GRE JULY 2015

PROJECT ID: 1517-75-75

COUNTY: WINNEBAGO

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 = 1236



19

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

USH 10 - USH 10/STH 441

COUNTY CB - ONEIDA STREET

USH 10

WINNEBAGO COUNTY

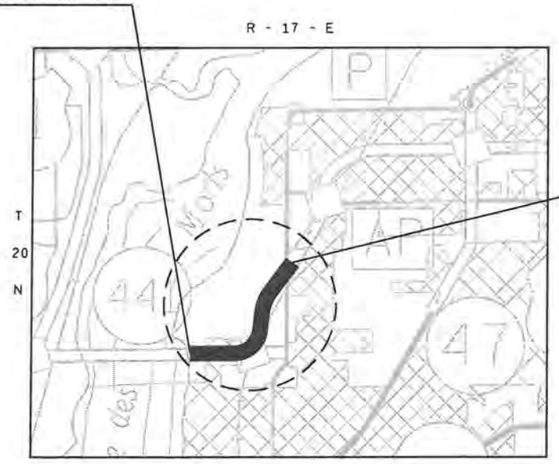
RACINE RD (CTH P) INTCHG

STATE PROJECT NUMBER
1517-75-75

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1517-75-75	WISC 2015428	1

BEGIN PROJECT 1517-75-75

STA 181EB+11.78
X = 814921.874
Y = 546293.225



END PROJECT 1517-75-75

STA 223EB+00.00
X = 817828.287
Y = 549097.307

LAYOUT
SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.793 MI.

STRUCTURES
B-70-410
B-70-411
B-70-420
B-70-421

RETAINING WALLS
R-70-120

SIGN BRIDGES
S-70-211
S-70-212
S-70-219
S-70-255

DESIGN DESIGNATION	USH 10/STH 441	RACINE RD CONNECTOR
A.A.D.T. (2020)	69,200	21,700
A.A.D.T. (2038)	88,000	23,700
D.H.V. (2038)	9,500	2,590
D.D.	57%	59%
T.	8.8%	3.03%
DESIGN SPEED	70 MPH	35 MPH
ESALS	11,858,000	XX

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- PROPOSED JOINT 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
- COMMUNICATION OVERHEAD (OH)
- COMMUNICATION UNDERGROUND (C)
- ELECTRIC OVERHEAD (OH)
- ELECTRIC UNDERGROUND (E)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD 88 (07).

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WINNEBAGO COUNTY, NAD83 (1991).

ORIGINAL PLANS PREPARED BY

HNTB
11414 WEST PARK PLACE
MILWAUKEE, WI 53224
(414) 359-2300

WISCONSIN
ANNA M. VARNEY
E-29957
DOUSMAN
WI
PROFESSIONAL ENGINEER

1/26/15 (Date)
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KAPUR
Designer	HNTB
Project Manager	SCOTT EBEL
Regional Examiner	
Regional Supervisor	CHAD DEGRAVE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 1/27/15 (Signature)

E

DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

UTILITY CONTACTS

AMERICAN TRANSMISSION COMPANY, LLC
MR. MIKE OLSEN
801 O'KEEFE ROAD
P.O. BOX 6113
DE PERE, WI 54115-6113
(920) 338-6582
MOBILE: (920) 660-2390
MOLSEN@ATCLLC.COM

AT&T WISCONSIN
MR. GARY LAABS
221 W. WASHINGTON ST 4TH FLOOR
APPLETON, WI 54911
(920) 735-3063
GL1784@ATT.COM

MENASHA UTILITIES
MR. GREG SHULL
MENASHA UTILITIES
321 MILWAUKEE ST
P.O. BOX 340
MENASHA, WI 54952-0340
(920) 967-3422
GSHULL@WPPIENERGY.ORG

TIME WARNER CABLE
MR. VINCE ALBIN
3520 DESTINATION DR
APPLETON, WI 54915
(920) 831-9249
MOBILE: (920) 378-0444
VINCE.ALBIN@TWCABLE.COM

TOWN OF MENASHA - SANITARY SEWER
MR. STEVEN LAABS
UTILITY DISTRICT
2340 AMERICAN DR
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(920) 739-5120
STEVEL@TOWN-MENASHA.COM

TOWN OF MENASHA - WATER
MR. JEFF ROTH
UTILITY DISTRICT
2340 AMERICAN DR
NEENAH, WI 54956
(920) 720-7175
JEFFR@TOWN-MENASHA.COM

WE ENERGIES - GAS
MS. LISA MAYNE
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
(715) 421-7227
LISA.MAYNE@WE-ENERGIES.COM

WE ENERGIES - ELECTRIC AND GAS
MR. LATROY BRUMFIELD
333 W. EVERETT ST
A299
MILWAUKEE, WI 53203
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MOBILE: (414) 975-9053
LATROY.BRUMFIELD@WE-ENERGIES.COM

TDS METROCOM
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APPLETON, WI 54911
(920) 882-4166
MOBILE: (920) 562-7221
STEVE.JAKUBIEC@TDSTELECOM.COM

WISCONSIN CENTRAL LTD CONTACTS

RAILROAD FLAGGING CONTACT
MARY ELLEN CARMODY
2800 LIVERNOIS ROAD, SUITE 330
TROY, MI 48083
OFFICE: (248) 740-6227
FAX: (248) 740-6036
MARYELLEN.CARMODY@CN.CA

MAIN RAILROAD CONTACT
JACKIE MACEWICZ
MANAGER PUBLIC WORKS
1625 DEPOT STREET
STEVENS POINT, WI 54481
OFFICE: (715) 345-2503
FAX: (715) 345-2507
JACKIE.MACEWICZ@CN.CA

24 HOUR EMERGENCY RAILROAD SIGNAL
1-800-616-3432

CALL BEFORE YOU DIG
WISCONSIN CENTRAL LTD IS NOT PART OF DIGGERS HOTLINE.
CALL CHRISTINE GRZESIAK, (715) 345-2506, WHEN DIGGING
ON RAILROAD R/W

DNR AREA LIAISON

JAY SCHIEFELBEIN
DNR NORTHEAST REGIONAL HQ
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 662-5130
JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

WINNEBAGO COUNTY HIGHWAY COMMISSIONER

ERNIE WINTERS
901 WEST COUNTY ROAD Y
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OSHKOSH, WI 54903
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DESIGN CONTACTS

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1940 WEST MASON STREET
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11414 W. PARK PLACE, SUITE 300
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COUNTY SURVEYOR

JERRY BOUGIE
WINNEBAGO COUNTY COURT HOUSE
445 ALGIMA BLVD
OSHKOSH, WI 54903
(920) 236-4839

US ARMY CORP OF ENGINEERS

TODD VESPERMAN
OLD FORT SQUARE
211 N. BROADWAY, STE 221
GREEN BAY, WI 54303
(651) 290-5857

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAIL
PAVING GRADES
CONTOUR MAP
EROSION CONTROL
STORM SEWER
POND DETAILS
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
FENCING PLAN
ALIGNMENT PLANS

GENERAL NOTES

THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES PRIOR TO THE START OF WORK. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. ANY LOCAL, MUNICIPAL OR OTHER UTILITY THAT IS NOT A MEMBER OF DIGGERS HOTLINE SHALL BE CONTACTED SEPERATELY.

EXISTING SURFACE ELEVATIONS USED TO CALCULATE PROPOSED EARTHWORK QUANTITIES ARE BASED UPON PREVIOUS CONSTRUCTION DIGITAL TERRAIN MODEL (DTM). FIELD CHANGES TO THESE PROPOSED DTM'S WILL NOT BE REFLECTED IN THE EXISTING DTM FOR THIS CONTRACT.

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

PROTECT INLETS WITH PROPER INLET PROTECTION AT LOCATIONS EXHIBITING RISK OF BEING IMPACTED BY CONSTRUCTION OPERATIONS AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

THE EXACT LOCATIONS OF COMMERCIAL AND 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 1 1/4-INCH SHALL BE USED UNDER ALL DRIVEWAYS.

THE EXACT LOCATION AND WIDTH OF TEMPORARY ACCESS FOR DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE, AT THE CONTRACTOR'S EXPENSE, FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS .

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.

EROSION BALES ARE TO ONLY BE USED FOR REINFORCEMENT OF PROPOSED SILT FENCE LOCATIONS ALONG WETLANDS. ANY OTHER USE OF EROSION BALES IS PROHIBITED.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WATERWAY.

CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE REPLACED WITH SPECIFIED THICKNESS AS OUTLINED IN THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

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

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE. CURB AND GUTTER RADII ARE MEASURED TO THE FACE OF CURB.

SIDEWALK ELEVATIONS ARE GIVEN FROM THE FRONT OF THE SIDEWALK WHEN SHOWN.

FERTILIZER SHALL NOT BE USED NEAR NAVIGABLE WATERWAYS OR WETLANDS.

BROKEN CONCRETE CONTAINING STEEL SHALL NOT BE USED AS RIPRAP OR HEAVY RIPRAP.

REMOVING CONCRETE INCLUDES ANY MESH OR REINFORCEMENT THAT MAY BE PART OF THE PAVEMENT STRUCTURE. EXISTING PAVEMENT DEPTHS ARE BASED ON AS-BUILT DATA AND MAY VARY IN THE FIELD.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS. THIS ALSO INCLUDES VERIFICATION OF INVERT ELEVATIONS AT ALL PROPOSED STORM SEWER CONNECTION POINTS TO EXISTING SYSTEMS.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM "TRAFFIC CONTROL COVERING SIGNS TYPE 1 OR TYPE 2."

STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN IN THE PLANS ARE APPROXIMATE. FINAL LOCATION OF SIGNS ARE TO BE DETERMINED BY THE ENGINEER.

BENCHMARK LOCATIONS SHOWN ON PLAN ARE APPROXIMATE AND SHOULD BE VERIFIED.

ALL ITEMS ASSOCIATED WITH SIGNING REMOVALS ARE SHOWN ON SIGNING PLAN, EXCEPT FOR REMOVING OLD SIGN STRUCTURES.

REMOVAL PLAN DOES NOT INCLUDE REMOVAL OF TEMPORARY PAVEMENT. SEE TRAFFIC CONTROL PLAN.

5 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 5 FEET. 10 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 10 FEET.

EXCAVATION REQUIRED FOR ALL SIGN STRUCTURES, BRIDGES, AND RETAINING WALLS IS NOT INCLUDED IN THE COMPUTER EARTHWORK AND IS INCIDENTAL TO THE PERTINANENT STRUCTURE ITEMS. SEE STRUCTURE PLANS FOR ADDITIONAL GUIDANCE ON REQUIRED EXCAVATION LIMITS.

SIDEWALK REPLACEMENT SHOULD BE TO THE NEAREST JOINT. LIMITS ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE ENGINEER. MATCH EXISTING SIDEWALK WIDTH.

VERIFY PROPOSED BEAMGUARD AND THRIE BEAM POST SPACING PRIOR TO SIGN STRUCTURE AND DRAINAGE STRUCTURE PLACEMENT.

FOR ALL CURB RAMPS, REFER TO THE STANDARD DETAIL DRAWINGS FOR THE RAMP TAPER DIMENSIONS. SIDEWALK WIDTHS ARE DIMENSIONED IN THE PLAN.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 1.5%, ± 0.5% CONSTRUCTION TOLERANCE.

ABBREVIATIONS

AEW	APRON END WALL
AGG	AGGREGATE
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CMCP	CULVERT PIPE CORRUGATED METAL
CONC	CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC-YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
EAT	ENERGY ABSORBING TERMINAL
FE	FIELD ENTRANCE
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASMENT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RIGHT
SALV	SALVAGED
SAPBC	SALVAGED ASPHALTIC PAVEMENT BASE COARSE
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWINGS
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT

2

ALIGNMENTS ARE LABELED WITH THE FOLLOWING IDENTIFIERS

ALIGNMENT IDENTIFIERS	
CNB	RACINE ROAD CONNECTOR NB
CSB	RACINE ROAD CONNECTOR SB
EB	USH 10 EB / STH 441 NB
EBL	USH 10 EB/STH 441 NB LEFT EOP
EBT	USH 10 EB/STH 441 NB INTERIM CONNECTION
ERA	EXISTING RAMP A
ERB	EXISTING RAMP B
ERC	EXISTING RAMP C
ERD	EXISTING RAMP D
FS	FRANCIS STREET
ML	EXISTING USH 10/STH 441
MST	USH 10 WB/STH 441 SB SHOULDER WIDENING
NWE	NOISEWALL - RACINE RD NE RAMP TO RACINE RD
NWF	NOISEWALL - RACINE RD TO MIDWAY NW RAMP
RNE	RACINE ROAD NE RAMP
RNW	RACINE ROAD NW RAMP
RRN	RACINE ROAD/STH 441 SB RAMP ROUNDABOUT
RRB	RAILROAD BUNGALOW
RSE	RACINE ROAD SE RAMP
RSW	RACINE ROAD SW RAMP
RSWC	RACINE ROAD SW BYPASS
TWA	TEMPORARY WIDENING A
TWB	TEMPORARY WIDENING B
TWC	TEMPORARY WIDENING C
TWE	TEMPORARY WIDENING E
TWG	TEMPORARY WIDENING G
TWH	TEMPORARY WIDENING H
WB	USH 10 WB / STH 441 SB
WBT	USH 10 WB/STH 441 SB INTERIM CONNECTION
XNW	RACINE ROAD NW RAMP LEFT EDGE OF LANE
XNE	RACINE ROAD NE RAMP RIGHT EOP
XSE	RACINE ROAD CONNECTOR NB RIGHT EOP
XSW	RACINE ROAD CONNECTOR SB RIGHT EOP

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08	0.16	0.22	0.12	0.20	0.27	0.15	0.24	0.33	0.19	0.28	0.38
	0.22	0.30	0.38	0.26	0.34	0.44	0.30	0.37	0.50	0.34	0.41	0.56
MEDIAN STRIP-	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25	0.30
TURF	0.24	0.26	0.30	0.25	0.28	0.33	0.26	0.30	0.37	0.27	0.32	0.40
SIDE SLOPE-			0.25			0.27			0.28			0.30
TURF			0.32			0.34			0.36			0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

1517-75-75

TOTAL PROJECT AREA = 59.37 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 58.35 ACRES

2

2

CITY OF APPLETON

N

TOWN OF MENASHA

USH 41

US 10

WIS 47

US 10/STH 441

US 10

CITY OF MENASHA

USH 41

LEGEND

TOWN OF MENASHA

CITY OF MENASHA

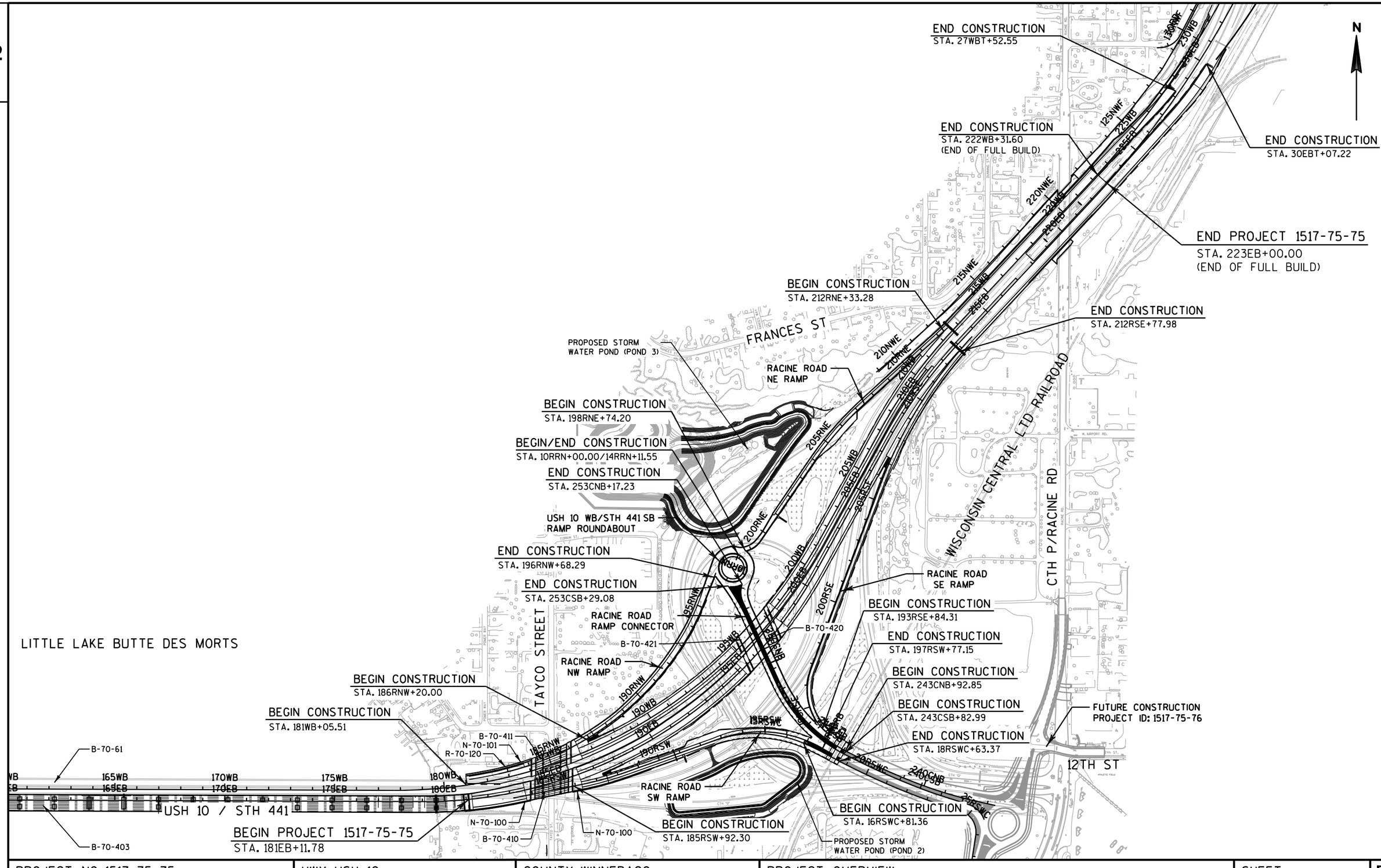
CITY OF APPLETON

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PROJECT OVERVIEW	SHEET 5	E

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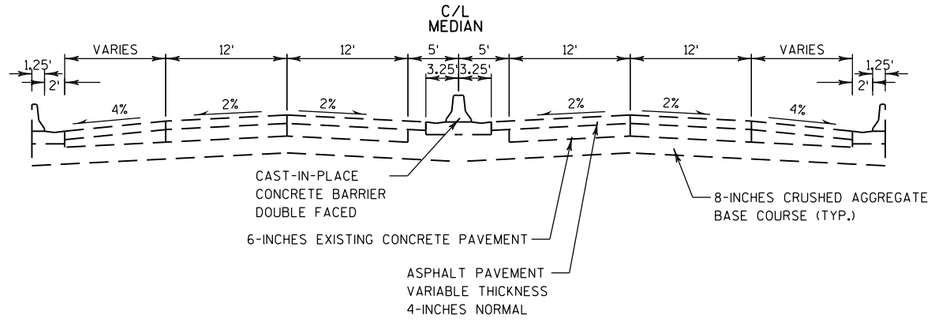
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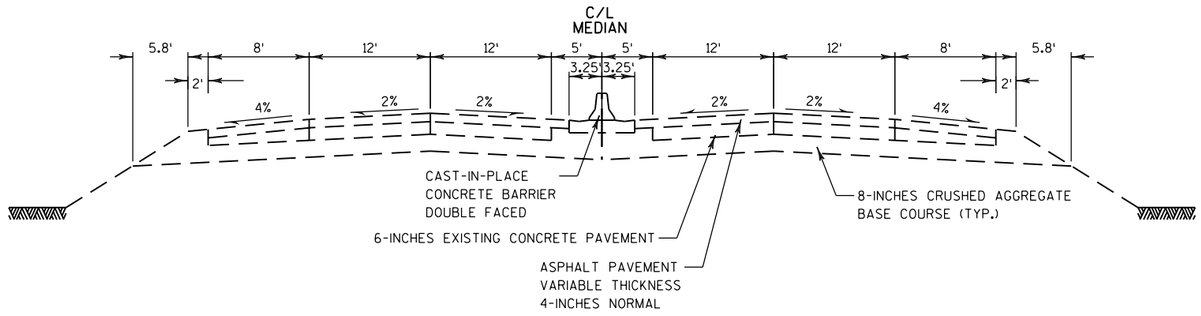
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2



TYPICAL EXISTING SECTION
USH 10

STA 181EB+11 TO STA 184EB+28
STA 181WB+04 TO STA 184WB+11

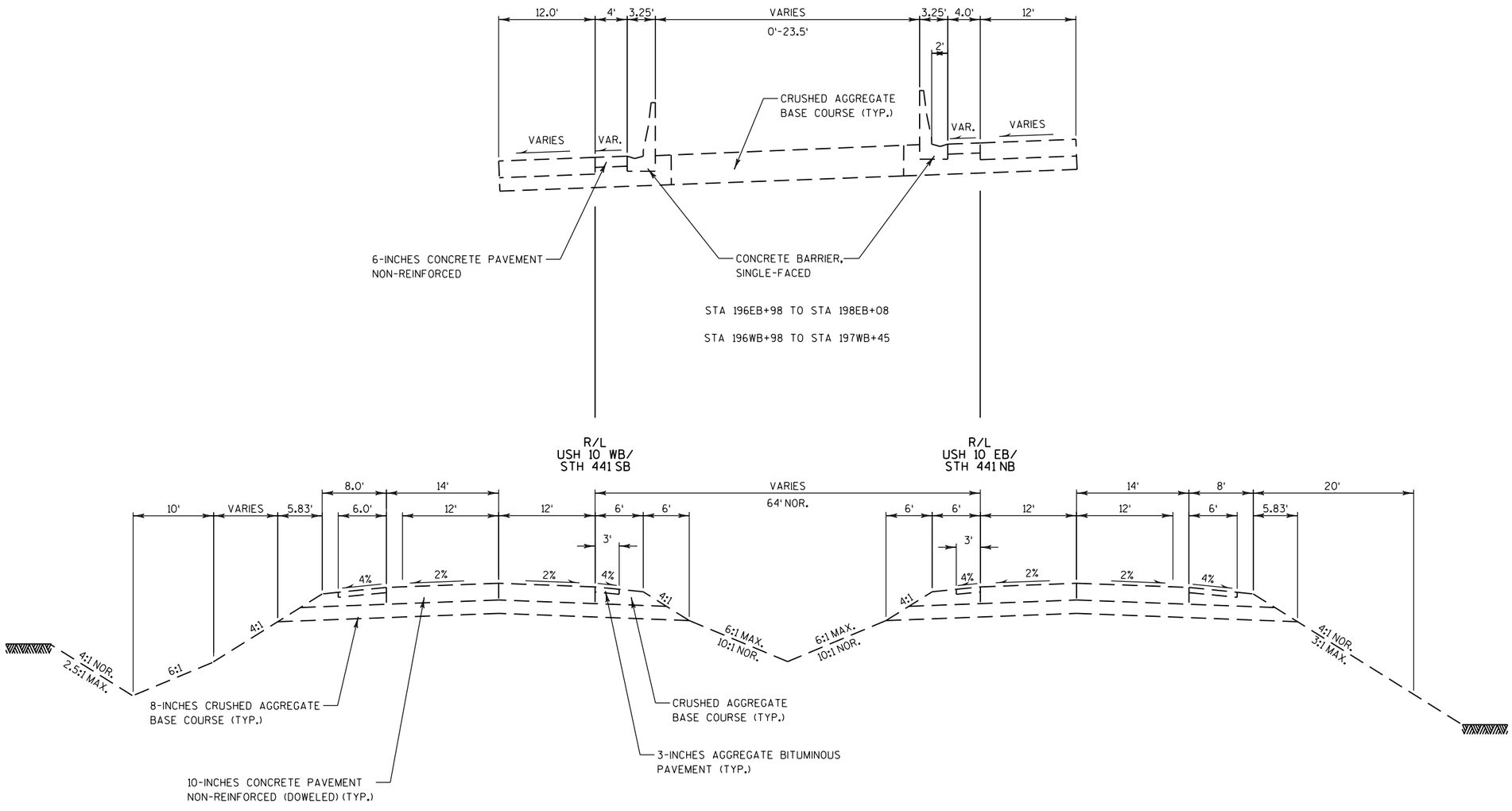


TYPICAL EXISTING SECTION
USH 10

STA 185EB+50 TO STA 192EB+76
STA 194EB+29 TO STA 196EB+98
STA 185WB+28 TO STA 192WB+76
STA 193WB+80 TO STA 196WB+98

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 7	E

2

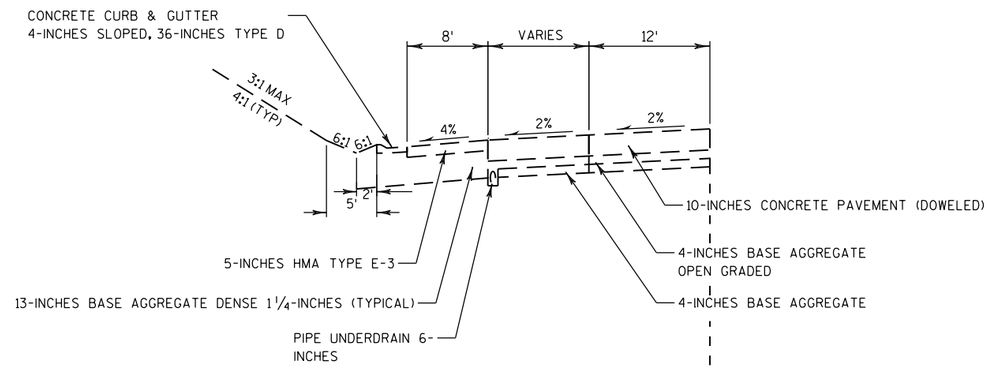


TYPICAL EXISTING SECTION
USH 10

STA 198EB+08 TO STA 222EB+01

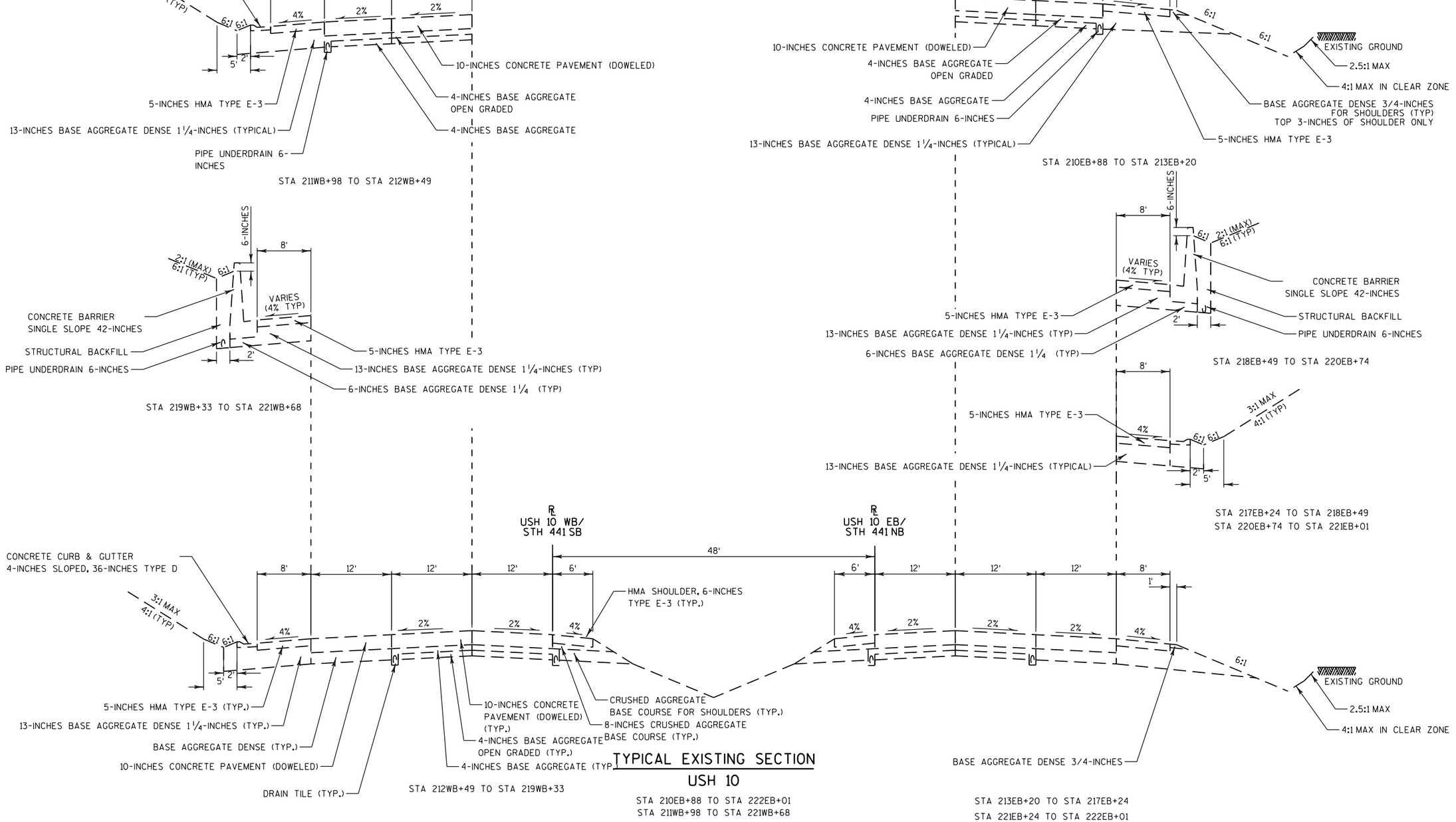
STA 197WB+45 TO STA 221WB+68

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 8	E



STA 211WB+98 TO STA 212WB+49

STA 219WB+33 TO STA 221WB+68

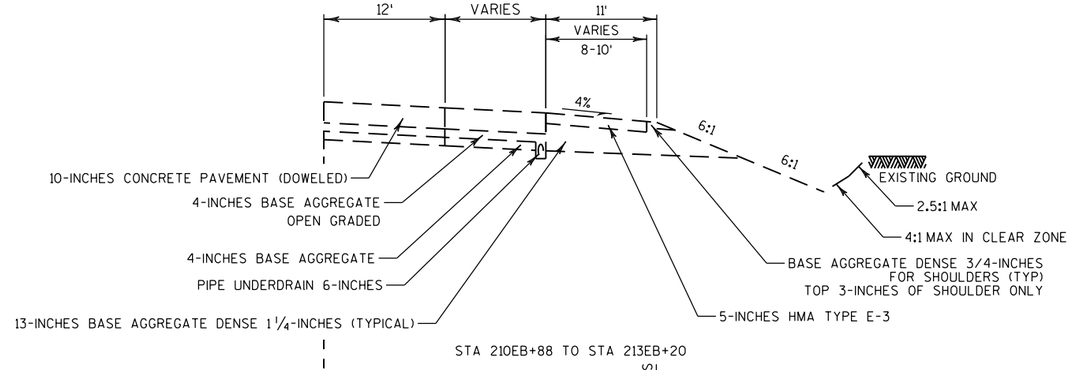


STA 212WB+49 TO STA 219WB+33

TYPICAL EXISTING SECTION
USH 10

STA 210EB+88 TO STA 222EB+01
STA 211WB+98 TO STA 221WB+68

STA 213EB+20 TO STA 217EB+24
STA 221EB+24 TO STA 222EB+01



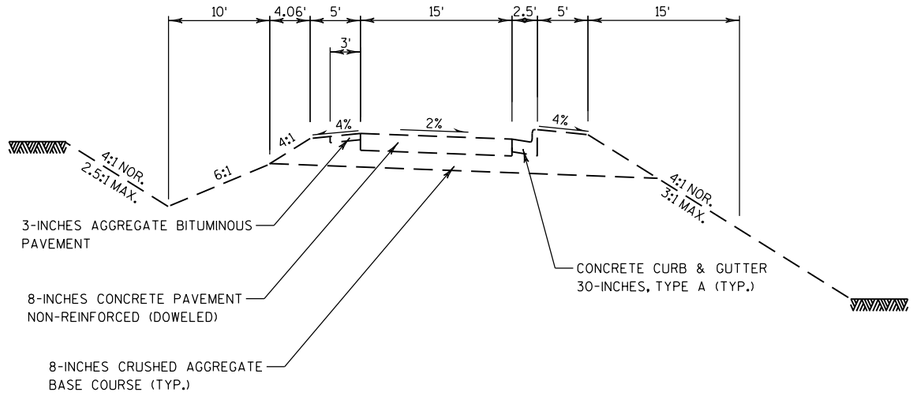
STA 210EB+88 TO STA 213EB+20

STA 218EB+49 TO STA 220EB+74

STA 217EB+24 TO STA 218EB+49
STA 220EB+74 TO STA 221EB+01

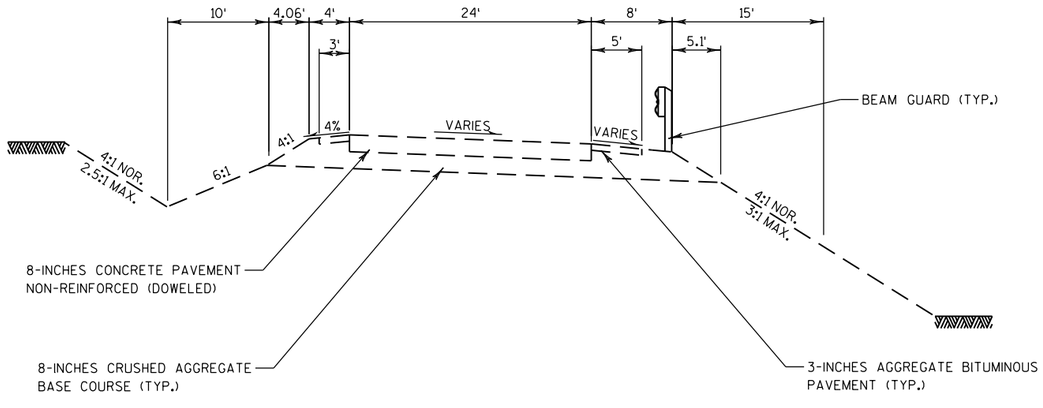
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 9	E

2



TYPICAL EXISTING SECTION

RACINE RD NW ON LOOP RAMP

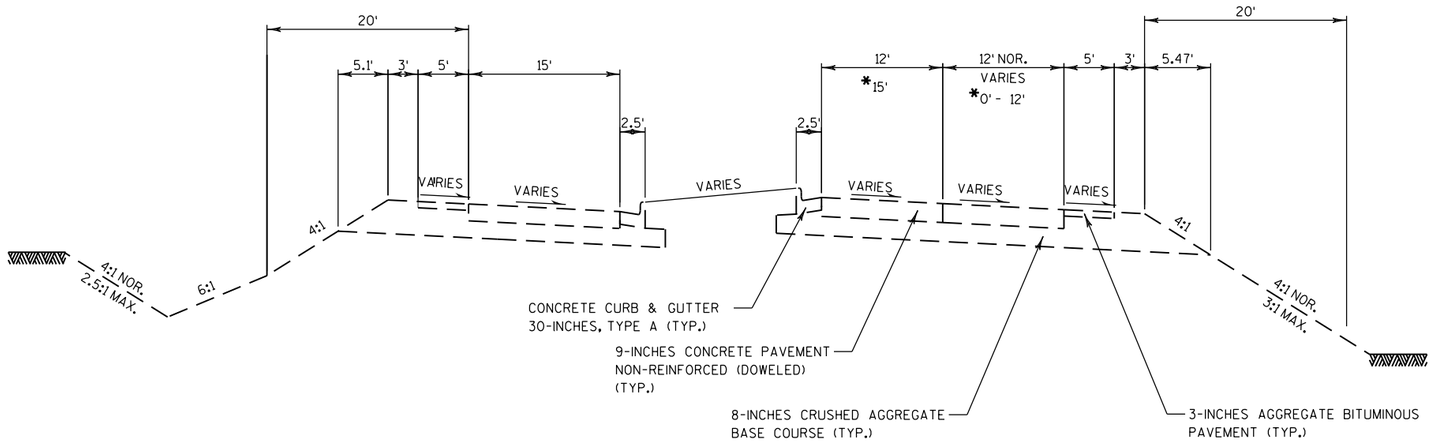


TYPICAL EXISTING SECTION

RACINE RD SW OFF RAMP

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 10	E

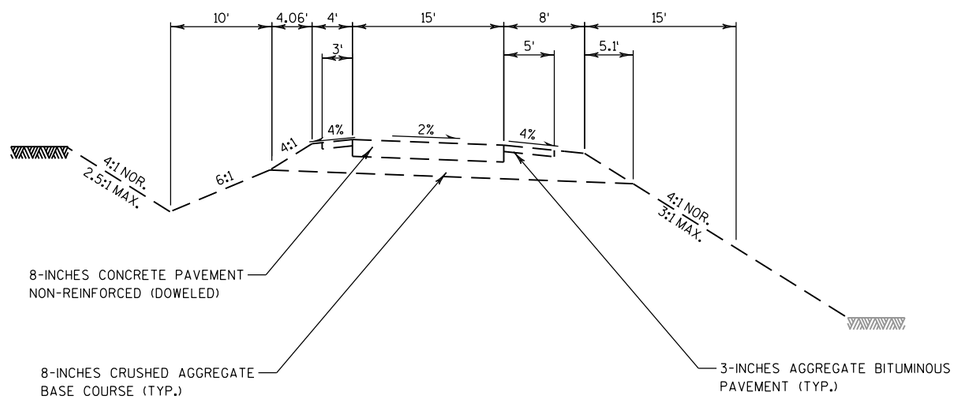
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TYPICAL EXISTING SECTION

RACINE RD RAMP CONNECTOR

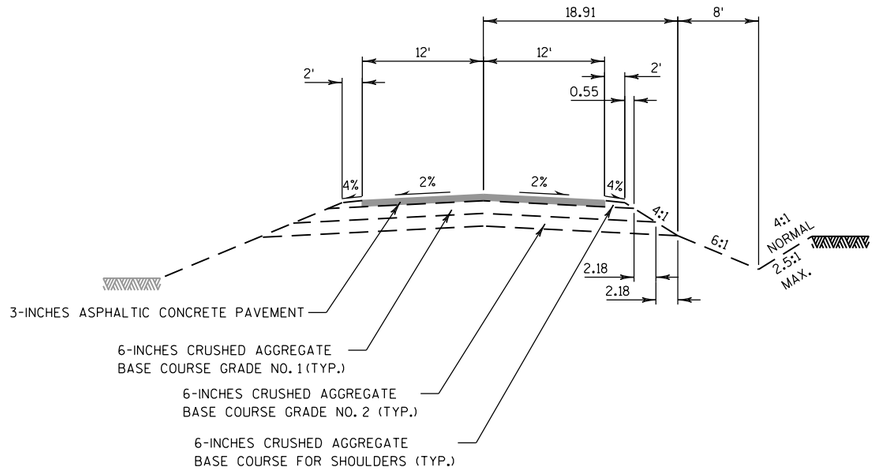
* WHEN THE TWO LOOPS MERGE TOGETHER



TYPICAL EXISTING SECTION

RACINE RD NW ON RAMP
RACINE RD SE OFF RAMP

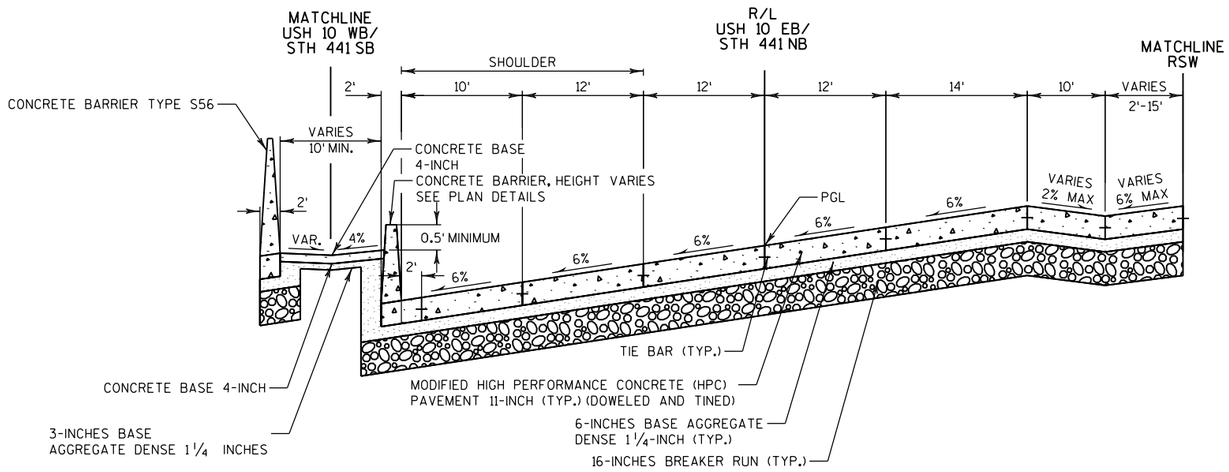
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TYPICAL EXISTING SECTION
FRANCES STREET

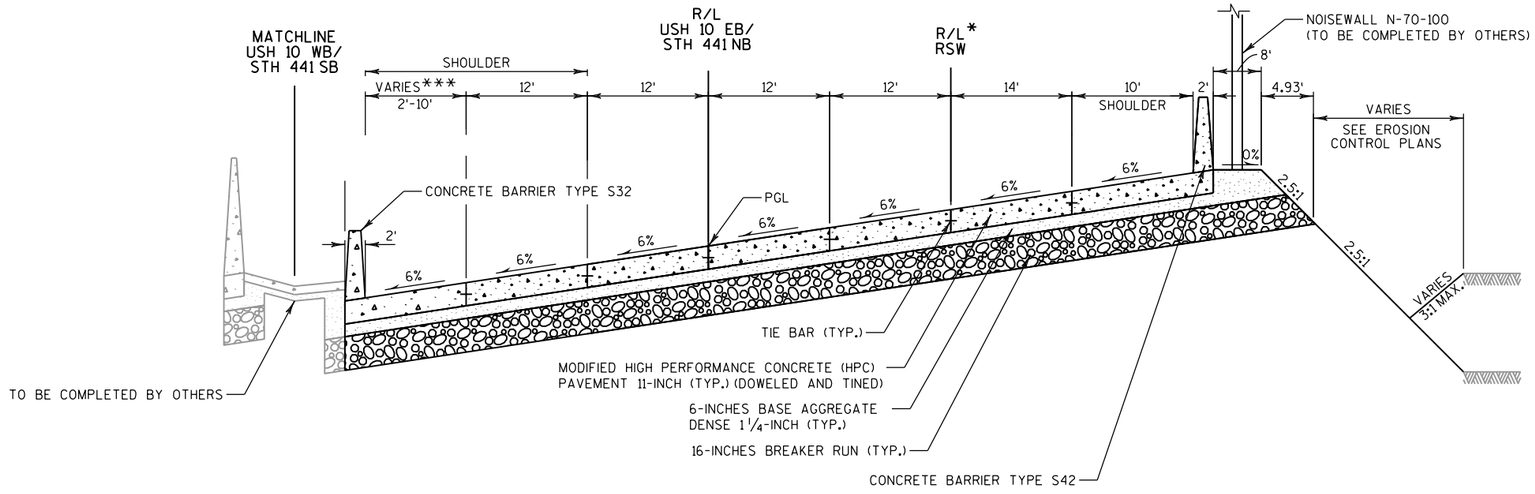
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 12	E

2



TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 186EB+25.58** TO STA 187EB+27.34

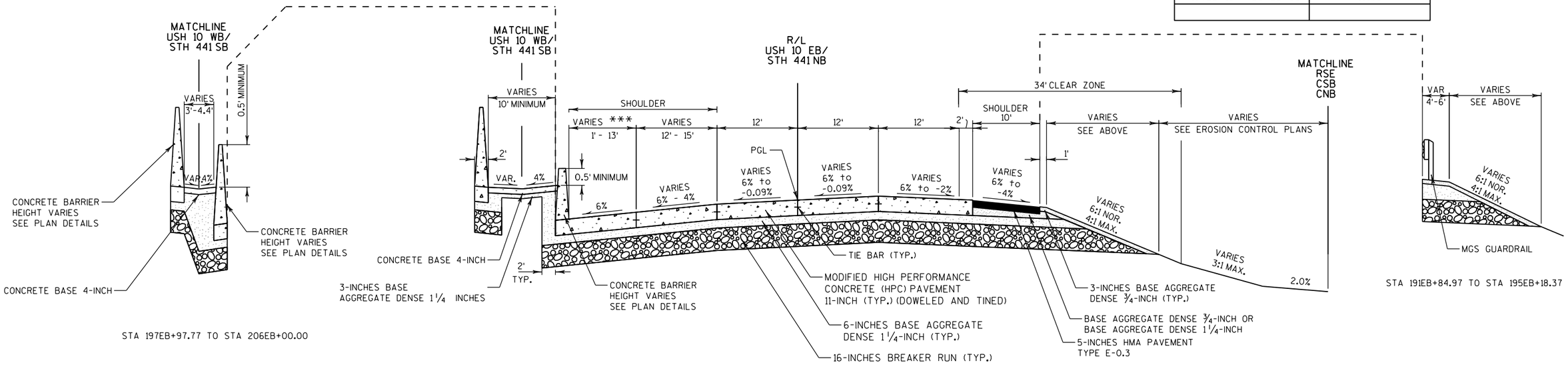


TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 181EB+11.78 TO STA 183EB+70.00**

* ALIGNMENT BEGINS AT STA 183EB+11.95 = 183RSW+11.95
** REFER TO BRIDGE B-70-410 PLANS
*** LANE BEGINS AT STA 181EB+56.75

STATION	SUBGRADE SHLDR WIDTH
188EB+25 - 195EB+60	18.75'
197EB+15 - 207EB+93	16.68'



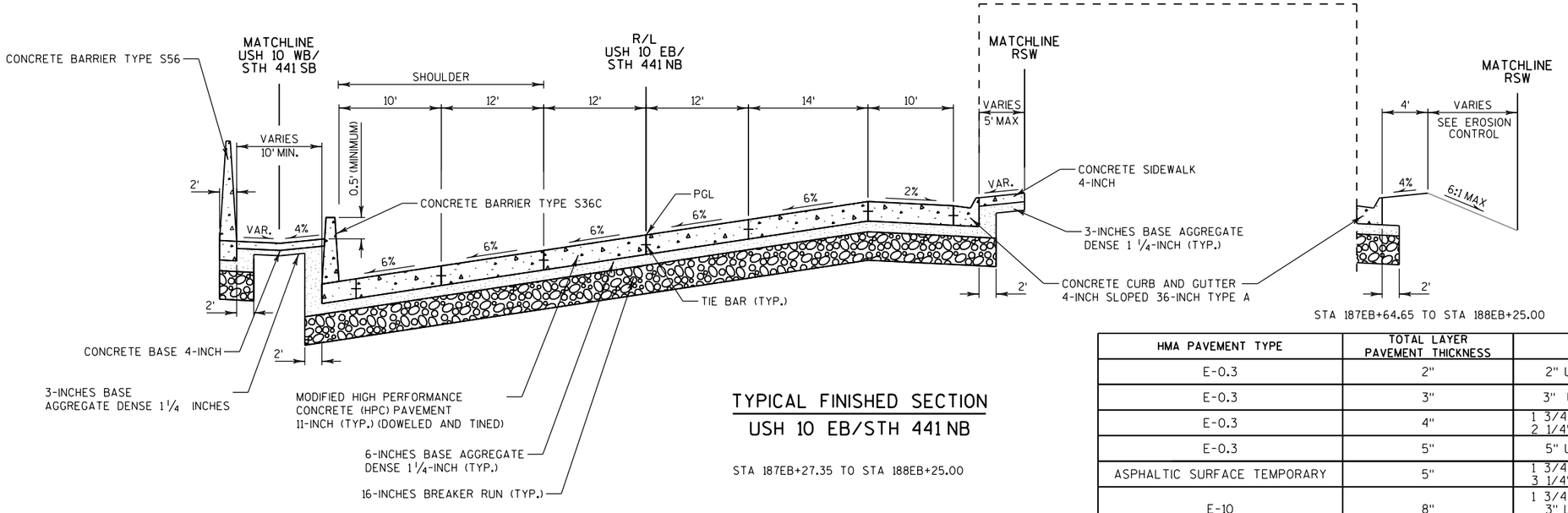
STA 197EB+97.77 TO STA 206EB+00.00

STA 191EB+84.97 TO STA 195EB+18.37

TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 188EB+25.00 TO STA 195EB+18.37**
STA 197EB+97.77** TO STA 206EB+00.00

** REFER TO BRIDGE B-70-420 PLANS
*** LANE ENDS AT STA 201EB+39.23



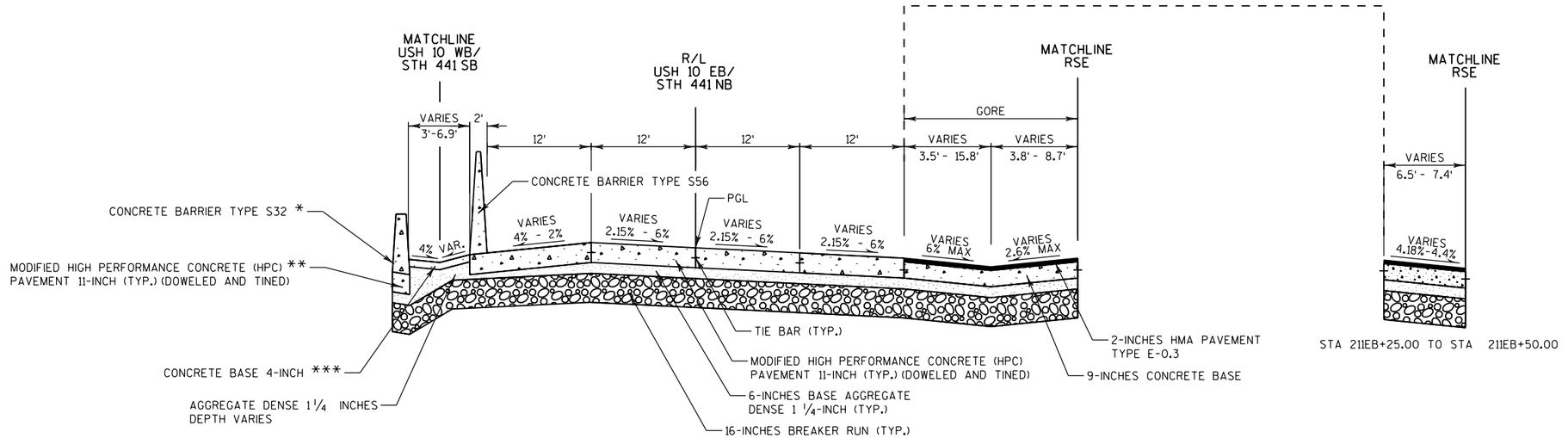
TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 187EB+27.35 TO STA 188EB+25.00

STA 187EB+64.65 TO STA 188EB+25.00

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2



STA 211EB+25.00 TO STA 211EB+50.00

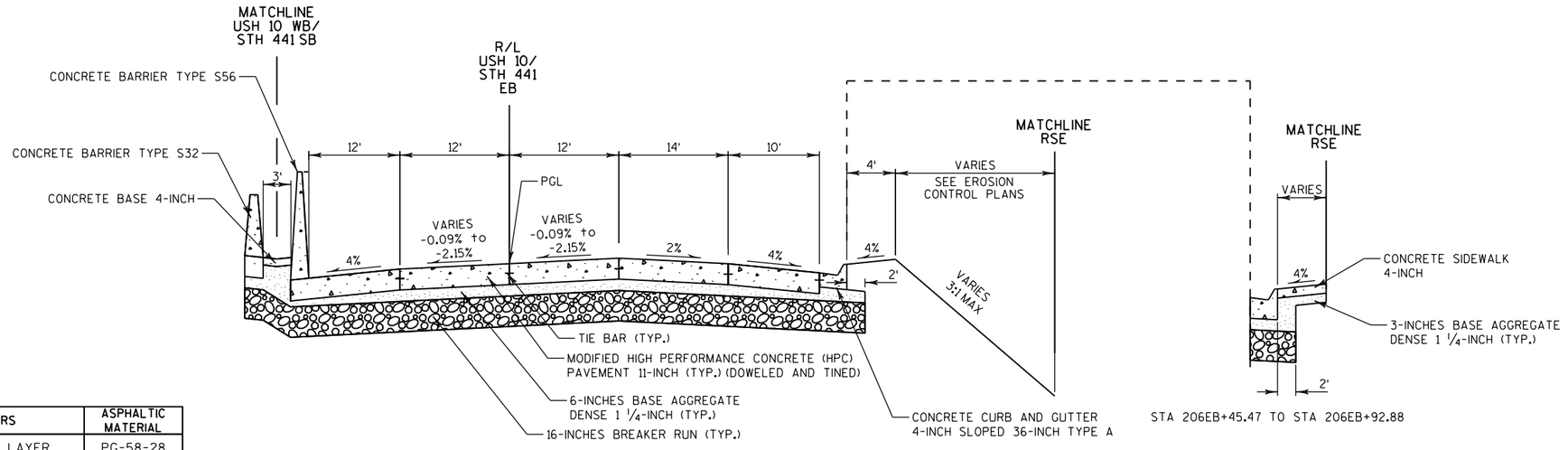
TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 206EB+92.88 TO STA 211EB+50.00

* CONCRETE BARRIER ENDS AT STA 211EB+22.62 = 210WB+50

** CONCRETE PAVEMENT ENDS AT STA 211EB+22.62 = 210WB+50
5-INCH HMA PAVEMENT BEGINS AT STA 211EB+22.62

*** CONCRETE BASE ENDS AT STA 211EB+22.62 = 210WB+50
5-INCH HMA PAVEMENT BEGINS AT STA 211EB+22.62, SINGLE SLOPE FROM BACK OF BARRIER AT ROADWAY SURFACE WB TO BACK OF BARRIER, ROADWAY SURFACE EB
(SEE NEXT STATION RANGE)



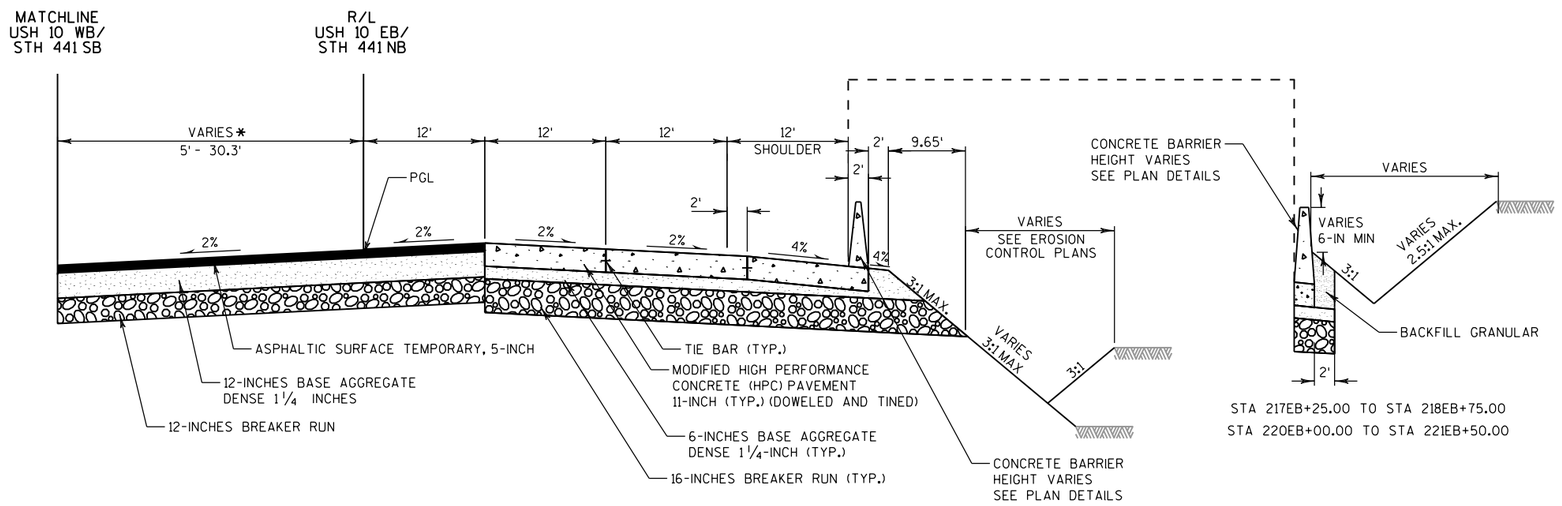
STA 206EB+45.47 TO STA 206EB+92.88

TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 206EB+00.00 TO STA 206EB+92.88

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2

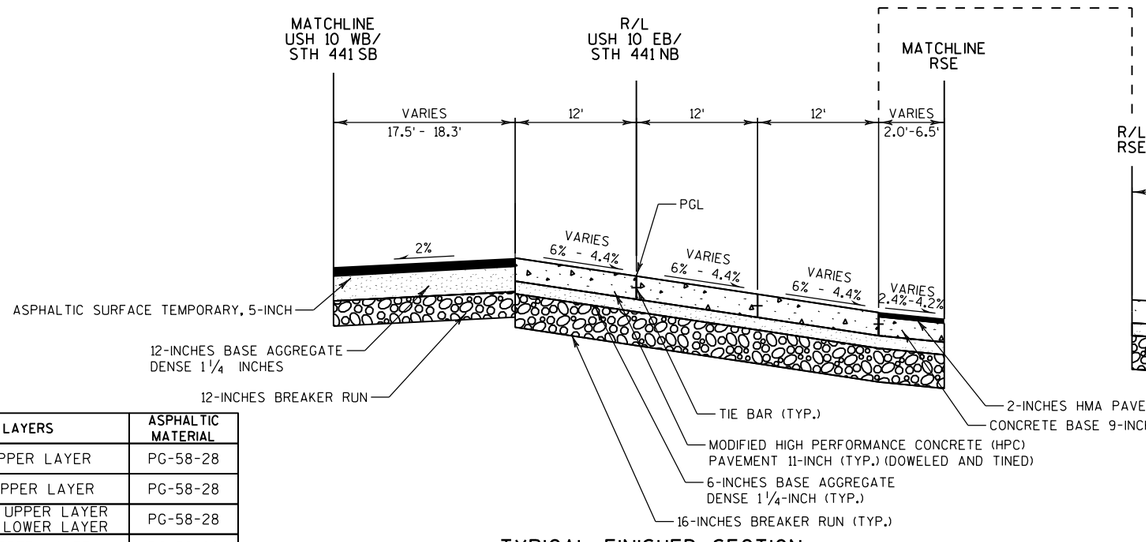


* 30.3' FROM STA 217EB+00.00 TO STA 218EB+13.42
5' FROM STA 218EB+13.42 TO STA 223EB+00.00

STA 217EB+25.00 TO STA 218EB+75.00
STA 220EB+00.00 TO STA 221EB+50.00

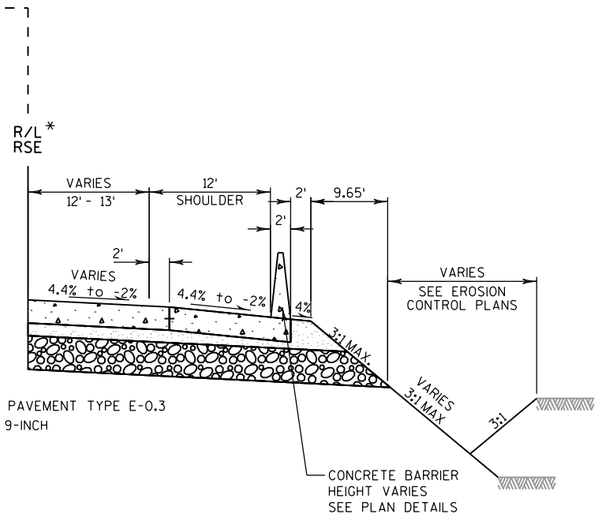
TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 217EB+00.00 TO STA 218EB+75.00
STA 220EB+00.00 TO STA 223EB+00.00



TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 211EB+50.00 TO STA 217EB+00.00

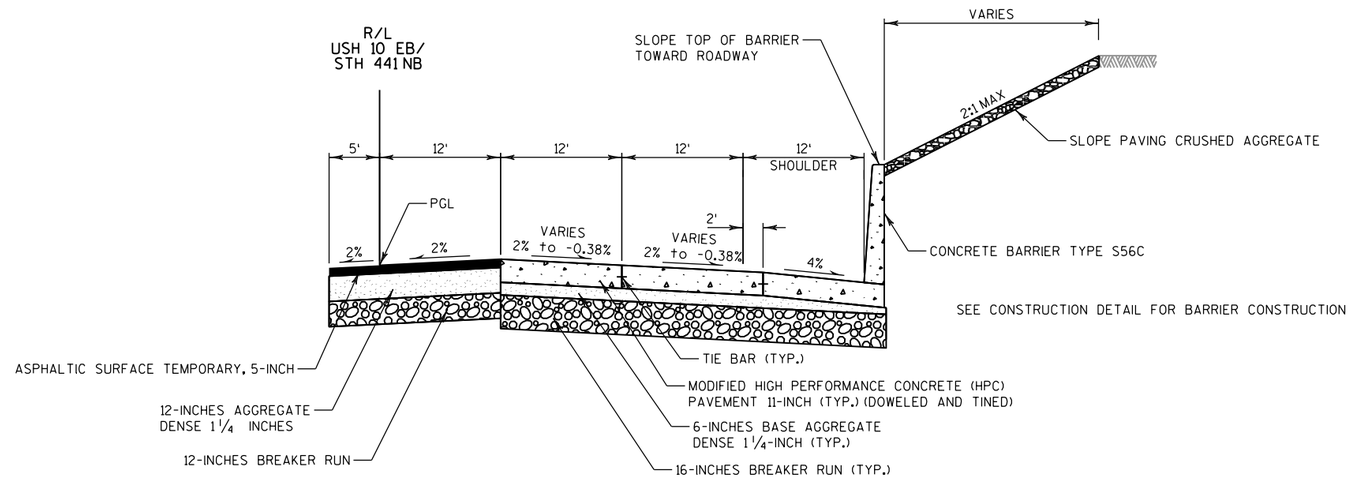


STA 212EB+77.74 TO STA 217EB+00.00

* ALIGNMENT ENDS AT STA 213EB+71.16 = 213RSE+71.15

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2

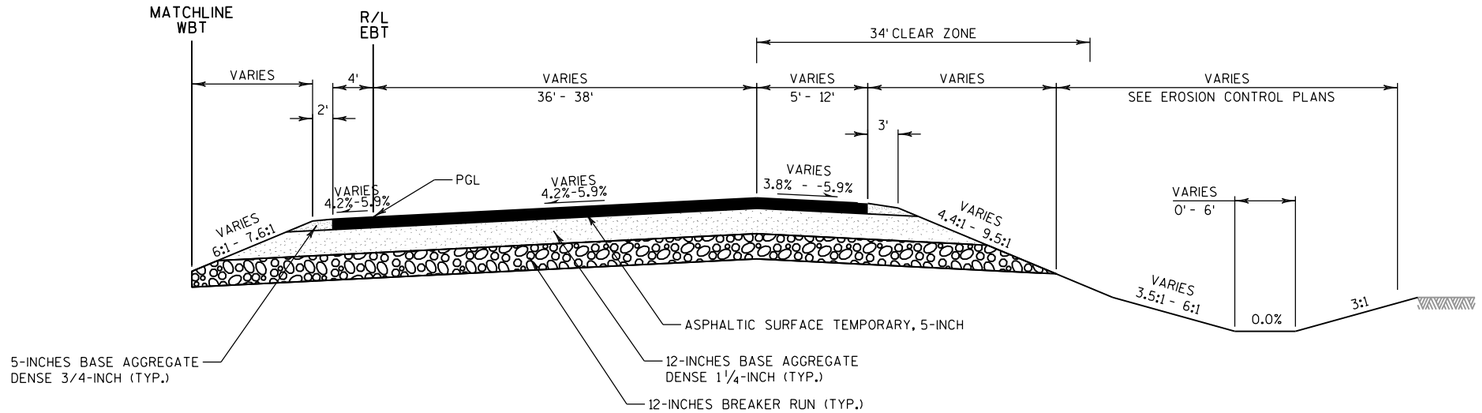


TYPICAL FINISHED SECTION
USH 10 EB/STH 441 NB

STA 218EB+75.00 TO STA 220EB+00.00

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2



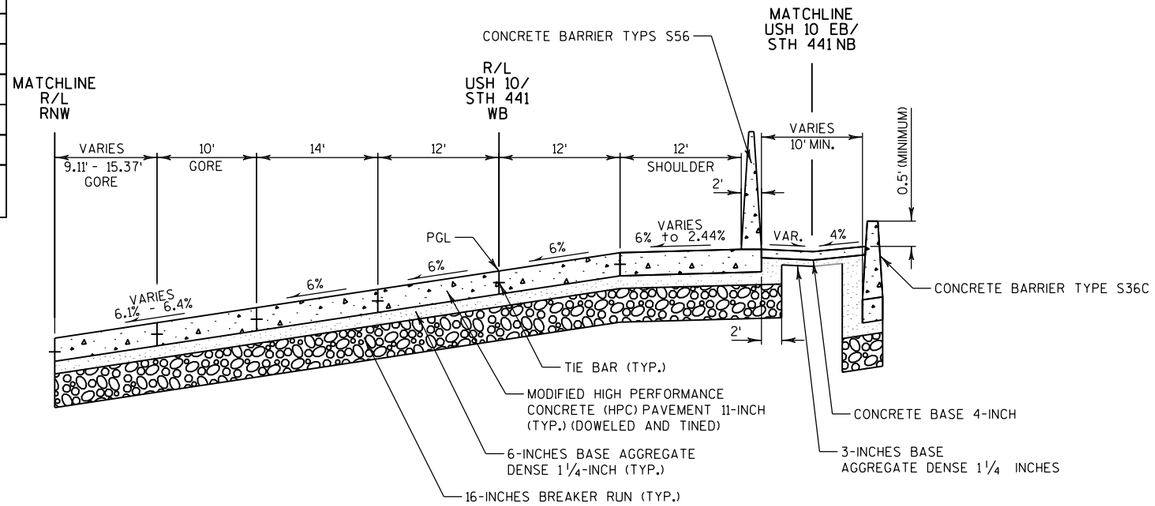
TYPICAL FINISHED SECTION

USH 10 EB/STH 441 NB
INTERIM CONNECTION

STA 23EBT+00.00 TO STA 30EBT+07.22

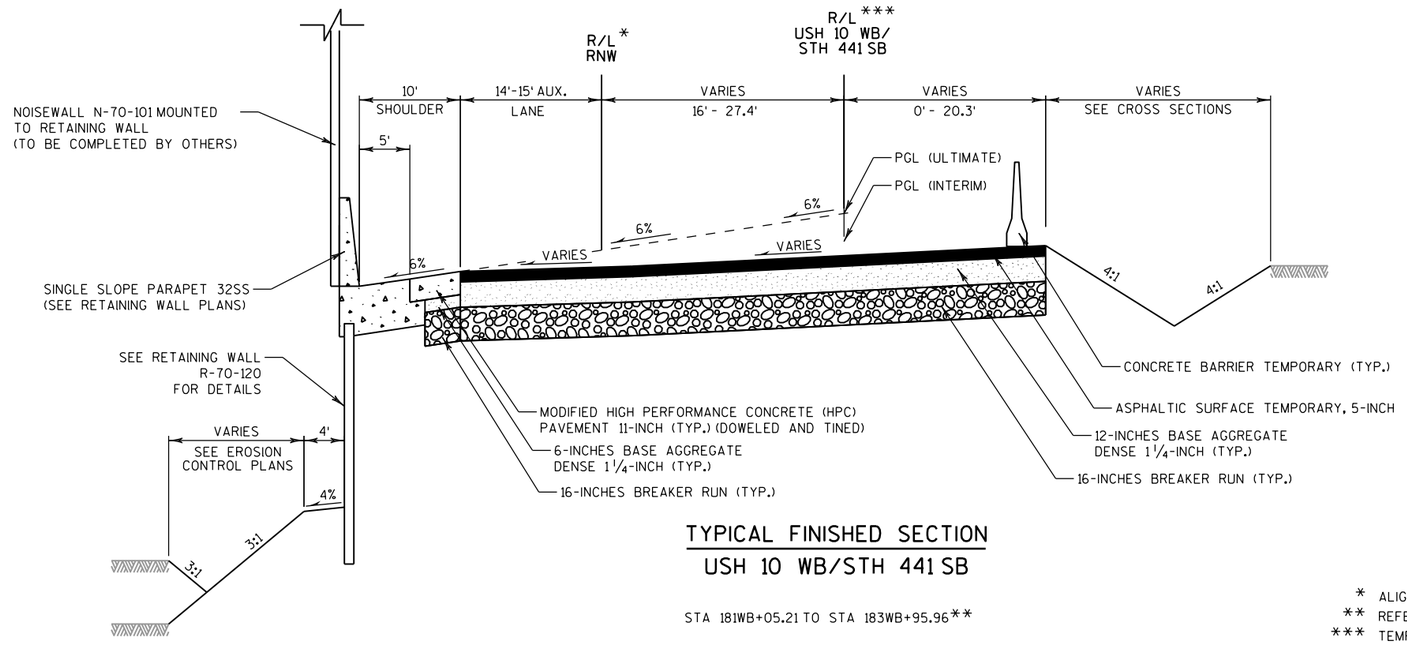
HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28



TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

STA 186WB+41.77** TO STA 186WB+95.34



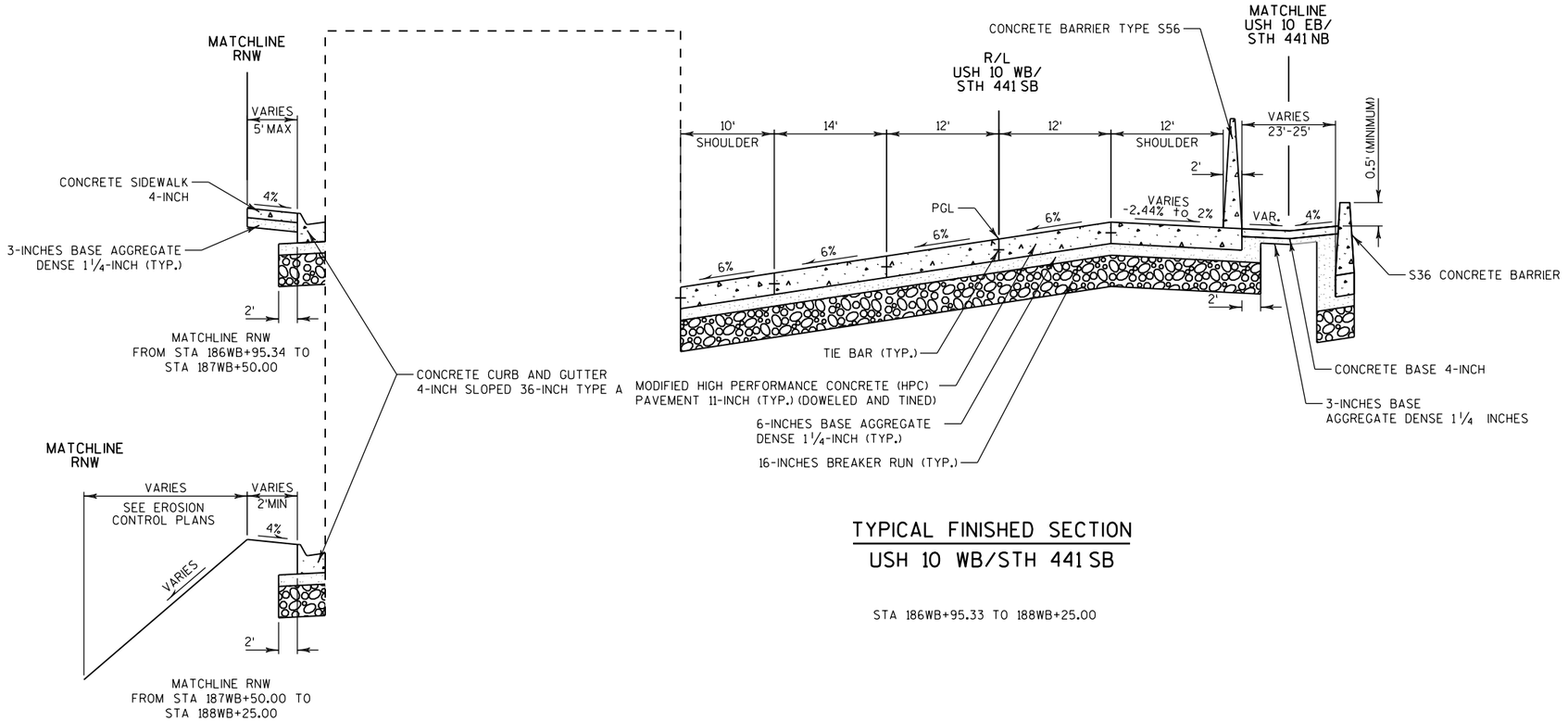
TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

STA 181WB+05.21 TO STA 183WB+95.96**

* ALIGNMENT BEGINS AT STA 182WB+56.62 = 182RNW+56.62
** REFER TO BRIDGE B-70-411 PLANS
*** TEMPORARY ALIGNMENT BEGINS AT STA OTWG+00.00 = 181WB+02.04

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 19	E

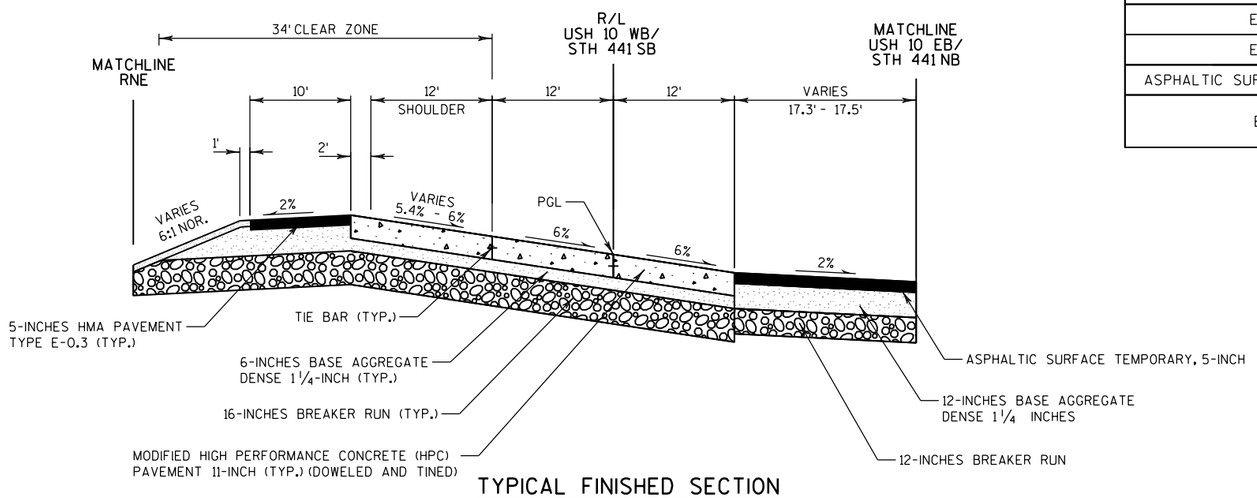
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TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

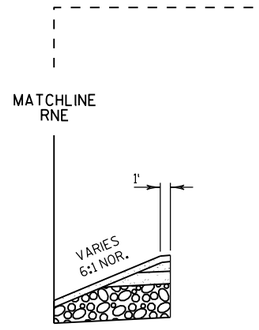
STA 186WB+95.33 TO 188WB+25.00

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

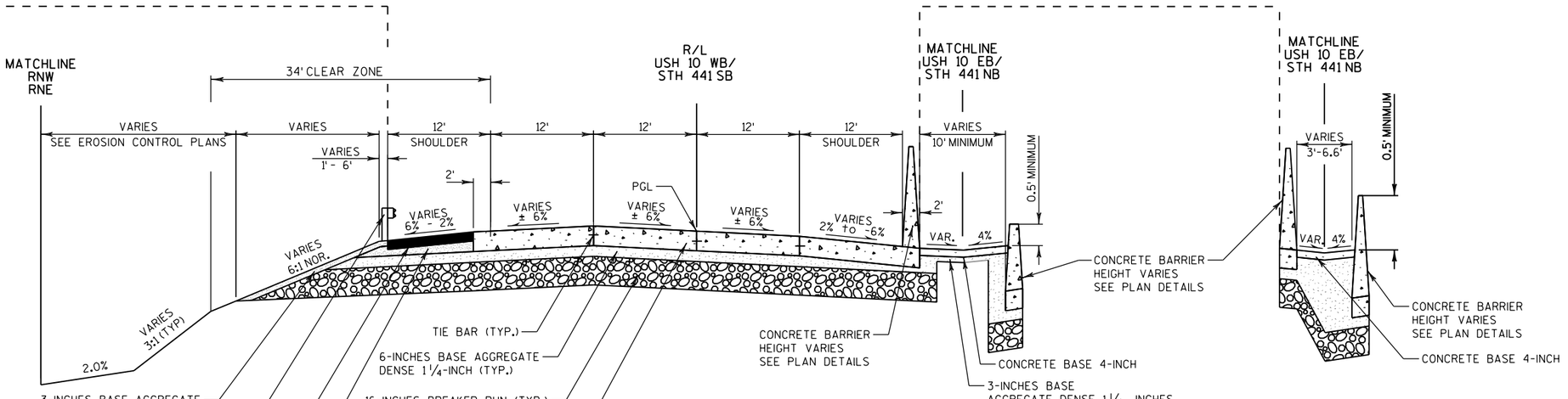


TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

STA 210WB+50.00 TO STA 210WB+83.73



MATCHLINE RNE
FROM STA 209WB+35.00 TO
STA 210WB+50.00



TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

STA 188WB+25.00 TO STA 194WB+89.65**
STA 197WB+61.07** TO STA 210WB+50.00

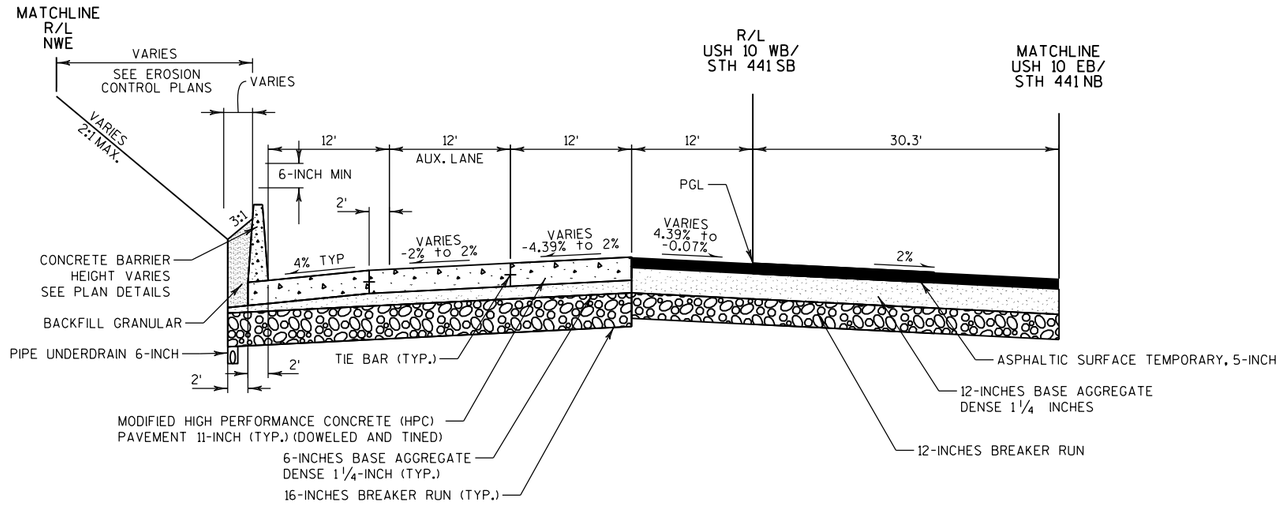
** REFER TO BRIDGE B-70-421 PLANS

STA 197WB+15.53 TO STA 210WB+83.73

*** STA 197WB+45.14 TO STA 200WB+90.30

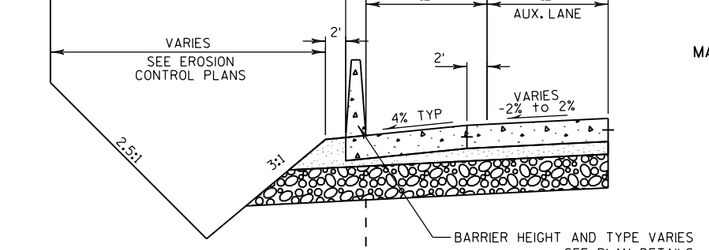
STATION	SUBGRADE SHLDR WIDTH
188WB+25 - 195WB+53	25.78' LT
197WB+22 - 209WB+00	17.25' LT

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

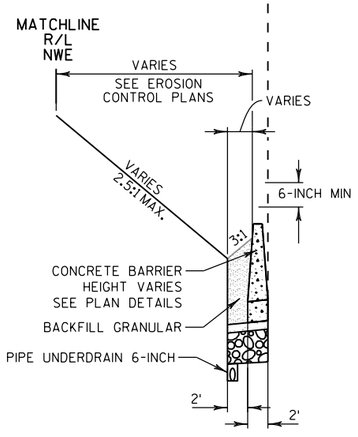


TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

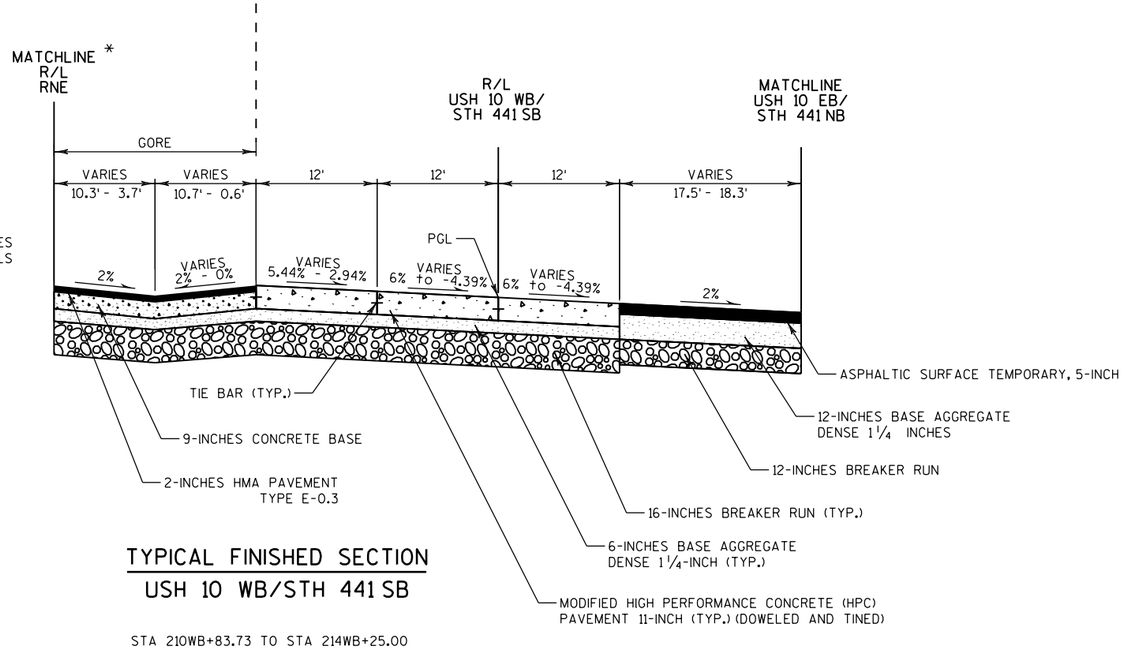
STA 214WB+25.00 TO STA 217WB+46.40



STA 212WB+33.64 TO STA 213WB+50.00



STA 213WB+50.00 TO STA 214WB+25.00

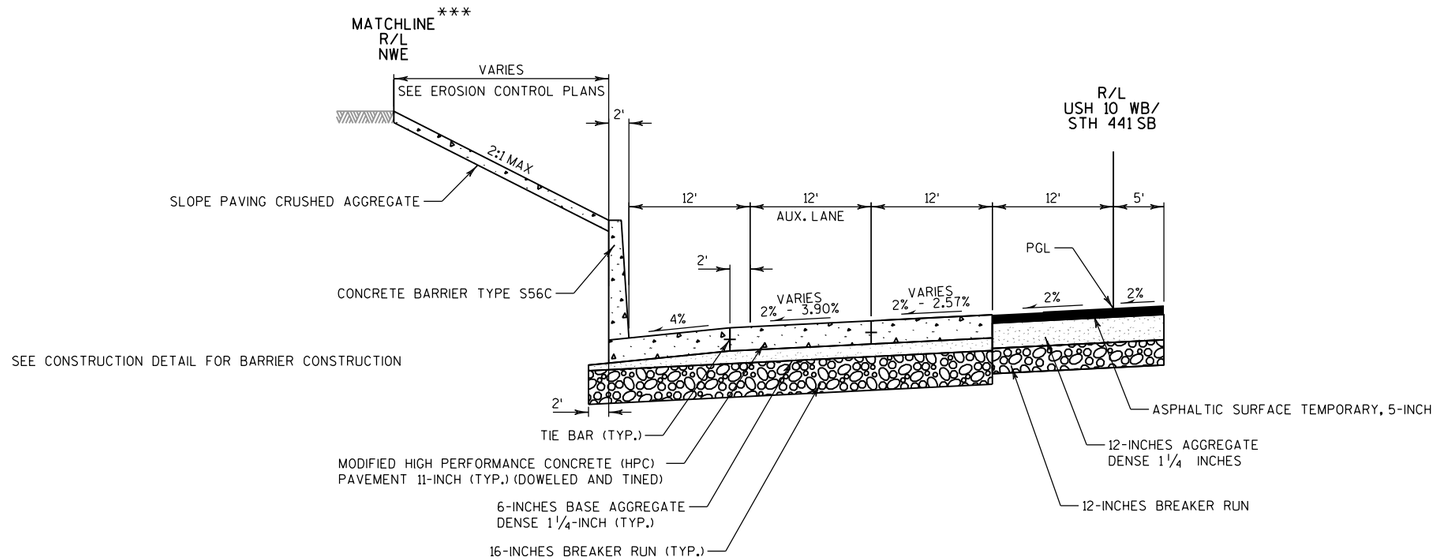


TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

STA 210WB+83.73 TO STA 214WB+25.00

* ALIGNMENT ENDS AT STA 212WB+56.91 = STA 212RNE+56.90
** ALIGNMENT ENDS AT STA 220WB+56.00 = STA 220NWE+56.00

2



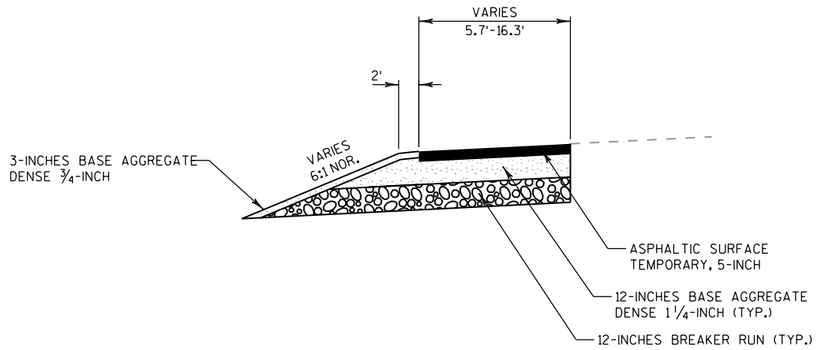
*** ALIGNMENT CHANGES FROM NWE TO NWF AT RACINE ROAD OVERPASS, SEE PLANS FOR DETAILS

TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB

STA 217WB+46.40 TO STA 222WB+31.60

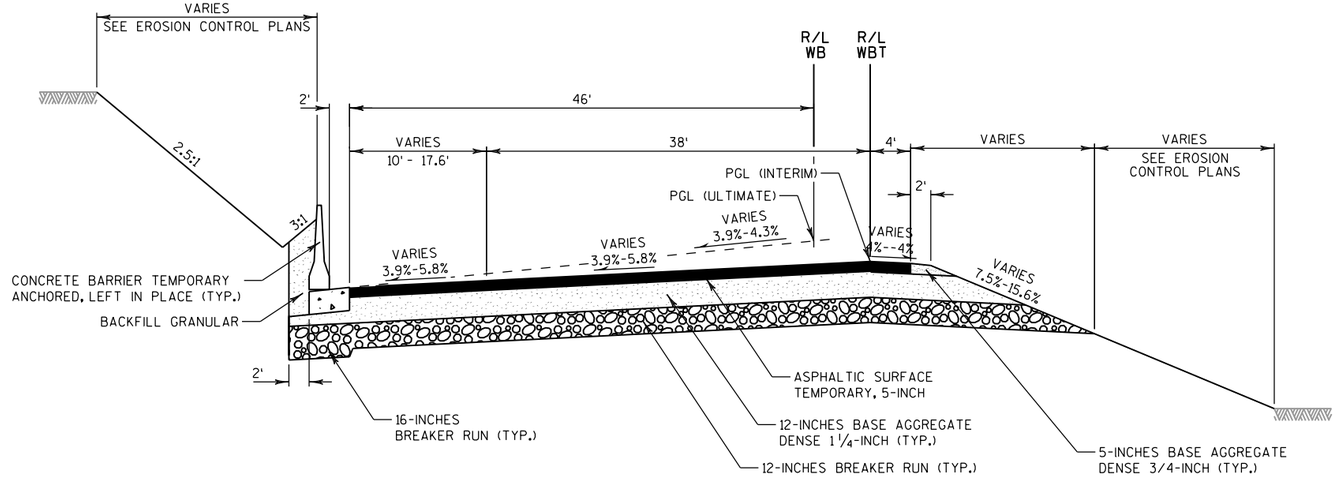
HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2



TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB
FINISHED SHOULDER WIDENING

