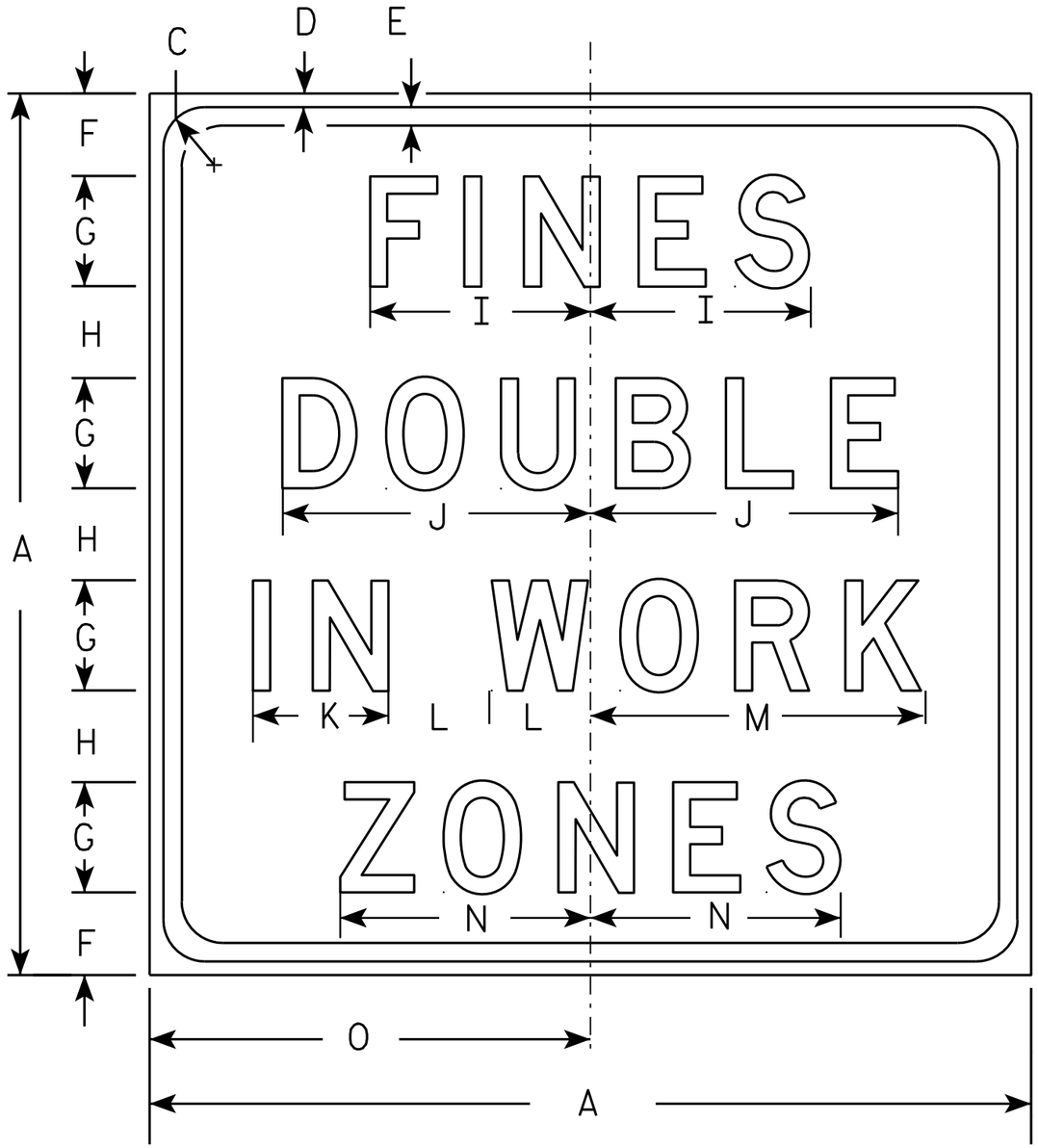
STANDARD SIGN
W21-5B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5B.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 712	E



W21-61

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	2 1/4	3	2 1/2	6	8 3/8	3 3/4	2 3/4	9 1/8	6 7/8	12												4.0
2S	36		1 5/8	5/8	3/4	3 3/8	4 1/2	3 3/4	9	12 5/8	5 1/2	4 1/8	13 3/4	10 1/4	18												9.0
2M	36		1 5/8	5/8	3/4	3 3/8	4 1/2	3 3/4	9	12 5/8	5 1/2	4 1/8	13 3/4	10 1/4	18												9.0
3	48		2 1/4	3/4	1	4 1/2	6	5	12	16 3/4	7 3/8	5 1/2	18 1/4	13 5/8	24												16.0
4																											
5																											

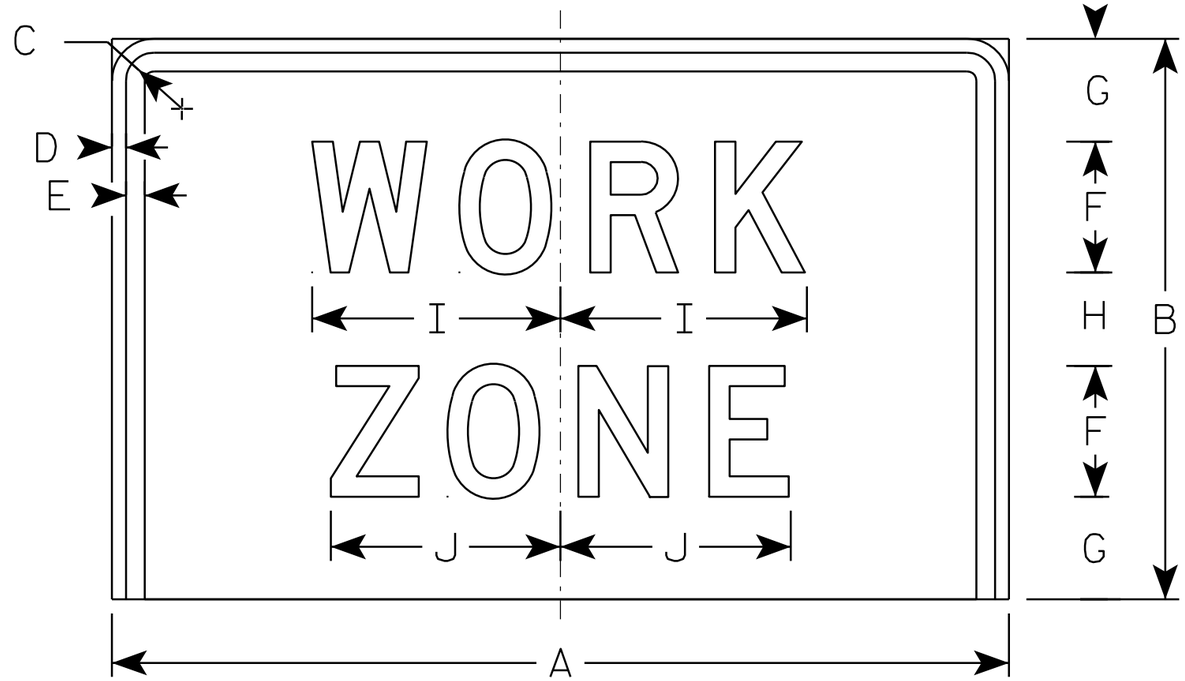
STANDARD SIGN
W21-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-61.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 713 | E



W21-620

NOTES

1. Sign is Type II - Type F - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
3																											
4																											
5																											

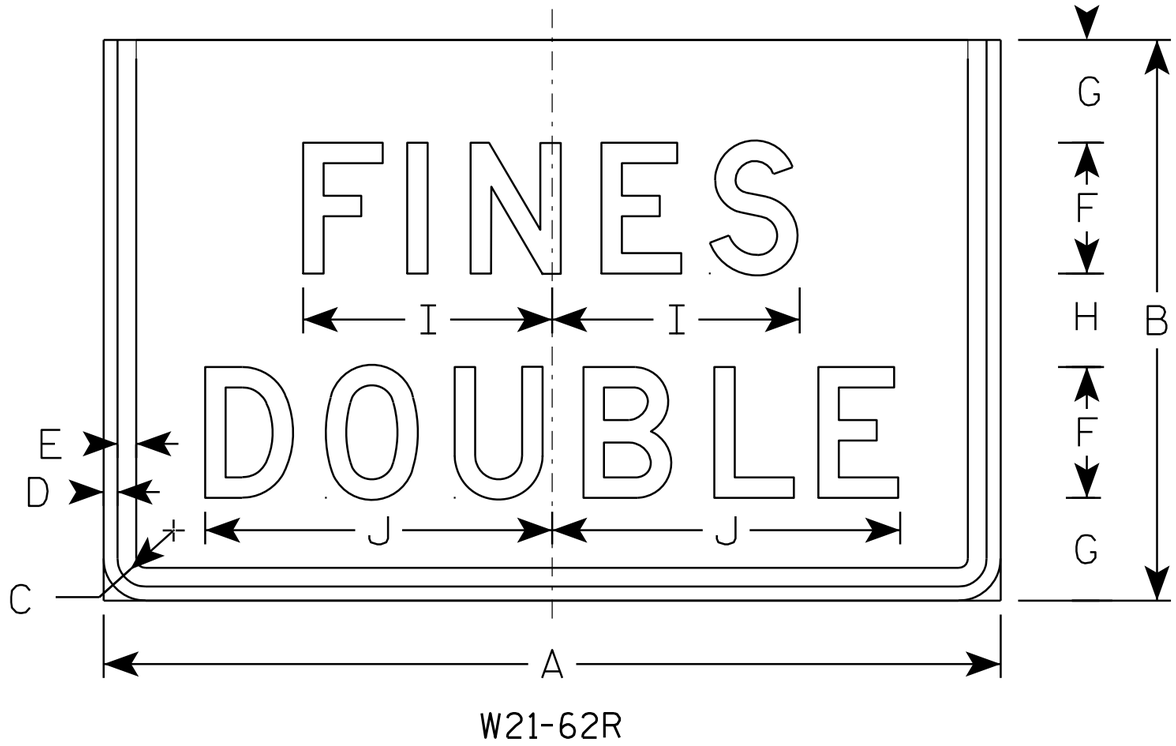
STANDARD SIGN
W21-620

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-620.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 714	E



W21-62R

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
W21-62R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-62R.2

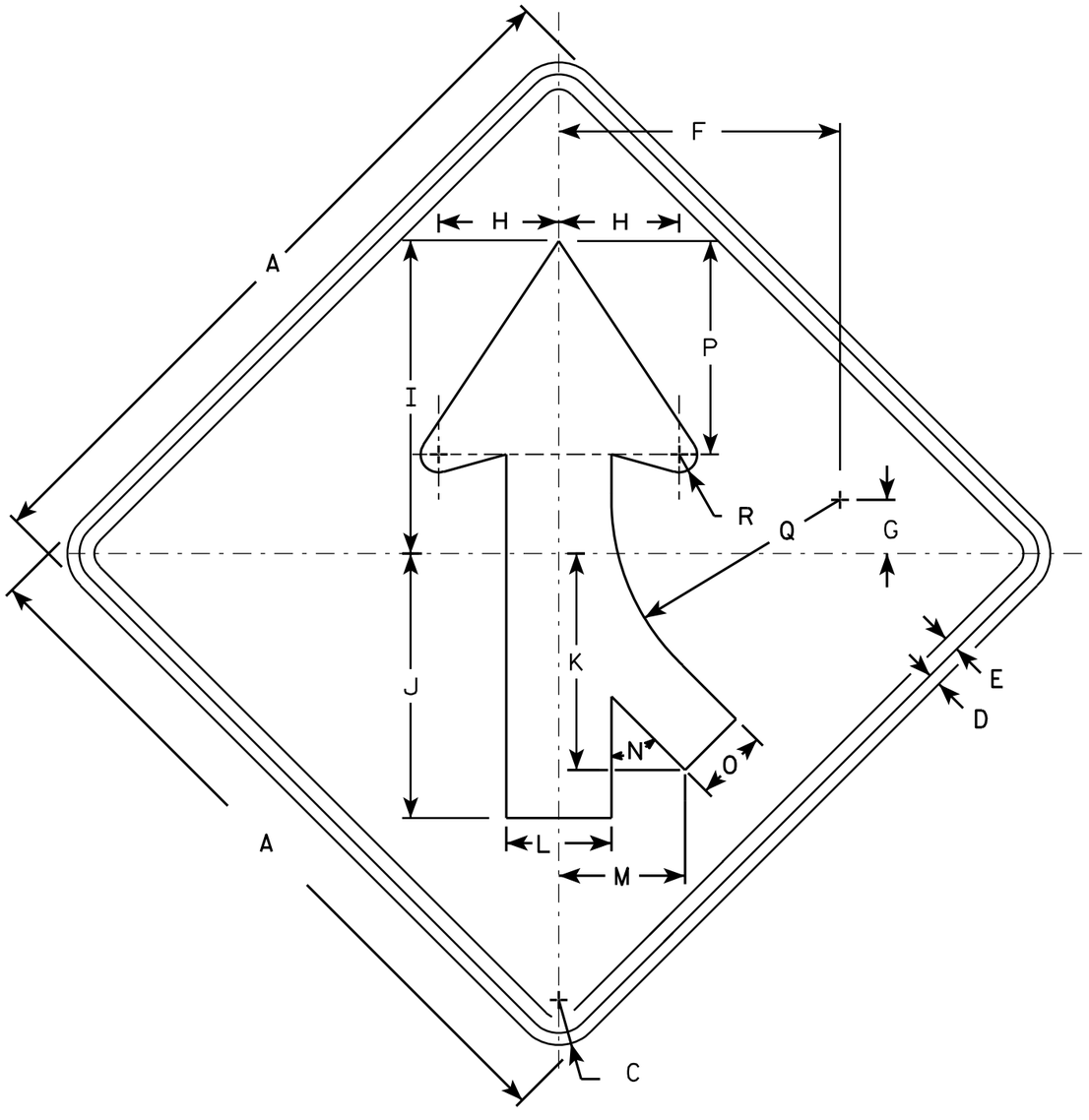
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 715	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W2162R.DGN PLOT DATE : 21-MAR-2011 10:51 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.108332:1.000000

WISDOT/CADDS SHEET 42

7

7



W4-1 R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

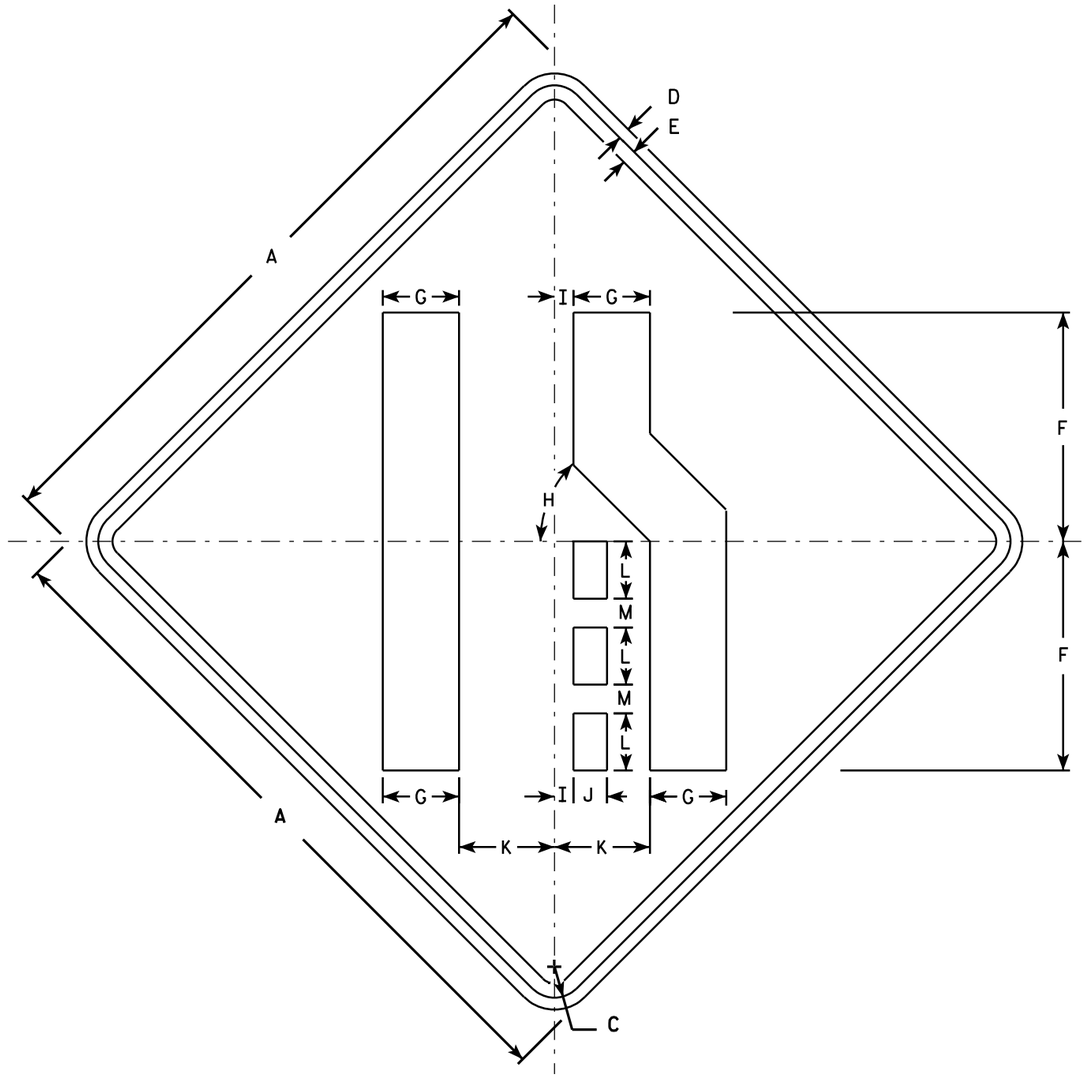
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rausch for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 716	E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

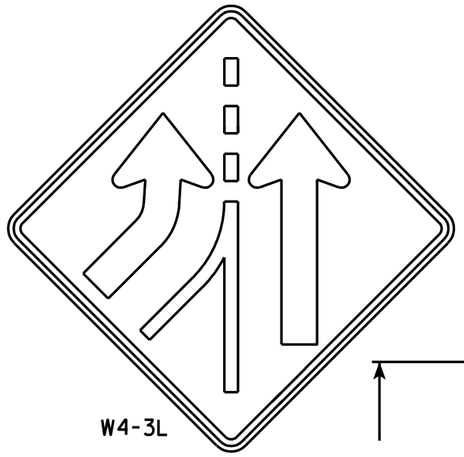
WISCONSIN DEPT OF TRANSPORTATION

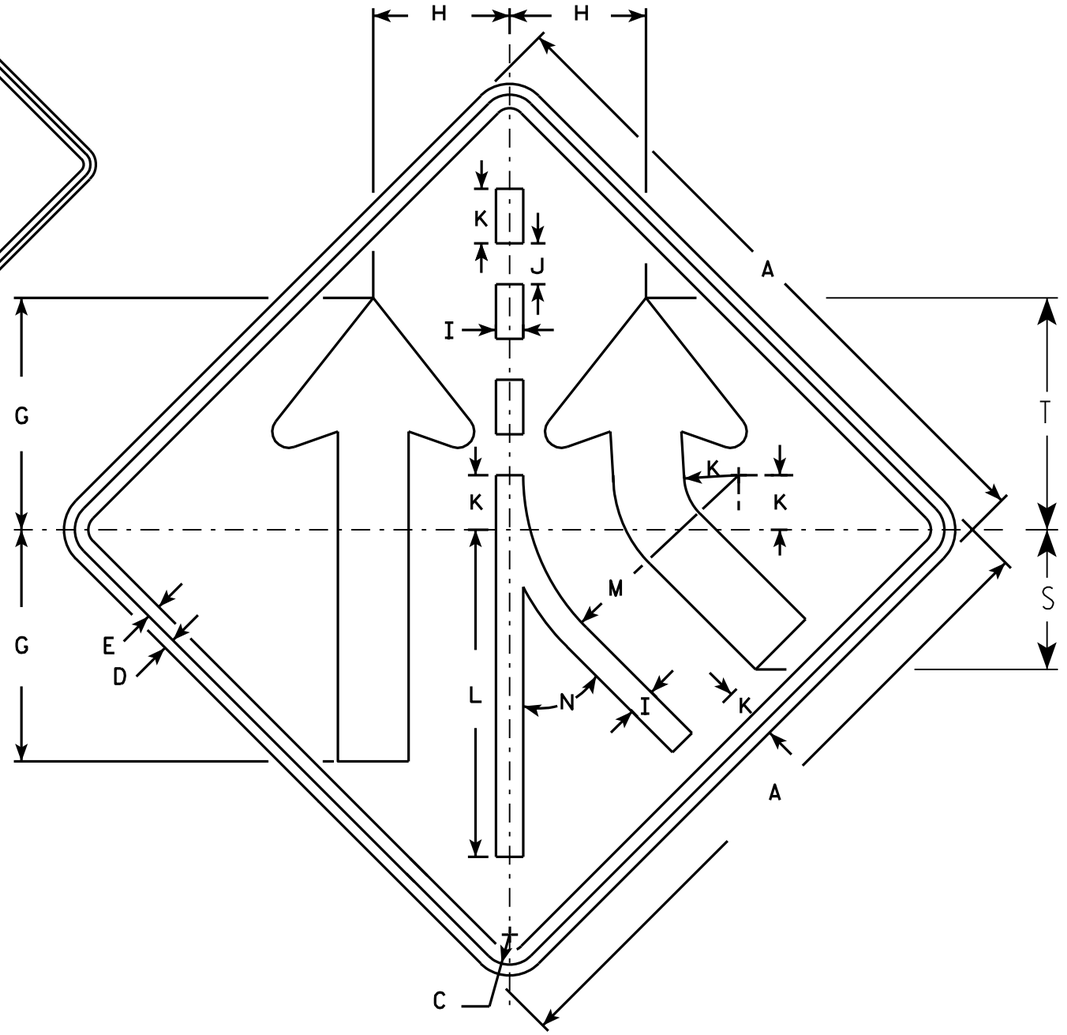
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 717 E

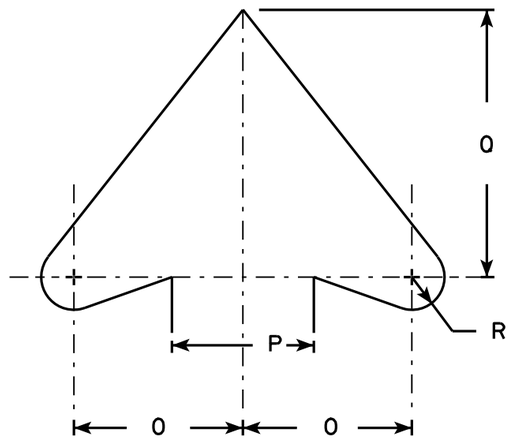




W4-3R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-3 L is the same as W4-3 R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		10 5/8	6 1/4	1 1/4	1 7/8	2 1/2	15	9 7/8	45°	3 7/8	3 1/4	6 1/8	3/4	6 3/8	10 5/8							6.25
2S	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2M	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
3																											
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W4-3

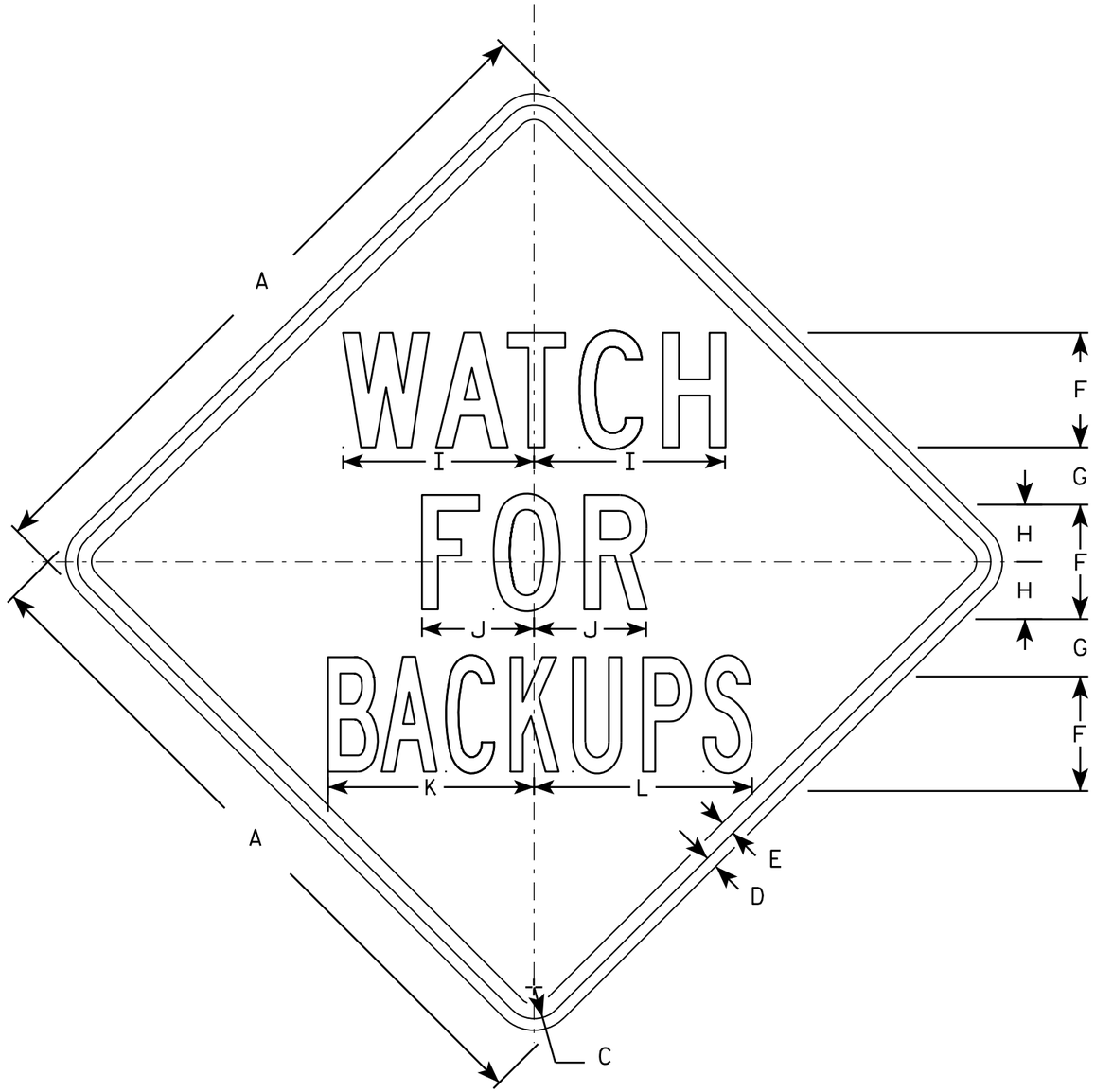
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-3.8

PROJECT NO:

SHEET NO: 718 E



W8-74

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Message - BLACK
3. Message Series - C except Line 3 is Series B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	6	2 1/2	3	10	5 7/8	10 3/4	11 3/8															9.0
2M	36		1 5/8	5/8	3/4	6	2 1/2	3	10	5 7/8	10 3/4	11 3/8															9.0
3	48		2 1/4	3/4	1	8	4	4	13 5/8	7 7/8	14 3/8	15 1/4															16.0
4	48		2 1/4	3/4	1	8	4	4	13 5/8	7 7/8	14 3/8	15 1/4															16.0
5	48		2 1/4	3/4	1	8	4	4	13 5/8	7 7/8	14 3/8	15 1/4															16.0

STANDARD SIGN
W8-74

WISCONSIN DEPT OF TRANSPORTATION

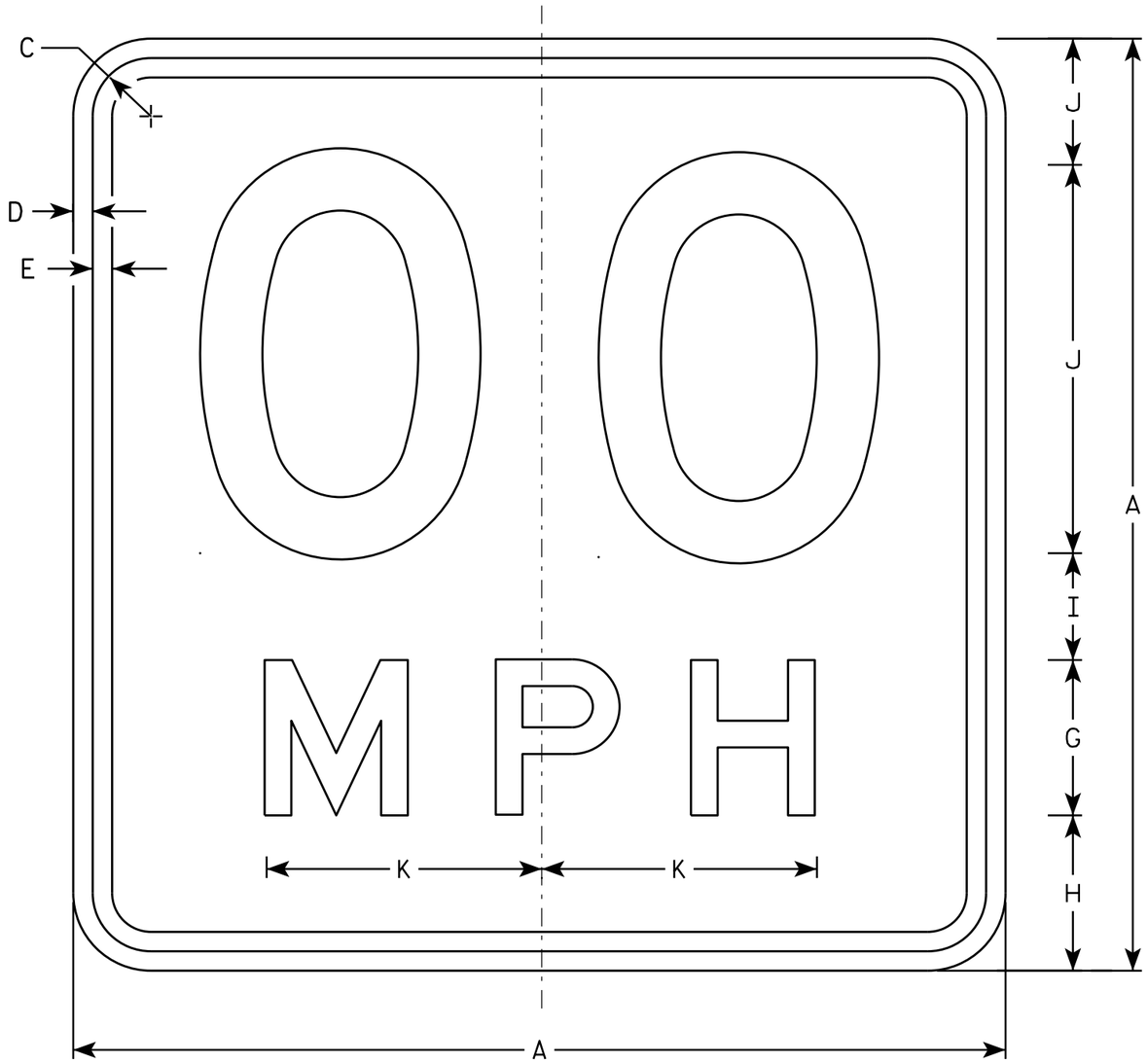
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/23/11 PLATE NO. W8-74.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 719 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W874.DGN PLOT DATE : 23-MAR-2011 10:22 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 7.510884:1.000000
WISDOT/CADDS SHEET 42



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

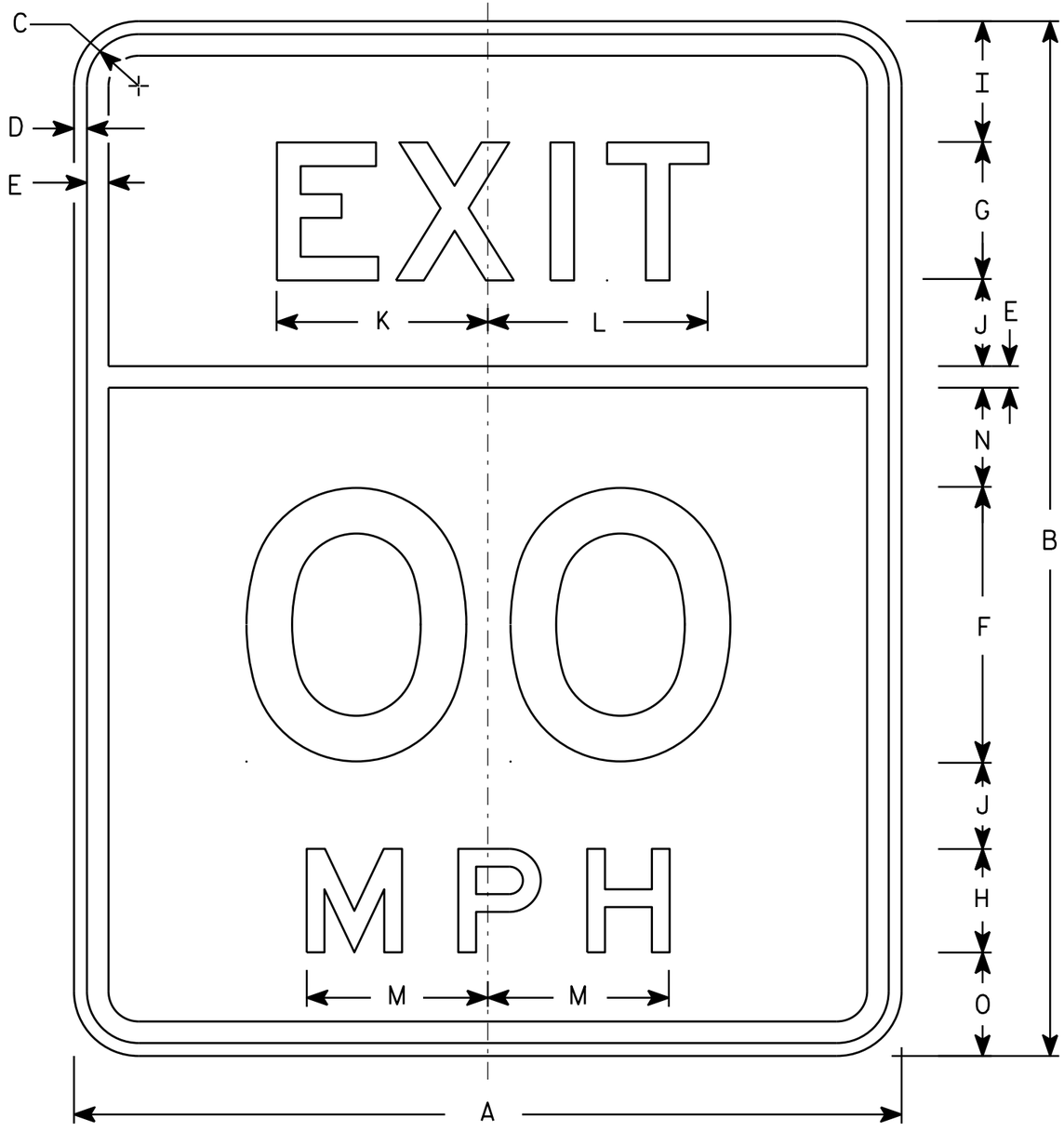
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 720 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W013-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
2M	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
3	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
4	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
5	48	60	2 1/4	3/4	1	16	8	6	7	5	12 1/4	12 3/4	10 5/8	5 3/4	6												20.0

STANDARD SIGN
W013-2

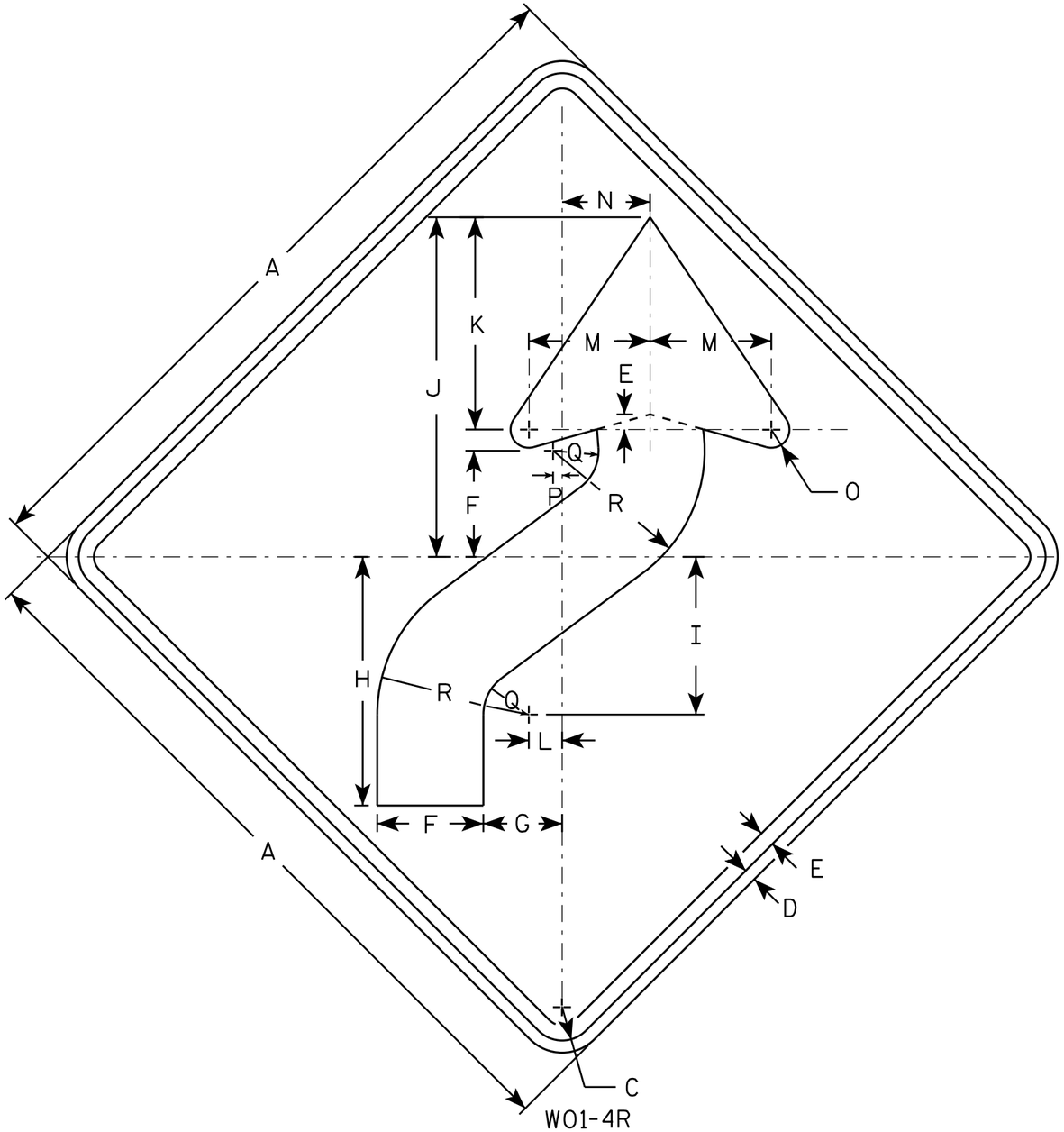
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/14 PLATE W013-2.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0132.DGN PLOT DATE : 10-MAR-2014 13:35 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.086268:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

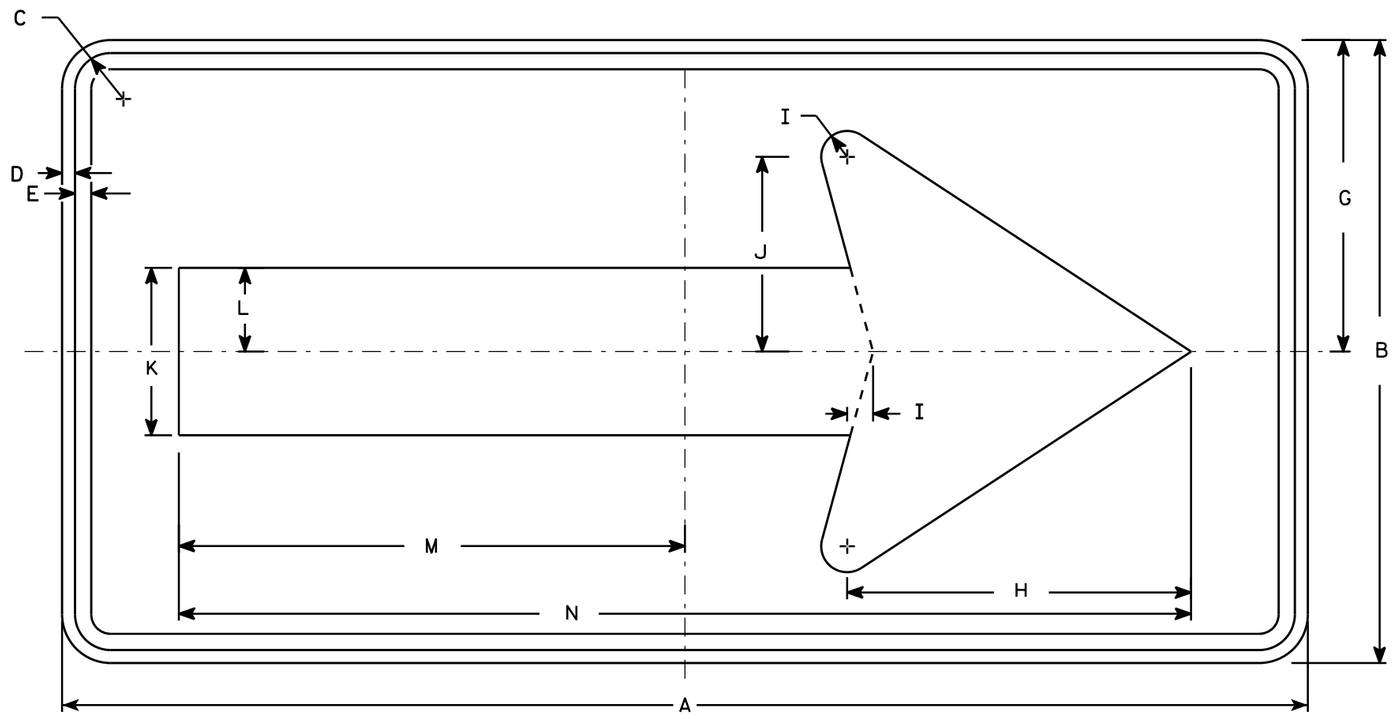
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42

7



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

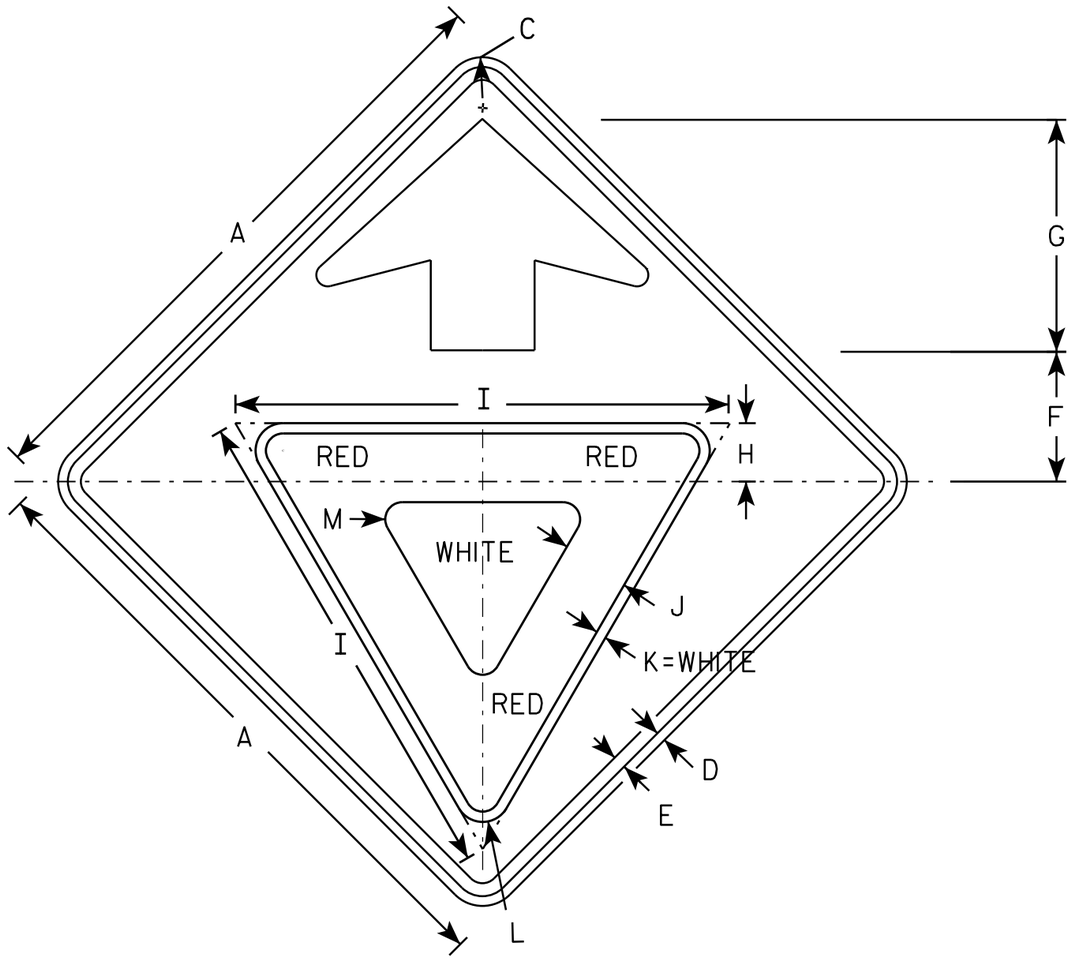
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

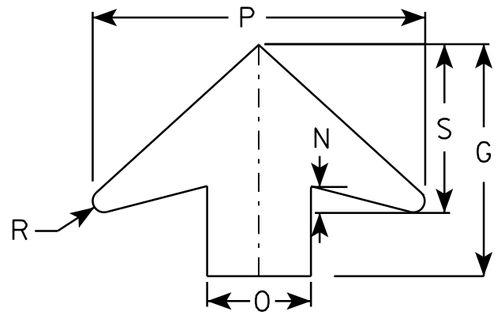
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W03-2

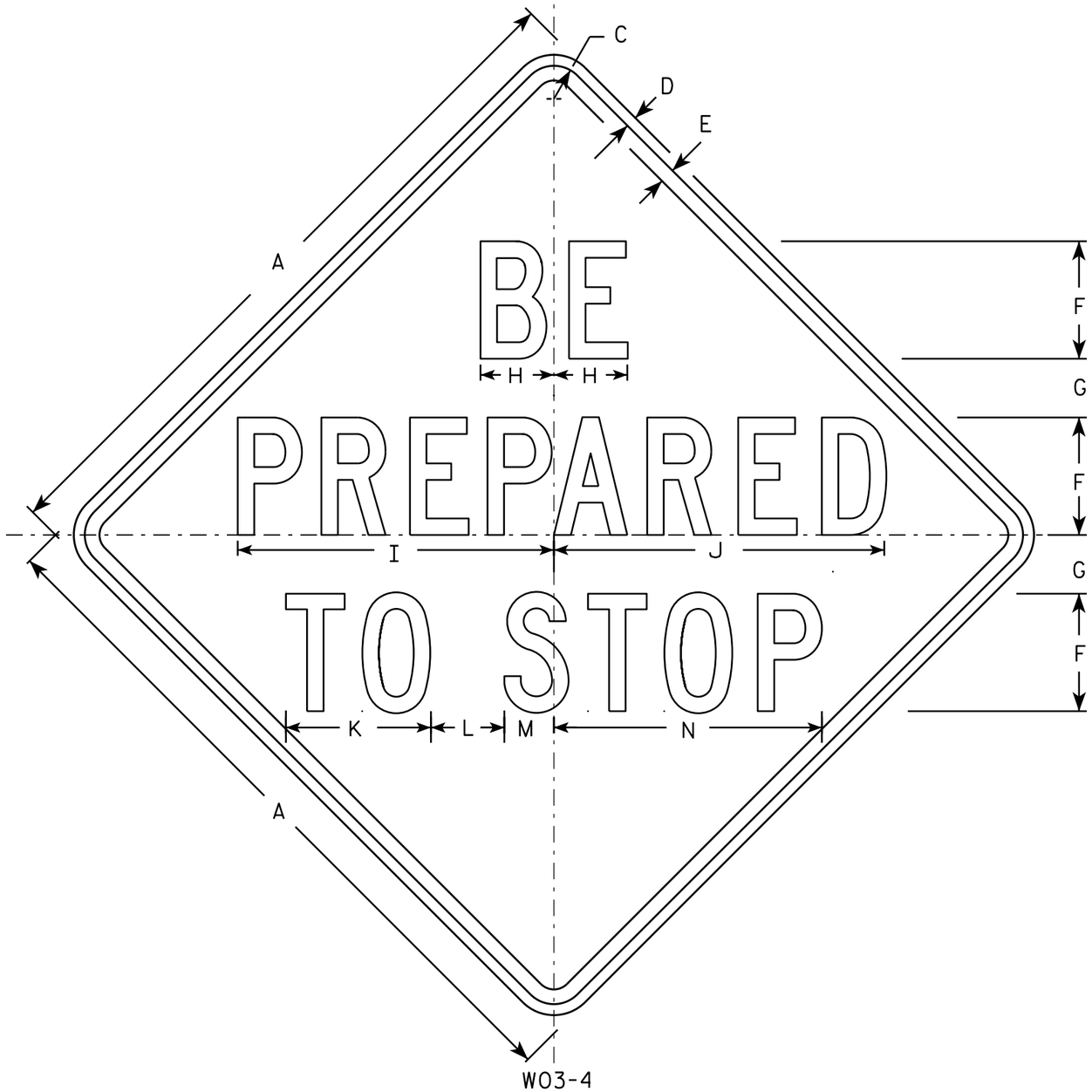
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-2.1

PROJECT NO:

SHEET NO: E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	6	2 1/2	3 3/4	15 7/8	16 7/8	7 3/8	4	2 3/8	13 3/4													9.0
2S	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
2M	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
3	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
4	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
5	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0

STANDARD SIGN
W03-4

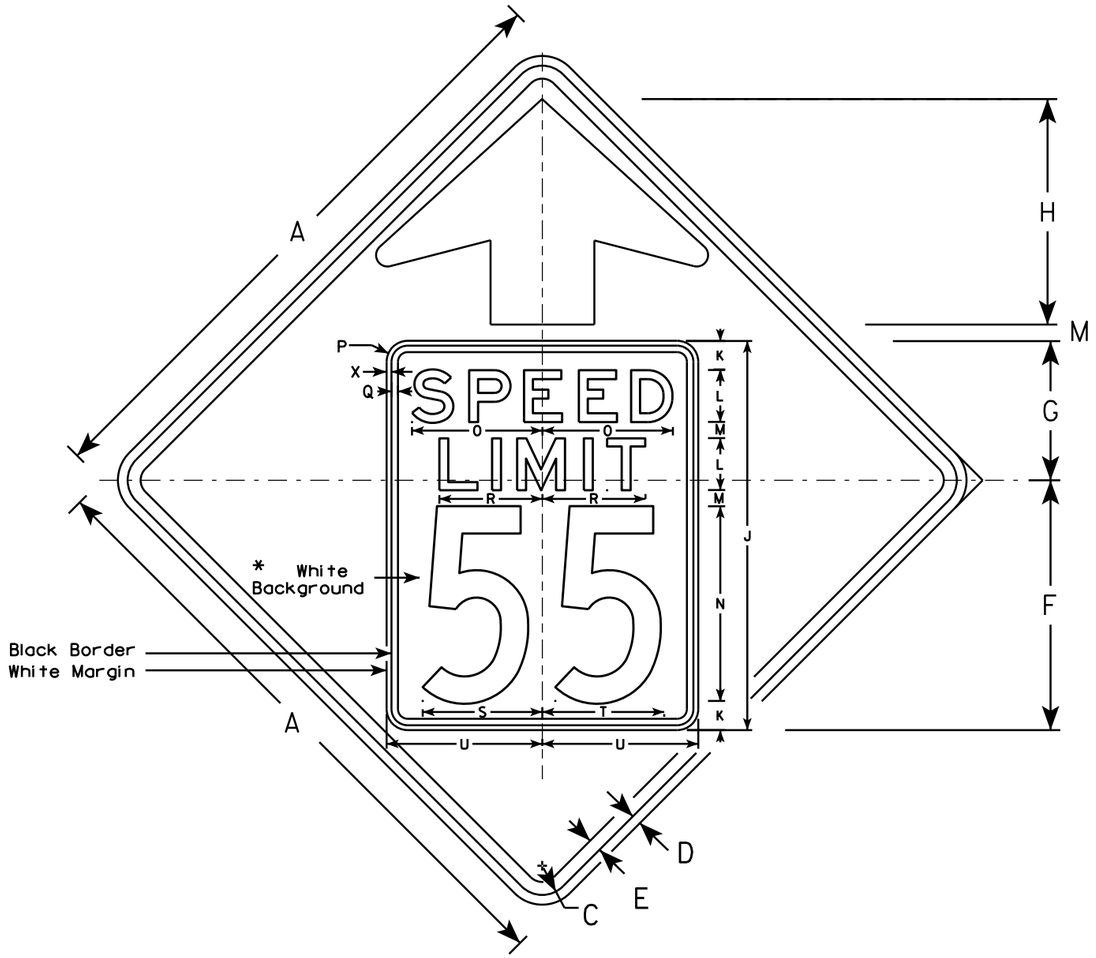
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/02/13 PLATE NO. W03-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W034.DGN PLOT DATE : 02-DEC-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.999518:1.000000
WISDOT/CADDS SHEET 42

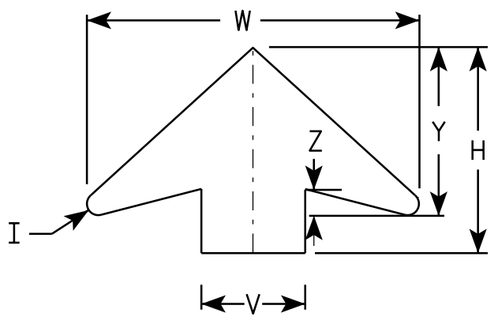


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

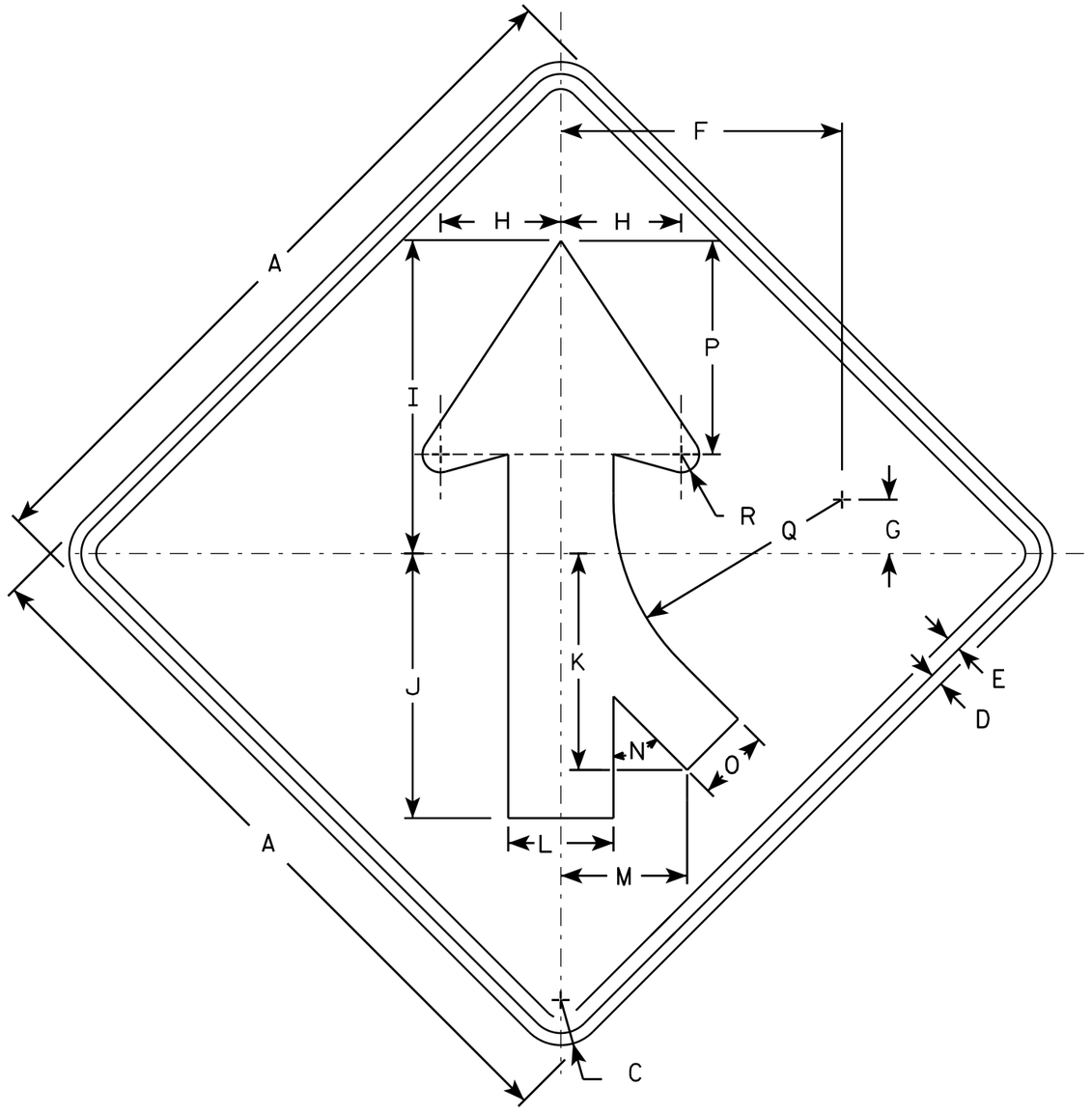
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

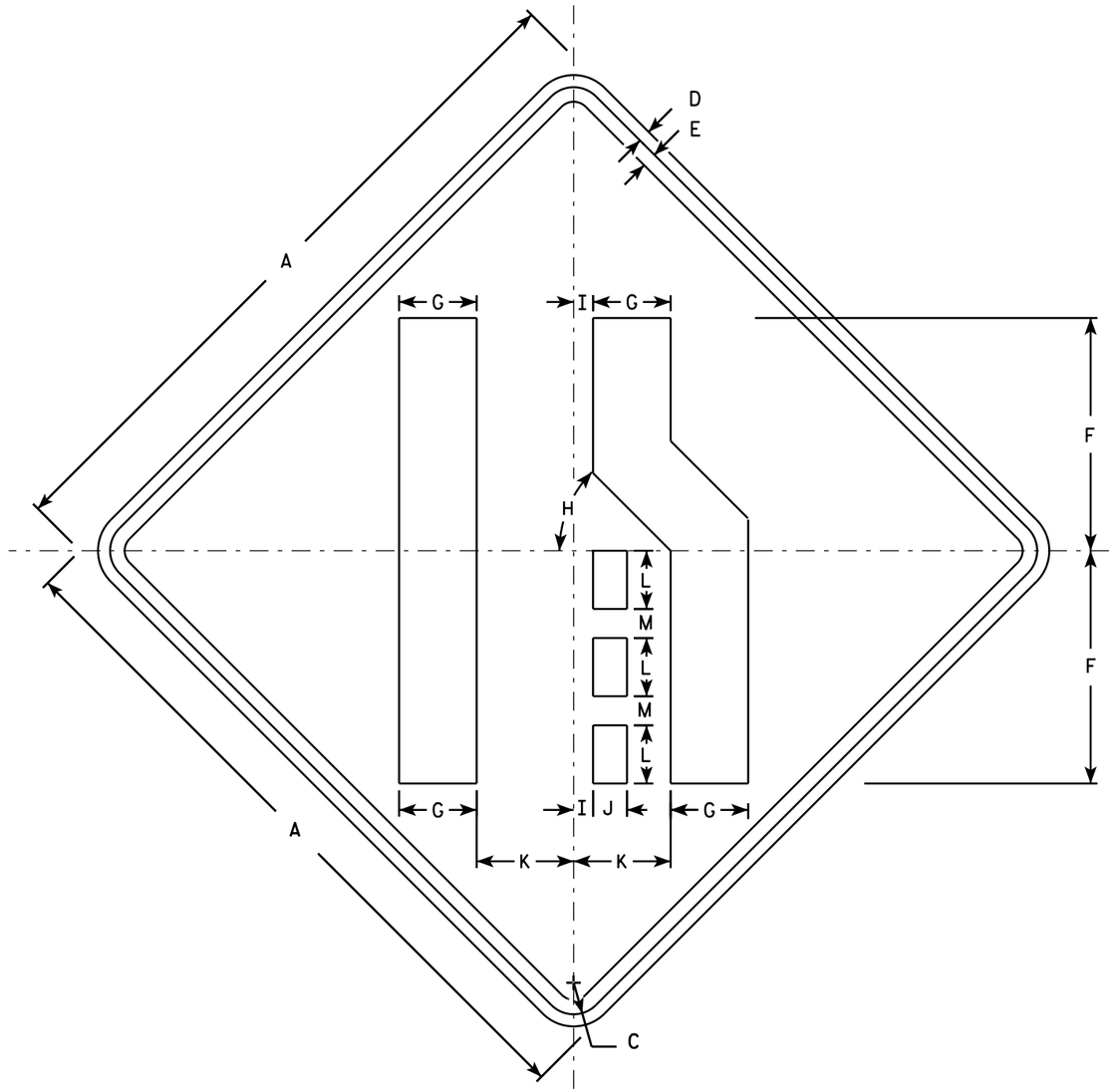
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1

727

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

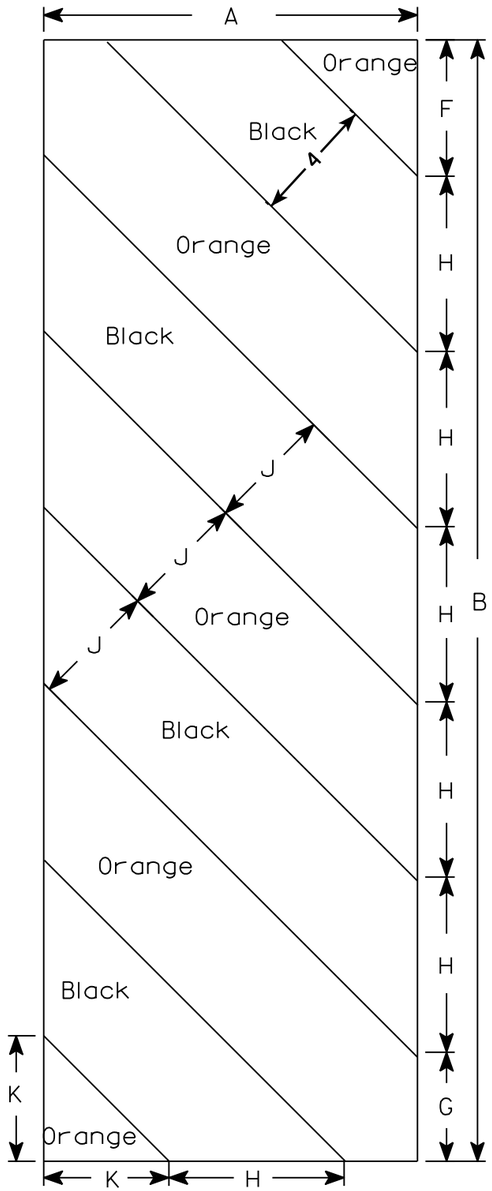
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

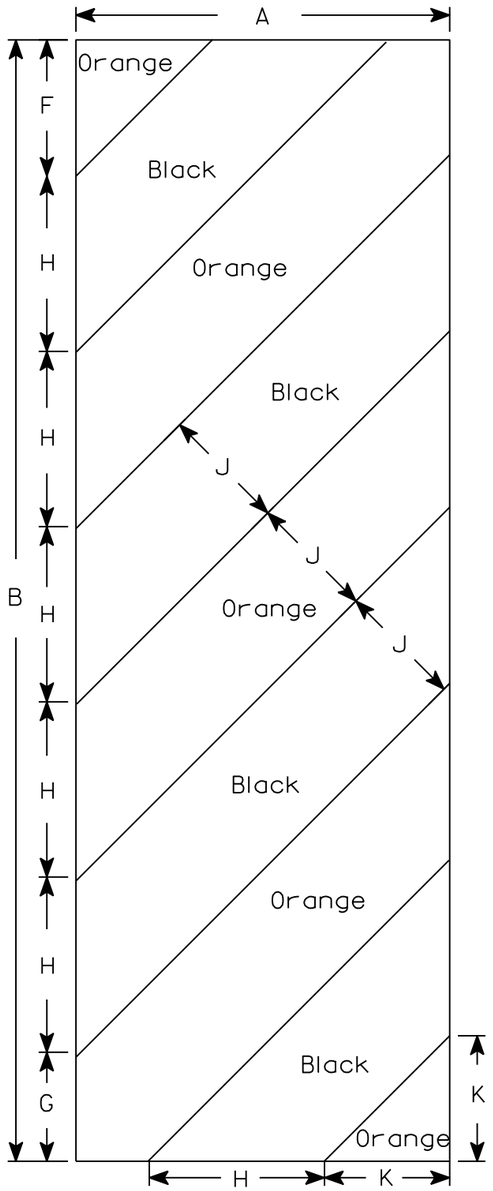
DATE 11/20/13 PLATE 728 W04-2.1

PROJECT NO:

SHEET NO: E



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

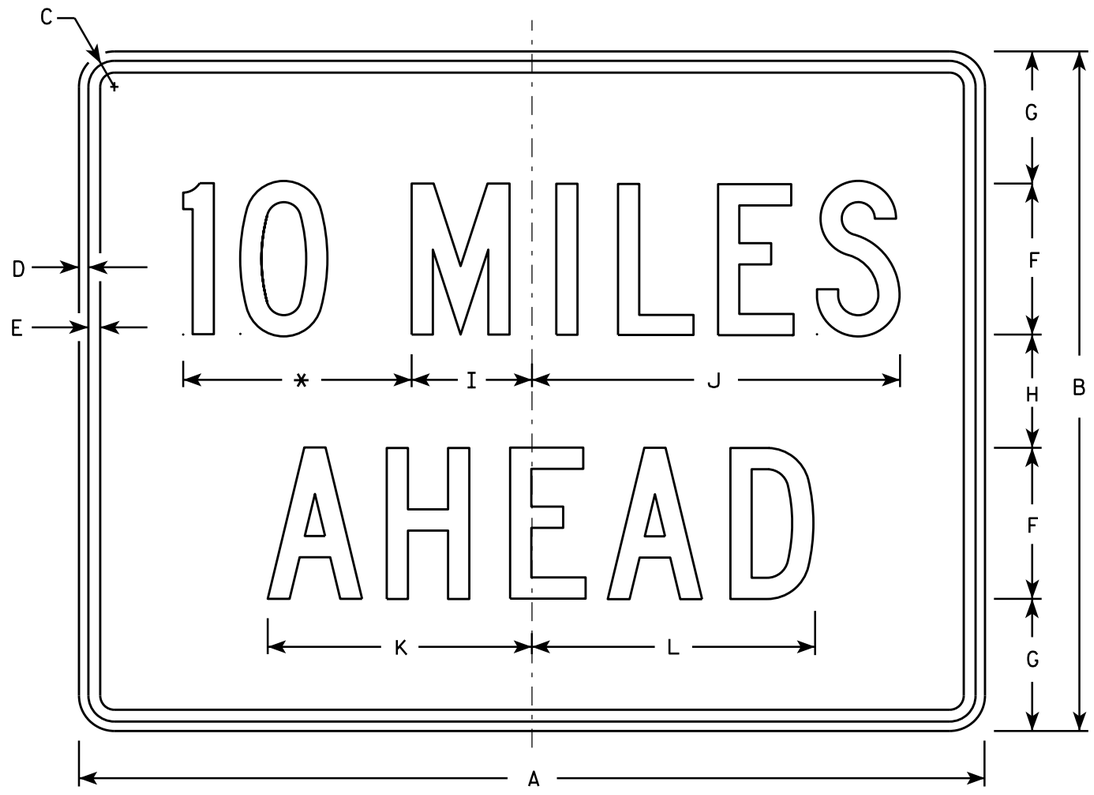
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

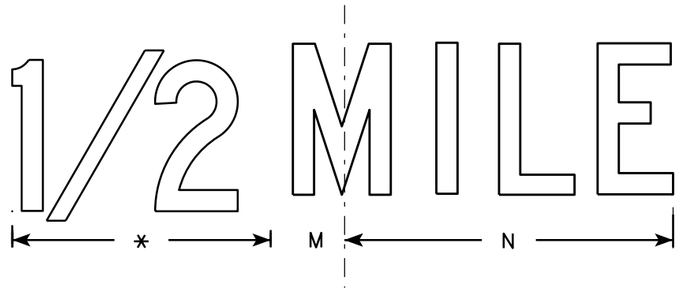
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE No. W05-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	13													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0

STANDARD SIGN
W057-52

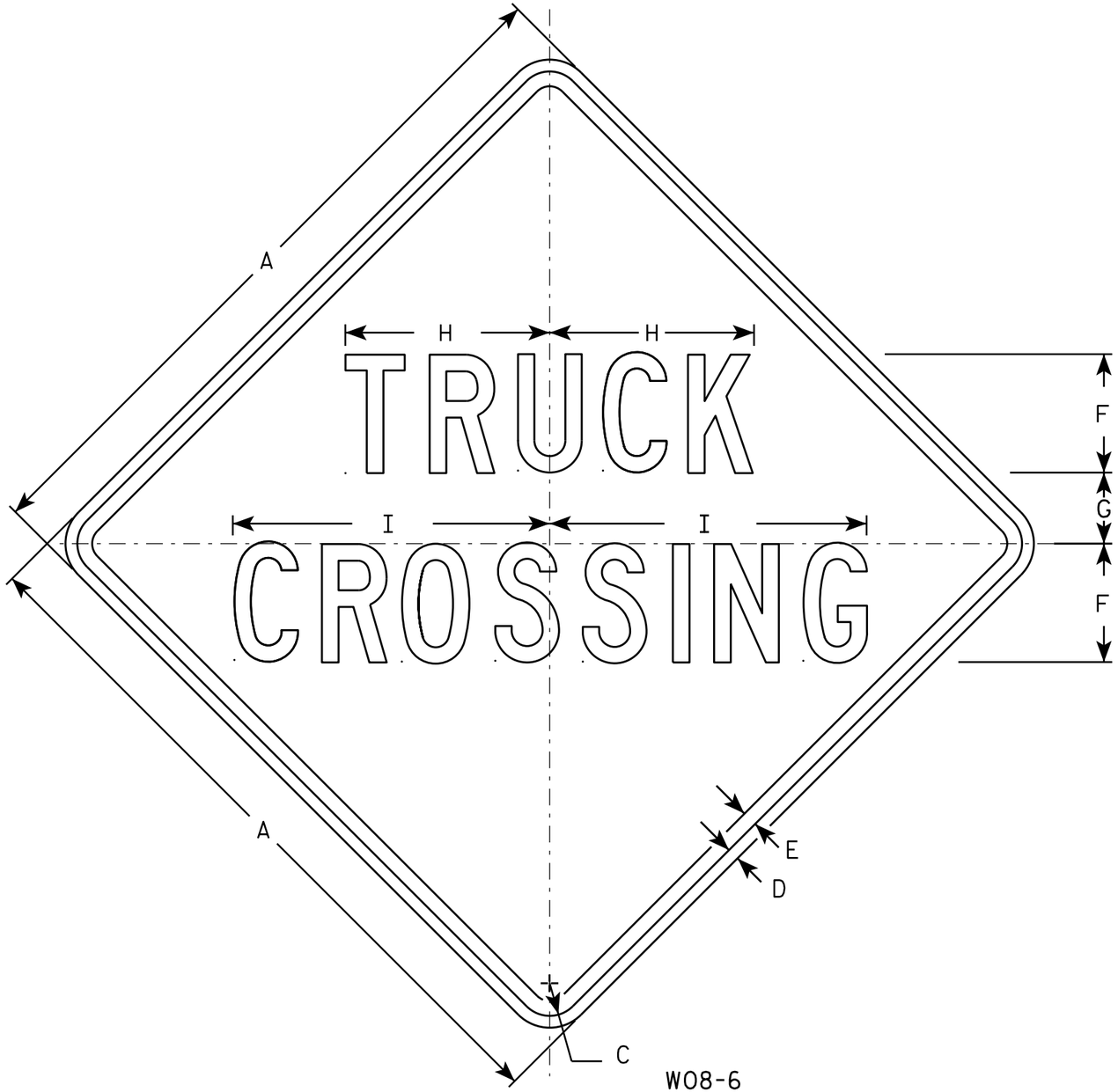
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W057-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W05752.DGN PLOT DATE : 28-FEB-2014 11:42 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.026599:1.000000 WISDOT/CADDS SHEET 42



W08-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	10 3/8	16																		9.0
2S	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
2M	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
3	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
4	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0

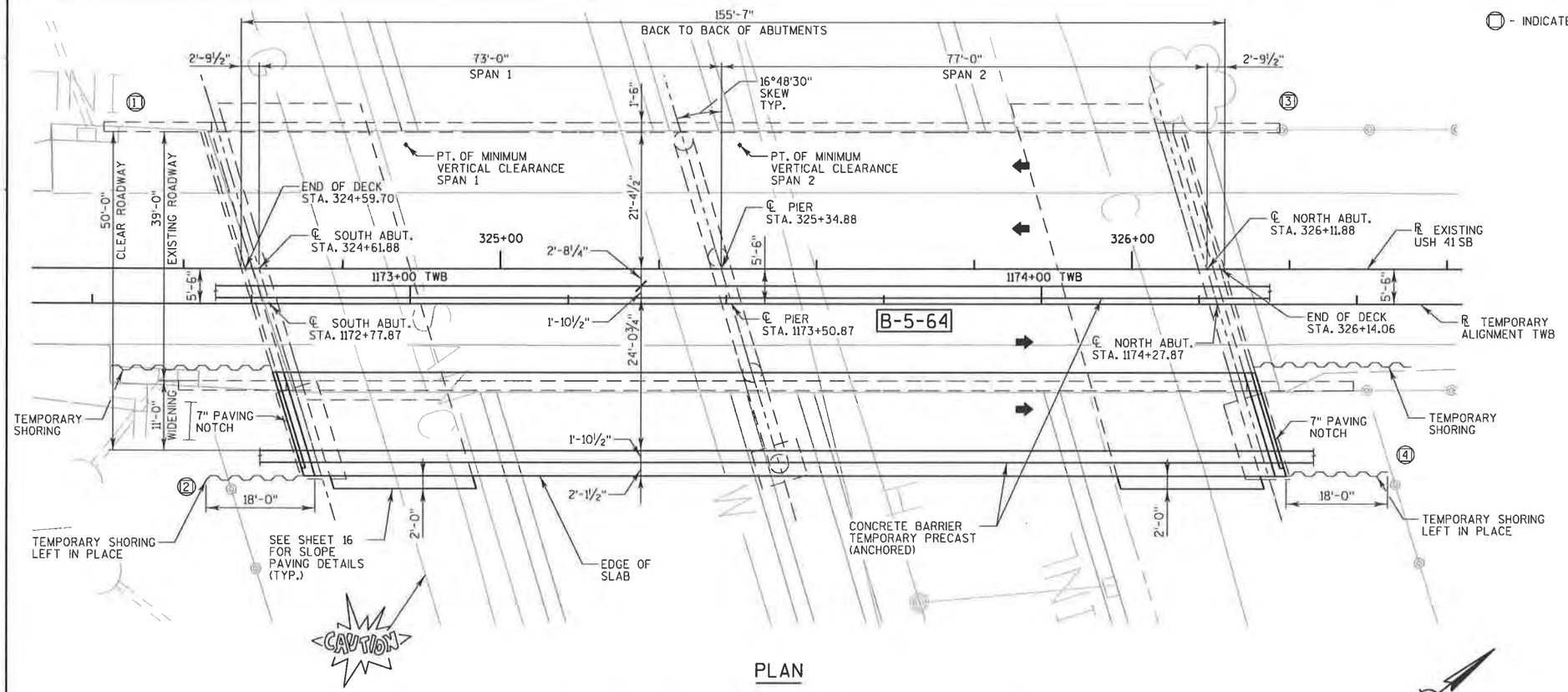
STANDARD SIGN
W08-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

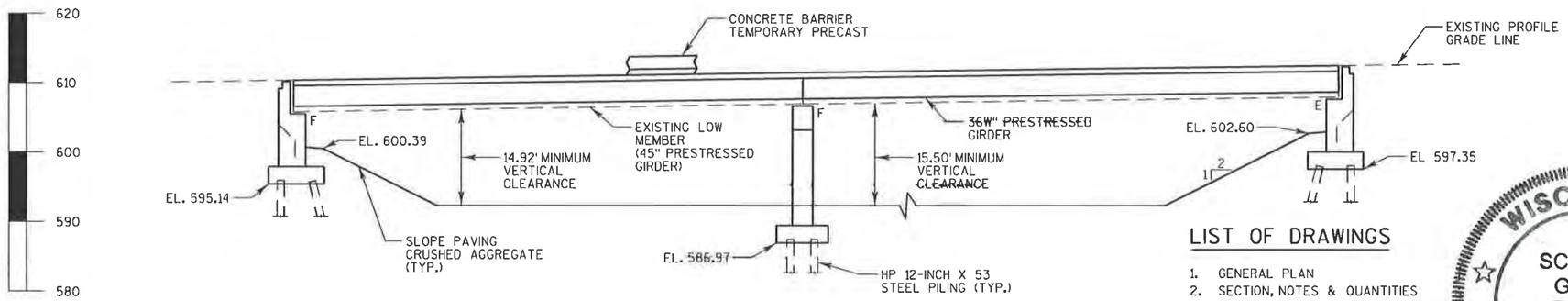
DATE 11/20/13 PLATE 731 "W08-6.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



PLAN

(REHAB - DECK WIDENING ON EXISTING TWO SPAN PRESTRESSED CONCRETE GIRDER)



NOTE:
PROPOSED 36W" GIRDER BEARING SEATS TO PROVIDE A MINIMUM OF 15'-0" VERTICAL CLEARANCE.

ELEVATION

(NORMAL TO ℄ OF STRUCTURE)

BENCH MARK

NO.	DESCRIPTION	ELEVATION
BM 538A	CHISELED "X" ON A FIRE HYDRANT BURY BOLT IN THE NORTHWEST QUADRANT OF USH 41 AND VELP AVE. 75' NORTH OF THE CENTERLINE OF VELP AVE. AND 110' EAST OF THE CENTERLINE OF PRIVATE ENTRANCE TO VENDERVEST HARLEY DEALERSHIP.	591.70

LIST OF DRAWINGS

1. GENERAL PLAN
2. SECTION, NOTES & QUANTITIES
3. CONSTRUCTION STAGING
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER DETAILS
9. 36W" PRESTRESSED GIRDER DETAILS
10. SUPERSTRUCTURE
11. SUPERSTRUCTURE SECTIONS & DETAILS 1
12. SUPERSTRUCTURE SECTIONS & DETAILS 2
13. N. ABUT. BEARING DETAILS
14. EXPANSION DEVICE
15. STEEL DIAPHRAGM
16. SLOPE PAVING
17. ~~SUBSURFACE EXPLORATION~~

WISCONSIN
SCOTT J. GINAL
E-38680
PORT WASHINGTON, WI
PROFESSIONAL ENGINEER
8/26/2014

⓪ - INDICATES WING NUMBER

STATE PROJECT NUMBER
1133-10-71

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93 (WIDENING)
DESIGN LOADING: HS20 (EXISTING)
INVENTORY RATING: RF = HS17
OPERATIONAL RATING: RF = HS28
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 200 KIPS.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY
SUPERSTRUCTURE ---------- f'c = 4,000 P.S.I
ALL OTHER ---------- f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.

36W" PRESTRESSED GIRDERS,
CONCRETE MASONRY ---------- f'c = 8,000 P.S.I.
PRESTRESSING STRANDS - 0.6"ϕ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12-INCH X 53 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS ⚠ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60'-0" LONG.

PIERS TO BE SUPPORTED ON HP 12-INCH X 53 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS ⚠ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 50'-0" LONG.

⚠ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC VOLUME

USH 41 SB	VELP AVENUE
A.D.T. = 15,500 (2015)	A.D.T. = 25,500 (2015)
R.D.S. = 70 M.P.H.	R.D.S. = 40 M.P.H.

DESIGN CONTACT:
SCOTT GINAL
(262)-317-3344

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

NO.	DATE	REVISION	BY

R.A. Smith National
Beyond Surveying and Engineering

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 09/06/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-64

USH 41 SB OVER VELP AVENUE

COUNTY	~~TOWN/CITY~~/VILLAGE
BROWN	HOWARD

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	JAD	DESIGN CK'D.	SJG	DRAWN BY	JAD	PLANS CK'D.	SJG

GENERAL PLAN

SHEET 1 OF 17
732

8

8

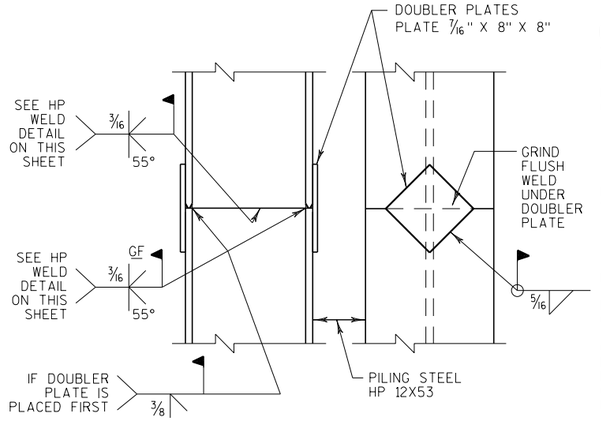
STATE PROJECT NUMBER

1133-10-71

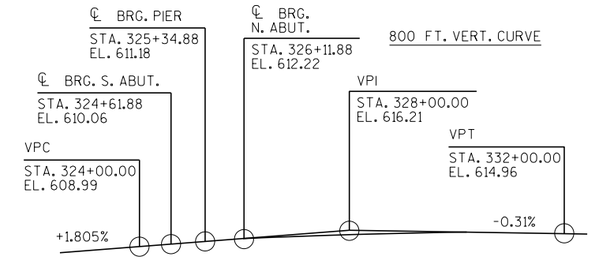
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	PIER	NORTH ABUT.	TOTALS
203.0200	REMOVING OLD STRUCTURE STA 325+35	LS	---	---	---	---	1
203.0225.S	DEBRIS CONTAINMENT B-5-64	LS	---	---	---	---	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-5-64	LS	---	---	---	---	1
210.0100	BACKFILL STRUCTURE	CY	---	90	---	80	170
502.0100	CONCRETE MASONRY BRIDGES	CY	87	27	15	29	158
502.2000	COMPRESSION JOINT SEALER PREFORMED ELASTOMERIC 3-INCH	LF	---	17	---	17	34
502.3100	EXPANSION DEVICE B-5-64	LS	---	---	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	280	---	---	---	280
502.5002	MASONRY ANCHORS TYPE L NO. 4 BARS	EACH	---	---	---	4	4
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	---	---	3	---	3
502.5010	MASONRY ANCHORS TYPE L NO. 6 BARS	EACH	---	13	12	15	40
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	302	---	---	---	302
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	20,430	1,430	3,110	1,670	26,640
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	---	2	4	---	6
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	---	---	---	2	2
506.4000	STEEL DIAPHRAGMS B-5-64	EACH	4	---	---	---	4
511.1200	TEMPORARY SHORING B-5-64	SF	---	240	---	240	480
511.2200	TEMPORARY SHORING LEFT IN PLACE B-5-64	SF	---	172	---	170	342
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	7	---	5	12
550.0500	PILE POINTS	EACH	---	4	4	4	12
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	---	240	200	240	680
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	---	45	---	45	90
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	50	---	50	100
	NON-BID ITEMS						
	FILLER	SIZE					1/2" & 3/4"

NOTE: ALL ITEMS ARE CATEGORY 1000.



PILE SPLICE DETAILS



PROFILE GRADE LINE EXISTING USH 41 SB

FOR INFORMATION ONLY. PROFILE GRADE LINE INFORMATION SHOWN IS FROM ORIGINAL CONSTRUCTION PLANS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

AT THE ABUTMENTS ALL EXCAVATED VOLUME BELOW THE ROADWAY SUBGRADE NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. THE STRUCTURE BACKFILL ESTIMATED QUANTITIES ASSUMED A 1½:1 EXCAVATION SLOPE AT THE ABUTMENTS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE ABUTMENTS AND PIER.

DIMENSIONS OF EXISTING BRIDGE MEMBERS SHOWN ARE BASED ON ORIGINAL PLANS AND OVERLAY PLANS.

ORIGINAL PLANS AND CONCRETE OVERLAY PLANS OF EXISTING BRIDGE B-5-64 ARE AVAILABLE AT THE WISDOT NORTHEAST REGION OFFICE. REFERENCE THESE PLANS FOR THE DESIGN OF SLAB OVERHANG SHORING AND TEMPORARY BRACING DURING CONSTRUCTION.

THIS STRUCTURE WILL WIDEN THE EXISTING STRUCTURE, B-5-64, A TWO SPAN, 155'-7" LONG, PRESTRESSED CONCRETE GIRDER BRIDGE SET ON CONCRETE ABUTMENTS AND A MULTI-COLUMN PIER.

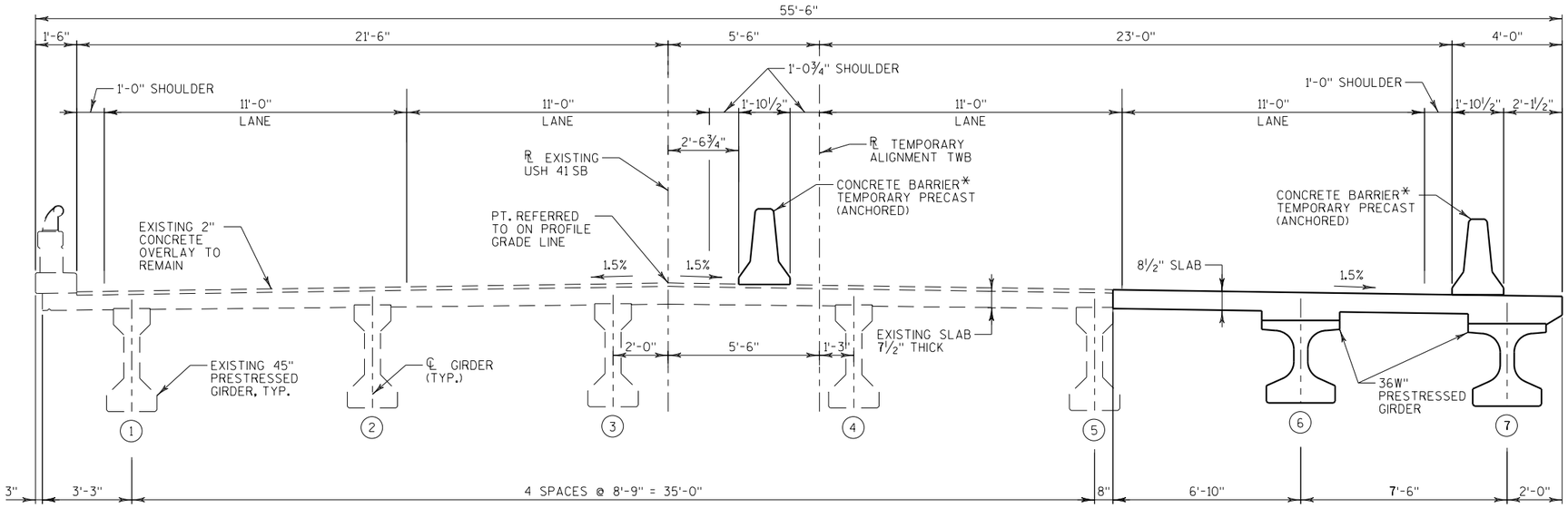
THE MINIMUM CONCRETE HAUNCH AT THE EDGE OF THE EXISTING GIRDER FLANGES SHALL BE 1¼" AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE HAUNCH DEPTH OF 2½" WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

THE LOCATION OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED AGGREGATE TO THE EXTENT SHOWN ON SHEET 1 AND IN THE SLOPE PAVING DETAILS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

ALL CONCRETE REMOVAL NOT COVERED BY NEW CONCRETE SHALL BE DEFINED BY A 1 INCH DEEP SAWCUT.

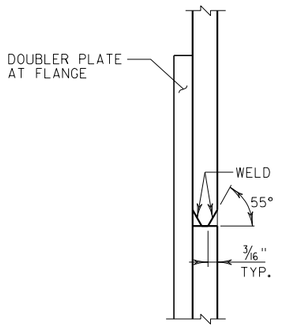


TYPICAL SECTION THRU BRIDGE

(LOOKING NORTH)

○ - INDICATES GIRDER NUMBER

* = CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED) IS A ROADWAY ITEM, TYPICAL.



HP WELD DETAIL

(FLANGE SHOWN, WEB SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

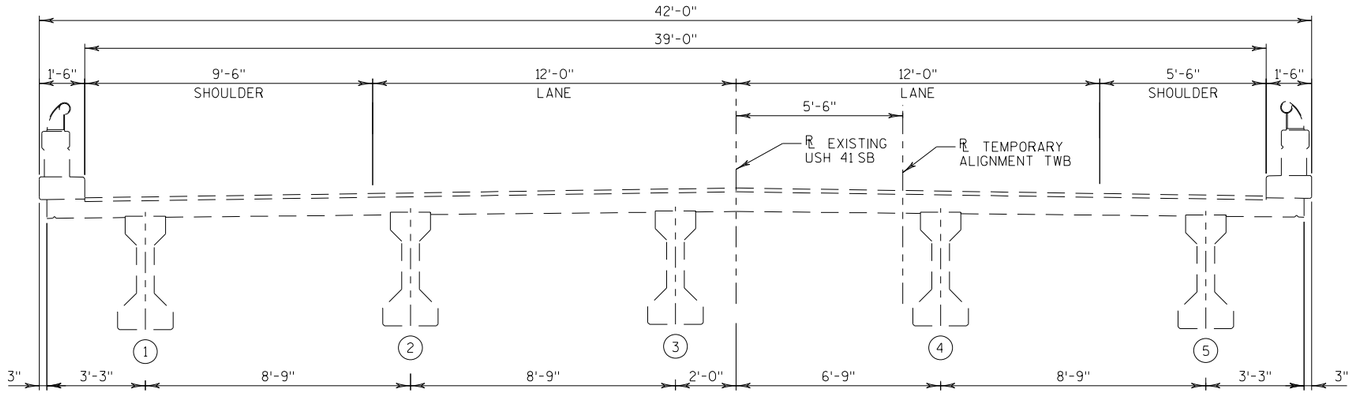
SECTION, NOTES & QUANTITIES

SHEET 2 OF 17

733

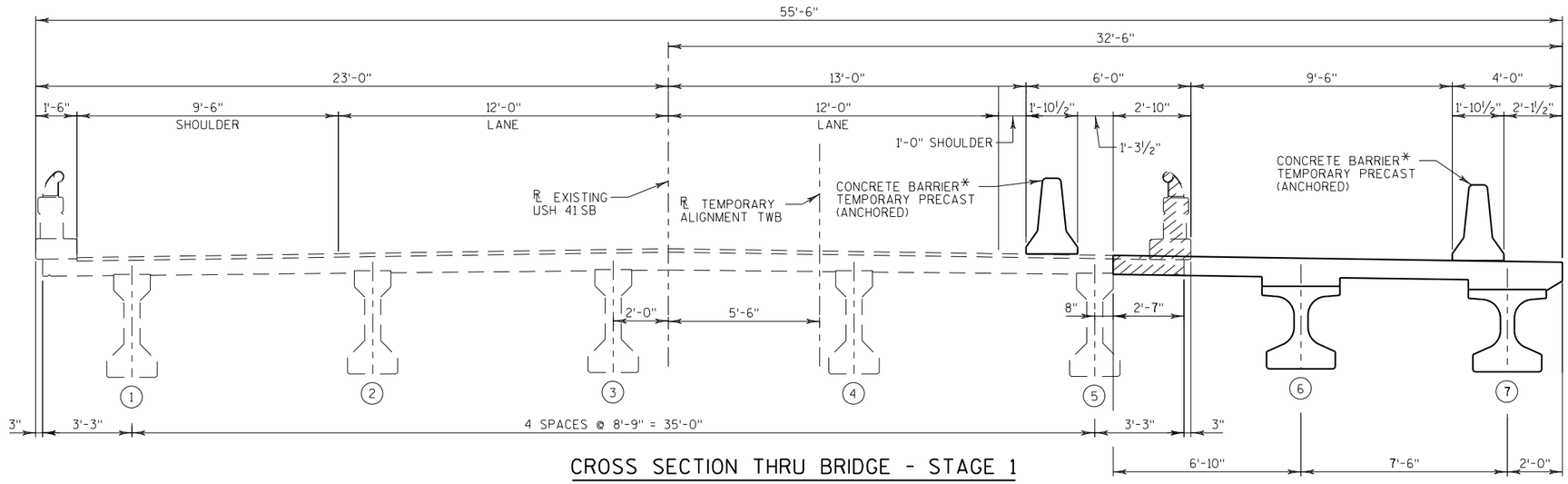
8

8



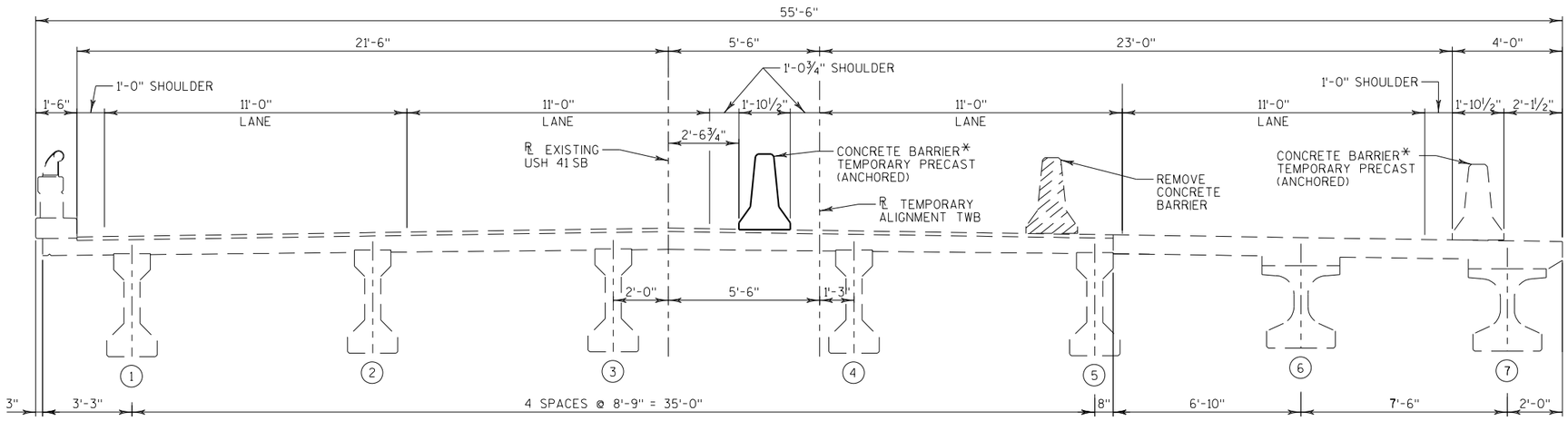
CROSS SECTION THRU EXISTING BRIDGE

(LOOKING NORTH)



CROSS SECTION THRU BRIDGE - STAGE 1

(LOOKING NORTH)



CROSS SECTION THRU BRIDGE - STAGE 2

(LOOKING NORTH)

STATE PROJECT NUMBER

1133-10-71

NOTES:

EXISTING CONCRETE OVERLAY TO REMAIN IN PLACE.

CONFORM TO STANDARD DETAIL DRAWING "CONCRETE BARRIER TEMPORARY PRECAST" FOR REQUIRED ANCHORAGE IN STAGE 1 AND STAGE 2. ANCHORAGE OF TEMPORARY CONCRETE BARRIERS TO THE BRIDGE SLAB IS REQUIRED. CONCRETE BARRIER TEMPORARY PRECAST IS INCLUDED IN THE ROAD APPROACH QUANTITIES.

◯ - INDICATES GIRDER NUMBER

* = CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED) IS A ROADWAY ITEM, TYPICAL.

LEGEND

- REMOVAL
- EXISTING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

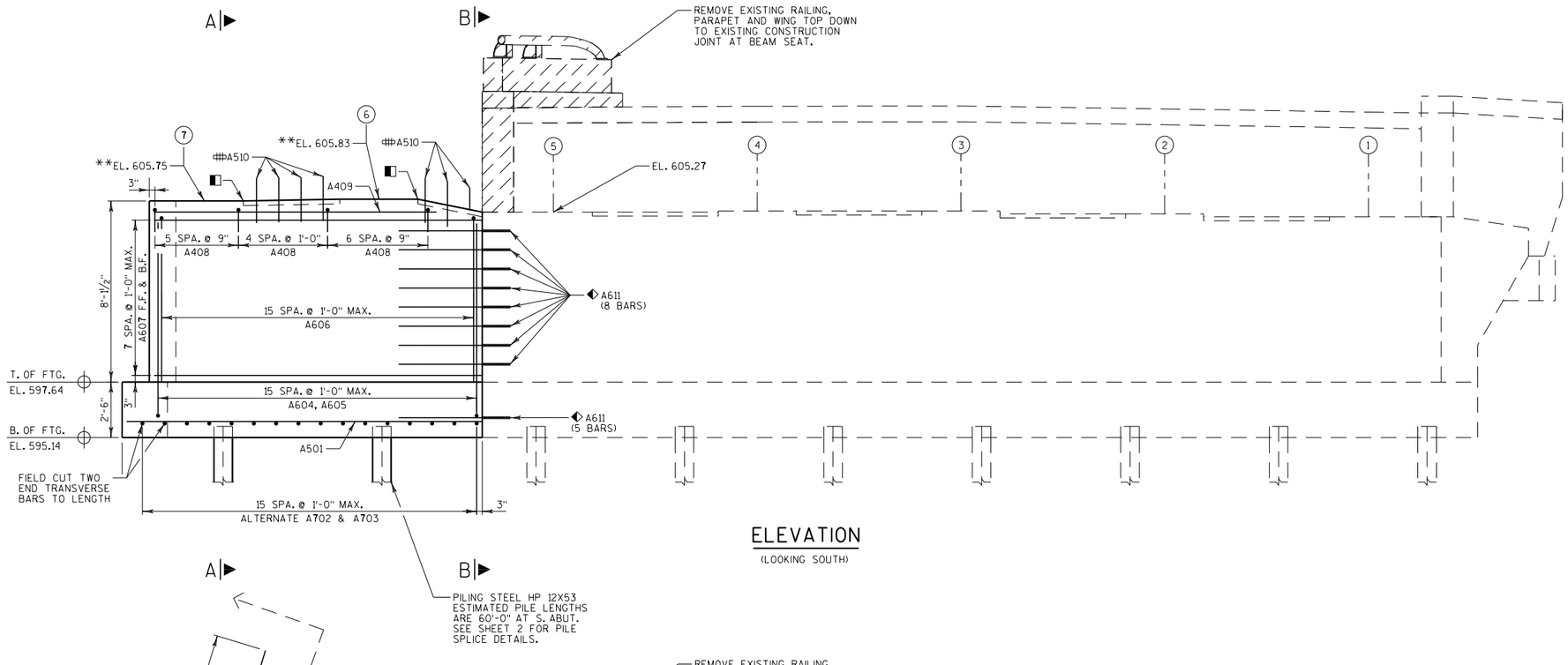
CONSTRUCTION STAGING

SHEET 3 OF 17
734

8

8

STATE PROJECT NUMBER
1133-10-71



ELEVATION
(LOOKING SOUTH)

PLAN

BEAM SEAT ELEVATION CORRECTIONS (FT)

GIRDER	ELEVATION CORRECTION AT POINTS			
	1	2	3	4
6	+0.03	-0.03	-0.05	+0.01
7	+0.05	-0.06	-0.09	+0.02

LEGEND

** - ELEVATION IS PROVIDED AT ℄ OF GIRDER AND ℄ BRG. ABUT. SEE "BEAM SEAT ELEVATION CORRECTIONS" TABLE FOR ELEVATION CORRECTIONS AT BEAM SEAT CORNER POINTS.

▣ - 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.

◧ - KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2 X 6.

◆ - MASONRY ANCHORS TYPE L NO. 4 BARS. EMBED 10" IN CONCRETE. MASONRY ANCHORS TYPE L NO. 6 BARS. EMBED 15" IN CONCRETE.

⋕ - NO. 5 BARS AT 1'-0" (2'-0" LONG). THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

◭ - 4" X ¾" FILLER

◍ - ¾" FILLER

◹ - ½" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD SEE SHEET 12 FOR DETAILS.

▨ - REMOVAL

▭ - EXISTING

◯ - INDICATES GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

SOUTH ABUTMENT

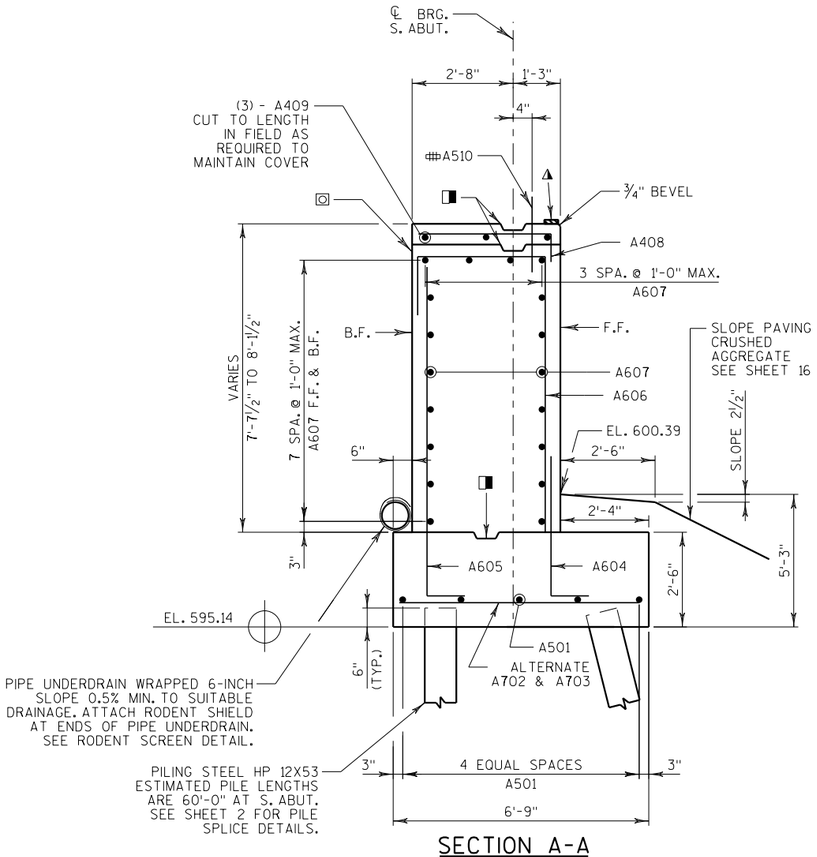
SHEET 4 OF 17
735

8

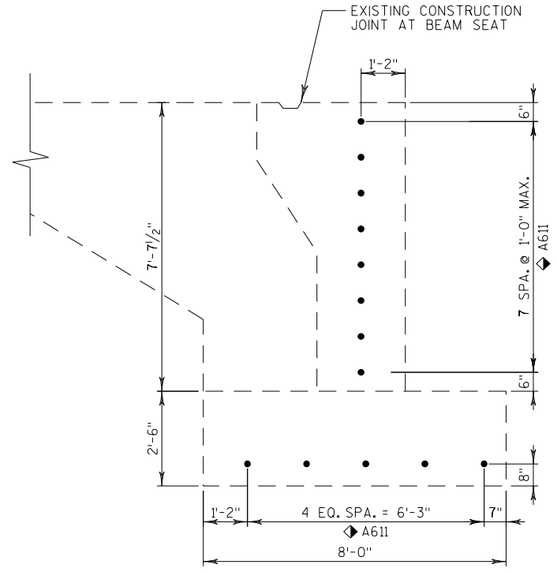
8

STATE PROJECT NUMBER

1133-10-71



SECTION A-A



SECTION B-B

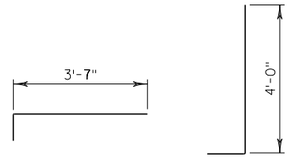
(TYPE L ANCHOR LAYOUT)

BILL OF BARS - SOUTH ABUTMENT

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		5	13'-10"			S. ABUTMENT FOOTING BOTTOM - HORIZONTAL
A702		8	3'-8"			S. ABUTMENT FOOTING BOTTOM - HORIZONTAL
A703		8	6'-5"			S. ABUTMENT FOOTING BOTTOM - HORIZONTAL
A604		16	4'-10"	X		S. ABUTMENT FOOTING DOWELS - VERTICAL
A605		16	10'-0"	X		S. ABUTMENT FOOTING DOWELS - VERTICAL
A606		16	12'-1"	X		S. ABUTMENT BODY STIRRUP - VERTICAL
A607		18	13'-4"			S. ABUTMENT BODY - HORIZONTAL
A408		16	4'-2"	X		S. ABUTMENT BODY - HORIZONTAL
A409		3	12'-0"			S. ABUTMENT BODY - HORIZONTAL
A510		7	2'-0"			S. ABUTMENT BETWEEN BEAM SEATS - VERTICAL
A611		13	5'-0"			S. ABUTMENT TYPE L BARS INTO EXISTING - HORIZONTAL

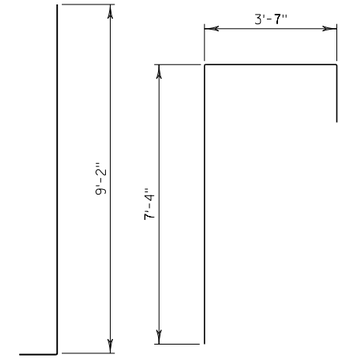
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.



A408

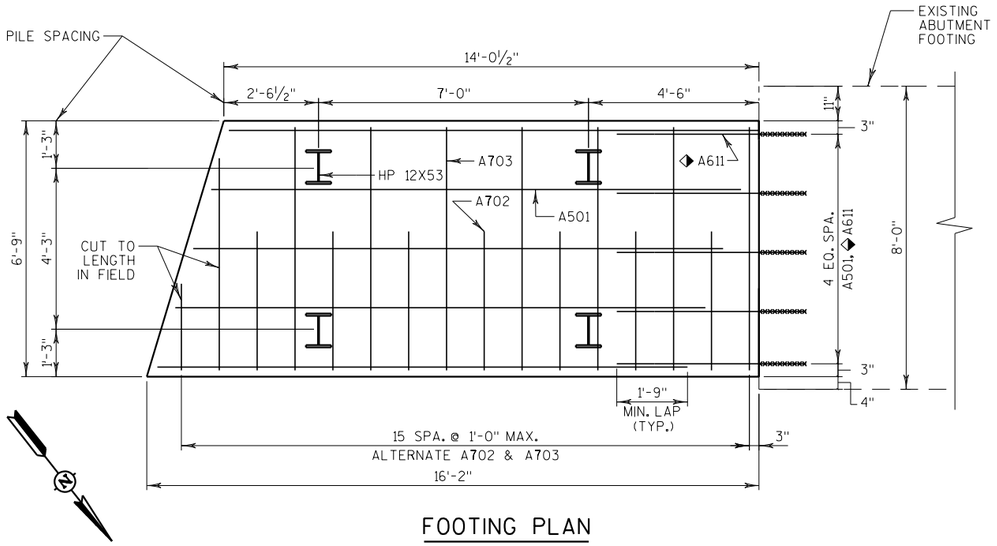
A604



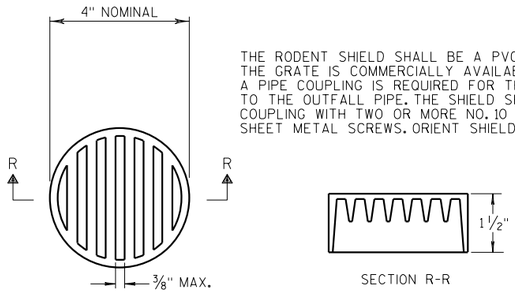
A605 A606

LEGEND

- ▣ - 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.
- ◧ - KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2 X 6.
- ⬖ - MASONRY ANCHORS TYPE L NO. 4 BARS. EMBED 10" IN CONCRETE. MASONRY ANCHORS TYPE L NO. 6 BARS. EMBED 15" IN CONCRETE.
- ⫼ - NO. 5 BARS AT 1'-0" (2'-0" LONG). THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- ◭ - 4" X ¾" FILLER



FOOTING PLAN



RODENT SCREEN DETAIL

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS. ORIENT SHIELD SO SLOTS ARE VERTICAL.

SECTION R-R

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

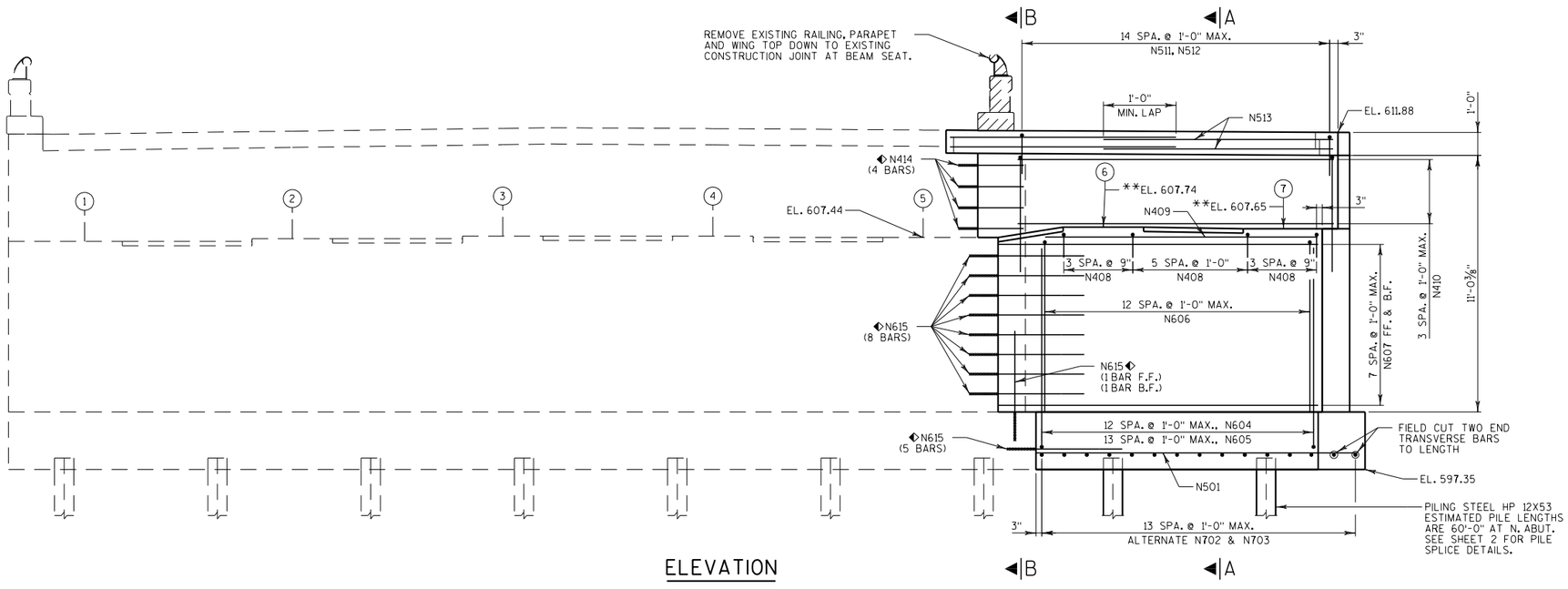
SOUTH ABUTMENT DETAILS

SHEET 5 OF 17
736

8

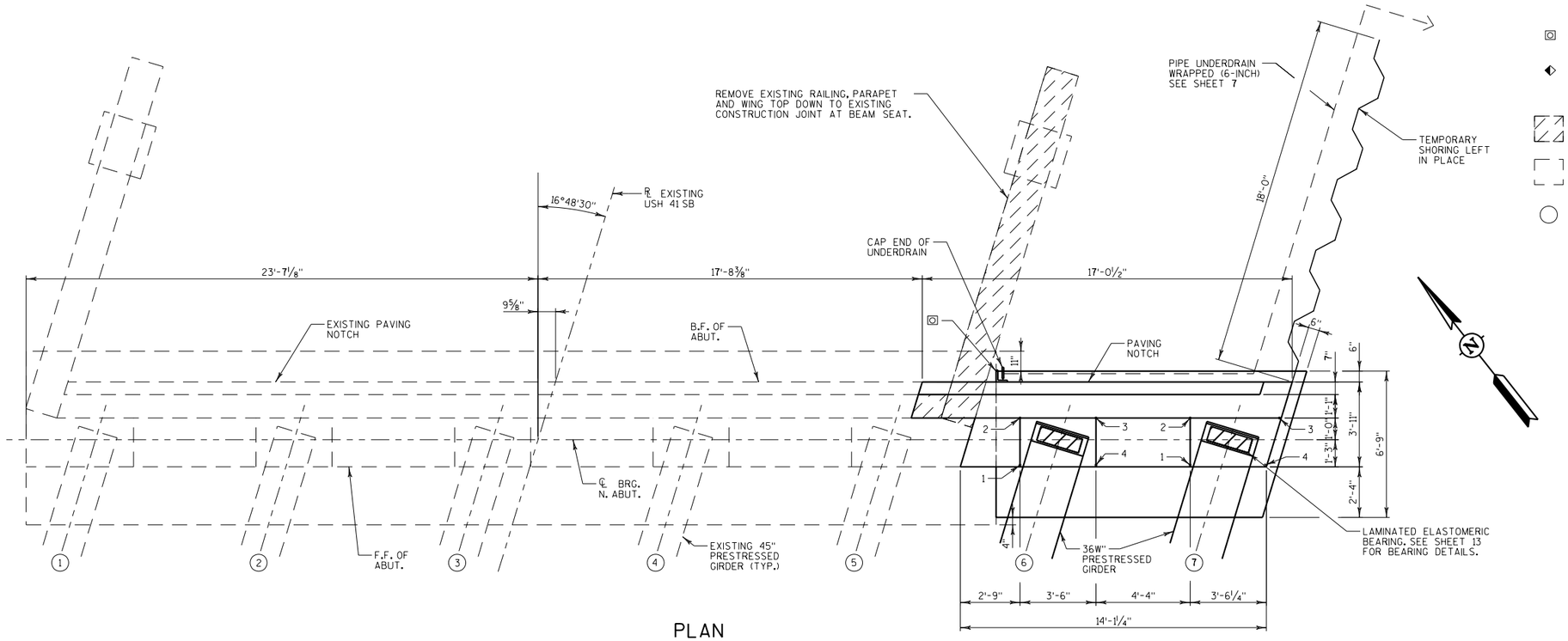
8

STATE PROJECT NUMBER
1133-10-71



ELEVATION

(LOOKING NORTH)



PLAN

BEAM SEAT ELEVATION CORRECTIONS (FT)

GIRDER	ELEVATION CORRECTION AT POINTS			
	1	2	3	4
6	-0.02	0.00	+0.01	-0.01
7	-0.01	0.00	+0.01	-0.01

LEGEND

** - ELEVATION IS PROVIDED AT ℄ OF GIRDER AND ℄ BRG. ABUT. SEE "BEAM SEAT ELEVATION CORRECTIONS" TABLE FOR ELEVATION CORRECTIONS AT BEAM SEAT CORNER POINTS.

▣ - 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.

◆ - MASONRY ANCHORS TYPE L NO. 4 BARS. EMBED 10" IN CONCRETE. MASONRY ANCHORS TYPE L NO. 6 BARS. EMBED 15" IN CONCRETE.

- REMOVAL

- EXISTING

○ - INDICATES GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

NORTH ABUTMENT

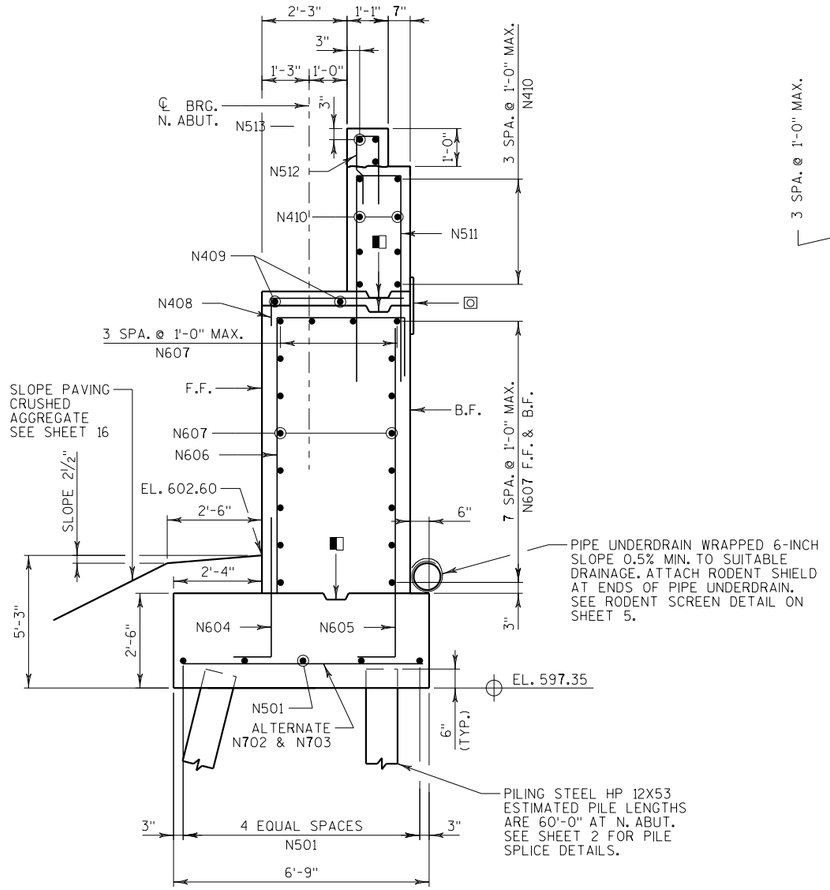
SHEET 6 OF 17
737

8

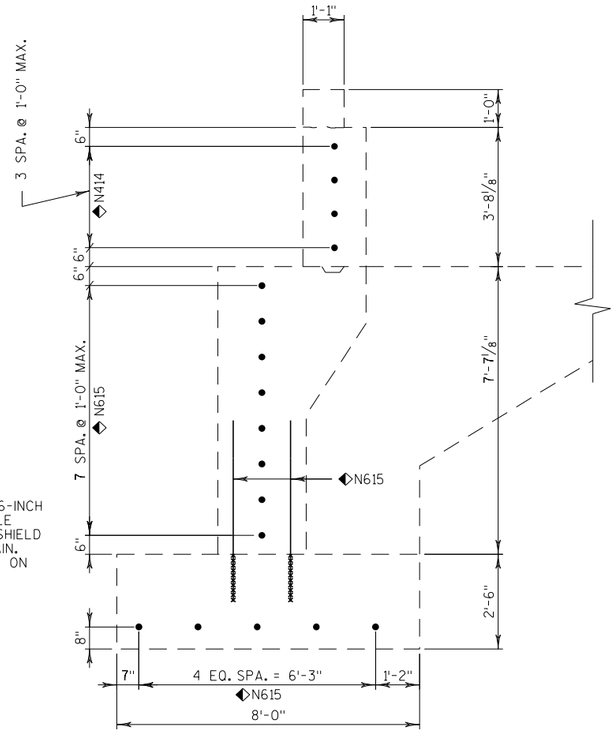
8

STATE PROJECT NUMBER

1133-10-71



SECTION A-A



SECTION B-B

(TYPE L AND TYPE S ANCHOR LAYOUT)

BILL OF BARS - NORTH ABUTMENT

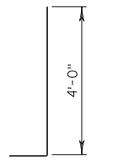
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
N501		5	12'-0"			N. ABUTMENT FOOTING BOTTOM - HORIZONTAL
N702		7	3'-8"			N. ABUTMENT FOOTING BOTTOM - HORIZONTAL
N703		7	6'-5"			N. ABUTMENT FOOTING BOTTOM - HORIZONTAL
N604		13	4'-10"	X		N. ABUTMENT FOOTING DOWELS - VERTICAL
N605		14	10'-0"	X		N. ABUTMENT FOOTING DOWELS - VERTICAL
N606		13	12'-1"	X		N. ABUTMENT BODY STIRRUP - VERTICAL
N607		18	13'-11"			N. ABUTMENT BODY - HORIZONTAL
N408		12	4'-2"	X		N. ABUTMENT BODY - HORIZONTAL
N409		2	12'-0"			N. ABUTMENT BODY - HORIZONTAL
N410		8	13'-9"			N. ABUTMENT BODY - HORIZONTAL
N511		15	11'-1"	X		N. ABUTMENT BODY STIRRUP - VERTICAL
N512		15	4'-1"	X		N. ABUTMENT TOP STIRRUP - VERTICAL
N513		6	10'-0"			N. ABUTMENT TOP - HORIZONTAL
N414		4	2'-10"			N. ABUTMENT TYPE L BARS INTO EXISTING - HORIZONTAL
N615		15	5'-0"			N. ABUTMENT TYPE L BARS INTO EXISTING - VERT. & HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

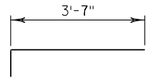
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

LEGEND

- ▣ - 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.
- ◧ - KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2 X 6.
- ◆ - MASONRY ANCHORS TYPE L NO. 4 BARS. EMBED 10" IN CONCRETE. MASONRY ANCHORS TYPE L NO. 6 BARS. EMBED 15" IN CONCRETE.



N604



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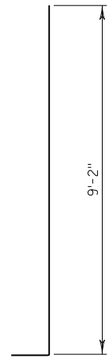
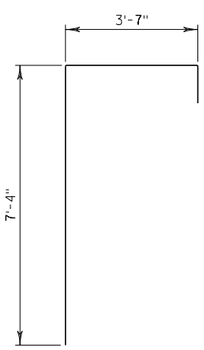


N605



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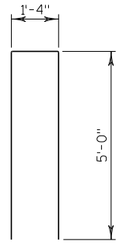

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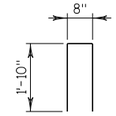

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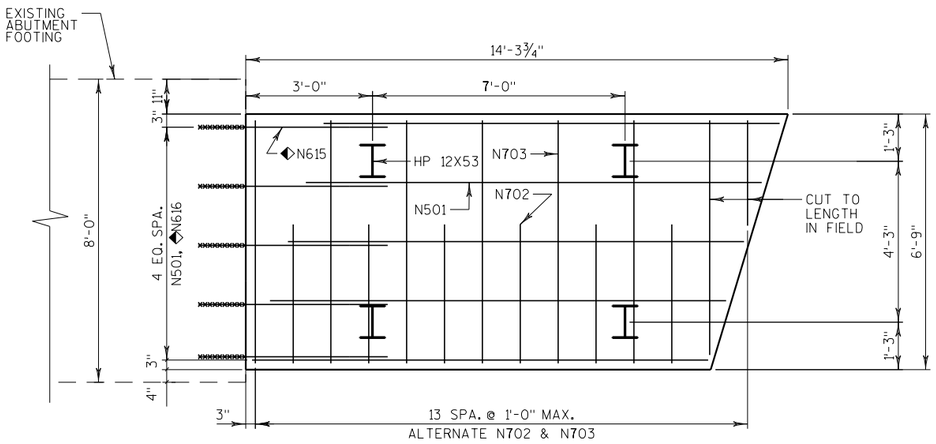


FOOTING PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

NORTH ABUTMENT DETAILS

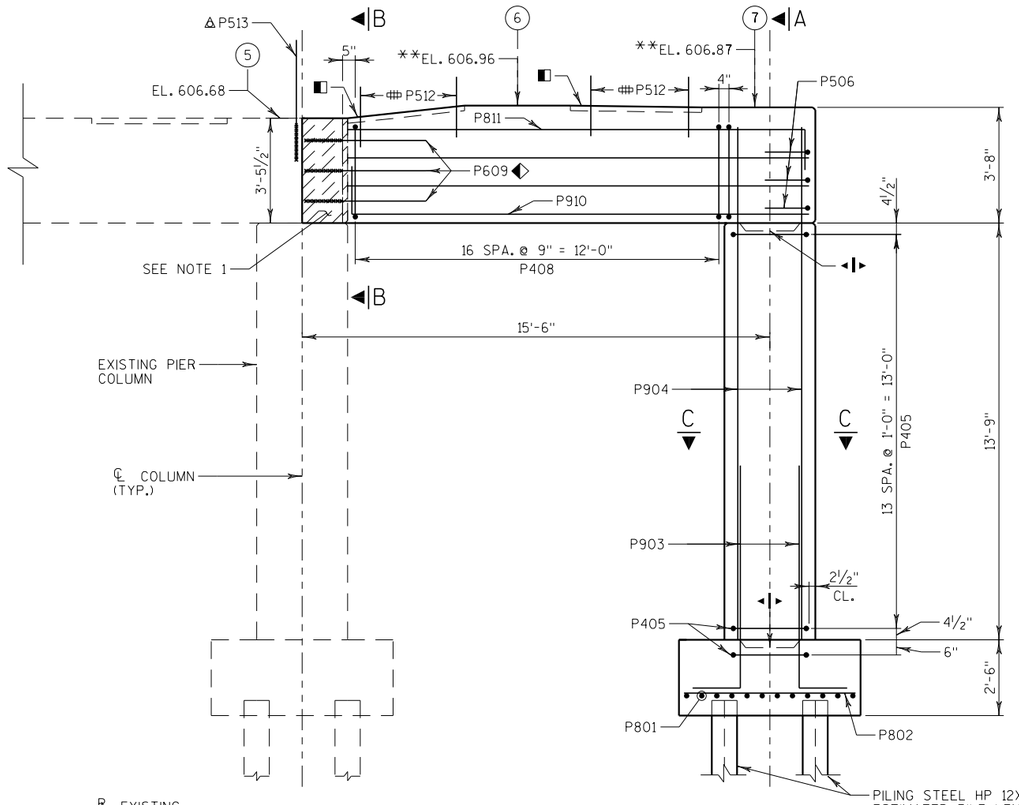
SHEET 7 OF 17
738

8

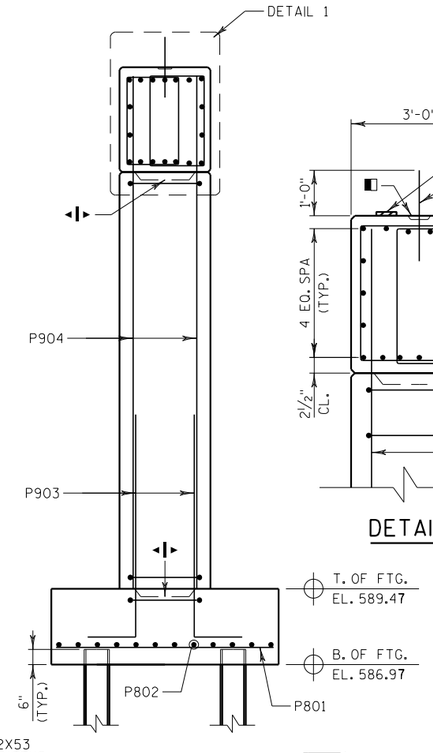
8

STATE PROJECT NUMBER

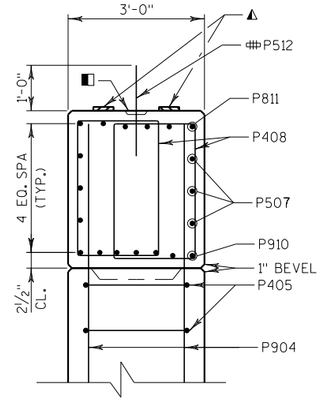
1133-10-71



ELEVATION - PIER WIDENING



SECTION A-A



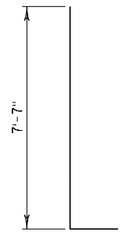
DETAIL 1

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P801		12	7'-2"			PIER FOOTING BOTTOM - HORIZONTAL
P802		12	5'-8"			PIER FOOTING BOTTOM - HORIZONTAL
P903		16	8'-11"	X		PIER FOOTING DOWELS - VERTICAL
P904		16	17'-0"			PIER COLUMN - VERTICAL
P405		15	9'-10"	X		PIER COLUMN HOOP - HORIZONTAL
P506		3	5'-1"	X		PIER CAP U-BARS - HORIZONTAL
P507		6	15'-1"			PIER CAP - HORIZONTAL
P408		36	10'-1"	X		PIER CAP STIRRUP - VERTICAL
P609		12	4'-0"			PIER CAP TYPE L BARS INTO EXISTING - HORIZONTAL
P910		7	17'-9"	X		PIER CAP BOTTOM - HORIZONTAL
P811		7	17'-4"	X		PIER CAP TOP - HORIZONTAL
P512		8	2'-0"			PIER CAP DOWELS - VERTICAL
P513		3	1'-6"			PIER CAP TYPE L BARS INTO EXISTING - VERTICAL

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.



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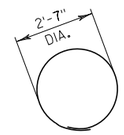

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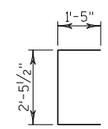

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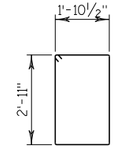

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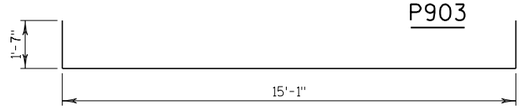

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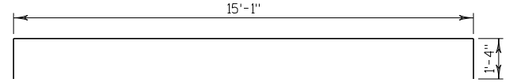

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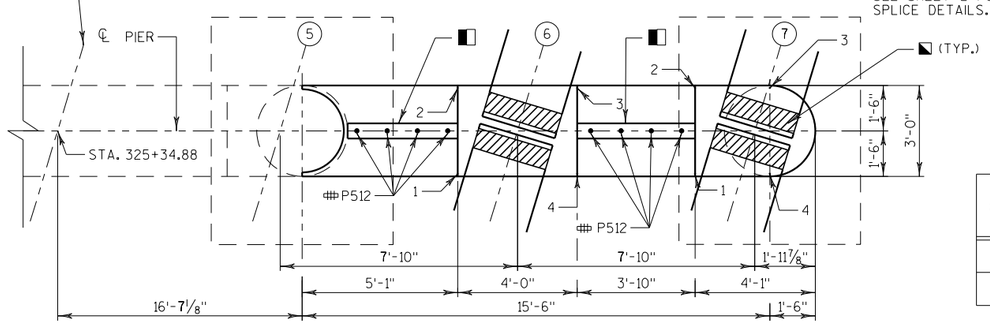


PLAN - PIER WIDENING

BEAM SEAT ELEVATION CORRECTIONS (FT)

GIRDER	ELEVATION CORRECTION AT POINTS			
	1	2	3	4
6	-0.03	+0.01	+0.02	-0.01
7	-0.01	+0.01	+0.02	0.00

LEGEND

** - ELEVATION IS PROVIDED AT ℄ OF GIRDER AND ℄ PIER. SEE "BEARING SEAT ELEVATION CORRECTIONS" TABLE FOR ELEVATION CORRECTIONS AT BEAM SEAT CORNER POINTS.

◧ - KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2 X 6.

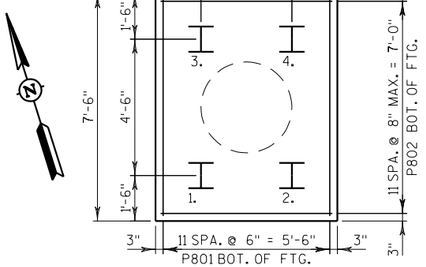
◆ - MASONRY ANCHORS TYPE L NO. 4 BARS. EMBED 10" IN CONCRETE. MASONRY ANCHORS TYPE L NO. 6 BARS. EMBED 15" IN CONCRETE.

△ - MASONRY ANCHORS TYPE L NO. 5 BARS. EMBED 12" IN CONCRETE.

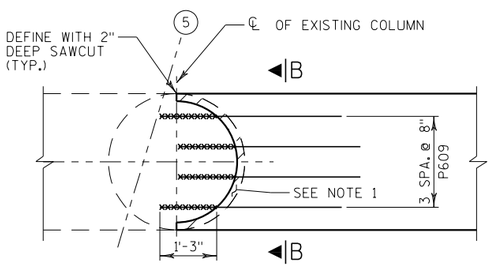
⧾ - NO. 5 BARS AT 1'-0" (2'-0" LONG). THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

▲ - 4" X ¾" FILLER

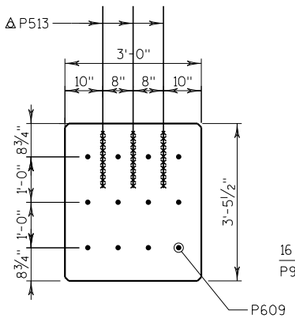
◹ - ½" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD SEE SHEET 13 FOR DETAILS.



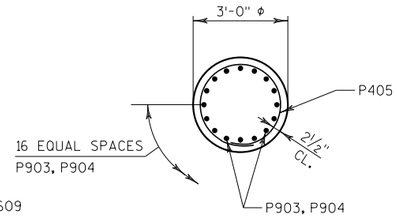
COLUMN FOOTING PLAN



PIER CAP CONNECTION PLAN



SECTION B-B



SECTION C-C

▨ - REMOVAL ▭ - EXISTING ◯ - INDICATES GIRDER NUMBER

NOTES

1. REMOVE CONCRETE TO EXPOSE EXISTING END STIRRUPS IN PIER CAP. DO NOT DAMAGE EXISTING REINFORCING DURING CONCRETE REMOVAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

PIER DETAILS

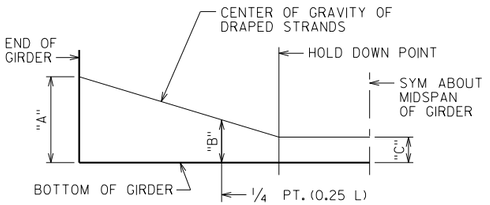
SHEET 8 OF 17
739

8

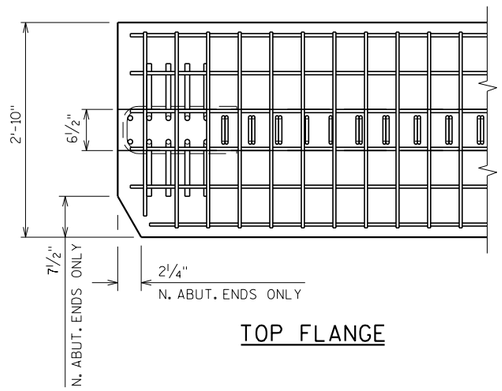
8

STATE PROJECT NUMBER

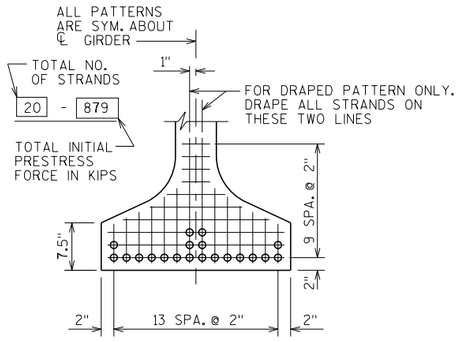
1133-10-71



DRAPED STRAND PROFILE



TOP FLANGE



TYP. STRAND PATTERN

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 0.6"Φ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

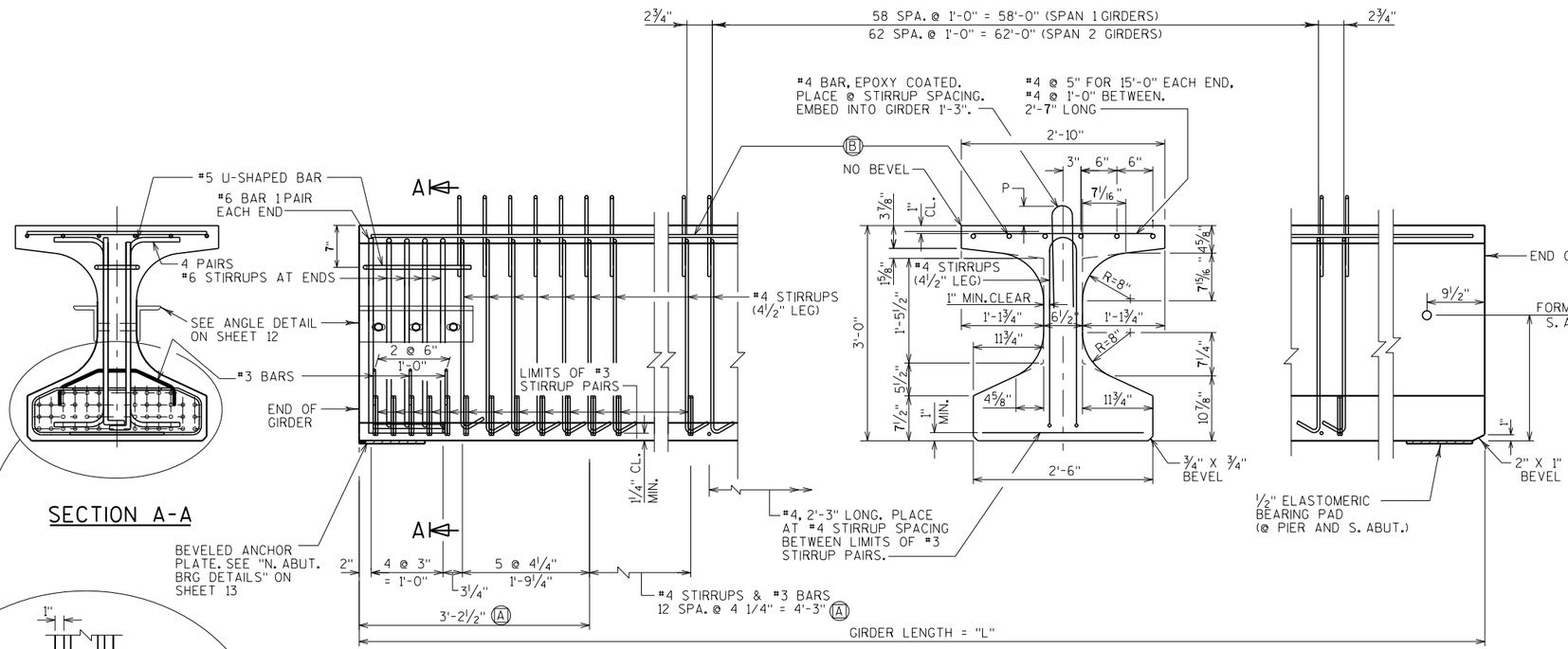
STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO APPLICATION OF THE SEALER.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.



SECTION A-A

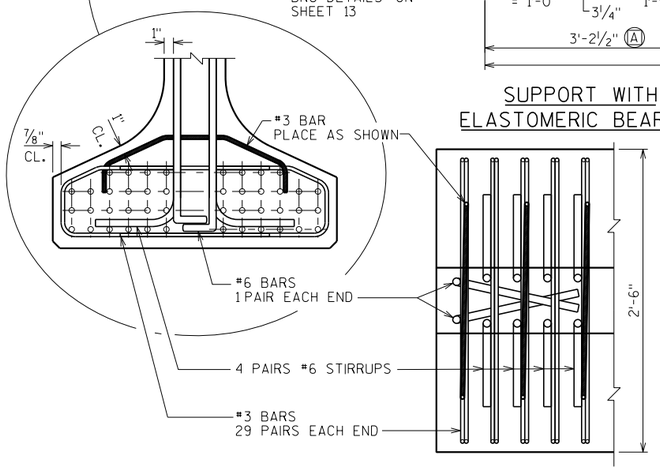
SUPPORT WITH ELASTOMERIC BEARINGS

SUPPORT WITH ½" ELASTOMERIC BEARING PAD

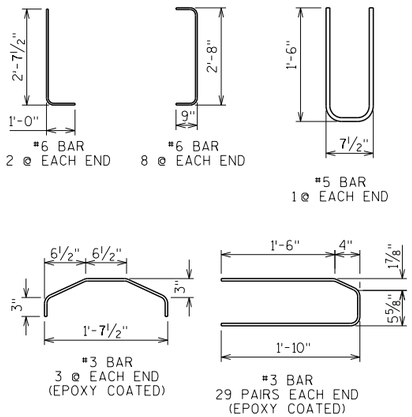
SIDE VIEW & TYP. SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



BOTTOM FLANGE



✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	DRAPED PATTERN f'ci (P.S.I.) ✳	DRAPED PATTERN (IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	UNDRAPED PATTERN f'ci (P.S.I.) ✳
1	6	73'-4½"	0.3	0.6	0.8	0.9	1.0	0.9	0.8	0.6	0.3	8,000	7	7	7	0.6	20	6,800	32	11	14	4		
1	7	73'-4½"	0.2	0.5	0.7	0.8	0.8	0.8	0.6	0.5	0.2	8,000	7	7	7	0.6	20	6,800	32	11	14	4		
2	6	77'-4½"	0.4	0.7	1.0	1.1	1.2	1.2	1.0	0.7	0.3	8,000	7	7	7	0.6	20	6,800	32	11	14	4		
2	7	77'-4½"	0.3	0.6	0.8	1.0	1.0	1.0	0.8	0.6	0.3	8,000	7	7	7	0.6	20	6,800	32	11	14	4		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

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36W" PRESTRESSED GIRDER DETAILS

SHEET 9 OF 17

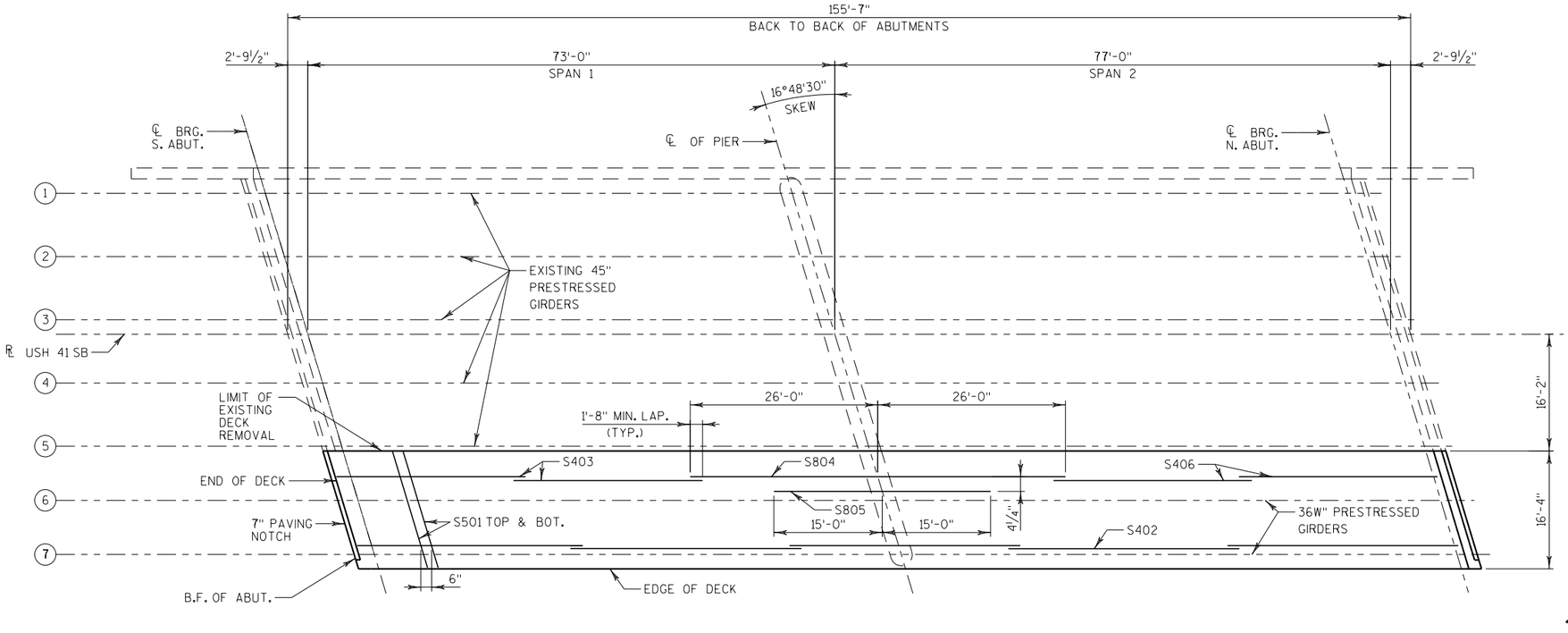
740

8

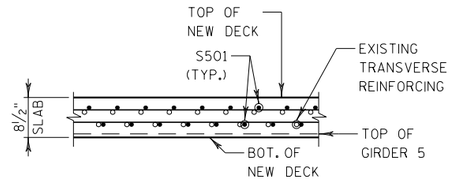
8

STATE PROJECT NUMBER

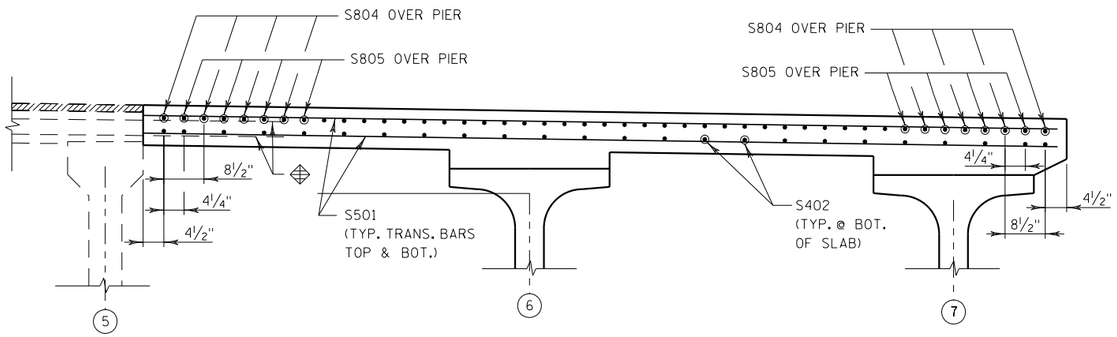
1133-10-71



PLAN

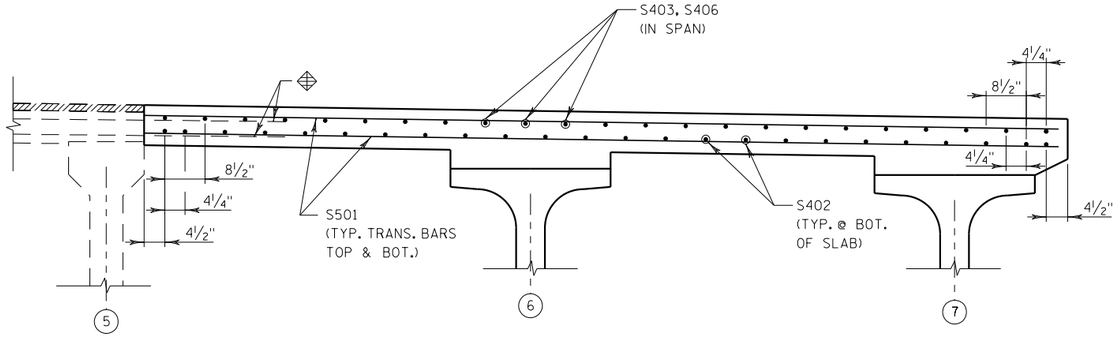


SECTION LOOKING AT
LONGITUDINAL CONSTRUCTION JOINT



CROSS SECTION THRU BRIDGE OVER PIER

(LOOKING NORTH)



CROSS SECTION THRU BRIDGE IN SPAN

(LOOKING NORTH)

TOP OF DECK ELEVATIONS *

	SPAN 1										
	℄ S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER
℞ USH 41 SB	610.06	610.18	610.29	610.41	610.52	610.64	610.75	610.86	610.97	611.08	611.18
GIRDER 5	609.90	610.02	610.14	610.25	610.36	610.48	610.59	610.70	610.81	610.91	611.02
GIRDER 6	609.82	609.94	610.06	610.17	610.29	610.40	610.51	610.62	610.73	610.83	610.94
GIRDER 7	609.75	609.87	609.98	610.10	610.21	610.32	610.43	610.54	610.65	610.75	610.86
E. EOD	609.73	609.85	609.96	610.08	610.19	610.30	610.41	610.52	610.63	610.73	610.84
	SPAN 2										
	℄ PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ N. ABUT.
℞ USH 41 SB	611.18	611.29	611.40	611.51	611.62	611.72	611.83	611.93	612.03	612.12	612.22
GIRDER 5	611.02	611.13	611.24	611.34	611.45	611.55	611.65	611.75	611.85	611.95	612.05
GIRDER 6	610.94	611.05	611.16	611.26	611.37	611.47	611.57	611.67	611.77	611.87	611.96
GIRDER 7	610.86	610.97	611.08	611.18	611.28	611.39	611.49	611.59	611.69	611.78	611.88
E. EOD	610.84	610.95	611.05	611.16	611.26	611.37	611.47	611.57	611.66	611.76	611.85

* - TOP OF DECK ELEVATIONS ARE BASED ON THE PROFILE GRADE LINE FROM THE ORIGINAL CONSTRUCTION PLANS.

◯ - INDICATES GIRDER NUMBER

⌖ - EXPOSE EXISTING STEEL REINFORCING AND LAP WITH S501 BARS. DO NOT DAMAGE EXISTING STEEL REINFORCING DURING CONCRETE REMOVAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

SUPERSTRUCTURE

SHEET 10 OF 17

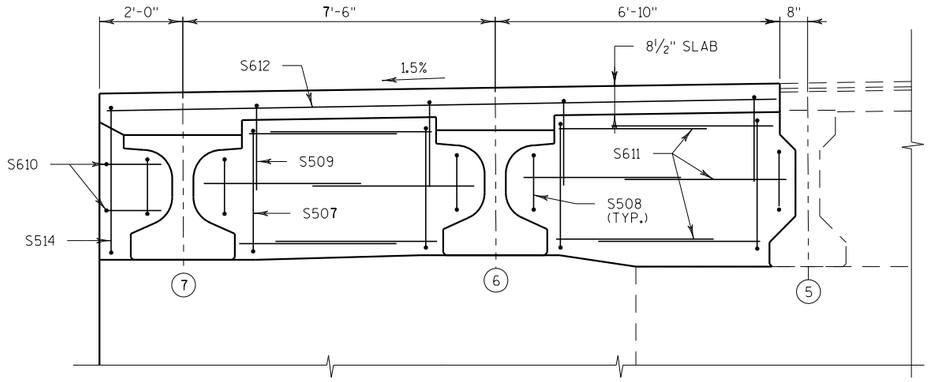
741

8

8

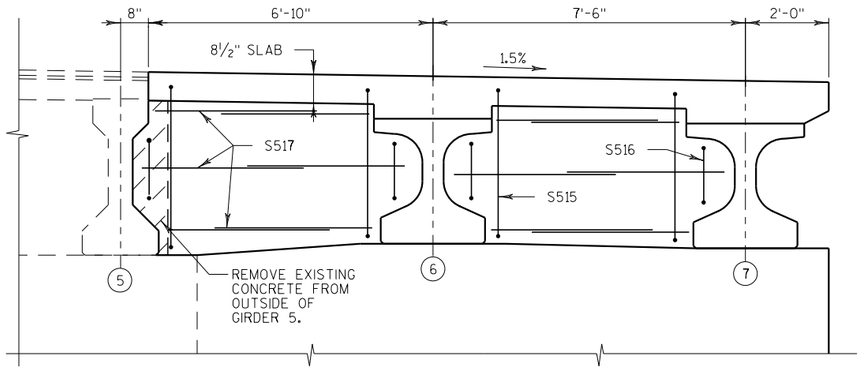
STATE PROJECT NUMBER

1133-10-71



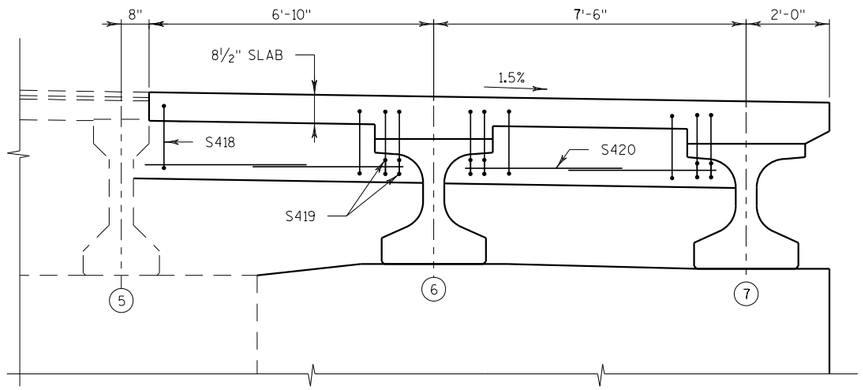
AT SOUTH ABUTMENT DIAPHRAGM

(LOOKING SOUTH)



AT PIER DIAPHRAGM

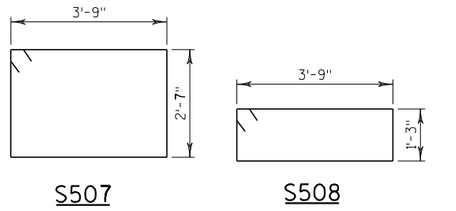
(LOOKING NORTH)



AT NORTH ABUTMENT DIAPHRAGM

(LOOKING NORTH)

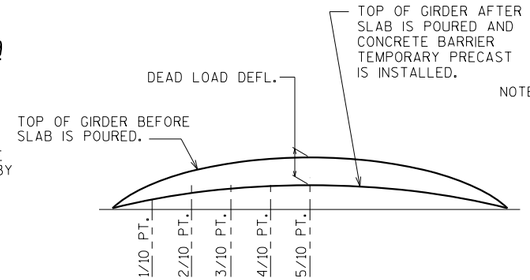
CROSS SECTIONS



* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.)*
1	1.3
2	1.3

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS. THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



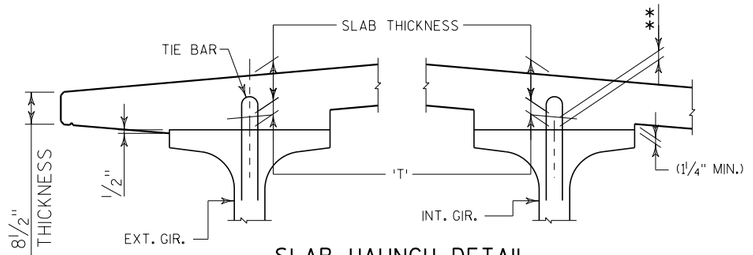
DEAD LOAD DEFLECTION DIAGRAM

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S501		592	16'-9"			SLAB TOP & BOT. - TRANS.
S402		120	32'-0"			SLAB BOTTOM - LONGIT.
S403		46	26'-3"			SLAB TOP SPAN 1 - LONGIT.
S804		23	52'-0"			SLAB TOP OVER PIER - LONGIT.
S805		22	30'-0"			SLAB TOP OVER PIER - LONGIT.
S406		46	27'-6"			SLAB TOP SPAN 2 - LONGIT.
S507		13	13'-0"	X		S. ABUT. DIAPH. - STIRRUP - VERT.
S508		5	10'-8"	X		S. ABUT. DIAPH. - STIRRUP - VERT.
S509		13	4'-6"	X		S. ABUT. DIAPH. - STIRRUP - VERT.
S610		2	5'-11"	X		S. ABUT. DIAPH. - U BARS - HORIZ.
S611		12	4'-0"			S. ABUT. DIAPH. - TRANS. - HORIZ.
S612		5	16'-9"			S. ABUT. DIAPH. - BACK FACE & IN DECK TRANS. - HORIZ.
S513		4	6'-0"			S. ABUT. DIAPH. - THRU GIRDER - HORIZ.
S514		1	15'-2"	X		S. ABUT. DIAPH. - STIRRUP @ SE CORNER - VERT.
S515		11	10'-3"	X		PIER DIAPH. - STIRRUP - VERT.
S516		4	7'-8"	X		PIER DIAPH. - STIRRUP - VERT.
S417		24	4'-0"			PIER DIAPH. - TRANS. - HORIZ.
S418		13	6'-1"	X		N. ABUT. DIAPH. - STIRRUP - VERT.
S419		6	4'-8"	X		N. ABUT. DIAPH. - STIRRUP - VERT.
S420		20	4'-0"			N. ABUT. DIAPH. - TRANS. - HORIZ.
S421		2	16'-9"			SLAB @ EXPANSION JOINT - TRANS. - HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.



SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.0" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

◯ - INDICATES GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

SUPERSTRUCTURE SECTIONS & DETAILS 1

SHEET 11 OF 17

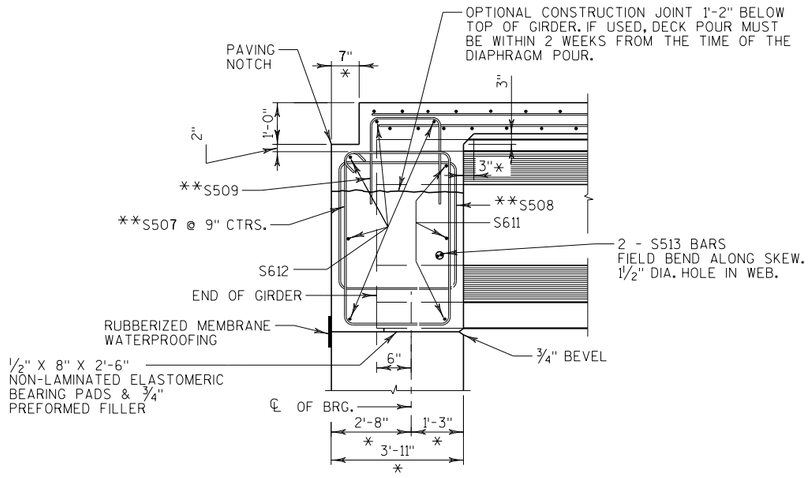
742

8

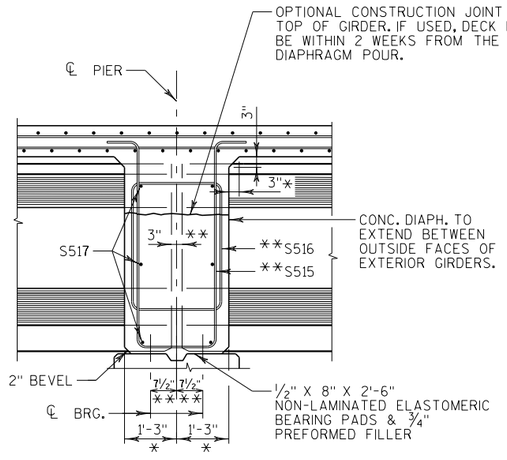
8

STATE PROJECT NUMBER

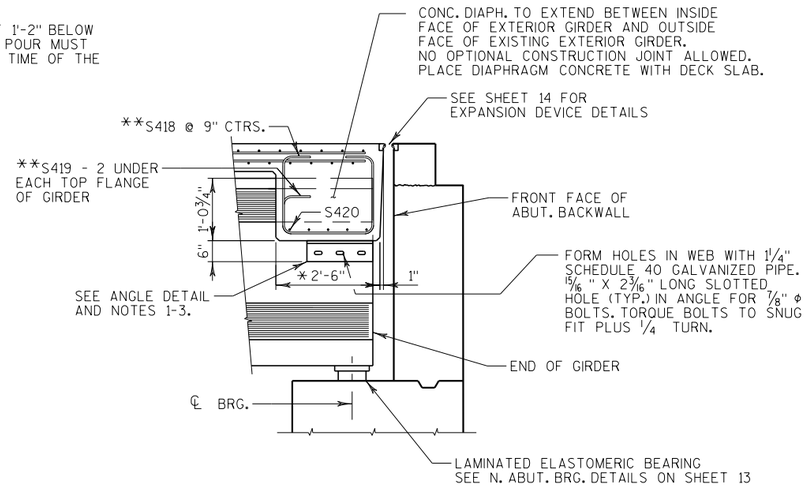
1133-10-71



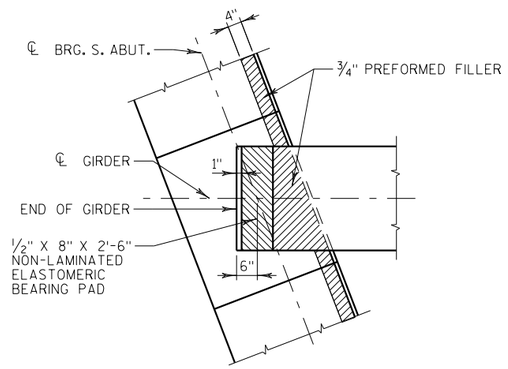
CROSS-SECTION THRU DIAPHRAGM AT SOUTH ABUTMENT



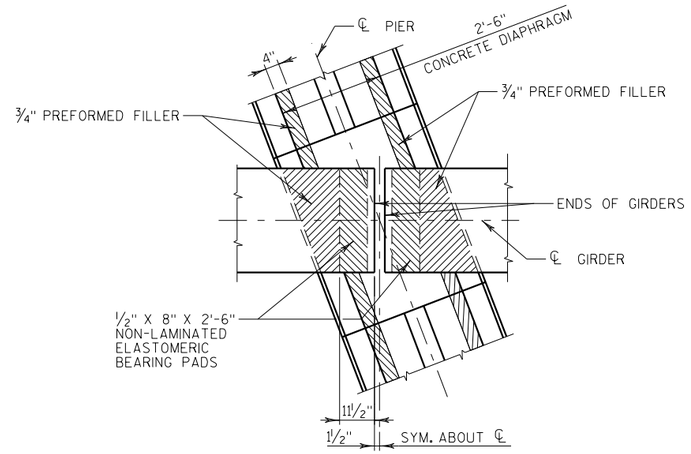
CROSS-SECTION THRU DIAPHRAGM AT PIER



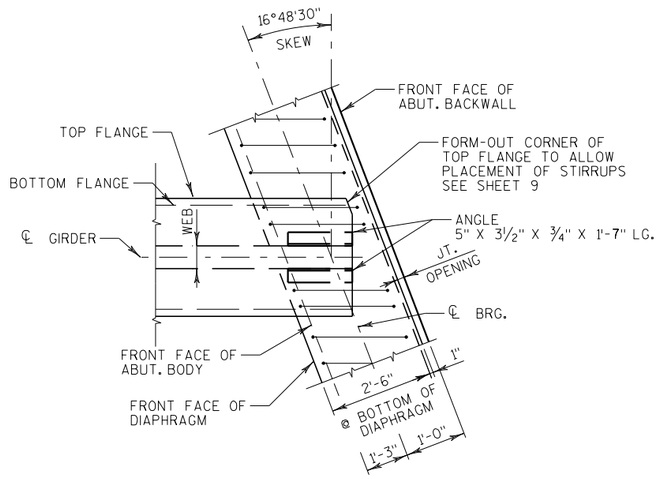
CROSS-SECTION THRU DIAPHRAGM AT NORTH ABUTMENT



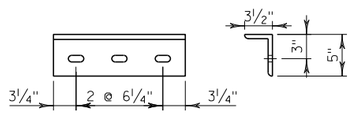
BEARING PAD DETAIL AT SOUTH ABUTMENT



BEARING PAD DETAIL AT PIER



TOP VIEW OF NORTH ABUTMENT DIAPHRAGM



ANGLE DETAIL
5" X 3½" X ¾" X 1'-7"

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

NOTES

1. DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUT AND WASHERS SHALL BE ASTM A325 TYPE 1.
2. ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.
3. ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

SUPERSTRUCTURE SECTIONS & DETAILS 2

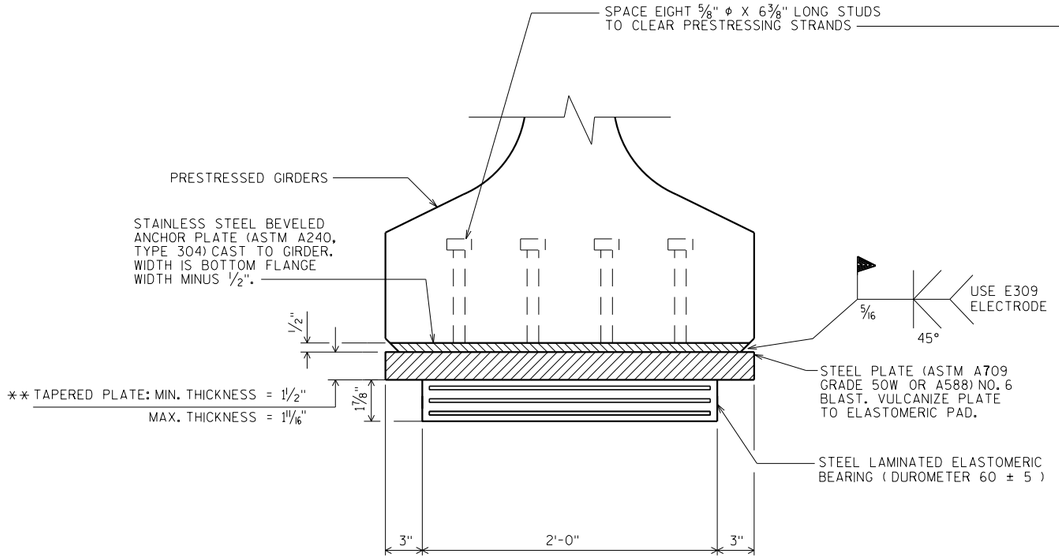
SHEET 12 OF 17
743

8

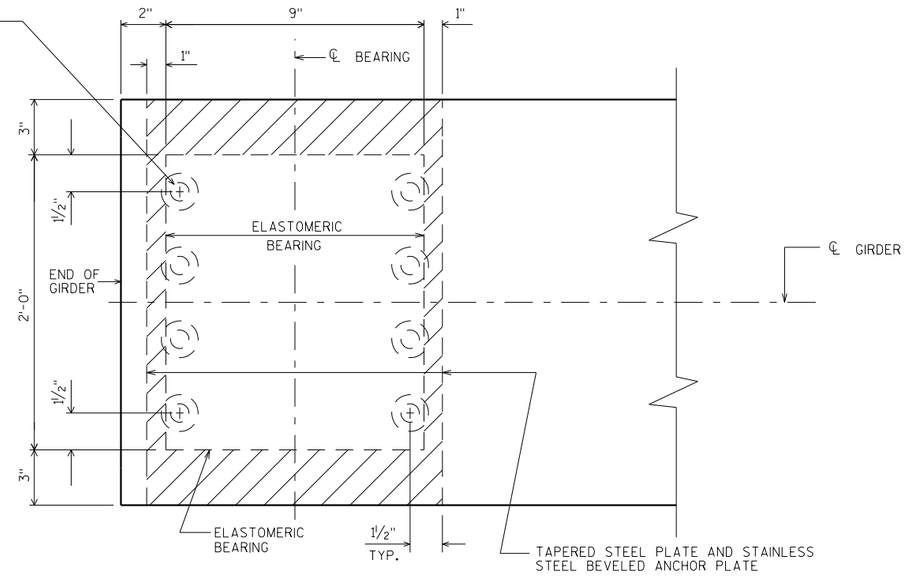
8

STATE PROJECT NUMBER

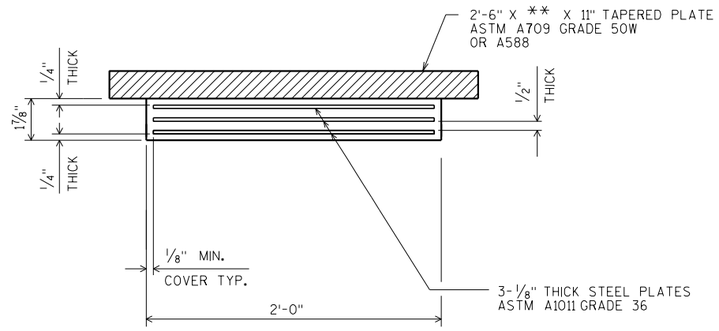
1133-10-71



END VIEW



PLAN VIEW



SECTION THRU ELASTOMERIC BEARING

** = 1 1/2" MIN. THICKNESS
1 11/16" MAX. THICKNESS

NOTES

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

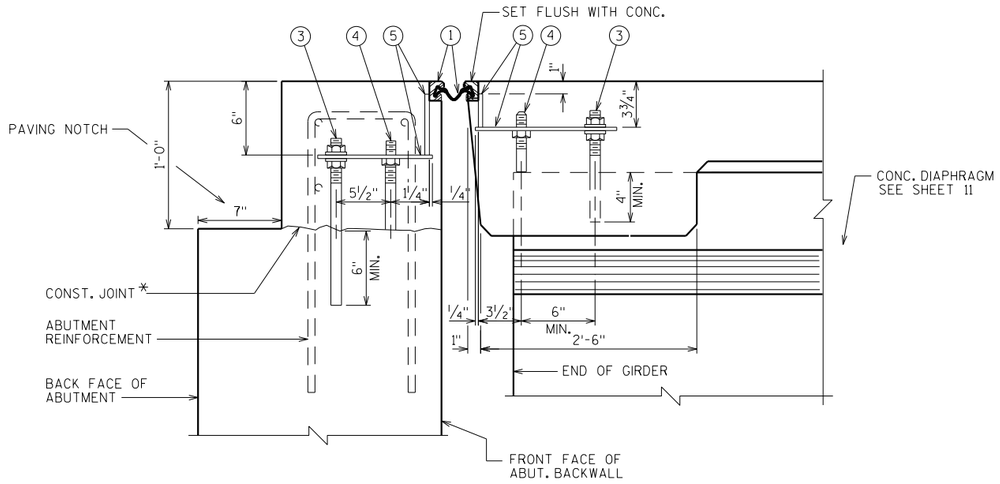
DRAWN BY	JAD	PLANS CK'D.	SJG

N. ABUT.
BEARING DETAILS

SHEET 13 OF 17
744

STATE PROJECT NUMBER

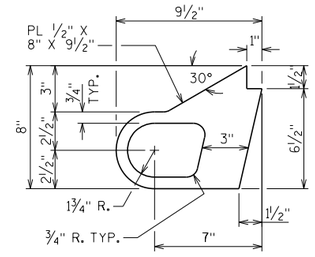
1133-10-71



* = POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

SECTION THRU JOINT AT ABUTMENT

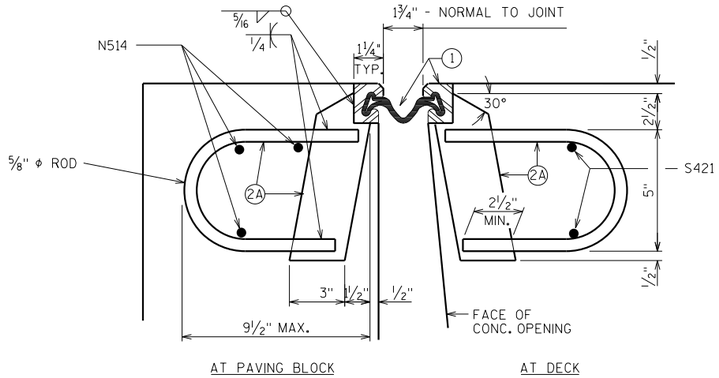
NORMAL TO ℄ SUBSTRUCTURE



ALTERNATE STRIP SEAL ANCHOR

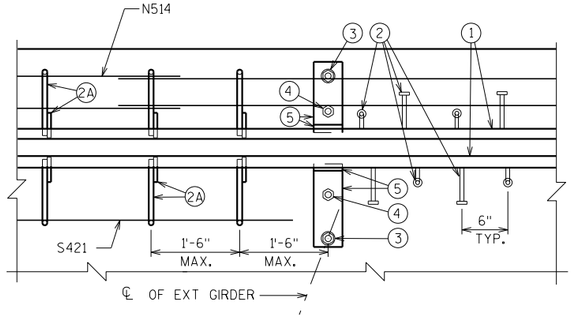
LEGEND

1. NEOPRENE STRIP SEAL (1¾") & STEEL EXTRUSIONS.
2. STUDS ⅝"ϕ X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
2A. ½" THICK ANCHOR PLATE WITH ⅝"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. ¾" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ℄ OF GIRDER AND AS SHOWN IN ABUTMENT BACKWALL.
4. ¾"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. FIELD OR SHOP WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

GENERAL NOTES

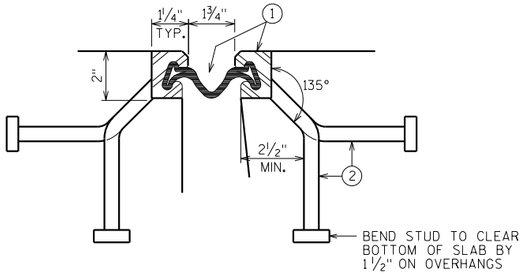
ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-5-64".



SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF DECK

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

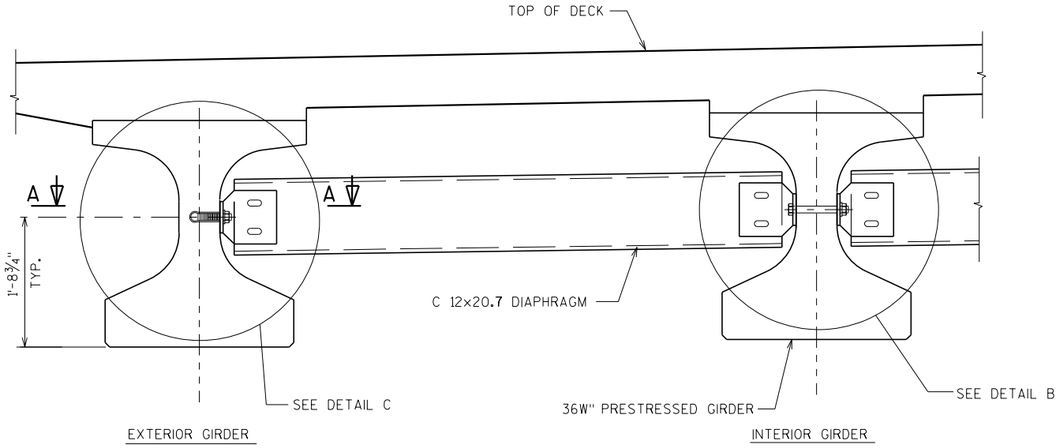
EXPANSION DEVICE

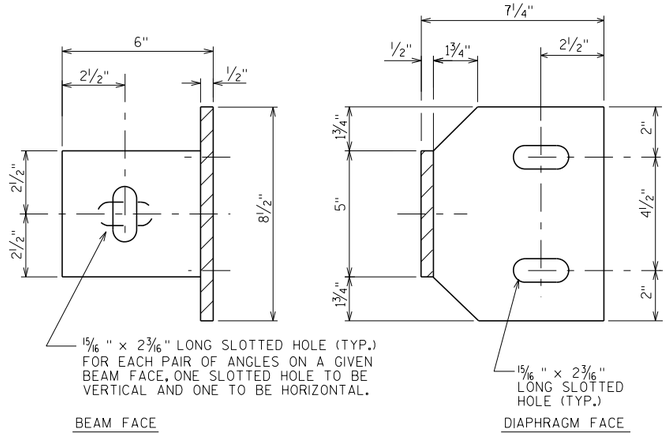
SHEET 14 OF 17

745

STATE PROJECT NUMBER

1133-10-71





NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-5-64", EACH.

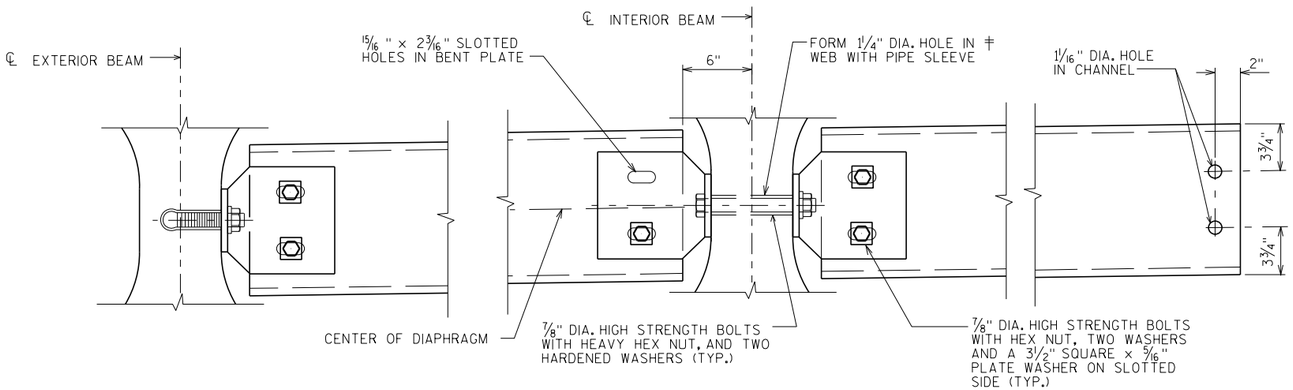
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

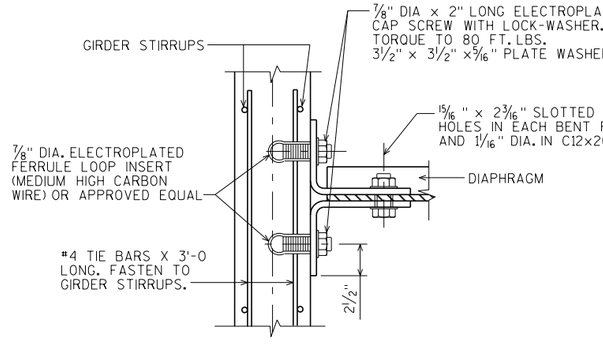
‡ CORE 1¼" DIA. HOLE AT EXISTING GIRDER 5. AVOID DRILLING THROUGH EXISTING STIRRUPS. USE 3½" X 3½" X ½" PLATE WASHER ON INSIDE FACE OF EXISTING GIRDER.

PART TRANSVERSE SECTION AT DIAPHRAGM



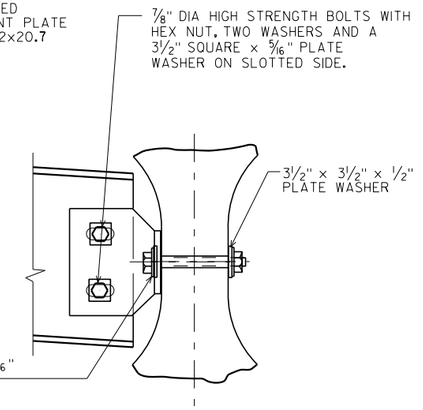
DETAIL C

DETAIL B

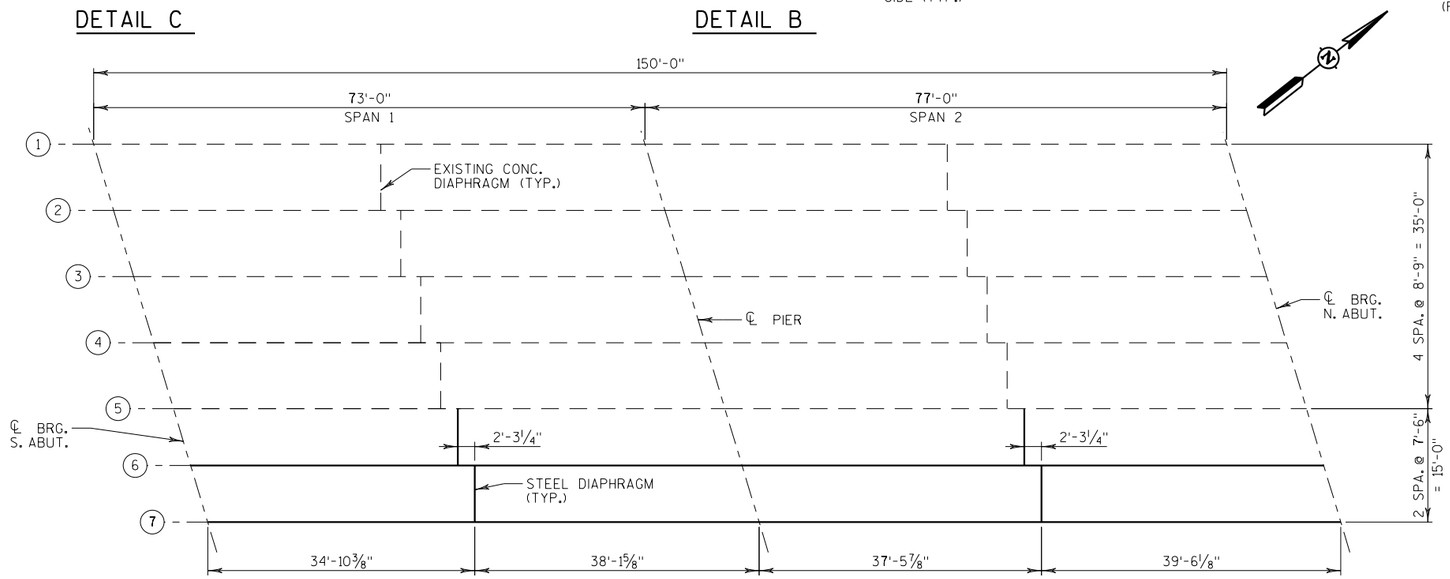


SECTION A-A

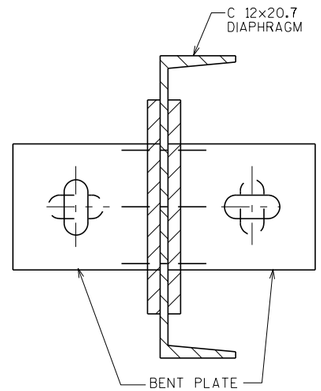
(FOR EXTERIOR ATTACHMENT)



SECTION THRU DIAPHRAGM AT INTERIOR GIRDERS



PLAN



ATTACHMENT TO CHANNEL

○ - INDICATES GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY	JAD	PLANS CK'D.	SJG

STEEL DIAPHRAGM

SHEET 15 OF 17

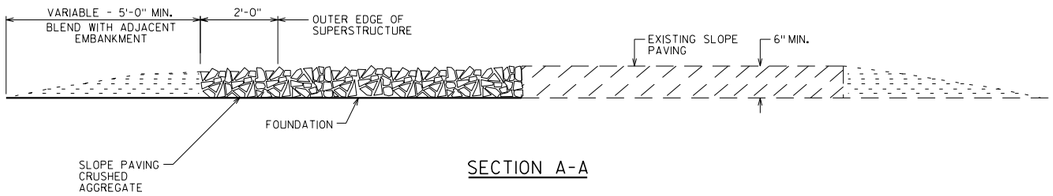
746

8

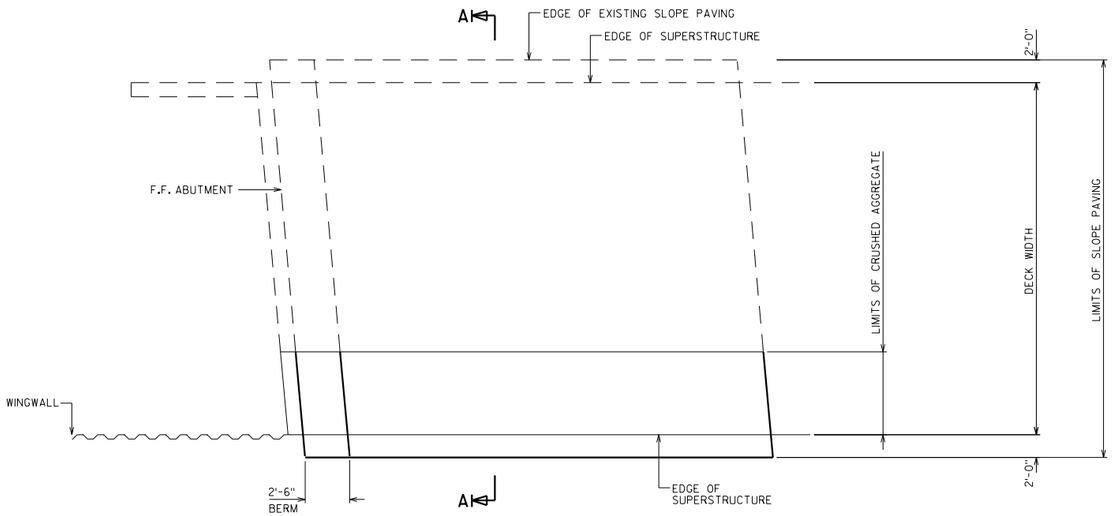
8

STATE PROJECT NUMBER

1133-10-71

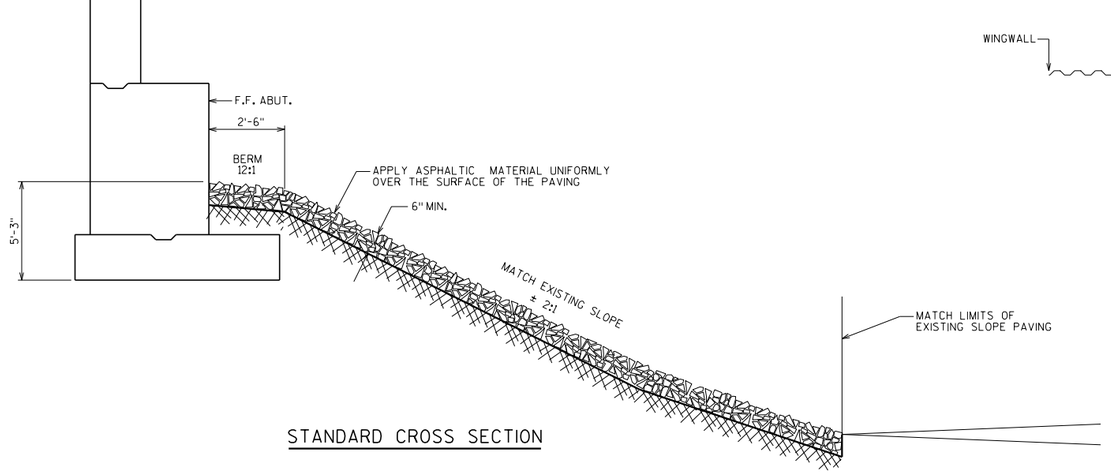


SECTION A-A



PLAN

(SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR)



STANDARD CROSS SECTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

SLOPE PAVING

SHEET 16 OF 17
747

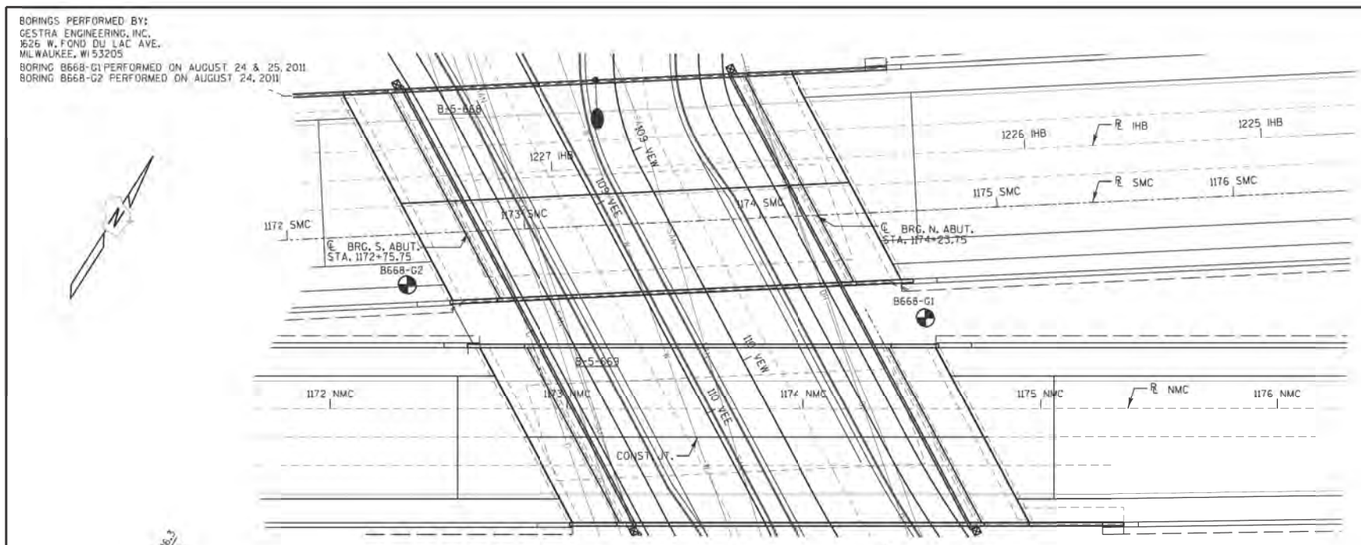
8

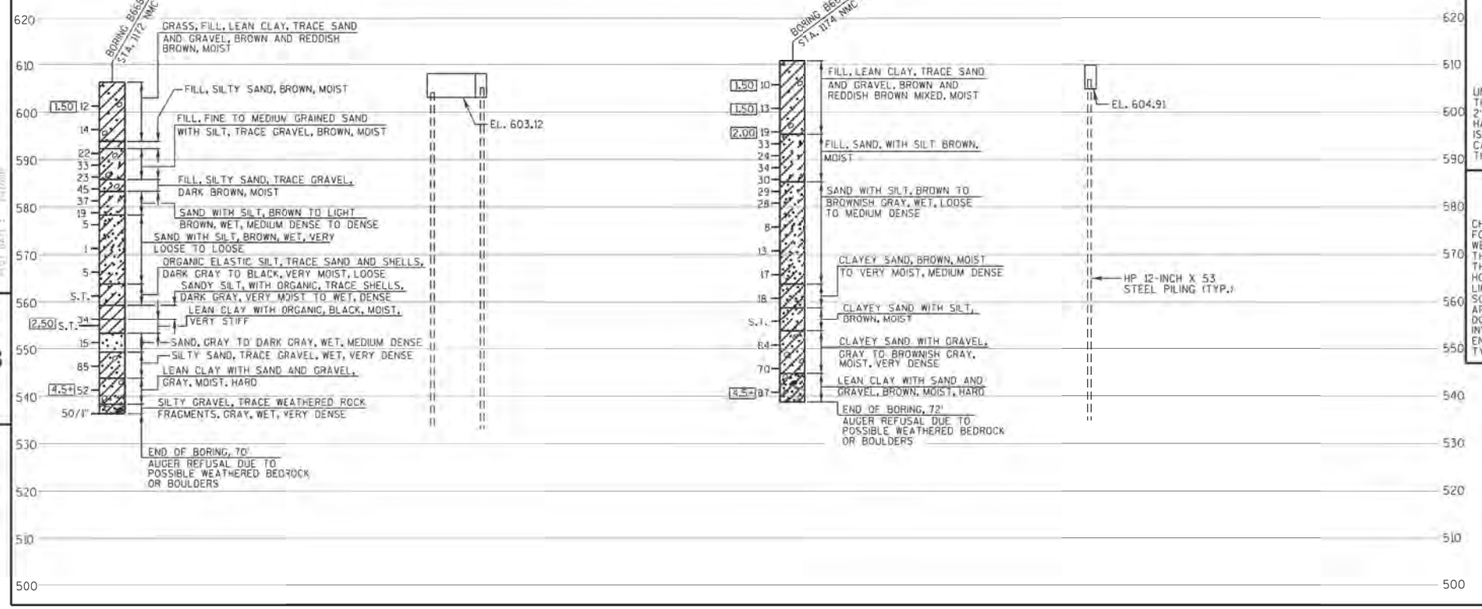
8

STATE PROJECT NUMBER

1133-10-71

BORINGS PERFORMED BY:
GESTRA ENGINEERING, INC.
1626 W. POND DU LAC AVE.
MILWAUKEE, WI 53205
BORING B668-G1 PERFORMED ON AUGUST 24 & 25, 2011
BORING B668-G2 PERFORMED ON AUGUST 24, 2011





STATE PROJECT NUMBER

1133-10-71

ABBREVIATIONS

F— FINE M— MEDIUM C— COARSE
WS— WEATHERED SO— SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

BORING NO.
STA.
ELEV.
UNCONFINED STRENGTH — 7.7 — SANDY GRAVEL
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE — F. BOULDERS OR COBBLES
SHELBY TUBE — S.T. — SAND
GROUND WATER ELEVATION — SILTY CLAY
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION — SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-668

DRAWN BY TAW | PLANS CK'D. TR

SUBSURFACE EXPLORATION

SHEET 4 OF 33

8

8

8

NOTE:

ALL INFORMATION, INCLUDING BORING LOGS AND LOCATIONS SHOWN ON THIS SHEET ARE REPRODUCED FROM THE DESIGN PLANS FOR PROPOSED STRUCTURE B-5-668. SEE THE GEOTECHNICAL REPORT FOR STRUCTURE B-5-668 FOR ADDITIONAL INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-64

DRAWN BY JAD | PLANS CK'D. SJG

SUBSURFACE EXPLORATION

SHEET 17 OF 17

748

STATE PROJECT NUMBER
1133-10-71

◯ - INDICATES WING/CORNER NUMBER

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. CONSTRUCTION STAGING
4. SUBSURFACE EXPLORATION
5. SOUTH ABUTMENT
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT
8. SOUTH ABUTMENT
9. WING 1
10. WING 2
11. SOUTH ABUTMENT DETAILS
12. NORTH ABUTMENT
13. NORTH ABUTMENT
14. NORTH ABUTMENT
15. WING 3
16. NORTH ABUTMENT DETAILS
17. ALTERNATE CONSTRUCTION JOINT
18. 72W" PRESTRESSED GIRDER DETAILS
19. 72W" PRESTRESSED GIRDER DETAILS
20. INTERMEDIATE STEEL DIAPHRAGMS
21. SUPERSTRUCTURE
22. SUPERSTRUCTURE
23. SUPERSTRUCTURE
24. SUPERSTRUCTURE
25. SUPERSTRUCTURE
26. SUPERSTRUCTURE
27. SINGLE SLOPE PARAPET 32SS (MODIFIED)
28. SINGLE SLOPE PARAPET 56SS
29. SOUTH APPROACH APRON DETAILS
30. NORTH APPROACH APRON DETAILS
31. APPROACH APRON DETAILS
32. APPROACH APRON DETAILS
33. FALL PROTECTION
34. AESTHETIC DETAILS
35. AESTHETIC DETAILS

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING: 1.03
OPERATIONAL RATING: 2.04
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

STRUCTURE IS DESIGNED FOR A 1½" SACRIFICIAL WEARING SURFACE PLACED AT INITIAL CONSTRUCTION INTEGRAL WITH THE DECK. THE DESIGN DOES NOT PROVIDE FOR ADDITIONAL LOADS DUE TO A FUTURE WEARING SURFACE.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY
SUPERSTRUCTURE ---------- f'c = 4,000 P.S.I
ALL OTHER ---------- f'c = 4,000 P.S.I.

BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.

72W" PRESTRESSED GIRDERS,
CONCRETE MASONRY ---------- f'c = 8,000 P.S.I.
PRESTRESSING STRANDS - 0.6" Φ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

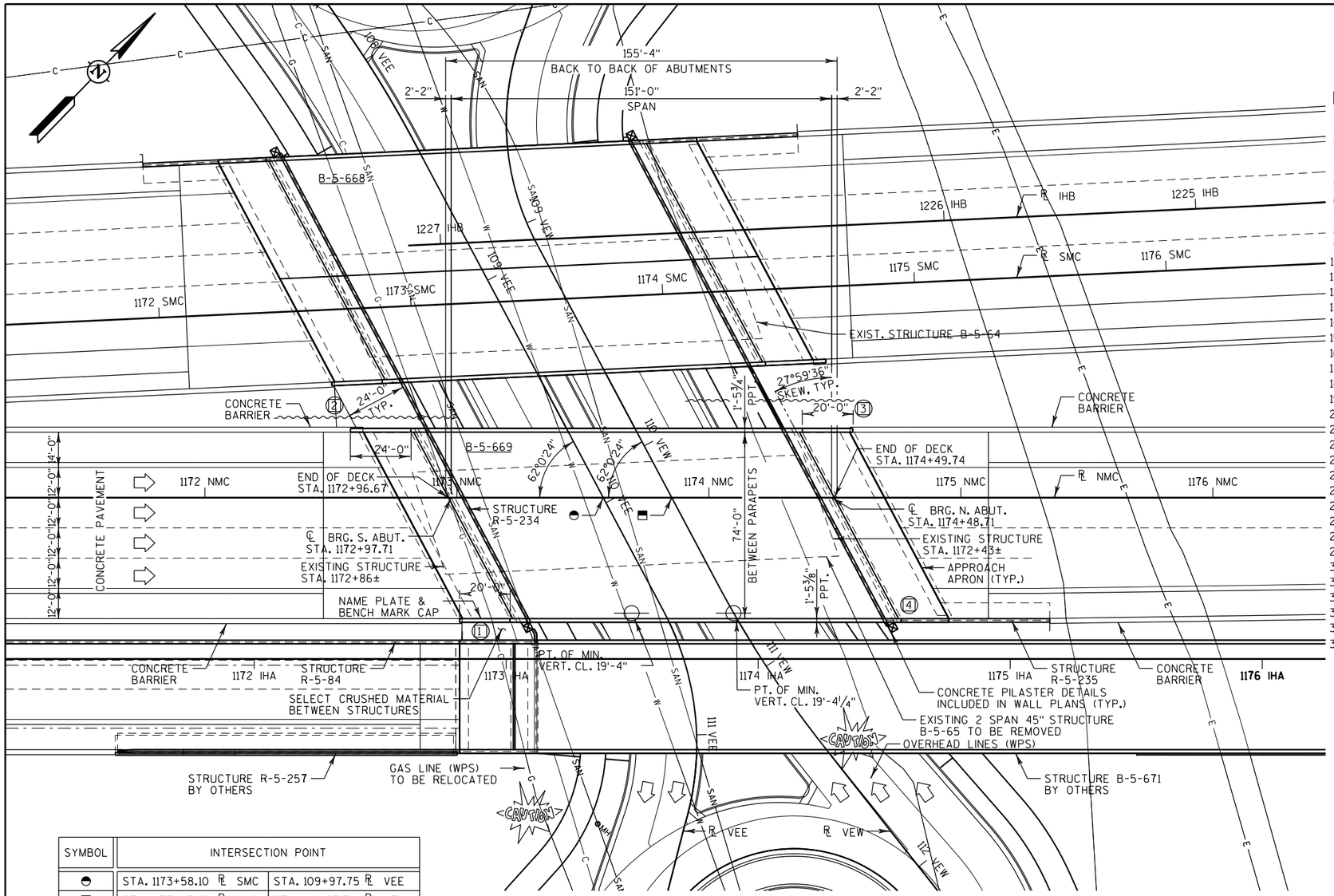
FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12-INCH X 53 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS⚠ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 80'-0" LONG.

⚠ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC VOLUME

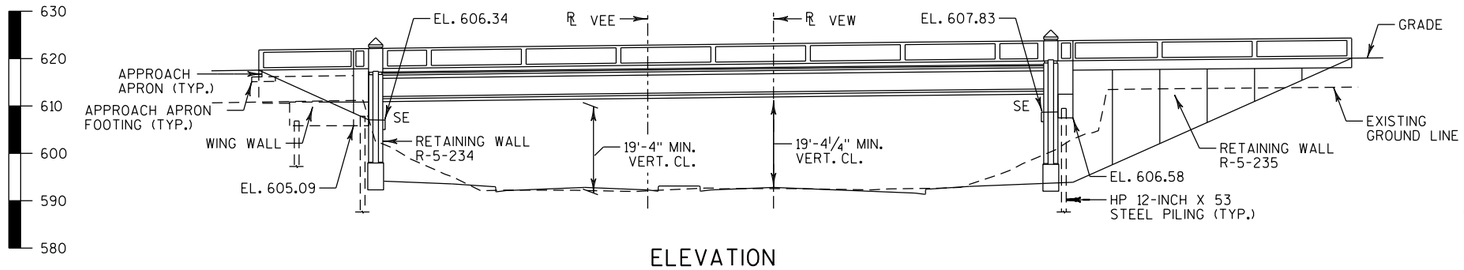
USH 41 SB (SMC)	VELP AVENUE
A.D.T. = 30,000 (2015)	A.D.T. = 25,500 (2015)
A.D.T. = 40,000 (2035)	A.D.T. = 34,100 (2035)
R.D.S. = 70 M.P.H.	R.D.S. = 40 M.P.H.



SYMBOL	INTERSECTION POINT	
◓	STA. 1173+58.10 ℄ SMC	STA. 109+97.75 ℄ VEE
⬒	STA. 1173+85.28 ℄ SMC	STA. 110+23.31 ℄ VEW

PLAN

(SINGLE SPAN 72W" PRESTRESSED GIRDERS)



ELEVATION

(LOOKING WEST)

DESIGN CONTACTS:
SCOTT GINAL
(262)-317-3344

NE REGION CONTACT:
PAUL VRANEY, P.E.
(920)-492-2232

ROMENESKO ENGINEERING, INC.
TOM ROMENESKO, P.E.
7325 CEDAR CREST DRIVE
SAUK CITY, WI 53583
(608) 644-1502

BRIDGE OFFICE CONTACT:
WILLIAM DREHER, P.E.
(608)-266-8489

NO.	DATE	REVISION	BY

Original Plans Prepared By
ROMENESKO ENGINEERING, INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/27/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-669

USH 41 NB OVER VELP AVENUE (USH 141 SB)

COUNTY	~~TOWN/CITY/~~VILLAGE
BROWN	HOWARD

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
TR	VR	MJB/TAW	TR

GENERAL PLAN

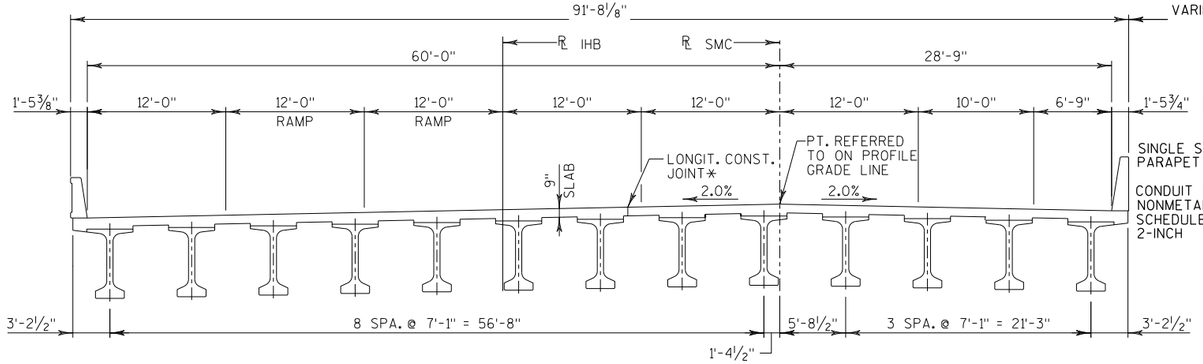
SHEET 1 OF 35
749

8

8

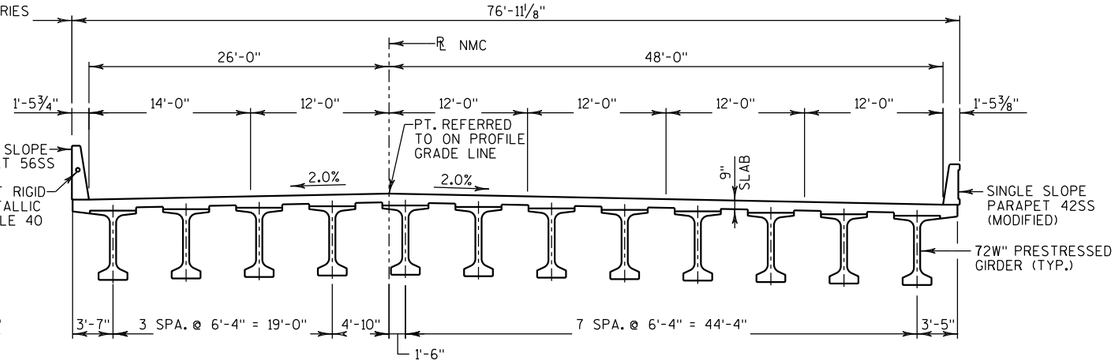
STATE PROJECT NUMBER

1133-10-71



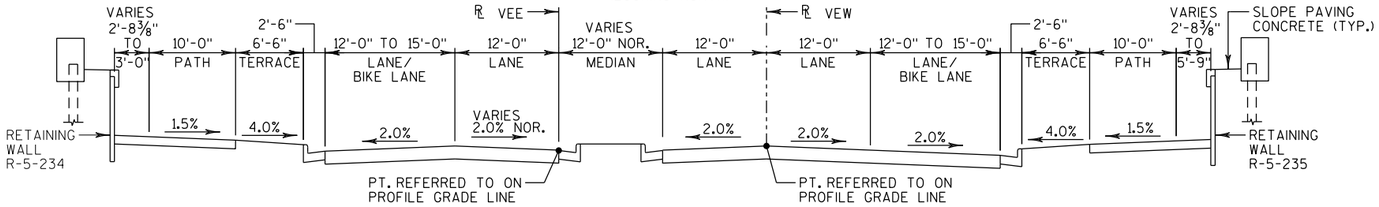
SECTION THRU USH 41 SB B-5-668

(LOOKING NORTH)



SECTION THRU USH 41 NB B-5-669

(LOOKING NORTH)

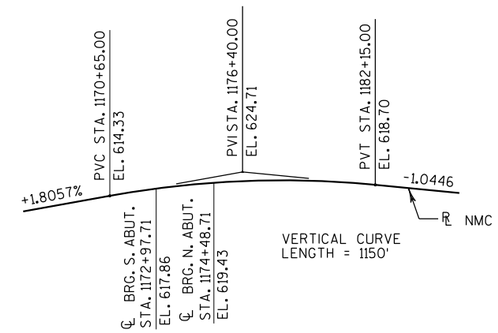


TYPICAL SECTION THRU VELP AVENUE

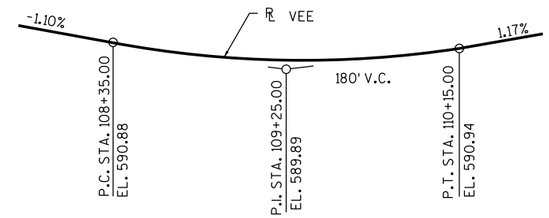
(LOOKING WEST)

TOTAL ESTIMATED QUANTITIES

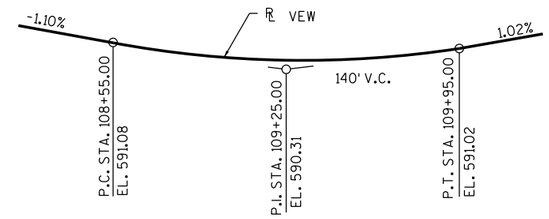
BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER.	APPROACH APRON	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 1173+73.21 NB	LS	——	——	——	——	1
203.0225.S	DEBRIS CONTAINAMENT STRUCTURE B-5-669	LS	——	——	——	——	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-5-669	LS	——	——	——	——	1
210.0100	BACKFILL STRUCTURE	CY	480	430	——	——	910
502.3200	PROTECTIVE SURFACE TREATMENT	SY	——	——	1,724	461	2,185
502.6110	MASONRY ANCHORS TYPE S 3/4-INCH	EACH	5	5	——	——	10
503.0172	PRESTRESSED GIRDER TYPE I 72W-INCH	LF	——	——	1,824	——	1,824
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	7,190	5,880	——	——	13,070
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	5,710	2,640	72,110	32,050	112,510
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	12	12	——	——	24
506.4000	STEEL DIAPHRAGMS B-5-669	EACH	——	——	22	——	22
511.1200	TEMPORARY SHORING B-5-669	SF	300	300	——	——	600
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	23	19	3	——	45
550.0500	PILE POINTS	EACH	22	21	——	——	43
550.1120.S	PILING STEEL HP 12-INCH X 53 LB	LF	1,760	1,680	——	——	3,440
604.0400	SLOPE PAVING CONCRETE	SY	22	22	——	——	44
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	135	110	——	390	635
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	——	——	10	45	55
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	——	——	146	——	146
SPV.0035.700	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	96	72	575	207	950
SPV.0085.700	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	——	——	2,660	——	2,660
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	48	44	368	——	460
SPV.0165.701	STAINING CONCRETE	SF	690	577	2,003	——	3,270
SPV.0165.702	STAINING CONCRETE BRICK	SF	48	44	368	——	460
SPV.0165.703	LONGITUDINAL GROOVING BRIDGE DECK	SF	——	——	11,029	2,840	13,869
	NON-BID ITEMS						
	FILLER	SIZE					1/2" & 3/4"



PROFILE GRADE LINE USH 41 NB (NMC)



PROFILE GRADE LINE VELP AVE. EB (VEE)



PROFILE GRADE LINE VELP AVE. WB (VEW)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED. THE TOP LAYER OF BAR STEEL REINFORCEMENT IN THE DECK SHALL BE PLACED 3 1/2" OF CLEAR CONCRETE COVER.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE FILL BETWEEN THE ABUTMENTS AND RETAINING WALLS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES FOR THE ABUTMENTS SHALL BE THE BOTTOM OF SLOPE PROTECTION.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

PRESTRESSED GIRDER BRIDGES - THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE, TOP OF APPROACH APRONS, TOP AND ROADWAY FACE OF PARAPET INCLUDING PARAPETS ON ABUTMENTS WINGS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

*LONGITUDINAL CONSTRUCTION JOINT IN DECK SHALL BE FORMED BY A BEVELED 2" X 2".

*LOW-VISCOSITY SEALER SHALL BE POURED OVER LONGITUDINAL CONSTRUCTION JOINT, COST INCIDENTAL TO THE BID ITEM "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES".

EXISTING STRUCTURE B-5-65 IS A 2 SPAN 45" PRESTRESSED GIRDER STRUCTURE TO BE REMOVED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY JAD | PLANS CK'D. SJG

CROSS SECTION & QUANTITIES

SHEET 2 OF 35

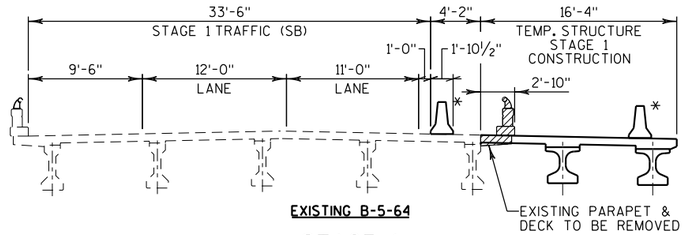
750

8

8

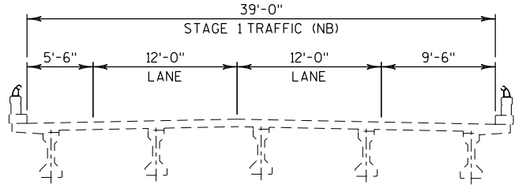
STATE PROJECT NUMBER

1133-10-71



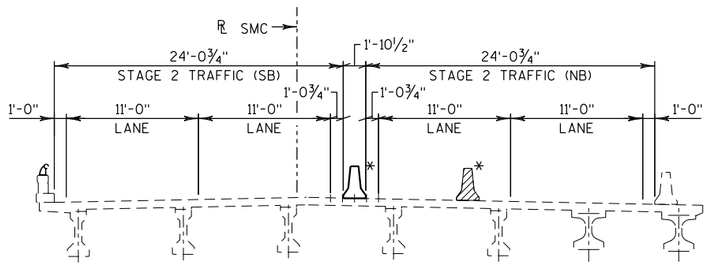
EXISTING B-5-64

STAGE 1
(LOOKING NORTH)



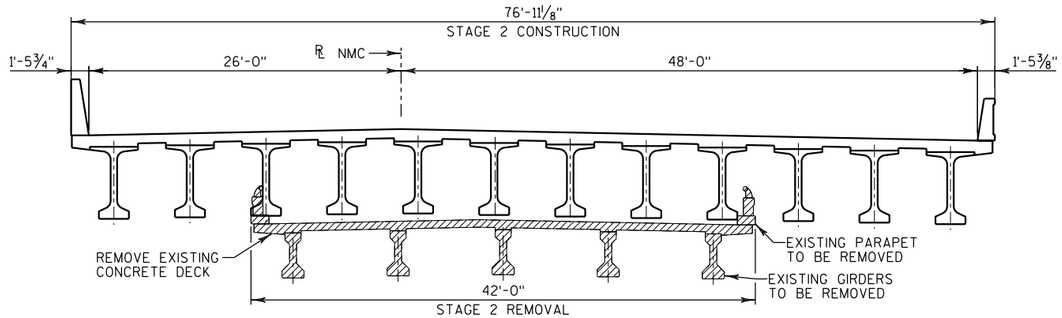
EXISTING B-5-65

STAGE 1
(LOOKING NORTH)



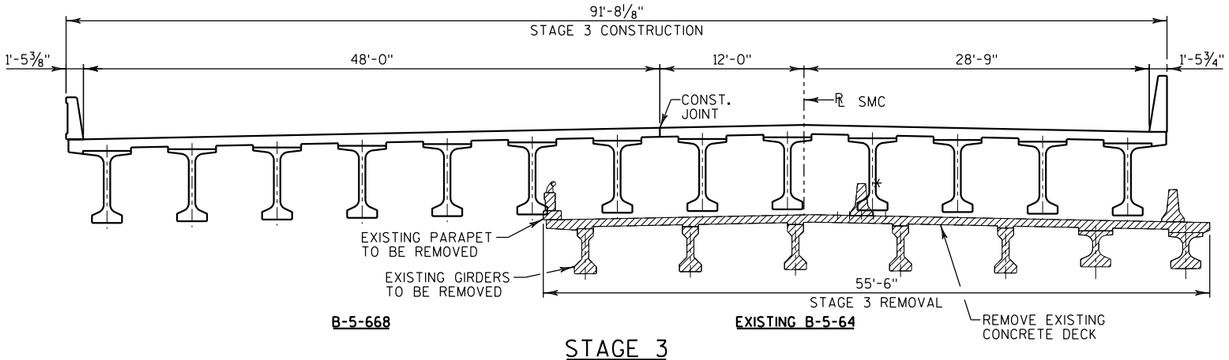
EXISTING B-5-64

STAGE 2
(LOOKING NORTH)



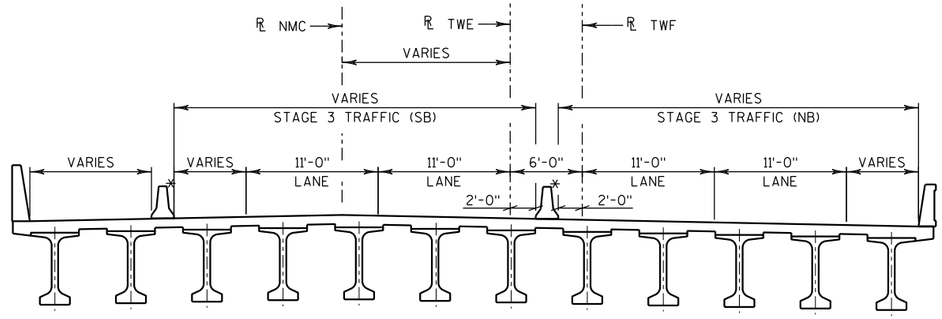
EXISTING B-5-65 B-5-669

STAGE 2
(LOOKING NORTH)



B-5-668 EXISTING B-5-64

STAGE 3
(LOOKING NORTH)



B-5-669

STAGE 3
(LOOKING NORTH)

LEGEND

- REMOVAL
- EXISTING

*TEMPORARY CONCRETE BARRIER (ANCHORED)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY JAD | PLANS CK'D. SJG

CONSTRUCTION STAGING

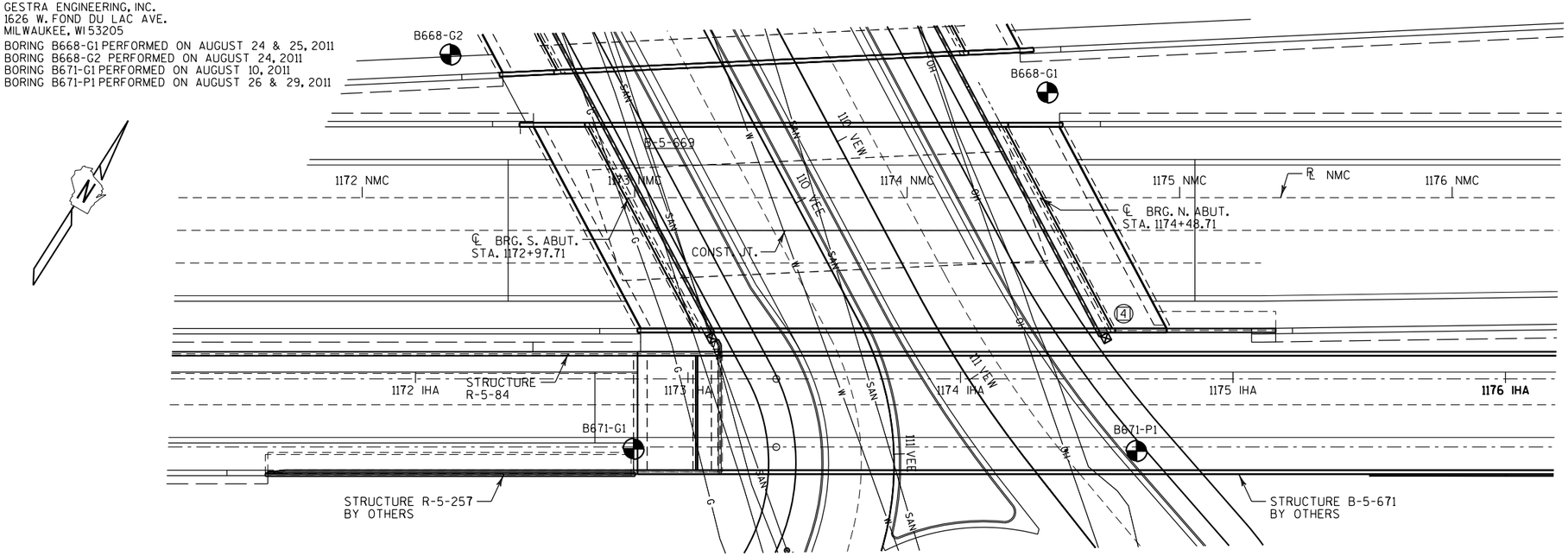
SHEET 3 OF 35
751

8

8

BORINGS PERFORMED BY:
GESTRA ENGINEERING, INC.
1626 W. FOND DU LAC AVE.
MILWAUKEE, WI 53205

BORING B668-G1 PERFORMED ON AUGUST 24 & 25, 2011
BORING B668-G2 PERFORMED ON AUGUST 24, 2011
BORING B671-G1 PERFORMED ON AUGUST 10, 2011
BORING B671-P1 PERFORMED ON AUGUST 26 & 29, 2011



WATER LEVEL ASSUMED FROM SAMPLE CONDITION
WATER LEVEL DURING DRILLING
WATER LEVEL AT COMPLETION OF DRILLING

BORING B668-G2, EL. 606.3
STA. 1172 NMC +31, 31'LT.

GRASS, FILL, LEAN CLAY, TRACE SAND AND GRAVEL, BROWN AND REDDISH BROWN, MOIST
FILL, SILTY SAND, BROWN, MOIST
FILL, FINE TO MEDIUM GRAINED SAND WITH SILT, TRACE GRAVEL, BROWN, MOIST
FILL, SILTY SAND, TRACE GRAVEL, DARK BROWN, MOIST
SAND WITH SILT, BROWN TO LIGHT BROWN, WET, MEDIUM DENSE TO DENSE
SAND WITH SILT, BROWN, WET, VERY LOOSE TO LOOSE
ORGANIC ELASTIC SILT, TRACE SAND AND SHELLS, DARK GRAY TO BLACK, VERY MOIST, LOOSE
SANDY SILT, WITH ORGANIC, TRACE SHELLS, DARK GRAY, VERY MOIST TO WET, DENSE
LEAN CLAY WITH ORGANIC, BLACK, MOIST, VERY STIFF
SAND, GRAY TO DARK GRAY, WET, MEDIUM DENSE
SILTY SAND, TRACE GRAVEL, WET, VERY DENSE
LEAN CLAY WITH SAND AND GRAVEL, GRAY, MOIST, HARD
SILTY GRAVEL, TRACE WEATHERED ROCK FRAGMENTS, GRAY, WET, VERY DENSE
END OF BORING, 70'
AUGER REFUSAL DUE TO POSSIBLE WEATHERED BEDROCK OR BOULDERS

EL. 605.09

BORING B671-G1, EL. 591.7
STA. 1172 IHA +78, 28'RT.

4" TOPSOIL, FILL, SAND, LIGHT BROWN, MOIST
FILL, SILTY CLAYEY SAND, BROWN, WET
FILL, LEAN CLAY, WITH WET SAND AND GRAVEL LAYERS, BROWN AND GRAY MIXED, VERY MOIST
FILL, SAND, TRACE GRAVEL, GRAY AND BROWN MIXED, WET
LEAN CLAY, TRACE GRAVEL, BROWN, MOIST, MEDIUM STIFF TO STIFF
LEAN CLAY, TRACE SAND AND GRAVEL, BROWN, MOIST TO VERY MOIST, SOFT TO VERY SOFT
LEAN CLAY, TRACE GRAVEL, BROWN, MOIST, MEDIUM STIFF TO STIFF
SILTY SAND, BROWN, WET, DENSE
SILTY GRAVEL, WITH SAND, LIGHT GRAY, WET, VERY DENSE
LEAN CLAY, WITH SAND, TRACE GRAVEL, GRAY, MOIST, VERY STIFF TO HARD
CLAYEY SAND, WITH GRAVEL, BROWNISH GRAY, MOIST, VERY DENSE
BEDROCK, DOLOMITE, LIGHT GRAY
END OF BORING, 80'
ROCK CORING 70' TO 80'

BORING B668-G1, EL. 610.8
STA. 1174 NMC +53, 44'LT.

EL. 606.58

FILL, LEAN CLAY, TRACE SAND AND GRAVEL, BROWN AND REDDISH BROWN MIXED, MOIST
FILL, SAND, WITH SILT BROWN, MOIST
SAND WITH SILT, BROWN TO BROWNISH GRAY, WET, LOOSE TO MEDIUM DENSE
CLAYEY SAND, BROWN, MOIST TO VERY MOIST, MEDIUM DENSE
CLAYEY SAND WITH SILT, BROWN, MOIST
CLAYEY SAND WITH GRAVEL, GRAY TO BROWNISH GRAY, MOIST, VERY DENSE
LEAN CLAY WITH SAND AND GRAVEL, GRAY, BROWN, MOIST, HARD
END OF BORING, 72'
AUGER REFUSAL DUE TO POSSIBLE WEATHERED BEDROCK OR BOULDERS
HP 12-INCH X 53 STEEL PILING (TYP.)

BORING B671-P1, EL. 593.2
STA. 1174 IHA +62, 26'RT.

FILL, SANDY SILT, WITH GRAVEL, DARK BROWN, MOIST
FILL, FINE TO MEDIUM SAND, TRACE GRAVEL, BROWN TO DARK BROWN, MOIST
FILL, SANDY SILT, BROWNISH GRAY, WET
FILL, SILT, TRACE CLAY, BROWN TO REDDISH BROWN, WET TO SATURATED
SILTY SAND, BROWN TO GRAY, SATURATED, LOOSE TO MEDIUM DENSE (POSSIBLE FILL)
LEAN CLAY, BROWN TO REDDISH BROWN, MOIST TO VERY MOIST, MEDIUM STIFF TO VERY STIFF
LEAN CLAY, WITH LAYERS OF FAT CLAY, BROWNISH GRAY, VERY MOIST, VERY SOFT TO MEDIUM STIFF
SILTY CLAY, OCCASIONAL SILT LENSES, GRAY, VERY MOIST TO WET, VERY SOFT
LEAN CLAY, WITH SILT LENSES, GRAY WITH REDDISH BROWN LAYERS, VERY MOIST, STIFF
SILTY SAND, GRAY, VERY MOIST TO WET, MEDIUM DENSE
NO RECOVERY, POSSIBLE BOULDER (DRILLERS OBSERVATION)
SILTY CLAY, WITH SAND AND GRAVEL, GRAY, MOIST, HARD
LEAN CLAY, WITH SAND SEAMS, GRAY, MOIST, VERY STIFF TO HARD
SILTY SAND, GRAY, WET, DENSE TO VERY DENSE
SILTY CLAY, WITH SAND, TRACE GRAVEL, GRAY, HARD, MOIST
SILTY CLAY, WITH SAND AND GRAVEL, TRACE WEATHERED ROCK FRAGMENTS, GRAY, MOIST, HARD
BEDROCK, DOLOMITE, LIGHT GRAY
END OF BORING, 92'

STATE PROJECT NUMBER

1133-10-71

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

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SUBSURFACE EXPLORATION

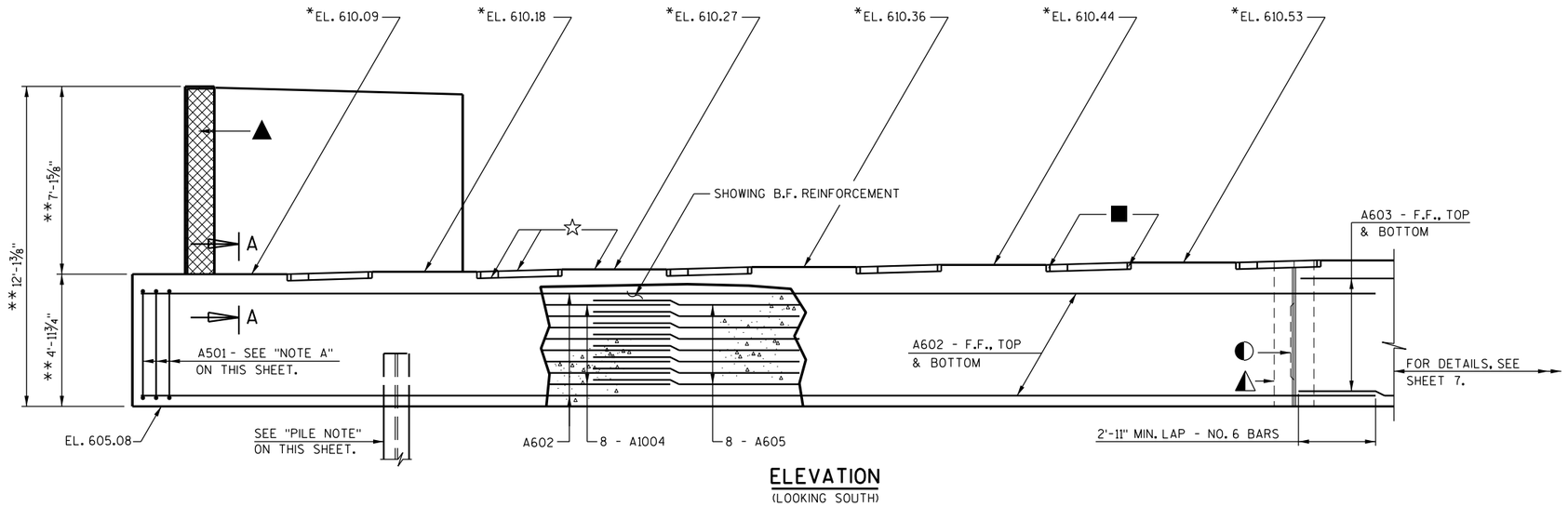
SHEET 4 OF 35
752

FILE NAME : P:\161 USH 41 over Velp Ave Rd Smith\Structures\B-5-669\04_subsurface.b-5-669.dgn
PLOT DATE : 5/12/2014

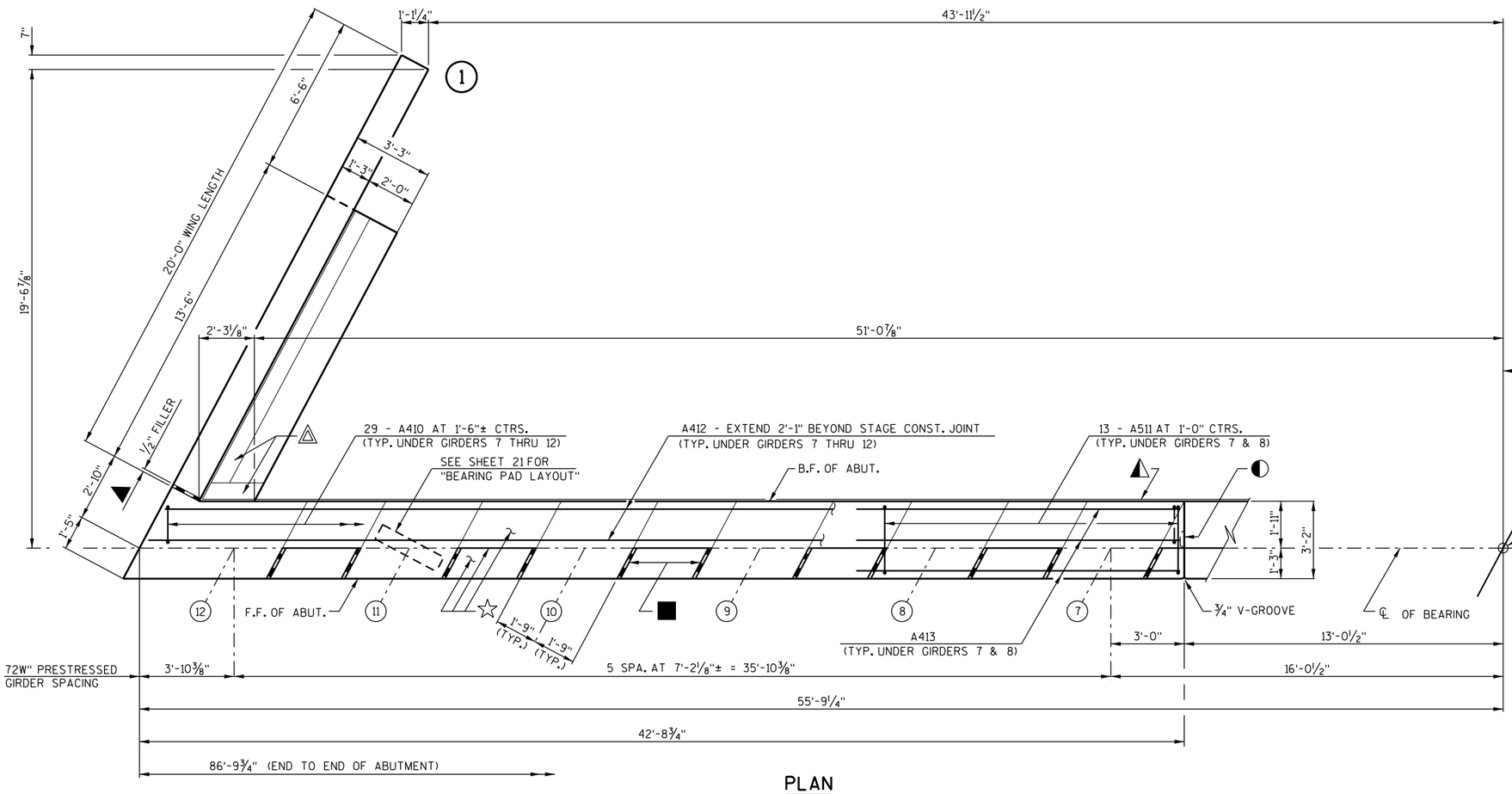
8

STATE PROJECT NUMBER

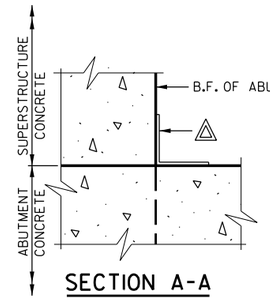
1133-10-71



ELEVATION
(LOOKING SOUTH)



PLAN



SECTION A-A

LEGEND

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE ℄ OF BEARING.

** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF ABUTMENT. FOR WING DETAILS AND ELEVATIONS, SEE SHEETS 9 & 10.

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

½" FILLER TO EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

KEYED CONST. JOINT FORMED BY A BEVELED 2" × 8".

¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

(X) INDICATES WING NUMBER

PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING HORIZONTAL IN THIS AREA. SEE SECTION A-A ON THIS SHEET.

NOTES: SEE "PLAN" VIEW AND "TYPICAL SECTION THRU BODY" ON SHEET 11 FOR ADDITIONAL BAR STEEL REINFORCEMENT DETAILS AT GIRDER SEATS.

FOR "TYPICAL SECTION THRU BODY", SEE SHEET 11.

PILE NOTE

SOUTH ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 12 × 53 WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 80'-0" LONG. FOR PILE LAYOUT DETAILS, SEE SHEETS 6 & 8. FOR PILE SPLICE DETAILS, SEE SHEET 6.

NOTE A

A501 BARS SHALL BE SPACED AT 6" CTRS. IN THE OUTSIDE THIRD OF THE BODY NEAR WING 1 AND AT 1'-0" CTRS. IN THE REST OF THE BODY CONSTRUCTED IN STAGE 1B. SPACE BARS TO MISS PILES. (ONE THIRD OF THE BODY IS 28'-11"± LONG).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

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SOUTH ABUTMENT

SHEET 5 OF 35
753

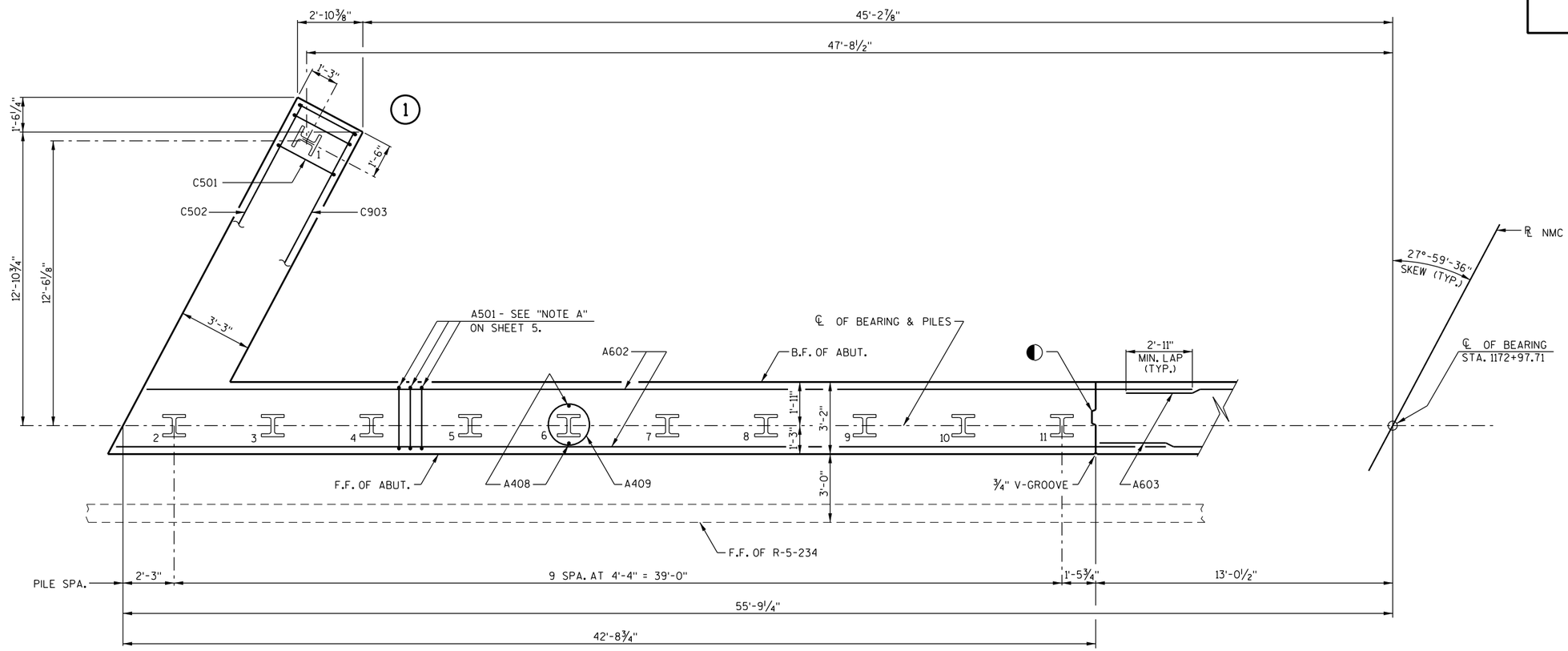
8

8

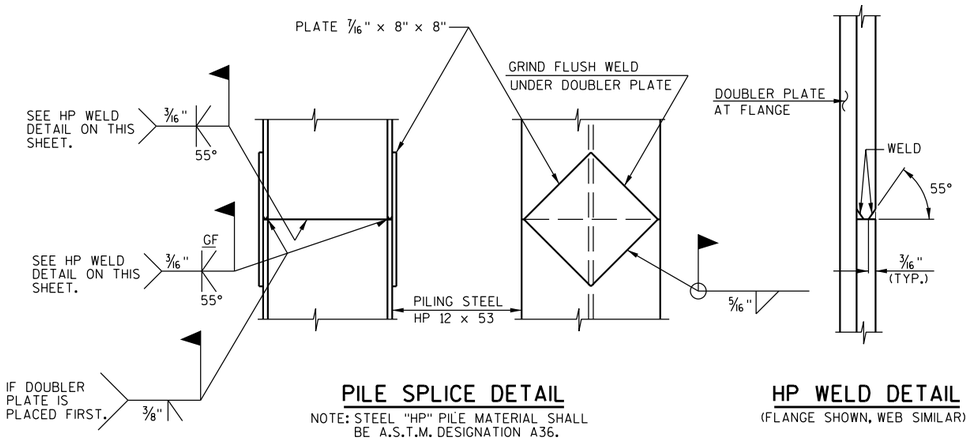
FILE NAME : P:\161 USH 41 over Velp Ave RA Sm\th\Structures\B-5-669\05_sabut1_b-5-669.dgn
PLOT DATE : 6/10/2014

STATE PROJECT NUMBER

1133-10-71



PILE PLAN

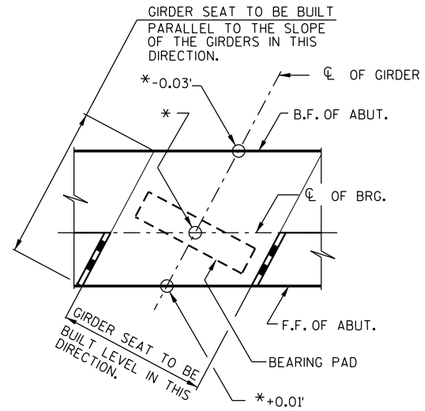


PILE SPLICE DETAIL

NOTE: STEEL "HP" PILE MATERIAL SHALL BE A.S.T.M. DESIGNATION A36.

HP WELD DETAIL

(FLANGE SHOWN, WEB SIMILAR)



GIRDER SEAT DETAIL

LEGEND

(X) ◐ FOR SYMBOL DESCRIPTION, SEE SHEET 5.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SOUTH ABUTMENT

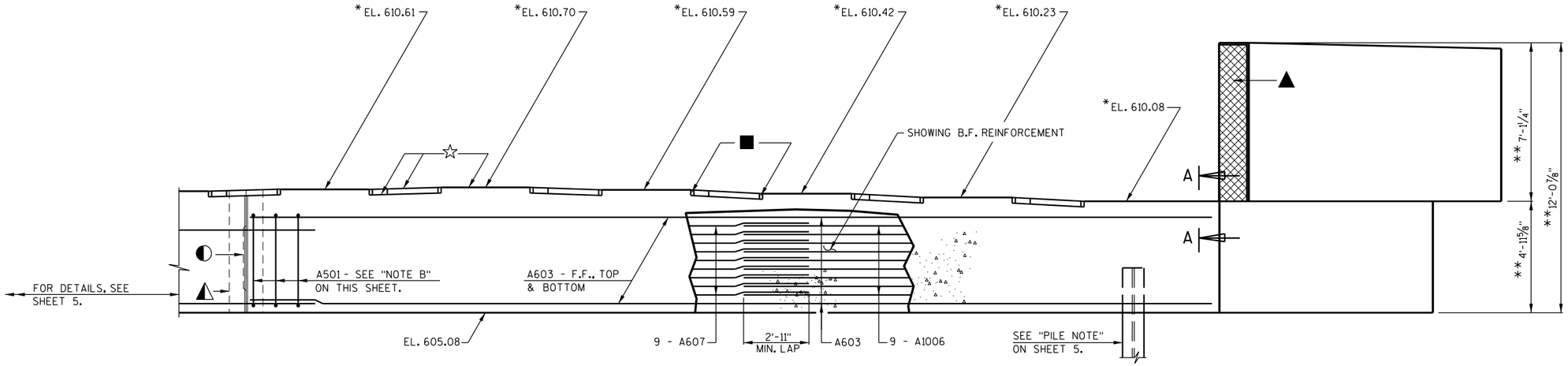
SHEET 6 OF 35
754

8

8

FILE NAME : P:\161 USH 41 over Velp Ave Rd Smith\Structures\B-5-669\06_sabut2_b-5-669.dgn
PLOT DATE : 6/10/2014

STATE PROJECT NUMBER
1133-10-71



ELEVATION
(LOOKING SOUTH)

LEGEND

* ◭ ** ◐ ■ ☆ ◬ ▲ FOR SYMBOL DESCRIPTIONS, SEE SHEET 5.

(X) INDICATES WING NUMBER

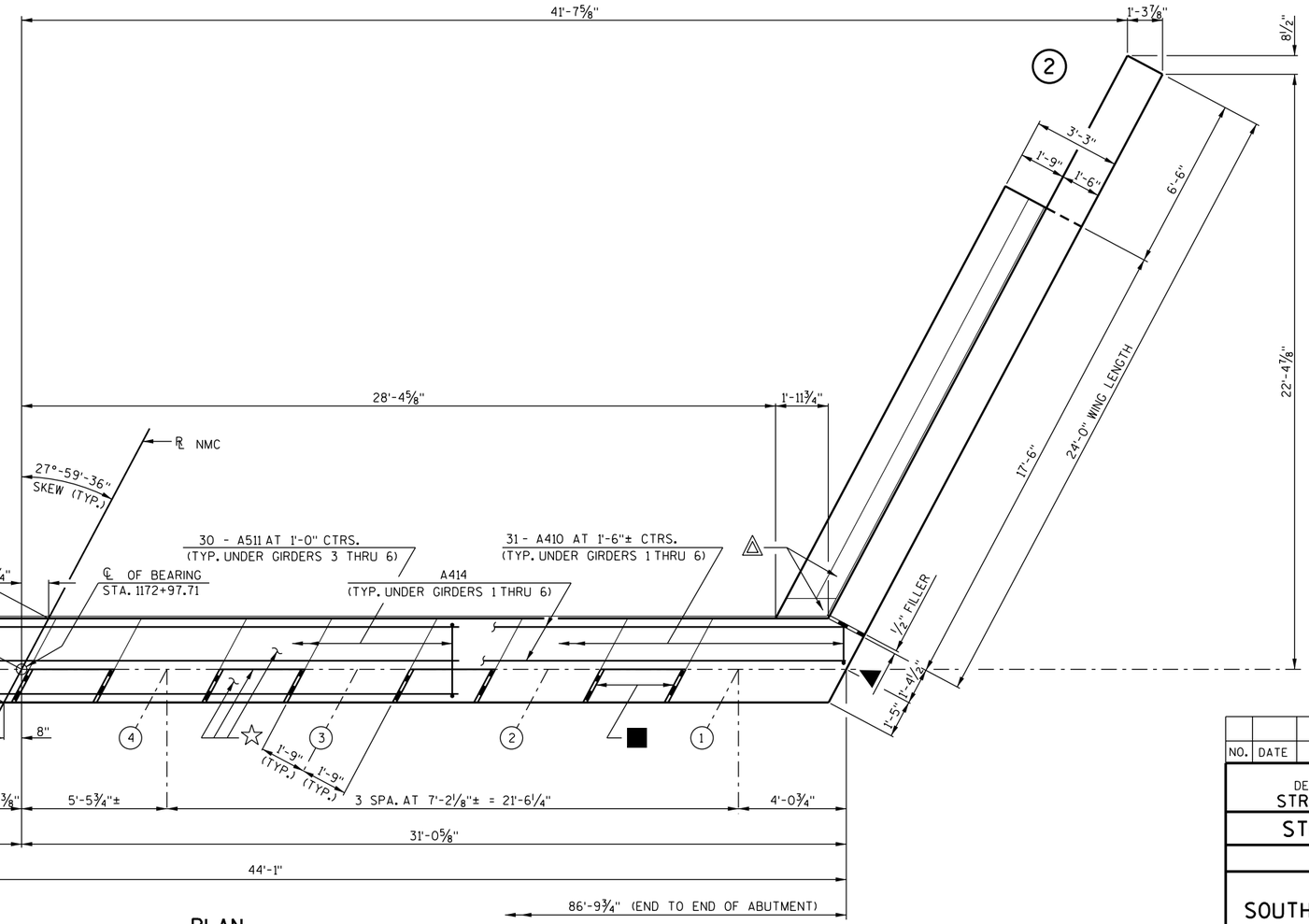
NOTES: SEE "PLAN" VIEW AND "TYPICAL SECTION THRU BODY" ON SHEET 11 FOR ADDITIONAL BAR STEEL REINFORCEMENT DETAILS AT GIRDER SEATS.

FOR "TYPICAL SECTION THRU BODY", SEE SHEET 11.

FOR "SECTION A-A", SEE SHEET 5.

NOTE B

A501 BARS SHALL BE SPACED AT 6" CTRS. IN THE OUTSIDE THIRD OF THE BODY NEAR WING 2 AND AT 2'-0" CTRS. IN THE REST OF THE BODY CONSTRUCTED IN STAGE 3. SPACE BARS TO MISS PILES. (ONE THIRD OF THE BODY IS 28'-11"± LONG).



PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SOUTH ABUTMENT

SHEET 7 OF 35
755

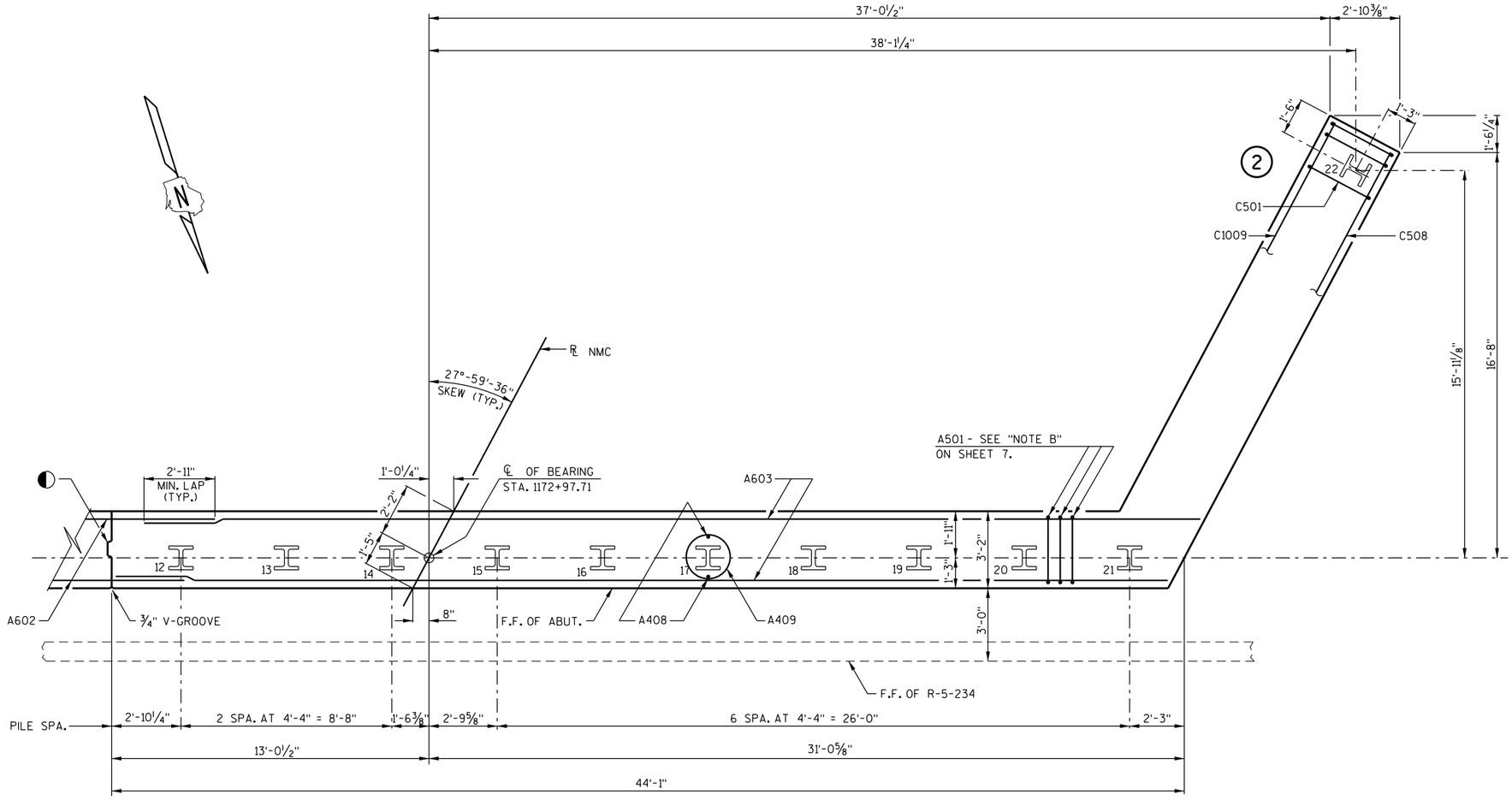
FILE NAME : P:\161 USH 41 over Velp Ave RA Sm\Structures\B-5-669\07_sdbut3_b-5-669.dgn
PLOT DATE : 6/10/2014

8

8

STATE PROJECT NUMBER

1133-10-71



PILE PLAN

LEGEND

(X) ◐ FOR SYMBOL DESCRIPTION, SEE SHEET 5.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SOUTH ABUTMENT

SHEET 8 OF 35
756

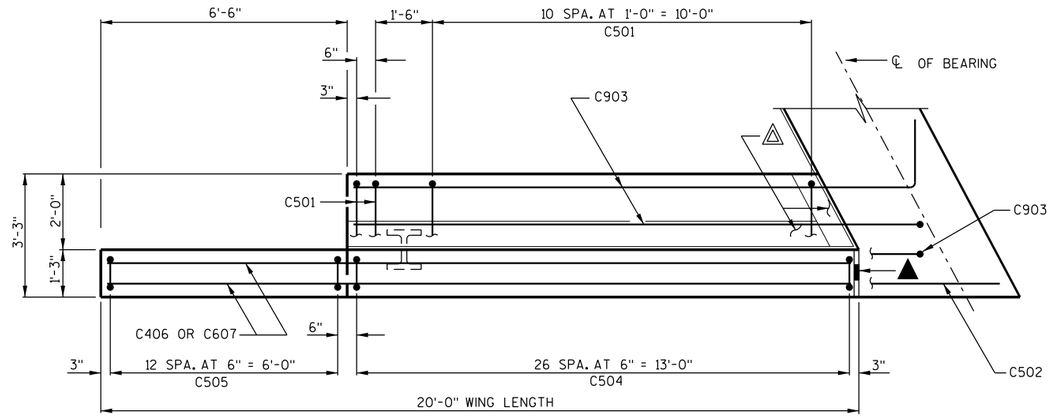
8

8

FILE NAME : P:\161 USH 41 over Velp Ave RA Sm\Structures\B-5-669\08_sabut4_b-5-669.dgn
PLOT DATE : 6/10/2014

STATE PROJECT NUMBER

1133-10-71



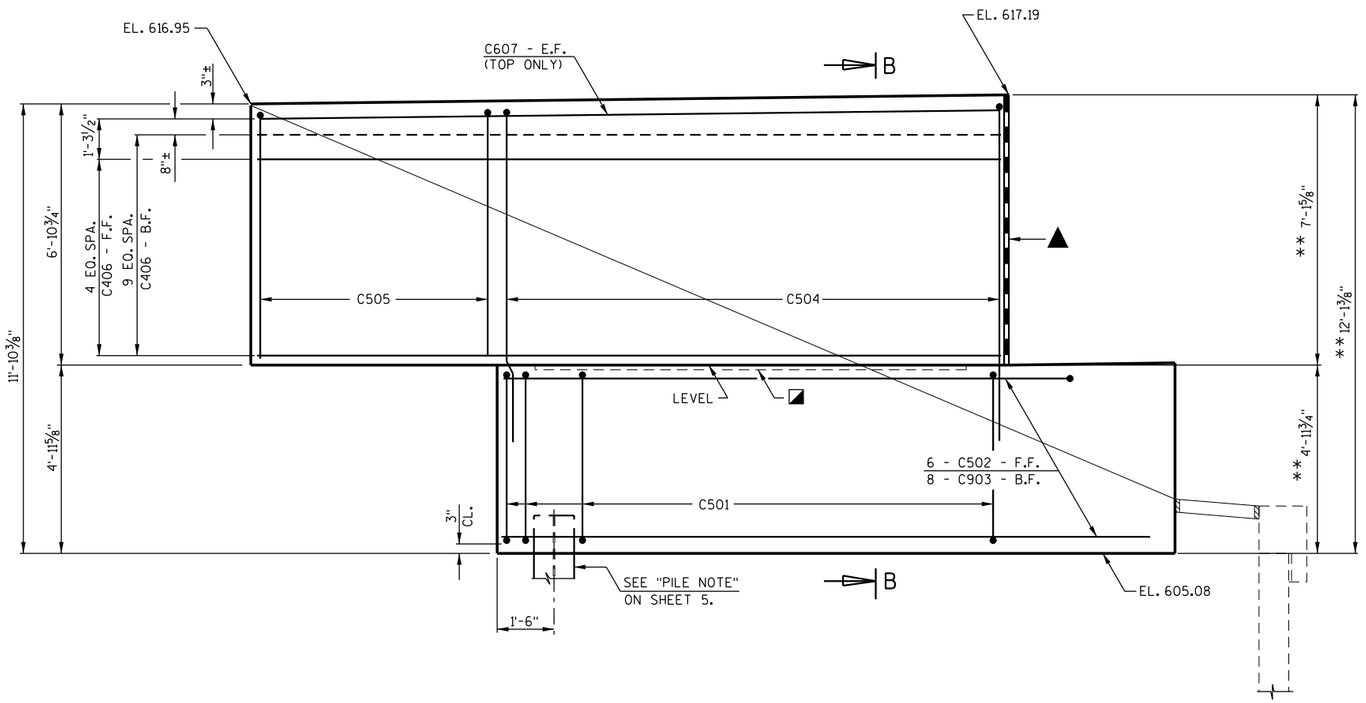
PLAN - WING 1

LEGEND

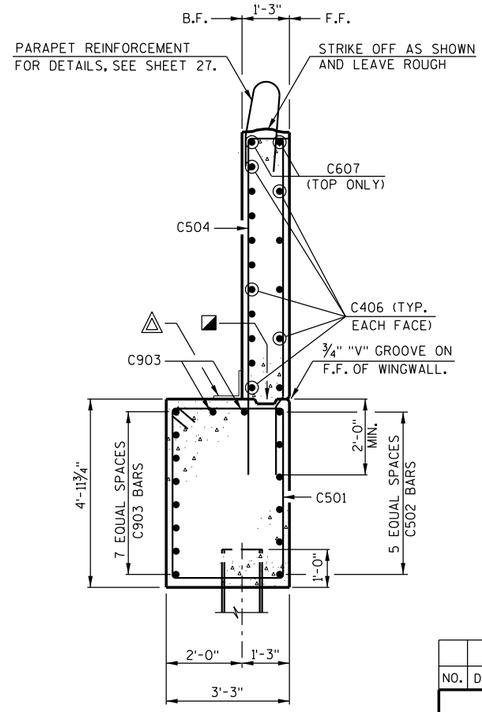
** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF ABUTMENT.

OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.

▲ △ FOR SYMBOL DESCRIPTIONS, SEE SHEET 5.



ELEVATION - WING 1



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

WING 1

SHEET 9 OF 35
757

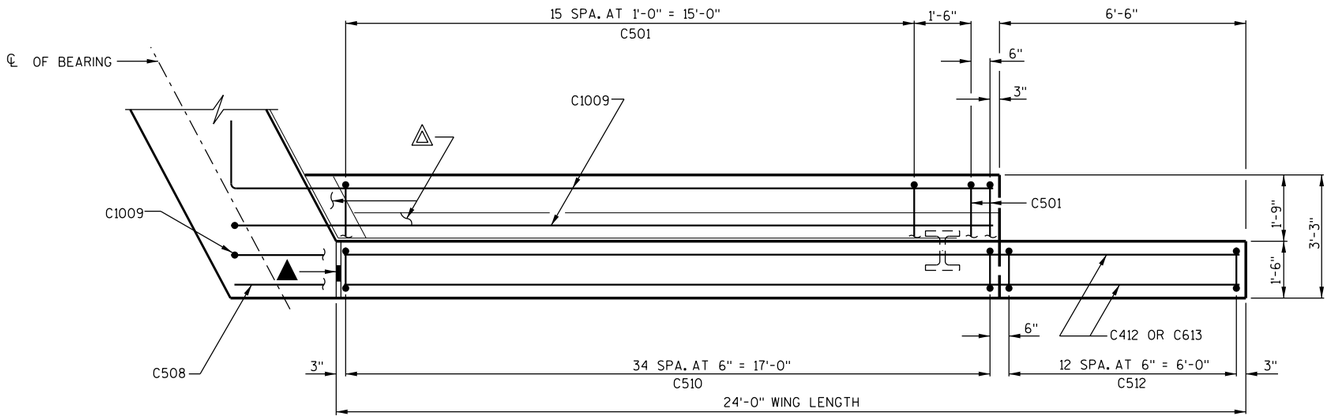
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\09.#/rgl_b-5-669.dgn
PLOT DATE : 6/10/2014

8

8

STATE PROJECT NUMBER

1133-10-71



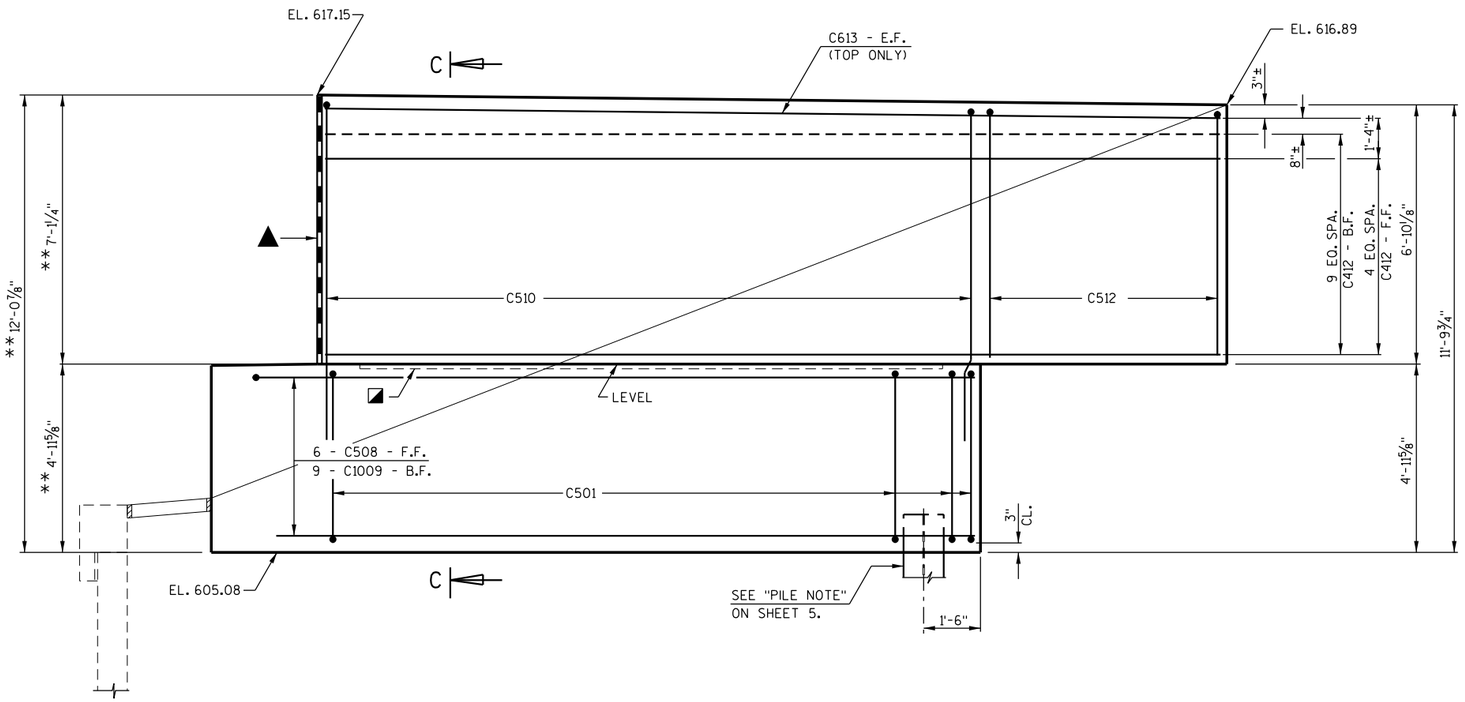
PLAN - WING 2

LEGEND

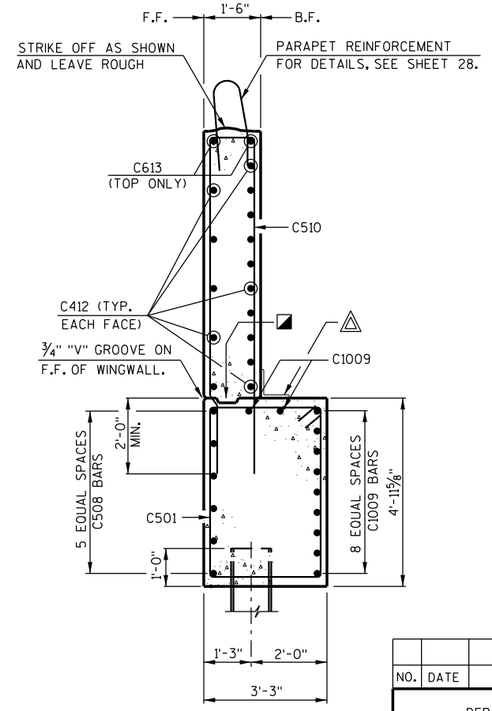
** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF ABUTMENT.

OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.

FOR SYMBOL DESCRIPTIONS, SEE SHEET 5.



ELEVATION - WING 2



SECTION C-C

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

WING 2

SHEET 10 OF 35
758

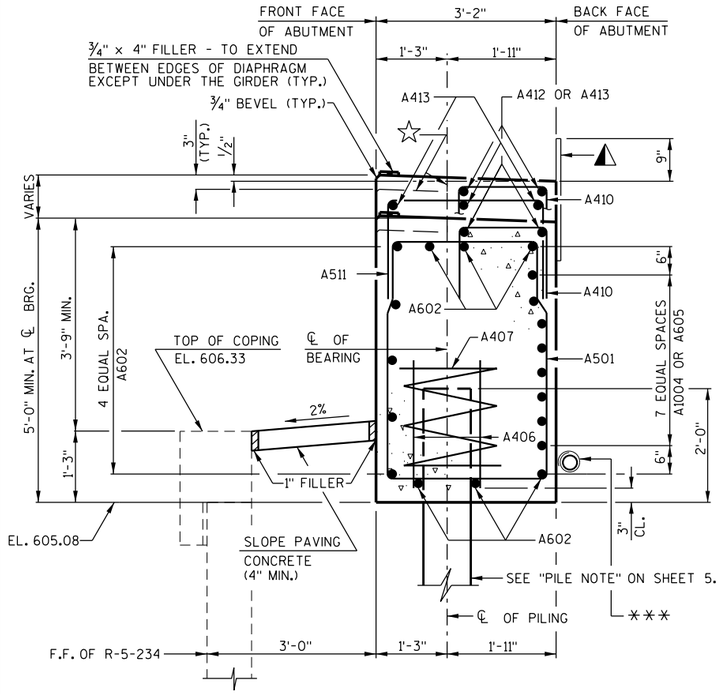
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\10.#rng2_b-5-669.dgn
PLOT DATE : 6/10/2014

8

8

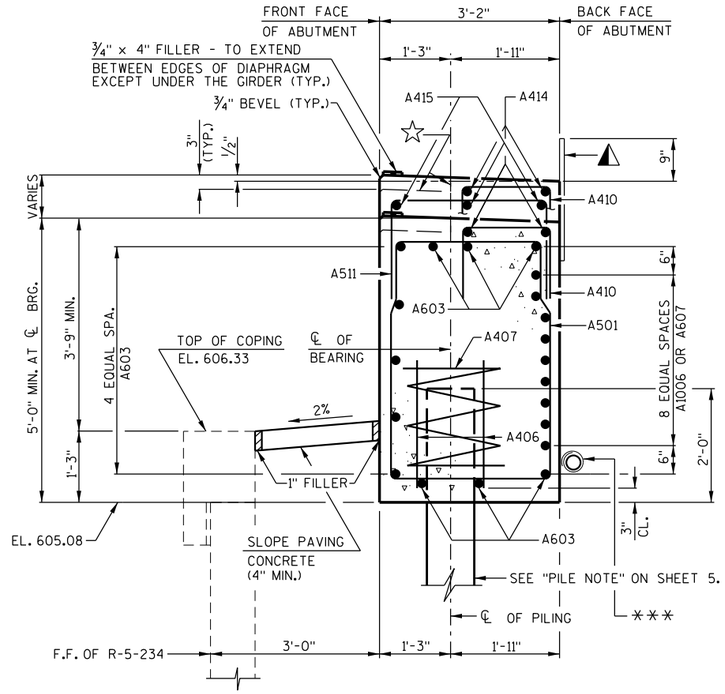
STATE PROJECT NUMBER

1133-10-71



TYPICAL SECTION THRU BODY FROM SHEET 5

(LOOKING EAST)



TYPICAL SECTION THRU BODY FROM SHEET 7

(LOOKING EAST)

BILL OF BARS

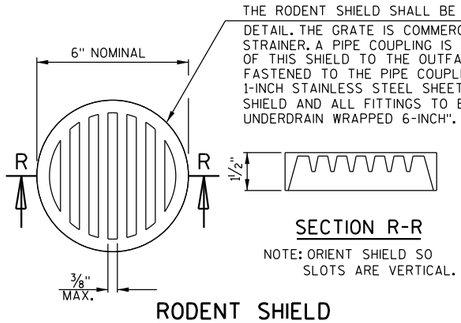
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
UNCOATED BARS					TOTAL WEIGHT =	LBS.
A501	149	14-11	X		BODY - STIRRUPS	VERT.
A602	11	46-0			BODY - TOP, BOTTOM & F.F.	HORIZ.
A603	11	43-5			BODY - TOP, BOTTOM & F.F.	HORIZ.
A1004	8	20-0	X		BODY - B.F. - NEAR WING 1	HORIZ.
A605	8	29-2			BODY - B.F.	HORIZ.
A1006	9	24-0	X		BODY - B.F. - NEAR WING 2	HORIZ.
A607	9	25-0			BODY - B.F.	HORIZ.
A408	40	2-3			BODY - AT PILES - 2 PER PILE	VERT.
A409	20	28-0	X		BODY - AT PILES - 1 PER PILE - SPIRAL WRAP	VERT.
A410	59	4-11	X		BODY - TOP - AT GIRDERS	VERT.
A511	42	5-7	X		BODY - TOP - AT GIRDERS 3 THRU 8	VERT.
A412	2	44-4			BODY - TOP - AT GIRDERS 7 THRU 12	HORIZ.
A413	3	13-3			BODY - TOP - AT GIRDERS 7 & 8	HORIZ.
A414	2	43-10			BODY - TOP - AT GIRDERS 1 THRU 6	HORIZ.
A415	3	29-4			BODY - TOP - AT GIRDERS 3 THRU 6	HORIZ.
EPOXY COATED BARS					TOTAL WEIGHT =	LBS.
C501	31	15-5	X		WINGS 1 & 2 - STIRRUPS	VERT.
C502	6	17-0			WING 1 - BOTTOM - F.F.	HORIZ.
C903	10	16-4	X		WING 1 - BOTTOM - B.F. & TOP	HORIZ.
C504	27	18-6	X		WING 1 - F.F. & B.F.	VERT.
C505	13	13-8	X		WING 1 - F.F. & B.F.	VERT.
C406	15	19-8			WING 1 - F.F. & B.F.	HORIZ.
C607	2	19-8			WING 1 - TOP - F.F. & B.F.	HORIZ.
C508	6	20-0			WING 2 - BOTTOM - F.F.	HORIZ.
C1009	11	21-8	X		WING 2 - BOTTOM - B.F. & TOP	HORIZ.
C510	35	18-11	X		WING 2 - F.F. & B.F.	VERT.
C511	13	13-11	X		WING 2 - F.F. & B.F.	VERT.
C412	15	23-8			WING 2 - F.F. & B.F.	HORIZ.
C613	2	23-8			WING 2 - TOP - F.F. & B.F.	HORIZ.

LEGEND

☆ ◭ FOR SYMBOL DESCRIPTIONS, SEE SHEET 5.

*** PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE. SEE "RODENT SHIELD" DETAIL ON THIS SHEET.

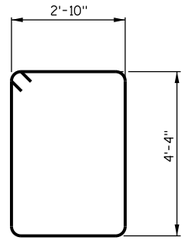


THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH STAINLESS STEEL SHEET METAL SCREWS. COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

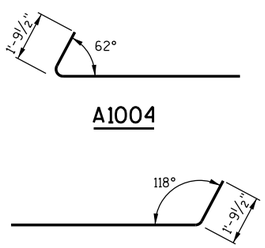
SECTION R-R

NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.

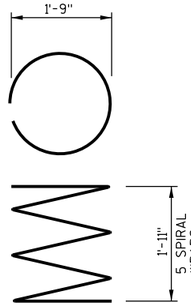
RODENT SHIELD



A501



A1004 A1006



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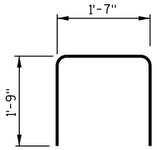

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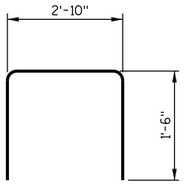

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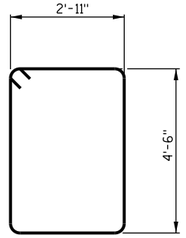
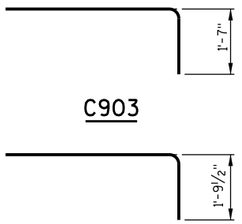
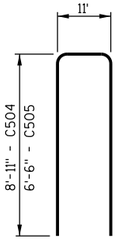


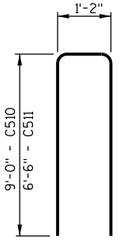
C501



C1009



C504 & C505



C510 & C511

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SOUTH ABUTMENT DETAILS

SHEET 11 OF 35
759

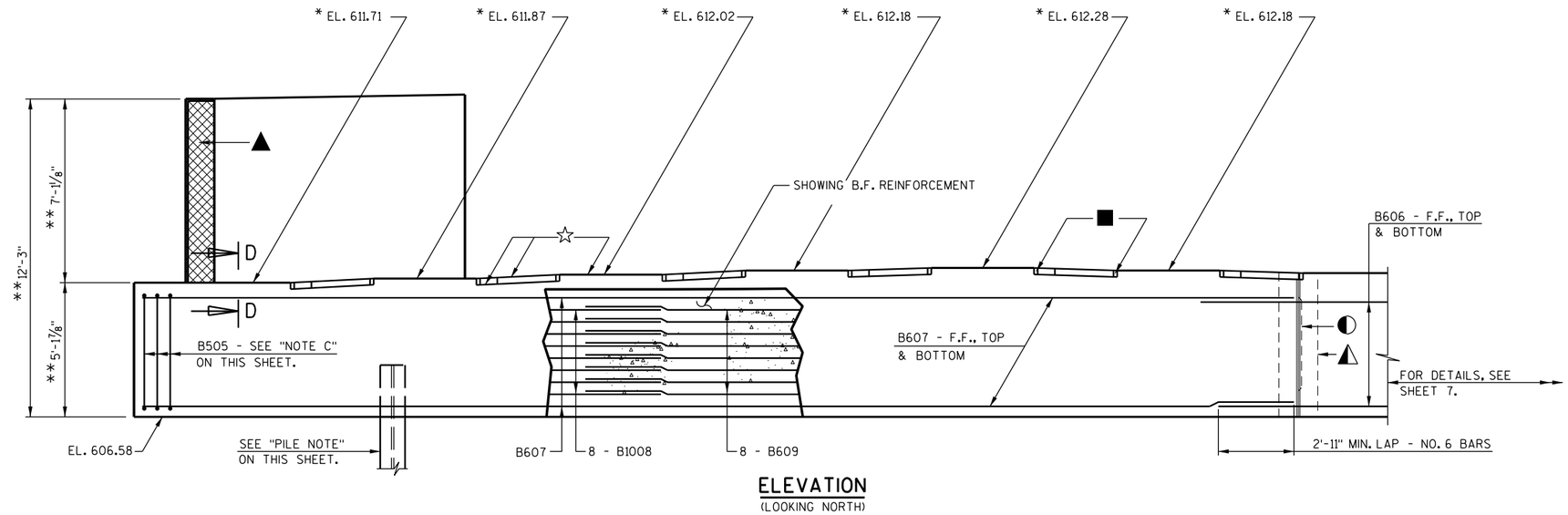
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\11.sabutdet.b-5-669.dgn
PLOT DATE : 6/10/2014

8

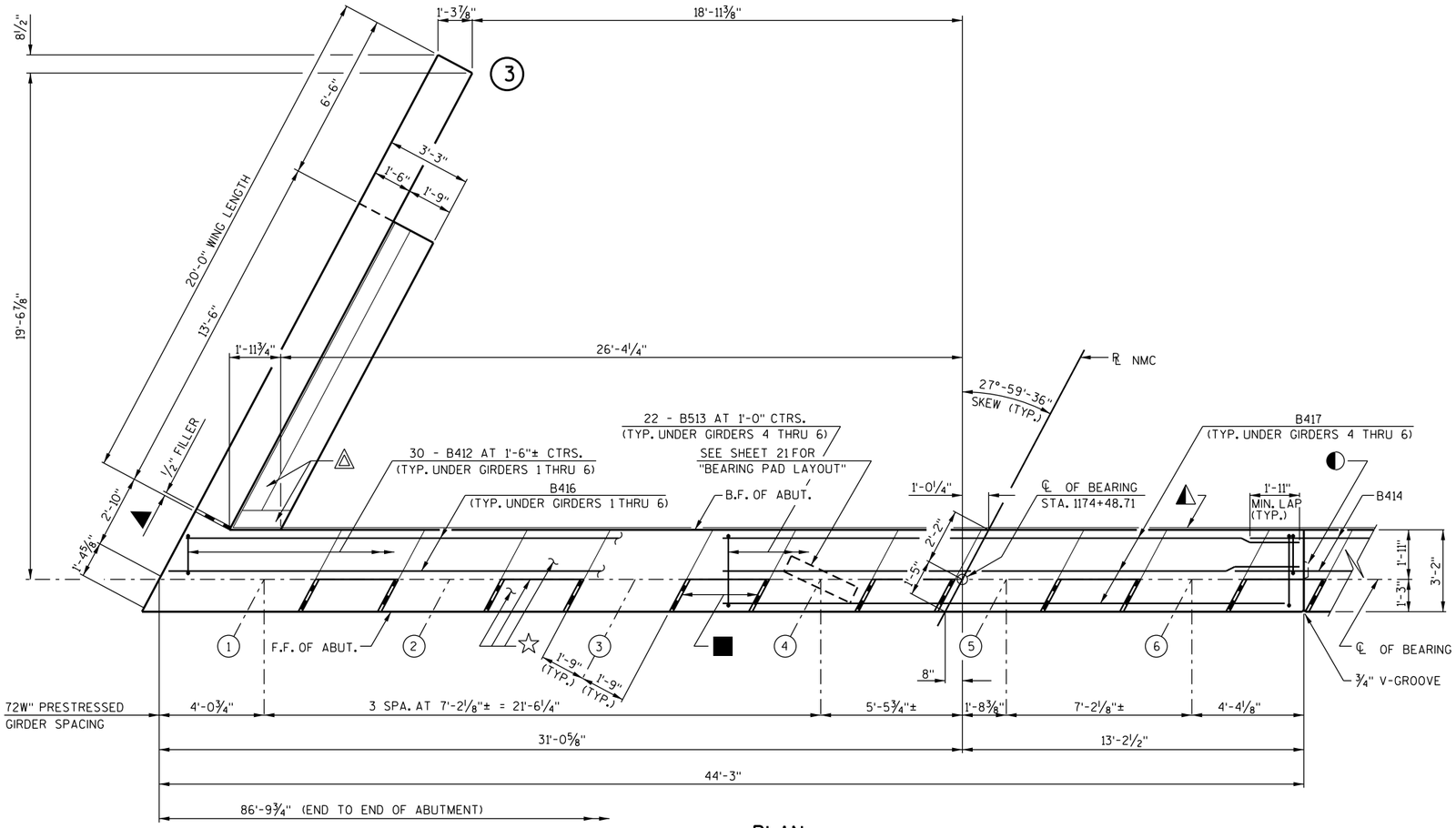
8

STATE PROJECT NUMBER

1133-10-71



ELEVATION
(LOOKING NORTH)



PLAN

LEGEND

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE ℄ OF BEARING.

** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF ABUTMENT. FOR WING DETAILS AND ELEVATIONS, SEE SHEET 15.

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

½" FILLER TO EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

KEYED CONST. JOINT FORMED BY A BEVELED 2" × 8".

¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

(X) INDICATES WING NUMBER

PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING HORIZONTAL IN THIS AREA. SEE SECTION D-D ON THIS SHEET.

NOTES: SEE "PLAN" VIEW AND "TYPICAL SECTION THRU BODY" ON SHEET 16 FOR ADDITIONAL BAR STEEL REINFORCEMENT DETAILS AT GIRDER SEATS.

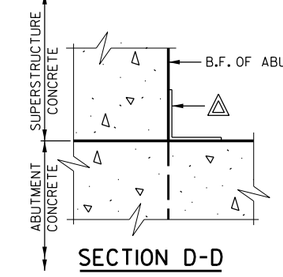
FOR "TYPICAL SECTION THRU BODY", SEE SHEET 16.

PILE NOTE

NORTH ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 12 × 53 WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 80'-0" LONG. FOR PILE LAYOUT DETAILS, SEE SHEETS 13 & 14. FOR PILE SPLICE DETAILS, SEE SHEET 6.

NOTE C

B505 BARS SHALL BE SPACED AT 6" CTRS. IN THE OUTSIDE THIRD OF THE BODY NEAR WING 3 AND AT 1'-0" CTRS. IN THE REST OF THE BODY CONSTRUCTED IN STAGE 3. SPACE BARS TO MISS PILES. (ONE THIRD OF THE BODY IS 28'-11"± LONG).



SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

NORTH ABUTMENT

SHEET 12 OF 35
760

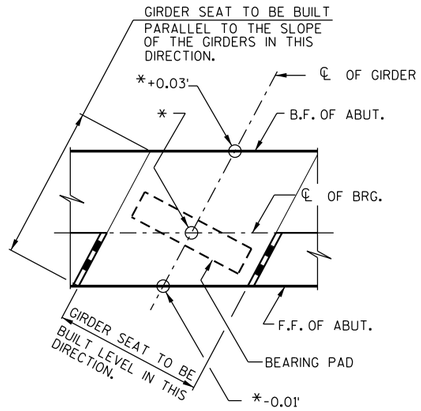
8

8

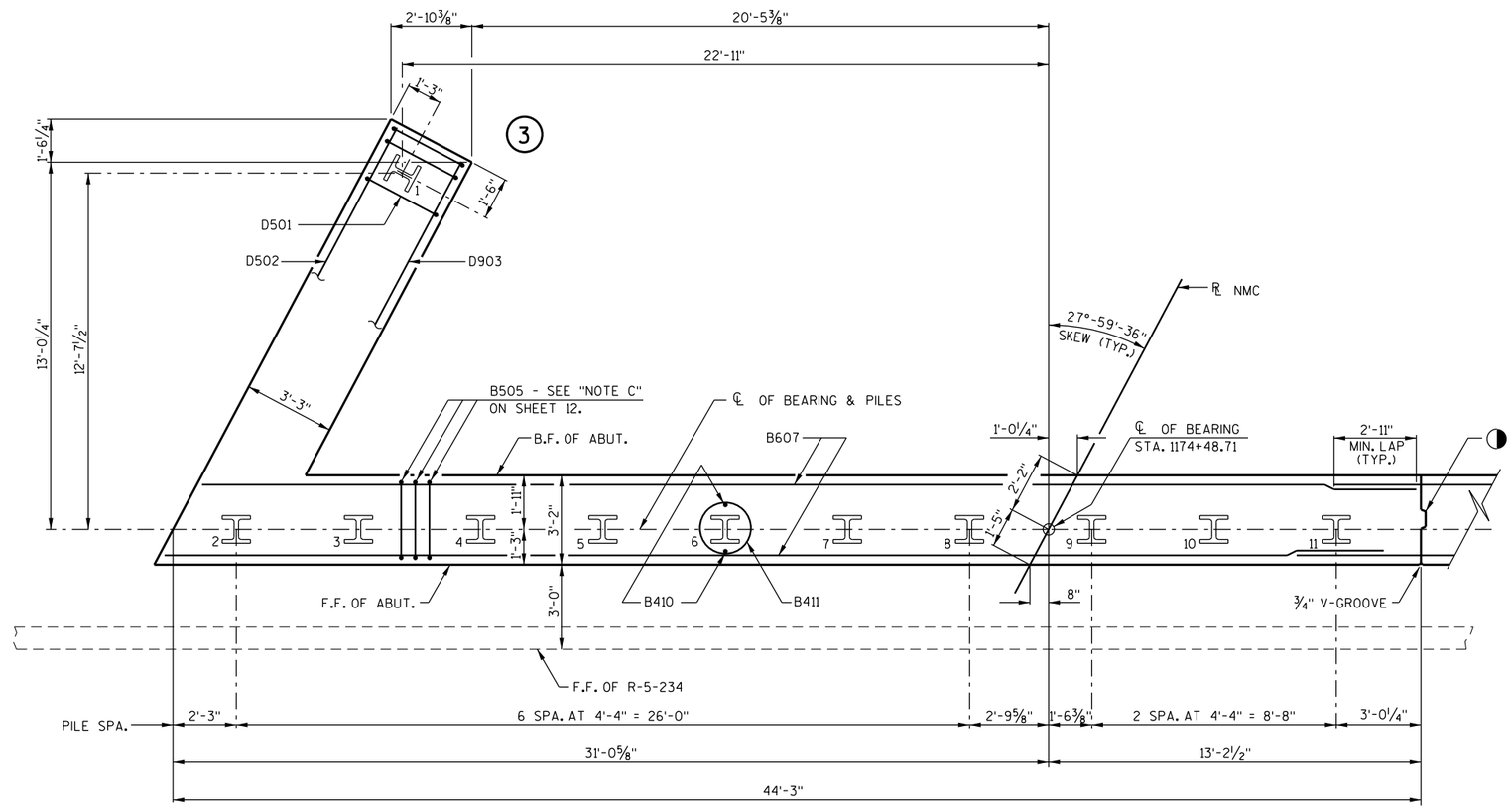
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\12.ndbut1.b-5-669.dgn
PLOT DATE : 6/10/2014

LEGEND

(X) ◐ FOR SYMBOL DESCRIPTION, SEE SHEET 12.



GIRDER SEAT DETAIL



PILE PLAN

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\13_rxbdf2_b-5-669.dgn
PLOT DATE : 6/10/2014

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

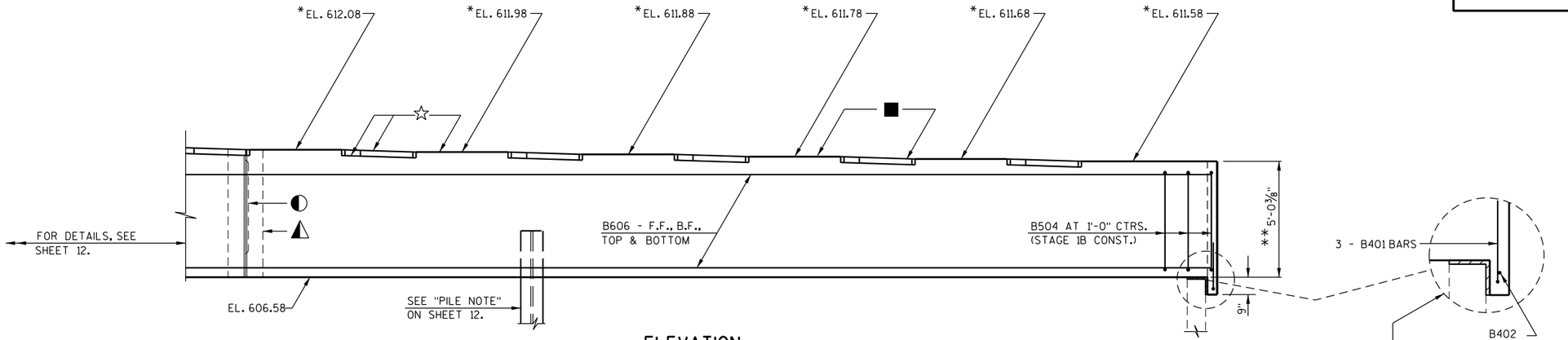
DRAWN BY TAW | PLANS CK'D. TR

NORTH ABUTMENT

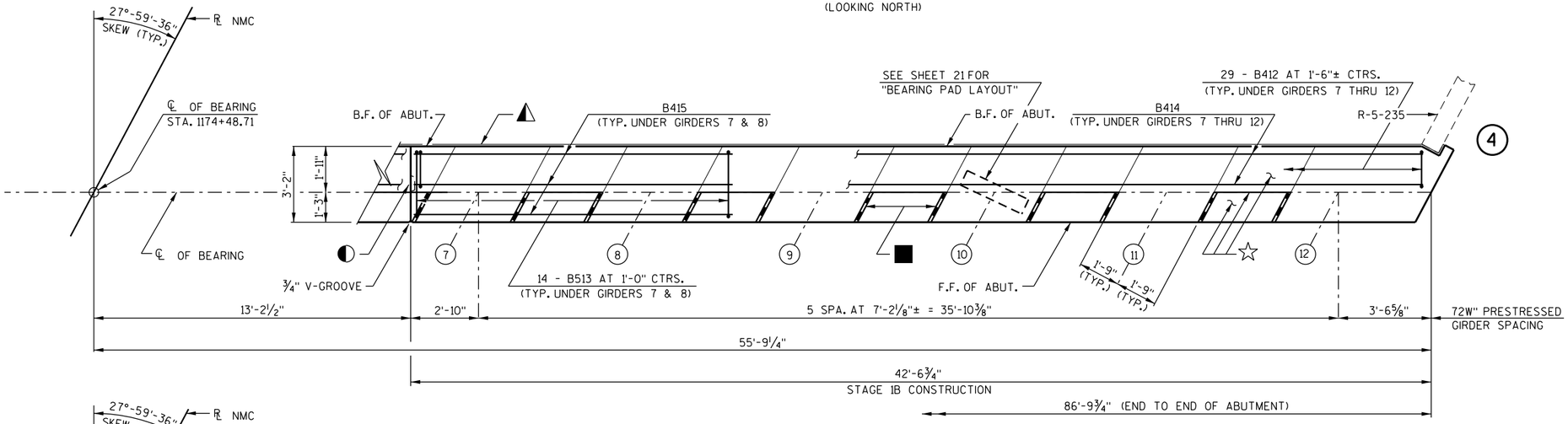
SHEET 13 OF 35
761

STATE PROJECT NUMBER

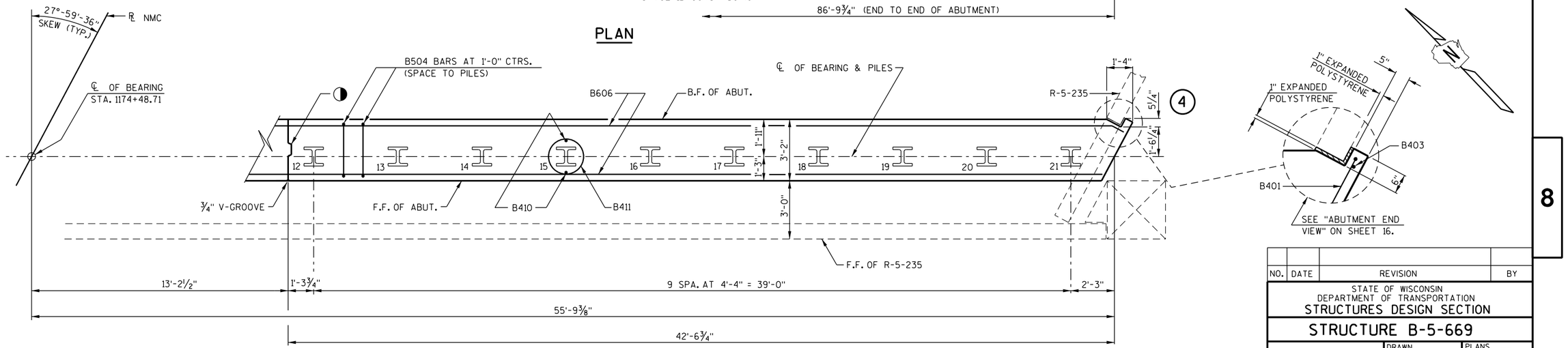
1133-10-71



ELEVATION
(LOOKING NORTH)



PLAN



PILE PLAN

LEGEND

* ▲ ** ◐ ■ ☆ FOR SYMBOL DESCRIPTIONS, SEE SHEET 12.

(X) INDICATES CORNER NUMBER

NOTES: SEE "PLAN" VIEW AND "TYPICAL SECTION THRU BODY" ON SHEET 16 FOR ADDITIONAL BAR STEEL REINFORCEMENT DETAILS AT GIRDER SEATS.

FOR "TYPICAL SECTION THRU BODY", SEE SHEET 16.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

NORTH ABUTMENT

SHEET 14 OF 35
762

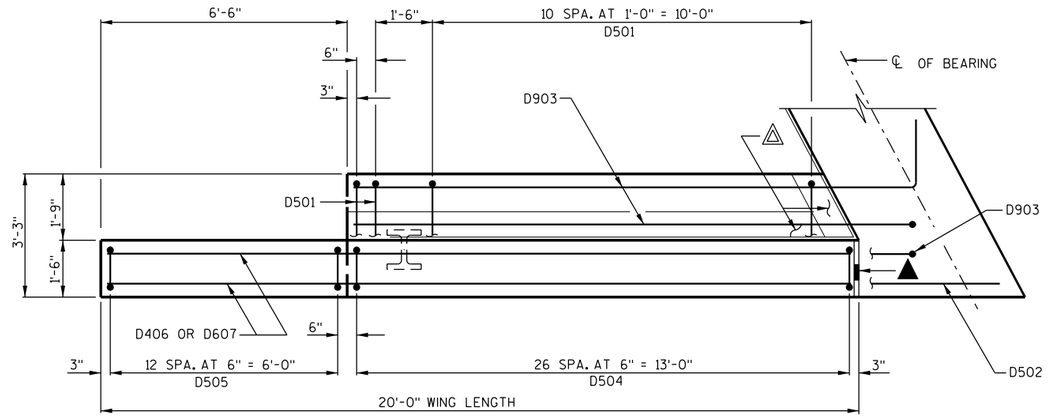
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\14_nbdu13_b-5-669.dgn
PLOT DATE : 6/10/2014

8

8

STATE PROJECT NUMBER

1133-10-71



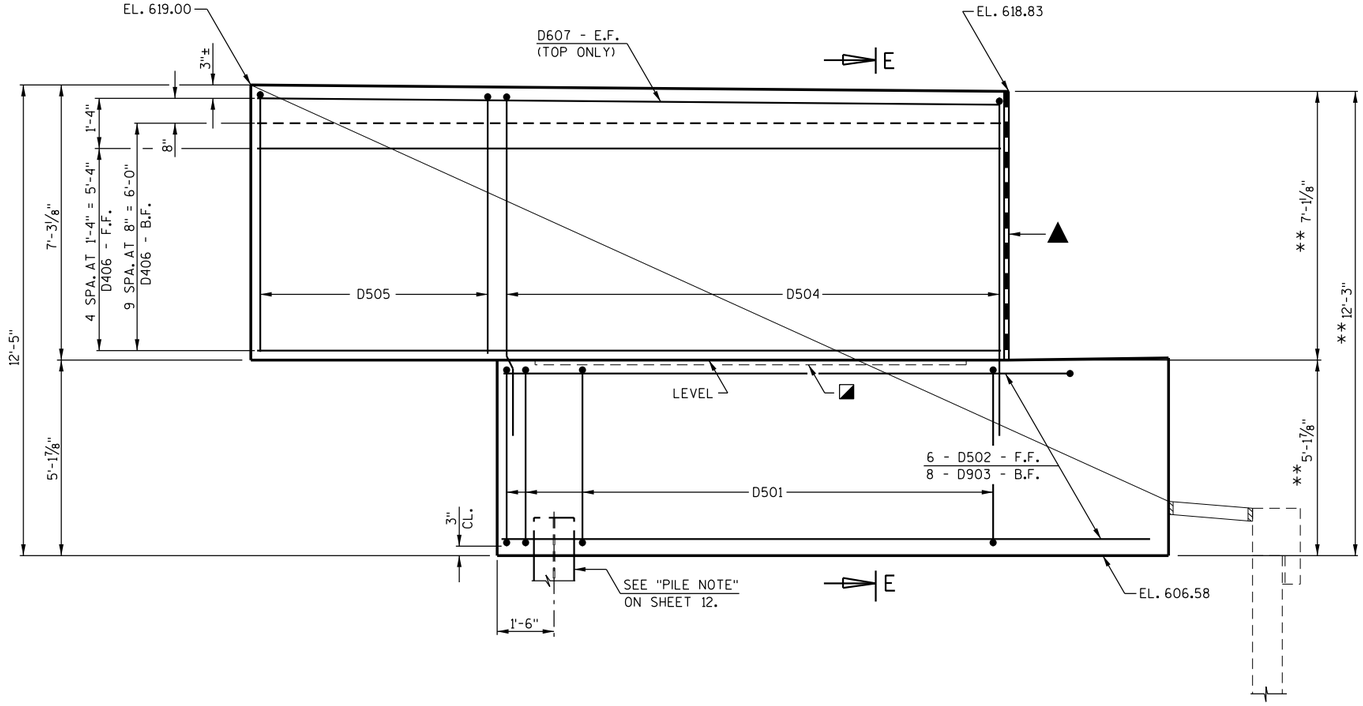
PLAN - WING 3

LEGEND

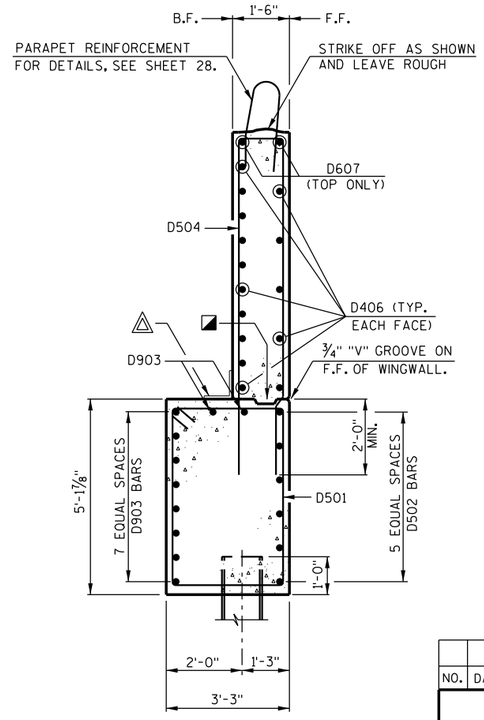
** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF ABUTMENT.

◪ OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.

▲ △ FOR SYMBOL DESCRIPTIONS, SEE SHEET 12.



ELEVATION - WING 3



SECTION E-E

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

WING 3

SHEET 15 OF 35
763

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\15.wing3.b-5-669.dgn
PLOT DATE : 6/10/2014

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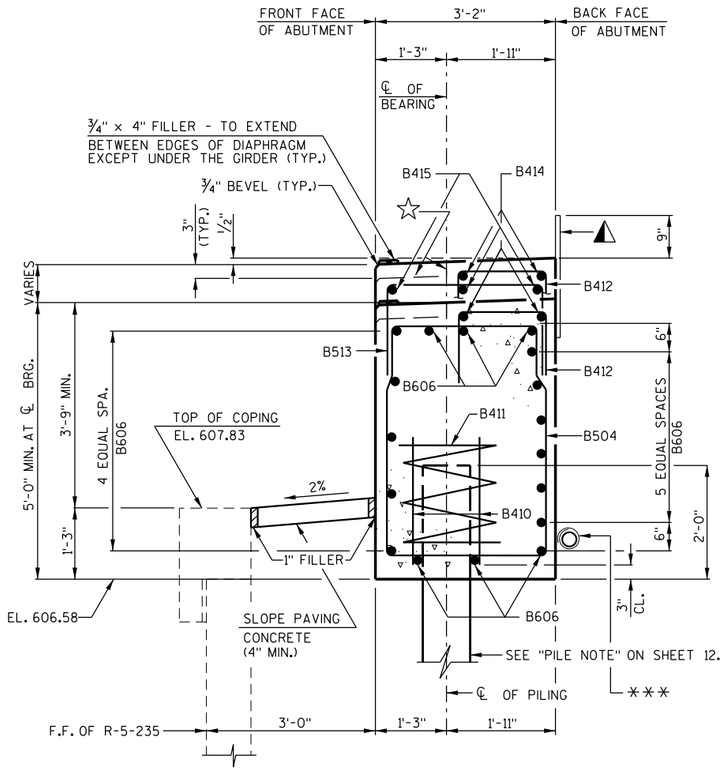
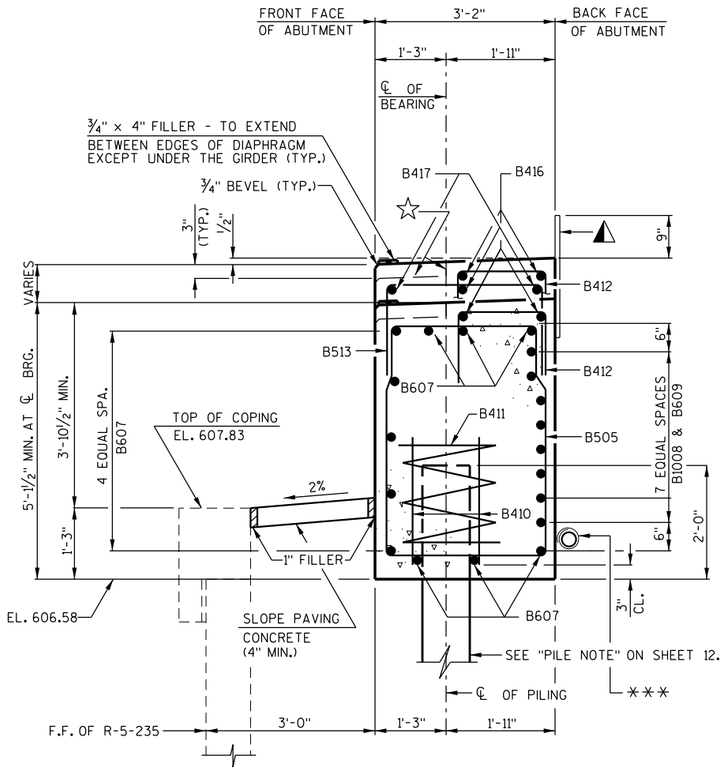
8

STATE PROJECT NUMBER
1133-10-71



TYPICAL SECTION THRU BODY FROM SHEET 12
(LOOKING WEST)



TYPICAL SECTION THRU BODY FROM SHEET 14
(LOOKING WEST)

BILL OF BARS

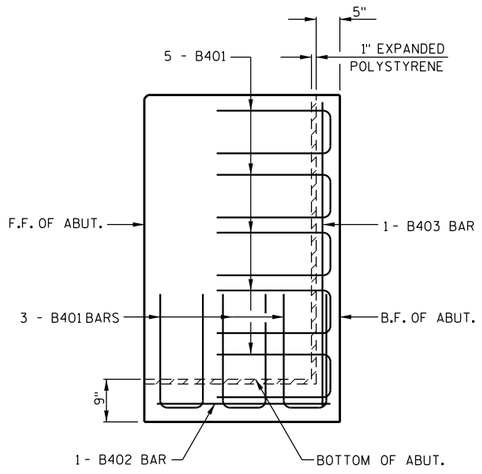
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
UNCOATED BARS					TOTAL WEIGHT =	LBS.
B401	8	4-7	X		BODY - WEST END	HORIZ.
B402	1	3-1			BODY - WEST END	HORIZ.
B403	1	5-1			BODY - WEST END	VERT.
B504	44	14-11	X		BODY - STIRRUPS	VERT.
B505	72	15-1	X		BODY - STIRRUPS	VERT.
B606	17	46-4			BODY - TOP, BOTTOM, F.F. & B.F.	HORIZ.
B607	11	43-0			BODY - TOP, F.F. & B.F.	HORIZ.
B1008	9	20-0	X		BODY - B.F. - NEAR WING 3	HORIZ.
B609	8	27-5			BODY - B.F.	HORIZ.
B410	40	2-3			BODY - AT PILES - 2 PER PILE	VERT.
B411	20	28-0	X		BODY - AT PILES - 1 PER PILE - SPIRAL WRAP	VERT.
B412	59	4-11	X		BODY - TOP - AT GIRDERS 1 THRU 12	VERT.
B513	36	5-7	X		BODY - TOP - AT GIRDERS 4 THRU 8	VERT.
B414	2	44-4			BODY - TOP - AT GIRDERS 7 THRU 12	HORIZ.
B415	3	13-4			BODY - TOP - AT GIRDERS 7 & 8	HORIZ.
B416	2	43-0			BODY - TOP - AT GIRDERS 1 THRU 6	HORIZ.
B417	3	22-5			BODY - TOP - AT GIRDERS 4 THRU 6	HORIZ.
EPOXY COATED BARS					TOTAL WEIGHT =	LBS.
D501	13	16-11	X		WING 3 - STIRRUPS	VERT.
D502	6	17-0			WING 3 - BOTTOM - F.F.	HORIZ.
D903	10	16-2	X		WING 3 - BOTTOM - B.F. & TOP	HORIZ.
D504	27	18-11	X		WING 3 - F.F. & B.F.	VERT.
D505	13	14-7	X		WING 3 - F.F. & B.F.	VERT.
D406	15	19-8			WING 3 - F.F. & B.F.	HORIZ.
D607	2	19-8			WING 3 - TOP - F.F. & B.F.	HORIZ.

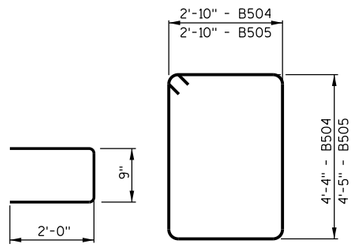
LEGEND

☆ ◭ FOR SYMBOL DESCRIPTIONS, SEE SHEET 12.

*** PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE. SEE "RODENT SHIELD" DETAIL ON SHEET 11.

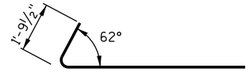


ABUTMENT END VIEW
(EAST END ONLY)



B401

B504 & B505



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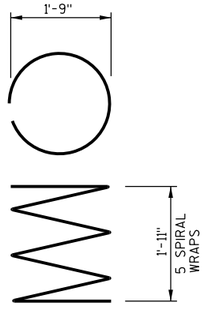

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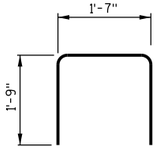

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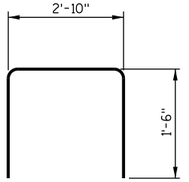

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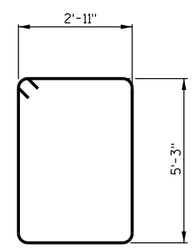

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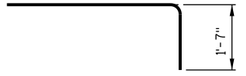

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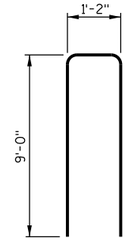

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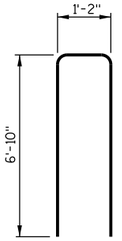

D505

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

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NORTH ABUTMENT DETAILS

SHEET 16 OF 35
764

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\16_nbdutdet_b-5-669.dgn
PLOT DATE : 6/10/2014

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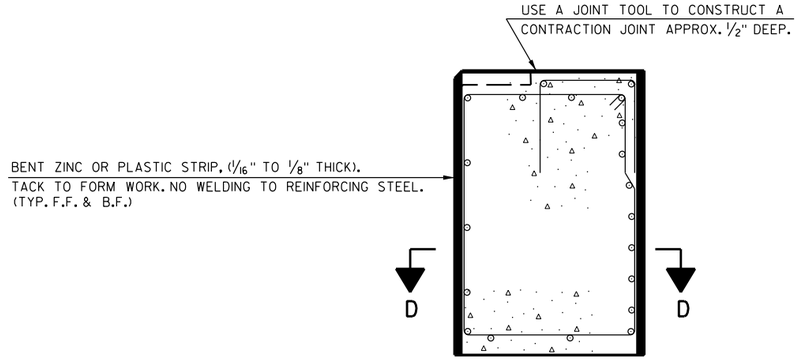
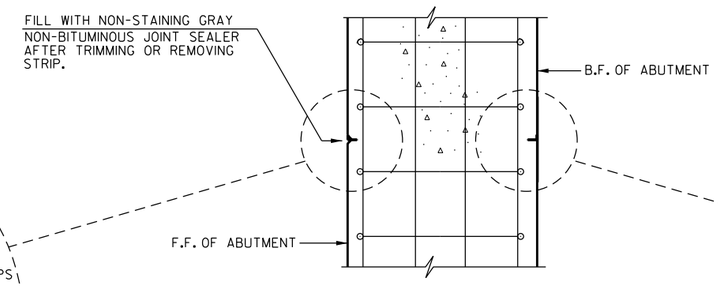
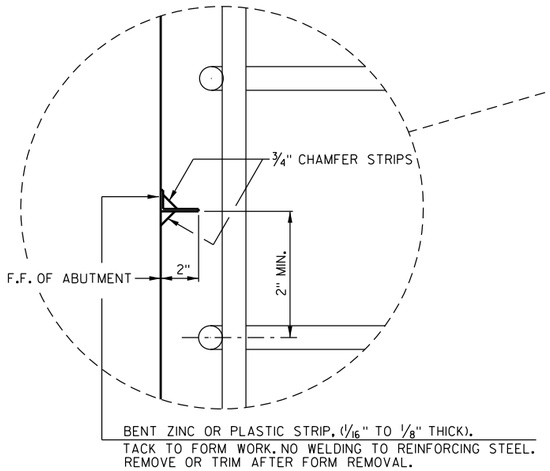
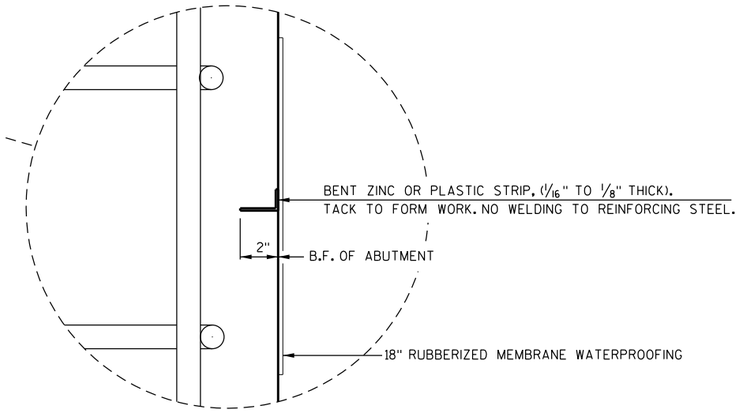


SECTION THRU ABUTMENT BODY



SECTION D-D





ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

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PLOT DATE : 6/10/2014

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

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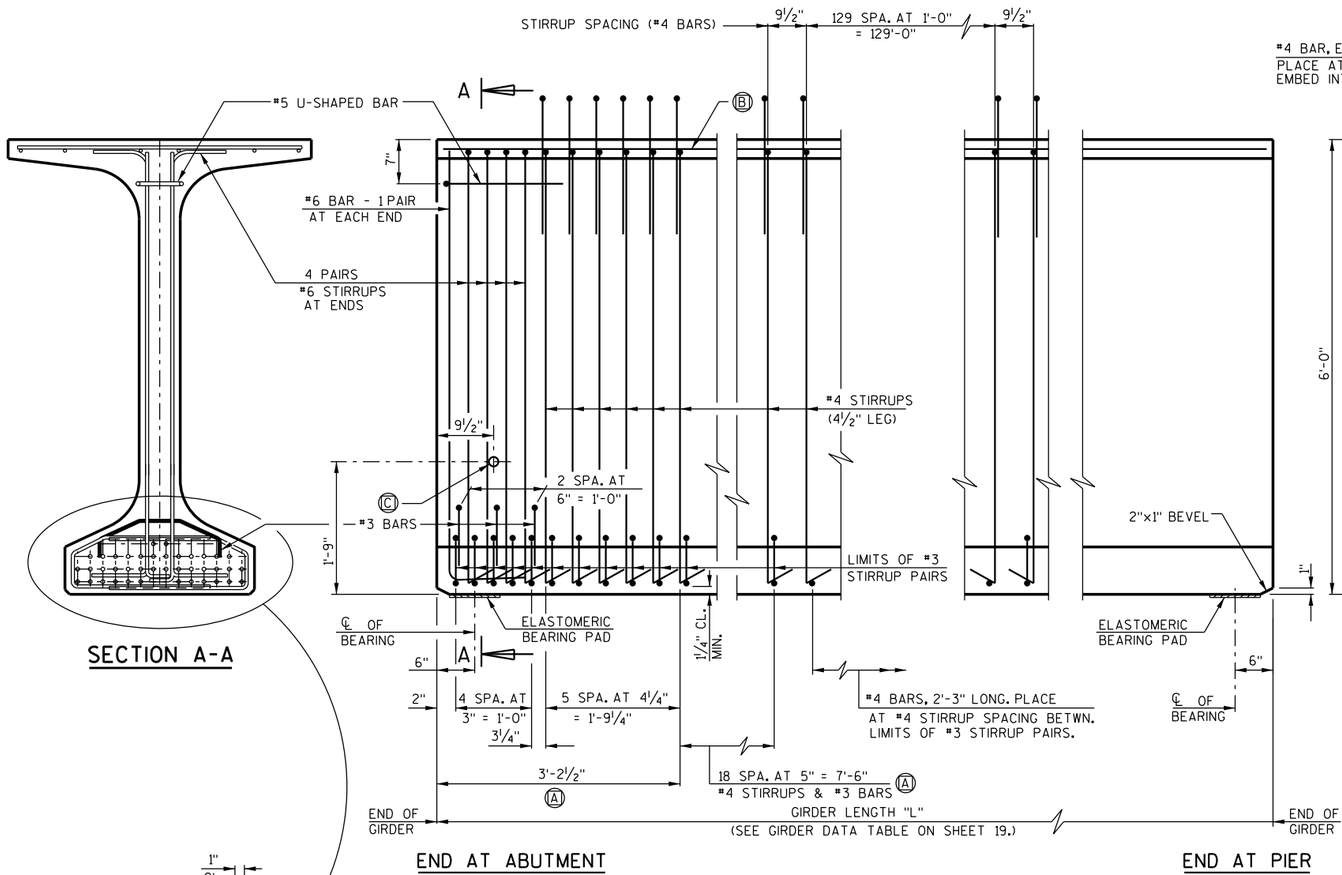
ALTERNATE CONSTRUCTION JOINT

SHEET 17 OF 35
765

STATE PROJECT NUMBER

1133-10-71



SECTION A-A

END AT ABUTMENT

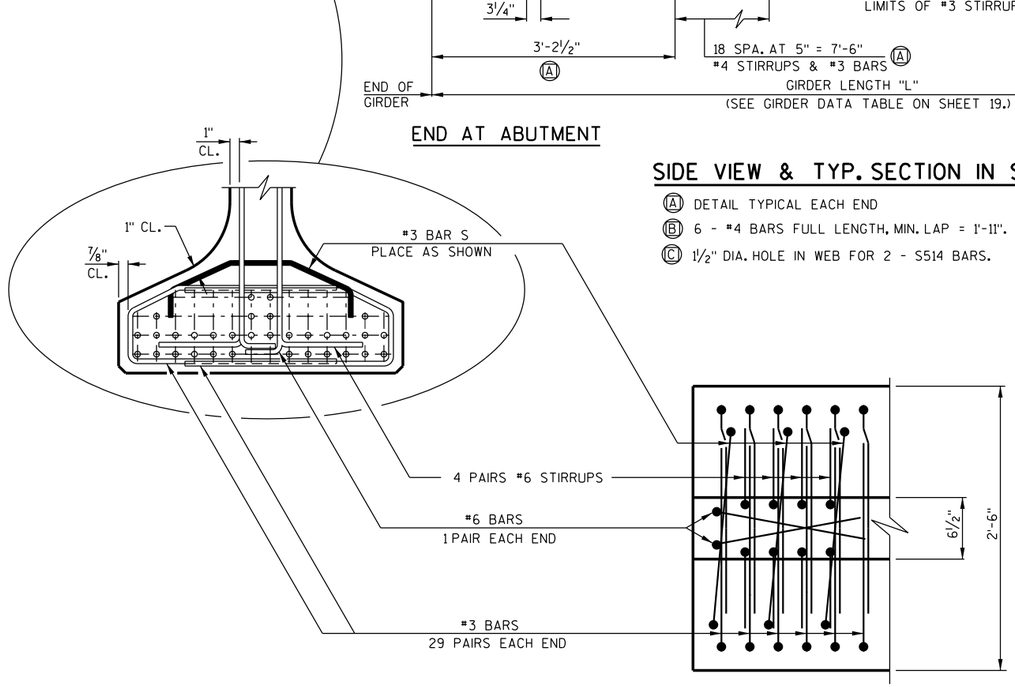
END AT PIER

SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYPICAL EACH END

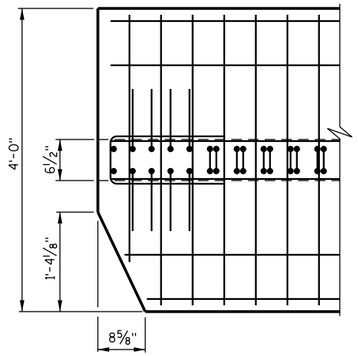
Ⓑ 6 - #4 BARS FULL LENGTH, MIN. LAP = 1'-11".

Ⓒ 1½" DIA. HOLE IN WEB FOR 2 - S514 BARS.



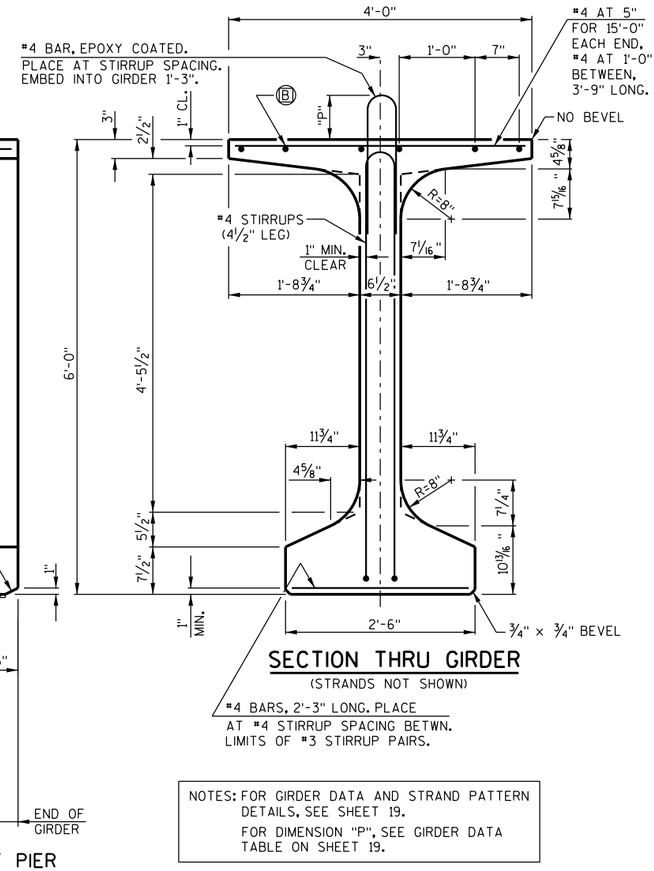
BOTTOM FLANGE

(TYP. EACH END)



TOP FLANGE

(SOUTH END OF GIRDER SHOWN, NORTH END SIMILAR)



SECTION THRU GIRDER

(STRANDS NOT SHOWN)

#4 BARS, 2'-3" LONG. PLACE AT #4 STIRRUP SPACING BETWN. LIMITS OF #3 STIRRUP PAIRS.

NOTES: FOR GIRDER DATA AND STRAND PATTERN DETAILS, SEE SHEET 19.

FOR DIMENSION "P", SEE GIRDER DATA TABLE ON SHEET 19.

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

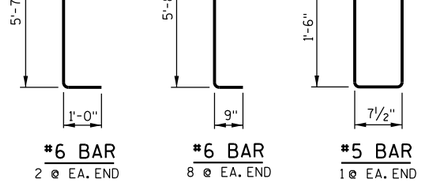
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, ONE OPTION IS AVAILABLE:

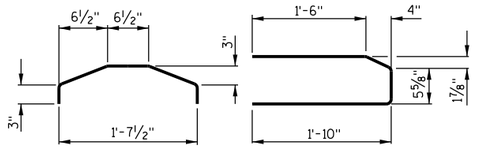
USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT CHIEF, (608)266-5161.

PRESTRESSING STRANDS SHALL BE 0.6" DIA.-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "INTERMEDIATE STEEL DIAPHRAGM" SHEET.





NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

72W" PRESTRESSED GIRDER DETAILS

SHEET 18 OF 35

766

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\18_72Wgdr1.b-5-669.dgn
PLOT DATE : 6/11/2014

8

8

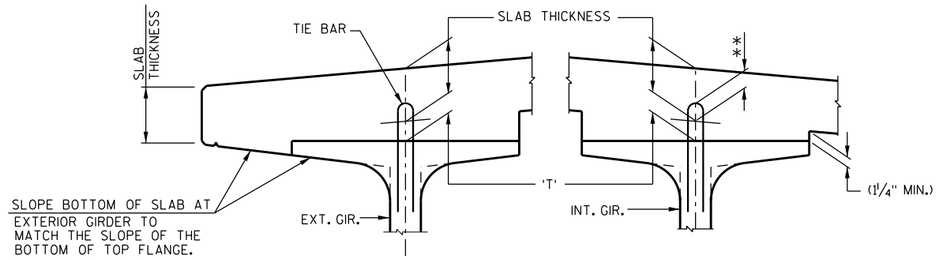
STATE PROJECT NUMBER

1133-10-71

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" 1st 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
1	1 - 12	152'-0"	3/4"	1 1/2"	2"	2 3/8"	2 1/2"	2 3/8"	2"	1 1/2"	3/4"	8000	7"	7"	7"	0.60	48	6800	67"	20 1/2"	23 1/2"	5"		

* MINIMUM CYLINDER STRENGTH OF CONCRETE AT THE TIME OF TRANSFER OF PRESTRESS FORCE.



SLAB HAUNCH DETAIL

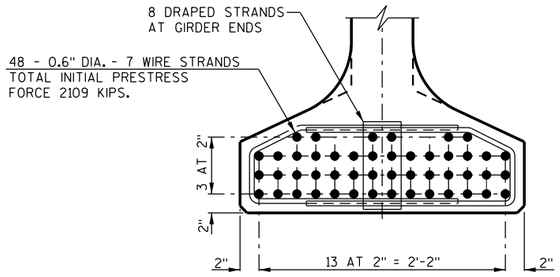
IF 1 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

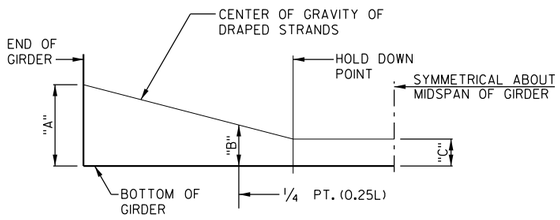
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DRAPED STRAND PATTERN - SPAN



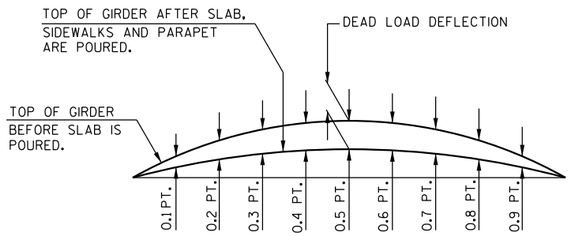
LOCATION OF DRAPED STRANDS

THEORETICAL CAMBER

SPAN	CAMBER (IN.) ***
1	4 7/8"

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS. THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

*** THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.



DEAD LOAD DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

72W" PRESTRESSED GIRDER DETAILS

SHEET 19 OF 35
767

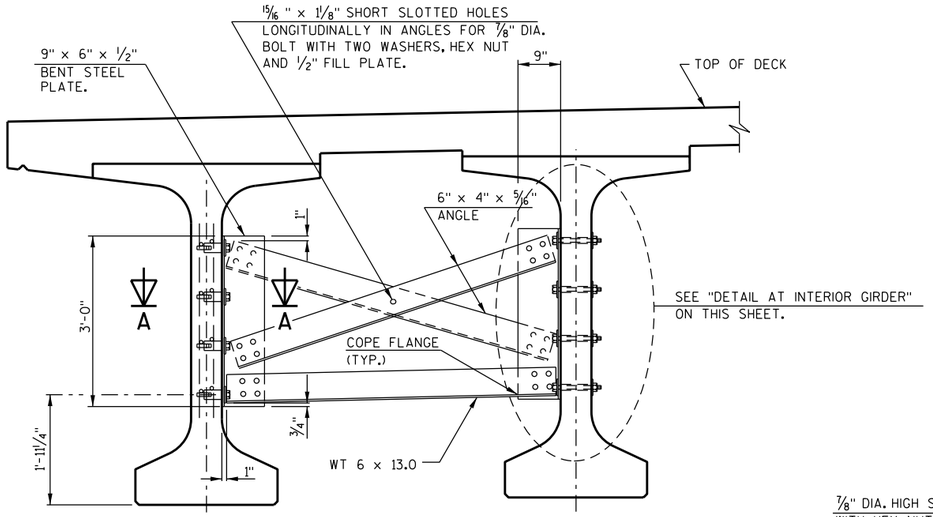
8

8

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\19_72Wgdr-2.b-5-669.dgn
PLOT DATE : 7/23/2014

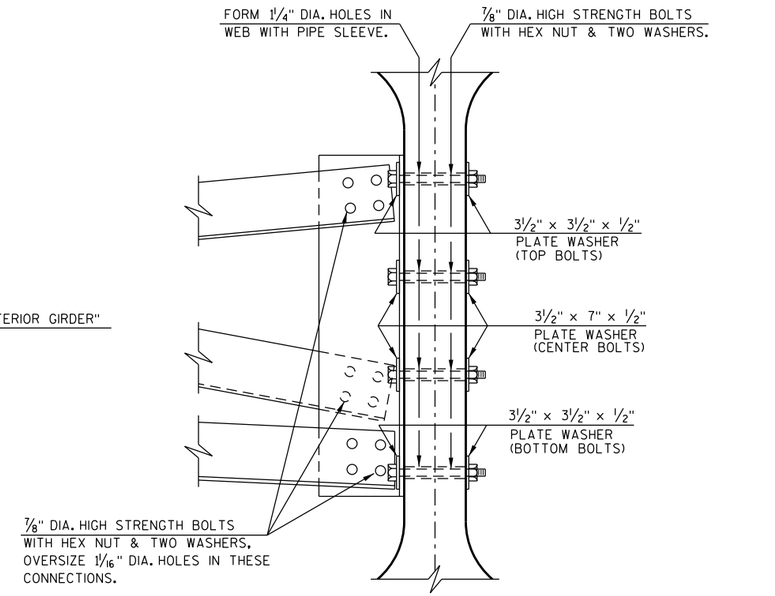
STATE PROJECT NUMBER

1133-10-71



EXTERIOR GIRDER INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL AT INTERIOR GIRDER

(SKEW ANGLE > 10°)

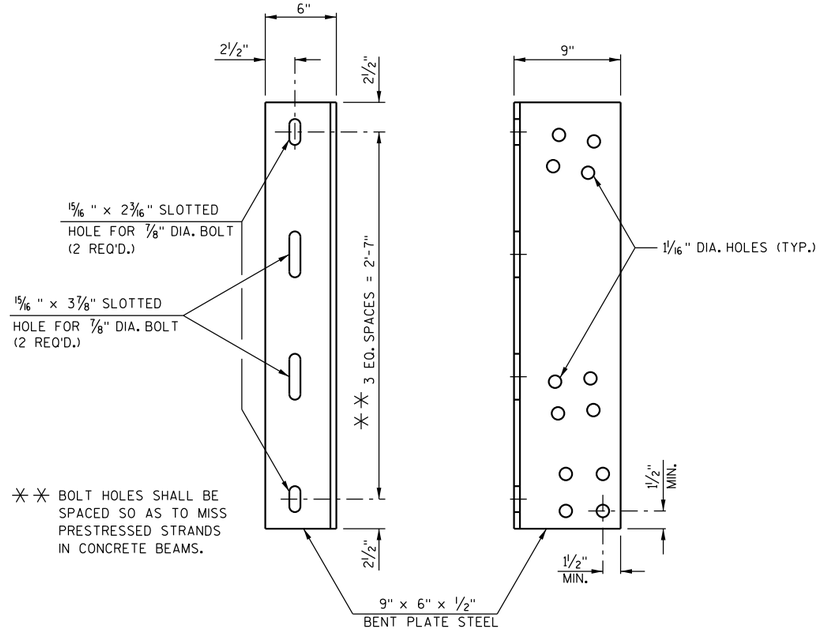
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-5-669", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

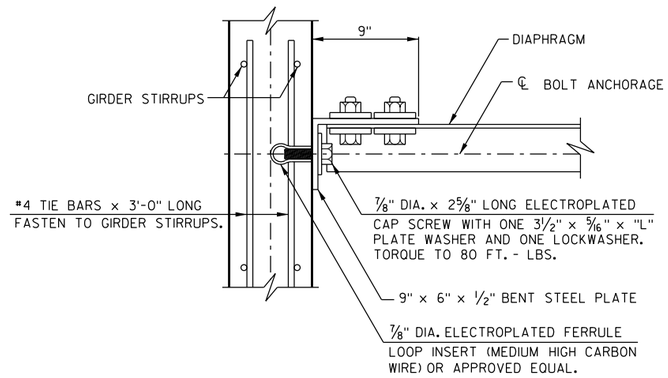
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



BEAM FACE DIAPHRAGM FACE

DIAPHRAGM SUPPORT



"L" = 3 1/2" FOR TOP AND BOTTOM BOLTS
"L" = 7" FOR CENTER BOLTS

SECTION A-A

(FOR EXTERIOR ATTACHMENT)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

INTERMEDIATE STEEL DIAPHRAGMS

SHEET 20 OF 35
768

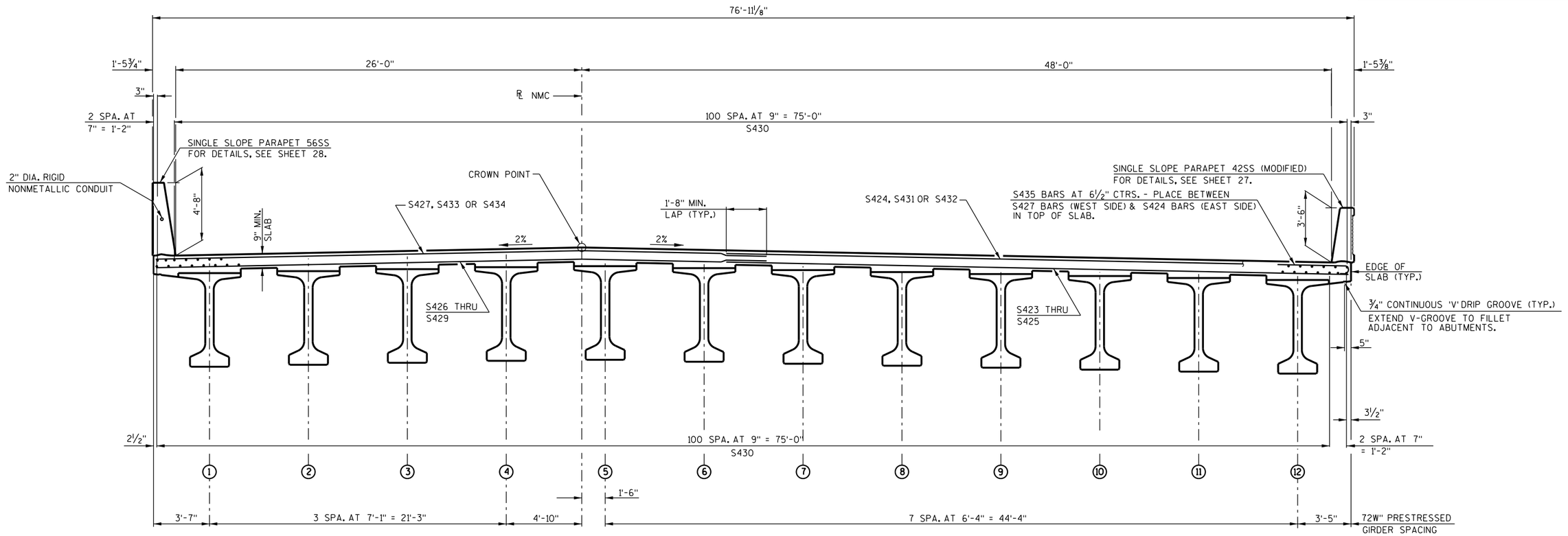
8

8

FILE NAME : P:\161 USH 41 over Yelp Ave RA Smith\Structures\B-5-669\20.steeldiaph.b-5-669.dgn
PLOT DATE : 6/10/2014

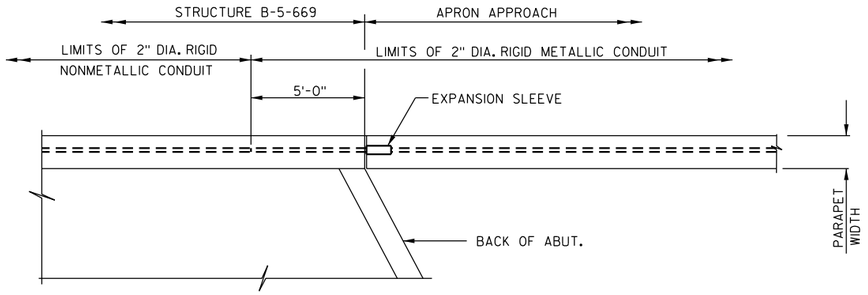
STATE PROJECT NUMBER

1133-10-71



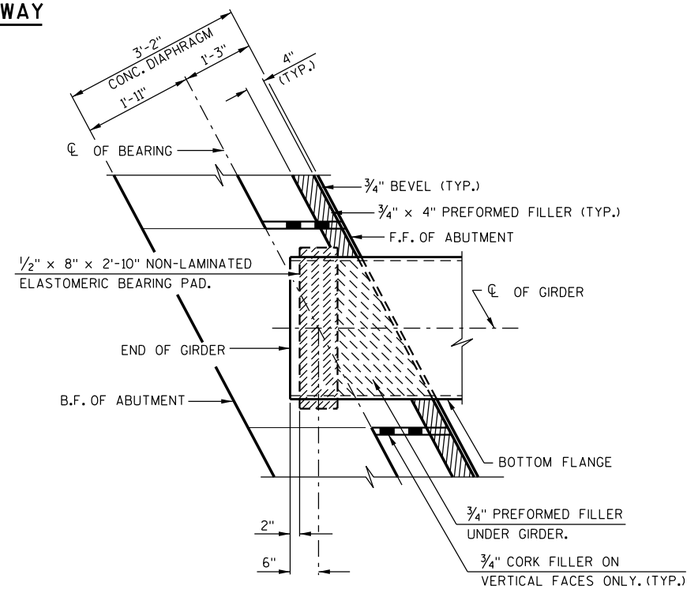
CROSS SECTION THRU ROADWAY

(LOOKING NORTH)



PART PLAN - SUPERSTRUCTURE

(SHOWING CONDUIT LIMITS IN WEST SIDE PARAPET. NORTH END OF DECK SHOWN, SOUTH END SIMILAR.)



BEARING PAD LAYOUT

(SHOWN AT SOUTH ABUTMENT, NORTH ABUTMENT SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SUPERSTRUCTURE

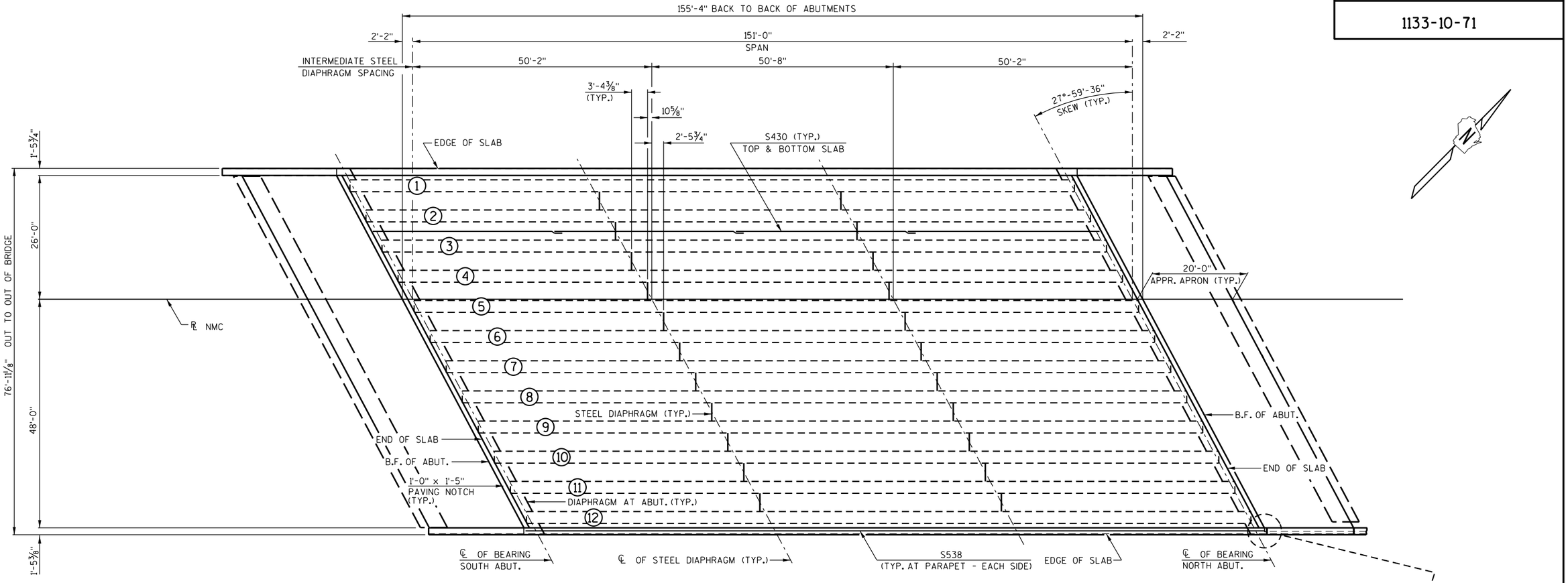
SHEET 21 OF 35
769

FILE NAME : P:\161 USH 41 over Velp Ave RR Smith\Structures\B-5-669\21.super1.b-5-669.dgn
PLOT DATE : 6/10/2014

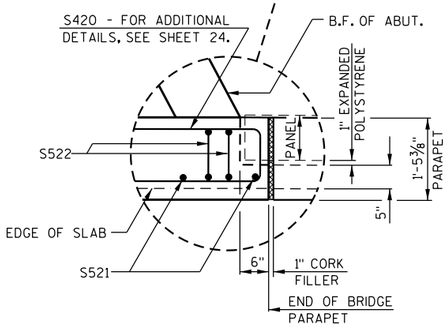
8

8

STATE PROJECT NUMBER
1133-10-71



PLAN



CORNER DETAIL
(CORNER 4 ONLY)

TOP OF DECK ELEVATIONS

	℄ OF BRG. S. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF BRG. N. ABUT.
W. EOD	617.13	617.32	617.50	617.68	617.85	618.01	618.17	618.33	618.48	618.62	618.76
GIRDER 1	617.22	617.41	617.59	617.77	617.94	618.11	618.26	618.42	618.57	618.71	618.84
GIRDER 2	617.39	617.58	617.76	617.93	618.10	618.27	618.43	618.58	618.72	618.87	619.00
GIRDER 3	617.56	617.75	617.93	618.10	618.27	618.43	618.59	618.74	618.88	619.02	619.16
GIRDER 4	617.73	617.91	618.09	618.26	618.43	618.59	618.75	618.90	619.04	619.18	619.31
P.G.L.	617.86	618.04	618.22	618.39	618.56	618.72	618.87	619.02	619.16	619.30	619.43
GIRDER 5	617.84	618.02	618.20	618.37	618.53	618.69	618.85	619.00	619.14	619.28	619.41
GIRDER 6	617.75	617.93	618.11	618.28	618.44	618.60	618.76	618.90	619.04	619.18	619.31
GIRDER 7	617.67	617.85	618.02	618.19	618.35	618.51	618.66	618.81	618.95	619.08	619.21
GIRDER 8	617.58	617.76	617.93	618.10	618.26	618.42	618.57	618.71	618.85	618.99	619.11
GIRDER 9	617.49	617.67	617.84	618.01	618.17	618.33	618.47	618.62	618.76	618.89	619.01
GIRDER 10	617.41	617.58	617.75	617.92	618.08	618.23	618.38	618.52	618.66	618.79	618.92
GIRDER 11	617.32	617.50	617.67	617.83	617.99	618.14	618.29	618.43	618.56	618.69	618.82
GIRDER 12	617.23	617.41	617.58	617.74	617.89	618.05	618.19	618.33	618.46	618.59	618.72
E. EOD	617.19	617.36	617.53	617.69	617.84	617.99	618.14	618.28	618.41	618.54	618.66

NOTES

1. THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.
2. THE BOTTOM TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE ENDS OF THE BOTTOM TRANSVERSE BAR STEEL.
3. LAP NO. 6 BARS 3'-6" MIN. AT BACK OF ABUTMENT DIAPHRAGMS.
4. LAP LONGITUDINAL NO. 5 BARS IN SINGLE SLOPE PARAPETS 1'-9" MIN.
5. LAP NO. 4 BARS 1'-8" MIN. IN SLAB.
6. ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO THE GIRDERS. FOR LAYOUT DETAILS, SEE SHEET 23.
7. EDGE OF DECK (EOD) ELEVATIONS ARE CALCULATED ASSUMING CROSS SLOPE CONTINUES TO EDGE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

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SUPERSTRUCTURE

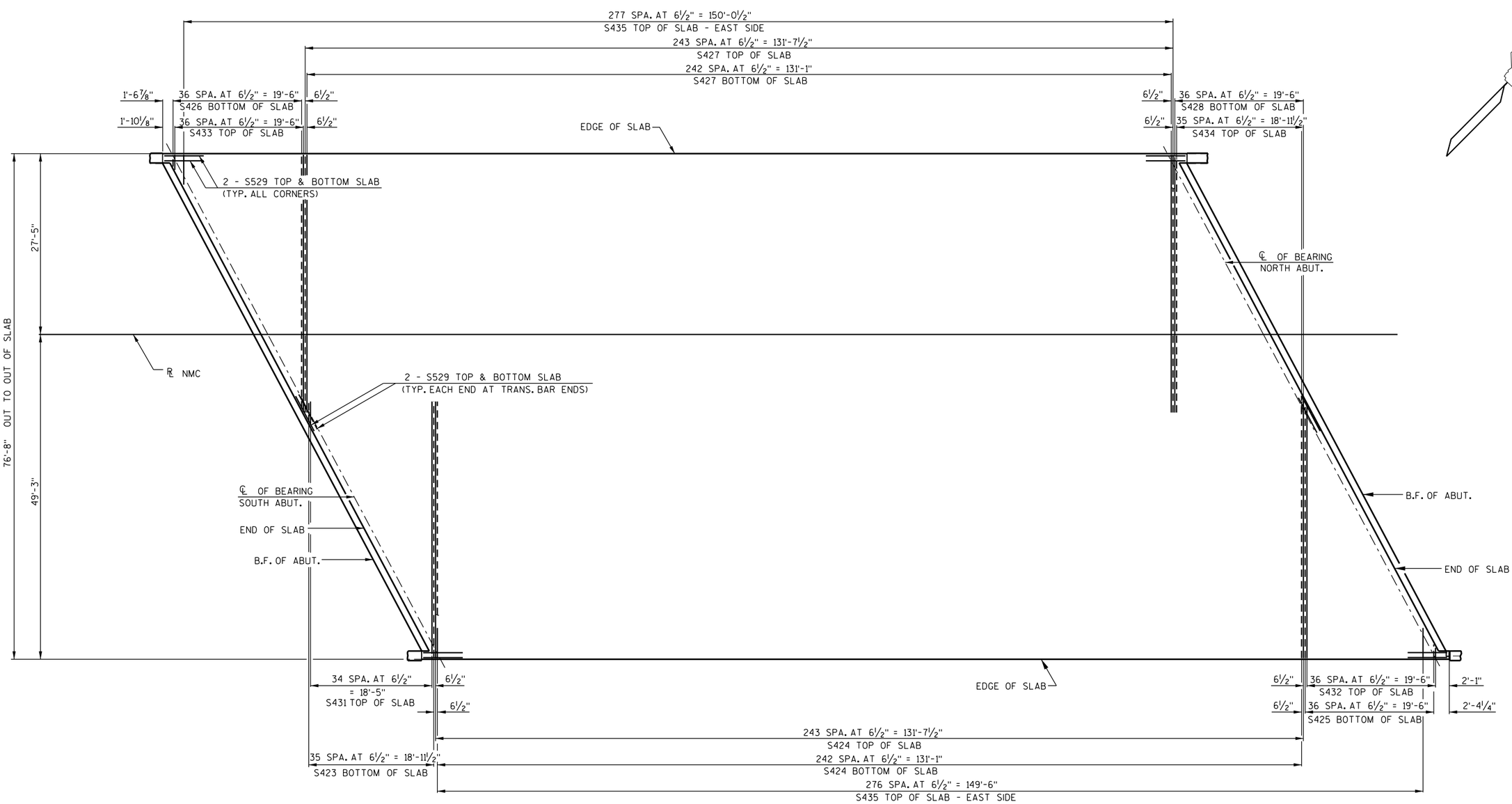
SHEET 22 OF 35
770

8

8

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\22_super2_b-5-669.dgn
PLOT DATE : 8/15/2014

STATE PROJECT NUMBER
1133-10-71



PLAN

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\23_super3_b-5-669.dgn
PLOT DATE : 6/10/2014

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

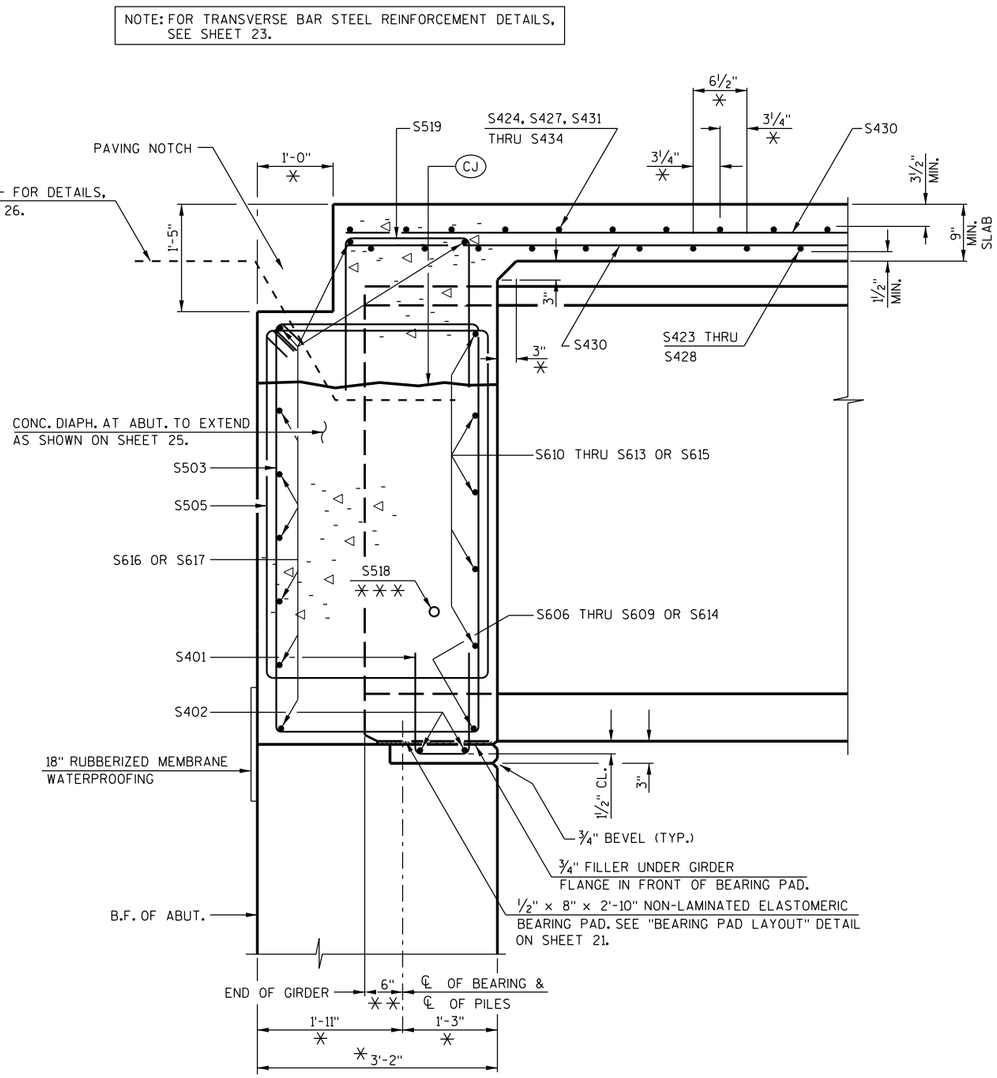
SUPERSTRUCTURE

SHEET 23 OF 35
771

STATE PROJECT NUMBER

1133-10-71

NOTE: FOR TRANSVERSE BAR STEEL REINFORCEMENT DETAILS, SEE SHEET 23.