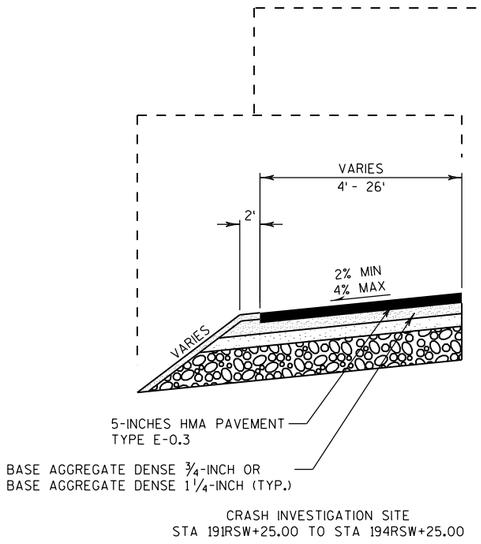
STA 29WBT+16.95 TO STA 31WBT+33.52



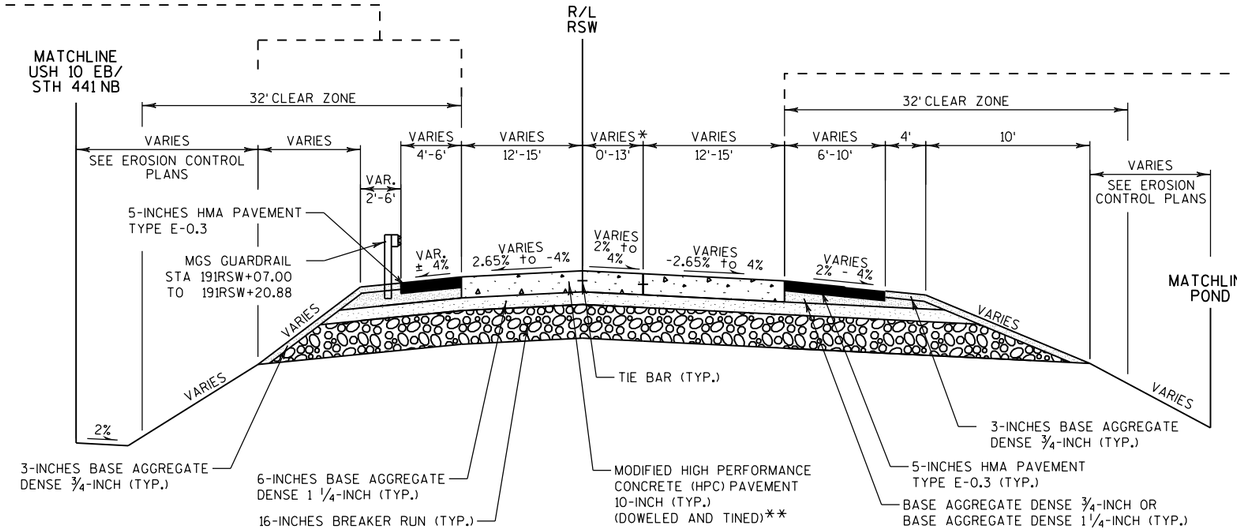
TYPICAL FINISHED SECTION
USH 10 WB/STH 441 SB
INTERIM CONNECTION

STA 22WBT+31.60 TO STA 29WBT+16.95

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

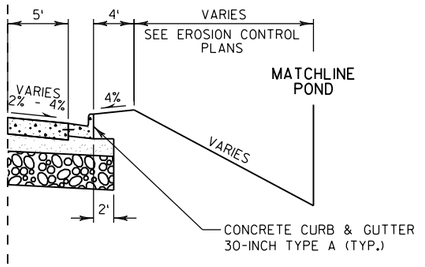


CRASH INVESTIGATION SITE
STA 191RSW+25.00 TO STA 194RSW+25.00

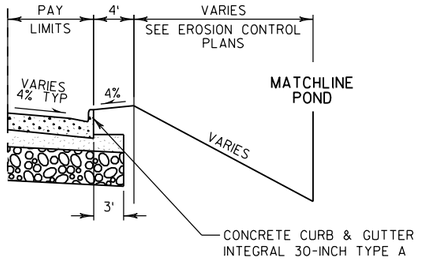


TYPICAL FINISHED SECTION
RACINE RD SW RAMP
STA 191RSW+07.00 TO STA 196RSW+00.00

* LANE BEGINS AT STA 192RSW+63.61

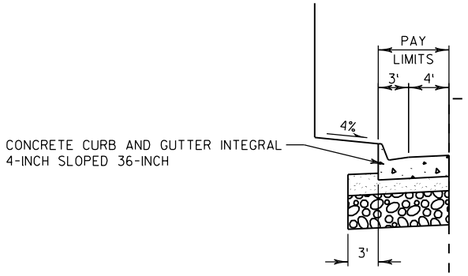


STA 192RSW+63.61 TO STA 193RSW+21.44

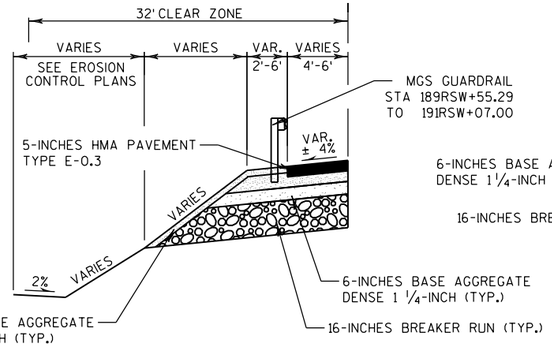


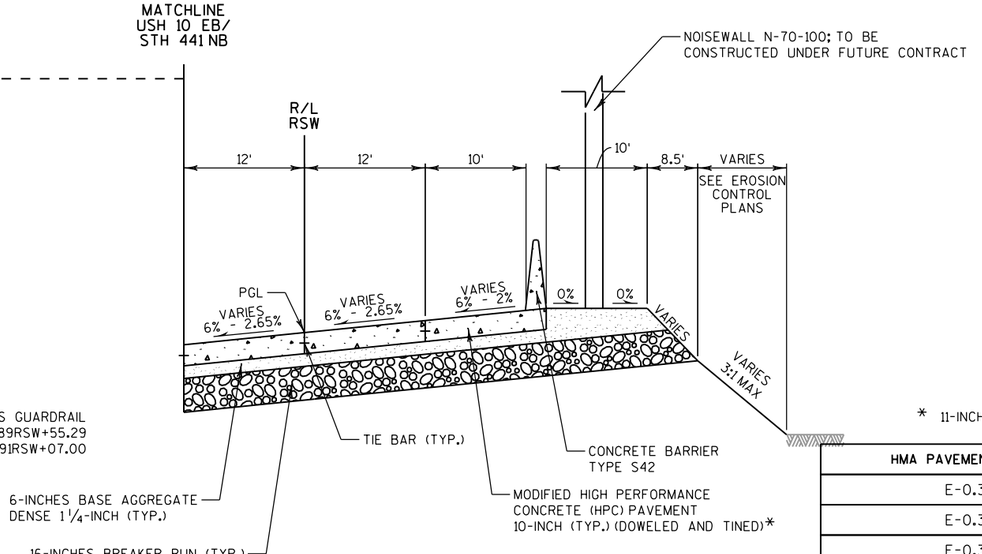
STA 193RSW+21.21 TO STA 196RSW+00.00

** SEE PLAN DETAILS FOR LIMITS OF CONCRETE TINING



STA 187RSW+34.48 TO STA 189RSW+00.00



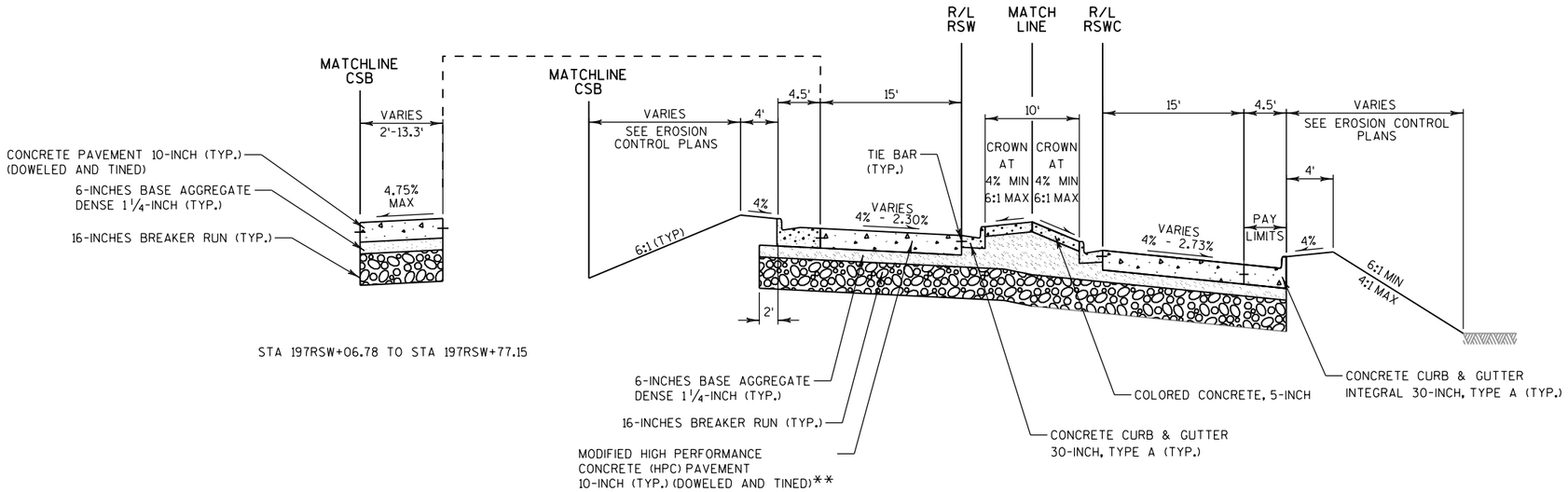


TYPICAL FINISHED SECTION
RACINE RD SW RAMP
STA 185RSW+92.30 TO STA 191RSW+07.00

* 11-INCH PAVEMENT FROM 186RSW+29.93 TO 187RSW+50

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

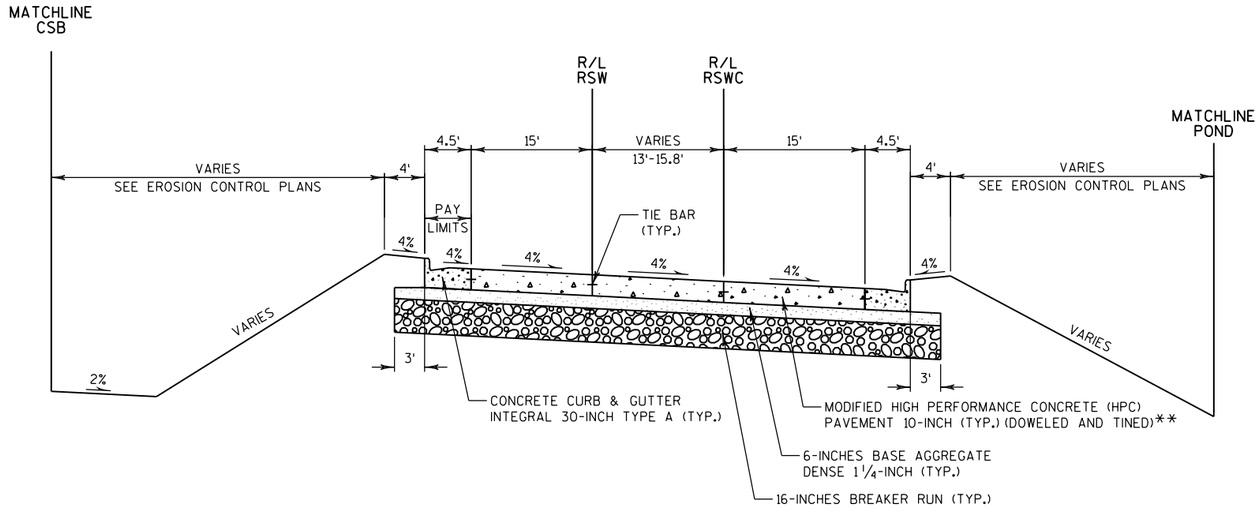
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TYPICAL FINISHED SECTION
RACINE RD SW RAMP

STA 196RSW+95.50 TO STA 197RSW+77.15

** SEE PLAN DETAILS FOR LIMITS OF CONCRETE TINING

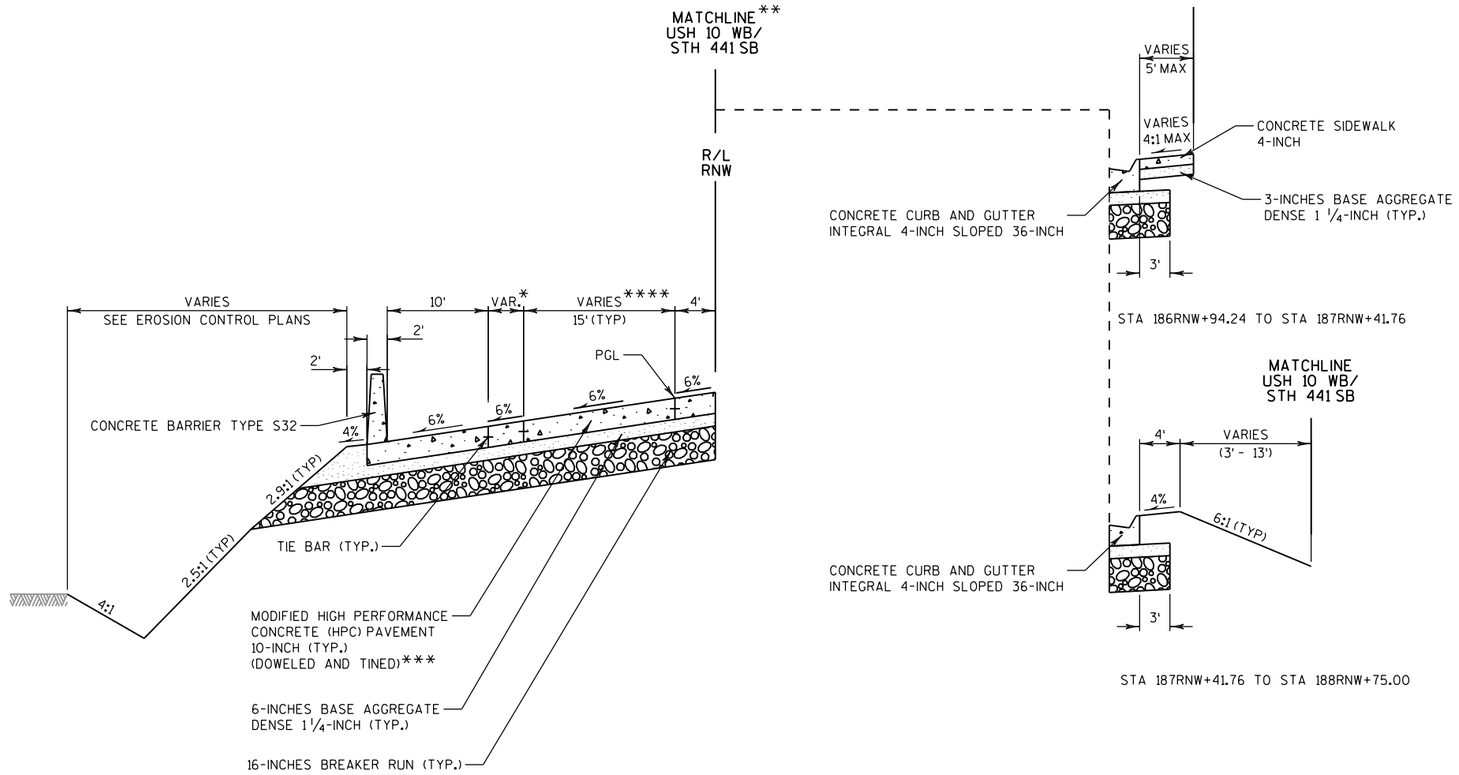


TYPICAL FINISHED SECTION
RACINE RD SW RAMP

STA 196RSW+00.00 TO STA 196RSW+95.50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 26	E

2



TYPICAL FINISHED SECTION

RACINE RD NW RAMP

STA 186RNW+20.00 TO STA 188RNW+75.00

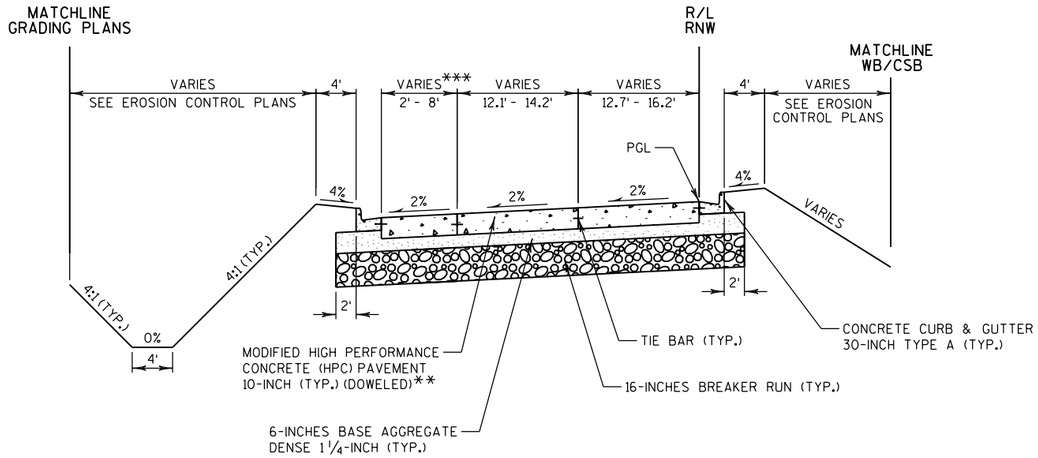
HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

* BEGIN LANE AT STA 188RNW+61.89
VARIES 3' - 3.5'

** USE MATCHLINE FROM STA 186RNW+00.00
TO STA 186RNW+88.46

*** 11-INCH CONCRETE FROM STA 186RNW+37.12
TO STA 187RNW+25.00

**** BEGIN 12'LANE AT STA 188RNW+61.89

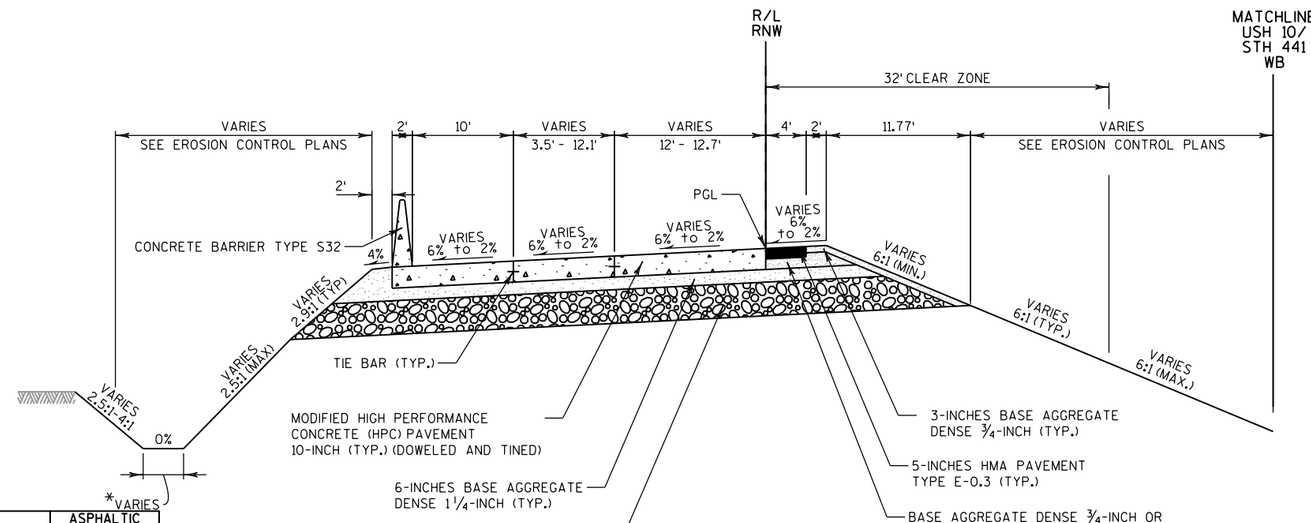


TYPICAL FINISHED SECTION

RACINE RD NW RAMP

STA 195RNW+38.96 TO STA 196RNW+68.29

** SEE PLAN DETAILS FOR LIMITS OF CONCRETE TINING
*** SHOULDER LANE ENDS AT 195RNW+76.66



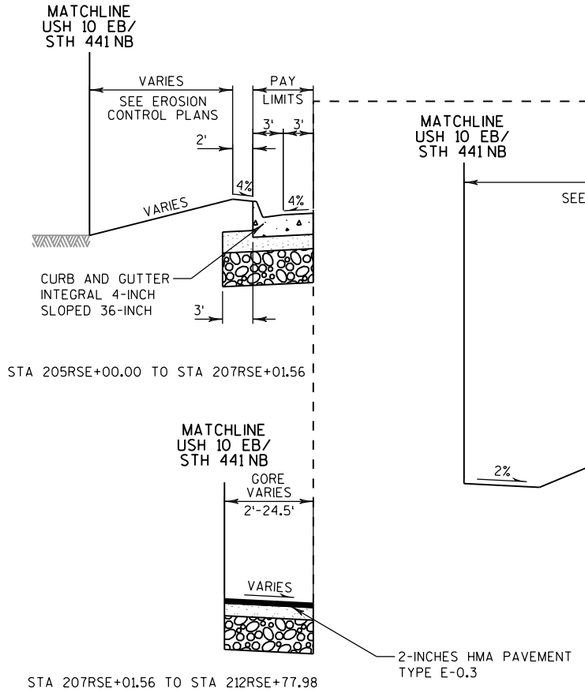
HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

TYPICAL FINISHED SECTION

RACINE RD NW RAMP

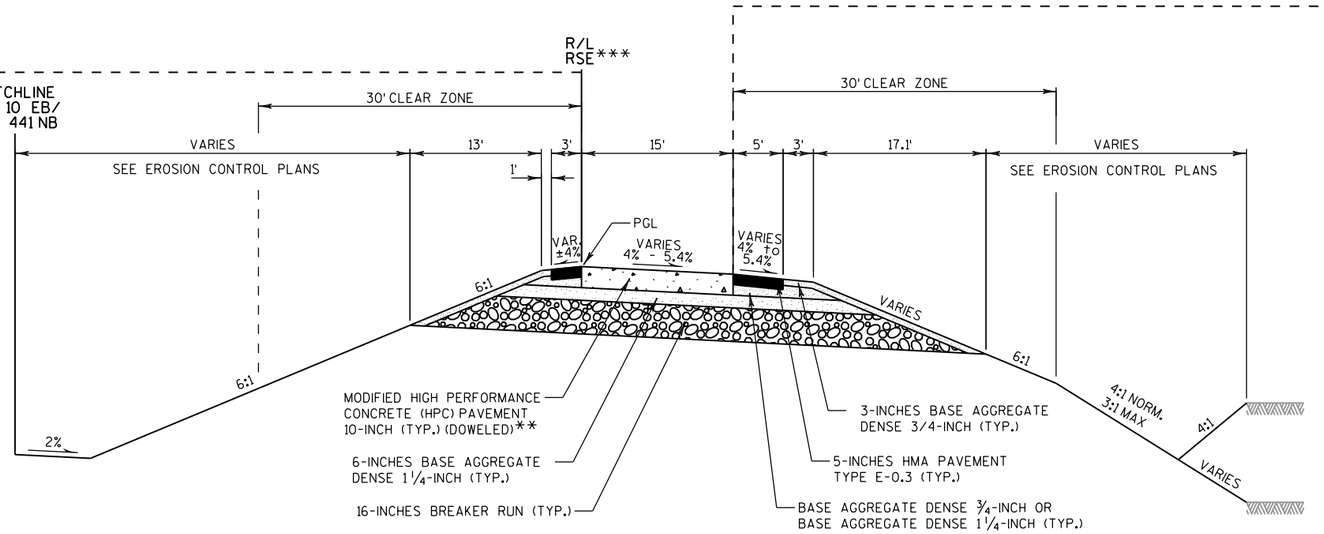
STA 188RNW+75.00 TO STA 195RNW+38.96

* DITCH VARIES 0-4 FEET BETWEEN STA 193RNW+00 - 193RNW+50.00
DITCH WIDTH 4 FEET BEGINNING STA 193RNW+50.00



STA 205RSE+00.00 TO STA 207RSE+01.56

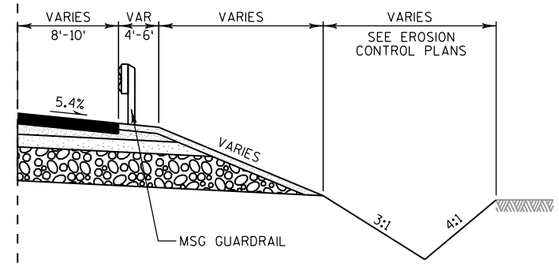
STA 207RSE+01.56 TO STA 212RSE+77.98



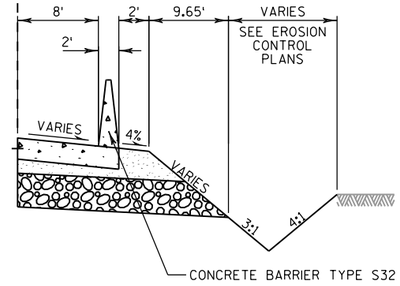
TYPICAL FINISHED SECTION

RACINE RD SE RAMP

STA 196RSE+00.00 TO STA 209RSE+75.00



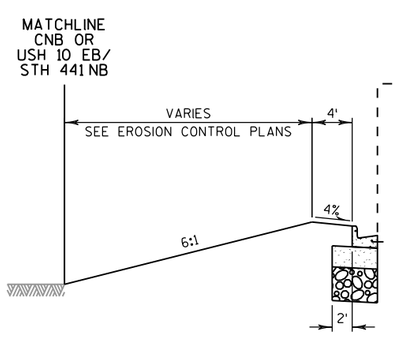
STA 207RSE+08.34 TO STA 208RSE+00.00



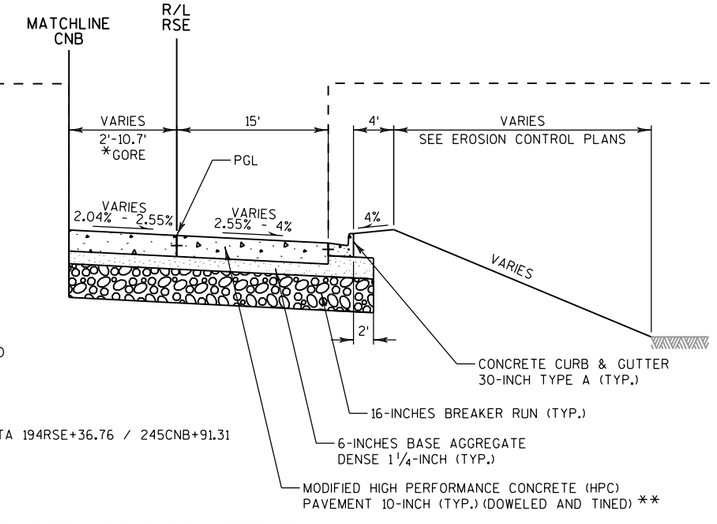
STA 208RSE+00.00 TO STA 209RSE+75.00

** 11-INCH PAVEMENT REQUIRED FROM STA 206RSE+75.00 TO 212RSE+77.98
REFER TO PLAN DETAILS FOR LIMITS OF CONCRETE TINING

*** R/L ACTS AS MATCHLINE BEGINNING AT 207RSE+01.56



STA 194RSE+31.74 TO STA 196RSE+00.00

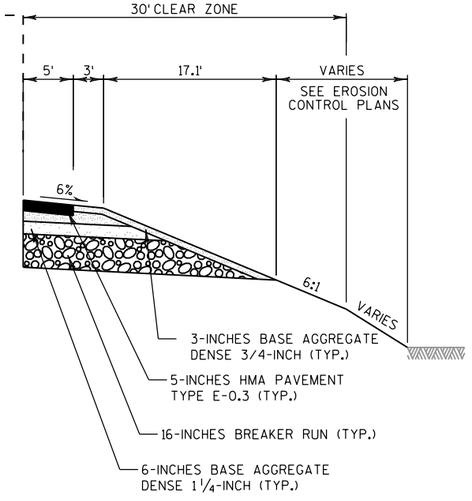


*GORE ENDS AT STA 194RSE+36.76 / 245CNB+91.31

TYPICAL FINISHED SECTION

RACINE RD SE RAMP

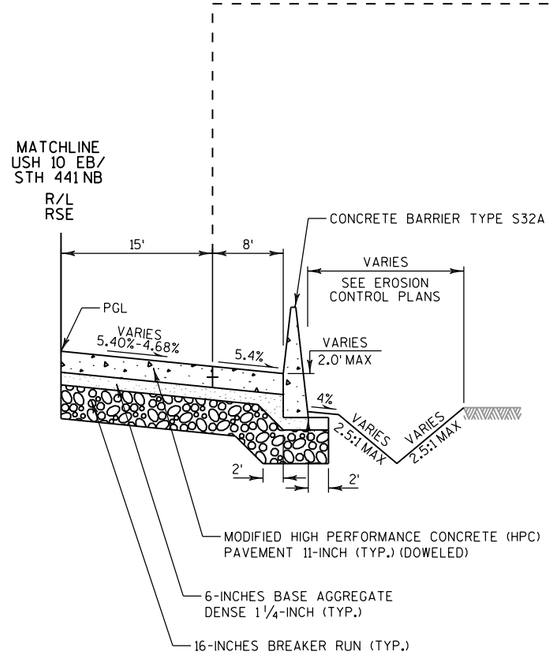
STA 193RSE+84.31 TO STA 196RSE+00.00

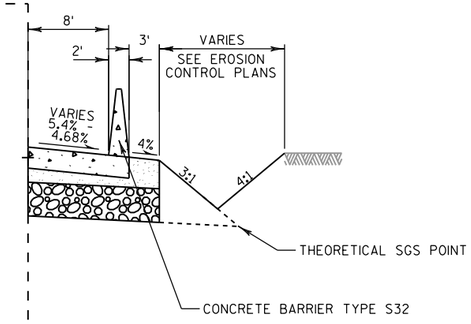


STA 195RSE+00.00 TO STA 196RSE+00.00

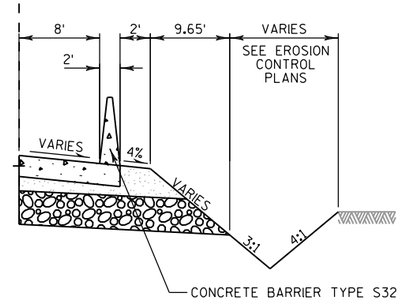
HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2





STA 211RSE+00.00 TO STA 212RSE+60.00
(FOR USE WHEN DITCH ELEVATION
IS ABOVE SGS POINT)

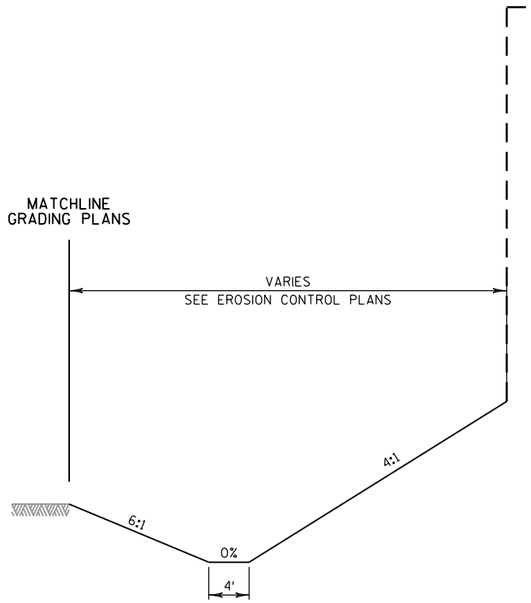


STA 212RSE+60.00 TO STA 212RSE+77.98

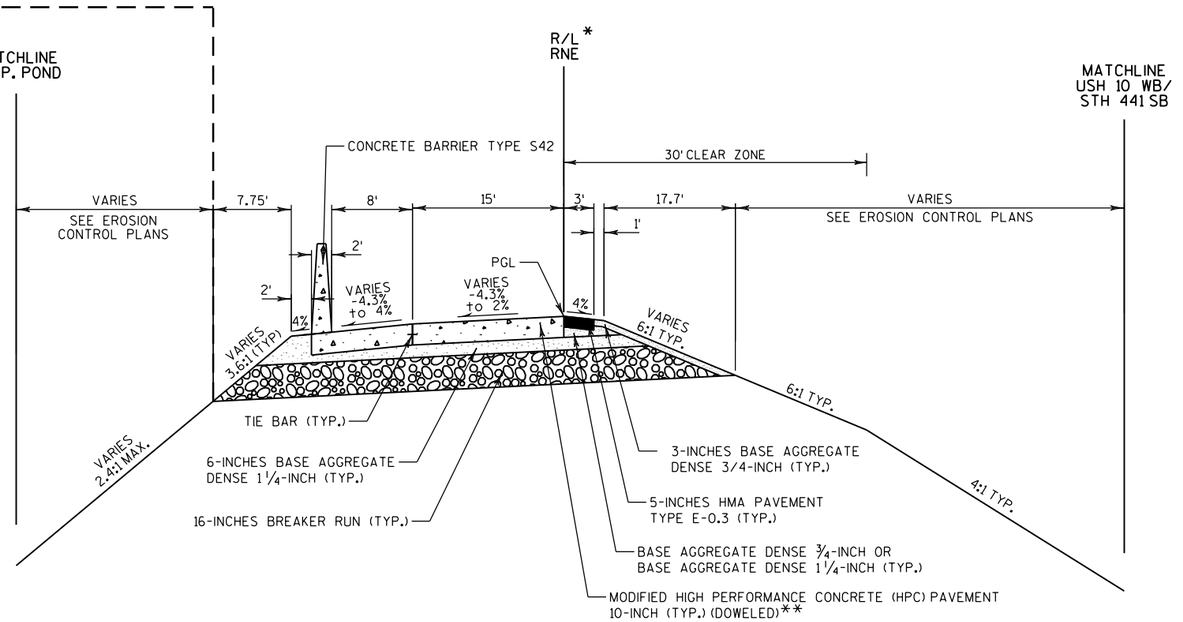
TYPICAL FINISHED SECTION

RACINE RD SE RAMP

STA 209RSE+75.00 TO STA 212RSE+77.98



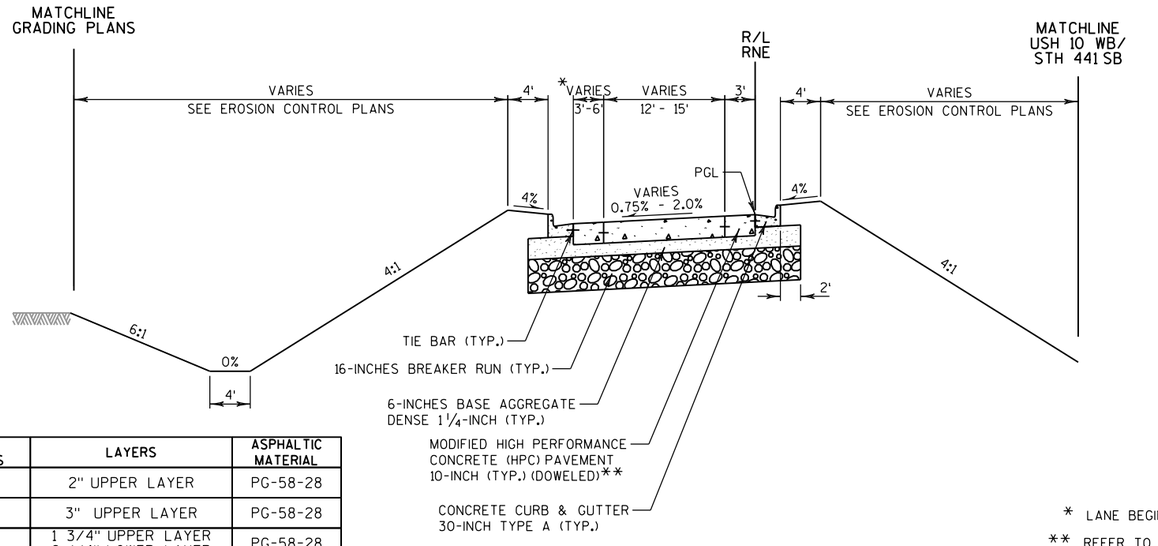
STA 200RNE+89.86 TO STA 201RNE+35.00



TYPICAL FINISHED SECTION

RACINE RD NE RAMP

STA 200RNE+89.86 TO STA 204RNE+17.36



HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

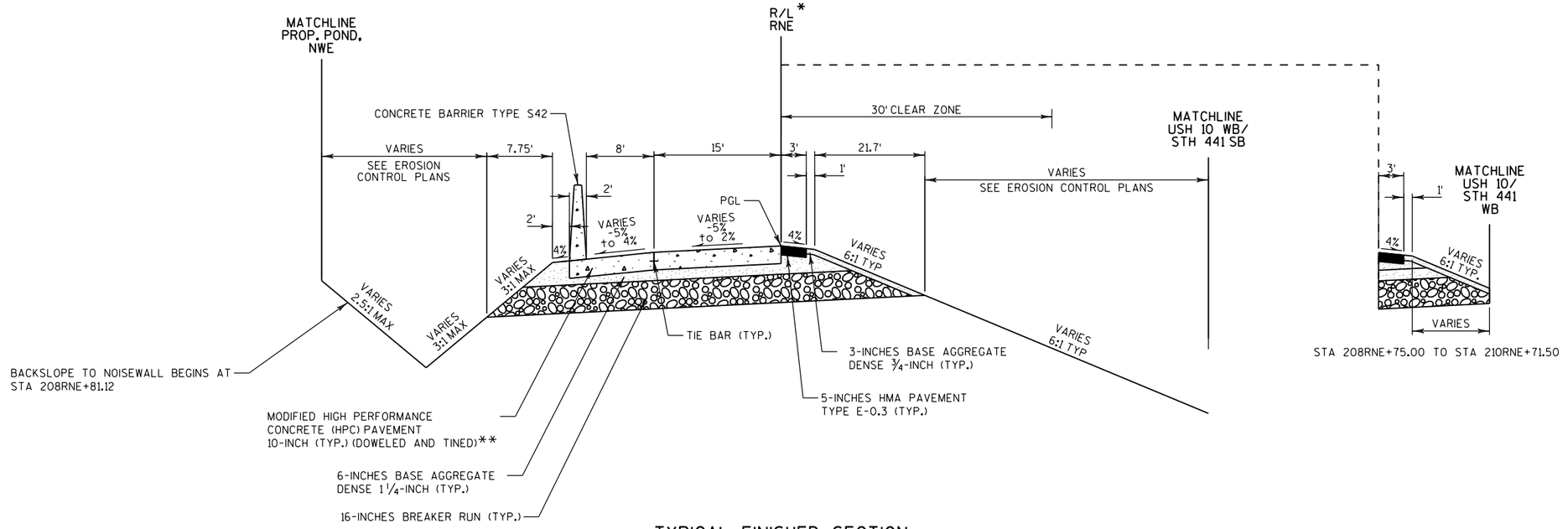
TYPICAL FINISHED SECTION

RACINE RD NE RAMP

STA 198RNE+74.20 TO STA 200RNE+89.86

* LANE BEGINS AT 200RNE+45.03

** REFER TO PLAN DETAILS FOR LIMITS OF CONCRETE TINING



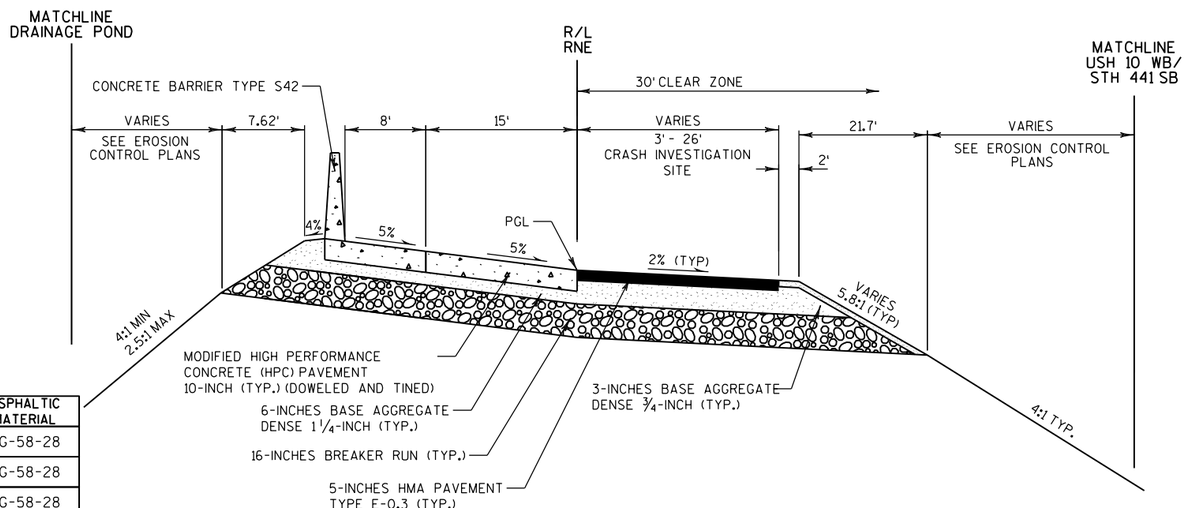
TYPICAL FINISHED SECTION

RACINE RD NE RAMP

STA 206RNE+93.04 TO STA 212RNE+33.28

* REFERENCE LINE ACTS AS MATCHLINE TO USH 10/STH 441 WB FROM STA 210RNE+50.00 TO STA 212RNE+33.28

** 11-INCH CONCRETE REQUIRED FROM 210RNE+80.75 TO 212RNE+33.28



HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE TEMPORARY	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

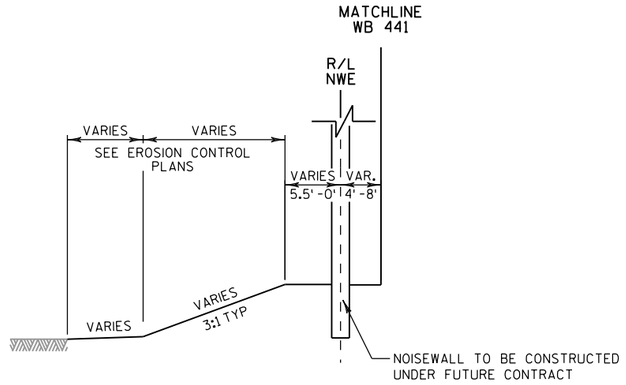
TYPICAL FINISHED SECTION

RACINE RD NE RAMP

STA 204RNE+17.36 TO 206RNE+93.04
CRASH INVESTIGATION SITE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 32	E

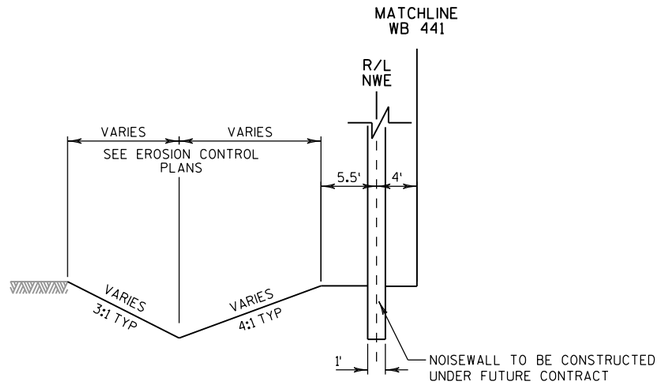
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TYPICAL FINISHED SECTION

NOISEWALL N-70-110

STA 213NWE+00.00 TO STA 215NWE+00.00

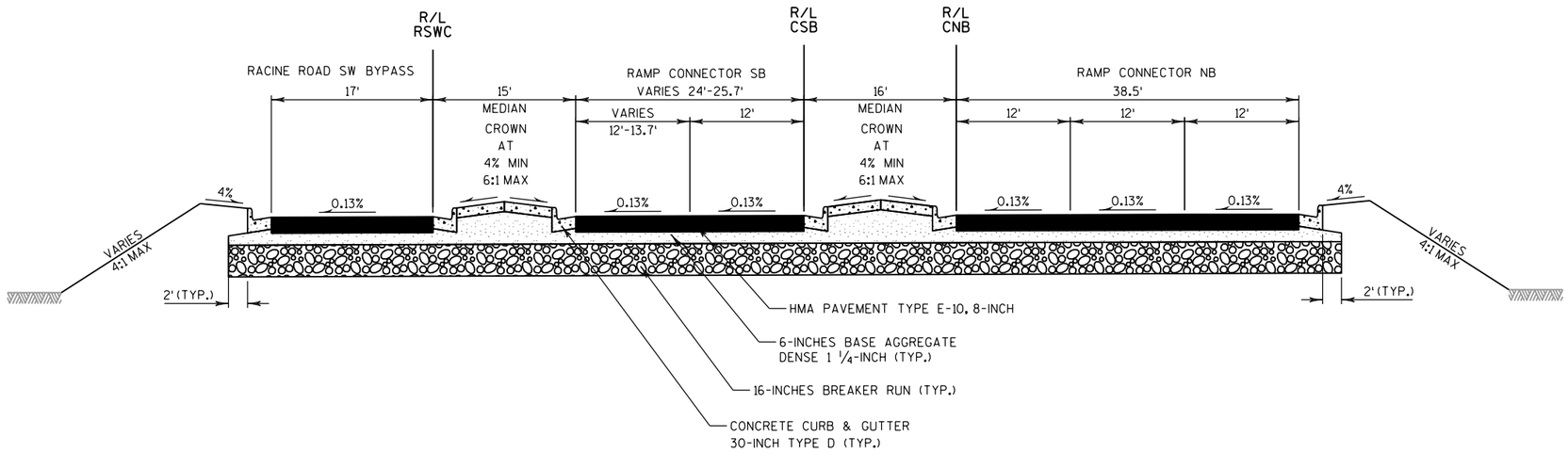


TYPICAL FINISHED SECTION

NOISEWALL N-70-110

STA 208NWE+85.99 TO STA 213NWE+00.00

2



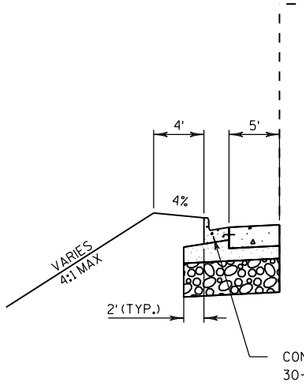
TYPICAL FINISHED SECTION

RACINE ROAD CONNECTOR NB/SB
& RACINE ROAD SW BYPASS

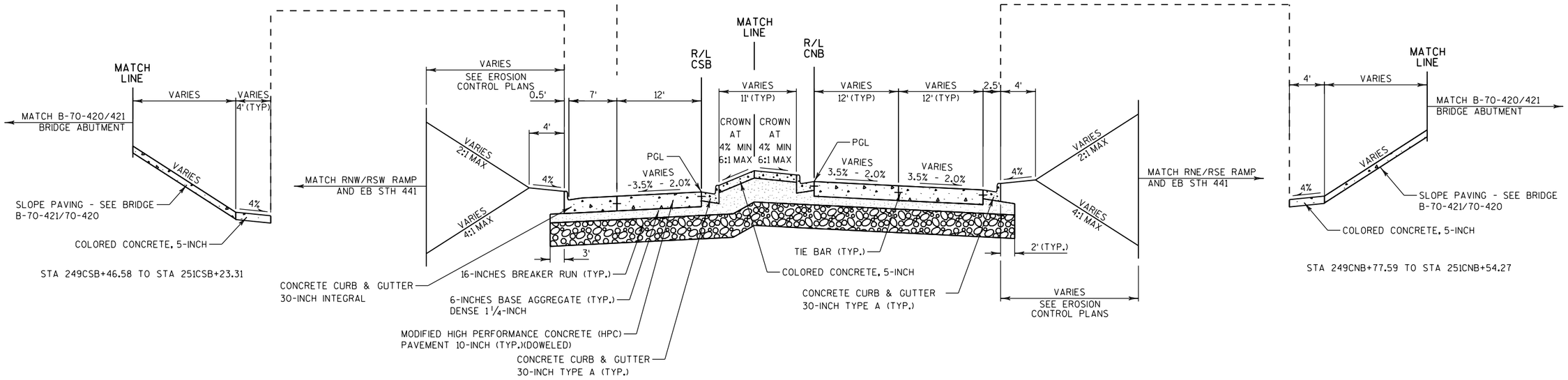
STA 243CNB+92.85 TO STA 244CNB+10.86; STA 244CNB+34.86 TO STA 244CNB+52.87
STA 243CSB+84.02 TO STA 244CSB+01.42; STA 244CSB+24.61 TO STA 244CSB+41.95
STA 18RSWC+45.36 TO STA 18RSWC+63.37; STA 18RSWC+03.34 TO STA 18RSWC+21.35

HMA PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	ASPHALTIC MATERIAL
E-0.3	2"	2" UPPER LAYER	PG-58-28
E-0.3	3"	3" UPPER LAYER	PG-58-28
E-0.3	4"	1 3/4" UPPER LAYER 2 1/4" LOWER LAYER	PG-58-28
E-0.3	5"	5" UPPER LAYER	PG-58-28
ASPHALTIC SURFACE	5"	1 3/4" UPPER LAYER 3 1/4" LOWER LAYER	N/A
E-10	8"	1 3/4" UPPER LAYER 3" LOWER LAYER 3 1/4" LOWER LAYER	PG-58-28

2



STA 252CSB+74.66 TO STA 253CSB+29.08



STA 249CSB+46.58 TO STA 251CSB+23.31

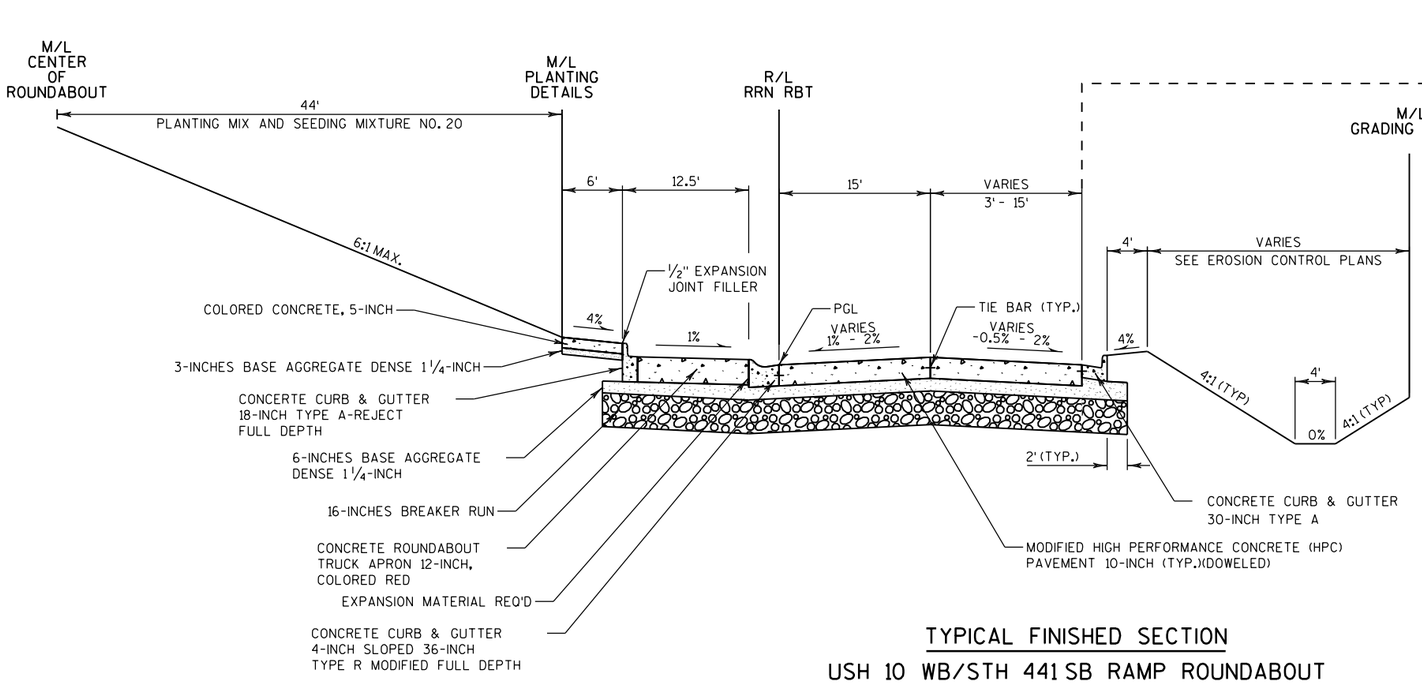
STA 249CNB+77.59 TO STA 251CNB+54.27

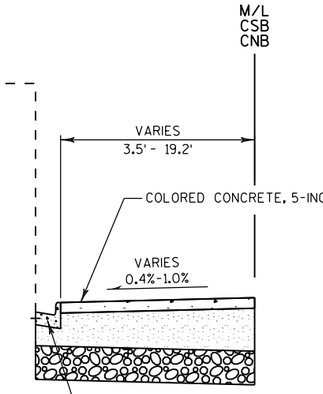
TYPICAL FINISHED SECTION

RACINE ROAD CONNECTOR NB/SB

STA 244CNB+52.87 TO STA 253CNB+17.23
STA 244CSB+43.01 TO STA 253CSB+29.08

2





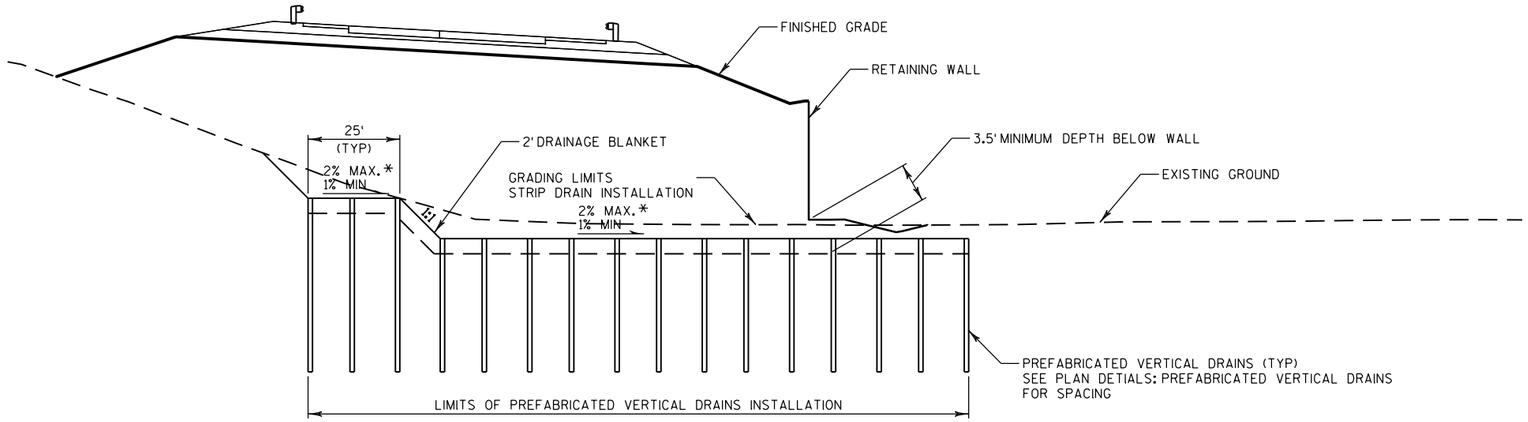
STA 12RRN+24.28 TO STA 12RRN+58.73

TYPICAL FINISHED SECTION

USH 10 WB/STH 441 SB RAMP ROUNDABOUT

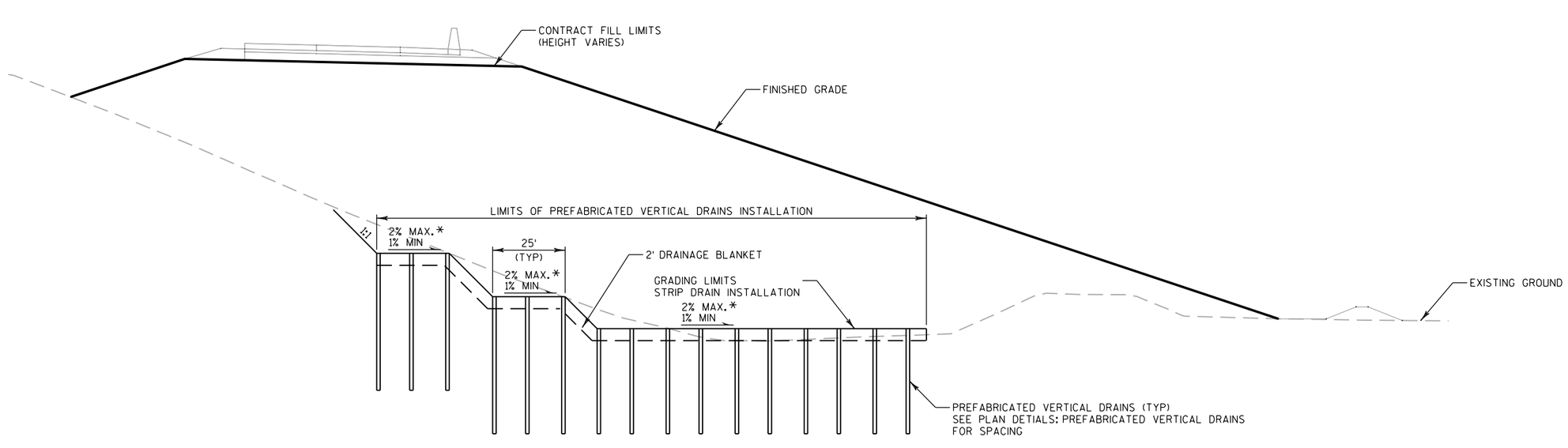
STA 10RRN+00 TO STA 14RRN+11.55

2



TYPICAL CROSS SECTION - PREFABRICATED VERTICAL DRAINS WITH STRUCTURE

NOT TO SCALE



* NUMBER OF STEPS VARIES DEPENDING ON EXISTING CONDITION AND LIMITS OF PREFABRICATED VERTICAL DRAINS INSTALLATION. SEE CROSS SECTIONS

TYPICAL CROSS SECTION - PREFABRICATED VERTICAL DRAINS WITHOUT STRUCTURE

NOT TO SCALE

2

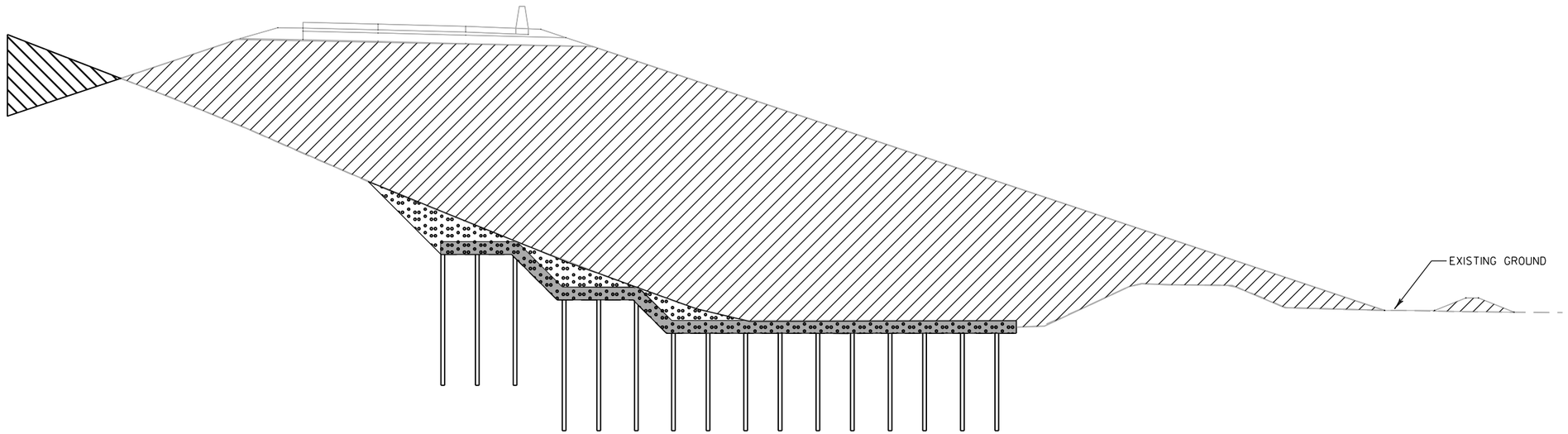
LEGEND

ROADWAY EMBANKMENT

EXCAVATION COMMON

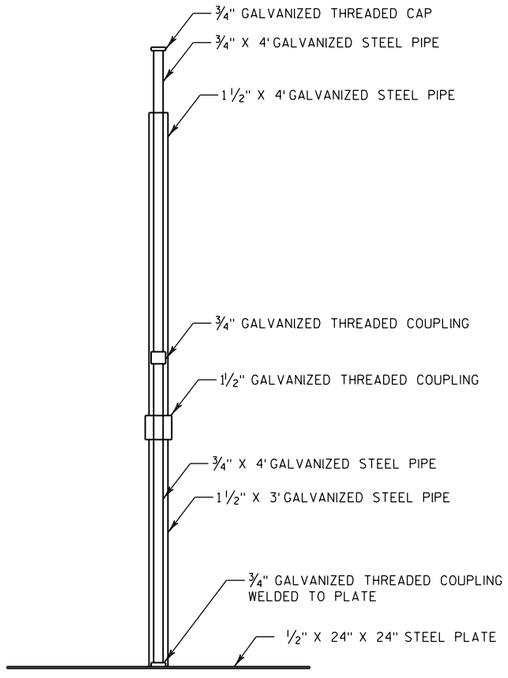
DRAINAGE BLANKET CUT
(PAID FOR AS EXCAVATION COMMON)

DRAINAGE BLANKET

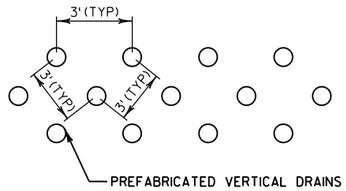


* NUMBER OF STEPS VARIES DEPENDING ON EXISTING CONDITION AND LIMITS OF PREFABRICATED VERTICAL DRAINS INSTALLATION. SEE CROSS SECTIONS

DETAIL FOR EARTHWORK MEASUREMENT AT FILL AREAS WITH PREFABRICATED VERTICAL DRAINS

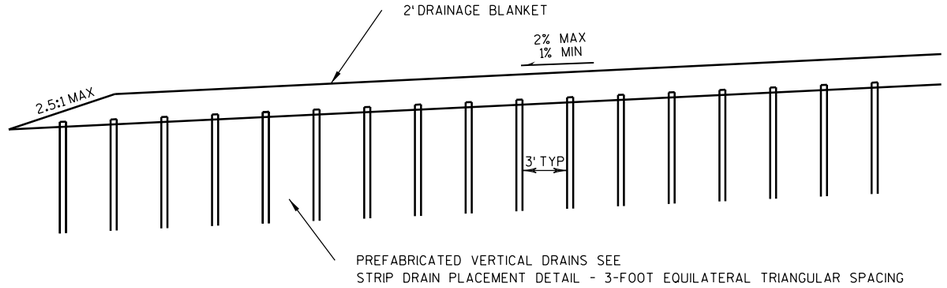


SETTLEMENT GAUGE DETAIL



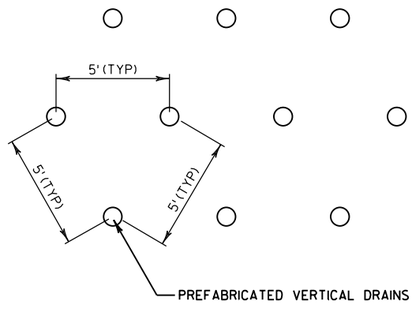
PREFABRICATED VERTICAL DRAINS PLACEMENT DETAIL - 3-FOOT EQUILATERAL TRIANGULAR SPACING

NOT TO SCALE



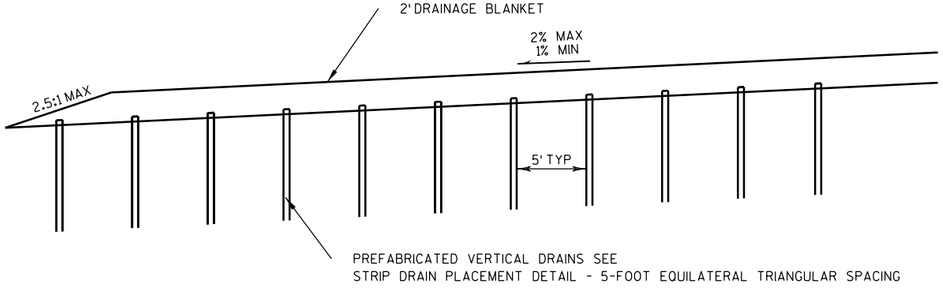
DRAINAGE BLANKET DETAIL - 3-FOOT EQUILATERAL TRIANGULAR SPACING

NOT TO SCALE



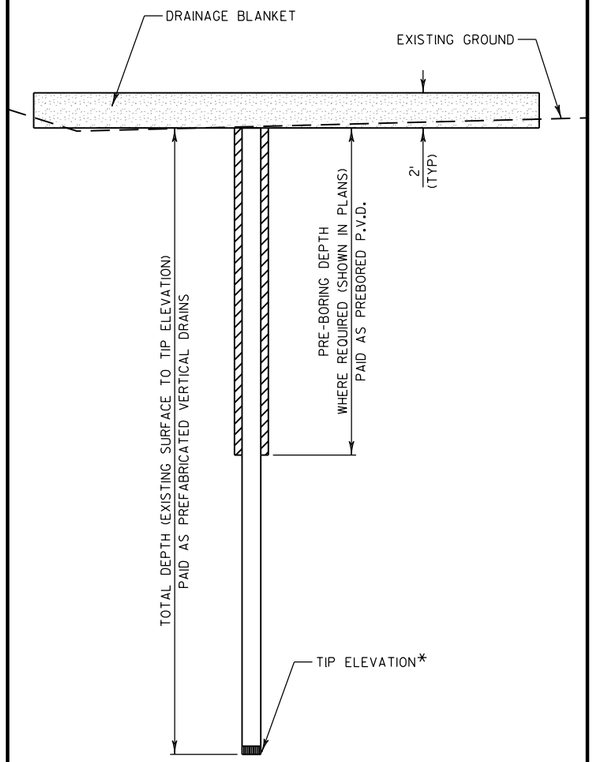
PREFABRICATED VERTICAL DRAINS PLACEMENT DETAIL - 5-FOOT EQUILATERAL TRIANGULAR SPACING

NOT TO SCALE



DRAINAGE BLANKET DETAIL - 5-FOOT EQUILATERAL TRIANGULAR SPACING

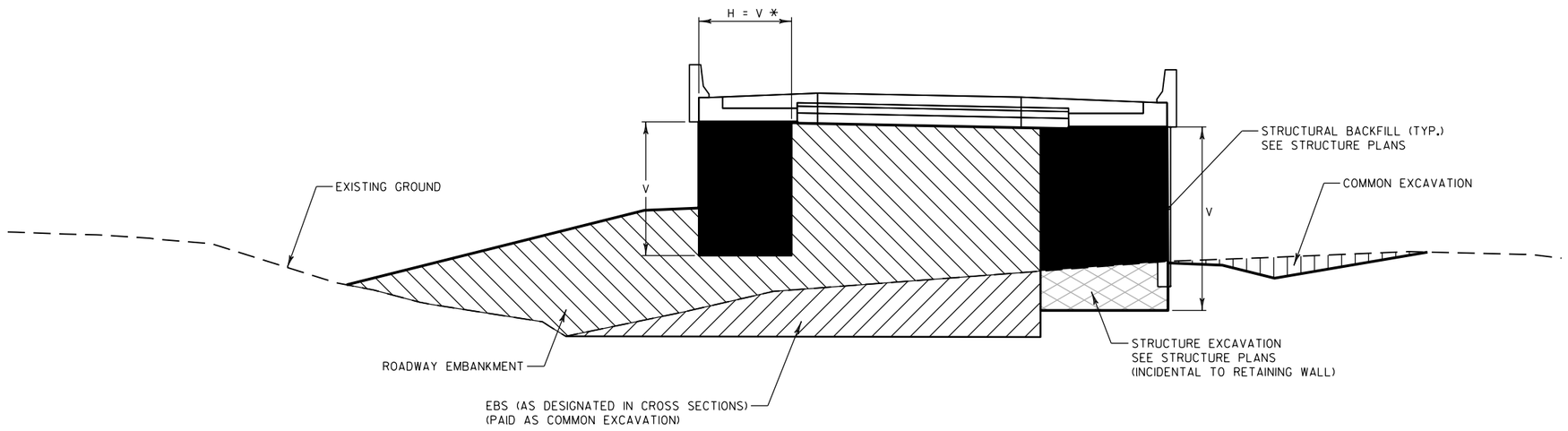
NOT TO SCALE



* SHOWN IN PLAN AS
"PLACED TO AN ELEVATION OF XXX.X FT"

PREFABRICATED VERTICAL DRAINS PAY ITEMS

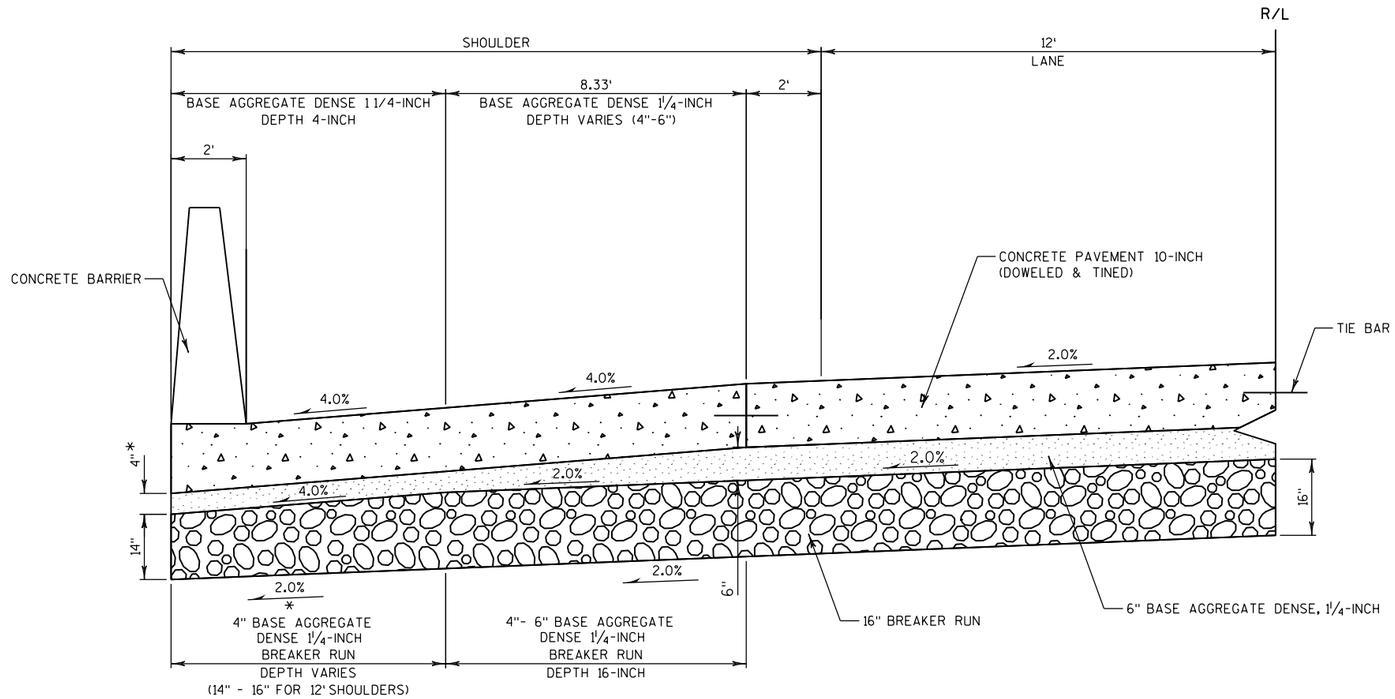
NOT TO SCALE



* SEE STRUCTURE PLANS FOR LENGTHS USED.

EARTHWORK MEASUREMENT DETAIL

2

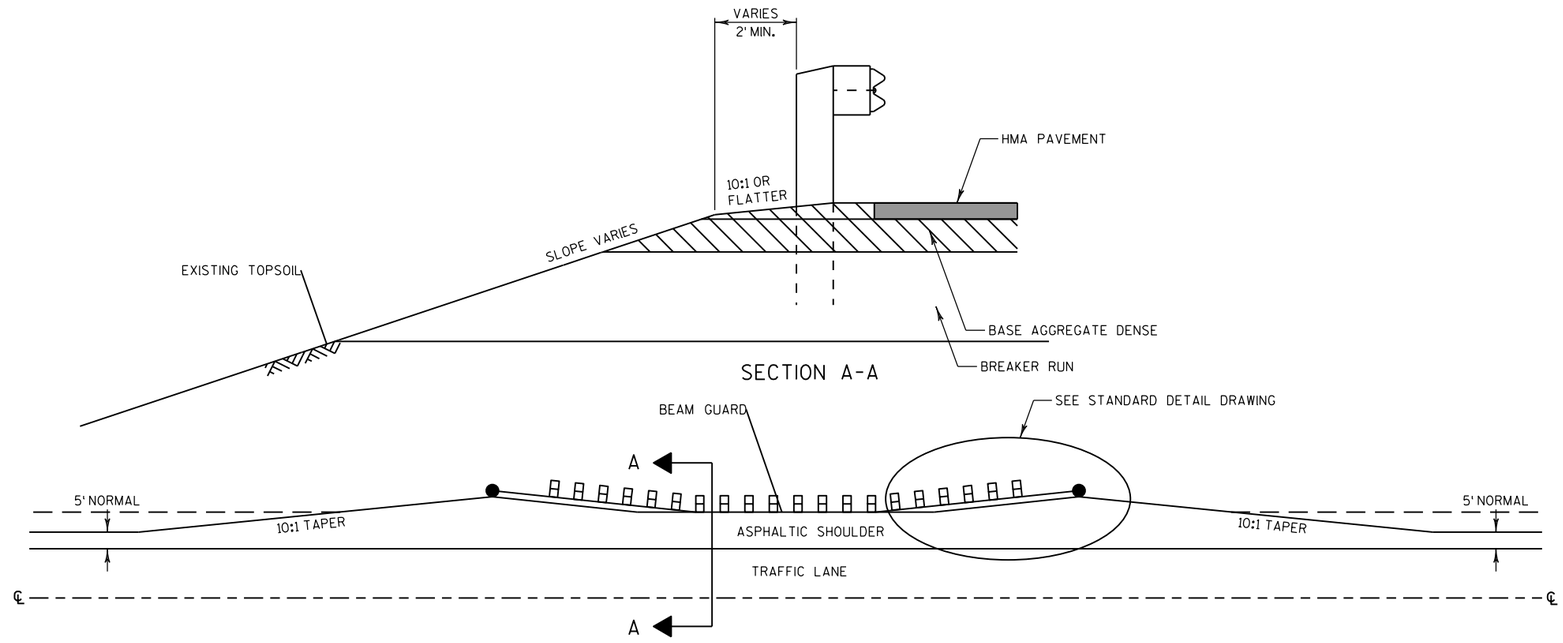


MINIMUM BASE AGGREGATE DENSE DEPTH

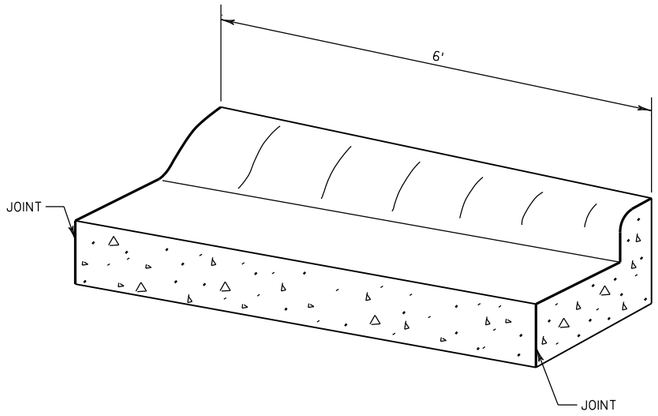
(NOT TO SCALE)

* MAINTAIN A MINIMUM THICKNESS OF 4" BASE AGGREGATE DENSE 1¼-INCH

2

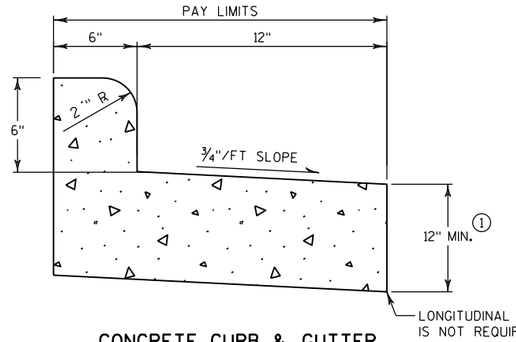


DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL



CURB TRANSITION DETAIL

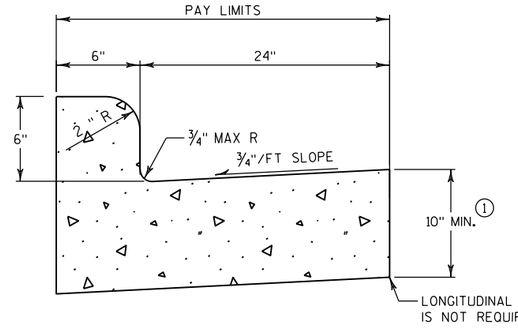
36" TYPE "A" CURB & GUTTER TO 30" TYPE "A" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS CONCRETE CURB & GUTTER 36-INCH TYPE A - SEE SDD "CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES")



CONCRETE CURB & GUTTER 18-INCH TYPE A REJECT FULL DEPTH

GENERAL NOTES

① THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED THAT THE GUTTER THICKNESS IS EQUAL TO THE ADJACENT PAVEMENT DEPTH.

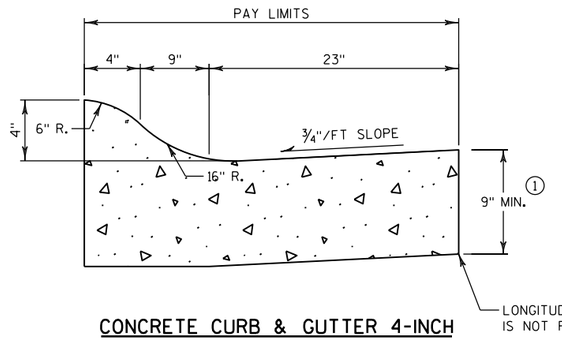


CONCRETE CURB & GUTTER 30-INCH INTEGRAL TYPE A

FULL DEPTH (OPTIONAL)

GENERAL NOTES

① THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED THAT THE GUTTER THICKNESS IS EQUAL TO THE ADJACENT PAVEMENT DEPTH.

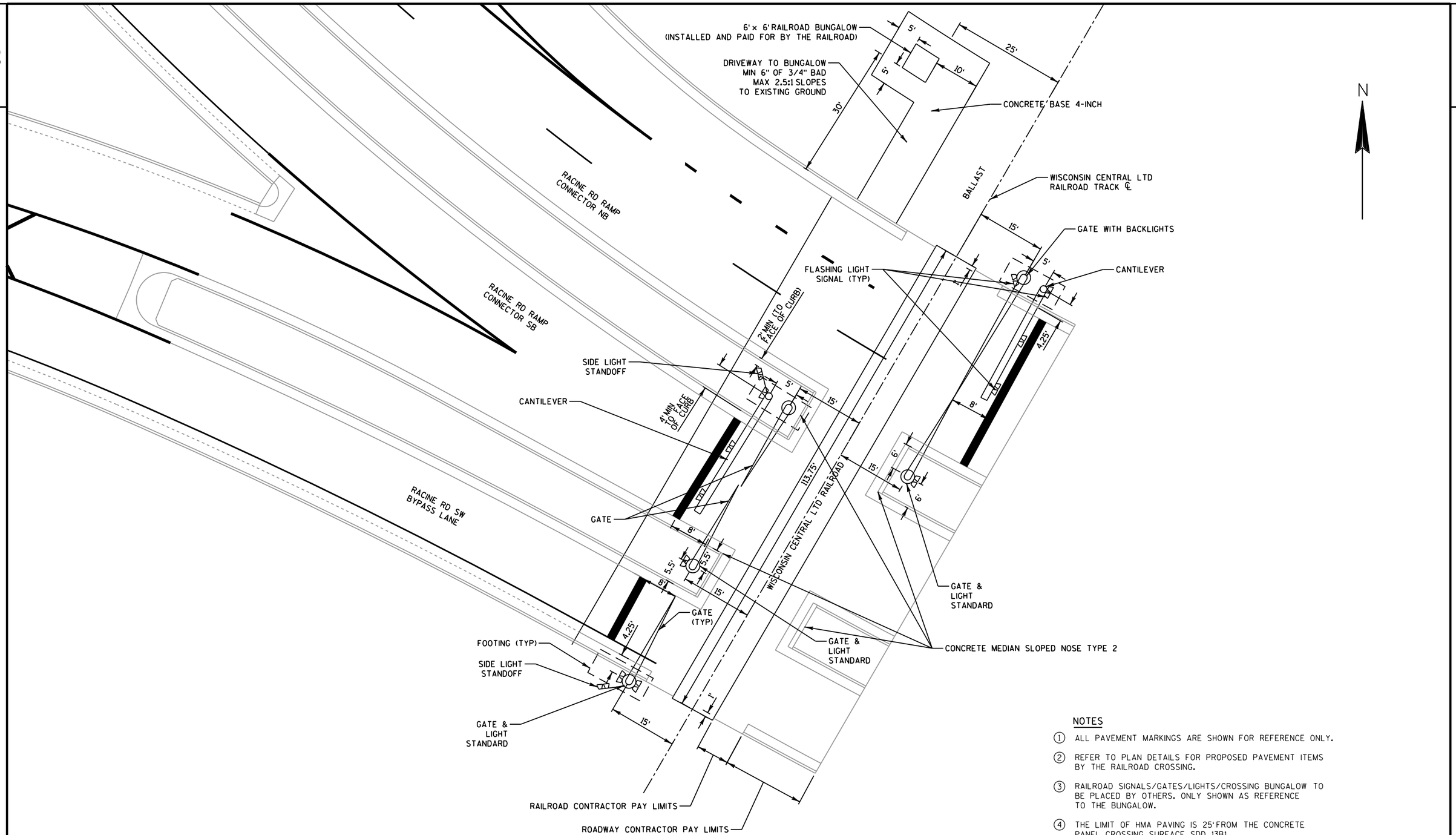


CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R FULL DEPTH

GENERAL NOTES

① THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED THAT THE GUTTER THICKNESS IS EQUAL TO THE ADJACENT PAVEMENT DEPTH.

2

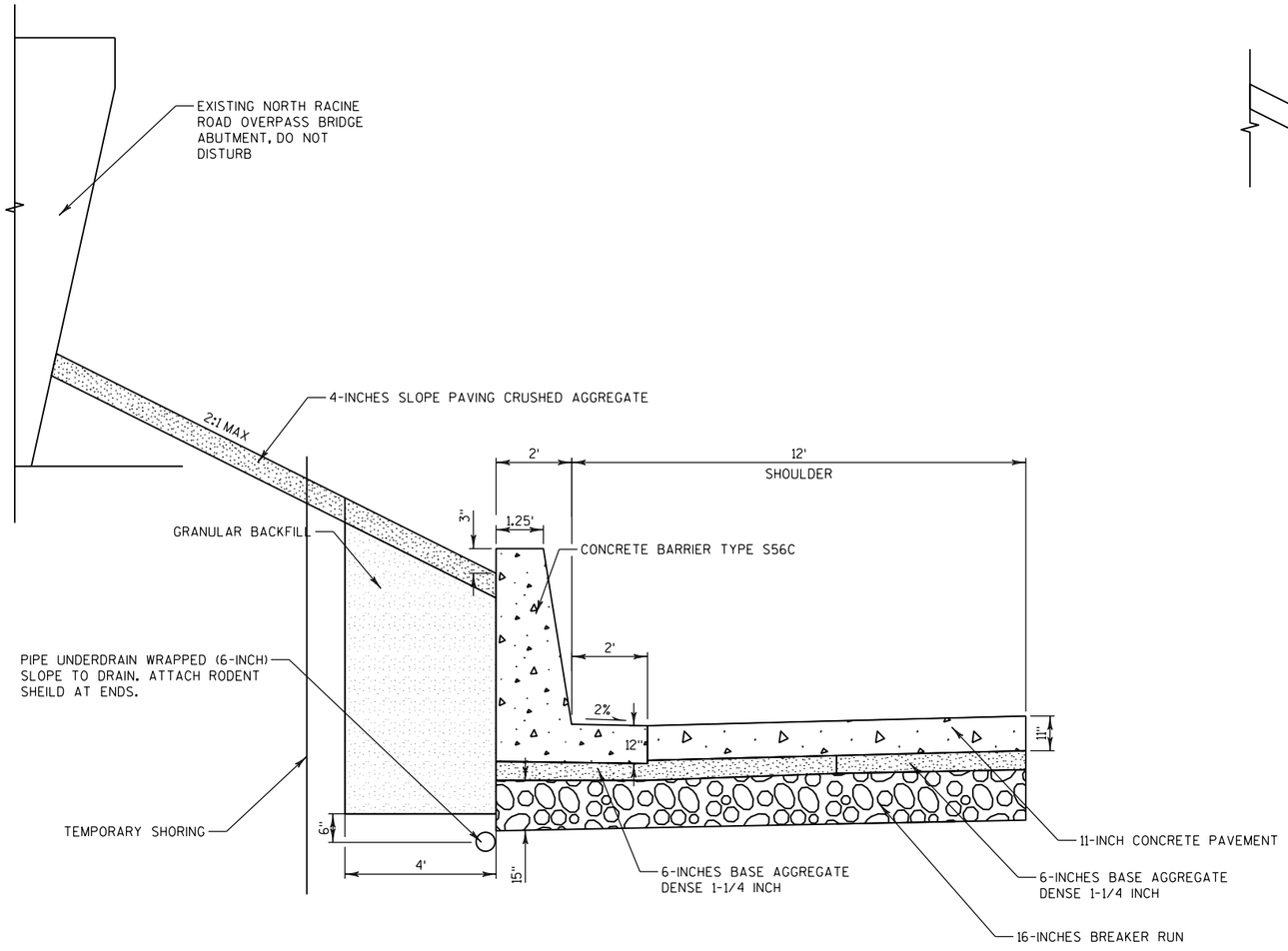


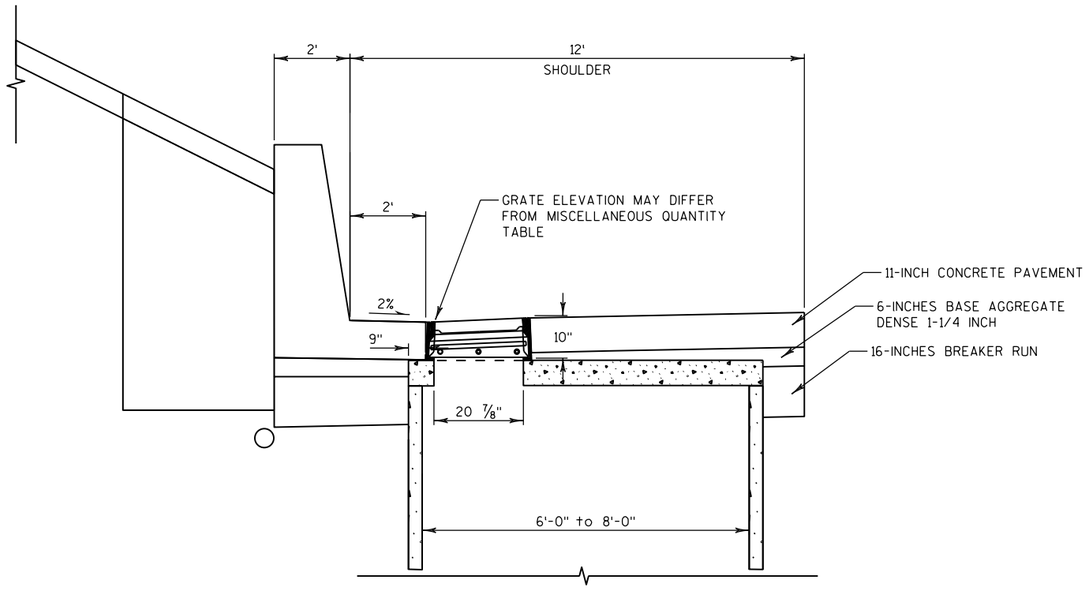
RAILROAD CROSSING DETAILS

NOTES

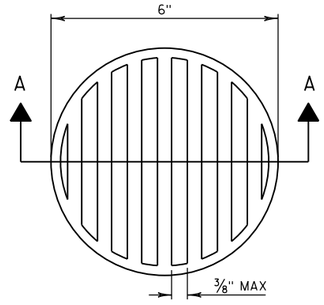
1. ALL PAVEMENT MARKINGS ARE SHOWN FOR REFERENCE ONLY.
2. REFER TO PLAN DETAILS FOR PROPOSED PAVEMENT ITEMS BY THE RAILROAD CROSSING.
3. RAILROAD SIGNALS/GATES/LIGHTS/CROSSING BUNGALOW TO BE PLACED BY OTHERS. ONLY SHOWN AS REFERENCE TO THE BUNGALOW.
4. THE LIMIT OF HMA PAVING IS 25'FROM THE CONCRETE PANEL CROSSING SURFACE. SDD 13B1.
5. SEE TYPICAL RAILROAD CROSSING DETAIL FOR MORE INFORMATION

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CONSTRUCTION DETAIL	SHEET 44	E

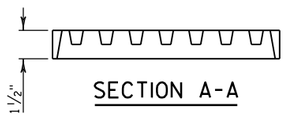




INLET PLACED BY RETAINING WALL BARRIER



RODENT SHIELD



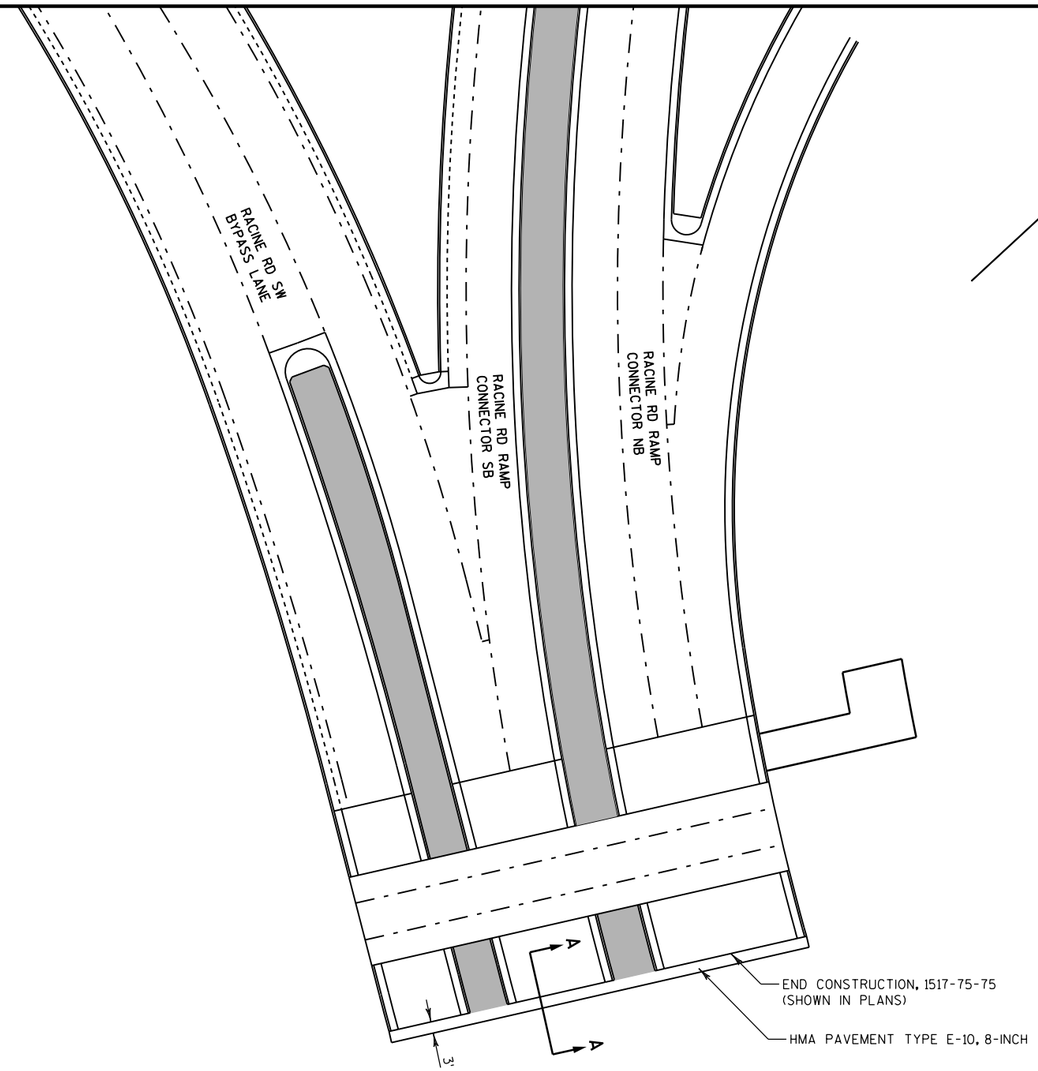
SECTION A-A

GENERAL NOTES

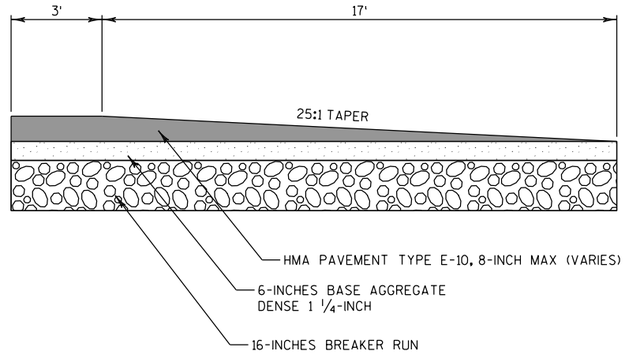
1. DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. FASTEN TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.
2. ORIENTATE SHIELD SO SLOTS ARE VERTICAL.
3. COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

RACINE ROAD OVERPASS RETAINING WALL BARRIER

2



PLAN VIEW



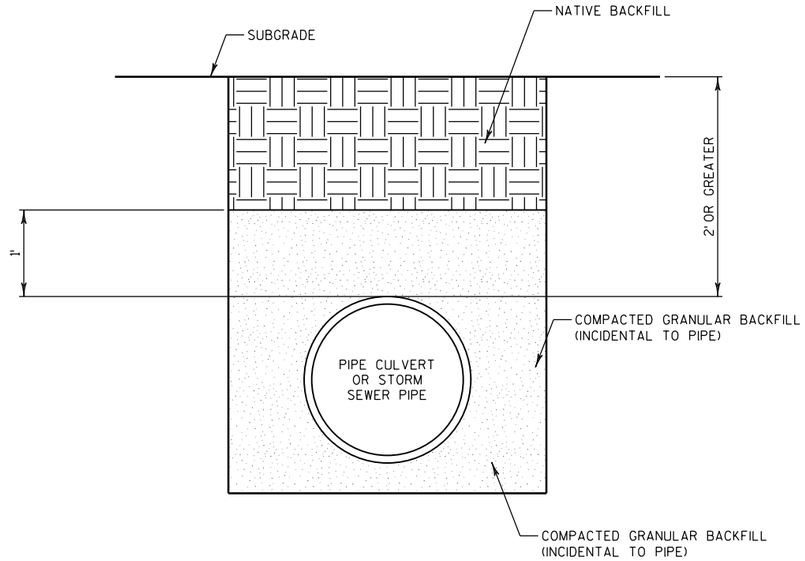
SECTION A-A

NOTES

1. ASPHALT EXTENSION NOT SHOWN IN PLAN VIEW
2. QUANTITIES ARE INCORPORATED UNDER APPROPRIATE BID ITEMS IN MISCELLANEOUS QUANTITIES TABLE

ASPHALT EXTENSION AT CONNECTOR ROAD LIMITS

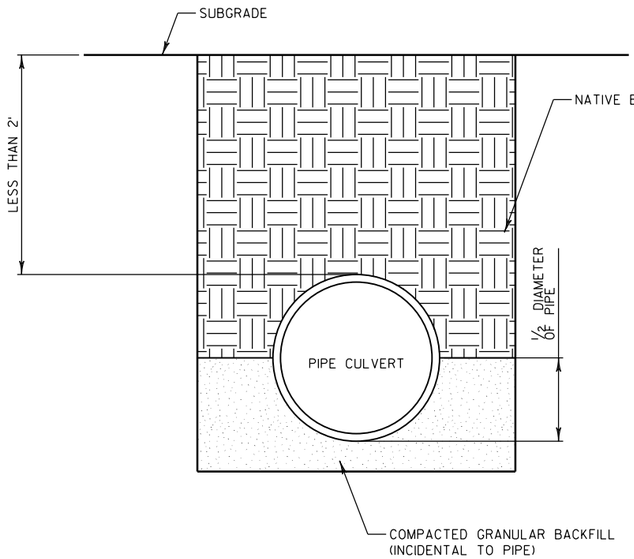
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CONSTRUCTION DETAIL	SHEET 46	E



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

NOTES:

(1) NATIVE BACKFILL SHALL BE FREE OF LARGE LUMPS, CLODS, OR ROCK.

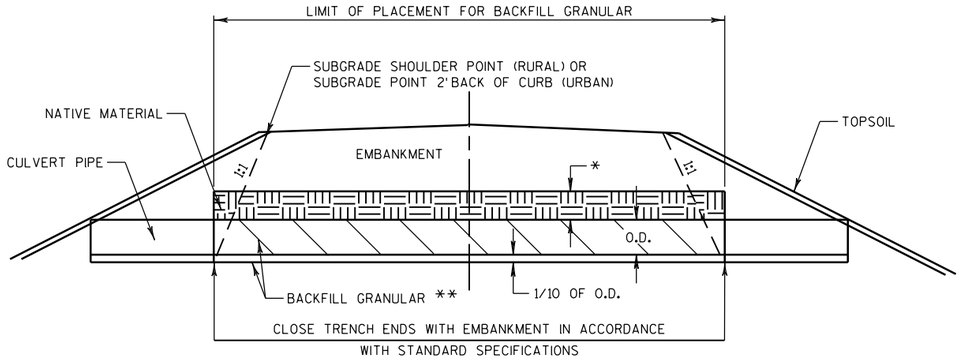


TRENCH BACKFILL DETAIL FOR SHALLOW PIPE CULVERTS

NOTES:

(1) NATIVE BACKFILL SHALL BE FREE OF LARGE LUMPS, CLODS, OR ROCK.

2



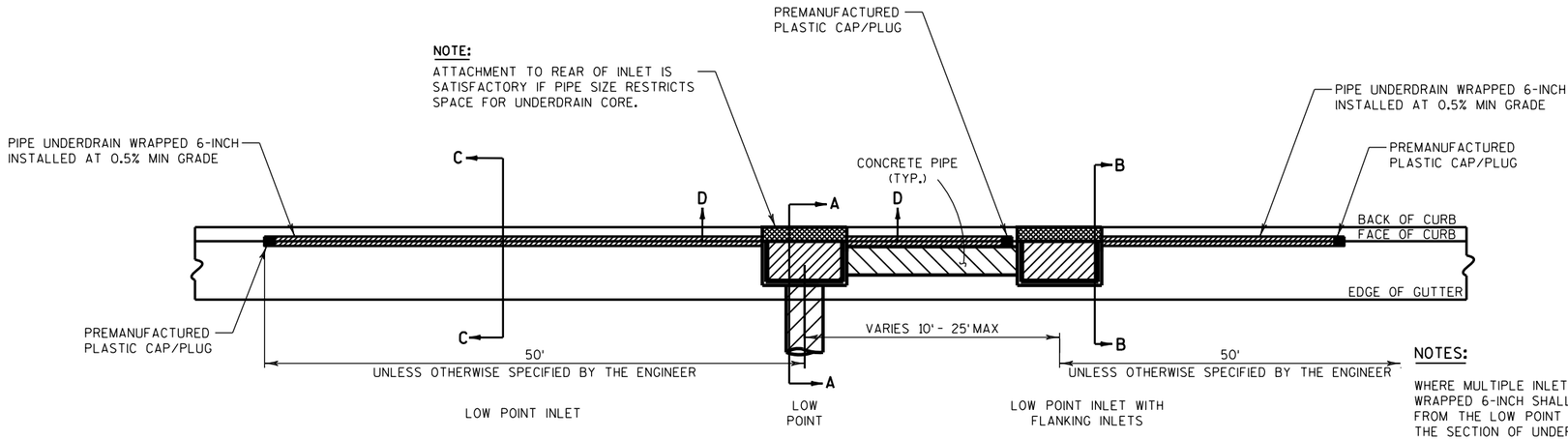
CULVERT BACKFILL DETAIL

NOTES:

OD = OUTSIDE DIAMETER

* CULVERT PIPE IN NEW EMBANKMENT = 1' MIN
* CULVERT PIPE IN EXISTING EMBANKMENT = TO EXISTING GROUND ELEVATION

** PAID UNDER SEPERATE BID ITEM



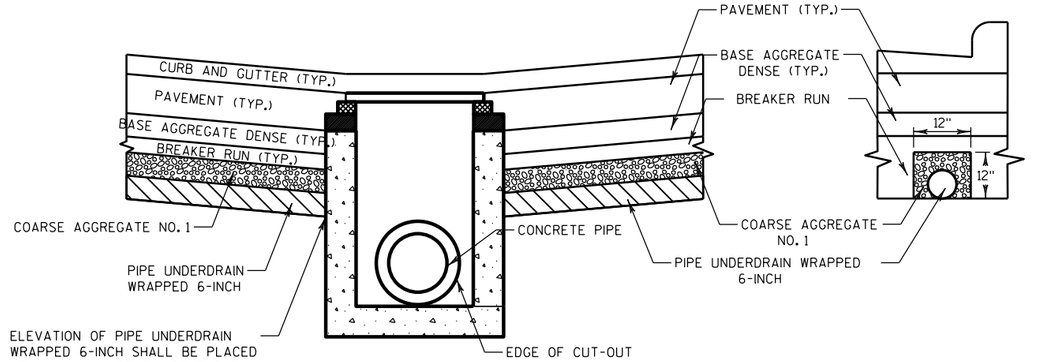
TOP VIEW

SPLIT DETAIL

INLET CONFIGURATION
WITH UNDERDRAIN AT LOW POINTS

NOTES:

WHERE MULTIPLE INLETS ARE USED AT LOW POINTS, PIPE UNDERDRAIN WRAPPED 6-INCH SHALL BE INSTALLED 50 FEET TO EITHER DIRECTION FROM THE LOW POINT AT A MINIMUM POSITIVE GRADE OF 0.5%. THE SECTION OF UNDERDRAIN BETWEEN THE CENTER AND OUTER INLETS SHALL BE PLACED TIGHT TO THE OUTER INLET, CAPPED WITH A PREMANUFACTURED PLASTIC CAP OR PLUG, AND LAID AS SPECIFIED ABOVE TO THE CENTER INLET.



SECTION D-D

CROSS-SECTION VIEW

TYPICAL INLET CONFIGURATION
WITH UNDERDRAIN CORED
INTO WALL WITH NO PIPE

FOUND AT LOW POINTS
WITHOUT FLANKING INLETS

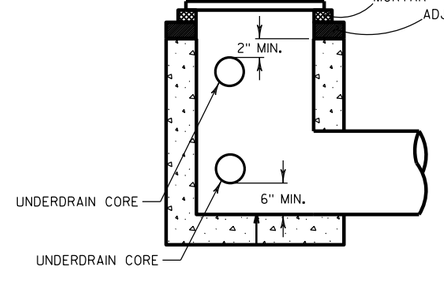
SECTION C-C

NOTES:

(1) BOTTOM OF PIPE SHALL BE PLACED AT THE BOTTOM OF COARSE AGGREGATE NO. 1 MATERIAL.

(2) BOTTOM OF COARSE AGGREGATE NO. 1 MATERIAL IS NOT NECESSARILY THE BOTTOM OF THE BREAKER RUN MATERIAL.

(3) ELEVATIONS TO BE DETERMINED BY ENGINEER IN FIELD.



SECTION A-A

CROSS-SECTION VIEW

TYPICAL INLET CONFIGURATION
WITH UNDERDRAIN CORED
INTO WALL WITH CROSSPIPE ONLY

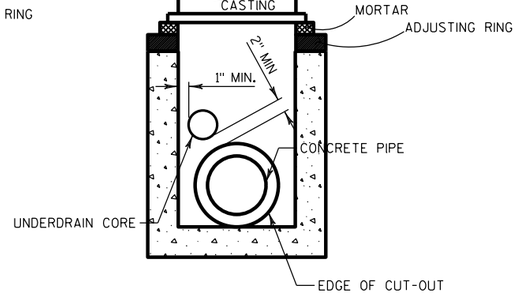
FOUND AT LOW POINTS
WITHOUT FLANKING INLETS

NOTES:

(1) BOTTOM OF CORE PLACED A MINIMUM OF 6" ABOVE THE INVERT OF THE CROSS PIPE.

(2) TOP OF CORE HOLES WILL BE A MINIMUM OF 2" BELOW THE TOP OF THE INLET STRUCTURES (BOTTOM OF RINGS)

(3) DRAIN TILES SHALL NOT BE ALLOWED IN THE RING OF THE STRUCTURE OF INLETS OR SEWER ACCESS STRUCTURES



SECTION B-B

CROSS-SECTION VIEW

TYPICAL INLET IN SUMP
CONDITION WITH
UNDERDRAIN CORED
INTO WALL WITH PIPE

FOUND AT FLANKING INLETS
NEAR LOWPOINTS

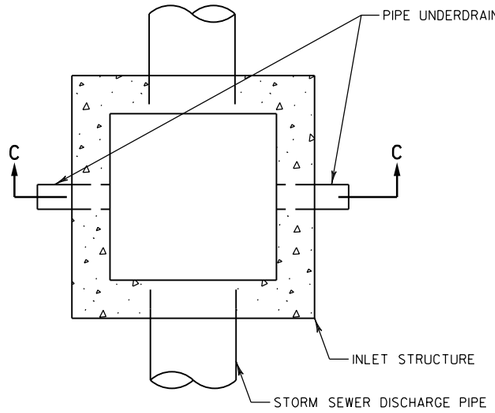
NOTES:

(1) CORE HOLES SHALL PROVIDE FOR A MINIMUM OF 2" OF CONCRETE BETWEEN THE CUTOUT FOR A CONCRETE PIPE AND THE EDGE OF THE CORE HOLE.

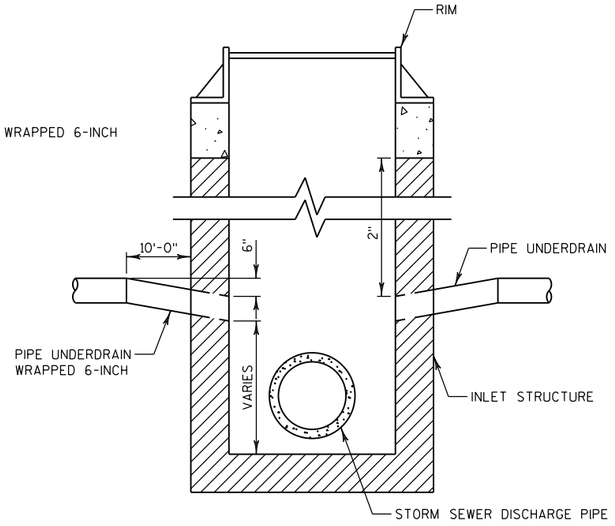
(2) CORE HOLES MAY HAVE 1" CLEARANCE FROM THE INSIDE WALLS OF A STRUCTURE.

UNDERDRAIN PIPE

2



PLAN VIEW



SECTION C-C

UNDERDRAIN OUTFALL AT INLET

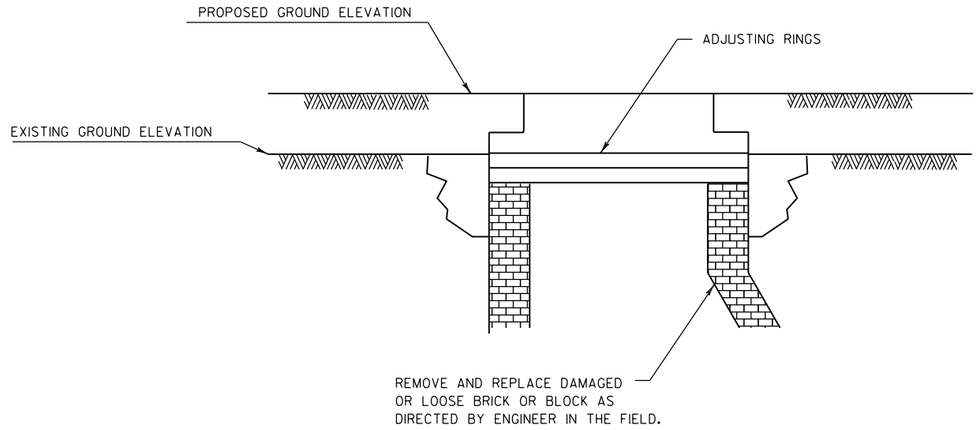
NOTES:

1) CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN WRAPPED, 6-INCH.

2) PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE.

3) SEE TYPICAL SECTIONS, STORM SEWER, AND UNDERDRAIN PLANS FOR PIPE UNDERDRAIN LOCATIONS.

2

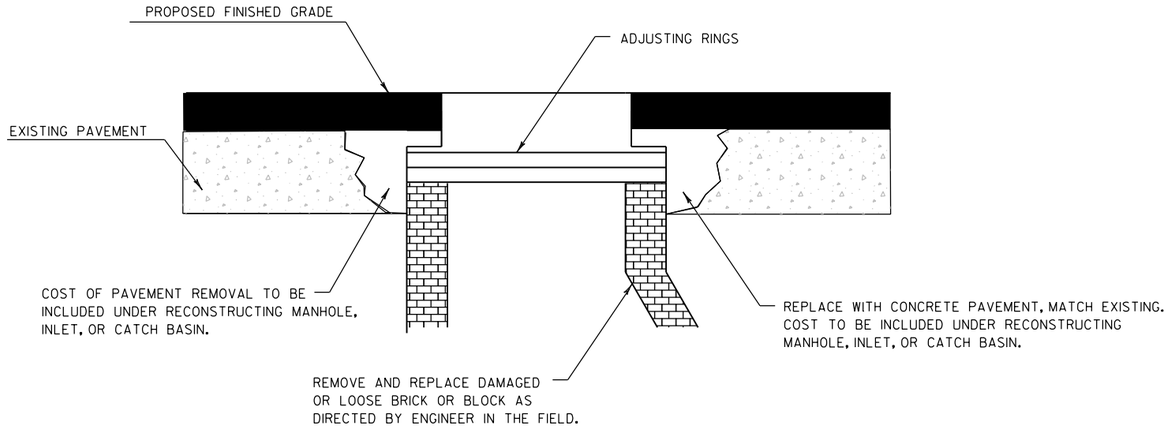


RECONSTRUCTING MANHOLE, INLET OR CATCH BASIN

MANHOLE OR INLET NOT IN PAVEMENT SECTION

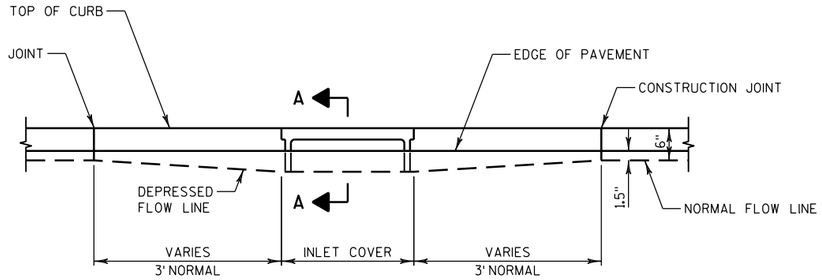
CONSTRUCTION NOTE:

ADJUST CHIMNEY WITH PROPER SIZE CONCRETE ADJUSTING RINGS (SIZE OF OPENING OF CONCRETE ADJUSTING RING TO BE DETERMINED BY SIZE OF OPENING IN FRAME) AND REINSTALL EXISTING FRAME AND LID TO FINISHED GRADE.
(BACKFILL AND OTHER WORK TO BE DONE IN ACCORDANCE WITH ITEM RECONSTRUCTING INLET OR RECONSTRUCTING MANHOLE)

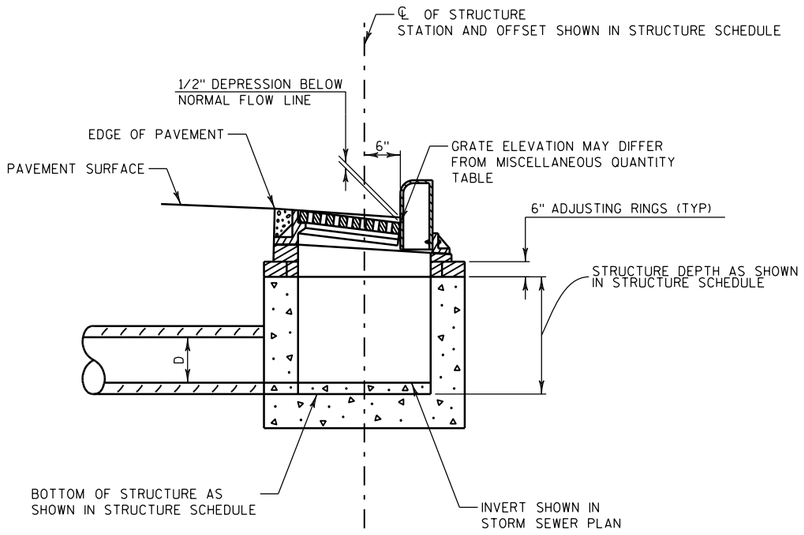


RECONSTRUCTING MANHOLE, INLET OR CATCH BASIN

MANHOLE OR INLET IN PAVEMENT SECTION

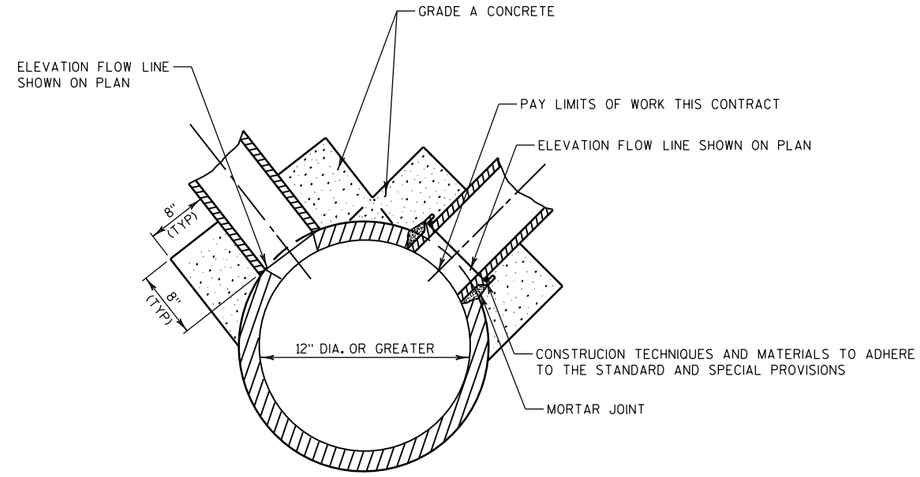


ELEVATION



SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

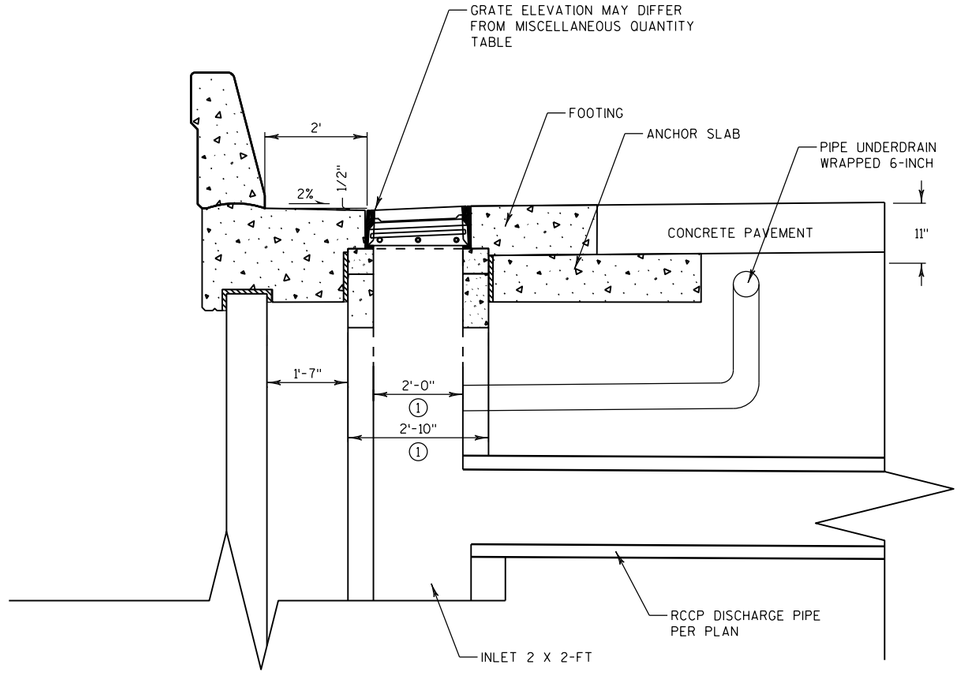


DETAIL OF CONNECTION TO EXISTING STORM SEWER

NOTE:

CONTRACT UNIT PRICE FOR PIPE SHALL INCLUDE COST OF CONNECTION TO EXISTING STORM SEWER OR M.H.

2

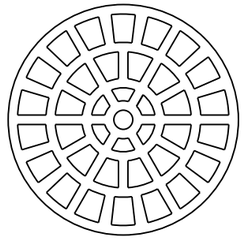


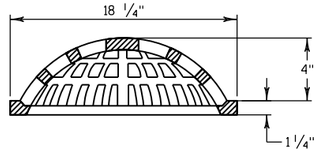
INLET PLACEMENT AT RETAINING WALL

NOTES

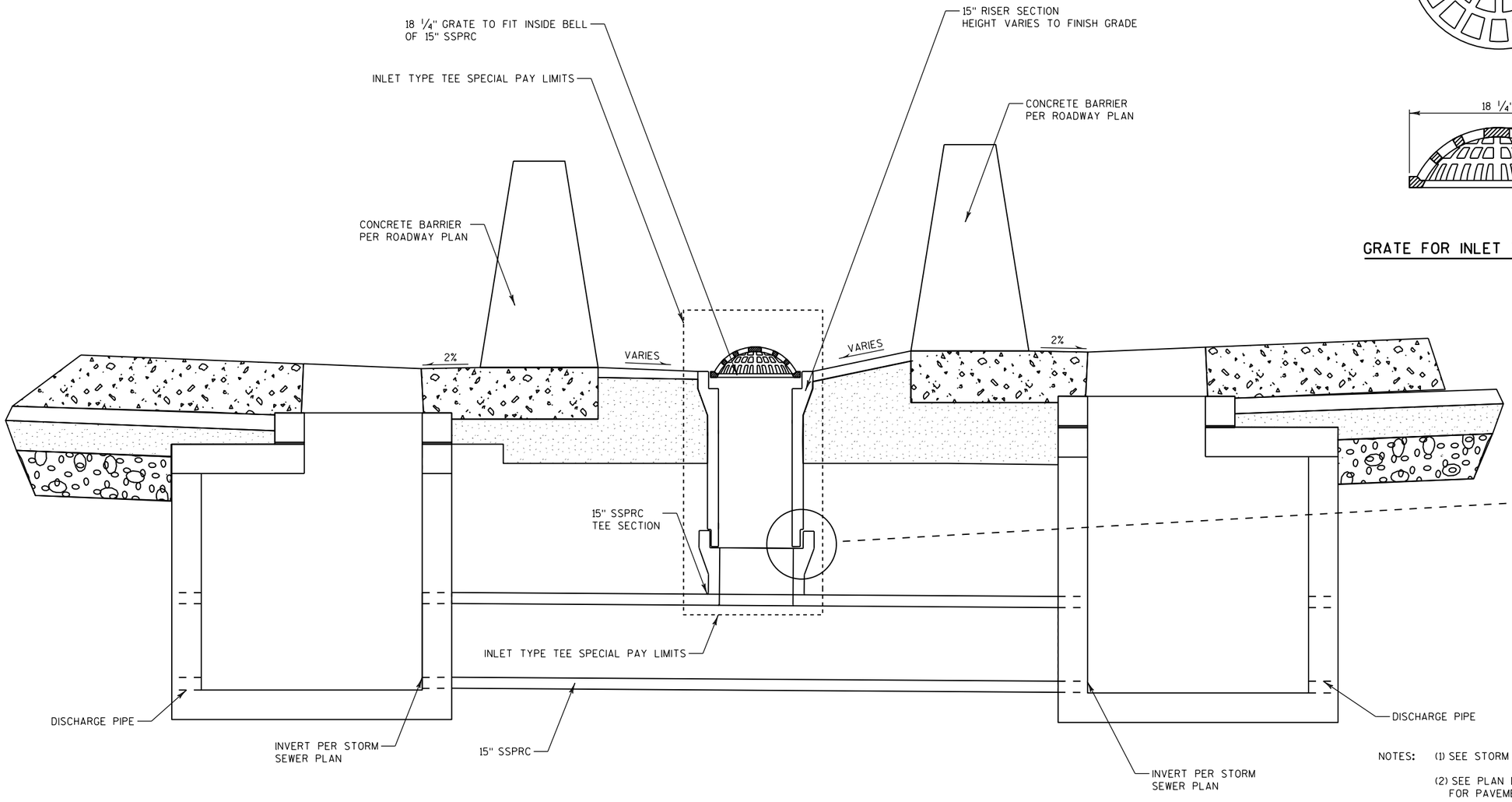
(1) DIMENSIONS WILL DIFFER DEPENDING ON INLET STRUCTURE, REFER TO STORM SEWER PLANS.

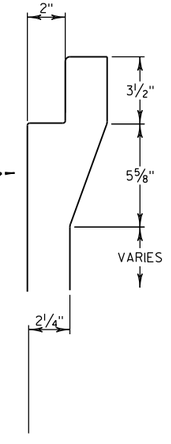
2





GRATE FOR INLET TYPE TEE SPECIAL





INLET TYPE TEE SPECIAL

NOTES:

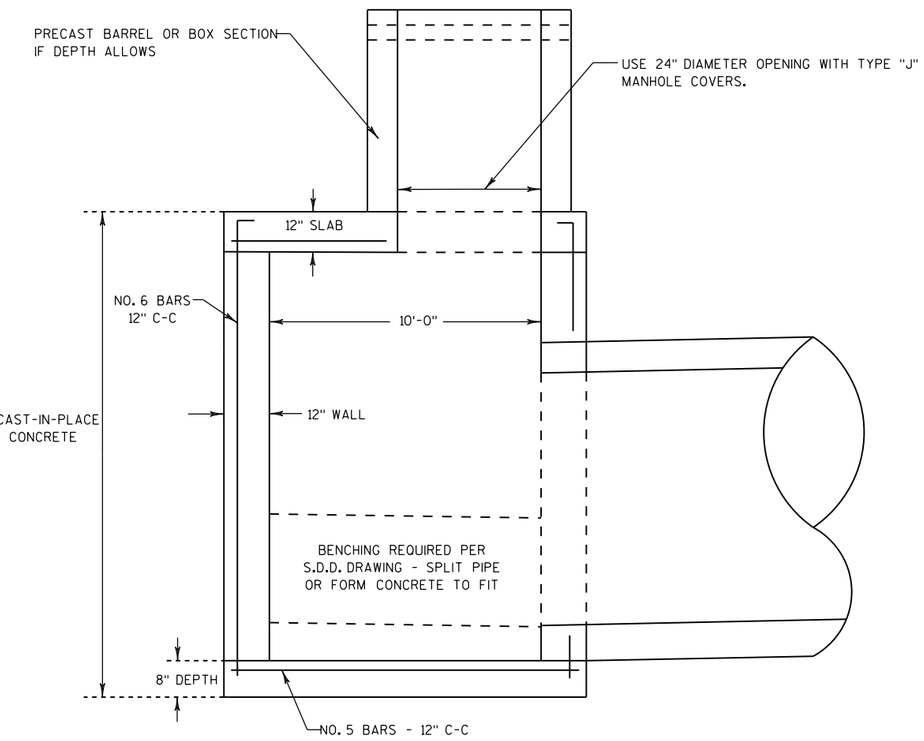
(1) SEE STORM SEWER PLANS FOR DETAILS.

(2) SEE PLAN DETAILS AND TYPICAL SECTIONS FOR PAVEMENT DETAILS.

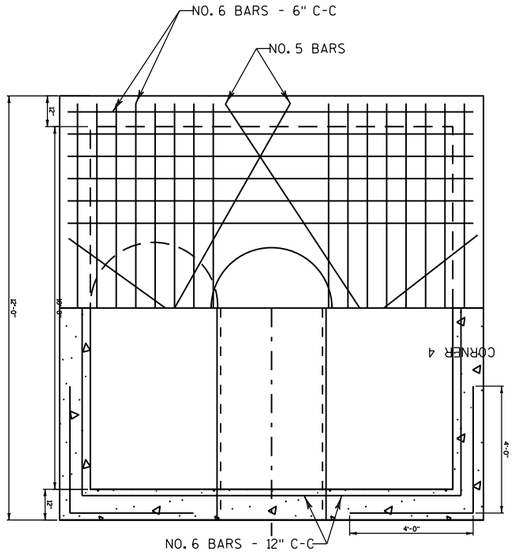
(3) CONCRETE COLLARS, VERTICAL BELL SECTION OF PIPE, AND ANY WORK REQUIRED TO ATTACH BARRELL SECTION TO CROSS PIPE IS INCIDENTAL TO INLET TYPE TEE SPECIAL.

(4) MORTER INSIDE BELL OF 15-INCH SSPRC SUCH THAT TOP OF 1 1/4" THICK FLANGE IS FLUSH WITH THE TOP OF BELL.

STRUCTURE	503	504
RIM ELEVATION	747.94	755.59
LOWEST INVERT	731.62	732.40
PIPE INTERSECTION	204RNE+82	208RNE+37
CORNER NE	N 547955.010 E 816487.929	N 548188.253 E 816772.345
CORNER NW	N 547959.265 E 816477.736	N 548186.834 E 816762.446
CORNER SE	N 547945.471 E 816484.927	N 548178.355 E 816773.765
CORNER SW	N 547948.472 E 816475.388	N 548176.935 E 816763.866



PROFILE VIEW



PLAN VIEW

NOTE:
ORIENTATE 24" DIAMETER OPENINGS IN PROPER RELATIONSHIP WITH LOCATION OF STEPS AND/OR CONCRETE PAVEMENT JOINT LAYOUT. CONFIRM LOCATIONS OF ALL SLAB OPENINGS WITH FIELD ENGINEER PRIOR TO POURING CONCRETE.

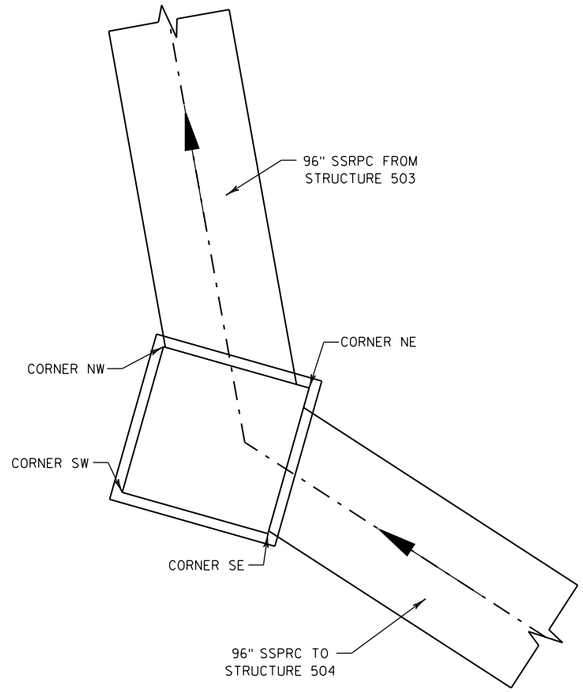


TABLE DETAIL
(STRUCTURE 503 DISPLAYED)

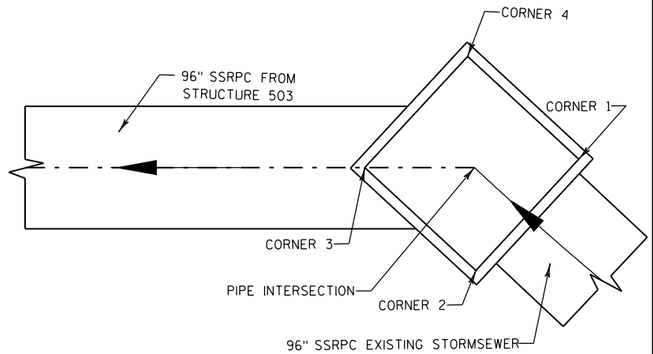
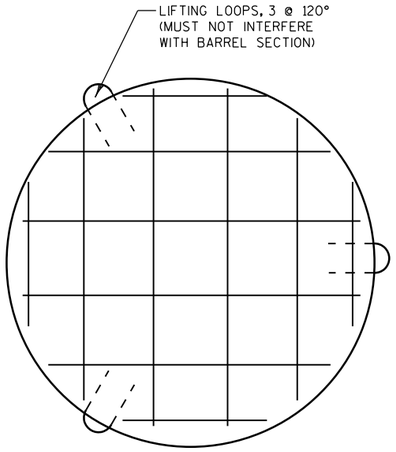


TABLE DETAIL
(STRUCTURE 504 DISPLAYED)

NOTE:
FIELD VERIFY LOCTION OF EXISITNG 96" STORM SEWER DURING PLACEMENT OF STRUCTURE 504, CONFIRM 2FT CONCRETE CAP ON TOP OF EXISTING PIPE.

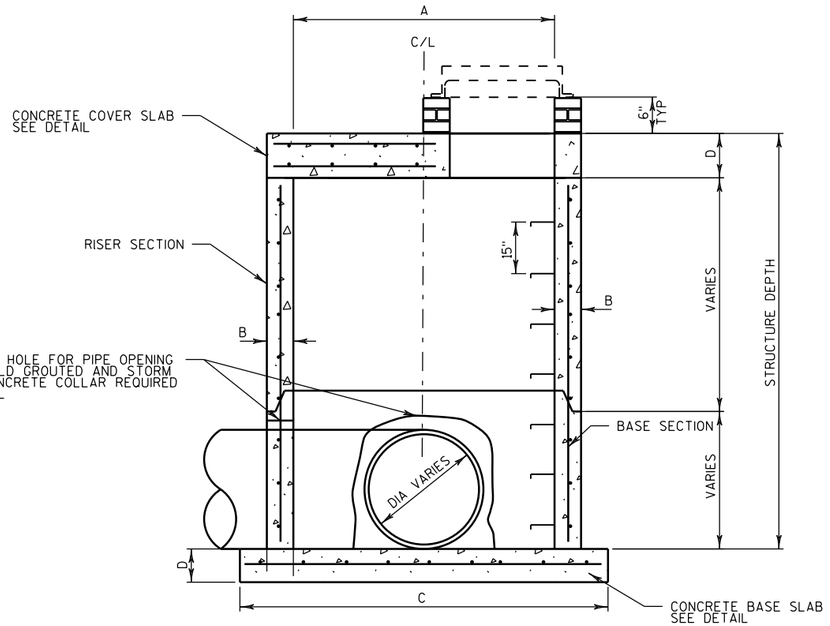
MANHOLES SPECIAL 10-FT X 10-FT

DETAILS NOT SHOWN HERE SHALL BE PER S.D.D. "MANHOLES 3FT & 6FT"



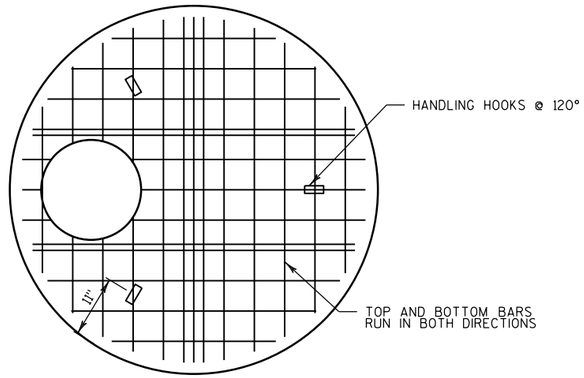
CONCRETE BASE SLAB

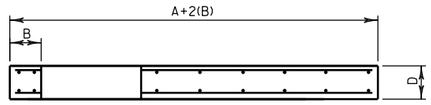
	A	B	C	D
MANHOLE 12-FT SPECIAL	144"	12"	168"	12"



NOTES

1) REINFORCING COMPLIES WITH ASTM C-478.
2) STEPS PLACED AT 15". STEPS COMPLY WITH ASTM C-478.
3) RISER & SLABS DESIGN FOR HS20 LOADING.



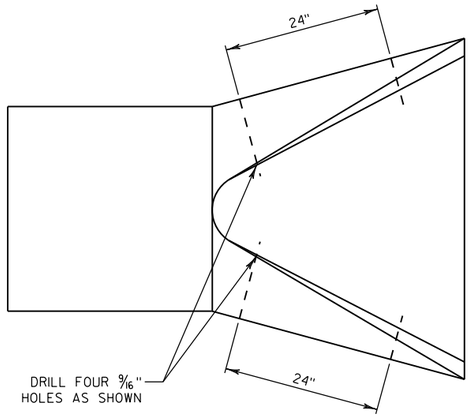


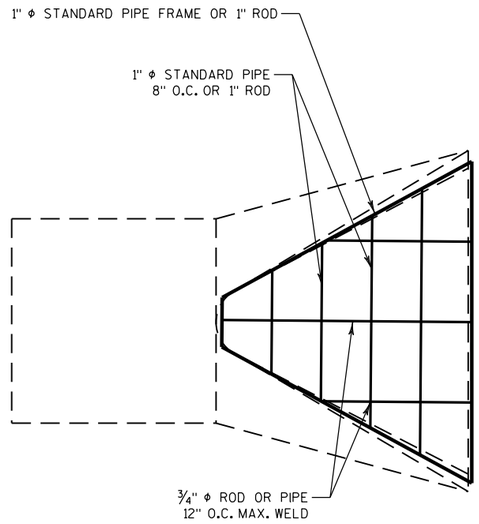
CONCRETE COVER SLAB

MANHOLES 12-FT SPECIAL

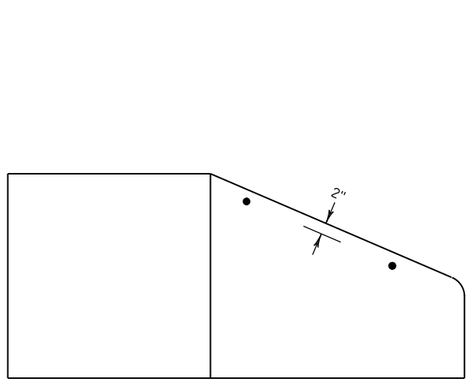
DETAILS NOT SHOWN HERE SHALL BE
PER S.D.D. "MANHOLES 3FT & 6FT"

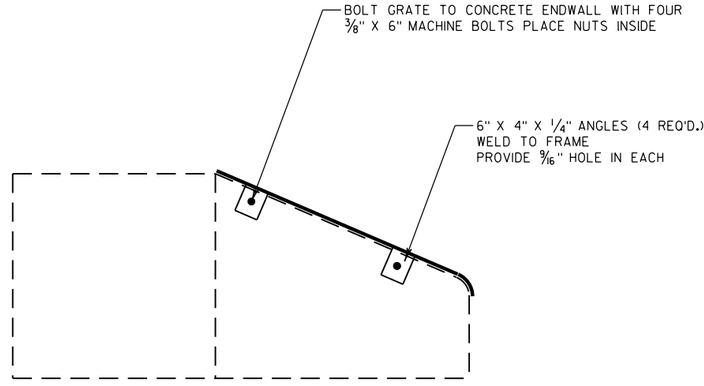
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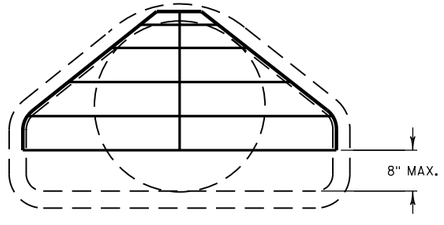
AT INLET OF EACH PIPE



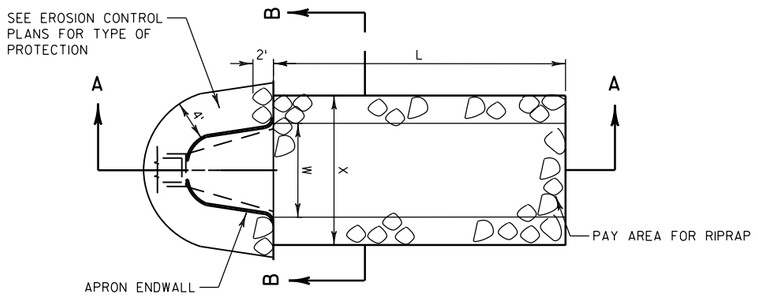


BAR SIZES				
STANDARD DESIGN				
	PIPE SIZE	HOLE DIA. REQ'D.	BOLT DIA.	BAR SIZE
ROUND	12'-24"	3/4"	5/8"	5/8"
	27"-48"	7/8"	3/4"	3/4"
	54"-90"	1 1/8"	1"	1"
ARCH	22"-29"	3/4"	5/8"	5/8"
	36"-59"	7/8"	3/4"	3/4"
	65"-88"	1 1/8"	1"	1"
BOLT LG.=PIPEWALL THK. + 2 1/2"				

ROUND		ARCH	
PIPE SIZE	H	PIPE SIZE	H
12"	2 1/2"	22"-29"	4"
15"	3"	36"-44"	5"
18"-24"	4"	51"-65"	6"
27"-36"	5"	73"-85"	7"
42"-54"	6"		
60"-72"	7"		
78"-90"	8"		



PIPE GRATE DETAIL



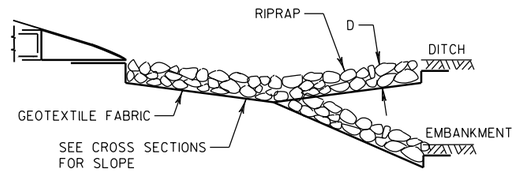
PLAN VIEW

L = 3 x W (NOR.) OR 10' MIN. OR AS INDICATED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

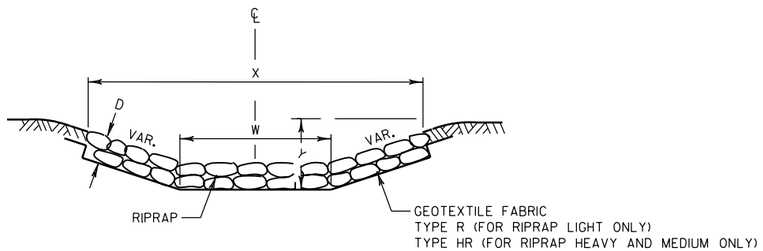
D = 12" FOR RIPRAP LIGHT
18" FOR RIPRAP MEDIUM
24" FOR RIPRAP HEAVY

X = W+2' FOR TYPICAL CULVERT DISCHARGE INTO DITCH
W+5' FOR CULVERT DISCHARGE DOWN EMBANKMENT SLOPE

Y = 0' FOR TYPICAL CULVERT DISCHARGE INTO DITCH
12" FOR CULVERT DISCHARGE DOWN EMBANKMENT SLOPE



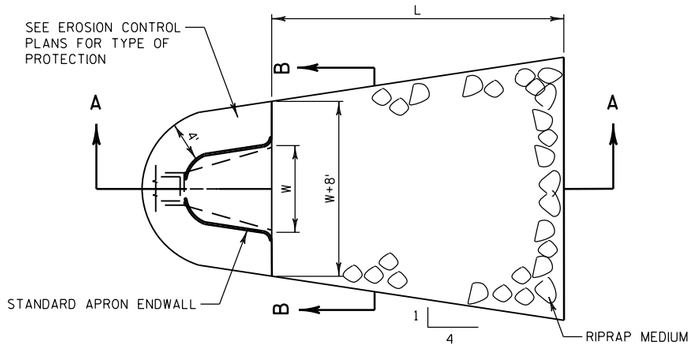
SECTION A-A



SECTION B-B

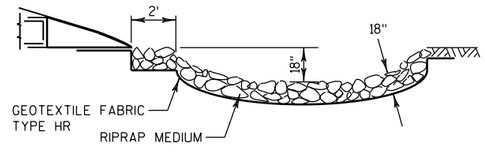
RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

SEE EROSION CONTROL PLAN FOR LOCATIONS

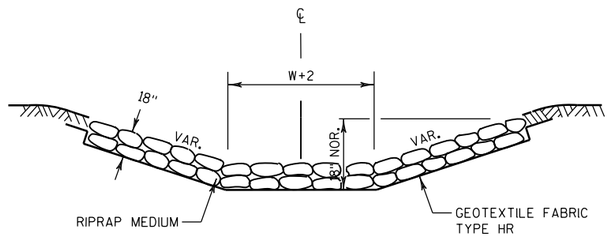


PLAN VIEW

L = 3 x W (NOR.) OR 10' MIN. OR AS INDICATED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

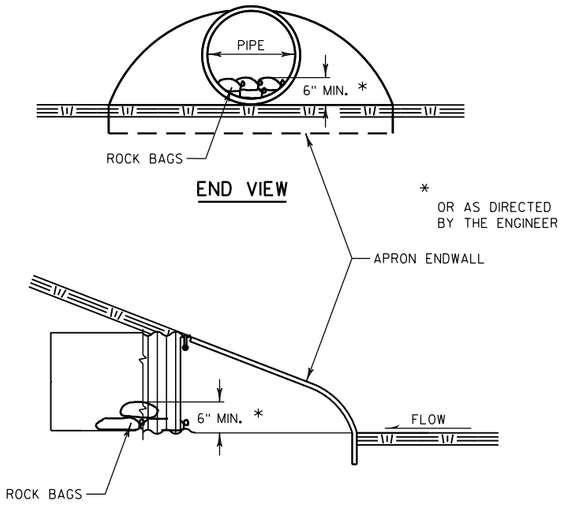


SECTION A-A



SECTION B-B

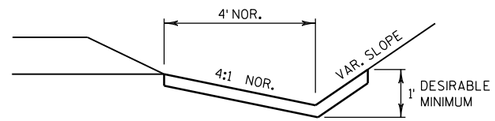
RIPRAP AND GEOTEXTILE FABRIC DETAIL AT POND OUTFALL ENDWALLS



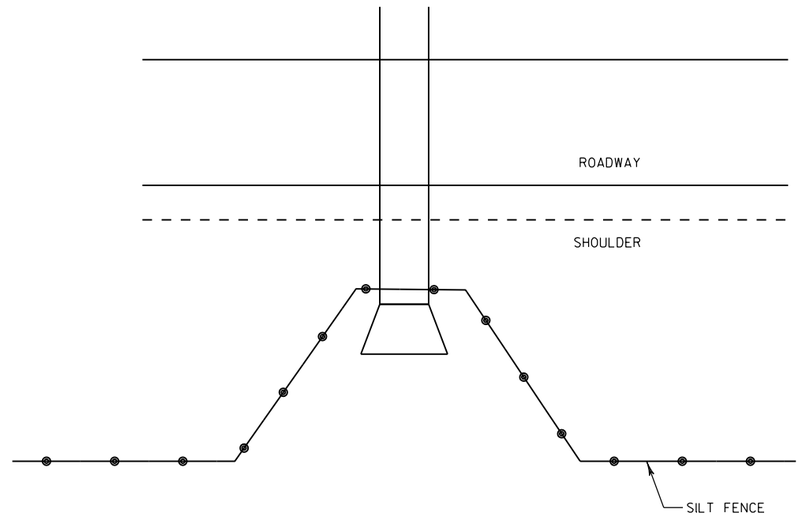
ESTIMATED BAG SIZE = 24" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
12"	1
15"	2
18"	2
24"	3
30"	5
36"	7
42"	7
48"	10
54"	10
60"	13
72"	16
30"X19"	5
38"X24"	7
53"X34"	10
60"X38"	13
76"X48"	18

ROCK BAG AT CULVERT INVERT DETAIL

AT INLET LOCATIONS

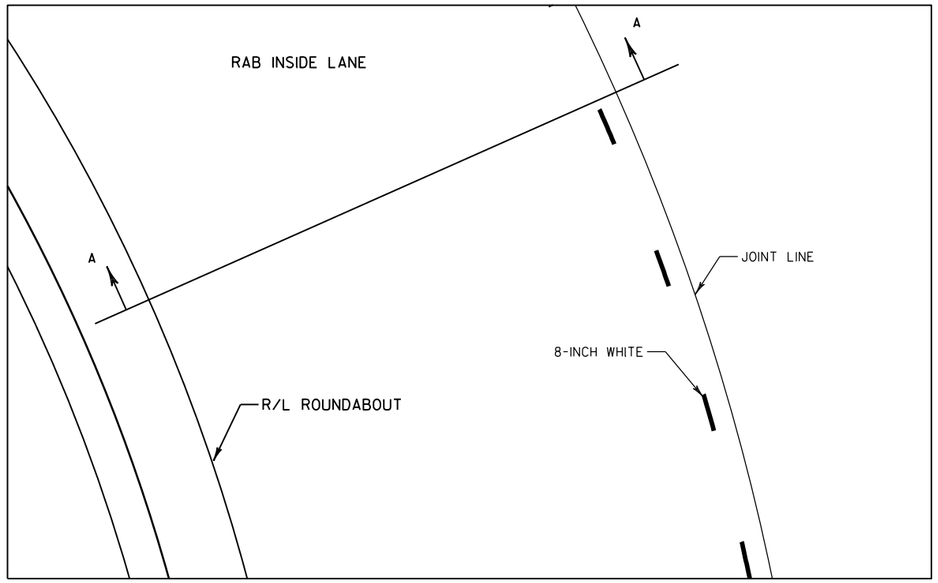


EROSION MAT DETAIL FOR DITCHES

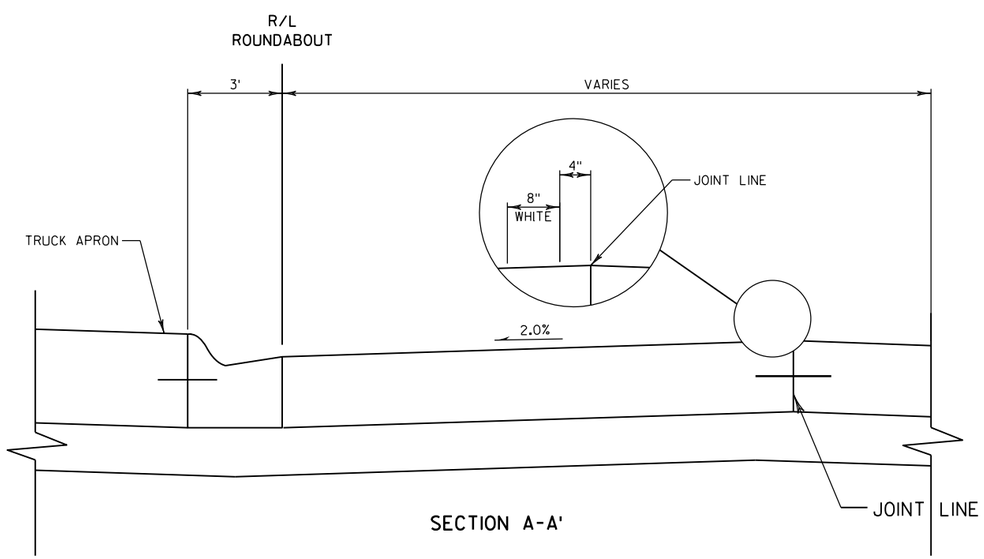


TYPICAL SILT FENCE DETAIL AT PIPE INLET

NOTE:
FOR FURTHER DETAIL SEE
SILT FENCE DETAIL SDD

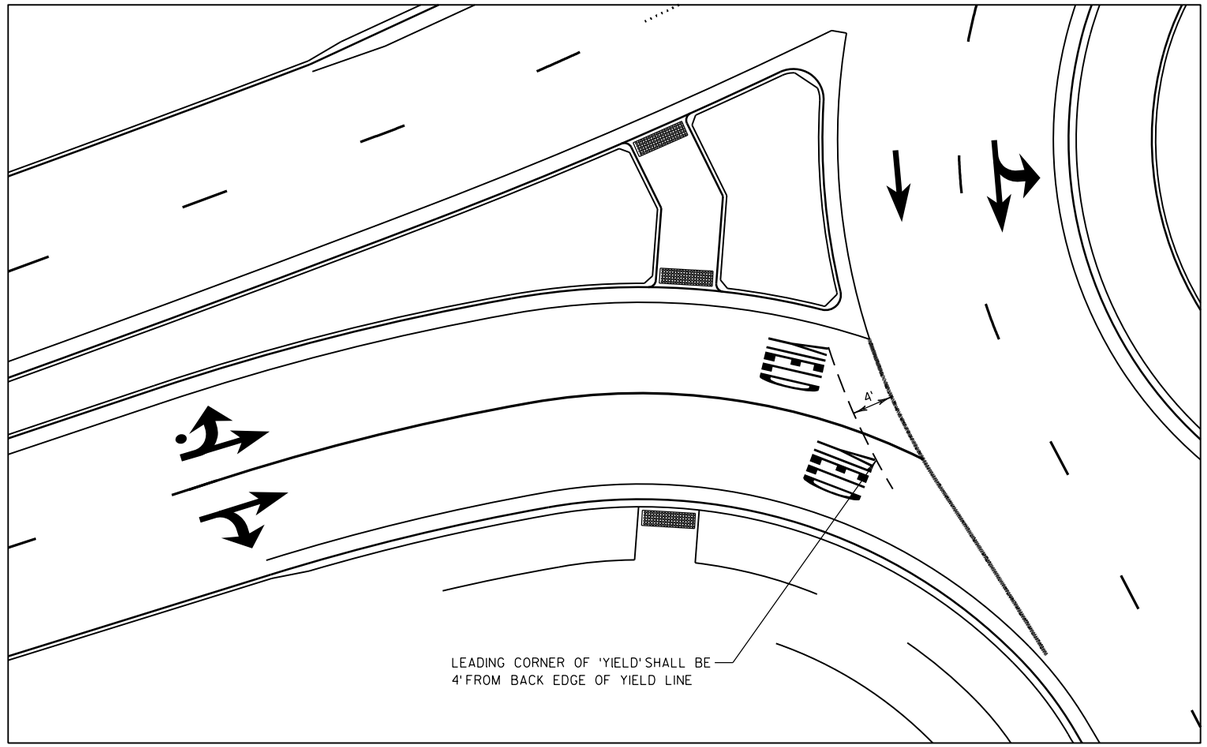


PLAN

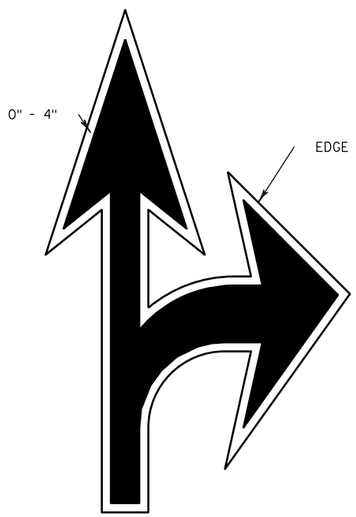


SECTION A-A'

ROUNDABOUT PAVEMENT MARKING DETAILS



ROUNDABOUT YIELD PAVEMENT MARKING LOCATION

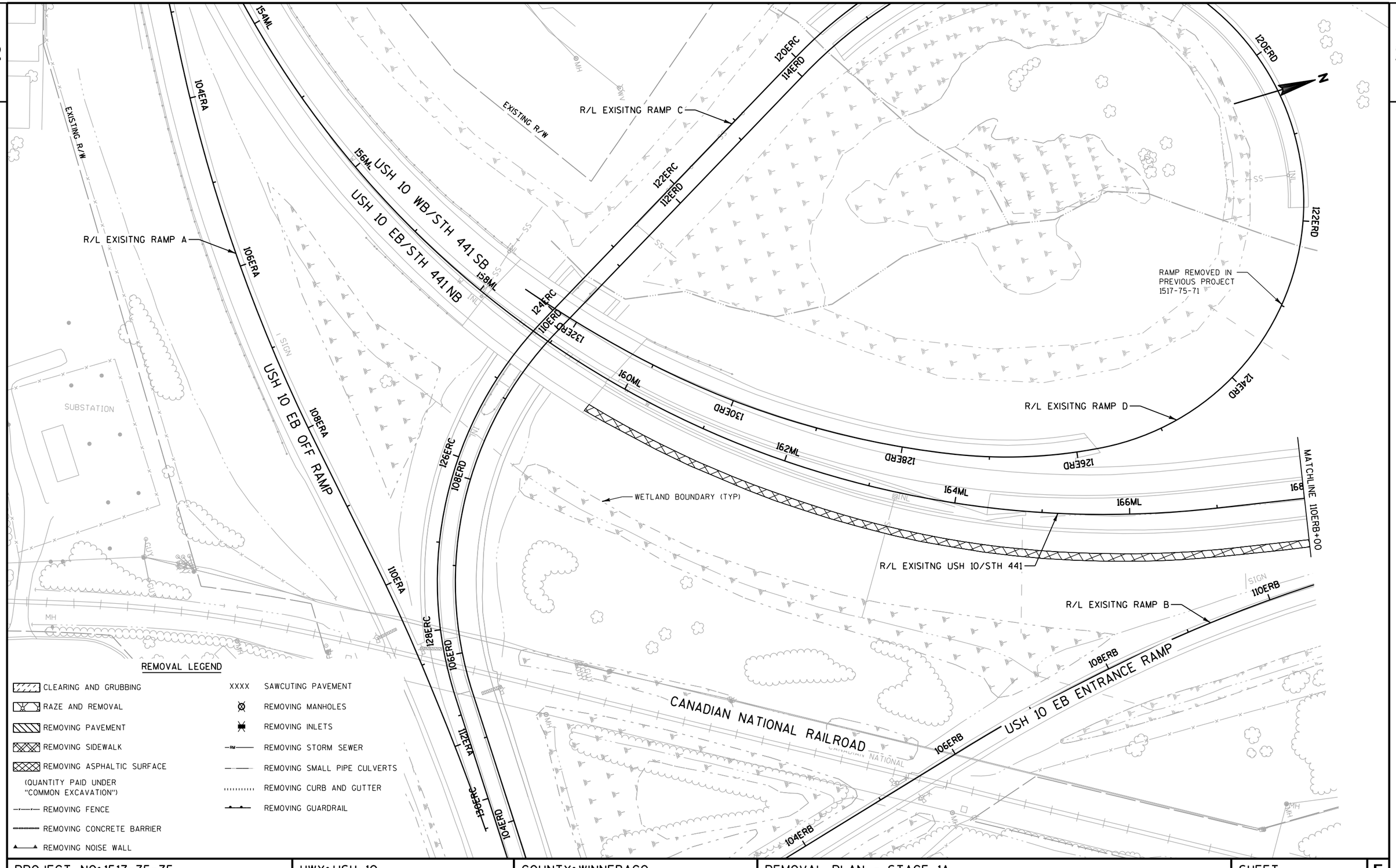


GROOVED MARKING DETAIL

NOTE:

CONSTRUCTION DETAIL TYPICAL FOR ALL GROOVED THERMOPLASTIC PAVEMENT MARKING SYMBOLS AND WORDS. GROOVED AREA NOT TO EXCEED 4-INCHES OUTSIDE OF EDGE OF PAVEMENT MARKING.

2



REMOVAL LEGEND

	CLEARING AND GRUBBING	XXXX	SAWCUTING PAVEMENT
	RAZE AND REMOVAL		REMOVING MANHOLES
	REMOVING PAVEMENT		REMOVING INLETS
	REMOVING SIDEWALK	RM	REMOVING STORM SEWER
	REMOVING ASPHALTIC SURFACE		REMOVING SMALL PIPE CULVERTS
	(QUANTITY PAID UNDER "COMMON EXCAVATION")		REMOVING CURB AND GUTTER
	REMOVING FENCE		REMOVING GUARDRAIL
	REMOVING CONCRETE BARRIER		
	REMOVING NOISE WALL		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 1A	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021101_rm_s1A.dgn PLOT DATE : 1/26/2015 8:59:58 PM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

2

USH 10 WB OFF RAMP
108ERC
R/L EXISTING RAMP C
106ERC
104ERC
102ERC
EXISTING R/W
TLE
FRANCES STREET
USH 10 WB/STH 441 SB
176ML
178ML
174ML
180ML
182ML
R/L EXISTING USH 10/STH 441
172ML
USH 10 EB/STH 441 NB
120ERB
116ERB
R/L EXISTING RAMP B
170ML
114ERB
USH 10 EB ENTRANCE RAMP
EXISTING R/W
WETLAND BOUNDARY (TYP)
110ERB
112ERB
MATCHLINE 108+80.00
REMOVING STORM SEWER (18-INCH)
CEMETERY
CANADIAN NATIONAL RAILROAD

REMOVAL LEGEND

CLEARING AND GRUBBING	XXXX SAWCUTING PAVEMENT
RAZE AND REMOVAL	REMOVING MANHOLES
REMOVING PAVEMENT	REMOVING INLETS
REMOVING SIDEWALK	REMOVING STORM SEWER
REMOVING ASPHALTIC SURFACE	REMOVING SMALL PIPE CULVERTS
(QUANTITY PAID UNDER "COMMON EXCAVATION")	REMOVING CURB AND GUTTER
REMOVING FENCE	REMOVING GUARDRAIL
REMOVING CONCRETE BARRIER	
REMOVING NOISE WALL	

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 1A	SHEET 62	E

2

118ERD
120ERD
122ERD
124ERD
126ERD
128
112ERC
110ERC
108ERC
106ERC
104ERC
102ERC
100ERC
116ERB
114ERB
112ERB
110ERB
118ERB
120ERB
164ML
166ML
168ML
170ML
172ML
174ML
176ML
178ML
MATCH LINE 179ML +00
USH 10 WB ENTRANCE RAMP
USH 10 WB OFF RAMP
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
USH 10 EB ENTRANCE RAMP
R/L EXISTING RAMP C
R/L EXISTING RAMP D
R/L EXISTING USH 10/STH 441
R/L EXISTING RAMP B
WETLAND BOUNDARY (TYP)
EXISTING R/W
EXISTING R/W
N
INL
HSS
SS
SIGN
MH

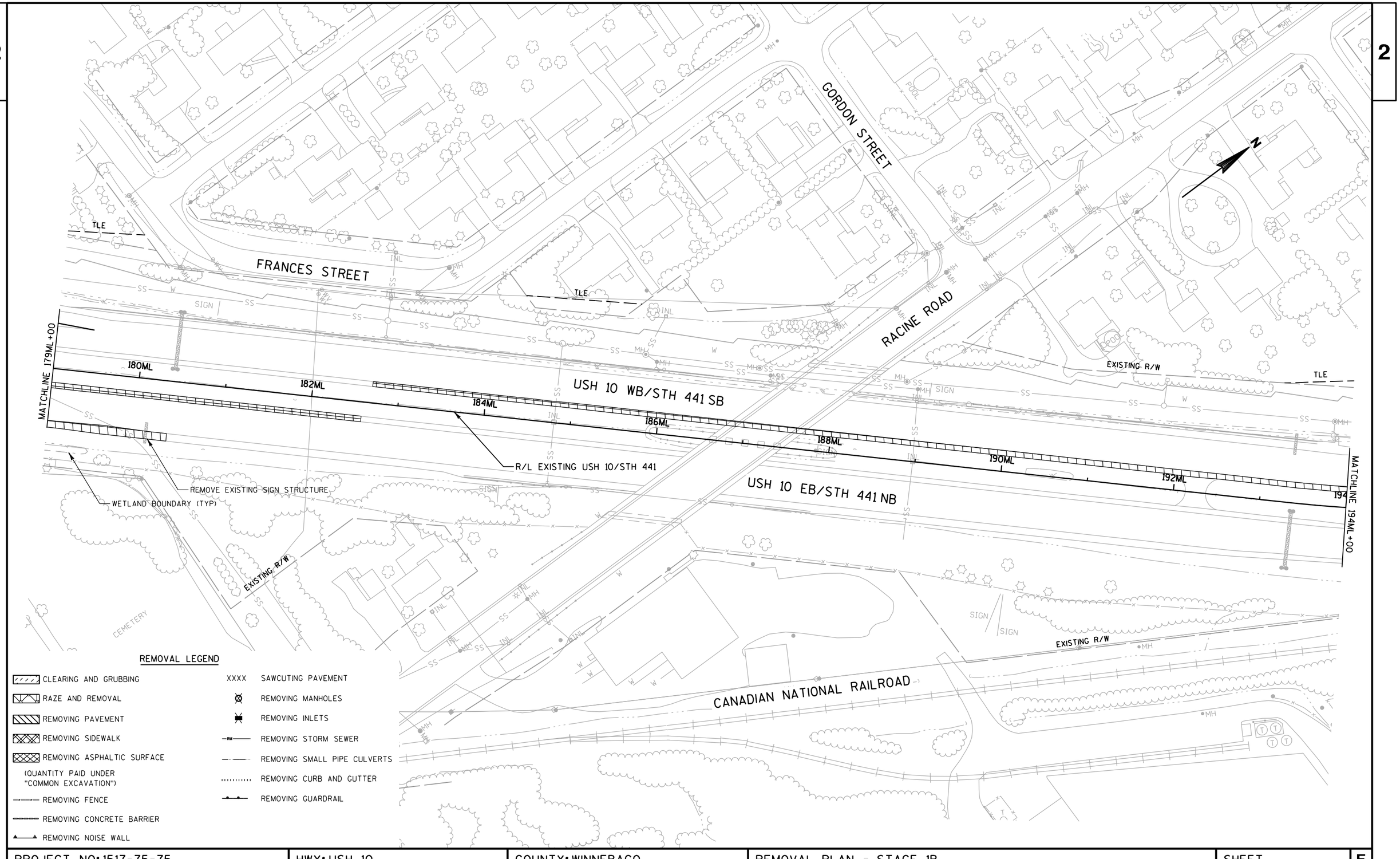
REMOVAL LEGEND

- CLEARING AND GRUBBING
- RAZE AND REMOVAL
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE
  (QUANTITY PAID UNDER "COMMON EXCAVATION")
- REMOVING FENCE
- REMOVING CONCRETE BARRIER
- REMOVING NOISE WALL
- XXXX SAWCUTING PAVEMENT
- REMOVING MANHOLES
- REMOVING INLETS
- RM REMOVING STORM SEWER
- REMOVING SMALL PIPE CULVERTS
- REMOVING CURB AND GUTTER
- REMOVING GUARDRAIL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 1B	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021103_rm_s1B.dgn PLOT DATE : 1/26/2015 9:00:09 PM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

2



REMOVAL LEGEND

	CLEARING AND GRUBBING	XXXX	SAWCUTING PAVEMENT
	RAZE AND REMOVAL		REMOVING MANHOLES
	REMOVING PAVEMENT		REMOVING INLETS
	REMOVING SIDEWALK	RM	REMOVING STORM SEWER
	REMOVING ASPHALTIC SURFACE		REMOVING SMALL PIPE CULVERTS
	(QUANTITY PAID UNDER "COMMON EXCAVATION")		REMOVING CURB AND GUTTER
	REMOVING FENCE		REMOVING GUARDRAIL
	REMOVING CONCRETE BARRIER		
	REMOVING NOISE WALL		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 1B	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021104_rm_s1B.dgn PLOT DATE : 1/26/2015 9:00:13 PM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

2

2

LILLY STREET

LILLY ST.

SANDELWOOD STREET

TLE

PROPOSED R/W

EXISTING R/W

RICHARD DRIVE

WESTBOUND ON RAMP

MATCHLINE 194ML +00

196ML

198ML

200ML

202ML

204ML

206ML

208ML

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

R/L EXISTING USH 10 /STH 441

EASTBOUND OFF RAMP

WETLAND BOUNDARY (TYP)

CANADIAN NATIONAL RAILROAD

MIDWAY ROAD

CANADIAN NATIONAL

N

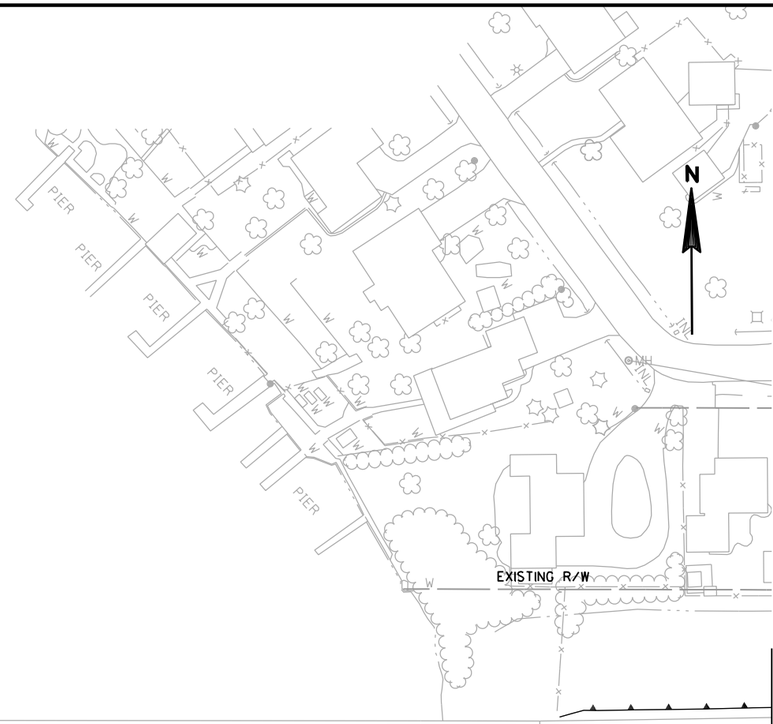
REMOVAL LEGEND

	CLEARING AND GRUBBING	XXXX	SAWCUTING PAVEMENT
	RAZE AND REMOVAL		REMOVING MANHOLES
	REMOVING PAVEMENT		REMOVING INLETS
	REMOVING SIDEWALK	—RM—	REMOVING STORM SEWER
	REMOVING ASPHALTIC SURFACE		REMOVING SMALL PIPE CULVERTS
	(QUANTITY PAID UNDER "COMMON EXCAVATION")		REMOVING CURB AND GUTTER
	REMOVING FENCE		REMOVING GUARDRAIL
	REMOVING CONCRETE BARRIER		
	REMOVING NOISE WALL		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 1B	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\021105_rm_s1B.dgn PLOT DATE : 1/26/2015 9:00:16 PM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

2



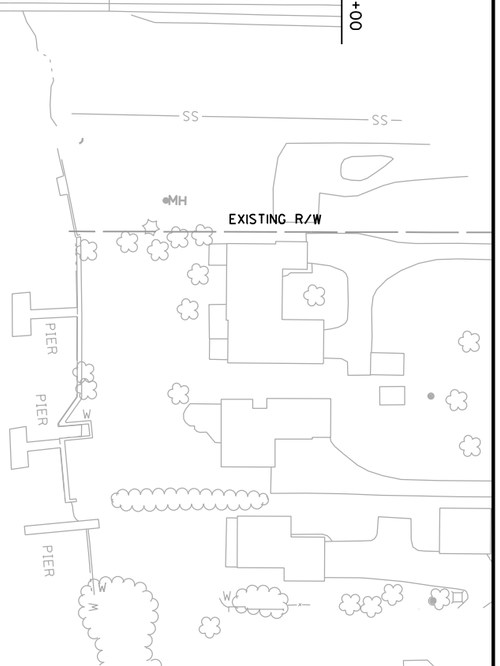
R/L EXISTING USH 10/STH 441

132ML 134ML 136ML 138ML 140ML 142ML 144ML 146

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

MATCHLINE 146ML+00



REMOVAL LEGEND

- CLEARING AND GRUBBING
- RAZE AND REMOVAL
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE
  (QUANTITY PAID UNDER "COMMON EXCAVATION")
- REMOVING FENCE
- REMOVING CONCRETE BARRIER
- REMOVING NOISE WALL
- XXXX SAWCUTING PAVEMENT
- REMOVING MANHOLES
- REMOVING INLETS
- RM REMOVING STORM SEWER
- REMOVING SMALL PIPE CULVERTS
- REMOVING CURB AND GUTTER
- REMOVING GUARDRAIL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 2A	SHEET 66	E

2

MATCHLINE 146ML+00

REMOVING STORM SEWER (18-INCH)

PROPOSED R/W

148ML

150ML

TAYCO STREET

TLE

REMOVING SIGN STRUCTURE

EXISTING R/W

152ML

102ERA

USH 10 EB OFF RAMP

104ERA

R/L EXISTING RAMP A

106ERA

154ML

R/L EXISTING USH 10/STH 441

USH 10 WB/STH 441 SB

156ML

USH 10 EB/STH 441 NB

158ML

PROPOSED R/W

REMOVING FENCE

WETLAND BOUNDARY (TYP)

EXISTING R/W

N

MATCHLINE 118ERD+00

118ERC

118ERD

116ERC

116ERD

USH 10 WB OFF RAMP

120ERC

114ERD

SALVAGE 24-INCH APRON ENDWALL

R/L EXISTING RAMP D

R/L EXISTING RAMP C

CULVERT PIPE SALVAGED (24-INCH)

122ERC

112ERD

SALVAGE 24-INCH APRON ENDWALL

124ERC

110ERD

132ERD

130ERD

128ERD

160ML

162ML

164ML

REMOVAL LEGEND

- CLEARING AND GRUBBING
- RAZE AND REMOVAL
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE
- (QUANTITY PAID UNDER "COMMON EXCAVATION")
- REMOVING FENCE
- REMOVING CONCRETE BARRIER
- REMOVING NOISE WALL
- XXXX SAWCUTING PAVEMENT
- REMOVING MANHOLES
- REMOVING INLETS
- REMOVING STORM SEWER
- REMOVING SMALL PIPE CULVERTS
- REMOVING CURB AND GUTTER
- REMOVING GUARDRAIL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 2A	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\021107_rm_s2A.dgn PLOT DATE : 5/8/2015 7:53:42 AM PLOT BY : nspitzer PLOT NAME : $FILE$ PLOT SCALE : 100:1

2

REMOVAL LEGEND

- CLEARING AND GRUBBING
- RAZE AND REMOVAL
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE
- (QUANTITY PAID UNDER "COMMON EXCAVATION")
- REMOVING FENCE
- REMOVING CONCRETE BARRIER
- REMOVING NOISE WALL
- XXXX SAWCUTING PAVEMENT
- REMOVING MANHOLES
- REMOVING INLETS
- REMOVING STORM SEWER
- REMOVING SMALL PIPE CULVERTS
- REMOVING CURB AND GUTTER
- REMOVING GUARDRAIL

ABANDONING CULVERT PIPE (96-INCH)
N=548064
E=816064

SALVAGE 96-INCH APRON ENDWALL

SALVAGE STORM SEWER (96-INCH)
218' RCP CLASS III @ 0.31%

EXISTING R/W

REMOVING FENCE

MATCHLINE 118ERD+00

114ERC

112ERC

R/L EXISTING RAMP C

108ERC

USH 10 WB EXIT RAMP

REMOVING STORM SEWER (12-INCH)

120ERD

USH 10 WB ENTRANCE RAMP

122ERD

REMOVING STORM SEWER (12-INCH)

WETLAND BOUNDARY (TYP)

R/L EXISTING RAMP D

124ERD

ABANDONING CULVERT PIPE (96-INCH)
N=548176
E=816704
STEP GRADING OF MATERIAL
REQUIRED TO ABANDONED PIPE

REMOVING STORM SEWER (96-INCH)

REMOVING STORM SEWER (60-INCH)

REMOVING SMALL PIPE CULVERT (30-INCH)

106ERC

104ERC

REMOVING STORM SEWER (18-INCH)

REMOVING SMALL PIPE CULVERT (42-INCH)

EXISTING R/W

MATCHLINE 177ML+00

176ML

174ML

172ML

118ERB

116ERB

R/L EXISTING USH 10/STH 441

USH 10 WB/STH 441 SB

170ML

168ML

USH 10 EB/STH 441 NB

114ERB

112ERB

USH 10 EB ENTRANCE RAMP

R/L EXISTING RAMP B

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 2A	SHEET 68	E

2

2

SUNSET LANE

FRANCES STREET

EXISTING R/W

DUNNING STREET

GORDON STREET

N

REMOVING STORM SEWER (60-INCH)

TLE

REMOVING NOISEWALL
STA 176ML+38 TO
STA 182ML+27

REMOVING STORM SEWER (54-INCH)

REMOVING STORM SEWER (60-INCH)

REMOVING STORM SEWER (30-INCH)

TLE

EXISTING R/W

REMOVING NOISEWALL
STA 186ML+81 TO STA 187ML+86

REMOVING STORM SEWER (36-INCH)

REMOVING STORM SEWER (48-INCH)

REMOVING STORM SEWER (30-INCH)

REMOVING STORM SEWER (18-INCH)

REMOVING NOISEWALL
STA 188ML+70 TO
STA 191ML+75

REMOVING SAND BARRELS

REMOVING STORM SEWER (60-INCH)

102ERC

MATCHLINE 177ML+00

178ML

180ML

182ML

184ML

186ML

188ML

190ML

192

MATCHLINE 192ML+00

REMOVING STORM SEWER (18-INCH)

REMOVING STORM SEWER (24-INCH)

USH 10 WB/STH 441 SB

REMOVING STORM SEWER (42-INCH)

REMOVING STORM SEWER (18-INCH)

REMOVING SAND BARRELS

REMOVING STORM SEWER (24-INCH)

120ERB

REMOVING SAND BARRELS

R/L EXISTING USH 10/STH 441

USH 10 EB/STH 441 NB

EXISTING R/W

WETLAND BOUNDARY (TYP)

EXISTING R/W

RACINE ROAD

CANADIAN NATIONAL RAILROAD

REMOVAL LEGEND

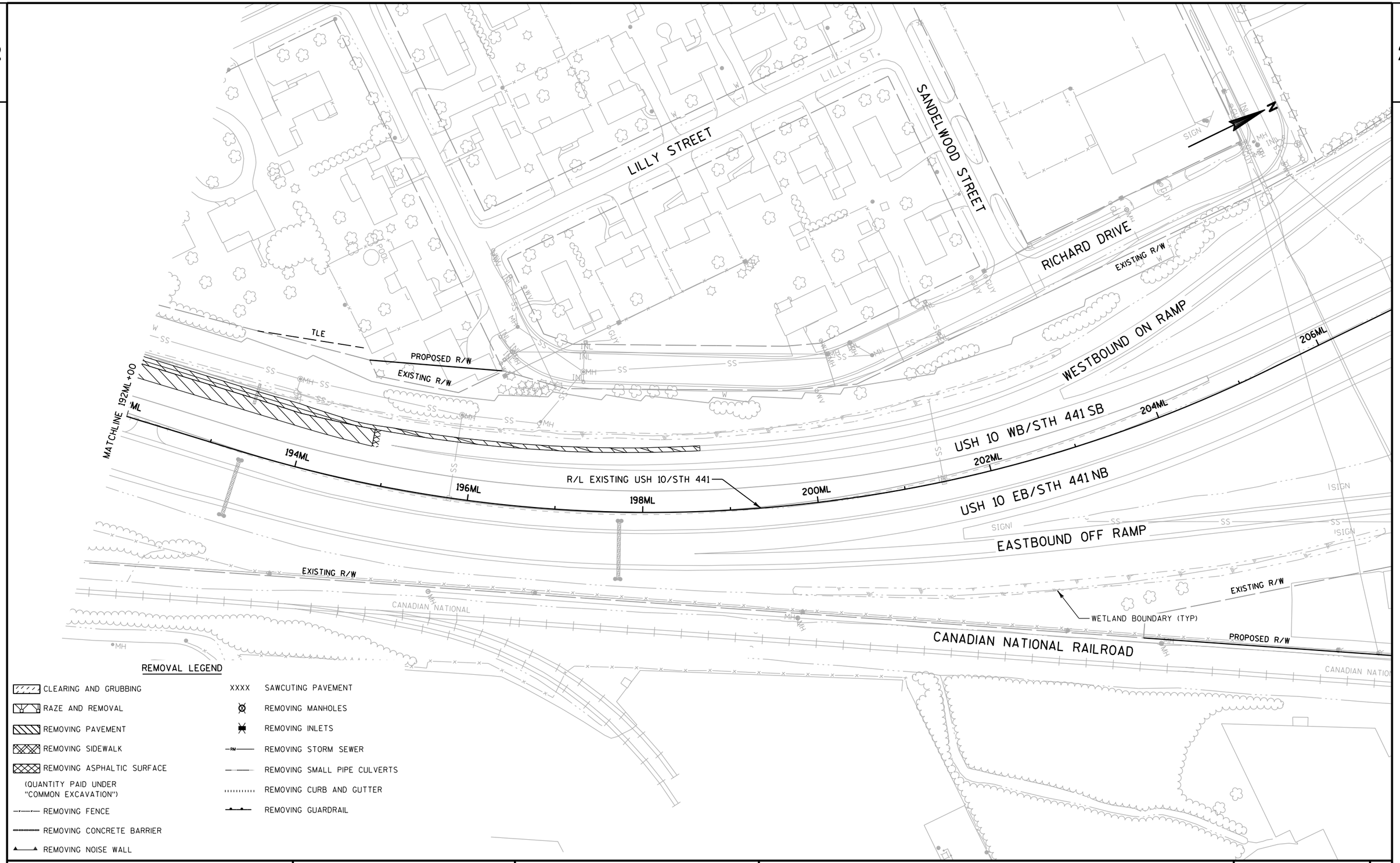
	CLEARING AND GRUBBING	XXXX	SAWCUTING PAVEMENT
	RAZE AND REMOVAL		REMOVING MANHOLES
	REMOVING PAVEMENT		REMOVING INLETS
	REMOVING SIDEWALK	—RM—	REMOVING STORM SEWER
	REMOVING ASPHALTIC SURFACE		REMOVING SMALL PIPE CULVERTS
	(QUANTITY PAID UNDER "COMMON EXCAVATION")		REMOVING CURB AND GUTTER
	REMOVING FENCE		REMOVING GUARDRAIL
	REMOVING CONCRETE BARRIER		
	REMOVING NOISE WALL		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 2A	SHEET 69	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\021109_rm_s2A.dgn PLOT DATE : 5/6/2015 8:57:39 AM PLOT BY : pshedivy PLOT NAME : $FILE$ PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

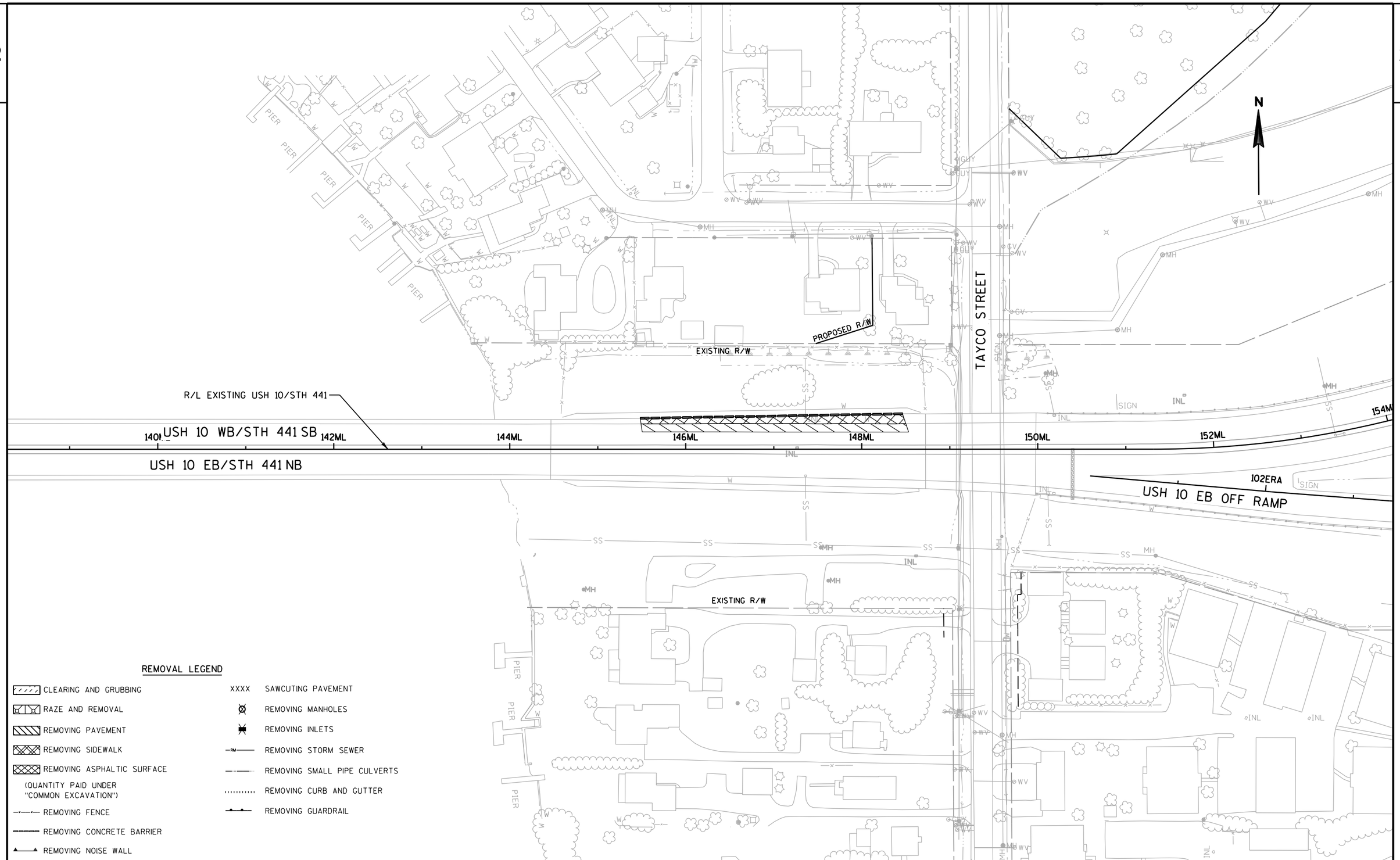


REMOVAL LEGEND

	CLEARING AND GRUBBING	XXXX	SAWCUTING PAVEMENT
	RAZE AND REMOVAL		REMOVING MANHOLES
	REMOVING PAVEMENT		REMOVING INLETS
	REMOVING SIDEWALK	RM	REMOVING STORM SEWER
	REMOVING ASPHALTIC SURFACE		REMOVING SMALL PIPE CULVERTS
	(QUANTITY PAID UNDER "COMMON EXCAVATION")		REMOVING CURB AND GUTTER
	REMOVING FENCE		REMOVING GUARDRAIL
	REMOVING CONCRETE BARRIER		
	REMOVING NOISE WALL		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 2A	SHEET 70	E

2



REMOVAL LEGEND

CLEARING AND GRUBBING	XXXX SAWCUTING PAVEMENT
RAZE AND REMOVAL	REMOVING MANHOLES
REMOVING PAVEMENT	REMOVING INLETS
REMOVING SIDEWALK	REMOVING STORM SEWER
REMOVING ASPHALTIC SURFACE	REMOVING SMALL PIPE CULVERTS
(QUANTITY PAID UNDER "COMMON EXCAVATION")	REMOVING CURB AND GUTTER
REMOVING FENCE	REMOVING GUARDRAIL
REMOVING CONCRETE BARRIER	
REMOVING NOISE WALL	