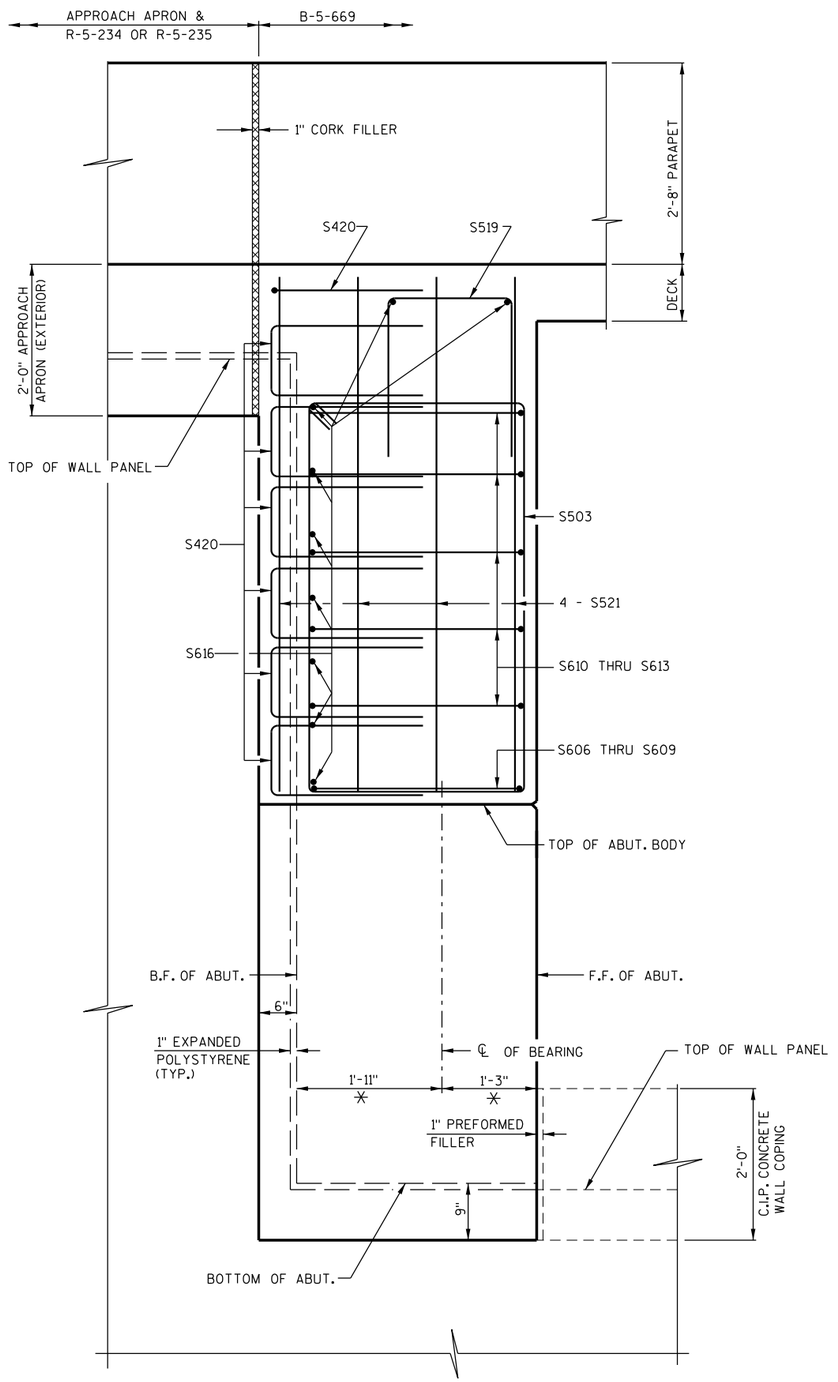
AT ABUTMENTS

LEGEND

- ✳ DIMENSIONS ARE GIVEN NORMAL TO ℄ OF SUBSTRUCTURE UNITS.
- ✳✳ DIMENSIONS ARE GIVEN PARALLEL TO THE GIRDER ℄.
- ✳✳✳ 1½" DIA. HOLE IN WEB FOR S518 BARS. PLACE TWO S518 BARS SYMMETRICAL ABOUT THE ℄ OF EACH GIRDER. FIELD BEND BARS ALONG SKEW. SEE "SIDE VIEW" ON SHEET 18 FOR DETAILS.
- (CJ) OPTIONAL CONSTRUCTION JOINT 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

NOTES: ALL VERTICAL BAR STEEL REINFORCEMENT IN CONCRETE DIAPHRAGMS SHALL BE SPACED AND PLACED PARALLEL TO GIRDERS.

PART LONGITUDINAL SECTION
(BETWEEN EXTERIOR GIRDERS)



TYPICAL END VIEW AT ABUTMENT DIAPHRAGM (CORNER 4 ONLY)
(LOOKING WEST AT NORTH ABUTMENT)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

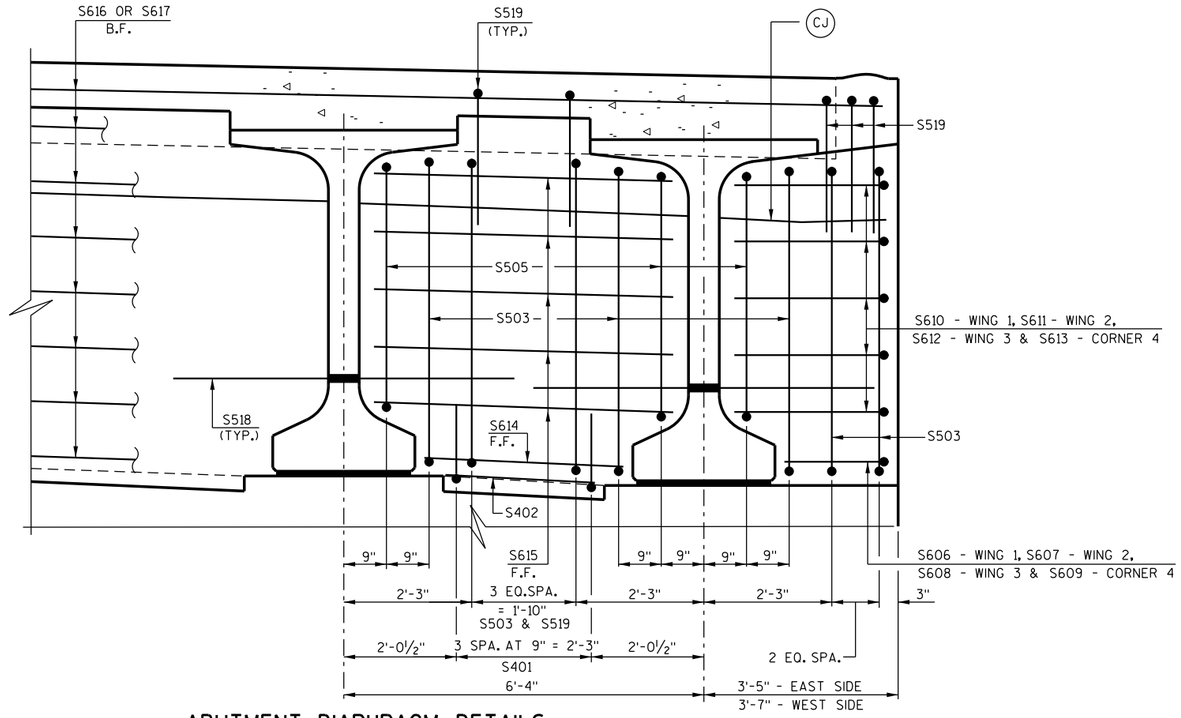
SUPERSTRUCTURE

SHEET 24 OF 35
772

8

8

FILE NAME : P:\161 USH 41 over Velp Ave Rd Sm\h\Structures\B-5-669\24_super4_b-5-669.dgn
PLOT DATE : 6/10/2014



ABUTMENT DIAPHRAGM DETAILS

(TYP. BETWEEN GIRDERS - NORTH ABUT. SHOWN, SOUTH ABUT. SIMILAR)

LEGEND

(CJ) OPTIONAL CONSTRUCTION JOINT 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

FILE NAME : P:\161 USH 41 over Yelp Ave RA Smith\Structures\B-5-669\25_super5_b-5-669.dgn
PLOT DATE : 6/10/2014

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

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SUPERSTRUCTURE

STATE PROJECT NUMBER

1133-10-71

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
ALL BAR STEEL REINFORCEMENT IN THIS BILL SHALL BE EPOXY COATED.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	TOTAL WEIGHT = 72,110 LBS.
S401	88	3-6	X		ABUTMENT DIAPHRAGM - BOTTOM	VERT.
S402	44	2-10			ABUTMENT DIAPHRAGM - BOTTOM	HORIZ.
S503	148	17-5	X		ABUTMENT DIAPHRAGM - STIRRUPS	VERT.
S505	48	15-5	X		ABUTMENT DIAPHRAGM - STIRRUPS UNDER FLANGE	VERT.
S606	1	7-0	X		ABUTMENT DIAPHRAGM - END - WING 1	HORIZ.
S607	1	6-8	X		ABUTMENT DIAPHRAGM - END - WING 2	HORIZ.
S608	1	7-4	X		ABUTMENT DIAPHRAGM - END - WING 3	HORIZ.
S609	1	6-7	X		ABUTMENT DIAPHRAGM - END - CORNER 4	HORIZ.
S610	5	9-2	X		ABUTMENT DIAPHRAGM - END - WING 1	HORIZ.
S611	5	8-10	X		ABUTMENT DIAPHRAGM - END - WING 2	HORIZ.
S612	5	9-6	X		ABUTMENT DIAPHRAGM - END - WING 3	HORIZ.
S613	5	8-9	X		ABUTMENT DIAPHRAGM - END - CORNER 4	HORIZ.
S614	22	3-11			ABUTMENT DIAPHRAGM - BETWEEN GIRDERS	HORIZ.
S615	110	5-11			ABUTMENT DIAPHRAGM - BETWEEN GIRDERS	HORIZ.
S616	18	46-2			ABUTMENT DIAPHRAGM - B.F.	HORIZ.
S617	18	44-3			ABUTMENT DIAPHRAGM - B.F.	HORIZ.
S518	48	6-0			ABUTMENT DIAPHRAGM - AT GIRDER HOLES	HORIZ.
S519	100	6-3	X		ABUTMENT DIAPHRAGM - TOP	VERT.
S420	7	4-9	X		ABUTMENT DIAPHRAGM - CORNER 4	HORIZ.
S521	4	6-9			ABUTMENT DIAPHRAGM - CORNER 4	VERT.
S522	2	5-10	X		ABUTMENT DIAPHRAGM & PARAPET - CORNER 4	VERT.
S423	36	20-11		✳	SLAB - BOTTOM	TRANS.
S424	487	38-11			SLAB - TOP & BOTTOM	TRANS.
S425	37	20-5		✳	SLAB - BOTTOM	TRANS.
S426	37	20-1		✳	SLAB - BOTTOM	TRANS.
S427	487	39-1			SLAB - TOP & BOTTOM	TRANS.
S428	37	20-4		✳	SLAB - BOTTOM	TRANS.
S529	16	6-0			SLAB - TOP & BOTTOM - CORNERS & STAGE JT.	TRANS.
S430	824	39-6			SLAB - TOP & BOTTOM	LONGIT.
S431	35	21-2		✳	SLAB - TOP	TRANS.
S432	37	19-11		✳	SLAB - TOP	TRANS.
S433	37	20-8		✳	SLAB - TOP	TRANS.
S434	36	20-4		✳	SLAB - TOP	TRANS.
S535	555	5-0			SLAB - TOP - EDGE OF SLAB	TRANS.
S536	235	4-5	X		PARAPET - EAST SIDE	VERT.
S537	235	6-8	X		PARAPET - EAST SIDE	VERT.
S538	90	32-6			PARAPET - WEST & EAST SIDE	LONGIT.
S539	235	4-6	X		PARAPET - WEST SIDE	VERT.
S540	235	9-1	X		PARAPET - WEST SIDE	VERT.

✳ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

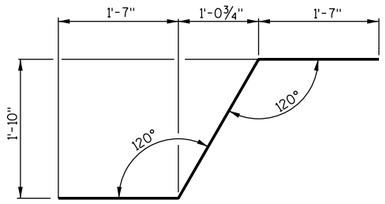
BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
S423	1 SERIES OF 36	3'-1" TO 38'-9"
S425	1 SERIES OF 37	2'-1" TO 38'-9"
S426	1 SERIES OF 37	1'-9" TO 38'-5"
S428	1 SERIES OF 37	2'-6" TO 38'-2"
S431	1 SERIES OF 35	3'-7" TO 38'-9"
S432	1 SERIES OF 37	1'-7" TO 38'-3"
S433	1 SERIES OF 27	2'-3" TO 39'-0"
S434	1 SERIES OF 36	2'-0" TO 38'-8"

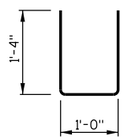
STAINLESS STEEL BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

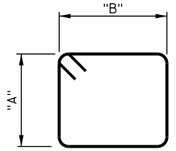
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	TOTAL WEIGHT = 2,660 LBS.
SS901	156	5-0	X		APPROACH APRON AT BRIDGE PAVING NOTCH	LONGIT.



SS901

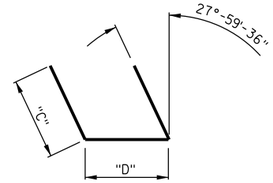


S401



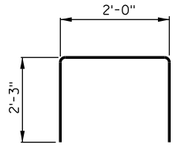
S503 & S505

MARK	DIM. "A"	DIM. "B"
S503	5'-4"	3'-1"
S505	4'-4"	3'-1"

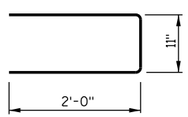


S606 THRU S613

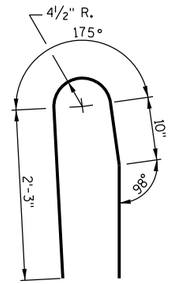
MARK	DIM. "C"	DIM. "D"
S606	2'-1"	3'-2"
S607	2'-3"	2'-6"
S608	2'-3"	3'-2"
S609	2'-1"	2'-9"
S610	3'-2"	3'-2"
S611	3'-4"	2'-6"
S612	3'-4"	3'-2"
S613	3'-2"	2'-9"



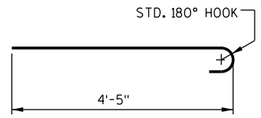
S519



S421



S522



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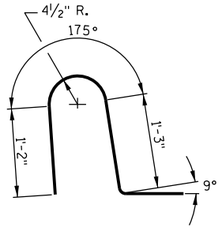
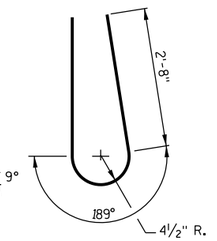
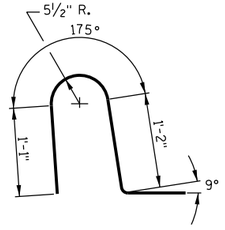


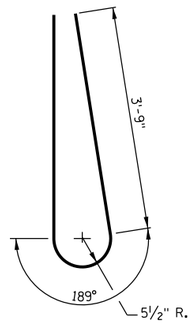
S536



S537



S539



S540

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SUPERSTRUCTURE

SHEET 26 OF 35
774

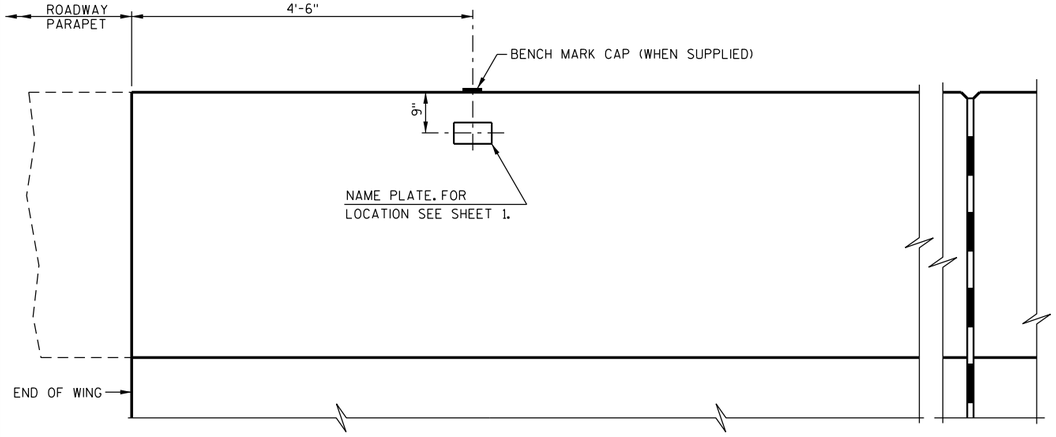
8

8

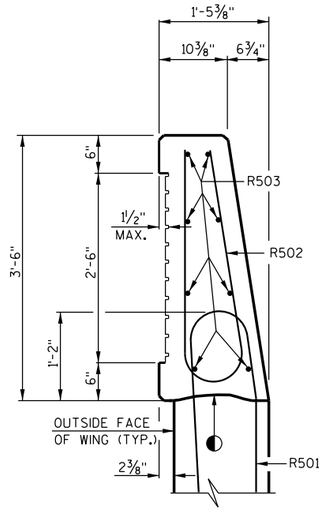
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\26_superб_b-5-669.dgn
PLOT DATE : 6/11/2014

STATE PROJECT NUMBER

1133-10-71



INSIDE ELEVATION - WING 1



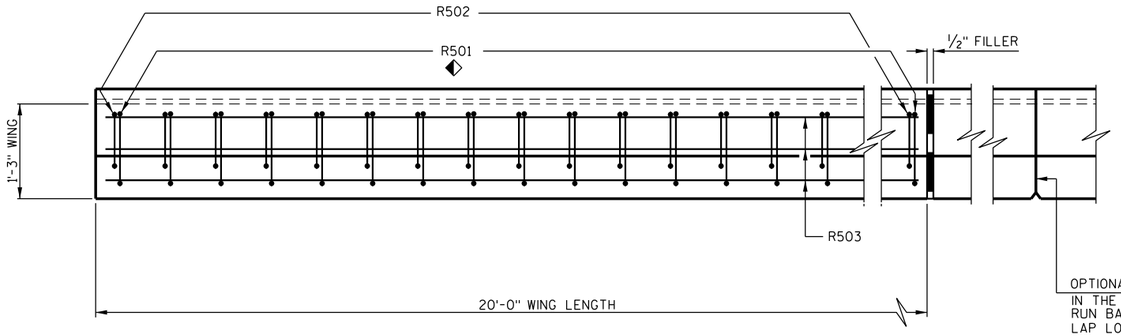
SECTION C-C

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
ALL REINFORCEMENT BARS IN THIS BILL SHALL BE EPOXY COATED.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	TOTAL WEIGHT = 560 LBS.
R501	30	5-10	X		PARAPET - WING 1	VERT.
R502	30	6-8	X		PARAPET - WING 1	VERT.
R503	8	19-8			PARAPET - WING 1	HORIZ.

NOTE: QUANTITIES OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT ARE INCLUDED IN THE ABUTMENT QUANTITIES ON SHEET 2.

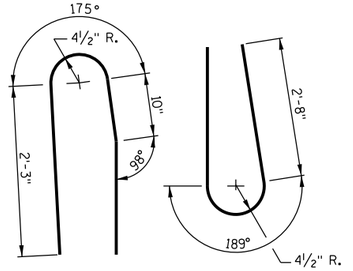


PLAN - WING 1

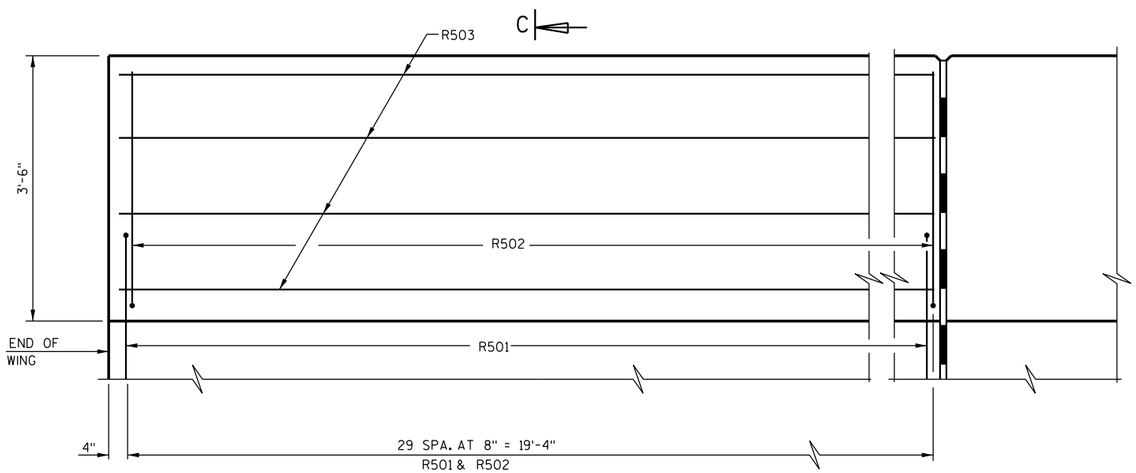
LEGEND

◆ R501 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

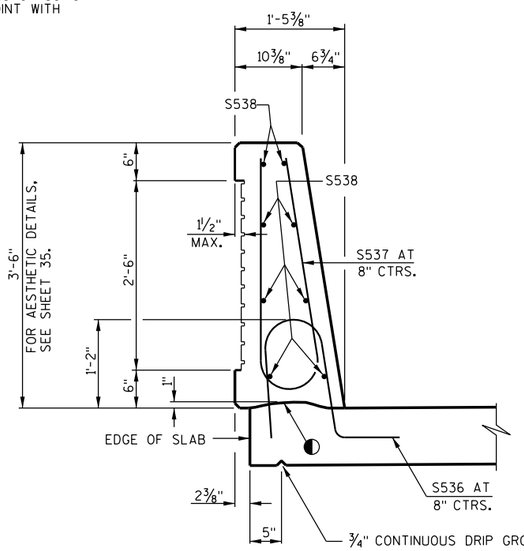
◐ CONST. JT. - STRIKE OFF AS SHOWN.



R501 R502



OUTSIDE ELEVATION - WING 1



SECTION THRU PARAPET ON BRIDGE

NOTE: SEE SHEET 26 FOR BAR STEEL REINFORCEMENT DETAILS AND BILL OF BARS FOR PARAPET ON BRIDGE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SINGLE SLOPE PARAPET 42SS (MODIFIED)

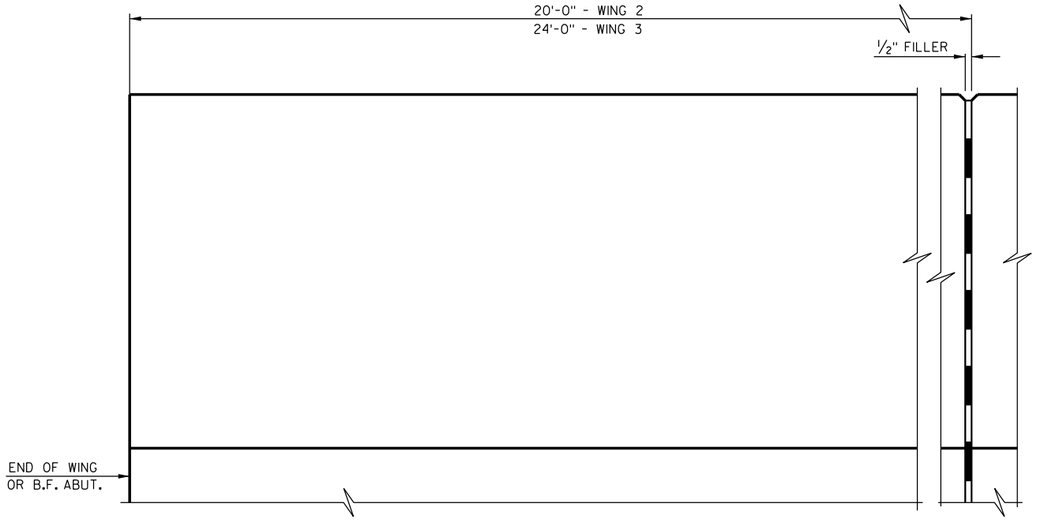
SHEET 27 OF 35
775

8

8

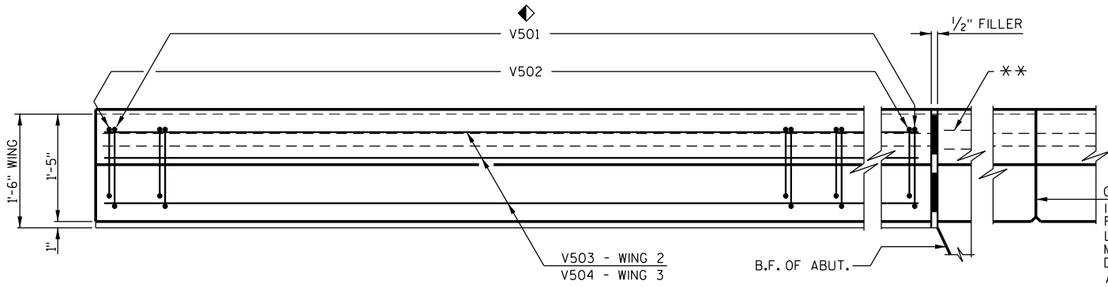
FILE NAME : P:\161 USH 41 over Yelp Ave RA Smith\Structures\B-5-669\27_parapet42ss_b-5-669.dgn
PLOT DATE : 6/11/2014

FILE NAME : P:\161 USH 41 over Velp Ave Rd Smith\Structures\B-5-669\28_parapet56ss_b-5-669.dgn
PLOT DATE : 6/11/2014



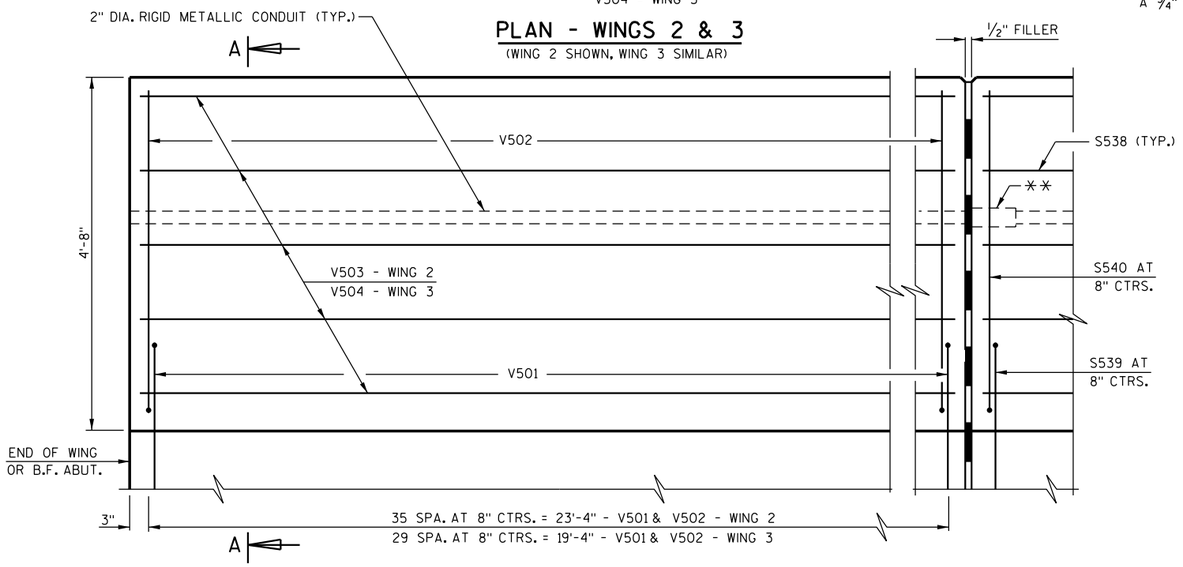
INSIDE ELEVATION - WINGS 2 & 3

(WING 2 SHOWN, WING 3 SIMILAR)



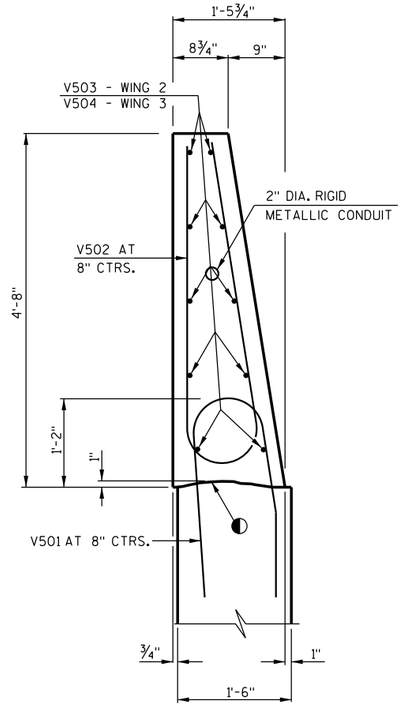
PLAN - WINGS 2 & 3

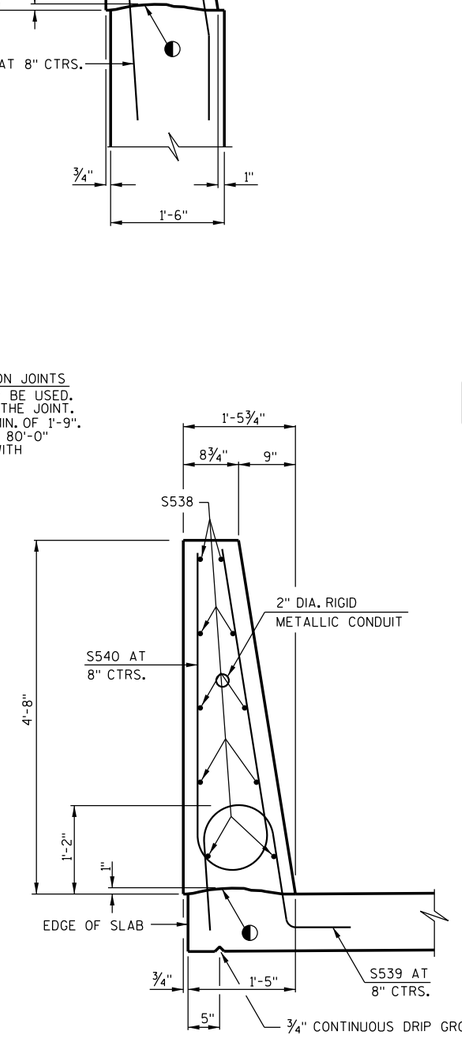
(WING 2 SHOWN, WING 3 SIMILAR)



OUTSIDE ELEVATION - WINGS 2 & 3

(WING 2 SHOWN, WING 3 SIMILAR)



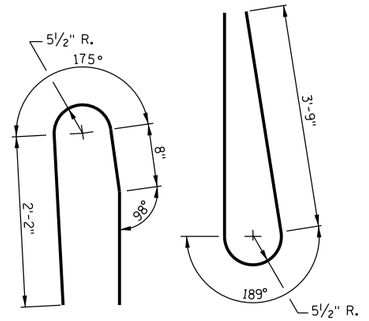


SECTION THRU PARAPET ON BRIDGE

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
ALL REINFORCEMENT BARS IN THIS BILL SHALL BE EPOXY COATED.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	TOTAL WEIGHT = 1,490 LBS.
V501	66	5-11	X		PARAPET - WINGS 2 & 3	VERT.
V502	66	9-1	X		PARAPET - WINGS 2 & 3	VERT.
V503	10	23-8			PARAPET - WING 2	HORIZ.
V504	10	19-8			PARAPET - WING 3	HORIZ.



V501 V502

NOTE: QUANTITIES OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT ARE INCLUDED IN THE ABUTMENT QUANTITIES ON SHEET 2.

LEGEND

◆ R501 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

◐ CONST. JT. - STRIKE OFF AS SHOWN.

** EXPANSION FITTING - USE AN APPROVED EXPANSION FITTING AT EACH SEMI-EXPANSION JOINT.

NOTE: SEE SHEET 26 FOR BAR STEEL REINFORCEMENT DETAILS AND BILL OF BARS FOR PARAPET ON BRIDGE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SINGLE SLOPE PARAPET 56SS

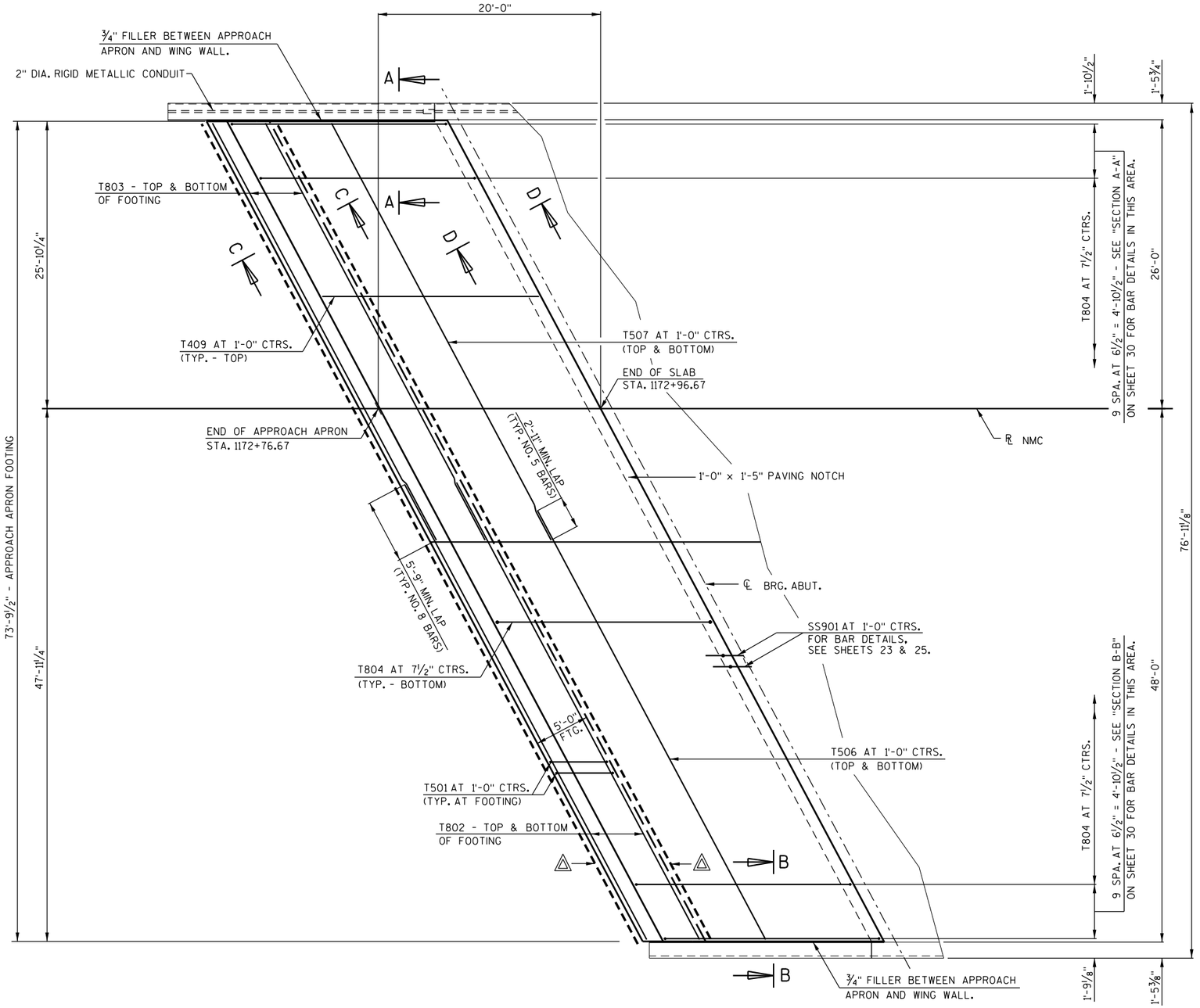
SHEET 28 OF 35
776

STATE PROJECT NUMBER
1133-10-71

8

STATE PROJECT NUMBER

1133-10-71



PART PLAN - SOUTH APPROACH APRON

LEGEND

△ FOR SYMBOL DESCRIPTION, SEE SHEET 31.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

SOUTH APPROACH APRON DETAILS

SHEET 29 OF 35
777

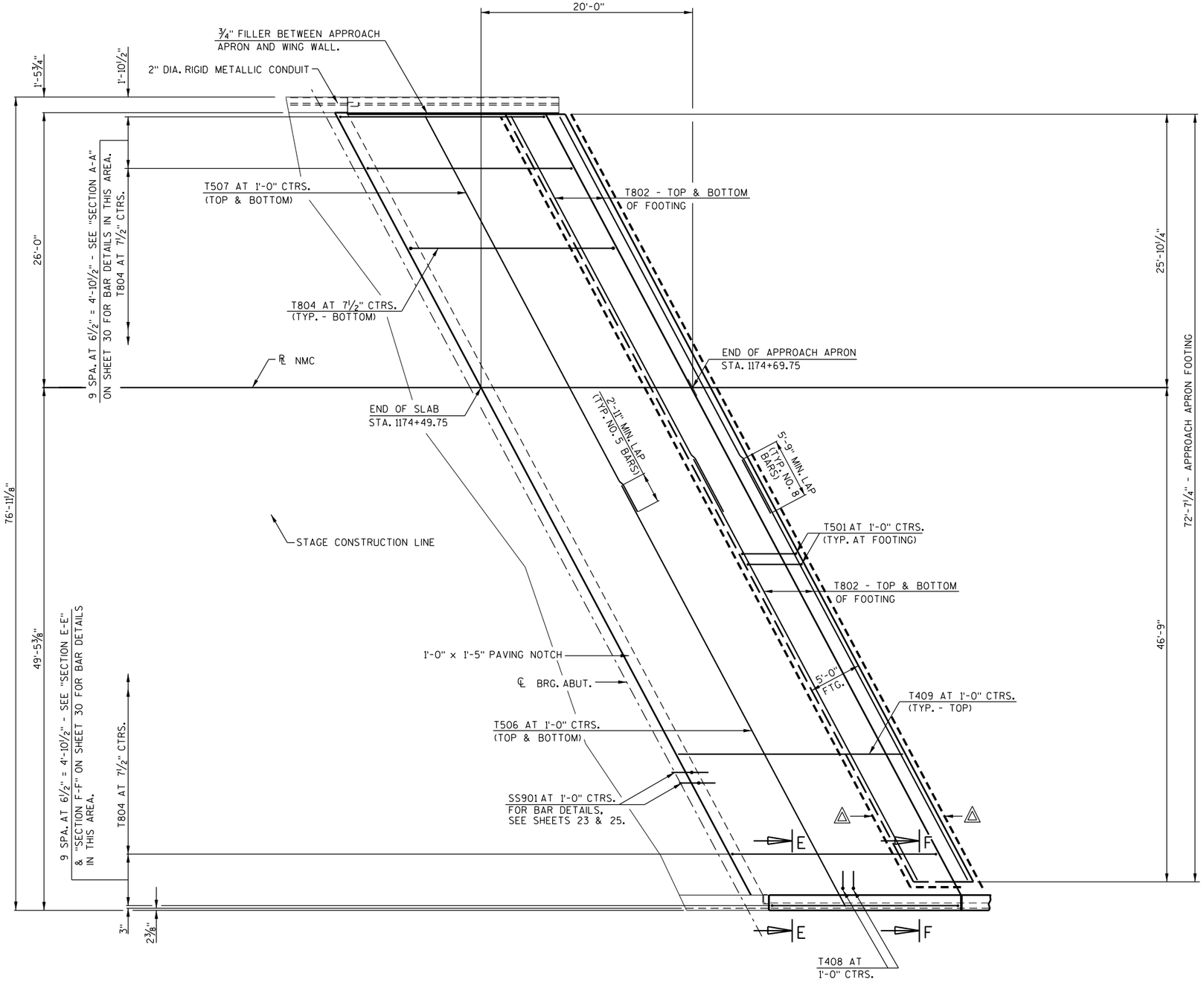
8

8

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\29_south_apron_b-5-669.dgn
PLOT DATE : 6/11/2014

STATE PROJECT NUMBER

1133-10-71



PART PLAN - NORTH APPROACH APRON

LEGEND

△ FOR SYMBOL DESCRIPTION, SEE SHEET 31.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

NORTH APPROACH APRON DETAILS

SHEET 30 OF 35
778

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\30_north_apron_b-5-669.dgn
PLOT DATE : 6/11/2014

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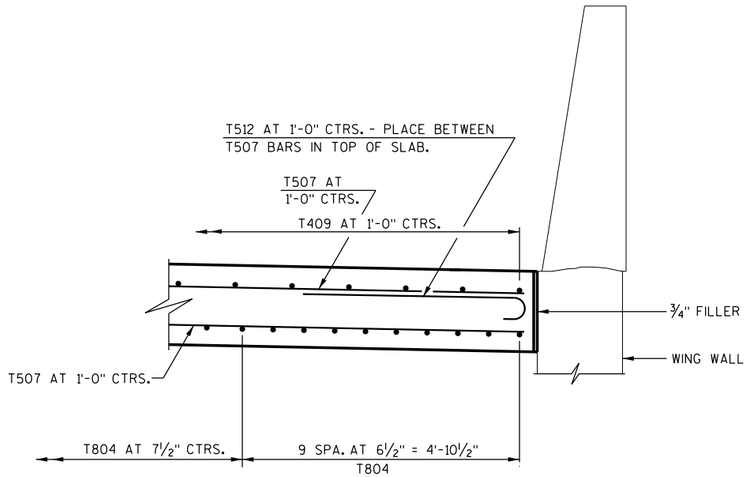
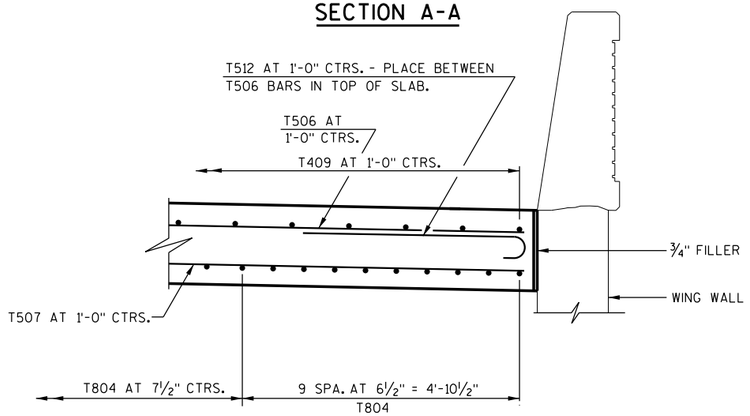
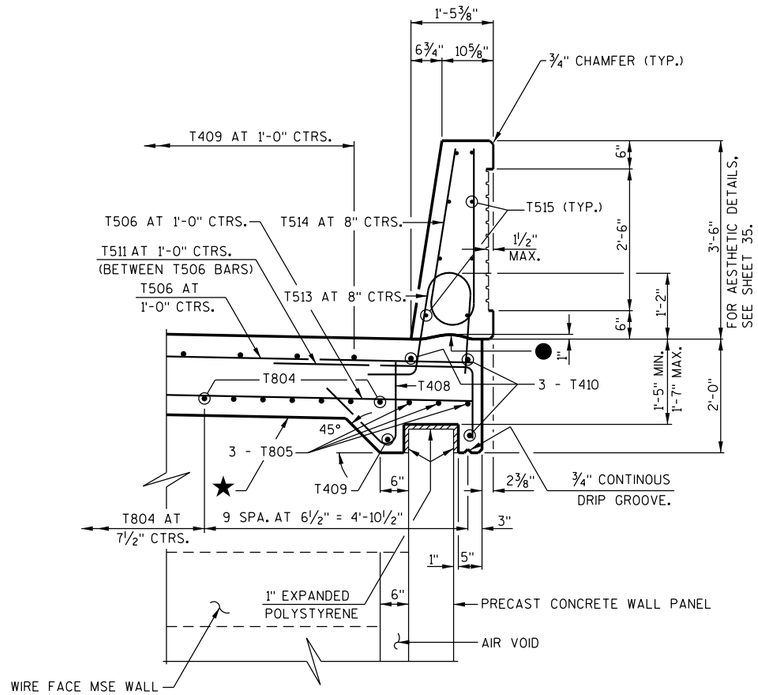


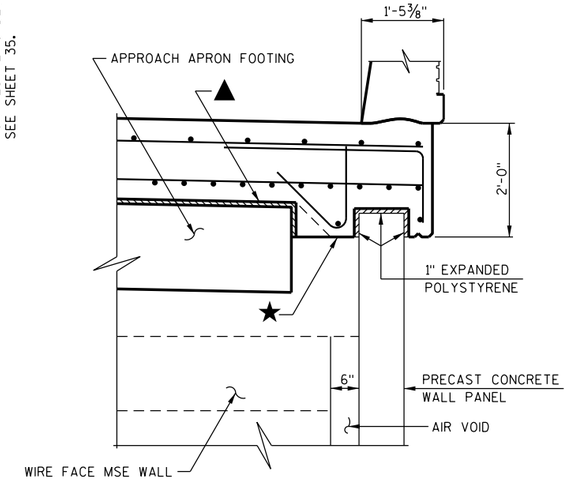
SECTION A-A



SECTION B-B

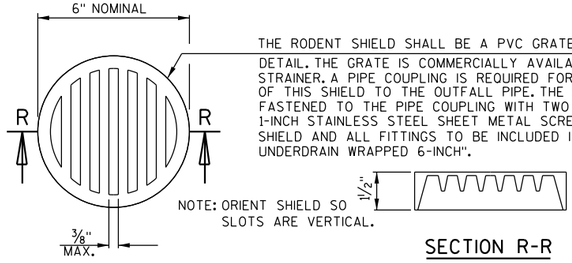


SECTION E-E
(AT MSE WALLS)



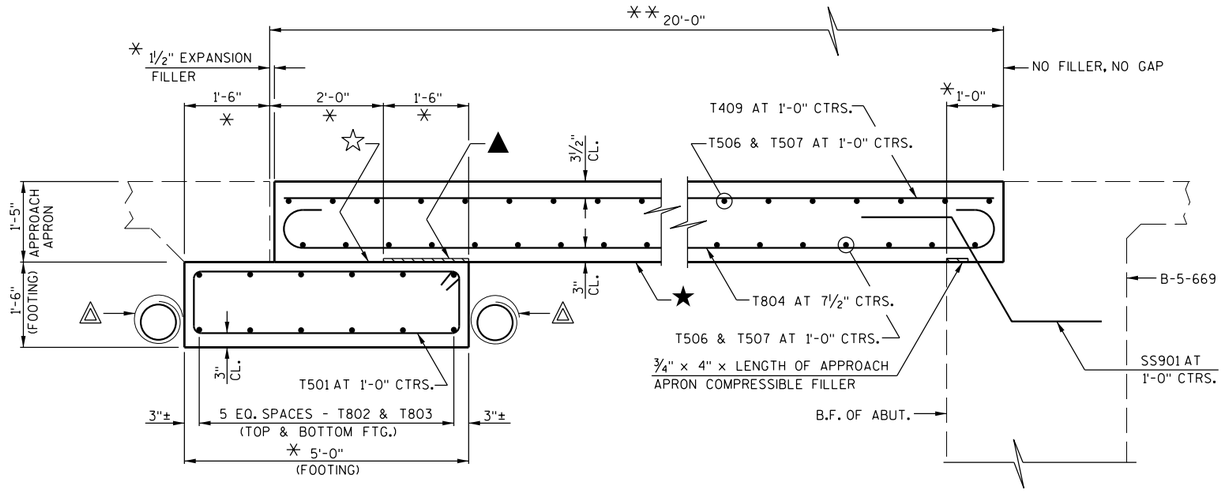
SECTION F-F
(AT MSE WALLS)

NOTE: BAR STEEL REINFORCEMENT FOR THE APPROACH APRON AND SLOPED FACE PARAPET LOCATED ON THE NORTHWEST SIDE OF THE APPROACH APRON IS INCLUDED IN THE BILL OF BARS ON SHEET 32.



SECTION R-R

RODENT SHIELD



SECTION C-C

SECTION D-D

PART LONGITUDINAL SECTION AT APPROACH APRONS
(LOOKING WEST AT SOUTH APPROACH APRON, NORTH APPROACH APRON SIMILAR)

LEGEND

- * DIMENSIONS ARE GIVEN NORMAL ℄ SUBSTRUCTURE.
- ** DIMENSIONS ARE GIVEN PARALLEL TO ℞ SMC.
- ☆ STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" x 1'-6" x LENGTH OF FOOTING COMPRESSIBLE FILLER.
- △ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD TO END OF PIPE. SEE "RODENT SHIELD" DETAIL ON THIS SHEET.
- ● CONST. JT. - STRIKE OFF AS SHOWN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

APPROACH APRON DETAILS

SHEET 31 OF 35
779

FILE NAME : P:\161 USH 41 over Velp Ave RA Sm\Structures\B-5-669\31_apron_det_b-5-669.dgn
PLOT DATE : 6/11/2014

8

8

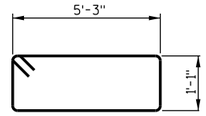
STATE PROJECT NUMBER

1133-10-71

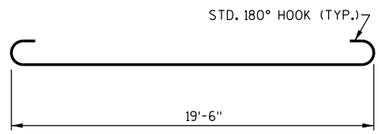
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
ALL BAR STEEL REINFORCEMENT IN THIS BILL SHALL BE EPOXY COATED.

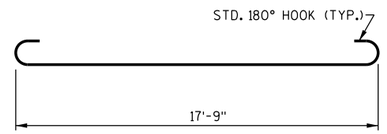
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION TOTAL WEIGHT = 32,050 LBS.	
T501	151	13-3	X		APPROACH APRONS - FOOTING	VERT.
T802	24	46-5			APPROACH APRONS - FOOTING	TRANS.
T803	24	42-6			APPROACH APRONS - FOOTING	TRANS.
T804	236	21-4	X		APPROACH APRONS - SLAB - BOTTOM	LONGIT.
T805	3	19-7	X		N. APPR. APRON - SLAB - BOTTOM - EAST EDGE	LONGIT.
T506	84	45-2			APPROACH APRONS - SLAB - TOP & BOTTOM	TRANS.
T507	84	42-6			APPROACH APRONS - SLAB - TOP & BOTTOM	TRANS.
T408	20	2-11	X		N. APPR. APRON - SLAB - BOTTOM - EAST EDGE	TRANS.
T409	151	19-6			N. APPR. APRON - SLAB - BOTTOM - EAST EDGE	LONGIT.
T410	3	17-10			N. APPR. APRON - SLAB - BOTTOM - EAST EDGE	LONGIT.
T511	21	5-0	X		N. APPR. APRON - SLAB - BOTTOM - EAST EDGE	TRANS.
T512	63	5-4	X		APPROACH APRONS - SLAB - TOP - AT EDGE	TRANS.
T513	28	4-5	X		N. APPROACH APRON - PARAPET - EAST SIDE	VERT.
T514	28	6-8	X		N. APPROACH APRON - PARAPET - EAST SIDE	VERT.
T515	8	17-9			N. APPROACH APRON - PARAPET - EAST SIDE	LONGIT.



T501



T804



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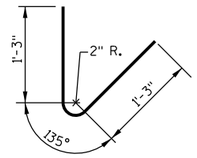

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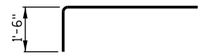

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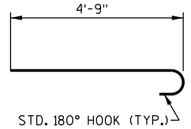

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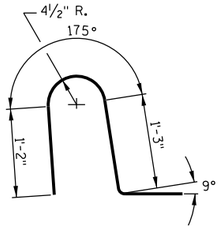

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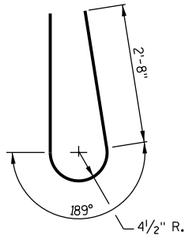

T514

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PLOT DATE : 6/11/2014

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

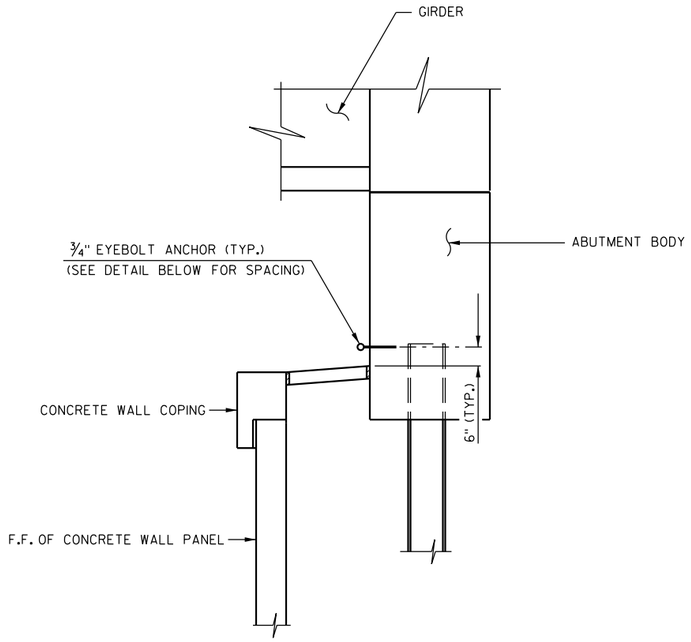
STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

APPROACH APRON DETAILS

SHEET 32 OF 35
780

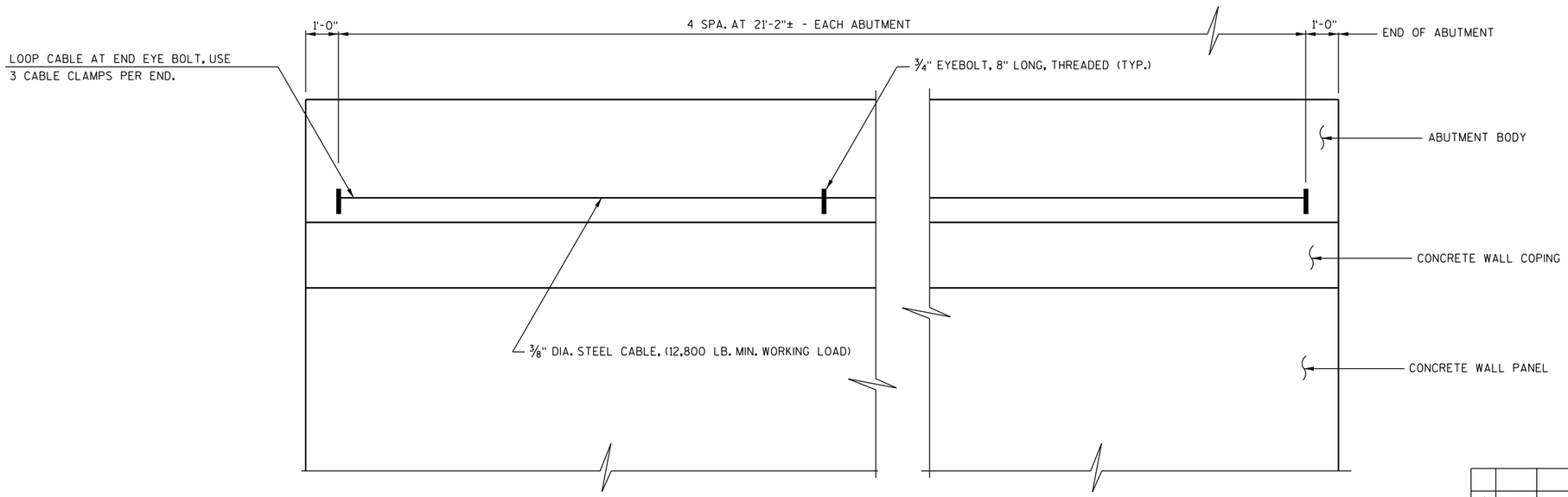
STATE PROJECT NUMBER
1133-10-71



TYPICAL SECTION THRU ABUTMENT BODY

NOTES

1. ALL LABOR AND MATERIAL (EYEBOLTS, CABLE AND CLAMPS) INCIDENTAL TO BID ITEM "MASONRY ANCHORS TYPE S 3/4-INCH".
2. ALL HARDWARE AND CABLE TO BE GALVANIZED OR STAINLESS STEEL.
3. USE EYEBOLTS FOR TYPE S ANCHOR HARDWARE.



PART FRONT VIEW OF ABUTMENT

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\33.fallprot.b-5-669.dgn
PLOT DATE : 6/11/2014

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

FALL PROTECTION

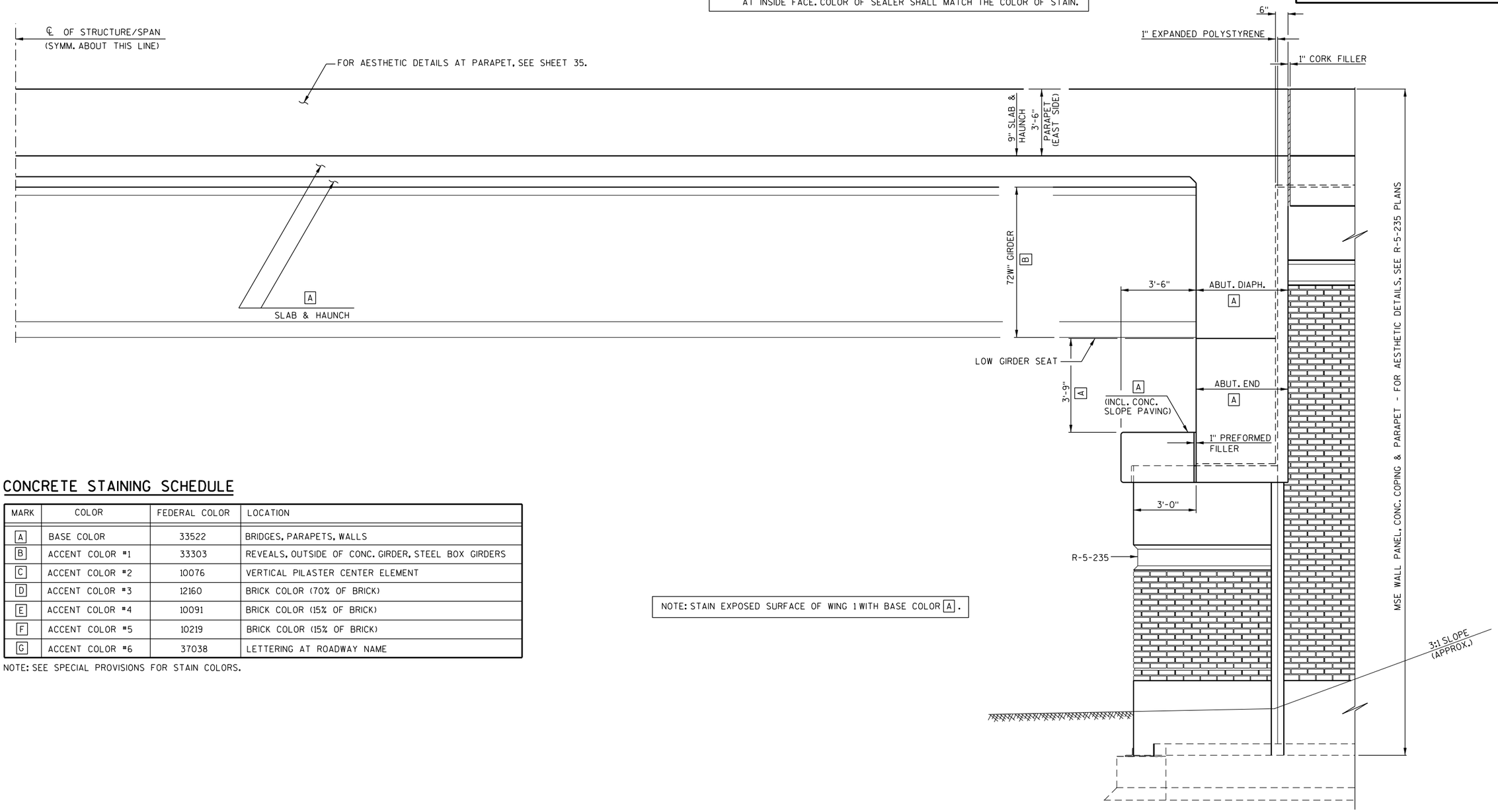
SHEET 33 OF 35
781

FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\34_aesthetics1_b-5-669.dgn
PLOT DATE : 6/11/2014

NOTE: FILLERS AND EXPANDED POLYSTYRENE ARE INCLUDED IN WALL LENGTH. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF THESE FILLERS WITH NON-STAINING AND NON-BITUMINOUS SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. COLOR OF SEALER SHALL MATCH THE COLOR OF STAIN.

STATE PROJECT NUMBER

1133-10-71



CONCRETE STAINING SCHEDULE

MARK	COLOR	FEDERAL COLOR	LOCATION
A	BASE COLOR	33522	BRIDGES, PARAPETS, WALLS
B	ACCENT COLOR #1	33303	REVEALS, OUTSIDE OF CONC. GIRDER, STEEL BOX GIRDERS
C	ACCENT COLOR #2	10076	VERTICAL PILASTER CENTER ELEMENT
D	ACCENT COLOR #3	12160	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	10091	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	10219	BRICK COLOR (15% OF BRICK)
G	ACCENT COLOR #6	37038	LETTERING AT ROADWAY NAME

NOTE: SEE SPECIAL PROVISIONS FOR STAIN COLORS.

NOTE: STAIN EXPOSED SURFACE OF WING 1 WITH BASE COLOR A.

PART ELEVATION - B-5-669

(LOOKING WEST AT NORTHEAST CORNER OF NORTH ABUTMENT)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

AESTHETIC DETAILS

SHEET 34 OF 35
782

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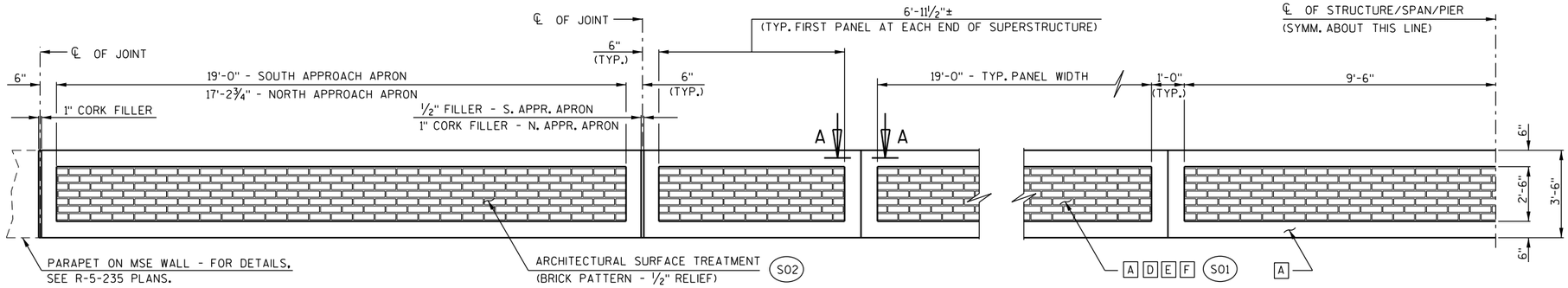
STATE PROJECT NUMBER

1133-10-71



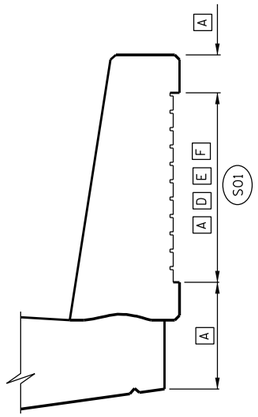
PARAPET ON APPROACH APRON

(SOUTH APPROACH APRON ABUTS WING 1, NORTH APPROACH APRON/PARAPET IS ON TOP OF R-5-235)

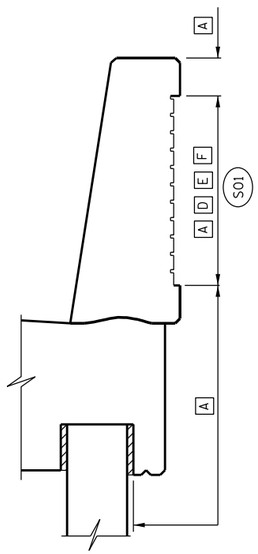
PARAPET ON BRIDGE DECK

PART ELEVATION AT PARAPET

(LOOKING WEST AT EAST SIDE PARAPET)



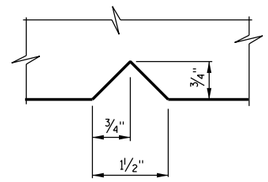
AT BRIDGE DECK



AT APPROACH APRON

SINGLE SLOPE PARAPET 42SS (MODIFIED)

(WEST SIDE ONLY)



SECTION A-A

(3/4" "V" GROOVE)

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION
A	BASE COLOR	BRIDGES, PARAPETS, WALLS
B	ACCENT COLOR #1	REVEALS, OUTSIDE OF CONC. GIRDER, STEEL BOX GIRDERS
C	ACCENT COLOR #2	VERTICAL PILASTER CENTER ELEMENT
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)
G	ACCENT COLOR #6	LETTERING AT ROADWAY NAME

NOTE: SEE SPECIAL PROVISIONS FOR STAIN COLORS.

NOTES

(S01) STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID FOR AS "STAINING CONCRETE BRICK".

(S02) THE COST OF BRICK PATTERN FORMLINER TREATMENT IS PAID FOR UNDER "ARCHITECTURAL SURFACE TREATMENT". SEE SPECIAL PROVISIONS FOR DESCRIPTION OF BRICK PATTERN FORMLINER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-669

DRAWN BY TAW | PLANS CK'D. TR

AESTHETIC DETAILS

SHEET 35 OF 35

783

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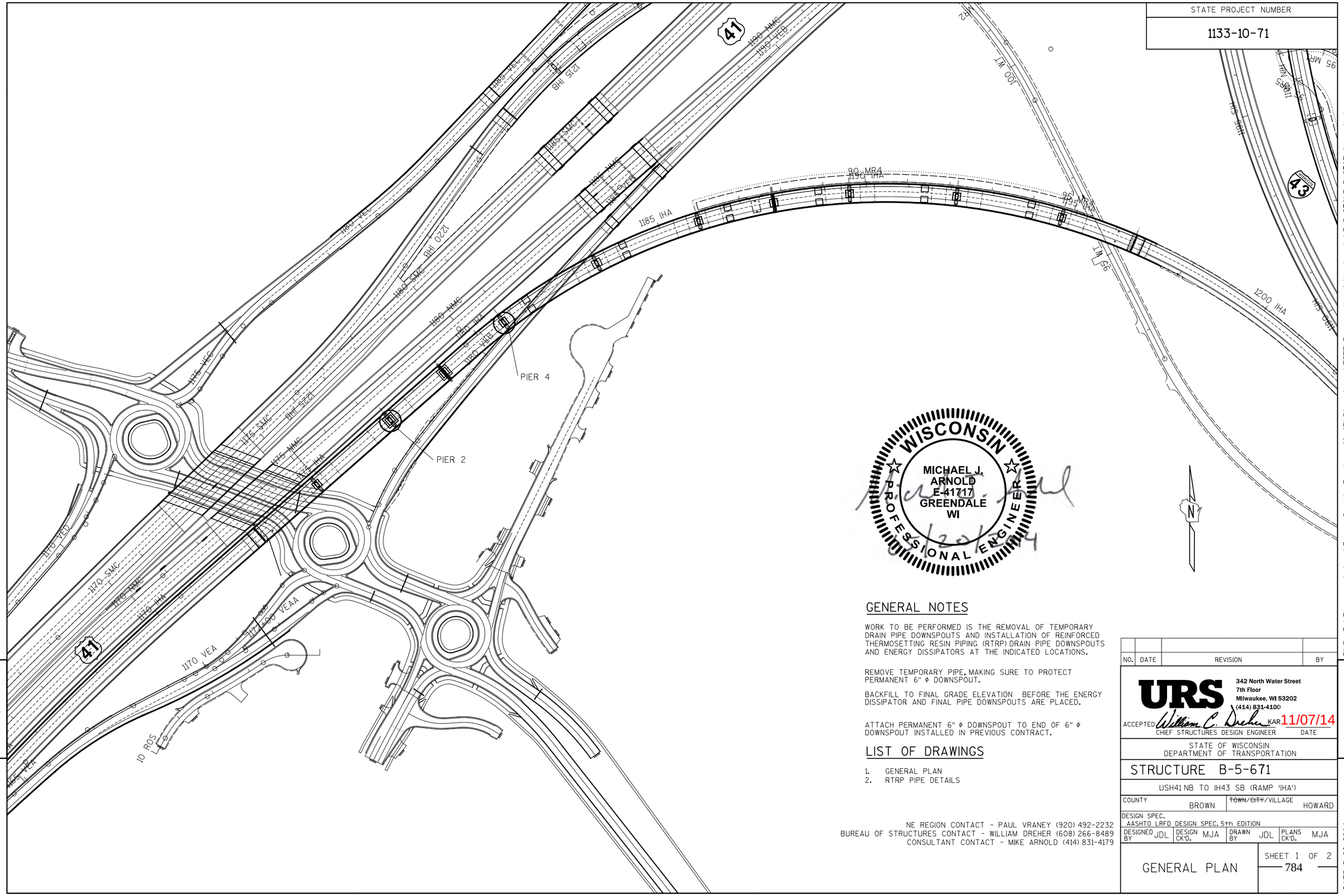
FILE NAME : P:\161 USH 41 over Velp Ave RA Smith\Structures\B-5-669\35_aesthet1cs2_b-5-669.dgn
PLOT DATE : 6/11/2014

STATE PROJECT NUMBER
1133-10-71



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MICHAEL J. ARNOLD E-41717 GREENDALE WI
WISCONSIN PROFESSIONAL ENGINEER

GENERAL NOTES

WORK TO BE PERFORMED IS THE REMOVAL OF TEMPORARY DRAIN PIPE DOWNSPOUTS AND INSTALLATION OF REINFORCED THERMOSETTING RESIN PIPING (RTRP) DRAIN PIPE DOWNSPOUTS AND ENERGY DISSIPATORS AT THE INDICATED LOCATIONS.

REMOVE TEMPORARY PIPE, MAKING SURE TO PROTECT PERMANENT 6" ϕ DOWNSPOUT.

BACKFILL TO FINAL GRADE ELEVATION BEFORE THE ENERGY DISSIPATOR AND FINAL PIPE DOWNSPOUTS ARE PLACED.

ATTACH PERMANENT 6" ϕ DOWNSPOUT TO END OF 6" ϕ DOWNSPOUT INSTALLED IN PREVIOUS CONTRACT.

LIST OF DRAWINGS

1. GENERAL PLAN
2. RTRP PIPE DETAILS

NE REGION CONTACT - PAUL VRANEY (920) 492-2232
BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MIKE ARNOLD (414) 831-4179

NO.	DATE	REVISION	BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

ACCEPTED William C. Dreher KAR 11/07/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-671

USH41 NB TO IH43 SB (RAMP 'IHA')

COUNTY	~~TOWN/CITY~~/VILLAGE
BROWN	HOWARD

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JDL	MJA	JDL	MJA

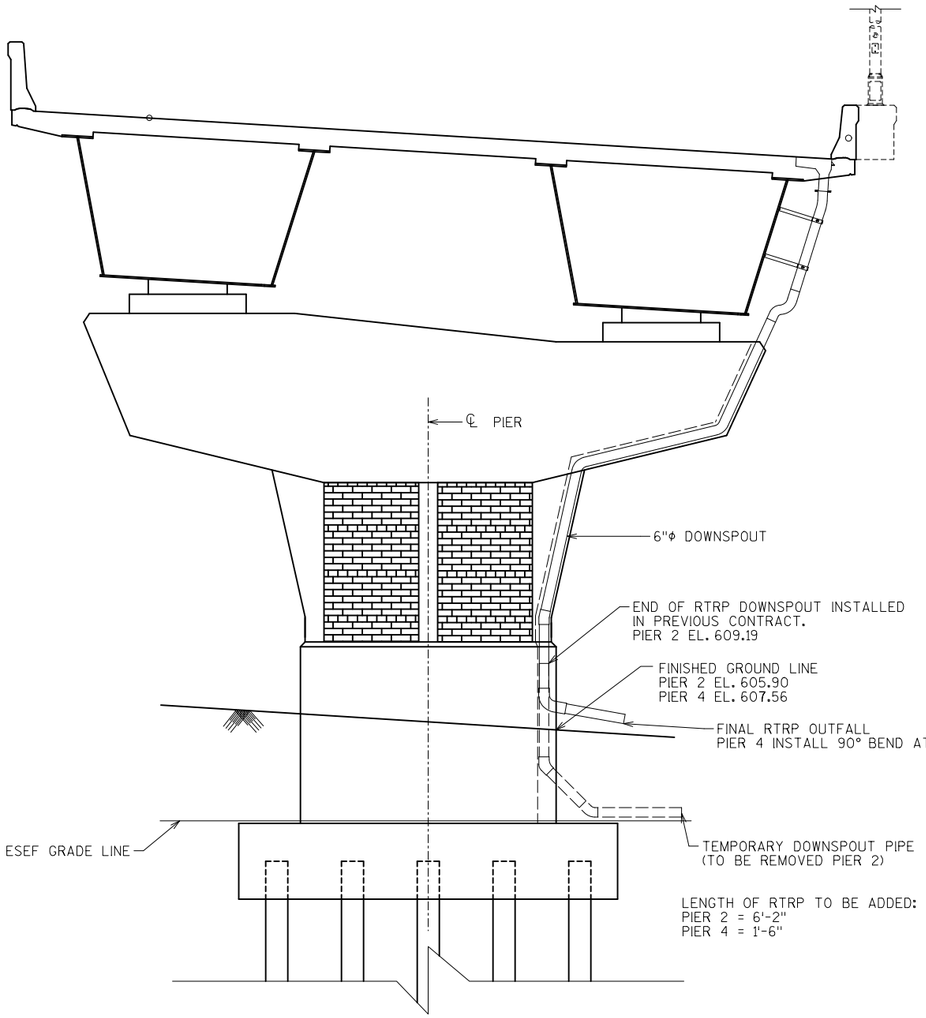
GENERAL PLAN

SHEET 1 OF 2
784

8

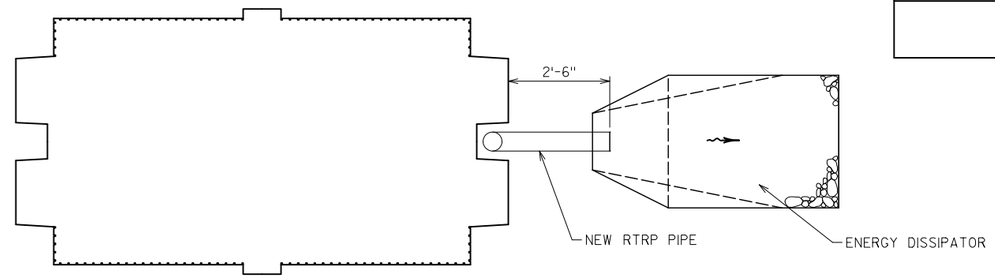
FILE= P:\Transportation\Brown County Bridges 41-43\Structures\ESEF Drain pipe Adjustments\B-5-671\B-5-671E_layout.dgn
DATE: 5/20/2014
I.D.

STATE PROJECT NUMBER
1133-10-71



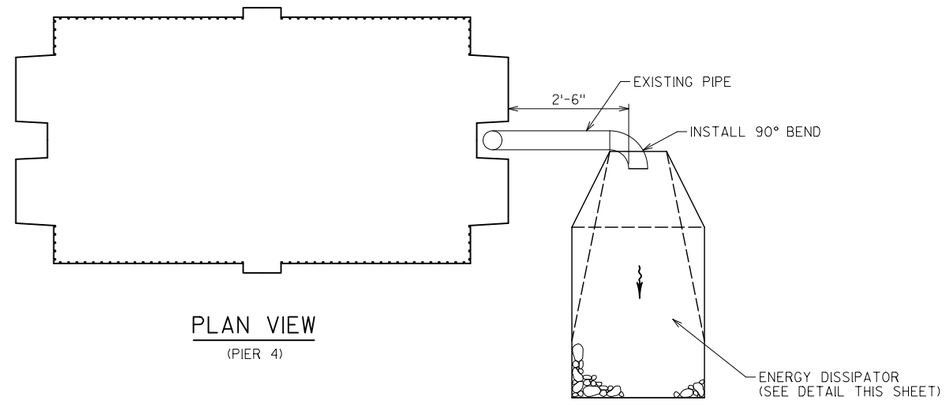
TYPICAL CROSS SECTION

(LOOKING UPSTATION PIER 2 SHOWN, PIER 4 SIMILAR)



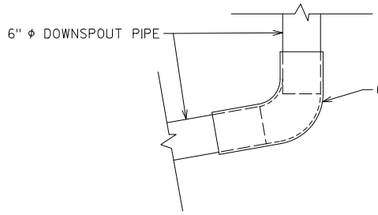
PLAN VIEW

(PIER 2)

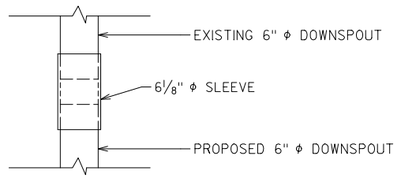


PLAN VIEW

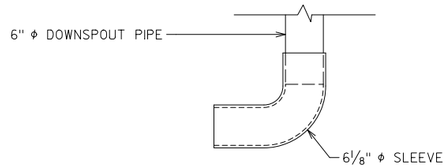
(PIER 4)



100° BEND

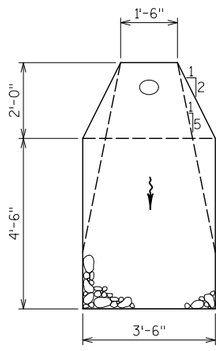


STRAIGHT CONNECTOR

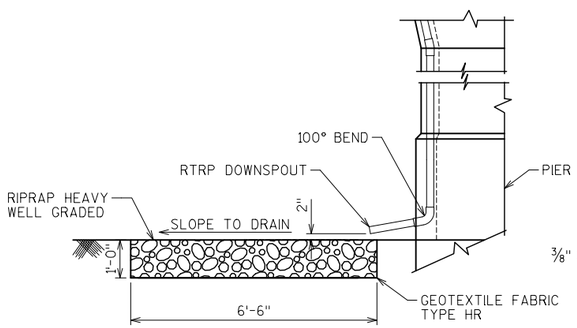


90° BEND

PIPE CONNECTION SLEEVE DETAIL

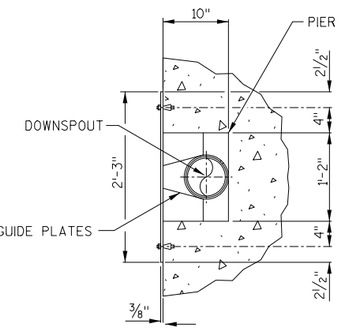


PLAN VIEW

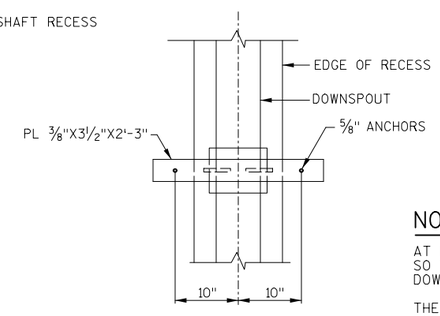


ELEVATION VIEW

ENERGY DISSIPATOR DETAIL



PLAN



FRONT ELEVATION

PIPE FASTENER DETAIL

TOTAL ESTIMATED QUANTITIES

BID ITEM #	BID ITEM	UNIT	TOTAL
606.0300	RIPRAP HEAVY	CY	2
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	9
SPV.0090.700	DOWNSPOUT RTRP 6-INCH	LF	8

QUANTITIES ARE INCLUDED UNDER CATEGORY 1000

NOTES:

AT PIER 4, INSTALL 90° BEND DOWNSPOUT SO THAT DOWNSPOUT WILL DISCHARGE DOWNHILL.

THE REMOVAL OF TEMPORARY DOWNSPOUT TO BE INCIDENTAL TO BID ITEM "DOWNSPOUT RTRP 6-INCH".

EXCAVATION FOR ENERGY DISSIPATOR IS INCIDENTAL TO ITEM "RIPRAP HEAVY".

VERIFY ALL DIMENSIONS BEFORE FABRICATING DOWNSPOUTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-671

DRAWN BY JDL | PLANS CK'D. MJA

RTRP PIPE DETAIL

SHEET 2 OF 2
785

DATE: 5/20/2014
I.D.

FILE= P:\Transportation\Brown County Bridges 41-43\Structures\ESEF Drain pipe Adjustments\B-5-671\007 B-05-671E Pier and Drainage outfall detail

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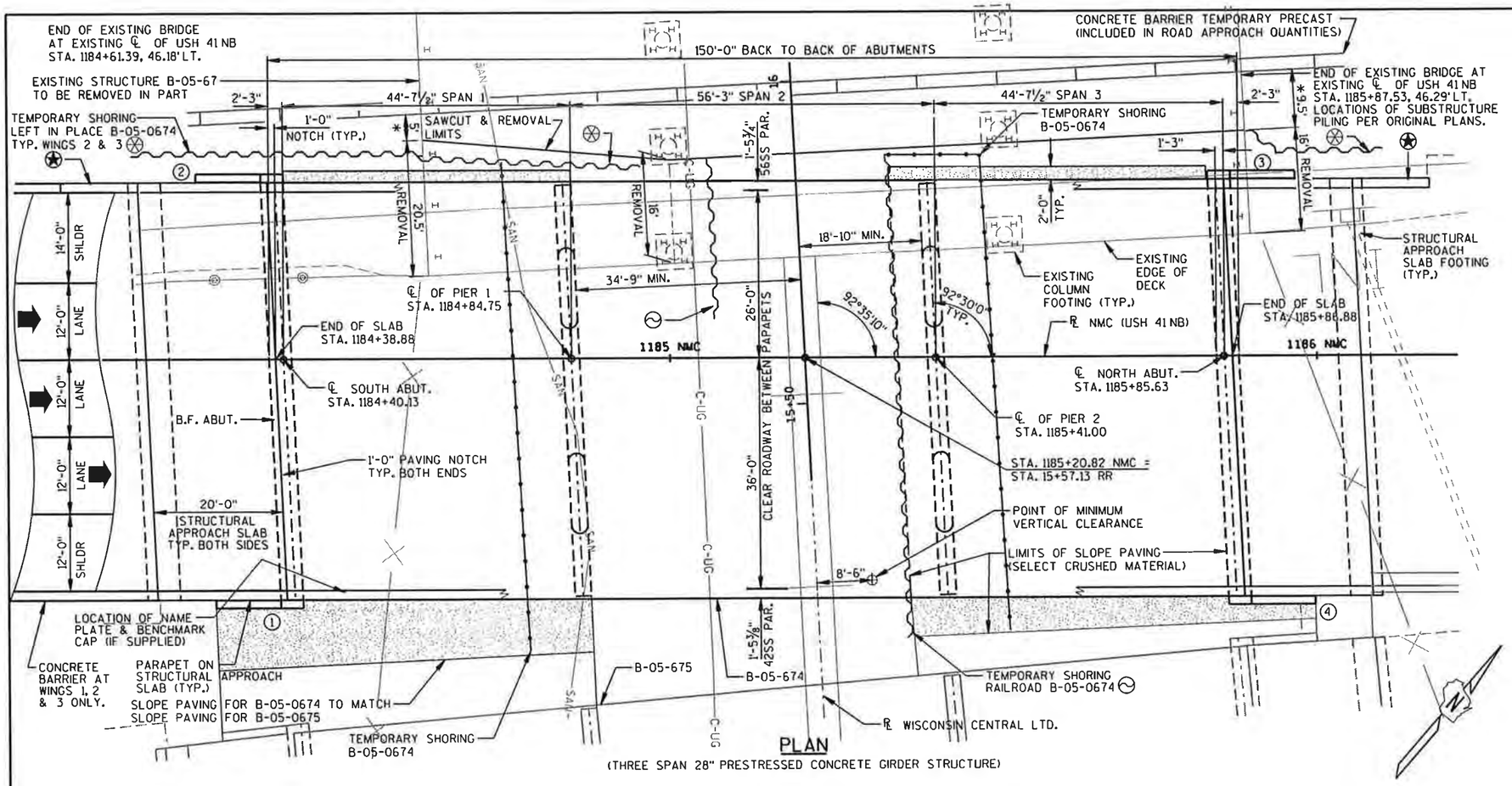


LEGEND

- ◯ - INDICATES WING NUMBER
- ⊗ - TEMPORARY SHORING LEFT IN PLACE B-05-0674.
- ★ - 12'-0" CONDUIT TRANSITION STUB REQUIRED AT WINGS 2 & 3 ONLY.
- * - LOCATION OF BARRIER ALLOWS FOR TEMPORARY 24'-0" CLEAR ROADWAY ON EXISTING BRIDGE.
- ⊖ - TEMPORARY SHORING RAILROAD B-05-0674 IS EXPECTED TO BE DESIGNED FOR ZONE B SHORING AND NOT ZONE A AS DEFINED IN THE "HIGHWAY OVER RAILROAD DESIGN REQUIREMENTS", BRIDGE STD. 38.01.

DESIGN DATA

LIVE LOAD:
DESIGN RATING : HL-93
INVENTORY RATING FACTOR : 1.08
OPERATIONAL RATING FACTOR : 1.41
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

TRAFFIC DATA:
A.A.D.T. (2015) = 35,200
A.A.D.T. (2035) = 22,800
R.D.S. = 70 MPH

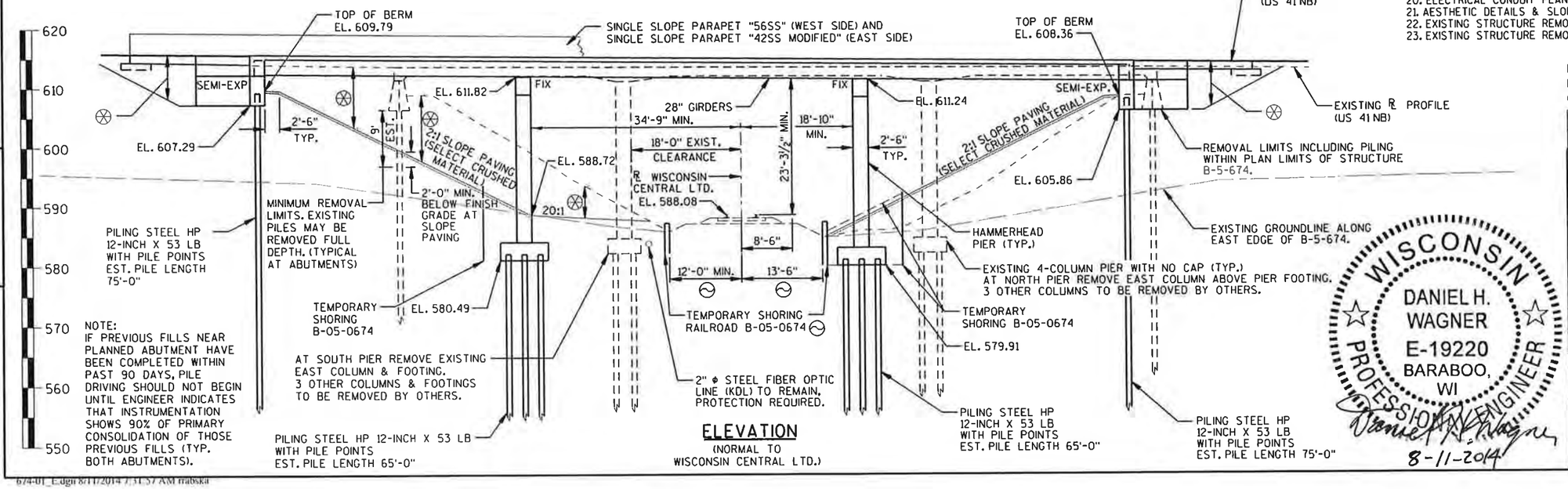
ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY HPC — fc' = 4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
28" PRESTRESSED GIRDERS, CONCRETE MASONRY — fc' = 8000 P.S.I.
STRANDS- 0.50" ϕ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.
PILING STEEL HP — fy = 50,000 P.S.I.

FOUNDATION DATA:
ABUTMENTS AND PIERS TO BE SUPPORTED ON PILING STEEL HP 12-INCH x 53 LB. WITH PILE POINTS DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS ARE 75'-0" AT THE ABUTMENTS, AND 65'-0" AT THE PIERS.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & DETAILS
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. PIERS
7. PIER DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT DETAILS
10. 28" PRESTRESSED GIRDER DETAILS
11. STEEL DIAPHRAGM
12. SUPERSTRUCTURE
13. SUPERSTRUCTURE SECTIONS & DETAILS
14. SINGLE SLOPE PARAPET 42SS MODIFIED ON SUPERSTRUCTURE
15. SINGLE SLOPE PARAPET 56SS ON SUPERSTRUCTURE
16. STRUCTURAL APPROACH SLAB
17. STRUCTURAL APPROACH SLAB DETAILS & CONDUIT TRANSITION STUB FOOTING
18. SINGLE SLOPE PARAPET 42SS MODIFIED ON APPROACH SLAB
19. SINGLE SLOPE PARAPET 56SS ON APPROACH SLAB
20. ELECTRICAL CONDUIT PLAN & DETAILS
21. AESTHETIC DETAILS & SLOPE PAVING
22. EXISTING STRUCTURE REMOVAL PLAN
23. EXISTING STRUCTURE REMOVAL SECTIONS



WISCONSIN
DANIEL H. WAGNER
E-19220
BARABOO, WI
PROFESSIONAL ENGINEER
Daniel H. Wagner
8-11-2014

DESIGN CONTACT: DANIEL WAGNER (608) 355-8952
BRIDGE OFFICE CONTACT: WILLIAM DREHER (608) 266-8489

NO.	DATE	REVISION	BY

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
1230 South Boulevard Baraboo, WI 53913
608-356-2771 1-800-362-4505 Fax: 608-356-2770

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 08/18/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
1133-10-71

STRUCTURE B-05-0674

USH 41 NB OVER WISCONSIN CENTRAL LTD.

COUNTY	~~TOWN/CITY~~/VILLAGE
BROWN	HOWARD

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JRS	DHW	RLR	DHW

GENERAL PLAN

SHEET 1 OF 23
786

FILE=674-01-E.DGN
DATE= 8/11/2014

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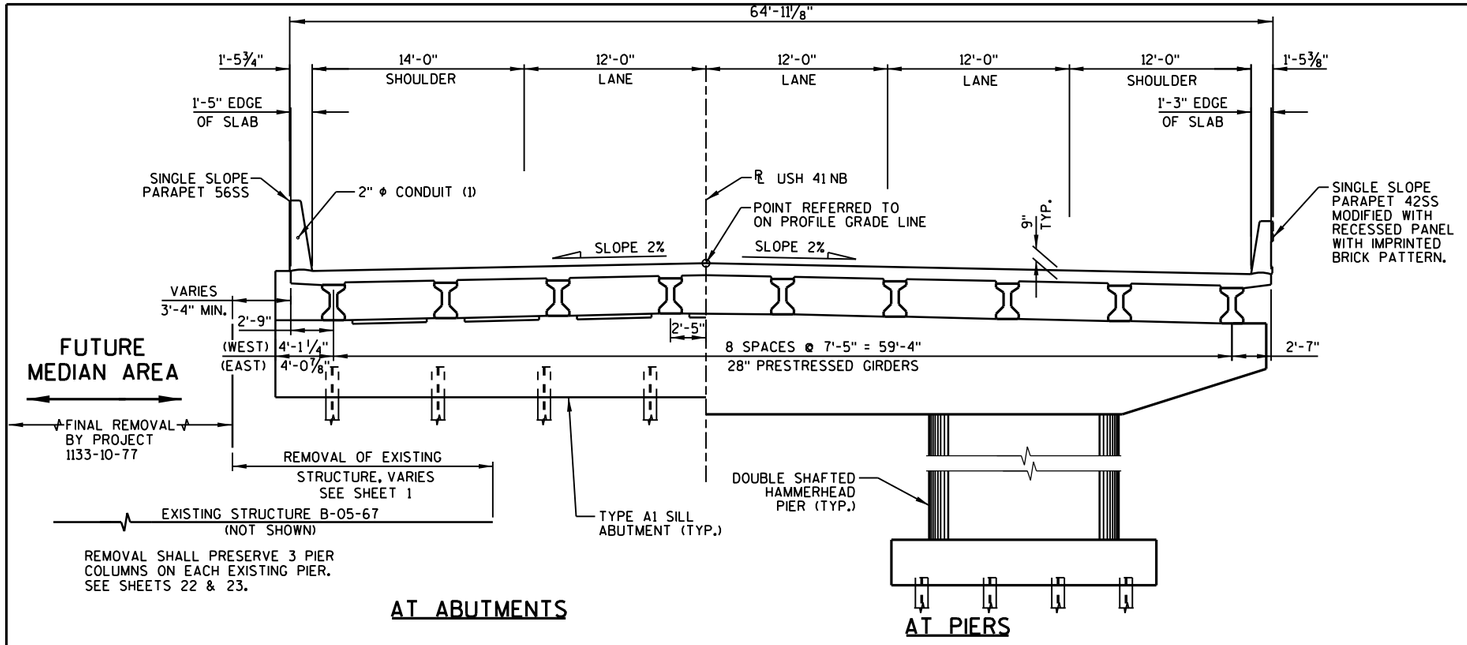


CROSS SECTION THRU BRIDGE LOOKING NORTH

(NO ARCHITECTURAL SURFACE TREATMENTS ON ABUTMENTS OR PIERS)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT.	PIER 1	PIER 2	NORTH ABUT.	SUPER	STR. APP. SLAB & TRANS. STUBS	TOTAL
203.0200	REMOVING OLD STRUCTURE (STATION 1185+25 NMC, 43' LT)	LS	-	-	-	-	-	-	1
203.0225.S	DEBRIS CONTAINMENT STRUCTURE (B-05-0674)	LS	-	-	-	-	-	-	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES (B-05-0674)	LS	-	-	-	-	-	-	1
210.0100	BACKFILL STRUCTURE	CY	230	-	-	230	-	-	460
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	1180	330	1510
503.0128	PRESTRESSED GIRDER TYPE I 28-INCH	LF	-	-	-	-	1314	-	1314
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	4260	-	-	4260	-	-	8520
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	1240	25050	25050	1240	72430	25440	150450
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	-	-	-	54	-	54
506.4000	STEEL DIAPHRAGMS (B-05-0674)	EACH	-	-	-	-	24	-	24
511.1200	TEMPORARY SHORING B-05-0674	SF	-	960	460	-	-	-	1420
511.2200	TEMPORARY SHORING LEFT IN PLACE B-05-0674	SF	750	-	-	105	-	-	855
516.0500	RUBBERIZED MEMBRANE WATERPROCFING	SY	15	-	-	15	-	-	30
550.0500	PILE POINTS	EACH	9	34	34	9	-	-	86
550.1120.S	PILING STEEL HP 12-INCH X 53 LB	LF	675	2210	2210	675	-	-	5770
604.0600	SLOPE PAVING SELECT CRUSHED MATERIAL	SY	440	-	-	440	-	-	880
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	135	-	-	135	-	-	270
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	-	-	-	-	-	24	24
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	-	-	-	-	200	-	200
653.0222	JUNCTION BOX 18X12X6-INCH	EACH	-	-	-	-	1	-	1
SPV.0035.700	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	62	109	109	62	411	194	947
SPV.0085.700	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	-	-	-	-	2210	-	2210
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	-	-	-	-	235	65	300
SPV.0165.701	STAINING CONCRETE	SF	350	1900	1900	350	3030	380	7910
SPV.0165.702	STAINING CONCRETE BRICK	SF	-	-	-	-	235	65	300
SPV.0165.703	LONGITUDINAL GROOVING BRIDGE DECK	SF	-	-	-	-	9180	2480	11660
SPV.0165.705	TEMPORARY SHORING RAILROAD B-05-0674	SF	-	140	450	-	-	-	590
	NON-BID ITEMS								
	CORK FILLER	SIZE							¾"
	PREFORMED FILLER	SIZE						1½"	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING SELECT CRUSHED MATERIAL TO THE LIMITS SHOWN ON SHEET 1 OR AS DIRECTED BY THE ENGINEER.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES (B-05-0674)" FOR THE ABUTMENTS AND PIERS. GRADING AND SHAPING FOR SLOPE PAVING IS INCLUDED IN THE BID ITEM EXCAVATION FOR STRUCTURES BRIDGES (B-05-0674).

THE EAST END OF THE SOUTH AND NORTH ABUTMENTS SHALL BE FOUNDED ON FILL EMBANKMENT PLACED AS PART OF THE ROAD APPROACH GRADING PROJECT.

EXCAVATION UNDER SPAN 1 OF B-05-0674 AND EAST OF TEMPORARY SHORING LEFT IN PLACE B-05-0674 AT THE EXISTING BRIDGE B-5-67 AS SHOWN ON SHEET 1 SHALL BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES (B-05-0674)".

PARTIALLY REMOVE BRIDGE B-5-67 TO THE LIMITS ON SHEET 1 AND AS DETAILED ON SHEETS 22 & 23. PRESERVE THE REMAINDER OF THE BRIDGE TO REMAIN IN SERVICE FOR HIGHWAY TRAFFIC. REMOVAL OF THE REMAINDER OF THE BRIDGE WILL BE COMPLETED BY OTHERS UNDER PROJECT ID 1133-10-77. TEMPORARY SHORING LEFT IN PLACE B-05-0674 ALONG THE WEST SIDE OF B-05-0674 WILL BE REMOVED BY OTHERS AS PART OF PROJECT ID 1133-10-77.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

THIS STRUCTURE WILL REPLACE EXISTING BRIDGE, B-05-67, A 127.7 FOOT LONG, 53 FOOT WIDE, 50 FOOT CLEAR WIDTH, THREE SPAN HAUNCHED CONCRETE SLAB BRIDGE SET ON PILE SUPPORTED CONCRETE SILL ABUTMENTS AND CONCRETE PIER COLUMNS. LOCATIONS OF EXISTING PILING AND FOOTINGS SHOWN ON SHEETS 1 AND 22 ARE INFORMATIONAL BASED ON EXISTING BRIDGE PLANS AND SHALL BE FIELD VERIFIED. EXISTING BRIDGE PLANS ARE AVAILABLE FROM THE WISDOT NORTH EAST REGION.

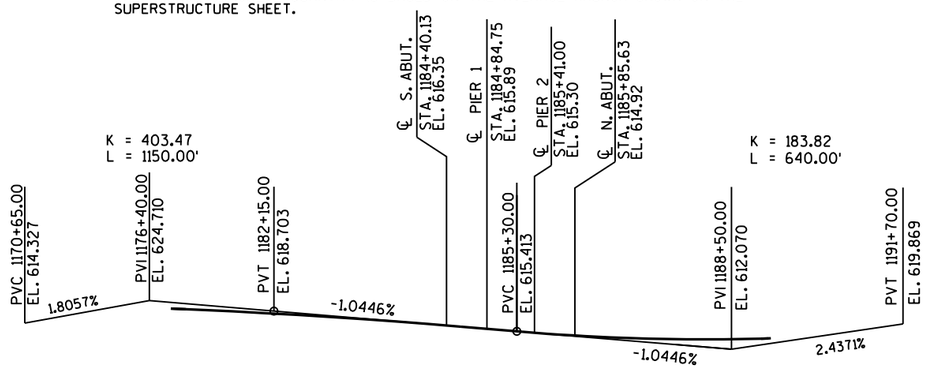
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (1991).

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB, TOP OF STRUCTURAL APPROACH SLABS AND INSIDE AND TOP FACES OF THE PARAPETS.

THE STRUCTURE IS DESIGNED FOR THE SLAB THICKNESS SHOWN WHICH INCLUDES A 1½" INTEGRAL WEARING SURFACE. NO ADDITIONAL LOAD FOR A FUTURE WEARING SURFACE IS CONSIDERED IN THE DESIGN. PROVIDE A 3½" CLEAR COVER TO REINFORCEMENT IN THE TOP OF SLAB.

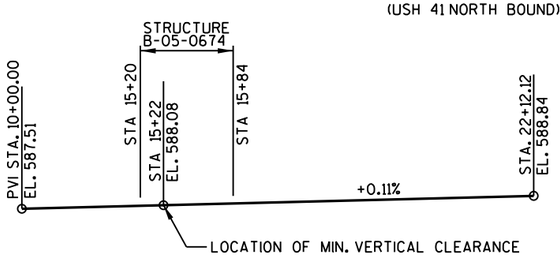
SAWCUTS SHOWN IN THIS PLAN ARE INCLUDED IN THE BID ITEM "REMOVING OLD STRUCTURE (STA. 1185+25 NMC, 43'LT.)".

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE SUPERSTRUCTURE SHEET.



PROFILE GRADE LINE - NMC

(USH 41 NORTH BOUND)



PROFILE GRADE LINE - RR

(WISCONSIN CENTRAL LTD.)

STATE PROJECT NUMBER

1133-10-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY BJH | PLANS CK'D. DHW

CROSS SECTION, QUANTITIES & DETAILS

SHEET 2 OF 23
787

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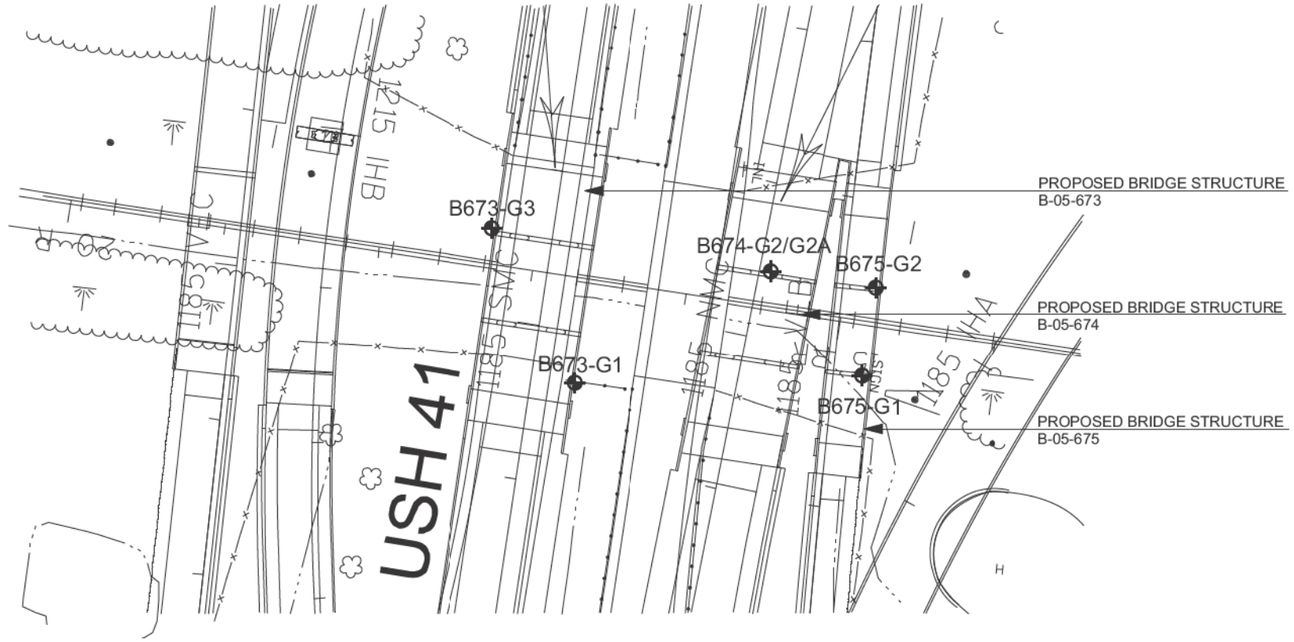
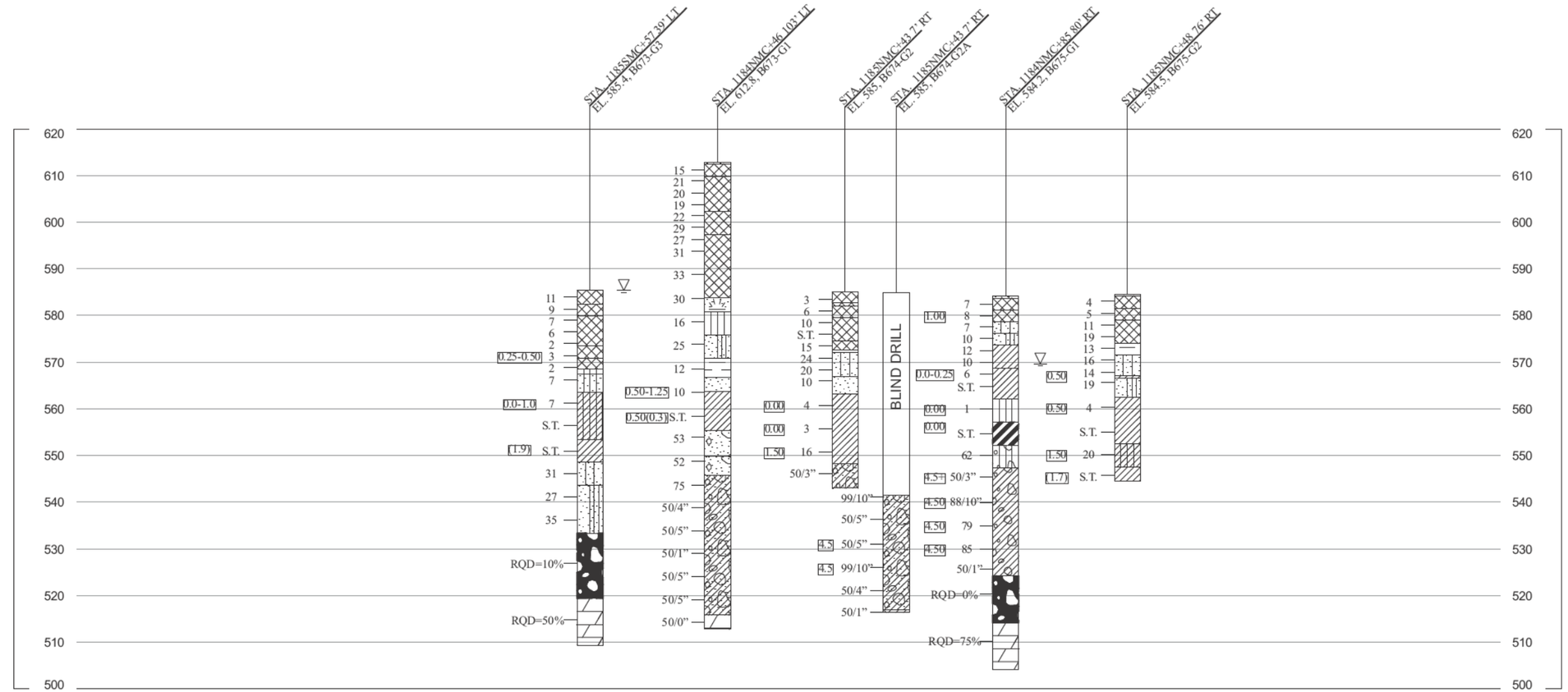
DATE= 8/11/2014

USH-41 (B-05-673, 674, & 675)
05-BROWN, WI





STATE PROJECT NUMBER

1133-10-71

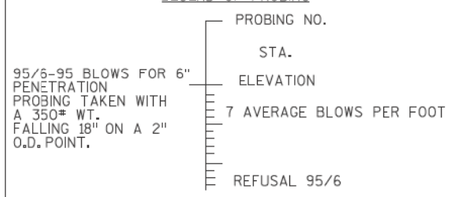
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

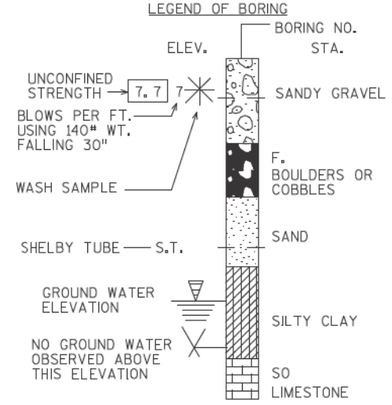
MATERIAL SYMBOLS

TOPSOIL, SILT, FAT CLAY, SAND, PEAT, DOLOMITE, GRAVEL, CLAY, FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-674

DRAWN BY RE | PLANS CK'D. DB

SUBSURFACE EXPLORATION

SHEET 3 OF 23
788

SCALE 1"=100'

8

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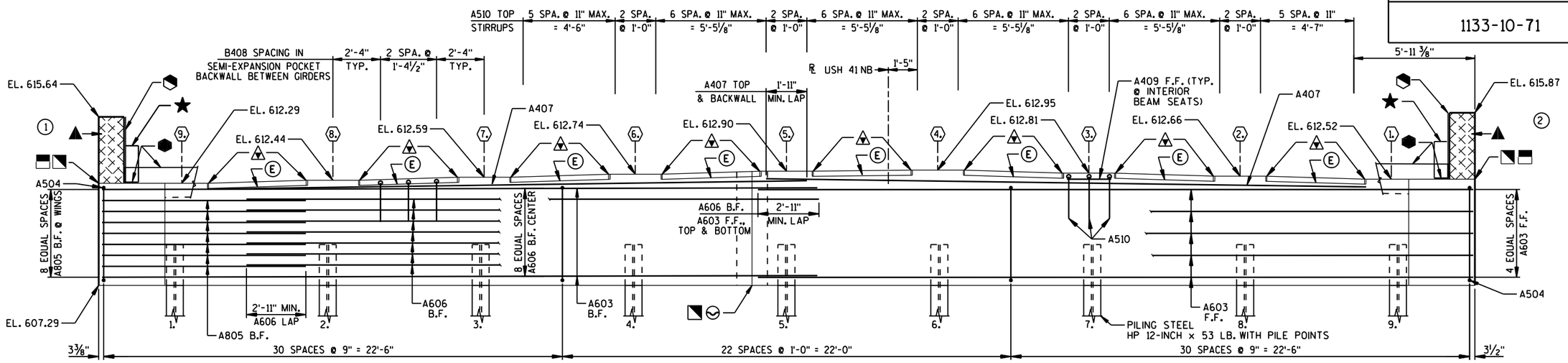
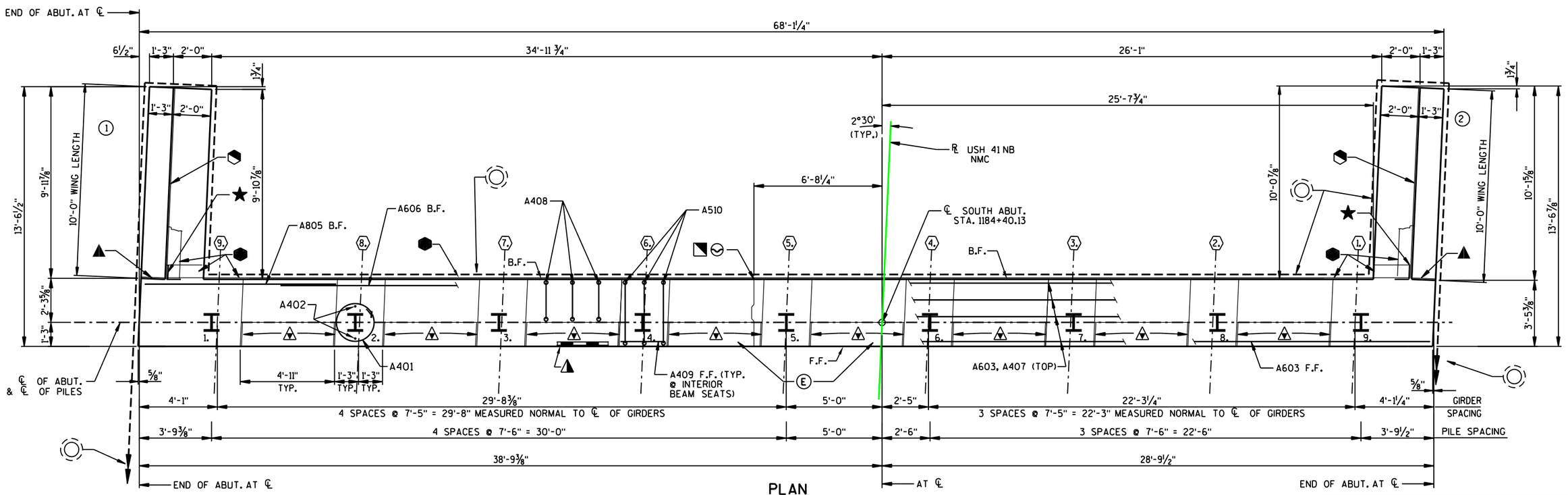
STATE PROJECT NUMBER

1133-10-71



ELEVATION

(SOUTH ABUTMENT LOOKING SOUTH)



PLAN

LEGEND

- ¾" "V" GROOVE ON FRONT FACE OF KEYED CONSTRUCTION JOINT.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2×6. POUR CONCRETE ABOVE THIS JOINT AFTER SLAB IS IN PLACE. PLACE ⬢ ON B.F. OF WING.
- 4"× ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03 INCHES. BEARING SEATS TO BE LEVEL.
- ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ½" FILLER BETWEEN WING TOP AND APPROACH APRON.

F.F.— FRONT FACE B.F.—BACK FACE CL. —CLEAR

- INDICATES GIRDER NUMBER
- KEYED CONSTRUCTION JOINT ON ABUTMENT BODY FORMED BY BEVELED 2 × 8. CLEAR PILES BY 9" MIN. PLACE 1'-6" WIDE RMW ON B.F. AT JOINT.
- (E) SEMI-EXPANSION POCKET. CONSTRUCT 3" DEEPER THAN ABUTMENT BACKWALL. SLOPE BETWEEN LEVEL BEAM SEATS ALONG ABUTMENT ℄.
- INDICATES WING NUMBER
- ¾" CORK FILLER (SIDE VERTICAL FACES ONLY IN S.E. POCKETS).
- ★ VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING (RMW). EXTEND FROM BRIDGE SEAT TO PAVING NOTCH.
- ⬢ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND ACROSS B.F. OF ABUTMENT AND B.F. OF WINGS.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND TO SLOPE PAVING SELECT CRUSHED MATERIAL. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE (SEE DETAIL SHEET 5).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

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SOUTH ABUTMENT

SHEET 4 OF 23
789

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DATE= 8/11/2014

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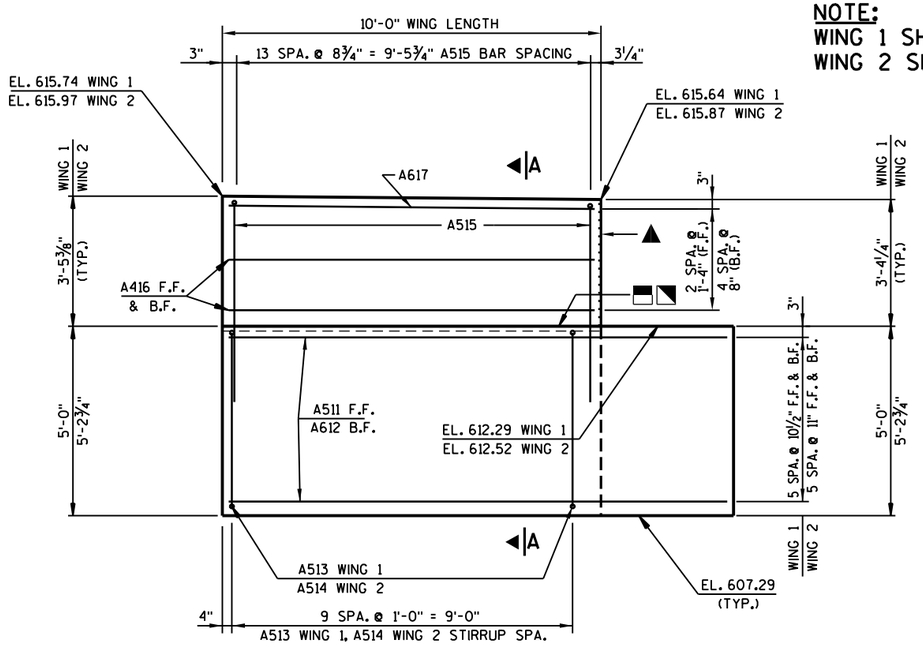
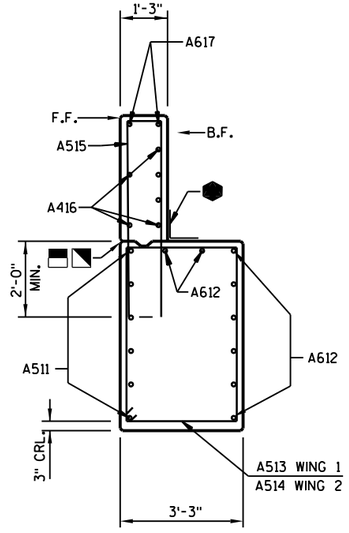
STATE PROJECT NUMBER

1133-10-71

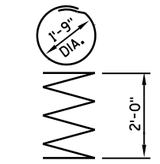
NOTE:
WING 1 SHOWN
WING 2 SIMILAR



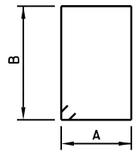
ELEVATION - WING



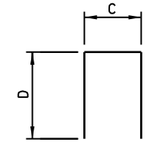
SECTION A-A THRU WING



A401



MARK	A	B
A504	3'-2"	4'-7"
A513	2'-11"	4'-7"
A514	2'-11"	4'-9½"



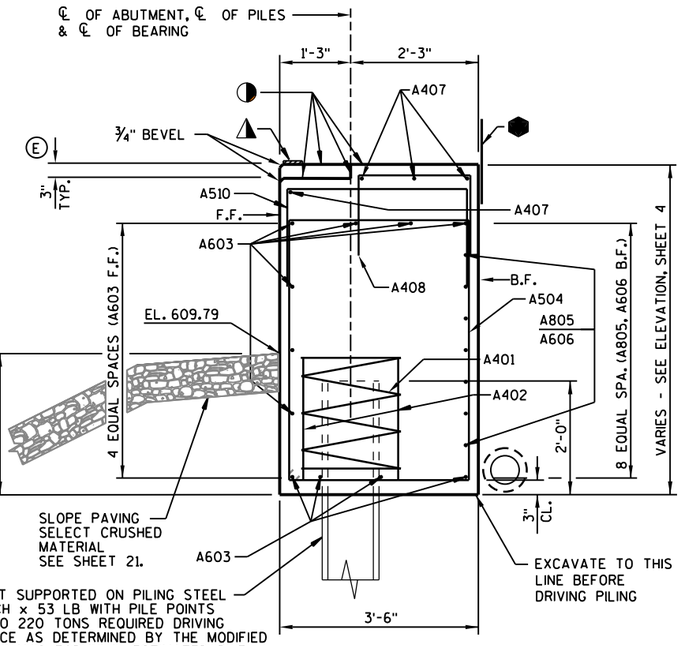
MARK	C	D
A408	1'-11"	1'-9"
A510	3'-2"	1'-9"
A515	11"	5'-3"

UNCOATED 4260 LBS.
COATED 1240 LBS.

BILL OF BARS (SOUTH ABUTMENT)

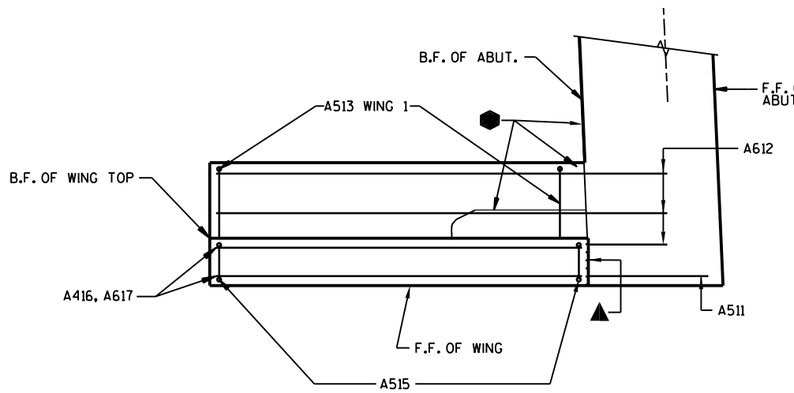
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	LOCATION
A401	-	9	28'-0"	X	AT BODY PILES - 1 PER PILE 7 SPIRAL WRAPS
A402	-	18	2'-3"		AT BODY PILES - 2 PER PILE - VERT.
A603	-	22	35'-1"		ABUT. BODY - F.F., TOP & BOTTOM - HORIZ.
A504	-	83	16'-1"	X	ABUT. BODY - STIRRUPS - VERT.
A805	-	14	10'-0"		ABUT. BODY - B.F. @ WINGS - HORIZ.
A606	-	14	28'-0"		ABUT. BODY - B.F. @ CENTER - HORIZ.
A407	-	8	29'-4"		ABUT. TOP & SEMI-EXP. POCKET BACKWALL - HORIZ.
A408	-	24	5'-3"	X	ABUT. TOP - B.F. SEMI-EXP. POCKET - VERT.
A409	-	7	2'-2"		ABUT. TOP - F.F. - INTERIOR GIRDER SEATS - HORIZ.
A510	-	45	6'-5"	X	ABUT. TOP - STIRRUPS - VERT.
A511	12	-	13'-2"		WINGS - BOTTOM - F.F. - HORIZ.
A612	16	-	11'-11"		WINGS - BOTTOM - B.F. & TOP - HORIZ.
A513	10	-	15'-7"	X	WING 1 - BOTTOM - STIRRUP - VERT.
A514	10	-	16'-0"	X	WING 2 - BOTTOM - STIRRUP - VERT.
A515	28	-	11'-2"	X	WINGS - TOP - STIRRUPS - VERT.
A416	12	-	9'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.
A617	4	-	9'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

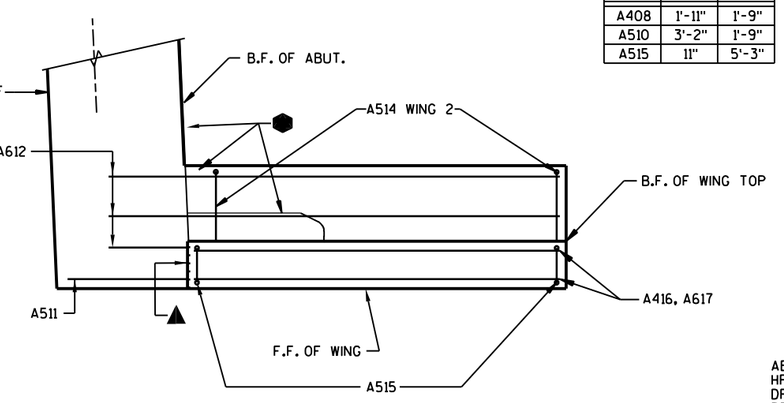


ABUTMENT SUPPORTED ON PILING STEEL HP 12-INCH x 53 LB WITH PILE POINTS DRIVEN TO 220 TONS REQUIRED DRIVING RESISTANCE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS 75'-0". SEE SHEET 9 FOR PILE SPLICE DETAILS.

TYPICAL SECTION THRU
ABUTMENT BETWEEN GIRDER SEATS

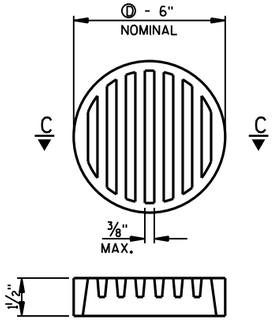


PLAN - WING 1



PLAN - WING 2

SEE SHEET 4 LEGEND FOR DESCRIPTION OF Ⓔ



SECTION C-C

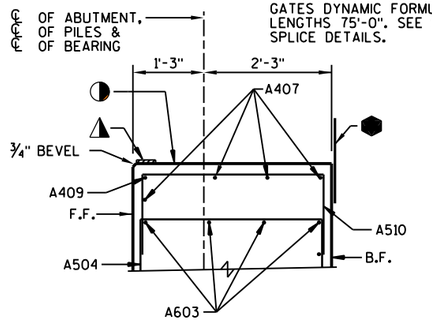
RODENT SHIELD NOTES:

ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER.
A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH STAINLESS STEEL SHEET METAL SCREWS. THE RODENT SHIELD SHALL BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

RODENT SHIELD

Ⓓ - DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



TYPICAL SECTION THRU ABUTMENT
AT INTERIOR GIRDER SEATS

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

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SOUTH ABUTMENT DETAILS

SHEET 5 OF 23
790

FILE= 674_05_SabutDET.DGN
DATE= 8/11/2014

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8

STATE PROJECT NUMBER

1133-10-71

P521 BARS AT 1'-0" CENTERS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. (SEE TOP PLAN, SHEET 7 FOR SPACING)

℄ PIER
DETAILS & REINFORCEMENT SYMMETRICAL ABOUT ℄ PIER EXCEPT BEAM SEAT ELEVATIONS & SEAT REINFORCEMENT.

℄ USH 41 NB

5'-0"

26'-8"

36'-8"

69 SPACES @ 8" = 46'-0"
P520 TOP TIE SPACING

5'-10"

2'-6"
1'-3" 1'-3"
℄ OF PIER

4'-0"
P405

EL. 612.34 P1
EL. 611.76 P2

EL. 612.19 P1
EL. 611.61 P2

EL. 612.05 P1
EL. 611.47 P2

EL. 612.48 P1
EL. 611.90 P2

P419 LAP 2'-4"

EL. 612.43 P1
EL. 611.85 P2

EL. 612.28 P1
EL. 611.69 P2

EL. 612.13 P1
EL. 611.54 P2

P419

EL. 611.97 P1
EL. 611.39 P2

EL. 611.82 P1
EL. 611.24 P2

◀|A ◀|B ◀|C

1'-0" TYP.

P1114 (BUNDLED TO P1115)

P520

P419 (1 ROW)

P1114 BUNDLED TO P1115

P1114 (2 ROWS)

P512 (2 ROWS)

P511 (1 ROW)

P510 (1 ROW)

P609 (1 ROW)

2½" CL. (TYP.)

2 SPA. @ 10" 3½"

2 SPA. @ 10"

3 SPA. @ 1'-0" HORIZ. BAR SPACING IN CAP

3½"

P1115

P513

P512

P511

P1108

P516

P417 BAR SERIES

P418

P510

3'-2¾"

3'-0"

6'-7⅞"

MIN. LAP 2'-11"

MIN. LAP 1'-10"

2'-11" LAP

P609

EL. 605.82 P1
EL. 605.24 P2

6" 13 SPA. @ 8" = 8'-8" P417 BAR SERIES 8" 2 SPA. @ 8"

14 SPA. @ 4"=4'-8" P418 STIRRUPS

18 SPACES @ 8" = 12'-0" P418 STIRRUP SPACING

14 SPA. @ 4"=4'-8" P418 STIRRUPS

5'-2½"

℄ PIER SHAFT

9'-5" 6'-4½" 12'-9" 19'-0" 12'-9" 9'-5"

DOUBLE BARS AT SPACING SHOWN TO PROVIDE 4 VERTICAL LEGS OF STIRRUPS AT EACH LOCATION.

P907

℄ PIER SHAFT

6'-5" MIN. LAP

11 SPACES @ 1'-0" = 11'-0" P404, P405, P406 BAR SPA.

6"

4"

OPTIONAL CONSTRUCTION JOINT

P406

P404

P405

P907

10 SPACES @ 1'-0" = 10'-0" P404, P405, P406 BAR SPACING

10"

1'-0"

28'-8¾"

12'-0"

10'-6"

P907

2½" CL. (TYP.)

P404

OPTIONAL CONSTRUCTION JOINT

P405 P406

P602

P601

P903

2'-10"

P404 P405 P406

6" PILE EMBEDMENT INTO FOOTING

SECTION A-A

2'-6" (TYP.)

P521

2½" CL. (TYP. TOP & BOTTOM)

P520

P419 (1 ROW)

P1114 BUNDLED TO P1115

P1114 (2 ROWS)

P512 (2 ROWS)

P511 (1 ROW)

3" CL. (TYP. SIDES)

P609 (1 ROW)

P417

SECTION B-B

1'-6"

EL. 583.32 P1
EL. 582.74 P2

FOOTING

EL. 580.49 P1 (PIER 1)
EL. 579.91 P2 (PIER 2)

P406

P903

PIERS SUPPORTED ON PILING STEEL HP 12-INCH x 53 LB WITH PILE POINTS DRIVEN TO 220 TONS REQUIRED DRIVING RESISTANCE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS 65'-0". SEE SHEET 9 FOR PILE SPLICE DETAILS.

15'-9" 3'-0" 13'-0" 15'-9"

℄ USH 41 NB

◀|A

ELEVATION
(LOOKING NORTH)

P521

P520

P419 (1 ROW)

P1115 (1 ROW, 6'-8" LAP AT ℄ PIER)

P513 (1 ROW)

P512 (2 ROWS)

P511 (1 ROW)

3" CL. (TYP. SIDES)

P510 (1 ROW)

P1108 (1 ROW)

P418

2½" CL.

VARIES

7"

2 SPA. @ 10"

3 SPA. @ 1'-0" HORIZ. BAR SPACING IN CAP

3½"

2'-6" (TYP.)

SECTION C-C

NOTE:

SET P903 ON TOP OF BOTTOM MAT OF FOOTING REINFORCEMENT.

LEGEND

P1 - PIER 1 P2 - PIER 2

⬡ - DENOTES GIRDER NUMBER.

⌖ - KEYED CONST. JOINT FORMED BY BEVELED 2 x 6 KEYWAY.

⌖ - CONST. JOINT FORMED BY BEVELED KEYWAY 4" DEEP x 10" WIDE x 7'-6" LONG. CENTER ON PIER SHAFT.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

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PIERS

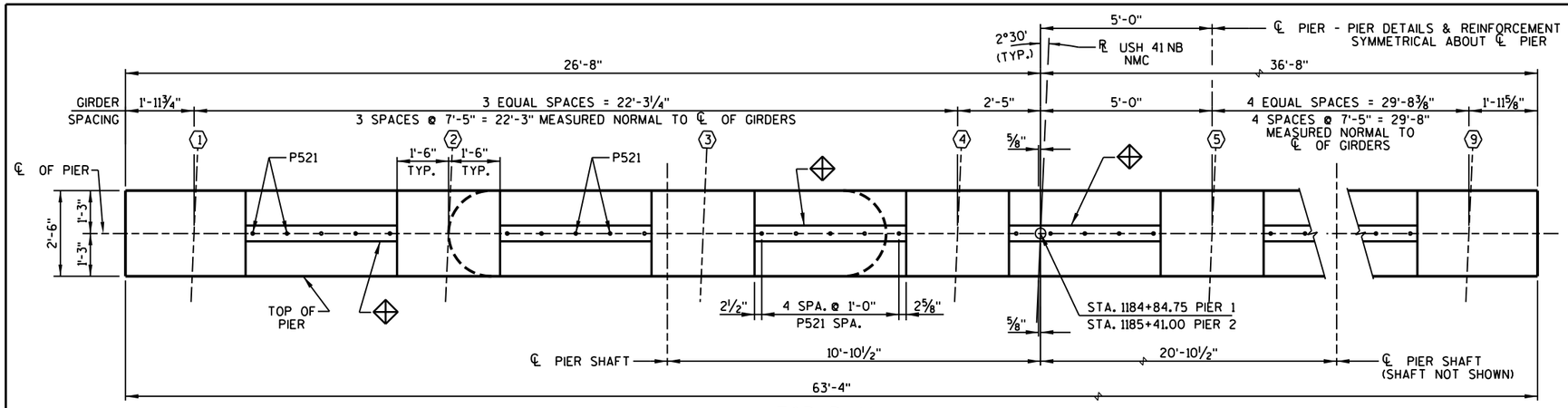
SHEET 6 OF 23
791

FILE= 674-06_pier.DGN
DATE= 8/11/2014

674-06_pier.dgn 8/11/2014 6:58:36 AM rrabska

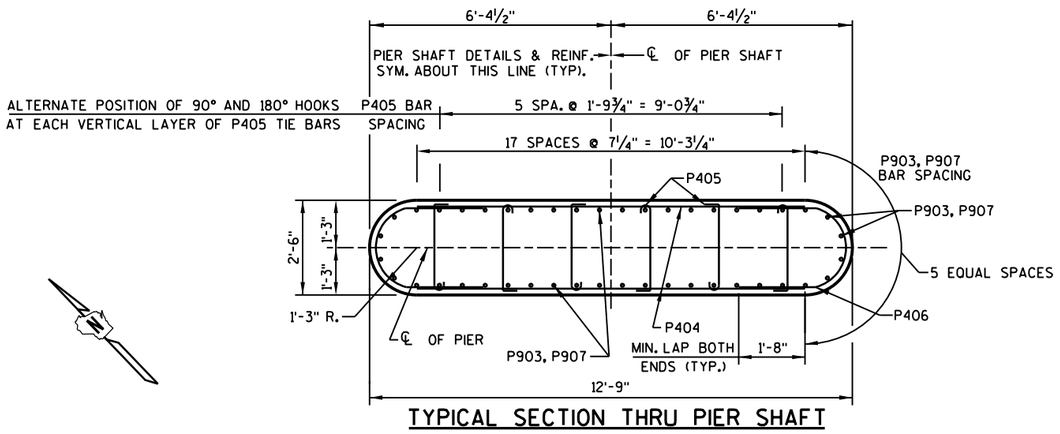
STATE PROJECT NUMBER

1133-10-71

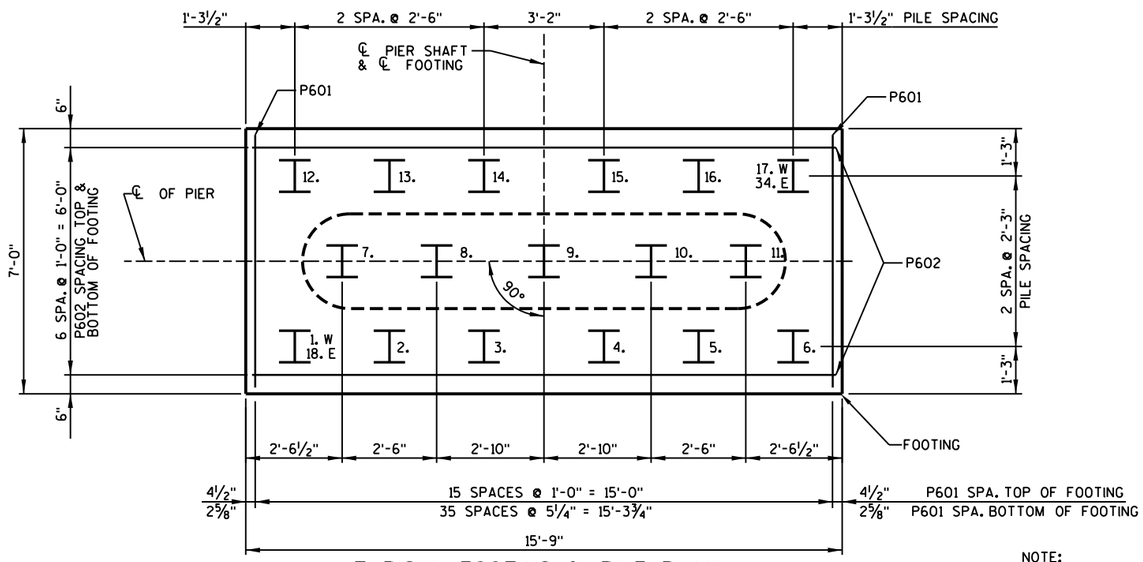


TOP PLAN

PIER 1 SHOWN
PIER 2 SIMILAR



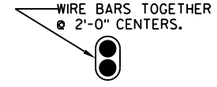
TYPICAL SECTION THRU PIER SHAFT



TYPICAL FOOTING & PILE PLAN

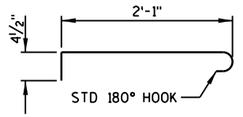
AT EACH PIER NUMBERED PILES 1-17 FOR WEST FOOTING ARE AS SHOWN.
AT EACH PIER FOR EAST FOOTING NUMBER PILES IN SAME SEQUENCE 18-34.

SEE SHEET 6 FOR LEGEND OF

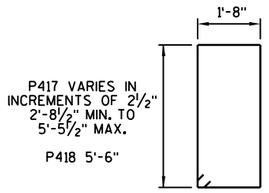


BUNDLING DETAIL

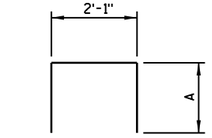
P1115 BUNDLED TO P1114 BARS



P405

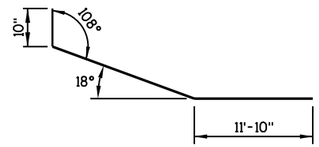


P417, P418

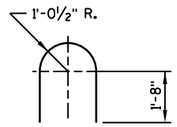


BAR MARK	A
P516	2'-11"
P520	2'-1"

P903



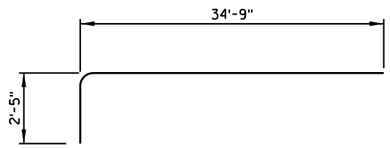
P609



P406

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
P417	4 SERIES OF 14	9'-3" TO 14'-9"



P1115

BILL OF BARS (PIER 1) 25,050 LBS. COATED

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
P601	104	6'-6"			PIER FOOTING - HORIZ.
P602	28	15'-3"			PIER FOOTING - HORIZ.
P903	88	10'-0"	X		PIER FOOTING & SHAFT - DOWELS - VERT.
P404	100	10'-3"			PIER SHAFT - HORIZ.
P405	324	2'-11"	X		PIER SHAFT & CAP - TIES - HORIZ.
P406	100	6'-7"	X		PIER SHAFT - TIES AT ENDS - HORIZ.
P907	176	16'-11"			PIER SHAFT & CAP - VERT.
P1108	4	25'-0"			PIER CAP - BOTTOM - HORIZ.
P609	8	22'-0"	X		PIER CAP - BOTTOM - HORIZ.
P510	8	26'-11"			PIER CAP - HORIZ.
P511	8	30'-1"			PIER CAP - HORIZ.
P512	16	33'-0"			PIER CAP - HORIZ.
P513	4	24'-4"			PIER CAP - HORIZ.
P1114	24	22'-3"			PIER CAP - HORIZ.
P1115	8	36'-10"	X		PIER CAP - TOP - HORIZ.
P516	10	7'-8"	X		PIER CAP - TIES AT ENDS - HORIZ.
P417	56	12'-0"	X	⊗	PIER CAP - STIRRUPS - VERT.
P418	106	14'-10"	X		PIER CAP - STIRRUPS - VERT.
P419	6	24'-6"			PIER CAP - TOP - HORIZ.
P520	70	6'-0"	X		PIER CAP - TOP - TIES - VERT.
P521	40	2'-0"			PIER CAP - TOP - DOWELS - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

⊗ - LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

BAR MARKS FOR PIER 1 (SOUTH PIER) ARE SHOWN (P601 THRU P521).
LABEL AND BUNDLE PIER 2 (NORTH PIER) BARS WITH N MARK (N601 THRU N521).

NOTE:

SEE GENERAL PLAN, SHEET 1, FOR LAYOUT OF TEMPORARY SHORING RAILROAD B-05-0674 NEAR PIER 2.

NO.	DATE	REVISION	BY

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STRUCTURE B-05-0674

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PIER DETAILS

SHEET 7 OF 23
792

FILE= 674-07_pierDet.DGN
DATE=6/4/2014

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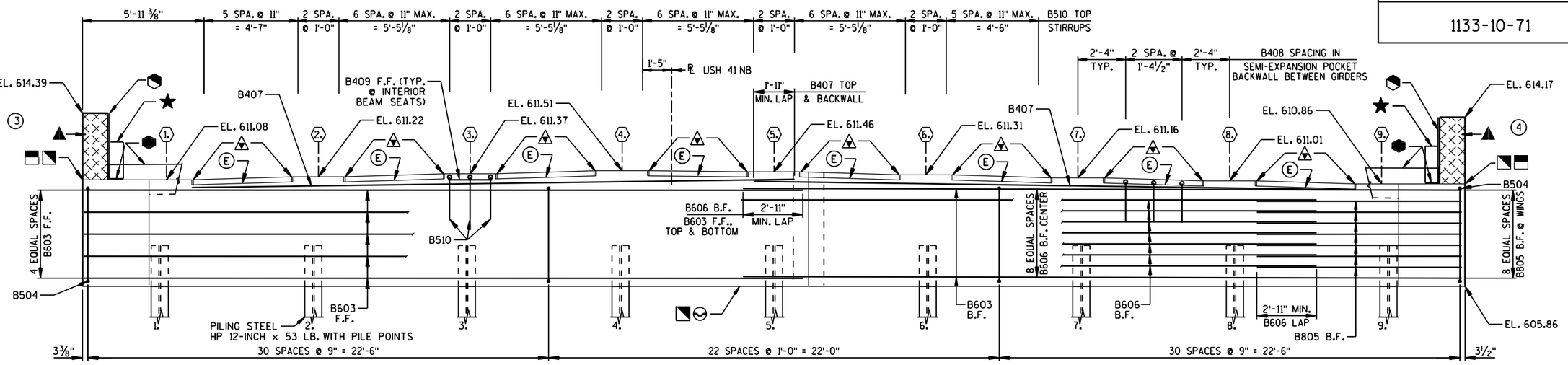
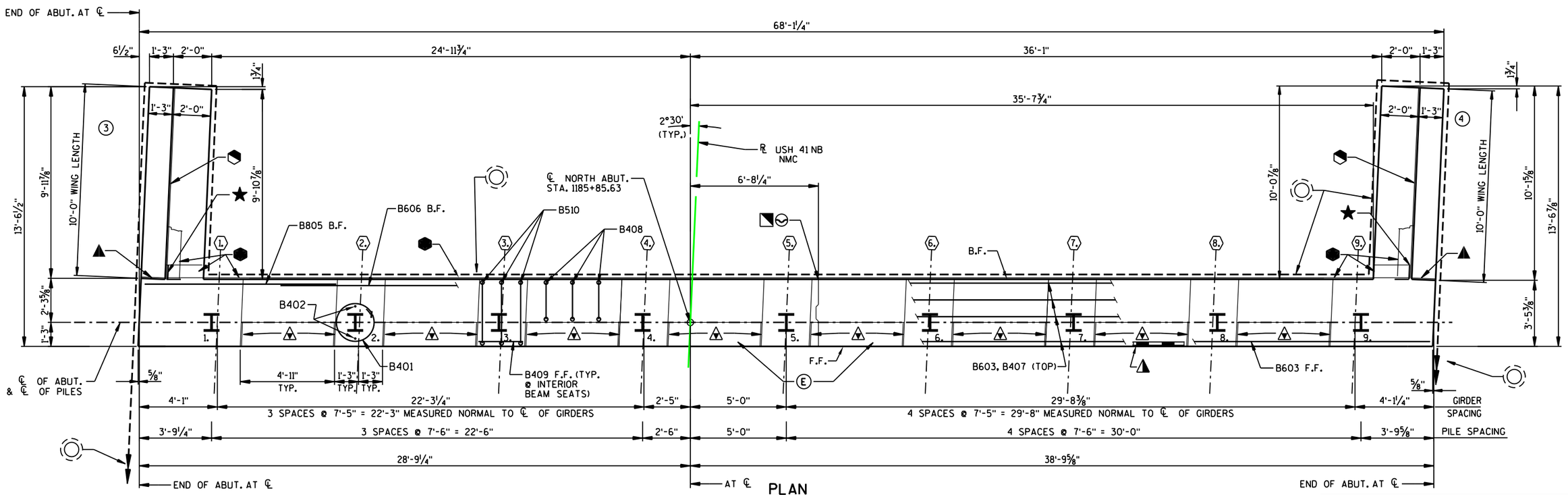
STATE PROJECT NUMBER

1133-10-71



ELEVATION

(NORTH ABUTMENT LOOKING NORTH)



PLAN

LEGEND

- — 3/4" "V" GROOVE ON FRONT FACE OF KEYED CONSTRUCTION JOINT.
- — KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2×6. POUR CONCRETE ABOVE THIS JOINT AFTER SLAB IS IN PLACE. PLACE ⬢ ON B.F. OF WING.
- — 4"× 3/4" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- — STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03 INCHES. BEARING SEATS TO BE LEVEL.
- — 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE).
- — 1/2" FILLER BETWEEN WING TOP AND APPROACH APRON.

F.F.— FRONT FACE B.F.—BACK FACE CL. —CLEAR

- — INDICATES GIRDER NUMBER
- — KEYED CONSTRUCTION JOINT ON ABUTMENT BODY FORMED BY BEVELED 2 × 8. CLEAR PILES BY 9" MIN. PLACE 1'-6" WIDE RMW ON B.F. AT JOINT.
- (E) — SEMI-EXPANSION POCKET. CONSTRUCT 3" DEEPER THAN ABUTMENT BACKWALL. SLOPE BETWEEN LEVEL BEAM SEATS ALONG ABUTMENT ℄.
- ◯ — INDICATES WING NUMBER
- — 3/4" CORK FILLER (SIDE VERTICAL FACES ONLY IN S.E. POCKETS).
- — VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING (RMW). EXTEND FROM BRIDGE SEAT TO PAVING NOTCH.
- ⬢ — HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND ACROSS B.F. OF ABUTMENT AND B.F. OF WINGS.
- — PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND TO SLOPE PAVING SELECT CRUSHED MATERIAL. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE (SEE DETAIL SHEET 5).

NO.	DATE	REVISION	BY

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STRUCTURE B-05-0674

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NORTH ABUTMENT

SHEET 8 OF 23
793

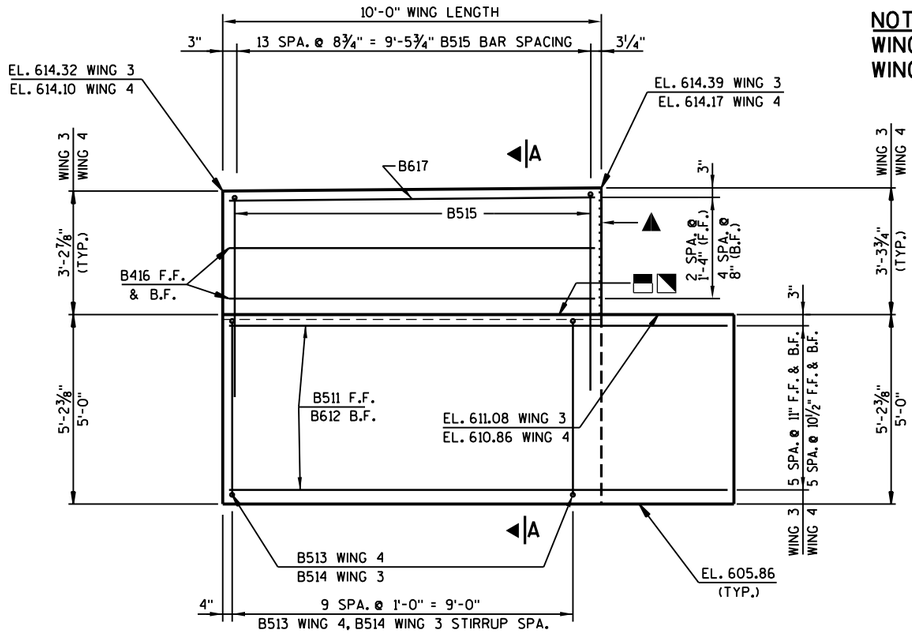
FILE= 674_08_NABUT.DGN
DATE= 8/11/2014

674-08_Nabut.dgn 8/11/2014 6:55:28 AM rrabska

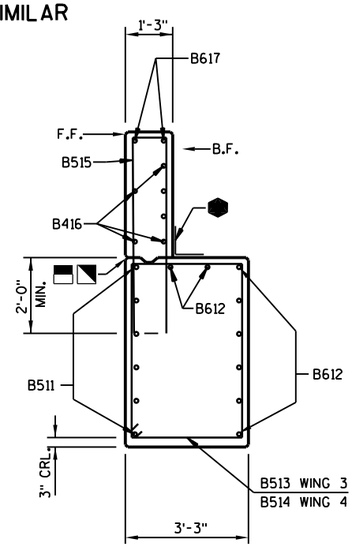
STATE PROJECT NUMBER

1133-10-71

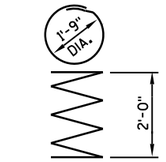
NOTE:
WING 3 SHOWN
WING 4 SIMILAR



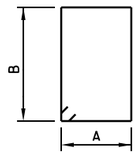
ELEVATION - WING



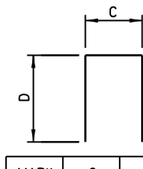
SECTION A-A THRU WING



B401



MARK	A	B
B504	3'-2"	4'-7"
B513	2'-11"	4'-9½"
B514	2'-11"	4'-7"



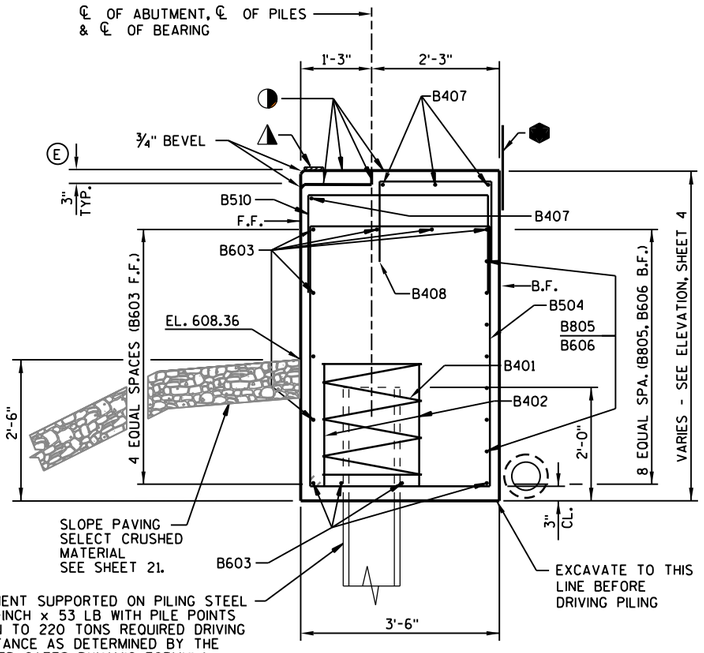
MARK	C	D
B408	1'-11"	1'-9"
B510	3'-2"	1'-9"
B515	11"	5'-3"

BILL OF BARS (NORTH ABUTMENT)

UNCOATED 4260 LBS.
COATED 1240 LBS.

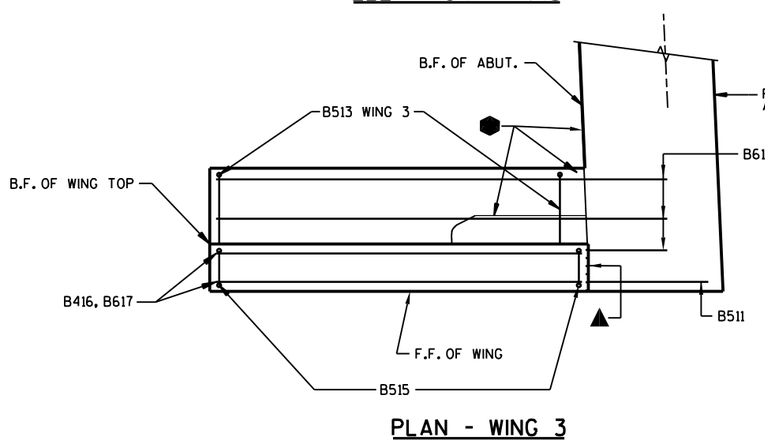
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	LOCATION
B401	-	9	28'-0"	X	ABUT. BODY PILES - 1 PER PILE 7 SPIRAL WRAPS
B402	-	18	2'-3"		ABUT. BODY PILES - 2 PER PILE - VERT.
B603	-	22	35'-1"		ABUT. BODY - F.F., TOP & BOTTOM - HORIZ.
B504	-	83	16'-1"	X	ABUT. BODY - STIRRUPS - VERT.
B805	-	14	10'-0"		ABUT. BODY - B.F. @ WINGS - HORIZ.
B606	-	14	28'-0"		ABUT. BODY - B.F. @ CENTER - HORIZ.
B407	-	8	29'-4"		ABUT. TOP & SEMI-EXP. POCKET BACKWALL - HORIZ.
B408	-	24	5'-3"	X	ABUT. TOP - B.F. SEMI-EXP. POCKET - VERT.
B409	-	7	2'-2"		ABUT. TOP - F.F. - INTERIOR GIRDER SEATS - HORIZ.
B510	-	45	6'-5"	X	ABUT. TOP - STIRRUPS - VERT.
B511	12	-	13'-2"		WINGS - BOTTOM - F.F. - HORIZ.
B612	16	-	11'-11"		WINGS - BOTTOM - B.F. & TOP - HORIZ.
B513	10	-	16'-0"	X	WING 3 - BOTTOM - STIRRUP - VERT.
B514	10	-	15'-7"	X	WING 4 - BOTTOM - STIRRUP - VERT.
B515	28	-	11'-2"	X	WINGS - TOP - STIRRUPS - VERT.
B416	12	-	9'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.
B617	4	-	9'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

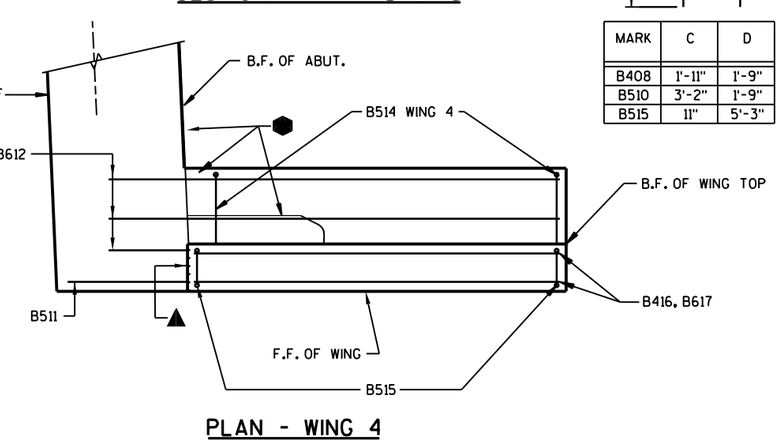


ABUTMENT SUPPORTED ON PILING STEEL HP 12-INCH x 53 LB WITH PILE POINTS DRIVEN TO 220 TONS REQUIRED DRIVING RESISTANCE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS 75'-0".

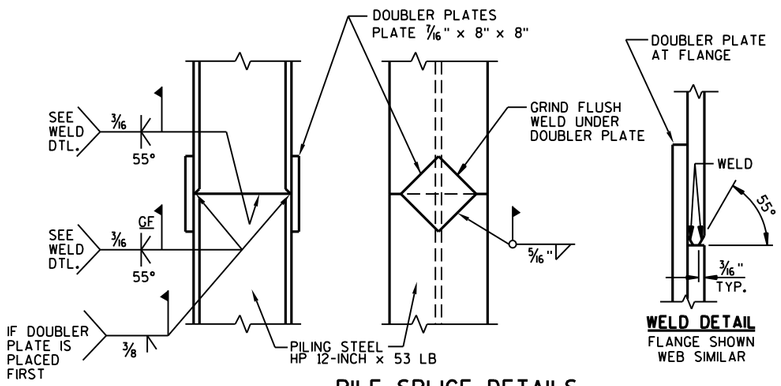
TYPICAL SECTION THRU
ABUTMENT BETWEEN GIRDER SEATS



PLAN - WING 3



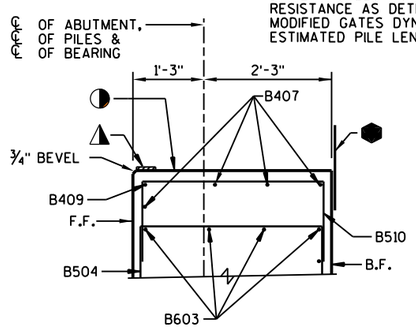
PLAN - WING 4



PILE SPLICE DETAILS

WELD DETAIL
FLANGE SHOWN
WEB SIMILAR

SEE SHEET 8 LEGEND FOR DESCRIPTION OF



TYPICAL SECTION THRU ABUTMENT
AT INTERIOR GIRDER SEATS

NO.	DATE	REVISION	BY

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STRUCTURE B-05-0674

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NORTH ABUTMENT DETAILS

SHEET 9 OF 23
794

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8

FILE= 674-09_NabutDET.DGN
DATE= 8/11/2014

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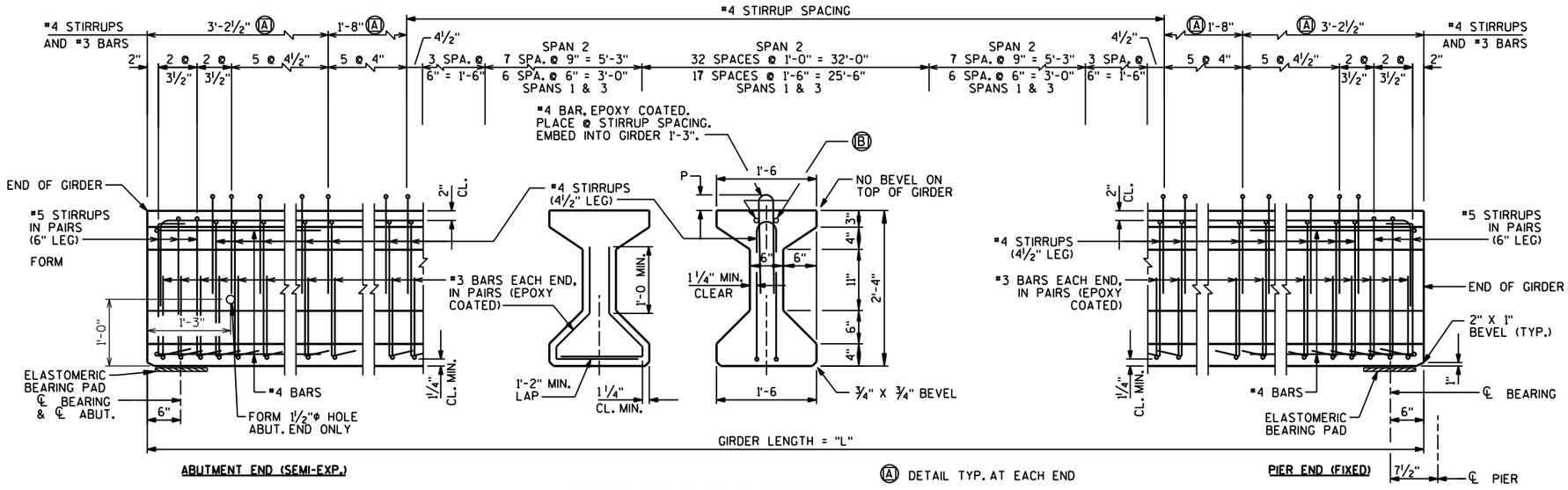


SIDE VIEW & TYP. SECTION

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 2" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 2" OF THE TOP FLANGE. DO NOT APPLY CONCRETE SEALER TO SURFACES OF EXTERIOR GIRDERS RECEIVING APPLICATION OF CONCRETE STAINING, SEE SHEET 21.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 0.6"Φ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

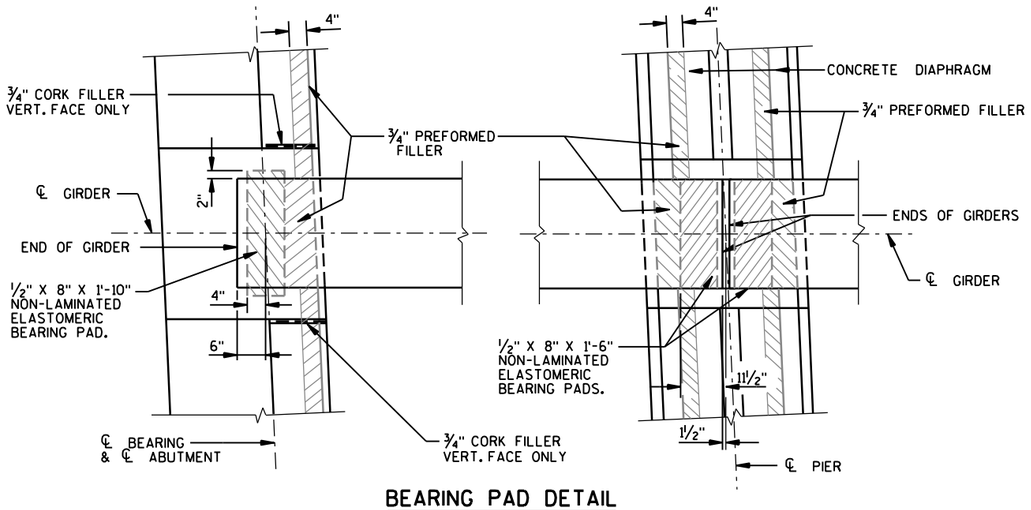
STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

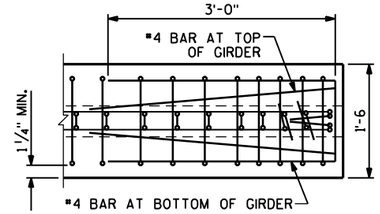
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

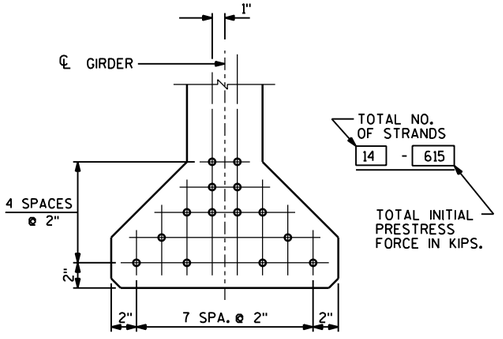
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.



BEARING PAD DETAIL



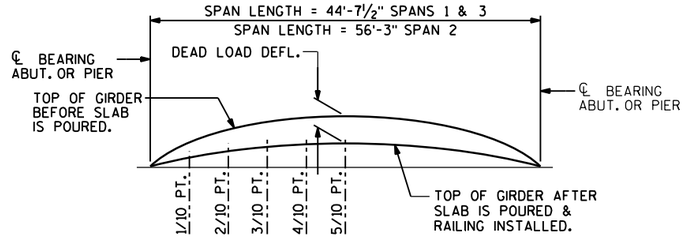
PLAN VIEW OF GIRDER ENDS



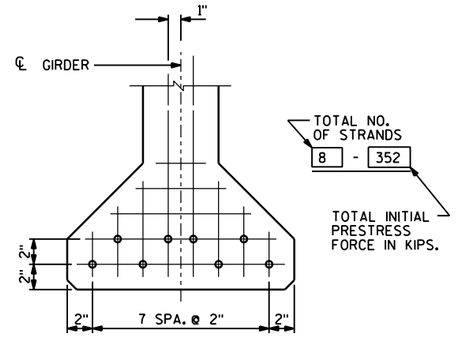
TYP. STRAND PATTERN

SPAN 2

THE THEORETICAL INITIAL CAMBER VALUES AT THE TIME OF STRAND RELEASE AT MIDSPAN IS 1" FOR SPANS 1 & 3, AND 1¾" FOR SPAN 2. VALUES INCLUDE A MAGNIFICATION FACTOR OF 1.4 TO ACCOUNT FOR CREEP BETWEEN RELEASE AND INSTALLATION. THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS. THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

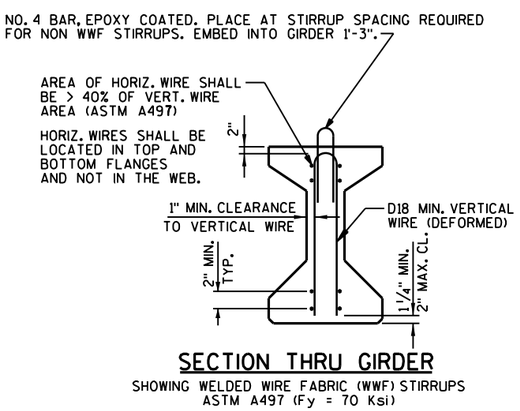


DEAD LOAD DEFLECTION DIAGRAM



TYP. STRAND PATTERN

SPANS 1 & 3



SECTION THRU GIRDER

SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS ASTM A497 (Fy = 70 Ksi)

⁎ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" IST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ⁎	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ⁎
1 & 3	INT. 2-8	45'-0"	0.14	0.26	0.36	0.42	0.44	0.42	0.36	0.26	0.14	8,000	6"	6"	6"	0.60	-	-	-	-	-	-	8	6,800
1 & 3	EXT. 1&9	45'-0"	0.13	0.24	0.33	0.39	0.41	0.39	0.33	0.24	0.13	8,000	6"	6"	6"	0.60	-	-	-	-	-	-	8	6,800
2	INT. 2-8	56'-0"	0.34	0.65	0.90	1.05	1.10	1.05	0.90	0.65	0.34	8,000	6"	6"	6"	0.60	-	-	-	-	-	-	14	6,800
2	EXT. 1&9	56'-0"	0.32	0.60	0.83	0.97	1.02	0.97	0.83	0.60	0.32	8,000	6"	6"	6"	0.60	-	-	-	-	-	-	14	6,800

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

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28" PRESTRESSED GIRDER DETAILS

SHEET 10 OF 23
795

FILE= 674_10_GIRDR.DGN
DATE=6/4/2014

8

8

STATE PROJECT NUMBER

1133-10-71

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICES BID FOR "STEEL DIAPHRAGMS B-05-0674", EACH.

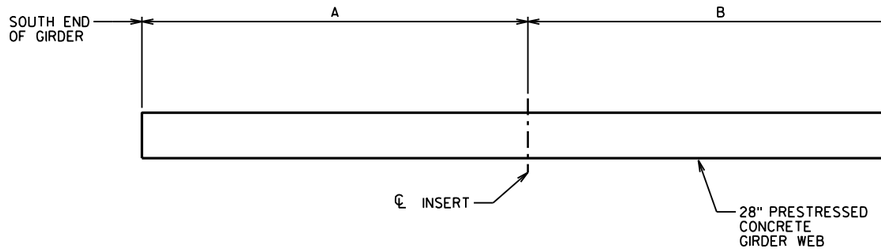
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

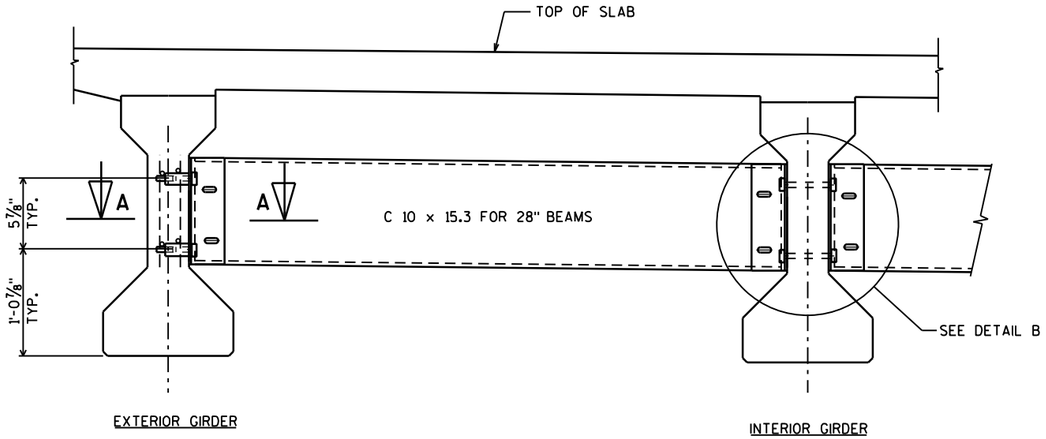
SEE SHEET 12 FOR LOCATION OF DIAPHRAGMS.



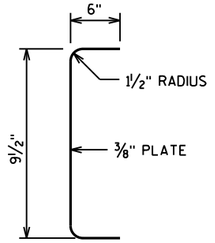
DIAPHRAGM INSERT LOCATION PLAN

DIAPHRAGM INSERT LOCATION TABLE

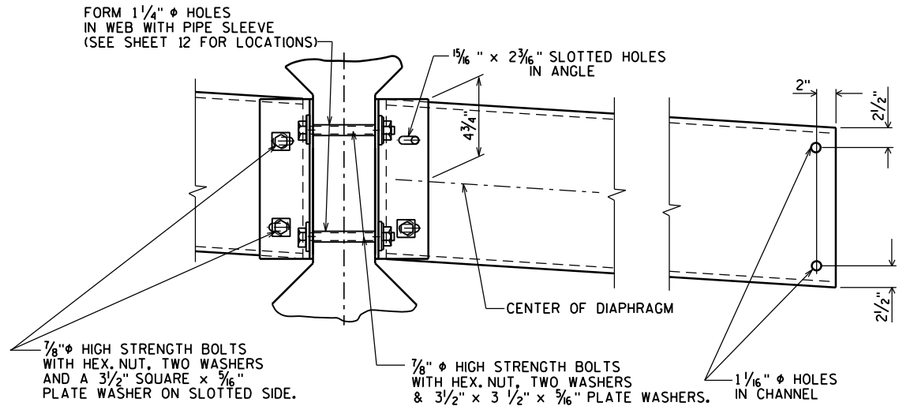
SPAN	GIRDER NUMBER	A	B	INSERT TYPE
1	1	23'-9½"	21'-2½"	FERRULE LOOP
	2	23'-5⅝"	21'-6⅜"	PIPE SLEEVE
	3	23'-1¾"	21'-10¼"	PIPE SLEEVE
	4	22'-9⅞"	22'-2⅛"	PIPE SLEEVE
	5	22'-6"	22'-6"	PIPE SLEEVE
	6	22'-2⅛"	22'-9⅞"	PIPE SLEEVE
	7	21'-10¼"	23'-1¾"	PIPE SLEEVE
	8	21'-6⅜"	23'-5⅝"	PIPE SLEEVE
	9	21'-2½"	23'-9½"	FERRULE LOOP
2	1	29'-3½"	26'-8½"	FERRULE LOOP
	2	28'-11⅝"	27'-0⅜"	PIPE SLEEVE
	3	28'-7¾"	27'-4¼"	PIPE SLEEVE
	4	28'-3⅞"	27'-8⅛"	PIPE SLEEVE
	5	28'-0"	28'-0"	PIPE SLEEVE
	6	27'-8⅛"	28'-3⅞"	PIPE SLEEVE
	7	27'-4¼"	28'-7¾"	PIPE SLEEVE
	8	27'-0⅜"	28'-11⅝"	PIPE SLEEVE
	9	26'-8½"	29'-3½"	FERRULE LOOP
3	1	23'-9½"	21'-2½"	FERRULE LOOP
	2	23'-5⅝"	21'-6⅜"	PIPE SLEEVE
	3	23'-1¾"	21'-10¼"	PIPE SLEEVE
	4	22'-9⅞"	22'-2⅛"	PIPE SLEEVE
	5	22'-6"	22'-6"	PIPE SLEEVE
	6	22'-2⅛"	22'-9⅞"	PIPE SLEEVE
	7	21'-10¼"	23'-1¾"	PIPE SLEEVE
	8	21'-6⅜"	23'-5⅝"	PIPE SLEEVE
	9	21'-2½"	23'-9½"	FERRULE LOOP



PART TRANSVERSE SECTION AT DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM

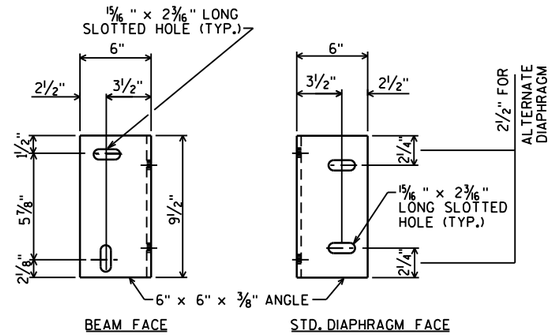


SECT. A-A

(FOR EXTERIOR ATTACHMENT)

DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)



DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY	RLR	PLANS CK'D.	DHW

STEEL DIAPHRAGM

SHEET 11 OF 23

796

8

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FILE= 674-11-DIAPH.DGN
DATE= 6/4/2014

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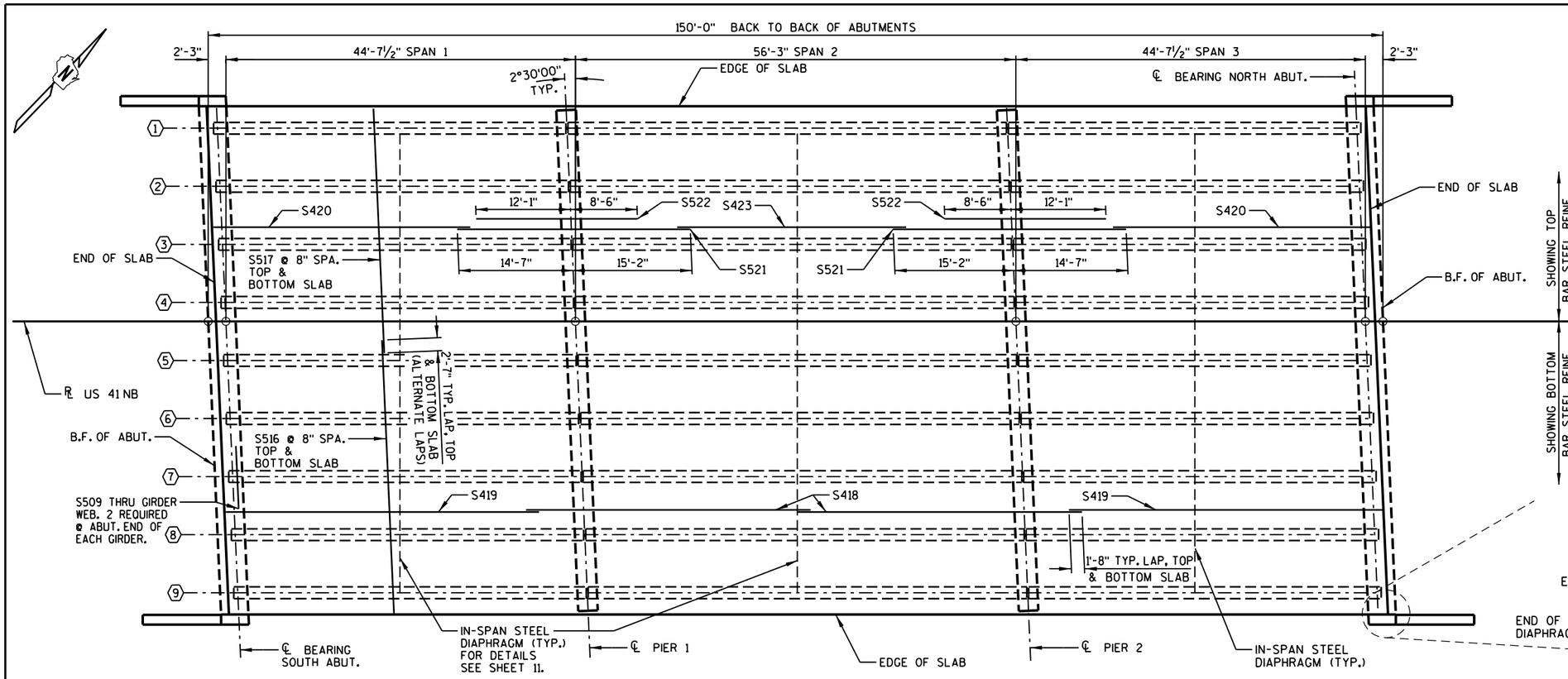
STATE PROJECT NUMBER

1133-10-71



GENERAL NOTES

⬡ - INDICATES GIRDER NUMBER

SEE SHEET 13 FOR TRANSVERSE AND LONGITUDINAL BAR SPACING.

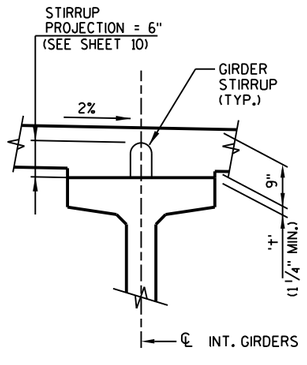
PLACE TRANSVERSE BARSTEEL ON THE SKEW.

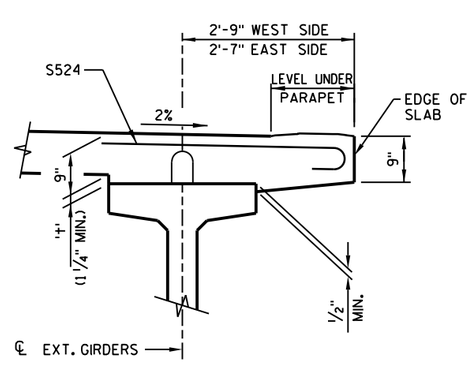
SEE SHEET 11 FOR LOCATION OF DIAPHRAGM INSERTS ON GIRDERS.

PLAN

TOP OF SLAB ELEVATIONS @ ℄ OF GIRDERS

LOCATION	SPAN POINT	EAST PARAPET FACE	GIRDER 9	GIRDER 8	GIRDER 7	GIRDER 6	GIRDER 5	R/L	GIRDER 4	GIRDER 3	GIRDER 2	GIRDER 1	WEST PARAPET FACE
S. ABUT.	1	615.61	615.64	615.79	615.95	616.10	616.25	616.35	616.30	616.16	616.01	615.87	615.84
	1.1	615.57	615.60	615.75	615.90	616.05	616.20	616.31	616.26	616.11	615.97	615.82	615.80
	1.2	615.52	615.55	615.70	615.85	616.00	616.16	616.26	616.21	616.07	615.92	615.78	615.75
	1.3	615.48	615.50	615.65	615.81	615.96	616.11	616.21	616.16	616.02	615.87	615.73	615.70
	1.4	615.43	615.46	615.61	615.76	615.91	616.06	616.17	616.12	615.97	615.83	615.68	615.66
	1.5	615.38	615.41	615.56	615.71	615.86	616.02	616.12	616.07	615.93	615.78	615.64	615.61
	1.6	615.34	615.36	615.51	615.67	615.82	615.97	616.07	616.02	615.88	615.74	615.59	615.56
	1.7	615.29	615.32	615.47	615.62	615.77	615.92	616.03	615.98	615.83	615.69	615.54	615.52
	1.8	615.24	615.27	615.42	615.57	615.72	615.88	615.98	615.93	615.79	615.64	615.50	615.47
	1.9	615.20	615.22	615.37	615.53	615.68	615.83	615.93	615.89	615.74	615.60	615.45	615.42
PIER 1	2	615.15	615.18	615.33	615.48	615.63	615.78	615.89	615.84	615.69	615.55	615.40	615.38
	2.1	615.09	615.12	615.27	615.42	615.57	615.72	615.83	615.78	615.63	615.49	615.34	615.32
	2.2	615.03	615.06	615.21	615.36	615.51	615.67	615.77	615.72	615.58	615.43	615.29	615.26
	2.3	614.97	615.00	615.15	615.30	615.46	615.61	615.71	615.66	615.52	615.37	615.23	615.20
	2.4	614.91	614.94	615.09	615.24	615.40	615.55	615.65	615.60	615.46	615.31	615.17	615.14
	2.5	614.85	614.88	615.03	615.19	615.34	615.49	615.59	615.54	615.40	615.25	615.11	615.08
	2.6	614.80	614.82	614.98	615.13	615.28	615.43	615.53	615.49	615.34	615.20	615.05	615.03
	2.7	614.74	614.77	614.92	615.07	615.22	615.37	615.47	615.43	615.28	615.14	614.99	614.97
	2.8	614.68	614.71	614.86	615.01	615.16	615.31	615.42	615.37	615.22	615.08	614.93	614.91
	2.9	614.62	614.65	614.80	614.95	615.10	615.26	615.36	615.31	615.17	615.02	614.88	614.85
PIER 2	3	614.57	614.59	614.74	614.90	615.05	615.20	615.30	615.25	615.11	614.96	614.82	614.79
	3.1	614.52	614.55	614.70	614.85	615.00	615.16	615.26	615.21	615.07	614.92	614.78	614.75
	3.2	614.48	614.51	614.66	614.81	614.96	615.11	615.22	615.17	615.02	614.88	614.73	614.71
	3.3	614.44	614.47	614.62	614.77	614.92	615.07	615.17	615.13	614.98	614.84	614.69	614.67
	3.4	614.40	614.43	614.58	614.73	614.88	615.03	615.13	615.09	614.94	614.80	614.65	614.62
	3.5	614.36	614.39	614.54	614.69	614.84	614.99	615.10	615.05	614.90	614.76	614.61	614.59
	3.6	614.32	614.35	614.50	614.65	614.80	614.96	615.06	615.01	614.86	614.72	614.57	614.55
	3.7	614.29	614.31	614.47	614.62	614.77	614.92	615.02	614.97	614.83	614.68	614.54	614.51
	3.8	614.25	614.28	614.43	614.58	614.73	614.88	614.98	614.94	614.79	614.65	614.50	614.47
	3.9	614.22	614.24	614.40	614.55	614.70	614.85	614.95	614.90	614.76	614.61	614.46	614.44
N. ABUT	4	614.18	614.21	614.36	614.51	614.66	614.81	614.92	614.87	614.72	614.58	614.43	614.41





SLAB HAUNCH DETAIL

TO DETERMINE 't', ELEV. OF TOP OF GIRDERS AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. TO DETERMINE THE TOP OF SLAB ELEVATION FOR POINT REFERRED USE TABLE ON THIS SHEET AND ADJUST FOR CROSS SLOPE OVER GIRDER. THEN FOLLOW THIS PROCESS:

TOP OF SLAB ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEADLOAD DEFLECTION (SEE SHEET 10)
- SLAB THICKNESS

= HAUNCH HEIGHT 't'

IF 1 ¼" MINIMUM HAUNCH HEIGHT 't' CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. MAX. HAUNCH HEIGHT EQUALS "STIRRUP PROJECTION" MINUS 3".

NOTE: AN AVERAGE HAUNCH ("t") OF 2⅜" WAS USED IN THE QUANTITY "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES."

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

SUPERSTRUCTURE

SHEET 12 OF 23
797

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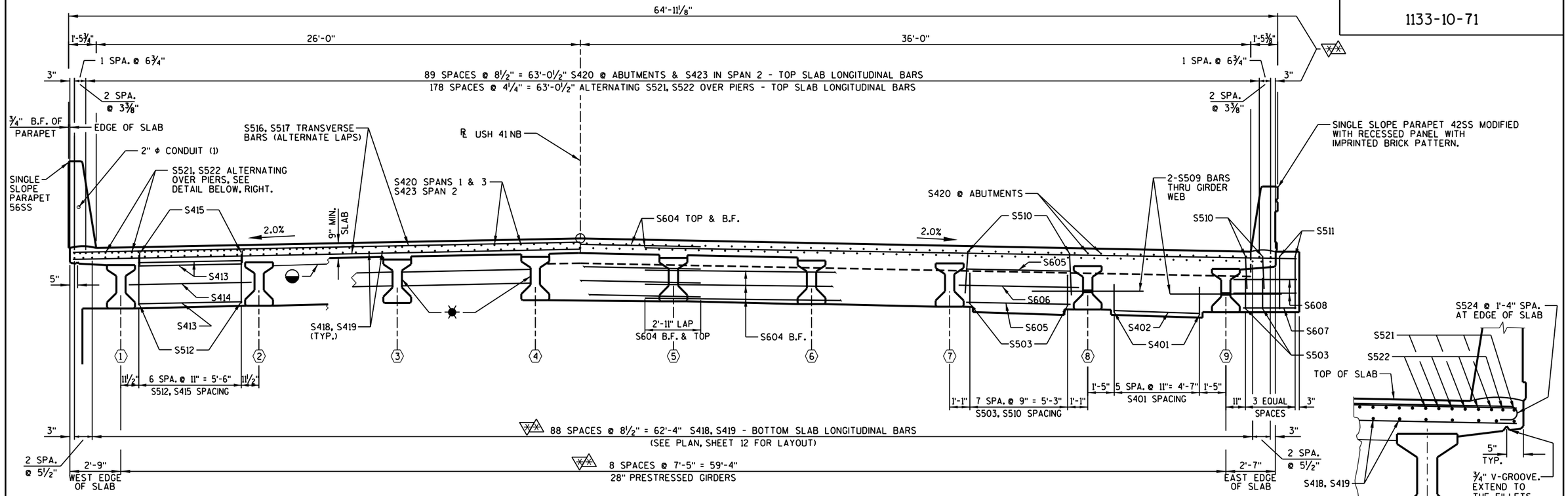
FILE= 674-12-SUPER.DGN
DATE= 6/4/2014

STATE PROJECT NUMBER

1133-10-71

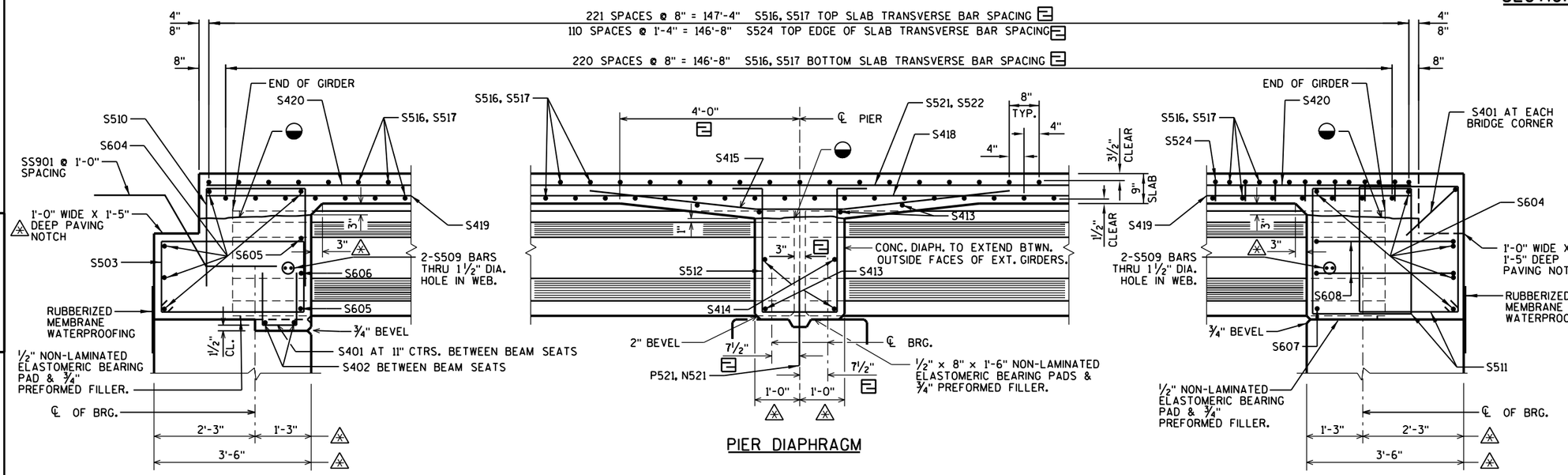


AT PIER — IN SPAN — AT ABUTMENT

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

SECTION THRU EDGE OF SLAB AT PIERS



PART LONGITUDINAL SECTION

LEGEND

F.F. - FRONT FACE

B.F. - BACK FACE

⬡ - INDICATES GIRDER NUMBER

✱ - FOR DETAILS OF IN-SPAN STEEL DIAPHRAGMS AND DIAPHRAGM INSERTS, SEE SHEET 11. FOR LAYOUT OF STEEL DIAPHRAGMS, SEE PLAN, SHEET 12.

◒ - OPTIONAL CONSTRUCTION JOINT (TYP. ALL BAYS).

⚠ - DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

⚠⚠ - DIMENSION IS TAKEN NORMAL TO ℄ GIRDER.

⊟ - DIMENSION IS TAKEN PARALLEL TO ℄ GIRDER.

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STRUCTURE B-05-0674

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SUPERSTRUCTURE SECTIONS & DETAILS

SHEET 13 OF 23
798

8

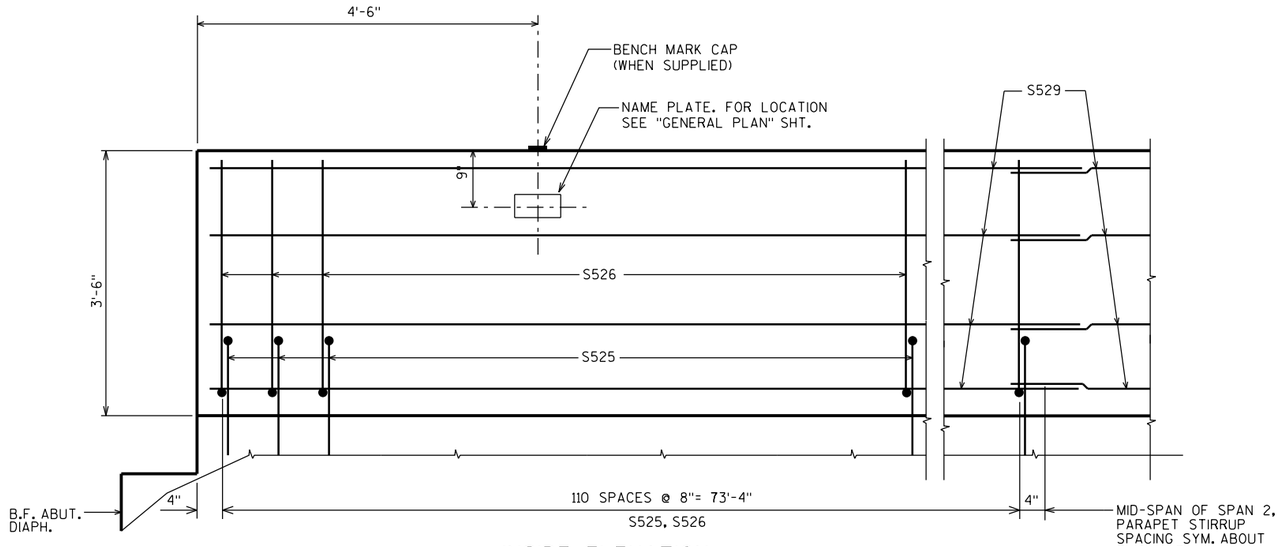
8

FILE= 674_13_SUPERSEC.DGN
DATE= 6/4/2014

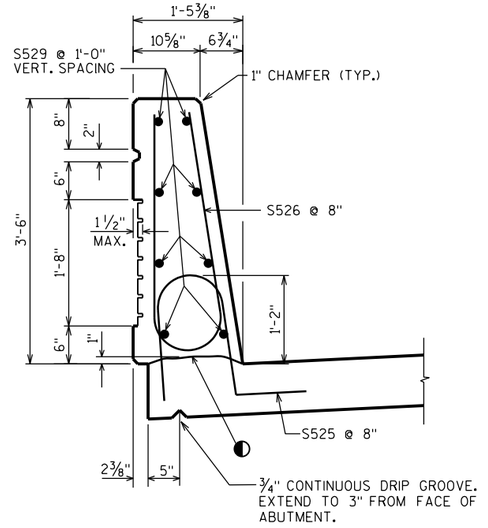
6/4-13_SUPERSEC.dgn 6/4/2014 1:58:39 PM rrabska

STATE PROJECT NUMBER

1133-10-71

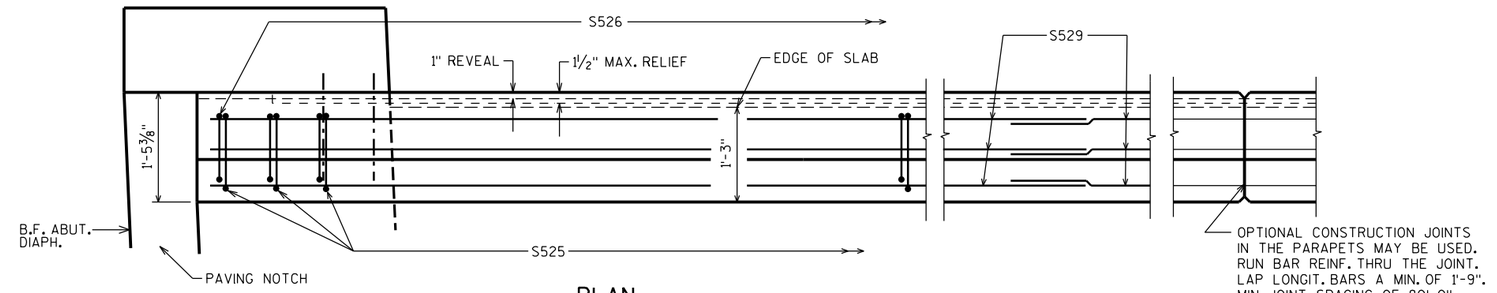


INSIDE ELEVATION

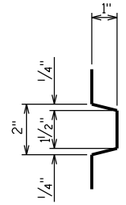


SECTION C-C

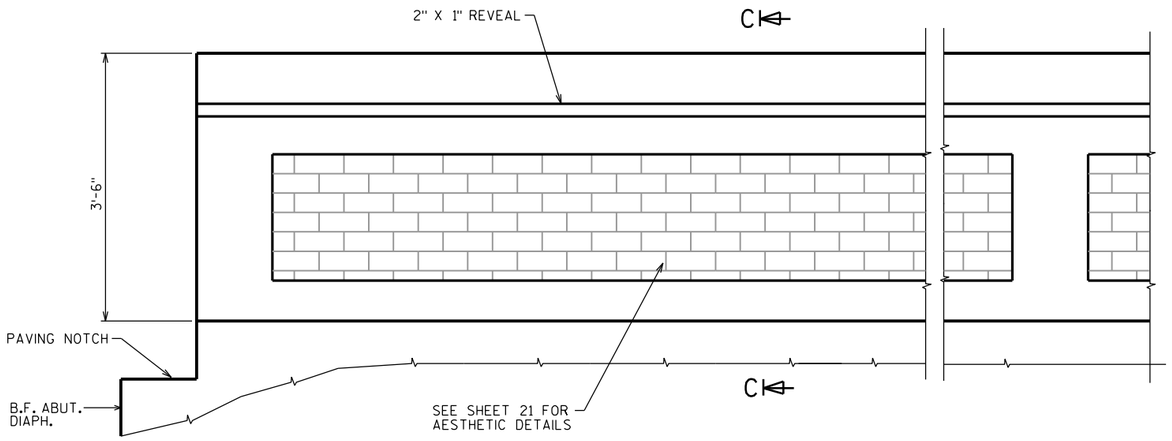
◐ CONST. JOINT - STRIKE OFF AS SHOWN.



PLAN



2" X 1" REVEAL



OUTSIDE ELEVATION

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8

NO.	DATE	REVISION	BY

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STRUCTURE B-05-0674

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SINGLE SLOPE PARAPET 42SS MODIFIED ON SUPERSTRUCTURE

SHEET 14 OF 23
799

FILE= 673_14_42SSDEC.DGN
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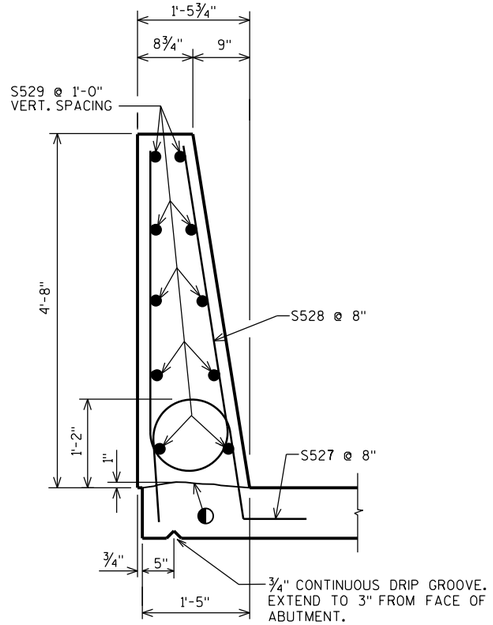
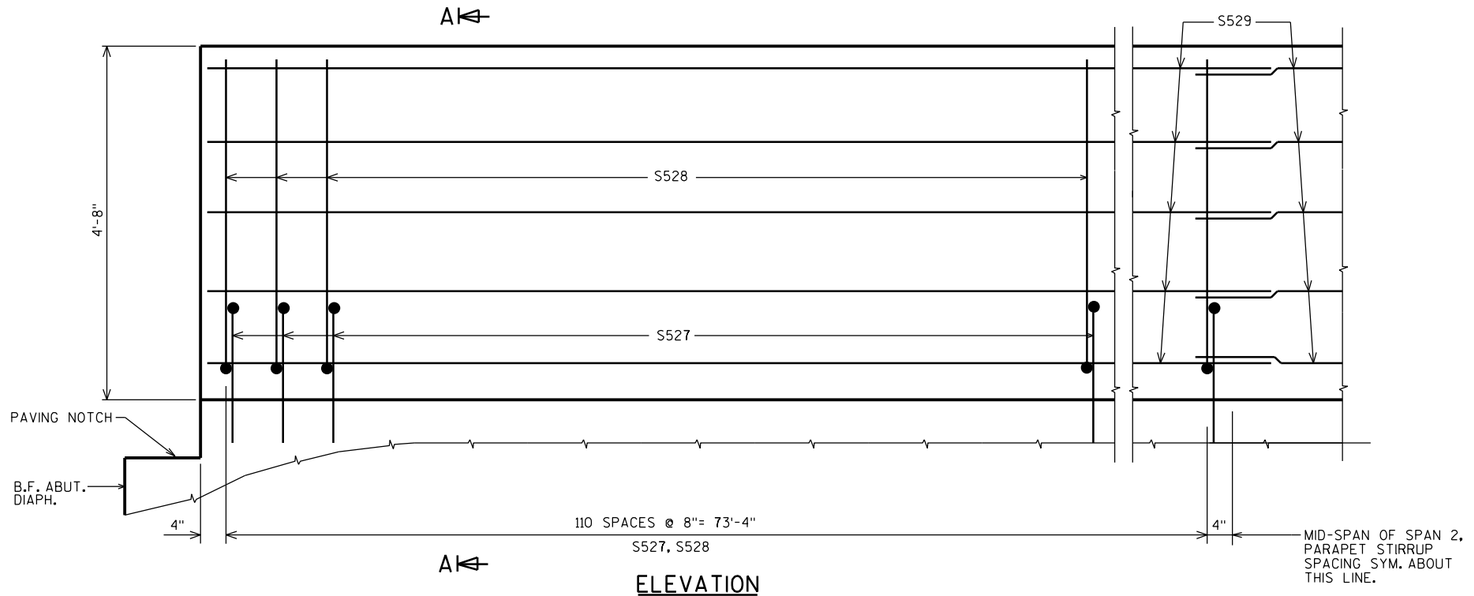
1133-10-71

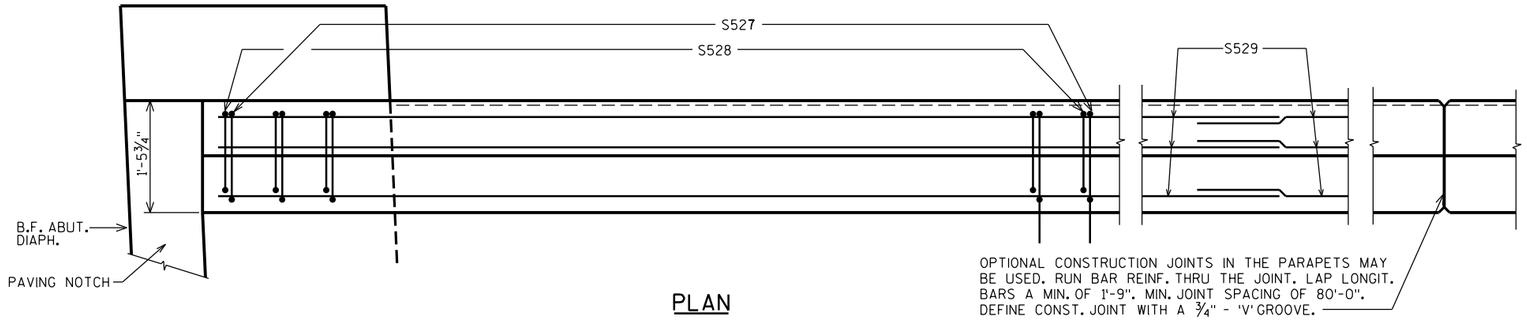


SECTION A-A

◐ CONST. JOINT - STRIKE OFF AS SHOWN.



ELEVATION



PLAN

COATED 72,430 LBS.
STAINLESS 2,210 LBS.

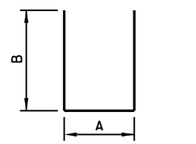
BILL OF BARS

MARK	NUMBER REQUIRED	LENGTH	BENT	LOCATION
S401	100	3'-9"	X	ABUT. DIAPH. - S.E. SEAT - STIRRUP - VERT.
S402	32	4'-7"		ABUT. DIAPH. - S.E. SEAT - TRANS.
S503	136	10'-1"	X	ABUT. DIAPH. - STIRRUP - VERT.
S604	20	35'-3"		ABUT. DIAPH. - B.F. & TOP - TRANS.
S605	32	5'-7"		ABUT. DIAPH. - INT. BAY - TRANS.
S606	16	6'-6"		ABUT. DIAPH. - INT. BAY - TRANS.
S607	4	2'-10"		ABUT. DIAPH. - ENDS - TRANS.
S608	8	9'-2"	X	ABUT. DIAPH. - ENDS - TRANS.
S509	36	6'-0"		ABUT. DIAPH. - THRU GIRDER WEB - TRANS.
S510	136	6'-5"	X	ABUT. DIAPH. - TOP STIRRUP - VERT.
S511	16	10'-5"	X	ABUT. DIAPH. - END STIRRUP - VERT.
S512	112	7'-8"	X	PIER DIAPH. - STIRRUP - VERT.
S413	96	5'-7"		PIER DIAPH. - TRANS.
S414	32	6'-7"		PIER DIAPH. - TRANS.
S415	112	9'-5"	X	PIER DIAPH. - LONGIT.
S516	443	35'-0"		SLAB - TOP & BOTTOM - TRANS.
S517	443	32'-0"		SLAB - TOP & BOTTOM - TRANS.
S418	186	36'-4"		SLAB - BOTTOM - LONGIT.
S419	186	40'-0"		SLAB - BOTTOM - LONGIT.
S420	184	32'-10"		SLAB - TOP @ ABUTS. & SPANS 1 & 3 - LONGIT.
S521	184	29'-9"		SLAB - TOP - OVER PIERS - LONGIT.
S522	182	20'-7"		SLAB - TOP - OVER PIERS - LONGIT.
S423	92	29'-3"		SLAB - TOP - SPAN 2 - LONGIT.
S524	222	4'-8"	X	SLAB - TOP @ EDGE - TRANS.
S525	222	4'-7"	X	PARAPET 42SS - STIRRUP - INTO SLAB - VERT.
S526	222	6'-8"	X	PARAPET 42SS - STIRRUP - VERT.
S527	222	4'-8"	X	PARAPET 56SS - STIRRUP - INTO SLAB - VERT.
S528	222	9'-1"	X	PARAPET 56SS - STIRRUP - VERT.
S529	72	38'-3"		PARAPET ON BRIDGE - LONGIT.
SS901	130	5'-0"	X	ABUT. DIAPH. TO APPROACH SLAB - LONGIT.

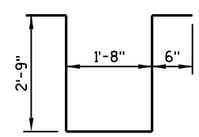
STAINLESS STEEL BAR. DO NOT EPOXY COAT.

EPOXY COAT ALL SUPERSTRUCTURE & PARAPET BARSTEEL.

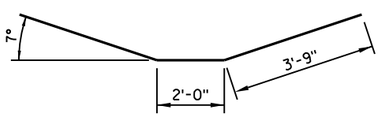
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



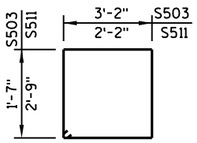
MARK	A	B
S401	11"	1'-6"
S608	3'-2"	3'-2"
S510	2'-2"	2'-3"



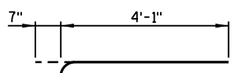
S512
(STIRRUP)



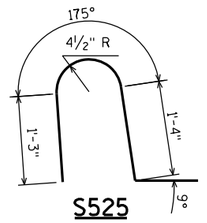
S415



S503, S511
(STIRRUPS)



S524
STD. 180° HOOK



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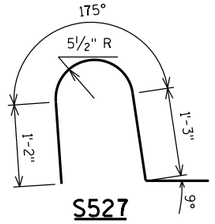

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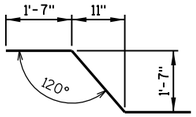
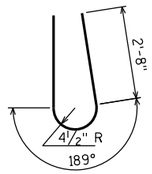


SS901
(STAINLESS STEEL)



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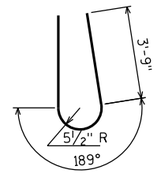

S528

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

SINGLE SLOPE PARAPET 56SS ON SUPERSTRUCTURE

SHEET 15 OF 23

800

FILE= 674-15_56SSDEC.DGN
DATE= 6/4/2014

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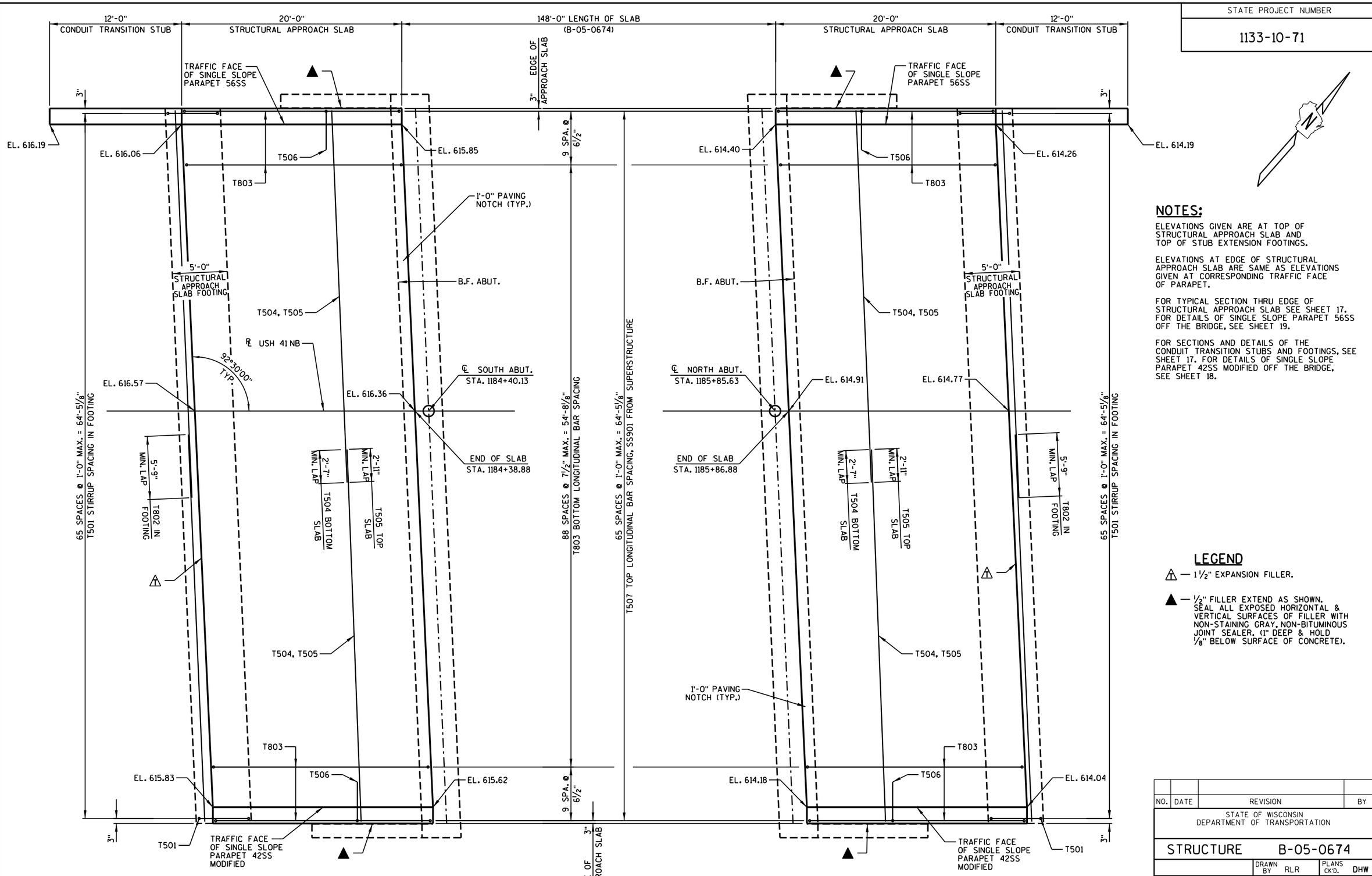
8

STATE PROJECT NUMBER

1133-10-71



PLAN - SOUTH APPROACH SLAB

PLAN - NORTH APPROACH SLAB

NOTES:

ELEVATIONS GIVEN ARE AT TOP OF STRUCTURAL APPROACH SLAB AND TOP OF STUB EXTENSION FOOTINGS.

ELEVATIONS AT EDGE OF STRUCTURAL APPROACH SLAB ARE SAME AS ELEVATIONS GIVEN AT CORRESPONDING TRAFFIC FACE OF PARAPET.

FOR TYPICAL SECTION THRU EDGE OF STRUCTURAL APPROACH SLAB SEE SHEET 17. FOR DETAILS OF SINGLE SLOPE PARAPET 56SS OFF THE BRIDGE, SEE SHEET 19.

FOR SECTIONS AND DETAILS OF THE CONDUIT TRANSITION STUBS AND FOOTINGS, SEE SHEET 17. FOR DETAILS OF SINGLE SLOPE PARAPET 42SS MODIFIED OFF THE BRIDGE, SEE SHEET 18.

LEGEND

⚠ — 1½" EXPANSION FILLER.

▲ — ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

STRUCTURAL APPROACH SLAB

SHEET 16 OF 23
801

8

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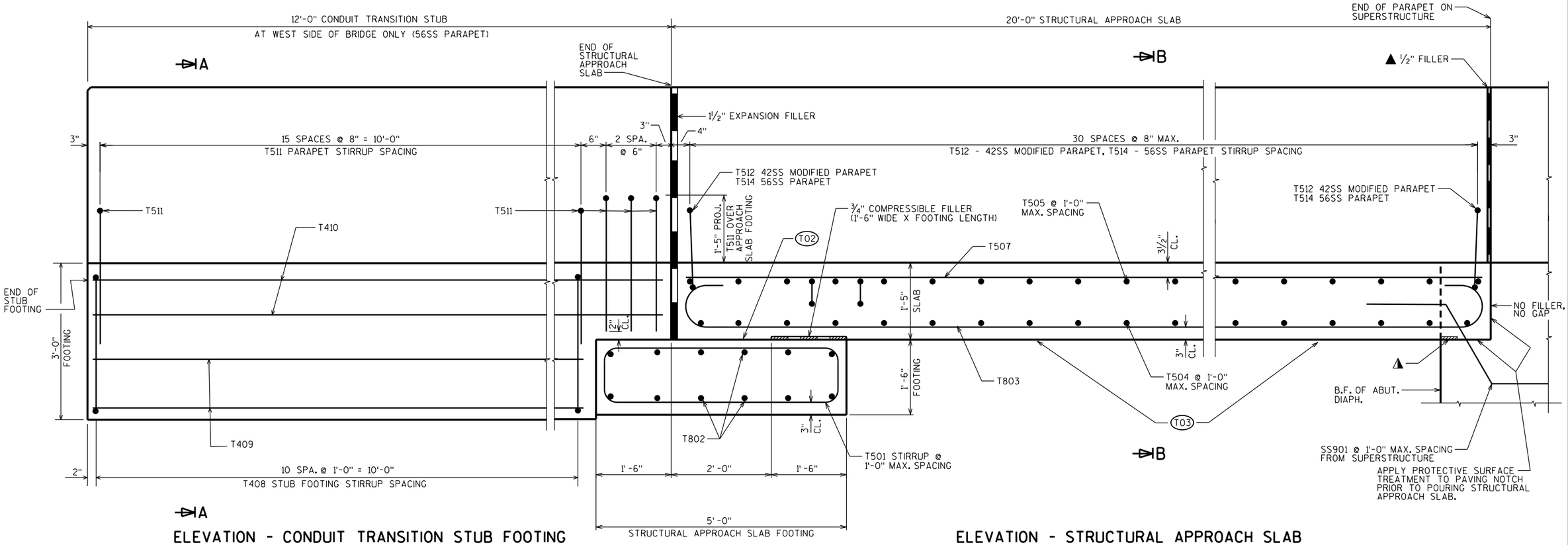
674-16_appslab.dgn 6/4/2014 2:06:36 PM rrabska

FILE= 674_16_appslab.DGN
DATE= 6/4/2014

STATE PROJECT NUMBER

1133-10-71

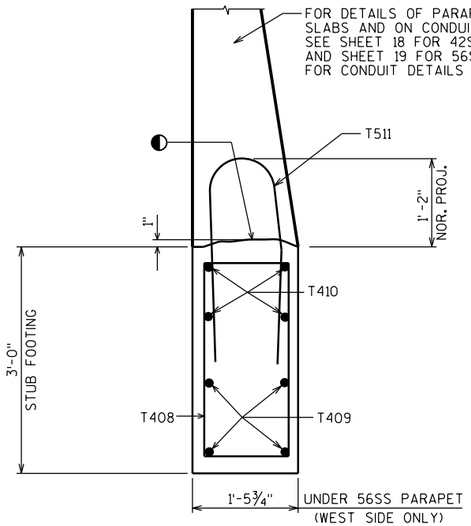


A

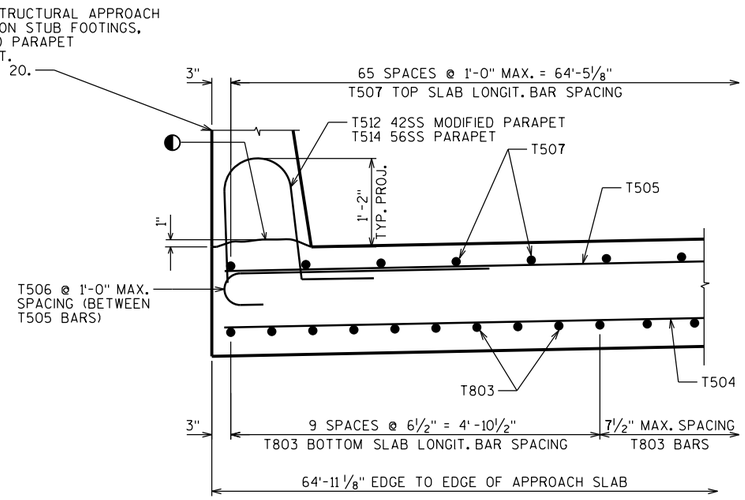
ELEVATION - CONDUIT TRANSITION STUB FOOTING

ELEVATION - STRUCTURAL APPROACH SLAB

FOR BASE AGGREGATE DENSE 1¼-INCH UNDER STRUCTURAL APPROACH SLAB AND UNDER FOOTING SEE ROAD PLANS



SECTION A-A THRU
CONDUIT TRANSITION STUB FOOTING



SECTION B-B THRU EDGE OF
STRUCTURAL APPROACH SLAB

LEGEND

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THICKNESS) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03"MIN. TOTAL THICKNESS) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF SUBGRADE BENEATH SLAB.

POLYETHYLENE SHEETS SHALL BE INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

▲ SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).

◮ 4" X ¾" PREFORMED JOINT FILLER, EXTEND FULL LENGTH OF PAVING NOTCH.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

STRUCTURAL APPROACH SLAB DETAILS & CONDUIT TRANSITION STUB FOOTING

SHEET 17 OF 23
802

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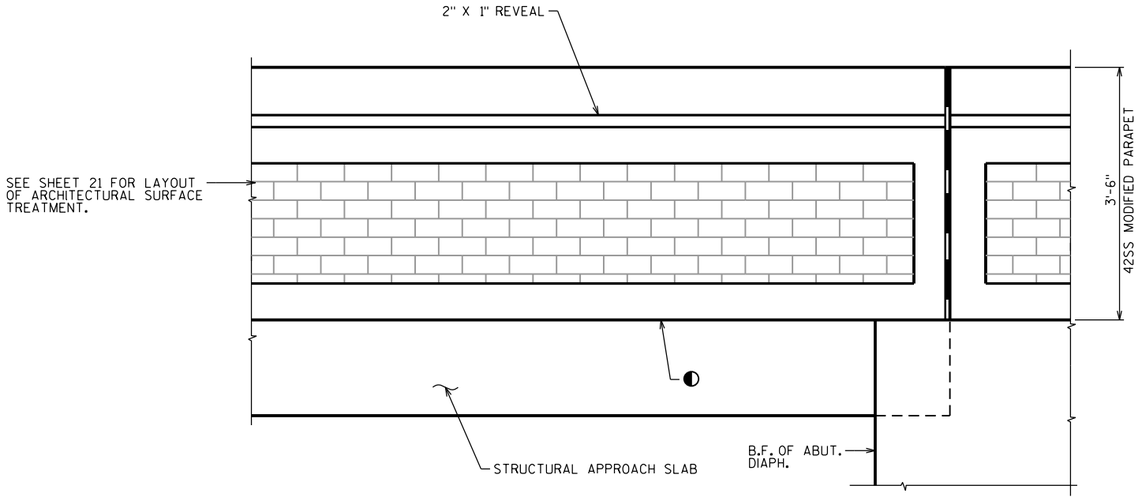
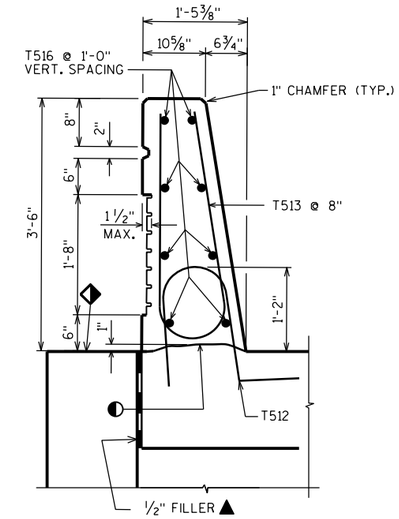
FILE= 674.17_StubFOOTING.DGN
DATE= 6/4/2014

STATE PROJECT NUMBER

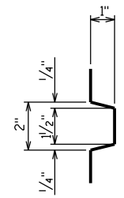
1133-10-71



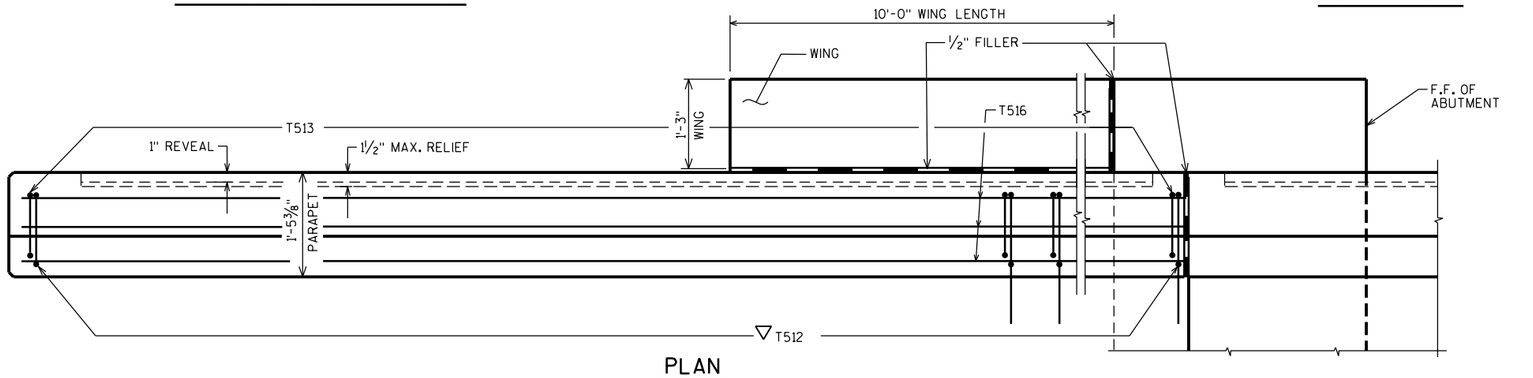
PART OUTSIDE ELEVATION



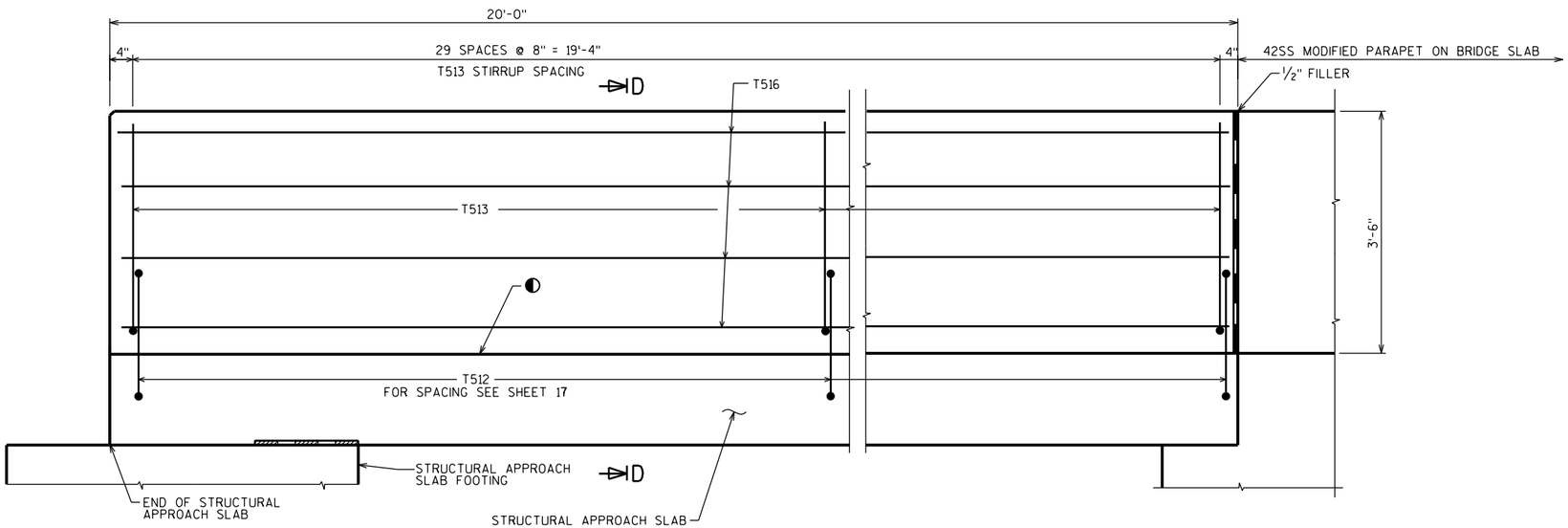
SECTION D-D



2" X 1" REVEAL



PLAN



INSIDE ELEVATION
(WING NOT SHOWN FOR CLARITY)

LEGEND

▲ SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ T512 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

SINGLE SLOPE PARAPET 42SS MODIFIED ON APPROACH SLAB

SHEET 18 OF 23
803

8

8

FILE= 674_18_42SSAPP.DGN
DATE= 6/4/2014

STATE PROJECT NUMBER

1133-10-71

BILL OF BARS (1 SET OF 2) COATED 12,720 LBS.

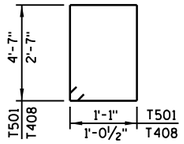
MARK	NUMBER REQUIRED	LENGTH	BENT	LOCATION
T501	66	11'-11"	X	APPROACH SLAB - FOOTING - STIRRUP - VERT.
T802	12	35'-4"		APPROACH SLAB - FOOTING - TRANS.
T803	107	21'-5"	X	APPROACH SLAB - BOTTOM - LONGIT.
T504	20	33'-9"		APPROACH SLAB - BOTTOM - TRANS.
T505	21	33'-11"		APPROACH SLAB - TOP - TRANS.
T506	40	4'-1"	X	APPROACH SLAB - TOP @ EDGE - TRANS.
T507	66	19'-7"		APPROACH SLAB - TOP - LONGIT.
T408	11	7'-10"	X	CONDUIT TRANSITION STUB - FOOTING - STIRRUP - VERT.
T409	4	10'-2"		CONDUIT TRANSITION STUB - FOOTING - BOTTOM - LONGIT.
T410	4	11'-8"		CONDUIT TRANSITION STUB - FOOTING - TOP - LONGIT.
T511	19	5'-10"	X	CONDUIT TRANSITION STUB - FOOTING & PARAPET STIRRUP - VERT.
T512	31	4'-7"	X	PARAPET 42SS & APPROACH SLAB - STIRRUP - VERT.
T513	30	6'-8"	X	PARAPET 42SS - STIRRUP - VERT.
T514	31	4'-8"	X	PARAPET 56SS & APPROACH SLAB - STIRRUP - VERT.
T515	48	9'-1"	X	PARAPET 56SS - STIRRUP - VERT.
T516	18	19'-6"		PARAPET ON APPROACH SLAB - LONGIT.
T517	10	11'-8"		PARAPET ON TRANSITION STUB - LONGIT.

SET OF BARS FOR ONE END OF BRIDGE SHOWN, 2 SETS REQUIRED.

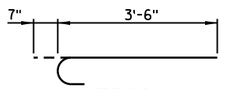
EPOXY COAT ALL SUPERSTRUCTURE & PARAPET BARSTEEL.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

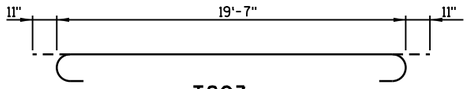
USE HIGH PERFORMANCE CONCRETE FOR PARAPETS, STRUCTURAL APPROACH SLAB, FOOTINGS AND TRANSITION STUB.



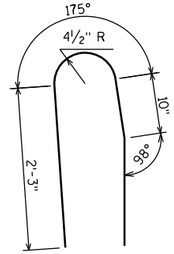
T501, T408



T506
STD. 180° HOOK



T803
STD. 180° HOOKS



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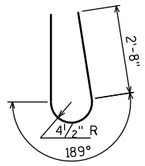

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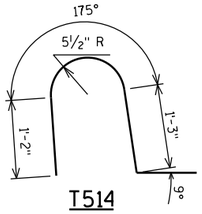

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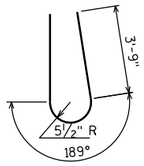

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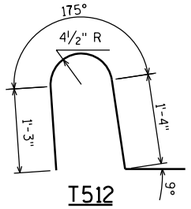
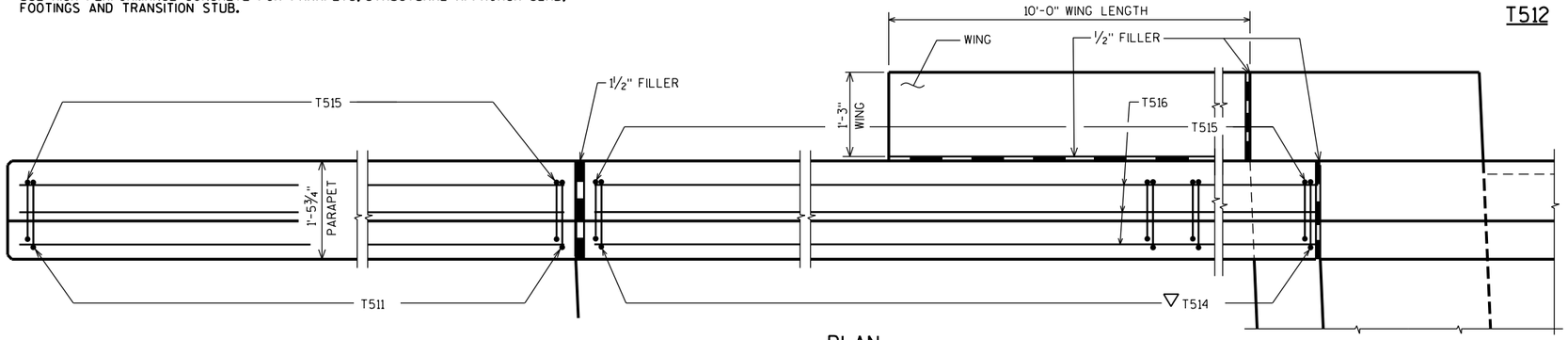
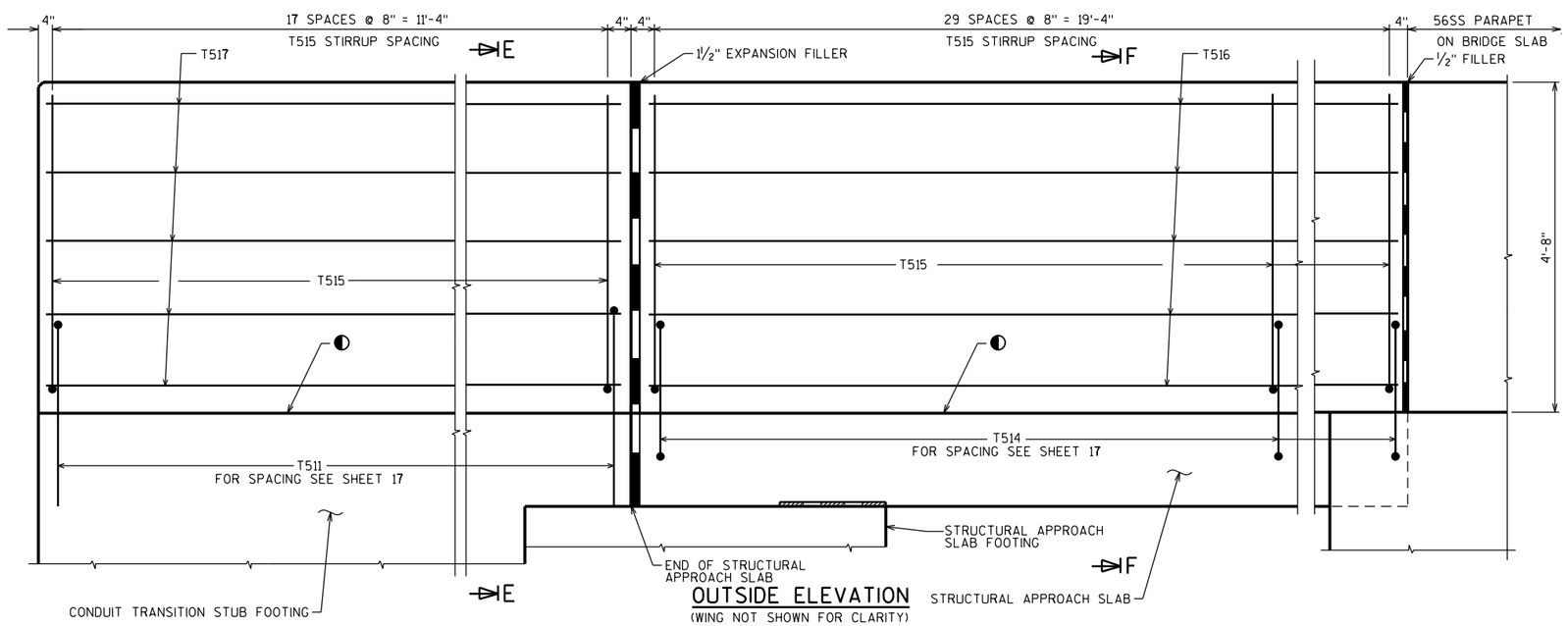


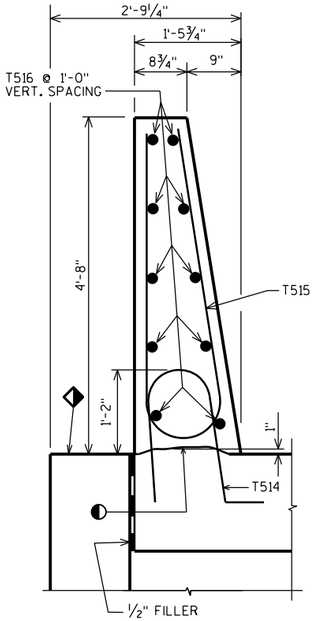
T512



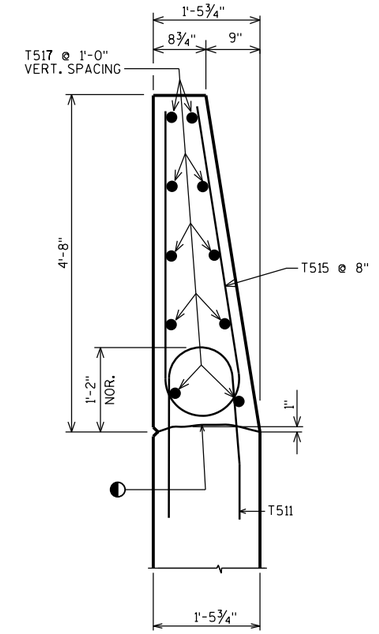
PLAN



OUTSIDE ELEVATION
(WING NOT SHOWN FOR CLARITY)



SECTION F-F



SECTION E-E

LEGEND

▲ SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ T514 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

SINGLE SLOPE PARAPET 56SS ON APPROACH SLAB & TRANSITION STUB

SHEET 19 OF 23
804

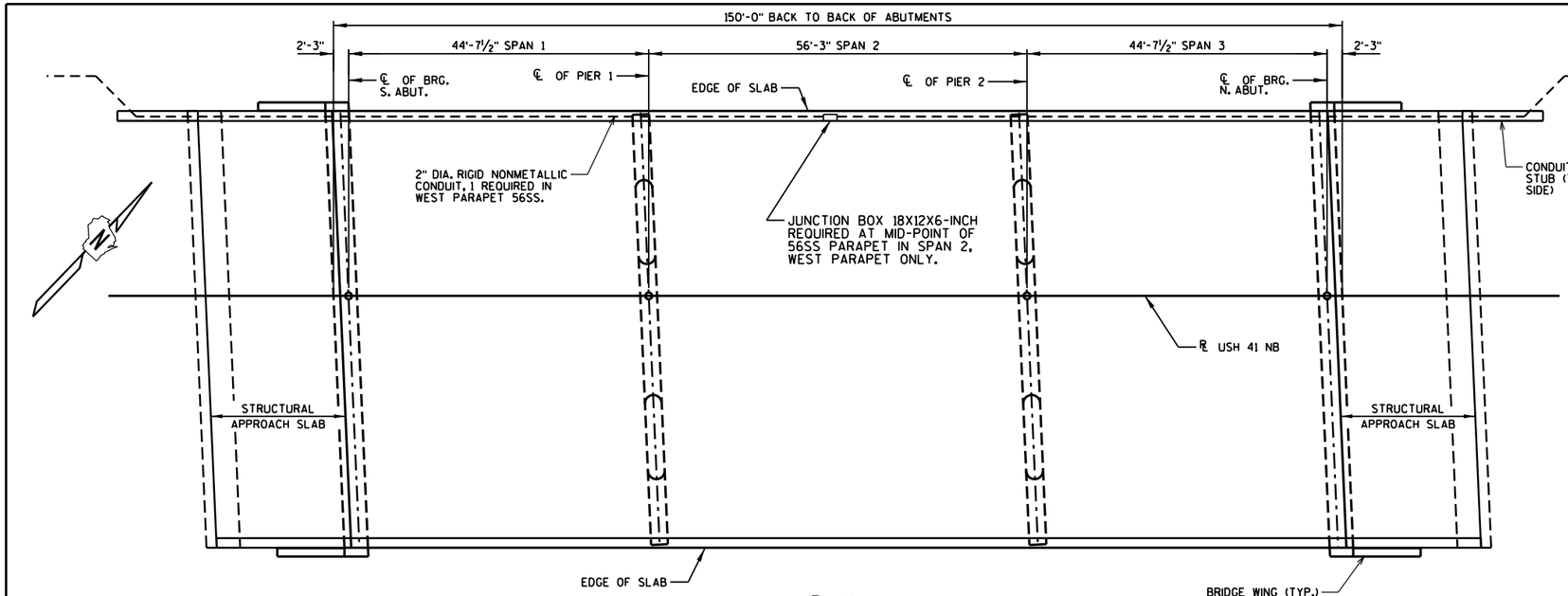
8

8

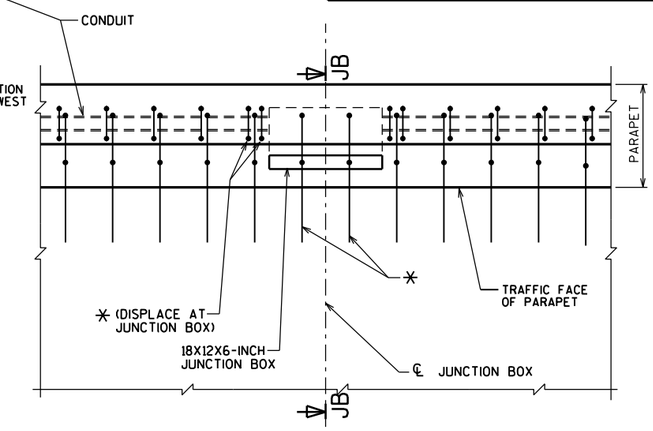
FILE= 674_19_56SSAPP.DGN
DATE= 6/4/2014

STATE PROJECT NUMBER

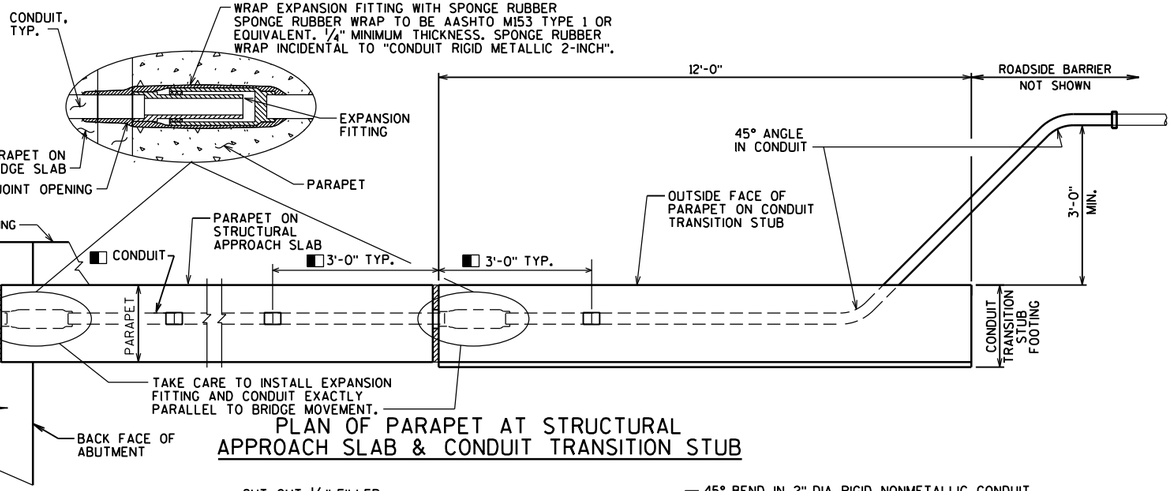
1133-10-71



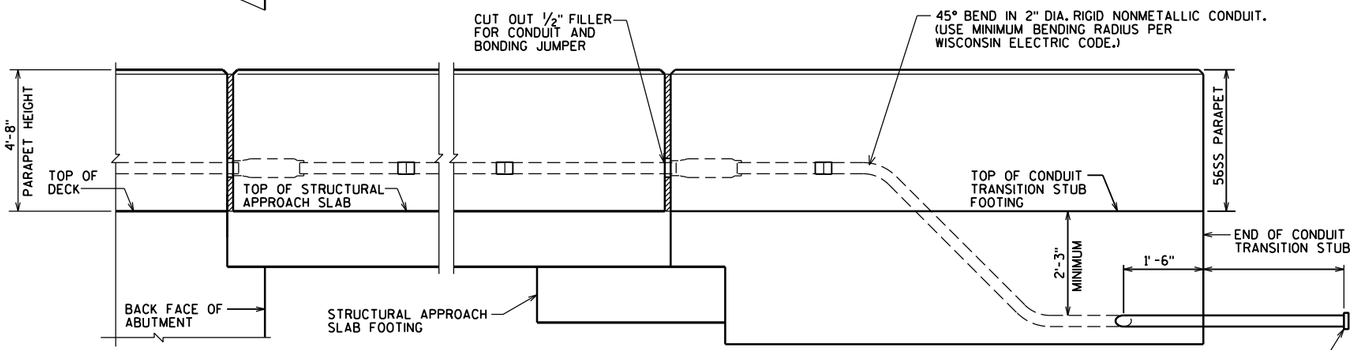
PLAN



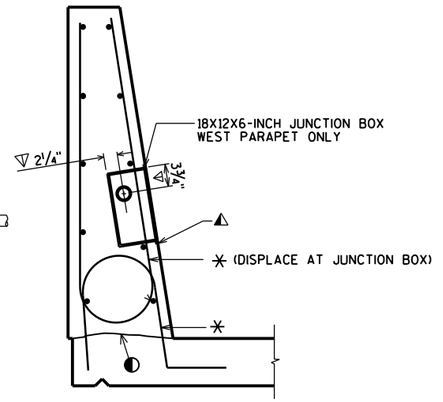
PLAN AT JUNCTION BOX



PLAN OF PARAPET AT STRUCTURAL APPROACH SLAB & CONDUIT TRANSITION STUB



OUTSIDE ELEVATION OF PARAPET AT STRUCTURAL APPROACH SLAB & CONDUIT TRANSITION STUB



SECTION JB-JB

56SS PARAPET ONLY

NOTES

BID ITEMS SHALL BE:
"CONDUIT RIGID METALLIC 2-INCH".
"JUNCTION BOXES 18X12X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH"

EXPANSION FITTINGS AND ADAPTER FITTINGS TO BE INCLUDED IN THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

APPROVED MANUFACTURERS - JUNCTION BOXES: SEE APPROVED MATERIAL LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER
(4" TOTAL CONDUIT MOVEMENT).

JUNCTION BOX REQUIREMENTS
- PLACE A 18" X 12" X 6" JUNCTION BOX AT MID-POINT OF THE WEST PARAPET ON BRIDGE.

CONDUIT REQUIREMENTS
- USE (1) - 2"Φ CONDUIT TO PROVIDE ELECTRICAL SERVICE IN THE WEST PARAPET.

EXPANSION FITTING REQUIREMENTS
- USE AN APPROVED EXPANSION FITTING AT EACH JOINT AS SHOWN AT EACH END OF THE STRUCTURAL APPROACH SLABS.

■ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON EITHER SIDE OF THE JOINT OPENINGS.

◐ CONSTR. JT. STRIKE OFF AS SHOWN

◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

✳ SEE SINGLE SLOPE PARAPET 56SS SHEET 15 FOR ADDITIONAL BAR STEEL DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

ELECTRICAL CONDUIT PLAN & DETAILS

SHEET 20 OF 23
805

8

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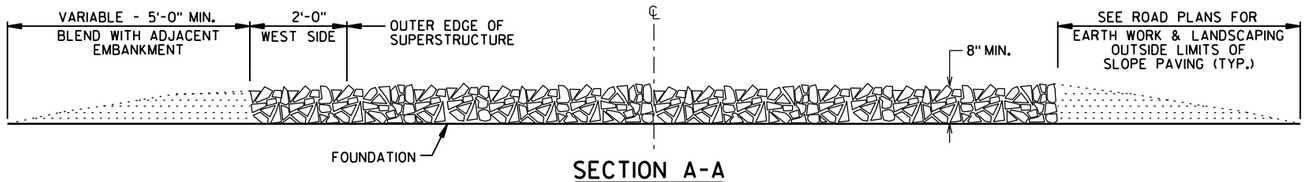
FILE= 674-20_CONDUIT.DGN
DATE= 6/4/2014

6/4-20_CONDUIT.dgn 6/4/2014 2:12:15 PM rrabska

STATE PROJECT NUMBER

1133-10-71

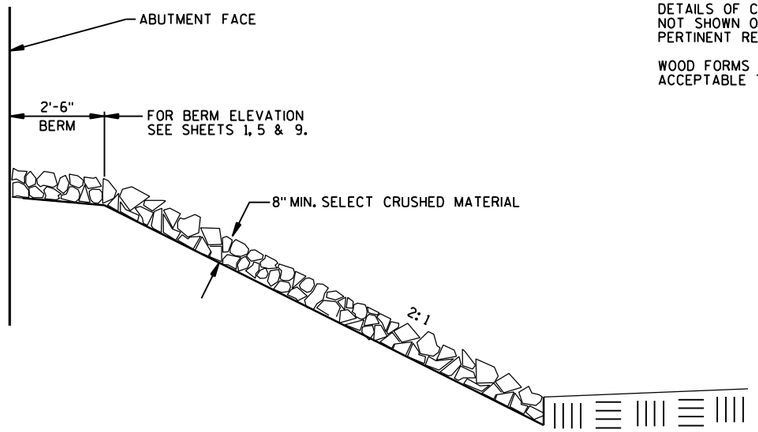


SECTION A-A

GENERAL NOTES

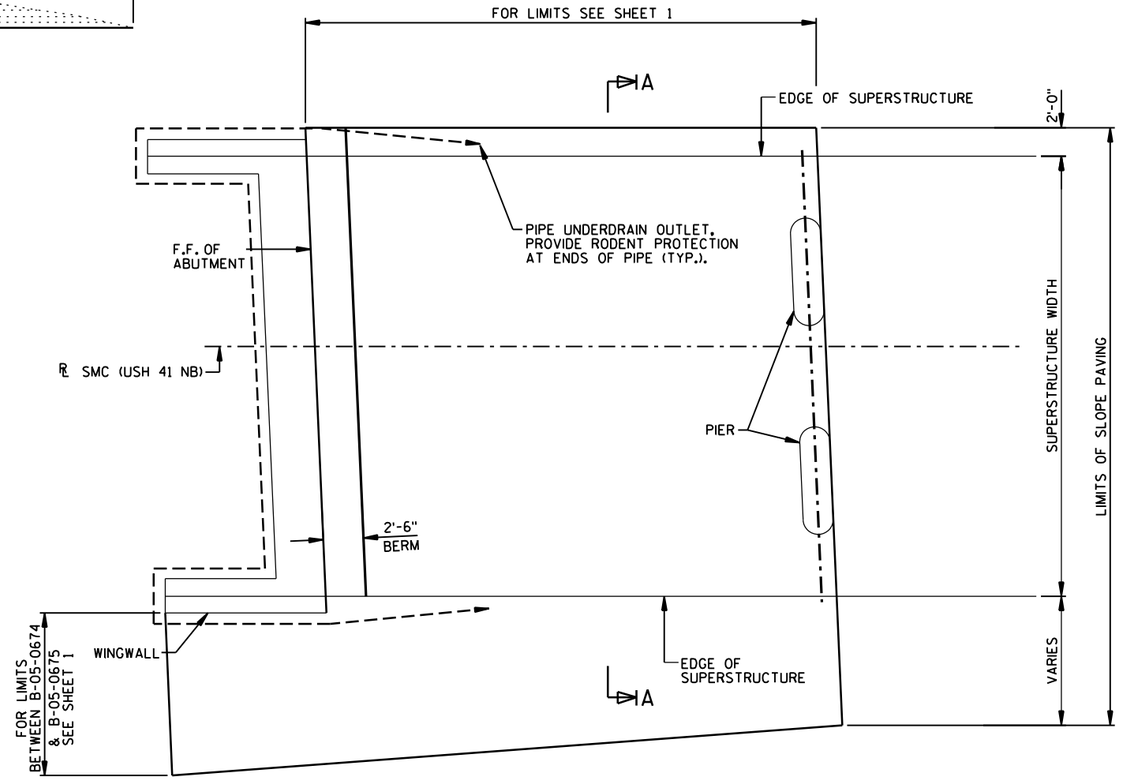
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.



TYPICAL LONGITUDINAL SECTION AT ABUTMENT

(PIER SHAFTS NOT SHOWN)



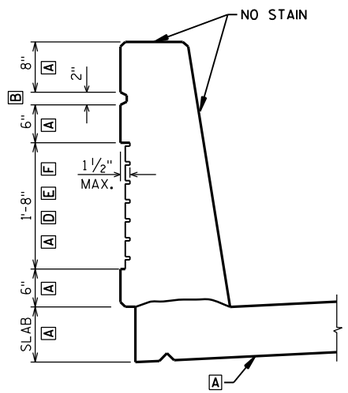
PLAN - SLOPE PAVING SELECT CRUSHED MATERIAL

STAINING NOTES

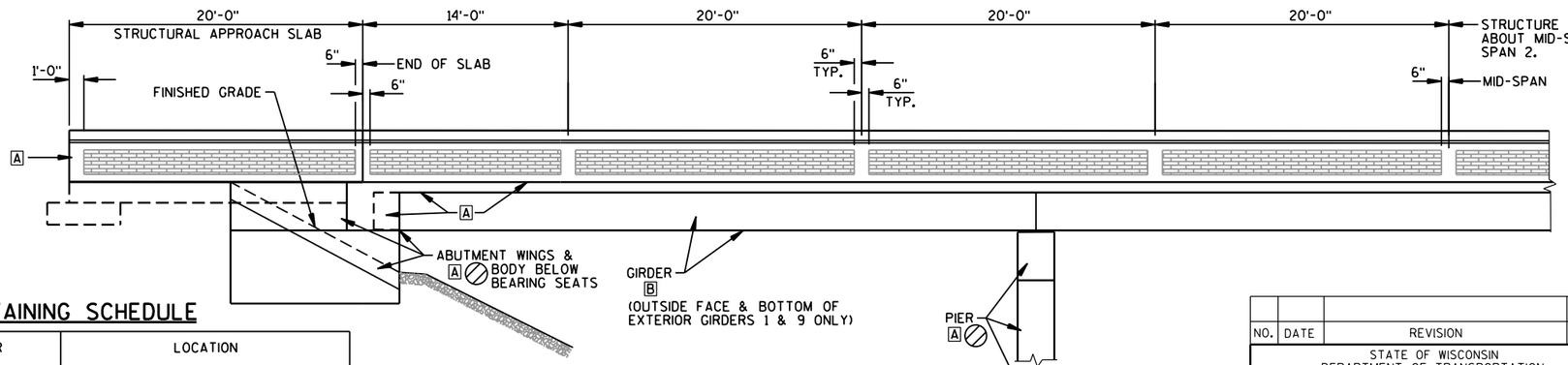
STAIN OUTSIDE FACE OF PARAPET 56SS BASE COLOR MARK "A".

STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID FOR AS "STAINING CONCRETE BRICK".

THE COST OF BRICK PATTERN FORMLINER TREATMENT IS PAID FOR UNDER "ARCHITECTURAL SURFACE TREATMENT". SEE SPECIAL PROVISIONS FOR DESCRIPTION OF BRICK PATTERN FORMLINER



SINGLE SLOPE PARAPET 42SS MODIFIED



CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	
A	BASE COLOR	BRIDGES, PARAPETS, WALLS	
B	ACCENT COLOR #1	REVEALS, OUTSIDE CONCRETE GIRDER	
C	ACCENT COLOR #2	VERTICAL PILASTER CENTER ELEMENT	≍
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)	
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)	
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)	
G	ACCENT COLOR #6	LETTERING AT ROADWAY NAME	≍

⊘ STAIN TO 1'-0" BELOW FINISHED GRADE.

≍ NOT USED ON STRUCTURE B-05-0674.

PART ELEVATION OF PARAPET

EAST SIDE OF BRIDGE SHOWN
WEST SIDE SIMILAR EXCEPT 56SS WITHOUT BRICK PATTERN
SEE STAINING NOTES

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

AESTHETIC DETAILS & SLOPE PAVING

SHEET 21 OF 23
806

FILE= 674_21_SLOPEPAVING.DGN
DATE= 6/4/2014

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STATE PROJECT NUMBER

1133-10-71

—LIMITS OF STRUCTURE REMOVAL (B-05-67)

—INDICATES WING NUMBER.

* —LOCATION OF BARRIER ALLOWS FOR TEMPORARY 24'-0" CLEAR ROADWAY ON EXISTING BRIDGE.

EXISTING STRUCTURE B-05-67 TO BE REMOVED IN PART

EDGE OF EXISTING DECK

CONCRETE BARRIER TEMPORARY PRECAST (INCLUDED IN ROAD APPROACH QUANTITIES)

END OF EXISTING BRIDGE AT EXISTING ℄ OF USH 41 NB STA. 1185+87.53, 46.29' LT. LOCATIONS OF SUBSTRUCTURE PILING PER ORIGINAL PLANS.

TO REMAIN IN SERVICE

END OF EXISTING BRIDGE AT EXISTING ℄ OF USH 41 NB STA. 1184+61.39, 46.18' LT.

16RR

* 5'

SAWCUT & REMOVAL LIMITS

* 9.5'

16' REMOVAL

20.5' REMOVAL

16' REMOVAL

C-UG

18'-10" MIN.

34'-9" MIN.

EXISTING COLUMN FOOTING (TYP.)

EXISTING EDGE OF DECK

℄ OF PIER 1 STA. 1184+84.75

END OF SLAB STA. 1184+38.88

END OF SLAB STA. 1185+86.88

℄ NMC (USH 41 NB)

1184 NMC

1185 NMC

1186 NMC

℄ SOUTH ABUT. STA. 1184+40.13

℄ NORTH ABUT. STA. 1185+85.63

15+50RR

℄ OF PIER 2 STA. 1185+41.00

STA. 1185+20.82 NMC = STA. 15+57.13 RR

C-UG

C-UG

B-05-674

℄ WISCONSIN CENTRAL LTD.

15RR

1

2

3

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N

REMOVAL PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

EXISTING STRUCTURE REMOVAL PLAN

SHEET 22 OF 23

807

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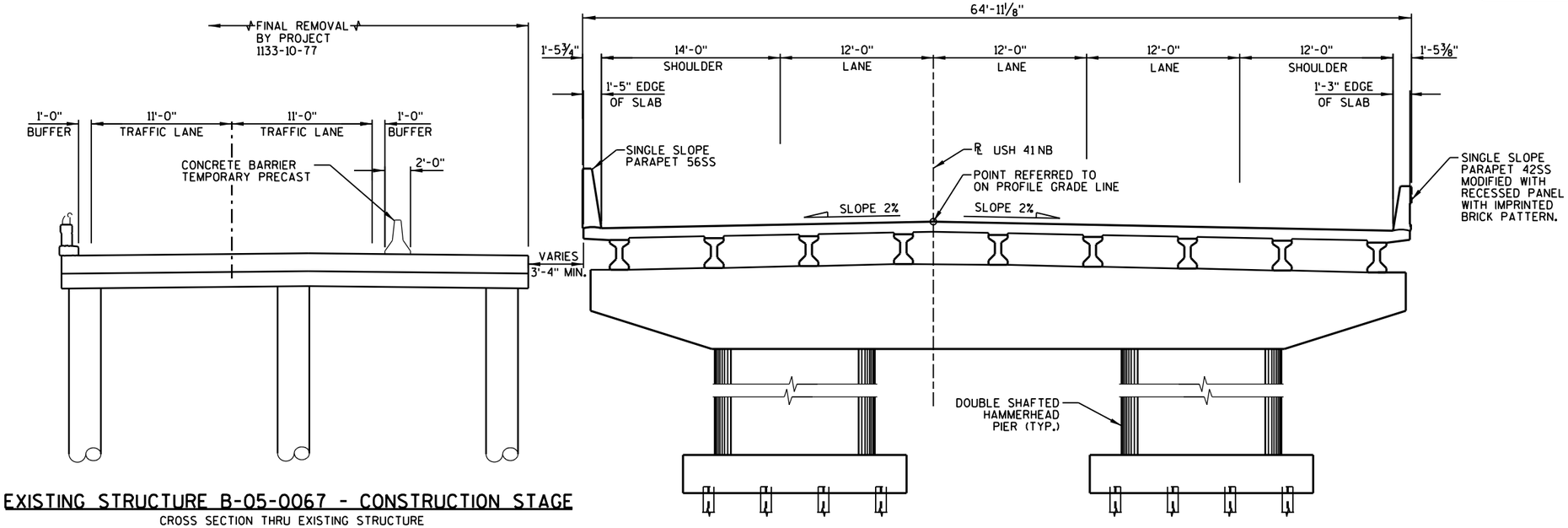
FILE= 674-22_removal.DGN
DATE= 6/5/2014

674-22_removal.dgn 6/5/2014 2:51:44 PM rrabska

STATE PROJECT NUMBER

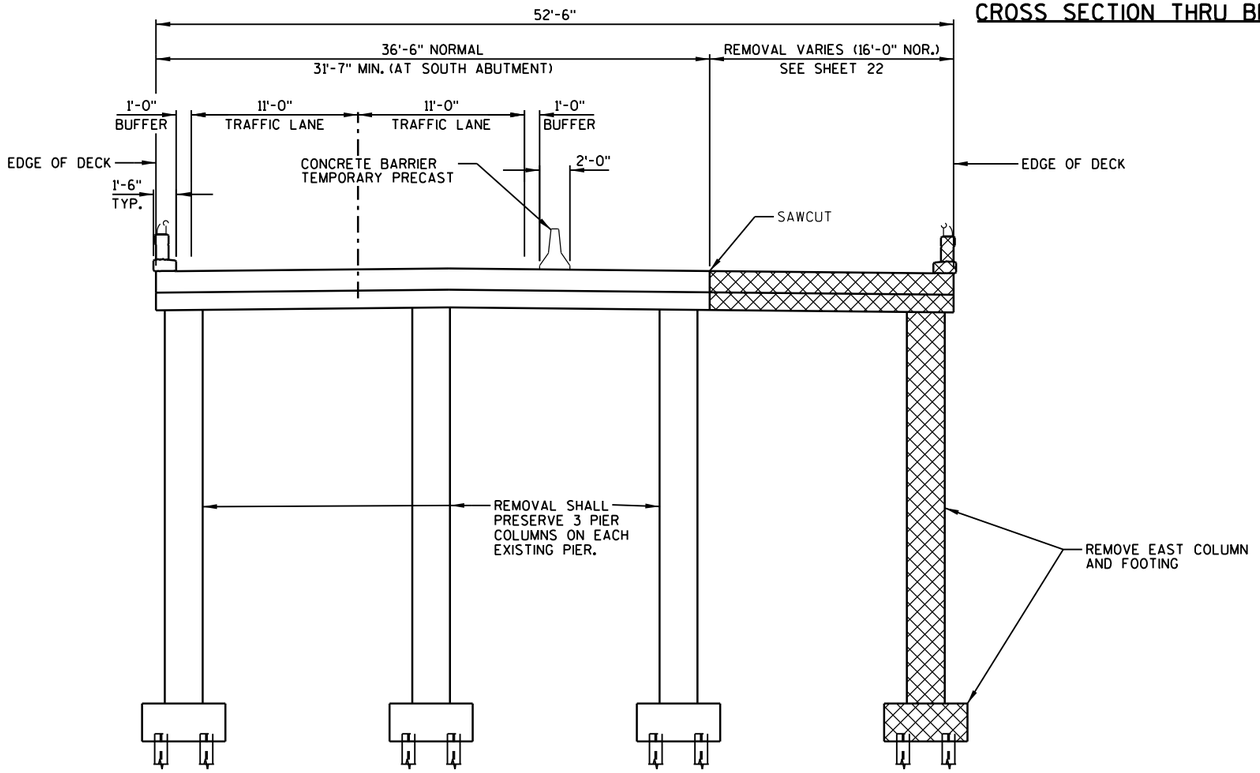
1133-10-71



EXISTING STRUCTURE B-05-0067 - CONSTRUCTION STAGE

CROSS SECTION THRU EXISTING STRUCTURE

CROSS SECTION THRU BRIDGE LOOKING NORTH



EXISTING STRUCTURE B-05-0067 - REMOVAL STAGE

CROSS SECTION THRU EXISTING STRUCTURE SHOWING PIERS LOOKING NORTH

GENERAL NOTES

PARTIALLY REMOVE BRIDGE B-05-0067 TO THE LIMITS SHOWN ON SHEETS 1 & 22.
PRESERVE THE REMAINDER OF THE BRIDGE TO REMAIN IN SERVICE FOR HIGHWAY TRAFFIC. REMOVAL OF THE REMAINDER OF THE BRIDGE WILL BE COMPLETED BY OTHERS UNDER PROJECT ID 1133-10-77.
TEMPORARY SHORING LEFT IN PLACE B-05-0674 ALONG THE WEST SIDE OF B-05-0674 WILL BE REMOVED BY OTHERS AS PART OF PROJECT ID 1133-10-77.

SEE SHEET 1 FOR LOCATIONS OF TEMPORARY SHORING LEFT IN PLACE B-05-0674.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0674

DRAWN BY RLR | PLANS CK'D. DHW

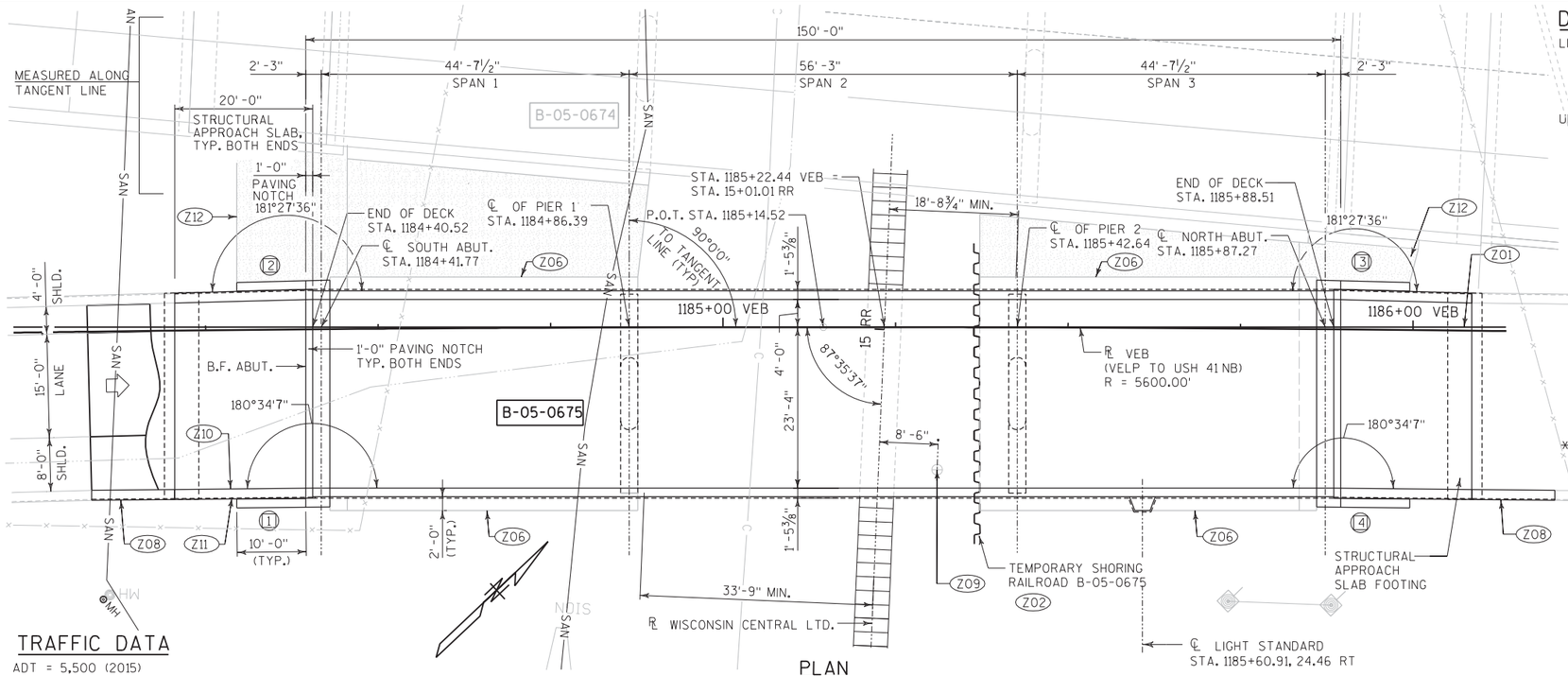
EXISTING STRUCTURE REMOVAL SECTIONS

SHEET 23 OF 23

808

FILE= 674-02_E.DGN
DATE= 6/5/2014

674-23_removal sections.dgn 6/5/2014 2:20:52 PM rrabska



PLAN

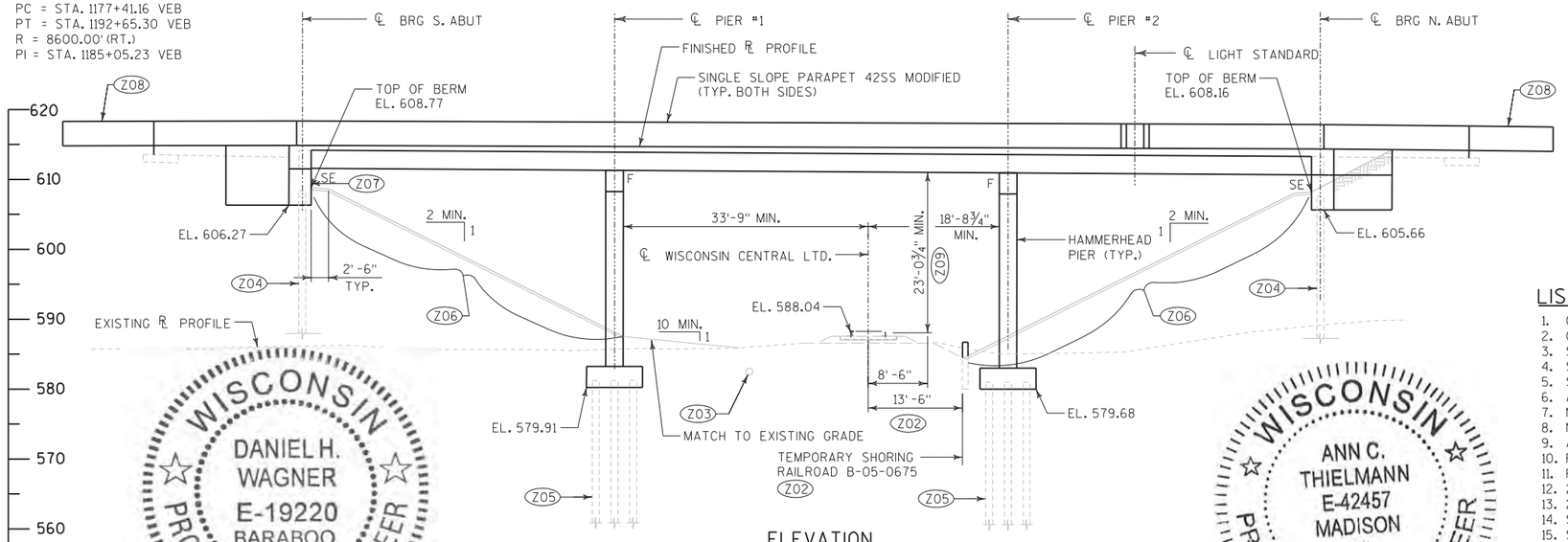
(3-SPAN 28" PRESTRESSED CONCRETE GIRDER STRUCTURE)

TRAFFIC DATA

ADT = 5,500 (2015)
ADT = 7,000 (2035)
RDS = 55 MPH

VEB ALIGNMENT CURVE DATA

PC = STA. 1177+41.16 VEB
PT = STA. 1192+65.30 VEB
R = 8600.00' (RT.)
PI = STA. 1185+05.23 VEB



ELEVATION

(NORMAL TO WISCONSIN CENTRAL LTD.)

PIER DESIGN & SHEETS 10 & 11 WERE PREPARED BY MSA PROFESSIONAL SERVICES

WISCONSIN DANIEL H. WAGNER E-19220 BARABOO, WI PROFESSIONAL ENGINEER
8-11-2014

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:
ANN THIELMANN (608) 229-1414

WISCONSIN ANN C. THIELMANN E-42457 MADISON WI PROFESSIONAL ENGINEER
10/7/14

DESIGN DATA

LIVE LOAD:
DESIGN LOAD HL-93
INVENTORY RATING FACTOR 1.04
OPERATING RATING FACTOR 1.35
WIS-SPV RATING .....250 KIPS

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY :
SUPERSTRUCTURE .....f'c = 4,000 PSI
ALL OTHER .....f'c = 4,000 PSI

HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 .....fy = 60,000 PSI

28-INCH PRESTRESSED GIRDERS CONCRETE MASONRY .....f'c = 8,000 PSI
PRESTRESSING STRANDS = 0.6 INCH DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 85'-0" LONG. PILE POINTS REQUIRED.

PIERS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60'-0" LONG. PILE POINTS REQUIRED.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

LEGEND

(Z01) TANGENT LINE IS TANGENT TO THE ℞ OF THE VEB ALIGNMENT AT THE MID-POINT OF STRUCTURE B-05-0675 AT STA. 1185+14.52 VEB.

(Z02) TEMPORARY SHORING RAILROAD IS EXPECTED TO BE DESIGNED FOR ZONE B SHORING AND NOT ZONE A AS DEFINED IN THE "HIGHWAY OVER RAILROAD DESIGN REQUIREMENTS", BRIDGE STD. 38.01.

(Z03) 2" ϕ STEEL FIBER OPTIC LINE (KDL) TO REMAIN, PROTECTION REQUIRED.

(Z04) PILING STEEL HP 12-INCH X 53 LB EST. PILE LENGTH 85'-0"

(Z05) PILING STEEL HP 12-INCH X 53 LB EST. PILE LENGTH 60'-0"

(Z06) SLOPE PAVING SELECT CRUSHED MATERIAL, TYP.

(Z07) STAIN ABUTMENT AND WING FACES

(Z08) 12'-0" CONDUIT STUB EAST SIDE ONLY.

(Z09) POINT OF MINIMUM VERTICAL CLEARANCE

(Z10) LOCATION OF NAME PLATE

(Z11) PARAPET ON APPROACH SLAB (TYP.)

(Z12) SLOPE PAVING SELECT CRUSHED MATERIAL IN ADDITION TO STANDARD 2'-0" OUTSIDE DECK WIDTH, EXTENDS TO WING TIPS OF STRUCTURES B-05-0675 AND B-05-0674 (SEE SHADED AREA.). HALF TO BE INCLUDED IN BID ITEM "SLOPE PAVING SELECT CRUSHED MATERIAL." SEE SHEET 23 FOR DETAIL.

(1) INDICATES WING NUMBER

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS-SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. ABUTMENT WING WALL #1 & #2
7. NORTH ABUTMENT
8. NORTH ABUTMENT DETAILS
9. ABUTMENT WING WALL #3 & #4
10. PIERS
11. PIER DETAILS
12. 28" PRESTRESSED GIRDER
13. 28" PRESTRESSED GIRDER DETAILS
14. STEEL DIAPHRAGMS
15. SUPERSTRUCTURE
16. SUPERSTRUCTURE CROSS-SECTION
17. SUPERSTRUCTURE BILL OF BARS
18. SUPERSTRUCTURE DETAILS
19. SINGLE SLOPE PARAPET 42SS MODIFIED
20. LIGHT STANDARD
21. STRUCTURAL APPROACH SLAB
22. STRUCTURAL APPROACH SLAB DETAILS
23. AESTHETIC DETAILS

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daareng.com
Madison, WI 53793
608-249-6140

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/09/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE PROJECT NUMBER
1133-10-71

STRUCTURE B-05-0675
VELP TO USH 41 NB (ON RAMP) OVER WISCONSIN CENTRAL LTD

COUNTY	VILLAGE
BROWN	HOWARD

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	BRS	TRW	BRS

GENERAL PLAN AND ELEVATION

SHEET 1 OF 23

809

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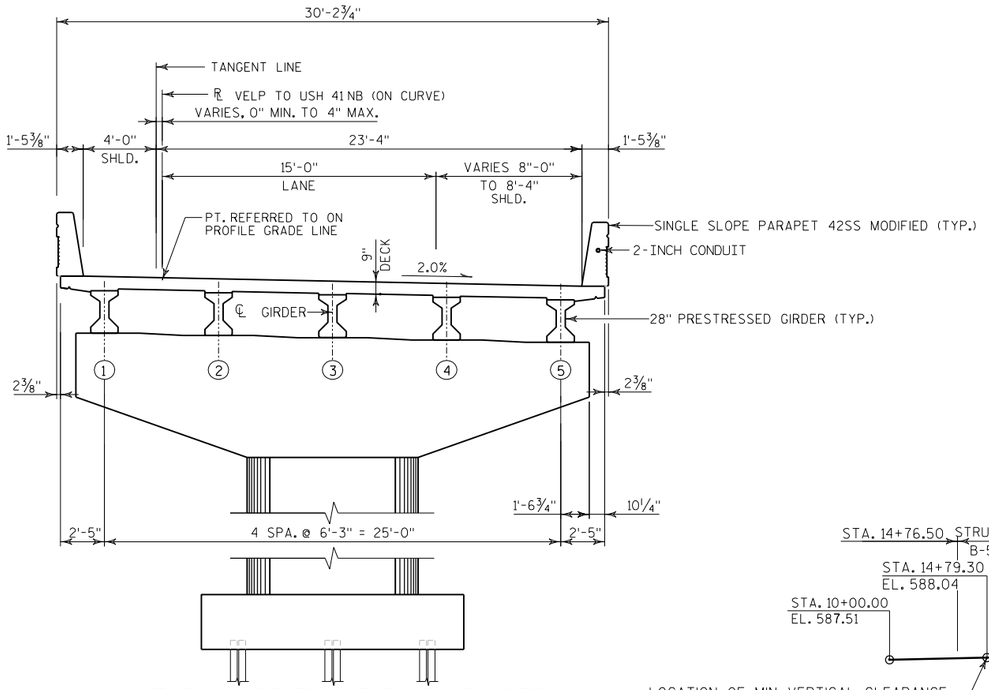
M:\2_Prjts\11331000_USH 41 MSA Structures\Plns\CAD\Str\final\B-05-675\B-05-675_01_GP with Sanitary Sewer 7-23-14 utility file update.dgn

8/11/2014

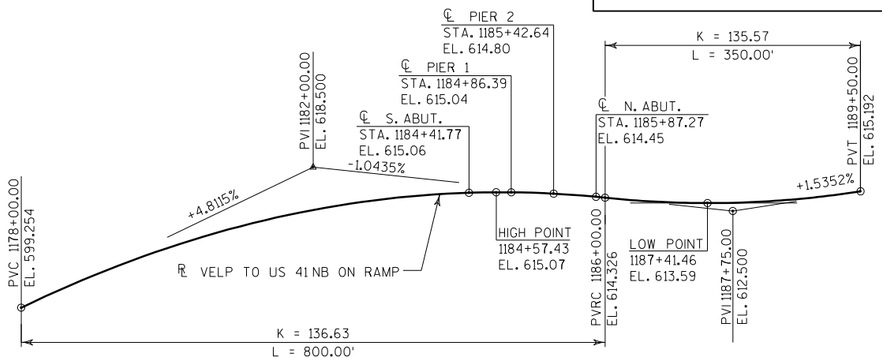
STATE PROJECT NUMBER

1133-10-71



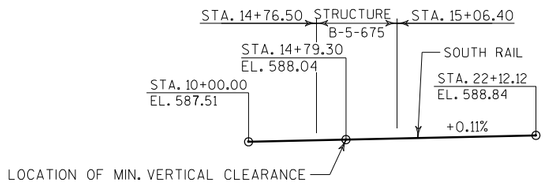
TYPICAL SECTION THRU B-05-0675

(LOOKING NORTH)
(NO ARCHITECTURAL SURFACE TREATMENTS ON ABUTMENTS OR PIERS)
STAIN ABUTMENTS AND PIERS



PROFILE GRADE LINE - VEB

(VELP TO USH 41 NB ON RAMP)



PROFILE GRADE LINE - RR

(WISCONSIN CENTRAL LTD.)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING SELECT CRUSHED MATERIAL TO THE LIMITS SHOWN ON SHEETS 1 AND 25 OR AS DIRECTED BY THE ENGINEER.

AT THE ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

THE ABUTMENTS SHALL BE FOUNDED ON FILL EMBANKMENT PLACED AS PART OF THE ROAD APPROACH GRADING PROJECT.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (1991).

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB, TOP OF STRUCTURAL APPROACH SLABS AND INSIDE AND TOP FACES OF THE PARAPETS.

THE STRUCTURE IS DESIGNED FOR THE SLAB THICKNESS SHOWN WHICH INCLUDES A 1½" INTEGRAL WEARING SURFACE. NO ADDITIONAL LOAD FOR A FUTURE WEARING SURFACE IS CONSIDERED IN THE DESIGN. PROVIDE A 3½" CLEAR COVER TO REINFORCEMENT IN THE TOP OF SLAB.

IF PREVIOUS FILLS NEAR PLANNED ABUTMENT HAVE BEEN COMPLETED WITHIN 90 DAYS, PILE DRIVING SHOULD NOT BEGIN UNTIL ENGINEER INDICATES THAT INSTRUMENTATION SHOWS 90% OF PRIMARY CONSOLIDATION OF THOSE PREVIOUS FILLS.

(X) INDICATES THE GIRDER NUMBER.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH APPROACH SLAB	SOUTH ABUT.	PIER 1	PIER 2	NORTH ABUT.	NORTH APPROACH SLAB	SUPER.	STUB EXTENS.	TOTALS
203.0225.S	DEBRIS CONTAINMENT STRUCTURE B-05-0675	LS	-	-	-	-	-	-	-	-	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-05-0675	LS	-	-	-	-	-	-	-	-	1
210.0100	BACKFILL STRUCTURE	CY	-	65	-	-	65	-	-	-	130
502.3200	PROTECTIVE SURFACE TREATMENT	SY	80	-	-	-	-	80	592	-	752
503.0128	PRESTRESSED GIRDER TYPE I 28-INCH	LF	-	-	-	-	-	-	730	-	730
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	-	3013	-	-	3013	-	-	-	6030
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	7780	463	11397	11397	453	7780	41800	905	81980
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	5	10	10	5	-	-	-	30
506.4000	STEEL DIAPHRAGMS B-05-0675	EACH	-	-	-	-	-	-	12	-	12
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-	10	-	-	10	-	-	-	20
550.0500	PILE POINTS	EACH	-	5	17	17	5	-	-	-	44
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	-	425	1020	1020	425	-	-	-	2890
604.0600	SLOPE PAVING SELECT CRUSHED MATERIAL	SY	-	246	-	-	238	-	-	-	484
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-	100	-	-	100	-	-	-	200
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	6	-	-	-	-	6	6	6	24
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	14	-	-	-	-	14	142	26	196
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	-	-	-	-	-	-	1	-	1
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	-	-	-	-	-	-	1	-	1
SPV.0035.700	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	43	38	52	52	38	43	199	7	471
SPV.0085.700	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGE	LB	530	-	-	-	-	530	-	-	1060
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	63	-	-	-	-	63	462	35	623
SPV.0165.701	STAINING CONCRETE	SF	100	231	890	890	230	100	2714	62	5217
SPV.0165.702	STAINING CONCRETE BRICK	SF	63	-	-	-	-	63	462	35	623
SPV.0165.703	LONGITUDINAL GROOVING BRIDGE DECK	SF	-	-	-	-	-	-	4229	-	4229
SPV.0165.706	TEMPORARY SHORING RAILROAD B-05-0675	SF	-	-	-	280	-	-	-	-	280
	NON-BID ITEMS										
	CORK FILLER	SIZE									¾"
	PREFORMED FILLER	SIZE									½" & ¾"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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CROSS-SECTION & QUANTITIES

SHEET 2 OF 23

810

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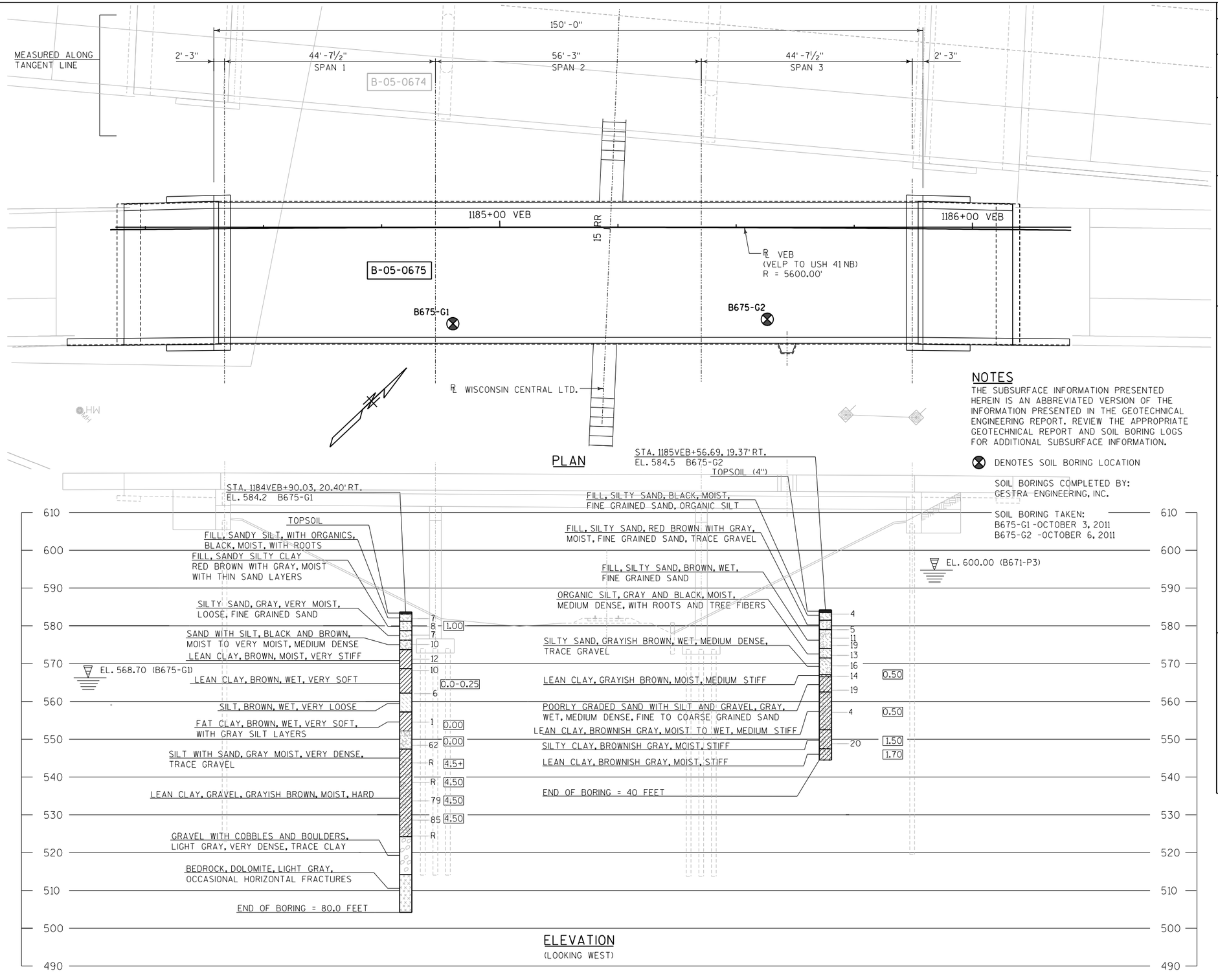

NOTES

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊗ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

SOIL BORING TAKEN:
B675-G1 -OCTOBER 3, 2011
B675-G2 -OCTOBER 6, 2011

STATE PROJECT NUMBER

1133-10-71

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
STA.
ELEV.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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SUBSURFACE EXPLORATION

SHEET 3 OF 23

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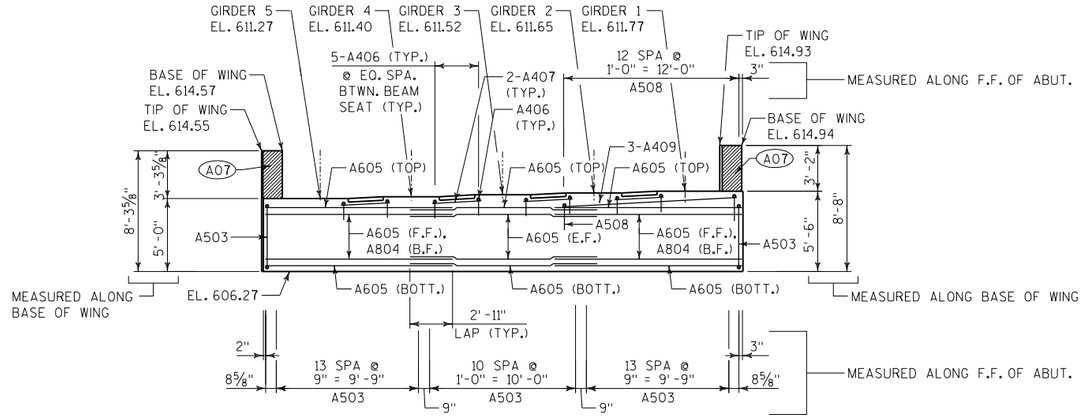
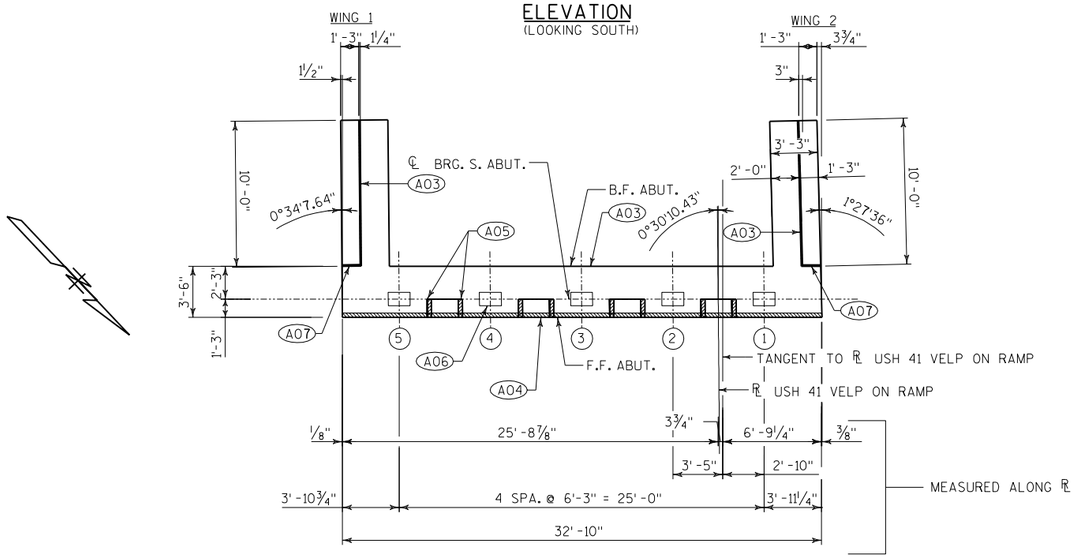
6/27/2014

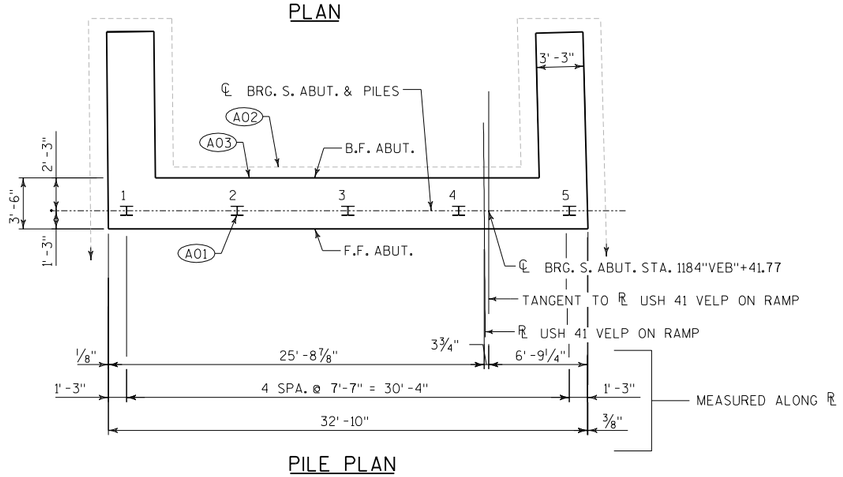
STATE PROJECT NUMBER
1133-10-71



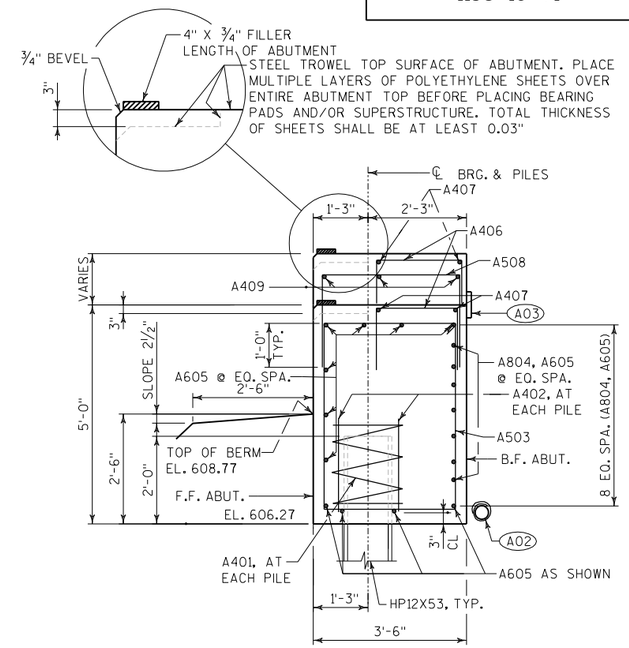
ELEVATION
(LOOKING SOUTH)



PLAN



PILE PLAN



SECTION THRU BODY

LEGEND

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 85'-0" LONG. PILE POINTS REQUIRED.

(A02) PIPE UNDERDRAIN, WRAPPED 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A04) 4" X ¾" FILLER

(A05) ¾" CORK FILLER ON VERT BEAM SEAT FACES THAT RUN PARALLEL TO GIRDER, TYP.

(A06) ½"X8"X1'-10" NON-LAMINATED ELASTIC BEARING PAD.

(A07) ½" FILLER (INCLUDED IN WING LENGTH) TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SEAL ALL HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NOTES

SEE SHEET 17 FOR BEARING PAD DETAIL.

SEE SHEET 5 FOR BILL OF BARS AND BENDING DIAGRAMS.

SEE SHEET 5 FOR PILE SPLICE DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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SOUTH ABUTMENT

SHEET 4 OF 23

812

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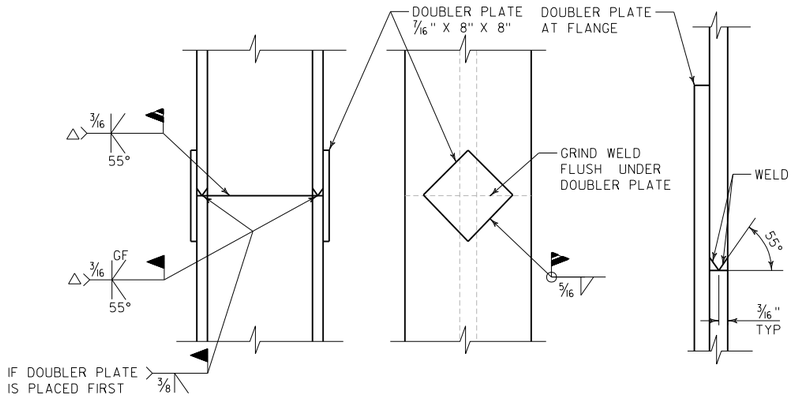
8/11/2014

STATE PROJECT NUMBER
1133-10-71



HP 12X53 PILE SPLICE DETAIL

△ SEE HP WELD DETAIL

'HP' WELD DETAIL

FLANGE SHOWN,
WEB SIMILAR

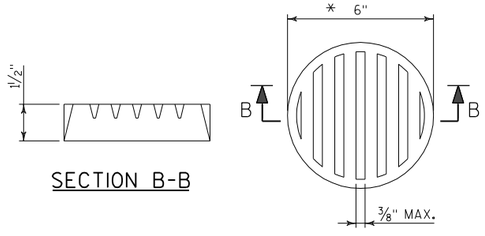
NOTES

SEE SHEET 4 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 17 FOR BEARING PAD DETAIL.

BILL OF BARS

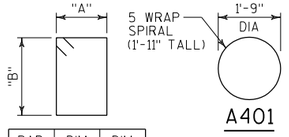
BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
A401	-	5	28'-0"	X	-	ABUTMENT PILES - 1 PER PILE	VERTICAL
A402	-	10	2'-3"	-	-	ABUTMENT PILES - 2 PER PILE	VERTICAL
A503	-	41	15'-7"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
A804	-	14	12'-10"	-	-	ABUTMENT BODY BF, ENDS	HORIZONTAL
A605	-	40	12'-10"	-	-	ABUTMENT BODY FF, TOP & BOTT	HORIZONTAL
A406	-	20	3'-9"	X	-	ABUTMENT BODY - TOP BTWN SEATS	VERTICAL
A407	-	8	5'-9"	-	-	ABUTMENT BODY - BTWN SEATS	HORIZONTAL
A508	-	13	6'-5"	X	-	ABUTMENT BODY	VERTICAL
A409	-	3	12'-0"	-	-	ABUTMENT BODY	HORIZONTAL
-	-	-	-	-	-	-	-
A515	-	11	15'-1"	X	-	WING WALL 1	VERTICAL
A516	-	11	13'-2"	-	-	WING WALL 1 & 2	HORIZONTAL
A617	-	16	11'-11"	-	-	WING WALL 1 & 2	HORIZONTAL
A518	X	14	11'-0"	X	-	WING WALL 1 TOP	VERTICAL
A419	X	14	9'-6"	-	-	WING WALL 1 & 2 TOP	HORIZONTAL
A620	X	4	9'-6"	-	-	WING WALL 1 & 2 TOP	HORIZONTAL
A521	-	11	16'-1"	X	-	WING WALL 2	VERTICAL
A522	X	14	10'-8"	X	-	WING WALL 2 TOP	VERTICAL



SECTION B-B

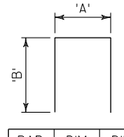
RODENT SHIELD

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.



A401

BAR MARK	DIM. A	DIM. B
A503	3'-2"	4'-4"
A515	2'-9"	4'-6"
A521	2'-9"	5'-0"



BAR MARK	DIM. A	DIM. B
A406	1'-11"	1'-0"
A508	3'-2"	1'-9"
A518	11"	5'-2"
A522	11"	5'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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SOUTH ABUTMENT DETAILS

SHEET 5 OF 23

813

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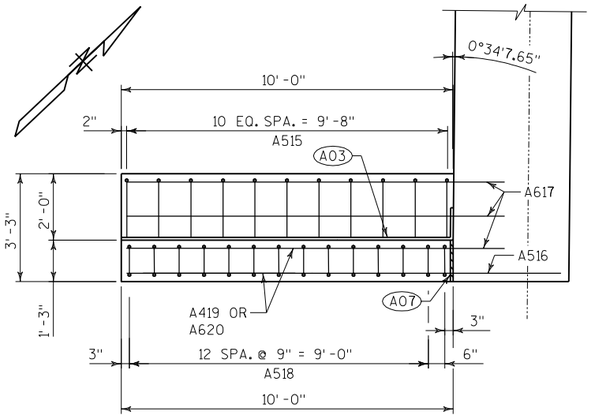
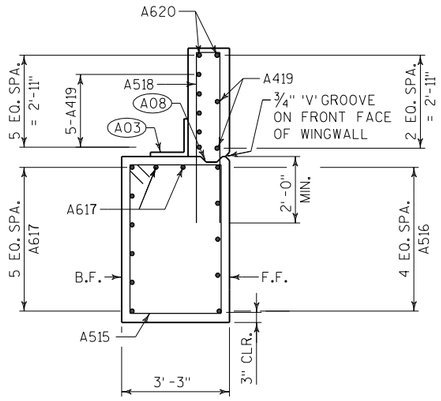
5/30/2014

STATE PROJECT NUMBER

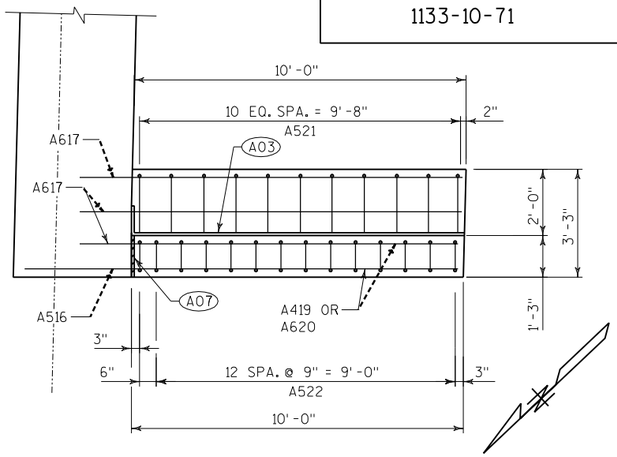
1133-10-71



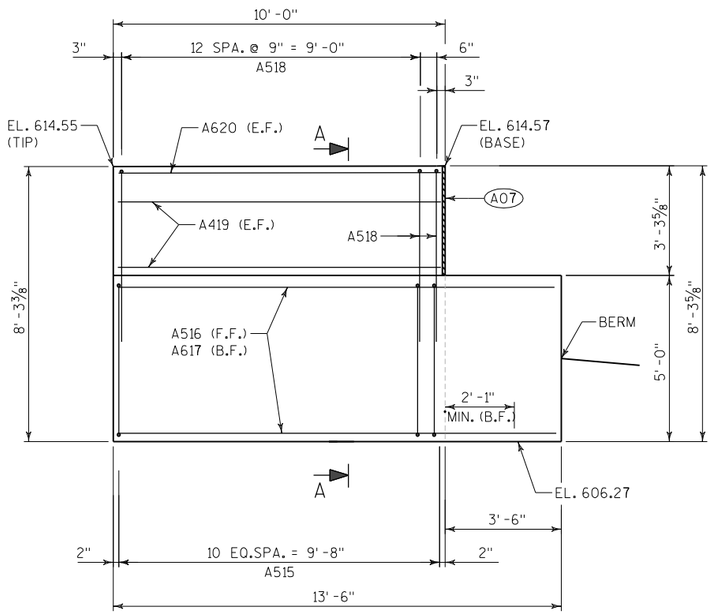
WING 1 PLAN



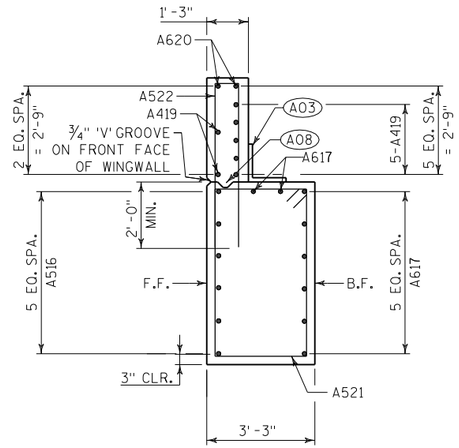
SECTION A-A



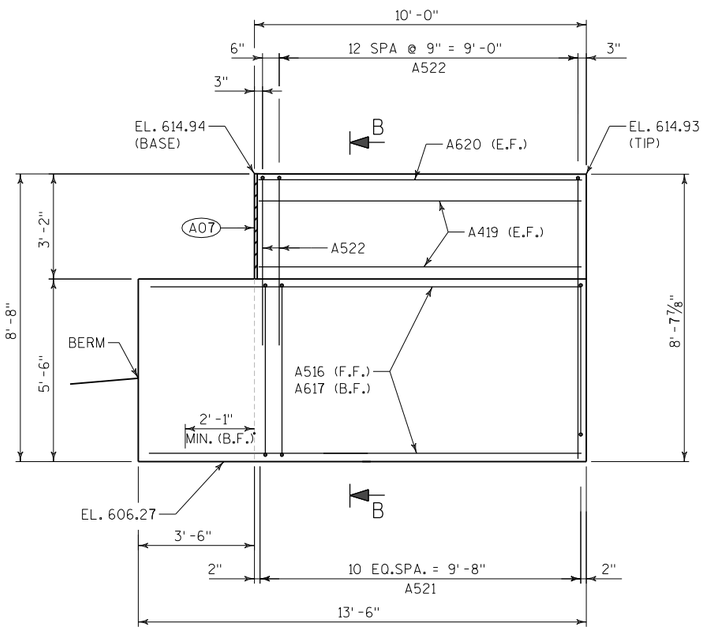
WING 2 PLAN



WING 1 ELEVATION
(FRONT FACE)



SECTION B-B



WING 2 ELEVATION
(FRONT FACE)

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LEGEND

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A07) ½" FILLER (INCLUDED IN WING LENGTH) TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A08) CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

NOTES

SEE SHEET 5 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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ABUTMENT
WING WALL #1 & #2

SHEET 6 OF 23

814

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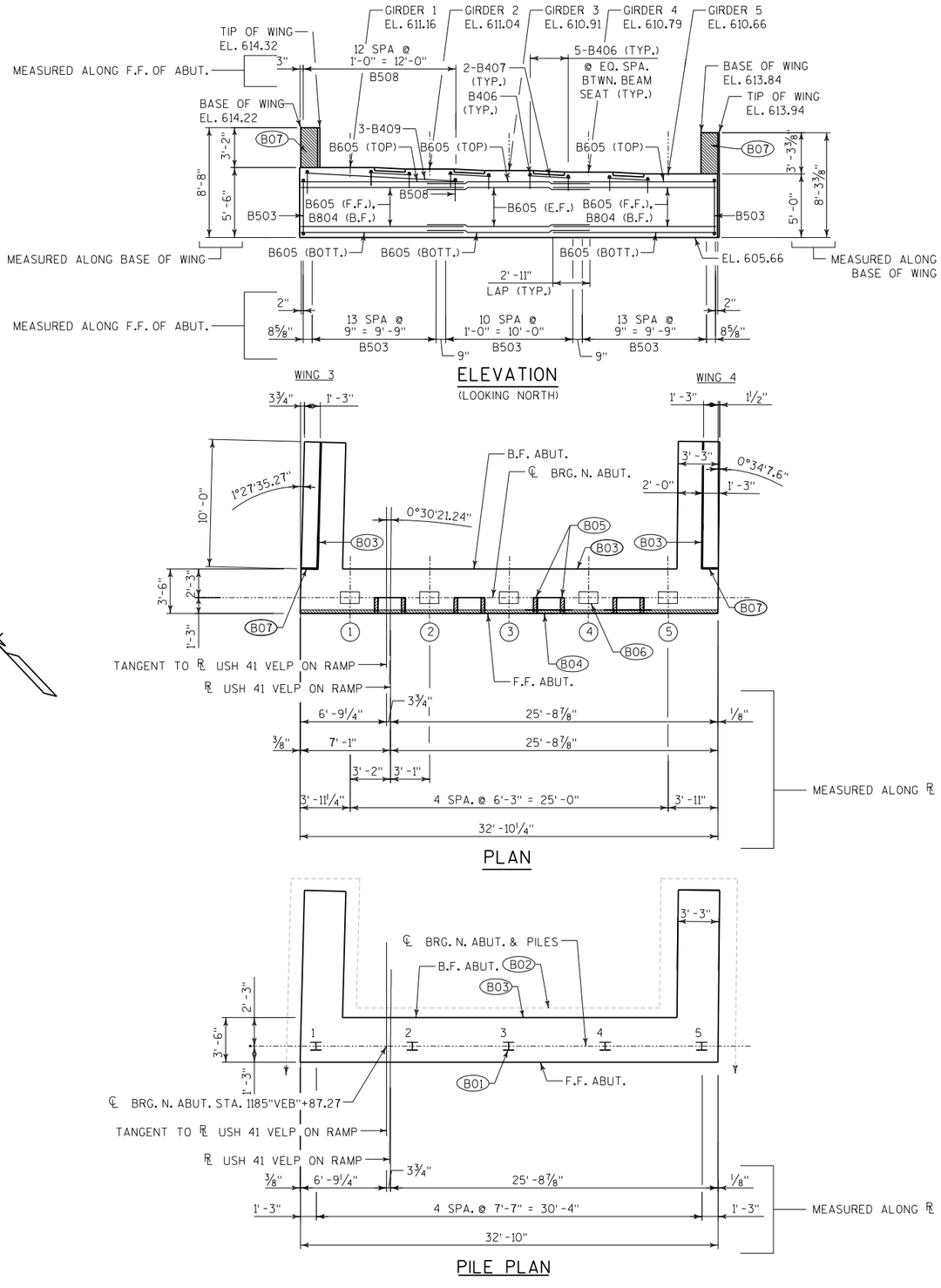
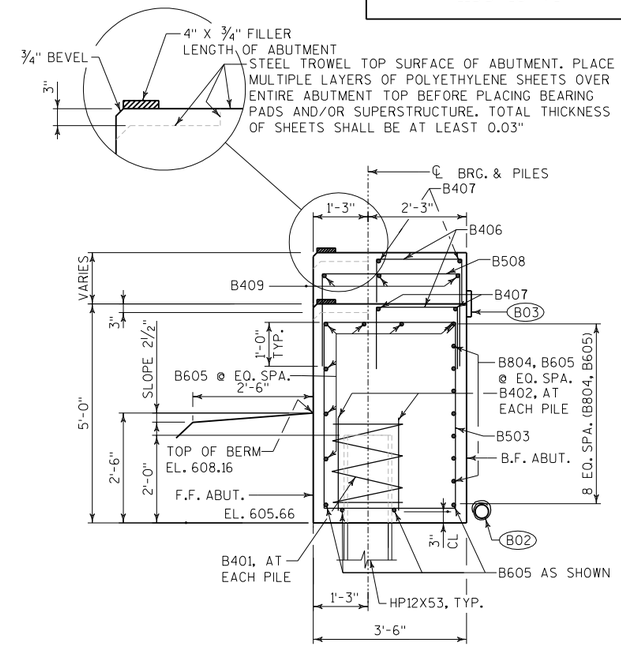
5/30/2014

STATE PROJECT NUMBER

1133-10-71





SECTION THRU BODY

LEGEND

(B01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 85'-0" LONG. PILE POINTS REQUIRED.

(B02) PIPE UNDERDRAIN, WRAPPED 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B04) 4" X ¾" FILLER

(B05) ¾" CORK FILLER ON VERT BEAM SEAT FACES THAT RUN PARALLEL TO GIRDER, TYP.

(B06) ½"X8"X1'-10" NON-LAMINATED ELASTIC BEARING PAD.

(B07) ½" FILLER (INCLUDED IN WING LENGTH) TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SEAL ALL HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NOTES

SEE SHEET 17 FOR BEARING PAD DETAIL.

SEE SHEET 8 FOR BILL OF BARS AND BENDING DIAGRAMS.

SEE SHEET 5 FOR PILE SPLICE DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-05-0675

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NORTH ABUTMENT

SHEET 7 OF 23

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8/11/2014

STATE PROJECT NUMBER
1133-10-71

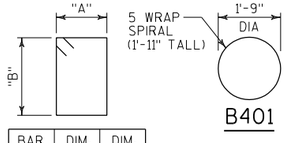
NOTES

SEE SHEET 7 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 17 FOR BEARING PAD DETAIL.

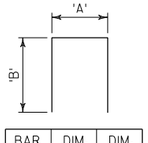
BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
B401	-	5	28'-0"	X	-	ABUTMENT PILES - 1 PER PILE	VERTICAL
B402	-	10	2'-3"	-	-	ABUTMENT PILES - 2 PER PILE	VERTICAL
B503	-	41	15'-7"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
B804	-	14	12'-10"	-	-	ABUTMENT BODY BF, ENDS	HORIZONTAL
B605	-	40	12'-10"	-	-	ABUTMENT BODY FF, TOP & BOTT	HORIZONTAL
B406	-	20	3'-9"	X	-	ABUTMENT BODY - TOP BTWN SEATS	VERTICAL
B407	-	8	5'-9"	-	-	ABUTMENT BODY - BTWN SEATS	HORIZONTAL
B508	-	13	6'-5"	X	-	ABUTMENT BODY	VERTICAL
B409	-	3	12'-0"	-	-	ABUTMENT BODY	HORIZONTAL
-	-	-	-	-	-	-	-
B515	-	11	16'-1"	X	-	WING WALL 3	VERTICAL
B516	-	11	13'-2"	-	-	WING WALL 3 & 4	HORIZONTAL
B617	-	16	11'-11"	-	-	WING WALL 3 & 4	HORIZONTAL
B518	X	14	10'-4"	X	-	WING WALL 3 TOP	VERTICAL
B419	X	14	9'-6"	-	-	WING WALL 3 & 4 TOP	HORIZONTAL
B620	X	4	9'-6"	-	-	WING WALL 3 & 4 TOP	HORIZONTAL
B521	-	11	15'-1"	X	-	WING WALL 4	VERTICAL
B522	X	14	10'-8"	X	-	WING WALL 4 TOP	VERTICAL



B401

BAR MARK	DIM. A	DIM. B
B503	3'-2"	4'-4"
B515	2'-9"	5'-0"
B521	2'-9"	4'-6"



BAR MARK	DIM. A	DIM. B
B406	1'-11"	1'-0"
B508	3'-2"	1'-9"
B518	11"	4'-10"
B522	11"	5'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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NORTH ABUTMENT DETAILS

SHEET 8 OF 23

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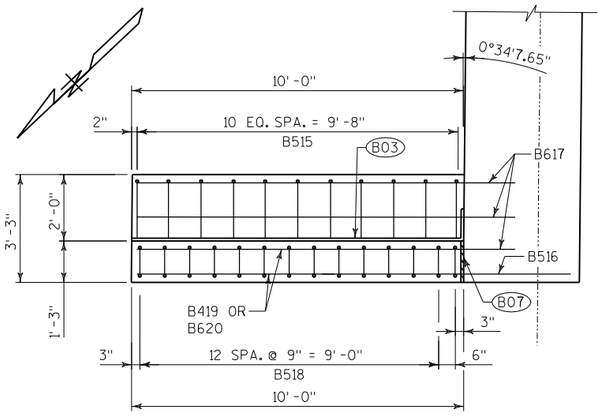
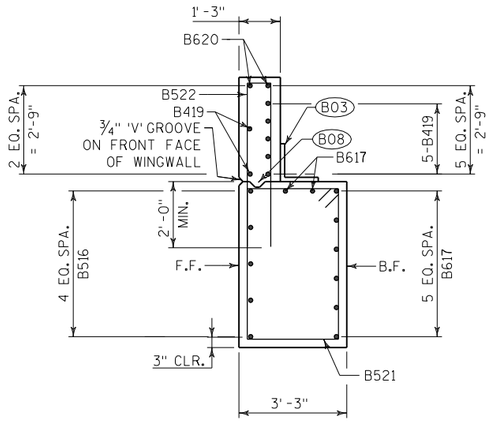
5/30/2014

STATE PROJECT NUMBER

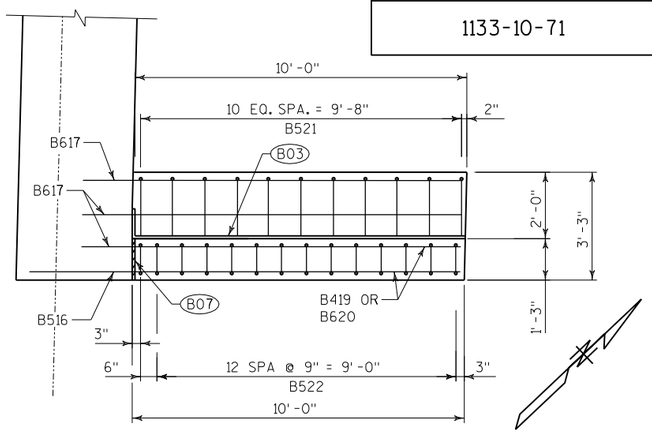
1133-10-71



WING 3 PLAN



SECTION B-B



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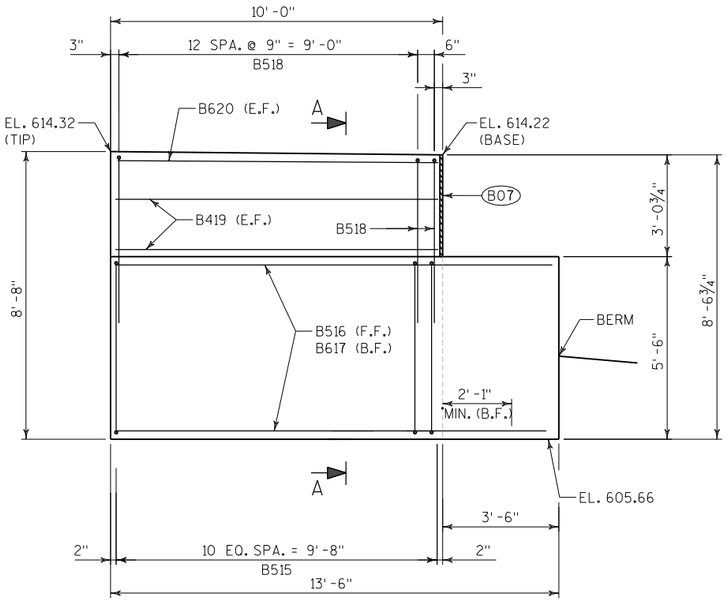
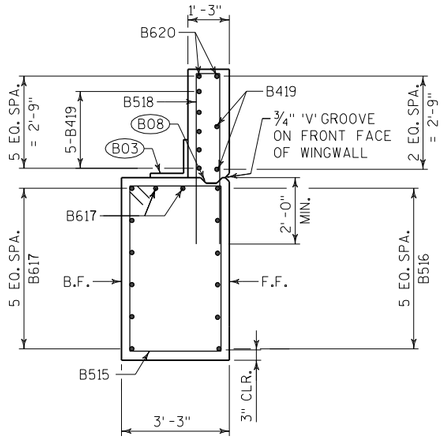
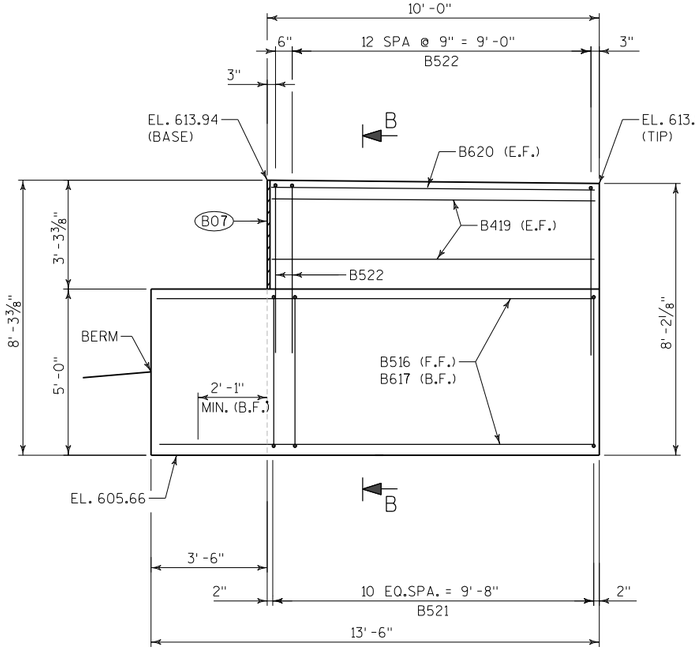


WING 3 ELEVATION
(FRONT FACE)



SECTION A-A



WING 4 ELEVATION
(FRONT FACE)

LEGEND

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B07) ½" FILLER (INCLUDED IN WING LENGTH) TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(B08) CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

NOTES

SEE SHEET 8 FOR BILL OF BARS AND BENDS.

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STRUCTURE B-05-0675

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ABUTMENT
WING WALL
#3 & #4

SHEET 9 OF 23

817

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5/30/2014

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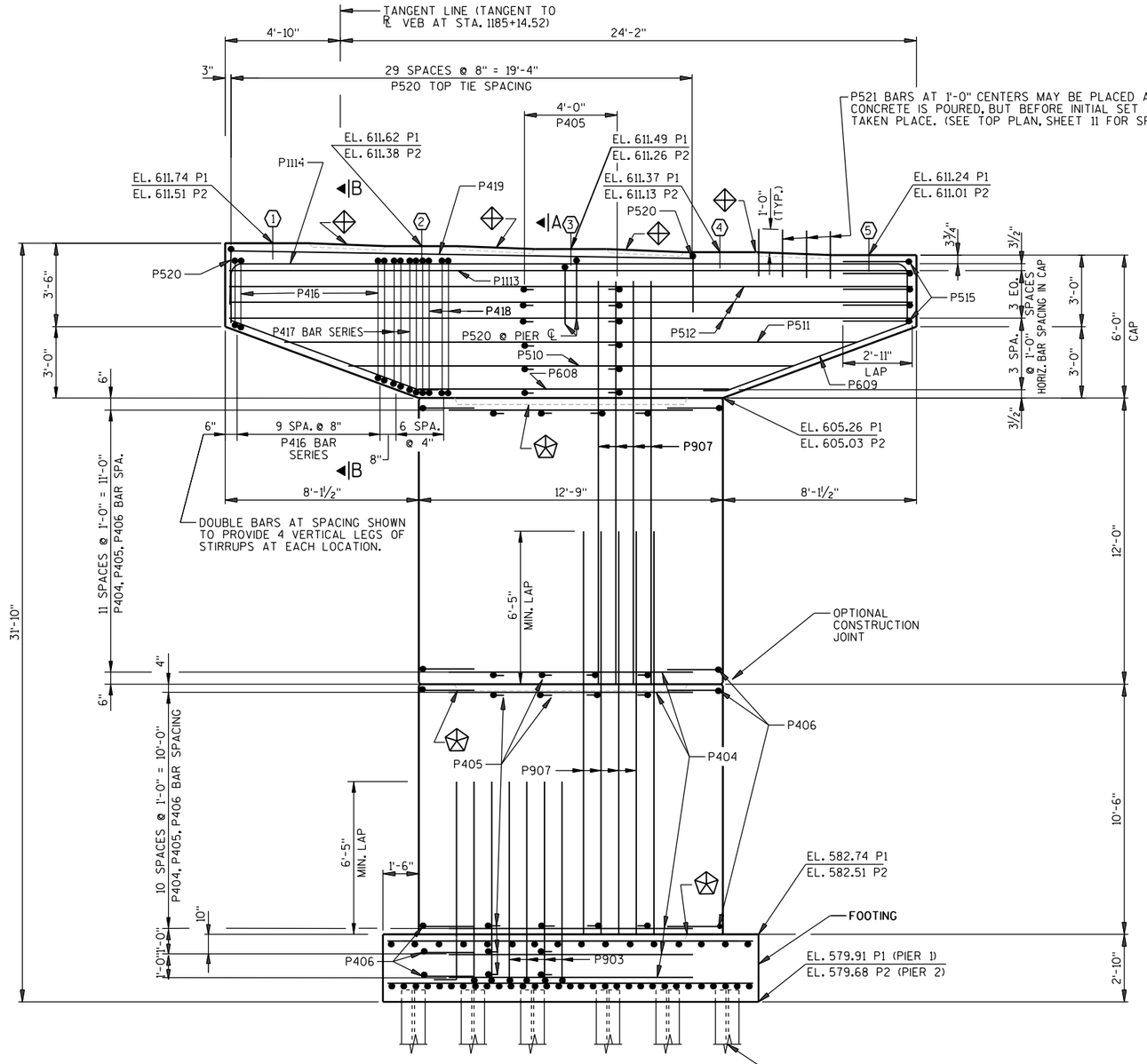
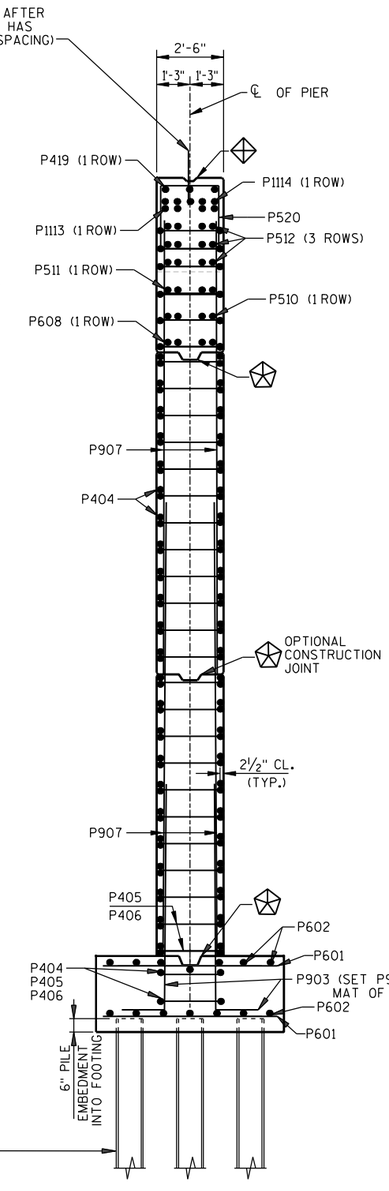
1133-10-71



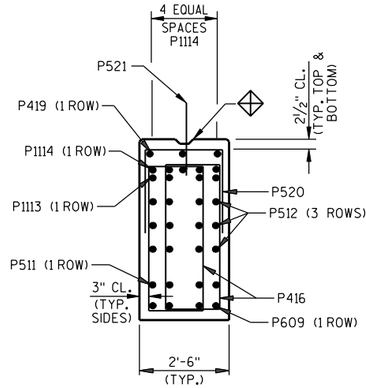
◀|A

ELEVATION

(LOOKING NORTH)



SECTION A-A



SECTION B-B

LEGEND

⬡ - DENOTES GIRDER NUMBER.

◈ - KEYED CONST. JOINT FORMED BY BEVELED 2 x 6 KEYWAY.

⛤ - CONST. JOINT FORMED BY BEVELED KEYWAY 4" DEEP x 10" WIDE x 7'-6" LONG. CENTER ON PIER SHAFT.

P1 - PIER 1

P2 - PIER 2

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PIERS

SHEET 10 OF 23

818

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8/11/2014

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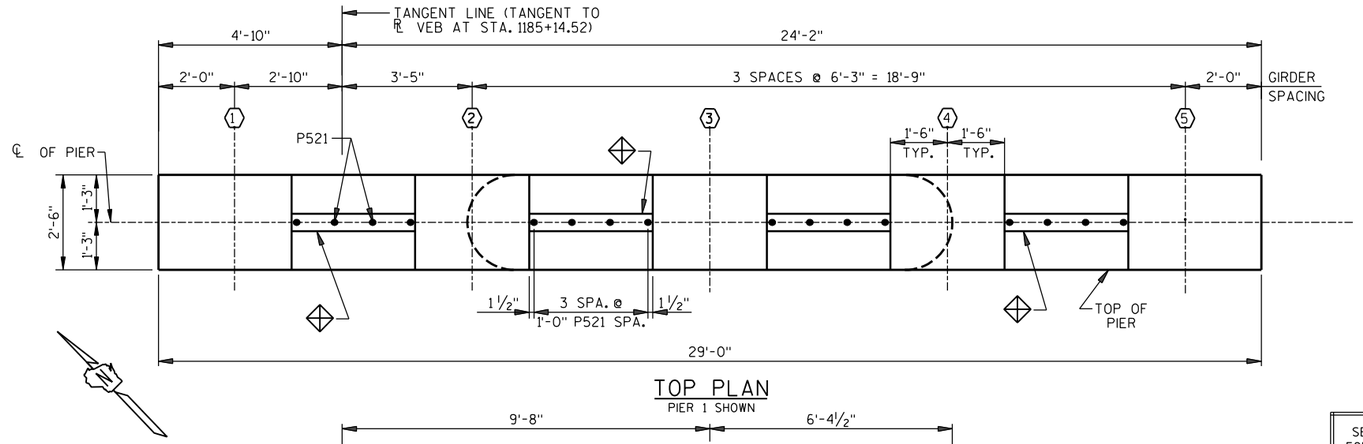
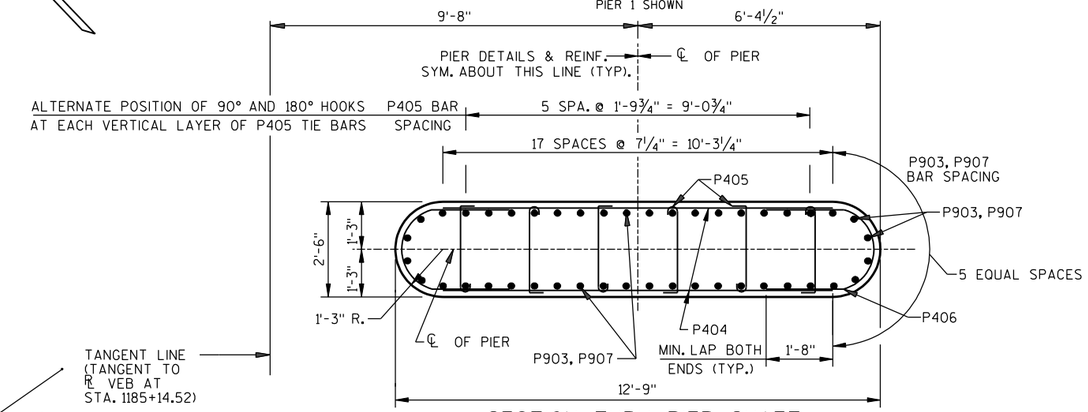
1133-10-71

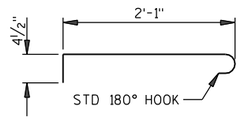


TOP PLAN
PIER 1 SHOWN



SECTION THRU PIER SHAFT

SEE SHEET 12 FOR LEGEND OF ⊕ ⬡



P405

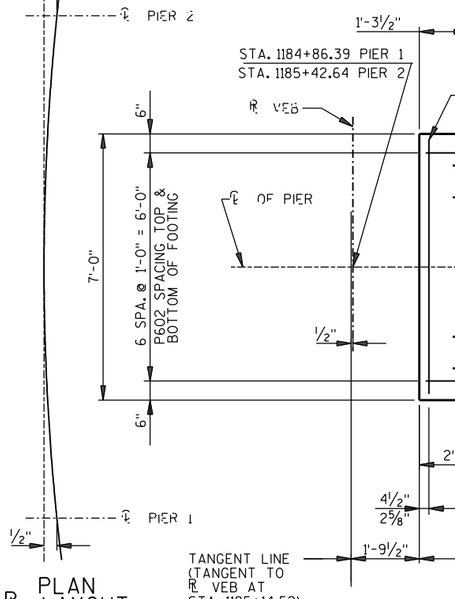
BILL OF BARS (PIER 1) 11,395 LBS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
P601	52	6'-6"			PIER FOOTING - HORIZ.
P602	14	15'-3"			PIER FOOTING - HORIZ.
P903	44	10'-0"	X		PIER FOOTING & SHAFT - DOWELS - VERT.
P404	50	10'-3"			PIER SHAFT - HORIZ.
P405	162	2'-11"	X		PIER SHAFT & CAP - TIES - HORIZ.
P406	50	6'-7"	X		PIER SHAFT - TIES AT ENDS - HORIZ.
P907	88	16'-11"			PIER SHAFT & CAP - VERT.
P608	4	13'-3"			PIER CAP - BOTTOM - HORIZ.
P609	8	9'-3"	X		PIER CAP - BOTTOM - HORIZ.
P510	4	18'-7"			PIER CAP - HORIZ.
P511	4	24'-0"			PIER CAP - HORIZ.
P512	12	28'-7"			PIER CAP - HORIZ.
P1113	4	28'-7"			PIER CAP - HORIZ.
P1114	5	32'-7"	X		PIER CAP - TOP - HORIZ.
P515	10	7'-8"	X		PIER CAP - AT ENDS - HORIZ.
P416	40	11'-6"	X	⊗	PIER CAP - STIRRUPS - VERT.
P417	12	14'-5"	X	⊗	PIER CAP - STIRRUPS - VERT.
P418	16	14'-10"	X		PIER CAP - STIRRUPS - VERT.
P419	3	19'-6"			PIER CAP - TOP - HORIZ.
P520	32	6'-0"	X		PIER CAP - TOP - TIES - VERT.
P521	16	2'-0"			PIER CAP - TOP - DOWELS - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

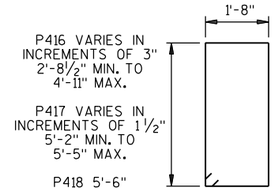
⊗ - LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

BAR MARKS FOR PIER 1 (SOUTH PIER) ARE SHOWN (P601 THRU P521).
LABEL AND BUNDLE PIER 2 (NORTH PIER) BARS WITH N MARK (N601 THRU N521).

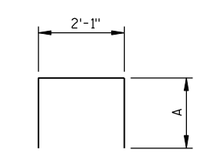


PLAN ℄ LAYOUT

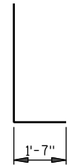
FOOTING & LAYOUT PLAN



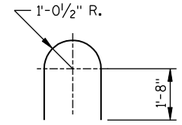
P416, P417, P418



BAR MARK	A
P515	2'-11"
P520	2'-1"



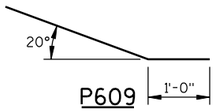
P903



P406

BAR SERIES TABLE

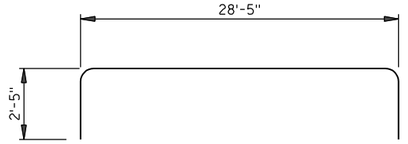
BAR MARK	NO. REQ'D.	LENGTH
P416	4 SERIES OF 10	9'-3" TO 13'-8"
P417	4 SERIES OF 3	14'-2" TO 14'-8"



P609

NOTE:

SEE GENERAL PLAN, SHEET 1, FOR LAYOUT OF TEMPORARY SHORING RAILROAD B-05-0675 NEAR PIER 2.



P1114

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STRUCTURE B-05-0675

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PIER DETAILS

SHEET 11 OF 23

819

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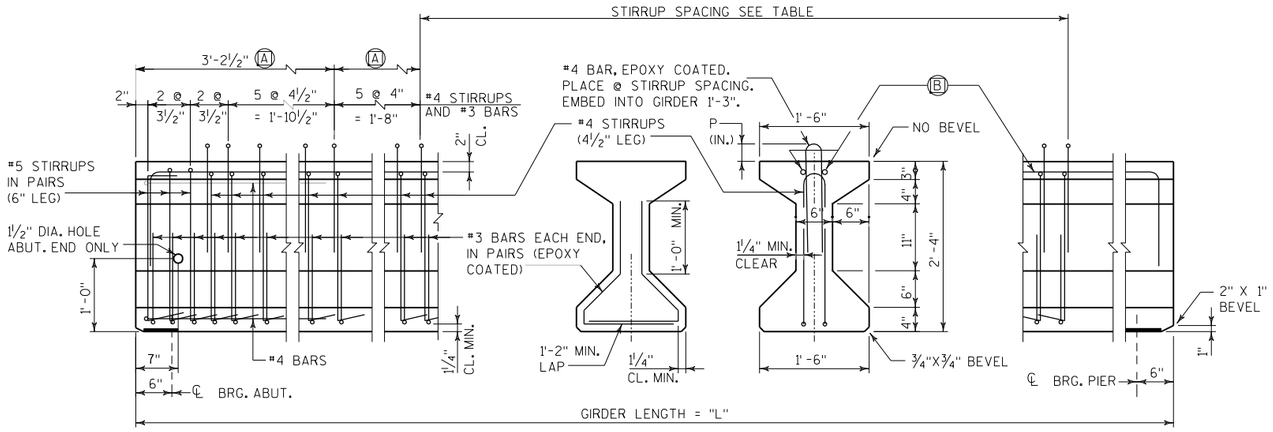
5/30/2014

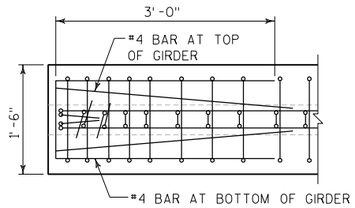
STATE PROJECT NUMBER
1133-10-71



SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 2-BARS BEND DOWN 16 BAR DIA. AT ENDS



TOP VIEW OF GIRDER ENDS

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 2" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 2" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

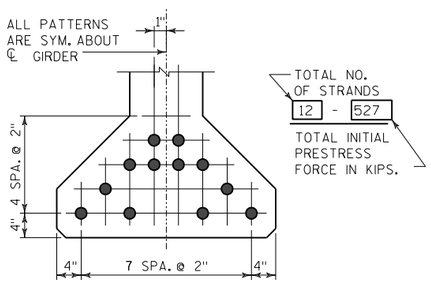
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

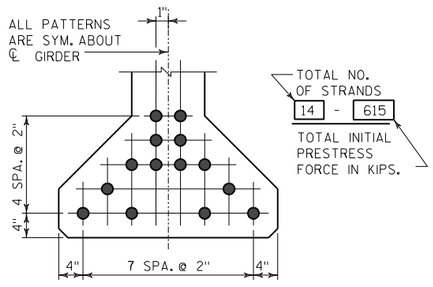
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

BEND EACH END OF #4 STIRRUPS 4½" AND #5 STIRRUPS 6". FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.



SPAN 1 & 3 STRAND PATTERN



SPAN 2 STRAND PATTERN

STIRRUP SPACING			
SPAN	LOCATION	BAR SIZE	SPACING
1 & 3	FROM END TO 4'-10½"	AS SHOWN	AS SHOWN
	FROM 4'-10½" TO 15'-0"	#4	7"
	FROM 15'-0" TO MIDSPAN	#4	15"
2	FROM END TO 4'-10½"	AS SHOWN	AS SHOWN
	FROM 4'-10½" TO 18'-8"	#4	7"
	FROM 18'-8" TO MIDSPAN	#4	15"

SPACING IS SYMMETRICAL ABOUT MIDSPAN OF GIRDER

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P"	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ☆	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ☆
1	1	45'-0"	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	8000	6	0.6	-	-	-	-	-	-	12	6800
	2-4	45'-0"	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	8000	6	0.6	-	-	-	-	-	-	12	6800
	5	45'-0"	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	8000	6	0.6	-	-	-	-	-	-	12	6800
2	1	56'-0"	0.2	0.5	0.7	0.8	0.8	0.8	0.7	0.5	0.2	8000	6	0.6	-	-	-	-	-	-	14	6800
	2-4	56'-0"	0.3	0.5	0.7	0.8	0.9	0.8	0.7	0.5	0.3	8000	6	0.6	-	-	-	-	-	-	14	6800
	5	56'-0"	0.2	0.5	0.7	0.8	0.8	0.8	0.7	0.5	0.2	8000	6	0.6	-	-	-	-	-	-	14	6800
3	1	45'-0"	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	8000	6	0.6	-	-	-	-	-	-	12	6800
	2-4	45'-0"	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	8000	6	0.6	-	-	-	-	-	-	12	6800
	5	45'-0"	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	8000	6	0.6	-	-	-	-	-	-	12	6800

☆MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

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STRUCTURE B-05-0675

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28" PRESTRESSED GIRDER

SHEET 12 OF 23

820

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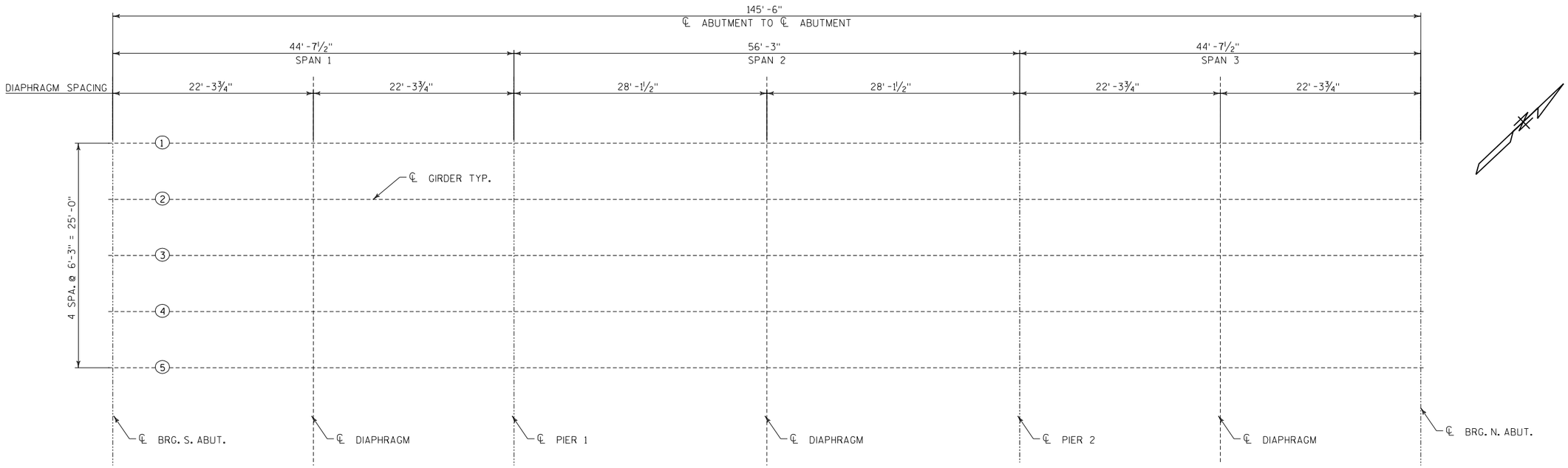
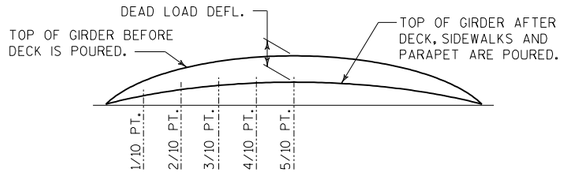
5/30/2014

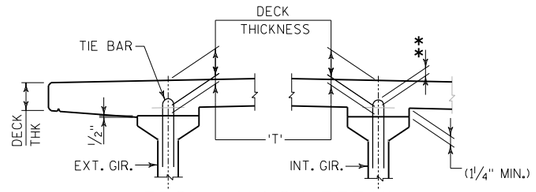
STATE PROJECT NUMBER
1133-10-71



FRAMING PLAN



DEAD LOAD DEFLECTION DIAGRAM



DECK HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION

** IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR, IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2.42" WAS USED IN THE QUANTITY "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES".

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1 & 3	1.5
2	2.5

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

28" PRESTRESSED GIRDER DETAILS

SHEET 13 OF 23

821

8

8

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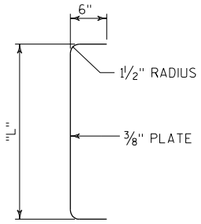
5/30/2014

STATE PROJECT NUMBER
1133-10-71

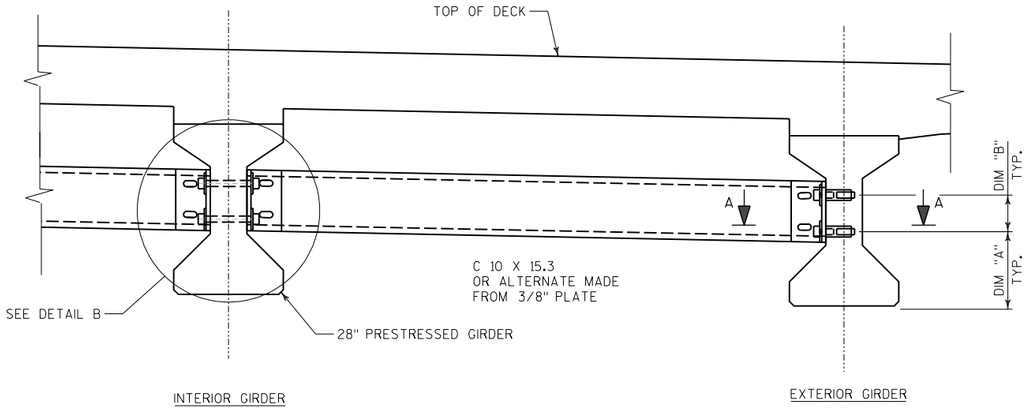
TABLE

GIRDER HEIGHT	DIM "A"	DIM "B"	DIM "L"	* DIM "X"
28"	1'-0 7/8"	5 7/8"	9 1/2"	2 1/4"

* DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM.



SECTION THRU ALTERNATE DIAPHRAGM



PART TRANSVERSE SECTION AT DIAPHRAGM

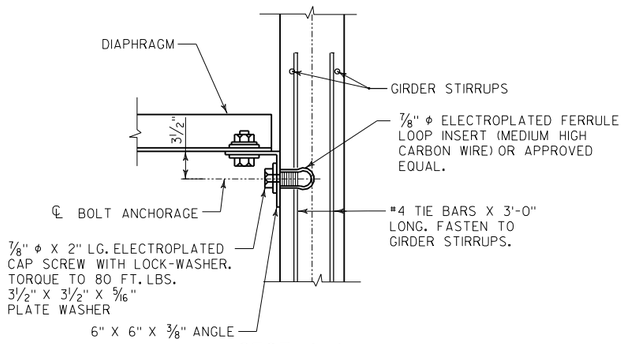
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-05-0675", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

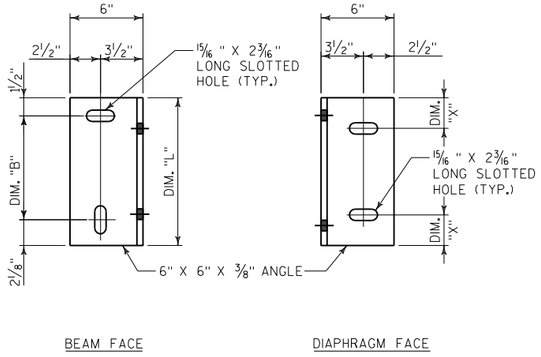
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



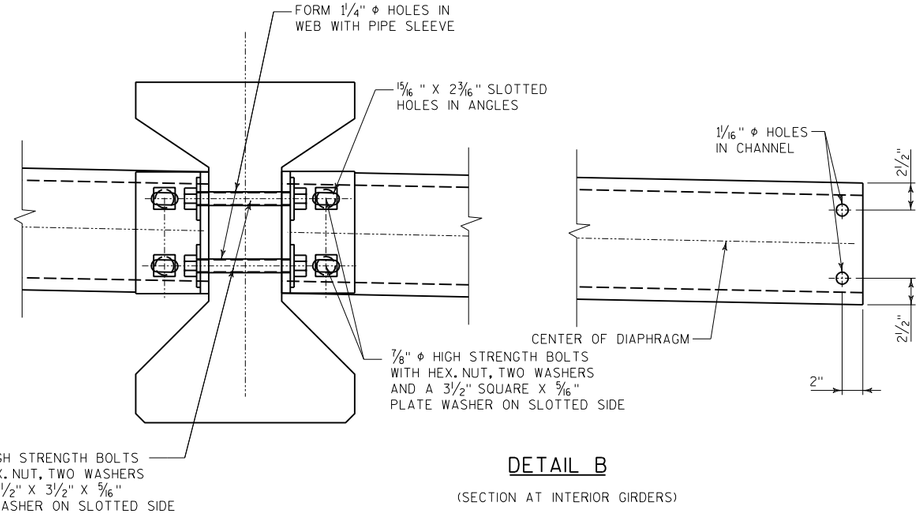
SECT. A-A

(FOR EXTERIOR ATTACMENT)



BEAM FACE DIAPHRAGM FACE

DIAPHRAGM SUPPORT



DETAIL B

(SECTION AT INTERIOR GIRDERS)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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STEEL DIAPHRAGMS

SHEET 14 OF 23

822

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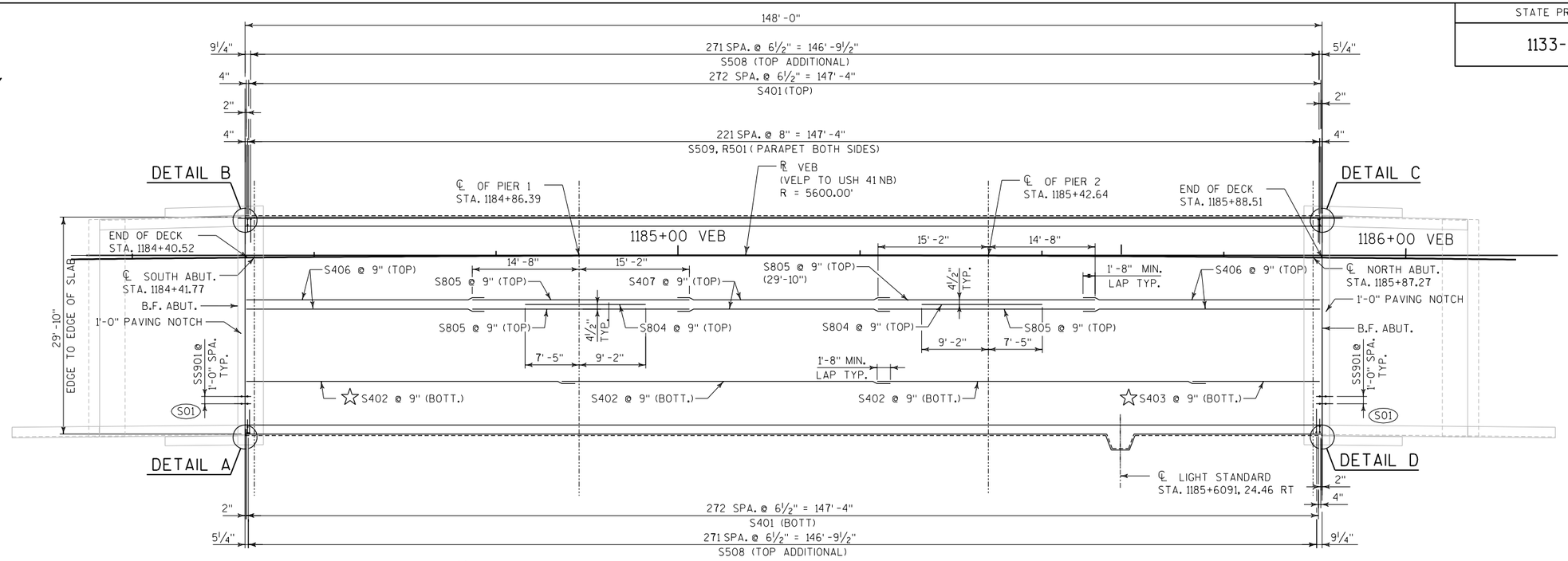
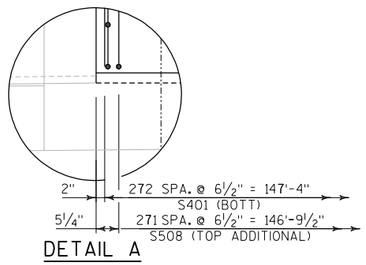
5/30/2014

STATE PROJECT NUMBER
1133-10-71

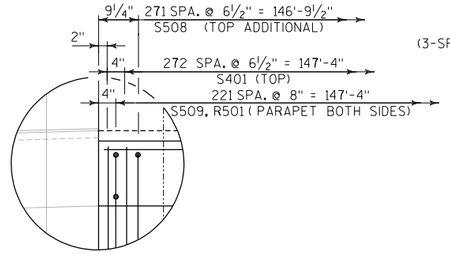


PLAN

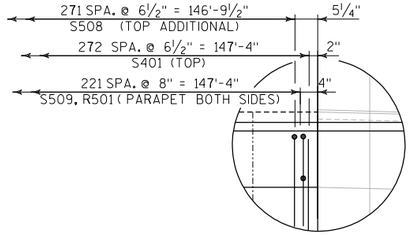
(3-SPAN, 28-INCH PRESTRESSED GIRDER STRUCTURE)



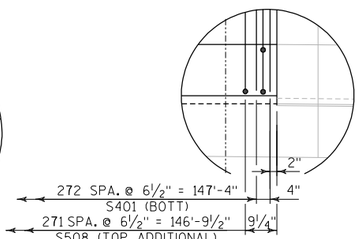
DETAIL A



DETAIL B



DETAIL C



DETAIL D

TOP OF DECK ELEVATIONS

LOCATION	S. ABUT.	SPAN 1									PIER 1	SPAN 2									PIER 2	SPAN 3									N. ABUT.
		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	
FF PARAPET	615.15	615.15	615.15	615.15	615.15	615.15	615.15	615.14	615.14	615.13	615.12	615.11	615.09	615.07	615.05	615.03	615.01	614.98	614.95	614.92	614.89	614.86	614.83	614.80	614.76	614.73	614.69	614.66	614.62	614.58	614.54
G1	615.12	615.13	615.13	615.13	615.13	615.13	615.12	615.12	615.11	615.11	615.10	615.08	615.07	615.05	615.03	615.01	614.98	614.96	614.93	614.90	614.86	614.83	614.80	614.77	614.74	614.71	614.67	614.63	614.60	614.56	614.52
PGL VEB NB	615.06	615.07	615.07	615.07	615.07	615.07	615.07	615.06	615.06	615.05	615.04	615.03	615.01	614.99	614.97	614.95	614.93	614.90	614.87	614.84	614.80	614.78	614.75	614.71	614.68	614.65	614.61	614.57	614.53	614.49	614.45
G2	615.00	615.00	615.00	615.01	615.00	615.00	615.00	614.99	614.99	614.98	614.97	614.96	614.94	614.92	614.90	614.88	614.86	614.83	614.80	614.77	614.74	614.71	614.68	614.65	614.62	614.58	614.55	614.51	614.47	614.43	614.39
G3	614.87	614.88	614.88	614.88	614.88	614.88	614.87	614.87	614.86	614.86	614.85	614.83	614.82	614.80	614.78	614.76	614.73	614.71	614.68	614.65	614.61	614.58	614.55	614.52	614.49	614.46	614.42	614.38	614.35	614.31	614.26
G4	614.75	614.75	614.75	614.76	614.75	614.75	614.75	614.74	614.74	614.73	614.72	614.71	614.69	614.67	614.65	614.63	614.61	614.58	614.55	614.52	614.49	614.46	614.43	614.40	614.36	614.33	614.30	614.26	614.22	614.18	614.14
G5	614.62	614.63	614.63	614.63	614.63	614.62	614.62	614.61	614.61	614.61	614.60	614.58	614.57	614.55	614.53	614.51	614.48	614.46	614.43	614.39	614.36	614.33	614.30	614.27	614.24	614.21	614.17	614.13	614.09	614.06	614.01
FF PARAPET	614.60	614.60	614.61	614.61	614.61	614.60	614.60	614.60	614.59	614.58	614.57	614.56	614.54	614.53	614.51	614.48	614.46	614.43	614.40	614.37	614.34	614.31	614.28	614.25	614.22	614.18	614.15	614.11	614.07	614.03	613.99

LEGEND

☆ ALTERNATE/REVERSE BARS S402 & S403 BOTTOM MAT BAR PATTERN TO RANDOMIZE SPLICE LOCATIONS.

(S01) SEE SHEET 21 FOR SS901 BAR SPACING.

NOTES

1. TRANSVERSE BAR STEEL REINFORCEMENT (S501) AND PARAPET REINFORCEMENT (S509) SHALL BE PLACED PERPENDICULAR TO GIRDERS.
2. THE BOTTOM TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE ENDS OF THE BOTTOM TRANSVERSE BAR STEEL.
3. THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.
4. SEE SHEET 17 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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SUPERSTRUCTURE

SHEET 15 OF 23

823

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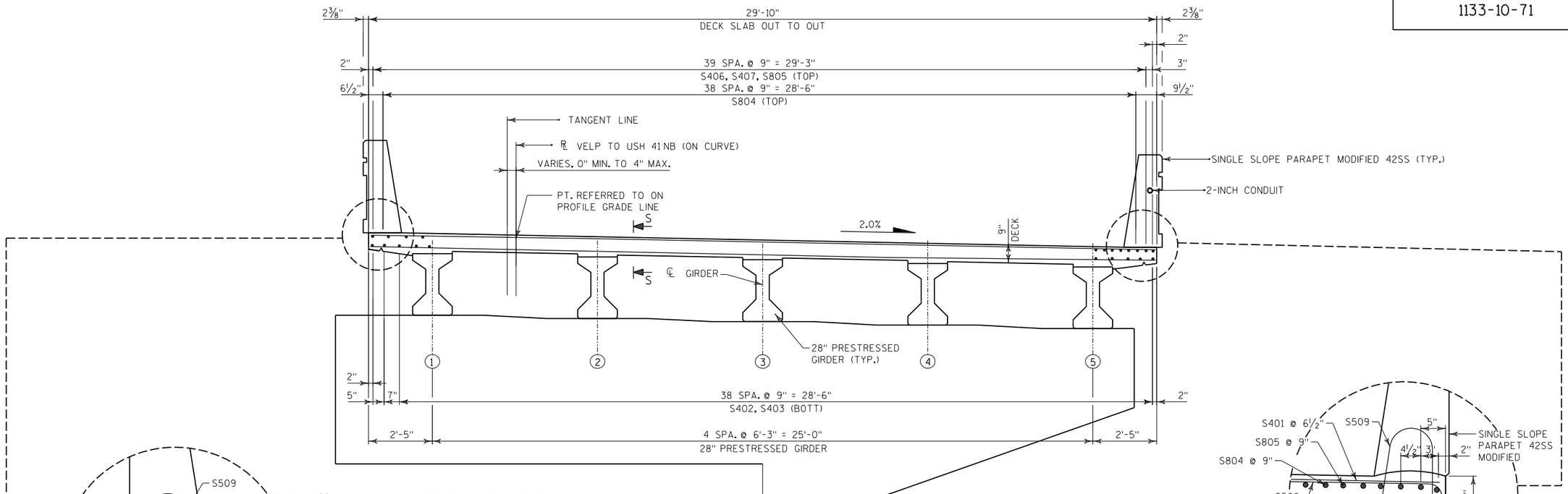
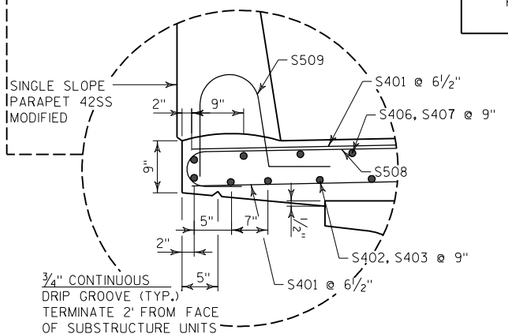
5/30/2014

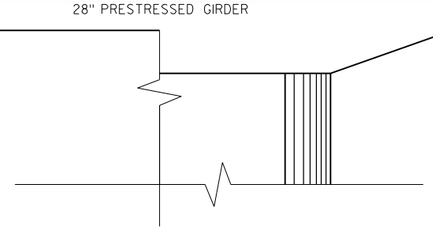
STATE PROJECT NUMBER
1133-10-71





CONC. DIAPH. AT ABUT.

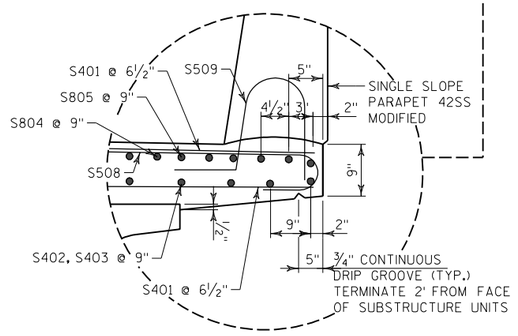
AT MIDSPAN



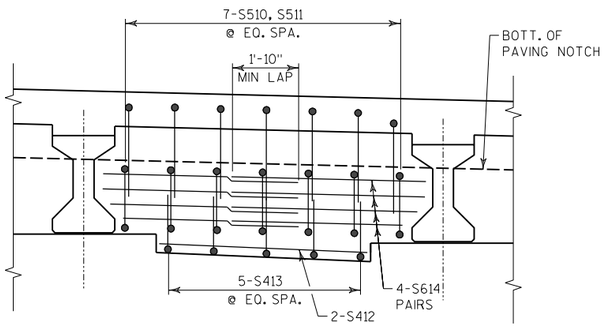
CONT. DIAPH AT PIER

CROSS-SECTION THROUGH ROADWAY

(LOOKING NORTH)



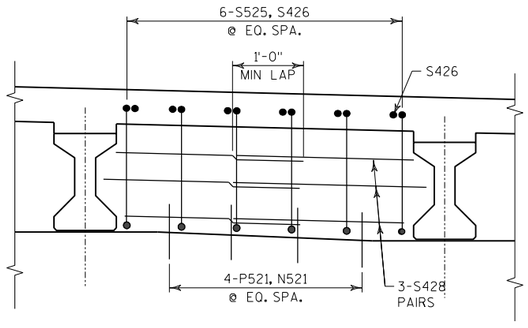
AT PIER



TYP. SECTION

ABUTMENT DIAPHRAGM DETAILS

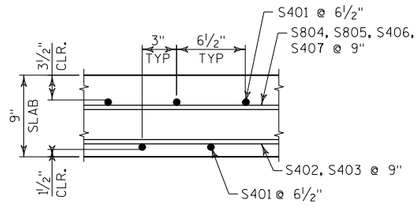
(SEE SHEET 18 FOR ADDITIONAL DETAILS)



TYP. SECTION

PIER DIAPHRAGM DETAILS

(SEE SHEET 18 FOR ADDITIONAL DETAILS)



SECTION S-S

NOTES

SEE SHEET 17 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

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SUPERSTRUCTURE CROSS-SECTION

SHEET 16 OF 23

824

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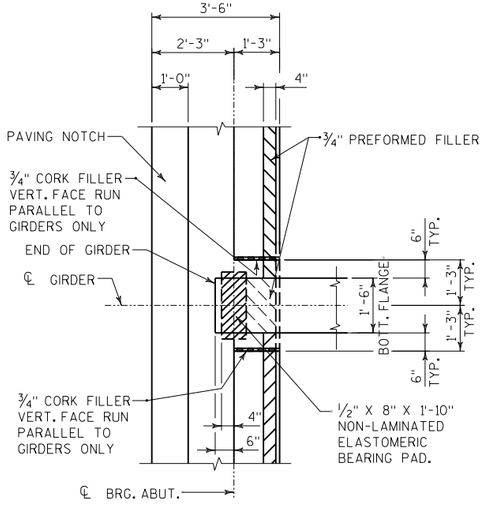
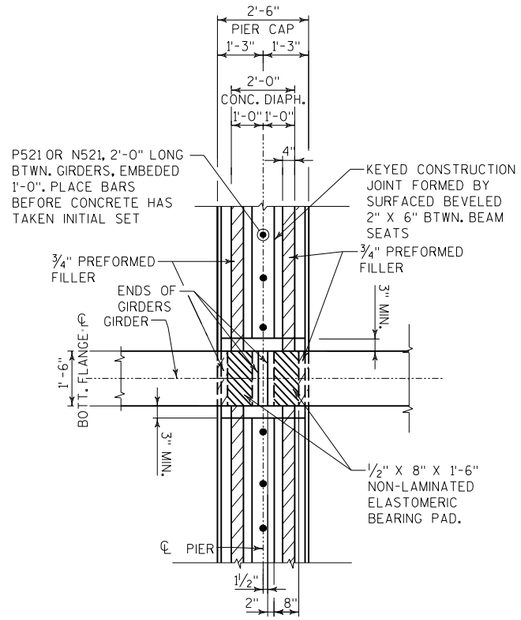
5/30/2014

STATE PROJECT NUMBER

1133-10-71

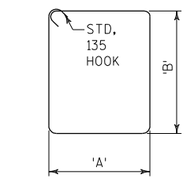


AT ABUTMENTS

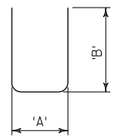


AT PIERS

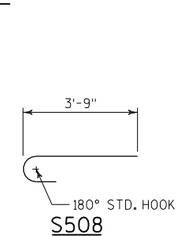
BEARING PAD DETAILS



BAR MARK	DIM. 'A'	DIM. 'B'
S510	3'-2"	1'-6"
S516	3'-2"	2'-11"



BAR MARK	DIM. 'A'	DIM. 'B'
S511	2'-2"	2'-3"
S413	11"	1'-4"
S531	1'-9"	3'-1"
S536	1'-7"	1'-0"



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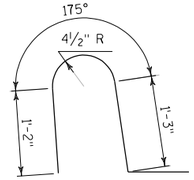
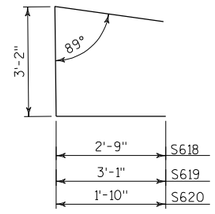
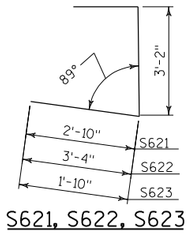


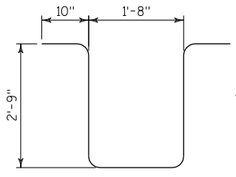
S509



S618, S619, S620



S621, S622, S623



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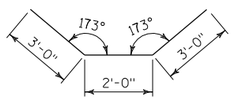
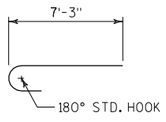


S426



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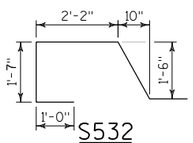

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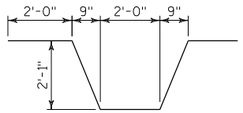

S633

S535

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
S401	X	548	29'-6"	-	-	SLAB - TOP & BOTT	TRANSVERSE
S402	X	123	45'-0"	-	-	SLAB - BOTT	LONGITUDINAL
S403	X	41	17'-8"	-	-	SLAB - BOTT	LONGITUDINAL
S804	X	78	16'-7"	-	-	SLAB - OVER PIERS	LONGITUDINAL
S805	X	82	29'-10"	-	-	SLAB - OVER PIERS	LONGITUDINAL
S406	X	82	32'-9"	-	-	SLAB - TOP	LONGITUDINAL
S407	X	41	29'-3"	-	-	SLAB - TOP	LONGITUDINAL
S508	X	544	4'-4"	X	-	SLAB - TOP	TRANSVERSE
S509	X	444	4'-5"	X	-	PARAPET	VERTICAL
S510	X	68	9'-11"	X	-	ABUT DIAPHRAGM - STIRRUPS	VERTICAL
S511	X	68	6'-5"	X	-	ABUT DIAPHRAGM - STIRRUPS	VERTICAL
S412	X	16	3'-5"	-	-	ABUT DIAPHRAGM ⌀ NOTCH	HORIZONTAL
S413	X	40	3'-5"	X	-	ABUT DIAPHRAGM ⌀ NOTCH	VERTICAL
S614	X	64	3'-8"	-	-	ABUT DIAPHRAGM - FF BTWN GIRDERS	HORIZONTAL
S615	X	24	17'-2"	-	-	ABUT DIAPHRAGM - BF & TOP	HORIZONTAL
S516	X	8	12'-9"	X	-	ABUT DIAPHRAGM - STIRRUPS ENDS	VERTICAL
S417	X	8	2'-11"	-	-	ABUT DIAPHRAGM - ENDS	VERTICAL
S618	X	2	7'-5"	X	-	ABUT DIAPHRAGM EAST EDGE	HORIZONTAL
S619	X	6	7'-9"	X	-	ABUT DIAPHRAGM EAST EDGE	HORIZONTAL
S620	X	6	5'-7"	X	-	ABUT DIAPHRAGM EAST EDGE	HORIZONTAL
S621	X	2	7'-6"	X	-	ABUT DIAPHRAGM WEST EDGE	HORIZONTAL
S622	X	6	8'-0"	X	-	ABUT DIAPHRAGM WEST EDGE	HORIZONTAL
S623	X	6	5'-7"	X	-	ABUT DIAPHRAGM WEST EDGE	HORIZONTAL
S524	X	20	6'-0"	-	-	ABUT DIAPHRAGM - THRU GRIDER	HORIZONTAL
S525	X	48	8'-4"	X	-	PIER DIAPHRAGM - STIRRUPS	VERTICAL
S426	X	48	8'-0"	X	-	PIER DIAPHRAGM	VERTICAL
S427	X	48	4'-5"	-	-	PIER DIAPHRAGM - BTWN GIRDERS	HORIZONTAL
S428	X	48	3'-3"	-	-	PIER DIAPHRAGM - BTWN GIRDERS	HORIZONTAL
-	-	-	-	-	-	-	-
S530	X	12	7'-10"	X	-	LIGHT STD - ADDITIONAL DECK (TOP)	TRANSVERSE
S531	X	4	7'-8"	X	-	LIGHT STD - PARAPET	VERTICAL
S532	X	4	7'-0"	X	-	LIGHT STD - PARAPET	VERTICAL
S633	X	9	10'-0"	X	-	LIGHT STD - PARAPET	HORIZONTAL
S534	X	12	7'-3"	-	-	LIGHT STD - ADDITIONAL DECK (BOTT)	TRANSVERSE
S535	X	2	4'-0"	X	-	LIGHT STD - PARAPET	VERTICAL
S536	X	2	3'-4"	X	-	LIGHT STD - PARAPET	VERTICAL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

SUPERSTRUCTURE BILL OF BARS

SHEET 17 OF 23

825

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5/30/2014

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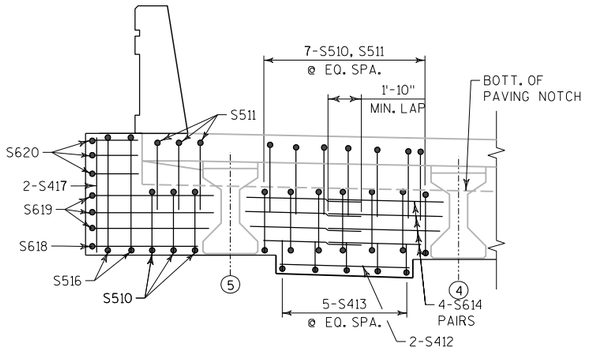
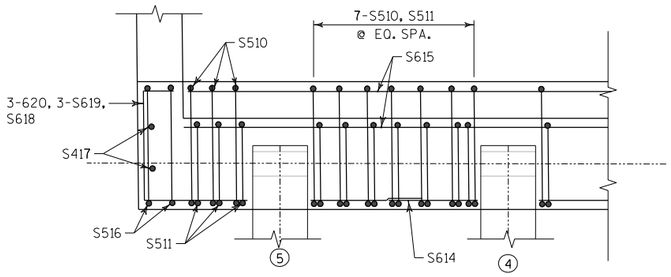
STATE PROJECT NUMBER

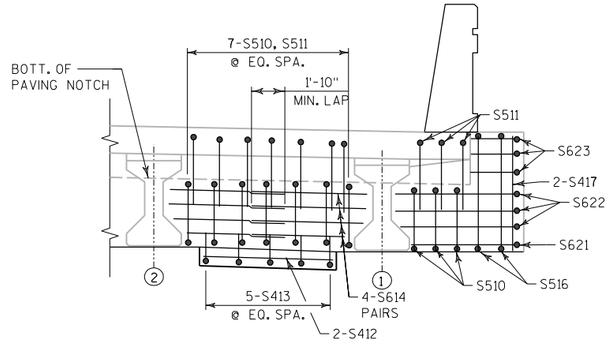
1133-10-71

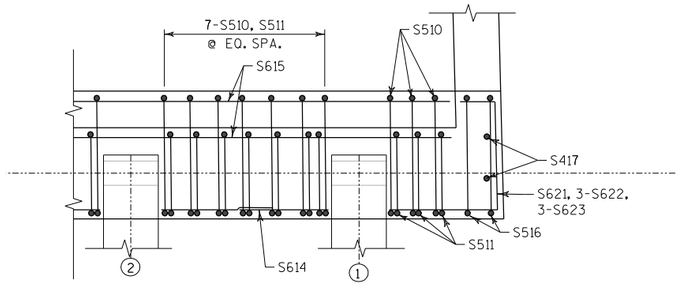




SOUTH-EAST

(MIRROR FOR NORTH-EAST)





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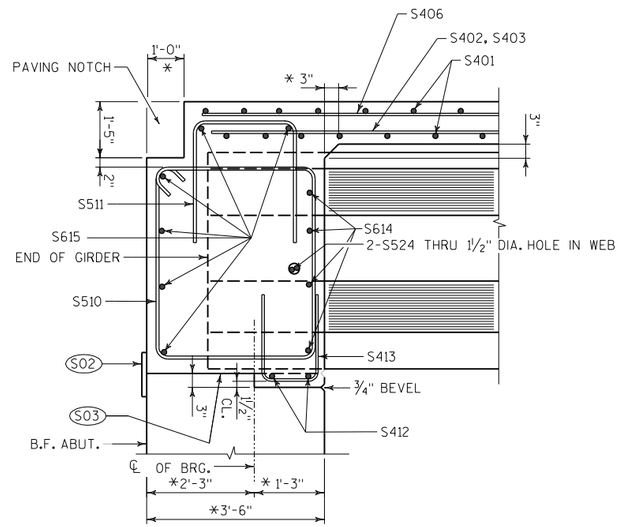
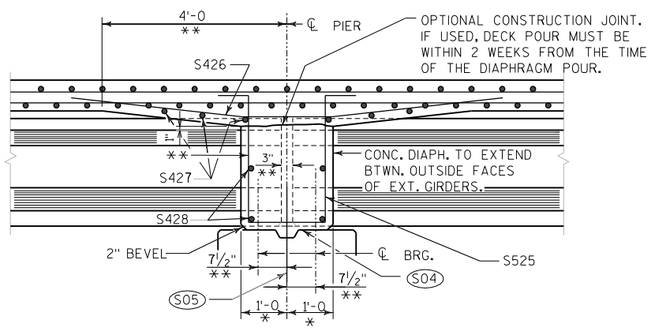
(MIRROR FOR NORTH-WEST)



DIAPHRAGM AT ABUTMENTS

(BTWN. GIRDERS, TYP.)



DIAPHRAGM AT PIER

LEGEND

* DIMENSIONS ARE NORMAL TO ℄ OF SUBSTRUCTURE UNITS

** DIMENSIONS ARE PARALLEL TO THE GIRDER

(S02) RUBBERIZED MEMBRANE WATERPROOFING.

(S03) ½" X 8" X 1'-10" NON-LAMINATED ELASTOMERIC BEARING PAD AND 4" X ¾" PREFORMED FILLER.

(S04) ½" NON-LAMINATED ELASTOMERIC BEARING PAD AND ¾" PREFORMED FILLER.

(S05) P521 OR N521 @ 1'-0" CENTERS BETWEEN GIRDERS. EMBED 1'-0", PLACE BARS BEFORE CONCRETE HAS TAKEN INITIAL SET.

NOTES

ALL VERTICAL BAR STEEL REINFORCMENT IN CONCRETE DIAPHRAGMS SHALL BE PLACED PARALLEL TO THE GIRDERS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

SUPERSTRUCTURE DETAILS

SHEET 18 OF 23

826

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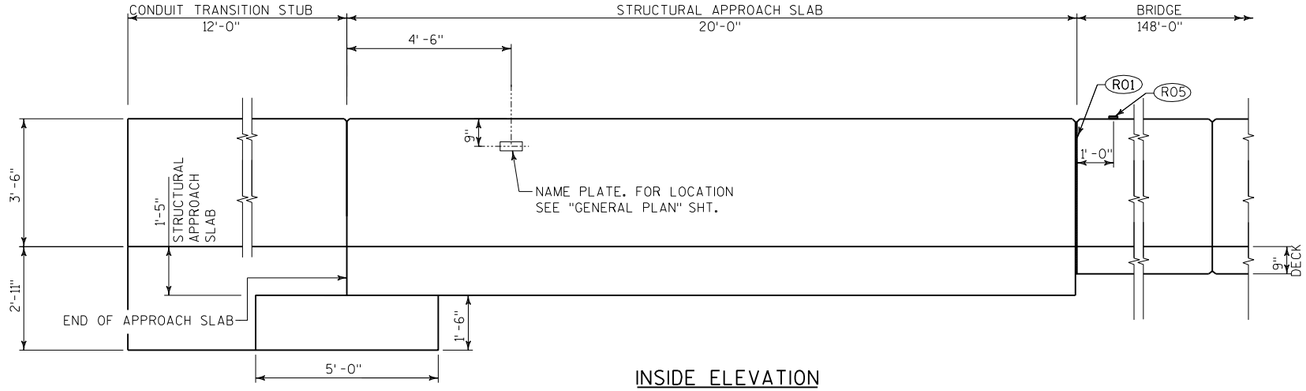
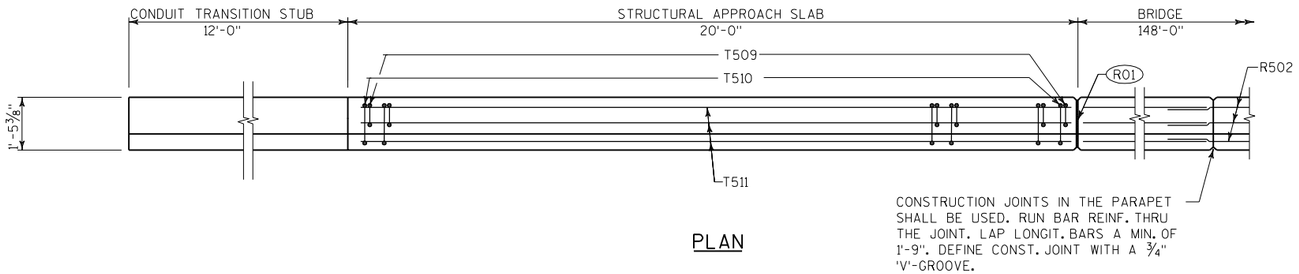
5/30/2014

STATE PROJECT NUMBER

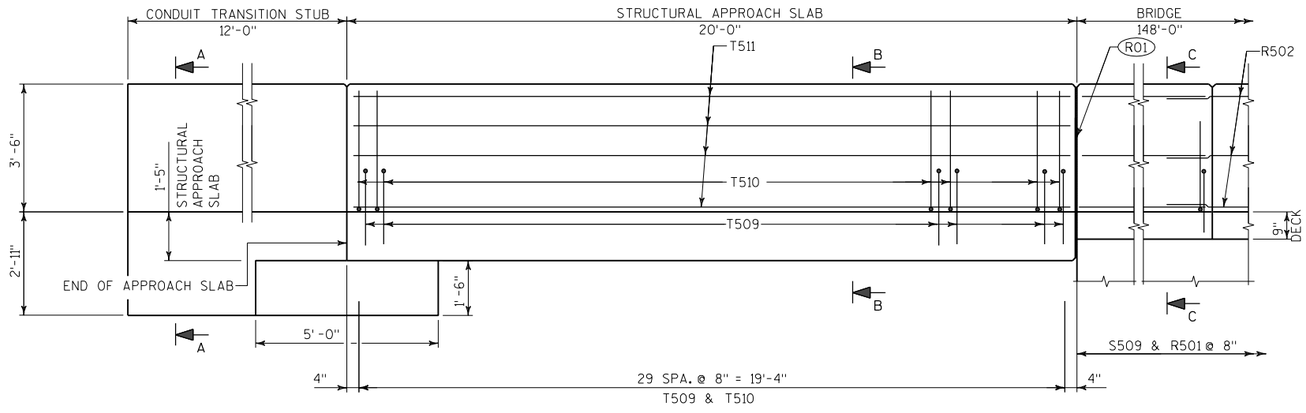
1133-10-71



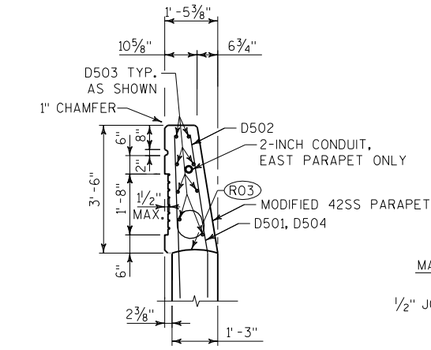
INSIDE ELEVATION



PLAN

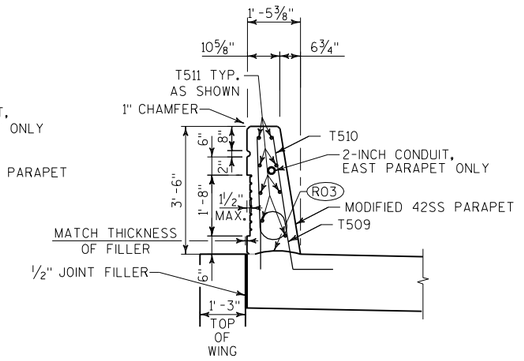


OUTSIDE ELEVATION

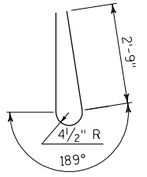


SECTION A-A, PARAPET ON STUB

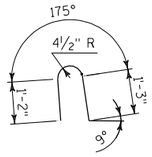
(ON EAST EDGE ONLY)



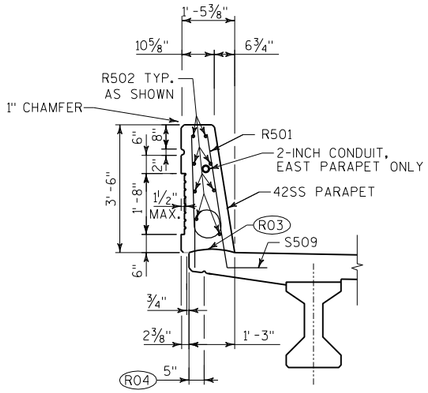
SECTION B-B, PARAPET ON APPROACH SLAB



R501



S509



SECTION C-C, PARAPET ON BRIDGE

LEGEND

(R01) ½" FILLER. SEAL ALL EXPOSED HORIZ. & VERT. SURFACE OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(R02) SLOPE FOR DRAINAGE.

(R03) CONSTRUCTION JOINT. STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(R04) ¾" CONTINUOUS DRIP GROOVE, TERMINATE 2' FROM FACE OF SUBSTRUCTURE UNITS

(R05) BENCH MARK CAP (WHEN SUPPLIED)

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
R501	X	444	6'-8"	X	-	PARAPET	VERTICAL
R502	X	48	50'-6"	-	-	PARAPET	HORIZONTAL

SEE SHEET 15 & 22 FOR ADDITIONAL REBAR INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

SINGLE SLOPE PARAPET 42SS MODIFIED

SHEET 19 OF 23

827

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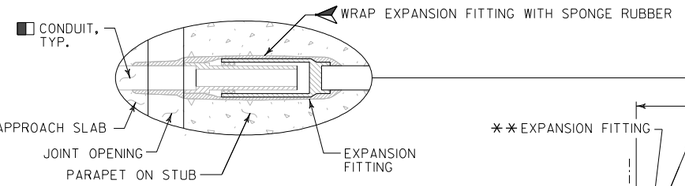
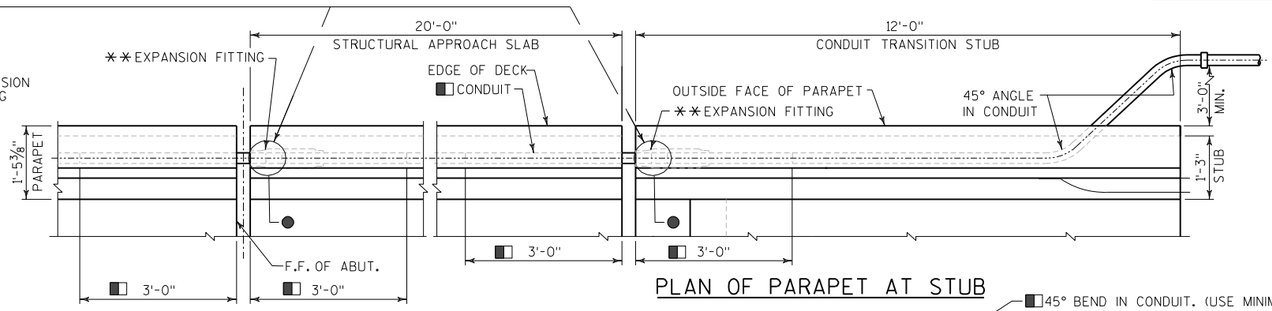
5/30/2014

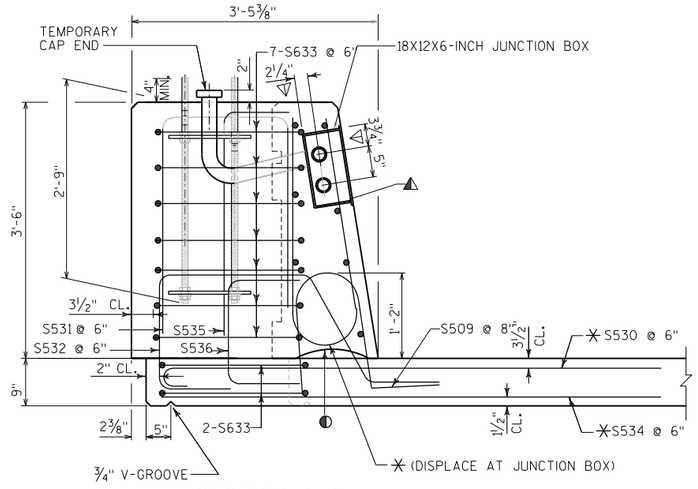
STATE PROJECT NUMBER

1133-10-71

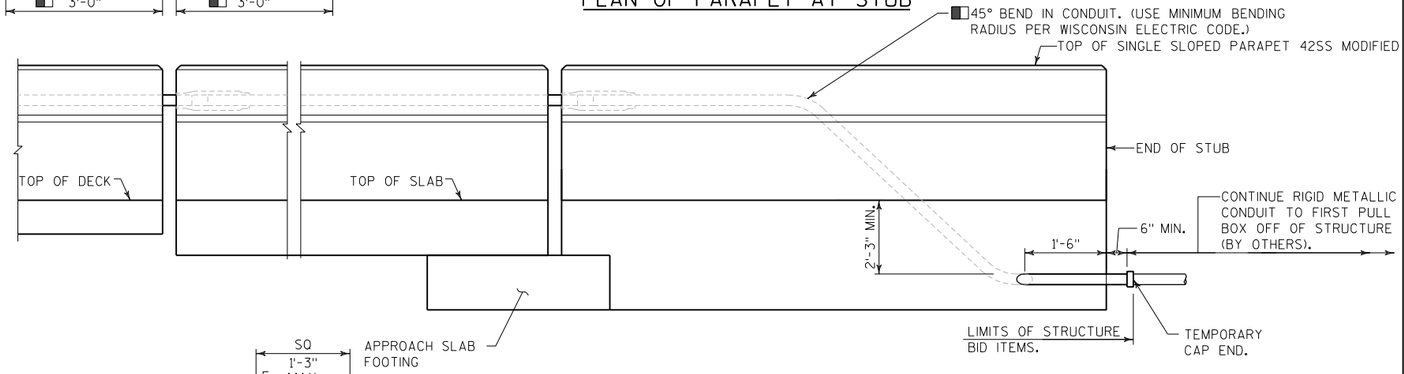




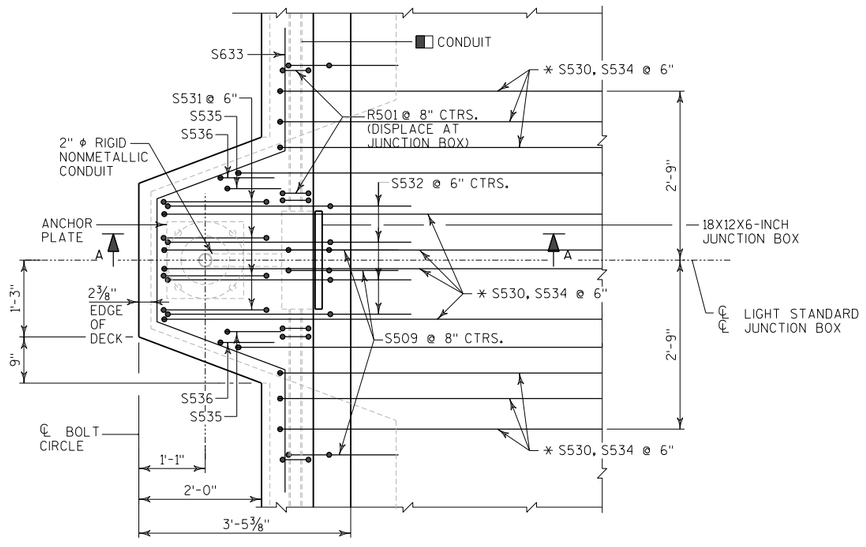
PLAN OF PARAPET AT STUB



SECTION A-A

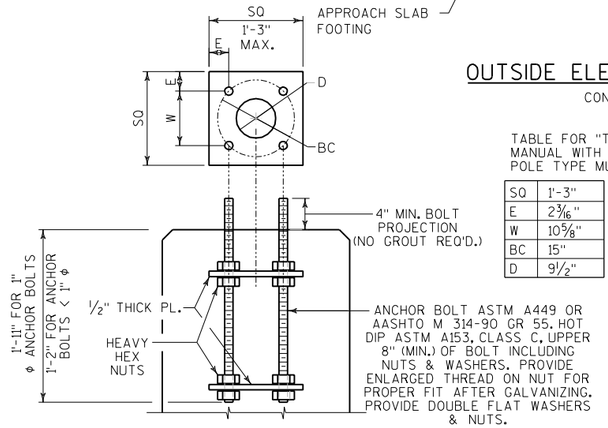


OUTSIDE ELEVATION OF PARAPET AT STUB



PLAN AT LIGHT STANDARD

LONGITUDINAL PARAPET BARS NOT SHOWN FOR CLARITY



ANCHORAGE DETAIL

TABLE FOR "TYPE 5 LIGHT POLE" FROM FACILITIES DEV. MANUAL WITH 1" ϕ ANCHOR BOLTS. (ANY OTHER LIGHT POLE TYPE MUST BE DESIGNED FOR.)

SQ	1'-3"
E	2 3/16"
W	10 5/8"
BC	15"
D	9 1/2"

W = 0.707 X BC
SQ = BC + 2D
D = ANCHOR BOLT DIA.
E = (SQ-W)/2
$D_{MAX.}$ = BC - 2D
$D_{MIN.}$ = 2 X CONDUIT DIA. + 1"

LEGEND

** EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS ARE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH". APPROVED MANUFACTURER OR EQUIVALENT: O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER.

● POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE THE SAME ALLOWANCE FOR MOVEMENT (EXPANSION/CONTRACTION) AS THE EXPANSION DEVICE SET IN PLACE IN THE DECK BELOW IT. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

◐ CONSTR. JT. STRIKE OFF AS SHOWN

■ USE 2"ϕ RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTINGS. AT EXPANSION FITTING USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND WING SIDES OF ABUTMENT JOINTS, AND 3'-0" INTO BOTH PARAPETS AT MODULAR JOINT.

◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

* THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.

△ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

◀ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - 1/4" MINIMUM THICKNESS. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

SEE SHTS. 15 THRU 18 FOR SUPERSTRUCTURE REINFORCEMENT DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

LIGHT STANDARD

SHEET 20 OF 23

828

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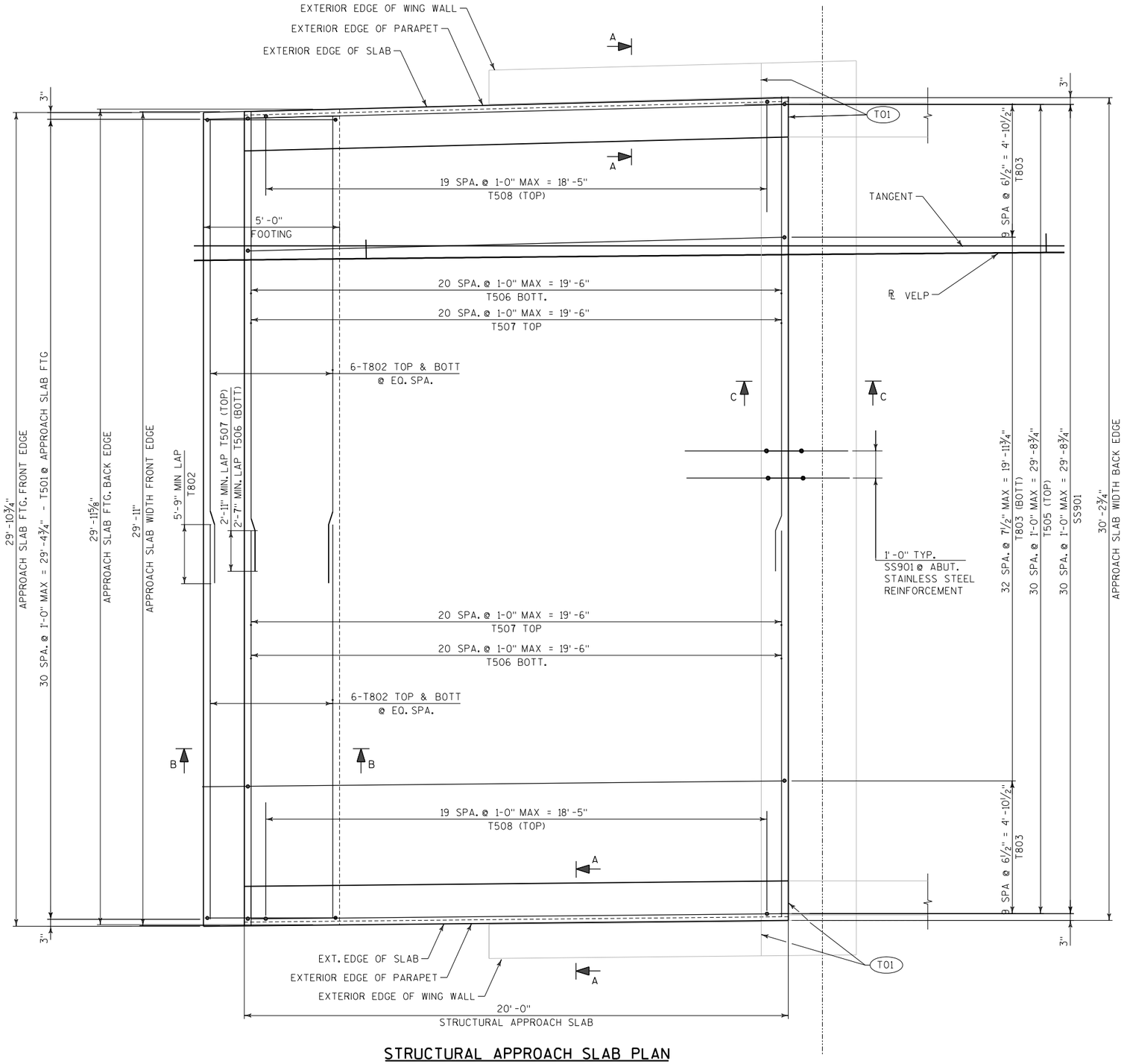
10/7/2014

STATE PROJECT NUMBER
1133-10-71



STRUCTURAL APPROACH SLAB PLAN

(SOUTH SLAB SHOWN, MIRROR FOR NORTH SLAB)

DESIGN DATA

ALLOWABLE SOIL BEARING PRESSURE:	2,000 P.S.F.
CONCRETE STRENGTH F'C:	4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60, FY:	60,000 P.S.I.

LEGEND

(T01) ½" FILLER (INCLUDED IN PARAPET/SLAB LENGTH). SEAL ALL EXPOSED HORIZ. & VERT. SURFACE OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NOTES

SEE SHEET 22 FOR BILL OF BARS.

SEE SHEET 22 FOR SECTION A-A, B-B, AND C-C VIEWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

STRUCTURAL APPROACH SLAB

SHEET 21 OF 23

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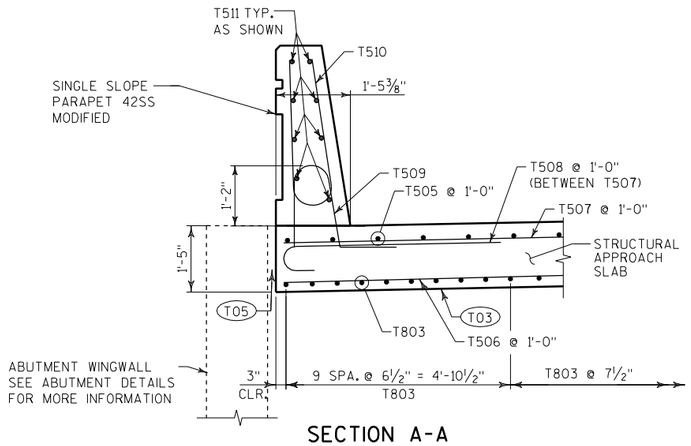
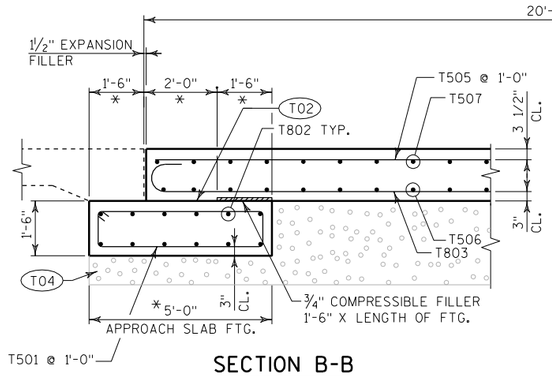
5/30/2014

STATE PROJECT NUMBER
1133-10-71

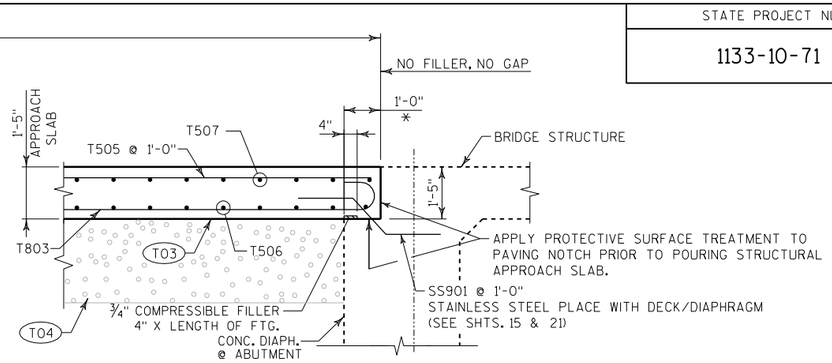


SECTION A-A

(AT WINGWALLS PARALLEL TO BRIDGE)



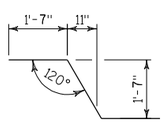
SECTION B-B



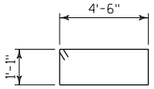
SECTION C-C

TRANSVERSE SECTION THRU STRUCTURAL APPROACH SLAB

* MEASURED NORMAL TO ABUTMENT



SS901



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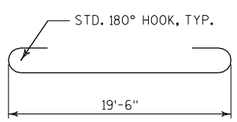
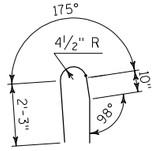


T803



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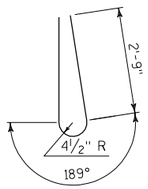

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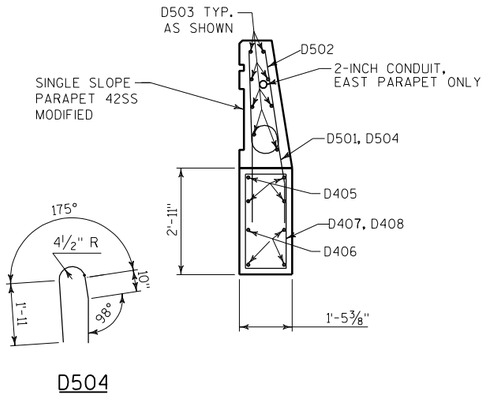

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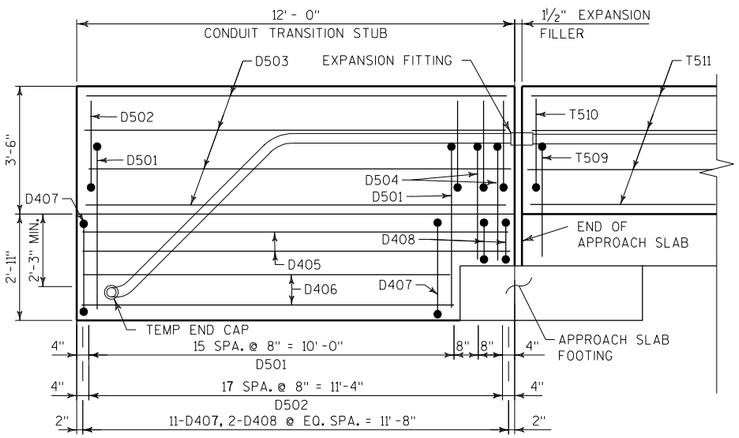
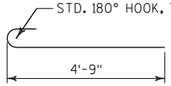


CONDUIT TRANSITION STUB

(ON EAST EDGE ONLY)



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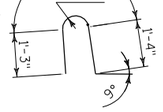

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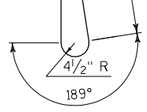

T510

D407

D408

BILL OF BARS

BAR MARK	COAT	NO REQ'D SOUTH	NO REQ'D NORTH	TOTAL NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
T501	X	31	31	62	11'-9"	X	-	APPROACH SLAB FOOTING - STIRRUP	VERTICAL
T802	X	24	24	48	29'-5"	-	-	APPROACH SLAB FOOTING	TRANS
T803	X	51	51	102	21'-4"	X	-	APPROACH SLAB - BOTT	LONG
-	-	-	-	-	-	-	-	-	-
T505	X	31	31	62	19'-6"	-	-	APPROACH SLAB - TOP	LONG
T506	X	21	21	42	16'-3"	-	-	APPROACH SLAB - BOTT	TRANS
T507	X	21	21	42	16'-5"	-	-	APPROACH SLAB - TOP	TRANS
T508	X	40	40	80	5'-4"	X	-	APPROACH SLAB - EDGE	TRANS
T509	X	60	60	120	4'-7"	X	-	APPROACH SLAB PARAPET	VERTICAL
T510	X	60	60	120	6'-8"	X	-	APPROACH SLAB PARAPET	VERTICAL
T511	X	16	16	32	19'-8"	-	-	APPROACH SLAB PARAPET	HORIZONTAL

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
SS901	-	62	5'-0"	X	-	CONC. ABUT. DIAPH. TO APPROACH SLAB

STAINLESS STEEL →

LEGEND

(T02) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

(T03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T04) FOR BASE AGGREGATE DENSE 1 1/4-INCH UNDER APPROACH SLAB FOOTINGS AND STRUCTURAL APPROACH SLABS, SEE ROAD WAY PLANS.

(T05) ½" FILLER, FULL LENGTH OF WING WALL. SEAL ALL EXPOSED HORIZ. & VERT. SURFACE OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NOTES

SEE SINGLE SLOPE PARAPET 42SS MODIFIED FOR REINFORCEMENT AND OTHER DETAILS, SHEET 19.

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
D501	X	32	5'-10"	X	-	STUB - PARAPET	VERTICAL
D502	X	36	6'-8"	X	-	STUB - PARAPET	VERTICAL
D503	X	16	11'-8"	-	-	STUB - PARAPET	HORIZONTAL
D504	X	4	5'-0"	X	-	STUB - PARAPET	VERTICAL
D405	X	8	11'-8"	-	-	STUB - FOOTING	HORIZONTAL
D406	X	8	10'-2"	-	-	STUB - FOOTING	HORIZONTAL
D407	X	22	7'-10"	X	-	STUB - FOOTING STIRRUP	VERTICAL
D408	X	4	4'-10"	X	-	STUB - FOOTING STIRRUP	VERTICAL

QUANTITY IS FOR 2 STRUCTURAL APPROACH SLAB STUBS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

STRUCTURAL APPROACH SLAB DETAILS

SHEET 22 OF 23

830

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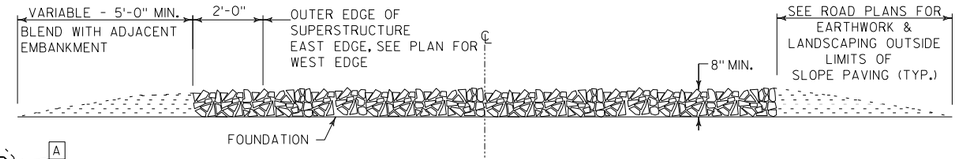
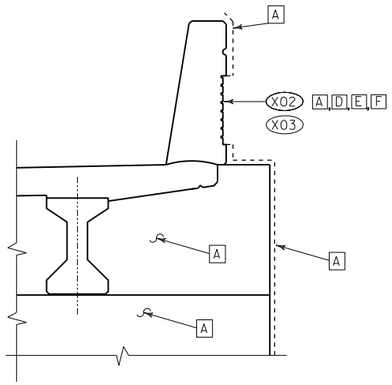
5/30/2014

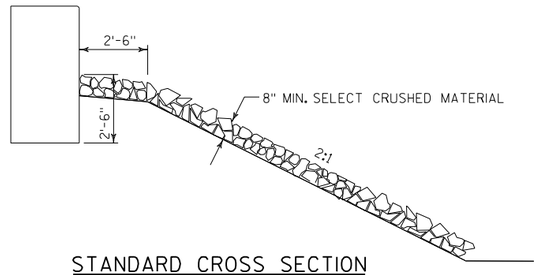
STATE PROJECT NUMBER
1133-10-71



SECTION A-A

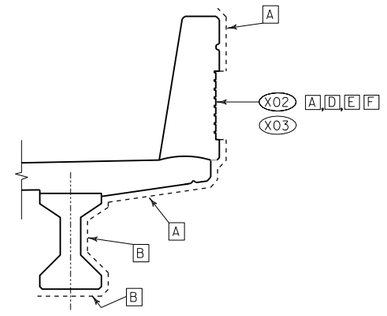


AT ABUTMENT/DIAPHRAGM

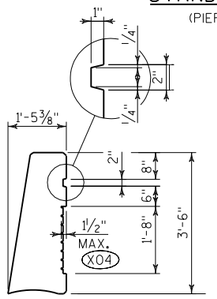


STANDARD CROSS SECTION

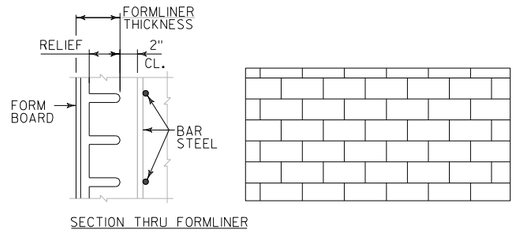
(PIER SHAFTS NOT SHOWN)



GIRDER, DECK AND PARAPET



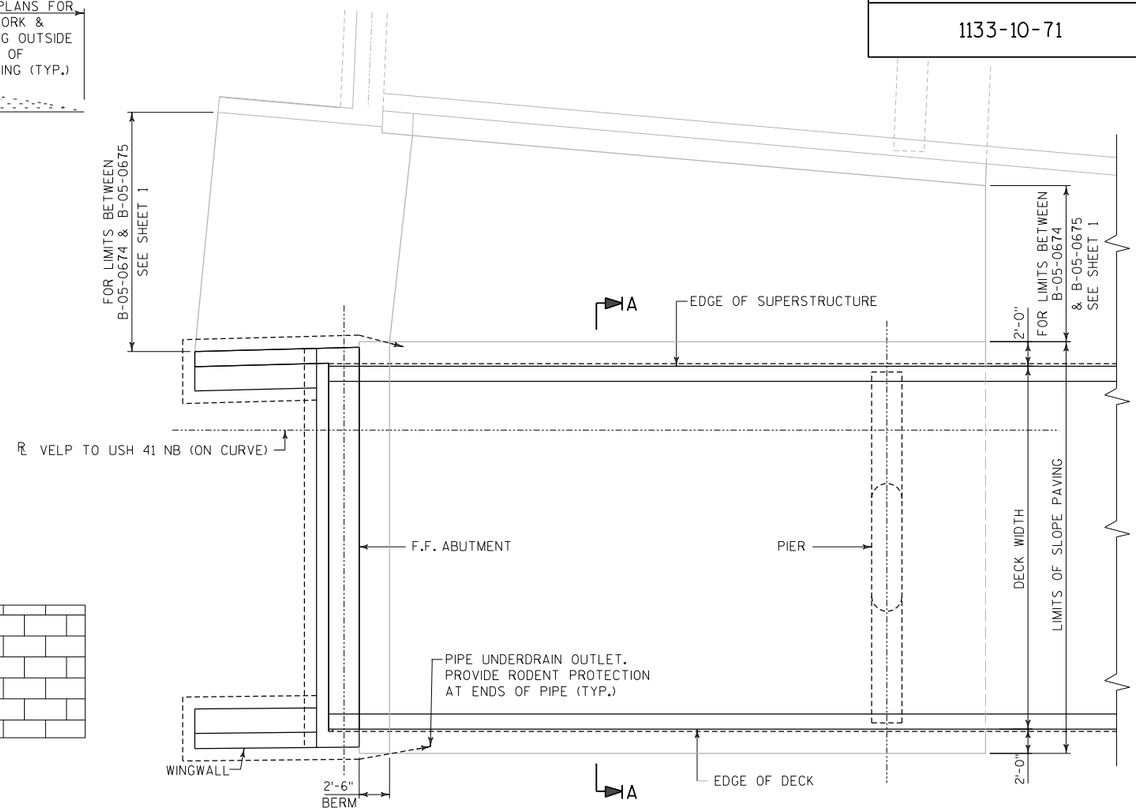
MODIFIED 42SS PARAPET



SECTION THRU FORMLINER

ARCHITECTURAL SURFACE TREATMENT
RECTANGULAR BRICK

SIZE = 2 1/4" to 2 3/8" x 7 5/8" to 8"
MAX. RELIEF = 1/2"

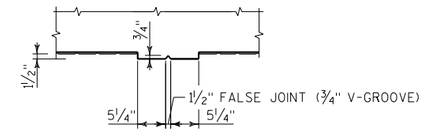


PLAN - SLOPE PAVING SELECT CRUSHED MATERIAL

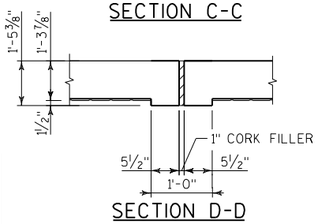
CONCRETE STAINING SCHEDULE

	MARK	COLOR	LOCATION
	A	BASE COLOR	BRIDGES, PARAPETS, WALLS, PILASTERS
	B	ACCENT COLOR #1	REVEALS, OUTSIDE OF CONC. GIRDER, STEEL BOX GIRDERS
*	C	ACCENT COLOR #2	VERTICAL PILASTER CENTER ELEMENT
	D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
	E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
	F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)
*	G	ACCENT COLOR #6	LETTERING AT ROADWAY NAME

NOTE: 1. ALL COLOR DESIGNATIONS ARE FEDERAL STANDARD COLORS.
2. FINISH ON COLORS IS FLAT (LUSTERLESS)
* NOT USED ON B-05-0675



SECTION C-C



SECTION D-D

LEGEND

(X01) PAY LIMIT FOR "ARCHITECTURAL SURFACE TREATMENT" FOR THE PARAPETS IS THE IMPRINTED BRICK PATTERN AREA. SEE SPECIAL PROVISIONS FOR DESCRIPTION OF FORMLINER AND DETAILS ON THIS SHEET.

(X02) STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID AS "STAINING CONCRETE BRICK"

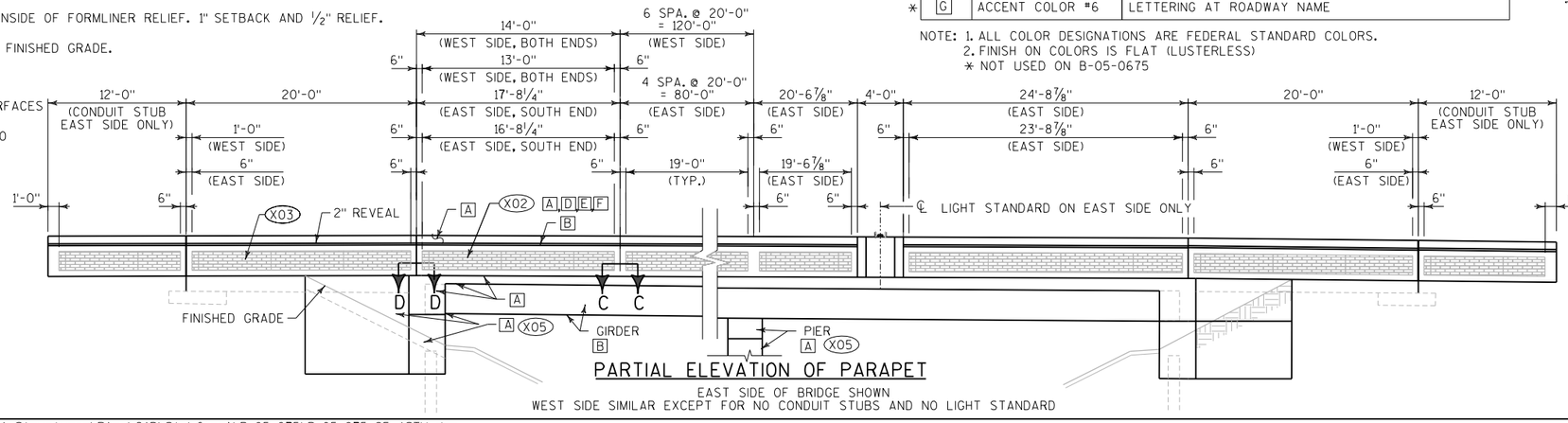
(X03) RECESSED PANEL WITH IMPRINTED BRICK PATTERN (TYP.)

(X04) 1 1/2" DIMENSION IS TO INSIDE OF FORMLINER RELIEF. 1" SETBACK AND 1/2" RELIEF.

(X05) STAIN TO 1'-0" BELOW FINISHED GRADE.

NOTES

APPLY STAIN [A] TO ALL SURFACES OF PIERS, FROM 1'-0" BELOW FINISHED GROUND LINE UP TO BEARING SEATS.



PARTIAL ELEVATION OF PARAPET

EAST SIDE OF BRIDGE SHOWN
WEST SIDE SIMILAR EXCEPT FOR NO CONDUIT STUBS AND NO LIGHT STANDARD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-05-0675

DRAWN BY TRW | PLANS CK'D. BRS

AESTHETIC DETAILS

SHEET 23 OF 23

831

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5/30/2014

STATE PROJECT NUMBER

1133-10-71

INLET 311B
STA. 0+24.75 WALL
STA. 1159+25 IHA

1160 NMC

B-5-693

INLET 318A
STA. 2+62.00 WALL
STA. 1161+65 VEA

℄ OF VEA LINE

INLET 318
STA. 2+76.94 WALL
STA. 1161+80 VEA

℄ OF IHA LINE

1165 NMC

℄ OF NMC LANES

INLET 324
STA. 8+42.37 WALL
STA. 1167+51.68 VEA

1170 NMC

ALL STATIONS & DIMENSIONS ARE MEASURED ALONG FRONT FACE

1160 IHA

1160 VEA

1165 IHA

1165 VEA

1170 IHA

NAME PLATE

PC STA. 0+23.45 WALL
STA. 1159+23.55 IHA
41.71' RT. OF IHA LINE
STA. 1159+25.49 VEA
23.75' RT. OF VEA LINE
Y= 581555.37
X= 87185.52

R = 5888.25'
Y = 577598.52
X = 91546.11

INLET 318C
STA. 2+47.06 WALL
STA. 1161+50 VEA

F.F. OF RET.
WALL R-5-81-ST1

PT/PC STA. 4+45.14 WALL
STA. 1163+48.88 VEA
23.75' RT. OF VEA LINE
Y= 581857.24
X= 87479.82

R = 4976.25'
Y = 578258.13
X = 90916.31

PT/PC STA. 6+57.95 WALL
STA. 1165+62.70 VEA
23.75' RT. OF VEA LINE
Y= 582000.87
X= 87636.83

R = 811.25'
Y = 581391.01
X = 88171.80

PC STA. 9+34.64 WALL
STA. 1168+45.42 VEA
32.42' RT. OF VEA LINE
Y= 582145.09
X= 87871.47

R = 1506.75'
Y = 583525.67
X = 87267.90

TEMPORARY SHORING TO BE LEFT IN PLACE, STA. 1169+75 VEA, 40.7' RT. OF VEA ℄ TO STA. 1170+50 VEAA, 28.0' RT. OF VEAA ℄. (ROADWAY BID ITEM ID 1133-10-71).

PT STA. 12+78.86 WALL
STA. 1171+83.88 VEAA
23.75' RT. OF VEAA LINE
Y= 582317.65
X= 88168.45

1170 VEA

1172 VEAA

℄ OF VEAA LINE

ROSEWOOD STREET

RETAINING WALL
R-5-81-ST2 (STAGE 2)
BUILT UNDER
FUTURE CONTRACT
1133-10-75

BEGIN WALL STA. 0+00.00 WALL
= STA. 1159+00.00 IHA, 40.0' RT.
= STA. 1159+01.95 VEA, 23.92' RT.
Y = 581537.85
X = 87169.92

LIGHT STANDARD
STA. 1+45.25 WALL
STA. 1160+47.78 VEA

INLET 311A
STA. 0+39.69 WALL
STA. 1159+40 IHA

LIGHT STANDARD
STA. 3+83.45 WALL
STA. 1162+86.94 VEA

LIGHT STANDARD
STA. 6+16.19 WALL
STA. 1165+20.74 VEA

LIGHT STANDARD
STA. 8+33.27 WALL
STA. 1167+42.39 VEA

LIGHT STANDARD
STA. 10+36.52 WALL
STA. 1169+46.92 VEA

PT STA. 9+07.76 WALL
STA. 1168+18.60 VEA
30.63' RT. OF VEA LINE
Y= 582134.52
X= 87846.84

END WALL
STA. 10+92.85 WALL
STA. 1170+00.00 VEA, 37.64' RT.
Y = 582215.96
X = 88012.84

FOR ALIGNMENT CURVE DATA SEE SHEET 3

F.F. DENOTES FRONT FACE.

PLAN

MSE RETAINING WALL WITH TILT-UP WALL PANELS

1092.85'
R-5-81-ST1

MSE WALL
R-5-81-ST2

29'-9" | 25'-9⅜" | 30'-0" | 22'-6⅛" | 30'-0" | 3 SPA. @ 30'-0" = 90'-0"

25'-0" | 30'-0" | 4 SPA. @ 30'-0" = 120'-0" | 22'-1⅛" | 20'-0" | 22'-0½"

2 SPA. @ 22'-0" = 44'-0" | 4 SPA. @ 30'-0" = 120'-0" | 26'-9⅛"

2 SPA @ 22'-5" = 44'-10" | 5 SPA. @ 30'-0" = 150'-0"

29'-0" | 2 SPA. @ 27'-5⅞" = 54'-11¾" | 26'-10⅝" | 20'-1¼"

2 SPA. @ 30'-0" = 60'-0" | 29'-0" | 20'-1¼"

EXPANSION JOINT SPACING

SINGLE SLOPE 42SS PARAPET

MAX. EL. 599.40

TOP OF WALL

610
600
590
580
570

10'-0" TYP. CONCRETE WALL PANEL WIDTH

ANCHOR SLAB

FINISHED GRADE - F.F.

OUTSIDE FACE OF EXTERIOR WALL

B-5-693

OUTSIDE FACE OF EXTERIOR WALL

BOTTOM OF MSE REINFORCEMENT ZONE (3'-6" MIN. BELOW GROUND LINE)

BOTTOM OF CONCRETE FOOTING (3'-0" MIN. BELOW GROUND LINE)

BOTTOM OF PRECAST PRESTRESSED PANEL (1'-9" MIN. BELOW FINISHED GRADE LINE)

NOTE: NOMINAL WIDTH OF PRESTRESSED PRECAST PANEL IS 10 FEET UNLESS SHOWN OTHERWISE. ALTERNATIVE PANEL WIDTH MAY BE SUBMITTED FOR REVIEW AND POSSIBLE ACCEPTANCE BY THE ENGINEER. PANELS LESS THAN 10 FEET WIDE MAY BE USED TO MAINTAIN THE PANEL JOINT LOCATIONS SHOWN ON THE ELEVATION VIEW.

ELEVATION

(LOOKING @ FRONT FACE OF WALL)

SEE GEOMETRY TABLE ON SHEET 2 FOR STATIONING, HEIGHT AND FINISHED GRADE ELEVATIONS.

NE REGION CONTACT:
PAUL VRANEY
(920)-492-2232

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
KAREN WALDERA
(715)-834-3161

WISCONSIN
KAREN L. WALDERA
E-39158
TAYLOR
WI
PROFESSIONAL ENGINEER
10-9-14

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/21/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-5-81 (STAGE 1)

USH 41 RETAINING WALL ALONG VELP AVE. OFF-RAMP

COUNTY	TOWN/~~CITY/VILLAGE~~
BROWN	HOWARD

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJM	KLW	CJM/CLS	

GENERAL PLAN

SHEET 1 OF 14
832

I.D.

DATE:

DATE: 8-19-14
DATE: 8-19-14
DATE: 8-19-14

CHECKED BY: KLW
BACK CHECKED BY: KLW
CORRECTED BY: CJM

$PRFNAME$
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10/9/2014

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GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/OMP PILOT".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THESE PLANS.

APPLY PROTECTIVE SURFACE TREATMENT TO THE EXPOSED SURFACE OF THE ANCHOR SLAB AND THE TOP OF THE PARAPETS.

THE COST OF FURNISHING AND PLACING THE FOOTING UNDER THE PRESTRESSED PRECAST PANELS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

THE QUANTITY OF CONCRETE MASONRY FOR THE CAST-IN-PLACE ANCHOR SLAB, PARAPETS, AND PARAPET BILASTER FOR LIGHT STANDARD IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY RETAINING WALLS".

ALL REFERENCE LINE STATIONS FOR R-05-81 ARE ALONG THE FRONT FACE OF WALL (UNLESS SHOWN OTHERWISE).

AT END OF WALL CLOSE SPACE BETWEEN THE WIRE FACE WALL AND PRECAST CONCRETE WALL PANEL WITH 1'-6" WIDE COLUMN OF CONCRETE.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

DESIGN THE MSE WALL FOR A SUCTION LOAD OF 20 PSF ACTING ON THE PRECAST WALL PANELS.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DEGISNATION M153, TYPE I, II, OR III OR AASHTO DEGISNATION M213.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 WITHOUT CERTIFIED TEST VALUES.

OPTIONAL TRANSVERSE CONSTRUCTION JOINTS ARE PERMITTED IN THE FOOTING WITH A MINIMUM SPACING OF TWO PANEL JOINTS. FOOTING JOINTS SHALL BE OFFSET A MINIMUM OF 1'-0" FROM WALL JOINTS. RUN BAR STEEL THROUGH FOOTING JOINTS.

DO NOT ALLOW CONCRETE OR FILL TO DROP OR ACCUMULATE IN WALL PANEL CAVITY.

HOT DIP GALVENIZE ALL STRUCTURAL STEEL CARBON IN ACCORDANCE WITH ASTM A123 WHERE SHOWN.

PROVIDE A RUBBED SURFACE TREATMENT IN ACCORDANCE WITH SECTION 502.3.7.3 TO ALL PERMAMENTLY EXPOSED SURFACES OF CONCRETE MASONRY RETAINING WALLS.

DESIGN RETAINING WALL TO PROVIDE A FINISHED GRADE SLOPE BEHIND THE WALL AS SHOWN IN THESE PLANS AND THE ROADWAY CROSS SECTIONS.

DESIGN FOR RETAINING WALL TO PROVIDE FOR ROADWAY BEHIND WALL AS SHOWN.

BOX CULVERT B-5-693 WILL BE BUILT PRIOR TO CONSTRUCTION OF WALL R-5-81.

SEE SPECIAL PROVISIONS AND SHEET 14 FOR ASETHETIC TREATMENTS TO THE WALL.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
502.3200	PROTECTIVE SURFACE TREATMENT	SY	1,385
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	537
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	63,380
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	50
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	1,115
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	1,105
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	15
653.0222	JUNCTION BOXES 18x12x6-INCH	EACH	5
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	5
SPV.0165.701	STAINING CONCRETE	SF	19,015
SPV.0165.850	WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/OMP PILOT	SF	14,098
SPV.0165.851	PRESTRESSED PRECAST CONCRETE WALL PANEL	SF	14,098
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	1/4", 1"
	CORK FILLER	SIZE	1/2"
	EXPANDED POLYSTYRENE	SIZE	1"

DEADMAN ANCHOR SYSTEM WHICH INCLUDES ANCHOR BLACK, ANCHOR ROD AND PANEL CONNECTION COMPONENTS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. TYPICAL SECTION AND DATA
4. SOILS DATA
5. SUBSURFACE EXPLORATION
6. SUBSURFACE EXPLORATION
7. WALL DETAILS
8. WALL DETAILS
9. WALL DETAILS
10. ANCHOR SLAB AND PARAPET ELEVATION
11. LIGHTING DETAILS
12. ANCHOR SLAB AT INLET
13. BILL OF BARS
14. AESTHETIC DETAILS

GEOMETRY TABLE

WALL STATION	ROAD STATION		OFFSET TO FF OF WALL (FT)	TOP OF WALL EL. "A"	FINISHED GRADE EL. "B"
0+00.00	1159+00.00	IHA	40.00	594.53	594.53
0+49.80	1159+50.00	IHA	43.83	594.55	585.11
0+85.54	1159+85.90	IHA	46.71	594.65	586.91
0+99.57	1160+00.00	IHA	47.84	594.70	586.91
1+38.05	1160+40.55	VEA	23.75	594.92	586.91
1+47.46	1160+50.00	VEA	23.75	594.99	583.09
1+97.26	1161+00.00	VEA	23.75	595.42	582.90
2+47.06	1161+50.00	VEA	23.75	596.01	582.63
2+96.86	1162+00.00	VEA	23.75	596.75	582.75
3+46.66	1162+50.00	VEA	23.75	597.51	582.88
3+96.46	1163+00.00	VEA	23.75	598.14	583.00
4+46.25	1163+50.00	VEA	23.75	598.64	583.13
4+96.02	1164+00.00	VEA	23.75	599.02	583.25
5+45.78	1164+50.00	VEA	23.75	599.27	583.37
5+95.54	1165+00.00	VEA	23.75	599.40	583.50
6+45.30	1165+50.00	VEA	23.75	599.40	583.63
6+94.37	1166+00.00	VEA	23.88	599.27	583.75
7+43.18	1166+50.00	VEA	24.52	598.99	583.88
7+91.96	1167+00.00	VEA	25.68	598.58	584.00
8+40.69	1167+50.00	VEA	27.38	598.02	584.20
8+89.34	1168+00.00	VEA	29.59	597.33	584.40
9+39.23	1168+50.00	VEA	32.72	597.02	584.60
9+89.29	1169+00.00	VEA	35.07	596.81	584.80
10+39.78	1169+50.00	VEA	35.81	596.42	588.15
10+92.85	1170+00.00	VEA	37.64	595.48	588.17

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE (ROADWAY): 240 PSF

MATERIAL PROPERTIES:

CONCRETE MASONRY RETAINING WALLS ——— f'_c = 4,000 p.s.i.
PRECAST CONCRETE WALL PANEL ——— f'_c = 5,000 p.s.i.
BAR STEEL REINFORCEMENT ——— f_y = 60,000 p.s.i.
STRUCTURAL CARBON STEEL ——— f_y = 36,000 p.s.i.

FOUNDATION DATA:

FACTORED BEARING RESISTANCE-MSE WALL: SEE WALL EXTERNAL & OVERALL STABILITY EVALUATION TABLE ON SHEET 4

NOTE: THE WALL HAS BEEN DESIGNED FOR TRAFFIC LOADING ONLY. IF DURING CONSTRUCTION HEAVY EQUIPMENT IS OPERATING IN CLOSE PROXIMITY TO THE WALL OR IF MATERIAL IS STOCKPILED NEAR THE WALL, THE SAFTEY FACTOR FOR THIS WALL WILL SIGNIFICANTLY DECREASE.

TRAFFIC DATA

USH 41 NB

A.D.T. (2015) = 36,700
A.D.T. (2035) = 44,800
DESIGN SPEED 70 MPH

RAMP VEA

A.D.T. (2015) = 7,800
A.D.T. (2035) = 8,900
DESIGN SPEED 60 MPH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM/CLS | PLANS CK'D. KLW

QUANTITIES AND NOTES

SHEET 2 OF 14
833

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

$PRFNAME$
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10/9/2014
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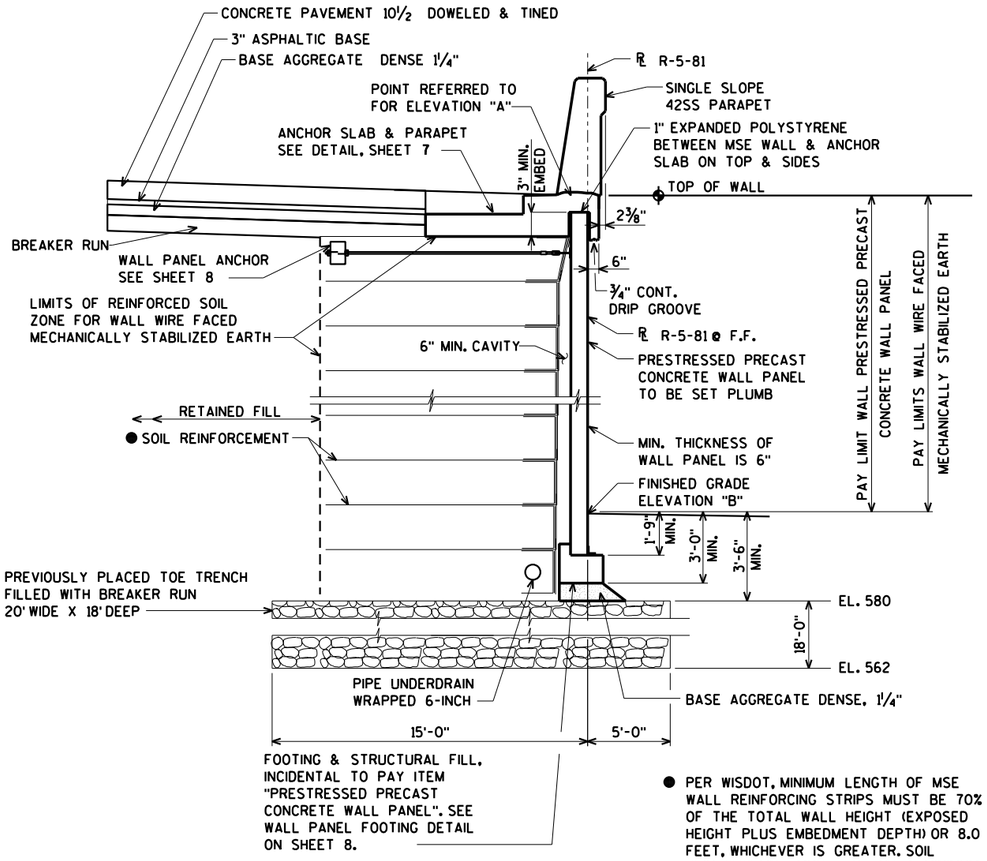
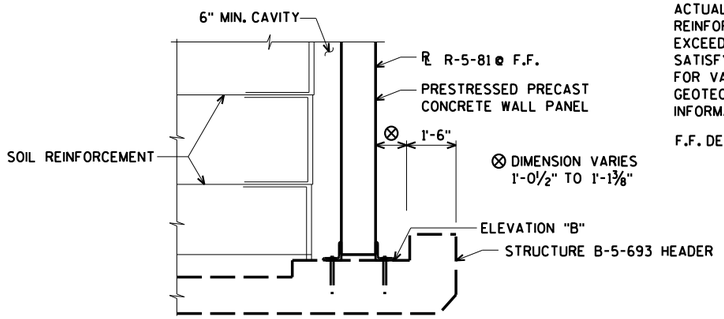


TYPICAL WALL SECTION

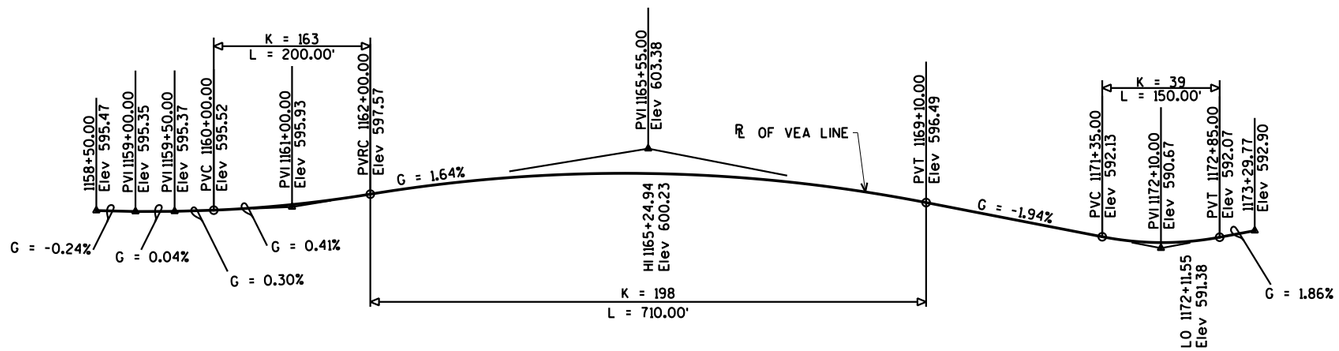


PARTIAL WALL SECTION AT B-5-693

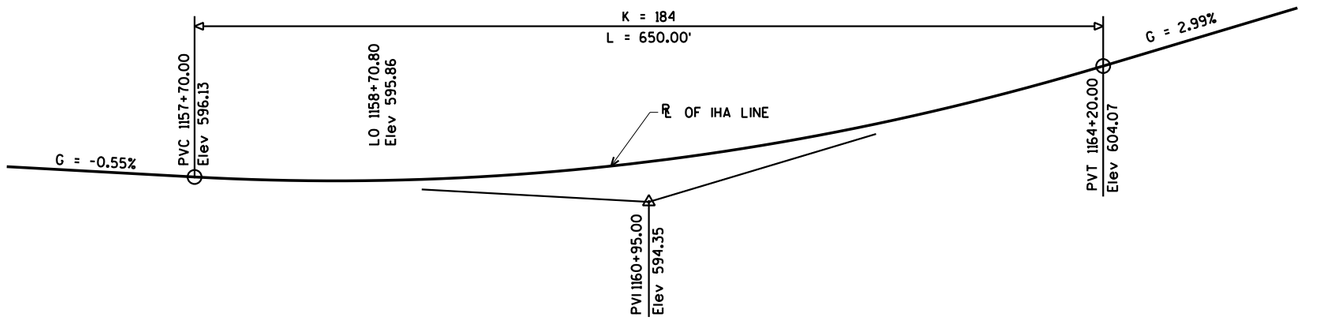
SEE SHEET 9 FOR WALL PANEL CONNECTION TO CULVERT DETAIL

- PER WISDOT, MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS MUST BE 70% OF THE TOTAL WALL HEIGHT (EXPOSED HEIGHT PLUS EMBEDMENT DEPTH) OR 8.0 FEET, WHICHEVER IS GREATER. SOIL REINFORCEMNT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO REGULATIONS. ACTUAL CALCULATED LENGTHS OF REINFORCING STRIPS WILL NEED TO EXCEED THESE MINIMUMS IN ORDER TO SATISFY MINIMUM FACTORS OF SAFTEY FOR VARIOUS MSE PARAMETERS. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

F.F. DENOTES FRONT FACE.



VEA PROFILE GRADE LINE



IHA PROFILE GRADE LINE

VEAA HORIZONTAL CURVE DATA

PI = 1170+99.78 VEA
X = 88086.677
Y = 582286.318
R = 1483.00'
Delta = 06°30'21" LT
T = 84.29'
L = 168.39'

BENCH MARK:

CHISLED SQUARE ON A LIGHT POLE
BASE AT TACO BELL
STA. 1173+77.92 IHA, 308.42' RT.
Y = 582387.97
X = 88370.06
EL. 595.33

VEA HORIZONTAL CURVE DATA

PI= 1160+99.65 VEA	PI= 1164+55.81 VEA	PI= 1166+85.51 VEA	PI= 1169+71.79 VEA	PI= 1170+62.78 VEA	PI= 1171+91.47 VEA
Y= 581702.100	Y= 581948.262	Y= 582099.660	Y= 582232.081	Y= 582281.854	Y= 582381.718
X= 87282.946	X= 87540.757	X= 87713.542	X= 87968.700	X= 88044.926	X= 88127.550
R= 5912.00'	R= 5000.00'	R= 1015.00'	R= 602.00'	R= 402.00'	R= 593.00'
Delta= 04°50'02" RT	Delta= 02°27'01" RT	Delta= 13°47'51" RT	Delta= 05°42'54" LT	Delta= 17°15'14" LT	Delta= 01°47'50" LT
T= 249.53'	T= 106.92'	T= 122.81'	T= 30.05'	T= 60.99'	T= 9.30'
L= 498.77'	L= 213.82'	L= 244.42'	L= 60.05'	L= 121.06'	L= 18.60'

IHA HORIZONTAL CURVE DATA

PI = 1162+22.75 IHA
X = 87290.269
Y = 581848.607
R = 5936.00'
Delta = 16°25'56" RT
T = 857.10'
L = 1702.44'

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM/CLS | PLANS CK'D. KLW

TYP. SECTION AND DATA

SHEET 3 OF 14
834

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45-0267.01
5/15/2014
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WALL EXTERNAL & OVERALL STABILITY EVALUATION

STRUCTURE	STATION	MIN. LENGTH OF REINFORCEMENT (FT)	WALL HEIGHT* (FT)	SLIDING (CDR > 1.0)	ECCENTRICITY (CDR > 1.0)	**OVERALL STABILITY (CDR > 1.0)	BEARING RESISTANCE (CDR > 1.0)	FACTORED BEARING RESIST. (PSF)
R-05-0081	1162+00 VEA	13	16.7	2.58	1.94	1.17	3.23	6500
	1165+00 VEA	13	18.5	2.38	1.63	1.02	2.60	6500
	1170+00 VEA	13	11.4	3.43	3.65	1.19	5.83	6500

NOTES:
* WALL HEIGHT INCUDES THE 3.5'EMBEDMENT DEPTH.
** CONTROLLING EXTERNAL STABILITY CONDITION

ALL FACTORS ARE CALCULATED FOR WALL HEIGHTS AND RENIFORCEMENT LENGTHS SHOWN IN THE TABLE. SEE GEOTECHNICAL REPORT FOR FURTHER INFOMATION. FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER, AND MAY BE DIFFERENT FROM THE VALUES IN THE TABLE.

ALL FACTORS ARE CALCULATED ASSUMING THE WALL FACE AND REINFORCED MSE WALL FILL ARE UNDERLAIN BY THE STABILITY TRENCH. FOR THIS ANALYSIS, A LATERAL DISTANCE OF 3-5 FEET WAS ASSUMED FROM THE FACE OF THE WALL TO THE EASTERN EDGE OF THE STABILITY TRENCH.

MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS MUST BE 70% OF THE TOTAL WALL HEIGHT (EXPOSED HEIGHT PLUS EMBEDMENT DEPTH) OR 8.0 FEET, WHICHEVER IS GREATER. SOIL RENIFORCEMENT MUST EXTEND A MNIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

FINAL DESIGN FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND ECCENTRICITY AT OTHER WALL LOCATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

1. WALL HEIGHT SHOWS ONLY THE MAXIMUM HEIGHT IN THE SECTION AND INCLUDES 3'-6" OF EMBEDMENT PER USH 41 BROWN COUNTY CORRIDOR MANUAL.
2. THE LENGTH OF THE REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH FOR THE MAXIMUM WALL HEIGHT AT THE EVALUATED SECTION.

ASSUMED SOIL PARAMETERS OF FILL MATERIALS

SOIL DESCRIPTION	SOIL UNIT WEIGHT (pcf)	UNDRAINED		DRAINED	
		FRICTION ANGLE (DEGREES)	COHESION (psf)	FRICTION ANGLE (DEGREES)	COHESION (psf)
NEW ENGINEERED GRANULAR FILL	120	31	0	31	0
EXISTING EMBANKMENT GRANULAR FILL	120	31	0	31	0
REINFORCED MSE FILL (GRANULAR) ⊗	120	45	5000	45	5000
BREAKER RUN/SELECT CRUSHED MATERIAL	135	36	0	36	0

⊗ MSE BACKFILL ASSUMED TO EXTEND 3.5 FEET BELOW PROPOSED FINISHED GRADE, EXCEPT OF BOX CULVERT B-5-693.

SOIL PARAMETERS

STATION	SOIL DESCRIPTION	BOTTOM ELEVATION (FEET)	SOIL UNIT WEIGHT (pcf)	UNDRAINED		DRAINED	
				FRICTION ANGLE (DEGREES)	COHESION (psf)	FRICTION ANGLE (DEGREES)	COHESION (psf)
1162+00 VEA	MARSH DISPOSAL ⚠	580.0	110	0	250	24	50
	VERY SOFT LEAN CLAY	575.0	110	0	300	24	50
	ORGANIC ELASTIC SILT	572.0	90	0	300	24	50
	MEDIUM TO STIFF LEAN CLAY	564.0	125	0	500	28	50
	MEDIUM DENSE SILT	559.0	115	30	0	30	0
	VERY DENSE SILTY SAND	<548.0	130	36	0	36	0
	NOTE: 20 FOOT WIDE STABILITY TRENCH TO BE EXCAVATED TO APPROXIMATELY ELEVATION 564 FEET, AND BACKFILLED WITH BREAKER RUN/SELECT CRUSHED MATERIALS.						
1165+00 VEA	MARSH DISPOSAL ⚠	580.0	110	0	250	24	50
	VERY SOFT LEAN CLAY	574.5	110	0	300	24	50
	ORGANIC ELASTIC SILT	571.0	90	0	300	24	50
	LOOSE SILTY SAND	569.0	110	26	0	26	0
	MEDIUM TO STIFF LEAN CLAY	561.5	125	0	500	28	50
	HARD LEAN CLAY	560.0	135	0	3000	28	50
	MEDIUM DENSE SILT	557.0	115	30	0	30	0
	VERY DENSE SILTY SAND	<548.0	130	36	0	36	0
	NOTE: 20 FOOT WIDE STABILITY TRENCH TO BE EXCAVATED TO APPROXIMATELY ELEVATION 564 FEET, AND BACKFILLED WITH BREAKER RUN/SELECT CRUSHED MATERIALS.						
1170+00 VEA	SOFT LEAN CLAY	578.0	115	0	500	26	50
	VERY SOFT LEAN CLAY	575.0	110	0	300	24	50
	ORGANIC ELASTIC SILT	564.5	90	0	300	24	50
	LOOSE SILTY SAND	556.5	110	26	0	26	0
	DENSE GRAVEL WITH SAND	<545.0	135	36	0	36	0
	NOTE: 20 FOOT WIDE STABILITY TRENCH TO BE EXCAVATED TO APPROXIMATELY ELEVATION 564 FEET, AND BACKFILLED WITH BREAKER RUN/SELECT CRUSHED MATERIALS.						

⚠ MARSH DISPOSAL TO BE REMOVED

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM | PLANS CK'D. KLW

SOILS DATA

SHEET 4 OF 14
835

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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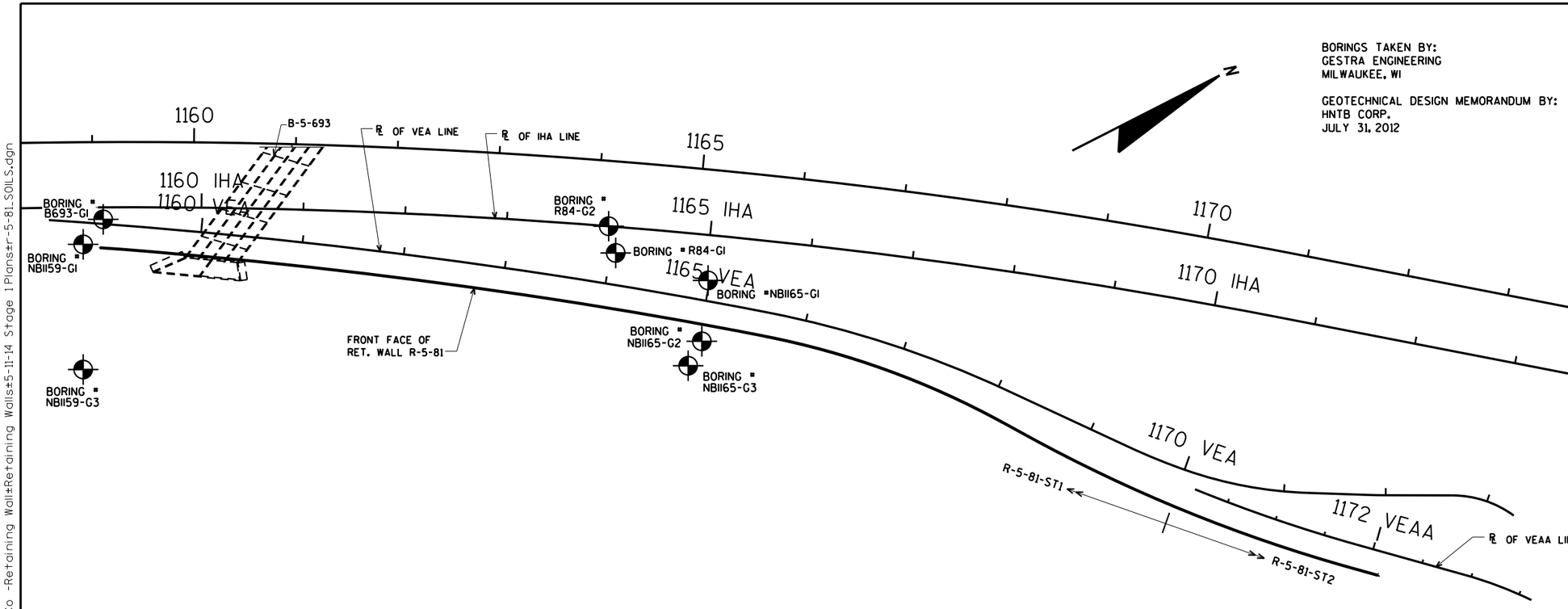
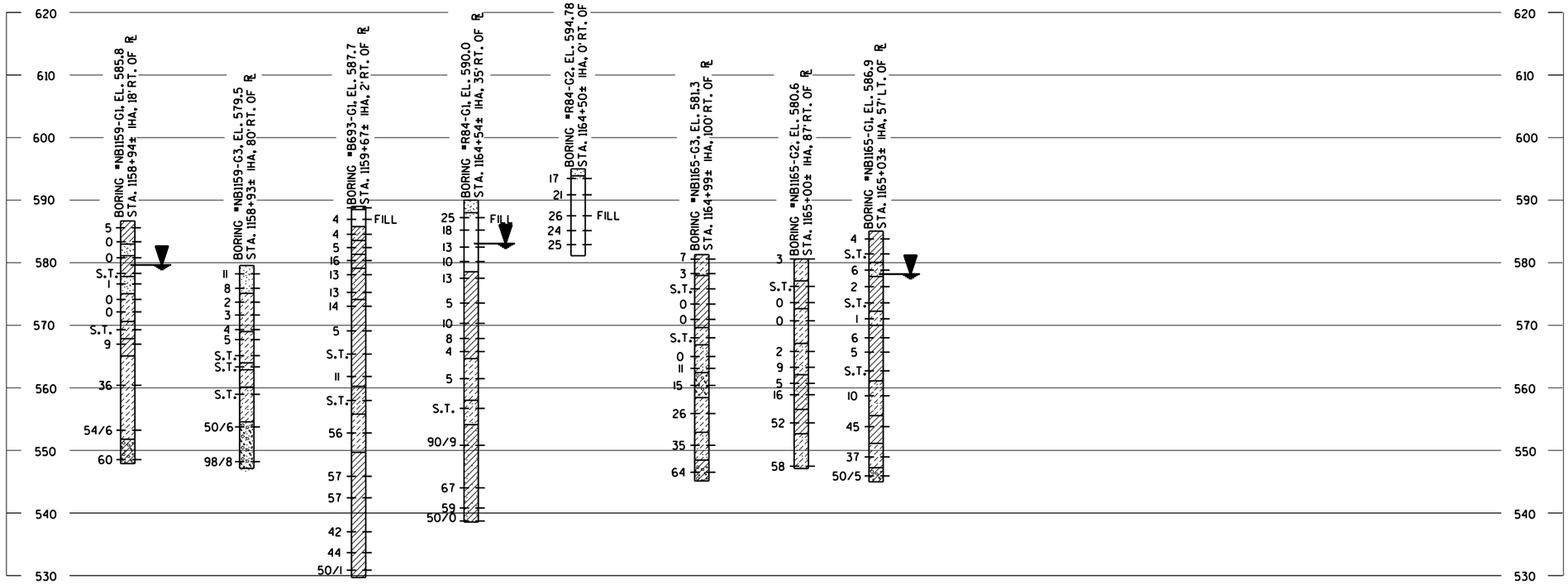


BORINGS TAKEN BY:
GESTRA ENGINEERING
MILWAUKEE, WI

GEOTECHNICAL DESIGN MEMORANDUM BY:
HNTB CORP.
JULY 31, 2012



STATE PROJECT NUMBER

1133-10-71

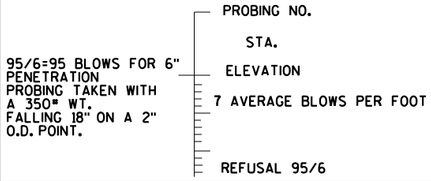
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



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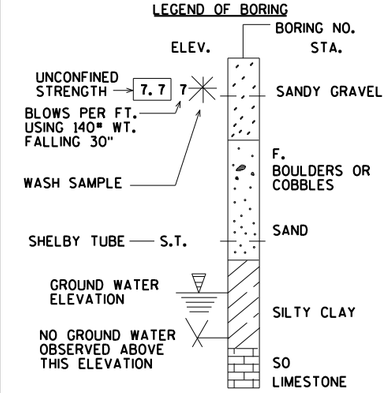

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM | PLANS CK'D. KLW

SUBSURFACE EXPLORATION

SHEET 5 OF 14
836

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$PRFNAME$
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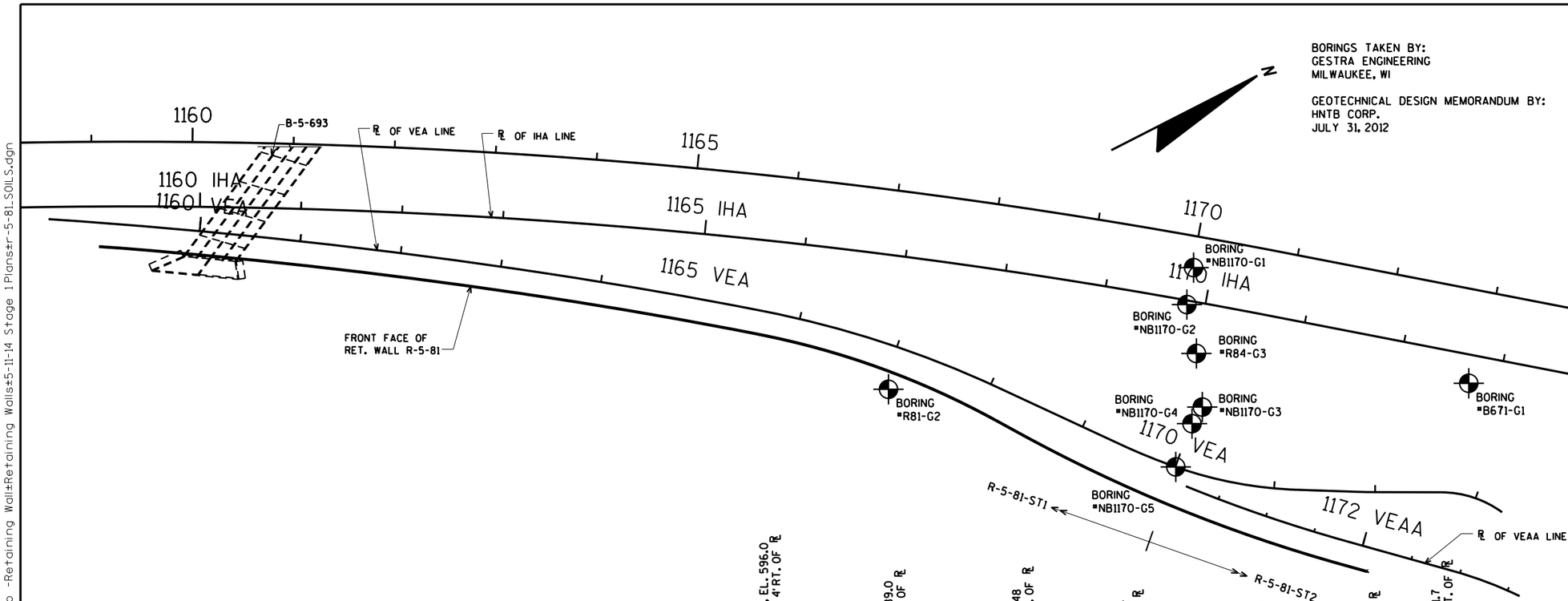
BORINGS TAKEN BY:
GESTRA ENGINEERING
MILWAUKEE, WI

GEOTECHNICAL DESIGN MEMORANDUM BY:
HNTB CORP.
JULY 31, 2012



STATE PROJECT NUMBER

1133-10-71

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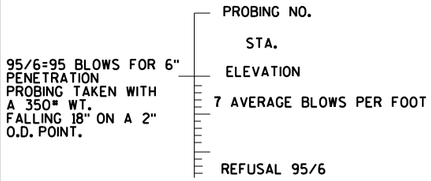
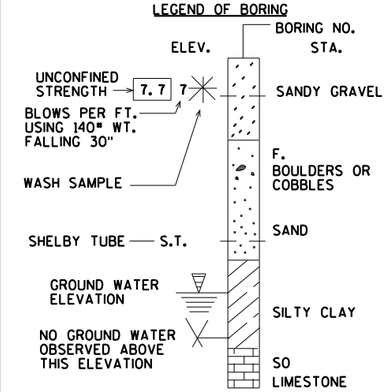


LEGEND OF BORING



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SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM | PLANS CK'D. KLW

SUBSURFACE EXPLORATION

SHEET 6 OF 14
837

8

8

5/15/2014

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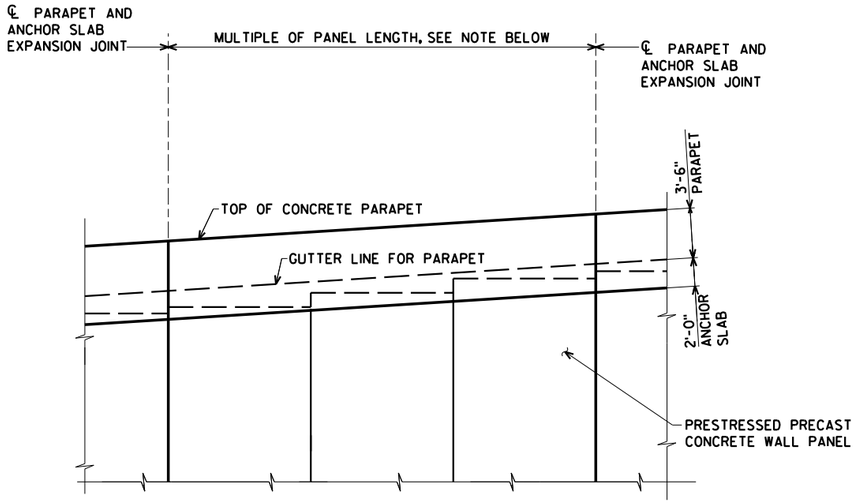
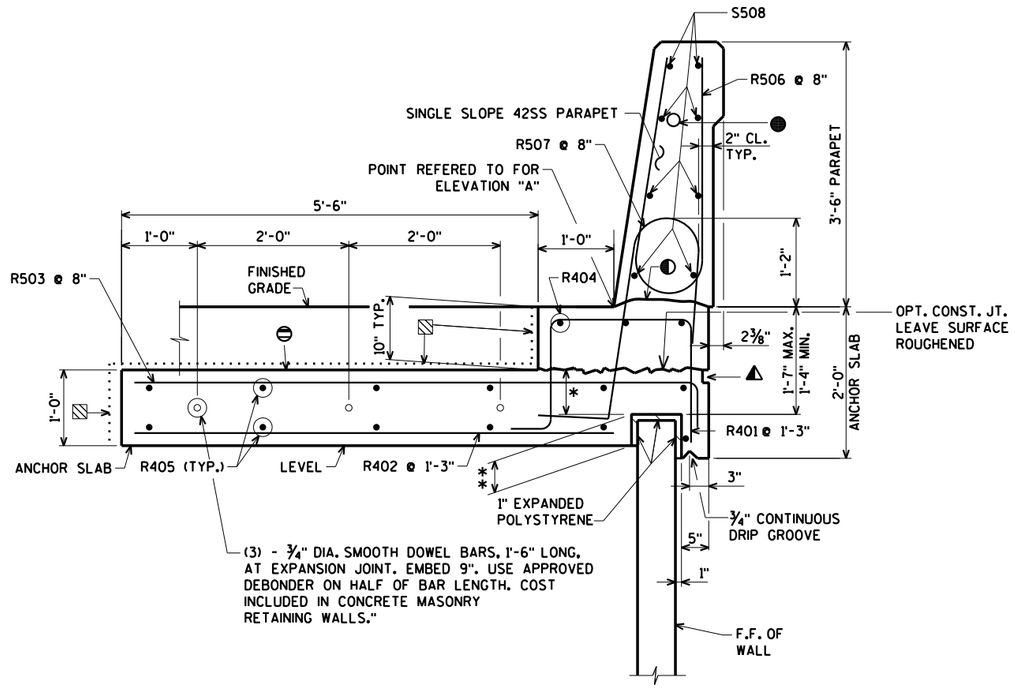


CONCRETE PARAPET PARTIAL ELEVATION

NOTE:
ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.



ANCHOR SLAB AND PARAPET DETAIL

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPET AND ANCHOR SLAB BETWEEN EXPANSION JOINTS MAY BE USED. RUN BAR RENIFORCEMENT TRHU THE JOINT.

LAP LONGITUDINAL #4 BARS A MINIMUM OF 1'-0".

ALL BAR STEEL SHALL BE EPOXY COATED.

CONCRETE QUANTITY BASED ON 3" PANEL EMBEDMENT.

BAR STEEL REINFORCEMENT SHALL BE EMBEDED 2" CLEAR UNLESS SHWON OR NOTED OTHERWISE.

F.F. DENOTES FRONT FACE.

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING TO BE PLACED ON THESE SURFACES AT EACH JOINT.

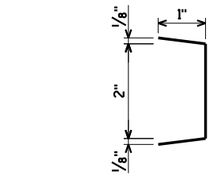
⊖ IF THE OPT. CONST. JOINT IS USED, PLACE 18" MEMBRANE WATERPROOFING ALONG THE ENTIRE LONGITUDINAL JOINT. THE MEMBRANE WATERPROOFING SEALING THE OPTIONAL CONST. JOINT IS INCIDENTAL TO THE CONCRETE MASONRY BID ITEM.

* 4" MIN.

** 3" MIN., 6" MAX.

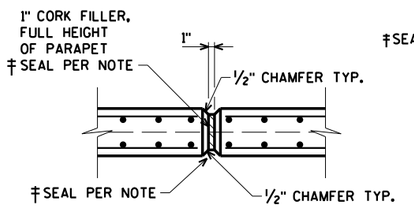
◐ CONST. JOINT -STRIKE OFF AS SHOWN.

● 2" DIA. RIGID METALLIC CONDUIT.

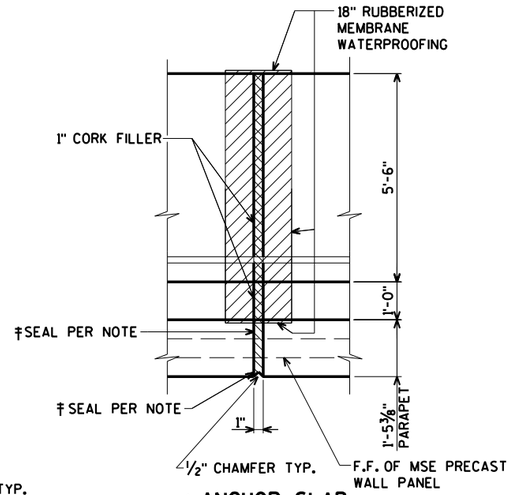


RUSTICATION DETAIL

▲ PROVIDE RUSTICATION IF OPT. CONST. JOINT IS USED.



▲PARAPET EXPANSION JOINT DETAIL

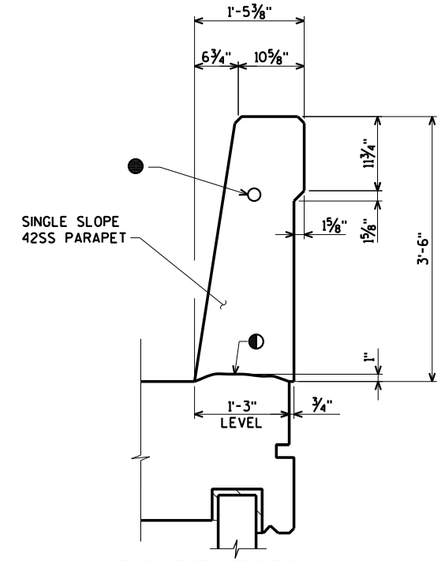


▲ANCHOR SLAB EXPANSION JOINT DETAIL

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

▲ EXPANSION JOINTS TO BE SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'. LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT, EXCEPT FOR DOWEL BARS. JOINT TO EXTEND FULL DEPTH OF PARAPET AND ANCHOR SLAB.

PROVIDE THE NUMBER OF BARS AND OVERALL LENGTH FOR QUANTITY PURPOSES ONLY. DO NOT DETAIL SPECIFIC BAR LENGTHS BETWEEN EXPANSION JOINTS AS THESE LENGTHS ARE BASED ON UNKNOWN MSE PANEL LENGTH AND CONFIGURATION.



PARAPET SECTION
(SHOWING DIMENSIONS)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM | PLANS CK'D. KLW

WALL DETAILS

SHEET 7 OF 14
838

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

$PRFNAME$
U:±45-0291.01 - USH 41 Brown Co -Retaining Wall±Retaining Walls±5-11-14 Stage 1Plans±r-5-81-Wall -parapet dtl.DGN
10/9/2014
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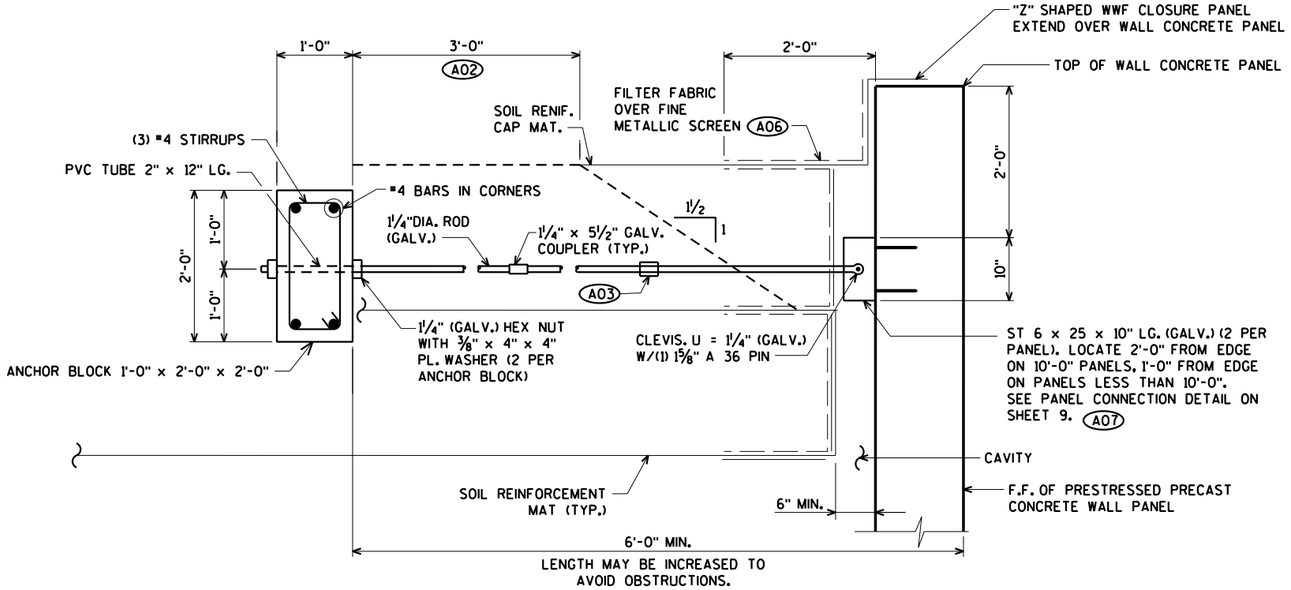
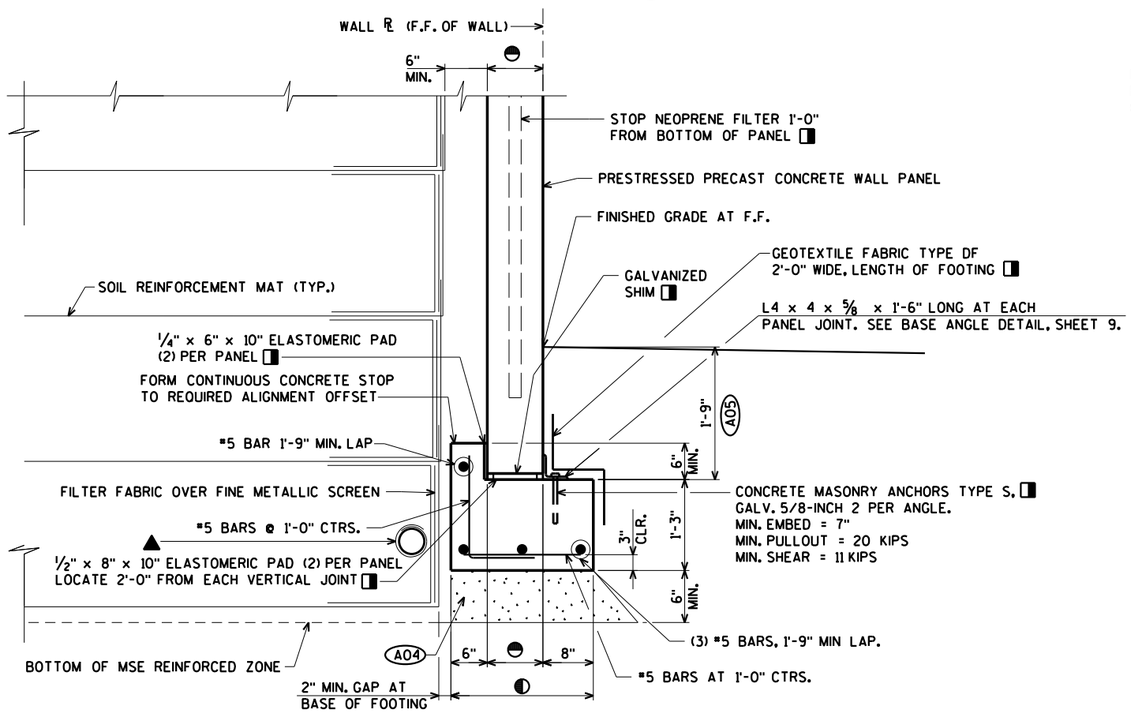


WALL PANEL ANCHOR DETAIL

A01

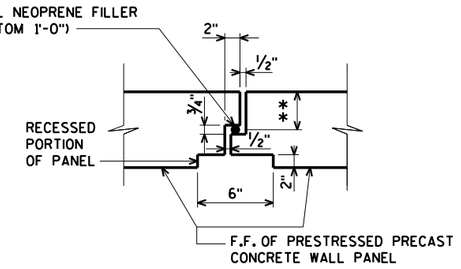


WALL PANEL FOOTING DETAIL

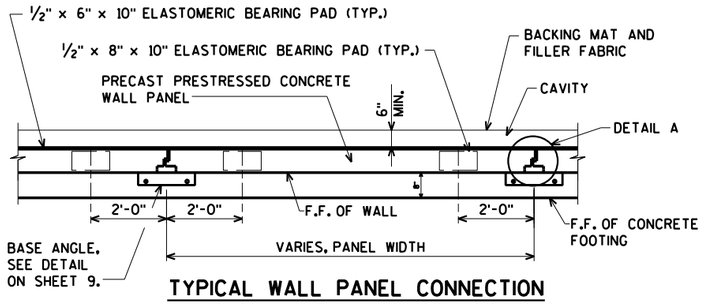
CONCRETE AND REINFORCEMNT INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

◓ = 7½" OR 9½"

◐ FOOTING DIMENSION EQUALS PANEL THICKENSS PLUS 1'-2"



DETAIL A



TYPICAL WALL PANEL CONNECTION

LEGEND

A01 WALL PANEL ANCHOR SYSTEM INCLUDES ANCHOR BLOCK, ANCHOR BLOCK COUPLER, 1¼" DIA. ANCHOR ROD, CLEVIS, AND OTHER PANEL CONNECTION COMPONENTS. DESIGN, DETAILING, AND FURNISHING OF THESE ITEMS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL". INSTALLATION OF THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/OMP PILOT".

A02 DESIGN LENGTH TO PROVIDE REQUIRED HORIZONTAL CAPACITY OF ANCHOR ASSEMBLY. MINIMUM OF 3'-0" OF COMPACTED FILL IN FRONT OF ANCHOR BLOCK PRIOR TO WALL PANEL ERECTION. ROD MIN. 2'-0" BELOW FINISH GRADE.

OPTIONAL MULTIDIRECTIONAL CONNECTOR MAY BE USED TO FACILITATE ALIGNMENT AT THE CONNECTION. CONNECTOR TO BE CORROSION RESISTANT AND DEVELOP 100% OF THE ULTIMATE STRENGTH OF 1¼" DIA. BAR.

A04 BASE AGGREGATE OPEN GRADED, 6" MIN. INCICENTAL TO BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

A05 MINIMUM DIMENSION FROM FINISHED GRADE AT FRONT FACE OF WALL TO BOTTOM OF WALL PANEL FOOTING IS SHOWN. THE FOOTING MAY BE CONSTRUCTED ON A SLOPE PARALLEL TO THE PROPOSED GRADE, OR MAY BE STEPPED. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THE WALL PANEL FOOTING WITH FABRICATION OF THE PRECAST PANELS.

A06 ALTERNATE METHODS OF SEALING OFF THE 6" VOID IN FRONT OF THE MSE WALL MAY BE SUBMITTED TO WISDOT FOR CONSIDERATION.

A07 AN OPTIONAL WELDED DETAIL OF THE S ANCHOR PLATE MAY BE SUBMITTED FOR CONSIDERATION BY THE ENGINEER. RESTORE ZINC COATING AROUND ANY WELD AREAS.

◨ INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP PILOT".

▲ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED. SEE DETAIL ON SHEET 10.

⊕ INCLUDED IN BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

** 4" FOR 9½" PANEL
3" FOR 7½" PANEL

NOTES

AN ALTERNATE WALL PANEL ANCHOR AND PANEL CONSTRUCTION SYSTEM MAY BE SUBMITTED FOR REVIEW AND POSSIBLE ACCEPTANCE BY THE ENGINEER.

TILT UP PANEL ANCHOR SYSTEM MAY BE TRENCHED IN IF THE GEOMETRY OF THE ANCHOR SYSTEM ALLOWS.

F.F. DENOTES FRONT FACE.

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STRUCTURE R-5-81 (STAGE 1)

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WALL DETAILS

SHEET 8 OF 14
839

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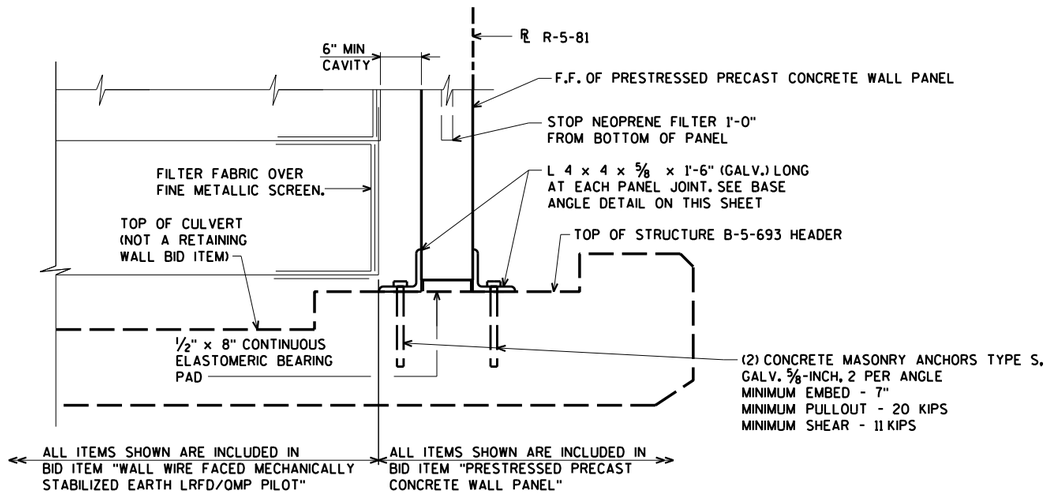
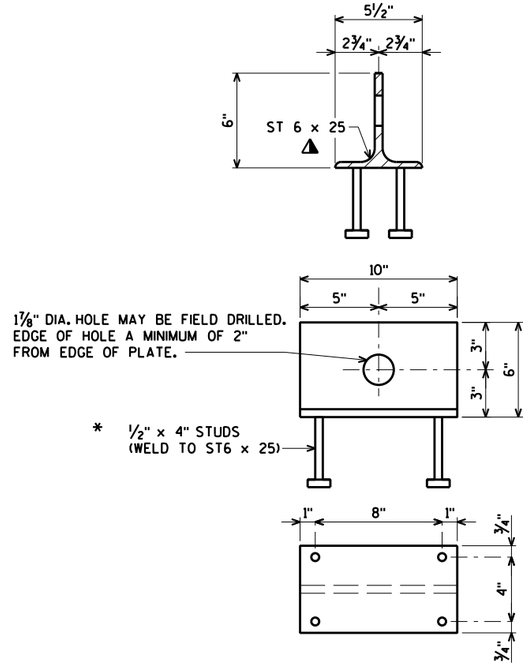


WALL PANEL CONNECTION TO CULVERT

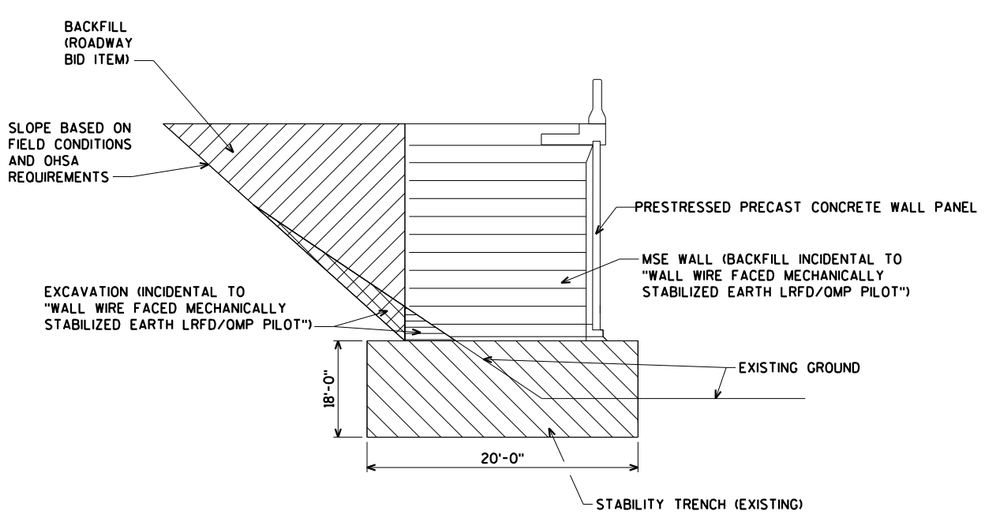


PANEL CONNECTION DETAILS

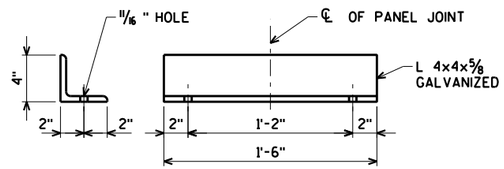
ST6 x 25 MAY BE WELDED TO 3/4" THICK PLATE WITH (4) 1/2" X 4" STUDS ANCHORED IN PRECAST PANEL. RESTORE ZINC COATING AROUND ANY WELDED AREAS. SUBMIT DETAILS FOR APPROVAL BY ENGINEER.

▲ S12x50 (GALV.) CUT IN HALF TO FORM "T" SECTION. BF = 5.477" TW = 0.687".

* AS AN ALTERNATIVE, 1/2" TYPE S ANCHORS MAY BE USED IN PLACE OF THE 4" STUDS.



TYPICAL LIMITS OF EXCAVATION AND BACKFILL



BASE ANGLE DETAIL

(1) AT EACH PANEL JOINT INCLUDED IN BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

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STRUCTURE R-5-81 (STAGE 1)

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WALL DETAILS

SHEET 9 OF 14
840

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8/27/2014
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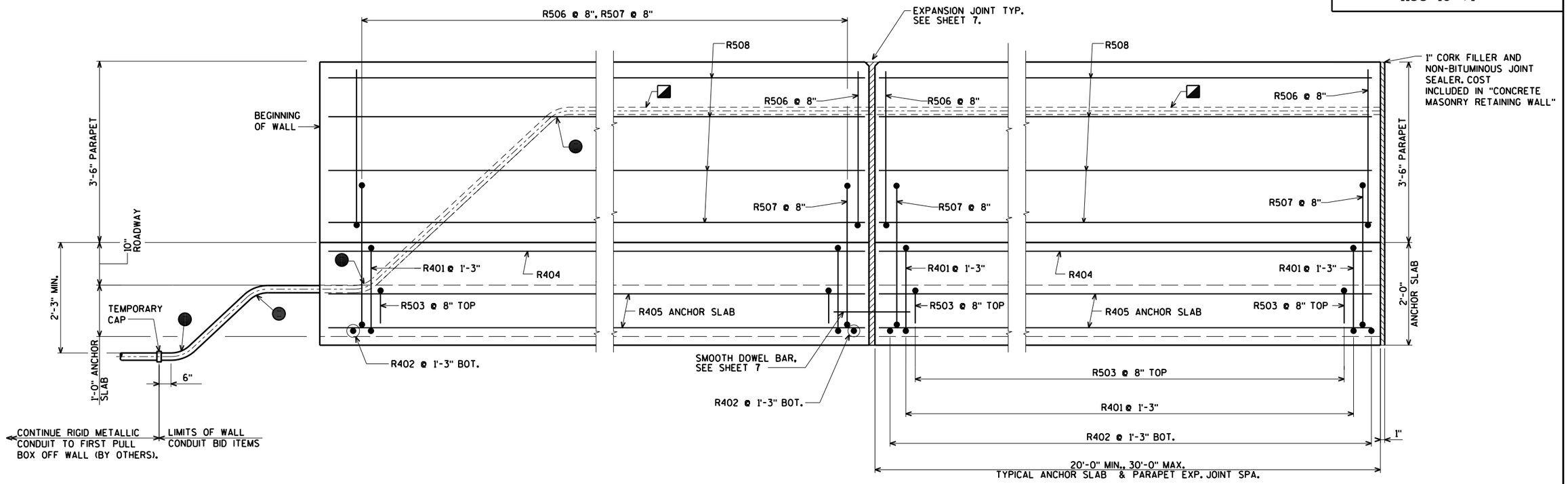
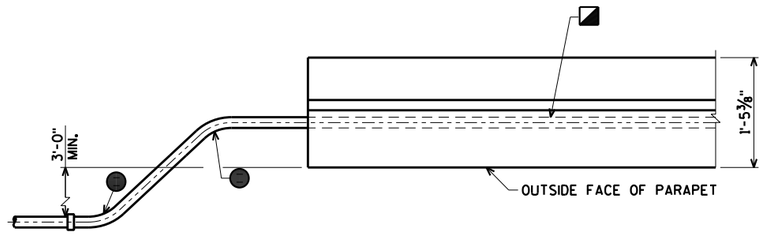
STATE PROJECT NUMBER

1133-10-71



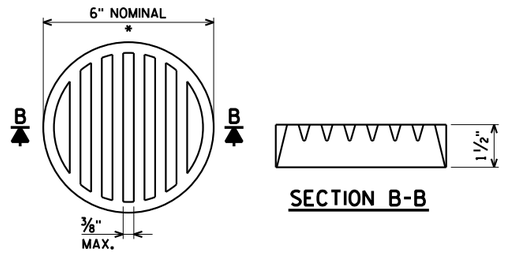
ELEVATION OF ANCHOR SLAB AND PARAPET

(LOOKING AT THE FRONT FACE OF WALL)



PLAN OF PARAPET

(SHOWING ONLY CONDUIT TRANSITION)



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL

NOTE: THE 2" DIA. RIGID METALLIC CONDUIT WILL NEED TO BE TEMPORARILY CAPPED WHERE IT EXITS THE PARAPET AT THE END OF THE WALL DURING STAGE 1 (TO BE CONTINUED DURING STAGE 2.)

LEGEND

F.F. DENOTES FRONT FACE.

B.F. DENOTES BACK FACE.

2" DIA. RIGID METALLIC CONDUIT

45° ANGLE IN CONDUIT. (USE MINIMUM BENDING RADIUS PER WISCONSIN ELECTRIC CODE.)

NOTES

FOR PARAPET, ANCHOR SLAB DETAILS SEE SHEET 7.

SEE SHEET 13 FOR BILL OF BARS.

FOR ANCHOR SLAB AND PARAPET DETAIL SEE SHEET 7

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STRUCTURE R-5-81 (STAGE 1)

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ANCHOR SLAB & PARAPET ELEVATION

SHEET 10 OF 14
841

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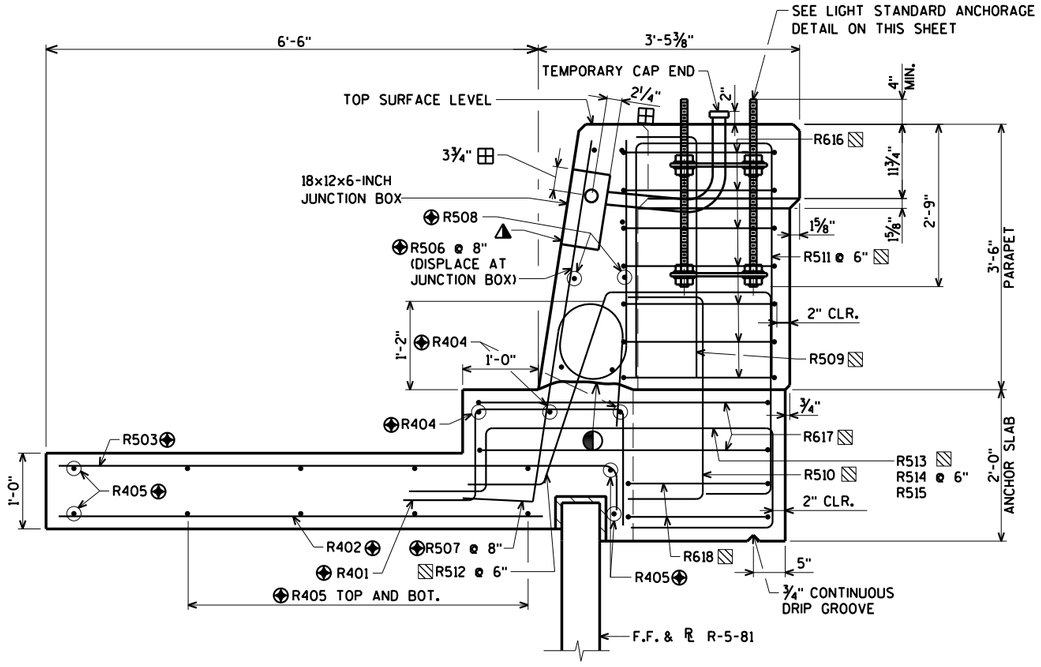
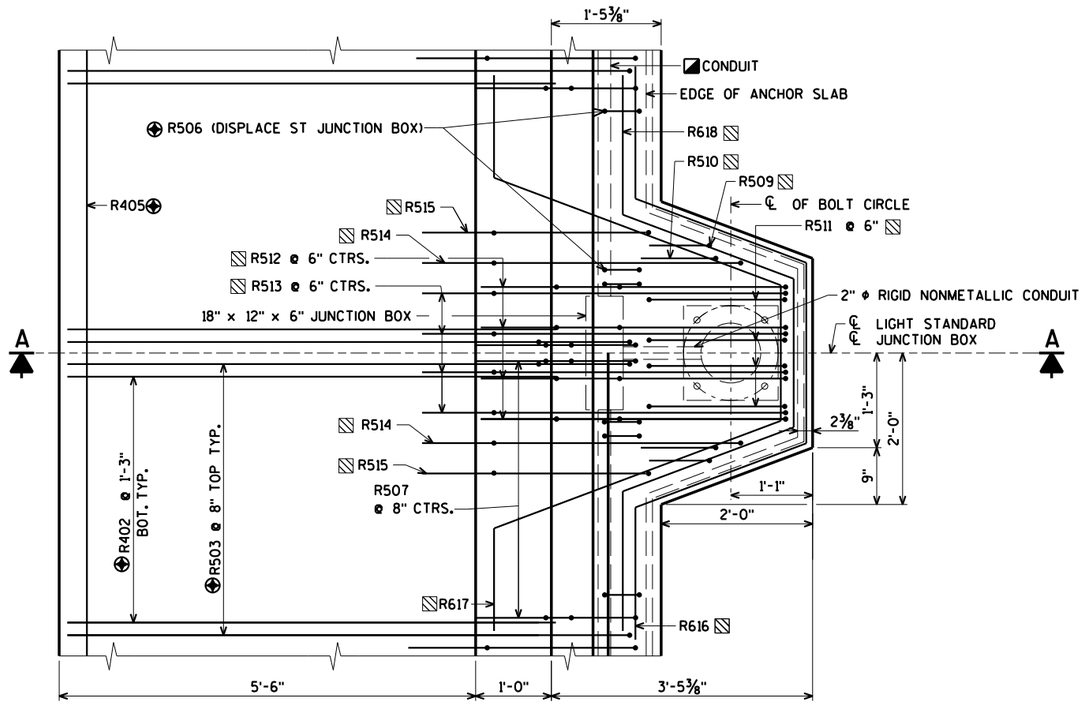


SECTION A



PLAN AT LIGHT STANDARD

LIGHT STANDARD LOCATION

RDWY. STA. (VEA)	WALL STATION
1160+47.48	1+45.25
1162+86.94	3+83.45
1165+20.74	6+16.19
1167+42.39	8+33.27
1169+46.92	10+36.52

CENTERLINE OF LIGHT STANDARD MUST BE PLACED A MINIMUM OF 5'-0" AWAY FROM EXPANSION JOINTS OR END OF SLAB, AND 9'-0" AWAY FROM CENTERLINE OF INLETS.

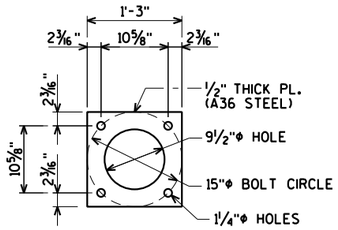
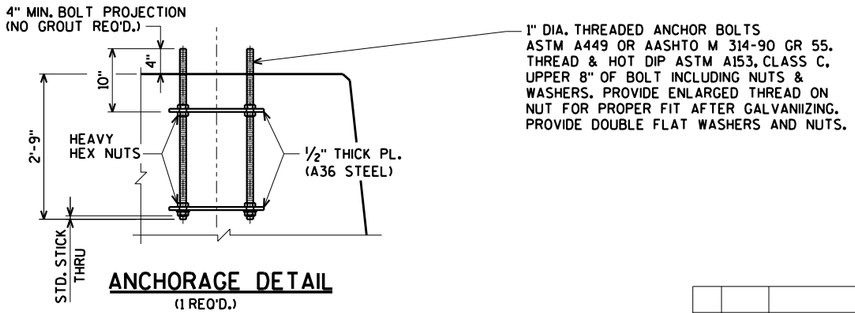


PLATE DETAIL
(1 REQ'D.)



ANCHORAGE DETAIL
(1 REQ'D.)

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18x12x6-INCH",
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURE"

EXPANSION FITTINGS, ANGLES, AND ADAPTER FITTINGS TO BE INCIDENTAL TO THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

APPROVED MANUFACTURERS - JUNCTION BOXES: SEE APPROVED MATERIAL LIST.

BONDING JUMPERS FOR LIGHTING CONDUIT SHALL EITHER ENTER THE JUNCTION BOX AND BE TERMINATED TO THE GROUNDING LUG USING TERMINAL BLOCKS; OR CAN BE EXOTHERMICALLY WELDED TO A FIELD INSTALLED GROUNDING LUG ON THE BACK SIDE OF THE JUNCTION BOX.

MINIMUM BENDING RADIUS FOR CONDUIT IS 12 INCHES.

FOR PARAPET '42SS' DETAILS, SEE SHEET 7

F.F. DENOTES FRONT FACE.

LEGEND

◑ CONSTR. JOINT STRIKE OFF AS SHOWN.

▲ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE

⊞ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

▨ THESE BARS ARE IN ADDITION TO THE STANDARD ANCHOR SLAB/PARAPET BARS.

⊕ SEE SHEET 7 FOR ADDITIONAL DETAILS OF THESE STANDARD ANCHOR SLAB/PARAPET BARS.

◪ 2" DIA. RIGID METALLIC CONDUIT

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STRUCTURE R-5-81 (STAGE 1)

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LIGHTING DETAILS

SHEET 11 OF 14
842

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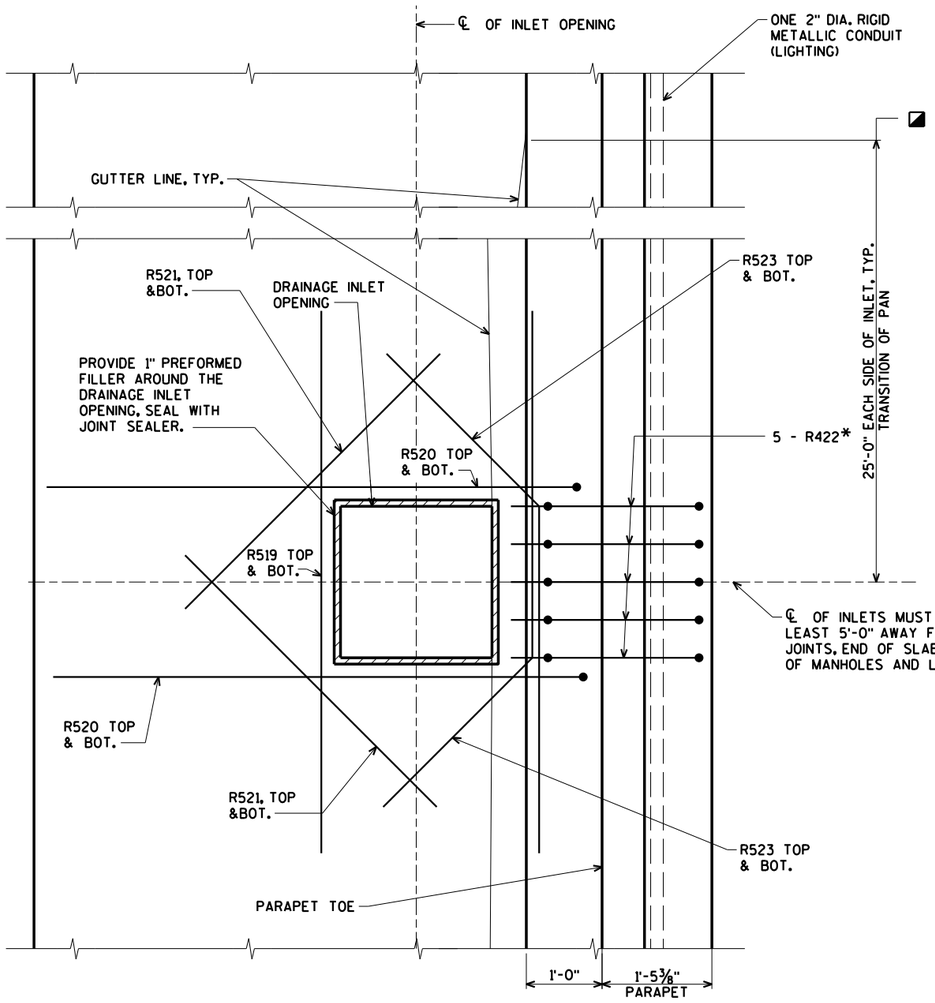


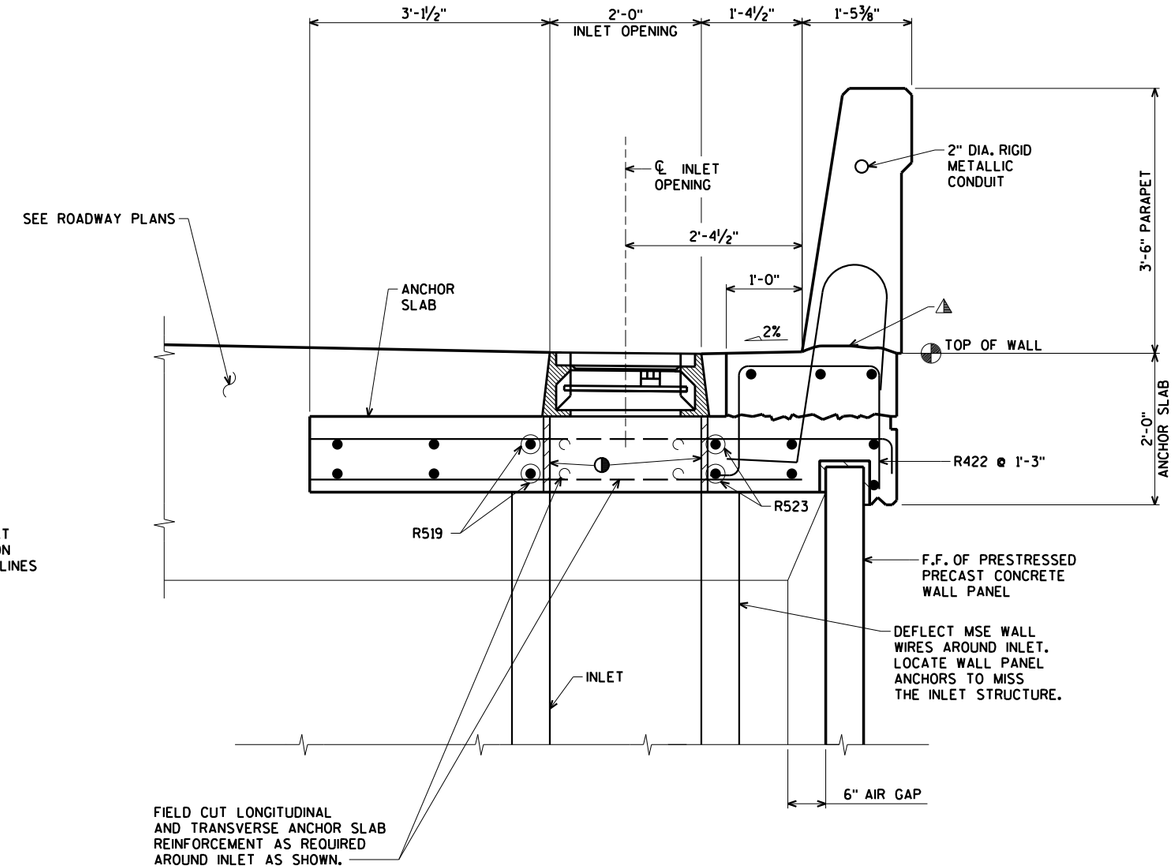
ANCHOR SLAB DETAIL AT INLET STRUCTURE

ALL REBARS SHOWN IN THIS DETAIL ARE IN ADDITION TO THE STANDARD REBARS IN ANCHOR SLAB EXCEPT AS NOTED.

*REPLACES R401 OF STANDARD ANCHOR SLAB DETAIL.

(INLET 318 - 2' x 2' INLET)

(INLET 311B, INLET 311A, INLET 318C, INLET 318A, & INLET 324 - 2' x 2.5' INLET)



SECTION AT INLET STRUCTURE

SEE STORM SEWER PLANS FOR ROADWAY STATIONING AND DIMENSIONS OF INLET STRUCTURE
CUT, BEND, OR DISPLACE STANDARD REINFORCEMENT 2" CLEAR OF INLET STRUCTURE AS REQUIRED.

(INLET 318 - 2' x 2' INLET)

(INLET 311B, INLET 311A, INLET 318C, INLET 318A, & INLET 324 - 2' x 2.5' INLET)

LEGEND

- ⚠ CONSTRUCTION JOINT - STRIKE OFF AS SHOWN
- ◑ 1" PREFORMED FILLER AROUND THE INLET OPENING. SEAL WITH JOINT SEALER.
- ◪ TRANSITION PAN OVER 25'-0" ON EACH SIDE OF THE INLET.

SEE SHEET 7 FOR STANDARD REBARS IN ANCHOR SLAB

SEE SHEET 13 FOR BILL OF BARS

F.F. DENOTES FRONT FACE.

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STATE OF WISCONSIN
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STRUCTURE R-5-81 (STAGE 1)

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ANCHOR SLAB AT INLET

SHEET 12 OF 14
843

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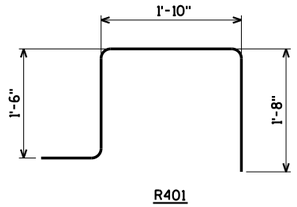
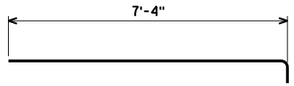


R401



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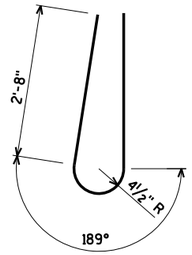

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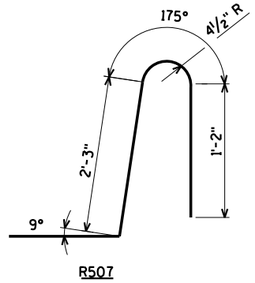

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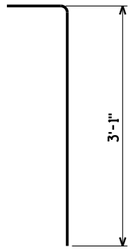

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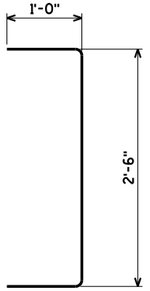

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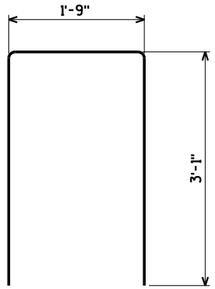

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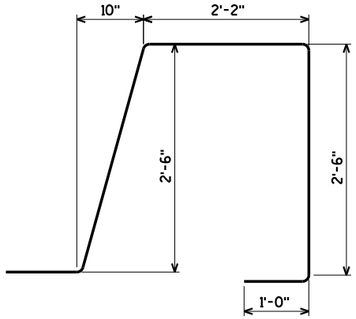


R512

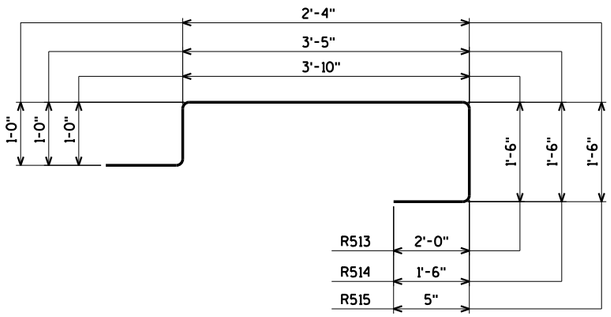
BILL OF BARS

	BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	63.380* COATED 0* UNCOATED LOCATION
	R401	X	875	5-5	X		ANCHOR SLAB TRANS.
◑	R402	X	875	6-0			ANCHOR SLAB BOT. TRANS.
	R503	X	1650	8-0	X		ANCHOR SLAB TOP TRANS.
⊕	R404	X	3	1079-6			ANCHOR SLAB LONG.
⊕	R405	X	12	1079-6			ANCHOR SLAB LONG.
	R506	X	1650	6-8	X		PARAPET VERTICAL
	R507	X	1650	5-5	X		PARAPET & ANCHOR SLAB VERT.
⊕	R508	X	8	1079-6			PARAPET HORIZ.
	R509	X	10	4-0	X		PARAPET VERT. @ LIGHT STD.
	R510	X	10	4-3	X		PARAPET VERT. @ LIGHT STD.
	R511	X	20	7-8	X		PARAPET VERT. @ LIGHT STD.
	R512	X	20	8-11	X		PARAPET VERT. @ LIGHT STD.
	R513	X	20	8-10	X		ANCHOR SLAB TRANS. @ LIGHT STD.
	R514	X	10	7-11	X		ANCHOR SLAB TRANS. @ LIGHT STD.
	R515	X	10	5-9	X		ANCHOR SLAB TRANS. @ LIGHT STD.
	R616	X	35	10-0	X		PARAPET HORIZ. @ LIGHT STD.
	R617	X	10	13-9	X		PARAPET HORIZ. @ LIGHT STD.
	R618	X	10	10-0	X		PARAPET HORIZ. @ LIGHT STD.
	R519	X	12	7-10			ANCHOR SLAB @ INLET
◑	R520	X	24	6-6	X		ANCHOR SLAB @ INLET
	R521	X	24	4-9			ANCHOR SLAB @ INLET
	R422	X	30	5-0	X		ANCHOR SLAB @ INLET
	R523	X	24	7-10	X		ANCHOR SLAB @ INLET

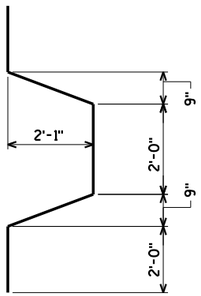
BENDING DIMENSIONS ARE OUT TO OUT OF BARS

◑ BAR LENGTH IS BASED ON 9½" THICK PRESTRESSED PRECAST CONCRETE WALL PANEL. ADJUST BAR LENGTH IF THE WALL PANEL THICKNESS IS DIFFERENT.

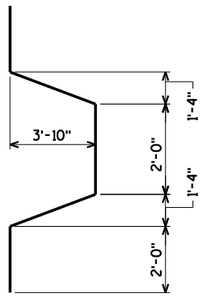
⊕ FIGURE SHOWN IN THE "NO. REQ'D" AND "LENGTH" COLUMNS OF THE TABLE SHOULD BE USED FOR BAR WEIGHT CALCULATIONS ONLY. INDIVIDUAL BAR LENGTHS TO BE DETERMINED BY THE CONTRACTOR BASED ON ACTUAL DISTANCE BETWEEN ANCHOR SLAB EXPANSION JOINTS.



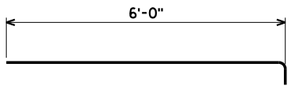
R513, R514, R515



R616
R618



R617



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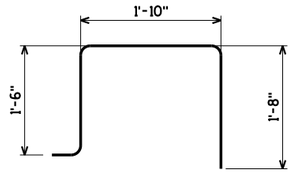

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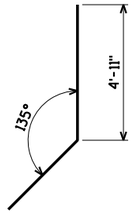


R523

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

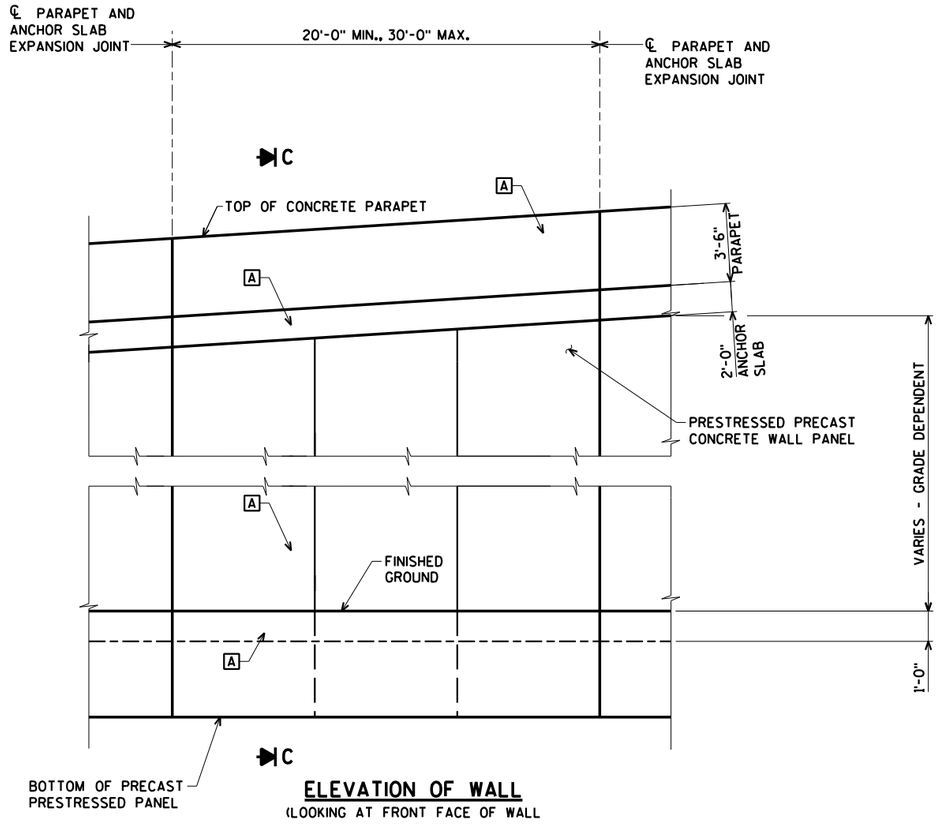
DRAWN BY CJM | PLANS CK'D. KLW

BILL OF BARS

SHEET 13 OF 14
844

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

8



ELEVATION OF WALL

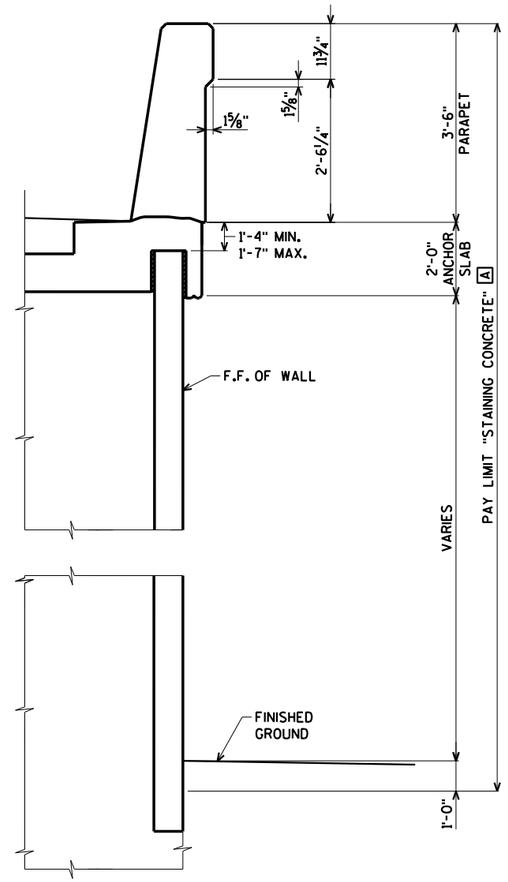
(LOOKING AT FRONT FACE OF WALL

LEGEND

(A20) PAY LIMIT FOR "STAINING CONCRETE" FOR THE WALL PANELS IS FROM TOP OF WALL TO 1'-0" BELOW GRADE. SEE SPECIAL PROVISIONS AND DETAILS ON THIS SHEET.

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION
A	BASE COLOR	PARAPETS AND WALLS



SECTION C-C

F.F. DENOTES FRONT FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-81 (STAGE 1)

DRAWN BY CJM | PLANS CK'D. KLW

AESTHETIC DETAILS

SHEET 14 OF 14
845

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

$PRFNAME$
U:\45-0291.01 - USH 41 Brown Co -Retaining Wall\Retaining Walls\5-11-14 Stage 1 Plans\R-5-81-Aesthetic.DGN
8/20/2014
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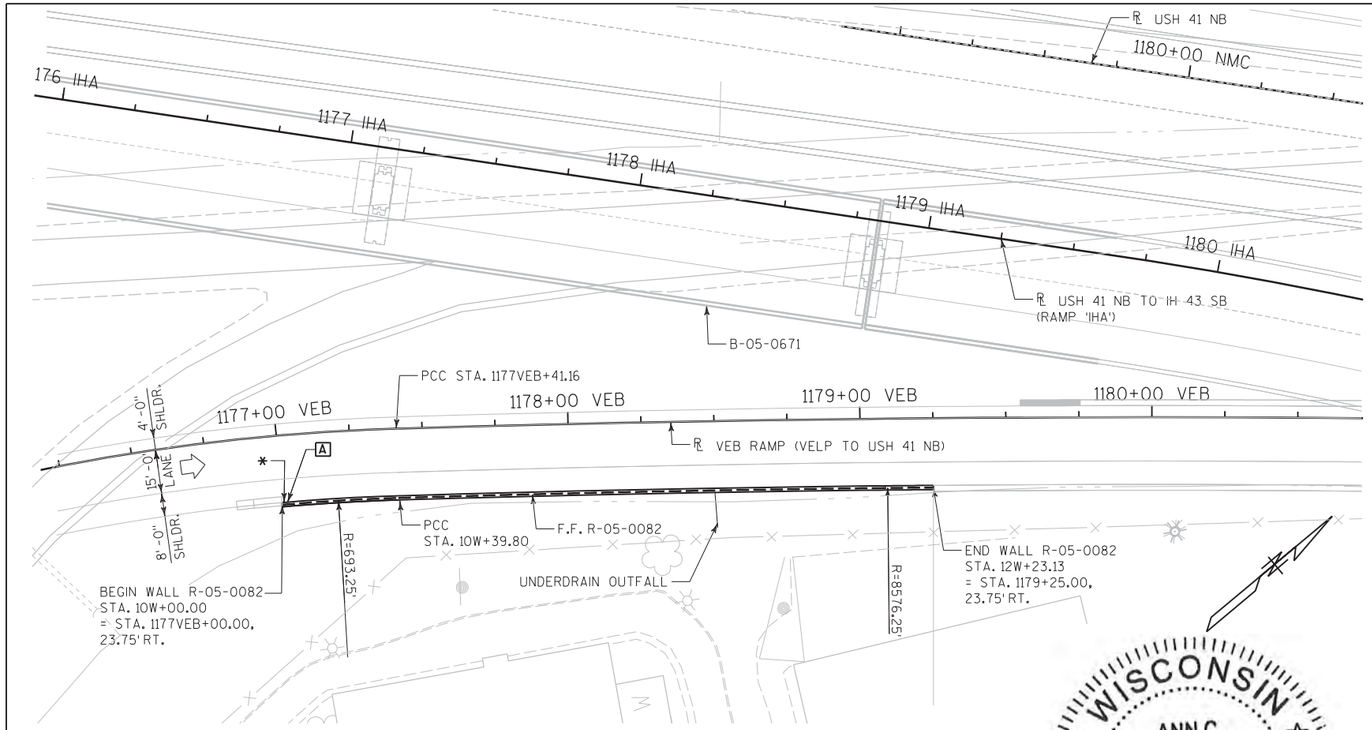


PLAN

MSE RETAINING WALL WITH TILT-UP PANELS

VEB HORIZONTAL CURVE DATA

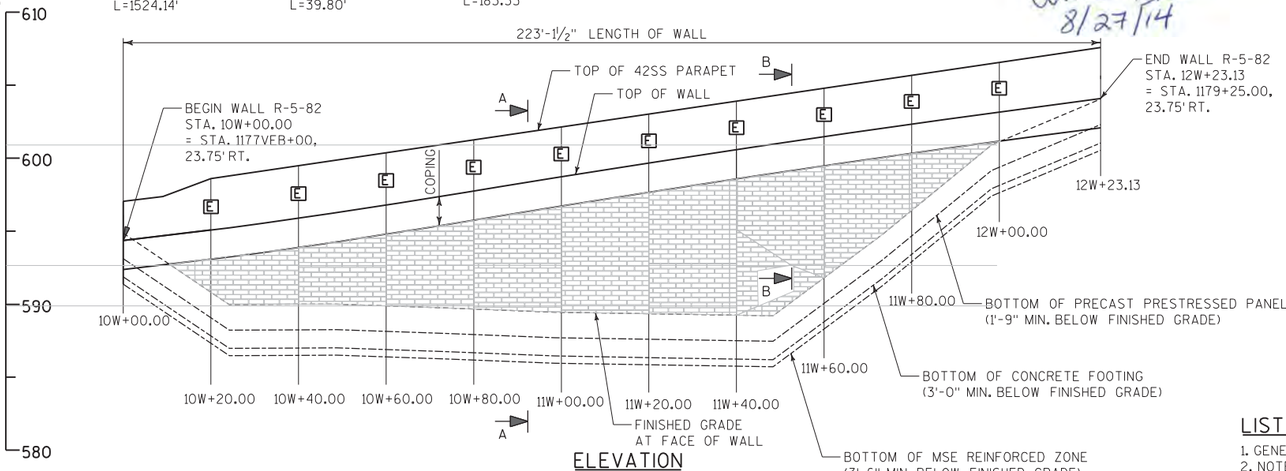
PI STA.=1176VEB+53.47
X=88437.706
Y=582711.381
PC STA.=1175VEB+64.88
PCC STA.=1177VEB+41.16
△ =14°05'11" RT
D=7°59'28"
R=717.00'
L=176.28'

PI STA.=1181VEB+05.23
X=88968.478
Y=583378.691
PCC STA.=1177VEB+41.16
PT STA.=1192VEB+65.30
△ =10°09'15" RT
D=0°09'58"
R=8600.00'
L=1524.14'

RETAINING WALL R-05-0082 HORIZONTAL CURVE DATA

PI STA.=10W+19.90
X=88499.047
Y=582750.348
PC STA.=10W+00.00
PCC STA.=10W+39.80
△ =3°17'21" RT
D=8°15'53"
R=693.25'
L=39.80'

PI STA.=11W+31.46
X=88568.501
Y=582837.668
PCC STA.=10W+39.80
PT STA.=12W+23.13
△ =1°13'29"
D=0°40'05"
R=8576.25'
L=183.33'



ELEVATION

(LOOKING WEST AT FRONT FACE OF WALL)

(DISTANCES AND STATIONS GIVEN ALONG FRONT FACE OF WALL)
SEE SHEET 3 FOR SECTION A-A.
SEE SHEET 7 FOR SECTION B-B.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP PILOT."

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE COST OF FURNISHING AND PLACING THE FOOTING UNDER THE MSE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

THE QUANTITY OF CONCRETE MASONRY FOR THE CAST-IN-PLACE ANCHOR SLAB AND PARAPETS IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY RETAINING WALLS."

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN IN THE GEOMETRY TABLE ON SHEET 2.

WALL STATIONS ALONG THE REFERENCE LINE FOR R-05-0082 ARE AT THE FRONT FACE OF PRECAST CONCRETE WALL PANEL UNLESS SHOWN OTHERWISE. ALIGNMENT STATIONS REFERENCE THE USH 41 VEB RAMP ALIGNMENT.

DO NOT ALLOW CONCRETE OR FILL TO DROP OR ACCUMULATE INTO WALL PANEL CAVITY.

HOT DIP GALVANIZE ALL STRUCTURAL STEEL CARBON IN ACCORDANCE WITH ASTM A123 WHERE SHOWN.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153, TYPE I, II, OR III, OR AASHTO DESIGNATION M213.

OPTIONAL TRANSVERSE CONSTRUCTION JOINTS ARE PERMITTED IN THE FOOTING WITH A MINIMUM SPACING OF TWO PANEL LENGTHS. OFFSET FOOTING JOINTS A MINIMUM OF 1'-0" FROM WALL JOINTS. RUN BAR STEEL THRU FOOTING JOINTS.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 DEGREES WITHOUT CERTIFIED TEST VALUES.

DESIGN THE RETAINING WALL FOR FINISHED GRADE SLOPE BEHIND THE WALL AS SHOWN ON THESE PLANS AND ON THE ROADWAY CROSS-SECTIONS.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

DESIGN MSE WALL FOR A SUCTION LOAD OF 20 PSF ACTING ON THE PRECAST WALL PANELS.

DESIGN FOR RETAINING WALL TO PROVIDE FOR ROADWAY BEHIND WALL AS SHOWN.

SEE SPECIAL PROVISIONS AND SHT. 7 FOR AESTHETIC TREATMENTS TO THE WALL.

IN ACCORDANCE WITH THE SPECIAL PROVISIONS, BID ITEM "STAINING CONCRETE" IS REQUIRED FOR BRICK SURFACES PRIOR TO BID ITEM "STAINING CONCRETE BRICK".

APPLY PROTECTIVE SURFACE TREATMENT TO THE EXPOSED SURFACE OF THE ANCHOR SLAB AND THE TOP AND INSIDE FACES OF PARAPETS.

PROVIDE A RUBBED SURFACE TREATMENT IN ACCORDANCE WITH SECTION 502.3.7.3, OF THE STANDARD SPECIFICATIONS, TO ALL PERMANENTLY EXPOSED SURFACES OF CONCRETE MASONRY RETAINING WALLS.

AT ENDS OF WALL, SEAL CAVITY BETWEEN WIRE-FACED WALL AND PRECAST CONCRETE PANEL WITH COLUMN OF CONCRETE 1'-6" WIDE. THIS WORK IS INCIDENTAL TO BID ITEM SPV.0165.851 "PRESTRESSED PRECAST CONCRETE WALL PANELS".

THE WALL ALIGNMENT IS CURVED, HOWEVER IT IS NOT NECESSARY TO FABRICATE CURVED TILT-UP PANELS. STRAIGHT PANELS SUPPLIED FOR THE CURVED ALIGNMENT SHALL BE A MAXIMUM OF 10'-0" IN LENGTH, AND BE LAID OUT SUCH THAT THEY LIE TANGENT TO THE ALIGNMENT AT THE PANEL CENTER. DEVIATION OF THE PANEL FROM THE CURVED ALIGNMENT SHALL BE TAKEN UP IN THE COPING OVERHANG, WHICH MAY VARY UP TO ¼" (POSITIVE) FROM THE PLAN DIMENSION. THE FACE OF THE COPING SHALL BE CAST CURVED, PARALLEL TO THE ALIGNMENT.

LEGEND

[A] NAME PLATE LOCATION, SEE SHT. 5 FOR DETAILS

[E] EXPANSION JOINT LOCATION

* PROVIDE STEEL THRIE BEAM ANCHORAGE

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. NOTES AND QUANTITIES
3. CROSS SECTION & WALL DETAILS
4. ADDITIONAL WALL DETAILS
5. PARAPET AND ANCHOR SLAB DETAILS -1
6. PARAPET AND ANCHOR SLAB DETAILS -2
7. AESTHETIC DETAILS
8. SUBSURFACE EXPLORATION

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER (608) 266-8489
NE REGION CONTACT:
PAUL VRANEY (920) 492-2232
CONSULTANT CONTACT:
ANN THIELMANN (608) 229-1414

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
8/27/14

STATE PROJECT NUMBER
1133-10-71

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53793
608-249-6140

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/21/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-05-0082

COUNTY	VILLAGE
BROWN	HOWARD

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JFR	ACT	TRW	ACT

GENERAL PLAN AND ELEVATION

SHEET 1 OF 8

846

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8/27/2014

STATE PROJECT NUMBER
1133-10-71

SOIL PARAMETERS

SOIL UNIT	APPROXIMATE BOTTOM ELEVATION (FEET)	SOIL UNIT WEIGHT (pcf)	UNDRAINED		DRAINED	
			COHESION (psf)	FRICTION ANGLE (DEGREES)	COHESION (psf)	FRICTION ANGLE (DEGREES)
EXISTING GRANULAR FILL/ NEW GRANULAR FILL	585.0	125	---	30	---	30
MEDIUM DENSE TO DENSE SANDY SILT	577.0	120	---	28	---	28
STIFF LEAN CLAY	573.0	130	1,500	---	---	28
VERY SOFT LEAN CLAY	557.0	115	400	---	---	24
MEDIUM STIFF LEAN CLAY	552.0	125	900	---	---	26
DENSE TO VERY DENSE TILL	520.0	130	---	35	---	35
POSSIBLE BEDROCK	---	150	200,000#	---	200,000#	---

NOTE: # = REFERENCE TO UNI-AXIAL COMPRESSIVE STRENGTH OF CONCRETE.

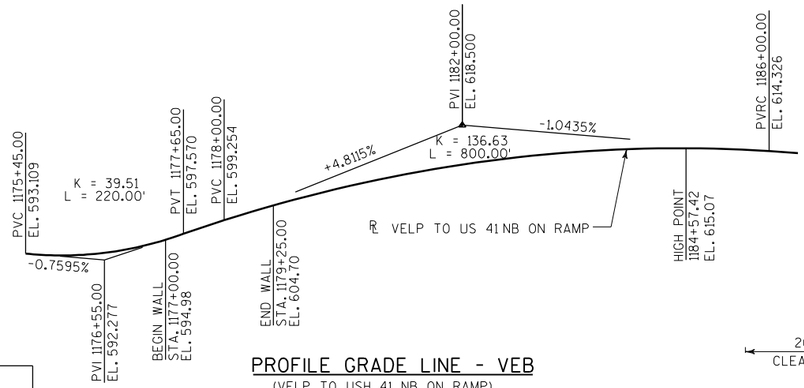
SUMMARY OF STABILITY ANALYSES

WALL STATION (VEB ℄)	DRAIN CONDITION	CRITICAL CONDITION	MAXIMUM WALL HEIGHT ☒, FT	REINFORCEMENT LENGTH, FT	MINIMUM REINFORCEMENT LENGTH/WALL HEIGHT RATIO	CDR
1177+00 TO 1177+75	DRAINED/ UNDRAINED	GLOBAL STABILITY *	9	9	1.0	1.14
		ECCENTRICITY	9	9	1.0	1.15
		SLIDING	9	9	1.0	1.03
		BEARING	9	9	1.0	1.08
	FACTORED BEARING RESISTANCE=3,000 psf					
1177+75 TO 1178+65	DRAINED/ UNDRAINED	GLOBAL STABILITY	13	13	1.0	1.14
		ECCENTRICITY	13	13	1.0	1.42
		SLIDING	13	13	1.0	1.22
		BEARING	13	13	1.0	1.14
	FACTORED BEARING RESISTANCE=3,000 psf					
1178+65 TO 1179+25	DRAINED/ UNDRAINED	GLOBAL STABILITY	9	9	1.0	1.14
		ECCENTRICITY	9	9	1.0	1.15
		SLIDING	9	9	1.0	1.03
		BEARING	9	9	1.0	1.83
	FACTORED BEARING RESISTANCE=3,000 psf					

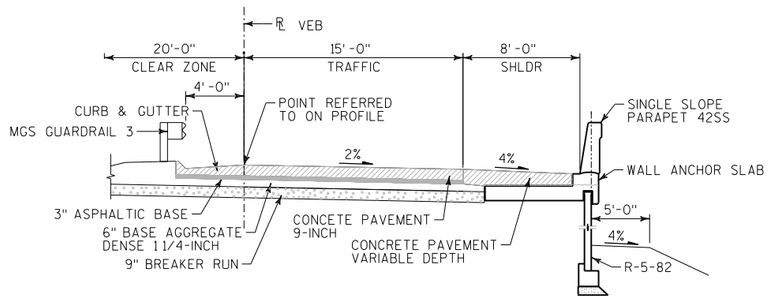
NOTE: ☒ INCLUDES 3 FOOT EMBEDMENT DEPTH BELOW FRONT WALL GRADE, DOES NOT INCLUDE ANCHOR SLAB DEPTH
* - A RESISTANCE FACTOR OF 0.75 WAS USED FOR DETERMINING CDR FOR THE SLOPES NOT SUPPORTING STRUCTURAL ELEMENTS. UNDRAINED CONDITION GOVERNED IN STABILITY ANALYSIS.
FINAL DESIGN FOR INTERNAL STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

TOTAL ESTIMATED QUANTITIES

BID - ITEM NUMBER	BID - ITEM	UNITS	QUANTITY
502.3200	PROTECTIVE SURFACE TREATMENT	SY	105
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	95
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	12760
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	13
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	225
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EA	1
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	1080
SPV.0165.701	STAINING CONCRETE	SF	1360
SPV.0165.702	STAINING CONCRETE BRICK	SF	1080
SPV.0165.850	WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP PILOT	SF	1495
SPV.0165.851	PRESTRESSED PRECAST CONCRETE WALL PANEL	SF	1495
	NON BID - ITEM		
	PREFORMED FILLER	SIZE	¾" & 1"
	CORK FILLER	SIZE	1"
	EXPANDED POLYSTYRENE	SIZE	1"



PROFILE GRADE LINE - VEB
(VELP TO USH 41 NB ON RAMP)
NOTE: TOP OF WALL E



TYPICAL SECTION-RAMP VEB

BENCH MARKS

NAME	COORDINATES X	Y	Z	DESCRIPTION
BM538A	87631.538	582971.250	591.64	CHISELED "X" ON FIRE HYDRANT BURY BOLT AT N.W. QUAD. OF USH 41 AND VELP AVE., 75' NORTH OF THE ℄ OF VELP AVE. AND 110' EAST OF THE ℄ OF PRIVATE ENTRANCE TO VENDERVEST HARLEY DEALERSHIP.
BM560	88254.831	581685.633	595.06	CHISELED "X" ON FIRE HYDRANT BURY BOLT AT S.E. QUAD. OF MEMORIAL DR. AND GLENVIEW AVE., 35' EAST OF MEMORIAL DR. AND 35' SOUTH OF GLENVIEW AVE.
BM561	88370.064	582387.974	595.33	CHISELED SQUARE ON LIGHT POLE BASE AT TACO BELL AT S.W. QUAD. OF VELP AVE. AND MEMORIAL DR. NEXT TO TACO BELL DRIVE THRU, 35' SOUTH OF E.B. VELP AVE. CURB AND 200' WEST OF MEMORIAL DR. ℄.

GEOMETRY TABLE

WALL STATION	COORDINATES X	Y	RAMP VEB STATION	OFFSET TO F.F. WALL	TOP OF WALL EL. A	FINISHED GROUND EL. B
10W+00.00	88487.5714	582734.0859	1177VEB+00.00	23.75' RT	594.36	594.36
10W+24.17	88501.8495	582753.5886	1177VEB+25.00	23.75' RT	595.23	589.97
10W+39.80	88511.4369	582765.9252	1177VEB+41.16	23.75' RT	595.87	589.99
10W+48.62	88516.9283	582772.8220	1177VEB+50.00	23.75' RT	596.26	590.00
10W+73.55	88532.4960	582792.2950	1177VEB+75.00	23.75' RT	597.43	589.74
10W+98.48	88548.1202	582811.7227	1178VEB+00.00	23.75' RT	598.63	589.45
11W+23.41	88563.8009	582831.1049	1178VEB+25.00	23.75' RT	599.81	589.32
11W+48.34	88579.5378	582850.4415	1178VEB+50.00	23.75' RT	600.95	589.20
11W+73.27	88595.3309	582869.7322	1178VEB+75.00	23.75' RT	602.04	594.75
11W+98.20	88611.1799	582889.9769	1179VEB+00.00	23.75' RT	603.08	600.90
12W+23.13	88627.0849	582908.1755	1179VEB+25.00	23.75' RT	604.08	604.08

DESIGN DATA

LIVE LOAD SURCHARGE (ROADWAY) ——— 240 P.S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY - BARRIER & COPING ——— f'c = 4,000 P.S.I.

PRECAST CONCRETE WALL PANEL ——— f'c = 5,000 P.S.I.

HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 ——— fy = 60,000 P.S.I.

STRUCTURAL STEEL CARBON (ASTM A709 GRADE A36) ——— fy = 36,000 P.S.I.

TRAFFIC DATA

A.A.D.T. (2015) = 5,500
A.A.D.T. (2035) = 7,000
R.D.S. = 55 MPH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-05-0082

DRAWN BY TRW | PLANS CK'D. ACT

NOTES AND QUANTITIES

SHEET 2 OF 8

847

8

8

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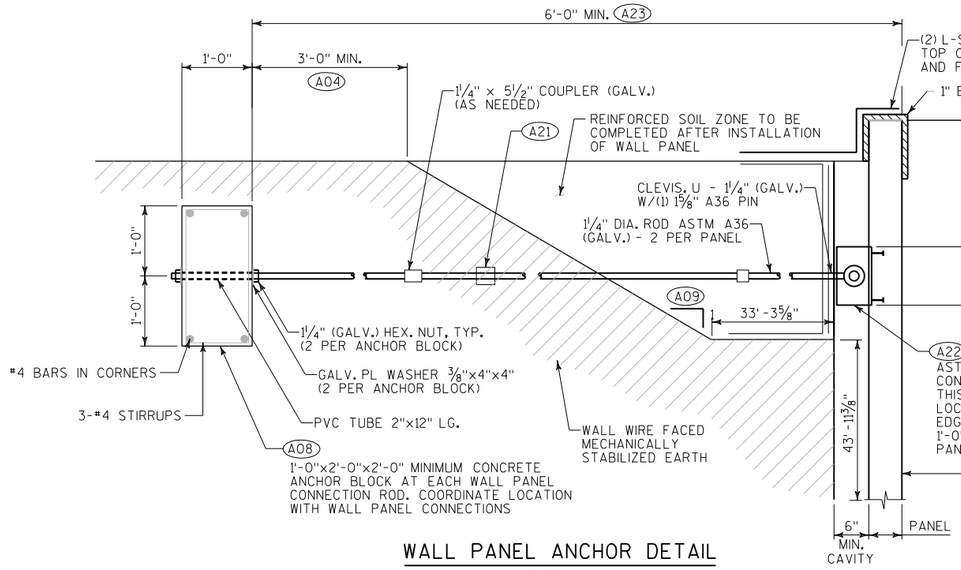
8/27/2014

STATE PROJECT NUMBER

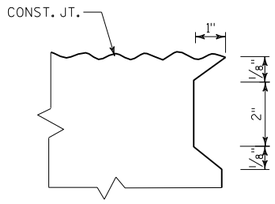
1133-10-71



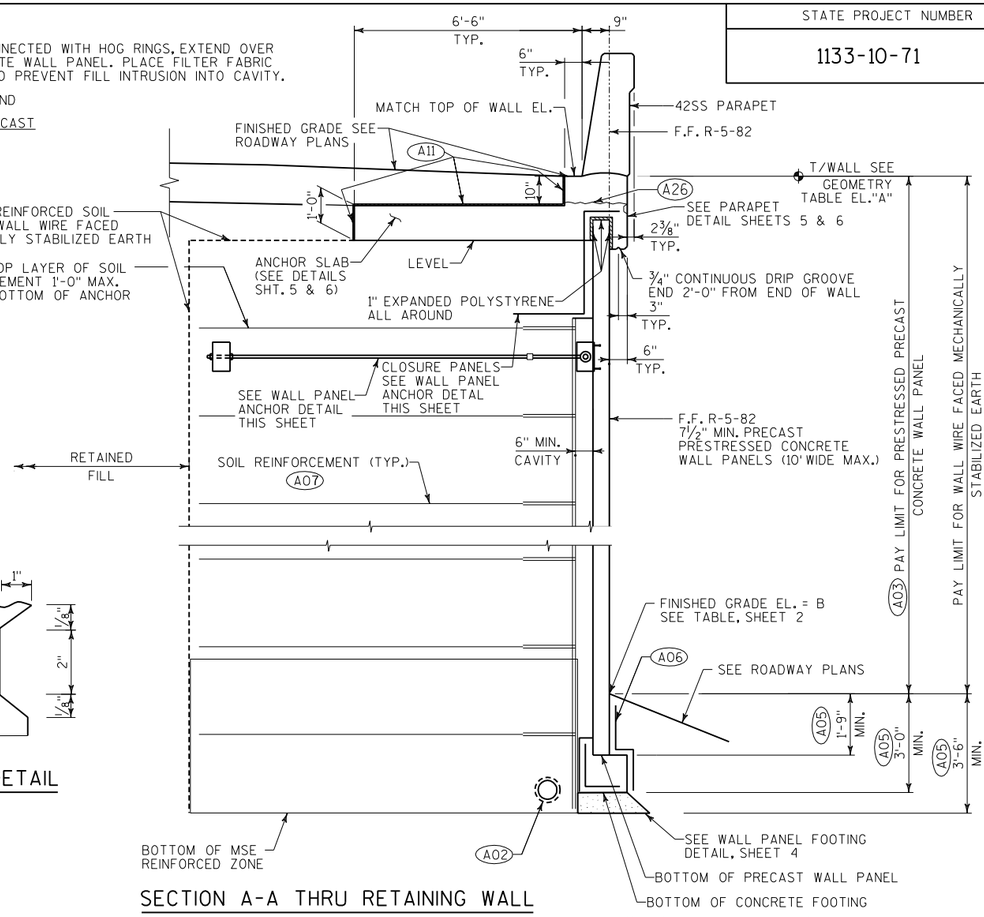
WALL PANEL ANCHOR DETAIL

A01

ALL ITEMS SHOWN ARE INCIDENTAL TO ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

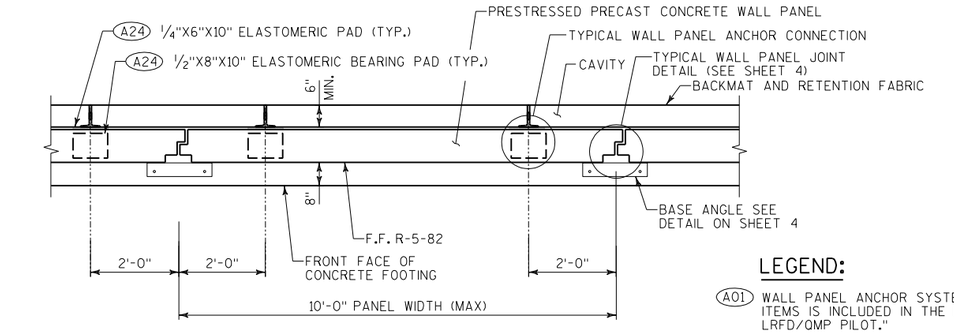


RUSTICATION DETAIL

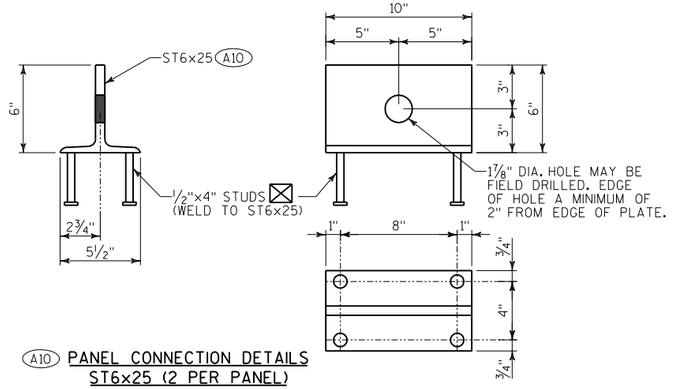


SECTION A-A THRU RETAINING WALL

LOOKING NORTH STA. 10W+00 TO STA. 12W+23.13 SEE ROADWAY CROSS SECTIONS FOR DETAILS AT FRONT FACE OF WALL SEE SHEET 7 FOR ARCHITECTURAL SURFACE TREATMENT AND STAINING TO FRONT FACE OF PRECAST WALL PANEL



PLAN VIEW WALL PANEL CONNECTION



A10 PANEL CONNECTION DETAILS ST6x25 (2 PER PANEL)

☒ AS AN ALTERNATE, ½" TYPE "S" ANCHORS MAY BE USED IN PLACE OF THE 4" STUDS.

ST6x25 MAY BE WELDED TO ¾" THICK PLATE ANCHORED IN PRECAST CONCRETE PANEL. DETAILS SUBJECT TO APPROVAL BY THE ENGINEER.

LEGEND:

A01 WALL PANEL ANCHOR SYSTEM INCLUDES ANCHOR BLOCK, ANCHOR BLOCK COUPLER, 1¼" DIA. ANCHOR ROD, CLEVIS, AND OTHER PANEL CONNECTION COMPONENTS. DESIGN, DETAILING, AND FURNISHING OF THESE ITEMS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL." INSTALLATION OF THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP PILOT."

A02 PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELDS AT EXPOSED ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON SHEET 4.

A03 THE PLAN QUANTITY FOR THE BID ITEMS "WALL WIRE FACED MECHANICALLY STABILIZED EARTH" AND "PRESTRESSED PRECAST CONCRETE WALL PANEL" ARE BASED ON A WALL HEIGHT MEASURED FROM THE FINISHED GRADE AT THE FRONT FACE OF THE WALL TO THE TOP OF THE WALL AS SHOWN.

A04 DESIGN LENGTH TO PROVIDE REQUIRED HORIZONTAL CAPACITY OF ANCHOR ASSEMBLY. MINIMUM 3'-0" COMPACTED FILL IN FRONT OF ANCHOR BLOCK PRIOR TO WALL PANEL ERECTION. ROD PLACED MINIMUM 2'-0" BELOW FINISHED GRADE.

A05 MINIMUM EMBEDMENT DEPTHS SHALL BE BASED ON FINISHED GRADE NOTED IN "GEOMETRY TABLE" ON SHEET 2.

A06 GEOTEXTILE FABRIC TYPE DF, 2'-0" WIDE, LENGTH OF FOOTING

A07 SEE SHEET 2 FOR SOIL REINFORCEMENT REQUIREMENTS.

A08 AN ALTERNATIVE DEADMAN AND PANEL CONNECTION SYSTEM MAY BE SUBMITTED FOR REVIEW AND POSSIBLE ACCEPTANCE BY THE ENGINEER. TILT-UP PANEL DEADMEN MAY BE TRENCHED IN IF THE GEOMETRY OF THE DEADMEN LOCATION ALLOWS.

A09 EXCAVATED SLOPE PER OSHA REQUIREMENTS.

A10 S12X50 (GALV.) CUT IN HALF TO FORM "T" SECTION BF=5.477", TW=0.687.

A11 18" RUBBERIZED MEMBRANE WATERPROOFING (RMW). SEAL ALL HORIZONTAL AND VERTICAL JOINTS IN ANCHOR SLAB. TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

A21 OPTIONAL MULTIDIRECTIONAL CONNECTOR MAY BE USED TO FACILITATE ALIGNMENT AT THE CONNECTION (CONNECTOR TO BE CORROSION RESISTANT AND DEVELOP 100% OF THE ULTIMATE STRENGTH OF 1¼" DIA. BAR)

A22 AN OPTIONAL WELDED DETAIL OR TYPE "S" ANCHORED PLATE MAY BE SUBMITTED FOR CONSIDERATION BY THE ENGINEER. (RESTORE ZINC COATING AROUND ANY WELDED AREAS)

A23 LENGTH MAY BE INCREASED TO AVOID OBSTRUCTIONS. INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

A24 INCLUDE IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL."

A26 OPTIONAL CONST. JT. LEAVE SURFACE ROUGHENED. PROVIDE RUSTICATION IF OPT. CONST. JT. IS USED. IF THE OPTIONAL CONST. JT. IS USED, PLACE 18" MEMBRANE WATERPROOFING ALONG ENTIRE LONGITUDINAL JOINT. THE MEMBRANE WATERPROOFING SEALING OPTIONAL CONST. JT. IS INCIDENTAL TO "CONCRETE MASONRY RETAINING WALLS" BID ITEM.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-05-0082

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CROSS SECTION AND WALL DETAILS

SHEET 3 OF 8

848

8/27/2014

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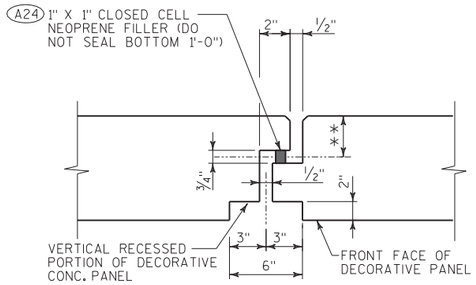
STATE PROJECT NUMBER

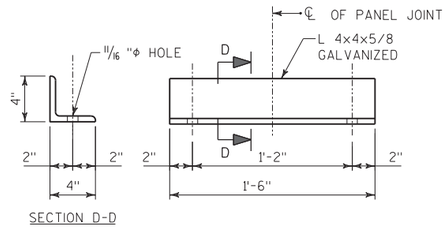
1133-10-71



TYPICAL WALL PANEL JOINT DETAIL

ALL ITEMS SHOWN INCLUDED IN BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

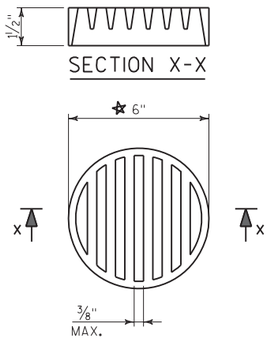
** 4" FOR 9½" PANEL
3" FOR 7½" PANEL



BASE ANGLE DETAIL

(1 AT EACH PANEL JOINT)

A24

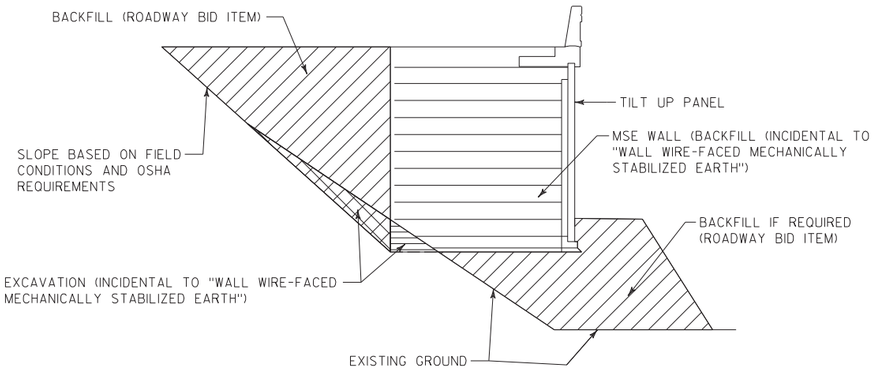


RODENT SHIELD

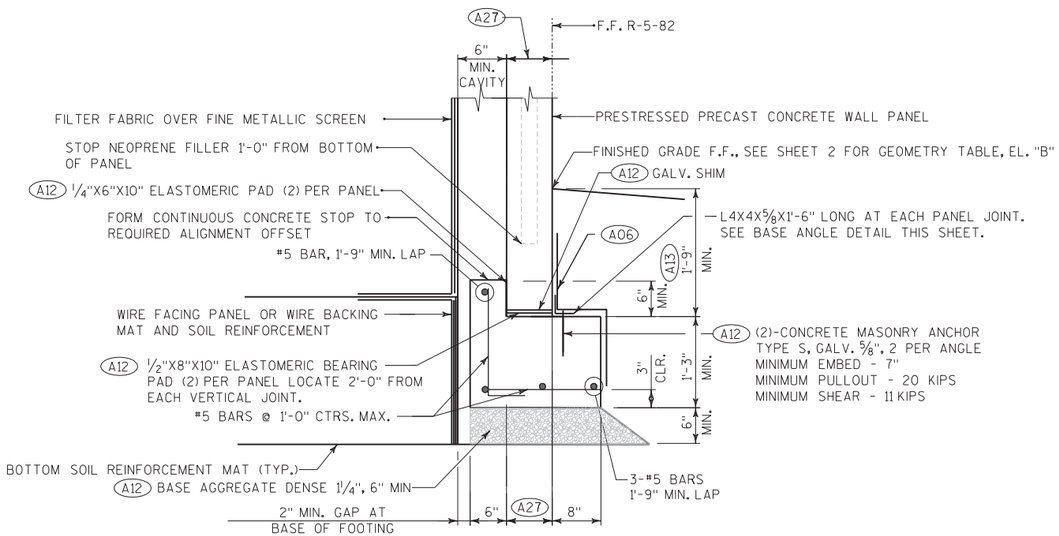
☆ DIMENSONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SHIELD SO SLOTS ARE VERTICAL.

COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".



EXCAVATION/BACKFILL DETAIL



WALL PANEL FOOTING DETAIL

(NOTE: FOOTING CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL")

LEGEND:

A06 GEOTEXTILE FABRIC TYPE DF, 2'-0" WIDE, LENGTH OF FOOTING.

A12 INCIDENTAL TO BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL."

A13 MINIMUM DIMENSION FROM FINISHED GRADE AT FRONT FACE OF WALL TO BOTTOM OF WALL PANEL FOOTING IS SHOWN. THE FOOTING MAY BE CONSTRUCTED ON A SLOPE PARALLEL TO THE PROPOSED GRADE, OR MAY BE STEPPED. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THE WALL PANEL FOOTING WITH FABRICATION OF THE PRECAST PANELS.

A24 INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL."

A27 7½" OR 9½"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-05-0082

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ADDITIONAL WALL DETAILS

SHEET 4 OF 8

849

8

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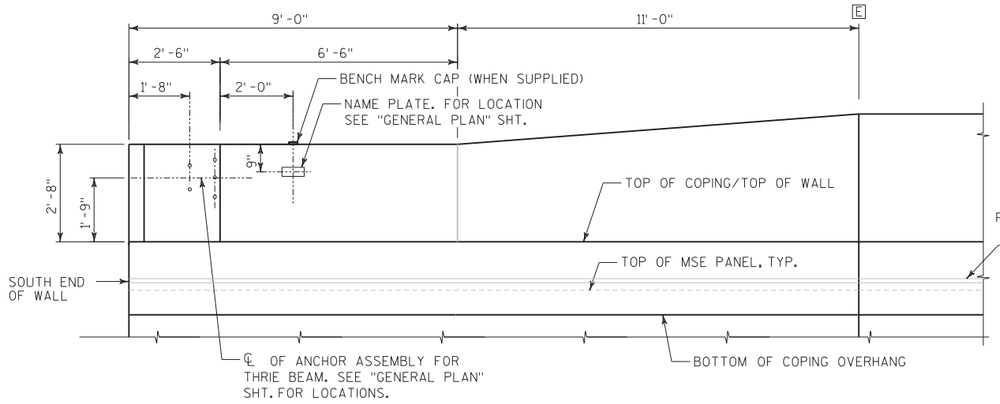
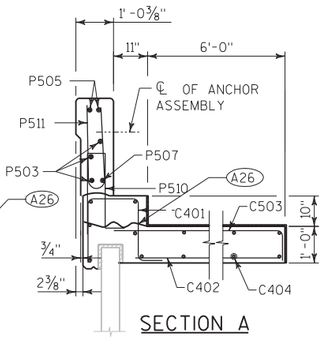
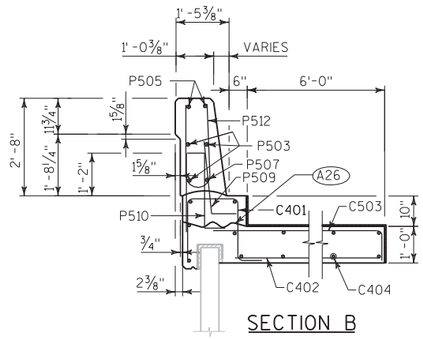
8/19/2014

STATE PROJECT NUMBER
1133-10-71

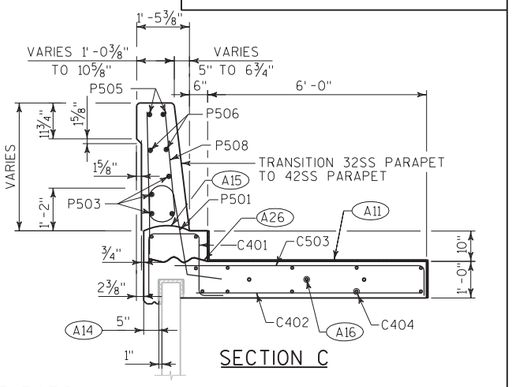




SECTION A



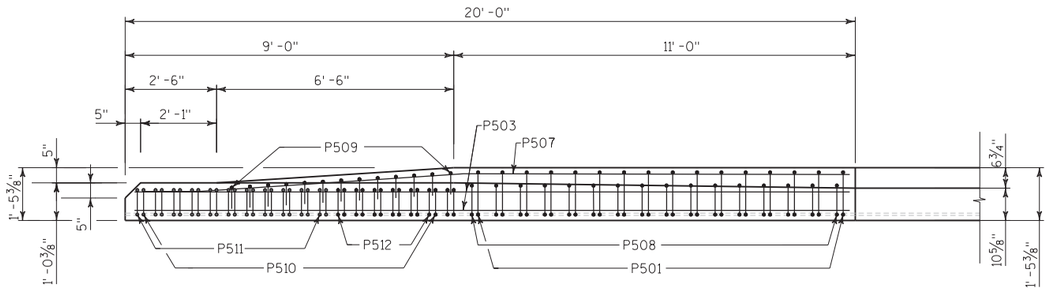
SECTION B

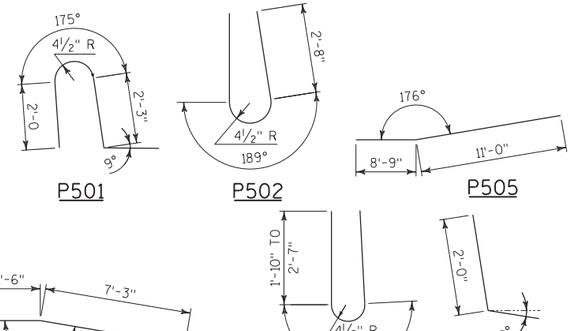


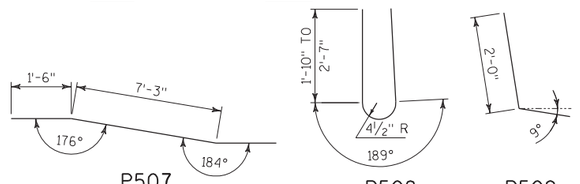
SECTION C

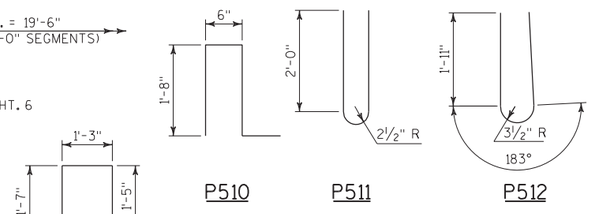
INSIDE ELEVATION

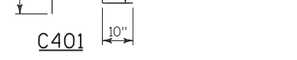
(LOOKING WEST THROUGH PARAPET)

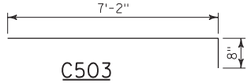












BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES ⚠	LOCATION	
P501	X	332	6'-2"	X	-	PARAPET	VERTICAL
P502	X	314	6'-8"	X	-	PARAPET	VERTICAL
P503	X	75	19'-6"	-	-	PARAPET	HORIZONTAL
P504	X	8	22'-8"	-	-	PARAPET	HORIZONTAL
P505	X	2	19'-9"	X	-	PARAPET	HORIZONTAL
P506	X	2	11'-5"	-	-	PARAPET	HORIZONTAL
P507	X	1	19'-2"	X	-	PARAPET	HORIZONTAL
P508	X	18	5'-9"	X	X	PARAPET	VERTICAL
P509	X	12	2'-9"	X	-	PARAPET	VERTICAL
P510	X	17	4'-4"	X	-	PARAPET	VERTICAL
P511	X	11	4'-9"	X	-	PARAPET	VERTICAL
P512	X	6	4'-10"	X	-	PARAPET	VERTICAL

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES

MARK	NO. REQ'D	"A"	LENGTH	LOCATION
P508	18	1'-10" TO 2'-7"	5'-0" TO 6'-6"	PARAPET TRANSITION

BUNDLE AND TAG EACH SERIES SEPARATELY

BILL OF BARS

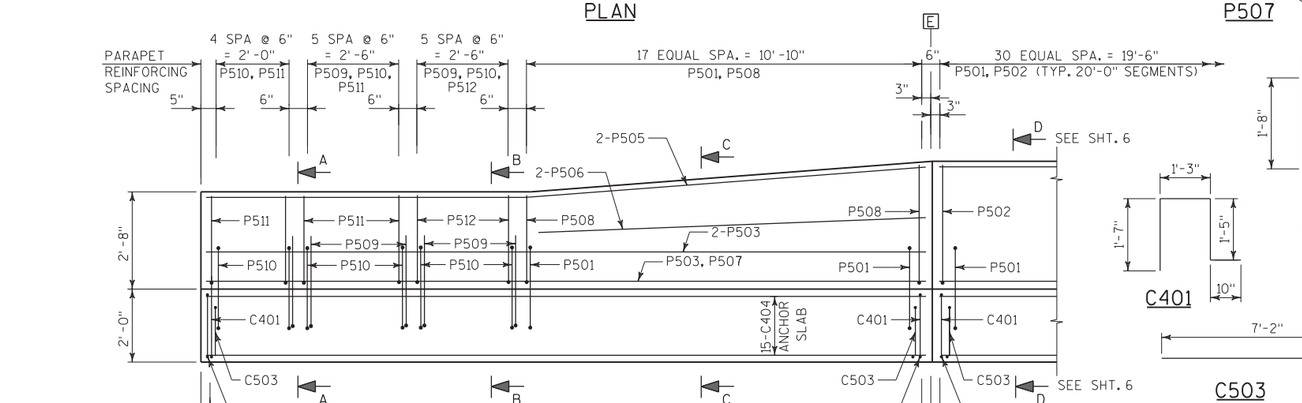
BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
C401	X	190	4'-10"	X	-	ANCHOR SLAB	VERTICAL
C402	X	190	5'-11"	-	-	ANCHOR SLAB	HORIZONTAL
C503	X	345	7'-9"	X	-	ANCHOR SLAB	HORIZONTAL
C404	X	150	19'-6"	-	-	ANCHOR SLAB	HORIZONTAL
C405	X	15	22'-8"	-	-	ANCHOR SLAB	HORIZONTAL

LEGEND:

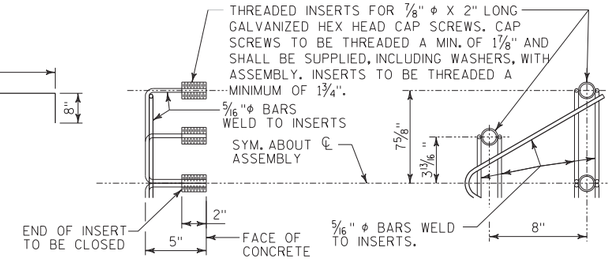
SEE SHEET 6.

E EXPANSION JOINT LOCATION

PLAN



OUTSIDE ELEVATION



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-05-0082

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PARAPET AND ANCHOR SLAB DETAILS

SHEET 5 OF 8

850

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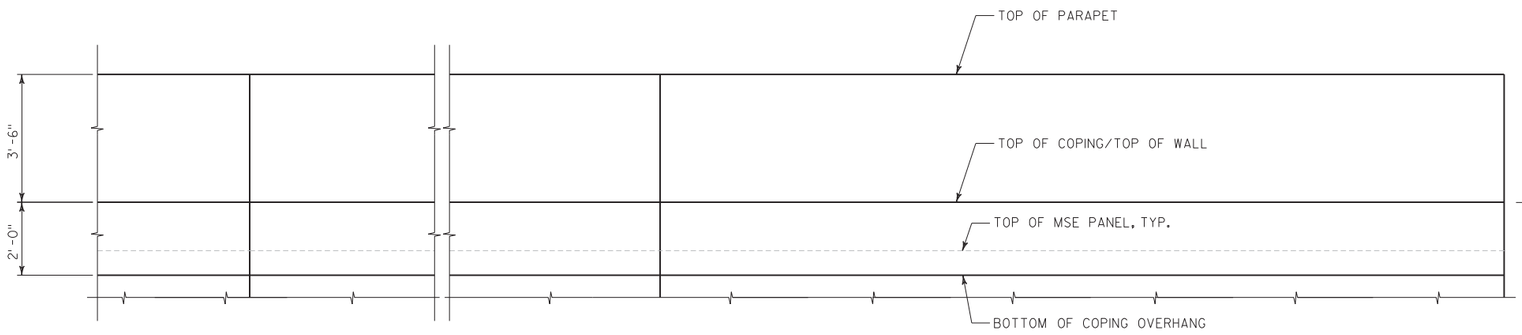
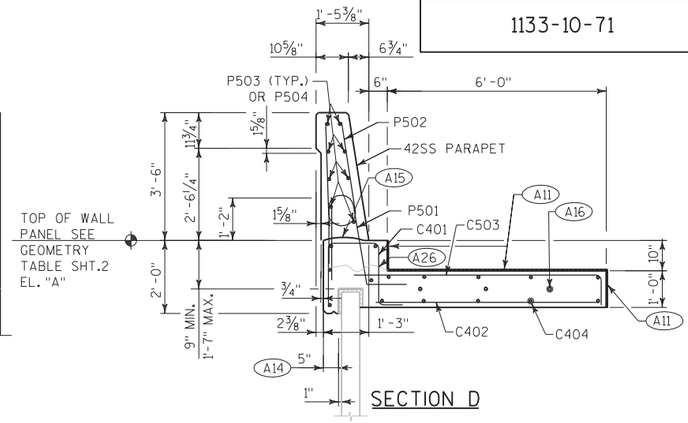
8/19/2014

STATE PROJECT NUMBER

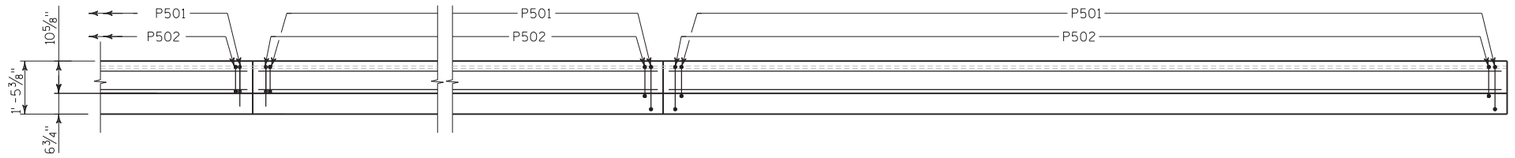
1133-10-71



INSIDE ELEVATION

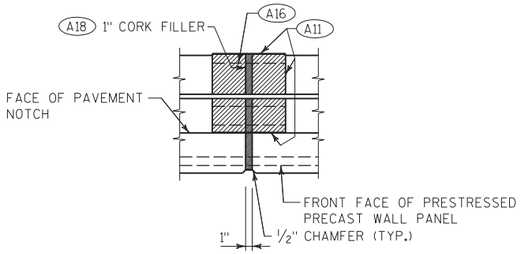


SECTION D

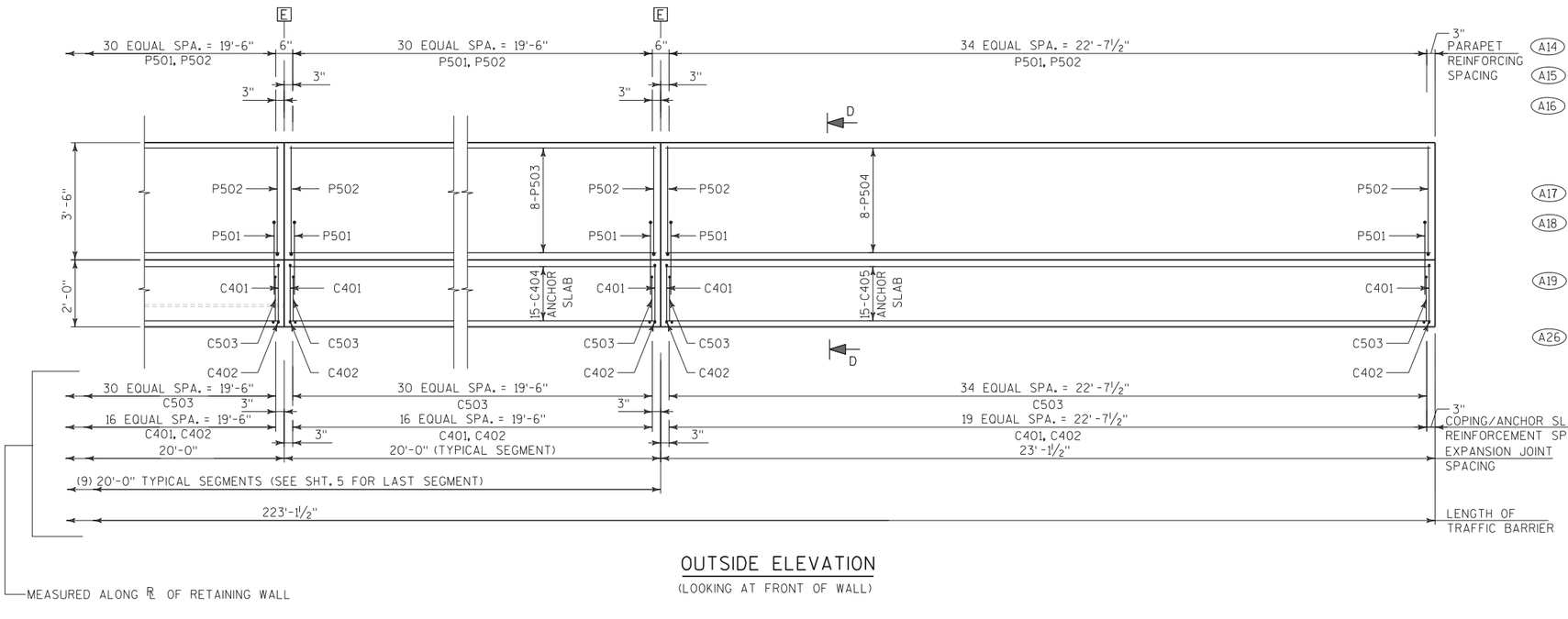


PLAN

(CURVE NOT SHOWN)



A19 ANCHOR SLAB EXPANSION JOINT DETAIL



OUTSIDE ELEVATION

(LOOKING AT FRONT OF WALL)

LEGEND:

- (A11) 18" RUBBERIZED MEMBRANE WATERPROOFING (RMW). SEAL ALL HORIZONTAL AND VERTICAL JOINTS IN ANCHOR SLAB. TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.
- (A14) OVERHANG DIMENSION MAY VARY UP TO ¼" (POSITIVE) TO ACCOMMODATE CURVATURE.
- (A15) CONSTRUCTION JOINT, STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- (A16) PLACE (3) -¾"Φ (SMOOTH) DOWEL BARS, 1'-6" LONG BETWEEN EXPANSION SEGMENTS. EMBED 9", SPACE EQUALLY, 6" MIN. CLR. FROM EDGE, 1'-6" MIN. SPACING. USE APPROVED DEBONDER ON½ OF BAR LENGTH. ASTM A36 MATERIAL MAY BE SUBSTITUTED FOR AASHTO M31. COST OF ITEMS ARE INCLUDED IN BID ITEM "CONCRETE MASONRY RETAINING WALLS."
- (A17) PLACE TRANSVERSE REINFORCEMENT ALONG RADIUS OF HORIZONTAL CURVE.
- (A18) SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)
- (A19) EXPANSION JOINTS TO BE SPACED AS SHOWN ON SHEET 1. LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT, EXCEPT FOR DOWEL BARS. JOINT TO EXTEND FULL DEPTH OF PARAPET AND ANCHOR SLAB.
- (A26) OPTIONAL CONST. JT. LEAVE SURFACE ROUGHENED. PROVIDE RUSTICATION IF OPT. CONST. JT. IS USED. IF THE OPTIONAL CONST. JT. IS USED, PLACE 18" MEMBRANE WATERPROOFING ALONG ENTIRE LONGITUDINAL JOINT. THE MEMBRANE WATERPROOFING SEALING OPTIONAL CONST. JT. IS INCIDENTAL TO "CONCRETE MASONRY RETAINING WALLS" BID ITEM.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE R-05-0082

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PARAPET AND ANCHOR SLAB DETAILS

SHEET 6 OF 8

851

8/19/2014

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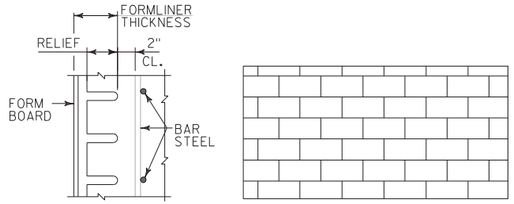
STATE PROJECT NUMBER
1133-10-71

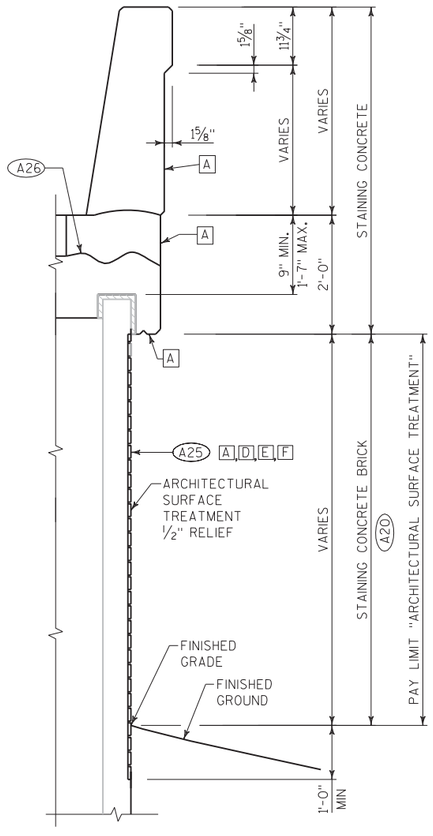
CONCRETE STAINING SCHEDULE		
MARK	COLOR	LOCATION
A	BASE COLOR	BRIDGES, PARAPETS, WALLS, PILASTERS
B	ACCENT COLOR #1	REVEALS, OUTSIDE OF CONC. GIRDER, STEEL BOX GIRDERS (NOT USED)
C	ACCENT COLOR #2	VERTICAL PILASTER CENTER ELEMENT (NOT USED)
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)
G	ACCENT COLOR #6	LETTERING AT ROADWAY NAME (NOT USED)



SECTION THRU FORMLINER

ARCHITECTURAL SURFACE TREATMENT
RECTANGULAR BRICK

SIZE = 2¼" TO 2⅜" x 7⅝" TO 8"
MAX. RELIEF = ½"



SECTION B-B

(SEE SHEET 1)

LEGEND:

(A20) PAY LIMIT FOR "ARCHITECTURAL SURFACE TREATMENT" FOR THE WALL IS FROM THE BOTTOM OF COPING TO FINISHED GRADE. SEE SPECIAL PROVISIONS AND FORMLINER DETAILS THIS SHEET.

(A25) STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID AS "STAINING CONCRETE BRICK"

(A26) OPTIONAL CONST. JT. LEAVE SURFACE ROUGHENED. PROVIDE RUSTICATION IF OPT. CONST. JT. IS USED. IF THE OPTIONAL CONST. JT. IS USED, PLACE 18" MEMBRANE WATERPROOFING ALONG ENTIRE LONGITUDINAL JOINT. THE MEMBRANE WATERPROOFING SEALING OPTIONAL CONST. JT. IS INCIDENTAL TO "CONCRETE MASONRY RETAINING WALLS" BID ITEM.

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STRUCTURE R-05-0082

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AESTHETIC DETAILS

SHEET 7 OF 8

852

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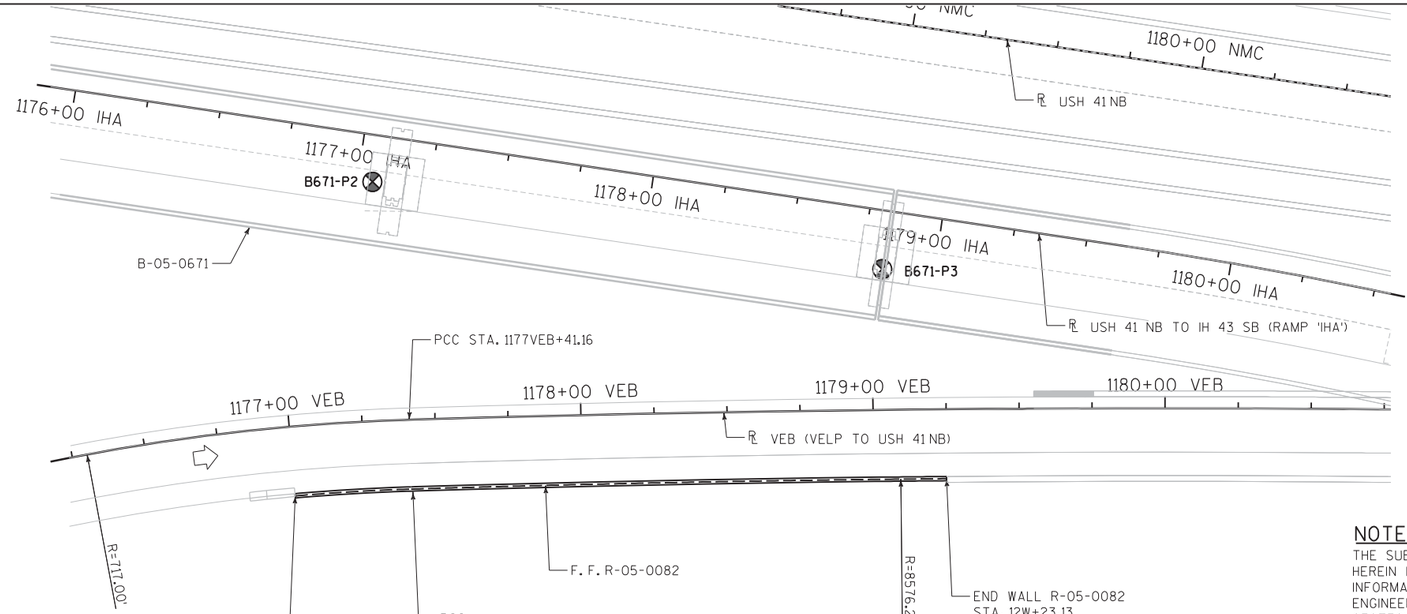
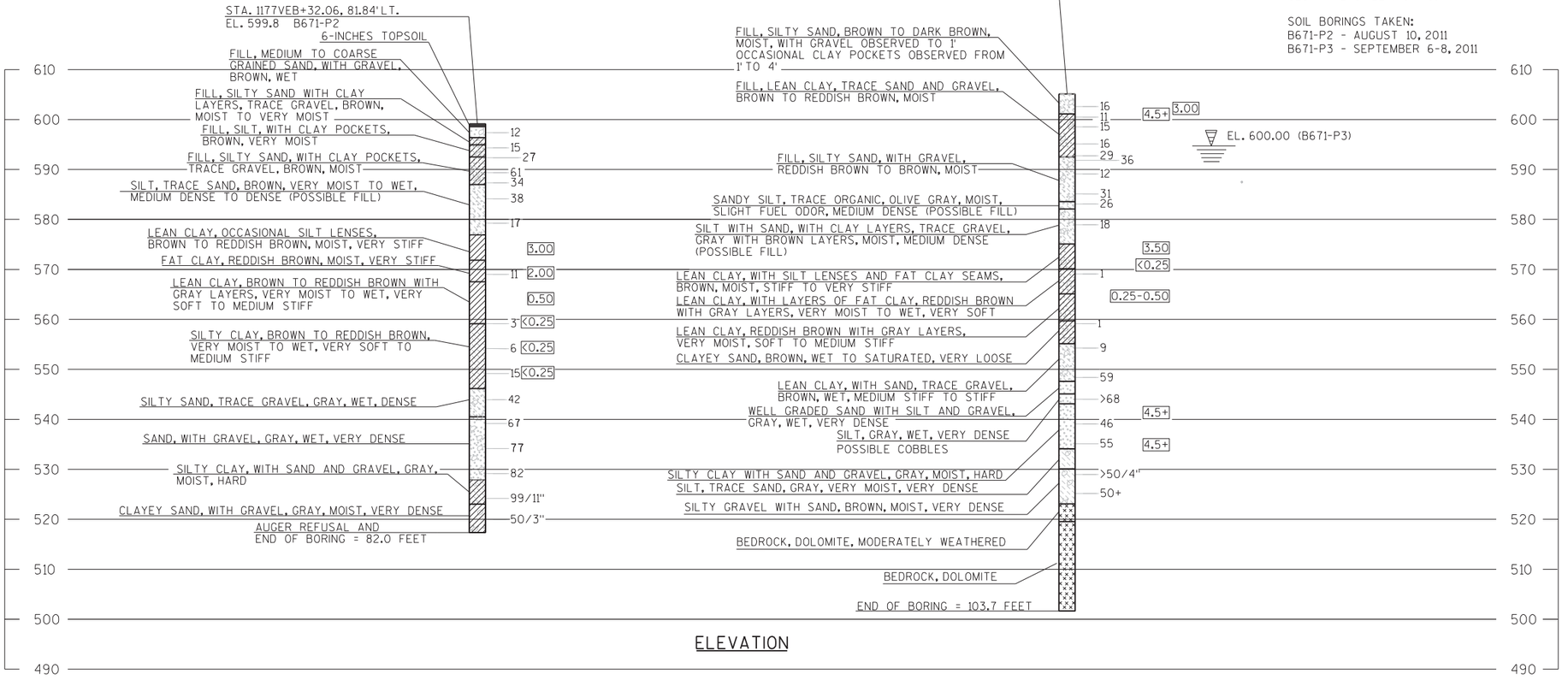
8/19/2014





ELEVATION

NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊗ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING INC.

SOIL BORINGS TAKEN:
B671-P2 - AUGUST 10, 2011
B671-P3 - SEPTEMBER 6-8, 2011

STATE PROJECT NUMBER

1133-10-71

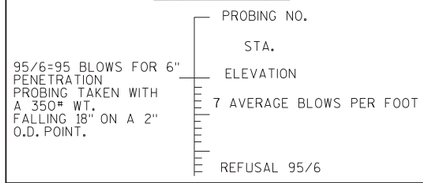
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

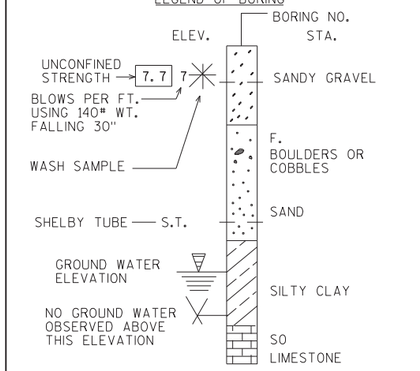
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-05-0082

DRAWN BY TRW | PLANS CK'D. ACT

SUBSURFACE EXPLORATION

SHEET 8 OF 8

853

8

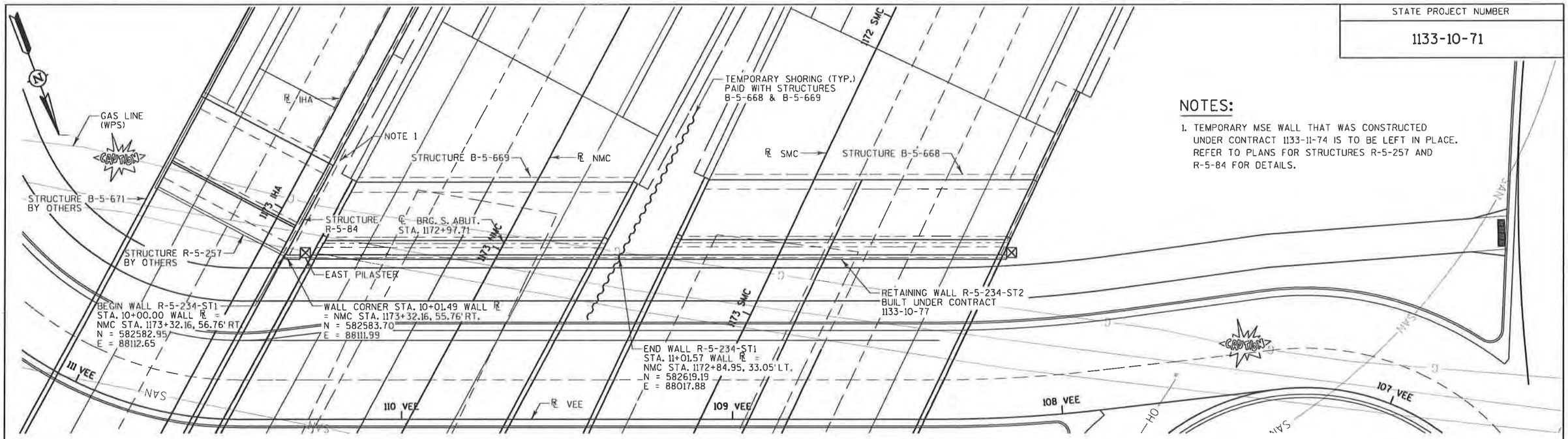
8

M:\2_Prjts\11331000_USH 41 MSA Structures\Plns\CAD\Str\final\R-05-082\R-05-082_08-SOIL.dgn

8/19/2014

STATE PROJECT NUMBER

1133-10-71

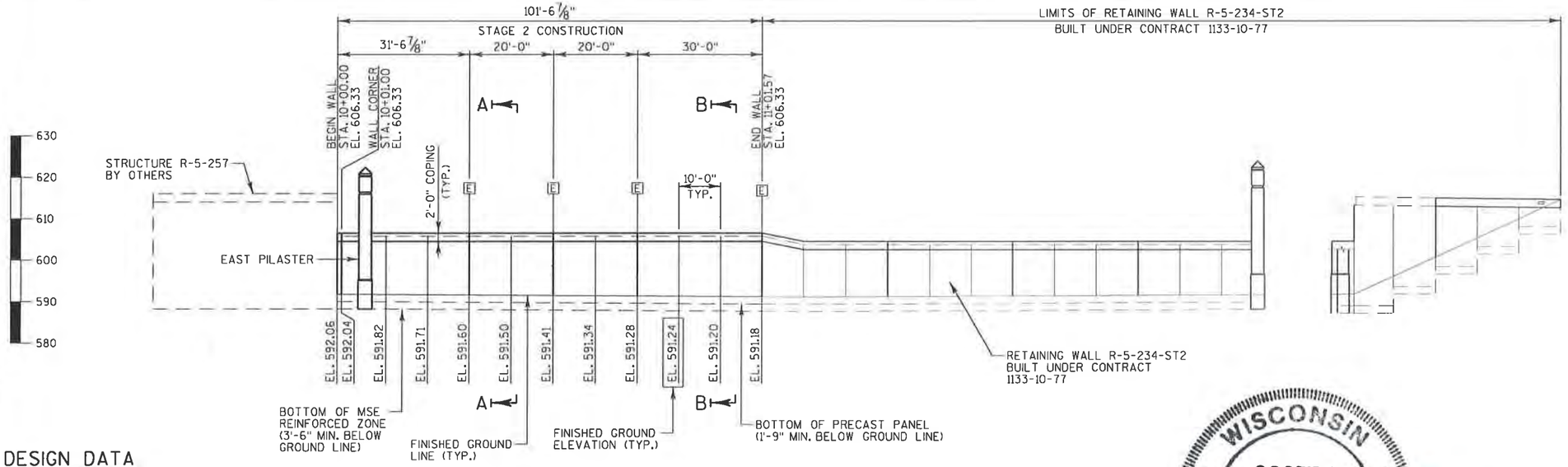


NOTES:

1. TEMPORARY MSE WALL THAT WAS CONSTRUCTED UNDER CONTRACT 1133-11-74 IS TO BE LEFT IN PLACE. REFER TO PLANS FOR STRUCTURES R-5-257 AND R-5-84 FOR DETAILS.

PLAN - STRUCTURE R-5-234

(WIRE FACED MSE WALL WITH TILT-UP PANELS)



ELEVATION - STRUCTURE R-5-234

(LOOKING @ F.F. OF WALL)

LIST OF DRAWINGS

1. GENERAL PLAN
2. DESIGN DATA & QUANTITES
3. SUBSURFACE EXPLORATION
4. WALL SECTIONS
5. WALL DETAILS 1
6. WALL DETAILS 2
7. PILASTER DETAILS
8. EAST PILASTER
9. AESTHETIC DETAILS

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE (ROADWAY) -------- 240 P.S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY RETAINING WALL ---- f'c = 4,000 P.S.I
PRECAST CONCRETE WALL PANELS ------ f'c = 5,000 P.S.I.
BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.
STRUCTURAL CARBON STEEL ---------- fy = 36,000 P.S.I.
(ASTM A709 GRADE 60)

FOUNDATION DATA

ALLOWABLE SOIL BEARING CAPACITY - SEE TABLE ON SHEET 2.

TRAFFIC VOLUME

USH 41 NB (NMC)	USH 41 SB (SMC)	VELP AVENUE
A.D.T. = 15,800 (2015)	A.D.T. = 15,500 (2015)	A.D.T. = 25,500 (2015)
A.D.T. = 31,500 (2035)	A.D.T. = 26,400 (2035)	A.D.T. = 34,100 (2035)
R.D.S. = 70 M.P.H.	R.D.S. = 70 M.P.H.	R.D.S. = 40 M.P.H.

LEGEND

E - EXPANSION JOINT LOCATION

APPR. - APPROACH

WISCONSIN
SCOTT J. GINAL
E-38600
PORT WASHINGTON, WI
PROFESSIONAL ENGINEER
9/24/2014

DESIGN CONTACT:
SCOTT GINAL
(262)-317-3344

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

NE REGION CONTACT:
PAUL VRANEY
(920)-492-2232

NO.	DATE	REVISION	BY

R.A. Smith National
Beyond Surveying and Engineering

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/07/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-5-234 (STAGE 1)

SOUTH RETAINING WALL @ VELP AVE. & USH 41

COUNTY	TOWN/CITY/VILLAGE
BROWN	HOWARD

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	JAD	DESIGN CK'D.	SJG	DRAWN BY	JAD	PLANS CK'D.	SJG

GENERAL PLAN

SHEET 854 OF 9

STATE PROJECT NUMBER
1133-10-71

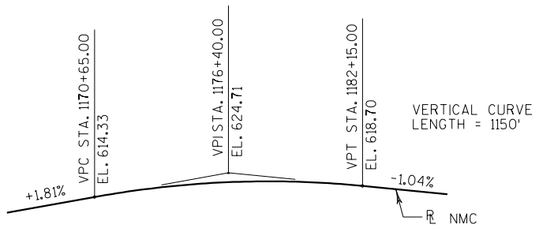
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
504.0500	CONCRETE MASONRY RETAINING WALLS	C.Y.	17
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB.	1380
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	1
550.0500	PILE POINTS	EACH	4
550.1120	PILING STEEL HP 12-INCH X 53 LB	L.F.	180
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	L.F.	55
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	L.F.	110
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	S.F.	1570
SPV.0165.701	STAINING CONCRETE	S.F.	1070
SPV.0165.702	STAINING CONCRETE BRICK	S.F.	1030
SPV.0165.850	WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP	S.F.	1470
SPV.0165.851	PRESTRESSED PRECAST CONCRETE WALL PANEL	S.F.	1470
	NON-BID ITEMS		
	PERFORMED FILLER	SIZE	¾" & 1"
	CORK FILLER	SIZE	½"
	EXPANDED POLYSTRENE	SIZE	1"

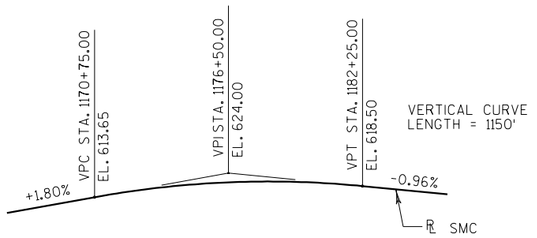
SOIL PARAMETERS: BORING B671-G1

			UNDRAINED		DRAINED	
SOIL UNIT	BOTTOM ELEVATION (FEET)	SOIL UNIT WEIGHT (pcf)	COHESION (PSF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)	FRICTION ANGLE (DEGREES)
EXISTING EMBANKMENT	578.0	120	---	---	0	32
SOFT TO MEDIUM CLAY	553.0	125	500 - 1,000[1]	0	50	26
DENSE SILTY SAND	548.0	125	---	---	0	32
VERY DENSE SILTY GRAVEL	543.0	135	---	---	0	36
HARD CLAY / HARDPAN	522.0	135	3,000	0	50	28

NOTES:
1. COHESION ASSUMED LINEARLY INCREASING WITH DEPTH.



PROFILE GRADE LINE USH 41 NB (NMC)



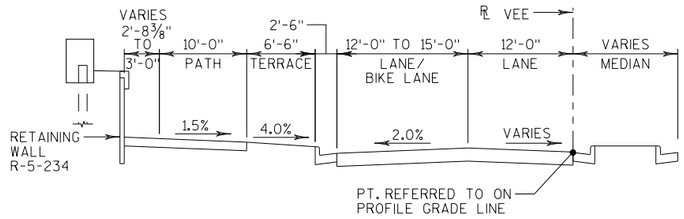
PROFILE GRADE LINE USH 41 SB (SMC)

SUMMARY OF STABILITY ANALYSES RESULTS

WALL STATION	WALL HEIGHT[1] (FEET)	MIN. REINF. LENGTH (FEET)	MIN. REINF. LENGTH/HT. RATIO	FAILURE MODE	CDR
11+01	18.9	30	1.59[2]	GLOBAL[3]	1.04
				ECCENTRICITY	5.24
				SLIDING	3.00
				BEARING	1.48
11+12	16.9	30	1.78[2]	GLOBAL[3]	1.18
				ECCENTRICITY	6.23
				SLIDING	3.24
				BEARING	1.58
12+23	28.7	25	0.87	GLOBAL	1.11
				ECCENTRICITY	2.48
				SLIDING	2.16
				BEARING[3]	1.03

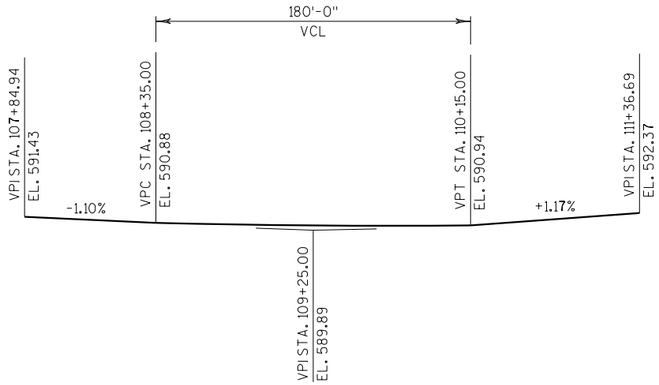
NOTES:
1. WALL HEIGHT INCLUDES THE 3.5 FT. EMBEDMENT DEPTH (FROM THE BOTTOM OF THE REINFORCED ZONE TO THE FINISHED GROUND ELEVATION).
2. MINIMUM REINFFORCEMENT RATIO IS APPROXIMATELY 1.0 TIMES THE TOTAL RETAININED HEIGHT (WALL HEIGHT PLUS THICKNESS OF UNREINFORCED FILL BEHIND THE ABUTMENT).
3. CONTROLLING CONDITION.

FINAL DESIGN FOR INTERNAL STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.



PARTIAL TYPICAL SECTION THRU VELP AVENUE

(LOOKING WEST)



PROFILE GRADE LINE VELP AVE. EB (VEE)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL WIRED FACED MECHANICALLY STABILIZED EARTH LRFD/QMP".

WALL SYSTEM SELECTED SHALL BE COMPATIBLE WITH WALL SYSTEMS USED FOR R-5-234-ST2 AND R-5-257. WALL SYSTEM SHALL UTILIZE STRIP TYPE SOIL REINFORCEMENT THAT IS HINGED AT THE CONNECTION.

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON SHEET 1.

THE CONTRACTOR MUST COORDINATE CONSTRUCTION OF THIS WALL WITH CONSTRUCTION OF SOUTH ABUTMENT FOR BRIDGES B-5-688 & B-5-669.

DESIGN WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

DESIGN WALL R-5-234-ST1 TO RESIST THE FORCE FROM ALL HORIZONTAL EARTH PRESSURES ACTING ON THE BACK OF THE ABUTMENT BELOW THE BEAM SEATS.

THE COST OF FURNISHING AND PLACING THE FOOTING UNDER THE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

THE QUANTITY OF CONCRETE MASONRY FOR THE CAST-IN-PLACE PILASTER IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY RETAINING WALLS".

ALL STATIONS ARE ALONG THE ℄ FOR R-5-234-ST1 WHICH IS ALONG THE FRONT FACE OF WALL UNLESS SHOWN OTHERWISE.

DO NOT PERMIT CONCRETE OF FILL TO DROP OR ACCUMULATE INTO THE WALL PANEL CAVITY.

HOT DIP GALVANIZED ALL STRUCTURAL STEEL CARBON IN ACCORDANCE WITH ASTM A123 WHERE SHOWN.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153, TYPE I, II, OR III OR ASSHTO DESIGNATION M213.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

OPTIONAL TRANSVERSE CONSTRUCTION JOINTS ARE PERMITTED IN THE FOOTING WITH A MINIMUM SPACING OF TWO PANELS JOINTS. FOOTING JOINTS SHOULD BE OFFSET A MINIMUM OF 1'-0" FROM WALL JOINTS. RUN BAR STEEL THRU FOOTING JOINTS.

EXISTING STRUCTURES ARE NOT SHOWN IN THESE PLANS. THE REMOVAL OF THESE STRUCTURES ARE INCLUDED AS A LUMP SUM PAY ITEM AS PART OF THE B-5-668 & B-5-669 BRIDGE QUANTITIES.

SEE SPECIAL PROVISIONS FOR AESTHETIC TREATMENT TO WALL.

TEMPORARY SHORING TO BE PAID AS PART OF THE B-5-668 & B-5-669 BRIDGE QUANTITIES.

DESIGN THE MSE WALL FOR A SUCTION LOAD OF 20 PSF ACTING ON THE PRECAST WALL PANELS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

DESIGN DATA & QUANTITIES

SHEET 2 OF 9
855

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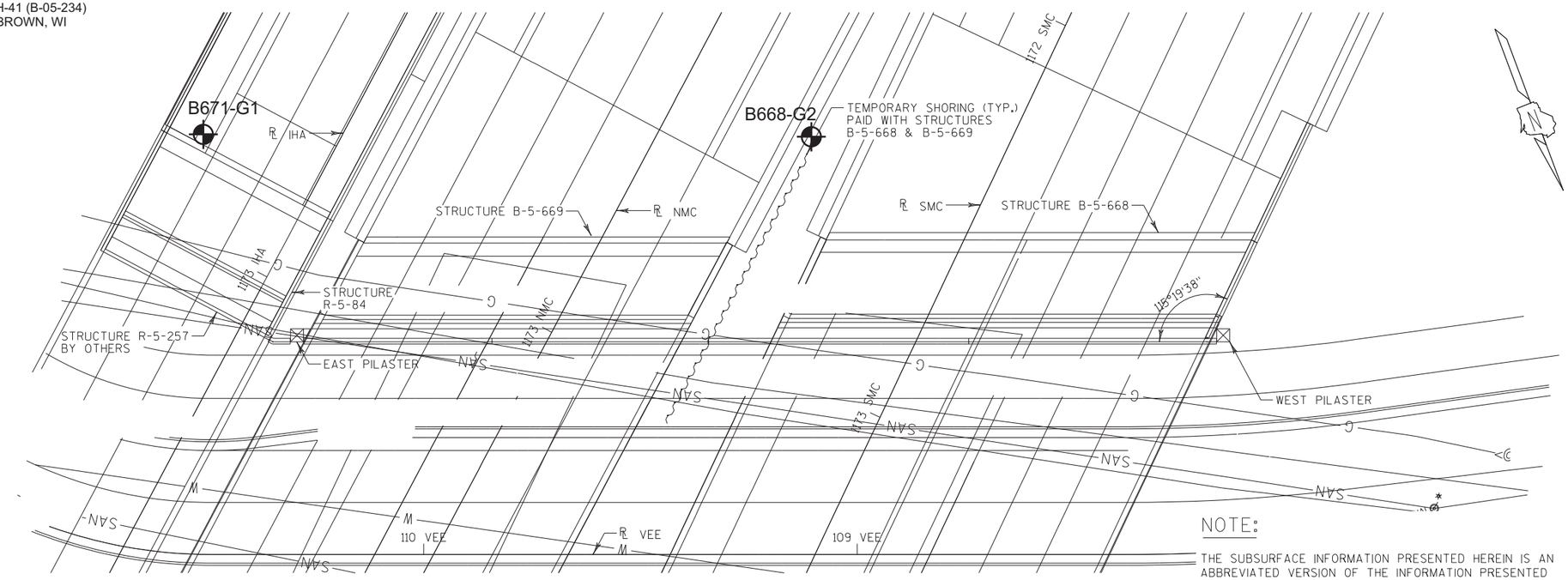
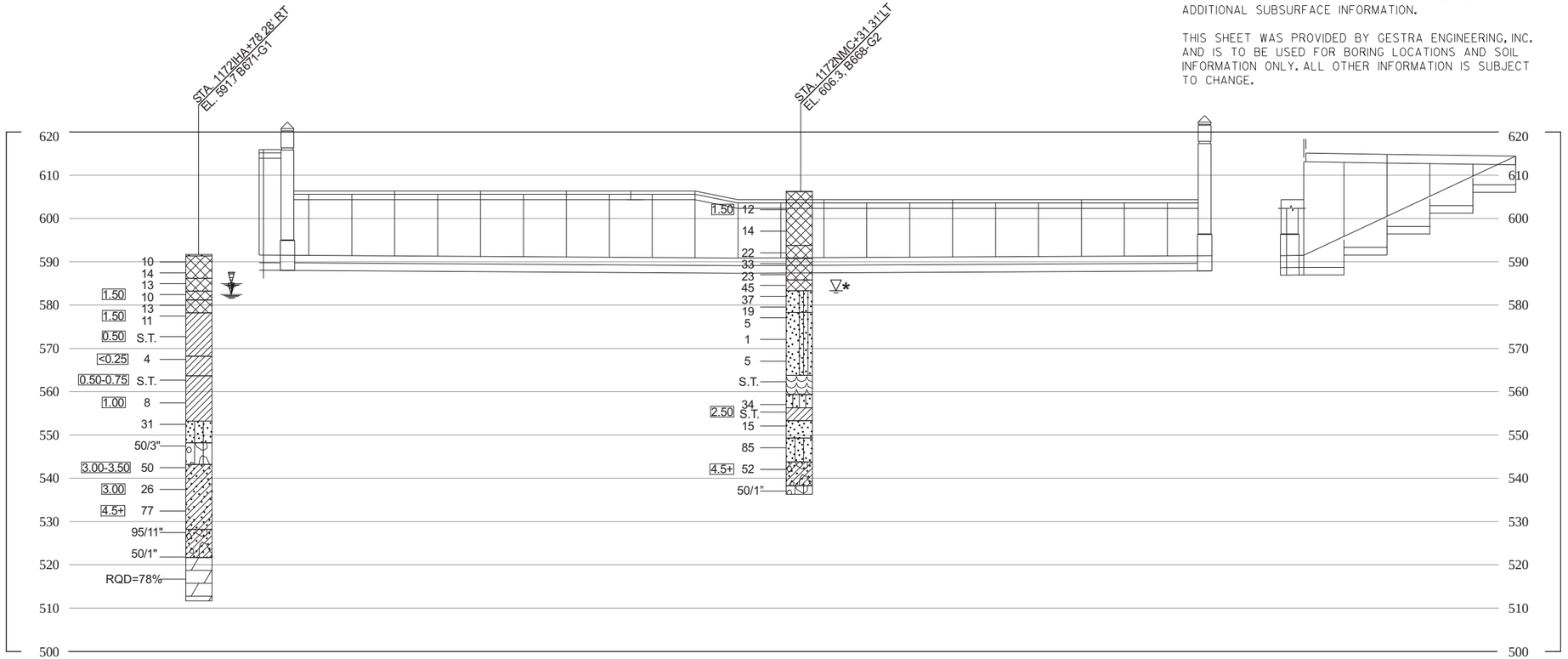
USH-41 (B-05-234)
05-BROWN, WI



STRUCTURE R-5-234



NOTE: -WATER LEVEL DURING DRILLING -WATER LEVEL AT COMPLETION OF DRILLING -WATER LEVEL ASSUMED FROM SAMPLE CONDITION

NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY HNTB DATED JUNE 18, 2013. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

THIS SHEET WAS PROVIDED BY GESTRA ENGINEERING, INC. AND IS TO BE USED FOR BORING LOCATIONS AND SOIL INFORMATION ONLY. ALL OTHER INFORMATION IS SUBJECT TO CHANGE.

STATE PROJECT NUMBER

1133-10-71

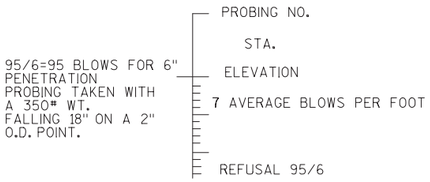
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

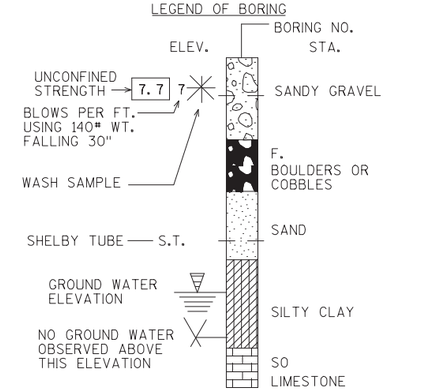
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY JAD PLANS CK'D. SJG

SUBSURFACE EXPLORATION

SHEET 3 OF 9
856

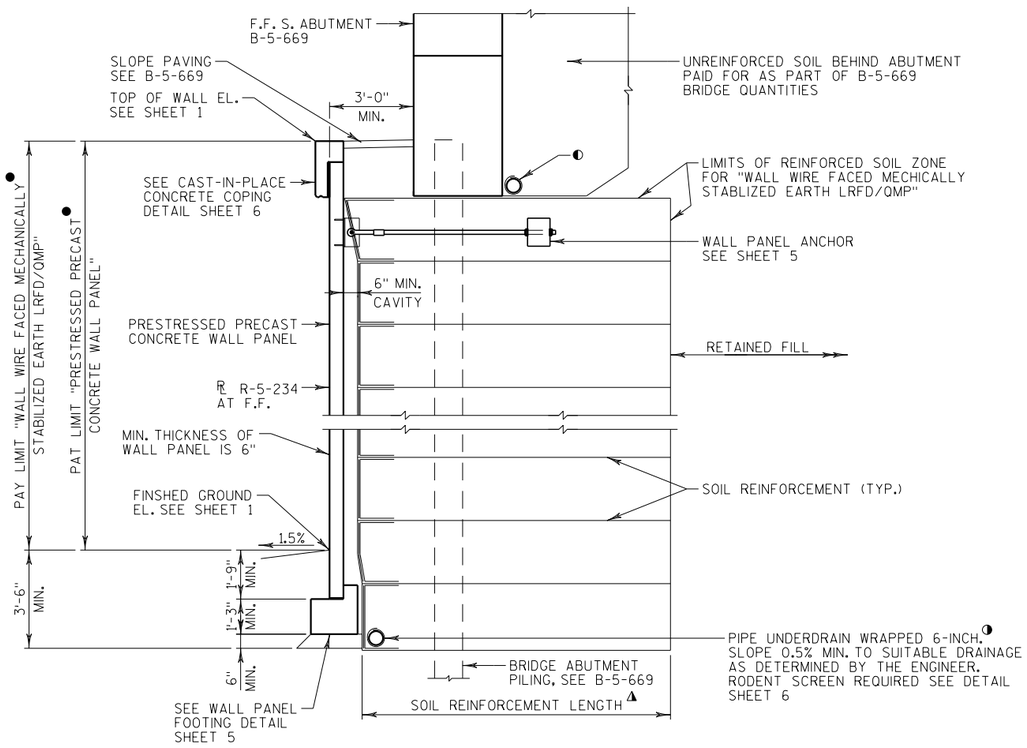
SCALE 1"=30'

8

8

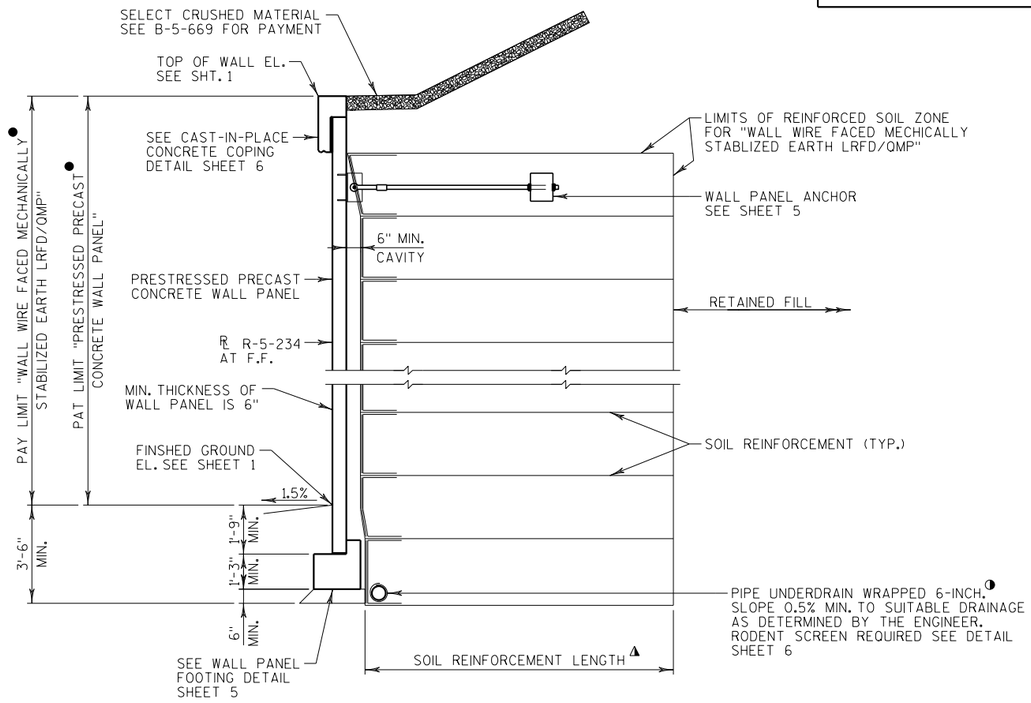
STATE PROJECT NUMBER

1133-10-71



TYPICAL WALL SECTION A-A

WALL STATIONS 10+10.01 TO 10+96.94



TYPICAL WALL SECTION B-B

WALL STATIONS 10+00.00 TO 10+10.01
WALL STATIONS 10+96.94 TO 11+01.57

LEGEND

● THE PLAN QUANTITY FOR THE BID ITEMS "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP" AND PRESTRESSED PRECAST CONCRETE WALL PANEL" ARE BASED ON A WALL HEIGHT MEASURED FROM THE FINISHED GRADE AT THE FRONT FACE OF THE WALL TO THE TOP OF TE WALL AS SHOWN. THE TOP OF THE FOOTING IS ASSUMED TO BE CONSTANT 1'-9" BELOW FINISHED GRADE. COPING CONCRETE AND COPING REINFORCEMENT ARE TO BE INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

◮ SEE SHT. 2 FOR SOIL REINFORCEMENT REQUIREMENTS.

◑ PROVIDE VERTICAL PIPE UNDERDRAIN UNPERFORATED 6-INCH TO CONNECT R-5-234-ST1 WALL UNDERDRAIN TO B-5-669 ABUTMENT UNDERDRAIN. LOCATE THE VERTICAL PIPE APPROXIMATELY 7 FEET FROM THE WEST END OF THE RETAINING WALL. CAP THE UNPERFORATED UNDERDRAIN AT ELEVATION 602.50 FOR CONNECTION TO THE ABUTMENT UNDERDRAIN.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

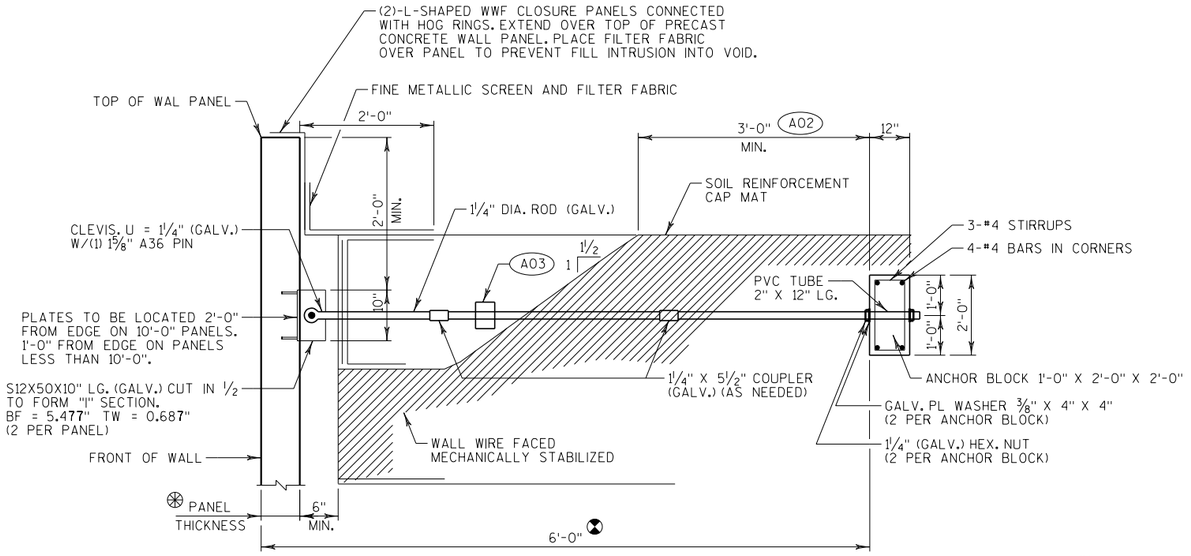
DRAWN BY JAD | PLANS CK'D. SJG

WALL SECTIONS

SHEET 4 OF 9
857

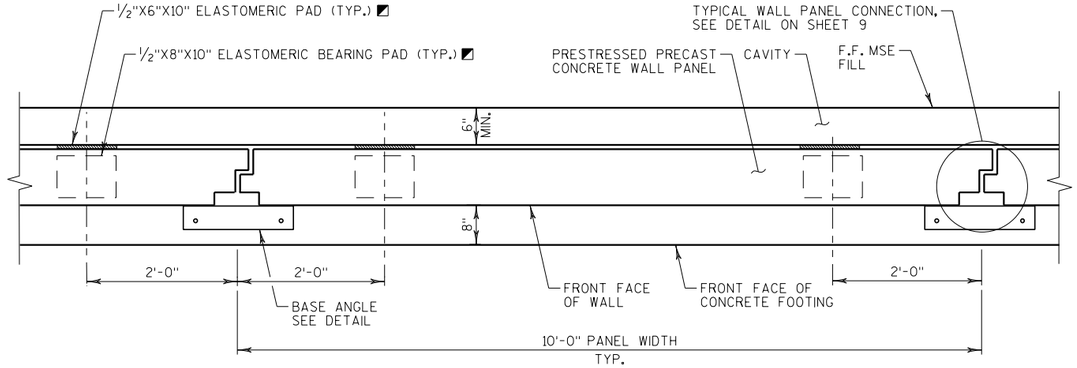
STATE PROJECT NUMBER

1133-10-71

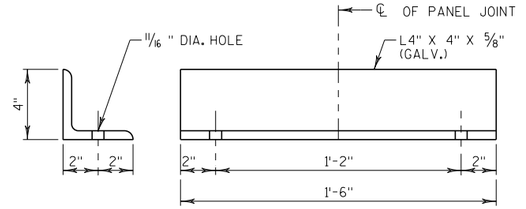


WALL PANEL ANCHOR DETAIL

A01

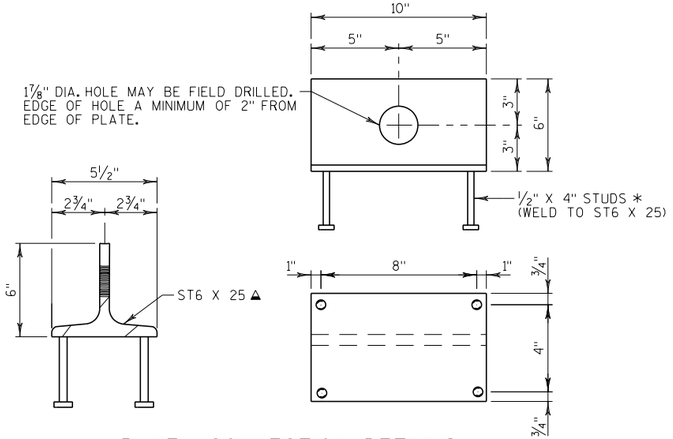


PLAN VIEW WALL PANEL CONNECTION



BASE ANGLE DETAIL

(1 AT EACH PANEL JOINT) ◩



PANEL CONNECTION DETAILS

(2 PER PANEL)

▲ S12X50 (GALV.) CUT IN ½ TO FORM "T" SECTION. BF = 5.477" TW = 0.687".

* AS AN ALTERNATE, ½" TYPE "S" ANCHORS MAY BE USED IN PLACE OF THE 4" STUDS.

ST6X25 MAY BE WELDED TO ¾" THICK PLATE WITH (4) ½" X 4" STUDS ANCHORED IN PRECAST PANEL. RESTORE ZINC COATING AROUND ANY WELDED AREAS. SUBMIT DETAILS FOR APPROVAL BY ENGINEER.

LEGEND

(A01) WALL PANEL ANCHOR SYSTEM INCLUDES ANCHOR BLOCK, ANCHOR BLOCK COUPLER, 1¼" DIA. ANCHOR ROD, CLEVIS, AND OTHER PANEL CONNECTION COMPONENTS. DESIGN, DETAILING, AND FURNISHING OF THESE ITEMS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL." INSTALLATION OF THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP."

(A02) DESIGN LENGTH TO PROVIDE REQUIRED HORIZONTAL CAPACITY OF ANCHOR ASSEMBLY. MINIMUM OF 3'-0" OF COMPACTED FILL IN FRONT OF ANCHOR BLOCK PRIOR TO WALL PANEL ERECTION. ROD MIN. 2'-0" BELOW FINISH GRADE.

(A03) OPTIONAL MULTIDIRECTIONAL CONNECTOR MAY BE USED TO FACILITATE ALIGNMENT AT THE CONNECTION. CONNECTOR TO BE CORROSION RESISTANT AND DEVELOP 100% OF THE ULTIMATE STRENGTH OF 1¼" DIA. BAR)

(A04) BASE AGGREGATE OPEN GRADED, 6" MIN. INCIDENTAL TO BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

(A05) MINIMUM DIMENSION FROM FINISHED GRADE AT FRONT FACE OF WALL TO BOTTOM OF WALL PANEL FOOTING IS SHOWN. THE FOOTING MAY BE CONSTRUCTED ON A SLOPE PARALLEL TO THE PROPOSED GRADE, OR MAY BE STEPPED. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THE WALL PANEL FOOTING WITH FABRICATION OF THE PRECAST PANELS.

◩ INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

⊛ = WALL PANEL THICKNESS AS DETERMINED IN ACCORDANCE WITH THE DESIGN REQUIREMENTS DEFINED IN THE SPECIAL PROVISIONS. (6" MIN.)

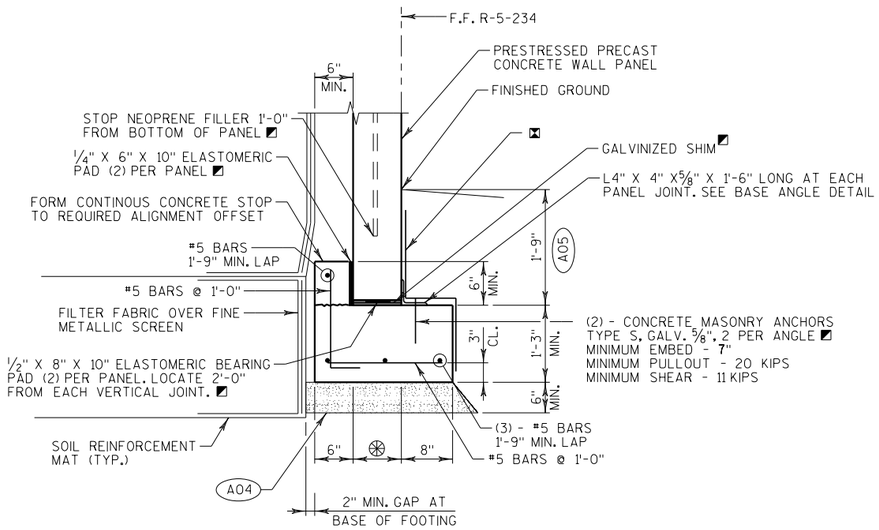
⊗ LENGTH MAY BE INCREASED TO AVOID OBSTRUCTIONS, SUCH AS ABUTMENT PILING.

▣ GEOTEXTILE FABRIC TYPE DF, 2'-0" WIDE BY LENGTH OF FOOTING. ◩

NOTES

AN ALTERNATE DEADMEN AND PANEL CONNECTION SYSTEM MAY BE SUBMITTED FOR REVIEW AND POSSIBLE ACCEPTANCE BY THE ENGINEER.

TILT UP PANEL DEADMAN MAY BE TRENCHED IN IF THE GEOMETERY OF THE DEADMEN LOCATION ALLOWS.



WALL PANEL FOOTING DETAIL

CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

WALL DETAILS 1

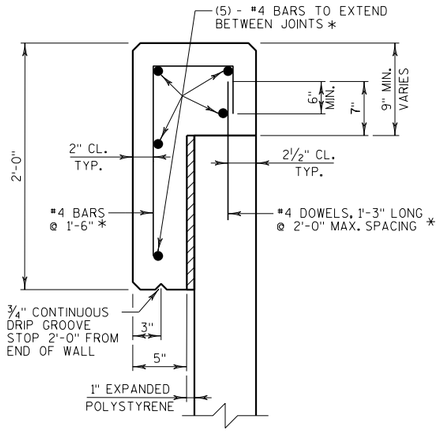
SHEET 5 OF 9
858

8

8

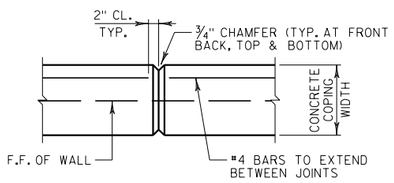
STATE PROJECT NUMBER

1133-10-71



CAST-IN-PLACE CONCRETE COPING DETAIL

* WALL COPING CONCRETE AND THE REINFORCEMENT BARS ARE TO BE INCLUDED IN THE BID ITEM: "PRESTRESSED PRECAST CONCRETE WALL PANEL"

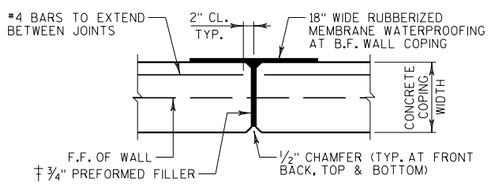


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

MAXIMUM SPACING OF JOINTS SHALL 12'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

ALL COANTRACTION JOINTS TO EXTEND THE FULL DEPTH OF COPING.



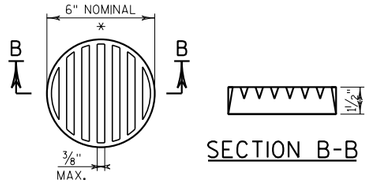
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

MAXIMUM SPACING OF JOINTS SHALL 50'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF WALL PANELS.

ALL EXPANSION JOINTS TO EXTEND THE FULL DEPTH OF COPING.



SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

LEGEND

† SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY	JAD	PLANS CK'D.	SJG

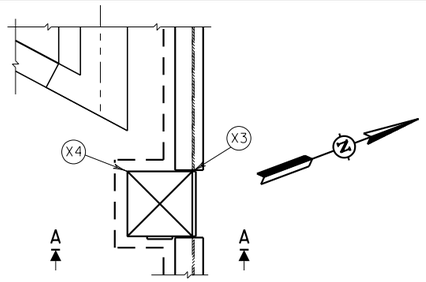
WALL DETAILS 2

SHEET 6 OF 9

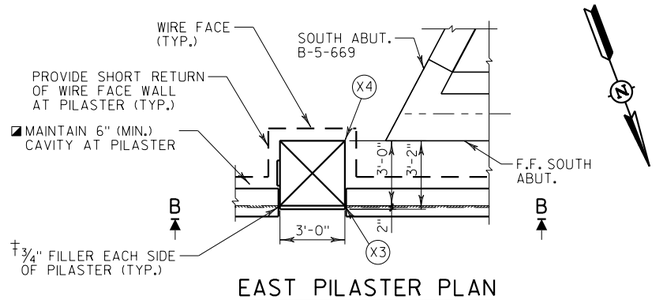
859

8

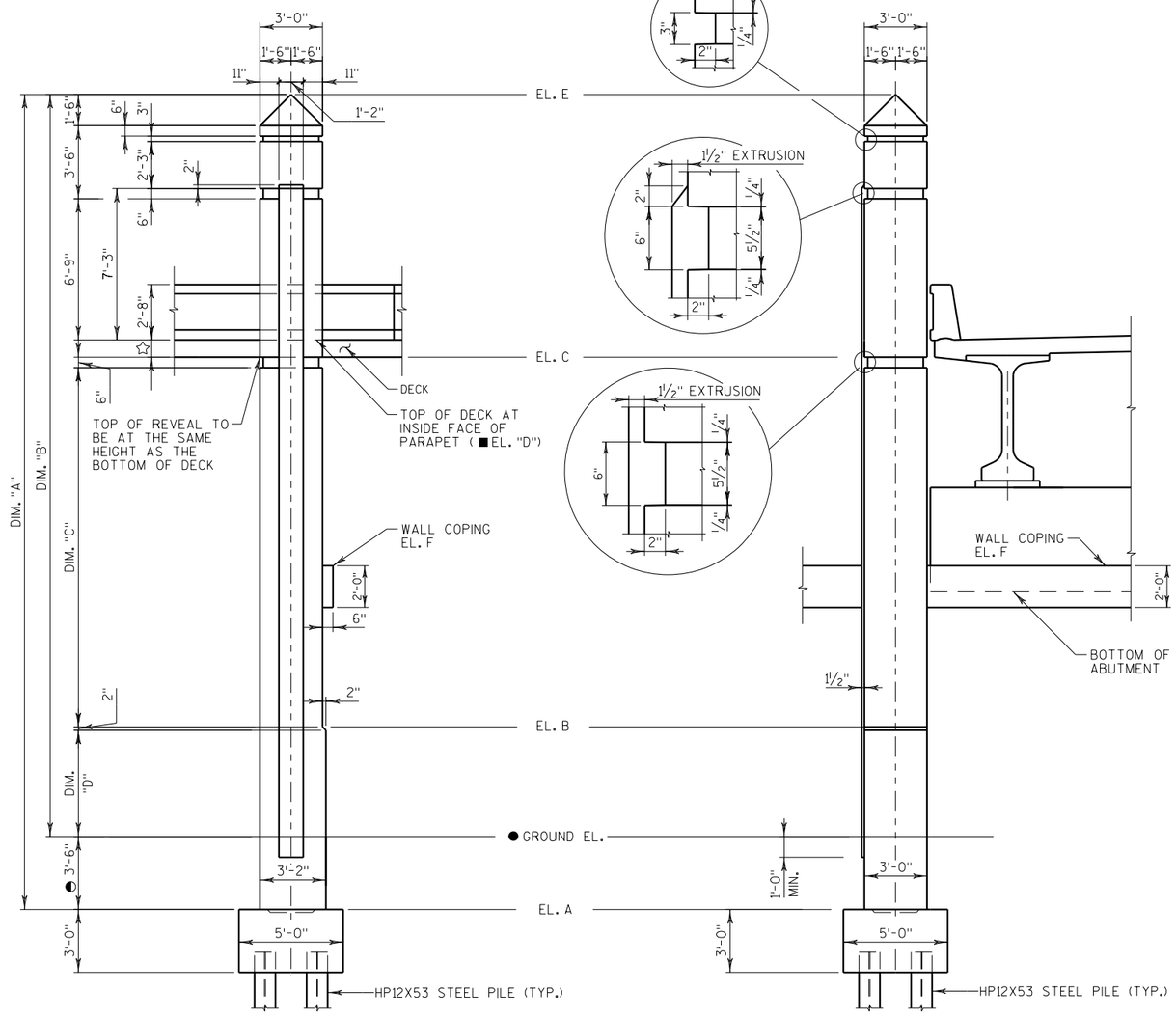
8



EAST PILASTER PLAN



EAST PILASTER PLAN



SECTION A-A

SECTION B-B

PILASTER DIMENSIONS

LOCATION	EAST
DIM. "A"	40'-7"
DIM. "B"	37'-1"
DIM. "C"	19'-0⅝"
DIM. "D"	4'-10⅞"

PILASTER ELEVATIONS

	LOCATION	EAST
	EL. A	588.42
	EL. B	596.95
	EL. C	616.50
■	EL. D	617.25
	EL. E	629.00
	EL. F	606.33
●	GROUND EL. @ NORTHWEST CORNER	591.92

PILASTER LOCATIONS

LOCATION		STATION	OFFSET
EAST	X3	1173+28.83 NMC	49.50' RT
	X4	1173+26.22 NMC	50.91' RT

■ EL. "D" = TOP OF DECK @ INSIDE FACE OF PARAPET.

● GROUND ELEVATION IS FINISHED GRADE.

▲ SEAL ALL HORIZ. AND VERTICAL SURFACES OF FILLER WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE). COLOR TO MATCH STAIN.

◐ IF WALL EMBEDMENT IS MORE THAN 3'-6", THEN PILASTER FOOTING EMBEDMENT AND REINFORCEMENT SHALL BE ADJUSTED ACCORDINGLY. IF EMBEDMENT IS MORE THAN 6" BELOW PLAN EMBEDMENT, THE DESIGNER SHALL BE NOTIFIED.

☆ DISTANCE FROM TOP OF DECK AT FACE OF PARAPET TO BOTTOM OF DECK AT OUTSIDE EDGE = 9".

◪ CLOSE OFF TOP WITH L-SHAPED WWF CLOSURE PANELS OVERLAYED WITH FINE METALLIC SCREEN AND FILTER FABRIC. FASTEN CLOSURE PIECE TO PILASTER AND ENCASE IN CONCRETE.

PILASTER FOUNDATION DATA

PILASTER TO BE SUPPORTED ON 4-HP12X53 STEEL PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 37 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. THE REQUIRED UPLIFT IS 17 TONS** PER PILE. ESTIMATED LENGTH = 45 FEET.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY. THE FACTORED AXIAL RESISTANCE OF PILES IN TENSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.25 USING STATIC ANALYSIS-ALPHA METHOD TO DETERMINE DRIVEN PILE CAPACITY.

DESIGN DATA

PILASTER AND FOUNDATION WERE DESIGNED PER AASHTO LRFD BRIDGE SPECIFICATION.

DESIGN WIND LOAD = 47 PSF

LEGEND

‡ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

STATE PROJECT NUMBER

1133-10-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

PILASTER DETAILS

SHEET 7 OF 9

860

8

8

STATE PROJECT NUMBER

1133-10-71

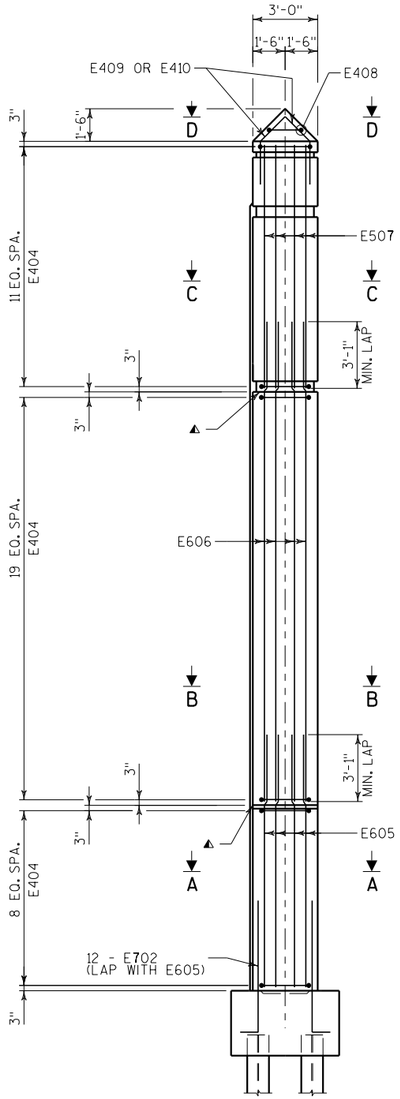
LEGEND & NOTES

* REINFORCEMENT WELDED TO PILE SHALL CONFORM TO ASTM A706.

SEE AESTHETIC DETAIL SHEETS FOR AESTHETIC INFORMATION.

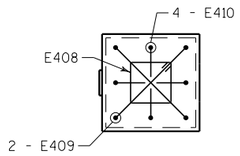
▲ OPTIONAL CONSTRUCTION JOINT FORMED BY 1'-6" X 1'-6" X 2" BEVELED KEYWAY.

THE PILASTER CAP MAY BE PRECAST. DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

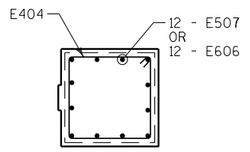


ELEVATION WITH REINFORCEMENT

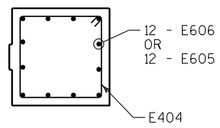
(LOOKING SOUTH)



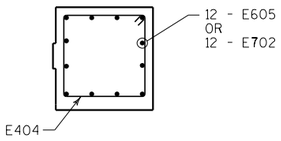
SECTION D-D



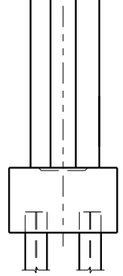
SECTION C-C



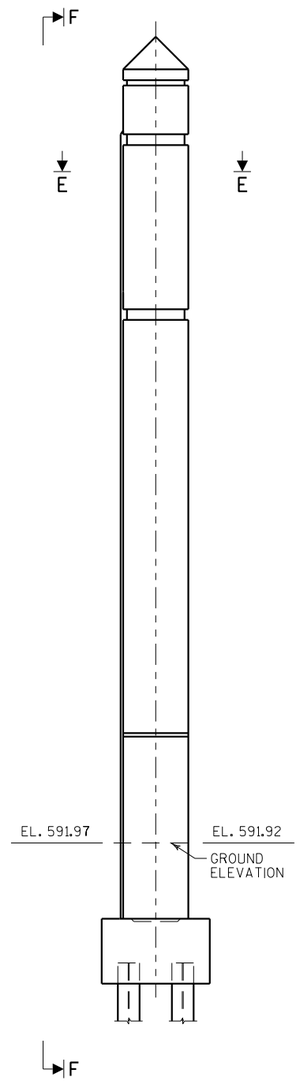
SECTION B-B



SECTION A-A

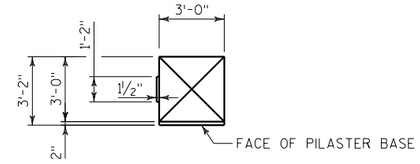


SECTION F-F



ELEVATION

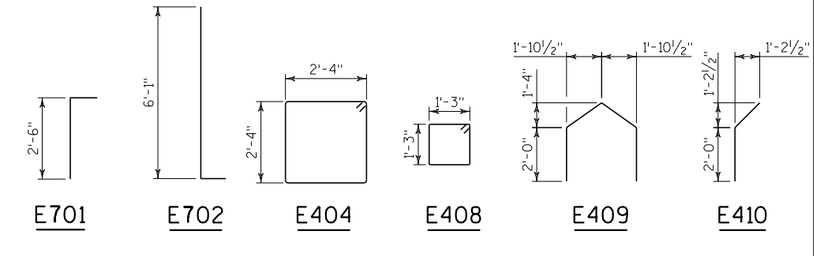
(LOOKING SOUTH)

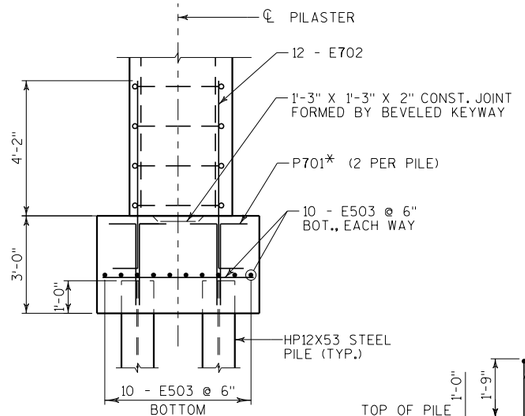


SECTION E-E

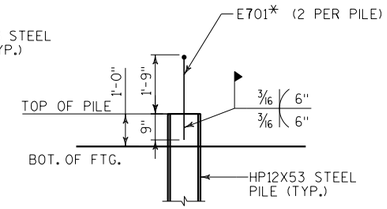
BILL OF BARS - PILASTER

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
E701	X	8	3'-6"	X		BAR WELDED TO PILE
E702	X	12	7'-1"	X		FOOTING VERTICAL DOWELS
E503	X	20	4'-8"			FOOTING BOTTOM BARS
E404	X	41	9'-9"	X		COLUMN - STIRRUPS
E605	X	12	11'-8"			COLUMN - VERT.
E606	X	12	22'-7"			COLUMN - VERT.
E507	X	12	11'-3"			COLUMN - VERT.
E408	X	1	5'-5"	X		PILASTER CAP - HORIZ.
E409	X	2	8'-5"	X		PILASTER CAP - VERT.
E410	X	4	3'-8"	X		PILASTER CAP - VERT.

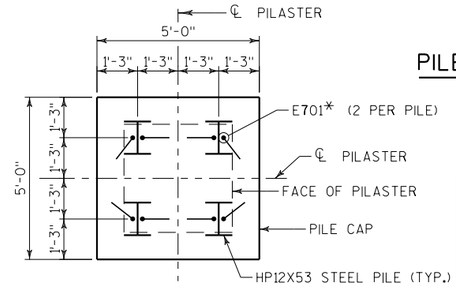




PILE CAP ELEVATION



PILE HEAD DETAIL



PILE CAP PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

EAST PILASTER

SHEET 8 OF 9

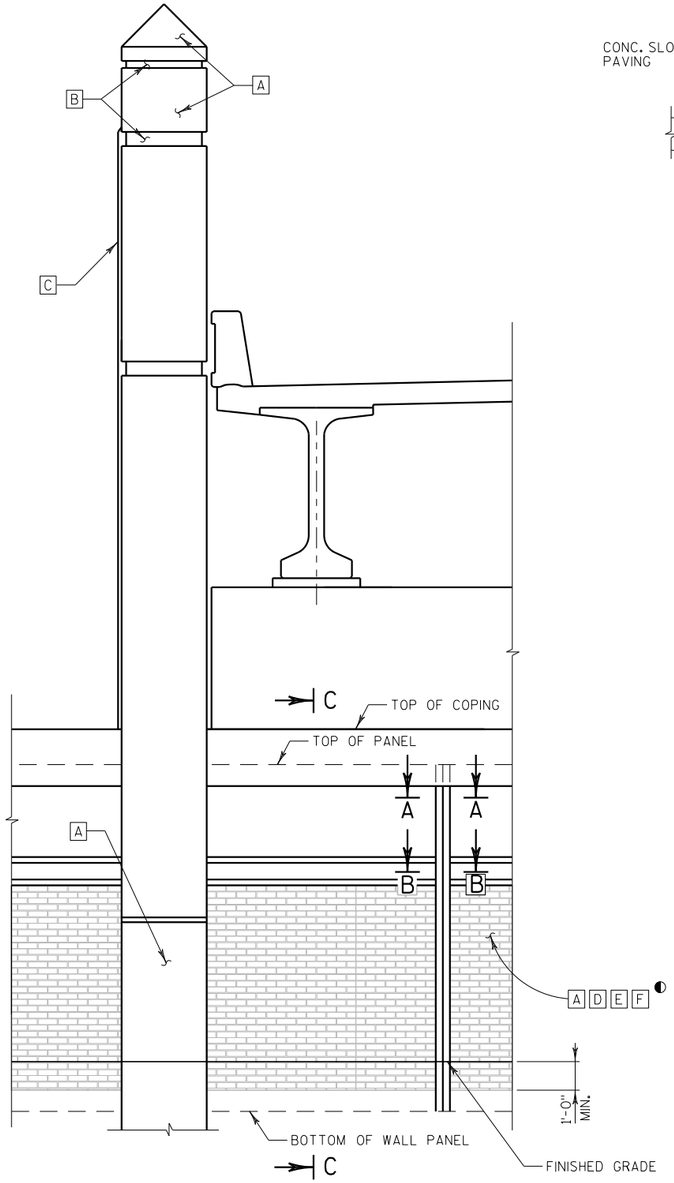
861

8

8

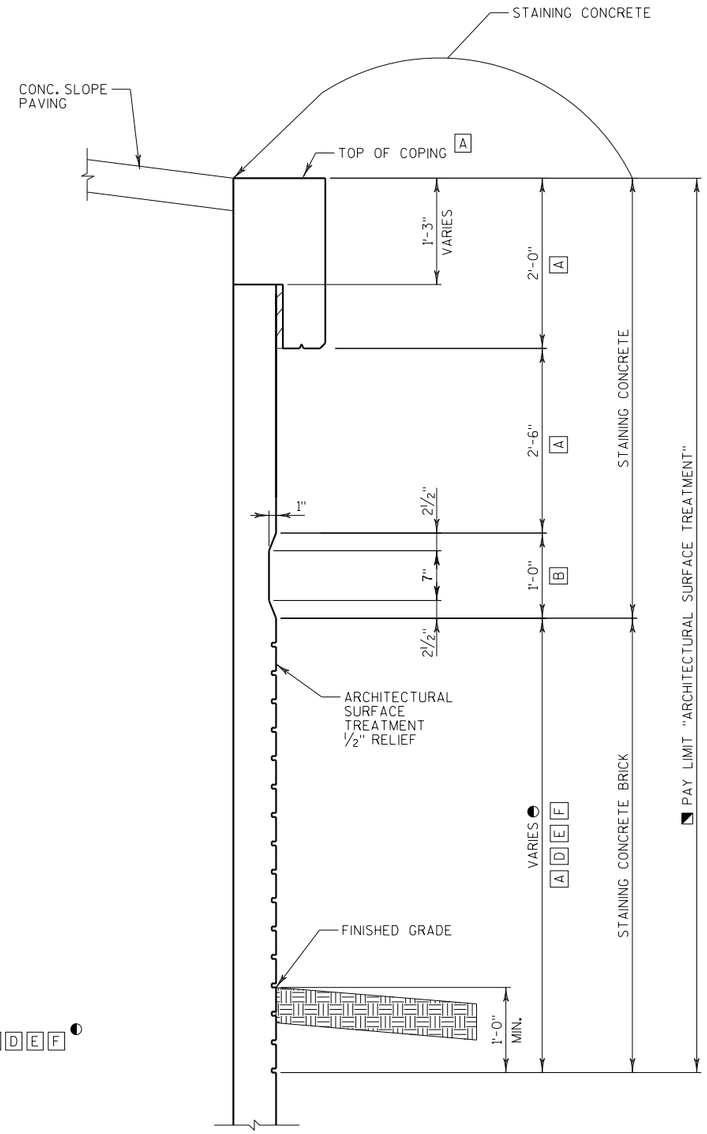
STATE PROJECT NUMBER

1133-10-71

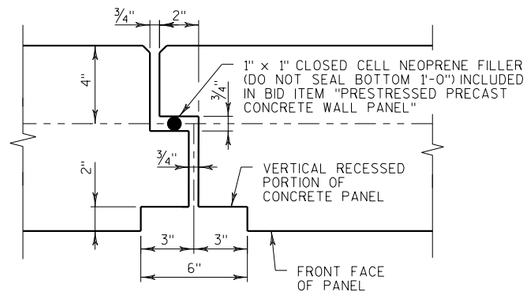


PART ELEVATION R-5-234

(LOOKING SOUTH)

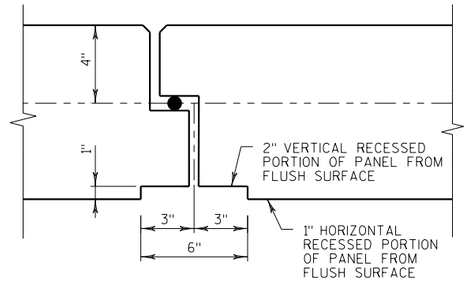


SECTION C-C



SECTION A-A

CHAMFER REVEALS 1/16" PER INCH OF DEPTH



SECTION B-B

LEGEND

- ◪ PAY LIMIT FOR "ARCHITECTURAL SURFACE TREATMENT" FOR THE WALL PANELS IS FROM TOP OF WALL TO 1'-0" BELOW GRADE.
- ◐ STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID FOR AS "STAINING CONCRETE BRICK."

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION
A	BASE COLOR	BRIDGES, PARAPETS, WALLS, PILASTERS
B	ACCENT COLOR #1	REVEALS
C	ACCENT COLOR #2	VERTICAL PILASTER CENTER ELEMENT
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)
G	ACCENT COLOR #6	NOT USED

SEE SPECIAL PROVISIONS FOR STAIN COLORS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-234 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

AESTHETIC DETAILS

SHEET 9 OF 9

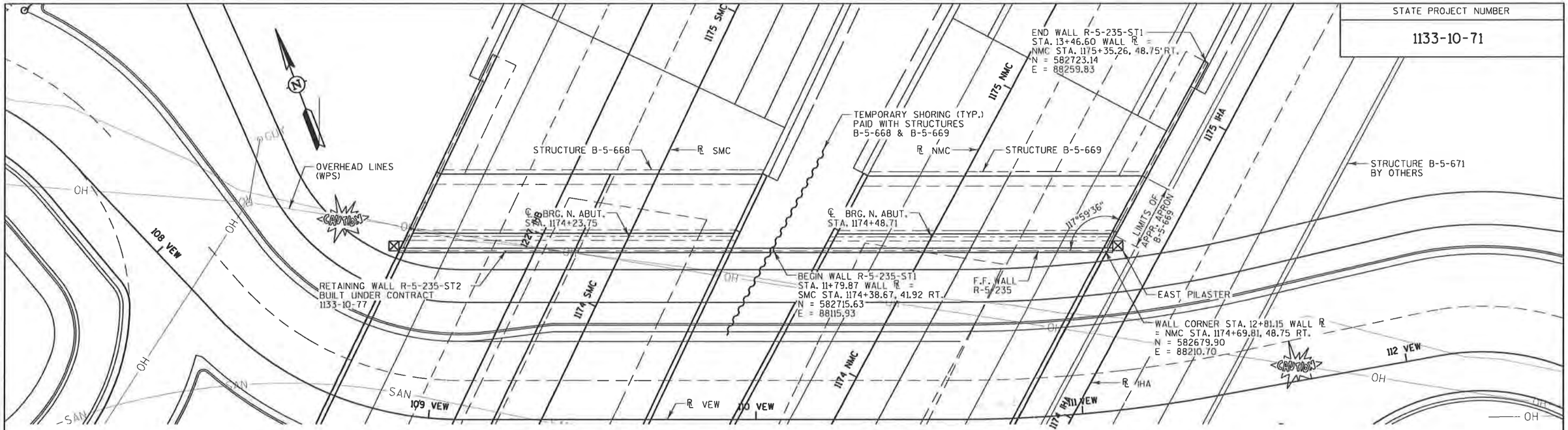
862

8

8

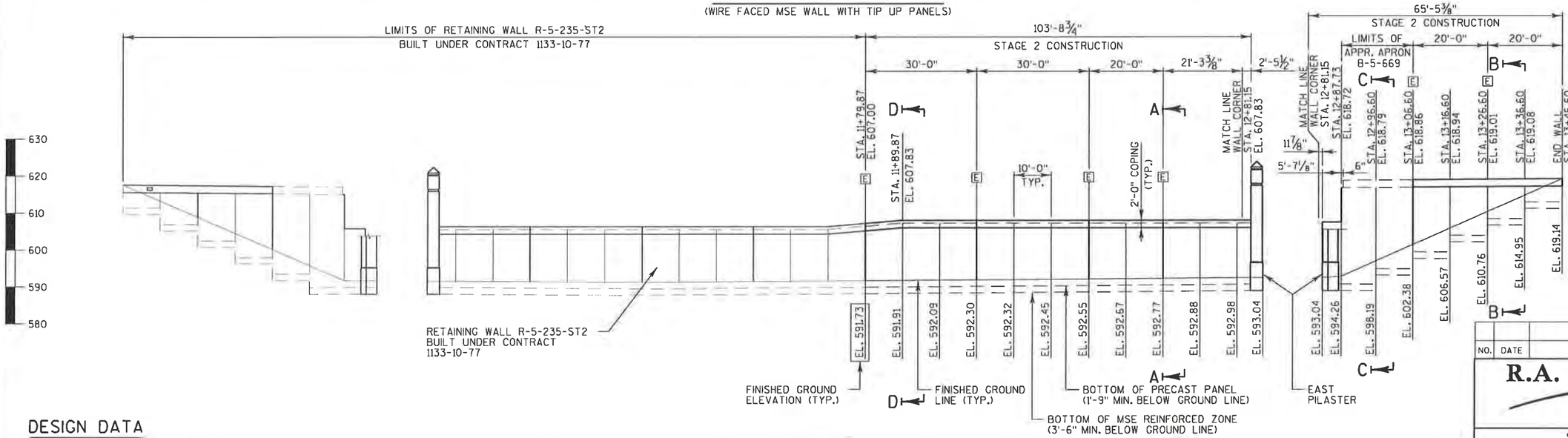
STATE PROJECT NUMBER

1133-10-71



PLAN - STRUCTURE R-5-235

(WIRE FACED MSE WALL WITH TIP UP PANELS)



ELEVATION - STRUCTURE R-5-235

(LOOKING @ F.F. OF WALL)

LIST OF DRAWINGS

1. GENERAL PLAN
2. NOTES & QUANTITES
3. SUBSURFACE EXPLORATION
4. DESIGN DATA
5. WALL SECTIONS
6. WALL DETAILS 1
7. WALL DETAILS 2
8. WALL DETAILS 3
9. PILASTER DETAILS
10. EAST PILASTER
11. AESTHETIC DETAILS

NO.	DATE	REVISION	BY

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE (ROADWAY) -------- 240 P.S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY RETAINING WALL ---- f'c = 4,000 P.S.I
PRECAST CONCRETE WALL PANELS ------ f'c = 5,000 P.S.I.
BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.
STRUCTURAL CARBON STEEL ---------- fy = 36,000 P.S.I.
(ASTM A709 GRADE 60)

FOUNDATION DATA

ALLOWABLE SOIL BEARING CAPACITY - SEE TABLE ON SHEET 4.

TRAFFIC VOLUME

USH 41 NB (NMC)	USH 41 SB (SMC)	VELP AVENUE
A.D.T. = 15,800 (2015)	A.D.T. = 15,500 (2015)	A.D.T. = 25,500 (2015)
A.D.T. = 31,500 (2035)	A.D.T. = 26,400 (2035)	A.D.T. = 34,100 (2035)
R.D.S. = 70 M.P.H.	R.D.S. = 70 M.P.H.	R.D.S. = 40 M.P.H.

LEGEND

E - EXPANSION JOINT LOCATION

APPR. - APPROACH

WISCONSIN
SCOTT J. GINAL
E-30880
PORT WASHINGTON, WI
PROFESSIONAL ENGINEER
9/24/2014

DESIGN CONTACT:
SCOTT GINAL
(262)-317-3344

BRIDGE OFFICE CONTACT:
WILLIAM DREHER, P.E.
(608)-266-8489

NE REGION CONTACT:
PAUL VRANEY, P.E.
(920)-492-2232

R.A. Smith National

Beyond Surveying and Engineering

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/07/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-5-235 (STAGE 1)

NORTH RETAINING WALL @ VELP AVE. & USH 41

COUNTY	~~TOWN/CITY~~/VILLAGE
BROWN	HOWARD

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JAD	SJG	JAD	SJG

GENERAL PLAN

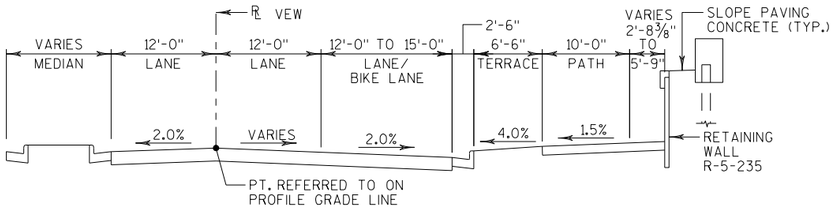
SHEET 863 11

STATE PROJECT NUMBER
1133-10-71

TOTAL ESTIMATED QUANTITIES

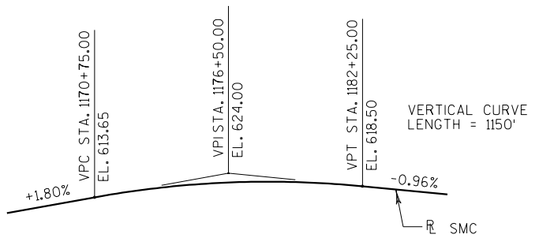
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
504.0500	CONCRETE MASONRY RETAINING WALLS	C.Y.	46
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB.	3720
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	4
550.0500	PILE POINTS	EACH	4
550.1120	PILING STEEL HP 12-INCH X 53 LB	L.F.	180
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	L.F.	85
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	L.F.	170
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	S.F.	2570
SPV.0165.701	STAINING CONCRETE	S.F.	1650
SPV.0165.702	STAINING CONCRETE BRICK	S.F.	1780
SPV.0165.850	WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP	S.F.	2400
SPV.0165.851	PRESTRESSED PRECAST CONCRETE WALL PANEL	S.F.	2400
	NON-BID ITEMS		
	PERFORMED FILLER	SIZE	¾" & 1"
	CORK FILLER	SIZE	½"
	EXPANDED POLYSTRENE	SIZE	1"

PROFILE GRADE LINE USH 41 NB (NMC)

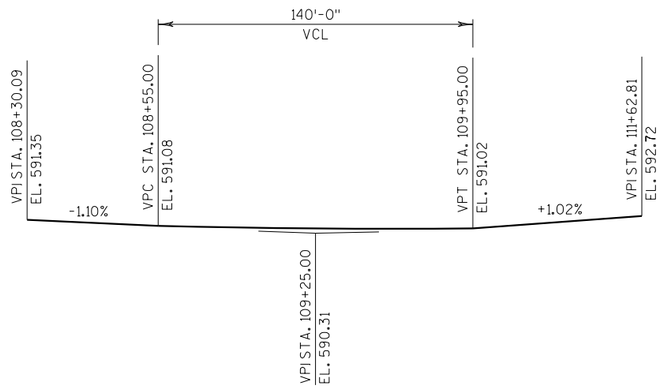


PARTIAL TYPICAL SECTION THRU VELP AVENUE

(LOOKING WEST)



PROFILE GRADE LINE USH 41 SB (SMC)



PROFILE GRADE LINE VELP AVE. EB (VEE)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL WIRED FACED MECHANICALLY STABILIZED EARTH LRFD/QMP".

WALL SYSTEM SELECTED SHALL BE COMPATIBLE WITH WALL SYSTEM USED FOR R-5-235-ST2.

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON SHEET 1.

THE CONTRACTOR MUST COORDINATE CONSTRUCTION OF THIS WALL WITH CONSTRUCTION OF NORTH ABUTMENT FOR BRIDGES B-5-688 & B-5-669.

DESIGN WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

APPLY PROTECTIVE SURFACE TREATMENT TO THE EXPOSED SURFACE OF THE ANCHOR SLAB AND THE ROADWAY FACE & TOP OF PARAPET.

DESIGN WALL R-5-235-ST1 TO RESIST THE FORCE FROM ALL HORIZONTAL EARTH PRESSURES ACTING ON THE BACK OF THE ABUTMENT BELOW THE BEAM SEATS.

THE COST OF FURNISHING AND PLACING THE FOOTING UNDER THE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

THE QUANTITY OF CONCRETE MASONRY FOR THE CAST-IN-PLACE ANCHOR SLAB, PARAPET AND PILASTER IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY RETAINING WALLS".

ALL STATIONS ARE ALONG THE ℄ FOR R-5-235-ST1 WHICH IS ALONG THE FRONT FACE OF WALL UNLESS SHOWN OTHERWISE.

DO NOT PERMIT CONCRETE OF FILL TO DROP OR ACCUMULATE INTO THE WALL PANEL CAVITY.

HOT DIP GALVANIZED ALL STRUCTURAL STEEL CARBON IN ACCORDANCE WITH ASTM A123 WHERE SHOWN.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153, TYPE I, II, OR III OR ASSHTO DESIGNATION M213.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

OPTIONAL TRANSVERSE CONSTRUCTION JOINTS ARE PERMITTED IN THE FOOTING WITH A MINIMUM SPACING OF TWO PANELS JOINTS. FOOTING JOINTS SHOULD BE OFFSET A MINIMUM OF 1'-0" FROM WALL JOINTS. RUN BAR STEEL THRU FOOTING JOINTS.

EXISTING STRUCTURES ARE NOT SHOWN IN THESE PLANS. THE REMOVAL OF THESE STRUCTURES ARE INCLUDED AS A LUMP SUM PAY ITEM AS PART OF THE B-5-668 & B-5-669 BRIDGE QUANTITIES.

SEE SPECIAL PROVISIONS FOR AESTHETIC TREATMENT TO WALL.

DESIGN THE MSE WALL FOR A SUCTION LOAD OF 20 PSF ACTING ON THE PRECAST WALL PANELS.

GENERAL NOTES (CONT.)

AT END OF WALL SEAL CAVITY BETWEEN WIRE FACE WALL AND PRECAST CONCRETE WALL PANEL WITH CLOSURE OF CONCRETE 1'-6" WIDE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

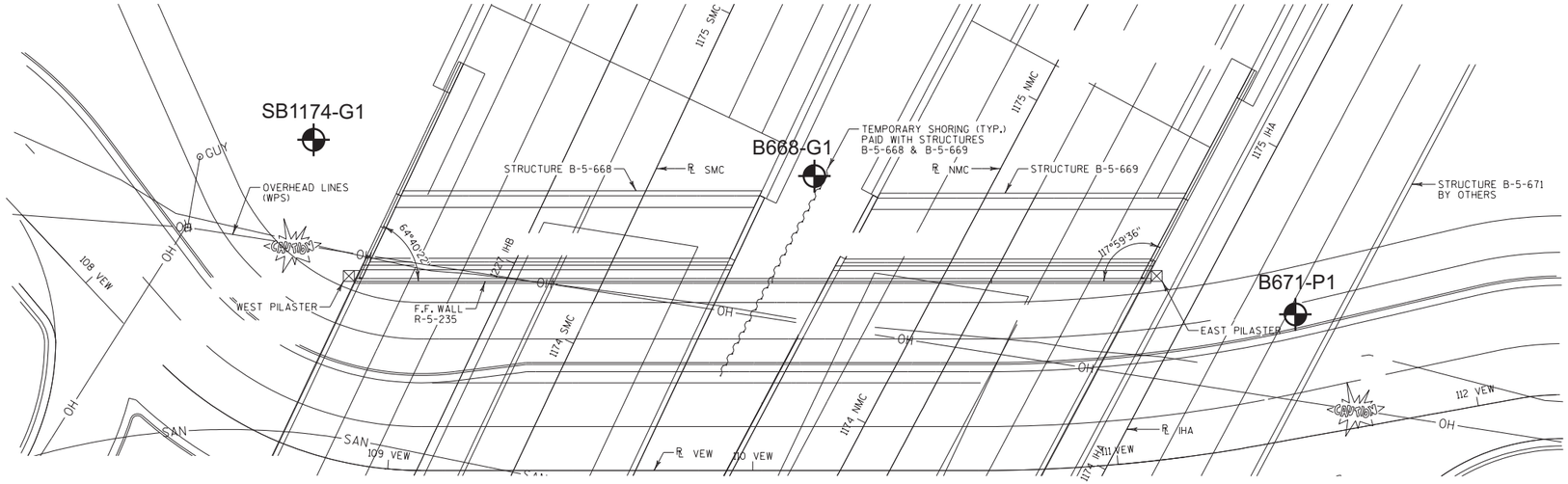
NOTES & QUANTITIES

SHEET 2 OF 11
864

8

8

USH-41 (R-05-235)
05-BROWN, WI



NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY GESTRA ENGINEERING, INC. DATED NOVEMBER 11, 2013. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

THIS SHEET WAS PROVIDED BY GESTRA ENGINEERING, INC. AND IS TO BE USED FOR BORING LOCATIONS AND SOIL INFORMATION ONLY. ALL OTHER INFORMATION IS SUBJECT TO CHANGE.

NOTE: ▽ -WATER LEVEL DURING DRILLING

STATE PROJECT NUMBER

1133-10-71

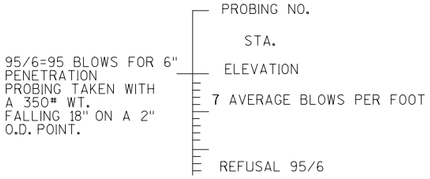
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

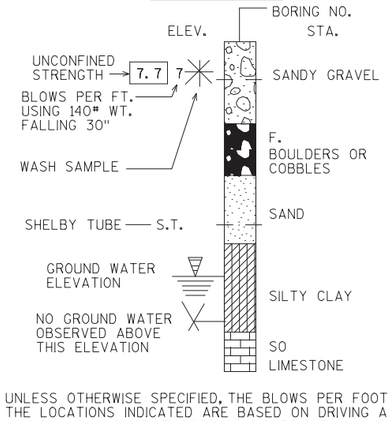
MATERIAL SYMBOLS

TOPSOIL, SILT, FAT CLAY, SAND, PEAT, DOLOMITE, GRAVEL, CLAY, FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY JAD PLANS CK'D. SJG

SUBSURFACE EXPLORATION

SHEET 3 OF 11
865

SCALE 1"=40'

8

8

STATE PROJECT NUMBER

1133-10-71

SOIL PARAMETERS

SOIL UNIT	BOTTOM ELEVATION (FEET)	SOIL UNIT WEIGHT (pcf)	UNDRAINED COHESION (PSF)	UNDRAINED FRICTION ANGLE (DEGREES)	DRAINED COHESION (PSF)	DRAINED FRICTION ANGLE (DEGREES)
WALL STATION LIMITS 10+00.0 TO 11+19.9						
GRANULAR FILL	585.0	125	---	32	---	32
VERY LOOSE SILTY SAND	583.0	110	---	24	---	24
MED. DENSE SILTY SAND	573.0	125	---	30	---	30
SOFT LEAN CLAY	556.0	120	400	---	22	---
STIFF SANDY LEAN CLAY	548.0	130	1,500	---	28	---
DENSE SILT	540.0	125	---	32	---	32
VERY STIFF LEAN CLAY WITH SAND AND GRAVEL	---	130	3,000	---	---	30
WALL STATION LIMITS 11+19.9 TO 12+39.9						
GRANULAR FILL	585.0	125	---	32	---	32
MED. DENSE SAND WITH SILT	563.0	125	---	30	---	30
MED. DENSE CLAYEY SAND	553.0	125	---	30	---	30
VERY DENSE CLAYEY SAND WITH GRAVEL	543.0	135	---	33	---	33
VERY STIFF LEAN CLAY WITH SAND AND GRAVEL	---	130	3,000	---	---	30
WALL STATION LIMITS 12+39.9 TO 13+46.6						
GRANULAR FILL	585.0	125	---	32	---	32
STIFF LEAN CLAY	573.0	130	2,000	---	---	25
VERY SOFT TO SOFT LEAN CLAY	556.0	120	400	---	---	22
VERY DENSE SILTY SAND, POSSIBLE COBBLES/BOULDERS	553.0	135	---	33	---	33
MEDIUM DENSE SILTY SAND	543.0	125	---	32	---	32
VERY STIFF LEAN CLAY WITH SAND AND GRAVEL	---	130	3,000	---	---	30

SUMMARY OF STABILITY ANALYSES RESULTS

WALL STATION	WALL HEIGHT[1] (FEET)	MIN. REINF. LENGTH (FEET)	MIN. REINF. LENGTH/HT. RATIO	FAILURE MODE	CDR
10+00.0 TO 10+58.9	27.0	22	0.80	GLOBAL[2]	0.96 / 1.08
				ECCENTRICITY	1.31
				SLIDING	1.40
				BEARING	1.04
10+58.9 TO 11+19.9	16.5	23	1.40	GLOBAL	0.85 / 1.05
				ECCENTRICITY	1.55
				SLIDING	1.13
				BEARING	1.10
11+19.9 TO 12+39.9	18.3	28	1.50	GLOBAL	1.10 / 1.10
				ECCENTRICITY	1.84
				SLIDING	1.23
				BEARING	1.06
12+39.9 TO 12+87.7	17.5	24	1.40	GLOBAL	0.79 / 1.01
				ECCENTRICITY	1.57
				SLIDING	1.16
				BEARING	1.07
12+87.7 TO 13+46.6	27.5	22	0.80	GLOBAL[2]	0.99 / 1.03
				ECCENTRICITY	1.27
				SLIDING	1.38
				BEARING	1.06

DRAINED / UNDRAINED (TYP.)

NOTES:
1. WALL HEIGHT INCLUDES THE 3.5 FT. EMBEDMENT DEPTH (FROM THE BOTTOM OF THE REINFORCED ZONE TO THE FINISHED GROUND ELEVATION).
2. A RESISTANCE FACTOR OF 0.75 WAS USED FOR DETERMINING CDR FOR THE SLOPES NOT SUPPORTING STRUCTURAL ELEMENTS.

FINAL DESIGN FOR INTERNAL STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

RECOMMENDED GEOTECHNICAL INSTRUMENTATIONS FOR WALL R-5-235

STATION	OFFSET	TIP ELEVATION, FEET[1]
PIEZOMETERS (VIBRATING WIRE)		
1174+00 'SMC'	50 FEET LEFT	563.0
1175+00 'NMC'	40 FEET RIGHT	563.0
SETTLEMENT GAUGES[2]		
1173+90 'SMC'	50 FEET LEFT	588.5
1174+60 'NMC'	50 FEET LEFT	589.0

NOTES:
1. PIEZOMETER TIP ELEVATION, SETTLEMENT GAUGE PLATE ELEVATION.
2. AS CLOSE AS PRACTICAL TO PLANNED FACE OF WALL WITHOUT INTERFERING WITH CONSTRUCTION.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

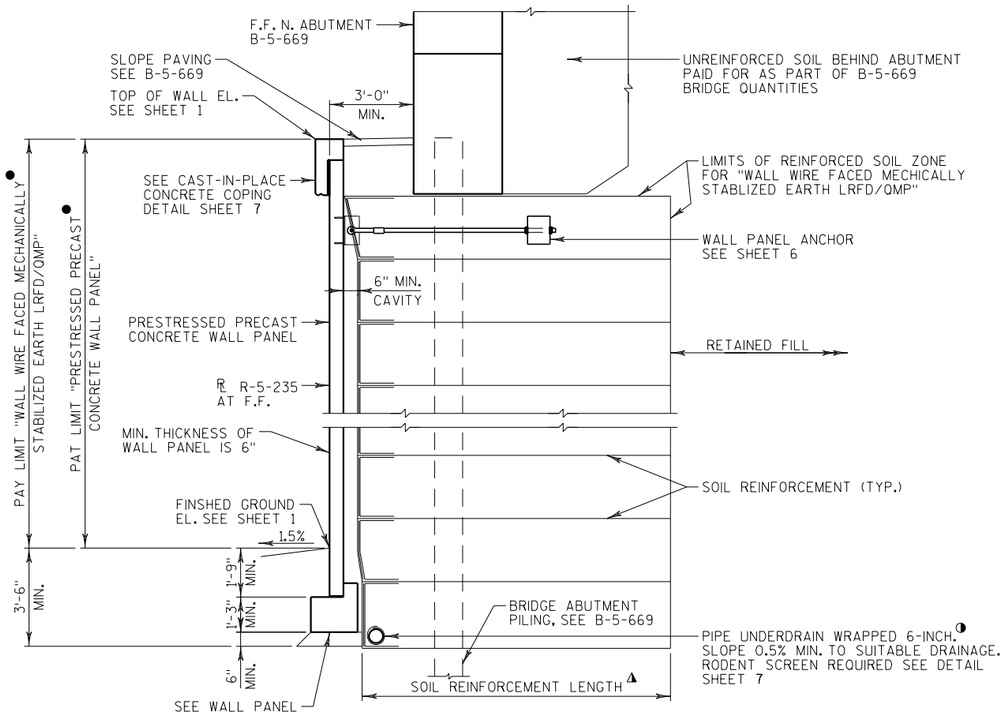
DRAWN BY JAD | PLANS CK'D. SJG

DESIGN DATA

SHEET 4 OF 11
866

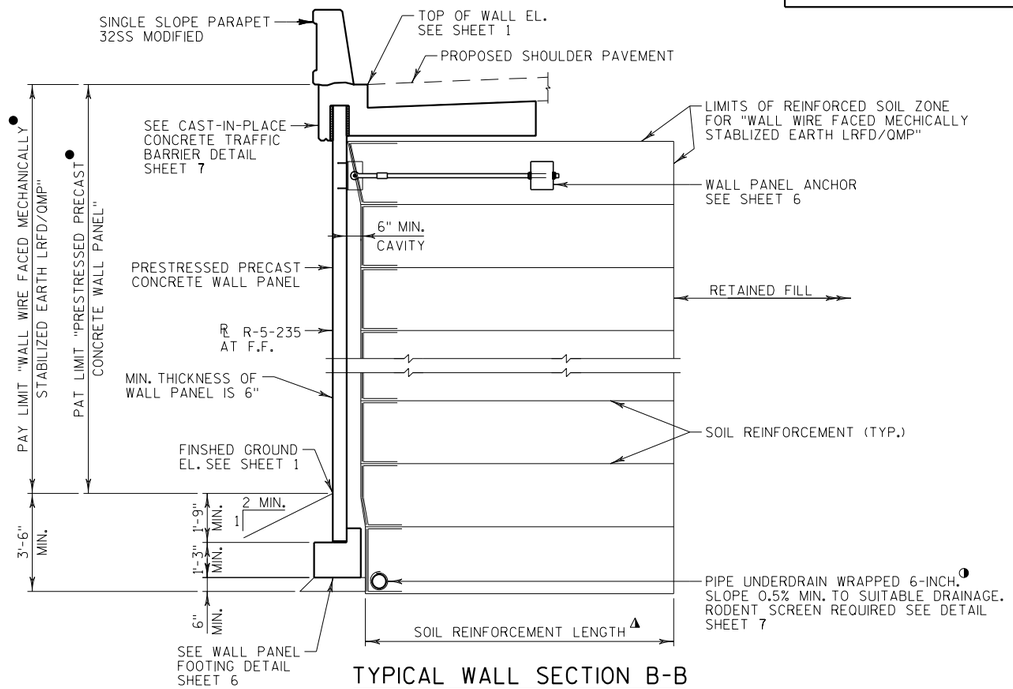
STATE PROJECT NUMBER

1133-10-71



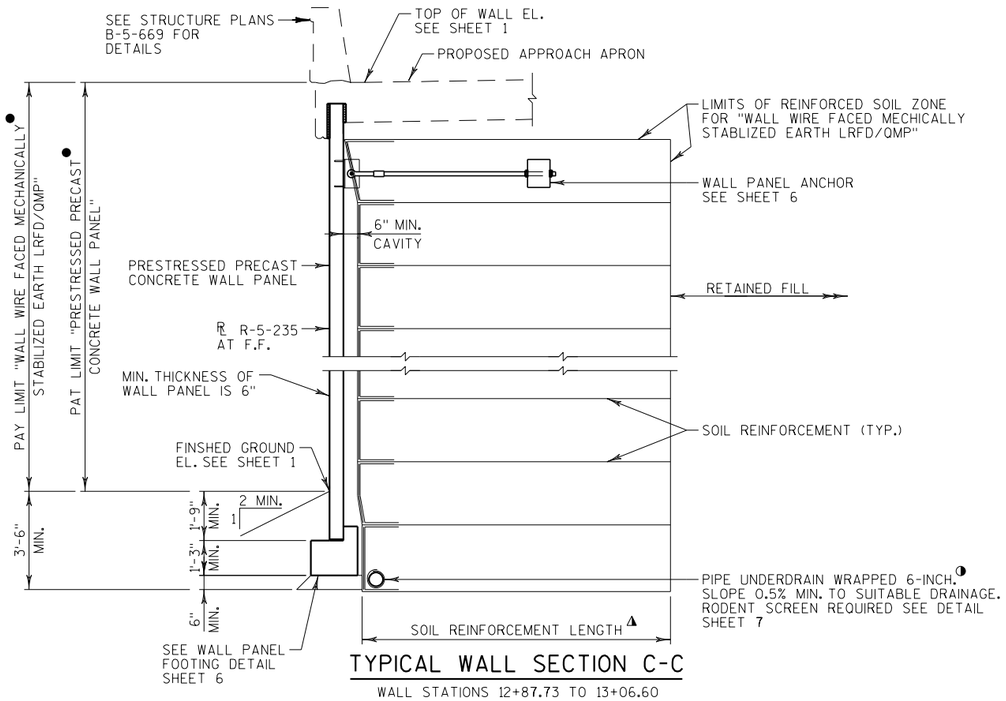
TYPICAL WALL SECTION A-A

WALL STATIONS 11+96.60 TO 12+87.73



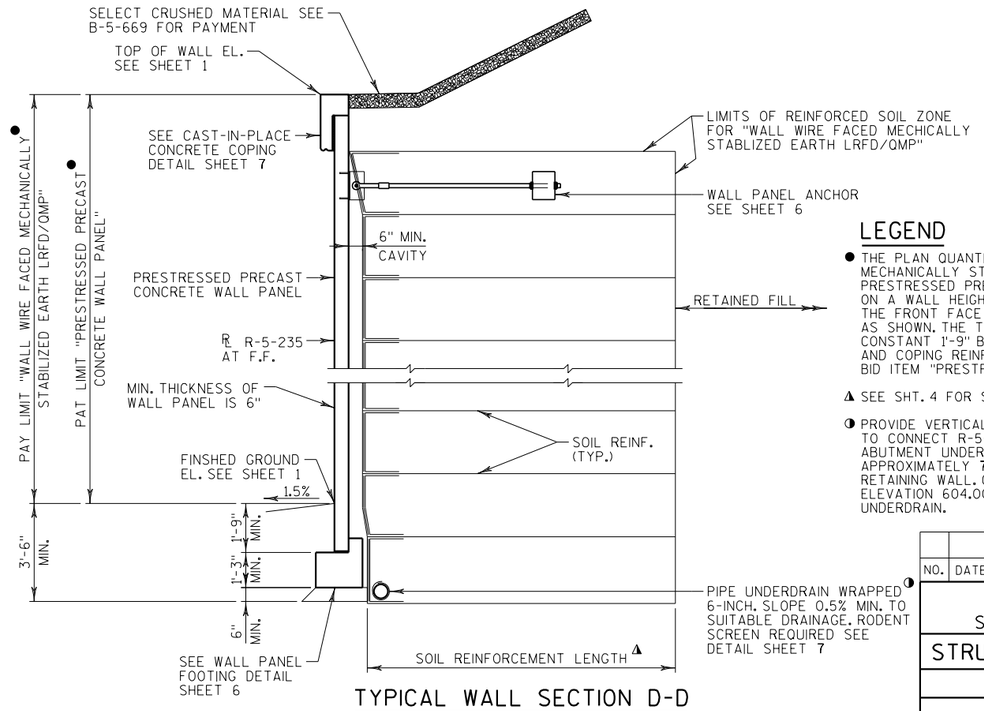
TYPICAL WALL SECTION B-B

WALL STATIONS 13+06.60 TO 13+46.60



TYPICAL WALL SECTION C-C

WALL STATIONS 12+87.73 TO 13+06.60



TYPICAL WALL SECTION D-D

WALL STATIONS 11+79.87 TO 11+96.60

LEGEND

● THE PLAN QUANTITY FOR THE BID ITEMS "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP" AND PRESTRESSED PRECAST CONCRETE WALL PANEL" ARE BASED ON A WALL HEIGHT MEASURED FROM THE FINISHED GRADE AT THE FRONT FACE OF THE WALL TO THE TOP OF TE WALL AS SHOWN. THE TOP OF THE FOOTING IS ASSUMED TO BE CONSTANT 1'-9" BELOW FINISHED GRADE. COPING CONCRETE AND COPING REINFORCEMENT ARE TO BE INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

Δ SEE SHT. 4 FOR SOIL REINFORCEMENT REQUIREMENTS.

◑ PROVIDE VERTICAL PIPE UNDERDRAIN UNPERFORATED 6-INCH TO CONNECT R-5-235-ST2 WALL UNDERDRAIN TO B-5-668 ABUTMENT UNDERDRAIN. LOCATE THE VERTICAL PIPE APPROXIMATELY 7 FEET FROM THE WEST CORNER OF THE RETAINING WALL. CAP THE UNPERFORATED UNDERDRAIN AT ELEVATION 604.00 FOR CONNECTION TO THE ABUTMENT UNDERDRAIN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY	JAD	PLANS CK'D.	SJG

WALL SECTIONS

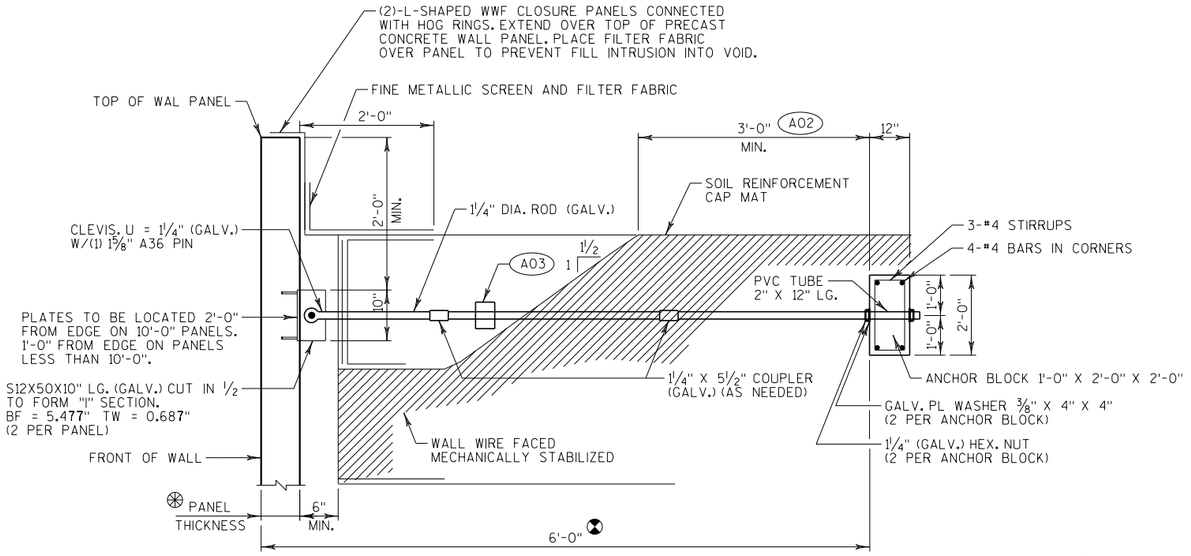
SHEET 5 OF 11
867

8

8

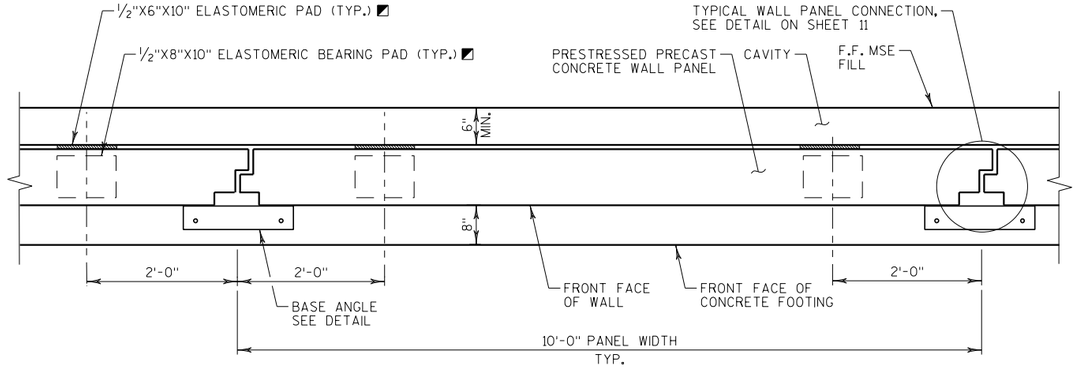
STATE PROJECT NUMBER

1133-10-71

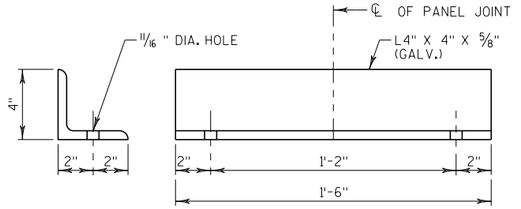


WALL PANEL ANCHOR DETAIL

(A01)

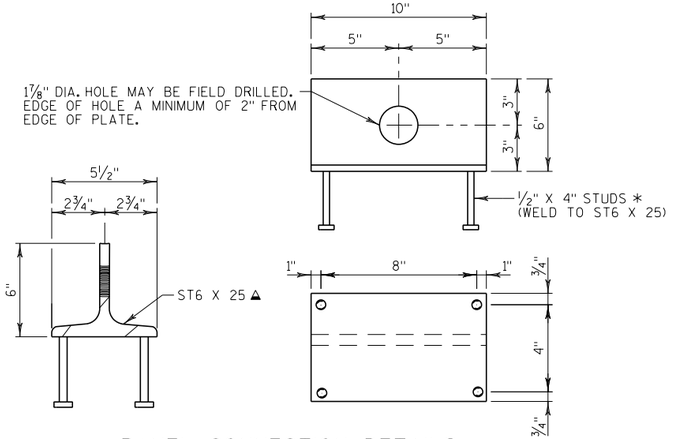


PLAN VIEW WALL PANEL CONNECTION



BASE ANGLE DETAIL

(1 AT EACH PANEL JOINT) ◩



PANEL CONNECTION DETAILS

(2 PER PANEL)

▲ S12X50 (GALV.) CUT IN ½ TO FORM "T" SECTION. BF = 5.477" TW = 0.687".

∗ AS AN ALTERNATE, ½" TYPE "S" ANCHORS MAY BE USED IN PLACE OF THE 4" STUDS.

ST6X25 MAY BE WELDED TO ¾" THICK PLATE WITH (4) ½" X 4" STUDS ANCHORED IN PRECAST PANEL. RESTORE ZINC COATING AROUND ANY WELDED AREAS. SUBMIT DETAILS FOR APPROVAL BY ENGINEER.

LEGEND

(A01) WALL PANEL ANCHOR SYSTEM INCLUDES ANCHOR BLOCK, ANCHOR BLOCK COUPLER, 1¼" DIA. ANCHOR ROD, CLEVIS, AND OTHER PANEL CONNECTION COMPONENTS. DESIGN, DETAILING, AND FURNISHING OF THESE ITEMS IS INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL." INSTALLATION OF THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP."

(A02) DESIGN LENGTH TO PROVIDE REQUIRED HORIZONTAL CAPACITY OF ANCHOR ASSEMBLY. MINIMUM OF 3'-0" OF COMPACTED FILL IN FRONT OF ANCHOR BLOCK PRIOR TO WALL PANEL ERECTION. ROD MIN. 2'-0" BELOW FINISH GRADE.

(A03) OPTIONAL MULTIDIRECTIONAL CONNECTOR MAY BE USED TO FACILITATE ALIGNMENT AT THE CONNECTION. CONNECTOR TO BE CORROSION RESISTANT AND DEVELOP 100% OF THE ULTIMATE STRENGTH OF 1¼" DIA. BAR)

(A04) BASE AGGREGATE OPEN GRADED, 6" MIN. INCIDENTAL TO BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL".

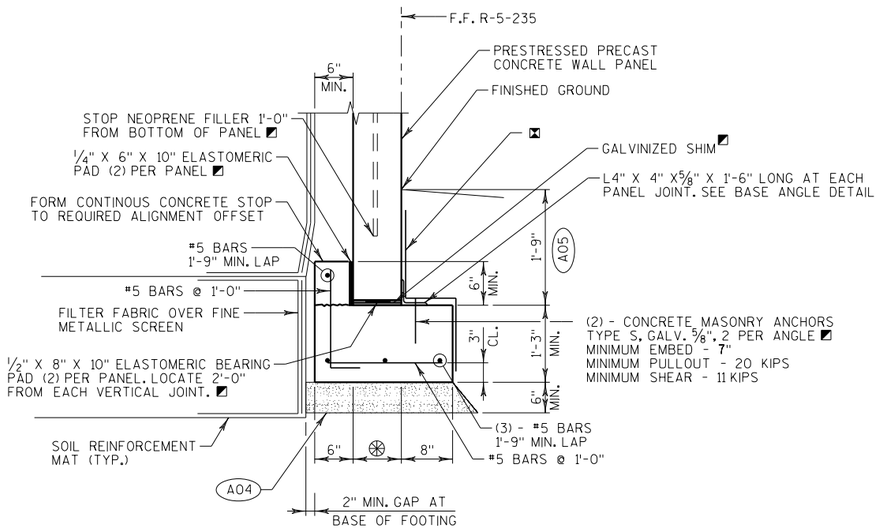
(A05) MINIMUM DIMENSION FROM FINISHED GRADE AT FRONT FACE OF WALL TO BOTTOM OF WALL PANEL FOOTING IS SHOWN. THE FOOTING MAY BE CONSTRUCTED ON A SLOPE PARALLEL TO THE PROPOSED GRADE, OR MAY BE STEPPED. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THE WALL PANEL FOOTING WITH FABRICATION OF THE PRECAST PANELS.

◩ INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

⊛ = WALL PANEL THICKNESS AS DETERMINED IN ACCORDANCE WITH THE DESIGN REQUIREMENTS DEFINED IN THE SPECIAL PROVISIONS. (6" MIN.)

⊛ LENGTH MAY BE INCREASED TO AVOID OBSTRUCTIONS, SUCH AS ABUTMENT PILING.

▣ GEOTEXTILE FABRIC TYPE DF, 2'-0" WIDE BY LENGTH OF FOOTING. ◩



WALL PANEL FOOTING DETAIL

CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL"

NOTES

AN ALTERNATE DEADMEN AND PANEL CONNECTION SYSTEM MAY BE SUBMITTED FOR REVIEW AND POSSIBLE ACCEPTANCE BY THE ENGINEER.

TILT UP PANEL DEADMAN MAY BE TRENCHED IN IF THE GEOMETERY OF THE DEADMEN LOCATION ALLOWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY	JAD	PLANS CK'D.	SJG

WALL DETAILS 1

SHEET 6 OF 11

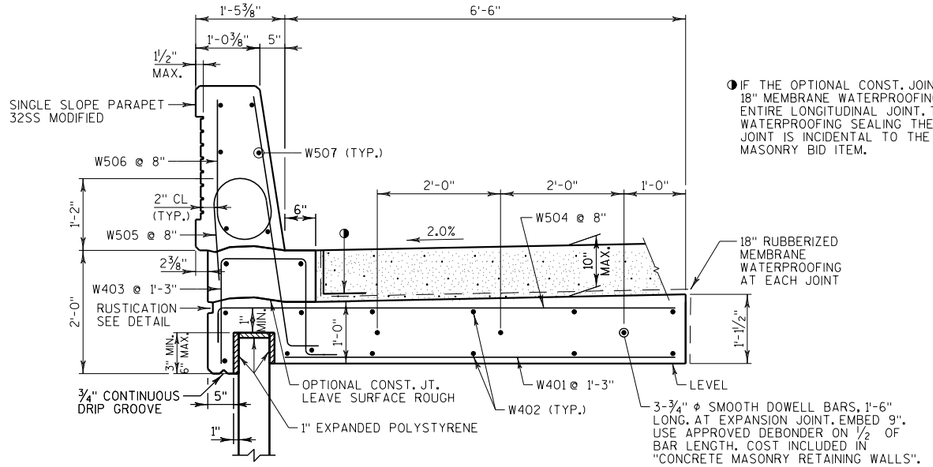
868

8

8

STATE PROJECT NUMBER

1133-10-71

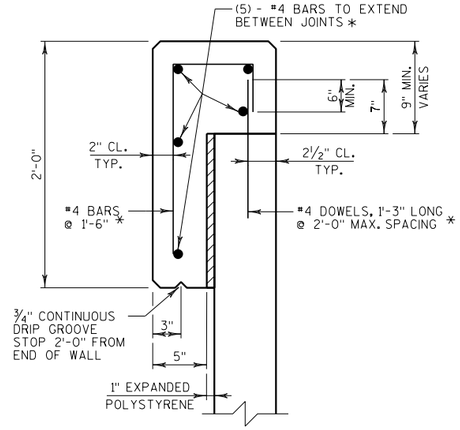


◑ IF THE OPTIONAL CONST. JOINT IS USED, PLACE 18" MEMBRANE WATERPROOFING ALONG THE ENTIRE LONGITUDINAL JOINT. THE MEMBRANE WATERPROOFING SEALING THE OPTIONAL CONST. JOINT IS INCIDENTAL TO THE CONCRETE MASONRY BID ITEM.

CAST-IN-PLACE CONCRETE TRAFFIC BARRIER DETAIL

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPET AND ANCHOR SLAB MAY BE USED BETWEEN EXP. JTS. RUN BAR REINFORCEMENT THRU THE JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 1'-9". DEFINE CONSTRUCTION JOINT WITH A ¾" "V" GROOVE.

SLOPE TOP OF ANCHOR SLAB TO MATCH FINAL ROADWAY SLOPE.



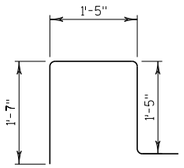
CAST-IN-PLACE CONCRETE COPING DETAIL

* WALL COPING CONCRETE AND THE REINFORCEMENT BARS ARE TO BE INCLUDED IN THE BID ITEM: "PRESTRESSED PRECAST CONCRETE WALL PANEL"

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
W401	X	34	6-2			ANCHOR SLAB BOTTOM	TRANS.
W402	X	30	19-8			ANCHOR SLAB	LONG.
W403	X	34	4-10	X		COPING	TRANS.
W504	X	62	8-1	X		ANCHOR SLAB TOP	TRANS.
W505	X	62	6-8	X		PARAPET - TIE TO ANCHOR SLAB	VERT.
W506	X	62	5-0	X		PARAPET	VERT.
W507	X	12	19-8			PARAPET	LONG.



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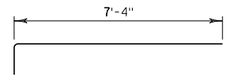

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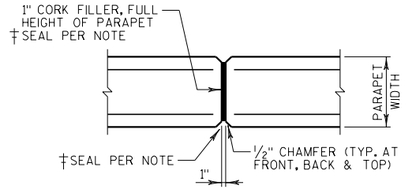
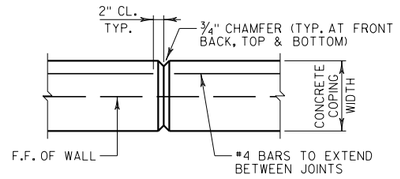


TRAFFIC BARRIER EXPANSION JOINT DETAIL

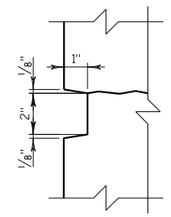


COPING CONTRACTION JOINT

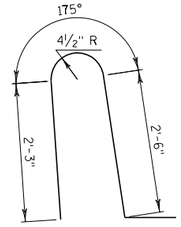
DO NOT RUN BAR STEEL THRU JOINT.

MAXIMUM SPACING OF JOINTS SHALL 12'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

ALL COANTRACTION JOINTS TO EXTEND THE FULL DEPTH OF COPING.



RUSTICATION DETAIL



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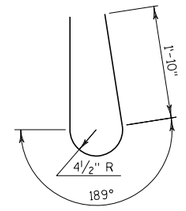

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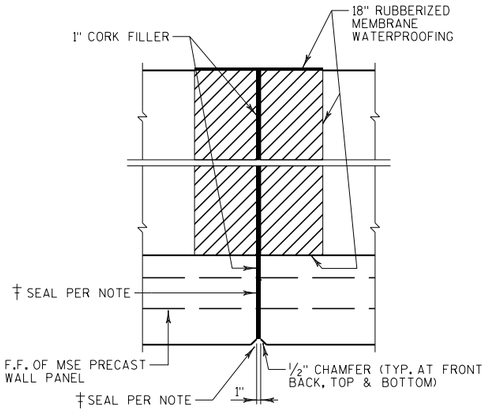
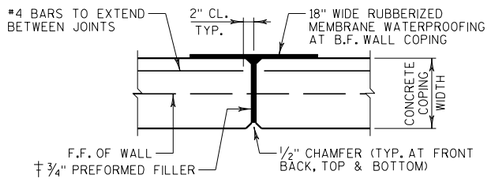


ANCHOR SLAB EXPANSION JOINT DETAIL

EXPANSION JOINTS TO BE SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'. LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT, EXCEPT FOR DOWELL BARS. JOINT TO EXTEND FULL DEPTH OF PARAPET AND ANCHOR SLAB.



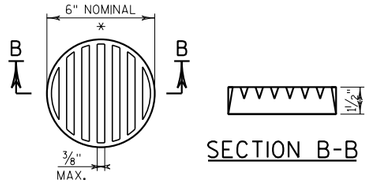
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

MAXIMUM SPACING OF JOINTS SHALL 50'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF WALL PANELS.

ALL EXPANSION JOINTS TO EXTEND THE FULL DEPTH OF COPING.



SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

LEGEND

‡ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

WALL DETAILS 2

SHEET 7 OF 11

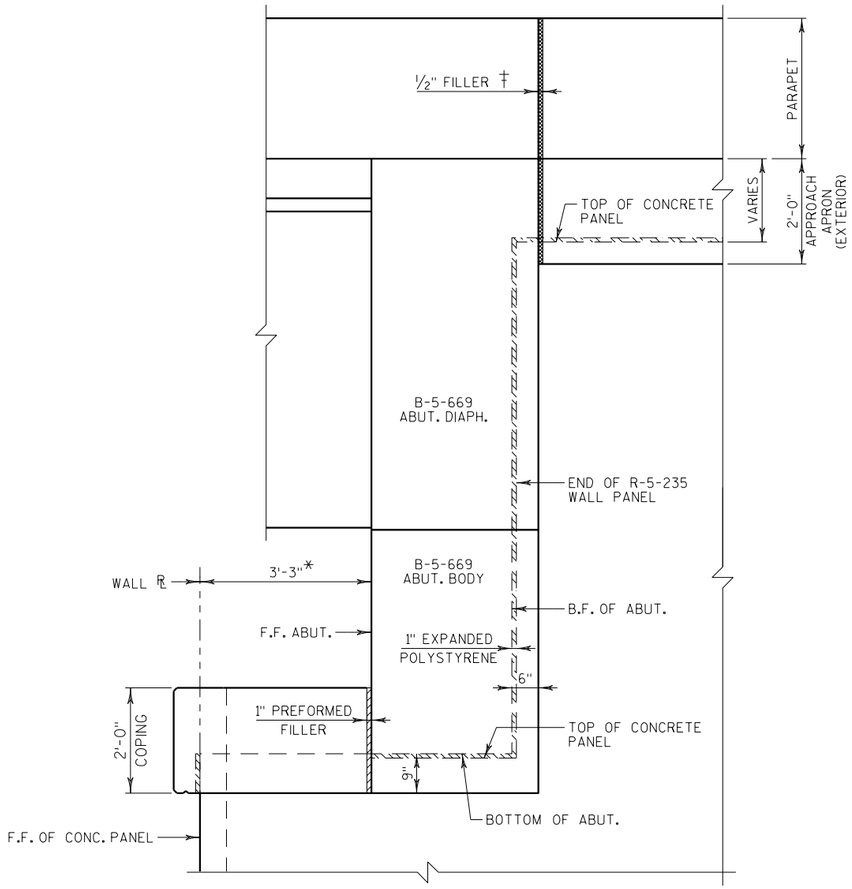
869

8

8

STATE PROJECT NUMBER

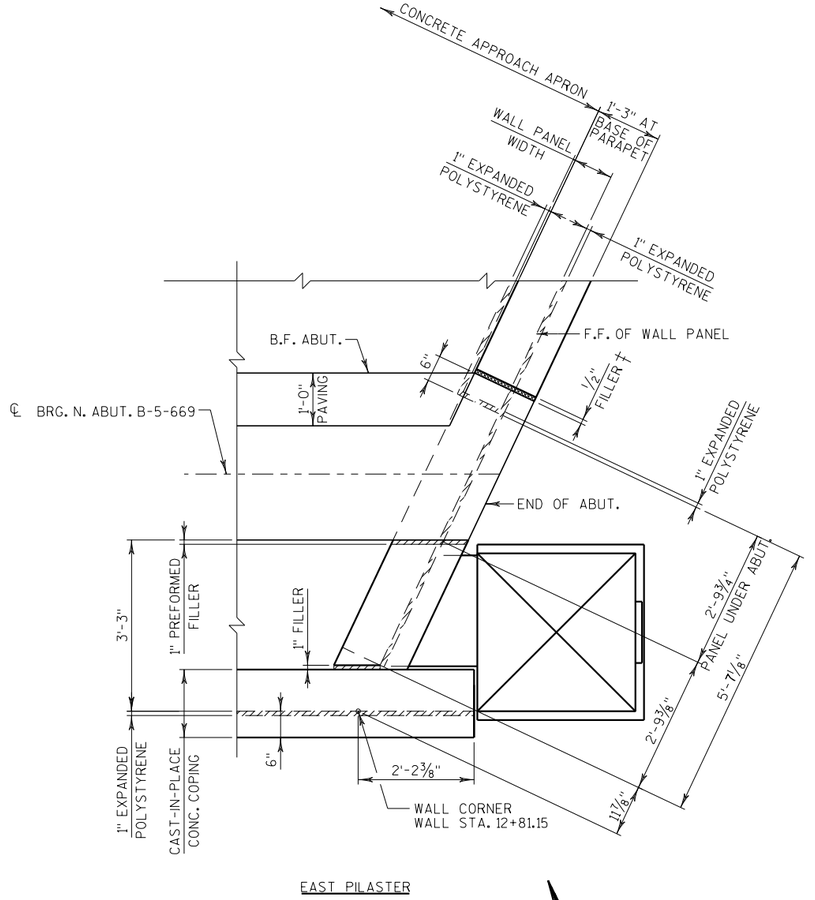
1133-10-71



PART ELEVATION - END VIEW

(PILASTER NOT SHOWN IN THIS VIEW FOR CLARITY)

*DIMESION IS GIVEN NORMAL TO ℄ OF BEARING



EAST PILASTER

PART PLAN

LEGEND

† SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

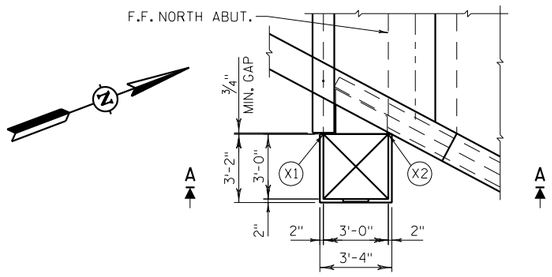
DRAWN BY JAD | PLANS CK'D. SJG

WALL DETAILS 3

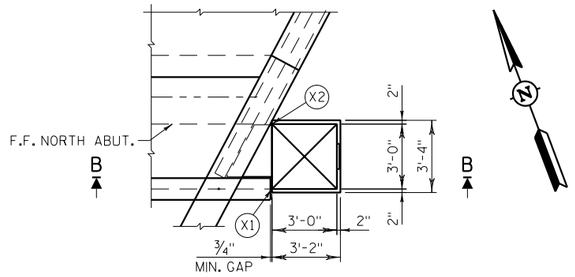
SHEET 8 OF 11
870

8

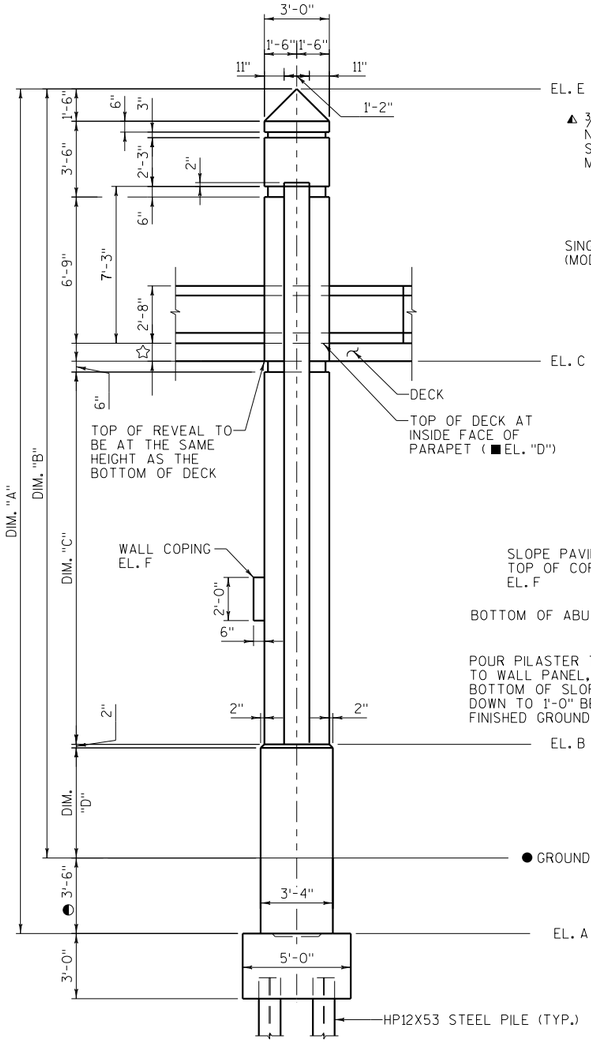
8



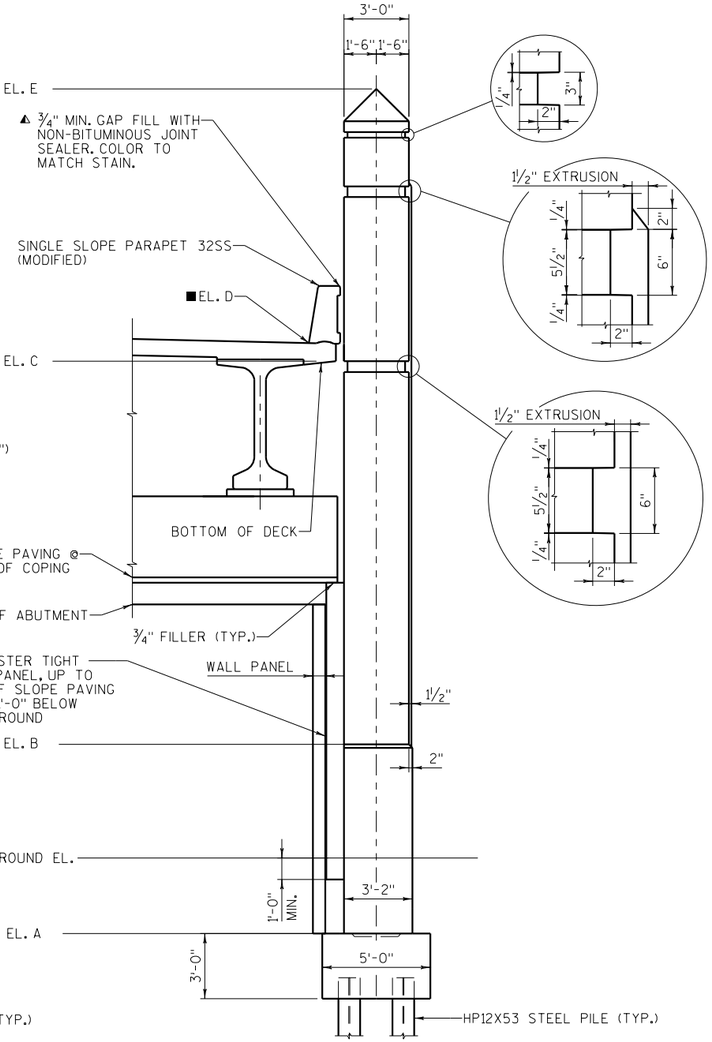
EAST PILASTER PLAN



EAST PILASTER PLAN



SECTION A-A



SECTION B-B

PILASTER DIMENSIONS

LOCATION	EAST
DIM. "A"	40'-10 1/2"
DIM. "B"	37'-4 1/2"
DIM. "C"	19'-4 1/2"
DIM. "D"	4'-10"

PILASTER ELEVATIONS

	LOCATION	EAST
	EL. A	589.54
	EL. B	598.04
	EL. C	617.92
■	EL. D	618.67
	EL. E	630.42
	EL. F	607.83
●	GROUND EL. @ FACE CLOSEST TO VELP AVE.	593.04

PILASTER LOCATIONS

LOCATION		STATION	OFFSET
EAST	X1	1174+70.86 NMC	50.72' RT
	X2	1174+73.50 NMC	49.31' RT

■ EL. "D" = TOP OF DECK @ INSIDE FACE OF PARAPET.

● GROUND ELEVATION IS FINISHED GRADE.

▲ SEAL ALL HORIZ. AND VERTICAL SURFACES OF FILLER WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE). COLOR TO MATCH STAIN.

◐ IF WALL EMBEDMENT IS MORE THAN 3'-6", THEN PILASTER FOOTING EMBEDMENT AND REINFORCEMENT SHALL BE ADJUSTED ACCORDINGLY. IF EMBEDMENT IS MORE THAN 6" BELOW PLAN EMBEDMENT, THE DESIGNER SHALL BE NOTIFIED.

☆ DISTANCE FROM TOP OF DECK AT FACE OF PARAPET TO BOTTOM OF DECK AT OUTSIDE EDGE = 9".

PILASTER FOUNDATION DATA

PILASTER TO BE SUPPORTED ON 4-HP12X53 STEEL PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 37 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. THE REQUIRED UPLIFT IS 17 TONS** PER PILE.
ESTIMATED LENGTH = 45 FEET.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY. THE FACTORED AXIAL RESISTANCE OF PILES IN TENSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.25 USING STATIC ANALYSIS-ALPHA METHOD TO DETERMINE DRIVEN PILE CAPACITY.

DESIGN DATA

PILASTER AND FOUNDATION WERE DESIGNED PER AASHTO LRFD 5TH EDITION SPECIFICATION.

DESIGN WIND LOAD = 47 PSF

STATE PROJECT NUMBER

1133-10-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

PILASTER DETAILS

SHEET 9 OF 11
871

8

8

STATE PROJECT NUMBER

1133-10-71

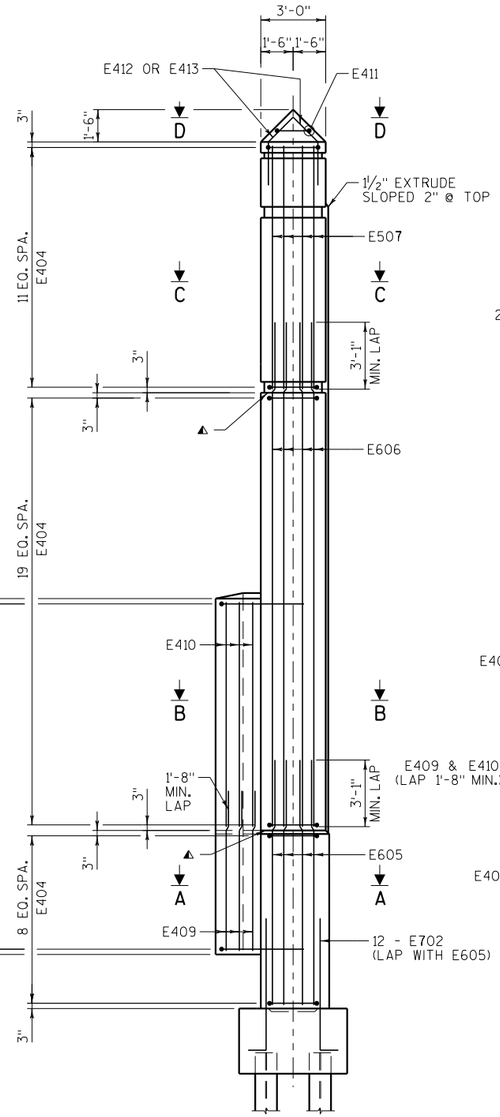
LEGEND & NOTES

* REINFORCEMENT WELDED TO PILE SHALL CONFORM TO ASTM A706.

SEE AESTHETIC DETAIL SHEETS FOR AESTHETIC INFORMATION.

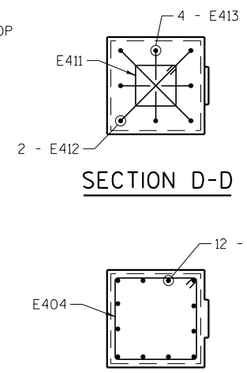
▲ OPTIONAL CONSTRUCTION JOINT FORMED BY 1'-6" X 1'-6" X 2" BEVELED KEYWAY.