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 2C	SHEET 71	E

2

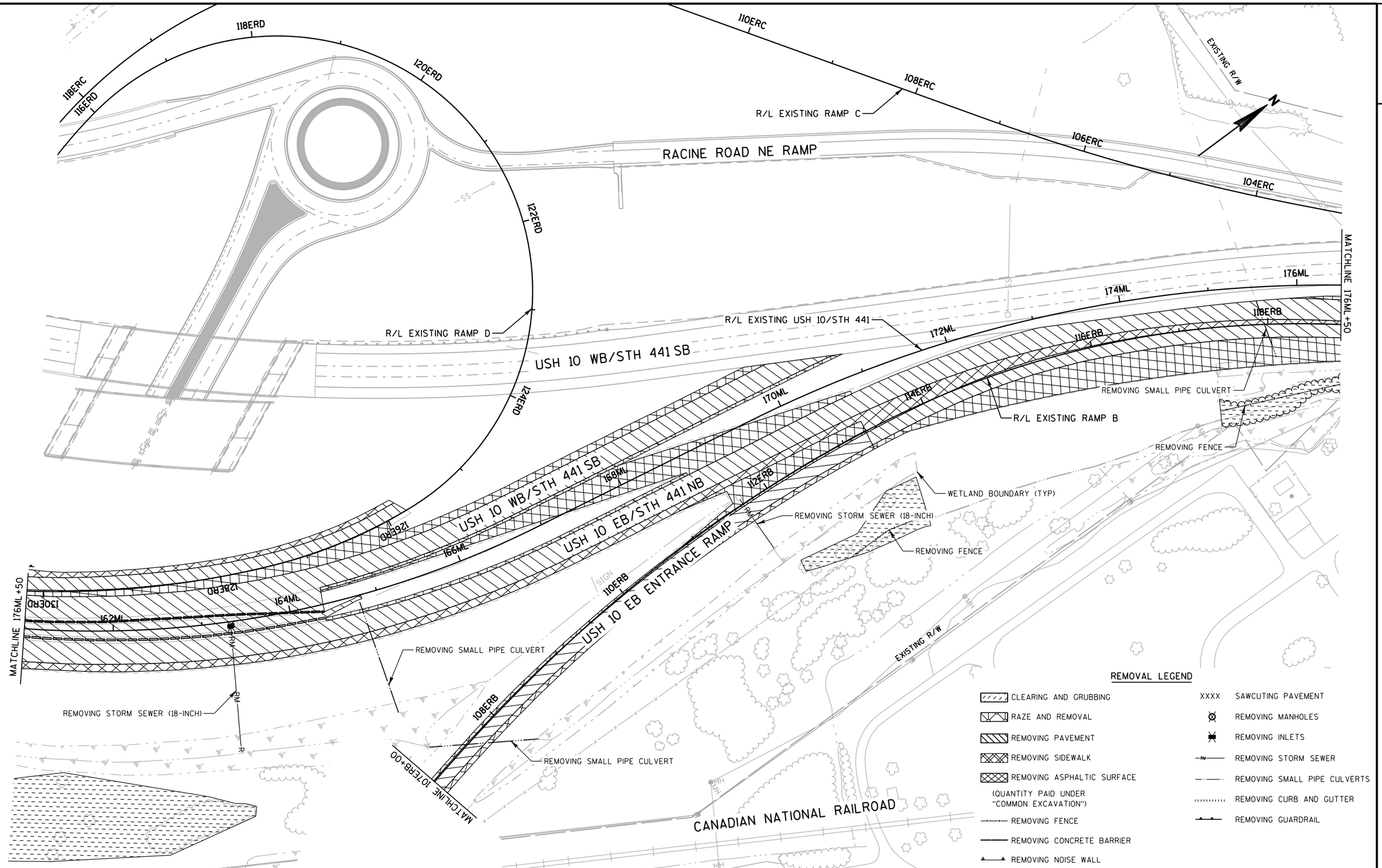
144ML
EXISTING R/W
PROPOSED R/W
146ML
148ML
PROPOSED R/W
REMOVING STORM SEWER (18-INCH)
RACINE ROAD NW RAMP
N
120ERC
114ERD
EXISTING R/W
USH 10 WB/STH 441 SB
R/L EXISTING RAMP C
150ML
REMOVING STORM SEWER (12-INCH)
REMOVING STORM SEWER (18-INCH)
REMOVING STORM SEWER (30-INCH)
R/L EXISTING RAMP D
122ERC
112ERD
REMOVING FENCE
R/L EXISTING USH 10/STH 441
152ML
REMOVING STORM SEWER (12-INCH)
EXISTING R/W
REMOVING STORM SEWER (18-INCH)
102ERA
SALVAGE 12-INCH APRON ENDWALL
SALVAGE STORM SEWER (12-INCH)
154ML
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
156ML
REMOVING STORM SEWER (18-INCH)
TAYCO STREET
REMOVING STORM SEWER (30-INCH)
SALVAGE STORM SEWER (18-INCH)
158ML
124ERC
116ERD
132ERD
160ML
MATCHLINE 176ML+50
R/L EXISTING RAMP A
104ERA
USH 10 EB OFF RAMP
SALVAGE 18-INCH APRON ENDWALL
SALVAGE STORM SEWER (18-INCH)
WETLAND BOUNDARY (TYP)
106
MATCHLINE 108ERA+00
EXISTING R/W
126ERC
108ERD

REMOVAL LEGEND

	CLEARING AND GRUBBING	XXXX	SAWCUTING PAVEMENT
	RAZE AND REMOVAL		REMOVING MANHOLES
	REMOVING PAVEMENT		REMOVING INLETS
	REMOVING SIDEWALK	RM	REMOVING STORM SEWER
	REMOVING ASPHALTIC SURFACE		REMOVING SMALL PIPE CULVERTS
	(QUANTITY PAID UNDER "COMMON EXCAVATION")		REMOVING CURB AND GUTTER
	REMOVING FENCE		REMOVING GUARDRAIL
	REMOVING CONCRETE BARRIER		
	REMOVING NOISE WALL		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3A	SHEET 72	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3A	SHEET 73	E

2

SUNSET LANE

DUNNING STREET

GORDON STREET

FRANCES STREET

EXISTING R/W

TLE

TLE

EXISTING R/W

R/L EXISTING RAMP C

102ERC

USH 10 WB/STH 441 SB

REMOVING STORM SEWER (24-INCH)

R/L EXISTING USH 10/STH 441

MATCHLINE 176ML+50

178ML

180ML

182ML

184ML

186ML

188ML

190ML

MATCHLINE 191ML+00

120ERB

USH 10 EB/STH 441 NB

R/L EXISTING RAMP B

REMOVING SAND BARRELS

WETLAND BOUNDARY (TYP)

REMOVING FENCE

REMOVING STORM SEWER (24-INCH)

REMOVING STORM SEWER (18-INCH)

REMOVING STORM SEWER (12-INCH)

EXISTING R/W

REMOVING STORM SEWER (24-INCH)

REMOVING FENCE

SIGN

SIGN

RACINE ROAD

CANADIAN NATIONAL RAILROAD

CEMETERY

REMOVAL LEGEND

CLEARING AND GRUBBING	XXXX SAWCUTING PAVEMENT
RAZE AND REMOVAL	REMOVING MANHOLES
REMOVING PAVEMENT	REMOVING INLETS
REMOVING SIDEWALK	REMOVING STORM SEWER
REMOVING ASPHALTIC SURFACE	REMOVING SMALL PIPE CULVERTS
(QUANTITY PAID UNDER "COMMON EXCAVATION")	REMOVING CURB AND GUTTER
REMOVING FENCE	REMOVING GUARDRAIL
REMOVING CONCRETE BARRIER	
REMOVING NOISE WALL	

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3A	SHEET 74	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021114_rm_s3A.dgn PLOT DATE : 4/27/2015 11:10:54 AM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

2

RACINE ROAD

LILLY STREET

SANDELWOOD STREET

RICHARD DRIVE

TLE

PROPOSED R/W

EXISTING R/W

R/L EXISTING USH 10/STH 441

MATCHLINE 191ML+00

192ML

194ML

196ML

198ML

200ML

202ML

204ML

206ML

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

WETLAND BOUNDARY (TYP)

PROPOSED R/W

EXISTING R/W

CANADIAN NATIONAL RAILROAD

REMOVING FENCE

N

REMOVAL LEGEND

CLEARING AND GRUBBING	XXXX SAWCUTING PAVEMENT
RAZE AND REMOVAL	REMOVING MANHOLES
REMOVING PAVEMENT	REMOVING INLETS
REMOVING SIDEWALK	REMOVING STORM SEWER
REMOVING ASPHALTIC SURFACE	REMOVING SMALL PIPE CULVERTS
(QUANTITY PAID UNDER "COMMON EXCAVATION")	REMOVING CURB AND GUTTER
REMOVING FENCE	REMOVING GUARDRAIL
REMOVING CONCRETE BARRIER	
REMOVING NOISE WALL	

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3A	SHEET 75	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021115_rm_s3A.dgn PLOT DATE : 1/26/2015 9:01:02 PM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

2

2

REMOVAL LEGEND

- CLEARING AND GRUBBING
- RAZE AND REMOVAL
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE
  (QUANTITY PAID UNDER "COMMON EXCAVATION")
- REMOVING FENCE
- REMOVING CONCRETE BARRIER
- REMOVING NOISE WALL
- XXXX SAWCUTING PAVEMENT
- REMOVING MANHOLES
- REMOVING INLETS
- REMOVING STORM SEWER
- REMOVING SMALL PIPE CULVERTS
- REMOVING CURB AND GUTTER
- REMOVING GUARDRAIL

MATCHLINE 107ERB+00

REMOVING STORM SEWER (18-INCH)

REMOVING SMALL PIPE CULVERT

CANADIAN NATIONAL RAILROAD

R/L EXISTING RAMP B

EXISTING R/W

USH 10 EB ENTRANCE RAMP

R/L EXISTING RAMP D

USH 10 WB OFF RAMP

USH 10 EB OFF RAMP

REMOVING STORM SEWER (24-INCH)

R/L EXISTING RAMP C

WETLAND BOUNDARY (TYP)

R/L EXISTING RAMP A

EXISTING R/W

PROPOSED R/W

MATCHLINE 106ERA+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3A	SHEET 76	E

2

SUNSET LANE

GORDON STREET

DUNNING STREET

FRANCES STREET

TLE

TLE

EXISTING R/W

REMOVING GUARDRAIL

REMOVING STORM SEWER (24-INCH)

USH 10 WB/STH 441 SB

178ML

180ML

182ML

184ML

186ML

188ML

190ML

192ML

MATCHLINE 193ML+00

USH 10 EB/STH 441 NB

R/L EXISTING USH 10/STH 441

REMOVING STORM SEWER (24-INCH)

EXISTING R/W

REMOVING STORM SEWER (24-INCH)

RACINE ROAD

SIGN

SIGN

CANADIAN NATIONAL RAILROAD

REMOVAL LEGEND

CLEARING AND GRUBBING	XXXX SAWCUTING PAVEMENT
RAZE AND REMOVAL	REMOVING MANHOLES
REMOVING PAVEMENT	REMOVING INLETS
REMOVING SIDEWALK	RM REMOVING STORM SEWER
REMOVING ASPHALTIC SURFACE	REMOVING SMALL PIPE CULVERTS
(QUANTITY PAID UNDER "COMMON EXCAVATION")	REMOVING CURB AND GUTTER
REMOVING FENCE	REMOVING GUARDRAIL
REMOVING CONCRETE BARRIER	
REMOVING NOISE WALL	

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3B	SHEET 77	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021117_rm_s3B.dgn PLOT DATE : 1/26/2015 9:01:11 PM PLOT BY : dbaumann PLOT NAME : $FILE$ PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

LILLY STREET

SANDELWOOD STREET

RICHARD DRIVE

TLE

EXISTING R/W

R/L EXISTING USH 10/STH 441

208ML

206ML

204ML

202ML

200ML

198ML

196ML

194ML

193ML+00

MATCHLINE

REMOVING STORM SEWER (18-INCH)

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

WETLAND BOUNDARY (TYP)

PROPOSED R/W

EXISTING R/W

CANADIAN NATIONAL RAILROAD

CANADIAN NATIONAL

CANADIAN NATIONAL

REMOVAL LEGEND

- CLEARING AND GRUBBING
- RAZE AND REMOVAL
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE
  (QUANTITY PAID UNDER "COMMON EXCAVATION")
- REMOVING FENCE
- REMOVING CONCRETE BARRIER
- REMOVING NOISE WALL
- XXXX SAWCUTING PAVEMENT
- REMOVING MANHOLES
- REMOVING INLETS
- RM REMOVING STORM SEWER
- REMOVING SMALL PIPE CULVERTS
- REMOVING CURB AND GUTTER
- REMOVING GUARDRAIL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	REMOVAL PLAN - STAGE 3B	SHEET 78	E

2

LEGEND

PREFABRICATED VERTICAL DRAINS

PREFABRICATED VERTICAL DRAINS PLACED UNDER PREVIOUS PROJECT

EROSION MAT CLASS 1 TYPE B

(A) INLET PROTECTION TYPE A

SURFACE WATER FLOW

SILT FENCE

N

MATCHLINE STA 128FEB+00

AREA D STA 124FEN+94.31 TO STA 131FEN+85.27
APPROXIMATELY 2615 PREFABRICATED VERTICAL DRAINS
PLACED TO AN ELEVATION OF 741FT
5-FOOT EQUILATERAL TRIANGLE SPACING

PLACED UNDER PREVIOUS CONTRACT

USH 41 SB TO USH 10 EB/STH 441 NB RAMP

SLOPE INTERCEPT (TYP)

STA 124FEN+94.31
36.46'LT

STA 126FEN+50.00
34.00'LT

STA 125FEN+25.00
14.70'LT

STA 125FEN+65.00
9.27'RT

STA 127FEN+00.00
30.00'LT

STA 128FEN+00.00
35.00'LT

STA 127FEN+50.00
31.00'LT

(A)

22FEN

123FEN

124FEN

125FEN

126FEN

127FEN

128FEN

USH 10 EB TO USH 41 NB RAMP

RAMP OBLITERATED UNDER PREVIOUS PROJECT

R/L USH 10 EB TO
USH 41 NB RAMP (FEN)

STA 125FEN+87.17
29.36'RT

STA 125FEN+90.10
38.76'RT

STA 125FEN+78.66
53.48'RT

STA 125FEN+87.65
44.42'RT

STA 126FEN+50.00
61.10'RT

STA 127FEN+00.00
64.30'RT

STA 127FEN+50.00
66.00'RT

STA 128FEN+00.00
67.90'RT

STA 126FEN+00.00
56.50'RT

PREFABRICATED VERTICAL DRAINS

SLOPE INTERCEPT (TYP)

WETLAND BOUNDARY (TYP)

USH 10 EB TO USH 41 SB

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS: PREFABRICATED VERTICAL DRAINS	SHEET 79	E

2

AREA D STA 124FEN+94.31 TO STA 131FEN+85.27
APPROXIMATELY 2615 PREFABRICATED VERTICAL DRAINS
PLACED TO AN ELEVATION OF 741FT
5-FOOT EQUILATERAL TRIANGLE SPACING

MATCHLINE STA 128FEB+00

STA 128FEN+00.00
35.00'LT

USH 41 SB TO USH 10 EB/STH 441 NB RAMP

STA 129FEN+00.00
41.00'LT

STA 130FEN+00.00
41.00'LT

382 STA 130FEN+03.44, 58.9'LT
INLET PLACED UNDER PREVIOUS PROJECT. CONNECTION TO INLET INCIDENTAL TO INSTALLATION OF STORM SEWER PIPE

STA 131FEN+00.00
43.00'LT

SLOPE INTERCEPT (TYP)

STA 131FEN+25.00
40.00'LT

STA 131FEN+85.27
40.00'LT

USH 41 SB ENTRANCE RAMP

USH 41 SB

INL

128FEN

129FEN

130FEN

131FEN

RAMP OBLITERATED UNDER PREVIOUS PROJECT

RAMP OBLITERATED UNDER PREVIOUS PROJECT

REMOVE APRON ENDWALL PLACED IN PREVIOUS CONTRACT AND PLACE STORM SEWER PLUG

132FEN

133FEN

134FEN

R/L USH 10 EB TO USH 41 NB RAMP (FEN)

USH 10 EB TO USH 41 NB RAMP

USH 41 NB

STA 131FEN+76.50
0.00'RT

STA 131FEN+66.11
40.00'RT

STA 131FEN+58.36
66.16'RT

STA 131FEN+00.00
65.30'RT

STA 130FEN+50.00
68.00'RT

STA 128FEN+00.00
67.90'RT

STA 128FEN+50.00
69.90'RT

SLOPE INTERCEPT (TYP)

STA 129FEN+00.00
72.00'RT

PREFABRICATED VERTICAL DRAINS

STA 129FEN+50.00
74.10'RT

STA 130FEN+00.00
75.30'RT

STORM SEWER PIPE REINFORCED CONCRETE CLASS V, 30-INCH

GRADE DITCH TO INLET

383 STA 130FEN+31.11,
111.6'RT

WETLAND BOUNDARY (TYP)

LEGEND

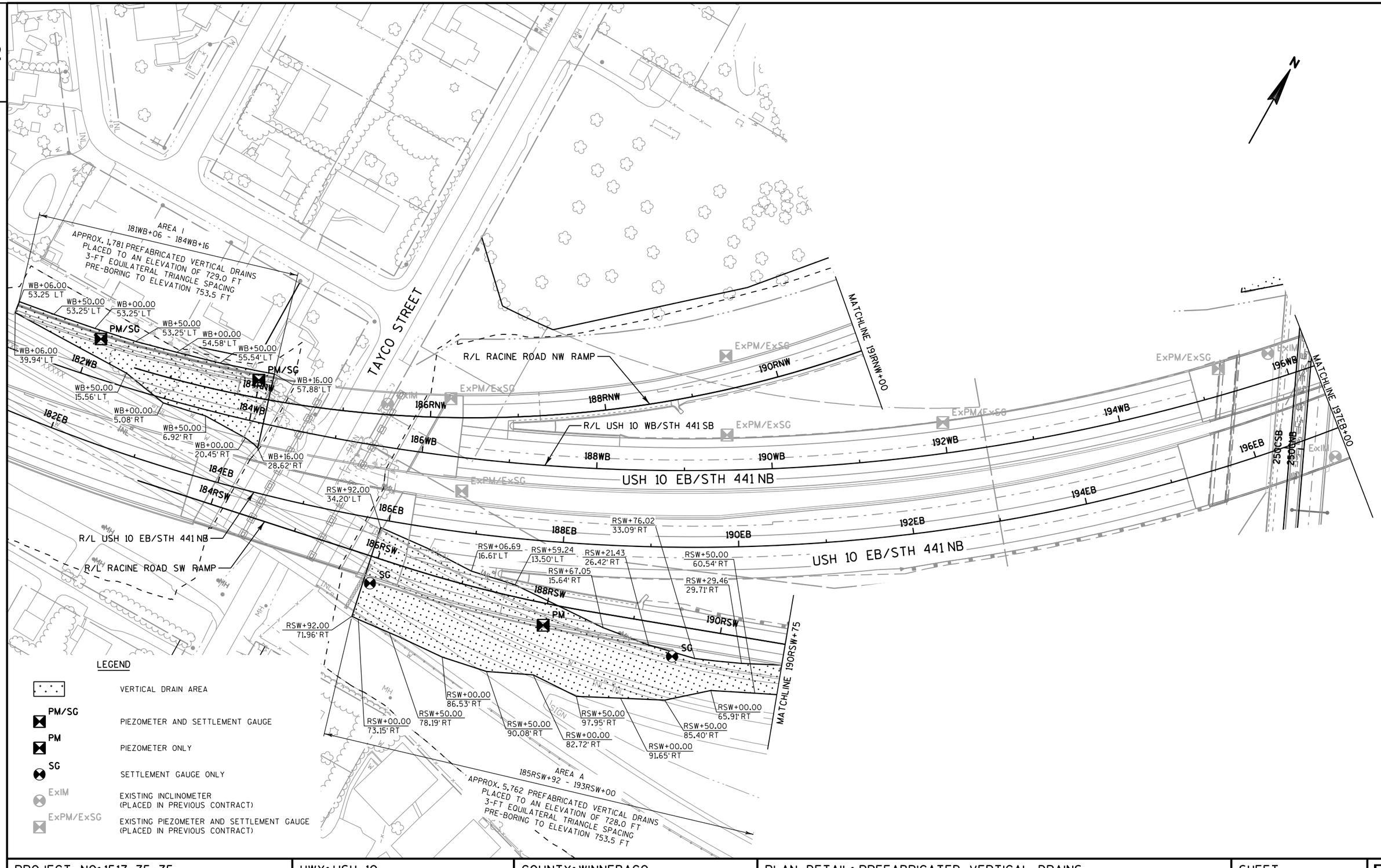
- PREFABRICATED VERTICAL DRAINS
- PREFABRICATED VERTICAL DRAINS PLACED UNDER PREVIOUS PROJECT
- ###### EROSION MAT CLASS 1 TYPE B
- (A) INLET PROTECTION TYPE A
- SURFACE WATER FLOW
- SILT FENCE

N

2

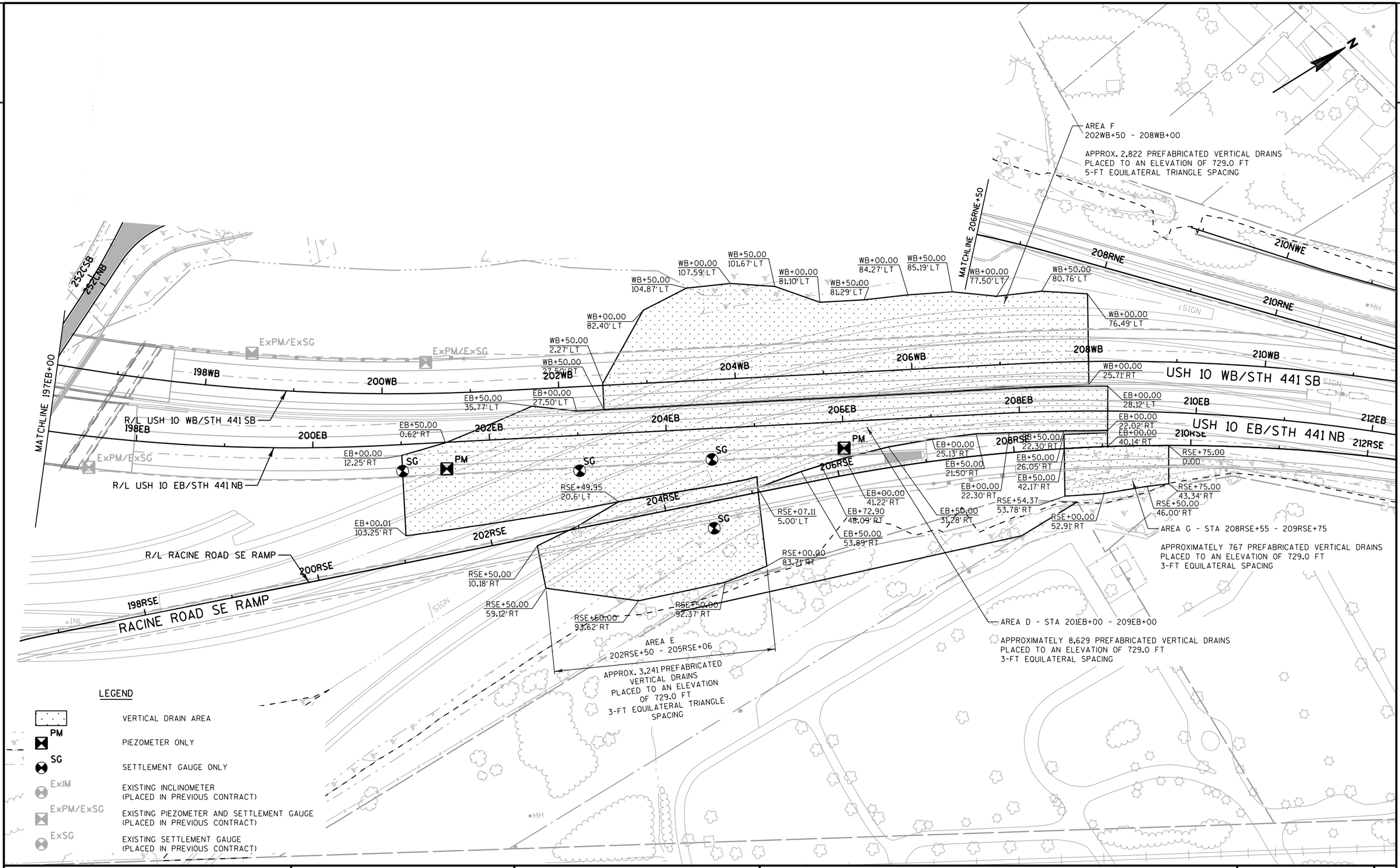
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS: PREFABRICATED VERTICAL DRAINS	SHEET 80	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAIL: PREFABRICATED VERTICAL DRAINS	SHEET 81	E

2



LEGEND

- VERTICAL DRAIN AREA
- PM — PIEZOMETER ONLY
- SG — SETTLEMENT GAUGE ONLY
- ExIM — EXISTING INCLINOMETER (PLACED IN PREVIOUS CONTRACT)
- ExPM/ExSG — EXISTING PIEZOMETER AND SETTLEMENT GAUGE (PLACED IN PREVIOUS CONTRACT)
- ExSG — EXISTING SETTLEMENT GAUGE (PLACED IN PREVIOUS CONTRACT)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAIL: PREFABRICATED VERTICAL DRAINS	SHEET 82	E

2

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

192WB

192EB

ExPM4ExSG

ExSG

AREA A
185RSW+92 - 193RSW+00
APPROX. 5,729 PREFABRICATED VERTICAL DRAINS PLACED TO AN ELEV OF 728.0 FT
3-FT EQUILATERAL TRIANGLE SPACING

AREA B
193RSW+00 - 195RSW+00
APPROX. 2,905 PREFABRICATED VERTICAL DRAINS PLACED TO AN ELEVATION OF 729.0 FT
3-FT EQUILATERAL TRIANGLE SPACING

MATCHLINE 190RSW+75

RSW+00.00 9.61' LT

RSW+00.00 41.70' LT

RSW+50.00 85.58' LT

RSW+00.00 99.90' LT

RSW+50.00 91.30' LT

192RSW

SG

194RSW

14RSWC

PM

RSW+00.00 16.70' LT

RSW+50.00 46.68' LT

RSW+00.00 15.39' RT

RSW+50.00 8.03' RT

RSW+50.00 0.00

RSW+00.00 9.96' RT

196RSW

16RSWC

RSW+50.00 48.61' RT

RSW+00.00 24.87' RT

RSW+00.00 55.55' RT

RSW+00.00 71.61' RT

RSW+00.00 64.64' RT

248CSB

248CNB

246CSB

246CNB

196RSE

198RSE

194RSE

CANADIAN NATIONAL RAILROAD

CANADIAN NATIONAL

ORRB

ORRB

R/L RACINE ROAD SW RAMP

R/L RACINE ROAD SW BYPASS

R/L RACINE ROAD CONNECTOR SB

R/L RACINE ROAD CONNECTOR NB

18RSWC

244CSB

244CNB

242CSB

242CNB

20RSWC

RACINE ROAD CONNECTOR

240CSB

240CNB

22RSWC

24RSWC

238CSB

238CNB

SIGN

INL

N

LEGEND

VERTICAL DRAIN AREA

PM — PIEZOMETER ONLY

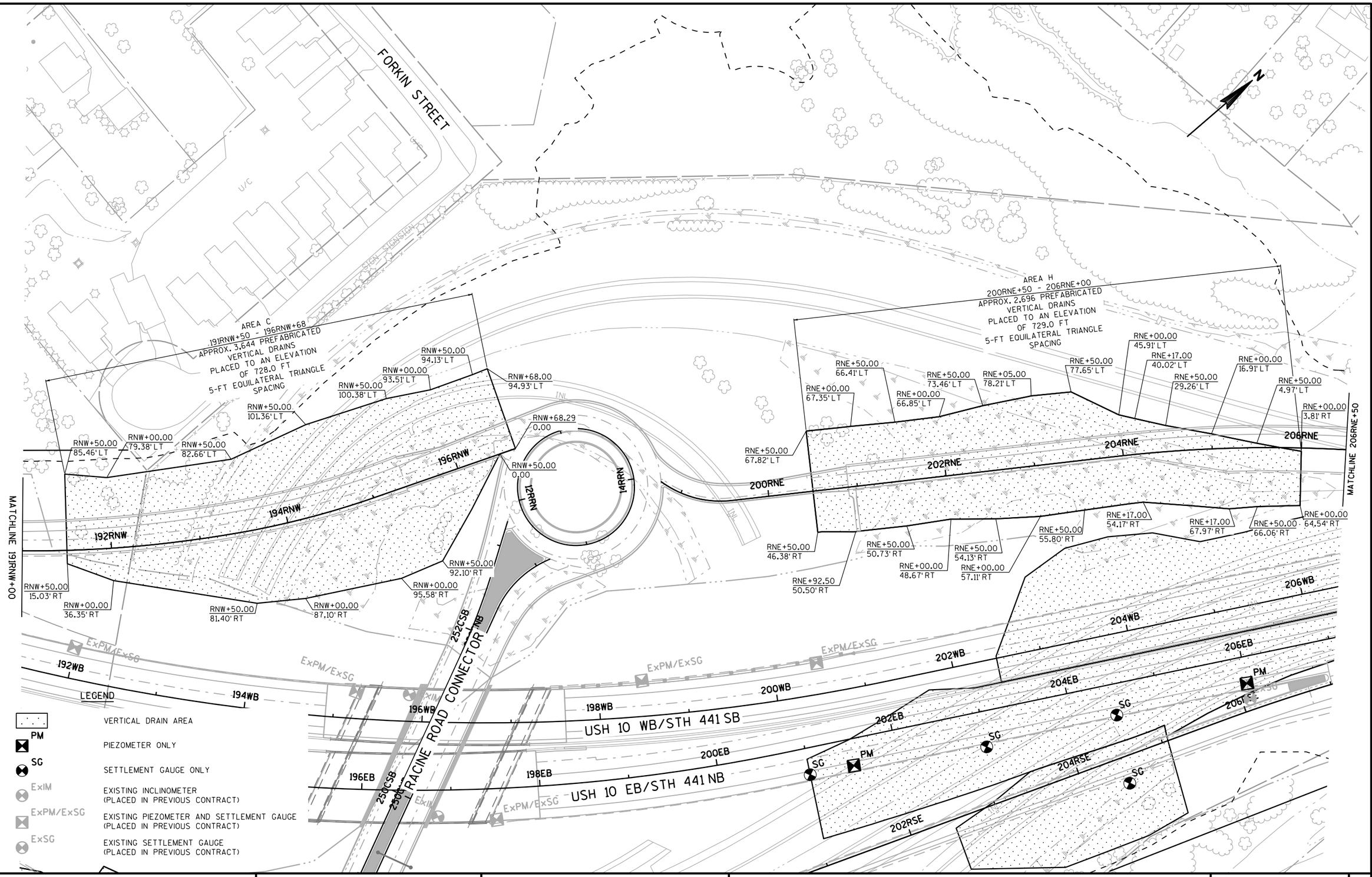
SG — SETTLEMENT GAUGE ONLY

ExSG — EXISTING SETTLEMENT GAUGE (PLACED IN PREVIOUS CONTRACT)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAIL: PREFABRICATED VERTICAL DRAINS	SHEET 83	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\021203_pd.dgn PLOT DATE : 4/6/2015 1:19:10 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAIL: PREFABRICATED VERTICAL DRAINS	SHEET 84	E

AREA K
243EB+15 - 256EB+31
APPROX. 18,846 PREFABRICATED VERTICAL DRAINS
PLACED TO AN ELEVATION OF 737.0 FT
5-FT EQUILATERAL TRIANGLE SPACING
PRE-BORING TO ELEVATION 755.0 FT

EB+00.00 312.30' LT
EB+50.00 320.44' LT
EB+00.00 327.21' LT
EB+50.00 329.87' LT
EB+00.00 325.99' LT
EB+50.00 328.40' LT
EB+00.00 305.65' LT
EB+50.00 284.39' LT
EB+00.00 266.28' LT
EB+50.00 252.06' LT
EB+00.00 238.38' LT
EB+50.00 220.31' LT
EB+31.49 204.12' LT
EB+00.00 222.37' LT
EB+50.00 225.39' LT
EB+00.00 228.62' LT
EB+50.00 207.22' LT
EB+00.00 194.16' LT
EB+50.00 300.95' LT
EB+50.00 162.82' LT
EB+00.00 134.70' LT
EB+50.00 107.93' LT
EB+00.00 85.38' LT
EB+50.00 62.90' LT
EB+00.00 36.94' LT
EB+14.55 8.18' LT
EB+22.93 93.00' RT
EB+00.00 94.54' RT
EB+50.00 99.67' RT
EB+00.00 99.72' RT
EB+50.00 103.61' RT
EB+00.00 111.23' RT
EB+50.00 118.72' RT
EB+00.00 128.23' RT
EB+50.00 139.04' RT
EB+00.00 149.58' RT
EB+50.00 119.78' RT
EB+00.00 116.58' RT
EB+50.00 117.24' RT
EB+00.00 114.06' RT
EB+50.00 109.74' RT
EB+00.00 102.18' RT
EB+50.00 90.69' RT
EB+00.00 84.74' RT
EB+50.00 77.82' RT
EB+00.00 72.78' RT
EB+50.00 58.05' RT
EB+00.00 42.32' RT
EB+50.00 13.11' RT
EB+00.00 2.70' LT
EB+50.00 31.97' LT
EB+31.08 75.24' LT
EB+99.86 57.97' LT

PM/SG
PM/SG
PM/SG
PM/SG

242WB
244WB
246WB
248WB
250WB
252WB
254WB
256WB
244EB
246EB
248EB
250EB
252EB
254EB
256EB
258EB

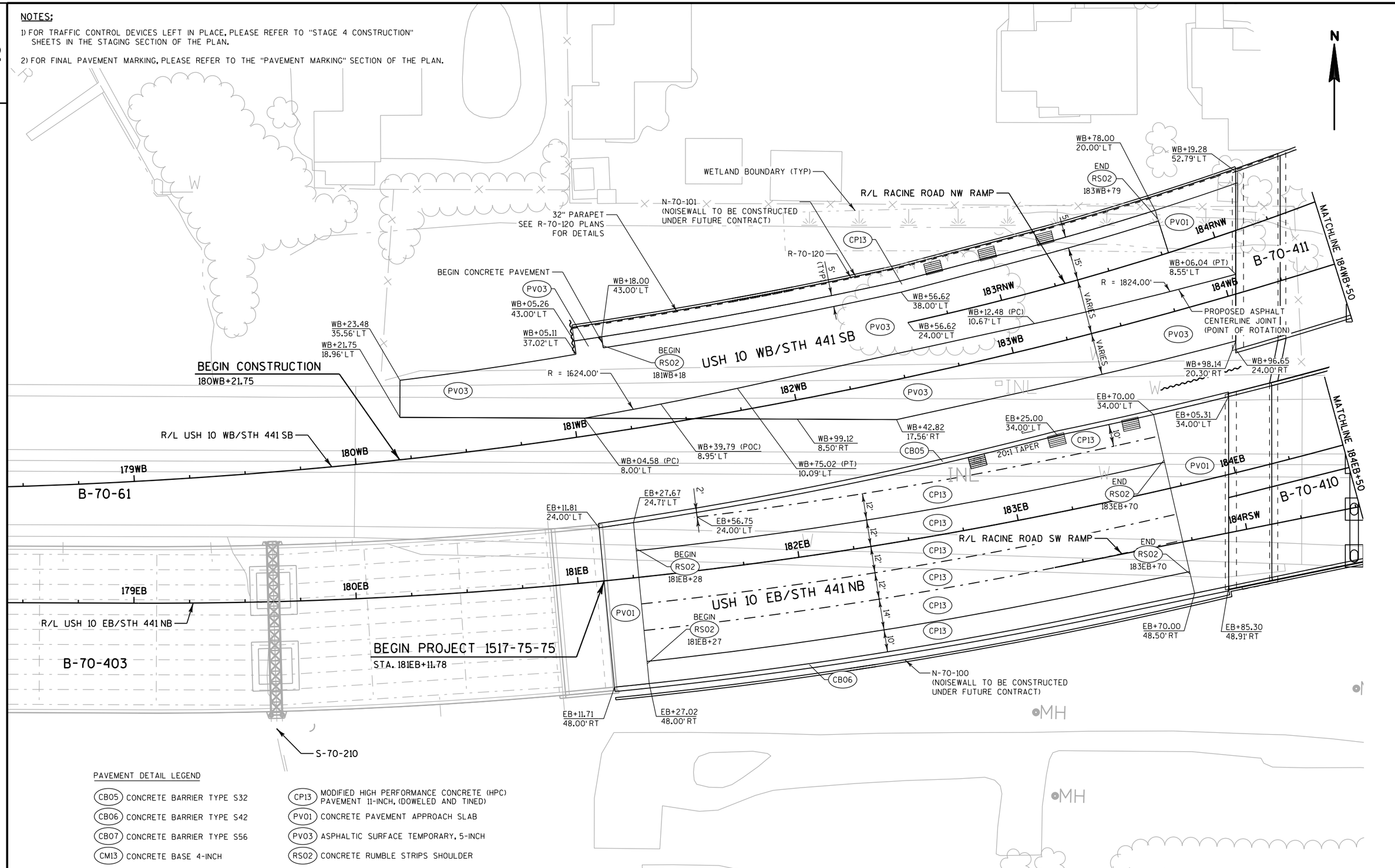
LEGEND
VERTICAL DRAIN AREA
PM/SG PIEZOMETER AND SETTLEMENT GAUGE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAIL: PREFABRICATED VERTICAL DRAINS	SHEET 85	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.



PAVEMENT DETAIL LEGEND

CB05	CONCRETE BARRIER TYPE S32	CP13	MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
CB06	CONCRETE BARRIER TYPE S42	PV01	CONCRETE PAVEMENT APPROACH SLAB
CB07	CONCRETE BARRIER TYPE S56	PV03	ASPHALTIC SURFACE TEMPORARY, 5-INCH
CM13	CONCRETE BASE 4-INCH	RS02	CONCRETE RUMBLE STRIPS SHOULDER

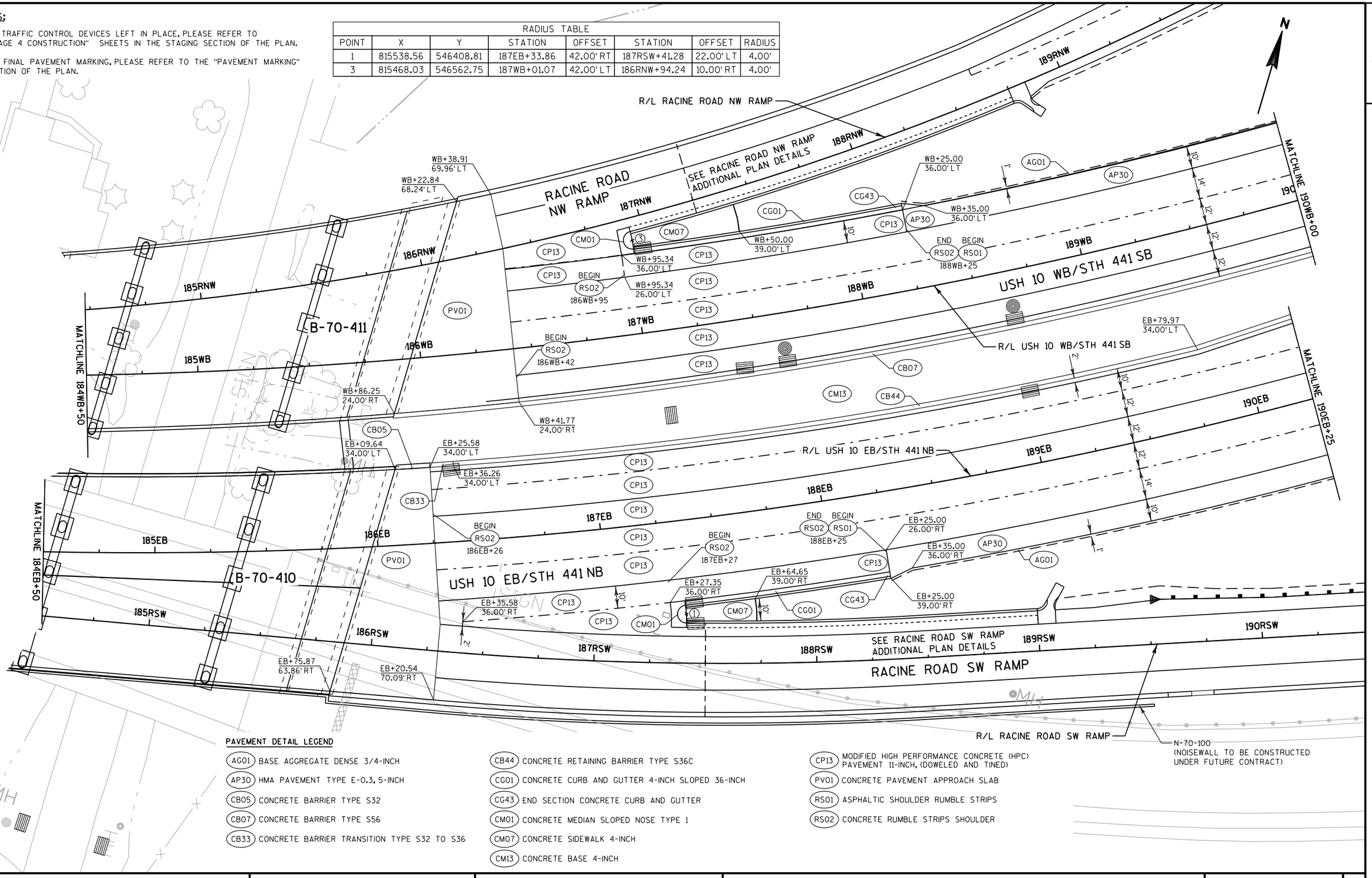
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 86	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.

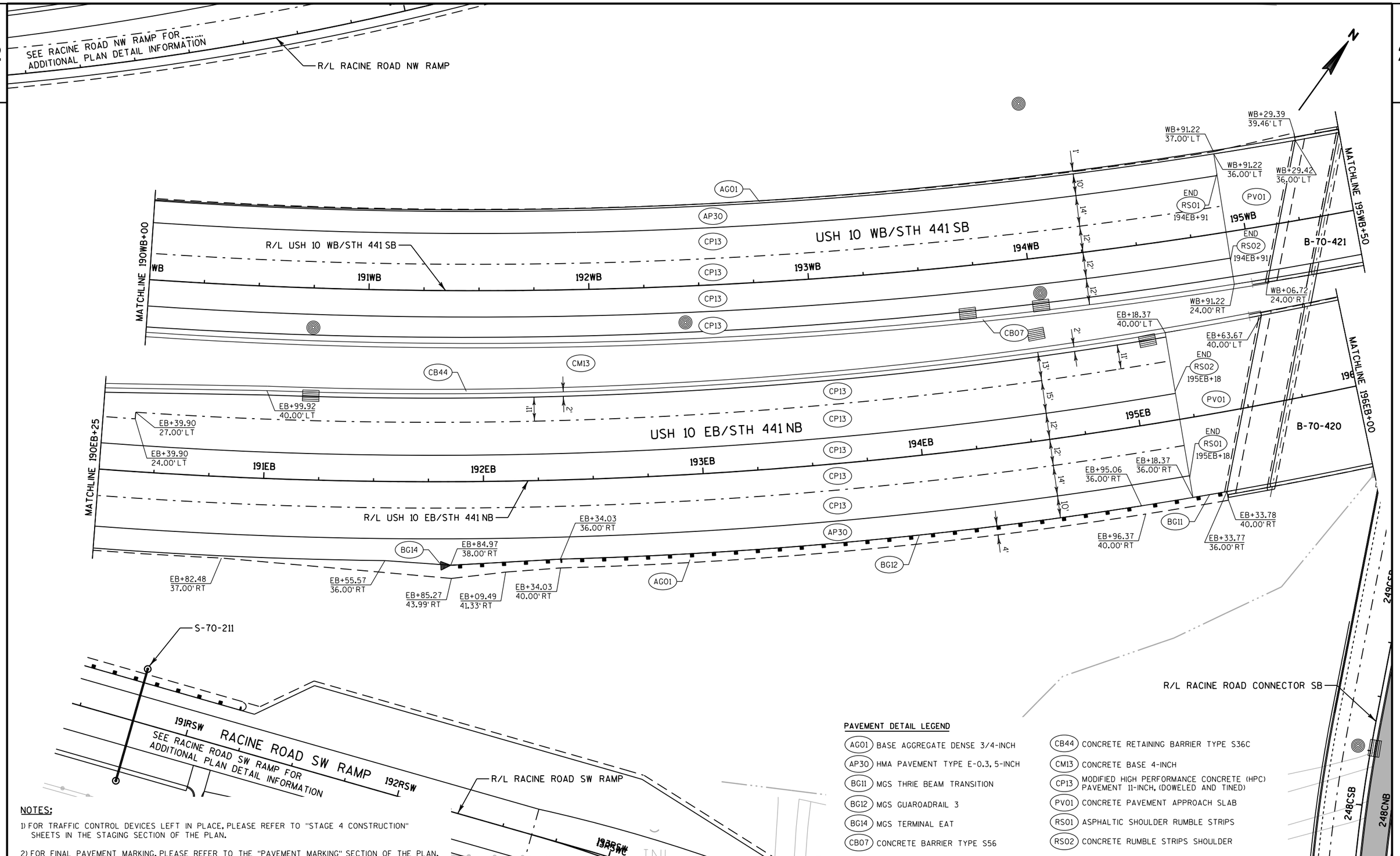
RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
1	815538.56	546408.81	187EB+33.86	42.00' RT	187RSW+41.28	22.00' LT	4.00'
3	815468.03	546562.75	187WB+01.07	42.00' LT	186RNW+94.24	10.00' RT	4.00'



PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- CB05 CONCRETE BARRIER TYPE S32
- CB07 CONCRETE BARRIER TYPE S56
- CB33 CONCRETE BARRIER TRANSITION TYPE S32 TO S36
- CB44 CONCRETE RETAINING BARRIER TYPE S36C
- CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM07 CONCRETE SIDEWALK 4-INCH
- CM13 CONCRETE BASE 4-INCH
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- RS01 ASPHALTIC SHOULDER RUMBLE STRIPS
- RS02 CONCRETE RUMBLE STRIPS SHOULDER

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 87	E



NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.

PAVEMENT DETAIL LEGEND

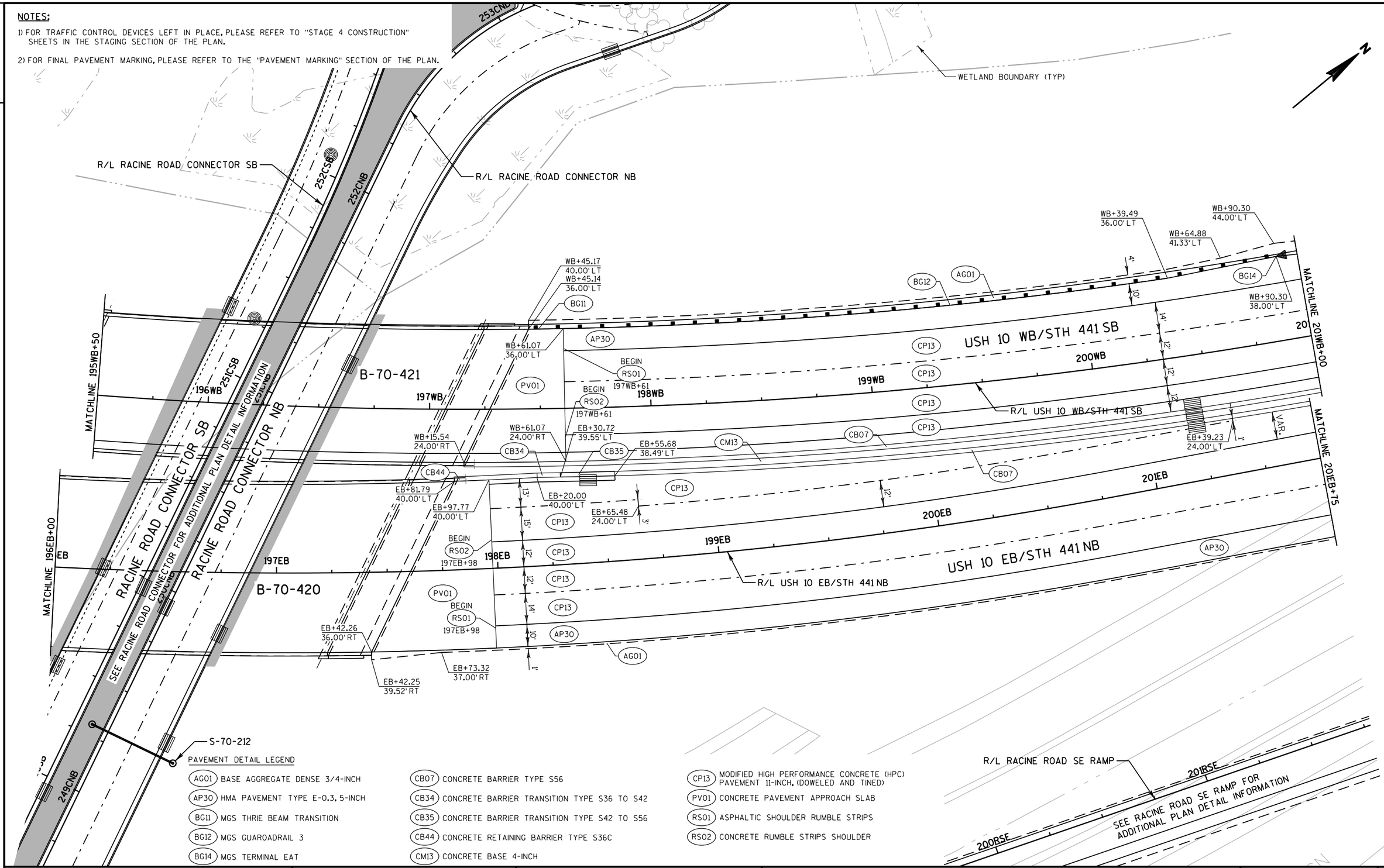
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP30	HMA PAVEMENT TYPE E-0.3, 5-INCH
BG11	MGS THRIE BEAM TRANSITION
BG12	MGS GUAROADRAIL 3
BG14	MGS TERMINAL EAT
CB07	CONCRETE BARRIER TYPE S56
CB44	CONCRETE RETAINING BARRIER TYPE S36C
CM13	CONCRETE BASE 4-INCH
CP13	MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
PV01	CONCRETE PAVEMENT APPROACH SLAB
RS01	ASPHALTIC SHOULDER RUMBLE STRIPS
RS02	CONCRETE RUMBLE STRIPS SHOULDER

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 88	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.



PAVEMENT DETAIL LEGEND

AG01 BASE AGGREGATE DENSE 3/4-INCH	CB07 CONCRETE BARRIER TYPE S56	CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH	CB34 CONCRETE BARRIER TRANSITION TYPE S36 TO S42	PV01 CONCRETE PAVEMENT APPROACH SLAB
BG11 MGS THRIE BEAM TRANSITION	CB35 CONCRETE BARRIER TRANSITION TYPE S42 TO S56	RS01 ASPHALTIC SHOULDER RUMBLE STRIPS
BG12 MGS GUARDRAIL 3	CB44 CONCRETE RETAINING BARRIER TYPE S36C	RS02 CONCRETE RUMBLE STRIPS SHOULDER
BG14 MGS TERMINAL EAT	CM13 CONCRETE BASE 4-INCH	

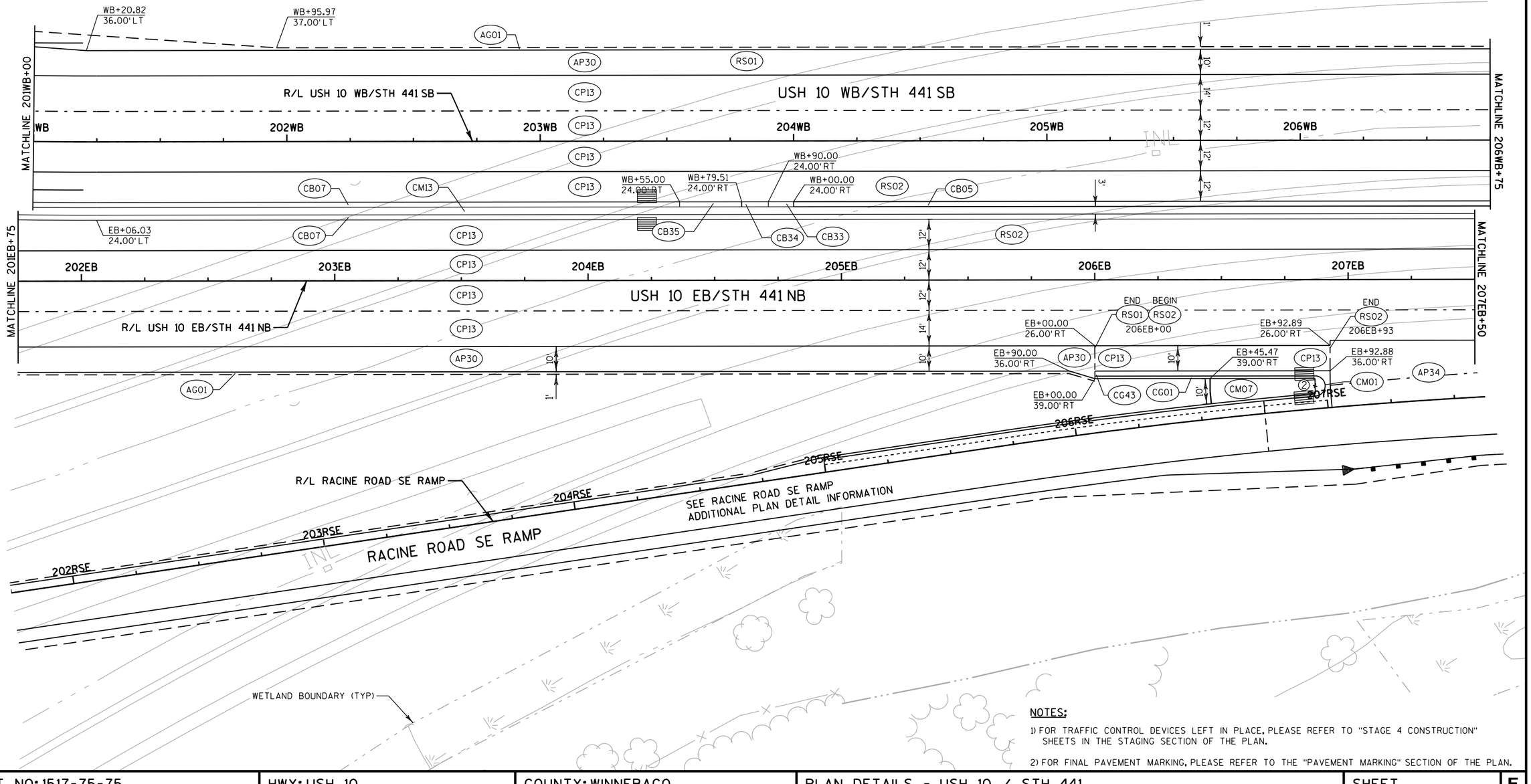
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 89	E

PAVEMENT DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AP30) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP34) HMA PAVEMENT TYPE E-0.3, 2-INCH OVER CONCRETE BASE 9-INCH
- (CB05) CONCRETE BARRIER TYPE S32
- (CB07) CONCRETE BARRIER TYPE S56
- (CB33) CONCRETE BARRIER TRANSITION TYPE S32 TO S36
- (CB34) CONCRETE BARRIER TRANSITION TYPE S36 TO S42
- (CB35) CONCRETE BARRIER TRANSITION TYPE S42 TO S56
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH
- (CG43) END SECTION CONCRETE CURB AND GUTTER
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM07) CONCRETE SIDEWALK 4-INCH
- (CM13) CONCRETE BASE 4-INCH
- (CP13) MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
- (RS01) ASPHALTIC SHOULDER RUMBLE STRIPS
- (RS02) CONCRETE RUMBLE STRIPS SHOULDER

RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
2	816834.18	547843.46	206EB+86.89	42.00' RT	206RSE+95.60	9.00' LT	4.00'



NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 90	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.

209NWE
210NWE
211NWE
212NWE
R/L NOISEWALL-RACINE ROAD NE RAMP TO RACINE ROAD
R/L RACINE ROAD NE RAMP
208RNE RACINE ROAD NE RAMP
209RNE
SEE RACINE ROAD NE RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION
210RNE
N-70-110
(NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)
211RNE
212RNE
AG01
AP30
CP13
R/L USH 10 WB/STH 441 SB
USH 10 WB/STH 441 SB
MATCHLINE 206WB+75
207WB
208WB
209WB
210WB
211WB
212WB
MATCHLINE 212WB+50
END RS01 210EB+84
WB+83.73 26.00'LT
WB+83.73 24.00'LT
AP34
END RS02 210WB+50
WB+33.64 24.00'LT
CB05
VARIES
EB+22.25 34.63'LT
CM13
CB07
EB+50.00 24.00'LT
PV03
END RS02 211EB+50
MATCHLINE 207EB+50
208EB
209EB
210EB
211EB
212EB
213EB
MATCHLINE 213EB+25
EB+75.00 24.00'RT
R/L USH 10 EB/STH 441 NB
USH 10 EB/STH 441 NB
208RSE
209RSE
210RSE
211RSE
212RSE
213RSE
R/L RACINE ROAD SE RAMP
RACINE ROAD SE RAMP
SEE RACINE ROAD SE RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION
EB+77.74 24.00'RT
BEGIN RS01 207EB+59
END RS01 BEGIN RS02 207EB+93
WETLAND BOUNDARY (TYP)
S-70-218
(CONSTRUCTED IN PROJECT I.D. 1517-75-72)

RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
4	816943.71	548282.02	211WB+09.30	101.50'LT	210RNE+33.55	10.00'RT	6.00'
5	816975.84	548316.83	211WB+54.44	97.98'LT	210RNE+80.75	6.00'RT	4.00'

PAVEMENT DETAIL LEGEND

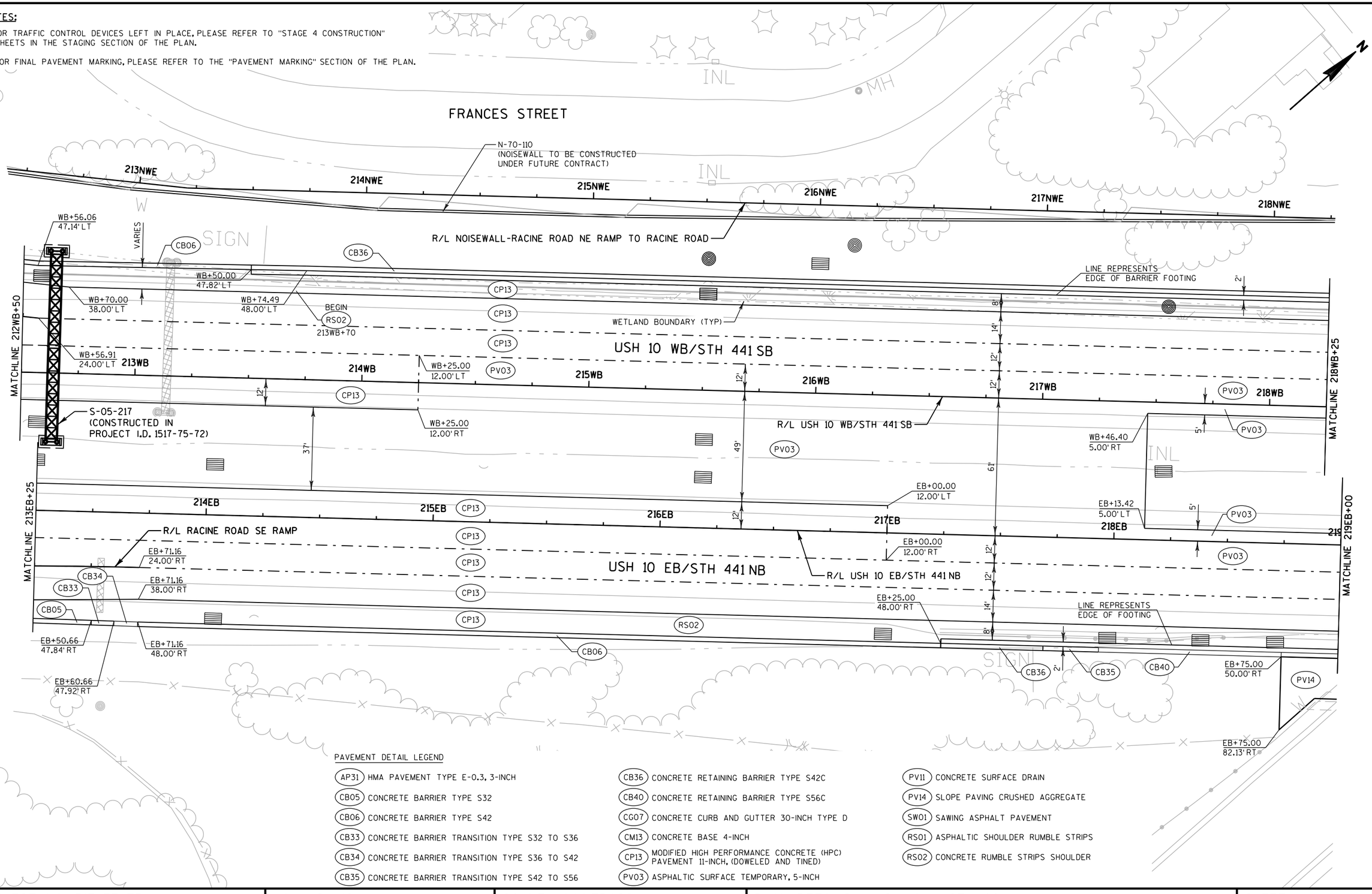
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- AP34 HMA PAVEMENT TYPE E-0.3, 2-INCH OVER CONCRETE BASE 9-INCH
- CB05 CONCRETE BARRIER TYPE S32
- CB07 CONCRETE BARRIER TYPE S56
- CM13 CONCRETE BASE 4-INCH
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
- PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH
- RS01 ASPHALTIC SHOULDER RUMBLE STRIPS
- RS02 CONCRETE RUMBLE STRIPS SHOULDER

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 91	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.



PAVEMENT DETAIL LEGEND

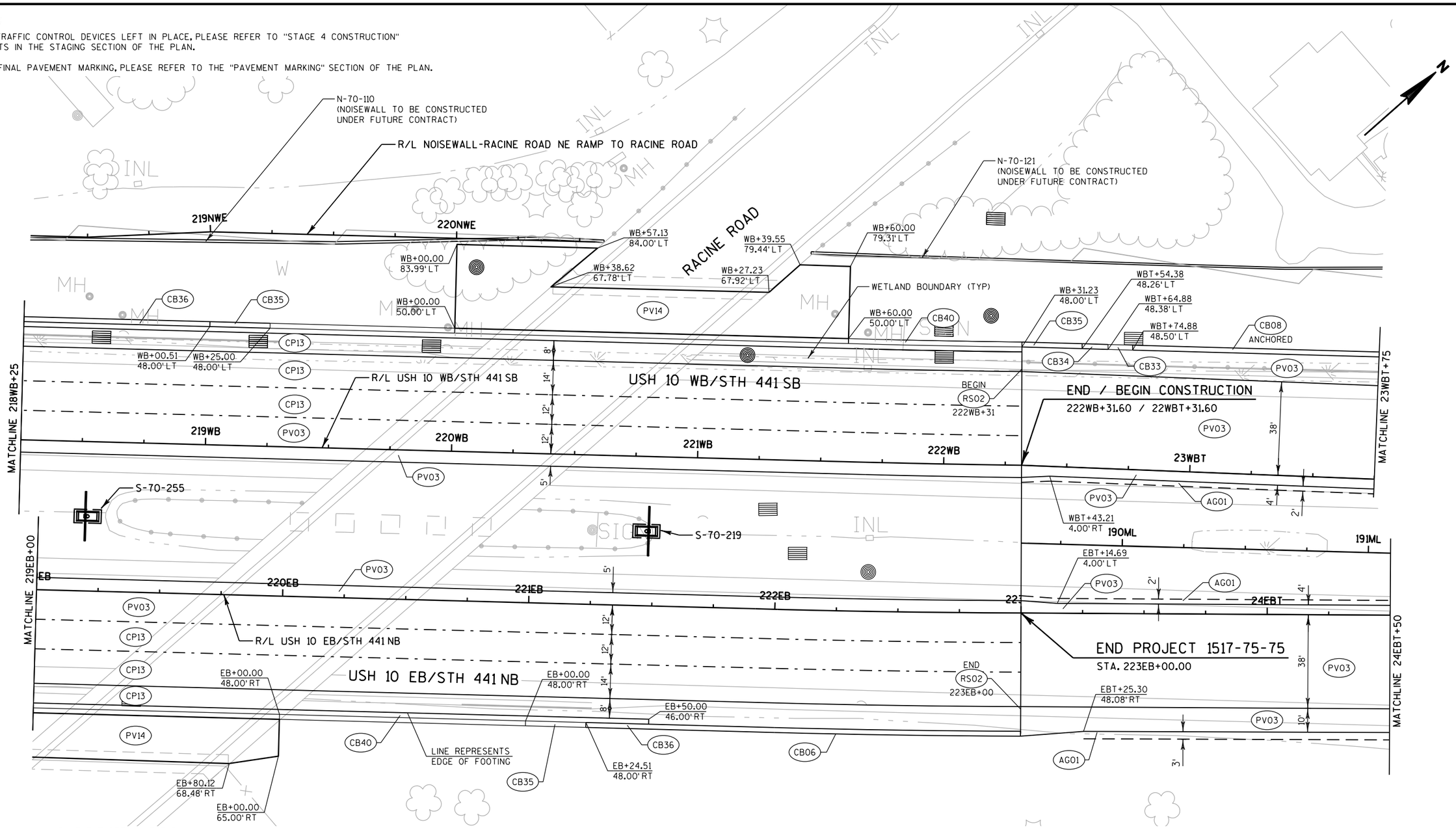
AP31 HMA PAVEMENT TYPE E-0.3, 3-INCH	CB36 CONCRETE RETAINING BARRIER TYPE S42C	PV11 CONCRETE SURFACE DRAIN
CB05 CONCRETE BARRIER TYPE S32	CB40 CONCRETE RETAINING BARRIER TYPE S56C	PV14 SLOPE PAVING CRUSHED AGGREGATE
CB06 CONCRETE BARRIER TYPE S42	CG07 CONCRETE CURB AND GUTTER 30-INCH TYPE D	SW01 SAWING ASPHALT PAVEMENT
CB33 CONCRETE BARRIER TRANSITION TYPE S32 TO S36	CM13 CONCRETE BASE 4-INCH	RS01 ASPHALTIC SHOULDER RUMBLE STRIPS
CB34 CONCRETE BARRIER TRANSITION TYPE S36 TO S42	CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)	RS02 CONCRETE RUMBLE STRIPS SHOULDER
CB35 CONCRETE BARRIER TRANSITION TYPE S42 TO S56	PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH	

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 92	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.



PAVEMENT DETAIL LEGEND

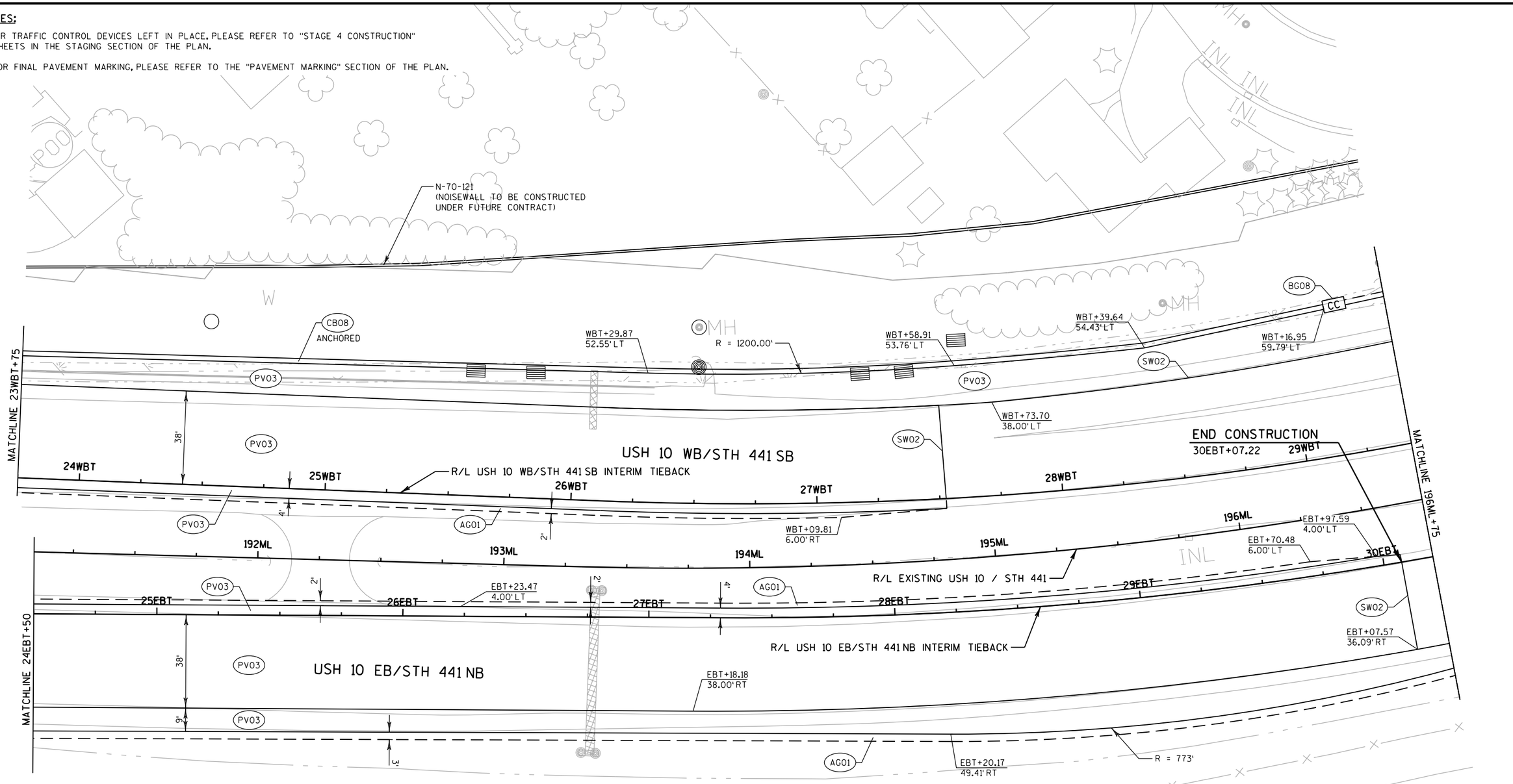
AG01 BASE AGGREGATE DENSE 3/4-INCH	CB08 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE	CB40 CONCRETE RETAINING BARRIER TYPE S56C	PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH
AP17 HMA PAVEMENT TYPE E-10, 5-INCH	CB33 CONCRETE BARRIER TRANSITION TYPE S32 TO S36	CG04 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	PV14 SLOPE PAVING CRUSHED AGGREGATE
AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH	CB34 CONCRETE BARRIER TRANSITION TYPE S36 TO S42	CM13 CONCRETE BASE 4-INCH	RS01 ASPHALTIC SHOULDER RUMBLE STRIPS
CB06 CONCRETE BARRIER TYPE S42	CB35 CONCRETE BARRIER TRANSITION TYPE S42 TO S56	CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)	RS02 CONCRETE RUMBLE STRIPS SHOULDER
CB07 CONCRETE BARRIER TYPE S56	CB36 CONCRETE RETAINING BARRIER TYPE S42C		

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 93	E

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.



PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- BG08 CRASH CUSHION TEMPORARY LEFT IN PLACE
- CB08 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH
- SW02 SAWING CONCRETE

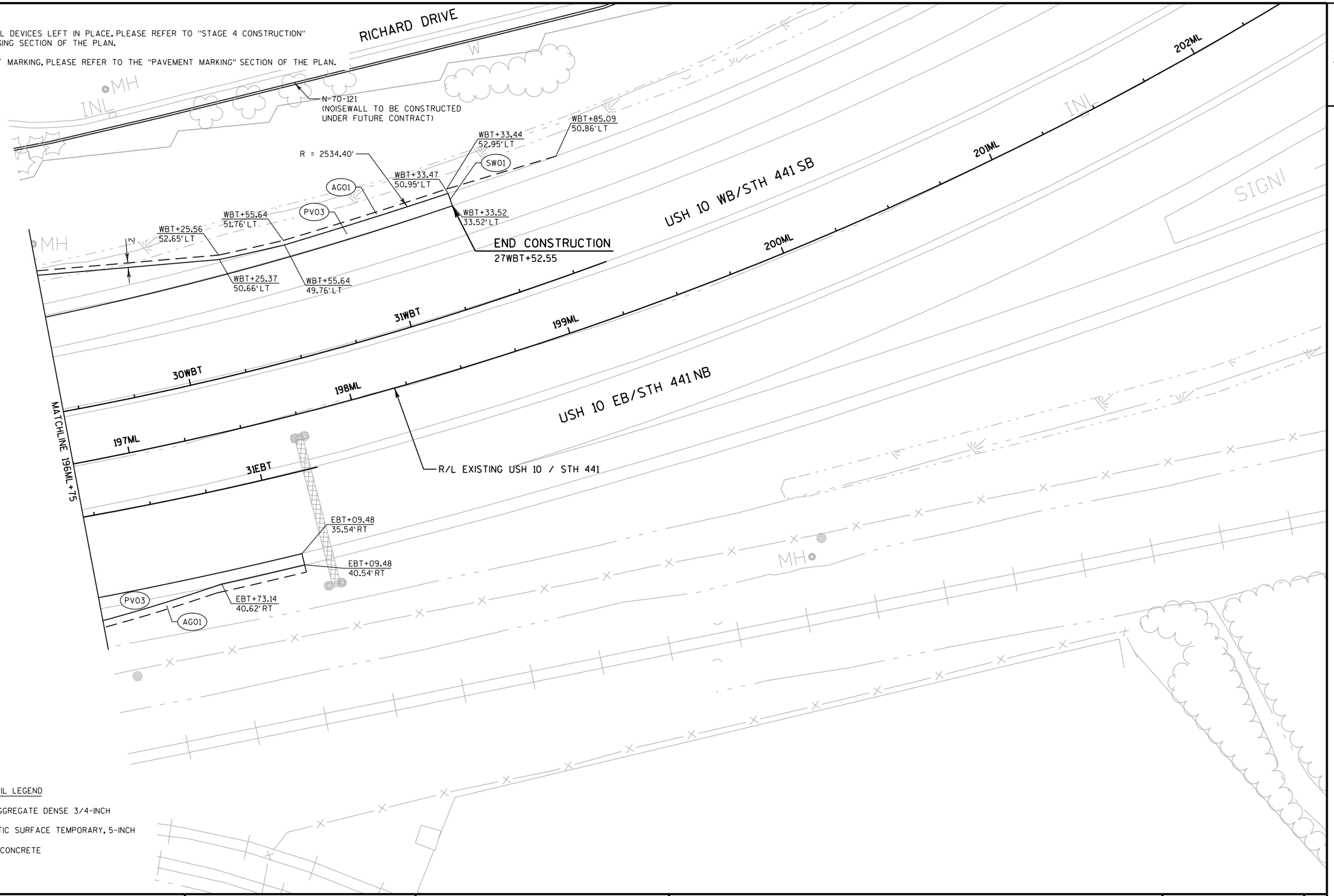
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021215_pd.dgn PLOT DATE : 5/5/2015 8:17:32 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

NOTES:

1) FOR TRAFFIC CONTROL DEVICES LEFT IN PLACE, PLEASE REFER TO "STAGE 4 CONSTRUCTION" SHEETS IN THE STAGING SECTION OF THE PLAN.

2) FOR FINAL PAVEMENT MARKING, PLEASE REFER TO THE "PAVEMENT MARKING" SECTION OF THE PLAN.



PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH
- SW02 SAWING CONCRETE

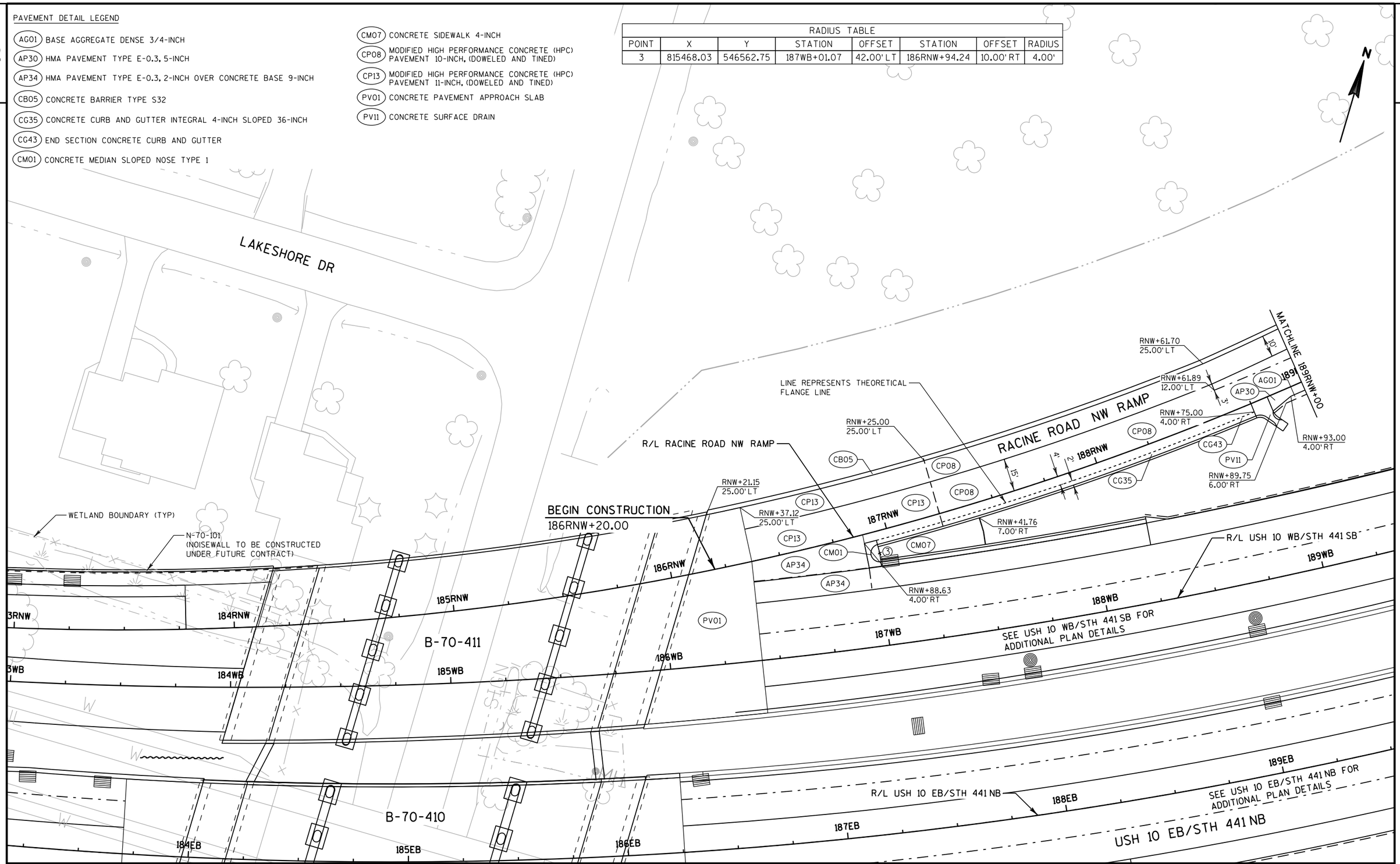
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - USH 10 / STH 441	SHEET 95	E

2

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- AP34 HMA PAVEMENT TYPE E-0.3, 2-INCH OVER CONCRETE BASE 9-INCH
- CB05 CONCRETE BARRIER TYPE S32
- CG35 CONCRETE CURB AND GUTTER INTEGRAL 4-INCH SLOPED 36-INCH
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM07 CONCRETE SIDEWALK 4-INCH
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV11 CONCRETE SURFACE DRAIN

RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
3	815468.03	546562.75	187WB+01.07	42.00' LT	186RNW+94.24	10.00' RT	4.00'



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD NW RAMP	SHEET 96	E

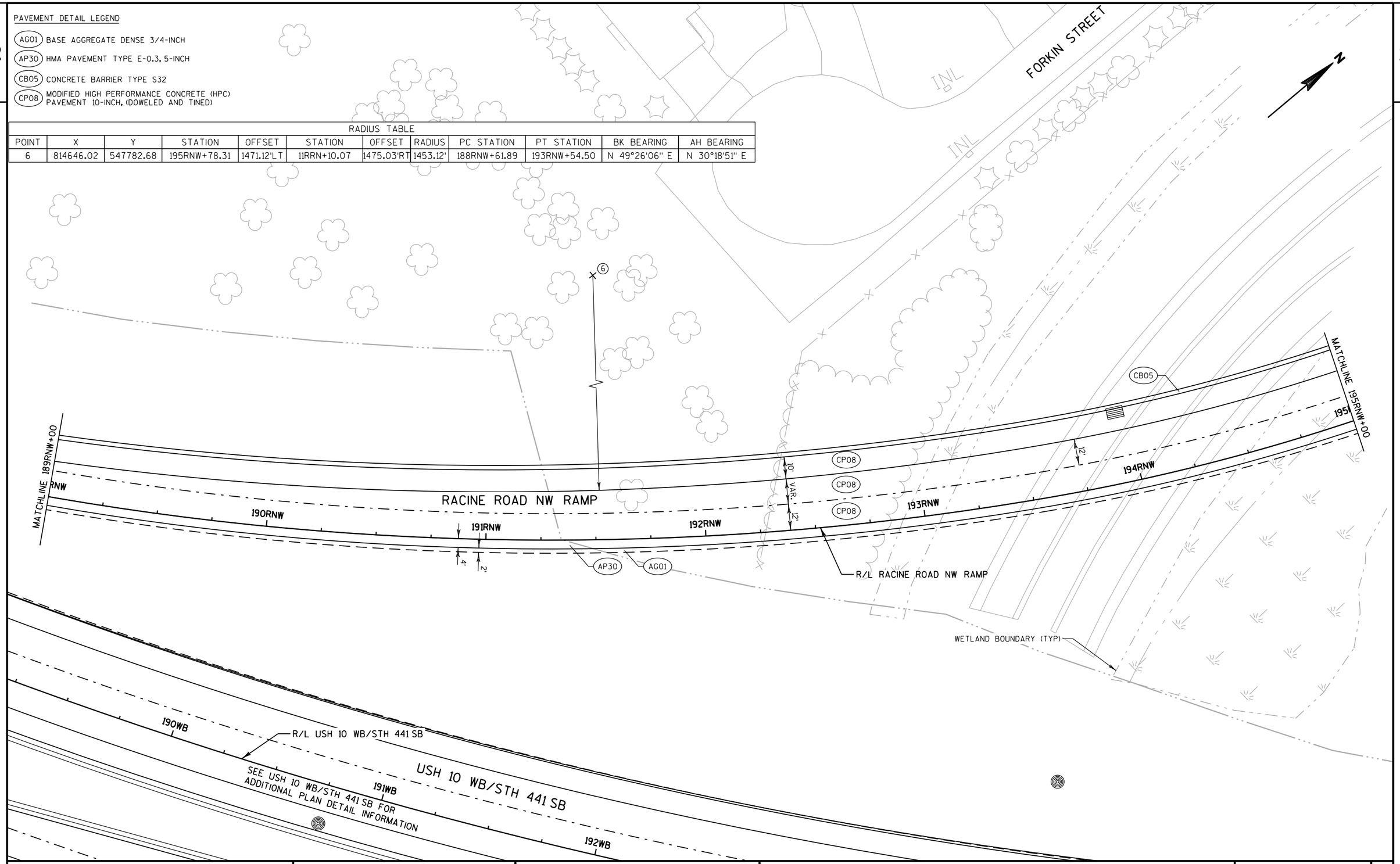
2

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- CB05 CONCRETE BARRIER TYPE S32
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)

RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS	PC STATION	PT STATION	BK BEARING	AH BEARING
6	814646.02	547782.68	195RNW+78.31	1471.12'LT	11RRN+10.07	1475.03'RT	1453.12'	188RNW+61.89	193RNW+54.50	N 49°26'06" E	N 30°18'51" E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD NW RAMP	SHEET 97	E

RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
7	816044.46	547302.10	196RNW+46.81	6.00' LT	11RRN+62.91	26.00' RT	4.00'

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- CB05 CONCRETE BARRIER TYPE S32
- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CP20 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)

END CONSTRUCTION
196RNW+68.29

RACINE ROAD NW RAMP

RNW+38.96
32.83' LT

RNW+76.66
26.46' LT

RNW+50.58
0.00' LT

196RNW

MATCHLINE 195RNW+00

RNW+38.96
END CONCRETE TINING

R/L RACINE ROAD NW RAMP

R/L RACINE ROAD CONNECTOR SB

R/L RACINE ROAD CONNECTOR NB

R/L STH 441 SB/RAMP CONNECTOR ROUNDABOUT

11RRN

12RRN

13RRN

14RRN

253CSB

253CNB

252CSB

252CNB

SEE RACINE ROAD CONNECTOR FOR ADDITIONAL PLAN DETAIL INFORMATION

RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB

199RNE RACINE ROAD NE RAMP 200RNE 201RNE

SEE RACINE ROAD NE RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION

R/L RACINE ROAD NE RAMP

WETLAND BOUNDARY (TYP)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD NW RAMP	SHEET 98	E

RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
8	816190.00	547421.92	198RNE+81.90	4.00' RT	12RRN+89.84	34.00' RT	2.00'

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- CB06 CONCRETE BARRIER TYPE S42
- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CP20 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)
- PV11 CONCRETE SURFACE DRAIN
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)

BEGIN CONSTRUCTION
198RNE+74.20

RACINE ROAD NW RAMP

SEE RACINE ROAD NW RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION

196RNW

195RNW

R/L RACINE ROAD NW RAMP

11RRN

12RRN

13RRN

14RRN

RRN+11.52 (PC)
35.76' RT

R = 98.00'

RNE+45.68 (PCC)
19.39' LT

R = 298.00'

RNE+09.76 (PT)
17.66' LT

RNE+89.86
23.00' LT

RNE+89.86
BEGIN CONCRETE TINING

RNE+45.03
15.00' LT

RACINE ROAD NE RAMP

199RNE

200RNE

201RNE

201RNE+25

MATCHLINE

RNE+59.86
2.00' RT

RNE+89.86
4.00' RT

R/L RACINE ROAD NE RAMP

R/L RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR SB

253CSB

253CNB

SEE RACINE ROAD CONNECTOR FOR ADDITIONAL PLAN DETAIL INFORMATION

RACINE ROAD CONNECTOR NB

252CSB

252CNB

R/L RACINE ROAD CONNECTOR NB

R/L USH 10 WB/STH 441 SB RAMP CONNECTOR ROUNDABOUT

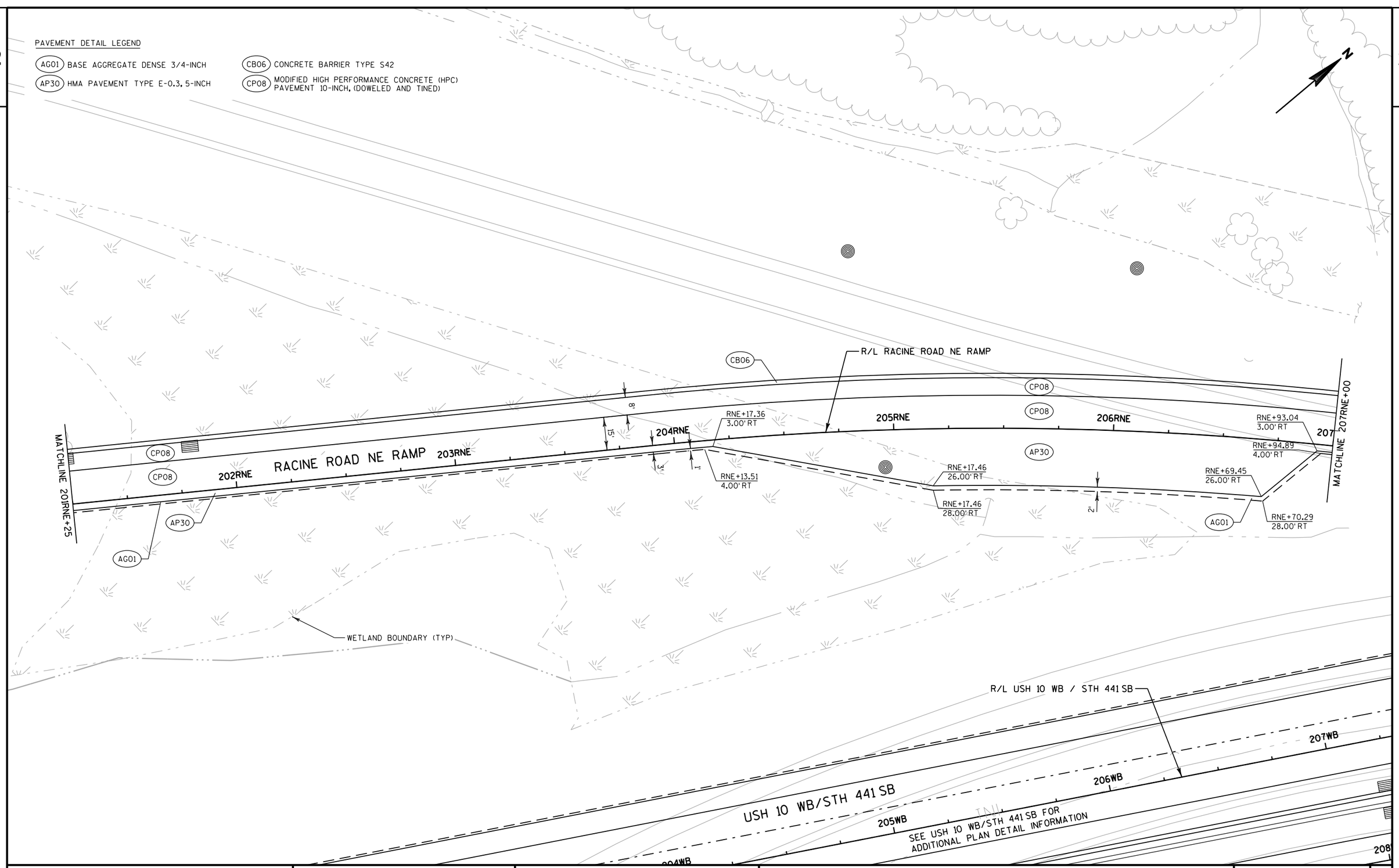
WETLAND BOUNDARY (TYP)

INL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD NE RAMP	SHEET 99	E

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- CB06 CONCRETE BARRIER TYPE S42
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD NE RAMP	SHEET 100 E

FILE NAME : I:\56537\1517-75-75\t1\cds\021221_pd.dgn PLOT DATE : 5/5/2015 8:17:47 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
4	816943.71	548282.02	210RNE+33.55	10.00' RT	210WB+37.39	43.00' LT	6.00'
5	816975.84	548316.83	210RNE+80.75	6.00' RT	210WB+83.73	39.00' LT	3.00'

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- AP34 HMA PAVEMENT TYPE E-0.3, 2-INCH OVER CONCRETE BASE 9-INCH
- CB06 CONCRETE BARRIER TYPE S42
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)

WETLAND BOUNDARY (TYP)

MATCHLINE 207RNE+00

207RNE

208RNE

209NWE

210NWE

211NWE

212NWE

N-70-110
(NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)

R/L NOISEWALL-RACINE ROAD NE RAMP TO RACINE ROAD

RACINE ROAD NE RAMP

209RNE

210RNE

211RNE

212RNE

R/L RACINE ROAD NE RAMP

8'

15'

3'

1'

RNE+50.00
23.00' LT

RNE+80.75
3.00' RT

END CONSTRUCTION
212RNE+33.28

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

207WB

208WB

209WB

210WB

211WB

212WB

SEE USH 10 WB/STH 441 SB FOR ADDITIONAL PLAN DETAIL INFORMATION

S-05-217
(CONSTRUCTED IN PROJECT I.D. 1517-75-72)

S-70-218
(CONSTRUCTED IN PROJECT I.D. 1517-75-72)

208EB

209EB

210EB

211EB

212EB

213EB

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

SEE USH 10 EB/STH 441 NB FOR ADDITIONAL PLAN DETAIL INFORMATION

208RSE

209RSE

210RSE

211RSE

212RSE

213RSE

SEE RACINE ROAD SE RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION

R/L RACINE ROAD SE RAMP

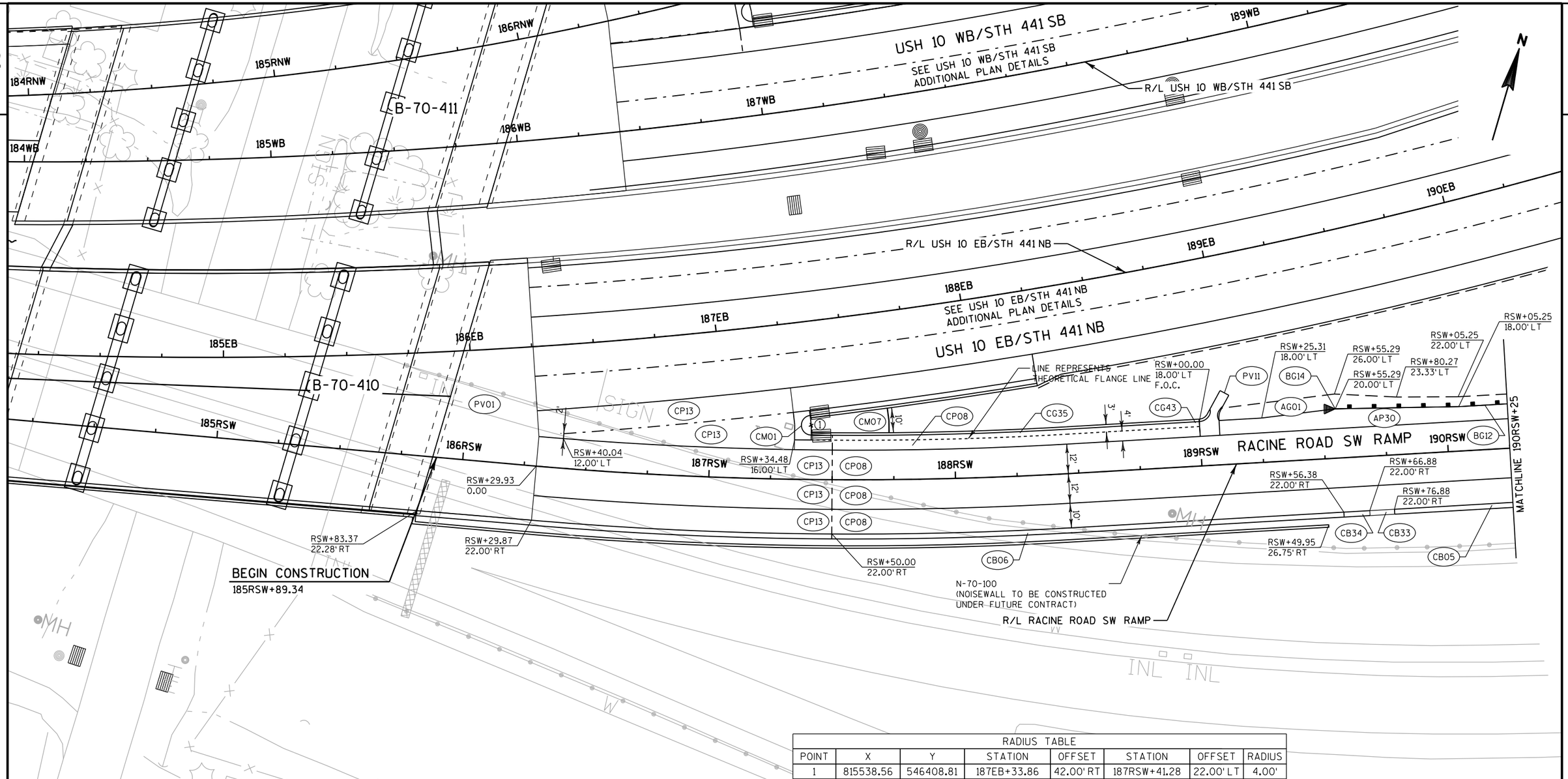
RACINE ROAD SE RAMP

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD NE RAMP	SHEET 101	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021222_pd.dgn PLOT DATE : 5/5/2015 8:17:49 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
1	815538.56	546408.81	187EB+33.86	42.00' RT	187RSW+41.28	22.00' LT	4.00'

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- BG12 MGS GUARDRAIL 3
- BG14 MGS TERMINAL EAT
- CB05 CONCRETE BARRIER TYPE S32
- CB06 CONCRETE BARRIER TYPE S42
- CB33 CONCRETE BARRIER TRANSITION TYPE S32 TO S36
- CB34 CONCRETE BARRIER TRANSITION TYPE S36 TO S42
- CG35 CONCRETE CURB AND GUTTER INTEGRAL 4-INCH SLOPED 36-INCH
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM07 CONCRETE SIDEWALK 4-INCH
- CP08 CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV11 CONCRETE SURFACE DRAINS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD SW RAMP	SHEET 102	E

190EB

SEE USH 10 EB/STH 441 NB FOR ADDITIONAL PLAN DETAIL INFORMATION

USH 10 EB/STH 441 NB

R/L USH 10 EB/STH 441 NB

MATCHLINE 190RSW+25

RSW+28.79
22.00' LT

RSW+49.25
40.00' LT

AG01

BG13

RSW+20.88
18.00' LT

RSW+50.00
38.00' LT

BG12

AP30

CP08

191RSW

RSW+27.27
18.00' LT

RACINE ROAD

192RSW

SW RAMP

CP20

193RSW
13RSWC

RSW+04.00
40.18' LT

RSW+04.00
38.18' LT

RSW+63.61
12.00' LT

RSW+63.61
BEGIN CONCRETE TINING

RSW+43.61
15.00' LT

RSW+22.06
0.00

RSW+25.00
19.00' LT

RSW+25.04
21.00' LT

RSWC+21.97
2.00' RT

194RSW
14RSWC

RSW+15.00
22.00' RT

RSW+75.00
18.00' RT

CB05

RSW+15.00
26.00' RT

RSW+75.00
22.00' RT

RSW+53.61
18.00' RT

RSW+63.61
19.50' RT

CG43

CG06

RSWC+21.44
13.98' RT

RSW+63.61
17.00' RT

CG42

LINE REPRESENTS
THEORETICAL FLANGE LINE

195RSW
15RSWC

MATCHLINE 195RSW+75

R/L RACINE ROAD SW RAMP

R/L RACINE ROAD SW RAMP BYPASS

S-70-211

WETLAND BOUNDARY (TYP)

W

INL

9

N

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- BG12 MGS GUARDRAIL 3
- BG13 MGS GUARDRAIL TERMINAL TYPE 2
- CB05 CONCRETE BARRIER TYPE S32
- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CG42 CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE A
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CP20 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)

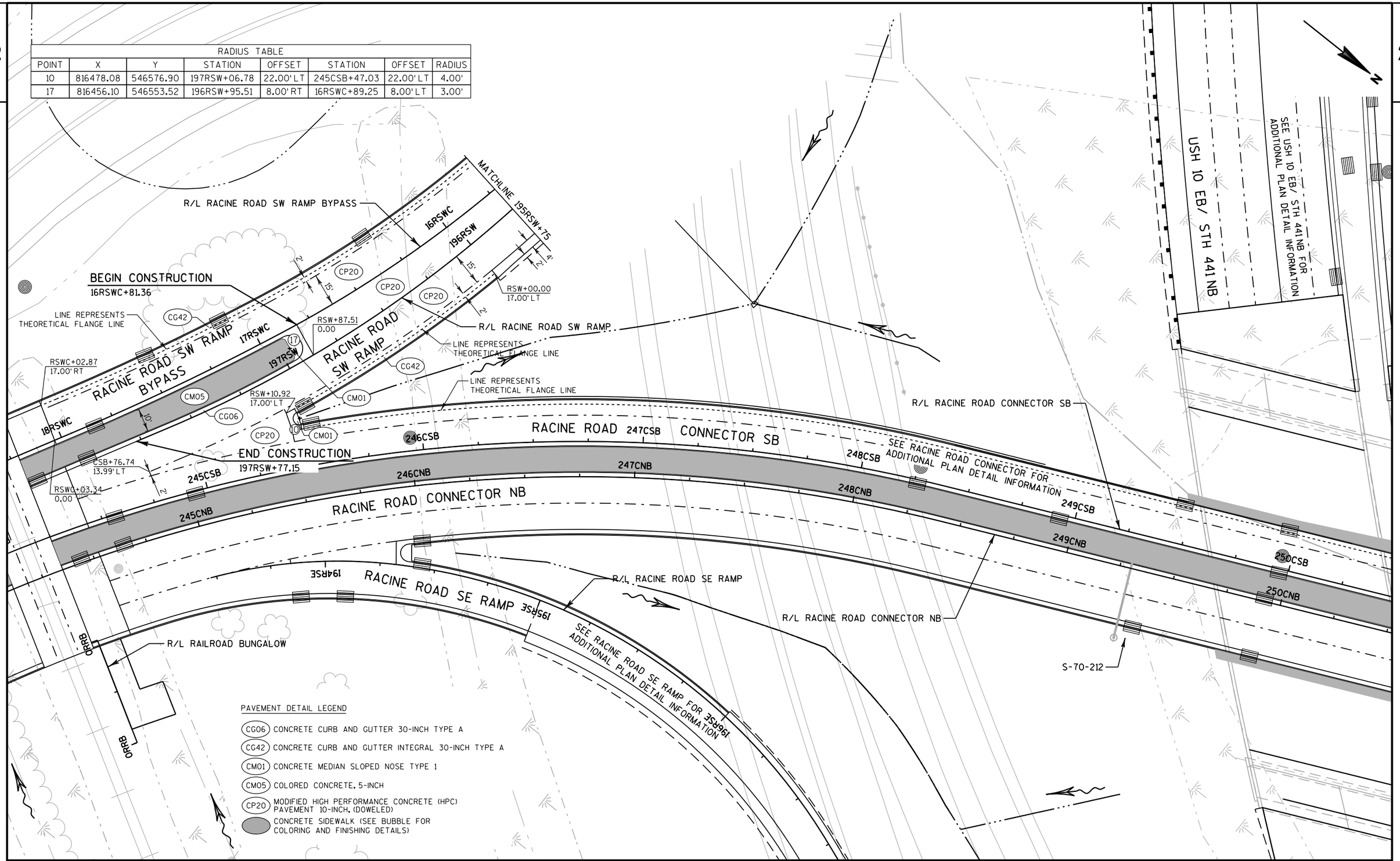
RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
9	816308.50	545927.99	18RSWC+55.67	616.74' RT	243CSB+91.91	655.74' LT	699.66'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD SW RAMP	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021224_pd.dgn PLOT DATE : 5/5/2015 8:17:54 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

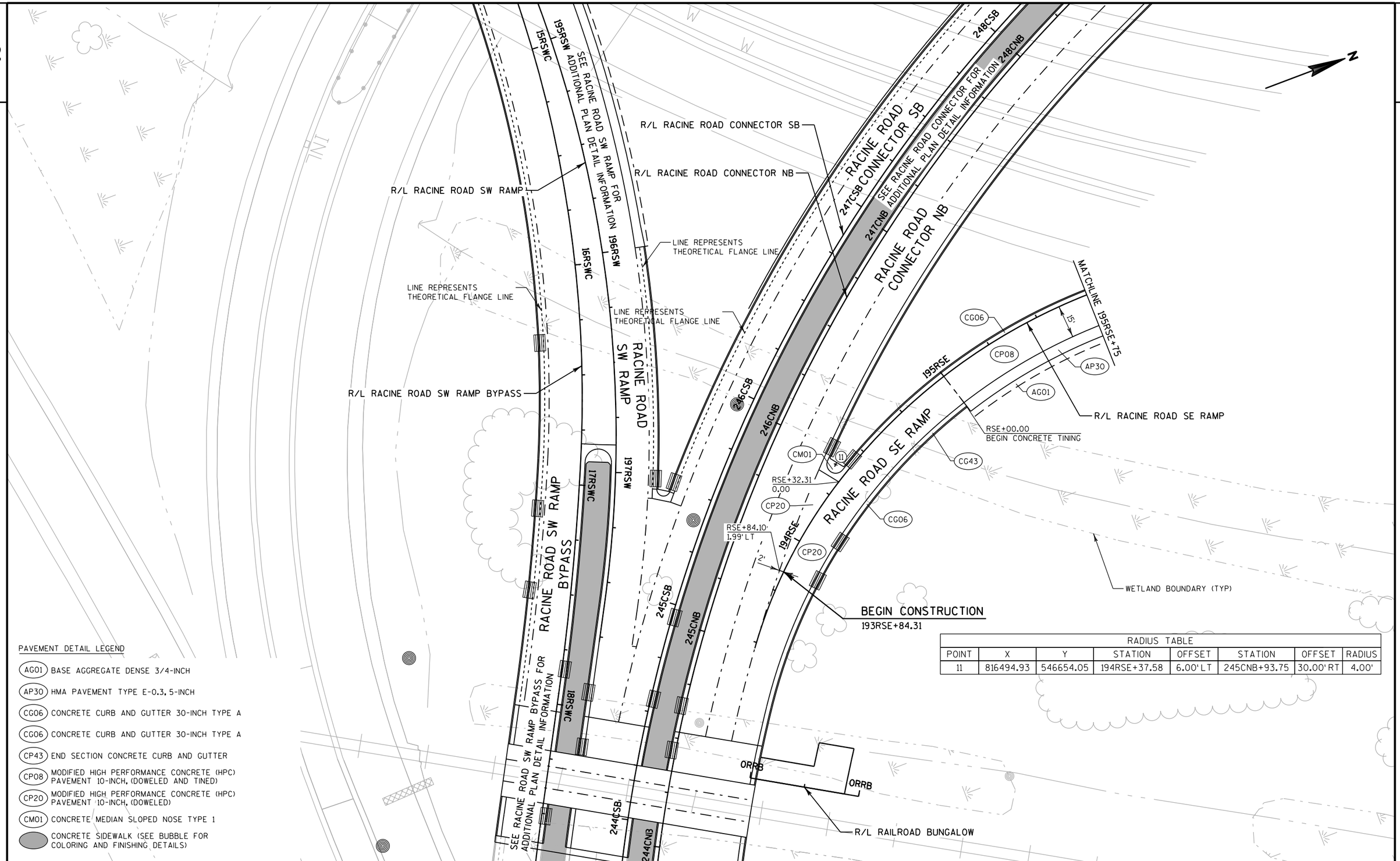
RADIUS TABLE							
POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
10	816478.08	546576.90	197RSW+06.78	22.00' LT	245CSB+47.03	22.00' LT	4.00'
17	816456.10	546553.52	196RSW+95.51	8.00' RT	16RSWC+89.25	8.00' LT	3.00'



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE RD SW RAMP	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021225_pd.dgn PLOT DATE : 5/5/2015 8:17:57 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

2



PAVEMENT DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AP30) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (CG06) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (CG06) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (CP43) END SECTION CONCRETE CURB AND GUTTER
- (CP08) MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- (CP20) MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)

RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
11	816494.93	546654.05	194RSE+37.58	6.00' LT	245CNB+93.75	30.00' RT	4.00'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD SE RAMP	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021226_pd.dgn PLOT DATE : 5/5/2015 8:18:00 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

249CSB

249CNB

S-70-212

R/L RACINE ROAD CONNECTOR NB

R/L RACINE ROAD CONNECTOR SB

199EB

200EB

201EB

SEE USH 10 EB/STH 441 NB FOR ADDITIONAL PLAN DETAIL INFORMATION

R/L USH 10 EB/ STH 441 NB

USH 10 EB/STH 441 NB

N

2

R/L RACINE ROAD SE RAMP

CG06

CG43

196RSE

197RSE

198RSE

199RSE

200RSE

201RSE

AP30

AG01

CP08

RACINE ROAD SE RAMP

3"

11"

15"

3"

5"

MATCHLINE 195RSE+75

RSE+00.00
0.00

MATCHLINE 201RSE+75

SIGN

WETLAND BOUNDARY (TYP)

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD SE RAMP	SHEET 106	E

2

N

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

201WB 202WB 203WB 204WB 205WB 206WB

SEE USH 10 WB/STH 441 SB FOR ADDITIONAL PLAN DETAIL INFORMATION

202EB 203EB 204EB 205EB 206EB 207EB

SEE USH 10 EB/STH 441 NB FOR ADDITIONAL PLAN DETAIL INFORMATION

USH 10 EB/STH 441 NB

R/L USH 10 EB/STH 441 NB

LINE REPRESENTS THEORETICAL FLANGE LINE

R/L RACINE ROAD SE RAMP

RACINE ROAD SE RAMP

202RSE 203RSE 204RSE 205RSE 206RSE 207RSE

CG43 CG35 AP30 AG01 CP08 CP13 CM01 CM07 AP34 BG14

RSE+70.00 3.00'LT

RSE+00.00 5.00'LT

RSE+54.38 6.00'LT

RSE+01.56 3.00'LT

RSE+33.29 20.00'RT

RSE+08.34 25.00'RT

RSE+87.61 23.00'RT

RSE+75.00 15.00'RT

RSE+08.51 31.00'RT

3' 1' 3' 15' 5' 3'

MATCHLINE 201RSE+75

MATCHLINE 207RSE+50

WETLAND BOUNDARY (TYP)

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- AP34 HMA PAVEMENT TYPE E-0.3, 2-INCH OVER CONCRETE BASE 9-INCH
- BG14 MGS TERMINAL EAT
- CG35 CONCRETE CURB AND GUTTER INTEGRAL 4-INCH SLOPED 36-INCH
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM07 CONCRETE SIDEWALK 4-INCH
- CP08 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED AND TINED)
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)

RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
2	816834.18	547843.46	206EB+86.89	42.00'RT	206RSE+95.60	9.00'LT	4.00'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD SE RAMP	SHEET 107	E

2

209RNE

N-70-110
(NOISEWALL TO BE CONSTRUCTED
UNDER FUTURE CONTRACT)

212N1

210RNE SEE RACINE ROAD NE RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION 211RNE RACINE ROAD NE RAMP

212RNE

R/L RACINE ROAD NE RAMP

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

207WB 208WB 209WB SEE USH 10 WB/STH 441 SB FOR ADDITIONAL PLAN DETAIL INFORMATION 211WB 212WB

S-05-217
(CONSTRUCTED IN
PROJECT I.D. 1517-75-72)

208EB 209EB 210EB SEE USH 10 EB/STH 441 NB FOR ADDITIONAL PLAN DETAIL INFORMATION 211EB 212EB 213EB

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

208RSE AP34 209RSE CP13 210RSE 211RSE 212RSE 213RSE

R/L RACINE ROAD SE RAMP

RACINE ROAD SE RAMP

MATCHLINE 207RSE+50

RSE+59.52
23.00' RT

AP30

CP13

RSE+00.00
23.00' RT

BG11

AG01

4'

RSE+59.02
27.00' RT

CB05

RSE+75.00
23.00' RT

CB46

RSE+25.00
23.00' RT

15'

8'

CB05

RSE+77.98
0.00

2'

50:1 TAPER

RSE+77.98
23.00' RT

END CONSTRUCTION
212RSE+77.98

EXISTING SANITARY SEWER MANHOLE
REMAIN IN PLACE. UTILITY CONTRACTOR MUST
ROTATE EXISTING CONE AWAY FROM THE RAMP

WETLAND BOUNDARY (TYP)

S-05-218
(CONSTRUCTED IN
PROJECT I.D. 1517-75-72)

PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP30 HMA PAVEMENT TYPE E-0.3, 5-INCH
- AP34 HMA PAVEMENT TYPE E-0.3, 2-INCH OVER CONCRETE BASE 9-INCH
- BG11 MGS THRIE BEAM TRANSITION
- CB05 CONCRETE BARRIER TYPE S32
- CB46 CONCRETE BARRIER TYPE S32A
- CP13 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH, (DOWELED AND TINED)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD SE RAMP	SHEET 108 E

2

RAILROAD CROSSING SURFACE TO BE CONSTRUCTED BY OTHERS

REFER TO CONSTRUCTION DETAIL "ASPHALT EXTENSION AT CONNECTOR ROAD LIMITS" FOR PAVING DETAILS

END CONSTRUCTION
18RSWC+63.37

REMAINING ROAD WILL BE CONSTRUCTED UNDER PROJECT I.D. 1517-75-76

R/L RACINE ROAD SW RAMP BYPASS

R/L RACINE ROAD CONNNECTOR SB

R/L RACINE ROAD CONNNECTOR NB

BEGIN CONSTRUCTION
243CSB+82.99

REMAINING ROAD WILL BE CONSTRUCTED UNDER PROJECT I.D. 1517-75-76

BEGIN CONSTRUCTION
243CNB+92.85

REFER TO CONSTRUCTION DETAIL "ASPHALT EXTENSION AT CONNECTOR ROAD LIMITS" FOR PAVING DETAILS

R/L RAILROAD BUNGALOW

LINE REPRESENTS THEORETICAL FLANGE LINE

BEGIN CONSTRUCTION
16RSWC+81.25

RACINE ROAD SW RAMP BYPASS

SEE RACINE ROAD SW RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION

RACINE ROAD SW RAMP

LINE REPRESENTS THEORETICAL FLANGE LINE

LINE REPRESENTS THEORETICAL FLANGE LINE

RACINE ROAD CONNECTOR NB

MATCHLINE 246CNB+25

WETLAND BOUNDARY (TYP)

PAVEMENT DETAIL LEGEND

- AP35 HMA PAVEMENT TYPE E-10, 8-INCH
- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG42 CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE A
- CG43 END SECTION CONCRETE CURB AND GUTTER
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM05 COLORED CONCRETE, 5-INCH
- CM11 COLORED AND STAMPED CONCRETE 5-INCH; TO BE BUILD AND PAID UNDER PROJECT 1517-75-76
- CM13 CONCRETE BASE 4-INCH
- CP20 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)

RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
10	816478.08	546576.90	197RSW+06.78	22.00' LT	245CSB+47.03	22.00' LT	3.00'
11	816494.93	546654.05	194RSE+37.58	6.00' LT	245CNB+93.75	30.00' RT	4.00'
17	816456.10	546553.52	196RSW+95.51	8.00' RT	16RSWC+89.25	8.00' LT	3.00'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD CONNECTOR	SHEET 109	E

2

R/L RACINE ROAD SW RAMP BYPASS

SEE RACINE ROAD SW RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION

RACINE ROAD SW RAMP

R/L RACINE ROAD SW RAMP

WETLAND BOUNDARY (TYP)

SEE USH 10 EB/STH 441NB FOR ADDITIONAL PLAN DETAIL INFORMATION

USH 10 EB/STH 441NB

SEE USH 10 WB/STH 441SB FOR ADDITIONAL PLAN DETAIL INFORMATION

USH 10 WB/STH 441SB

N

R/L RACINE ROAD CONNECTOR SB

LINE REPRESENTS THEORETICAL FLANGE LINE

CSB+46.58
23.50' LT

CSB+00.00
23.50' LT

CSB+21.62
27.52' LT

RACINE ROAD 247CSB CONNECTOR SB

248CSB

249CSB

250CSB

251CSB

CG42

CP20

CM05

5'

4'

8'

247CNB

248CNB

249CNB

250CNB

251CNB

CG06

RACINE ROAD CONNECTOR NB

12'

12'

MATCHLINE 246CNB+25

MATCHLINE 251CNB+50

S-70-212

CNB+77.59
30.50' RT

195RSE RACINE ROAD SE RAMP 195RSE

R/L RACINE ROAD SE RAMP

SEE RACINE ROAD SE RAMP FOR ADDITIONAL PLAN DETAIL INFORMATION

SLOPE INTERCEPT (TYP)

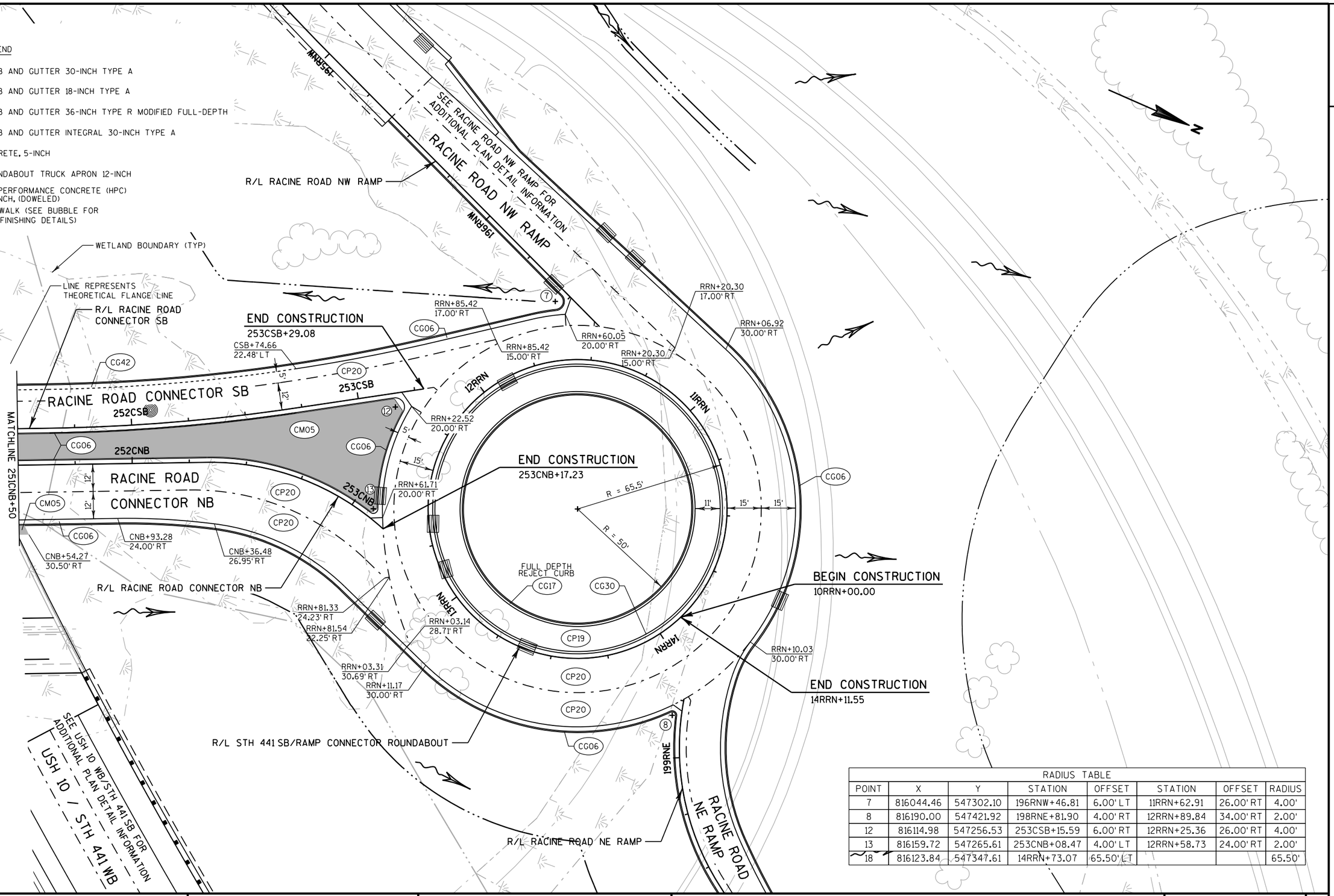
PAVEMENT DETAIL LEGEND

- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG42 CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE A
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM05 COLORED CONCRETE, 5-INCH
- CP20 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD CONNECTOR	SHEET 110	E

PAVEMENT DETAIL LEGEND

- CG06 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CG17 CONCRETE CURB AND GUTTER 18-INCH TYPE A
- CG30 CONCRETE CURB AND GUTTER 36-INCH TYPE R MODIFIED FULL-DEPTH
- CG42 CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE A
- CM05 COLORED CONCRETE, 5-INCH
- CP19 CONCRETE ROUNDABOUT TRUCK APRON 12-INCH
- CP20 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH, (DOWELED)
- CONCRETE SIDEWALK (SEE BUBBLE FOR COLORING AND FINISHING DETAILS)



RADIUS TABLE

POINT	X	Y	STATION	OFFSET	STATION	OFFSET	RADIUS
7	816044.46	547302.10	196RNW+46.81	6.00' LT	11RRN+62.91	26.00' RT	4.00'
8	816190.00	547421.92	198RNE+81.90	4.00' RT	12RRN+89.84	34.00' RT	2.00'
12	816114.98	547256.53	253CSB+15.59	6.00' RT	12RRN+25.36	26.00' RT	4.00'
13	816159.72	547265.61	253CNB+08.47	4.00' LT	12RRN+58.73	24.00' RT	2.00'
~~18~~	816123.84	547347.61	14RRN+73.07	65.50' LT			65.50'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - RACINE ROAD CONNECTOR	SHEET 111	E

2

2

PAVEMENT DETAIL LEGEND

AGO1 BASE AGGREGATE DENSE 3/4-INCH

PVO3 ASPHALTIC SURFACE TEMPORARY, 5-INCH

N

INL

158ML

159ML

160ML

161ML

162ML

163ML

164ML

MATCHLINE 164ML+00

R/L EXISTING USH 10/STH 441

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

R/L TEMPORARY WIDENING A

TWA+85.13
0.00

TWA+85.13
6.06'RT

4TWA
773.34
774.30

TWA+11.45
8.19'RT

776.18
776.28

778.25
778.28

6.9'

PVO3

5TWA
779.71
780.01

779.64
779.98

TWA+23.73
6.77'RT

779.47
779.67

779.49
779.79

AGO1

779.39
779.76

6TWA
779.20
779.50

2'

779.11
779.46

TWA+62.26
7.45'RT

778.93
779.29

7TWA
778.83
779.25

778.37
778.71

778.11
778.46

777.88
778.38

8'

777.68
778.23

8TWA
777.43
777.98

TWA+00.71
8.10'RT

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1A)	SHEET	E

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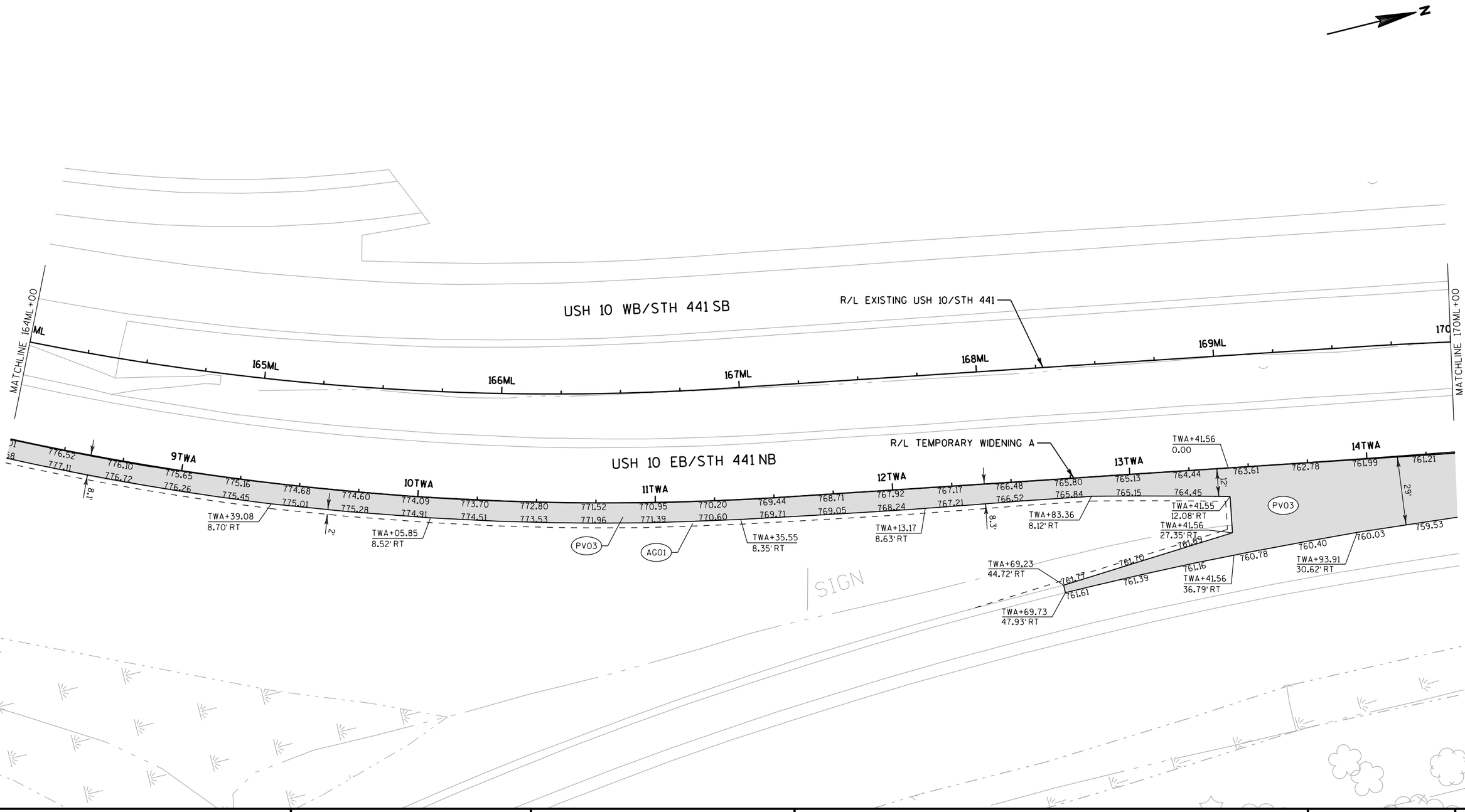
WISDOT/CADDS SHEET 42

2

PAVEMENT DETAIL LEGEND

(AG01) BASE AGGREGATE DENSE 3/4-INCH

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1A)	SHEET 113	E

2

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

(PV15) ASPHALTIC SURFACE TEMPORARY, 2-INCH

N

USH 10 WB/STH 441 SB

R/L EXISTING USH 10/STH 441

USH 10 EB/STH 441 NB

R/L TEMPORARY WIDENING A

MILL AND OVERLAY FROM 15TWA+11.64 TO 22TWS+36.77

MATCHLINE 170ML+00

MATCHLINE 176ML+00

171ML 172ML 173ML 174ML 175ML 176ML

15TWA 16TWA 17TWA 18TWA 19TWA 20TWA

TWA+11.64 0.00

758.87 759.65 760.43 758.16 757.51 756.86 756.29 755.77 755.27 754.78 754.32 753.87 753.46 753.14 752.85 752.50 752.25 752.06 751.90 751.67 751.41 751.14 750.80 751.07 750.56

PV03 PV15

25'

757.39 TWA+11.64 22.73' RT

757.93 TWA+83.05 24.18' RT

758.44 758.93

756.70 TWA+60.83 19.77' RT

756.09 TWA+04.61 16.66' RT

755.58 755.22

754.85 TWA+61.72 12.84' RT

754.43

753.99 TWA+17.70 10.10' RT

753.59 753.24 752.95

752.58 TWA+04.11 8.37' RT

752.40

752.11 TWA+47.49 7.61' RT

751.86

751.70 TWA+92.70 6.88' RT

751.44 751.17

9.3'

751.41 751.14

TWA+94.75 5.57' RT

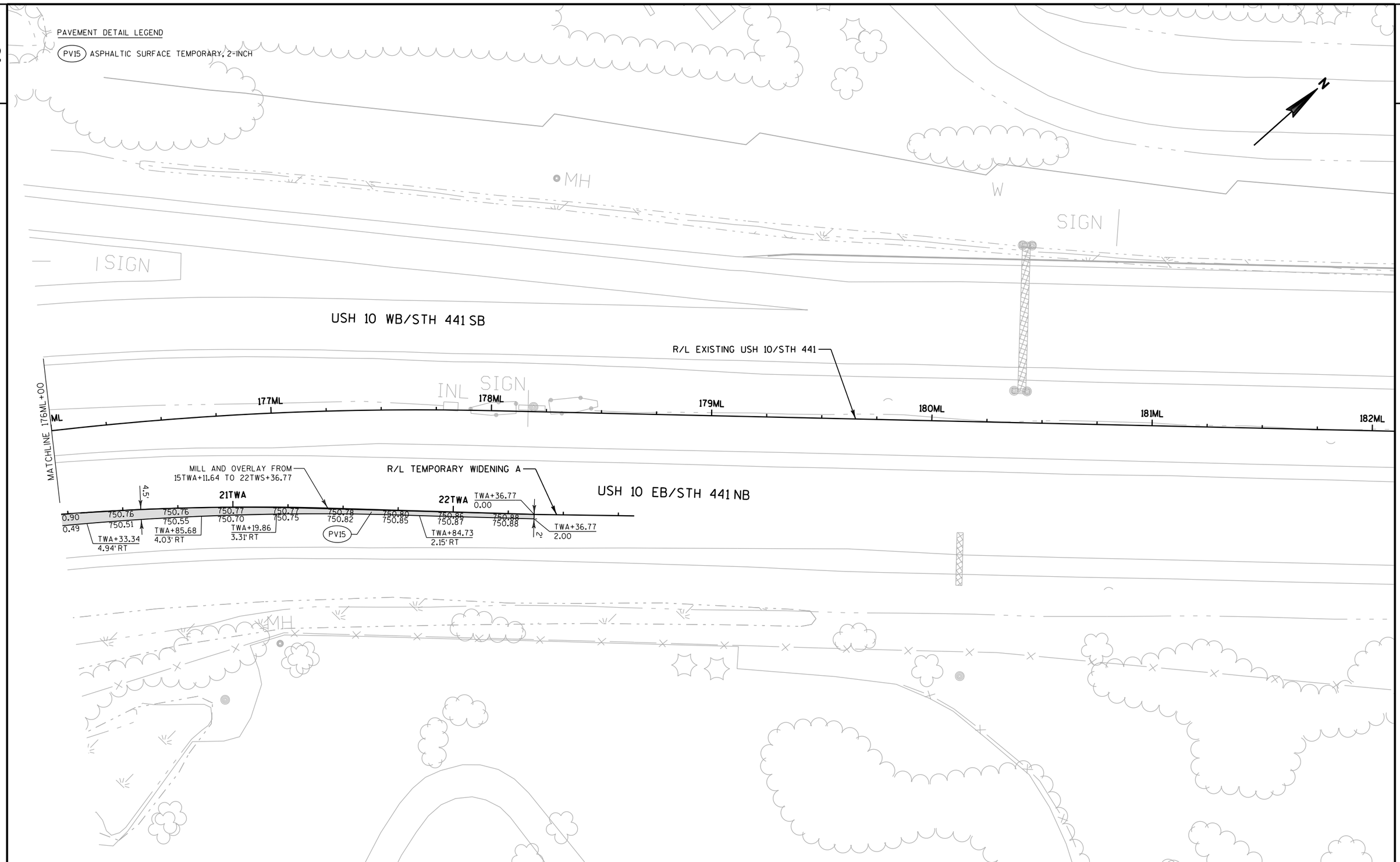
75 75

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1A)	SHEET 114	E

2

PAVEMENT DETAIL LEGEND

(PV15) ASPHALTIC SURFACE TEMPORARY, 2-INCH



2

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1A)	SHEET 115	E

2

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

N

USH 10 WB/STH 441 SB

15TWB

16TWB

17TWB

18TWB

19TWB

20TWB

21TWB

164ML

165ML

166ML

167ML

168ML

169ML

170ML

TWB+53.26
12.89' RT

TWB+53.05
16.00' RT

TWB+50.00
10.41' RT

TWB+25.90
16.00' RT

TWB+13.76
22.36' LT

TWB+13.78
16.00' LT

TWB+80.00
16.00' RT

3.3%

3.2%

773.70 773.93 773.13 773.39 772.64 772.94 772.14 772.47 771.54 771.91 771.07 771.49 770.64 771.13 769.68 770.21 769.23 769.80 768.72 769.34 768.16 768.74 767.63 768.15 767.21 767.55 766.78 766.96 766.24 766.32 765.69 765.69 765.13 765.05 764.57 764.42 764.09 763.81 763.62 763.22 763.13 762.63 762.57 762.04

PV03

R/L EXISTING USH 10/STH 441

R/L TEMPORARY WIDENING B

MATCHLINE 170ML+00

USH 10 EB/STH 441 NB

SIGN

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET 116	E

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

R/L EXISTING USH 10/STH 441

R/L TEMPORARY WIDENING B

R/L TEMPORARY WIDENING C

MATCHLINE 170ML+00

MATCHLINE 176ML+00

171ML 172ML 173ML 174ML 175ML 176ML

22TWB 23TWB 24TWB 25TWB 26TWB

171TWC 172TWC 173TWC 174TWC

PV03

TWB+87.67
15.55' LT

761.85 761.38 761.20 760.87 760.42 760.29

TWC+23.55
0.00

754.20 756.06 755.66 755.43 755.03 754.62 754.32 753.43 753.83 752.49 753.35 751.76 752.99 751.32 752.60 750.84 752.21 750.28 751.87 749.71 751.55 749.44 751.32 749.17 750.95 748.81 750.78 748.65 750.59 748.44 750.36 748.35 750.17 748.35 749.89 748.40 749.80 748.26

TWC+23.49
4.03' RT

TWC+95.00
16.94' RT

TWC+67.50
26.08' RT

TWC+35.00
31.14' RT

TWC+97.50
32.92' RT

TWC+65.00
32.94' RT

TWC+35.00
31.74' RT

33'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET	E

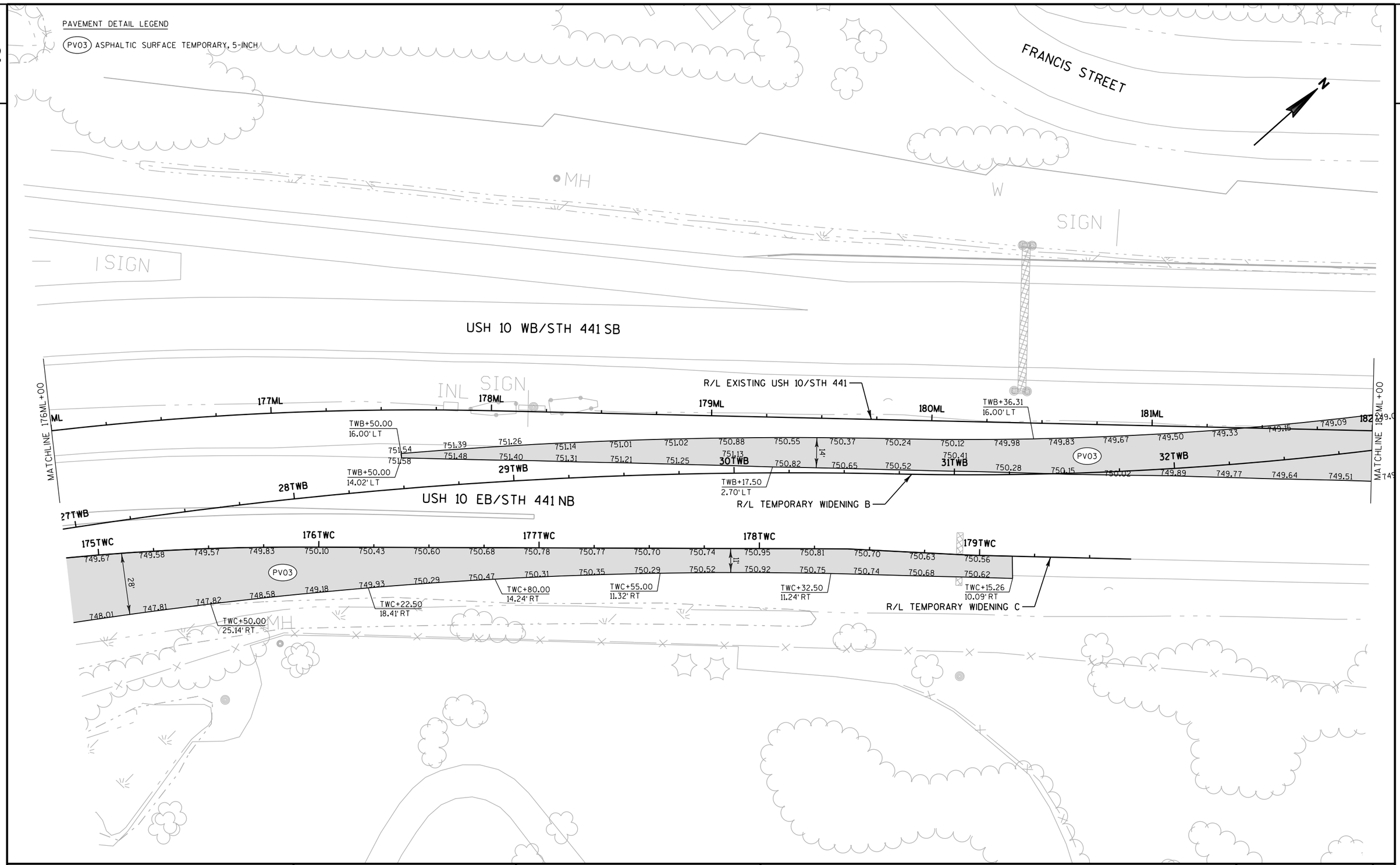
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WISDOT/CADDS SHEET 42

2

PAVEMENT DETAIL LEGEND

PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET	E

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WISDOT/CADDS SHEET 42

PAVEMENT DETAIL LEGEND

AGO1 BASE AGGREGATE DENSE 3/4-INCH

PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH

FRANCIS STREET

USH 10 WB/STH 441 SB

R/L TEMPORARY WIDENING B

TWB+19.89
16.00' LT

TWB+64.10
21.71' LT

TWB+64.61
0.00

TWB+25.07
14.00' RT

R/L EXISTING USH 10/STH 441

TWB+00.46
14.00' RT

TWB+48.92
14.00' RT

TWB+00.00
15.68' RT

MATCHLINE 182ML+00

MATCHLINE 188ML+00

749.51

USH 10 EB/STH 441 NB

RACINE ROAD

SIGN

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET	E

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WISDOT/CADDS SHEET 42

2

PAVEMENT DETAIL LEGEND

AGO1 BASE AGGREGATE DENSE 3/4-INCH

PVO3 ASPHALTIC SURFACE TEMPORARY, 5-INCH

RACINE ROAD

MH

MH

SIGN

INL

W

MH

N

USH 10 WB/STH 441 SB

R/L TEMPORARY WIDENING B

39TWB 40TWB TWB+24.30 0.00 41TWB TWB+99.78 2.69' LT 42TWB TWB+19.79 3.40' LT 43TWB 44TWB TWB+29.77 6.45' LT

8.26 748.31 748.41 748.52 748.59 748.57 748.37 748.39 748.47 748.56 748.65 748.79 748.95 749.08 749.22 749.39 749.62 749.81 750.03 750.16 750.35 750.48 750.61 750.93 751.10 751.3

8.01 748.06 748.15 748.26 748.33 748.30 748.09 748.10 748.17 748.26 748.34 748.47 748.63 748.74 748.96 749.21 749.53 749.81 750.13 750.35 750.64 750.88 751.12 751.55 751.84 752.

13

12

2

PVO3

TWB+19.10 14.00' RT

TWB+22.46 14.00' RT

ML 188ML+00 189ML 190ML 191ML 192ML 193ML 194ML+00

MATCHLINE

AGO1

R/L EXISTING USH 10/STH 441

USH 10 EB/STH 441 NB

SIGN

SIGN

MH

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET 120	E

2

PAVEMENT DETAIL LEGEND

(AG01) BASE AGGREGATE DENSE 3/4-INCH

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

RICHARD DRIVE

N

MH

INL

W

USH 10 WB/STH 441 SB

MATCHLINE 194ML +00

MATCHLINE 200ML +00

TWB+49.77
8.17' LT

TWB+09.77
8.50' LT

TWB+29.77
6.03' LT

45TWB 751.10
46TWB 752.15
47TWB 753.38
48TWB 754.65
49TWB 756.29
50TWB 758.23
ML 751.84
195ML 752.19
196ML 753.97
197ML 755.68
198ML 757.24
199ML 759.05
206 760.4

751.50 751.59 751.85 752.23 752.59 753.01 753.68 753.96 754.32 755.01 755.47 755.93 756.73 757.24 757.81 758.78 759.31 759.93
752.48 752.70 753.09 753.51 753.59 754.37 754.74 755.05 755.34 756.00 756.36 756.80 757.59 758.02 758.51 759.45 759.99 760.48 761.07

22'
20'
2%

PV03

AG01

INL

R/L TEMPORARY WIDENING B

USH 10 EB/STH 441 NB

CANADIAN NATIONAL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET 121	E

2

PAVEMENT DETAIL LEGEND

(AGO1) BASE AGGREGATE DENSE 3/4-INCH

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

RICHARD DRIVE

USH 10 WB/STH 441 SB

R/L TEMPORARY WIDENING B

MATCHLINE 200ML+00

51TWB 759.93 760.45

TWB+49.77 3.13' LT

52TWB 761.07 761.11 761.79 762.46 763.08 763.83 764.55 765.22 765.99 766.78 767.60 768.40 769.20 770.02 770.83 771.65 772.38 773.22

TWB+63.18 0.00

PV03

53TWB 761.56 762.17 762.82 763.46 764.01 764.74 765.41 766.04 766.75 767.49 768.26 769.01 769.74 770.50 771.25 772.01 772.68 773.46

TWB+19.77 1.89' RT

54TWB

TWB+79.77 8.10' RT

55TWB

TWB+46.77 11.06' RT

TWB+46.77 13.99' RT

AGO1

200ML 201ML 202ML 203ML 204ML 205ML 206ML

18"

24"

USH 10 EB/STH 441 NB

SIGN

SIGN

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 1B)	SHEET 122	E

PAVEMENT DETAIL LEGEND

PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH

TAYCO STREET

SIGN

MH

INL

SIGN

INL

MH

PV03

MATCH EXISTING GRADES

154ML

153ML

152ML

151ML

150ML

149ML

MATCHLINE 154ML+00

ML+97.67
5.36'LT

11"

ML+97.58
5.78'RT

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

R/L EXISTING USH 10/STH 441

INL INL

SIGN

INL

RACINE ROAD SW RAMP

W

MH

MH

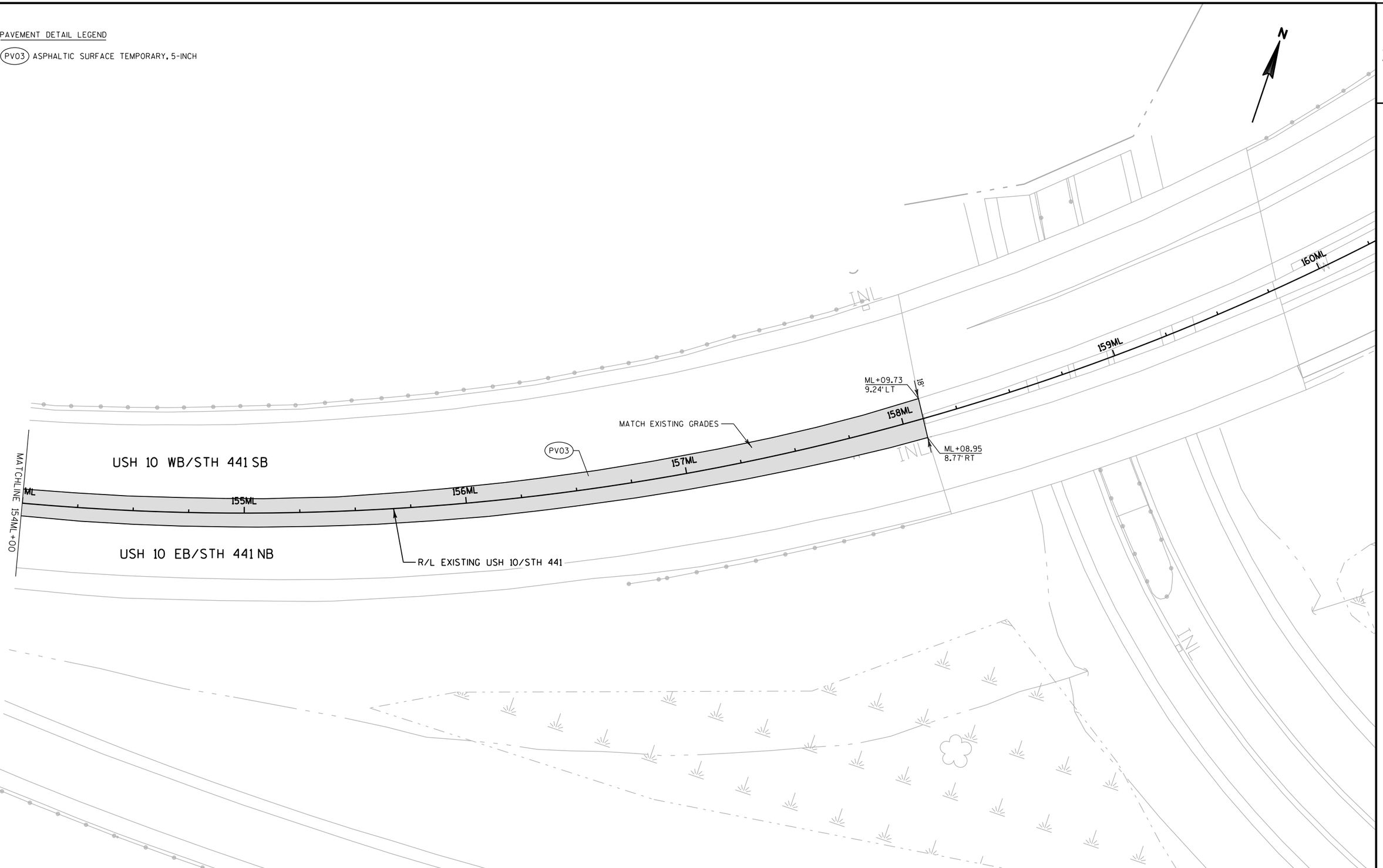
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 2A)	SHEET 123	E

2

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 2A)	SHEET 124	E

2

2

PAVEMENT DETAIL LEGEND

PV03 ASPHALTIC SURFACE TEMPORARY, 5-INCH

INL MH INL INL MH MH W

N

USH 10 WB/STH 441 SB

TWH+12.23
17.26' LT

TWH+42.30
19.48' LT

7TWH 8TWH 10TWH 11TWH 12TWH

749.60 749.60 749.51 749.42 749.33 749.25 748.92 748.75 748.44 748.13 748.09 748.04 747.99 748.10 748.08 748.05 748.06 748.06 748.05 748.08 748.07 748.06

33"

14"

749.05 748.96 748.87 748.78 748.69 748.61 748.68 748.75 748.60 748.45 748.41 748.35 748.33 748.58 748.52 748.44 748.39 748.38 748.35 748.37 748.36 748.35

TWH+14.27
13.19' RT

181ML 182ML 183ML 184ML 185ML 186ML 187ML

TWH+07.07
16.50' LT

PV03

TWH+17.73
16.00' LT

MATCHLINE 187ML+00

TWH+90.88
16.00' RT

TWH+50.35
0.00' LT

USH 10 EB/STH 441 NB

R/L TEMPORARY WIDENING H

SIGN

INL

W

RACINE ROAD

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 2C)	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\021264_pd.dgn PLOT DATE : 3/31/2015 4:44:52 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

RACINE ROAD

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

MATCHLINE 187ML+00

MATCHLINE 193ML+00

188ML TWH+56.75 16.00'LT

189ML

190ML

191ML

TWH+42.04 16.00'LT

192ML

193

748.09	748.12	748.13	748.17	748.17	748.23	748.31	748.30	748.03	748.11	748.23	748.36	748.47	748.57	748.71	748.92	749.12	749.32	749.53	749.70	749.96	750.18	750.27	750.30
748.37	13TWH 748.41	748.42	748.46	748.46	14TWH 748.52	748.61	748.59	748.32	15TWH 748.41	748.52	748.66	748.77	16TWH 748.87	749.01	749.22	749.42	17TWH 749.62	749.83	750.01	750.26	18TWH 750.47	750.70	750.86

14'

PV03

TWH+60.59 1.44'LT

TWH+39.00 1.16'LT

TWH+33.45 0.86'LT

SIGN

SIGN

MH

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 2C)	SHEET 126	E

2

2

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

RICHARD DRIVE

N

USH 10 WB/STH 441 SB

MATCHLINE 193ML+00

MATCHLINE 199ML+00

193ML

194ML

195ML

196ML

197ML

198ML

199ML

19TWH 751.08 751.28 751.64 751.94 752.26

20TWH 750.41 750.47 750.82 751.12 751.44 751.75 752.56 752.68

21TWH 751.88 751.93 752.36 752.72 753.14 753.47 753.59

22TWH 752.73 752.87 753.21 753.62 753.90 753.95 754.29 754.60 754.91

23TWH 754.29 754.62 754.97 755.21 755.36 755.53 755.82 755.88

24TWH 756.26 756.31 756.71 756.71 757.11 757.18 757.54

100TWE 759.40 759.52 759.84 760.03

13'

PV03

TWH+08.48
16.00'LT

TWH+46.59
16.00'LT

TWH+22.80
16.00'LT

TWH+23.01
10.65'LT

TWH+48.89
2.97'LT

TWH+79.39
4.90'LT

TWE+00.00
2.00'LT

TWE+00.00
0.00

R/L TEMPORARY WIDENING H

R/L TEMPORARY WIDENING E

USH 10 EB/STH 441 NB

CANADIAN NATIONAL

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 2C)	SHEET 127	E

2

PAVEMENT DETAIL LEGEND

(PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH

(PV15) ASPHALTIC SURFACE TEMPORARY, 2-INCH

RICHARD DRIVE

USH 10 WB/STH 441 SB

MATCHLINE 199ML +00

199ML

200ML

201ML

202ML

203ML

204ML

205ML

USH 10 EB/STH 441 NB

760.41 760.53 101TWE 760.97 761.05 761.50 761.71 762.04 762.34 762.63 762.93 763.27 763.48 763.93 764.13 764.50 764.80 765.12 765.45 765.77 766.15 766.48 766.79 TWE+05.97 23.81'LT TWE+06.91 17.17'LT 767.41 767.93 768.16 768.62 768.98 769.29 769.55 769.76 769.96 770.09 TWE+30.80 5.99'LT TWE+30.80 0.00 102TWE 103TWE 104TWE 105TWE PV15 PV03 17' 2'

MILL AND OVERLAY FROM 100TWE+00.00 - 103TWE+06.91

R/L TEMPORARY WIDENING E

TWE+06.91 0.00

N

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN DETAILS - TEMPORARY (STAGE 2C)	SHEET 128	E

2

N

R/L RACINE ROAD NW RAMP

N-70-101

32" PARAPET
SEE R-70-120 PLANS
FOR DETAILS

R/L USH 10 WB/STH 441 SB

BEGIN CONSTRUCTION
181WB+05.51

USH 10 WB/STH 441 SB

B-70-411

MATCHLINE 184WB+50

MATCHLINE 184EB+50

B-70-61

B-70-410

B-70-403

USH 10 EB/STH 441 NB

R/L USH 10 EB/STH 441 NB

BEGIN PROJECT 1517-75-75
STA. 181EB+11.78

S-70-210

R/L RACINE ROAD SW
RAMP

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 129 E

2

N

R/L RACINE ROAD NW RAMP

RACINE ROAD NW RAMP
GRADES SHOWN ELSEWHERE

RACINE ROAD NW RAMP

RACINE ROAD

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

MATCHLINE 189WB+85

MATCHLINE 190EB+12

MATCHLINE 184WB+50

B-70-411

185RNW 186RNW 187RNW 188RNW 189RNW

185WB 186WB 187WB 188WB 189WB

779.00 779.84
779.60
780.32 780.56
781.04 781.28
781.76 782.00
781.88 782.12

778.62 778.83 779.08 779.28 779.47 779.65 779.82 779.98
779.24 779.46 779.68 779.88 780.07 780.25 780.42 780.58
780.08 780.30 780.52 780.72 780.91 781.09 781.26 781.42
780.80 781.02 781.24 781.44 781.63 781.81 781.98 782.14
781.52 781.74 781.96 782.16 782.35 782.53 782.70 782.86
782.18 782.20 782.21 782.22 782.21 782.29 782.46 782.62
782.28 782.26 782.23 782.19 782.25 782.42 782.58
782.29 782.73

780.13 780.27 780.39 780.51 780.61 780.71
780.73 780.87 780.99 781.11 781.21 781.31
781.13 781.57 781.71 781.83 781.95 782.05 782.15
781.42 782.29 782.43 782.55 782.67 782.77 782.87
782.14 783.01 783.15 783.27 783.39 783.49 783.59
782.86 782.91 783.03 783.15 783.25 783.35
782.77 782.87 782.99 783.11 783.21 783.31

NOTE: INSIDE SHOULDER CROSS SLOPE ROTATES (6% TO -2%) TO MATCH BRIDGE CROSS SLOPE
STA 186WB+42 TO 187WB+62

779.87 779.97 780.07 780.17 780.27 780.37 780.47 780.57 780.67 780.77 780.87 780.97 781.07 781.17 781.27 781.28
780.11 780.21 780.31 780.41 780.51 780.61 780.71 780.81 780.91 781.01 781.11 781.21 781.31 781.41 781.51 781.52
780.59 780.69 780.79 780.89 780.99 781.09 781.19 781.29 781.39 781.49 781.59 781.69 781.79 781.89 781.99 782.09
781.31 781.41 781.51 781.61 781.71 781.81 781.91 782.01 782.11 782.21 782.31 782.41 782.51 782.61 782.71 782.81
781.93 782.03 782.13 782.23 782.33 782.43 782.53 782.63 782.73 782.83 782.93 783.03 783.13 783.23 783.33 783.43 783.53
782.65 782.75 782.85 782.95 783.05 783.15 783.25 783.35 783.45 783.55 783.65 783.75 783.85 783.95 784.05 784.15 784.25
783.49 783.59 783.69 783.79 783.89 783.99 784.09 784.19 784.29 784.39 784.49 784.59 784.69 784.79 784.89 784.99 785.09

MATCHLINE 184EB+50

B-70-410

185EB 186EB 187EB 188EB 189EB 190EB

185RSW 186RSW 187RSW 188RSW 189RSW 190RSW

USH 10 EB/STH 441 NB

R/L USH 10 EB/STH 441 NB

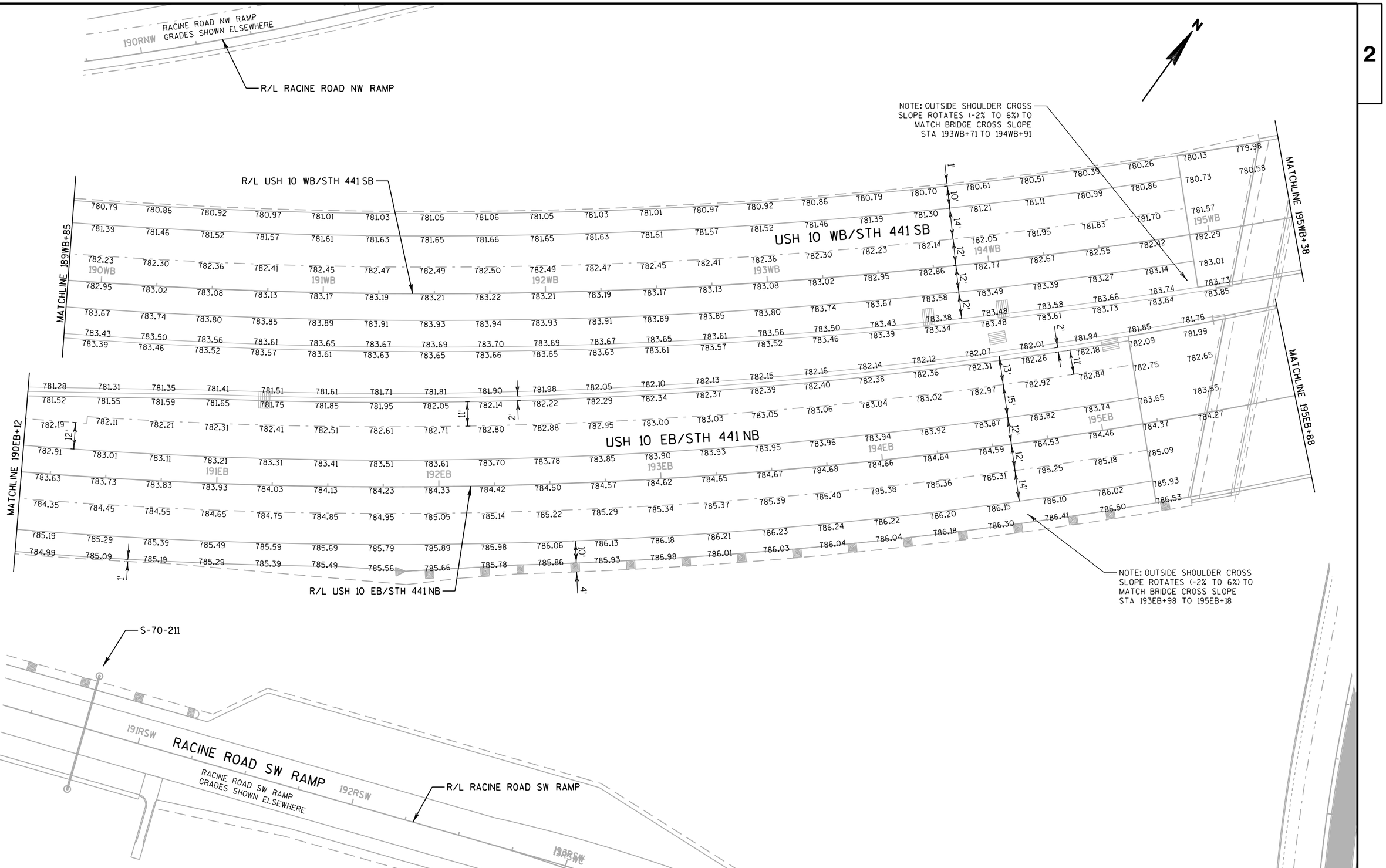
NOTE: OUTSIDE SHOULDER CROSS SLOPE ROTATES (6% TO -2%) TO MATCH BRIDGE CROSS SLOPE
STA 186EB+25.57 TO 187EB+45.57

RACINE ROAD SW RAMP

RACINE ROAD SW RAMP
GRADES SHOWN ELSEWHERE

R/L RACINE ROAD SW RAMP

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 130	E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 131 E

2

N

RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB GRADES SHOWN ELSEWHERE

R/L RACINE ROAD CONNECTOR NB

R/L RACINE ROAD CONNECTOR SB

253CNB

252CNB

251CNB

249CNB

B-70-421

B-70-420

S-70-212

MATCHLINE 195WB+38

MATCHLINE 195EB+88

MATCHLINE 201WB+88

MATCHLINE 201EB+62

196WB

197WB

198WB

199WB

200WB

201EB

196EB

197EB

198EB

199EB

200EB

NOTE: OUTSIDE SHOULDER CROSS SLOPE ROTATES (6% TO -2%) TO MATCH BRIDGE CROSS SLOPE STA 197WB+59 TO 198WB+79

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

R/L USH 10 EB/STH 441 NB

NOTE: OUTSIDE SHOULDER CROSS SLOPE ROTATES (6% TO -2%) TO MATCH BRIDGE CROSS SLOPE STA 197EB+96 TO 199EB+16

R/L RACINE ROAD SE RAMP

RACINE ROAD SE RAMP GRADES SHOWN ELSEWHERE

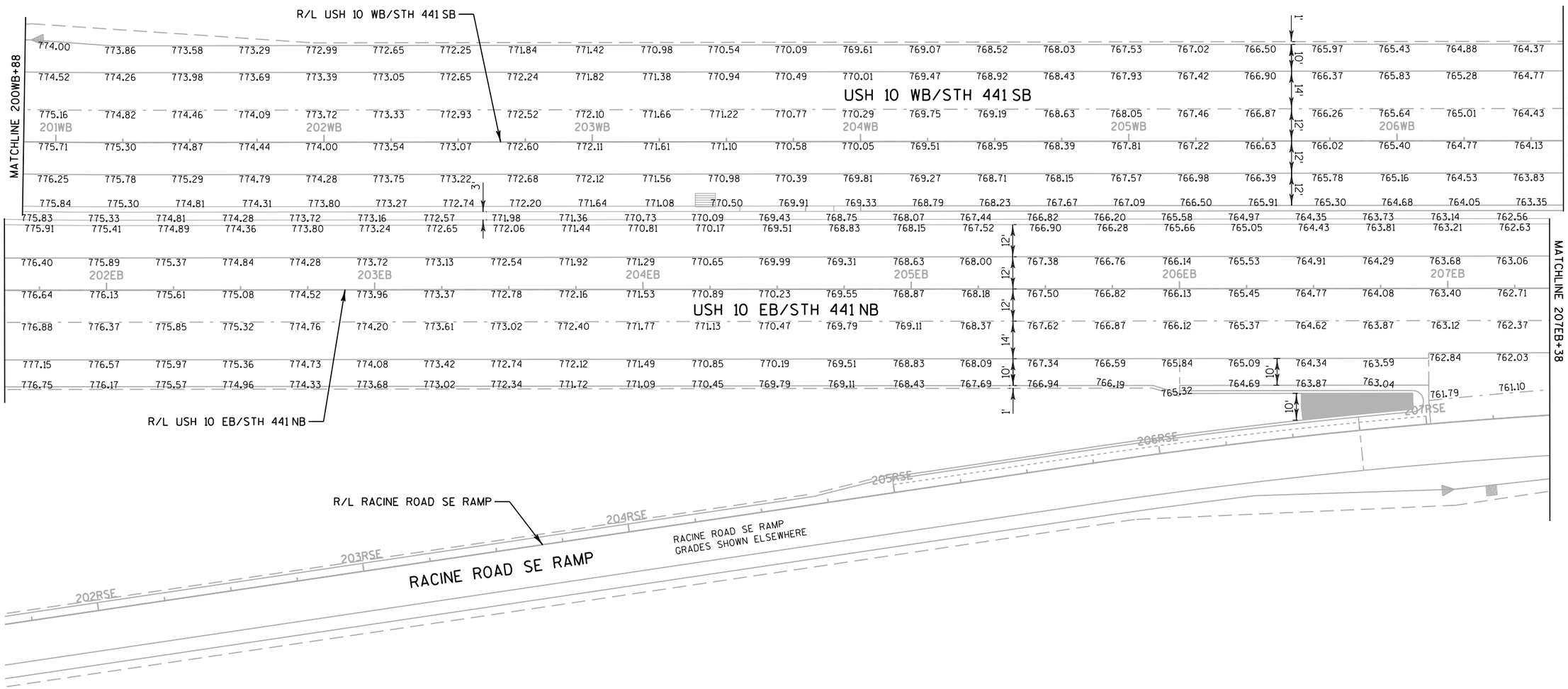
201RSE

200RSE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021304_gr.dgn PLOT DATE : 1/31/2015 9:33:58 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2



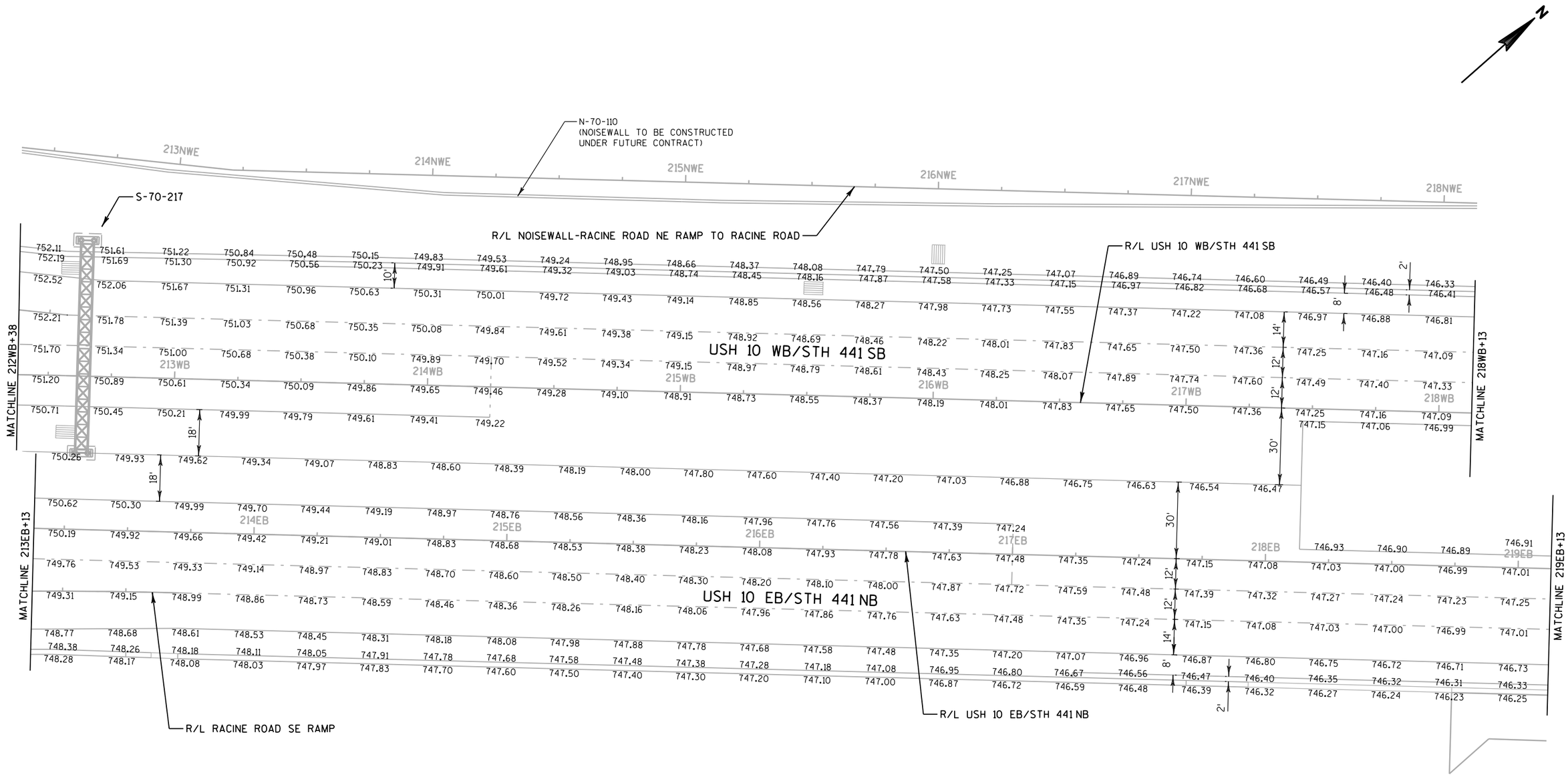
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 133	E

2

207RNE
208RNE
209RNE
210RNE
211RNE
212RNE
209NWE
210NWE
211NWE
212NWE
RACINE ROAD NE RAMP
R/L RACINE ROAD NE RAMP
N-70-110
(NOISEWALL TO BE CONSTRUCTED
UNDER FUTURE CONTRACT)
R/L NOISEWALL-RACINE ROAD NE RAMP TO RACINE ROAD
RACINE ROAD CONNECTOR NB
GRADES SHOWN ELSEWHERE
N
R/L USH 10 WB/STH 441 SB
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
RACINE ROAD SE RAMP
RACINE ROAD CONNECTOR NB
GRADES SHOWN ELSEWHERE
R/L RACINE ROAD SE RAMP
R/L USH 10 EB/STH 441 NB
MATCHLINE 206WB+62
MATCHLINE 207EB+38
MATCHLINE 212WB+38
MATCHLINE 213EB+13
207WB
208WB
209WB
210WB
211WB
212WB
208EB
209EB
210EB
211EB
212EB
208RSE
209RSE
210RSE
211RSE
212RSE
213EB
213RSE
S-70-218
10'
14'
12'
12'
12'
12'
12'
12'
12'
1'
2'
2'

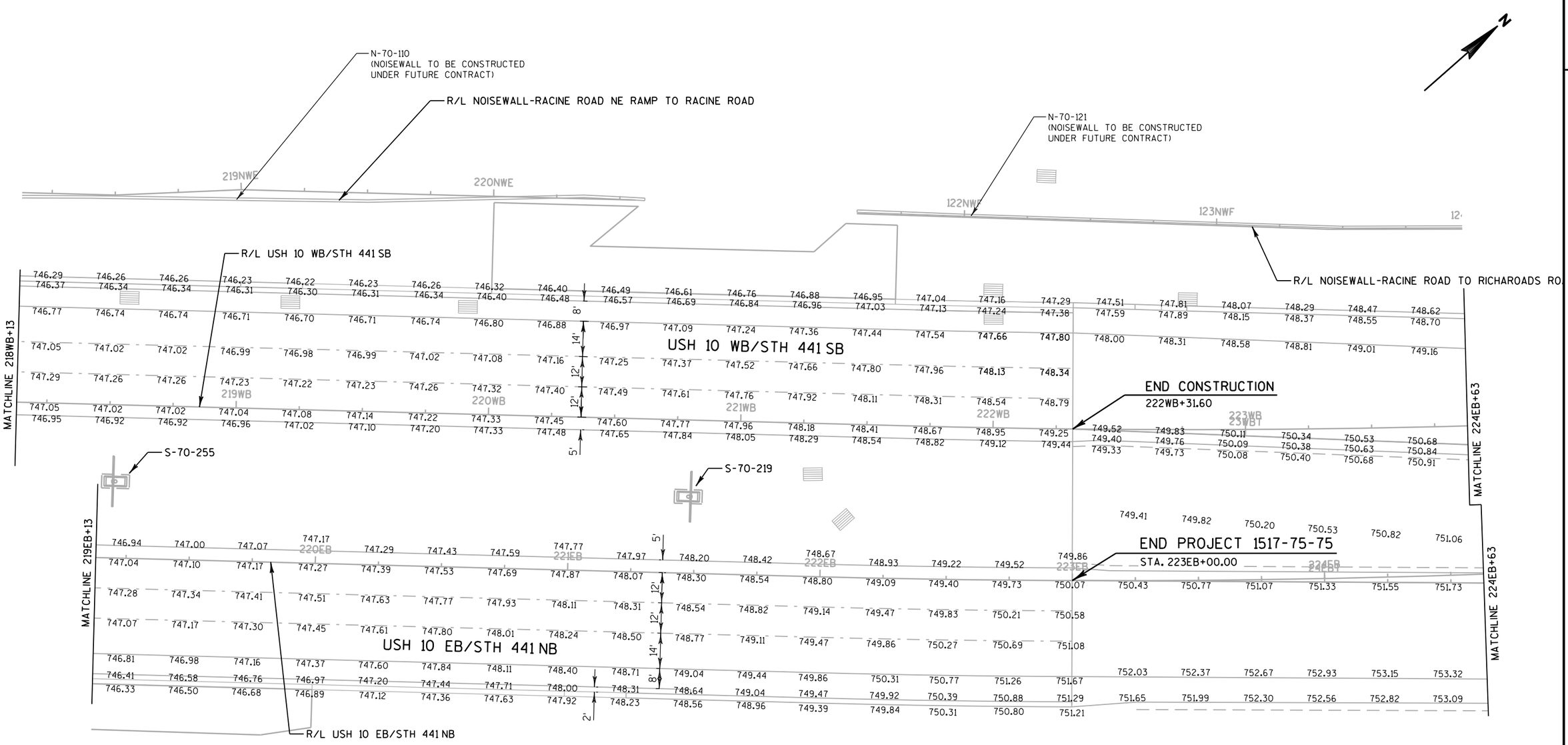
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 134 E

2



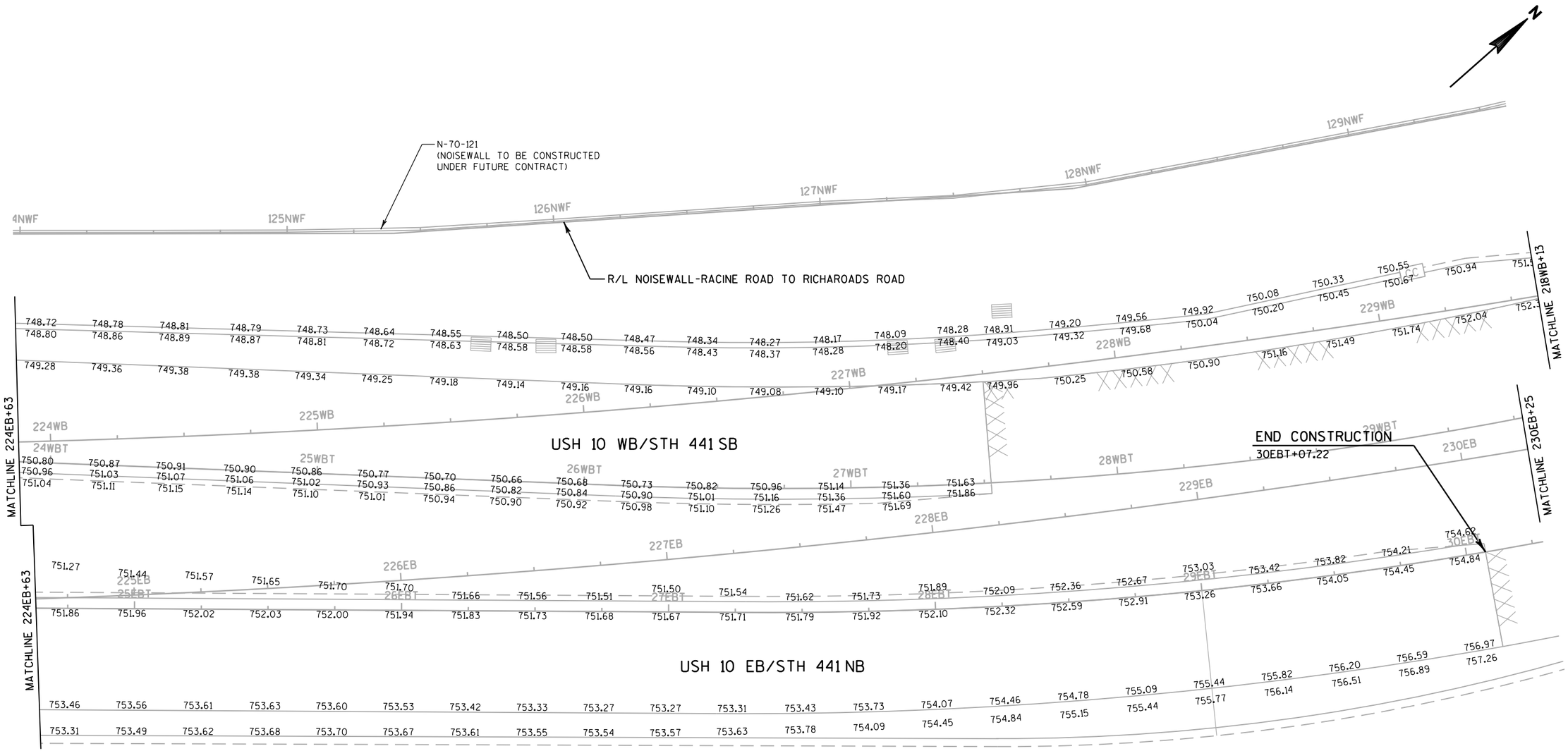
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2

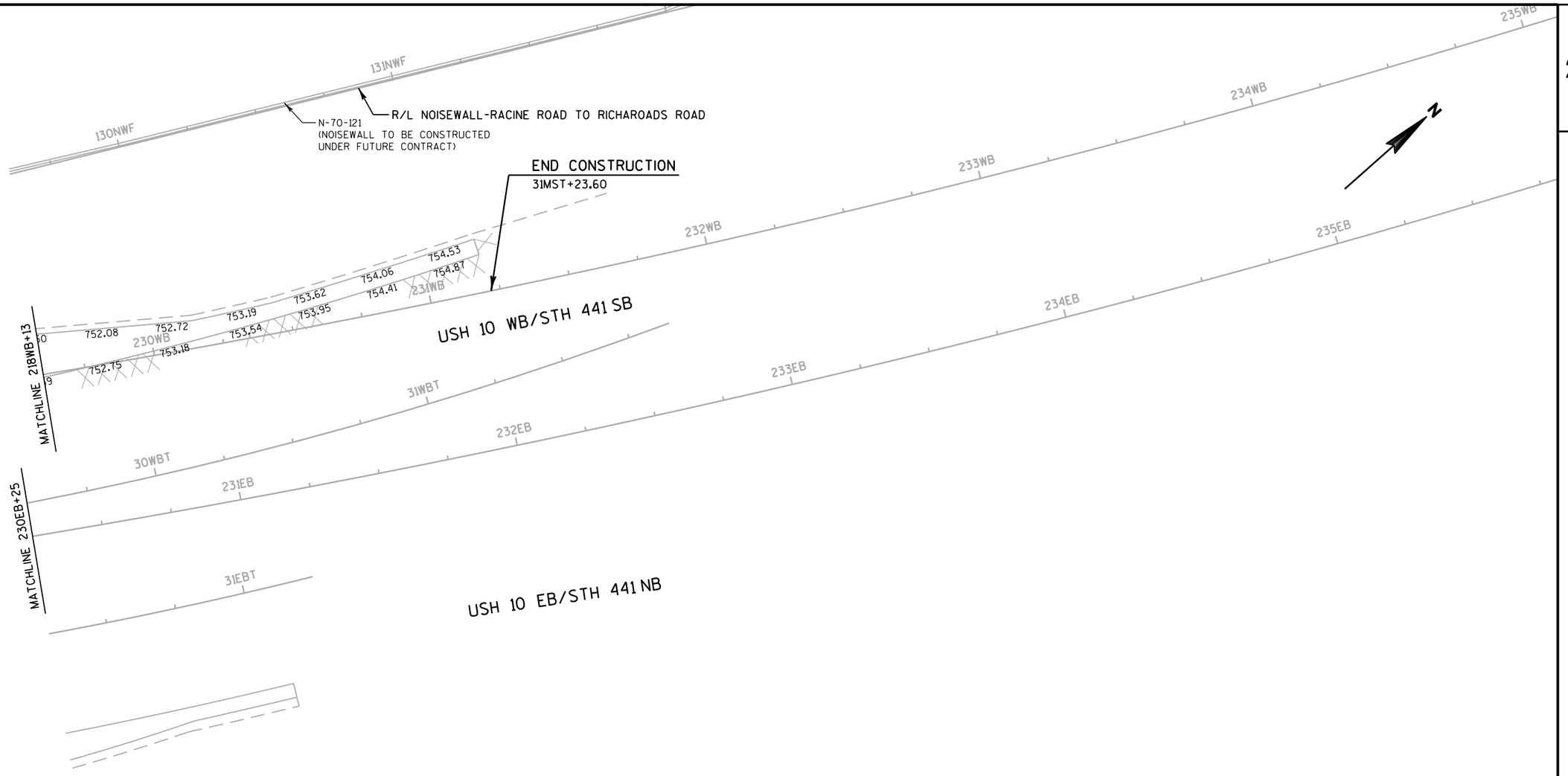


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 136	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 137	E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - USH 10 / STH 441	SHEET 138	E

2

2

N

MATCHLINE I89RNW+13

R/L RACINE ROAD NW RAMP

RACINE ROAD NE RAMP

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB
GRADES SHOWN ELSEWHERE

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

USH 10 EB/STH 441 SB
GRADES SHOWN ELSEWHERE

B-70-411

B-70-410

BEGIN CONSTRUCTION
186RNW+20.00

10

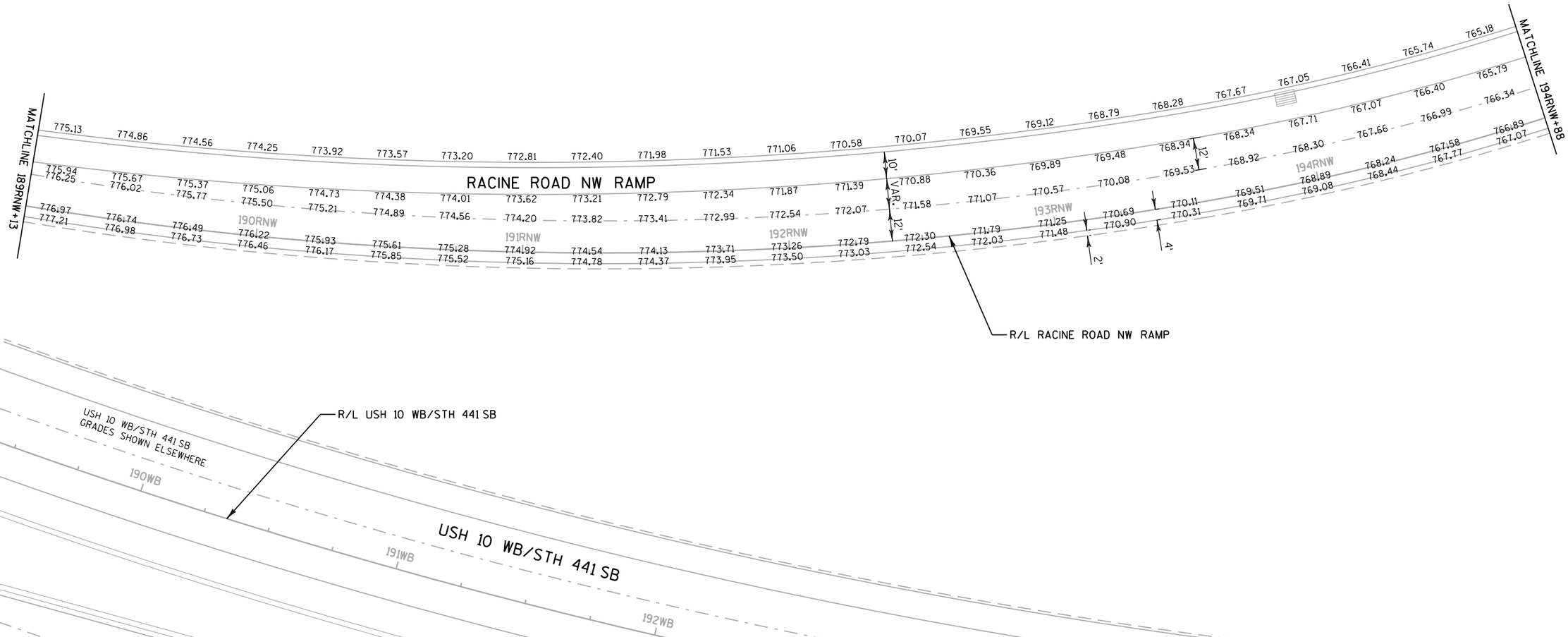
15

4

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD NW RAMP	SHEET 139 E

FILE NAME : I:\56537\1517-75-75\t1\cds\021311_gr.dgn PLOT DATE : 1/31/2015 9:34:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD NW RAMP	SHEET 140	E