THE PILASTER CAP MAY BE PRECAST. DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

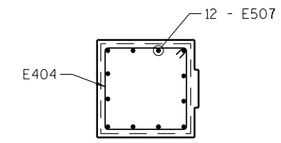


ELEVATION WITH REINFORCEMENT

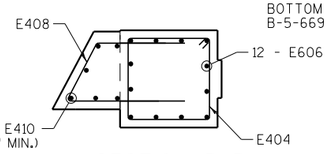
(LOOKING NORTH)



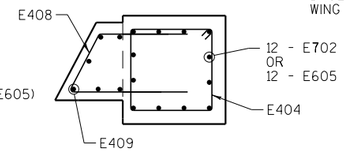
SECTION D-D



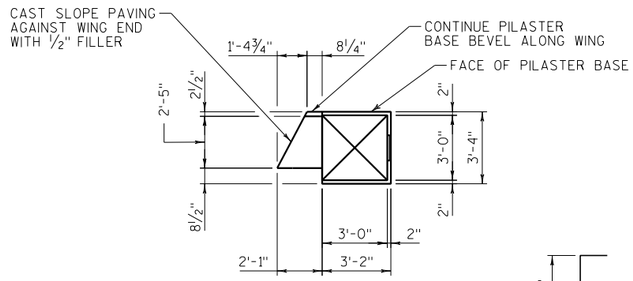
SECTION C-C



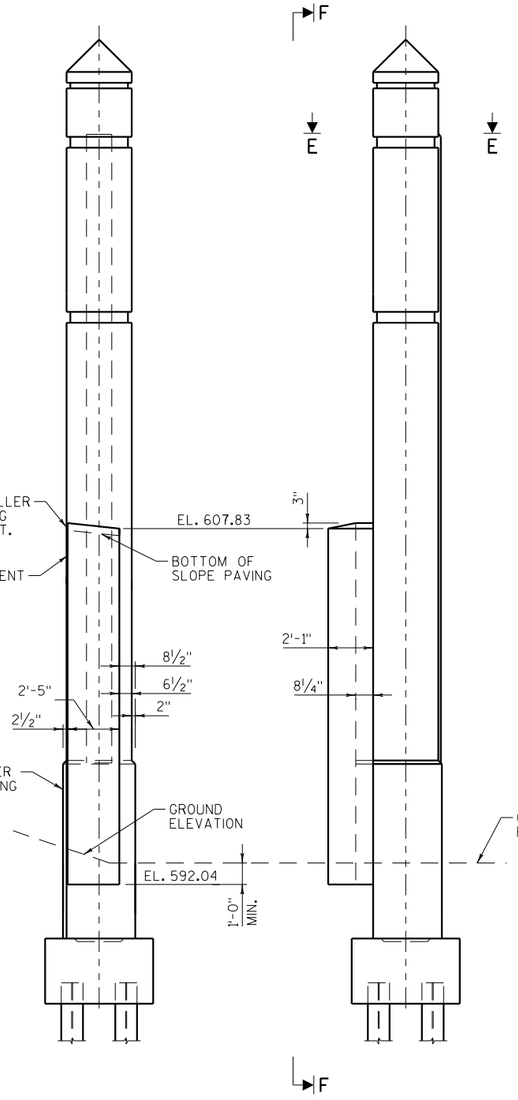
SECTION B-B



SECTION A-A



SECTION E-E



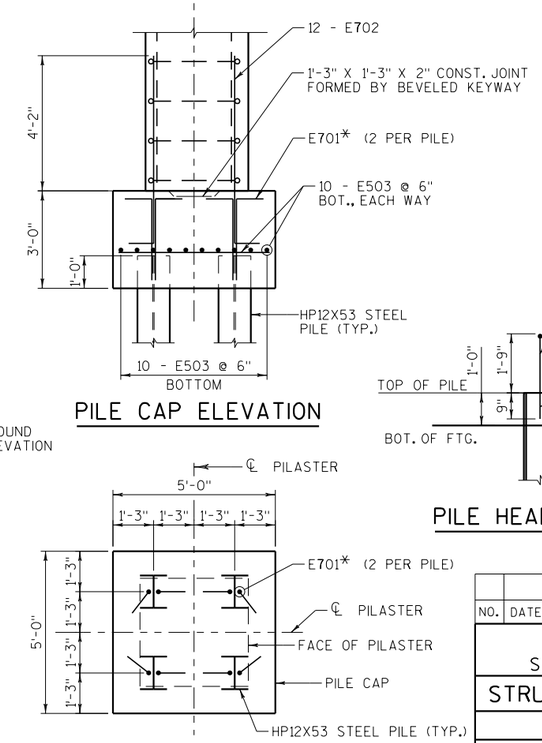
SECTION F-F

ELEVATION

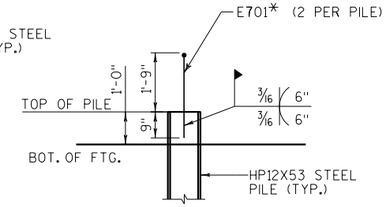
(LOOKING NORTH)

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
E701	X	8	3'-6"	X		BAR WELDED TO PILE
E702	X	12	7'-1"	X		FOOTING VERTICAL DOWELS
E503	X	20	4'-8"			FOOTING BOTTOM BARS
E404	X	41	9'-10"	X		COLUMN - STIRRUPS
E605	X	12	11'-9"			COLUMN - VERT.
E606	X	12	22'-6"			COLUMN - VERT.
E507	X	12	11'-3"			COLUMN - VERT.
E408	X	17	8'-10"	X		COLUMN @ WALL PANELS - HORIZ.
E409	X	6	8'-0"			COLUMN @ LOWER WALL PANELS - VERT.
E410	X	6	10'-0"			COLUMN @ WALL PANELS - VERT.
E411	X	1	5'-6"	X		PILASTER CAP - HORIZ.
E412	X	2	8'-5"	X		PILASTER CAP - VERT.
E413	X	4	3'-8"	X		PILASTER CAP - VERT.



PILE CAP ELEVATION



PILE HEAD DETAIL

PILE CAP PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

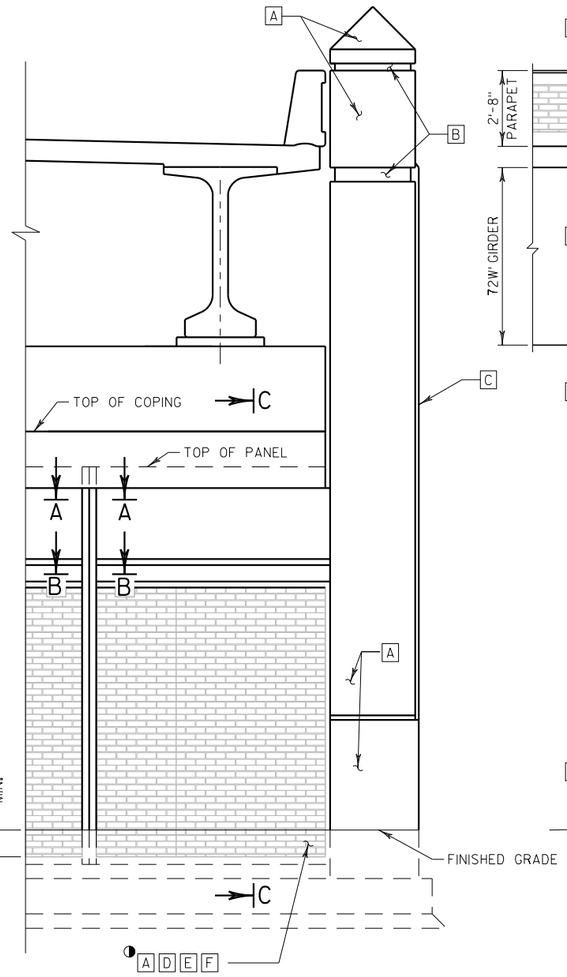
EAST PILASTER

SHEET 10 OF 11
872

8

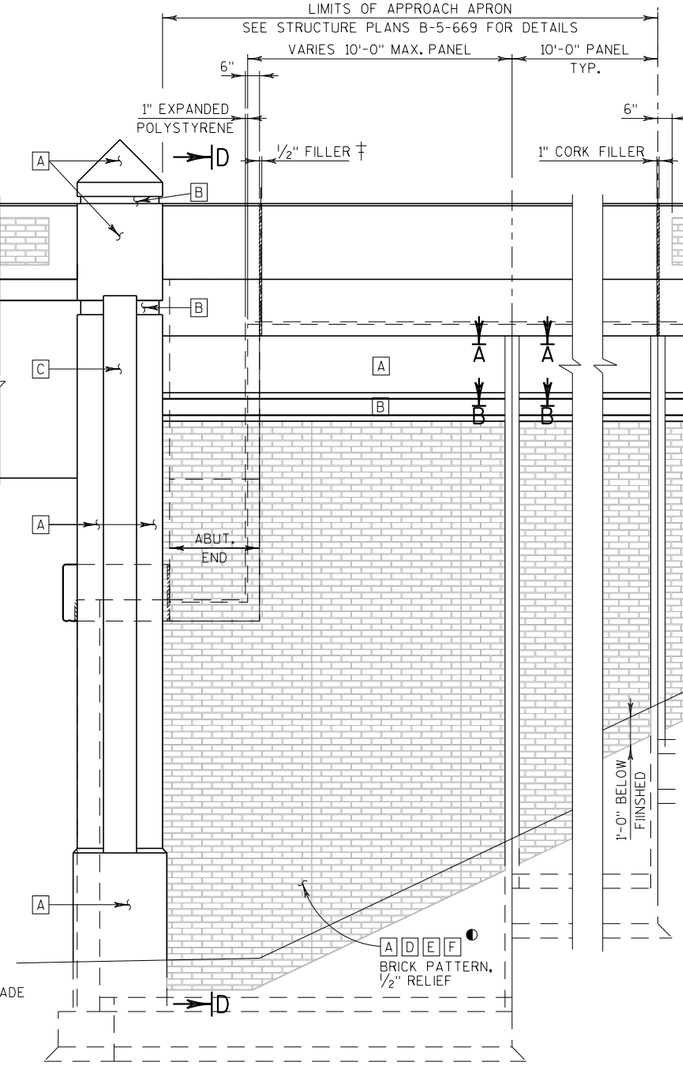
8

STATE PROJECT NUMBER
1133-10-71



PARTIAL ELEVATION - R-5-235

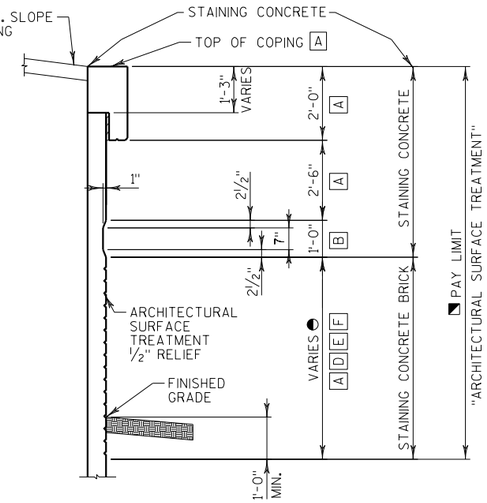
(LOOKING NORTH)



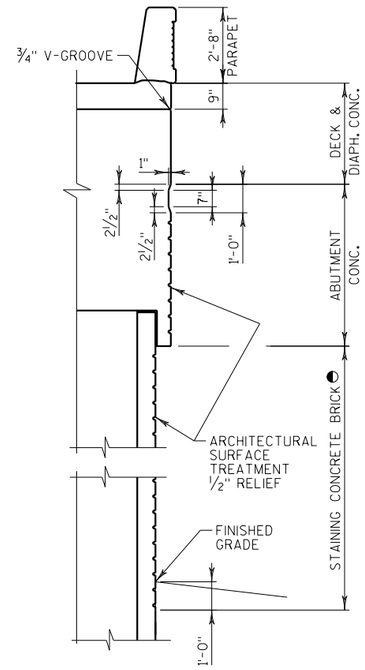
FOOTING STEPS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

PARTIAL ELEVATION - R-5-235

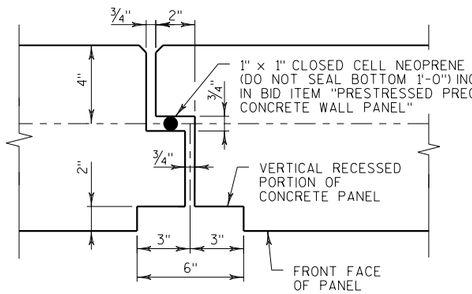
(LOOKING WEST AT NORTHEAST WING)



SECTION C-C

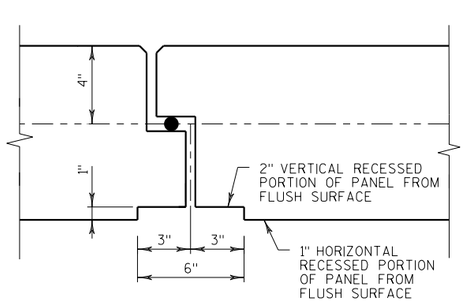


SECTION D-D



SECTION A-A

CHAMFER REVEALS 1/16" PER INCH OF DEPTH



SECTION B-B

LEGEND

- ◩ PAY LIMIT FOR "ARCHITECTURAL SURFACE TREATMENT" FOR THE WALL PANELS IS FROM TOP OF WALL TO 1'-0" BELOW GRADE.
- ◐ STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID FOR AS "STAINING CONCRETE BRICK."
- ‡ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION
A	BASE COLOR	BRIDGES, PARAPETS, WALLS, PILASTERS
B	ACCENT COLOR #1	REVEALS
C	ACCENT COLOR #2	VERTICAL PILASTER CENTER ELEMENT
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)
G	ACCENT COLOR #6	NOT USED

SEE SPECIAL PROVISIONS FOR STAIN COLORS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-5-235 (STAGE 1)

DRAWN BY JAD | PLANS CK'D. SJG

AESTHETIC DETAILS

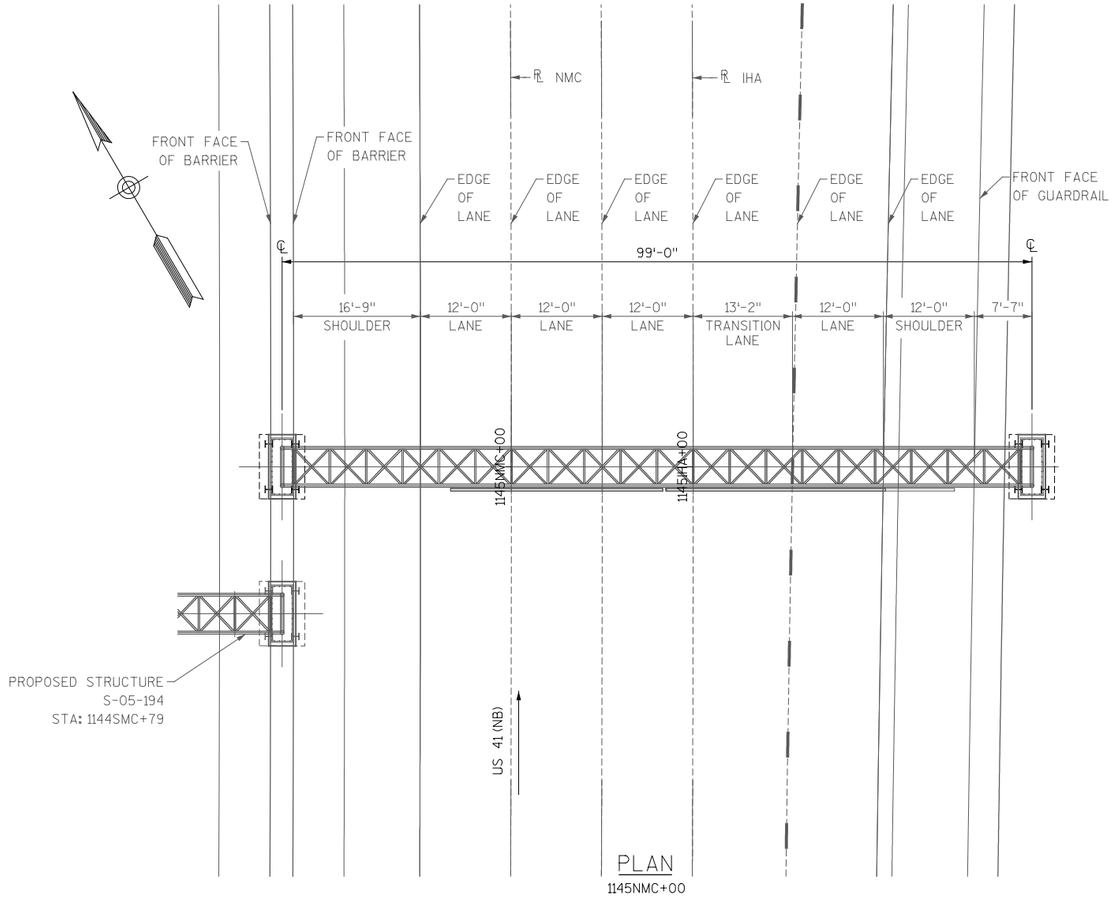
SHEET 11 OF 11
873

8

8

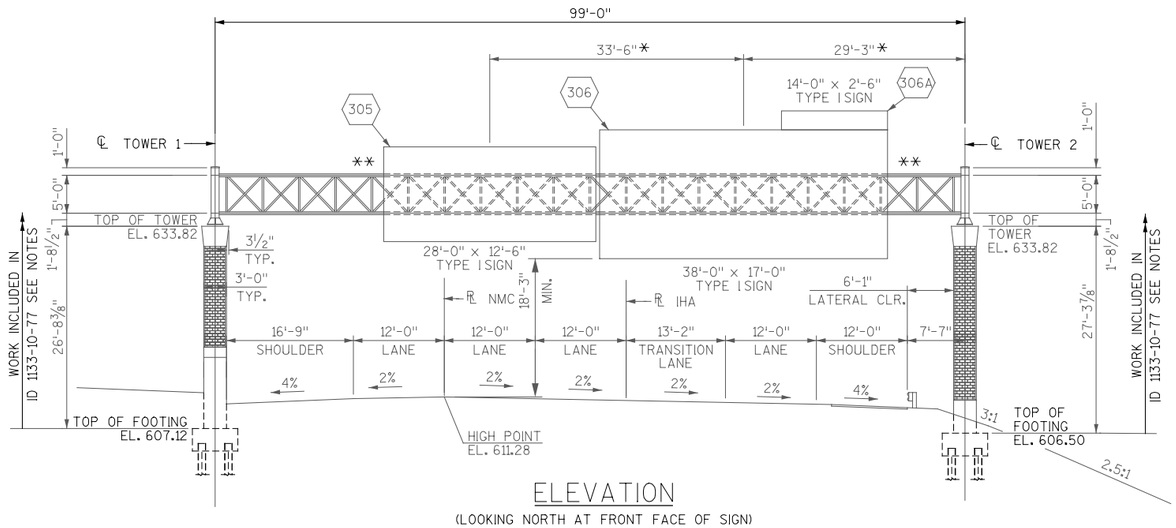
STATE PROJECT NUMBER

1133-10-71



PLAN

1145NMC+00



ELEVATION

(LOOKING NORTH AT FRONT FACE OF SIGN)

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

FOOTING

CONCRETE: ..... f'c = 3,500 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT: ..... fy = 60,000 psi

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.

LIVE LOAD - NONE.

ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.

WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

FOUNDATION DATA

SEE FOUNDATION DETAILS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S-05-189 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133-10-77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133-10-71.

LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL, THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** PERMANENT SIGNS TO BE INSTALLED UNDER CONTRACT 1133-10-77

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	432
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	800
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1640
SPV.0060.951	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	60

CONTACTS

WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

STEVEN J. MILLER 36937 MILWAUKEE, WI PROFESSIONAL ENGINEER

Steven J. Miller 10/10/14

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-189

DE PERE - SUAMICO

COUNTY	TOWN/CITY/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	CSH	VC

PLAN & ELEVATION

SHEET 1 OF 4

874

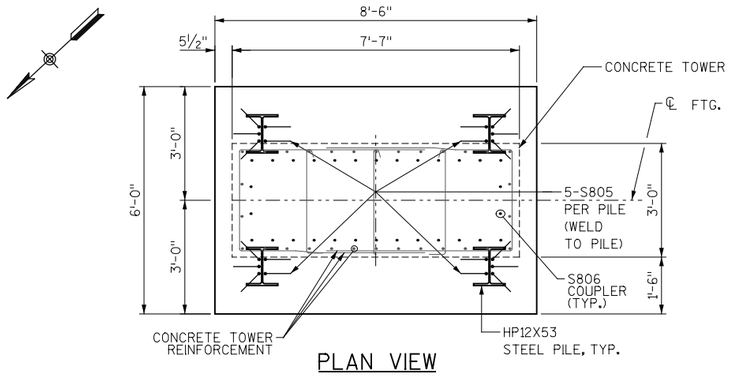
8

8

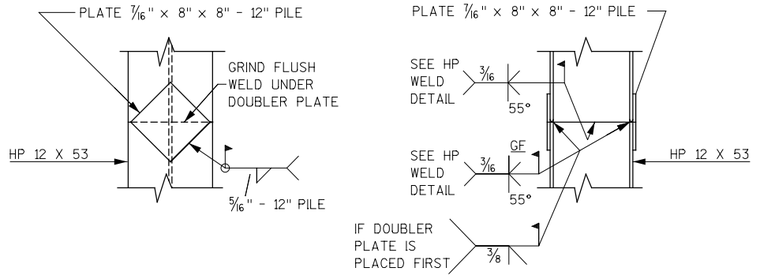
FILE NAME 15-05-089.dgn
PLOT DATE 10/10/2014 12:38:23 AM PLOT BY : MarkSv8i DRV :Pdf_bw_HS.by levelplt PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

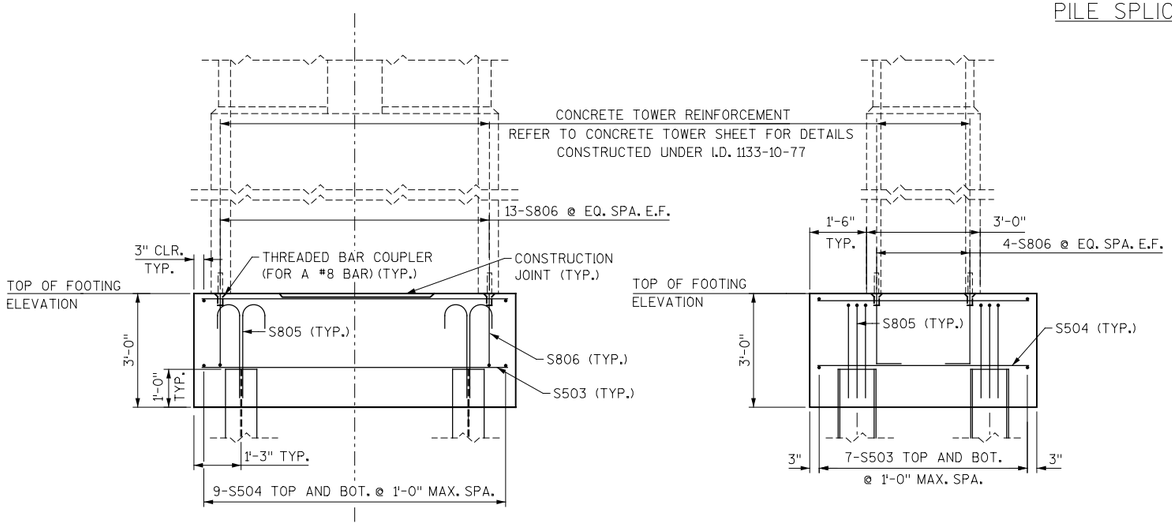
1133-10-71



PLAN VIEW

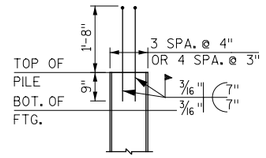


PILE SPLICE DETAIL

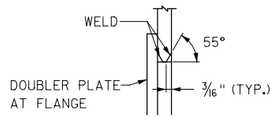


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
*S806	X	30	12'-1"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

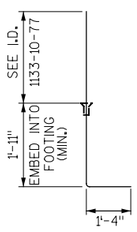
FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 50'IS REQUIRED FOR UPLIFT.

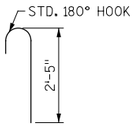
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".



*S806



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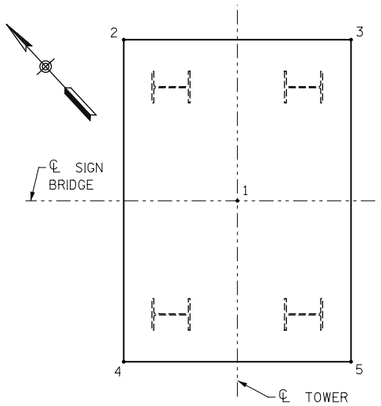


NORTHING & EASTING DETAIL

NORTHING & EASTING TABLE

TOWER 1- TOP OF FOOTING ELEVATION = 607.12					
LOCATION	1	2	3	4	5
NORTHING	580421.88	580427.07	580424.04	580419.74	580416.71
EASTING	86320.23	86319.78	86324.96	86315.48	86320.66

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-189

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 4

875

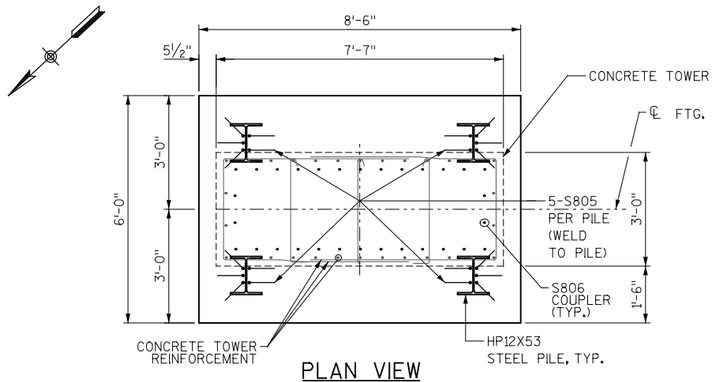
8

8

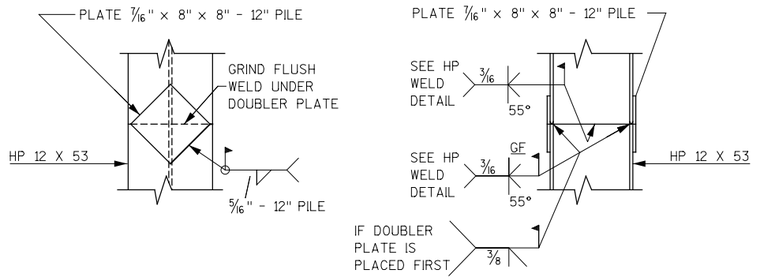
FILE NAME :S-05-0189.dgn
PLOT DATE :10/10/2014 12:38:24 AM PLOT BY : MarkSvik DRV :Pdf_bw_HS.by levelplt PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

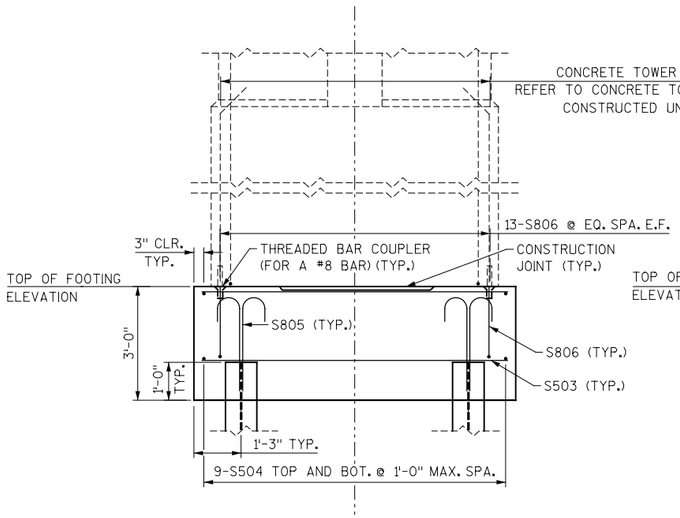
1133-10-71



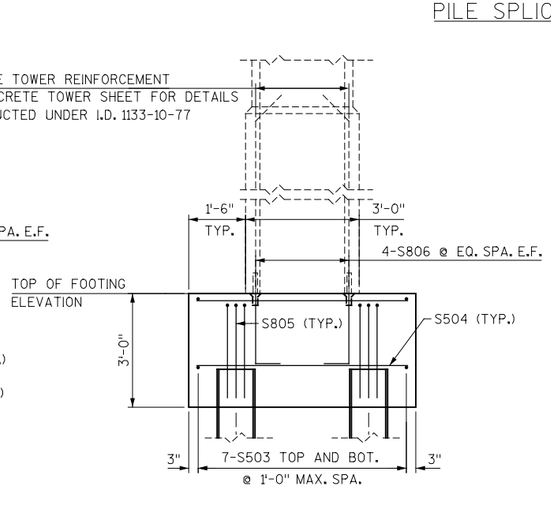
PLAN VIEW



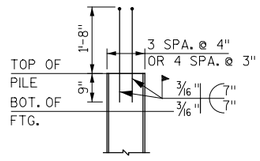
PILE SPLICE DETAIL



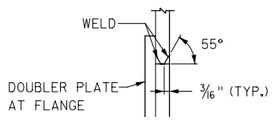
ELEVATION VIEW



END VIEW

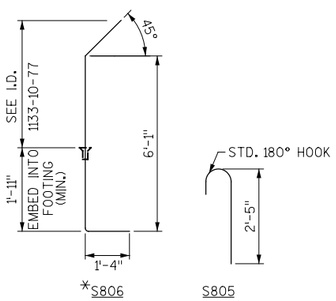


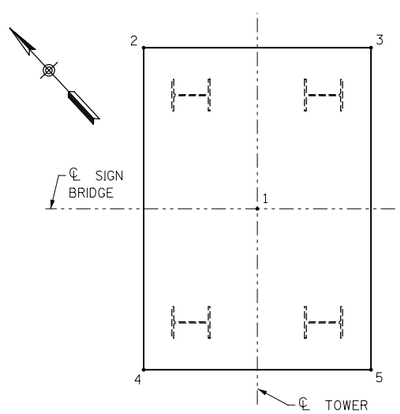
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
*S806	X	30	8-10"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

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**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".

NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 606.50					
LOCATION	1	2	3	4	5
NORTHING	580371.95	580377.15	580374.11	580369.82	580366.78
EASTING	86405.71	86405.27	86410.44	86400.97	86406.14

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-189

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4

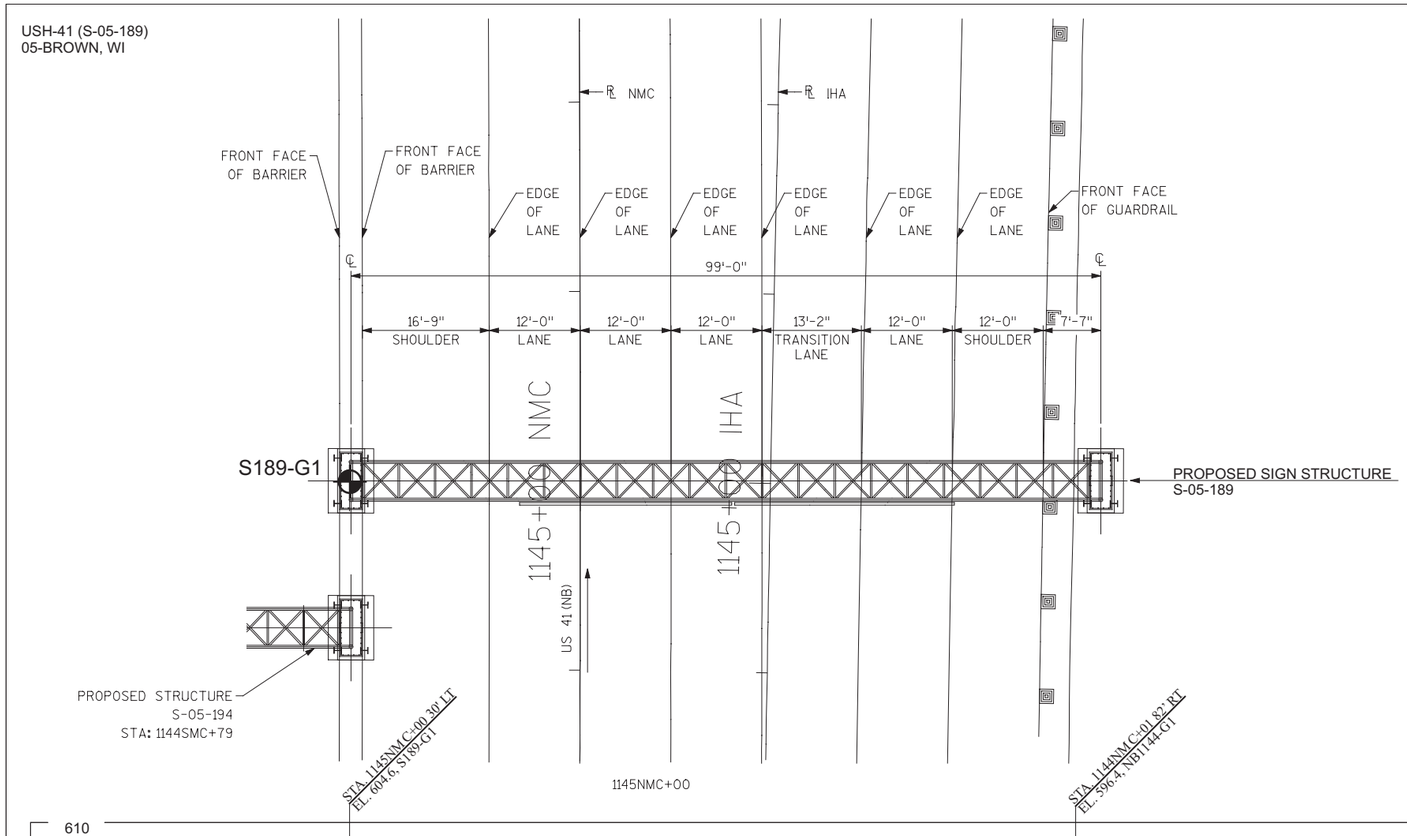
876

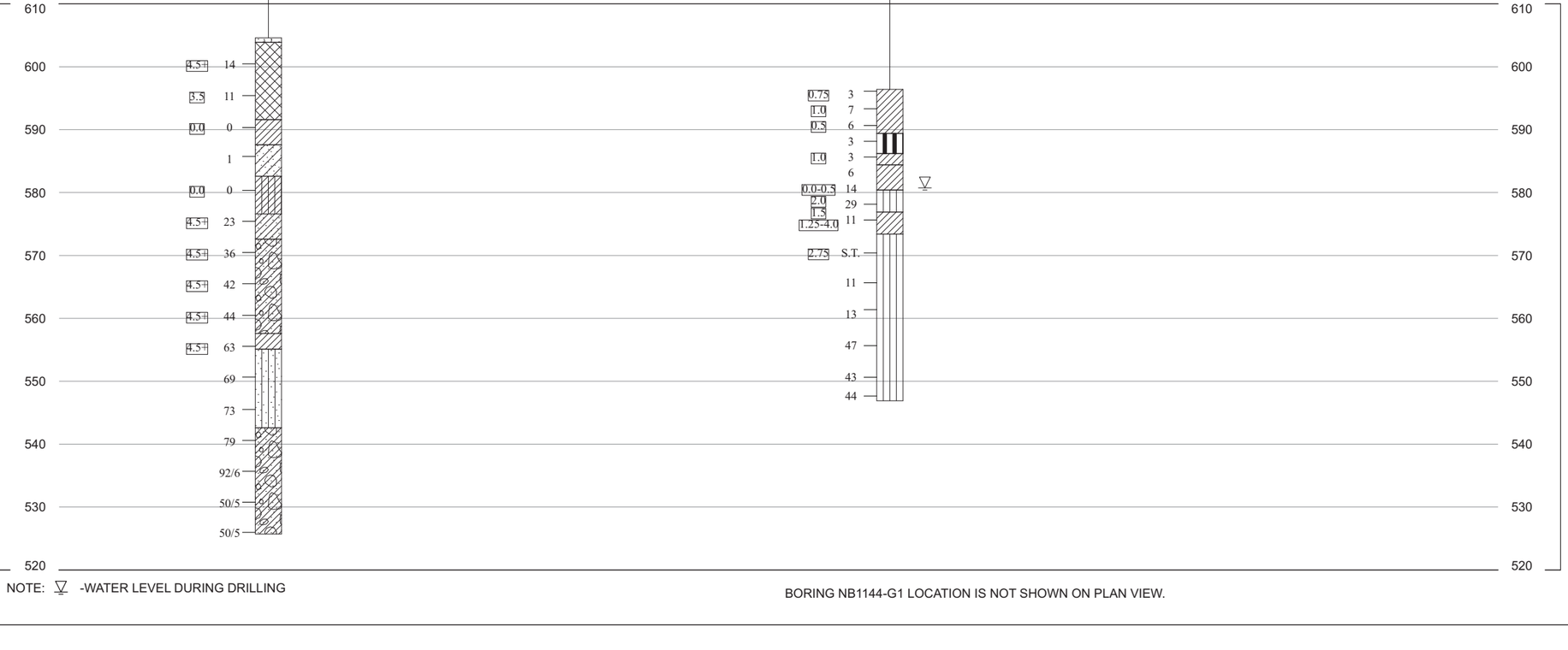
8

8

FILE NAME :S-05-0189.dgn
PLOT DATE :10/10/2014 12:38:24 AM PLOT BY : MarkSv8i DRV :Pdf_bw_HS.by level.dt PEN :CEL.TextSub_ScreenControlByLevel.tbl

USH-41 (S-05-189)
05-BROWN, WI





NOTE: ▽ -WATER LEVEL DURING DRILLING

BORING NB1144-G1 LOCATION IS NOT SHOWN ON PLAN VIEW.

STATE PROJECT NUMBER

1133-10-71

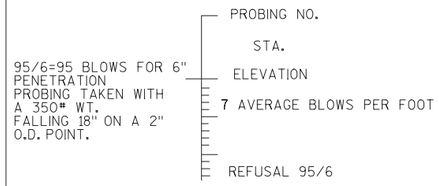
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

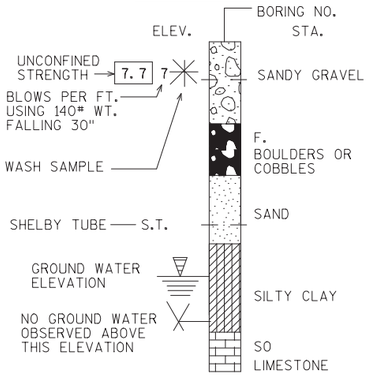
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-189

DRAWN BY RE PLANS CK'D. NS

SUBSURFACE EXPLORATION

SHEET 4 OF 4

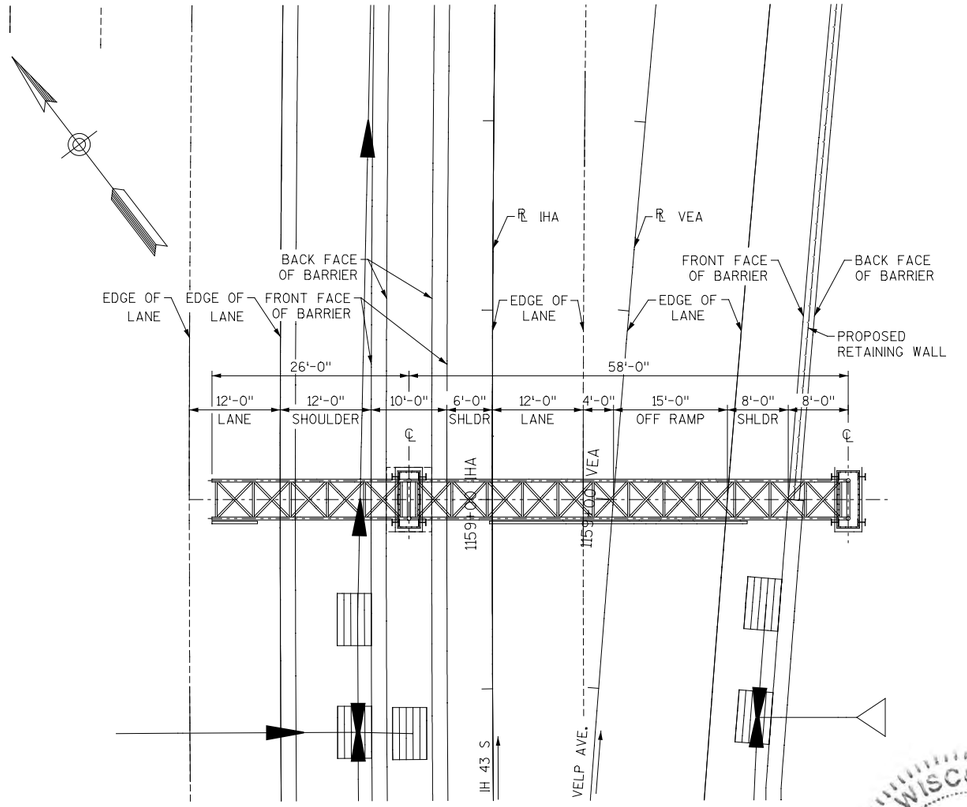
877

SCALE 1"=20'

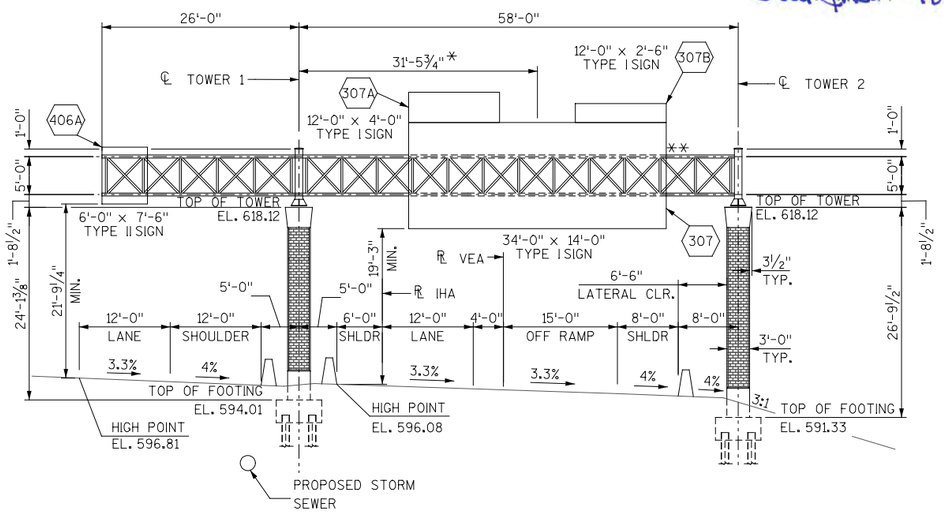
8

8

STATE PROJECT NUMBER
1133-10-71



PLAN
1159IHA+00



ELEVATION
(LOOKING NORTH AT FRONT FACE OF SIGNS)

10-27-14

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 1 DETAILS
4. CONCRETE TOWER 2 FOUNDATION DETAILS
5. CONCRETE TOWER 2 DETAILS
6. GALVANIZED STEEL SIGN BRIDGE
7. SIGN BRIDGE DETAILS
8. CONCRETE TOWER 1 AESTHETIC DETAILS
9. CONCRETE TOWER 2 AESTHETIC DETAILS
10. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

TOWER

CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

SIGN BRIDGE

STEEL COLUMN PIPE: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42
STEEL PIPE MEMBERS OF TRUSS: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42
PLATES, BARS, STRUCTURAL ANGLES: .....fy = 36,000 psi
A.S.T.M. A709 GRADE 36
STEEL ANCHOR BOLTS: .....fy = 55,000 psi
A.A.S.H.T.O. M314-90 GRADE 55
ALL BOLTED CONNECTIONS: ¾" ϕ A325 BOLTS,
GALVANIZED A.S.T.M. A153, CLASS C

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

TYPE I SIGN DESIGN DATA

	MAX DESIGN SIGN AREA (SQ. FT.)	MAX. TYPE I SIGN DEPTH
FULL SPAN	768	16'-0"
CANTILEVER	264	12'-0"

CONTACTS
WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	520
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	51
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	800
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	8460
641.6600	SIGN BRIDGE S-05-191	LS	1
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	635
SPV.0165.701	STAINING CONCRETE	SF	955
SPV.0165.702	STAINING CONCRETE BRICK	SF	635
SPV.0165.950	SIGN BLANKS LEFT IN PLACE	SF	147

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

CENTER SIGNS VERTICALLY ON CHORD/TRUSS.

CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO FABRICATION OF CONCRETE TOWERS AND SIGN BRIDGE.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

PROVIDE AN IDENTIFICATION PLAQUE FOR THE SIGN BRIDGE IN ACCORDANCE WITH SDD STRUCTURE IDENTIFICATION PLAQUES, SIGN BRIDGES AND OVERHEAD SIGN SUPPORT. FASTEN THE IDENTIFICATION PLAQUE TO THE TOWER USING 3 - ¼" DIAMETER BY 1¾" LONG STAINLESS STEEL CONCRETE SCREWS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE S-05-191 "

SIGNS OR BLANKS SHALL BE INSTALLED ON THE TRUSS AT THE TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE BRIDGE, 2'-0" DEEPER THAN CENTER TO CENTER OF CHORDS & SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS. SIGN BLANKS AND MOUNTING HARDWARE SHALL BE INCIDENTAL TO "SIGN BRIDGE S-05-191 "

THE UPPER 12" OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE A.A.S.H.T.O. SPECIFICATION AS STATED IN SECTION 641. OF THE WISDOT STANDARD SPECIFICATIONS. WELD TEST AS PER AWS D1.1.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF UNIT CAN BE GALVANIZED IN ONE PIECE.

THE SIGN SUPPORTS CONCRETE MASONRY QUANTITY IS BASED ON THE OUT-TO-OUT CONCRETE DIMENSIONS. NO DEDUCTIONS IN QUANTITY FOR THE ARCHITECTURAL SURFACE TREATMENT RELIEF HAVE BEEN MADE.

PROVIDE A ¾" CHAMFER OR 1" RADIUS ON ALL EXPOSED CONCRETE EDGES.

⟨##⟩ - REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEETS.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** PERMANENT SIGNS TO BE INSTALLED UNDER CONTRACT 1133-10-77

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 11/11/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-191

DE PERE - SUAMICO

COUNTY	TOWN/CITY/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	CSH	VC

PLAN & ELEVATION

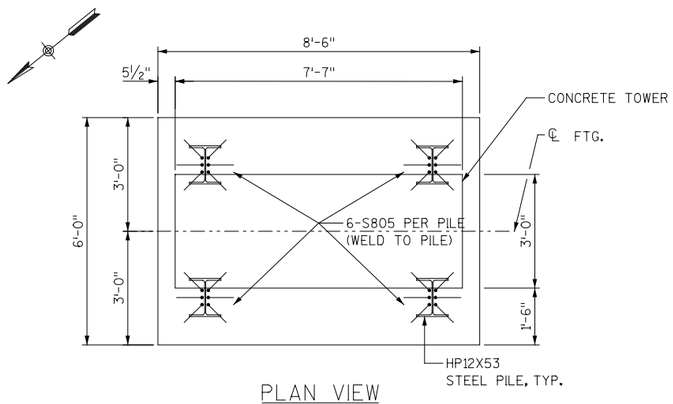
SHEET 1 OF 10
878

8

8

FILE NAME :S-05-0191.dgn
PLOT DATE :10/24/2014 2:23:46 PM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.plt PEN :CEL.TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER
1133-10-71

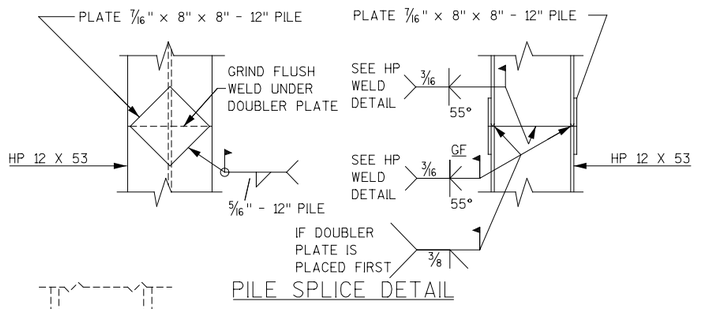


PLAN VIEW

BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
S412	2 SERIES OF 4	12'-3" TO 12'-10"
S417	2 SERIES OF 4	3'-4" TO 3'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



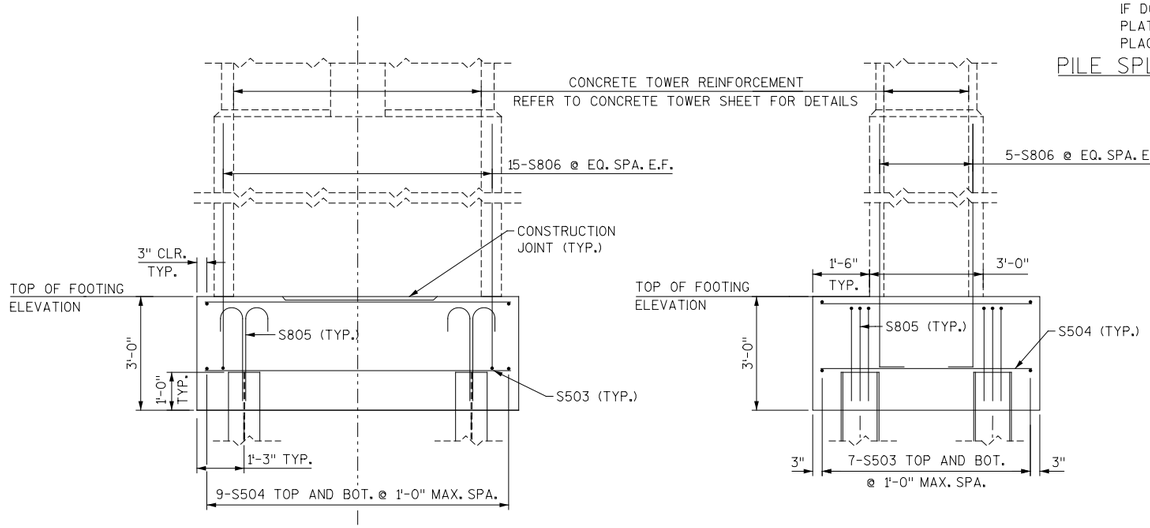
PILE SPLICE DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

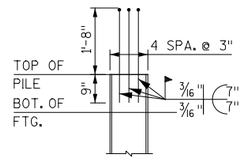
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
S806	X	36	8'-10"	▲		CAP BEAM VERTICAL
S507	X	10	12'-5"	▲		HORZ. STIRRUP, BOTTOM OF TOWER
S808	X	36	25'-0"	▲		VERT. REINF., MIDDLE OF TOWER
S409	X	4	16'-11"			VERT. REINF., MIDDLE OF TOWER
S510	X	44	11'-6"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S411	X	36	5'-1"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S412	X	8	12'-7"	▲	△	HORZ. STIRRUP, TOP OF TOWER
S413	X	4	5'-0"	▲		VERT. REINF., TOP OF TOWER
S414	X	20	2'-4"			VERT. REINF., TOP OF TOWER
S415	X	15	3'-4"	▲		HORZ. CROSSTIE, BOTTOM OF TOWER
S416	X	66	2'-11"	▲		HORZ. CROSSTIE, MIDDLE OF TOWER
S417	X	8	3'-7"	▲	△	HORZ. CROSSTIE, TOP OF TOWER

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WIEGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

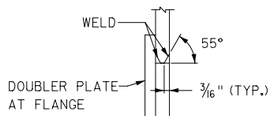


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

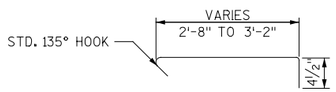
FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 65'IS REQUIRED FOR UPLIFT.

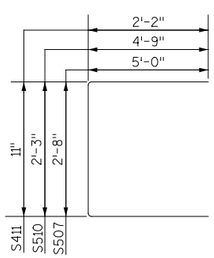
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

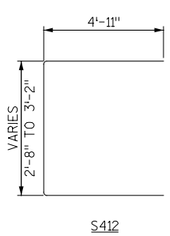
WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".



S417



S507,S510,S411



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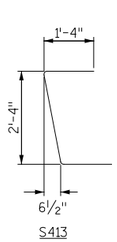

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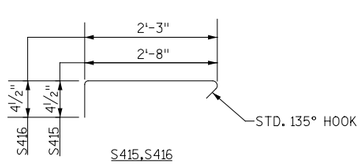
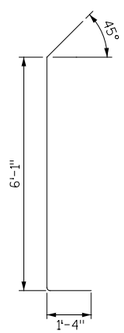
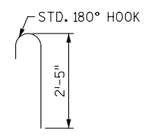


S415,S416



S806



S805

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 10

879

NOV 2006

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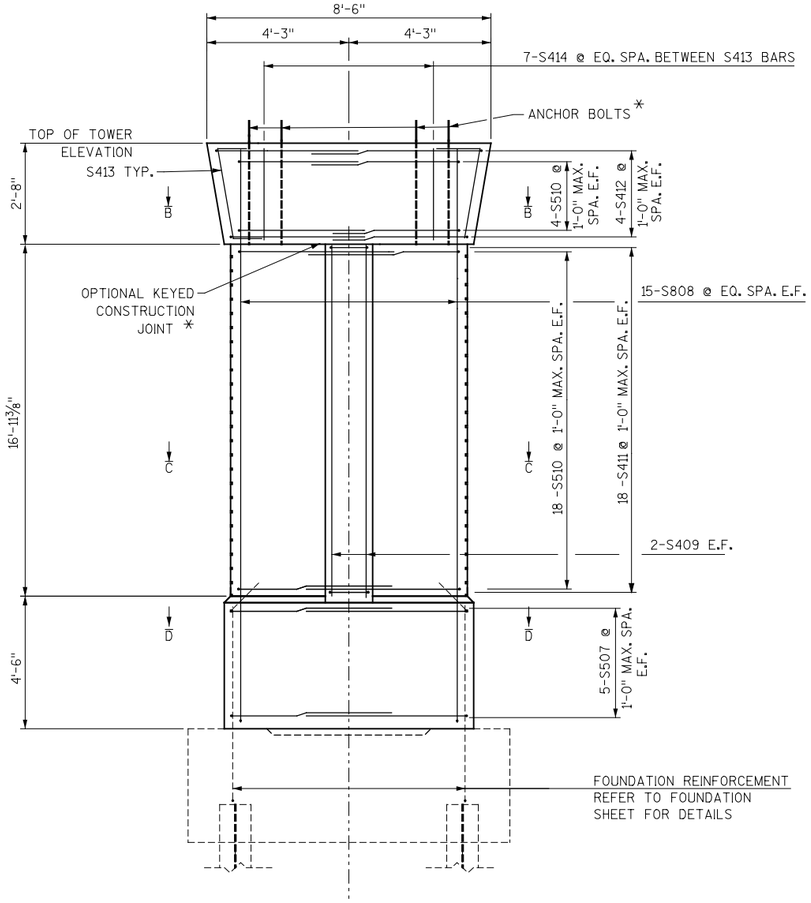
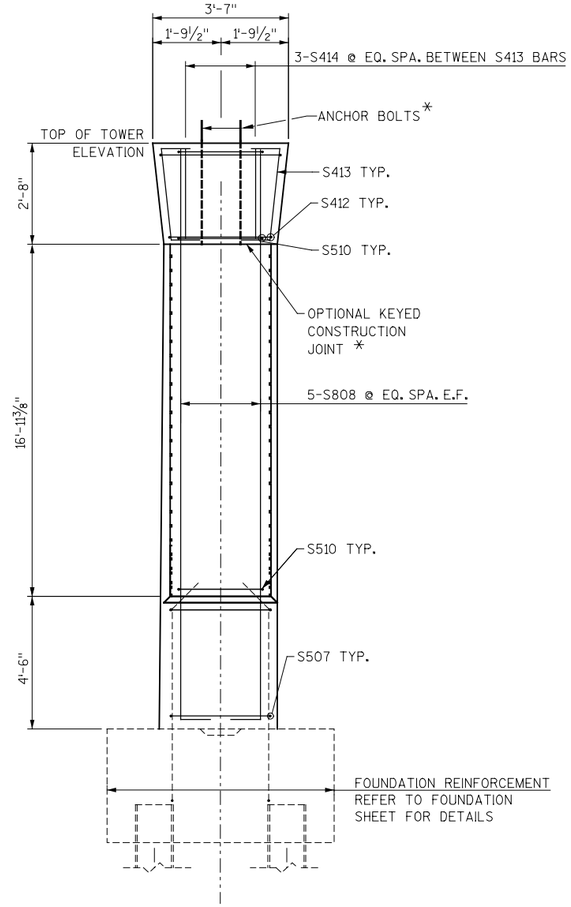
STATE PROJECT NUMBER
1133-10-71



ELEVATION VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS



END VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS

TOWER NOTES

DRAWING SHALL NOT BE SCALED.

"E.F." SIGNIFIES EACH FACE.

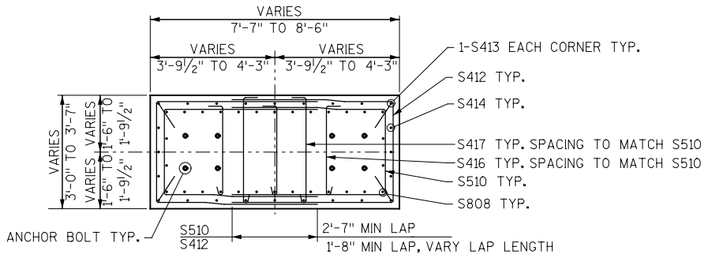
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR FROM THE FACE OF THE SMOOTH CONCRETE AND 2½" FROM THE FACE OF THE ARCHITECTURAL SURFACE TREATMENT, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

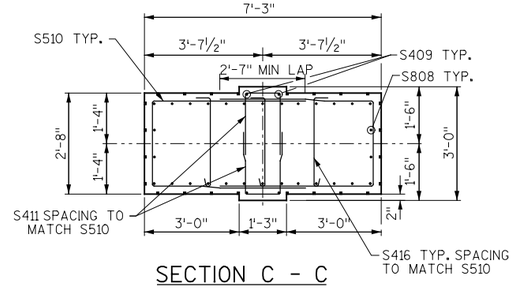
ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" × 6" × 1'-6" LONG BEVELED KEYWAY.

* PLACE ANCHOR BOLTS PRIOR TO POURING MIDDLE SECTION OF CONCRETE TOWER. OPTIONAL KEYED CONSTRUCTION JOINT MAY BE LOCATED AT A GROUT LINE BELOW THE ANCHOR ASSEMBLIES. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS THE CONSTRUCTION JOINT. OMIT JOINT BEVELED EDGES.

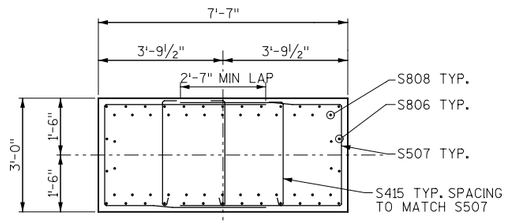
CONTRACTOR TO FIELD VERIFY FOUNDATION DETAILS PRIOR TO CONSTRUCTION OF TOWER. SEE FOUNDATION DETAILS SHEET FOR TOWER 1.



SECTION B - B



SECTION C - C



SECTION D - D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 DETAILS

SHEET 3 OF 10

880

NOV 2006

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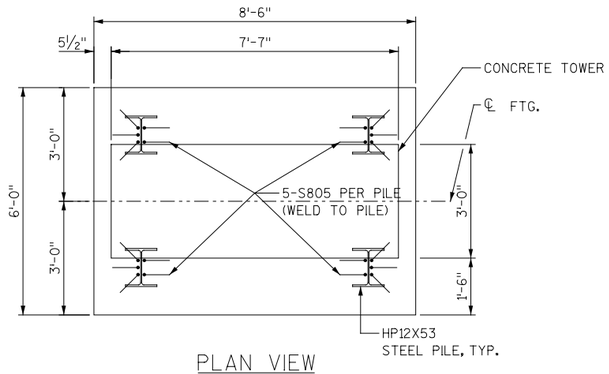
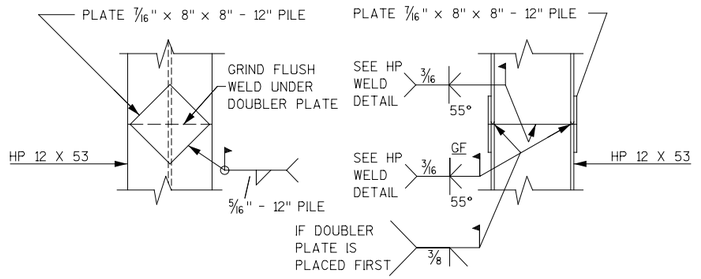


PLAN VIEW

BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
S412	2 SERIES OF 4	12'-3" TO 12'-10"
S417	2 SERIES OF 4	3'-4" TO 3'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



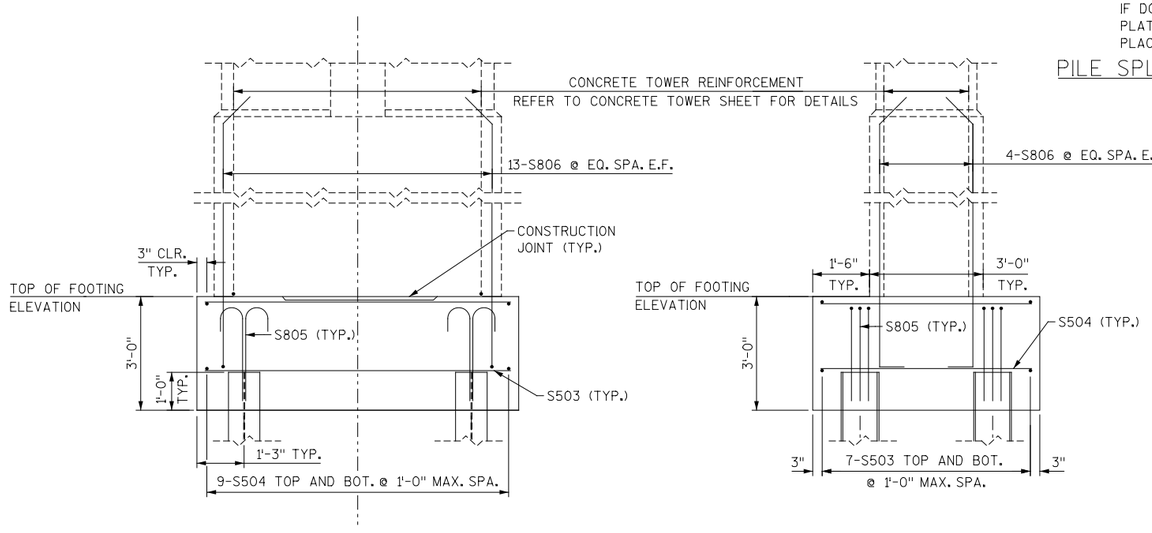
PILE SPLICE DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

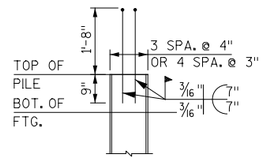
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
S806	X	30	8'-10"	▲		CAP BEAM VERTICAL
S507	X	10	12'-5"	▲		HORZ. STIRRUP, BOTTOM OF TOWER
S808	X	30	27'-8"	▲		VERT. REINF., MIDDLE OF TOWER
S409	X	4	19'-7"			VERT. REINF., MIDDLE OF TOWER
S510	X	50	11'-6"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S411	X	42	5'-1"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S412	X	8	12'-7"	▲	△	HORZ. STIRRUP, TOP OF TOWER
S413	X	4	5'-0"	▲		VERT. REINF., TOP OF TOWER
S414	X	20	2'-4"			VERT. REINF., TOP OF TOWER
S415	X	15	3'-4"	▲		HORZ. CROSSTIE, BOTTOM OF TOWER
S416	X	75	2'-11"	▲		HORZ. CROSSTIE, MIDDLE OF TOWER
S417	X	8	3'-7"	▲	△	HORZ. CROSSTIE, TOP OF TOWER

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WIEGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

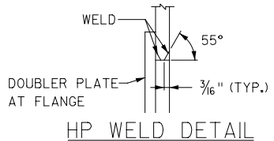


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

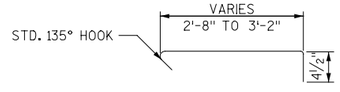
FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 62'IS REQUIRED FOR UPLIFT.

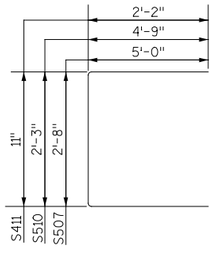
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

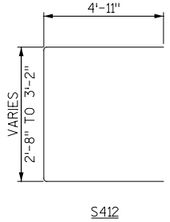
WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".



S417



S507,S510,S411



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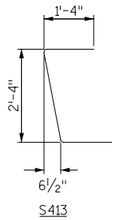

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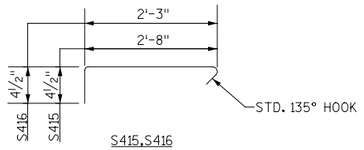
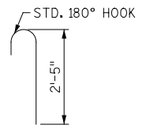


S415,S416



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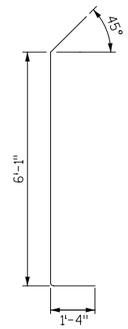


S806

S808

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 4 OF 10

881

8

8

STATE PROJECT NUMBER
1133-10-71

TOWER NOTES

DRAWING SHALL NOT BE SCALED.

"E.F." SIGNIFIES EACH FACE.

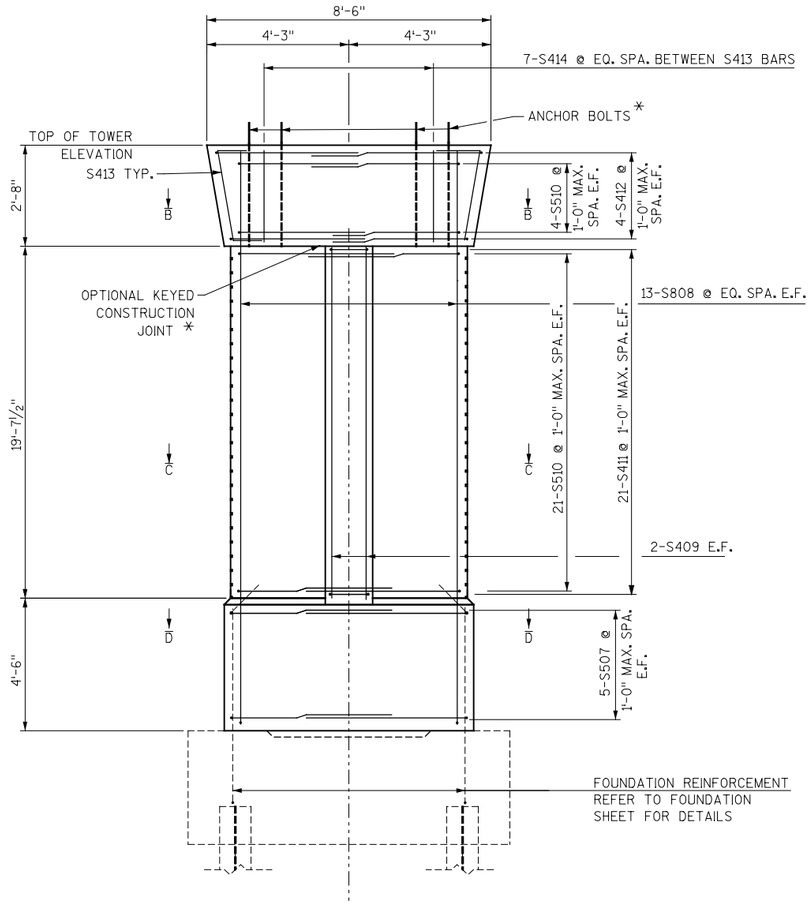
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR FROM THE FACE OF THE SMOOTH CONCRETE AND 2½" FROM THE FACE OF THE ARCHITECTURAL SURFACE TREATMENT, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" × 6" × 1'-6" LONG BEVELED KEYWAY.

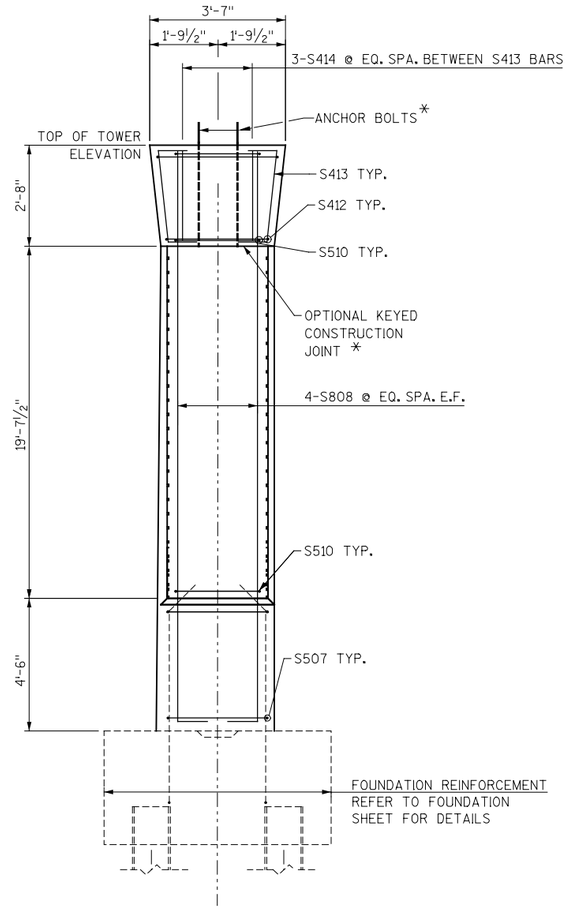
* PLACE ANCHOR BOLTS PRIOR TO POURING MIDDLE SECTION OF CONCRETE TOWER. OPTIONAL KEYED CONSTRUCTION JOINT MAY BE LOCATED AT A GROUT LINE BELOW THE ANCHOR ASSEMBLIES. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS THE CONSTRUCTION JOINT. OMIT JOINT BEVELED EDGES.

CONTRACTOR TO FIELD VERIFY FOUNDATION DETAILS PRIOR TO CONSTRUCTION OF TOWER. SEE FOUNDATION DETAILS SHEET FOR TOWER 2.



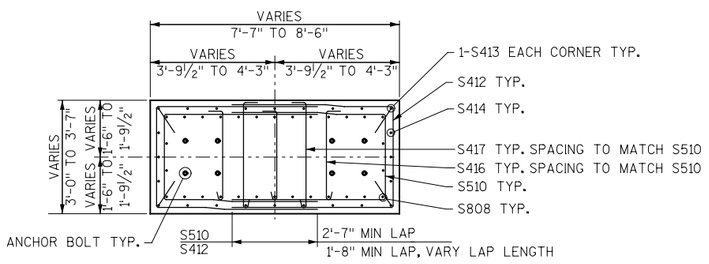
ELEVATION VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS

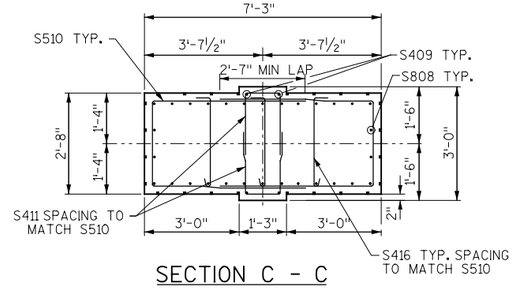


END VIEW

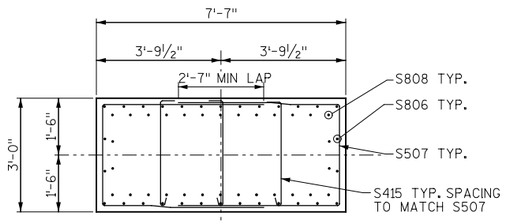
S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS



SECTION B - B



SECTION C - C



SECTION D - D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-191

DRAWN BY	VC	PLANS CK'D.	SJM

CONCRETE TOWER 2 DETAILS

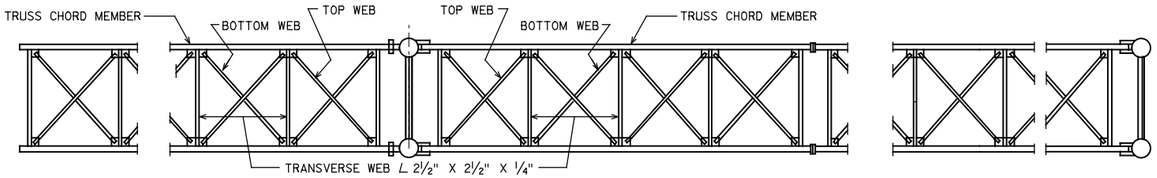
SHEET 5 OF 10

882

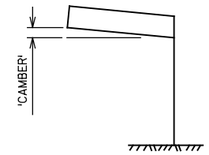
NOV 2006

STATE PROJECT NUMBER

1133-10-71



PLAN

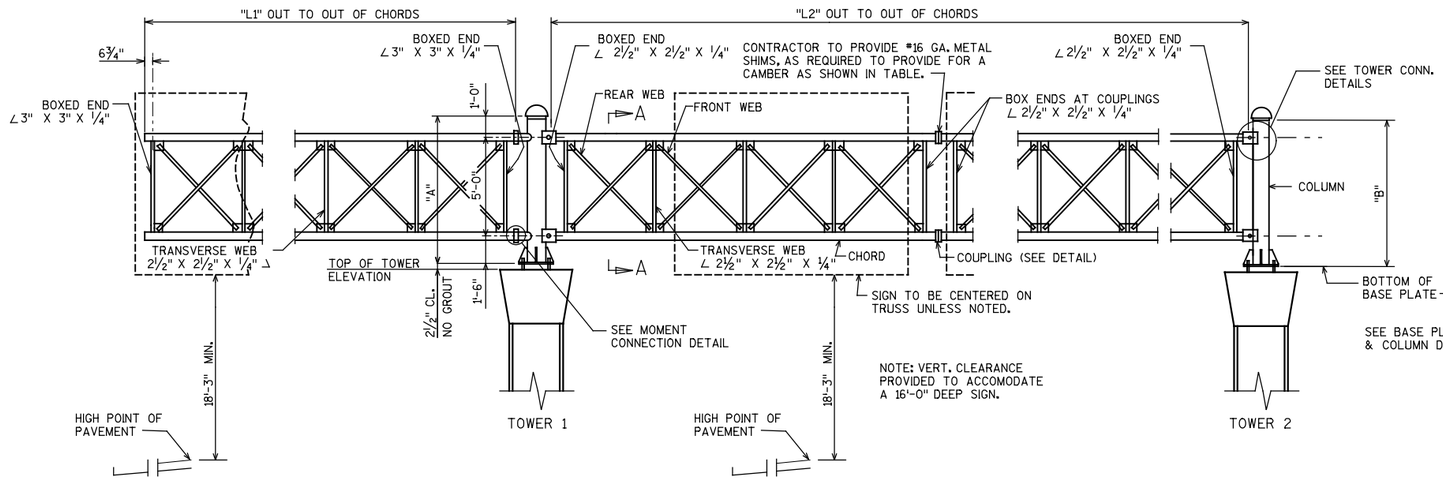


CAMBER DIAGRAM

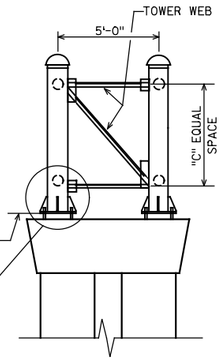
GENERAL NOTES

DRAWING SHALL NOT BE SCALED

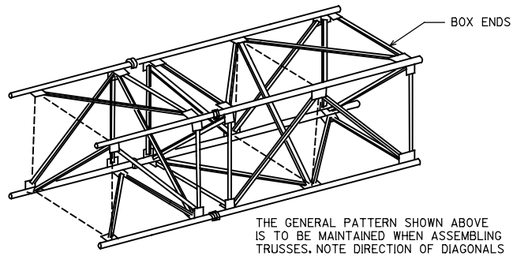
REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.



ELEVATION

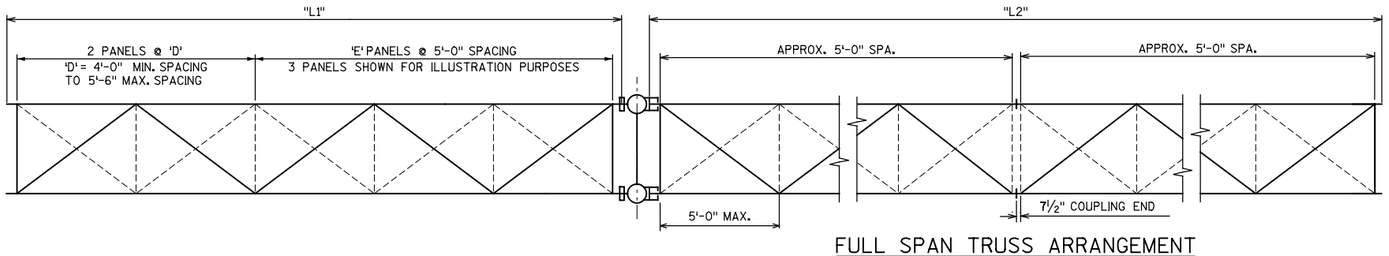


TOWER 2 END VIEW
(TOWER 1 OPPOSITE HAND)



THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES. NOTE DIRECTION OF DIAGONALS AT JOINTS.

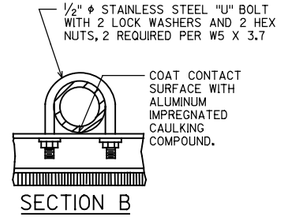
TYPICAL TRUSS SECTION



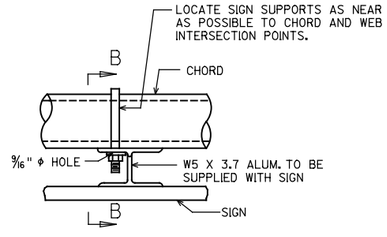
CANTILEVER TRUSS ARRANGEMENT

FULL SPAN TRUSS ARRANGEMENT

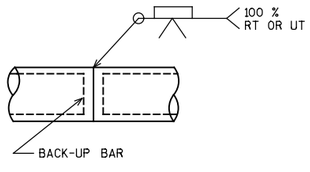
FABRICATOR MAY MAKE TRUSSES ANY LENGTH KEEPING A SECTION A MINIMUM OF 20'-0" & A MULTPLE OF 5'-0". CHORD FIELD SPLICES SHALL BE MADE WITH COUPLINGS. CHORD SHOP SPLICE SHALL BE THE WELDED SPLICE SHOWN ABOVE.



SECTION B

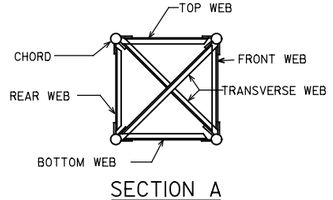


TYPICAL SIGN CONNECTION



OPTIONAL COLUMN OR CHORD SPLICE DETAIL

NOTE: FOR SIGN BRIDGE FULL CANTILEVER, SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.



SECTION A

STRUCTURE MEMBER TABLE

	A	B	C	D	E	CHORDS O.D. X THK.	TOP & BOTTOM WEB	FRONT & REAR WEB	COUPLING PLATE D1 & "T"	BOLT CIRCLE DIA. "D2"	NO. OF BOLTS IN COUPLING	CAMBER	COLUMN O.D. X THK.	TOWER WEBS	"L1"	"L2"
SIGN BRIDGE CANTILEVER	7'-6"	7'-6"	1	3'-6"	4	4.5"x0.674"	3"x3"x¼"	3"x3"x¼"	--	--	--	1"	10.75"x0.50"	3"x3"3/16"	28'-1⅝"	--
SIGN BRIDGE FULL SPAN				--	--	4.5"x0.237"	3"x3"x¼"	3"x3"x¼"	10.5" X 1"	7.5"	6	1⅜"		3"x3"3/16"	--	56'-10¼"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

GALVANIZED STEEL SIGN BRIDGE

SHEET 6 OF 10

883

NOV 2006

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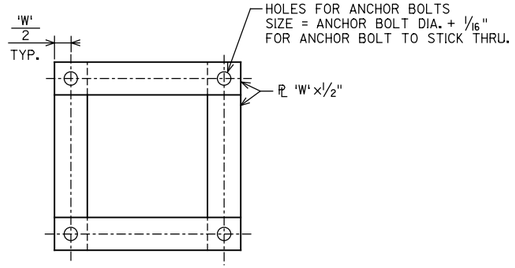
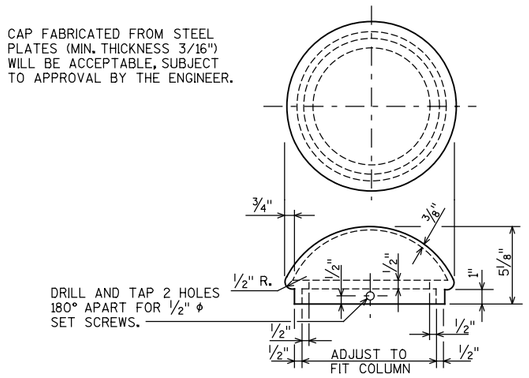
STATE PROJECT NUMBER

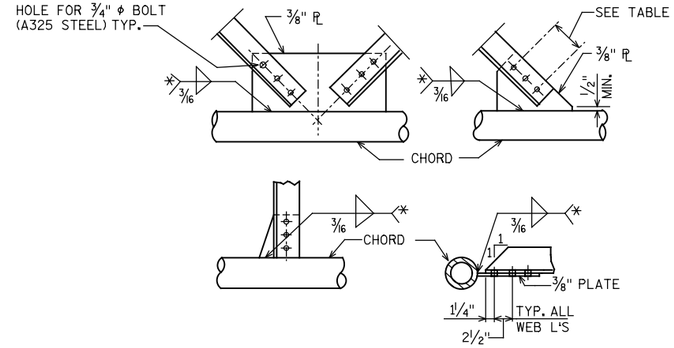
1133-10-71



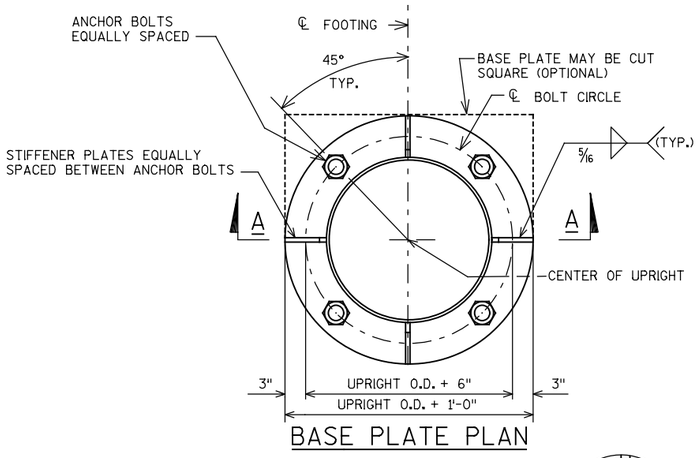
ANCHOR PLATE/TEMPLATE PLAN



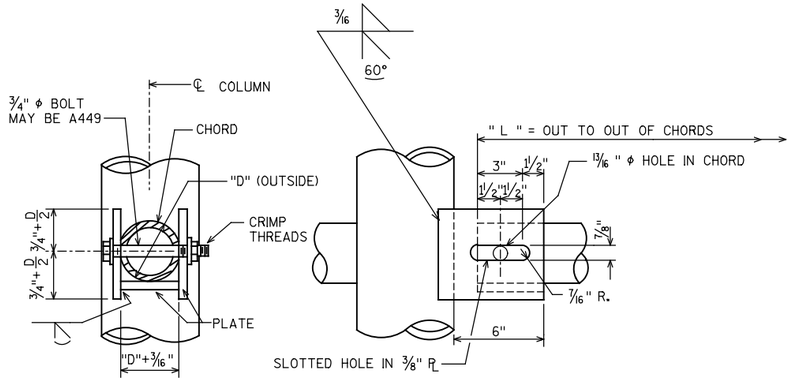
TOWER CAP DETAIL



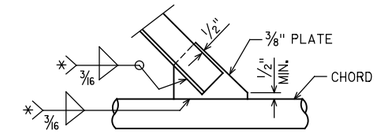
TYPICAL TRUSS CONNECTION DETAILS



BASE PLATE PLAN



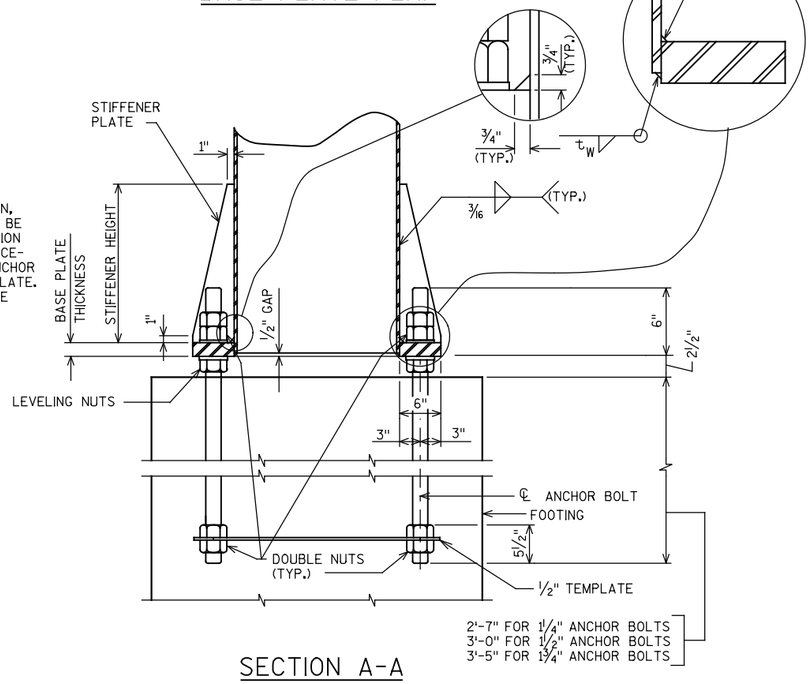
TOWER CONNECTION DETAIL



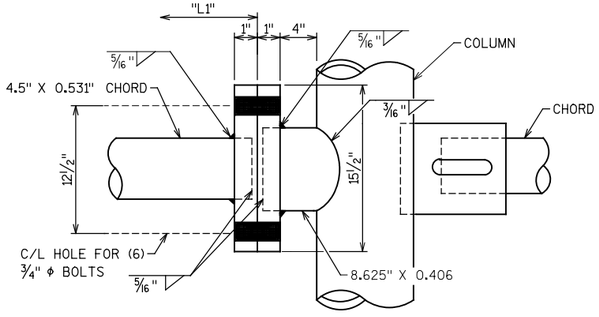
TYPICAL WELDED ALTERNATE

*ANGLE	WELD LENGTH	NO. OF BOLTS
● 2 1/2" x 2 1/2" x 1/4"	11"	3
3" x 3" x 3/16"	10"	3
3" x 3" x 1/4"	13"	4
3" x 3" x 5/16"	16 1/2"	5
3" x 3" x 3/8"	19 1/2"	6
4" x 4" x 1/4"	18"	5
4" x 4" x 5/16"	22"	6
4" x 4" x 3/8"	26"	8
4" x 4" x 7/16"	30"	9
4" x 4" x 1/2"	34"	10

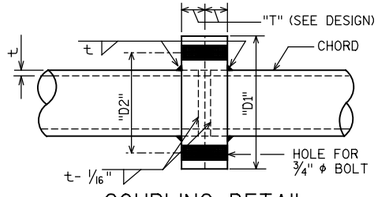
● ONLY USED FOR BOXED END AND TRANSVERSE BRACING.



SECTION A-A



MOMENT CONNECTION DETAIL



COUPLING DETAIL

(CONNECTION BOLTS OMITTED FOR CLARITY)

BASE PLATE & UPRIGHT COLUMN DETAILS

COLUMN O.D. X THK.	ANCHOR BOLTS	BASE PLATE THICKNESS (IN.)	STIFFENER PLATE THICKNESS (IN.)	STIFFENER PLATE HEIGHT (IN.)	t_W (IN.)
10.75"x0.50"	1 3/4"	1 3/4"	5/8"	10"	3/16"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

GALVANIZED STEEL SIGN BRIDGE DETAILS

SHEET 7 OF 10

884

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FILE NAME : S-05-0191.dgn

PLOT DATE : 10/24/2014 2:23:49 PM PLOT BY : Veronica Chavezv8I

NOV 2006

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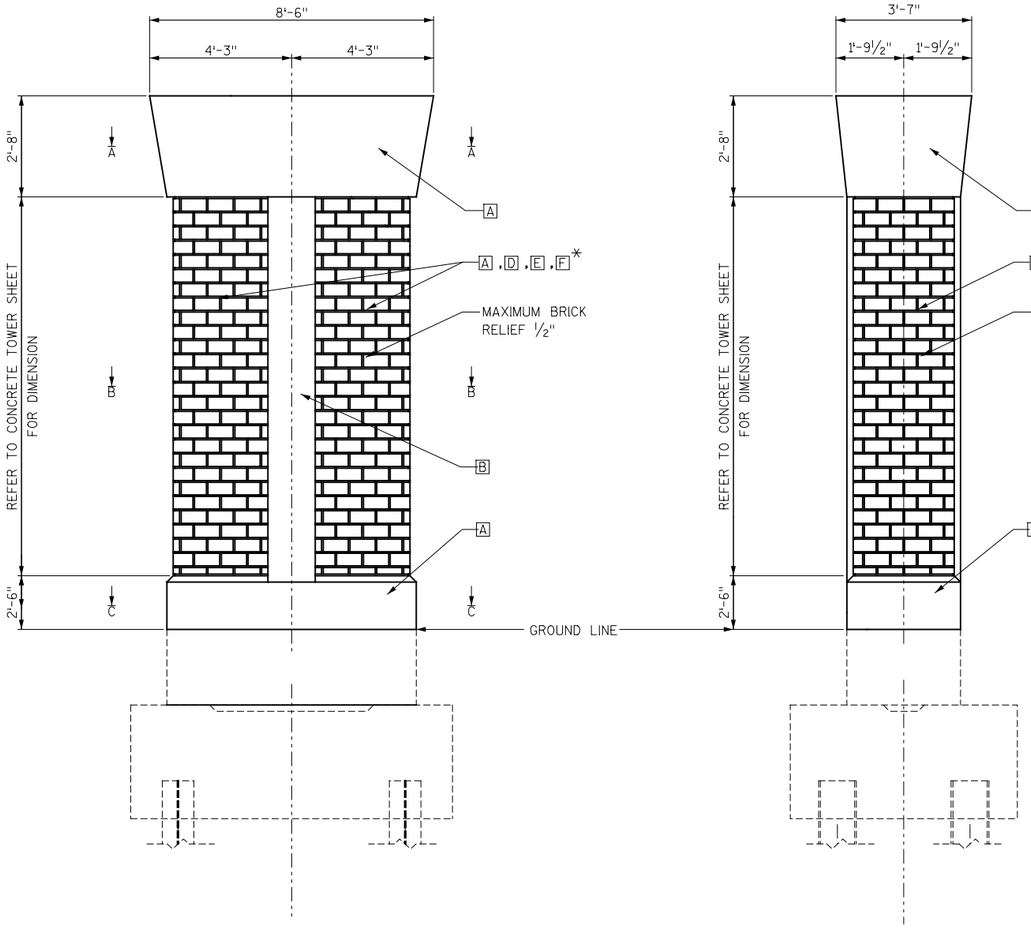
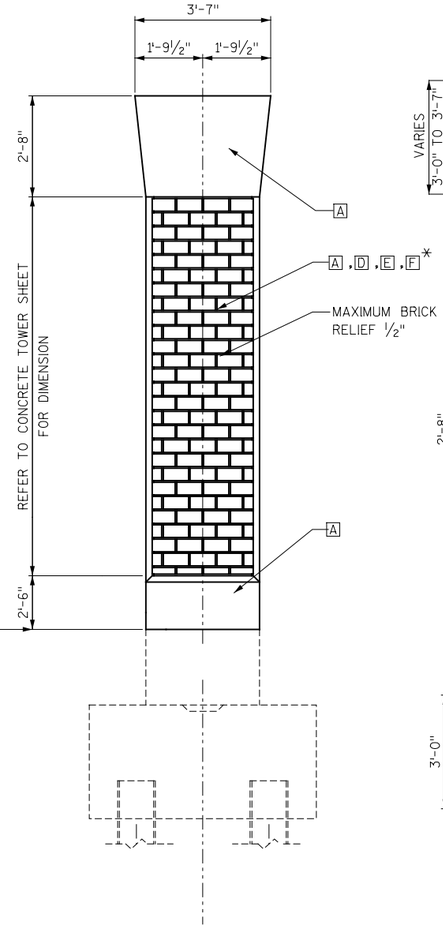
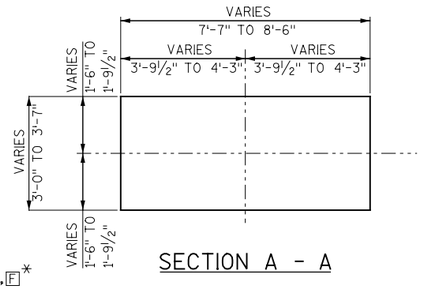


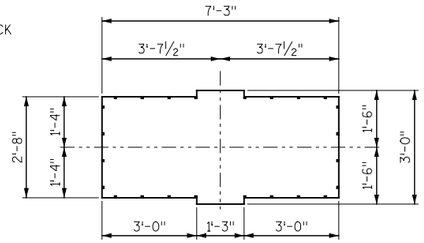
ELEVATION VIEW



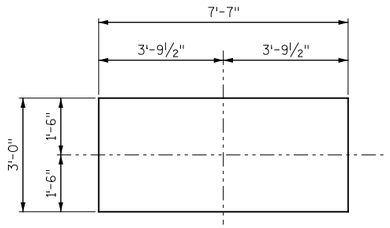
END VIEW



SECTION A - A



SECTION B - B



SECTION C - C

CONCRETE STAINING SCHEDULE

MARK	COLOR
A	BASE COLOR
B	ACCENT COLOR #1
D	ACCENT COLOR #3
E	ACCENT COLOR #4
F	ACCENT COLOR #5

* STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

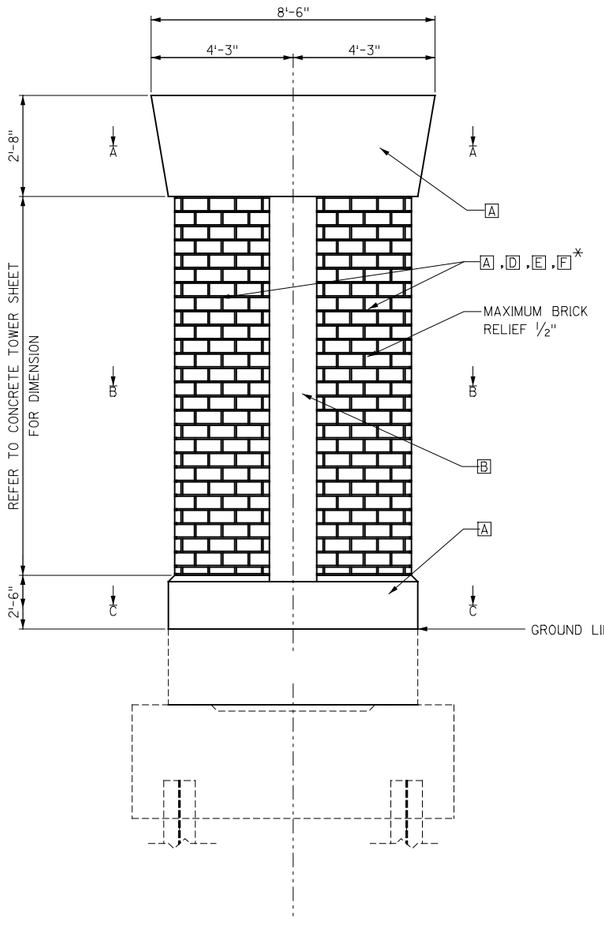
STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

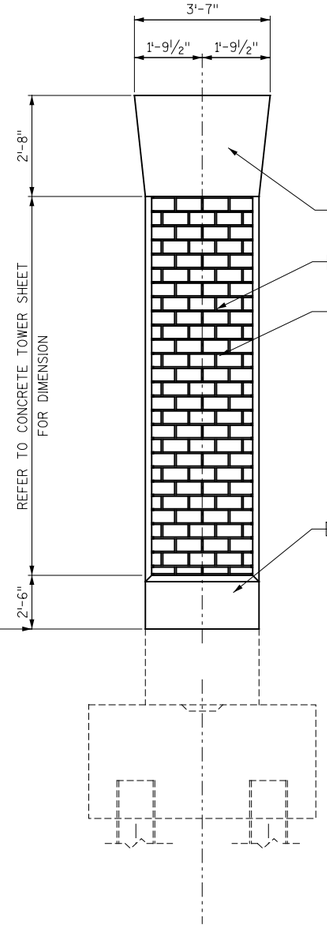
CONCRETE TOWER 1 AESTHETIC DETAILS

SHEET 8 OF 10
885

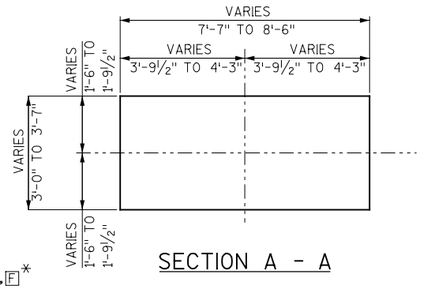
STATE PROJECT NUMBER
1133-10-71



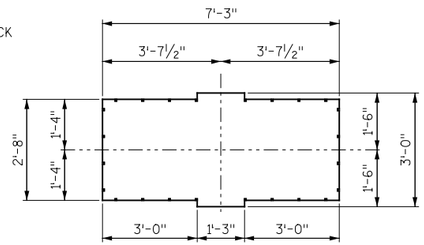
ELEVATION VIEW



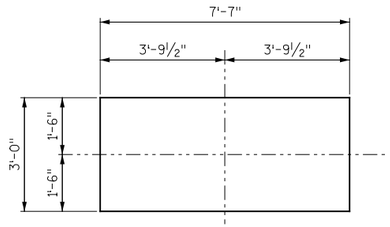
END VIEW



SECTION A - A



SECTION B - B



SECTION C - C

CONCRETE STAINING SCHEDULE

MARK	COLOR
A	BASE COLOR
B	ACCENT COLOR #1
D	ACCENT COLOR #3
E	ACCENT COLOR #4
F	ACCENT COLOR #5

* STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

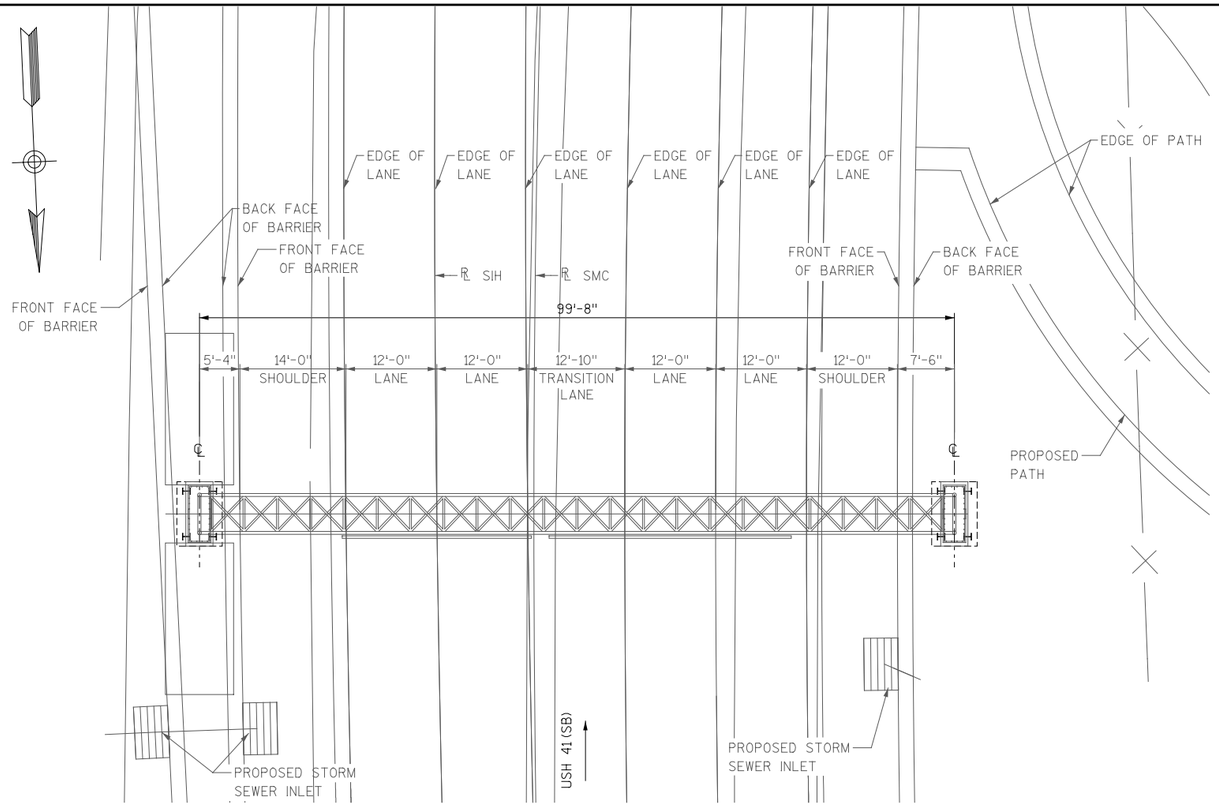
STRUCTURE S-5-191

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2
AESTHETIC
DETAILS

SHEET 9 OF 10
886

Pdf.tw.10.2y 14/4/2014
CEL.TEXT.SUB.1.SCREEN.MON.PROJ.BY.LEVEL.TBL



PLAN
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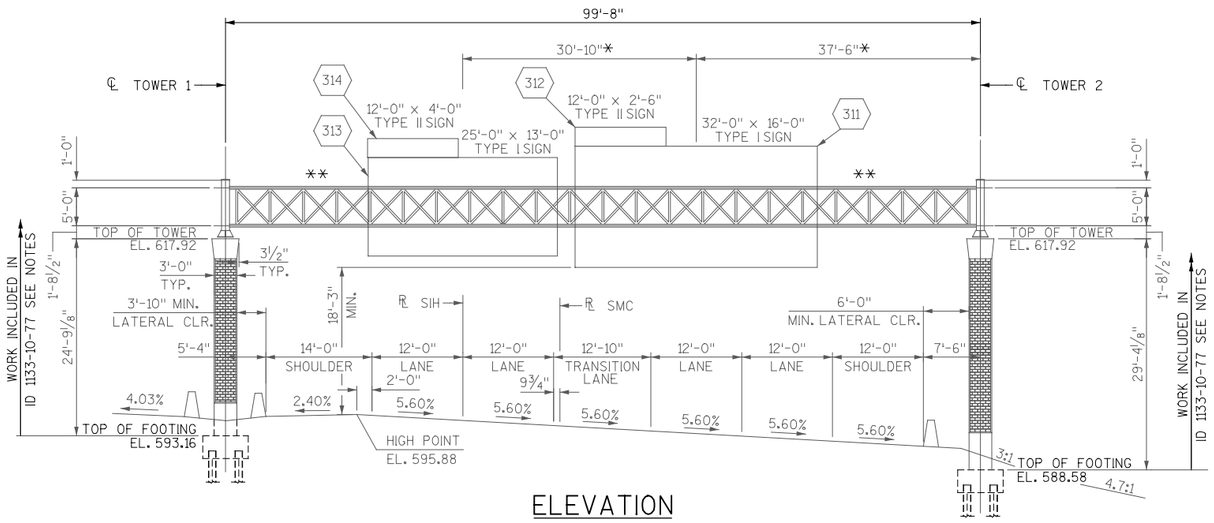


ELEVATION
(LOOKING SOUTH AT FRONT FACE OF SIGN)

LIST OF DRAWINGS
1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:
FOOTING
CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

DESIGN DATA
DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND†)	133

† MIN. VALUE OF 25 PSF FOR GR. 3

FOUNDATION DATA
SEE FOUNDATION DETAILS

GENERAL NOTES
DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S-05-193 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133-10-77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133-10-71.

LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL, THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** PERMANENT SIGNS TO BE INSTALLED UNDER CONTRACT 1133-10-77

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	504
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	800
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1350
SPV.0060.951	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	60

STATE PROJECT NUMBER
1133-10-71

STEVEN J. MILLER 36937 MILWAUKEE, WI — PROFESSIONAL ENGINEER
10/10/14

CONTACTS
WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-193

DE PERE - SUAMICO

COUNTY: BROWN COUNTY
~~TOWN/CITY/~~VILLAGE: HOWARD
DESIGN SPEC.: AASHTO STD. SPEC.

DESIGNED BY	VC	DESIGN CK'D.	CES	DRAWN BY	VC	PLANS CK'D.	SJM

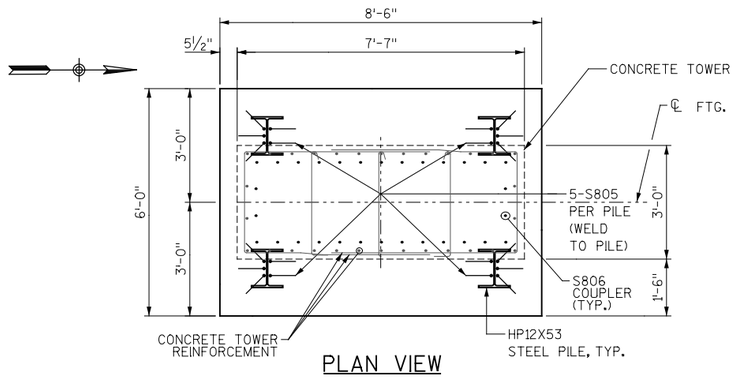
PLAN & ELEVATION

SHEET 1 OF 4
887

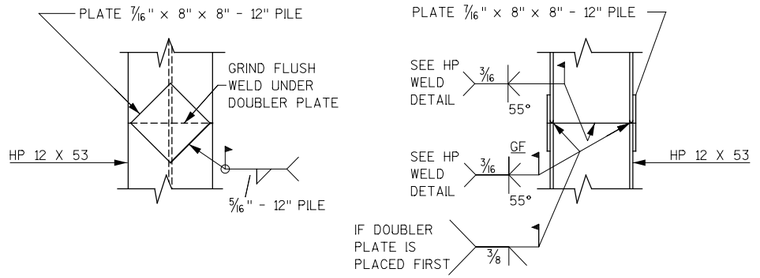
8

8

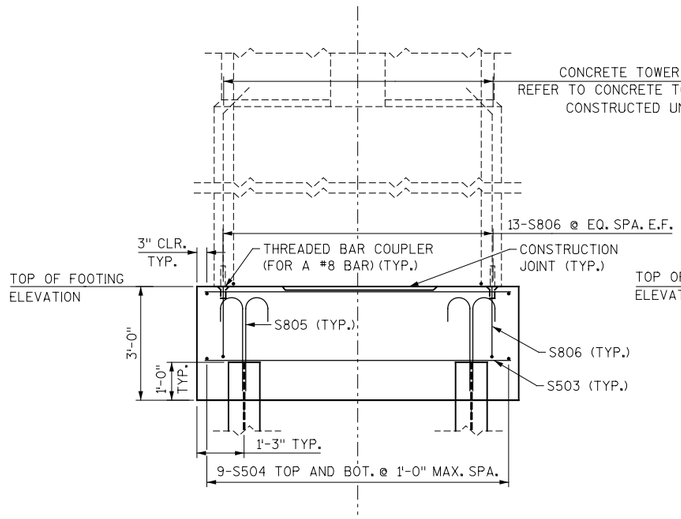
FILE NAME :S-05-0193.DGN
PLOT DATE :10/14/2014 12:09:16 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.plt PEN :CEL_TextSub_ScreenControlByLevel.tbl



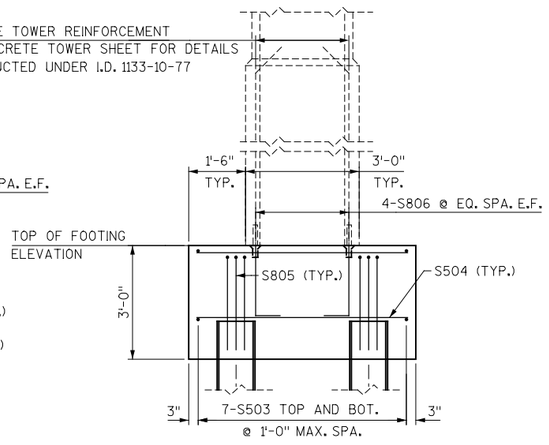
PLAN VIEW



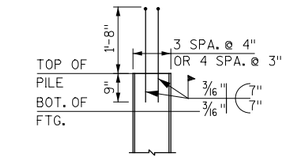
PILE SPLICE DETAIL



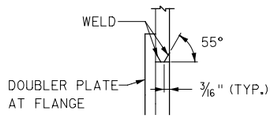
ELEVATION VIEW



END VIEW

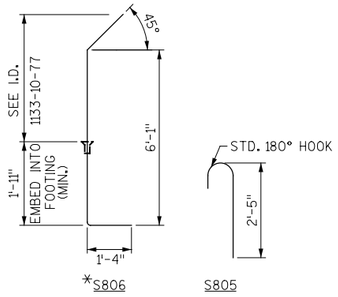


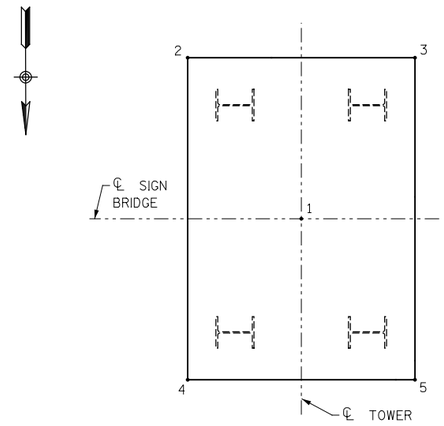
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
*S806	X	30	8'-10"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

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FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 64'IS REQUIRED FOR UPLIFT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".

NORTHING & EASTING TABLE

TOWER 1- TOP OF FOOTING ELEVATION = 593.16					
LOCATION	1	2	3	4	5
NORTHING	586589.55	586585.17	586585.45	586593.66	586593.94
EASTING	91047.51	91050.30	91044.31	91050.70	91044.70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-193

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 4
888

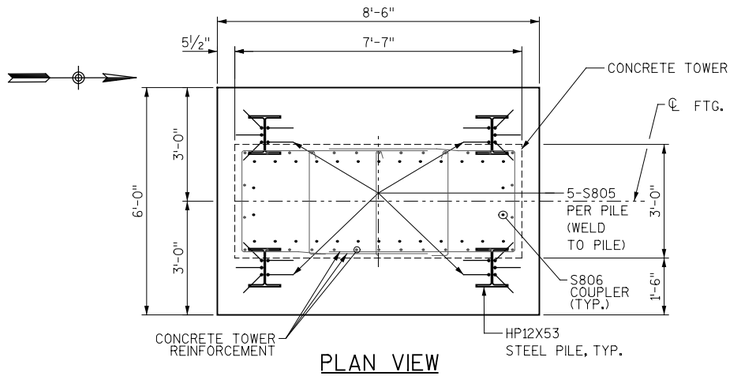
8

8

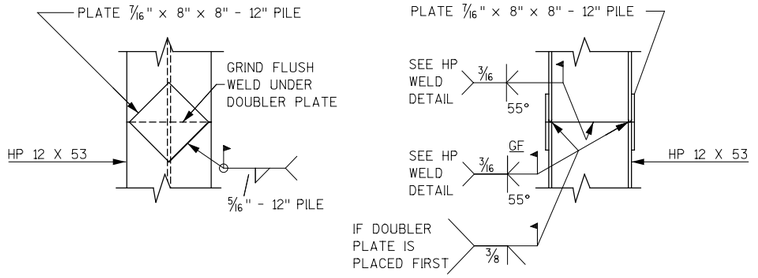
FILE NAME :S-05-0193.DGN
PLOT DATE :10/14/2014 10:09:18 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.dt PEN :CEL.TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

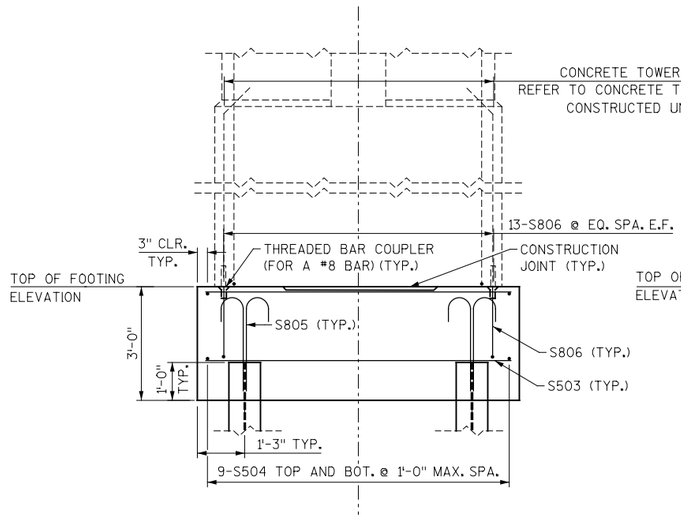
1133-10-71



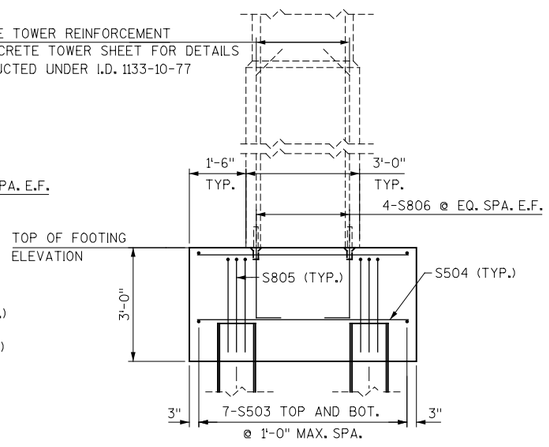
PLAN VIEW



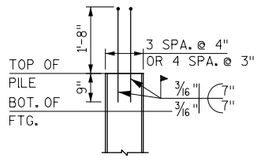
PILE SPLICE DETAIL



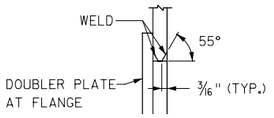
ELEVATION VIEW



END VIEW

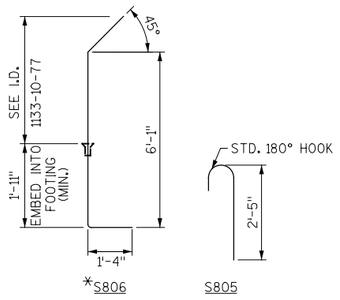


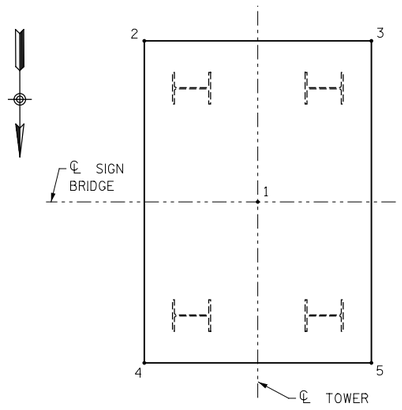
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

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*BAR COUPLERS REQUIRED

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NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 588.58					
LOCATION	1	2	3	4	5
NORTHING	586593.96	586589.58	586589.86	586598.07	586598.35
EASTING	90947.95	90950.74	90944.74	90951.13	90945.14

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-193

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4

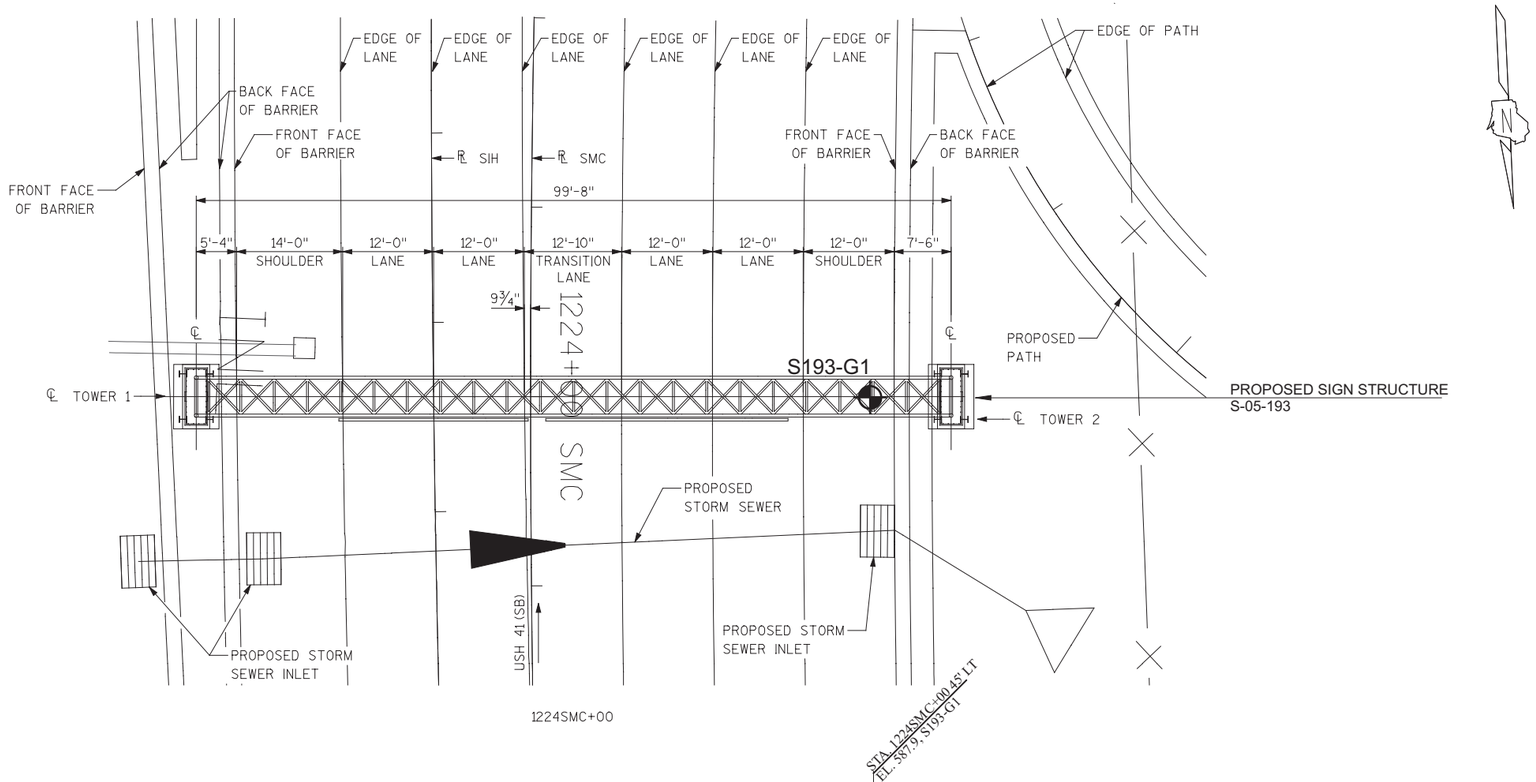
889

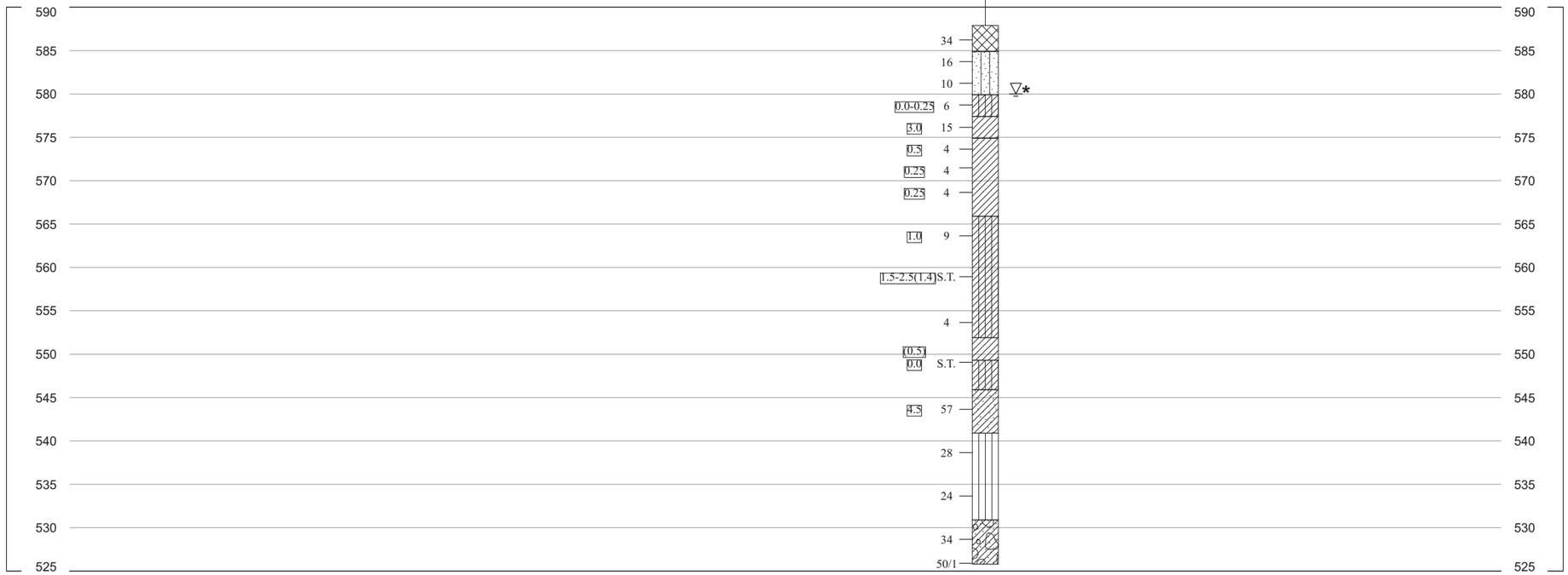
8

8

FILE NAME :S-05-0193.DGN
PLOT DATE :10/14/2014 12:09:19 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.plt PEN :CEL_TextSub_ScreenControlByLevel.tbl

USH-41 (S-05-193)
05-BROWN, WI





NOTE: ▽* -WATER LEVEL ASSUMED FROM SAMPLE CONDITION

DRILLING REFUSAL ON APPARENT BEDROCK @ ELEV. 525.8 FT

STATE PROJECT NUMBER

1133-10-71

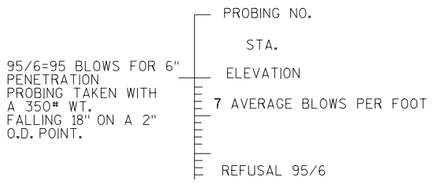
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

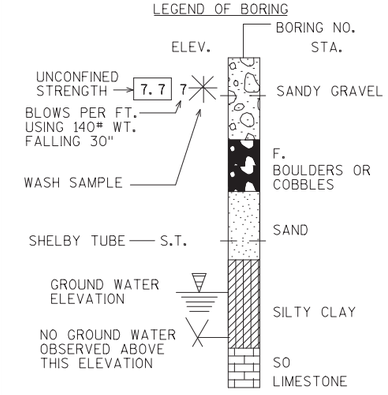
MATERIAL SYMBOLS

TOPSOIL, SILT, FAT CLAY, SAND, PEAT, DOLOMITE, GRAVEL, CLAY, FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-193

DRAWN BY RE | PLANS CK'D. NS

SUBSURFACE EXPLORATION

SHEET 4 OF 4

890

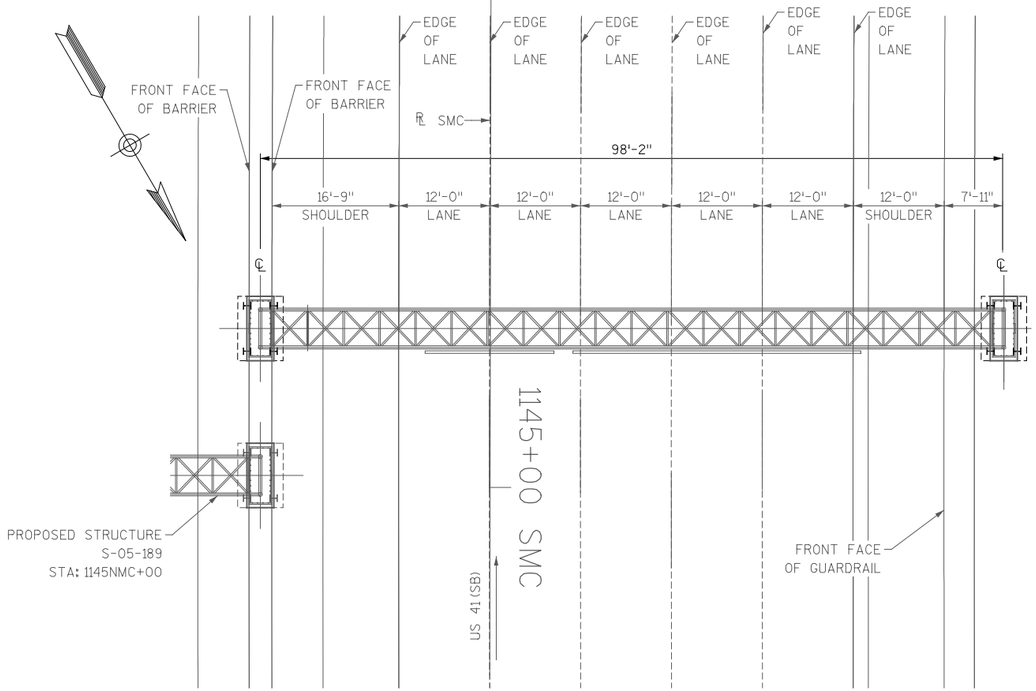
SCALE 1"=20'

8

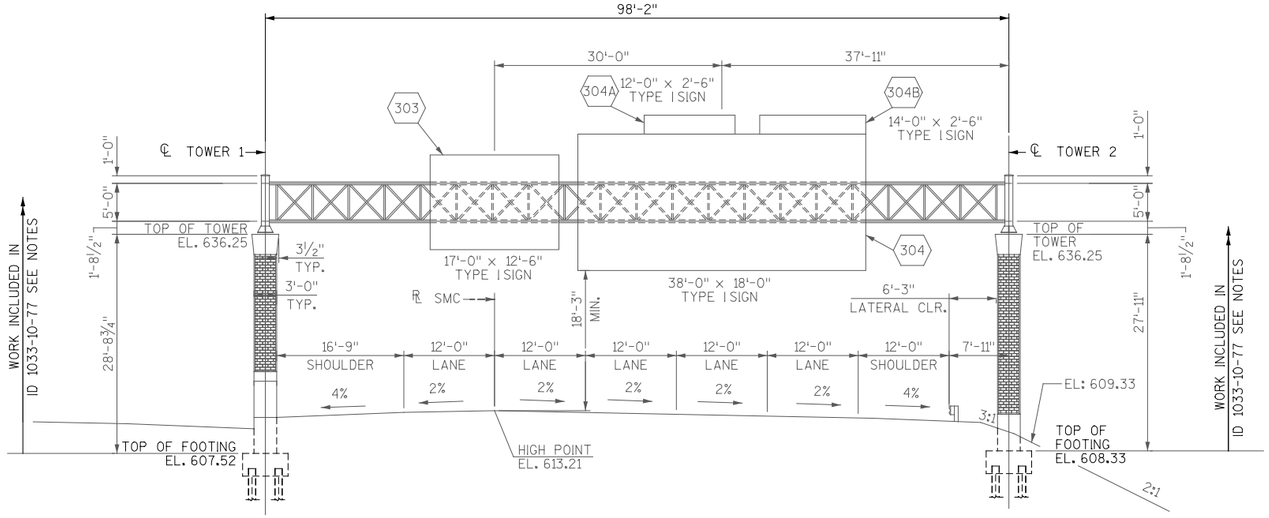
8

STATE PROJECT NUMBER

1133-10-71



PLAN
1144SMC+79



ELEVATION
(LOOKING SOUTH)

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

FOOTING
CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

FOUNDATION DATA

SEE FOUNDATION DETAILS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S-05-194 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133-10-77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133-10-71.

LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL, THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

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WISCONSIN PROFESSIONAL ENGINEER
STEVEN J. MILLER 36937 MILWAUKEE, WI
Steven J. Miller 10/3/14

CONTACTS
WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	452
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636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	800
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1790
SPV.0060.951	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	60

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Duchac KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-194

US 41 SB

COUNTY	TOWN/CITY/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	CSH	VC

PLAN & ELEVATION

SHEET 1 OF 4
891

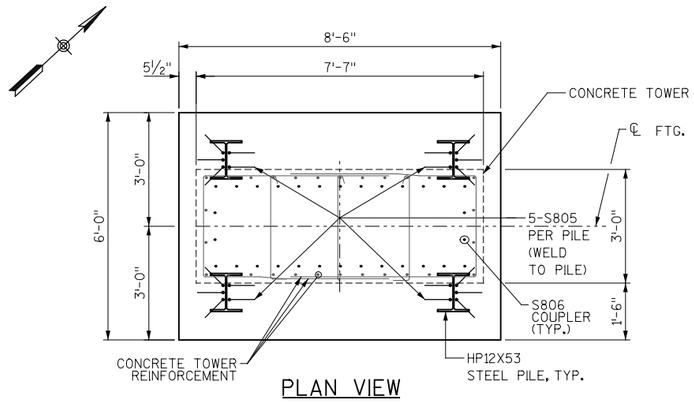
8

8

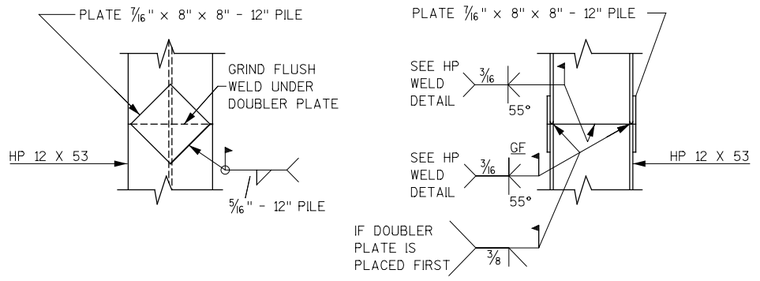
FILE NAME :S-05-0194.dgn
PLOT DATE :9/18/2014 125159 AM PLOT BY : Veronica Chavezvill DRV :Pdf_bw_HS.by levelplt PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

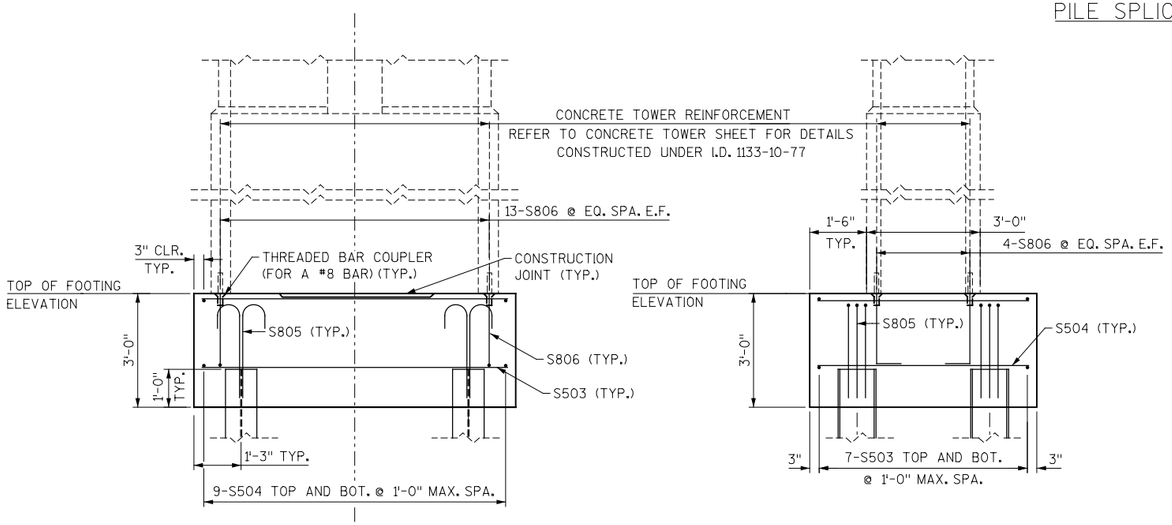
1133-10-71



PLAN VIEW

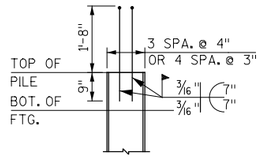


PILE SPLICE DETAIL

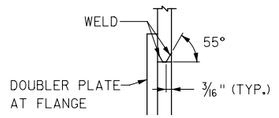


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
*S806	X	30	13'-7"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

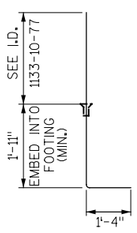
FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 50'IS REQUIRED FOR UPLIFT.

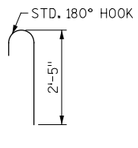
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

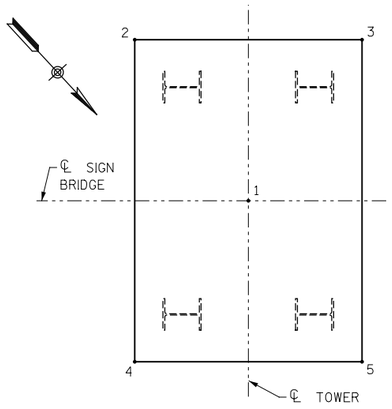
WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".



*S806



S805



NORTHING & EASTING DETAIL

NORTHING & EASTING TABLE

TOWER 1- TOP OF FOOTING ELEVATION = 607.52					
LOCATION	1	2	3	4	5
NORTHING	580405.13	580399.95	580402.99	580407.28	580410.32
EASTING	86310.44	86310.87	86305.70	86315.17	86310.00

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-194

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 4

892

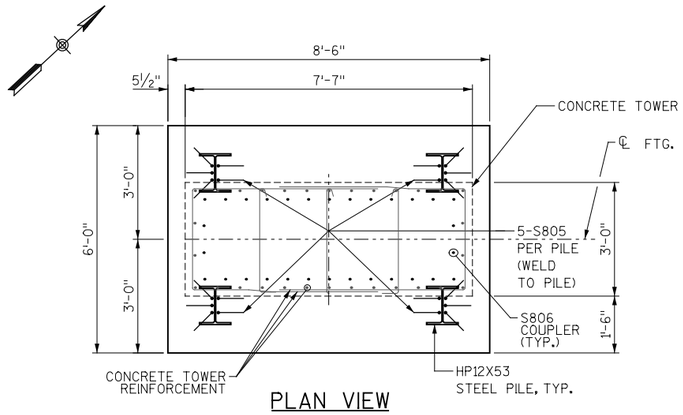
8

8

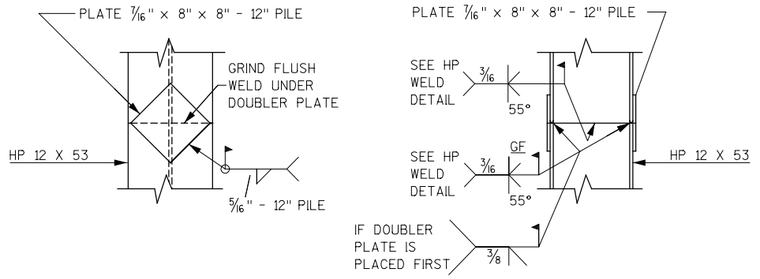
FILE NAME :S-05-0194.dgn
PLOT DATE :9/18/2014 11:50:01 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.plt PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

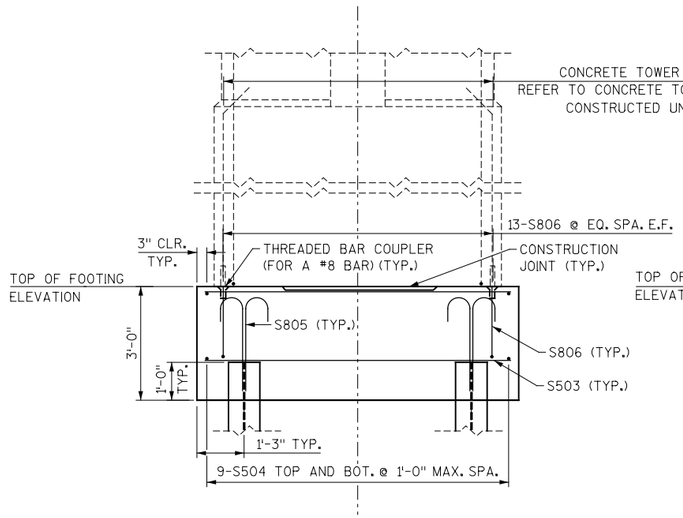
1133-10-71



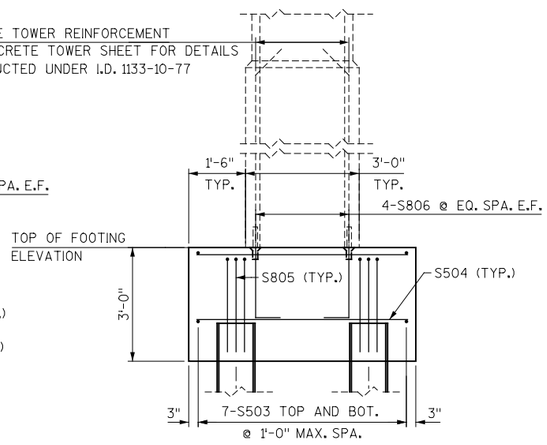
PLAN VIEW



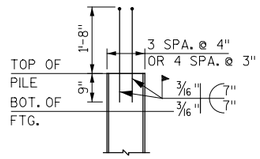
PILE SPLICE DETAIL



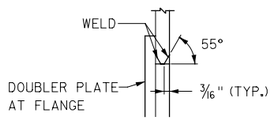
ELEVATION VIEW



END VIEW

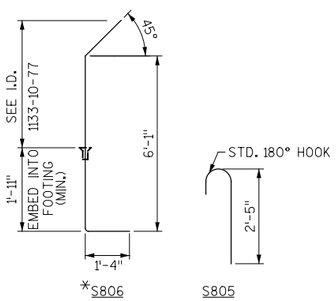


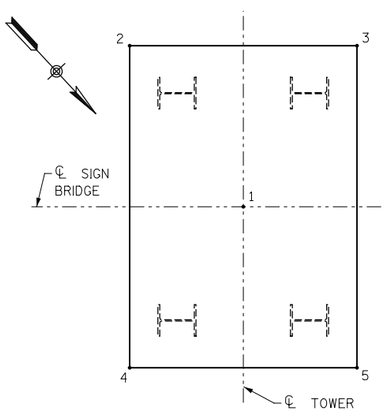
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





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S805		20	3'-4"	▲		WELDED TO PILES
*S806	X	30	8'-9"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

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NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 608.33					
LOCATION	1	2	3	4	5
NORTHING	580454.63	580449.46	580452.50	580456.79	580459.83
EASTING	86225.67	86226.10	86220.93	86230.40	86225.23

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-194

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4

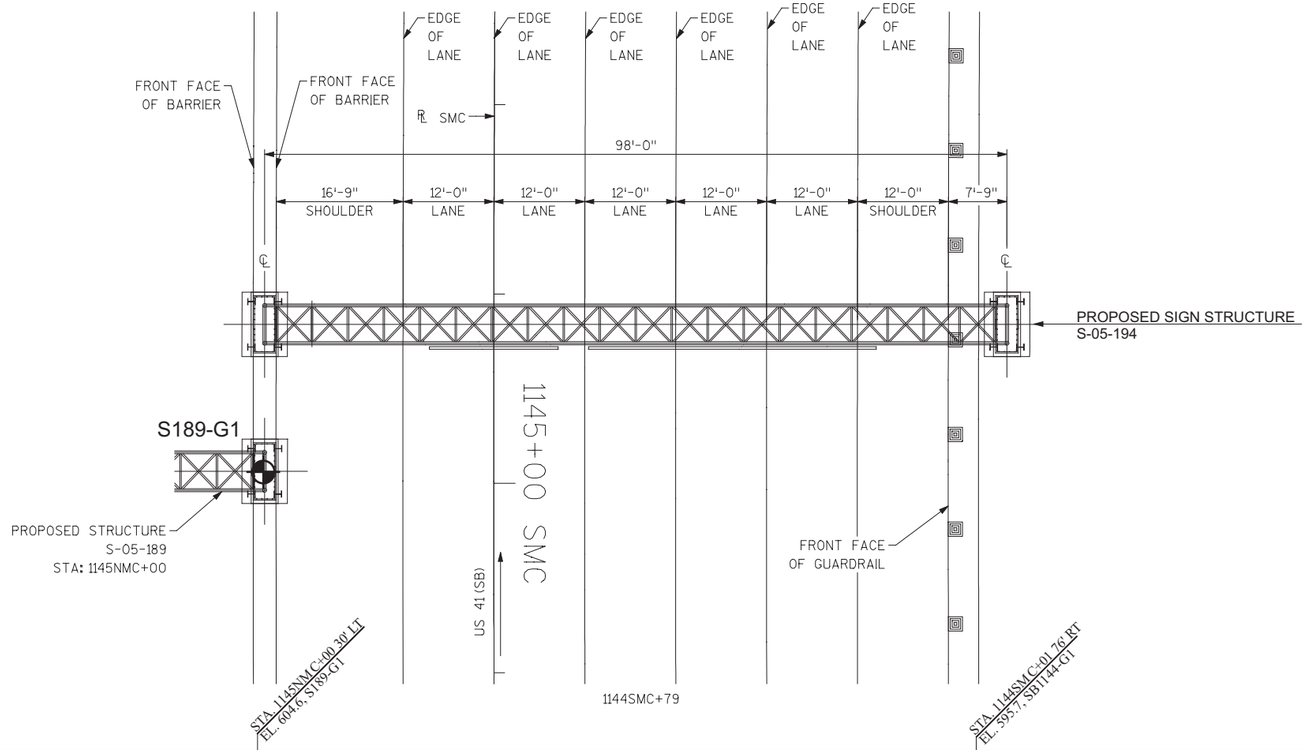
893

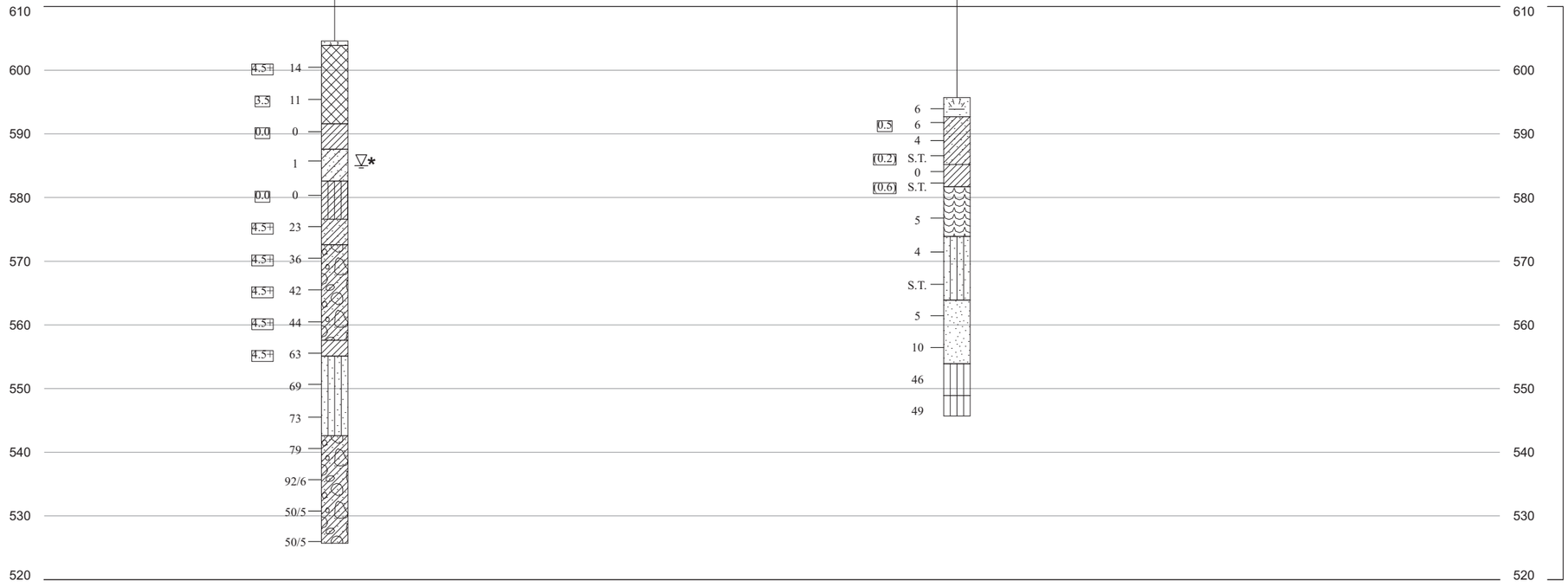
8

8

FILE NAME 15-05-0194.dgn
PLOT DATE 19/18/2014 136102 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.dt PEN :CEL_TextSub_ScreenControlByLevel.tbl

USH-41 (S-05-194)
05-BROWN, WI





NOTE: ▽* -WATER LEVEL ASSUMED FROM SAMPLE CONDITION

BORING SB1144-G1 LOCATION IS NOT SHOWN ON PLAN VIEW.

STATE PROJECT NUMBER

1133-10-71

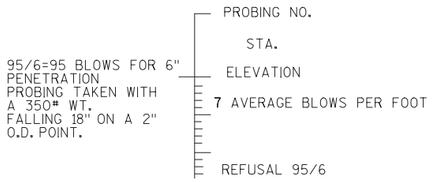
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

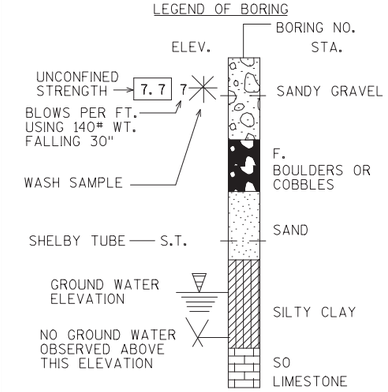
MATERIAL SYMBOLS

TOPSOIL, SILT, FAT CLAY, SAND, PEAT, DOLOMITE, GRAVEL, CLAY, FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-194

DRAWN BY RE | PLANS CK'D. NS

SUBSURFACE EXPLORATION

SHEET 4 OF 4

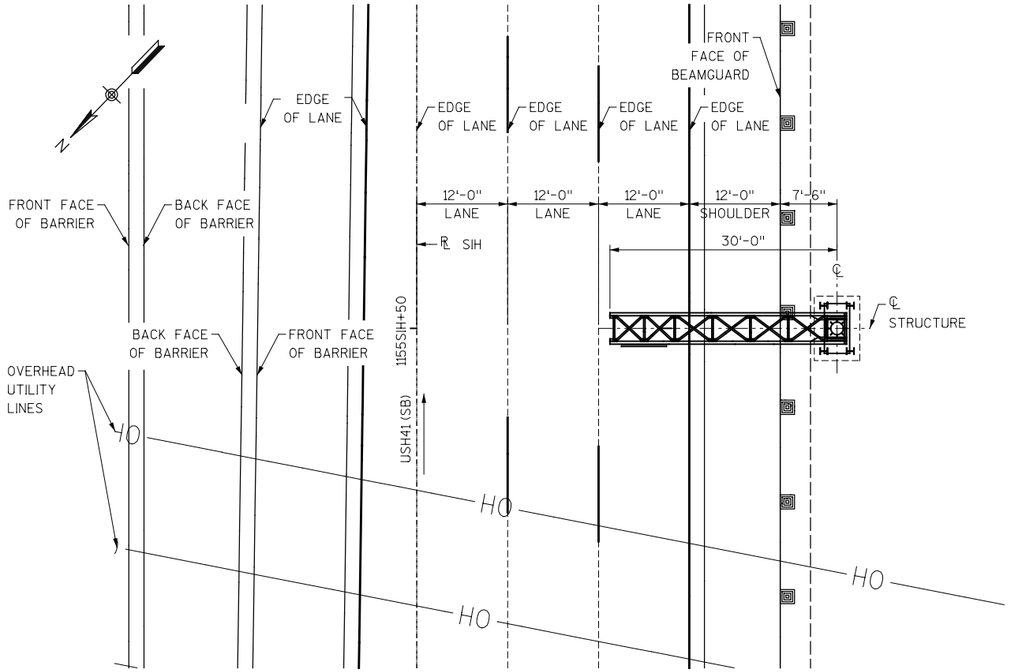
894

SCALE 1"=20'

8

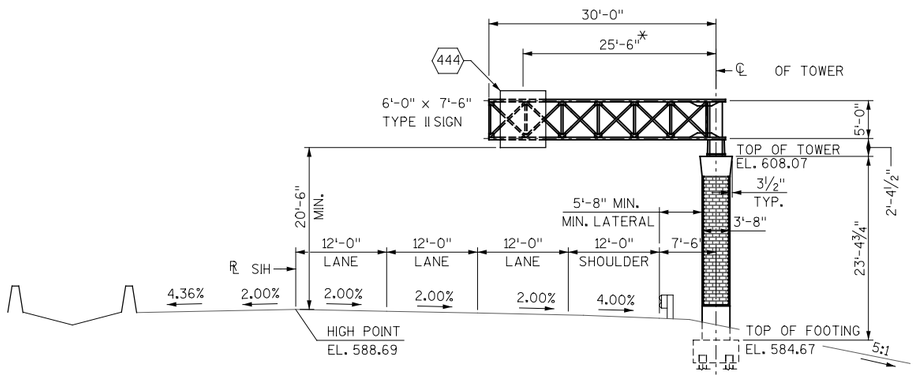
8

STATE PROJECT NUMBER
1133-10-71



PLAN

STA. 1155SIH+50



ELEVATION

(LOOKING SOUTH AT FRONT FACE OF SIGN)

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER FOUNDATION DETAILS
3. CONCRETE TOWER DETAILS
4. GALVANIZED STEEL CANTILEVER SIGN TRUSS
5. SIGN TRUSS DETAILS
6. CONCRETE TOWER AESTHETIC DETAILS
7. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

TOWER

CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

SIGN BRIDGE

STEEL COLUMN & CHORDS: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42
PLATES, BARS, STRUCTURAL ANGLES: .....fy = 36,000 psi
A.S.T.M. A709 GRADE 36
STEEL ANCHOR BOLTS: .....fy = 55,000 psi
A.A.S.H.T.O. M314 GRADE 55
HIGH STRENGTH BOLTS A325 .....fy=92,000 psi
STRUCTURAL MEMBERS GALVANIZED A123
HARDWARE GALVANIZED .....A153 CLASS C

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

TYPE I SIGN DESIGN DATA

MAX DESIGN SIGN AREA (SQ. FT.)	MAX. TYPE I SIGN DEPTH
264	12'-0"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

CENTER SIGNS VERTICALLY ON CHORD/TRUSS.

CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO FABRICATION OF CONCRETE TOWERS AND SIGN BRIDGE.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

PROVIDE AN IDENTIFICATION PLAQUE FOR THE SIGN BRIDGE IN ACCORDANCE WITH SDD STRUCTURE IDENTIFICATION PLAQUES, SIGN BRIDGES AND OVERHEAD SIGN SUPPORT. FASTEN THE IDENTIFICATION PLAQUE TO THE TOWER USING 3 - ¼" DIAMETER BY 1¾" LONG STAINLESS STEEL CONCRETE SCREWS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE CANTILEVERED S-05-195"

SIGNS OR BLANKS SHALL BE INSTALLED ON THE TRUSS AT THE TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE BRIDGE, 2'-0" DEEPER THAN CENTER TO CENTER OF CHORDS & SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS. SIGN BLANKS AND MOUNTING HARDWARE SHALL BE INCIDENTAL TO "SIGN BRIDGE CANTILEVERED S-05-195 "

THE UPPER 12" OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE A.A.S.H.T.O. SPECIFICATION AS STATED IN SECTION 641. OF THE WISDOT STANDARD SPECIFICATIONS. WELD TEST AS PER AWS D1.1.

THE SIGN SUPPORTS CONCRETE MASONRY QUANTITY IS BASED ON THE OUT-TO-OUT CONCRETE DIMENSIONS. NO DEDUCTIONS IN QUANTITY FOR THE ARCHITECTURAL SURFACE TREATMENT RELIEF HAVE BEEN MADE.

PROVIDE A ¾" CHAMFER OR 1" RADIUS ON ALL EXPOSED CONCRETE EDGES.

⟨##⟩ - REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEETS.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

CONTACTS

WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	108
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	29
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	300
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	3420
641.1200	SIGN BRIDGE CANTILEVERED S-05-195	LS	1
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	305
SPV.0165.701	STAINING CONCRETE	SF	475
SPV.0165.702	STAINING CONCRETE BRICK	SF	305
SPV.0165.950	SIGN BLANKS LEFT IN PLACE	SF	53

WISCONSIN STEVEN J. MILLER 36937 MILWAUKEE, WI PROFESSIONAL ENGINEER
Steven Jmiller 10/10/14

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-195

DE PERE - SUAMICO

COUNTY	TOWN/CITY/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	VC	RJW

PLAN & ELEVATION

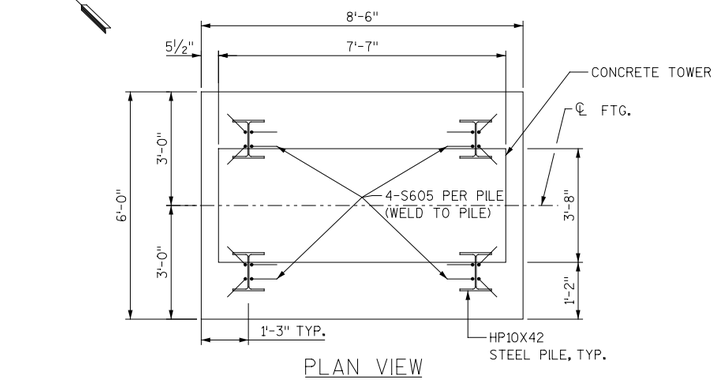
SHEET 1 OF 7
895

8

8

FILE NAME :S-05-0195.dgn
PLOT DATE :10/14/2014 10:12:56 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.plt PEN :CEL.TEXTSUB_SCREENCONTROLBYLEVEL.TBL

STATE PROJECT NUMBER
1133-10-71

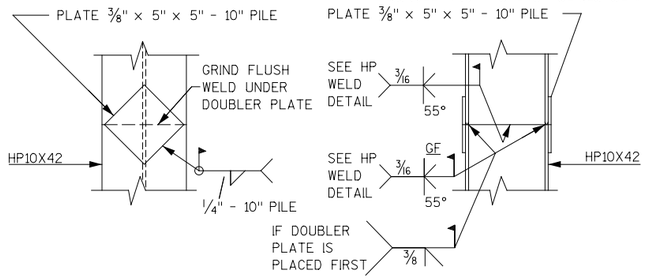


PLAN VIEW

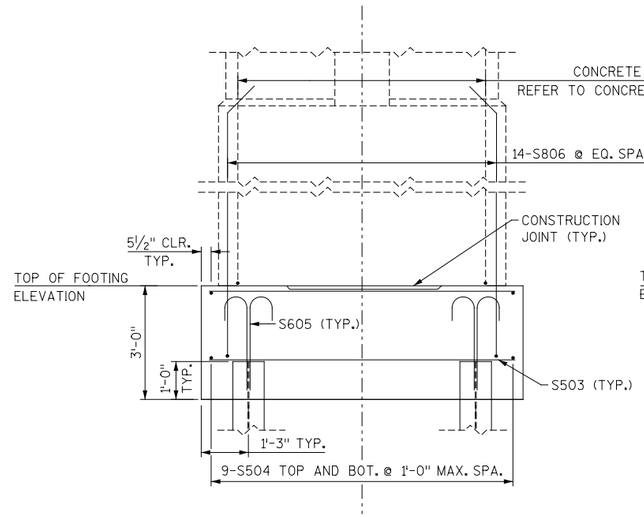
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
S412	2 SERIES OF 4	13'-0" TO 13'-7"
S417	2 SERIES OF 4	4'-0" TO 4'-7"

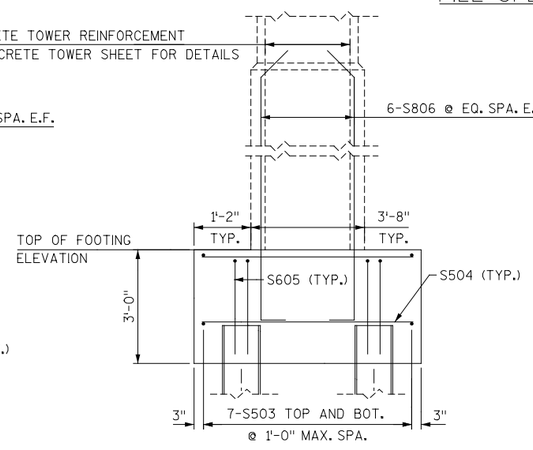
BUNDLE AND TAG EACH SERIES SEPARATELY



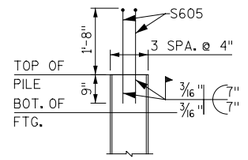
PILE SPLICE DETAIL



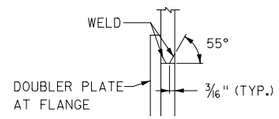
ELEVATION VIEW



END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S605		16	3'-1"	▲		WELDED TO PILES
S806	X	30	8'-10"	▲		CAP BEAM VERTICAL
S407	X	10	12'-2"	▲		HORZ. STIRRUP, BOTTOM OF TOWER
S808	X	30	24'-2"	▲		VERT. REINF., MIDDLE OF TOWER
S409	X	4	16'-2"			VERT. REINF., MIDDLE OF TOWER
S410	X	42	11'-3"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S411	X	34	5'-9"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S412	X	8	13'-4"	▲	△	HORZ. STIRRUP, TOP OF TOWER
S413	X	4	5'-0"	▲		VERT. REINF., TOP OF TOWER
S414	X	20	2'-5"			VERT. REINF., TOP OF TOWER
S415	X	15	4'-0"	▲		HORZ. CROSSTIE, BOTTOM OF TOWER
S416	X	63	3'-7"	▲		HORZ. CROSSTIE, MIDDLE OF TOWER
S417	X	8	4'-4"	▲	△	HORZ. CROSSTIE, TOP OF TOWER

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WIEGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

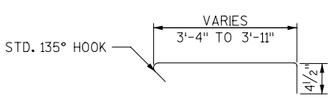
FOUNDATION DATA

TOWER TO BE SUPPORTED ON HP10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED LENGTH 26 FEET LONG.

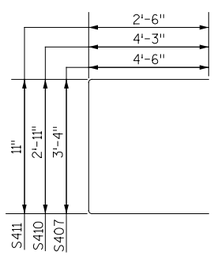
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy = 50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

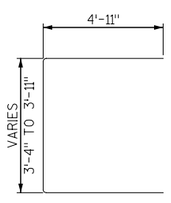
WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 10-INCH X 42 LB".



S417



S407,S410,S411



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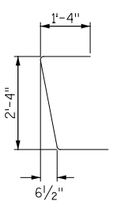

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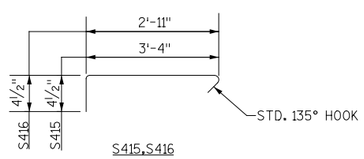
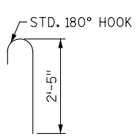
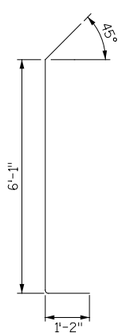


S415,S416



S605



S806

S808

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-195

DRAWN BY VC | PLANS CK'D. RJW

CONCRETE TOWER FOUNDATION DETAILS

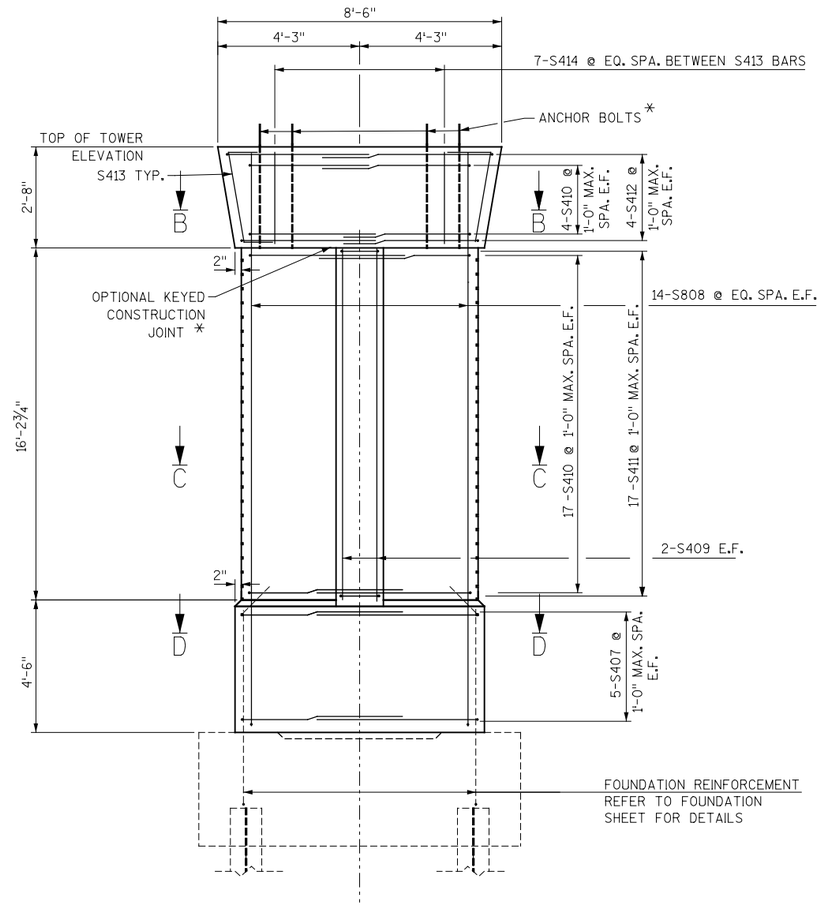
SHEET 2 OF 7

896

8

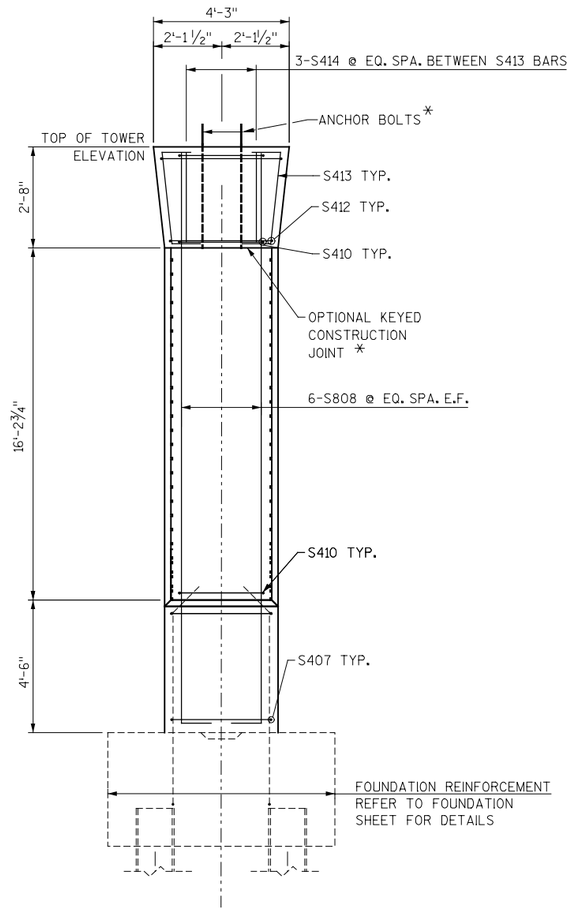
8

STATE PROJECT NUMBER
1133-10-71



ELEVATION VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS



END VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS

TOWER NOTES

DRAWING SHALL NOT BE SCALED.

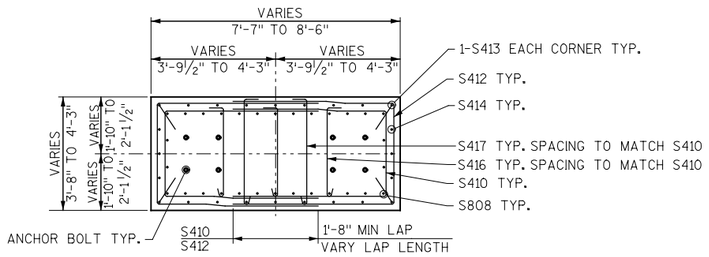
"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR FROM THE FACE OF THE SMOOTH CONCRETE AND 2½" FROM THE FACE OF THE ARCHITECTURAL SURFACE TREATMENT, UNLESS OTHERWISE NOTED.

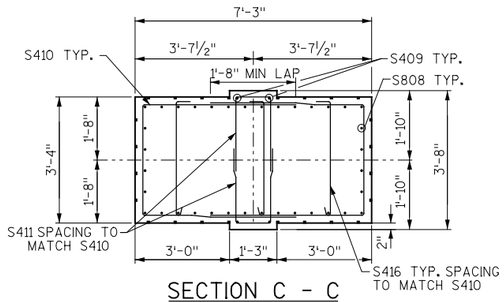
REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" × 6" × 1'-6" LONG BEVELED KEYWAY.

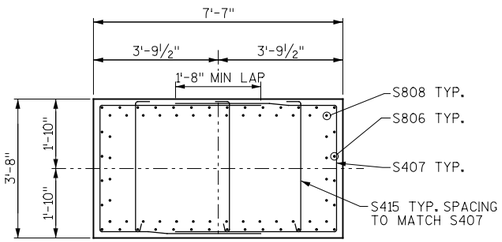
* PLACE ANCHOR BOLTS PRIOR TO POURING MIDDLE SECTION OF CONCRETE TOWER. OPTIONAL KEYED CONSTRUCTION JOINT MAY BE LOCATED AT A GROUT LINE BELOW THE ANCHOR ASSEMBLIES. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS THE CONSTRUCTION JOINT. OMIT JOINT BEVELED EDGES.



SECTION B - B



SECTION C - C



SECTION D - D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-195

DRAWN BY VC | PLANS CK'D. RJW

CONCRETE TOWER DETAILS

SHEET 3 OF 7

897

8

8

STATE PROJECT NUMBER
1133-10-71

GENERAL NOTES

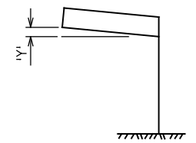
DRAWINGS SHALL NOT BE SCALED.

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN IN "CAMBER DIAGRAM". DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF LEVELING NUTS.

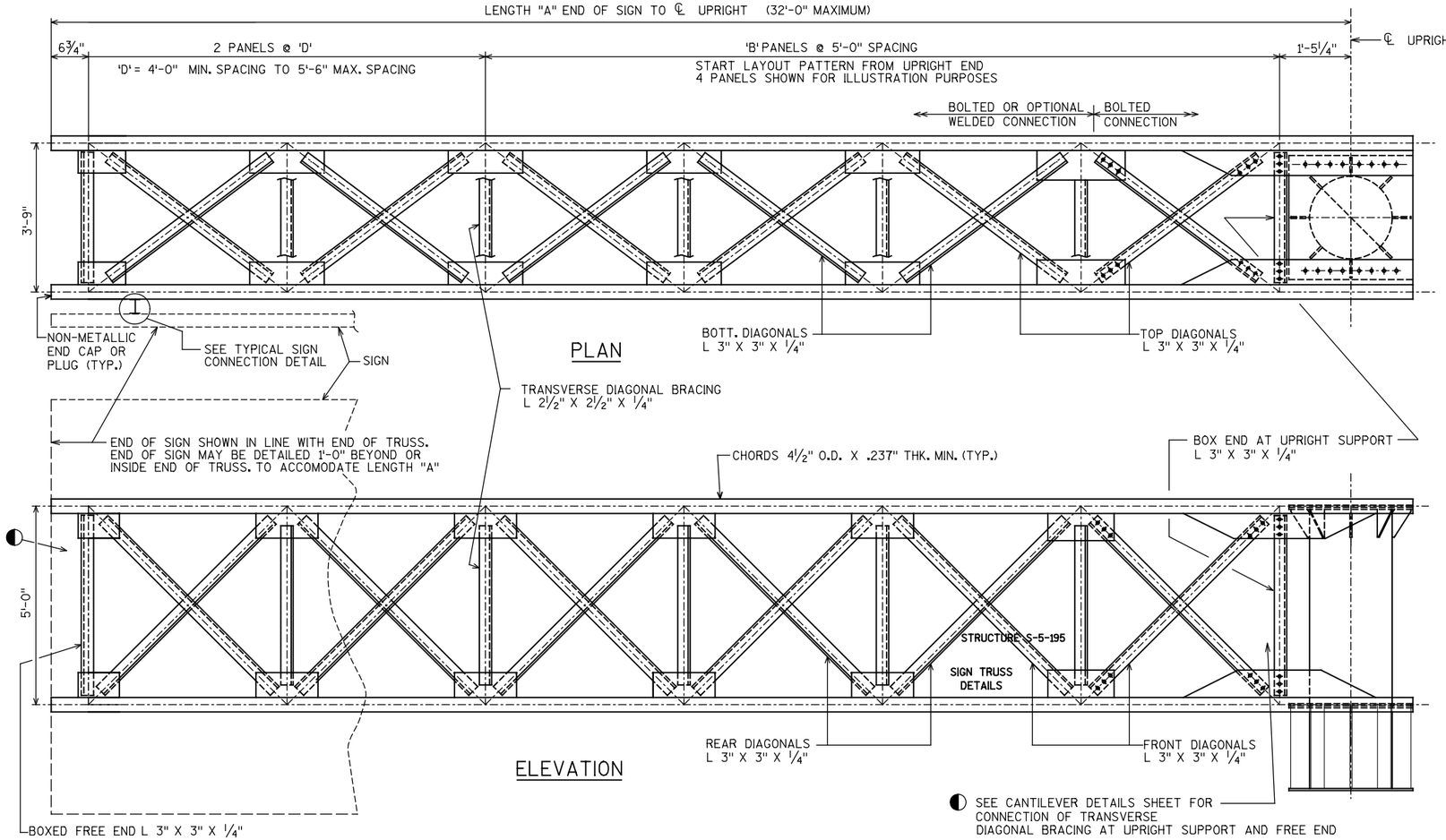
REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

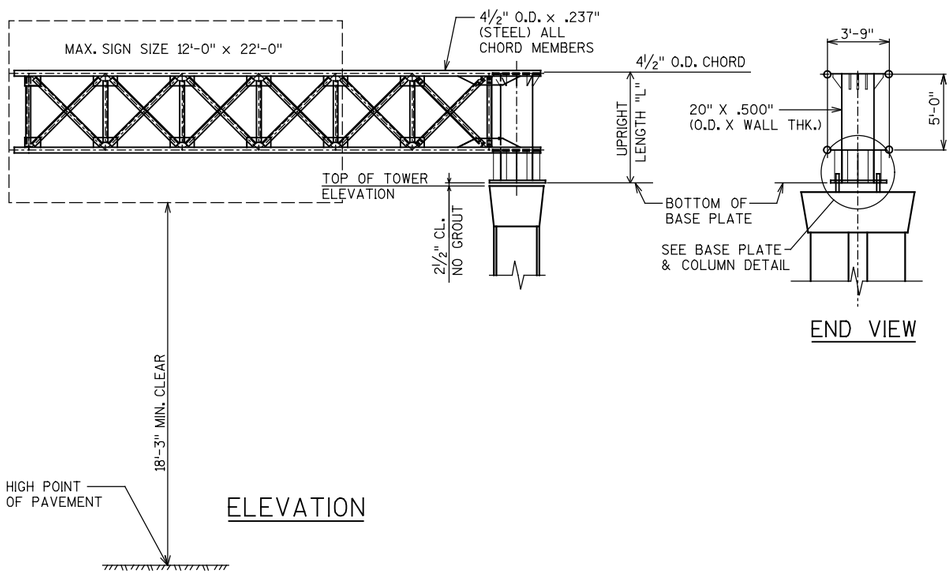
STRUCTURE MEMBER TABLE

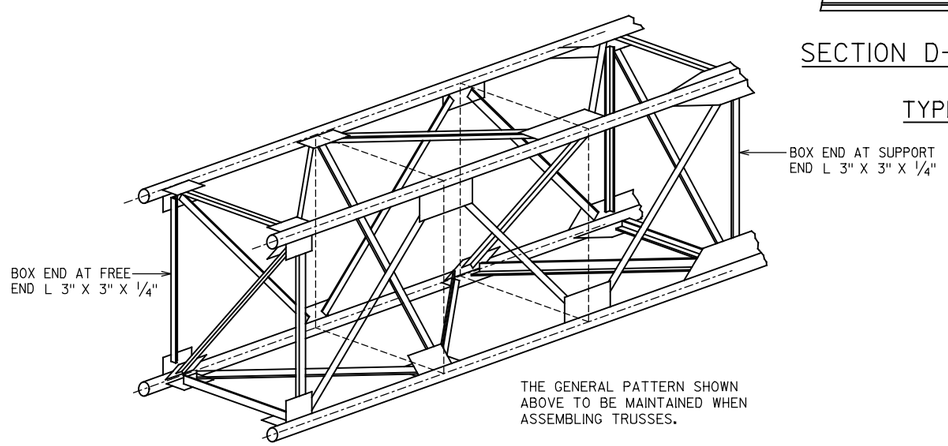
"A"	"L"	"B"	"D"	"Y"
30'-0"	7'-2"	4	4'-0"	1"



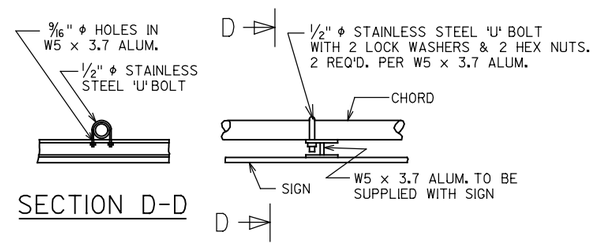
CAMBER DIAGRAM







TYPICAL TRUSS SECTION



TYPICAL SIGN CONNECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-195

DRAWN BY VC | PLANS CK'D. RJW

GALVANIZED STEEL CANTILEVER SIGN TRUSS

SHEET 4 OF 7

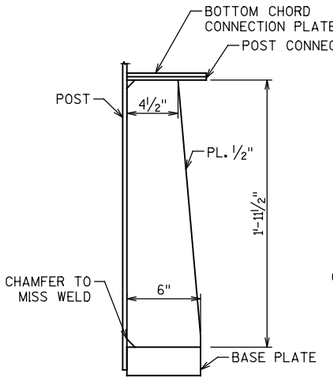
898

8

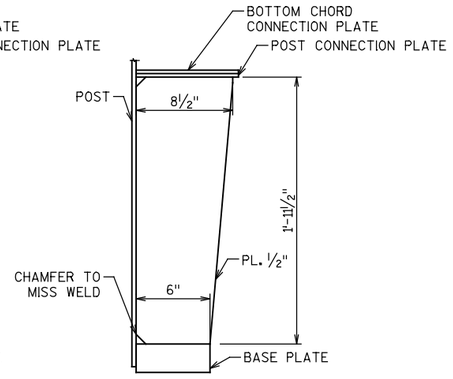
8

STATE PROJECT NUMBER

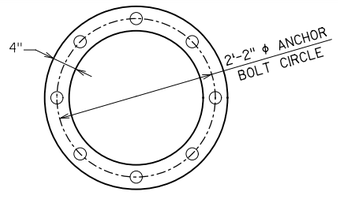
1133-10-71



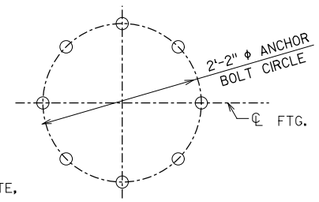
BASE PLATE - ½" PLATE PARALLEL ARM

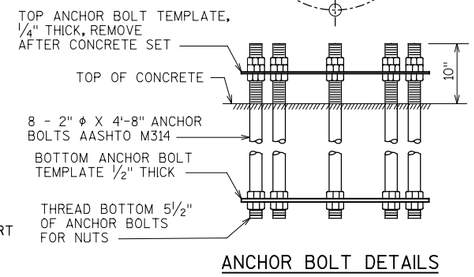


BASE PLATE - ½" PLATE OTHERS
(CHORD OMITTED FOR CLARITY)

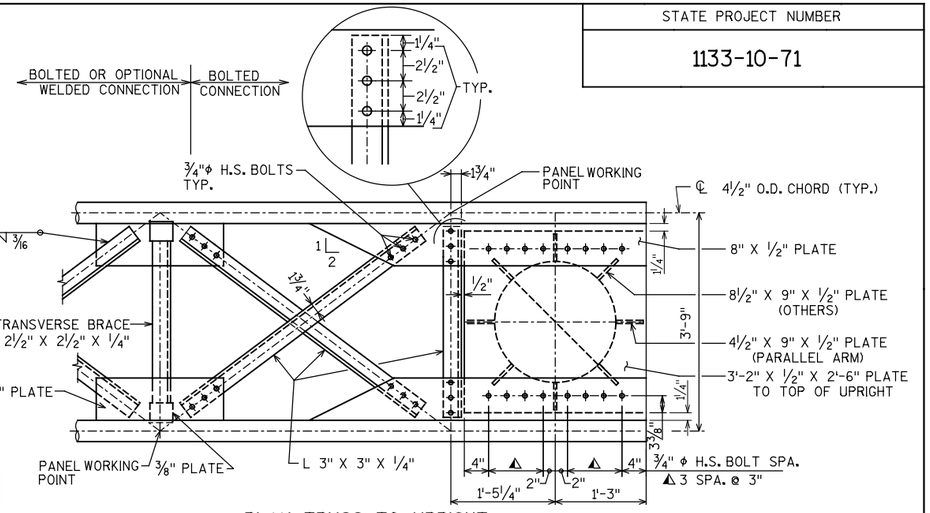


TOP VIEW OF TOP & BOTTOM TEMPLATES



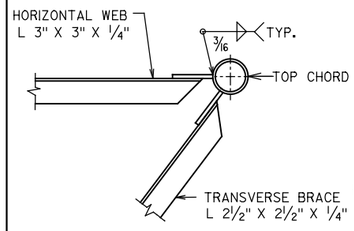


ANCHOR BOLT DETAILS

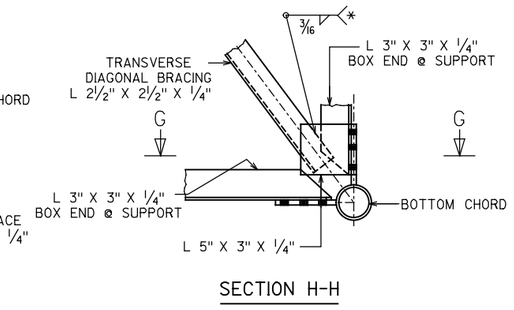


PLAN TRUSS TO UPRIGHT

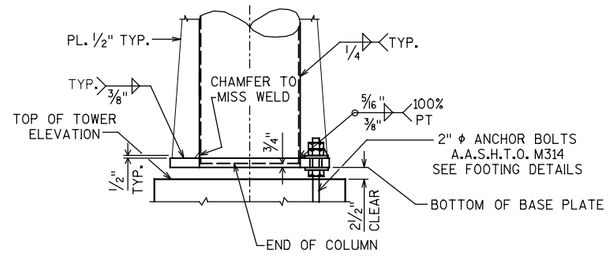
*ANGLE	WELD LENGTH (MIN.)
L 2½" X 2½" X ¼"	7"
L 3" X 3" X ¼"	8"



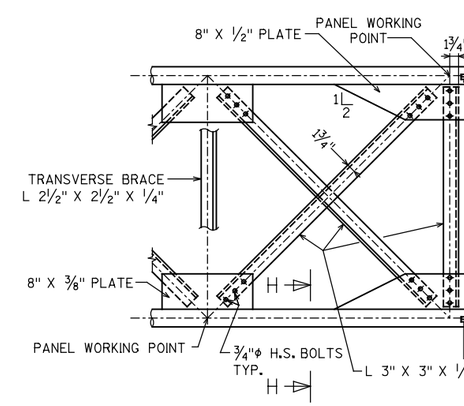
SECTION B-B



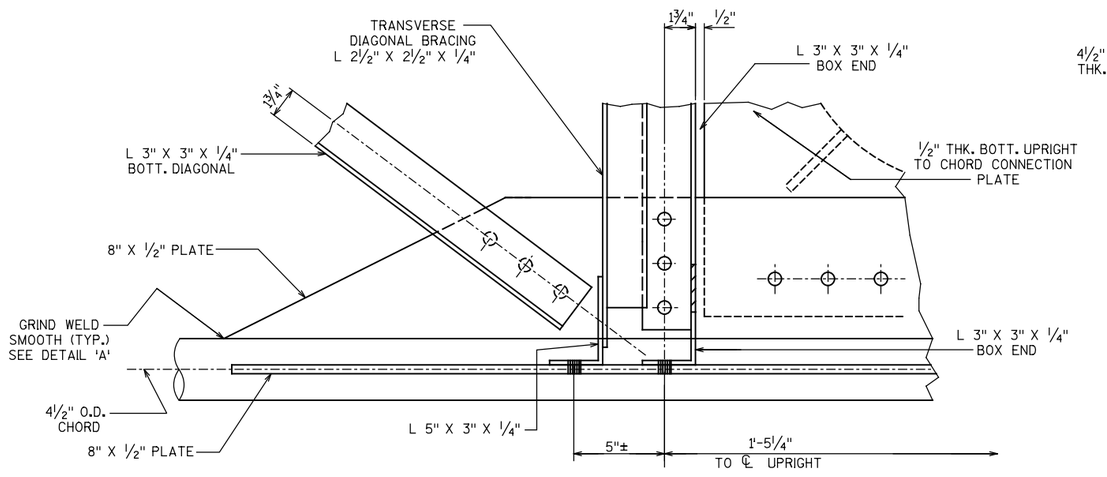
SECTION H-H



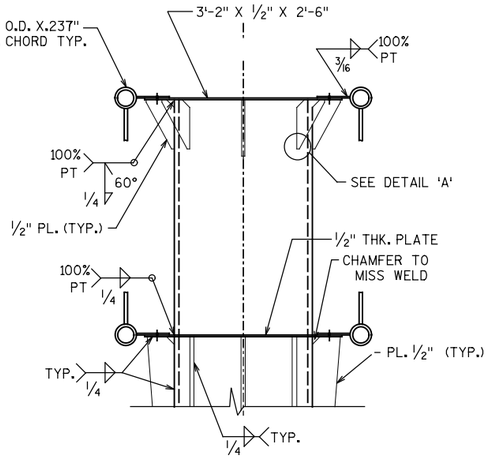
SECTION I-I



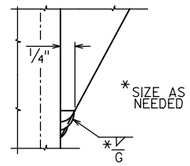
ELEVATION TRUSS TO UPRIGHT



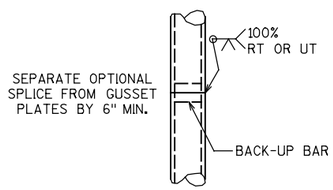
SECTION G-G
(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)



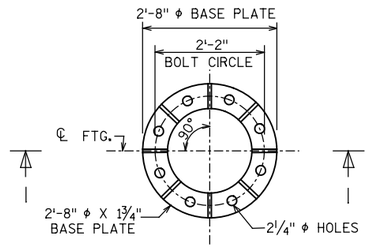
END VIEW
TRUSS TO UPRIGHT



DETAIL 'A'



OPTIONAL COLUMN OR CHORD SPLICE DETAIL



BASE PLATE PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-195

DRAWN BY VC | PLANS CK'D. RJW

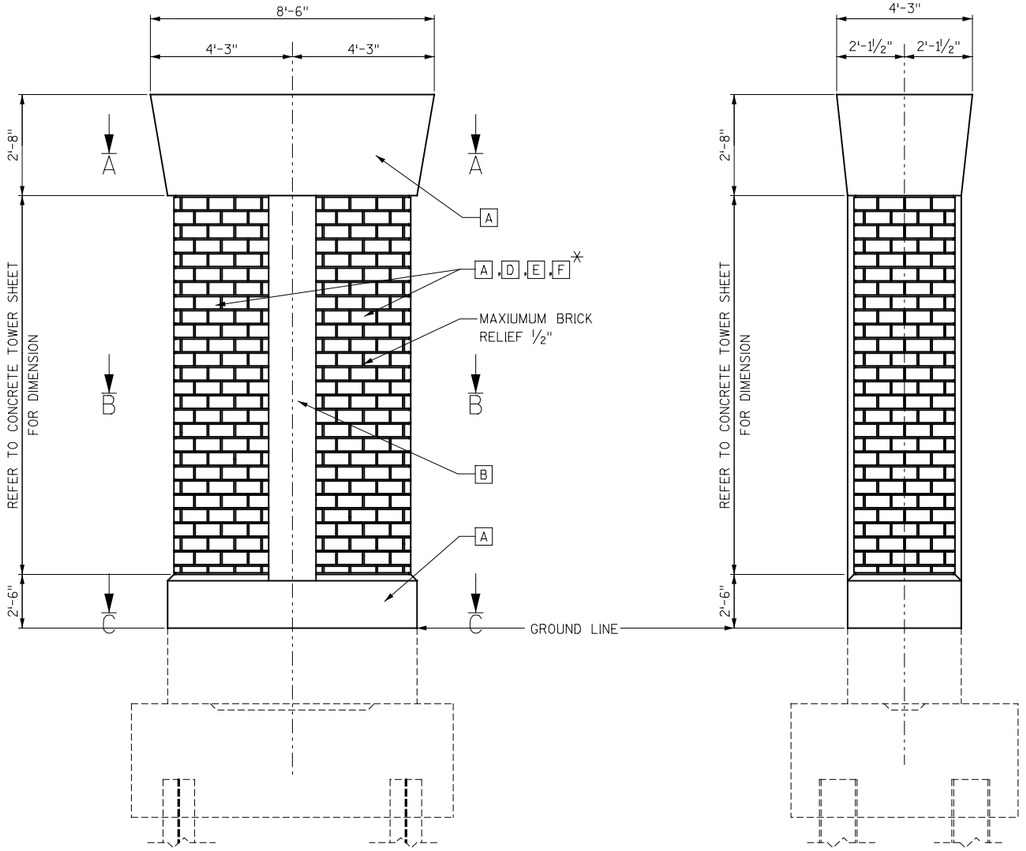
SIGN TRUSS DETAILS

SHEET 5 OF 7
899

8

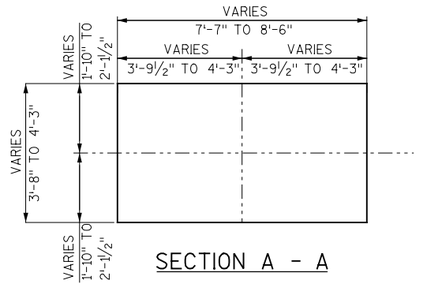
8

STATE PROJECT NUMBER
1133-10-71

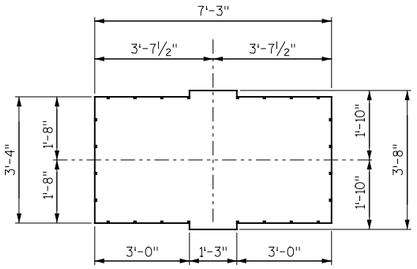


ELEVATION VIEW

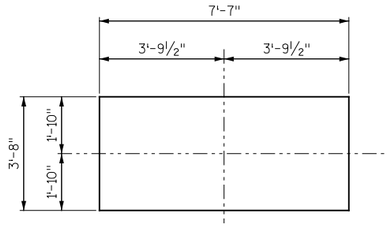
END VIEW



SECTION A - A



SECTION B - B



SECTION C - C

CONCRETE STAINING SCHEDULE

MARK	COLOR
A	BASE COLOR
B	ACCENT COLOR #1
D	ACCENT COLOR #3
E	ACCENT COLOR #4
F	ACCENT COLOR #5

* STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-195

DRAWN BY VC | PLANS CK'D. RJW

CONCRETE TOWER AESTHETIC DETAILS

SHEET 6 OF 7

900

Pdf_Iw_MS_2y_Ver#4.dot
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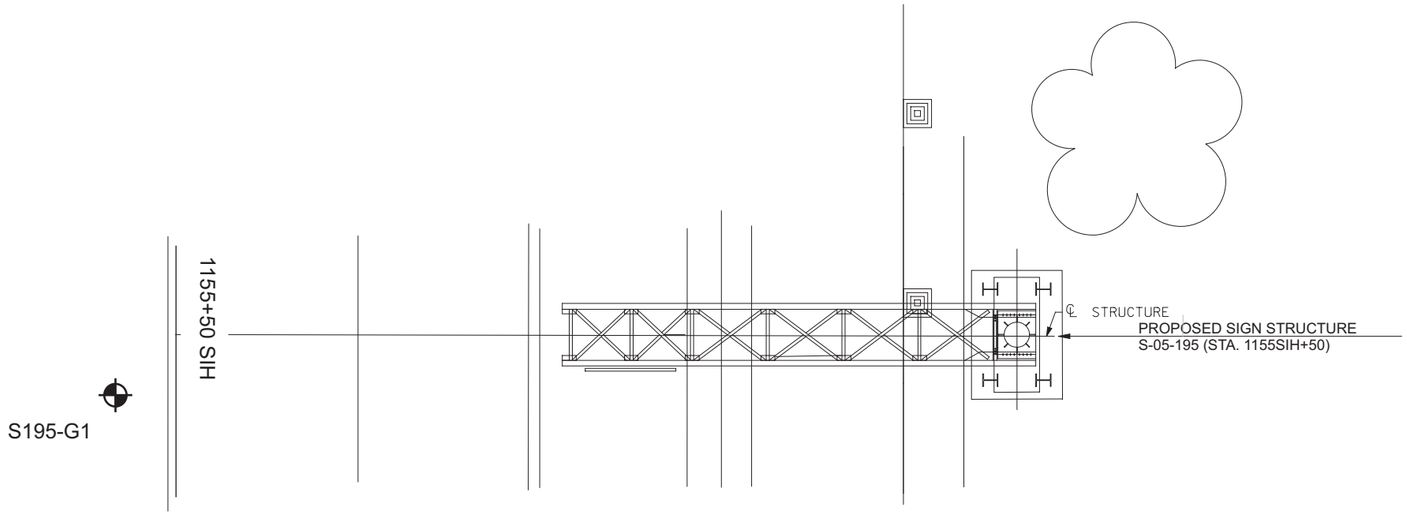
USH-41 (S-05-195)
05-BROWN, WI



NOTE: ▽ -WATER LEVEL DURING DRILLING

DRILLING REFUSAL ON POSSIBLE BEDROCK @ ELEV. 500 FT

STATE PROJECT NUMBER

1133-10-71

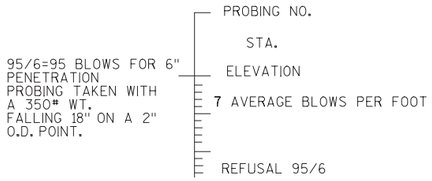
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

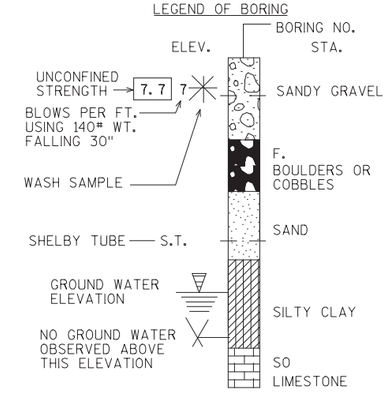
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-195

DRAWN BY RH PLANS CK'D. DB

SUBSURFACE EXPLORATION

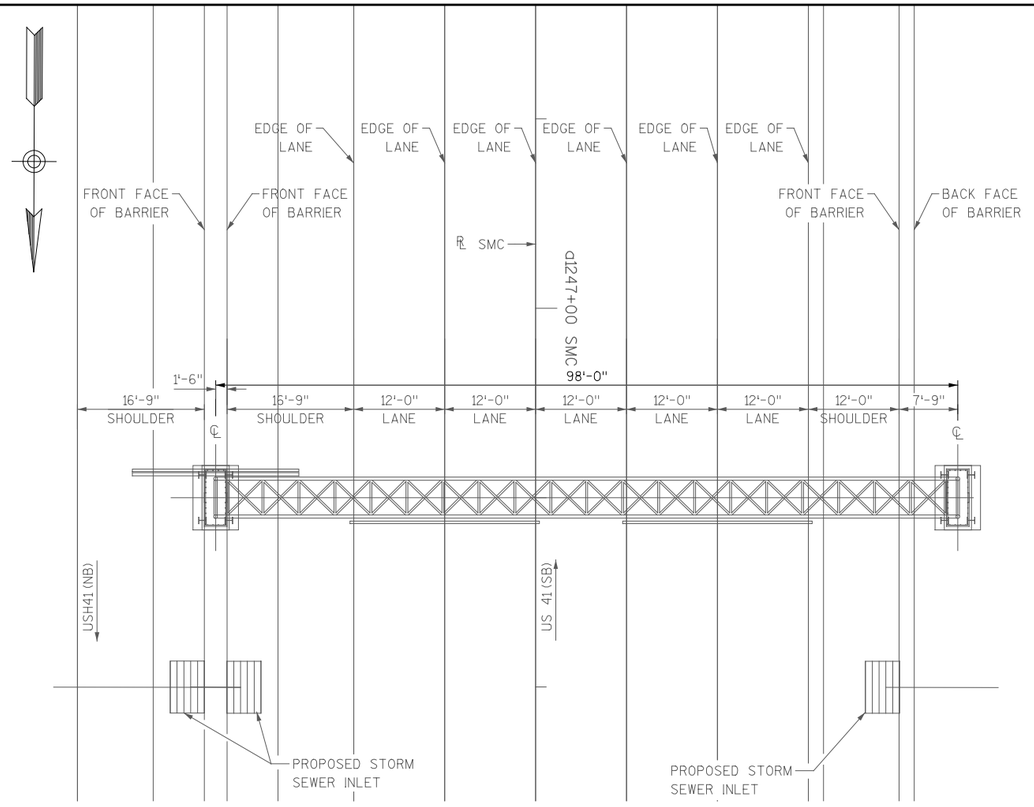
SHEET 7 OF 7

901

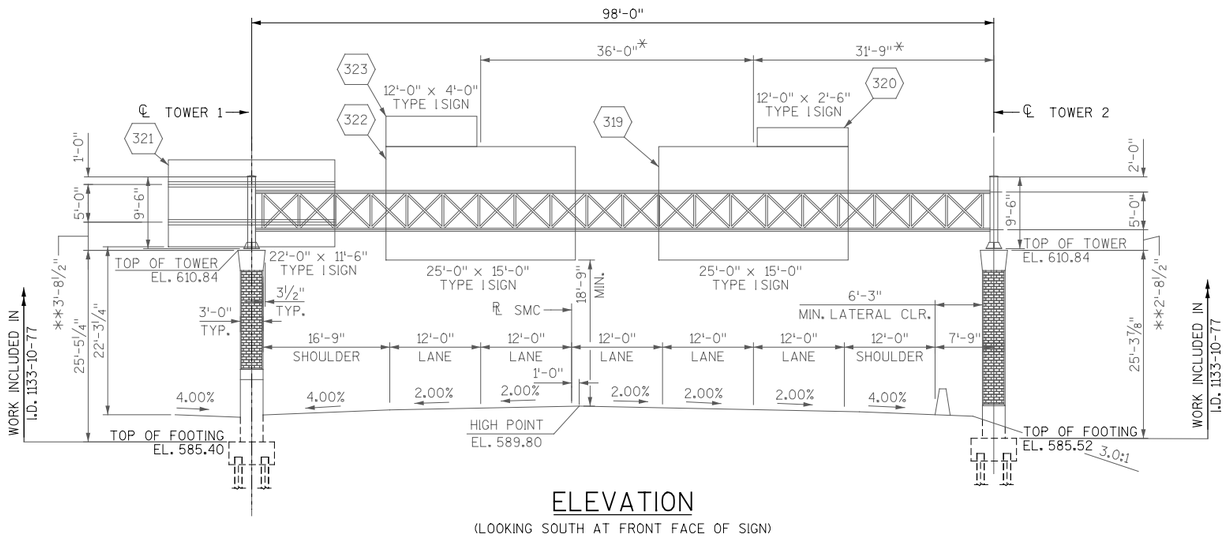
SCALE 1"=10'

8

8



PLAN
a1247SMC+25



ELEVATION
(LOOKING SOUTH AT FRONT FACE OF SIGN)

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

FOOTING
CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + 1/2 (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

FOUNDATION DATA

SEE FOUNDATION DETAILS

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	525
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	840
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1890
SPV.0060.951	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	66

STATE PROJECT NUMBER
1133-10-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S-05-196 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133-10-77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133-10-71.

LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL, THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** TOWER DIMENSION HAS BEEN INCREASED TO ACCOMMODATE PANEL 321.

CONTACTS
WisDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-196

US 41 SB

COUNTY	TOWN/CITY/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	VC	SJM

PLAN & ELEVATION

SHEET 1 OF 4
902

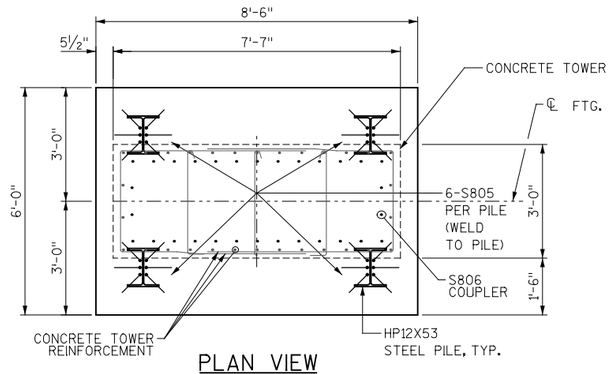
8

8

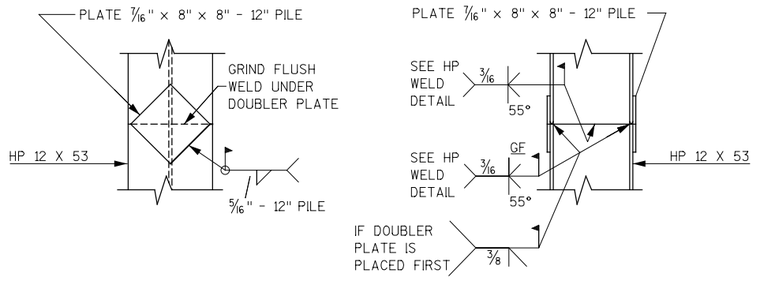
FILE NAME :S-05-196.DGN
PLOT DATE :9/18/2014 11:48 AM PLOT BY : Veronica Chavez/BI DRV :Pdf_bw_HS.by level.dat PEN :CEL_Text Sub_Screen Control By Level.tbl

STATE PROJECT NUMBER

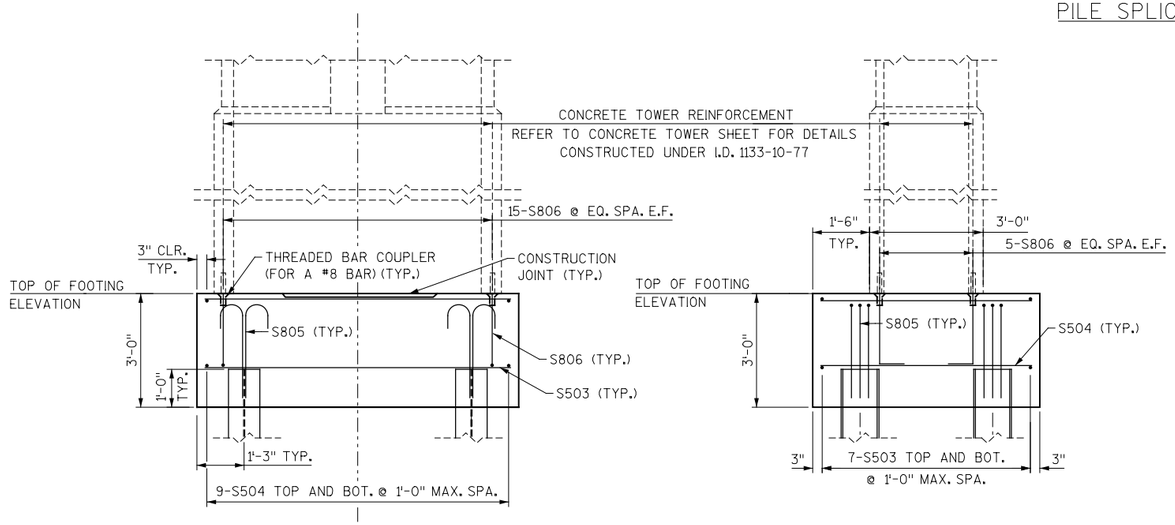
1133-10-71



PLAN VIEW

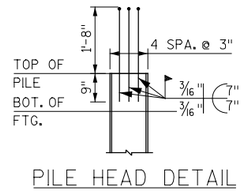


PILE SPLICE DETAIL

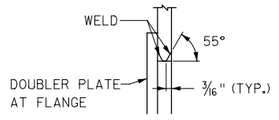


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		24	3'-4"	▲		WELDED TO PILES
*S806	X	36	12'-4"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

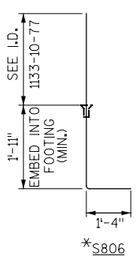
FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 65'IS REQUIRED FOR UPLIFT.

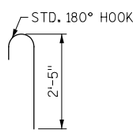
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

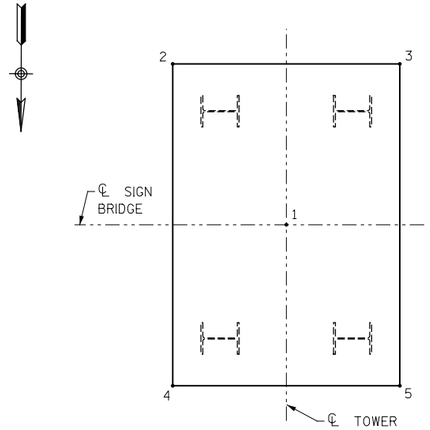
WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".



*S806



S805



NORTHING & EASTING DETAIL

NORTHING & EASTING TABLE

TOWER 1- TOP OF FOOTING ELEVATION = 585.40					
LOCATION	1	2	3	4	5
NORTHING	588774.05	588769.81	588769.79	588778.31	588778.29
EASTING	91041.58	91044.60	91038.60	91044.57	91038.57

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-196

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 4

903

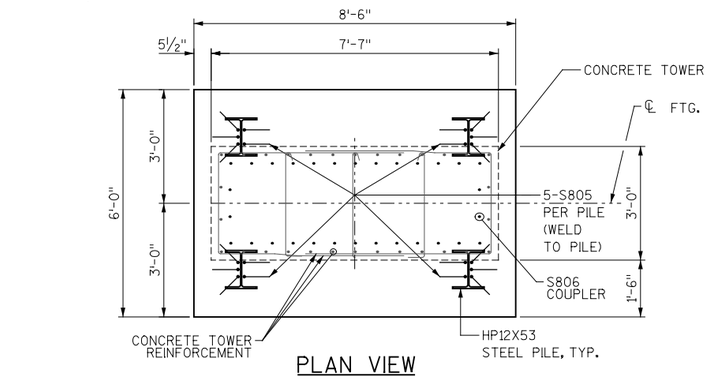
8

8

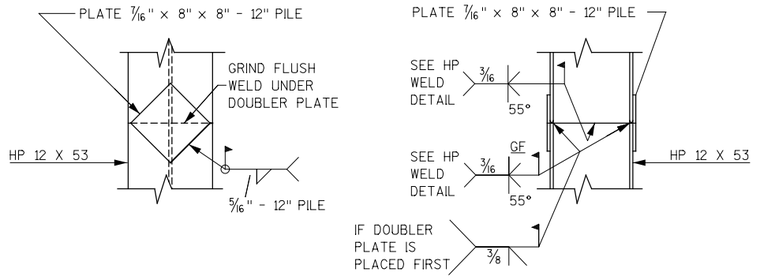
FILE NAME : S-05-0196.DGN PLOT DATE : 9/18/2014 1:17:51 AM PLOT BY : Veronica Chavezv8i

I.D. 2967-04-01/71 NOV 2006

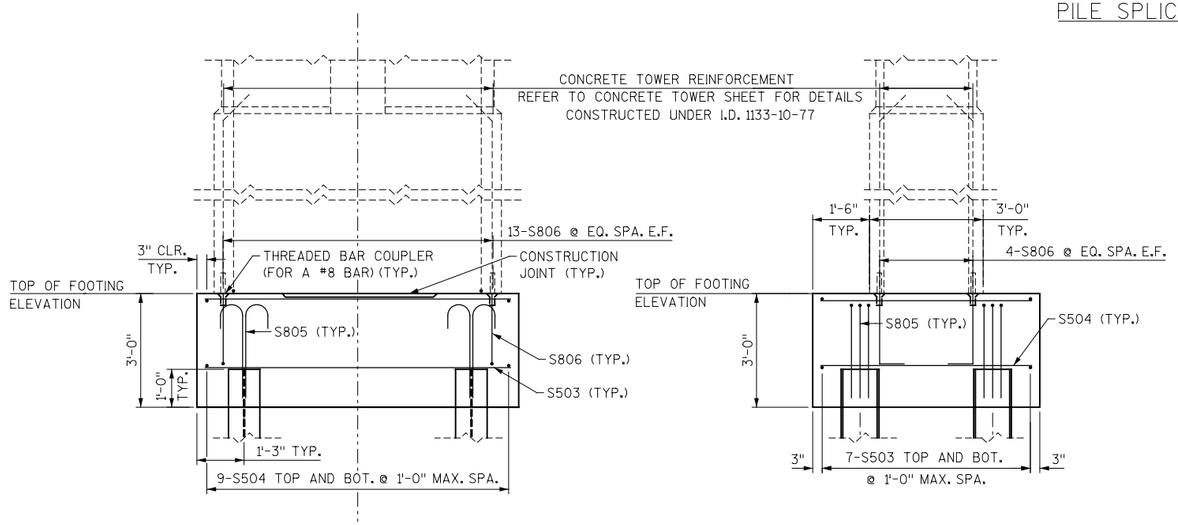
STATE PROJECT NUMBER
1133-10-71



PLAN VIEW

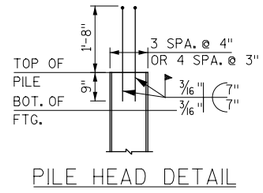


PILE SPLICE DETAIL

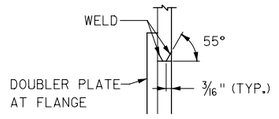


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



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FLANGE SHOWN, WEB SIMILAR

BILL OF BARS

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S503		14	8'-0"			CAP LONGITUDINAL
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*S806	X	30	8'-9"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

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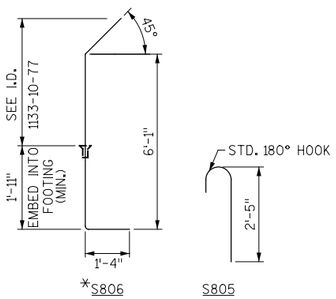
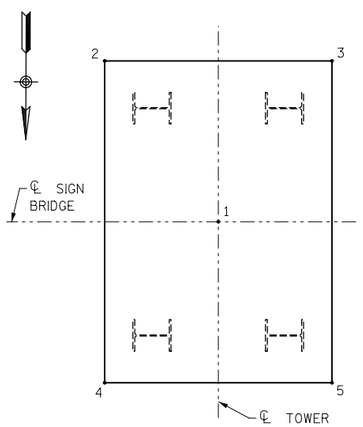




NORTHING & EASTING DETAIL

NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 585.52					
LOCATION	1	2	3	4	5
NORTHING	588773.73	588769.49	588769.47	588777.99	588777.97
EASTING	90943.58	90946.60	90940.60	90946.57	90940.57

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-196

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4

904

I.D. 2967-04-01/71

NOV 2006

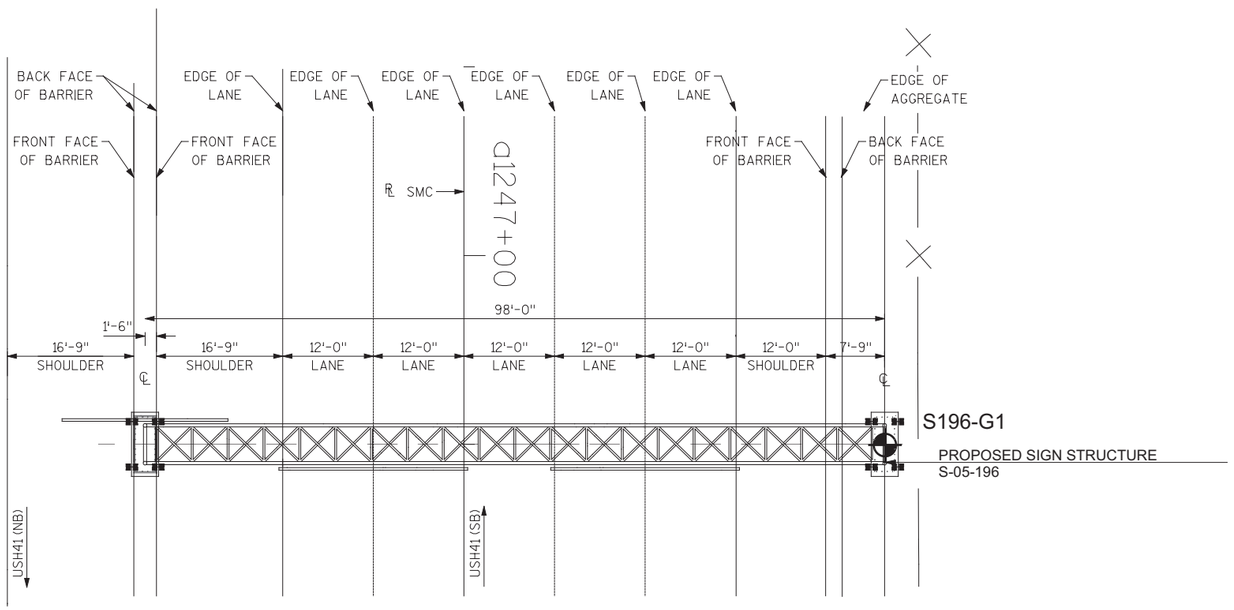
8

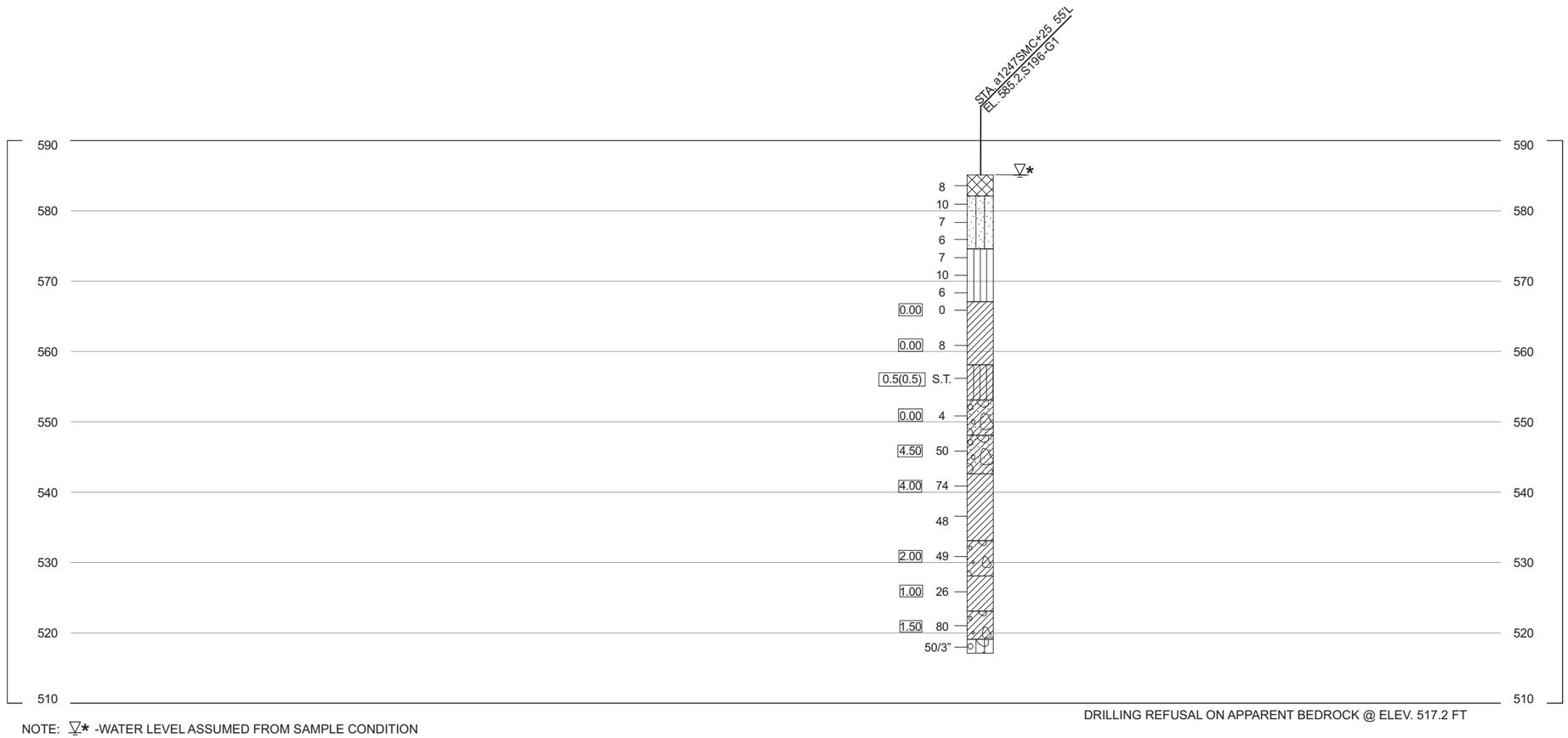
8

FILE NAME : S-05-0196.DGN PLOT DATE : 9/18/2014 1:17:51 AM PLOT BY : Veronica Chavez8I

Pdf.tw:JIG:2y:ieva&2dt
CEL:TEXT:SS:SCREEN:ROS,ROS,LEVEL:TBL

USH-41 (S-05-196)
05-BROWN, WI





NOTE: ▽* -WATER LEVEL ASSUMED FROM SAMPLE CONDITION

DRILLING REFUSAL ON APPARENT BEDROCK @ ELEV. 517.2 FT

STATE PROJECT NUMBER

1133-10-71

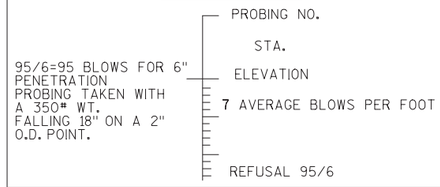
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

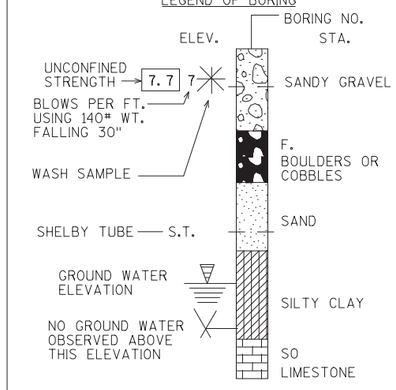
MATERIAL SYMBOLS

TOPSOIL, SILT, FAT CLAY, SAND, PEAT, DOLOMITE, GRAVEL, CLAY, FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-196

DRAWN BY RH | PLANS CK'D. DB

SUBSURFACE EXPLORATION

SHEET 4 OF 4

905

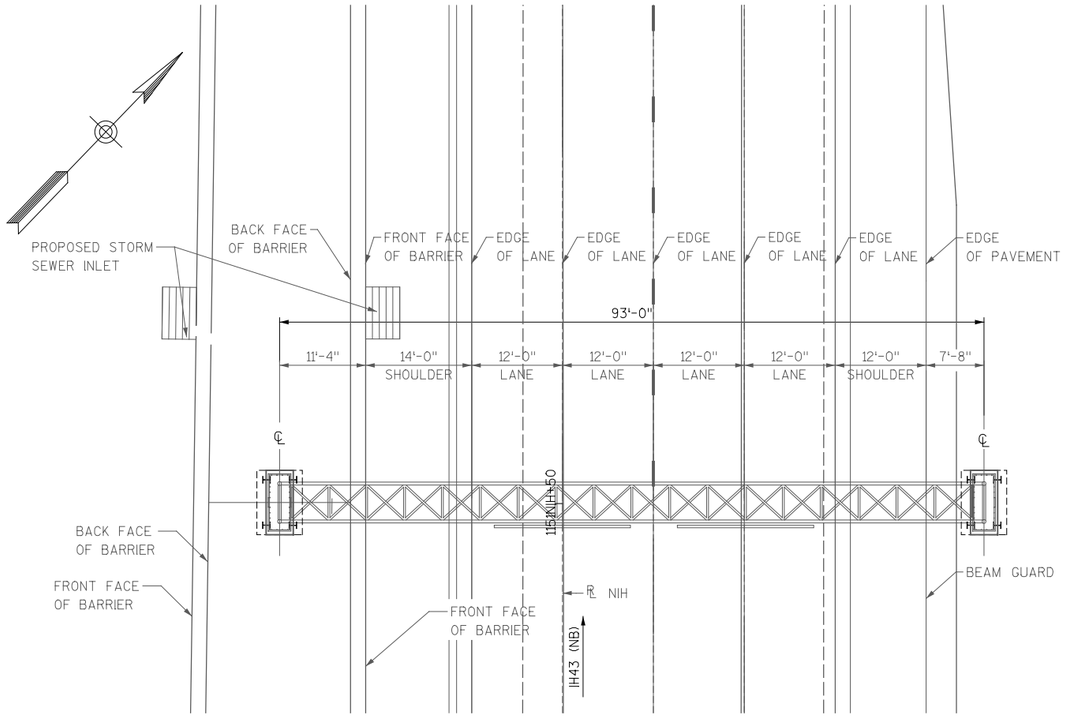
SCALE 1"=20'

8

8

STATE PROJECT NUMBER

1133-10-71



PLAN

1151NIH+50

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

TOWER

CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

SIGN BRIDGE

STEEL COLUMN PIPE: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42
STEEL PIPE MEMBERS OF TRUSS: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42
PLATES, BARS, STRUCTURAL ANGLES: .....fy = 36,000 psi
A.S.T.M. A709 GRADE 36
STEEL ANCHOR BOLTS: .....fy = 55,000 psi
A.A.S.H.T.O. M314–90 GRADE 55
ALL BOLTED CONNECTIONS: ?" | A325 BOLTS,
GALVANIZED A.S.T.M. A153, CLASS C

DESIGN DATA

DEAD LOAD – WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD – NONE.
ICE LOAD – 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE – 90 M.P.H. (3–SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	F ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ? (WIND‡)	133

‡MIN. VALUE OF 25 PSF FOR GR. 3

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".
WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S–05–200 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133–10–77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133–10–71.

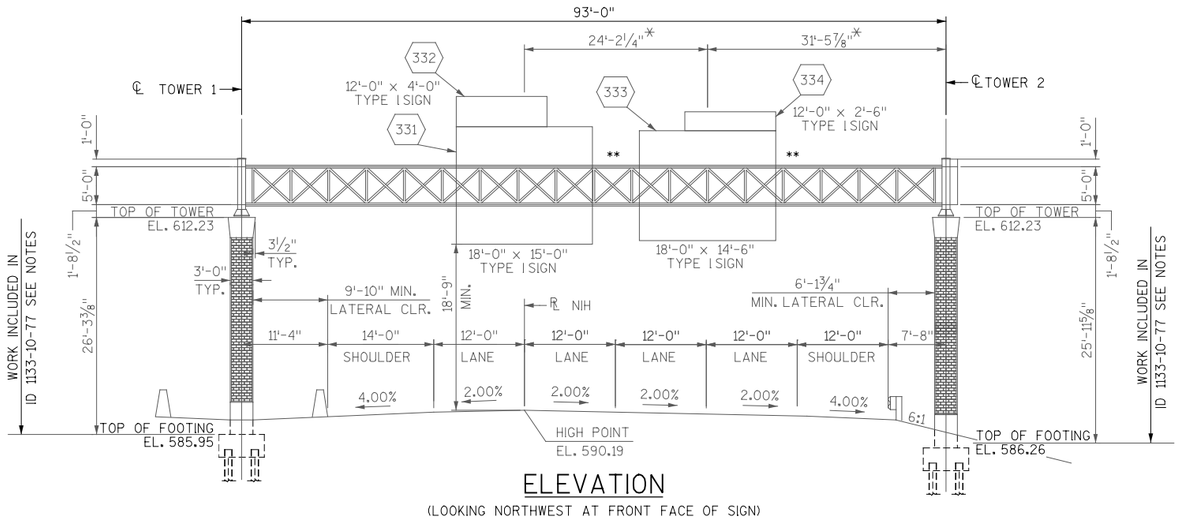
LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** PERMANENT SINGS TO BE INSTALLED UNDER CONTRACT 1133–10–77



ELEVATION

(LOOKING NORTHWEST AT FRONT FACE OF SIGN)

CONTACTS

WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	575
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	800
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1350
SPV.0060.951	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	60

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-200

DE PERE - SUAMICO

COUNTY	~~TOWN/CITY~~/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	VC	DESIGN CK'D.	CES	DRAWN BY	VC	PLANS CK'D.	SJM

PLAN & ELEVATION

SHEET 1 OF 4

906

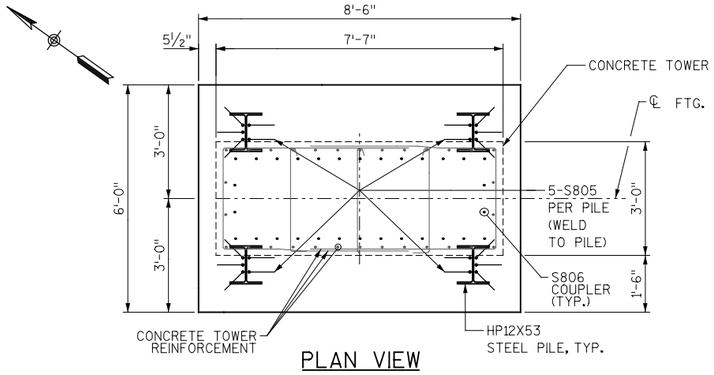
8

8

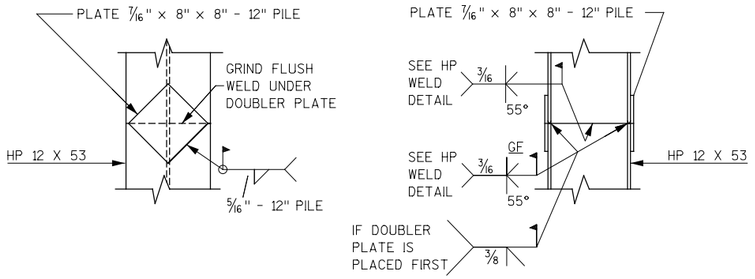
FILE NAME :S-05-0200.DGN
PLOT DATE :10/14/2014 9:42:56 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.pit PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

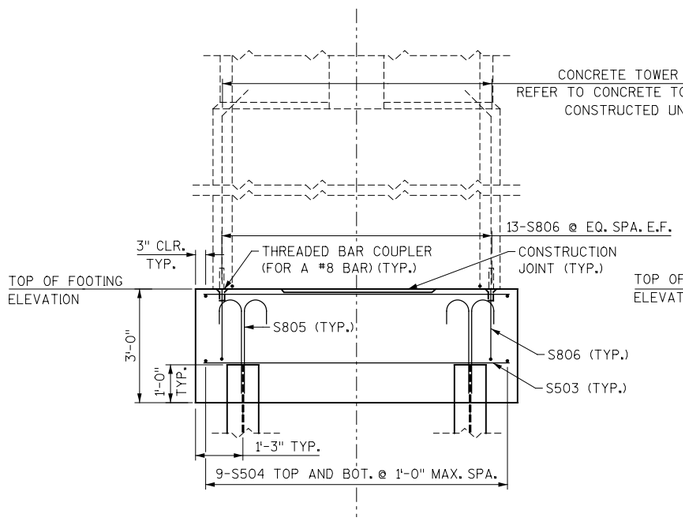
1133-10-71



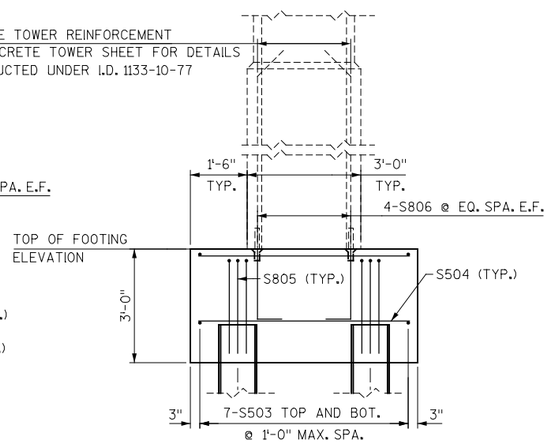
PLAN VIEW



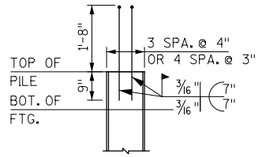
PILE SPLICE DETAIL



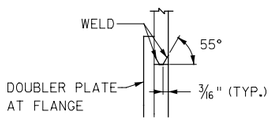
ELEVATION VIEW



END VIEW

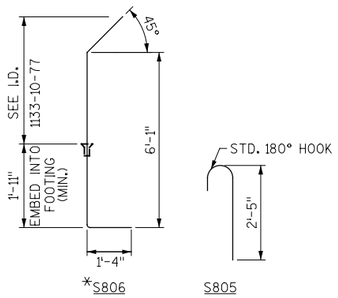


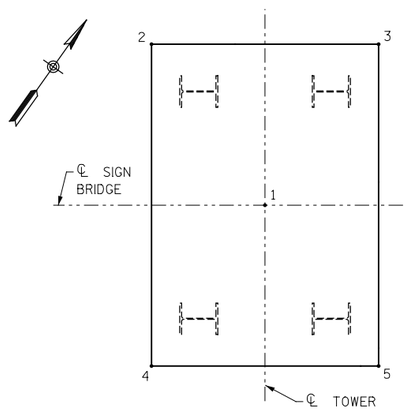
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
S806		30	8'-10"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 71'IS REQUIRED FOR UPLIFT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".

NORTHING & EASTING TABLE

TOWER 1 - TOP OF FOOTING ELEVATION = 585.95					
LOCATION	1	2	3	4	5
NORTHING	580304.36	580305.34	580309.51	580299.22	580303.39
EASTING	93300.97	93295.86	93300.18	93301.76	93306.08

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-200

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 4

907

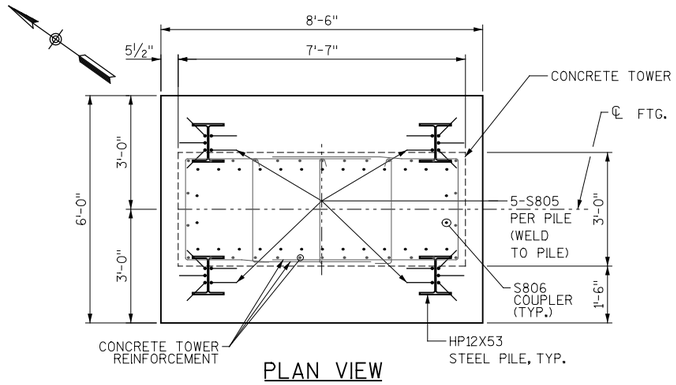
8

8

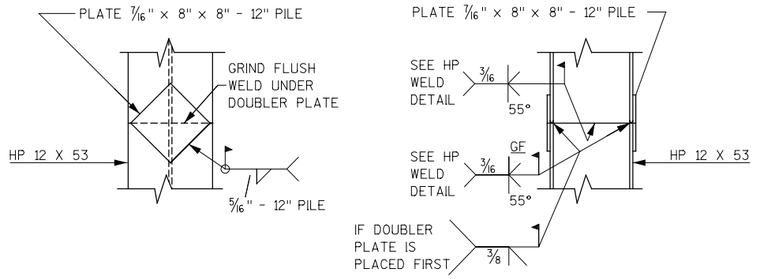
FILE NAME :S-05-0200.DGN
PLOT DATE :10/14/2014 9:42:59 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.dt PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

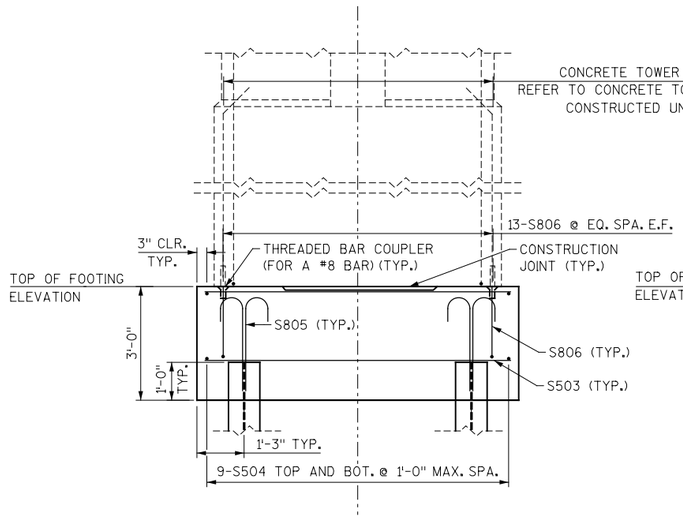
1133-10-71



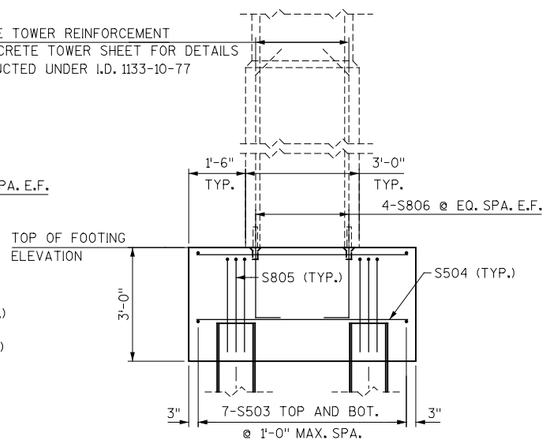
PLAN VIEW



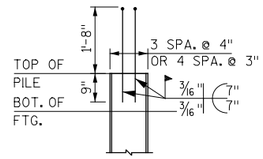
PILE SPLICE DETAIL



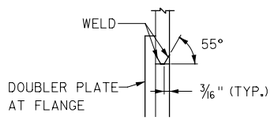
ELEVATION VIEW



END VIEW

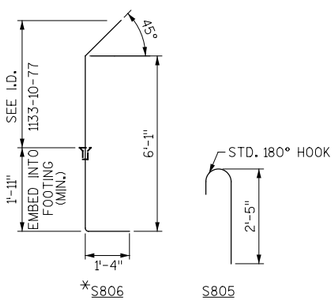


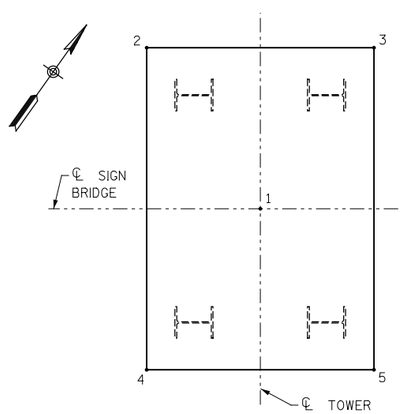
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
S806		30	8'-10"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 70' IS REQUIRED FOR UPLIFT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".

NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 586.26					
LOCATION	1	2	3	4	5
NORTHING	580368.92	580369.89	580374.06	580363.78	580367.94
EASTING	93367.92	93362.81	93367.13	93368.71	93373.03

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-200

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4

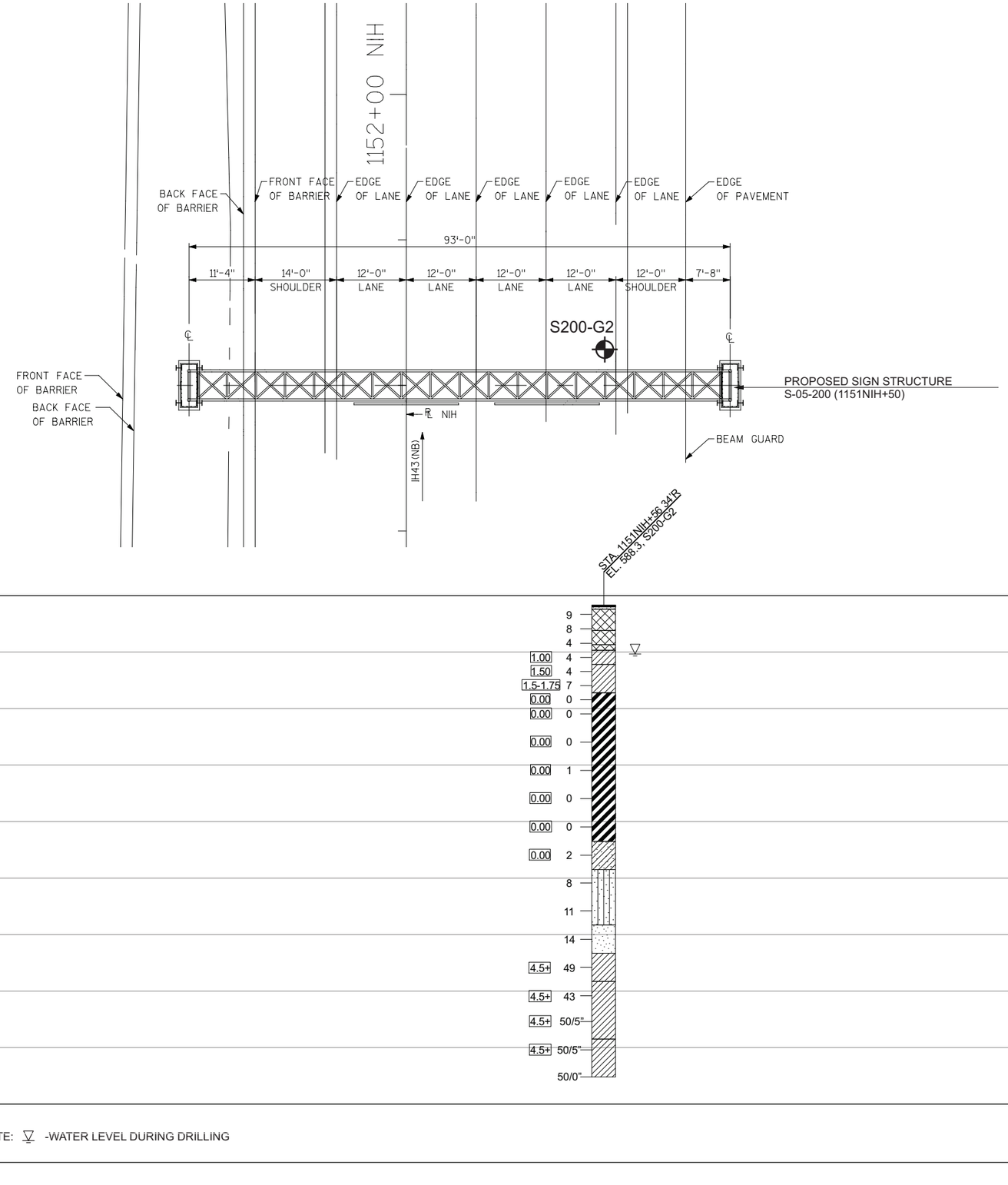
908

8

8

FILE NAME :S-05-0200.DGN
PLOT DATE :10/14/2014 9:43:00 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.by level.plt PEN :CEL.TextSub_ScreenControlByLevel.tbl

USH-41 (S-05-200)
05-BROWN, WI



NOTE: ▽ -WATER LEVEL DURING DRILLING

STATE PROJECT NUMBER

1133-10-71

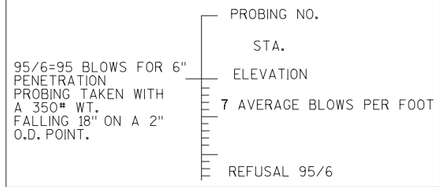
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

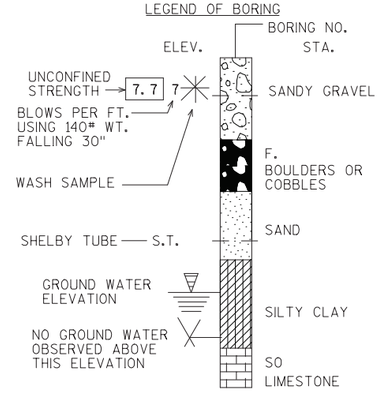
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-200

DRAWN BY RH | PLANS CK'D. DB

SUBSURFACE EXPLORATION

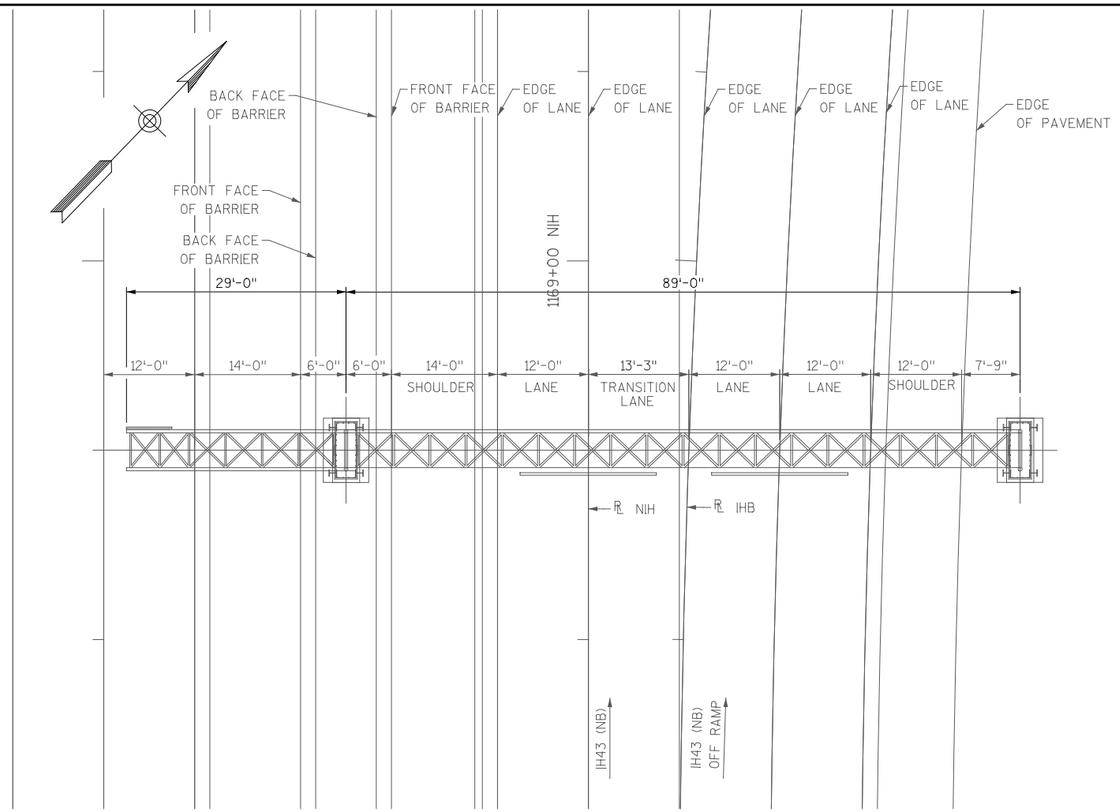
SHEET 4 OF 4

909

SCALE 1"=20'

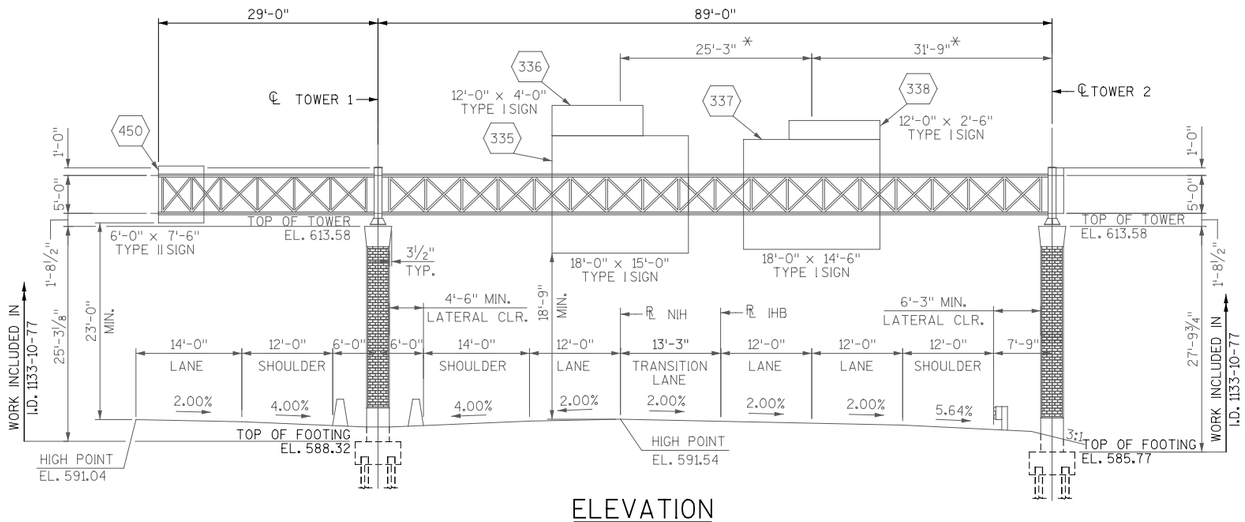
8

8



PLAN

STA. 1168NIH+75



ELEVATION

(LOOKING NORTHWEST AT FRONT FACE OF SIGN)

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

FOOTING

CONCRETE: ..... f'c = 3,500 psi

HIGH STRENGTH BAR
STEEL REINFORCEMENT: ..... fy = 60,000 psi

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

FOUNDATION DATA

SEE FOUNDATION DETAILS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S-05-201 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133-10-77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133-10-71.

LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL, THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	600
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	910
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1400
SPV.0060.951	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 8	EACH	60

CONTACTS
WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

WISCONSIN STEVEN J. MILLER 36937 MILWAUKEE, WI PROFESSIONAL ENGINEER

Steven J. Miller 10/5/14

STATE PROJECT NUMBER

1133-10-71

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-201

DE PERE - SUAMICO

COUNTY	TOWN/CITY/VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	VC	SJM

PLAN & ELEVATION

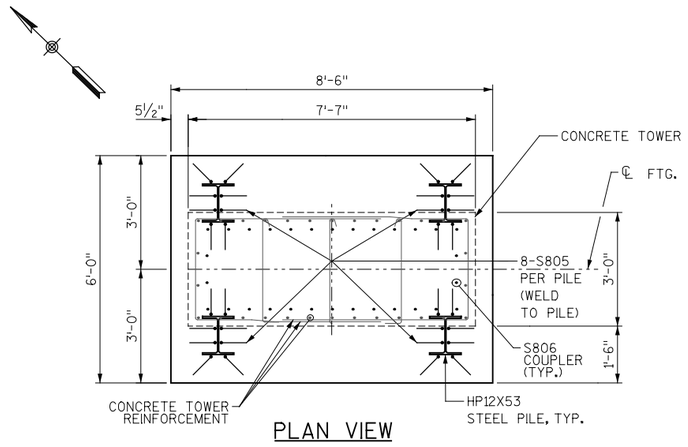
SHEET 1 OF 4

910

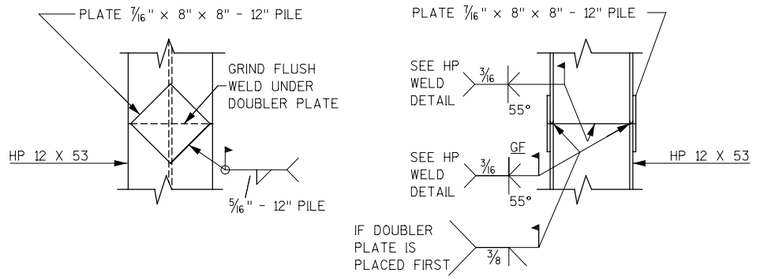
8

8

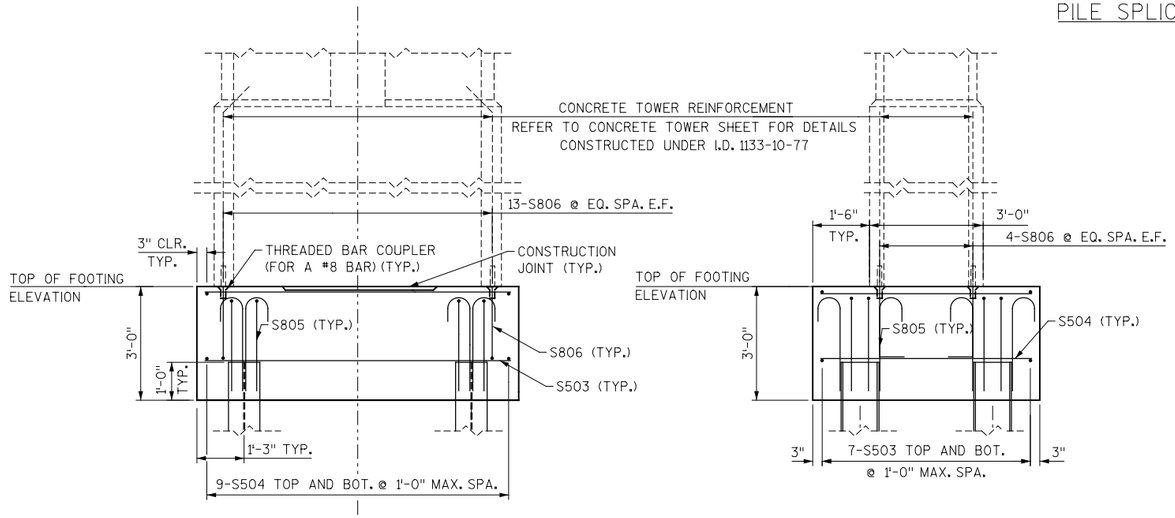
FILE NAME :S-05-020LDGN
PLOT DATE :9/18/2014 12:00:00 AM PLOT BY : Veronica Chavez-Vil DRV :Pdf_bw_HS.drv levelplt PEN :CEL_TextSub_ScreenControlByLevel.tbl



PLAN VIEW

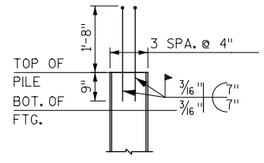


PILE SPLICE DETAIL

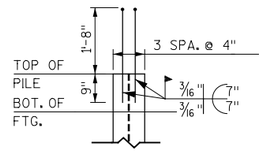


ELEVATION VIEW

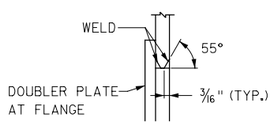
END VIEW



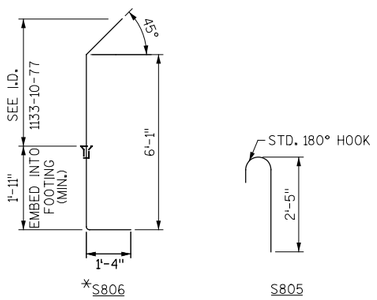
PILE HEAD DETAIL
WEB CONNECTION



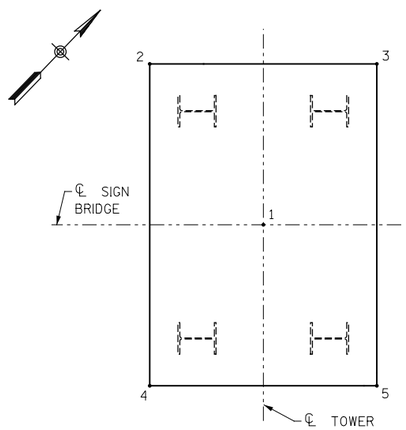
PILE HEAD DETAIL
FLANGE CONNECTION



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR



*S806 S805



NORTHING & EASTING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		32	3'-4"	▲		WELDED TO PILES
*S806	X	30	8'-9"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

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COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 80' IS REQUIRED FOR UPLIFT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".

NORTHING & EASTING TABLE

TOWER 1- TOP OF FOOTING ELEVATION = 588.32					
LOCATION	1	2	3	4	5
NORTHING	581549.85	581550.84	581555.00	581544.71	581548.86
EASTING	92107.48	92102.39	92106.71	92108.27	92112.60

NO.	DATE	REVISION	BY

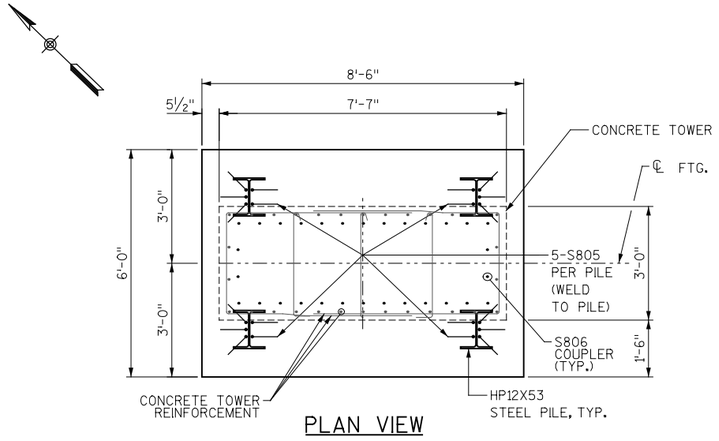
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-201

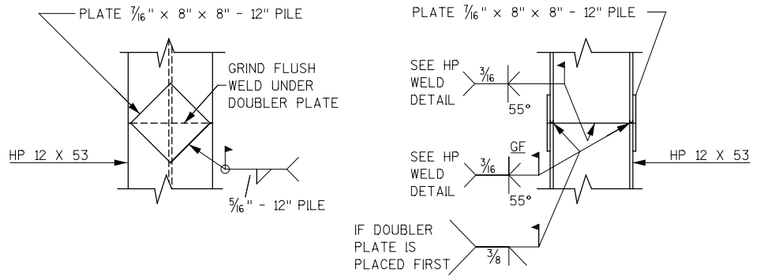
DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 FOUNDATION DETAILS

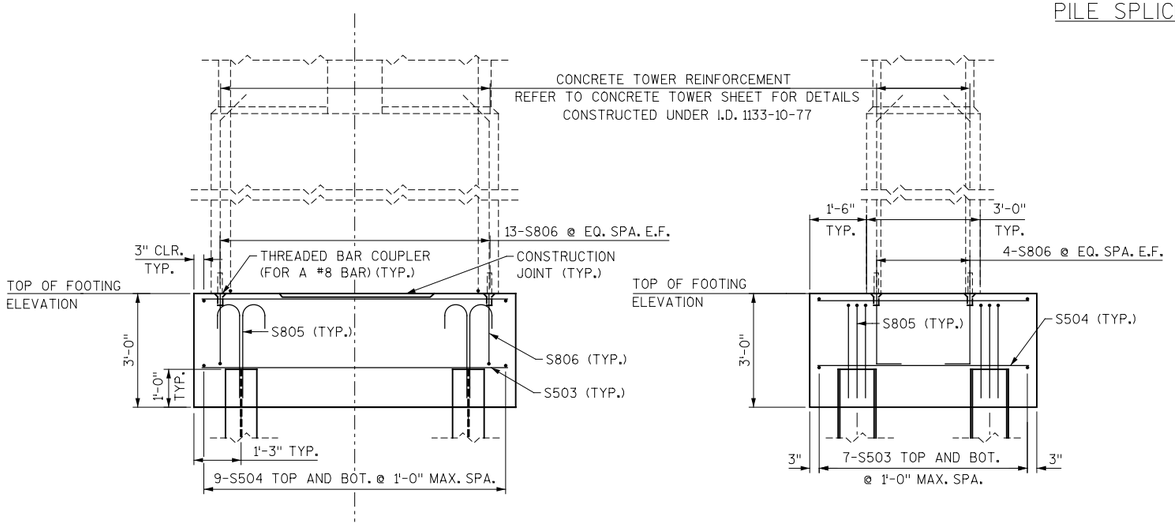
SHEET 2 OF 4
911



PLAN VIEW

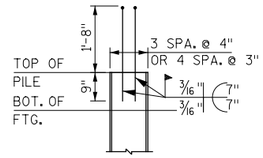


PILE SPLICE DETAIL

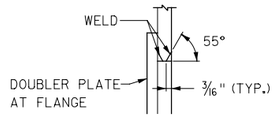


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



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FLANGE SHOWN, WEB SIMILAR

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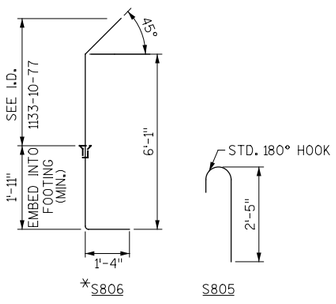

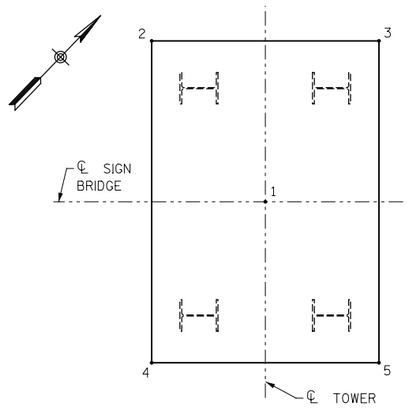

NORTHING & EASTING DETAIL

NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 585.77					
LOCATION	1	2	3	4	5
NORTHING	581611.63	581612.62	581616.77	581606.49	581610.64
EASTING	92171.55	92166.45	92170.78	92172.34	92176.67

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-201

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4
912

I.D. 2967-04-01/71

NOV 2006

8

FILE NAME : S-05-0201.DGN
PLOT DATE : 9/18/2014 1:19:01 AM PLOT BY : Veronica Chavezv8I
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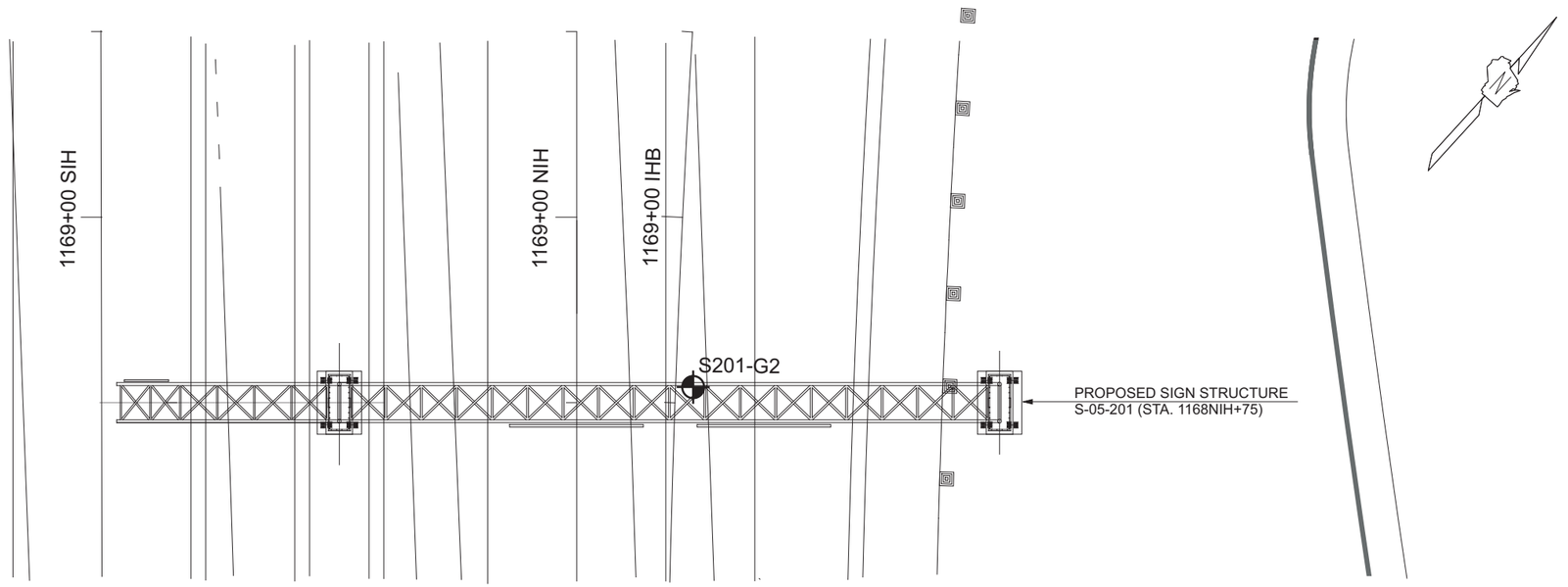
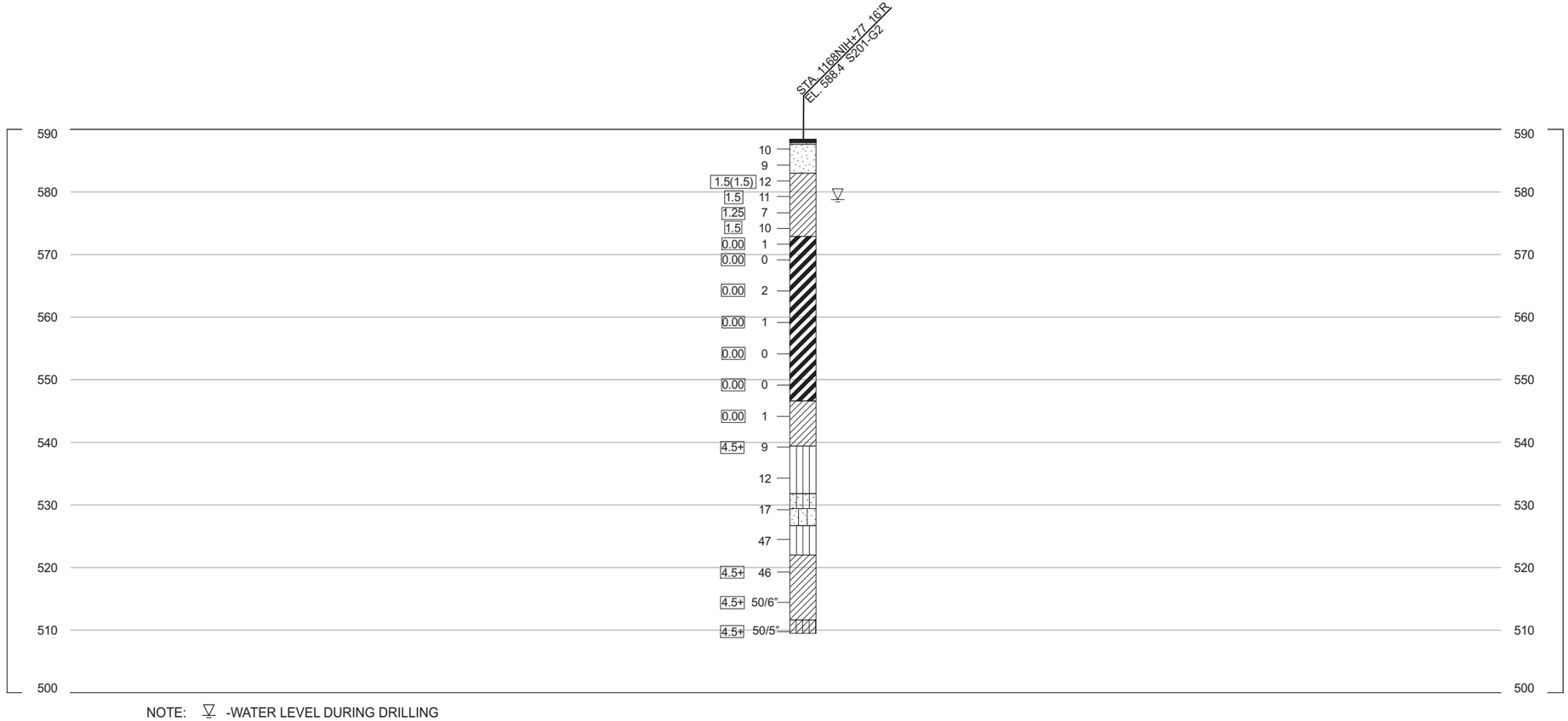
USH-41 (S-05-201)
05-BROWN, WI





NOTE: ▽ -WATER LEVEL DURING DRILLING

STATE PROJECT NUMBER
1133-10-71

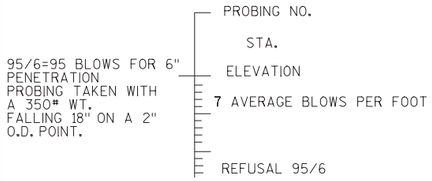
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

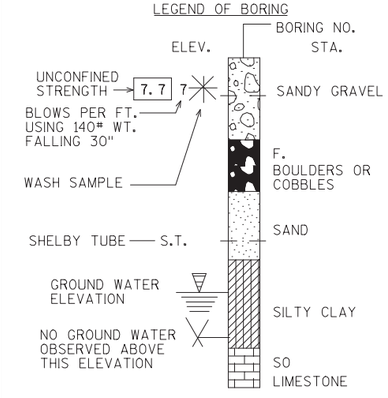
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-201

DRAWN BY RH PLANS CK'D. DB

SUBSURFACE EXPLORATION

SHEET 4 OF 4

913

SCALE 1"=20'

8

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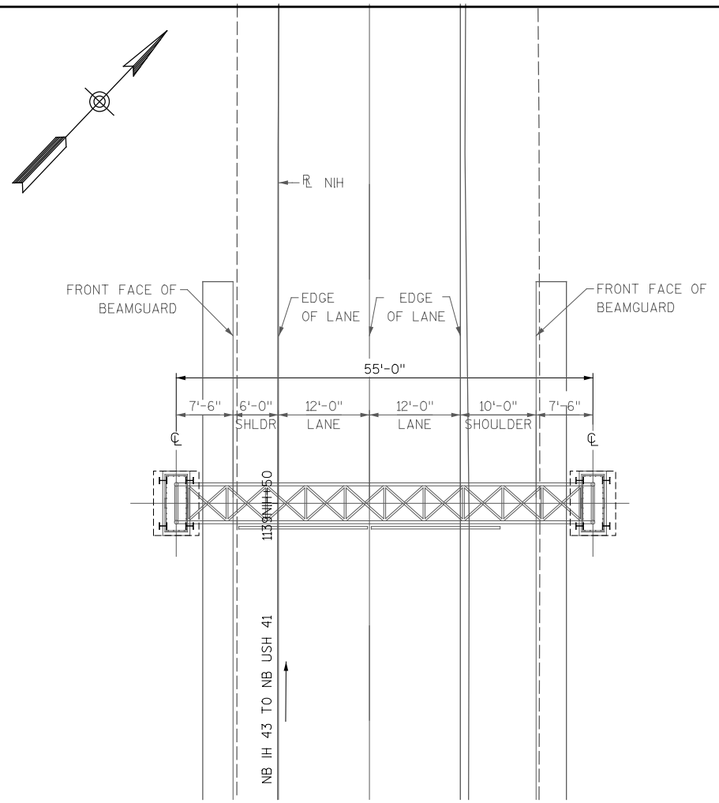
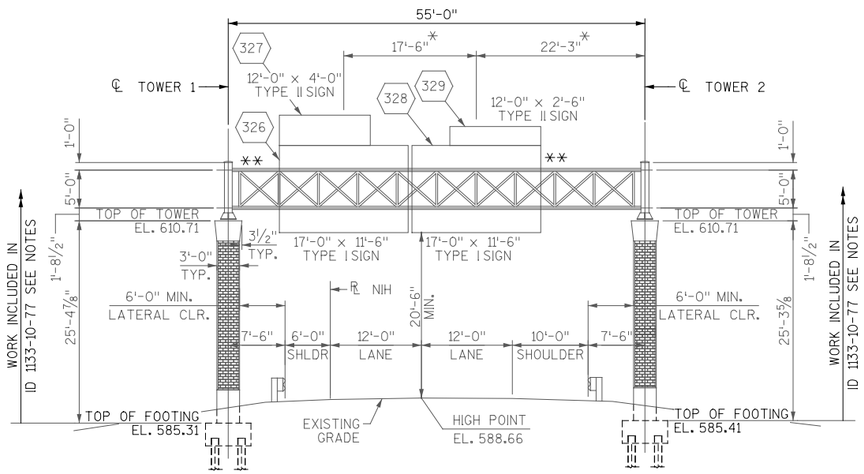


PLAN
STA. 1139NIH+50



ELEVATION
(LOOKING NORTHWEST AT FRONT FACE OF SIGN)

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 2 FOUNDATION DETAILS
4. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

FOOTING
CONCRETE: .....f'c = 3,500 psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.
LIVE LOAD - NONE.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

FOUNDATION DATA

SEE FOUNDATION DETAILS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

WORK FOR SIGN STRUCTURE TOWERS AND SIGN BRIDGE S-05-202 NOT INCLUDED IN THIS CONTRACT. THIS WORK SHALL BE CONSTRUCTED UNDER I.D. 1133-10-77.

CONSTRUCT FOUNDATIONS FOR TOWERS 1 & 2 TO TOP OF FOOTING ELEVATIONS SHOWN, UNDER I.D. 1133-10-71.

LOCATE FOUNDATIONS BASED ON NORTHING & EASTING TABLE PROVIDED ON FOUNDATION DETAIL SHEETS.

IF THE SIGN STRUCTURE IS TO BE INSTALLED NEAR THE BASE OF AN EXISTING RETAINING WALL, THE CONTRACTOR IS TO NOTE THAT SPECIAL TEMPORARY SUPPORT OF THE SIGN BASE EXCAVATION MAY BE REQUIRED TO PROTECT THE EXISTING WALL AND FACILITATE THE INSTALLATION OF THE NEW SIGN STRUCTURE BASE. ANY ADDITIONAL SUPPORT NEEDED WOULD BE CONSIDERED INCIDENTAL TO THE SIGN STRUCTURE BID ITEM.

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* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** PERMANENT SIGNS TO BE INSTALLED UNDER CONTRACT 1133-10-77

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	232
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	600
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	1020
SPV.0060.950	BAR COUPLERS VERTICAL FOOTING REINFORCEMENT NO. 7	EACH	60

CONTACTS
WisDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

STATE PROJECT NUMBER
1133-10-71

WISCONSIN PROFESSIONAL ENGINEER
STEVEN J. MILLER
36937
MILWAUKEE, WI
Steven Jmiller 10/10/14

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-05-202

DE PERE - SUAMICO

COUNTY		~~TOWN/CITY~~/VILLAGE	
BROWN COUNTY			HOWARD
DESIGN SPEC. AASHTO STD. SPEC.			
DESIGNED BY VC	DESIGN CK'D. CES	DRAWN BY VC	PLANS CK'D. SJM

PLAN & ELEVATION

SHEET 1 OF 4
914

8

8

FILE NAME :S-05-0202.DGN
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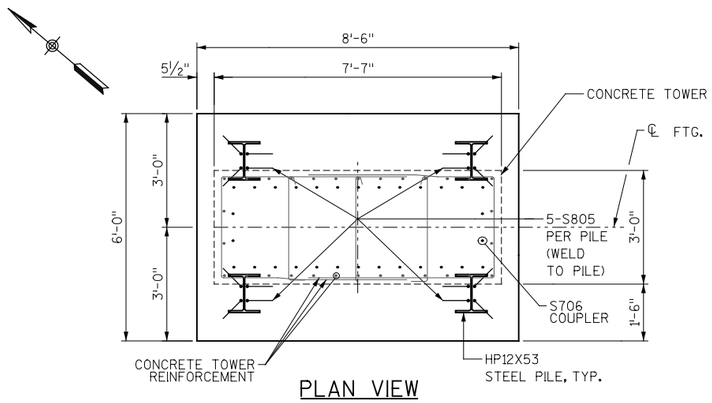
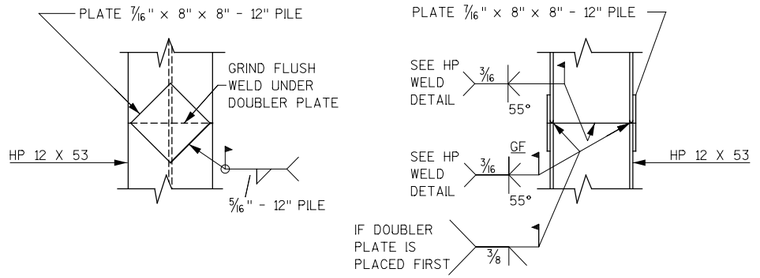
STATE PROJECT NUMBER

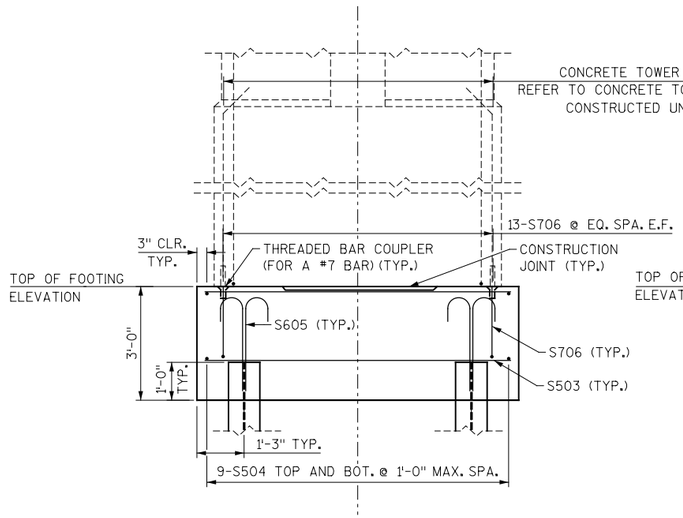
1133-10-71



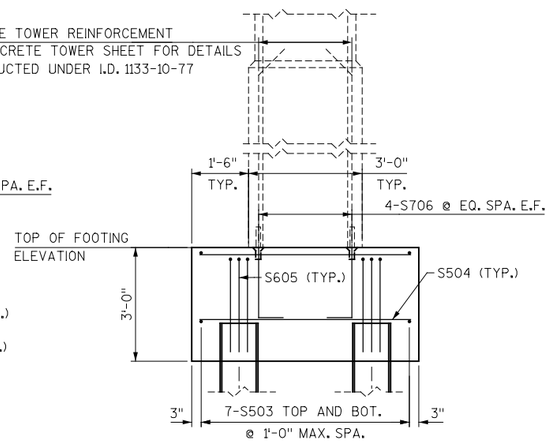
PLAN VIEW



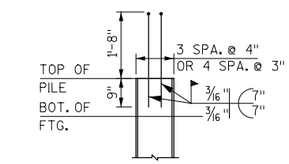
PILE SPLICE DETAIL



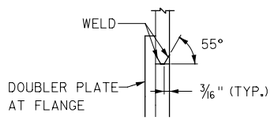
ELEVATION VIEW



END VIEW

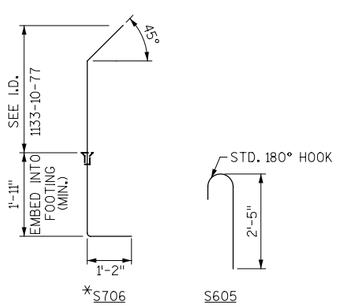


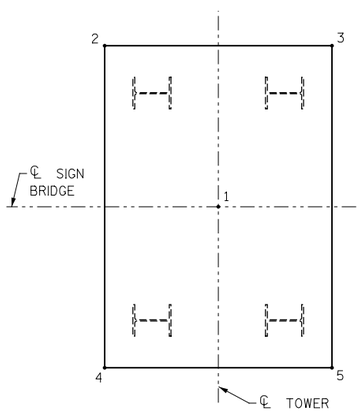
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S605		16	3'-4"	▲		WELDED TO PILES
S706	X	30	8'-4"	▲		CAP BEAM VERTICAL

*BAR COUPLERS REQUIRED

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

COUPLERS SHALL BE THREADED. THE CONTRACTOR WILL PROVIDE THE COMPLETE COUPLER ASSEMBLY. TOP OF COUPLERS SHALL BE FLUSH WITH TOP OF CONCRETE FOOTING CAP. THE EXPOSED COUPLER IN FOOTING SHALL BE PROTECTED AS DIRECTED BY THE MANUFACTURER WITH THE APPROVAL OF THE ENGINEER.

FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 28'IS REQUIRED FOR UPLIFT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".

NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 585.31					
LOCATION	1	2	3	4	5
NORTHING	579457.08	579458.06	579462.22	579451.94	579456.11
EASTING	94151.08	94145.97	94150.29	94151.87	94156.19

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-202

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 4

915

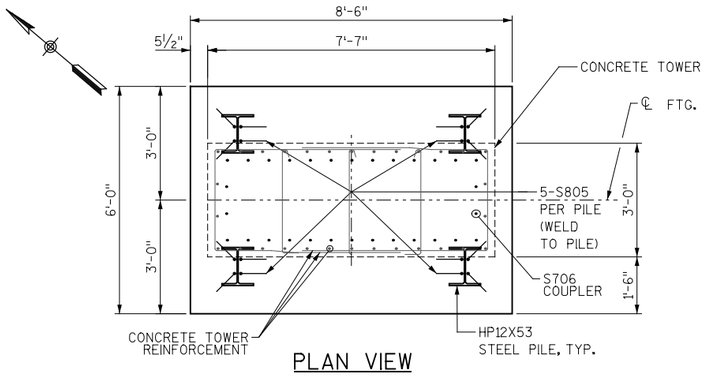
8

8

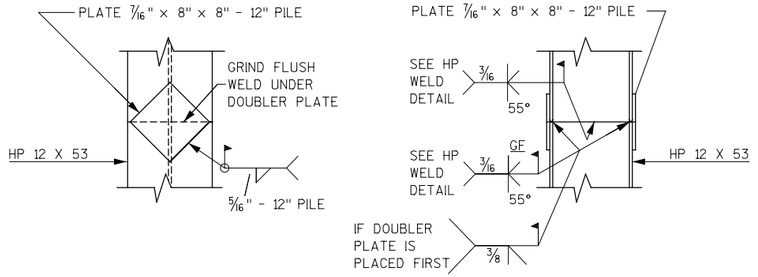
FILE NAME :S-05-0202.DGN
PLOT DATE :10/10/2014 12:49:32 AM PLOT BY : MarkSv8i DRV :Pdf_bw_HS.by levelzit PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

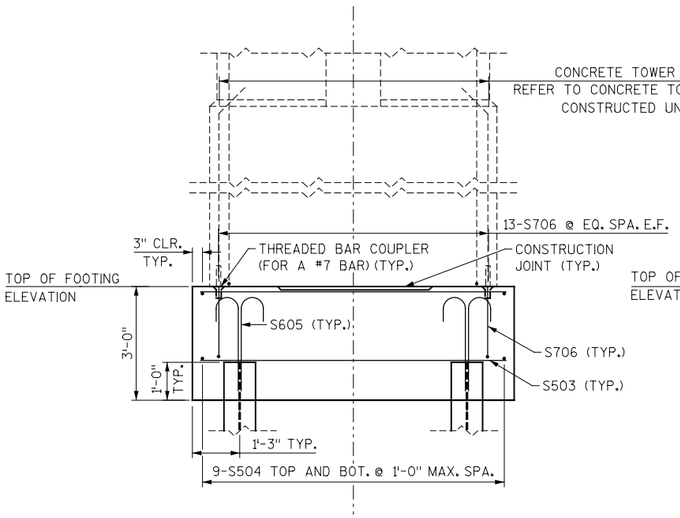
1133-10-71



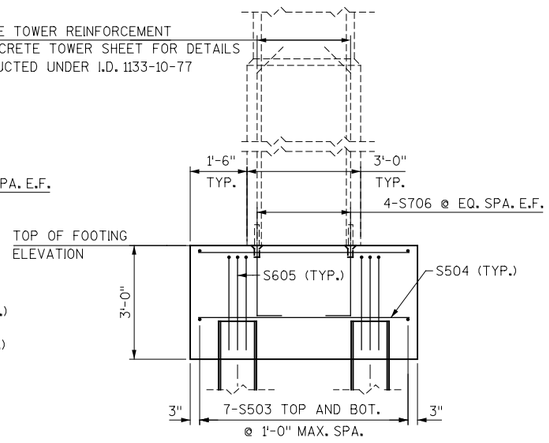
PLAN VIEW



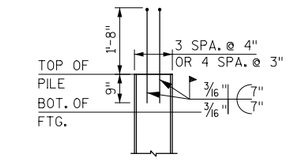
PILE SPLICE DETAIL



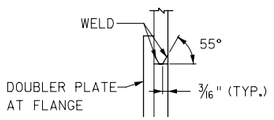
ELEVATION VIEW



END VIEW

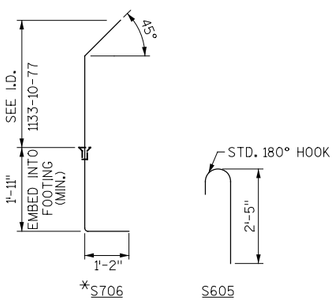


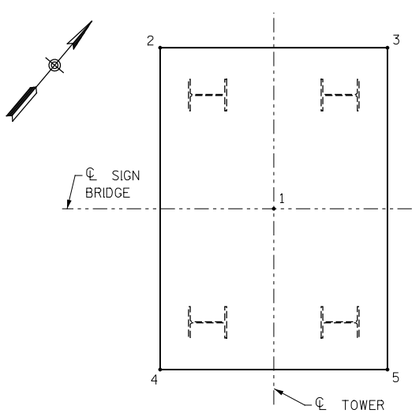
PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





NORTHING & EASTING DETAIL

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NORTHING & EASTING TABLE

TOWER 2 - TOP OF FOOTING ELEVATION = 585.41					
LOCATION	1	2	3	4	5
NORTHING	579495.26	579496.24	579500.40	579490.12	579494.28
EASTING	94190.67	94185.56	94189.88	94191.46	94195.78

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-202

DRAWN BY CES | PLANS CK'D. VC

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 3 OF 4

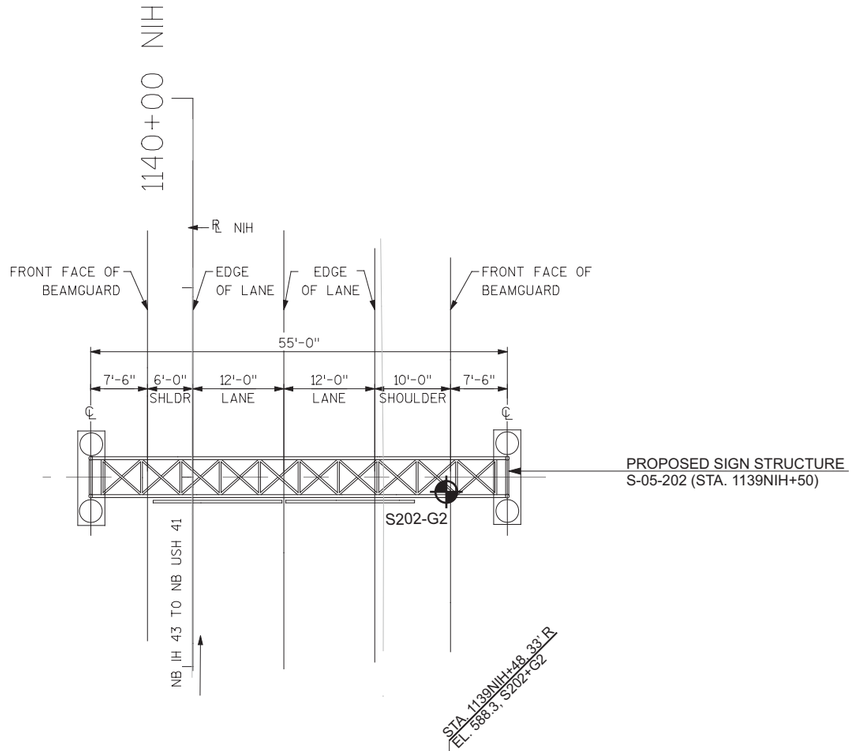
916

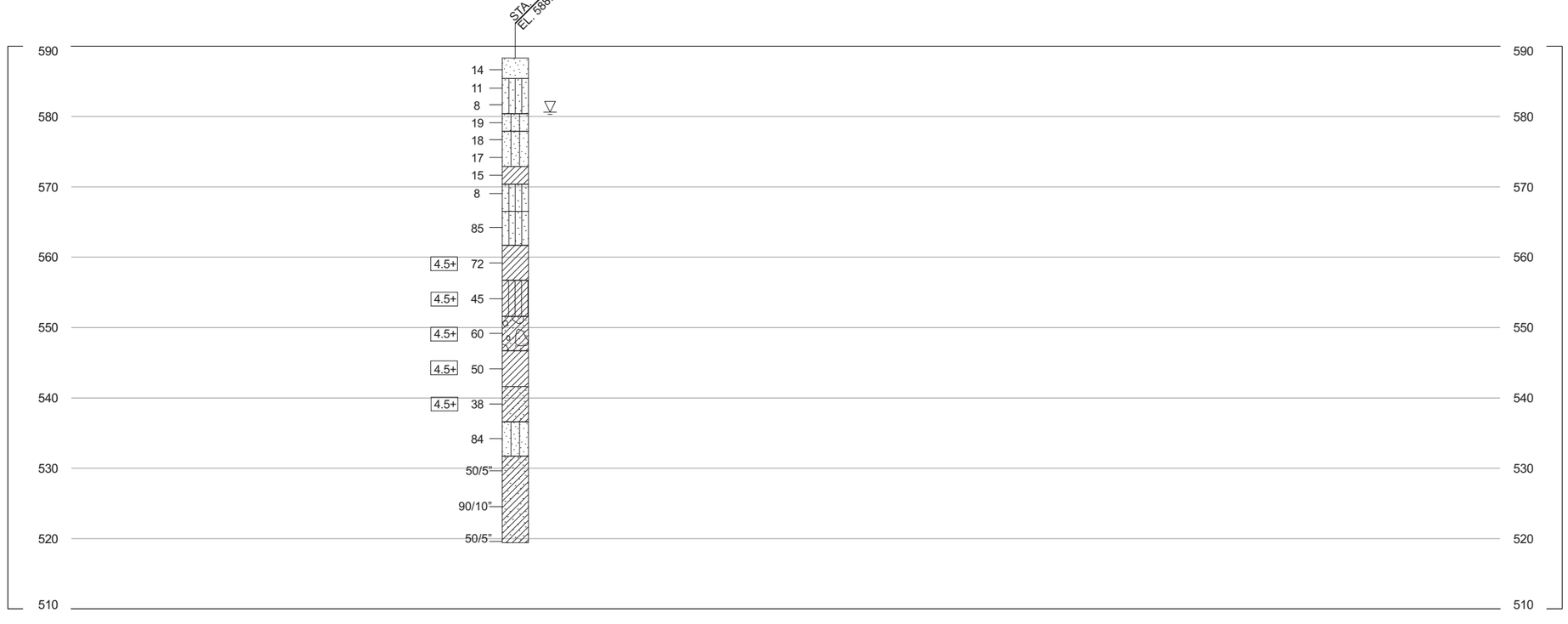
8

8

FILE NAME :S-05-0202.DGN
PLOT DATE :10/10/2014 12:49:32 AM PLOT BY : MarkSv8i DRV :Pdf_bw_HS.by level.pit PEN :CEL.TextSub_ScreenControlByLevel.tbl

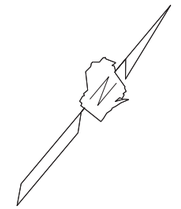
USH-41 (S-05-202)
05-BROWN, WI





NOTE: ▽ -WATER LEVEL DURING DRILLING

POSSIBLE BEDROCK AND/OR BOULDER AT ELEVATION 519.4 FEET



STATE PROJECT NUMBER

1133-10-71

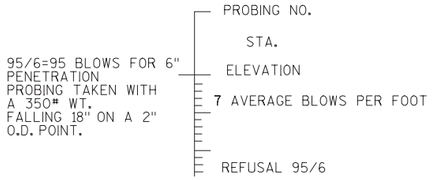
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

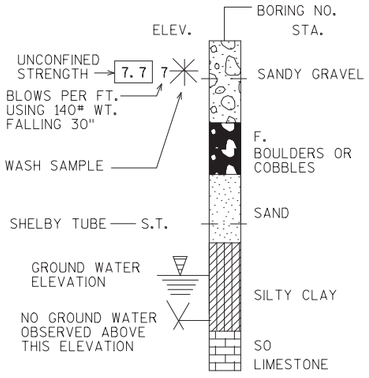
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-202

DRAWN BY RH PLANS CK'D. NS

SUBSURFACE EXPLORATION

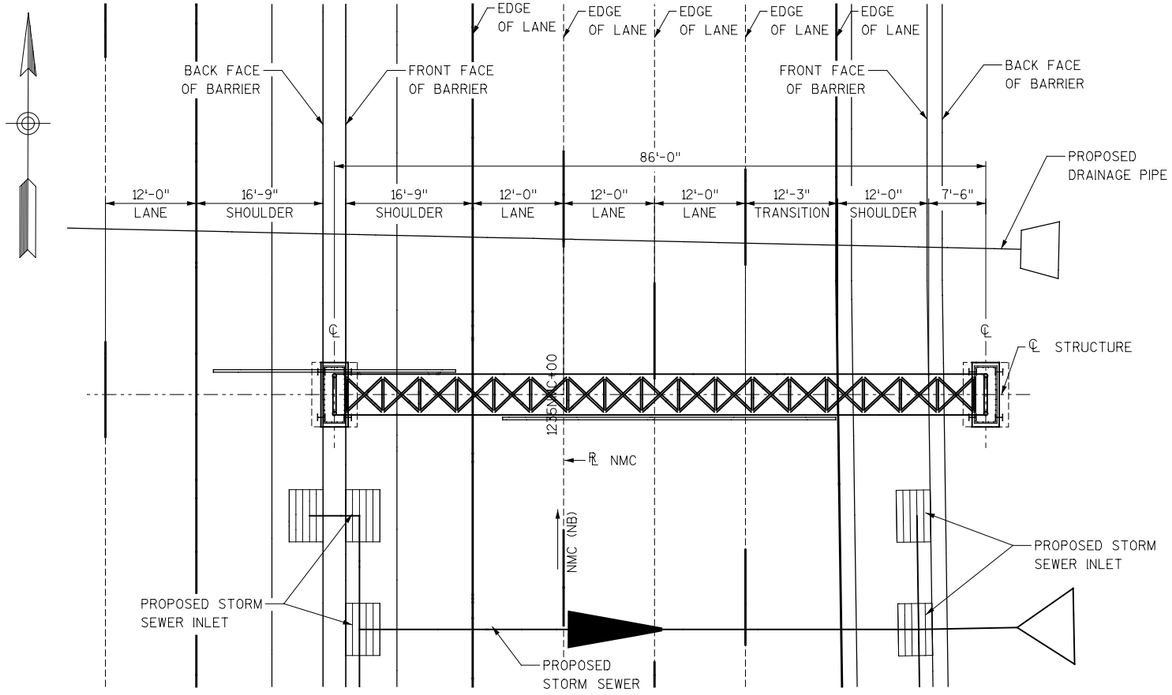
SHEET 4 OF 4

917

SCALE 1"=20'

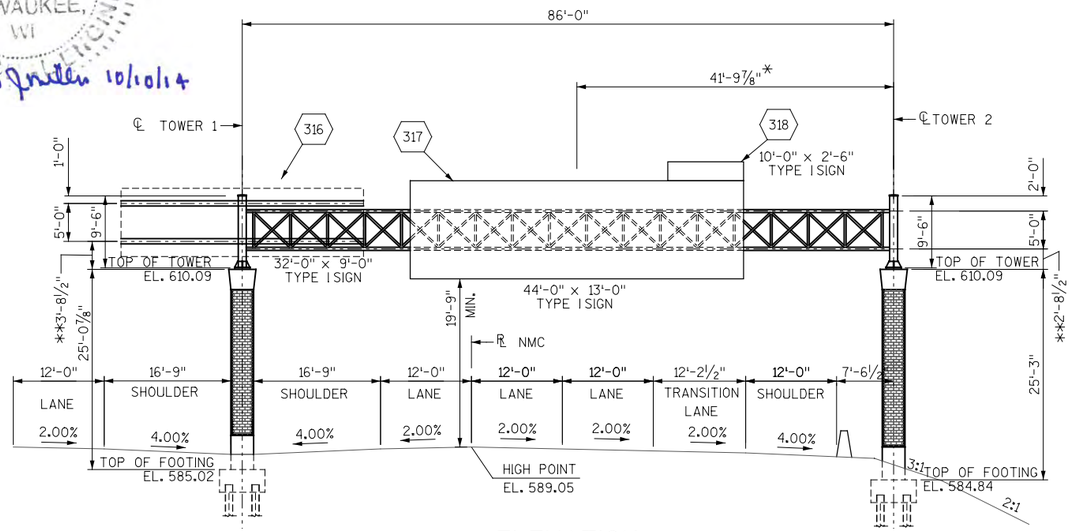
8

8



PLAN

1235NMC+00



ELEVATION

(LOOKING NORTH AT FRONT FACE OF SIGN)

STEVEN J. MILLER 36937 MILWAUKEE, WI PROFESSIONAL ENGINEER WISCONSIN

Steven Jmiller 10/10/14

LIST OF DRAWINGS

1. PLAN & ELEVATION
2. CONCRETE TOWER 1 FOUNDATION DETAILS
3. CONCRETE TOWER 1 DETAILS
4. CONCRETE TOWER 2 FOUNDATION DETAILS
5. CONCRETE TOWER 2 DETAILS
6. GALVANIZED STEEL SIGN BRIDGE
7. SIGN BRIDGE DETAILS
8. CONCRETE TOWER 1 AESTHETIC DETAILS
9. CONCRETE TOWER 2 AESTHETIC DETAILS
10. SUBSURFACE EXPLORATION

ULTIMATE DESIGN STRESSES:

TOWER

CONCRETE: .....f'c = 3,500 psi

HIGH STRENGTH BAR
STEEL REINFORCEMENT: .....fy = 60,000 psi

SIGN BRIDGE

STEEL COLUMN PIPE: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42

STEEL PIPE MEMBERS OF TRUSS: .....fy = 42,000 psi
A.P.I. SPEC 5L GRADE X42

PLATES, BARS, STRUCTURAL ANGLES: .....fy = 36,000 psi
A.S.T.M. A709 GRADE 36

STEEL ANCHOR BOLTS: .....fy = 55,000 psi
A.A.S.H.T.O. M314-90 GRADE 55

ALL BOLTED CONNECTIONS: ¾" ϕ A325 BOLTS,
GALVANIZED A.S.T.M. A153, CLASS C

DESIGN DATA

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.

LIVE LOAD - NONE.

ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.

WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½ (WIND‡)	133

‡ MIN. VALUE OF 25 PSF FOR GR. 3

TYPE I SIGN DESIGN DATA

	MAX DESIGN SIGN AREA (SQ. FT.)	MAX. TYPE I SIGN DEPTH
FULL SPAN	1152	16'-0"
BUTTERFLY	288	9'-0"

CONTACTS

WISDOT BRIDGE OFFICE CONTACT
BILL DREHER: (608) 266-8489

CONSULTANT CONTACT, COLLINS ENGINEERS INC.
STEVEN J. MILLER: (414) 282-6905

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	515
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	52
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	840
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	8600
641.6600	SIGN BRIDGE S-05-234	LS	1
SPV.0165.700	ARCHITECTURAL SURFACE TREATMENT	SF	540
SPV.0165.701	STAINING CONCRETE	SF	850
SPV.0165.702	STAINING CONCRETE BRICK	SF	540
SPV.0165.950	SIGN BLANKS LEFT IN PLACE	SF	150.5

STATE PROJECT NUMBER

1133-10-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

CENTER SIGNS VERTICALLY ON CHORD/TRUSS.

CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO FABRICATION OF CONCRETE TOWERS AND SIGN BRIDGE.

EXCAVATION REQUIRED TO CONSTRUCT THE CONCRETE TOWER FOUNDATION ON THE PILES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

PROVIDE AN IDENTIFICATION PLAQUE FOR THE SIGN BRIDGE IN ACCORDANCE WITH SDD STRUCTURE IDENTIFICATION PLAQUES, SIGN BRIDGES AND OVERHEAD SIGN SUPPORT. FASTEN THE IDENTIFICATION PLAQUE TO THE TOWER USING 3 - ¼" DIAMETER BY 1¾" LONG STAINLESS STEEL CONCRETE SCREWS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE S-05-234"

SIGNS OR BLANKS SHALL BE INSTALLED ON THE TRUSS AT THE TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE BRIDGE, 2'-0" DEEPER THAN CENTER TO CENTER OF CHORDS & SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS. SIGN BLANKS AND MOUNTING HARDWARE SHALL BE INCIDENTAL TO "SIGN BRIDGE S-05-234"

THE UPPER 12" OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE A.A.S.H.T.O. SPECIFICATION AS STATED IN SECTION 641. OF THE WISDOT STANDARD SPECIFICATIONS. WELD TEST AS PER AWS D1.1.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF UNIT CAN BE GALVANIZED IN ONE PIECE.

THE SIGN SUPPORTS CONCRETE MASONRY QUANTITY IS BASED ON THE OUT-TO-OUT CONCRETE DIMENSIONS. NO DEDUCTIONS IN QUANTITY FOR THE ARCHITECTURAL SURFACE TREATMENT RELIEF HAVE BEEN MADE.

PROVIDE A ¾" CHAMFER OR 1" RADIUS ON ALL EXPOSED CONCRETE EDGES.

⟨##⟩ - REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEETS.

* SIGN PANEL DIMENSIONS ARE TO THE CENTER OF THE SIGN PANEL. CONTRACTOR TO FIELD VERIFY SIGN PANEL DISPLAYS CORRELATE WITH ROADWAY LANE LAYOUT.

** TOWER DIMENSION HAS BEEN INCREASED TO ACCOMMODATE PANEL 316.

NO.	DATE	REVISION	BY

COLLINS ENGINEERS INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 10/20/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE S-05-234

DE PERE - SUAMICO

COUNTY	~~TOWN/CITY/~~VILLAGE
BROWN COUNTY	HOWARD

DESIGN SPEC. AASHTO STD. SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VC	CES	VC	SJM

PLAN & ELEVATION

SHEET 1 OF 10

918

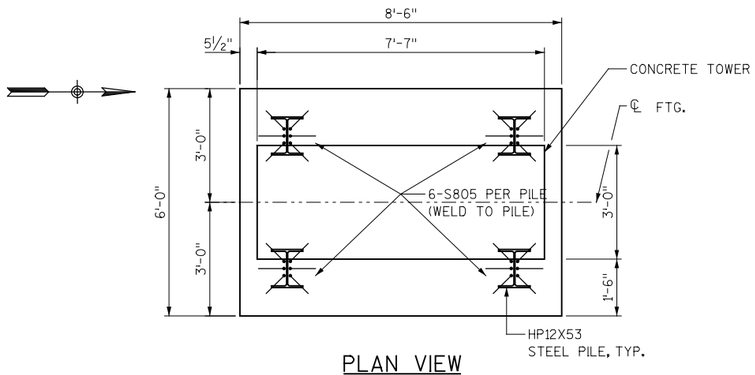
8

8

FILE NAME :S-05-0234.DGN
PLOT DATE :10/10/2014 10:43:16 AM PLOT BY : MarkSv8i DRV :Pdf_bw_HS.by levelplt PEN :CEL_TextSub_ScreenControlByLevel.tbl

STATE PROJECT NUMBER

1133-10-71

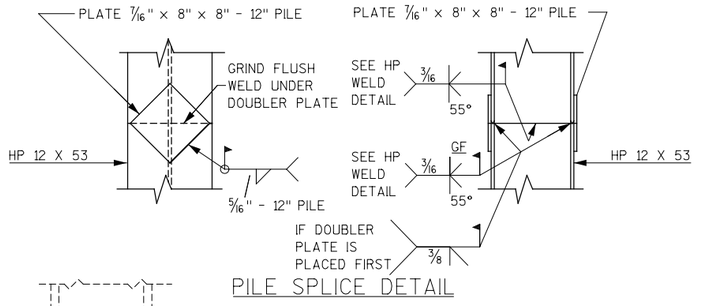


PLAN VIEW

BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
S412	2 SERIES OF 4	12'-3" TO 12'-10"
S417	2 SERIES OF 4	3'-4" TO 3'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



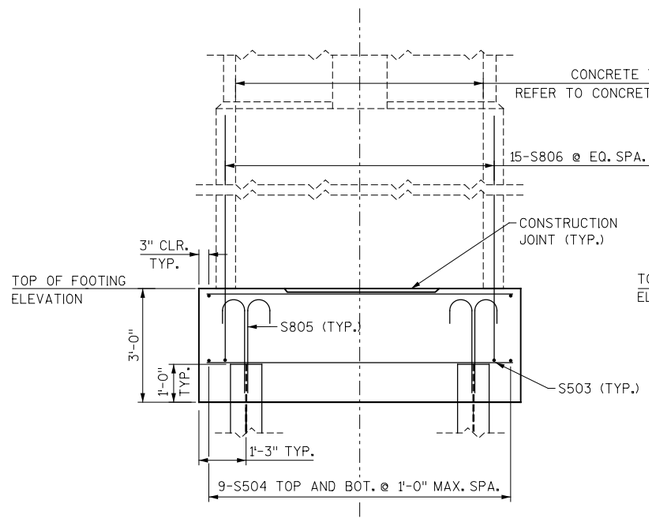
PILE SPLICE DETAIL

BILL OF BARS

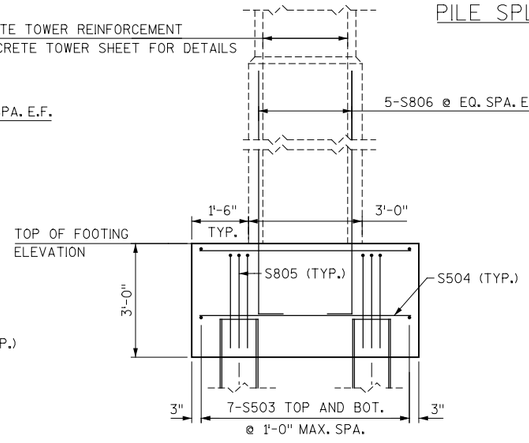
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		24	3'-4"	▲		WELDED TO PILES
S806	X	36	12'-1"	▲		CAP BEAM VERTICAL
S507	X	20	12'-5"	▲		HORZ. STIRRUP, BOTTOM OF TOWER
S808	X	36	24'-10"	▲		VERT. REINF., MIDDLE OF TOWER
S409	X	4	12'-11"			VERT. REINF., MIDDLE OF TOWER
S510	X	36	11'-6"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S411	X	28	5'-1"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S412	X	8	12'-7"	▲	△	HORZ. STIRRUP, TOP OF TOWER
S413	X	4	5'-0"	▲		VERT. REINF., TOP OF TOWER
S414	X	20	2'-4"			VERT. REINF., TOP OF TOWER
S415	X	30	3'-4"	▲		HORZ. CROSSTIE, BOTTOM OF TOWER
S416	X	54	2'-11"	▲		HORZ. CROSSTIE, MIDDLE OF TOWER
S417	X	8	3'-7"	▲	△	HORZ. CROSSTIE, TOP OF TOWER

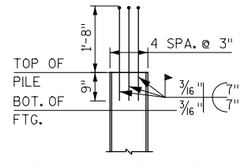
△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WIEGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



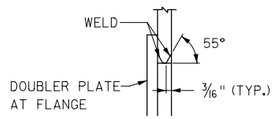
ELEVATION VIEW



END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF FOOTING ELEVATIONS.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

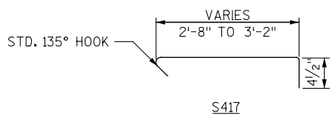
FOUNDATION DATA

SIGN BRIDGE TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. A MINIMUM PILE LENGTH OF 68'IS REQUIRED FOR UPLIFT.

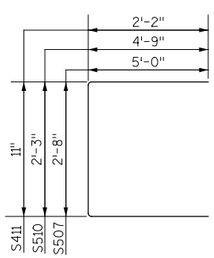
**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

STEEL HP PILE MATERIAL SHALL BE A.S.T.M. A572. Fy=50,000 psi. PILE SPLICES (IF REQUIRED) SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES.

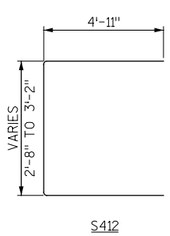
WELDING OF THE REINFORCEMENT BARS TO THE PILES SHALL BE MADE BY A CERTIFIED WELDER USING LOW HYDROGEN ELECTRODES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL HP 12-INCH X 53 LB".



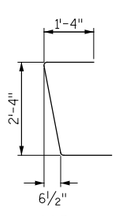
S417



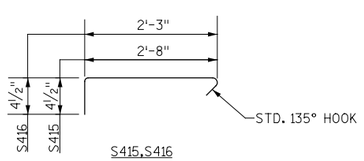
S507,S510,S411



S412

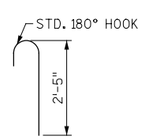


S413



S415,S416

S806



S805

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 FOUNDATION DETAILS

SHEET 2 OF 10

919

NOV 2006

8

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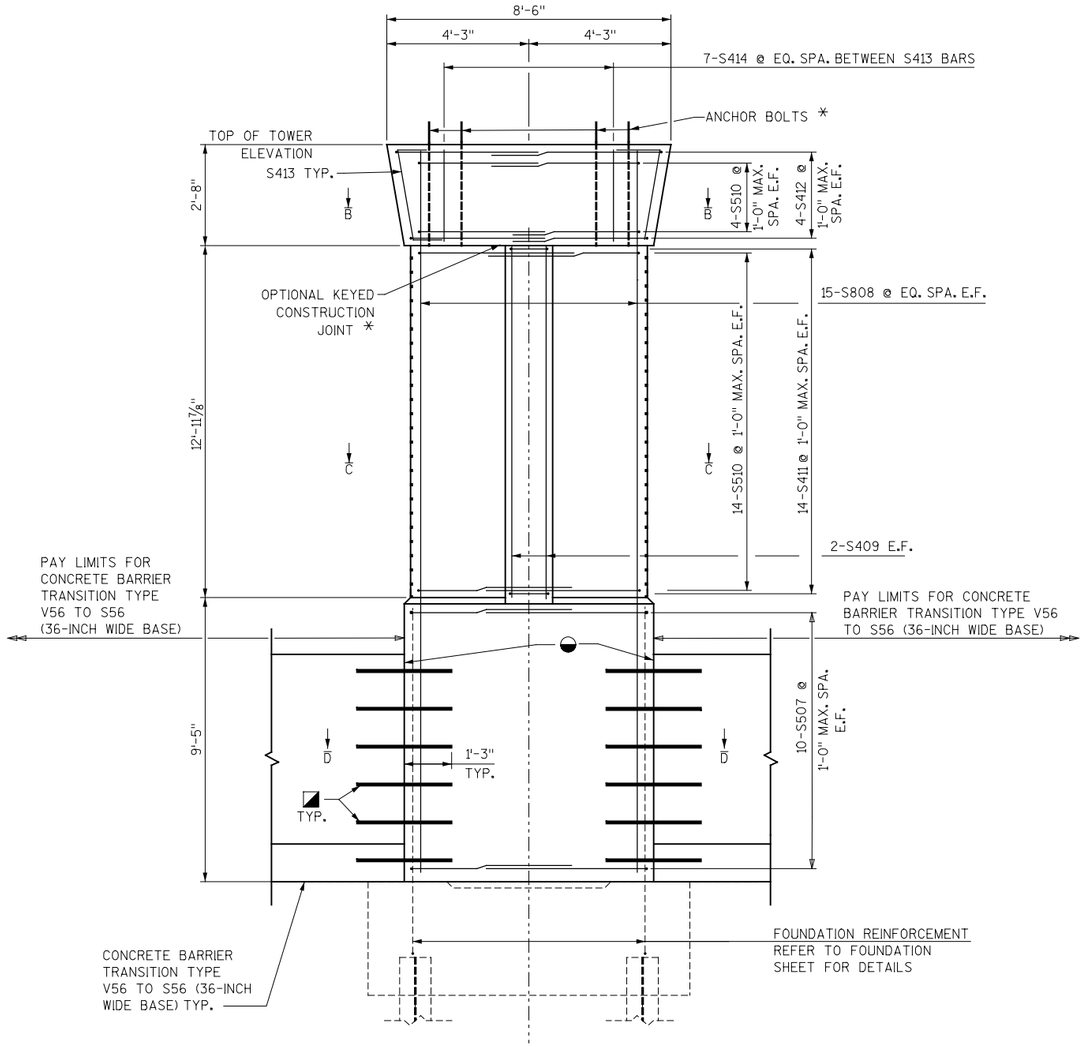
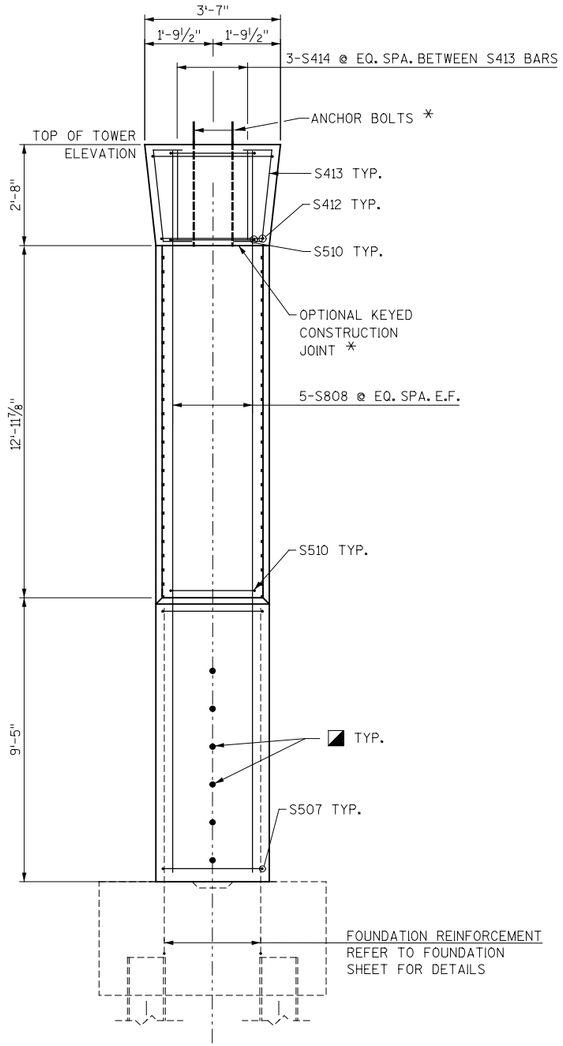
STATE PROJECT NUMBER

1133-10-71



ELEVATION VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS



END VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS

TOWER NOTES

DRAWING SHALL NOT BE SCALED.

"E.F." SIGNIFIES EACH FACE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR FROM THE FACE OF THE SMOOTH CONCRETE AND 2½" FROM THE FACE OF THE ARCHITECTURAL SURFACE TREATMENT, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" x 6" x 1'-6" LONG BEVELED KEYWAY.

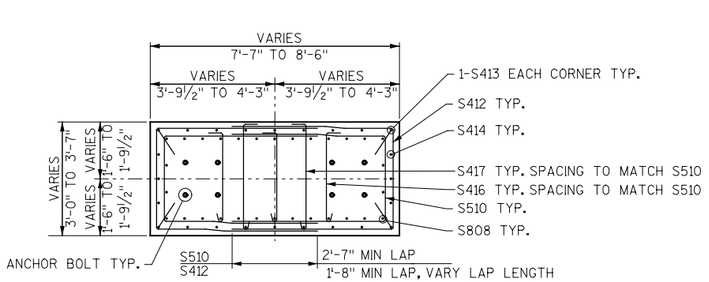
COORDINATE THE LOCATION OF THE ELECTRICAL CONDUIT IN THE TOWER TO MATCH THE LOCATION OF THE CONDUIT IN THE CONCRETE BARRIER.

* PLACE ANCHOR BOLTS PRIOR TO POURING MIDDLE SECTION OF CONCRETE TOWER. OPTIONAL KEYED CONSTRUCTION JOINT MAY BE LOCATED AT A GROUT LINE BELOW THE ANCHOR ASSEMBLIES. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS THE CONSTRUCTION JOINT. OMIT JOINT BEVELED EDGES.

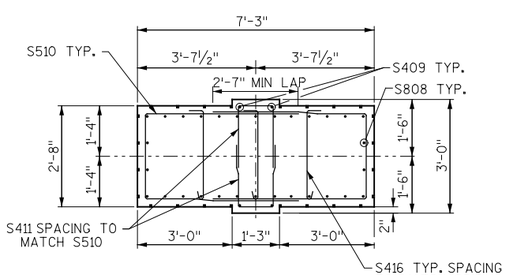
◪ PLACE 1" ϕ PLAIN (SMOOTH) ROUND DOWEL BARS, 2'-6" LONG BETWEEN BARRIER. ASTM A36 MATERIAL MAY BE SUBSTITUTED FOR AASHTO M31. SPACE DOWELS AT 1'-0". COST OF ITEMS ARE TO BE INCLUDED IN THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

◒ PLACE 1/2" EXPANSION JOINT FILLER BETWEEN TOWER AND BARRIER WALL, TYP. THE JOINT FILLER SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY"

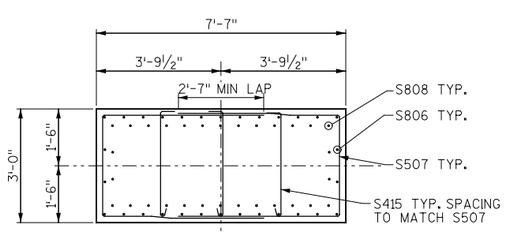
CONTRACTOR TO FIELD VERIFY FOUNDATION DETAILS PRIOR TO CONSTRUCTION OF TOWER. SEE FOUNDATION DETAILS SHEET FOR TOWER 1.



SECTION B - B



SECTION C - C



SECTION D - D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 DETAILS

SHEET 3 OF 10

920

NOV 2006

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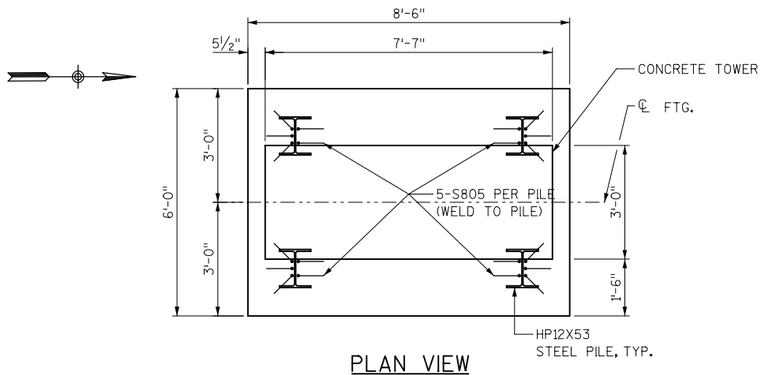
8

FILE NAME : S-05-0234.DGN PLOT DATE : 10/10/2014 10:14:18 AM PLOT BY : MarkSv8I

Pdf Iw JIG.3y ww4d3t
CELLTEXTSUBS.SHEENCONTROLS.ENTLEVEL.TBL

STATE PROJECT NUMBER

1133-10-71

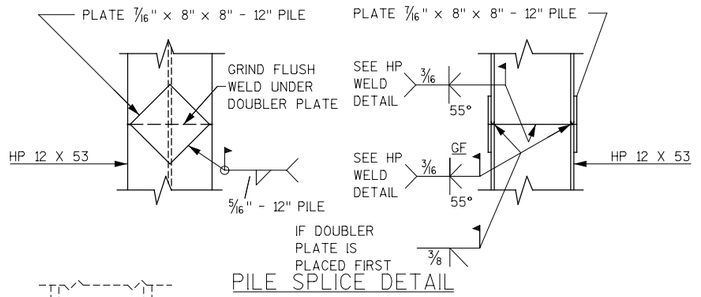


PLAN VIEW

BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
S412	2 SERIES OF 4	12'-3" TO 12'-10"
S417	2 SERIES OF 4	3'-4" TO 3'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



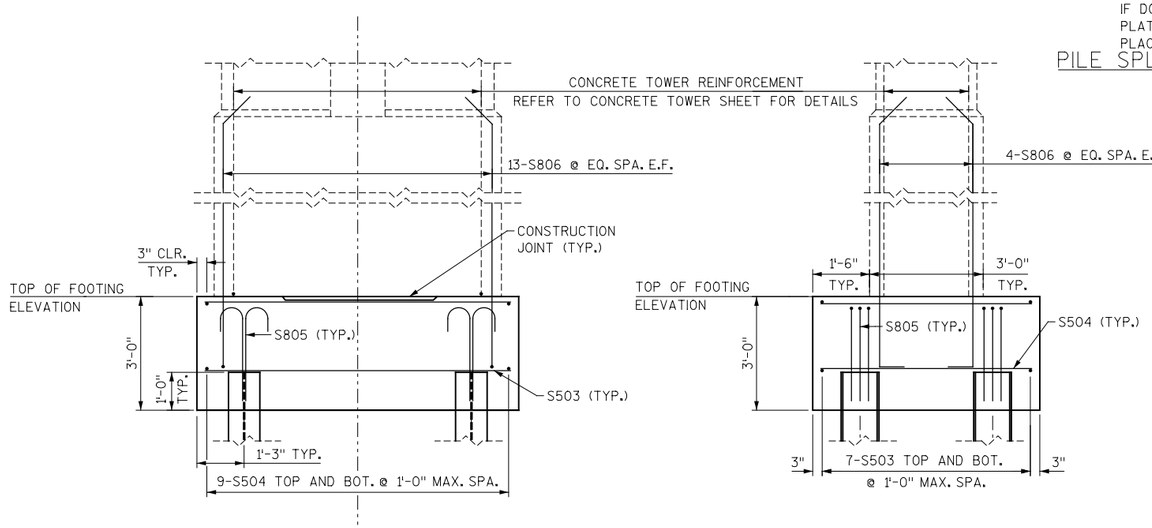
PILE SPLICE DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

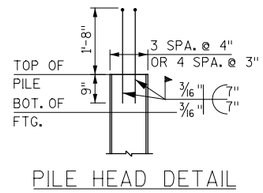
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S503		14	8'-0"			CAP LONGITUDINAL
S504		18	5'-6"			CAP TRANSVERSE
S805		20	3'-4"	▲		WELDED TO PILES
S806	X	30	8'-10"	▲		CAP BEAM VERTICAL
S507	X	10	12'-5"	▲		HORZ. STIRRUP, BOTTOM OF TOWER
S808	X	30	28'-10"	▲		VERT. REINF., MIDDLE OF TOWER
S409	X	4	20'-9"			VERT. REINF., MIDDLE OF TOWER
S510	X	46	11'-6"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S411	X	38	5'-1"	▲		HORZ. STIRRUP, MIDDLE OF TOWER
S412	X	8	12'-7"	▲	△	HORZ. STIRRUP, TOP OF TOWER
S413	X	4	5'-0"	▲		VERT. REINF., TOP OF TOWER
S414	X	20	2'-4"			VERT. REINF., TOP OF TOWER
S415	X	15	3'-4"	▲		HORZ. CROSSTIE, BOTTOM OF TOWER
S416	X	69	2'-11"	▲		HORZ. CROSSTIE, MIDDLE OF TOWER
S417	X	8	3'-7"	▲	△	HORZ. CROSSTIE, TOP OF TOWER

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WIEGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

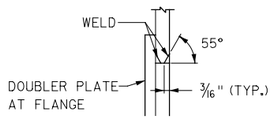


ELEVATION VIEW

END VIEW



PILE HEAD DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

FOUNDATION NOTES

DRAWING SHALL NOT BE SCALED. "FTG" SIGNIFIES FOOTING.

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FOUNDATION DATA

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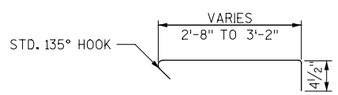
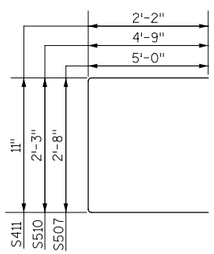
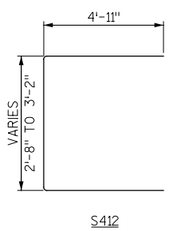


S417



S507,S510,S411



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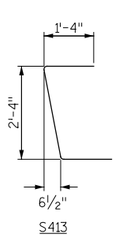

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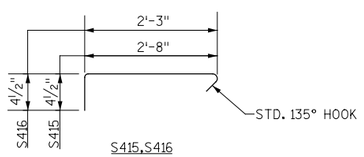
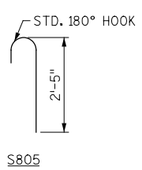


S415,S416



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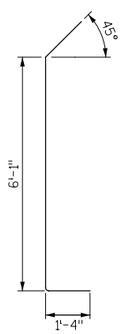

S806

S808

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2 FOUNDATION DETAILS

SHEET 4 OF 10

921

NOV 2006

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FILE NAME : S-05-0234.DGN PLOT DATE : 10/10/2014 10:14:19 AM PLOT BY : MarkSv8I

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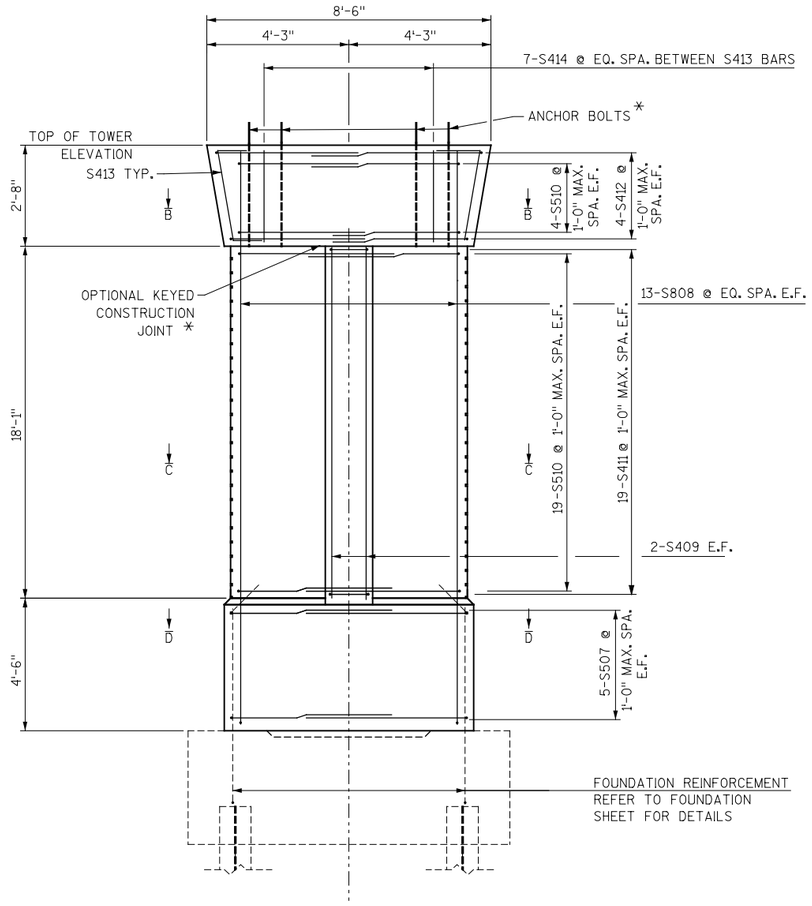
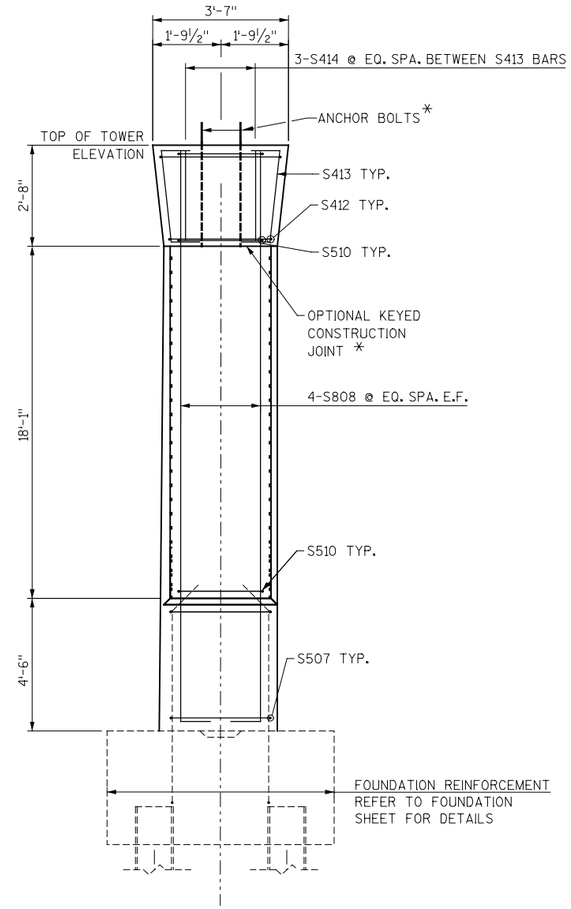
STATE PROJECT NUMBER
1133-10-71



ELEVATION VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS



END VIEW

S411, S415, S416, AND S417 NOT SHOWN FOR CLARITY. REFER TO SECTIONS

TOWER NOTES

DRAWING SHALL NOT BE SCALED.

"E.F." SIGNIFIES EACH FACE.

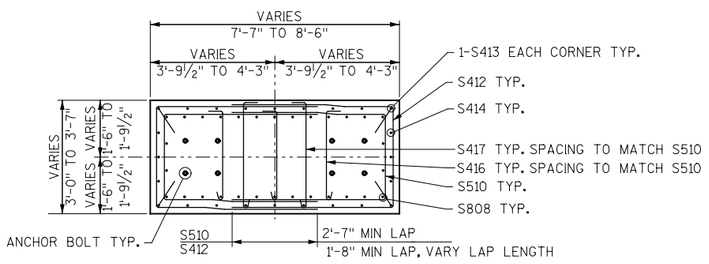
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR FROM THE FACE OF THE SMOOTH CONCRETE AND 2½" FROM THE FACE OF THE ARCHITECTURAL SURFACE TREATMENT, UNLESS OTHERWISE NOTED.

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

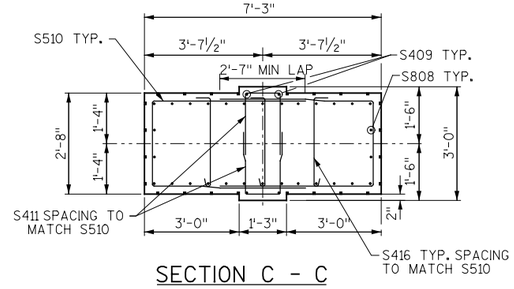
ALL CONSTRUCTION JOINTS SHALL BE FORMED BY A 2" × 6" × 1'-6" LONG BEVELED KEYWAY.

* PLACE ANCHOR BOLTS PRIOR TO POURING MIDDLE SECTION OF CONCRETE TOWER. OPTIONAL KEYED CONSTRUCTION JOINT MAY BE LOCATED AT A GROUT LINE BELOW THE ANCHOR ASSEMBLIES. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS THE CONSTRUCTION JOINT. OMIT JOINT BEVELED EDGES.

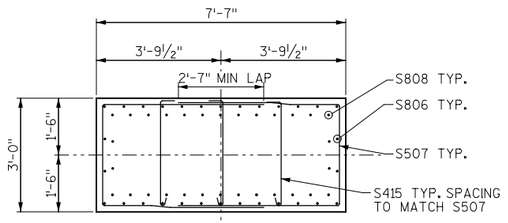
CONTRACTOR TO FIELD VERIFY FOUNDATION DETAILS PRIOR TO CONSTRUCTION OF TOWER. SEE FOUNDATION DETAILS SHEET FOR TOWER 2.



SECTION B - B



SECTION C - C



SECTION D - D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2 DETAILS

SHEET 5 OF 10

922

NOV 2006

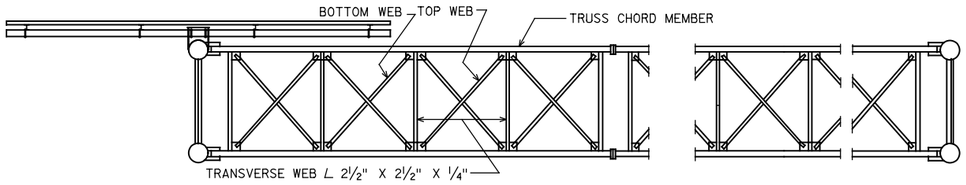
8

8

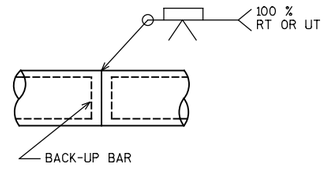
Pdf_Iw_HS_32y (w=46pt)
CELL TEXT USES_SCREEN PROJ_BYLEVEL.TBL

STATE PROJECT NUMBER

1133-10-71



PLAN

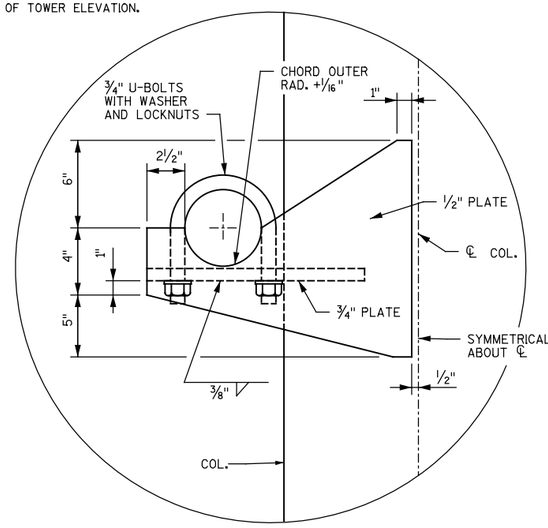


COLUMN OR CHORD SPLICE DETAIL

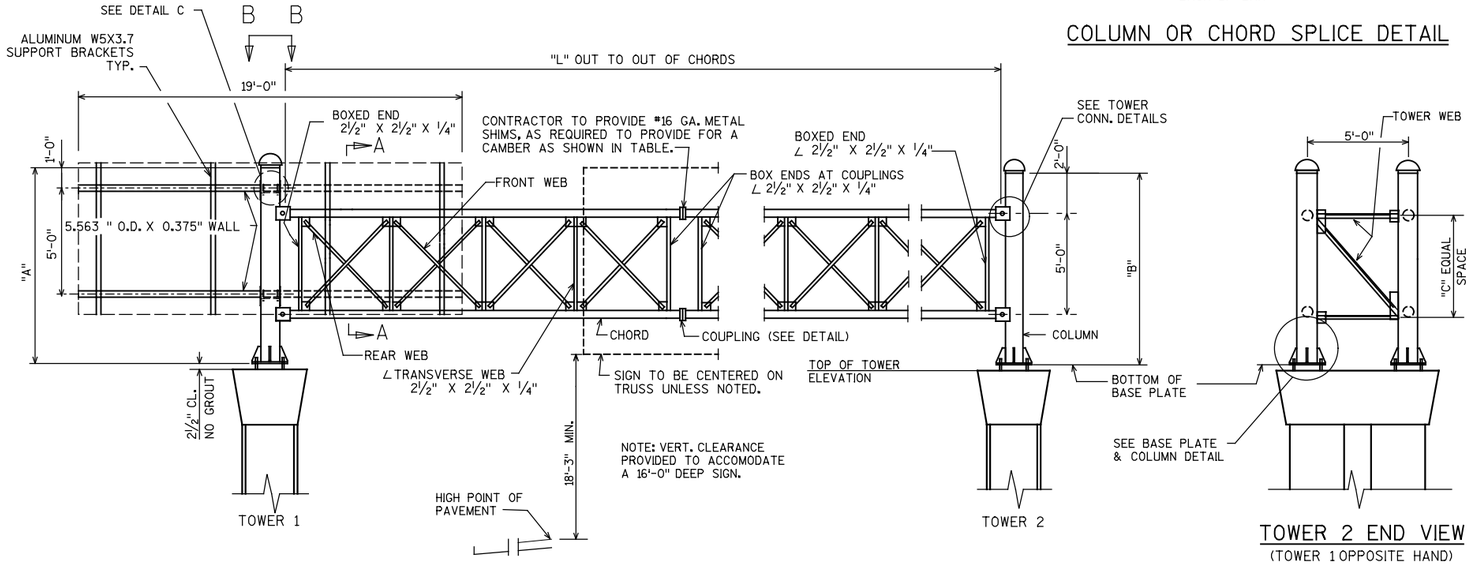
GENERAL NOTES

DRAWING SHALL NOT BE SCALED

REFER TO THE RESPECTIVE PLAN AND ELEVATION SHEET FOR TOP OF TOWER ELEVATION.

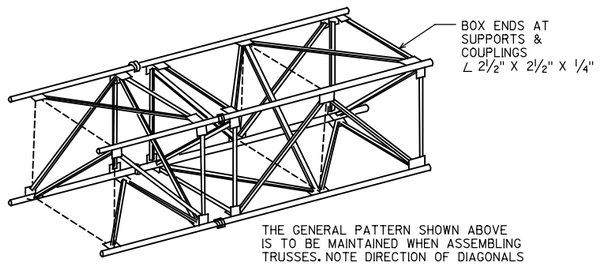


DETAIL C
(BRACKETS NOT SHOWN)

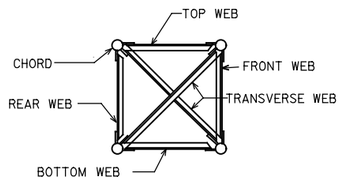


ELEVATION

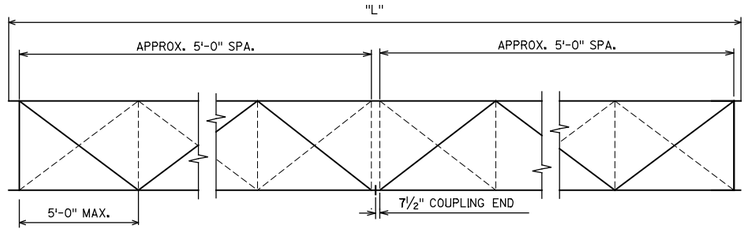
TOWER 2 END VIEW
(TOWER 1 OPPOSITE HAND)



TYPICAL TRUSS SECTION

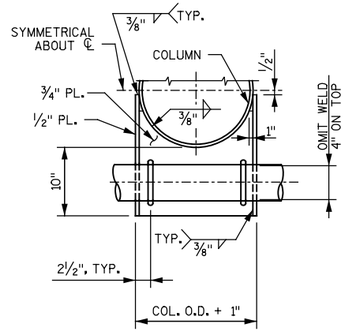


SECTION A-A



TRUSS ARRANGEMENT

FABRICATOR MAY MAKE TRUSSES ANY LENGTH KEEPING A SECTION A MINIMUM OF 20'-0" & A MULTIPLE OF 5'-0". CHORD FIELD SPLICES SHALL BE MADE WITH COUPLINGS. CHORD SHOP SPLICE SHALL BE THE WELDED SPLICE SHOWN ABOVE.



SECTION B-B

(TRUSS TO TOWER BRACKETS OMITTED FOR CLARITY)

STRUCTURE MEMBER TABLE

STRUCTURE	A	B	C	CHORDS O.D. X THK.	TOP & BOTTOM WEB	FRONT & REAR WEB	COUPLING PLATE D1 & "T"	BOLT CIRCLE DIA. "D2"	NO. OF BOLTS IN COUPLING	CAMBER	COLUMN O.D. X THK.	TOWER WEBS	"L"
S-05-234	9'-6"	9'-6"	1	4.5"x0.237"	3"x3"x¼"	3"x3"x¼"	10.5" X 1.125"	7.5"	6	1⅜"	12.75"x0.50"	3"x3"⅜"	84'-8¼"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

GALVANIZED STEEL SIGN BRIDGE

SHEET 6 OF 10
923

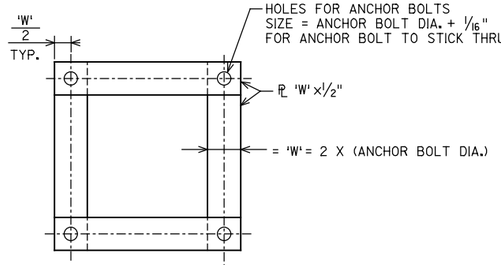
NOV 2006

8

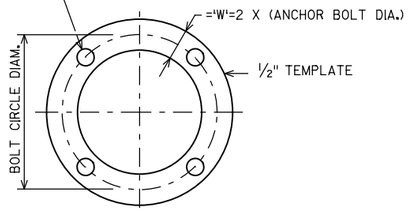
8

STATE PROJECT NUMBER

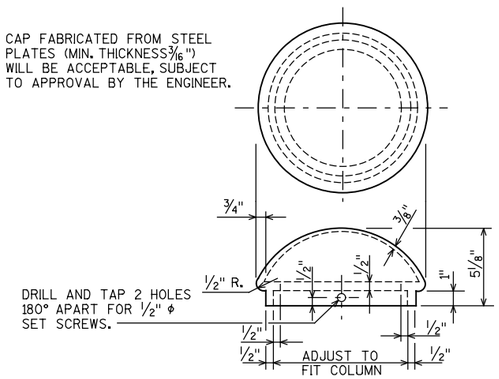
1133-10-71



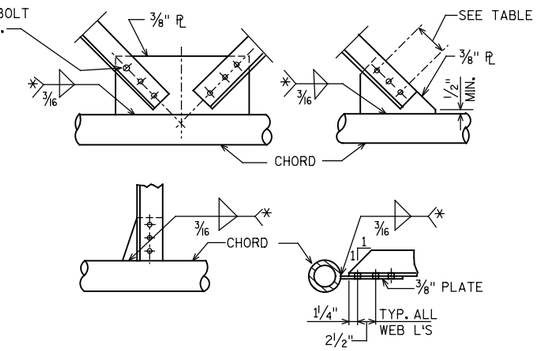
ALTERNATE
ANCHOR PLATE/TEMPLATE PLAN



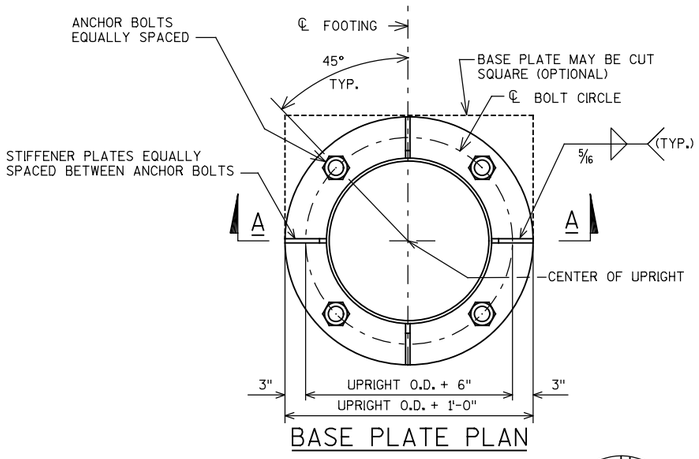
ANCHOR PLATE/TEMPLATE PLAN



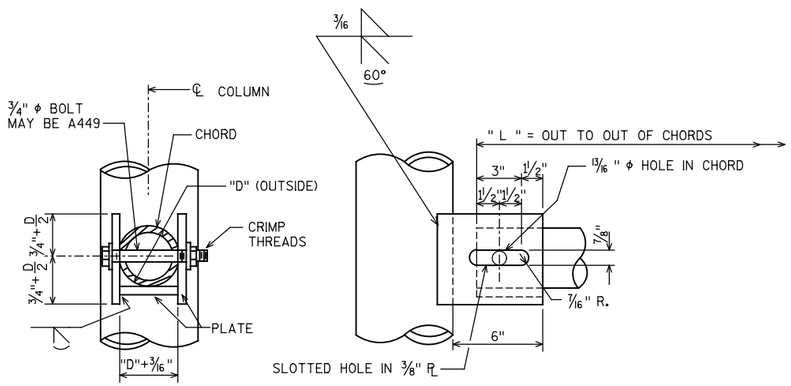
TOWER CAP DETAIL



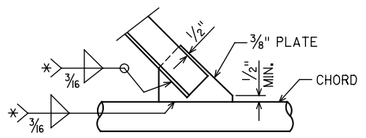
TYPICAL TRUSS CONNECTION DETAILS



BASE PLATE PLAN



TOWER CONNECTION DETAIL

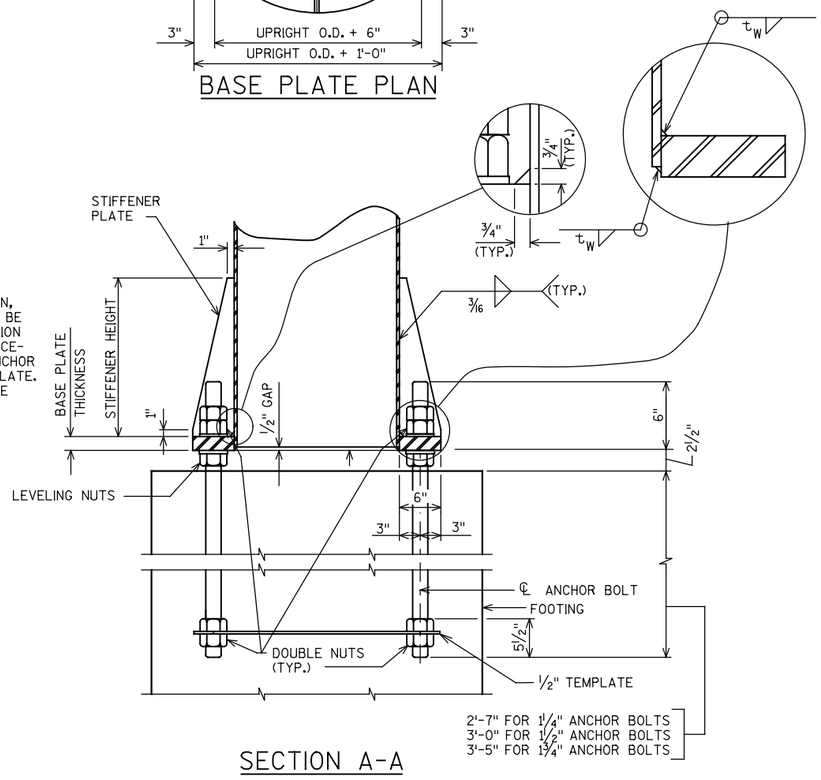


TYPICAL WELDED ALTERNATE

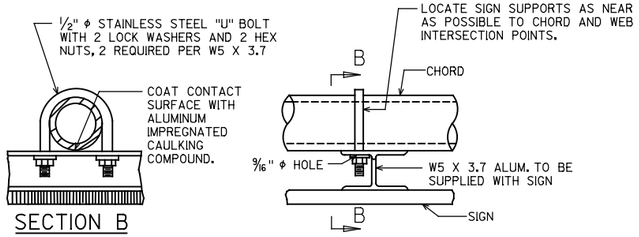
*ANGLE	WELD LENGTH	NO. OF BOLTS
● 2 1/2" x 2 1/2" x 1/4"	11"	3
3" x 3" x 3/16"	10"	3
3" x 3" x 1/4"	13"	4
3" x 3" x 5/16"	16 1/2"	5
3" x 3" x 3/8"	19 1/2"	6
4" x 4" x 1/4"	18"	5
4" x 4" x 5/16"	22"	6
4" x 4" x 3/8"	26"	8
4" x 4" x 7/16"	30"	9
4" x 4" x 1/2"	34"	10

● ONLY USED FOR BOXED END AND TRANSVERSE BRACING.

NOTE:
PRIOR TO INSTALLATION, ANCHOR BOLTS SHALL BE RIGIDLY HELD IN POSITION DURING CONCRETE PLACEMENT USING STEEL ANCHOR PLATE AND TOP TEMPLATE. REMOVE TOP TEMPLATE (NOT SHOWN) AFTER CONCRETE SETS.

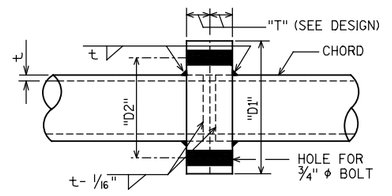


SECTION A-A



SECTION B

TYPICAL SIGN CONNECTION



COUPLING DETAIL
(CONNECTION BOLTS OMITTED FOR CLARITY)

BASE PLATE & UPRIGHT COLUMN DETAILS

STRUCTURE	COLUMN O.D. X THK.	ANCHOR BOLTS	BASE PLATE THICKNESS (IN.)	STIFFENER PLATE THICKNESS (IN.)	STIFFENER PLATE HEIGHT (IN.)	tw (IN.)
S-05-234	12.75" x 0.5"	1 3/4"	1 3/4"	1"	13"	3/8"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

GALVANIZED STEEL SIGN BRIDGE DETAILS

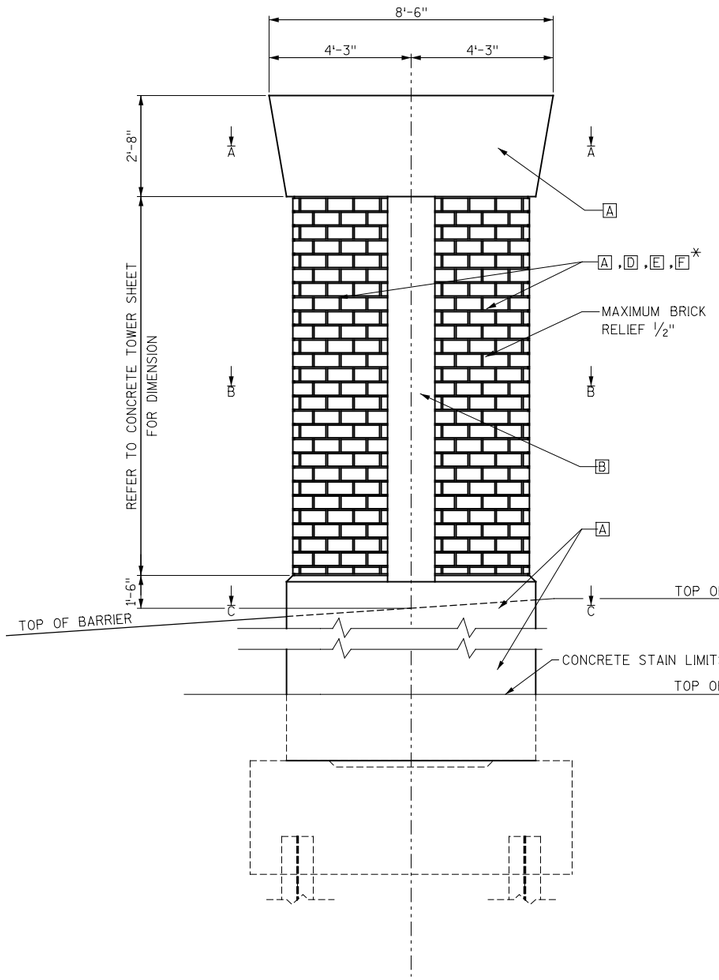
SHEET 7 OF 10
924

8

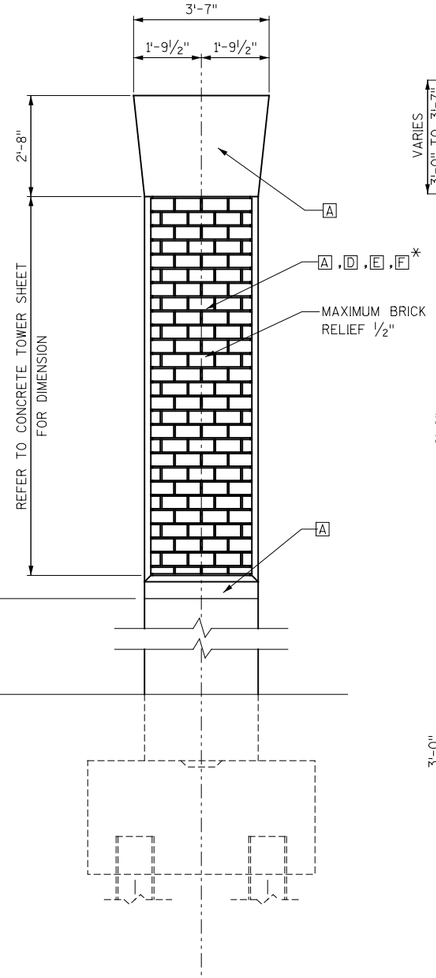
8

STATE PROJECT NUMBER

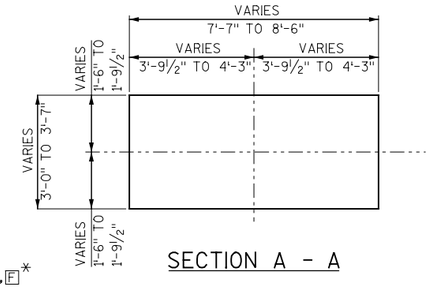
1133-10-71



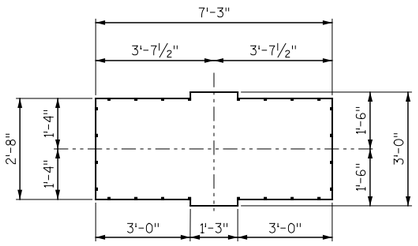
ELEVATION VIEW



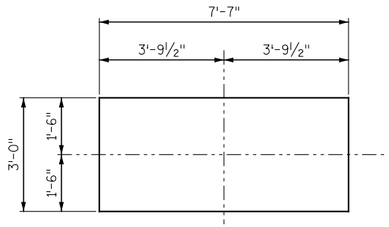
END VIEW



SECTION A - A



SECTION B - B



SECTION C - C

CONCRETE STAINING SCHEDULE

MARK	COLOR
A	BASE COLOR
B	ACCENT COLOR #1
D	ACCENT COLOR #3
E	ACCENT COLOR #4
F	ACCENT COLOR #5

* STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-5-234

DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 1 AESTHETIC DETAILS

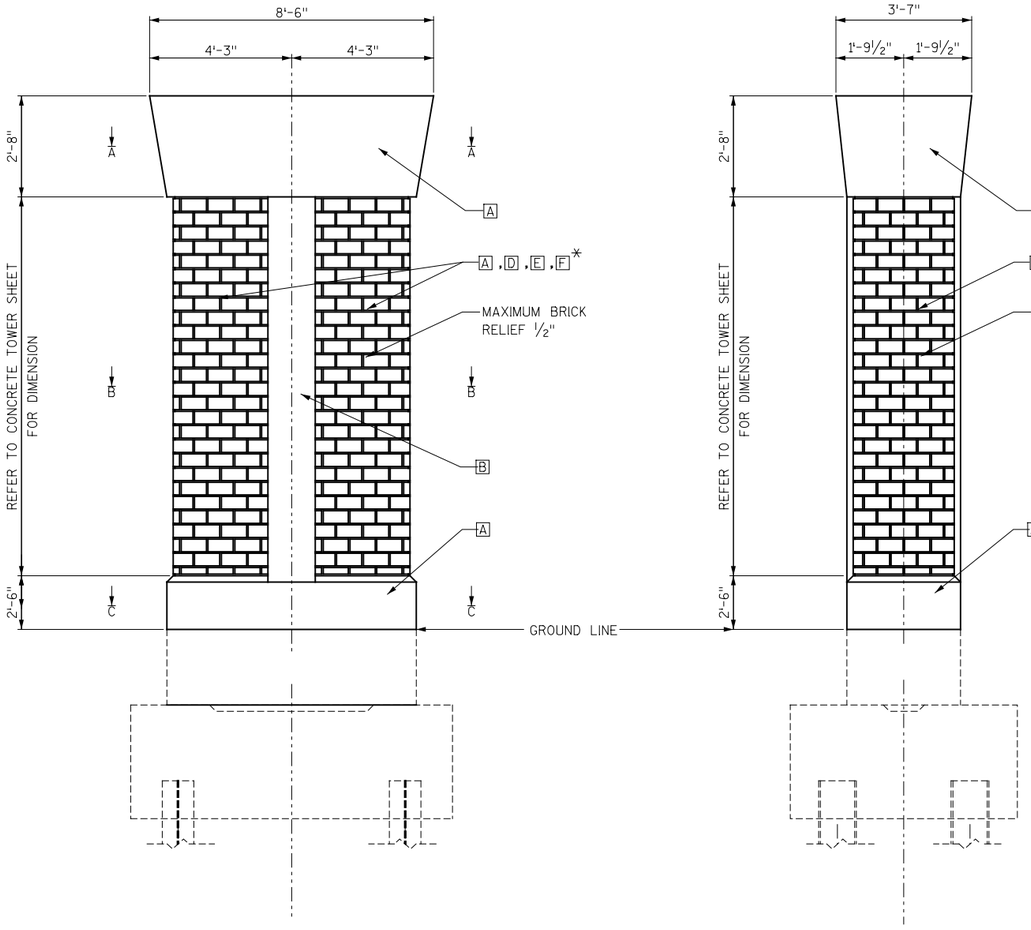
SHEET 8 OF 10

925

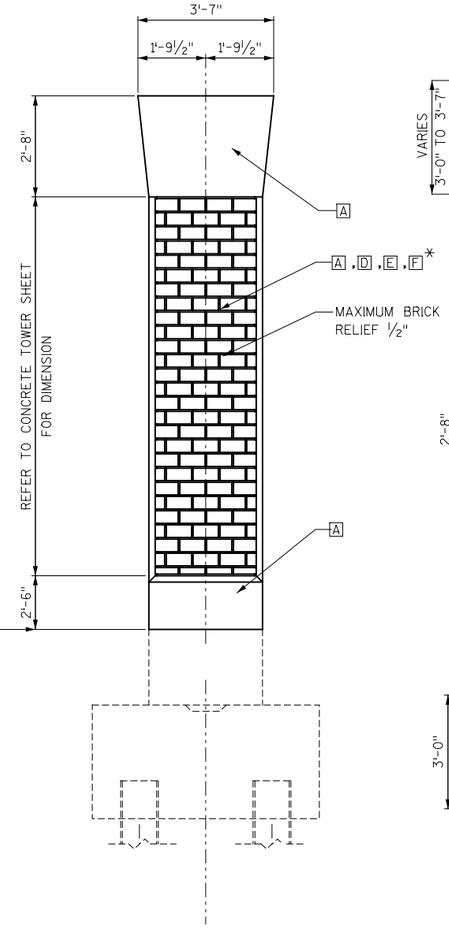
NOV 2006

8

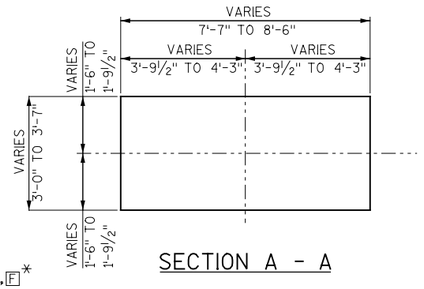
8



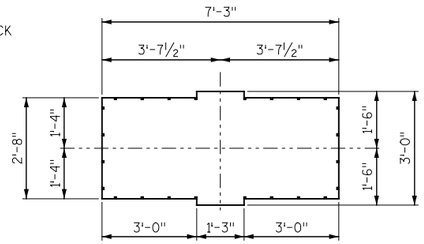
ELEVATION VIEW



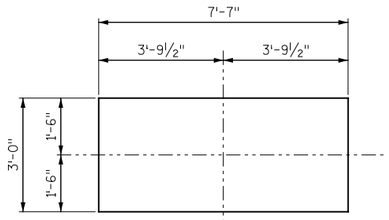
END VIEW



SECTION A - A



SECTION B - B



SECTION C - C

CONCRETE STAINING SCHEDULE

MARK	COLOR
A	BASE COLOR
B	ACCENT COLOR #1
D	ACCENT COLOR #3
E	ACCENT COLOR #4
F	ACCENT COLOR #5

*STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

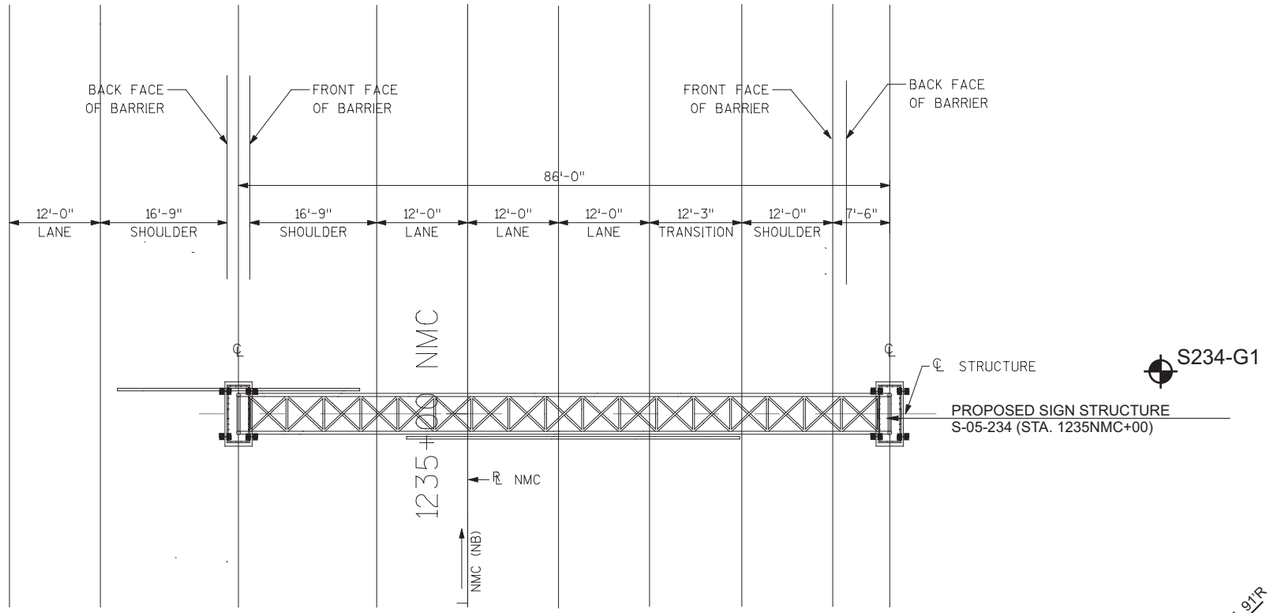
STRUCTURE S-5-234

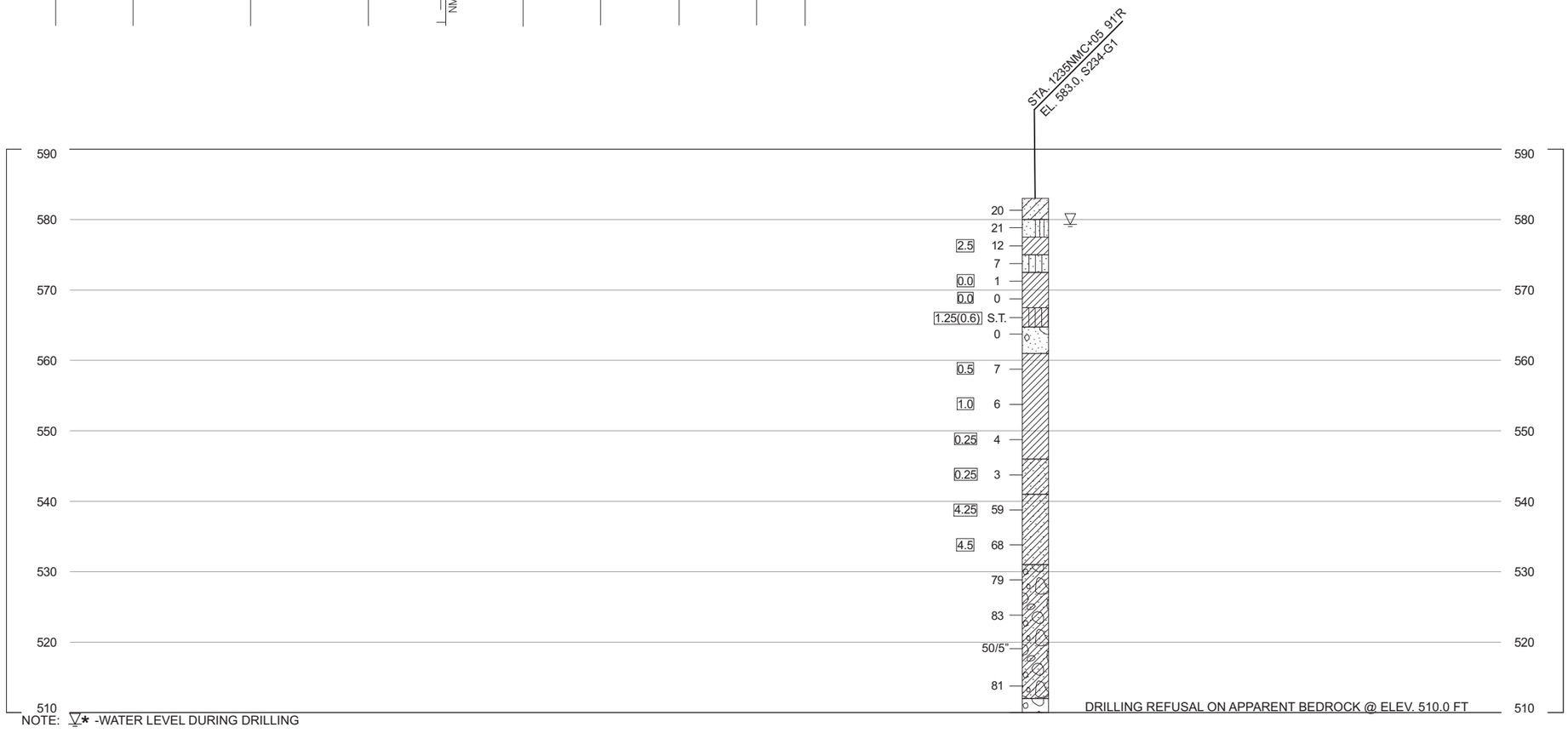
DRAWN BY VC | PLANS CK'D. SJM

CONCRETE TOWER 2 AESTHETIC DETAILS

SHEET 9 OF 10
926

USH-41 (S-05-234)
05-BROWN, WI





NOTE: ▽* -WATER LEVEL DURING DRILLING

STATE PROJECT NUMBER

1133-10-71

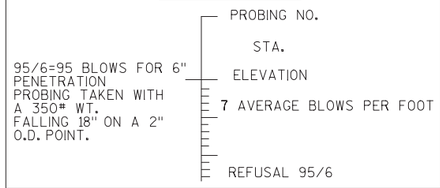
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

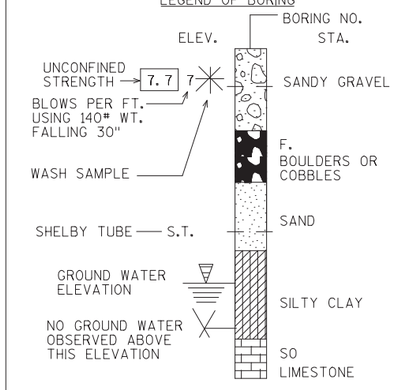
MATERIAL SYMBOLS

TOPSOIL SILT FAT CLAY
SAND PEAT DOLOMITE
GRAVEL CLAY FILL

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-05-234

DRAWN BY RH PLANS CK'D. DB

SUBSURFACE EXPLORATION

SHEET 10 OF 10

927

SCALE 1"=20'

8

8

NB USH 41 to SB IH 43 RAMP "IHA"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1148+50		0	134.1	0	0	0	0	0										
1149+00	50	0	166.0	0	0	0	0	0	0	278	0	0	0	0	0	0	278	-278
1149+50	50	0	180.3	0	0	0	0	0	0	321	0	0	0	0	0	0	599	-599
1150+00	50	0	207.0	0	0	0	0	0	0	359	0	0	0	0	0	0	957	-957
1150+50	50	0	225.2	0	0	0	0	0	0	400	0	0	0	0	0	0	1357	-1357
1151+00	50	0	240.1	0	0	0	0	0	0	431	0	0	0	0	0	0	1788	-1788
1151+50	50	0	255.7	0	0	0	0	0	0	459	0	0	0	0	0	0	2247	-2247
1152+00	50	0	569.1	0	0	0	0	0	0	764	0	0	0	0	0	0	3011	-3011
1152+50	50	0	422.7	0	0	0	0	0	0	918	0	0	0	0	0	0	3929	-3929
1153+00	50	0	463.3	0	0	0	0	0	0	820	0	0	0	0	0	0	4750	-4750
1153+50	50	0	432.8	0	0	0	0	0	0	830	0	0	0	0	0	0	5579	-5579
1154+00	50	0	357.0	0	0	0	0	0	0	731	0	0	0	0	0	0	6311	-6311
1154+50	50	0	352.7	0	0	0	0	0	0	657	0	0	0	0	0	0	6968	-6968
1155+00	50	0	350.4	0	0	0	0	0	0	651	0	0	0	0	0	0	7619	-7619
1155+50	50	0	329.2	0	0	0	0	0	0	629	0	0	0	0	0	0	8248	-8248
1156+00	50	0	316.9	0	0	0	0	0	0	598	0	0	0	0	0	0	8846	-8846
1156+50	50	0	289.7	0	0	0	0	0	0	562	0	0	0	0	0	0	9408	-9408
1157+00	50	0	261.7	0	0	0	0	0	0	511	0	0	0	0	0	0	9919	-9919
1157+50	50	0	239.0	0	0	0	0	0	0	464	0	0	0	0	0	0	10382	-10382
1158+00	50	0	273.2	0	0	0	0	0	0	474	0	0	0	0	0	0	10856	-10856
1158+50	50	0	209.6	0	0	0	0	0	0	447	0	0	0	0	0	0	11303	-11303
1159+00	50	0	244.7	0	0	0	0	0	0	421	0	0	0	0	0	0	11724	-11724
1159+50	50	25.6	110.8	0	0	0	0	0	24	329	0	0	0	0	0	24	12053	-12030
1160+00	50	0	140.8	0	0	0	0	0	24	233	0	0	0	0	0	47	12286	-12239
1160+50	50	0	80.6	0	0	0	0	0	0	205	0	0	0	0	0	47	12491	-12444
1161+00	50	0	93.4	0	0	0	0	0	0	161	0	0	0	0	0	47	12652	-12605
1161+50	50	0	111.8	0	0	0	0	0	0	190	0	0	0	0	0	47	12842	-12795
1162+00	50	0	134.8	0	0	0	0	0	0	228	0	0	0	0	0	47	13071	-13023
1162+50	50	0	155.7	0	0	0	0	0	0	269	0	0	0	0	0	47	13340	-13292
1163+00	50	3.0	69.9	0	0	0	0	0	3	209	0	0	0	0	0	50	13548	-13498
								COLUMN SUB-TOTALS	*50*	*13,548*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

9 9

PROJECT NUMBER: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | COMPUTER EARTHWORK DATA | SHEET NO: 928 | E

NB USH 41 to SB IH 43 RAMP "IHA" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1163+50	50	3.0	180.2	0	0	0	0	0	6	232	0	0	0	0	0	56	13780	-13724
1164+00	50	3.0	164.0	0	0	0	0	0	6	319	0	0	0	0	0	61	14099	-14037
1164+50	50	3.0	198.6	0	0	0	0	0	6	336	0	0	0	0	0	67	14434	-14367
1165+00	50	3.0	230.6	0	0	0	0	0	6	397	0	0	0	0	0	72	14832	-14759
1165+50	50	3.0	275.6	0	0	0	0	0	6	469	0	0	0	0	0	78	15300	-15222
1166+00	50	3.0	376.0	0	0	0	0	0	6	603	0	0	0	0	0	84	15904	-15820
1166+50	50	3.0	513.8	0	0	0	0	0	6	824	0	0	0	0	0	89	16728	-16638
1167+00	50	3.0	634.6	0	0	0	0	0	6	1063	0	0	0	0	0	95	17791	-17696
1167+50	50	3.0	712.2	0	0	0	0	0	6	1247	0	0	0	0	0	100	19038	-18938
1168+00	50	3.0	690.5	0	0	0	0	0	6	1299	0	0	0	0	0	106	20337	-20231
1168+50	50	3.0	790.0	0	0	0	0	0	6	1371	0	0	0	0	0	111	21708	-21596
1169+00	50	3.0	677.0	0	0	0	0	0	6	1358	0	0	0	0	0	117	23066	-22949
1169+50	50	3.0	504.8	0	0	0	0	0	6	1094	0	0	0	0	0	122	24160	-24038
1170+00	50	3.0	474.8	0	0	0	0	0	6	907	0	0	0	0	0	128	25067	-24939
1170+50	50	3.0	242.2	0	0	0	0	0	7	664	0	0	0	0	0	135	25731	-25596
1171+00	50	3.0	145.1	0	0	0	0	0	8	359	0	0	0	0	0	143	26090	-25947
1171+50	50	3.0	25.9	0	0	0	0	0	9	158	0	0	0	0	0	152	26248	-26097
1172+00	50	6.5	8.2	0	0	0	0	0	10	32	0	0	0	0	0	162	26280	-26118
1172+82	82	6.1	2.8	0	0	0	0	0	17	17	0	0	0	0	0	178	26296	-26118
BRIDGE																		
1196+75		6.1	6.7	0	0	0	0	0										
1197+00	25	3.0	20.7	0	0	0	0	0	214	13	0	0	0	0	0	392	26309	-25917
1197+50	50	61.7	417.5	985.9	0	0	0	118.8	585	406	913	0	0	0	110	978	26715	-26540
1198+00	50	417.6	741.8	1295.5	363.2	0	0	175.3	641	1073	2112	336	0	0	272	1618	27788	-28477
1198+50	50	669.0	1286.1	1020.0	23.3	0	0	206.8	445	1878	2144	358	0	0	354	2063	29666	-31342
1199+00	50	428.7	1585.2	1072.9	117.4	0	0	245.7	390	2659	1938	130	0	0	419	2453	32324	-34999
1199+50	50	152.6	1662.7	1036.9	221.9	0	0	275.5	220	3007	1954	314	0	0	483	2673	35332	-38943
1200+00	50	13.6	1744.6	688.1	66.2	0	0	265.4	77	3155	1597	267	0	0	501	2750	38487	-42851
1200+50	50	0	1030.9	544.4	4.5	0	0	236.7	8	2570	1141	66	0	0	465	2759	41057	-46023
1201+00	50	0	813.6	533.8	0	0	0	215.1	0	1708	998	4	0	0	418	2759	42765	-48307
								COLUMN SUB-TOTALS	*2,708*	*29,216*	*12,797*	*1,475*	*0*	*0*	*3,022*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 to SB IH 43 RAMP "IHA" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut 1.00	Fill 1.00	Mass Ordinate
									Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7			Note 8
1201+50	50	0	636.7	505.0	0	0	0	198.3	0	1343	962	0	0	0	383	2759	44107	-50229
1202+00	50	0	523.1	493.7	0	0	0	186.7	0	1074	925	0	0	0	356	2759	45181	-51871
1202+50	50	0	419.8	0	0	0	0	0	0	873	457	0	0	0	173	2759	46054	-53028
1203+00	50	0	339.6	0	0	0	0	0	0	703	0	0	0	0	0	2759	46757	-53731
1203+50	50	0	246.0	0	0	0	0	0	0	542	0	0	0	0	0	2759	47300	-54273
1204+00	50	0	169.5	0	0	0	0	0	0	385	0	0	0	0	0	2759	47684	-54658
1204+50	50	0	103.4	0	0	0	0	0	0	253	0	0	0	0	0	2759	47937	-54911
1205+00	50	6.0	51.0	0	0	0	0	0	6	143	0	0	0	0	0	2764	48080	-55048
1205+50	50	27.2	24.8	0	0	0	0	0	31	70	0	0	0	0	0	2795	48150	-55088
1206+00	50	46.2	11.3	0	0	0	0	0	68	33	0	0	0	0	0	2863	48184	-55053
1206+50	50	61.3	0.6	0	0	0	0	0	100	11	0	0	0	0	0	2963	48195	-54964
1207+00	50	208.9	0	0	0	0	0	0	250	1	0	0	0	0	0	3213	48195	-54715
1207+50	50	225.1	0	0	0	0	0	0	402	0	0	0	0	0	0	3615	48195	-54313
1208+00	50	220.6	0	0	0	0	0	0	413	0	0	0	0	0	0	4027	48195	-53900
1208+50	50	209.8	0	0	0	0	0	0	398	0	0	0	0	0	0	4426	48195	-53502
1209+00	50	205.8	0	0	0	0	0	0	385	0	0	0	0	0	0	4811	48195	-53117
1209+50	50	204.4	0	0	0	0	0	0	380	0	0	0	0	0	0	5191	48195	-52737
1210+00	50	222.6	0	0	0	0	0	0	395	0	0	0	0	0	0	5586	48195	-52342
1210+50	50	242.9	0	0	0	0	0	0	431	0	0	0	0	0	0	6017	48195	-51911
1211+00	50	256.8	0	0	0	0	0	0	463	0	0	0	0	0	0	6480	48195	-51448
1211+50	50	263.4	0	0	0	0	0	0	482	0	0	0	0	0	0	6961	48195	-50966
1212+00	50	260.4	0	0	0	0	0	0	485	0	0	0	0	0	0	7446	48195	-50481
1212+50	50	260.2	0	0	0	0	0	0	482	0	0	0	0	0	0	7928	48195	-49999
1213+00	50	250.0	0	0	0	0	0	0	472	0	0	0	0	0	0	8401	48195	-49527
1213+50	50	233.5	0	0	0	0	0	0	448	0	0	0	0	0	0	8848	48195	-49079
1214+00	50	217.3	0	0	0	0	0	0	417	0	0	0	0	0	0	9266	48195	-48662
1214+50	50	206.1	0	0	0	0	0	0	392	0	0	0	0	0	0	9658	48195	-48270
1215+00	50	170.6	0	0	0	0	0	0	349	0	0	0	0	0	0	10006	48195	-47921
1215+50	50	152.4	0	0	0	0	0	0	299	0	0	0	0	0	0	10306	48196	-47623
1216+00	50	137.8	1.7	0	0	0	0	0	269	2	0	0	0	0	0	10574	48198	-47356
1216+50	50	140.2	3.0	0	0	0	0	0	257	4	0	0	0	0	0	10832	48202	-47103
								COLUMN SUB-TOTALS	*8,073*	*5,437*	*2,344*	*0*	*0*	*0*	*912*			
								COLUMN TOTALS	10,832	48,202	15,141	1,475	0	*0*	*3,934*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB IH 43 to SB USH 41 "IHB"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1167+50		1.9	26.4	0	0	0	0	0										
1168+00	50	0	28.8	0	0	0	0	0	2	51	0	0	0	0	0	2	51	-49
1168+50	50	0	44.0	0	0	0	0	0	0	67	0	0	0	0	0	2	118	-117
1169+00	50	0	48.7	0	0	0	0	0	0	86	0	0	0	0	0	2	204	-202
1169+50	50	0	82.4	0	0	0	0	0	0	121	0	0	0	0	0	2	326	-324
1170+00	50	0	53.8	0	0	0	0	0	0	126	0	0	0	0	0	2	452	-450
1170+50	50	0	68.9	0	0	0	0	0	0	114	0	0	0	0	0	2	565	-563
1171+00	50	0	84.9	0	0	0	0	0	0	142	0	0	0	0	0	2	708	-706
1171+50	50	0	92.9	0	0	0	0	0	0	165	0	0	0	0	0	2	872	-871
1172+00	50	0	0.5	0	0	0	0	0	0	86	0	0	0	0	0	2	959	-957
1172+50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	959	-958
1173+00	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	960	-958
1173+50	50	1.4	0	0	0	0	0	0	1	0	0	0	0	0	0	3	960	-957
1174+00	50	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	960	-956
1174+50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	960	-956
1175+00	50	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	4	961	-956
1175+50	50	0	2.1	0	0	0	0	0	0	2	0	0	0	0	0	4	963	-959
1176+00	50	0	3.9	0	0	0	0	0	0	6	0	0	0	0	0	4	969	-964
1176+65	65	0	5.4	0	0	0	0	0	0	11	0	0	0	0	0	4	980	-975
								COLUMN TOTALS	4	980	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB IH 43 "NIH"

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1141+00		43.4	0	0	0	0	0	0										
1141+50	50	43.4	0	0	0	0	0	0	80	0	0	0	0	0	0	80	0	80
1142+00	50	48.9	0	0	0	0	0	0	85	0	0	0	0	0	0	166	0	165
1142+50	50	56.5	0	0	0	0	0	0	98	0	0	0	0	0	0	263	1	263
1143+00	50	94.0	0	0	0	0	0	0	139	0	0	0	0	0	0	403	1	402
1143+50	50	85.0	0	0	0	0	0	0	166	0	0	0	0	0	0	569	1	567
1144+00	50	73.8	0	0	0	0	0	0	147	0	0	0	0	0	0	715	2	714
1144+50	50	69.1	0	0	0	0	0	0	132	0	0	0	0	0	0	848	2	846
1145+00	50	62.0	0	0	0	0	0	0	121	0	0	0	0	0	0	969	2	967
1145+50	50	54.0	0	0	0	0	0	0	107	0	0	0	0	0	0	1077	3	1074
1146+00	50	47.8	0	0	0	0	0	0	94	0	0	0	0	0	0	1171	3	1168
1146+50	50	40.3	1.7	0	0	0	0	0	82	2	0	0	0	0	0	1252	5	1248
1147+00	50	31.5	9.0	0	0	0	0	0	66	10	0	0	0	0	0	1319	15	1304
1147+50	50	23.4	18.5	0	0	0	0	0	51	26	0	0	0	0	0	1370	40	1329
1148+00	50	18.0	33.8	0	0	0	0	0	38	48	0	0	0	0	0	1408	89	1319
1148+50	50	20.3	46.7	0	0	0	0	0	35	75	0	0	0	0	0	1443	163	1280
1149+00	50	16.1	108.4	0	0	0	0	0	34	144	0	0	0	0	0	1477	307	1170
1149+50	50	22.7	44.2	0	0	0	0	0	36	141	0	0	0	0	0	1513	448	1065
1150+00	50	26.2	54.9	0	0	0	0	0	45	92	0	0	0	0	0	1558	540	1018
1150+50	50	28.8	59.0	0	0	0	0	0	51	105	0	0	0	0	0	1609	645	964
1151+00	50	31.4	43.5	0	0	0	0	0	56	95	0	0	0	0	0	1665	740	925
1151+50	50	38.7	28.8	0	0	0	0	0	65	67	0	0	0	0	0	1730	807	923
1152+00	50	45.7	33.1	0	0	0	0	0	78	57	0	0	0	0	0	1808	864	944
1152+50	50	55.1	12.0	0	0	0	0	0	93	42	0	0	0	0	0	1901	906	995
1153+00	50	68.0	8.4	0	0	0	0	0	114	19	0	0	0	0	0	2015	925	1090
1153+50	50	82.3	4.5	0	0	0	0	0	139	12	0	0	0	0	0	2155	937	1217
1154+00	50	93.9	18.7	0	0	0	0	0	163	22	0	0	0	0	0	2318	959	1359
1154+50	50	104.2	2.5	0	0	0	0	0	183	20	0	0	0	0	0	2501	978	1523
1155+00	50	108.5	0	0	0	0	0	0	197	2	0	0	0	0	0	2698	981	1718
1155+50	50	108.6	0	0	0	0	0	0	201	0	0	0	0	0	0	2899	981	1919
1156+00	50	112.6	0	0	0	0	0	0	205	0	0	0	0	0	0	3104	981	2123
								COLUMN SUB-TOTALS	*3,104*	*981*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB IH 43 "NIH" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1156+50	50	108.6	0	0	0	0	0	0	205	0	0	0	0	0	0	3309	981	2328
1157+00	50	106.7	0	0	0	0	0	0	199	0	0	0	0	0	0	3508	981	2528
1157+50	50	102.3	6.7	0	0	0	0	0	194	6	0	0	0	0	0	3702	987	2715
1158+00	50	101.7	0	0	0	0	0	0	189	6	0	0	0	0	0	3891	993	2897
1158+50	50	103.6	0	0	0	0	0	0	190	0	0	0	0	0	0	4081	993	3087
1159+00	50	102.9	0	0	0	0	0	0	191	0	0	0	0	0	0	4272	993	3278
1159+50	50	114.2	0	0	0	0	0	0	201	0	0	0	0	0	0	4473	993	3479
1160+00	50	129.6	0	0	0	0	0	0	226	0	0	0	0	0	0	4699	993	3705
1160+50	50	119.9	0	0	0	0	0	0	231	0	0	0	0	0	0	4930	993	3936
1161+00	50	114.0	26.4	0	0	0	0	0	217	24	0	0	0	0	0	5146	1018	4128
1161+50	50	91.5	8.2	0	0	0	0	0	190	32	0	0	0	0	0	5336	1050	4286
1162+00	50	94.2	8.1	0	0	0	0	0	172	15	0	0	0	0	0	5508	1065	4443
1162+50	50	71.6	10.1	0	0	0	0	0	170	17	0	0	0	0	0	5678	1082	4597
1163+00	50	145.1	0	0	0	0	0	0	161	9	0	0	0	0	0	5840	1091	4749
1163+50	50	84.3	34.1	0	0	0	0	0	156	32	0	0	0	0	0	5995	1123	4873
1164+00	50	64.7	3.0	0	0	0	0	0	117	34	0	0	0	0	0	6113	1157	4955
1164+50	50	70.2	16.2	0	0	0	0	0	97	18	0	0	0	0	0	6210	1175	5035
1165+00	50	56.0	52.7	0	0	0	0	0	87	64	0	0	0	0	0	6297	1239	5058
1165+50	50	40.9	130.2	0	0	0	0	0	66	169	0	0	0	0	0	6362	1408	4954
1166+00	50	30.9	50.2	0	0	0	0	0	46	167	0	0	0	0	0	6408	1575	4833
1166+50	50	36.6	21.1	0	0	0	0	0	31	66	0	0	0	0	0	6439	1641	4798
1167+00	50	12.7	32.0	0	0	0	0	0	20	49	0	0	0	0	0	6459	1690	4769
1167+50	50	3.0	0	0	0	0	0	0	6	30	0	0	0	0	0	6465	1720	4745
1168+00	50	0.5	0	0	0	0	0	0	1	0	0	0	0	0	0	6466	1720	4746
1168+50	50	0	2.6	0	0	0	0	0	0	2	0	0	0	0	0	6466	1722	4744
1169+00	50	0	5.8	0	0	0	0	0	0	8	0	0	0	0	0	6466	1730	4736
1169+50	50	0	9.1	0	0	0	0	0	0	14	0	0	0	0	0	6466	1744	4722
1170+00	50	0	10.9	0	0	0	0	0	0	19	0	0	0	0	0	6466	1763	4704
1170+50	50	0	11.6	0	0	0	0	0	0	21	0	0	0	0	0	6466	1783	4683
1171+00	50	0	12.5	0	0	0	0	0	0	22	0	0	0	0	0	6466	1806	4661
								COLUMN SUB-TOTALS	*3,363*	*825*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB IH 43 "NIH" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1171+50	50	0	12.5	0	0	0	0	0	0	23	0	0	0	0	0	6466	1829	4638
1172+00	50	0	33.9	0	0	0	0	0	0	43	0	0	0	0	0	6466	1872	4595
1172+50	50	0.6	38.9	0	0	0	0	0	1	67	0	0	0	0	0	6467	1939	4528
1173+00	50	0	46.4	0	0	0	0	0	1	79	0	0	0	0	0	6467	2018	4449
1173+50	50	5.2	62.1	0	0	0	0	0	5	100	0	0	0	0	0	6472	2119	4354
1174+00	50	7.2	58.7	0	0	0	0	0	12	112	0	0	0	0	0	6484	2230	4253
1174+50	50	9.5	47.8	0	0	0	0	0	16	99	0	0	0	0	0	6499	2329	4170
1175+00	50	10.6	30.3	0	0	0	0	0	19	72	0	0	0	0	0	6518	2401	4117
1175+50	50	13.2	17.8	0	0	0	0	0	22	45	0	0	0	0	0	6540	2446	4094
1176+00	50	14.0	53.0	0	0	0	0	0	25	66	0	0	0	0	0	6565	2512	4054
1176+50	50	13.0	63.7	0	0	0	0	0	25	108	0	0	0	0	0	6590	2620	3971
1177+00	50	54.6	70.4	0	0	0	0	0	63	124	0	0	0	0	0	6653	2744	3909
1177+50	50	45.5	88.1	0	0	0	0	0	93	147	0	0	0	0	0	6746	2891	3855
1178+00	50	40.9	107.4	0	0	0	0	0	80	181	0	0	0	0	0	6826	3072	3754
1178+50	50	0	49.6	0	0	0	0	0	38	145	0	0	0	0	0	6864	3217	3647
1179+00	50	0	20.8	0	0	0	0	0	0	65	0	0	0	0	0	6864	3282	3581
1179+50	50	3.0	1.0	0	0	0	0	0	3	20	0	0	0	0	0	6866	3302	3564
1180+00	50	3.0	2.4	0	0	0	0	0	6	3	0	0	0	0	0	6872	3306	3566
1180+50	50	3.0	0	0	0	0	0	0	6	2	0	0	0	0	0	6878	3308	3569
1181+00	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6883	3309	3575
1181+50	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6889	3309	3580
1182+00	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6894	3309	3585
1182+50	50	3.0	3.8	0	0	0	0	0	6	4	0	0	0	0	0	6900	3313	3587
1183+00	50	3.0	0	0	0	0	0	0	6	4	0	0	0	0	0	6905	3317	3588
1183+50	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6911	3317	3593
1184+00	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6916	3318	3599
1184+50	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6922	3318	3604
1185+00	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6928	3319	3609
1185+50	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6933	3319	3614
1186+00	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6939	3320	3619
1186+50	50	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6944	3320	3624
1187+08	58	3.0	0	0	0	0	0	0	6	0	0	0	0	0	0	6951	3321	3630
								COLUMN SUB-TOTALS	*484*	*1,515*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	6,951	3,321	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 "NMC"

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1138+00		128.6	0	0	0	0	0	0										
1138+50	50	135.5	0	0	0	0	0	0	245	0	0	0	0	0	0	245	0	245
1139+00	50	140.4	0	0	0	0	0	0	255	0	0	0	0	0	0	500	0	500
1139+50	50	144.0	0	0	0	0	0	0	263	0	0	0	0	0	0	763	0	763
1140+00	50	146.1	0	0	0	0	0	0	269	0	0	0	0	0	0	1032	0	1032
1140+50	50	143.1	0	0	0	0	0	0	268	0	0	0	0	0	0	1300	0	1300
1141+00	50	126.8	0	0	0	0	0	0	250	0	0	0	0	0	0	1550	0	1550
1141+50	50	101.4	1.2	0	0	0	0	0	211	1	0	0	0	0	0	1761	1	1760
1142+00	50	83.3	3.6	0	0	0	0	0	171	4	0	0	0	0	0	1932	6	1926
1142+50	50	67.0	7.0	0	0	0	0	0	139	10	0	0	0	0	0	2071	15	2056
1143+00	50	46.0	12.8	0	0	0	0	0	105	18	0	0	0	0	0	2176	34	2142
1143+50	50	35.9	20.3	0	0	0	0	0	76	31	0	0	0	0	0	2252	64	2187
1144+00	50	15.3	28.7	0	0	0	0	0	47	45	0	0	0	0	0	2299	110	2189
1144+50	50	3.5	45.2	0	0	0	0	0	17	68	0	0	0	0	0	2316	178	2138
1145+00	50	0	64.3	0	0	0	0	0	3	101	0	0	0	0	0	2320	280	2040
1145+50	50	0	96.7	0	0	0	0	0	0	149	0	0	0	0	0	2320	429	1891
1146+00	50	0	112.8	0	0	0	0	0	0	194	0	0	0	0	0	2320	623	1697
1146+50	50	0	133.7	0	0	0	0	0	0	228	0	0	0	0	0	2320	851	1469
1147+00	50	0	154.0	0	0	0	0	0	0	266	0	0	0	0	0	2320	1117	1202
1147+50	50	0	167.3	0	0	0	0	0	0	297	0	0	0	0	0	2320	1415	905
1148+00	50	0	204.0	0	0	0	0	0	0	344	0	0	0	0	0	2320	1759	561
1148+50	50	0	88.7	0	0	0	0	0	0	271	0	0	0	0	0	2320	2030	290
1149+00	50	0	108.2	0	0	0	0	0	0	182	0	0	0	0	0	2320	2212	108
1149+50	50	0	115.7	0	0	0	0	0	0	207	0	0	0	0	0	2320	2419	-100
1150+00	50	0	126.4	0	0	0	0	0	0	224	0	0	0	0	0	2320	2643	-324
1150+50	50	0	137.8	0	0	0	0	0	0	245	0	0	0	0	0	2320	2888	-568
1151+00	50	0	145.7	0	0	0	0	0	0	263	0	0	0	0	0	2320	3151	-831
1151+50	50	0	158.9	0	0	0	0	0	0	282	0	0	0	0	0	2320	3433	-1113
1152+00	50	0	161.3	0	0	0	0	0	0	297	0	0	0	0	0	2320	3729	-1410
1152+50	50	0	169.6	0	0	0	0	0	0	306	0	0	0	0	0	2320	4036	-1716
								COLUMN SUB-TOTALS	*2,320*	*4,036*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

9 9

PROJECT NUMBER: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | COMPUTER EARTHWORK DATA | SHEET NO: 935 | E

NB USH 41 "NMC" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1153+00	50	0	179.3	0	0	0	0	0	0	323	0	0	0	0	0	2320	4359	-2039
1153+50	50	0	178.6	0	0	0	0	0	0	331	0	0	0	0	0	2320	4690	-2370
1154+00	50	0	236.4	0	0	0	0	0	0	384	0	0	0	0	0	2320	5074	-2754
1154+50	50	0	258.6	0	0	0	0	0	0	458	0	0	0	0	0	2320	5533	-3213
1155+00	50	0	254.6	0	0	0	0	0	0	475	0	0	0	0	0	2320	6008	-3688
1155+50	50	0	255.5	0	0	0	0	0	0	472	0	0	0	0	0	2320	6480	-4160
1156+00	50	0	251.3	0	0	0	0	0	0	469	0	0	0	0	0	2320	6949	-4630
1156+50	50	0	237.7	0	0	0	0	0	0	453	0	0	0	0	0	2320	7402	-5082
1157+00	50	0	224.1	0	0	0	0	0	0	428	0	0	0	0	0	2320	7830	-5510
1157+50	50	0	211.0	0	0	0	0	0	0	403	0	0	0	0	0	2320	8232	-5913
1158+00	50	0	196.0	0	0	0	0	0	0	377	0	0	0	0	0	2320	8609	-6290
1158+50	50	0	189.8	0	0	0	0	0	0	357	0	0	0	0	0	2320	8967	-6647
1159+00	50	0	182.1	0	0	0	0	0	0	344	0	0	0	0	0	2320	9311	-6991
1159+50	50	0	173.4	0	0	0	0	0	0	329	0	0	0	0	0	2320	9640	-7320
1160+00	50	0	173.3	0	0	0	0	0	0	321	0	0	0	0	0	2320	9961	-7641
1160+50	50	0	176.2	0	0	0	0	0	0	324	0	0	0	0	0	2320	10285	-7965
1161+00	50	0	178.9	0	0	0	0	0	0	329	0	0	0	0	0	2320	10613	-8294
1161+50	50	0	188.3	0	0	0	0	0	0	340	0	0	0	0	0	2320	10953	-8634
1162+00	50	0	199.1	0	0	0	0	0	1	359	0	0	0	0	0	2321	11312	-8991
1162+50	50	0	209.6	0	0	0	0	0	3	378	0	0	0	0	0	2324	11690	-9367
1163+00	50	0	213.2	0	0	0	0	0	5	391	0	0	0	0	0	2329	12082	-9753
1163+50	50	2.2	215.9	0	0	0	0	0	8	397	0	0	0	0	0	2336	12479	-10143
1164+00	50	5.9	231.0	0	0	0	0	0	10	414	0	0	0	0	0	2346	12893	-10546
1164+50	50	6.3	245.8	0	0	0	0	0	11	441	0	0	0	0	0	2358	13334	-10976
1165+00	50	6.2	258.9	0	0	0	0	0	10	467	0	0	0	0	0	2368	13802	-11433
1165+50	50	6.2	267.4	0	0	0	0	0	10	487	0	0	0	0	0	2379	14289	-11910
1166+00	50	6.3	277.7	0	0	0	0	0	10	505	0	0	0	0	0	2389	14794	-12405
1166+50	50	6.3	283.8	0	0	0	0	0	10	520	0	0	0	0	0	2398	15313	-12915
1167+00	50	2.4	289.1	0	0	0	0	0	9	530	0	0	0	0	0	2407	15844	-13437
1167+50	50	5.8	288.3	0	0	0	0	0	8	535	0	0	0	0	0	2415	16378	-13964
								COLUMN SUB-TOTALS	*95*	*12,343*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 "NMC" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1168+00	50	8.5	284.8	0	0	0	0	0	13	531	0	0	0	0	0	2428	16909	-14481
1168+50	50	8.5	282.9	0	0	0	0	0	16	526	0	0	0	0	0	2444	17435	-14991
1169+00	50	8.9	281.7	0	0	0	0	0	16	523	0	0	0	0	0	2460	17958	-15498
1169+50	50	9.2	285.9	0	0	0	0	0	17	525	0	0	0	0	0	2477	18483	-16006
1170+00	50	9.2	297.2	0	0	0	0	0	17	540	0	0	0	0	0	2494	19023	-16529
1170+50	50	9.5	318.5	0	0	0	0	0	17	570	0	0	0	0	0	2511	19593	-17082
1171+00	50	9.0	322.1	0	0	0	0	0	17	593	0	0	0	0	0	2528	20186	-17658
1171+50	50	9.8	315.5	0	0	0	0	0	17	590	0	0	0	0	0	2546	20777	-18231
1172+00	50	9.8	307.7	0	0	0	0	0	18	577	0	0	0	0	0	2564	21354	-18790
1172+75	75	9.8	403.2	0	0	0	0	0	27	987	0	0	0	0	0	2591	22341	-19750
BRIDGE																		
1174+70		16.9	506.0	0	0	0	0	0										
1175+50	80	0	1316.3	0	0	0	0	0	25	2700	0	0	0	0	0	2616	25041	-22424
1176+00	50	0	1318.8	0	0	0	0	0	0	2440	0	0	0	0	0	2616	27481	-24864
1176+50	50	0	1284.9	0	0	0	0	0	0	2411	0	0	0	0	0	2616	29891	-27275
1177+00	50	0	1262.5	0	0	0	0	0	0	2359	0	0	0	0	0	2616	32250	-29634
1177+50	50	0	1136.0	0	0	0	0	0	0	2221	0	0	0	0	0	2616	34471	-31855
1178+00	50	1.5	1068.7	0	0	0	0	0	2	2041	0	0	0	0	0	2618	36512	-33894
1178+50	50	7.2	1012.1	0	0	0	0	0	8	1927	0	0	0	0	0	2626	38439	-35813
1179+00	50	20.3	948.5	0	0	0	0	0	25	1815	0	0	0	0	0	2652	40254	-37603
1179+50	50	29.8	837.4	0	0	0	0	0	46	1654	0	0	0	0	0	2698	41908	-39210
1180+00	50	28.3	674.0	0	0	0	0	0	54	1399	0	0	0	0	0	2752	43307	-40556
1180+50	50	12.6	510.7	0	0	0	0	0	38	1097	0	0	0	0	0	2790	44404	-41615
1181+00	50	3.2	475.7	0	0	0	0	0	15	913	0	0	0	0	0	2804	45318	-42513
1181+50	50	0	491.8	0	0	0	0	0	3	896	0	0	0	0	0	2807	46213	-43406
1182+00	50	0	424.8	0	0	0	0	0	0	849	0	0	0	0	0	2808	47062	-44255
1182+50	50	0	339.8	0	0	0	0	0	1	708	0	0	0	0	0	2808	47770	-44962
1183+00	50	0	256.1	0	0	0	0	0	1	552	0	0	0	0	0	2809	48322	-45513
1183+50	50	0	161.6	0	0	0	0	0	0	387	0	0	0	0	0	2809	48709	-45899
1184+20	70	0	91.2	0	0	0	0	0	0	328	0	0	0	0	0	2809	49036	-46227
								COLUMN SUB-TOTALS	*395*	*32,658*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 "NMC" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
RR																		
1186+07		19.4	117.8	0	0	0	0	0										
1187+00	93	8.9	103.7	0	0	0	0	0	49	381	0	0	0	0	0	2858	49418	-46560
1187+50	50	4.9	97.9	0	0	0	0	0	13	187	0	0	0	0	0	2871	49604	-46733
1188+00	50	1.3	93.7	0	0	0	0	0	6	177	0	0	0	0	0	2877	49782	-46905
1188+50	50	0	102.4	0	0	0	0	0	1	182	0	0	0	0	0	2878	49963	-47086
1189+00	50	0	109.3	0	0	0	0	0	0	196	0	0	0	0	0	2878	50159	-47282
1189+50	50	0	119.9	0	0	0	0	0	0	212	0	0	0	0	0	2878	50372	-47494
1190+00	50	0	162.2	0	0	0	0	0	0	261	0	0	0	0	0	2878	50633	-47754
1190+50	50	1.1	148.4	0	0	0	0	0	1	288	0	0	0	0	0	2880	50920	-48041
1191+00	50	2.0	156.9	0	0	0	0	0	3	283	0	0	0	0	0	2883	51203	-48320
1191+50	50	3.5	158.1	0	0	0	0	0	5	292	0	0	0	0	0	2888	51495	-48607
1192+00	50	4.0	173.9	0	0	0	0	0	7	307	0	0	0	0	0	2895	51802	-48908
1192+84	84	5.0	187.4	0	0	0	0	0	14	562	0	0	0	0	0	2909	52364	-49456
Wietor Dr																		
1195+55		7.7	507.2	0	0	0	0	0										
1196+00	45	2.3	571.1	0	0	0	0	0	8	899	0	0	0	0	0	2917	53263	-50346
1196+50	50	2.5	579.0	0	0	0	0	0	4	1065	0	0	0	0	0	2921	54328	-51406
1197+00	50	1.9	646.0	0	0	0	0	0	4	1134	0	0	0	0	0	2926	55462	-52536
1197+50	50	1.1	744.1	0	0	0	0	0	3	1287	0	0	0	0	0	2928	56749	-53821
1198+00	50	0	931.4	0	0	0	0	0	1	1551	0	0	0	0	0	2929	58300	-55371
1198+50	50	0	1157.5	0	0	0	0	0	0	1934	0	0	0	0	0	2929	60235	-57305
1199+00	50	0	1480.6	0	0	0	0	0	0	2443	0	0	0	0	0	2929	62677	-59748
1199+50	50	0	2247.0	0	0	0	0	0	0	3451	0	0	0	0	0	2929	66129	-63199
1200+00	50	0	3981.8	0	0	0	0	0	0	5767	0	0	0	0	0	2929	71896	-68967
1200+50	50	0	5248.1	0	0	0	0	0	0	8546	0	0	0	0	0	2929	80442	-77513
1201+00	50	0	4724.9	0	0	0	0	0	0	9234	0	0	0	0	0	2929	89677	-86747
1201+50	50	0	2388.0	0	0	0	0	0	0	6586	0	0	0	0	0	2929	96263	-93333
1202+00	50	0	176.5	0	0	0	0	0	0	2375	0	0	0	0	0	2929	98637	-95708
1202+75	75	3.0	142.3	0	0	0	0	0	4	443	0	0	0	0	0	2934	99080	-96146
								COLUMN SUB-TOTALS	*124*	*50,044*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 "NMC" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
BRIDGE																		
1220+41		0	0	0	0	0	0	0										
1220+50	9	197.0	56.1	0	0	0	0	0	33	9	0	0	0	0	0	2967	99089	-96123
1221+00	50	10.0	92.4	0	0	0	0	0	192	137	0	0	0	0	0	3158	99227	-96069
1221+50	50	5.9	99.4	0	0	0	0	0	15	178	0	0	0	0	0	3173	99404	-96232
1222+00	50	0.8	106.6	0	0	0	0	0	6	191	0	0	0	0	0	3179	99595	-96416
1222+50	50	1.9	100.2	0	0	0	0	0	3	191	0	0	0	0	0	3182	99787	-96605
1223+00	50	7.1	101.6	0	0	0	0	0	8	187	0	0	0	0	0	3190	99973	-96783
1223+50	50	14.2	92.5	0	0	0	0	0	20	180	0	0	0	0	0	3210	100153	-96943
1224+00	50	22.2	105.4	0	0	0	0	0	34	183	0	0	0	0	0	3243	100336	-97093
1224+50	50	30.1	93.3	0	0	0	0	0	48	184	0	0	0	0	0	3292	100520	-97229
1225+00	50	33.3	79.7	0	0	0	0	0	59	160	0	0	0	0	0	3350	100681	-97330
1225+50	50	49.0	86.8	0	0	0	0	0	76	154	0	0	0	0	0	3427	100835	-97408
1226+00	50	58.0	80.0	0	0	0	0	0	99	154	0	0	0	0	0	3526	100989	-97464
1226+50	50	65.9	77.6	0	0	0	0	0	115	146	0	0	0	0	0	3640	101135	-97495
1227+00	50	63.1	78.0	0	0	0	0	0	119	144	0	0	0	0	0	3760	101279	-97519
1227+50	50	62.8	68.9	0	0	0	0	0	117	136	0	0	0	0	0	3877	101415	-97539
1228+00	50	57.9	64.7	0	0	0	0	0	112	124	0	0	0	0	0	3988	101539	-97551
1228+50	50	59.5	13.2	0	0	0	0	0	109	72	0	0	0	0	0	4097	101611	-97514
1229+00	50	64.4	11.8	0	0	0	0	0	115	23	0	0	0	0	0	4212	101634	-97423
1229+50	50	70.2	11.8	0	0	0	0	0	125	22	0	0	0	0	0	4336	101656	-97320
1230+00	50	88.0	11.8	0	0	0	0	0	146	22	0	0	0	0	0	4483	101678	-97195
1230+50	50	105.4	11.8	0	0	0	0	0	179	22	0	0	0	0	0	4662	101700	-97038
1231+00	50	116.1	11.8	0	0	0	0	0	205	22	0	0	0	0	0	4867	101722	-96854
1231+50	50	131.4	11.8	0	0	0	0	0	229	22	0	0	0	0	0	5096	101743	-96647
1232+00	50	143.2	11.8	0	0	0	0	0	254	22	0	0	0	0	0	5351	101765	-96414
1232+50	50	152.9	12.2	0	0	0	0	0	274	22	0	0	0	0	0	5625	101787	-96162
1233+00	50	166.4	12.9	0	0	0	0	0	296	23	0	0	0	0	0	5920	101810	-95890
1233+50	50	164.5	13.3	0	0	0	0	0	306	24	0	0	0	0	0	6227	101835	-95608
1234+00	50	162.0	13.2	0	0	0	0	0	302	25	0	0	0	0	0	6529	101859	-95330
								COLUMN SUB-TOTALS	*3,595*	*2,779*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 "NMC" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1234+50	50	144.2	13.3	0	0	0	0	0	284	25	0	0	0	0	0	6813	101884	-95071
1235+00	50	130.7	13.3	0	0	0	0	0	255	25	0	0	0	0	0	7067	101909	-94841
1235+50	50	138.9	59.8	0	0	0	0	0	250	68	0	0	0	0	0	7317	101976	-94659
1236+00	50	123.0	58.4	0	0	0	0	0	242	109	0	0	0	0	0	7559	102086	-94526
1236+50	50	100.6	64.8	0	0	0	0	0	207	114	0	0	0	0	0	7766	102200	-94433
1237+00	50	83.1	79.1	0	0	0	0	0	170	133	0	0	0	0	0	7936	102333	-94397
1237+50	50	69.8	92.5	0	0	0	0	0	142	159	0	0	0	0	0	8078	102492	-94414
1238+00	50	59.9	97.9	0	0	0	0	0	120	176	0	0	0	0	0	8198	102668	-94470
1238+50	50	47.0	95.5	0	0	0	0	0	99	179	0	0	0	0	0	8297	102847	-94550
1239+00	50	33.6	101.7	0	0	0	0	0	75	183	0	0	0	0	0	8371	103030	-94658
1239+50	50	29.7	104.3	0	0	0	0	0	59	191	0	0	0	0	0	8430	103220	-94790
1240+00	50	28.8	107.3	0	0	0	0	0	54	196	0	0	0	0	0	8484	103416	-94932
1240+50	50	30.9	106	0	0	0	0	0	55	198	0	0	0	0	0	8540	103614	-95074
1241+00	50	34.1	106.4	0	0	0	0	0	60	197	0	0	0	0	0	8600	103811	-95211
1241+50	50	47.9	106.3	0	0	0	0	0	76	197	0	0	0	0	0	8676	104008	-95332
1242+00	50	62.4	85.7	0	0	0	0	0	102	178	0	0	0	0	0	8778	104185	-95407
1242+50	50	84.9	69.6	0	0	0	0	0	136	144	0	0	0	0	0	8914	104329	-95415
1243+00	50	102.3	61.4	0	0	0	0	0	173	121	0	0	0	0	0	9088	104450	-95363
1243+50	50	117.2	54.7	0	0	0	0	0	203	108	0	0	0	0	0	9291	104558	-95267
1244+00	50	137.2	51.2	0	0	0	0	0	235	98	0	0	0	0	0	9526	104656	-95130
1244+50	50	158.1	42.1	0	0	0	0	0	273	86	0	0	0	0	0	9800	104742	-94943
1245+00	50	174.9	38.2	0	0	0	0	0	308	74	0	0	0	0	0	10108	104817	-94709
1245+50	50	178.5	32.8	0	0	0	0	0	327	66	0	0	0	0	0	10435	104883	-94447
1246+00	50	176.6	29.8	0	0	0	0	0	329	58	0	0	0	0	0	10764	104940	-94176
1246+50	50	181.2	29.0	0	0	0	0	0	331	54	0	0	0	0	0	11095	104995	-93900
1247+00	50	175.9	29.9	0	0	0	0	0	331	55	0	0	0	0	0	11426	105049	-93623
1247+50	50	171.5	28.2	0	0	0	0	0	322	54	0	0	0	0	0	11748	105103	-93356
1248+00	50	168.5	29.7	0	0	0	0	0	315	54	0	0	0	0	0	12063	105157	-93094
1248+50	50	164.0	32.0	0	0	0	0	0	308	57	0	0	0	0	0	12371	105214	-92844
1249+00	50	149.3	35.2	0	0	0	0	0	290	62	0	0	0	0	0	12661	105276	-92616
*									1500	0	0	0	0	0	0	14161	105276	-91116
								COLUMN SUB-TOTALS	*7,632*	*3,417*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	14,161	105,276	0	0	0	0	0			

*Temporary Median Crossover Removal

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

OBLITERATE NB USH 41 to SB IH 43 "OB2"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1182+00		0	0	0	0	886.0	0	55.0										
1182+50	50	0	0	0	0	1244.7	0	98.0	0	0	0	0	1973	0	142	0	0	142
1183+00	50	0	0	0	0	1264.2	0	161.5	0	0	0	0	2323	0	240	0	0	382
1183+50	50	0	0	0	0	946.2	0	118.4	0	0	0	0	2047	0	259	0	0	641
1184+00	50	0	0	0	0	977.5	0	117.5	0	0	0	0	1781	0	218	0	0	860
1184+50	50	0	0	0	0	999.5	0	118.3	0	0	0	0	1831	0	218	0	0	1078
1185+00	50	0	0	0	0	980.5	0	114.0	0	0	0	0	1833	0	215	0	0	1293
1185+50	50	0	0	0	0	988.3	0	111.3	0	0	0	0	1823	0	209	0	0	1502
GAP																		
1198+50		81.3	0	251.5	251.5	0	0	0										
1199+00	50	737.0	0	316.0	316.0	0	0	0	758	0	525	525	0	0	0	758	0	2259
1199+50	50	1186.9	0	292.1	292.1	0	0	0	1781	0	563	563	0	0	0	2539	0	4041
1200+00	50	1232.7	0	508.6	508.6	0	0	0	2240	0	741	741	0	0	0	4780	0	6281
1200+50	50	1098.9	0	446.8	446.8	0	0	0	2159	0	885	885	0	0	0	6938	0	8440
1201+00	50	979.3	0	409.0	409.0	0	0	0	1924	0	792	792	0	0	0	8863	0	10364
1201+50	50	872.8	0	373.0	373.0	0	0	0	1715	0	724	724	0	0	0	10578	0	12079
1202+00	50	753.6	0	317.1	317.1	0	0	0	1506	0	639	639	0	0	0	12084	0	13585
1202+50	50	646.6	0	264.9	264.9	0	0	0	1297	0	539	539	0	0	0	13380	0	14882
1203+00	50	572.7	0	246.5	246.5	0	0	0	1129	0	473	473	0	0	0	14509	0	16011
1203+50	50	498.5	0	216.9	216.9	0	0	0	992	0	429	429	0	0	0	15501	0	17003
1204+00	50	429.8	0	184.3	184.3	0	0	0	860	0	371	371	0	0	0	16360	0	17862
1204+50	50	360.2	0	143.2	143.2	0	0	0	731	0	303	303	0	0	0	17092	0	18594
1205+00	50	285.7	0	109.7	109.7	0	0	0	598	0	234	234	0	0	0	17690	0	19192
1205+50	50	229.1	0	81.0	81.0	0	0	0	477	0	177	177	0	0	0	18167	0	19668
1206+00	50	182.2	0	58.8	58.8	0	0	0	381	0	129	129	0	0	0	18547	0	20049
1206+50	50	153.5	0	46.2	46.2	0	0	0	311	0	97	97	0	0	0	18858	0	20360
								COLUMN TOTALS	18,858	0	7,623	7,623	13,611	0	1,502			

Note: STA 1182+00 - 1185+50 OB2 located in OB2 SD cross sections only.

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB IH 43 "SIH"

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1125+00		26.1	0	0	0	0	0	0										
1125+50	50	24.0	0	0	0	0	0	0	46	0	0	0	0	0	0	46	0	46
1126+00	50	22.0	0	0	0	0	0	0	43	0	0	0	0	0	0	89	0	89
1126+50	50	23.9	0	0	0	0	0	0	43	0	0	0	0	0	0	132	0	132
1127+00	50	22.6	0	0	0	0	0	0	43	0	0	0	0	0	0	175	0	175
1127+50	50	25.3	0	0	0	0	0	0	44	0	0	0	0	0	0	219	0	219
1128+00	50	24.5	0	0	0	0	0	0	46	0	0	0	0	0	0	265	0	265
1128+50	50	24.9	0	0	0	0	0	0	46	0	0	0	0	0	0	311	0	311
1129+00	50	25.5	0	0	0	0	0	0	47	0	0	0	0	0	0	358	0	358
1129+50	50	25.7	0	0	0	0	0	0	47	0	0	0	0	0	0	405	0	405
1130+00	50	25.5	0	0	0	0	0	0	47	0	0	0	0	0	0	453	0	452
1130+50	50	24.9	0	0	0	0	0	0	47	0	0	0	0	0	0	499	1	499
1131+00	50	25.2	0	0	0	0	0	0	46	1	0	0	0	0	0	546	1	545
1131+50	50	25.8	0	0	0	0	0	0	47	0	0	0	0	0	0	593	1	591
1132+00	50	26.9	0	0	0	0	0	0	49	0	0	0	0	0	0	642	2	640
1132+50	50	25.9	0	0	0	0	0	0	49	0	0	0	0	0	0	690	2	689
1133+00	50	24.5	1.3	0	0	0	0	0	47	1	0	0	0	0	0	737	3	734
1133+50	50	25.2	0.7	0	0	0	0	0	46	2	0	0	0	0	0	783	5	778
1134+00	50	26.0	0.9	0	0	0	0	0	47	1	0	0	0	0	0	831	6	824
1134+50	50	26.5	1.1	0	0	0	0	0	49	2	0	0	0	0	0	879	8	871
1135+00	50	26.1	1.6	0	0	0	0	0	49	3	0	0	0	0	0	928	11	917
1135+50	50	25.7	1.3	0	0	0	0	0	48	3	0	0	0	0	0	976	13	963
1136+00	50	25.8	0.7	0	0	0	0	0	48	2	0	0	0	0	0	1024	15	1008
1136+50	50	25.1	3.7	0	0	0	0	0	47	4	0	0	0	0	0	1071	19	1051
1137+00	50	23.0	5.7	0	0	0	0	0	45	9	0	0	0	0	0	1115	28	1087
1137+50	50	23.3	6.6	0	0	0	0	0	43	11	0	0	0	0	0	1158	39	1119
1138+00	50	23.4	4.9	0	0	0	0	0	43	11	0	0	0	0	0	1201	50	1151
1138+50	50	23.9	4.6	0	0	0	0	0	44	9	0	0	0	0	0	1245	59	1186
1139+00	50	26.9	1.4	0	0	0	0	0	47	6	0	0	0	0	0	1292	64	1228
1139+50	50	30.6	0	0	0	0	0	0	53	1	0	0	0	0	0	1345	66	1280
								COLUMN SUB-TOTALS	*1,345*	*66*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

9 9

PROJECT NUMBER: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | COMPUTER EARTHWORK DATA | SHEET NO: 942 | E

SB IH 43 "SIH" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1140+00	50	28.3	1.0	0	0	0	0	0	55	1	0	0	0	0	0	1400	67	1333
1140+50	50	26.1	0.9	0	0	0	0	0	50	2	0	0	0	0	0	1450	69	1382
1141+00	50	40.7	5.0	0	0	0	0	0	62	5	0	0	0	0	0	1512	74	1438
1141+50	50	45.2	3.4	0	0	0	0	0	80	8	0	0	0	0	0	1592	82	1510
1142+00	50	49.2	2.3	0	0	0	0	0	87	5	0	0	0	0	0	1679	87	1592
1142+50	50	52.5	0	0	0	0	0	0	94	2	0	0	0	0	0	1773	89	1684
1143+00	50	96.9	0	0	0	0	0	0	138	0	0	0	0	0	0	1911	89	1822
1143+50	50	86.5	0	0	0	0	0	0	170	0	0	0	0	0	0	2081	89	1992
1144+00	50	73.8	0	0	0	0	0	0	148	0	0	0	0	0	0	2230	89	2140
1144+50	50	66.4	0	0	0	0	0	0	130	0	0	0	0	0	0	2360	90	2270
1145+00	50	56.7	4.2	0	0	0	0	0	114	4	0	0	0	0	0	2473	94	2379
1145+50	50	52.1	4.4	0	0	0	0	0	101	8	0	0	0	0	0	2574	102	2472
1146+00	50	42.9	5.3	0	0	0	0	0	67	9	0	0	0	0	0	2642	111	2531
1146+50	50	37.0	6.8	0	0	0	0	0	54	11	0	0	0	0	0	2696	122	2574
1147+00	50	28.4	13.0	0	0	0	0	0	45	18	0	0	0	0	0	2741	141	2601
1147+50	50	21.6	17.8	0	0	0	0	0	39	29	0	0	0	0	0	2780	169	2611
1148+00	50	16.2	25.1	0	0	0	0	0	35	40	0	0	0	0	0	2815	209	2606
1148+50	50	19.4	23.1	0	0	0	0	0	34	45	0	0	0	0	0	2848	253	2595
1149+00	50	19.2	24.2	0	0	0	0	0	37	44	0	0	0	0	0	2885	297	2588
1149+50	50	17.0	13.8	0	0	0	0	0	40	35	0	0	0	0	0	2925	332	2593
1150+00	50	19.4	10.7	0	0	0	0	0	48	23	0	0	0	0	0	2973	355	2618
1150+50	50	23.7	6.5	0	0	0	0	0	61	16	0	0	0	0	0	3034	371	2663
1151+00	50	29.1	3.2	0	0	0	0	0	79	9	0	0	0	0	0	3113	380	2733
1151+50	50	39.4	0.9	0	0	0	0	0	101	4	0	0	0	0	0	3215	384	2831
1152+00	50	53.4	0	0	0	0	0	0	153	1	0	0	0	0	0	3368	385	2983
1152+50	50	68.5	0	0	0	0	0	0	167	0	0	0	0	0	0	3534	385	3150
1153+00	50	83.6	0	0	0	0	0	0	180	0	0	0	0	0	0	3714	385	3330
1153+50	50	97.4	0	0	0	0	0	0	193	0	0	0	0	0	0	3908	385	3523
1154+00	50	112.8	0	0	0	0	0	0	206	0	0	0	0	0	0	4114	385	3729
1154+50	50	123.8	0	0	0	0	0	0	219	0	0	0	0	0	0	4333	385	3948
								COLUMN SUB-TOTALS	*2,988*	*319*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB IH 43 "SIH" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1155+00	50	125.4	0	0	0	0	0	0	229	0	0	0	0	0	0	4562	385	4178
1155+50	50	121.9	0	0	0	0	0	0	229	0	0	0	0	0	0	4791	385	4407
1156+00	50	128.4	0	0	0	0	0	0	232	0	0	0	0	0	0	5023	385	4638
1156+50	50	124.3	0	0	0	0	0	0	234	0	0	0	0	0	0	5257	385	4872
1157+00	50	131.1	0	0	0	0	0	0	236	0	0	0	0	0	0	5493	385	5109
1157+50	50	121.4	0	0	0	0	0	0	234	0	0	0	0	0	0	5727	385	5343
1158+00	50	121.3	0	0	0	0	0	0	225	0	0	0	0	0	0	5952	385	5567
1158+50	50	118.3	0	0	0	0	0	0	222	0	0	0	0	0	0	6174	385	5789
1159+00	50	112.3	0	0	0	0	0	0	213	0	0	0	0	0	0	6387	385	6003
1159+50	50	136.5	0	0	0	0	0	0	230	0	0	0	0	0	0	6617	385	6233
1160+00	50	140.1	0	0	0	0	0	0	256	0	0	0	0	0	0	6874	385	6489
1160+50	50	132.0	0	0	0	0	0	0	252	0	0	0	0	0	0	7126	385	6741
1161+00	50	133.1	0	0	0	0	0	0	245	0	0	0	0	0	0	7371	385	6986
1161+50	50	90.7	8.9	0	0	0	0	0	207	8	0	0	0	0	0	7578	393	7186
1162+00	50	91.1	7.1	0	0	0	0	0	168	15	0	0	0	0	0	7747	408	7339
1162+50	50	84.5	8.1	0	0	0	0	0	163	14	0	0	0	0	0	7909	422	7488
1163+00	50	92.6	2.7	0	0	0	0	0	164	10	0	0	0	0	0	8073	432	7642
1163+50	50	93.5	0.7	0	0	0	0	0	172	3	0	0	0	0	0	8246	435	7811
1164+00	50	88.3	0	0	0	0	0	0	168	1	0	0	0	0	0	8414	435	7979
1164+50	50	82.9	0	0	0	0	0	0	158	0	0	0	0	0	0	8572	435	8137
1165+00	50	69.6	0	0	0	0	0	0	141	0	0	0	0	0	0	8714	435	8278
1165+50	50	56.8	1.0	0	0	0	0	0	117	1	0	0	0	0	0	8831	436	8394
1166+00	50	46.2	2.8	0	0	0	0	0	95	4	0	0	0	0	0	8926	440	8486
1166+50	50	26.1	5.7	0	0	0	0	0	67	8	0	0	0	0	0	8993	448	8545
1167+00	50	21.1	7.7	0	0	0	0	0	44	12	0	0	0	0	0	9037	460	8577
1167+50	50	16.8	8.6	0	0	0	0	0	35	15	0	0	0	0	0	9072	475	8597
1168+00	50	10.4	8.6	0	0	0	0	0	25	16	0	0	0	0	0	9097	491	8606
1168+50	50	6.2	6.8	0	0	0	0	0	15	14	0	0	0	0	0	9113	505	8607
1169+00	50	1.7	4.7	0	0	0	0	0	7	11	0	0	0	0	0	9120	516	8604
1169+50	50	0	6.6	0	0	0	0	0	2	10	0	0	0	0	0	9122	526	8595
								COLUMN SUB-TOTALS	*4,789*	*142*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB IH 43 "SIH" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1170+00	50	0	6.1	0	0	0	0	0	0	12	0	0	0	0	0	9122	538	8584
1170+50	50	1.6	5.1	0	0	0	0	0	2	10	0	0	0	0	0	9124	548	8575
1171+00	50	1.6	2.7	0	0	0	0	0	3	7	0	0	0	0	0	9127	556	8571
1171+50	50	11.7	1.0	0	0	0	0	0	12	3	0	0	0	0	0	9139	559	8580
1172+00	50	19.6	0.5	0	0	0	0	0	29	1	0	0	0	0	0	9168	560	8608
1172+50	50	33.4	0	0	0	0	0	0	49	1	0	0	0	0	0	9218	561	8657
1173+00	50	52.9	0	0	0	0	0	0	80	0	0	0	0	0	0	9298	561	8736
1173+50	50	74.9	0	0	0	0	0	0	118	0	0	0	0	0	0	9416	561	8855
1174+00	50	96.0	17.4	0	0	0	0	0	158	16	0	0	0	0	0	9574	577	8997
1174+50	50	57.3	16.7	0	0	0	0	0	142	32	0	0	0	0	0	9716	609	9107
								COLUMN SUB-TOTALS	*594*	*82*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	9,716	609	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB USH 41 "SMC"

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1138+00		73.4	0	0	0	0	0	0										
1138+50	50	71.8	0	0	0	0	0	0	134	0	0	0	0	0	0	134	0	134
1139+00	50	70.3	0	0	0	0	0	0	132	0	0	0	0	0	0	266	0	266
1139+50	50	63.4	0	0	0	0	0	0	124	0	0	0	0	0	0	390	0	389
1140+00	50	53.3	0.7	0	0	0	0	0	108	1	0	0	0	0	0	498	1	497
1140+50	50	37.8	3.3	0	0	0	0	0	84	4	0	0	0	0	0	582	5	577
1141+00	50	27.8	13.6	0	0	0	0	0	61	16	0	0	0	0	0	643	21	622
1141+50	50	13.2	27.3	0	0	0	0	0	38	38	0	0	0	0	0	681	59	622
1142+00	50	38.4	192.4	0	0	0	0	0	48	204	0	0	0	0	0	729	262	467
1142+50	50	34.4	198.4	0	0	0	0	0	67	362	0	0	0	0	0	796	624	172
1143+00	50	43.0	206.1	0	0	0	0	0	72	374	0	0	0	0	0	868	998	-130
1143+50	50	78.5	214.9	0	0	0	0	0	113	390	0	0	0	0	0	980	1388	-408
1144+00	50	82.1	229.6	0	0	0	0	0	149	412	0	0	0	0	0	1129	1800	-671
1144+50	50	85.8	237.7	0	0	0	0	0	156	433	0	0	0	0	0	1285	2232	-948
1145+00	50	89.7	239.2	0	0	0	0	0	163	442	0	0	0	0	0	1447	2674	-1227
1145+50	50	93.7	240.1	0	0	0	0	0	170	444	0	0	0	0	0	1617	3118	-1501
1146+00	50	68.3	233.1	0	0	0	0	0	150	438	0	0	0	0	0	1767	3556	-1789
1146+50	50	71.3	222.1	0	0	0	0	0	129	422	0	0	0	0	0	1896	3978	-2081
1147+00	50	61.9	214.4	0	0	0	0	0	123	404	0	0	0	0	0	2020	4382	-2362
1147+50	50	63.6	212.7	0	0	0	0	0	116	396	0	0	0	0	0	2136	4777	-2641
1148+00	50	65.2	212.0	0	0	0	0	0	119	393	0	0	0	0	0	2255	5171	-2915
1148+50	50	58.1	222.2	0	0	0	0	0	114	402	0	0	0	0	0	2369	5573	-3203
1149+00	50	50.2	235.4	0	0	0	0	0	100	424	0	0	0	0	0	2470	5996	-3527
1149+50	50	40.2	255.5	0	0	0	0	0	84	455	0	0	0	0	0	2553	6451	-3898
1150+00	50	38.2	273.4	0	0	0	0	0	73	490	0	0	0	0	0	2626	6941	-4315
1150+50	50	21.0	289.9	0	0	0	0	0	55	522	0	0	0	0	0	2681	7462	-4782
1151+00	50	4.5	314.0	0	0	0	0	0	24	559	0	0	0	0	0	2704	8022	-5317
1151+50	50	11.0	340.4	0	0	0	0	0	14	606	0	0	0	0	0	2719	8627	-5909
1152+00	50	14.0	363.7	0	0	0	0	0	23	652	0	0	0	0	0	2742	9279	-6538
1152+50	50	12.0	382.4	0	0	0	0	0	24	691	0	0	0	0	0	2766	9970	-7204
								COLUMN SUB-TOTALS	*2,766*	*9,970*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

9 9

PROJECT NUMBER: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | COMPUTER EARTHWORK DATA | SHEET NO: 946 | E

SB USH 41 "SMC" (continued)

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1153+00	50	4.0	366.7	0	0	0	0	0	15	694	0	0	0	0	0	2781	10664	-7883
1153+50	50	3.7	366.1	0	0	0	0	0	7	679	0	0	0	0	0	2788	11342	-8555
1154+00	50	10.7	375.0	0	0	0	0	0	13	686	0	0	0	0	0	2801	12029	-9227
1154+50	50	9.3	364.8	0	0	0	0	0	19	685	0	0	0	0	0	2820	12714	-9894
1155+00	50	0	335.0	0	0	0	0	0	9	648	0	0	0	0	0	2828	13362	-10533
1155+50	50	0	309.9	0	0	0	0	0	0	597	0	0	0	0	0	2828	13959	-11130
1156+00	50	0	291.9	0	0	0	0	0	0	557	0	0	0	0	0	2828	14516	-11688
1156+50	50	0	290.8	0	0	0	0	0	0	540	0	0	0	0	0	2829	15056	-12227
1157+00	50	0	241.0	0	0	0	0	0	0	492	0	0	0	0	0	2829	15548	-12719
1157+50	50	28.7	219.2	0	0	0	0	0	27	426	0	0	0	0	0	2856	15974	-13119
1158+00	50	0	189.3	0	0	0	0	0	27	378	0	0	0	0	0	2883	16352	-13470
								COLUMN SUB-TOTALS	*117*	*6,382*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	2,883	16,352	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB 41 TEMPORARY ALIGNMENT "TWA"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut 1.00	Fill 1.00	Mass Ordinate
									Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7			Note 8
1152+00		43.1	6.2	0	0	0	0	0										
1152+50	50	40.9	8.0	0	0	0	0	0	78	13	0	0	0	0	0	78	13	65
1153+00	50	40.2	10.2	0	0	0	0	0	75	17	0	0	0	0	0	153	30	123
1153+50	50	40.6	10.7	0	0	0	0	0	75	19	0	0	0	0	0	228	49	178
1154+00	50	43.5	5.7	0	0	0	0	0	78	15	0	0	0	0	0	306	65	241
1154+50	50	48.2	0.5	0	0	0	0	0	85	6	0	0	0	0	0	391	70	320
1155+00	50	51.2	0	0	0	0	0	0	92	0	0	0	0	0	0	483	71	412
1155+50	50	56.5	0	0	0	0	0	0	100	0	0	0	0	0	0	583	71	512
1156+00	50	57.3	0	0	0	0	0	0	105	0	0	0	0	0	0	688	71	617
1156+50	50	53.8	0	0	0	0	0	0	103	0	0	0	0	0	0	791	71	720
1157+00	50	52.2	0	0	0	0	0	0	98	0	0	0	0	0	0	889	71	818
1157+50	50	55.6	0	0	0	0	0	0	100	0	0	0	0	0	0	989	71	918
1158+00	50	45.4	0	0	0	0	0	0	94	0	0	0	0	0	0	1083	71	1012
1158+50	50	43.7	0	0	0	0	0	0	83	0	0	0	0	0	0	1165	71	1094
1159+00	50	43.1	0	0	0	0	0	0	80	0	0	0	0	0	0	1245	71	1175
1159+50	50	44.3	0	0	0	0	0	0	81	0	0	0	0	0	0	1326	71	1255
1160+00	50	43.3	0	0	0	0	0	0	81	0	0	0	0	0	0	1407	71	1336
1160+50	50	42.4	0	0	0	0	0	0	79	0	0	0	0	0	0	1487	71	1416
1161+00	50	30.1	0	0	0	0	0	0	67	0	0	0	0	0	0	1554	71	1483
1161+50	50	32.6	0	0	0	0	0	0	58	0	0	0	0	0	0	1612	71	1541
1162+00	50	35.8	0	0	0	0	0	0	63	0	0	0	0	0	0	1675	71	1604
1162+50	50	39.7	0	0	0	0	0	0	70	0	0	0	0	0	0	1745	71	1674
1163+00	50	28.9	0	0	0	0	0	0	64	0	0	0	0	0	0	1809	71	1737
1163+50	50	31.1	0	0	0	0	0	0	56	0	0	0	0	0	0	1864	71	1793
1164+00	50	29.0	0	0	0	0	0	0	56	0	0	0	0	0	0	1920	72	1848
1164+50	50	29.2	0	0	0	0	0	0	54	0	0	0	0	0	0	1974	72	1902
1165+00	50	29.4	0	0	0	0	0	0	54	0	0	0	0	0	0	2028	72	1956
1165+50	50	29.7	0	0	0	0	0	0	55	0	0	0	0	0	0	2083	72	2011
1166+00	50	30.0	0	0	0	0	0	0	55	0	0	0	0	0	0	2138	72	2066
1166+50	50	30.0	0	0	0	0	0	0	56	0	0	0	0	0	0	2193	72	2122
								COLUMN SUB-TOTALS	*2,193*	*72*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

9 9

PROJECT NUMBER: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | COMPUTER EARTHWORK DATA | SHEET NO: 948 | E

SB 41 TEMPORARY ALIGNMENT "TWA" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1167+00	50	31.8	0	0	0	0	0	0	57	0	0	0	0	0	0	2251	72	2179
1167+50	50	52.4	0	0	0	0	0	0	78	0	0	0	0	0	0	2329	72	2257
1168+00	50	49.0	0	0	0	0	0	0	94	0	0	0	0	0	0	2423	72	2351
1168+50	50	42.7	0	0	0	0	0	0	85	0	0	0	0	0	0	2507	72	2436
1169+00	50	40.1	0	0	0	0	0	0	77	0	0	0	0	0	0	2584	72	2512
1169+50	50	35.4	9.0	0	0	0	0	0	70	8	0	0	0	0	0	2654	80	2574
1170+00	50	30.9	18.6	0	0	0	0	0	61	26	0	0	0	0	0	2715	106	2609
1170+50	50	34.7	13.1	0	0	0	0	0	61	29	0	0	0	0	0	2776	135	2641
1171+00	50	37.0	7.1	0	0	0	0	0	66	19	0	0	0	0	0	2843	154	2688
1171+50	50	38.8	4.7	0	0	0	0	0	70	11	0	0	0	0	0	2913	165	2748
1172+00	50	39.4	2.1	0	0	0	0	0	72	6	0	0	0	0	0	2985	171	2814
1172+50	50	34.8	12.9	0	0	0	0	0	69	14	0	0	0	0	0	3054	185	2868
1173+00	50	0	0	0	0	0	0	0	50	12	0	0	0	0	0	3104	197	2906
Velp Ave																		
1174+00		36.4	6.5	0	0	0	0	0										
1174+50	50	36.4	6.5	0	0	0	0	0	67	12	0	0	0	0	0	3171	209	2962
1175+00	50	41.6	0	0	0	0	0	0	72	6	0	0	0	0	0	3243	215	3028
1175+50	50	41.8	0	0	0	0	0	0	77	0	0	0	0	0	0	3321	215	3105
1176+00	50	39.0	0	0	0	0	0	0	75	0	0	0	0	0	0	3395	215	3180
1176+50	50	37.9	0	0	0	0	0	0	71	0	0	0	0	0	0	3467	216	3251
1177+00	50	34.8	0	0	0	0	0	0	67	1	0	0	0	0	0	3534	216	3317
1177+50	50	35.1	0	0	0	0	0	0	65	1	0	0	0	0	0	3599	217	3382
1178+00	50	34.4	0	0	0	0	0	0	64	0	0	0	0	0	0	3663	217	3446
1178+50	50	31.2	0	0	0	0	0	0	61	0	0	0	0	0	0	3724	217	3506
1179+00	50	29.5	0	0	0	0	0	0	56	0	0	0	0	0	0	3780	217	3563
1179+50	50	29.1	0	0	0	0	0	0	54	0	0	0	0	0	0	3834	217	3617
1180+00	50	27.2	0	0	0	0	0	0	52	0	0	0	0	0	0	3886	217	3669
								COLUMN SUB-TOTALS	*1,693*	*145*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	3,886	217	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWB"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1138+60		30.8	2.1	0	0	0	0	0										
1139+00	40	29.8	4.0	0	0	0	0	0	45	5	0	0	0	0	0	45	5	40
1139+50	50	28.5	4.2	0	0	0	0	0	54	8	0	0	0	0	0	99	12	87
1140+00	50	27.8	5.1	0	0	0	0	0	52	9	0	0	0	0	0	151	21	130
1140+50	50	27.7	6.1	0	0	0	0	0	51	10	0	0	0	0	0	202	31	171
1141+00	50	28.0	14.2	0	0	0	0	0	52	19	0	0	0	0	0	254	50	204
1141+50	50	26.1	6.0	0	0	0	0	0	50	19	0	0	0	0	0	304	69	235
1142+00	50	26.5	1.8	0	0	0	0	0	49	7	0	0	0	0	0	352	76	276
1142+50	50	22.3	1.5	0	0	0	0	0	45	3	0	0	0	0	0	398	79	319
1143+00	50	26.7	0.9	0	0	0	0	0	45	2	0	0	0	0	0	443	81	362
1143+50	50	40.9	1.5	0	0	0	0	0	63	2	0	0	0	0	0	506	83	422
1144+00	50	54.6	1.2	0	0	0	0	0	88	3	0	0	0	0	0	594	86	508
1144+50	50	42.6	5.9	0	0	0	0	0	90	7	0	0	0	0	0	684	93	591
1145+00	50	47.0	11.3	0	0	0	0	0	83	16	0	0	0	0	0	767	109	658
1145+50	50	46.2	5.9	0	0	0	0	0	86	16	0	0	0	0	0	853	124	729
1146+00	50	46.0	2.8	0	0	0	0	0	85	8	0	0	0	0	0	939	133	806
1146+50	50	41.7	0	0	0	0	0	0	81	3	0	0	0	0	0	1020	135	884
1147+00	50	41.3	0	0	0	0	0	0	77	0	0	0	0	0	0	1097	136	961
1147+50	50	37.9	0	0	0	0	0	0	73	0	0	0	0	0	0	1170	136	1034
1148+00	50	37.2	0	0	0	0	0	0	70	0	0	0	0	0	0	1240	136	1104
1148+50	50	34.7	0	0	0	0	0	0	67	0	0	0	0	0	0	1306	136	1170
1149+00	50	35.9	0	0	0	0	0	0	65	0	0	0	0	0	0	1372	136	1235
1149+50	50	36.3	0	0	0	0	0	0	67	0	0	0	0	0	0	1438	136	1302
1150+00	50	34.8	0	0	0	0	0	0	66	0	0	0	0	0	0	1504	136	1368
1150+50	50	34.0	0	0	0	0	0	0	64	0	0	0	0	0	0	1568	136	1431
1151+00	50	32.8	0	0	0	0	0	0	62	0	0	0	0	0	0	1630	137	1493
1151+50	50	29.9	0	0	0	0	0	0	58	0	0	0	0	0	0	1688	137	1551
1152+00	50	26.3	0	0	0	0	0	0	52	0	0	0	0	0	0	1740	137	1603
1152+50	50	24.2	0	0	0	0	0	0	47	0	0	0	0	0	0	1787	137	1650
1153+00	50	23.4	0	0	0	0	0	0	44	0	0	0	0	0	0	1831	137	1694
								COLUMN SUB-TOTALS	*1,831*	*137*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWB" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1153+50	50	26.7	0	0	0	0	0	0	46	0	0	0	0	0	0	1877	137	1740
1154+00	50	27.3	0	0	0	0	0	0	50	0	0	0	0	0	0	1927	137	1790
1154+50	50	20.7	0.6	0	0	0	0	0	44	1	0	0	0	0	0	1971	137	1834
1155+00	50	31.0	0.1	0	0	0	0	0	48	1	0	0	0	0	0	2019	138	1881
1155+50	50	29.6	0.7	0	0	0	0	0	56	1	0	0	0	0	0	2075	139	1937
1156+00	50	40.1	0	0	0	0	0	0	65	1	0	0	0	0	0	2140	139	2000
1156+50	50	37.5	0	0	0	0	0	0	72	0	0	0	0	0	0	2212	139	2072
1157+00	50	35.1	3.2	0	0	0	0	0	67	3	0	0	0	0	0	2279	142	2137
1157+50	50	34.5	6.7	0	0	0	0	0	64	9	0	0	0	0	0	2343	152	2192
1158+00	50	32.1	10.1	0	0	0	0	0	62	16	0	0	0	0	0	2405	167	2238
1158+50	50	37.0	5.1	0	0	0	0	0	64	14	0	0	0	0	0	2469	181	2288
1159+00	50	39.3	3.0	0	0	0	0	0	71	7	0	0	0	0	0	2540	189	2351
1159+50	50	44.7	0	0	0	0	0	0	82	3	0	0	0	0	0	2622	191	2430
1160+00	50	44.2	1.1	0	0	0	0	0	87	1	0	0	0	0	0	2709	192	2516
1160+50	50	44.6	1.1	0	0	0	0	0	90	2	0	0	0	0	0	2799	194	2605
1161+00	50	48.2	1.1	0	0	0	0	0	91	2	0	0	0	0	0	2890	196	2694
1161+50	50	53.9	2.9	0	0	0	0	0	92	4	0	0	0	0	0	2982	200	2782
1162+00	50	52.7	0	0	0	0	0	0	92	3	0	0	0	0	0	3074	203	2871
1162+50	50	47.0	1.4	0	0	0	0	0	89	1	0	0	0	0	0	3163	204	2959
1163+00	50	46.4	1.7	0	0	0	0	0	86	3	0	0	0	0	0	3249	207	3042
1163+50	50	48.1	1.6	0	0	0	0	0	85	3	0	0	0	0	0	3334	210	3124
1164+00	50	45.5	1.5	0	0	0	0	0	84	3	0	0	0	0	0	3418	213	3205
1164+50	50	44.9	5.6	0	0	0	0	0	82	7	0	0	0	0	0	3500	220	3281
1165+00	50	44.2	5.7	0	0	0	0	0	82	10	0	0	0	0	0	3582	230	3352
1165+50	50	44.0	5.5	0	0	0	0	0	80	10	0	0	0	0	0	3662	240	3422
1166+00	50	44.1	5.7	0	0	0	0	0	80	10	0	0	0	0	0	3742	251	3491
1166+50	50	43.8	1.8	0	0	0	0	0	79	7	0	0	0	0	0	3822	258	3564
1167+00	50	44.7	5.9	0	0	0	0	0	79	7	0	0	0	0	0	3901	265	3636
1167+50	50	42.0	2.4	0	0	0	0	0	78	8	0	0	0	0	0	3979	272	3706
1168+00	50	40.0	4.1	0	0	0	0	0	76	6	0	0	0	0	0	4055	278	3776
								COLUMN SUB-TOTALS	*2,224*	*142*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWB" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1168+50	50	37.0	6.3	0	0	0	0	0	74	10	0	0	0	0	0	4129	288	3841
1169+00	50	34.8	9.5	0	0	0	0	0	67	15	0	0	0	0	0	4195	303	3893
1169+50	50	32.2	8.3	0	0	0	0	0	62	16	0	0	0	0	0	4257	319	3938
1170+00	50	35.1	9.4	0	0	0	0	0	62	16	0	0	0	0	0	4320	335	3984
1170+50	50	23.3	14.9	0	0	0	0	0	54	23	0	0	0	0	0	4374	358	4016
1171+00	50	22.4	8	0	0	0	0	0	42	21	0	0	0	0	0	4416	379	4037
1171+50	50	23.2	7	0	0	0	0	0	42	14	0	0	0	0	0	4458	392	4066
1172+00	50	27.9	5.3	0	0	0	0	0	47	12	0	0	0	0	0	4505	404	4101
1172+50	50	36.4	7.7	0	0	0	0	0	59	12	0	0	0	0	0	4565	416	4149
1173+00	50	0	0	0	0	0	0	0	34	7	0	0	0	0	0	4599	423	4175
Velp Ave																		
1174+00		27.5	23	0	0	0	0	0										
1174+50	50	27.5	23	0	0	0	0	0	51	44	0	0	0	0	0	4649	467	4183
1175+00	50	39.4	4.6	0	0	0	0	0	62	26	0	0	0	0	0	4711	493	4219
1175+50	50	34.1	8.3	0	0	0	0	0	68	12	0	0	0	0	0	4780	505	4275
1176+00	50	19.5	11.8	0	0	0	0	0	50	19	0	0	0	0	0	4829	523	4306
1176+50	50	17.1	11.1	0	0	0	0	0	34	21	0	0	0	0	0	4863	544	4319
1177+00	50	16.6	17	0	0	0	0	0	31	26	0	0	0	0	0	4894	570	4324
1177+50	50	15.0	8.7	0	0	0	0	0	29	23	0	0	0	0	0	4924	593	4330
1178+00	50	12.5	0.8	0	0	0	0	0	25	9	0	0	0	0	0	4949	602	4347
1178+50	50	0	0	0	0	0	0	0	12	1	0	0	0	0	0	4961	603	4358
1179+00	50	19.2	0	0	0	0	0	0	18	0	0	0	0	0	0	4978	603	4376
1179+50	50	26.5	0	0	0	0	0	0	42	0	0	0	0	0	0	5021	603	4418
1180+00	50	30.6	0	0	0	0	0	0	53	0	0	0	0	0	0	5074	603	4471
1180+50	50	31.0	0	0	0	0	0	0	57	0	0	0	0	0	0	5131	603	4528
1181+00	50	25.7	0.8	0	0	0	0	0	53	1	0	0	0	0	0	5183	604	4579
1181+50	50	19.6	1.7	0	0	0	0	0	42	2	0	0	0	0	0	5225	606	4619
1182+00	50	19.4	10.3	0	0	0	0	0	36	11	0	0	0	0	0	5261	617	4644
1182+50	50	18.9	22.2	0	0	0	0	0	35	30	0	0	0	0	0	5297	647	4649
1183+00	50	18.1	5.4	0	0	0	0	0	34	26	0	0	0	0	0	5331	673	4658
								COLUMN SUB-TOTALS	*1,276*	*394*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWB" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1183+50	50	16.9	1.8	0	0	0	0	0	32	7	0	0	0	0	0	5363	679	4684
1184+00	50	15.9	0.2	0	0	0	0	0	30	2	0	0	0	0	0	5394	681	4712
1184+50	50	14.5	0.2	0	0	0	0	0	28	0	0	0	0	0	0	5422	682	4740
Exist. NB																		
1196+00		30.1	0	0	0	0	0	0										
1196+50	50	31.2	0	0	0	0	0	0	57	0	0	0	0	0	0	5479	682	4797
1197+00	50	33.3	0	0	0	0	0	0	60	0	0	0	0	0	0	5538	682	4857
1197+50	50	36.3	0	0	0	0	0	0	64	0	0	0	0	0	0	5603	682	4921
1198+00	50	40.8	0	0	0	0	0	0	71	0	0	0	0	0	0	5674	682	4993
1198+50	50	49.8	0	0	0	0	0	0	84	0	0	0	0	0	0	5758	682	5076
1199+00	50	32.4	0	0	0	0	0	0	76	0	0	0	0	0	0	5834	682	5153
1199+50	50	32.1	0	0	0	0	0	0	60	0	0	0	0	0	0	5894	682	5212
1200+00	50	33.1	0	0	0	0	0	0	60	0	0	0	0	0	0	5954	682	5273
1200+50	50	33.7	0	0	0	0	0	0	62	0	0	0	0	0	0	6016	682	5335
1201+00	50	34.2	0	0	0	0	0	0	63	0	0	0	0	0	0	6079	682	5397
1201+50	50	34.5	0	0	0	0	0	0	64	0	0	0	0	0	0	6143	682	5461
1202+00	50	38.3	0	0	0	0	0	0	67	0	0	0	0	0	0	6210	682	5529
1202+50	50	34.6	7.4	0	0	0	0	0	68	7	0	0	0	0	0	6278	688	5589
1203+00	50	32.9	0	0	0	0	0	0	62	7	0	0	0	0	0	6340	695	5645
1203+50	50	32.5	0	0	0	0	0	0	61	0	0	0	0	0	0	6401	696	5705
1204+00	50	32.7	0	0	0	0	0	0	60	0	0	0	0	0	0	6461	696	5765
1204+50	50	30.5	0	0	0	0	0	0	58	0	0	0	0	0	0	6519	696	5824
1205+00	50	28.7	0	0	0	0	0	0	55	0	0	0	0	0	0	6574	696	5879
1205+50	50	25.5	0	0	0	0	0	0	50	0	0	0	0	0	0	6624	696	5929
1206+00	50	24.6	0	0	0	0	0	0	46	0	0	0	0	0	0	6671	696	5975
1206+50	50	21.4	0	0	0	0	0	0	43	0	0	0	0	0	0	6713	696	6018
Duck Cr.																		
1215+00		61.1	10.0	0	0	0	0	0										
1215+50	50	73.1	3.7	0	0	0	0	0	124	13	0	0	0	0	0	6838	708	6129
1216+00	50	63.9	1.5	0	0	0	0	0	127	5	0	0	0	0	0	6964	713	6251
								COLUMN SUB-TOTALS	*1,633*	*40*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWB" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1216+50	50	56.3	0	0	0	0	0	0	111	2	0	0	0	0	0	7076	715	6361
1217+00	50	50.4	2.5	0	0	0	0	0	99	3	0	0	0	0	0	7174	717	6457
1217+50	50	47.7	3.5	0	0	0	0	0	91	6	0	0	0	0	0	7265	723	6542
1218+00	50	45.7	5.5	0	0	0	0	0	86	8	0	0	0	0	0	7352	731	6620
1218+50	50	30.6	5.1	0	0	0	0	0	71	10	0	0	0	0	0	7422	741	6681
1219+00	50	29.4	24.3	0	0	0	0	0	56	27	0	0	0	0	0	7478	768	6710
1219+50	50	30.8	21.8	0	0	0	0	0	56	43	0	0	0	0	0	7534	811	6723
1220+00	50	35.7	13.5	0	0	0	0	0	62	33	0	0	0	0	0	7595	844	6752
1220+50	50	32.0	8.2	0	0	0	0	0	63	20	0	0	0	0	0	7658	864	6794
1221+00	50	27.3	14.9	0	0	0	0	0	55	21	0	0	0	0	0	7713	885	6828
1221+50	50	25.1	19.1	0	0	0	0	0	49	31	0	0	0	0	0	7762	917	6845
1222+00	50	28.6	23.5	0	0	0	0	0	50	39	0	0	0	0	0	7811	956	6855
1222+50	50	26.5	28.1	0	0	0	0	0	51	48	0	0	0	0	0	7862	1004	6858
1223+00	50	27.5	53.2	0	0	0	0	0	50	75	0	0	0	0	0	7912	1079	6833
1223+50	50	32.1	51.9	0	0	0	0	0	55	97	0	0	0	0	0	7968	1176	6791
1224+00	50	31.2	53.9	0	0	0	0	0	59	98	0	0	0	0	0	8026	1274	6752
1224+50	50	30.3	51.7	0	0	0	0	0	57	98	0	0	0	0	0	8083	1372	6711
1225+00	50	32.9	36.4	0	0	0	0	0	59	82	0	0	0	0	0	8142	1454	6688
1225+50	50	33.5	33.7	0	0	0	0	0	62	65	0	0	0	0	0	8203	1519	6685
1226+00	50	32.1	32.5	0	0	0	0	0	61	61	0	0	0	0	0	8264	1580	6684
1226+50	50	28.7	33.0	0	0	0	0	0	56	61	0	0	0	0	0	8320	1641	6680
1227+00	50	28.3	24.4	0	0	0	0	0	53	53	0	0	0	0	0	8373	1694	6679
1227+50	50	29.6	17.0	0	0	0	0	0	54	38	0	0	0	0	0	8427	1732	6695
1228+00	50	32.8	11.8	0	0	0	0	0	58	27	0	0	0	0	0	8484	1759	6726
1228+50	50	31.4	10.1	0	0	0	0	0	59	20	0	0	0	0	0	8544	1779	6765
1229+00	50	31.3	9.1	0	0	0	0	0	58	18	0	0	0	0	0	8602	1797	6805
1229+50	50	33.4	6.2	0	0	0	0	0	60	14	0	0	0	0	0	8662	1811	6851
1230+00	50	34.9	6.2	0	0	0	0	0	63	11	0	0	0	0	0	8725	1822	6903
1230+50	50	34.0	7.1	0	0	0	0	0	64	12	0	0	0	0	0	8789	1835	6954
1231+00	50	32.6	7.5	0	0	0	0	0	62	14	0	0	0	0	0	8850	1848	7002
								COLUMN SUB-TOTALS	*1,886*	*1,135*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWB" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1231+50	50	36.6	5.9	0	0	0	0	0	64	12	0	0	0	0	0	8914	1861	7054
1232+00	50	35.7	5.7	0	0	0	0	0	67	11	0	0	0	0	0	8981	1871	7110
1232+50	50	36.0	6.0	0	0	0	0	0	66	11	0	0	0	0	0	9048	1882	7165
1233+00	50	34.2	8.2	0	0	0	0	0	65	13	0	0	0	0	0	9113	1895	7217
1233+50	50	33.5	9.8	0	0	0	0	0	63	17	0	0	0	0	0	9175	1912	7263
1234+00	50	34.1	9.4	0	0	0	0	0	63	18	0	0	0	0	0	9238	1930	7308
1234+50	50	35.6	6.9	0	0	0	0	0	65	15	0	0	0	0	0	9302	1945	7357
1235+00	50	35.0	6.2	0	0	0	0	0	65	12	0	0	0	0	0	9368	1957	7411
1235+50	50	35.8	4.4	0	0	0	0	0	66	10	0	0	0	0	0	9433	1967	7466
1236+00	50	36.6	4.9	0	0	0	0	0	67	9	0	0	0	0	0	9500	1975	7525
1236+50	50	37.2	3.8	0	0	0	0	0	68	8	0	0	0	0	0	9569	1984	7585
1237+00	50	41.9	1.7	0	0	0	0	0	73	5	0	0	0	0	0	9642	1989	7653
1237+50	50	45.9	0	0	0	0	0	0	81	2	0	0	0	0	0	9723	1990	7733
1238+00	50	37.3	3.6	0	0	0	0	0	77	4	0	0	0	0	0	9800	1994	7806
1238+50	50	37.4	2.8	0	0	0	0	0	69	6	0	0	0	0	0	9870	2000	7870
1239+00	50	37.6	3.3	0	0	0	0	0	69	6	0	0	0	0	0	9939	2006	7933
1239+50	50	36.3	3.9	0	0	0	0	0	68	7	0	0	0	0	0	10007	2012	7995
1240+00	50	33.4	6.9	0	0	0	0	0	65	10	0	0	0	0	0	10072	2022	8050
1240+50	50	33.4	8.1	0	0	0	0	0	62	14	0	0	0	0	0	10134	2036	8098
1241+00	50	35.8	5.3	0	0	0	0	0	64	12	0	0	0	0	0	10198	2048	8150
1241+50	50	35.8	4.4	0	0	0	0	0	66	9	0	0	0	0	0	10264	2057	8207
1242+00	50	37.0	3.6	0	0	0	0	0	67	7	0	0	0	0	0	10332	2065	8267
1242+50	50	37.3	2.7	0	0	0	0	0	69	6	0	0	0	0	0	10401	2071	8330
1243+00	50	36.6	2.6	0	0	0	0	0	68	5	0	0	0	0	0	10469	2076	8394
1243+50	50	36.4	2.7	0	0	0	0	0	68	5	0	0	0	0	0	10537	2080	8456
1244+00	50	36.8	2.5	0	0	0	0	0	68	5	0	0	0	0	0	10605	2085	8519
1244+50	50	36.4	2.6	0	0	0	0	0	68	5	0	0	0	0	0	10672	2090	8582
1245+00	50	35.0	3.8	0	0	0	0	0	66	6	0	0	0	0	0	10738	2096	8643
1245+50	50	34.7	4.0	0	0	0	0	0	65	7	0	0	0	0	0	10803	2103	8700
1245+75	25	34.8	4.0	0	0	0	0	0	32	4	0	0	0	0	0	10835	2107	8728
								COLUMN SUB-TOTALS	*1,985*	*259*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	10,835	2,107	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB 43 TEMPORARY ALIGNMENT "TWC"

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1123+50		24.4	0	0	0	0	0	0										
1124+00	50	24.4	0	0	0	0	0	0	45	0	0	0	0	0	0	45	0	45
1124+50	50	23.0	0	0	0	0	0	0	44	0	0	0	0	0	0	89	0	89
1125+00	50	22.2	0	0	0	0	0	0	42	0	0	0	0	0	0	131	0	131
1125+50	50	23.3	0	0	0	0	0	0	42	0	0	0	0	0	0	173	0	173
1126+00	50	24.2	0	0	0	0	0	0	44	0	0	0	0	0	0	217	0	217
1126+50	50	23.7	0	0	0	0	0	0	44	0	0	0	0	0	0	261	0	261
1127+00	50	23.4	0	0	0	0	0	0	44	0	0	0	0	0	0	305	0	305
1127+50	50	24.9	0	0	0	0	0	0	45	0	0	0	0	0	0	350	0	350
1128+00	50	25.5	0	0	0	0	0	0	47	0	0	0	0	0	0	396	0	396
1128+50	50	17.2	0	0	0	0	0	0	39	0	0	0	0	0	0	436	0	436
1129+00	50	26.7	0	0	0	0	0	0	41	0	0	0	0	0	0	476	0	476
1129+50	50	27.5	0	0	0	0	0	0	50	0	0	0	0	0	0	526	0	526
1130+00	50	24.9	0	0	0	0	0	0	48	0	0	0	0	0	0	575	0	575
1130+50	50	24.6	0	0	0	0	0	0	46	0	0	0	0	0	0	621	0	620
1131+00	50	23.2	0	0	0	0	0	0	44	0	0	0	0	0	0	665	0	665
1131+50	50	23.1	0	0	0	0	0	0	43	0	0	0	0	0	0	708	0	707
1132+00	50	22.2	0	0	0	0	0	0	42	0	0	0	0	0	0	750	0	749
1132+50	50	26.1	0	0	0	0	0	0	45	0	0	0	0	0	0	794	0	794
1133+00	50	25.8	0	0	0	0	0	0	48	0	0	0	0	0	0	842	0	842
1133+50	50	26.8	0	0	0	0	0	0	49	0	0	0	0	0	0	891	0	891
1134+00	50	27.5	0	0	0	0	0	0	50	0	0	0	0	0	0	941	0	941
1134+50	50	27.4	0	0	0	0	0	0	51	0	0	0	0	0	0	992	0	992
1135+00	50	26.9	0	0	0	0	0	0	50	0	0	0	0	0	0	1042	0	1042
1135+50	50	26.6	0	0	0	0	0	0	50	0	0	0	0	0	0	1092	0	1092
1136+00	50	27.8	0	0	0	0	0	0	50	0	0	0	0	0	0	1142	0	1142
1136+50	50	30.4	0	0	0	0	0	0	54	0	0	0	0	0	0	1196	0	1196
1137+00	50	33.9	0	0	0	0	0	0	60	0	0	0	0	0	0	1256	1	1255
1137+50	50	34.9	3.2	0	0	0	0	0	64	3	0	0	0	0	0	1319	4	1315
1138+00	50	36.9	11.6	0	0	0	0	0	66	14	0	0	0	0	0	1386	18	1368
								COLUMN SUB-TOTALS	*1,386*	*18*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1) Cut — Measured from existing ground to top of proposed cut. Cut includes pavement material.

(2) Fill — Measured from existing ground to top of proposed fill.

(3) Marsh Excavation — All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.

(4) Marsh Excavation Cut — Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).

(5) Blanket Cut — Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.

(6) EBS — All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).

(7) Drainage Blanket — End area occupied by drainage blanket

(8) Mass Ordinate — Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

9 9

PROJECT NUMBER: 1133-10-71 | HWY: USH 41 | COUNTY: BROWN | COMPUTER EARTHWORK DATA | SHEET NO: 956 | E

SB 43 TEMPORARY ALIGNMENT "TWC" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1138+50	50	34.8	9	0	0	0	0	0	66	19	0	0	0	0	0	1452	37	1415
1139+00	50	24.9	6	0	0	0	0	0	55	14	0	0	0	0	0	1507	51	1456
1139+50	50	18.3	8.3	0	0	0	0	0	40	14	0	0	0	0	0	1547	65	1483
1140+00	50	13.3	11.0	0	0	0	0	0	29	18	0	0	0	0	0	1577	83	1494
1140+50	50	10.7	14.9	0	0	0	0	0	22	24	0	0	0	0	0	1599	107	1492
1141+00	50	10.4	17.6	0	0	0	0	0	20	30	0	0	0	0	0	1618	137	1482
1141+50	50	11.6	14.5	0	0	0	0	0	20	30	0	0	0	0	0	1639	166	1472
1142+00	50	12.2	11.3	0	0	0	0	0	22	24	0	0	0	0	0	1661	190	1470
1142+50	50	14.1	8.9	0	0	0	0	0	24	19	0	0	0	0	0	1685	209	1476
1143+00	50	14.2	8.8	0	0	0	0	0	26	16	0	0	0	0	0	1711	226	1486
1143+50	50	15.2	8.1	0	0	0	0	0	27	16	0	0	0	0	0	1739	241	1497
1144+00	50	12.5	7.9	0	0	0	0	0	26	15	0	0	0	0	0	1764	256	1508
1144+50	50	17.7	2.9	0	0	0	0	0	33	10	0	0	0	0	0	1797	266	1531
1145+00	50	17.5	2.1	0	0	0	0	0	35	5	0	0	0	0	0	1832	271	1562
1145+50	50	19.4	1.4	0	0	0	0	0	36	3	0	0	0	0	0	1868	274	1594
1146+00	50	21.6	0.9	0	0	0	0	0	35	2	0	0	0	0	0	1903	276	1627
1146+50	50	18.8	1.3	0	0	0	0	0	33	2	0	0	0	0	0	1937	278	1659
1147+00	50	18.6	1.8	0	0	0	0	0	31	3	0	0	0	0	0	1967	281	1687
1147+50	50	17.3	2.7	0	0	0	0	0	29	4	0	0	0	0	0	1997	285	1711
1148+00	50	13.8	4.5	0	0	0	0	0	27	7	0	0	0	0	0	2024	292	1732
1148+50	50	14.6	5.4	0	0	0	0	0	27	9	0	0	0	0	0	2051	301	1750
1149+00	50	14.1	7.4	0	0	0	0	0	28	12	0	0	0	0	0	2078	313	1766
1149+50	50	13.9	8.6	0	0	0	0	0	28	15	0	0	0	0	0	2106	327	1779
1150+00	50	16.0	10.1	0	0	0	0	0	29	17	0	0	0	0	0	2135	345	1791
1150+50	50	15.9	7.1	0	0	0	0	0	31	16	0	0	0	0	0	2166	361	1806
1151+00	50	15.8	5.9	0	0	0	0	0	31	12	0	0	0	0	0	2197	373	1824
1151+50	50	16.7	4.3	0	0	0	0	0	31	9	0	0	0	0	0	2228	382	1846
1152+00	50	17.6	3.5	0	0	0	0	0	32	7	0	0	0	0	0	2260	389	1871
1152+50	50	17.0	2.8	0	0	0	0	0	32	6	0	0	0	0	0	2292	395	1897
1153+00	50	17.2	1.8	0	0	0	0	0	32	4	0	0	0	0	0	2324	399	1924
								COLUMN SUB-TOTALS	*938*	*382*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 41 TEMPORARY ALIGNMENT "TWC" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1153+50	50	15.5	1.5	0	0	0	0	0	32	3	0	0	0	0	0	2356	403	1953
1154+00	50	14.8	1.6	0	0	0	0	0	28	3	0	0	0	0	0	2384	405	1978
1154+50	50	15.2	2.4	0	0	0	0	0	28	4	0	0	0	0	0	2411	409	2002
1155+00	50	14.4	3.6	0	0	0	0	0	27	5	0	0	0	0	0	2439	415	2024
1155+50	50	12.6	6.4	0	0	0	0	0	25	9	0	0	0	0	0	2464	424	2040
1156+00	50	13.3	7.1	0	0	0	0	0	24	12	0	0	0	0	0	2488	436	2051
1156+50	50	14.5	5.8	0	0	0	0	0	26	12	0	0	0	0	0	2513	448	2065
1157+00	50	15.4	5.2	0	0	0	0	0	28	10	0	0	0	0	0	2541	458	2083
1157+50	50	14.7	7.3	0	0	0	0	0	28	12	0	0	0	0	0	2569	470	2099
1158+00	50	15.2	11.5	0	0	0	0	0	28	17	0	0	0	0	0	2597	487	2109
1158+50	50	12.2	9.2	0	0	0	0	0	25	19	0	0	0	0	0	2622	507	2116
1159+00	50	16.4	5.8	0	0	0	0	0	26	14	0	0	0	0	0	2649	520	2128
1159+50	50	25.9	1.8	0	0	0	0	0	39	7	0	0	0	0	0	2688	527	2160
1160+00	50	25.7	2.1	0	0	0	0	0	48	4	0	0	0	0	0	2735	531	2204
1160+50	50	26.5	2.0	0	0	0	0	0	48	4	0	0	0	0	0	2784	535	2249
1161+00	50	42.4	0	0	0	0	0	0	64	2	0	0	0	0	0	2847	537	2311
1161+50	50	36.6	0	0	0	0	0	0	73	0	0	0	0	0	0	2921	537	2384
1162+00	50	34.5	0	0	0	0	0	0	66	0	0	0	0	0	0	2986	537	2450
1162+50	50	38.0	0	0	0	0	0	0	67	0	0	0	0	0	0	3054	537	2517
1163+00	50	49.8	0	0	0	0	0	0	81	0	0	0	0	0	0	3135	537	2598
1163+50	50	21.5	1.5	0	0	0	0	0	66	1	0	0	0	0	0	3201	538	2663
1164+00	50	19.0	1.6	0	0	0	0	0	38	3	0	0	0	0	0	3239	541	2697
1164+50	50	14.1	3.5	0	0	0	0	0	31	5	0	0	0	0	0	3269	546	2723
1165+00	50	11.1	4.7	0	0	0	0	0	23	8	0	0	0	0	0	3292	553	2739
1165+50	50	7.1	7.6	0	0	0	0	0	17	11	0	0	0	0	0	3309	565	2744
1166+00	50	5.9	17.8	0	0	0	0	0	12	23	0	0	0	0	0	3321	588	2733
1166+50	50	4.2	8.5	0	0	0	0	0	9	24	0	0	0	0	0	3331	613	2718
1167+00	50	4.6	4.7	0	0	0	0	0	8	12	0	0	0	0	0	3339	625	2714
1167+50	50	7.4	2.9	0	0	0	0	0	11	7	0	0	0	0	0	3350	632	2718
1168+00	50	9.9	3.0	0	0	0	0	0	16	5	0	0	0	0	0	3366	637	2729
								COLUMN SUB-TOTALS	*1,042*	*238*	*0*	*0*	*0*	*0*	*0*			
								COLUMN TOTALS	3,366	637	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 43 TEMPORARY ALIGNMENT "TWD"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1135+00		16.5	0	0	0	0	0	0										
1135+50	50	17.4	0	0	0	0	0	0	31	0	0	0	0	0	0	31	0	31
1136+00	50	19.7	0	0	0	0	0	0	34	0	0	0	0	0	0	66	0	65
1136+50	50	25.0	0.8	0	0	0	0	0	41	1	0	0	0	0	0	107	1	106
1137+00	50	34.0	0	0	0	0	0	0	55	1	0	0	0	0	0	162	2	160
1137+50	50	35.5	6.9	0	0	0	0	0	64	6	0	0	0	0	0	226	9	218
1138+00	50	39.8	11.1	0	0	0	0	0	70	17	0	0	0	0	0	296	25	271
1138+50	50	36.8	8.0	0	0	0	0	0	71	18	0	0	0	0	0	367	43	324
1139+00	50	24.2	5.4	0	0	0	0	0	56	12	0	0	0	0	0	423	55	368
1139+50	50	18.3	8.0	0	0	0	0	0	39	12	0	0	0	0	0	462	68	395
1140+00	50	12.3	10.6	0	0	0	0	0	28	17	0	0	0	0	0	491	85	406
1140+50	50	10.2	14.5	0	0	0	0	0	21	23	0	0	0	0	0	512	108	404
1141+00	50	8.1	18.9	0	0	0	0	0	17	31	0	0	0	0	0	529	139	390
1141+50	50	9.1	16.1	0	0	0	0	0	16	32	0	0	0	0	0	545	171	373
1142+00	50	10.8	11.1	0	0	0	0	0	18	25	0	0	0	0	0	563	197	366
1142+50	50	11.9	8.4	0	0	0	0	0	21	18	0	0	0	0	0	584	215	369
1143+00	50	12.2	7.9	0	0	0	0	0	22	15	0	0	0	0	0	606	230	377
1143+50	50	11.8	7.7	0	0	0	0	0	22	14	0	0	0	0	0	629	244	384
1144+00	50	11.8	7.4	0	0	0	0	0	22	14	0	0	0	0	0	651	258	392
1144+50	50	15.1	3.2	0	0	0	0	0	25	10	0	0	0	0	0	675	268	407
1145+00	50	14.9	3.0	0	0	0	0	0	28	6	0	0	0	0	0	703	274	429
1145+50	50	14.6	2.6	0	0	0	0	0	27	5	0	0	0	0	0	730	279	451
1146+00	50	14.8	2.4	0	0	0	0	0	27	5	0	0	0	0	0	758	284	474
1146+50	50	15.2	2.2	0	0	0	0	0	28	4	0	0	0	0	0	785	288	497
1147+00	50	14.6	3.8	0	0	0	0	0	28	6	0	0	0	0	0	813	294	519
1147+50	50	12.3	4.2	0	0	0	0	0	25	7	0	0	0	0	0	838	301	537
1148+00	50	10.8	5.7	0	0	0	0	0	21	9	0	0	0	0	0	859	310	549
1148+50	50	10.5	9.1	0	0	0	0	0	20	14	0	0	0	0	0	879	324	555
1149+00	50	8.0	12.8	0	0	0	0	0	17	20	0	0	0	0	0	896	344	552
1149+50	50	7.9	15.4	0	0	0	0	0	15	26	0	0	0	0	0	911	370	540
								COLUMN SUB-TOTALS	*911*	*370*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 43 TEMPORARY ALIGNMENT "TWD" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1150+00	50	8.4	20.1	0	0	0	0	0	15	33	0	0	0	0	0	926	403	523
1150+50	50	8.9	12.9	0	0	0	0	0	16	31	0	0	0	0	0	942	434	508
1151+00	50	9.8	10.4	0	0	0	0	0	17	22	0	0	0	0	0	959	456	504
1151+50	50	11.2	6.9	0	0	0	0	0	19	16	0	0	0	0	0	979	472	507
1152+00	50	11.5	4.9	0	0	0	0	0	21	11	0	0	0	0	0	1000	483	517
1152+50	50	13.0	4.4	0	0	0	0	0	23	9	0	0	0	0	0	1022	491	531
1153+00	50	11.7	4.8	0	0	0	0	0	23	8	0	0	0	0	0	1045	500	546
1153+50	50	12.7	2.5	0	0	0	0	0	23	7	0	0	0	0	0	1068	506	562
1154+00	50	13.5	2.1	0	0	0	0	0	24	4	0	0	0	0	0	1092	511	581
1154+50	50	13.6	3.1	0	0	0	0	0	25	5	0	0	0	0	0	1117	515	602
1155+00	50	12.8	4.8	0	0	0	0	0	24	7	0	0	0	0	0	1142	523	619
1155+50	50	11.1	6.4	0	0	0	0	0	22	10	0	0	0	0	0	1164	533	631
1156+00	50	11.1	6.7	0	0	0	0	0	22	12	0	0	0	0	0	1186	545	641
1156+50	50	12.6	5.8	0	0	0	0	0	23	12	0	0	0	0	0	1209	557	652
1157+00	50	13.0	6.9	0	0	0	0	0	23	12	0	0	0	0	0	1232	569	663
1157+50	50	12.2	7.9	0	0	0	0	0	23	14	0	0	0	0	0	1254	582	672
1158+00	50	12.1	11.3	0	0	0	0	0	25	18	0	0	0	0	0	1279	600	679
1158+50	50	12.2	8.6	0	0	0	0	0	29	18	0	0	0	0	0	1308	619	690
1159+00	50	12.1	6.9	0	0	0	0	0	34	14	0	0	0	0	0	1342	633	709
1159+50	50	19.0	3.7	0	0	0	0	0	45	10	0	0	0	0	0	1387	643	744
1160+00	50	22.3	2.4	0	0	0	0	0	53	6	0	0	0	0	0	1441	649	792
1160+50	50	26.2	1.4	0	0	0	0	0	59	4	0	0	0	0	0	1500	652	848
1161+00	50	41.8	0	0	0	0	0	0	65	1	0	0	0	0	0	1565	653	912
1161+50	50	34.9	0	0	0	0	0	0	76	0	0	0	0	0	0	1641	653	988
1162+00	50	34.0	0	0	0	0	0	0	67	0	0	0	0	0	0	1708	653	1055
1162+50	50	39.2	0	0	0	0	0	0	67	0	0	0	0	0	0	1776	653	1123
1163+00	50	56.6	0	0	0	0	0	0	68	0	0	0	0	0	0	1844	653	1191
1163+50	50	31.7	0.7	0	0	0	0	0	67	1	0	0	0	0	0	1912	654	1258
1164+00	50	29.4	0.5	0	0	0	0	0	55	1	0	0	0	0	0	1966	655	1311
1164+50	50	27.7	0.8	0	0	0	0	0	53	1	0	0	0	0	0	2019	656	1363
								COLUMN SUB-TOTALS	*1,108*	*286*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 43 TEMPORARY ALIGNMENT "TWD" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1165+00	50	23.9	1.3	0	0	0	0	0	51	2	0	0	0	0	0	2071	658	1412
1165+50	50	23.7	0.8	0	0	0	0	0	44	2	0	0	0	0	0	2115	660	1454
1166+00	50	23.9	1.5	0	0	0	0	0	44	2	0	0	0	0	0	2159	662	1496
1166+50	50	28.8	0	0	0	0	0	0	49	2	0	0	0	0	0	2208	664	1543
1167+00	50	34.3	0	0	0	0	0	0	58	0	0	0	0	0	0	2266	665	1601
1167+50	50	35.4	0	0	0	0	0	0	65	0	0	0	0	0	0	2331	665	1666
1168+00	50	35.2	11.4	0	0	0	0	0	65	11	0	0	0	0	0	2396	675	1721
1168+50	50	49.6	3.0	0	0	0	0	0	78	13	0	0	0	0	0	2475	689	1786
1169+00	50	52.7	3.1	0	0	0	0	0	95	6	0	0	0	0	0	2569	694	1875
1169+50	50	51.0	3.9	0	0	0	0	0	96	6	0	0	0	0	0	2665	701	1964
1170+00	50	47.4	4.5	0	0	0	0	0	91	8	0	0	0	0	0	2756	709	2048
1170+50	50	43.0	2.0	0	0	0	0	0	84	6	0	0	0	0	0	2840	715	2125
1171+00	50	41.0	4.4	0	0	0	0	0	78	6	0	0	0	0	0	2918	721	2197
1171+50	50	39.7	4.8	0	0	0	0	0	75	8	0	0	0	0	0	2992	729	2263
1172+00	50	37.2	5.7	0	0	0	0	0	71	10	0	0	0	0	0	3064	739	2325
1172+50	50	34.0	6.6	0	0	0	0	0	66	11	0	0	0	0	0	3130	750	2380
1173+00	50	16.9	15.6	0	0	0	0	0	47	21	0	0	0	0	0	3177	771	2406
1173+50	50	18.9	5.1	0	0	0	0	0	33	19	0	0	0	0	0	3210	790	2420
1174+00	50	19.9	4.0	0	0	0	0	0	36	8	0	0	0	0	0	3246	798	2448
1174+50	50	19.8	1.9	0	0	0	0	0	37	5	0	0	0	0	0	3283	804	2479
1175+00	50	17.9	1.2	0	0	0	0	0	35	3	0	0	0	0	0	3318	806	2511
1175+50	50	16.3	9.2	0	0	0	0	0	32	10	0	0	0	0	0	3349	816	2533
1176+00	50	19.4	3.3	0	0	0	0	0	33	12	0	0	0	0	0	3382	828	2554
1176+50	50	22.1	2.4	0	0	0	0	0	38	5	0	0	0	0	0	3421	833	2588
1177+00	50	23.9	1.3	0	0	0	0	0	43	3	0	0	0	0	0	3463	836	2627
1177+50	50	22.2	1.0	0	0	0	0	0	43	2	0	0	0	0	0	3506	839	2667
1178+00	50	21.6	0.7	0	0	0	0	0	41	2	0	0	0	0	0	3546	840	2706
1178+50	50	17.7	2.7	0	0	0	0	0	36	3	0	0	0	0	0	3583	843	2739
1179+00	50	13.2	4.7	0	0	0	0	0	29	7	0	0	0	0	0	3612	850	2761
1179+50	50	12.5	5.8	0	0	0	0	0	24	10	0	0	0	0	0	3635	860	2775
								COLUMN SUB-TOTALS	*1,616*	*204*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 43 TEMPORARY ALIGNMENT "TWD" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1180+00	50	12.1	5.9	0	0	0	0	0	23	11	0	0	0	0	0	3658	871	2787
1180+50	50	12.6	5.3	0	0	0	0	0	23	10	0	0	0	0	0	3681	881	2800
1181+00	50	14.7	3.6	0	0	0	0	0	25	8	0	0	0	0	0	3706	889	2817
1181+50	50	14.3	3.6	0	0	0	0	0	27	7	0	0	0	0	0	3733	896	2837
1182+00	50	13.9	3.7	0	0	0	0	0	26	7	0	0	0	0	0	3759	903	2856
1182+50	50	14.8	2.2	0	0	0	0	0	27	5	0	0	0	0	0	3786	908	2877
1183+00	50	15.3	2.0	0	0	0	0	0	28	4	0	0	0	0	0	3814	912	2901
1183+50	50	16.9	1.4	0	0	0	0	0	30	3	0	0	0	0	0	3844	915	2928
1184+00	50	15.4	2.3	0	0	0	0	0	30	3	0	0	0	0	0	3874	919	2955
1184+50	50	13.7	3.9	0	0	0	0	0	27	6	0	0	0	0	0	3900	925	2976
1185+00	50	12.1	7.2	0	0	0	0	0	24	10	0	0	0	0	0	3924	935	2989
1185+50	50	11.8	4.0	0	0	0	0	0	22	10	0	0	0	0	0	3946	945	3001
1186+00	50	11.5	4.8	0	0	0	0	0	22	8	0	0	0	0	0	3968	953	3015
1186+50	50	12.2	7.9	0	0	0	0	0	22	12	0	0	0	0	0	3990	965	3025
1187+00	50	13.9	6.8	0	0	0	0	0	24	14	0	0	0	0	0	4014	979	3035
1187+50	50	15.1	8.0	0	0	0	0	0	27	14	0	0	0	0	0	4041	992	3048
1188+00	50	15.9	9.6	0	0	0	0	0	29	16	0	0	0	0	0	4070	1009	3061
1188+50	50	18.2	10.4	0	0	0	0	0	32	19	0	0	0	0	0	4101	1027	3074
1189+00	50	47.6	14.9	0	0	0	0	0	61	23	0	0	0	0	0	4162	1051	3111
1189+50	50	35.3	20.4	0	0	0	0	0	77	33	0	0	0	0	0	4239	1083	3155
1190+00	50	36.9	17.0	0	0	0	0	0	67	35	0	0	0	0	0	4306	1118	3188
1190+50	50	34.3	18.1	0	0	0	0	0	66	33	0	0	0	0	0	4372	1151	3221
1191+00	50	32.2	16.7	0	0	0	0	0	62	32	0	0	0	0	0	4433	1183	3250
1191+50	50	32.2	15.7	0	0	0	0	0	60	30	0	0	0	0	0	4493	1213	3280
1192+00	50	34.7	14.7	0	0	0	0	0	62	28	0	0	0	0	0	4555	1241	3314
1192+50	50	40.5	10.3	0	0	0	0	0	70	23	0	0	0	0	0	4624	1264	3360
1193+00	50	40.3	9.6	0	0	0	0	0	75	18	0	0	0	0	0	4699	1283	3417
1193+50	50	39.9	6.8	0	0	0	0	0	74	15	0	0	0	0	0	4774	1298	3476
1194+00	50	46.4	4.9	0	0	0	0	0	80	11	0	0	0	0	0	4853	1308	3545
1194+50	50	61.0	4.4	0	0	0	0	0	99	9	0	0	0	0	0	4953	1317	3636
								COLUMN SUB-TOTALS	*1,318*	*457*	*0*	*0*	*0*	*0*	*0*			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB 43 TEMPORARY ALIGNMENT "TWD" (continued)

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1195+00	50	70.7	1.0	0	0	0	0	0	122	5	0	0	0	0	0	5075	1322	3753
1195+50	50	68.9	2.2	0	0	0	0	0	129	3	0	0	0	0	0	5204	1325	3879
1196+00	50	60.7	0.7	0	0	0	0	0	120	3	0	0	0	0	0	5324	1328	3997
1196+50	50	50.4	4.2	0	0	0	0	0	103	5	0	0	0	0	0	5427	1332	4095
1197+00	50	42.7	12.2	0	0	0	0	0	86	15	0	0	0	0	0	5513	1347	4166
1197+50	50	43.8	15.5	0	0	0	0	0	80	26	0	0	0	0	0	5593	1373	4220
1198+00	50	43.8	15.4	0	0	0	0	0	81	29	0	0	0	0	0	5674	1401	4273
1198+50	50	43.1	11.4	0	0	0	0	0	80	25	0	0	0	0	0	5755	1426	4329
1199+00	50	40.7	10.3	0	0	0	0	0	78	20	0	0	0	0	0	5833	1446	4386
1199+50	50	40.2	12.6	0	0	0	0	0	75	21	0	0	0	0	0	5907	1468	4440
1200+00	50	45.1	5.7	0	0	0	0	0	79	17	0	0	0	0	0	5987	1485	4502
1200+50	50	55.2	0	0	0	0	0	0	93	5	0	0	0	0	0	6079	1490	4590
1201+00	50	37.6	0	0	0	0	0	0	86	0	0	0	0	0	0	6165	1490	4675
1201+15	15	31.8	0	0	0	0	0	0	19	0	0	0	0	0	0	6185	1490	4695
							COLUMN SUB-TOTALS		*1,232*	*173*	*0*	*0*	*0*	*0*	*0*			
							COLUMN TOTALS		6,185	1,490	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

SB 41 TEMPORARY ALIGNMENT "TWE"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1138+00		96.5	0	0	0	0	0	0										
1138+50	50	71.5	20.8	0	0	0	0	0	156	20	0	0	0	0	0	156	20	136
1139+00	50	31.8	25.5	0	0	0	0	0	96	43	0	0	0	0	0	251	62	189
1139+50	50	15.0	32.1	0	0	0	0	0	43	53	0	0	0	0	0	295	116	179
1140+00	50	3.5	44.4	0	0	0	0	0	17	71	0	0	0	0	0	312	186	125
1140+50	50	1.6	69.1	0	0	0	0	0	5	105	0	0	0	0	0	316	291	25
1141+00	50	6.1	65.2	0	0	0	0	0	7	124	0	0	0	0	0	324	416	-92
1141+50	50	11.2	55.8	0	0	0	0	0	16	112	0	0	0	0	0	340	528	-188
1142+00	50	13.7	45.0	0	0	0	0	0	23	93	0	0	0	0	0	363	621	-258
1142+50	50	17.5	36.5	0	0	0	0	0	29	75	0	0	0	0	0	392	697	-305
1143+00	50	20.6	28.4	0	0	0	0	0	35	60	0	0	0	0	0	427	757	-330
1143+50	50	13.8	27.7	0	0	0	0	0	32	52	0	0	0	0	0	459	809	-350
1144+00	50	0	19.0	0	0	0	0	0	13	43	0	0	0	0	0	472	852	-380
1144+50	50	0	37.5	0	0	0	0	0	0	52	0	0	0	0	0	472	904	-433
								COLUMN TOTALS	472	904	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 OFF-RAMP "VEA"

Station	Distance	AREA (SF) Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cumulative Vol (CY) Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1160+50		54.2	118.9	0	0	0	0	0										
1161+00	50	44.8	141.4	0	0	0	0	0	92	241	0	0	0	0	0	92	241	-149
1161+50	50	7.6	177.6	0	0	0	0	0	49	295	0	0	0	0	0	140	536	-396
1162+00	50	5.3	205.8	0	0	0	0	0	12	355	0	0	0	0	0	152	891	-739
1162+50	50	5.3	232.0	0	0	0	0	0	10	405	0	0	0	0	0	162	1297	-1135
1163+00	50	5.3	190.9	0	0	0	0	0	10	392	0	0	0	0	0	172	1688	-1517
1163+50	50	5.7	190.6	0	0	0	0	0	10	353	0	0	0	0	0	182	2042	-1860
1164+00	50	6.2	207.9	0	0	0	0	0	11	369	0	0	0	0	0	193	2410	-2217
1164+50	50	6.4	188.3	0	0	0	0	0	12	367	0	0	0	0	0	205	2777	-2573
1165+00	50	5.1	190.3	0	0	0	0	0	11	351	0	0	0	0	0	215	3128	-2913
1165+50	50	3.4	196.9	0	0	0	0	0	8	358	0	0	0	0	0	223	3486	-3263
1166+00	50	3.1	218.6	0	0	0	0	0	6	385	0	0	0	0	0	229	3871	-3642
1166+50	50	3.1	230.9	0	0	0	0	0	6	416	0	0	0	0	0	235	4287	-4052
1167+00	50	3.1	248.8	0	0	0	0	0	6	444	0	0	0	0	0	241	4732	-4491
1167+50	50	3.1	299.6	0	0	0	0	0	6	508	0	0	0	0	0	246	5239	-4993
1168+00	50	3.1	345.8	0	0	0	0	0	6	598	0	0	0	0	0	252	5837	-5585
1168+50	50	3.1	371.0	0	0	0	0	0	6	664	0	0	0	0	0	258	6501	-6243
1169+00	50	5.7	377.6	0	0	0	0	0	8	693	0	0	0	0	0	266	7194	-6928
1169+50	50	2.2	354.1	0	0	0	0	0	7	678	0	0	0	0	0	273	7871	-7598
1170+00	50	2.2	354.1	0	0	0	0	0	4	656	0	0	0	0	0	277	8527	-8250
								COLUMN TOTALS	277	8,527	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

NB USH 41 ON-RAMP "VEB"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1177+00		78.5	151.1	0	0	0	0	0										
1177+50	50	111.7	21.9	0	0	0	0	0	176	160	0	0	0	0	0	176	160	16
1178+00	50	139.3	23.7	0	0	0	0	0	232	42	0	0	0	0	0	408	202	206
1178+50	50	173.3	39.7	0	0	0	0	0	289	59	0	0	0	0	0	698	261	437
1179+00	50	135.5	148.7	0	0	0	0	0	286	174	0	0	0	0	0	984	436	548
1179+50	50	92.4	141.6	0	0	0	0	0	211	269	0	0	0	0	0	1195	704	491
1180+00	50	64.0	122.9	0	0	0	0	0	145	245	0	0	0	0	0	1340	949	390
1180+50	50	7.7	92.7	0	0	0	0	0	66	200	0	0	0	0	0	1406	1149	257
1181+00	50	20.0	11.4	0	0	0	0	0	26	96	0	0	0	0	0	1432	1245	186
1181+50	50	10.4	12.3	0	0	0	0	0	28	22	0	0	0	0	0	1460	1267	193
1182+00	50	7.2	12.7	0	0	0	0	0	16	23	0	0	0	0	0	1476	1290	186
1182+50	50	3.1	13.5	0	0	0	0	0	10	24	0	0	0	0	0	1486	1314	171
1183+00	50	4.0	55.5	0	0	0	0	0	7	64	0	0	0	0	0	1492	1378	114
1183+50	50	0.8	13.8	0	0	0	0	0	4	64	0	0	0	0	0	1497	1442	54
1184+00	50	0	19.1	0	0	0	0	0	1	30	0	0	0	0	0	1498	1473	25
1184+20	20	0	19.1	0	0	0	0	0	0	14	0	0	0	0	0	1498	1487	11
BRIDGE																		
1186+08		0	8.1	0	0	0	0	0										
1186+50	42	0	8.1	0	0	0	0	0	1	13	0	0	0	0	0	1498	1500	-1
1187+00	50	1.0	9.0	0	0	0	0	0	1	16	0	0	0	0	0	1500	1515	-16
1187+50	50	0	7.8	0	0	0	0	0	1	16	0	0	0	0	0	1501	1531	-30
1188+00	50	0	8.0	0	0	0	0	0	0	15	0	0	0	0	0	1501	1545	-45
1188+50	50	0	8.0	0	0	0	0	0	0	15	0	0	0	0	0	1501	1560	-60
1189+00	50	0	7.8	0	0	0	0	0	0	15	0	0	0	0	0	1501	1575	-74
1189+50	50	0	7.6	0	0	0	0	0	0	14	0	0	0	0	0	1501	1589	-89
1190+00	50	0	7.0	0	0	0	0	0	0	14	0	0	0	0	0	1501	1603	-102
								COLUMN TOTALS	1,501	1,603	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

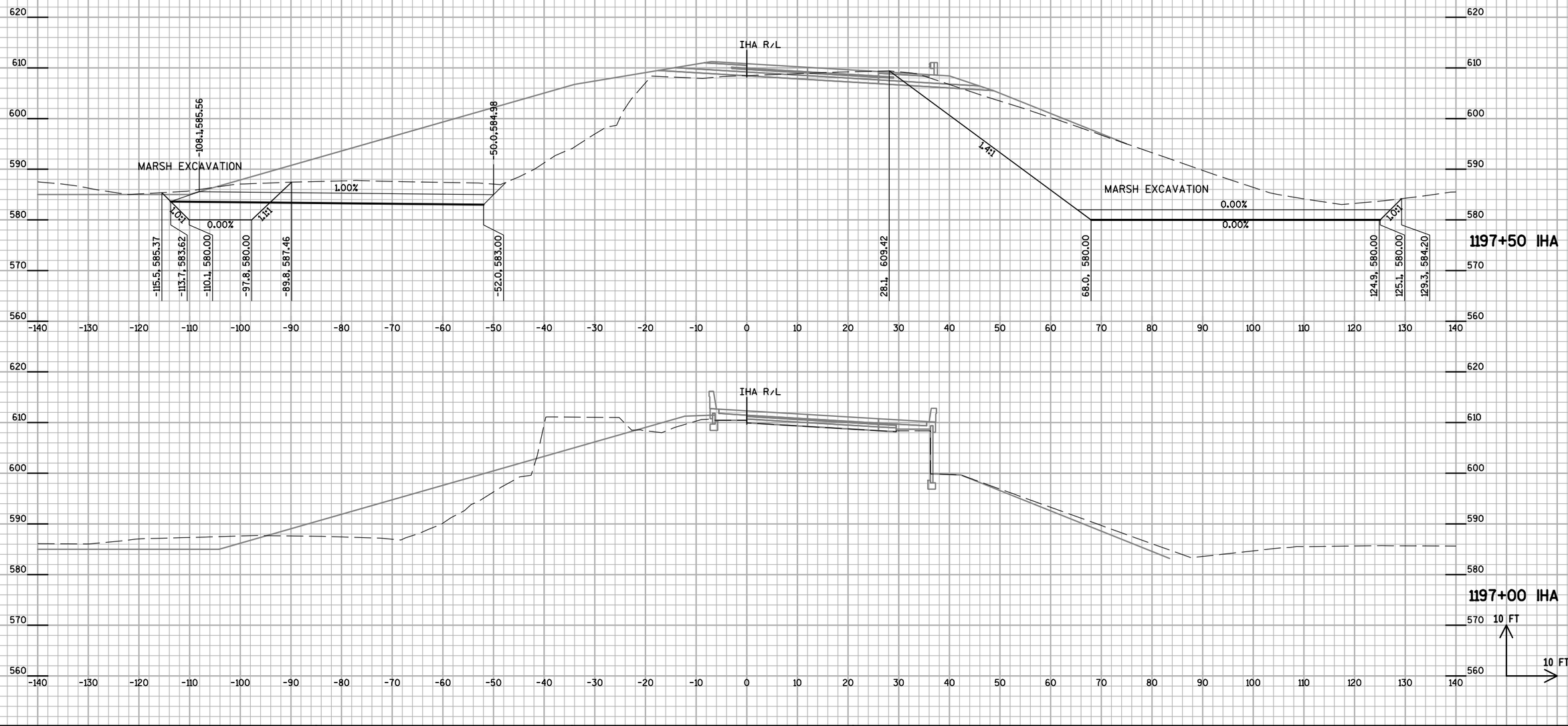
SB USH 41 OFF-RAMP "VED"

Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)		
		Cut	Fill	Marsh Ex.	Marsh Ex. Cut	Blanket Cut	EBS	Drainage Blanket	Cut Note 1	Fill Note 2	Marsh Ex. Note 3	Marsh Ex. Cut Note 4	Blanket Cut Note 5	EBS Note 6	Drainage Blanket Note 7	Cut 1.00	Fill 1.00	Mass Ordinate Note 8
1158+00		0	0	0	0	0	0	0										
1158+50	50	0	169.8	0	0	0	0	0	0	157	0	0	0	0	0	0	157	-157
1159+00	50	0	163.3	0	0	0	0	0	0	308	0	0	0	0	0	0	466	-466
1159+50	50	0	163.8	0	0	0	0	0	0	303	0	0	0	0	0	0	768	-768
1160+00	50	0	165.0	0	0	0	0	0	0	304	0	0	0	0	0	0	1073	-1073
1160+50	50	0	178.8	0	0	0	0	0	0	318	0	0	0	0	0	0	1391	-1391
1161+00	50	0	198.3	0	0	0	0	0	0	349	0	0	0	0	0	0	1740	-1740
1161+50	50	0	218.6	0	0	0	0	0	0	386	0	0	0	0	0	0	2126	-2126
1162+00	50	0	253.4	0	0	0	0	0	0	437	0	0	0	0	0	0	2563	-2563
1162+50	50	15.4	326.4	0	0	0	0	0	14	537	0	0	0	0	0	14	3100	-3086
1163+00	50	0	364.6	0	0	0	0	0	14	640	0	0	0	0	0	29	3740	-3712
1163+50	50	0	438.0	0	0	0	0	0	0	743	0	0	0	0	0	29	4483	-4455
1164+00	50	0	513.0	0	0	0	0	0	0	881	0	0	0	0	0	29	5364	-5335
1164+50	50	0	660.0	0	0	0	0	0	0	1086	0	0	0	0	0	29	6450	-6421
1165+00	50	0	762.3	0	0	0	0	0	0	1317	0	0	0	0	0	29	7767	-7738
1165+50	50	0	1196.9	0	0	0	0	0	0	1814	0	0	0	0	0	29	9581	-9553
1166+00	50	0	1250.3	0	0	0	0	0	0	2266	0	0	0	0	0	29	11847	-11818
1166+50	50	0	749.9	0	0	0	0	0	0	1852	0	0	0	0	0	29	13699	-13670
1167+00	50	0	658.9	0	0	0	0	0	0	1304	0	0	0	0	0	29	15003	-14975
1167+50	50	0	574.1	0	0	0	0	0	0	1142	0	0	0	0	0	29	16145	-16116
1168+00	50	0	490.6	0	0	0	0	0	0	986	0	0	0	0	0	29	17131	-17102
1168+50	50	0	497.5	0	0	0	0	0	0	915	0	0	0	0	0	29	18046	-18017
								COLUMN TOTALS	29	18,046	0	0	0	0	0			

Notes:

(1)	Cut	Measured from existing ground to top of proposed cut. Cut includes pavement material.
(2)	Fill	Measured from existing ground to top of proposed fill.
(3)	Marsh Excavation	All marsh excavation planned to be wasted offsite. Marsh excavation to be backfilled with Roadway Embankment, inless specified in plans.
(4)	Marsh Excavation Cut	Portion of material excavated as Marsh Excavation, but not to be backfilled (see construction detail).
(5)	Blanket Cut	Additional excavation necessary to install drainage blanket. Measured from bottom of drainage blanket to existing ground.
(6)	EBS	All EBS material assumed to be wasted offsite. All EBS to be backfilled with Roadway Embankment, unless specified by Engineer (see construction detail).
(7)	Drainage Blanket	End area occupied by drainage blanket
(8)	Mass Ordinate	Mass Ordinate = (Cut + Blanket Cut) - [(Marsh Excavation - Marsh Excavation Cut) + Fill + Blanket Cut - Drainage Blanket]

STA. 1197+00 IHA TO 1197+50 IHA



9

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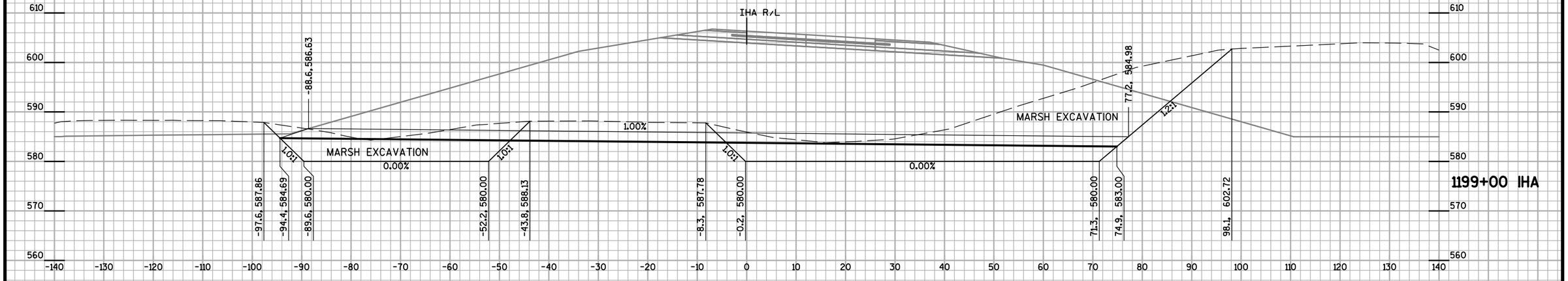
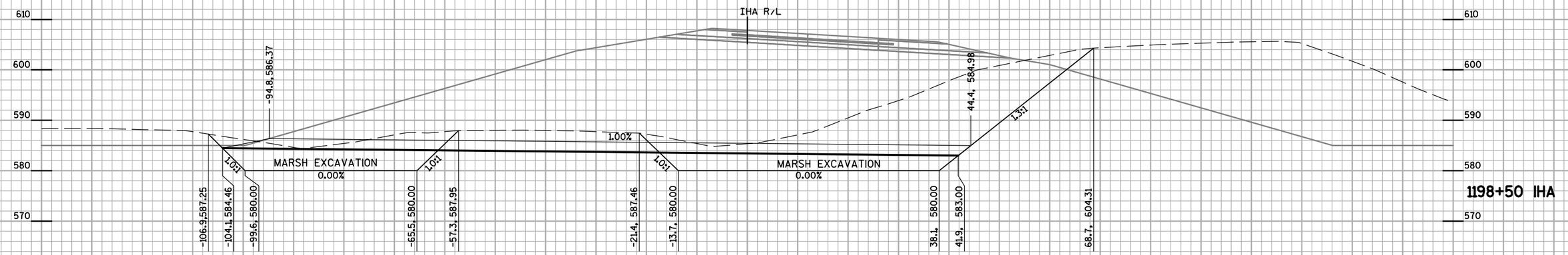
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE - STRIP DRAINS	SHEET 968	E

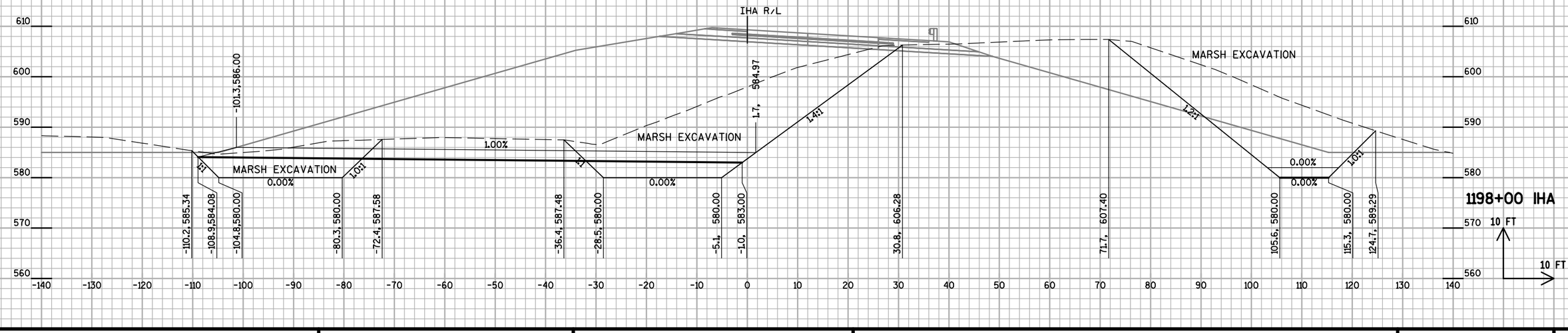
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090150_xs_IHA-SD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1198+00 IHA TO 1199+00 IHA







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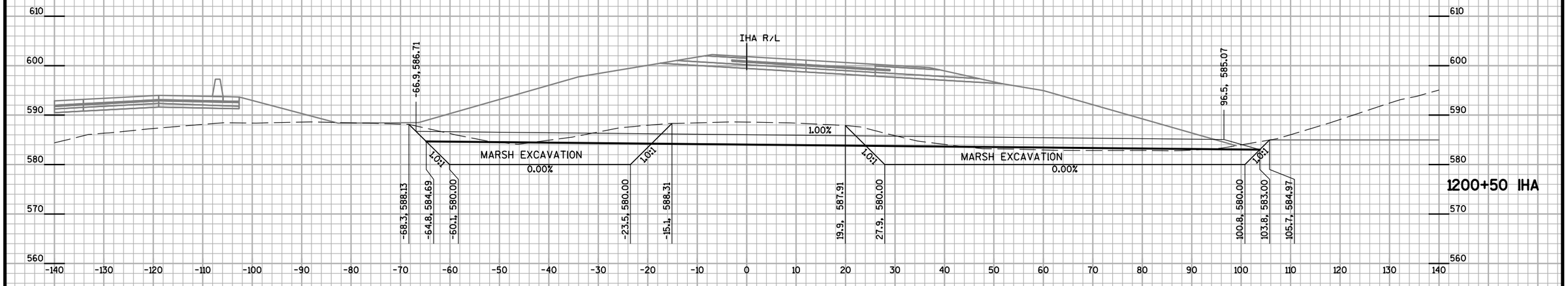
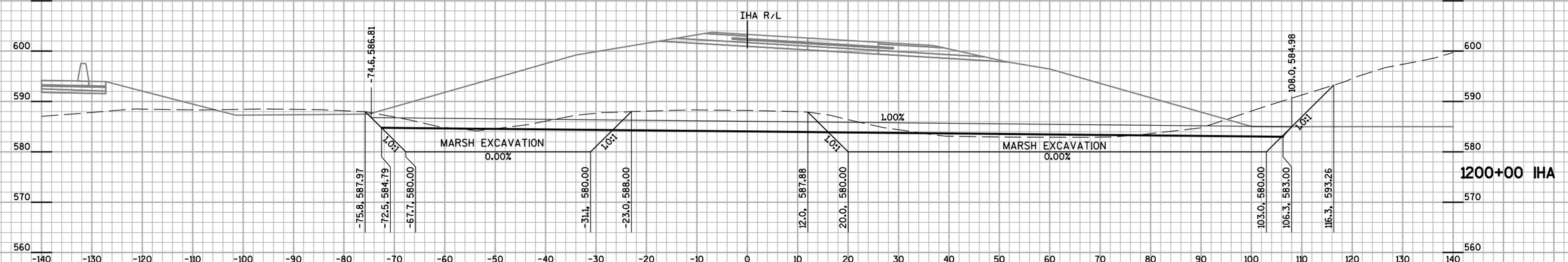
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE - STRIP DRAINS	SHEET 969	E

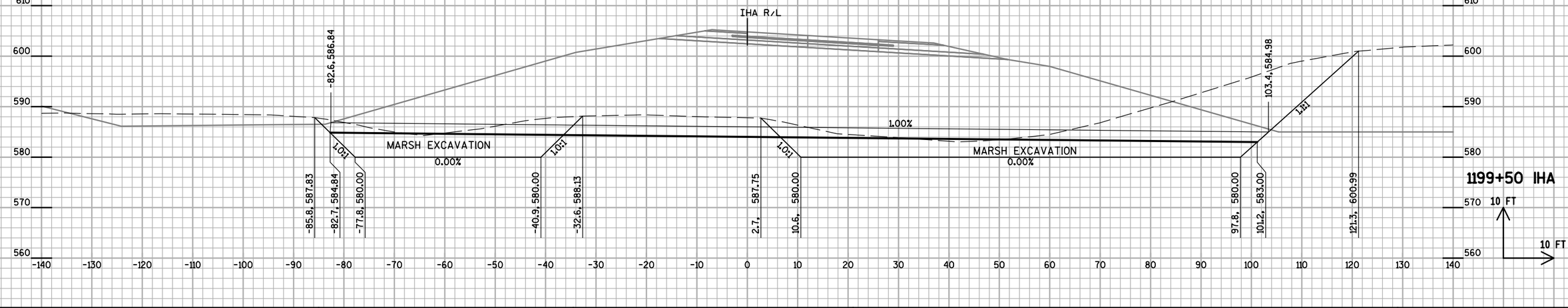
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090150_xs_IHA-SD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1199+50 IHA TO 1200+50 IHA







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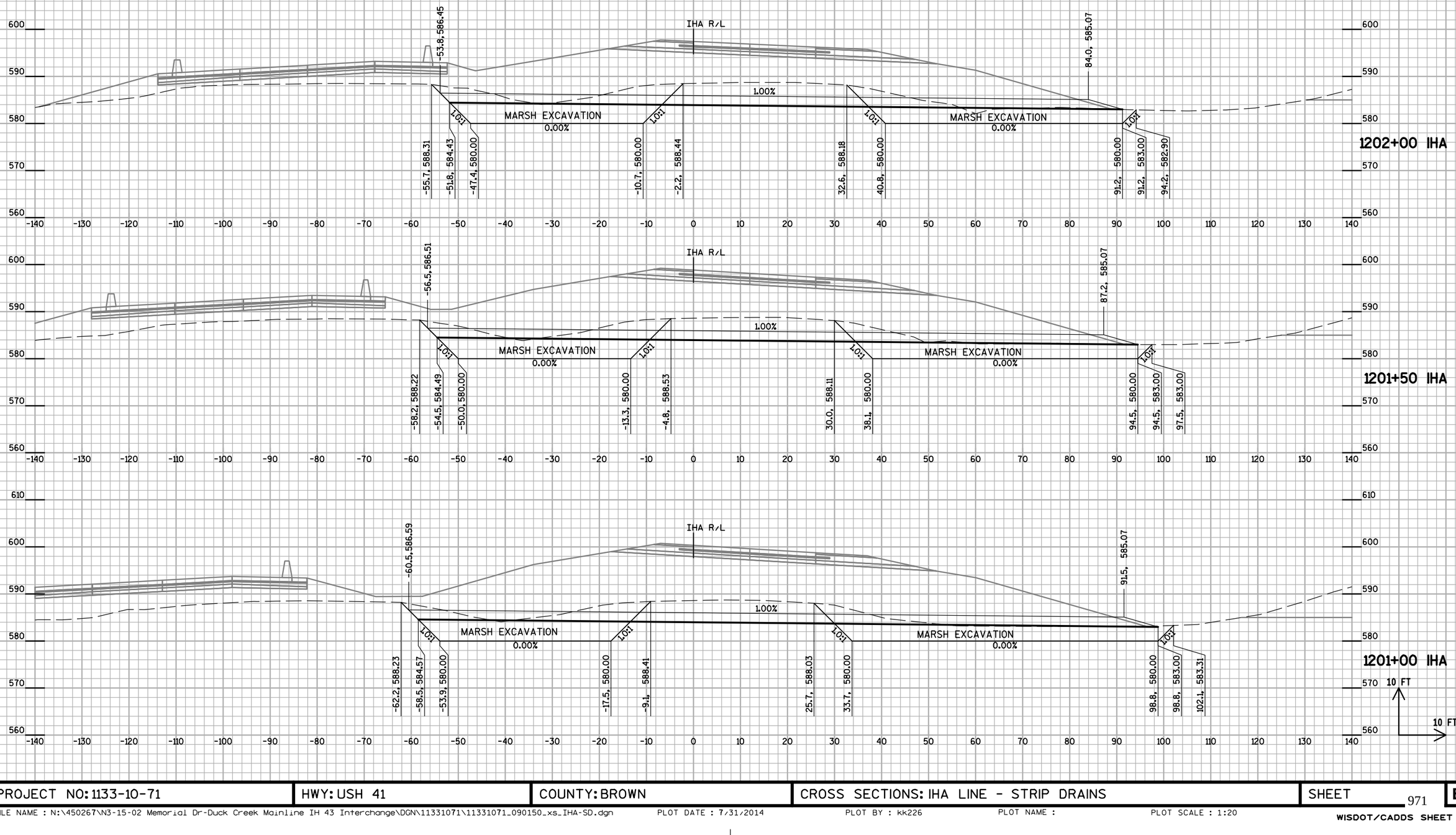
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE - STRIP DRAINS	SHEET 970	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090150_xs_IHA-SD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

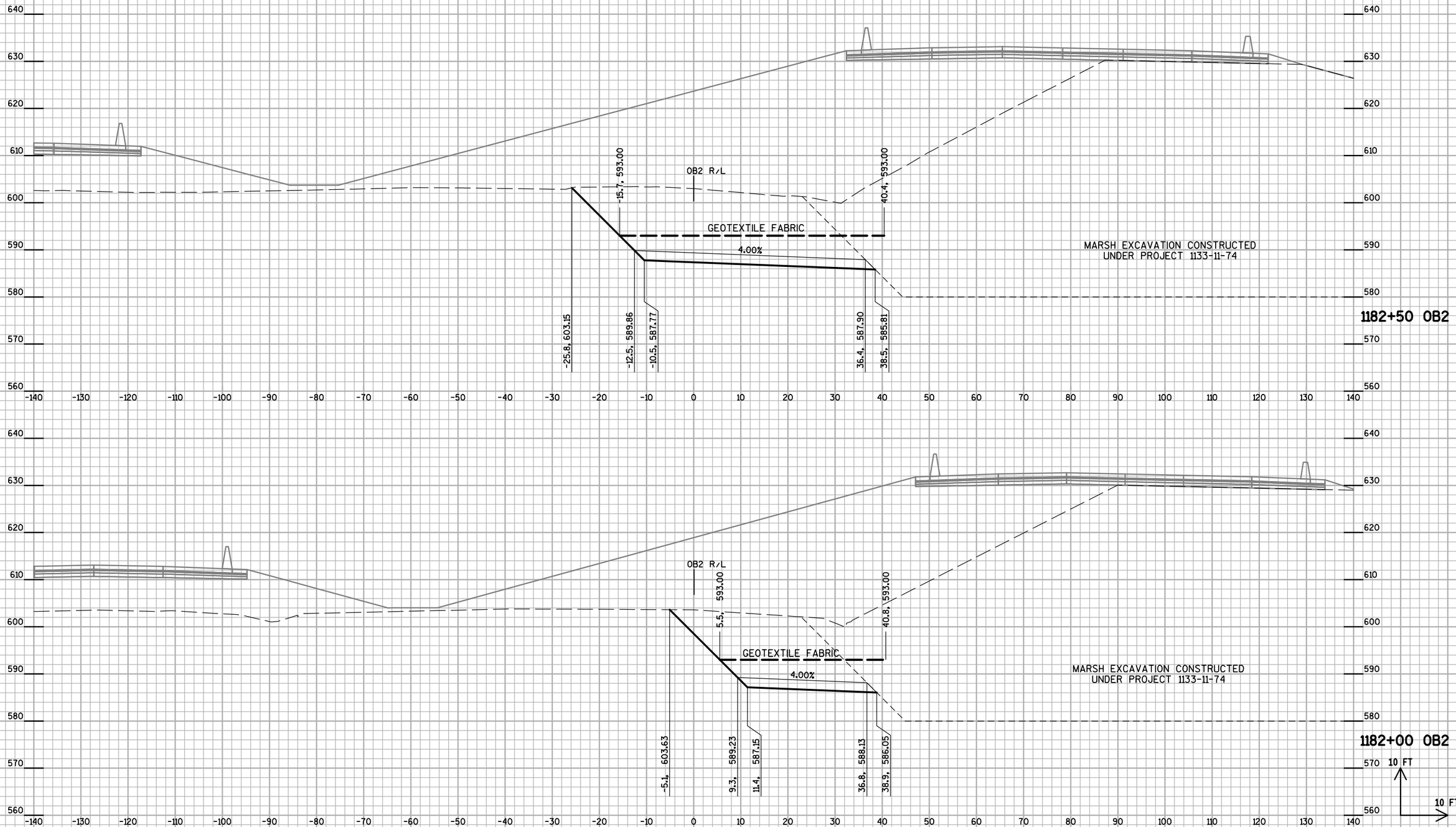
WISDOT/CADDS SHEET 21

STA. 1201+00 IHA TO 1202+00 IHA



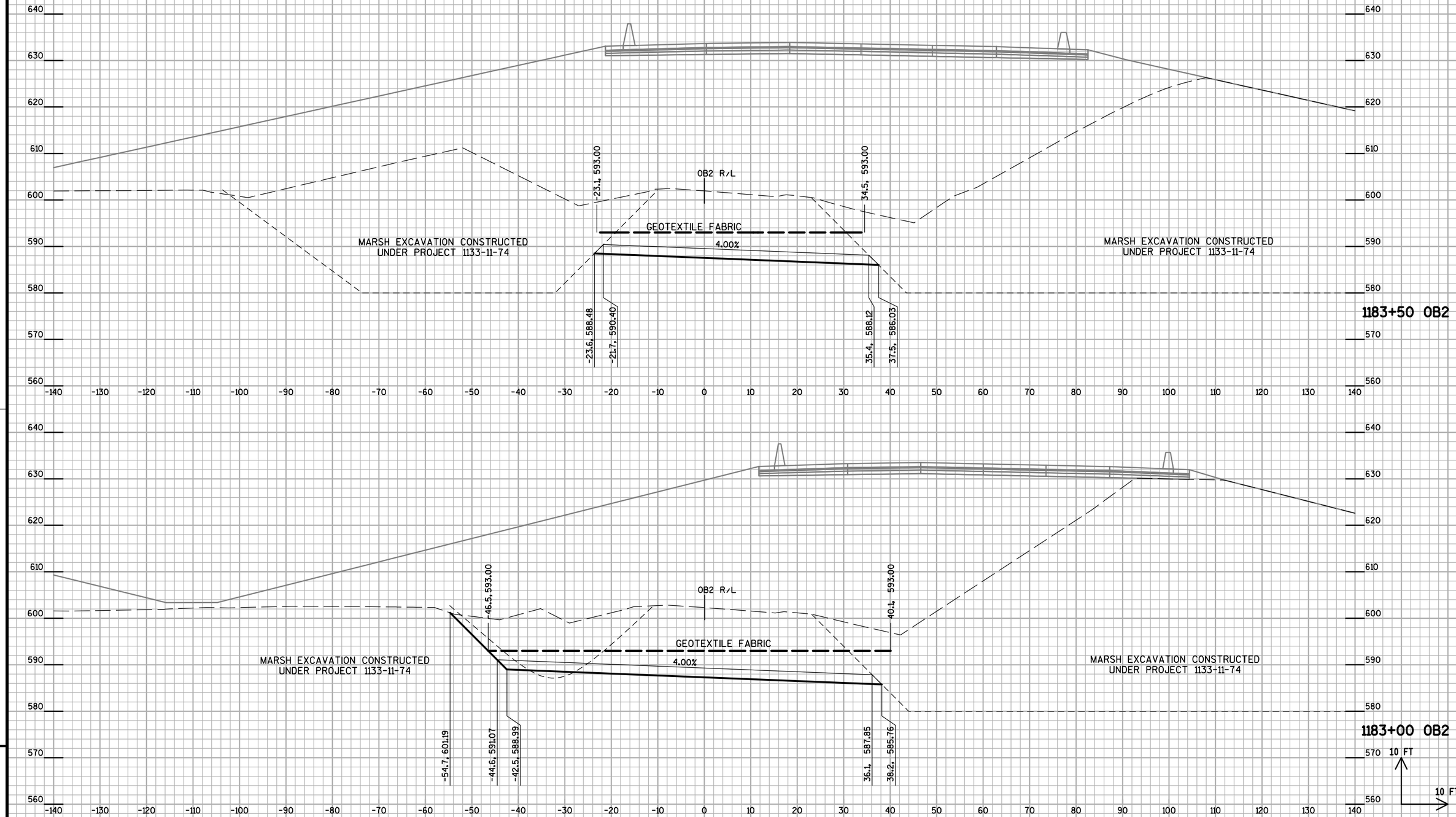
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE - STRIP DRAINS	SHEET 971	E

STA. 1182+00 OB2 TO 1182+50 OB2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: OB2 LINE - STRIP DRAINS	SHEET 972	E

STA. 1183+00 0B2 TO 1183+50 0B2



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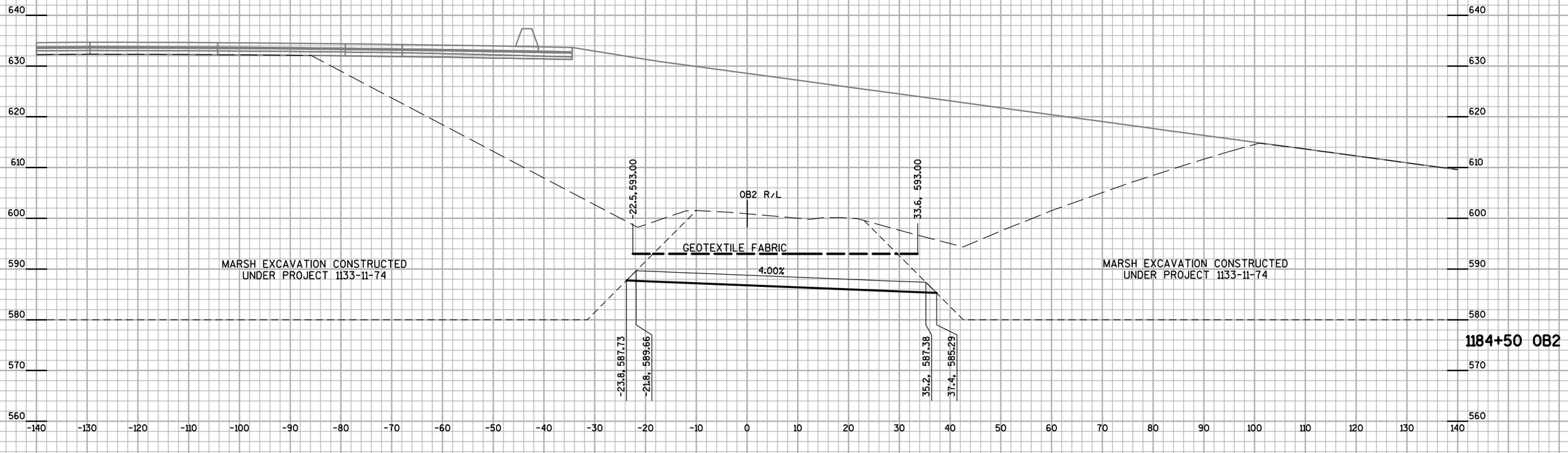
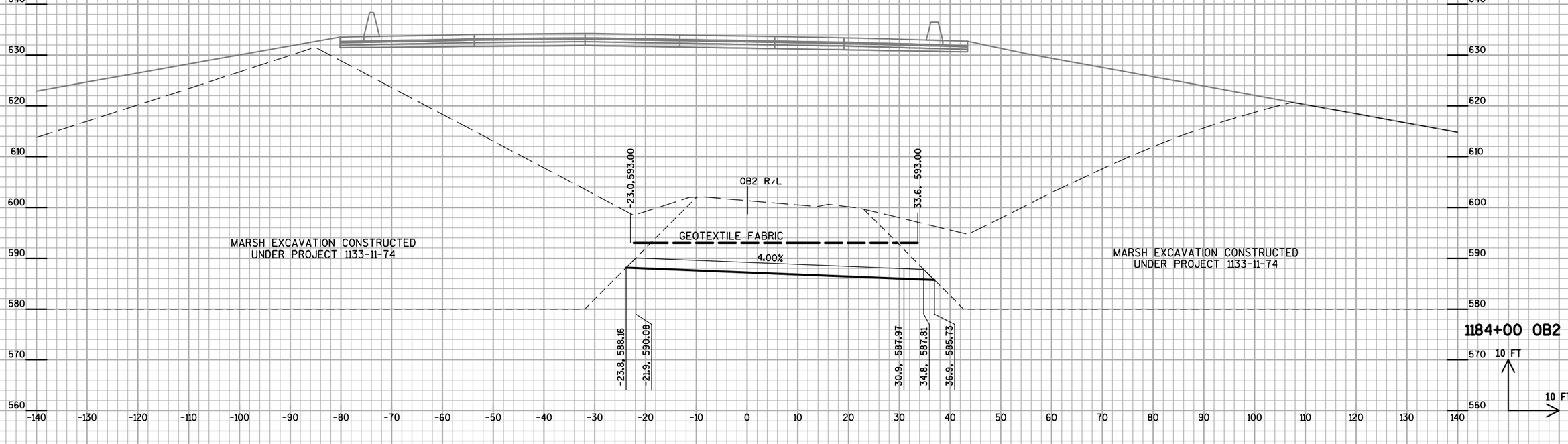
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE - STRIP DRAINS	SHEET 973	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090154_xs_0B2-SD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1184+00 0B2 TO 1184+50 0B2





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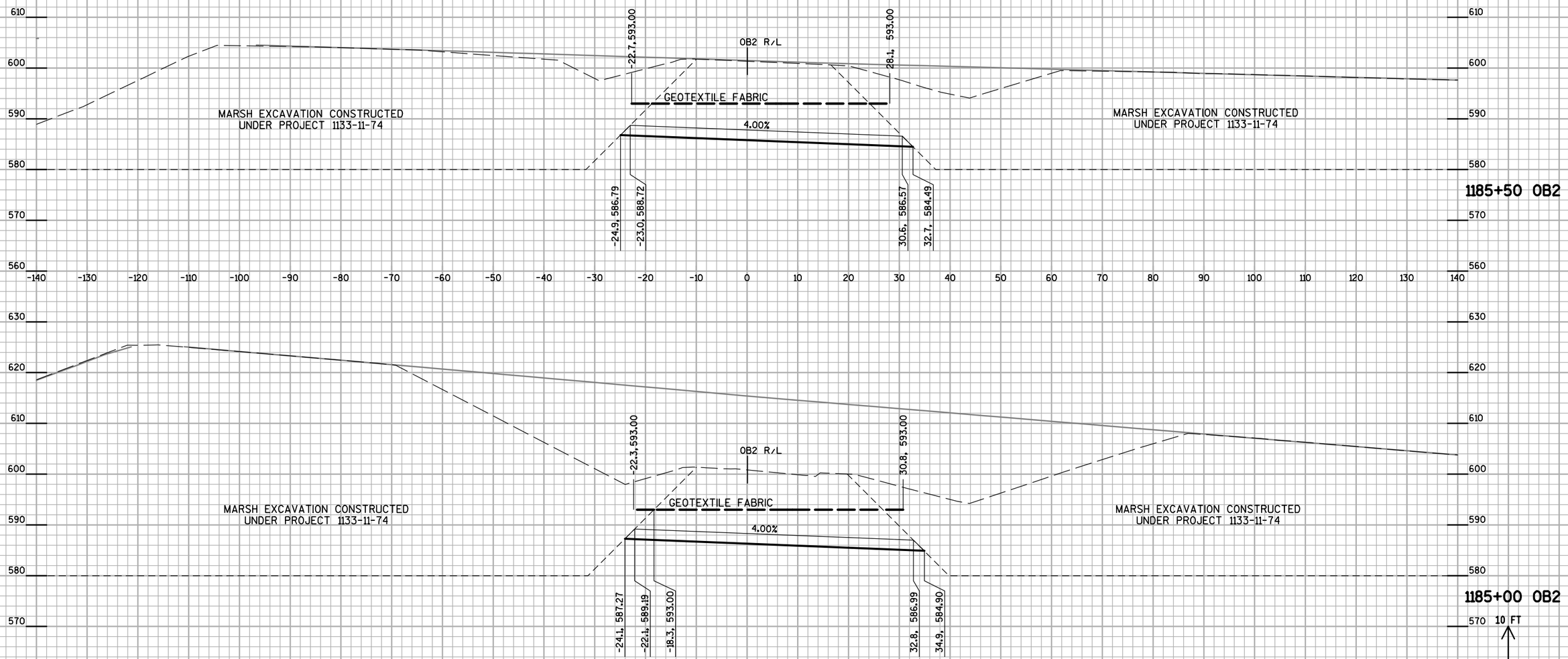
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE - STRIP DRAINS	SHEET 974	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090154_xs_0B2-SD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1185+00 OB2 TO 1185+50 OB2



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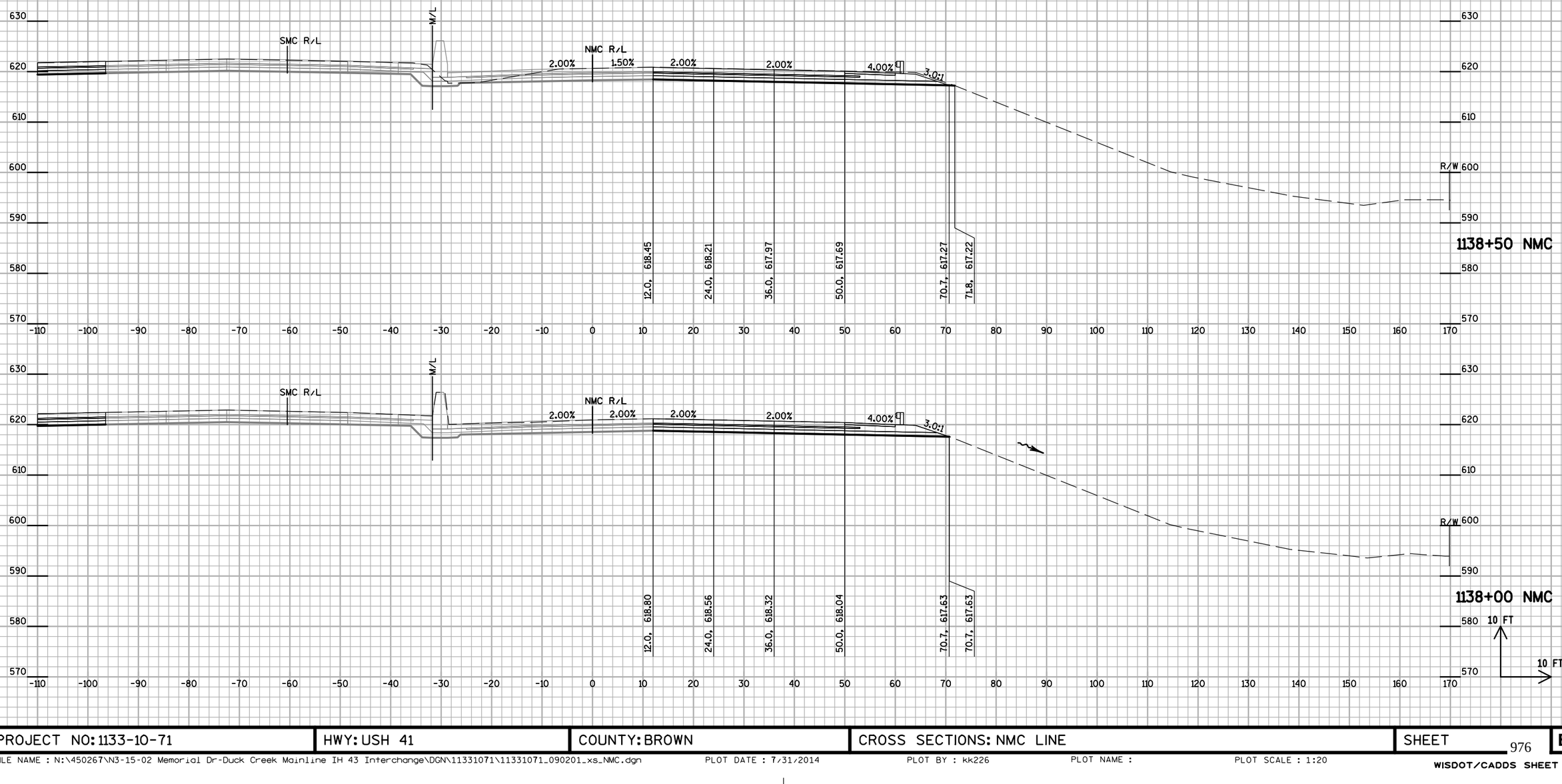
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: OB2 LINE - STRIP DRAINS	SHEET 975	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090154_xs_OB2-SD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1138+00 NMC TO 1138+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



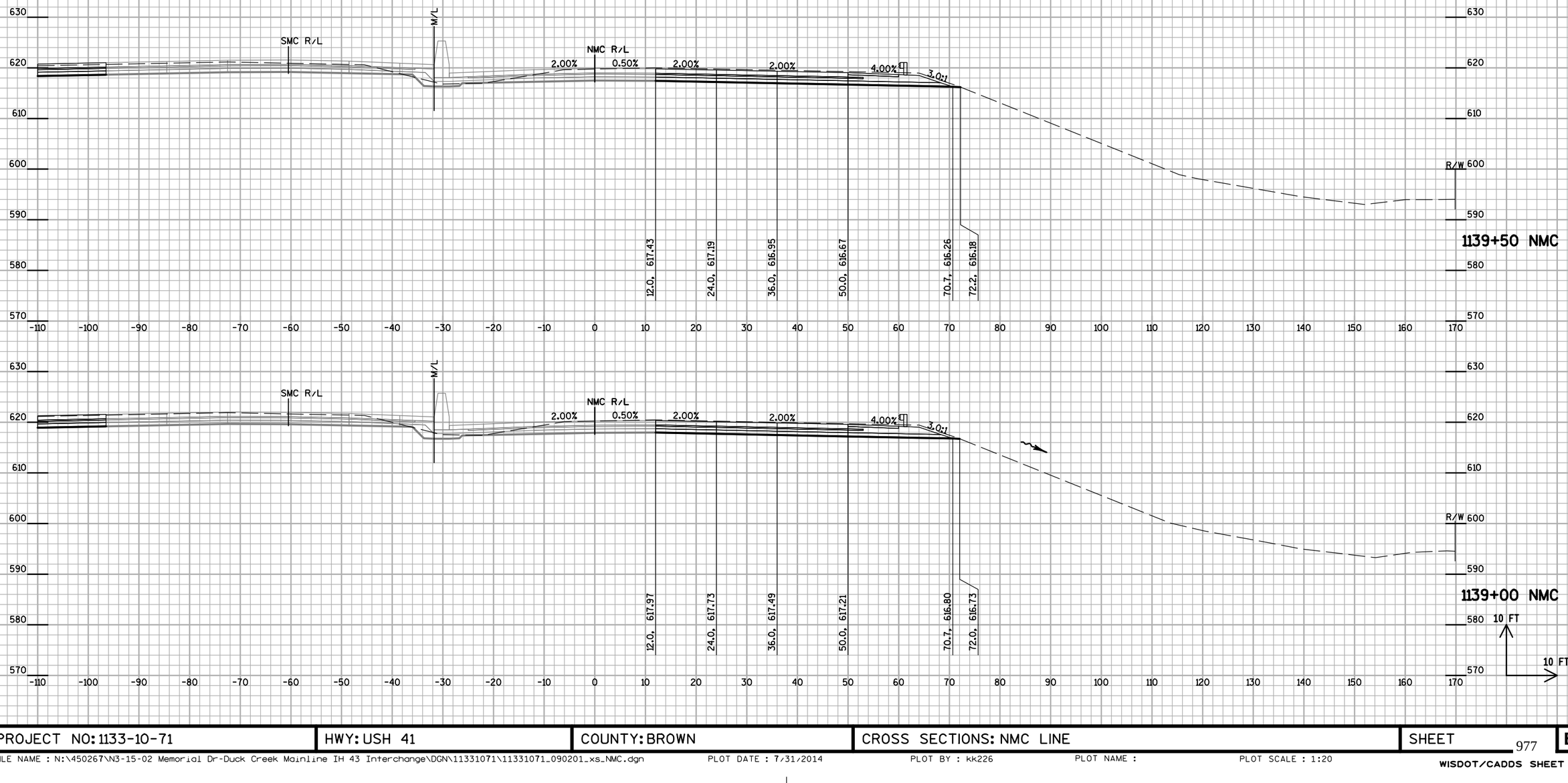
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1139+00 NMC TO 1139+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



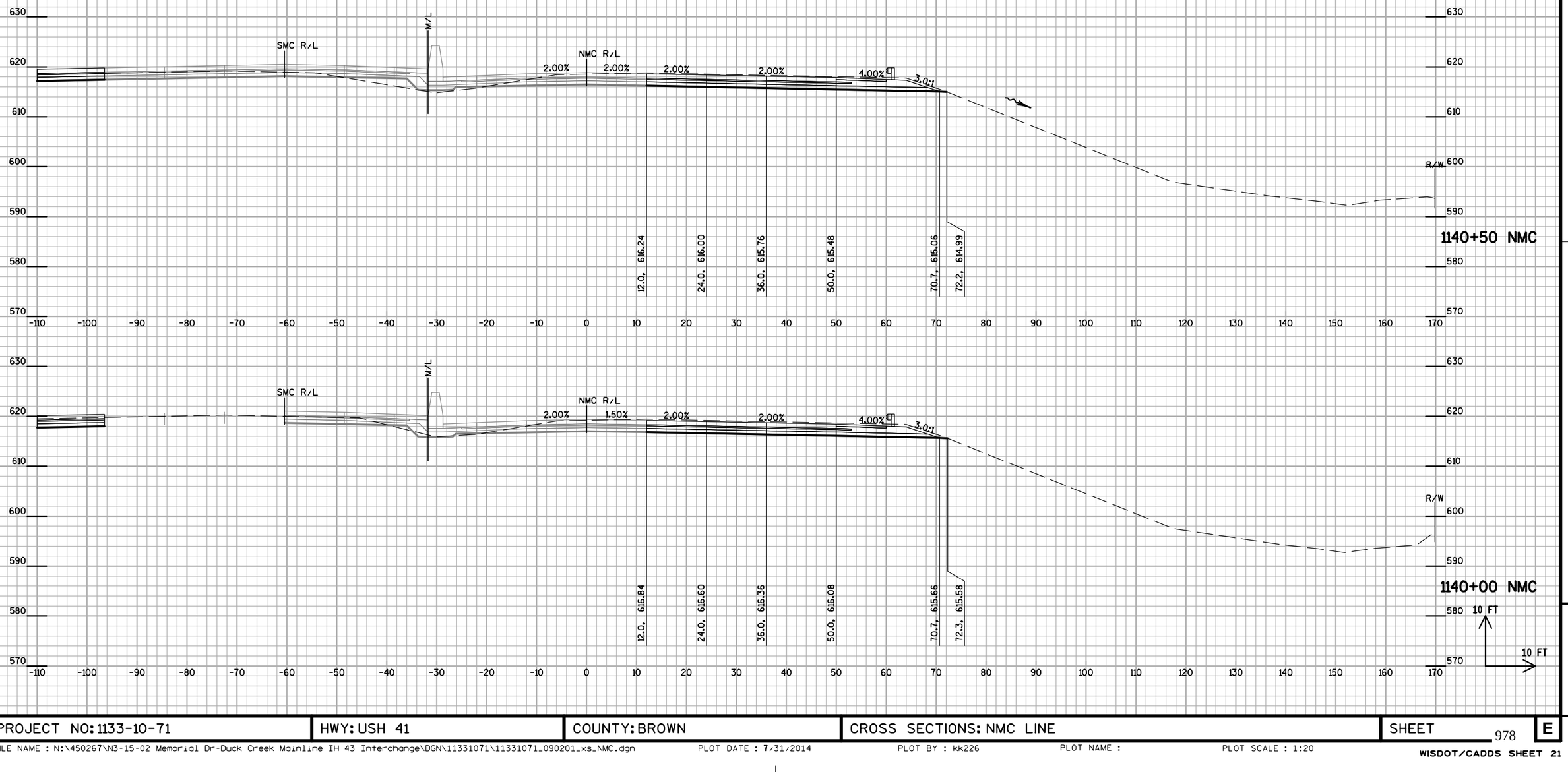
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 977	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1140+00 NMC TO 1140+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



9

9

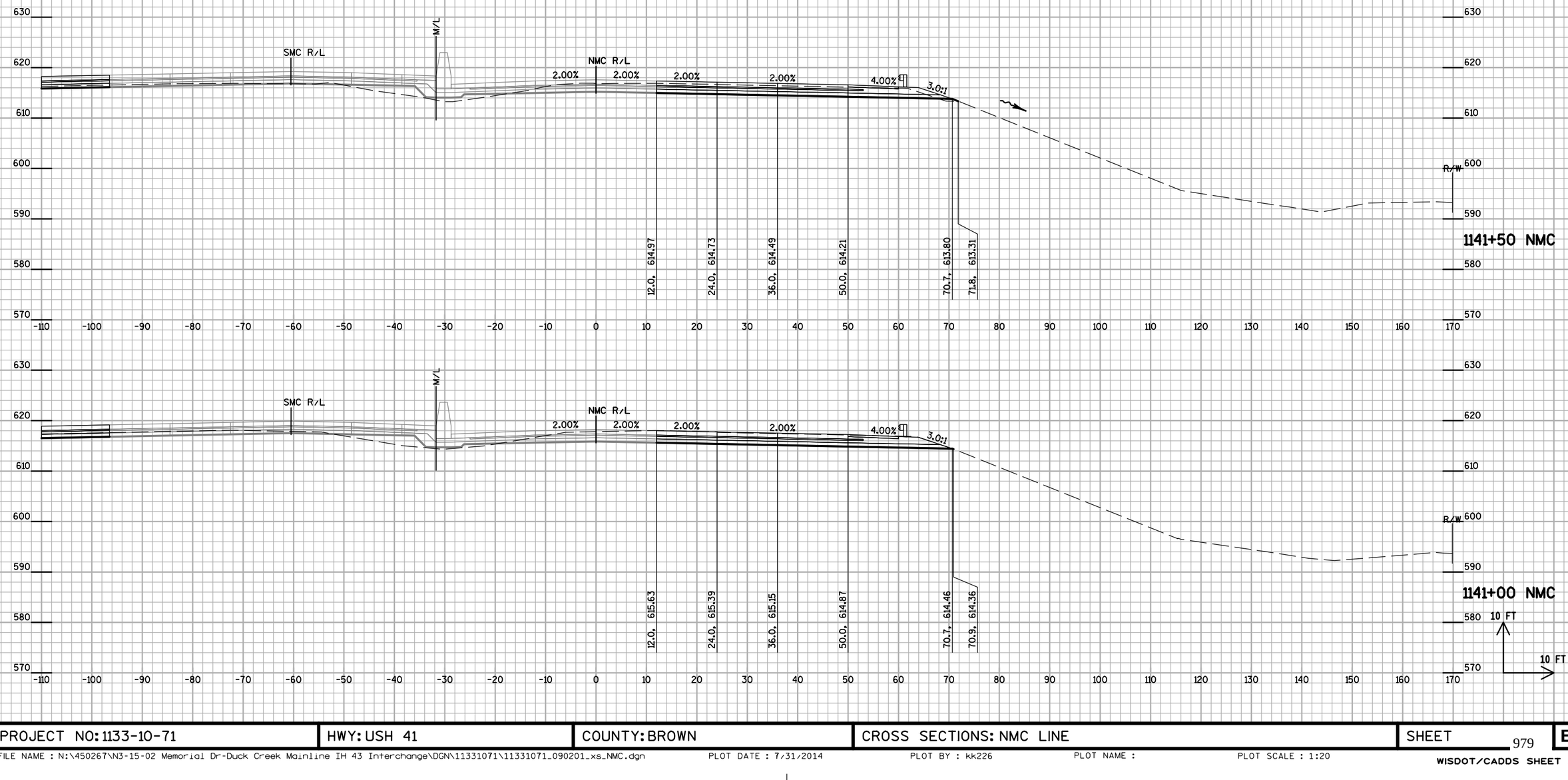
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 978	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1141+00 NMC TO 1141+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



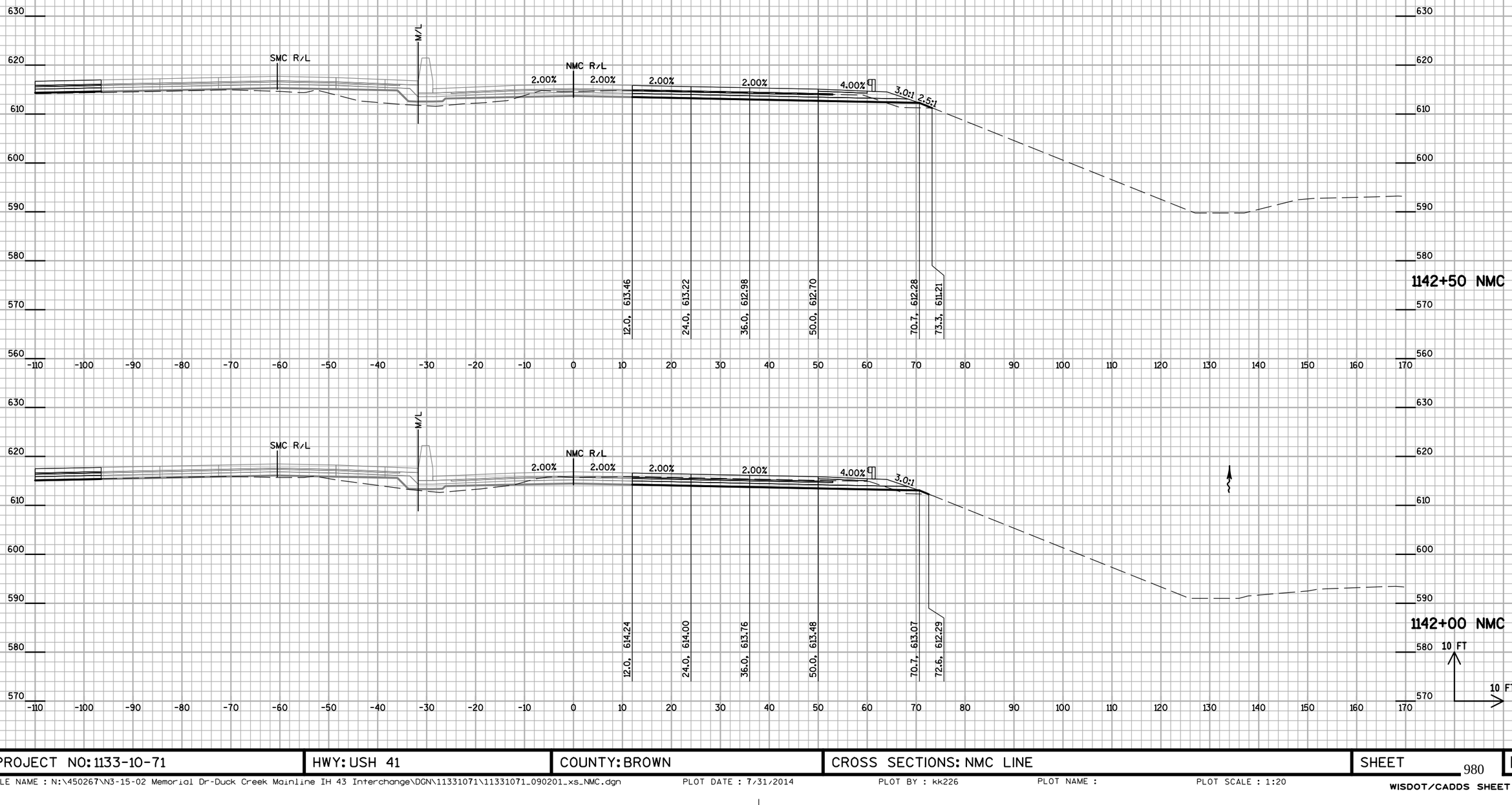
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 979	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1142+00 NMC TO 1142+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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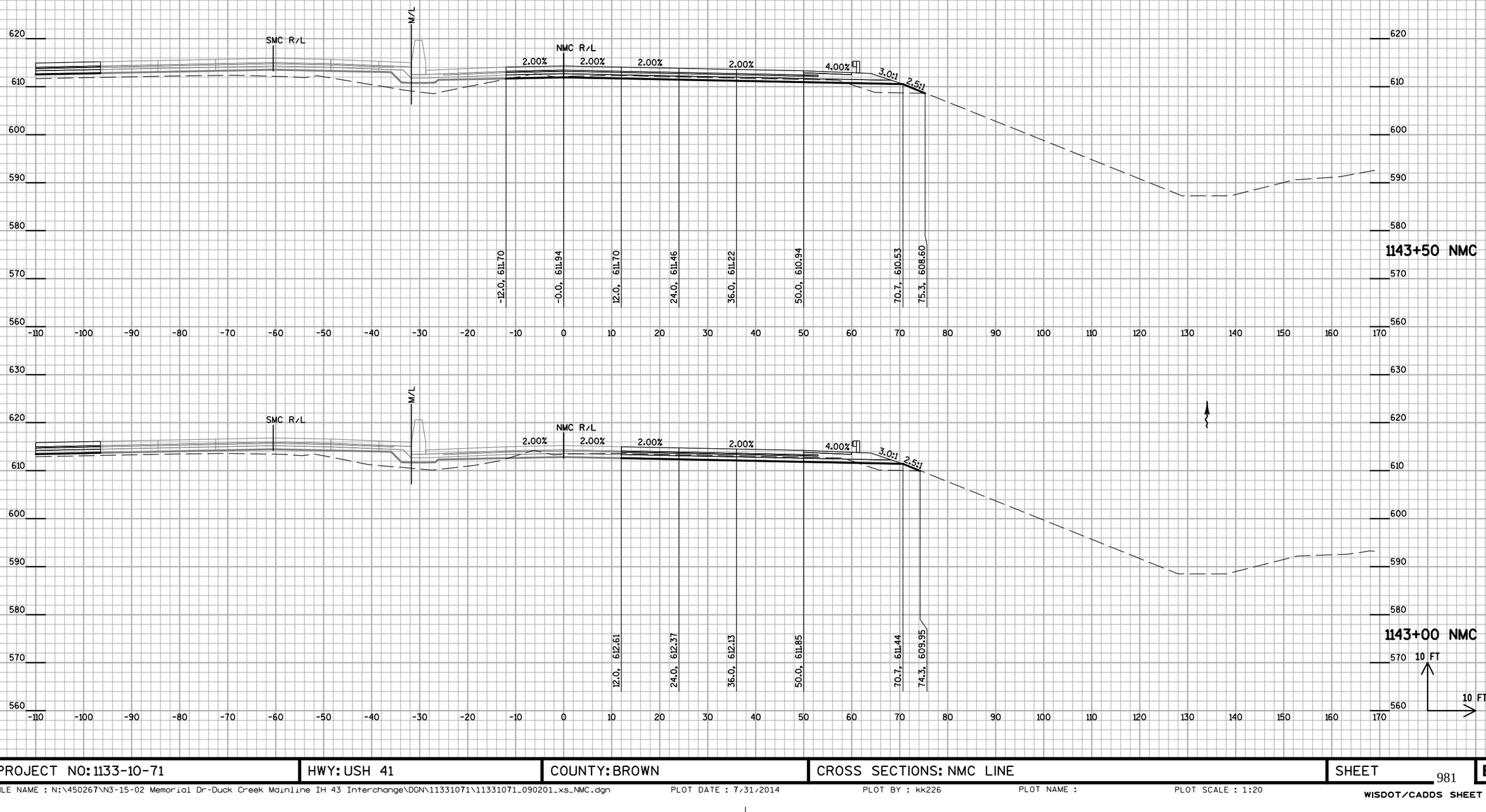
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 980	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1143+00 NMC TO 1143+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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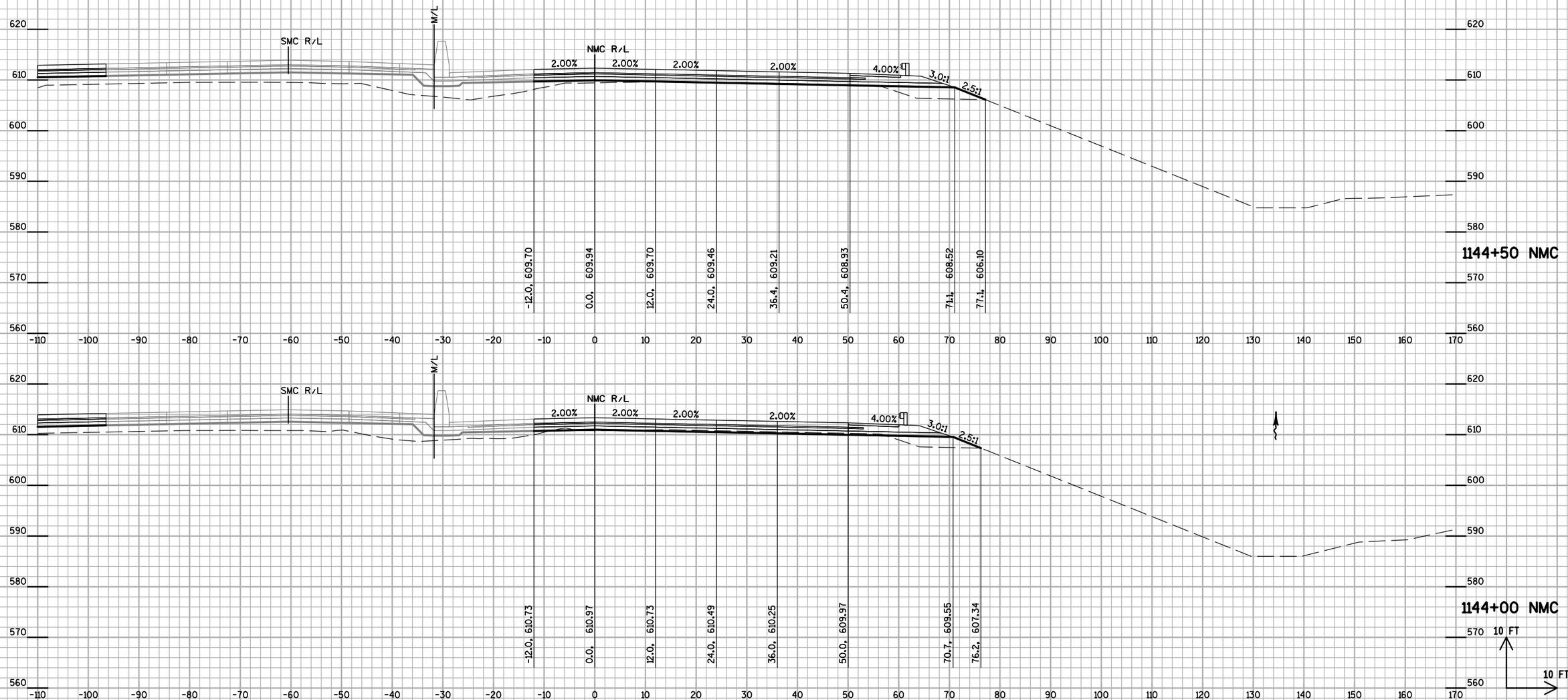
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 981	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1144+00 NMC TO 1144+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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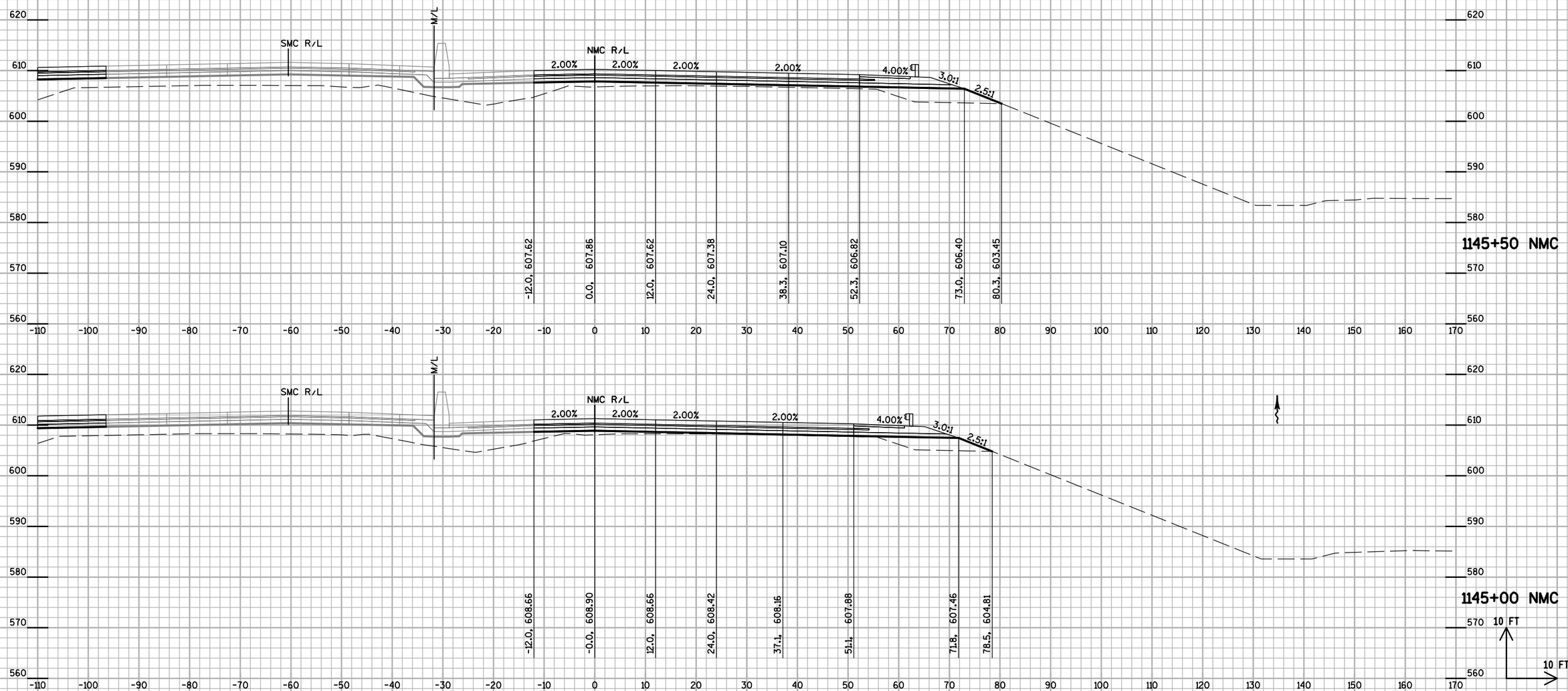
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 982	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1145+00 NMC TO 1145+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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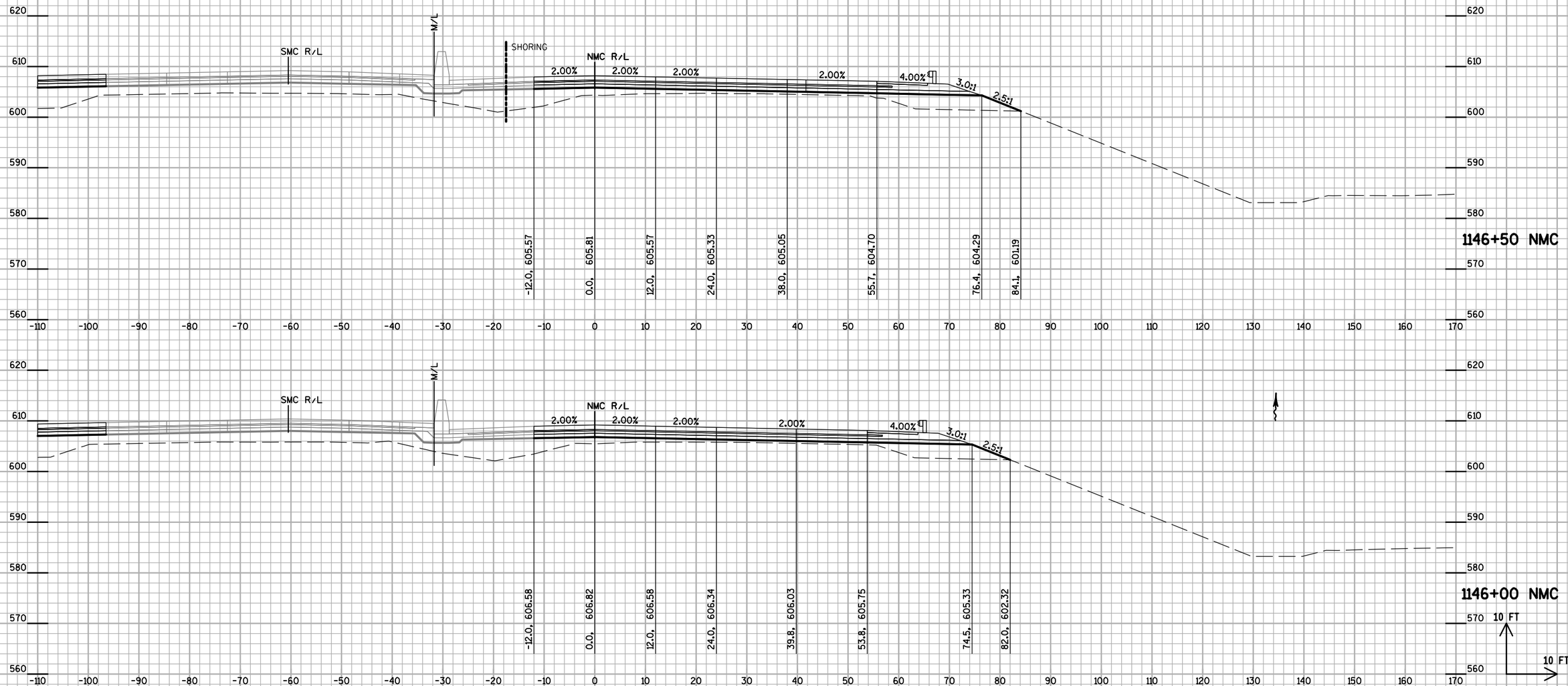
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 983	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1146+00 NMC TO 1146+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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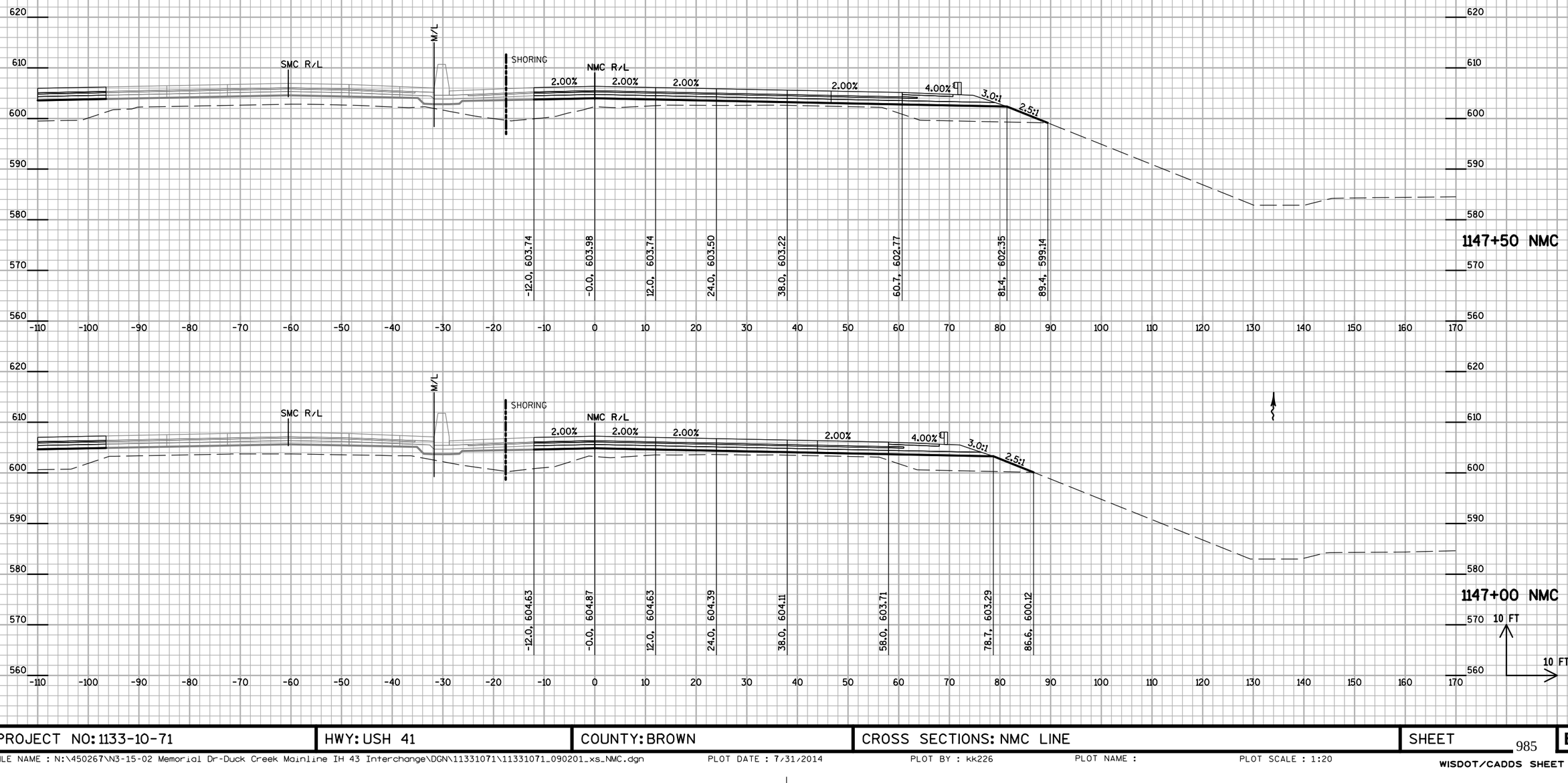
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 984	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1147+00 NMC TO 1147+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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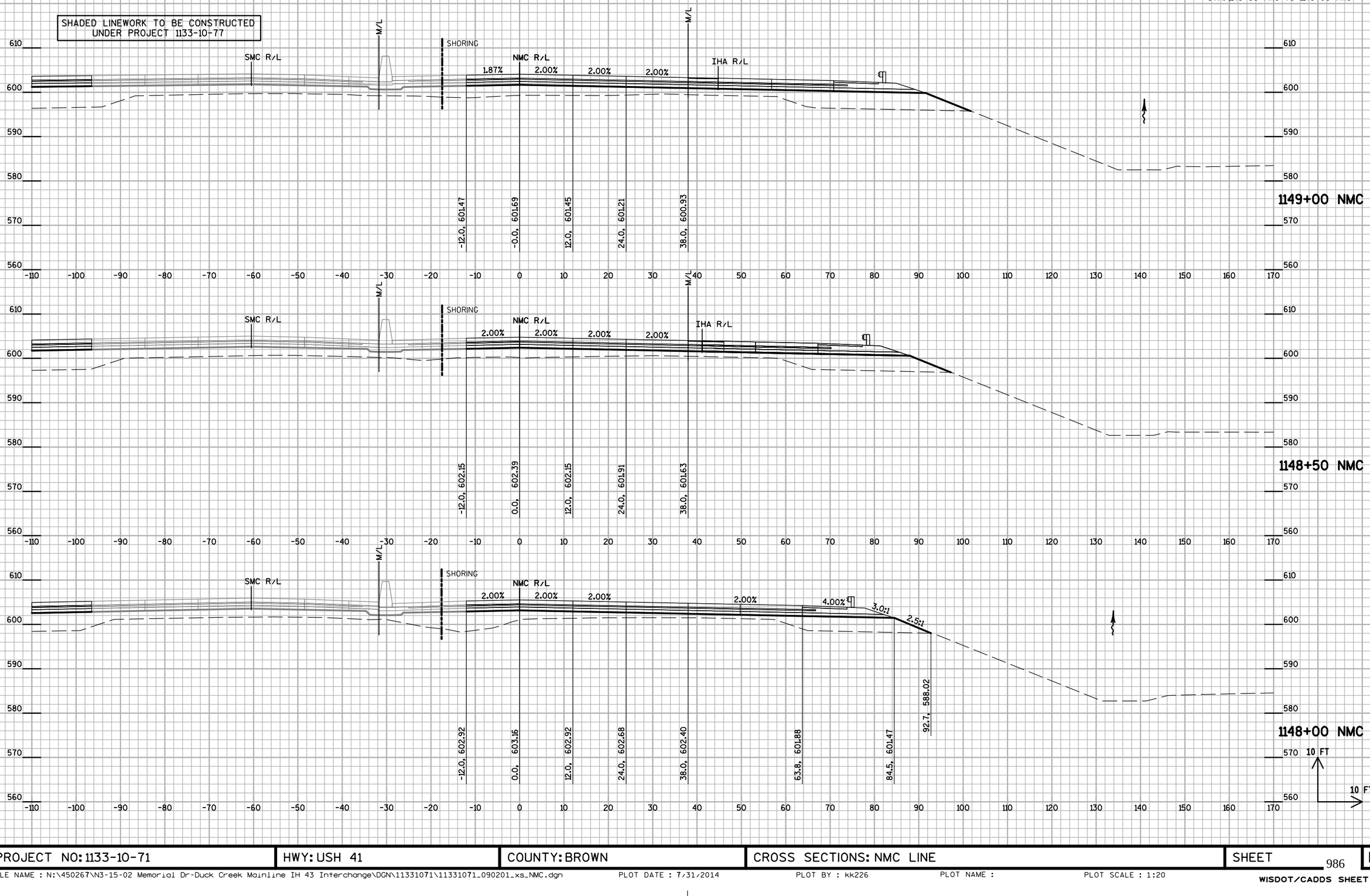
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 985	E

STA. 1148+00 NMC TO 1149+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



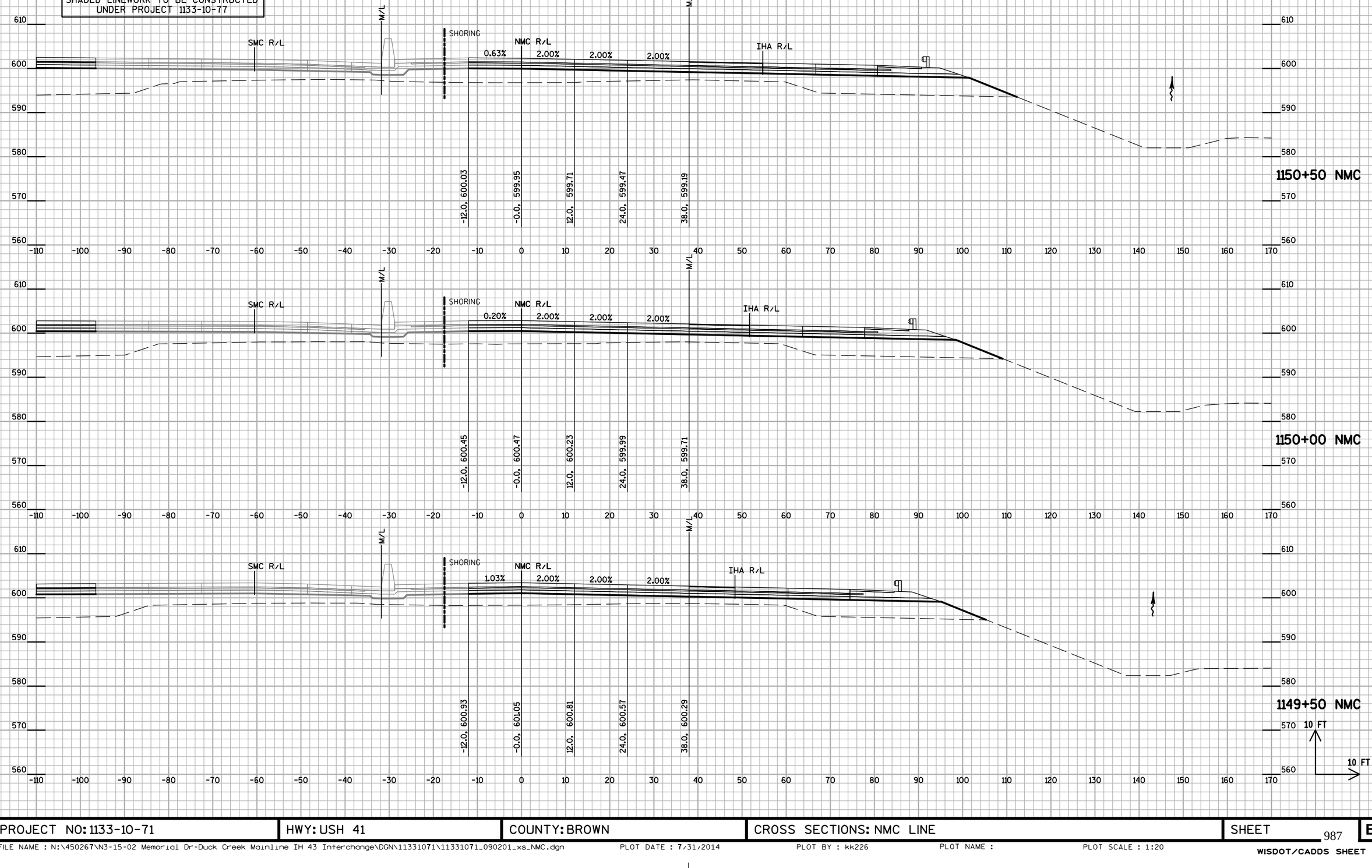
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1149+50 NMC TO 1150+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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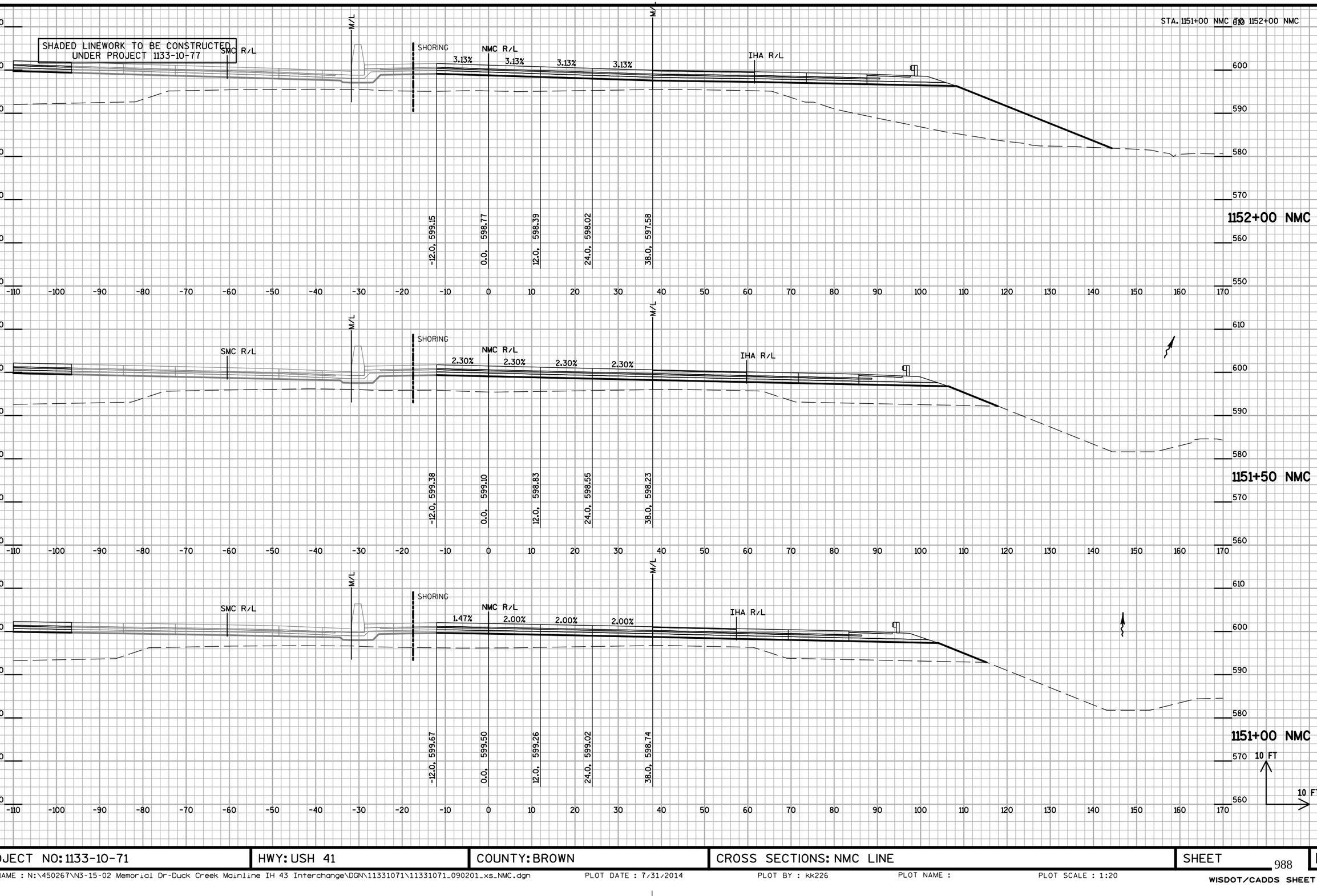
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 987	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STA. 1151+00 NMC TO 1152+00 NMC



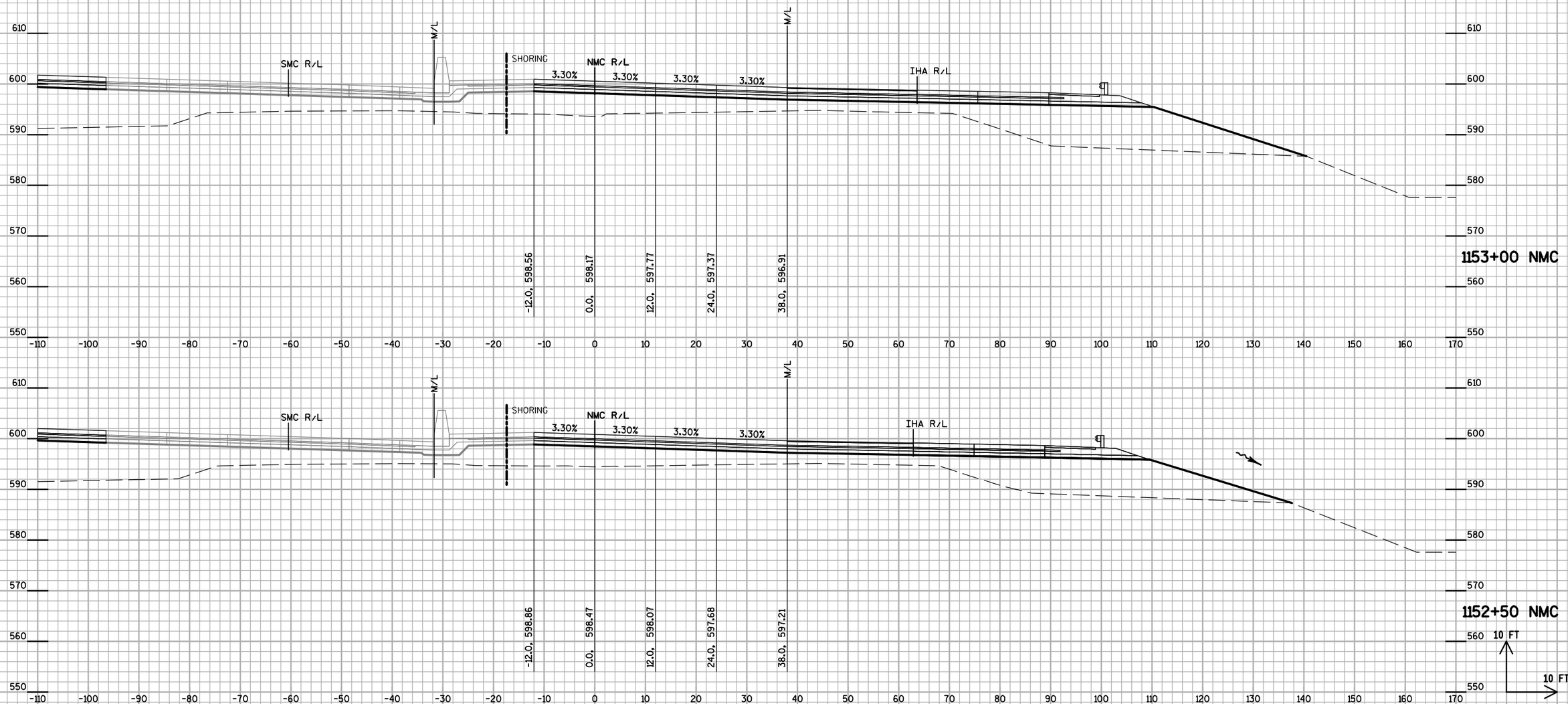
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1152+50 NMC TO 1153+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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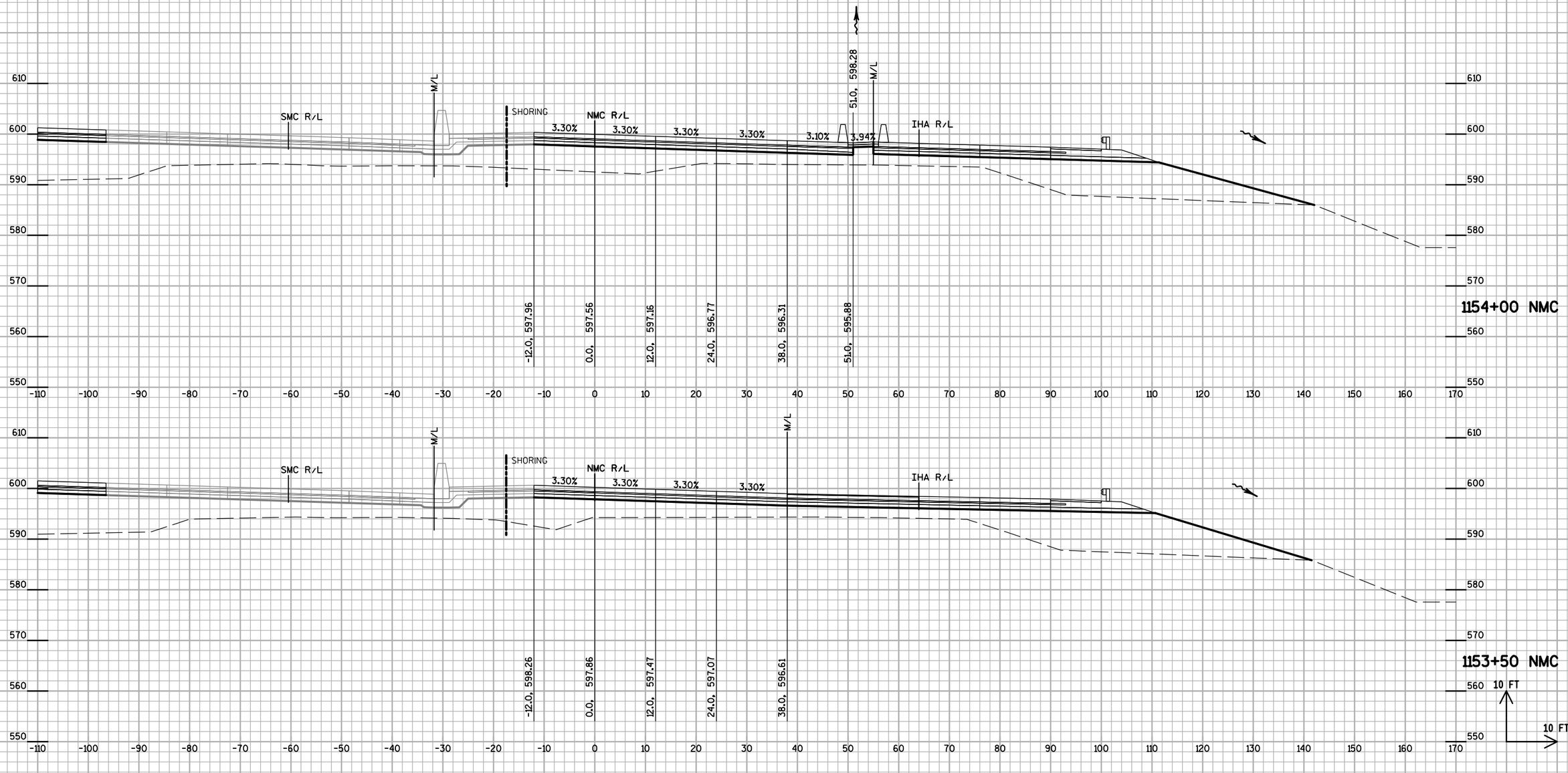
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 989	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1153+50 NMC TO 1154+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



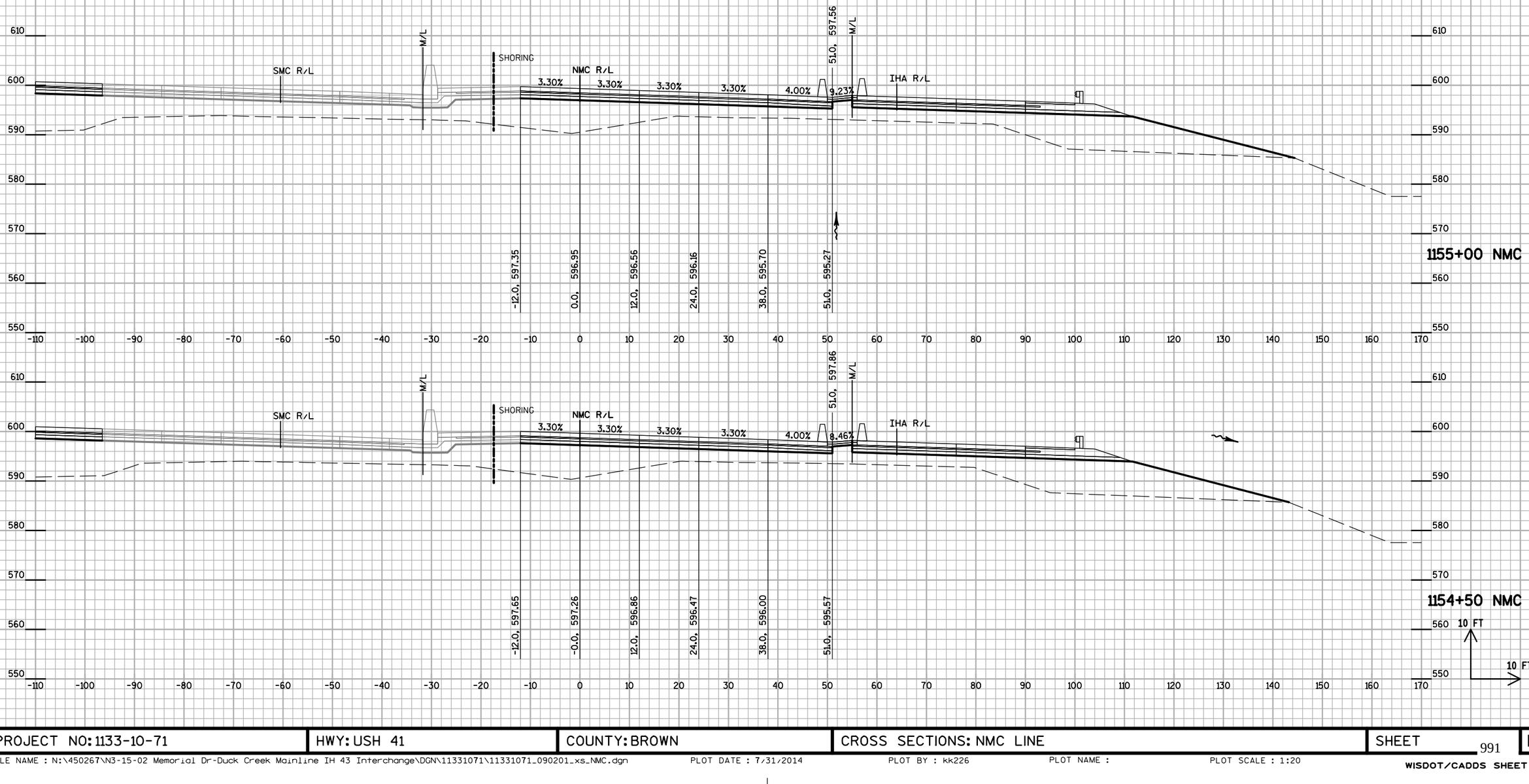
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 990	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1154+50 NMC TO 1155+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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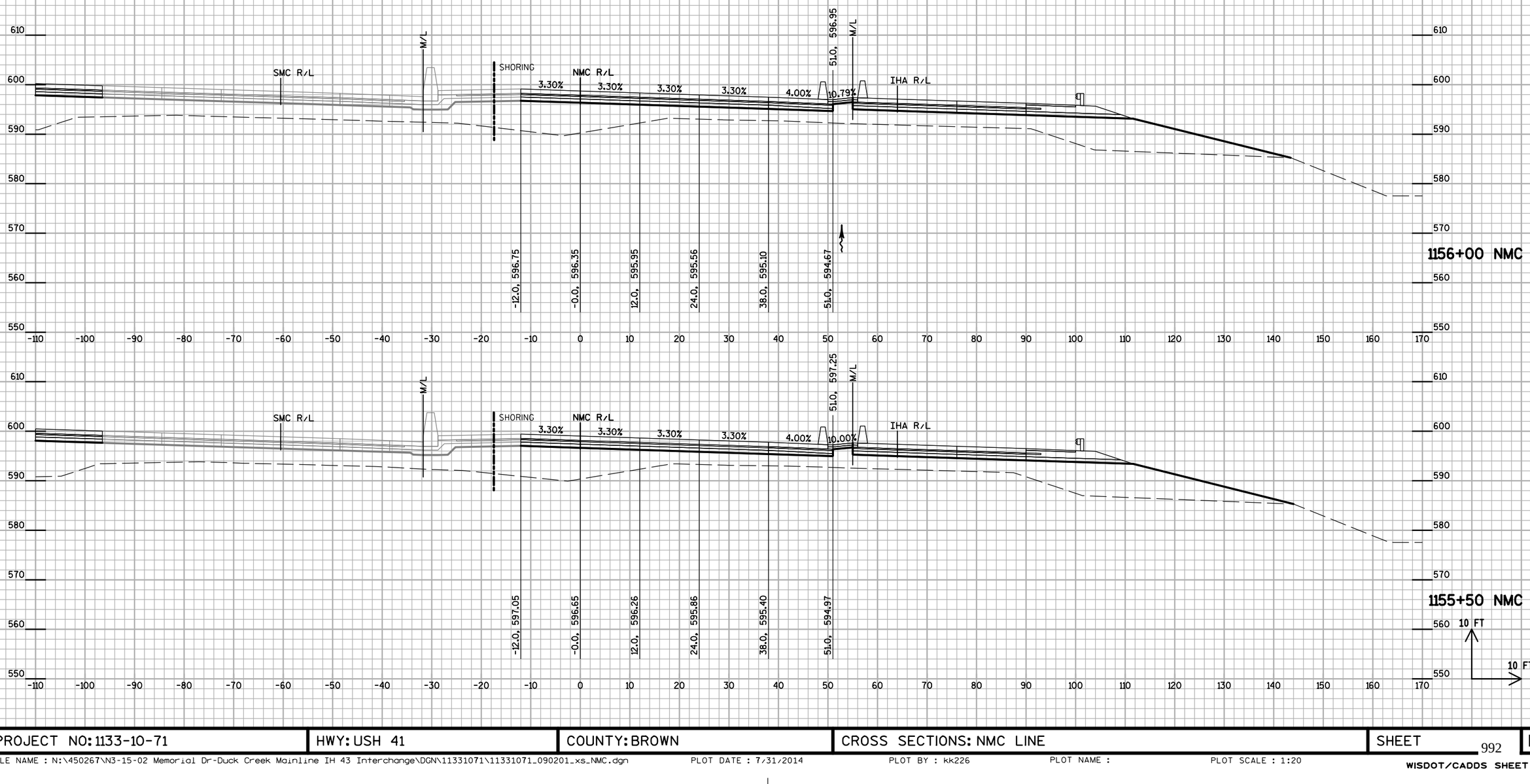
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1155+50 NMC TO 1156+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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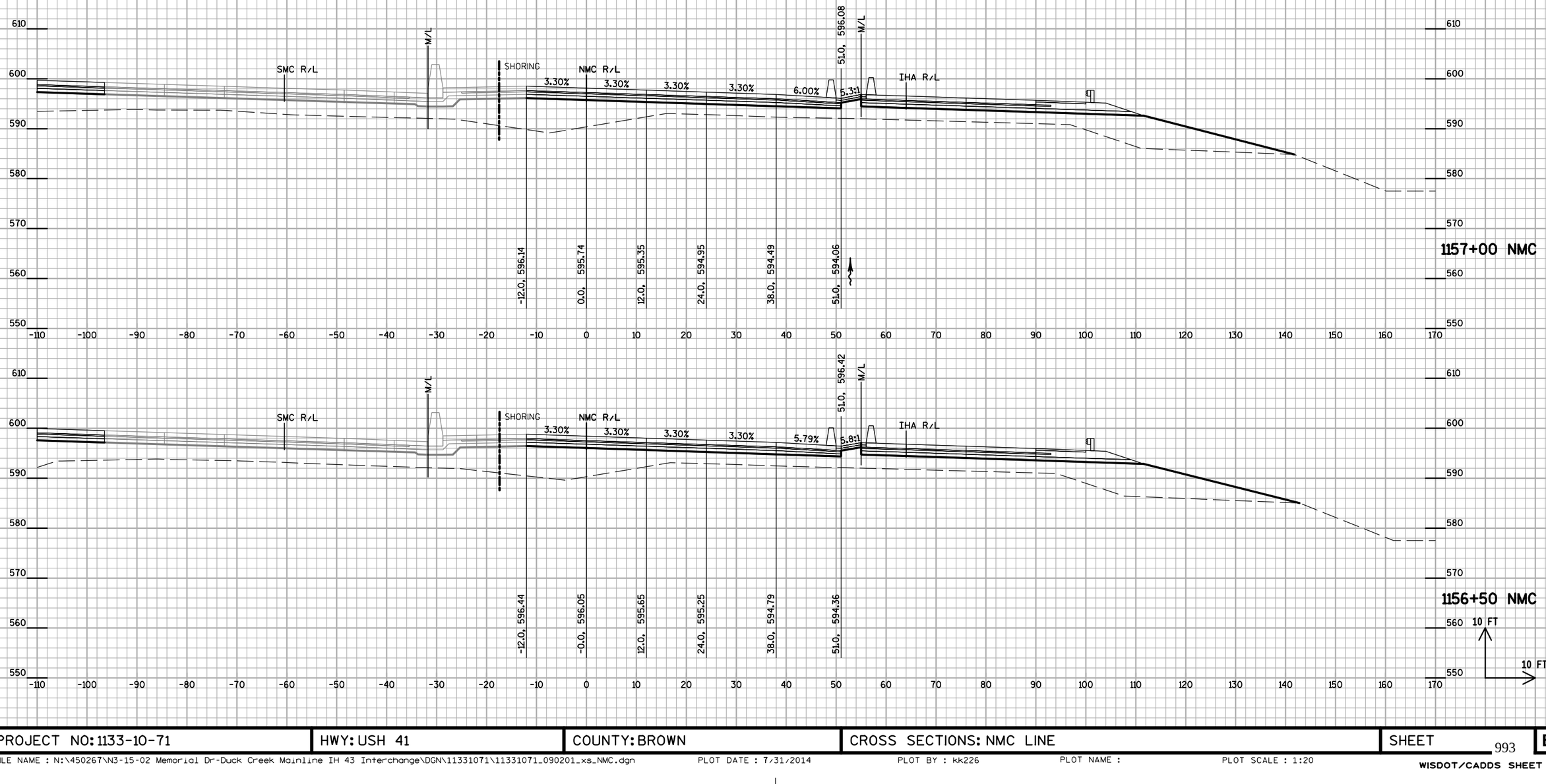
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1156+50 NMC TO 1157+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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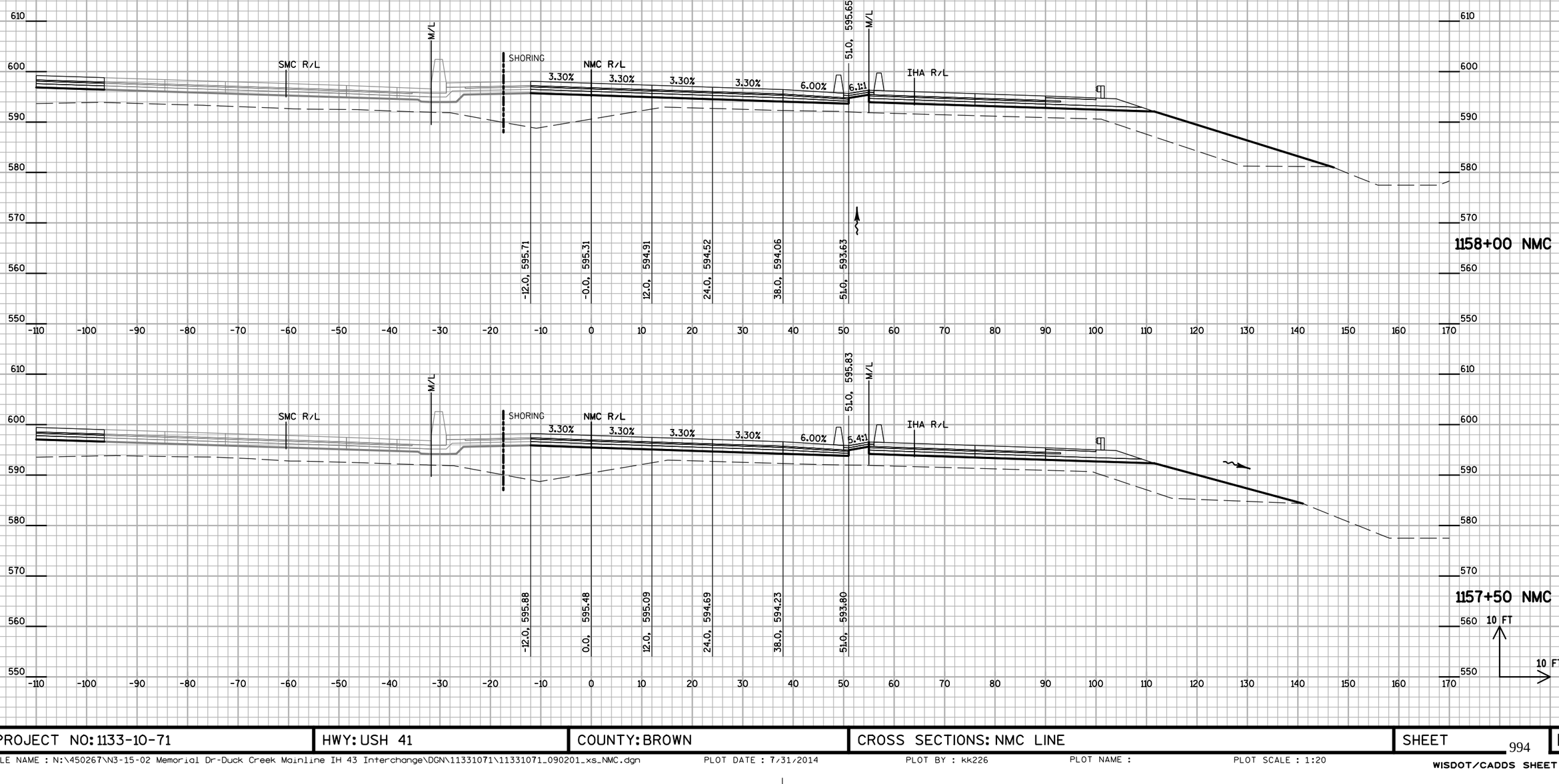
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1157+50 NMC TO 1158+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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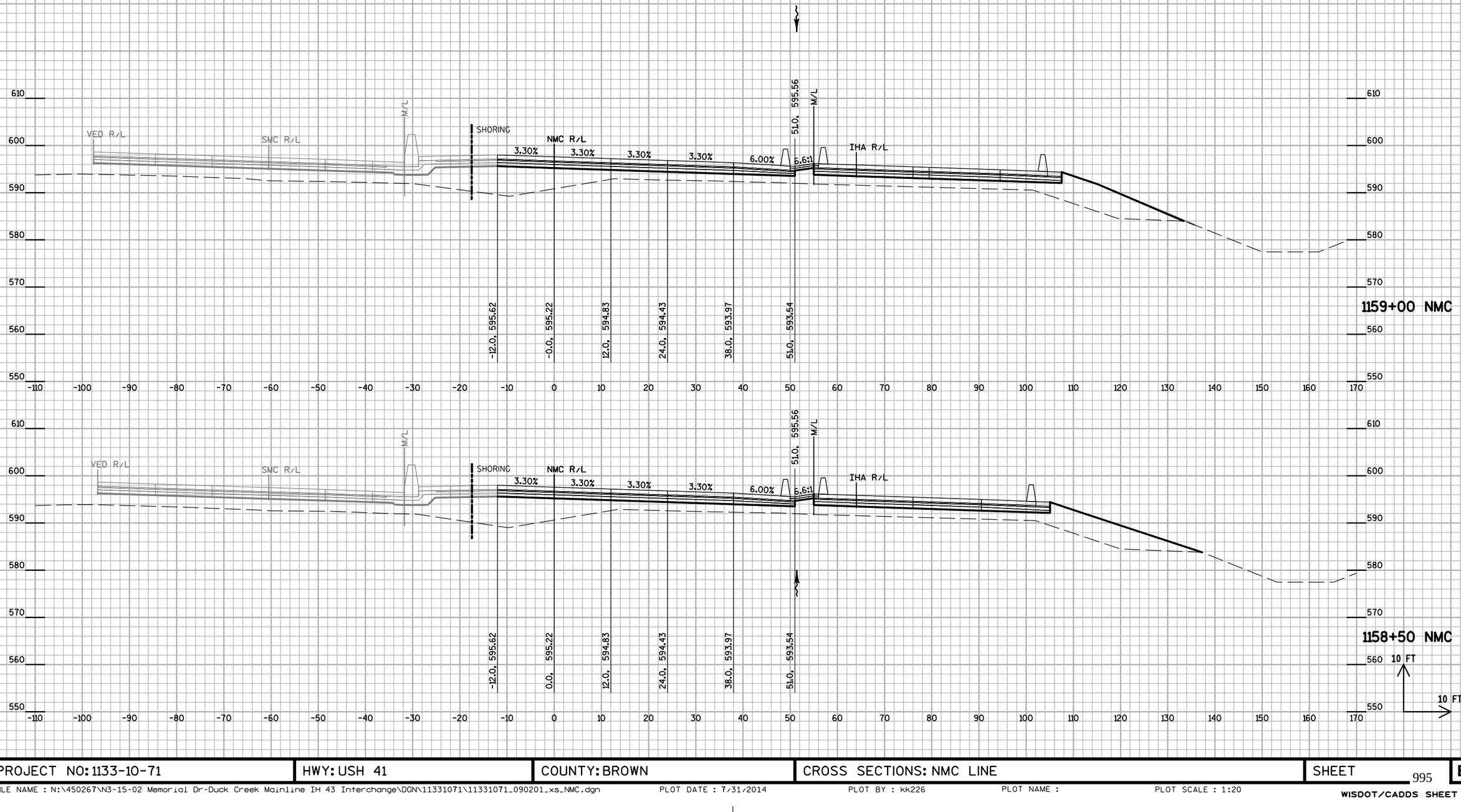
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1158+50 NMC TO 1159+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



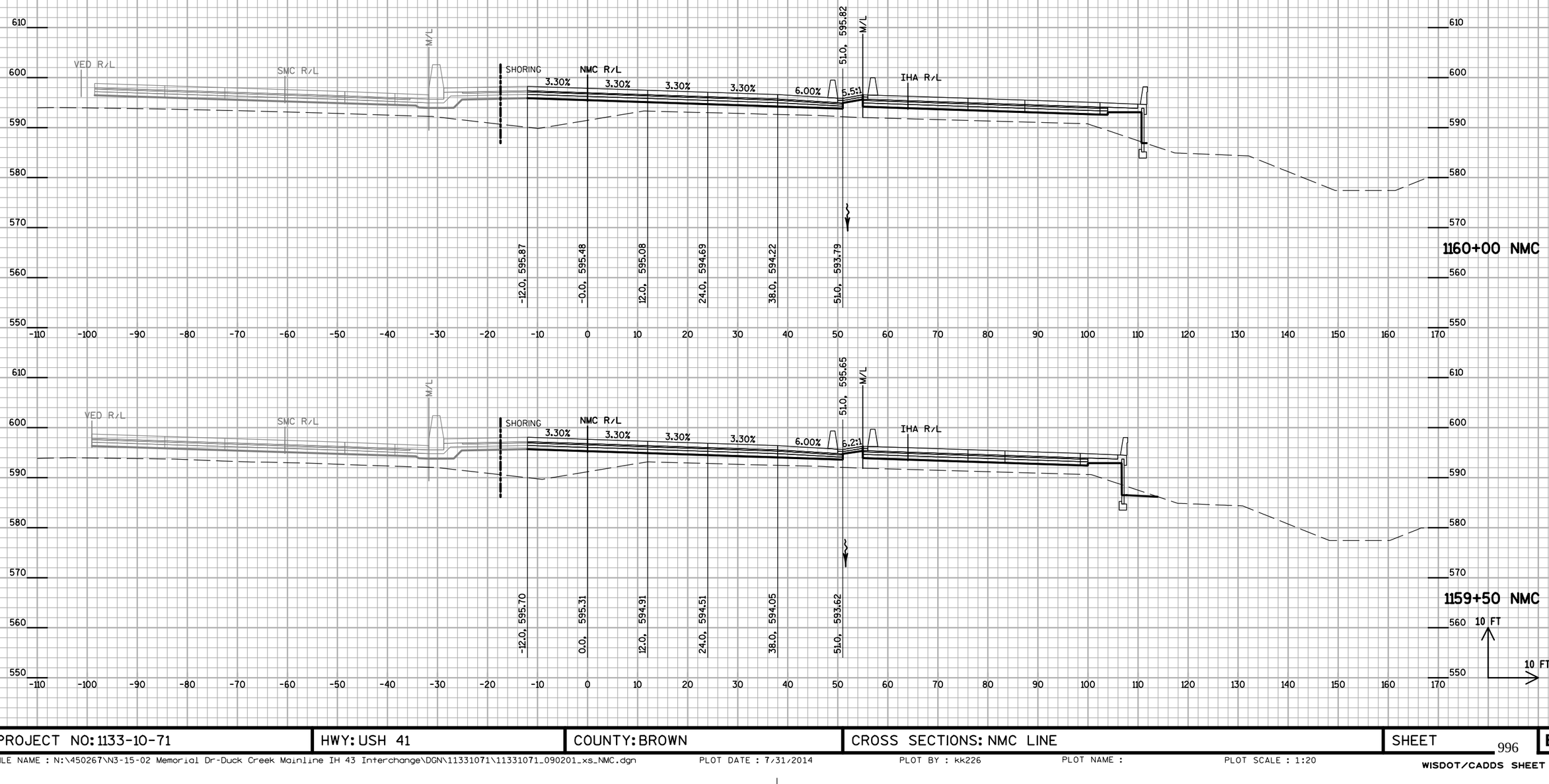
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1159+50 NMC TO 1160+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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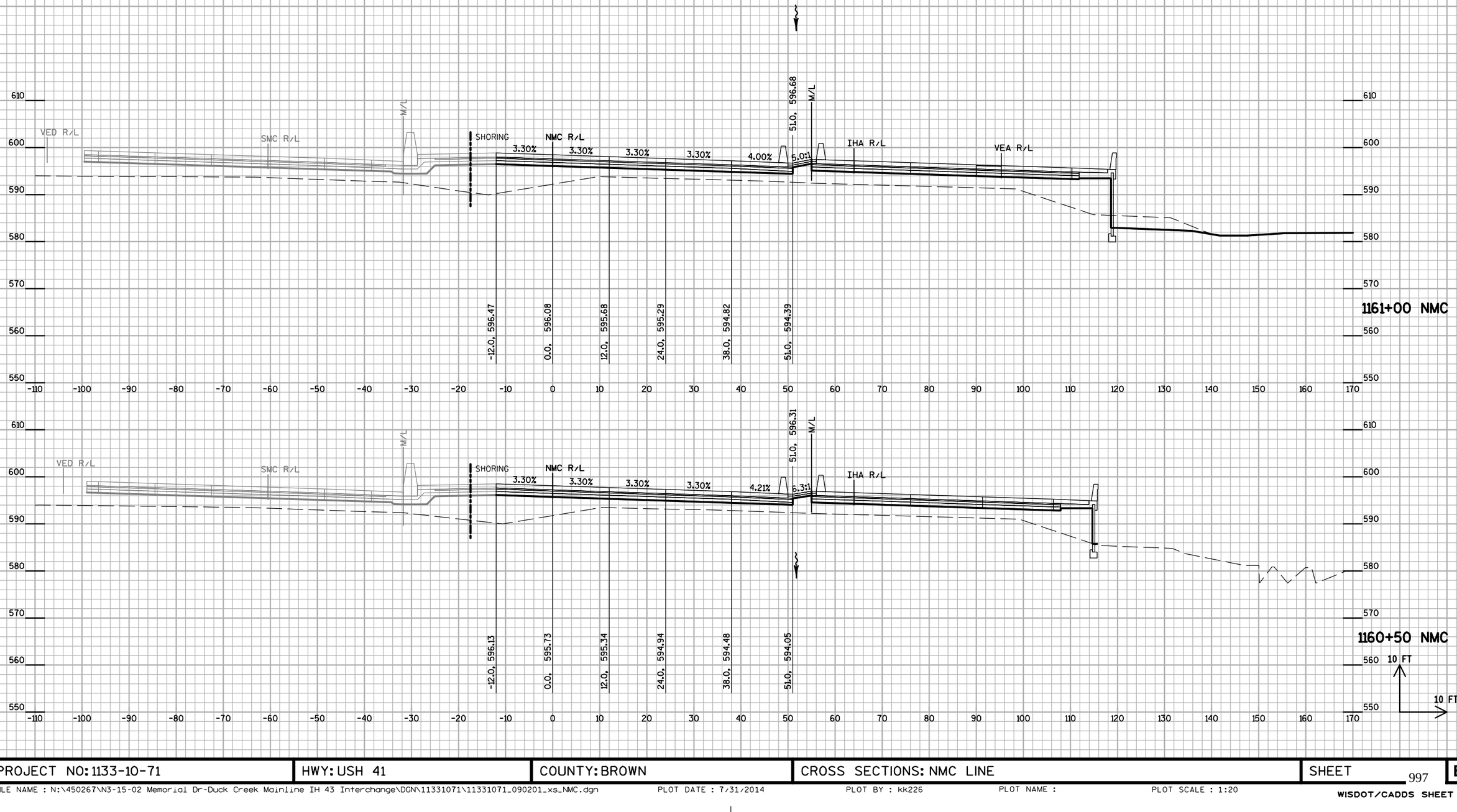
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1160+50 NMC TO 1161+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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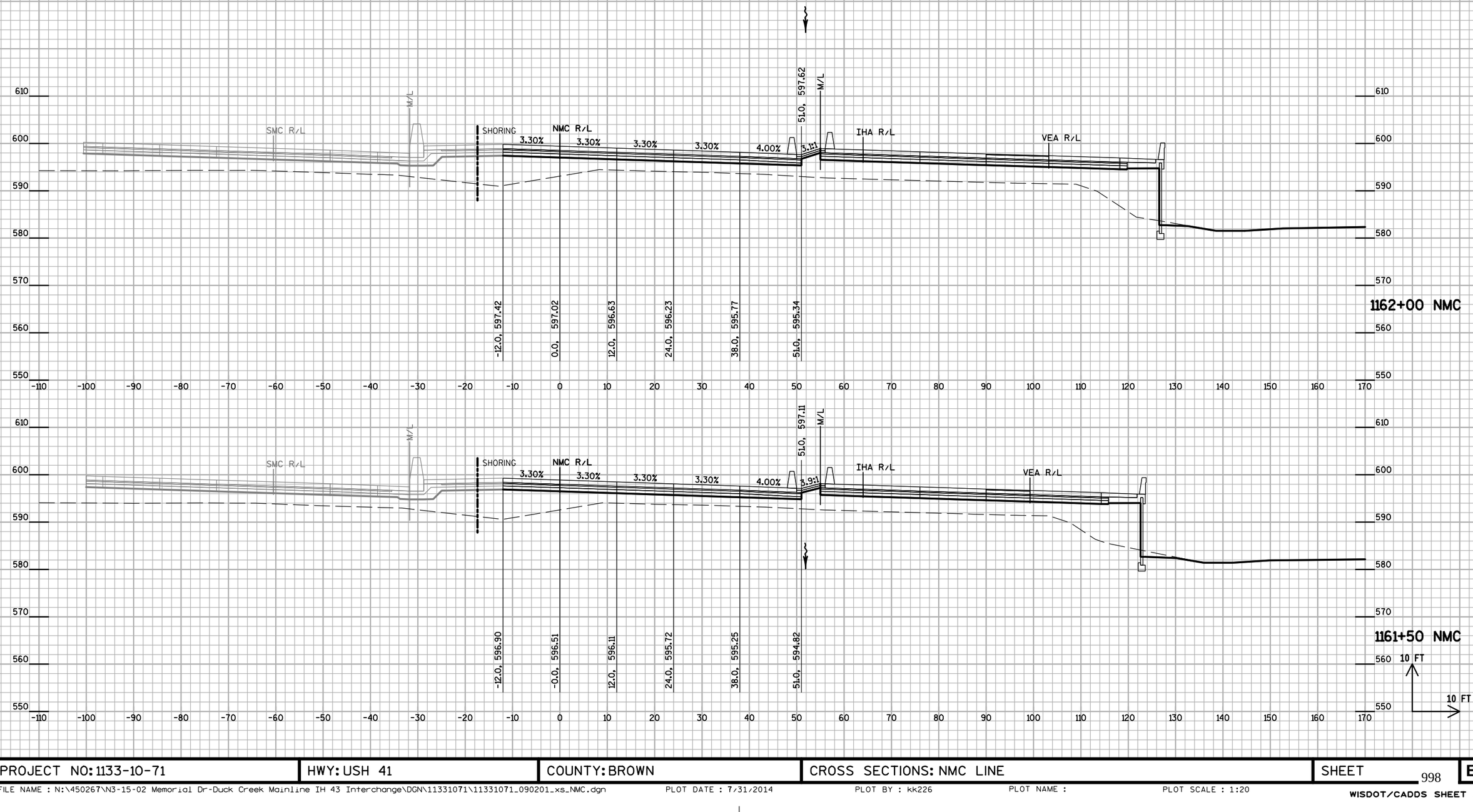
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1161+50 NMC TO 1162+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



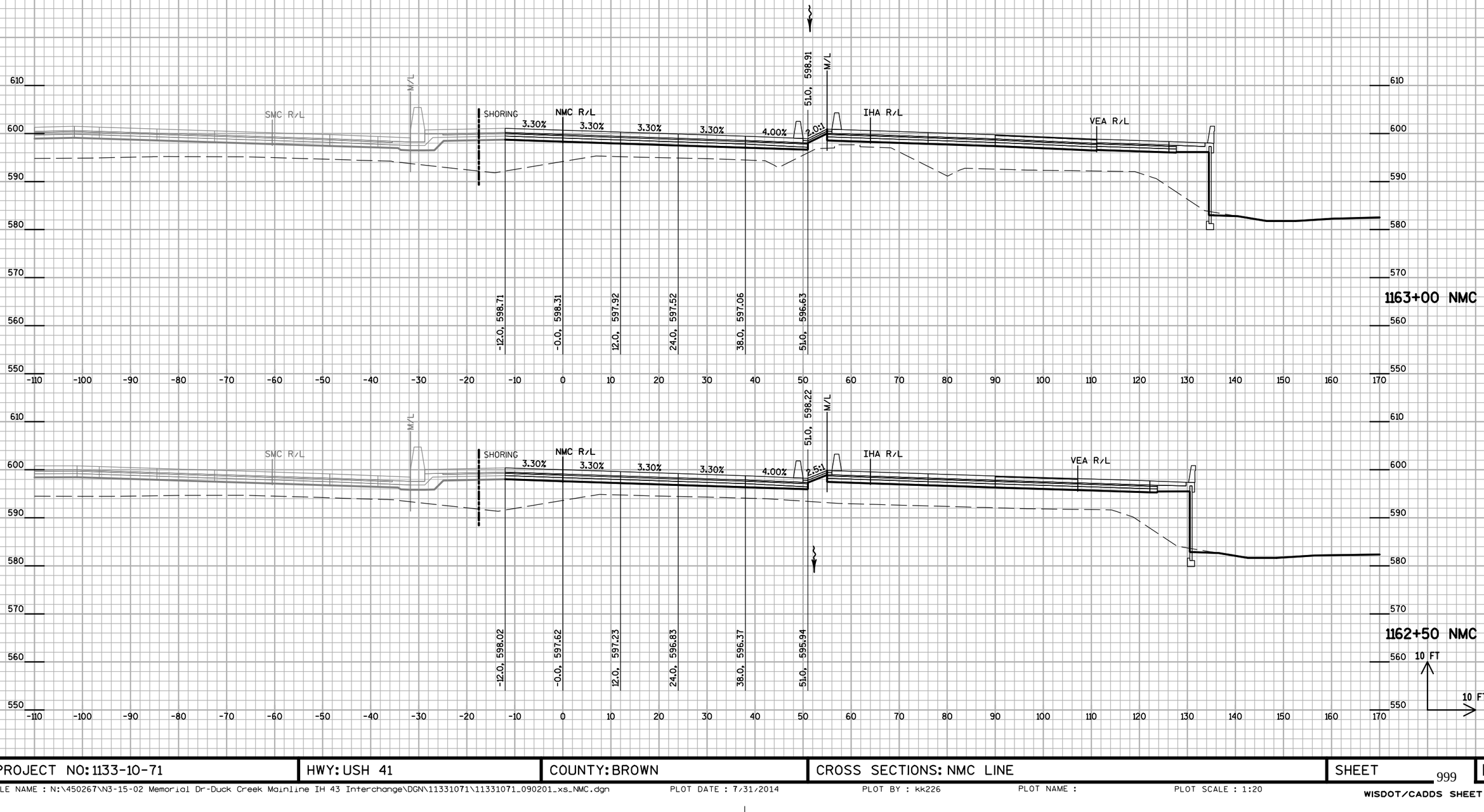
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1162+50 NMC TO 1163+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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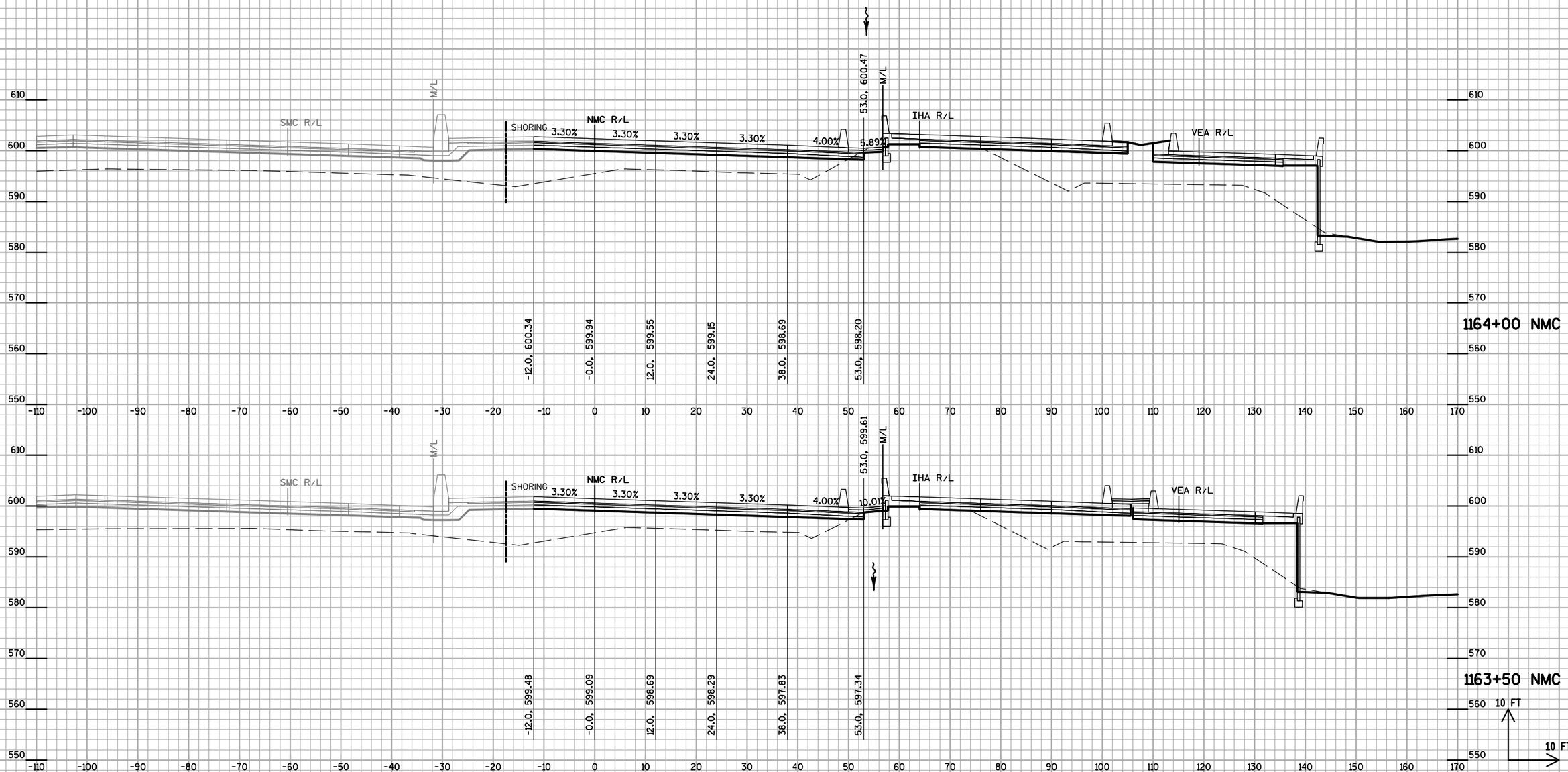
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 999	E

STA. 1163+50 NMC TO 1164+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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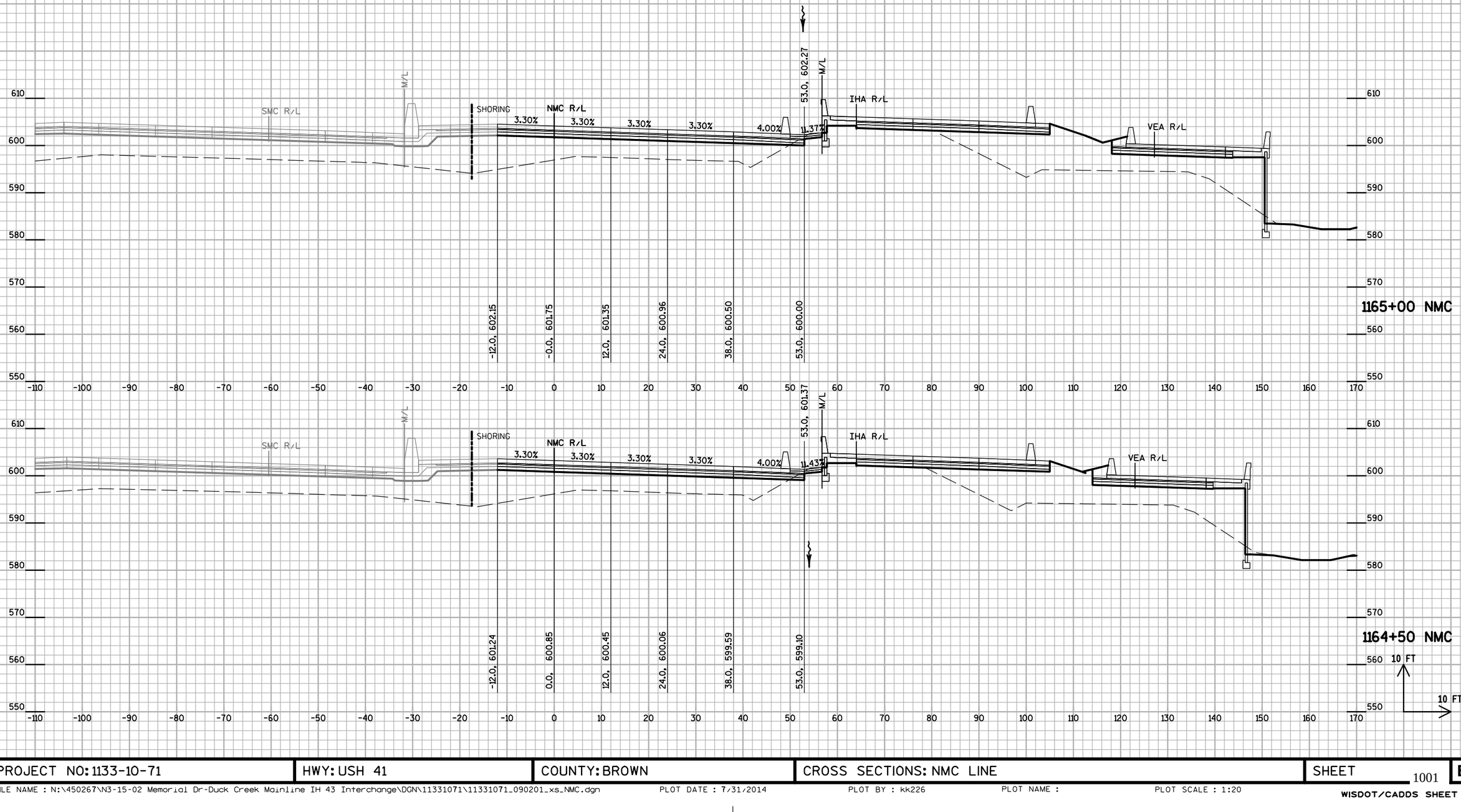
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1000	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1164+50 NMC TO 1165+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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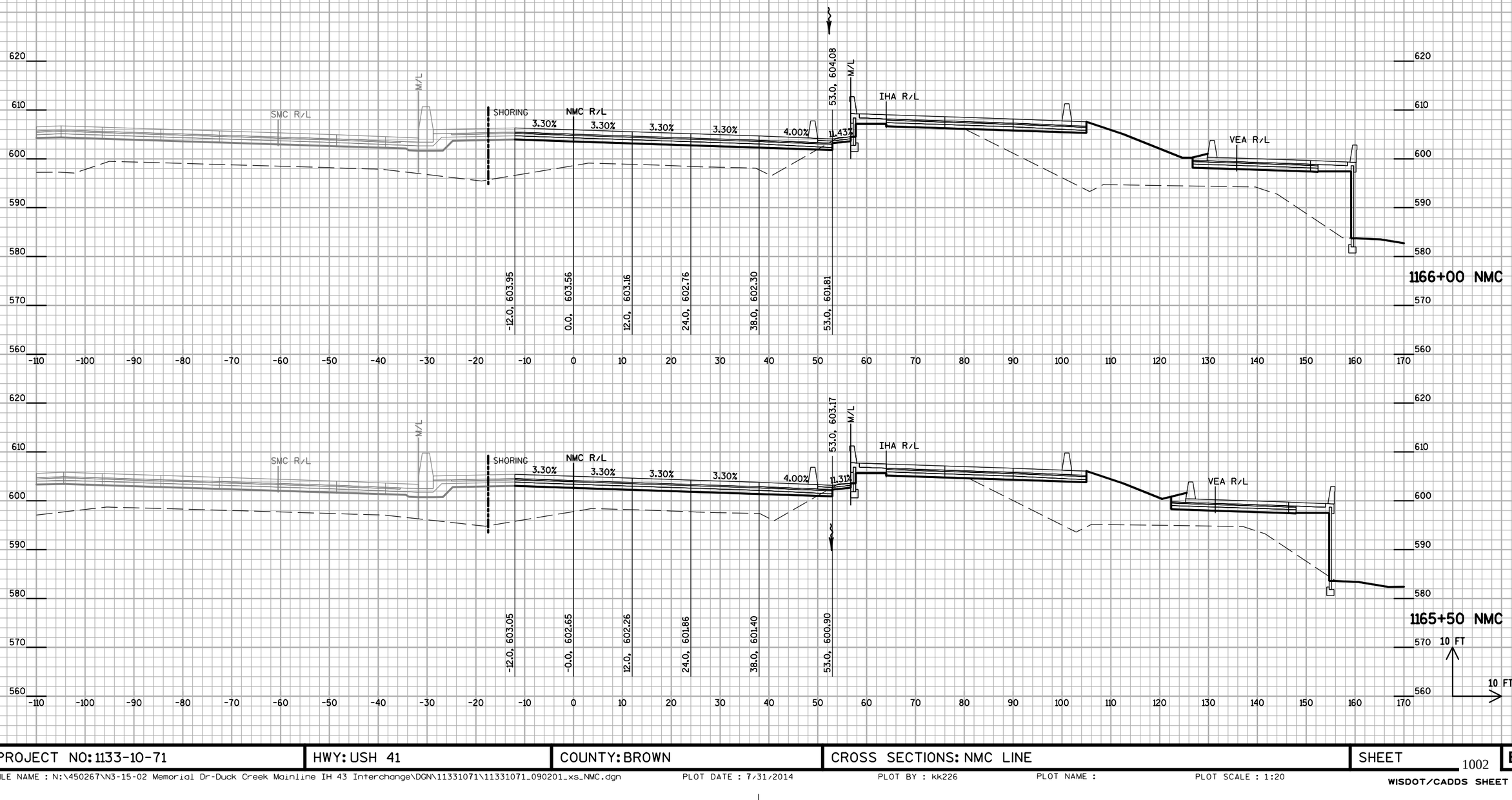
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1001	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1165+50 NMC TO 1166+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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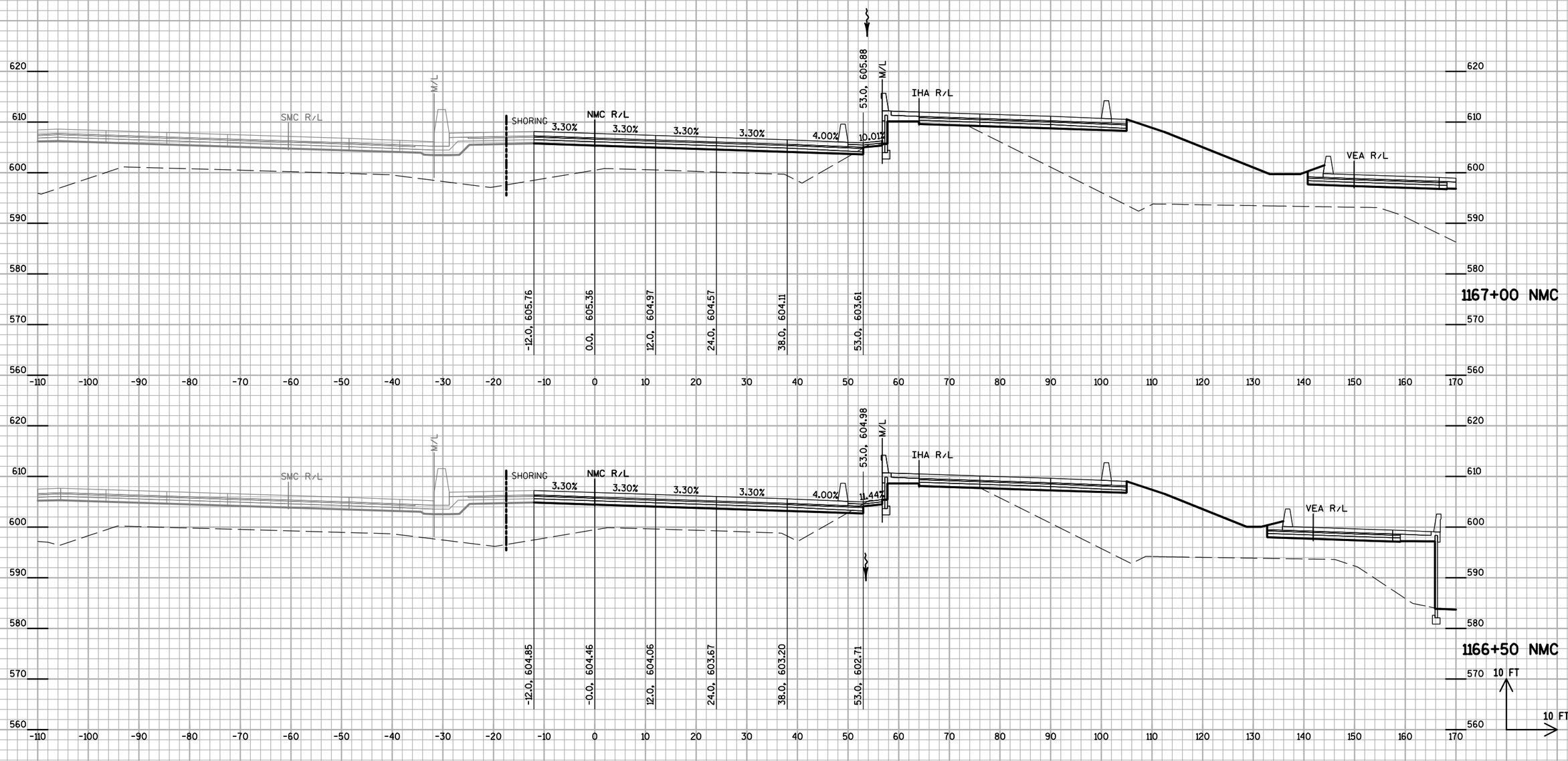
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1002	E

STA. 1166+50 NMC TO 1167+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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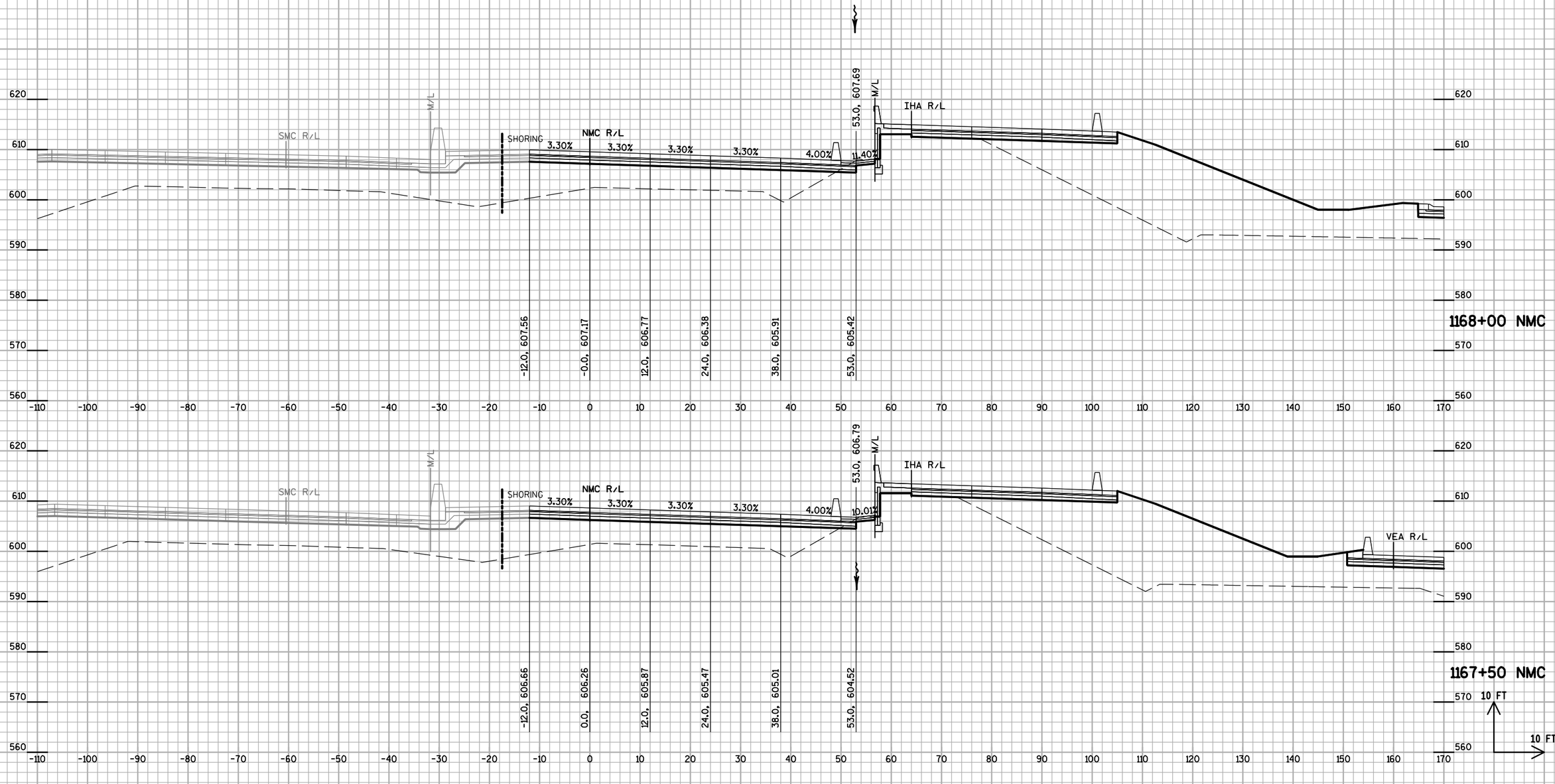
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1003	E

STA. 1167+50 NMC TO 1168+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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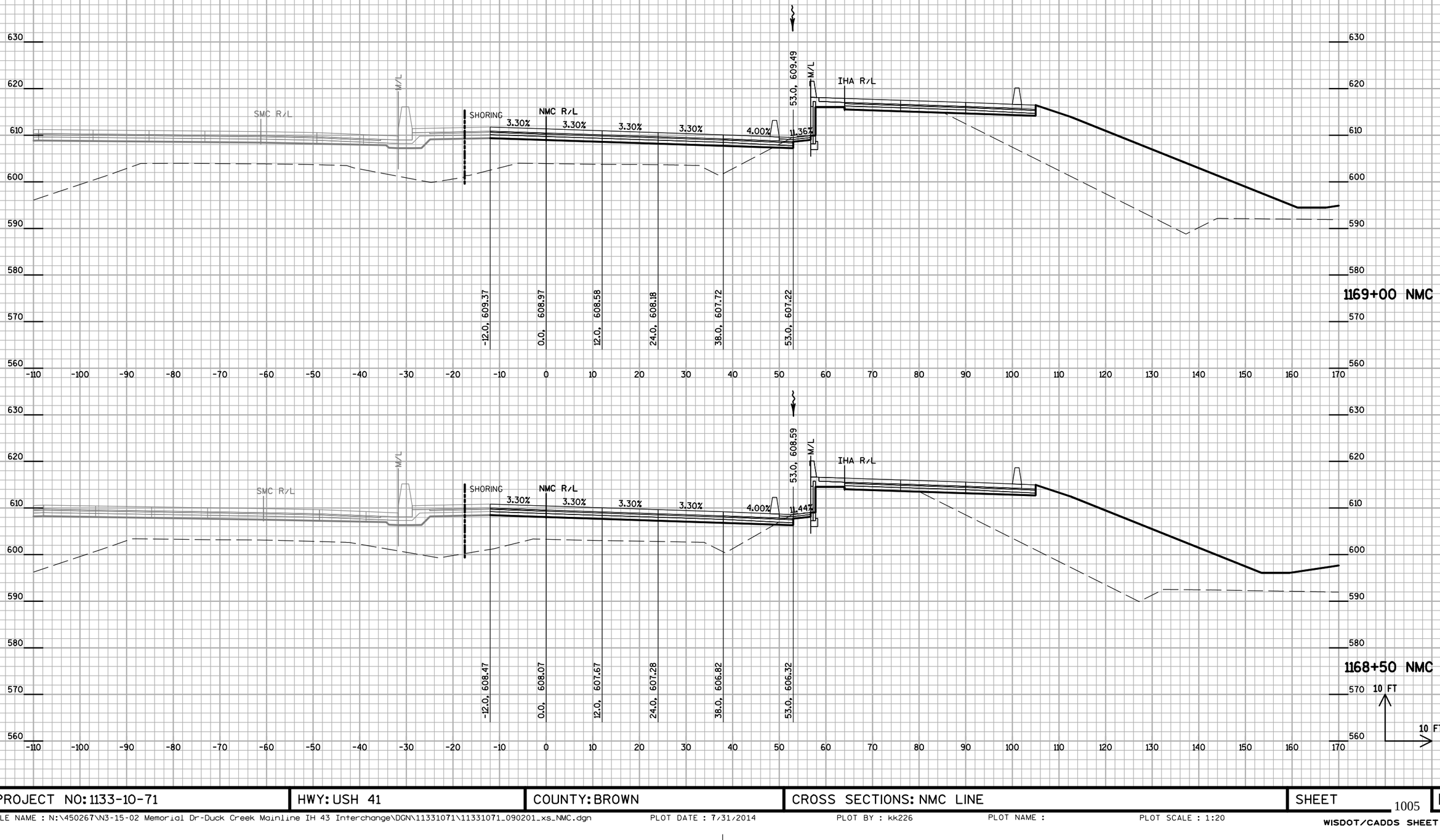
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1004	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1168+50 NMC TO 1169+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



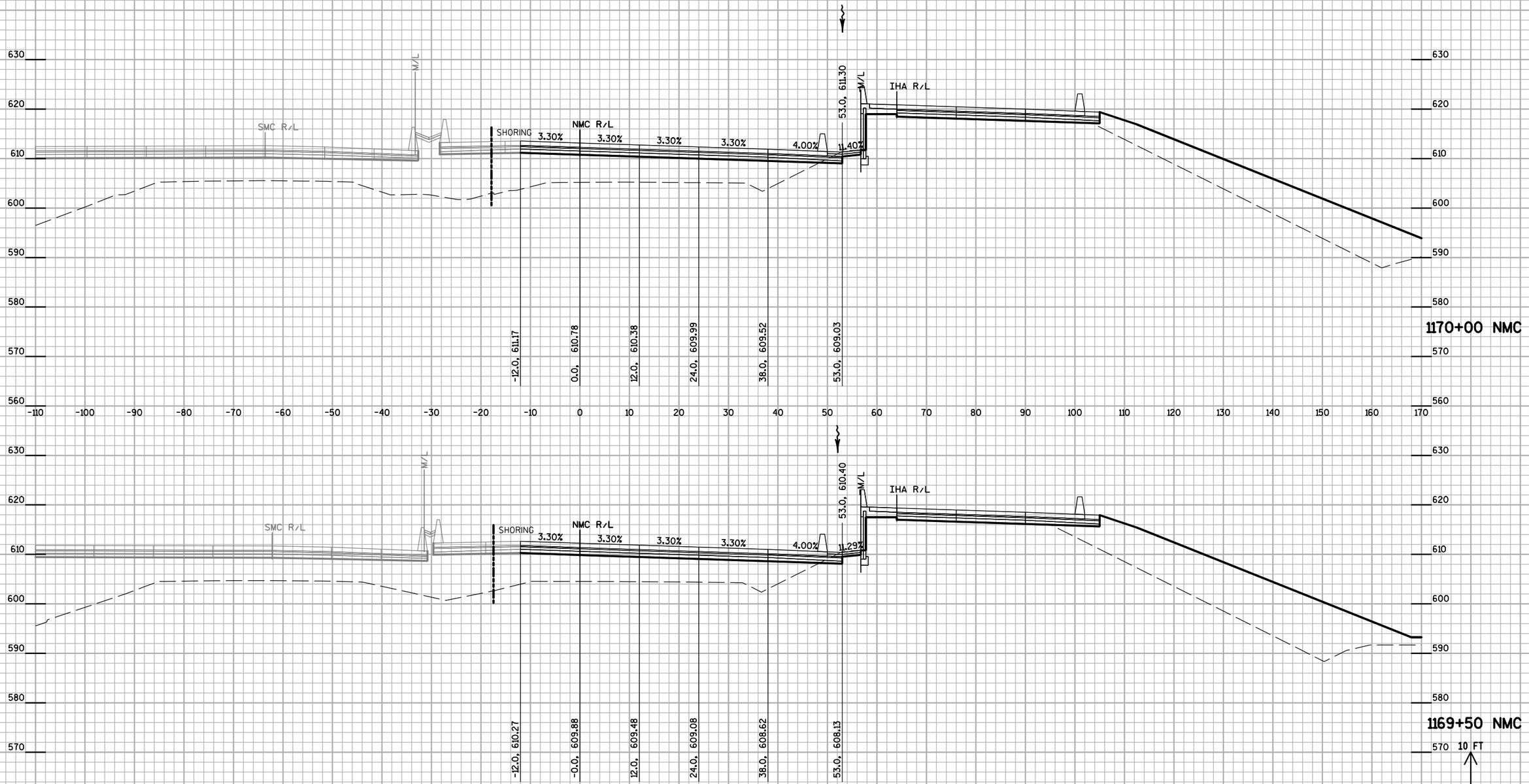
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1005	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1169+50 NMC TO 1170+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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9

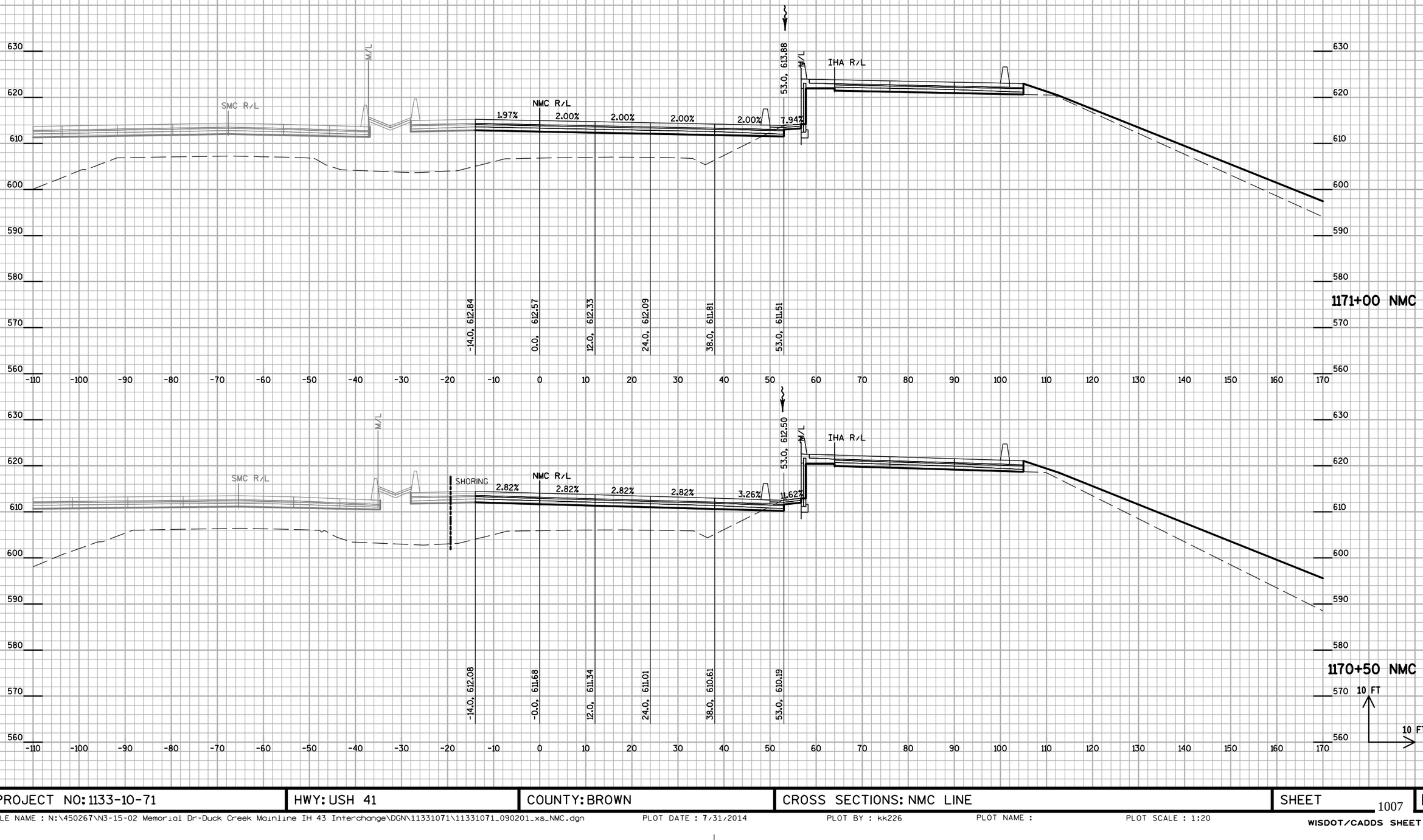
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1006	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1170+50 NMC TO 1171+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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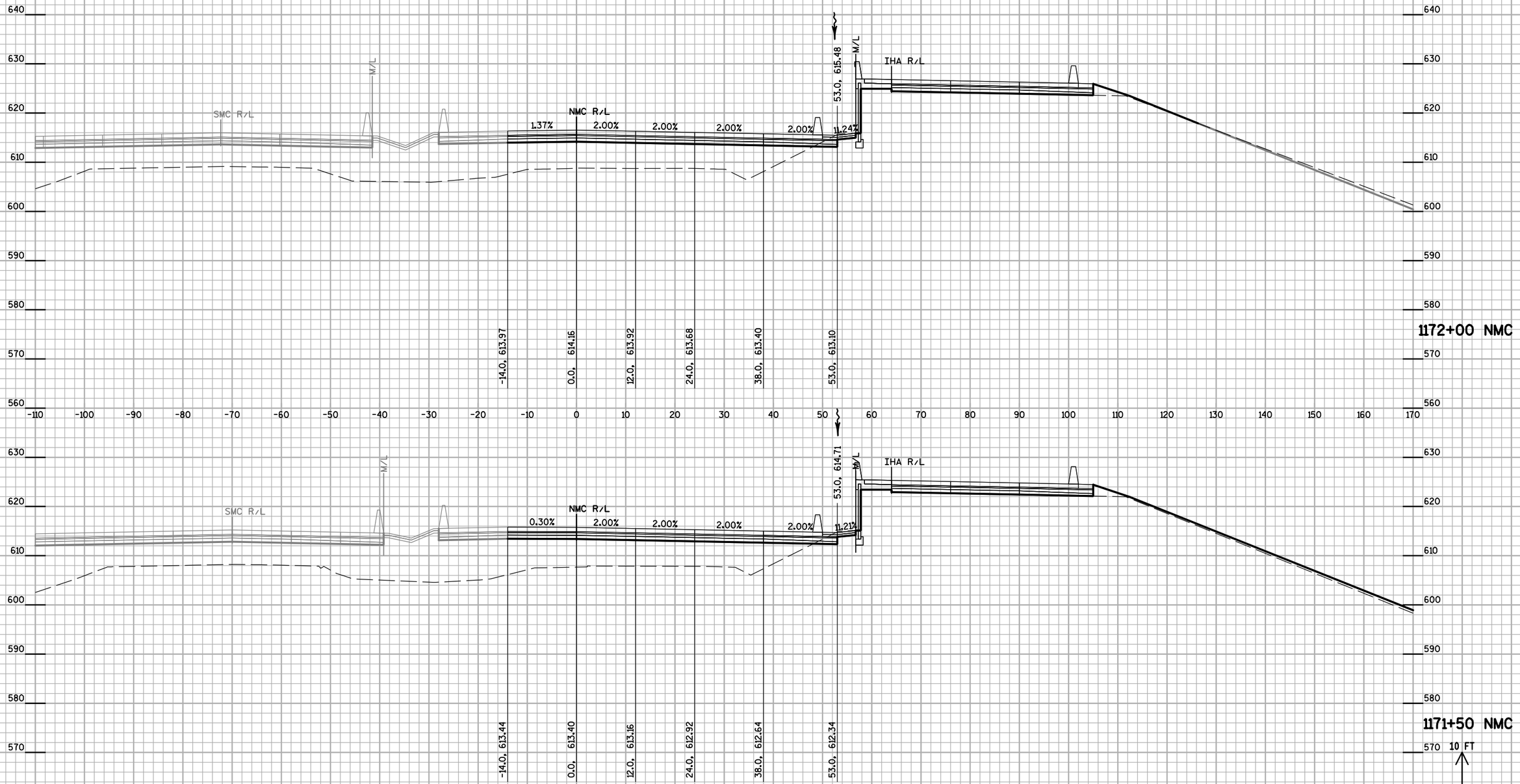
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1007	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1171+50 NMC TO 1172+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1008	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1172+50 NMC TO 1173+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STRUCTURE B-05-671

STRUCTURE B-05-669

NMC R/L

IHA R/L

M/L

640 630 620 610 600 590 580 570

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

1173+00 NMC

M/L

NMC R/L

IHA R/L

M/L

53.0, 616.18

2.00% 2.00% 2.00% 2.00% 2.00% 11.21%

-28.0, 614.31

-14.0, 614.59

0.0, 614.87

12.0, 614.63

24.0, 614.39

38.0, 614.11

53.0, 613.81

1172+50 NMC

10 FT

10 FT

9

9

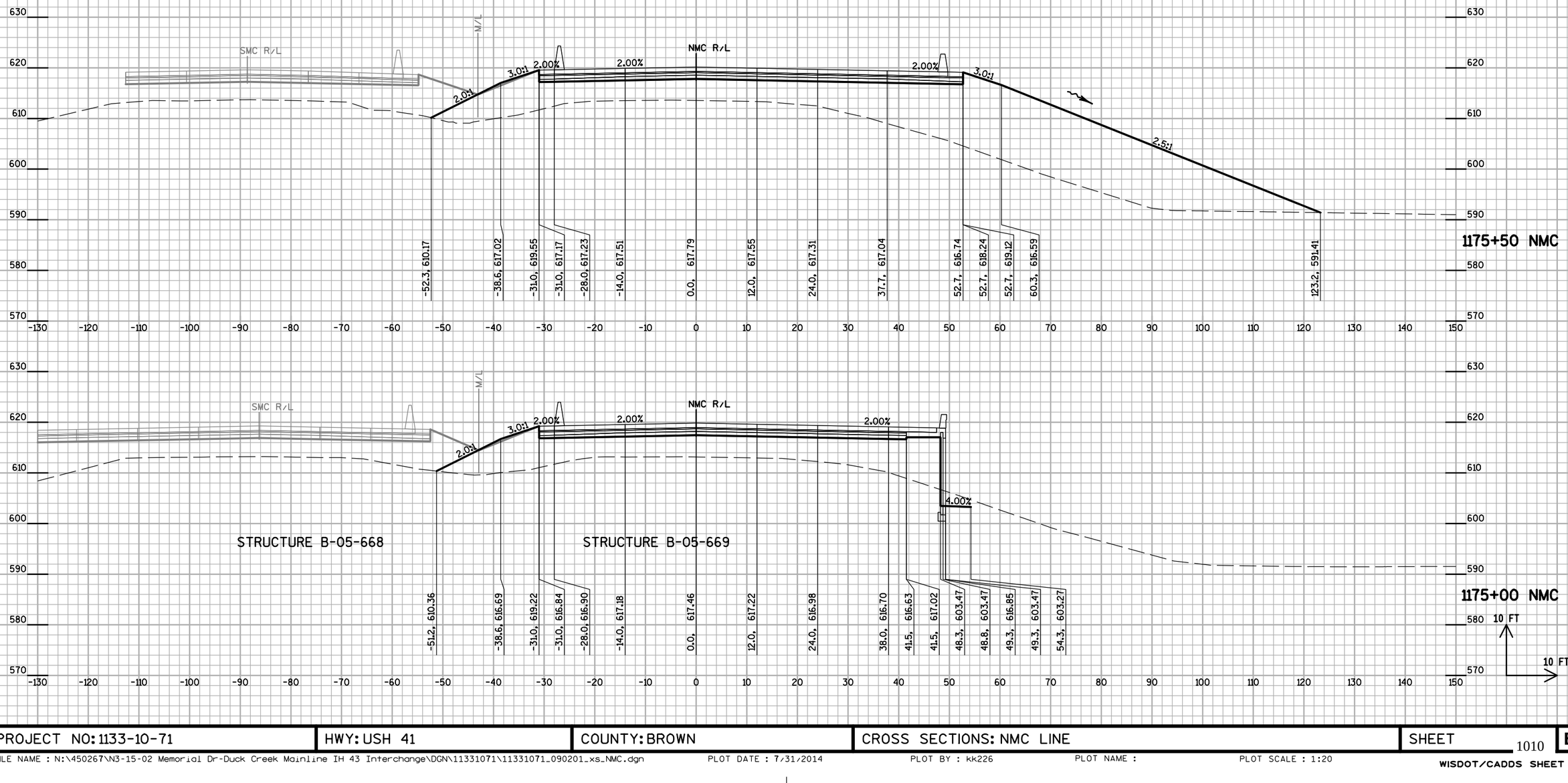
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1009	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1175+00 NMC TO 1175+50 NMC



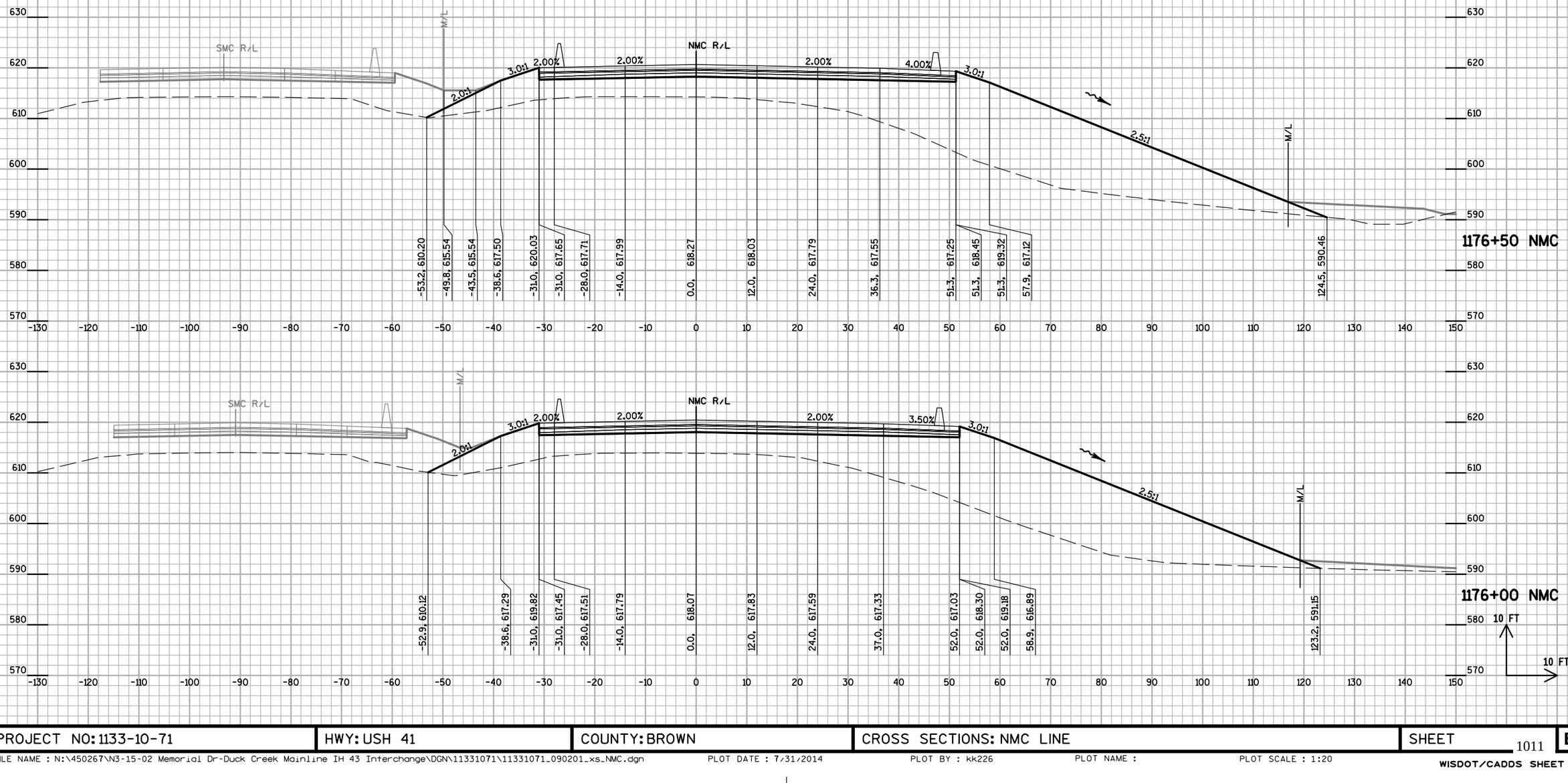
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1010	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1176+00 NMC TO 1176+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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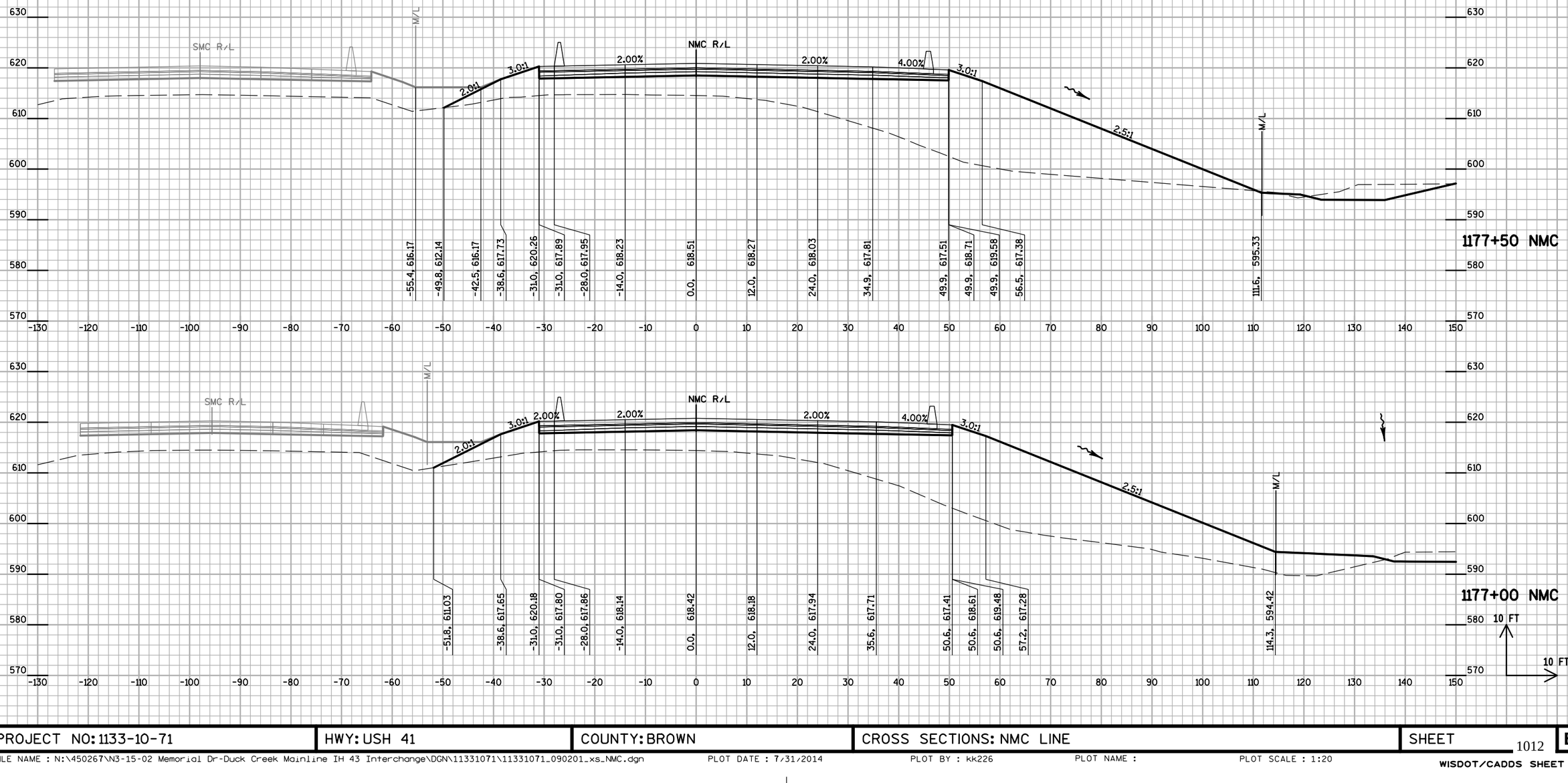
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1011	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1177+00 NMC TO 1177+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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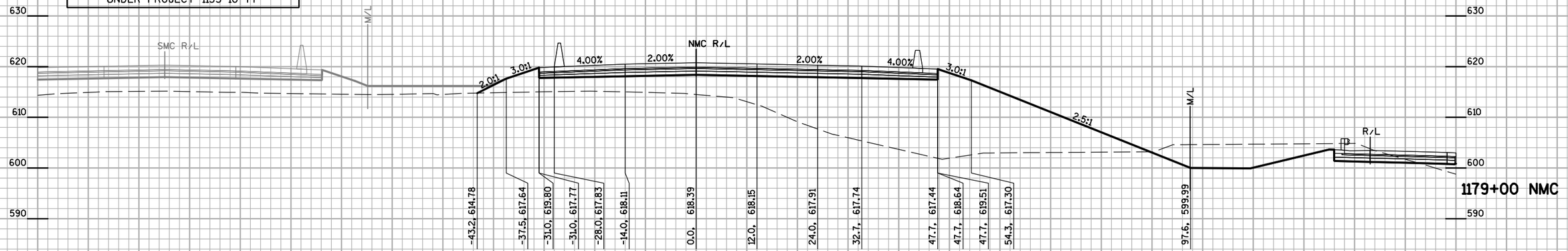
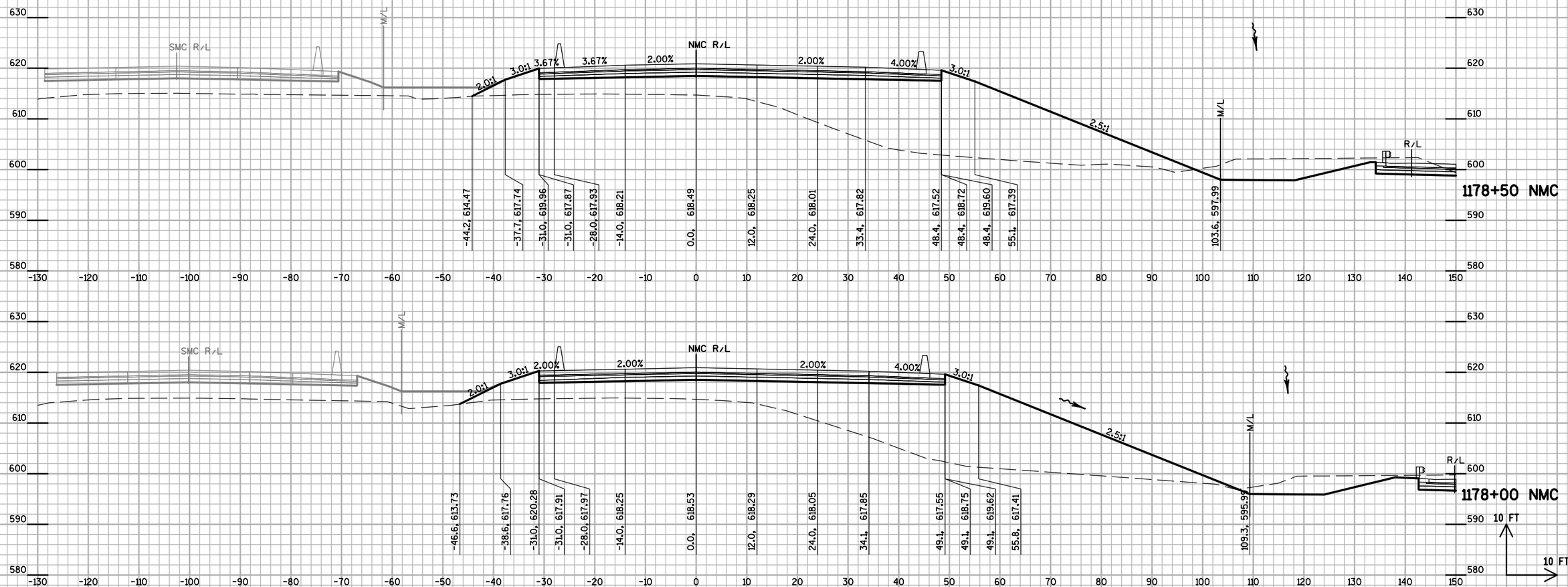
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1012	E

STA. 1178+00 NMC TO 1179+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77





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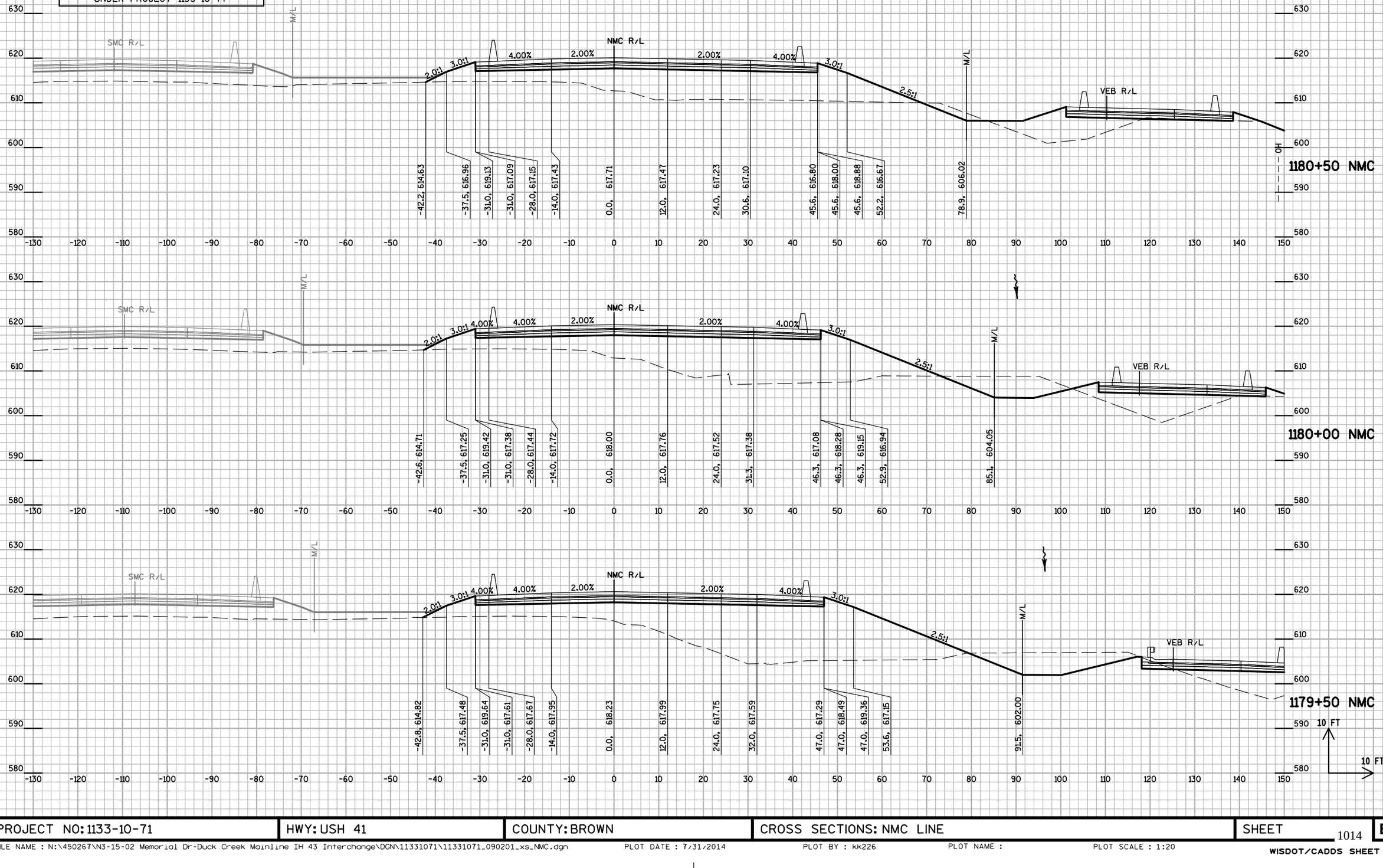
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1013	E

STA. 1179+50 NMC TO 1180+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



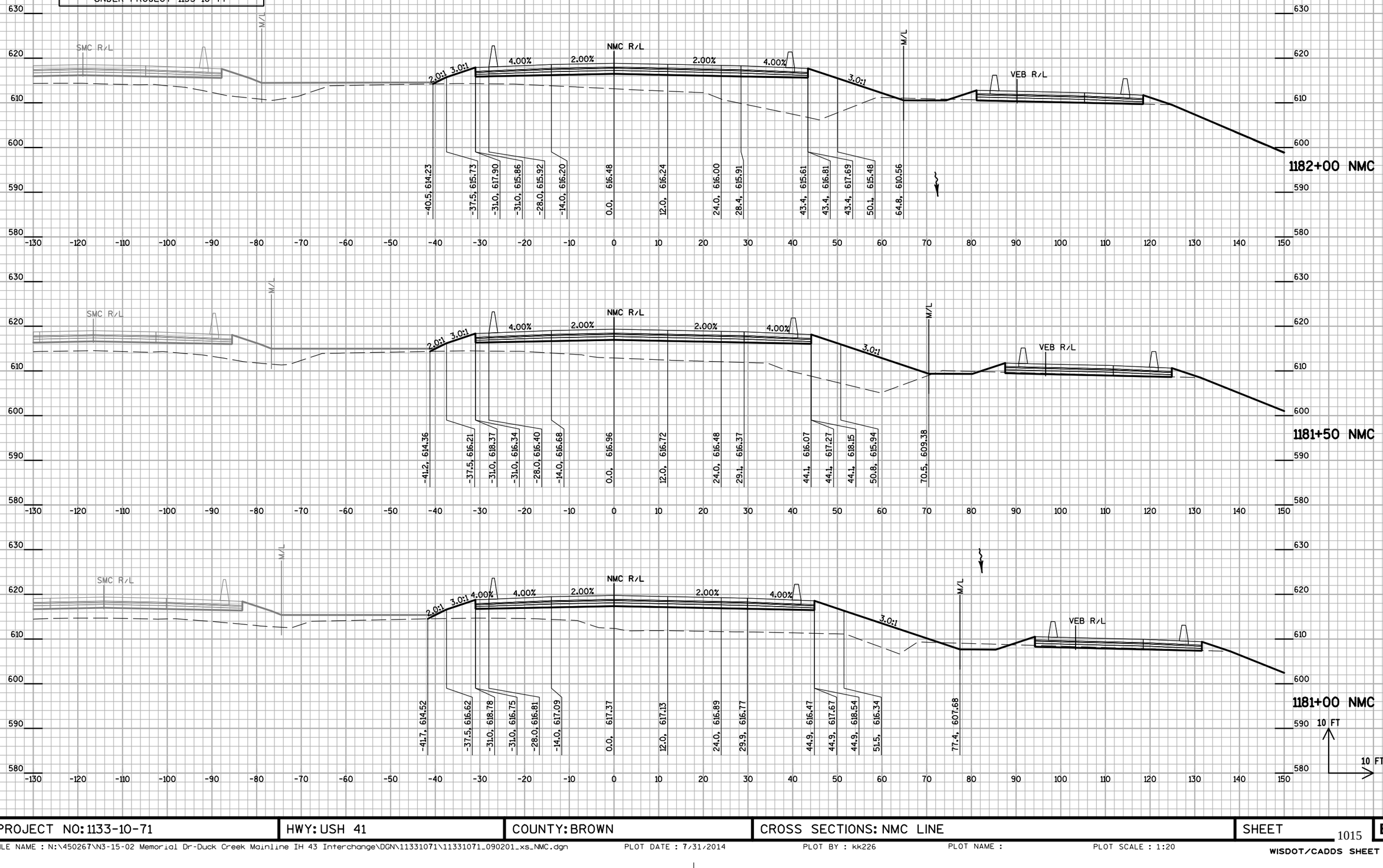
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1181+00 NMC TO 1182+00 NMC

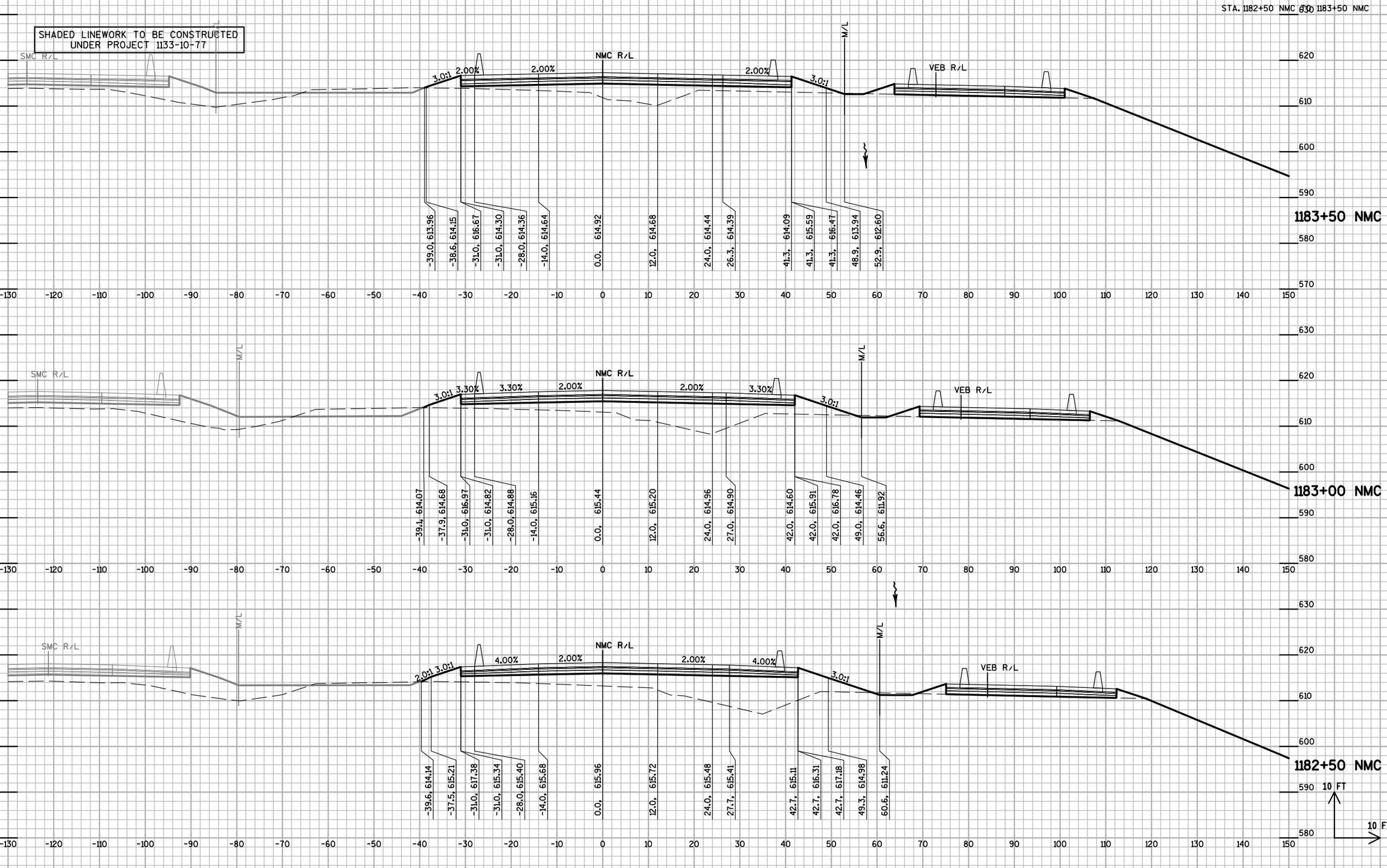
SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1015 E

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STA. 1182+50 NMC



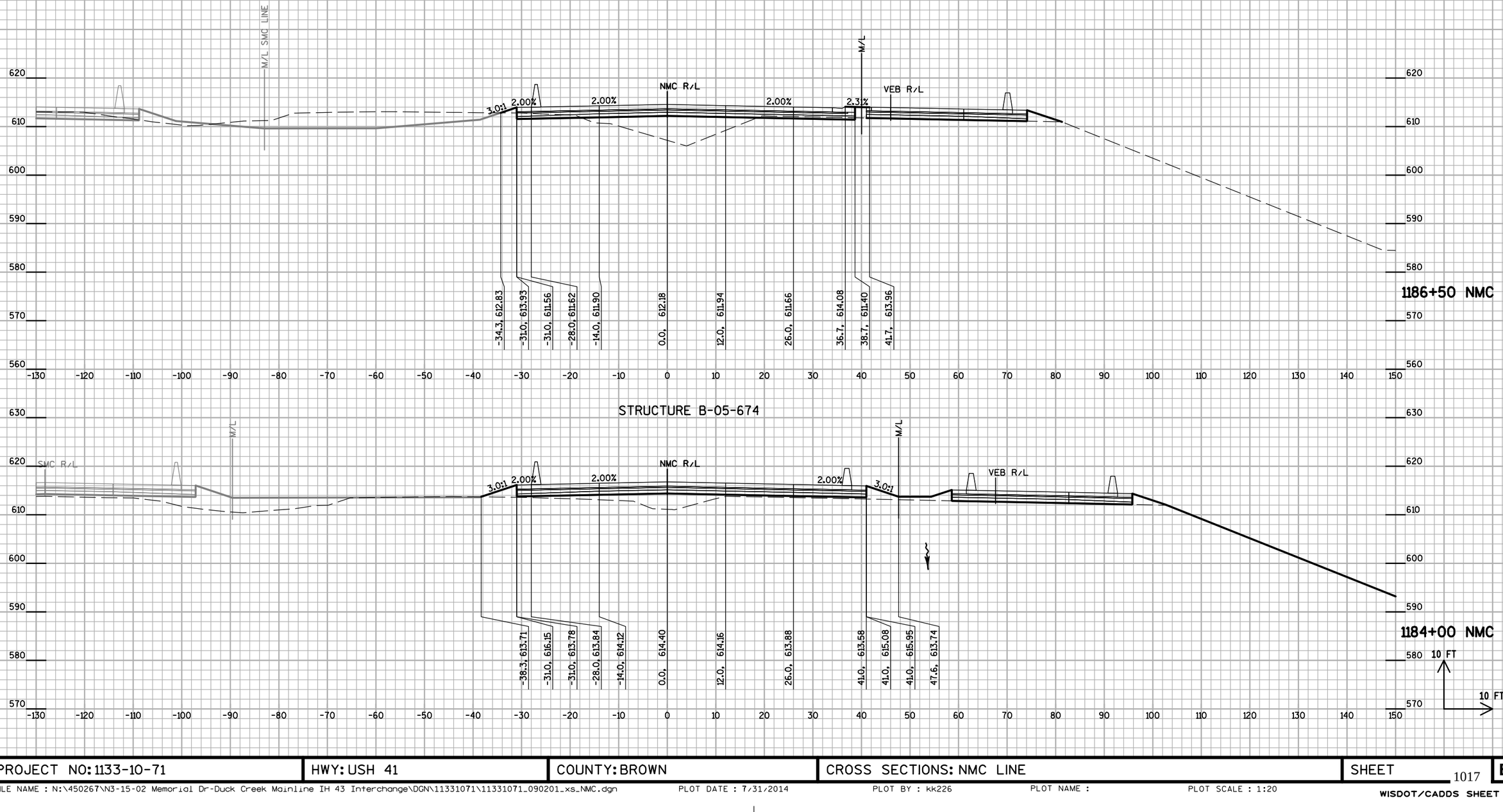
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1016	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1184+00 NMC TO 1186+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



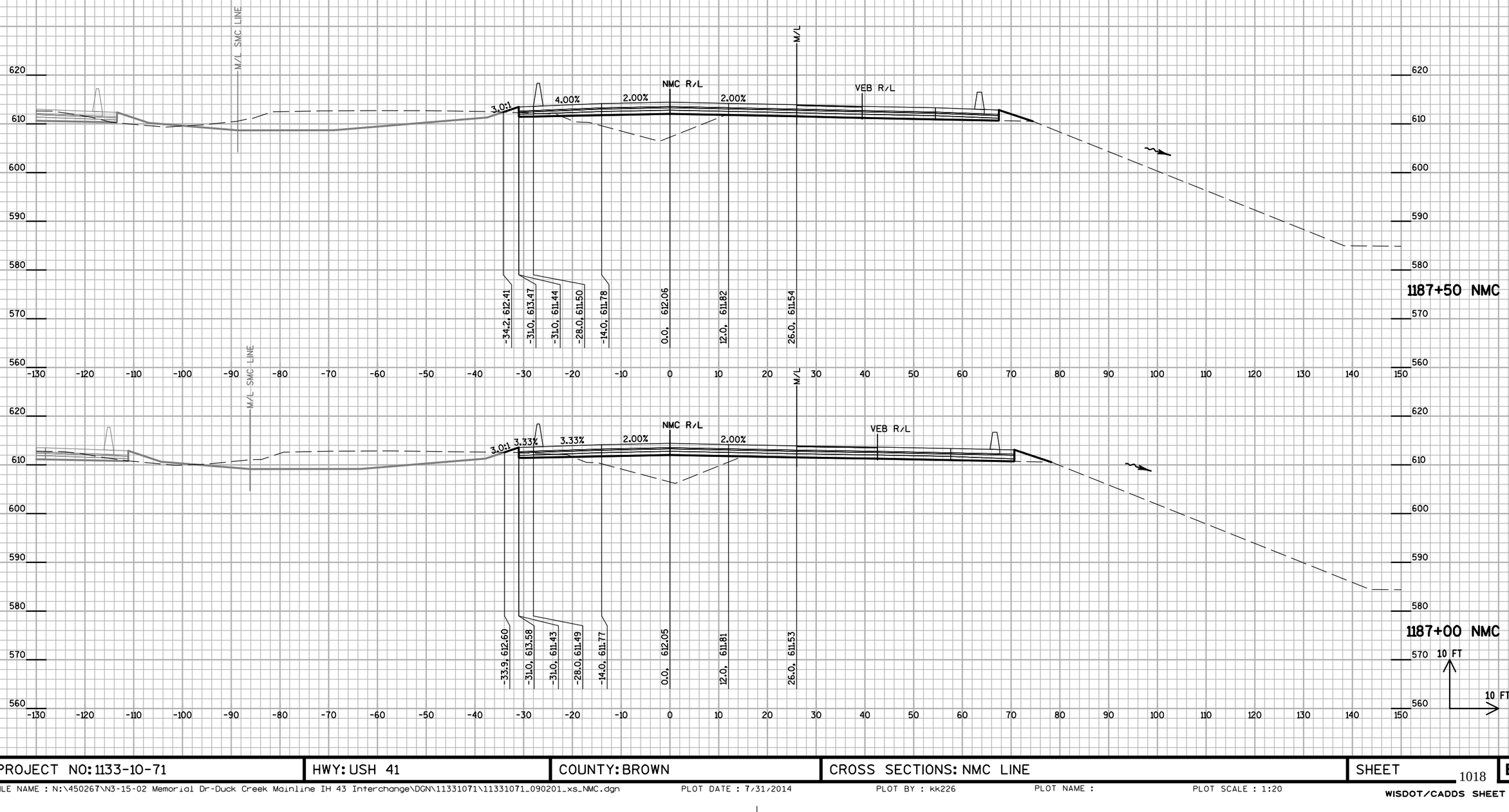
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1017	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1187+00 NMC TO 1187+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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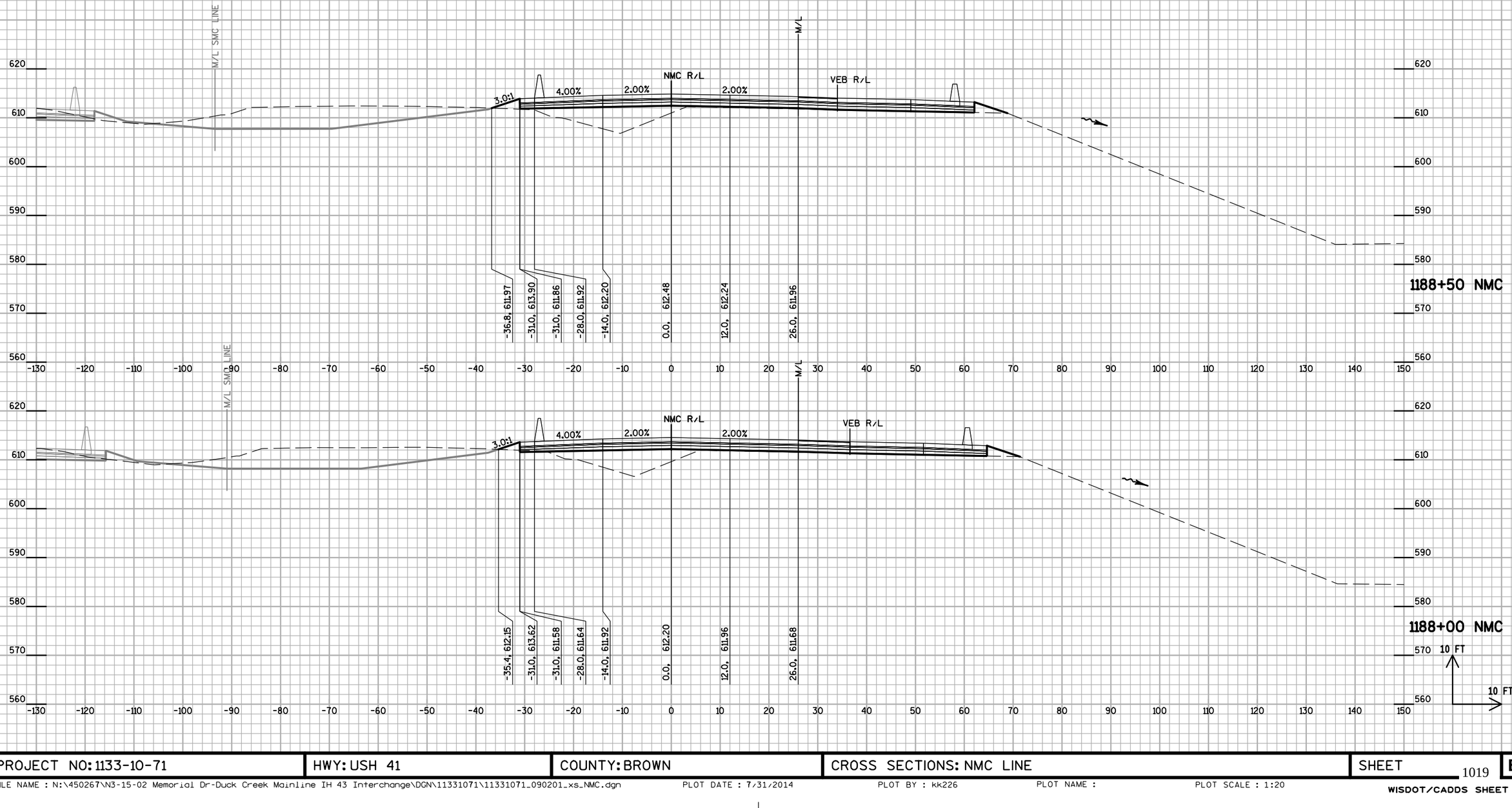
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1018	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1188+00 NMC TO 1188+50 NMC



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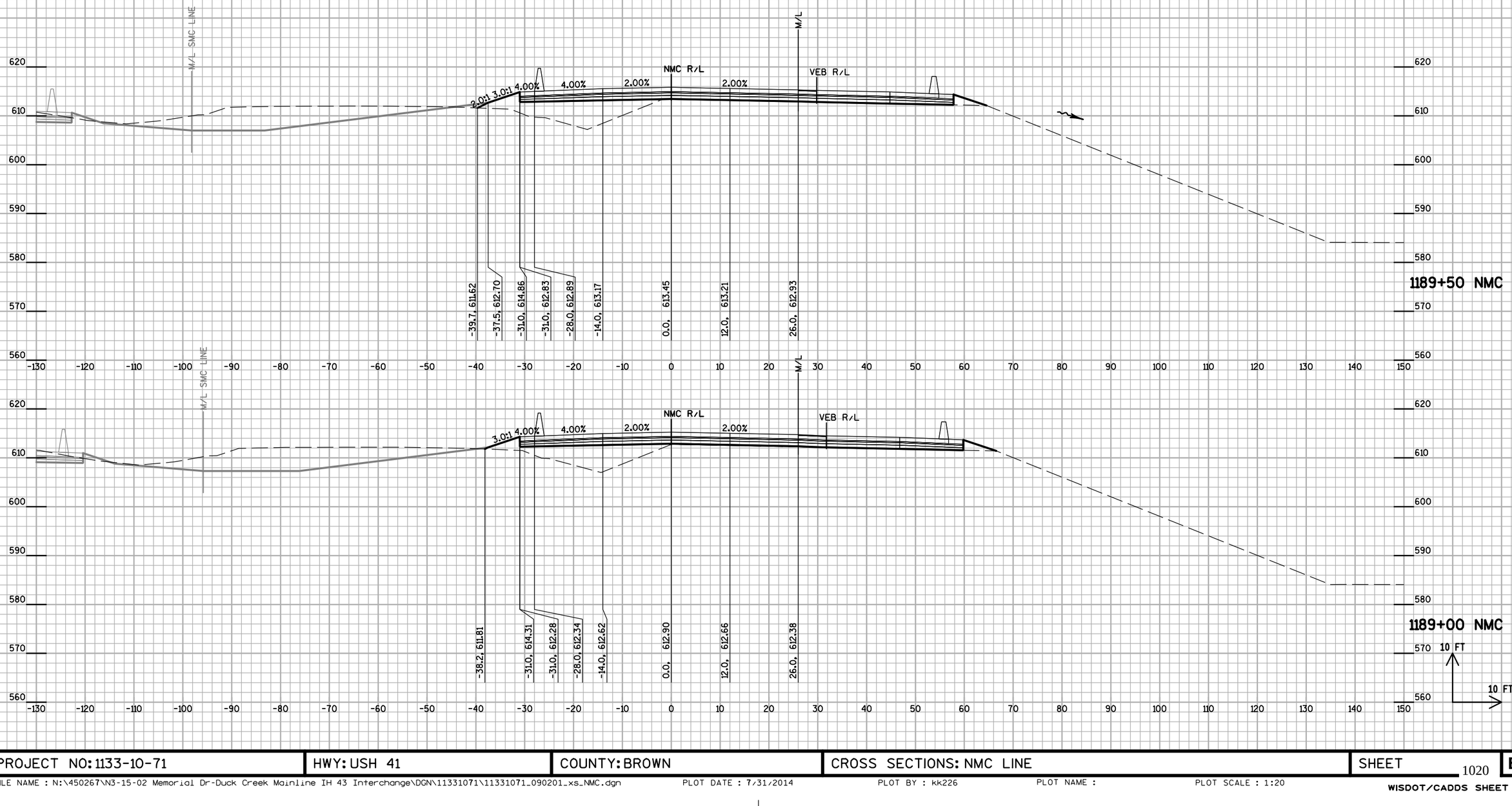
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1019	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1189+00 NMC TO 1189+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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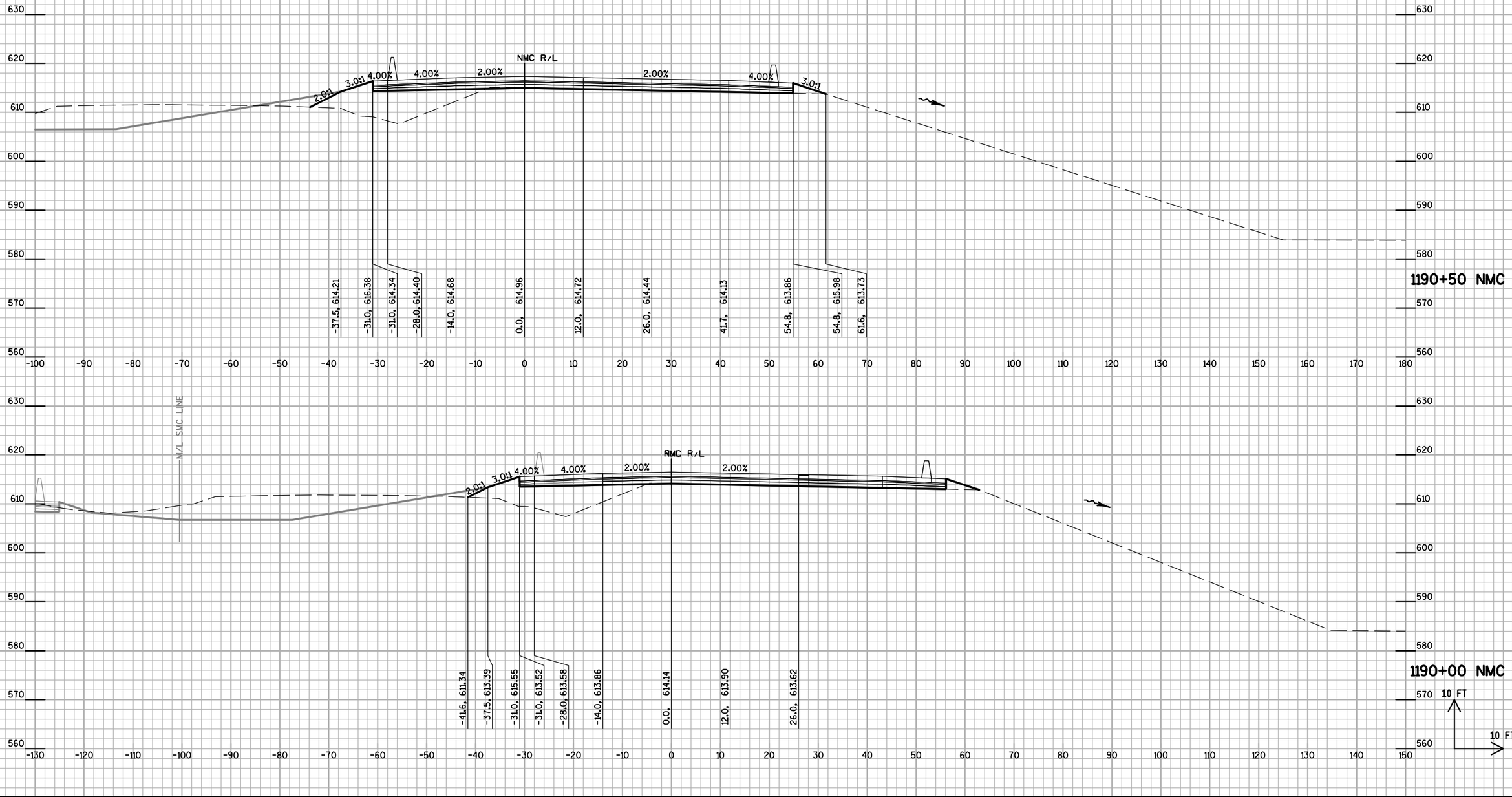
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1190+00 NMC TO 1190+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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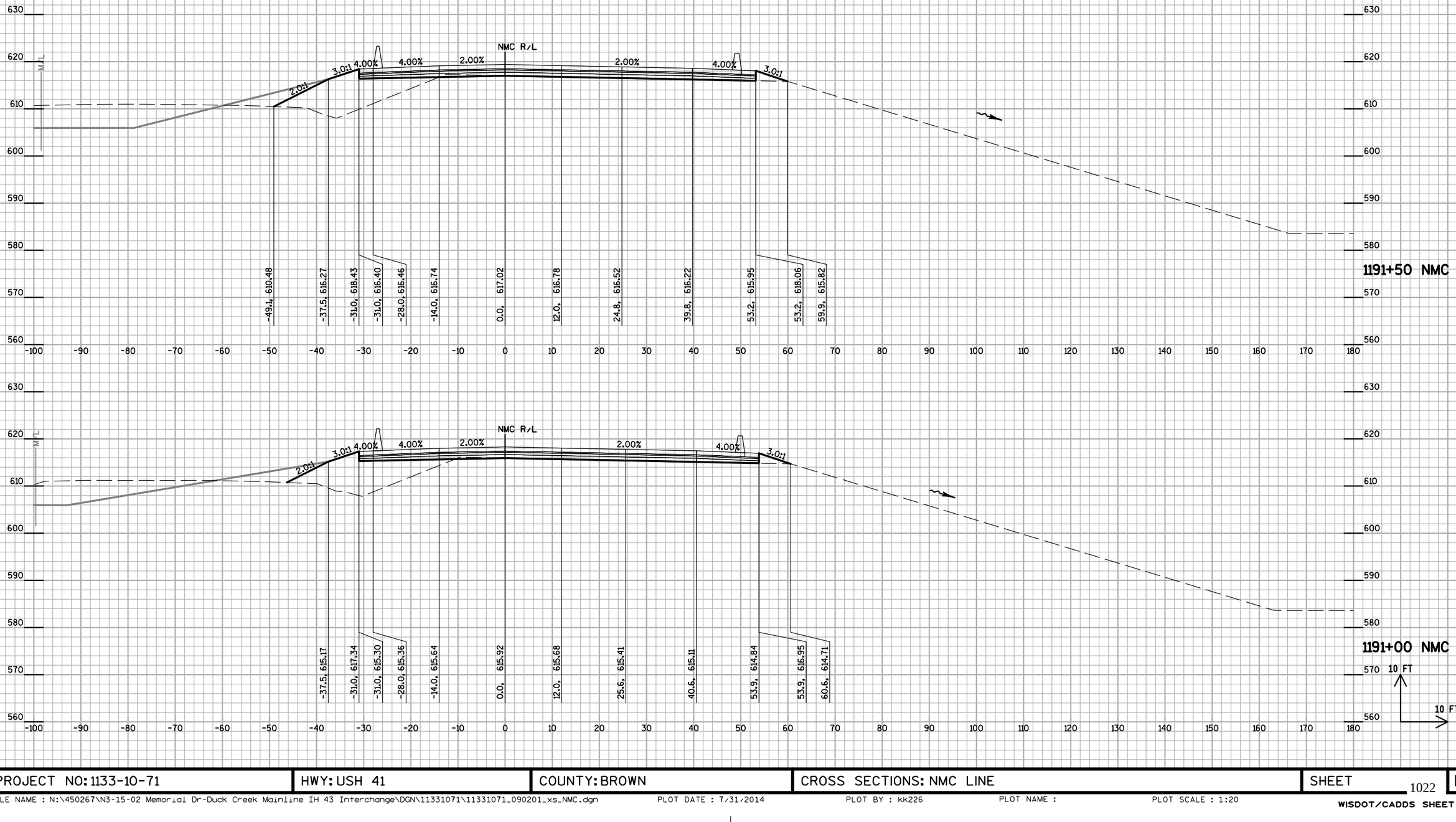
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1021	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1191+00 NMC TO 1191+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

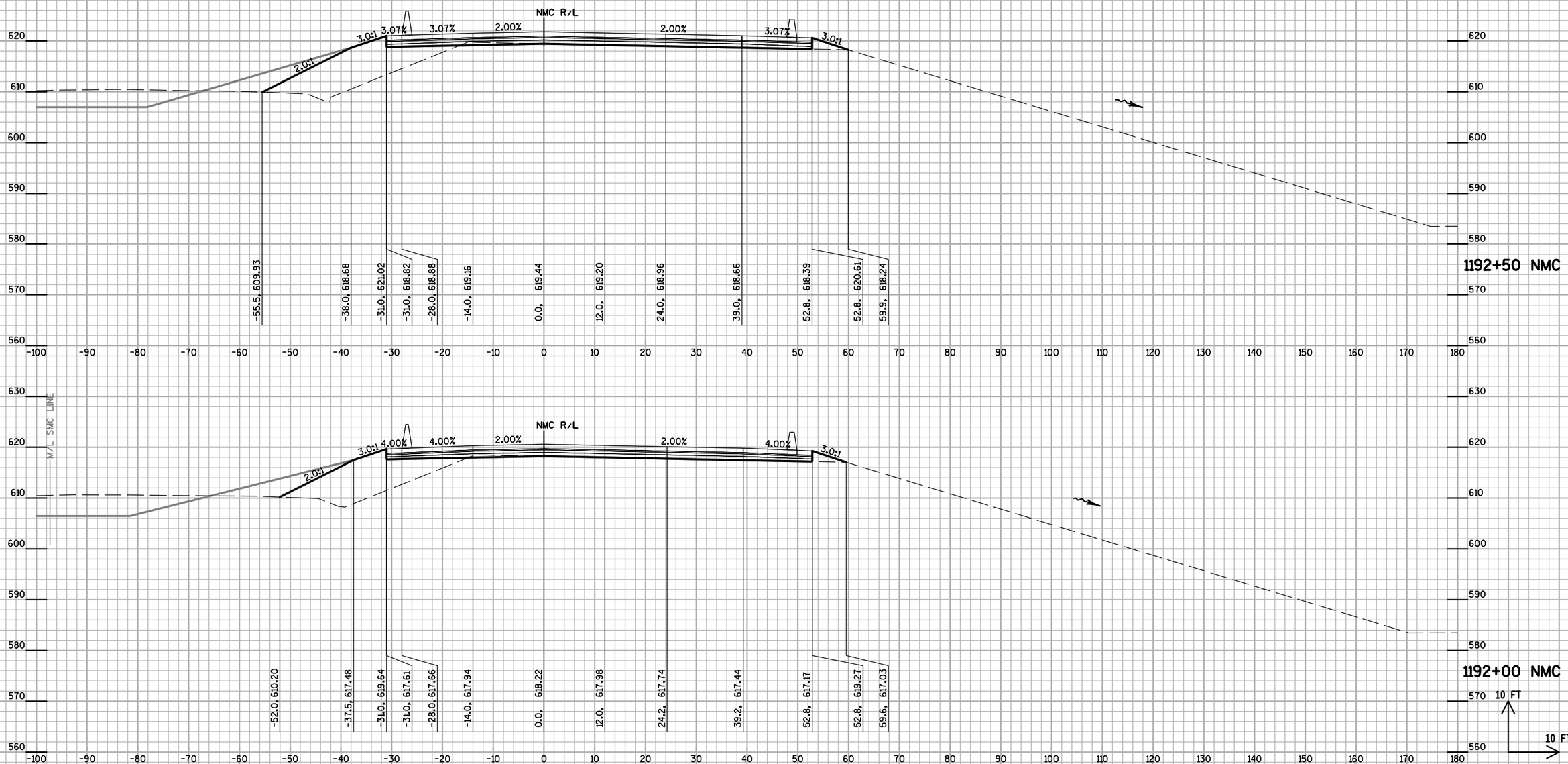
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1192+00 NMC TO 1192+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STRUCTURE B-05-677



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

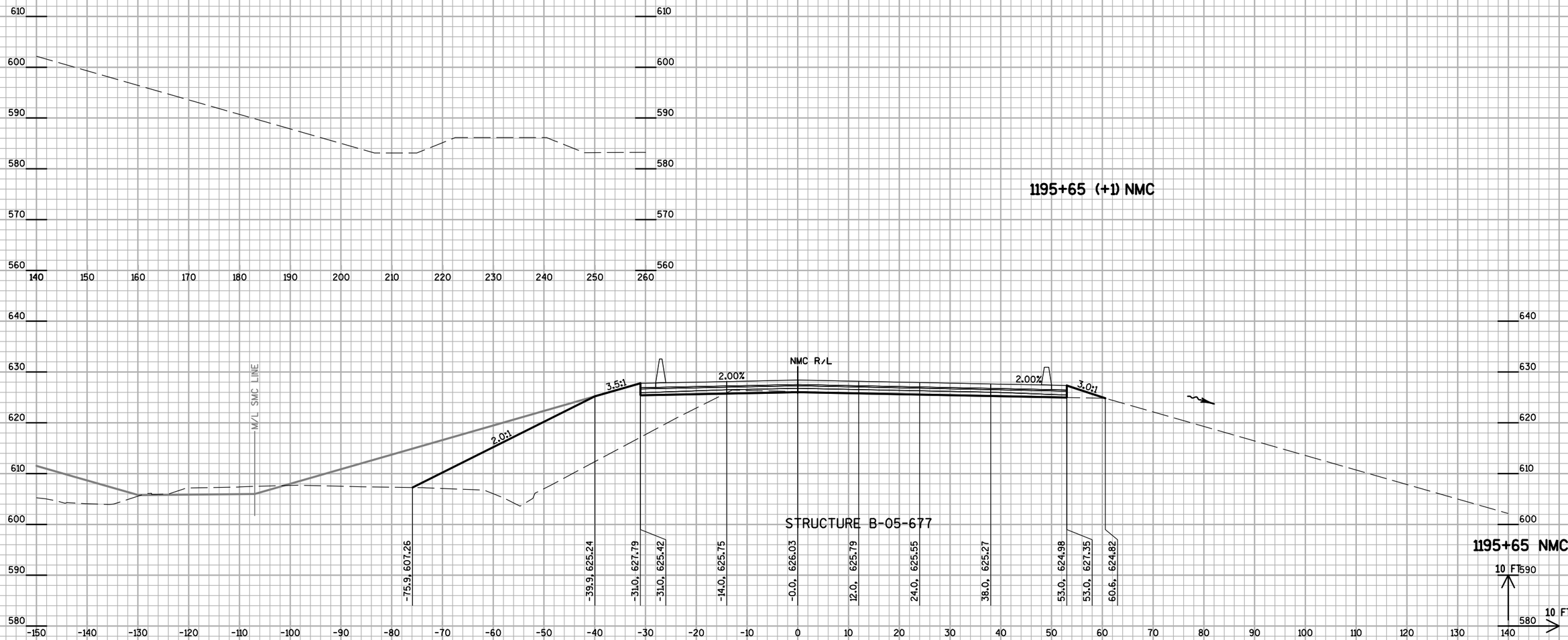
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1195+65 NMC TO 1195+65 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