2

N

R/L RACINE ROAD NW RAMP

STH 441 SB/RAMP
CONNECTOR ROUNDABOUT
GRADES SHOWN ELSEWHERE

BEGIN CONSTRUCTION
198RNE+74.20

END CONSTRUCTION
196RNW+68.29

MATCHLINE 194RNW+88

RACINE ROAD NW RAMP

R/L RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR SB
GRADES SHOWN ELSEWHERE
253CSB

RACINE ROAD CONNECTOR SB
252CSB

RACINE ROAD CONNECTOR SB
GRADES SHOWN ELSEWHERE

RACINE ROAD CONNECTOR NB

R/L RACINE ROAD CONNECTOR NB

R/L USH 10 WB/STH 441 SB RAMP ROUNDABOUT

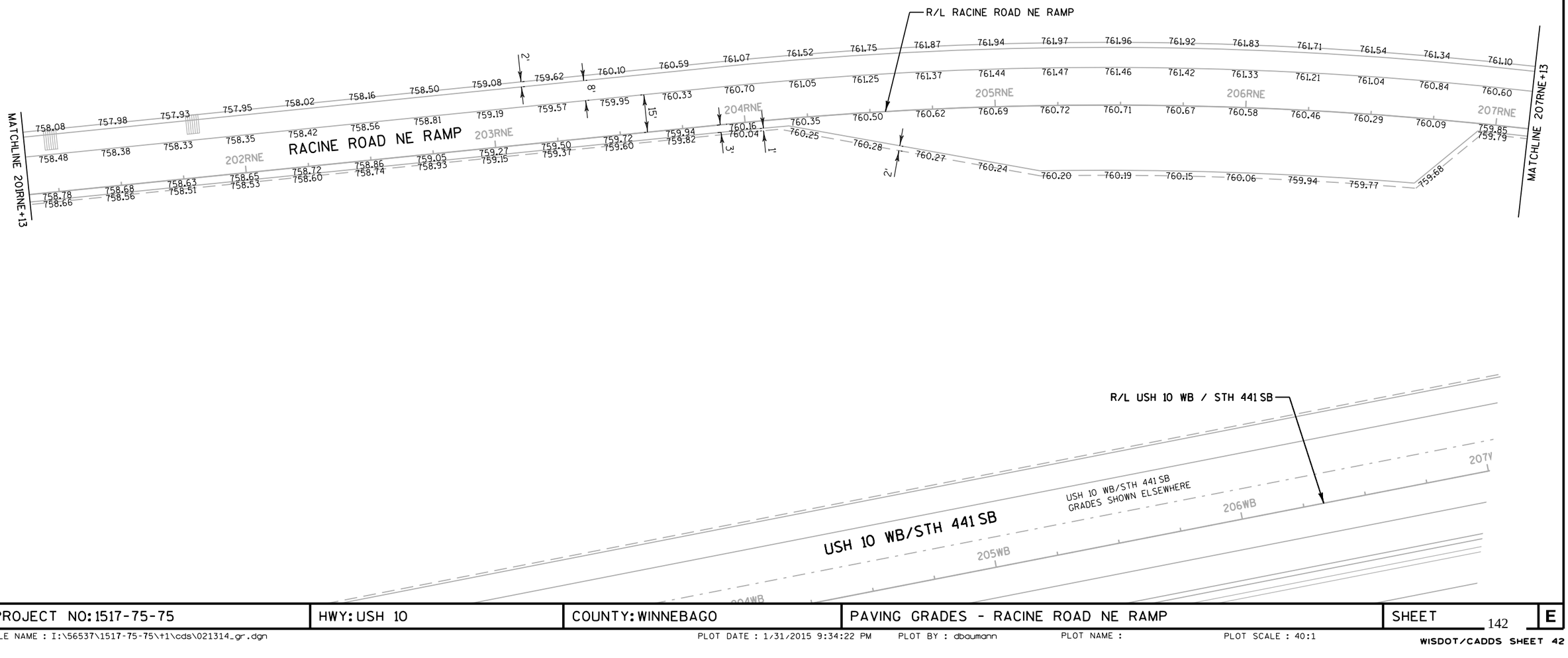
RACINE ROAD NE RAMP

R/L RACINE ROAD NE RAMP

MATCHLINE 201RNE+13

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD NW & NE RAMP	SHEET 141 E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD NE RAMP	SHEET 142	E

FILE NAME : I:\56537\1517-75-75\t1\cds\021314_gr.dgn PLOT DATE : 1/31/2015 9:34:22 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

N

MATCHLINE 207RNE+13

760.59 760.06 759.52 759.04 758.56 758.10 757.82 757.55 757.27 756.97 756.64 756.29 755.92 755.52 755.10 754.65 754.20 753.75 753.30 752.85 752.40
760.19 759.75 759.32 759.05 758.77 758.50 758.22 757.95 757.67 757.37 757.04 756.69 756.32 755.92 755.49 755.05 754.60 754.15 753.70 753.25 752.80
759.57 759.46 759.30 759.18 759.02 758.90 758.75 758.63 758.47 758.35 758.20 758.08 757.92 757.80 757.65 757.53 757.37 757.25 757.07 756.95 756.74 756.62 756.39 756.27 756.02 755.90 755.62 755.50 755.19 754.75 754.30 753.85 753.40 752.95 752.50

208RNE
RACINE ROAD NE RAMP
209RNE
210RNE
211RNE
212RNE

209NWE
210NWE
211NWE
212NWE

R/L NOISEWALL-RACINE ROAD NE RAMP TO RACINE ROAD

8'
15'
3'
1'

R/L RACINE ROAD NE RAMP

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

207WB 208WB 209WB 210WB 211WB 212WB

WB-4

USH 10 WB/STH 441 SB
GRADES SHOWN ELSEWHERE

END CONSTRUCTION
212RNE+33.28

S-70-218

208EB 209EB 210EB 211EB 212EB

EB-4

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB
GRADES SHOWN ELSEWHERE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD NE RAMP	SHEET 143 E

2

N

USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB
GRADES SHOWN ELSEWHERE

R/L RACINE ROAD NW RAMP

R/L USH 10 WB/STH 441 SB

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB
GRADES SHOWN ELSEWHERE

B-70-411

B-70-410

184RNW 185RNW 186RNW 777.97 778.01 778.62 778.83 187WB 188WB 189WB

184WB 185WB 186WB 187EB 188EB 189EB 190EB

185EB 186EB

185RSW

186RSW 783.79 784.01 784.53 784.73 785.25 785.45 785.98 786.17

187RSW 784.17 784.30 784.38 784.42 784.89 785.02 785.10 785.14 785.61 785.74 785.82 785.86 786.18 786.16 786.09 785.98

188RSW 784.17 784.20 784.23 784.41 784.40 784.39 785.13 785.09 785.01 785.85 785.79 785.63 785.82 785.61 785.38

189RSW 784.09 783.95 783.78 784.34 784.25 784.12 783.94 784.88 784.72 784.51 784.26 785.43 785.18 784.90 784.58 785.19 784.94 784.66 784.34

190RSW 783.49 783.09 782.74 782.36 783.73 783.40 783.03 782.61 783.97 783.64 783.27 782.85 784.21 783.81 783.36 782.87 783.97 783.57 783.12 782.63

4' 12' 12' 10'

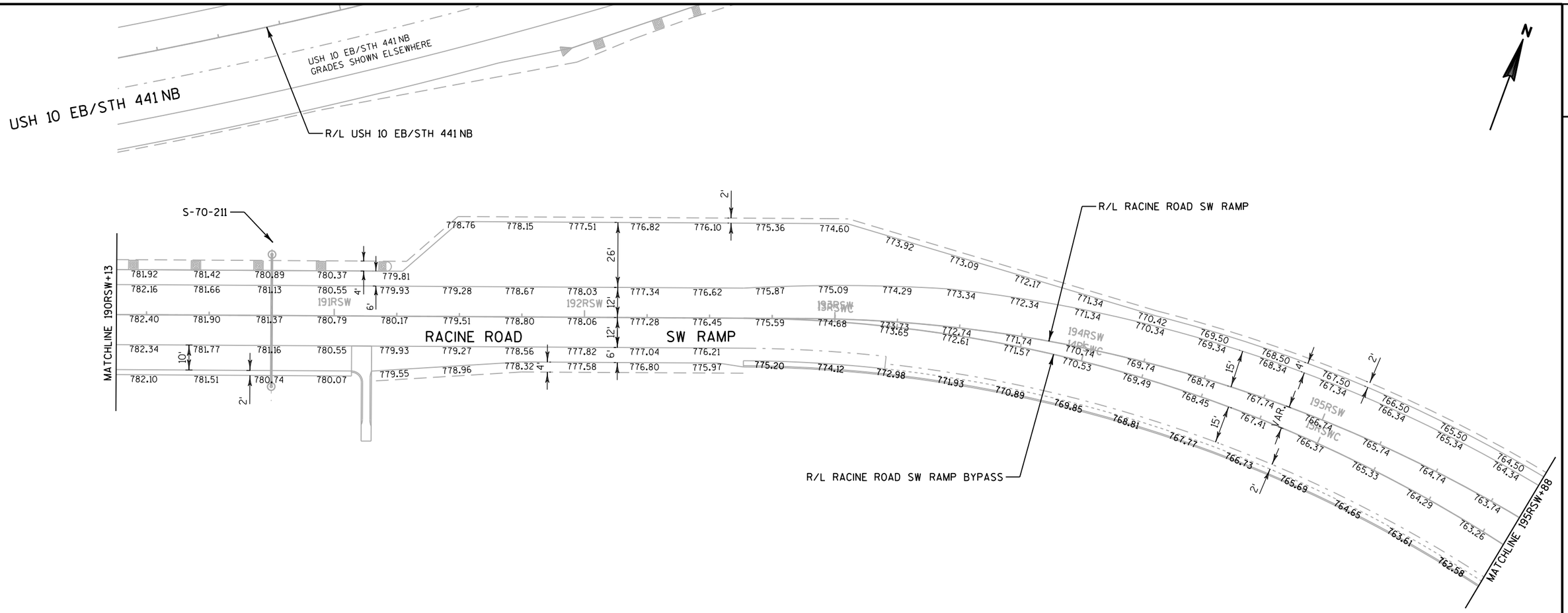
RACINE ROAD SW RAMP

MATCHLINE 190RSW+13

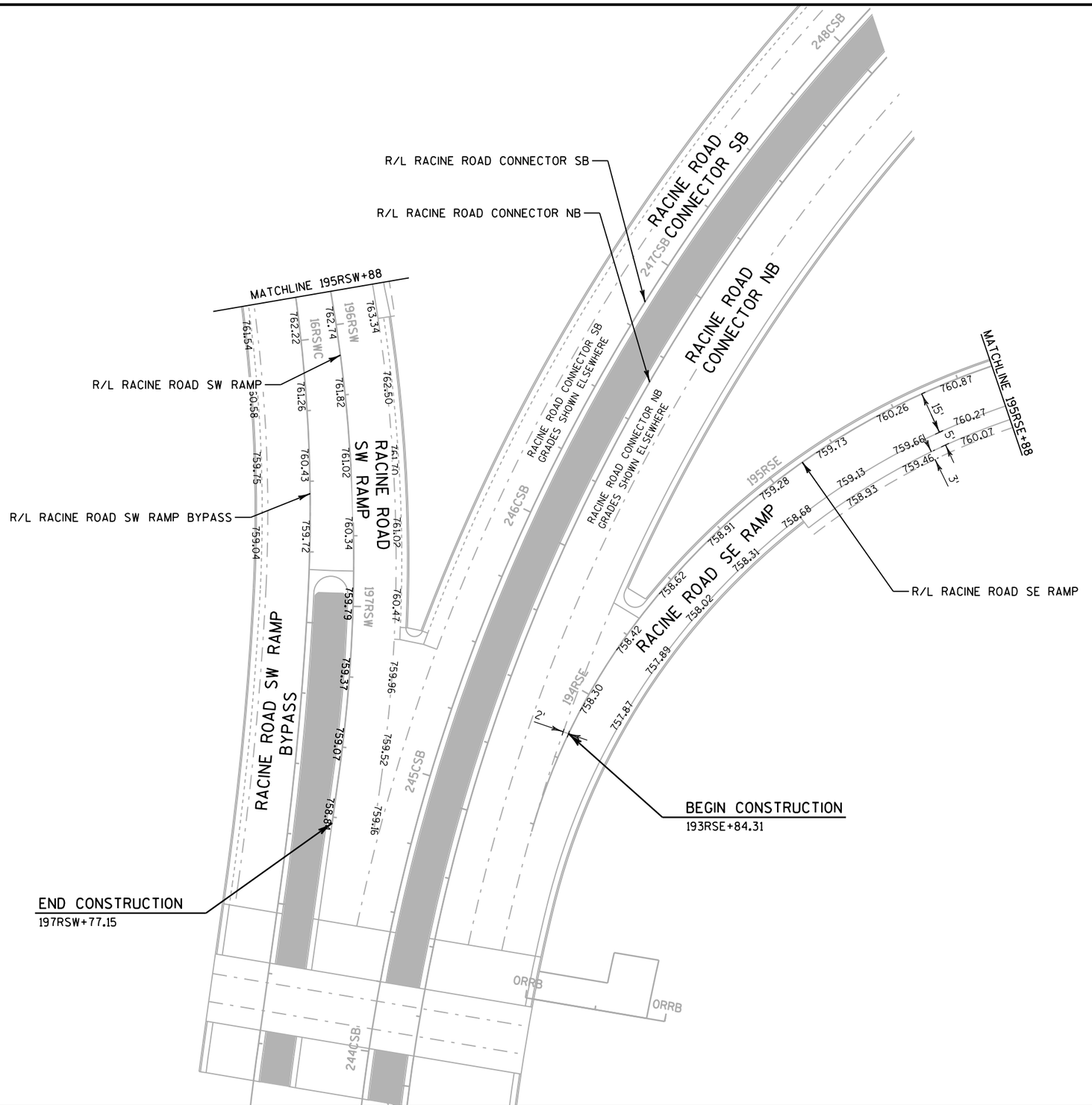
BEGIN CONSTRUCTION
185RSW+92.30

R/L RACINE ROAD SW RAMP

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD SW RAMP	SHEET 144	E

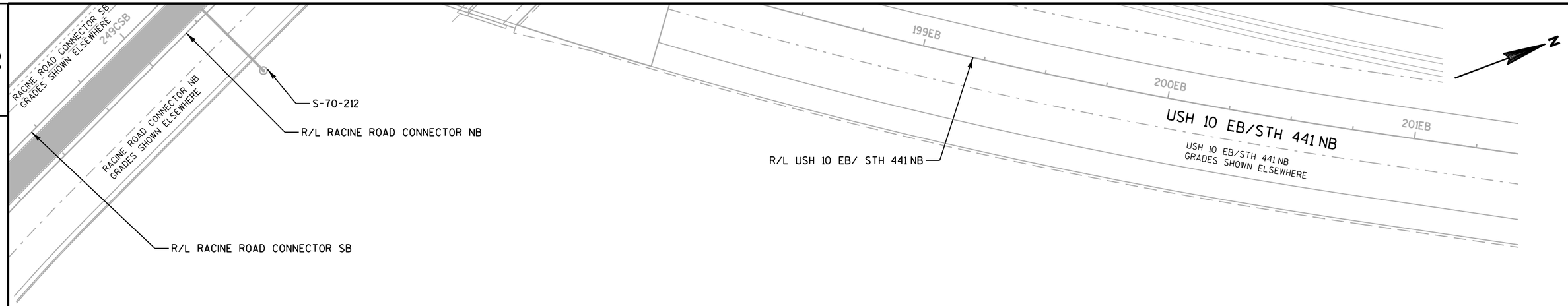

USH 10 EB/STH 441 NB
USH 10 EB/STH 441 NB
GRADES SHOWN ELSEWHERE
R/L USH 10 EB/STH 441 NB
N
S-70-211
MATCHLINE 190RSW+13
781.92
781.42
780.89
780.37
779.81
782.16
781.66
781.13
780.55
779.93
191RSW
782.40
781.90
781.37
780.79
780.17
782.34
781.77
781.16
780.55
779.93
782.10
781.51
780.74
780.07
779.55
778.76
778.15
777.51
776.82
776.10
775.36
774.60
779.28
778.67
778.03
777.34
776.62
775.87
775.09
774.29
779.27
778.56
777.82
777.04
776.21
778.96
778.32
777.58
776.80
775.97
192RSW
RACINE ROAD
SW RAMP
26'
12'
12'
6'
4'
6'
4'
10'
2'
2'
2'
R/L RACINE ROAD SW RAMP
R/L RACINE ROAD SW RAMP BYPASS
773.92
773.09
772.17
771.34
770.42
769.50
768.50
767.50
766.50
765.50
764.50
773.34
772.34
771.34
770.34
769.34
768.34
767.34
766.34
765.34
764.34
773.65
772.74
771.74
770.74
769.74
768.74
767.74
766.74
765.74
764.74
763.74
772.61
771.57
770.53
769.49
768.45
767.41
766.37
765.33
764.29
763.26
775.20
774.12
772.98
771.93
770.89
769.85
768.81
767.77
766.73
765.69
764.65
763.61
762.58
193RSW
194RSW
195RSW
15'
15'
VAR.
4'
2'
2'
MATCHLINE 195RSW+88

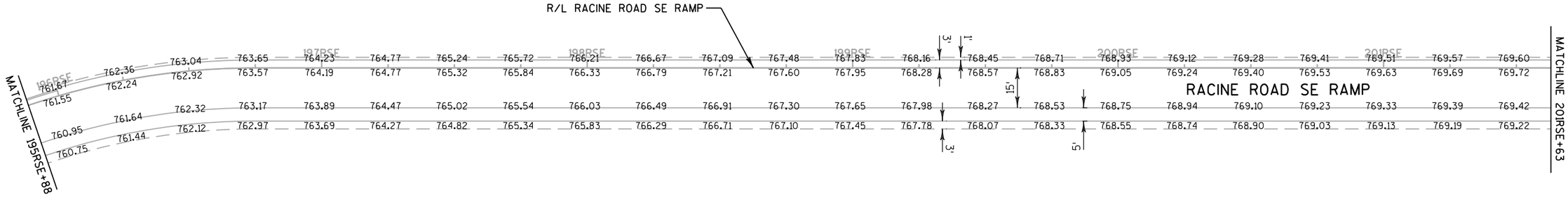
2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD SW & SE RAMP	SHEET 146	E

2





PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD SE RAMP	SHEET 147	E

2

N

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

201WB 202WB 203WB 204WB 205WB 206WB

USH 10 WB/STH 441 SB
GRADES SHOWN ELSEWHERE

202EB 203EB 204EB 205EB 206EB 207EB

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

USH 10 EB/STH 441 WB
GRADES SHOWN ELSEWHERE

MATCHLINE 20IRSE+63

R/L RACINE ROAD SE RAMP

RACINE ROAD SE RAMP

202RSE 203RSE 204RSE 205RSE 206RSE

769.59 769.71 769.56 769.68 769.49 769.61 769.39 769.51 769.25 769.37 769.09 769.21 768.89 769.01 768.65 768.77 768.39 768.51 768.09 768.21 767.76 767.88 767.43 767.52 767.05 767.12 766.63 766.69 766.17 766.23 765.68 765.74 765.15 765.21 764.59 764.65 764.00 764.06 763.38 763.44 762.72 762.78 762.06 762.09 761.41

769.41 769.21 769.38 769.18 769.31 769.11 769.21 769.01 769.07 768.87 768.91 768.71 768.71 768.51 768.47 768.27 768.21 768.01 767.91 767.71 767.58 767.38 767.22 767.02 766.82 766.62 766.39 766.19 765.93 765.73 765.33 765.13 764.66 764.46 763.97 763.74 763.25 762.98 762.63 762.28 761.97 761.53 761.28 760.77 760.60 760.08

3' 1' 3' 15' 3' 5' 10'

MATCHLINE 20TRSE+38

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD SE RAMP	SHEET 148	E

2

R/L USH 10 WB/STH 441 SB

R/L RACINE ROAD NE RAMP

USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB
GRADES SHOWN ELSEWHERE

RACINE ROAD NE RAMP

207WB 208WB 209WB 210WB 211WB 212WB

WB-4

208EB 209EB 210EB 211EB 212EB 213EB

EB-4

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB
GRADES SHOWN ELSEWHERE

S-70-217

S-70-218

END CONSTRUCTION
212RSE+77.98

MATCHLINE 207RSE+38

208RSE 209RSE 210RSE 211RSE 212RSE 213RSE

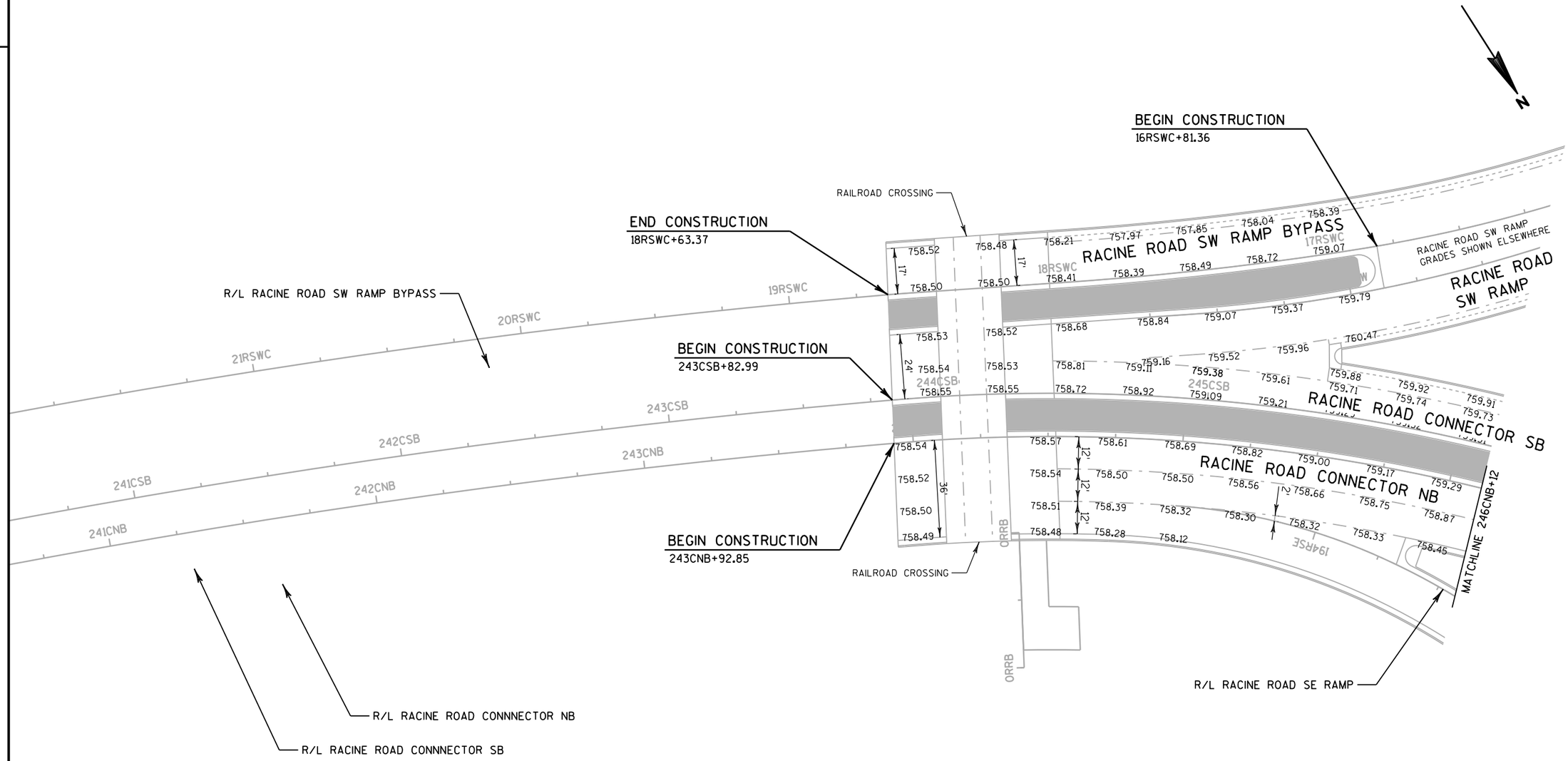
RACINE ROAD SE RAMP

R/L RACINE ROAD SE RAMP

209RNE 210RNE 211RNE 212NE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD SE RAMP	SHEET 149 E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD CONNECTOR	SHEET 150	E

2

RACINE ROAD SW RAMP

RACINE ROAD SW RAMP GRADES SHOWN ELSEWHERE

16RSWC

196RSW

195RSE

R/L RACINE ROAD SW RAMP BYPASS

R/L RACINE ROAD SW RAMP

USH 10 EB / STH 441 NB

USH 10 EB/STH 441 NB GRADES SHOWN ELSEWHERE

195EB

USH 10 WB / STH 441 SB

USH 10 WB/STH 441 SB GRADES SHOWN ELSEWHERE

195WB

196EB

R/L RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB

247CSB

248CSB

250CSB

251CSB

196WB

RACINE ROAD CONNECTOR NB

R/L RACINE ROAD CONNECTOR NB

MATCHLINE 246CNB+12

MATCHLINE 251CNB+50

S-70-212

197EB

197WB

198EB

RACINE ROAD SE RAMP

RACINE ROAD SE RAMP GRADES SHOWN ELSEWHERE

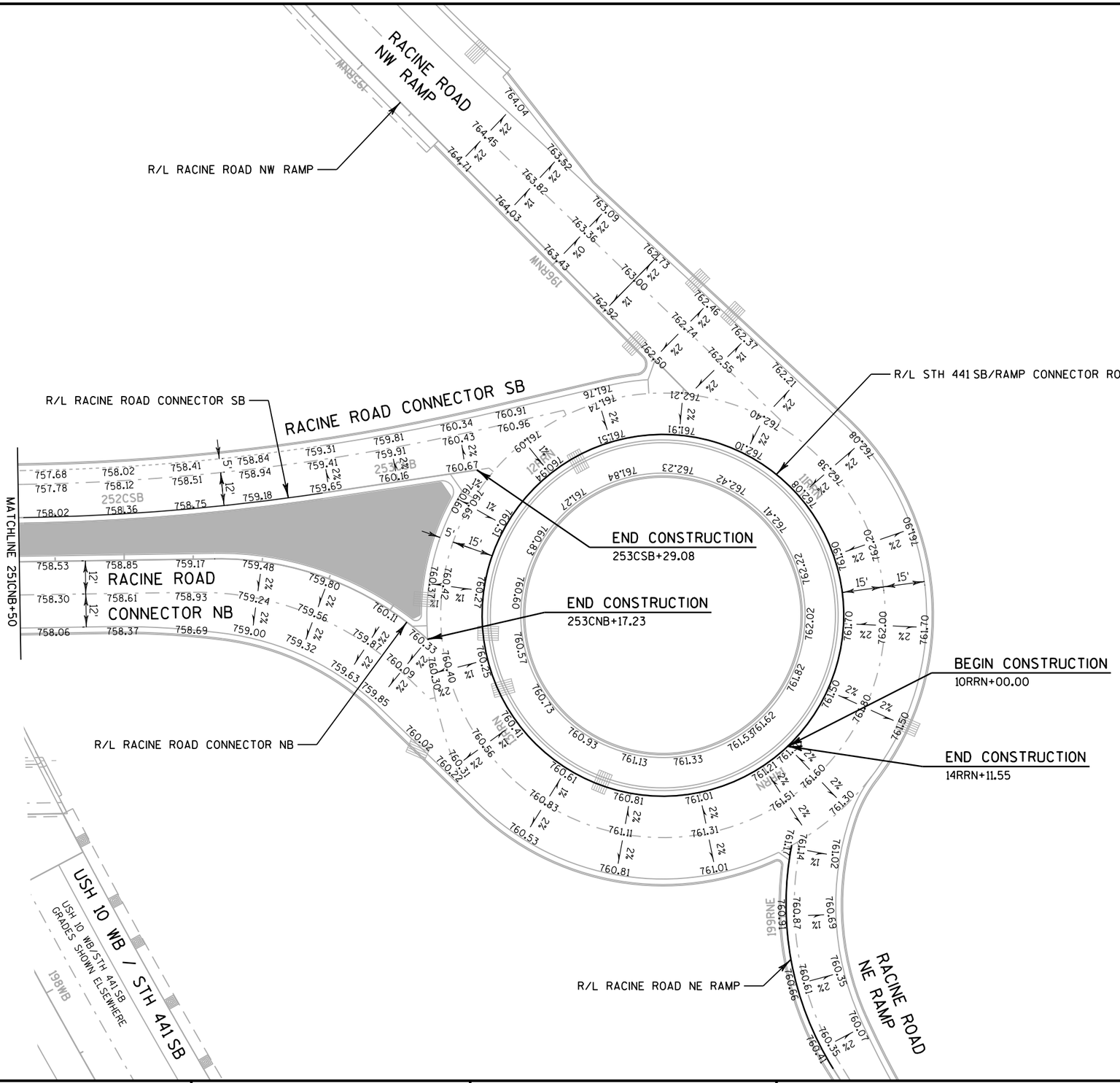
195RSE

196RSE

197RSE

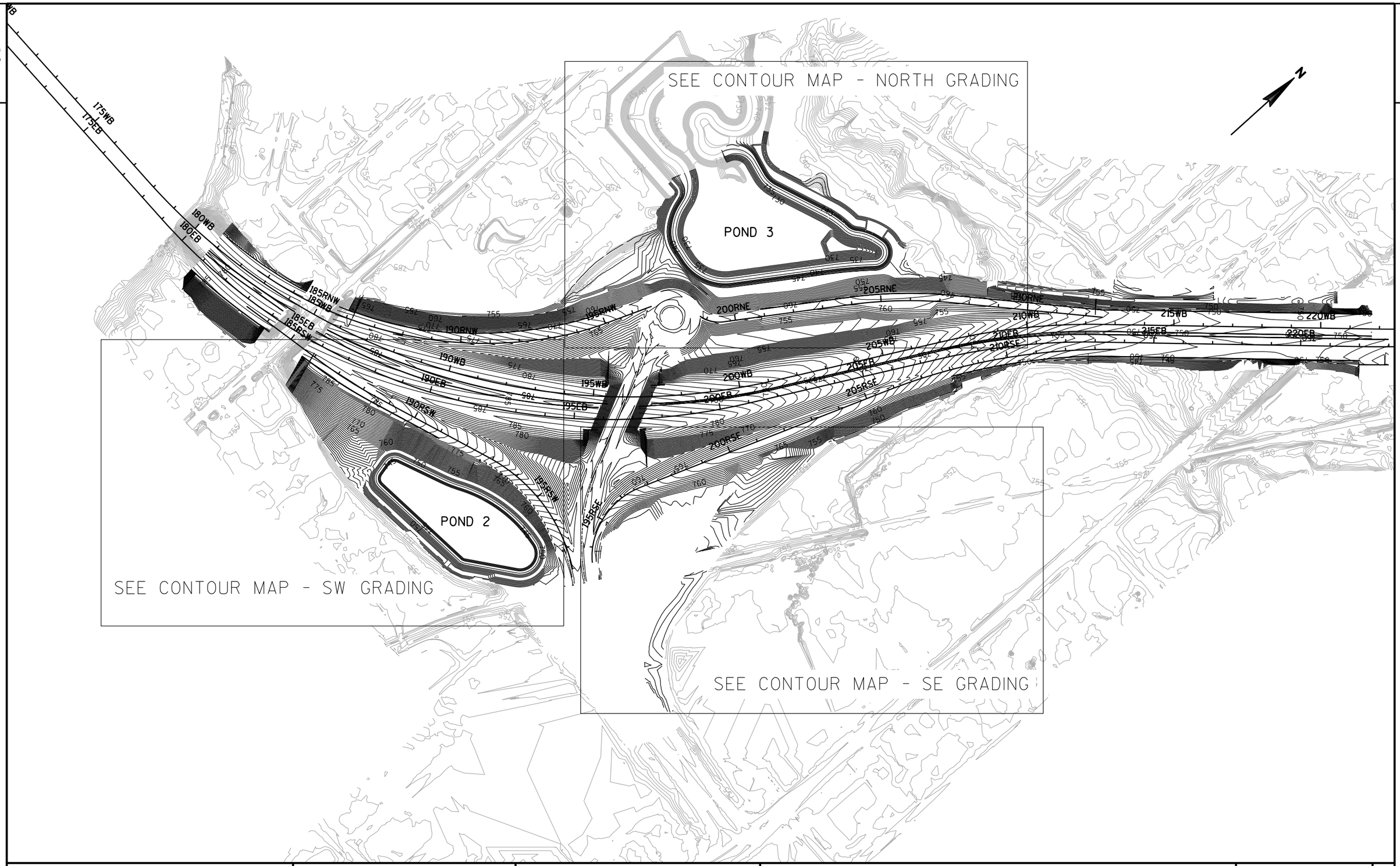
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD CONNECTOR	SHEET 151	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVING GRADES - RACINE ROAD CONNECTOR	SHEET 152	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CONTOUR MAP OVERVIEW	SHEET 153	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CONTOUR MAP - SW GRADING	SHEET 154	E

2

RACINE RD RAMP CONNECTOR SB

RACINE RD SE RAMP

R/L RACINE RD SE RAMP

SLOPE INTERCEPTS (TYP)

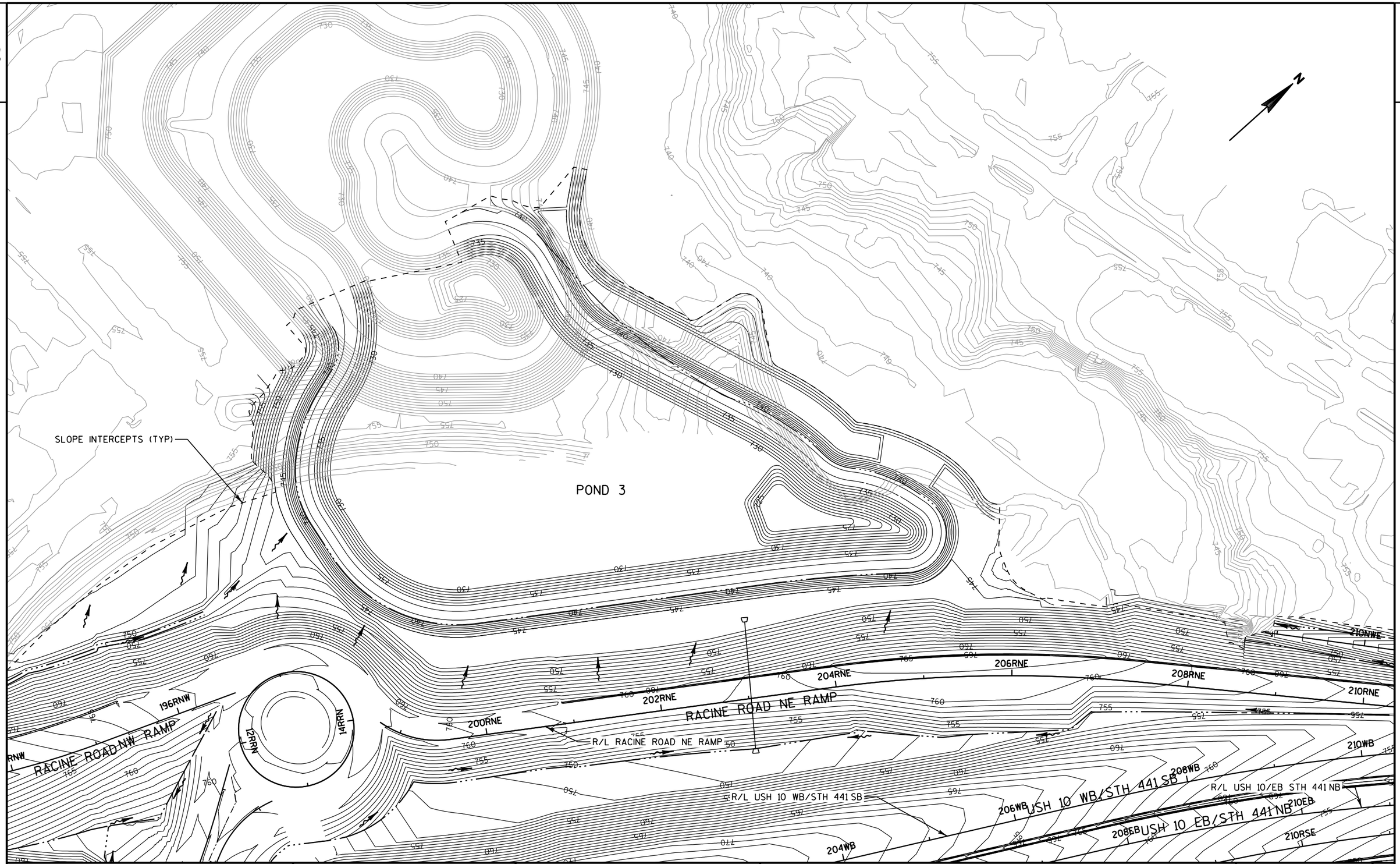
WISCONSIN CENTRAL LTD

R/L RACINE RD RAMP CONNECTOR SB

R/L RACINE RD RAMP CONNECTOR NB

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CONTOUR MAP - SE GRADING	SHEET 155	E

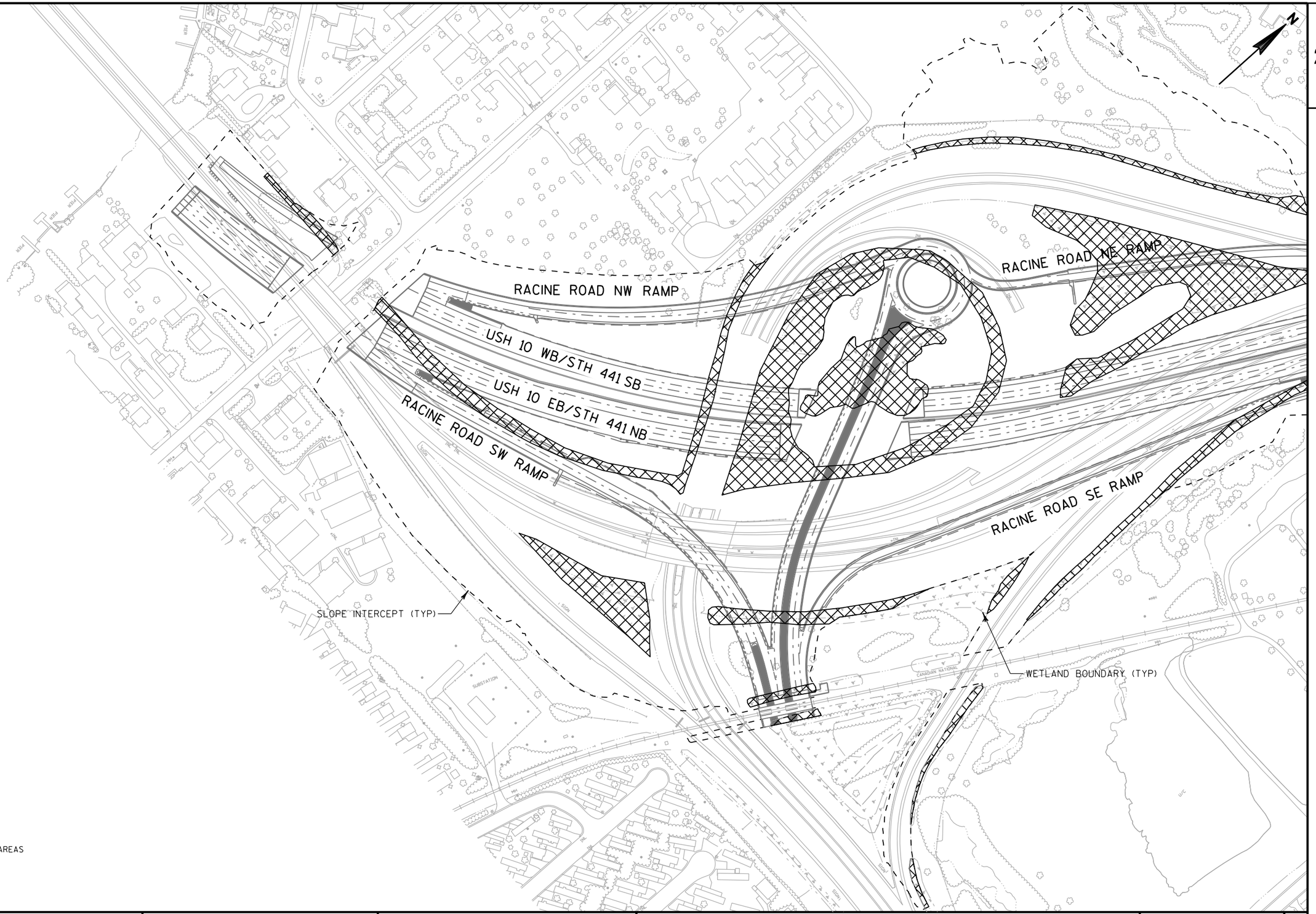
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CONTOUR MAP - NORTH GRADING	SHEET	E

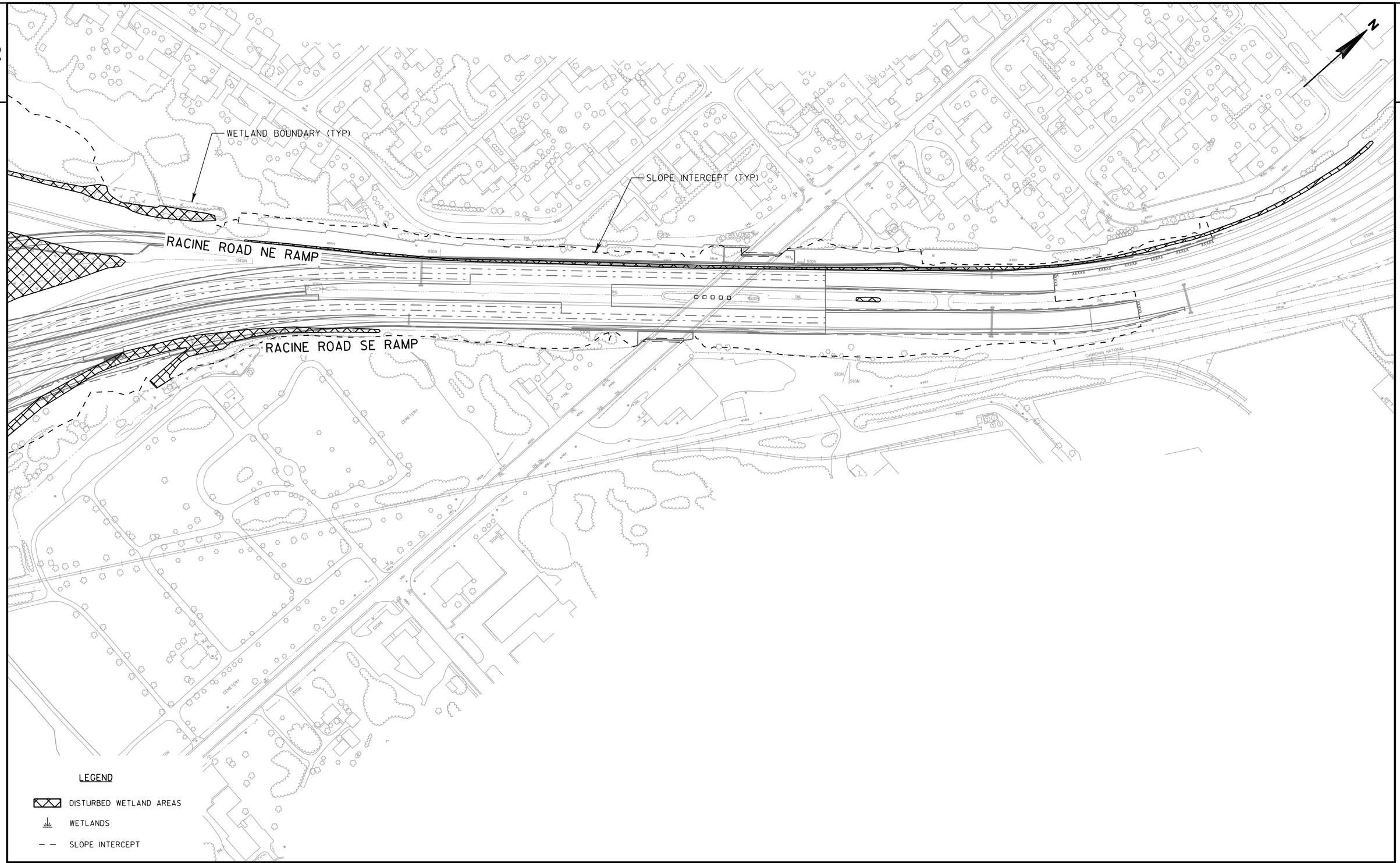
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2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	DISTURBED WETLAND AREAS	SHEET 157	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	DISTURBED WETLAND AREAS	SHEET 158	E

2

2

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

191EB

192EB

193EB

194EB

195EB

196EB

193WB

194WB

195WB

R/L USH 10 EB/STH 441 NB

R/L USH 10 WB/STH 441 SB

N

191RSW

192RSW RACINE ROAD SW RAMP

193RSW

194RSW

195RSW

R/L RACINE ROAD SW RAMP

PURPLE LOOSESTRIFE

PURPLE LOOSESTRIFE

PURPLE LOOSESTRIFE

RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB

249CSB

249CNB

248CSB

248CNB

R/L RACINE RD CONNECTOR SB

R/L RACINE RD CONNECTOR NB

INL

W

LEGEND

PHRAGMITES

PURPLE LOOSESTRIFE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	INVASIVE SPECIES	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\021900_is.dgn PLOT DATE : 1/26/2015 9:04:33 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

2

USH 10 EB/STH 441 NB

N

203RSE

202RSE

201RSE

200RSE

199RSE

198RSE

197RSE

RACINE ROAD SE RAMP

R/L RACINE ROAD SE RAMP

INL

INL

SIGN

MH

PHRAGMITES

LEGEND

PHRAGMITES

PURPLE LOOSESTRIFE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	INVASIVE SPECIES	SHEET 160	E

2

2

N

R/L USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

207WB 208WB 209WB 210WB 211WB 212WB

211RNE 212RNE

R/L RACINE RD NE RAMP

R/L USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

208EB 209EB 210EB 211EB 212EB 213EB

208RSE 209RSE 210RSE 211RSE 212RSE 213RSE

RACINE ROAD SE RAMP

PURPLE LOOSESTRIFE

R/L RACINE RD SE RAMP

LEGEND

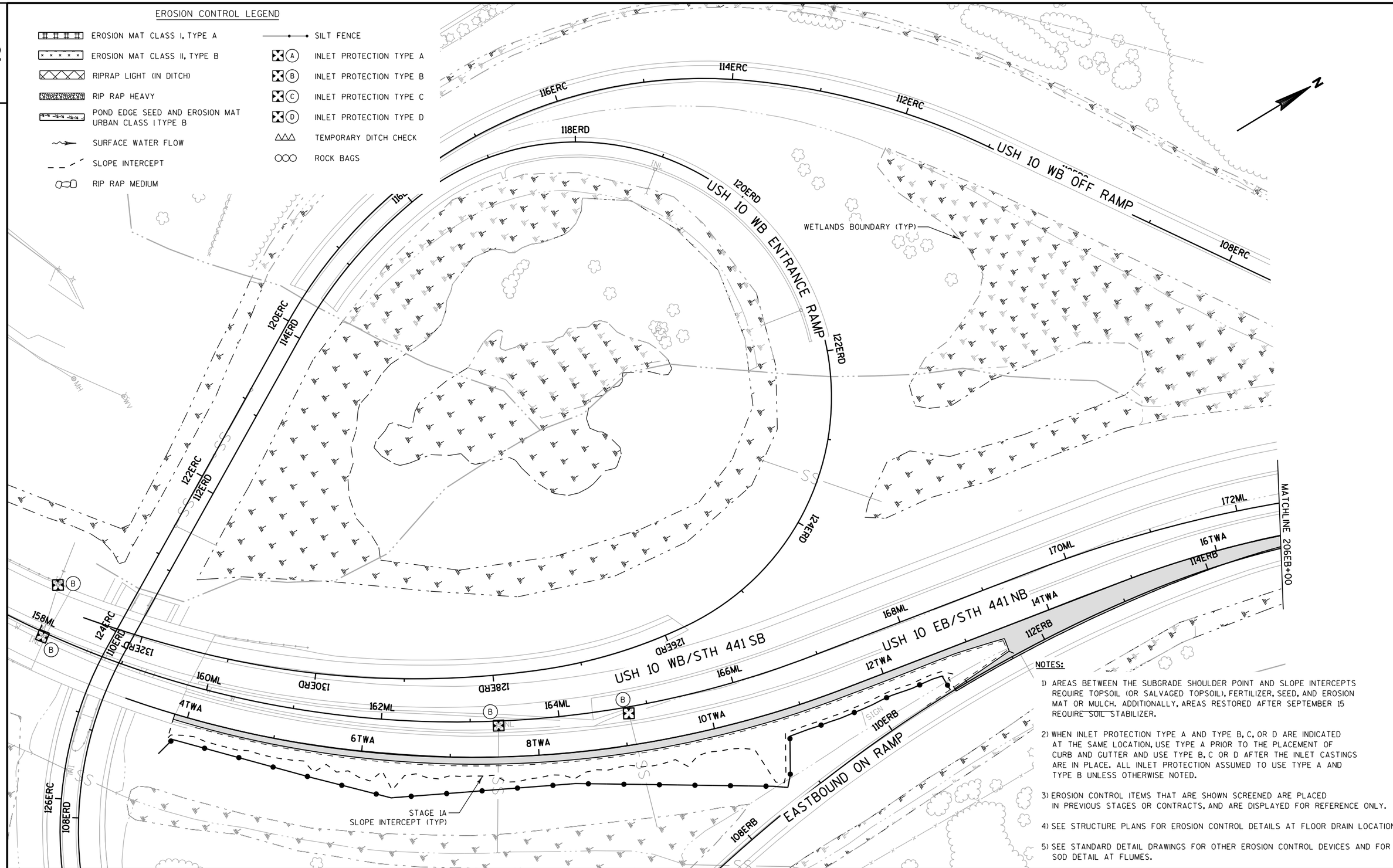
PHRAGMITES

PURPLE LOOSESTRIFE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	INVASIVE SPECIES	SHEET 161	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

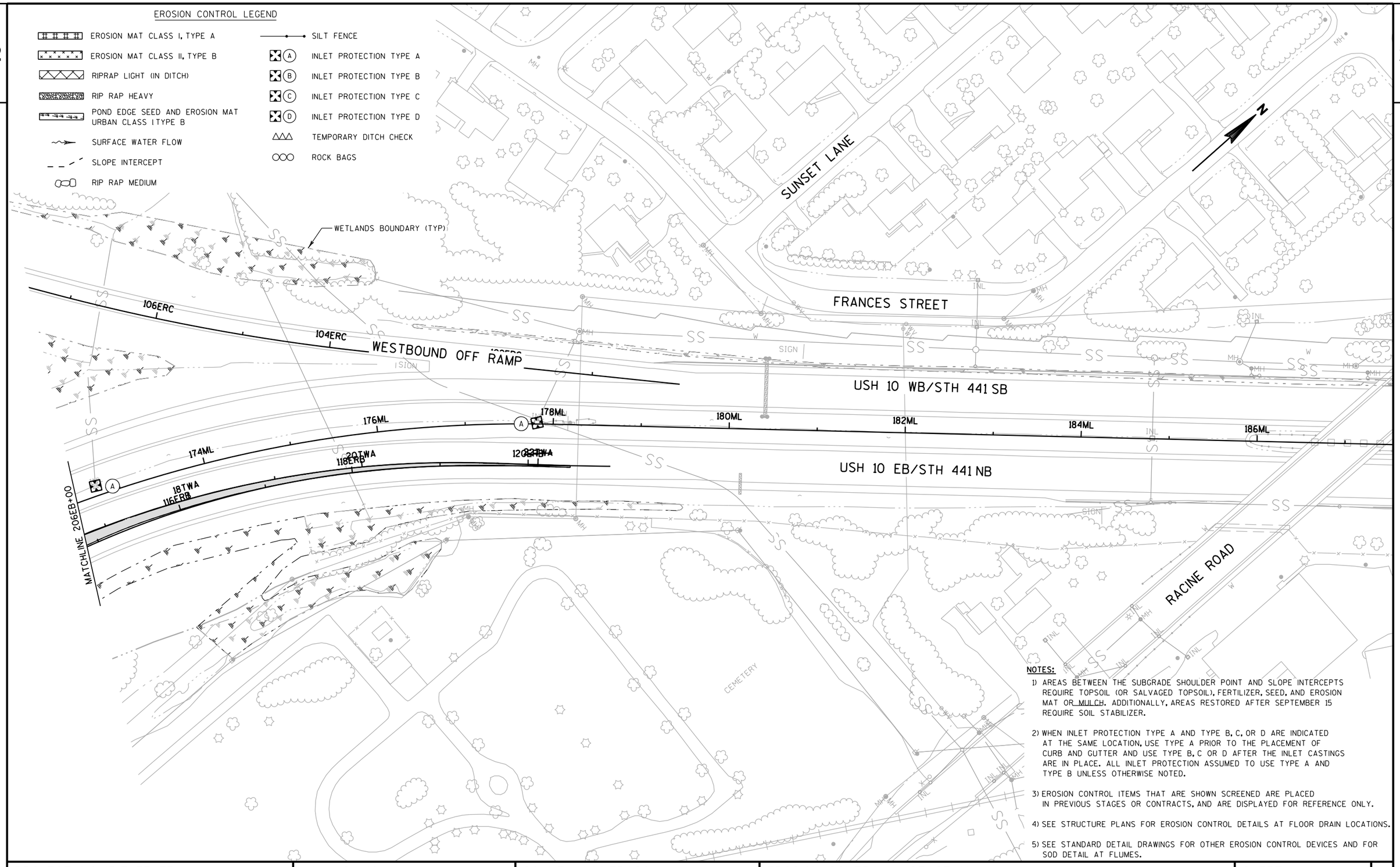
4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 1A	SHEET 162	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

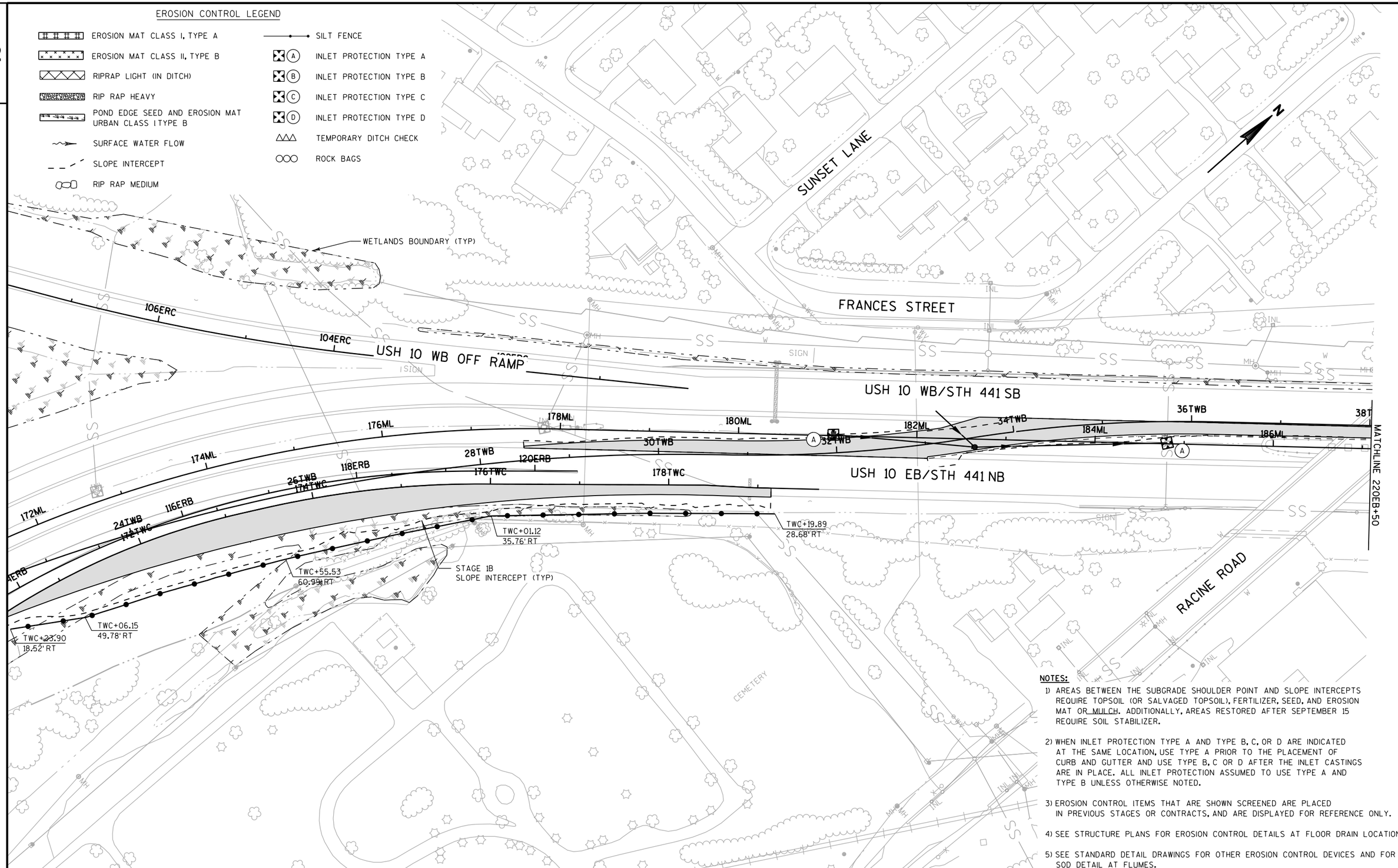
4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 1A	SHEET 163	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

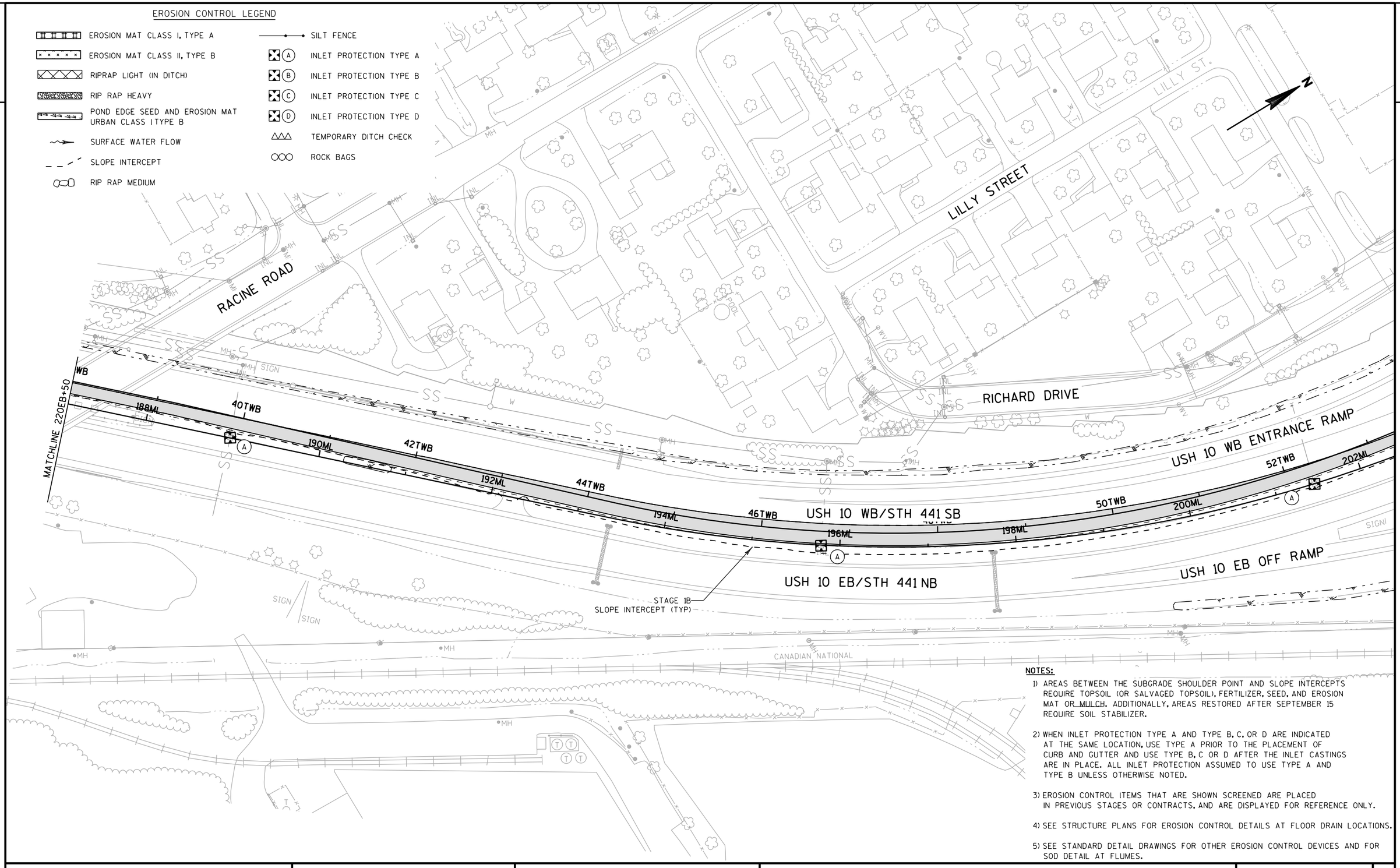
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 1B	SHEET	E

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WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 1B	SHEET 165	E

NOTES:

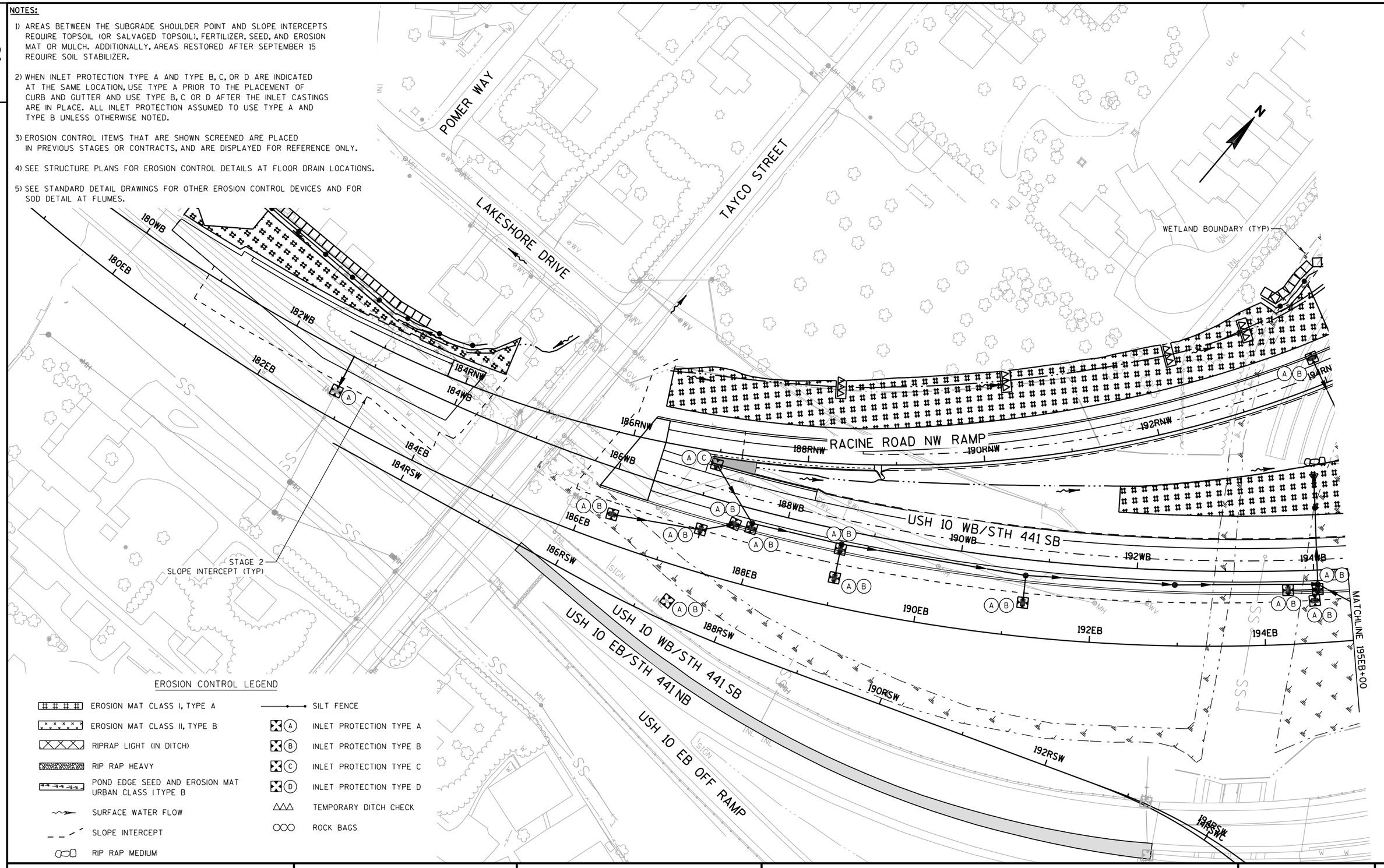
1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.



EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS ITYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE B
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 2A	SHEET 166 E

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS ITYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

WETLANDS BOUNDARY (TYP)

SEE POND DETAILS - EROSION CONTROL FOR DETAILS

RACINE ROAD CONNECTOR

RACINE ROAD NE RAMP

USH 10 WB/STH 441 SB

MATCHLINE 195EB+00

MATCHLINE 209EB+00

STAGE 2
SLOPE INTERCEPT (TYP)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 2A	SHEET E

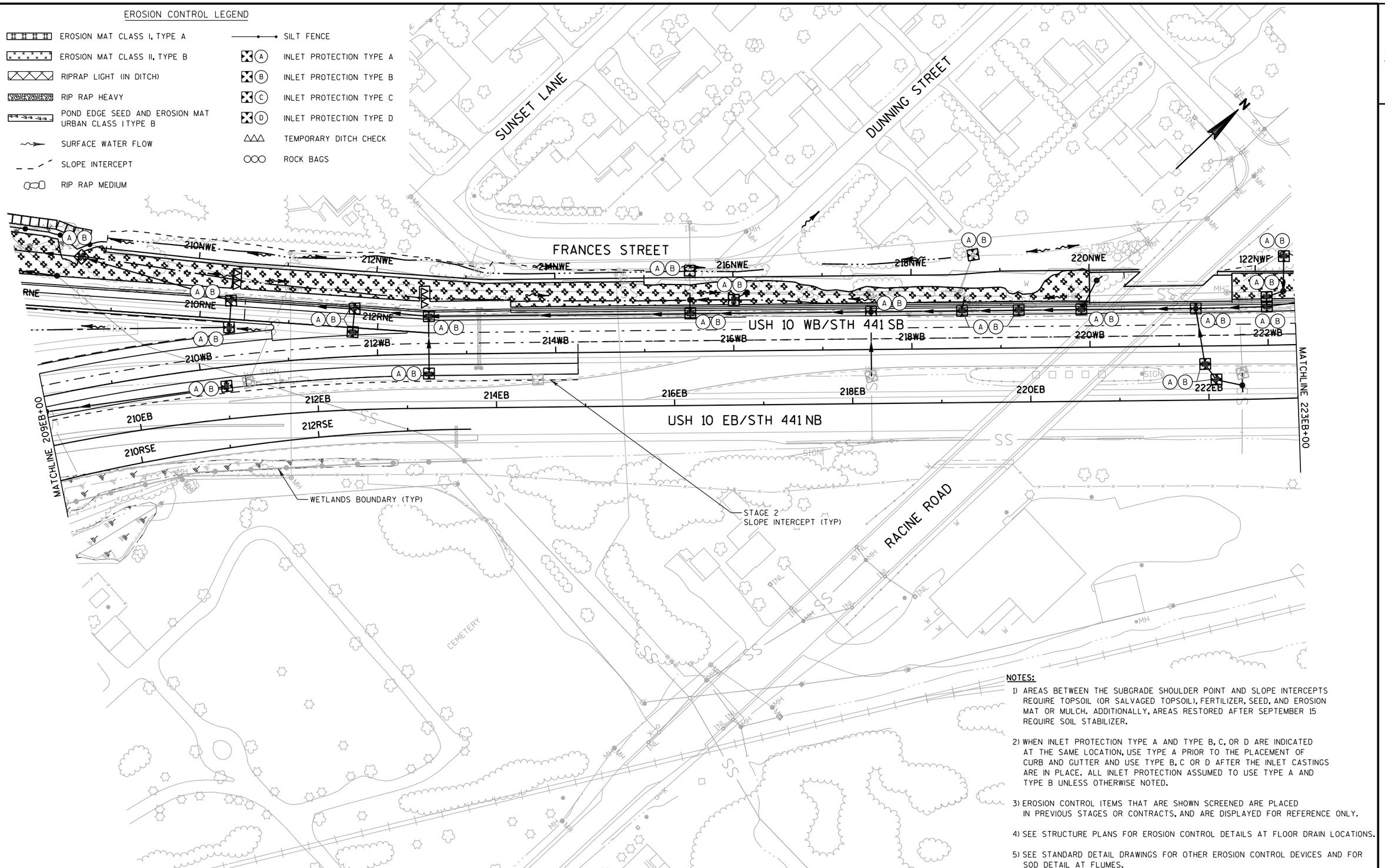
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WISDOT/CADDS SHEET 42

2

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

2) 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.

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

4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

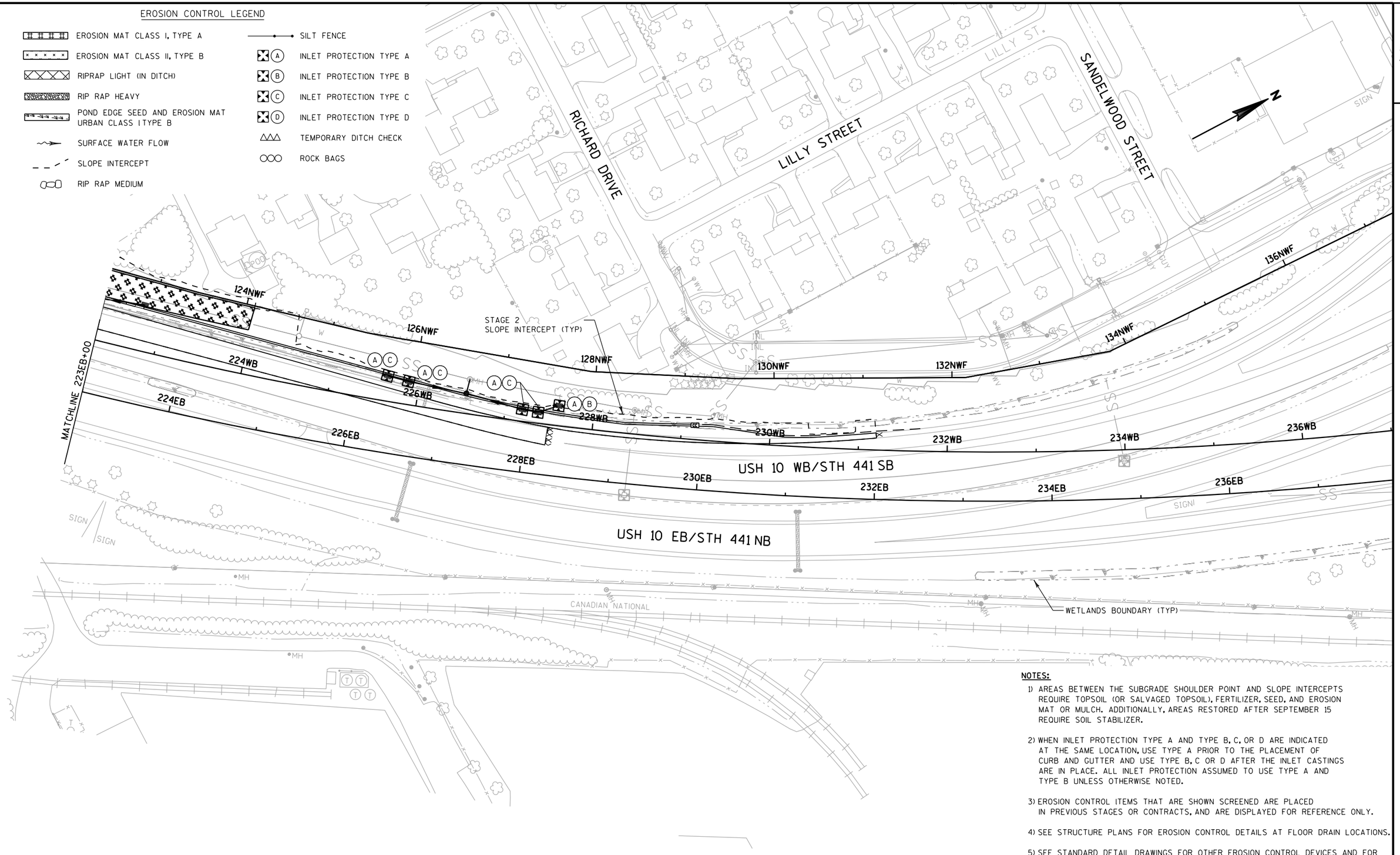
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 2A	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\022007_ec_s2A.dgn PLOT DATE : 4/26/2015 9:40:45 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

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4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 2A	SHEET 169	E

NOTES:

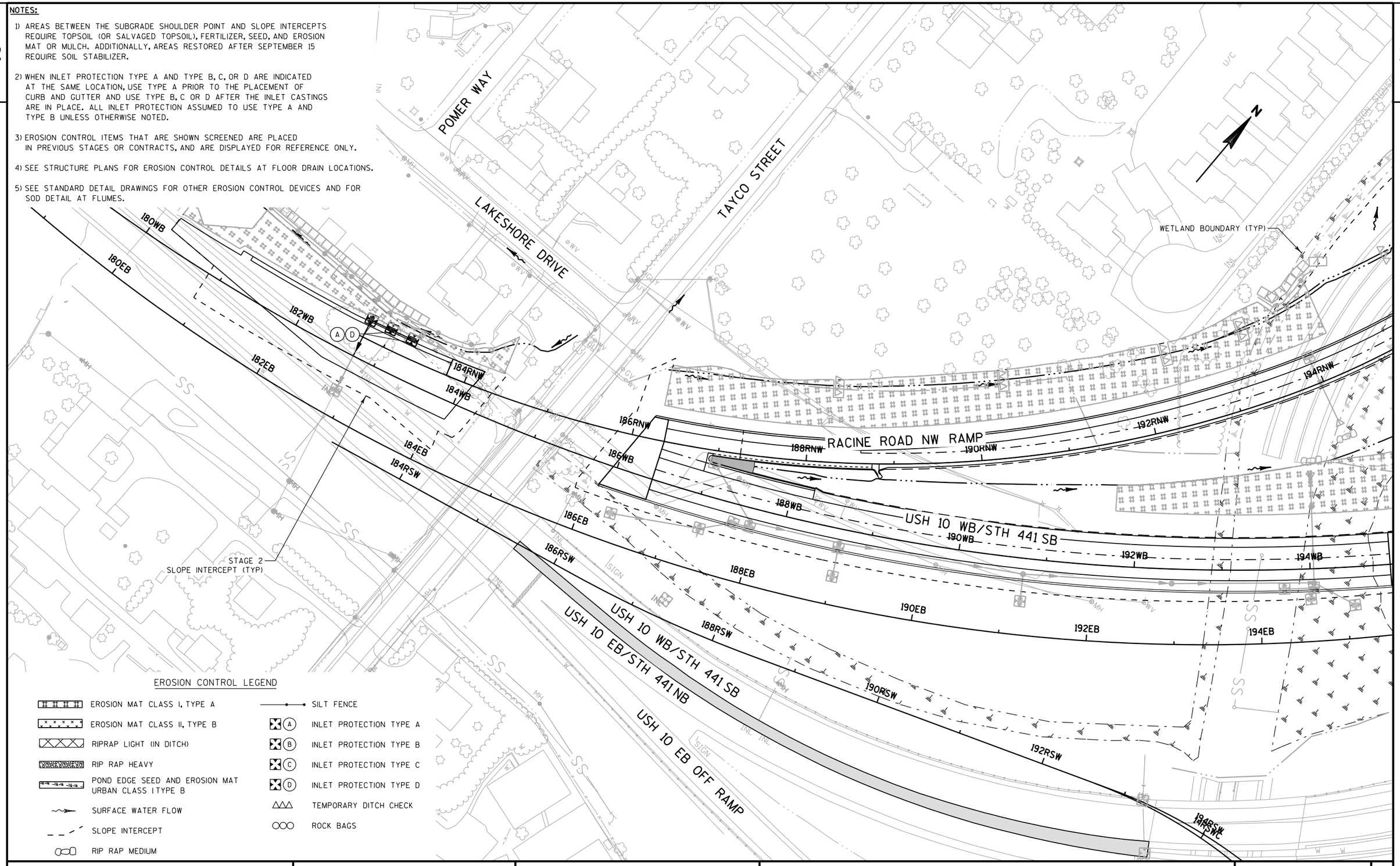
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5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.



EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

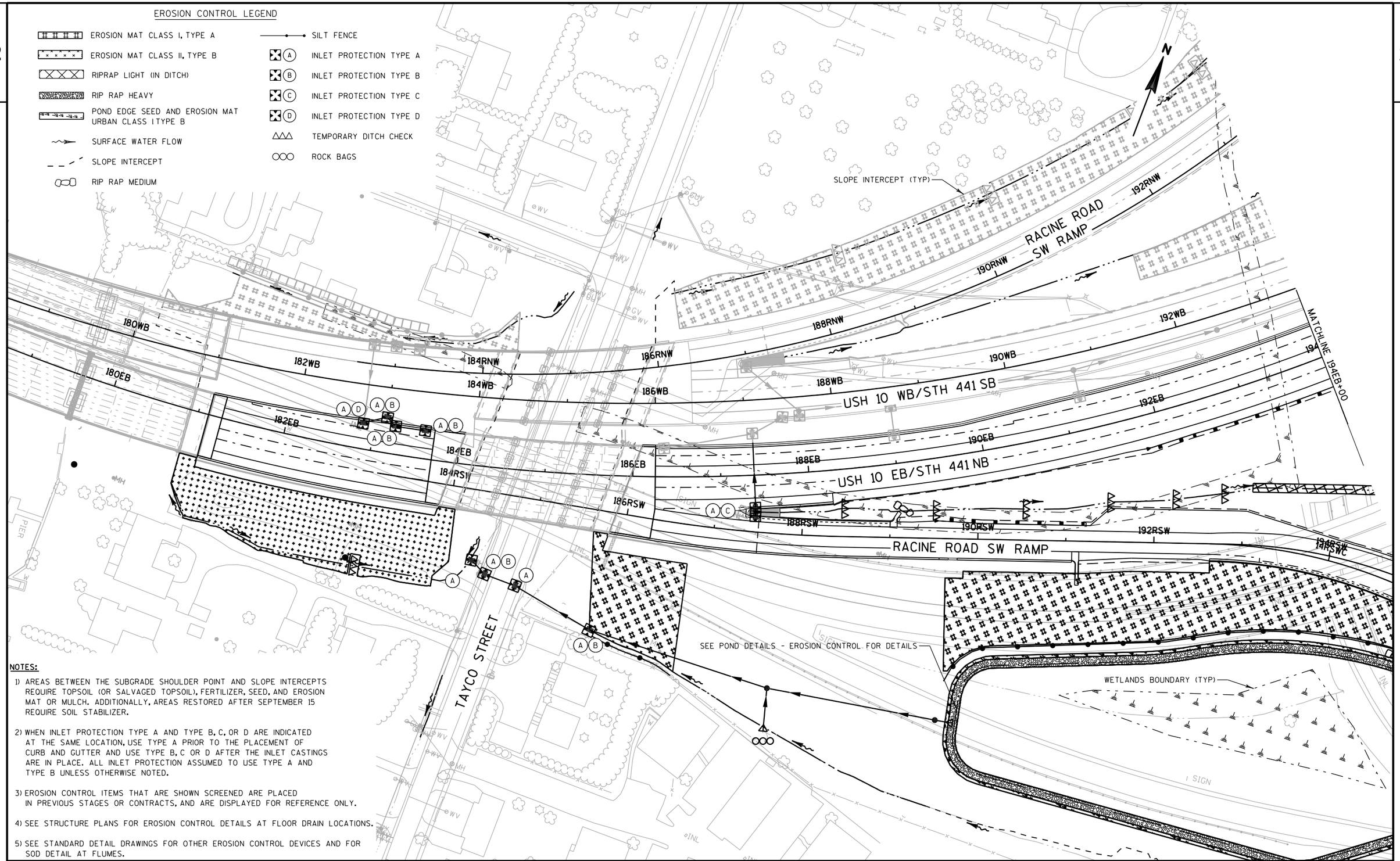
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 2C	SHEET 170 E

2

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

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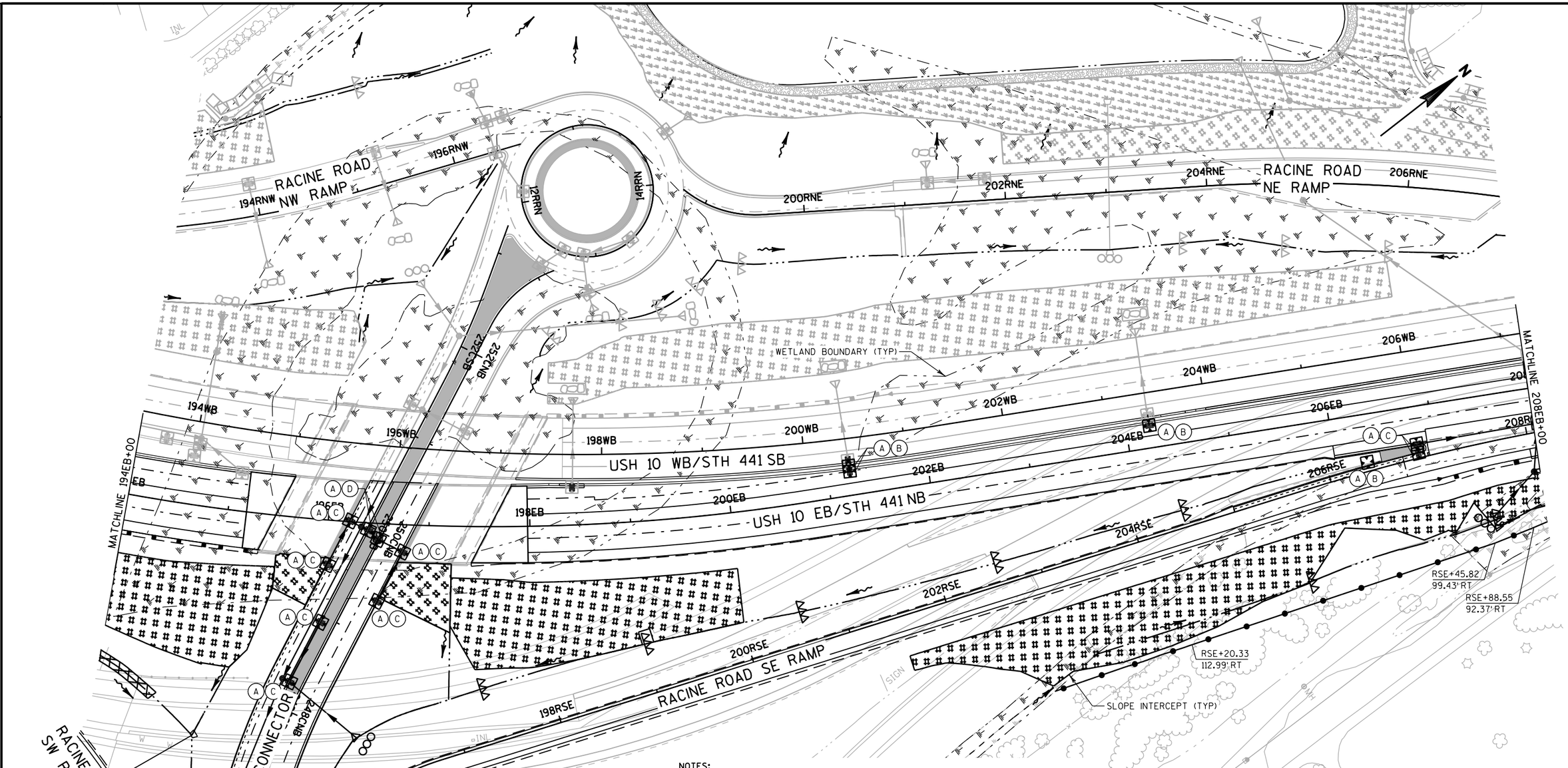
4) SEE STRUCTURE PLANS FOR EROSION CONTROL DETAILS AT FLOOR DRAIN LOCATIONS.

5) SEE STANDARD DETAIL DRAWINGS FOR OTHER EROSION CONTROL DEVICES AND FOR SOD DETAIL AT FLUMES.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 3A	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\022009_ec_s3A.dgn PLOT DATE : 4/8/2015 2:17:29 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2



NOTES:

1) AREAS BETWEEN THE SUBGRADE SHOULDER POINT AND SLOPE INTERCEPTS REQUIRE TOPSOIL (OR SALVAGED TOPSOIL), FERTILIZER, SEED, AND EROSION MAT OR MULCH. ADDITIONALLY, AREAS RESTORED AFTER SEPTEMBER 15 REQUIRE SOIL STABILIZER.