1195+65 (+1) NMC



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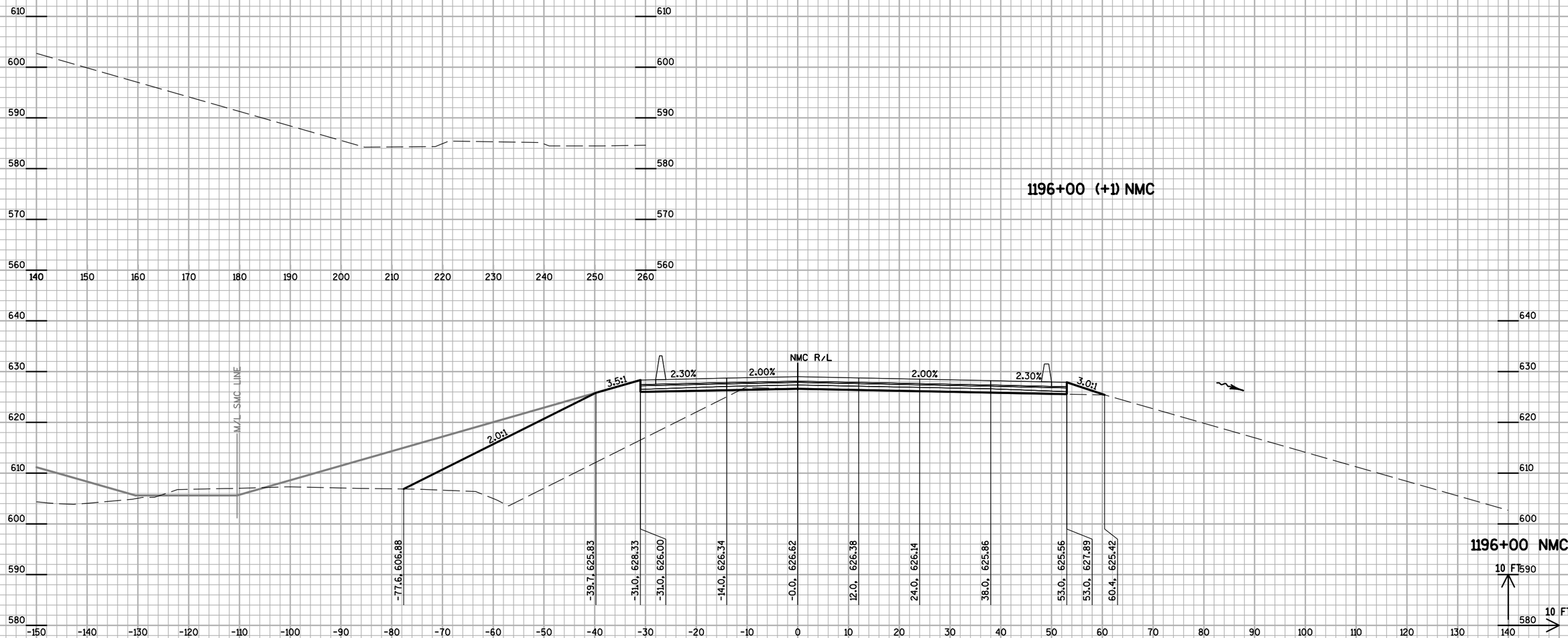
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1024	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1196+00 NMC TO 1196+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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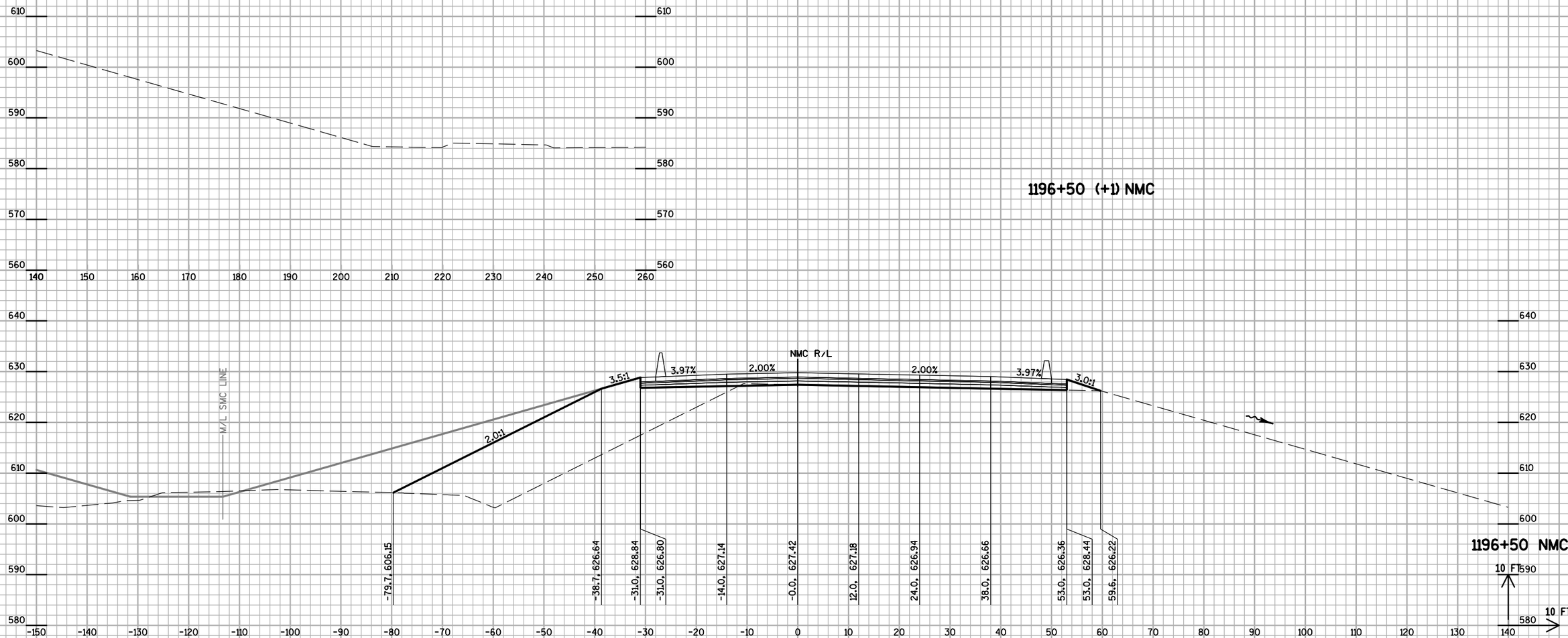
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1025	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1196+50 NMC TO 1196+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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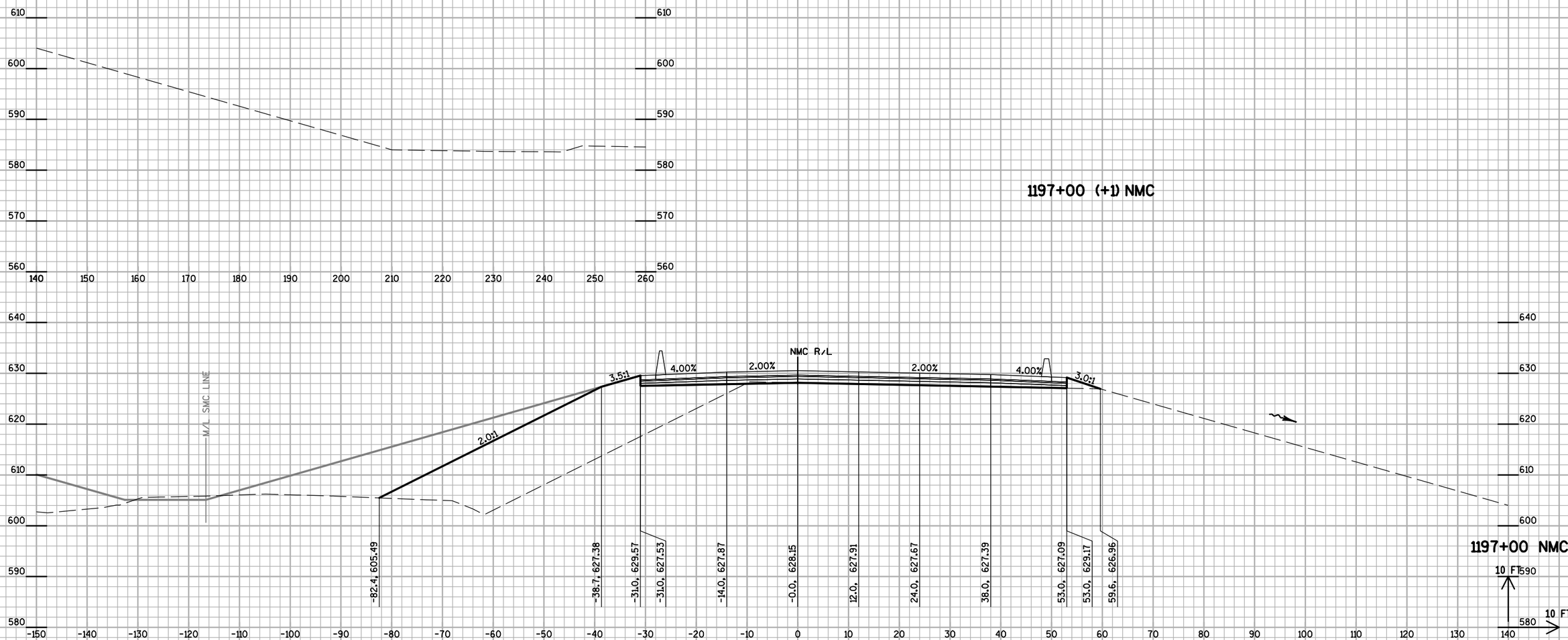
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1026	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1197+00 NMC TO 1197+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



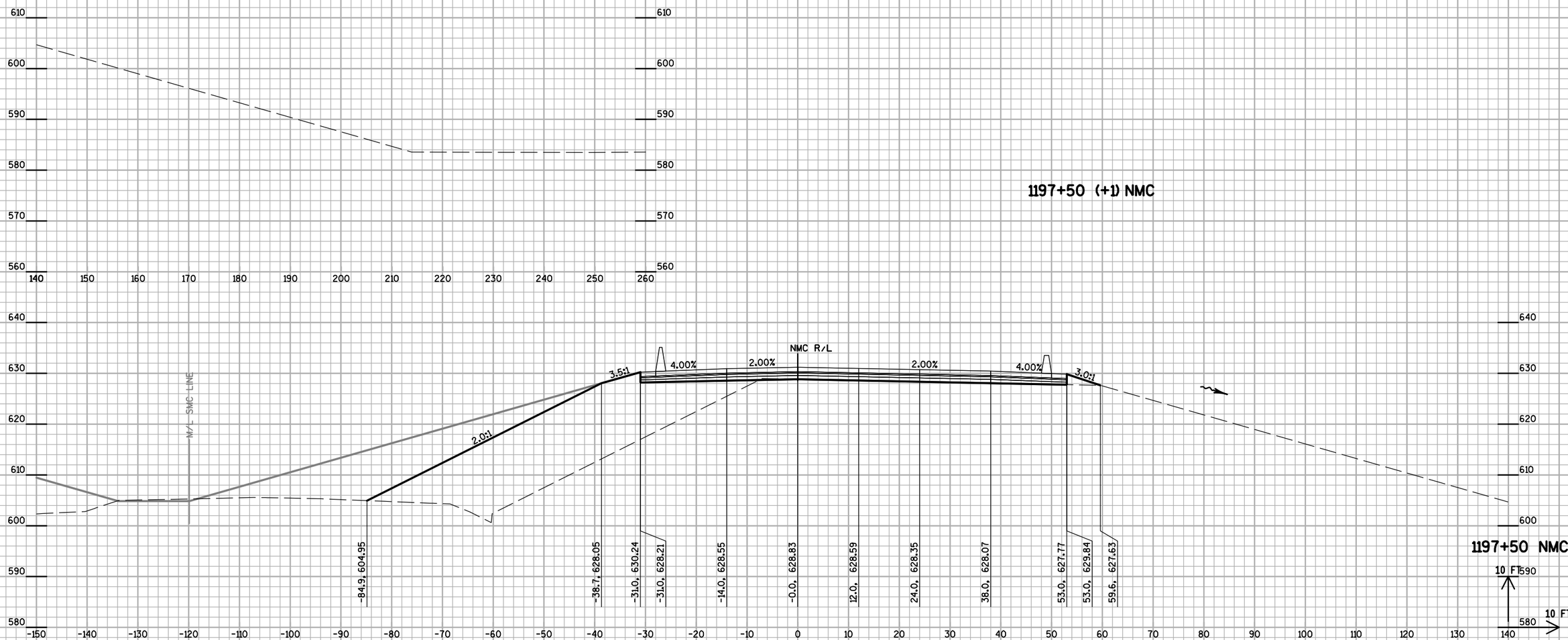
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1027	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1197+50 NMC TO 1197+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1028	E

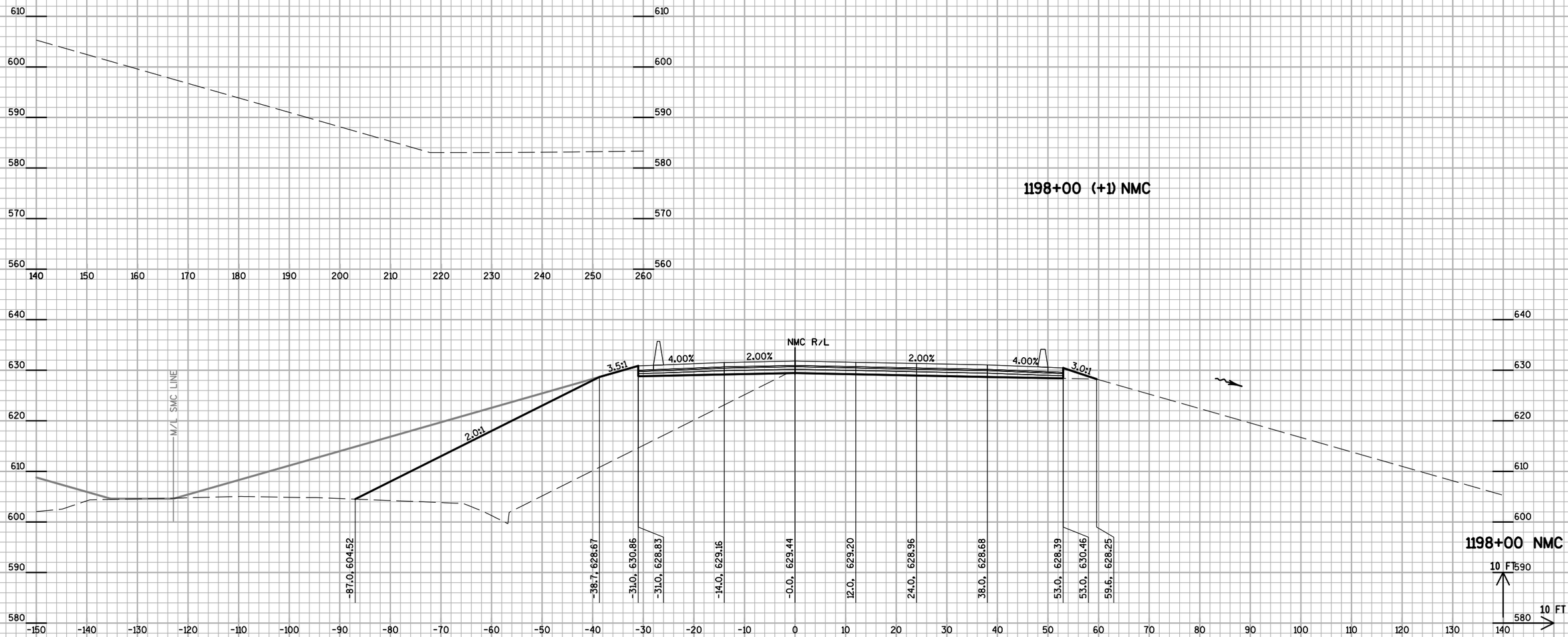
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1198+00 NMC TO 1198+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

1198+00 (+1) NMC



1198+00 NMC

9

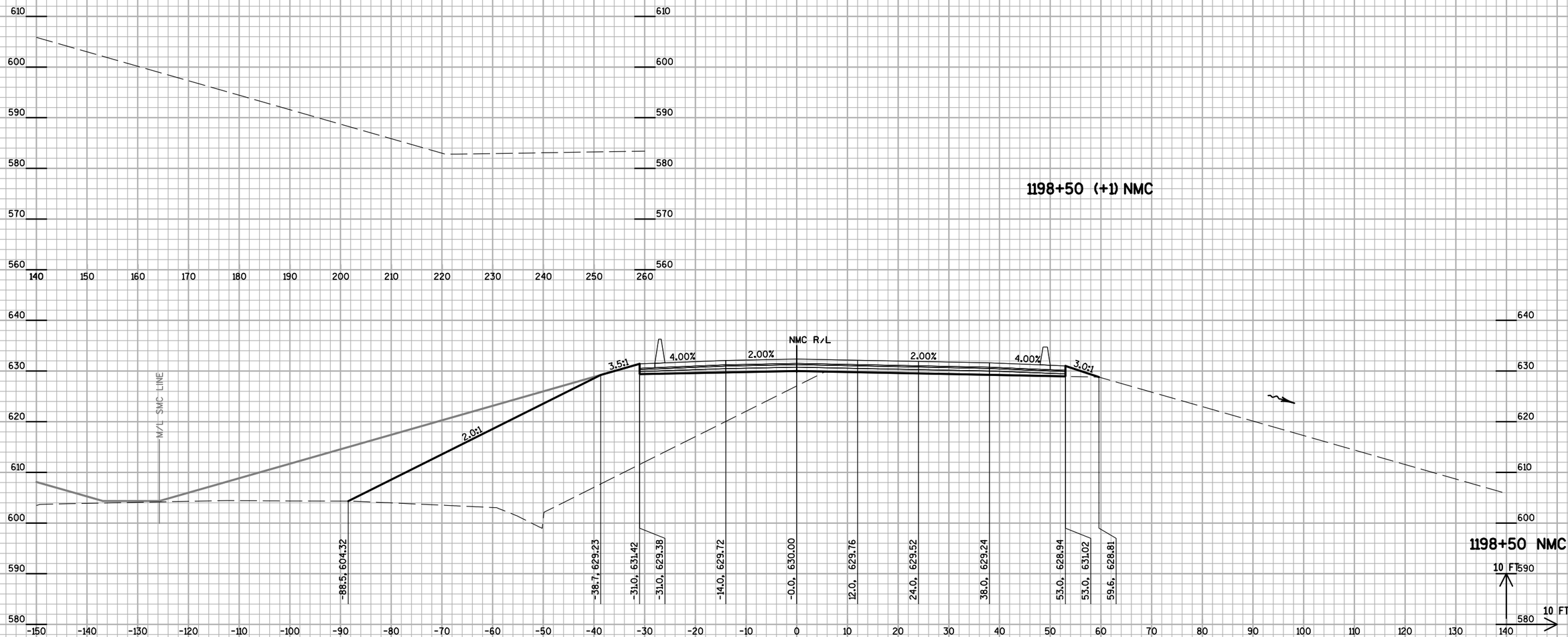
9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1029	E

STA. 1198+50 NMC TO 1198+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

1198+50 (+1) NMC



1198+50 NMC

10 FT

10 FT

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1030	E

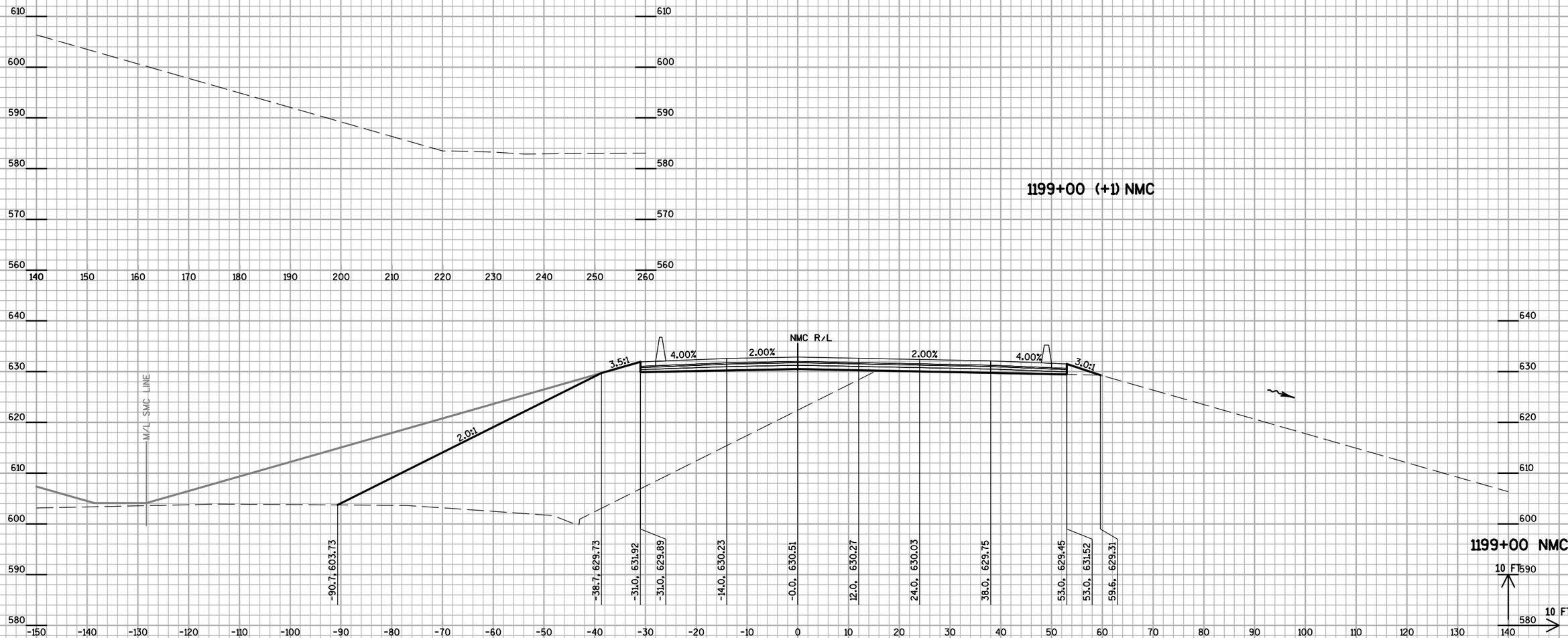
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1199+00 NMC TO 1199+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

1199+00 (+1) NMC



1199+00 NMC

9

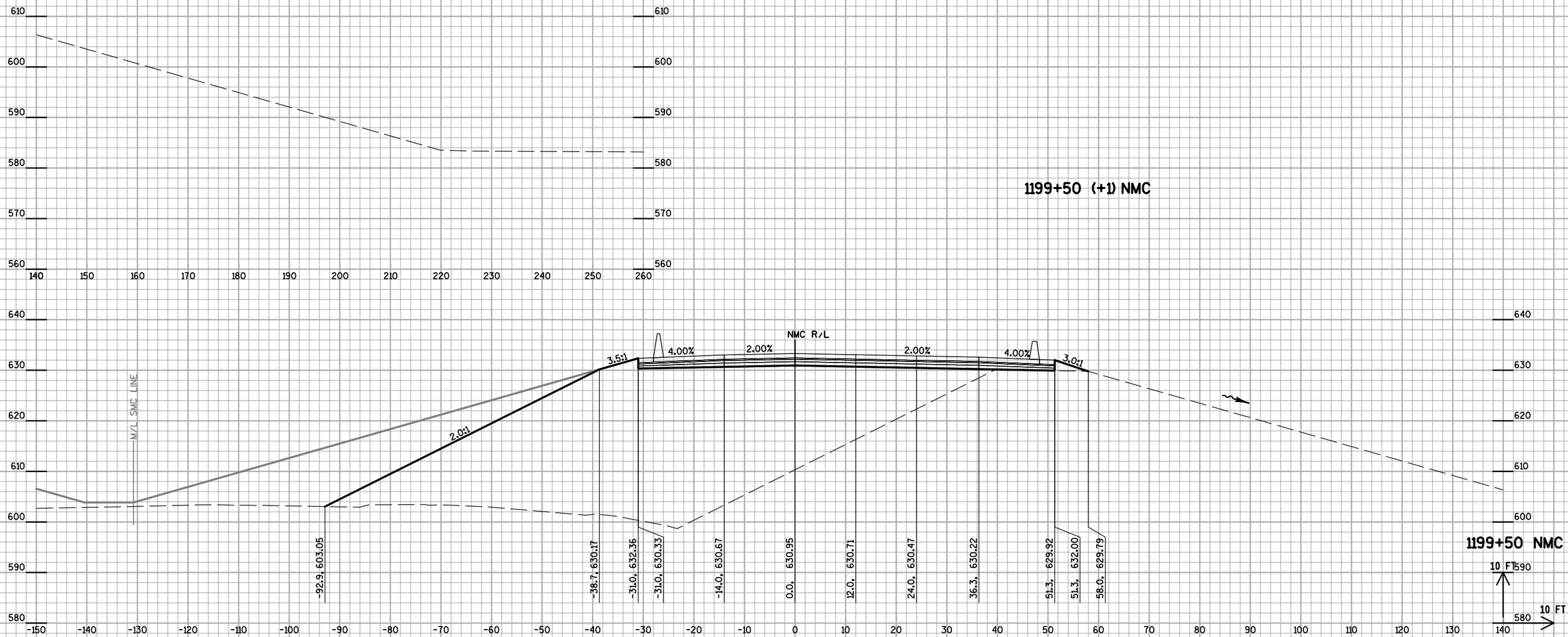
9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1031	E

STA. 1199+50 NMC TO 1199+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

1199+50 (+1) NMC



1199+50 NMC

10 FT

10 FT

9

9

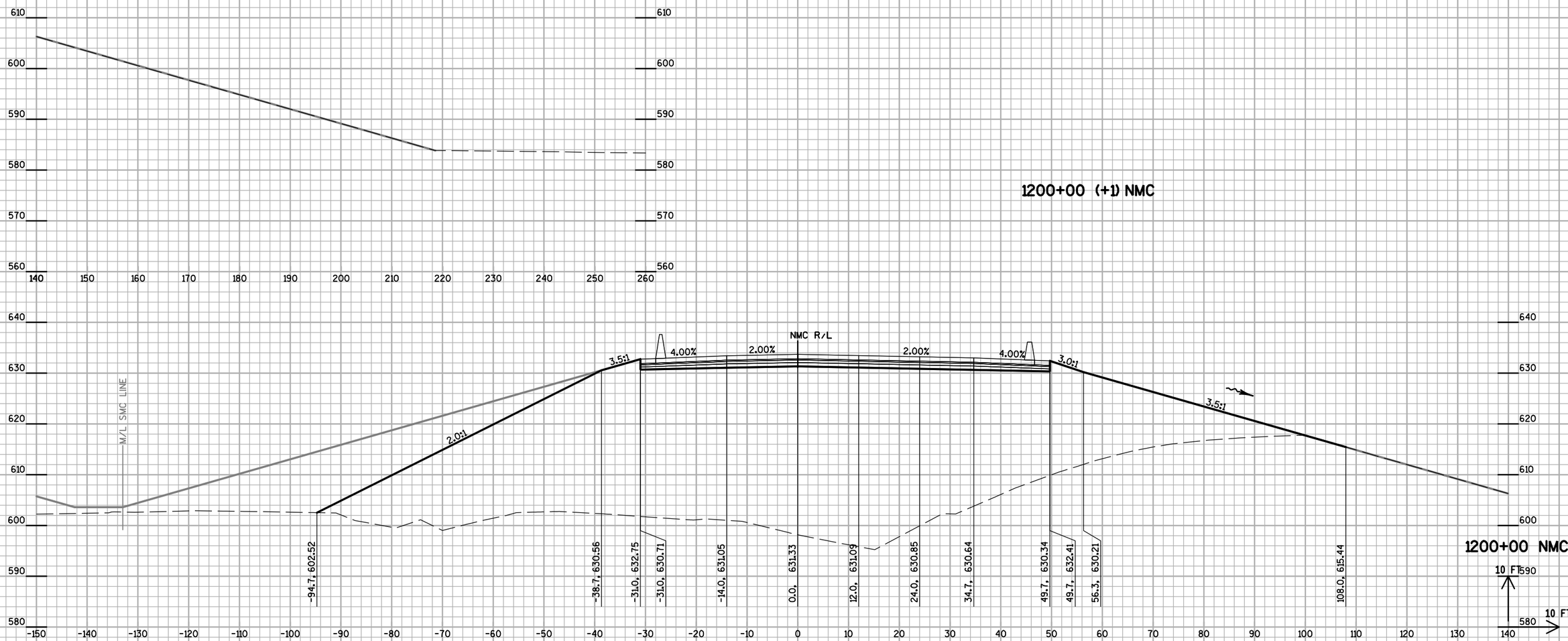
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1032	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1200+00 NMC TO 1200+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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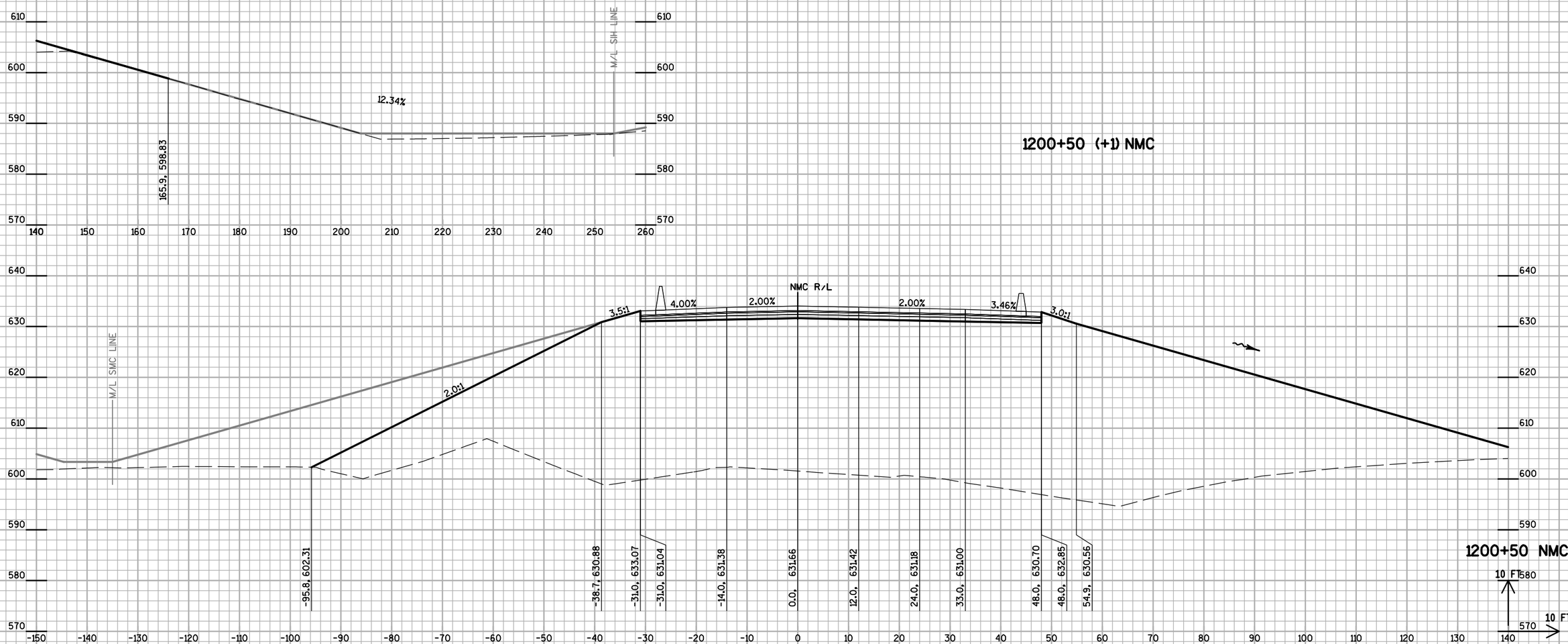
9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1033	E

STA. 1200+50 NMC TO 1200+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1200+50 (+1) NMC

1200+50 NMC

10 FT

10 FT

9

9

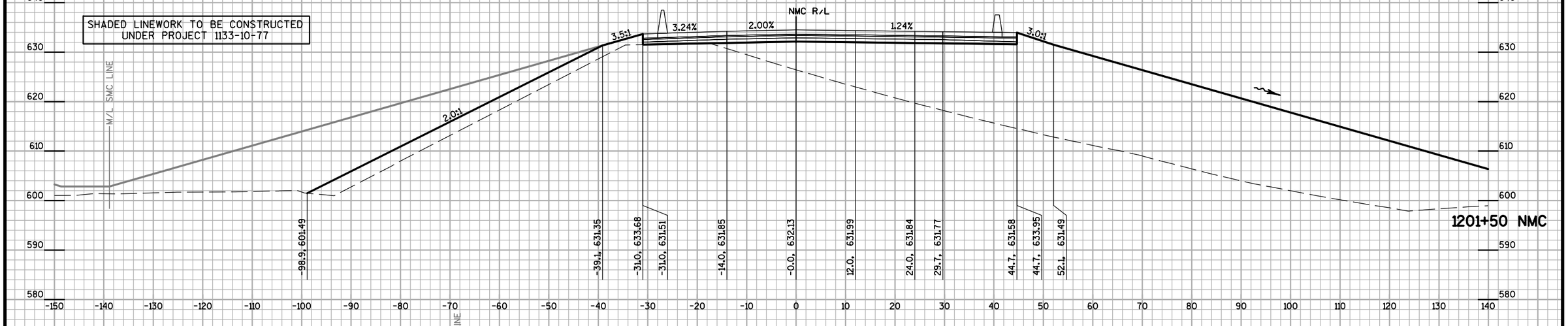
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1034	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

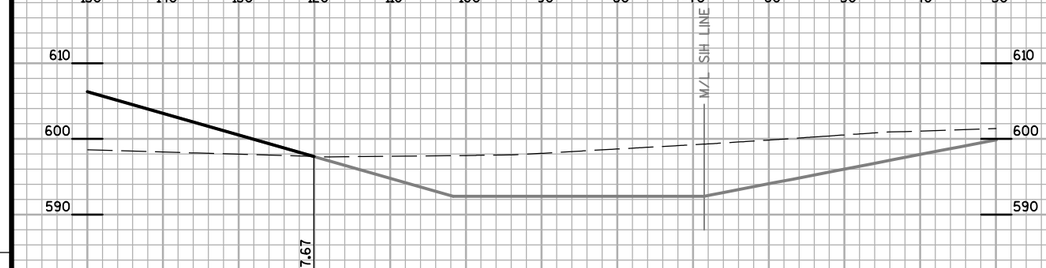
WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

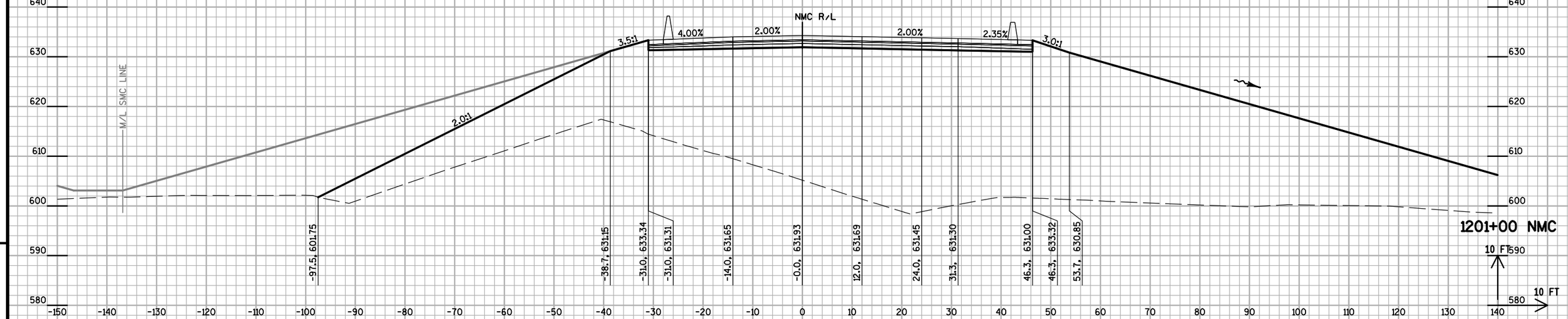
STA. 1201+00 NMC TO 1201+50 NMC



1201+50 NMC



1201+00 (+1) NMC



1201+00 NMC

10 FT

10 FT

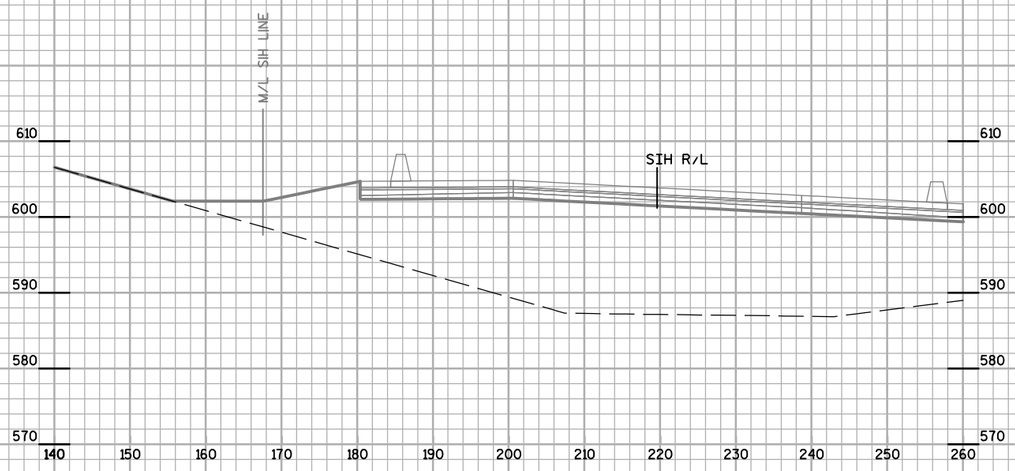
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1035	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

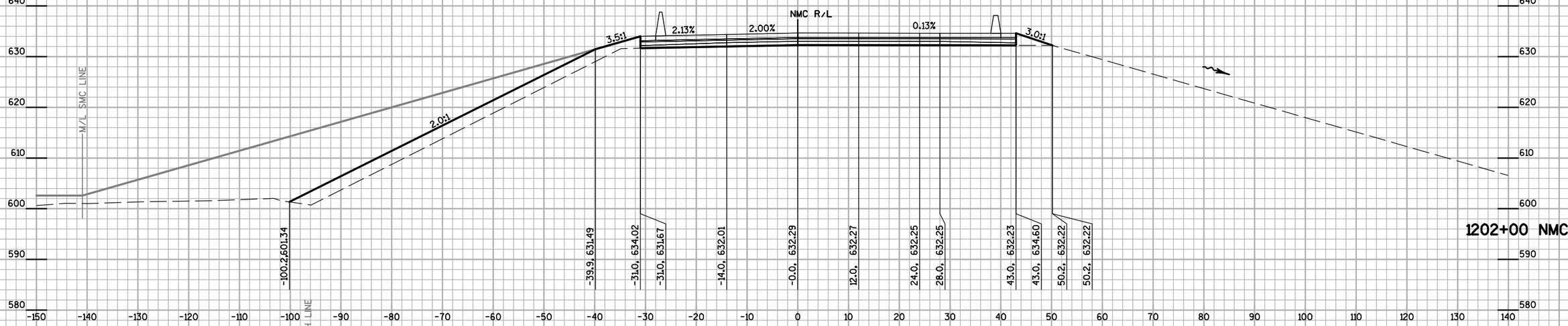
WISDOT/CADDS SHEET 21

STA. 1201+50 NMC TO 1202+00 NMC

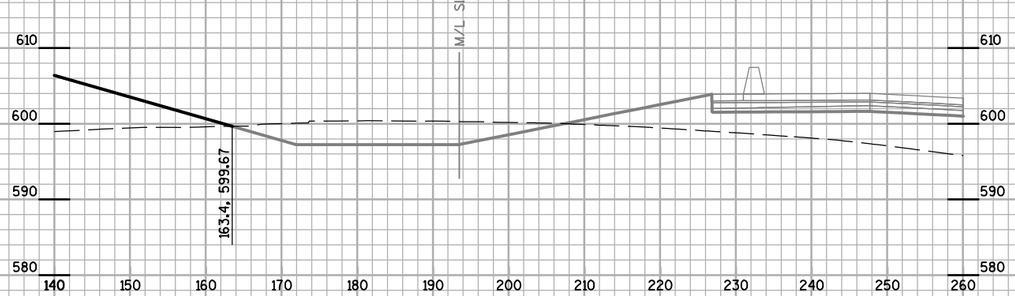
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



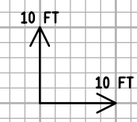
1202+00 (+1) NMC



1202+00 NMC



1201+50 (+1) NMC



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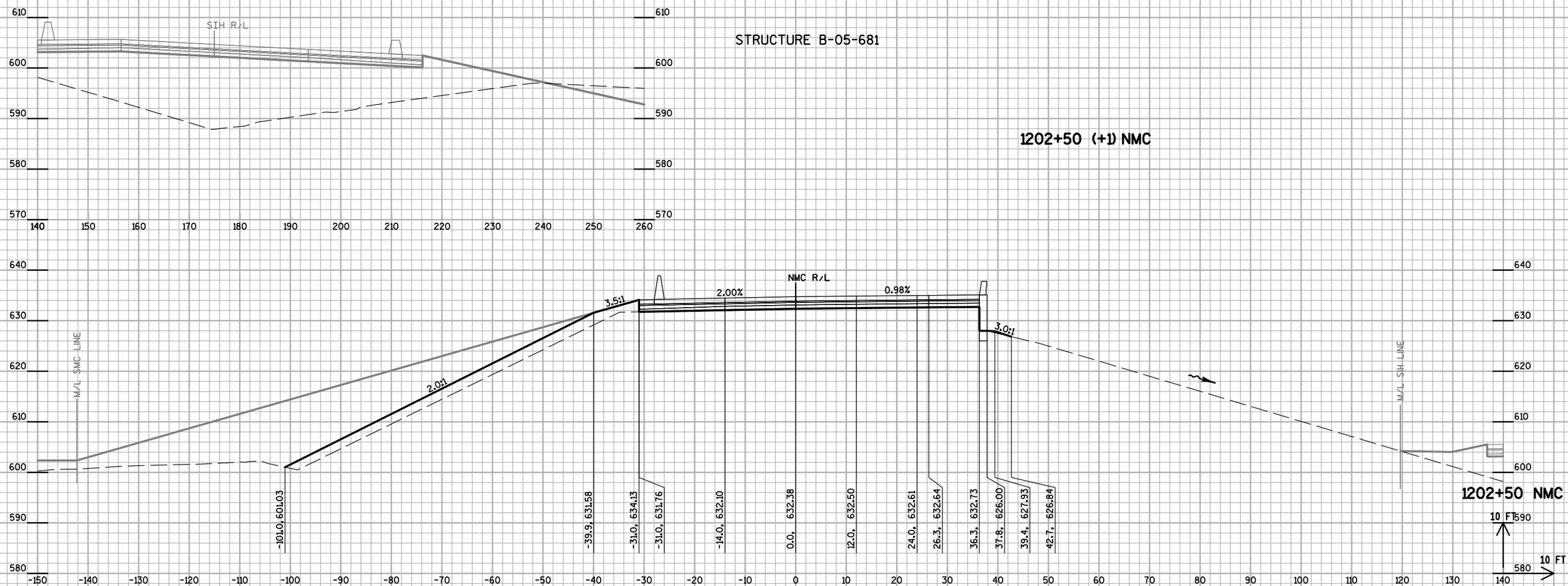
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1036	E

STA. 1202+50 NMC TO 1202+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STRUCTURE B-05-681

1202+50 (+1) NMC



1202+50 NMC

10 FT

10 FT

9

9

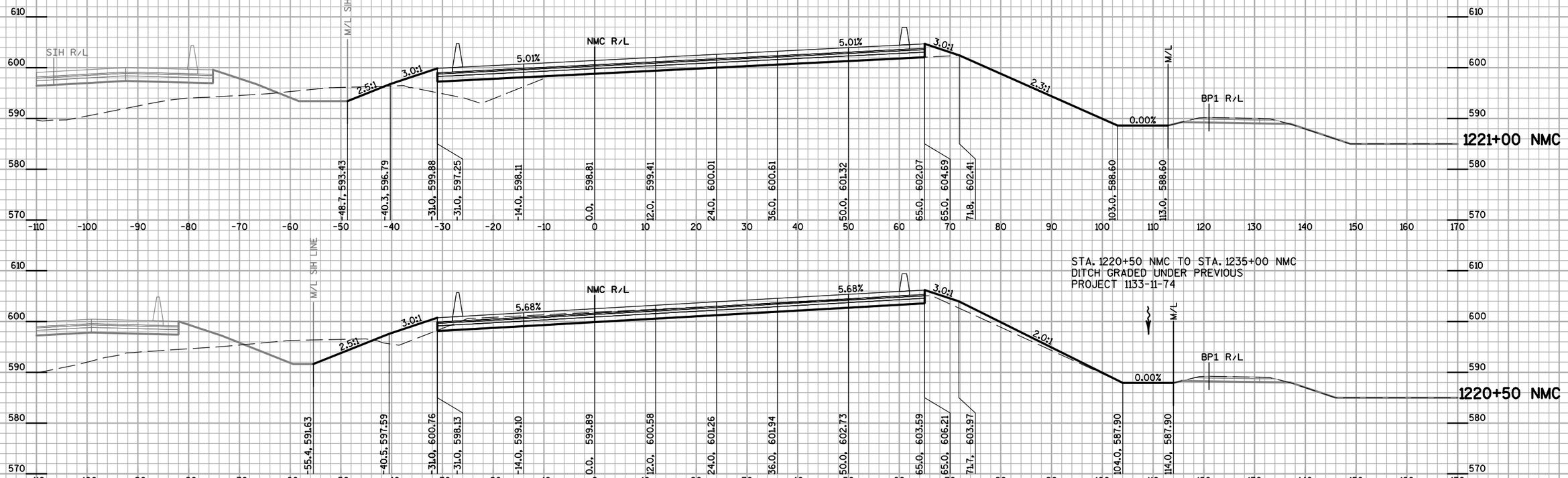
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1037	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1220+00 NMC TO 1221+00 NMC



STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74

STRUCTURE B-05-681

9 9

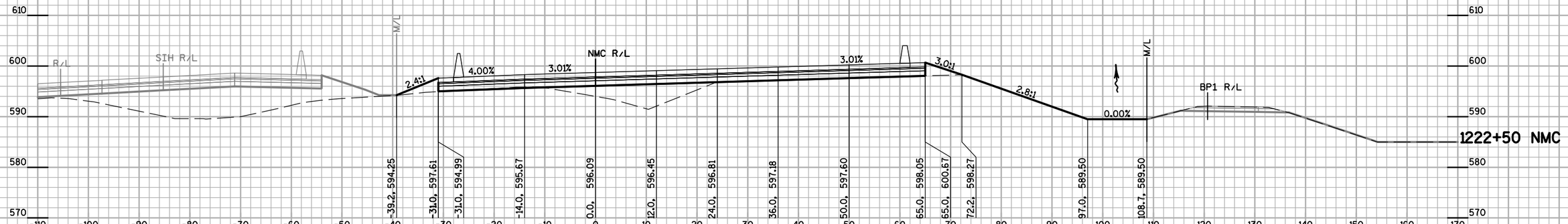
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1038 E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

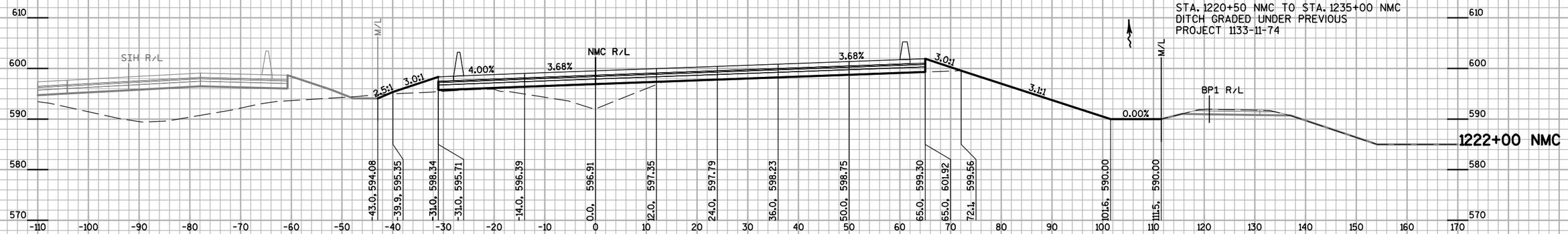
WISDOT/CADDS SHEET 21

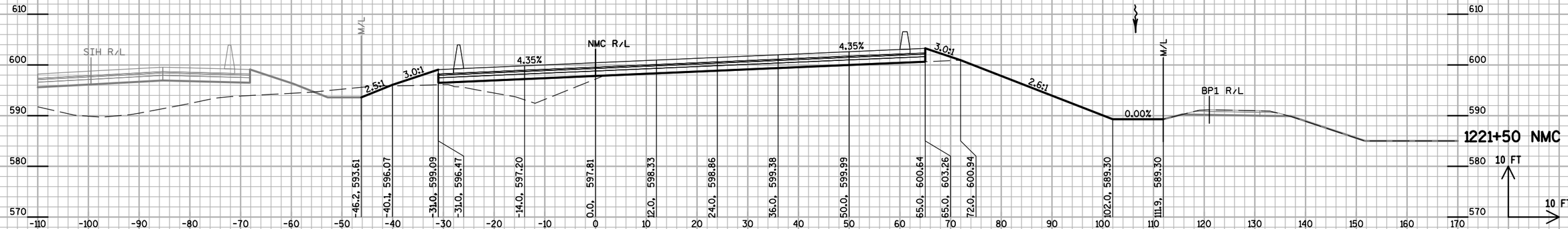
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1221+50 NMC TO 1222+50 NMC



STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74





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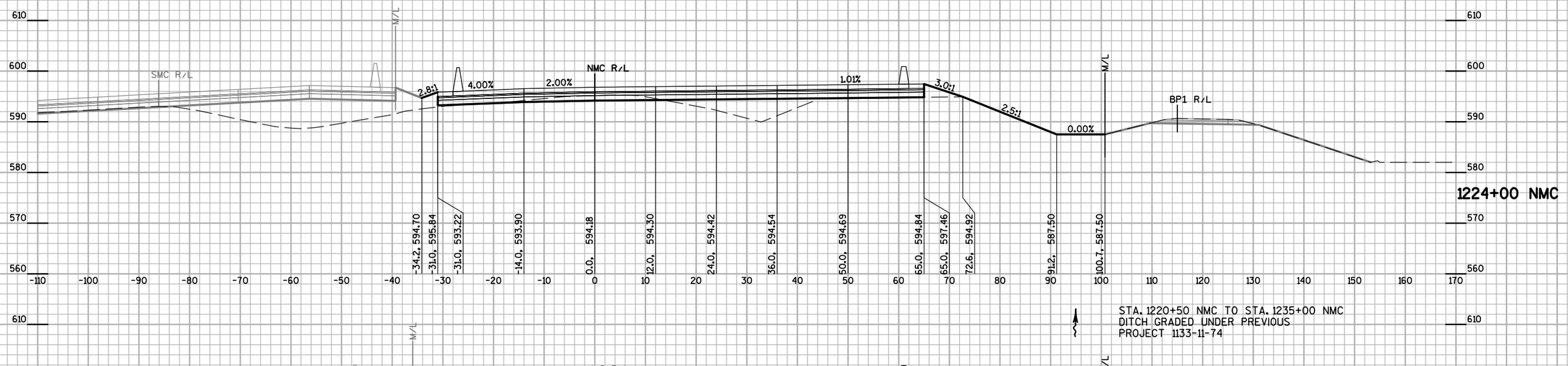
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1039	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

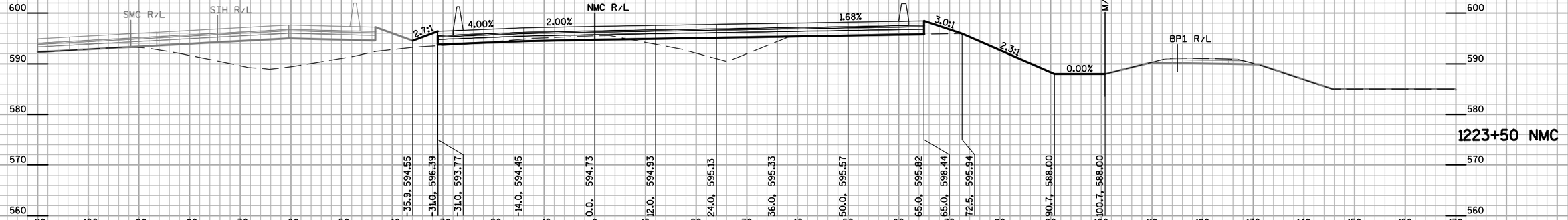
WISDOT/CADDS SHEET 21

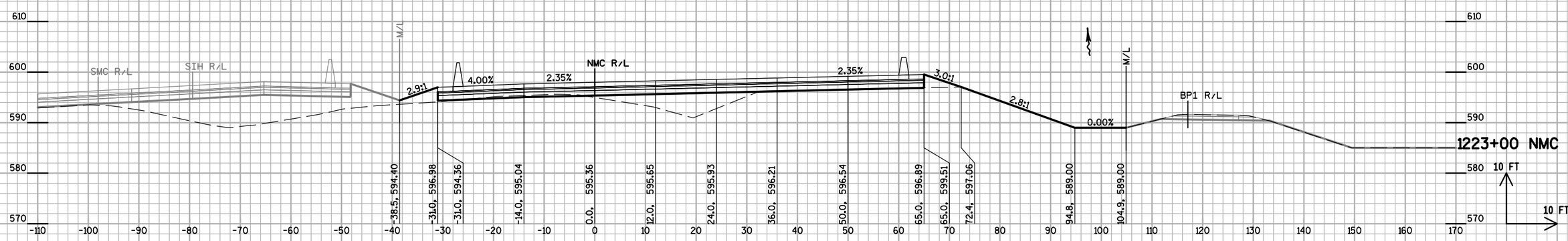
STA. 1223+00 NMC TO 1224+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74





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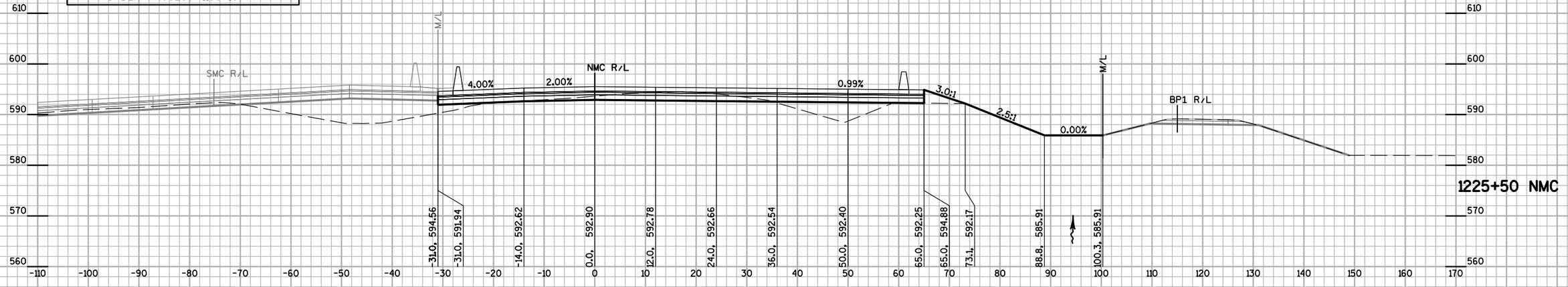
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1040	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

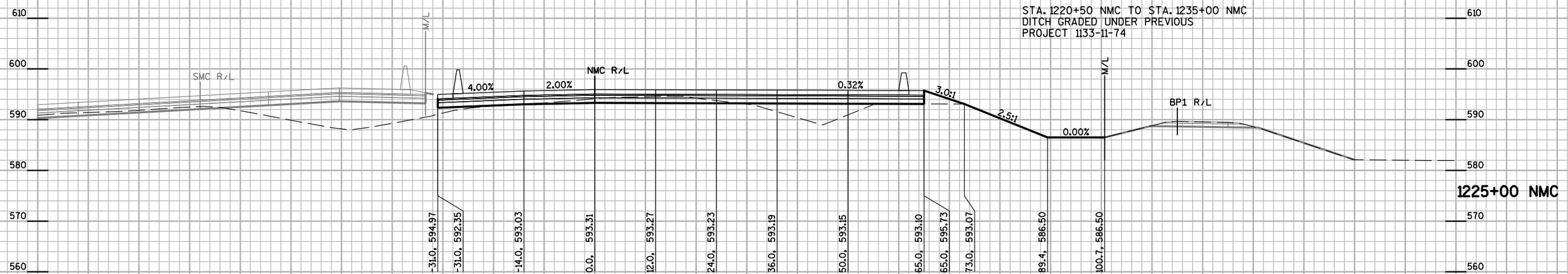
WISDOT/CADDS SHEET 21

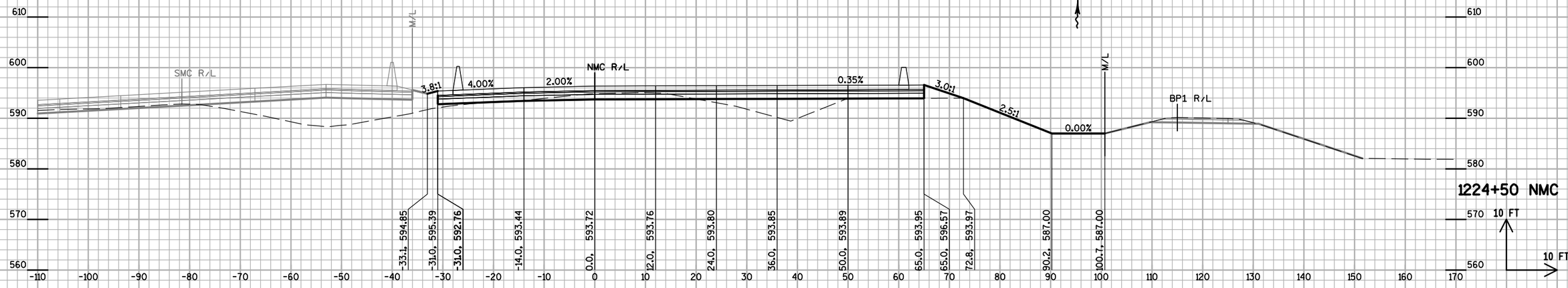
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1224+50 NMC TO 1225+50 NMC



STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74





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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1041	E

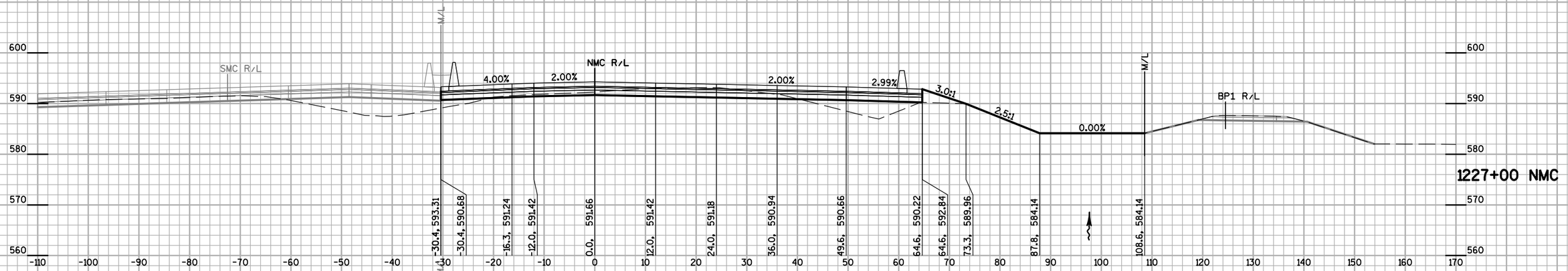
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

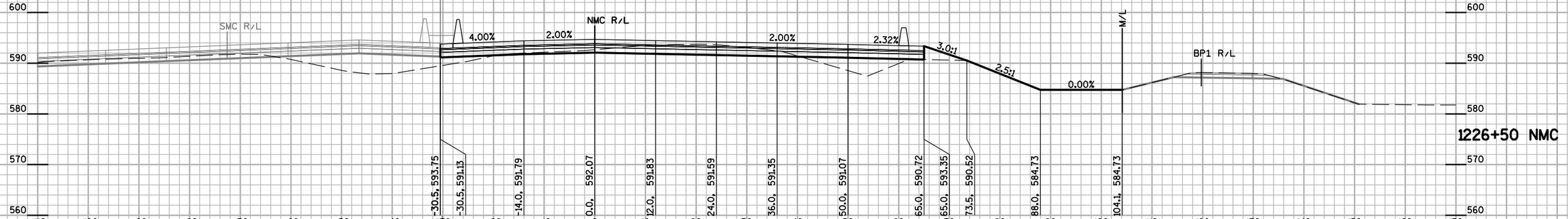
WISDOT/CADDS SHEET 21

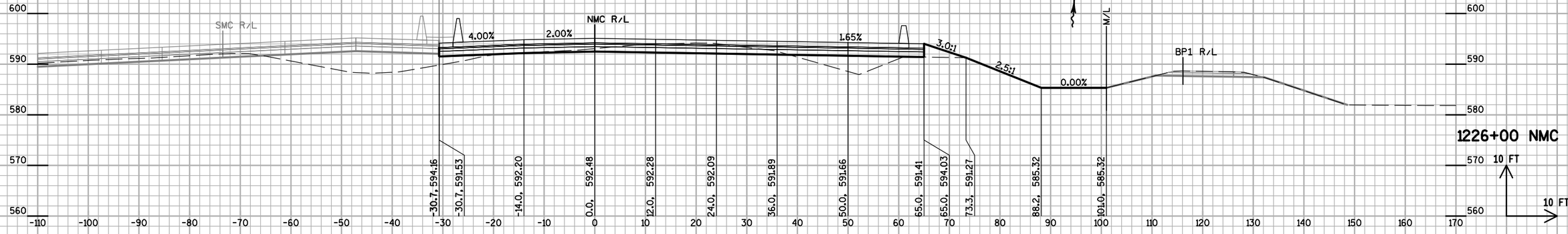
STA. 1226+00 NMC TO 1227+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74







PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

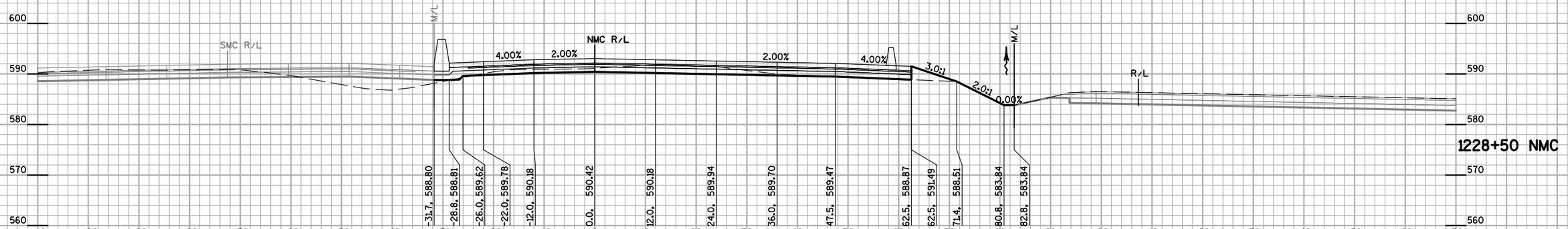
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

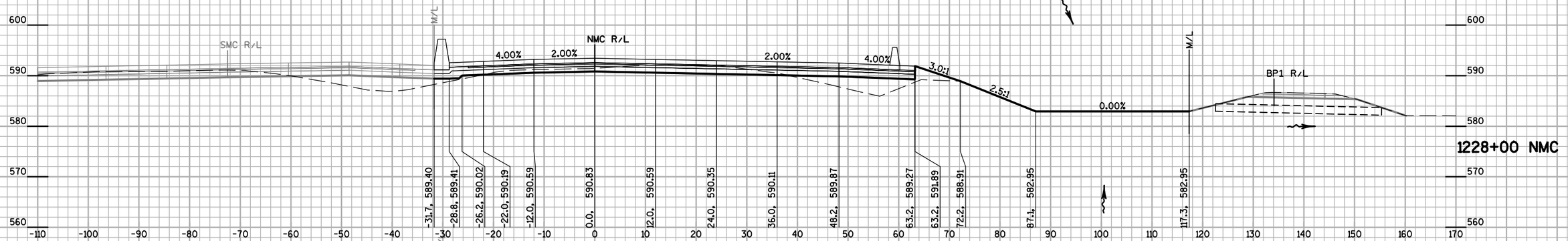
STA. 1227+50 NMC TO 1228+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

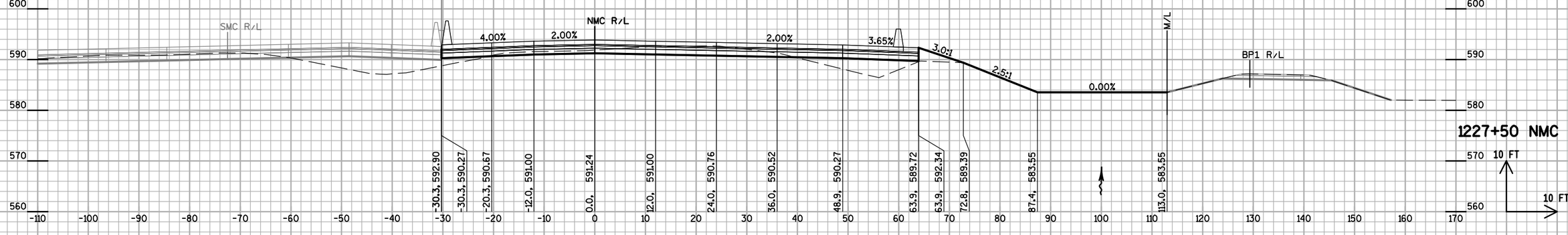
STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74



1228+50 NMC



1228+00 NMC



1227+50 NMC

9

9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1043	E

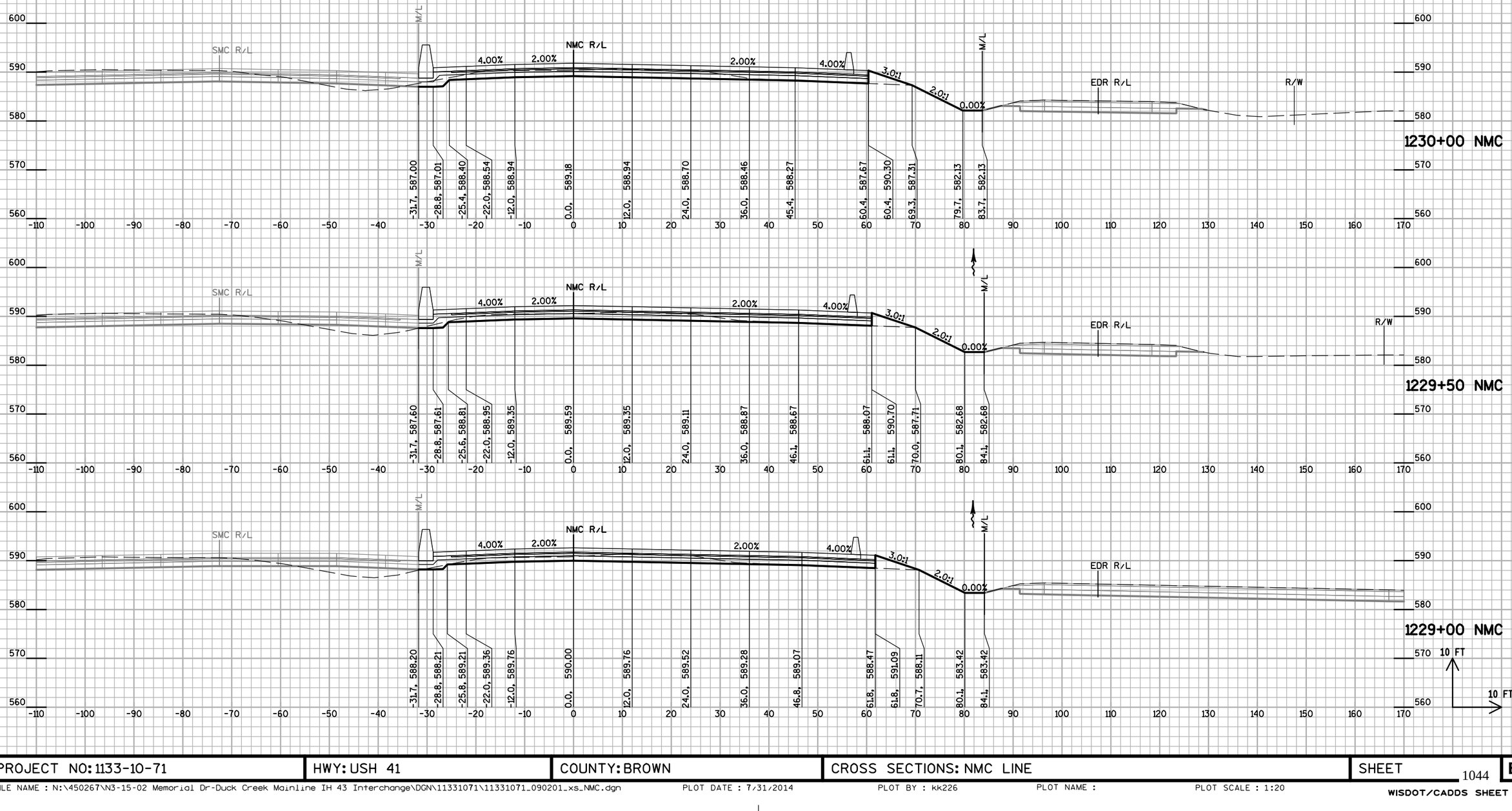
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1229+00 NMC TO 1230+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1044	E

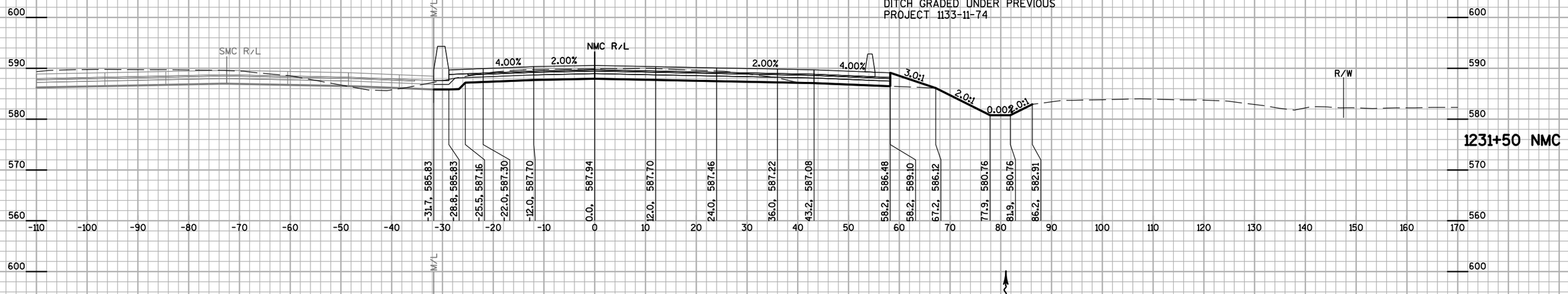
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

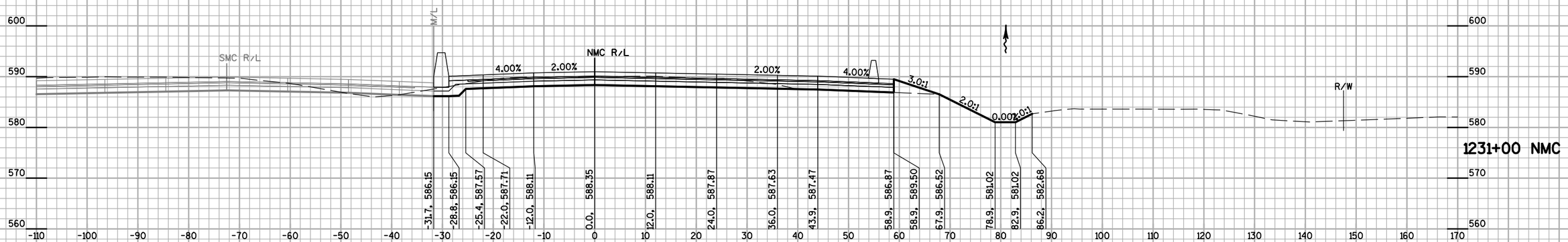
STA. 1230+50 NMC TO 1231+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

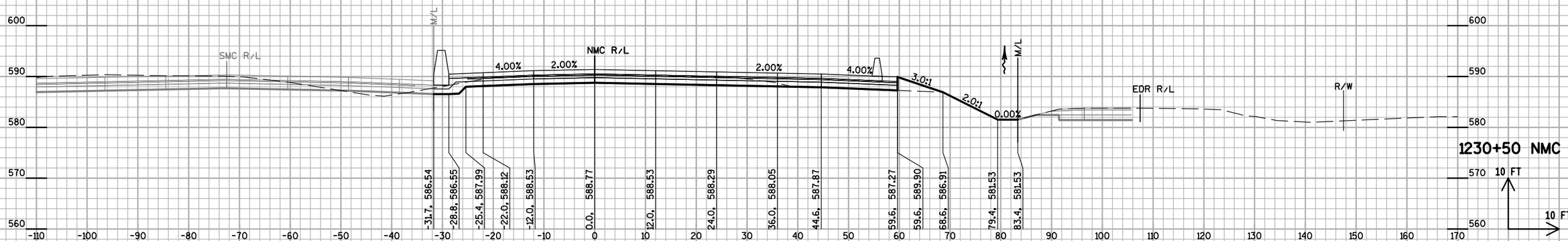
STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74



1231+50 NMC



1231+00 NMC



1230+50 NMC

10 FT
10 FT

9

9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1045	E

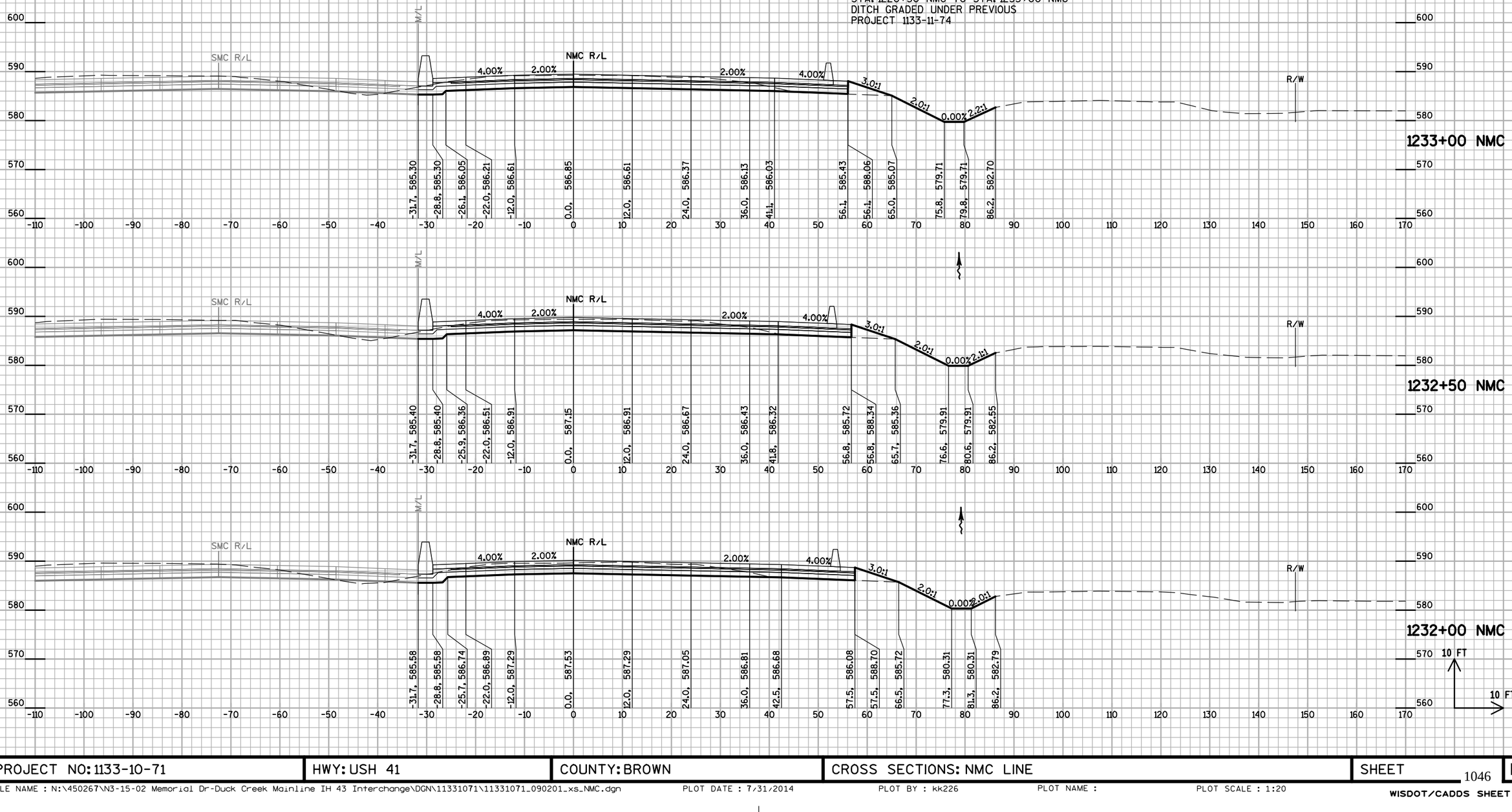
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1232+00 NMC TO 1233+00 NMC

STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74



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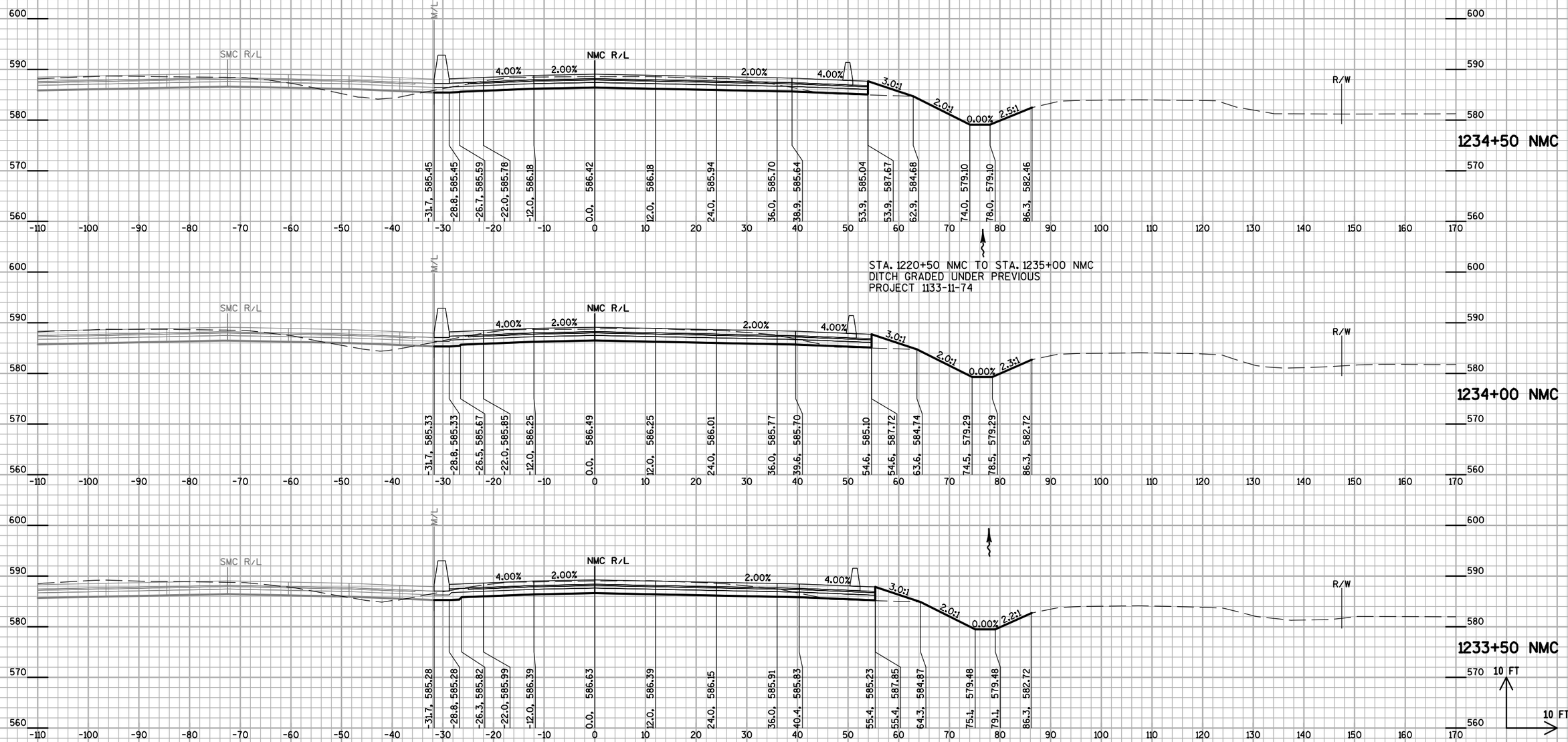
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1046	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1233+50 NMC TO 1234+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



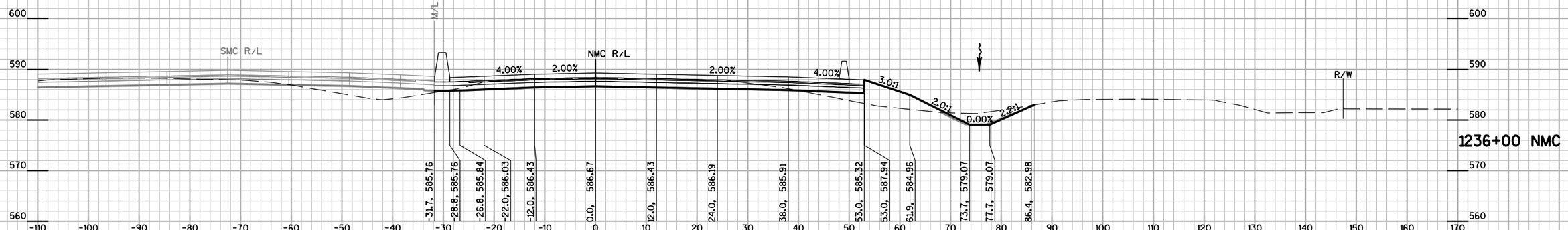
9

9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1047	E

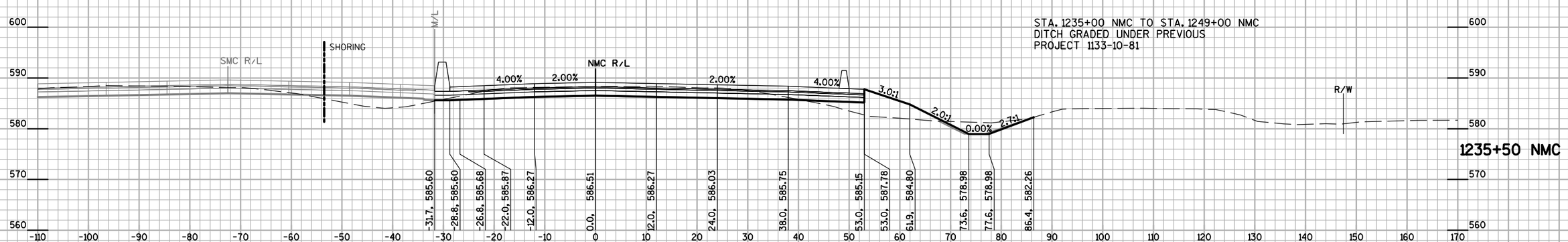
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1235+00 NMC TO 1236+00 NMC



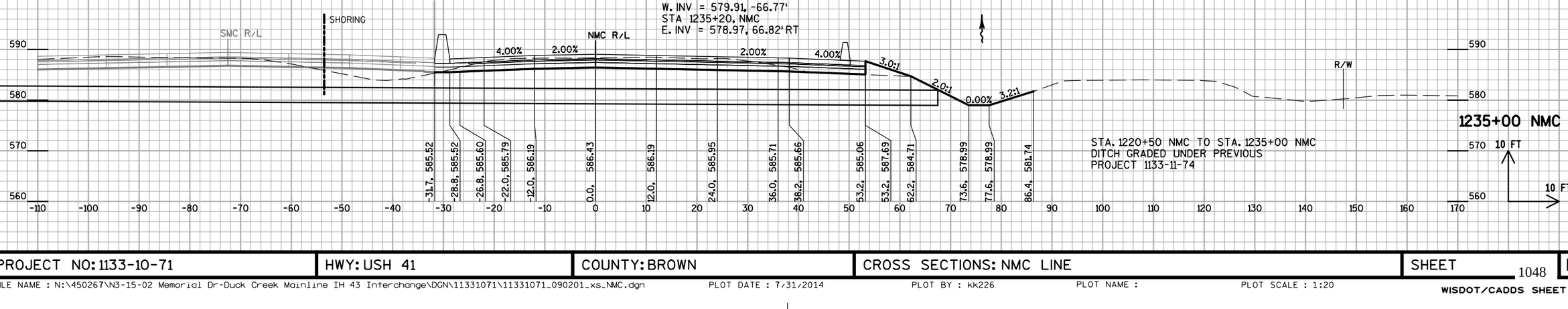
1236+00 NMC

STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81



1235+50 NMC

1- 206' X 36" C.P.R.C.
2-APRON ENDWALLS REQ'D
STA 1235+21 SMC
W. INV = 579.91, -66.77'
STA 1235+20, NMC
E. INV = 578.97, 66.82' RT



1235+00 NMC

STA. 1220+50 NMC TO STA. 1235+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-11-74

10 FT
10 FT

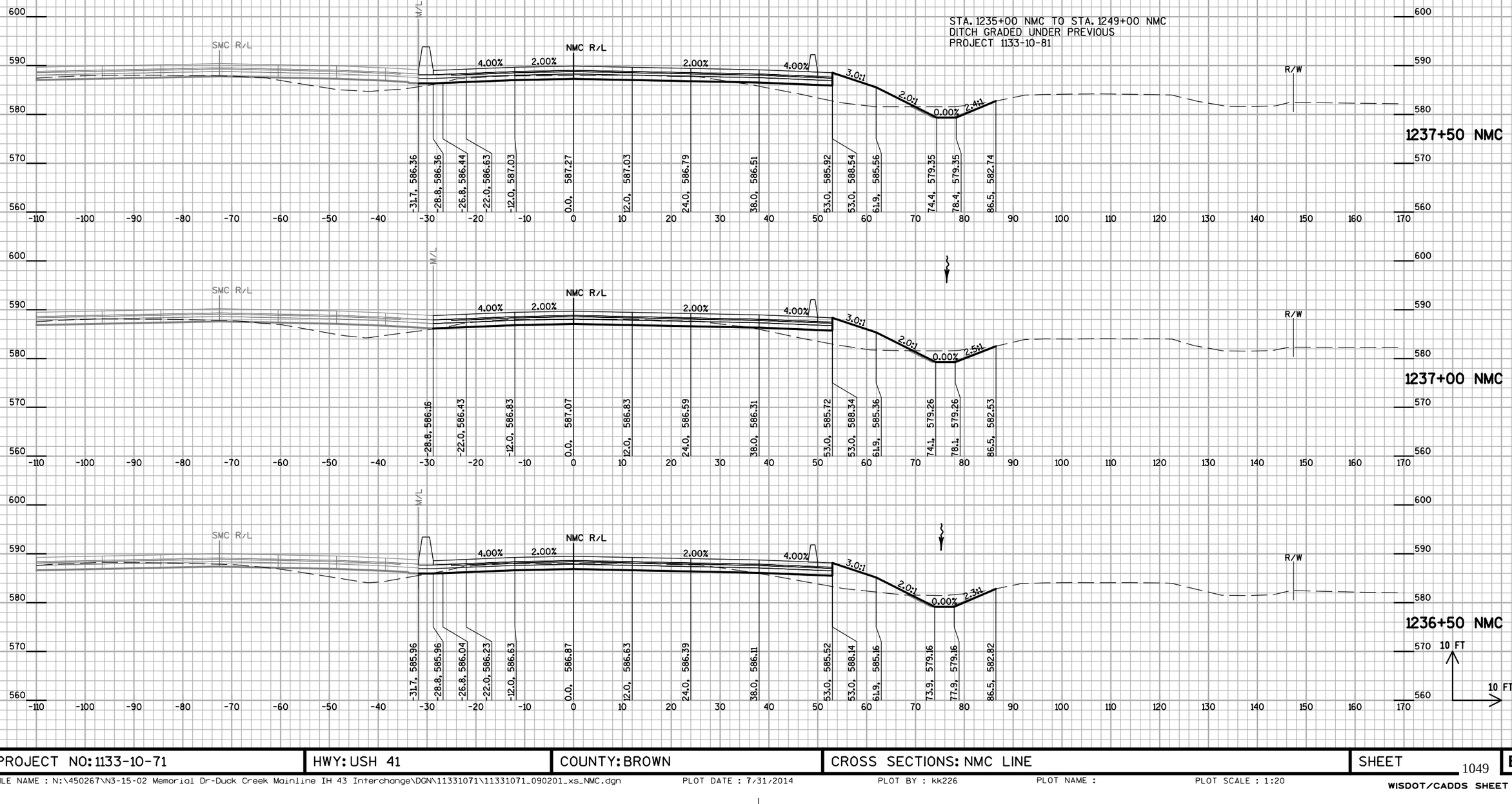
9

9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1048	E

STA. 1236+50 NMC TO 1237+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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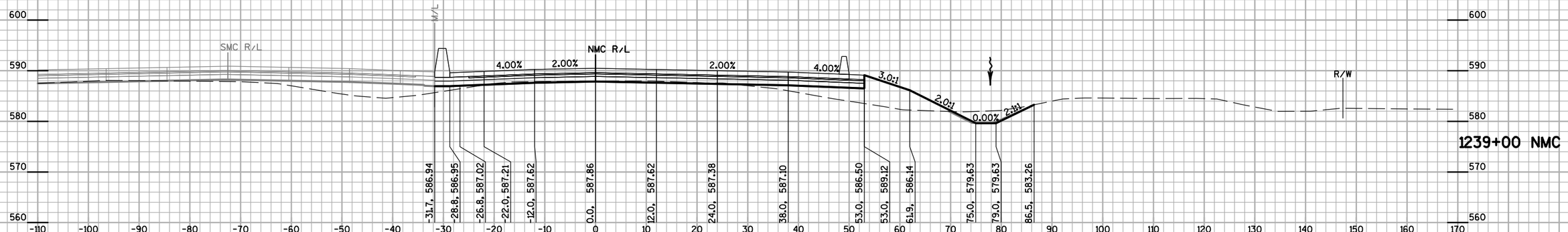
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1049	E

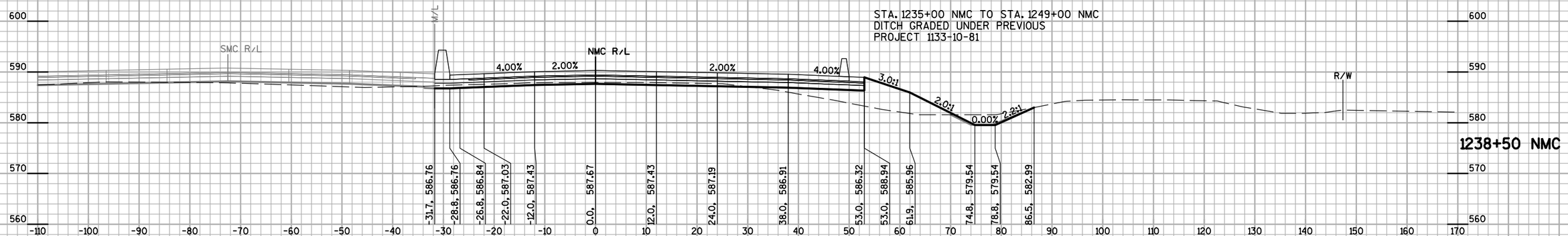
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1238+00 NMC TO 1239+00 NMC



1239+00 NMC

STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81



1238+50 NMC

1238+00 NMC

9

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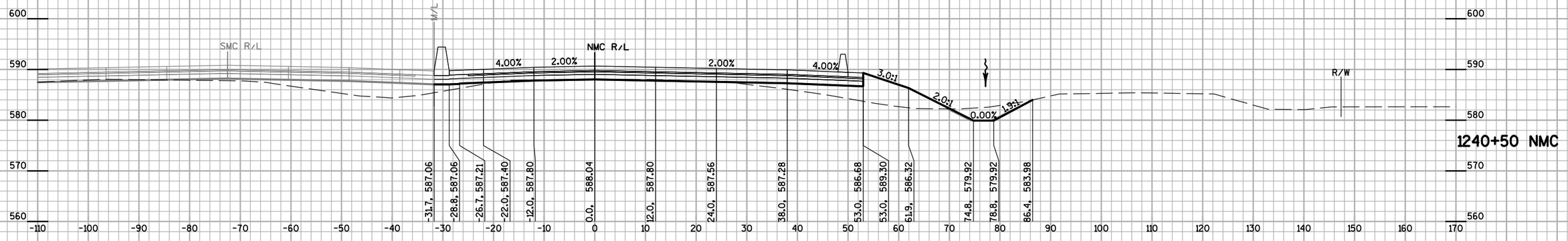
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1050	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

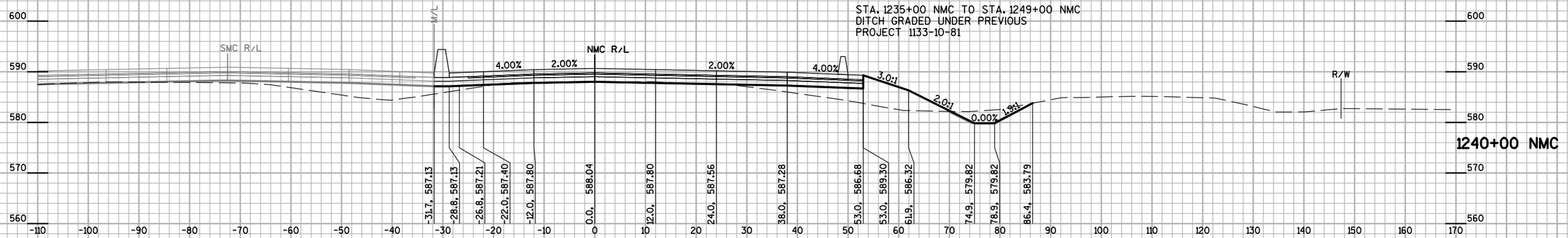
WISDOT/CADDS SHEET 21

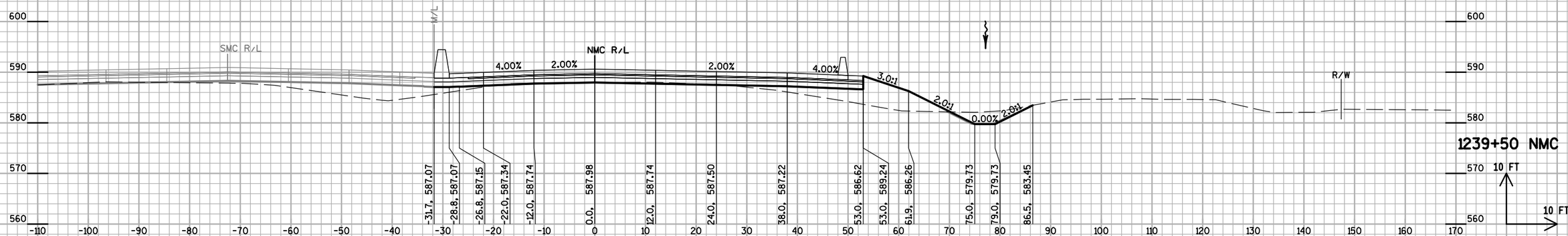
STA. 1239+50 NMC TO 1240+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81





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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1051	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

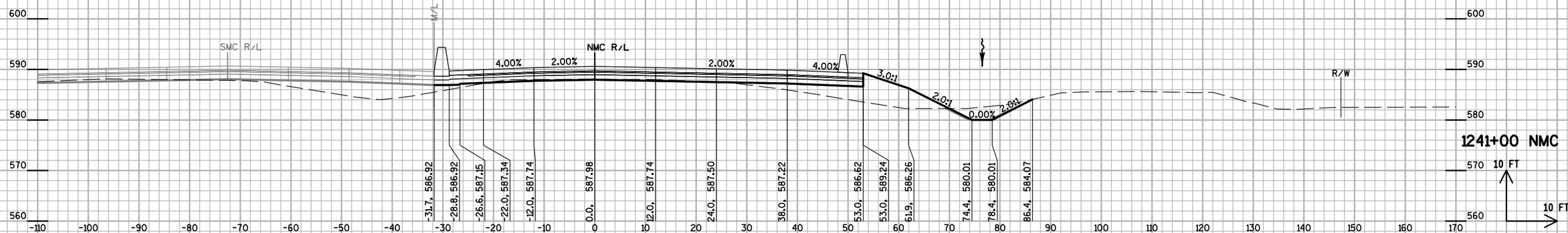
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1241+00 NMC TO 1242+00 NMC

1242+00 NMC

STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81

1241+50 NMC



1241+00 NMC

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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1052	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1242+50 NMC TO 1243+50 NMC

1243+50 NMC

STA. 1243+00 NMC TO STA. 1242+50 NMC

1243+00 NMC

STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81

1242+50 NMC

10 FT
10 FT

9

9

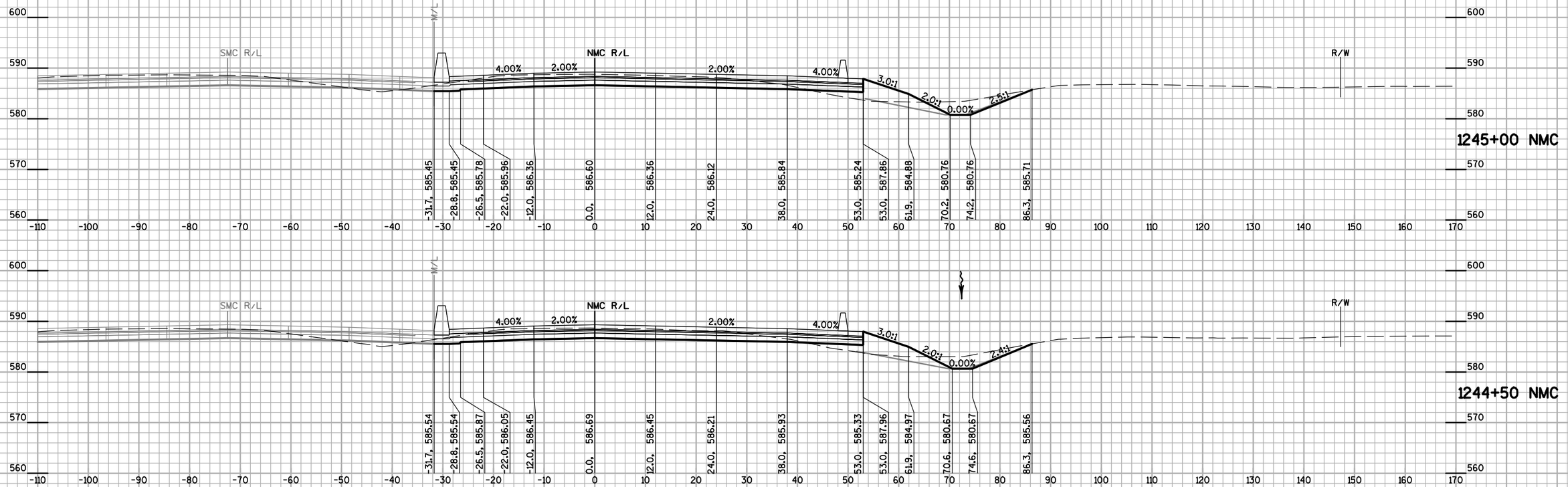
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1053	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1244+00 NMC TO 1245+00 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



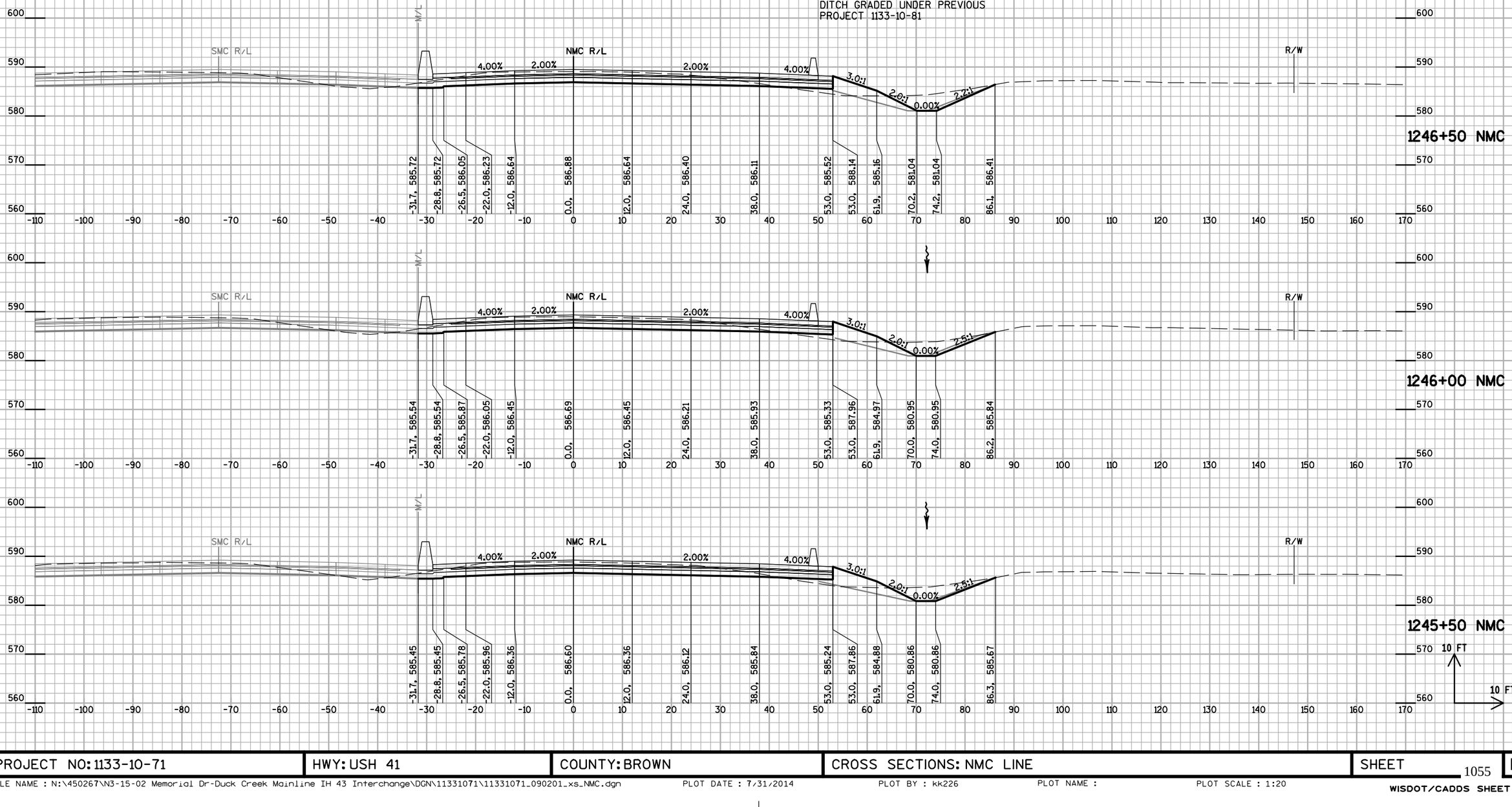
STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1054	E

STA. 1245+50 NMC TO 1246+50 NMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1055	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

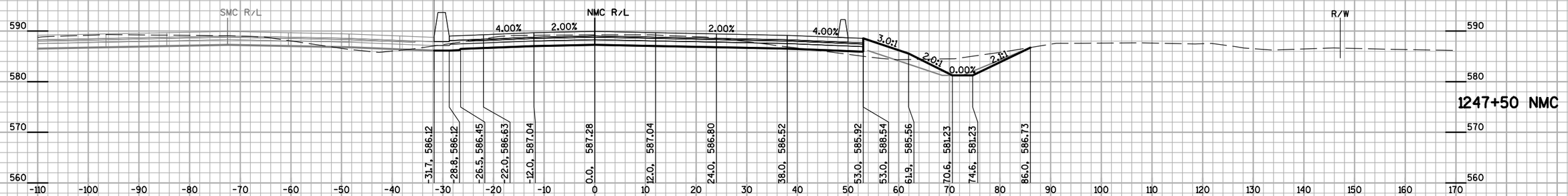
WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1247+00 NMC TO 1248+00 NMC

1248+00 NMC

STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81



1247+50 NMC

1247+00 NMC

9

9

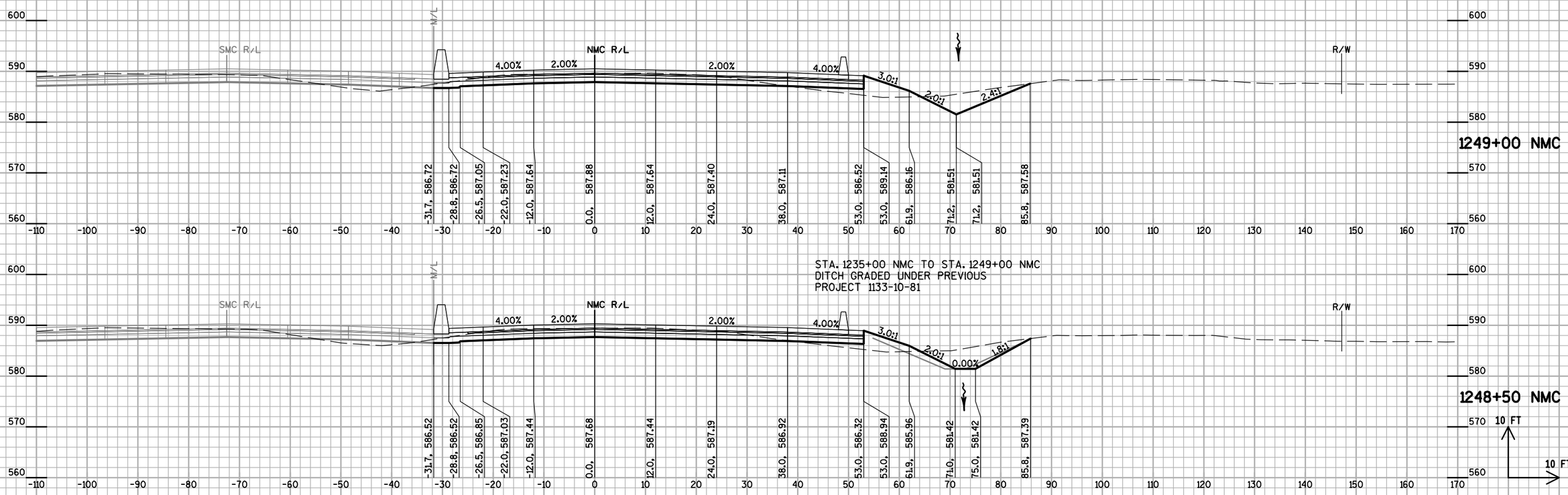
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET 1056	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1248+50 NMC TO 1249+00 NMC



STA. 1235+00 NMC TO STA. 1249+00 NMC
DITCH GRADED UNDER PREVIOUS
PROJECT 1133-10-81

9

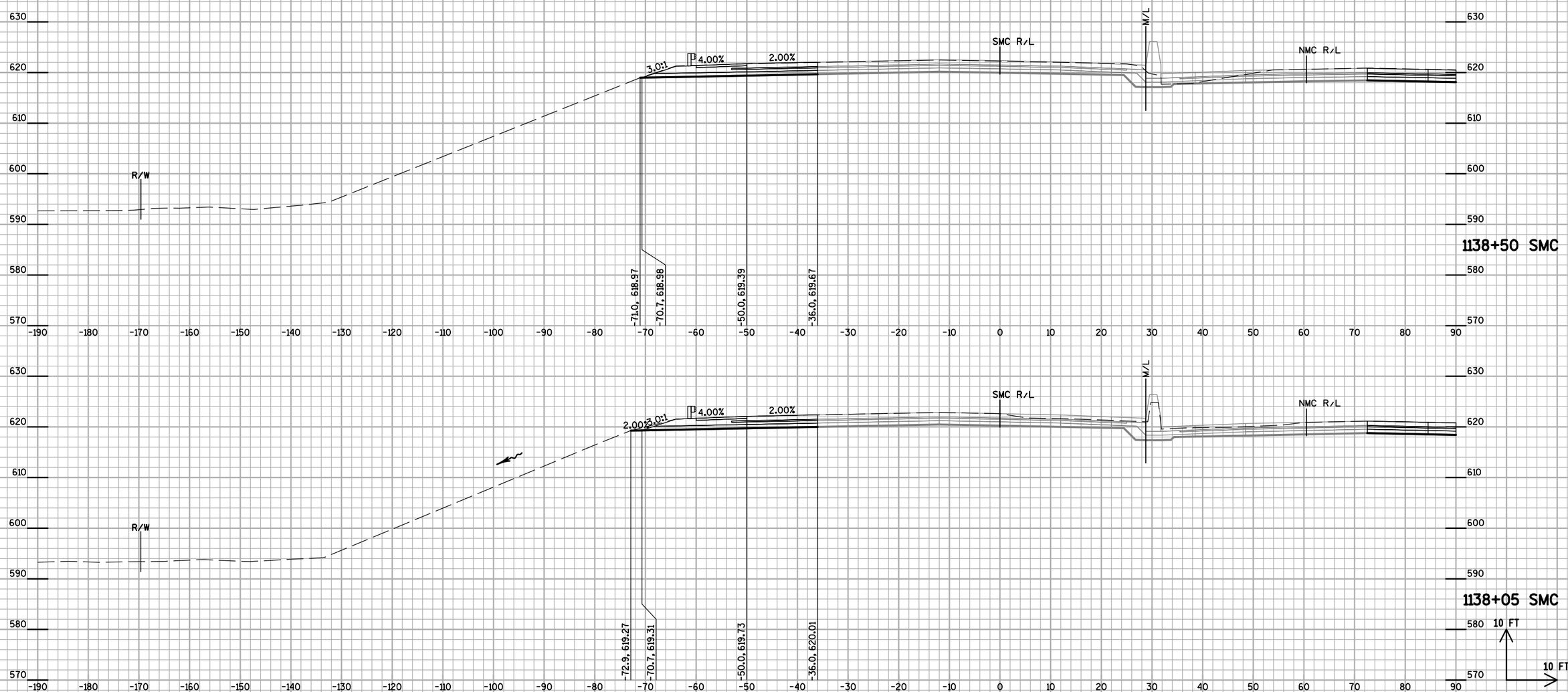
9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090201_xs_NMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1138+05 SMC TO 1138+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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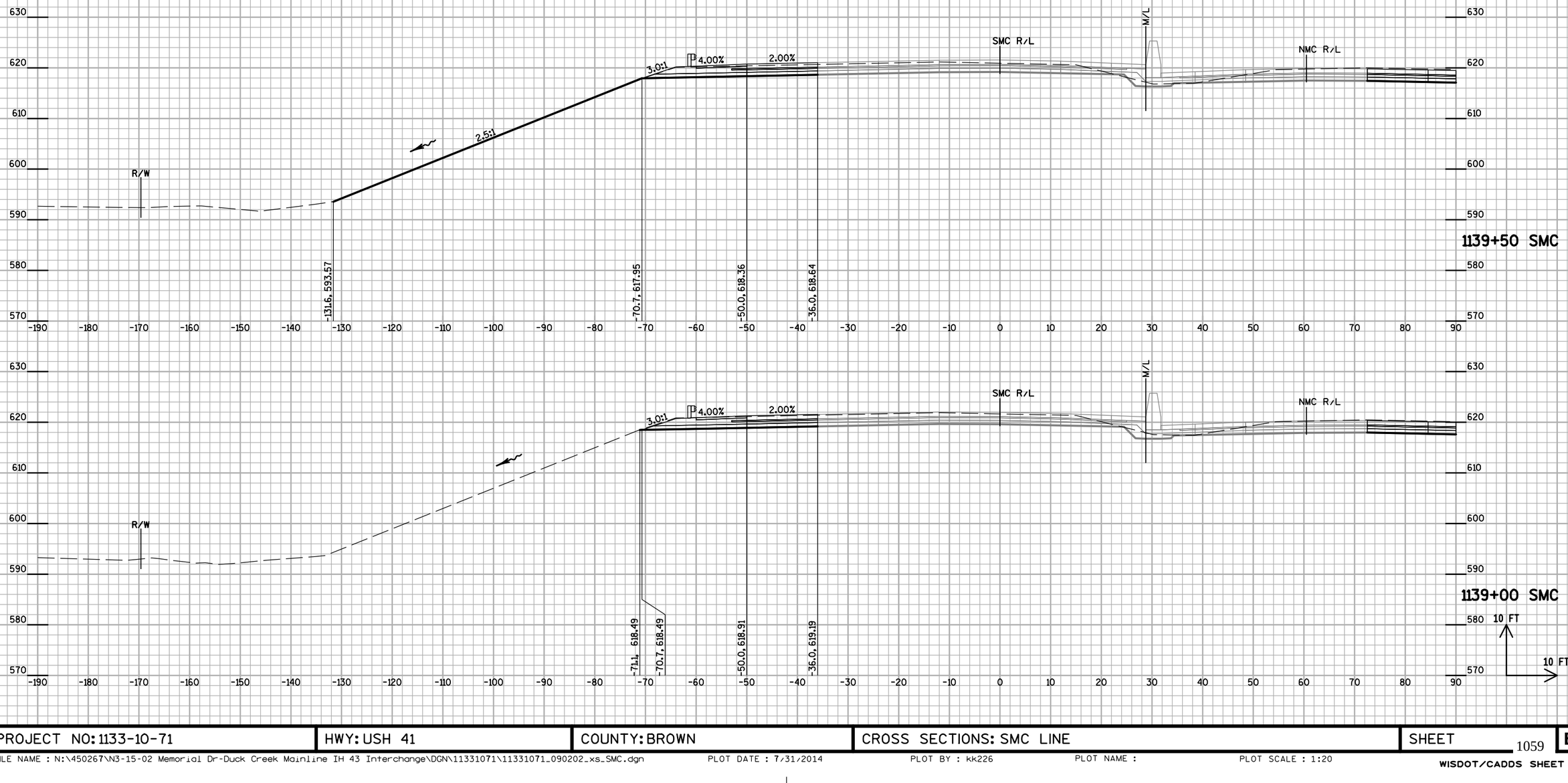
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1139+00 SMC TO 1139+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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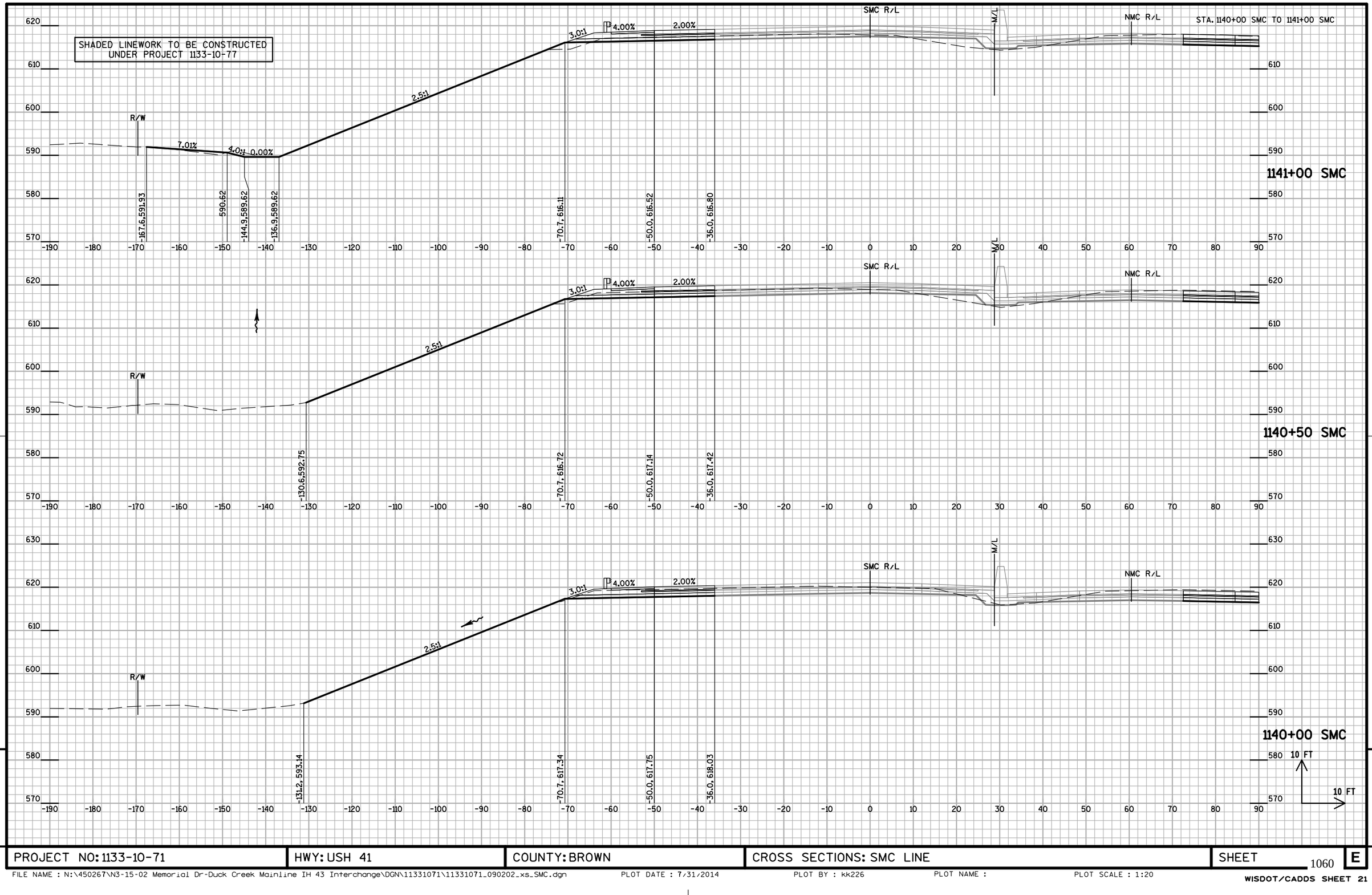
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1140+00 SMC TO 1141+00 SMC



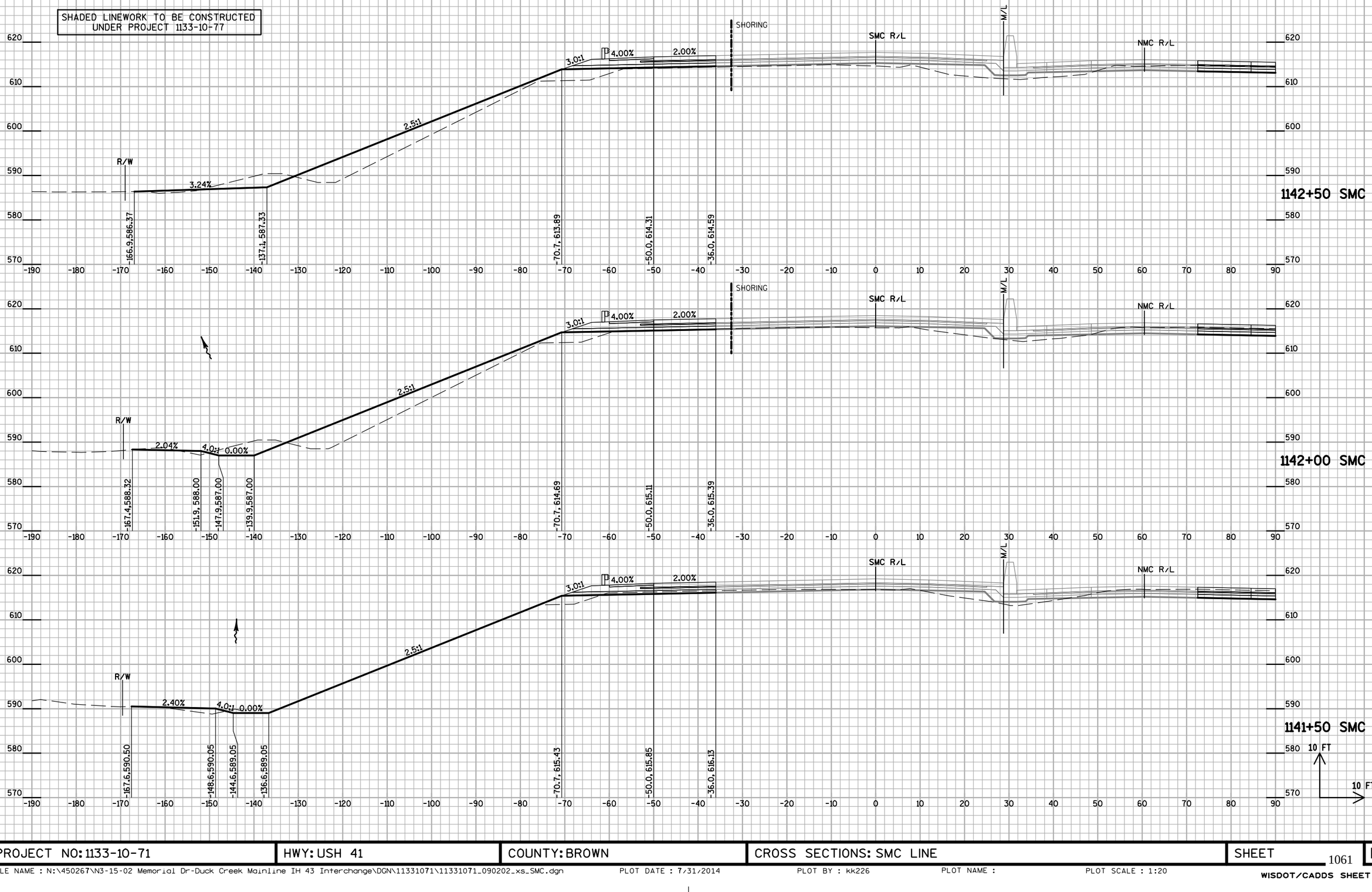
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1060	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1141+50 SMC TO 1142+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



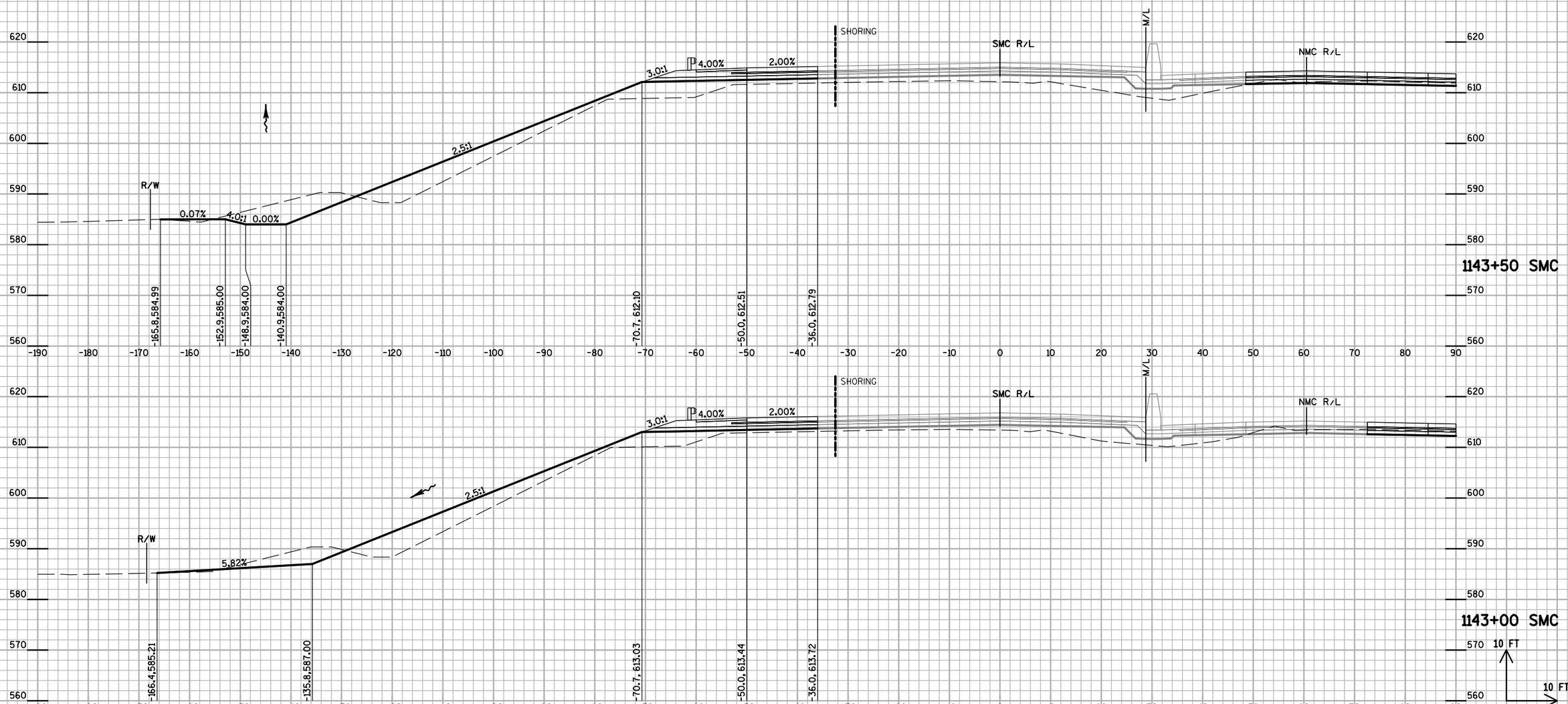
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1061	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1143+00 SMC TO 1143+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



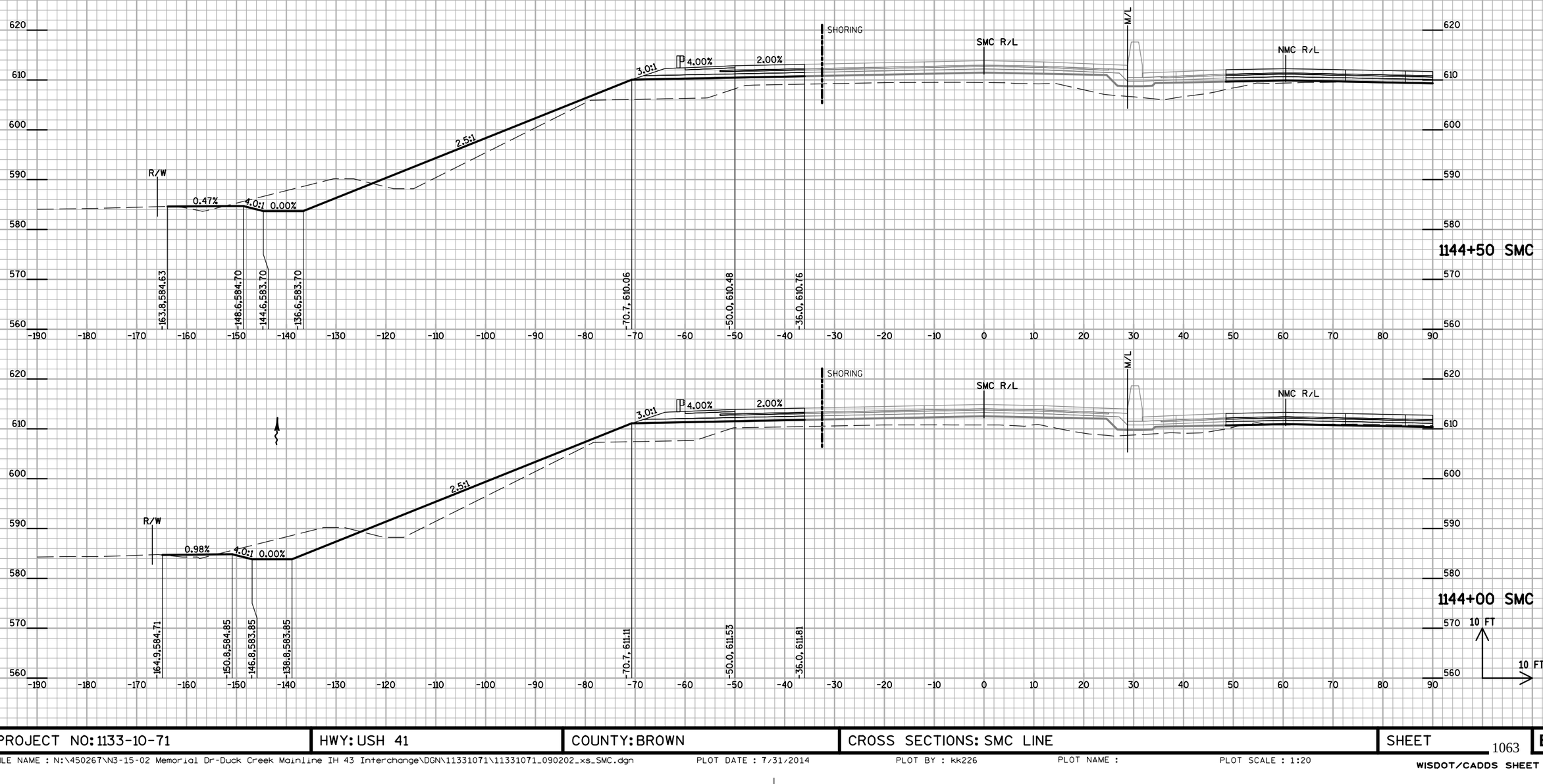
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1062	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1144+00 SMC TO 1144+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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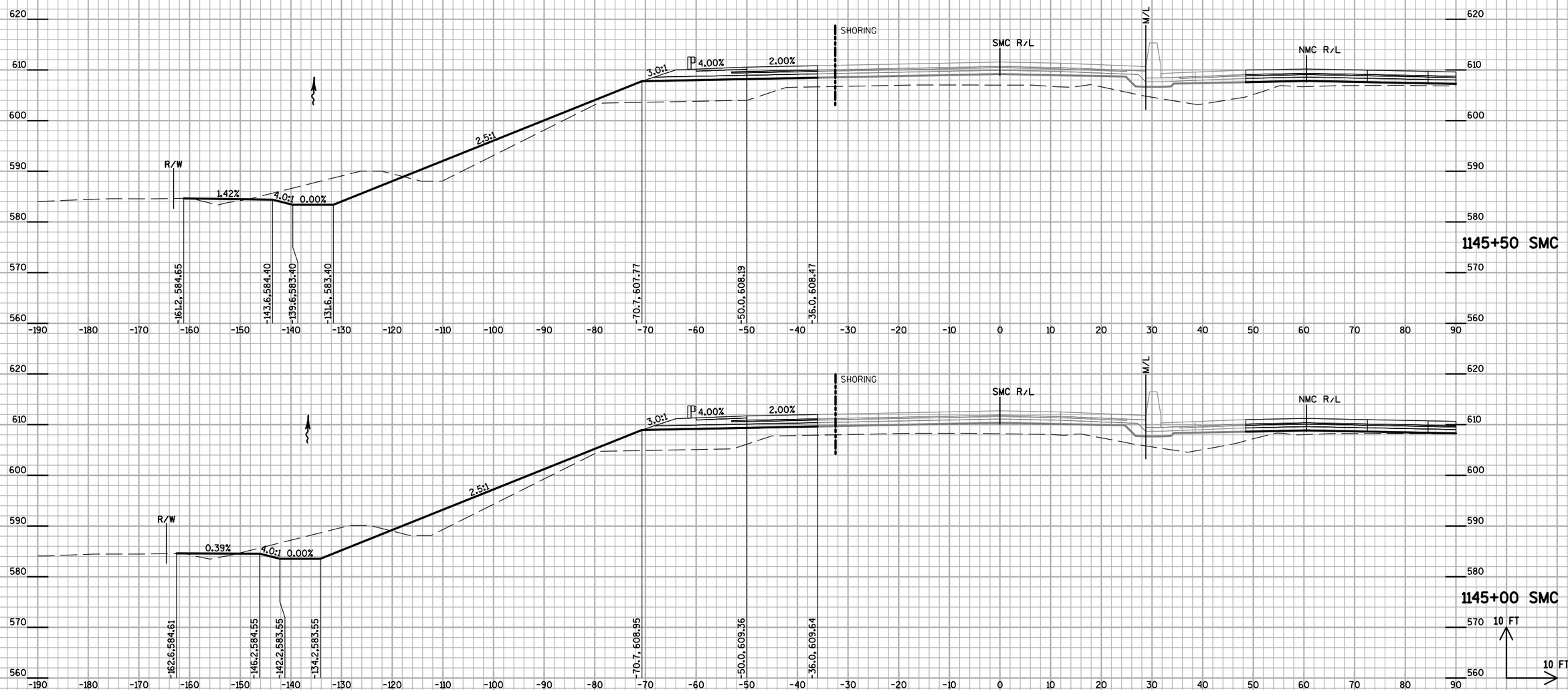
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1145+00 SMC TO 1145+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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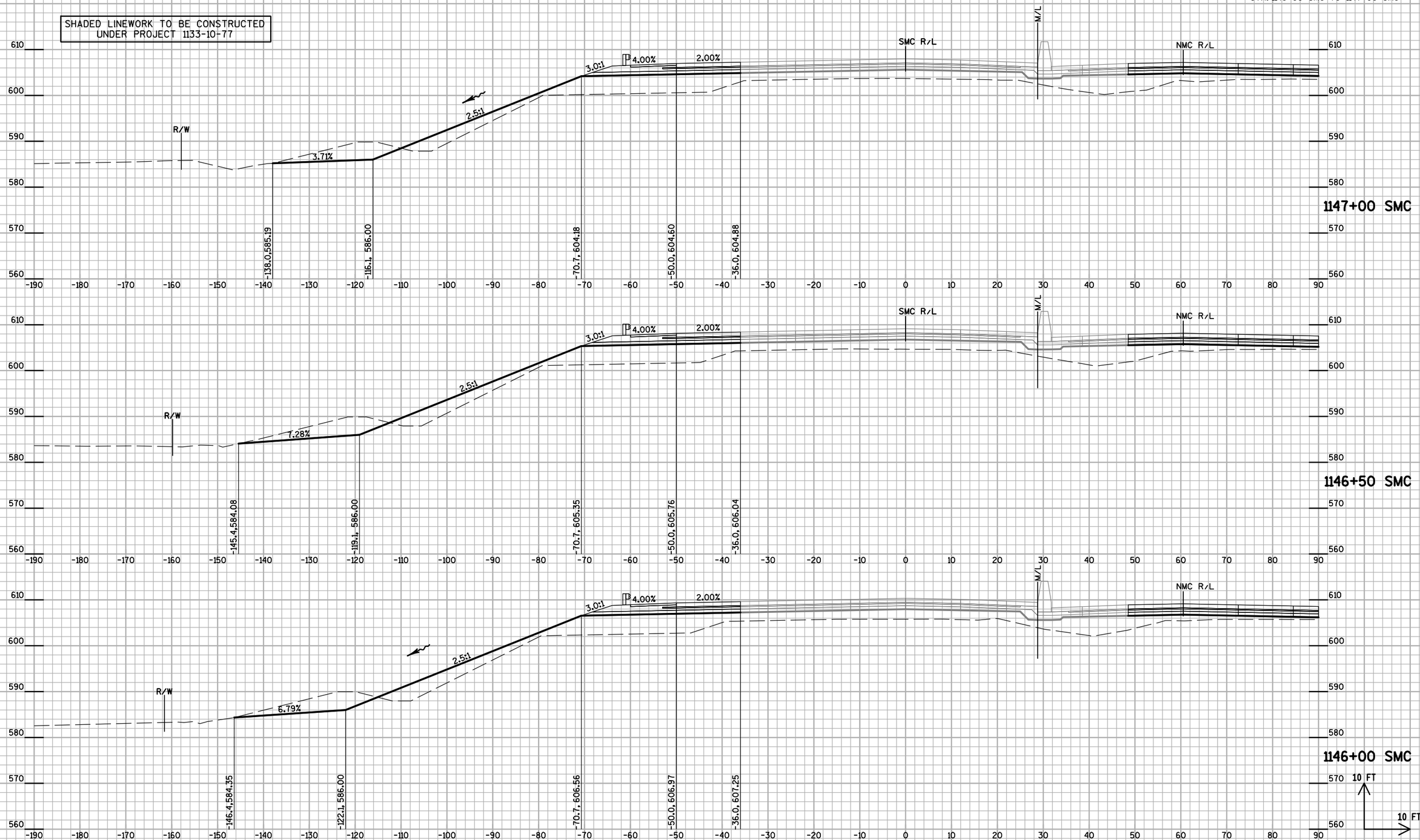
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1146+00 SMC TO 1147+00 SMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



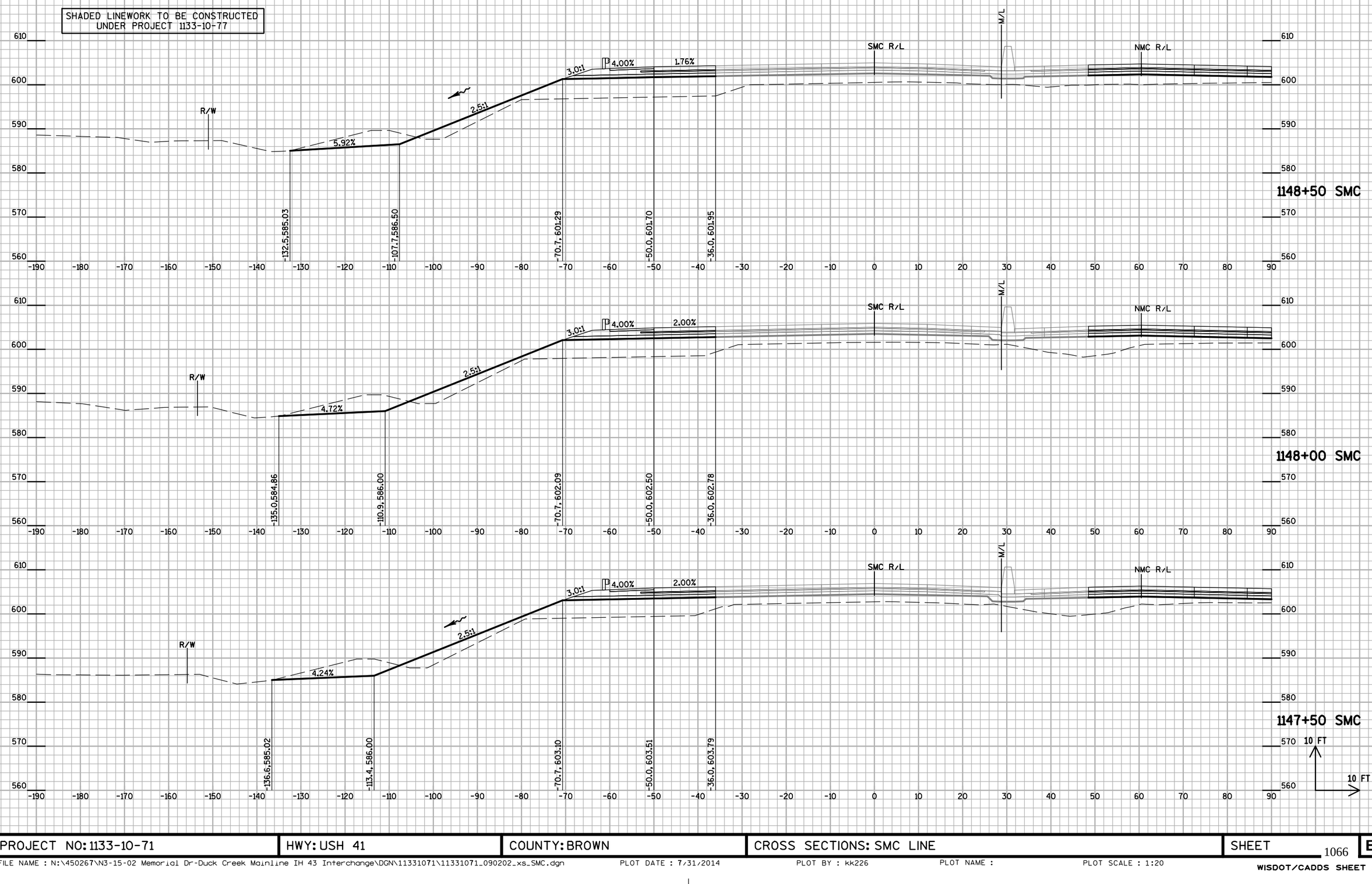
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1147+50 SMC TO 1148+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



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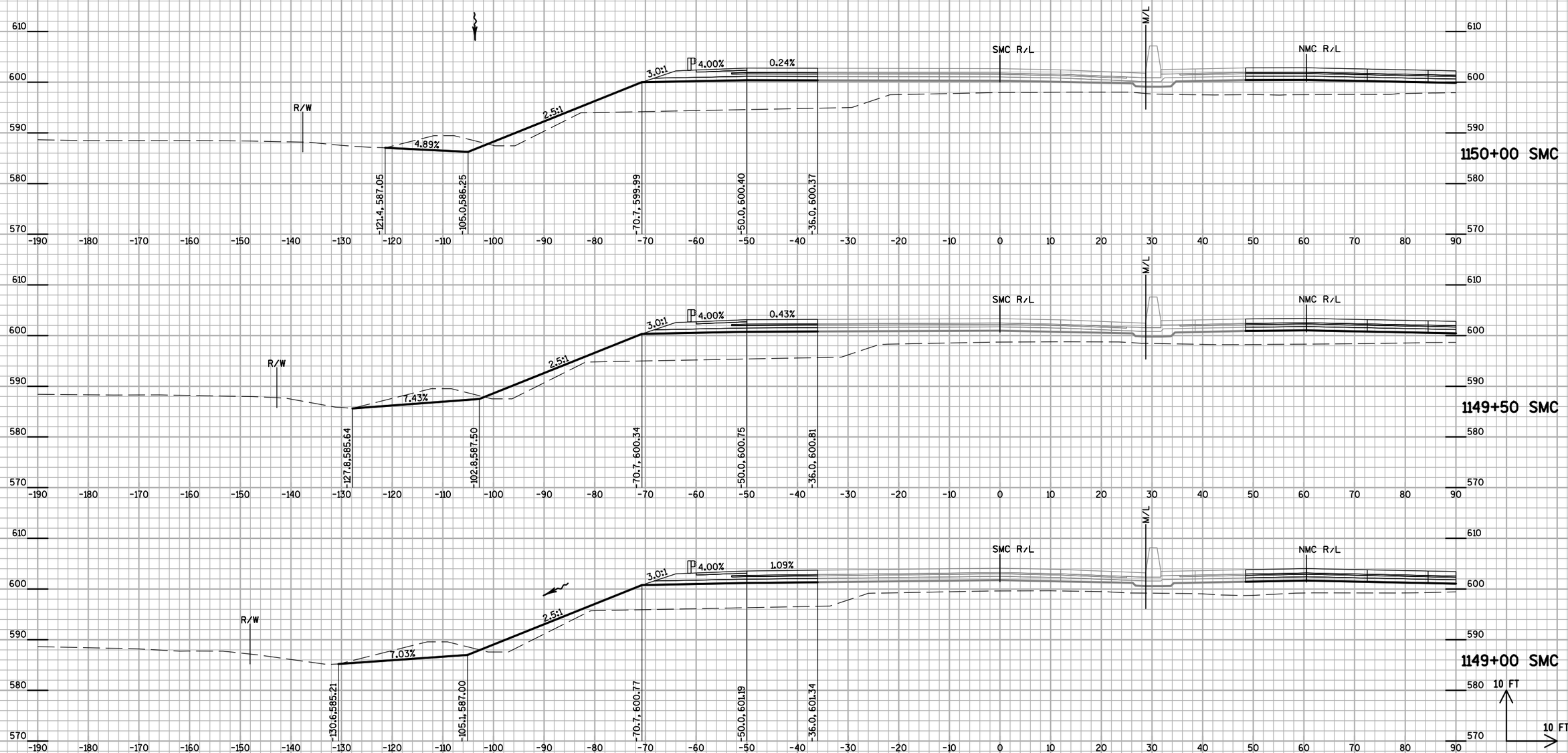
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1149+00 SMC TO 1150+00 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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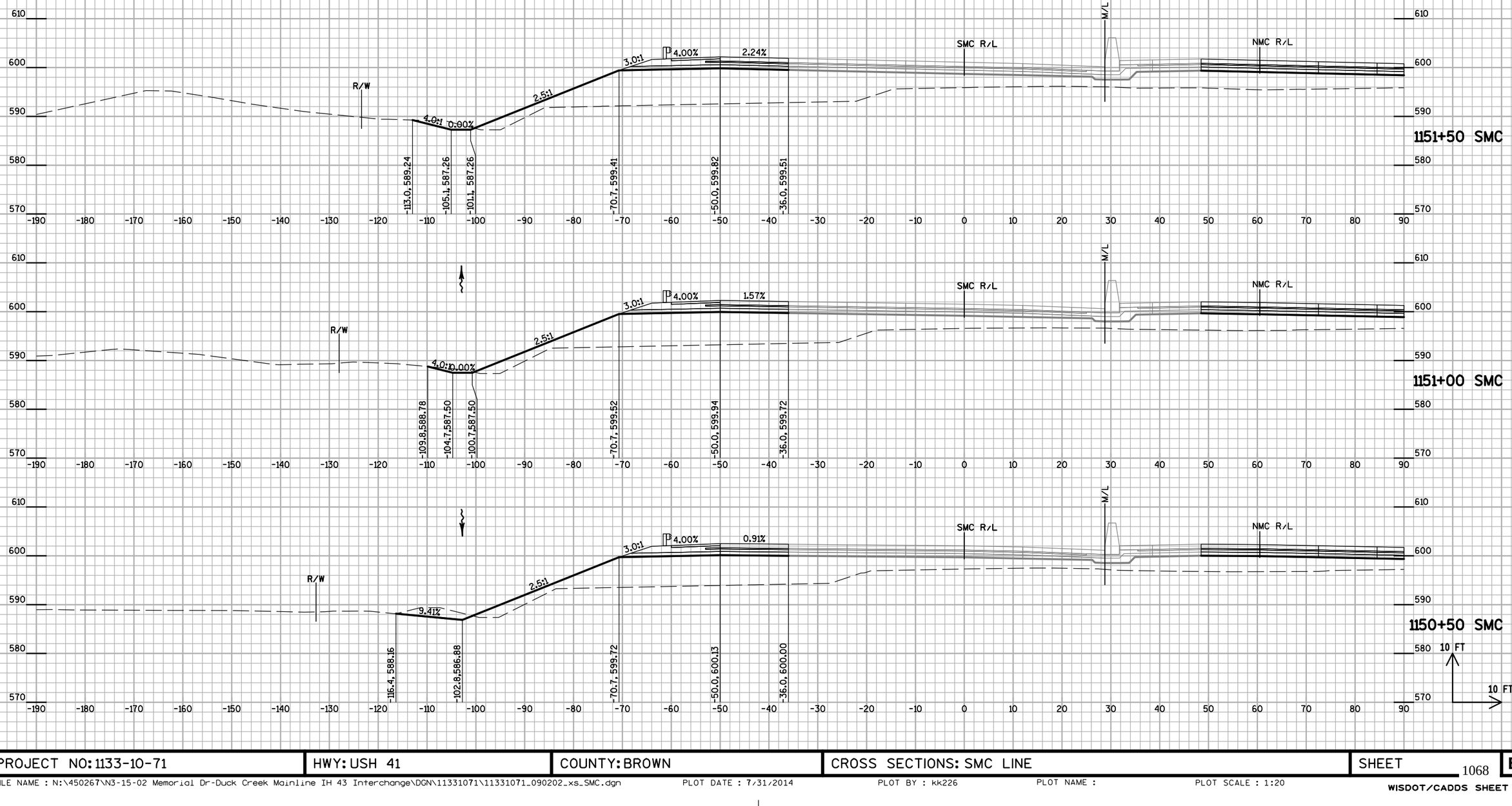
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1067	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1150+50 SMC TO 1151+50 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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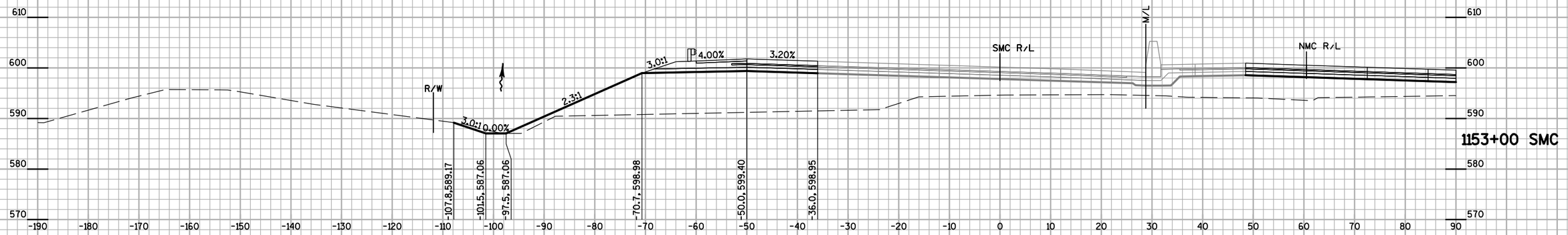
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1068	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

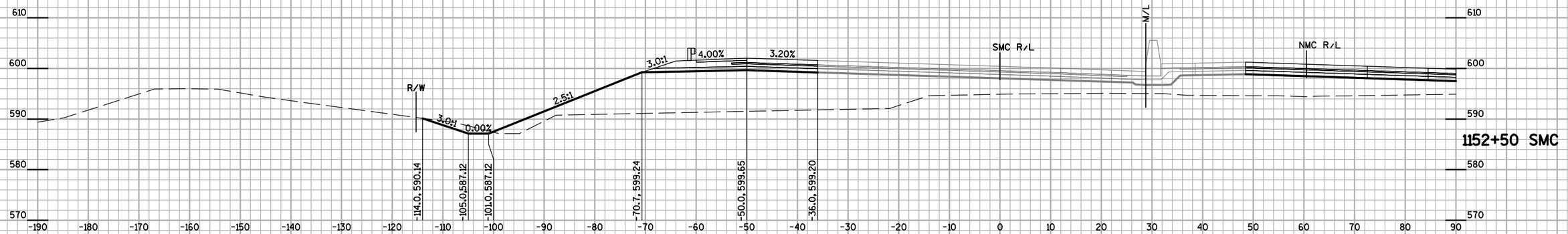
WISDOT/CADDS SHEET 21

STA. 1152+00 SMC TO 1153+00 SMC

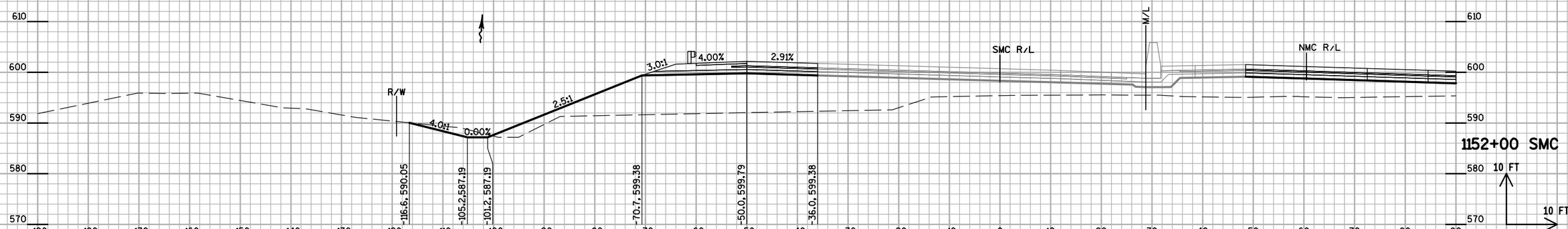
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1153+00 SMC



1152+50 SMC



1152+00 SMC

9

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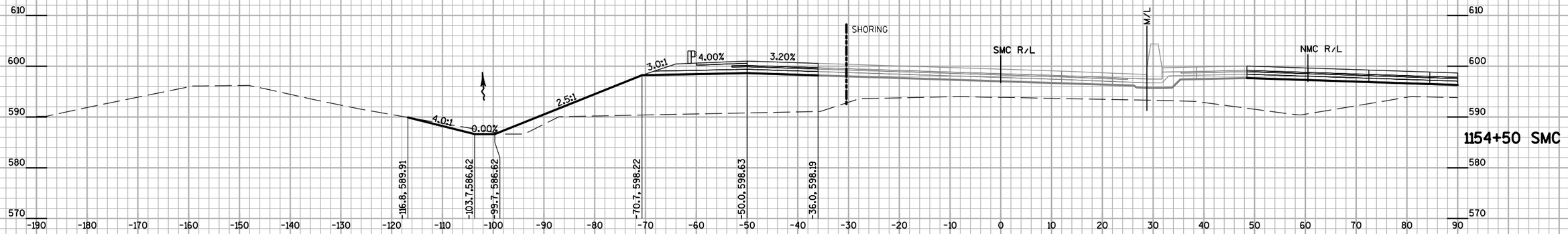
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1069	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

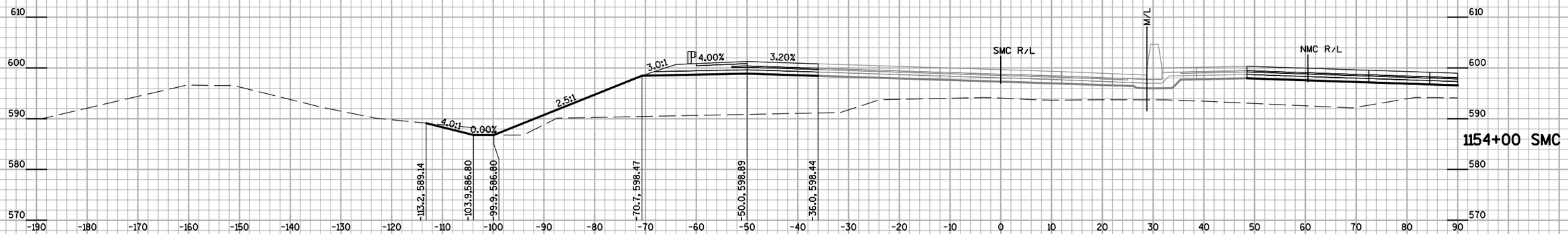
WISDOT/CADDS SHEET 21

STA. 1153+50 SMC TO 1154+50 SMC

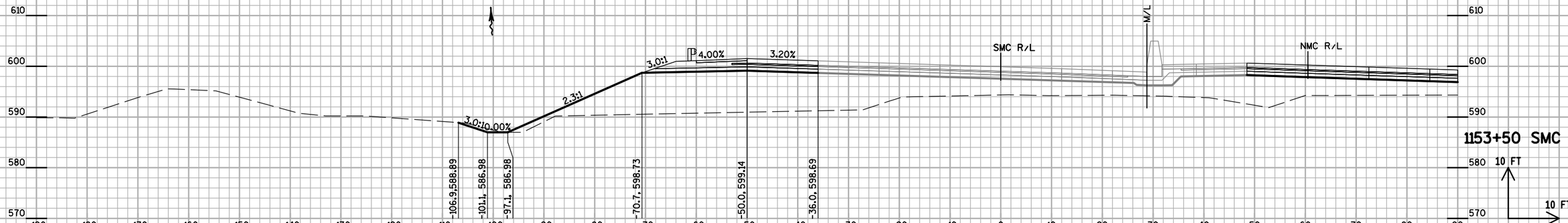
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1154+50 SMC



1154+00 SMC



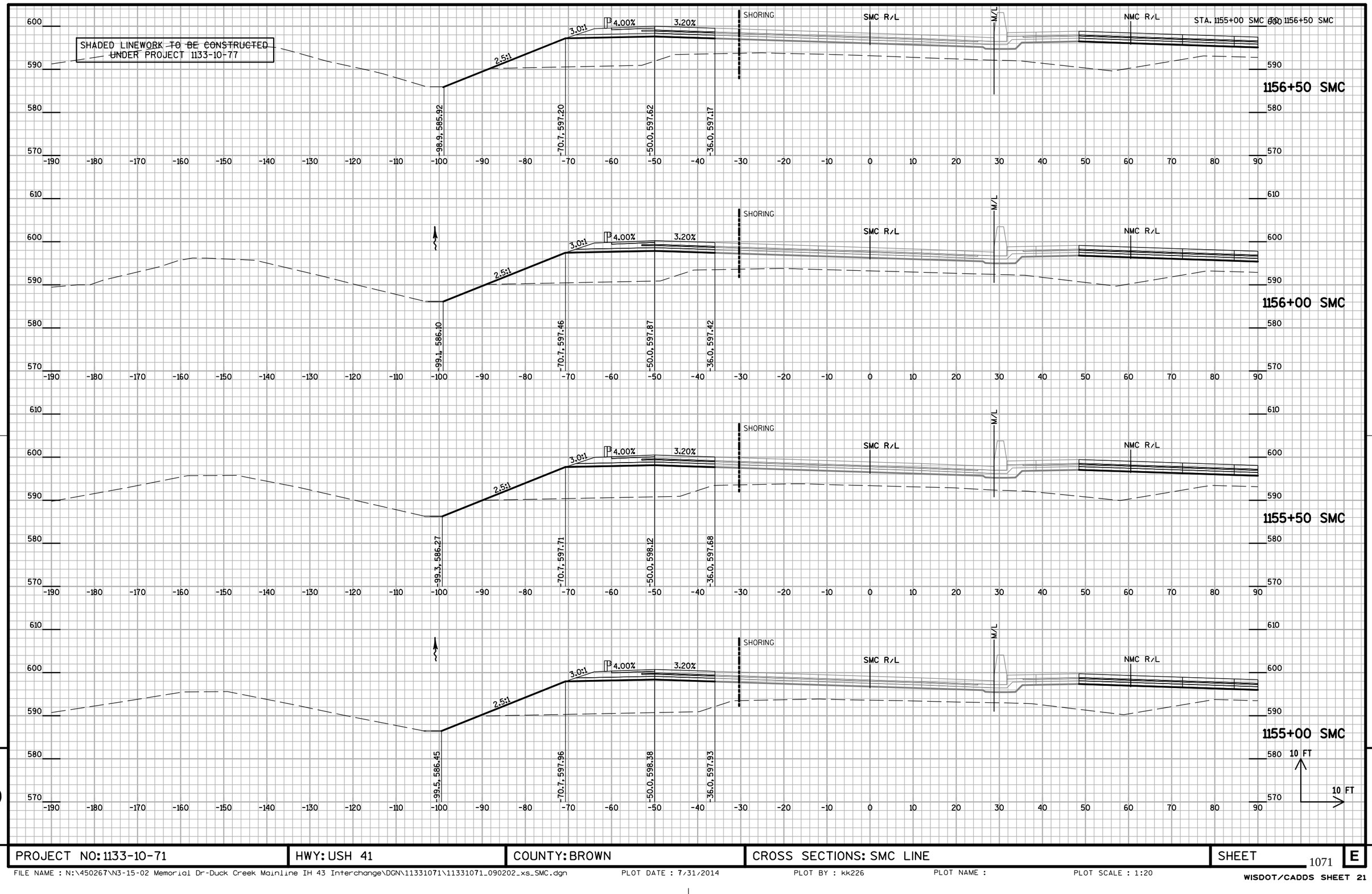
1153+50 SMC

9 9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1070	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



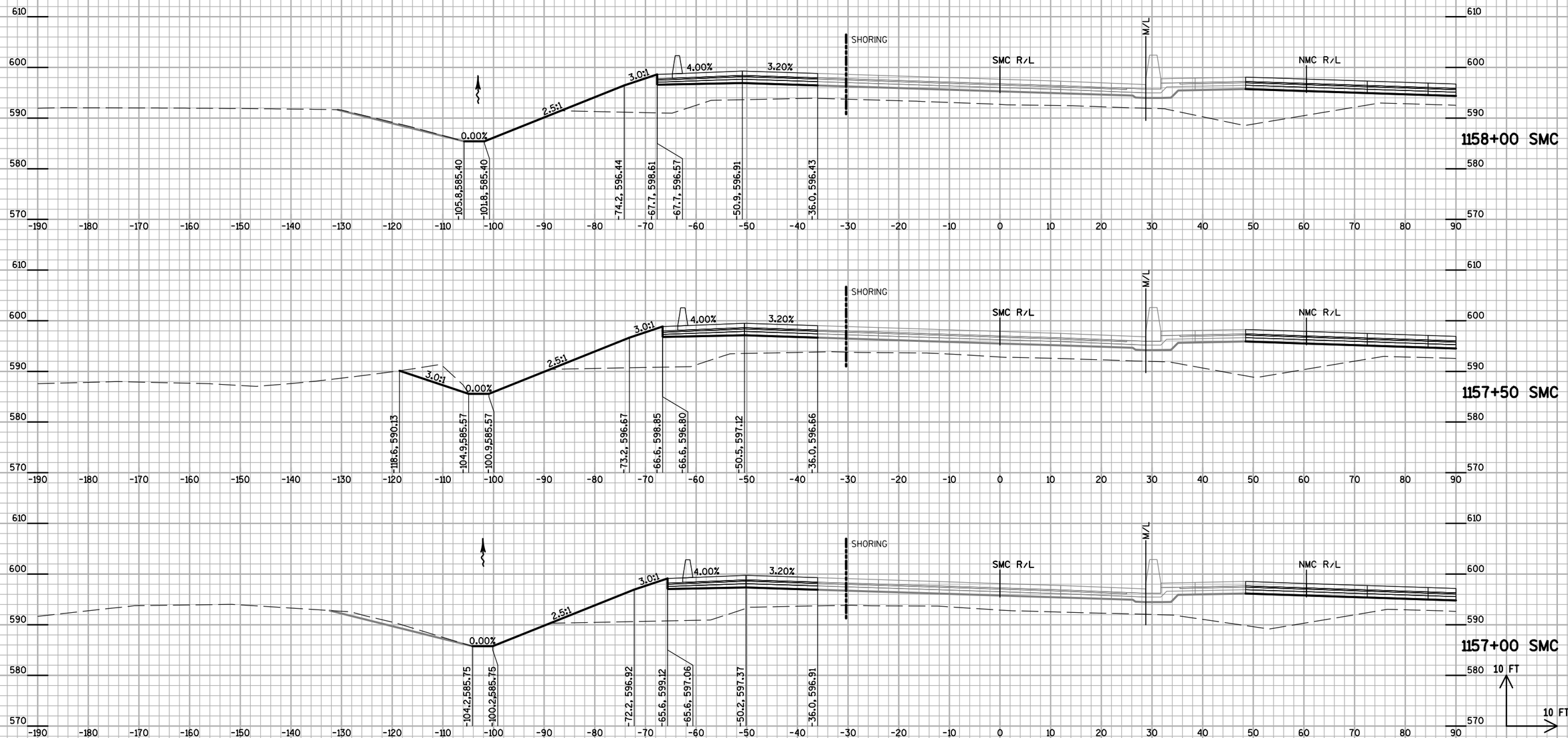
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1071	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1157+00 SMC TO 1158+00 SMC

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



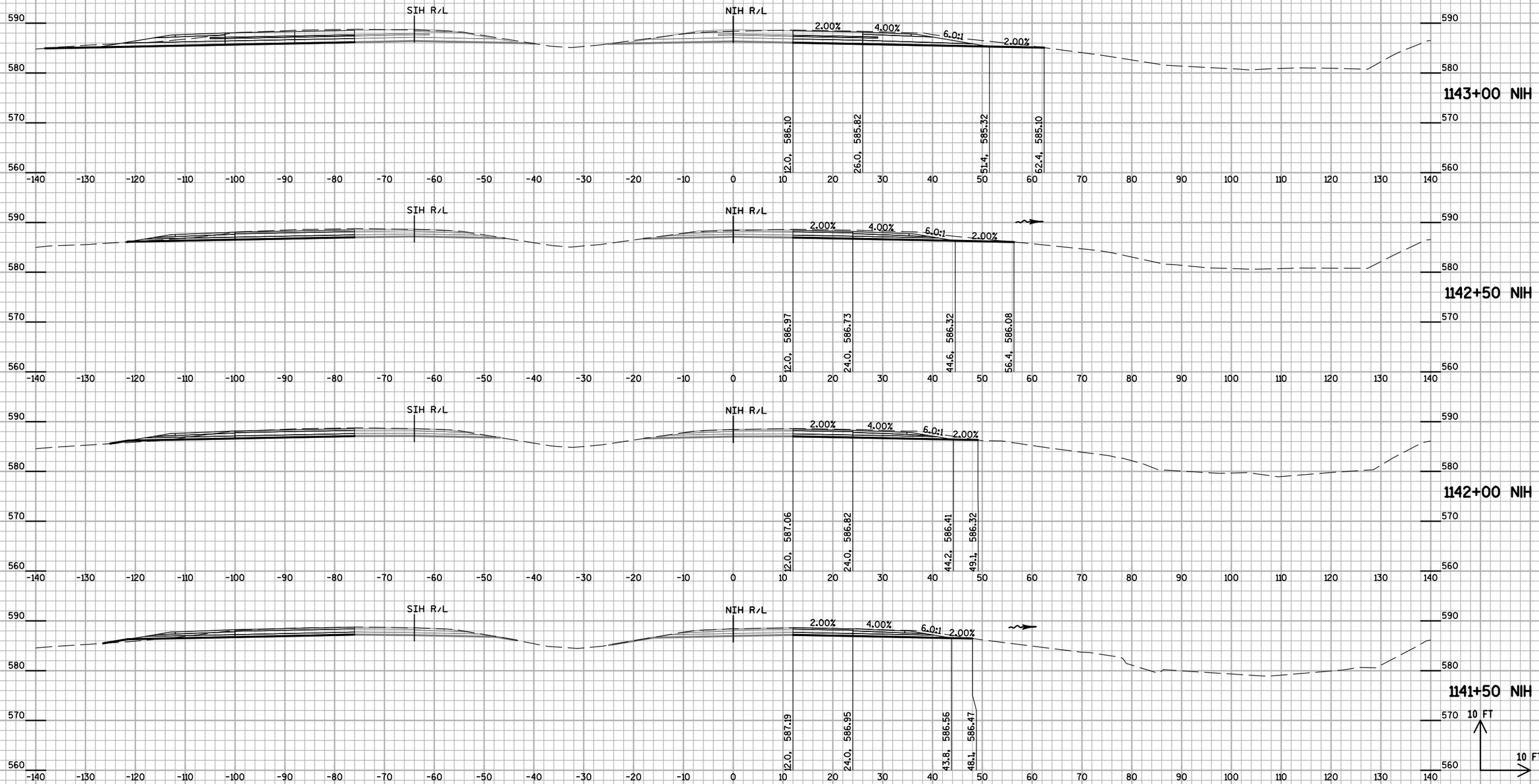
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SMC LINE	SHEET 1072	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090202_xs_SMC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1141+50 NIH TO 1143+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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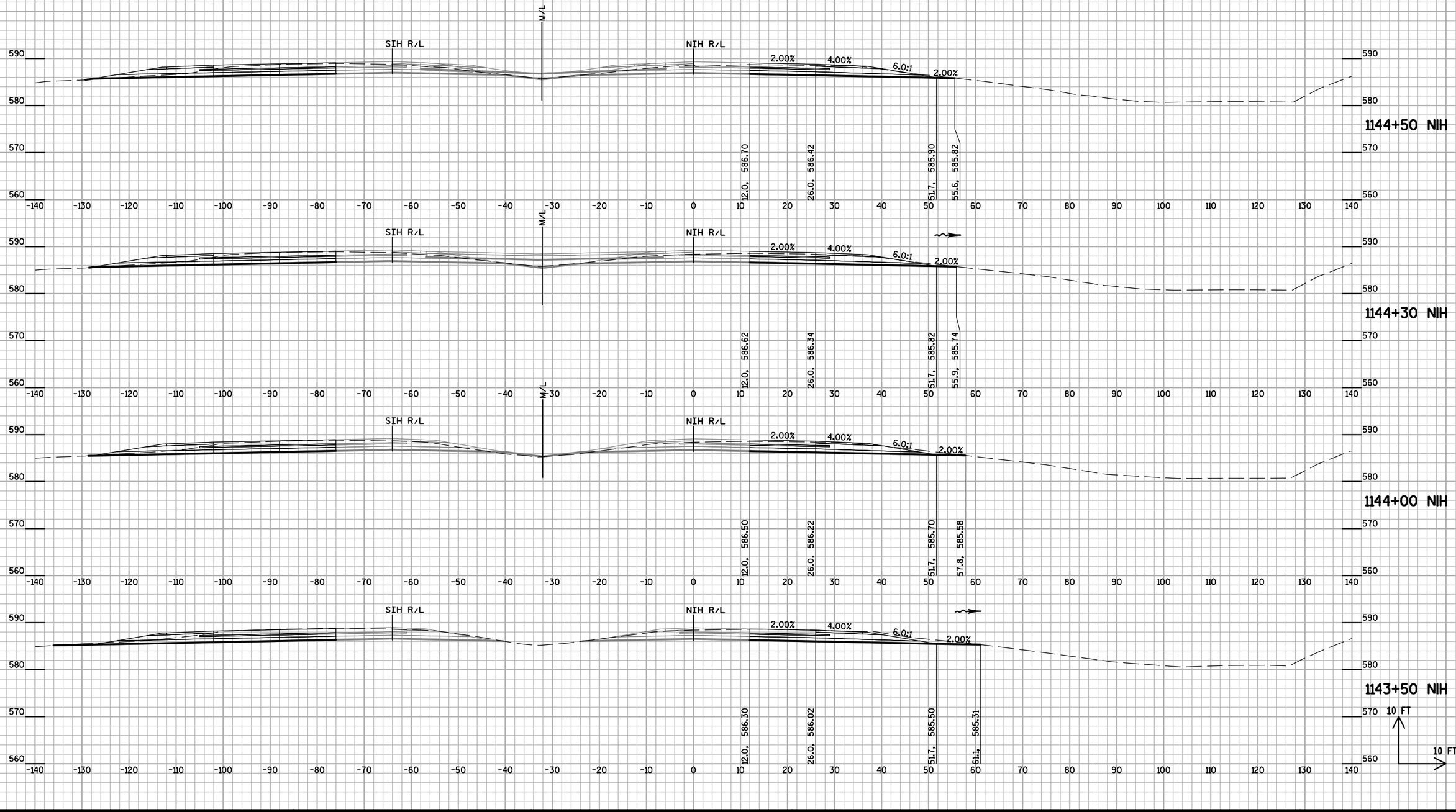
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1143+50 NIH TO 1144+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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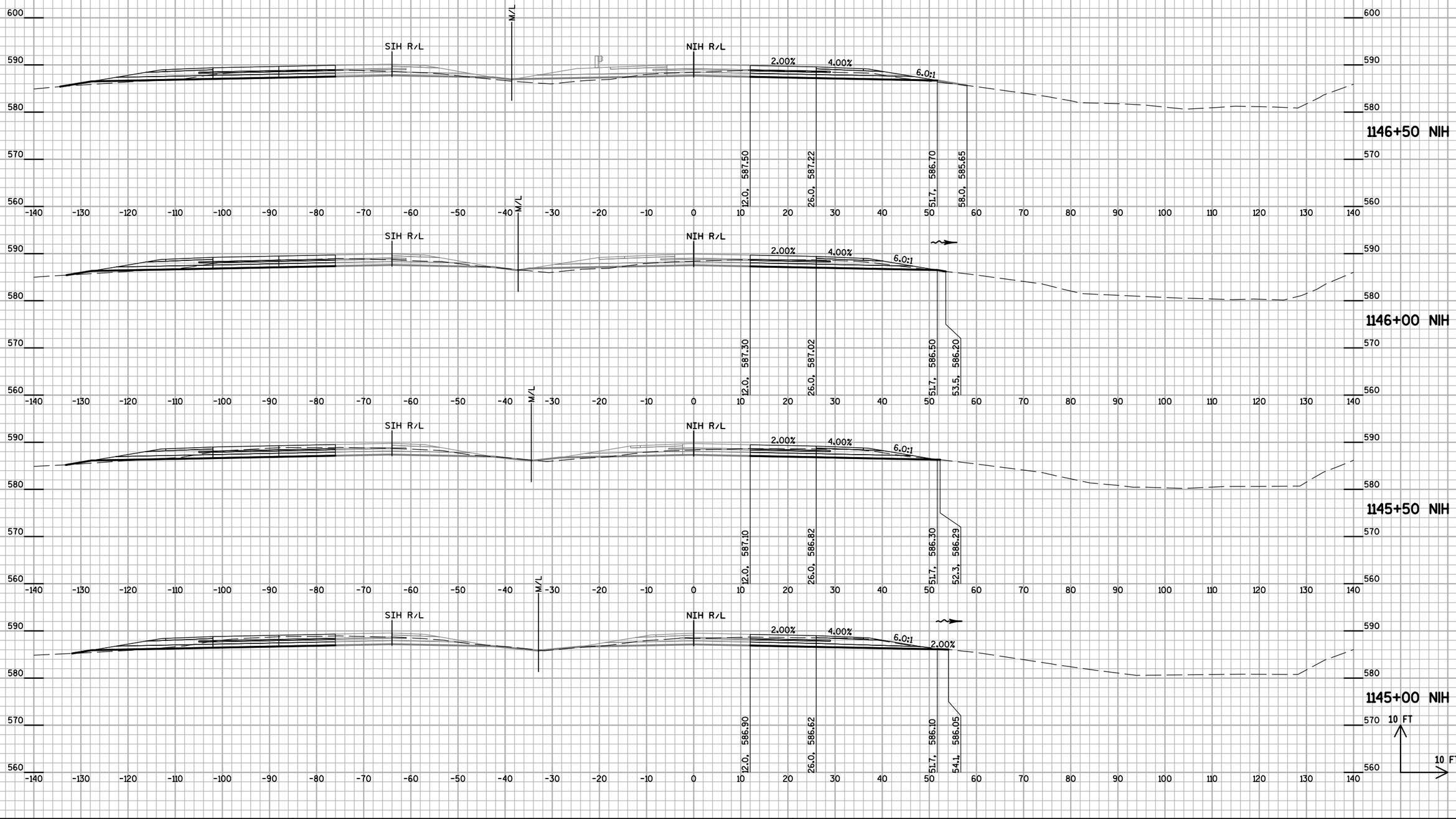
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1145+00 NIH TO 1146+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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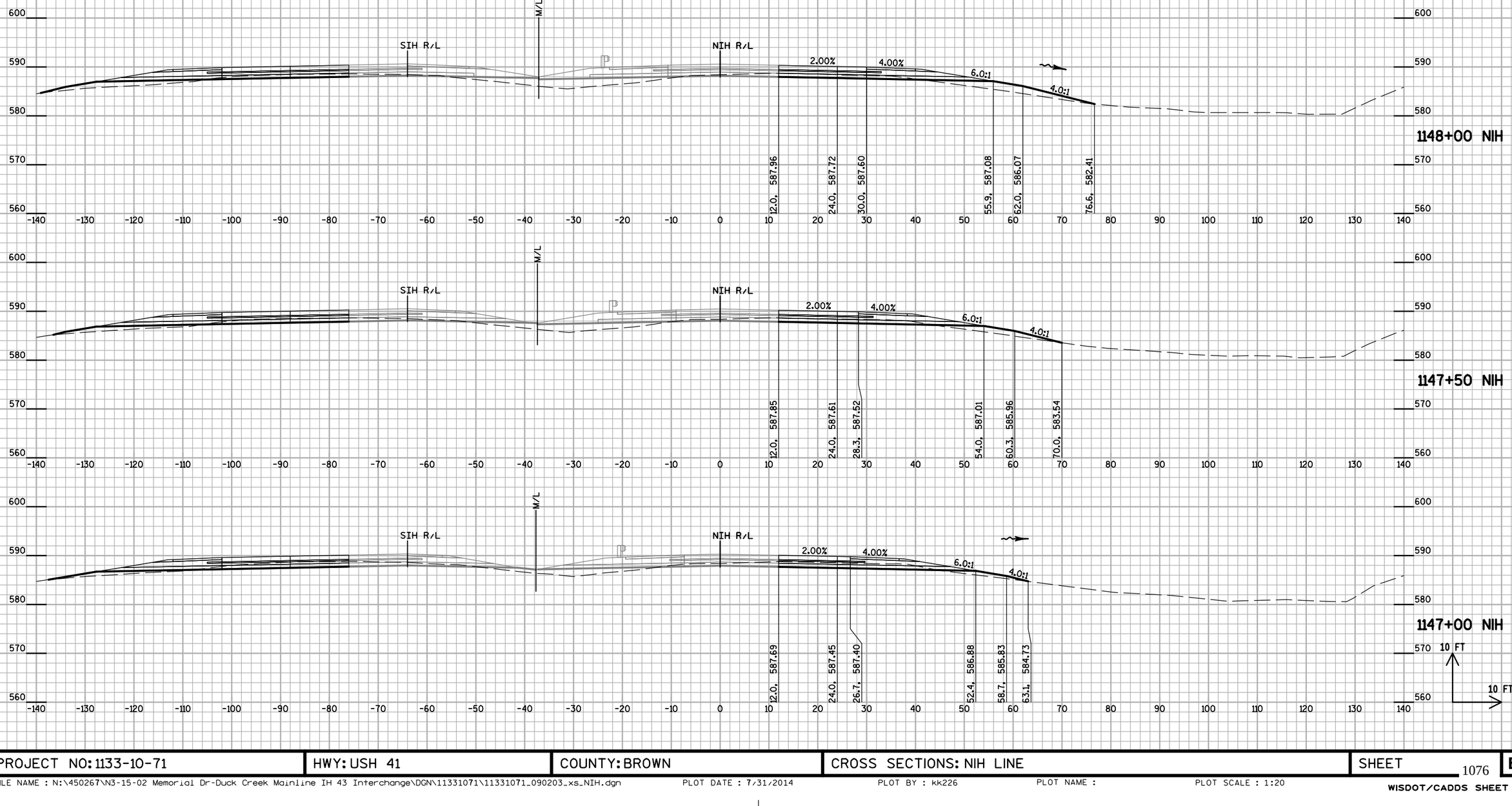
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1147+00 NIH TO 1148+00 NIH

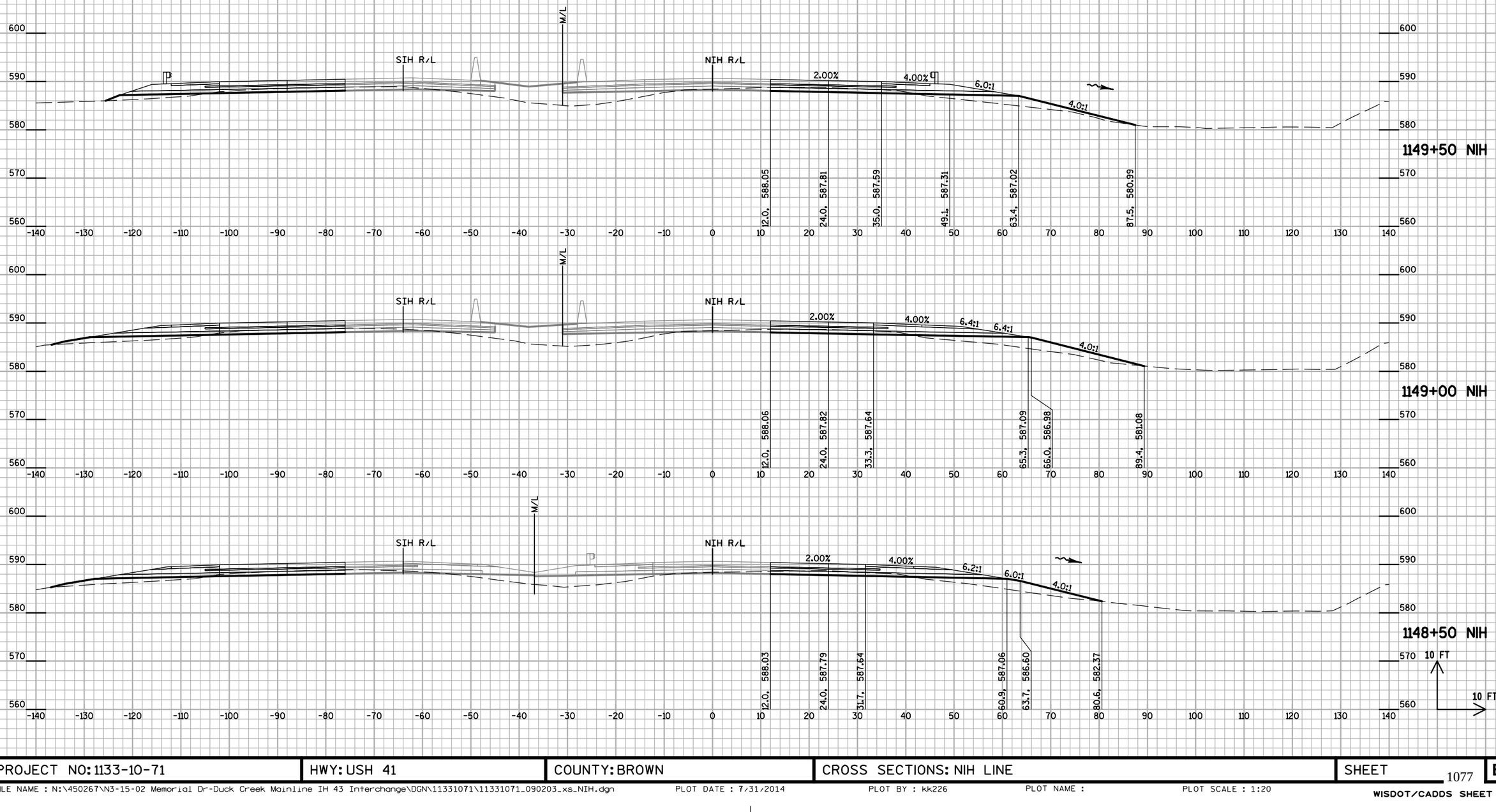
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1076	E

STA. 1148+50 NIH TO 1149+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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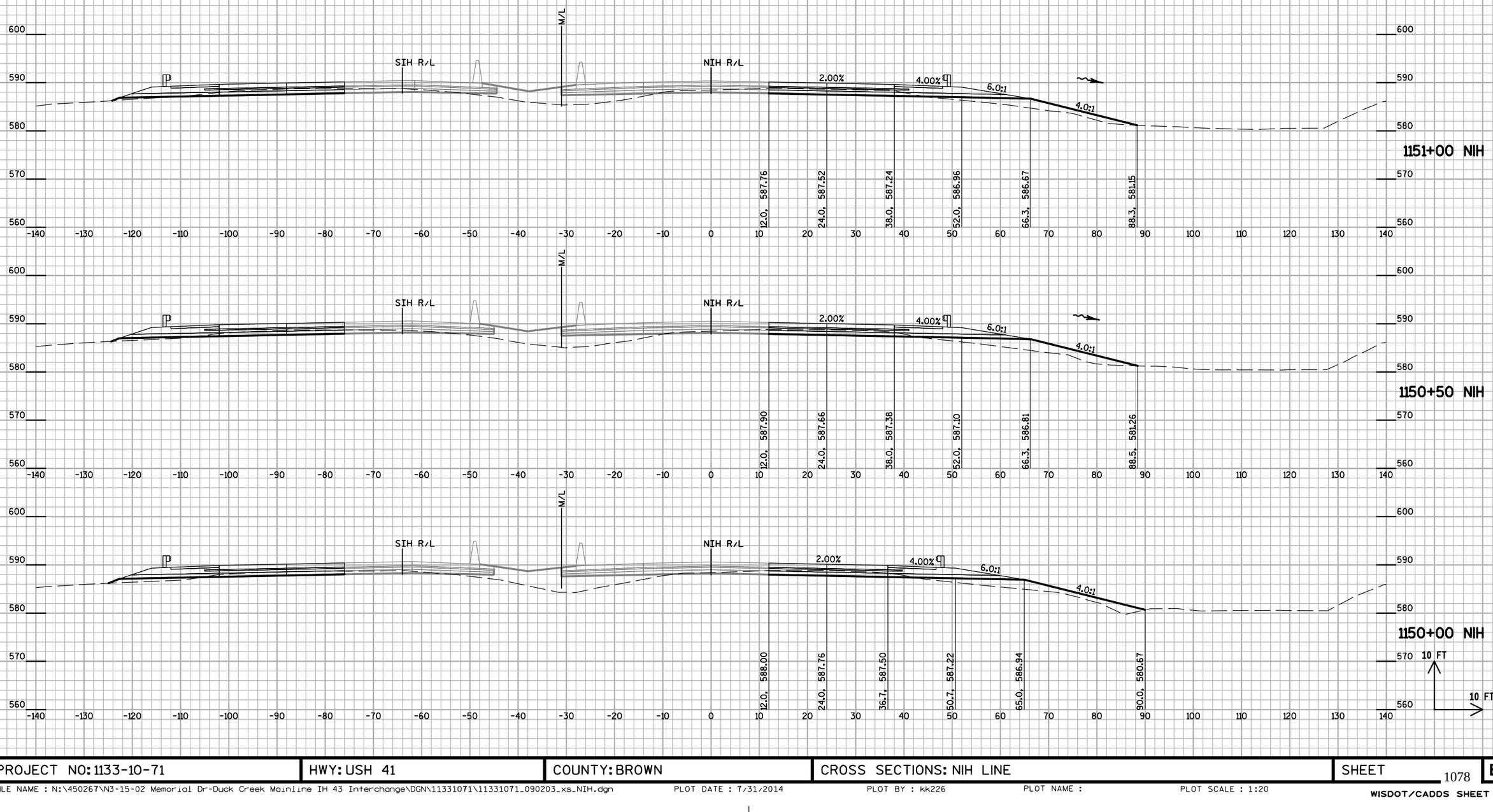
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1077	E

STA. 1150+00 NIH TO 1151+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1078	E

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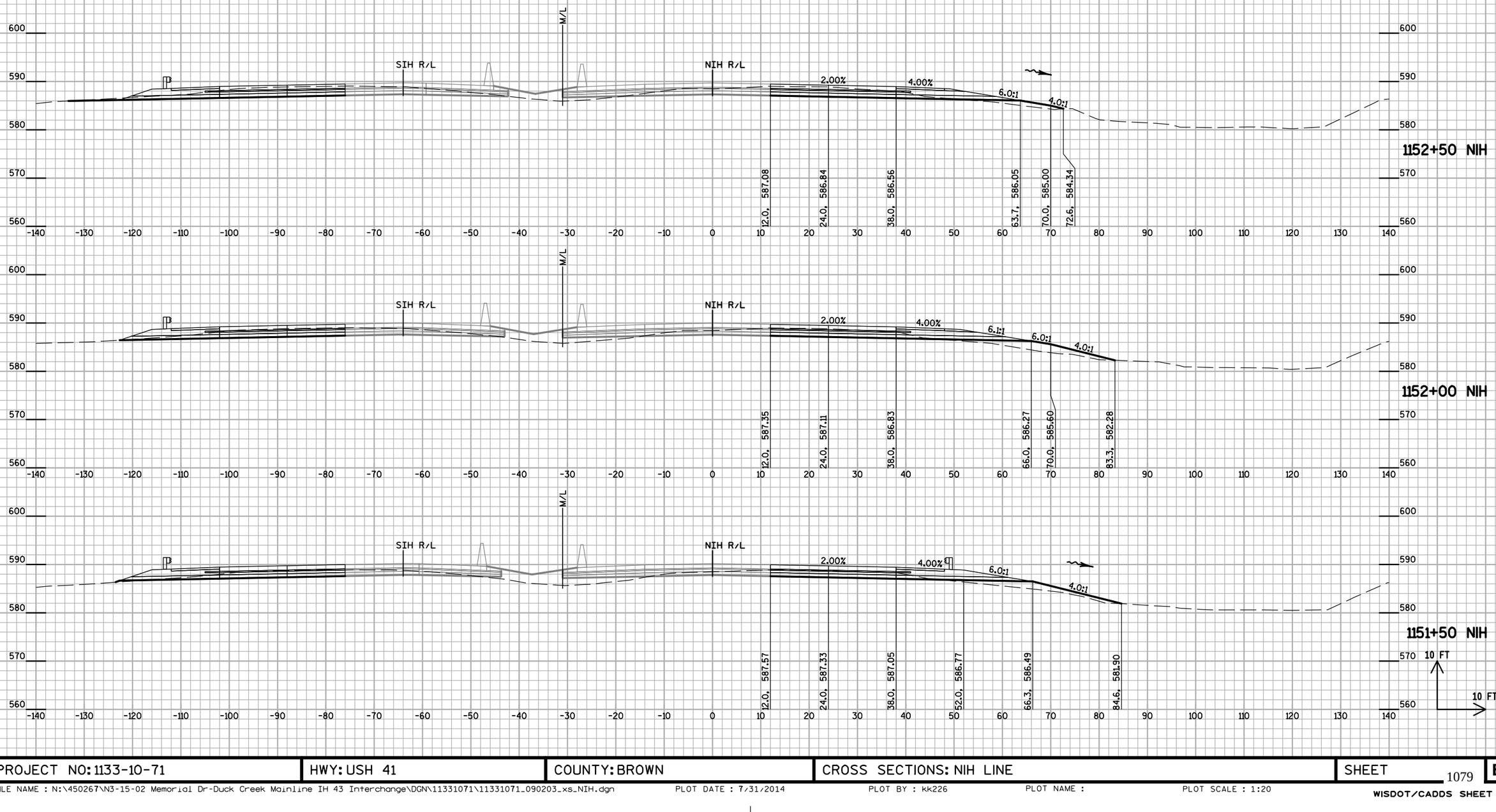
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1151+50 NIH TO 1152+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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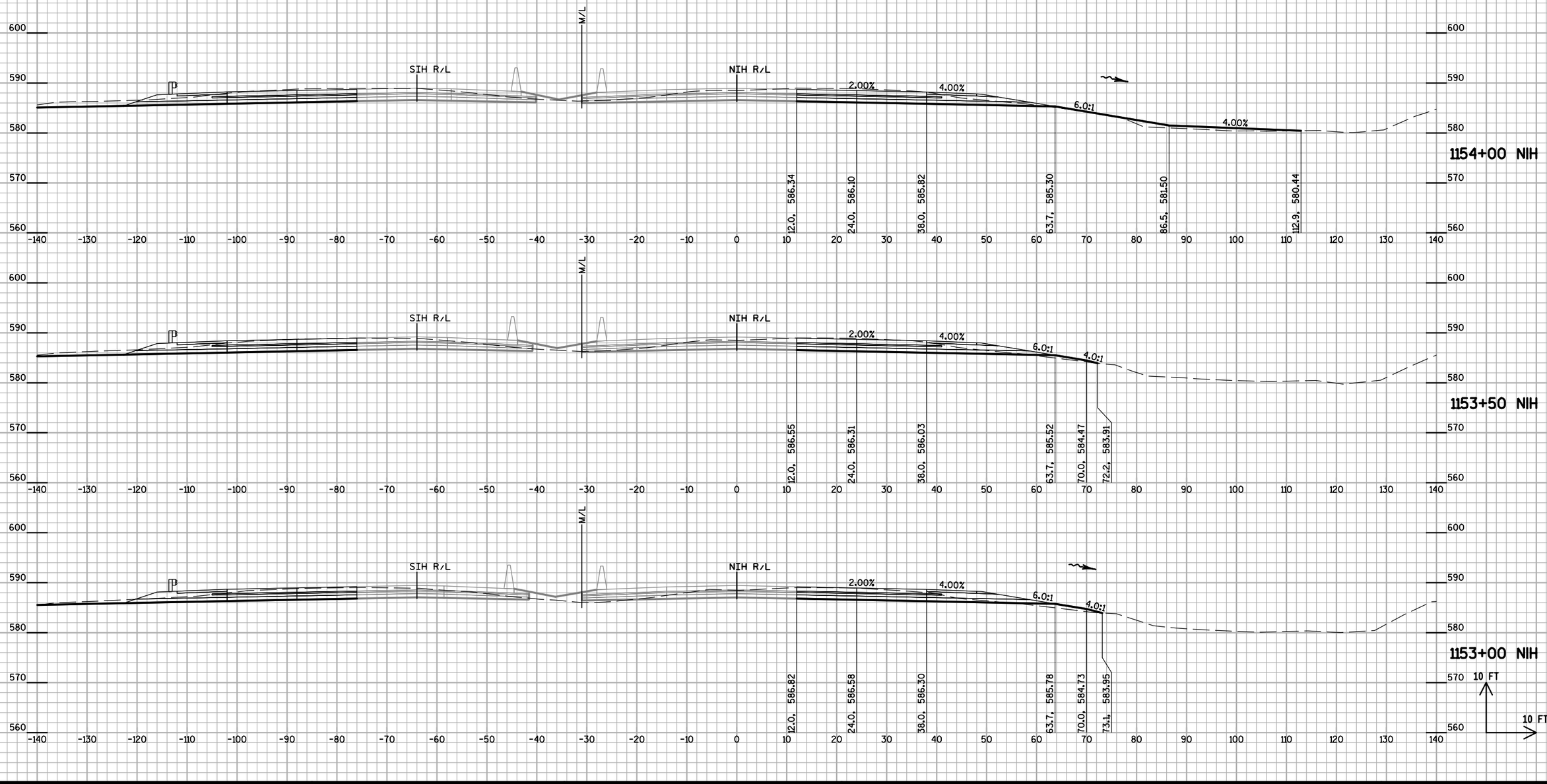
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1079	E

STA. 1153+00 NIH TO 1154+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



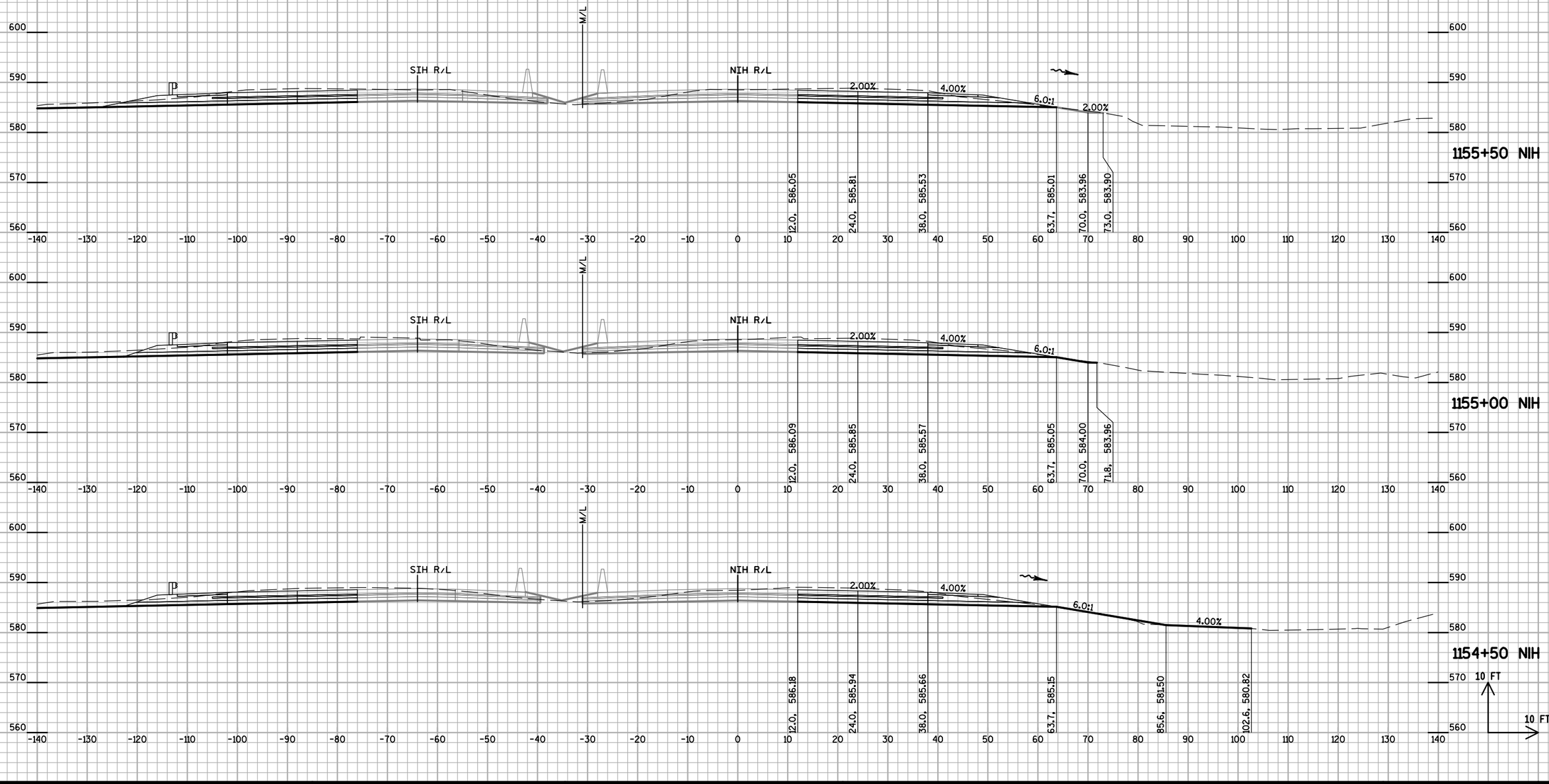
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1080	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1154+50 NIH TO 1155+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



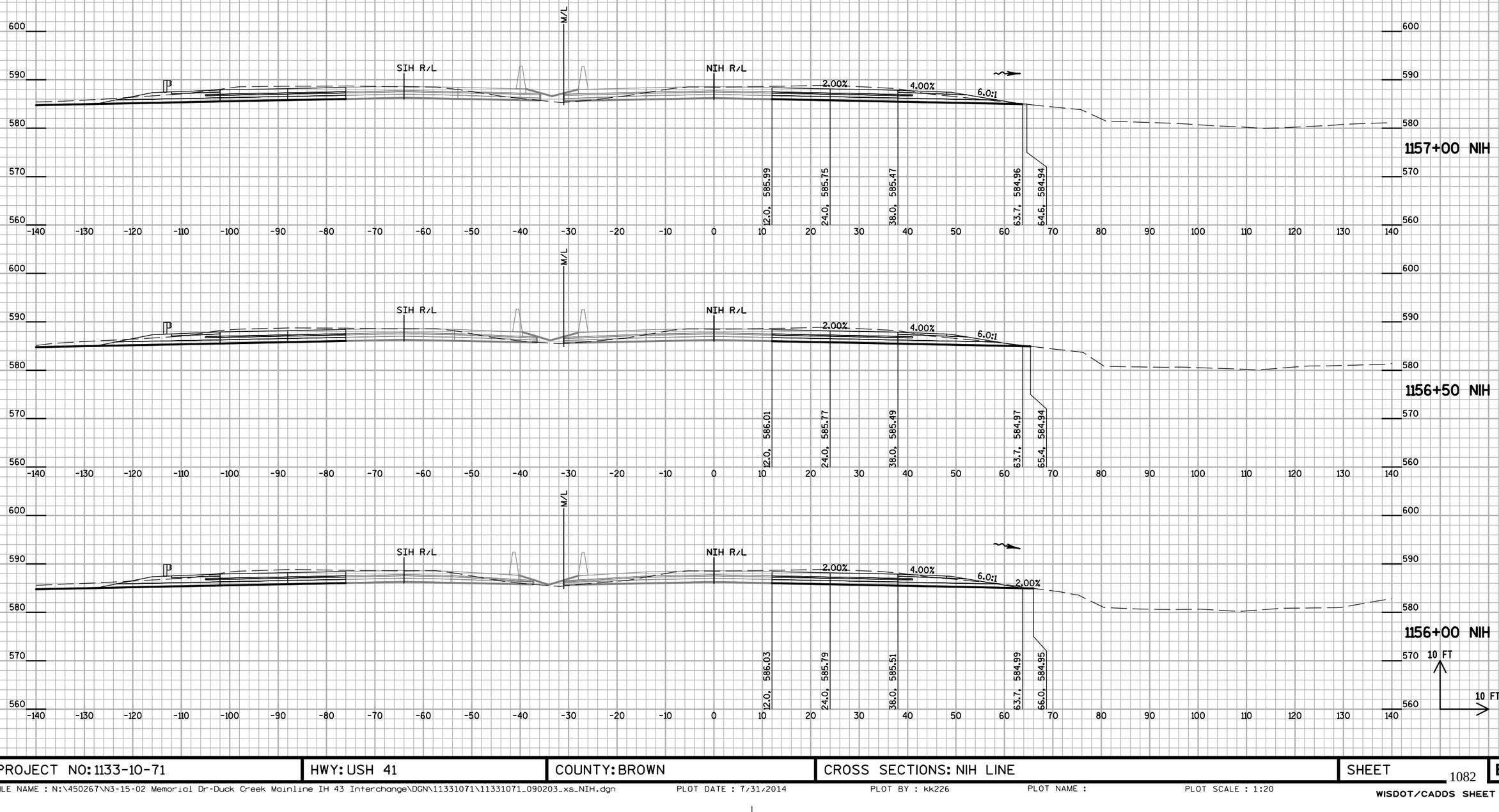
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1081	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1156+00 NIH TO 1157+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



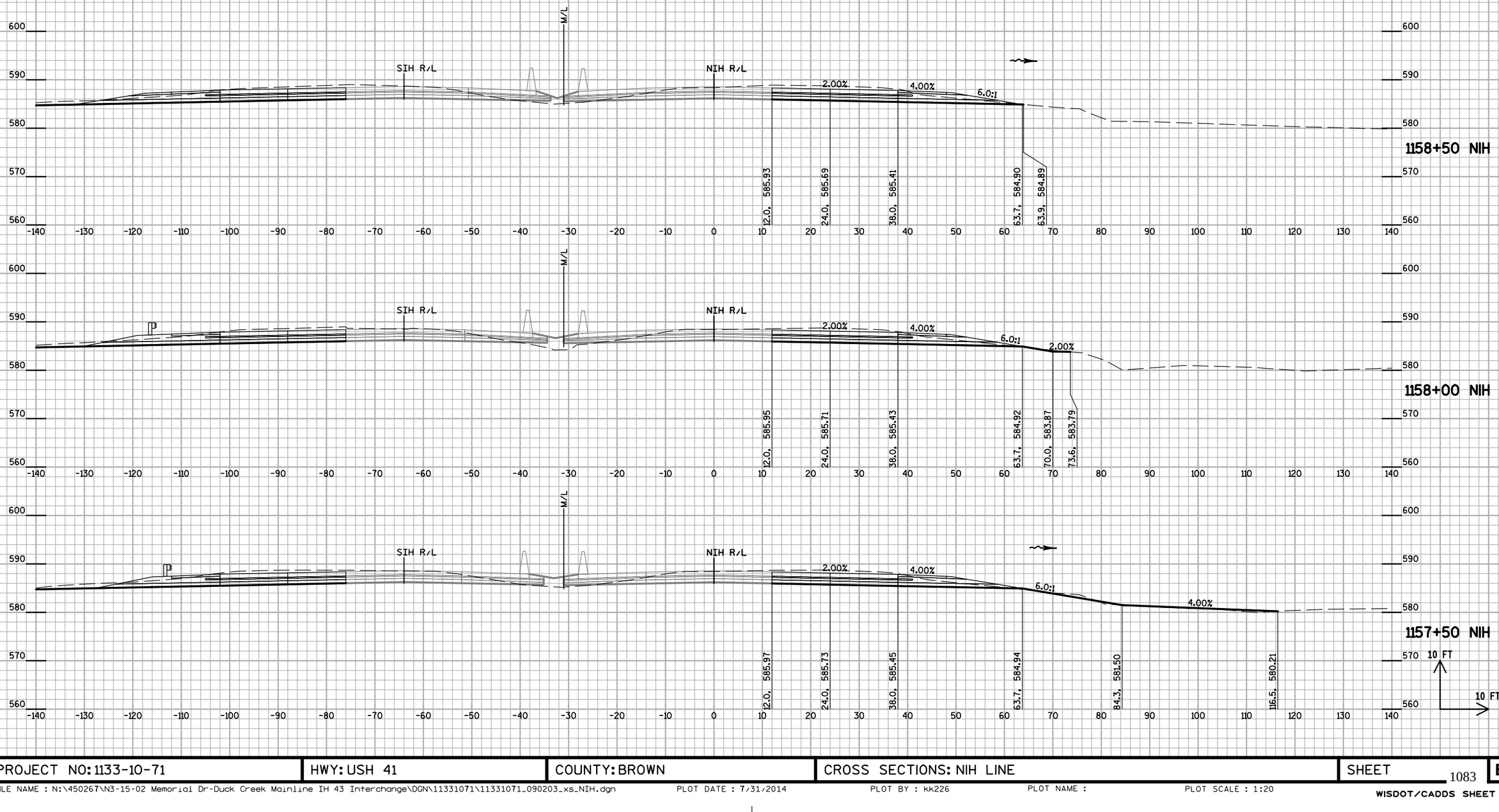
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1082	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1157+50 NIH TO 1158+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



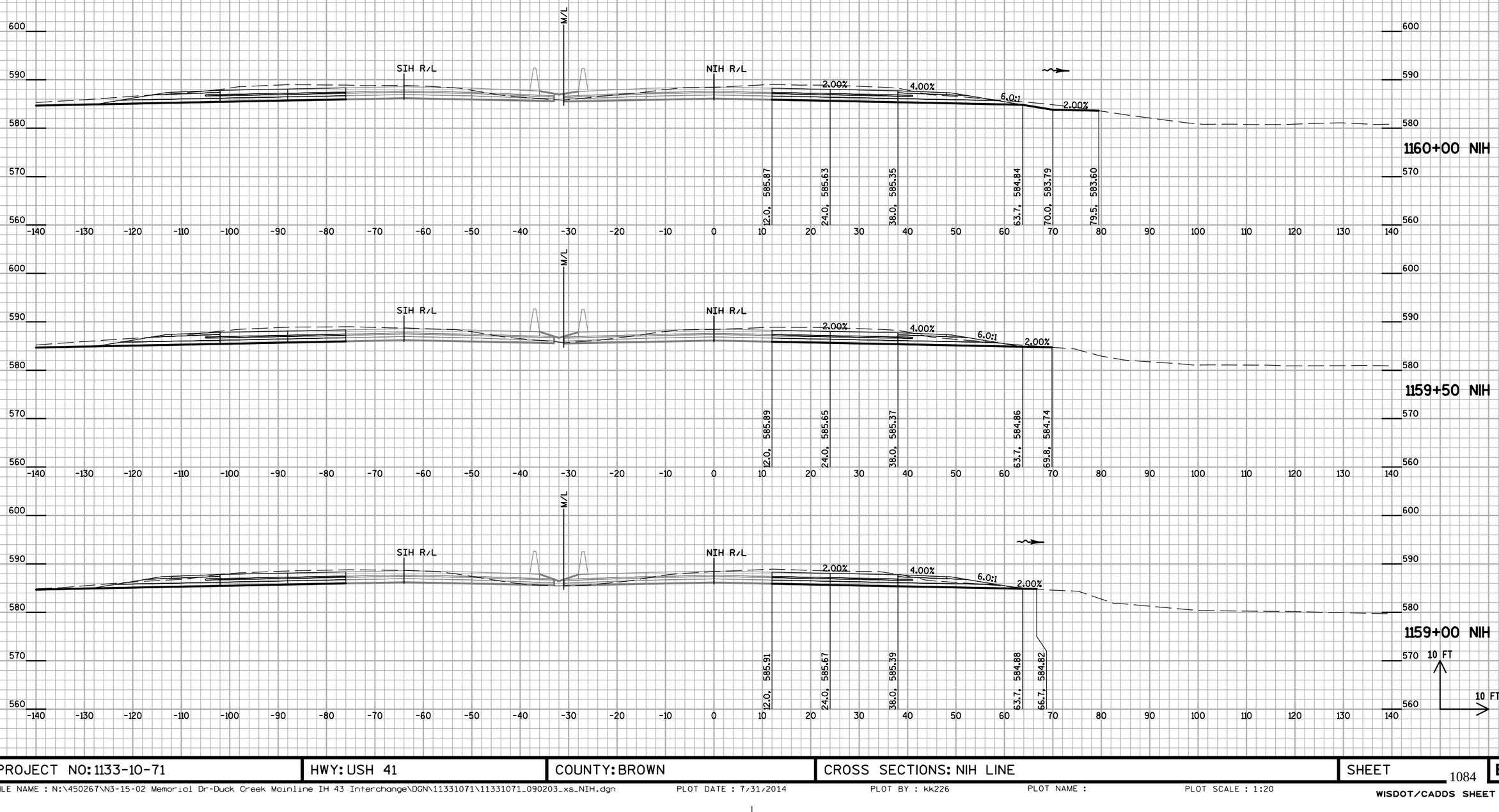
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1083	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1159+00 NIH TO 1160+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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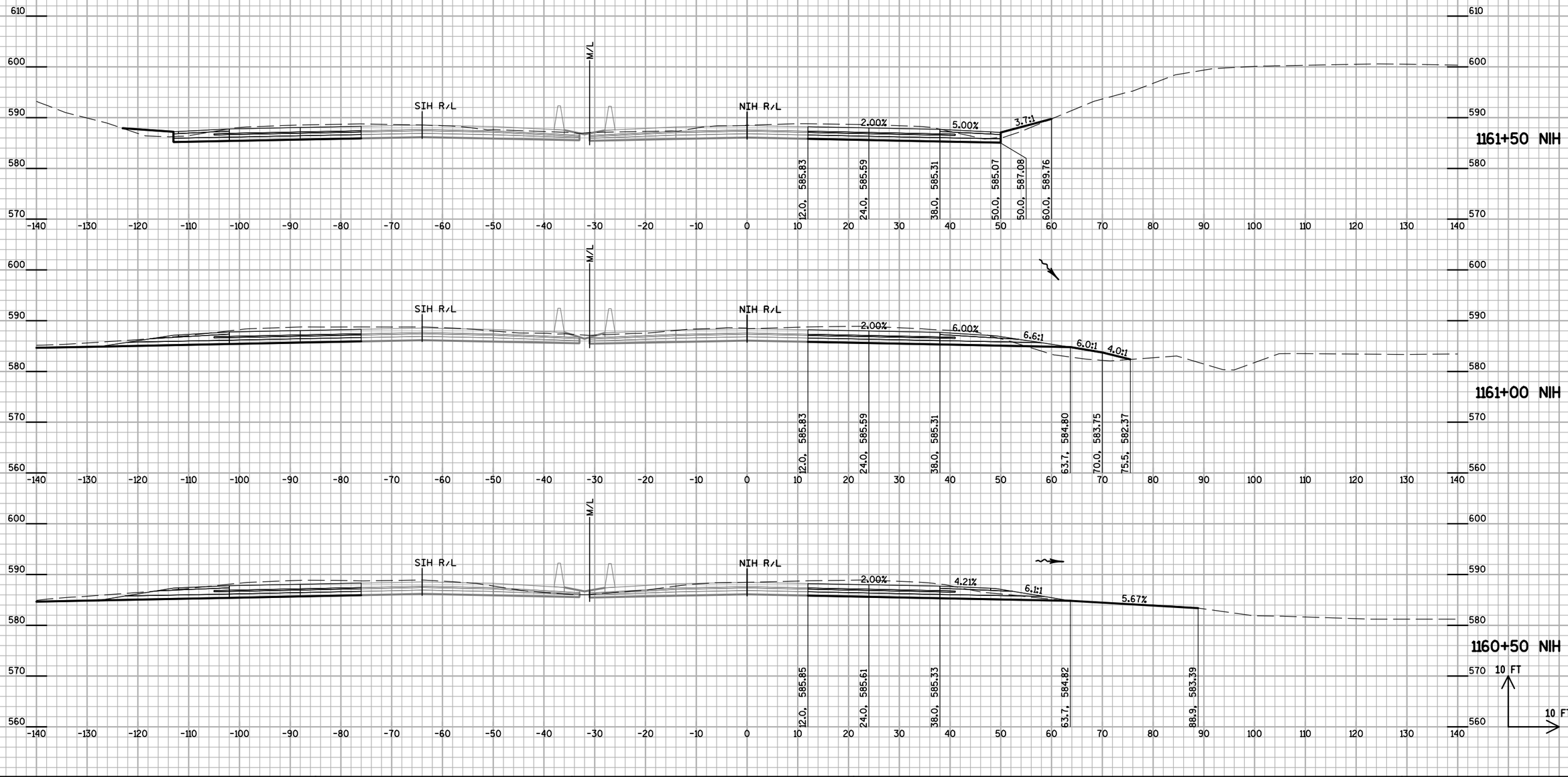
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1084	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1160+50 NIH TO 1161+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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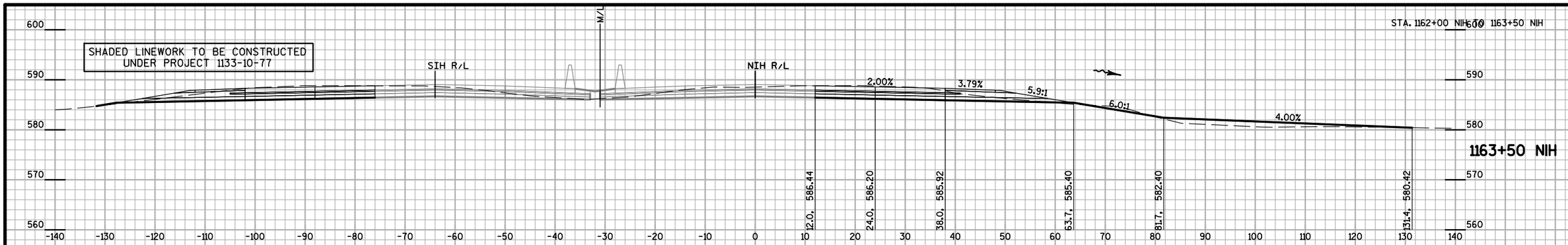
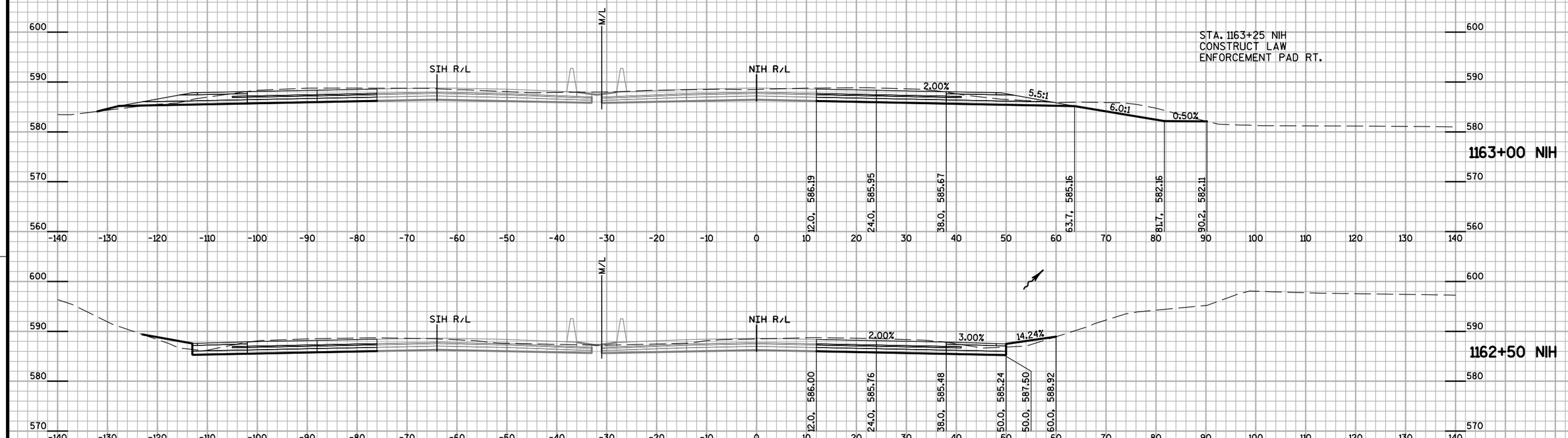
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1085	E

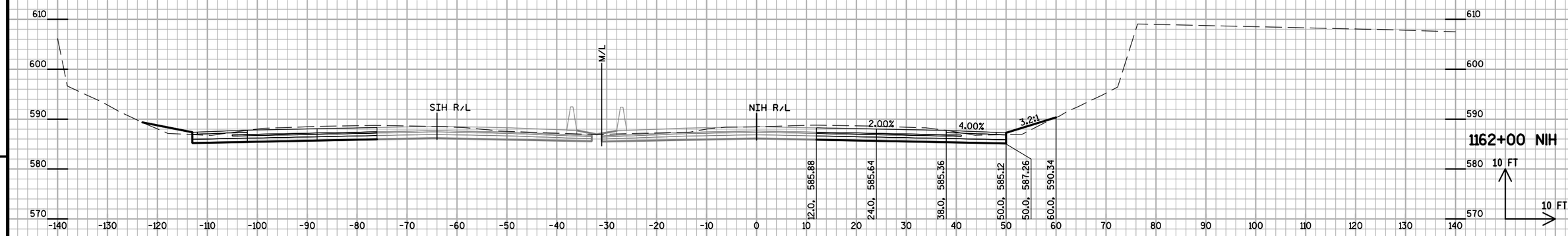
SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STA. 1162+00 NIH TO 1163+50 NIH



STA. 1163+25 NIH
CONSTRUCT LAW
ENFORCEMENT PAD RT.





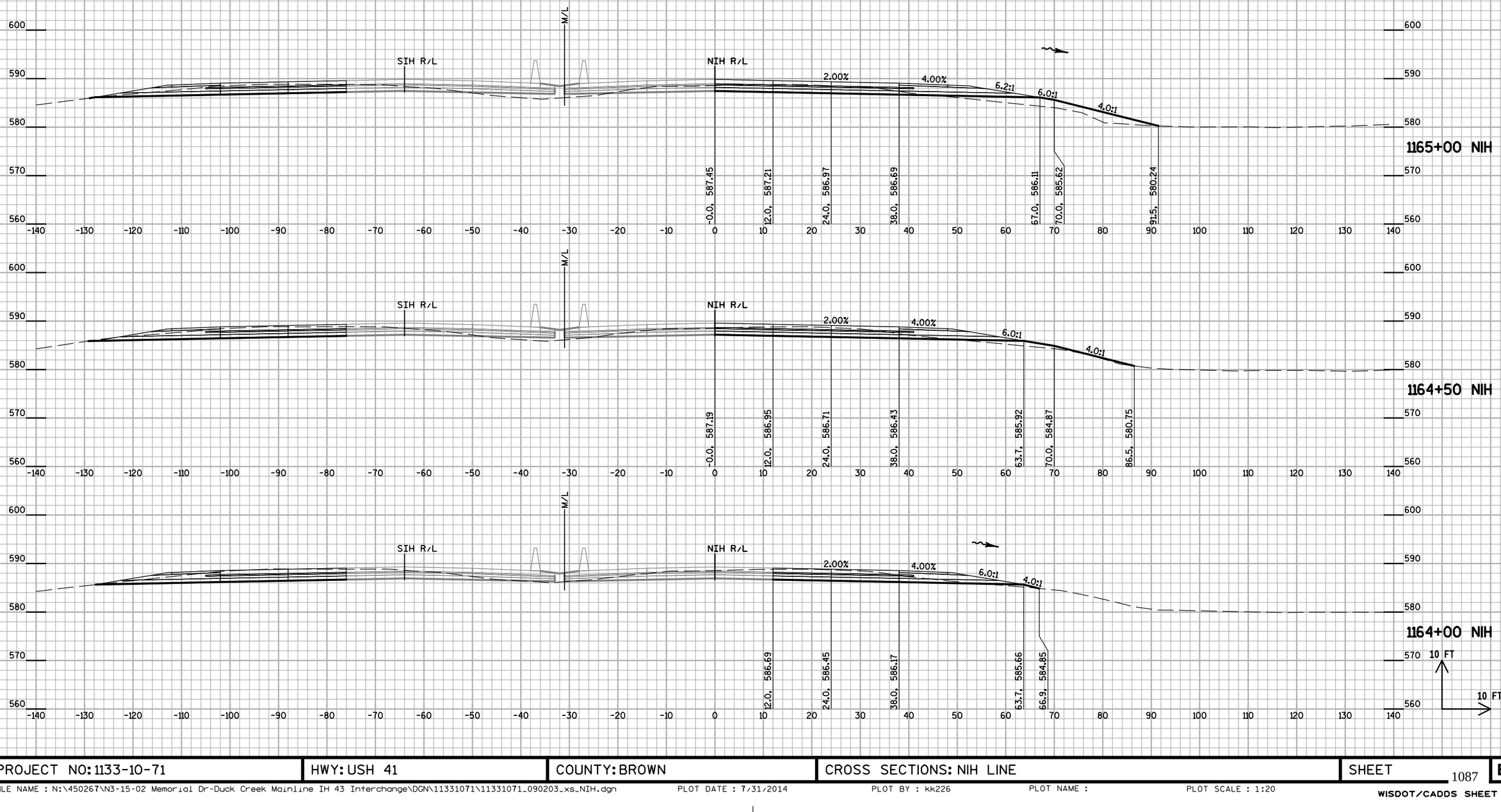
9

9

PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1086	E

STA. 1164+00 NIH TO 1165+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



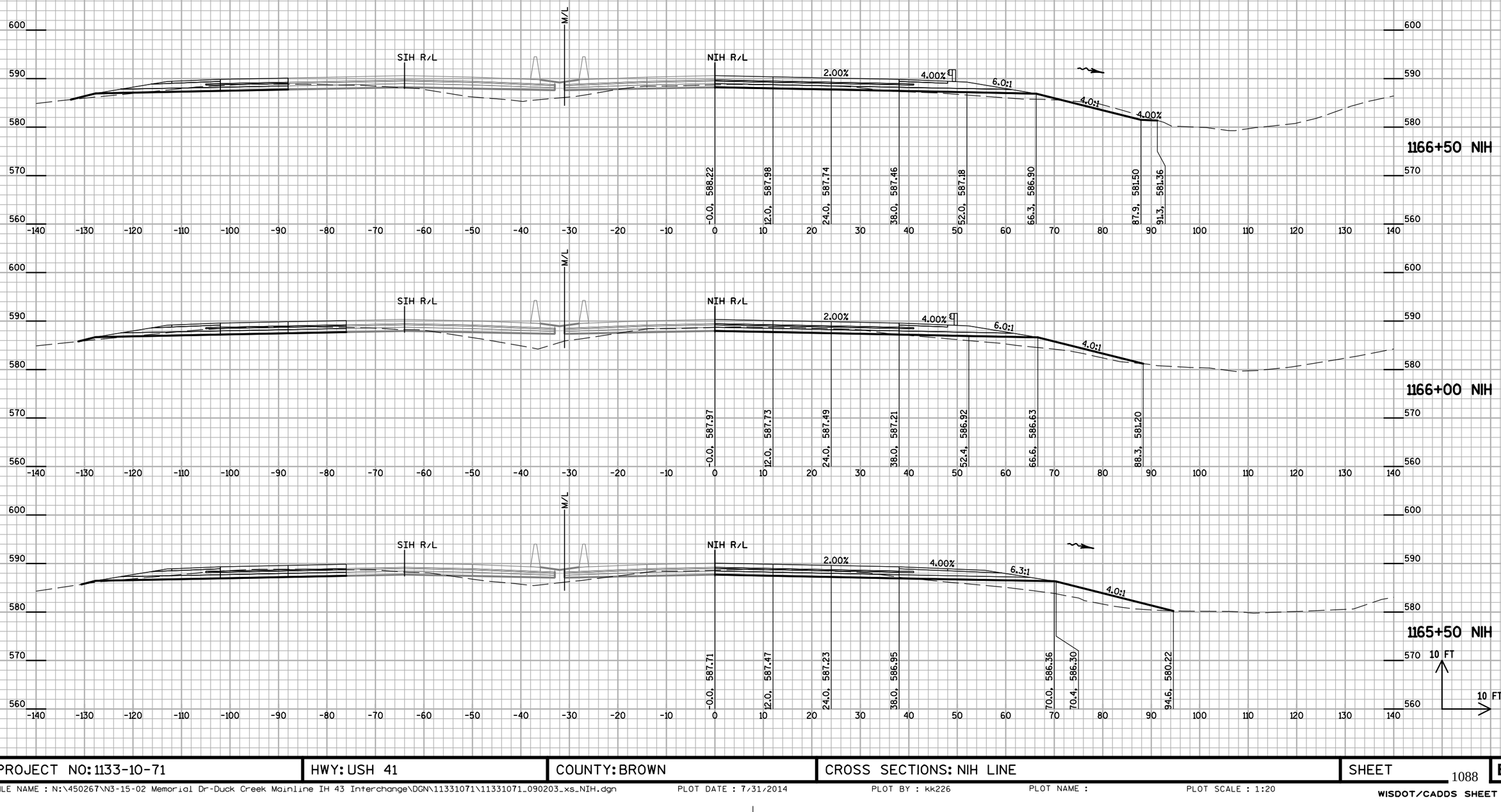
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1087	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1165+50 NIH TO 1166+50 NIH

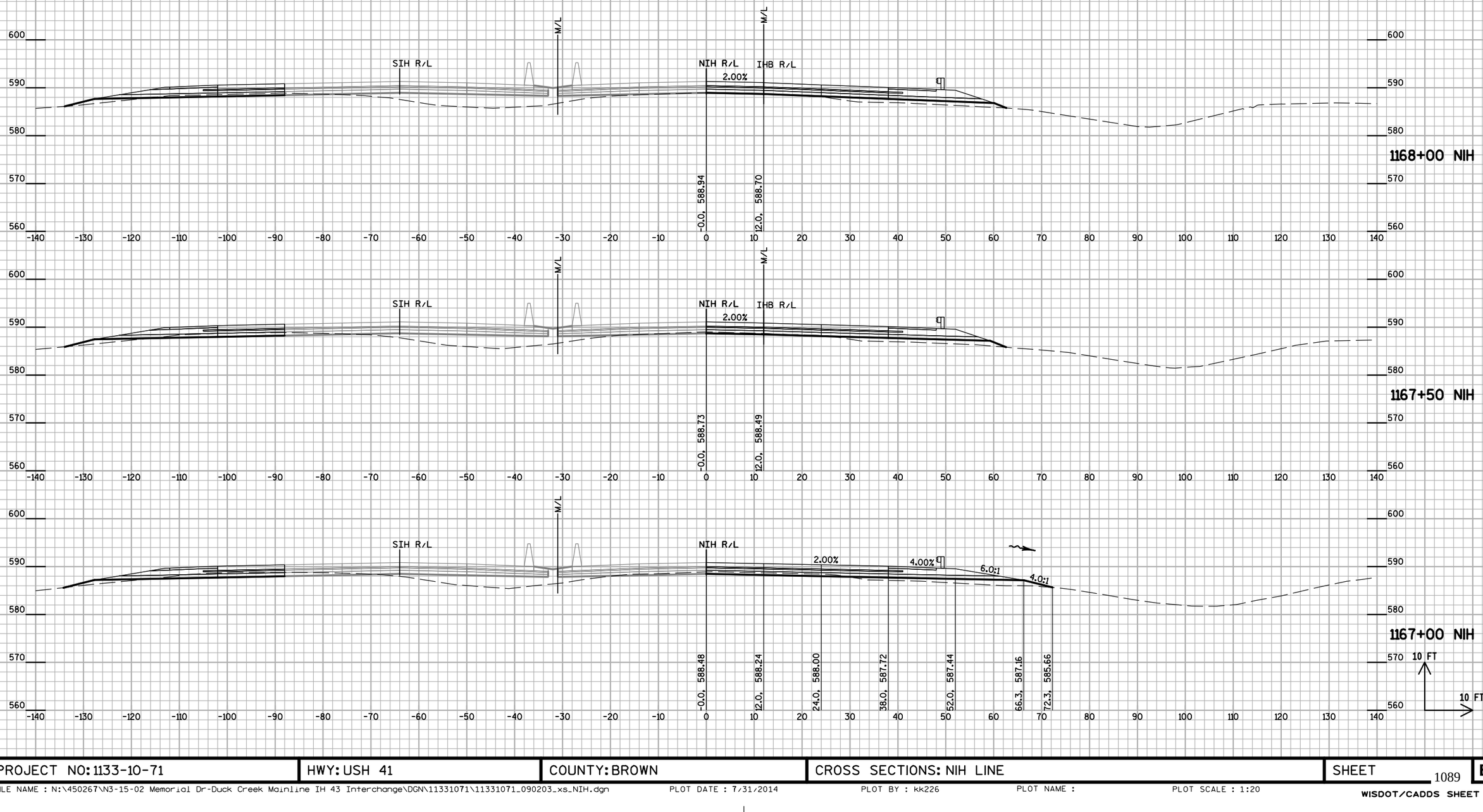
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1088	E

STA. 1167+00 NIH TO 1168+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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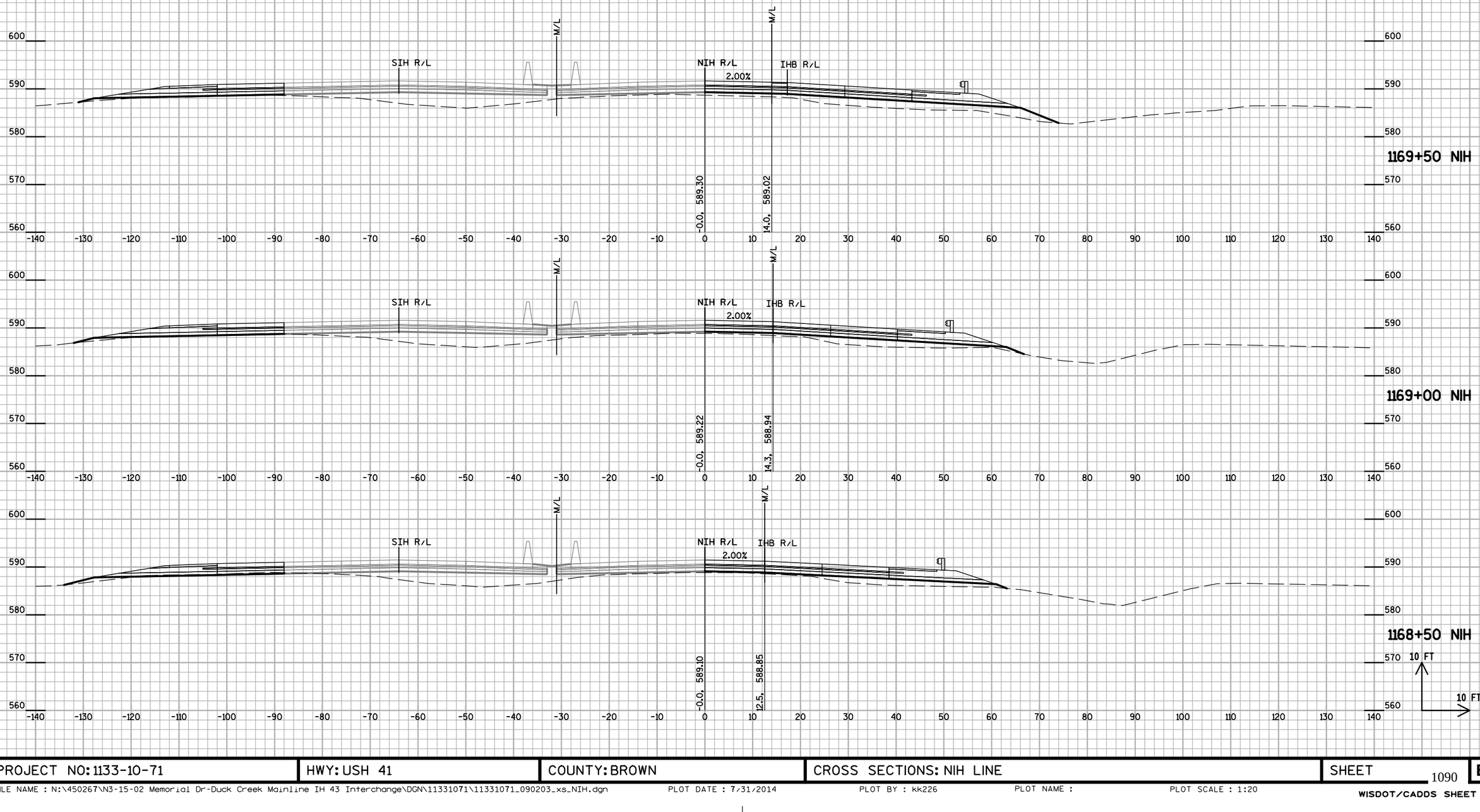
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1089	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1168+50 NIH TO 1169+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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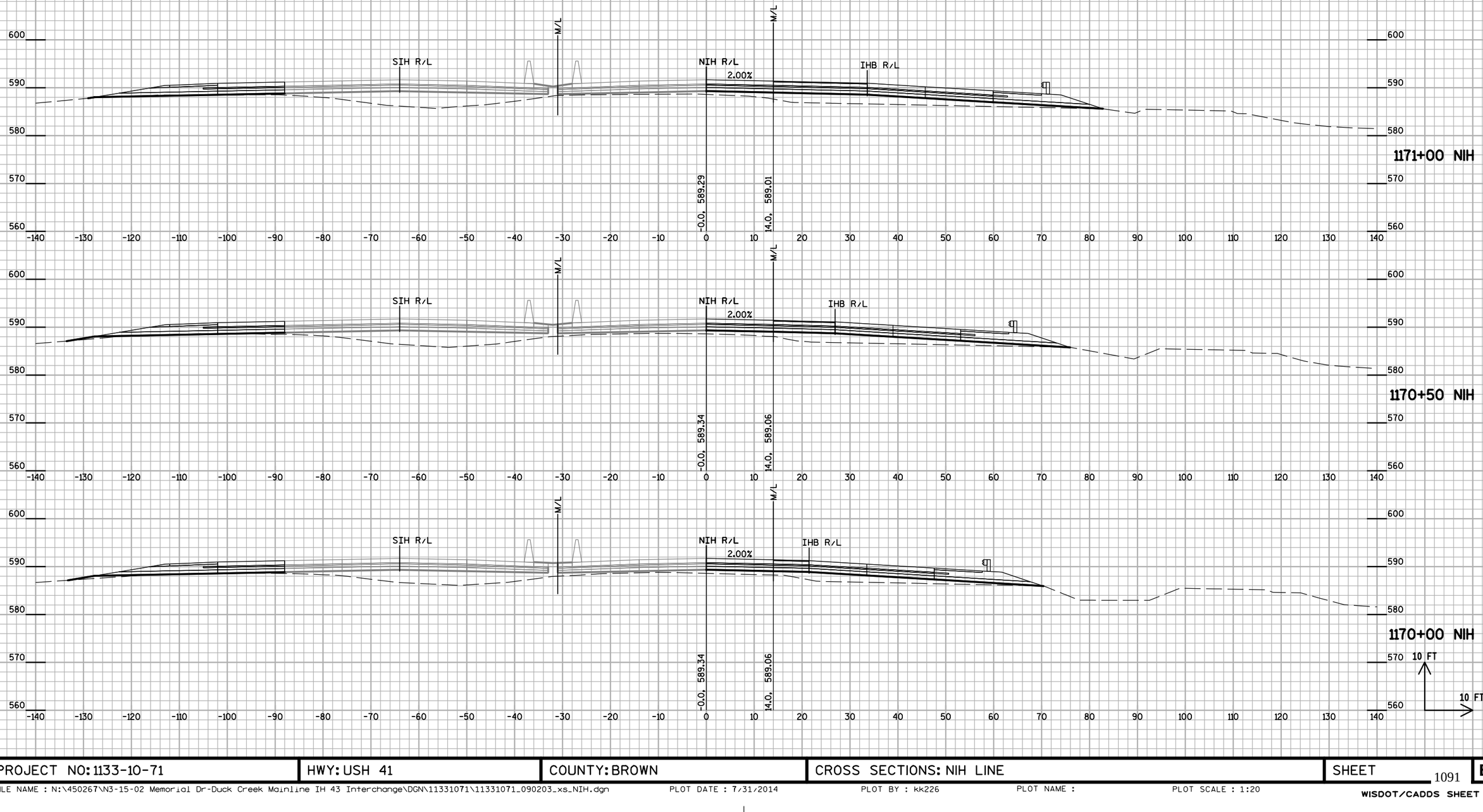
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1170+00 NIH TO 1171+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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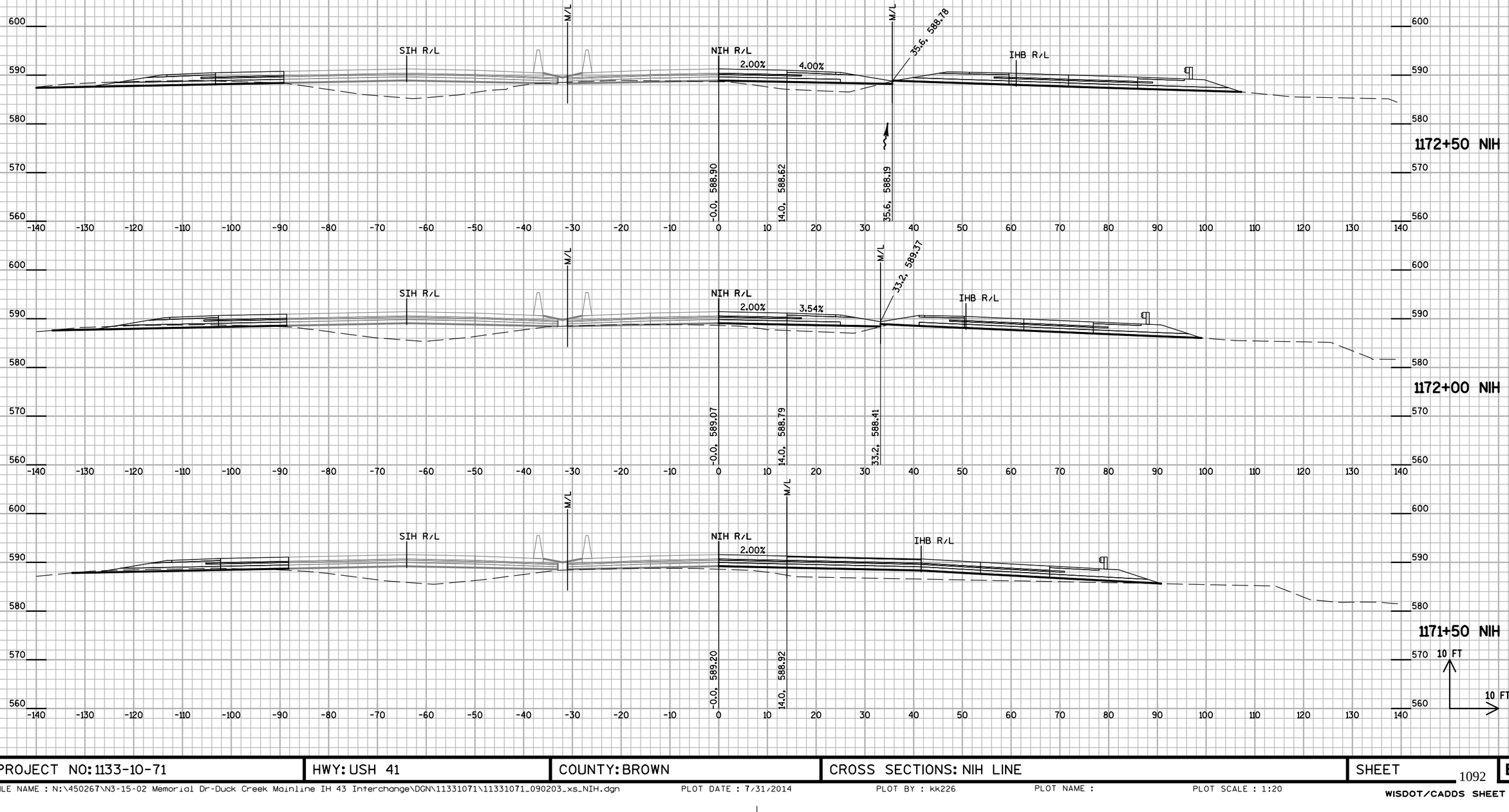
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1171+50 NIH TO 1172+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



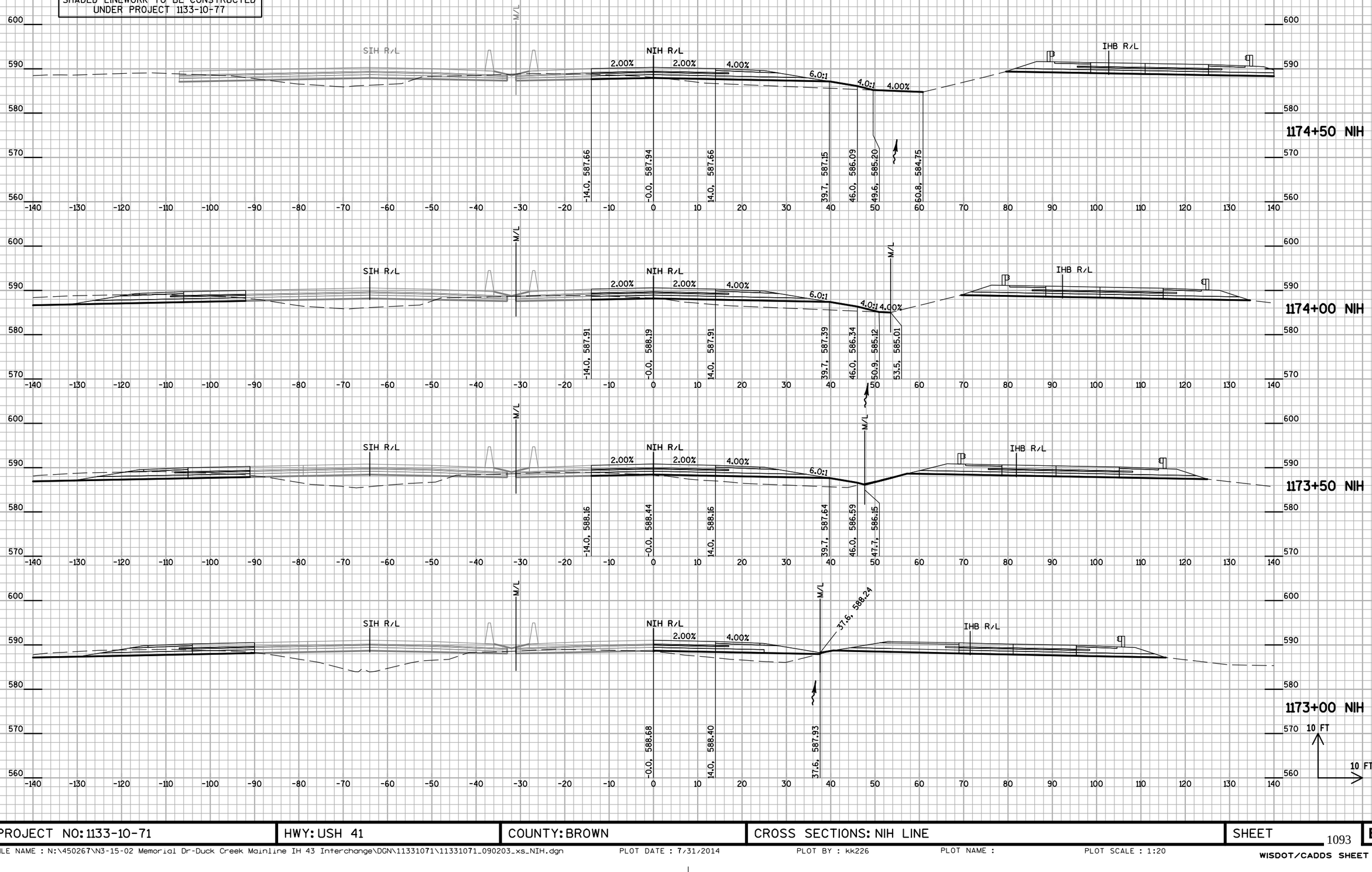
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1173+00 NIH TO 1174+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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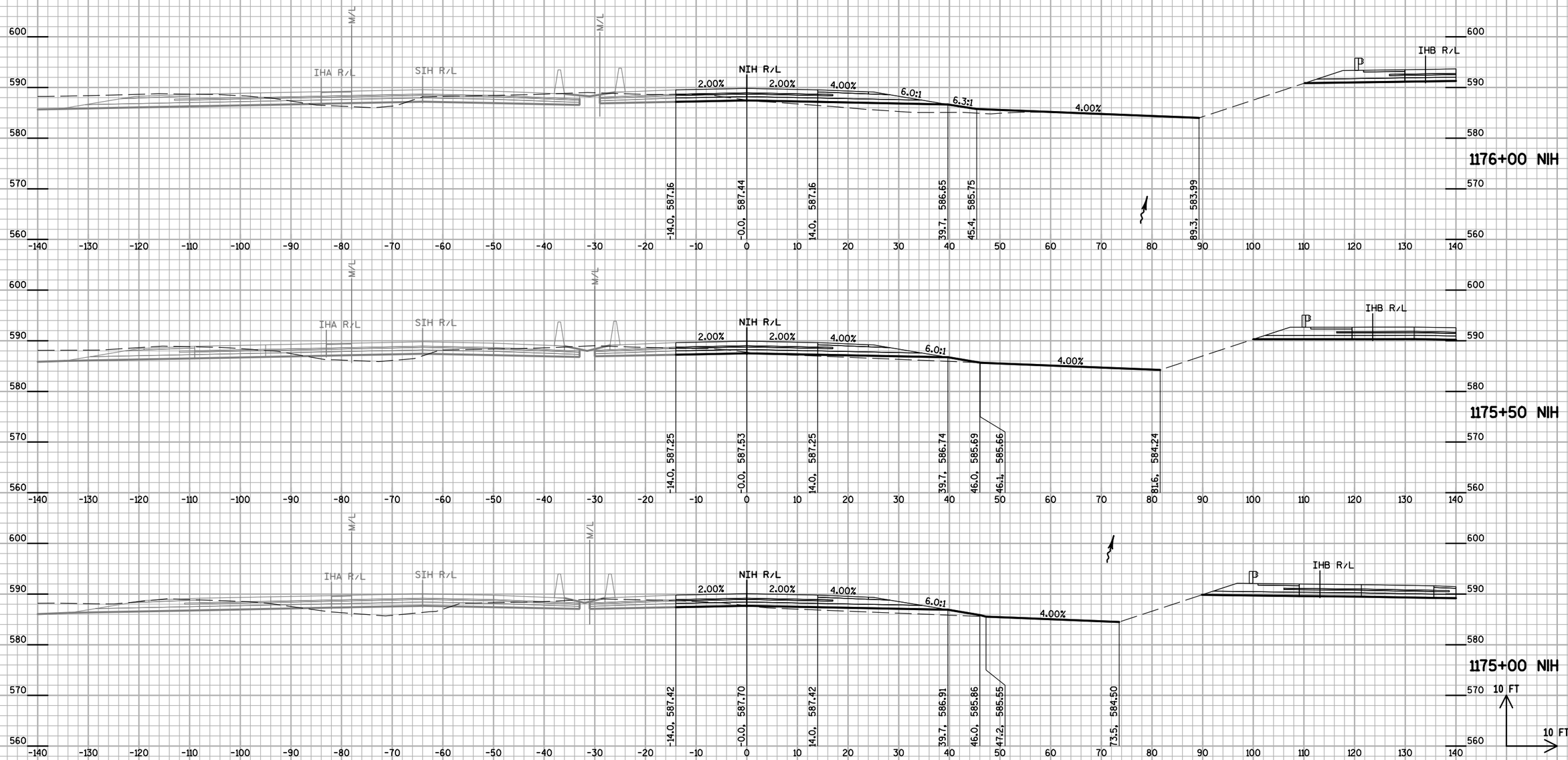
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1093	E

STA. 1175+00 NIH TO 1176+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



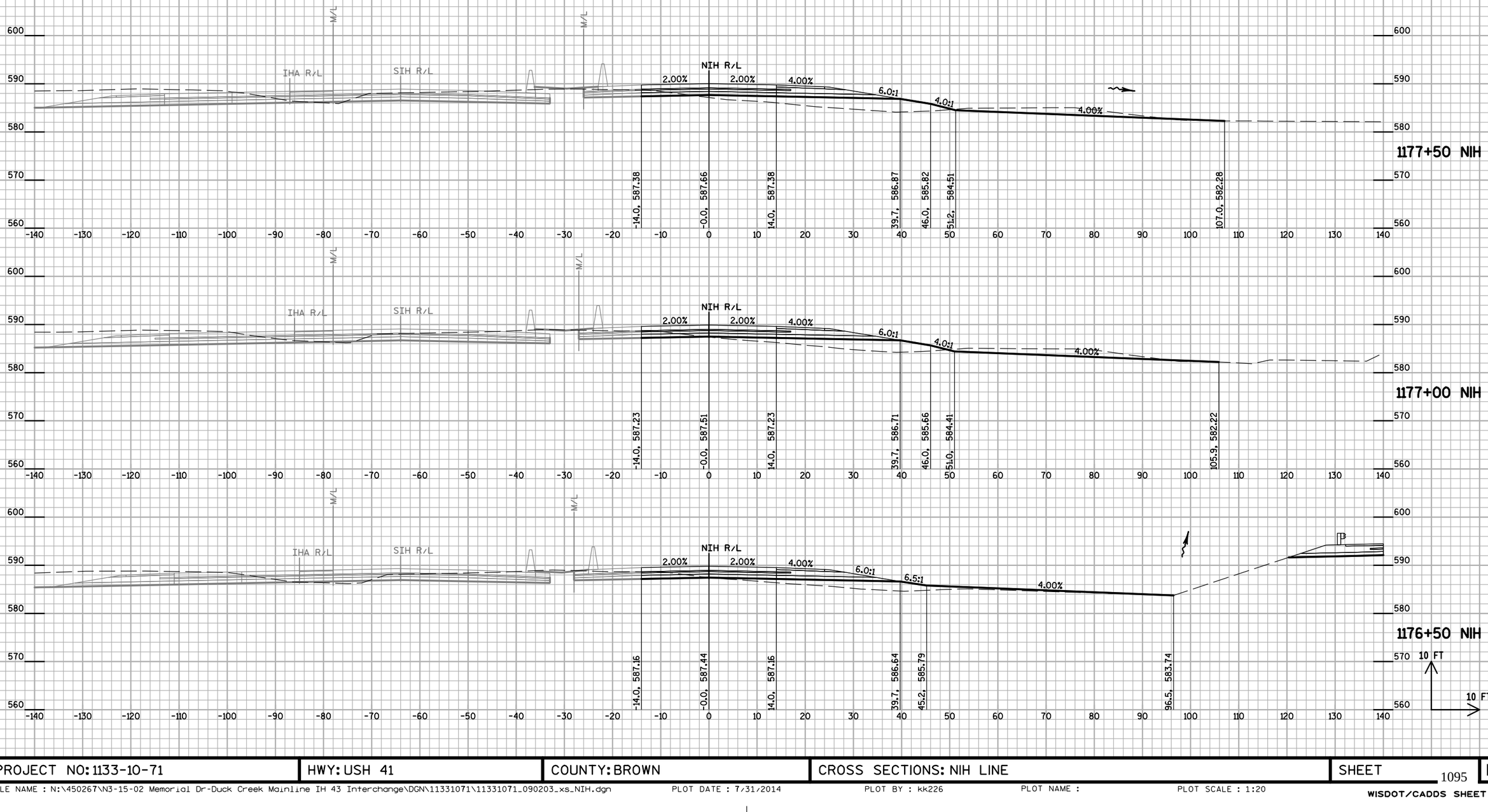
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1094	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1176+50 NIH TO 1177+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



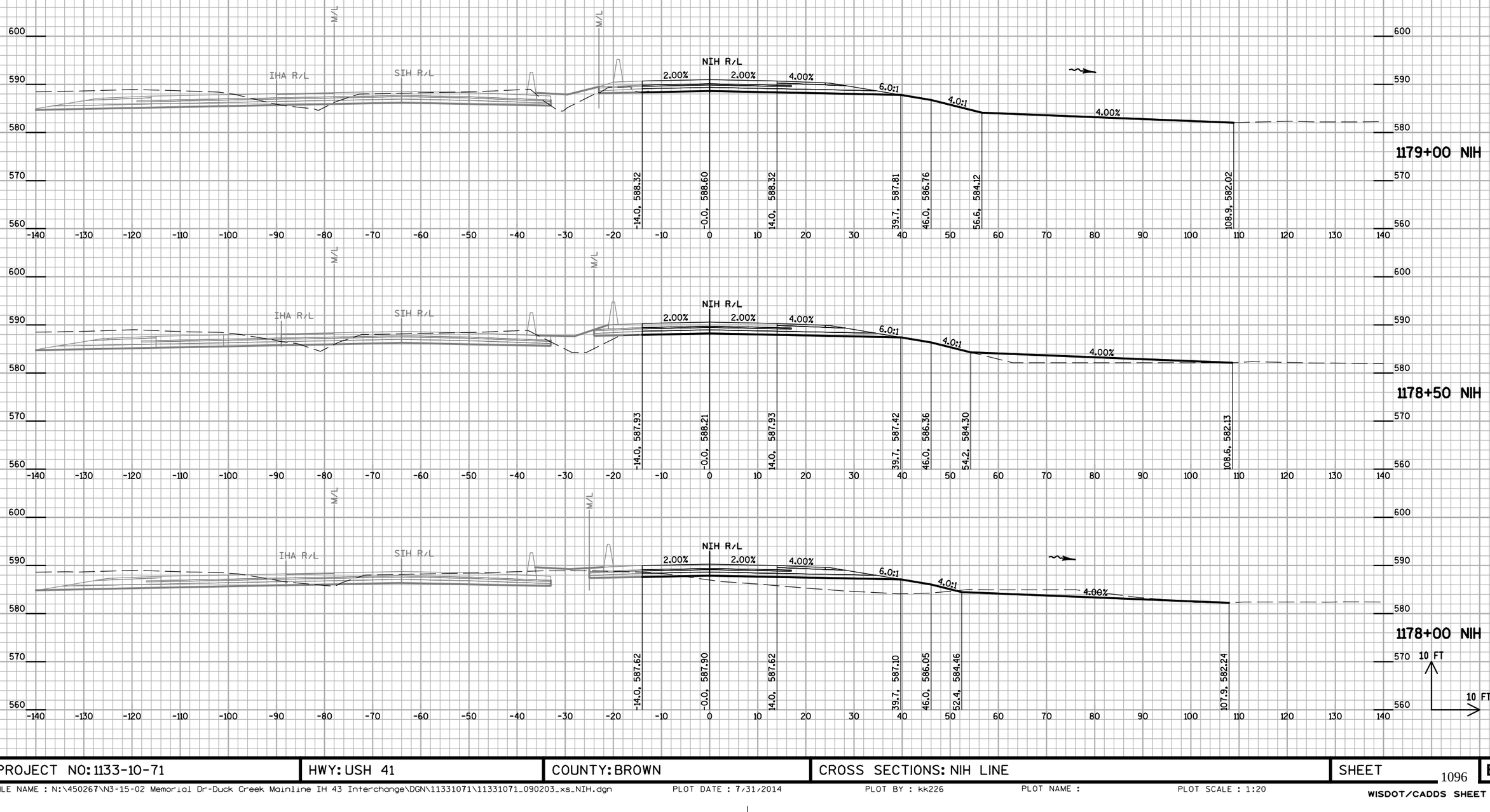
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1095	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1178+00 NIH TO 1179+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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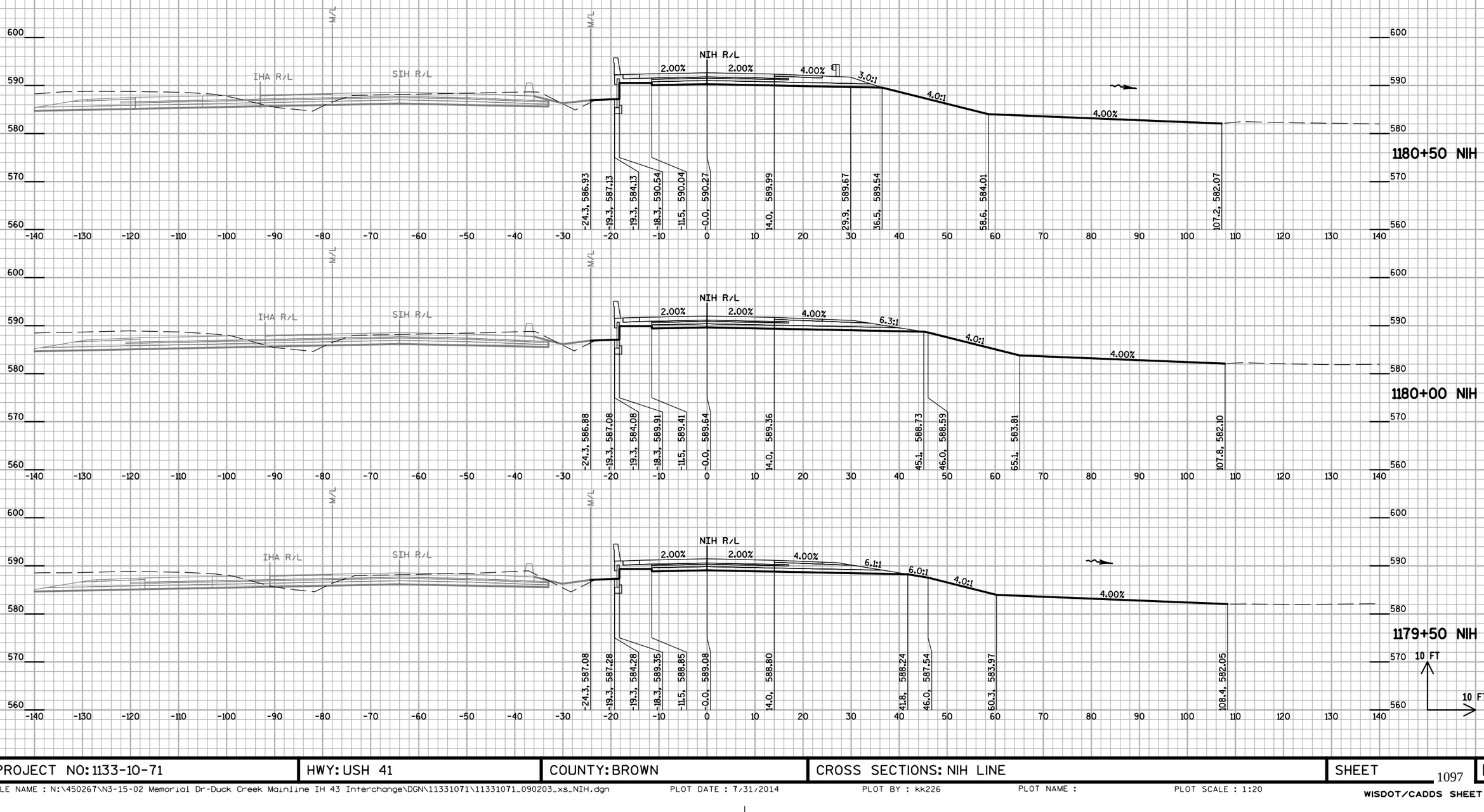
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1096	E

STA. 1179+50 NIH TO 1180+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



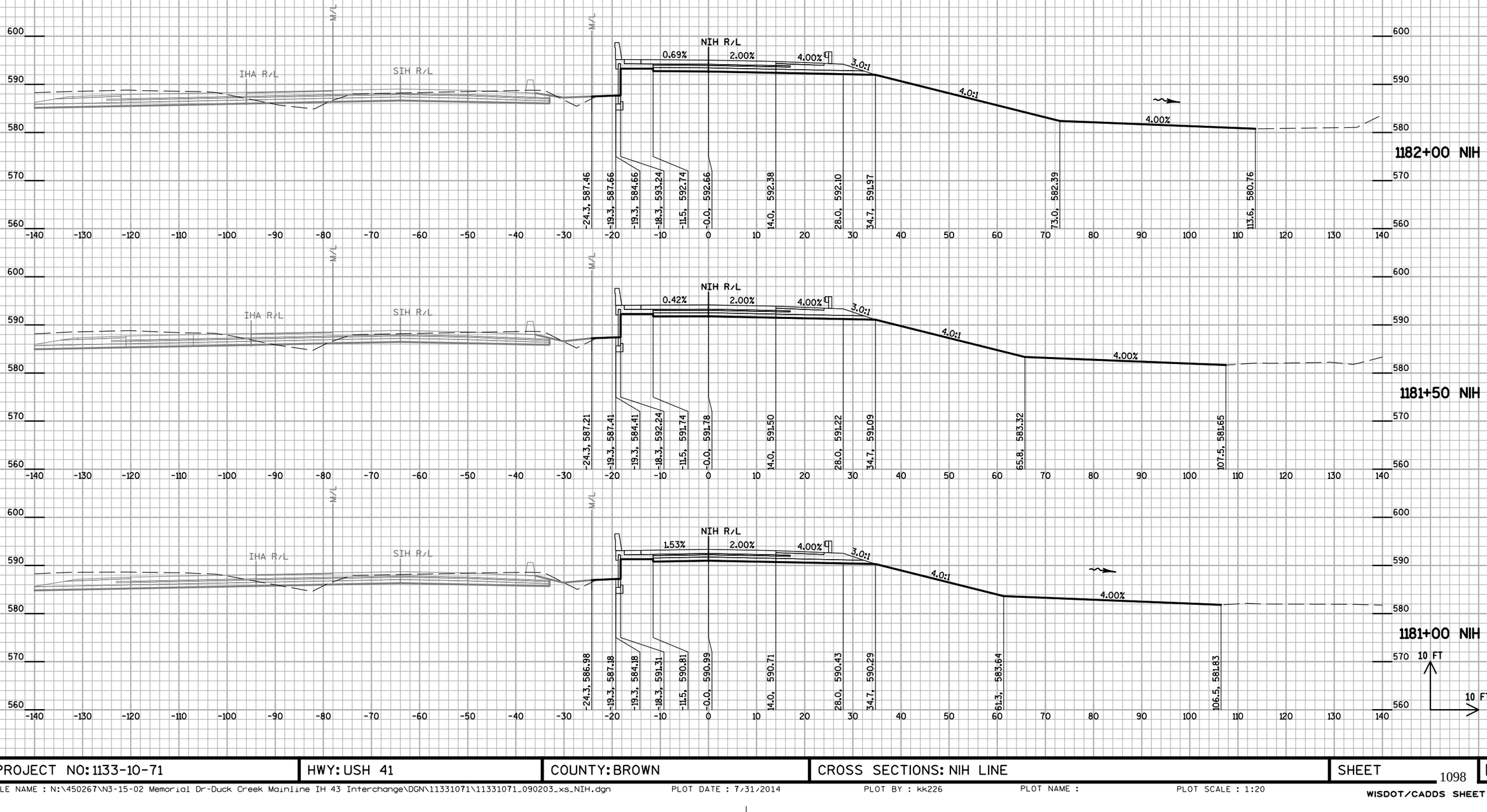
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1097 E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1181+00 NIH TO 1182+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



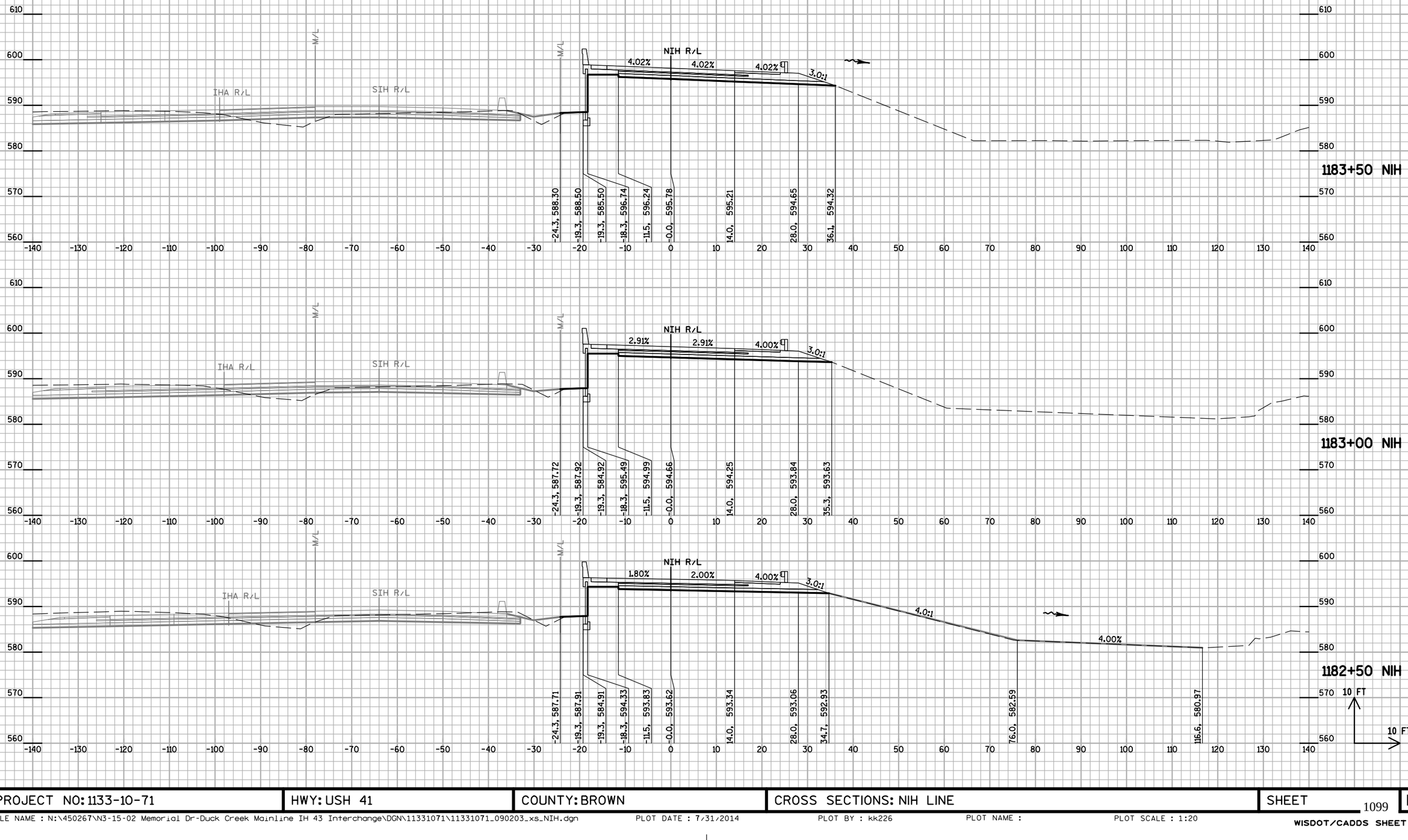
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1098	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1182+50 NIH TO 1183+50 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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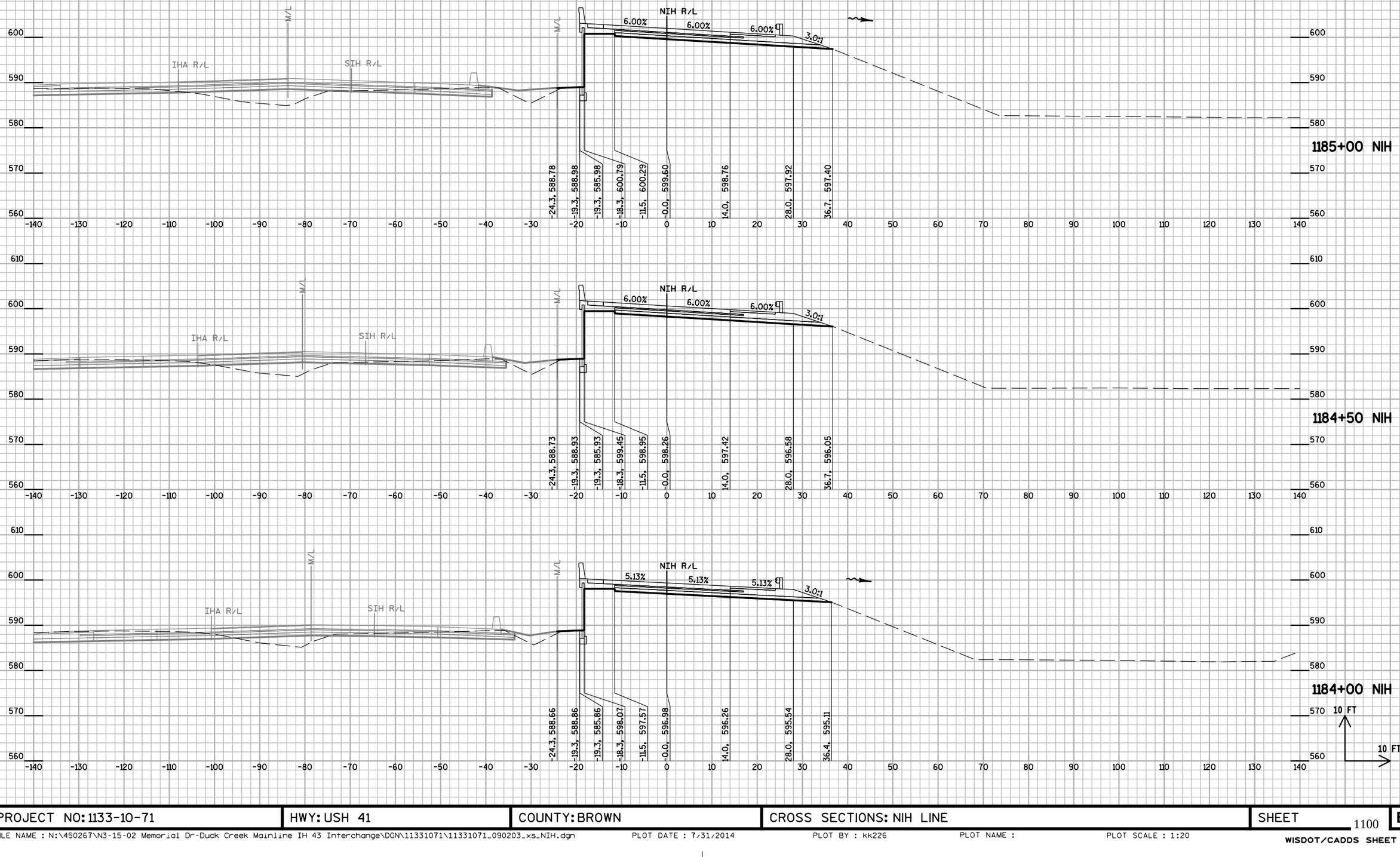
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1099	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1184+00 NIH TO 1185+00 NIH

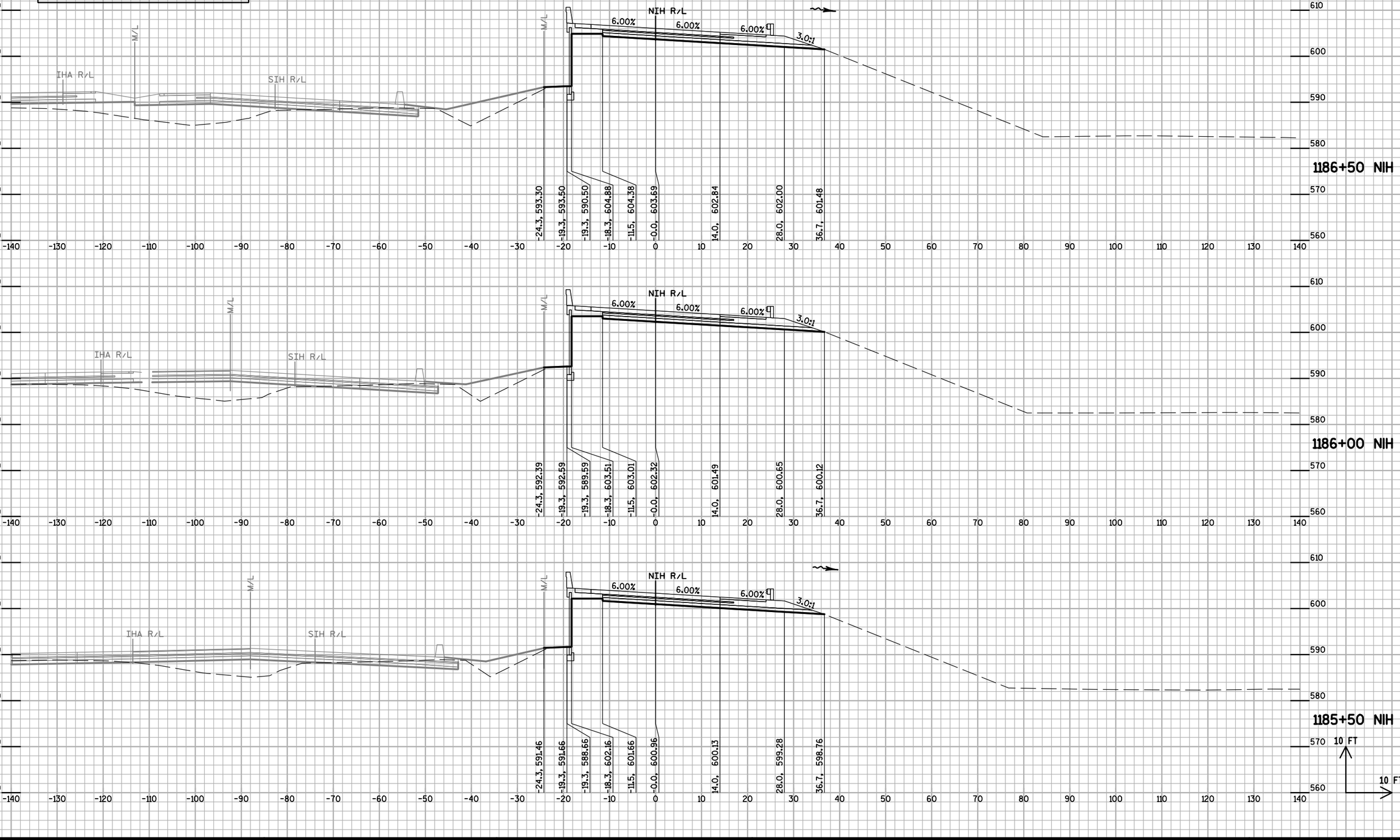
SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1100	E

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1185+50 NIH TO 1186+50 NIH



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1101	E

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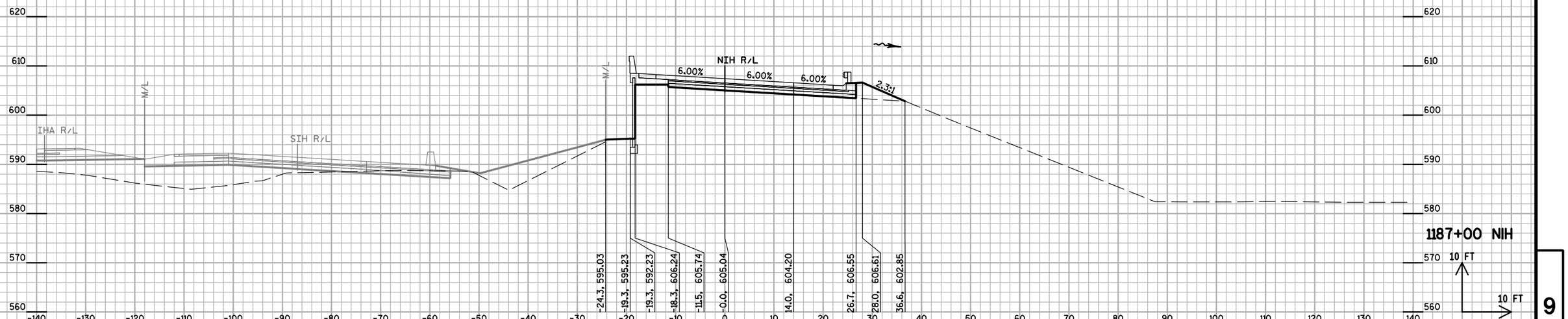
WISDOT/CADDS SHEET 21

STA. 1187+00 NIH TO 1187+00 NIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STRUCTURE B-05-679



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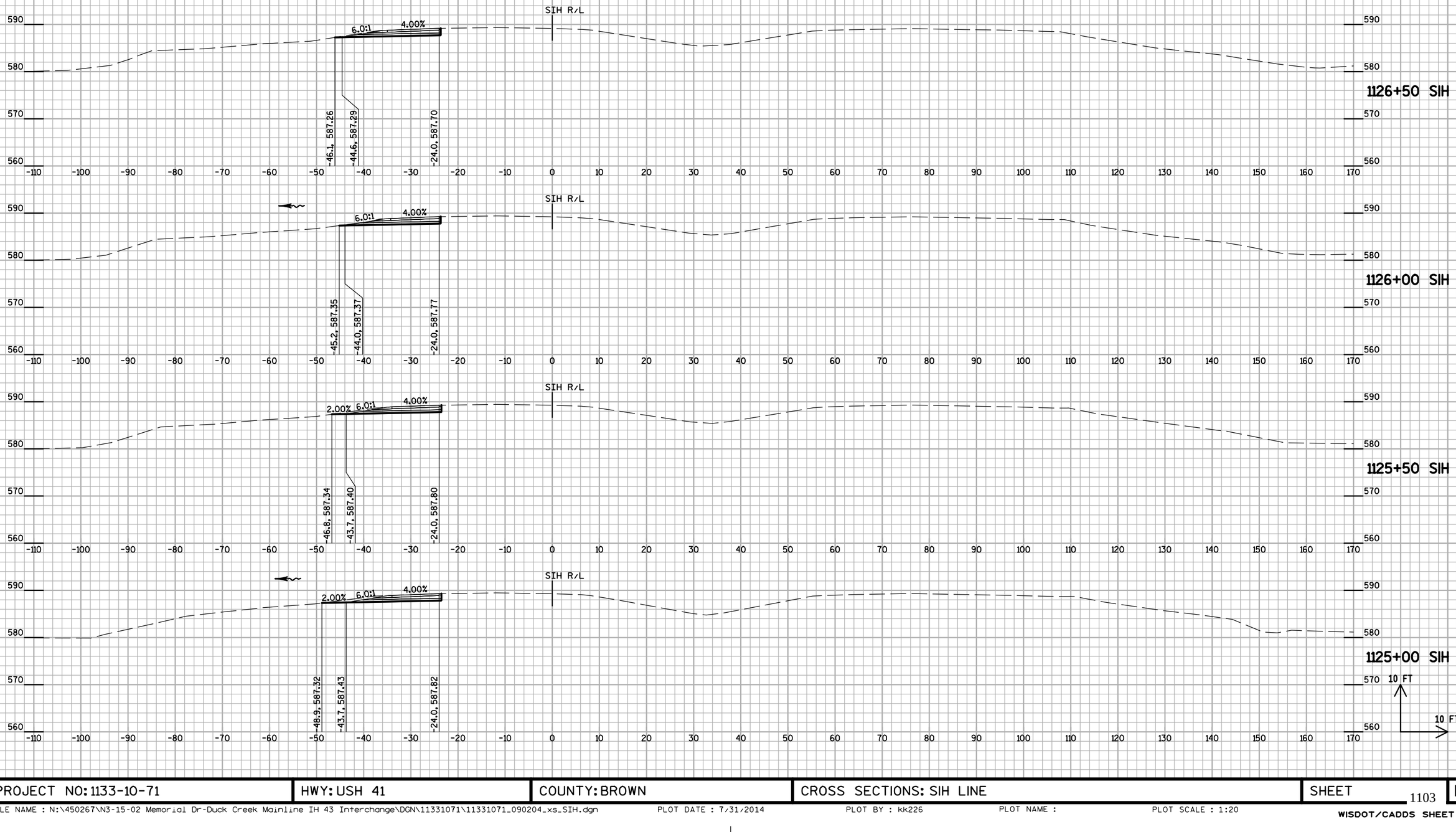
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: NIH LINE	SHEET 1102	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090203_xs_NIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1125+00 SIH TO 1126+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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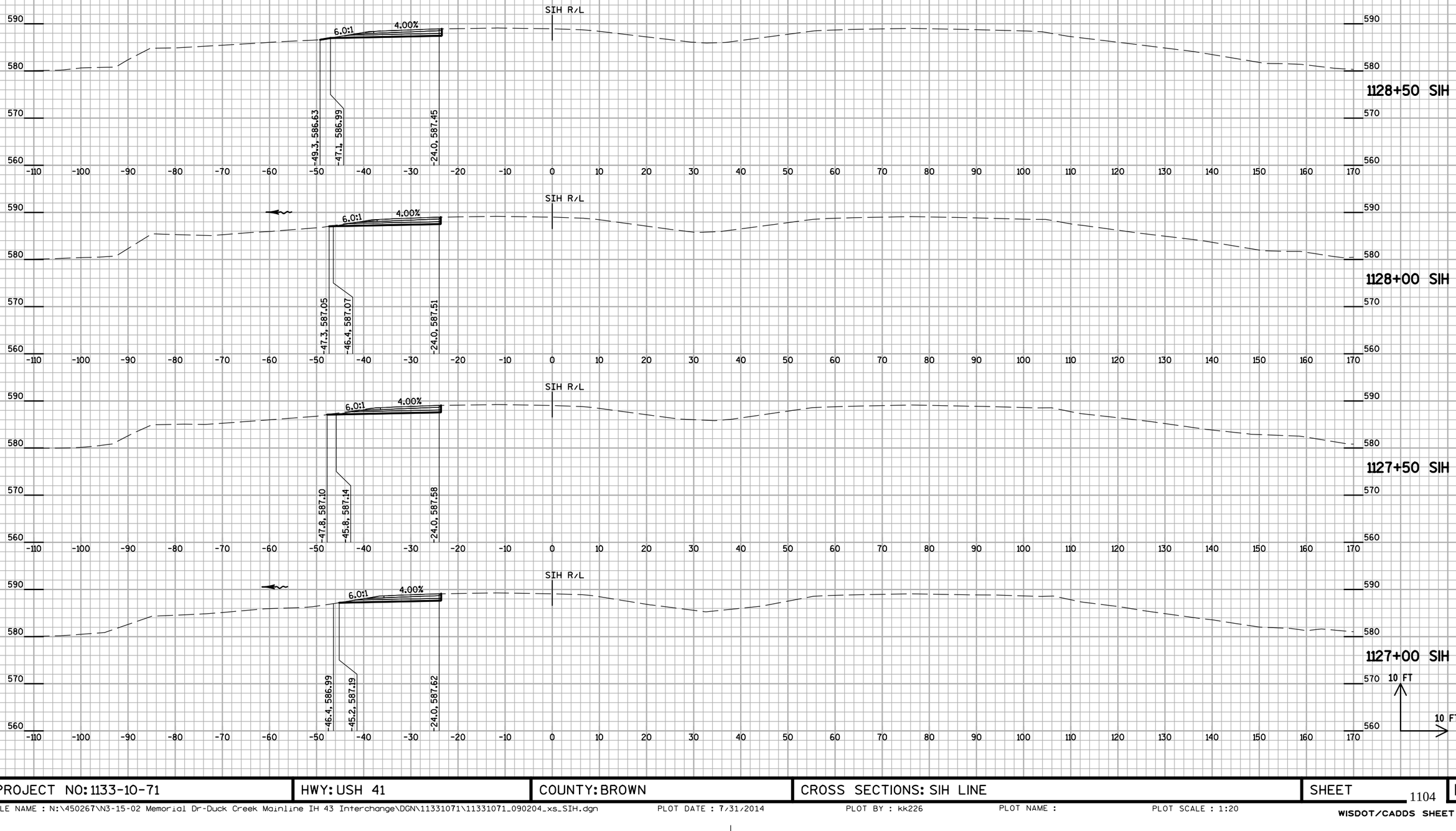
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1103	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1127+00 SIH TO 1128+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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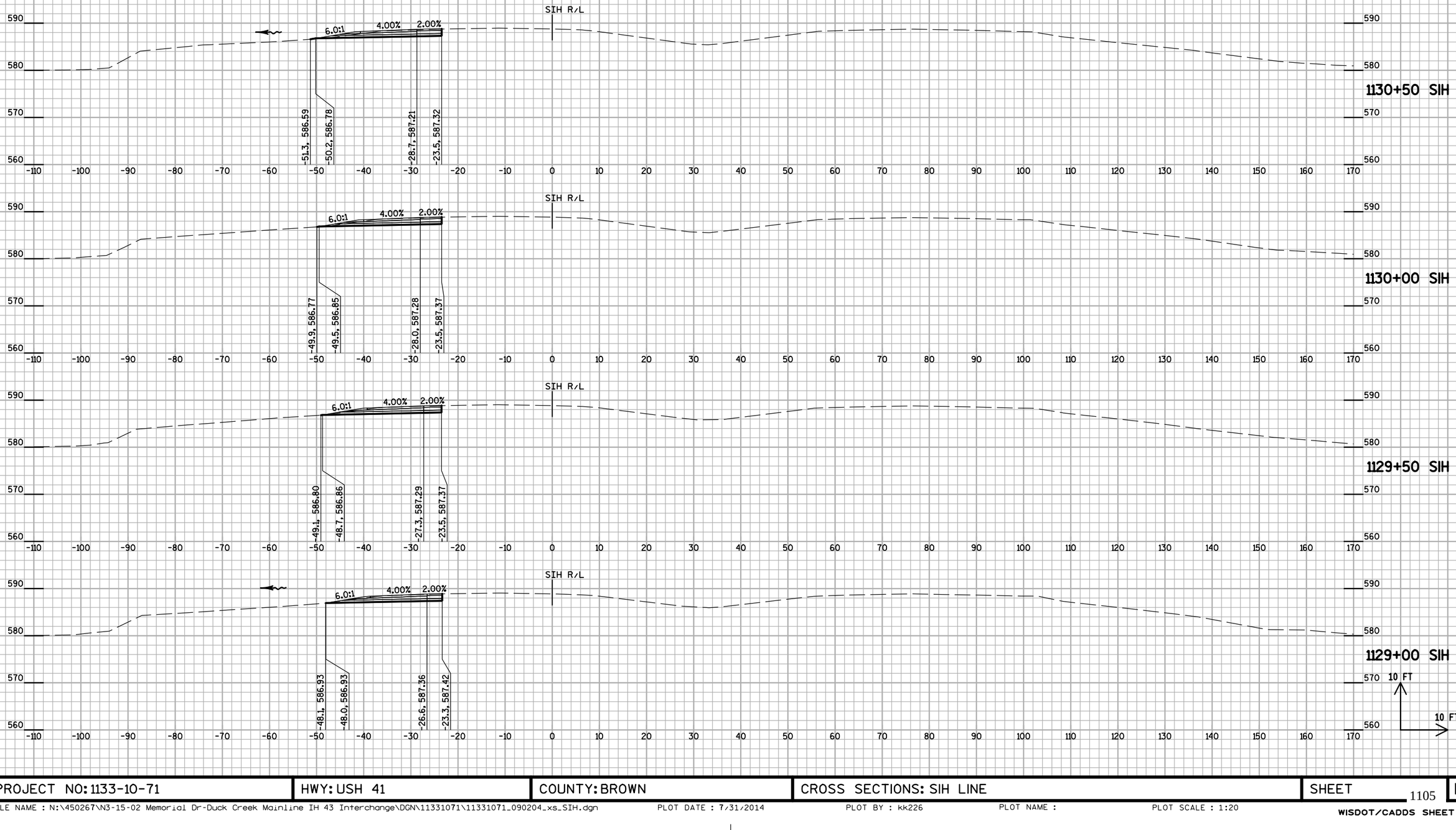
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1104	E

STA. 1129+00 SIH TO 1130+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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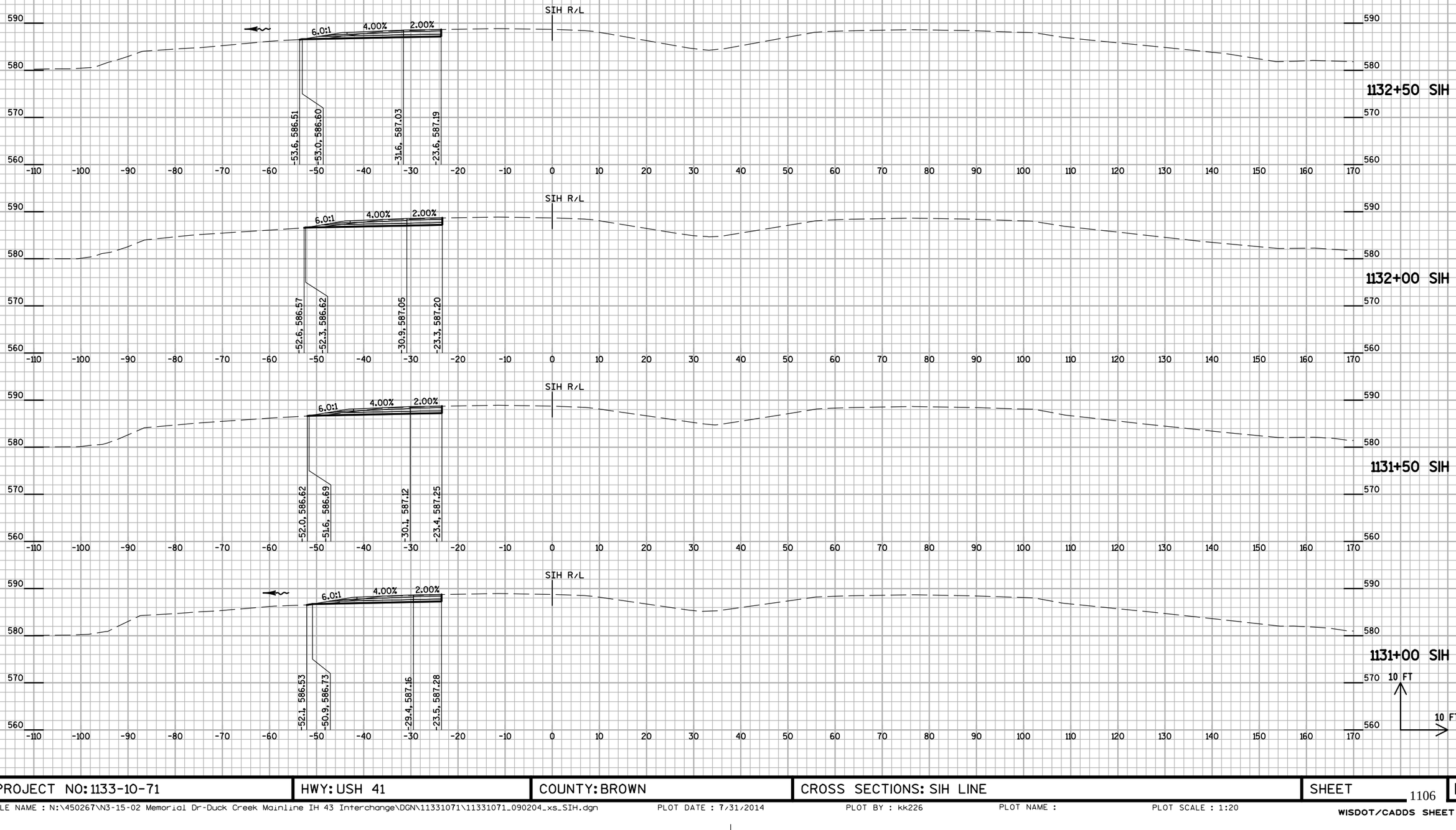
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1131+00 SIH TO 1132+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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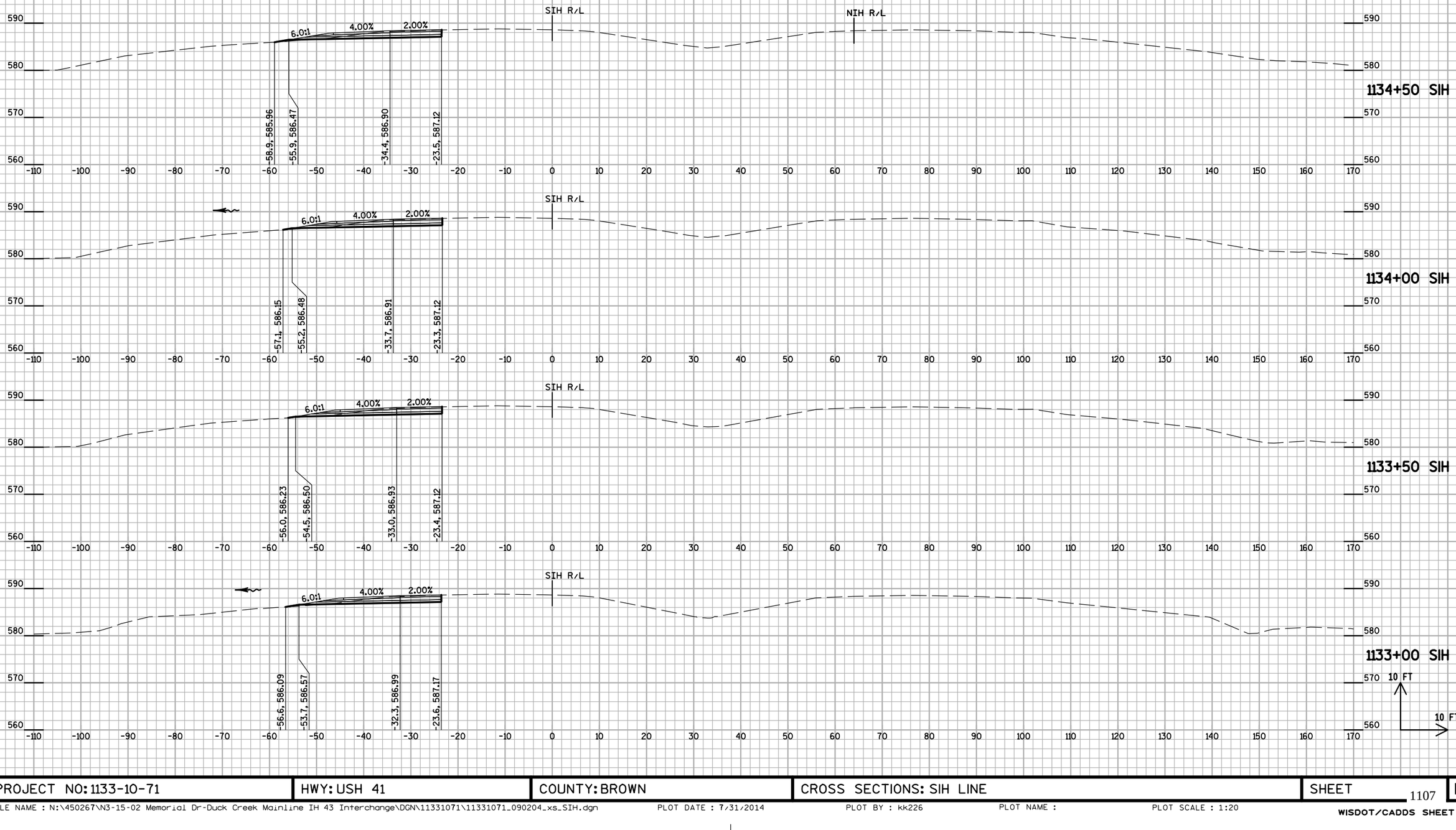
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1106	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1133+00 SIH TO 1134+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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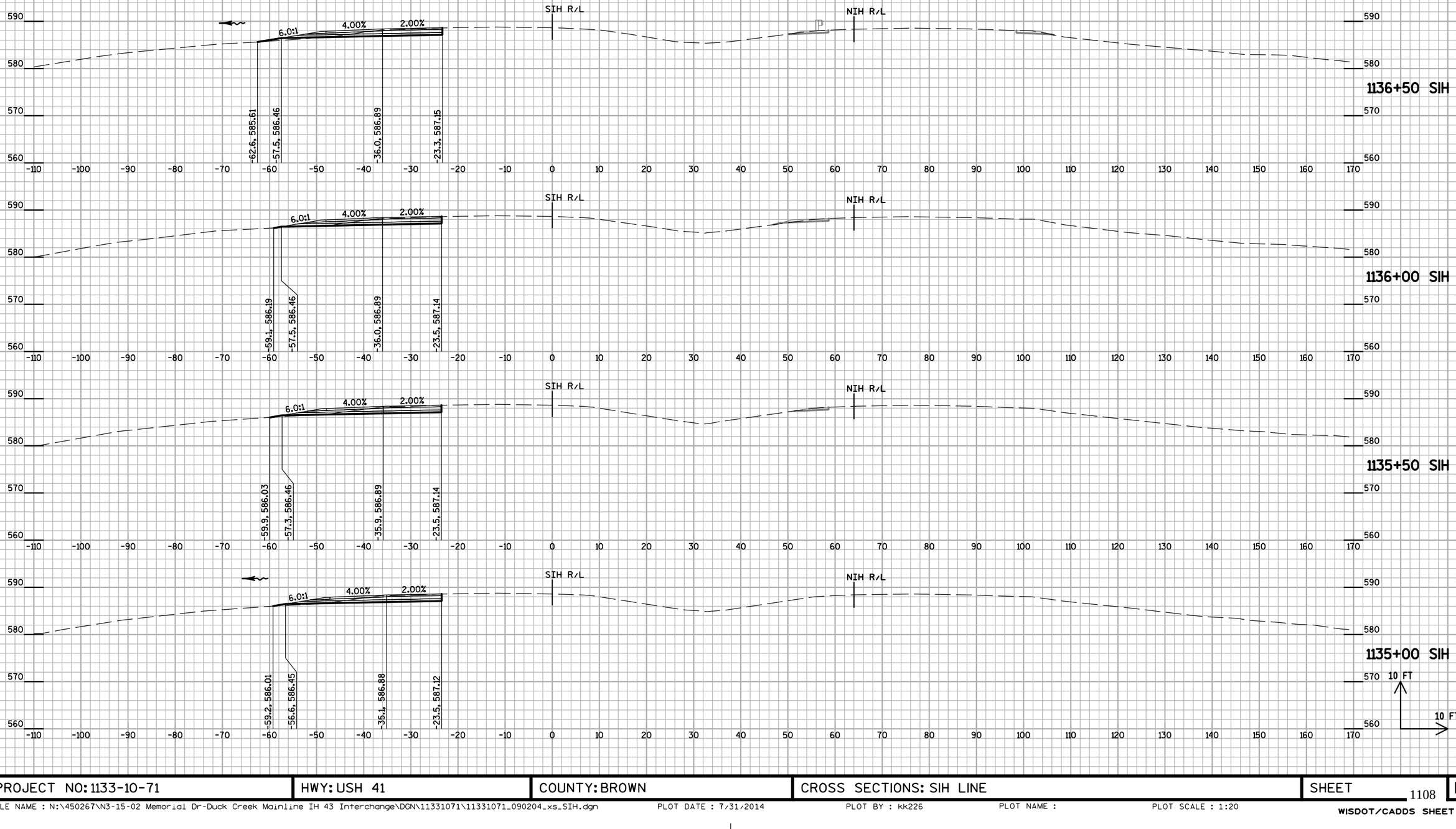
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1107	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1135+00 SIH TO 1136+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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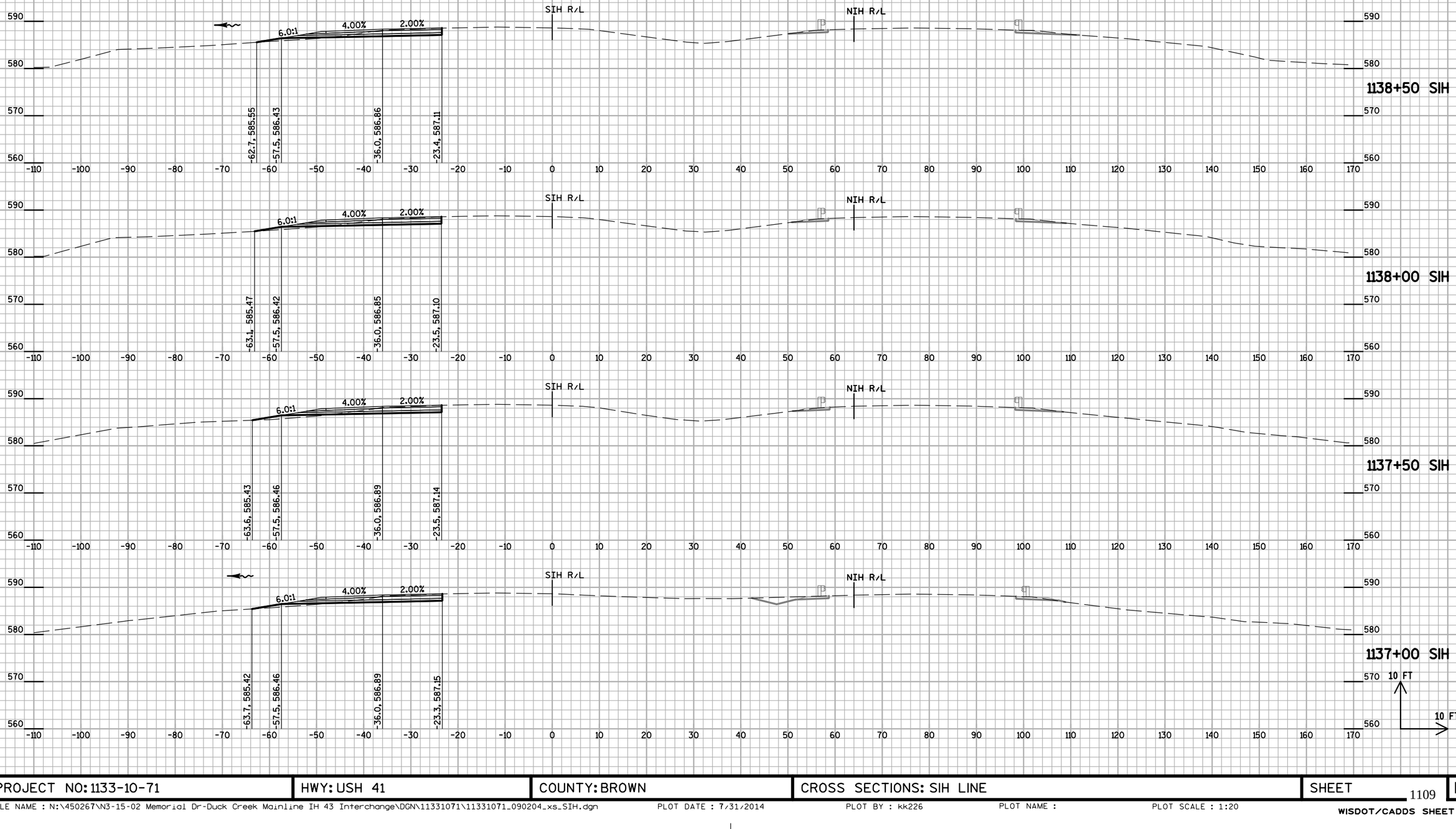
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1108	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1137+00 SIH TO 1138+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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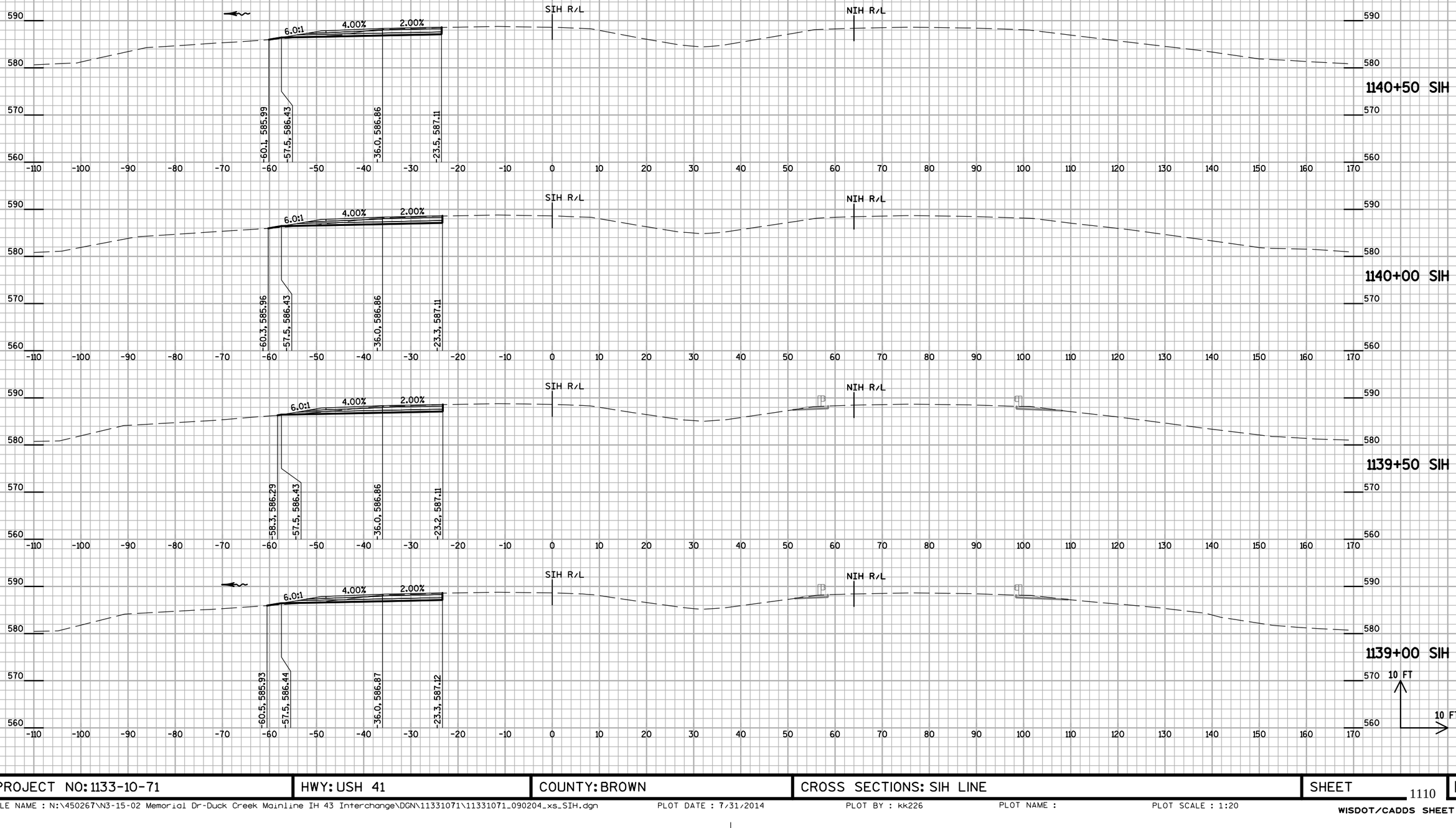
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1109	E

STA. 1139+00 SIH TO 1140+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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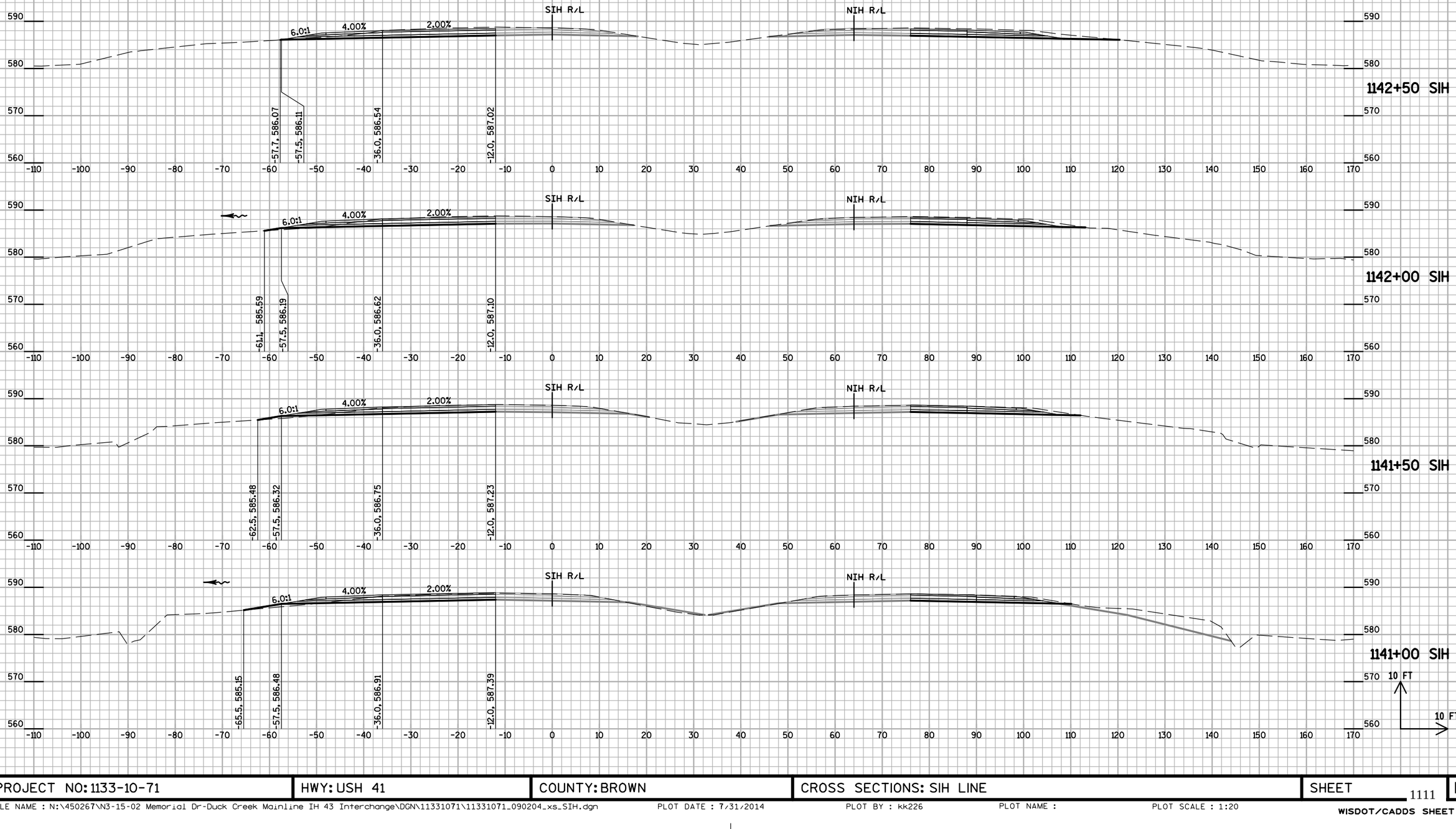
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1110	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1141+00 SIH TO 1142+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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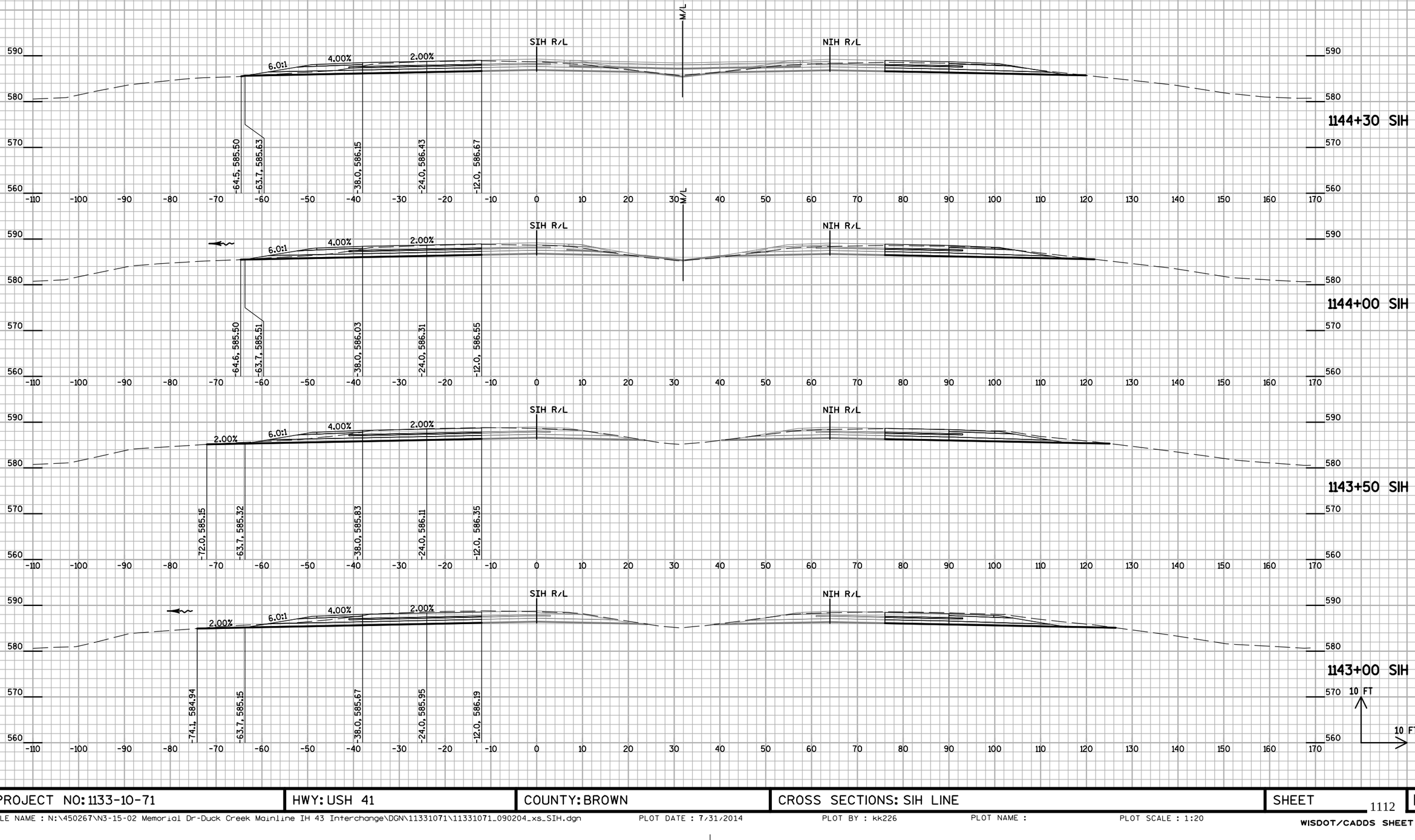
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1111	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1143+00 SIH TO 1144+30 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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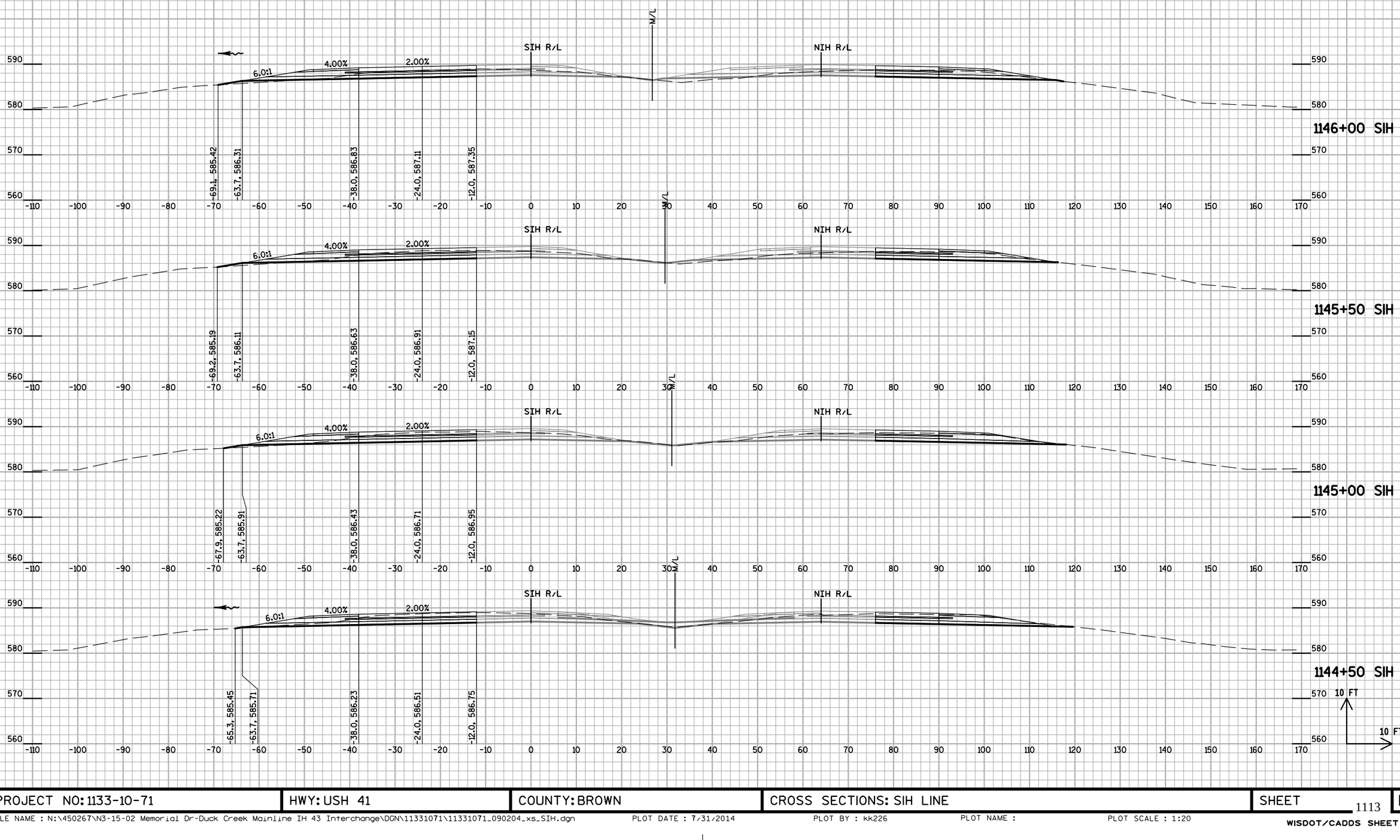
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1112	E

STA. 1144+50 SIH TO 1146+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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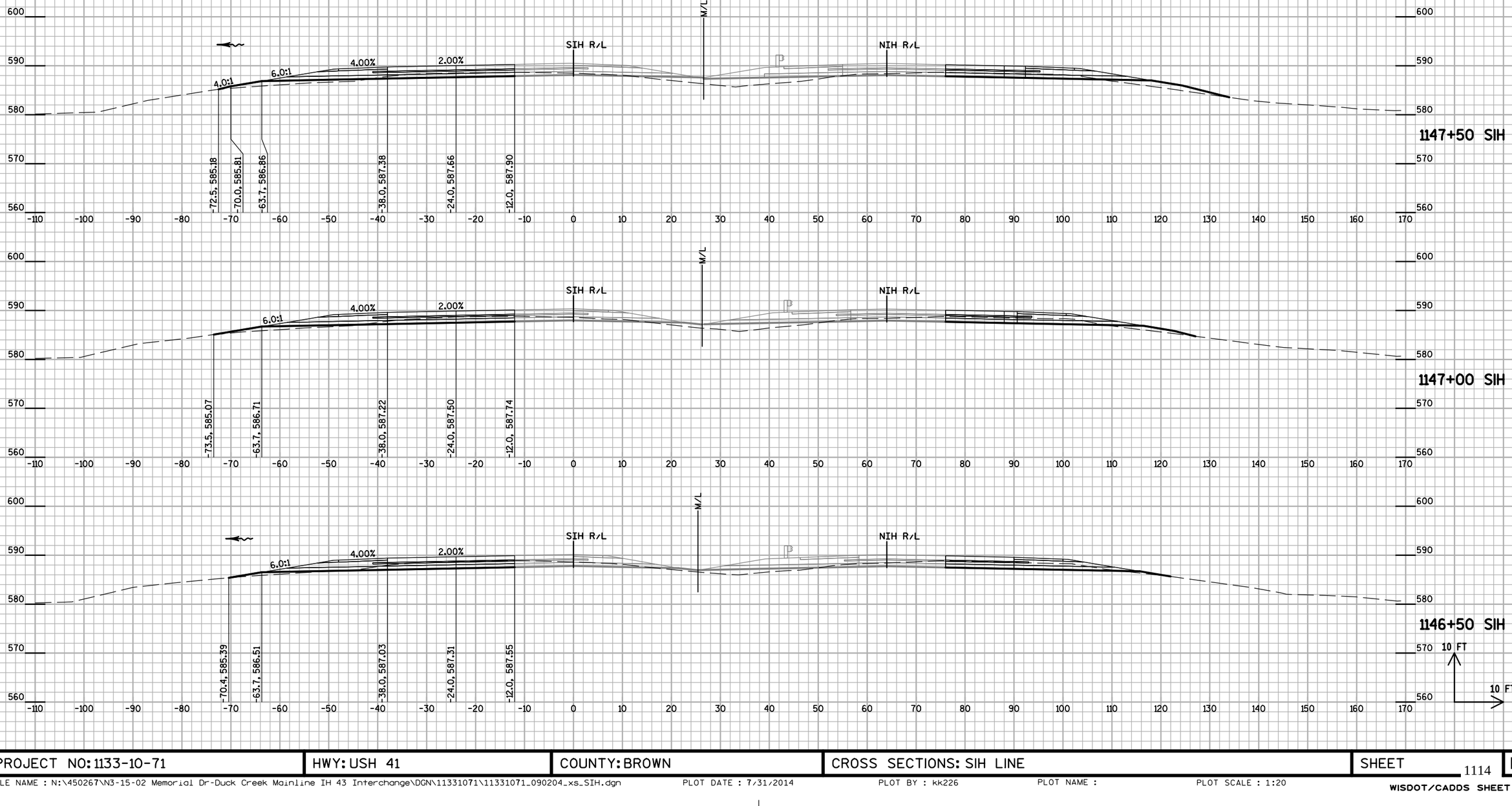
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1113	E

STA. 1146+50 SIH TO 1147+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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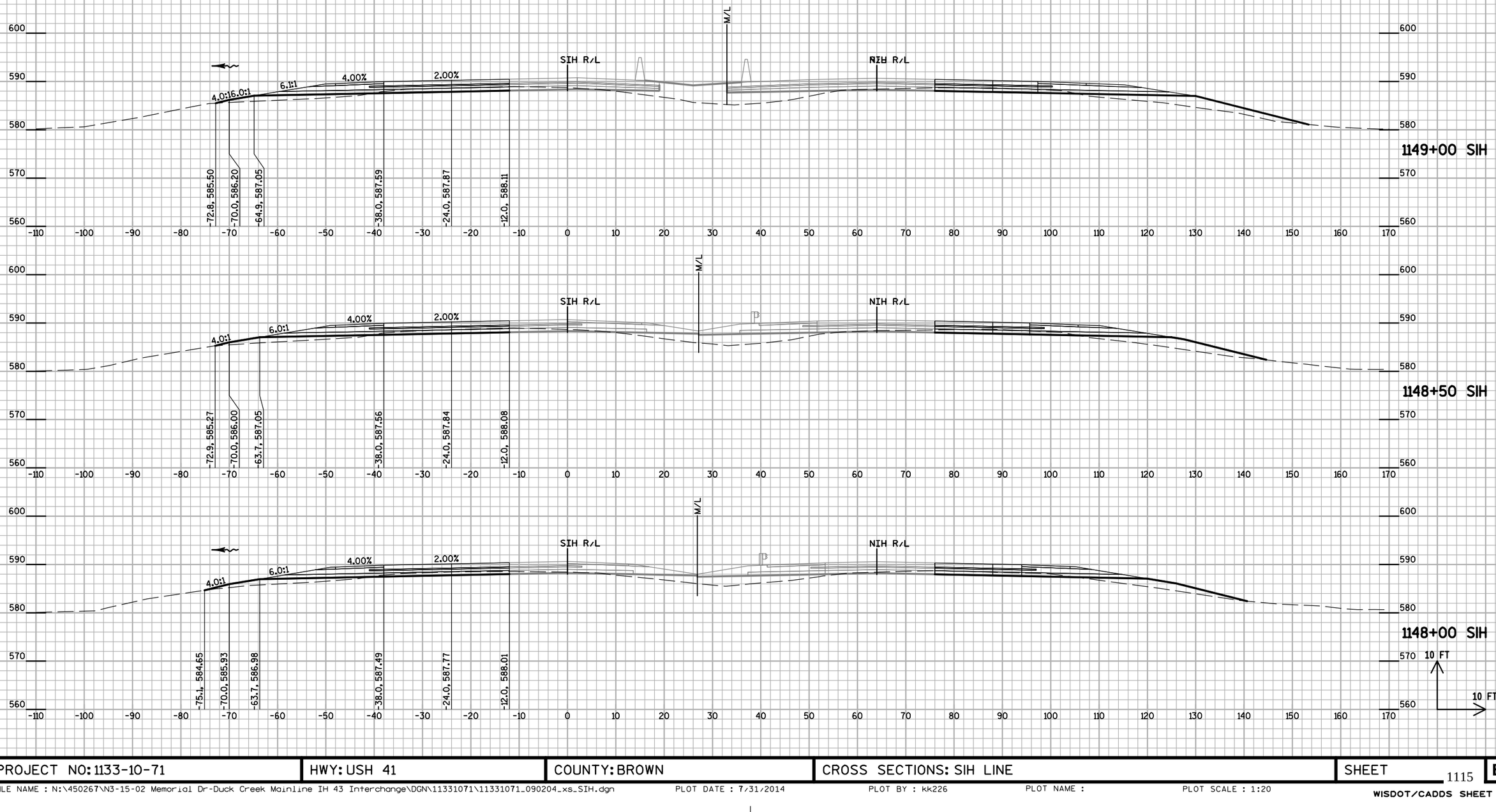
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1114	E

STA. 1148+00 SIH TO 1149+00 SIH

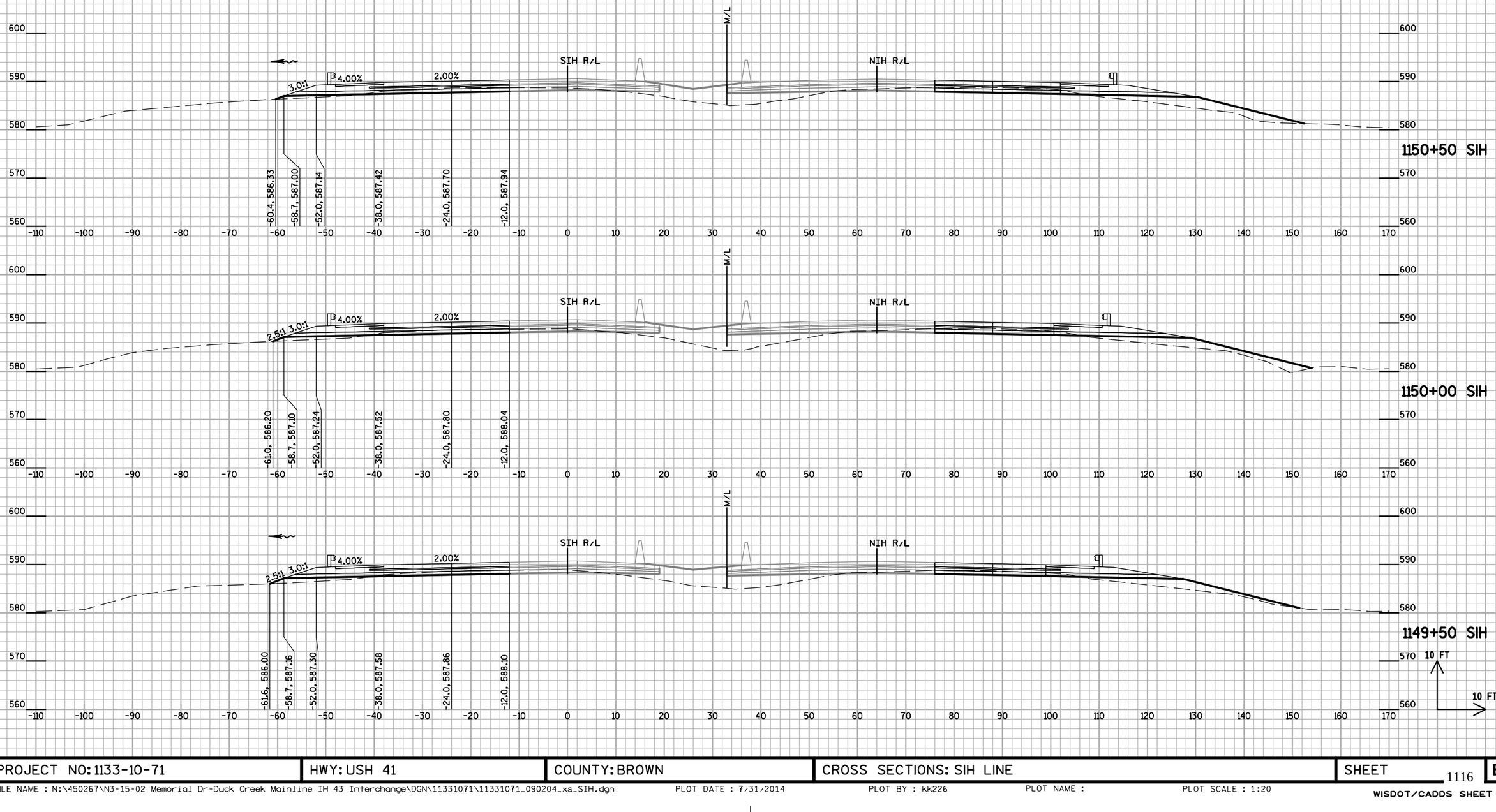
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1115	E

STA. 1149+50 SIH TO 1150+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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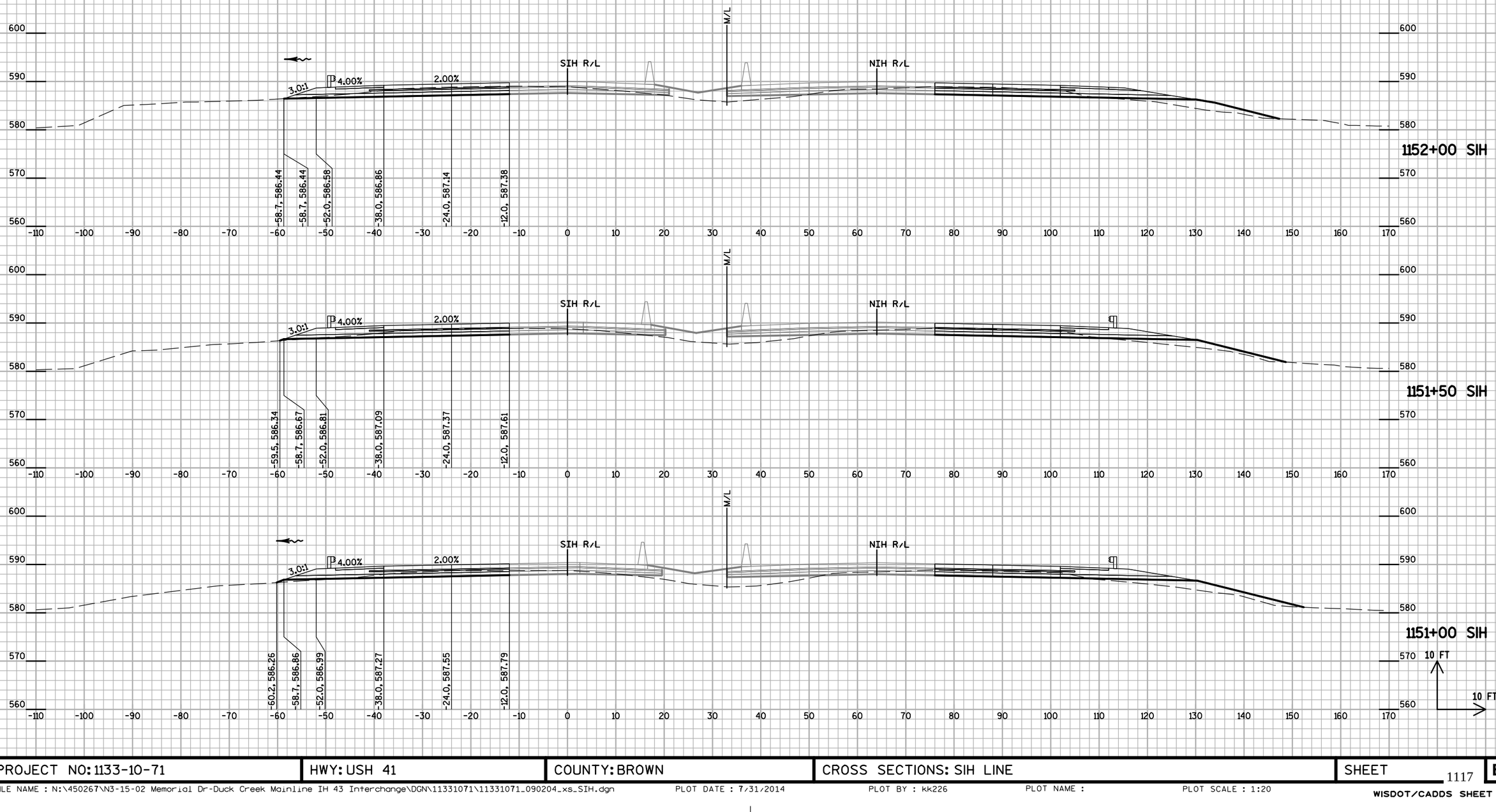
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1116	E

STA. 1151+00 SIH TO 1152+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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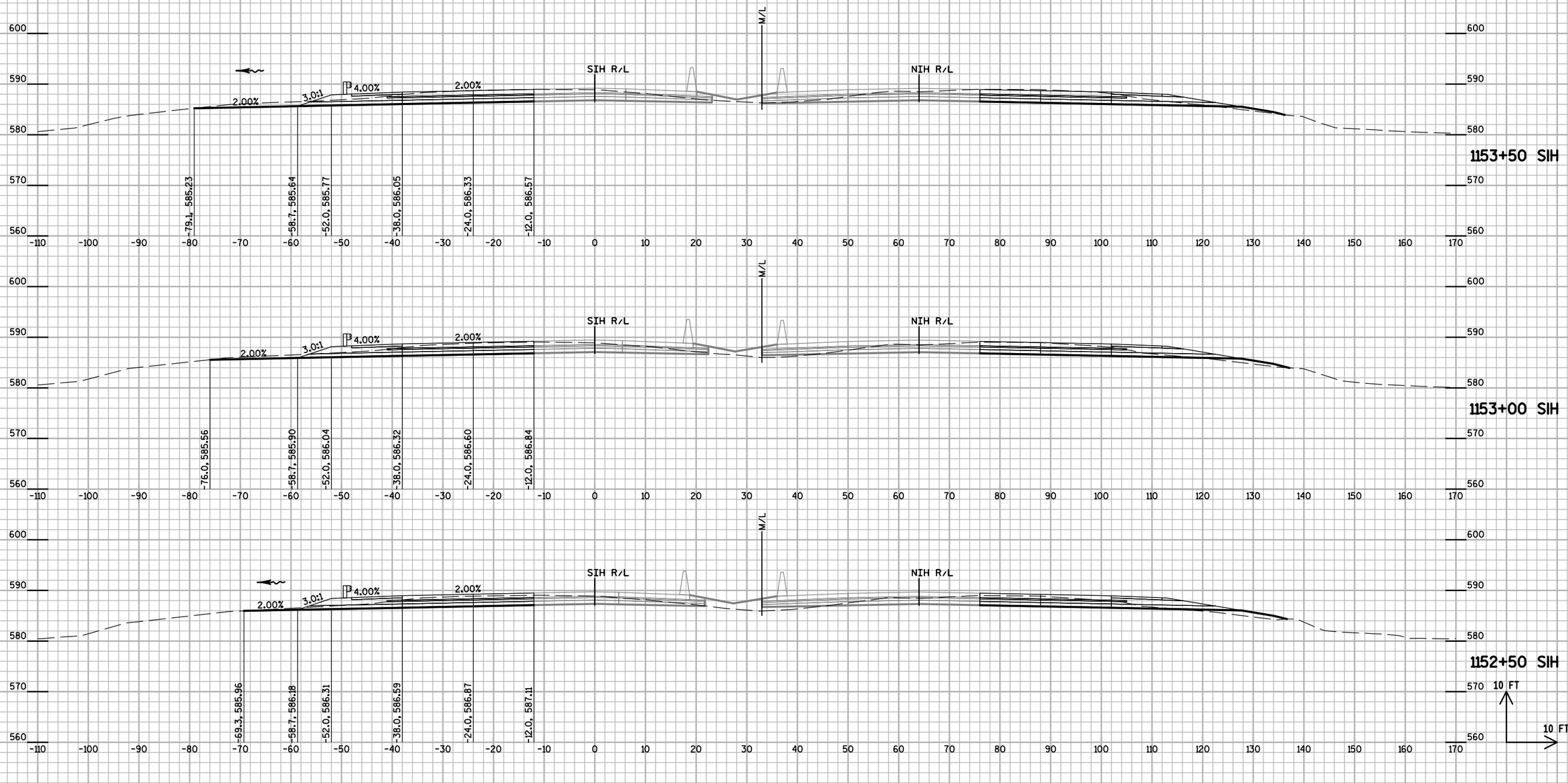
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1117	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1152+50 SIH TO 1153+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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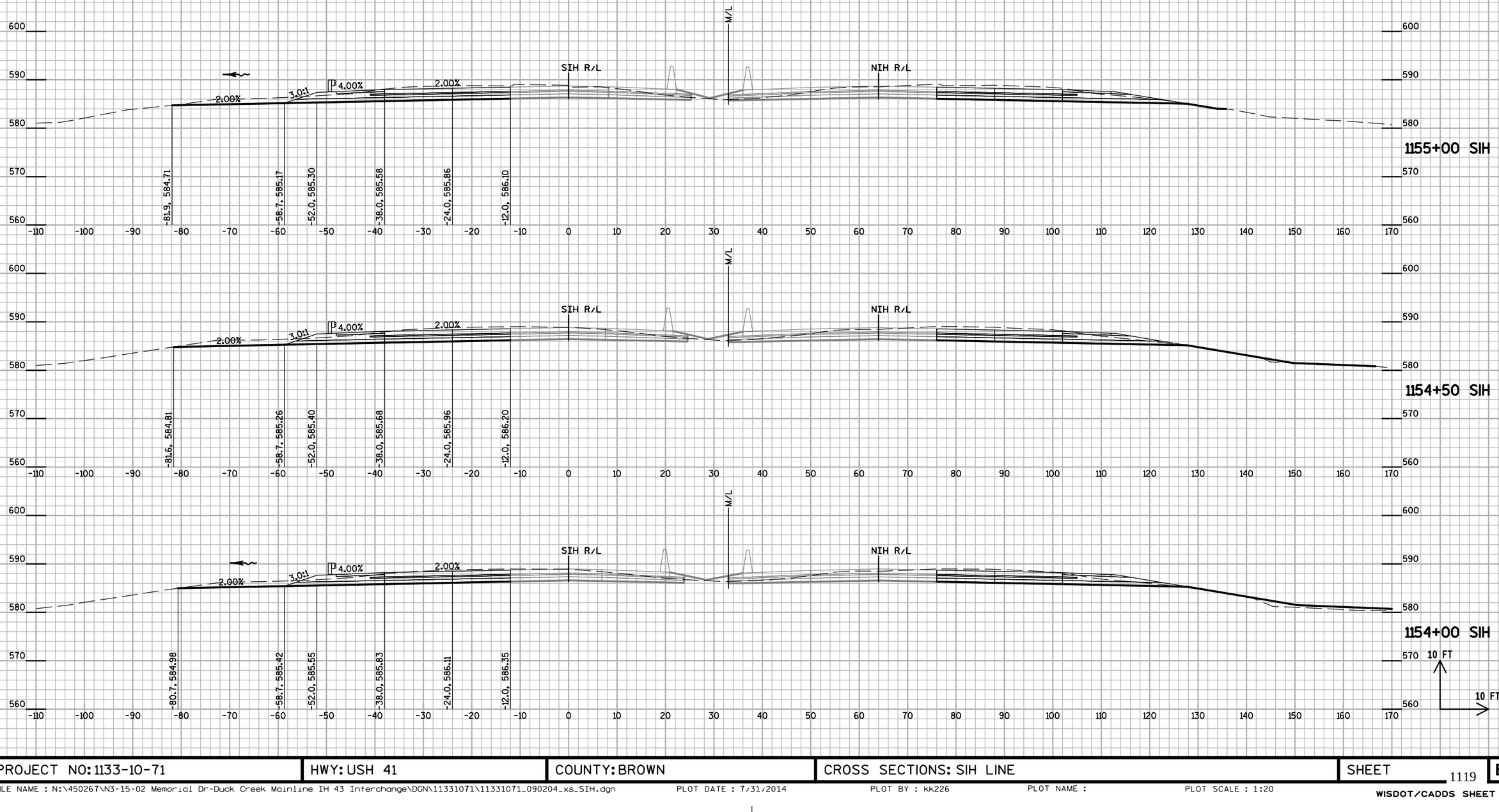
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1118	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1154+00 SIH TO 1155+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1119	E

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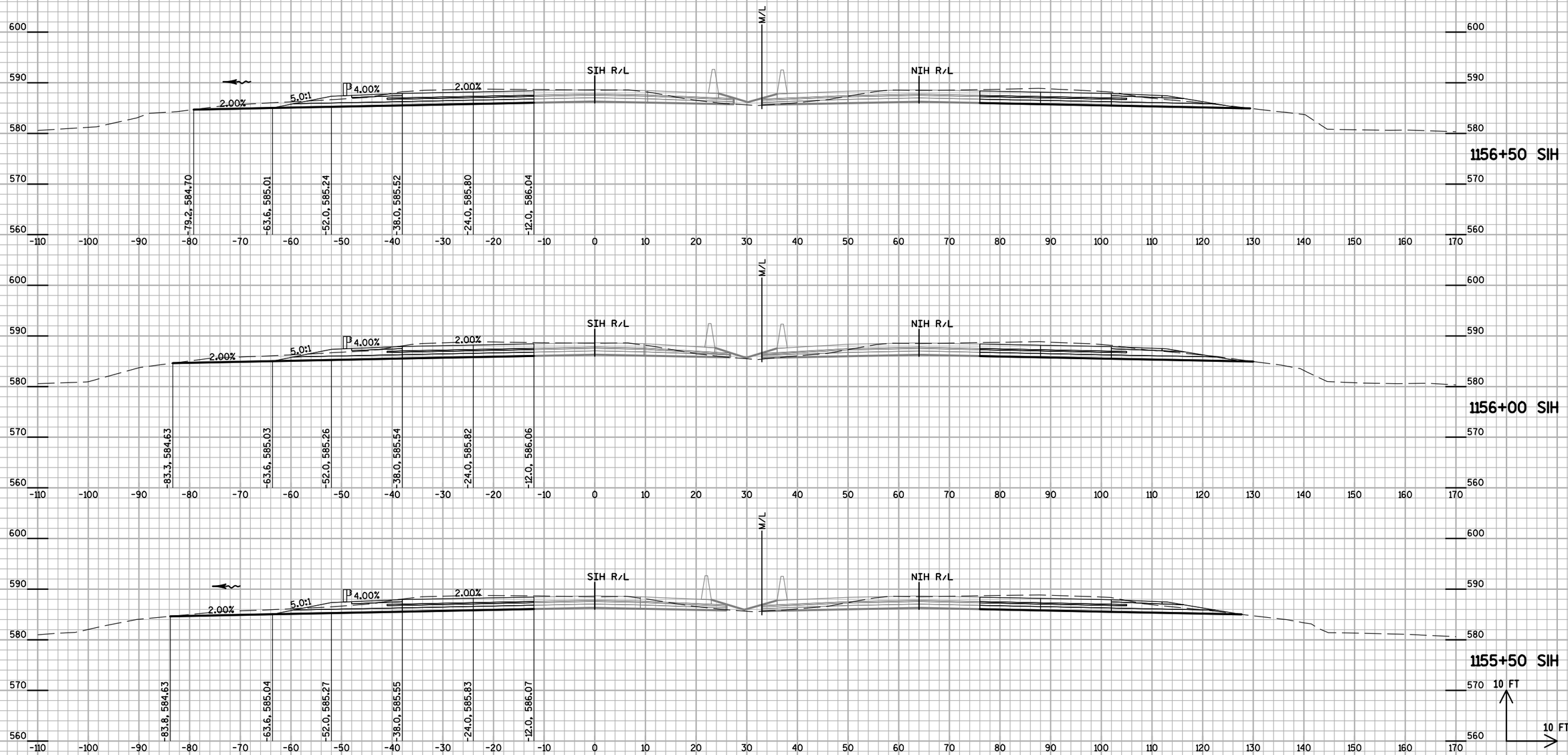
WISDOT/CADDS SHEET 21

STA. 1155+50 SIH TO 1156+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1120	E

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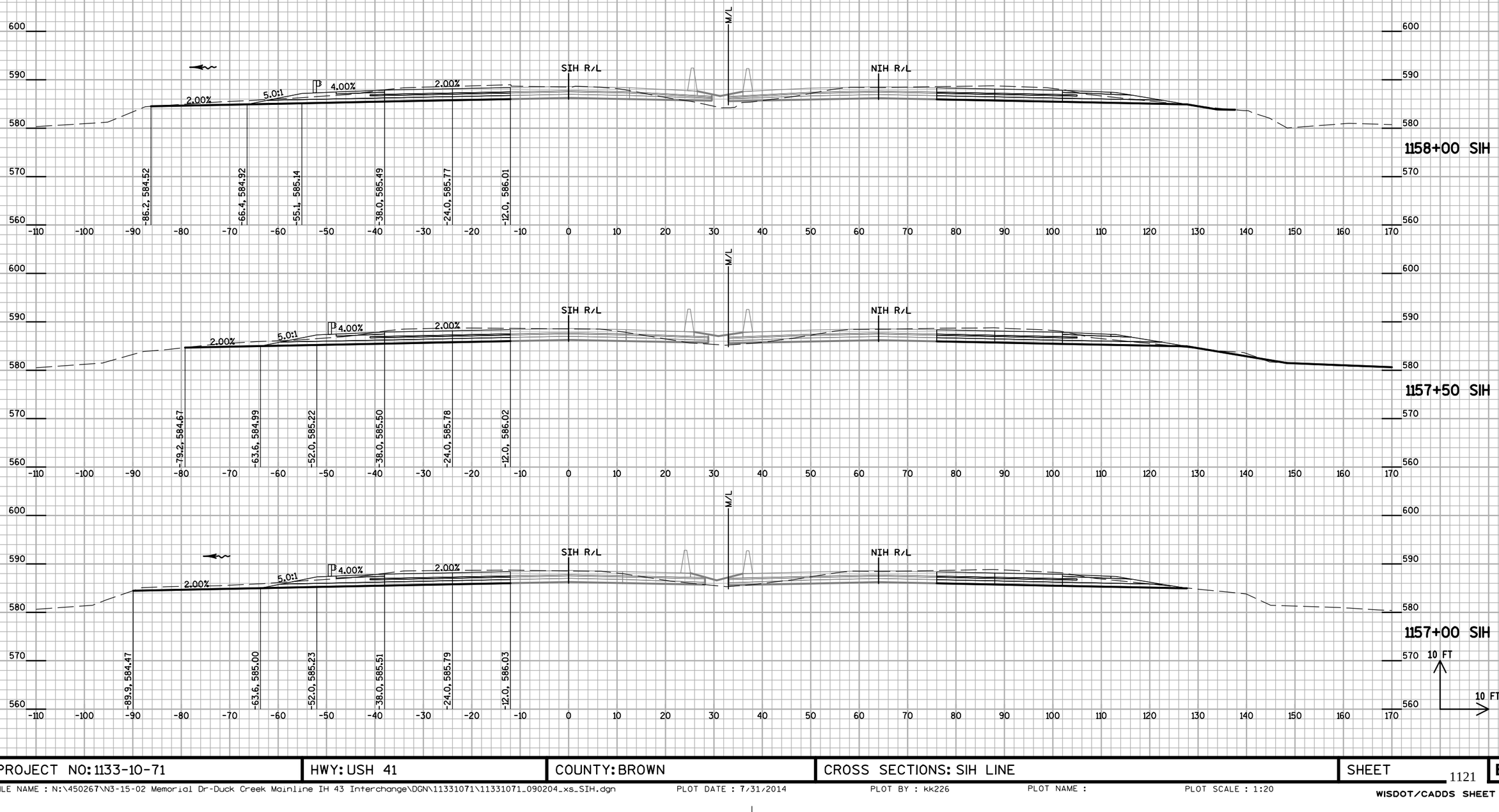
WISDOT/CADDS SHEET 21

STA. 1157+00 SIH TO 1158+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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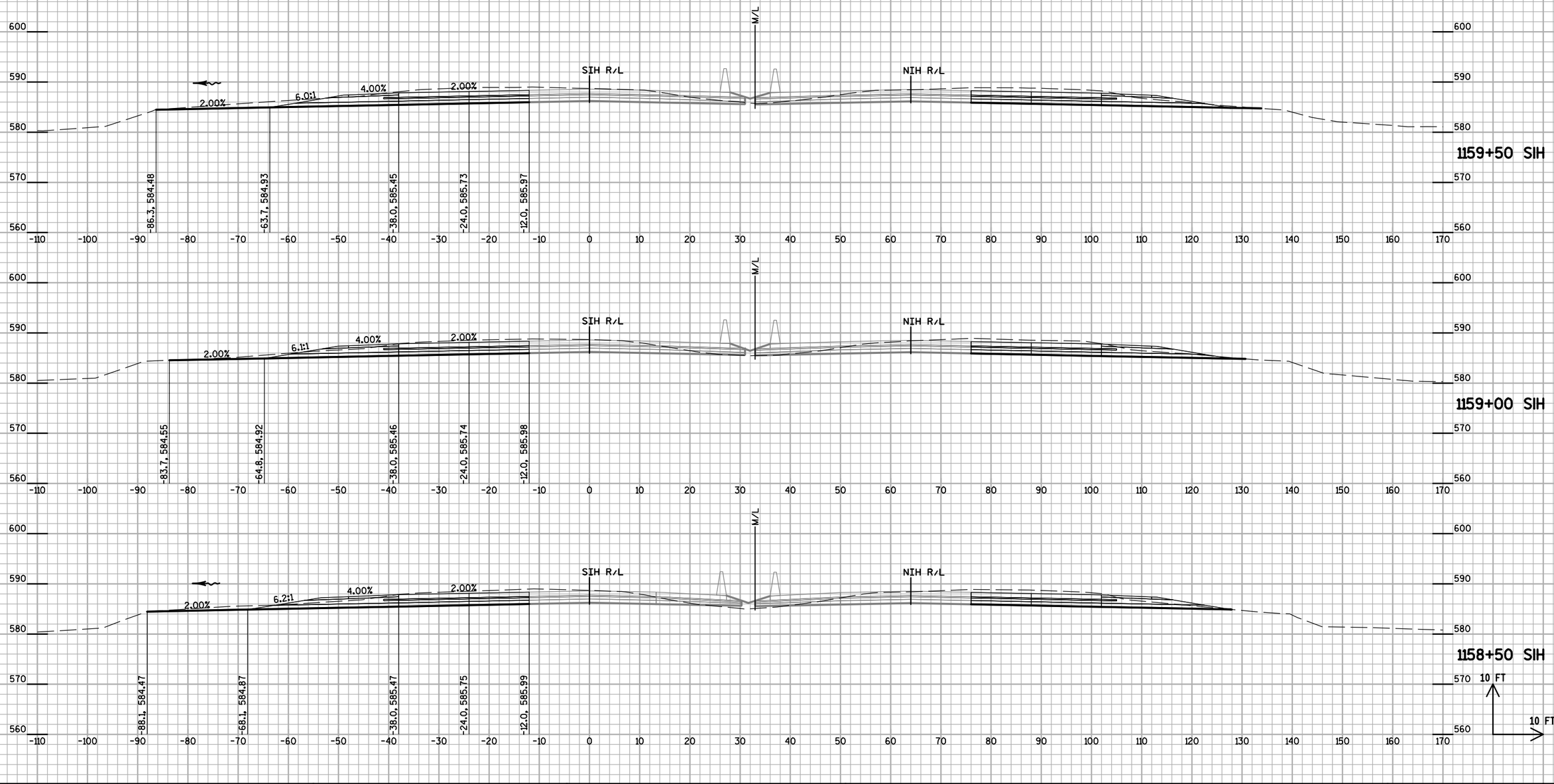
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1121	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1158+50 SIH TO 1159+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



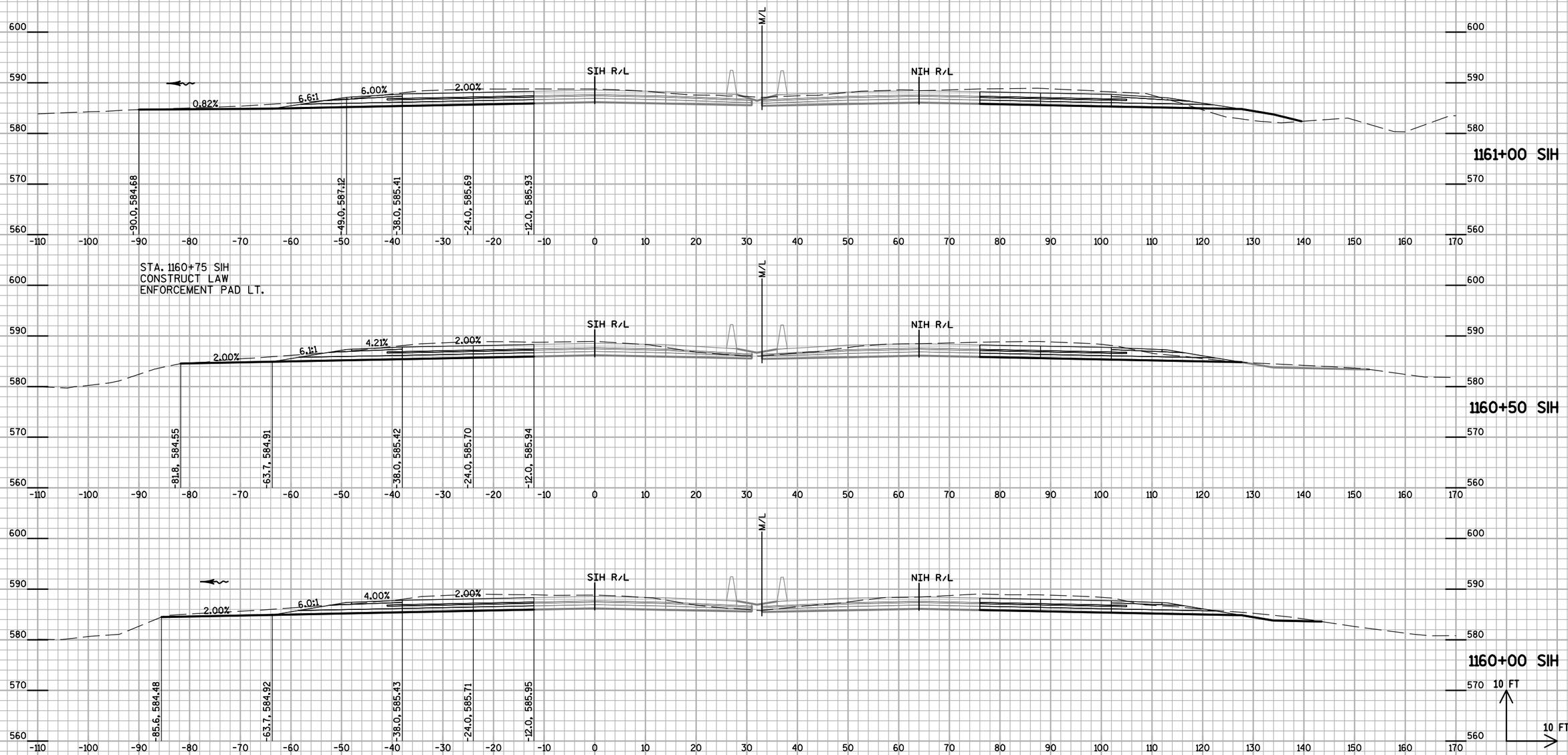
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1122	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1160+00 SIH TO 1161+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

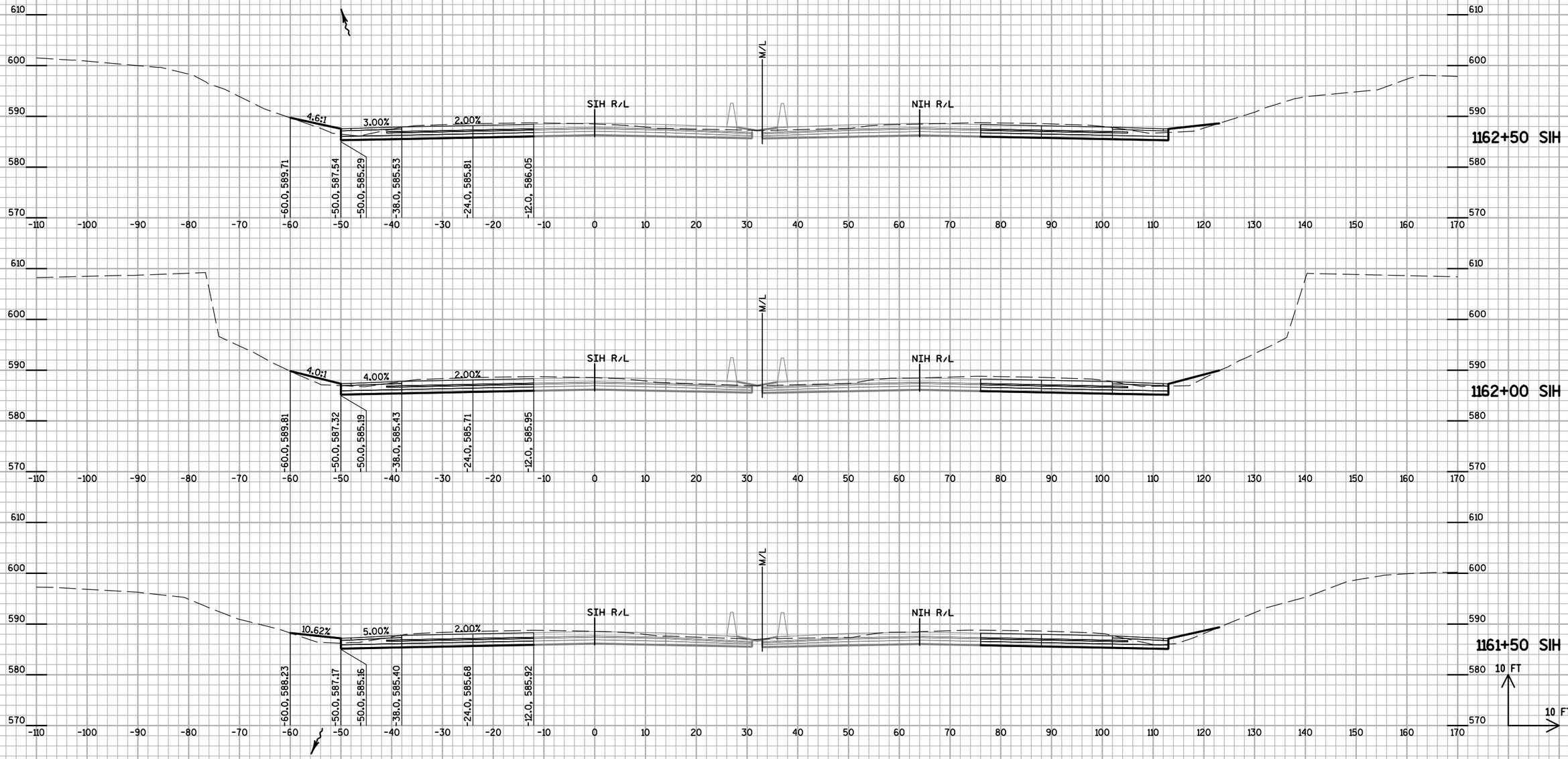


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1123	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1161+50 SIH TO 1162+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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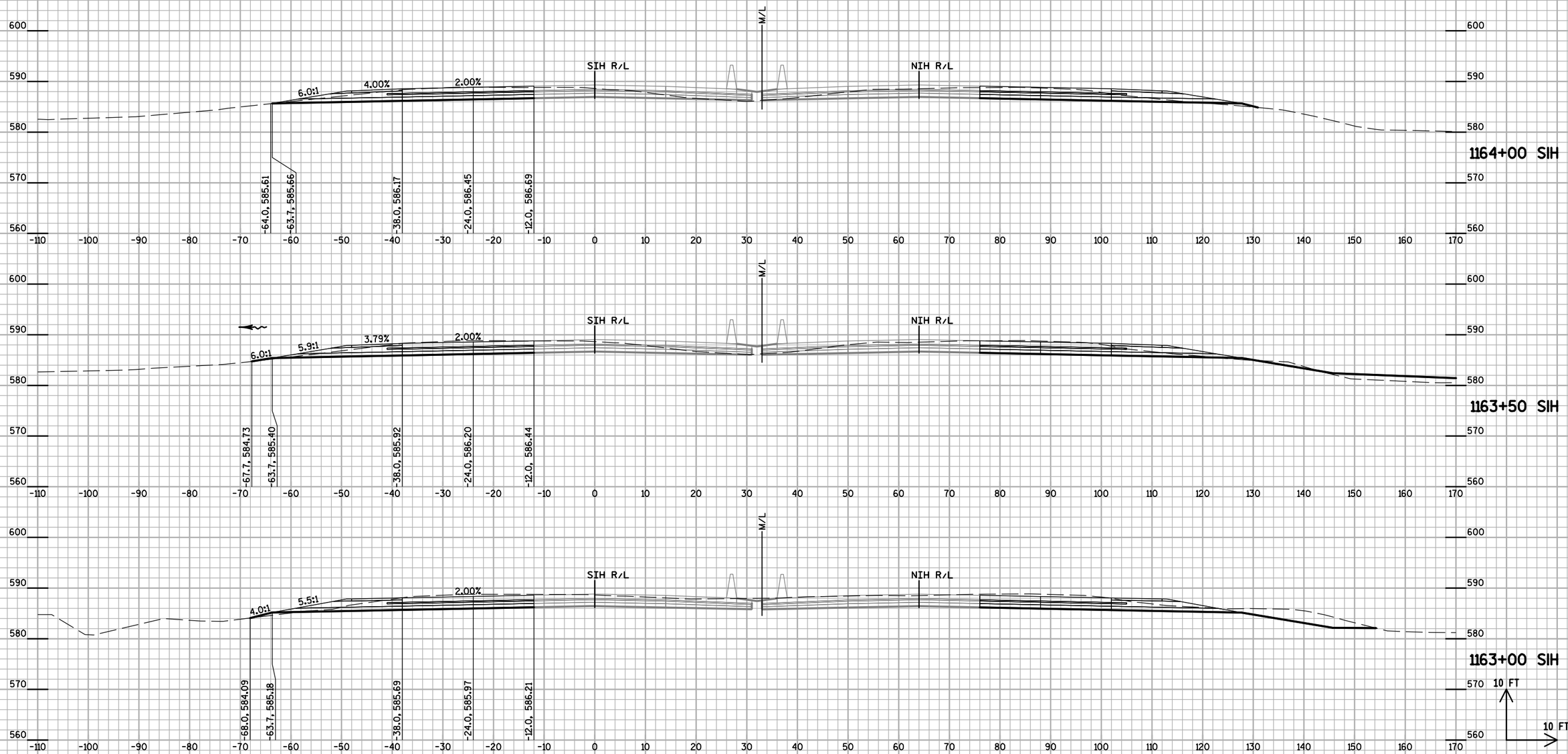
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1124	E

STA. 1163+00 SIH TO 1164+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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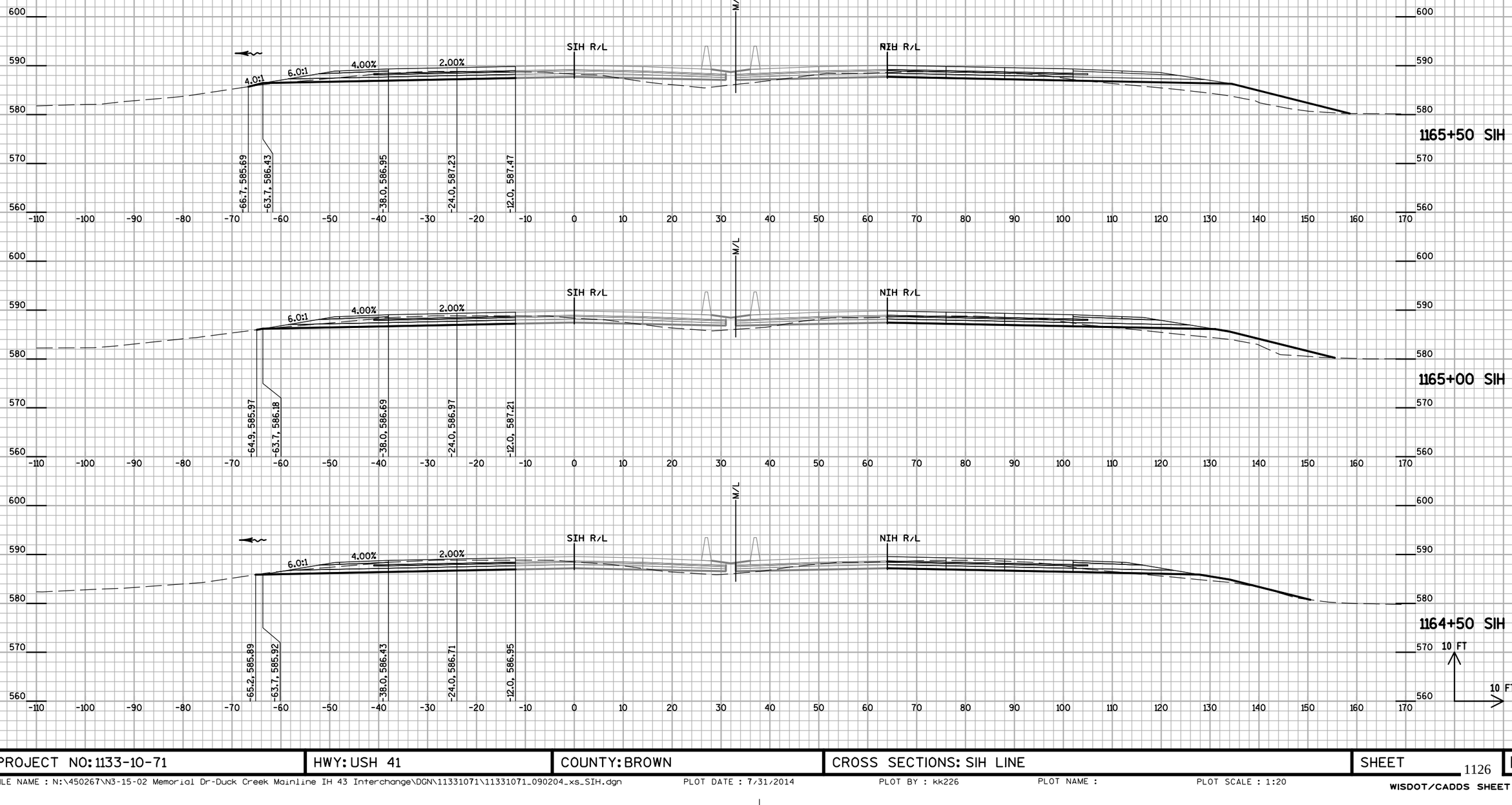
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1125	E

STA. 1164+50 SIH TO 1165+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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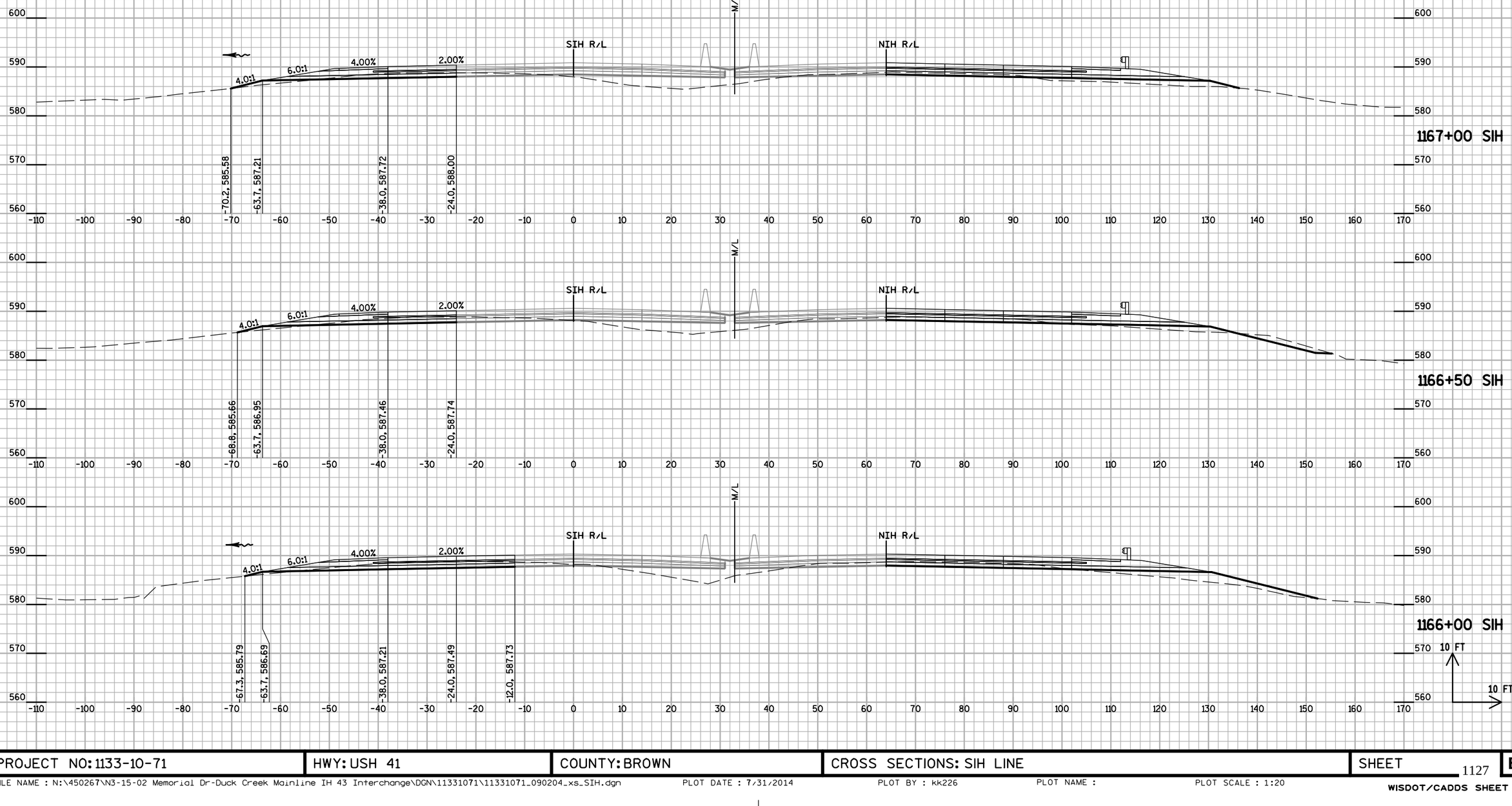
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1126	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1166+00 SIH TO 1167+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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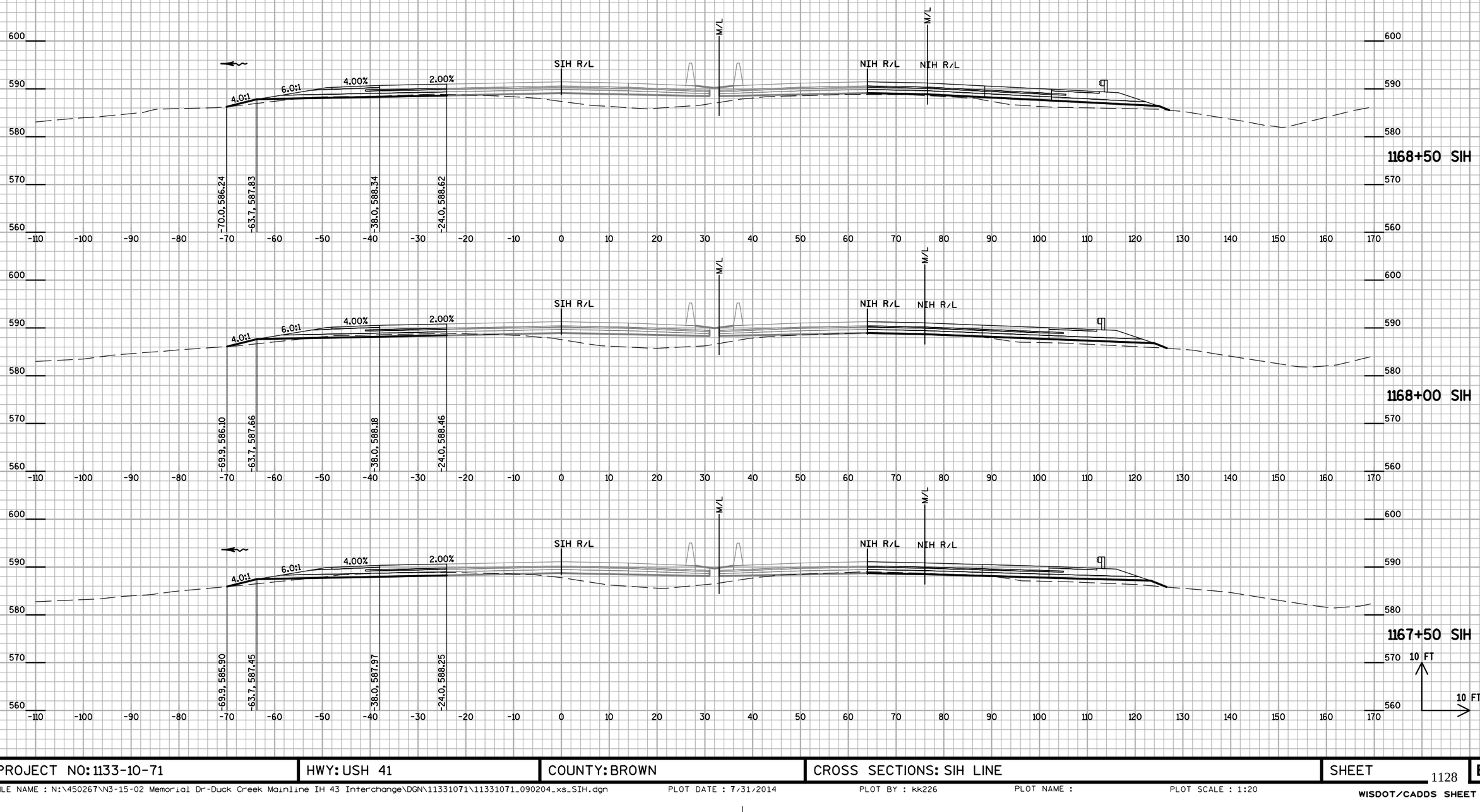
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1127	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1167+50 SIH TO 1168+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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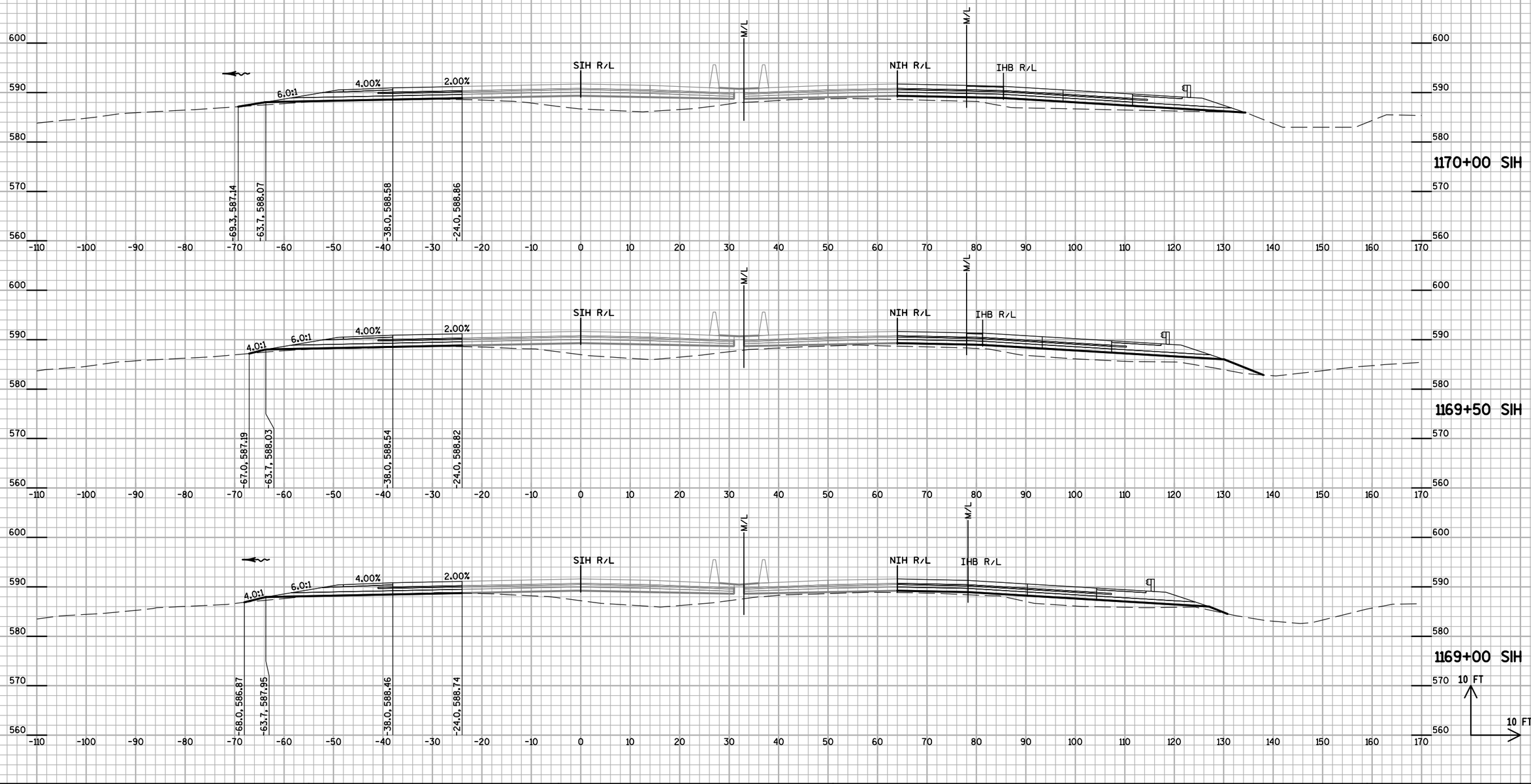
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1128	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1169+00 SIH TO 1170+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



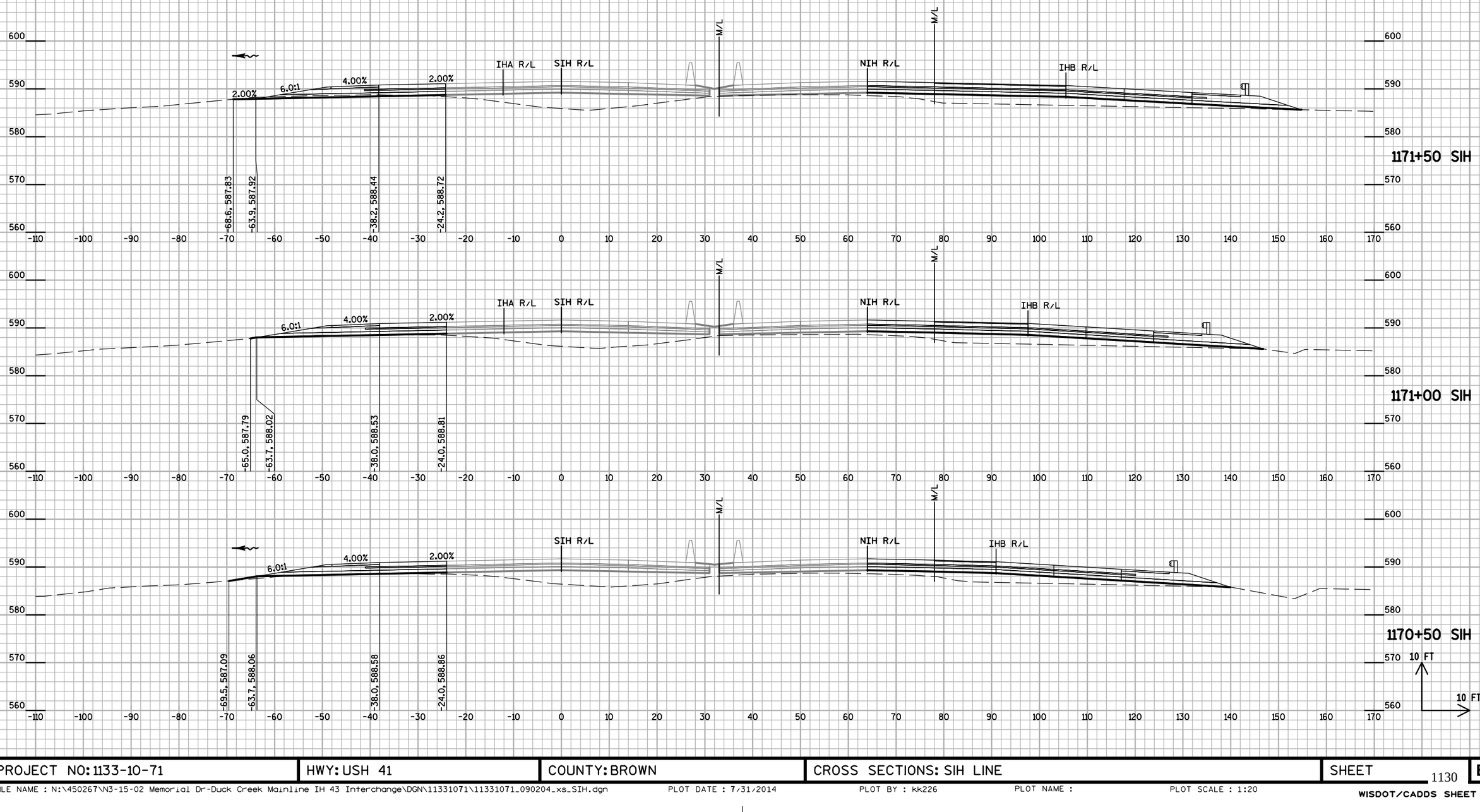
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1129	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1170+50 SIH TO 1171+50 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1130	E

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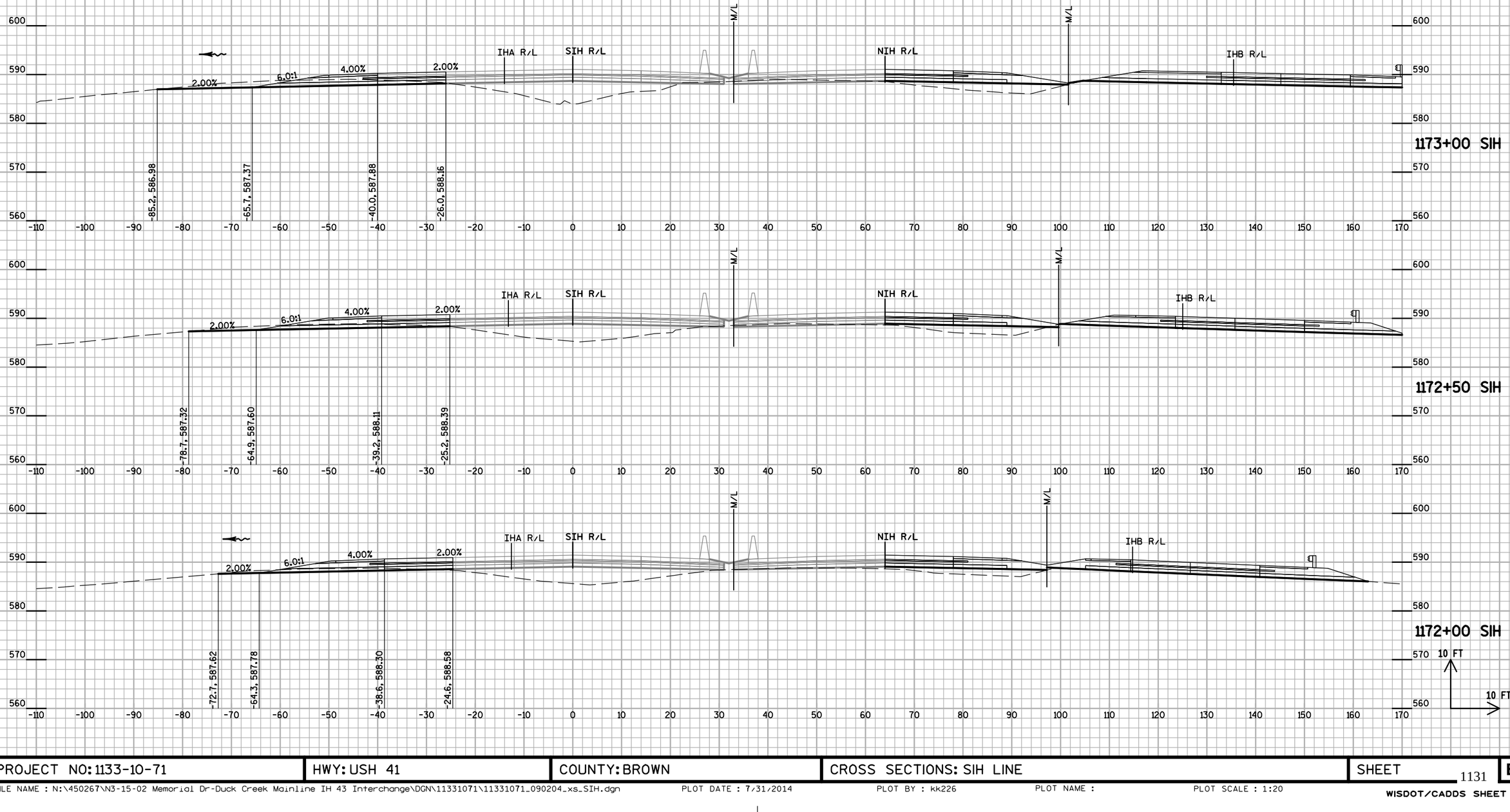
WISDOT/CADDS SHEET 21

STA. 1172+00 SIH TO 1173+00 SIH

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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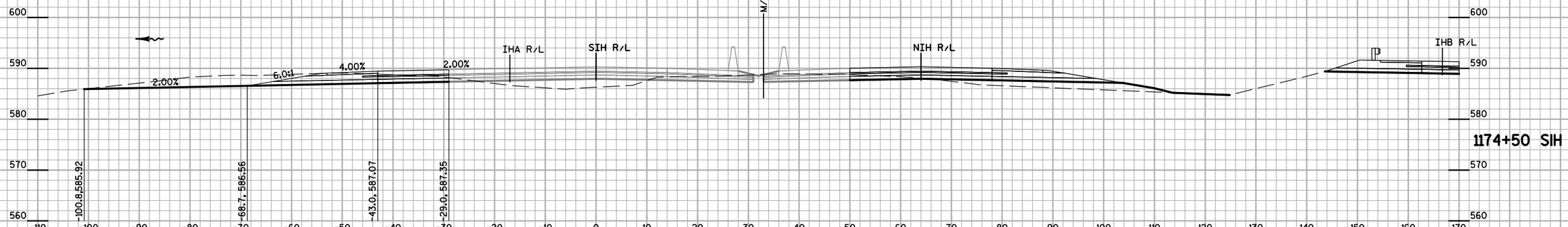
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1131	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

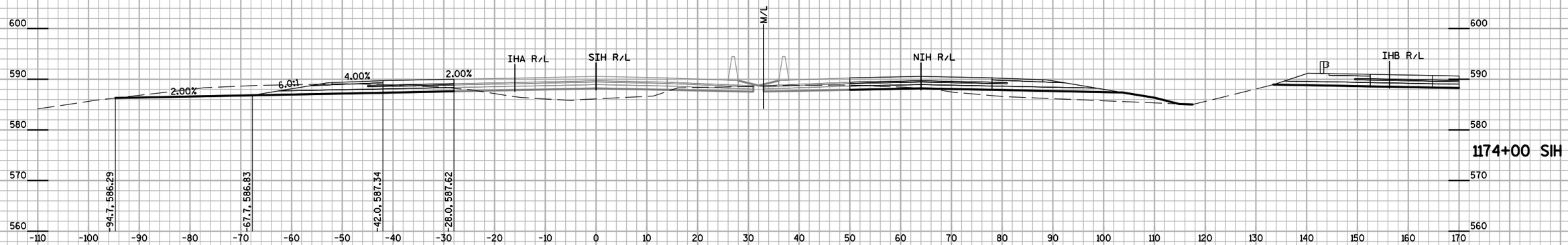
WISDOT/CADDS SHEET 21

STA. 1173+50 SIH TO 1174+50 SIH

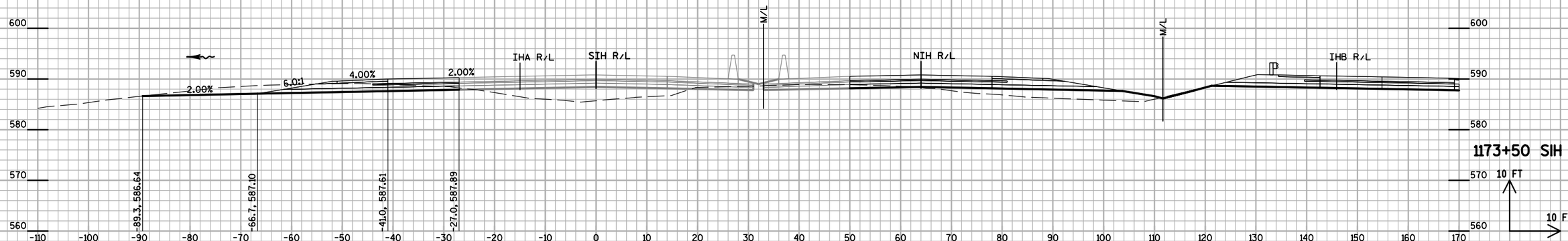
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1174+50 SIH



1174+00 SIH



1173+50 SIH

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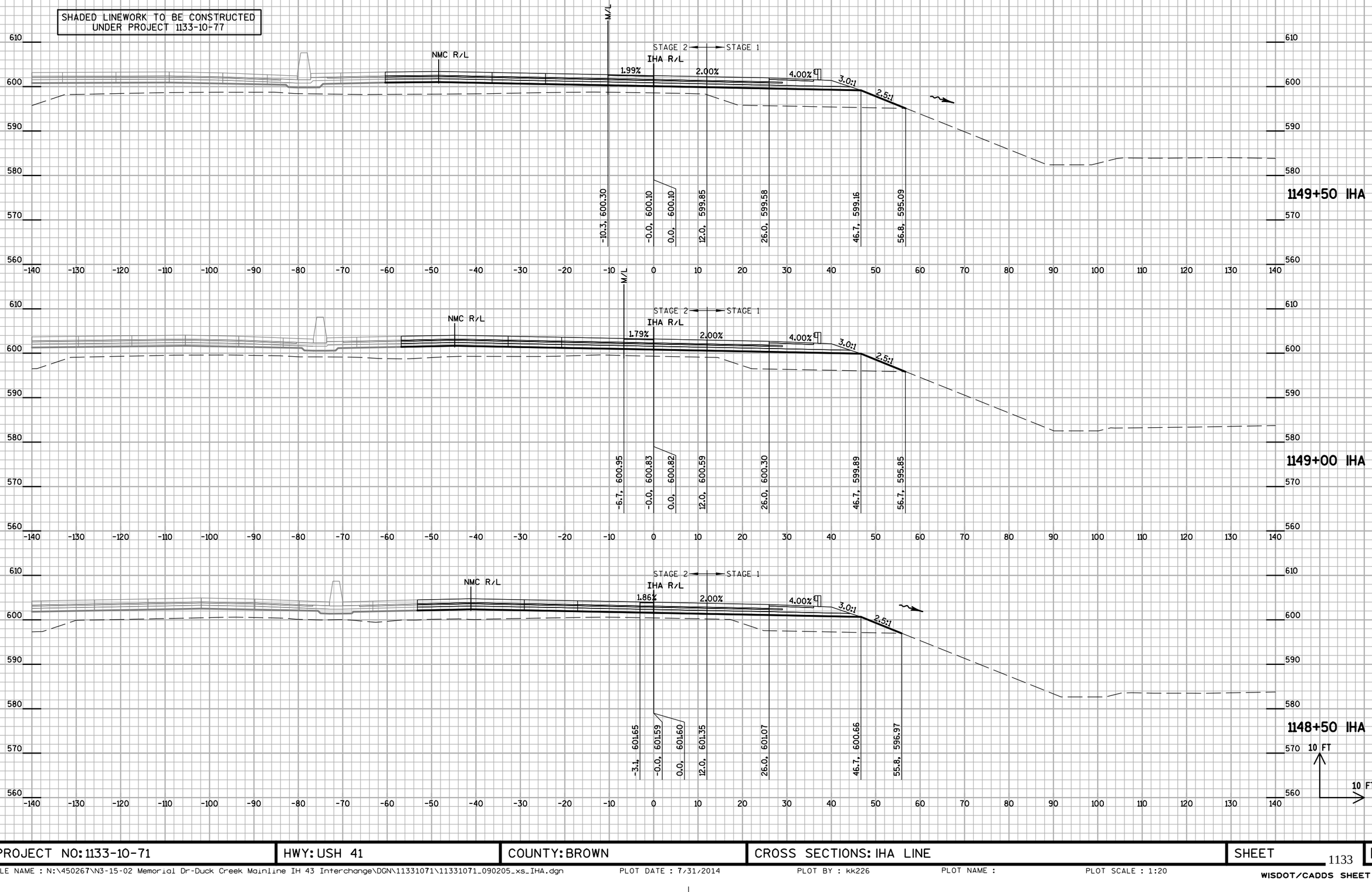
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: SIH LINE	SHEET 1132	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090204_xs_SIH.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1148+50 IHA TO 1149+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1133	E

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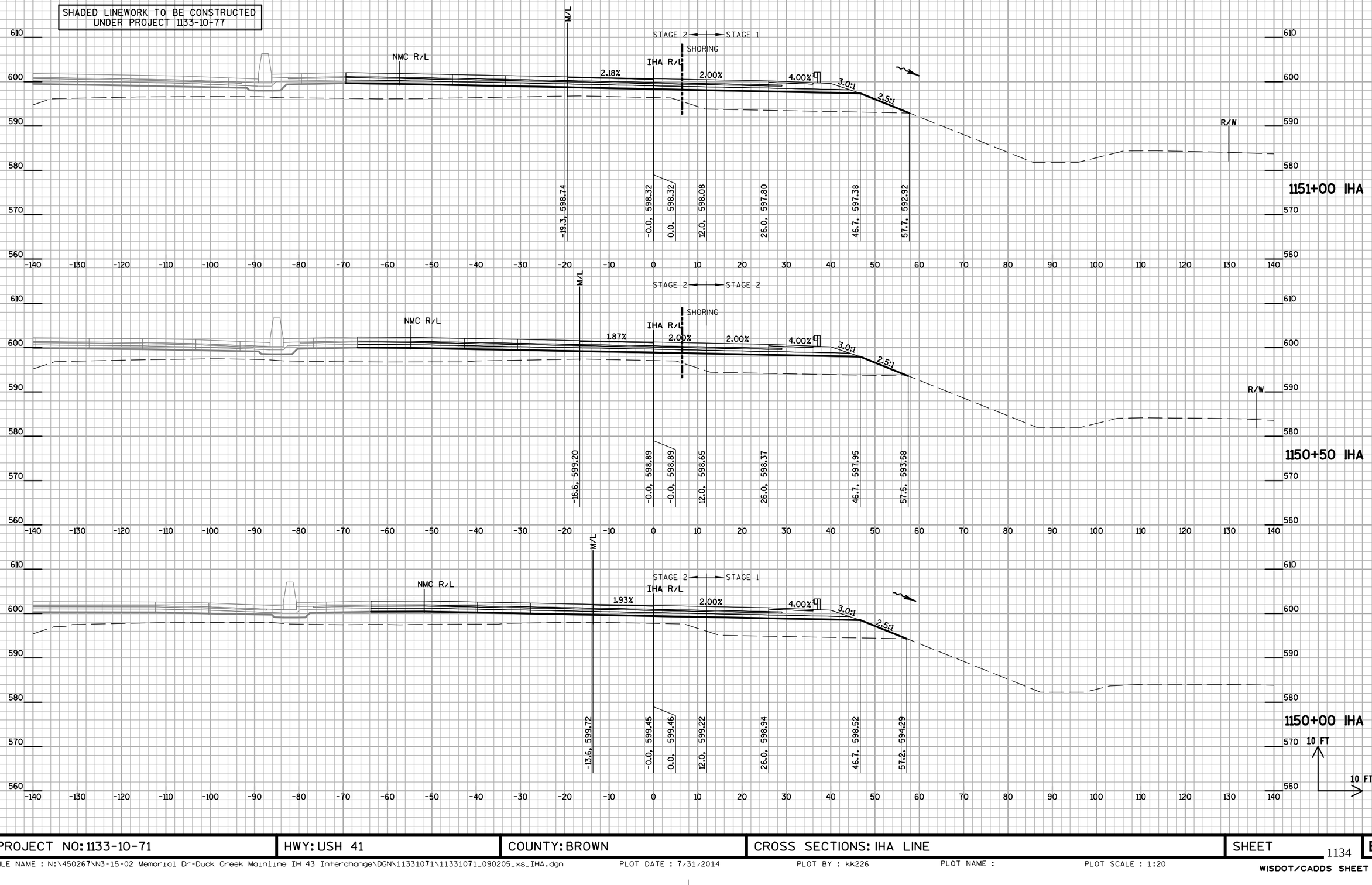
WISDOT/CADDS SHEET 21

STA. 1150+00 IHA TO 1151+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



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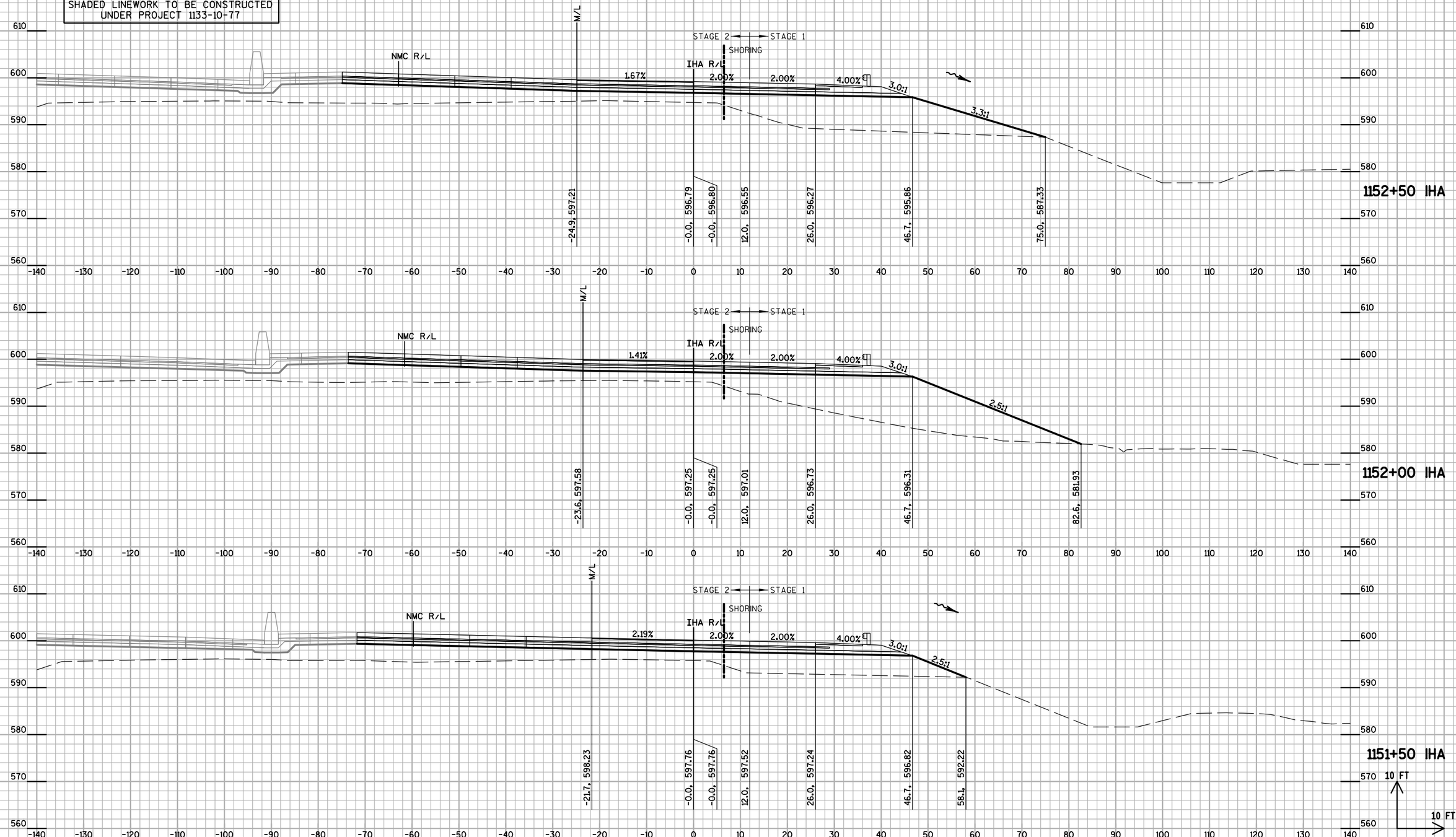
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1134	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1151+50 IHA TO 1152+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



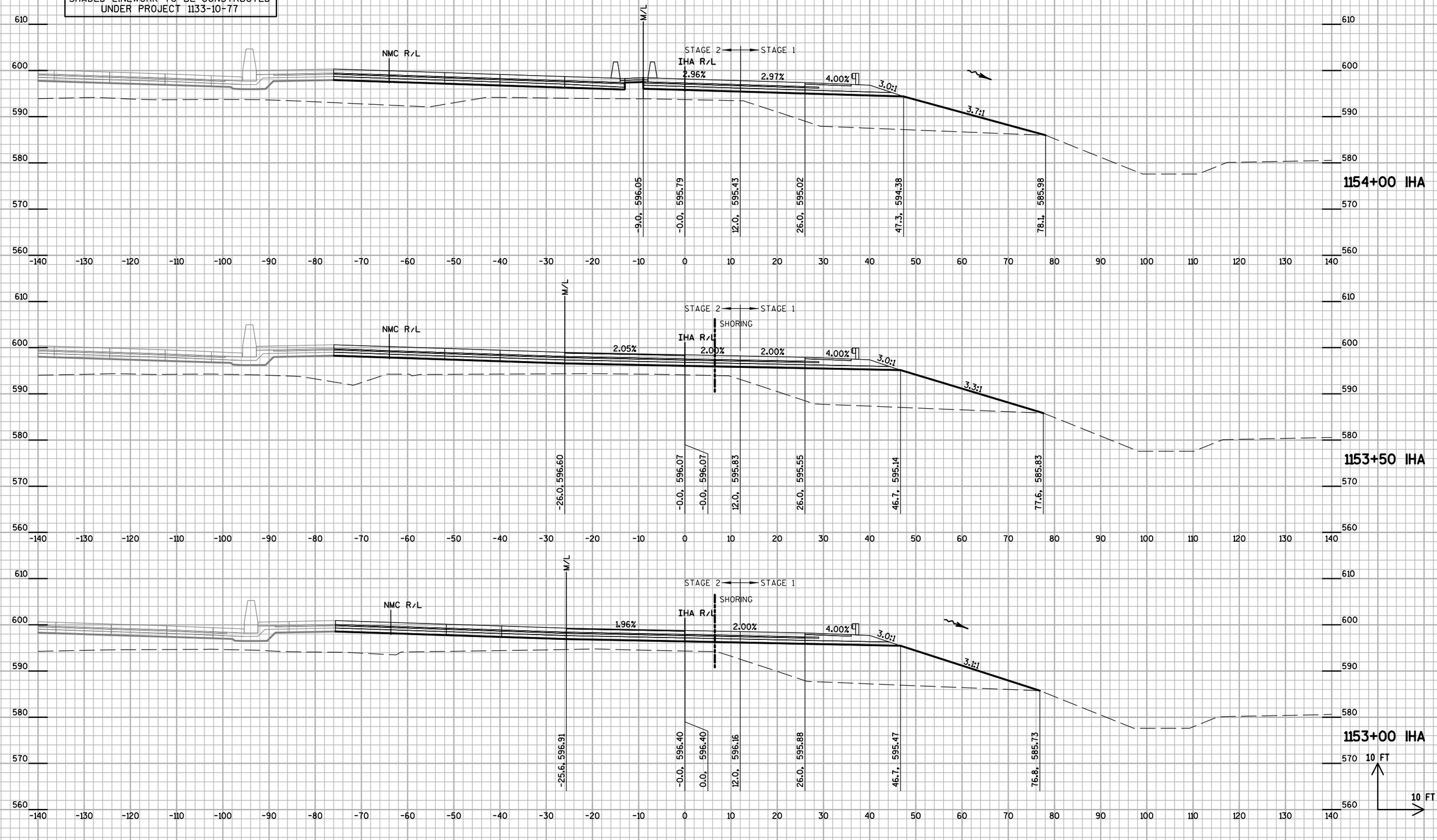
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1135	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1153+00 IHA TO 1154+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET	E

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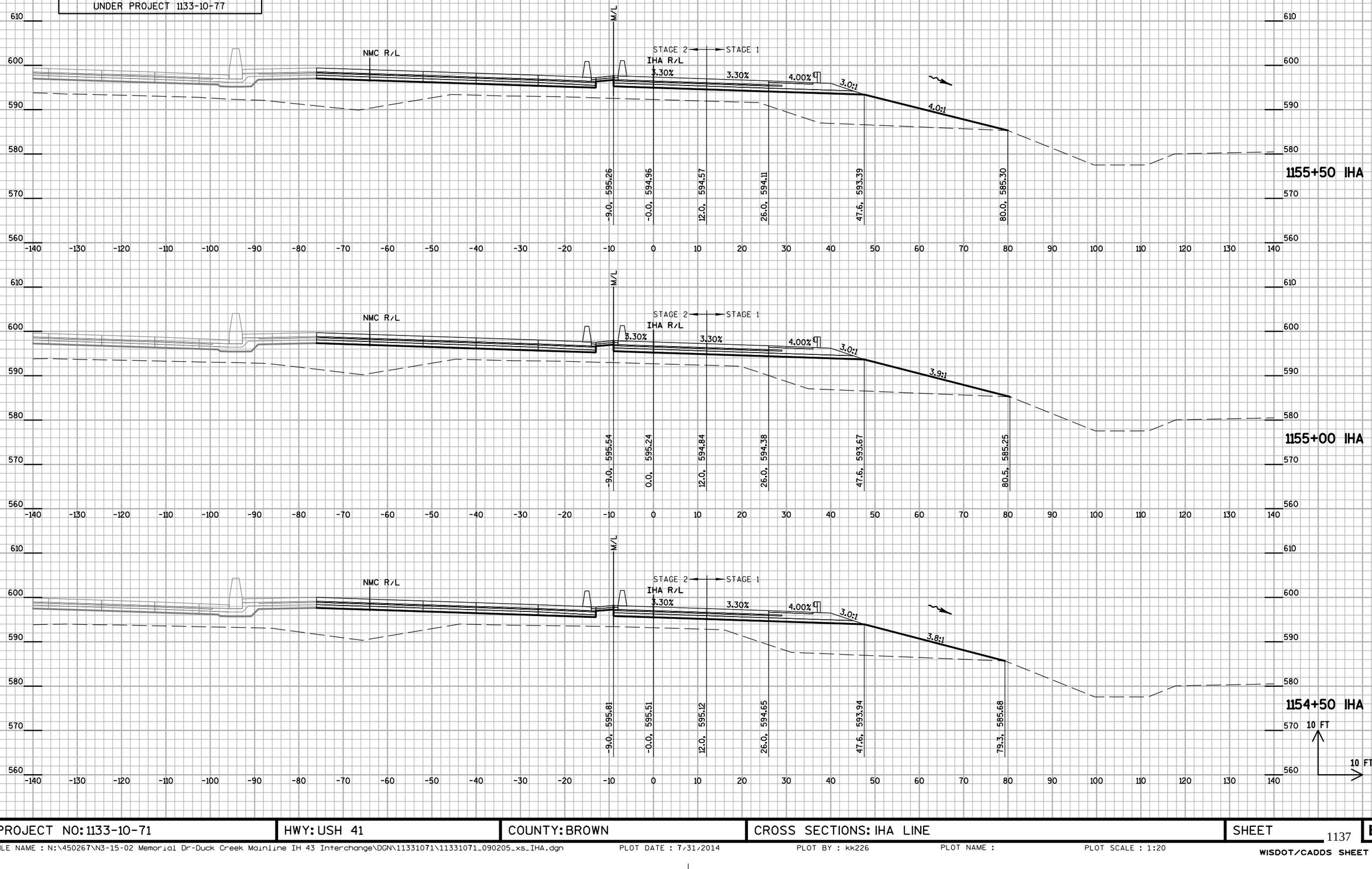
WISDOT/CADDS SHEET 21

STA. 1154+50 IHA TO 1155+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



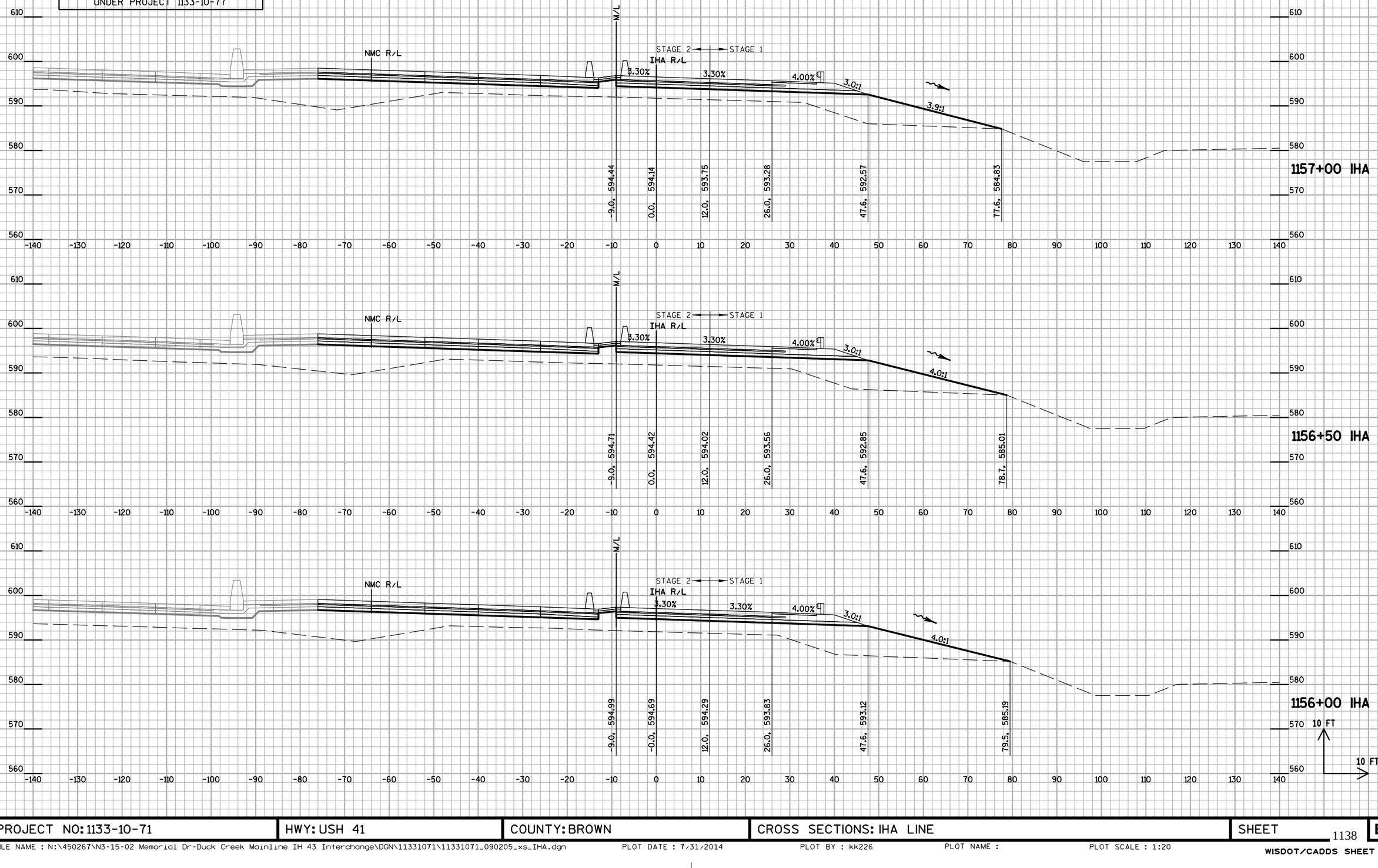
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1137	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1156+00 IHA TO 1157+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



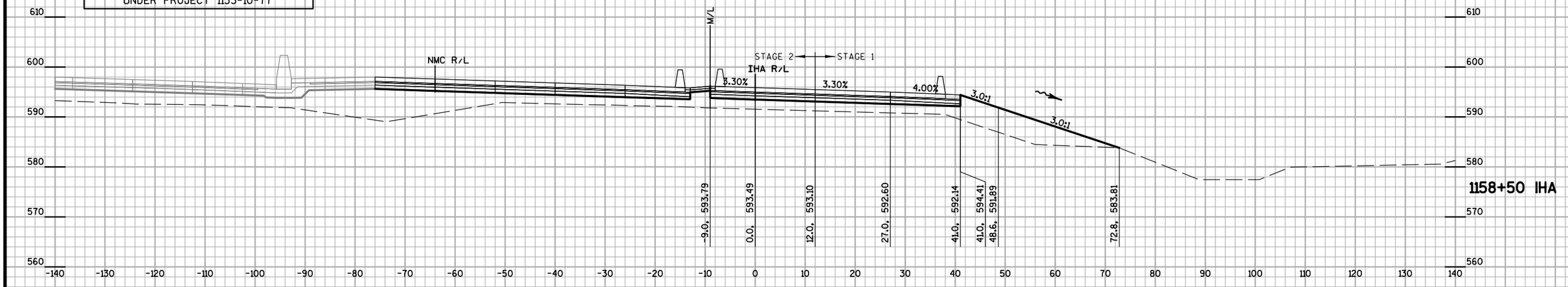
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1138	E

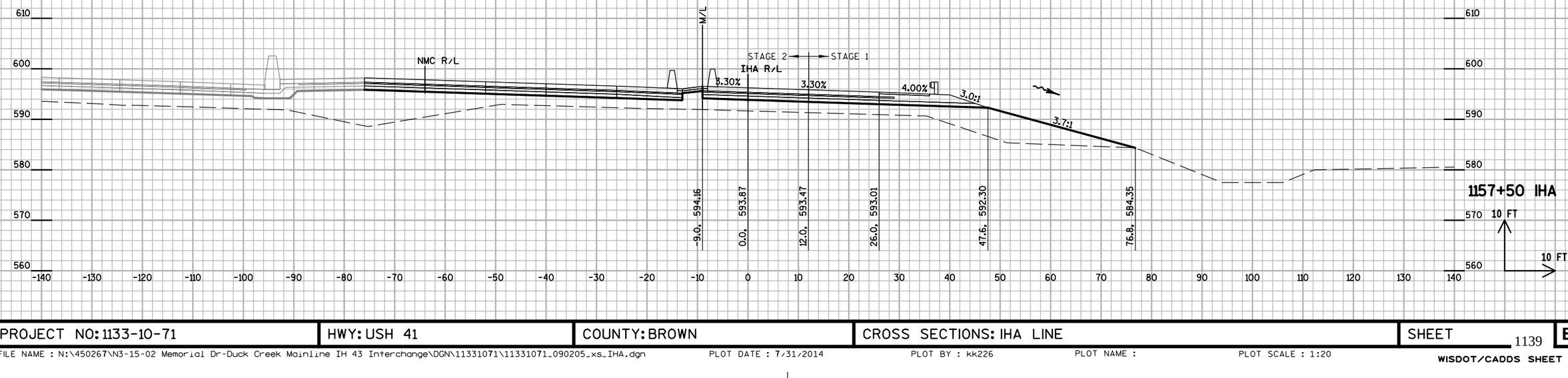
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1157+50 IHA TO 1158+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77





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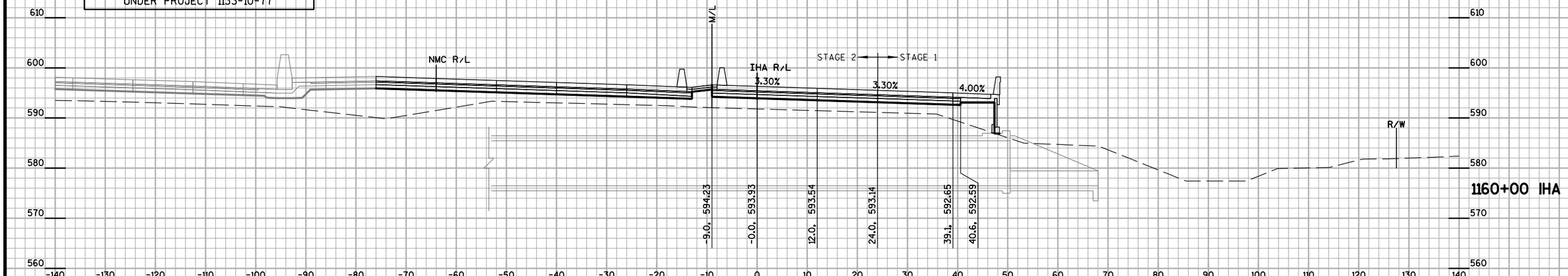
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1139	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

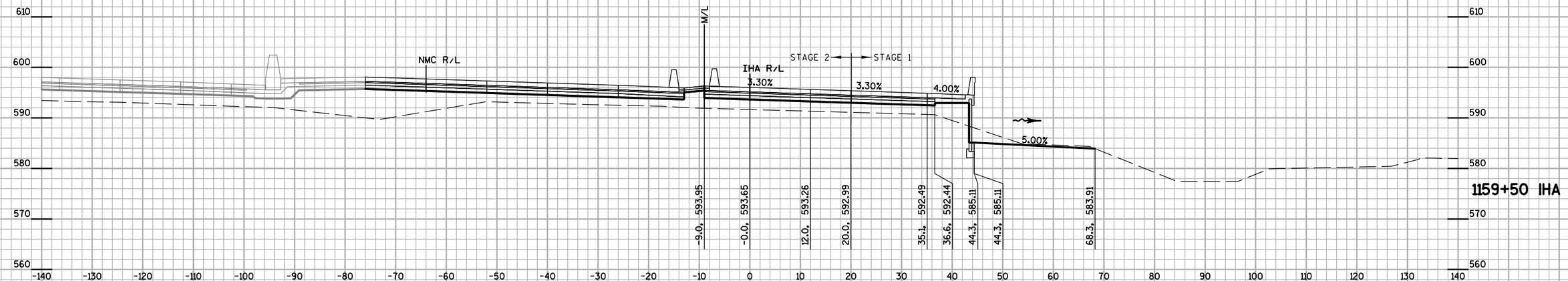
WISDOT/CADDS SHEET 21

STA. 1159+00 IHA TO 1160+00 IHA

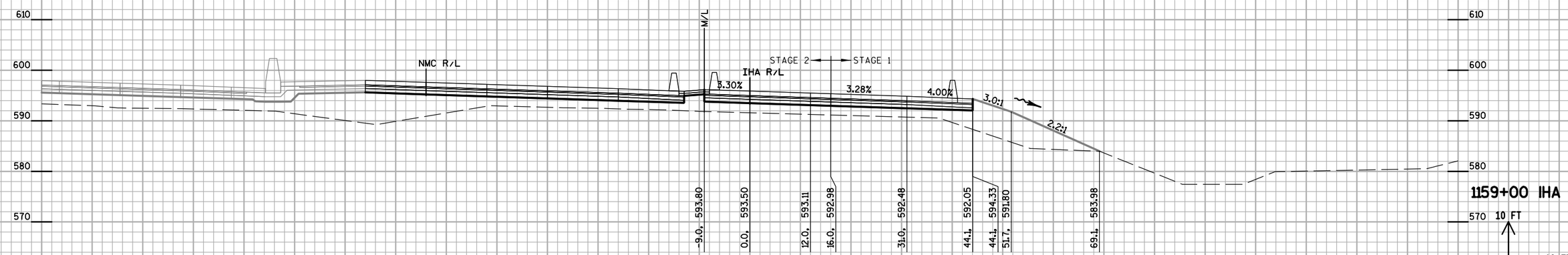
SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



1160+00 IHA



1159+50 IHA



1159+00 IHA

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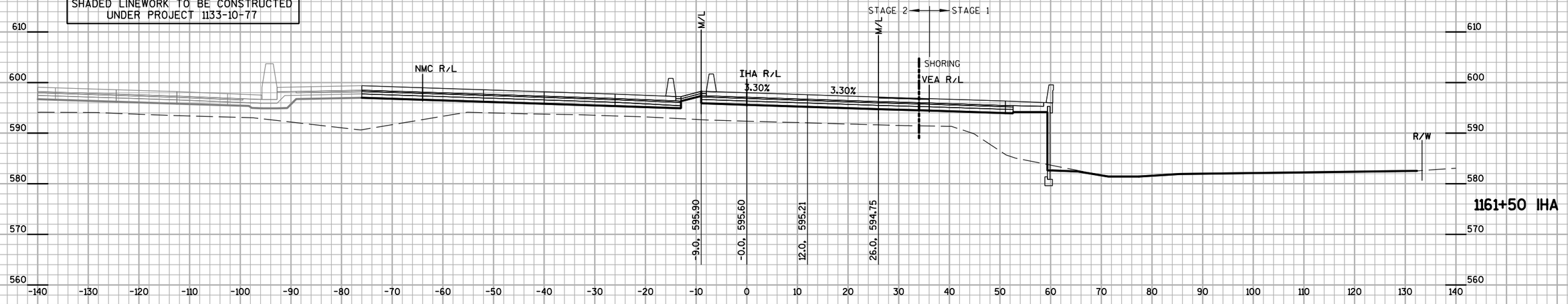
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1140	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

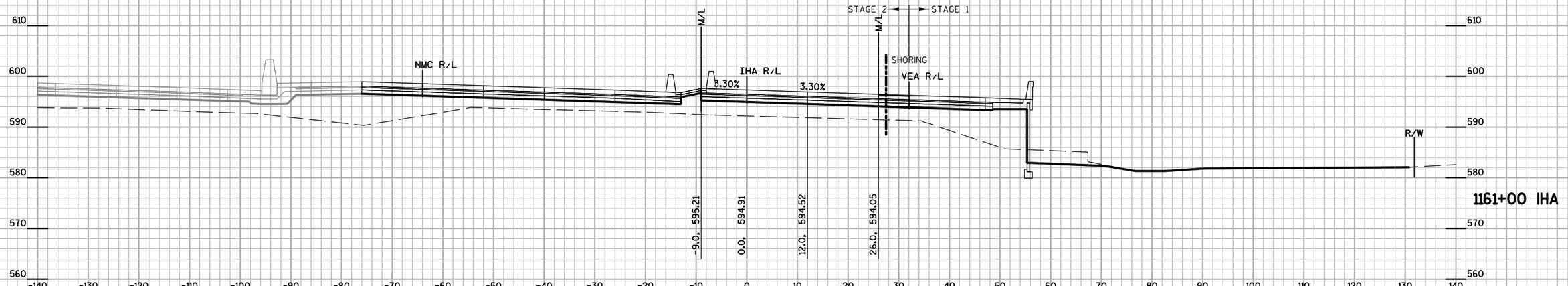
WISDOT/CADDS SHEET 21

STA. 1160+50 IHA TO 1161+50 IHA

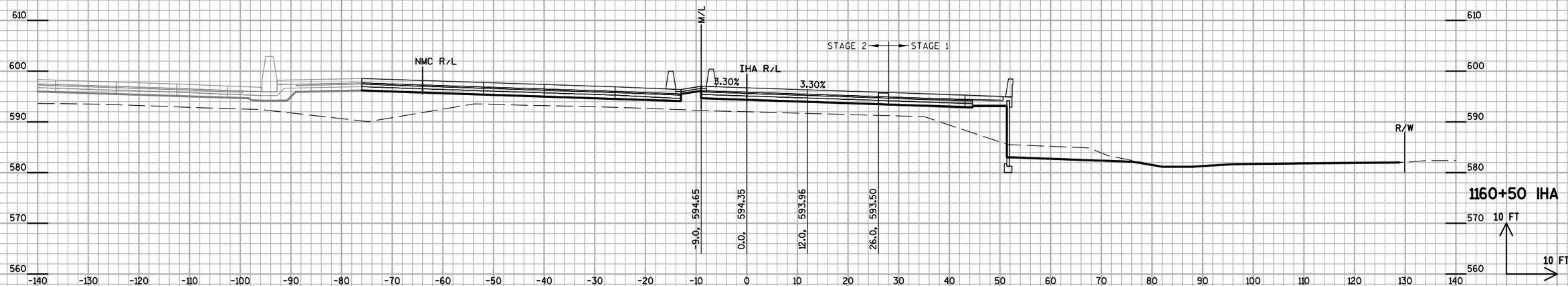
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1161+50 IHA



1161+00 IHA



1160+50 IHA

10 FT
10 FT

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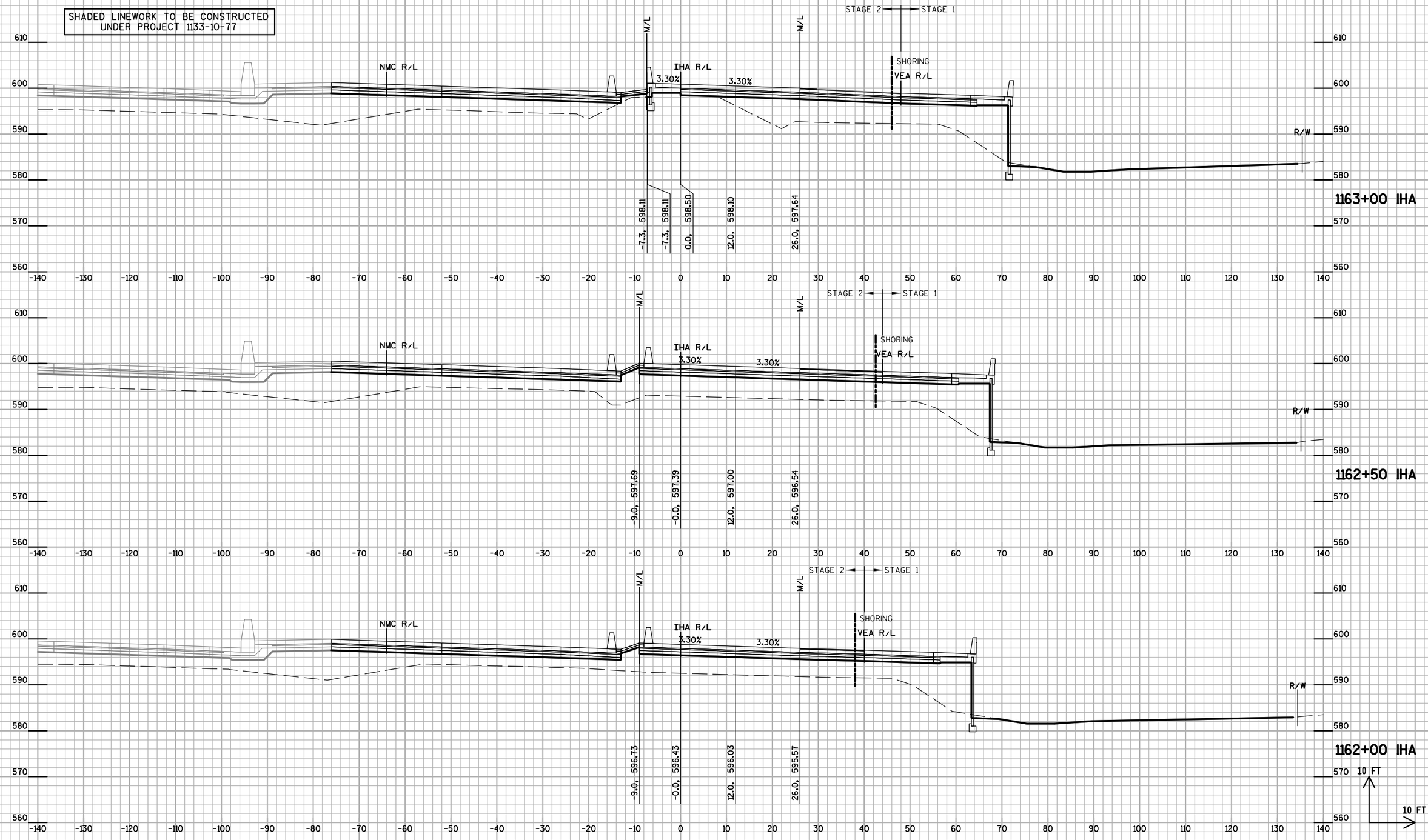
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1141	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1162+00 IHA TO 1163+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



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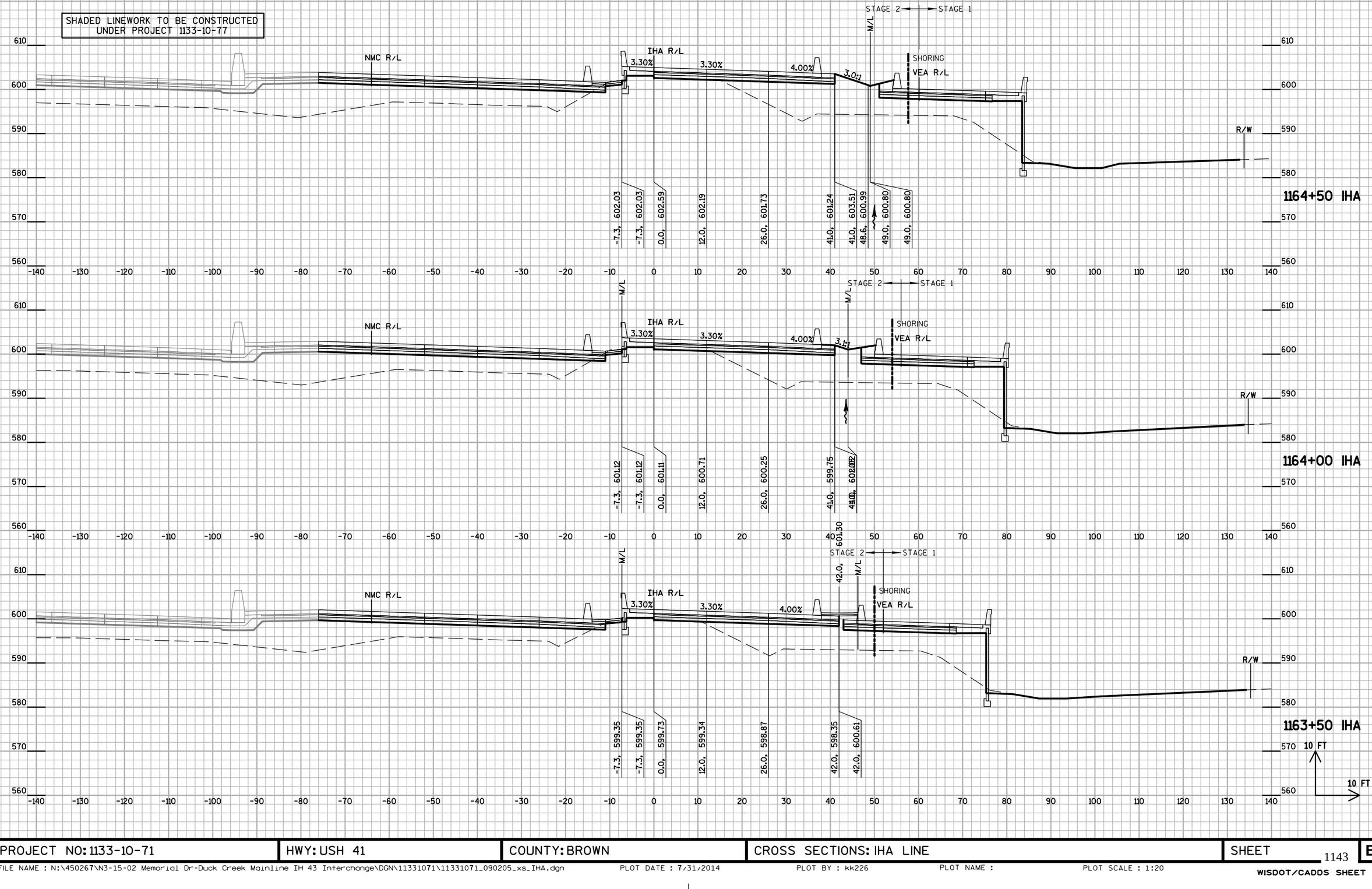
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1142	E

STA. 1163+50 IHA TO 1164+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



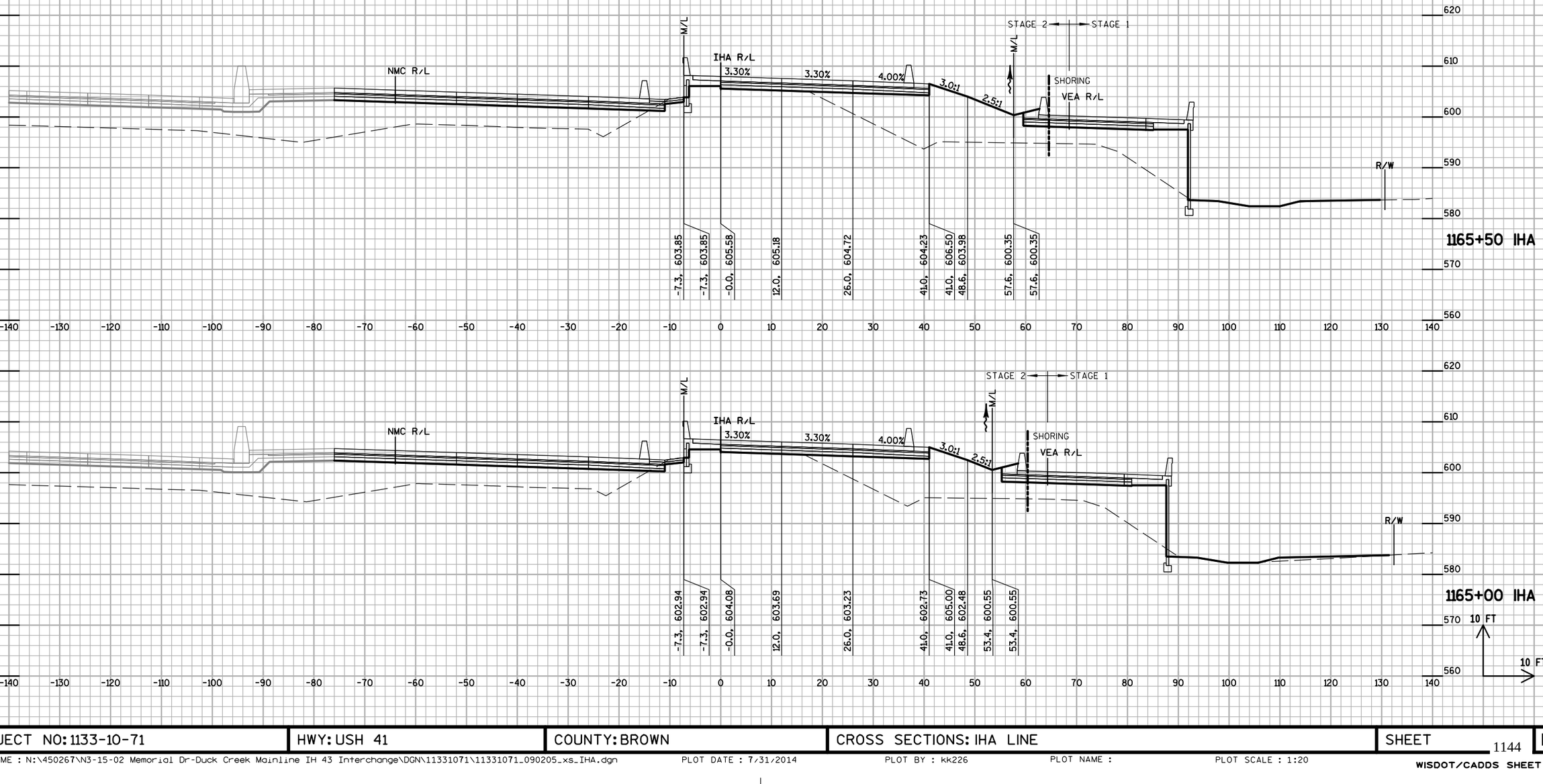
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1143	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1165+00 IHA TO 1165+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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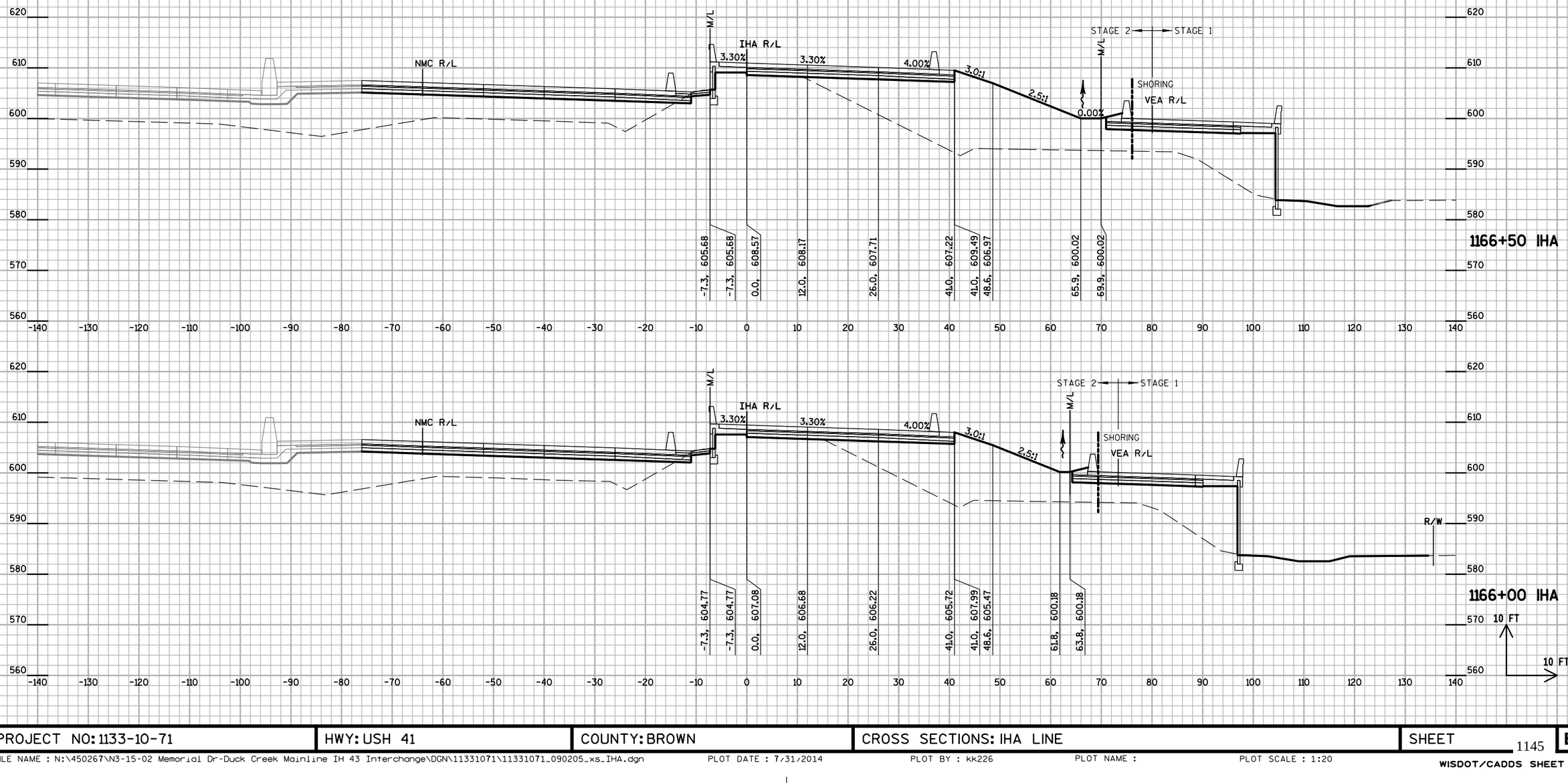
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1144	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1166+00 IHA TO 1166+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



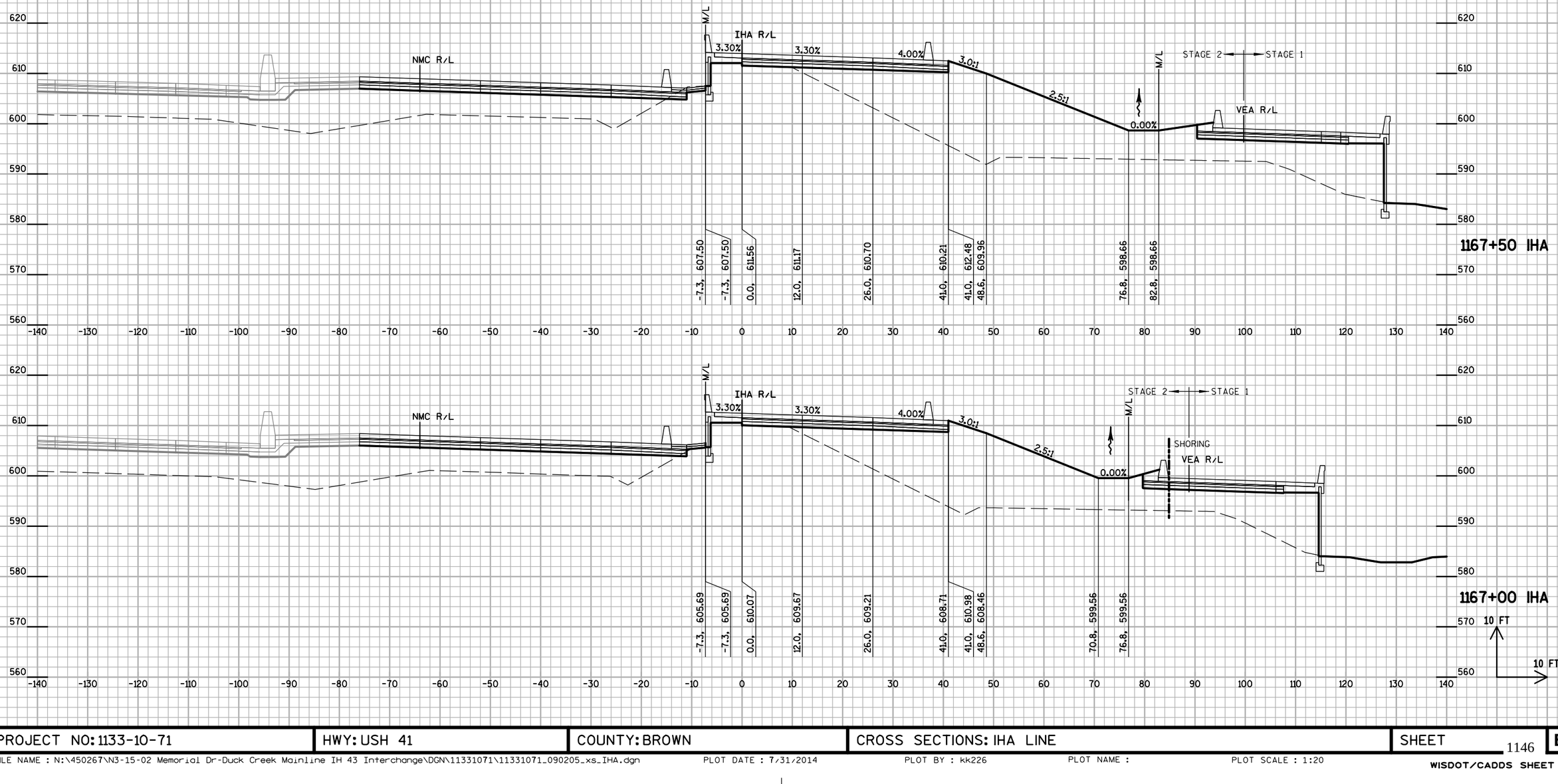
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1145	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1167+00 IHA TO 1167+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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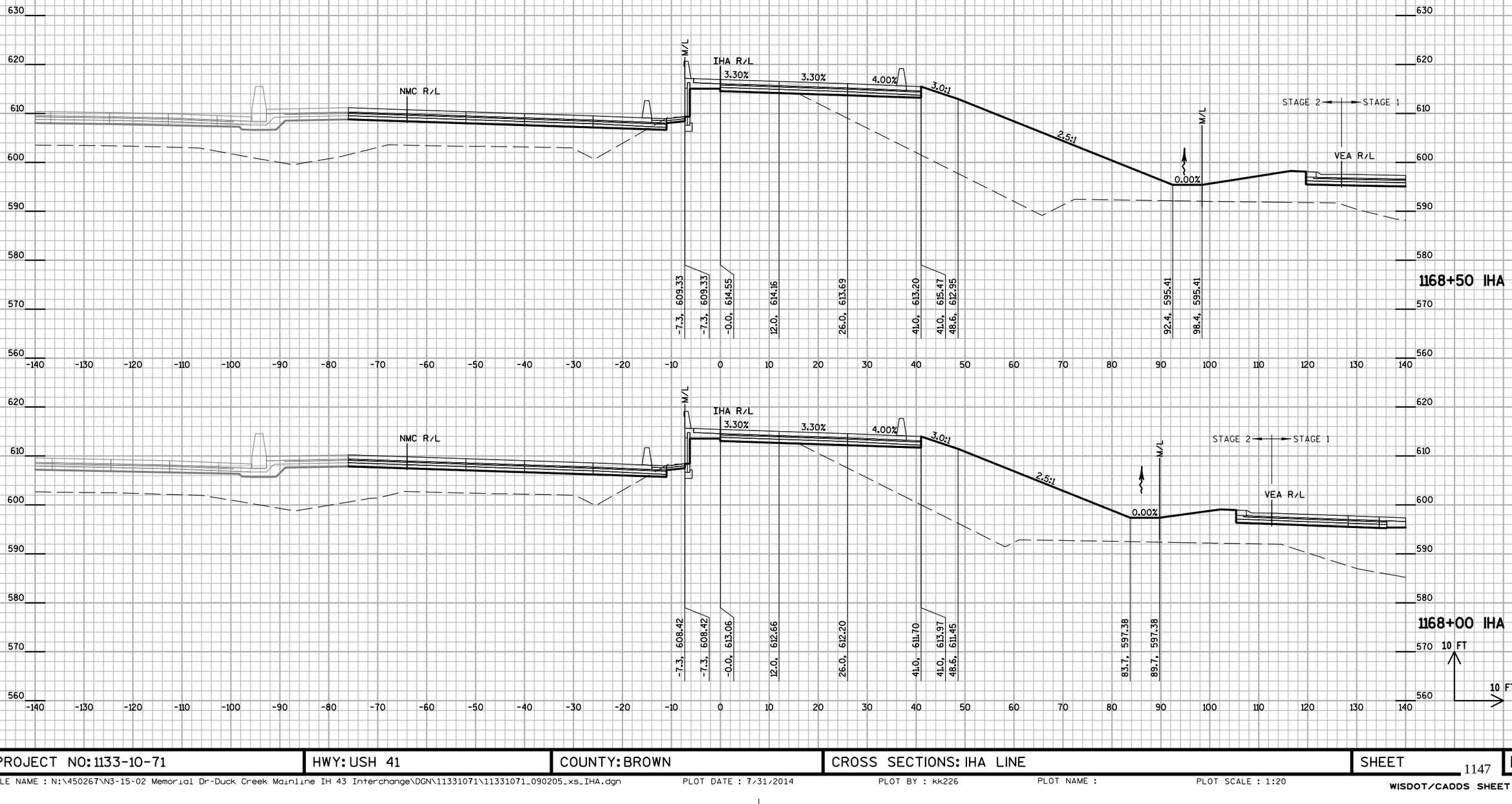
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1146	E

STA. 1168+00 IHA TO 1168+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



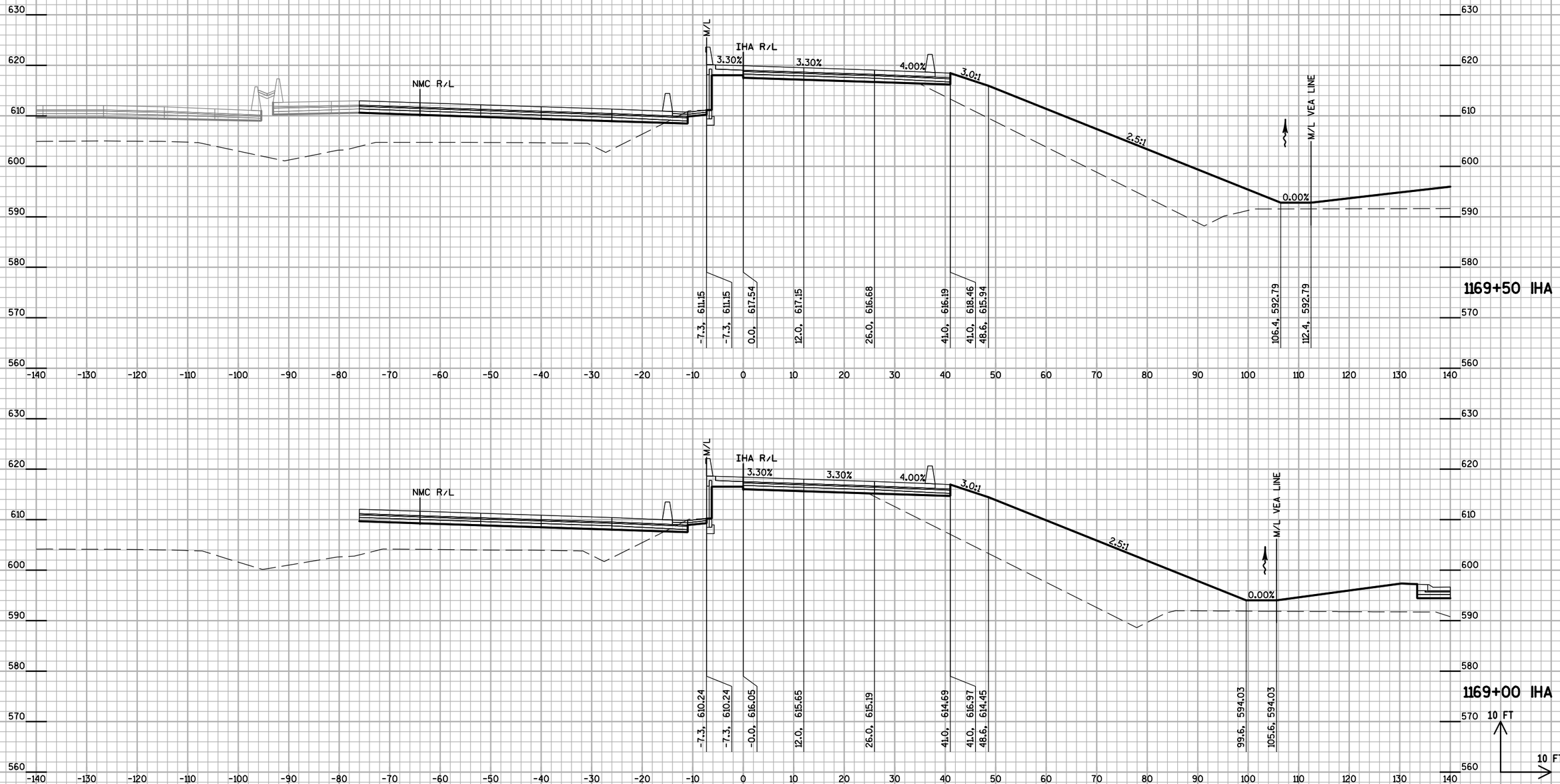
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1147	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1169+00 IHA TO 1169+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



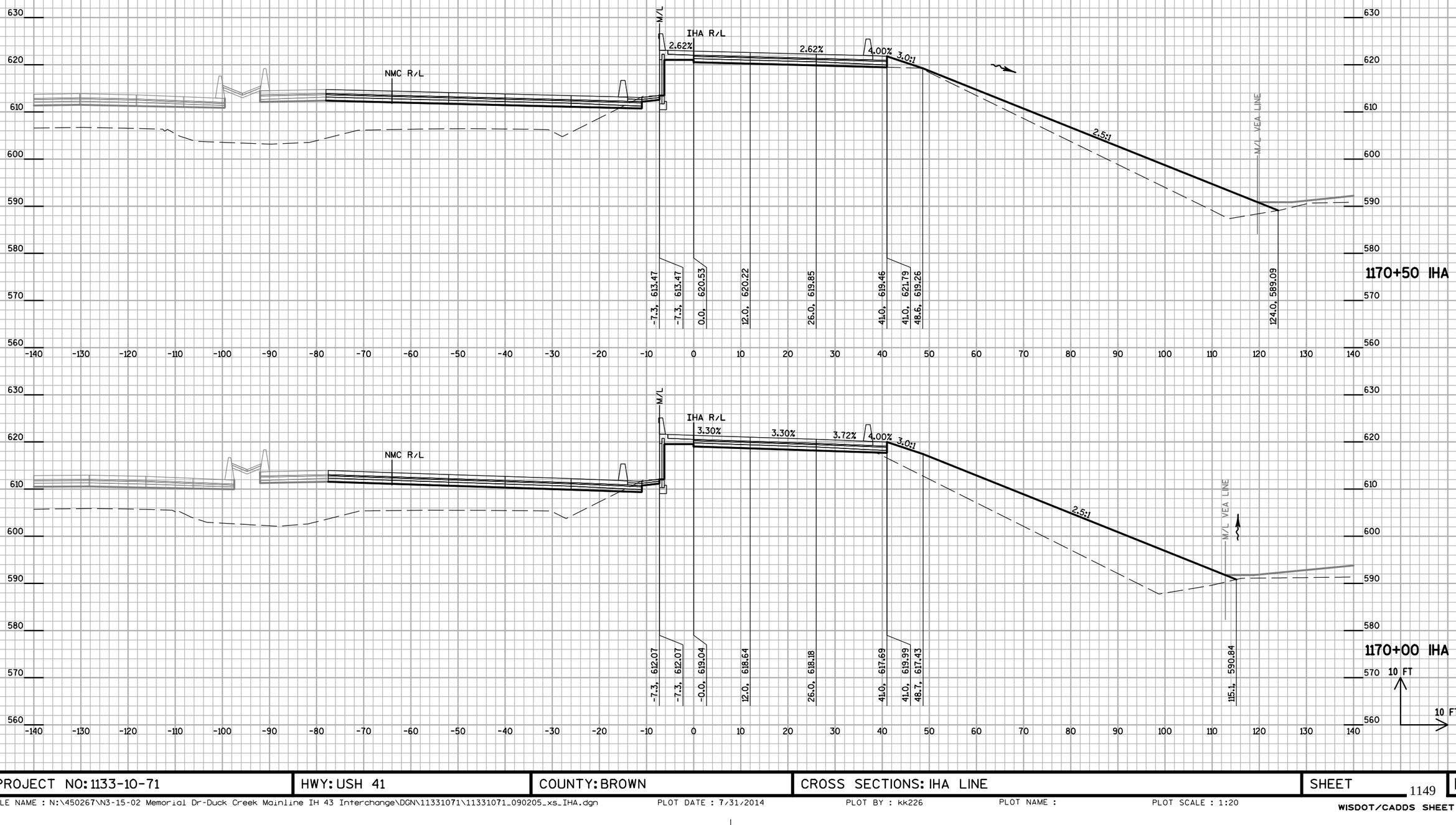
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1148	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1170+00 IHA TO 1170+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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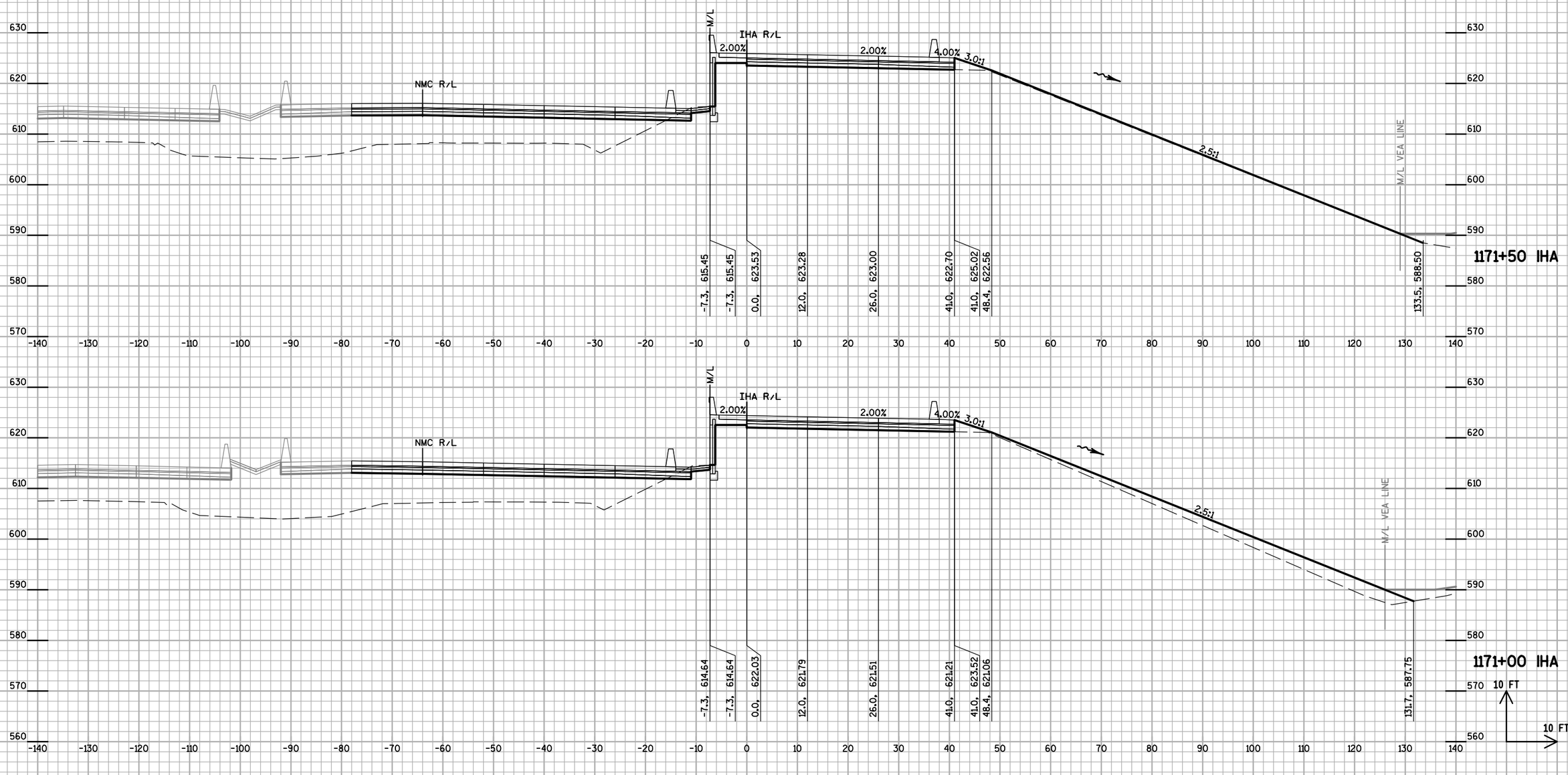
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1149	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1171+00 IHA TO 1171+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



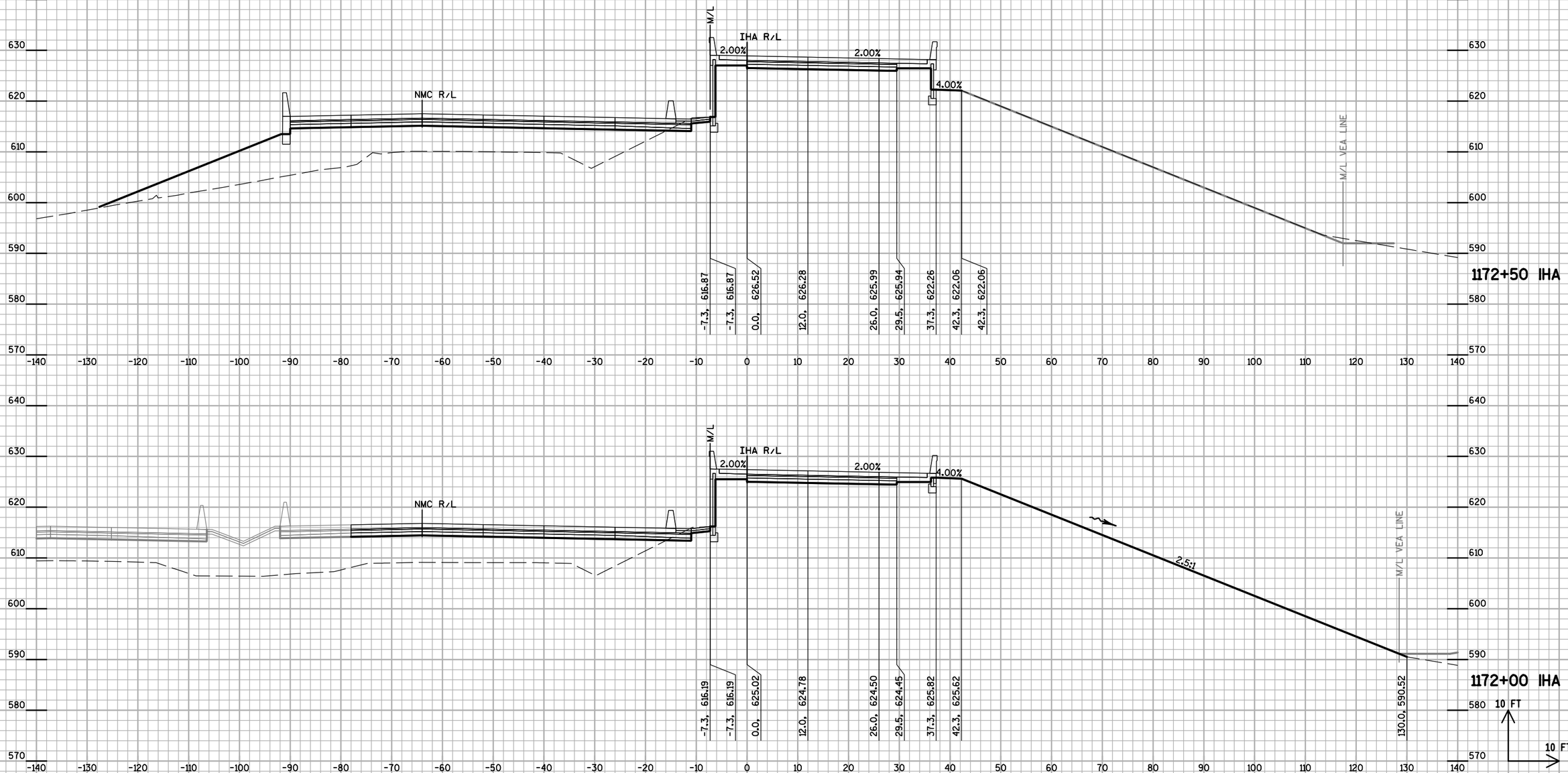
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1150	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1172+00 IHA TO 1172+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



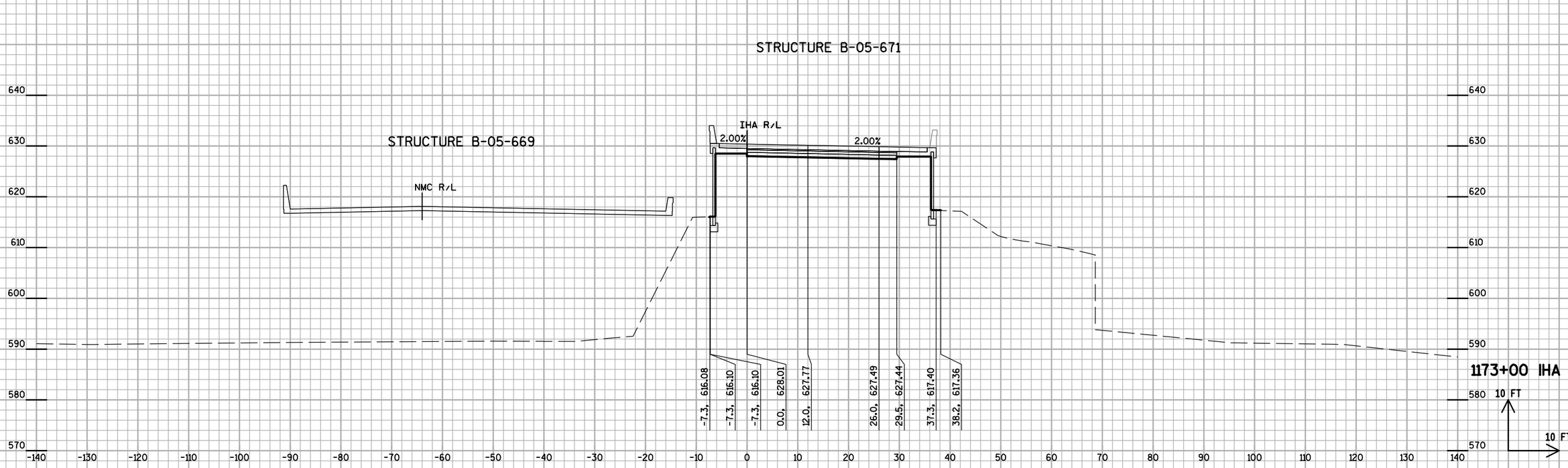
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1151	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1173+00 IHA TO 1173+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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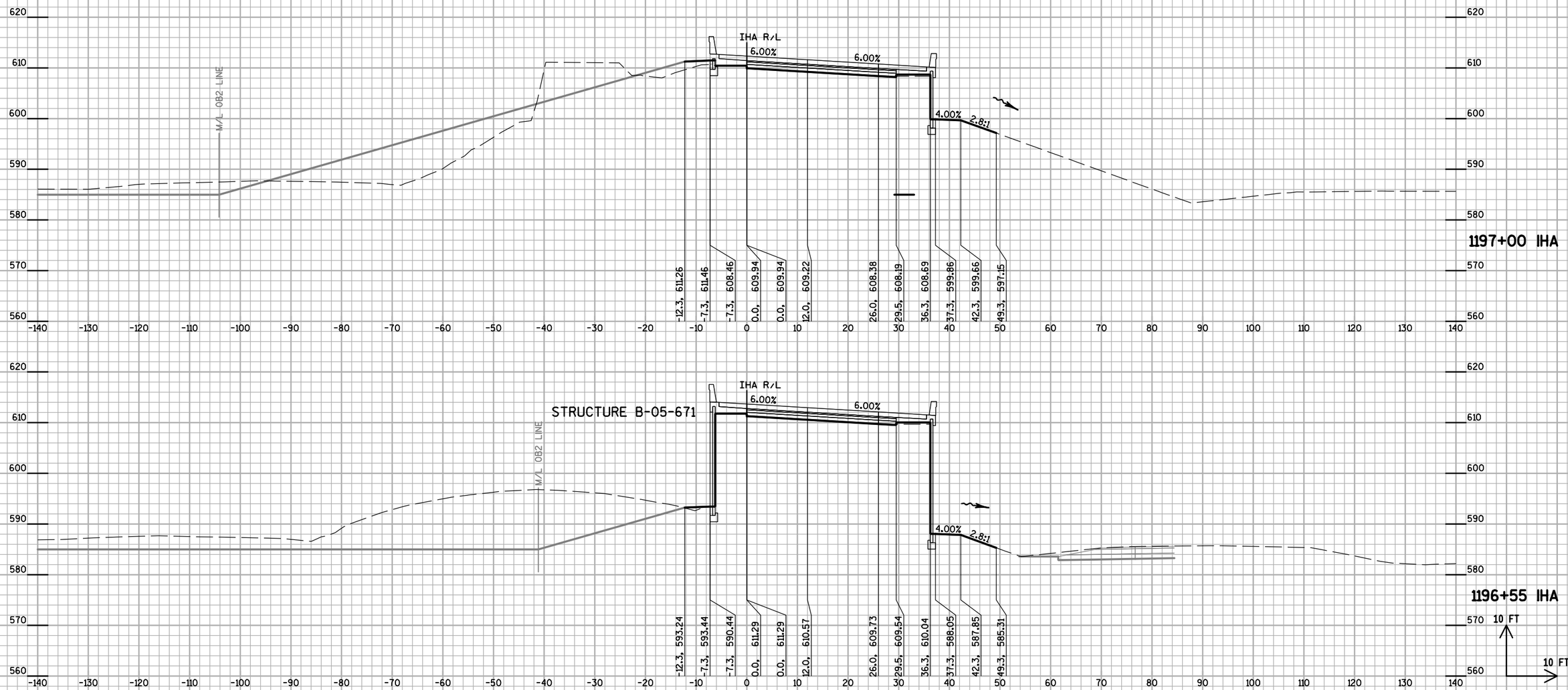
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1152	E

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1196+55 IHA TO 1197+00 IHA



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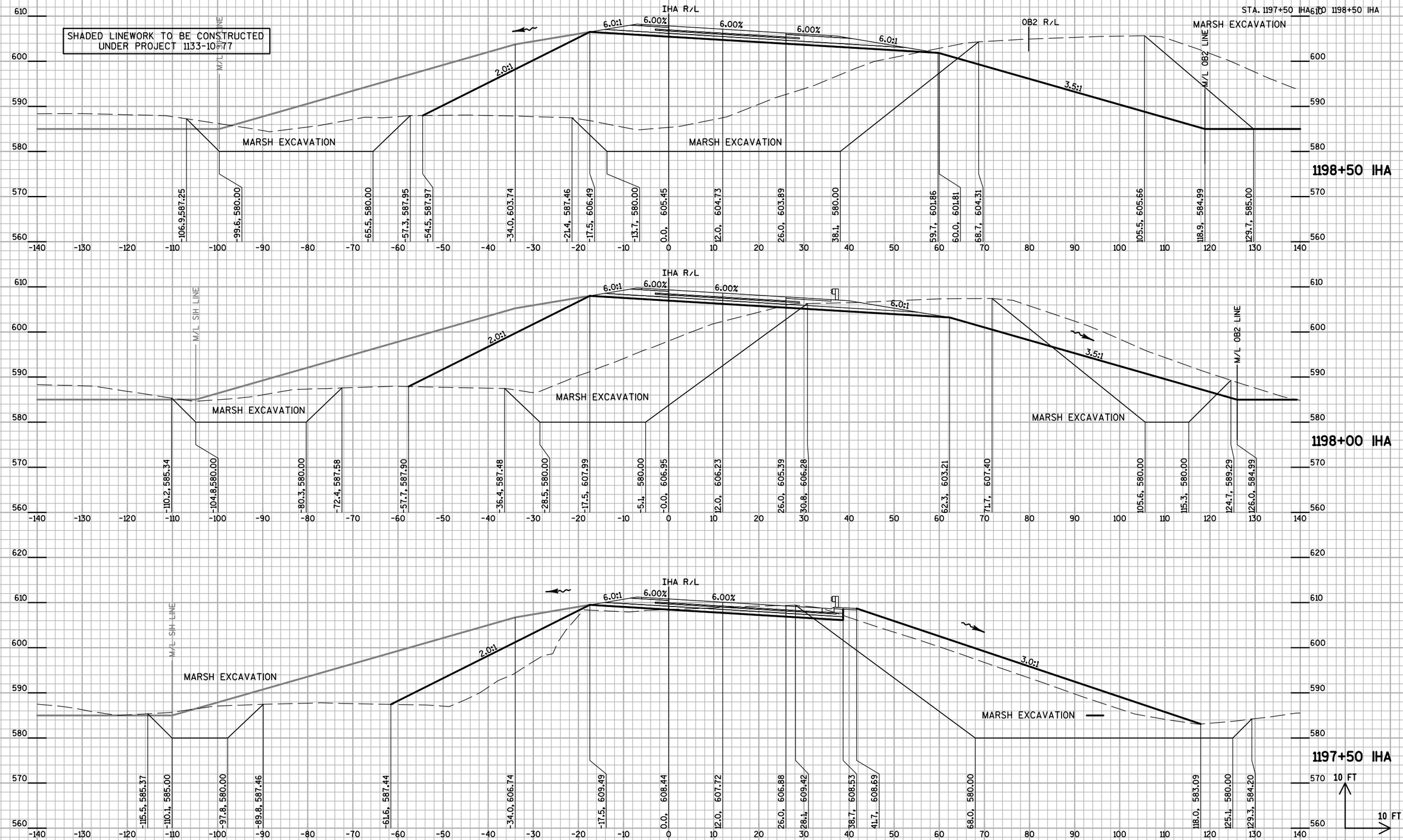
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1153	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

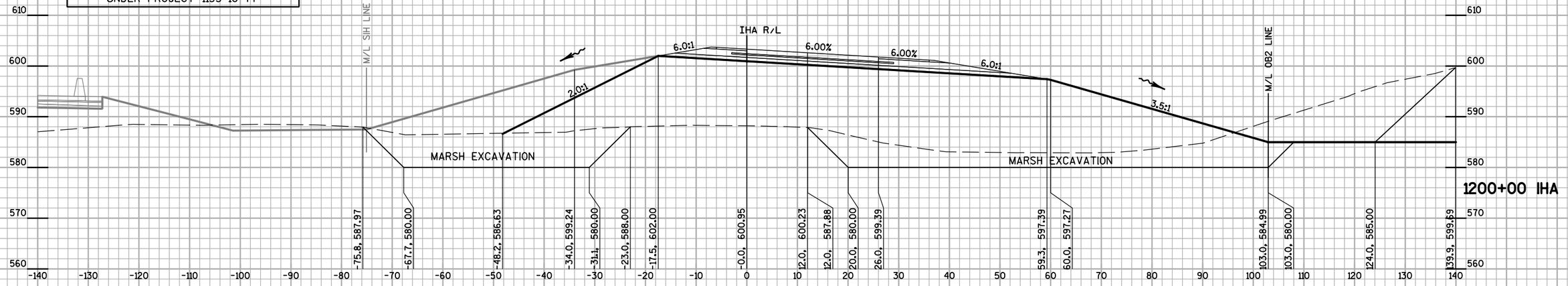


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET	E

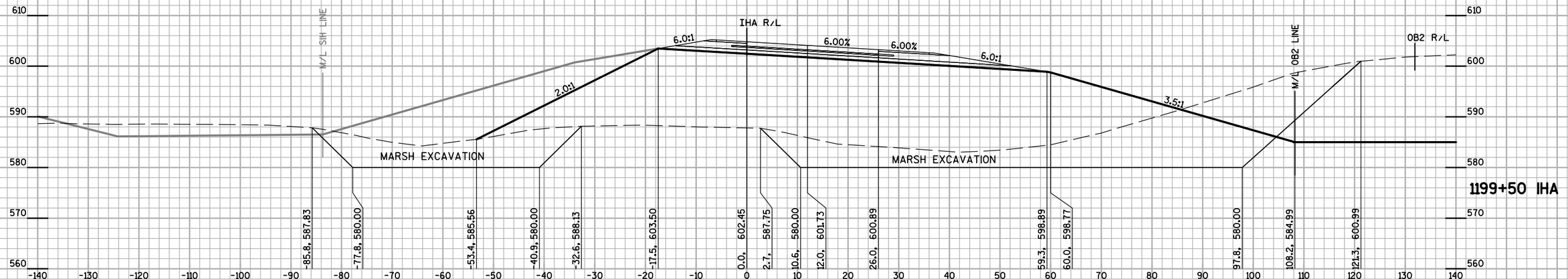
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1199+00 IHA TO 1200+00 IHA

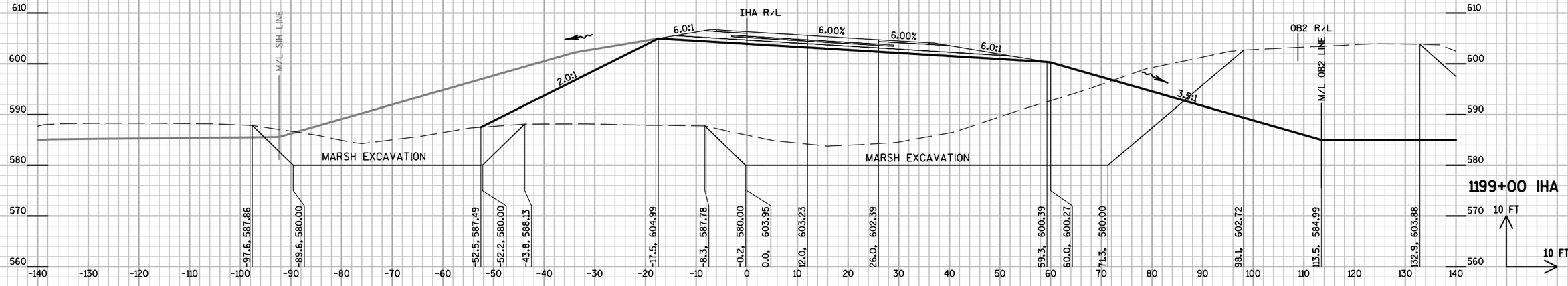
SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1200+00 IHA



1199+50 IHA



1199+00 IHA

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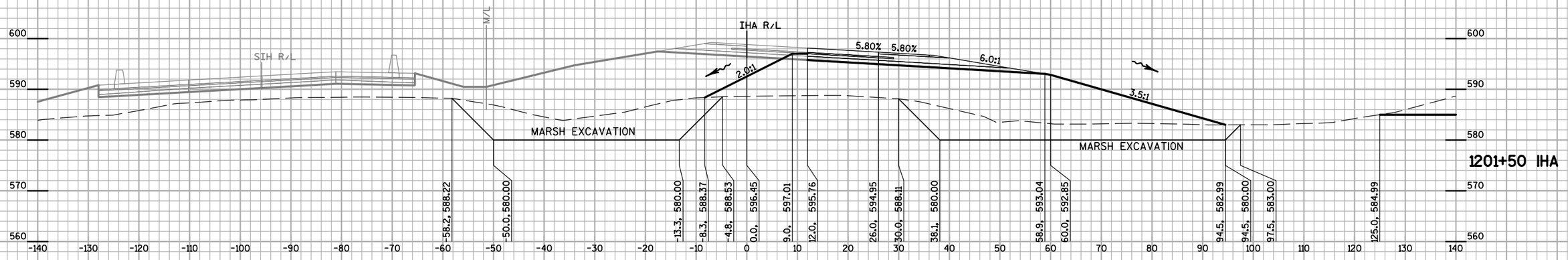
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1155	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

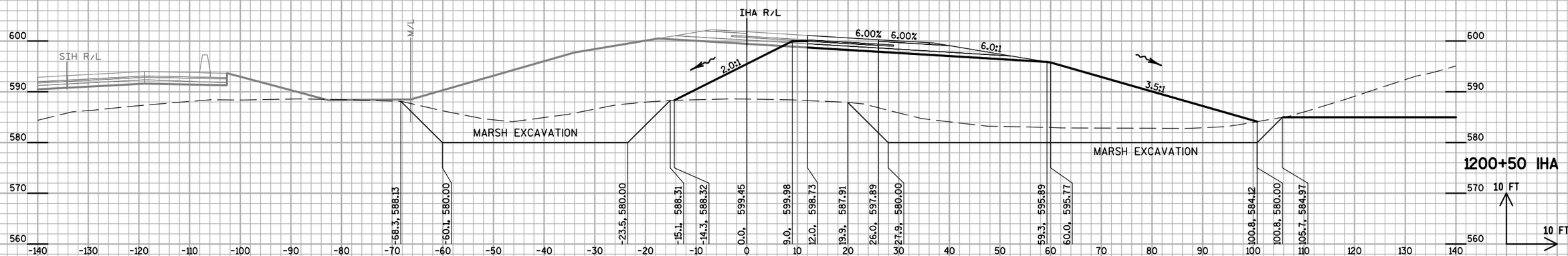
STA. 1200+50 IHA TO 1201+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



1201+50 IHA

1201+00 IHA



1200+50 IHA

10 FT
10 FT

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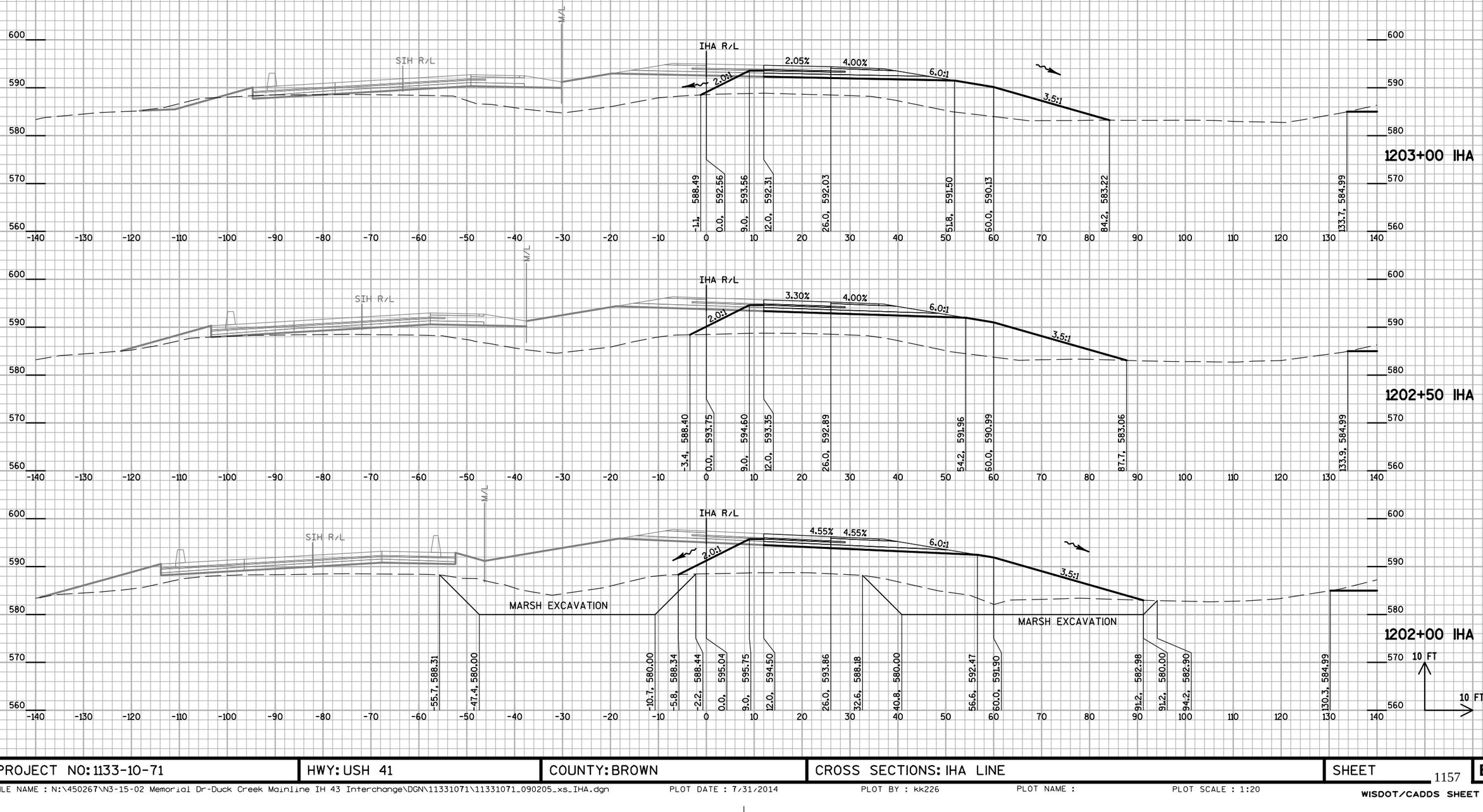
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1156	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1202+00 IHA TO 1203+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



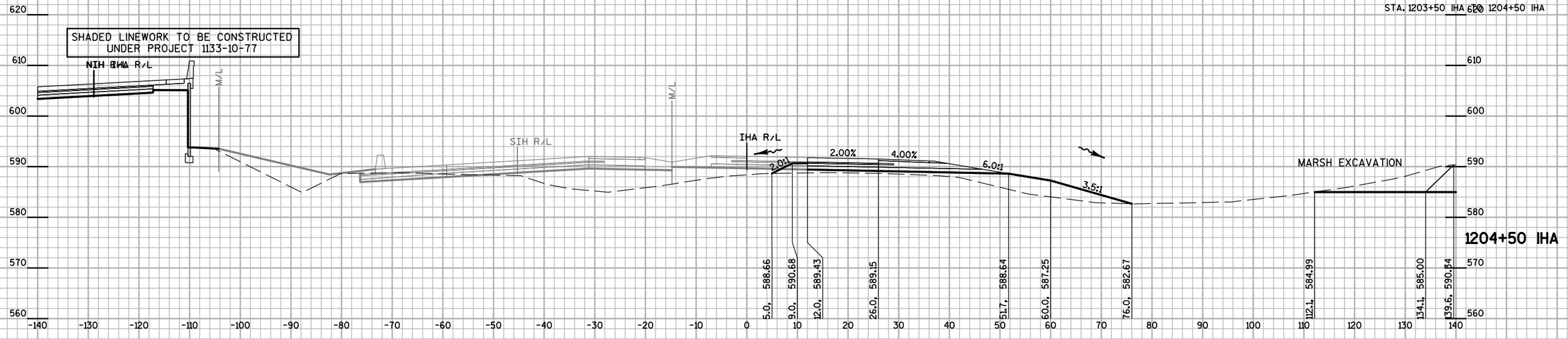
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1157	E

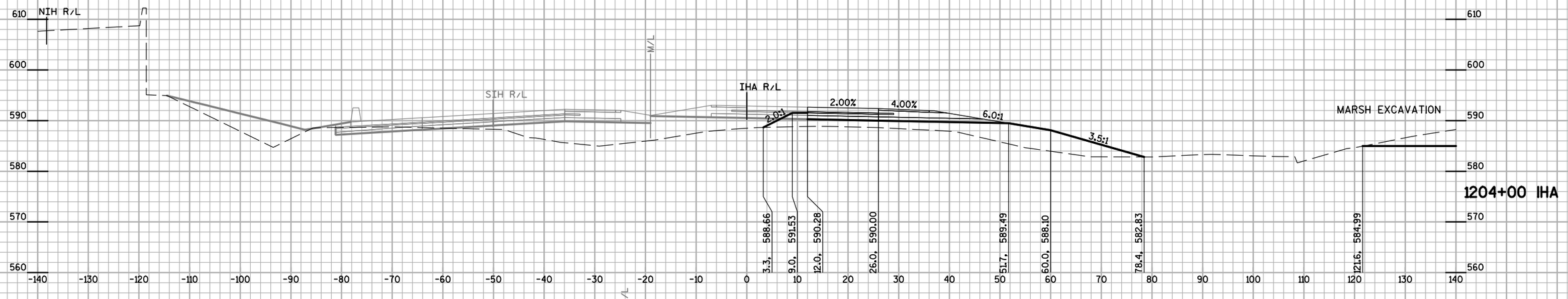
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

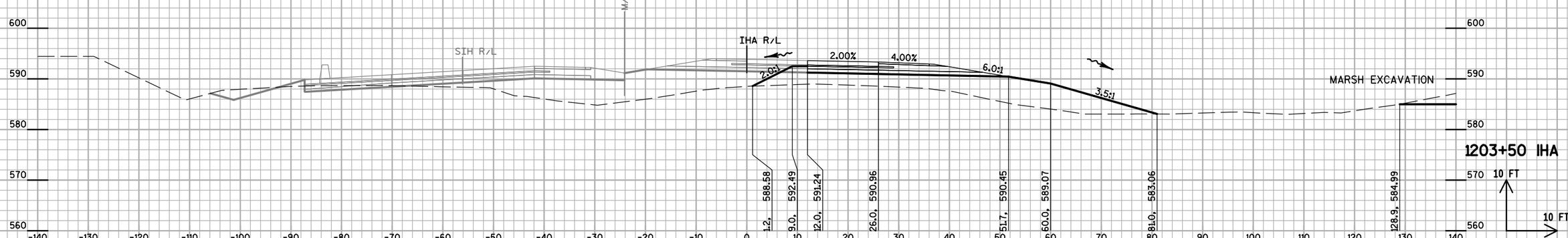
WISDOT/CADDS SHEET 21

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1203+50 IHA & 1204+50 IHA







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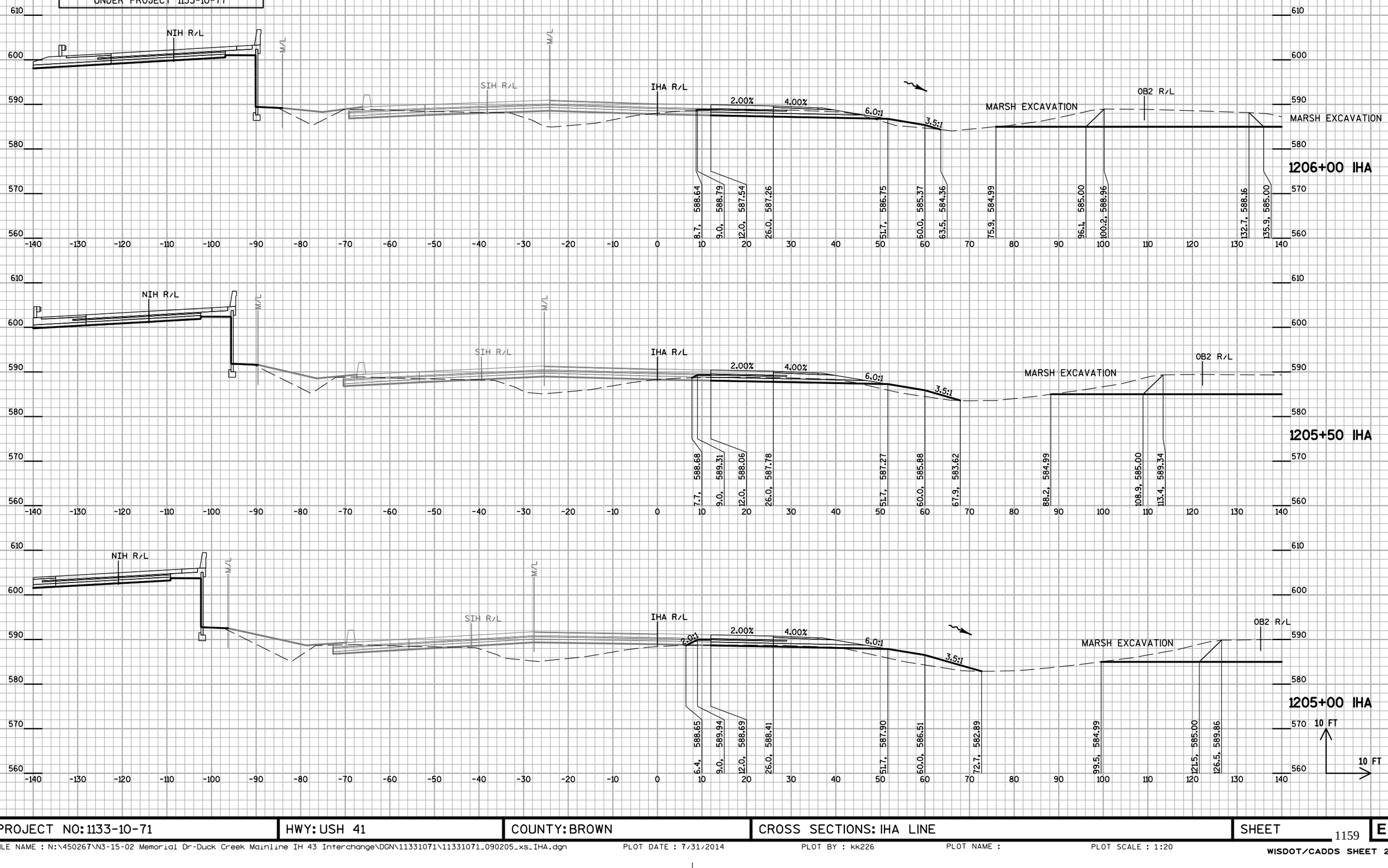
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1158	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1205+00 IHA TO 1206+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



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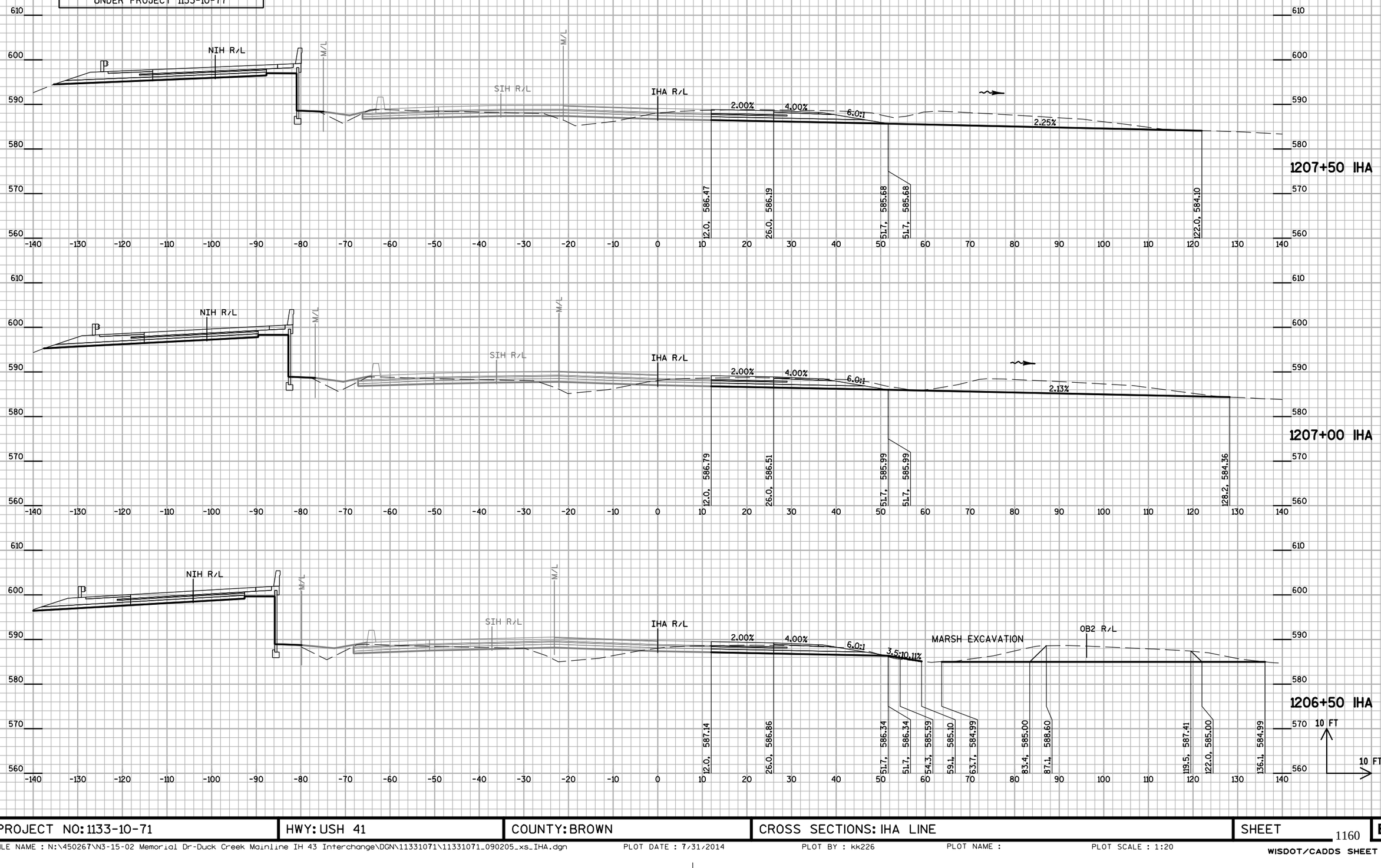
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1159	E

STA. 1206+50 IHA TO 1207+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1160	E

STA. 1208+00 IHA TO 1209+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

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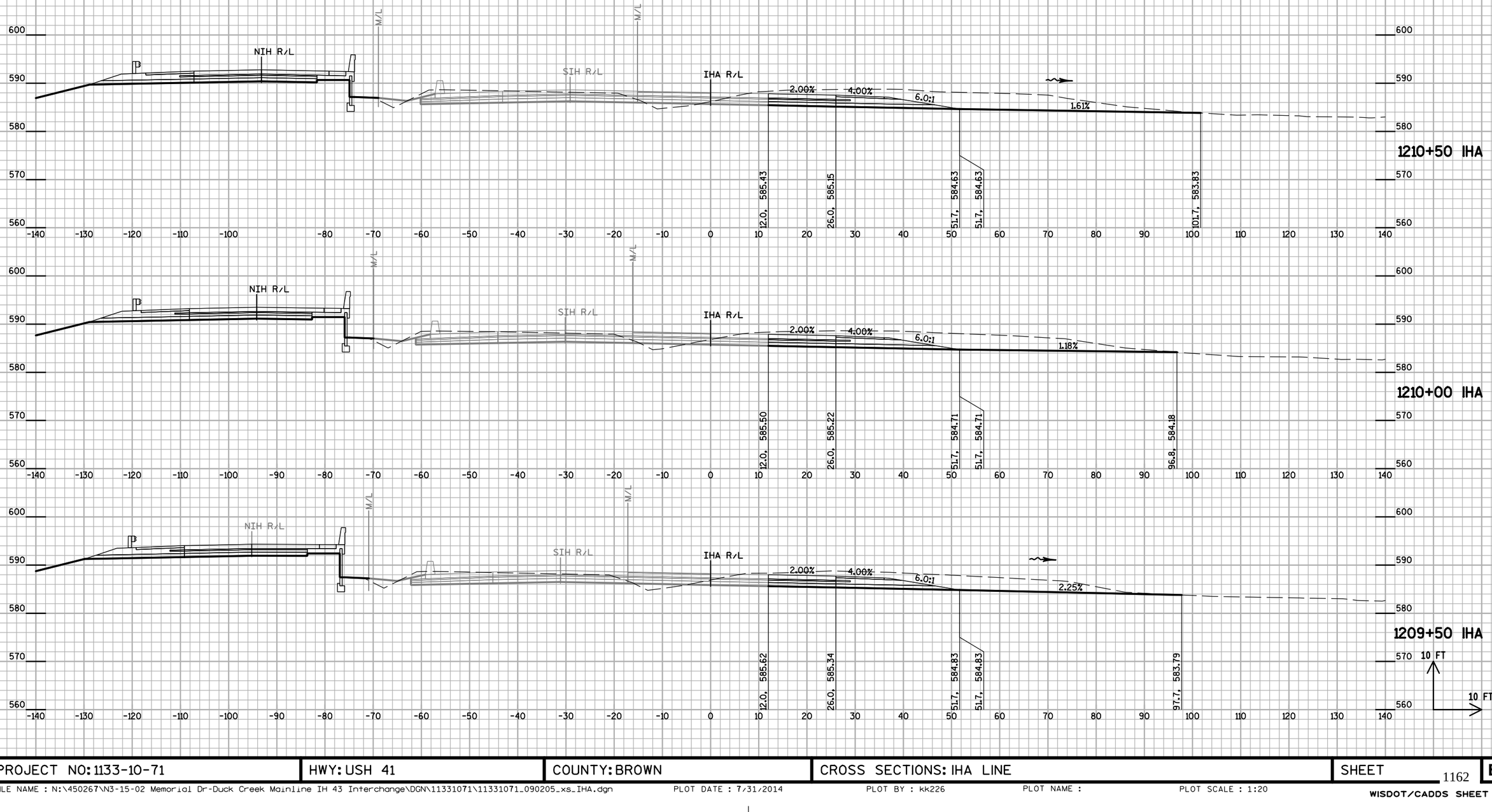
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1209+50 IHA TO 1210+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

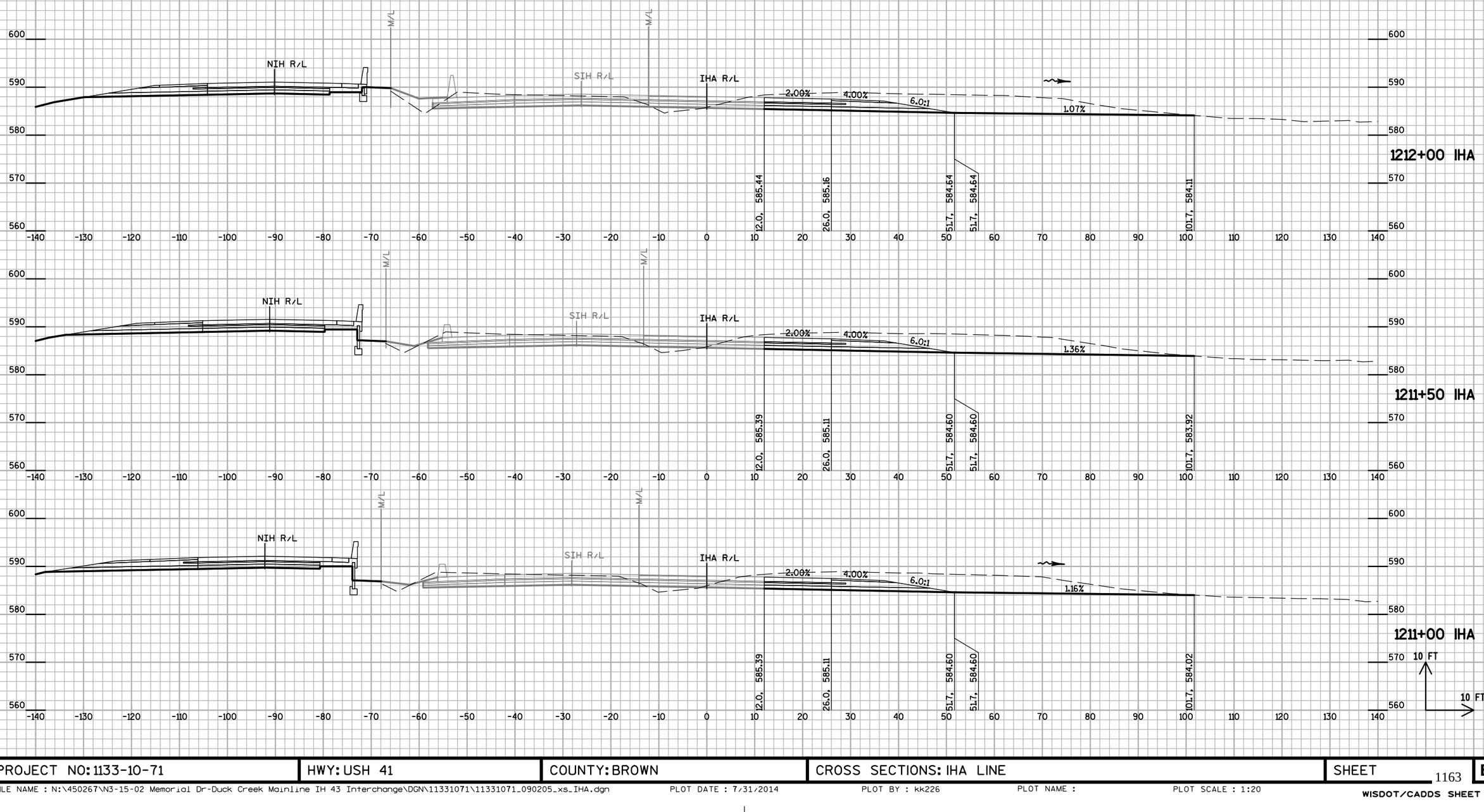


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1162	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA. 1211+00 IHA TO 1212+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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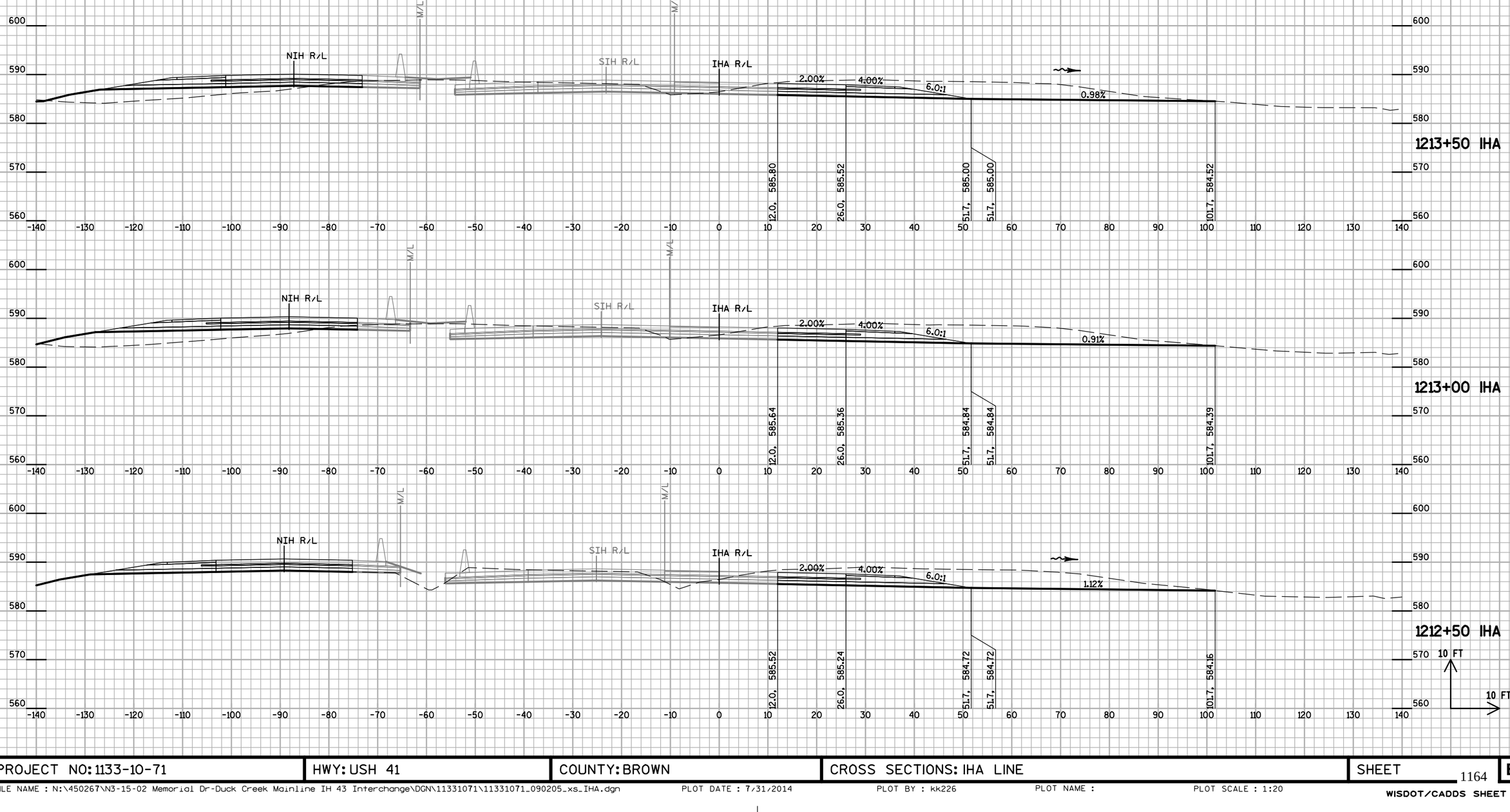
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1163	E

STA. 1212+50 IHA TO 1213+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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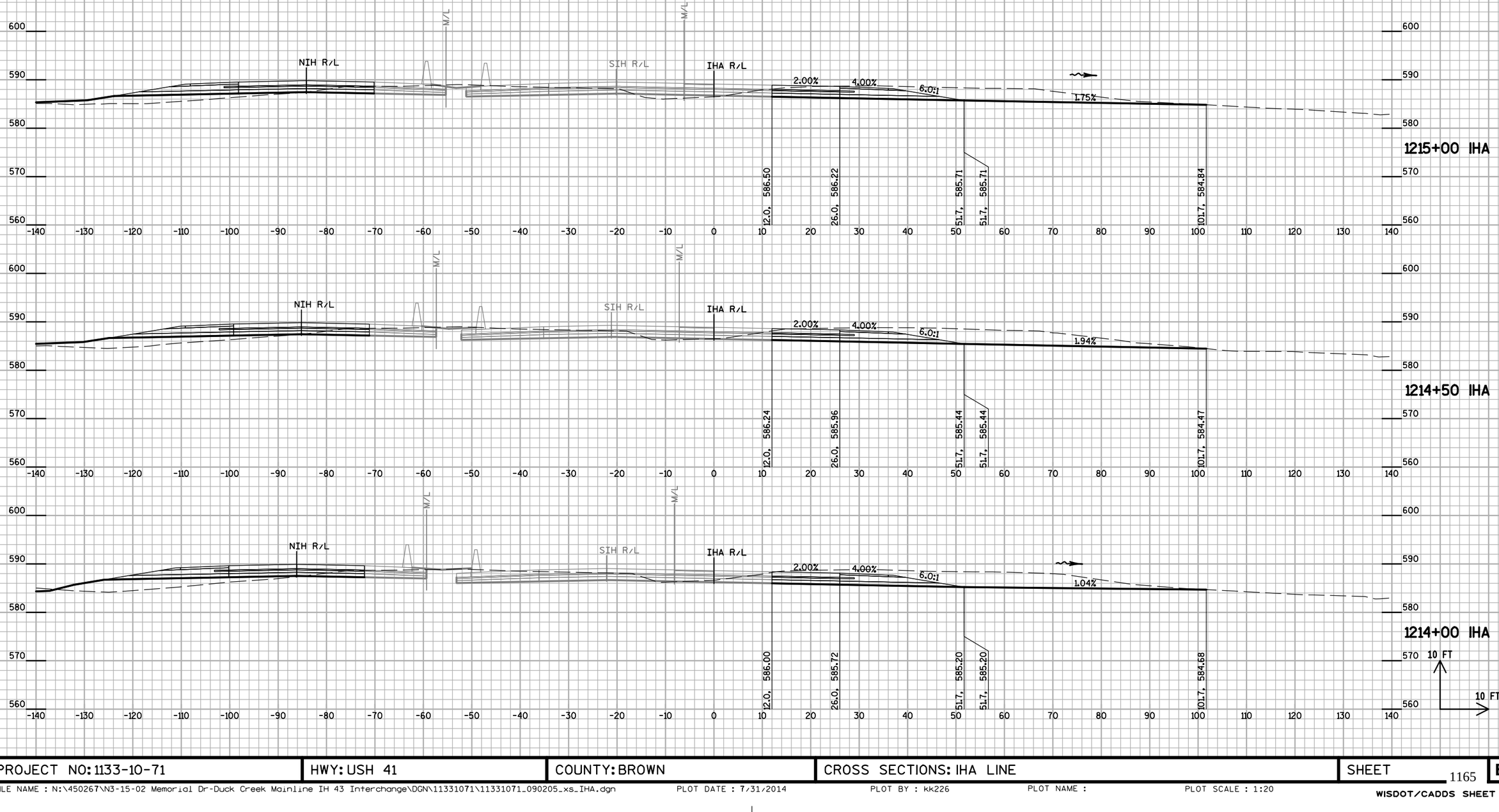
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1164	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090205_xs_IHA.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1214+00 IHA TO 1215+00 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1165	E

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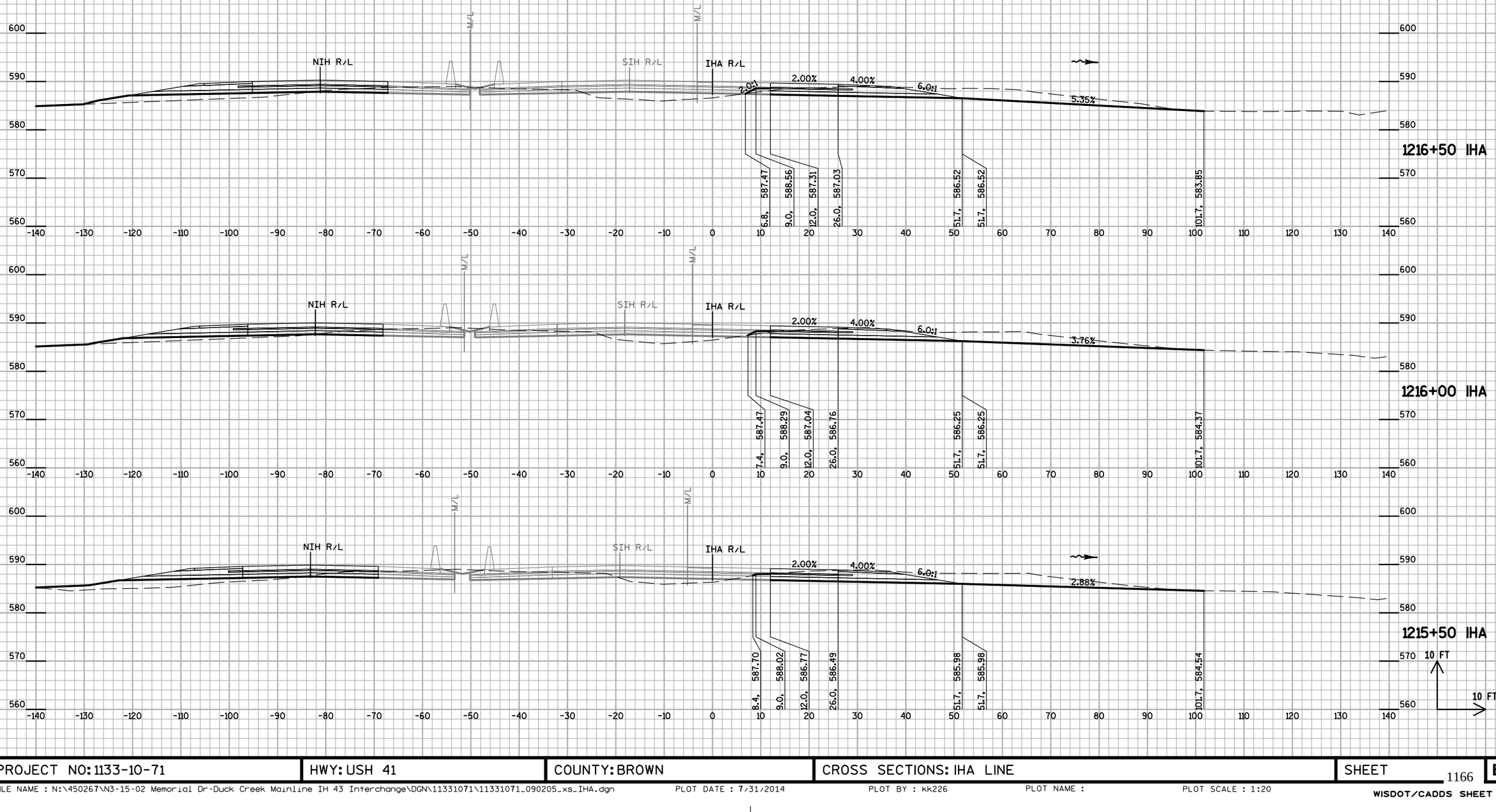
WISDOT/CADDS SHEET 21

STA. 1215+50 IHA TO 1216+50 IHA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHA LINE	SHEET 1166	E

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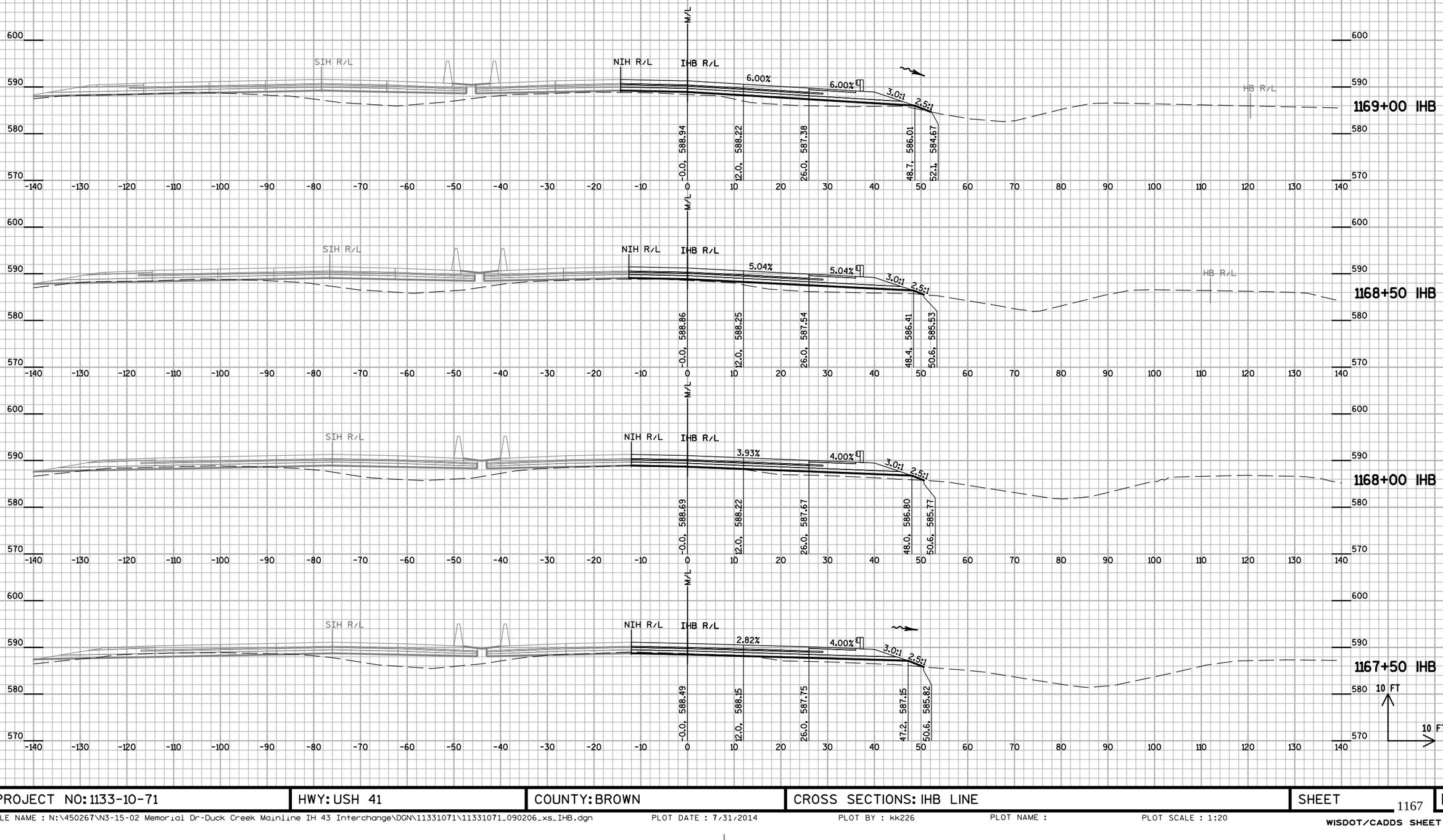
WISDOT/CADDS SHEET 21

STA. 1167+50 IHB TO 1169+00 IHB

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHB LINE	SHEET 1167	E

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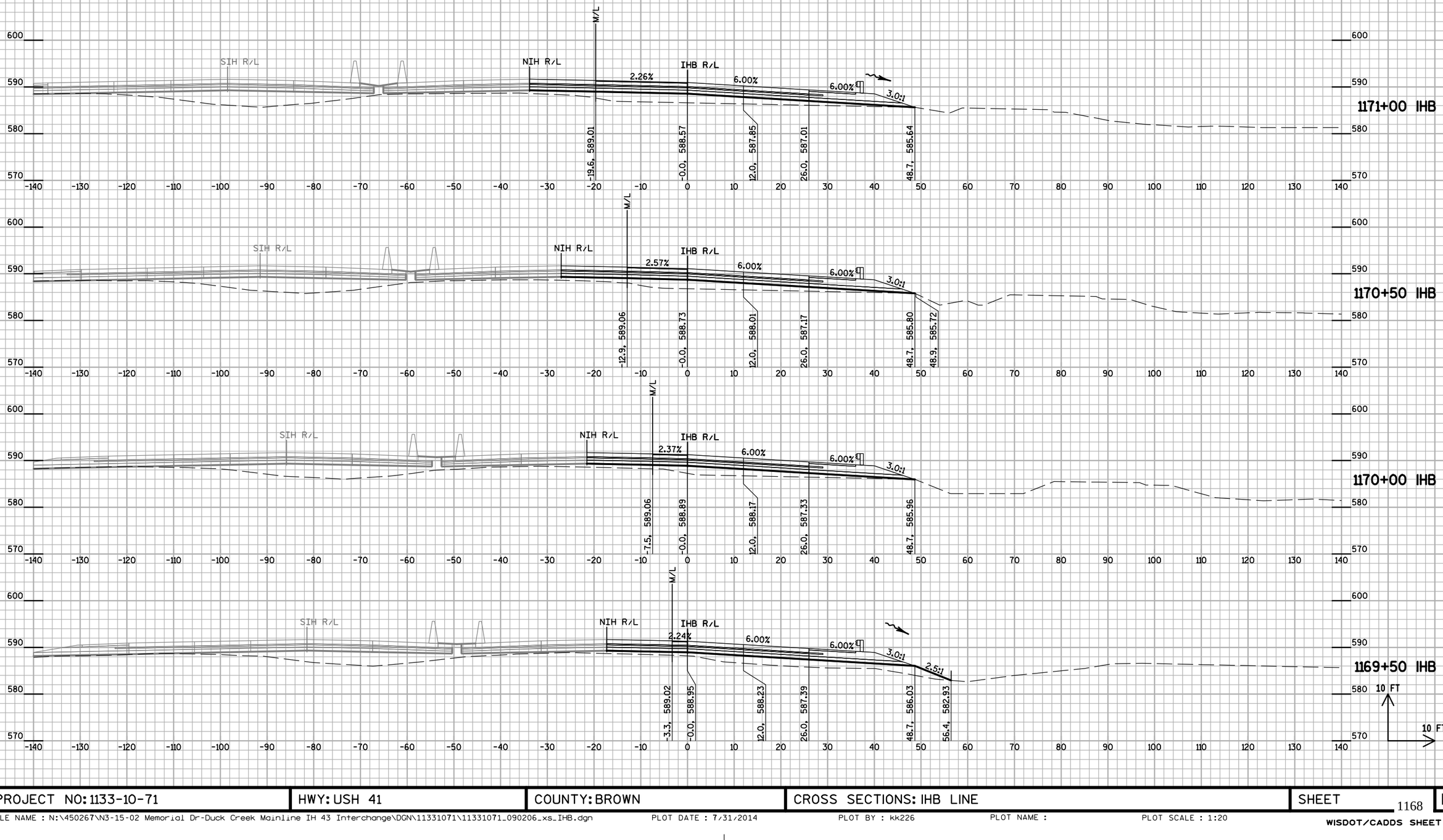
WISDOT/CADDS SHEET 21

STA. 1169+50 IHB TO 1171+00 IHB

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHB LINE	SHEET	E

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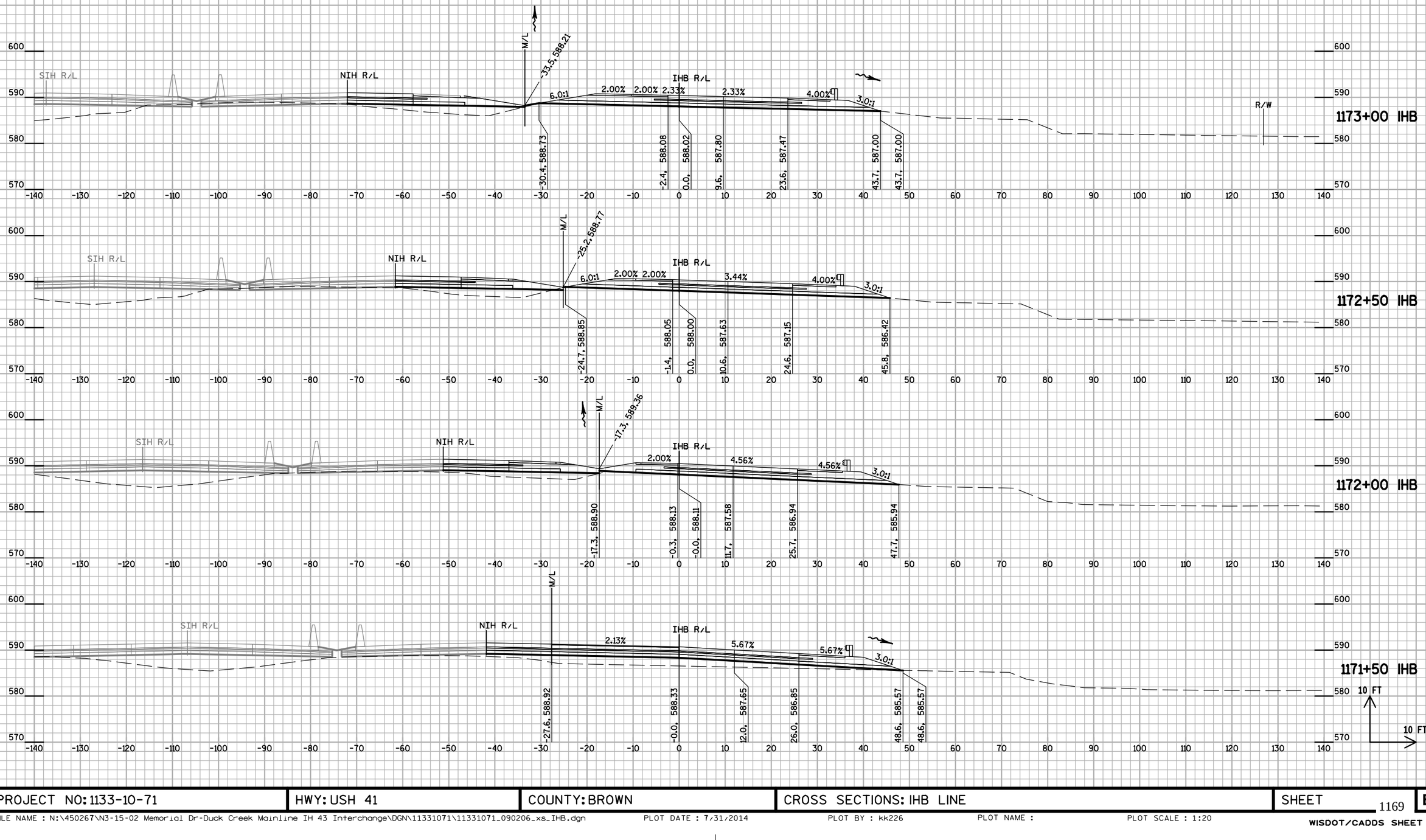
WISDOT/CADDS SHEET 21

STA. 1171+50 IHB TO 1173+00 IHB

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



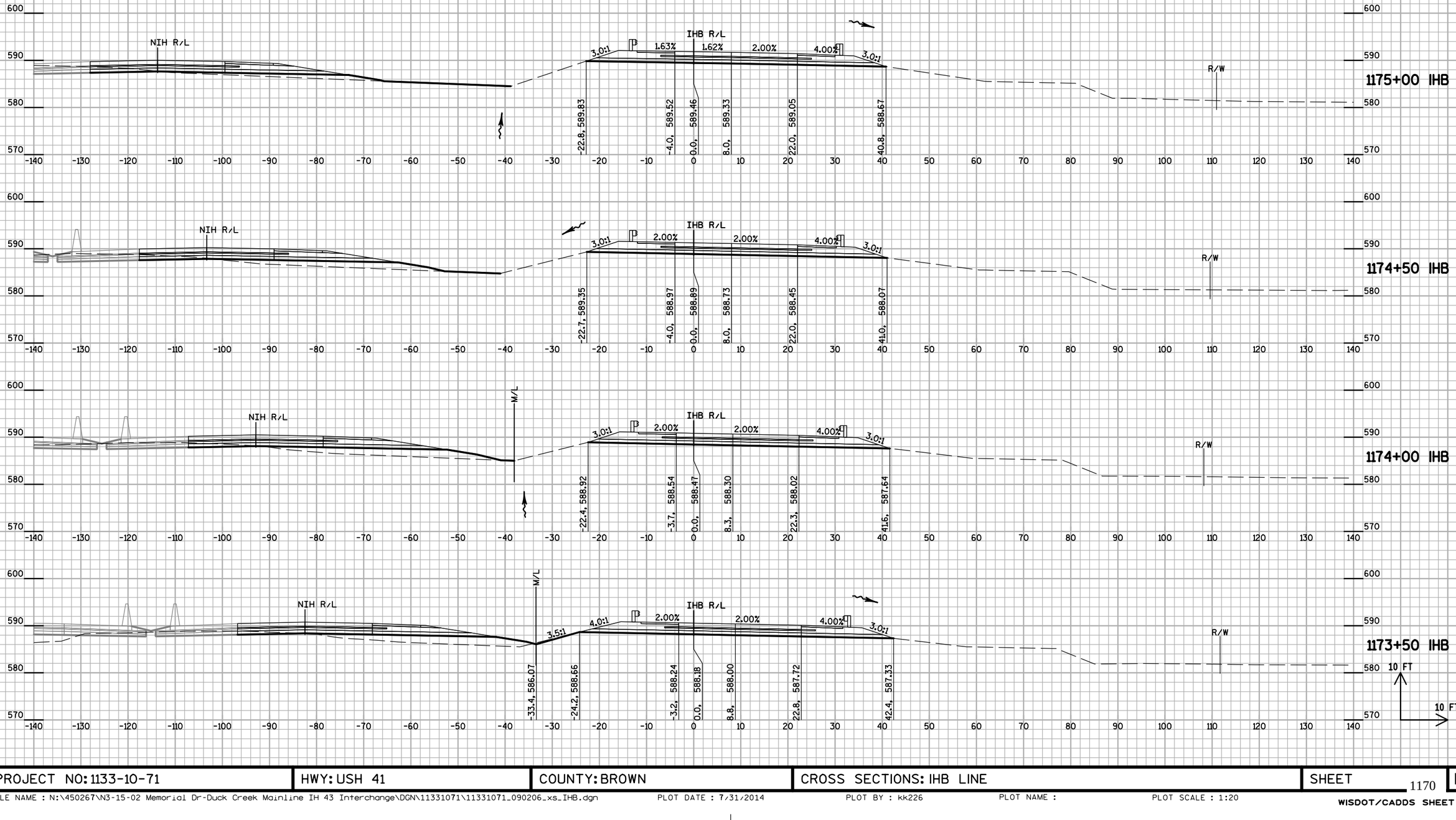
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHB LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090206_xs_IHB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1173+50 IHB TO 1175+00 IHB

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHB LINE	SHEET 1170	E

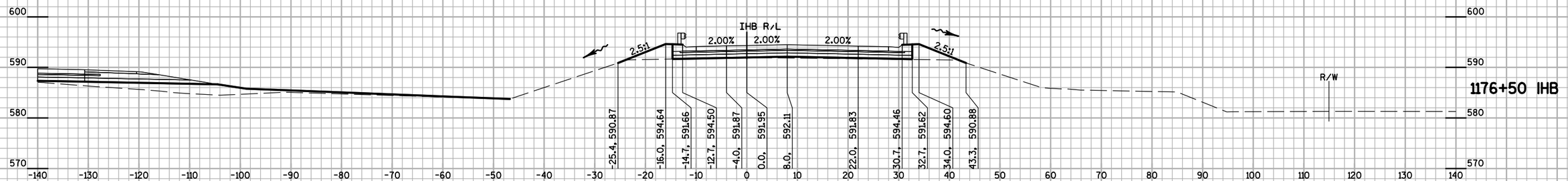
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090206_xs_IHB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

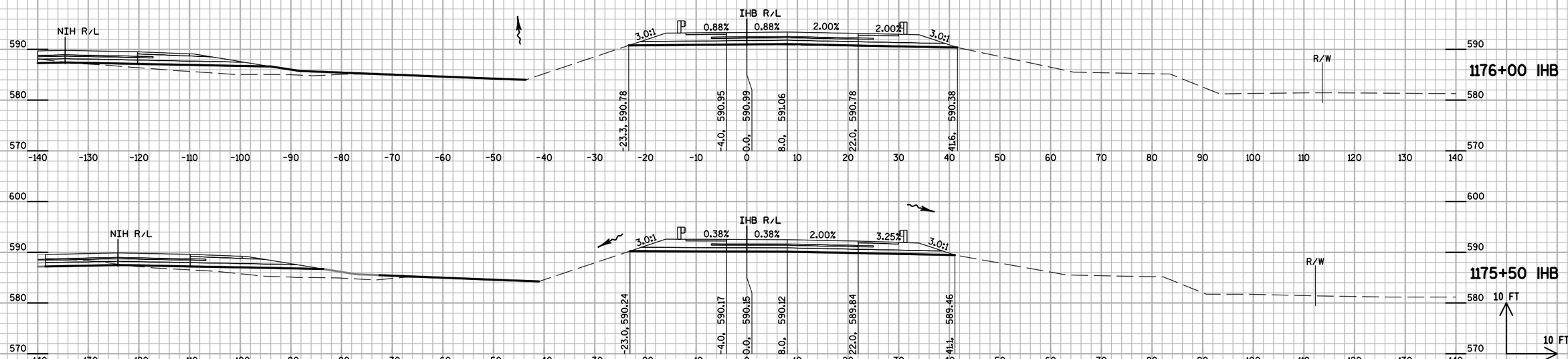
WISDOT/CADDS SHEET 21

STA. 1175+50 IHB TO 1176+50 IHB

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STRUCTURE B-05-678





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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: IHB LINE	SHEET 1171	E

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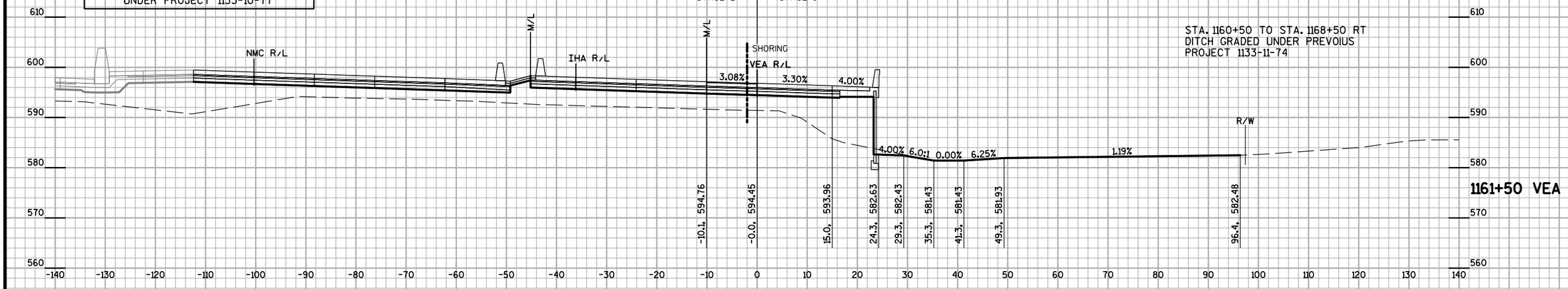
WISDOT/CADDS SHEET 21

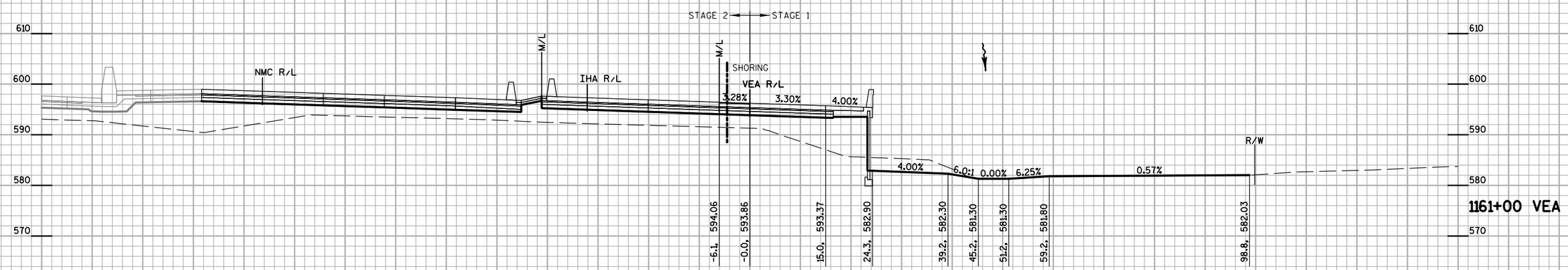
STA. 1160+50 VEA TO 1161+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



1161+50 VEA



1161+00 VEA

1160+50 VEA

9

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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1172	E

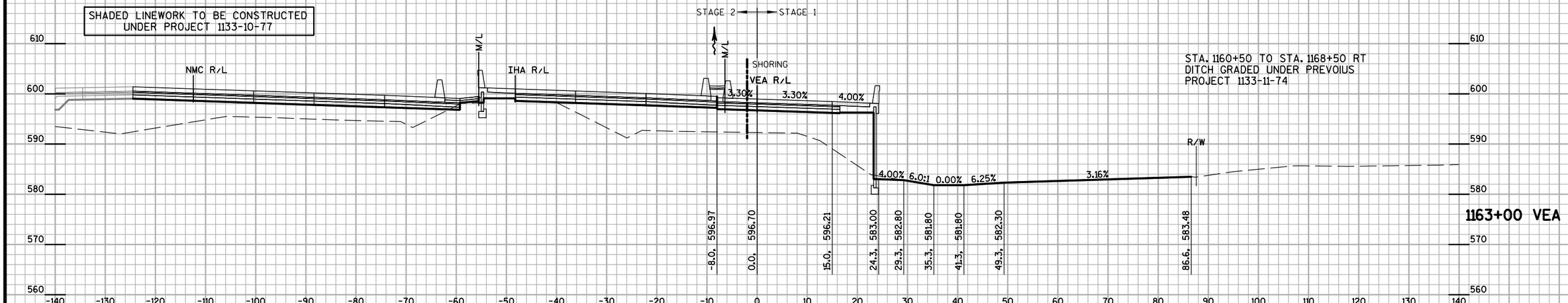
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

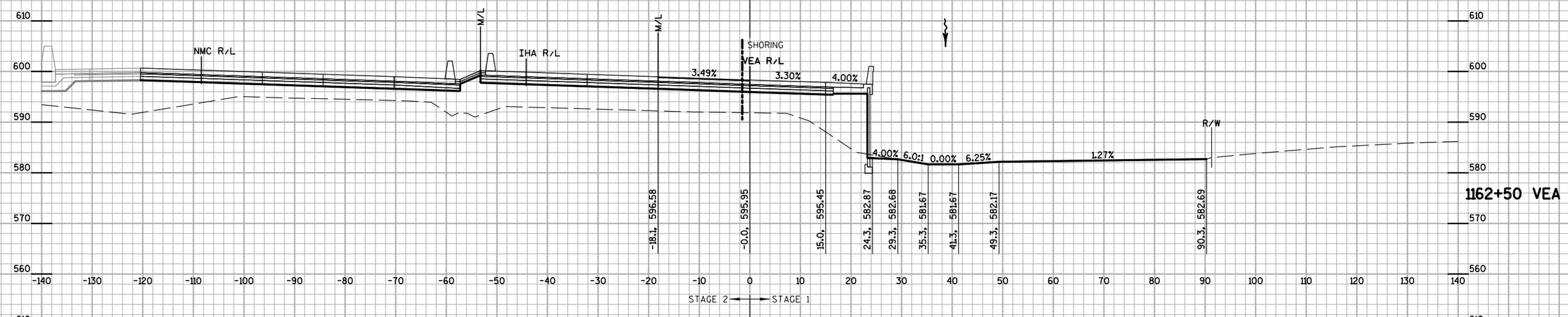
WISDOT/CADDS SHEET 21

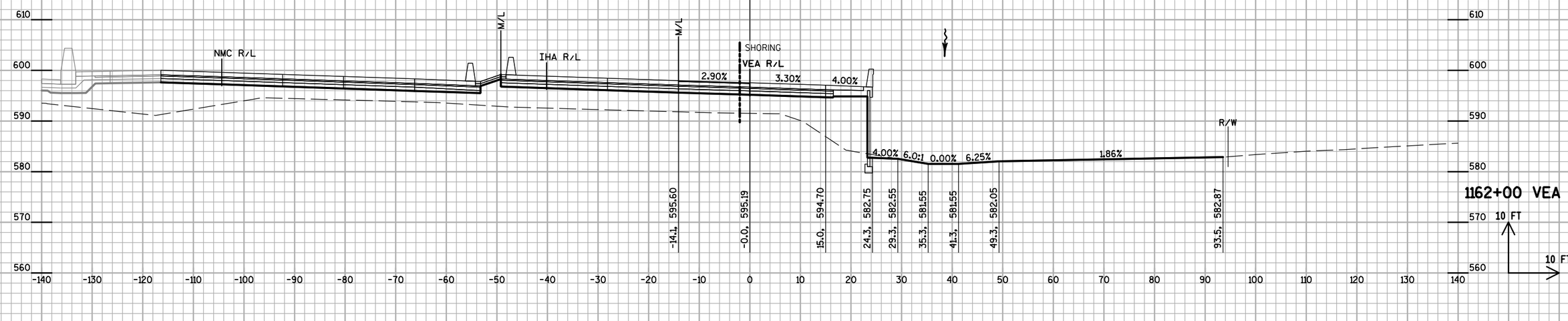
STA. 1162+00 VEA TO 1163+00 VEA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74







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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1173	E

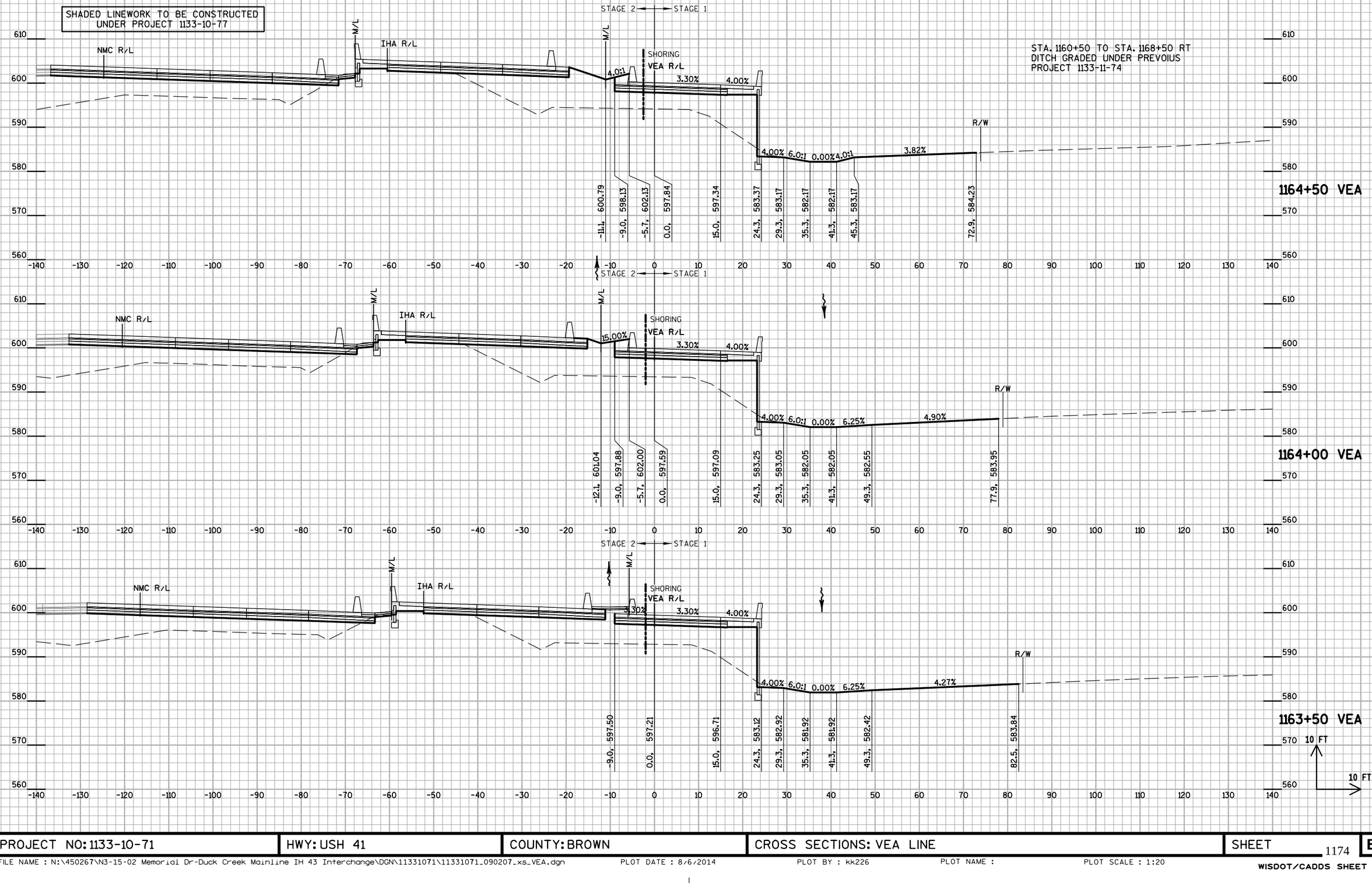
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1163+50 VEA TO 1164+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT DITCH GRADED UNDER PREVOIUS PROJECT 1133-11-74



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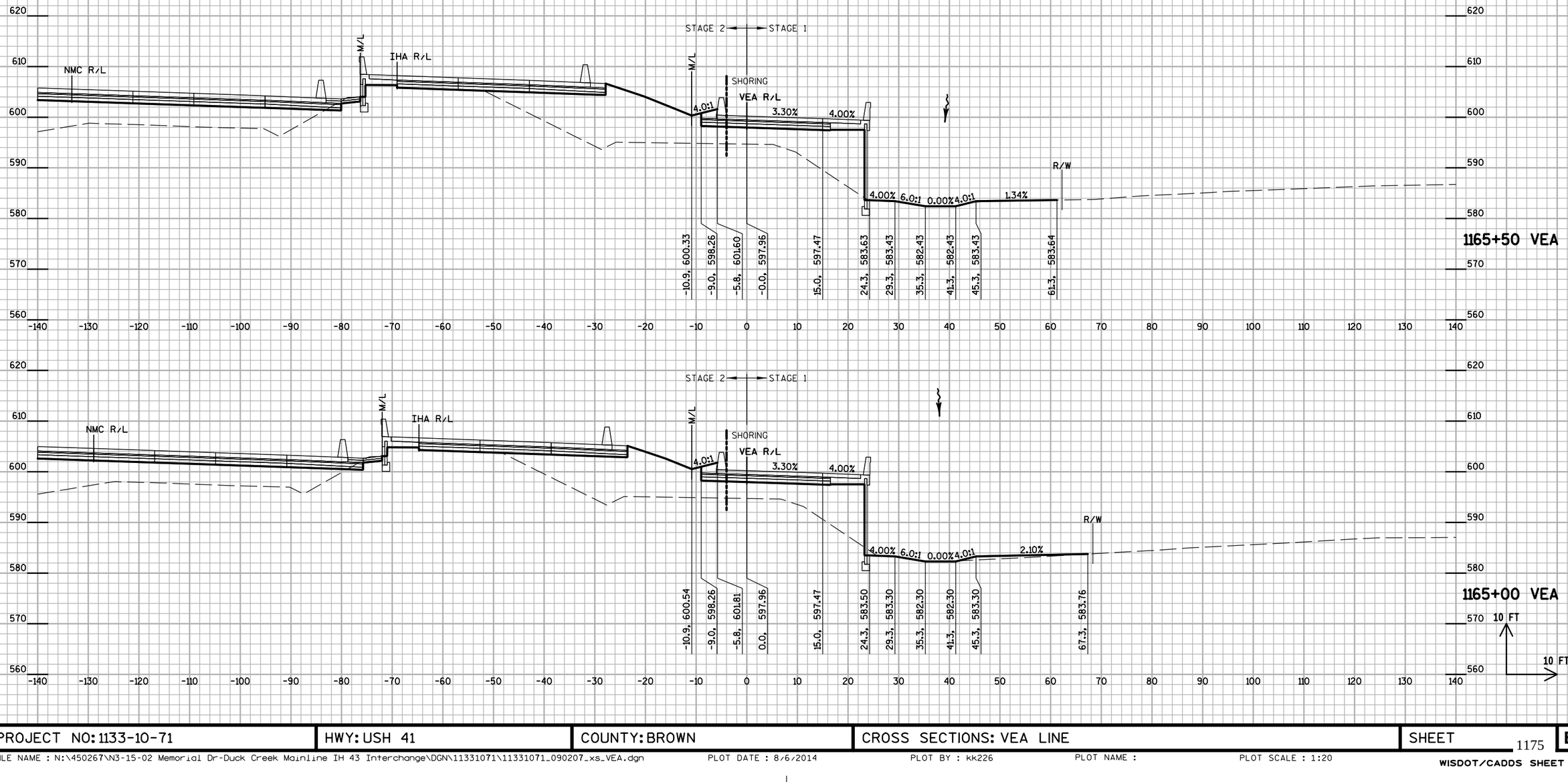
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1174	E

STA. 1165+00 VEA TO 1165+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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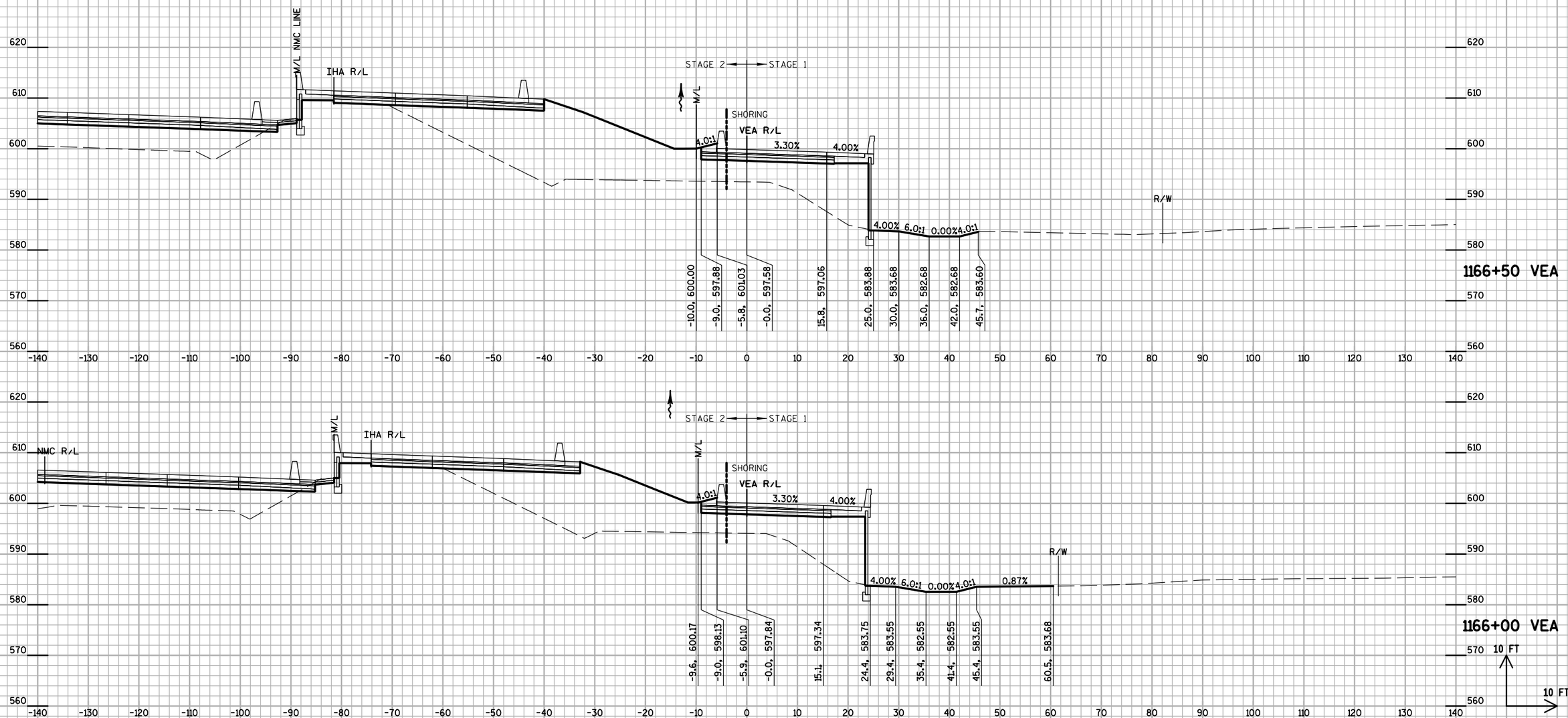
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1175	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1166+00 VEA TO 1166+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1176	E

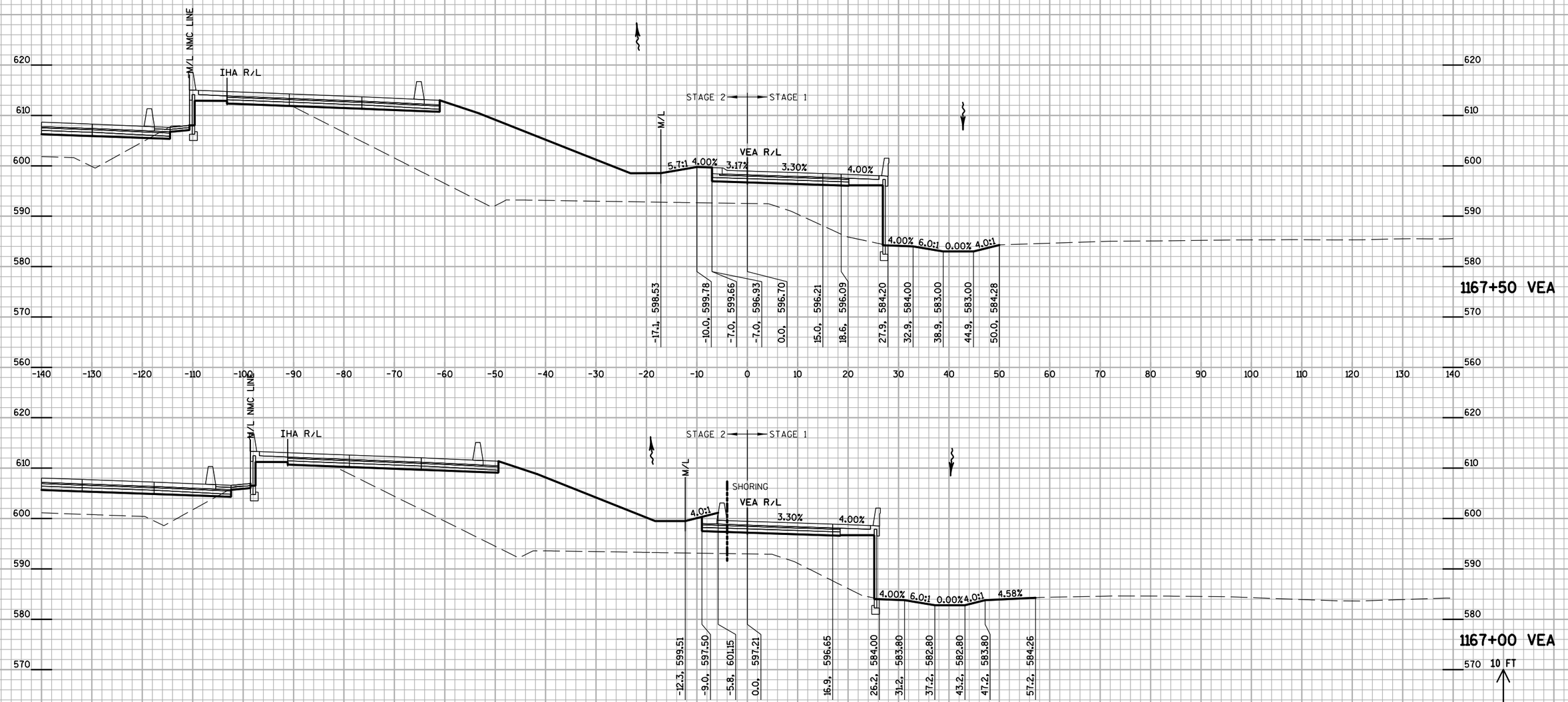
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1167+00 VEA TO 1167+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1177	E

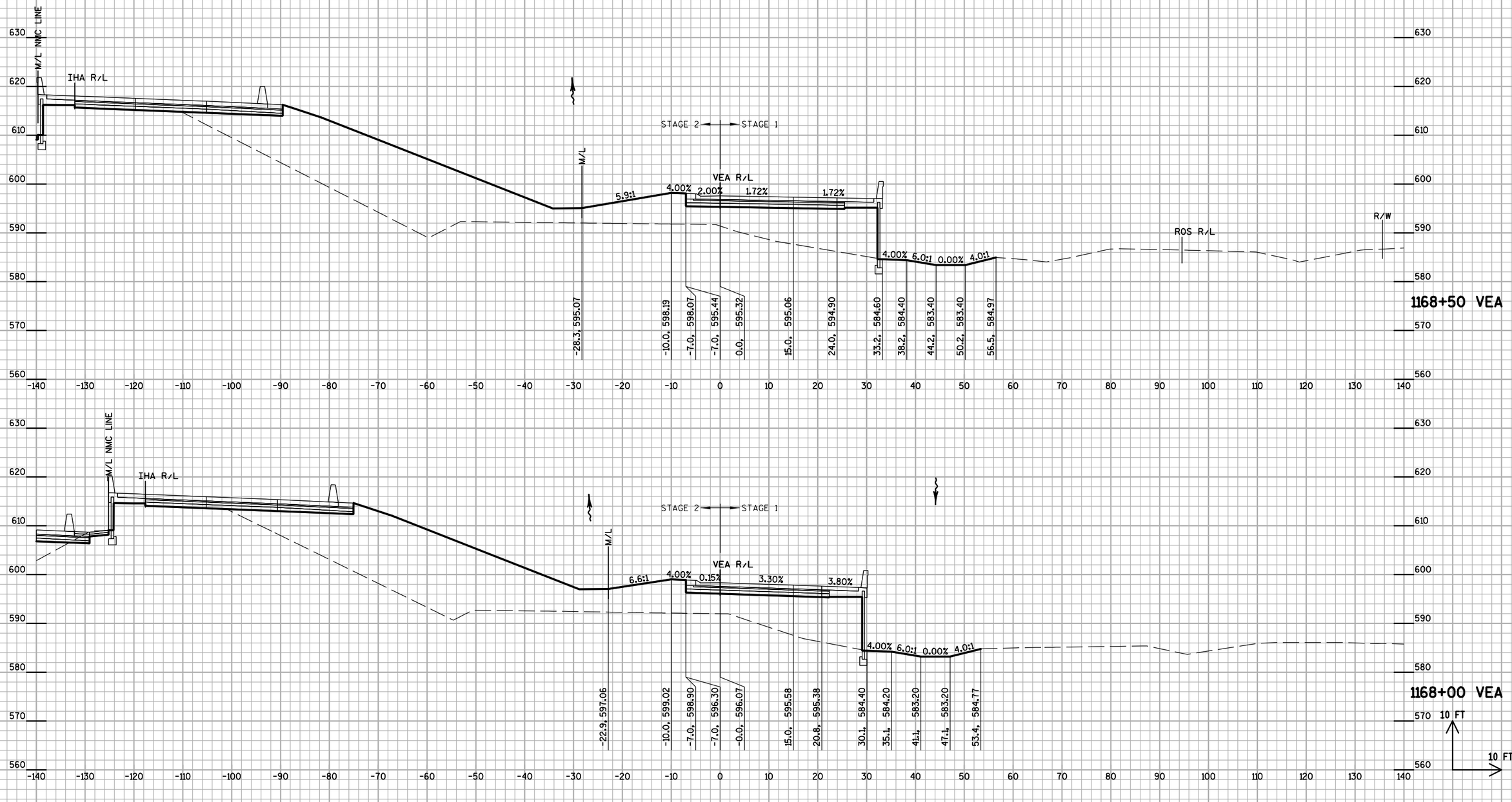
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1168+00 VEA TO 1168+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77

STA. 1160+50 TO STA. 1168+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



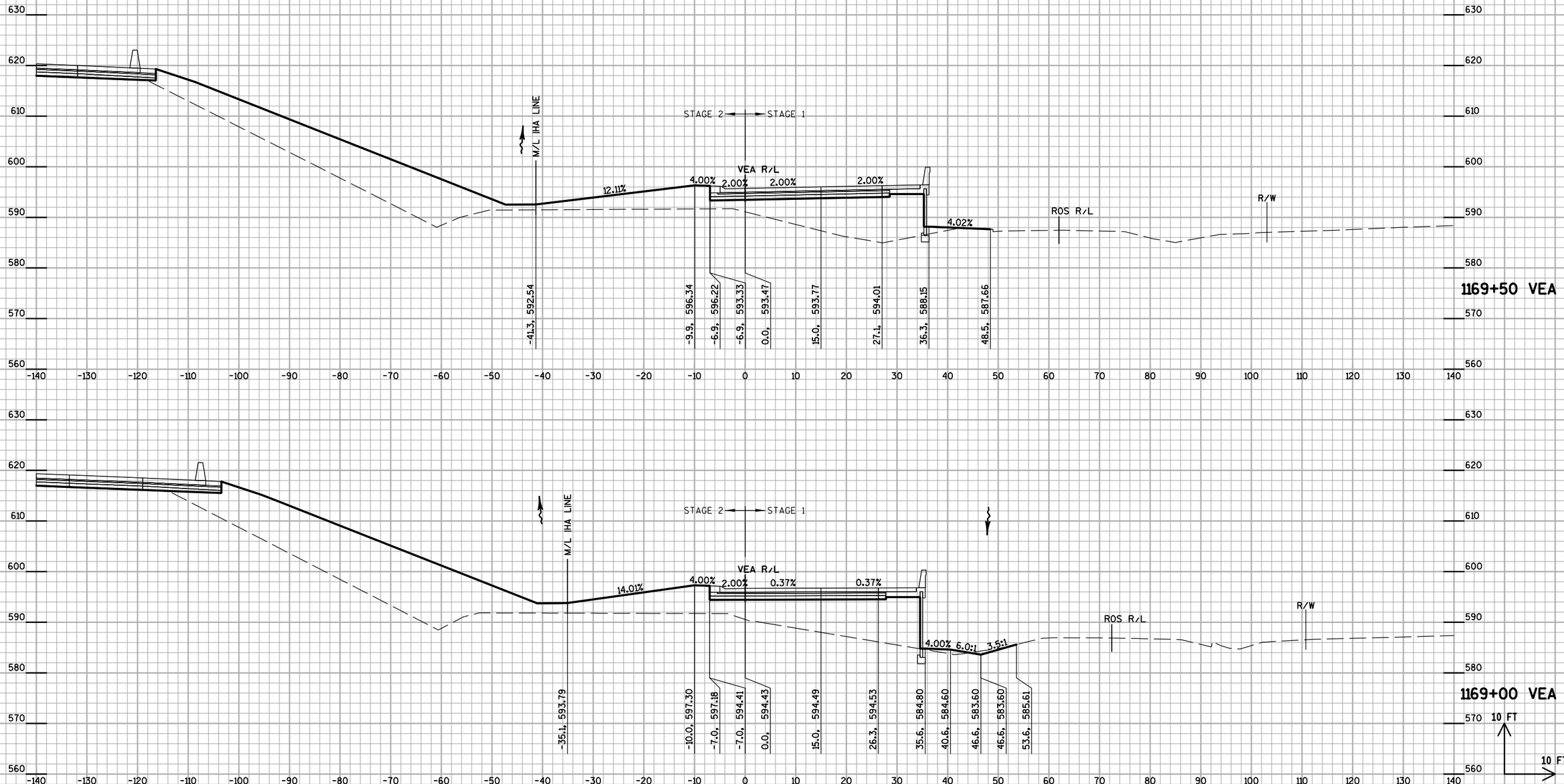
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1178	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1169+00 VEA TO 1169+50 VEA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



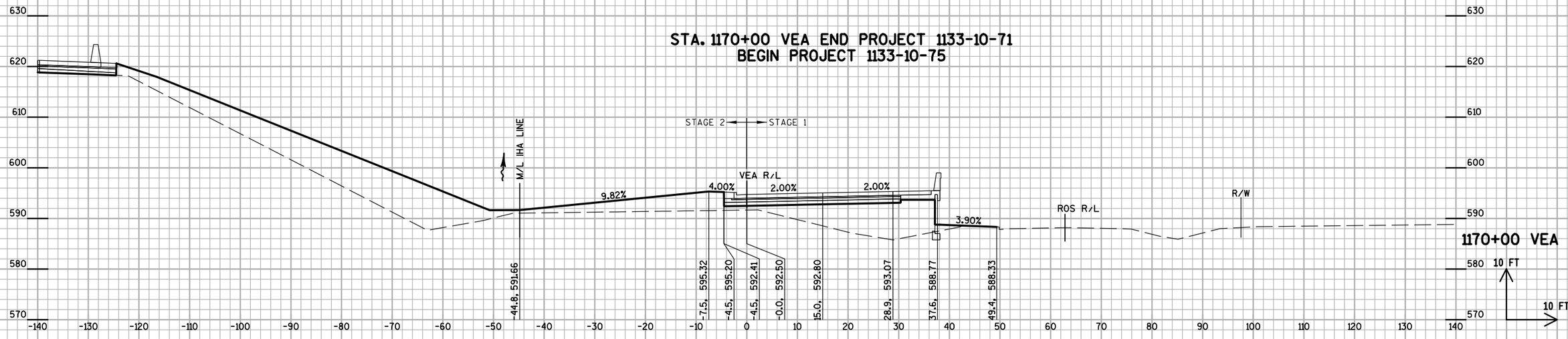
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1179	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1170+00 VEA TO 1170+00 VEA

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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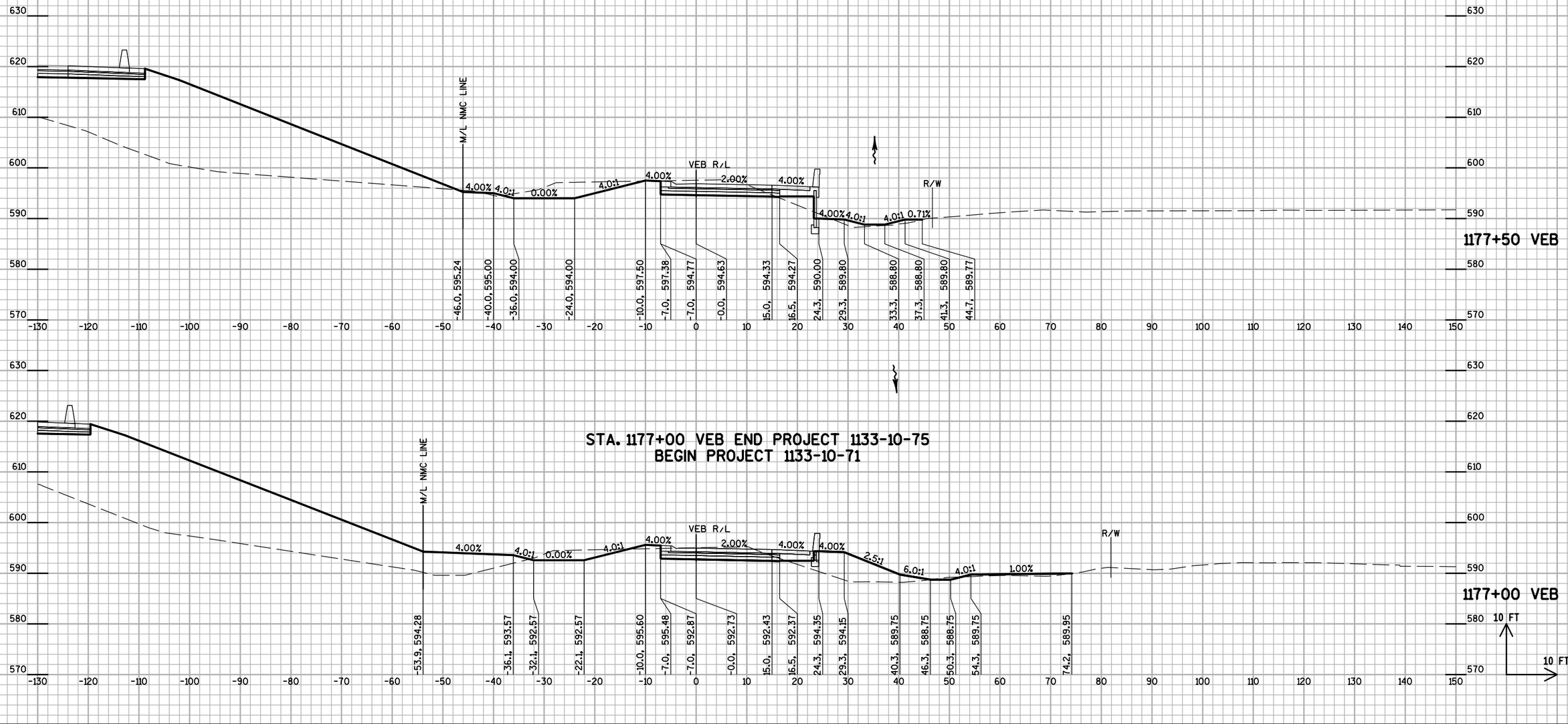
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEA LINE	SHEET 1180	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090207_xs_VEA.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1177+00 VEB TO 1177+50 VEB



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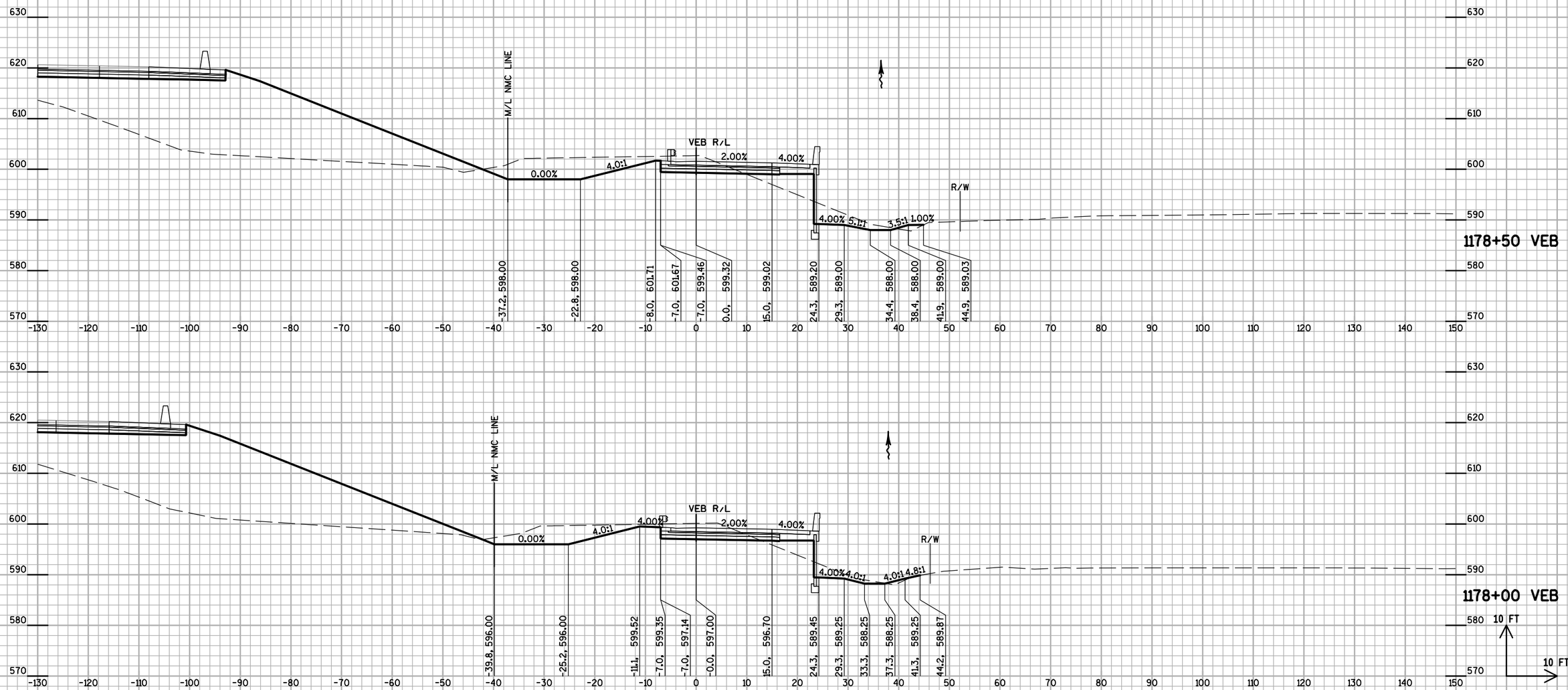
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1181	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1178+00 VEB TO 1178+50 VEB



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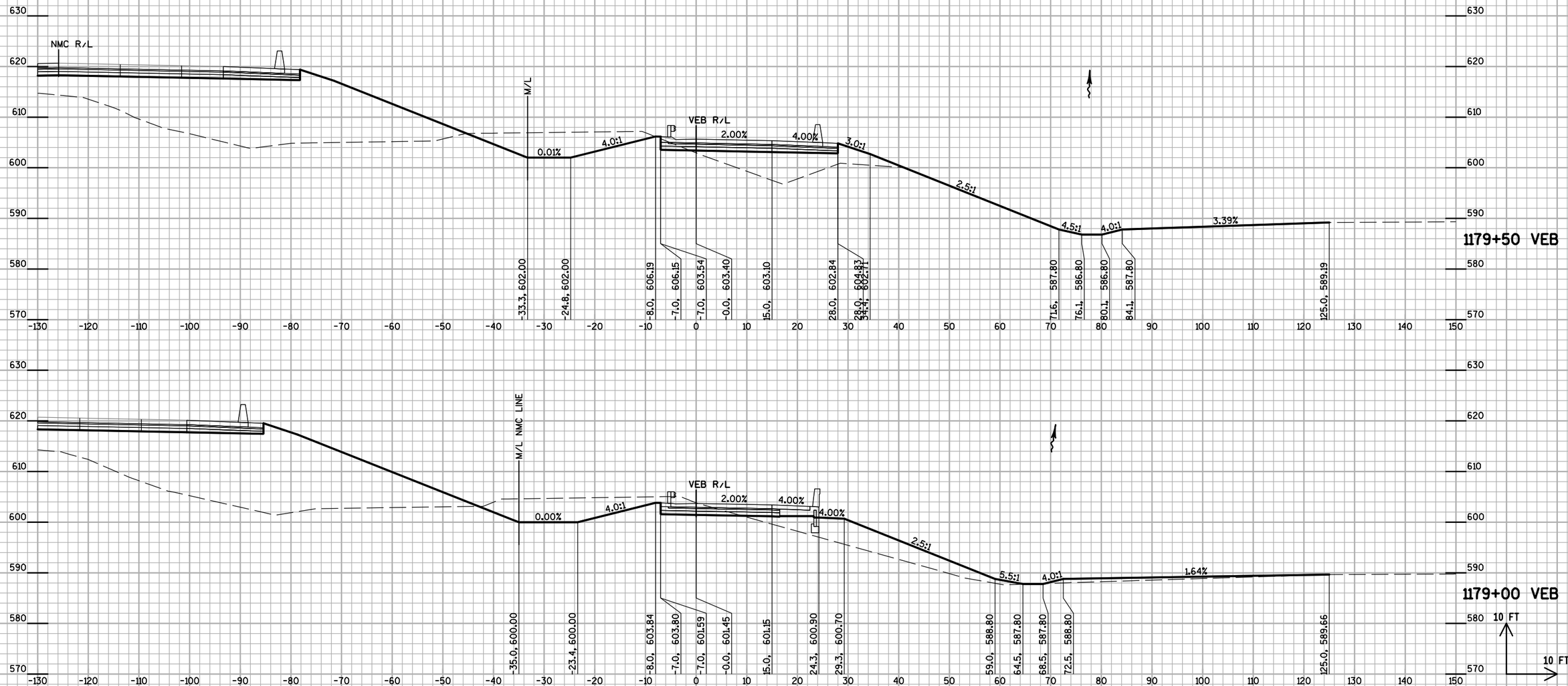
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1182	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1179+00 VEB TO 1179+50 VEB

STA. 1179+50 TO STA. 1184+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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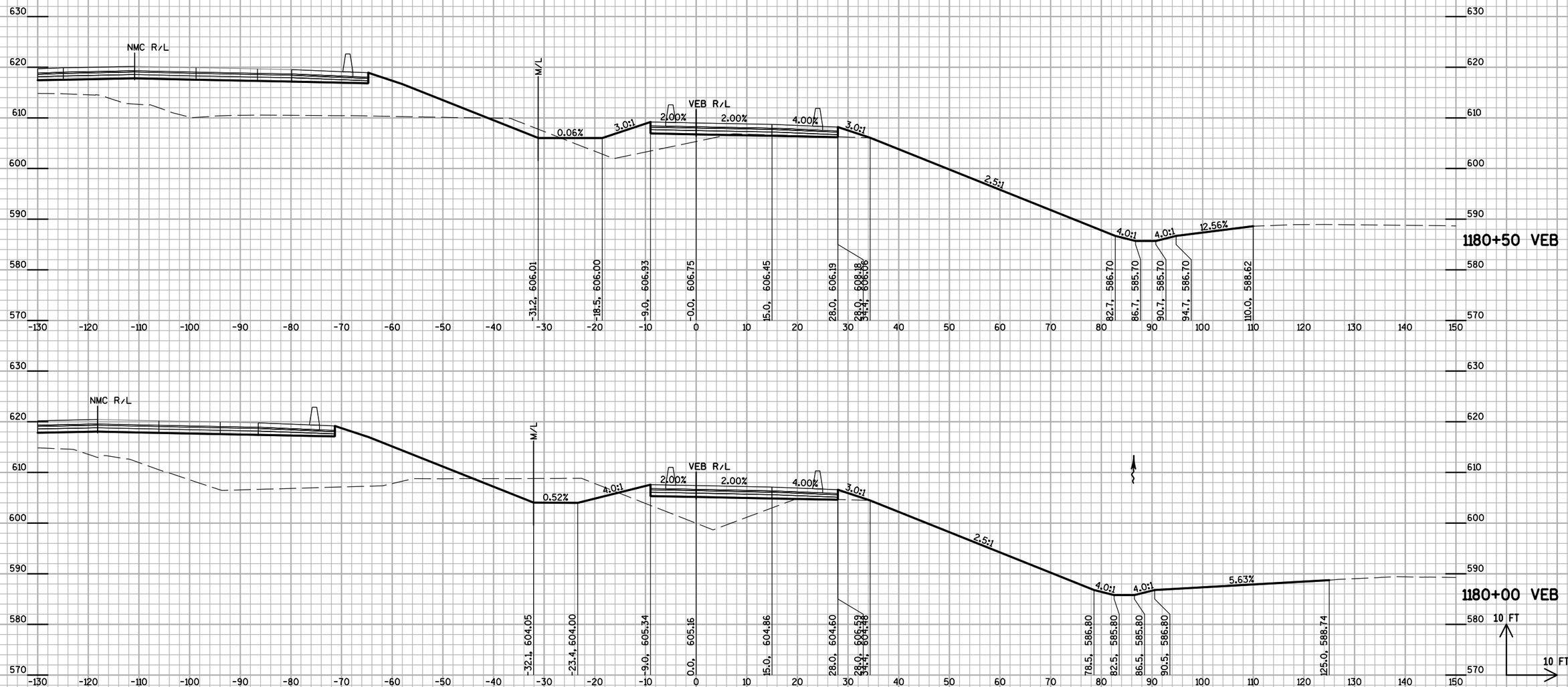
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1183	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1180+00 VEB TO 1180+50 VEB

STA. 1179+50 TO STA. 1184+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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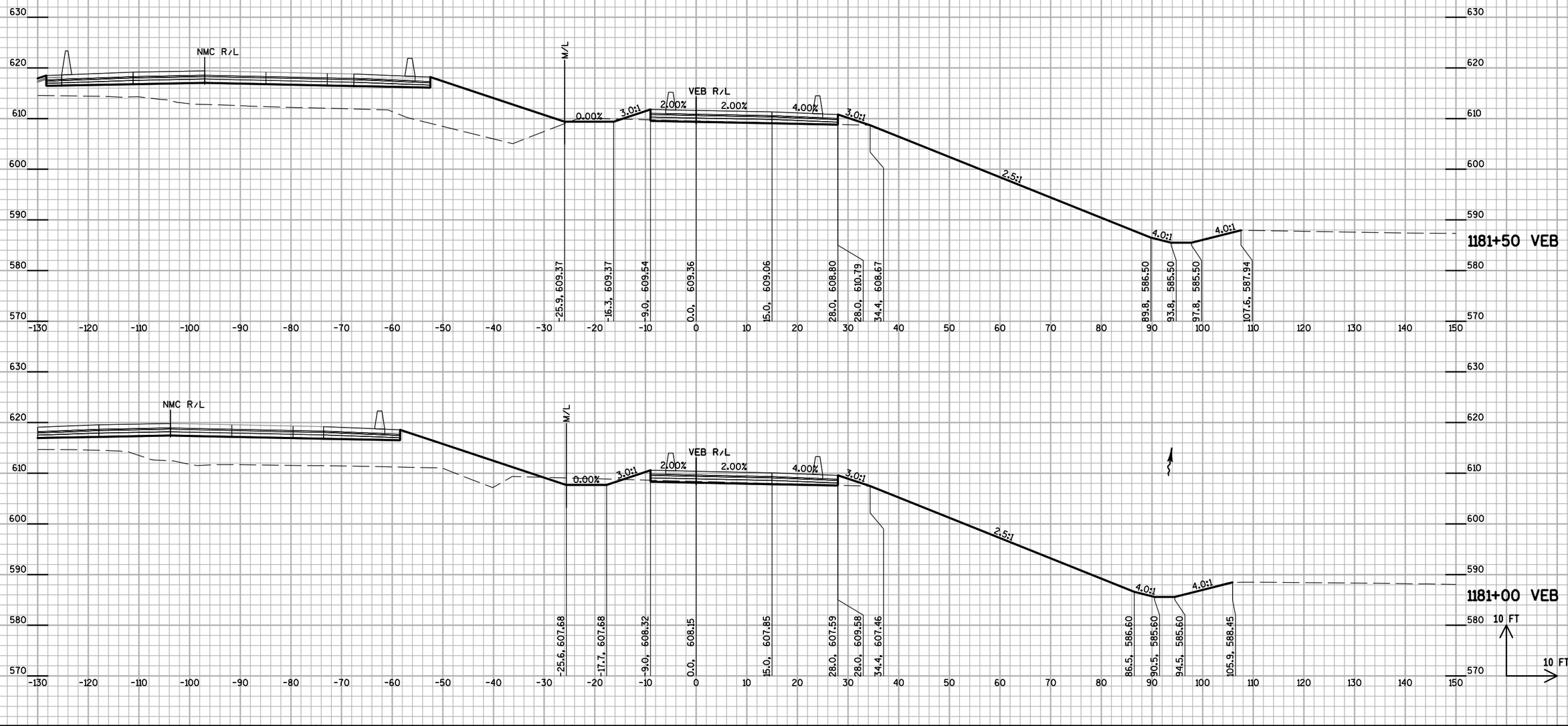
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1184	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1181+00 VEB TO 1181+50 VEB

STA. 1179+50 TO STA. 1184+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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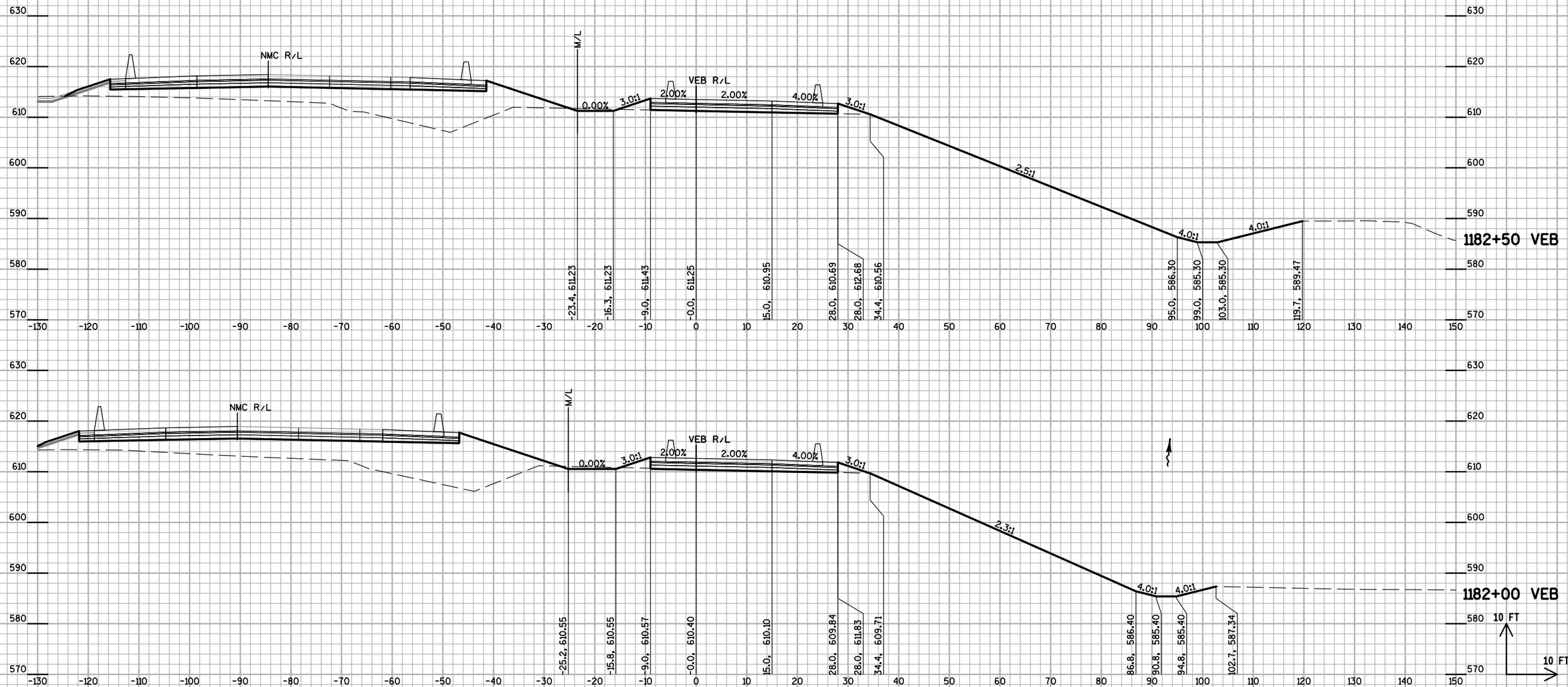
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1185	E

STA. 1182+00 VEB TO 1182+50 VEB

STA. 1179+50 TO STA. 1184+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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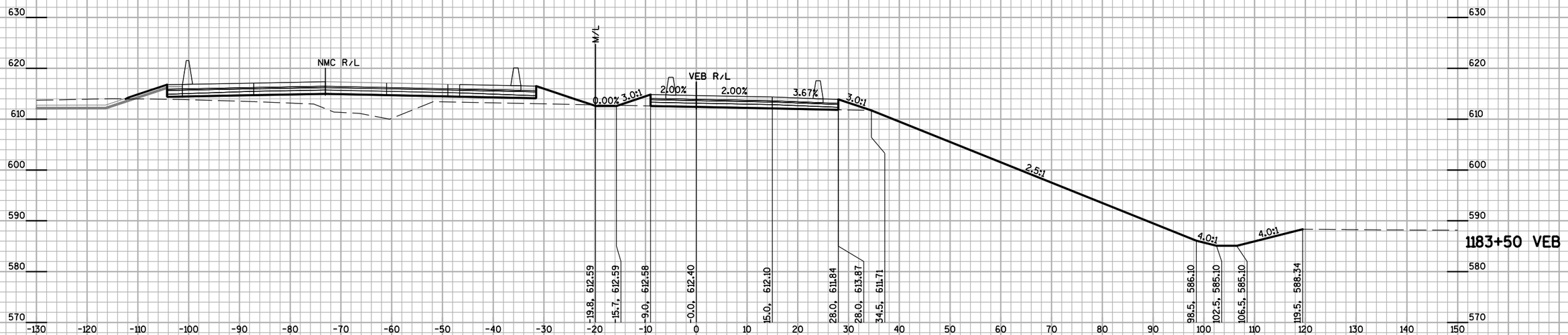
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1186	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

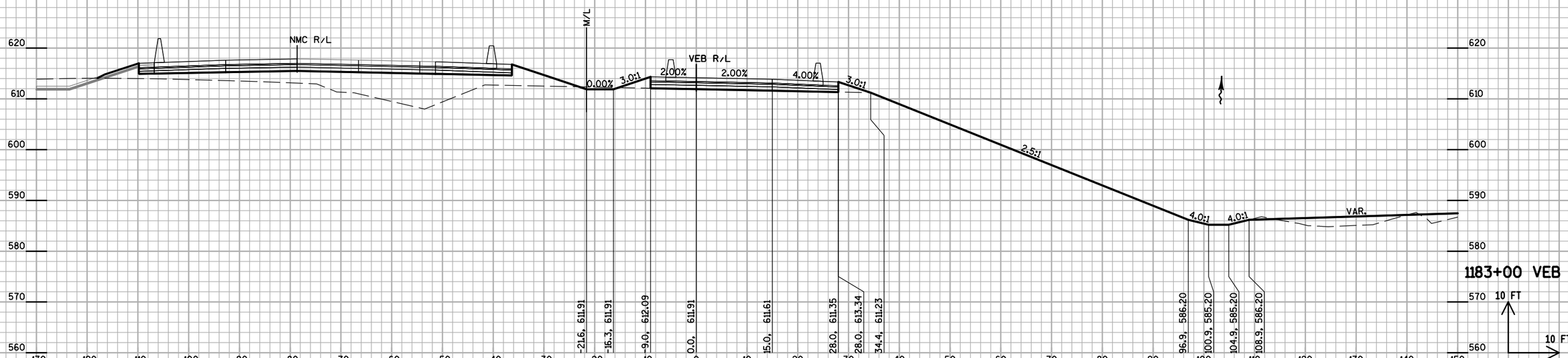
WISDOT/CADDS SHEET 21

STA. 1183+00 VEB TO 1183+50 VEB

STA. 1179+50 TO STA. 1184+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



1183+50 VEB



1183+00 VEB

10 FT
10 FT

9 9

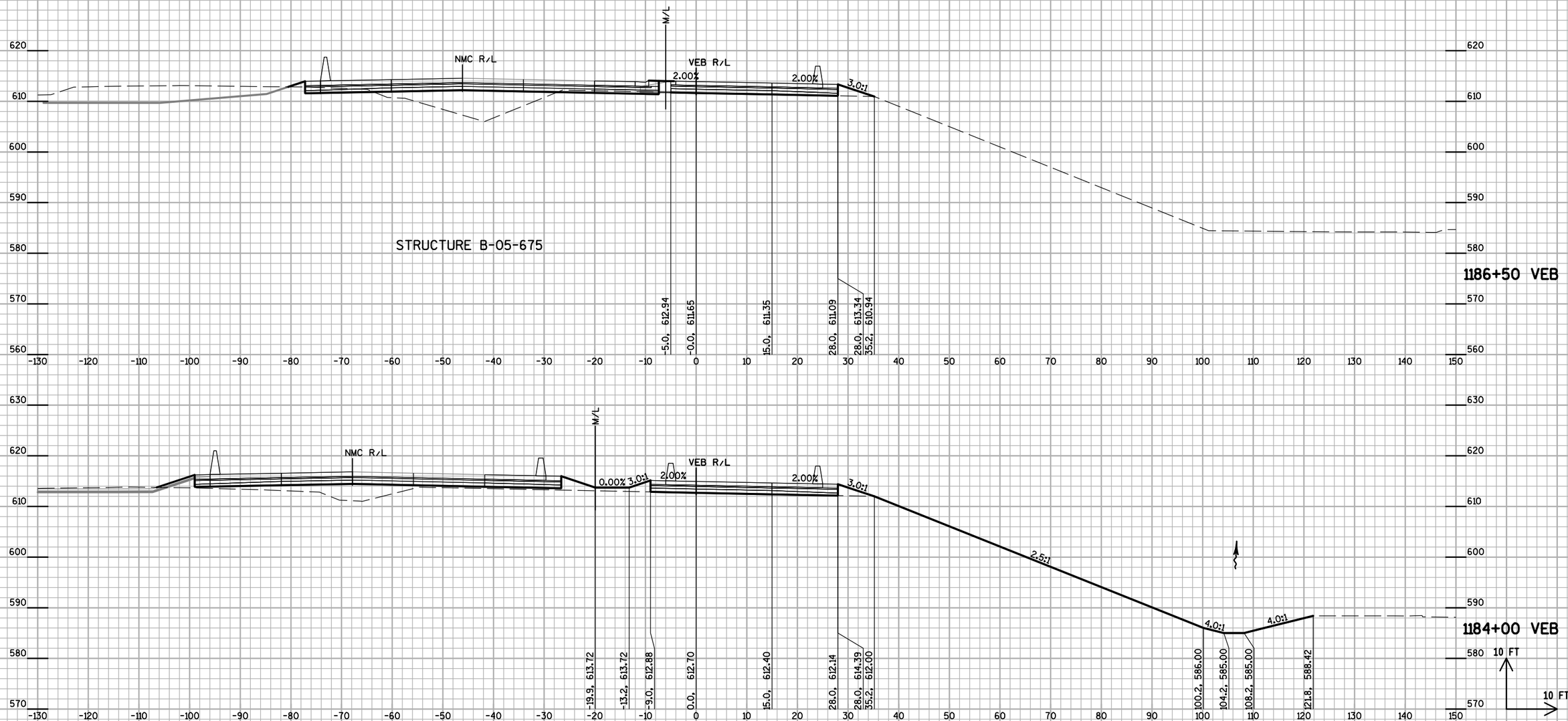
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1187 E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1184+00 VEB TO 1186+50 VEB

STA. 1179+50 TO STA. 1184+50 RT
DITCH GRADED UNDER PREVOIUS
PROJECT 1133-11-74



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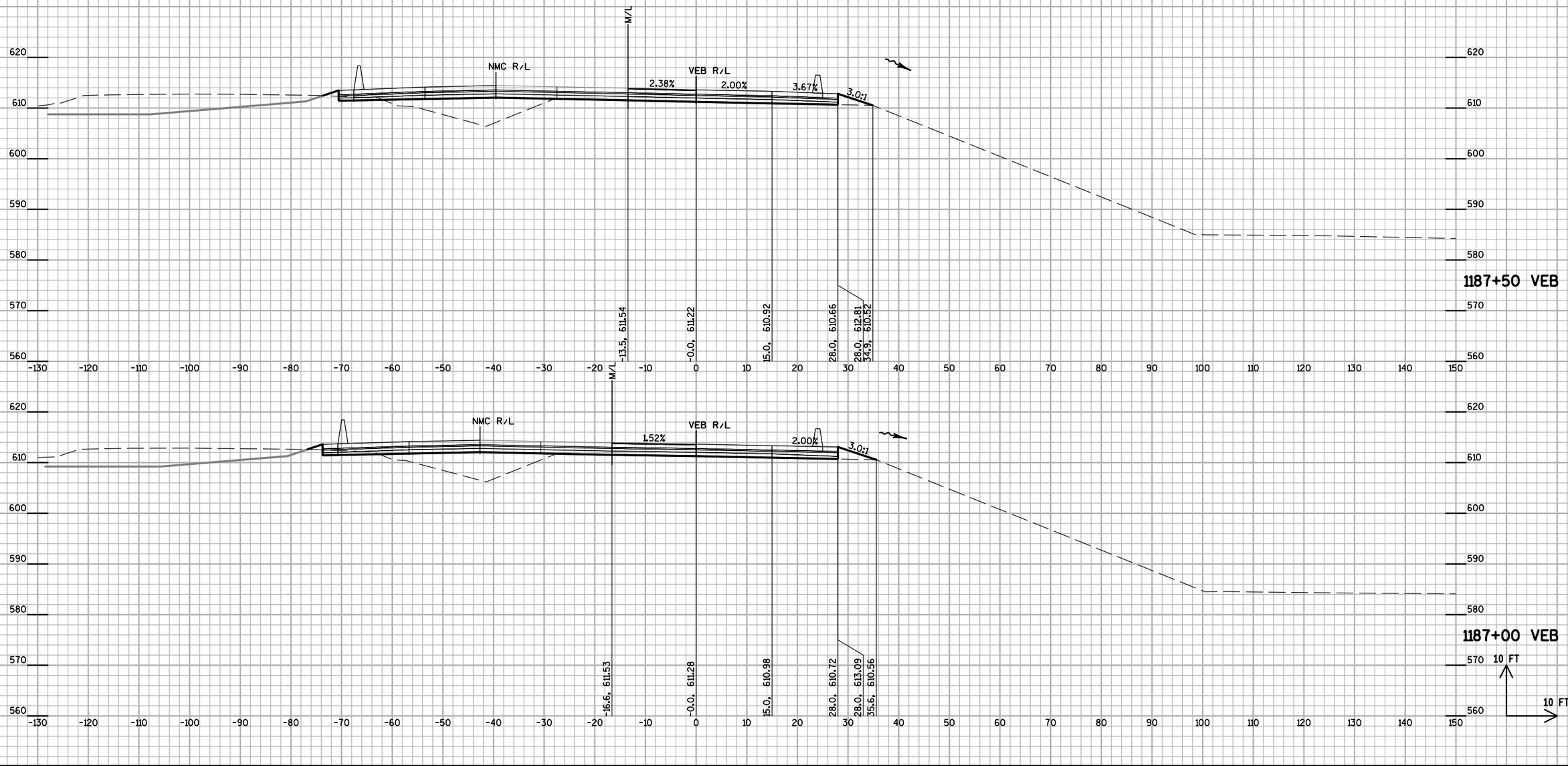
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1188	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1187+00 VEB TO 1187+50 VEB

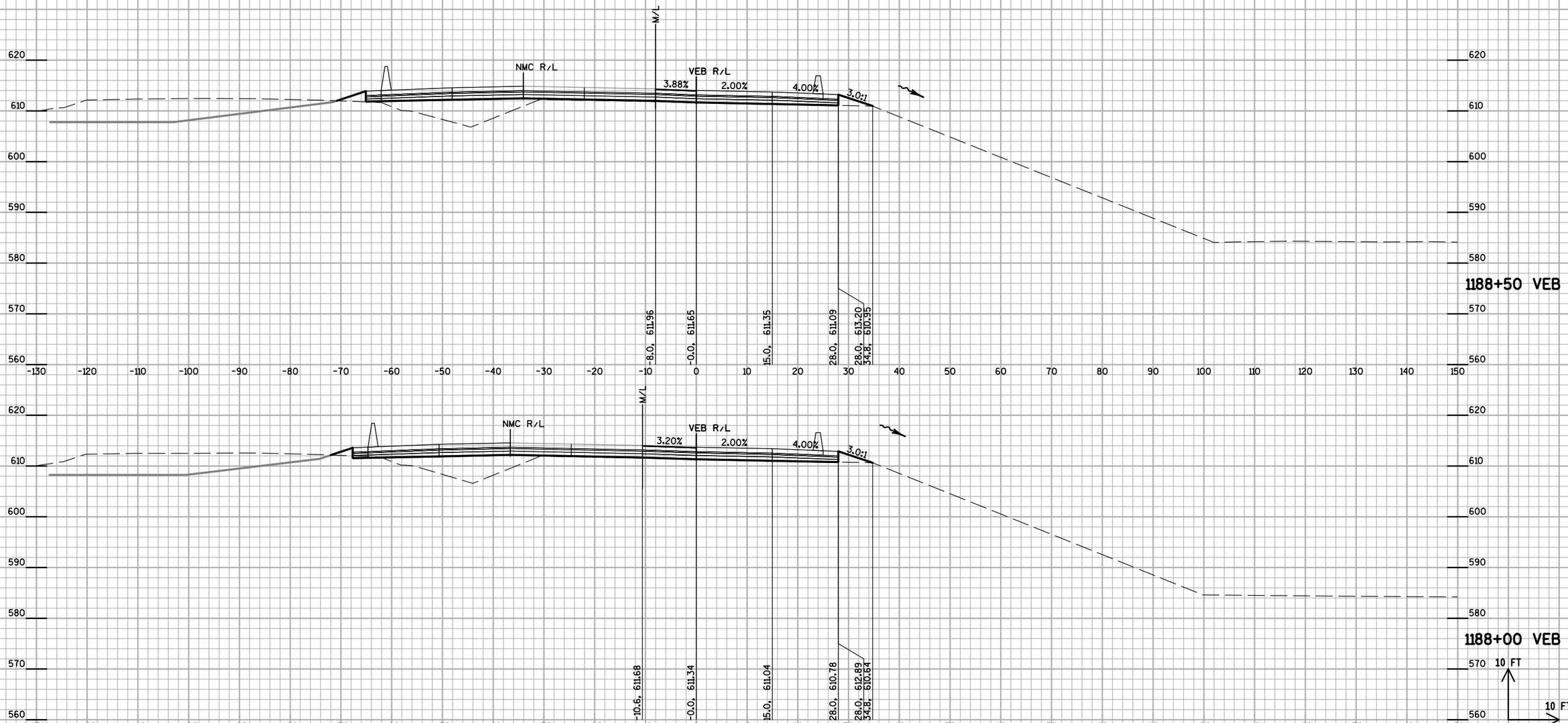


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1189	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1188+00 VEB TO 1188+50 VEB



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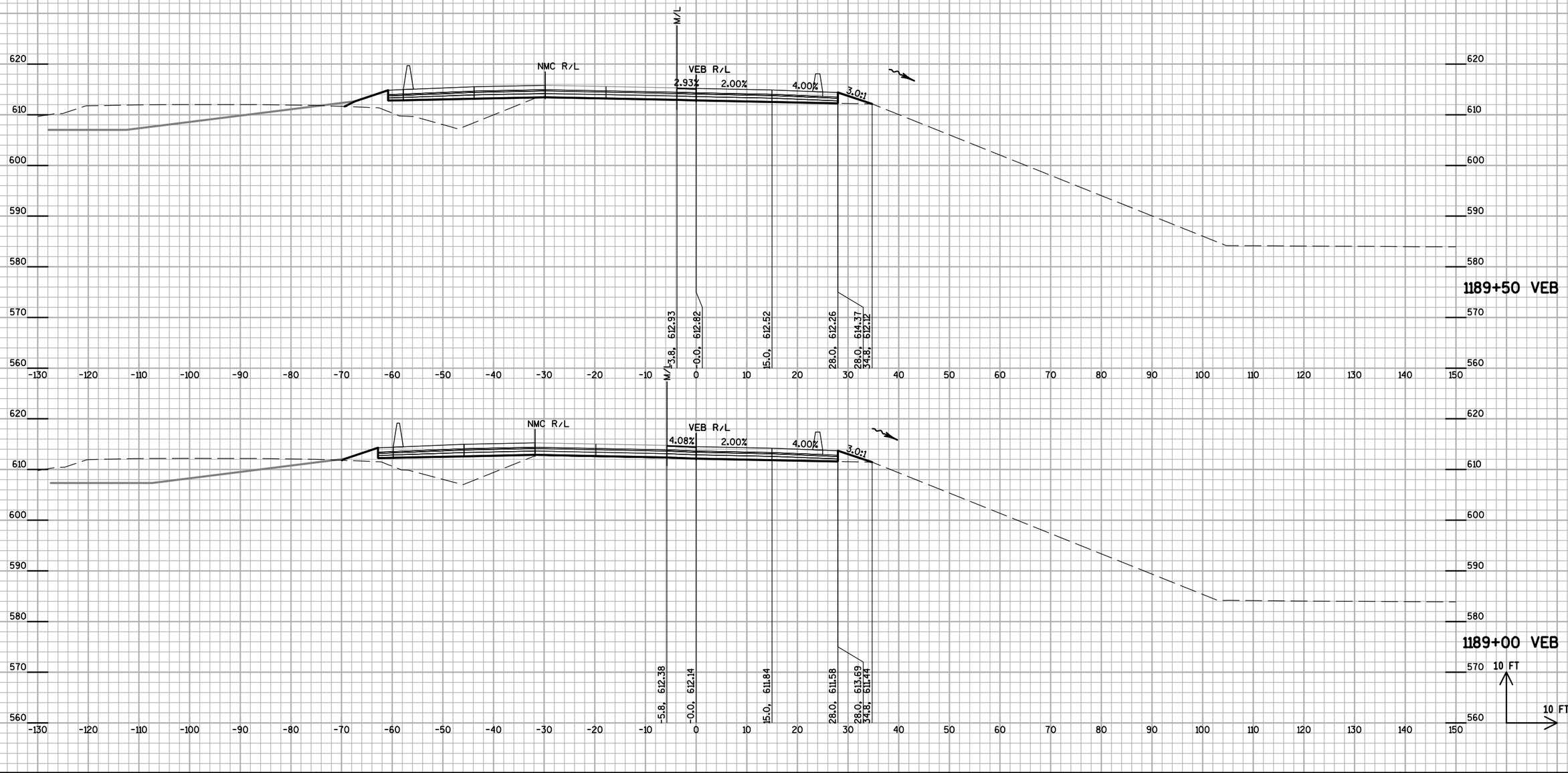
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1190	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1189+00 VEB TO 1189+50 VEB



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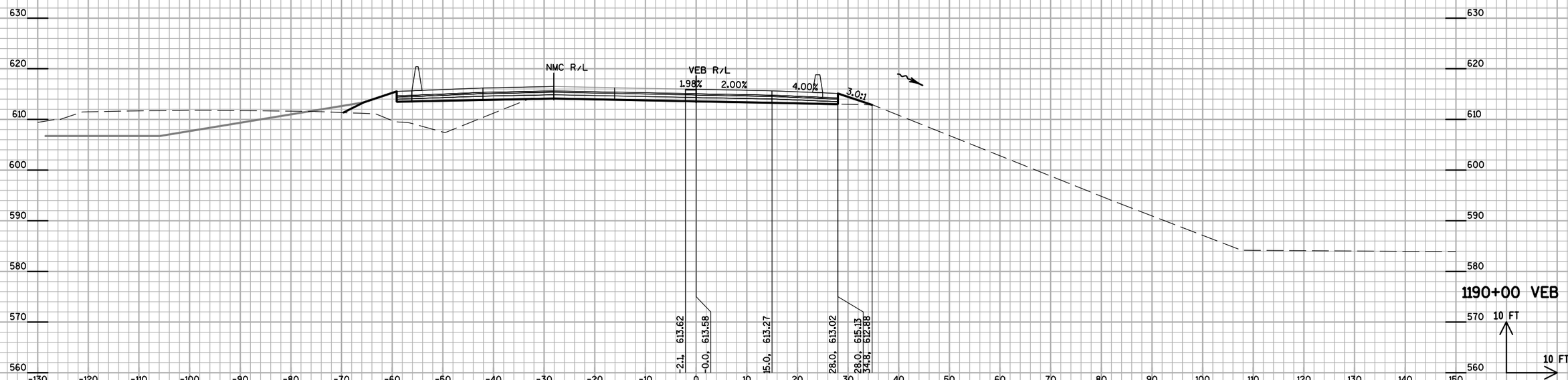
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1191	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1190+00 VEB TO 1190+00 VEB



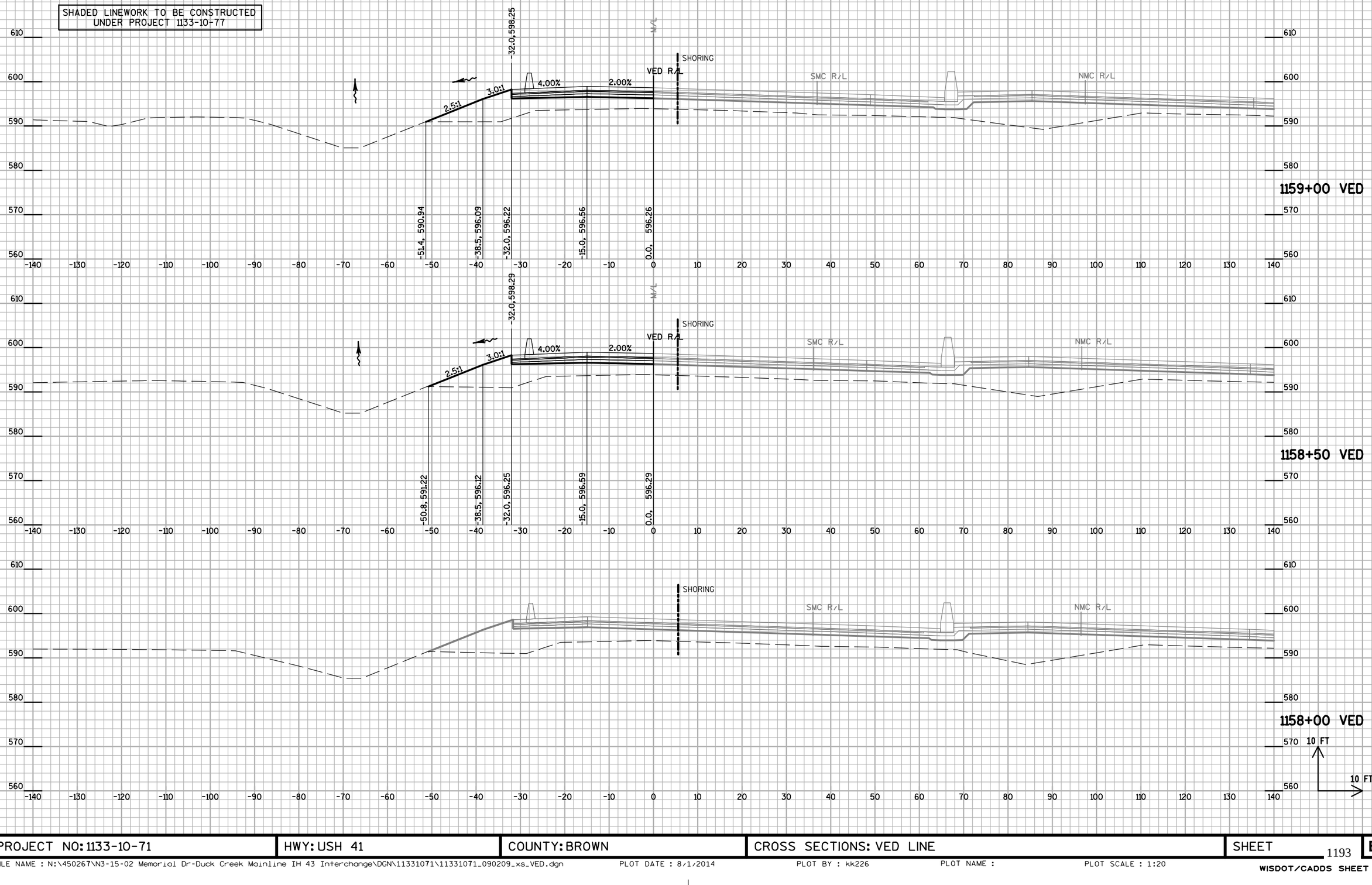
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VEB LINE	SHEET 1192	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090208_xs_VEB.dgn PLOT DATE : 8/6/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1158+00 VED TO 1159+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



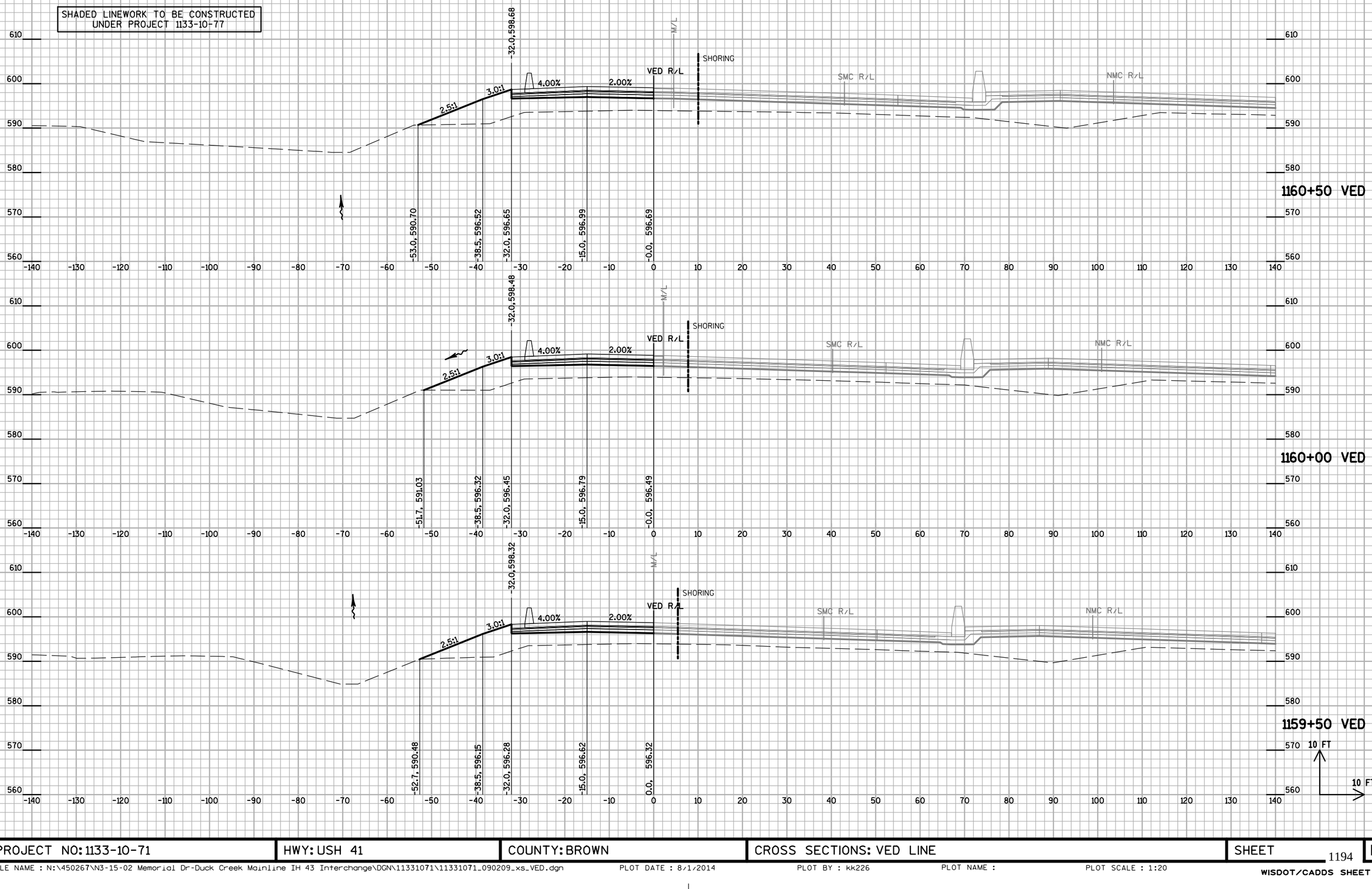
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1193	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1159+50 VED TO 1160+50 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



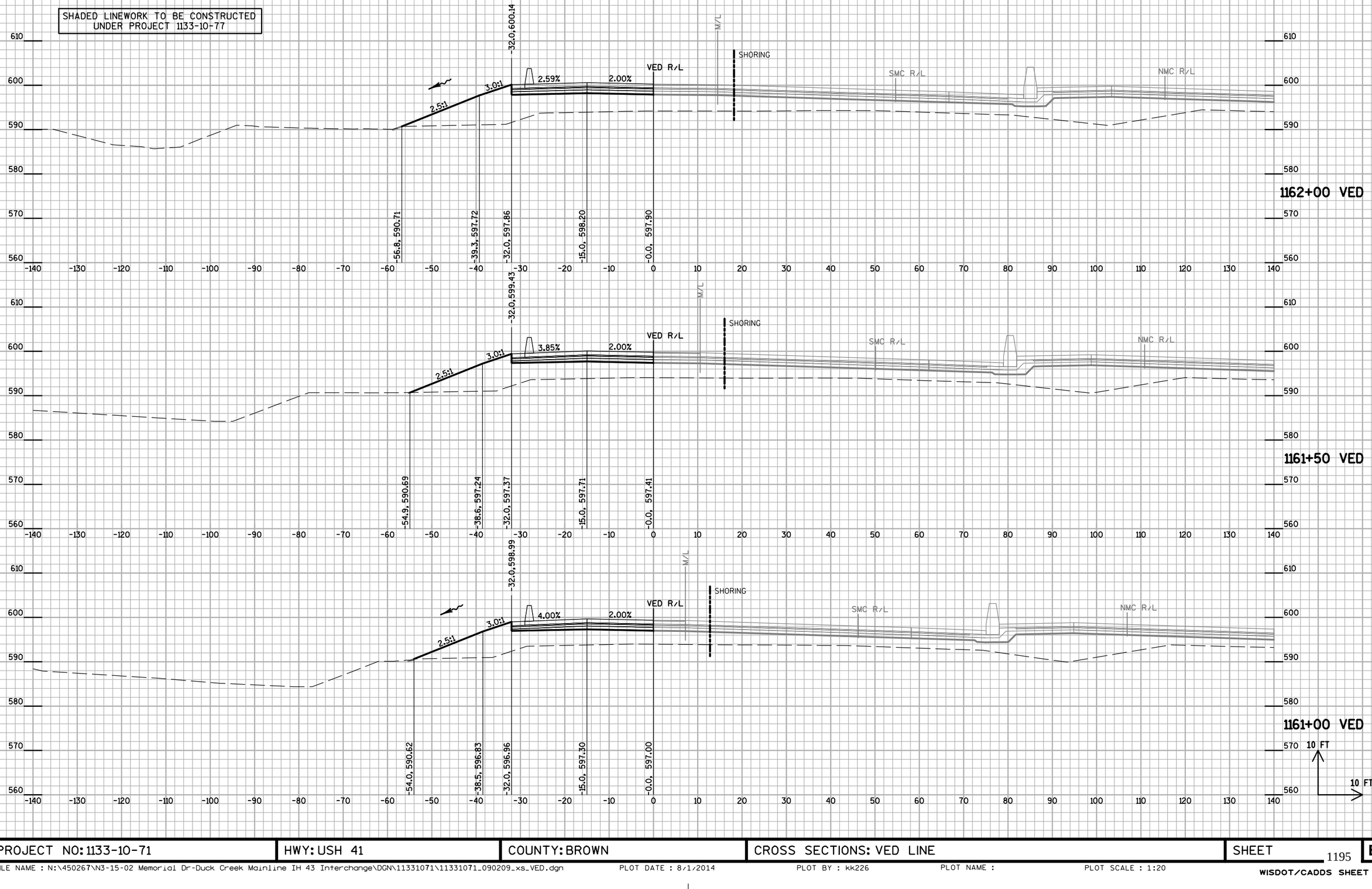
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1194	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1161+00 VED TO 1162+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



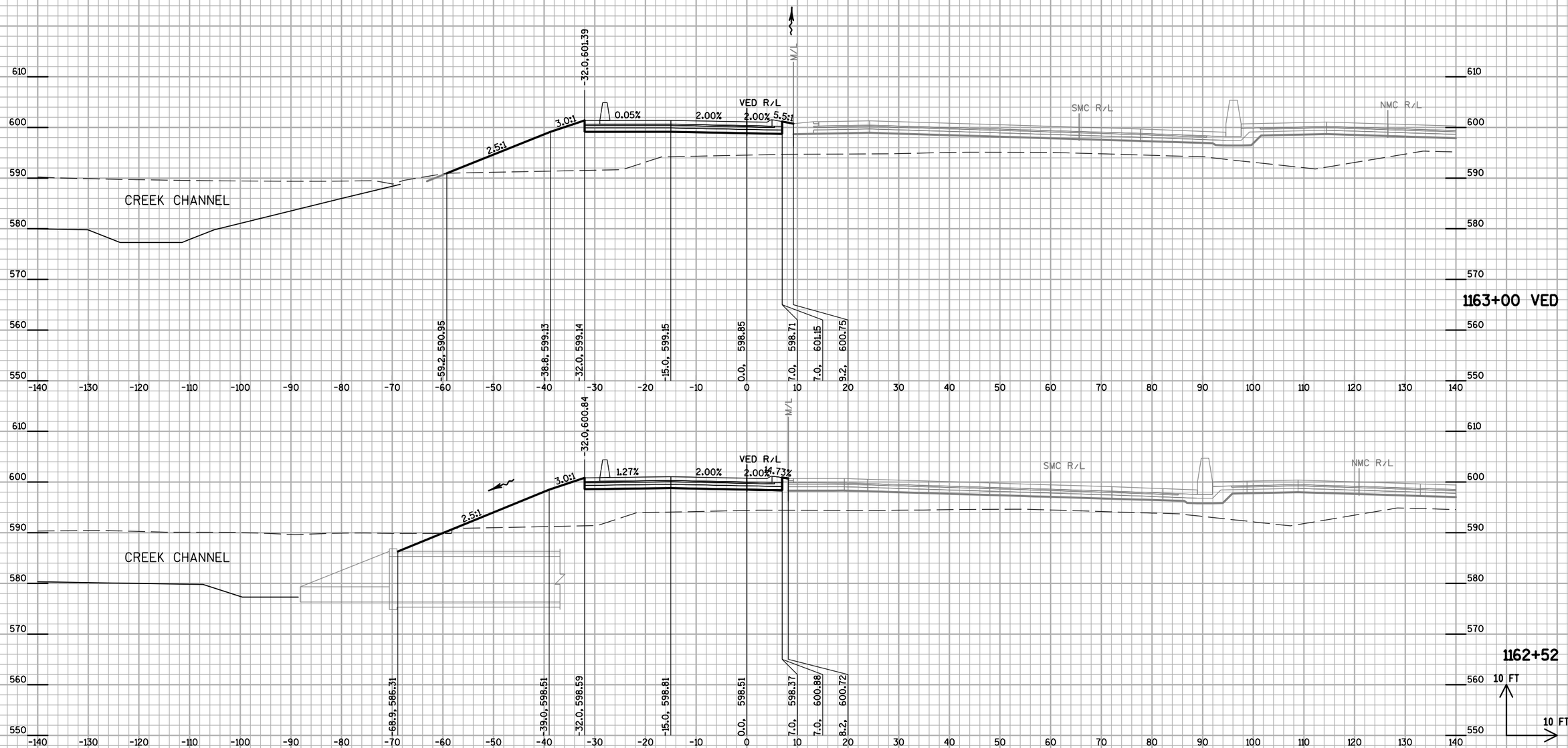
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1195	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1162+52 TO 1163+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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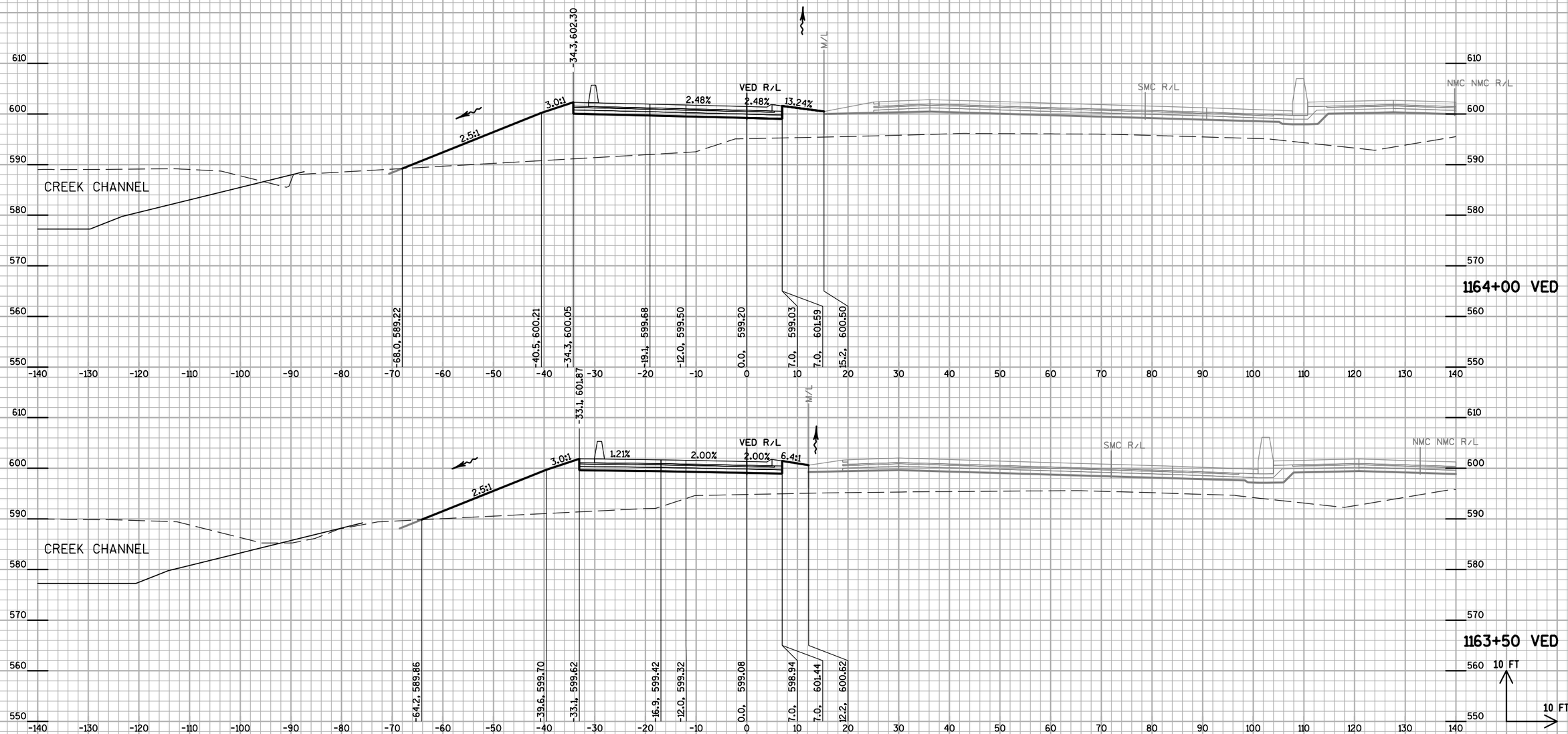
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1163+50 VED TO 1164+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



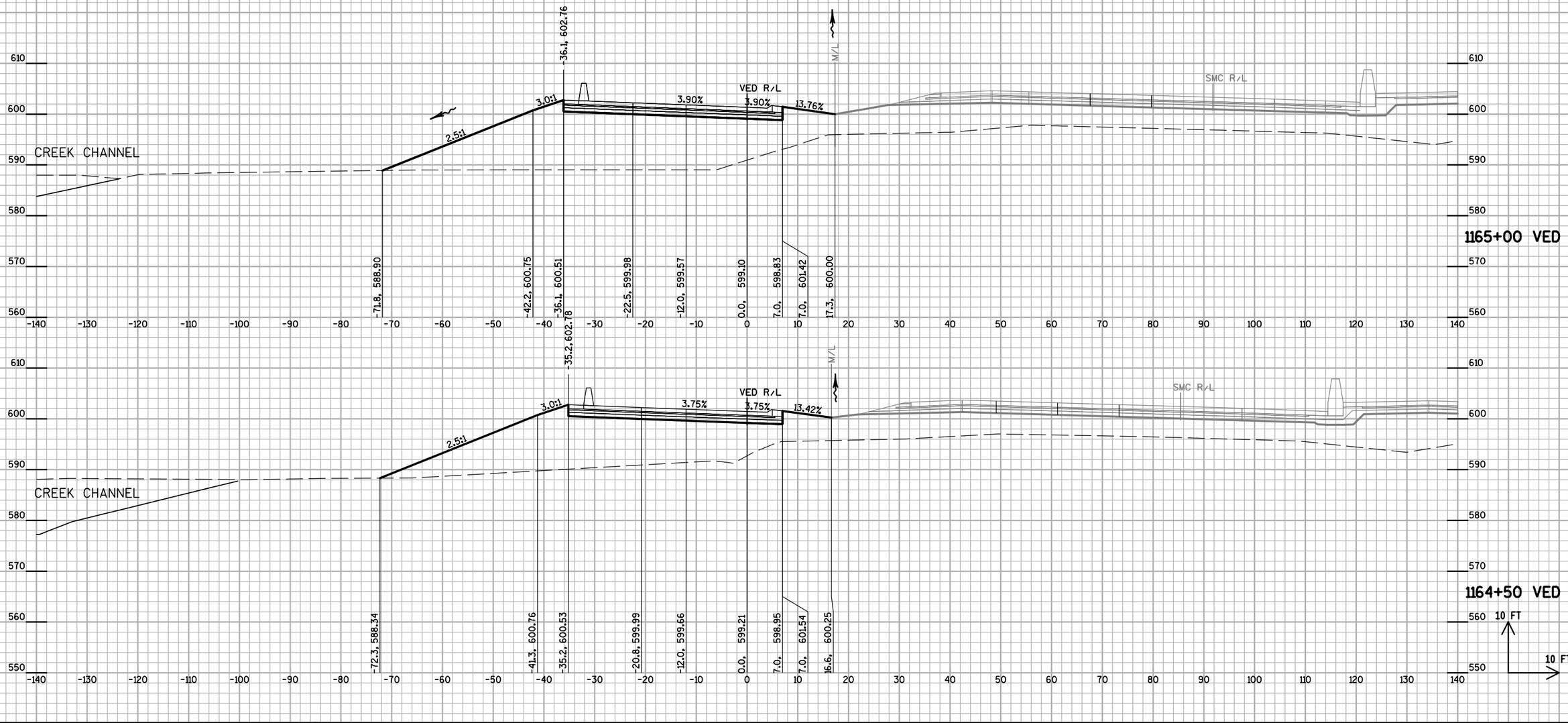
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1197	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1164+50 VED TO 1165+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



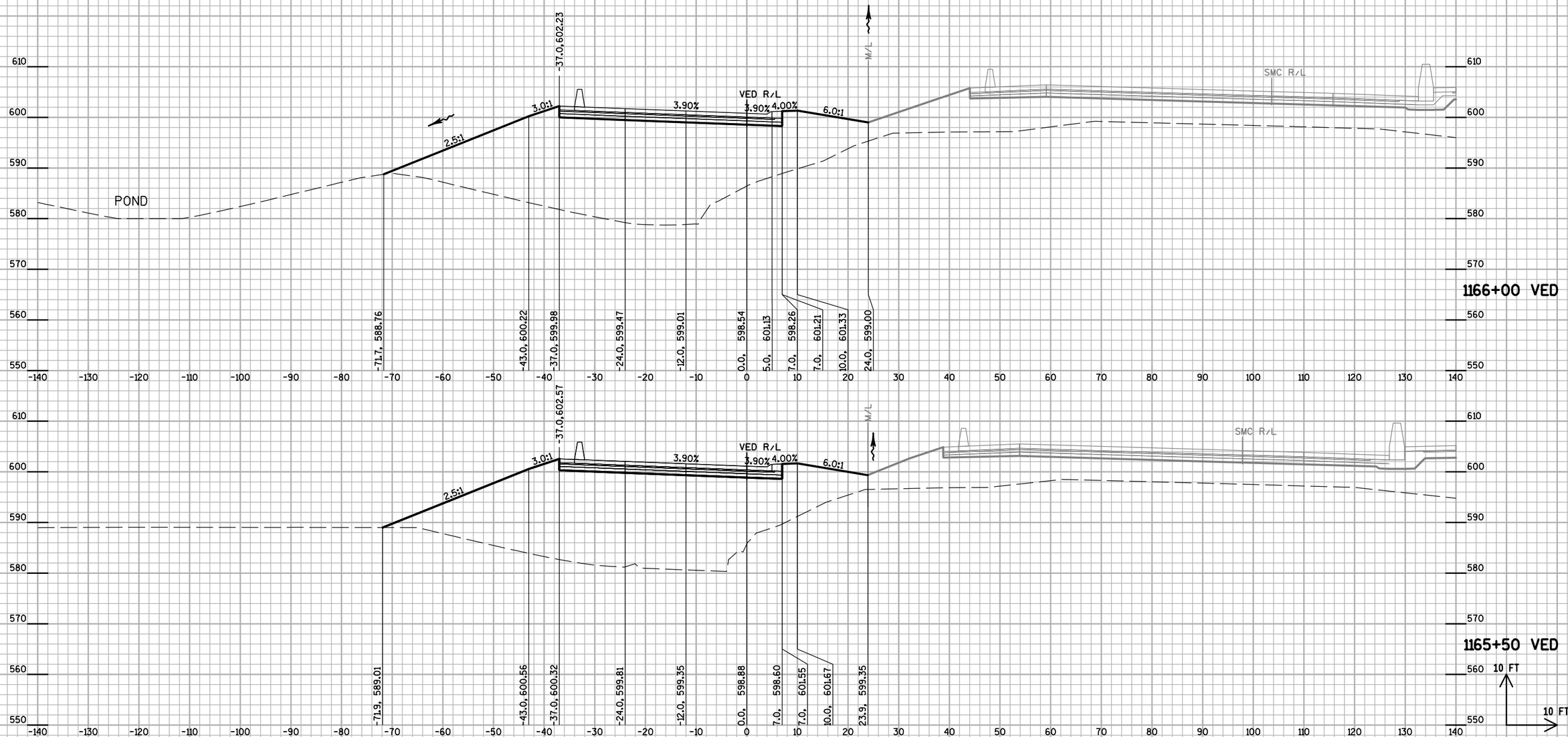
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1198	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1165+50 VED TO 1166+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



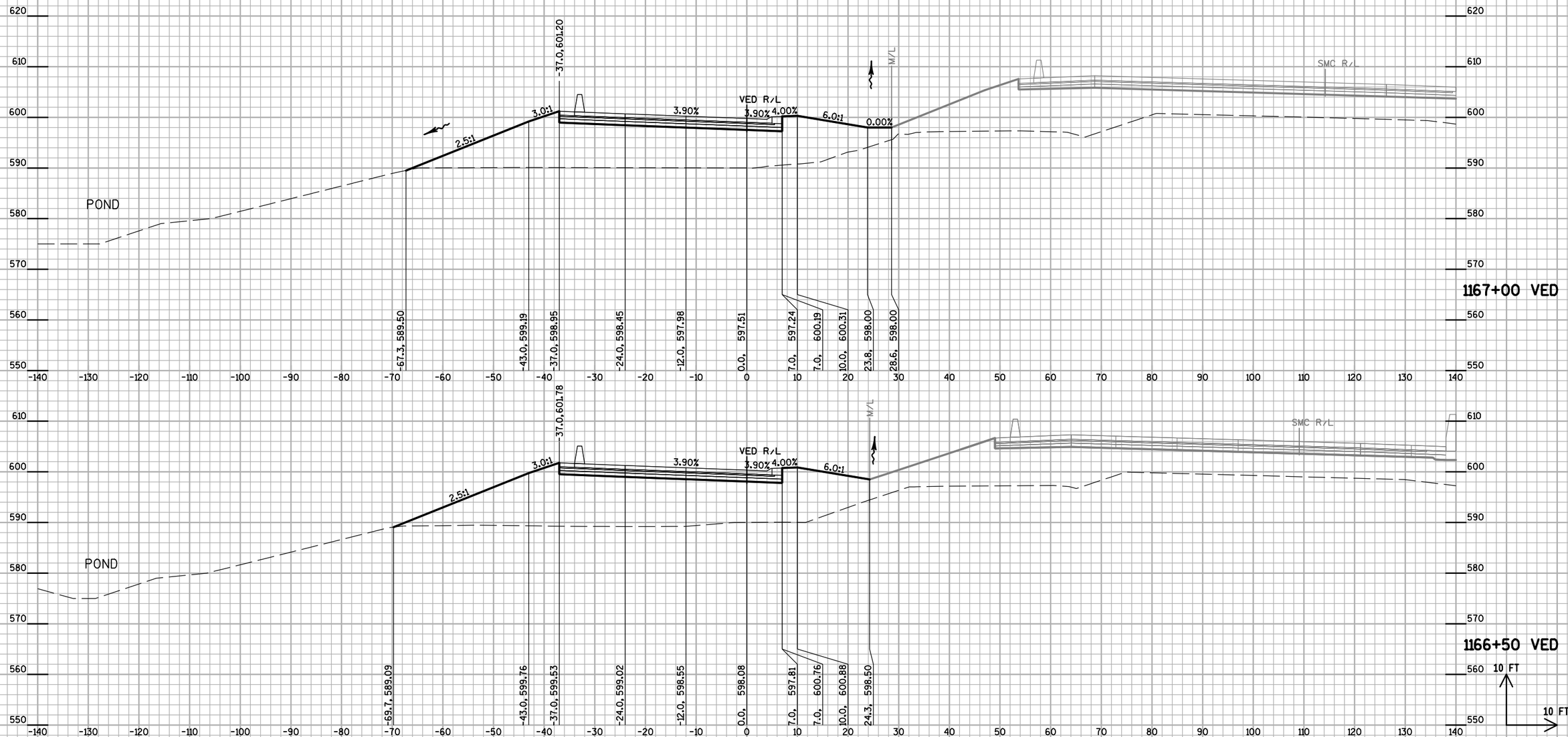
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1199	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1166+50 VED TO 1167+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



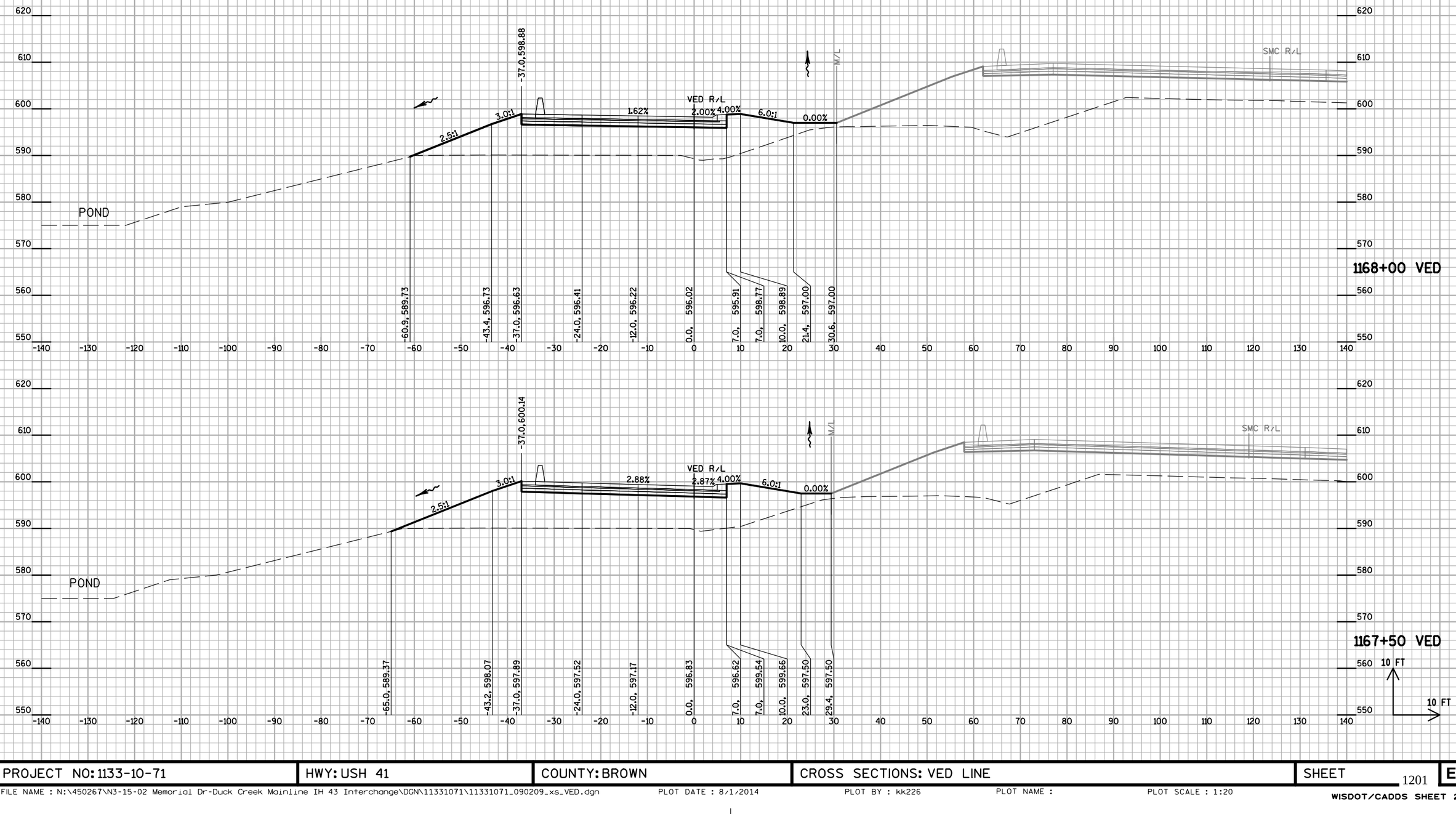
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1200	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1167+50 VED TO 1168+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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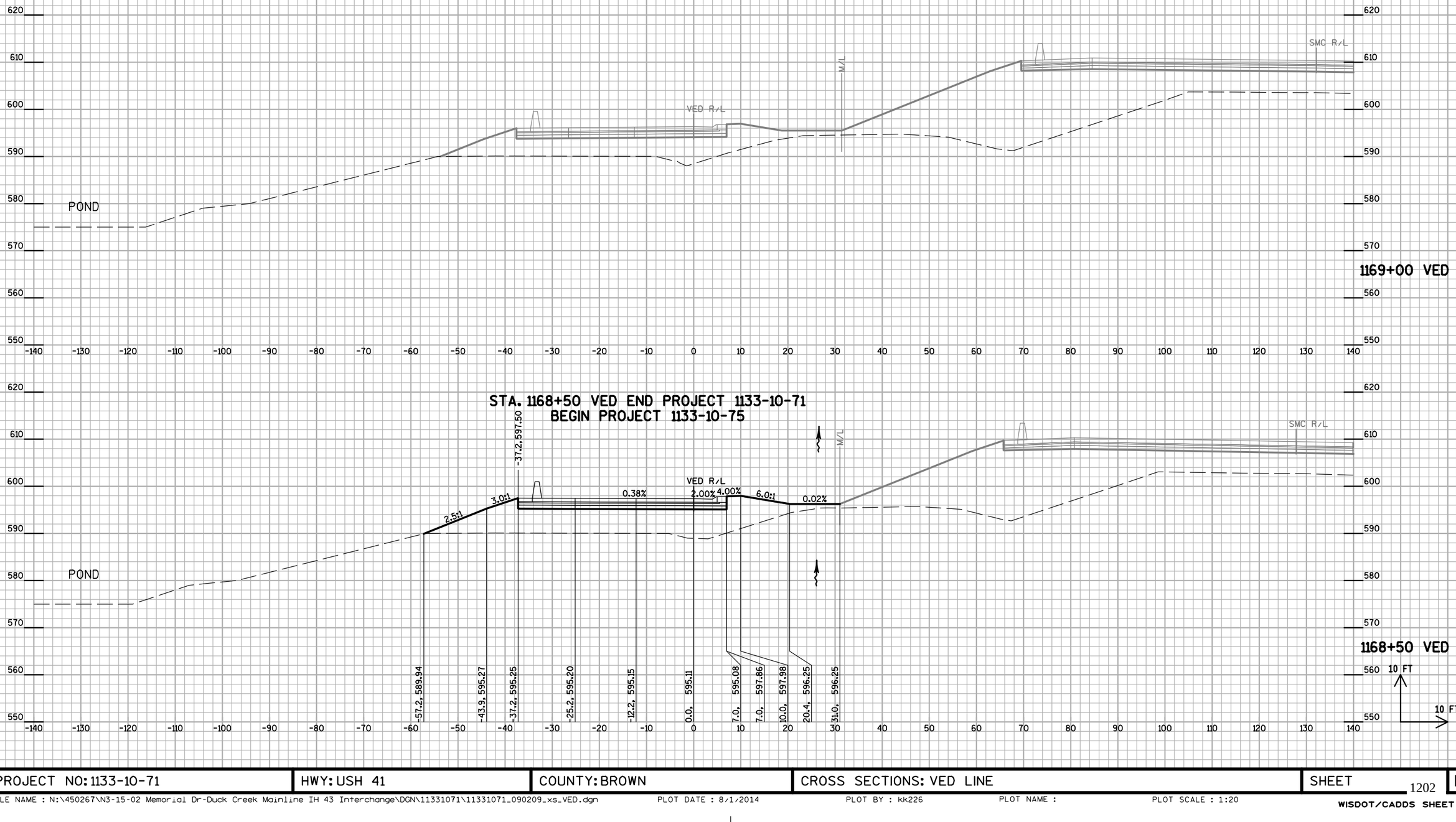
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET 1201	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1168+50 VED TO 1169+00 VED

SHADED LINEWORK TO BE CONSTRUCTED
UNDER PROJECT 1133-10-77



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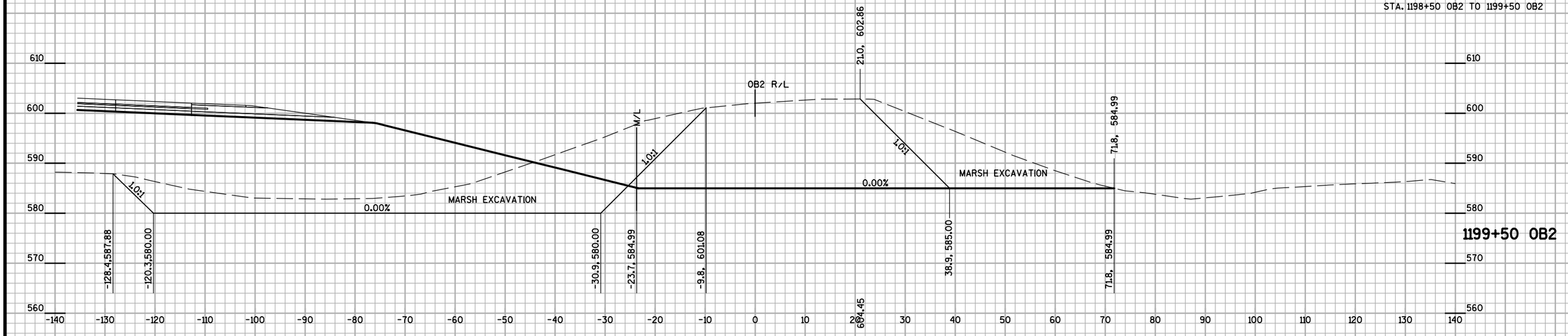
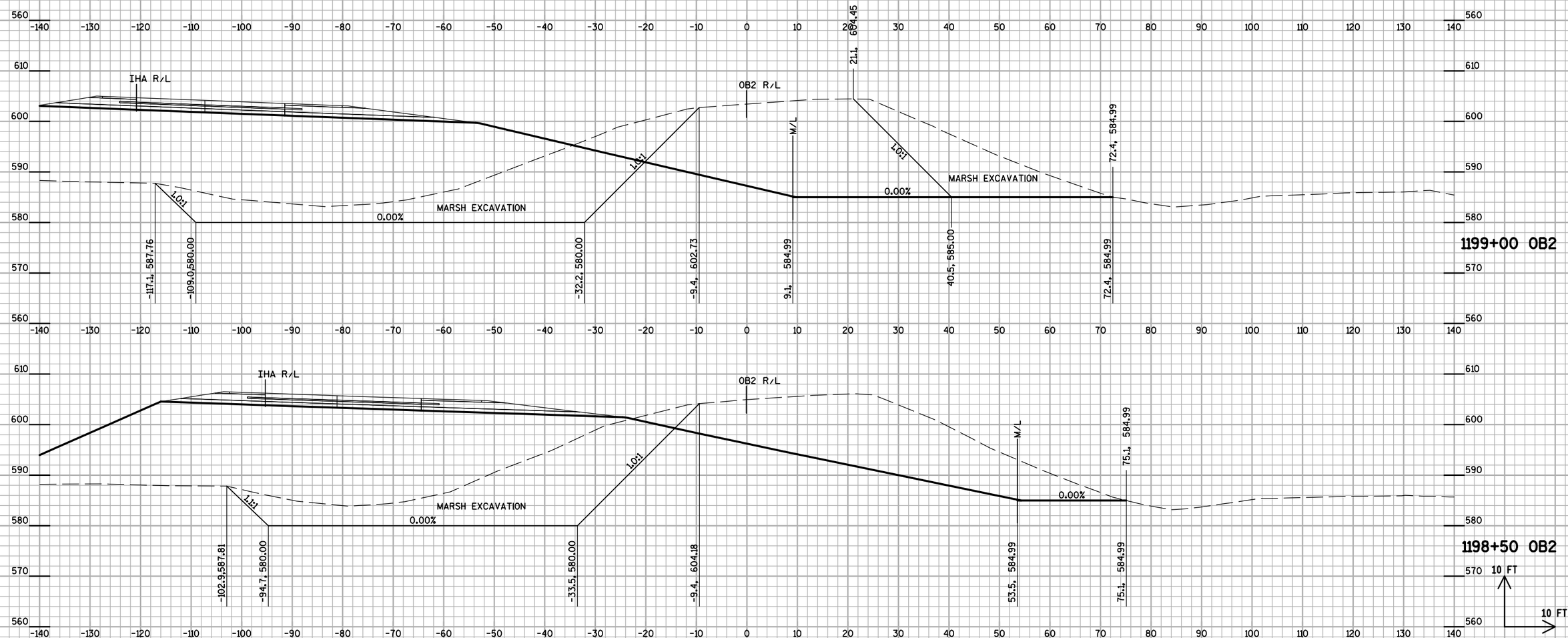
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: VED LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090209_xs_VED.dgn PLOT DATE : 8/1/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1198+50 0B2 TO 1199+50 0B2



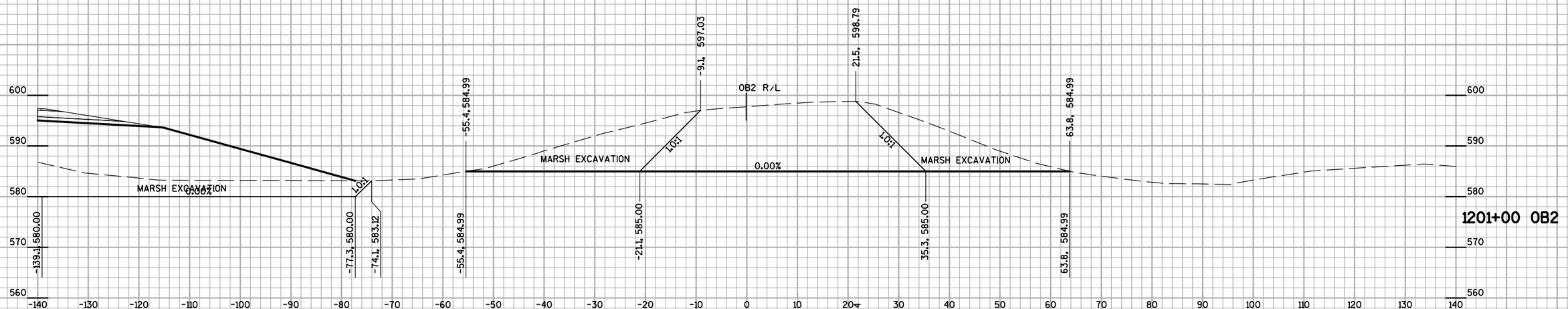


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE	SHEET 1203	E

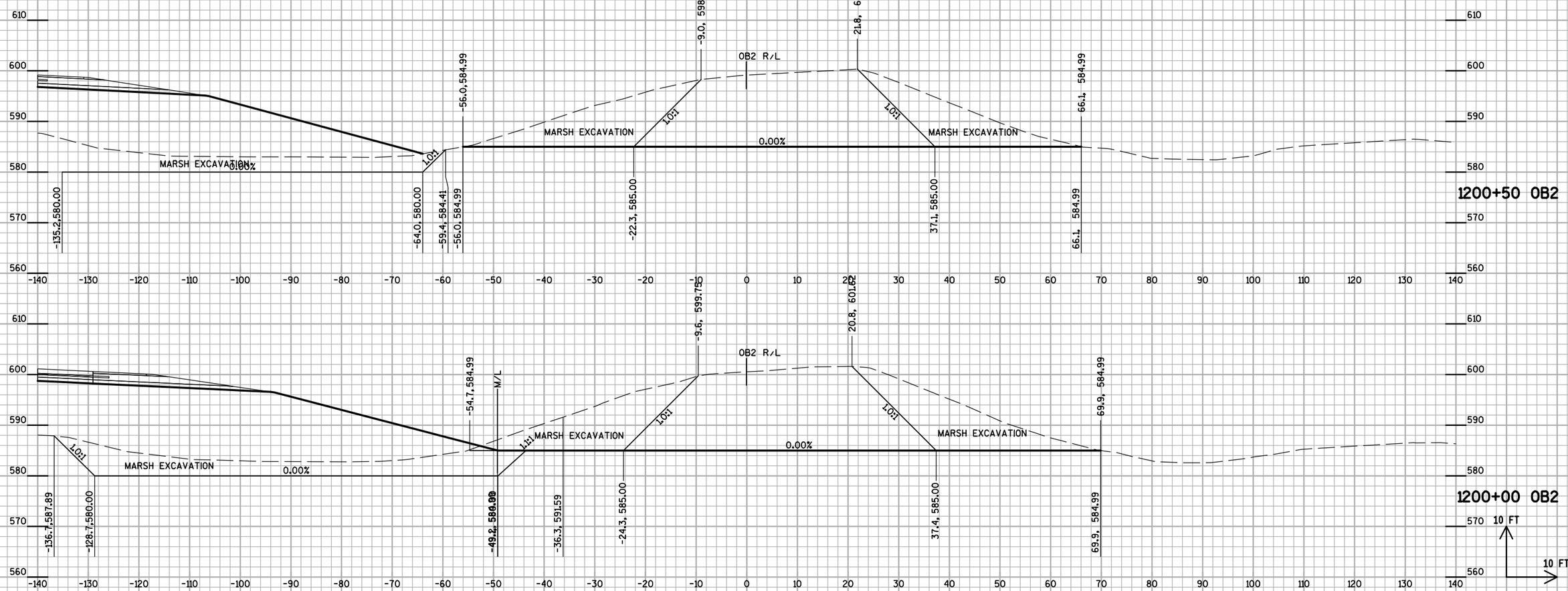
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090214_xs_0B2.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1200+00 0B2 TO 1201+00 0B2



1201+00 0B2



1200+50 0B2

1200+00 0B2

10 FT

10 FT

9

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PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090214_xs_0B2.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1201+50 0B2 TO 1202+50 0B2

9

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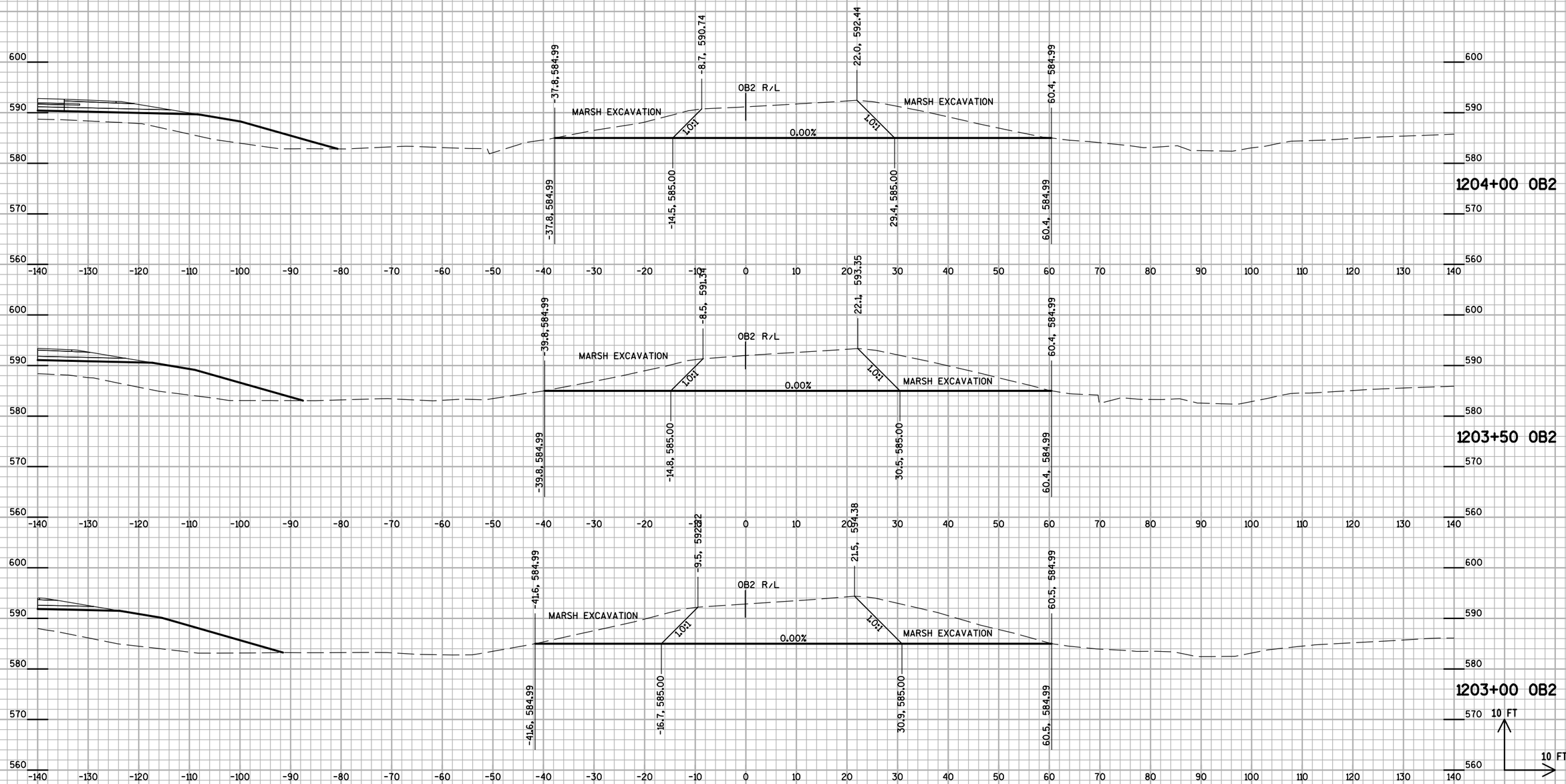
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE	SHEET 1205	E

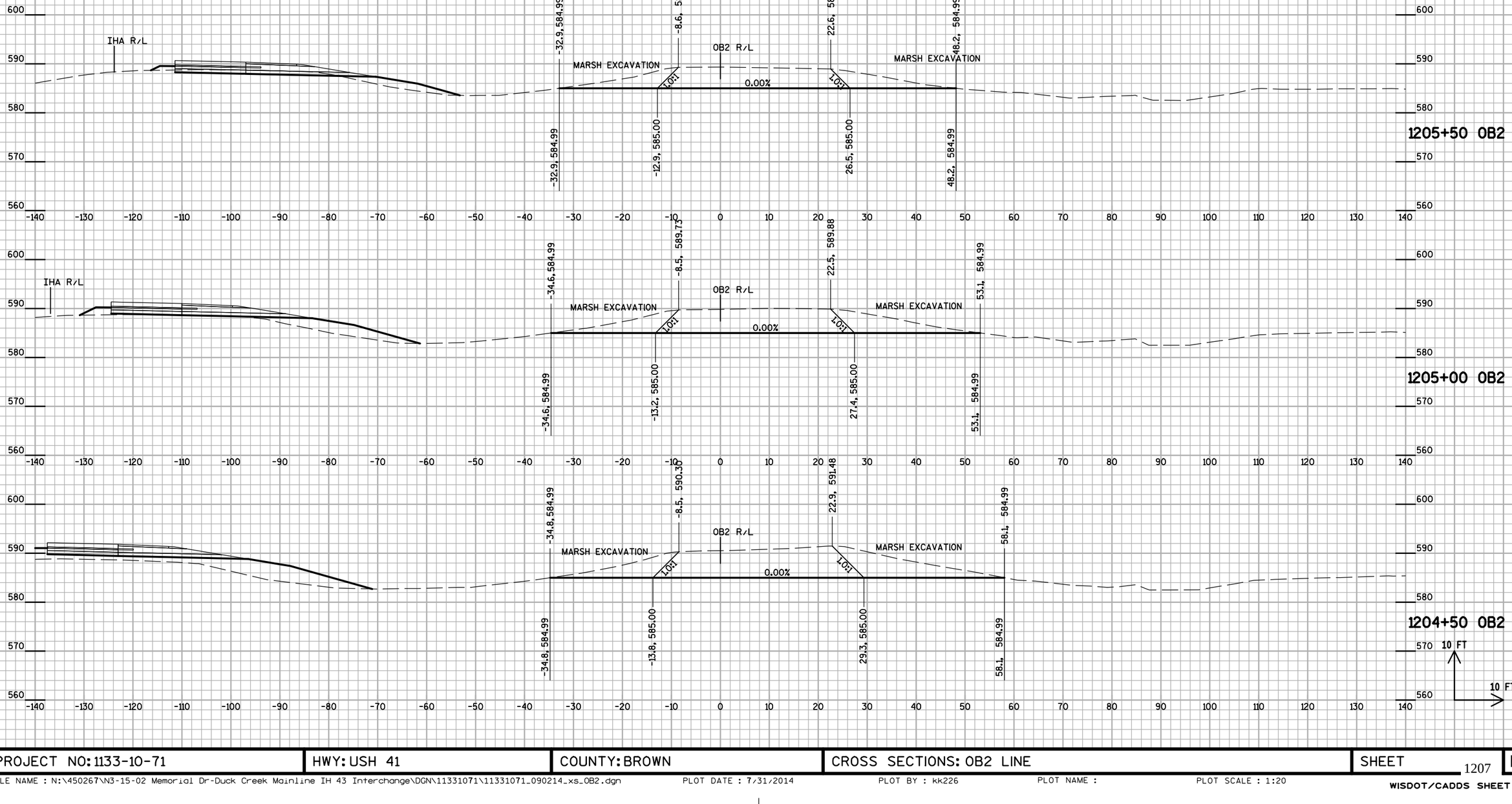
STA. 1203+00 0B2 TO 1204+00 0B2



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090214_xs_0B2.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1204+50 0B2 TO 1205+50 0B2



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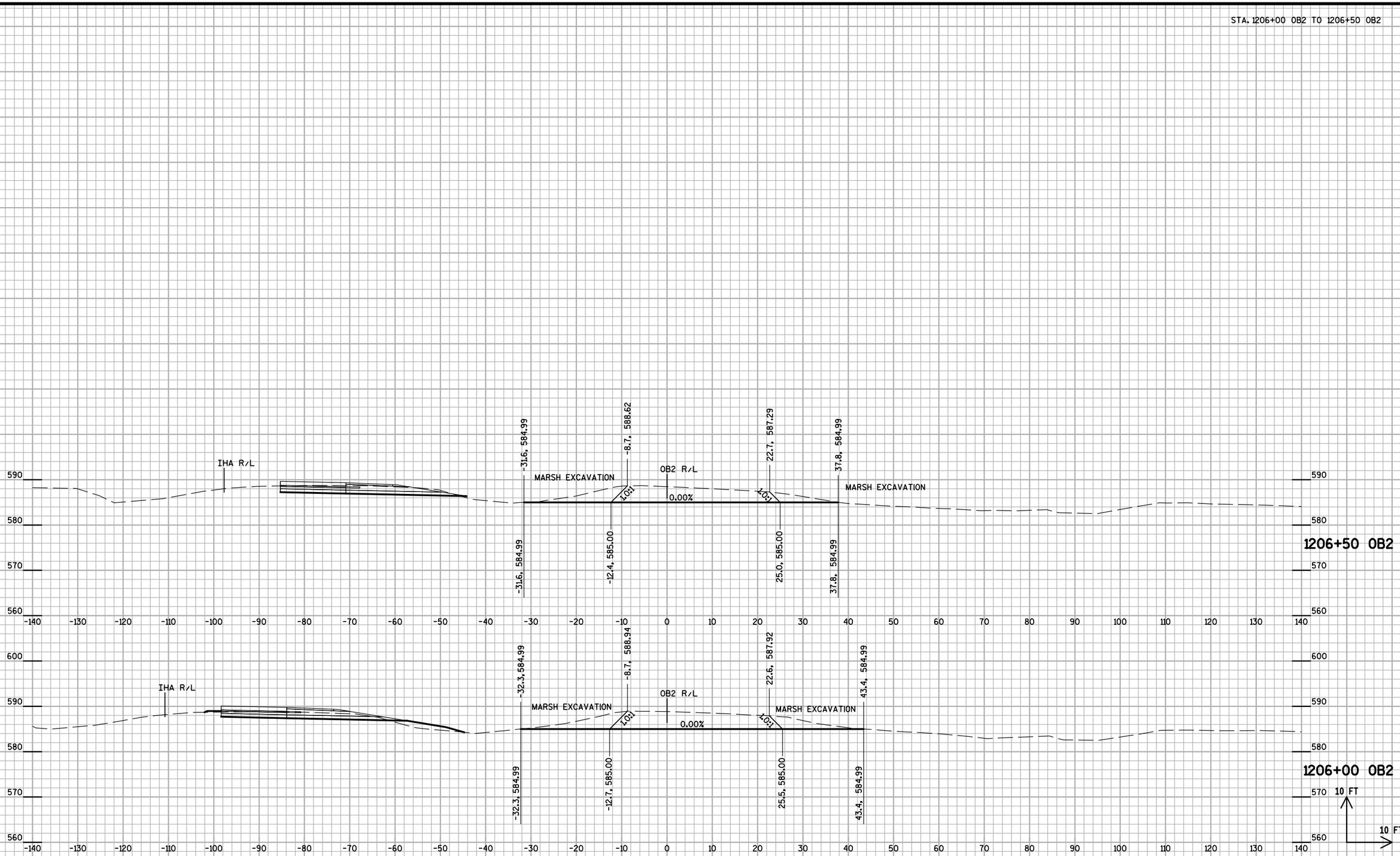
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090214_xs_0B2.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1206+00 0B2 TO 1206+50 0B2



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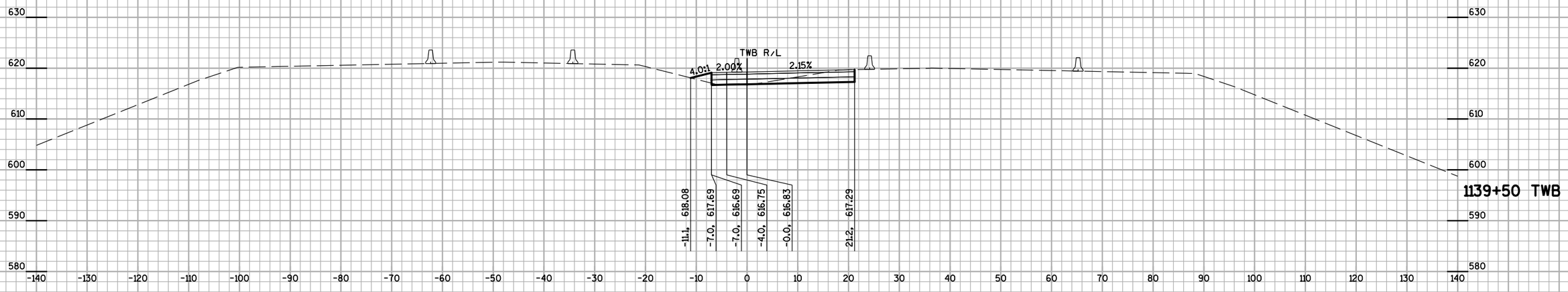
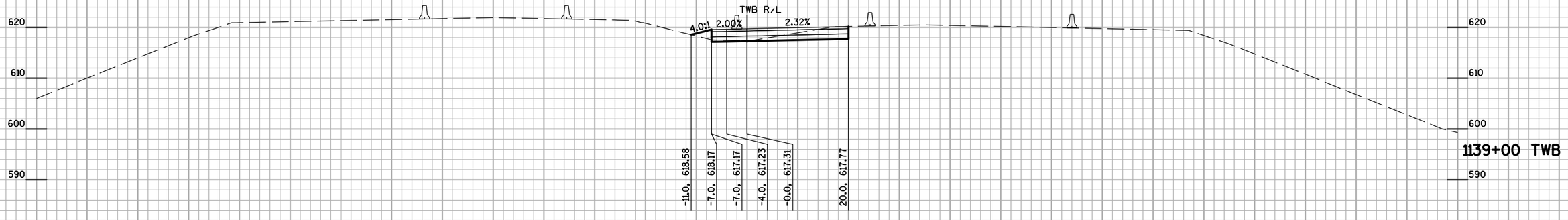
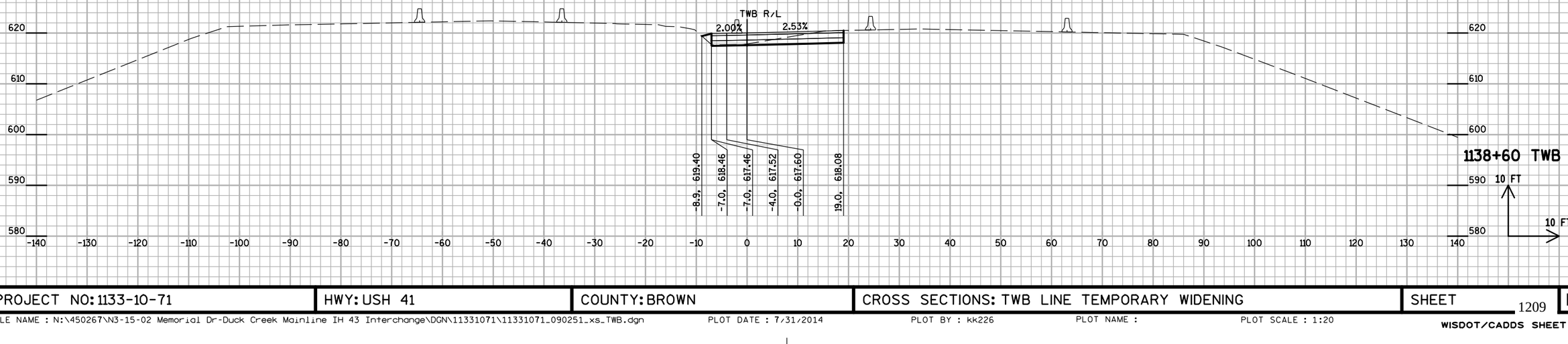
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: 0B2 LINE	SHEET 1208	E

STA. 1138+60 TWB TO 1139+50 TWB







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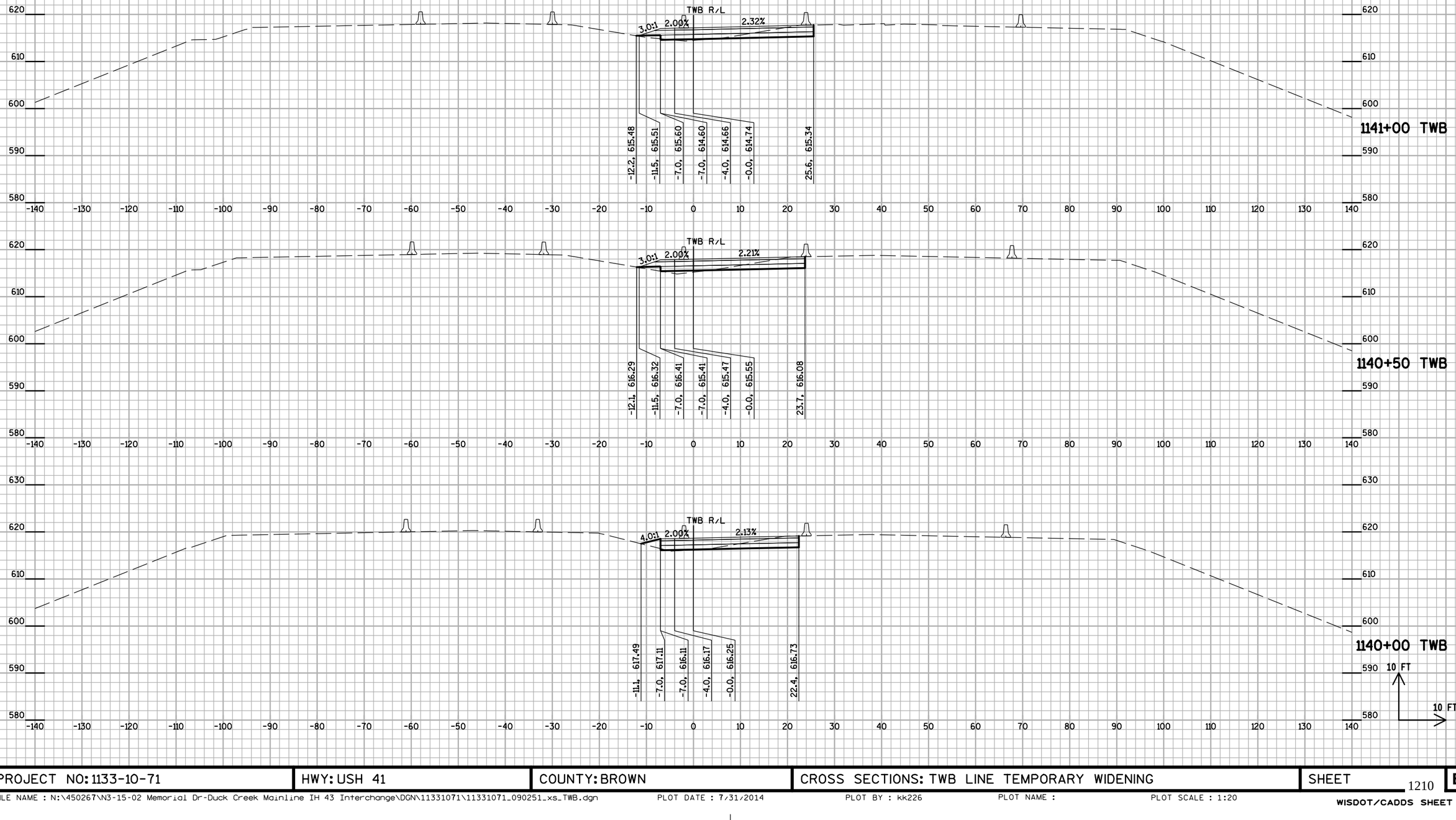
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1209	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1140+00 TWB TO 1141+00 TWB



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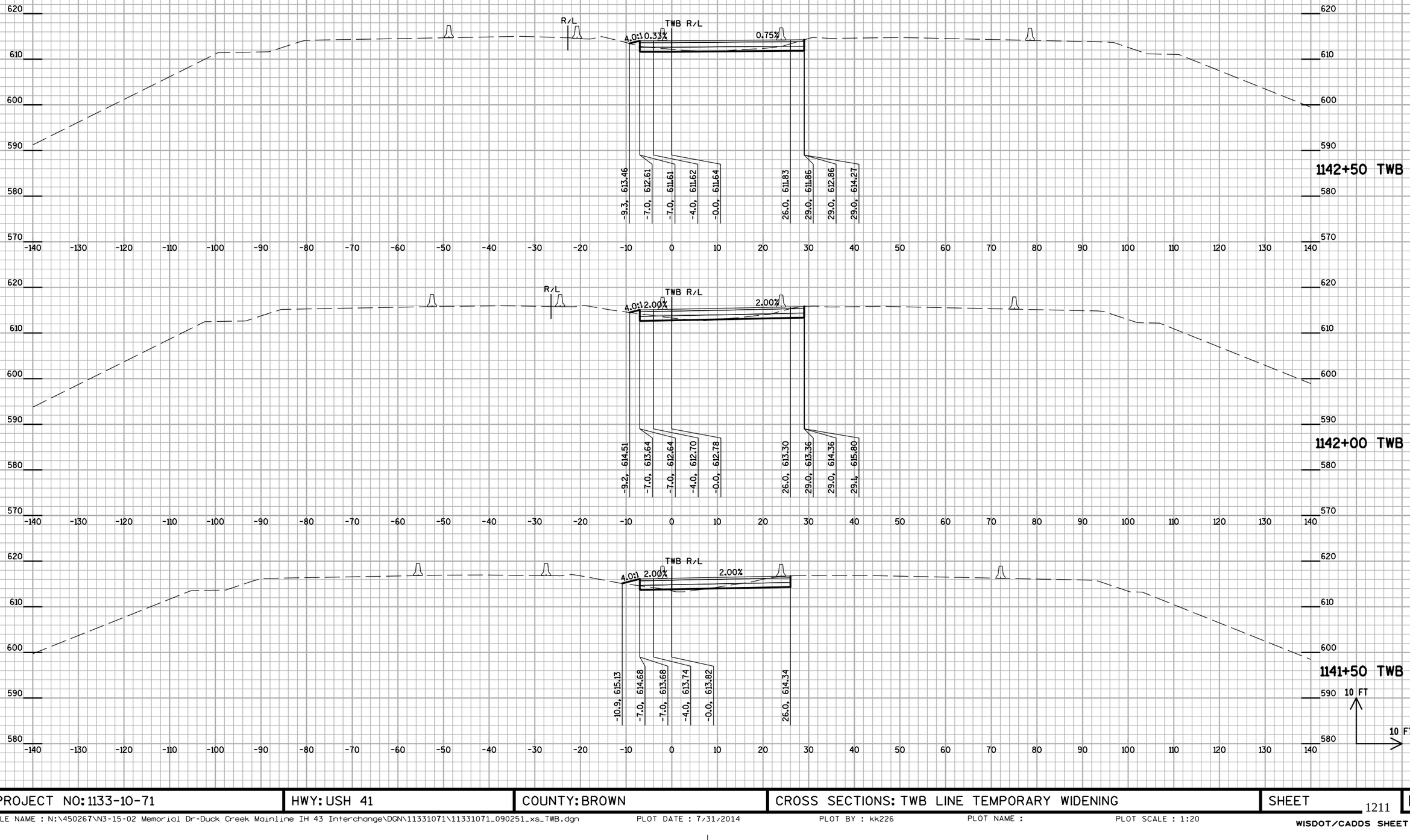
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1210	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1141+50 TWB TO 1142+50 TWB

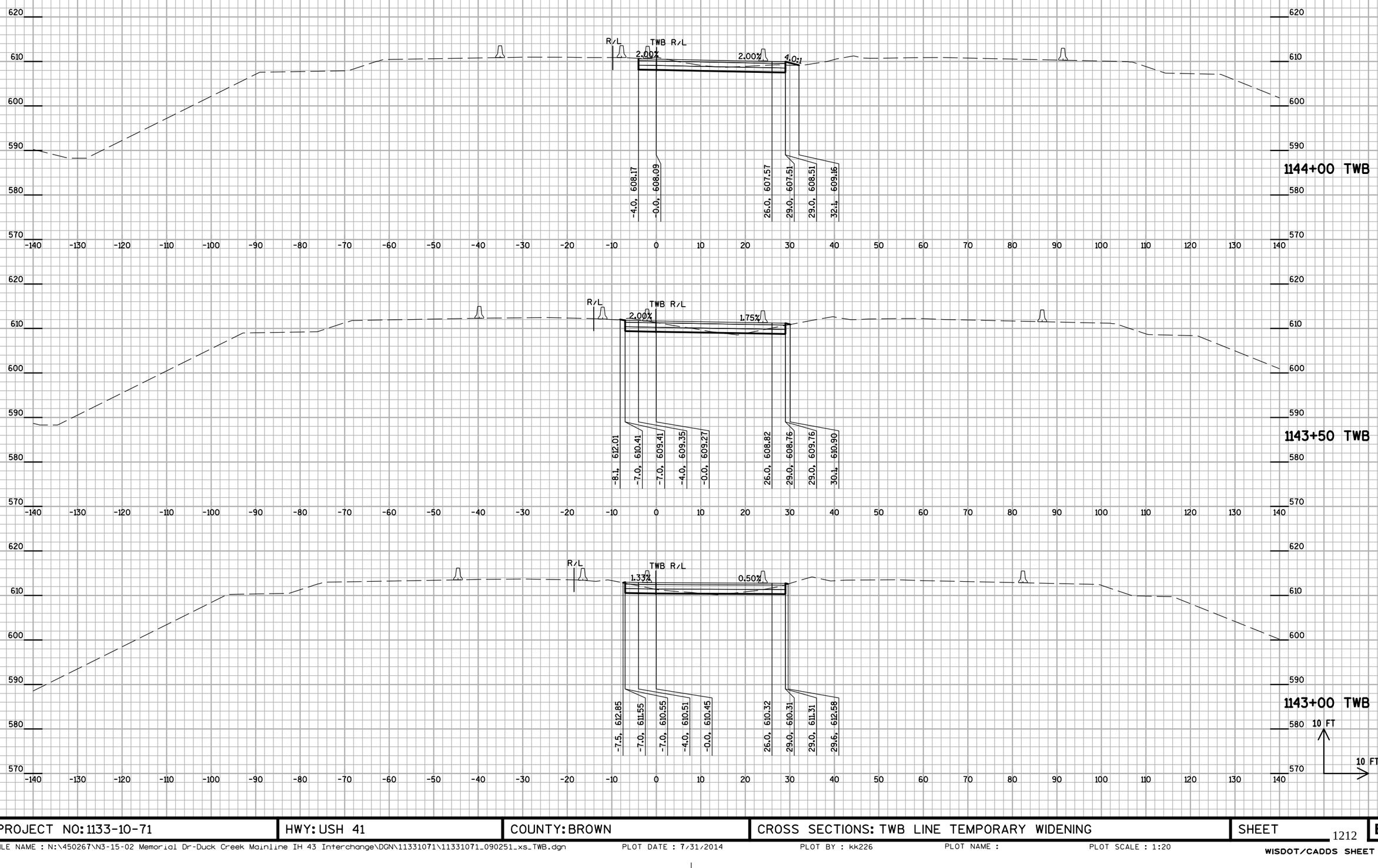


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1211	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1143+00 TWB TO 1144+00 TWB



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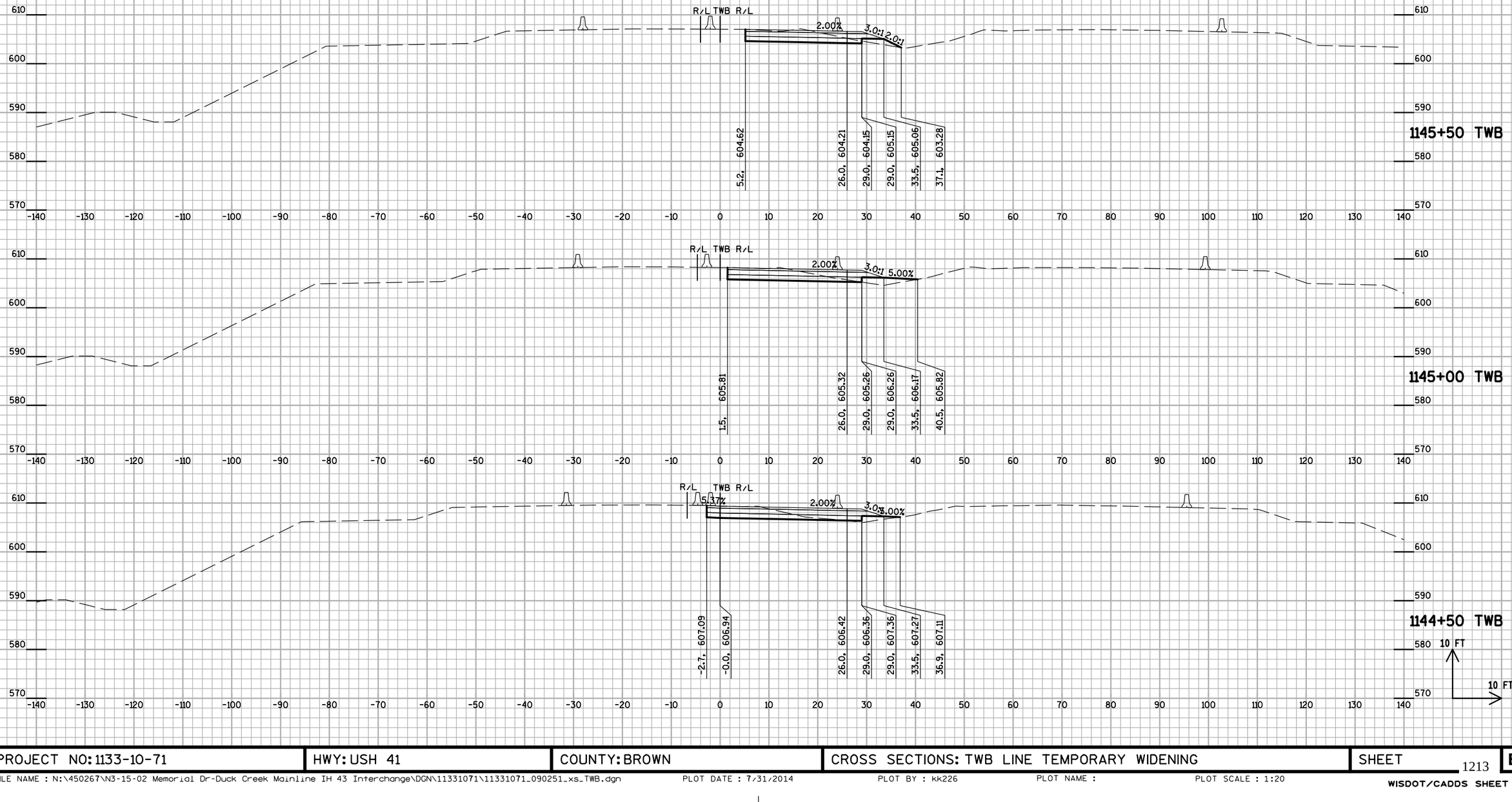
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1212	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1144+50 TWB TO 1145+50 TWB



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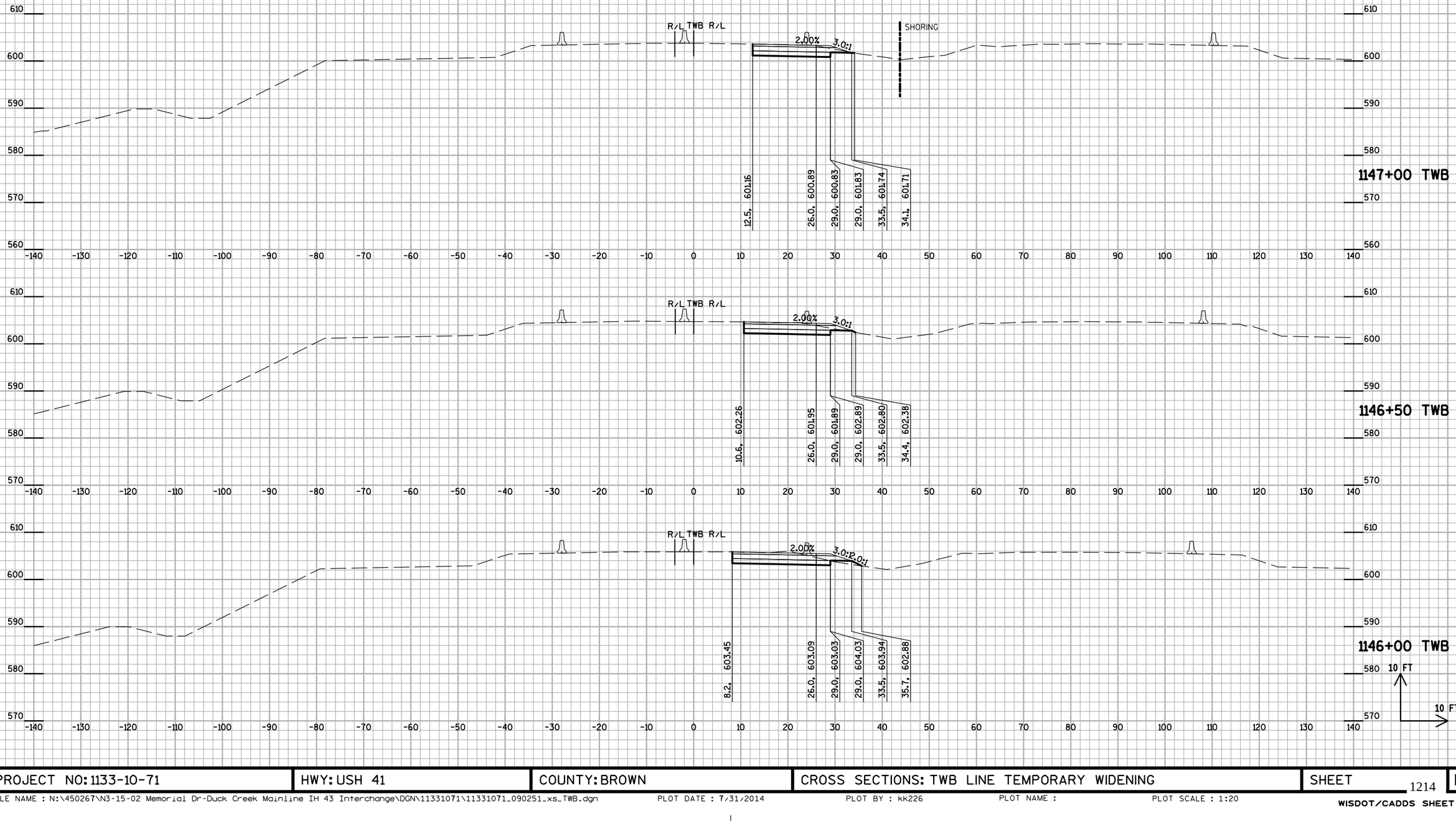
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1213	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1146+00 TWB TO 1147+00 TWB



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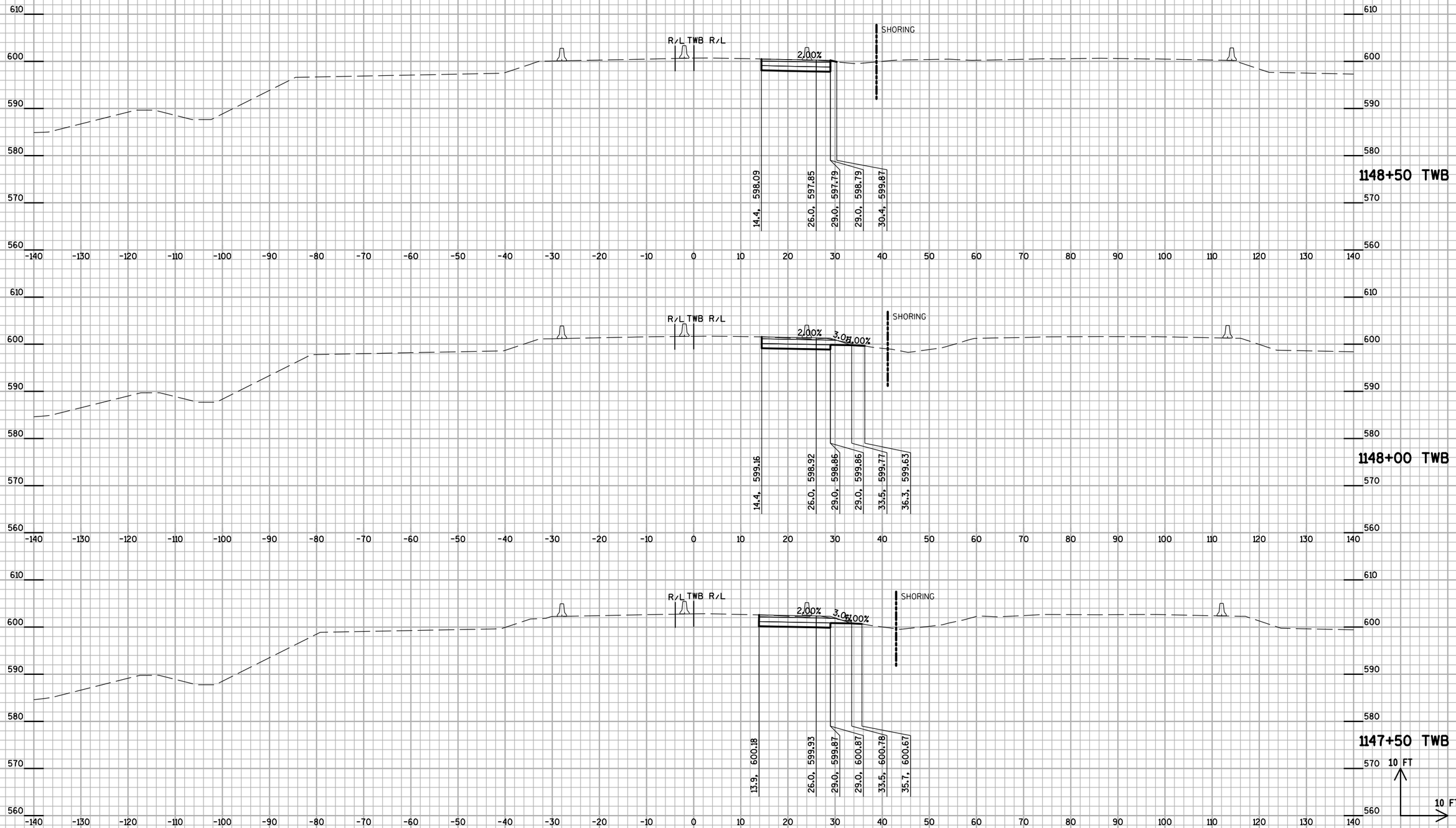
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1214	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1147+50 TWB TO 1148+50 TWB



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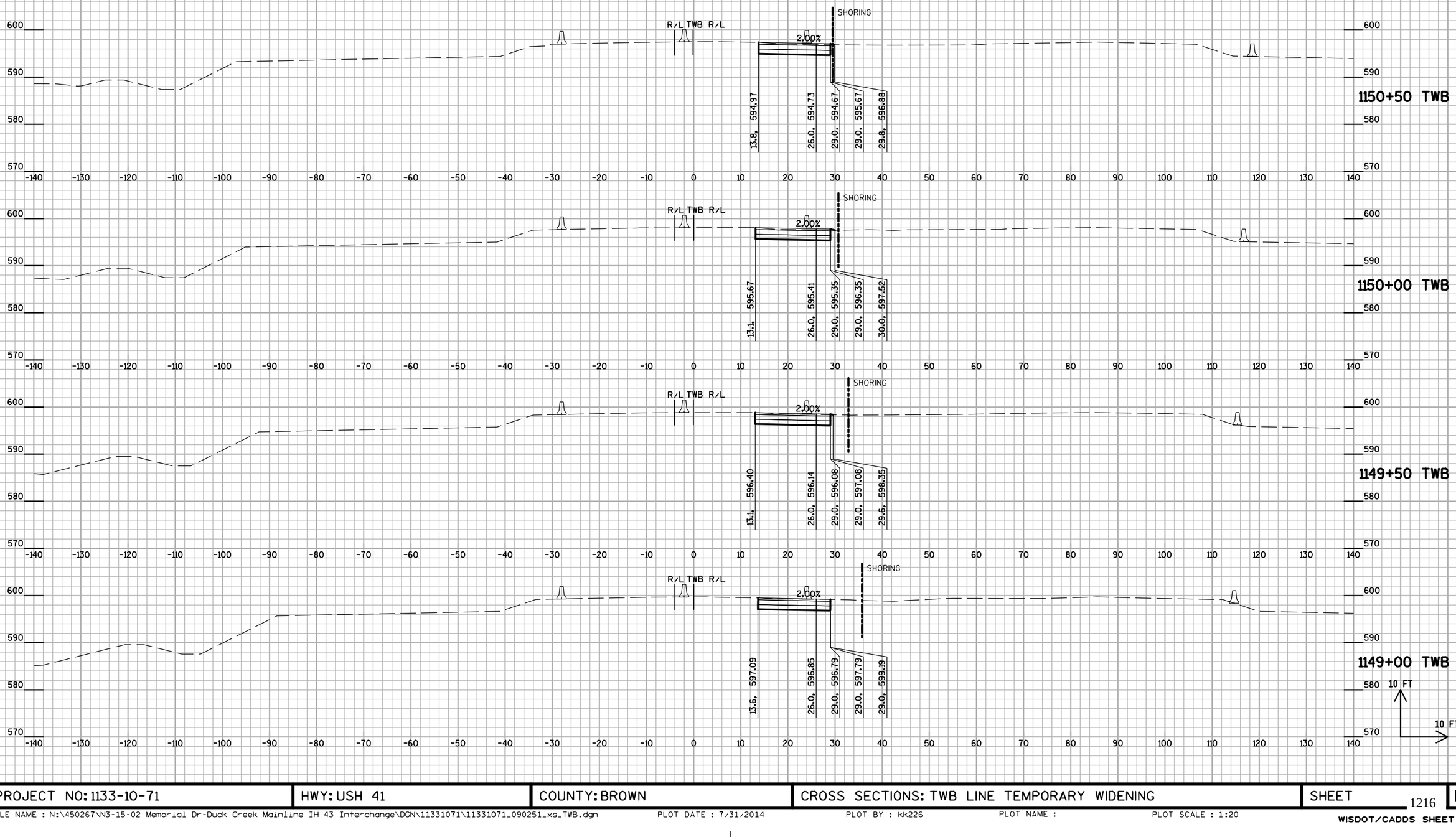
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1215	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1149+00 TWB TO 1150+50 TWB