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EROSION CONTROL LEGEND

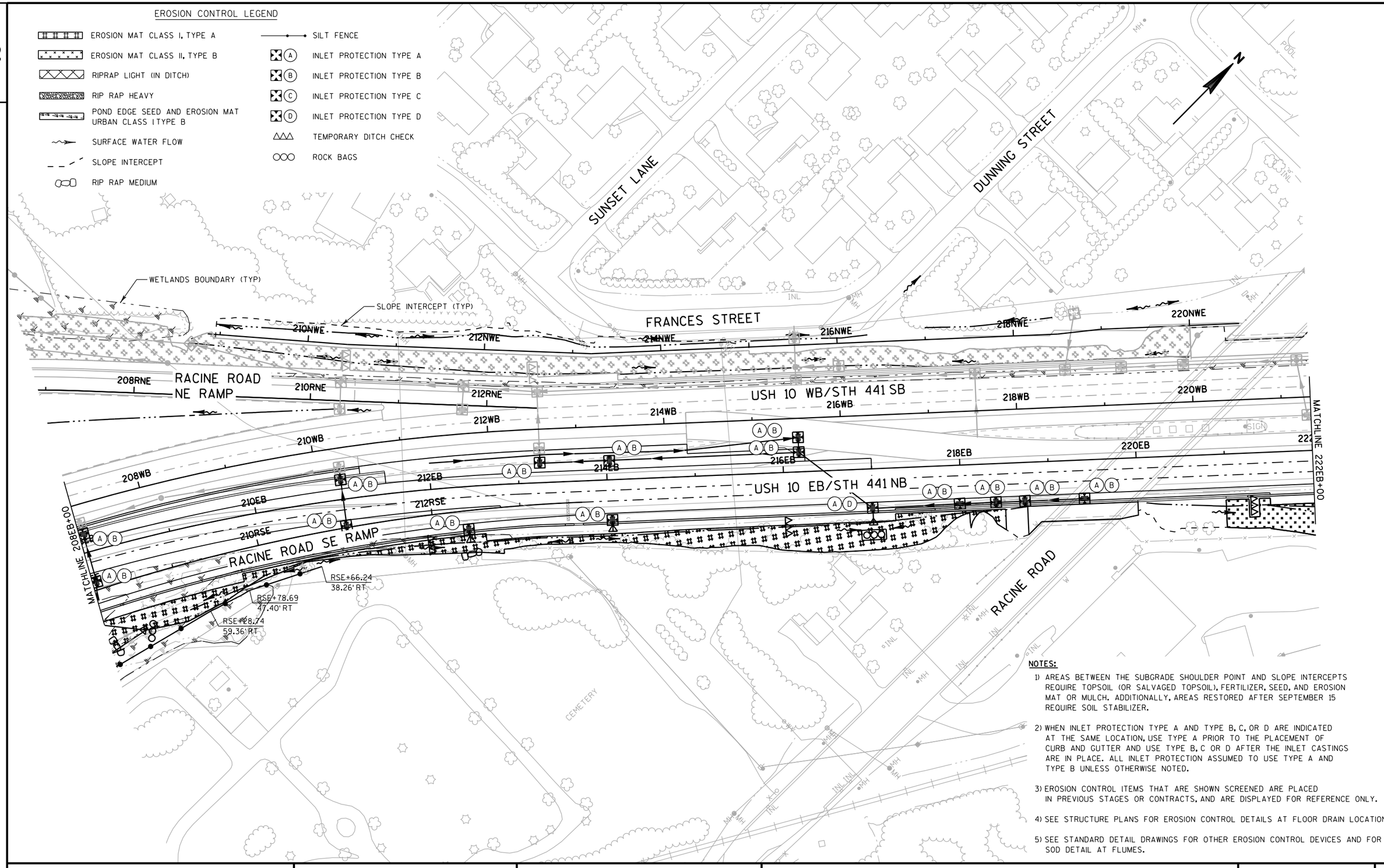
- EROSION MAT CLASS I, TYPE A
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- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 3A	SHEET 172	E

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
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- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



NOTES:

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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 3A	SHEET 173	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

RACINE ROAD
LILLY ST.
LILLY STREET
SANDELWOOD STREET
N
SLOPE INTERCEPT (TYP)
122NWF
124NWF
126NWF
128NWF
130NWF
132NWF
134NWF
136NWF
RICHARD DRIVE
MIDWAY ROAD SW RAMP
222WB
222EB+00
224WB
224EB
226WB
226EB
228WB
228EB
230WB
230EB
232WB
232EB
234WB
234EB
236WB
236EB
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
MATCHLINE 222EB+00
MIDWAY ROAD SE RAMP
WETLAND BOUNDARY (TYP)
CANADIAN NATIONAL
SIGN
SIGN
MH
INL
W
POOL
GUY

NOTES:

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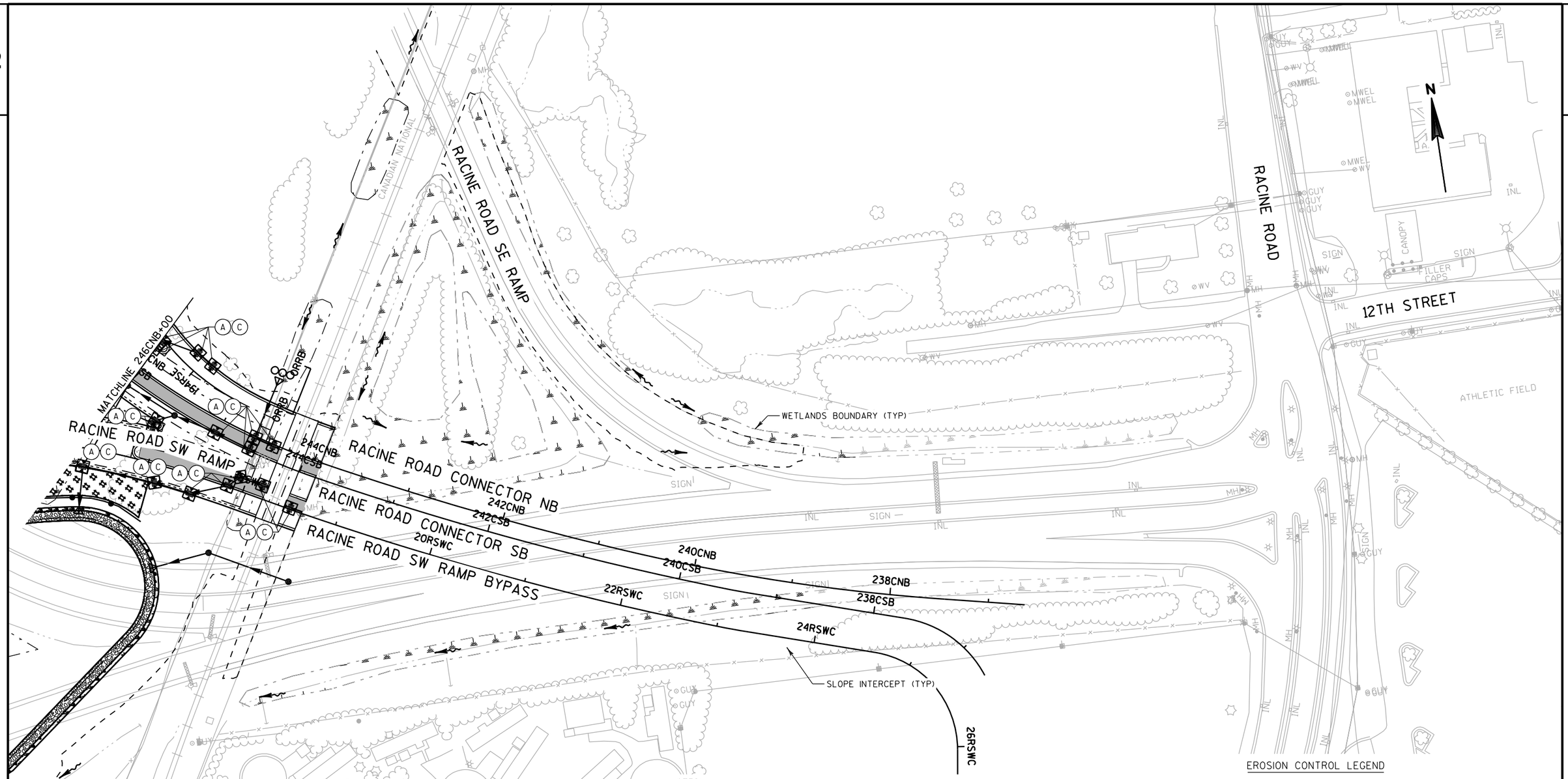
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 3A	SHEET 174	E

2



NOTES:

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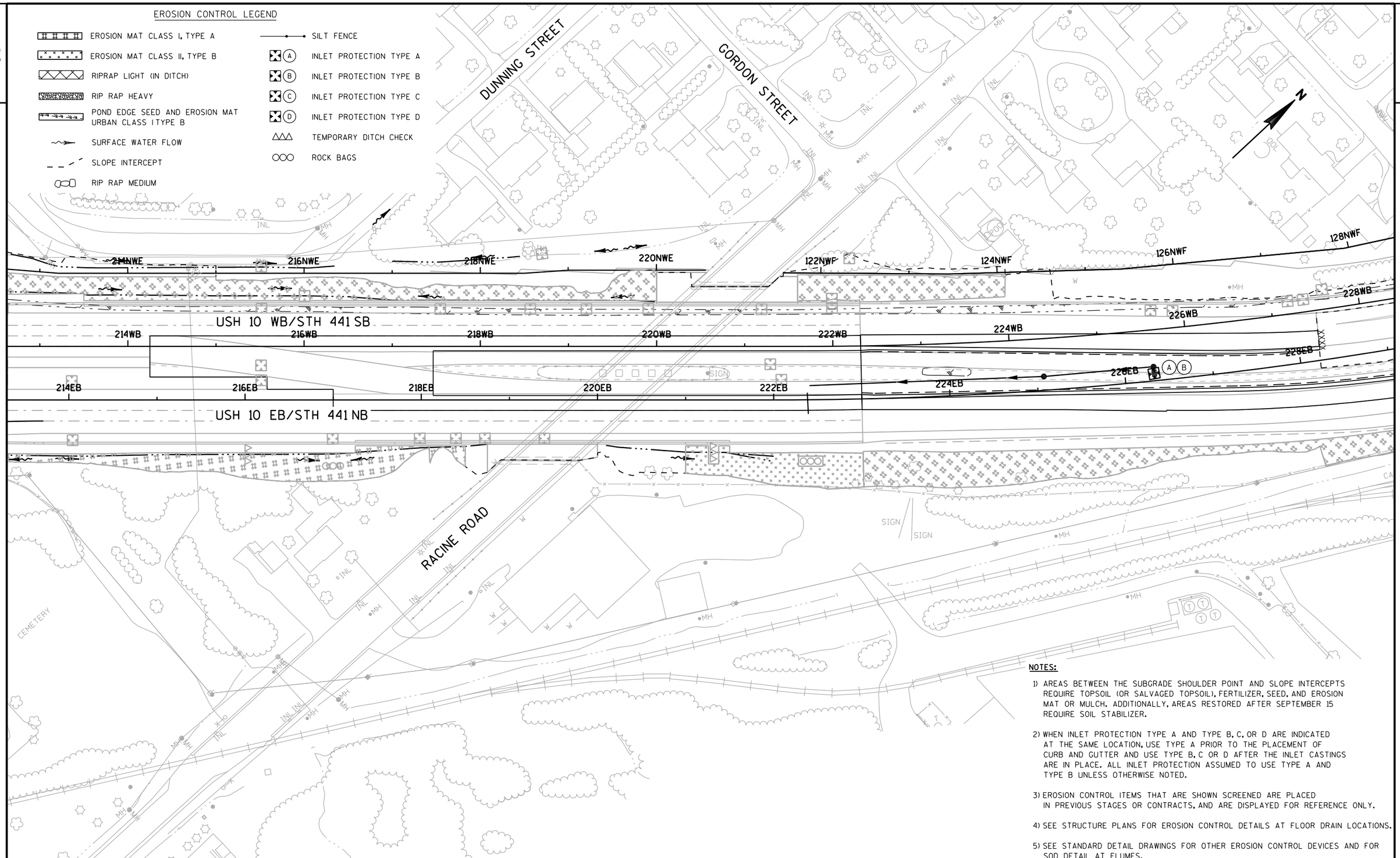
EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE B
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	EROSION CONTROL - STAGE 3A	SHEET 175	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS



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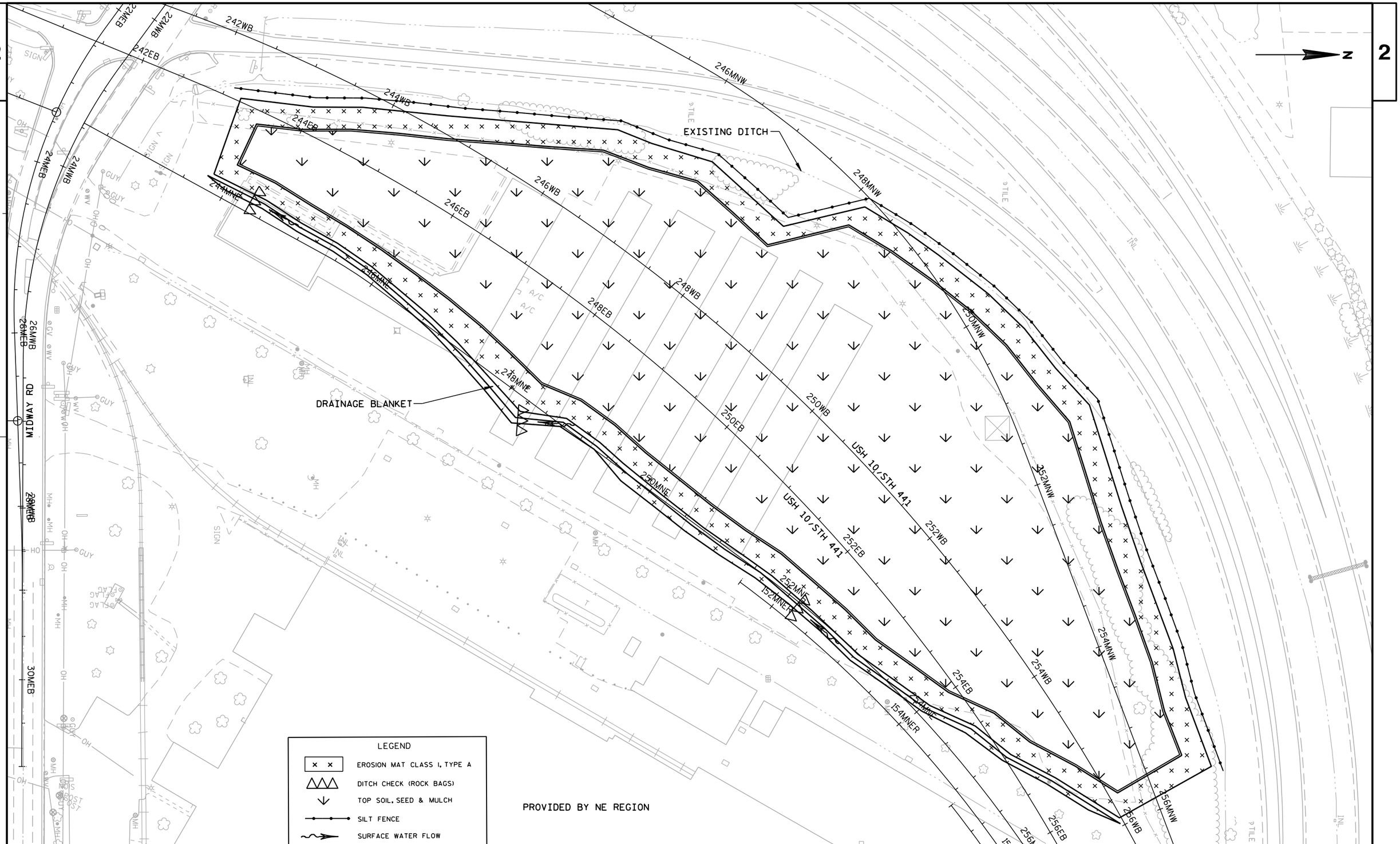
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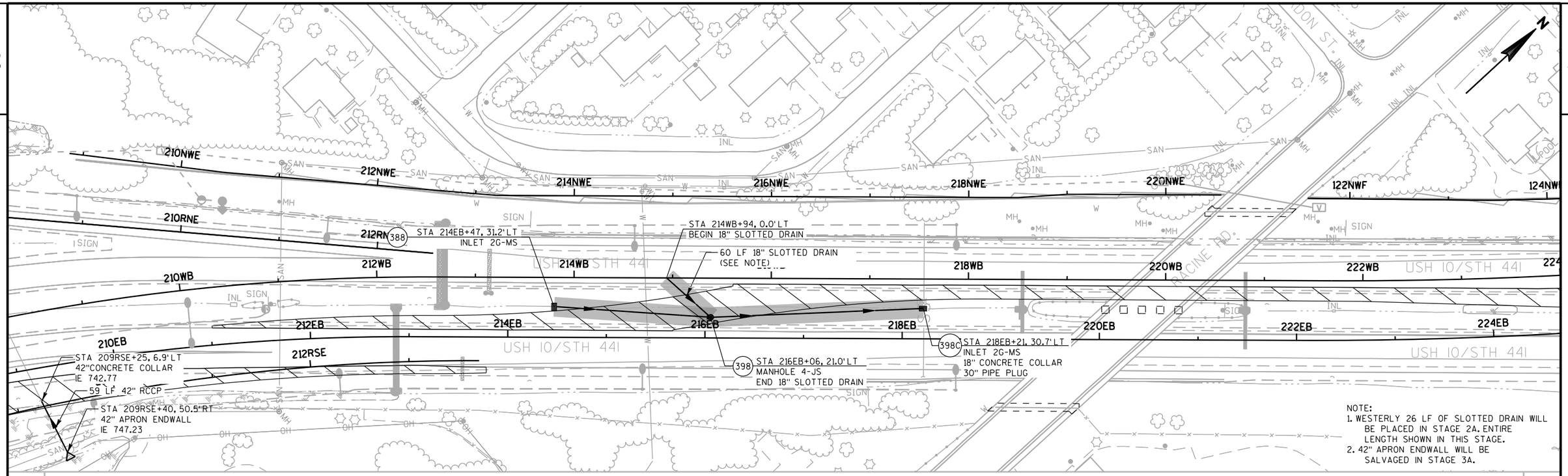
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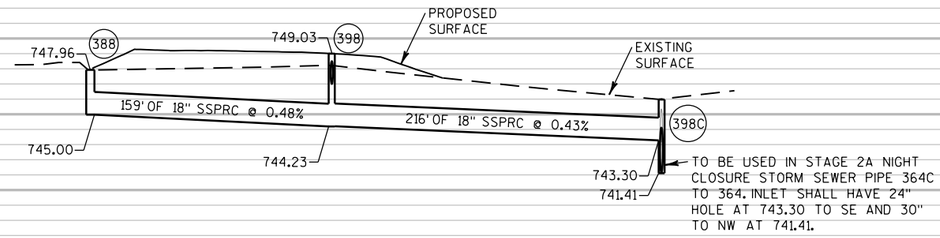


PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 177	E

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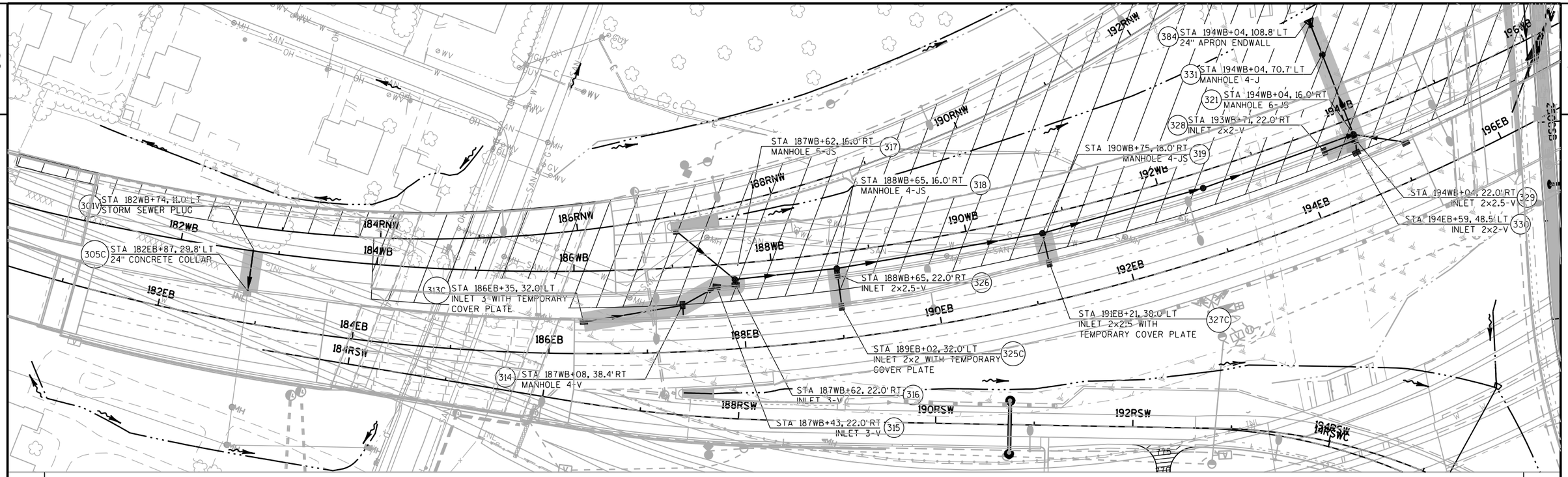
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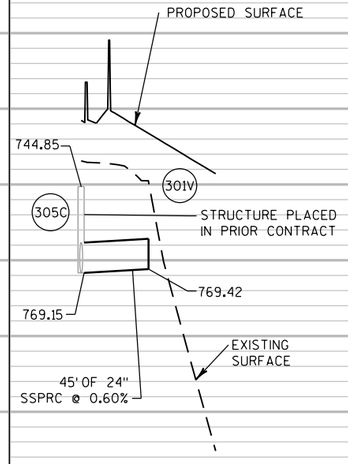


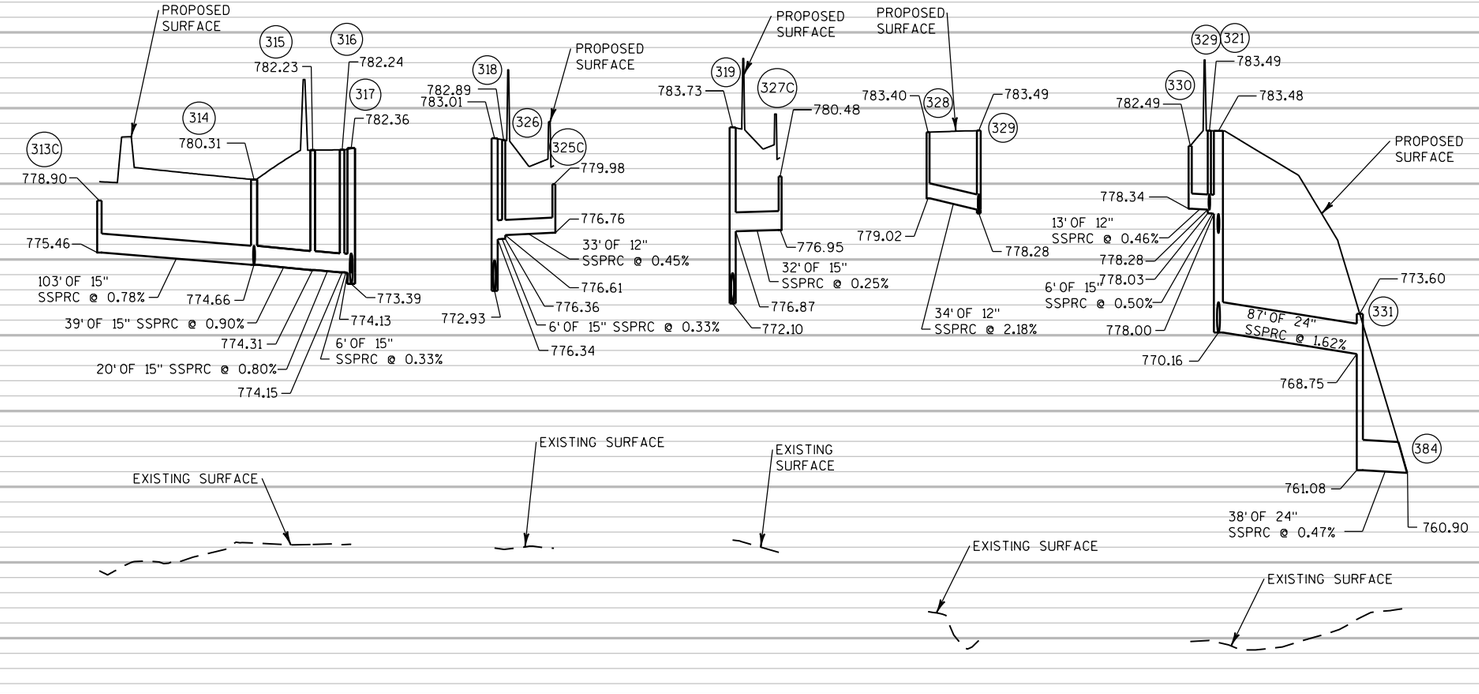


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 1B	SHEET 178 E

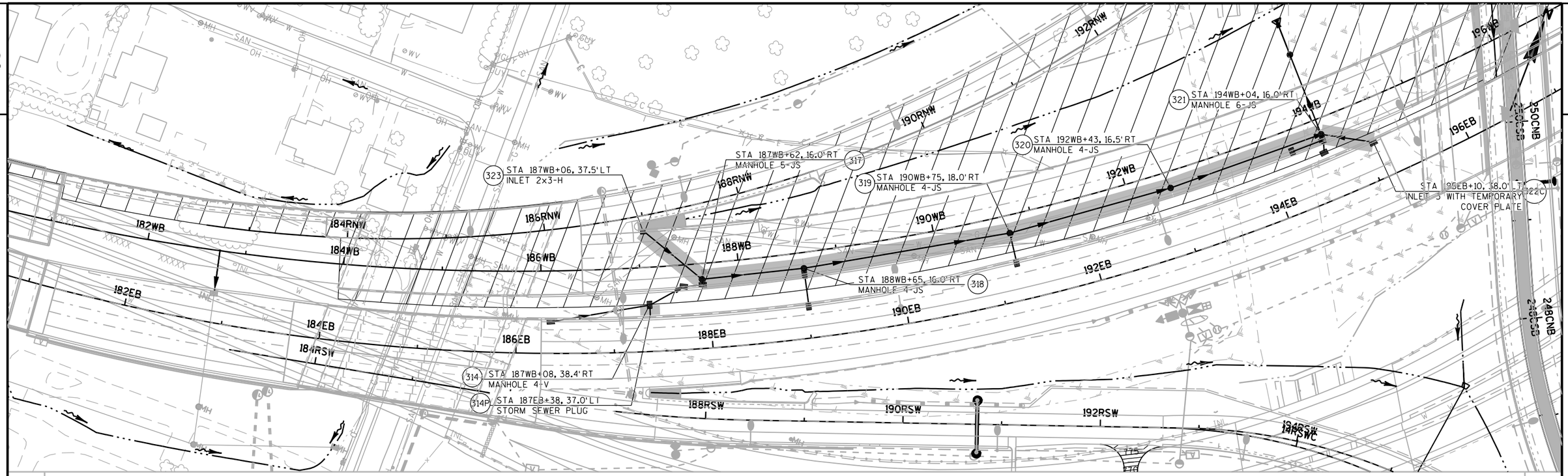
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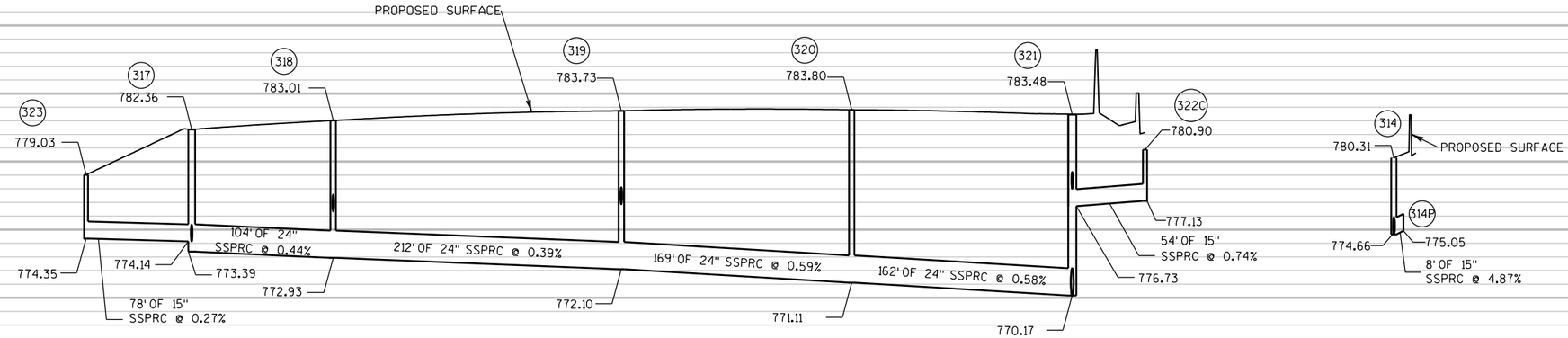

STA 182WB+74, 11.0' LT
STORM SEWER PLUG
301V
STA 182EB+87, 29.8' LT
24" CONCRETE COLLAR
305C
STA 186EB+35, 32.0' LT
INLET 3 WITH TEMPORARY
COVER PLATE
313C
STA 187WB+08, 38.4' RT
MANHOLE 4-V
314
STA 187WB+62, 16.0' RT
MANHOLE 5-JS
317
STA 187WB+62, 22.0' RT
INLET 3-V
316
STA 187WB+43, 22.0' RT
INLET 3-V
315
STA 188WB+65, 16.0' RT
MANHOLE 4-JS
318
STA 188WB+65, 22.0' RT
INLET 2x2.5-V
326
STA 189EB+02, 32.0' LT
INLET 2x2 WITH TEMPORARY
COVER PLATE
325C
STA 190WB+75, 16.0' RT
MANHOLE 4-JS
319
STA 191EB+21, 38.0' LT
INLET 2x2.5 WITH
TEMPORARY COVER PLATE
327C
STA 193WB+71, 22.0' RT
INLET 2x2-V
328
STA 194WB+04, 16.0' RT
MANHOLE 6-JS
321
STA 194WB+04, 70.7' LT
MANHOLE 4-J
331
STA 194WB+04, 108.8' LT
24" APRON ENDWALL
384
STA 194WB+04, 22.0' RT
INLET 2x2.5-V
329
STA 194EB+59, 48.5' LT
INLET 2x2-V
330
182WB
182EB
184RNW
184WB
184EB
184RSW
186RNW
186WB
186EB
188RNW
188WB
188EB
188RSW
190RNW
190WB
190EB
190RSW
192RNW
192WB
192EB
192RSW
194RSW
194RSWC
196WB
196EB


PROPOSED SURFACE
744.85
301V
305C
STRUCTURE PLACED
IN PRIOR CONTRACT
769.42
769.15
EXISTING
SURFACE
45' OF 24"
SSPRC @ 0.60%

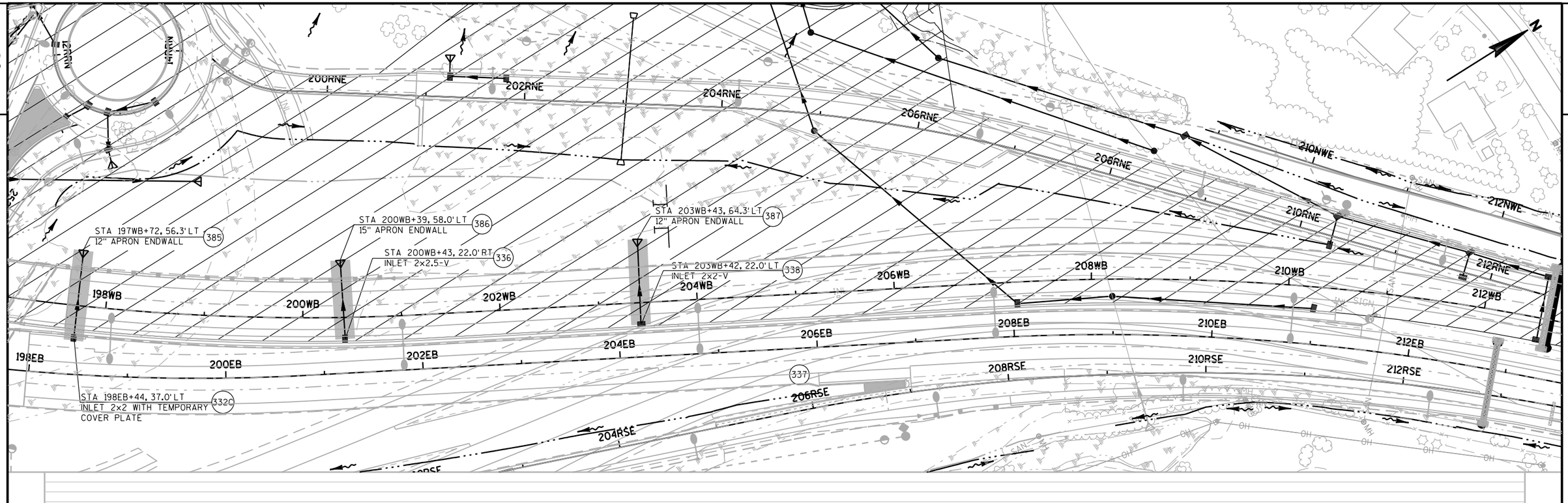

PROPOSED
SURFACE
315
316
782.23
782.24
314
780.31
317
782.36
313C
778.90
775.46
103' OF 15"
SSPRC @ 0.78%
774.66
39' OF 15" SSPRC @ 0.90%
774.31
20' OF 15" SSPRC @ 0.80%
774.15
6' OF 15"
SSPRC @ 0.33%
773.39
774.13
EXISTING SURFACE
PROPOSED
SURFACE
318
782.89
783.01
326
325C
779.98
776.76
33' OF 12"
SSPRC @ 0.45%
776.61
776.36
6' OF 15" SSPRC @ 0.33%
772.93
776.34
EXISTING SURFACE
PROPOSED
SURFACE
319
783.73
327C
780.48
776.95
32' OF 15"
SSPRC @ 0.25%
776.87
772.10
EXISTING
SURFACE
PROPOSED
SURFACE
783.40
328
783.49
329
779.02
778.28
34' OF 12"
SSPRC @ 2.18%
EXISTING SURFACE
329
321
783.49
330
782.49
783.48
PROPOSED
SURFACE
778.34
13' OF 12"
SSPRC @ 0.46%
778.28
778.03
6' OF 15"
SSPRC @ 0.50%
778.00
770.16
773.60
331
87' OF 24"
SSPRC @ 1.62%
768.75
384
761.08
38' OF 24"
SSPRC @ 0.47%
760.90
EXISTING SURFACE

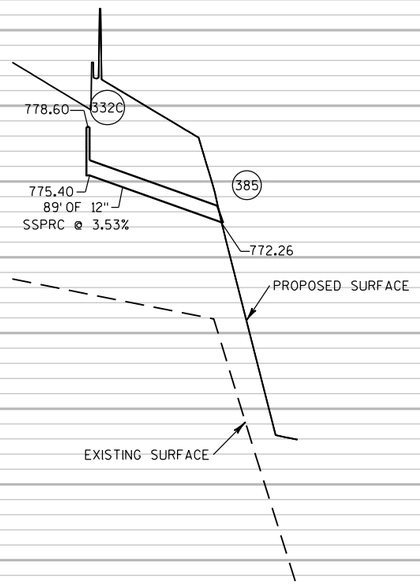
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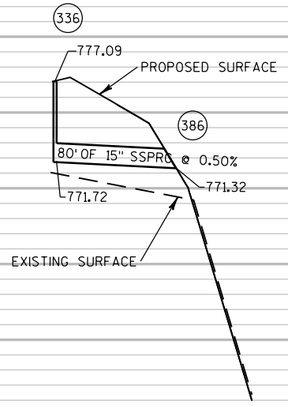


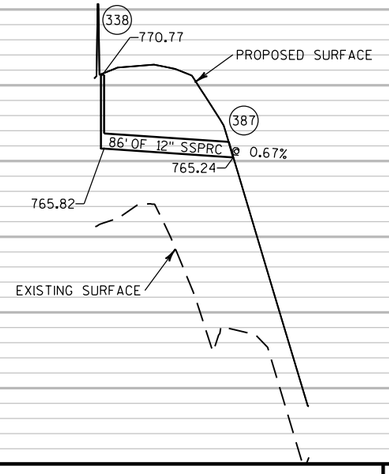


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 180 E

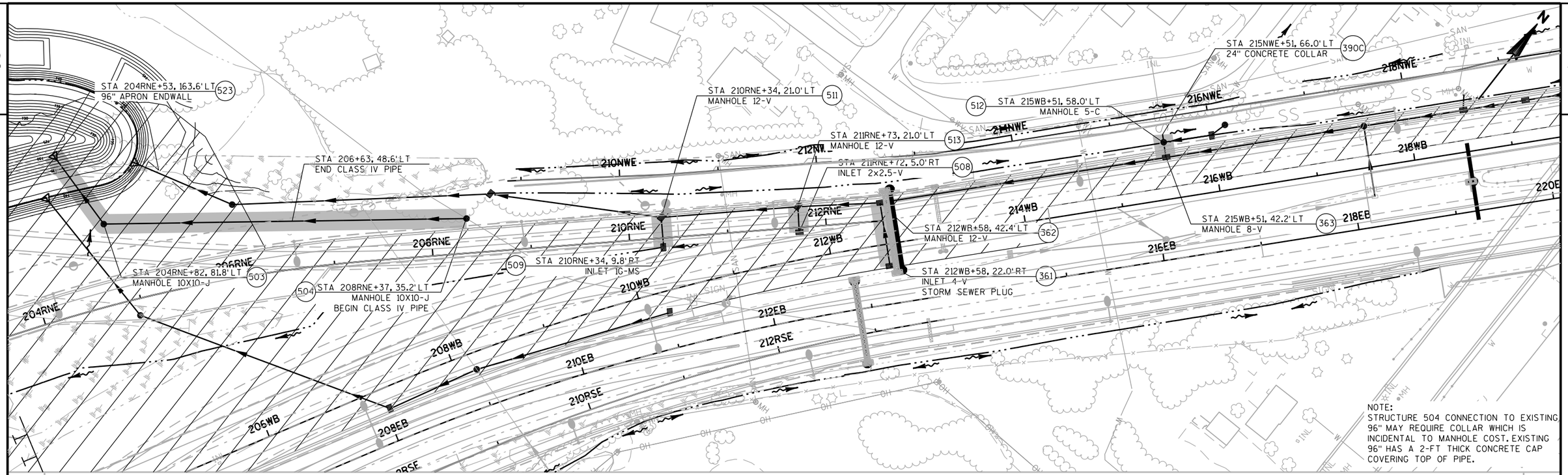


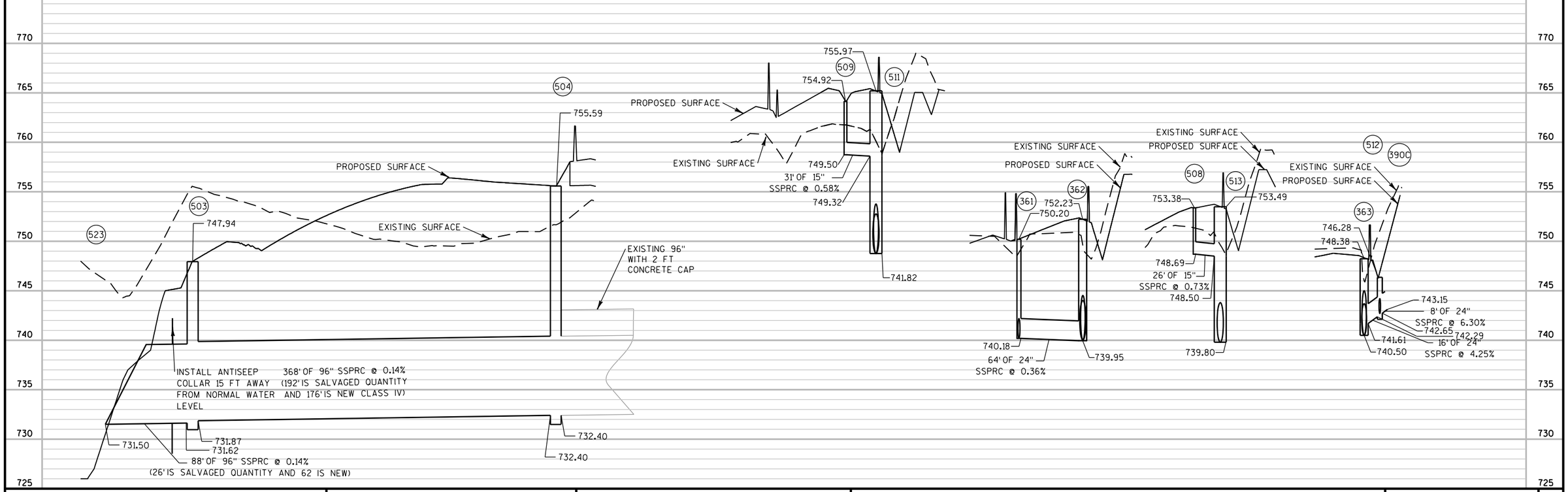






PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 181 E

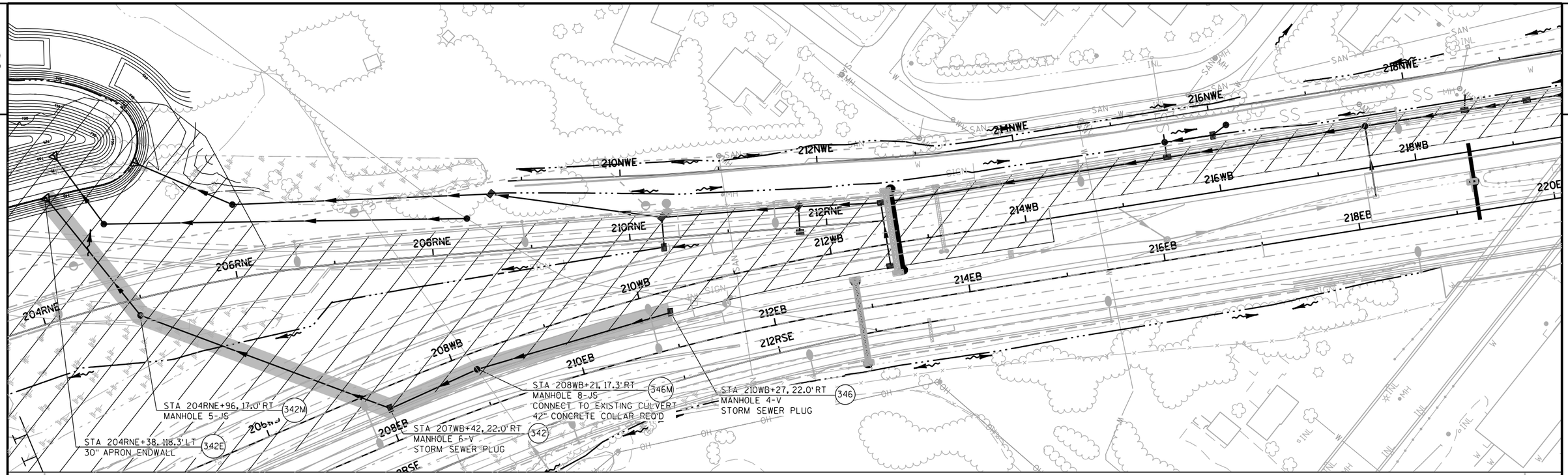




PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 182 E

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WISDOT/CADDS SHEET 41

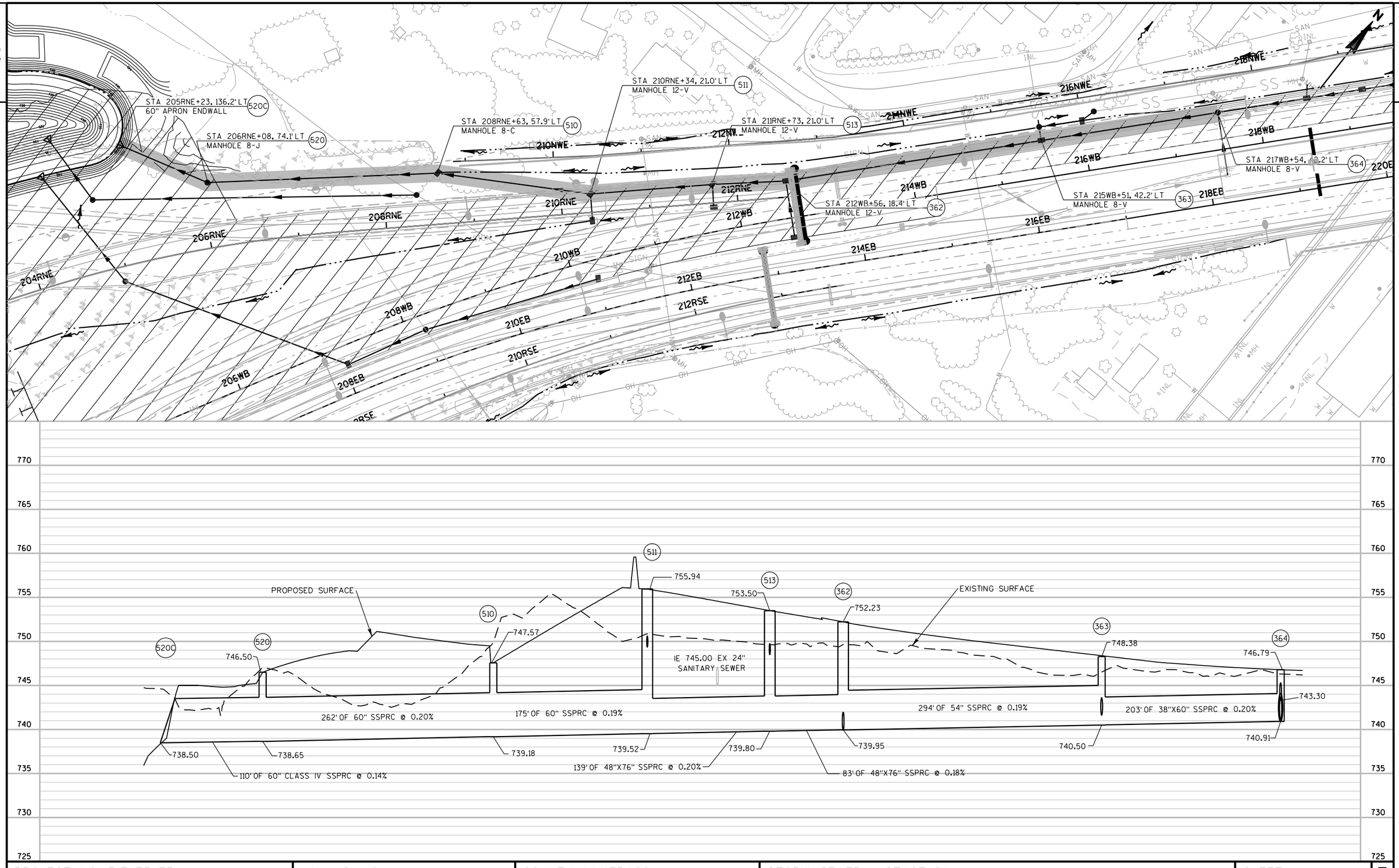
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 183 E

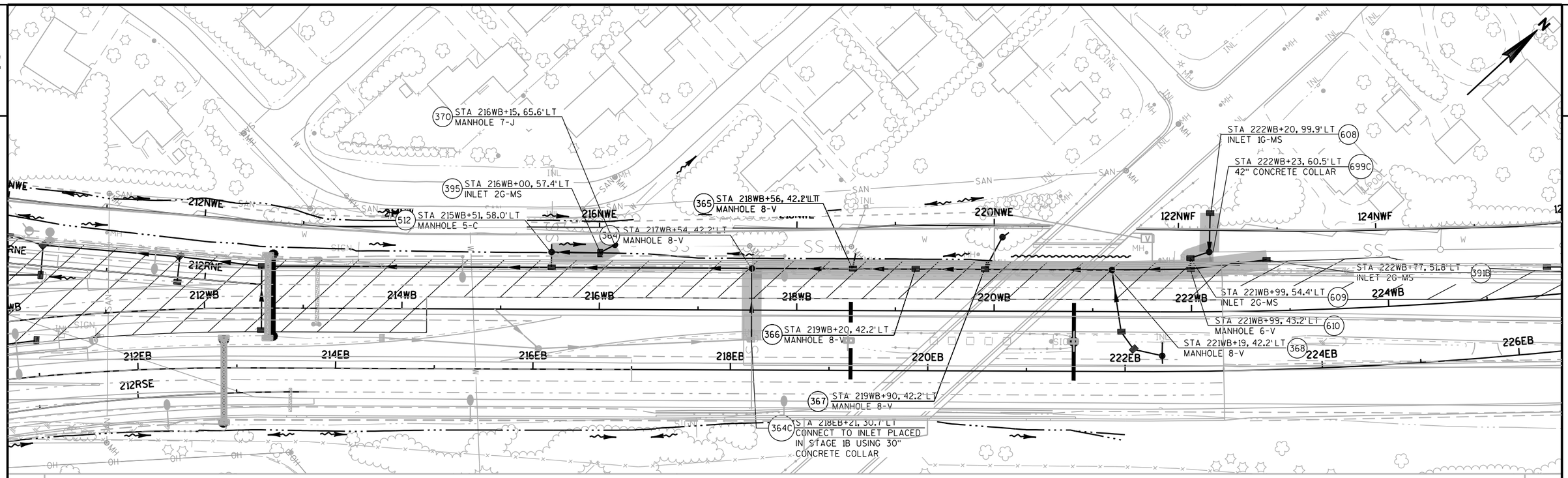
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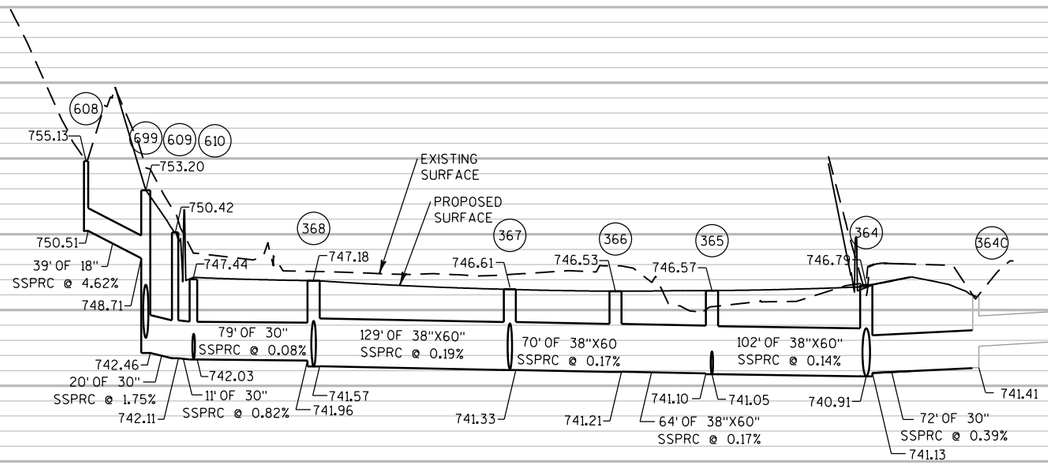
WISDOT/CADDS SHEET 41

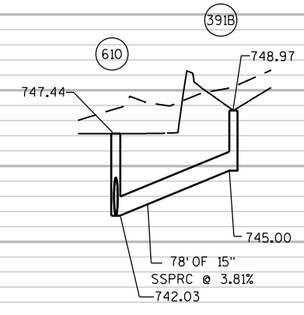


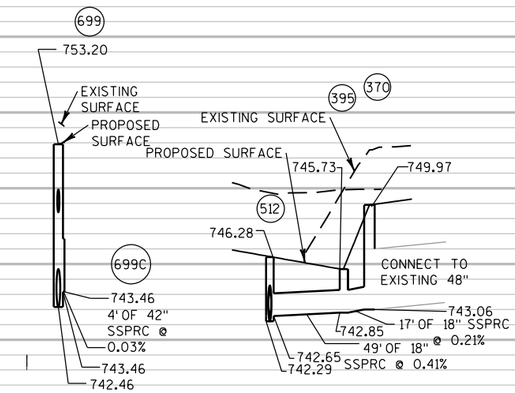
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 184 E

2



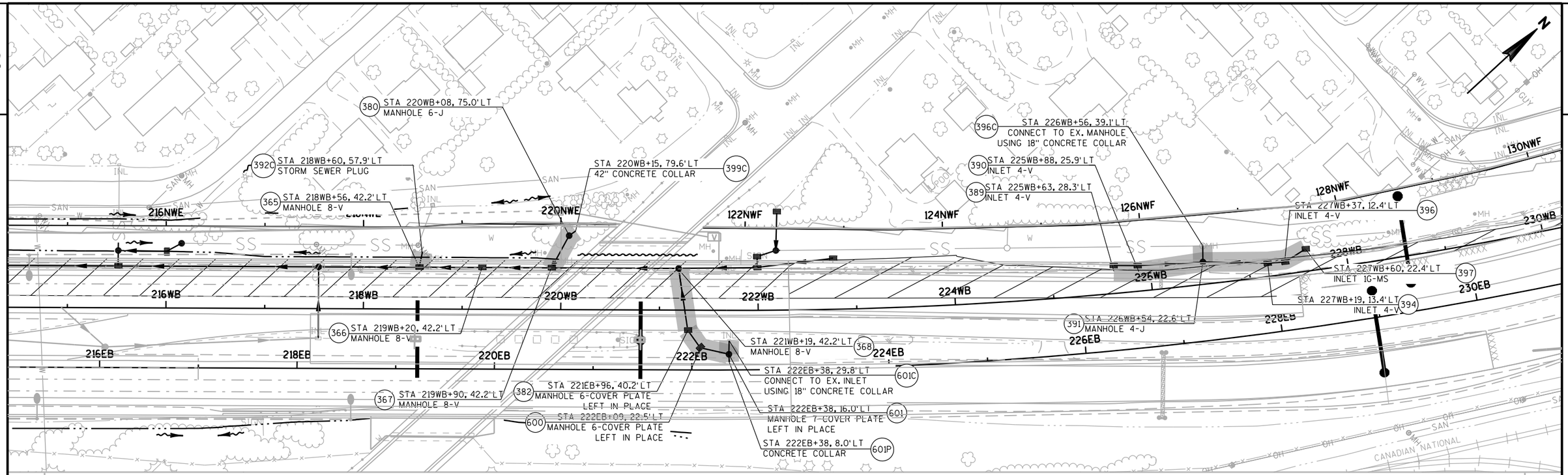


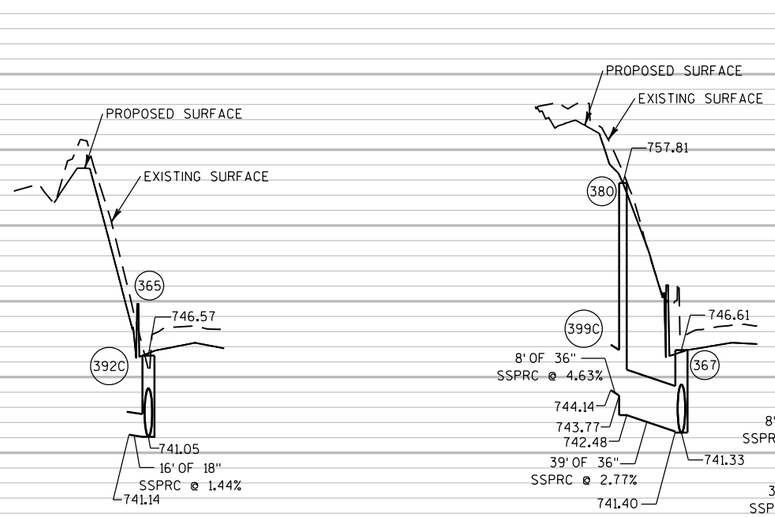


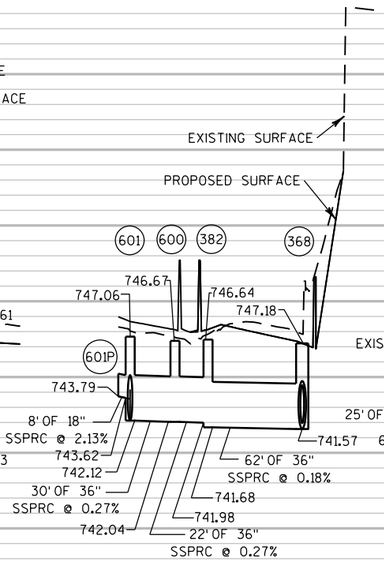


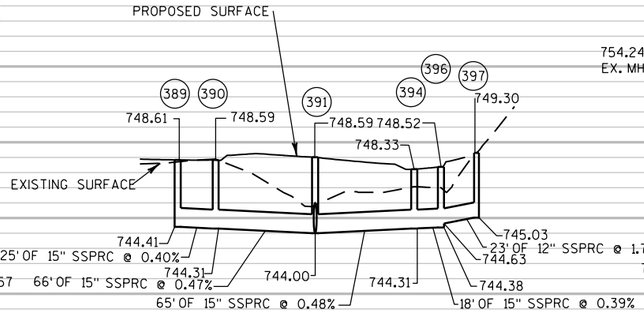
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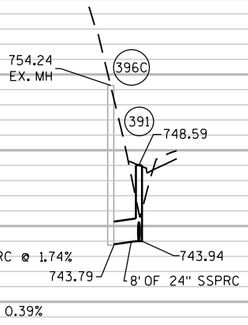
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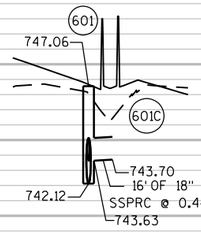






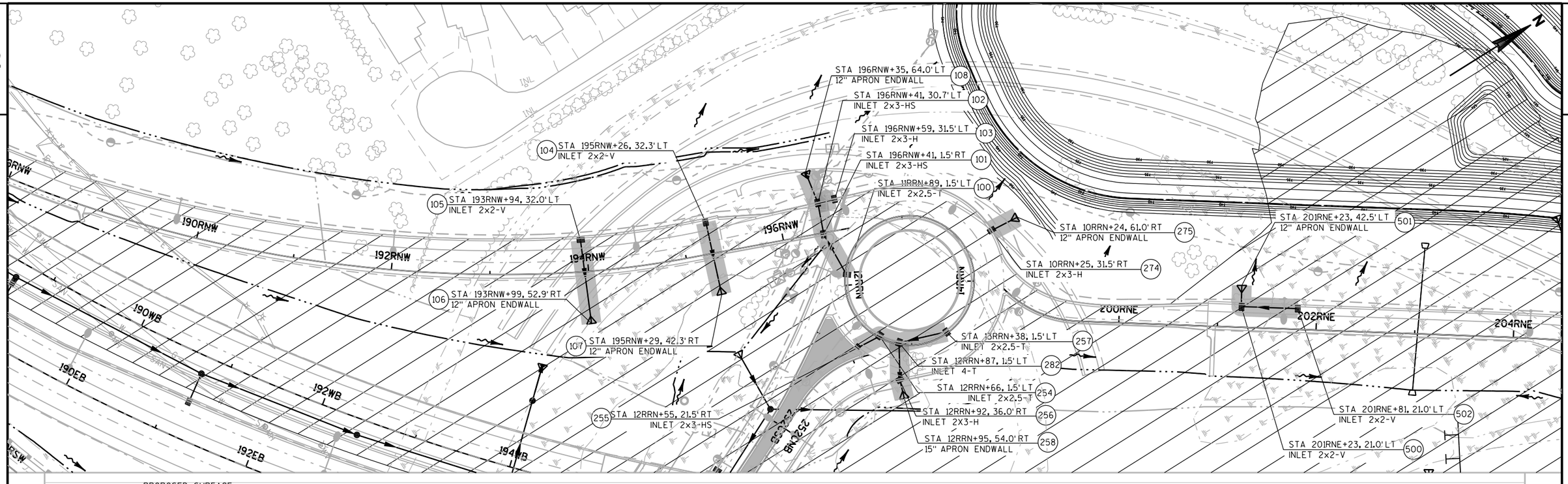


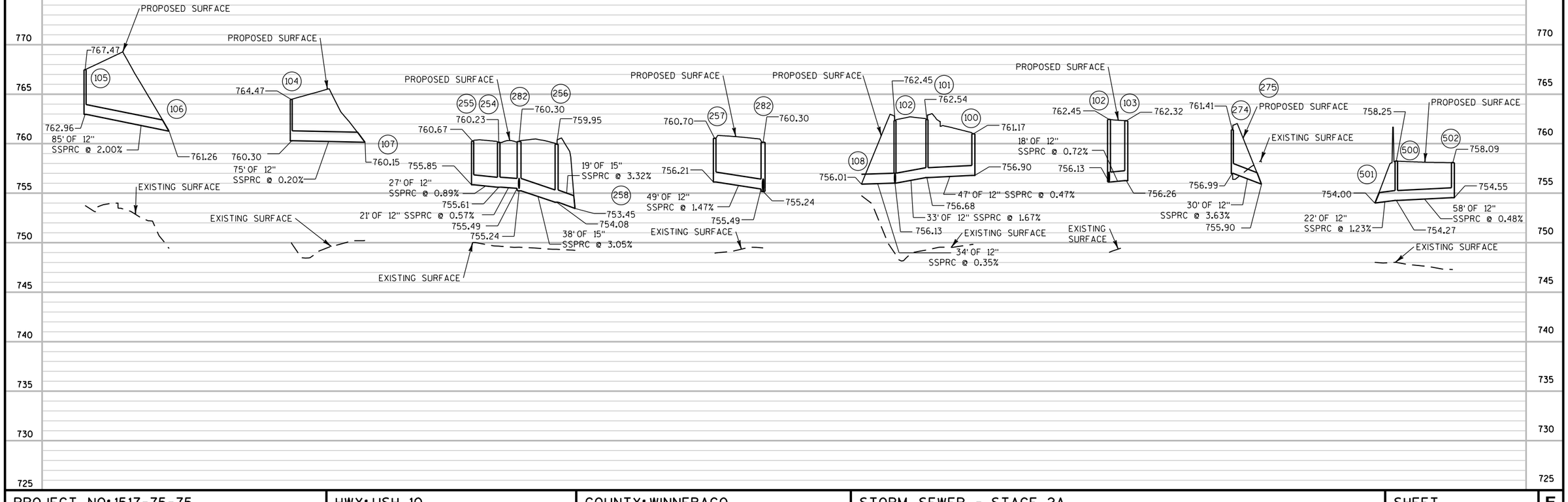




PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 186 E

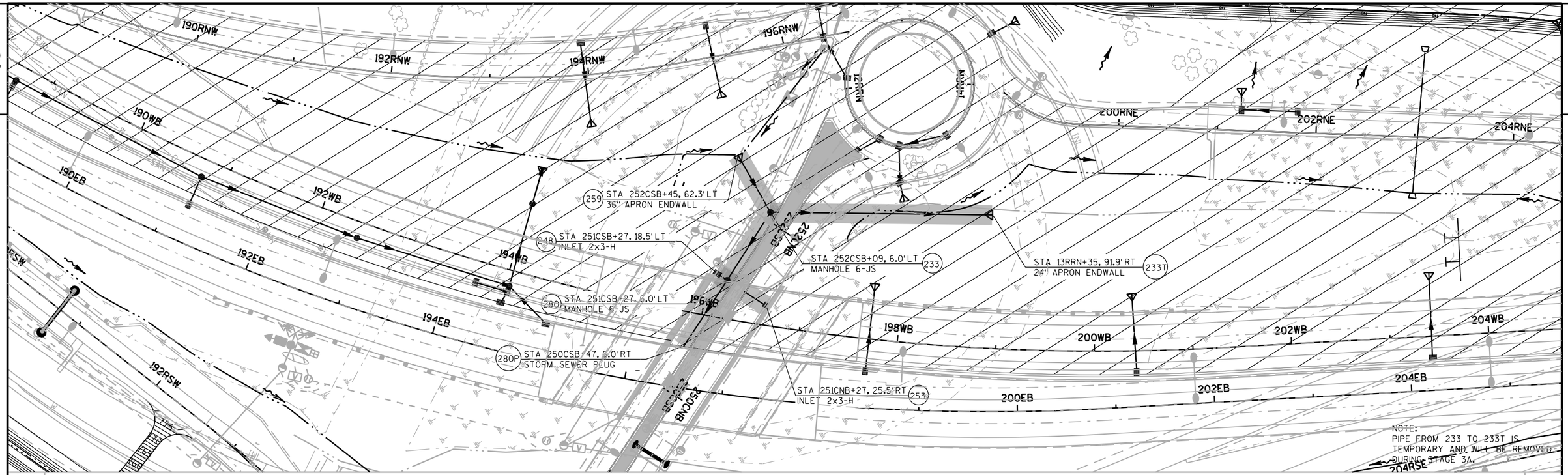
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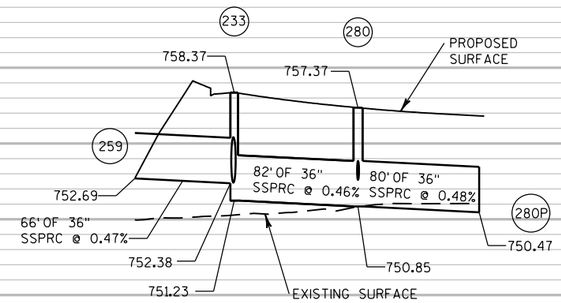


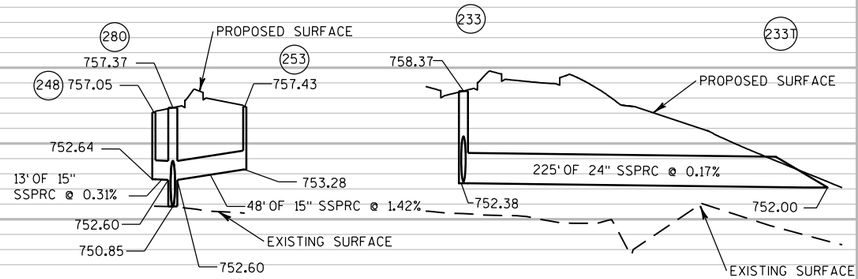


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 187	E

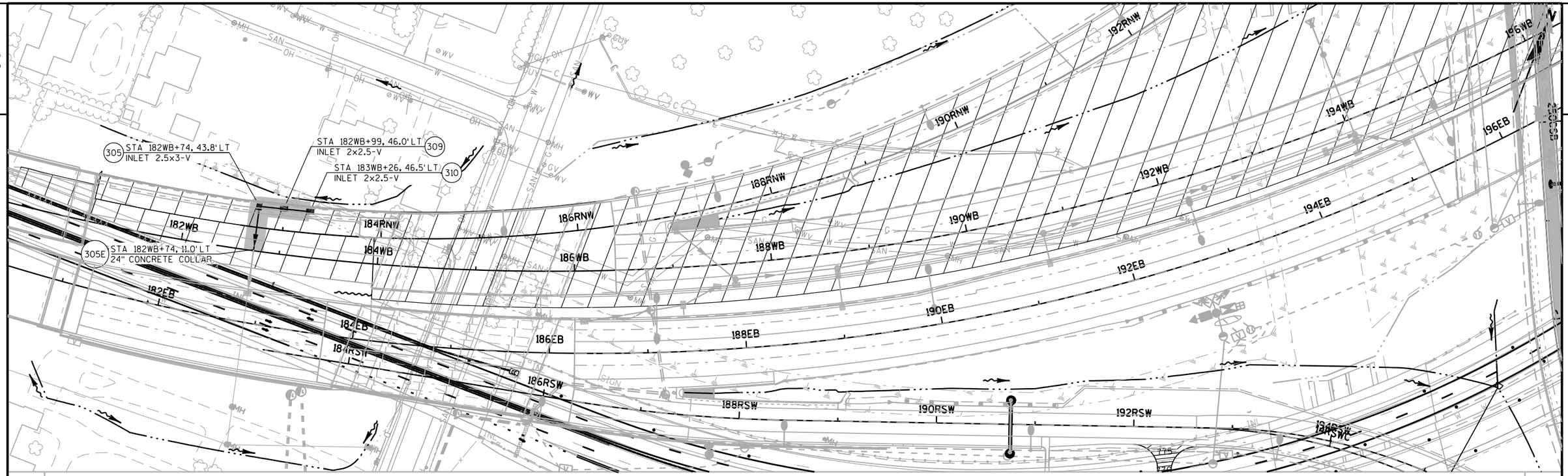
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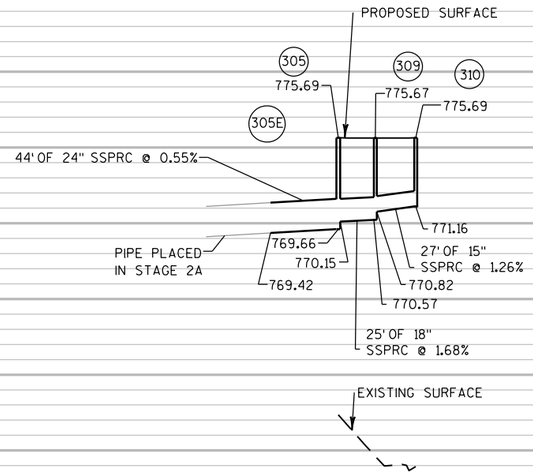






PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2A	SHEET 188 E





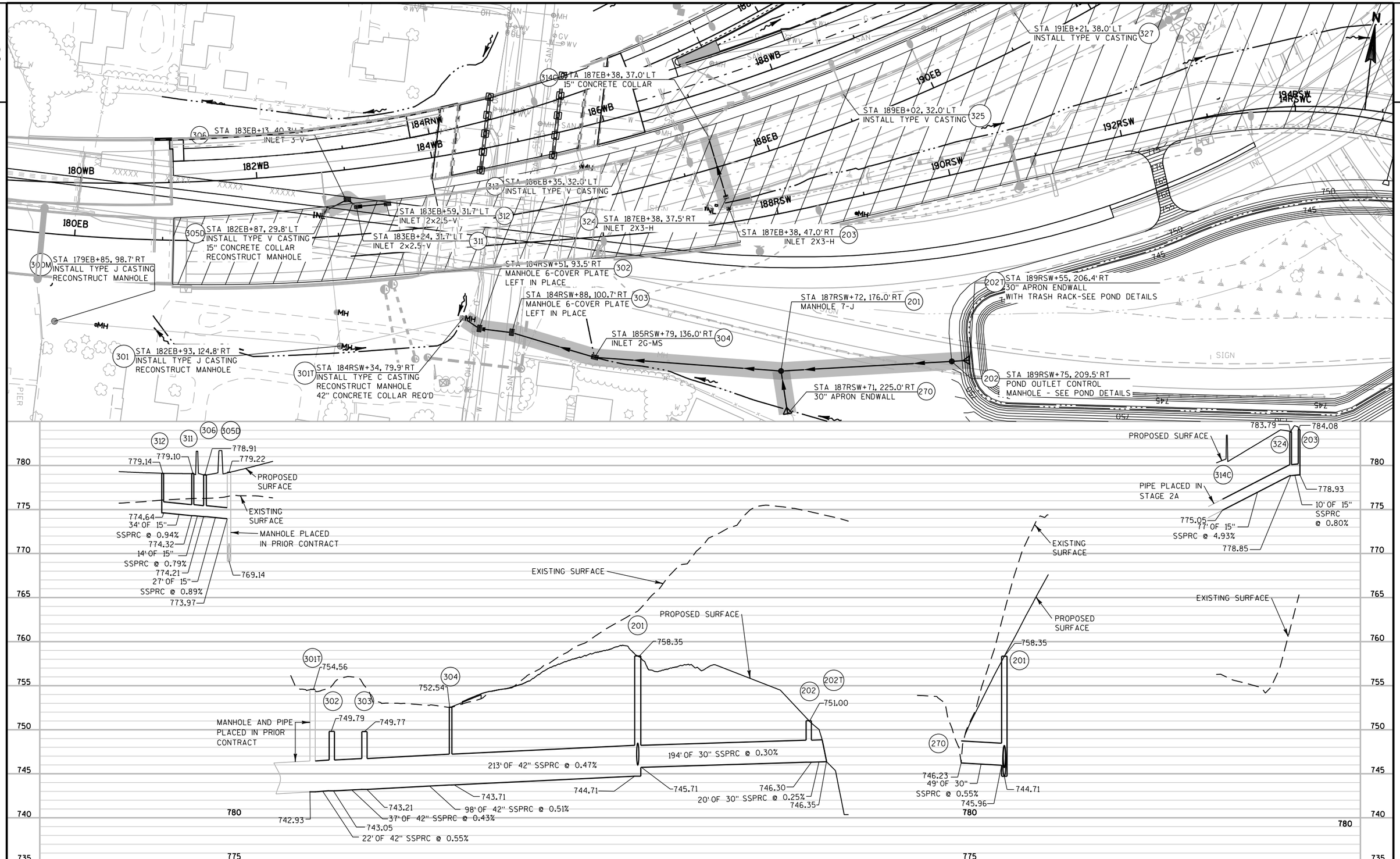
790 785 780 775 770 765 760 755 750

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 2C	SHEET 189	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\022509_ss_s2C.dgn PLOT DATE : 4/27/2015 2:30:28 PM PLOT BY : pshedivy PLOT NAME : PLOT SCALE : 100:1

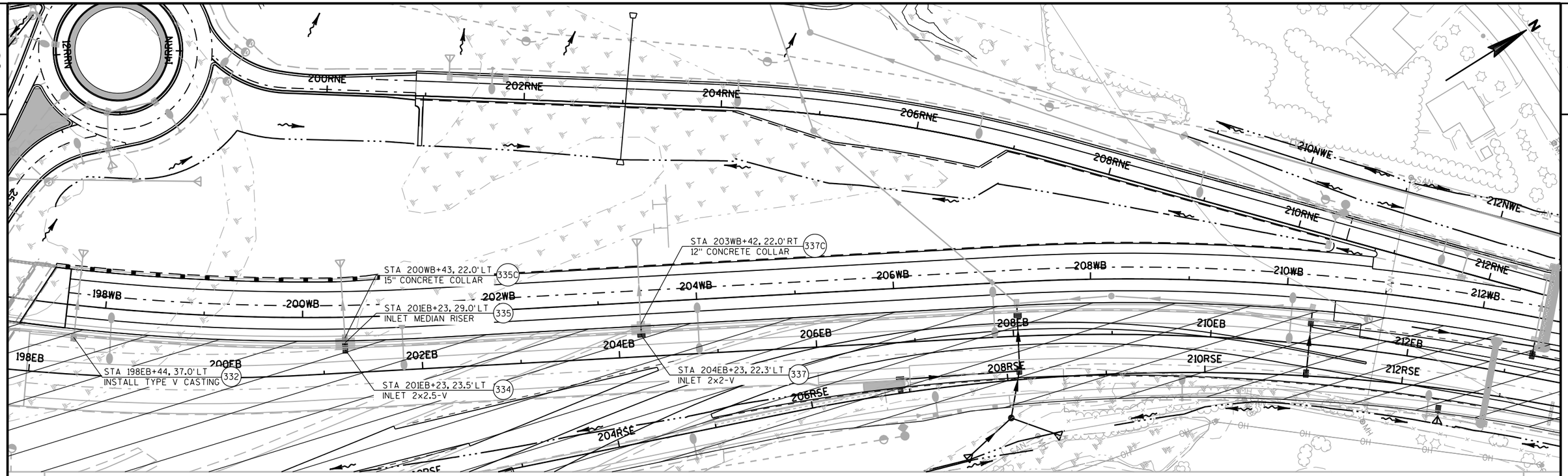
WISDOT/CADDS SHEET 41

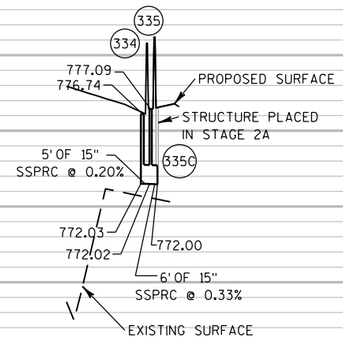
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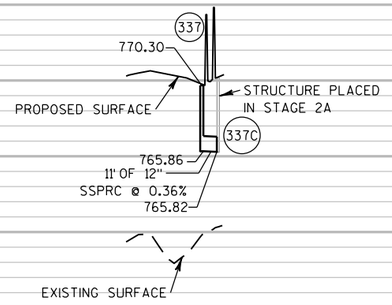


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3A	SHEET 190 E

2

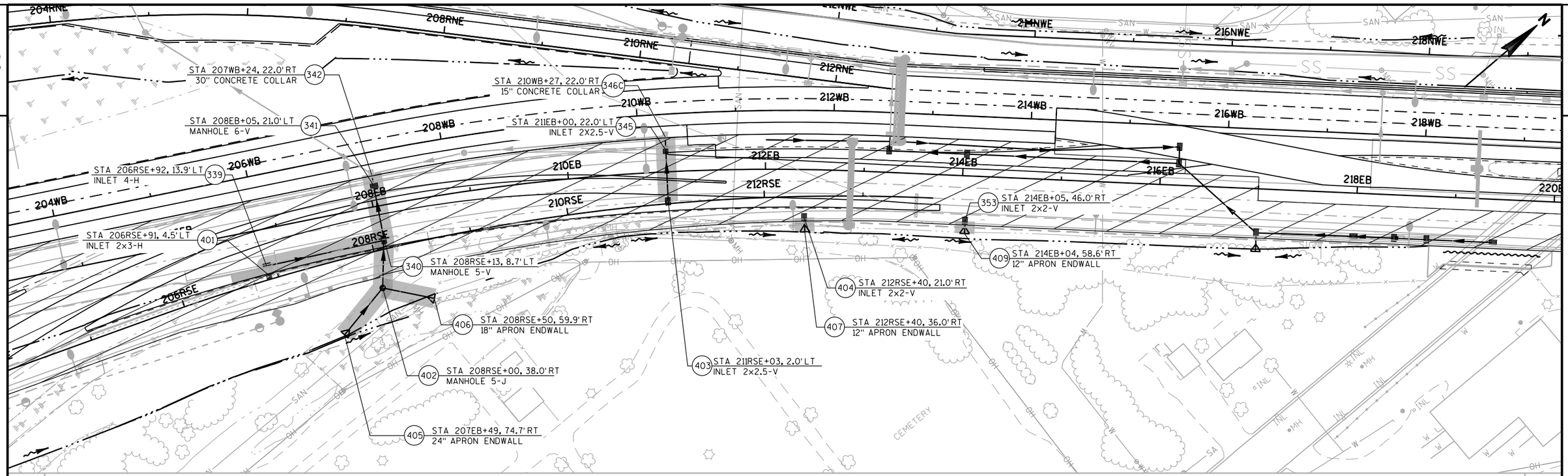


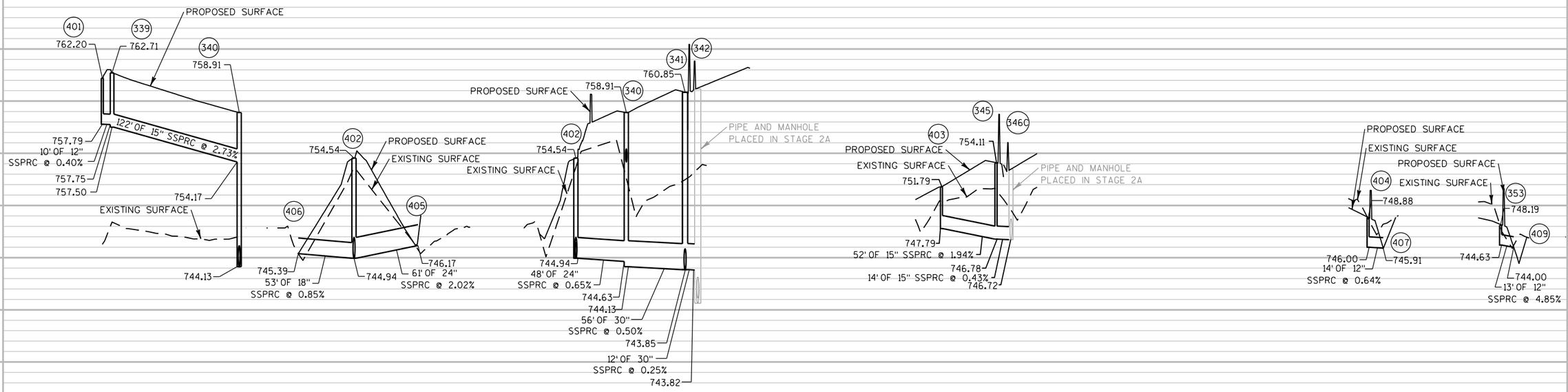




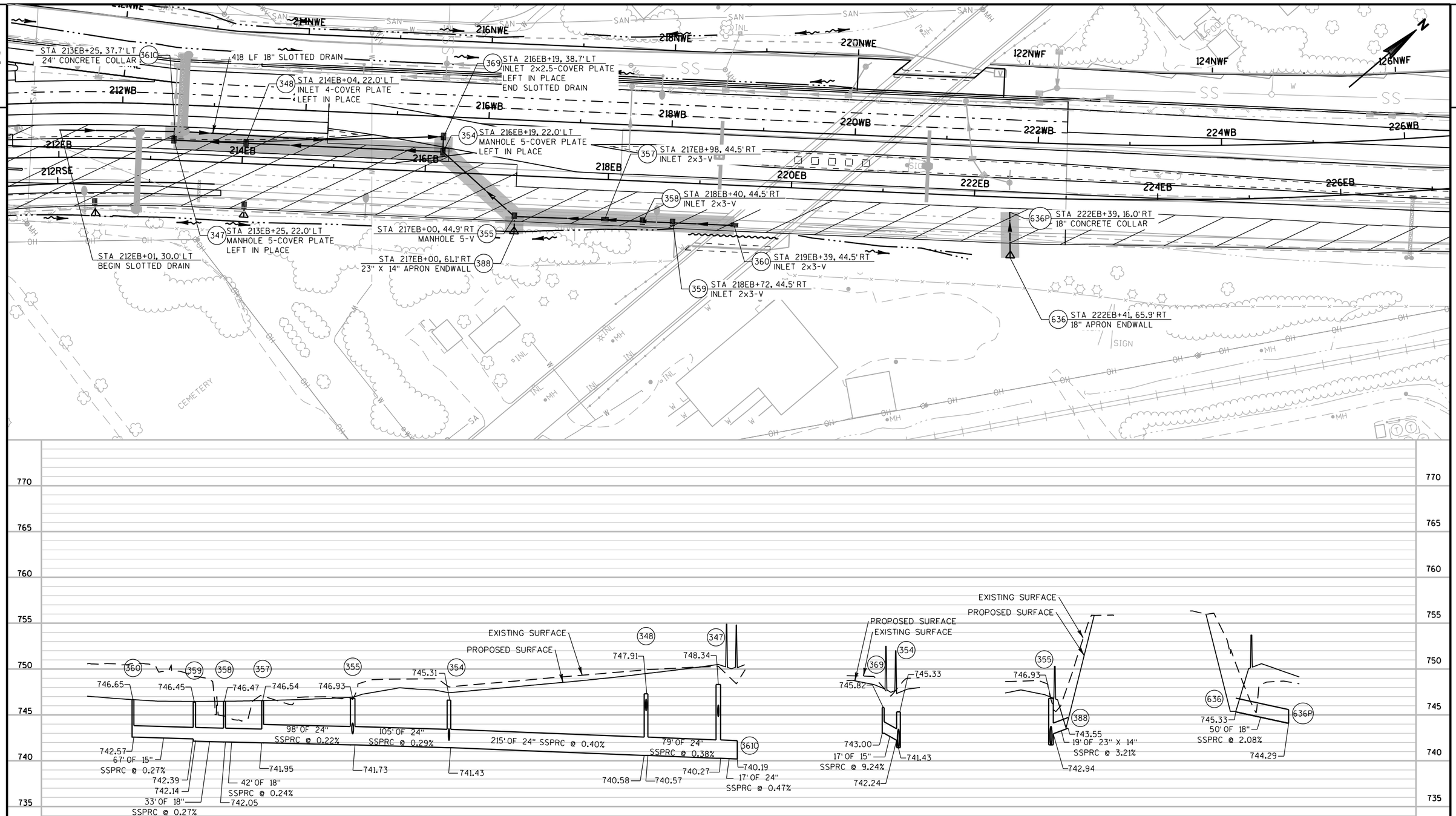
785 780 775 770 765 760 755 750 745 740

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3A	SHEET 191 E



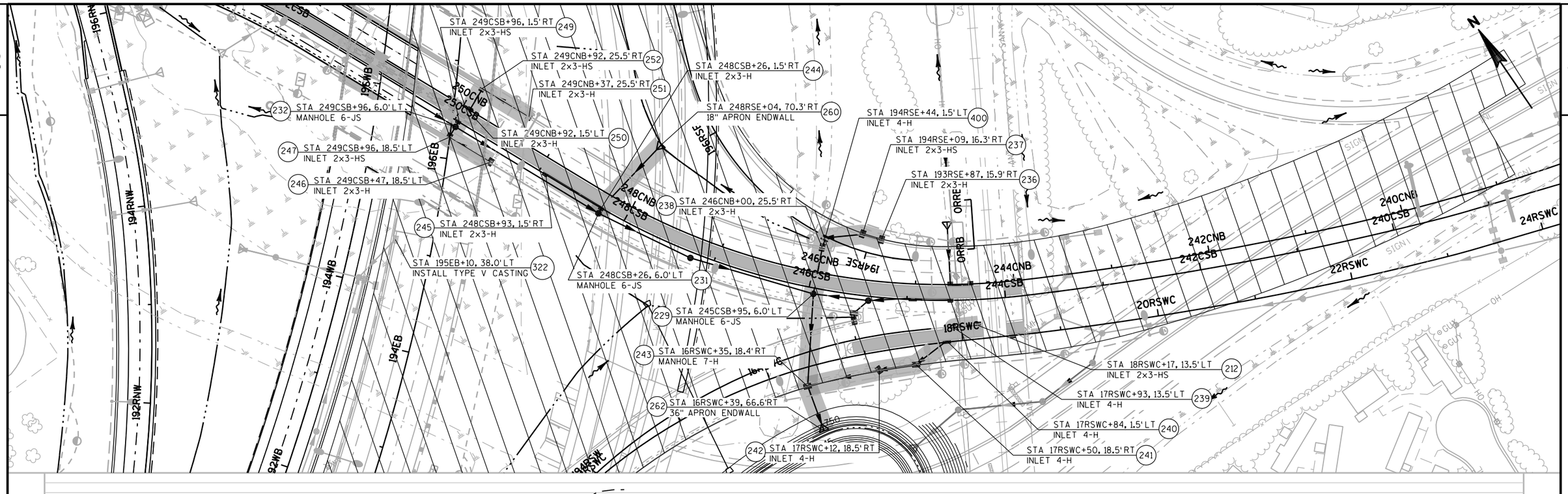


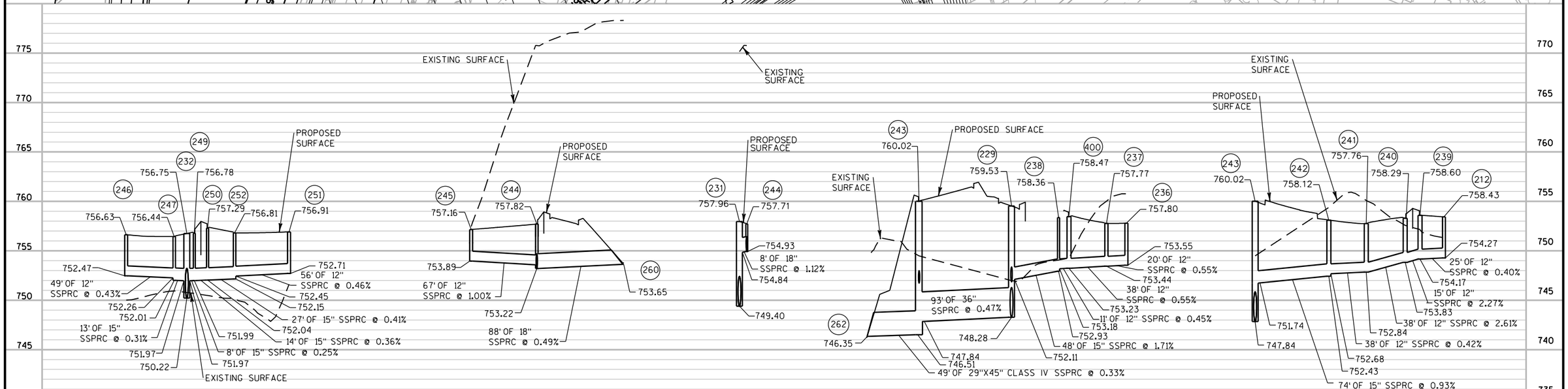
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3A	SHEET 192	E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3A	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\022512_ss_s3A.dgn
PLOT DATE : 4/27/2015 2:30:49 PM PLOT BY : pshedivy PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 41





PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3A	SHEET 194 E

2

280C STA 250CSB+47, 6.0'LT
36" CONCRETE COLLAR

232 STA 249CSB+96, 6.0'LT
MANHOLE 6-JS

231 STA 248CSB+26, 6.0'LT
MANHOLE 6-JS

230 STA 247CSB+24, 6.0'LT
MANHOLE 5-JS

229 STA 245CSB+95, 6.0'LT
MANHOLE 6-JS

234 STA 245CSB+51, 18.5'LT
INLET 2X3-H

235 STA 197RSW+02, 18.5'LT
INLET 2X3-H

263 STA 17RSWC+33, 103.2'RT
42" APRON ENDWALL SALVAGED

264 STA 244CNB+68, 63.4'RT
12" APRON ENDWALL

225 STA 244CNB+65, 1.5'LT
INLET 2X3-H

226 STA 244CSB+56, 1.5'RT
INLET 2X3-H

227 STA 244CSB+94, 1.5'RT
INLET 4-H

228 STA 245CSB+39, 4.4'LT
MANHOLE 4-JS

207 STA 244CNB+44, 1.5'LT
INLET 2X3-HS

258 STA 18RSWC+51, 1.5'LT
INLET 2X3-HS

258C STA 18RSWC+63, 1.6'LT
STORM SEWER PLUG

STORM SEWER GETTING
BUILT CONCURRENTLY
IN CONTRACT 1517-75-76

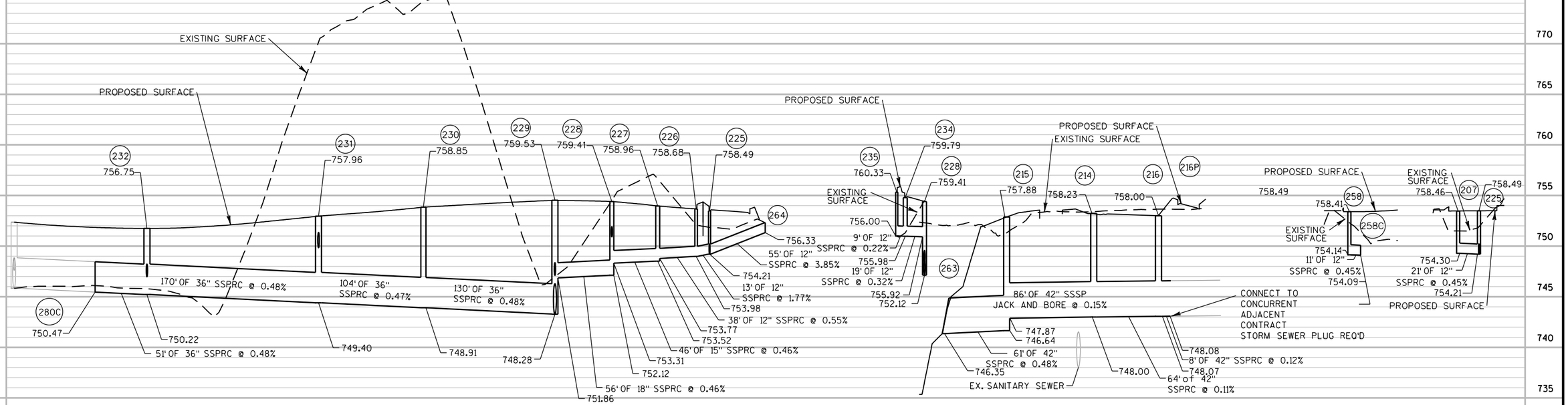
216P STA 19RSWC+31, 30.2'
STORM SEWER PLUG

216 STA 19RSWC+28, 37.4'RT
MANHOLE 6-J

214 STA 18RSWC+73, 69.8'RT
MANHOLE 6-J

215 STA 17RSWC+88, 69.5'RT
MANHOLE 6-J

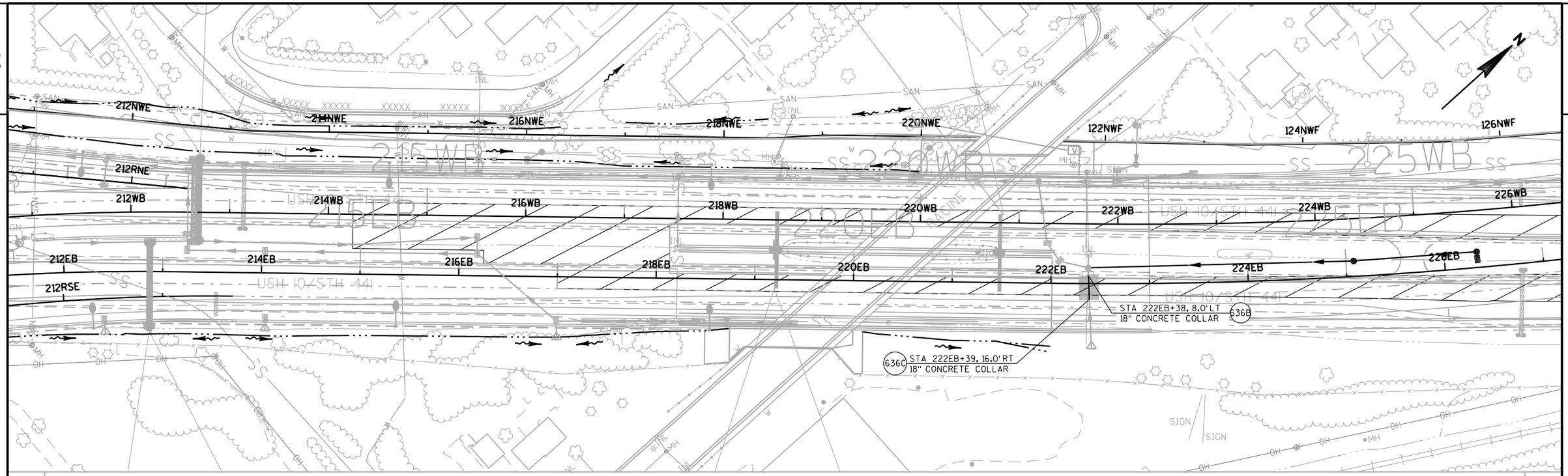
250CNB 250CSB 196EB 196RSE 248CNB 248CSB 194WB 194EB 192WB 194RSE 194RSW 246CNB 246CSB 19RSWC 244CNB 244CSB 18RSWC 242CNB 242CSB 240CNB 240CSB 238CNB 238CSB 24RSWC 22RSWC 26RSWC ORRB

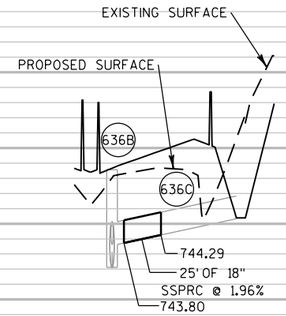


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3A	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\022514_ss_s3A.dgn
PLOT DATE : 5/7/2015 8:53:54 AM PLOT BY : pshedivy PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 41

2



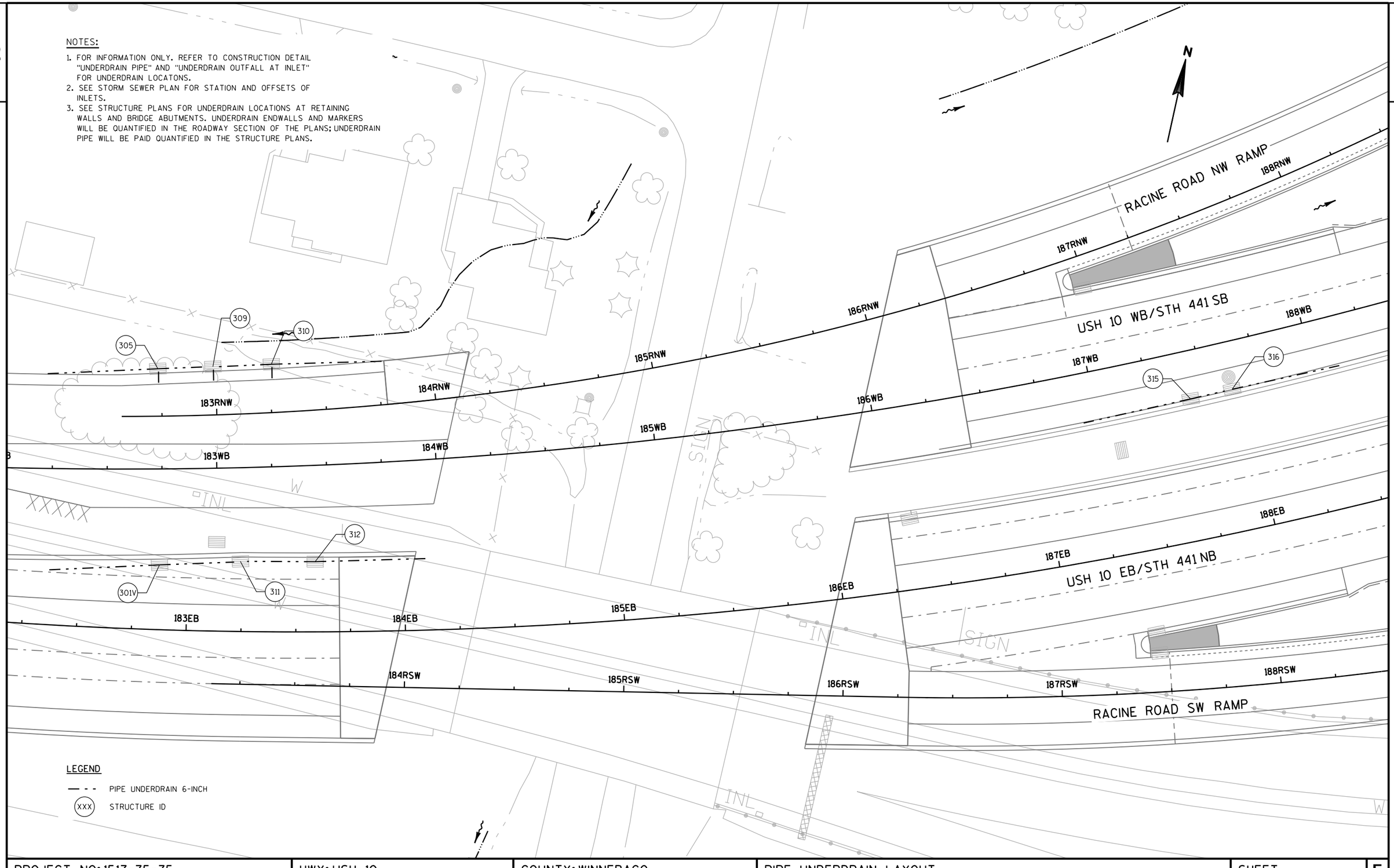


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORM SEWER - STAGE 3B	SHEET E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\022515_ss_s3B.dgn PLOT DATE : 4/27/2015 2:31:07 PM PLOT BY : pshedivy PLOT NAME : PLOT SCALE : 100:1

NOTES:

1. FOR INFORMATION ONLY. REFER TO CONSTRUCTION DETAIL "UNDERDRAIN PIPE" AND "UNDERDRAIN OUTFALL AT INLET" FOR UNDERDRAIN LOCATONS.
2. SEE STORM SEWER PLAN FOR STATION AND OFFSETS OF INLETS.
3. SEE STRUCTURE PLANS FOR UNDERDRAIN LOCATIONS AT RETAINING WALLS AND BRIDGE ABUTMENTS. UNDERDRAIN ENDWALLS AND MARKERS WILL BE QUANTIFIED IN THE ROADWAY SECTION OF THE PLANS; UNDERDRAIN PIPE WILL BE PAID QUANTIFIED IN THE STRUCTURE PLANS.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PIPE UNDERDRAIN LAYOUT	SHEET 197	E

NOTES:
1. FOR INFORMATION ONLY. REFER TO CONSTRUCTION DETAIL "UNDERDRAIN PIPE" AND "UNDERDRAIN OUTFALL AT INLET" FOR UNDERDRAIN LOCATONS.
2. SEE STORM SEWER PLAN FOR STATION AND OFFSETS OF INLETS.