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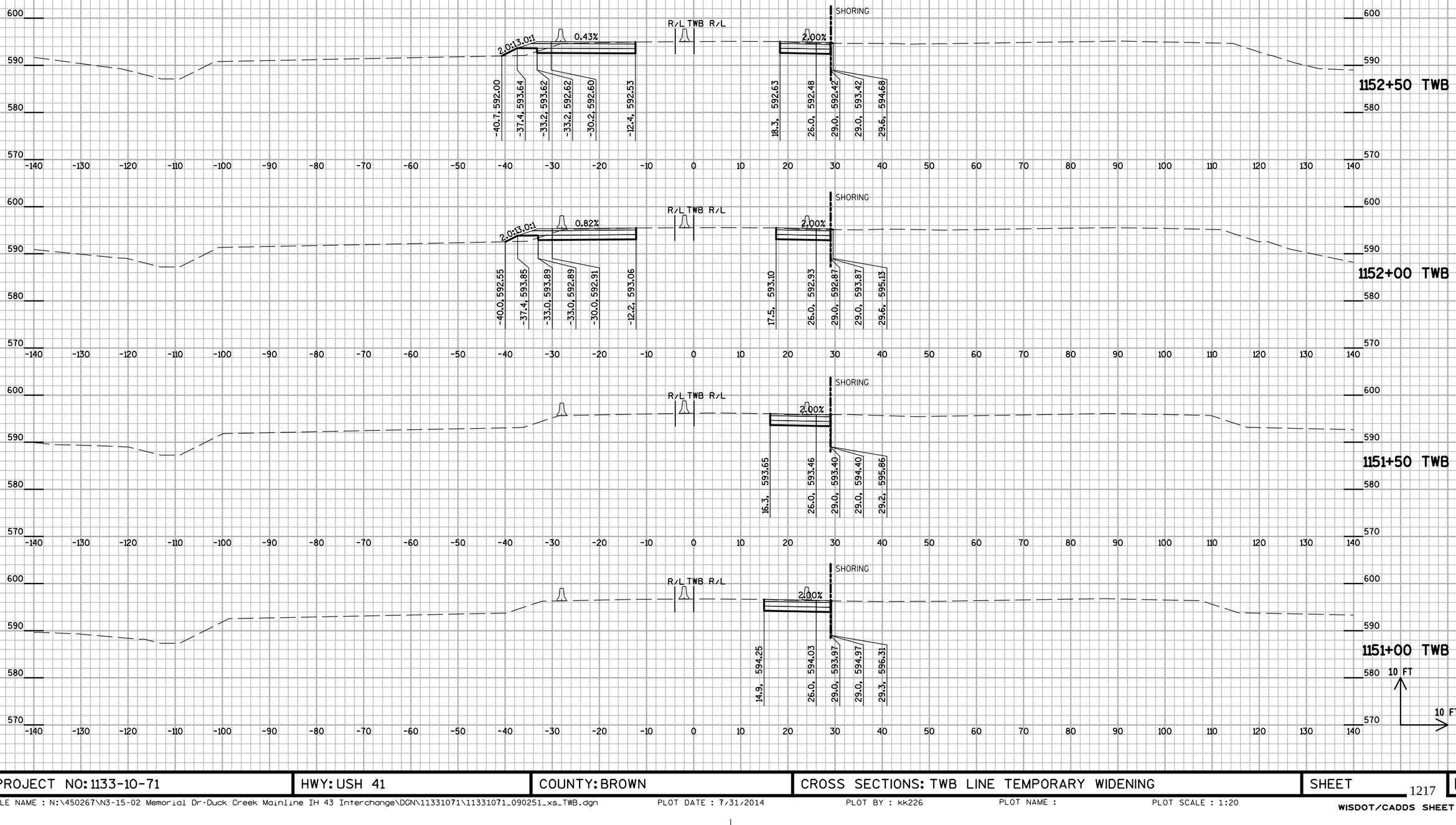
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1216	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1151+00 TWB TO 1152+50 TWB



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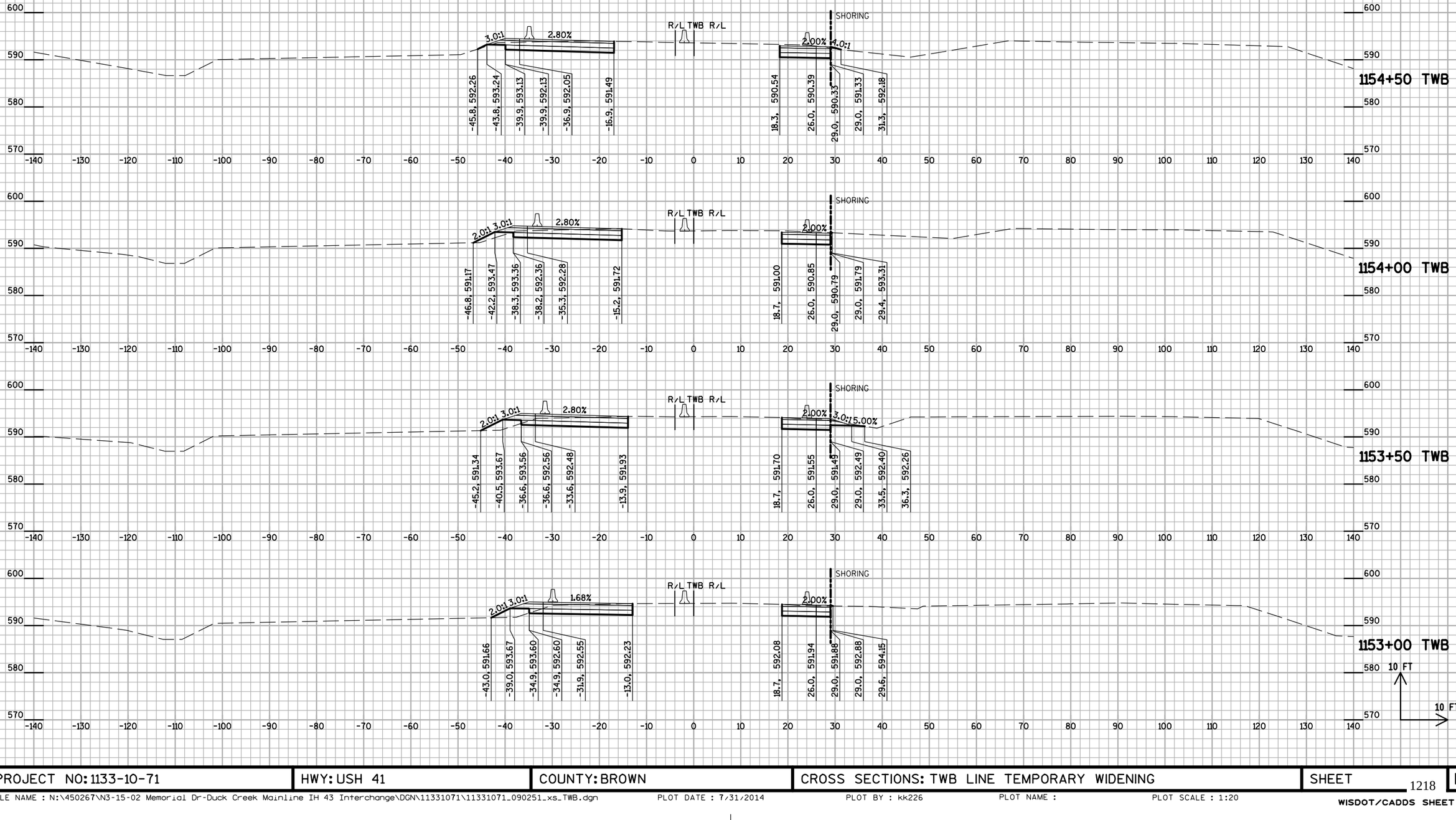
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1217	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1153+00 TWB TO 1154+50 TWB

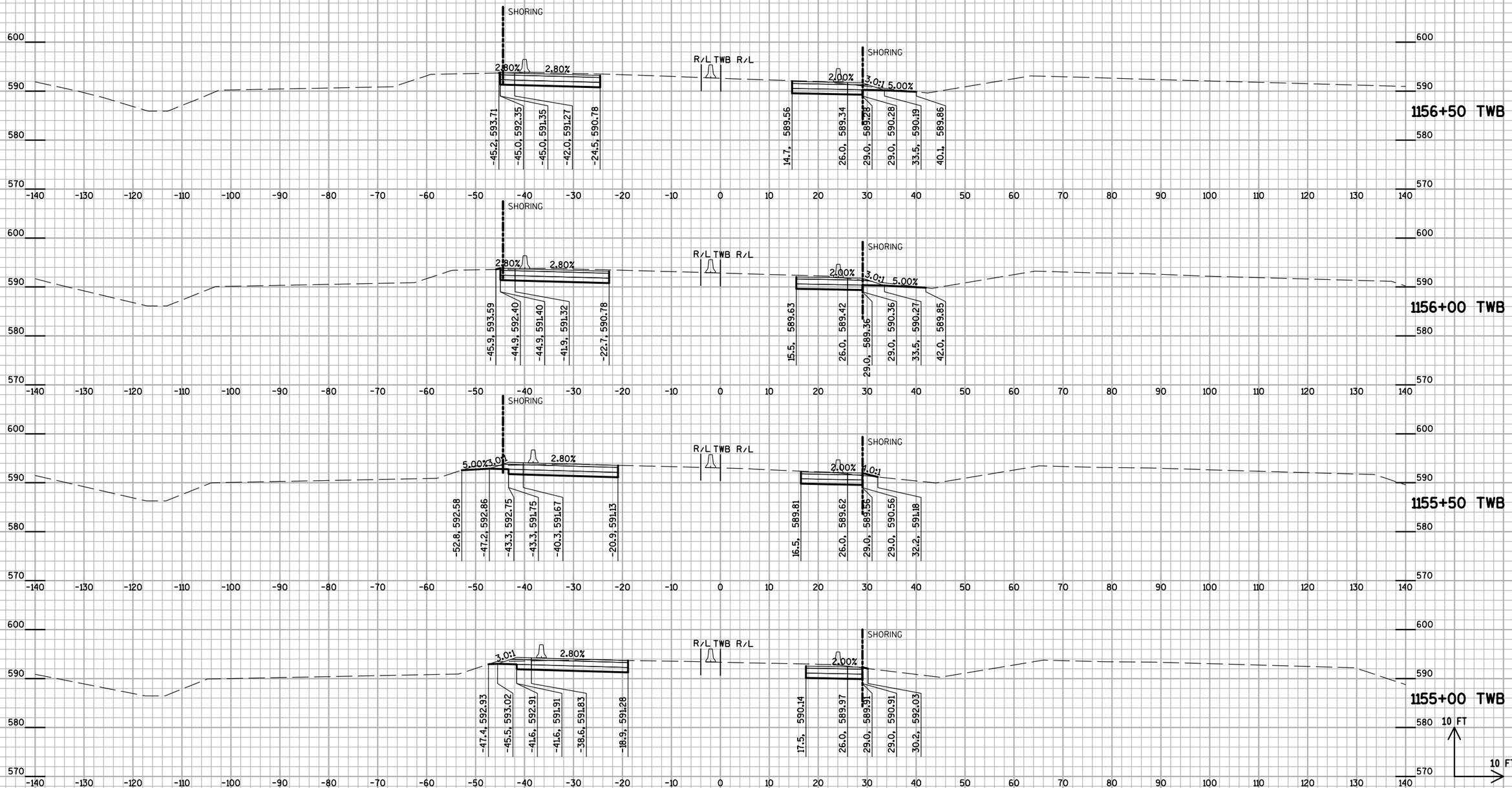


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1218	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1155+00 TWB TO 1156+50 TWB



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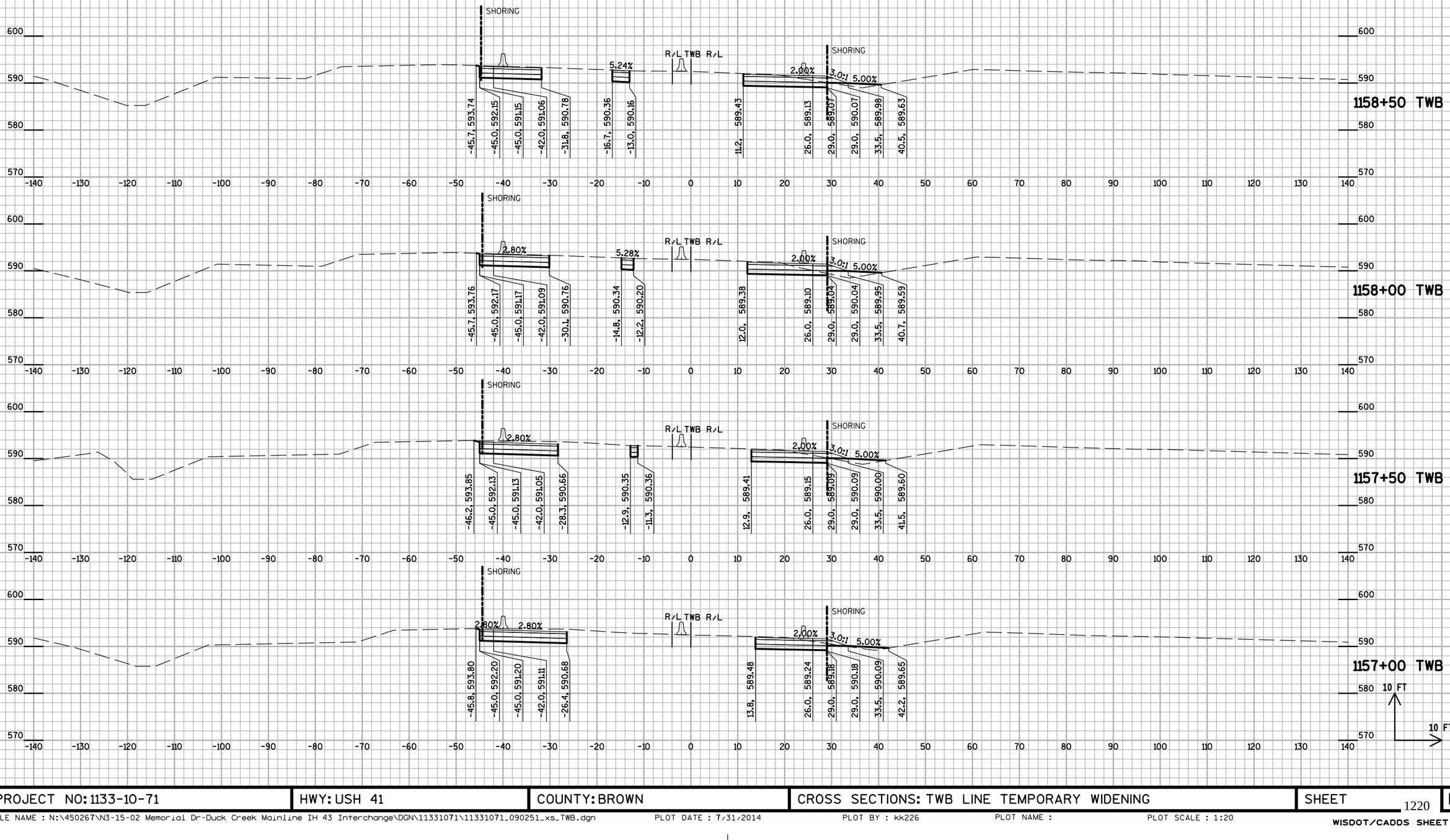
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1219	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

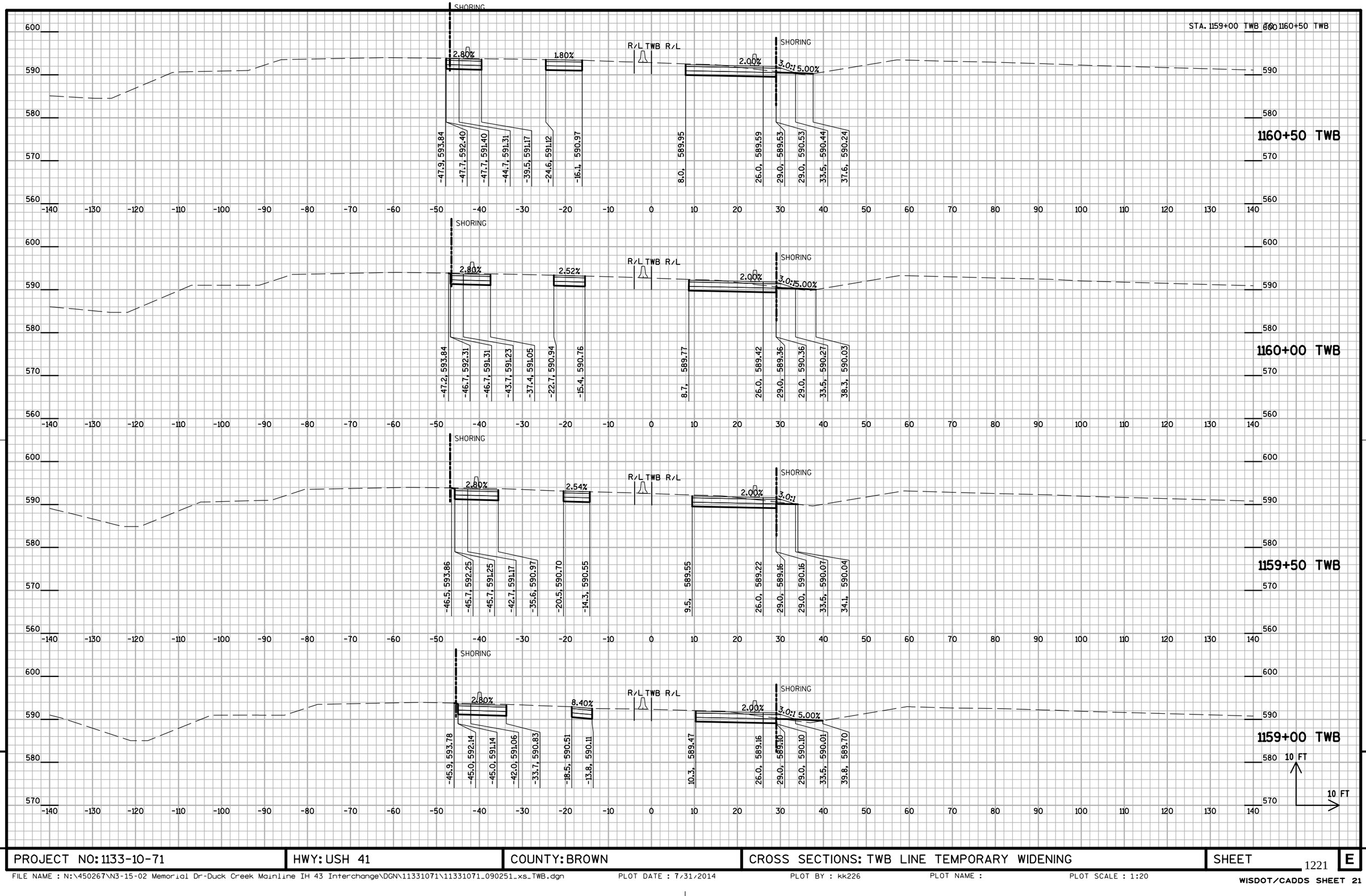
STA. 1157+00 TWB TO 1158+50 TWB



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1220	E

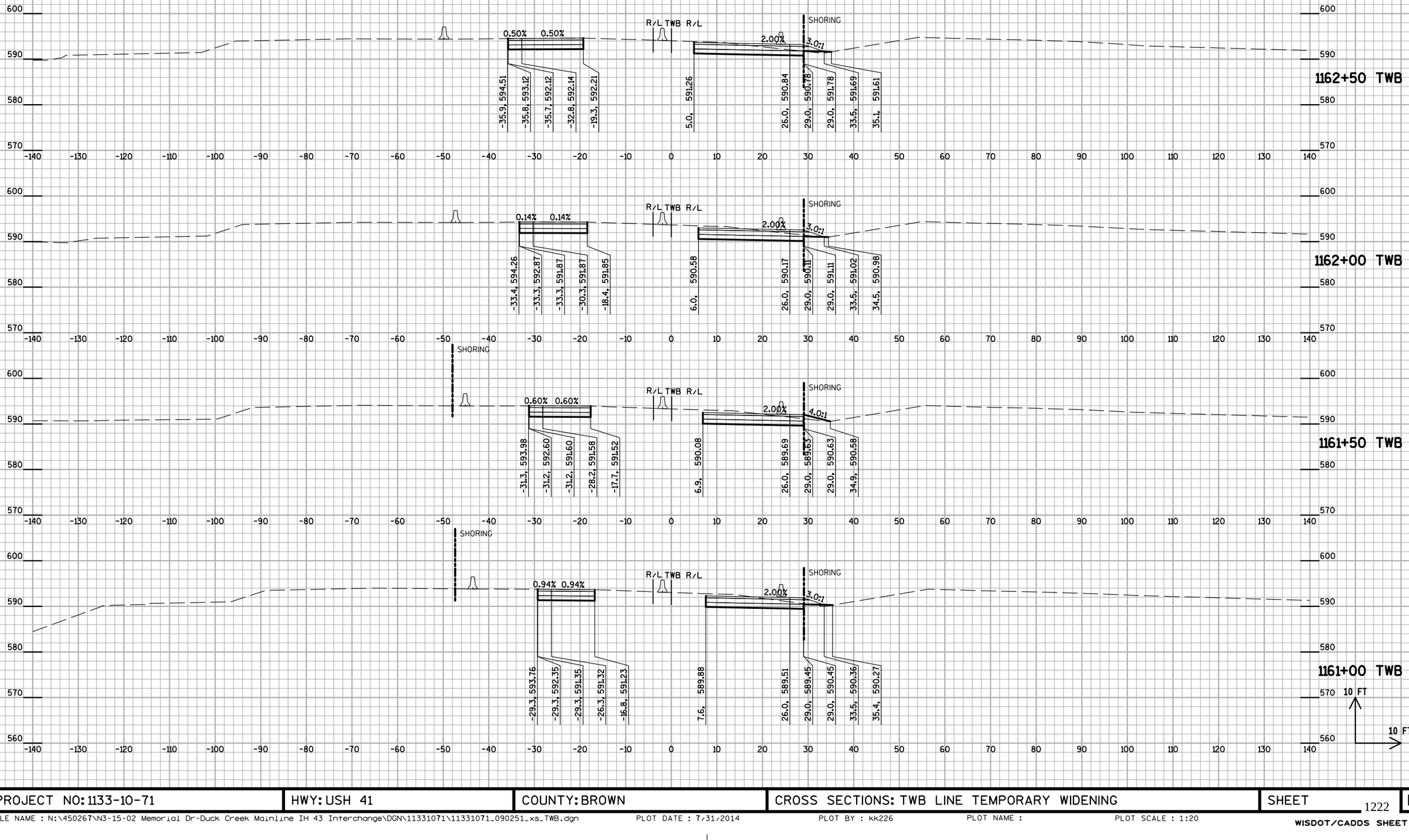
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1221	E

STA. 1161+00 TWB TO 1162+50 TWB

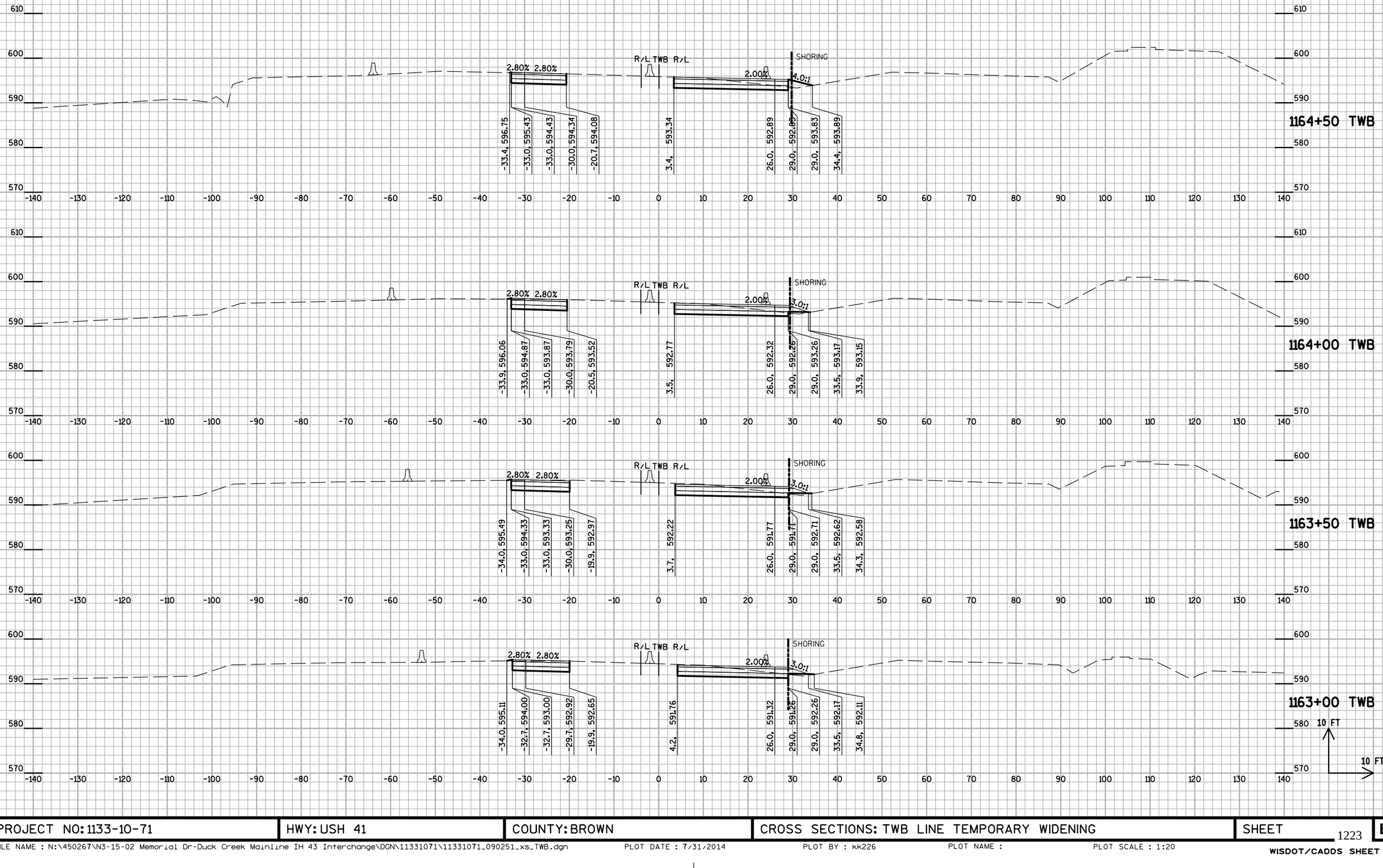


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1222	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1163+00 TWB TO 1164+50 TWB



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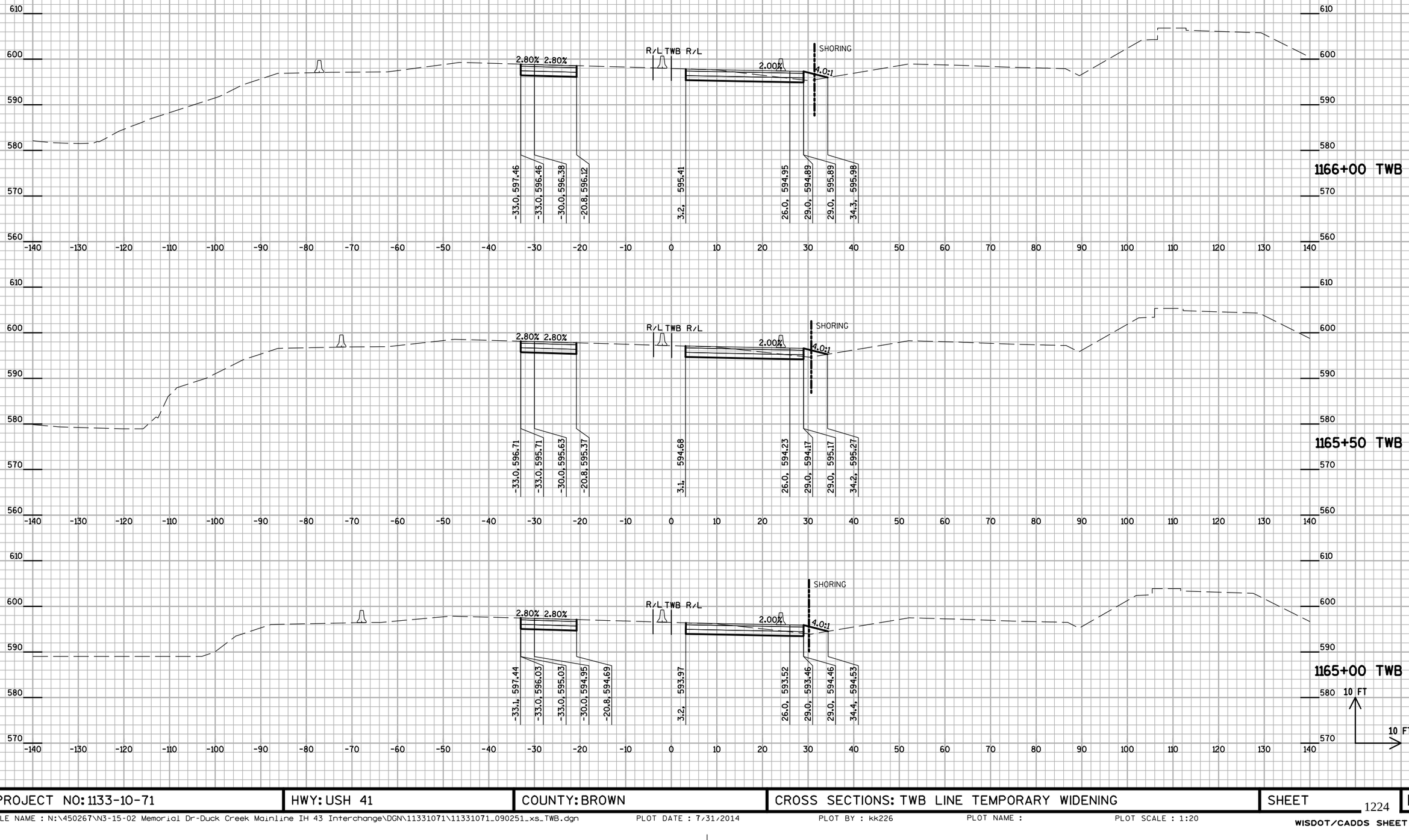
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1223	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1165+00 TWB TO 1166+00 TWB



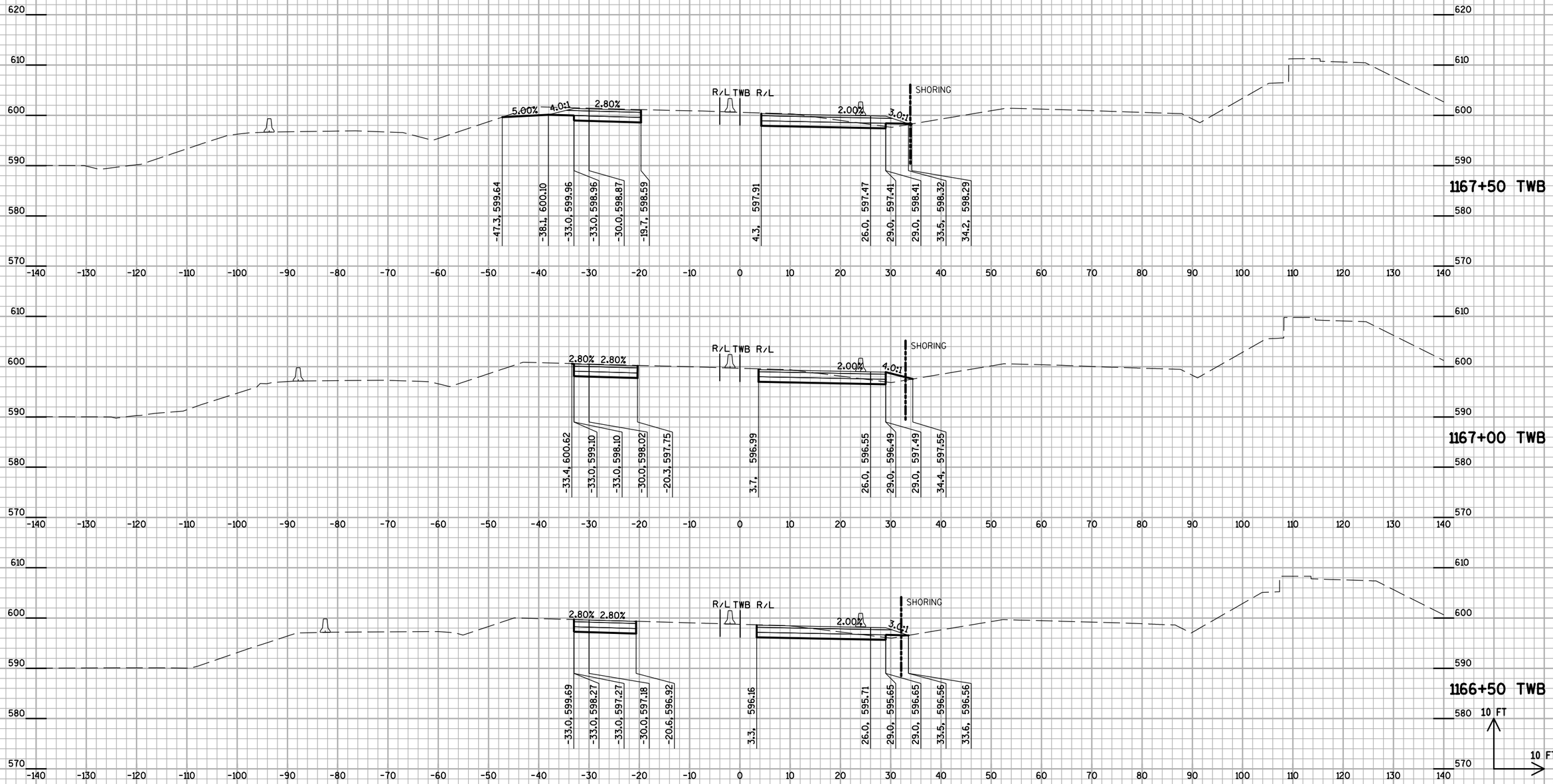
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1224	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9 9

STA. 1166+50 TWB TO 1167+50 TWB

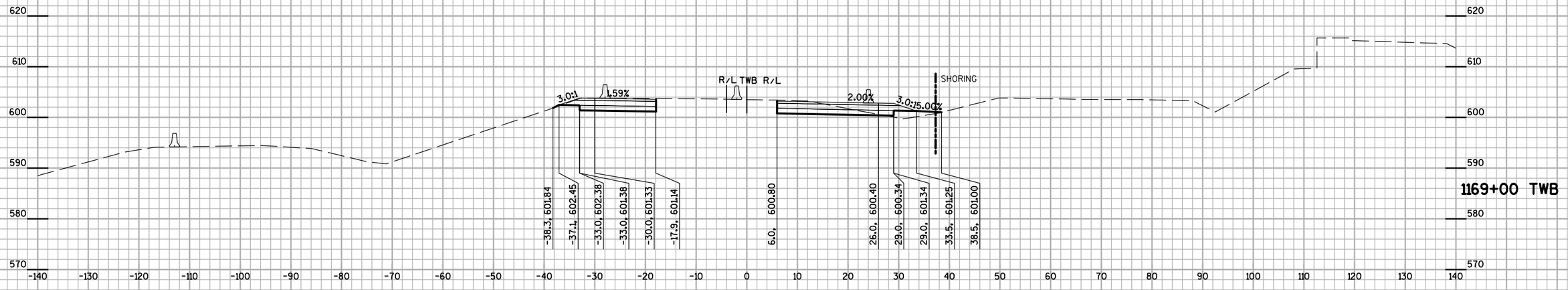


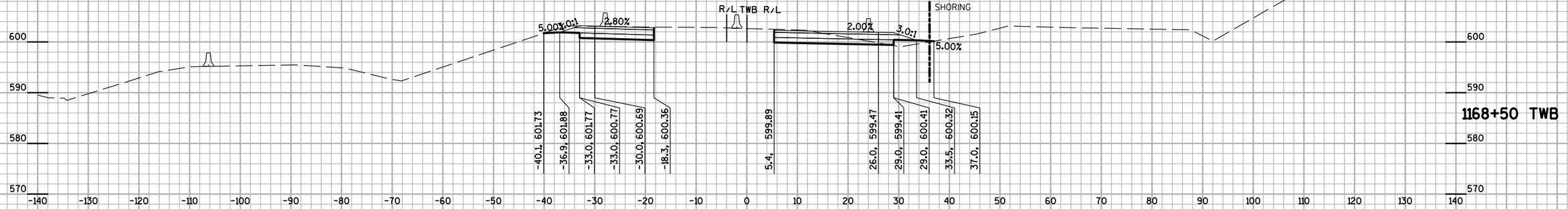
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1225	E

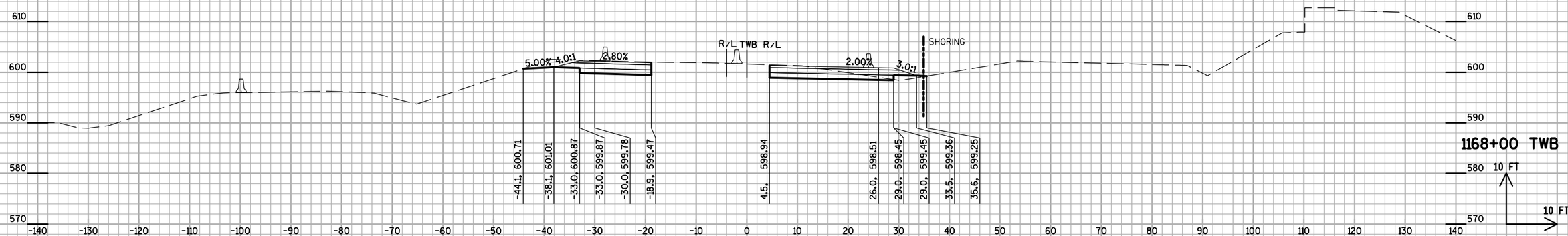
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1168+00 TWB TO 1169+00 TWB







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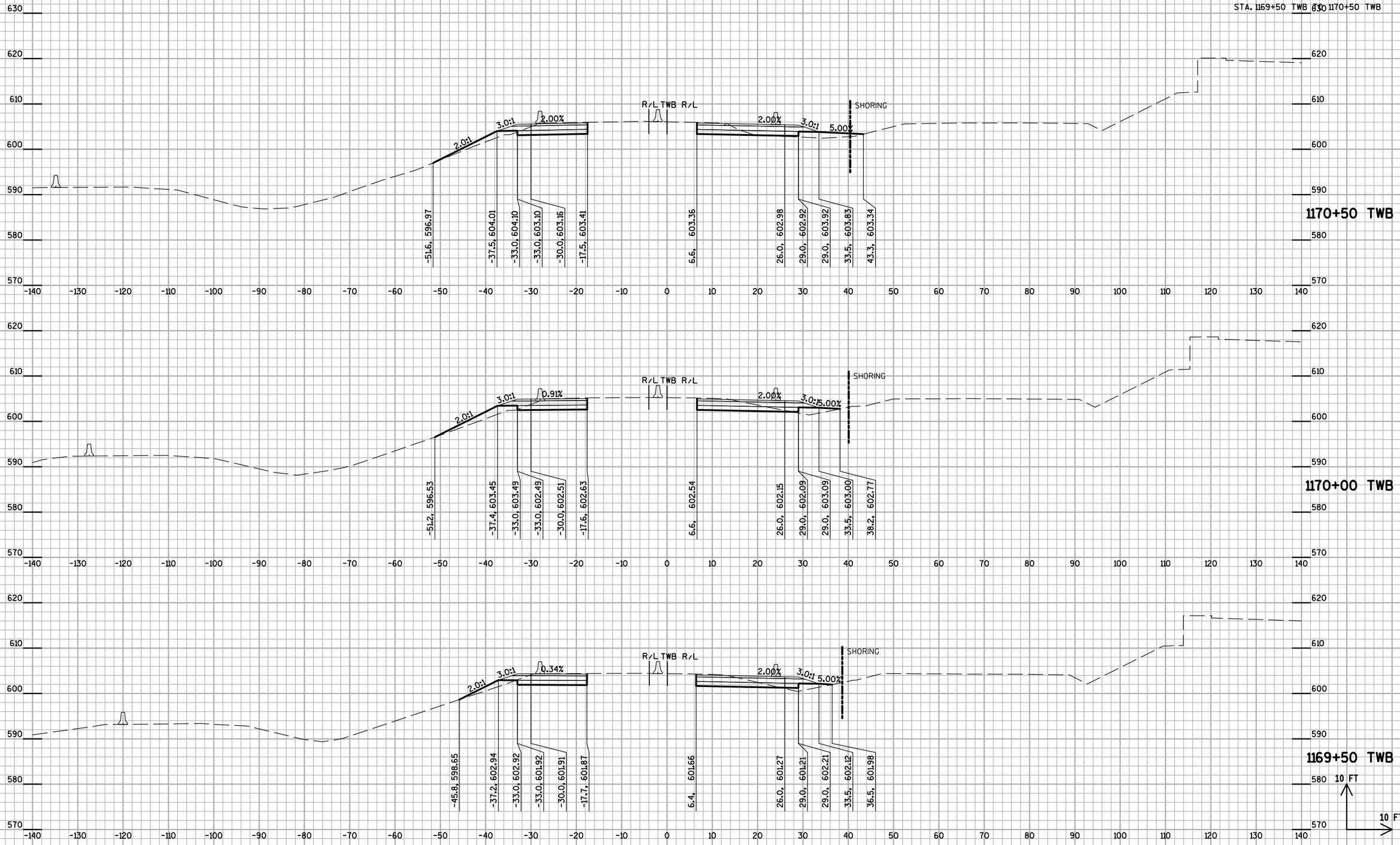
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1226	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

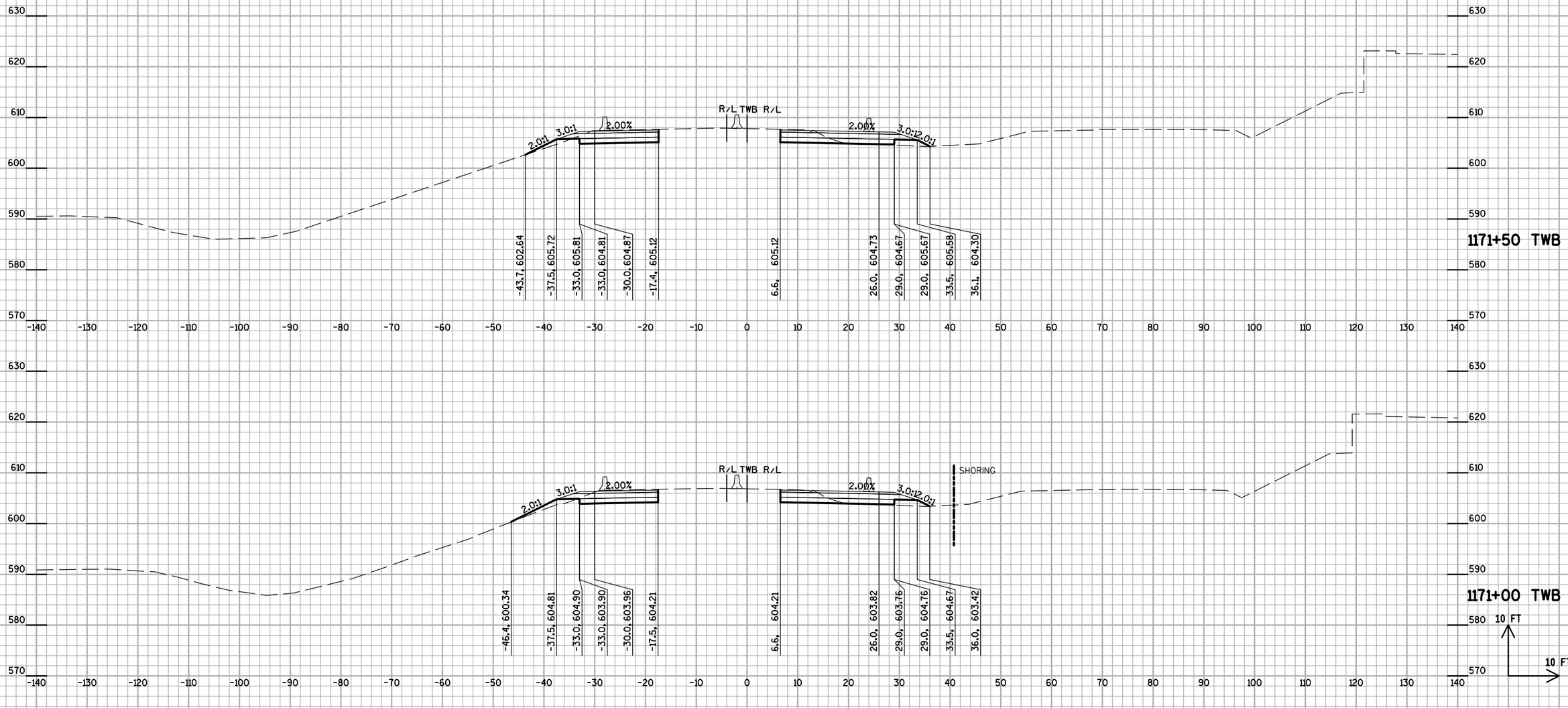


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1227	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1171+00 TWB TO 1171+50 TWB



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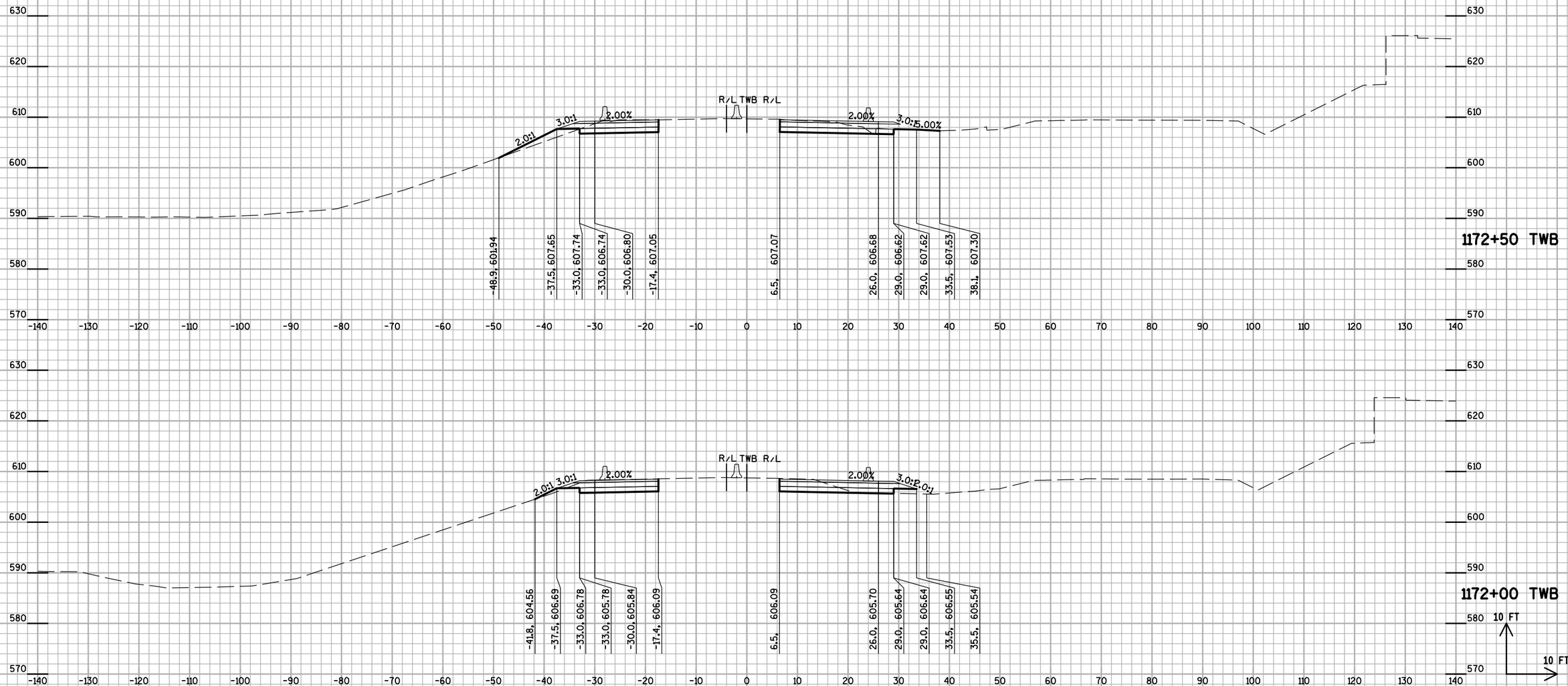
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1228	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1172+00 TWB TO 1172+50 TWB



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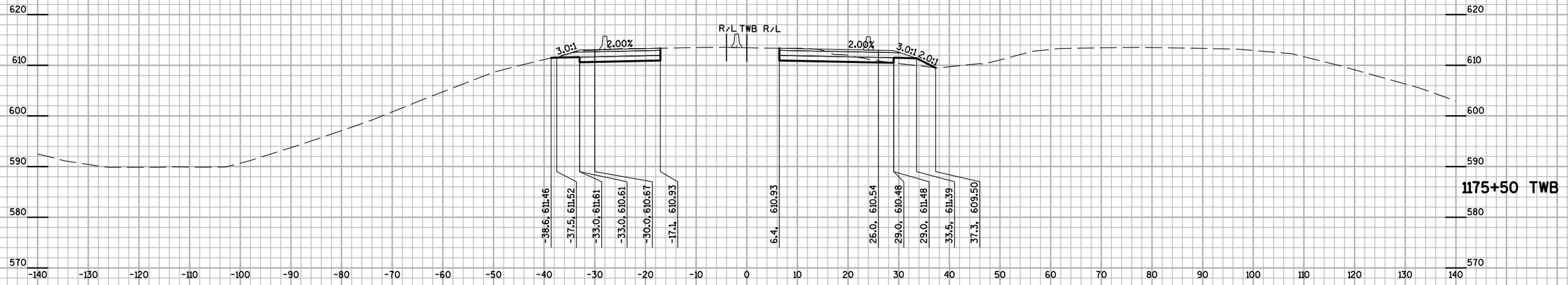
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1229	E

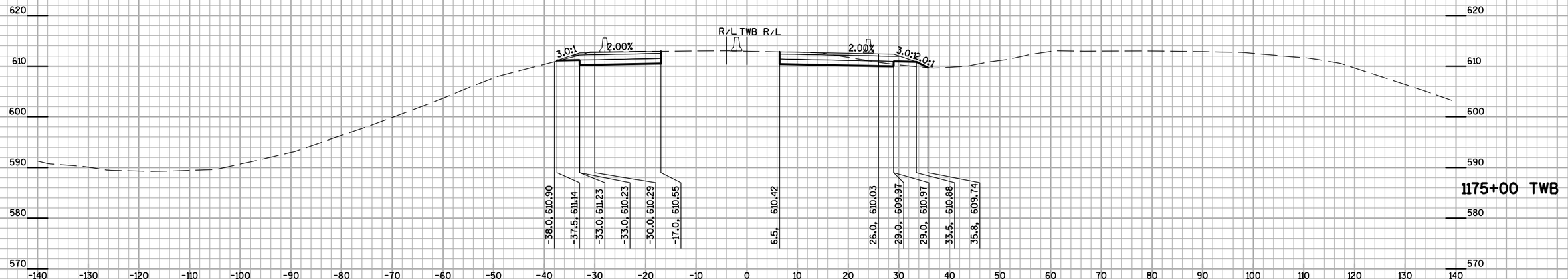
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

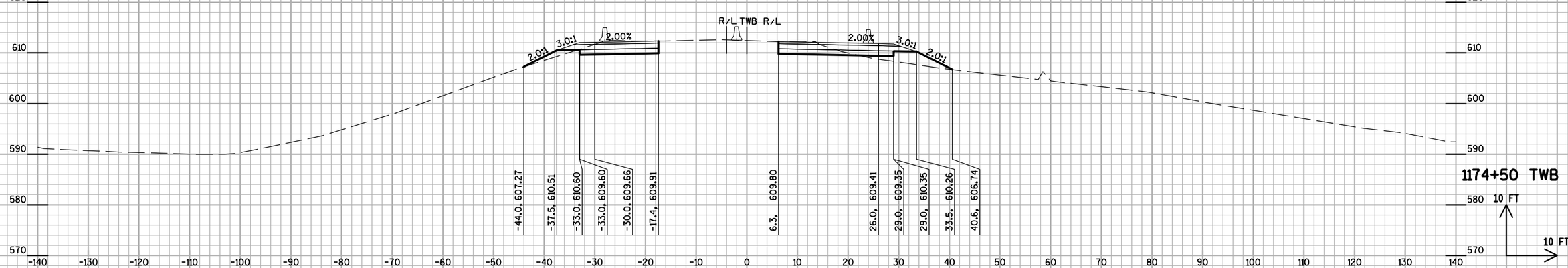
STA. 1174+50 TWB TO 1175+50 TWB



1175+50 TWB



1175+00 TWB



1174+50 TWB

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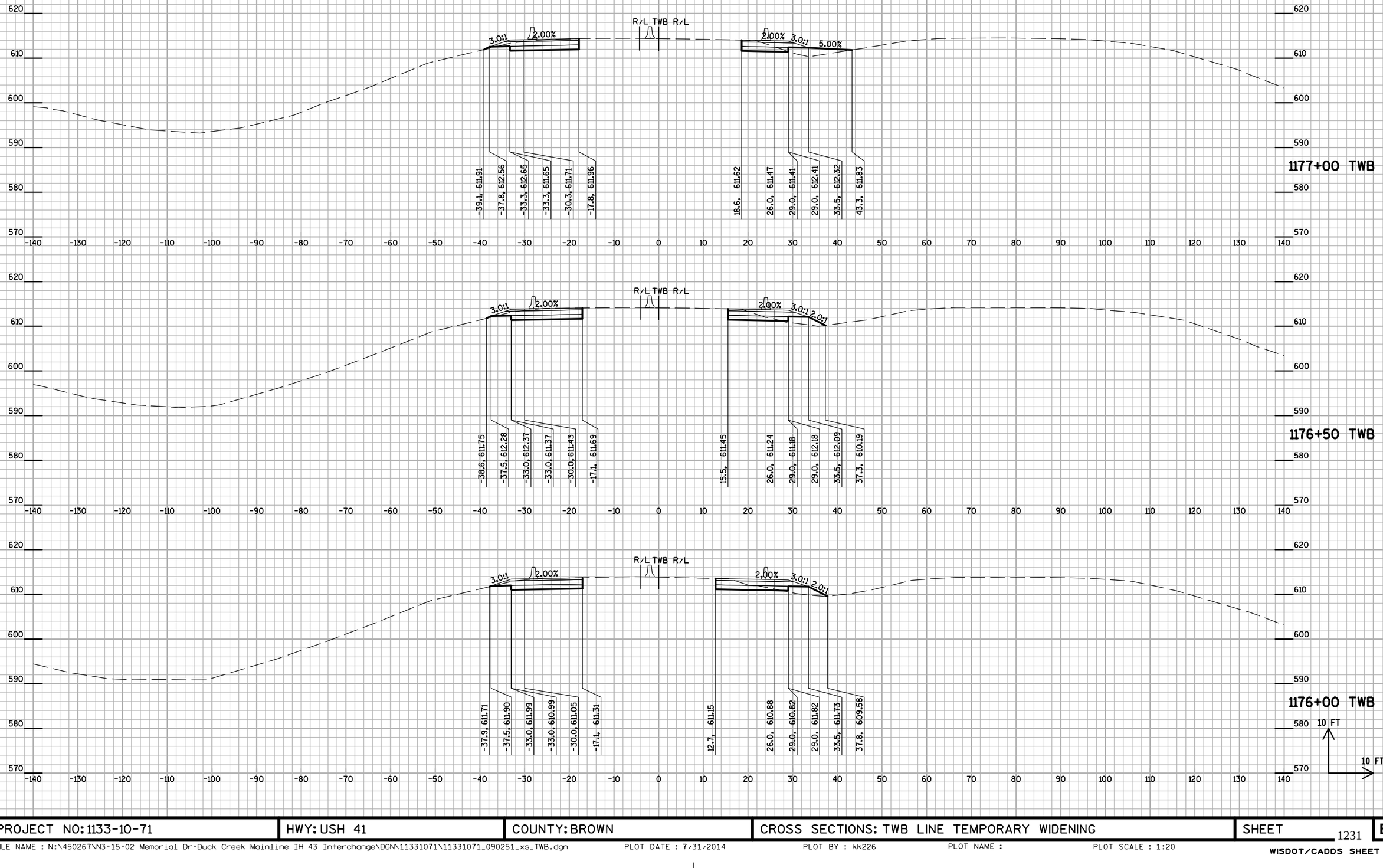
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1230	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1176+00 TWB TO 1177+00 TWB

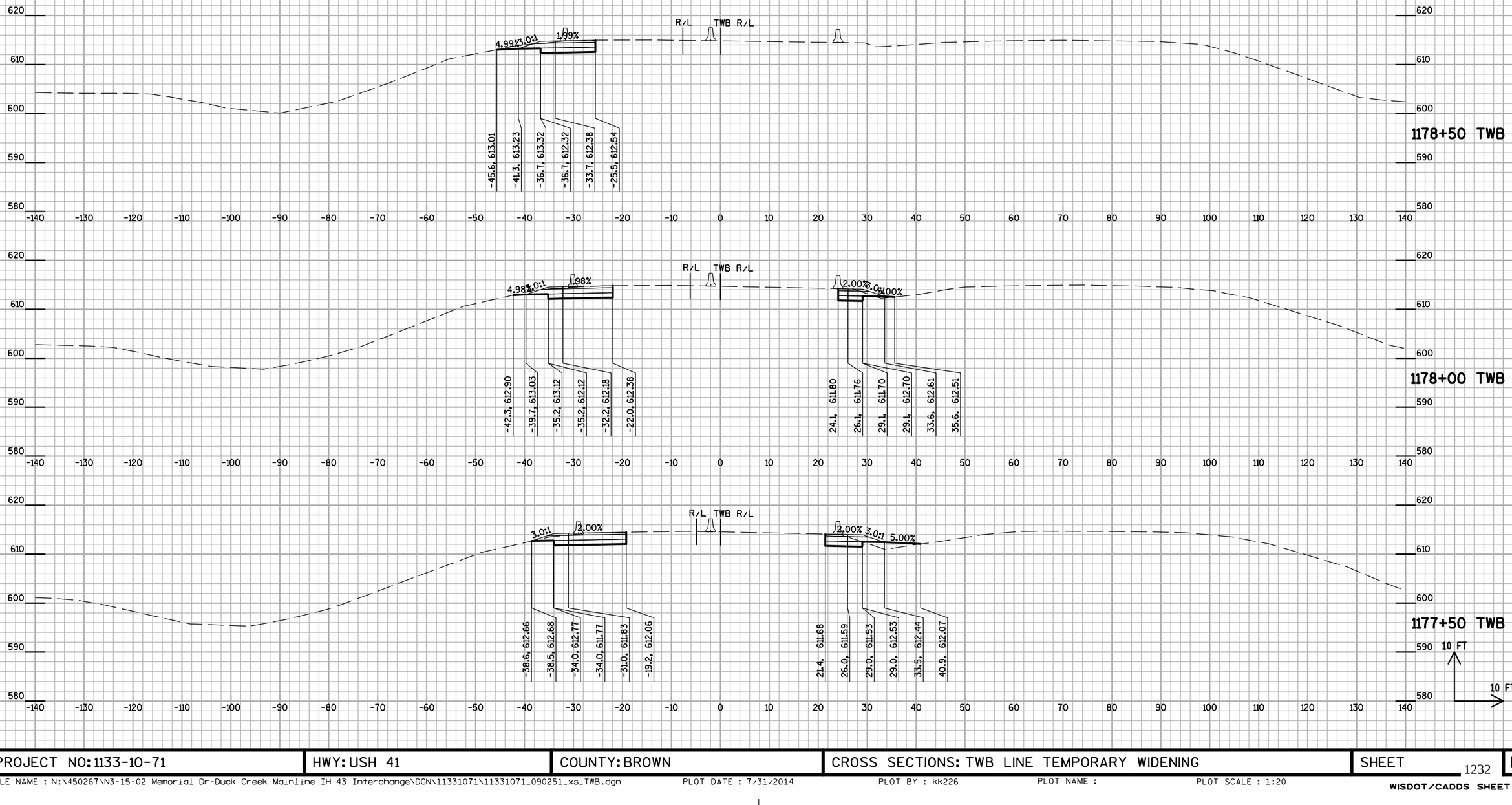


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1231	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1177+50 TWB TO 1178+50 TWB



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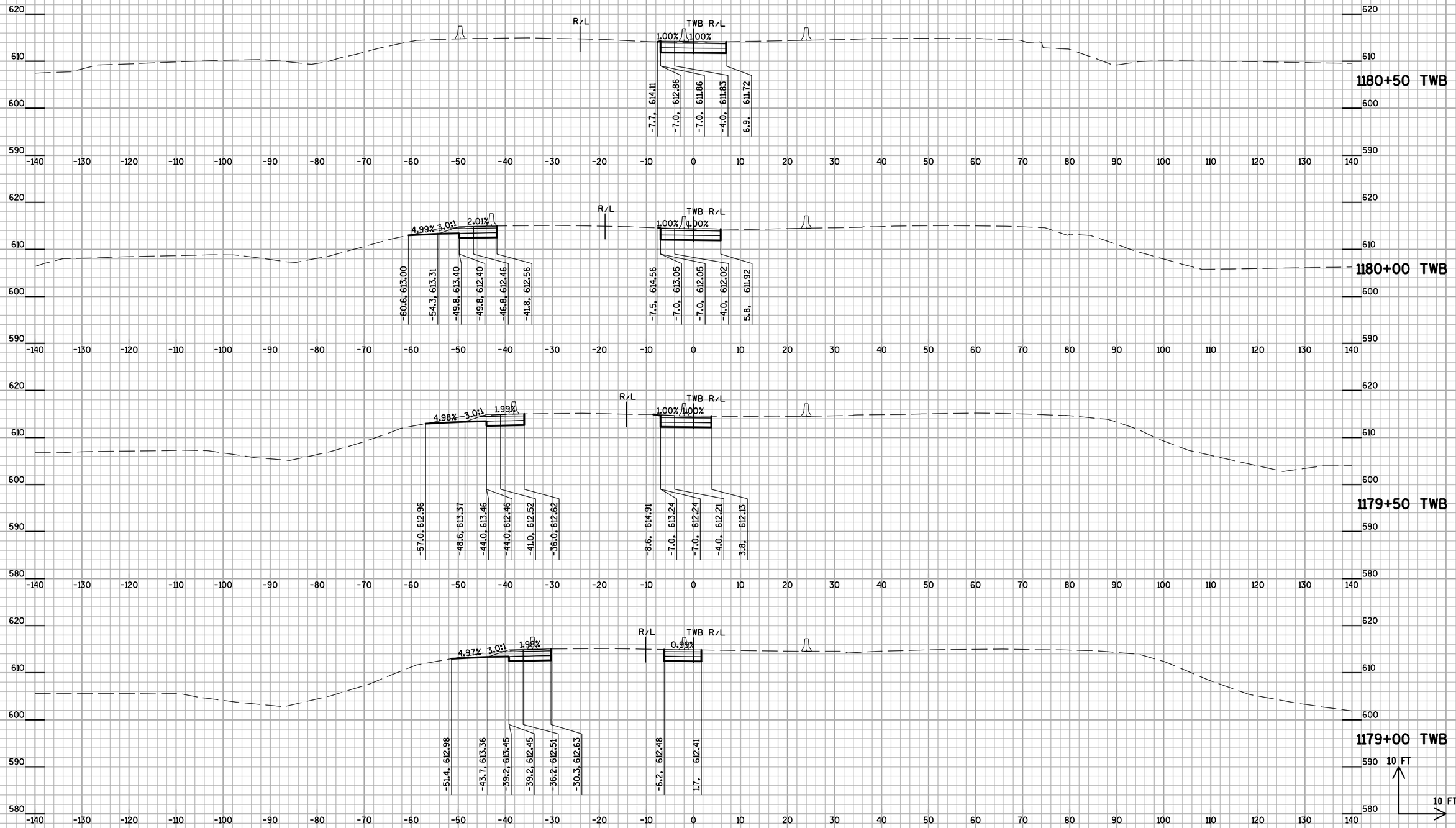
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1232	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1179+00 TWB TO 1180+50 TWB



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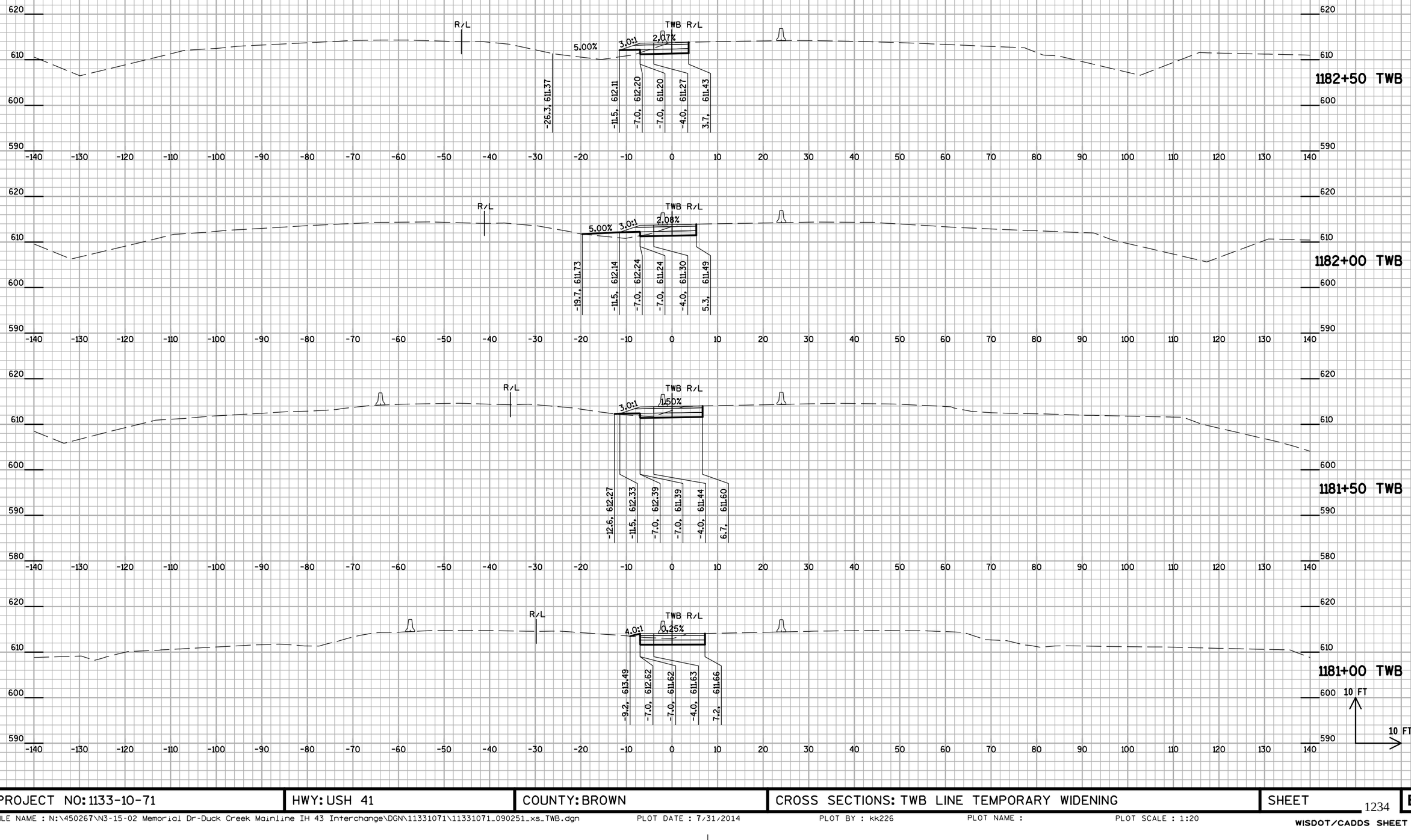
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1233	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1181+00 TWB TO 1182+50 TWB



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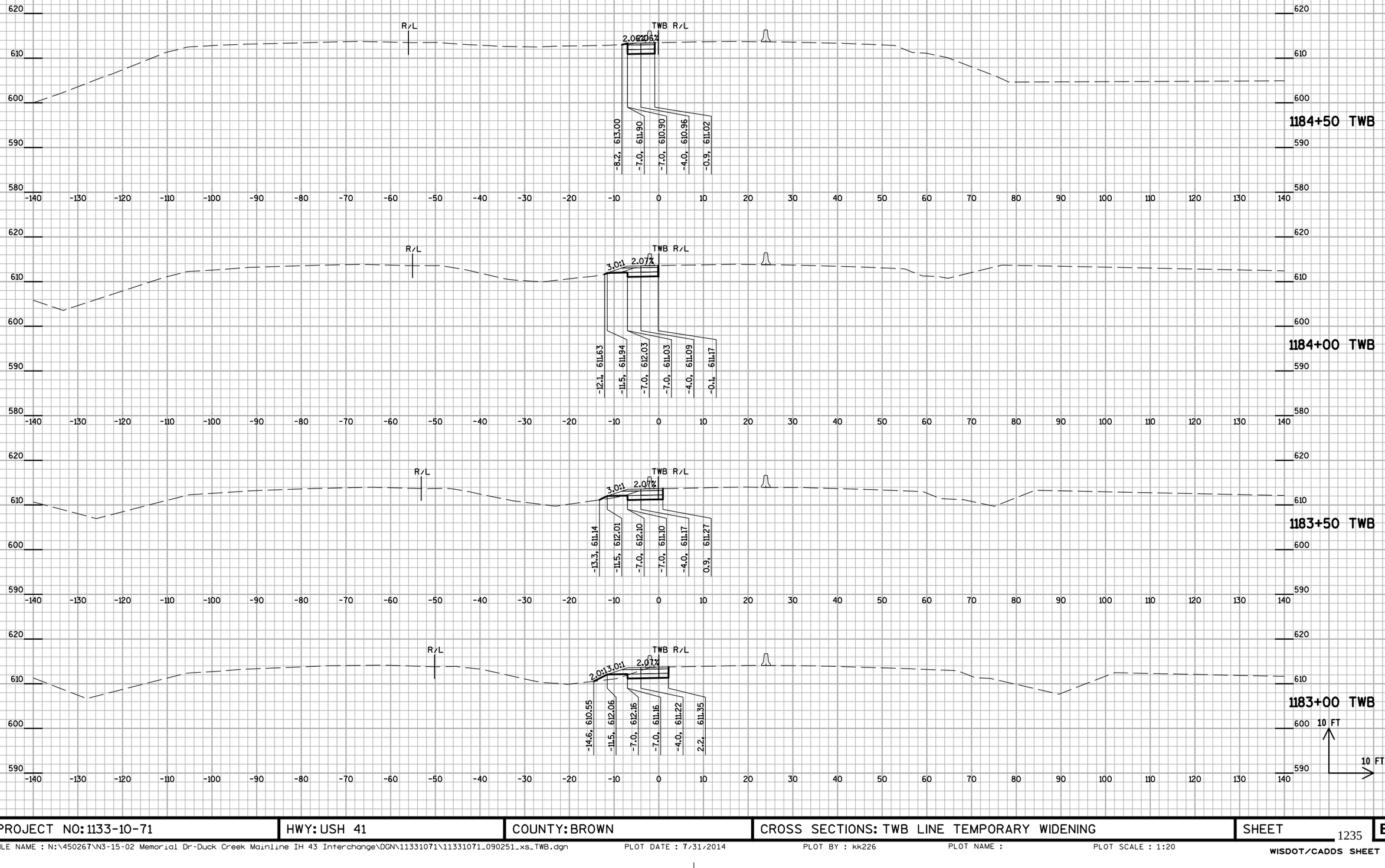
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1234	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1183+00 TWB TO 1184+50 TWB



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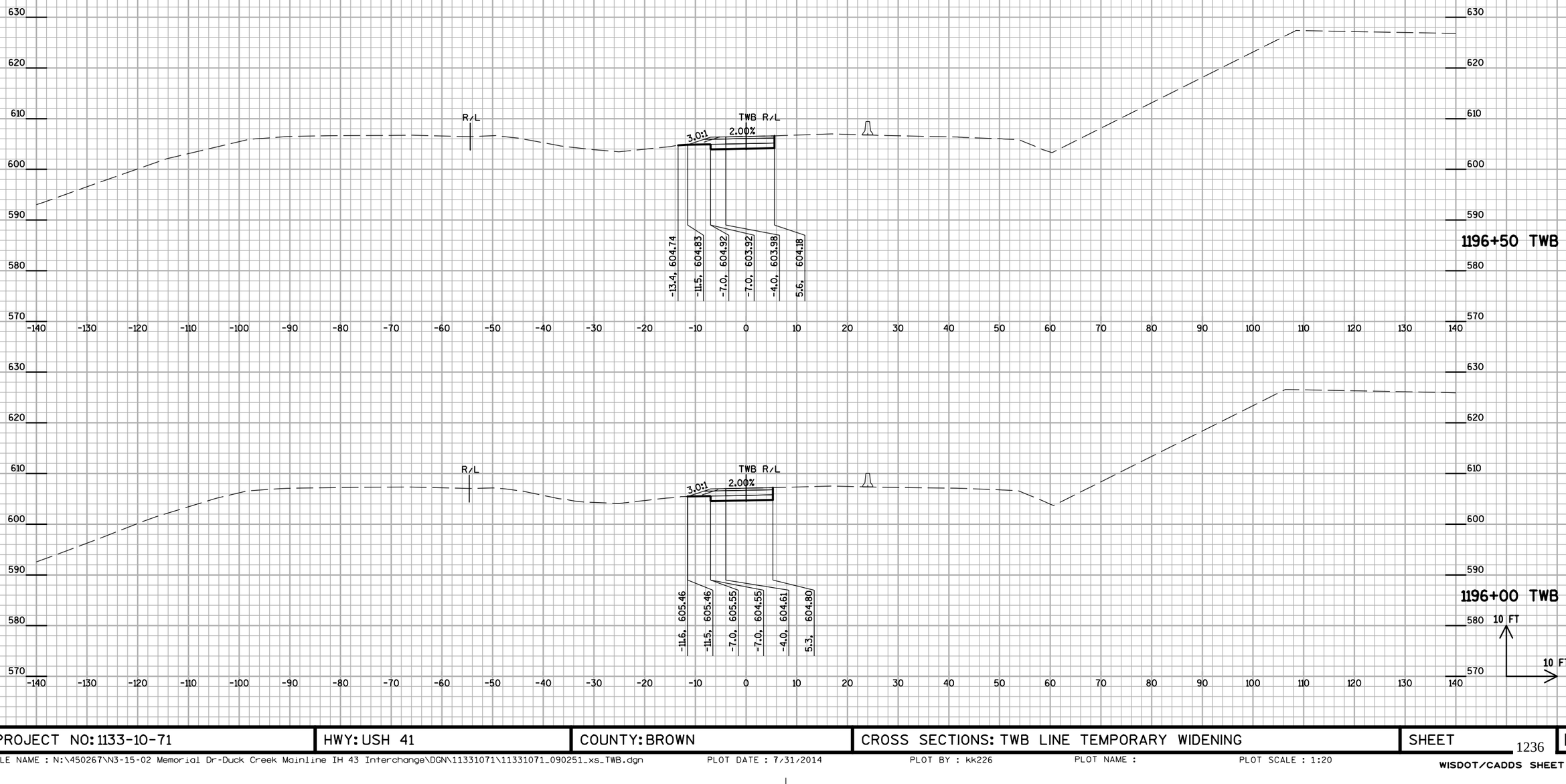
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1235	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1196+00 TWB TO 1196+50 TWB



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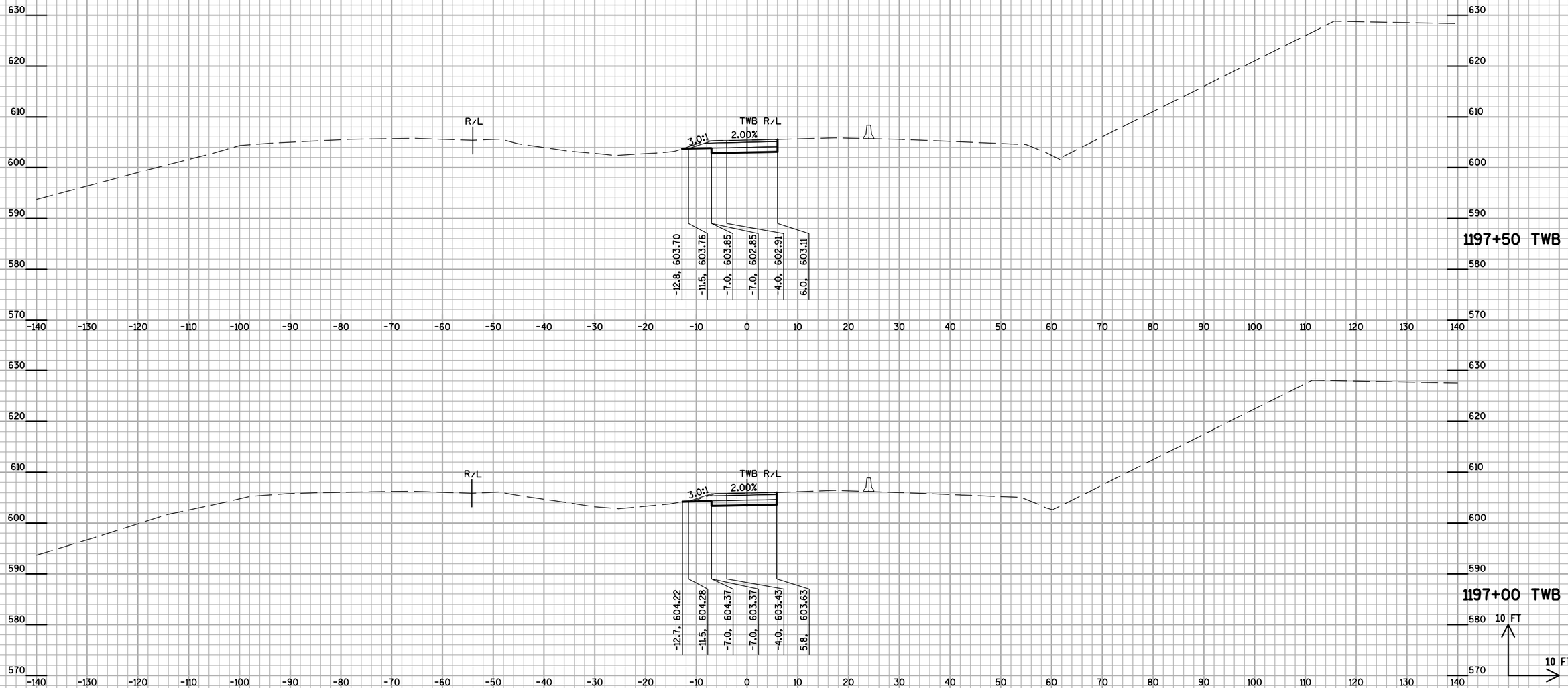
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1236	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1197+00 TWB TO 1197+50 TWB



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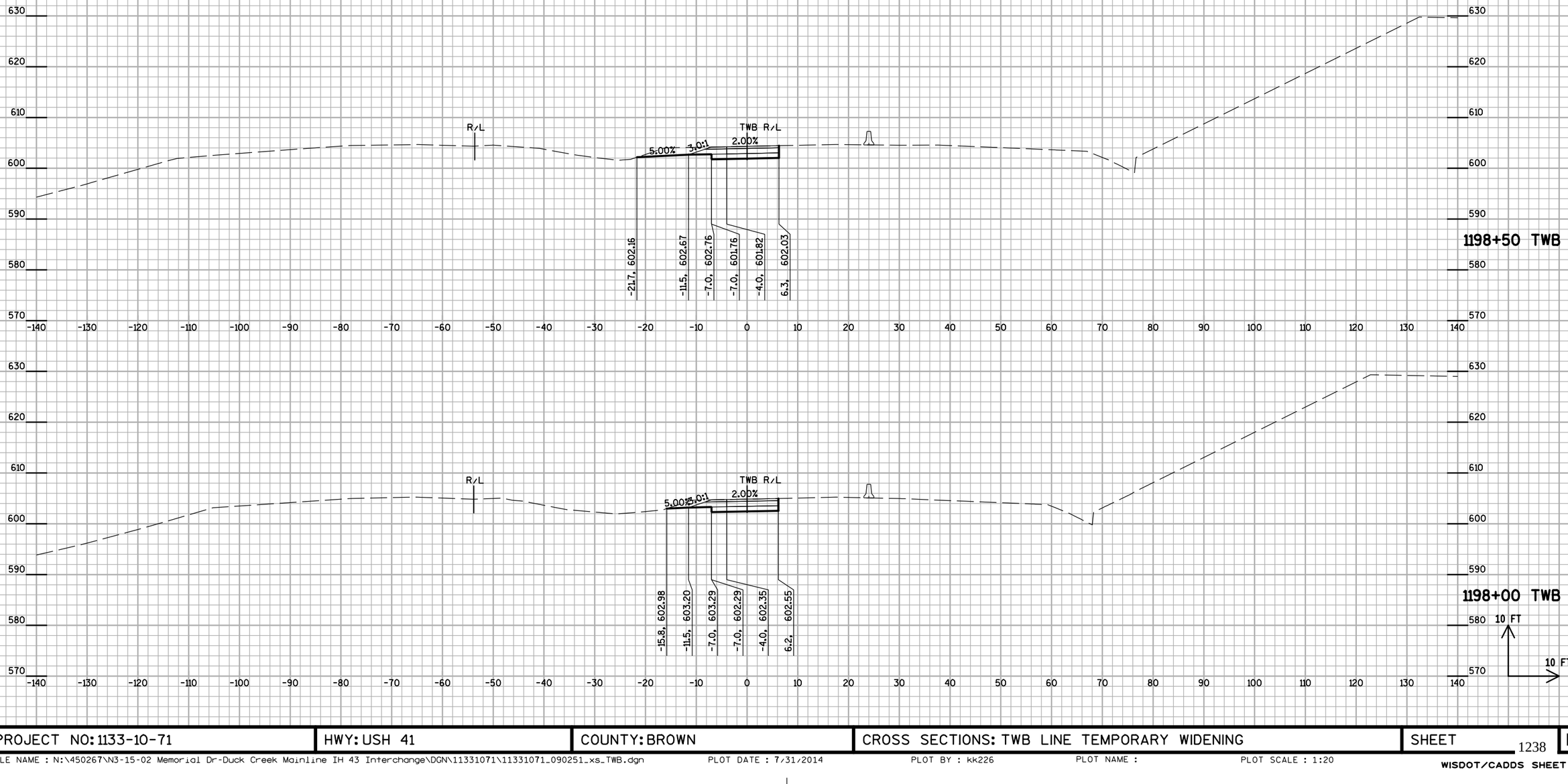
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1237	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1198+00 TWB TO 1198+50 TWB



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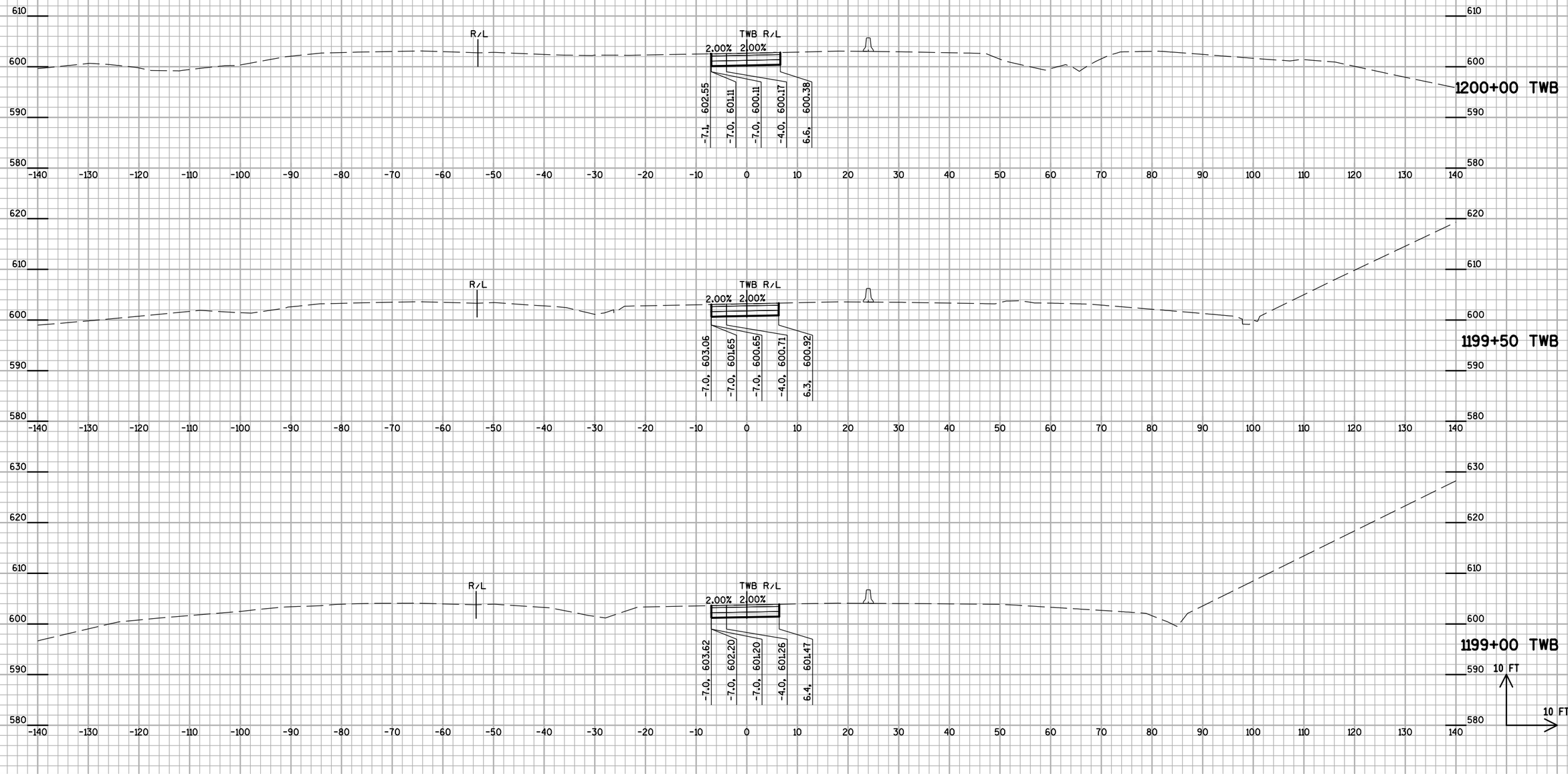
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1238	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1199+00 TWB TO 1200+00 TWB

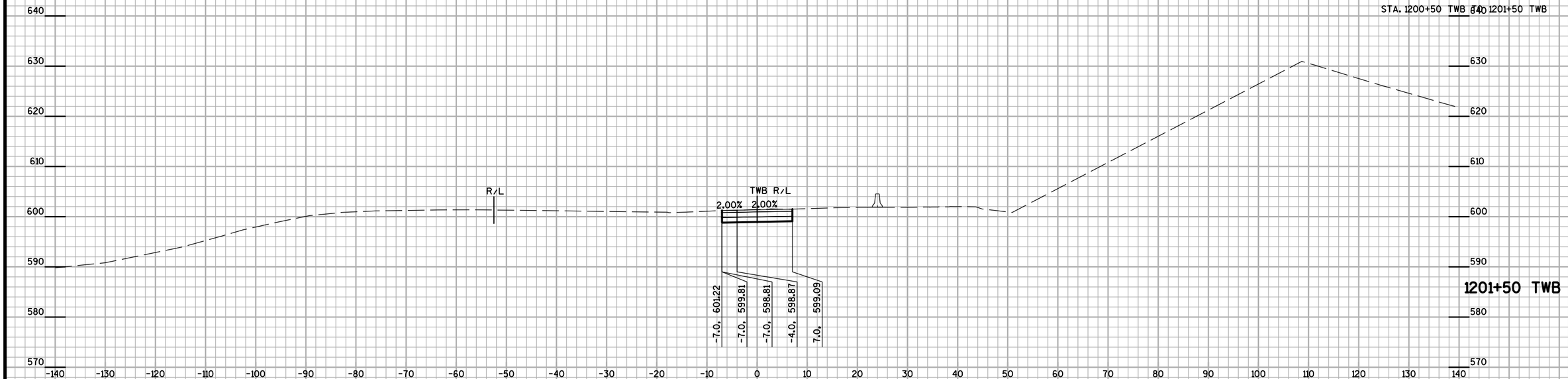


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1239	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

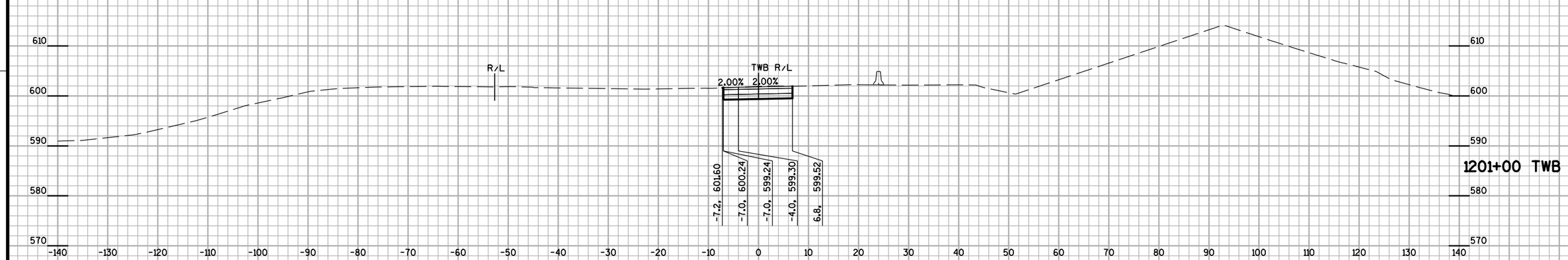
WISDOT/CADDS SHEET 21

STA. 1200+50 TWB

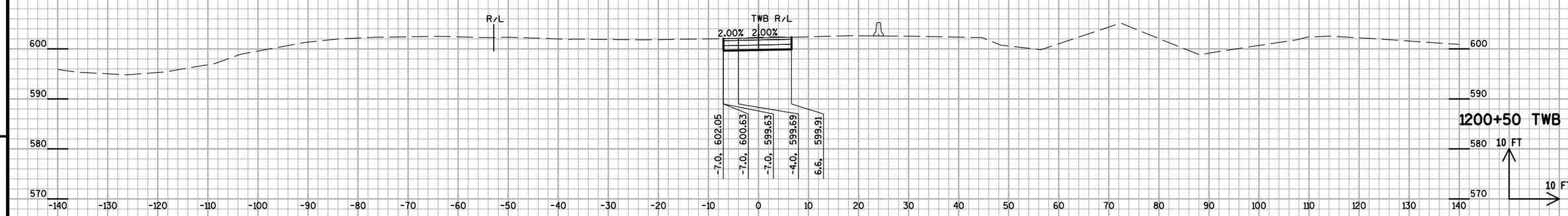


1201+50 TWB

STA. 1201+50 TWB



1201+00 TWB



1200+50 TWB

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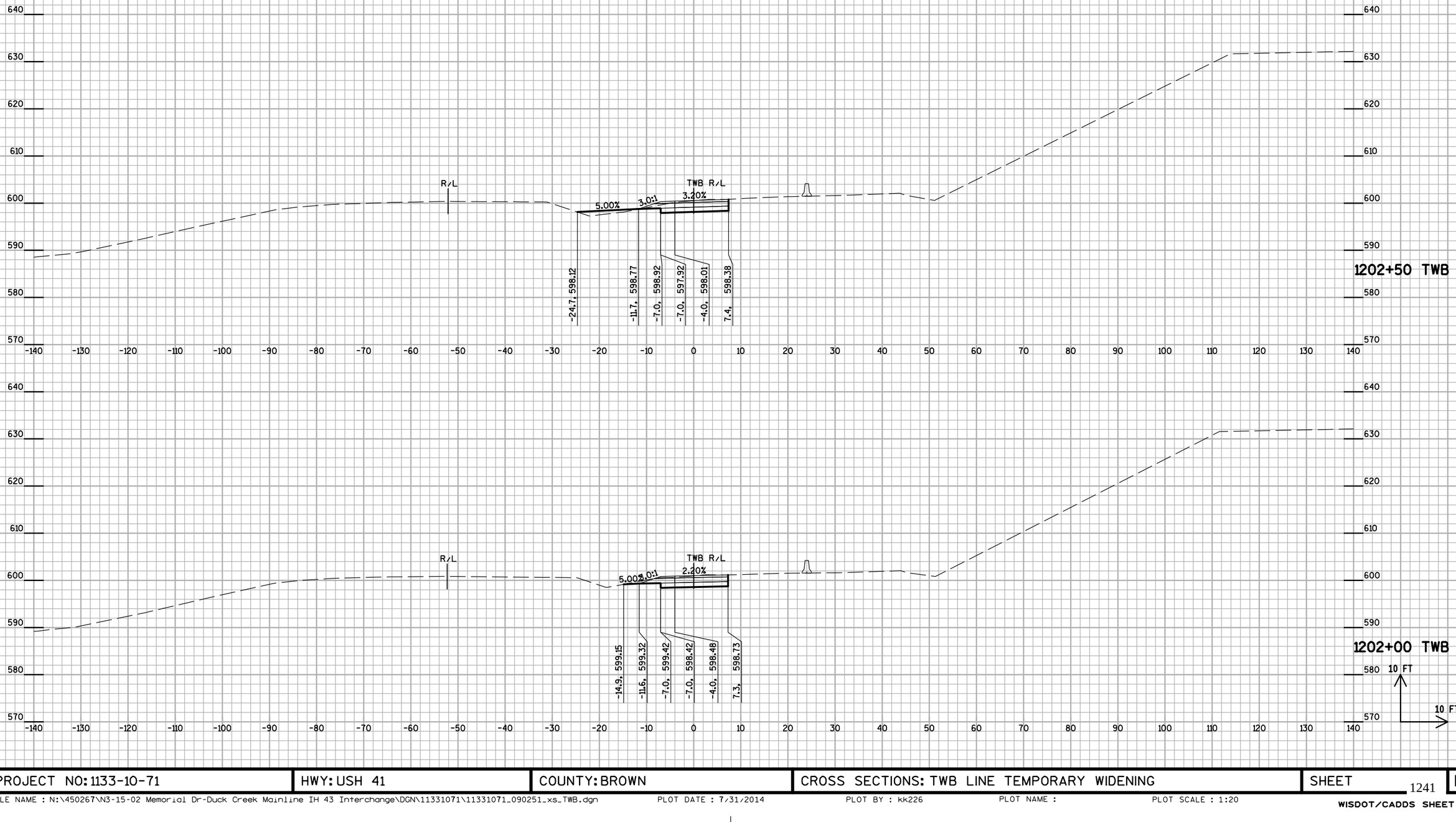
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1240	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1202+00 TWB TO 1202+50 TWB



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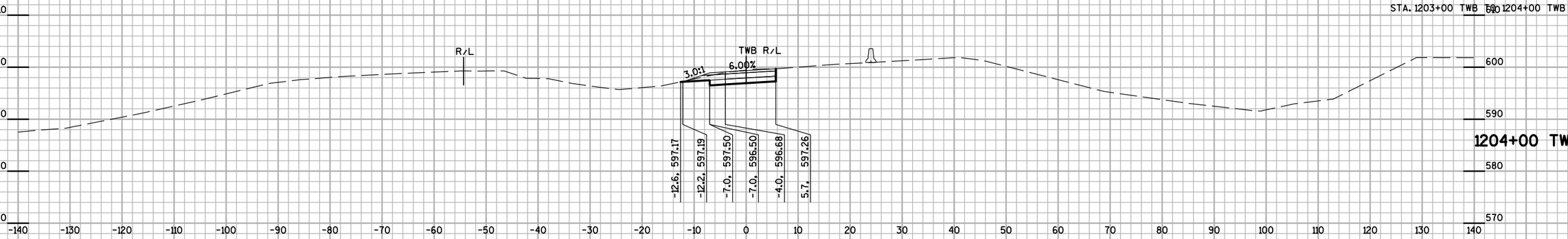
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1241	E

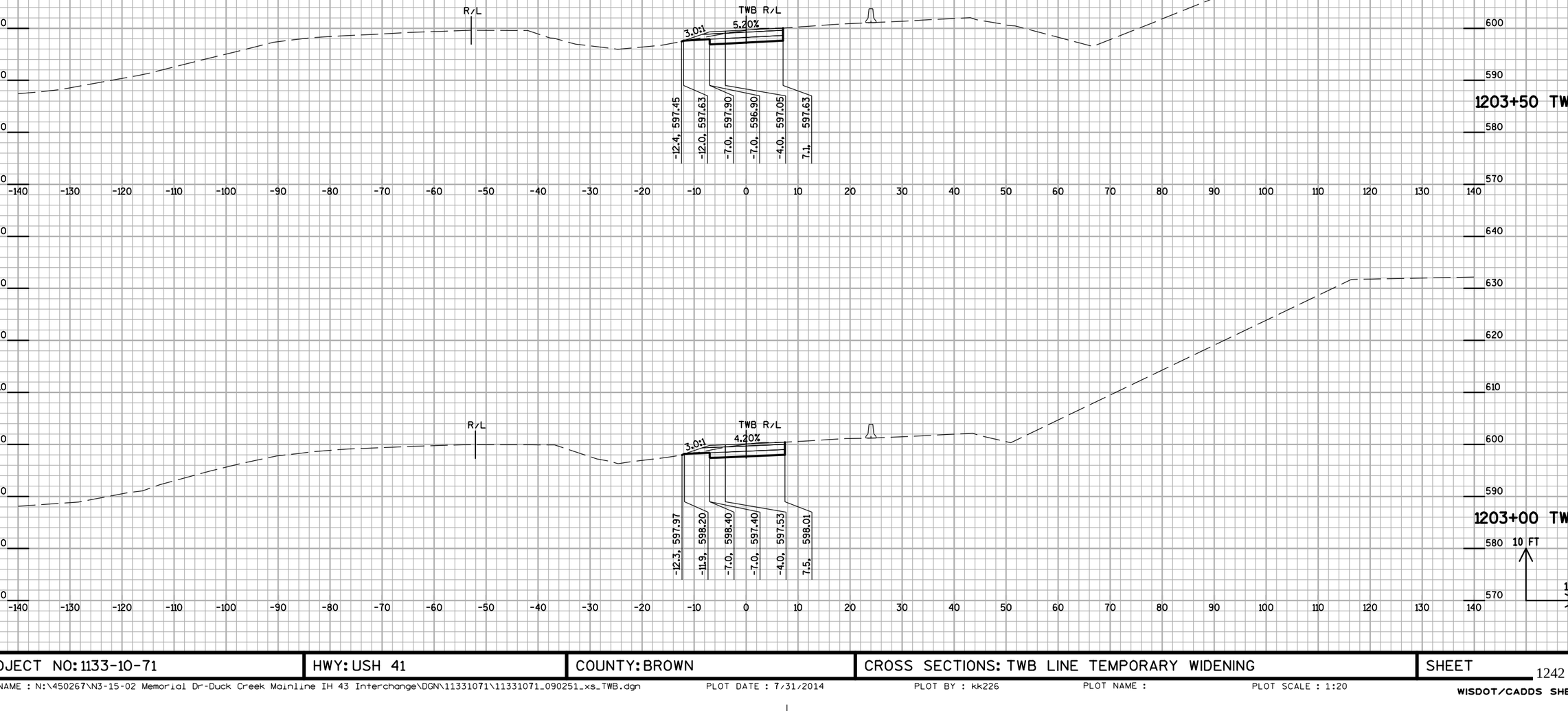
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1203+00 TWB

STA. 1204+00 TWB



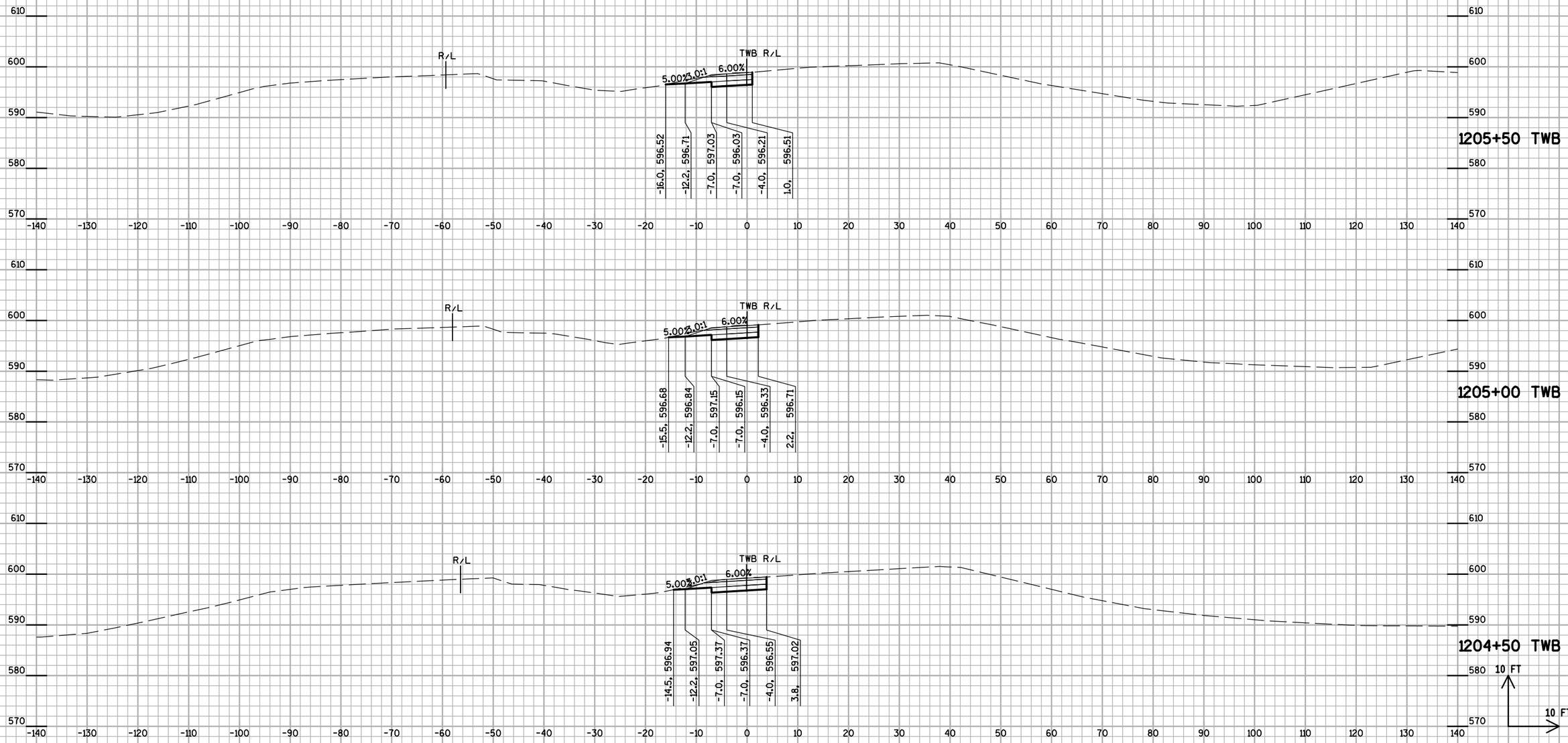


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1242	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1204+50 TWB TO 1205+50 TWB



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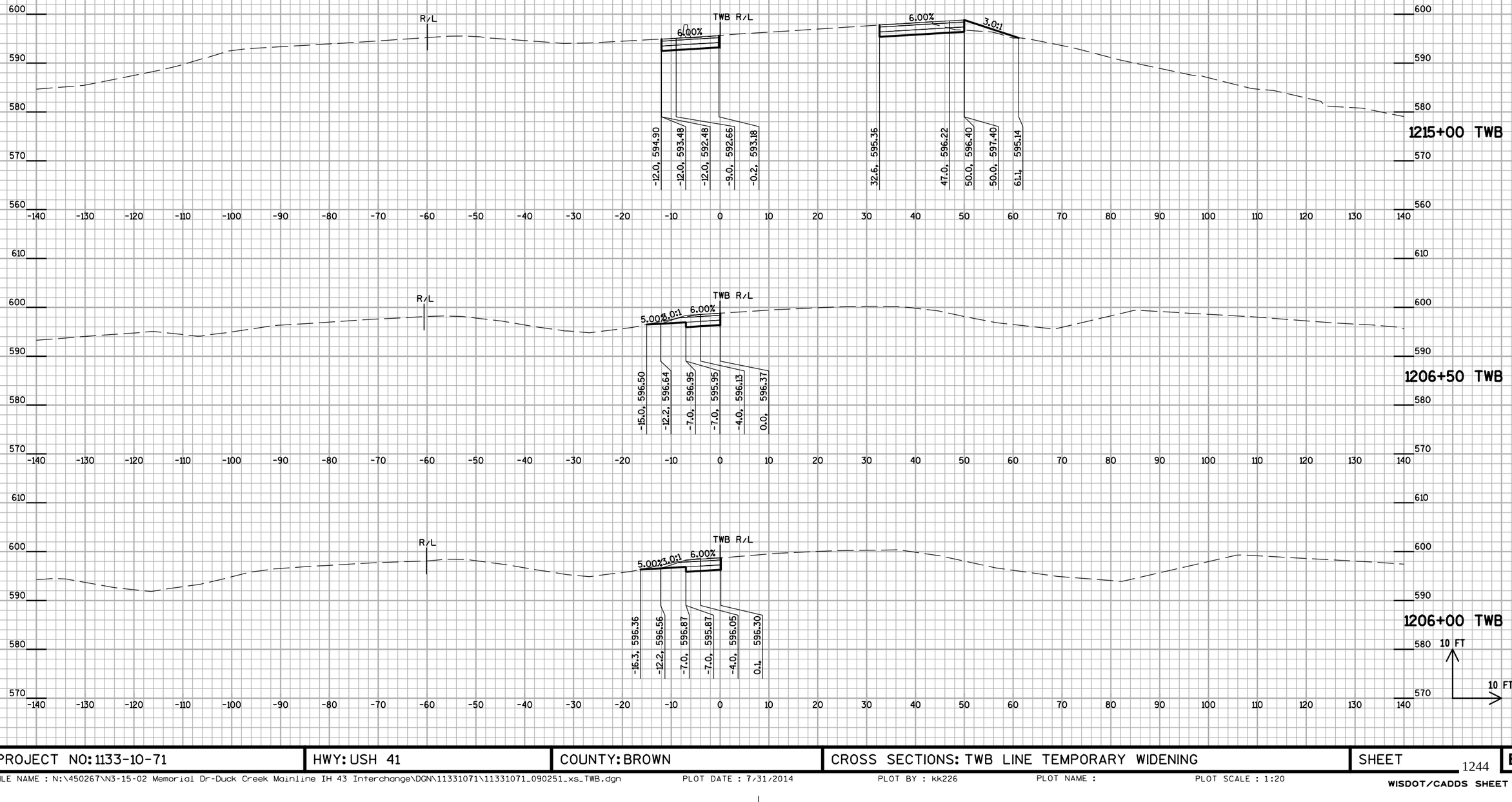
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1243	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1206+00 TWB TO 1215+00 TWB

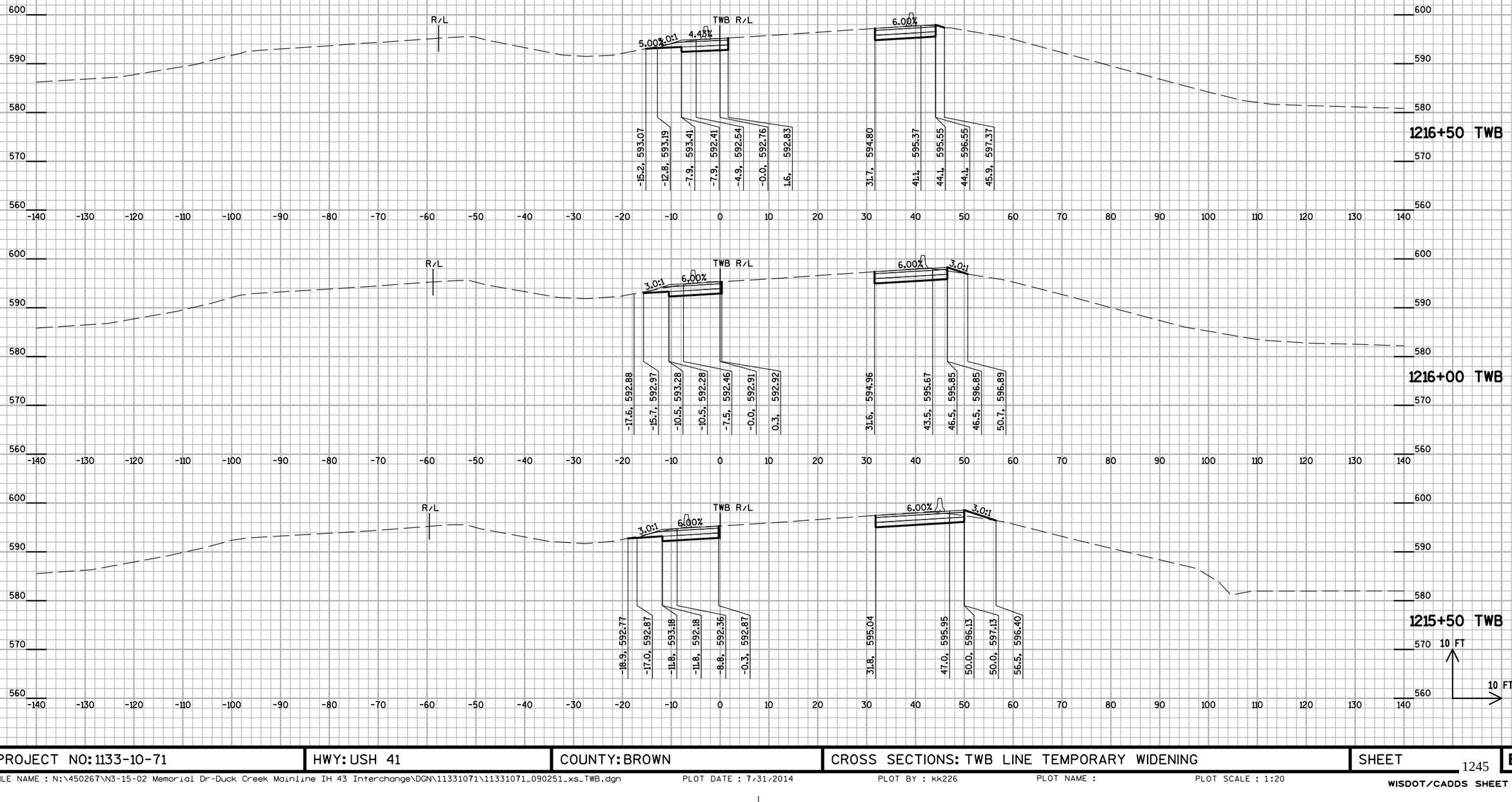


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1244	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1215+50 TWB TO 1216+50 TWB



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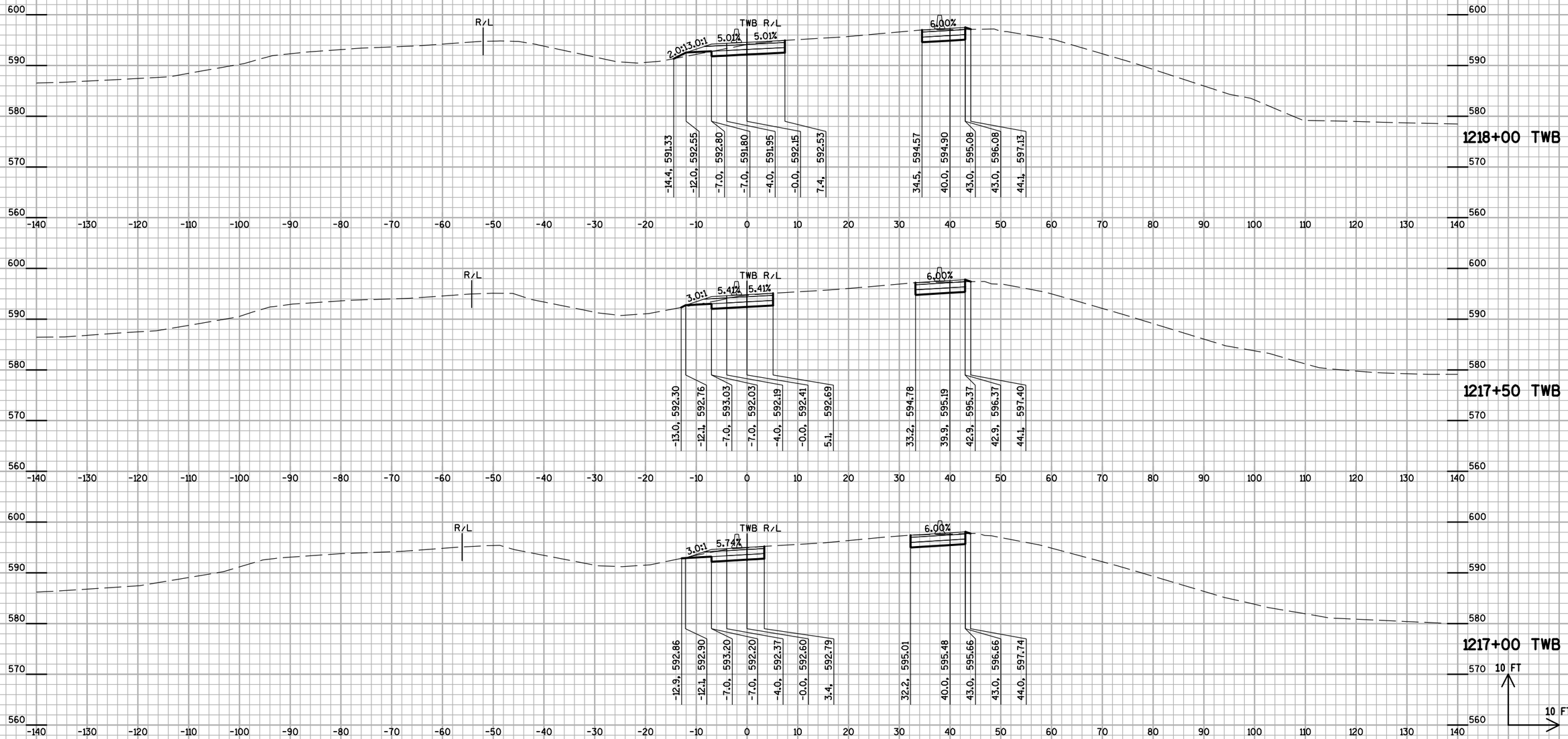
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1245	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1217+00 TWB TO 1218+00 TWB



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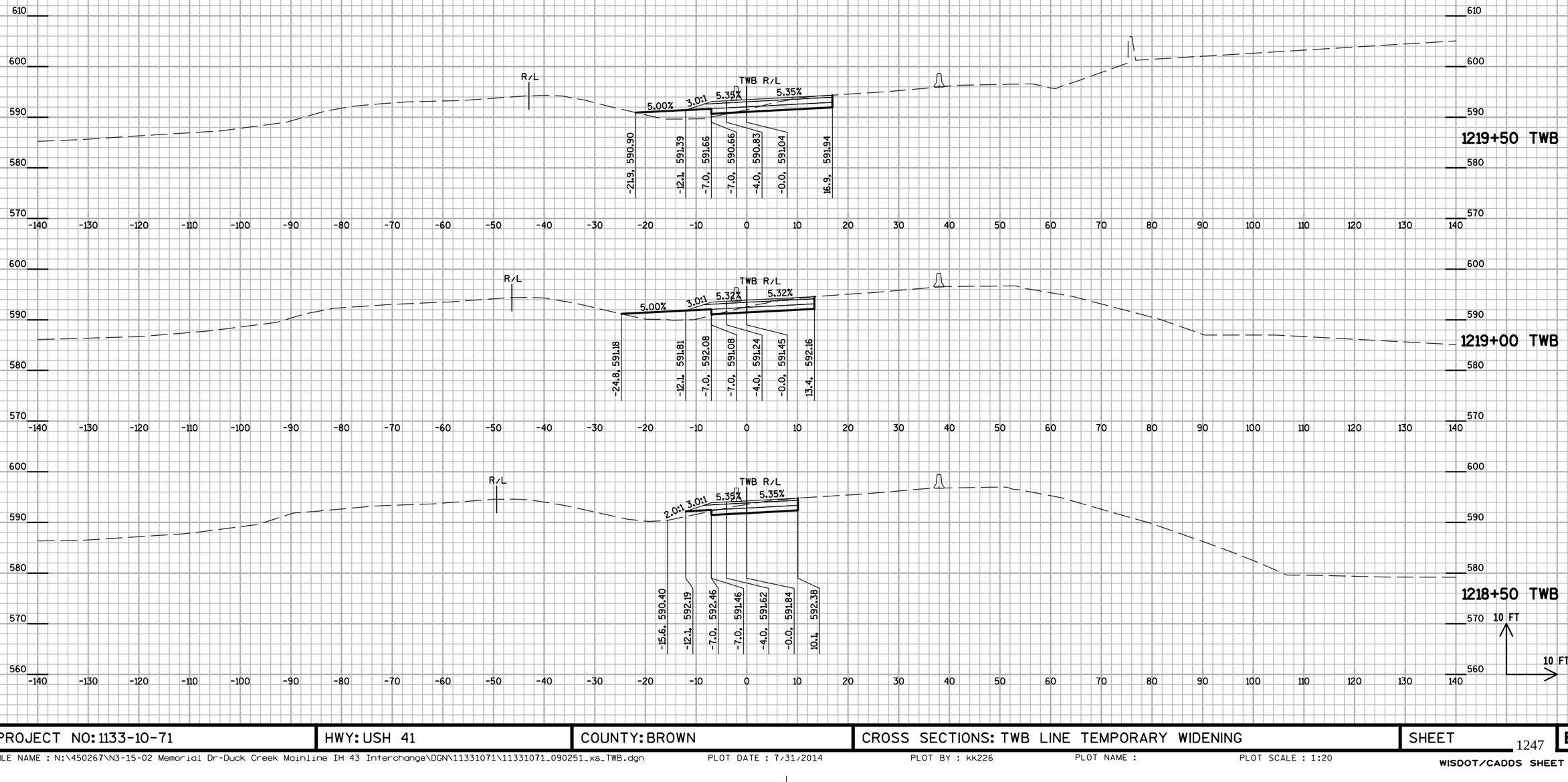
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1246	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1218+50 TWB TO 1219+50 TWB



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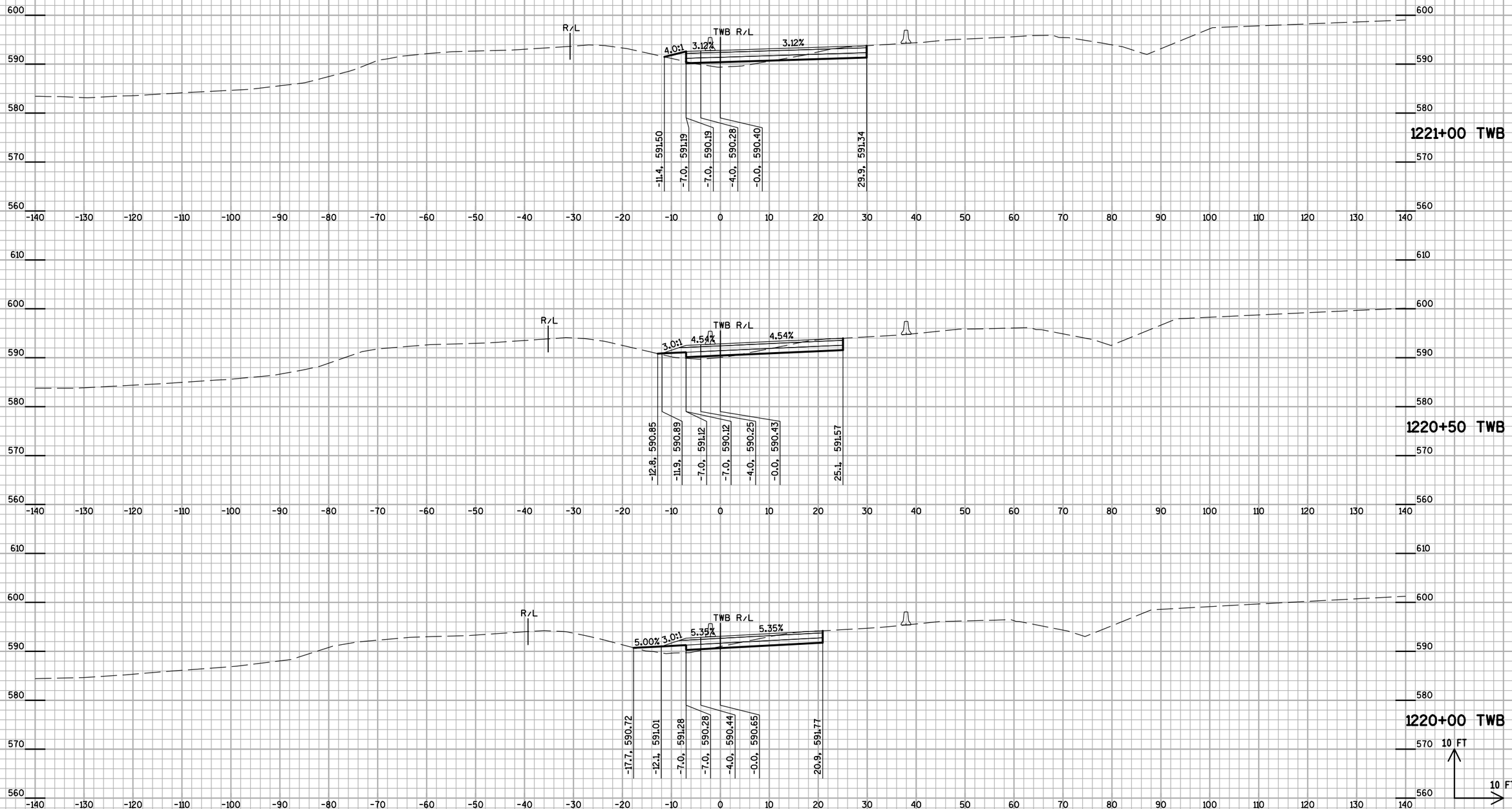
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1247	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1220+00 TWB TO 1221+00 TWB

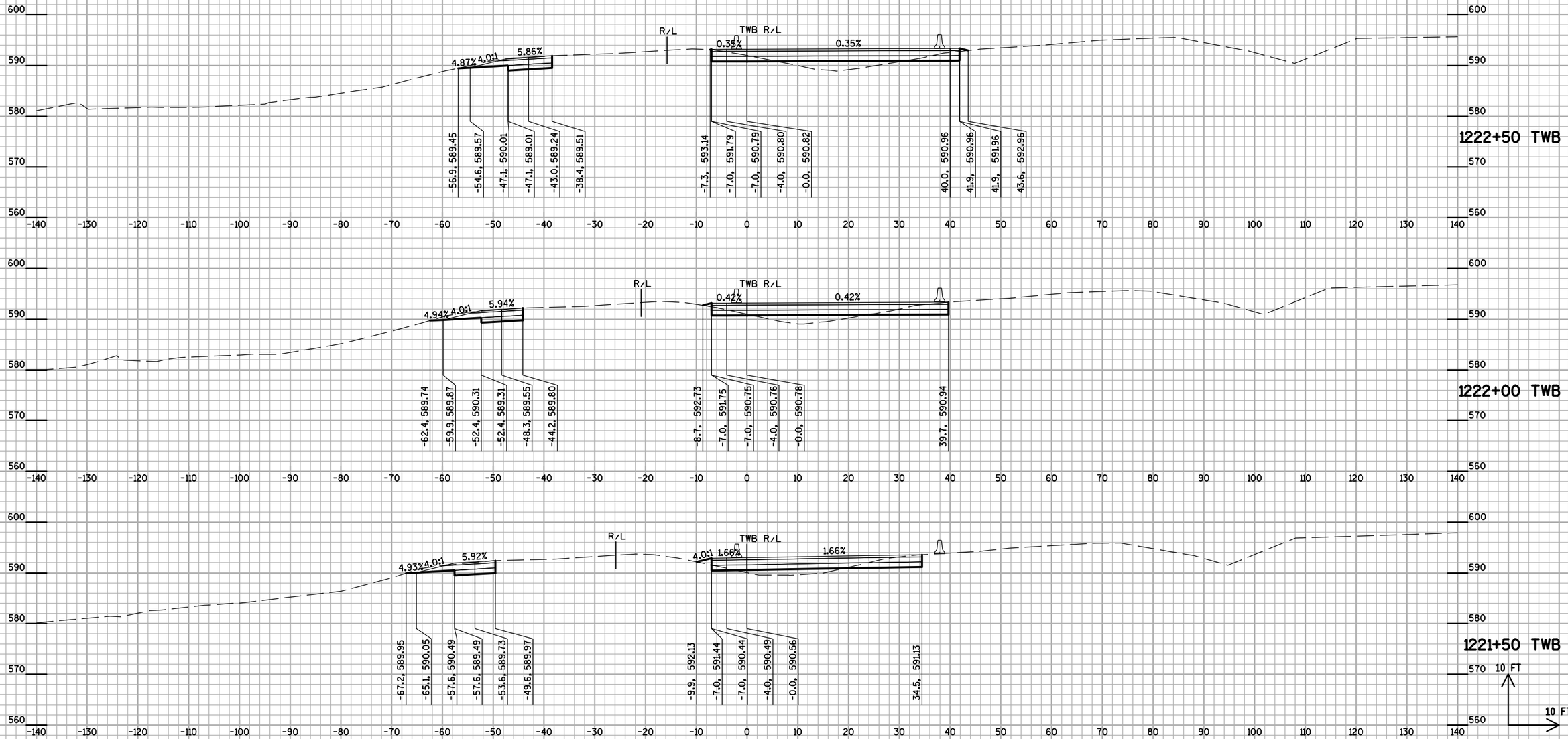


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1248	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1221+50 TWB TO 1222+50 TWB

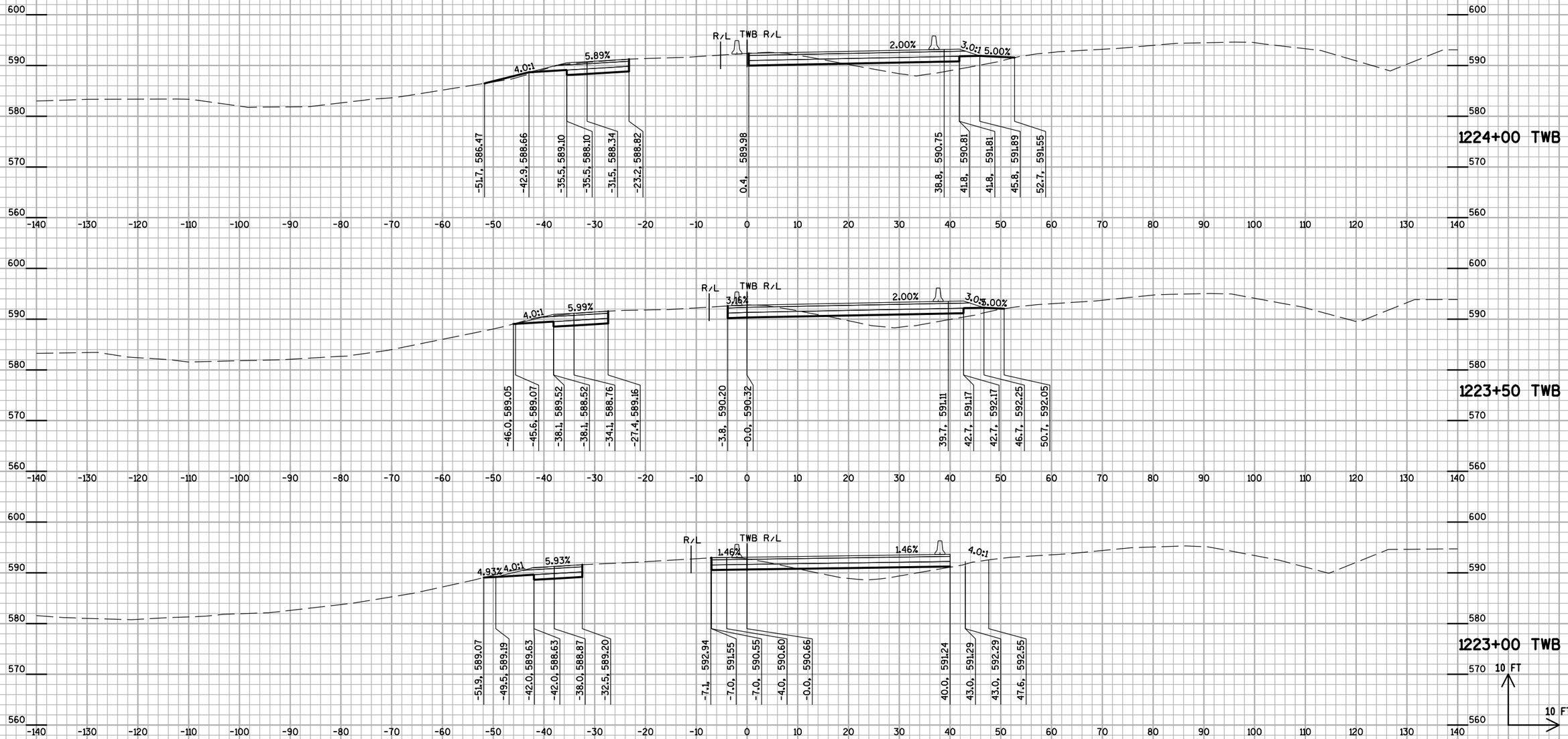


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1249	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1223+00 TWB TO 1224+00 TWB

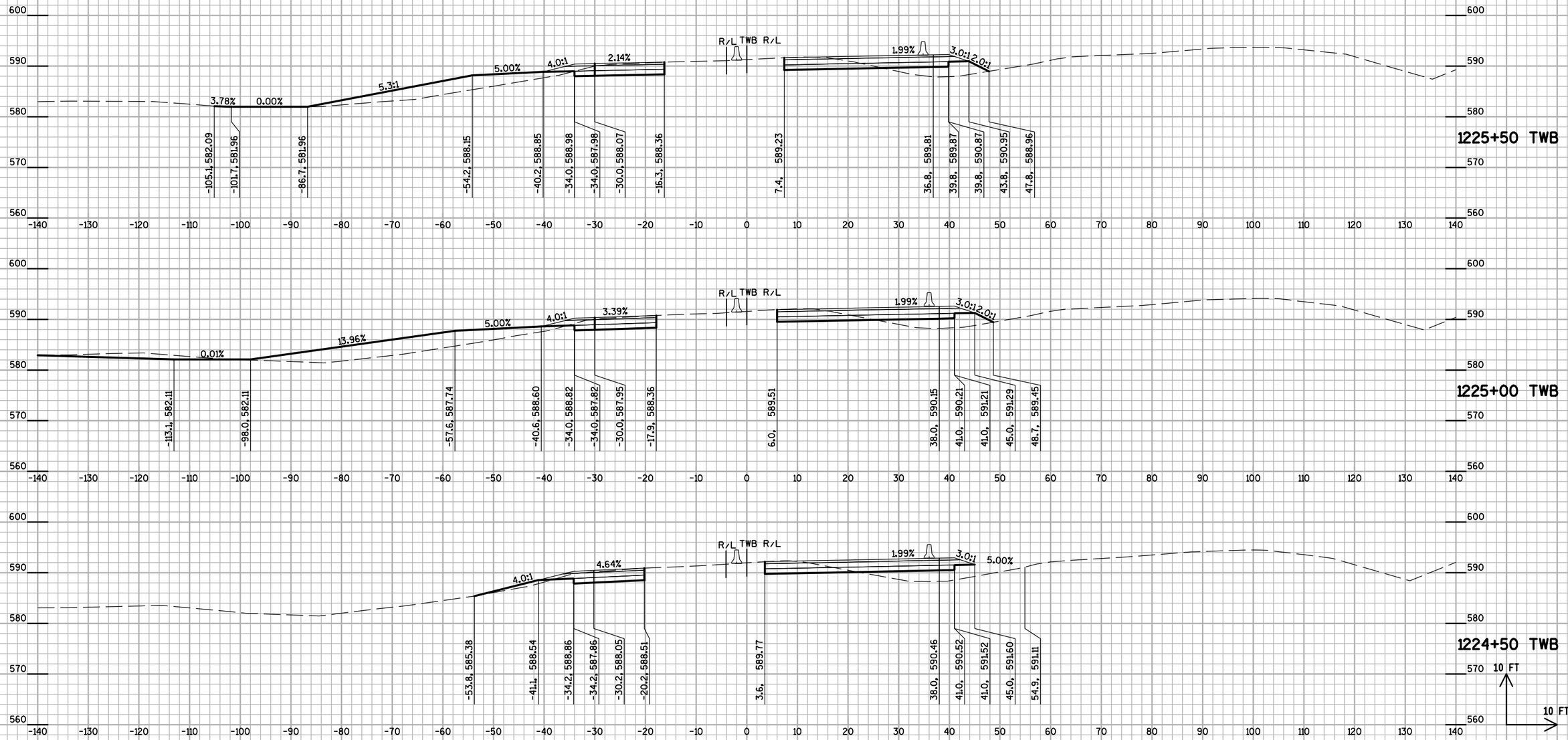


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1250	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1224+50 TWB TO 1225+50 TWB

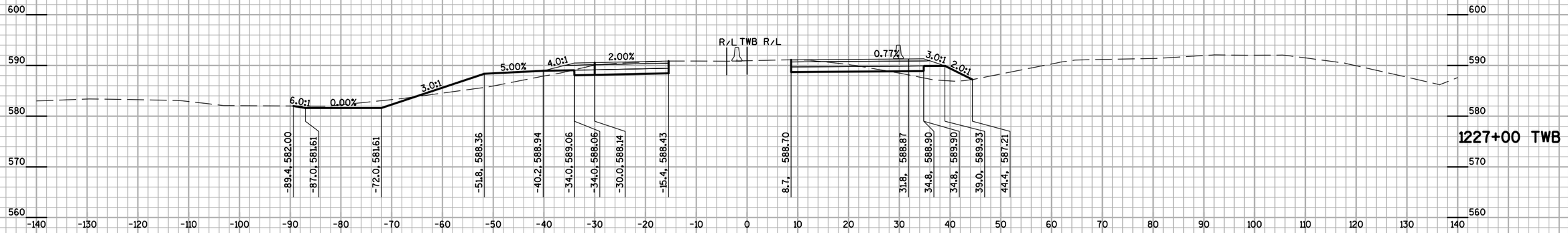


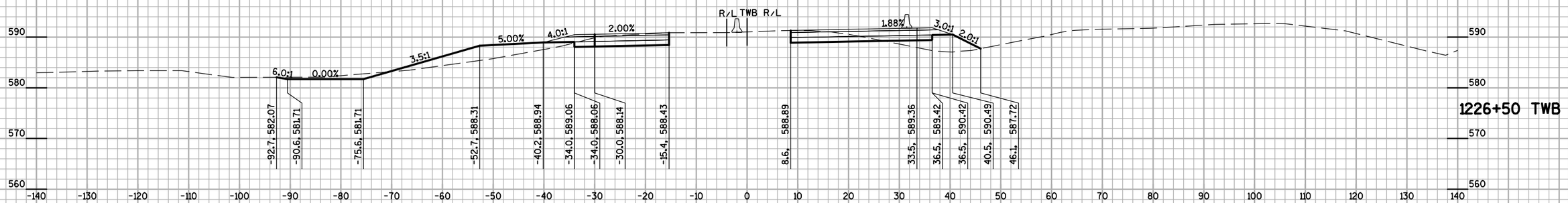
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1251	E

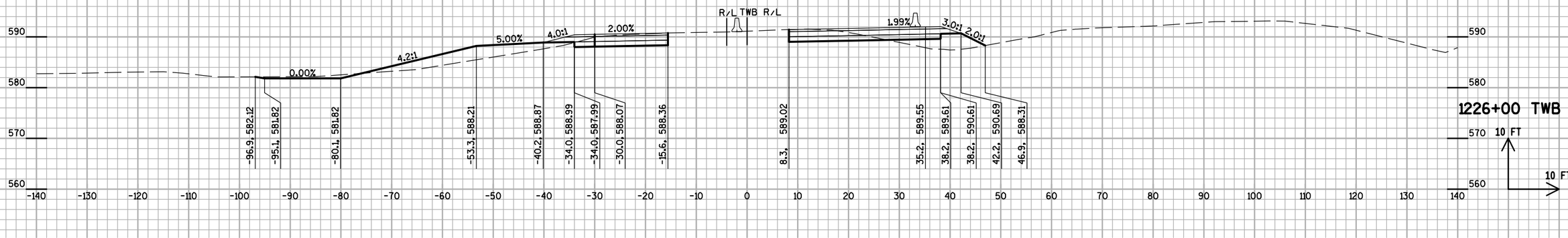
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1226+00 TWB TO 1227+00 TWB







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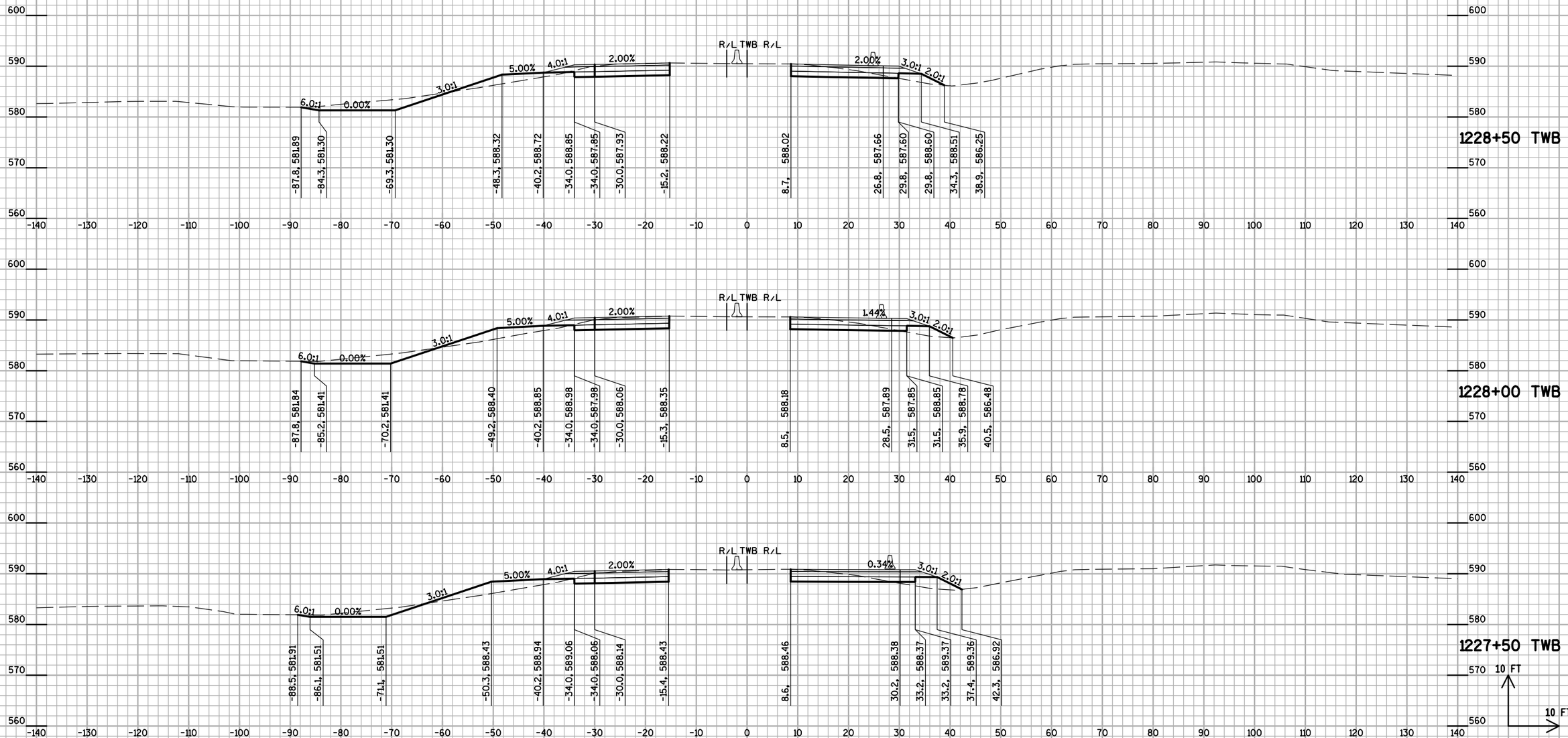
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1252	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1227+50 TWB TO 1228+50 TWB



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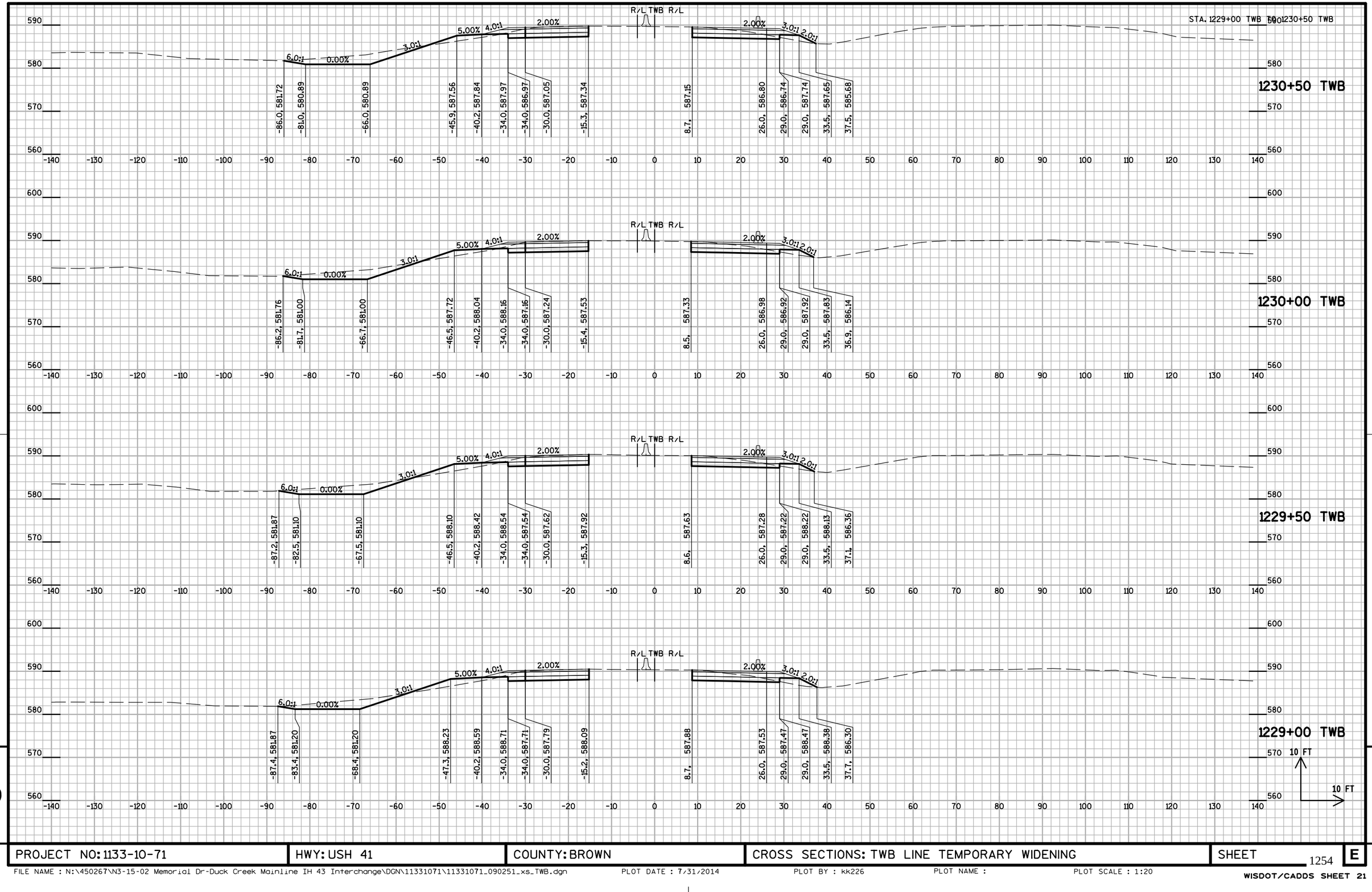
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1253	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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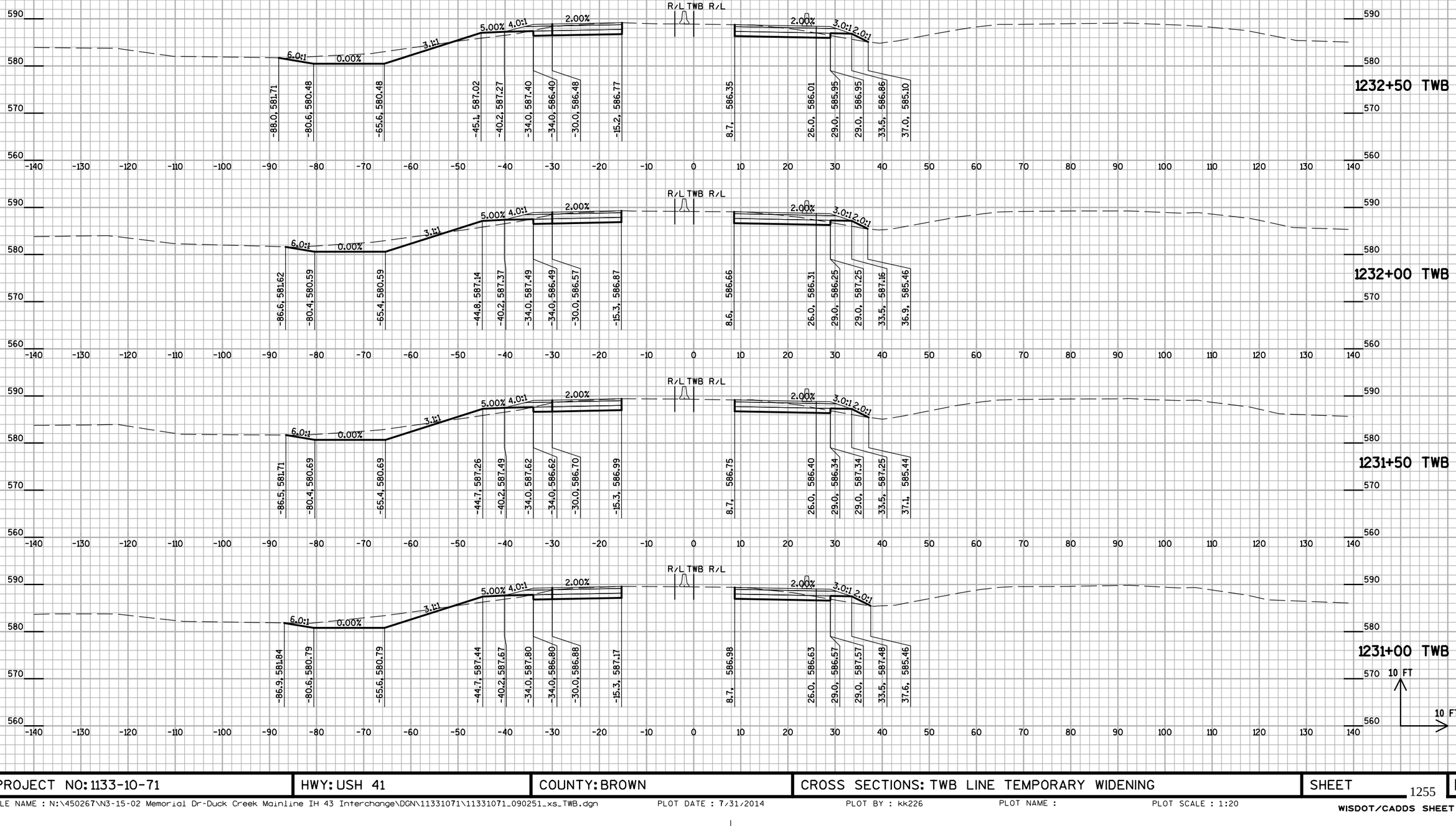
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1254	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1231+00 TWB TO 1232+50 TWB



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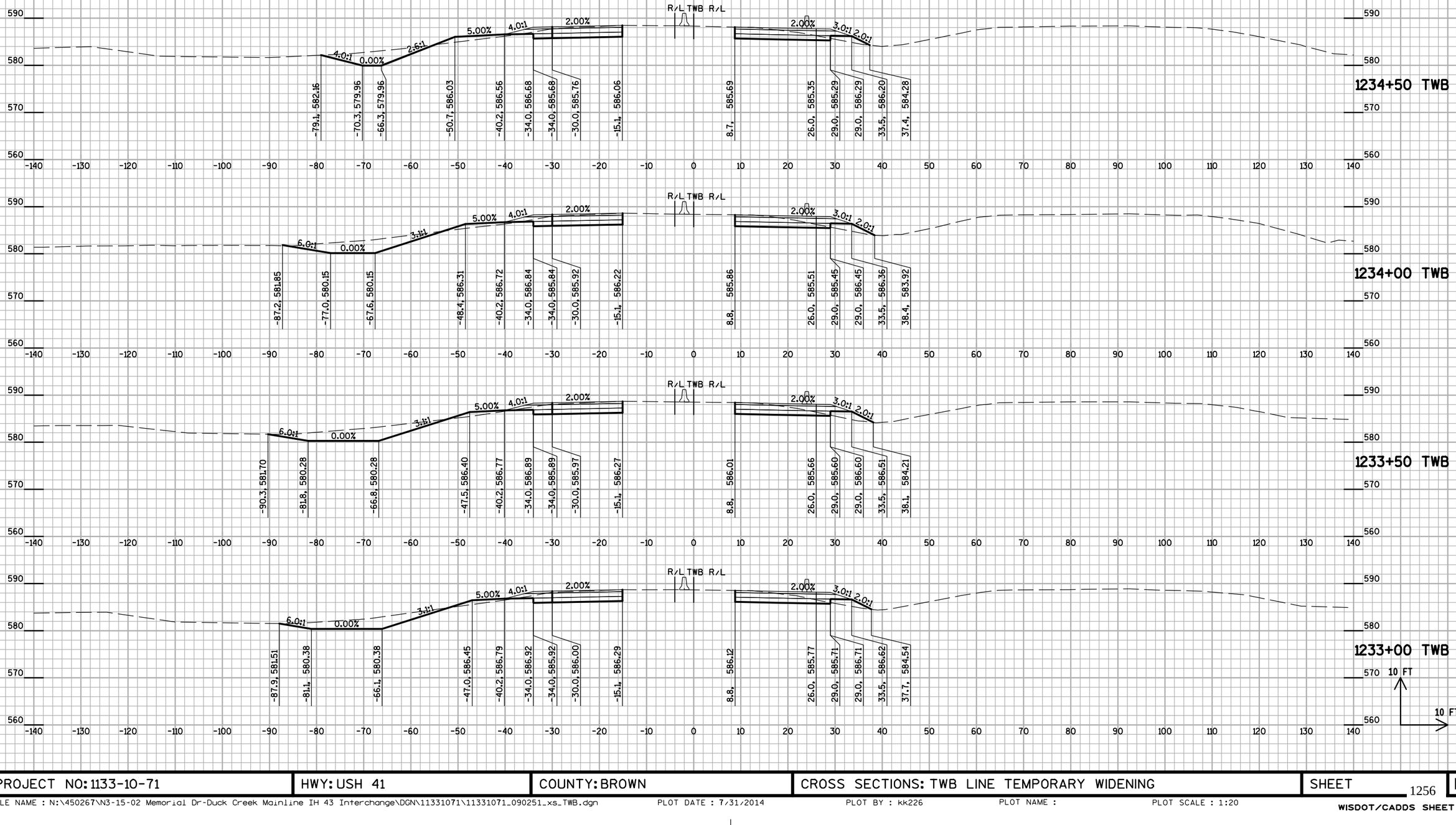
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1255	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1233+00 TWB TO 1234+50 TWB



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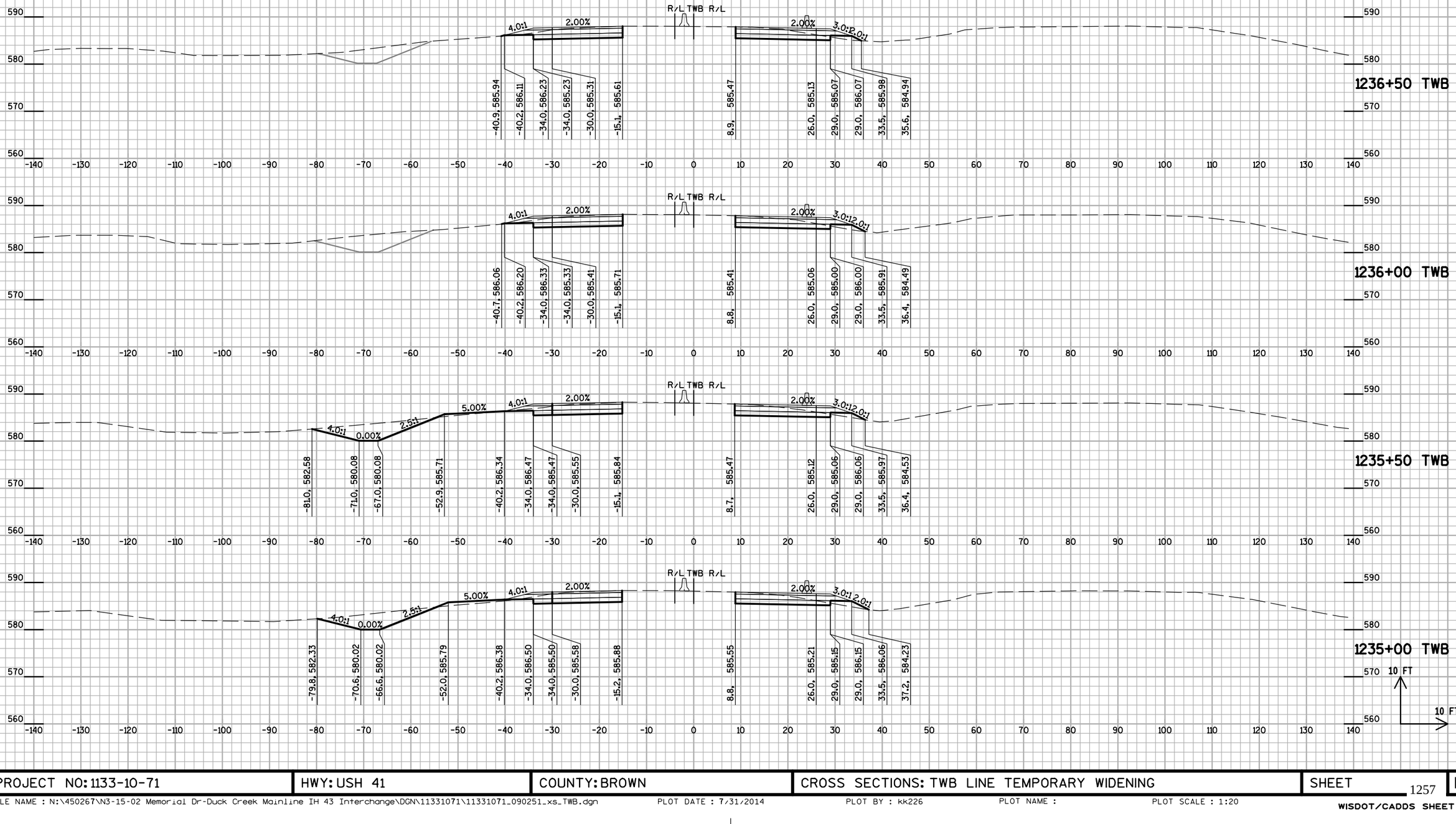
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1256	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1235+00 TWB TO 1236+50 TWB



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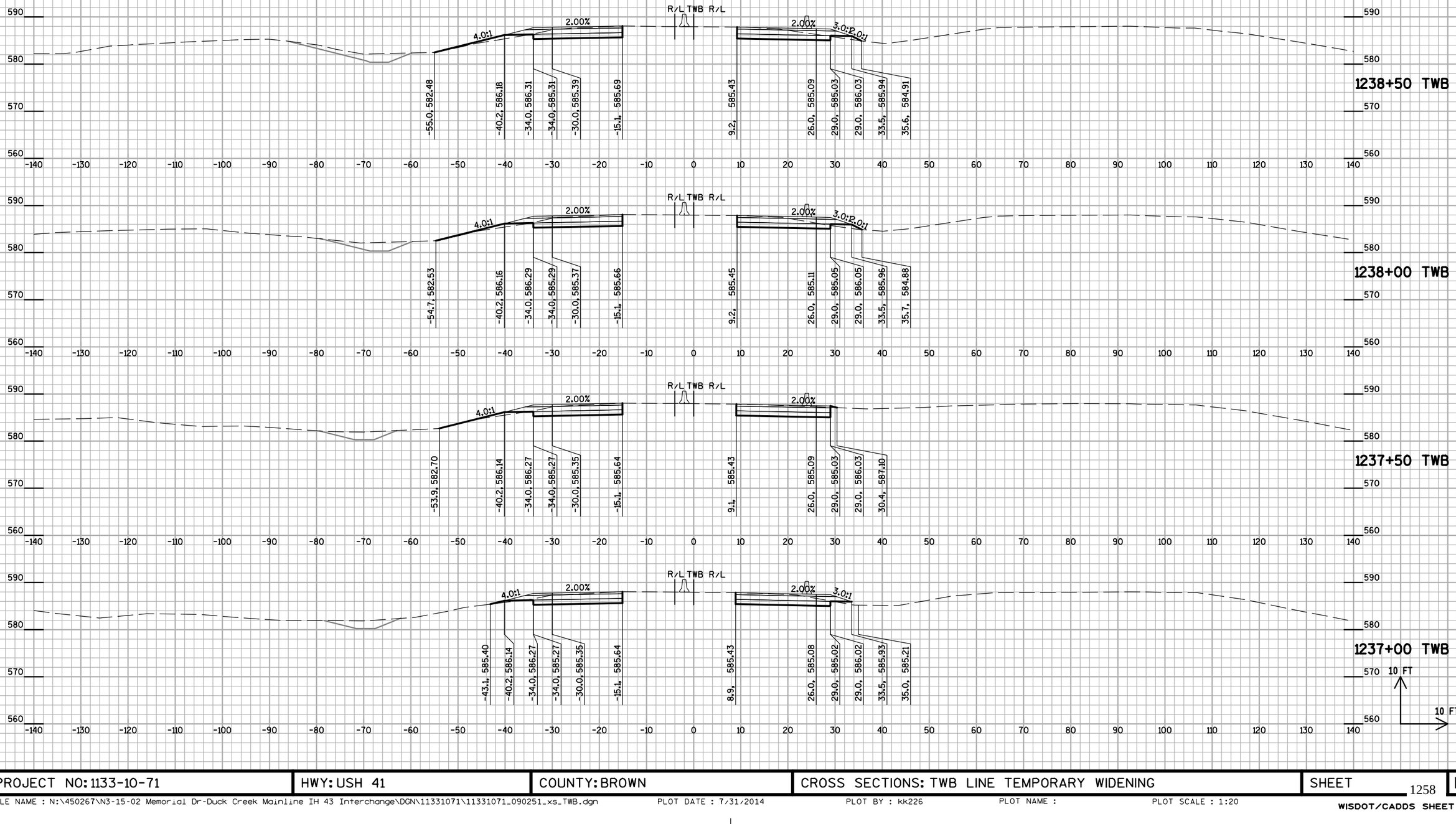
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1257	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1237+00 TWB TO 1238+50 TWB



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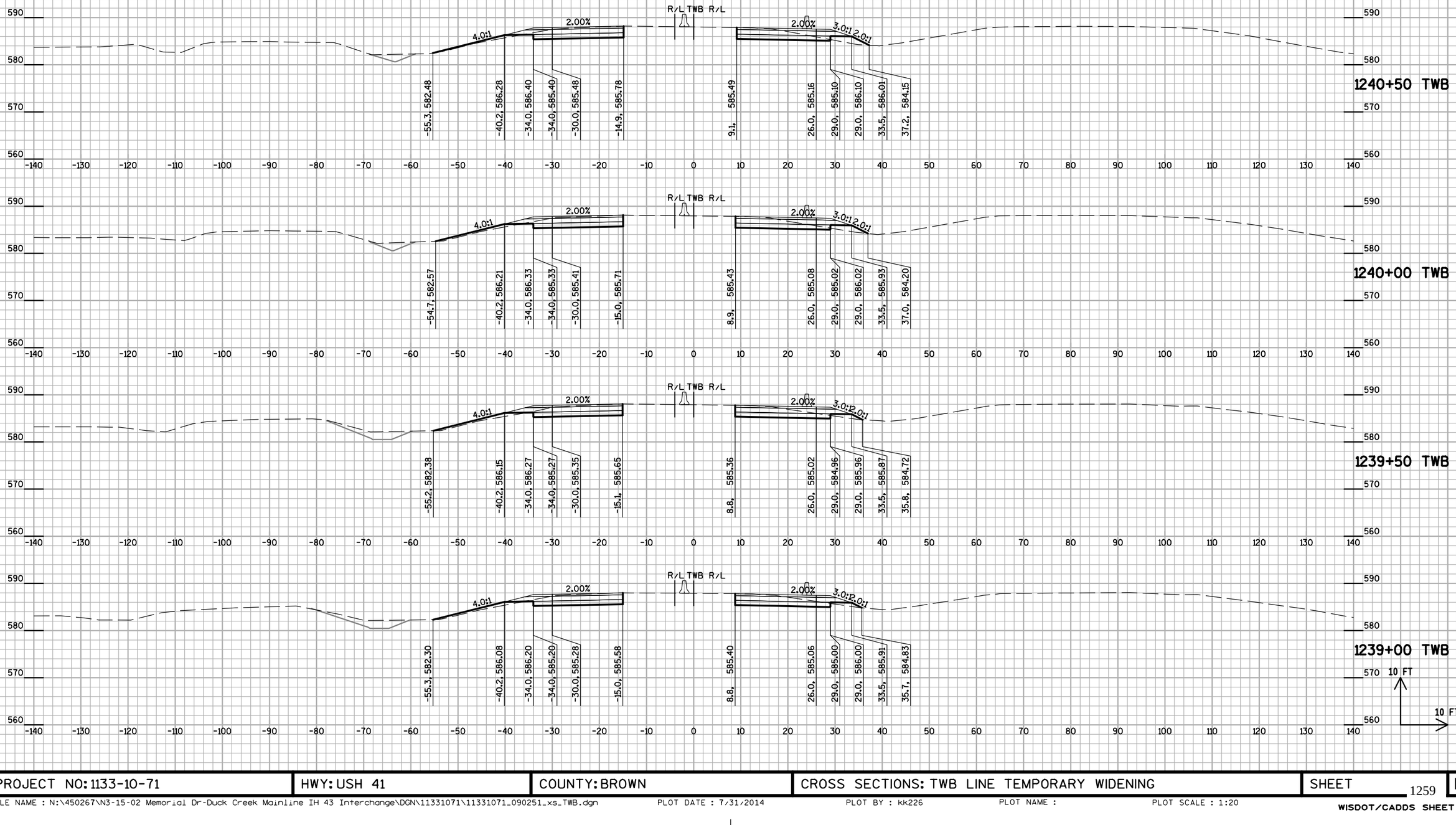
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1258	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1239+00 TWB TO 1240+50 TWB



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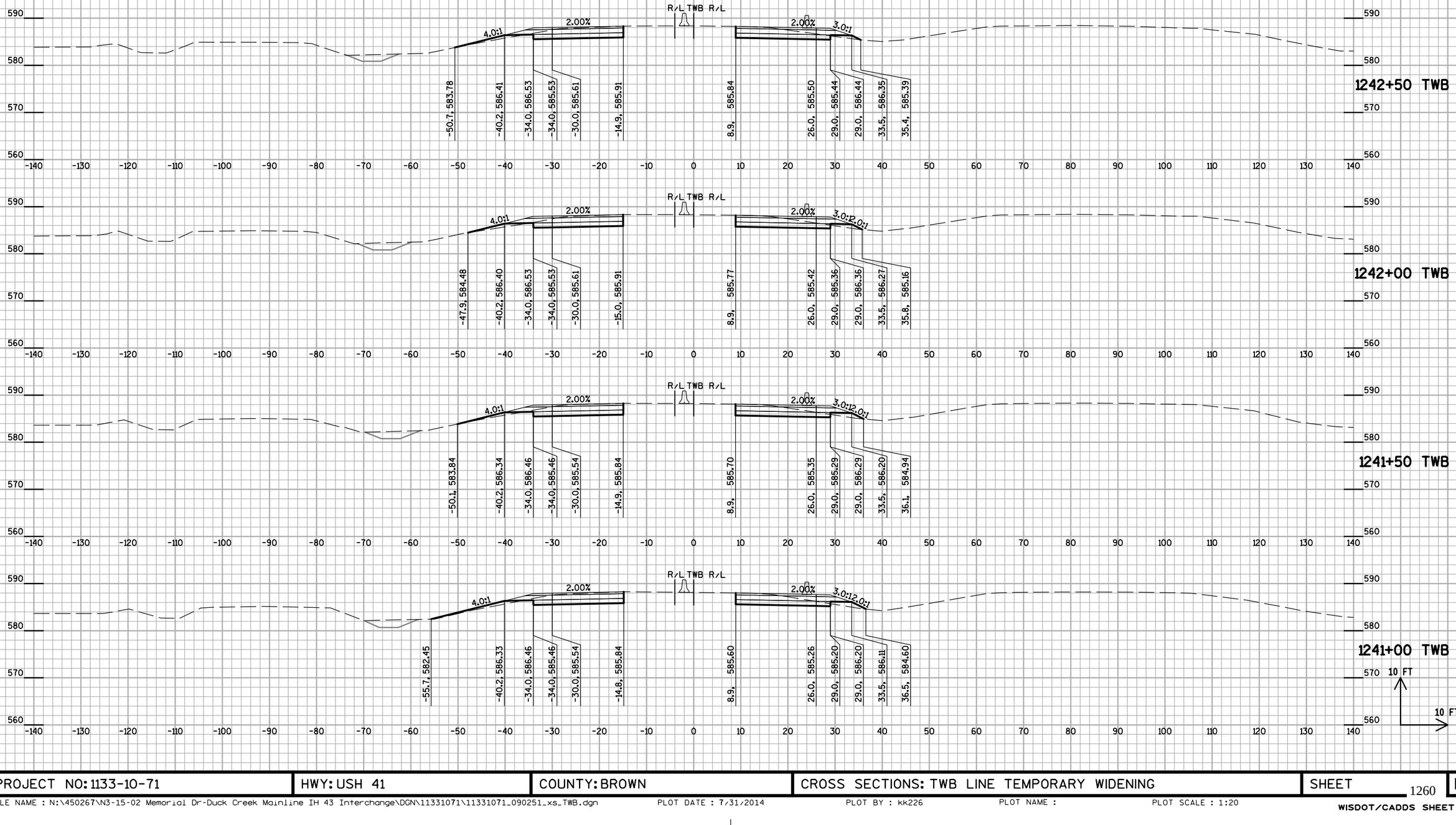
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1259	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1241+00 TWB TO 1242+50 TWB



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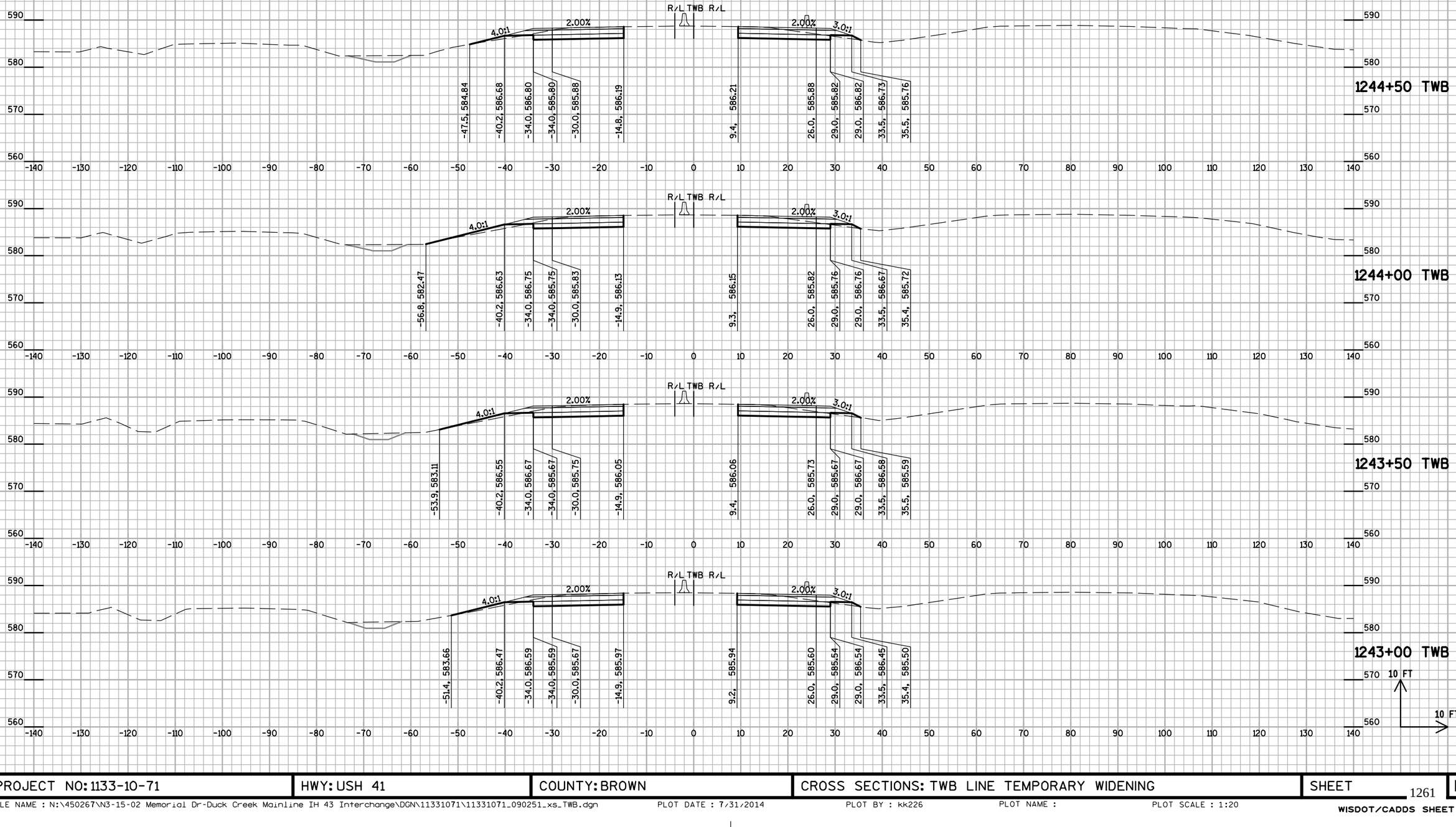
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1260	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1243+00 TWB TO 1244+50 TWB



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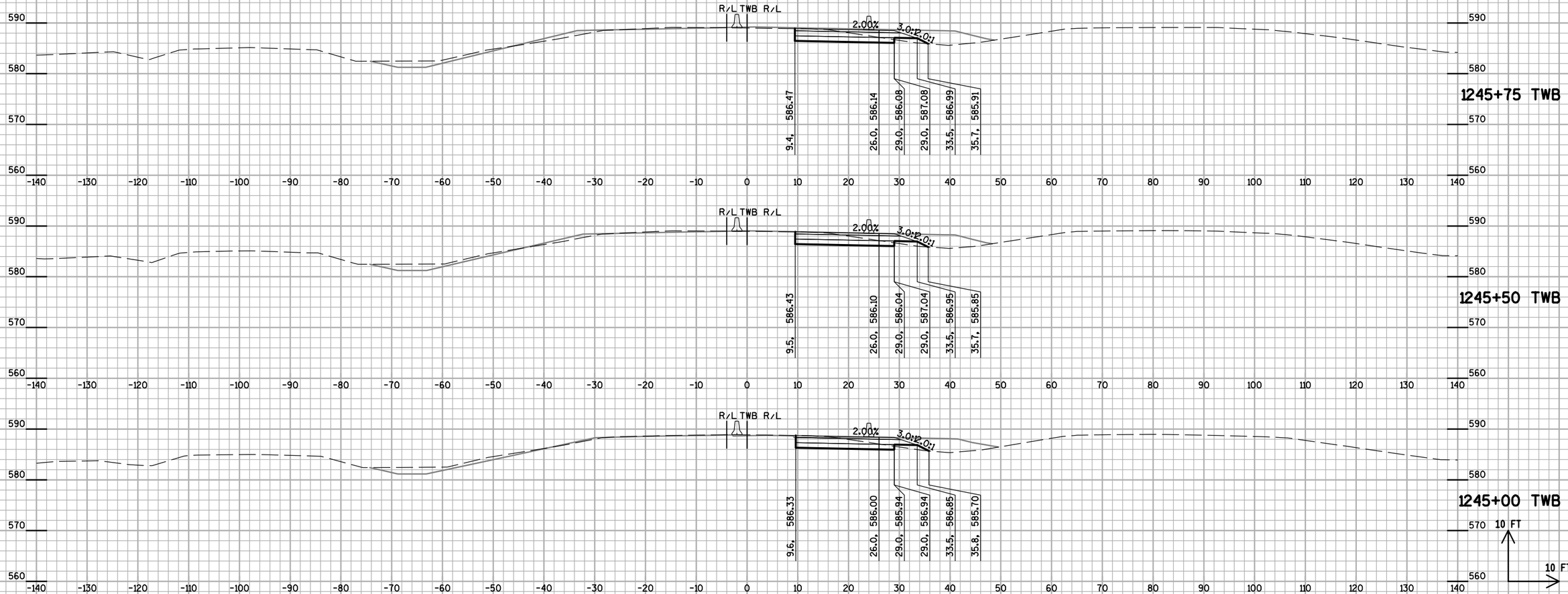
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET 1261	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1245+00 TWB TO 1245+75 TWB



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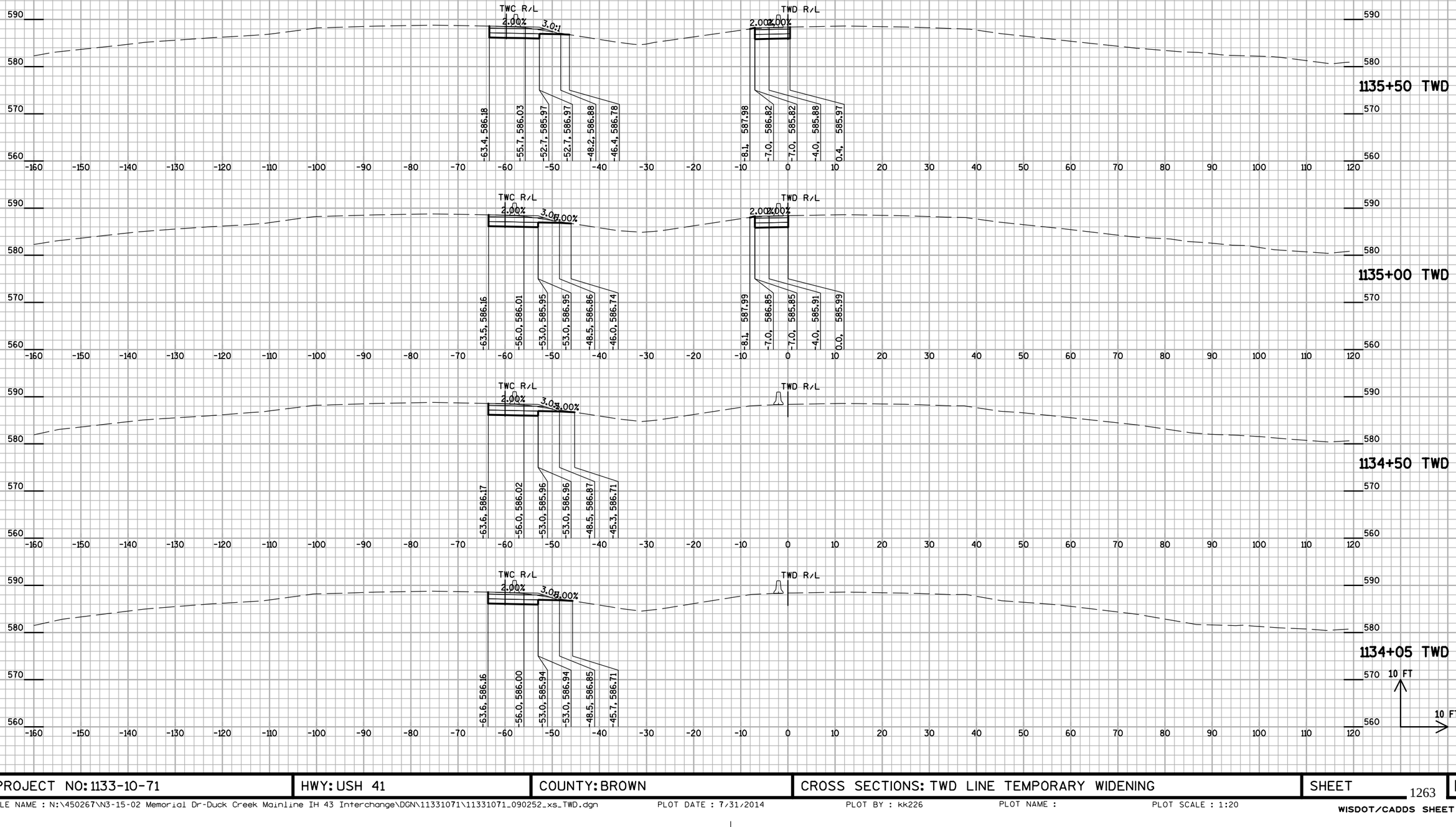
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWB LINE TEMPORARY WIDENING	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090251_xs_TWB.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1134+05 TWD TO 1135+50 TWD

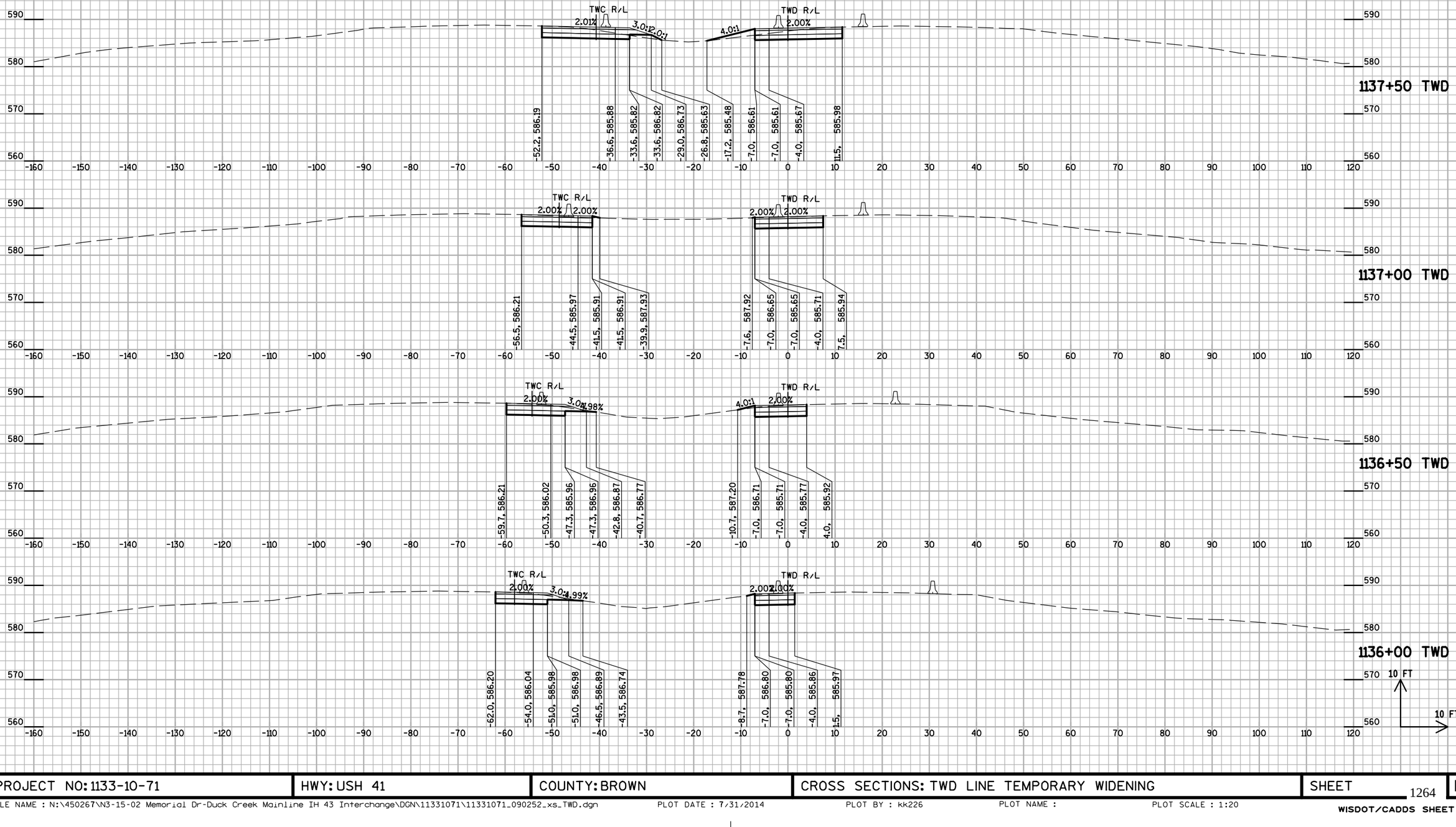


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1263	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1136+00 TWD TO 1137+50 TWD



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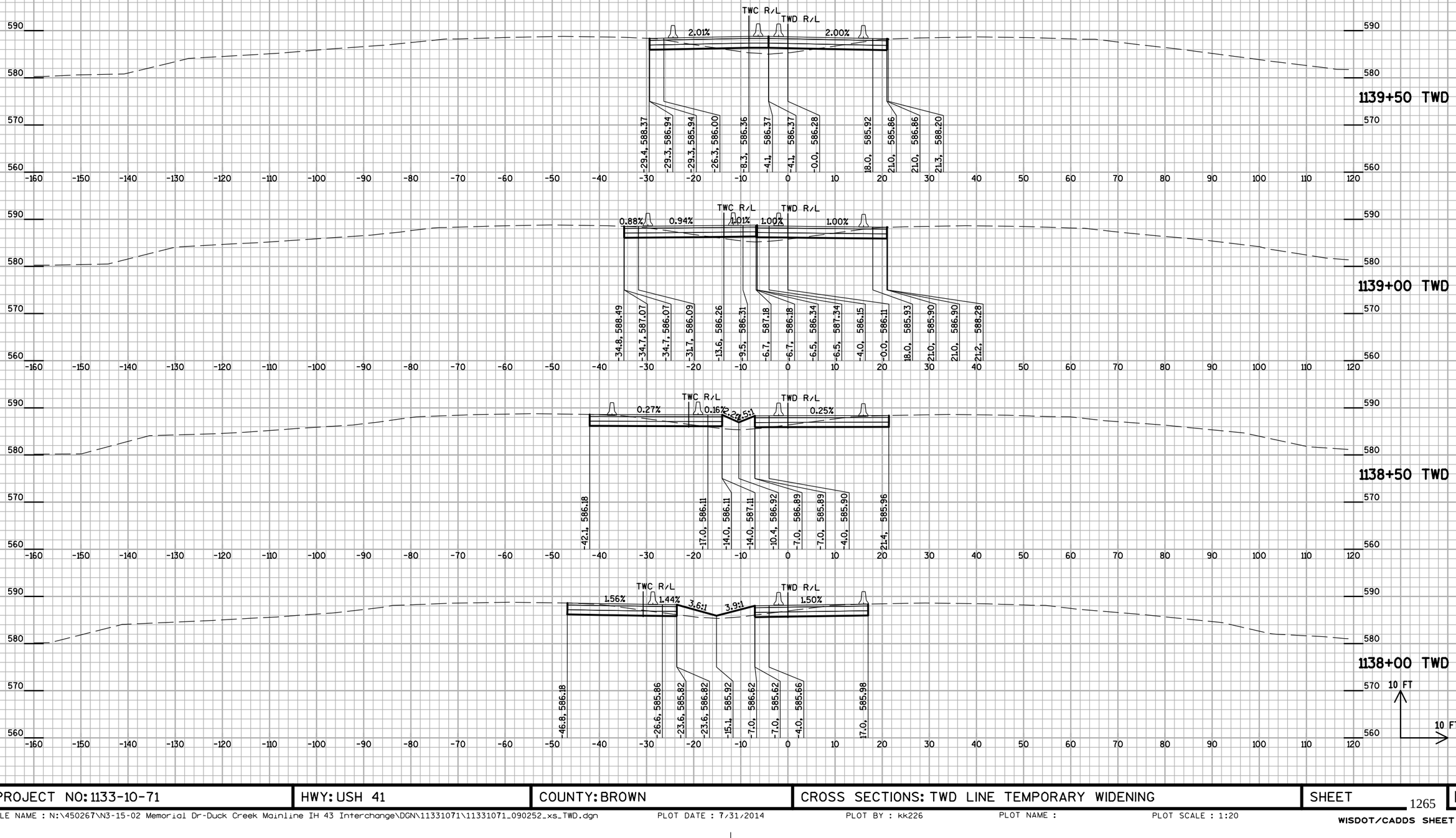
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1264	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1138+00 TWD TO 1139+50 TWD



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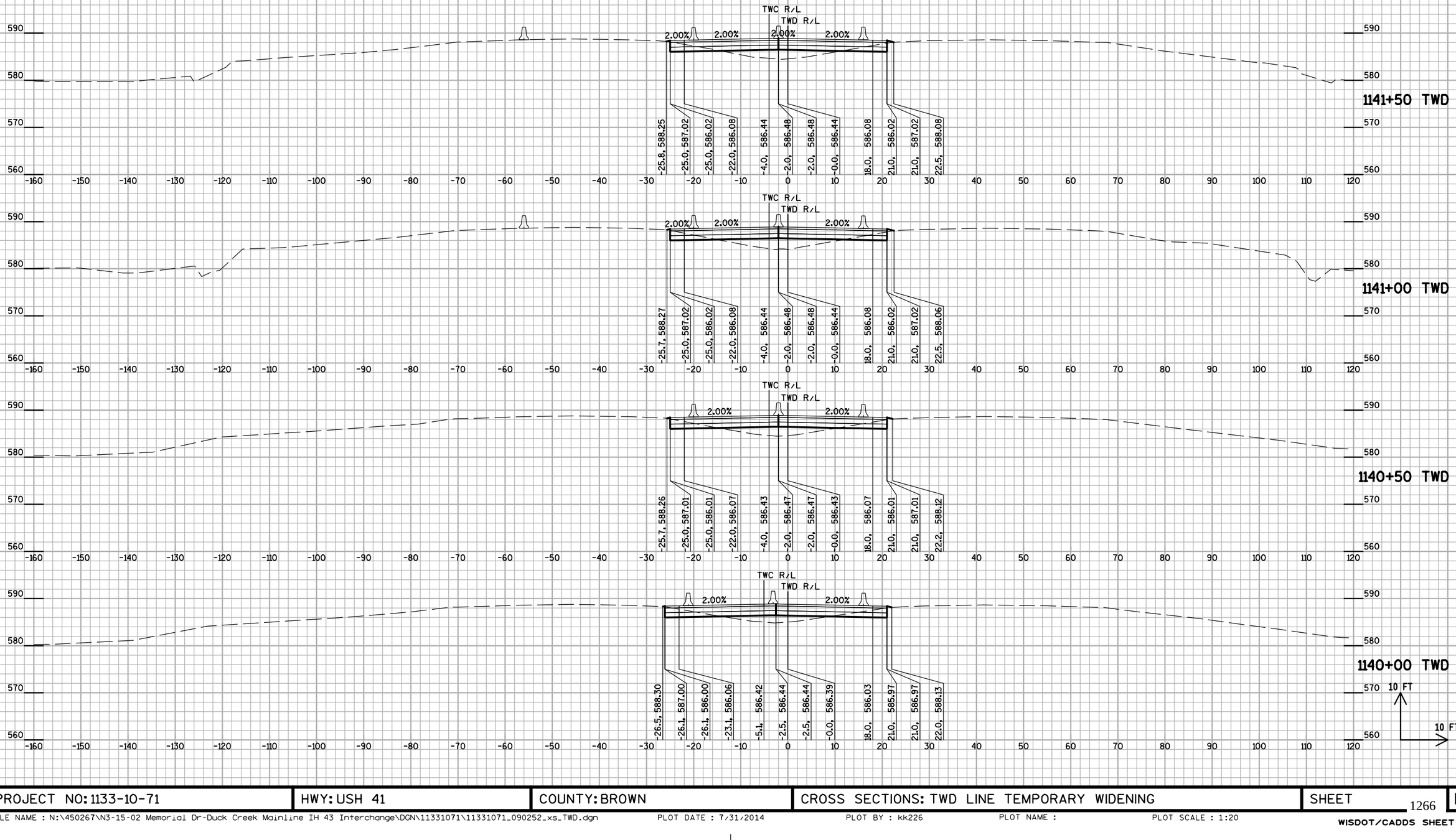
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1265	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1140+00 TWD TO 1141+50 TWD



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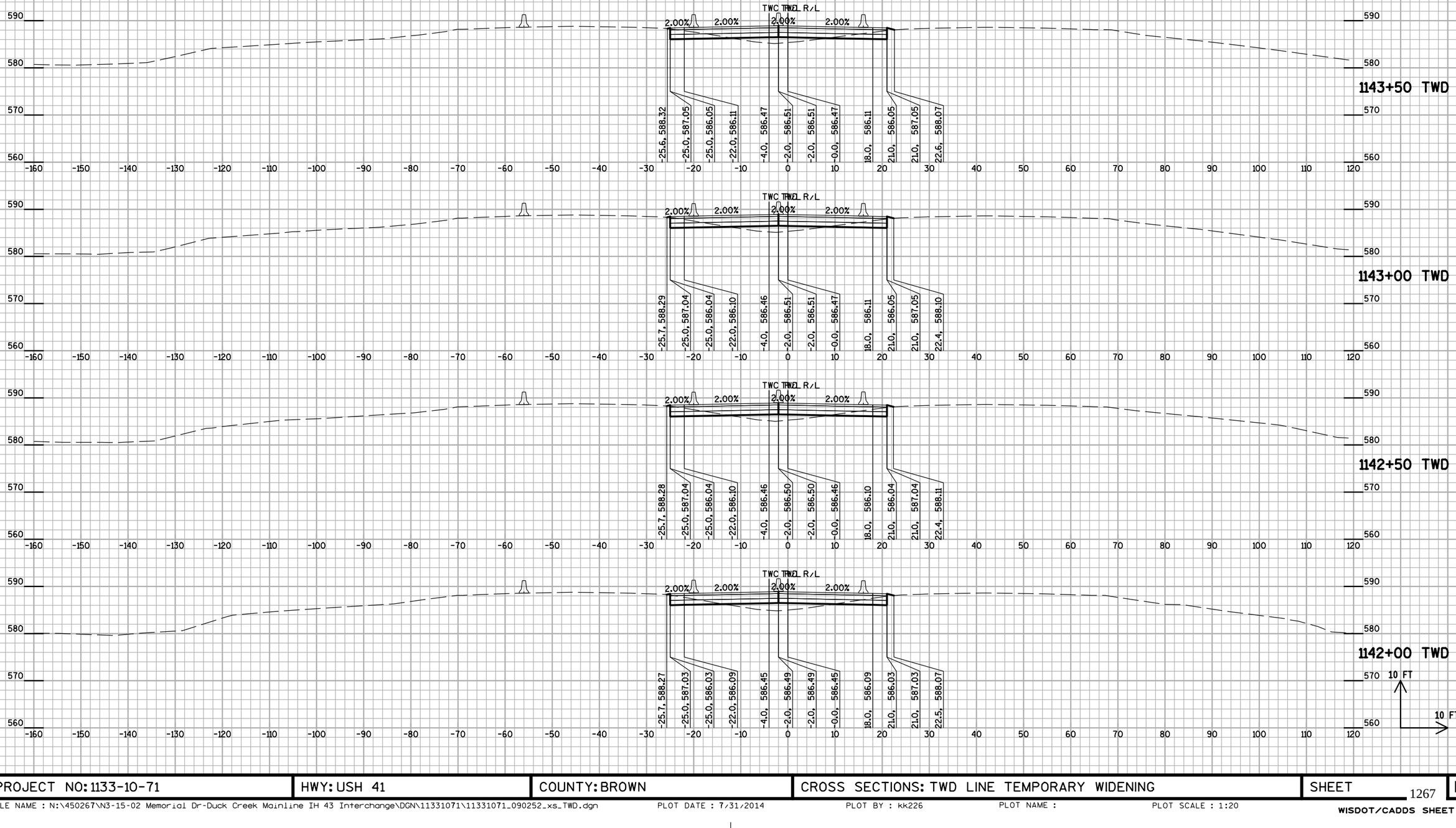
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1266	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1142+00 TWD TO 1143+50 TWD



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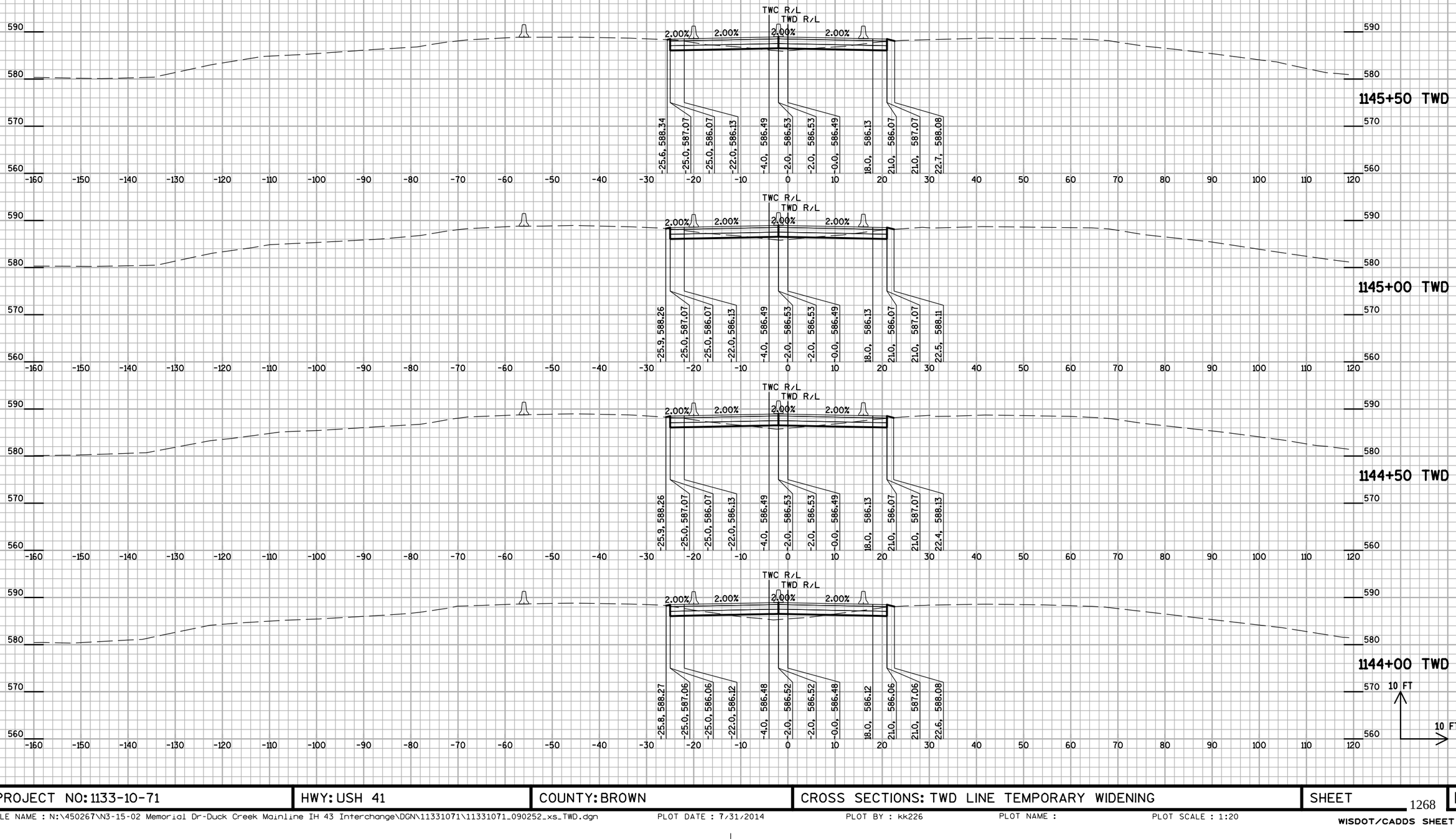
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1267	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1144+00 TWD TO 1145+50 TWD

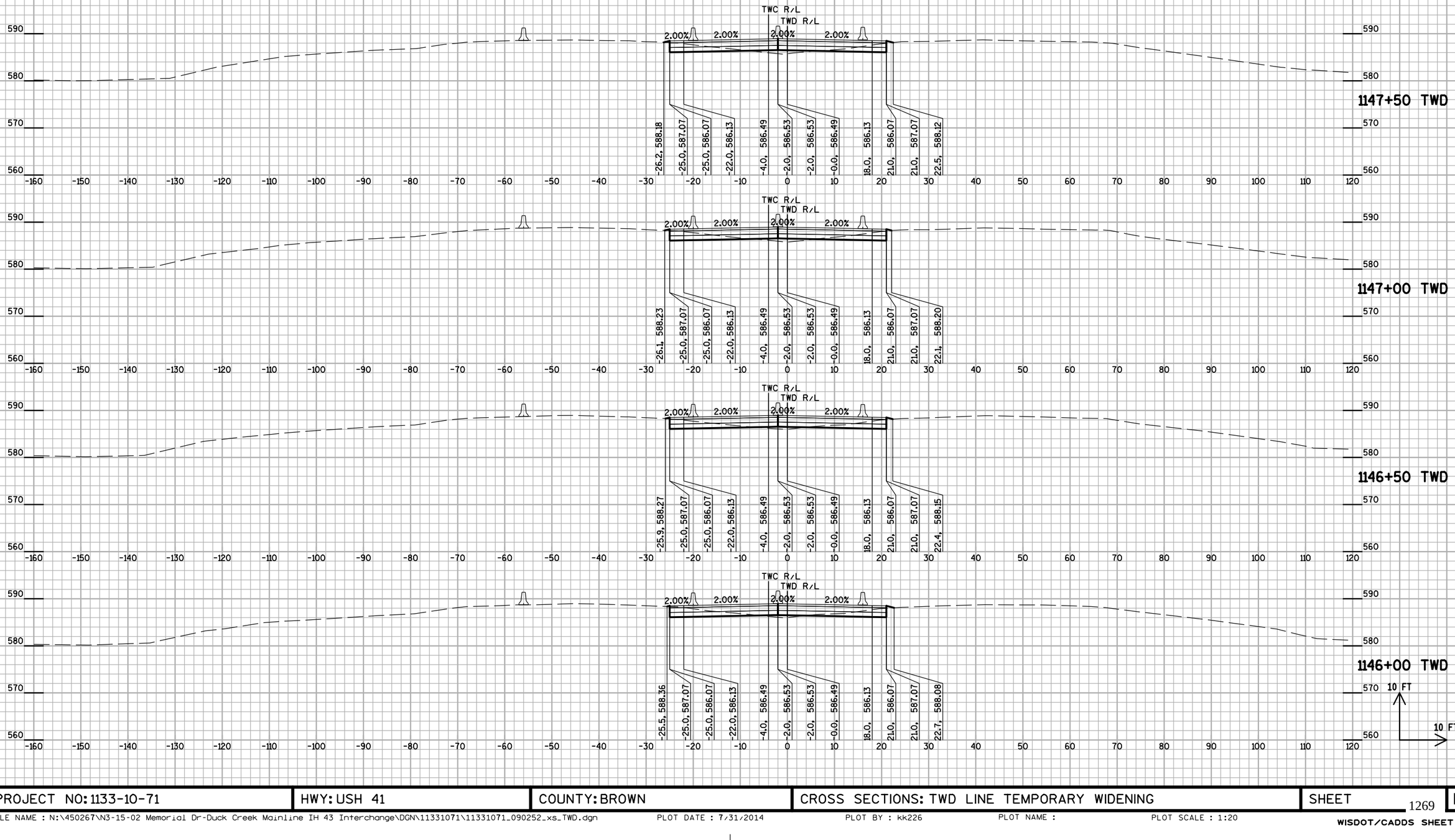


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1268	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1146+00 TWD TO 1147+50 TWD



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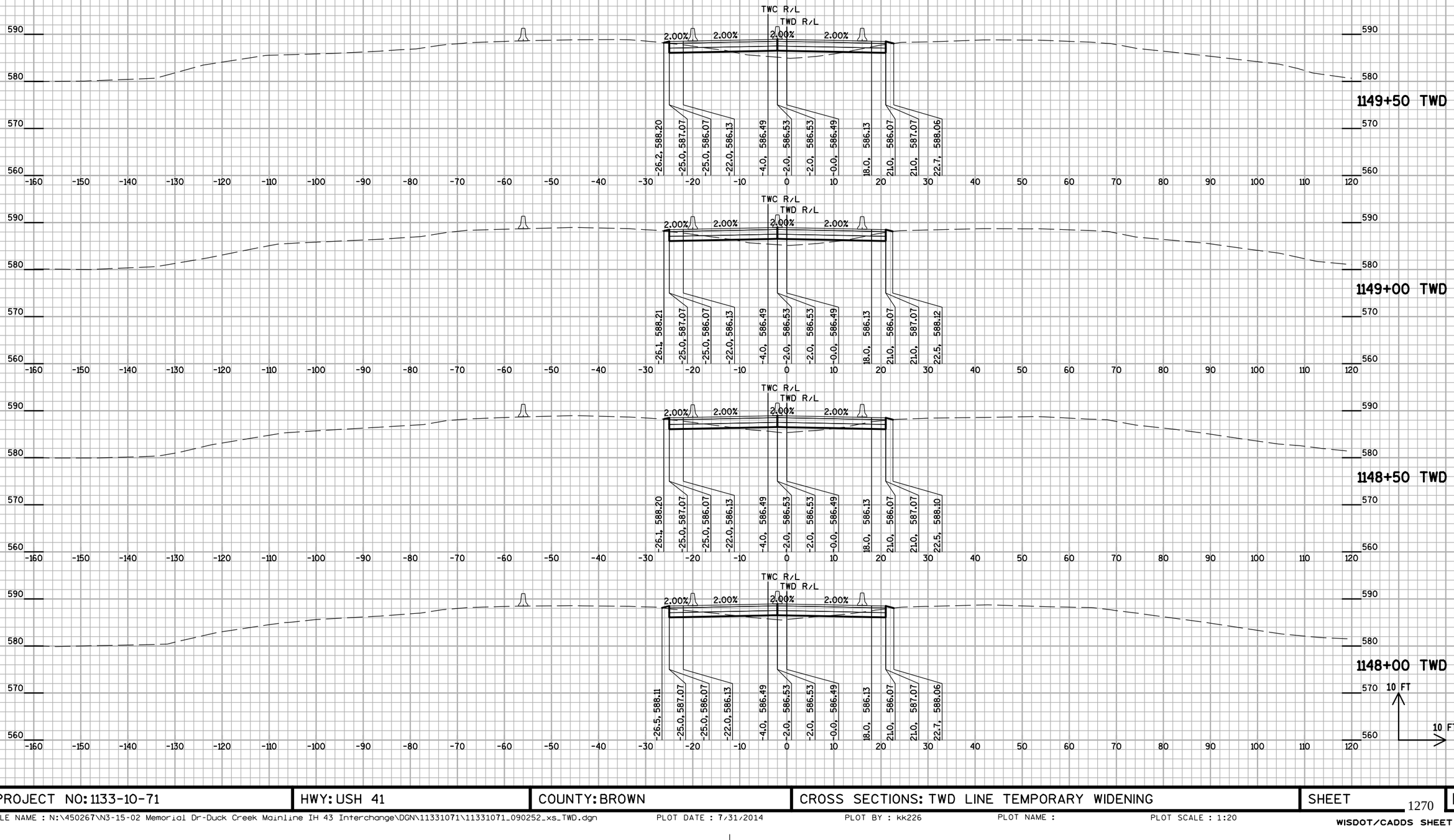
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1269	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1148+00 TWD TO 1149+50 TWD



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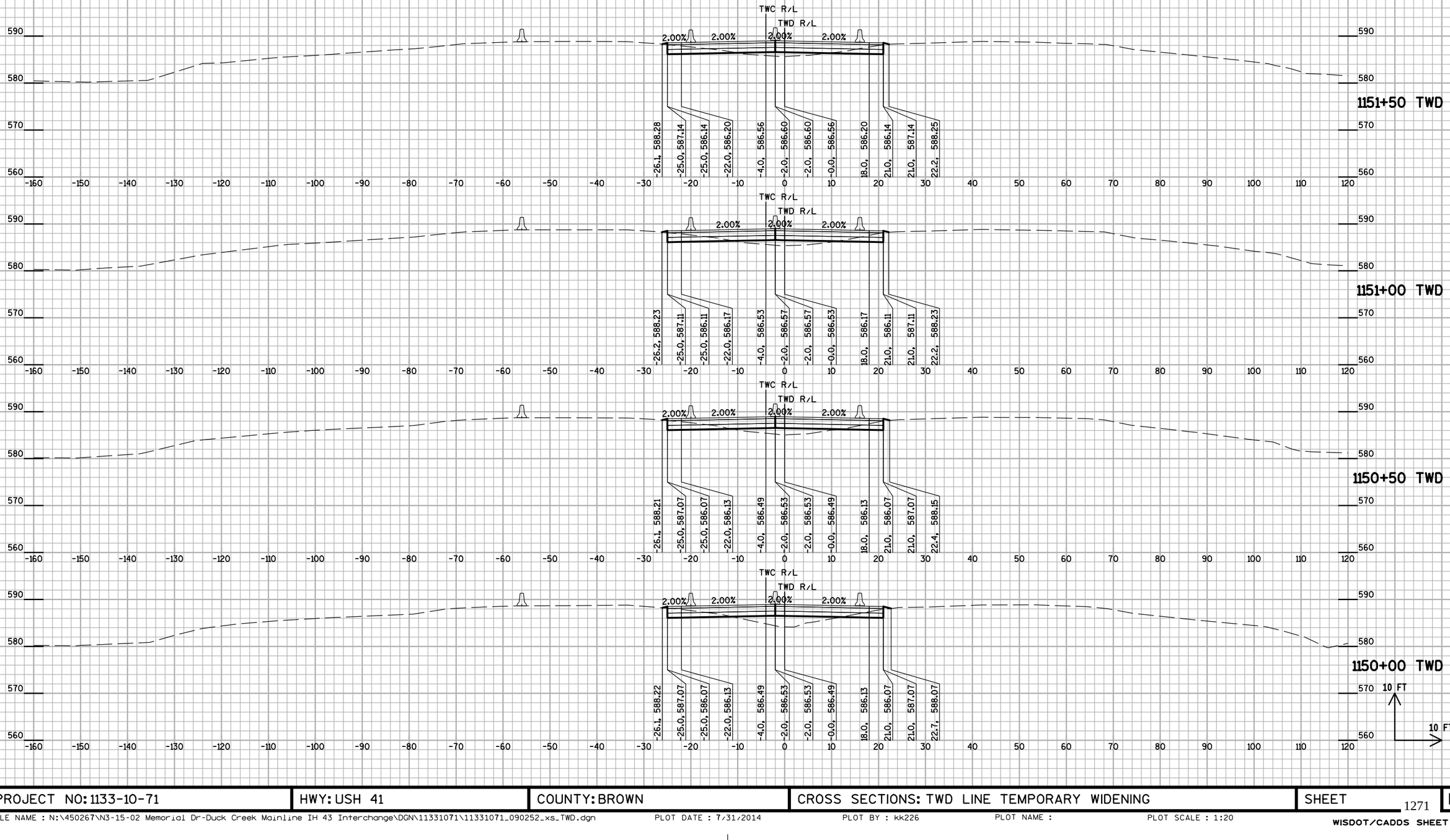
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1270	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1150+00 TWD TO 1151+50 TWD



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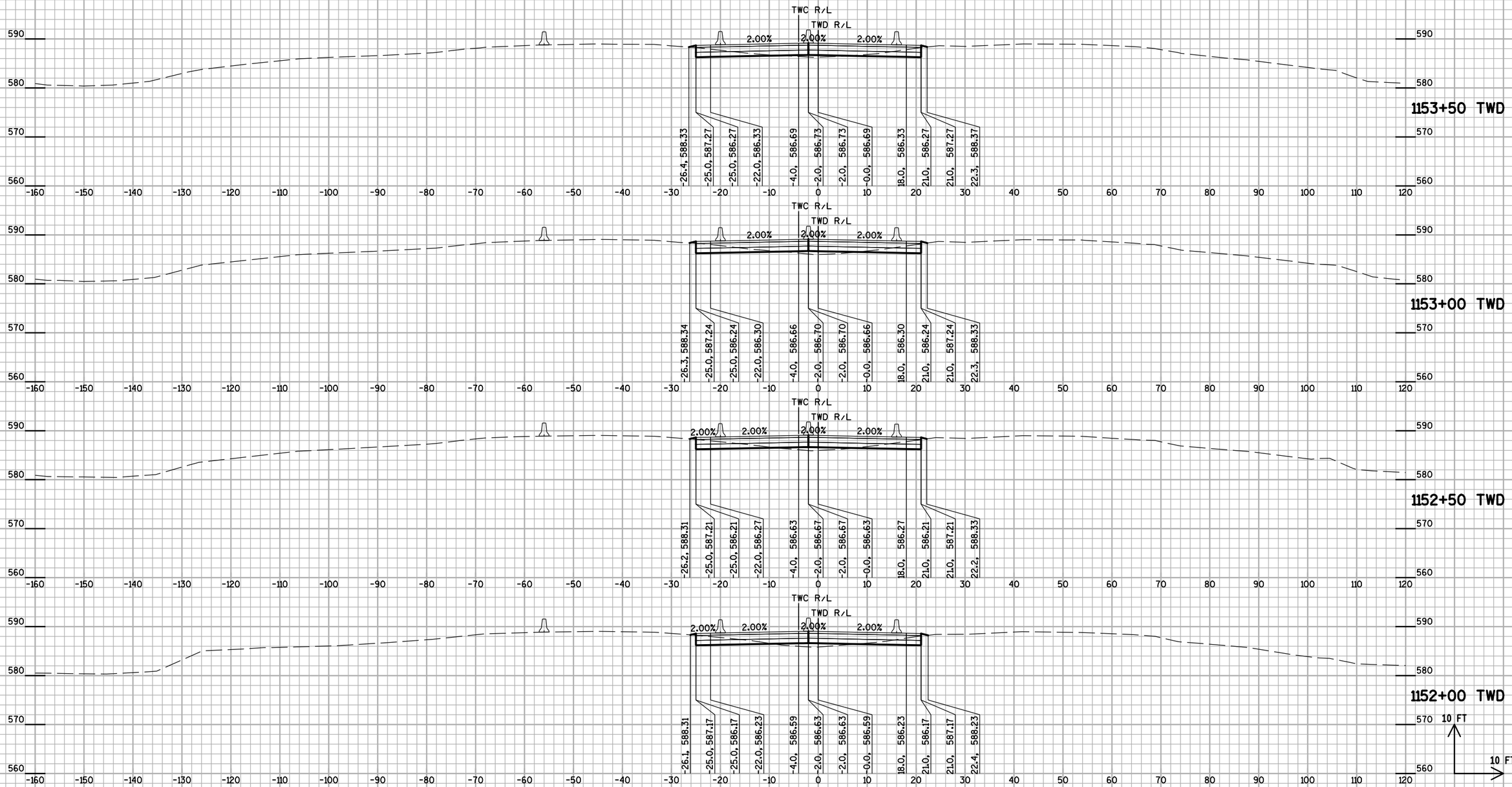
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1271	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

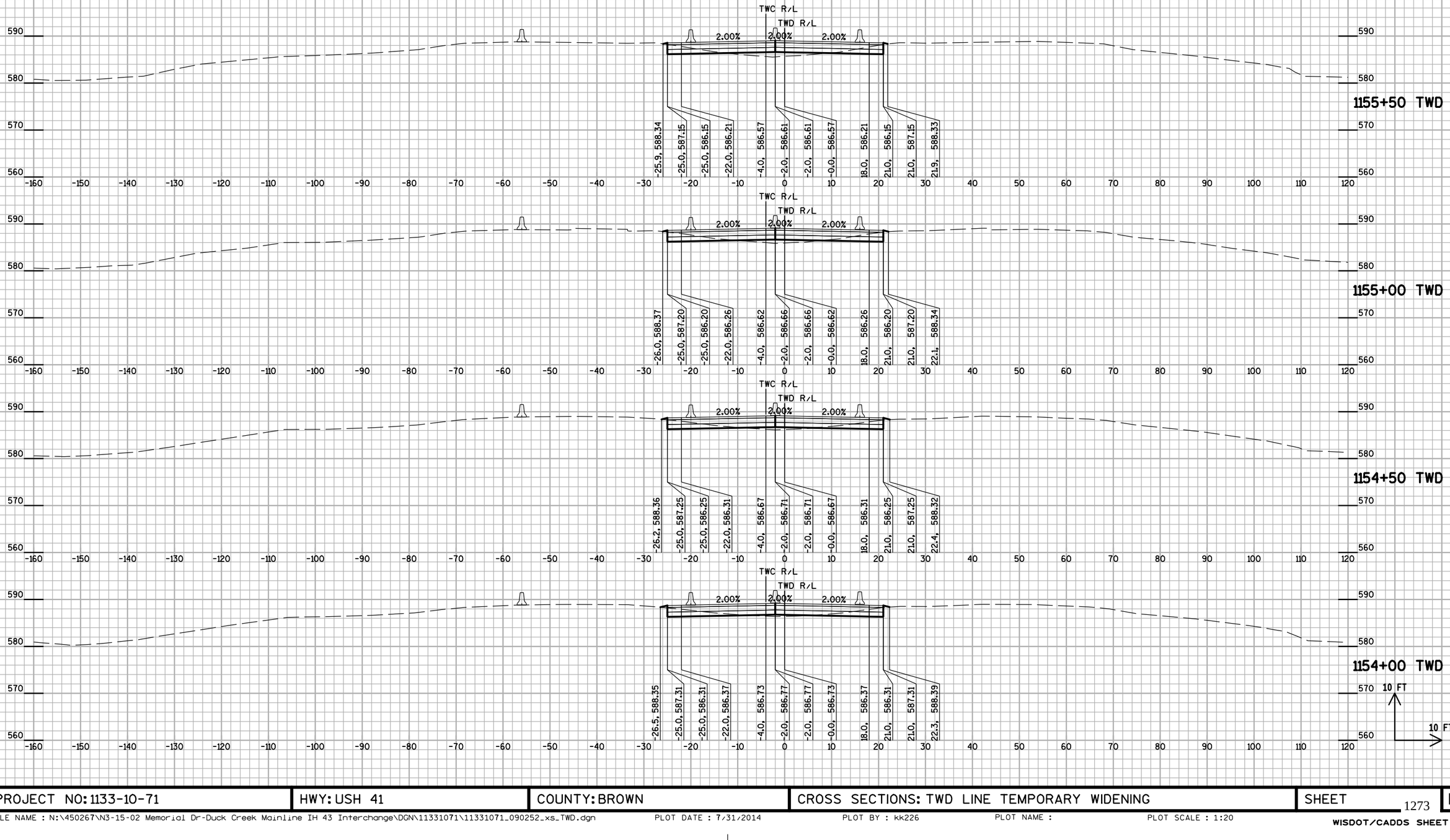
WISDOT/CADDS SHEET 21

STA. 1152+00 TWD TO 1153+50 TWD



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1272	E

STA. 1154+00 TWD TO 1155+50 TWD



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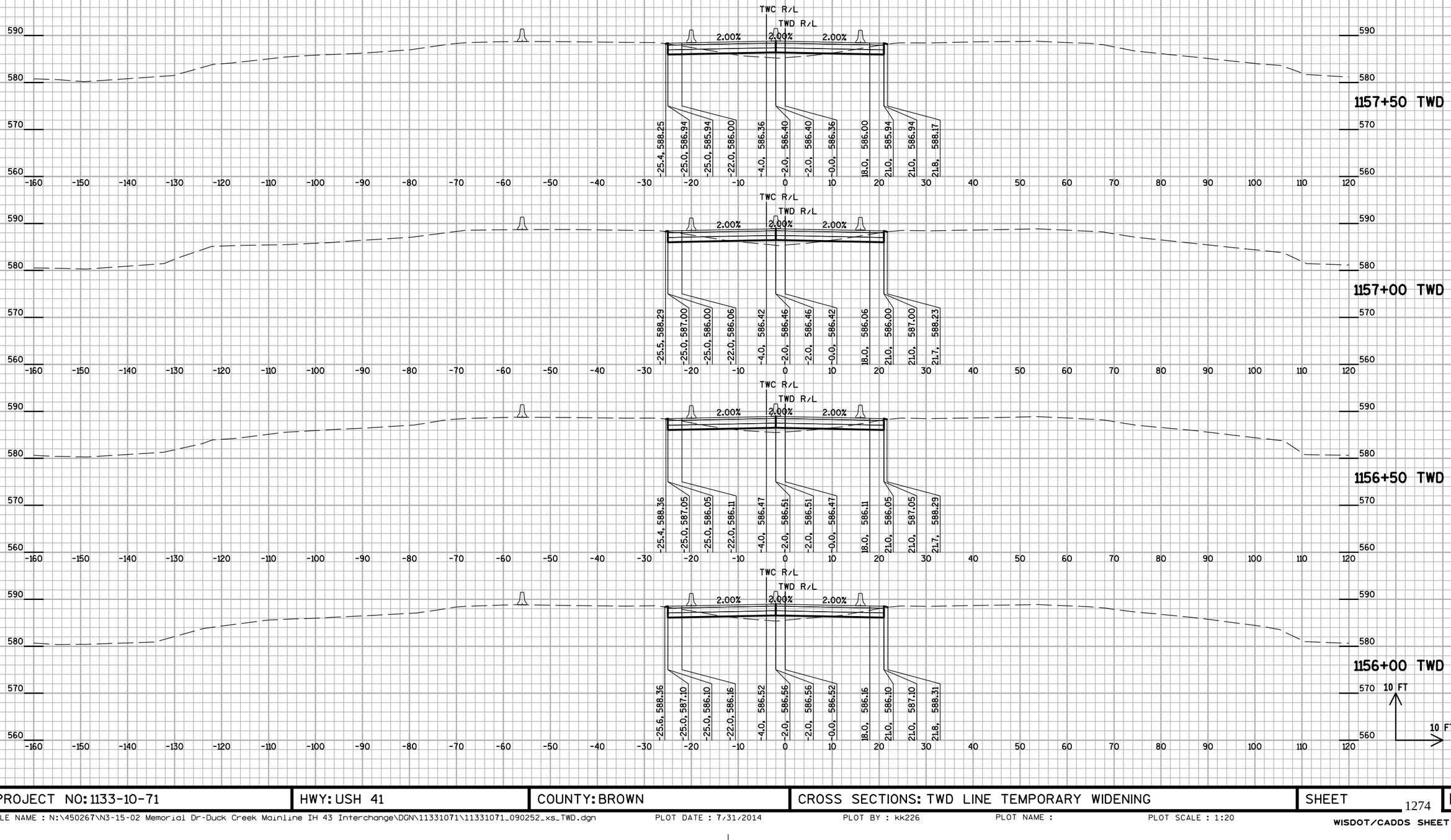
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1273	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1156+00 TWD TO 1157+50 TWD



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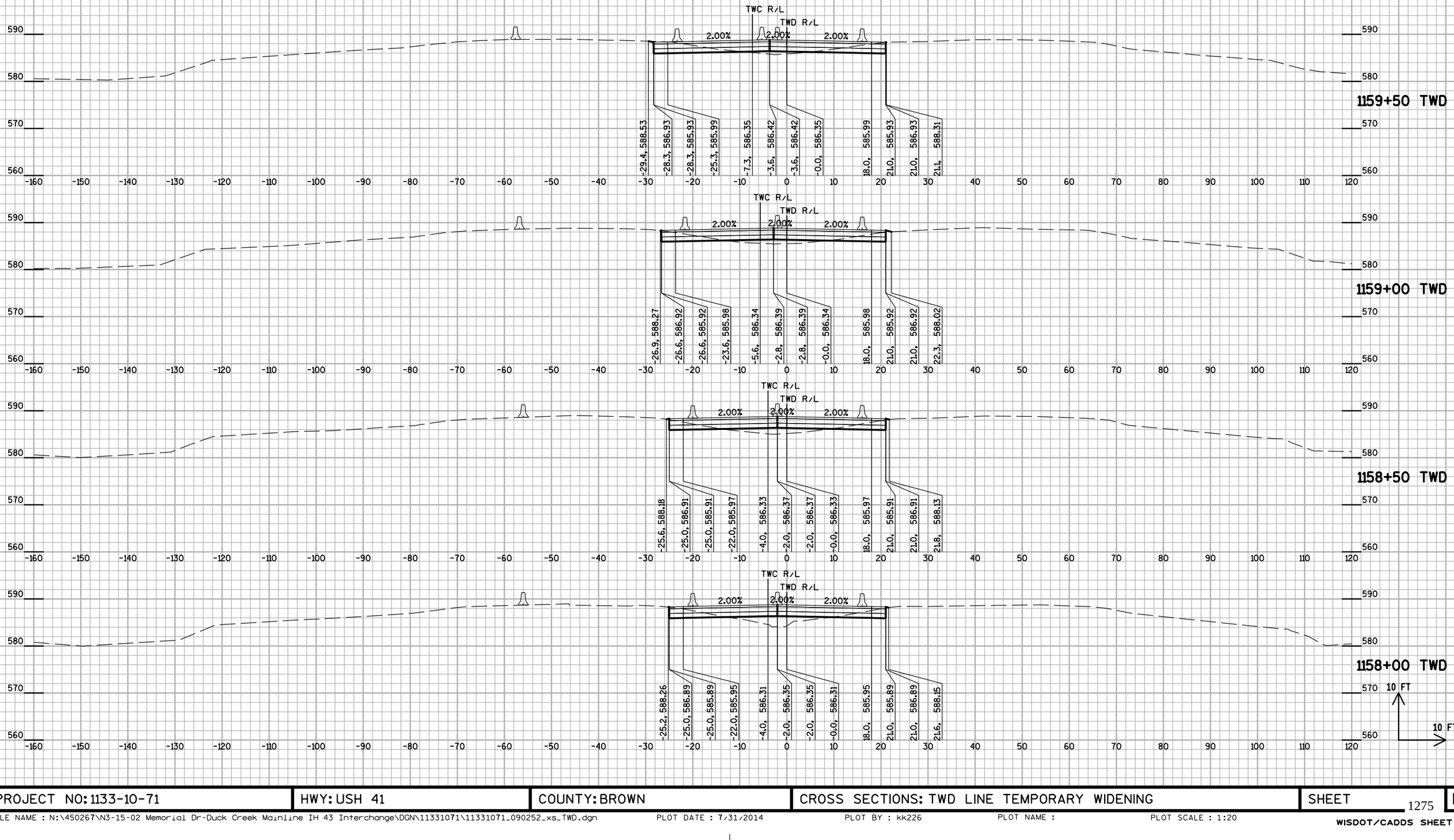
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1274	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1158+00 TWD TO 1159+50 TWD



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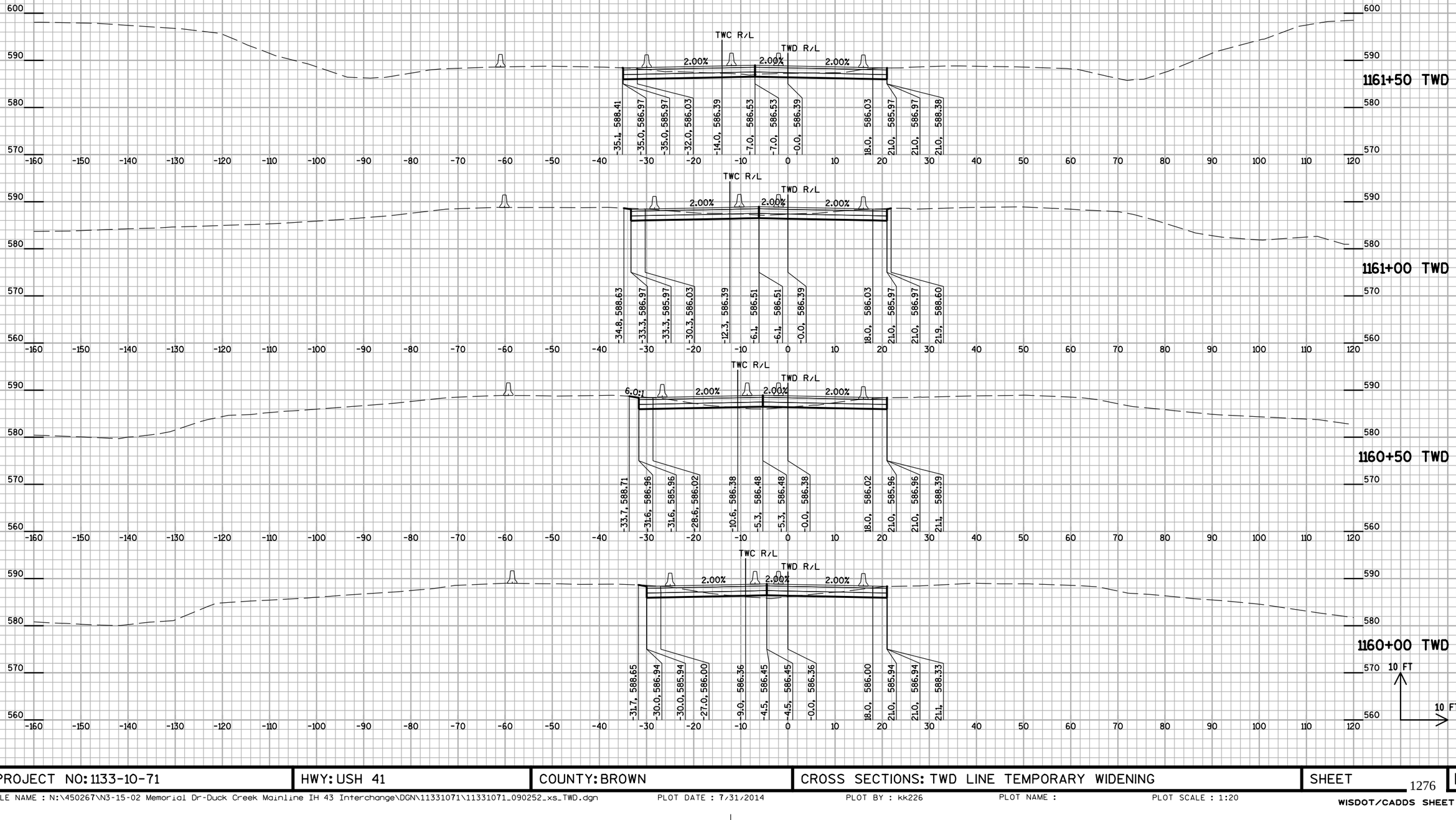
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1275	E

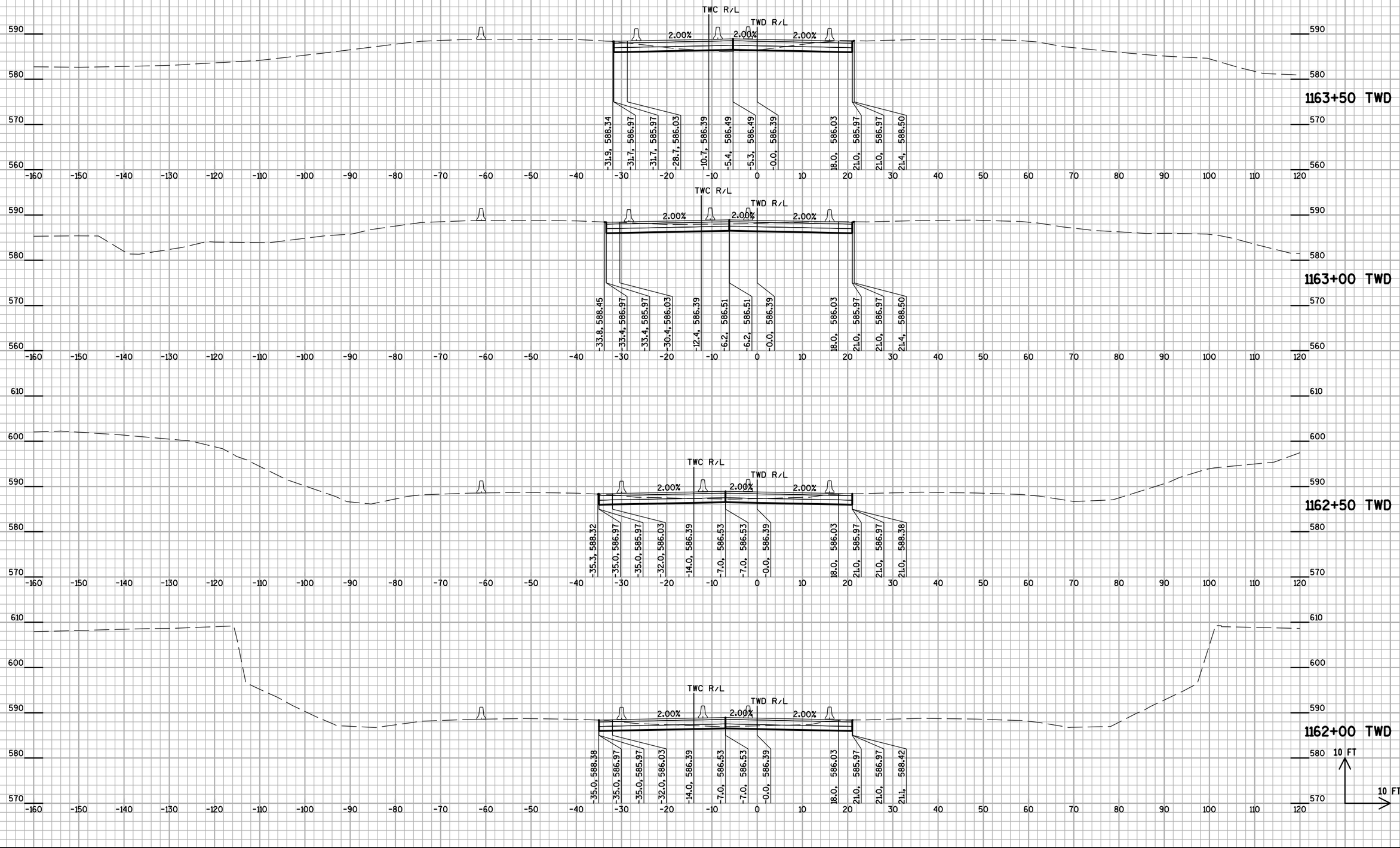
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1160+00 TWD TO 1161+50 TWD



PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1276	E

STA. 1162+00 TWD TO 1163+50 TWD



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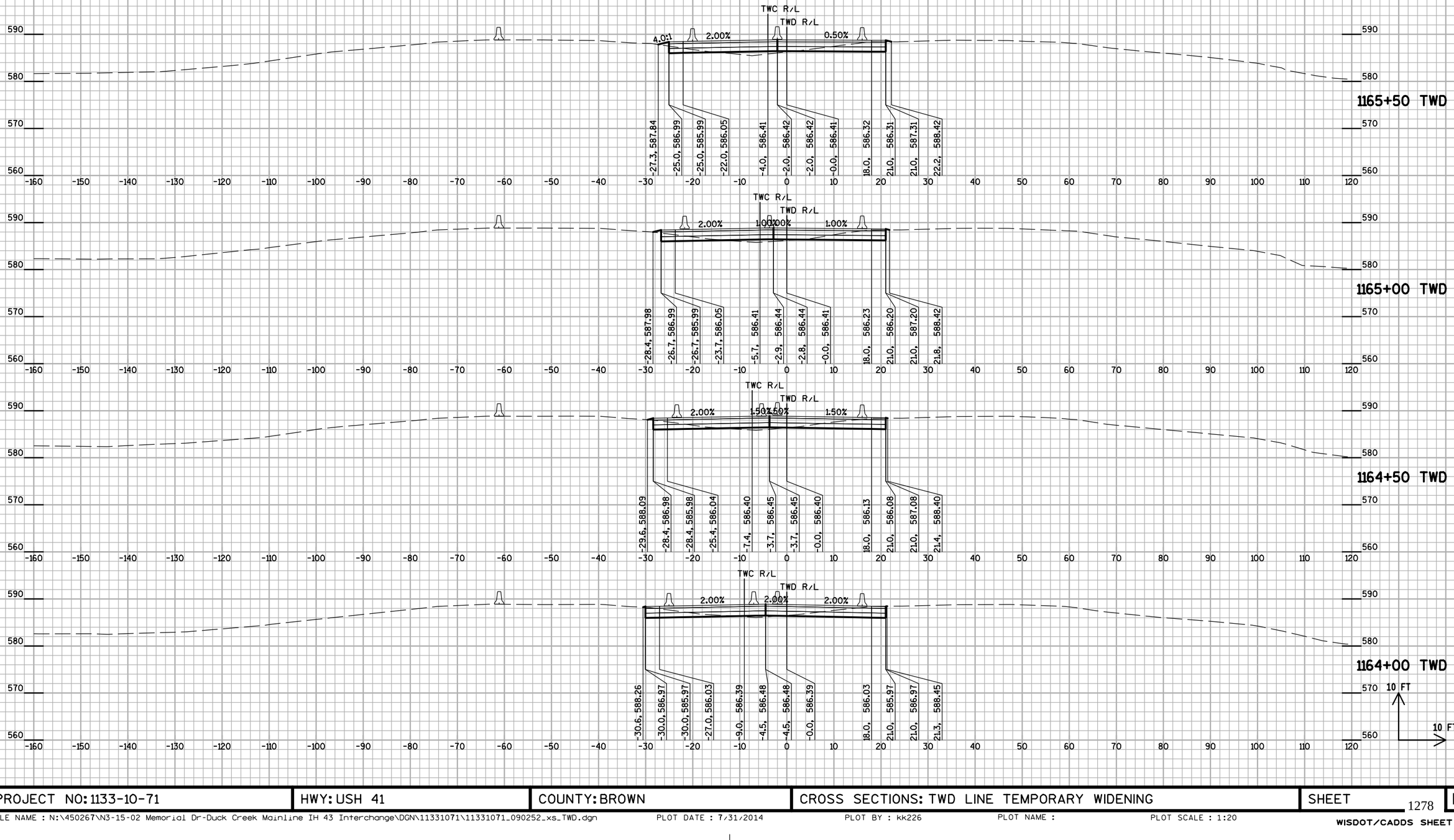
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1277	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1164+00 TWD TO 1165+50 TWD



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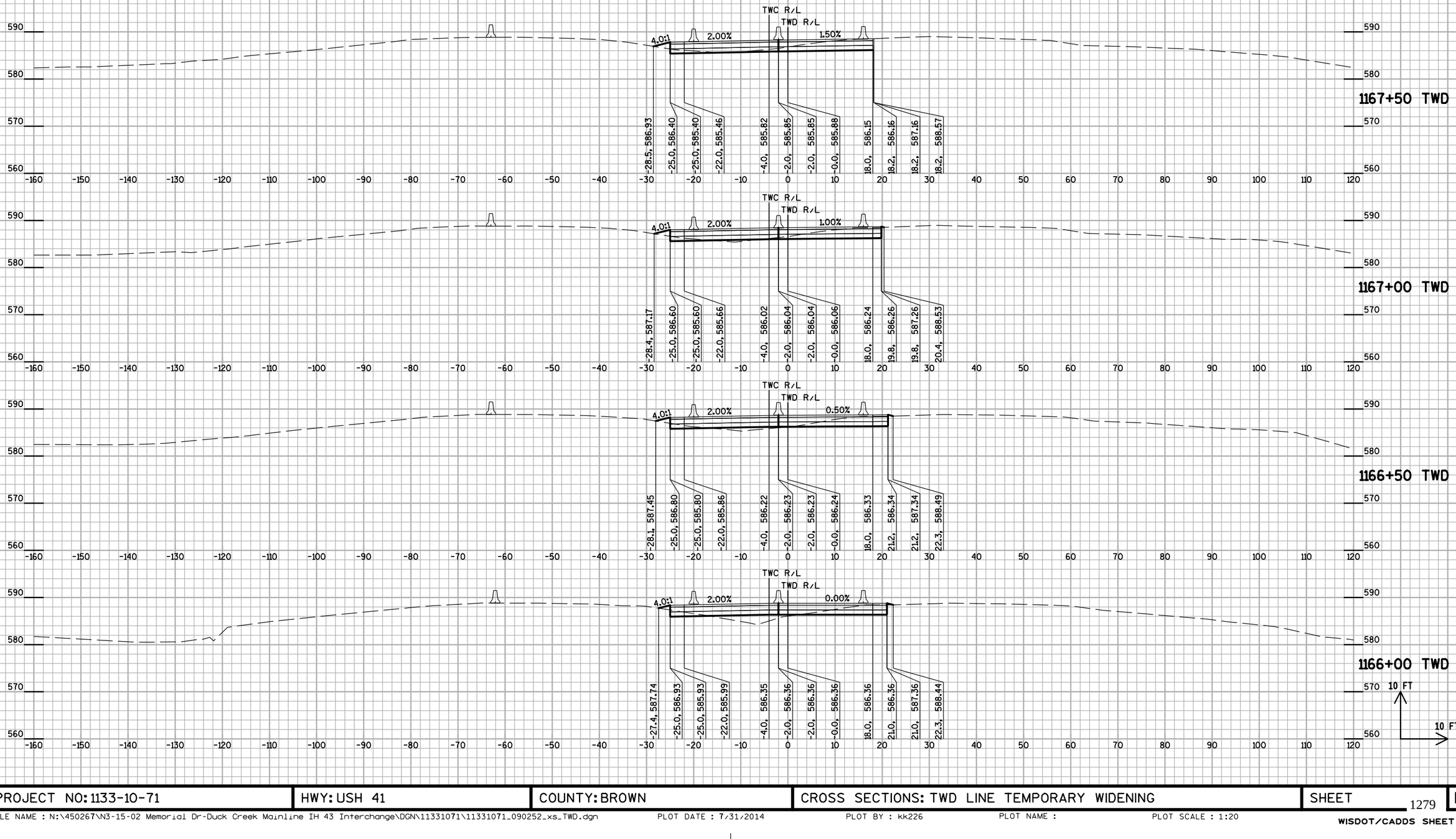
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1278	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1166+00 TWD TO 1167+50 TWD



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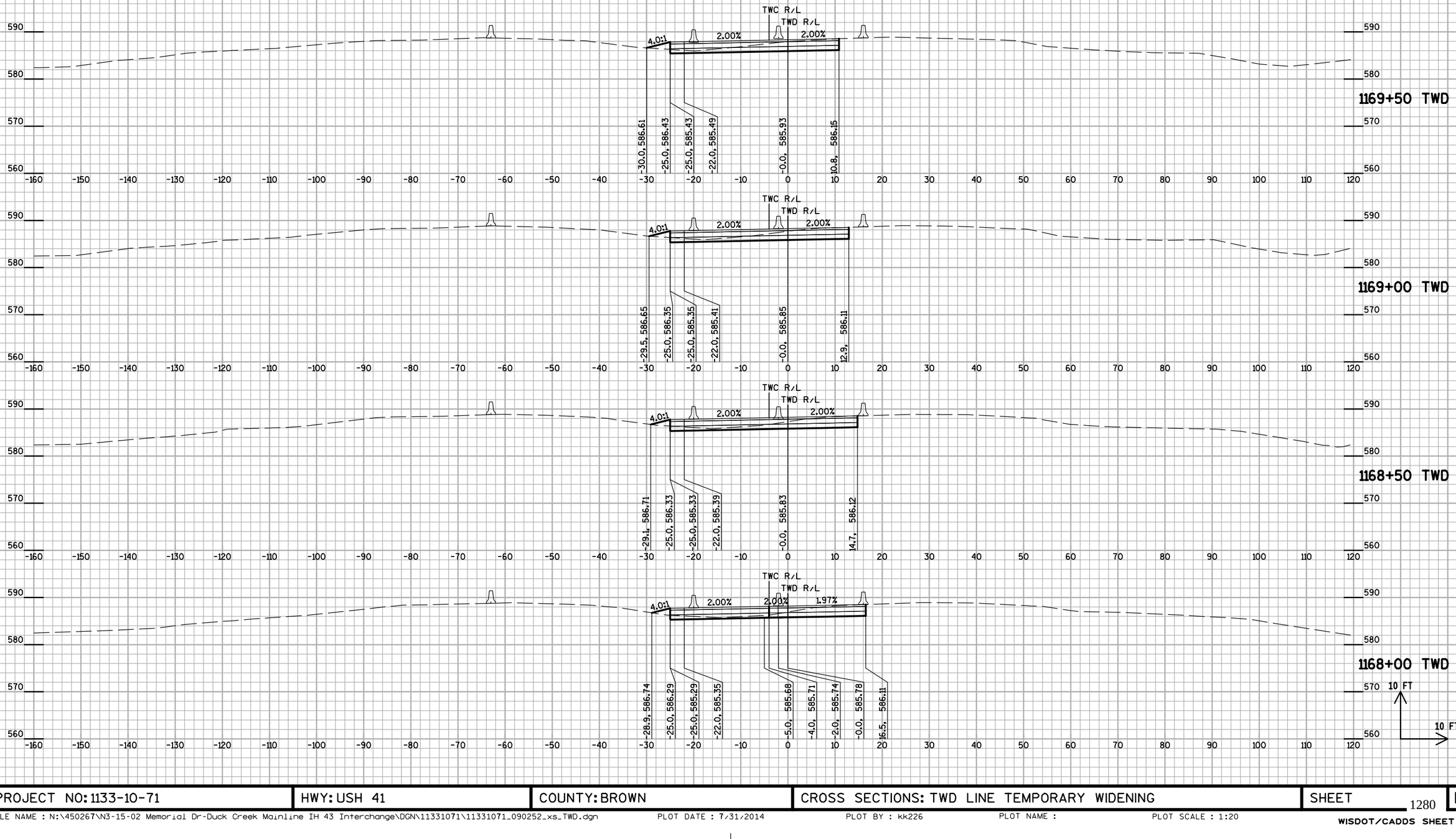
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1279	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1168+00 TWD TO 1169+50 TWD



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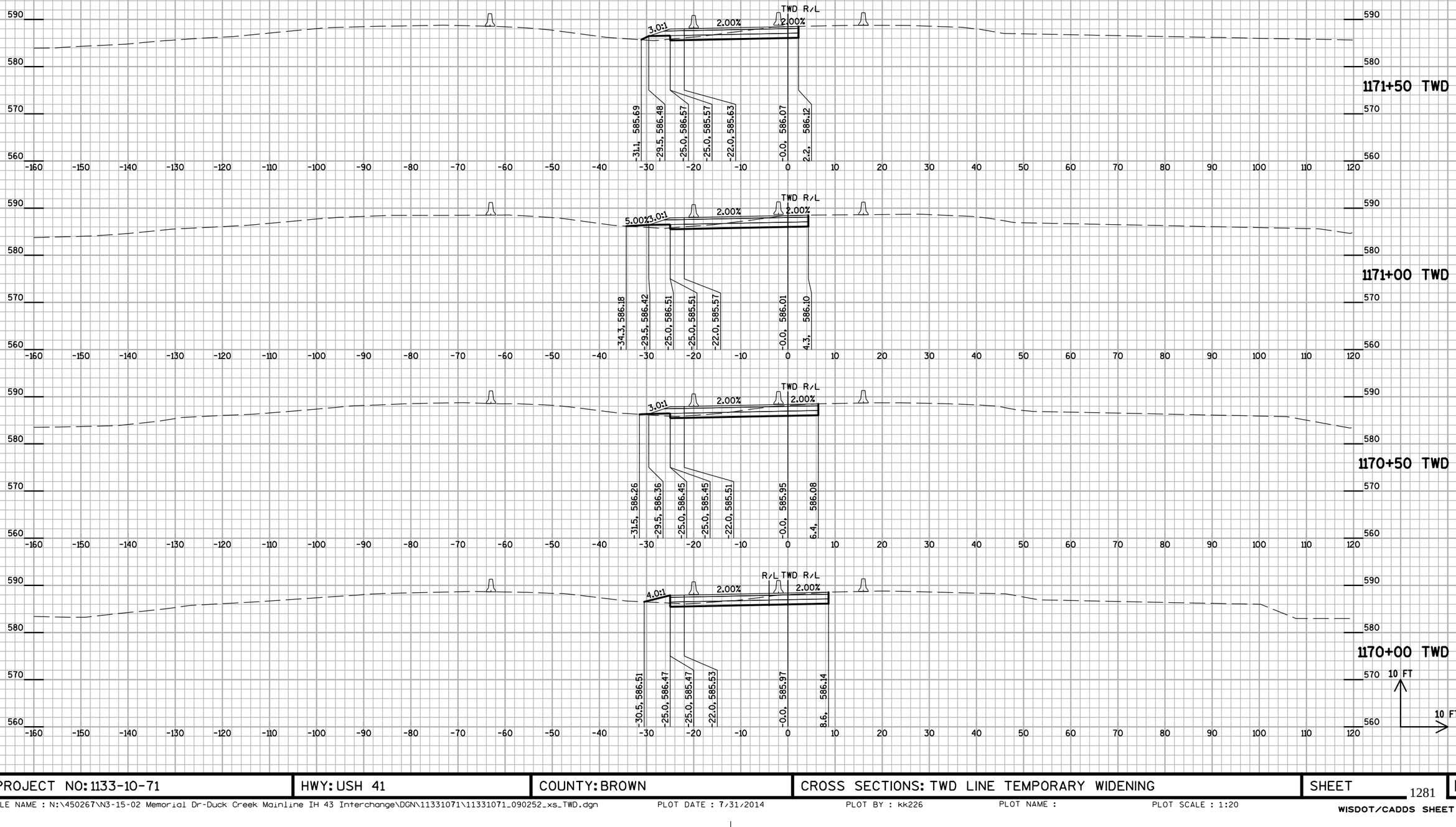
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1280	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1170+00 TWD TO 1171+50 TWD



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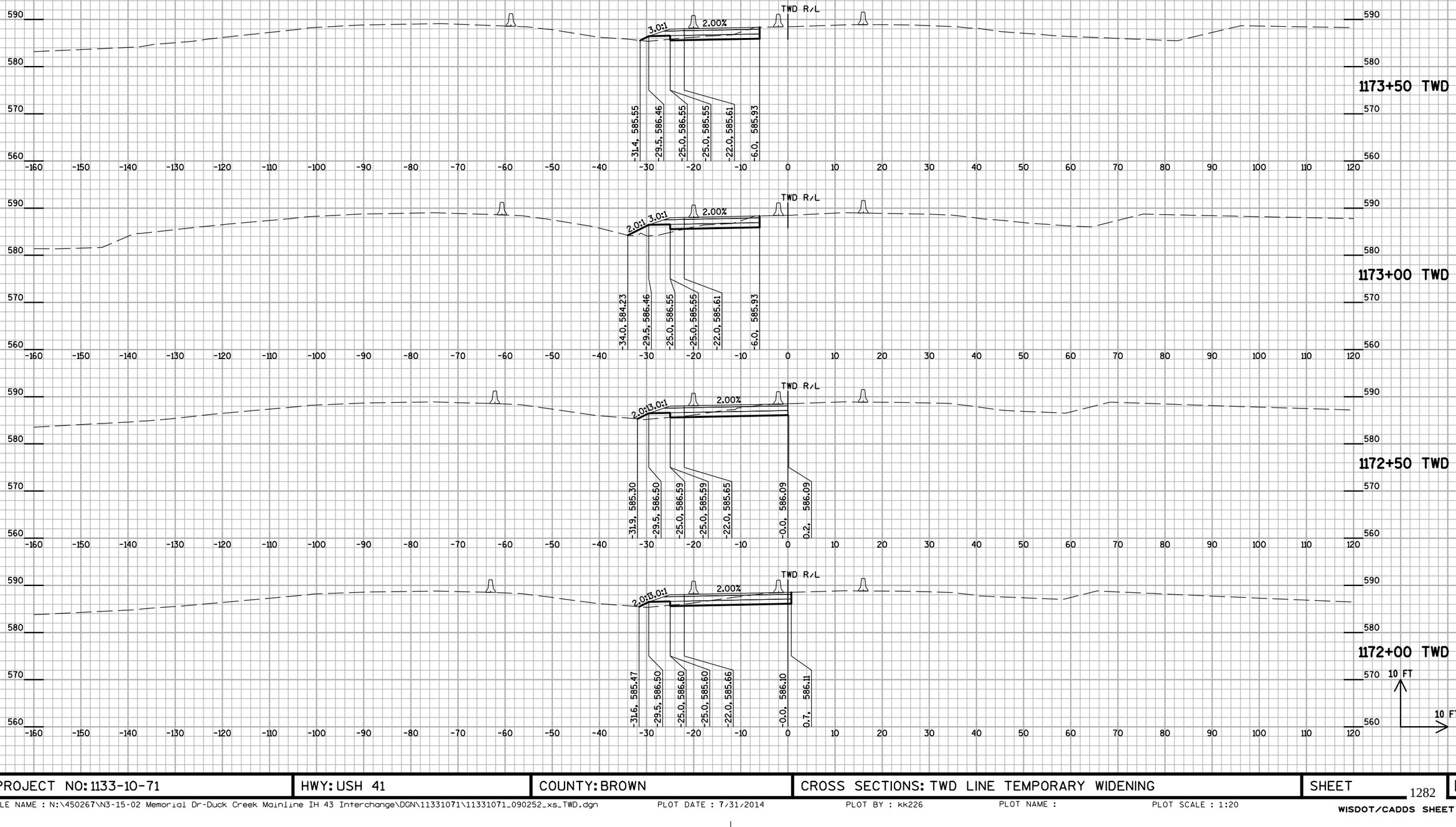
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1281	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1172+00 TWD TO 1173+50 TWD



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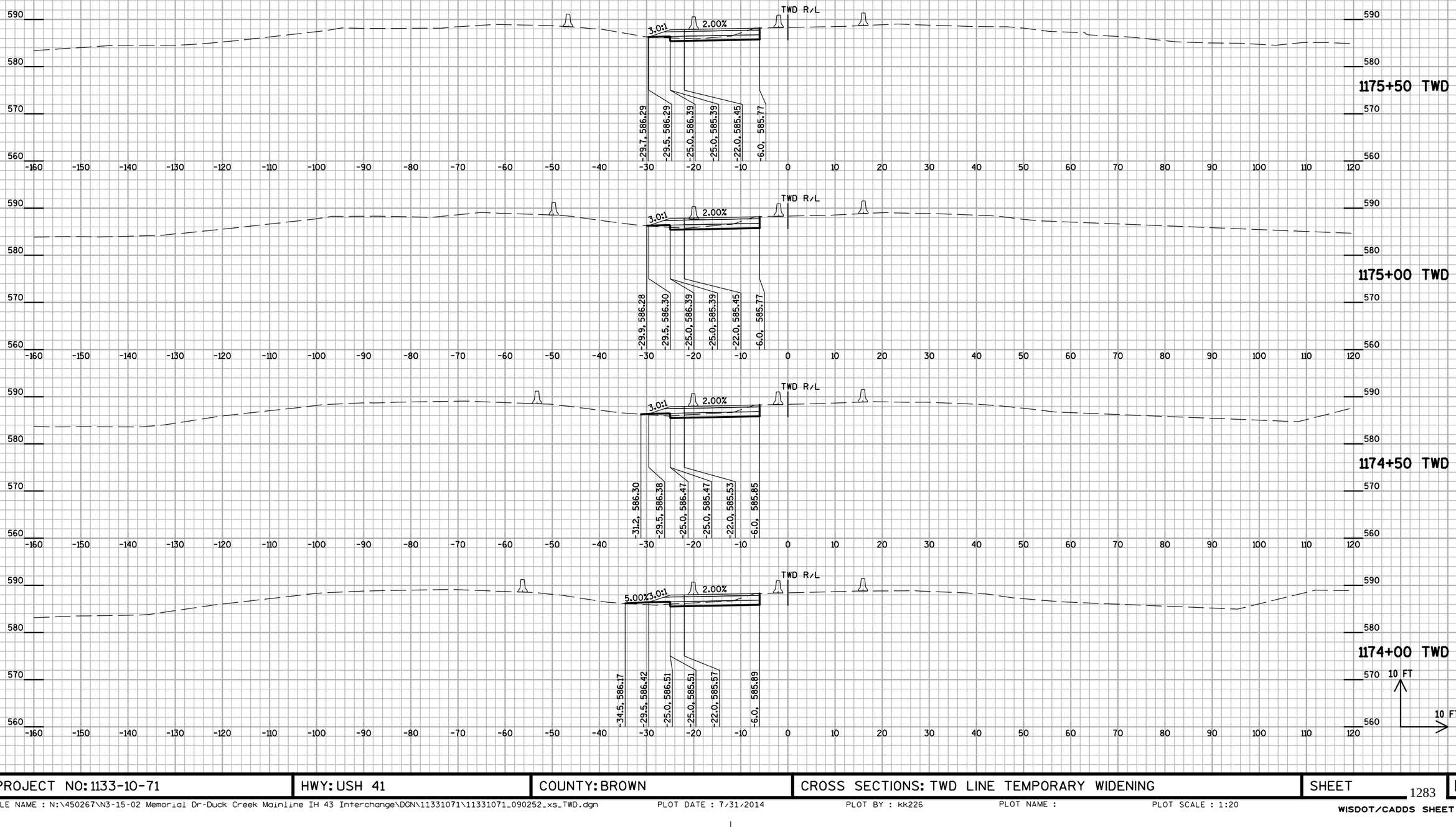
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1282	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1174+00 TWD TO 1175+50 TWD



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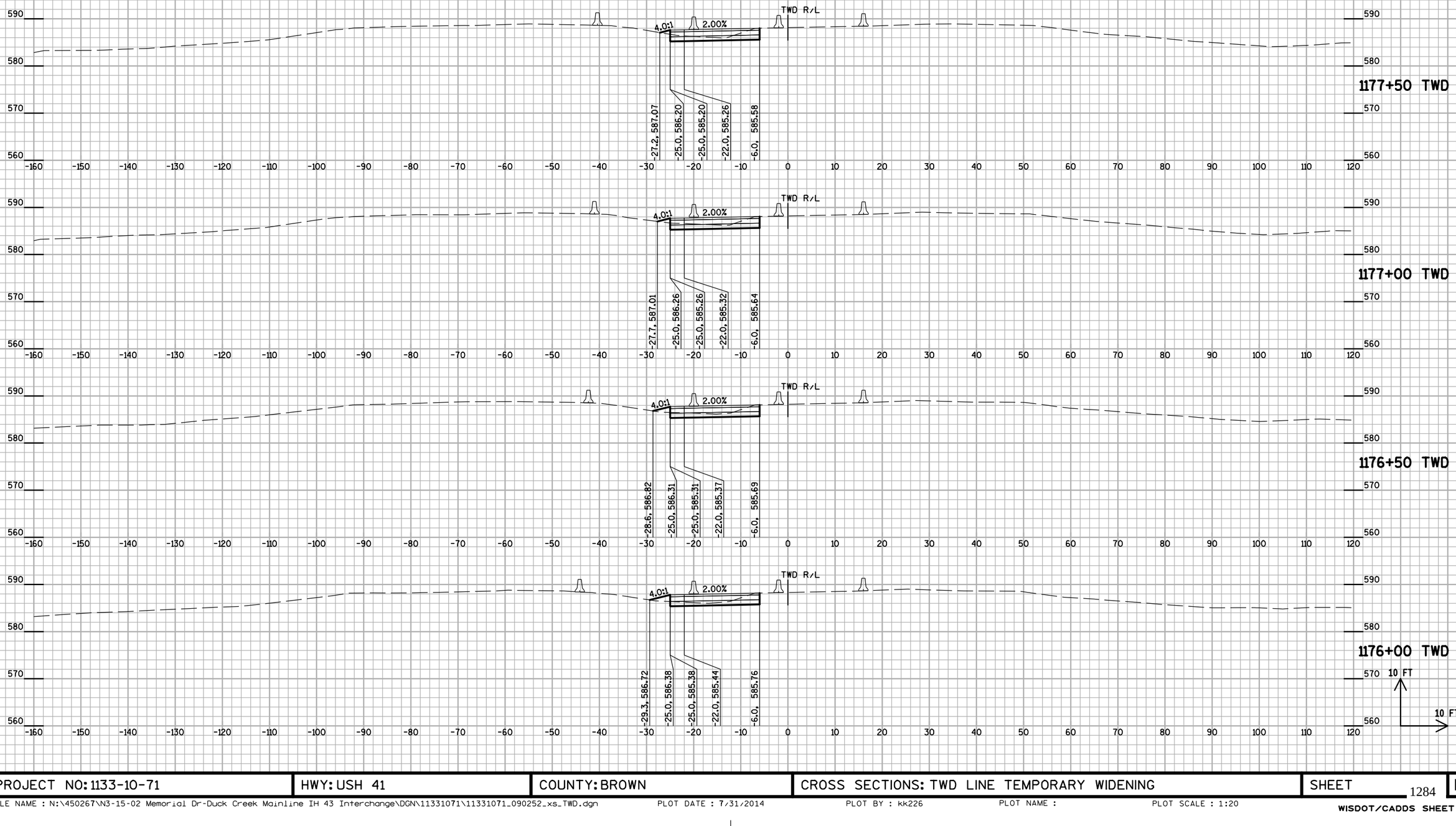
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1283	E

STA. 1176+00 TWD TO 1177+50 TWD



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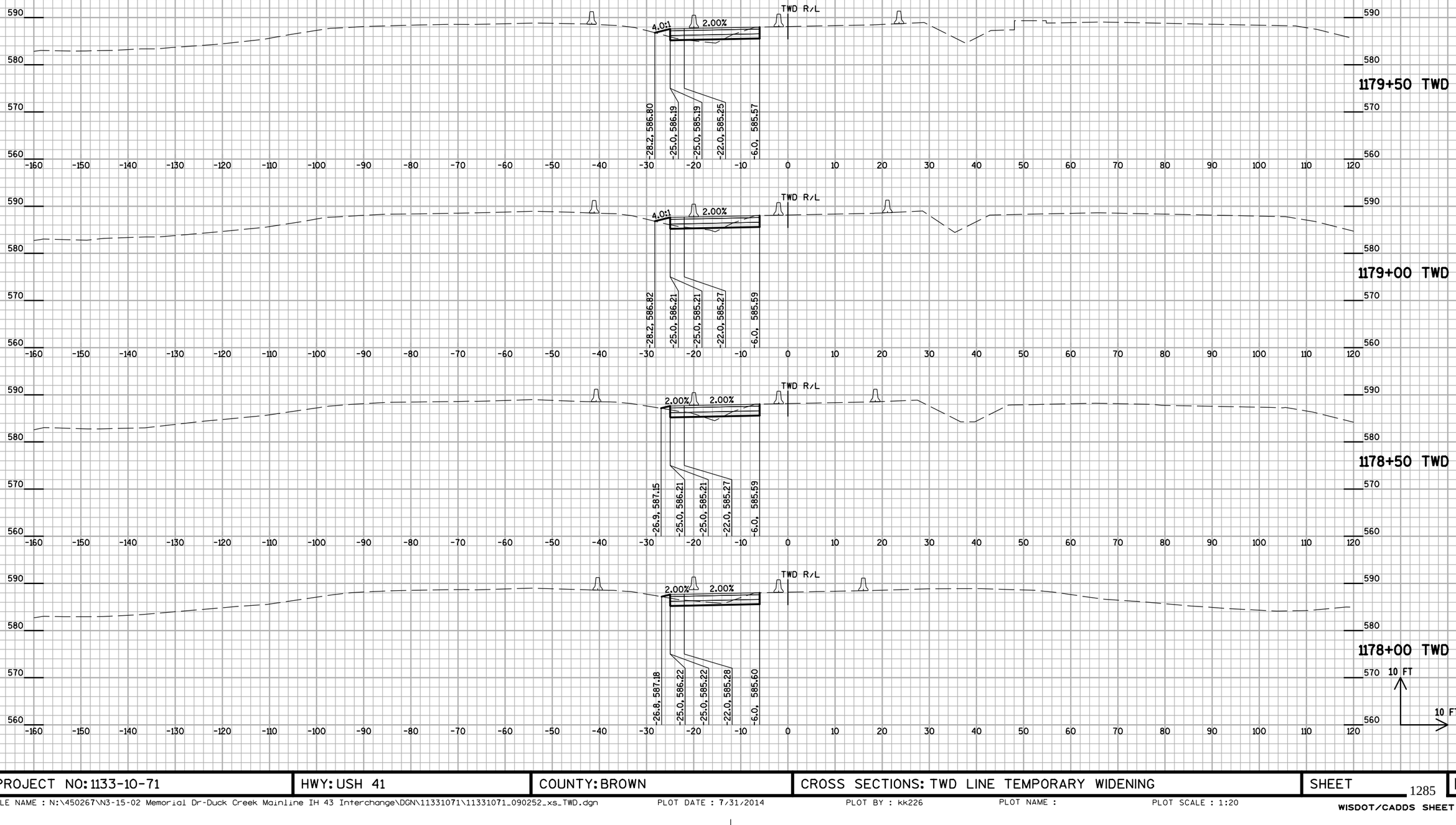
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1178+00 TWD TO 1179+50 TWD



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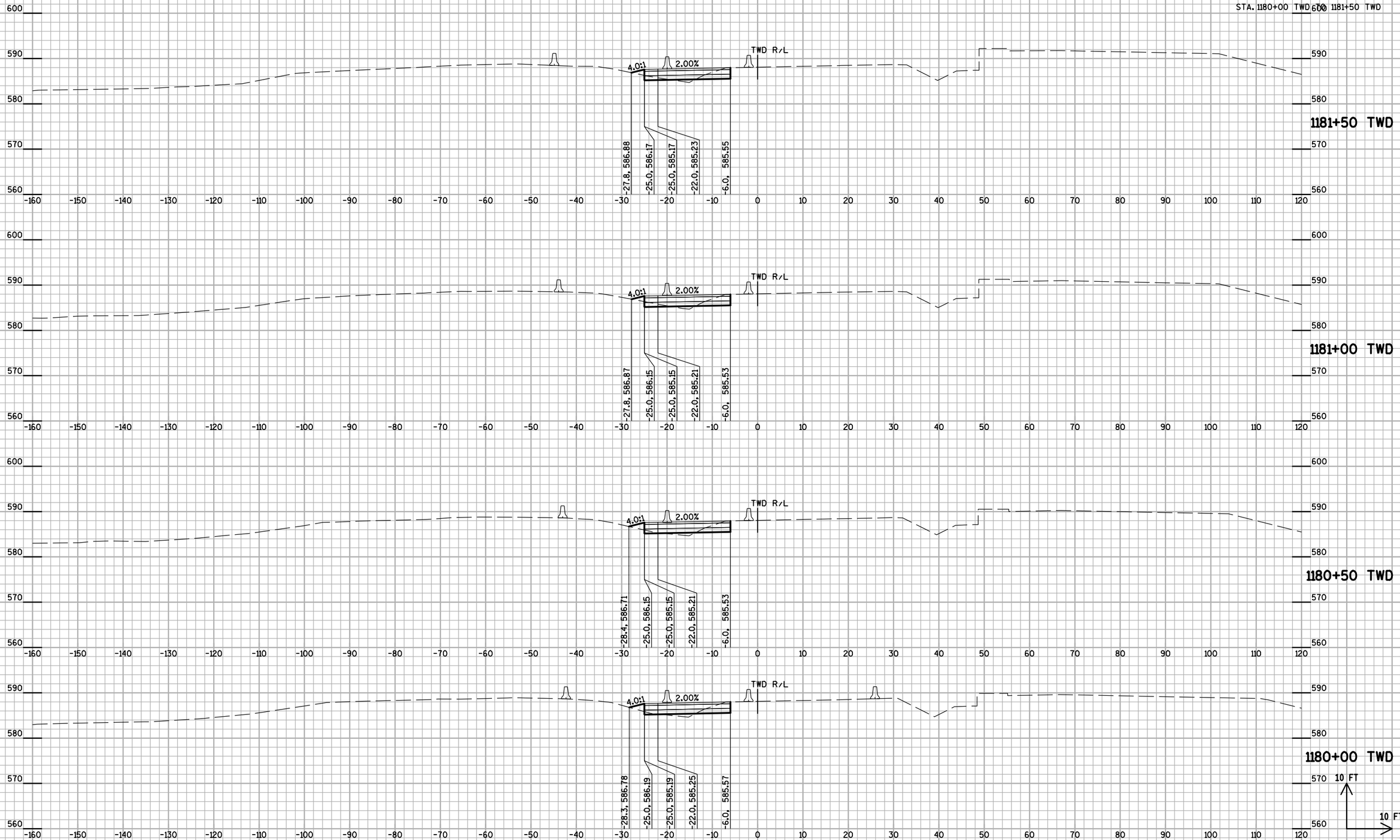
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

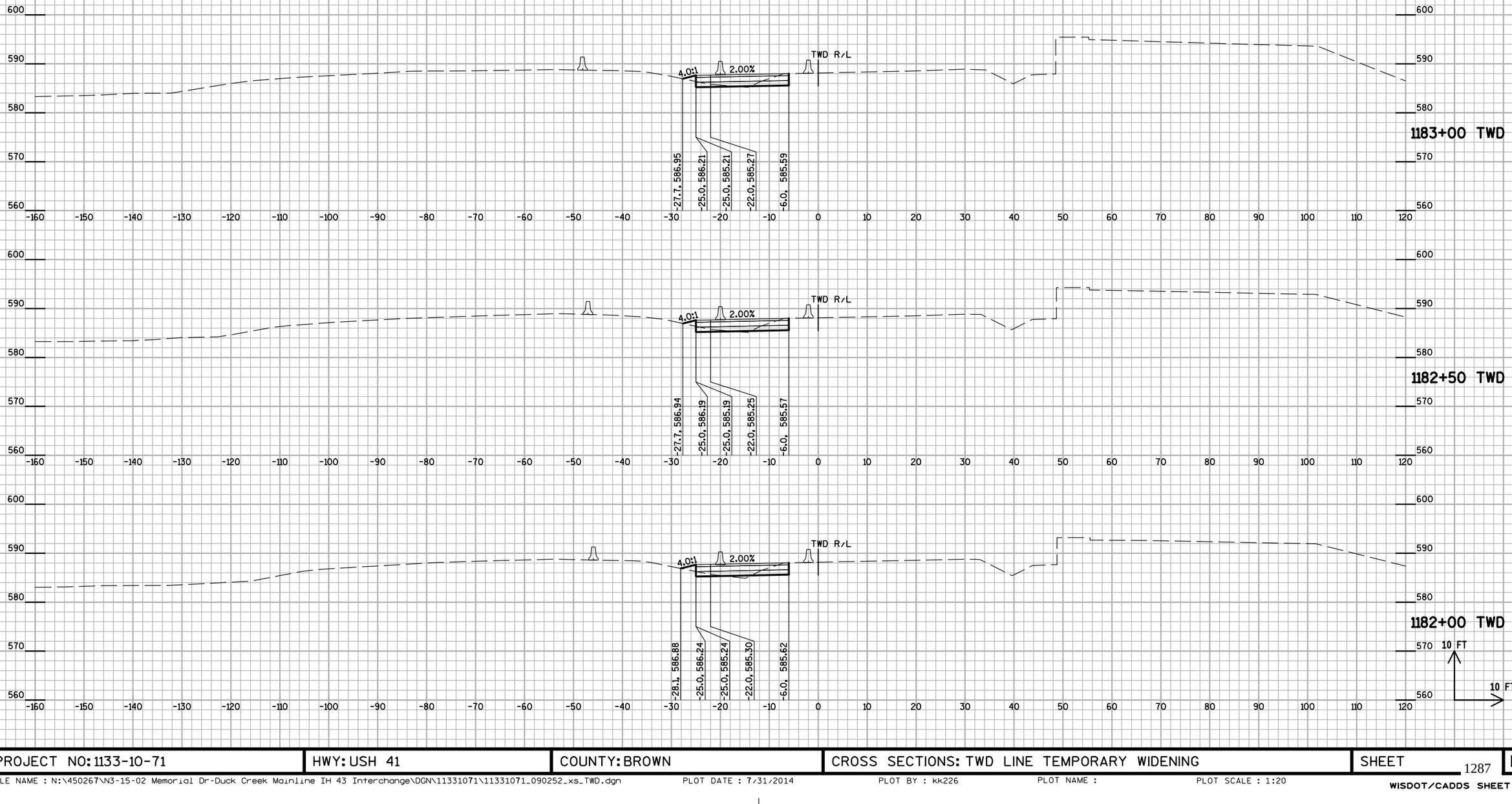


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1286	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1182+00 TWD TO 1183+00 TWD



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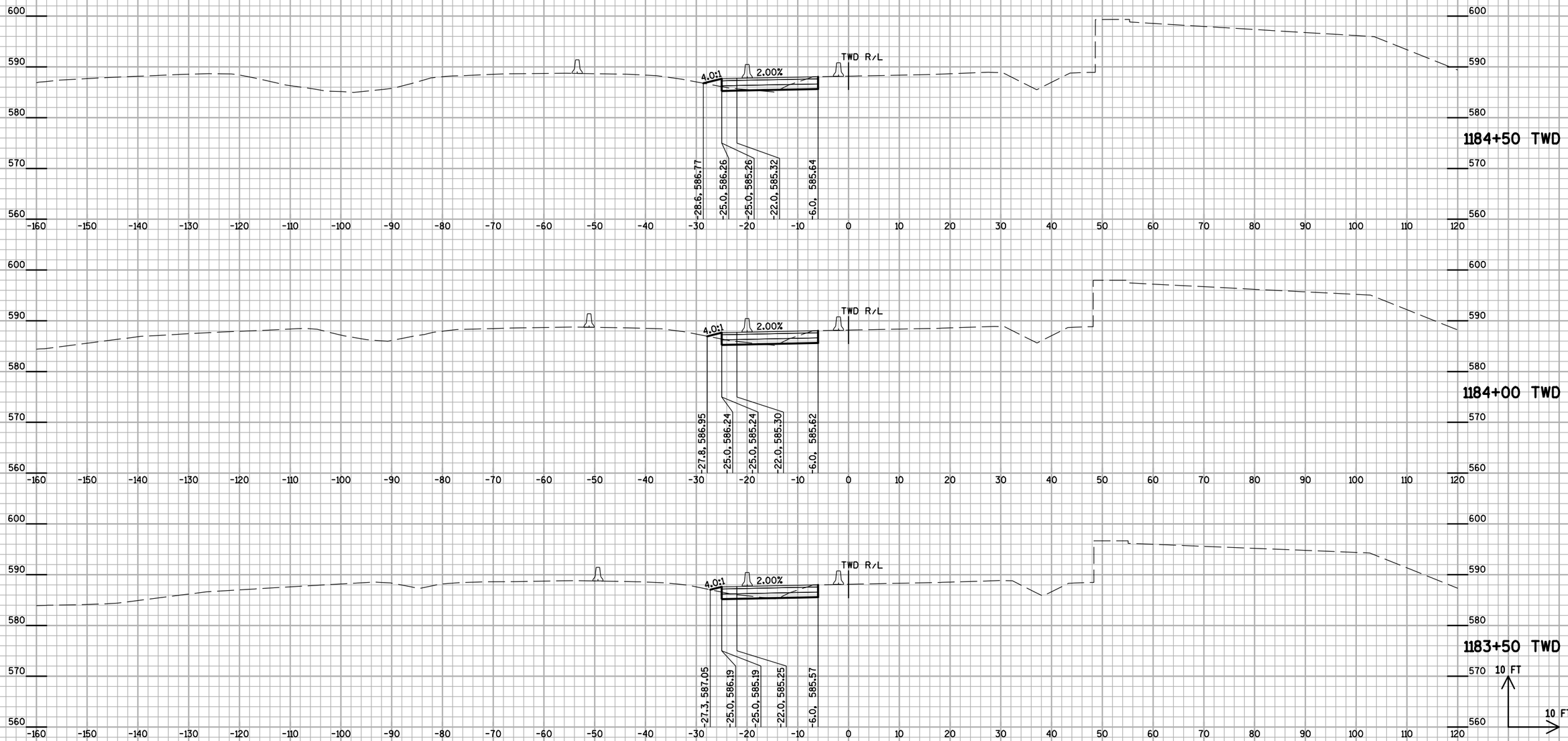
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1287	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9

STA. 1183+50 TWD TO 1184+50 TWD



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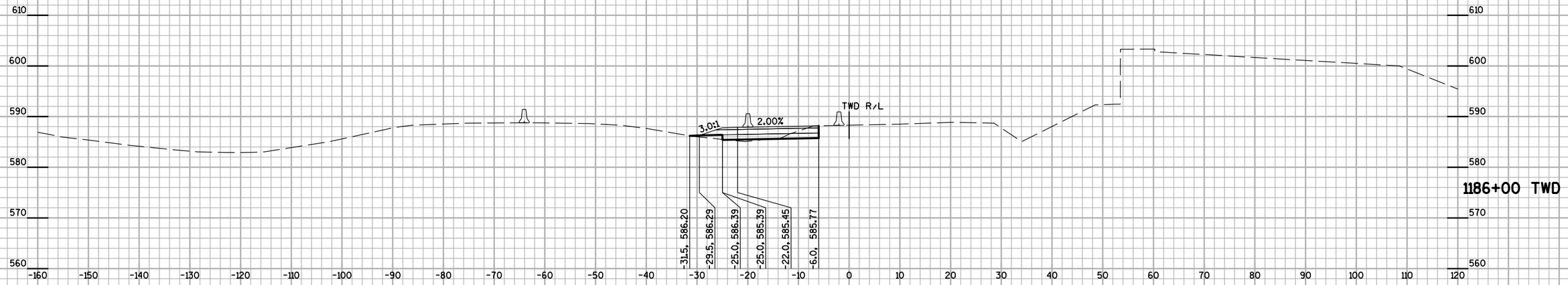
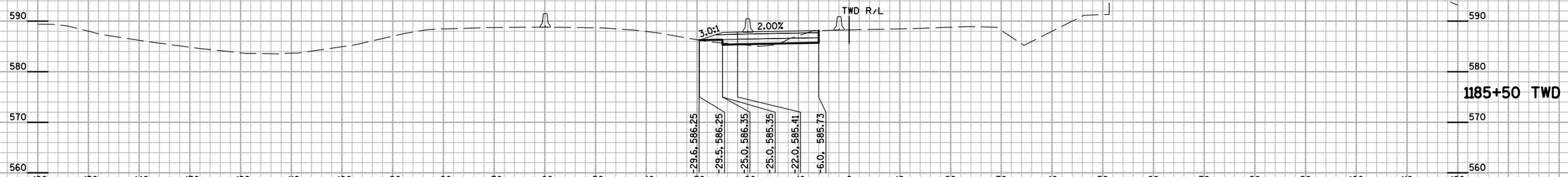
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1288	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

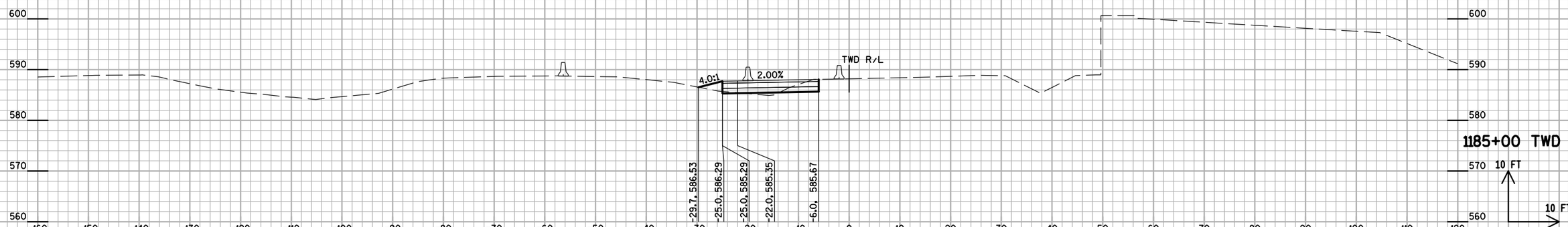
STA. 1185+00 TWD TO 1186+00 TWD



1186+00 TWD



1185+50 TWD



1185+00 TWD

10 FT

10 FT

9

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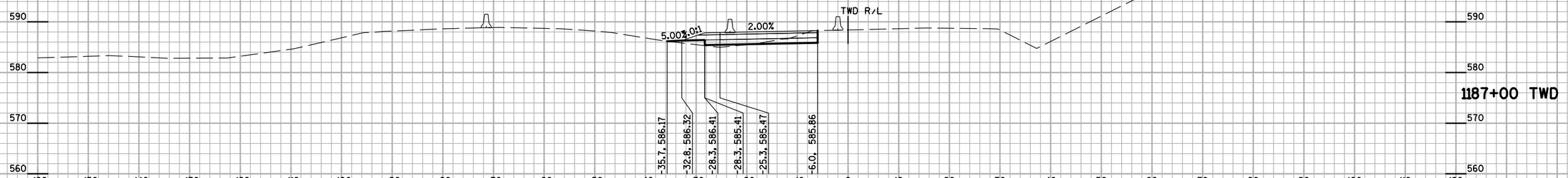
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1289	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

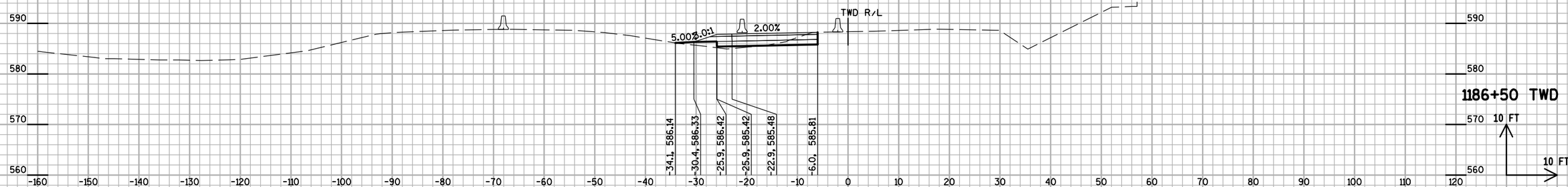
WISDOT/CADDS SHEET 21

STA. 1186+50 TWD TO 1187+50 TWD

1187+50 TWD



1187+00 TWD



1186+50 TWD

10 FT

10 FT

9

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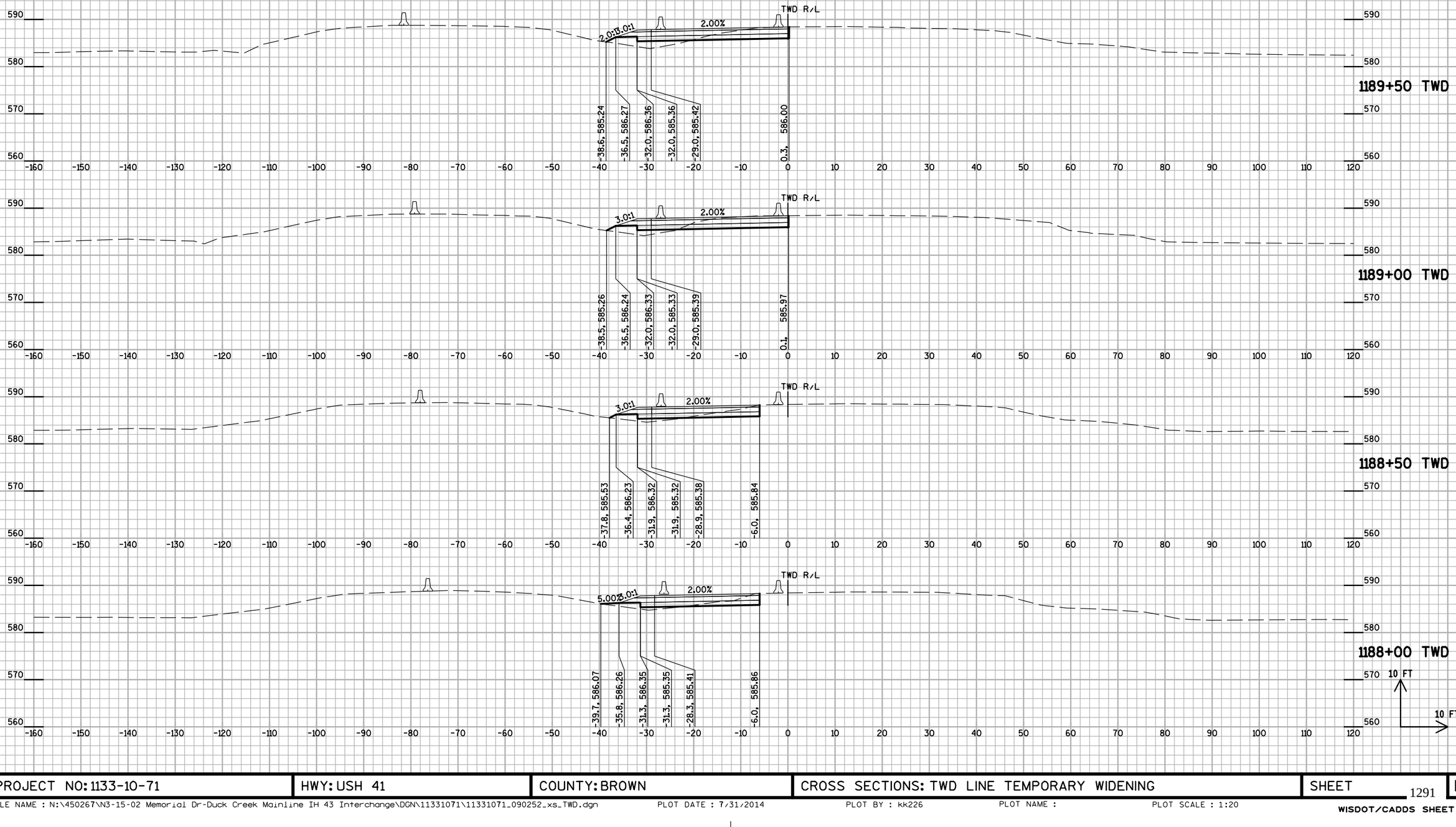
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1290	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1188+00 TWD TO 1189+50 TWD

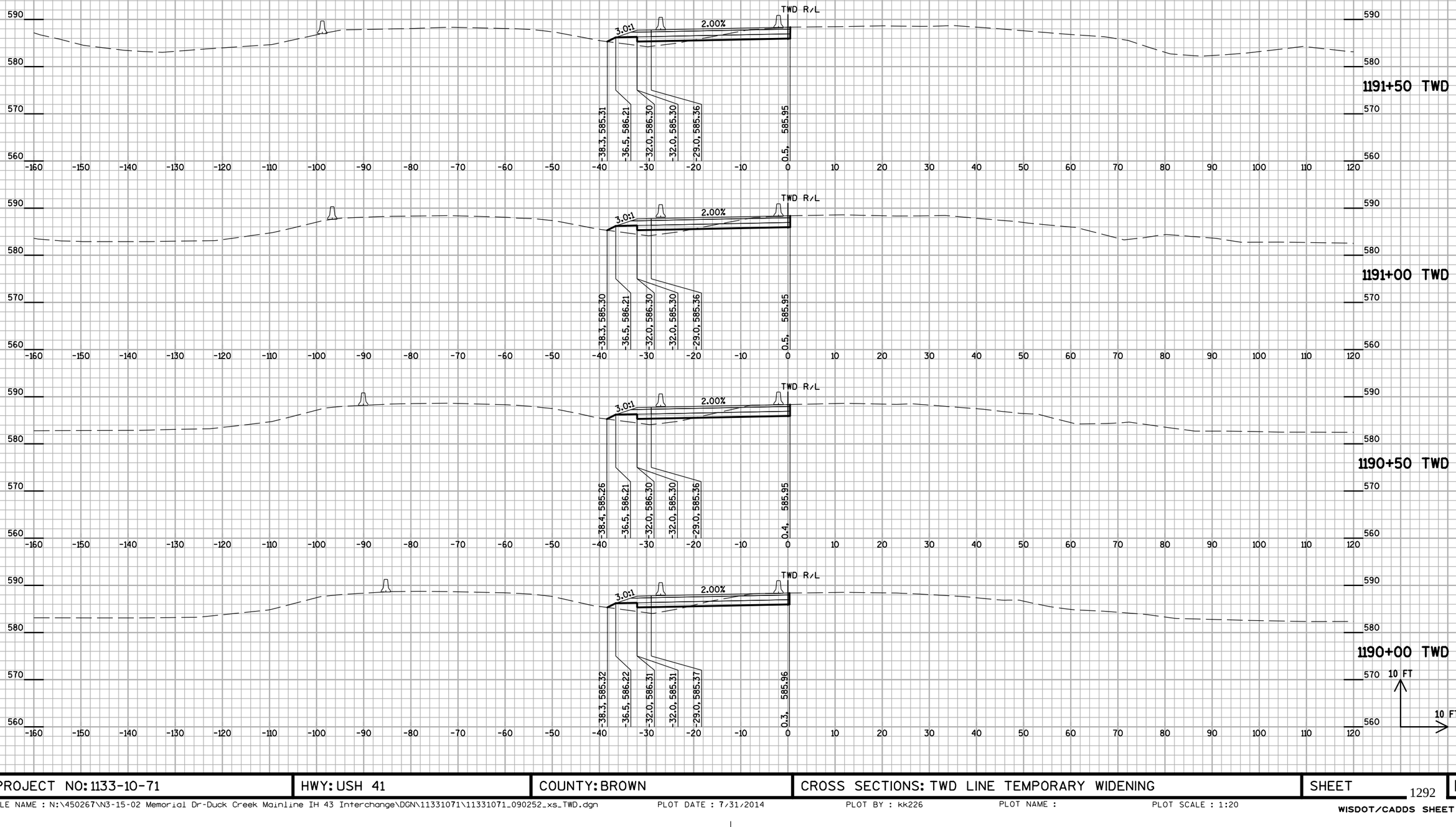


PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1291	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1190+00 TWD TO 1191+50 TWD



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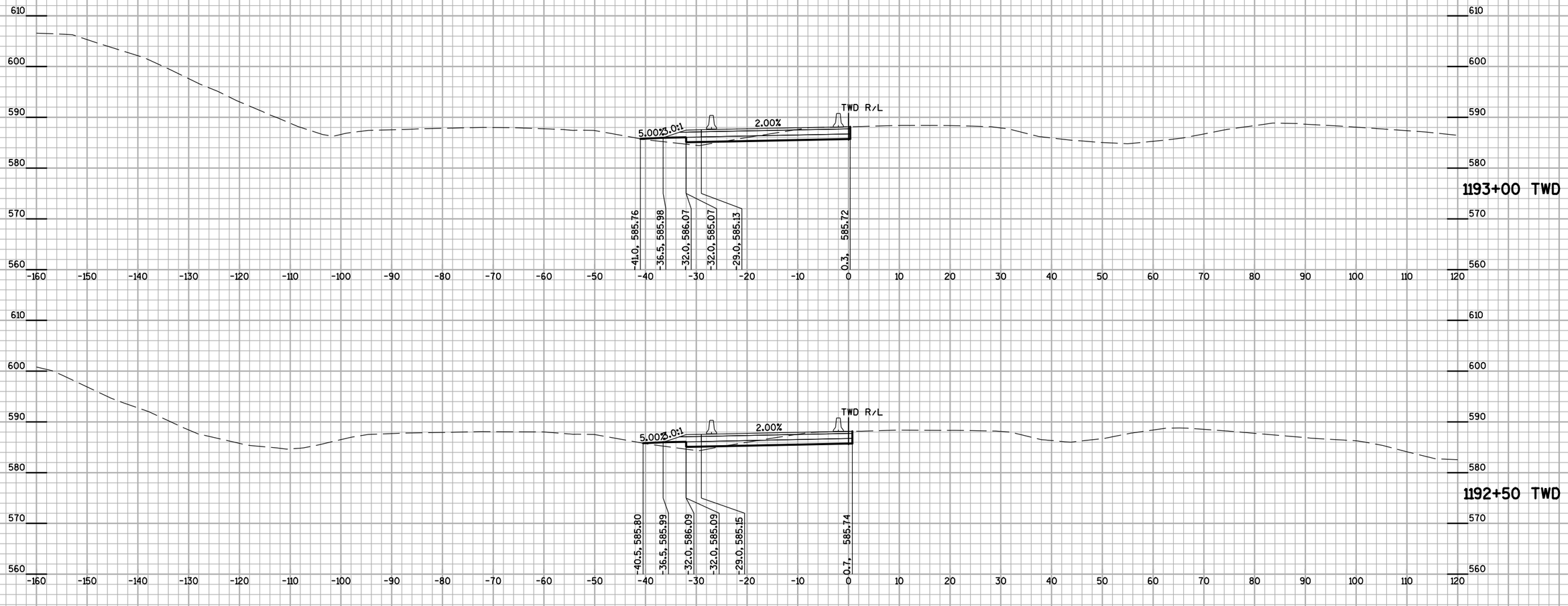
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1292	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1192+00 TWD TO 1193+00 TWD



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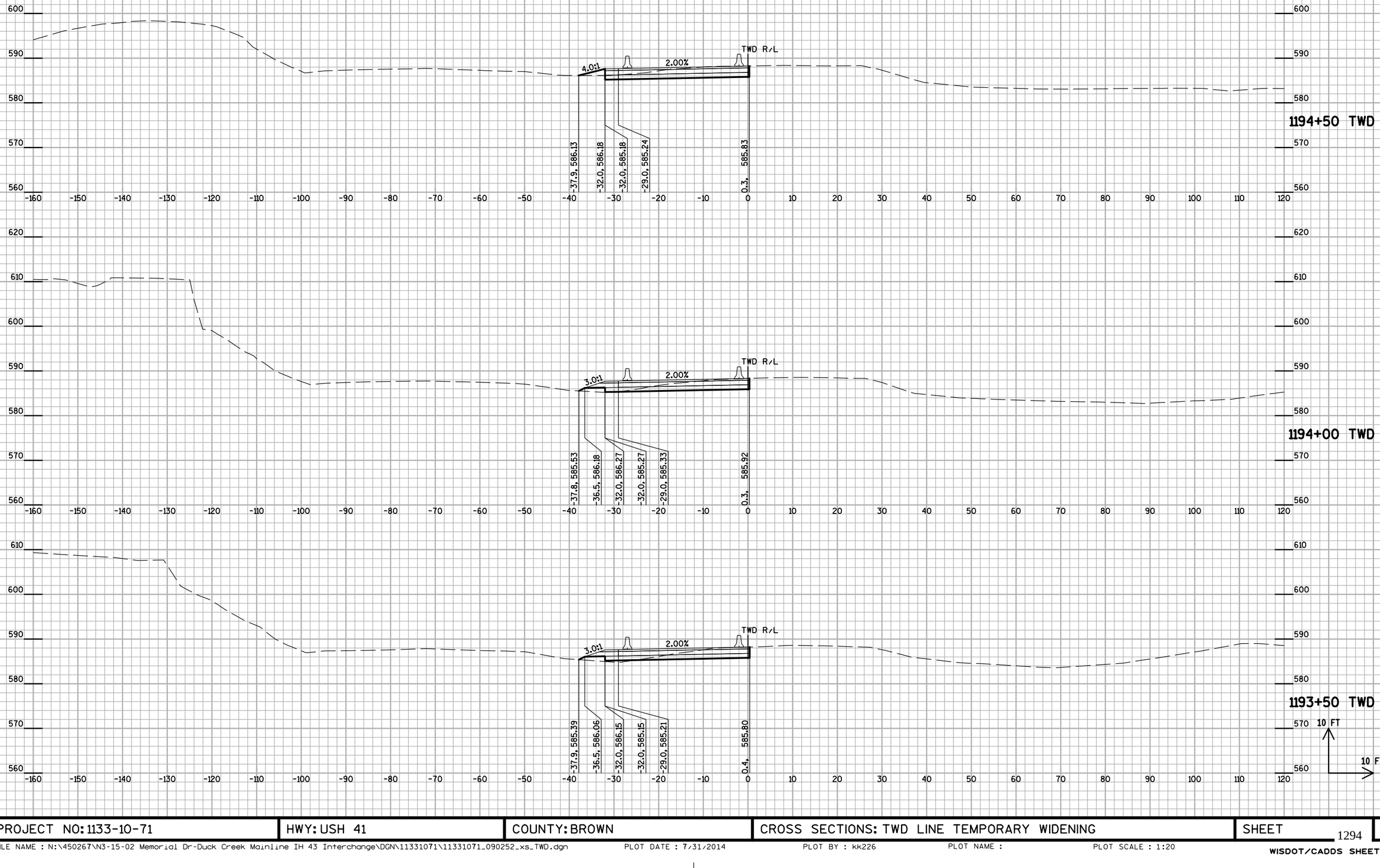
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1293	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1193+50 TWD TO 1194+50 TWD



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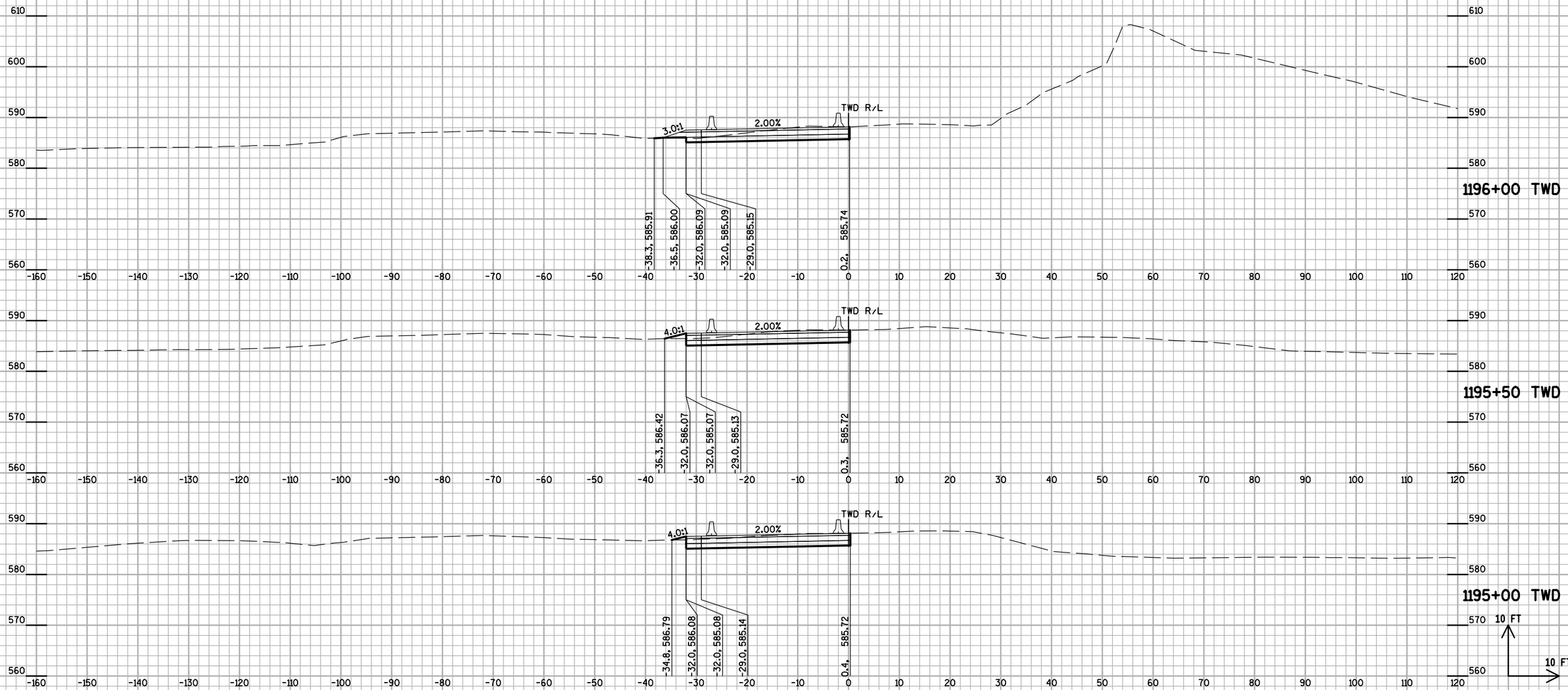
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1195+00 TWD TO 1196+00 TWD



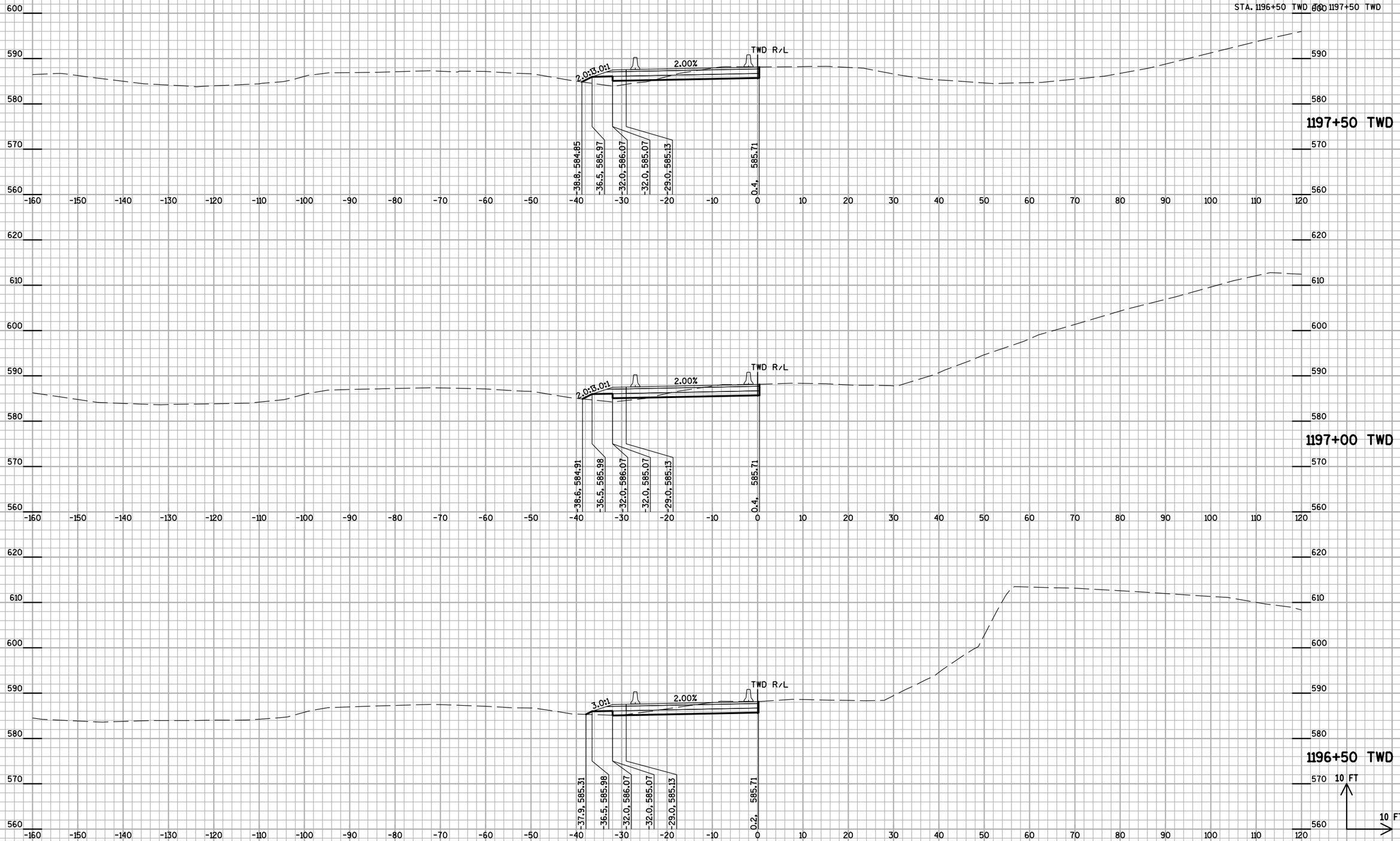
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1295	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1196+50 TWD

STA. 1197+50 TWD



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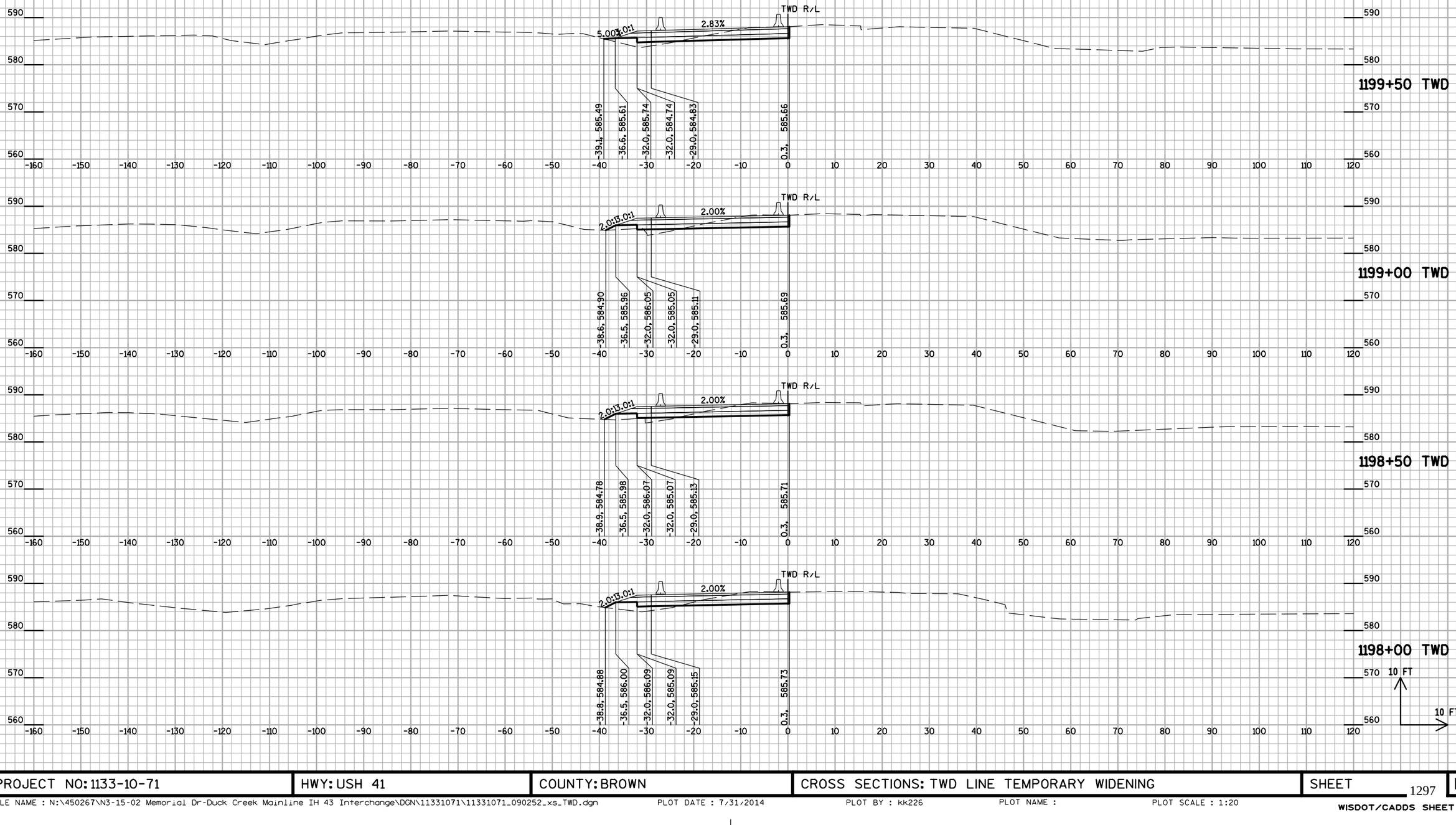
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1296	E

STA. 1198+00 TWD TO 1199+50 TWD



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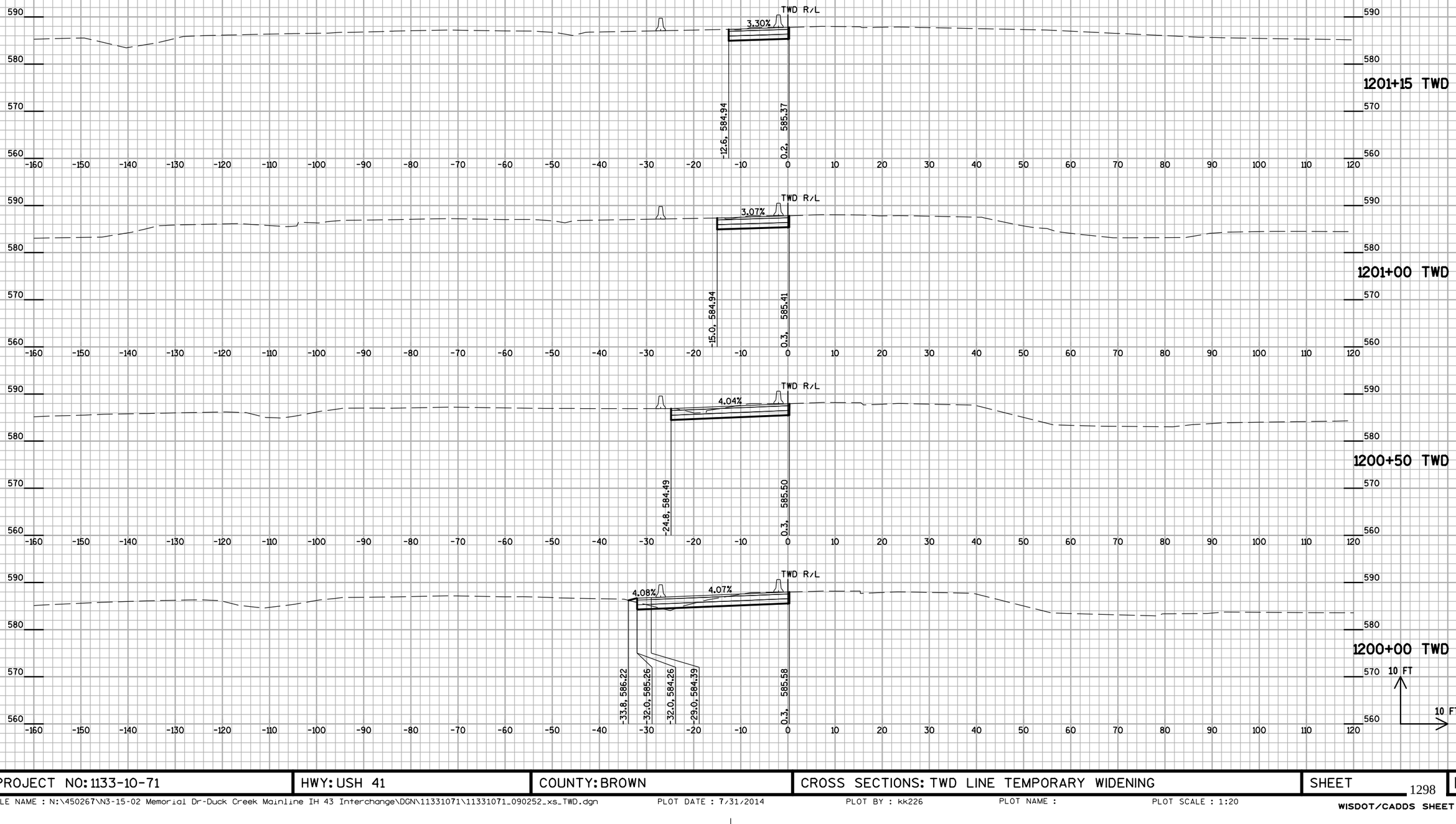
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1297	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

STA. 1200+00 TWD TO 1201+15 TWD



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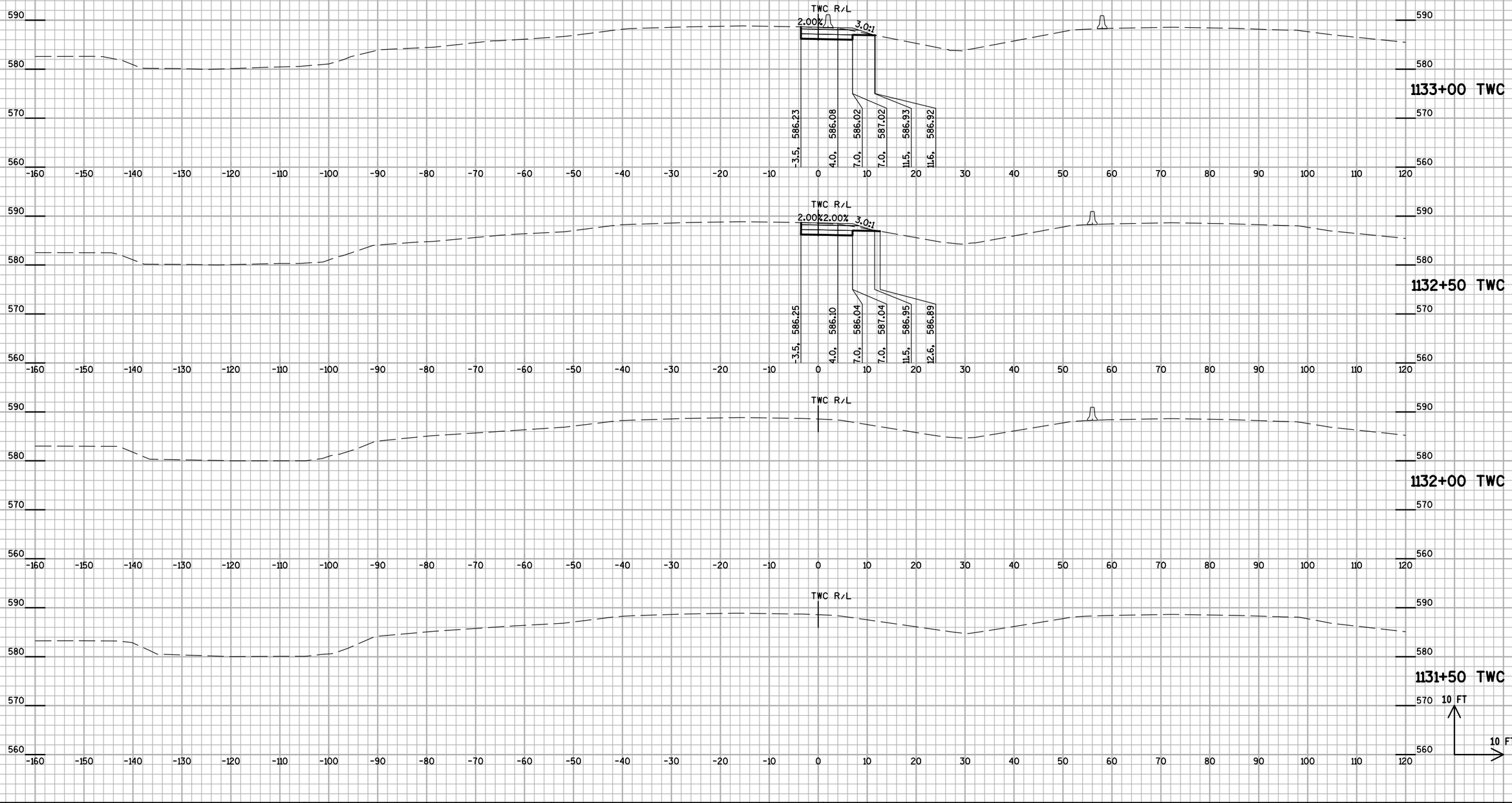
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWD LINE TEMPORARY WIDENING	SHEET 1298	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090252_xs_TWD.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1131+50 TWC TO 1133+00 TWC



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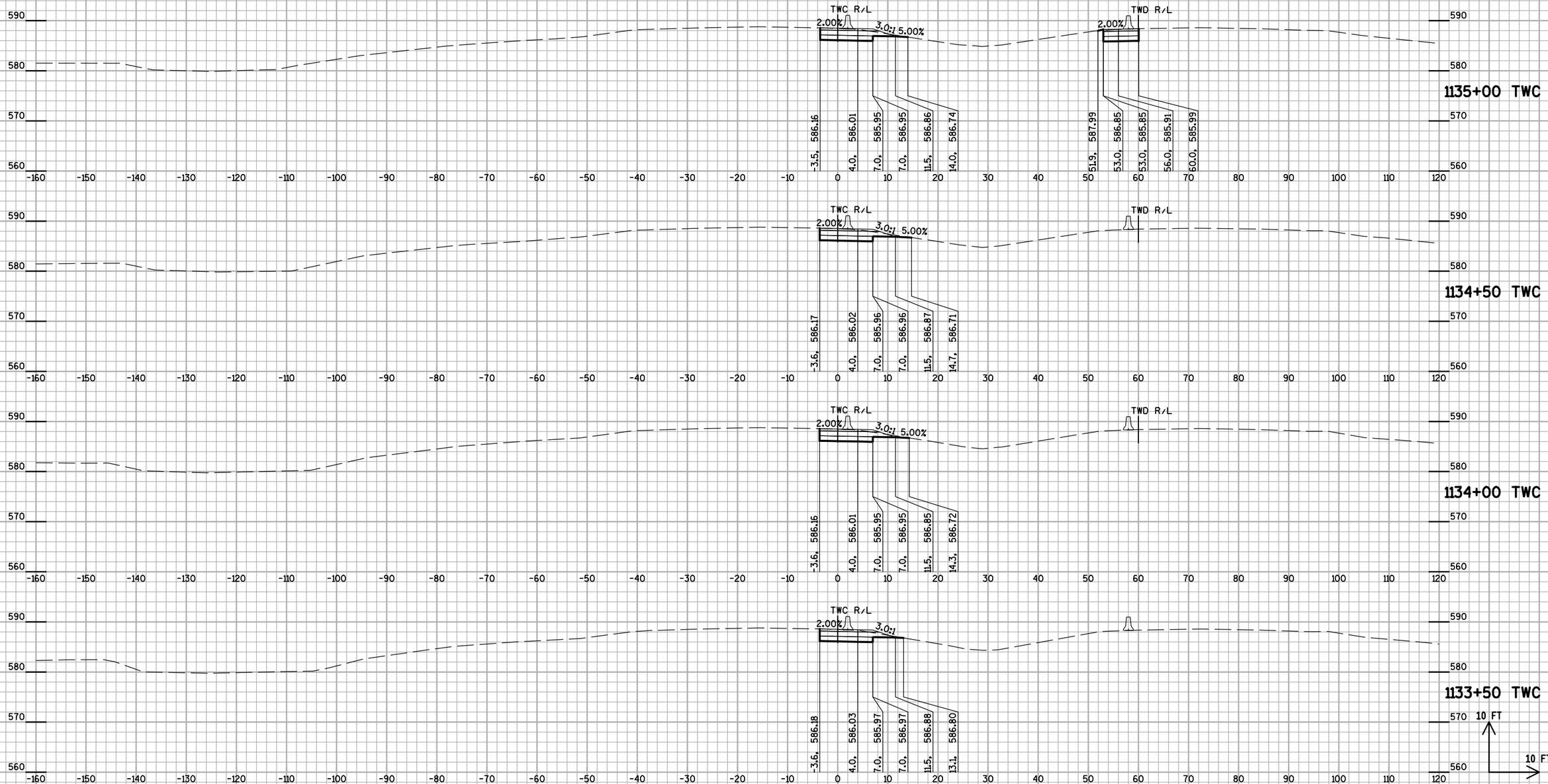
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWC LINE TEMPORARY WIDENING	SHEET 1299	E

STA. 1133+50 TWC TO 1135+00 TWC



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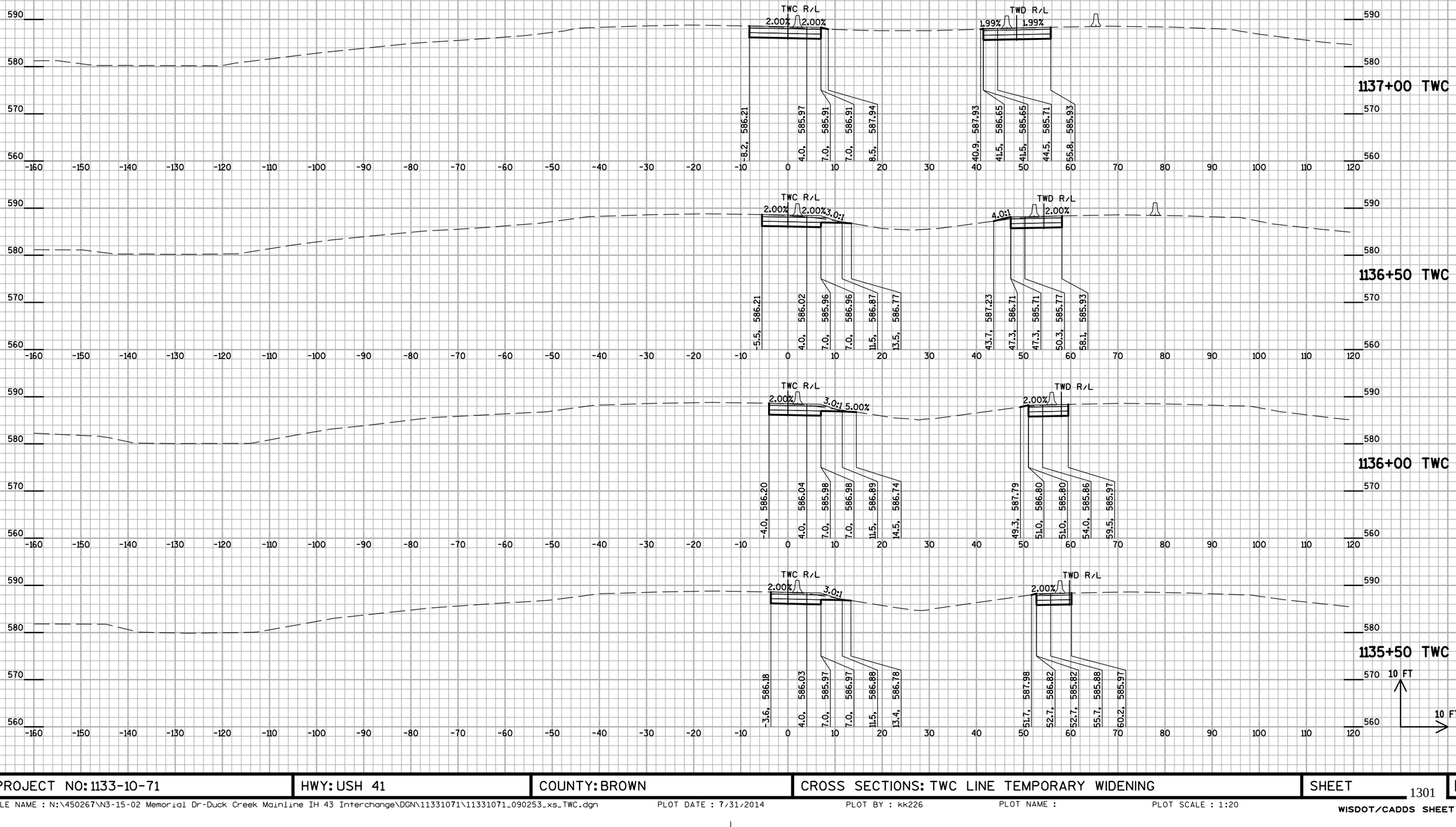
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWC LINE TEMPORARY WIDENING	SHEET 1300	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090253_xs_TWC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1135+50 TWC TO 1137+00 TWC



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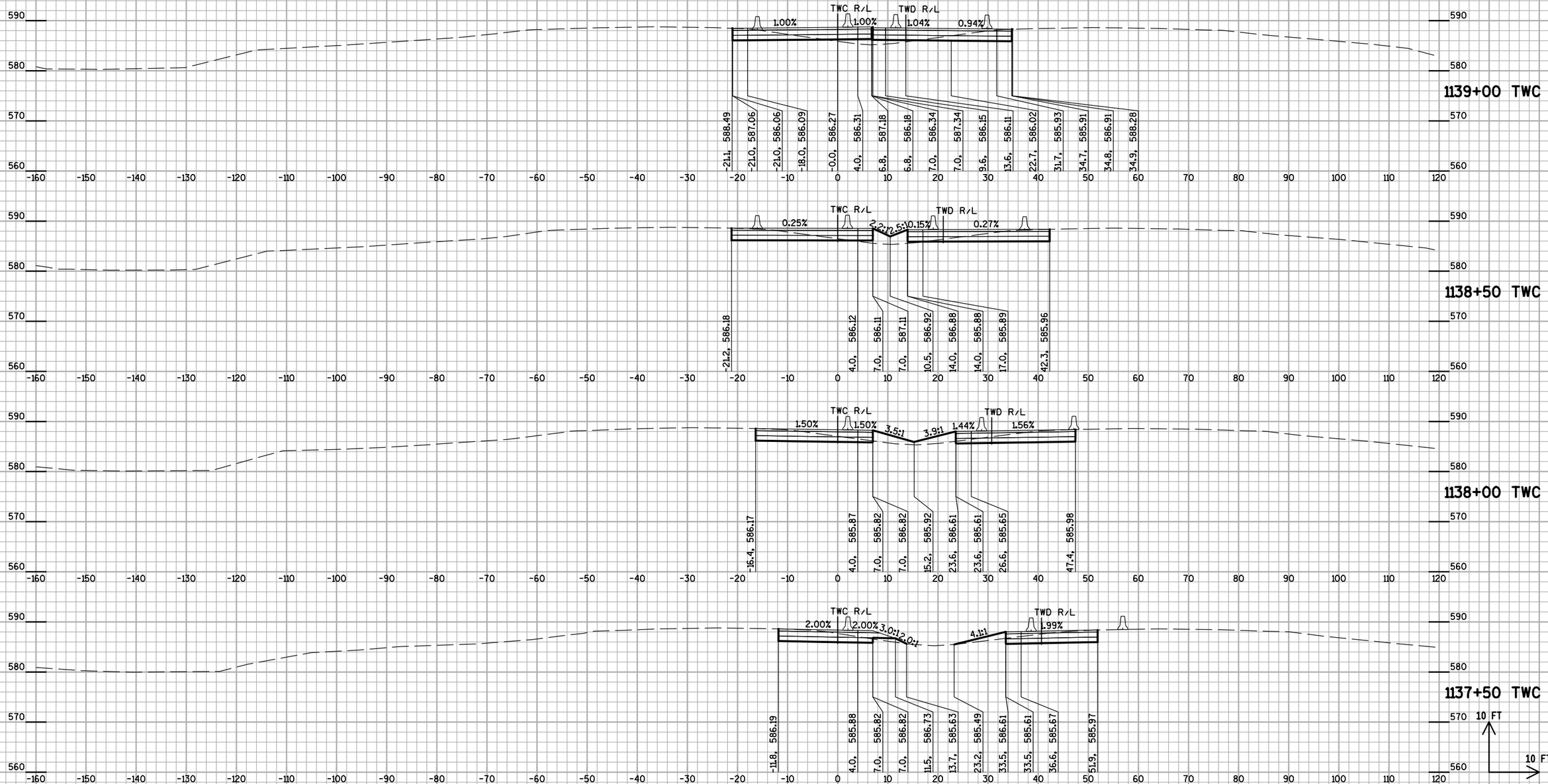
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWC LINE TEMPORARY WIDENING	SHEET 1301	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090253_xs_TWC.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1137+50 TWC TO 1139+00 TWC



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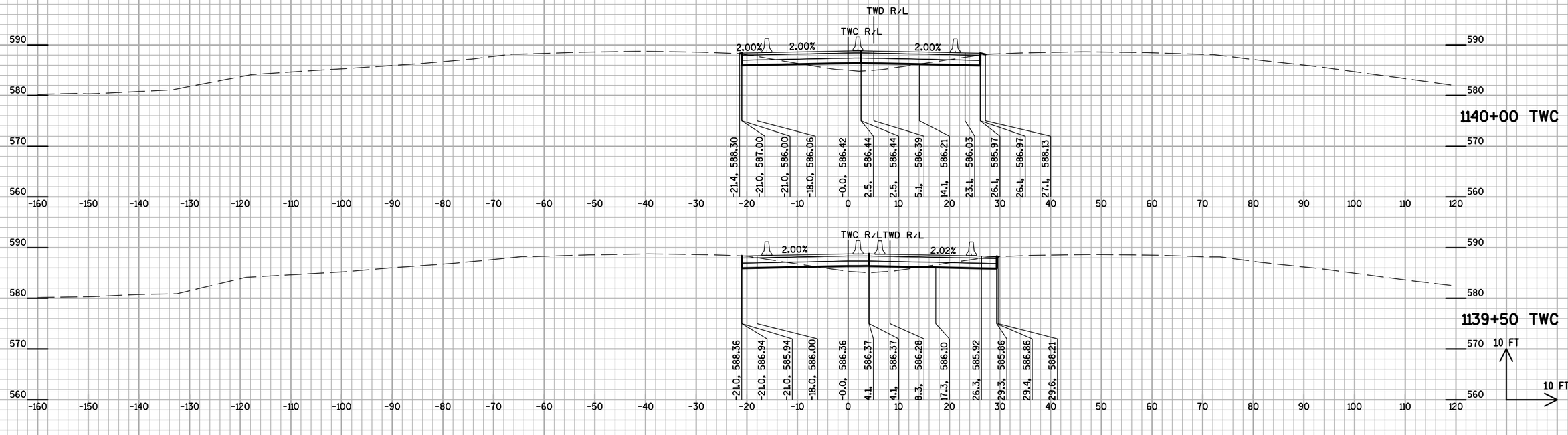
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWC LINE TEMPORARY WIDENING	SHEET 1302	E

STA. 1139+50 TWC TO 1140+00 TWC



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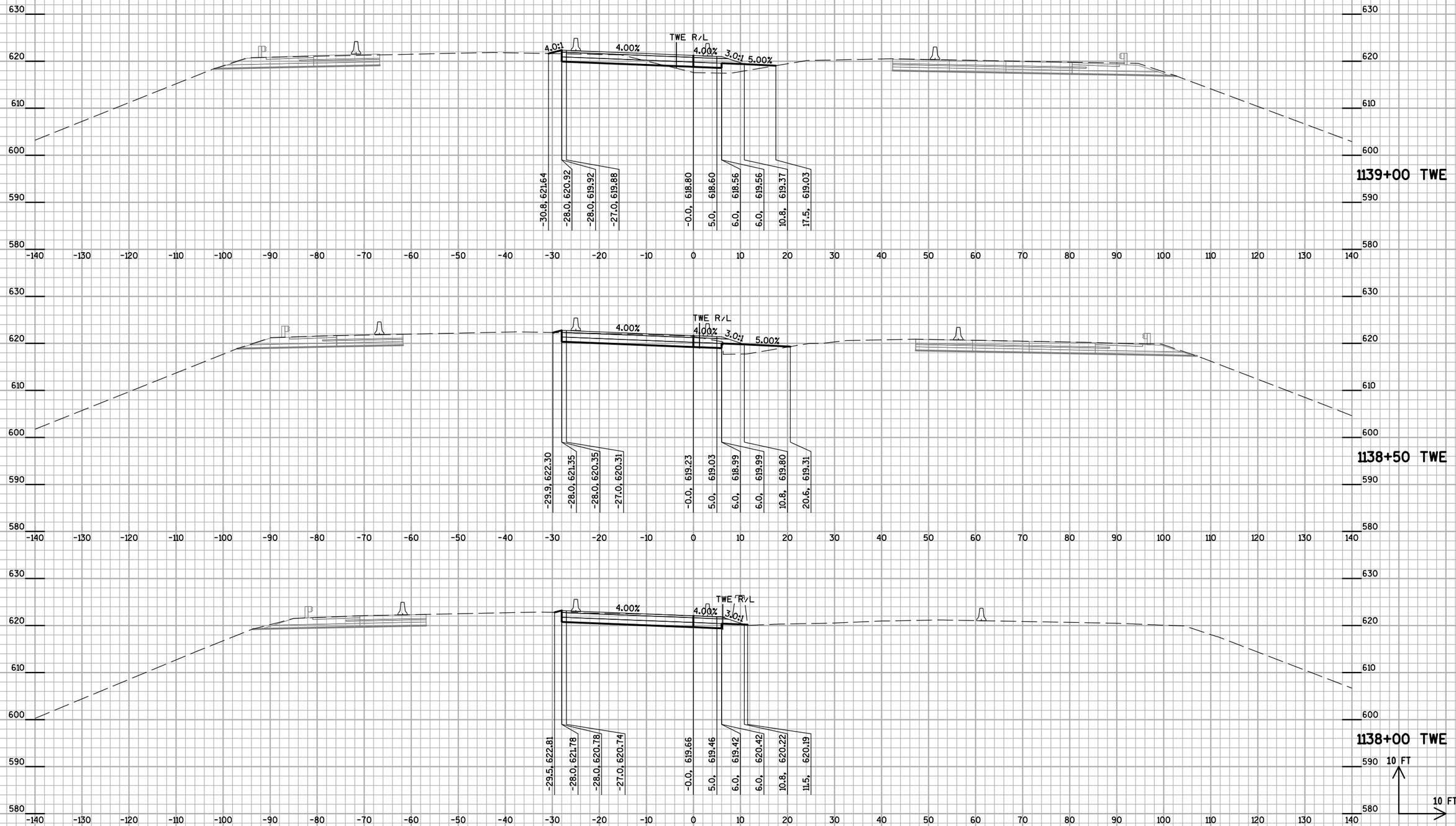
PROJECT NO: 1133-10-71	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWC LINE TEMPORARY WIDENING	SHEET 1303	E

STA. 1138+00 TWE TO 1139+00 TWE

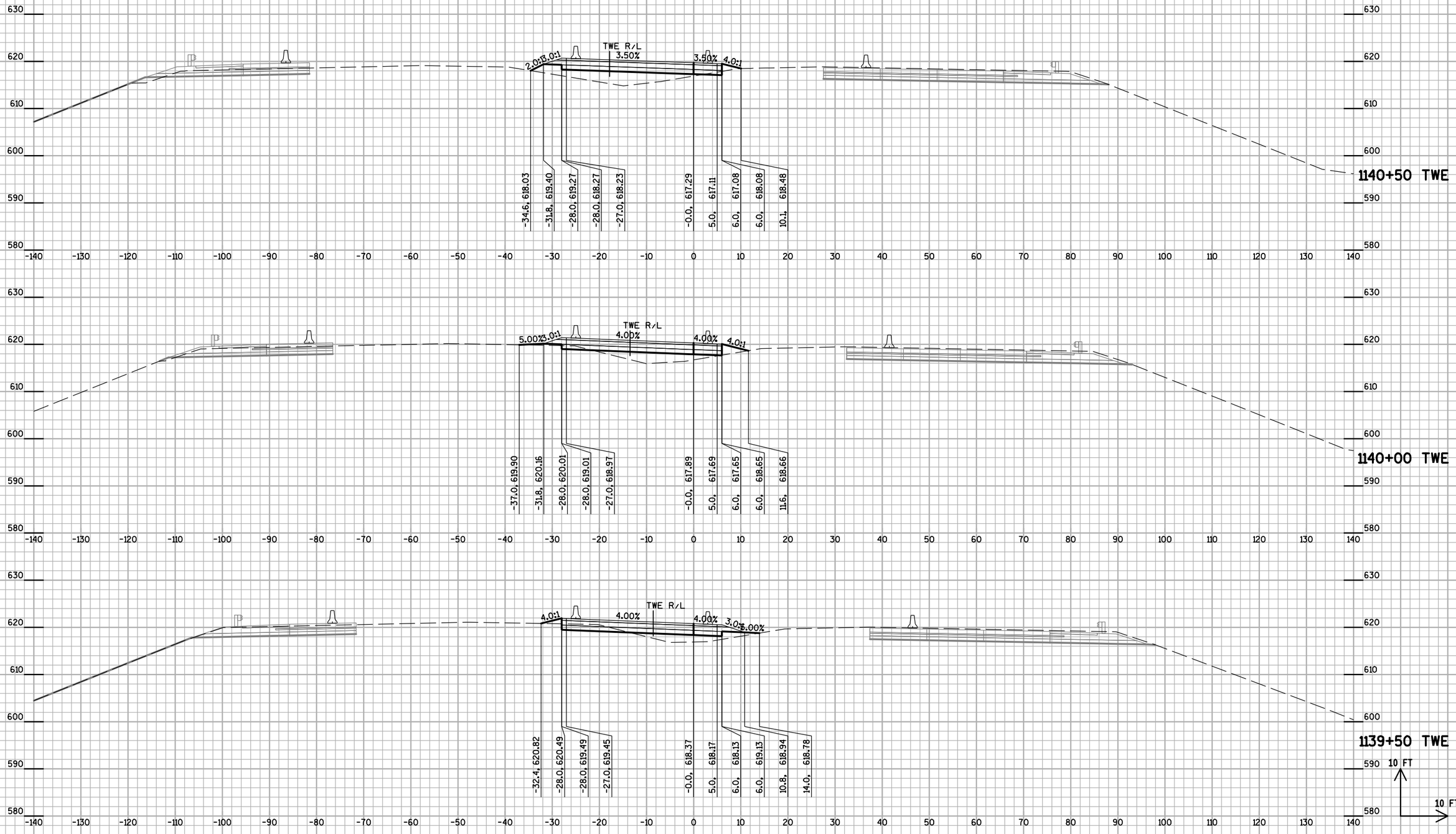


PROJECT NO: 1133-10-71, 77	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWE LINE TEMPORARY WIDENING	SHEET 1304	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090254_xs_TWE.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1139+50 TWE TO 1140+50 TWE

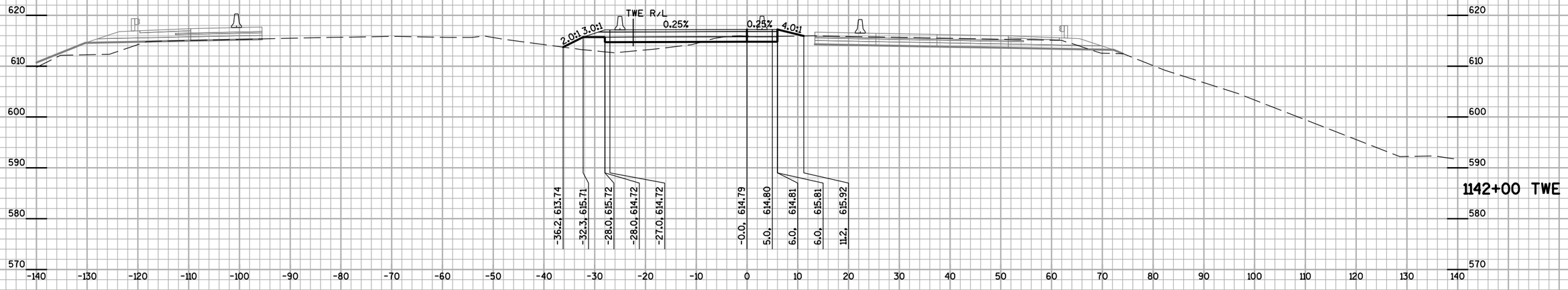


PROJECT NO: 1133-10-71, 77	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWE LINE TEMPORARY WIDENING	SHEET 1305	E

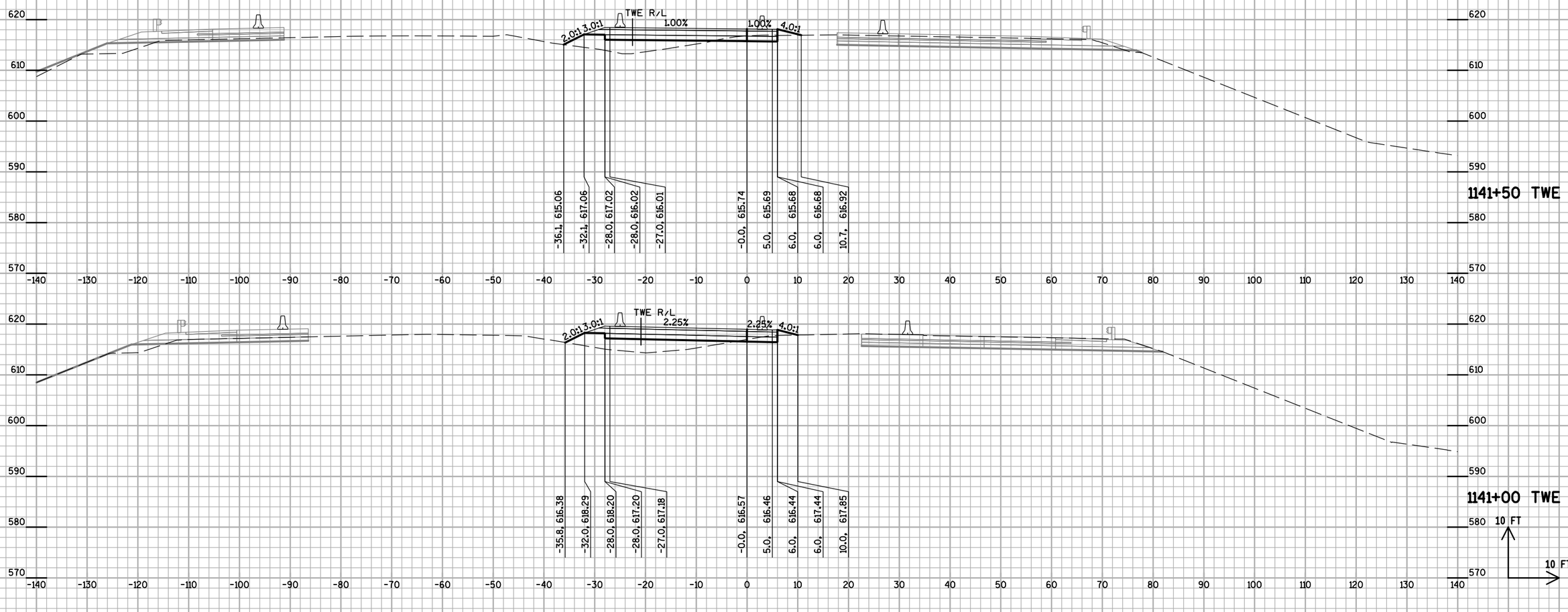
FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090254_xs_TWE.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1141+00 TWE TO 1142+00 TWE



1142+00 TWE



1141+50 TWE

1141+00 TWE

10 FT

10 FT

9

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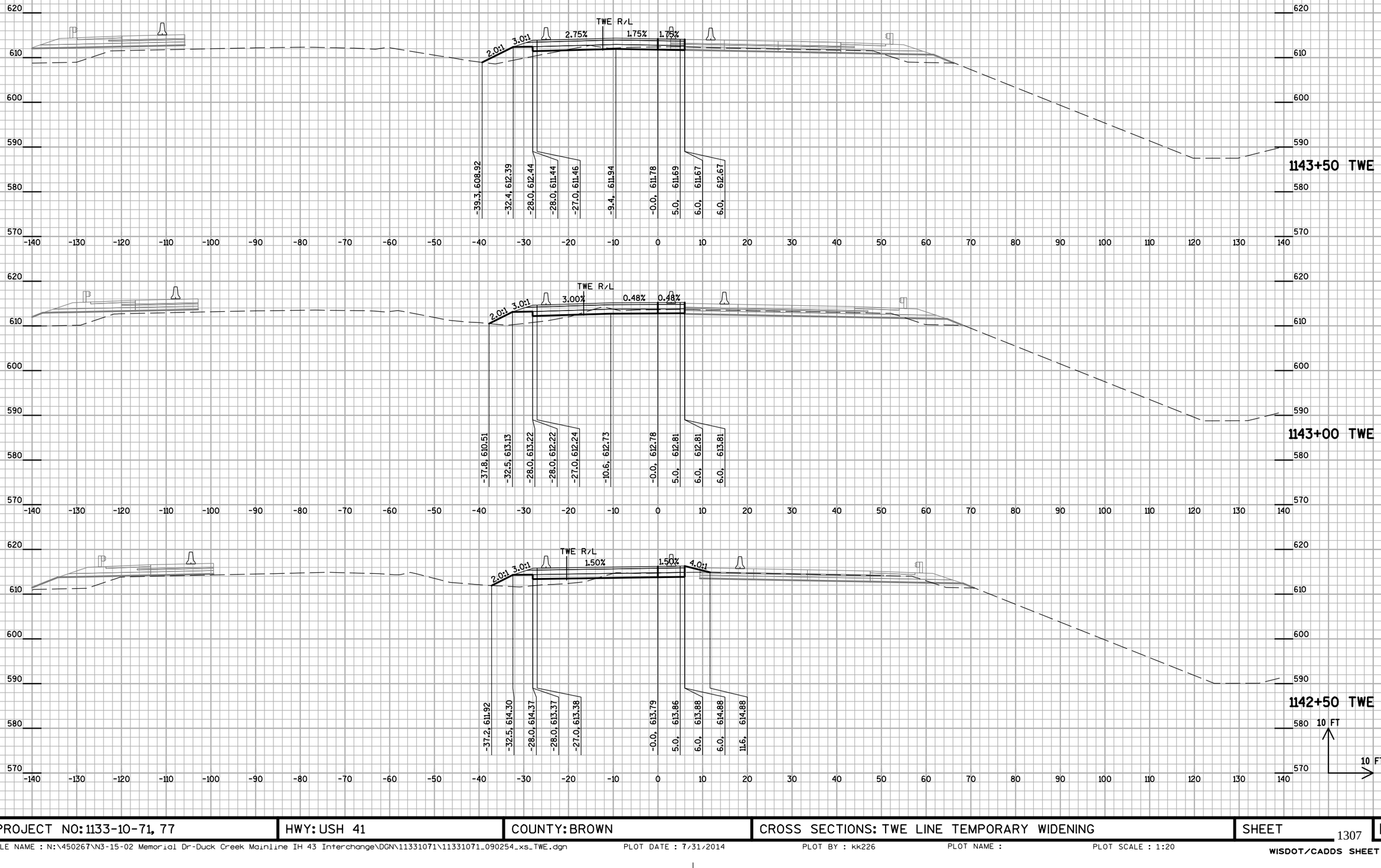
PROJECT NO: 1133-10-71, 77	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWE LINE TEMPORARY WIDENING	SHEET 1306	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090254_xs_TWE.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1142+50 TWE TO 1143+50 TWE



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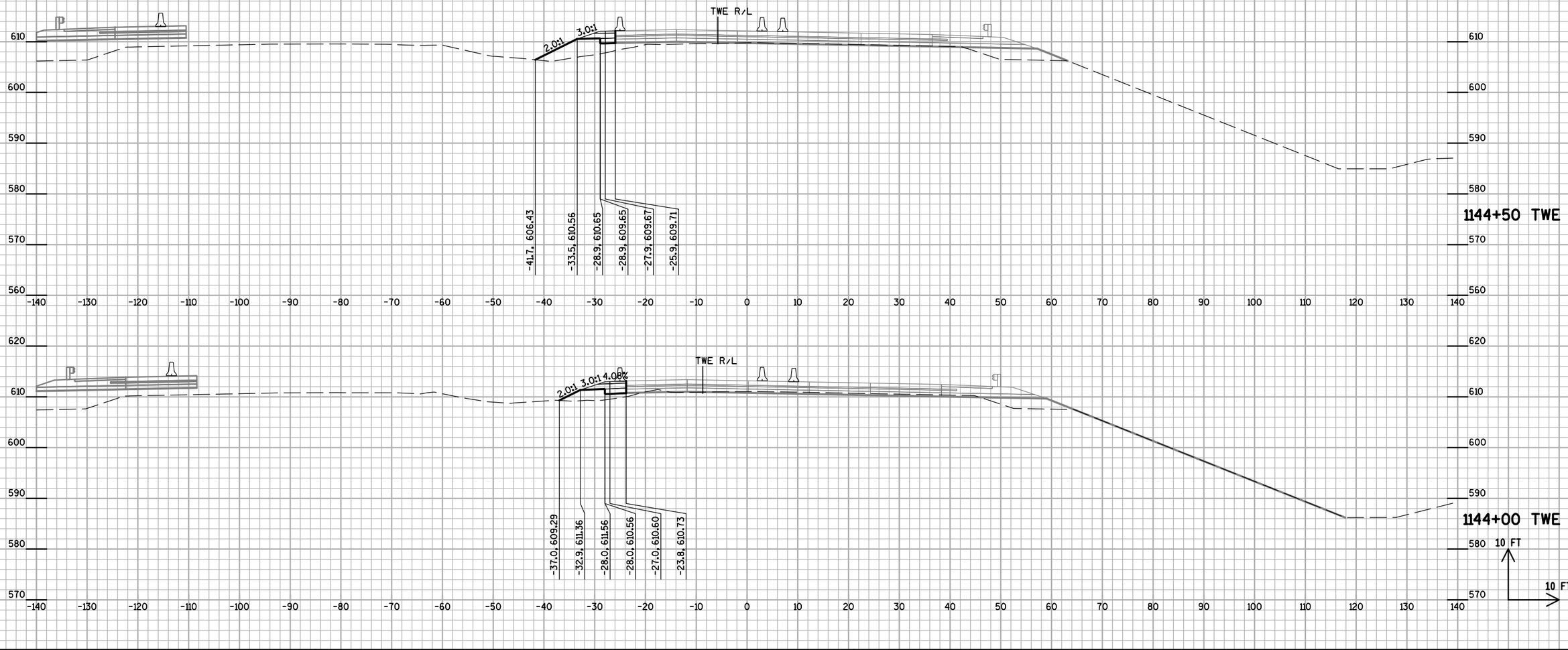
PROJECT NO: 1133-10-71, 77	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWE LINE TEMPORARY WIDENING	SHEET 1307	E

STA. 1144+00 TWE TO 1144+50 TWE



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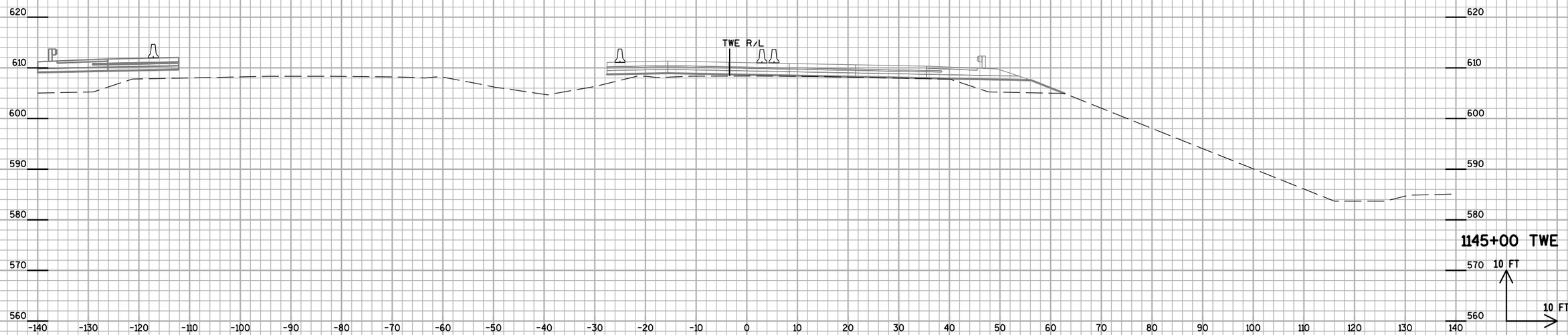
PROJECT NO: 1133-10-71, 77	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWE LINE TEMPORARY WIDENING	SHEET 1308	E

FILE NAME : N:\450267\N3-15-02 Memorial Dr-Duck Creek Mainline IH 43 Interchange\DGN\11331071\11331071_090254_xs_TWE.dgn PLOT DATE : 7/31/2014 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

STA. 1145+00 TWE TO 1145+00 TWE



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PROJECT NO: 1133-10-71, 77	HWY: USH 41	COUNTY: BROWN	CROSS SECTIONS: TWE LINE TEMPORARY WIDENING	SHEET 1309	E

Wisconsin Department of Transportation

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