216NWE 217NWE 218NWE 219NWE 220NWE

UNDERDRAIN PLACED BEHIND RETAINING BARRIER, REFER TO CONSTRUCTION DETAIL "RACINE ROAD OVERPASS RETAINING WALL BARRIER" FOR MORE INFORMATION.

365 366 367

USH 10 WB/STH 441 SB

216WB 217WB 218WB 219WB 220WB 221WB

217EB 218EB 219EB 220EB 221EB 222EB

USH 10 EB/STH 441 NB

357 359 358

UNDERDRAIN PLACED BEHIND RETAINING BARRIER, REFER TO CONSTRUCTION DETAIL "RACINE ROAD OVERPASS RETAINING WALL BARRIER" FOR MORE INFORMATION.

LEGEND

PIPE UNDERDRAIN 6-INCH

XXX STRUCTURE ID

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PIPE UNDERDRAIN LAYOUT	SHEET 198	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\022602_pu.dgn PLOT DATE : 4/20/2015 4:05:23 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

NOTES:

1. FOR INFORMATION ONLY. REFER TO CONSTRUCTION DETAIL "UNDERDRAIN PIPE" AND "UNDERDRAIN OUTFALL AT INLET" FOR UNDERDRAIN LOCATONS.
2. SEE STORM SEWER PLAN FOR STATION AND OFFSETS OF INLETS.
3. SEE STRUCTURE PLANS FOR UNDERDRAIN LOCATIONS AT RETAINING WALLS AND BRIDGE ABUTMENTS. UNDERDRAIN ENDWALLS AND MARKERS WILL BE QUANTIFIED IN THE ROADWAY SECTION OF THE PLANS; UNDERDRAIN PIPE WILL BE PAID QUANTIFIED IN THE STRUCTURE PLANS.

RACINE ROAD SW RAMP

RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB

RACINE ROAD SE RAMP

15RSWC
195RSW
16RSWC
196RSW
17RSWC
197RSW
18RSWC
195EB
196EB
197EB
195WB
248CSB
249CSB
250CSB
247CSB
248CNB
249CNB
250CNB
247CNB
246CSB
246CNB
245CSB
245CNB
194RSE
195RSE
196RSE
197RSE
ORRB

242
241
246
247
249
250
251
252
237
236

LEGEND

PIPE UNDERDRAIN 6-INCH

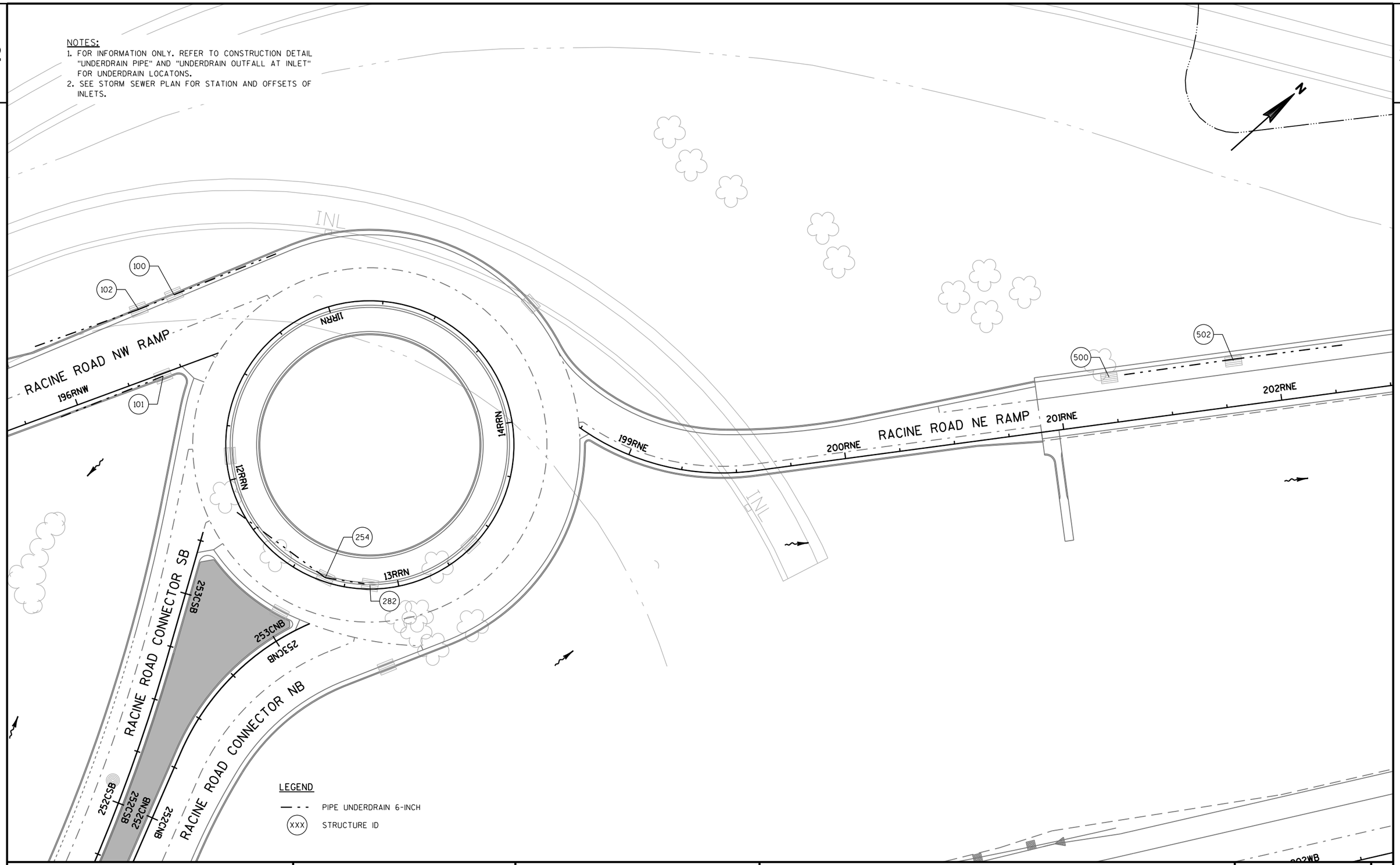
XXX STRUCTURE ID

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PIPE UNDERDRAIN LAYOUT	SHEET	E

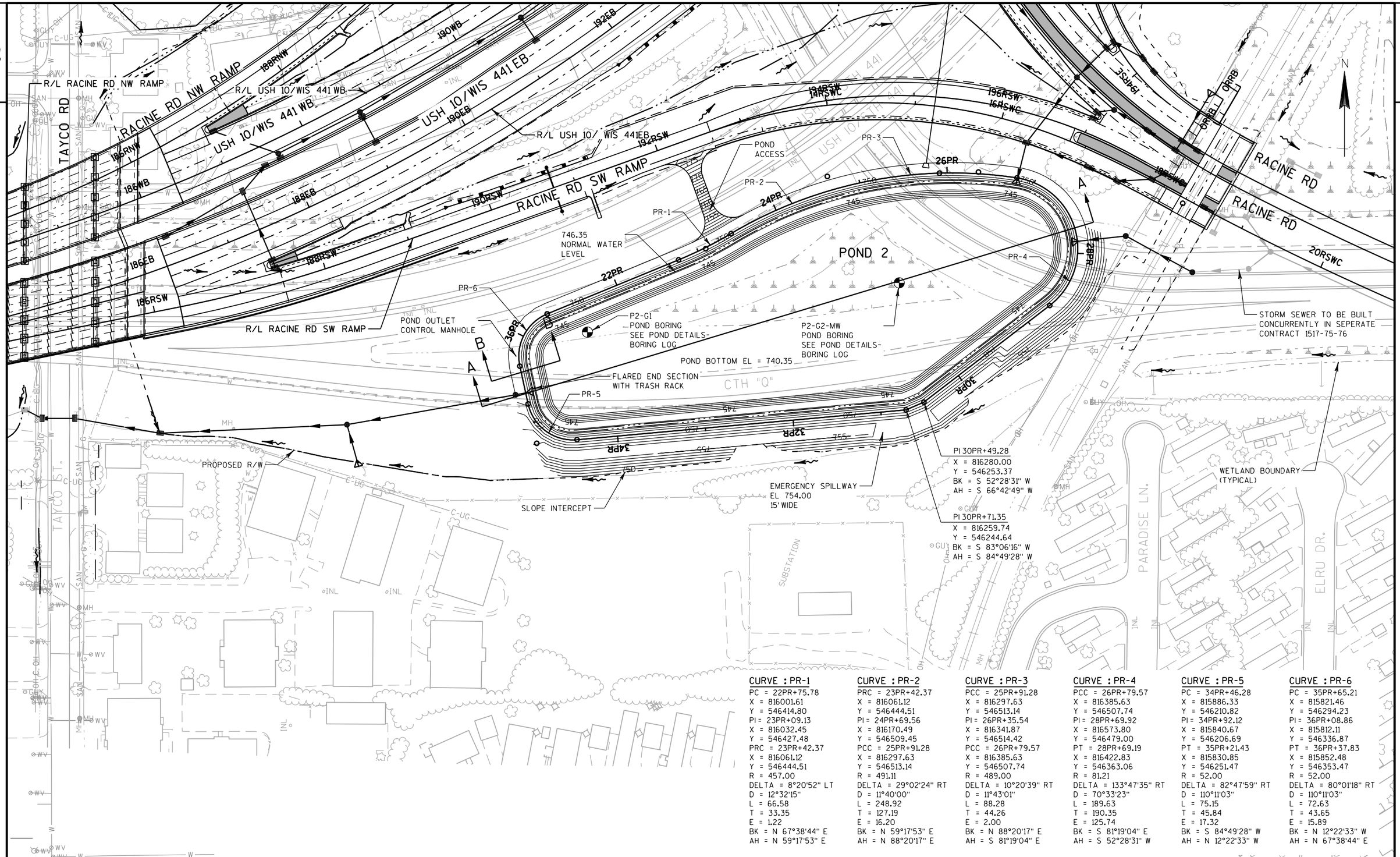
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WISDOT/CADDS SHEET 42

NOTES:
1. FOR INFORMATION ONLY. REFER TO CONSTRUCTION DETAIL "UNDERDRAIN PIPE" AND "UNDERDRAIN OUTFALL AT INLET" FOR UNDERDRAIN LOCATONS.
2. SEE STORM SEWER PLAN FOR STATION AND OFFSETS OF INLETS.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PIPE UNDERDRAIN LAYOUT	SHEET 200	E



CURVE : PR-1
PC = 22PR+75.78
X = 816001.61
Y = 546414.80
PI = 23PR+09.13
X = 816032.45
Y = 546427.48
PRC = 23PR+42.37
X = 816061.12
Y = 546444.51
R = 457.00
DELTA = 8°20'52" LT
D = 12°32'15"
L = 66.58
T = 33.35
E = 1.22
BK = N 67°38'44" E
AH = N 59°17'53" E

CURVE : PR-2
PRC = 23PR+42.37
X = 816061.12
Y = 546444.51
PI = 24PR+69.56
X = 816170.49
Y = 546509.45
PCC = 25PR+91.28
X = 816297.63
Y = 546513.14
R = 491.11
DELTA = 29°02'24" RT
D = 11°40'00"
L = 248.92
T = 127.19
E = 16.20
BK = N 59°17'53" E
AH = N 88°20'17" E

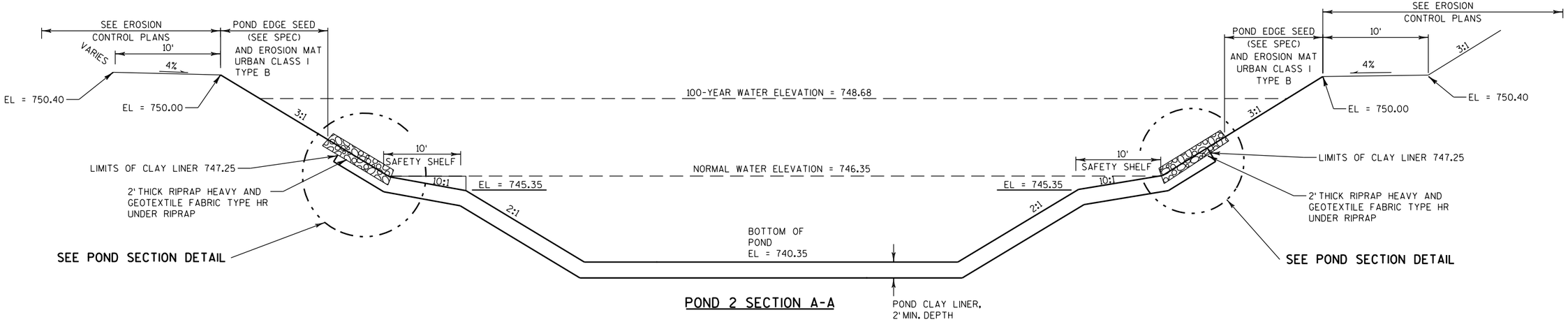
CURVE : PR-3
PCC = 25PR+91.28
X = 816297.63
Y = 546513.14
PI = 26PR+35.54
X = 816341.87
Y = 546514.42
PCC = 26PR+79.57
X = 816385.63
Y = 546507.74
R = 489.00
DELTA = 10°20'39" RT
D = 11°43'01"
L = 88.28
T = 44.26
E = 2.00
BK = N 88°20'17" E
AH = S 81°19'04" E

CURVE : PR-4
PCC = 26PR+79.57
X = 816385.63
Y = 546507.74
PI = 28PR+69.92
X = 816573.80
Y = 546479.00
PT = 28PR+69.19
X = 816422.83
Y = 546363.06
R = 81.21
DELTA = 133°47'35" RT
D = 70°33'23"
L = 189.63
T = 190.35
E = 125.74
BK = S 81°19'04" E
AH = S 52°28'31" W

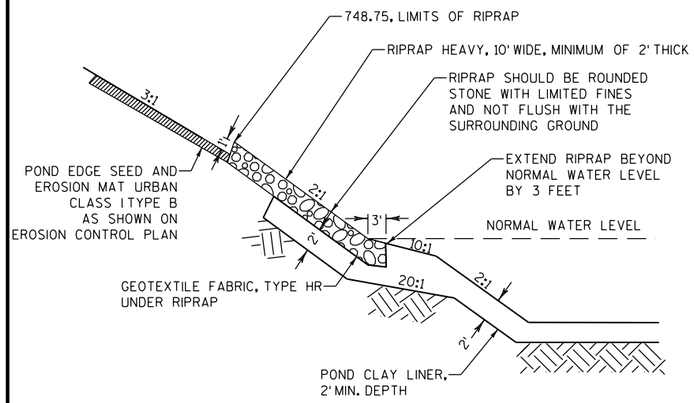
CURVE : PR-5
PC = 34PR+46.28
X = 815886.33
Y = 546210.82
PI = 34PR+92.12
X = 815840.67
Y = 546206.69
PT = 35PR+21.43
X = 815830.85
Y = 546251.47
R = 52.00
DELTA = 82°47'59" RT
D = 110°11'03"
L = 75.15
T = 45.84
E = 17.32
BK = S 84°49'28" W
AH = N 12°22'33" W

CURVE : PR-6
PC = 35PR+65.21
X = 815821.46
Y = 546294.23
PI = 36PR+08.86
X = 815812.11
Y = 546336.87
PT = 36PR+37.83
X = 815852.48
Y = 546353.47
R = 52.00
DELTA = 80°01'18" RT
D = 110°11'03"
L = 72.63
T = 43.65
E = 15.89
BK = N 12°22'33" W
AH = N 67°38'44" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORMWATER MANAGEMENT - CONSTRUCTION DETAILS (POND 2)	SHEET 201	E

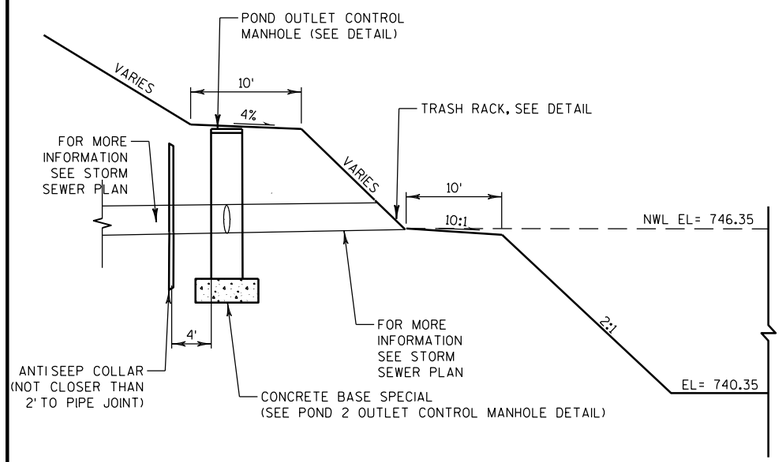


POND 2 SECTION A-A



POND SECTION DETAIL

NOT TO SCALE

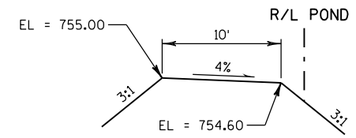


POND 2 SECTION B-B

NOT TO SCALE

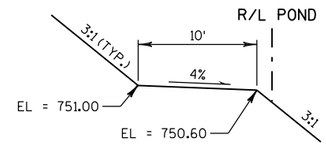
NOTES

1. REFER TO STANDARD DETAIL CATCH BASIN 6-FT DIAMETER FOR OTHER INFORMATION.
2. OUTLET STRUCTURE WILL BE PAID FOR AS POND OUTLET CONTROL MANHOLE.
3. TRASH RACKS WILL BE GALVANIZED OR SIMILARLY PROTECTED FROM CORROSION.
4. CONNECTOR DEVICE WILL BE REMOVABLE AND APPROVED BY THE ENGINEER



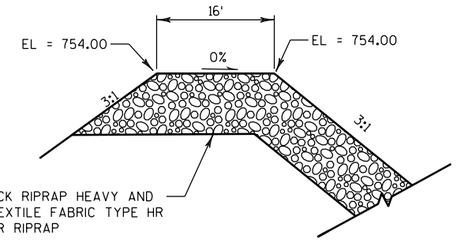
TYPICAL SECTION POND ACCESS ROAD

STA 29PR+59.70 LT TO STA 34PR+70.32 LT



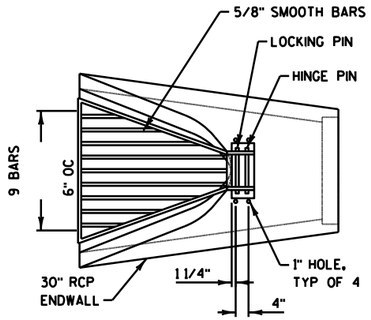
TYPICAL SECTION POND ACCESS ROAD

STA 20PR+02.39 LT TO STA 29PR+41.68 LT

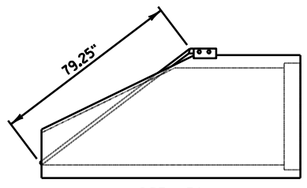


TYPICAL SECTION POND ACCESS ROAD - EMERGENCY SPILLWAY

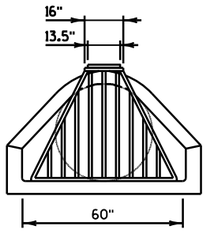
STA 30PR+91.34 TO STA 31PR+06.34



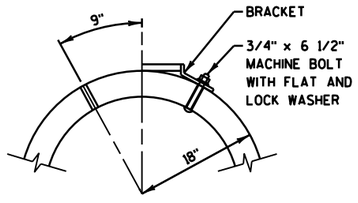
PLAN



SIDE VIEW



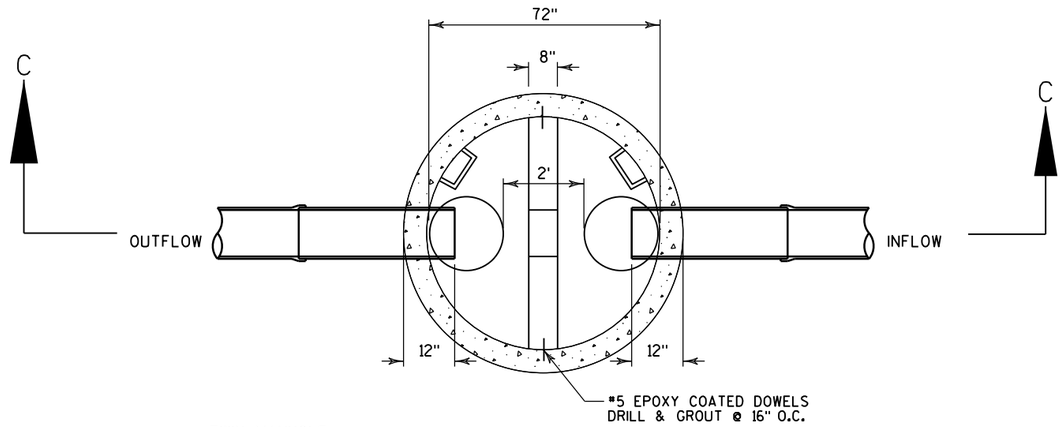
END VIEW

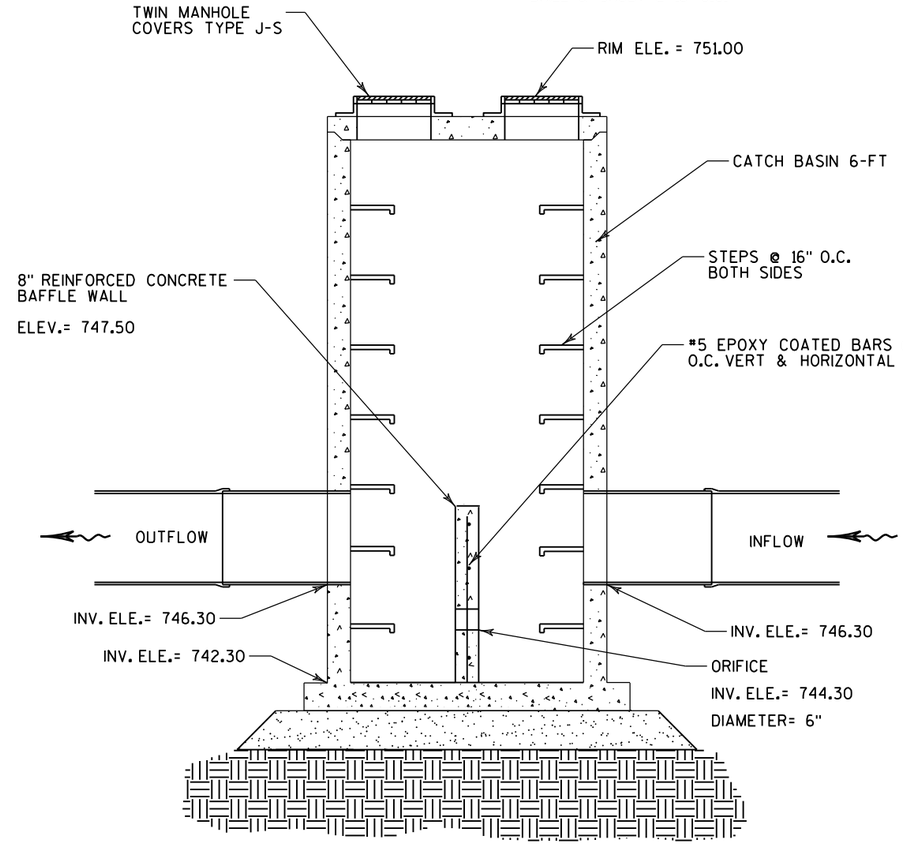


CROSS SECTION

TRASH RACK DETAIL

N.T.S.





SECTION C-C

POND 2 OUTLET CONTROL MANHOLE

N.T.S.

2

WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1517-07-04	BORING ID:	P2-G1
	WISDOT STRUCTURE ID:	PAGE NO:	1 of 2
WISDOT PROJECT NAME: WIS 441	CONSULTANT: Tri-County Partners, Inc.	CONSULTANT PROJECT NO: 49349781	LATITUDE: / LONGITUDE:
ROADWAY NAME: EB 10 off-ramp to Racine Rd.	DRILLING CONTRACTOR: Soils & Engineering Services, Inc.	DRILLING CONTRACTOR PROJECT NO: 12974	NORTHING: 546332.85 / EASTING: 815898.16
DATE STARTED: 12/05/12	CREW CHIEF: S. Hunger	DRILL RIG: CME 550X	COORDINATE SYSTEM:
DATE COMPLETED: 12/05/12	LOGGED BY: R. Borkovetz	HOLE SIZE: 7.6 in	HORIZONTAL DATUM: WISCRS (2006) / VERTICAL DATUM: NAVD 88
COUNTY: Winnebago	LOG QC BY: D. Reichel	HAMMER TYPE: Automatic	STREAMBED ELEVATION: NA
STATION: / OFFSET:	TOWNSHIP: 20 / RANGE: 17 / SECTION: / 1/4 SECTION: / 1/4 1/4 SECTION:		SURFACE ELEVATION: 765.49 ft

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						TOPSOIL- [13" thick]							
				1.1		764.4							
						FAT CLAY (CH) Reddish-Brown, moist, stiff to hard							
SPT 1	8	M	3-4-6 (10)					3.8, 4.3					
SPT 2	14	M 23	4-8-9 (17)	5				4.5, 3.8	53	32			NM=22.7%
SPT 3	12	M	4-4-5 (9)				CH	2.8, 1.8					
SPT 4	12	M 25	3-5-7 (12)	10				4.9, 2.8	52	31			NM=25.3%
SPT 5	18	M 22	5-9-11 (20)	15				5.3, 4.5	45	25			NM=21.7%
				12.0		753.5							
						LEAN CLAY (CL) Reddish-Brown, moist, very stiff to hard	CL						
												HSA	4¼"-inside-diameter continuous flight hollow-stem augers
SPT 6	18	M 28	4-6-7 (13)					2.8, 2.0					NM=28.0%

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NMR		CAVE - IN DEPTH AT COMPLETION: NMR	WET / DRY
WATER LEVEL AT COMPLETION: NE		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET / DRY

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1517-07-04	BORING ID:	P2-G1
	WISDOT STRUCTURE ID:	PAGE NO:	2 of 2

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						LEAN CLAY (CL) Reddish-Brown, moist, very stiff to hard	CL						
				22.5		743.0							
						FAT CLAY (CH) Reddish-Brown, wet, soft to stiff							
SH st1	24	34		25			CH	1.5	57	36			NM=34.0% q_u=1.18 tsf k= $1.8x10^{-8}$ cm/sec Dry Wt = 88 pcf Fines = 100%
SPT 8	18	W 29	2-2-3 (5)					0.4, <0.5					Topsoil/Organic Odor NM=29.0%
				28.0		737.5							
						LEAN CLAY (CL) Reddish-Brown, moist to wet, soft							
SPT 9	18	W 40	0	30				0.2, <0.5	46	25			Pushed Stone Topsoil/Organic Odor NM=40.1%
SPT 10	18	W 53	1-2-2 (4)				CL	0.2, <0.5					Topsoil/Organic Odor NM=53.2%
SPT 11	18	M 29	2-2-3 (5)	34.0		731.5		1.1, 1.0	49	28			Topsoil/Organic Odor NM=29.4% LI=2.4%
				34.5		*FIBROUS PEAT (PT)* Black	731.0	PT					
				35.0		*LEAN CLAY (CL)* Reddish-Brown, moist, stiff	730.5	CL					
				35		End of Boring at 35.0 ft.							

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1517-07-04
WISDOT STRUCTURE ID:

BORING ID: P2-G2-MW
PAGE NO: 1 of 2

WISDOT PROJECT NAME: WIS 441	CONSULTANT: Tri-County Partners, Inc.	CONSULTANT PROJECT NO: 49349781	LATITUDE: / LONGITUDE:
ROADWAY NAME: EB 10 off-ramp to Racine Rd.	DRILLING CONTRACTOR: Soils & Engineering Services, Inc.	DRILLING CONTRACTOR PROJECT NO: 12974	NORTHING: 546389.007 / EASTING: 816251.74
DATE STARTED: 12/05/12	CREW CHIEF: S. Hunger	DRILL RIG: CME 550X	COORDINATE SYSTEM:
DATE COMPLETED: 12/05/12	LOGGED BY: R. Borkovetz	HOLE SIZE: 7.6 in	HORIZONTAL DATUM: WISCRS (2006) / VERTICAL DATUM: NAVD 88
COUNTY: Winnebago	LOG QC BY: D. Reichel	HAMMER TYPE: Automatic	STREAMBED ELEVATION: NA
STATION: / OFFSET:	TOWNSHIP: 20 / RANGE: 17 / SECTION: / 1/4 SECTION: / 1/4 1/4 SECTION:		SURFACE ELEVATION: 755.097 ft

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	WELL DIAGRAM	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0		**TOPSOIL**-[10" thick] 754.3								
SPT 1	6	M	2-3-6 (9)	0.8		***LEAN CLAY (CL)*** Reddish-Brown, moist, stiff to hard			2.1, 2.3					Topsoil/Organic Odor
SPT 2	10	M 21	8-15-18 (33)	5					5.8, 4.0					NM=20.7% Fines = 100%
SPT 3	15	M 21	3-4-5 (9)				CL		4.0, 3.5	48	28			NM=21.3%
SPT 4	18	M	6-8-9 (17)						3.5, 1.8					
SPT 5	18	M 35	4-3-4 (7)	10		10.5 744.6 ***FAT CLAY (CH)*** Reddish-Brown, moist, medium to stiff	CH		1.3, 0.8	57	36		HSA	NM=34.9% 4¼"-inside-diameter continuous flight hollow-stem augers
SH st1	3			15										
SH st2	24	33				16.0 739.1 ***LEAN CLAY (CL)*** Reddish-Brown, wet, very soft	CL			42	23			NM=33.3% q_u=0.46 tsf k= $2.5x10^{-5}$ cm/sec Dry Wt = 89 pcf Fines = 100%
SPT 8	18	W	2-2-2 (4)						0.1, <0.3					

WATER LEVEL & CAVE-IN OBSERVATION DATA

▽ WATER ENCOUNTERED DURING DRILLING: NMR		CAVE - IN DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
▼ WATER LEVEL AT COMPLETION: NE		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

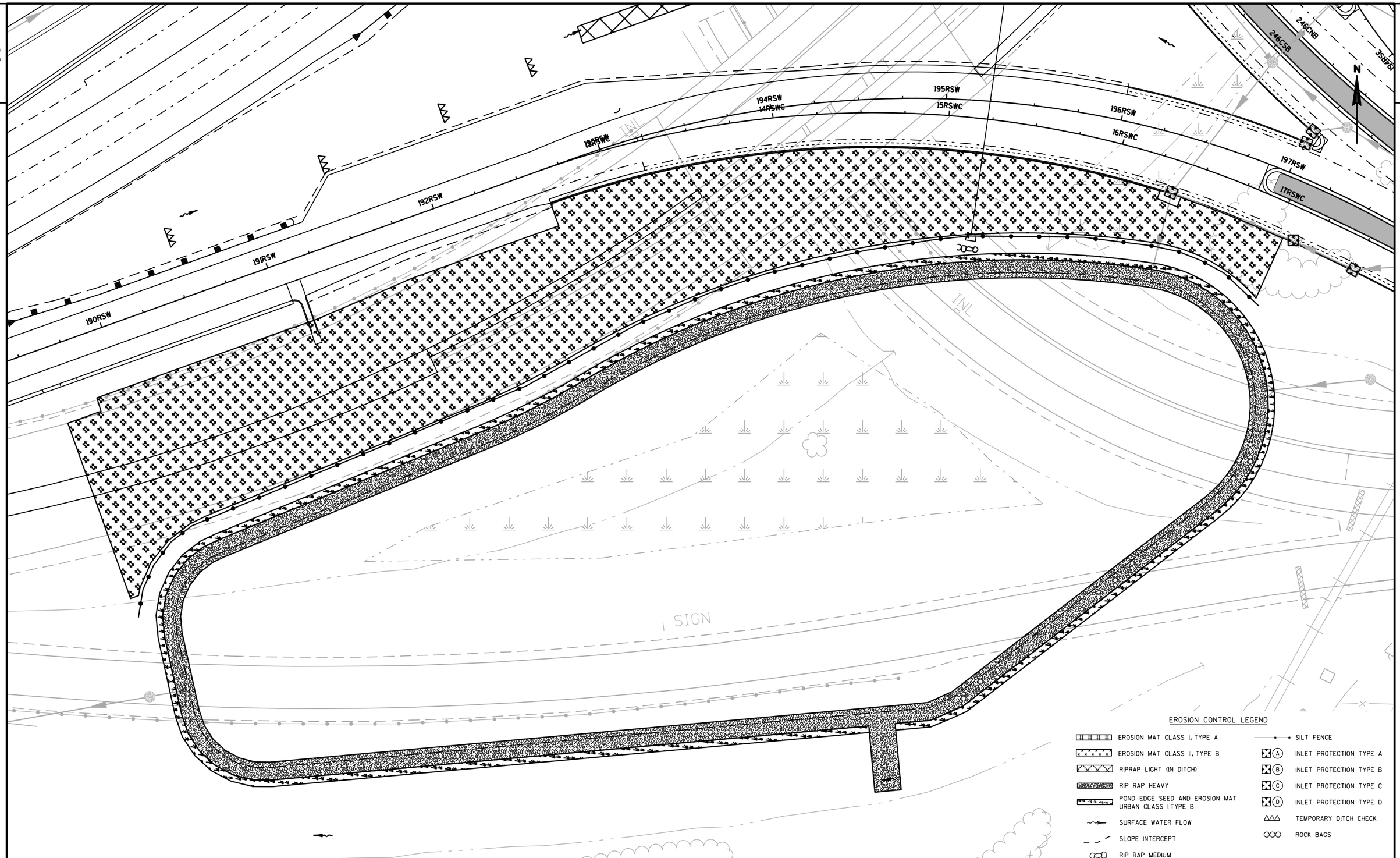
WISDOT PROJECT ID: 1517-07-04
WISDOT STRUCTURE ID:

BORING ID: P2-G2-MW
PAGE NO: 2 of 2

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	WELL DIAGRAM	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
SPT 9	18	W 56	0	22.5		***LEAN CLAY (CL)*** Reddish-Brown, wet, very soft 732.6	CL		0.2, <0.3					Topsoil/Orgsnic Odor NM=55.5% LI=1.5%
						FIBROUS PEAT (PT) Black Wood at 22.5'	PT							
SPT 10	18	M 87 23	2-4-6 (10)	24.3		730.8			2.1, 1.3	36	21			NM=87.1% LI=20.2% NM=23.1% LI=1.2%
				25		***LEAN CLAY (CL)*** Reddish-Brown, moist, stiff to very stiff 26.0 730.1	CL							
						End of Boring at 26.0 ft.								

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2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORMWATER MANAGEMENT - CONSTRUCTION DETAILS (POND 2)	SHEET 206	E

2

CURVE : PC-1
PC = 6PC+96.91
X = 816460.28
Y = 547936.86
PI = 7PC+18.35
X = 816447.14
Y = 547919.92
PT = 7PC+39.71
X = 816436.77
Y = 547901.15
R = 275.00
DELTA = 8°54'58" LT
D = 20°50'05"
L = 42.79
T = 21.44
E = 0.83
BK = S 37°48'57" W
AH = S 28°53'58" W

CURVE : PC-2
PC = 8PC+84.30
X = 816366.90
Y = 547774.56
PI = 9PC+22.45
X = 816348.46
Y = 547741.17
PT = 9PC+60.50
X = 816325.98
Y = 547710.35
R = 605.50
DELTA = 7°12'36" RT
D = 9°27'45"
L = 76.19
T = 38.15
E = 1.20
BK = S 28°53'58" W
AH = S 36°06'34" W

CURVE : PC-3
PC = 11PC+90.36
X = 816190.51
Y = 547524.64
PI = 12PC+07.56
X = 816180.37
Y = 547510.75
PT = 12PC+22.85
X = 816163.32
Y = 547508.54
R = 40.00
DELTA = 46°32'02" RT
D = 143°14'22"
L = 32.49
T = 17.20
E = 3.54
BK = S 36°06'34" W
AH = S 82°38'36" W

CURVE : PC-4
PC = 13PC+89.71
X = 815997.73
Y = 547487.95
PI = 13PC+98.01
X = 815989.50
Y = 547486.96
PT = 14PC+06.20
X = 815981.30
Y = 547488.23
R = 60.00
DELTA = 15°44'41" RT
D = 95°29'35"
L = 16.49
T = 8.30
E = 0.57
BK = S 83°06'16" W
AH = N 81°09'03" W

CURVE : PC-5
PC = 14PC+26.93
X = 815960.82
Y = 547491.42
PI = 14PC+76.86
X = 815911.48
Y = 547499.10
PCC = 15PC+22.94
X = 815877.88
Y = 547536.04
R = 141.58
DELTA = 38°51'19" RT
D = 40°28'12"
L = 96.01
T = 49.93
E = 8.55
BK = N 81°09'03" W
AH = N 42°17'43" W

CURVE : PC-6
PCC = 15PC+22.94
X = 815877.88
Y = 547536.04
PI = 15PC+70.66
X = 815845.76
Y = 547571.34
PT = 16PC+16.76
X = 815832.24
Y = 547617.11
R = 208.06
DELTA = 25°50'18" RT
D = 27°32'18"
L = 93.83
T = 47.72
E = 5.40
BK = N 42°17'43" W
AH = N 16°27'25" W

CURVE : PC-7
PC = 16PC+45.13
X = 815824.20
Y = 547644.31
PI = 16PC+63.58
X = 815818.98
Y = 547662.01
PT = 16PC+76.92
X = 815800.52
Y = 547662.22
R = 25.00
DELTA = 72°52'00" LT
D = 229°10'59"
L = 31.79
T = 18.45
E = 6.07
BK = N 416°27'25" W
AH = N 89°19'25" W

CURVE : PC-8
PC = 19PC+14.92
X = 815562.54
Y = 547665.03
PI = 20PC+14.48
X = 815462.99
Y = 547666.21
PT = 21PC+71.56
X = 815463.73
Y = 547765.77
R = 100.00
DELTA = 89°44'54" RT
D = 57°17'45"
L = 156.64
T = 99.56
E = 41.11
BK = N 89°19'25" W
AH = N 0°25'29" E

CURVE : PC-9
PC = 21PC+90.68
X = 815464.61
Y = 547884.88
PI = 22PC+90.57
X = 815465.35
Y = 547984.77
PT = 23PC+57.94
X = 815563.47
Y = 548003.47
R = 121.64
DELTA = 78°47'08" RT
D = 47°06'12"
L = 167.26
T = 99.89
E = 35.76
BK = N 0°25'29" E
AH = N 79°12'37" E

CURVE : PC-10
PC = 23PC+69.59
X = 815574.92
Y = 548005.65
PI = 23PC+95.63
X = 815600.50
Y = 548010.53
PRC = 24PC+16.96
X = 815609.42
Y = 548035.00
R = 145.87
DELTA = 59°11'00" LT
D = 124°55'16"
L = 47.38
T = 26.05
E = 6.88
BK = N 79°12'37" E
AH = N 20°01'37" E

CURVE : PC-11
PRC = 24PC+16.96
X = 815609.42
Y = 548035.00
PI = 24PC+43.16
X = 815618.40
Y = 548059.61
PCC = 24PC+68.38
X = 815637.57
Y = 548077.46
R = 109.00
DELTA = 27°01'47" RT
D = 52°33'54"
L = 51.42
T = 26.20
E = 3.10
BK = N 20°01'37" E
AH = N 47°03'24" E

CURVE : PC-12
PCC = 24PC+68.38
X = 815637.57
Y = 548077.46
PI = 25PC+02.33
X = 815662.42
Y = 548100.59
PCC = 25PC+33.01
X = 815696.37
Y = 548100.36
R = 85.45
DELTA = 43°19'58" RT
D = 67°03'14"
L = 64.62
T = 33.95
E = 6.50
BK = N 47°03'24" E
AH = S 89°36'38" E

CURVE : PC-13
PCC = 25PC+33.01
X = 815696.37
Y = 548100.36
PI = 26PC+51.51
X = 815814.87
Y = 548099.55
PRC = 27PC+35.70
X = 815848.87
Y = 547985.17
R = 156.00
DELTA = 74°26'40" RT
D = 36°43'41"
L = 202.69
T = 118.51
E = 39.91
BK = S 89°36'38" E
AH = S 15°09'58" E

CURVE : PC-14
PRC = 27PC+35.70
X = 815848.87
Y = 547985.17
PI = 27PC+70.99
X = 815855.11
Y = 547951.11
PT = 27PC+97.16
X = 815890.30
Y = 547948.40
R = 50.00
DELTA = 70°25'55" LT
D = 114°35'29"
L = 61.46
T = 35.29
E = 11.20
BK = S 15°09'58" E
AH = S 85°35'53" E

CURVE : PC-15
PC = 28PC+27.49
X = 815920.53
Y = 547946.07
PI = 29PC+37.36
X = 816030.07
Y = 547937.64
PT = 30PC+44.67
X = 816135.16
Y = 547969.69
R = 582.49
DELTA = 21°21'46" LT
D = 9°50'11"
L = 217.18
T = 109.87
E = 10.27
BK = S 85°35'53" E
AH = N 73°02'21" E

CURVE : PC-16
PC = 30PC+65.81
X = 816155.38
Y = 547975.86
PI = 30PC+72.87
X = 816162.13
Y = 547977.92
PRC = 30PC+79.85
X = 816168.10
Y = 547981.69
R = 52.50
DELTA = 15°19'23" LT
D = 109°08'05"
L = 14.04
T = 7.06
E = 0.47
BK = N 73°02'21" E
AH = N 57°42'59" E

CURVE : PC-17
PRC = 30PC+79.85
X = 816168.10
Y = 547981.69
PI = 31PC+09.27
X = 816192.98
Y = 547997.40
PT = 31PC+38.26
X = 816221.37
Y = 548005.15
R = 196.69
DELTA = 17°01'00" RT
D = 29°07'49"
L = 58.42
T = 29.42
E = 2.19
BK = N 57°42'59" E
AH = N 74°43'59" E

CURVE : PC-18
PC = 31PC+57.51
X = 816239.93
Y = 548010.22
PI = 31PC+78.22
X = 816259.91
Y = 548015.67
PT = 31PC+98.82
X = 816280.55
Y = 548017.42
R = 1226.79
DELTA = 10°26'10" RT
D = 25°15'50"
L = 41.31
T = 20.71
E = 0.94
BK = N 74°43'59" E
AH = N 85°10'09" E

CURVE : PC-19
PC = 32PC+11.66
X = 816293.35
Y = 548018.50
PI = 32PC+22.66
X = 816304.31
Y = 548019.43
PT = 32PC+32.97
X = 816312.77
Y = 548026.45
R = 35.00
DELTA = 34°53'14" LT
D = 163°42'08"
L = 21.31
T = 11.00
E = 1.69
BK = N 85°10'09" E
AH = N 50°16'55" E

CURVE : PC-20
PC = 32PC+45.61
X = 816322.49
Y = 548034.52
PI = 32PC+82.50
X = 816350.87
Y = 548057.10
PT = 33PC+18.13
X = 816386.70
Y = 548066.87
R = 160.00
DELTA = 25°58'14" RT
D = 35°48'36"
L = 72.52
T = 36.90
E = 4.20
BK = N 50°16'55" E
AH = N 76°15'09" E

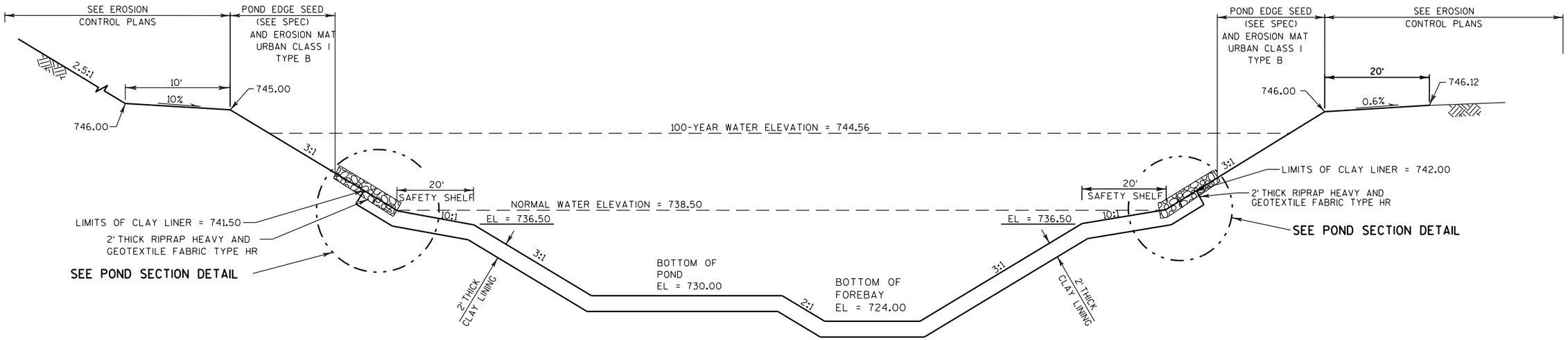
CURVE : PC-21
PC = 33PC+37.64
X = 816405.66
Y = 548071.51
PI = 33PC+71.19
X = 816438.25
Y = 548079.48
PT = 33PC+99.58
X = 816463.62
Y = 548057.54
R = 65.00
DELTA = 54°35'54" RT
D = 88°08'50"
L = 61.94
T = 33.55
E = 8.15
BK = N 76°15'09" E
AH = S 49°09'57" E

CURVE : PC-22
PC = 34PC+33.10
X = 816488.97
Y = 548035.61
PI = 34PC+71.03
X = 816517.67
Y = 548010.80
PT = 34PC+93.81
X = 816494.41
Y = 547980.83
R = 40.00
DELTA = 86°57'54" RT
D = 143°14'22"
L = 60.71
T = 37.94
E = 15.13
BK = S 49°09'57" E
AH = S 37°48'57" W

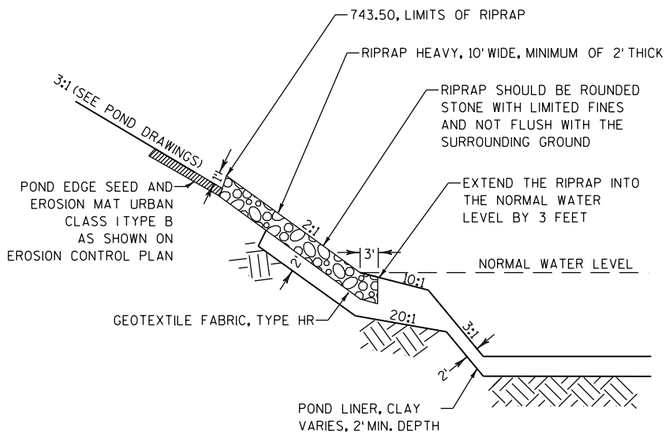
DO NOT DISTURB WETLANDS (UPDATED WETLAND DELINEATION FORTHCOMING)
PREVIOSULY ABANDONED 96" STORM SEWER PIPE
BOLT FRAME & GRATE
ABANDON EX. STO MH "B" RIM 743.21 INV 731.90 E. INV 728.05 S. D. = 15.16'
EXISTING POND OUTLET STRUCTURE
BEGIN PIPE SALVAGE X=816064.66 Y=548038.89
EMERGENCY SPILLWAY ELEV. 744.20 60' WIDE
EX. 218'-96" RCP, CLASS III @ 0.31% (TO BE SALVAGED)
12' MAINTENANCE PATH
MATCH GRADING TO EXISTING
EXISTING CITY OF MENASHA STORM WATER POND
EX. 96" APRON ENDWALL (TO BE SALVAGED)
POND BOTTOM ELEV 730.00
SEDIMENT FOREBAY
X=816272.24 Y=547899.15
X=816265.78 Y=547949.05
X=816318.52 Y=547881.14
P3-G1-MW POND BORING SEE POND DETAILS-BORING LOG FOR BORING DETAILS
20' WIDE SAFETY SHELF
PROPOSED STORM WATER POND
NWL ELEV = 738.50
10PC+00.00, POND 3 = 201RNE+70.20, 77.6' LT X = 816304.42 Y = 547688.81
LITTLE LAKE BUTTE DES MORTS FEMA FLOOD INSURANCE STUDY STILLWATER ELEVATIONS 10-YEAR = 741.2 100-YEAR = 742.7
LITTLE LAKE BUTTE DES MORTS (MARCH 20, 2009 WATER ELEVATION = 738.04; JULY 29, 2013 WATER ELEVATION = 736.68)
2-YEAR FLOOD ELEVATION: 741.86
10-YEAR FLOOD ELEVATION: 743.40
100-YEAR FLOOD ELEVATION: 744.56
POND (PC) ALIGNMENT
MATCH GRADING TO EXISTING
PI 12PC+92.85 X = 8160693.90 Y = 547499.58 BK = S 82°38'36" W AH = S 83°06'16" W
PC-1 PC-2 PC-3 PC-4 PC-5 PC-6 PC-7 PC-8 PC-9 PC-10 PC-11 PC-12 PC-13 PC-14 PC-15 PC-16 PC-17 PC-18 PC-19 PC-20 PC-21 PC-22
22PC 20PC 18PC 24PC 28PC 30PC 32PC 34PC 14PC 12PC 10PC 8PC

NOTE:
1. SEE EROSION CONTROL PLANS FOR MATTING AND RIPRAP DETAILS.
2. MAINTAIN INFLOW AND OUTFLOW OF EXISTING CITY OF MENASHA STORM WATER POND AND CONSTRUCTED POND 3 AT ALL TIMES. COST INCIDENTAL TO SALVAGED 96" APRON ENDWALL..

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORMWATER MANAGEMENT - CONSTRUCTION DETAILS (POND 3)	SHEET 207	E

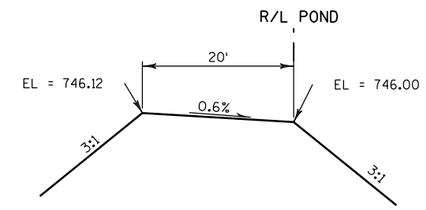


POND 3 SECTION A-A



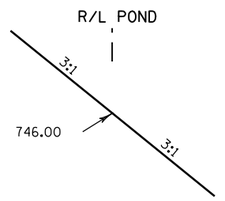
POND SECTION DETAIL

NOT TO SCALE



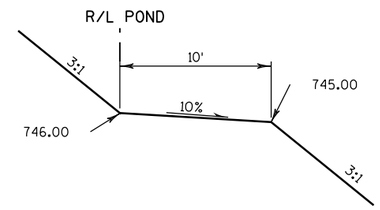
TYPICAL SECTION POND ACCESS ROAD

STA 27PC+95 TO STA 34PC+18



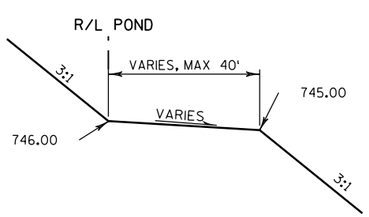
TYPICAL SECTION POND ACCESS ROAD

STA 13PC+00 TO STA 14PC+00



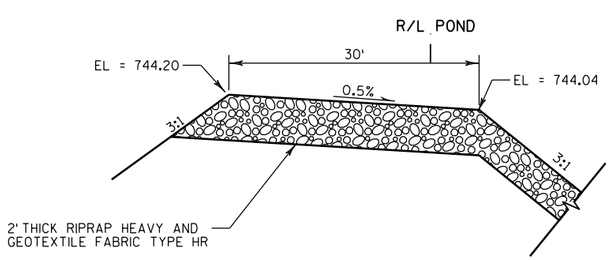
TYPICAL SECTION POND ACCESS ROAD

STA 14PC+00 TO STA 16PC+77



TYPICAL SECTION POND ACCESS ROAD

STA 34PC+18 TO STA 13PC+00



TYPICAL SECTION POND ACCESS ROAD AT EMERGENCY SPILLWAY

STA 32PC+70 TO STA 33PC+30

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORMWATER MANAGMENET - CONSTRUCTION DETAILS (POND 3)	SHEET 208	E

WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1517-07-04	BORING ID: P3-G1-MW
	WISDOT STRUCTURE ID:	PAGE NO: 1 of 2

WISDOT PROJECT NAME: WIS 441	CONSULTANT: Tri-County Partners, Inc.	CONSULTANT PROJECT NO: 49349781	LATITUDE: / LONGITUDE:
ROADWAY NAME: SB 10 off-ramp to Racine Rd.	DRILLING CONTRACTOR: Soils & Engineering Services, Inc.	DRILLING CONTRACTOR PROJECT NO: 12974	NORTHING: 547912.32 / EASTING: 816339.3
DATE STARTED: 12/04/12	CREW CHIEF: S. Hunger	DRILL RIG: CME 550X	COORDINATE SYSTEM:
DATE COMPLETED: 12/04/12	LOGGED BY: R. Borkovetz	HOLE SIZE: 7.6 in	HORIZONTAL DATUM: WISCRS (2006) / VERTICAL DATUM: NAVD 88
COUNTY: Winnebago	LOG QC BY: D. Reichel	HAMMER TYPE: Automatic	STREAMBED ELEVATION: NA
STATION: / OFFSET:	TOWNSHIP: 20 / RANGE: 17 / SECTION: / 1/4 SECTION: / 1/4 1/4 SECTION:		SURFACE ELEVATION: 747.135 ft

SAMPLE TYPE NUMBER	RECOVERY (in) (ROD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	WELL DIAGRAM	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						TOPSOIL-[14" thick]								
				1.2		746.0								
SPT 1	16	M	2-3-4 (7)			***LEAN CLAY (CL)*** Reddish-Brown, moist to wet, soft to stiff Trace organics, 1.17' to 4'			1.8, 1.3					Topsoil/Organic Odor NM=29.0% LL=1.0% Fines = 99%
SPT 2	18	M	3-3-3 (6)	5					1.4, 1.0					Topsoil/Organic Odor
SPT 3	18	W 34	2-2-2 (4)				CL		0.4,	48	30			NM=33.9%
SPT 4	18	W 29	0						0.3,				HSA	NM=29.3% 4¼"-inside-diameter continuous flight hollow-stem augers
				10.0		737.1								
SH st1	12	40		10		***FAT CLAY (CH)*** Reddish-Brown, wet, soft			0.5	58	39			NM=39.7% q_p=0.76 tsf k= 3.3x10^{-9} cm/sec Dry Wt = 81 pcf Fines = 100%
SPT 6	18	W 53	2-2-2 (4)				CH		0.2,					NM=53.4%
SPT 7	18	W 62	1-2-3 (5)	15					0.3,					Topsoil/Organic Odor NM=62.2%
				17.5		729.6								
SPT 8	10	W 27	4-5-6 (11)			***LEAN CLAY (CL)*** Reddish-Brown, wet, very soft to very stiff	CL		0.1 2.0, 2.6	48	26			Topsoil/Organic Odor NM=26.9% LL=3.1%
				19.3		727.8								
				19.6		***FIBROUS PEAT (PT)*** Black	PT							
				20.0			CL							

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NMR		CAVE - IN DEPTH AT COMPLETION: NMR	WET / DRY
WATER LEVEL AT COMPLETION: NE		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET / DRY

NOTES: 1) Stratification lines between soil types represent the approximate boundary, gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

Y:\PROJECTS\DRILLING PROJECTS\12900 PROJECTS\12974 WIS 441 PONDS WISDOT.GPJ WIS 441 04/23/13

WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1517-07-04	BORING ID: P3-G1-MW
	WISDOT STRUCTURE ID:	PAGE NO: 2 of 2

SAMPLE TYPE NUMBER	RECOVERY (in) (ROD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	WELL DIAGRAM	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						LEAN CLAY (CL) Reddish-Brown, wet, soft to very stiff								
						End of Boring at 20.0 ft.								

Y:\PROJECTS\DRILLING PROJECTS\12900 PROJECTS\12974 WIS 441 PONDS WISDOT.GPJ WIS 441 04/23/13

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- RIPRAP LIGHT (IN DITCH)
- RIP RAP HEAVY
- POND EDGE SEED AND EROSION MAT URBAN CLASS I TYPE B
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP MEDIUM
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- ROCK BAGS

20PC
22PC
24PC
26PC
28PC
30PC
18PC
12PC
10PC
202RNE
204RNE
206RNE

SEE RIPRAP DETAILS

SLOPE INTERCEPTS

POND EDGE SEED AND EROSION MAT URBAN CLASS I, TYPE B

RIP RAP HEAVY

N 34°14'32" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	STORMWATER MANAGMENET - EROSION CONTROL (POND 3)	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\022909_sw.dgn PLOT DATE : 4/27/2015 3:30:54 PM PLOT BY : pshedivy PLOT NAME : PLOT SCALE : 100:1

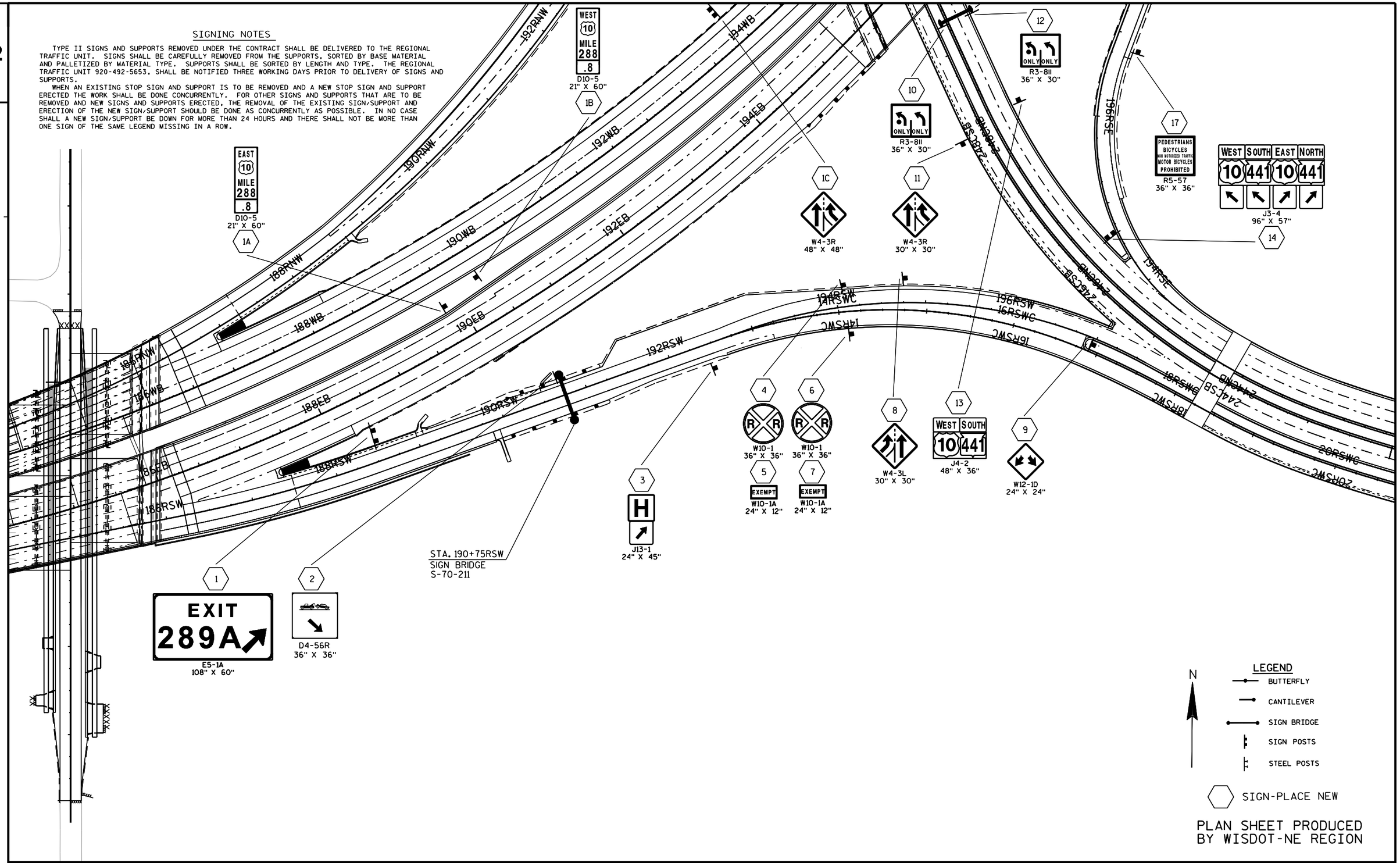
WISDOT/CADDS SHEET 42

2

SIGNING NOTES

TYPE II SIGNS AND SUPPORTS 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. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.



N

LEGEND

- BUTTERFLY
- CANTILEVER
- SIGN BRIDGE
- SIGN POSTS
- STEEL POSTS

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WISDOT-NE REGION

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 211	E

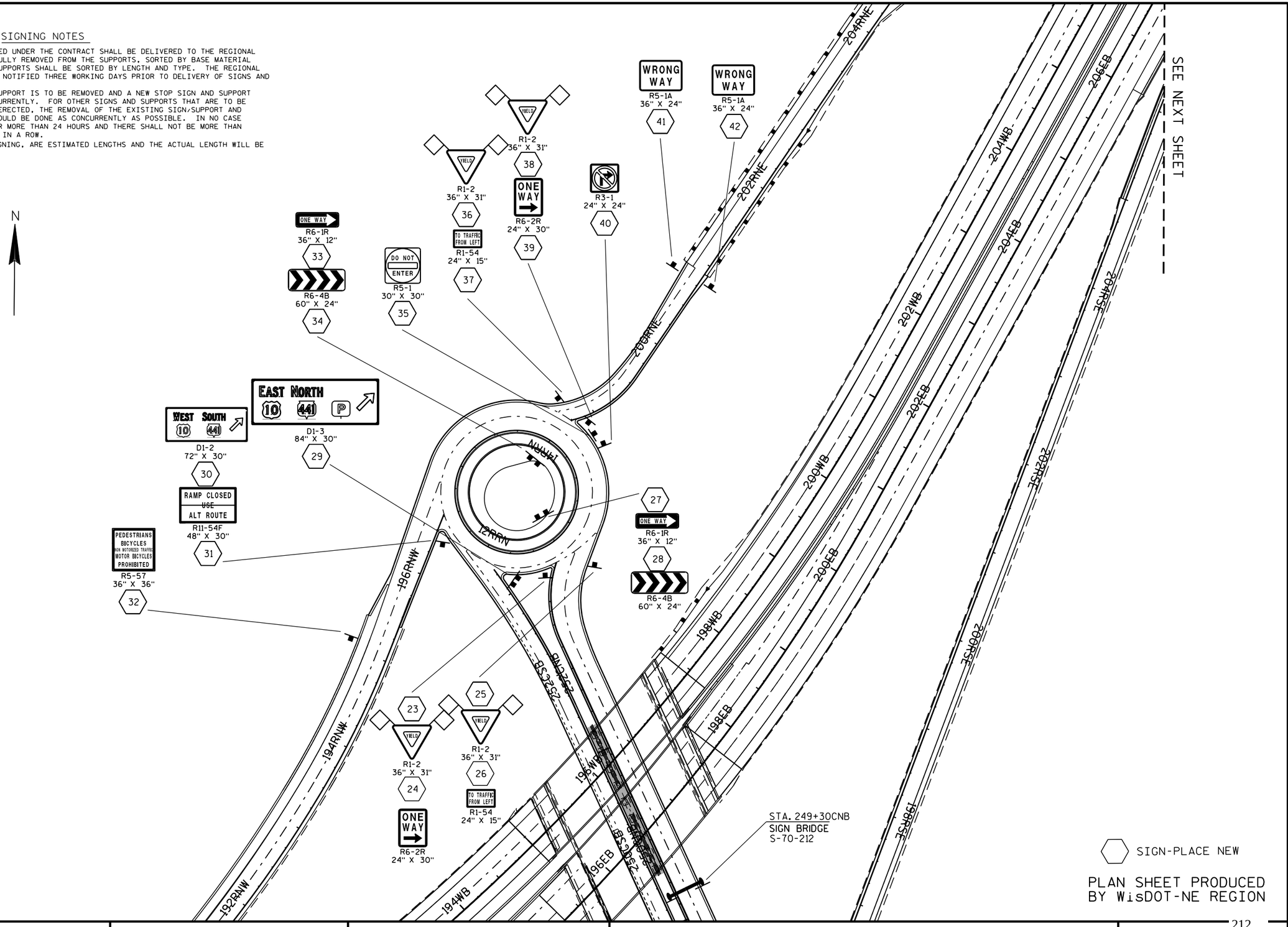
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SIGNING NOTES

TYPE II SIGNS AND SUPPORTS 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. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.



LEGEND

- BUTTERFLY
- CANTILEVER
- SIGN BRIDGE
- SIGN POSTS
- STEEL POSTS

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET E

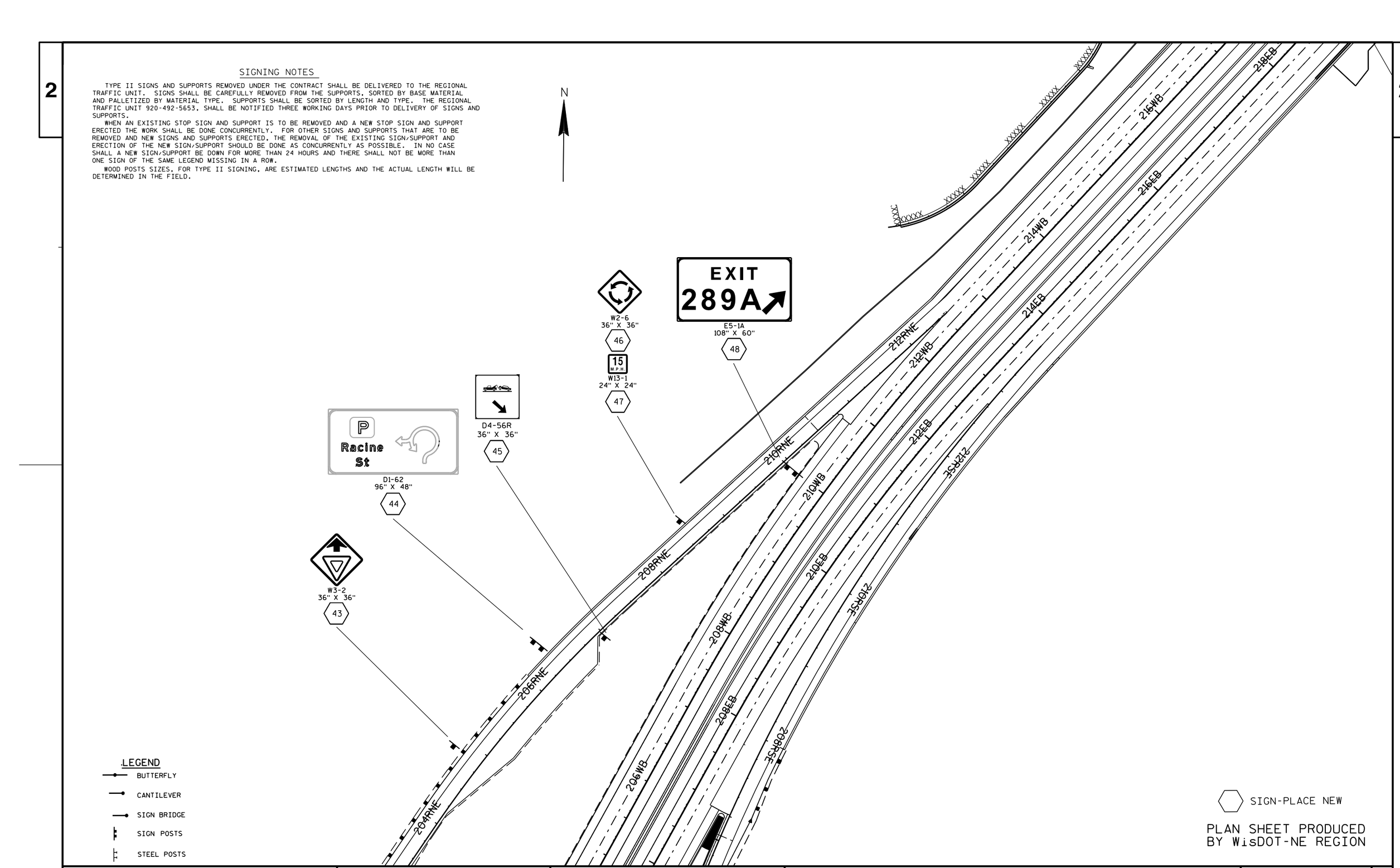
FILE NAME : N:\spo\traffic\SIGNING\Projects\1517-75-75 STH441-USH 10 Racine St Int\023202_ps.dgn PLOT DATE : 16-SEP-2014 12:11 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1 WISDOT/CADDS SHEET 42

SIGNING NOTES

TYPE II SIGNS AND SUPPORTS 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. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.



PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 213	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1517-75-75 STH441-USH 10 Racine St Int\023203_ps.dgn PLOT DATE : 28-JAN-2015 15:44 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

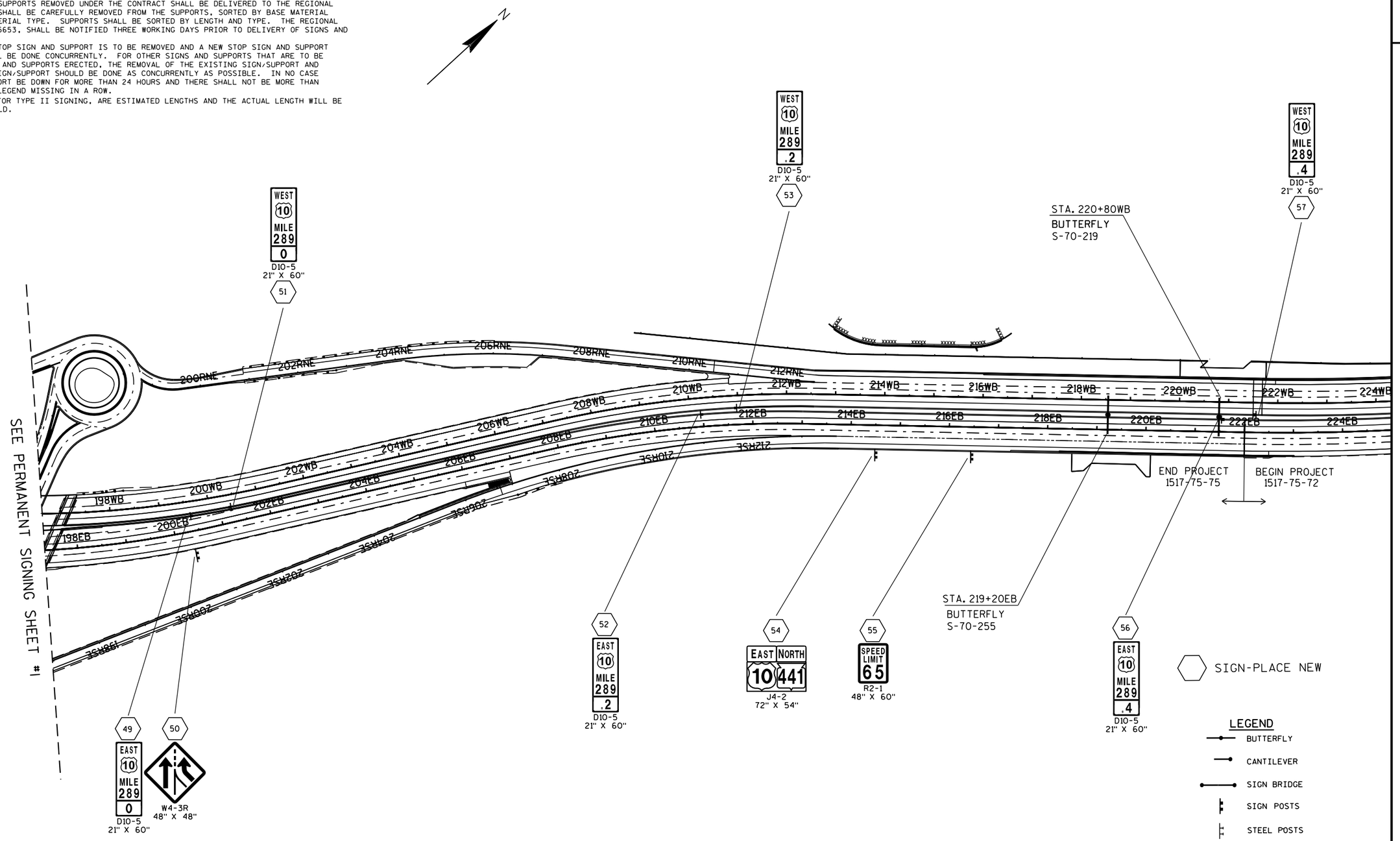
2

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PROJECT NO:1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 214	E

2

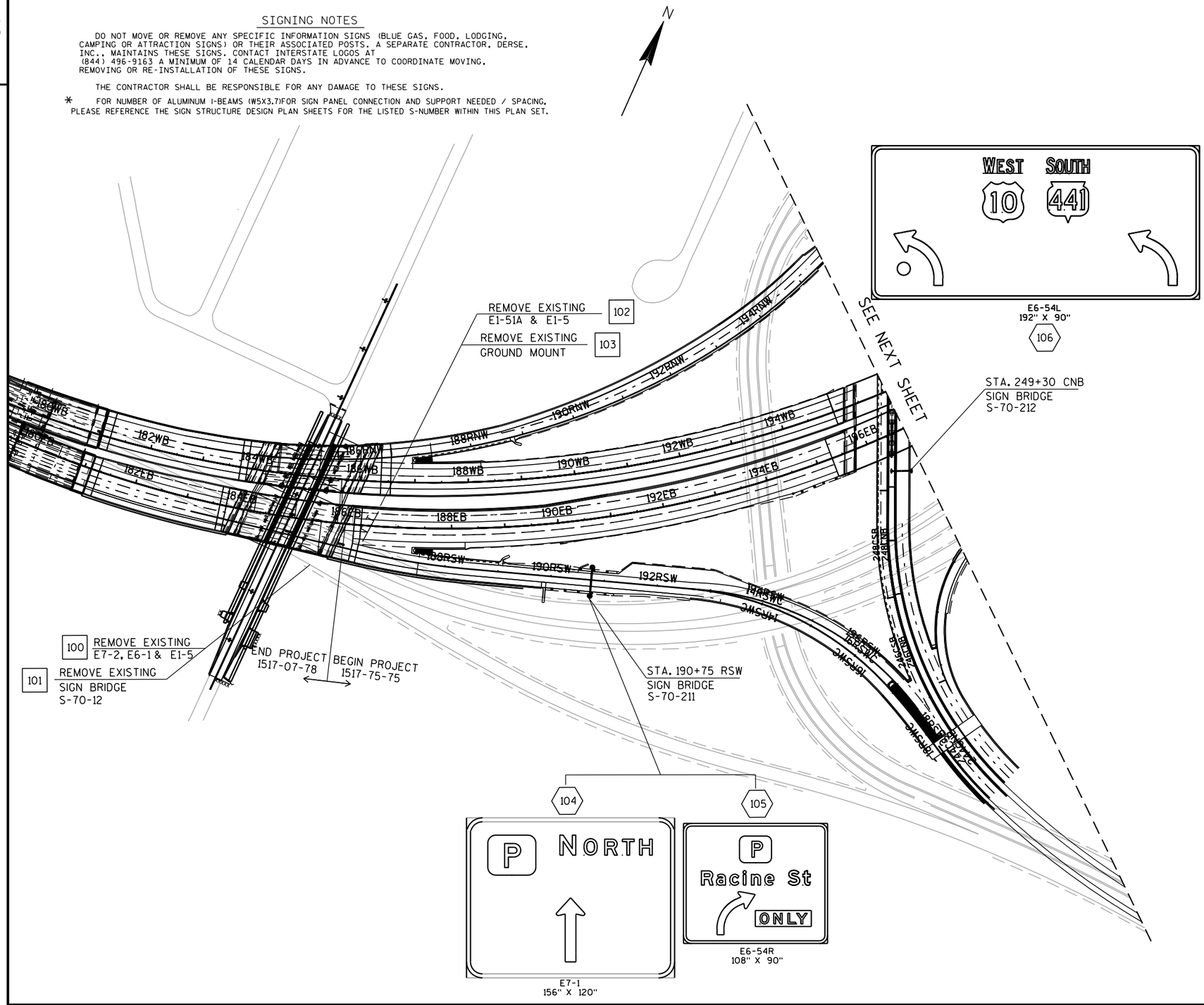
2

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 INTERSTATE LOGOS AT (844) 496-9163 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.

* FOR NUMBER OF ALUMINUM I-BEAMS (W5X3.7)FOR SIGN PANEL CONNECTION AND SUPPORT NEEDED / SPACING, PLEASE REFERENCE THE SIGN STRUCTURE DESIGN PLAN SHEETS FOR THE LISTED S-NUMBER WITHIN THIS PLAN SET.



SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

SIGN-REMOVE EXISTING

LEGEND

BUTTERFLY

CANTILEVER

SIGN BRIDGE

SIGN POSTS

STEEL POSTS

PLAN SHEET PRODUCED BY WisDOT-NE REGION

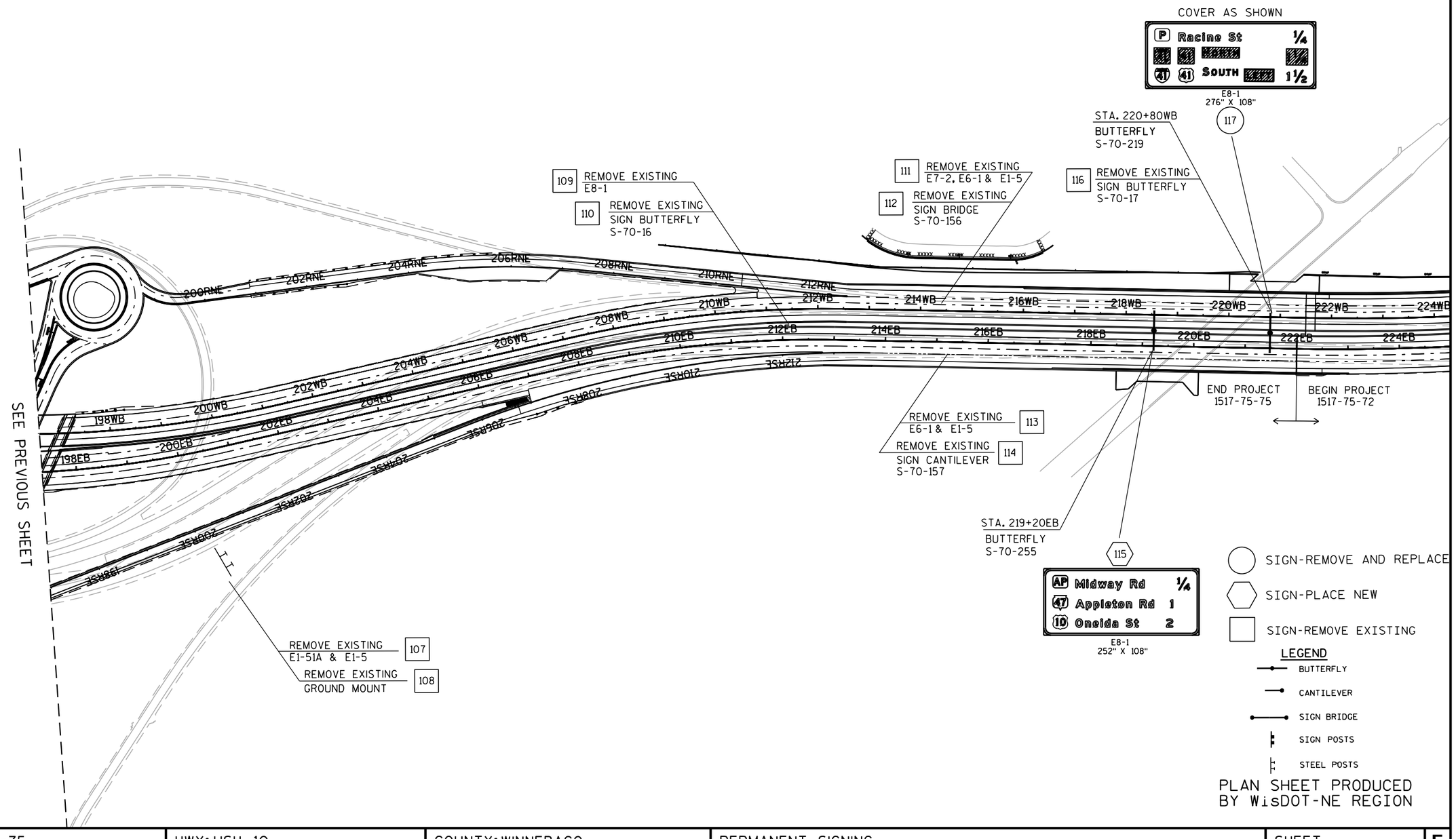
PROJECT NO:1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 215	E

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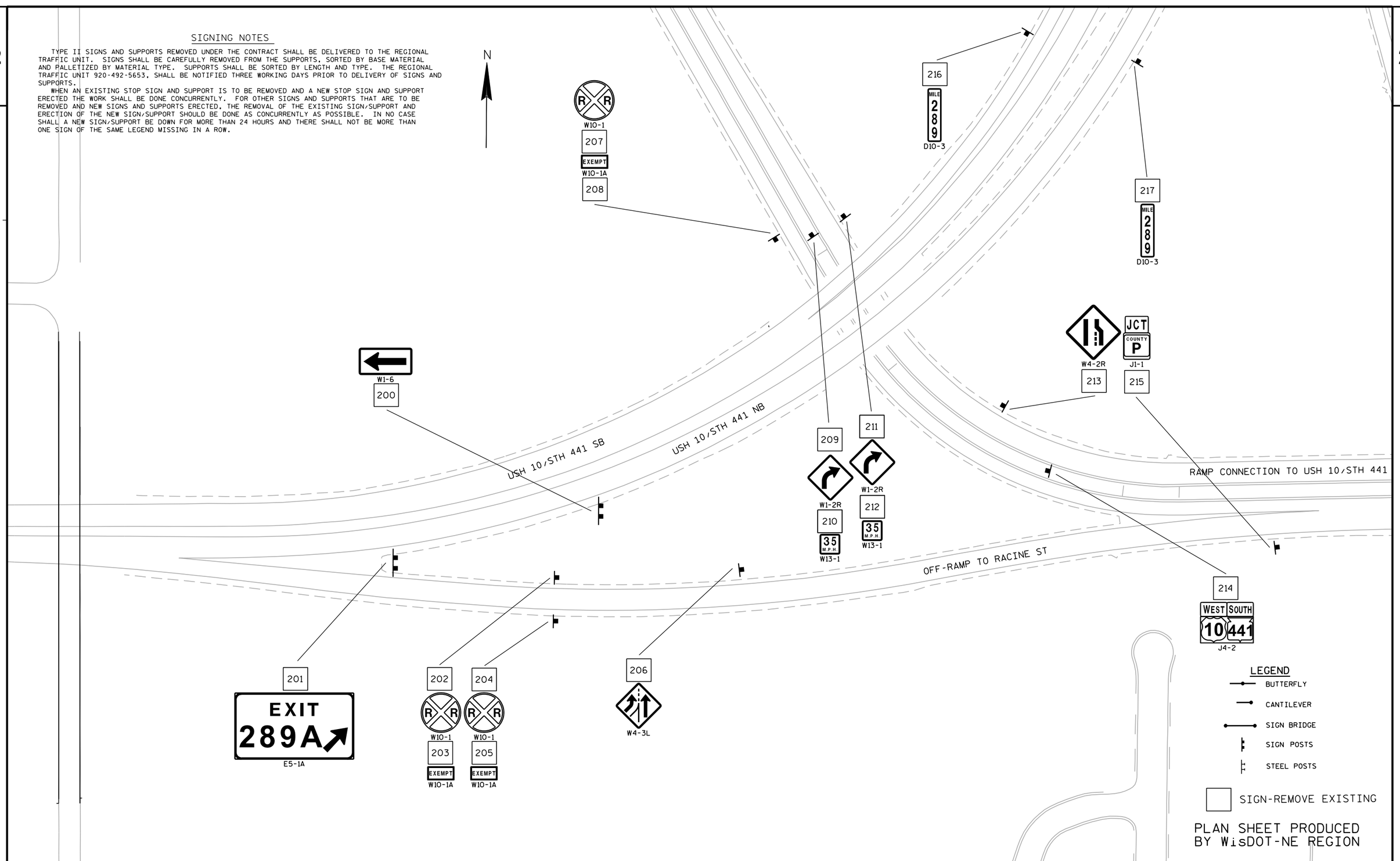


PROJECT NO:1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 216	E

SIGNING NOTES

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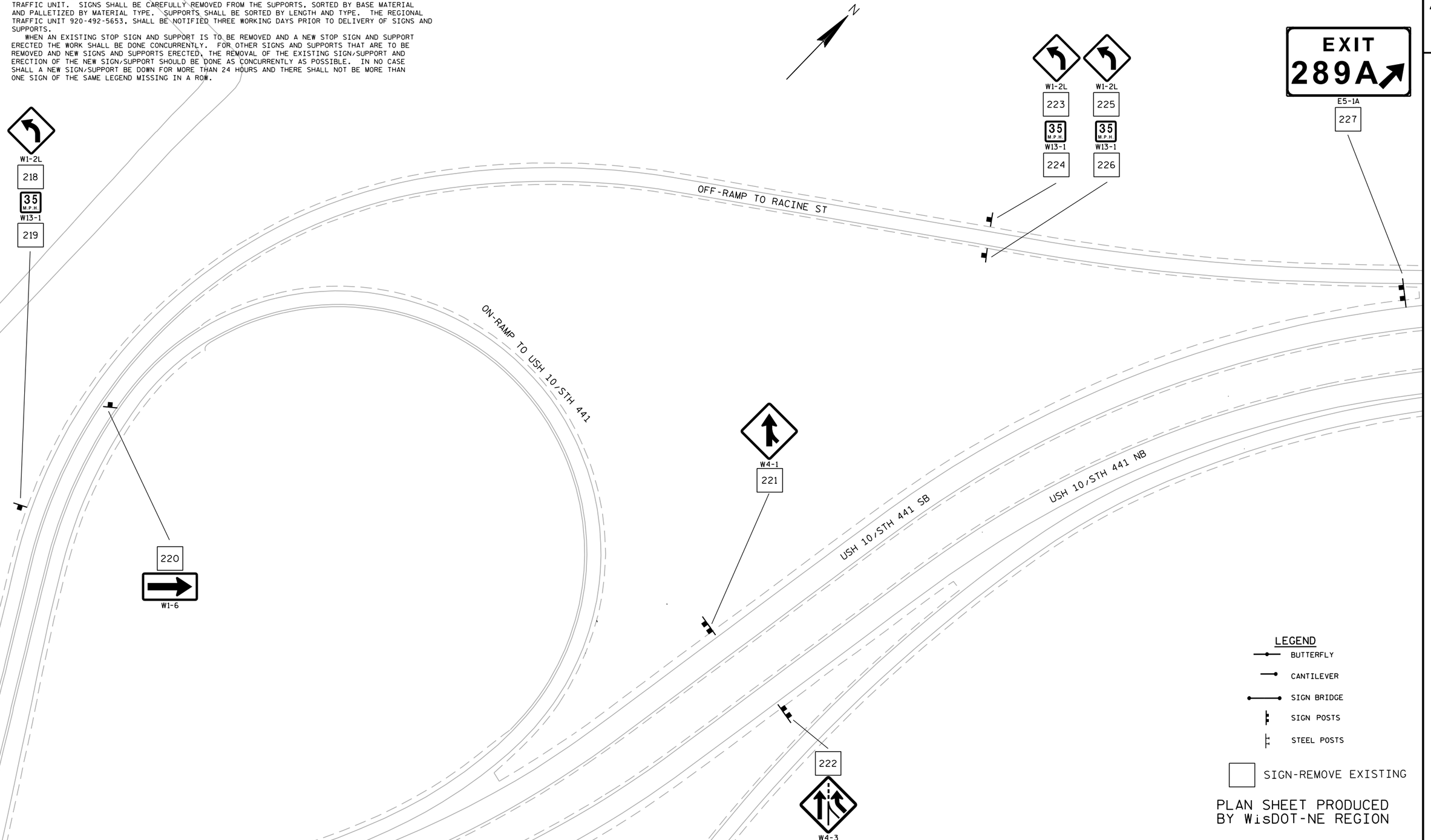


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 217	E

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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 218	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1517-75-75 STH441-USH 10 Racine St Int\023207_ps.dgn PLOT DATE : 16-SEP-2014 12:11 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

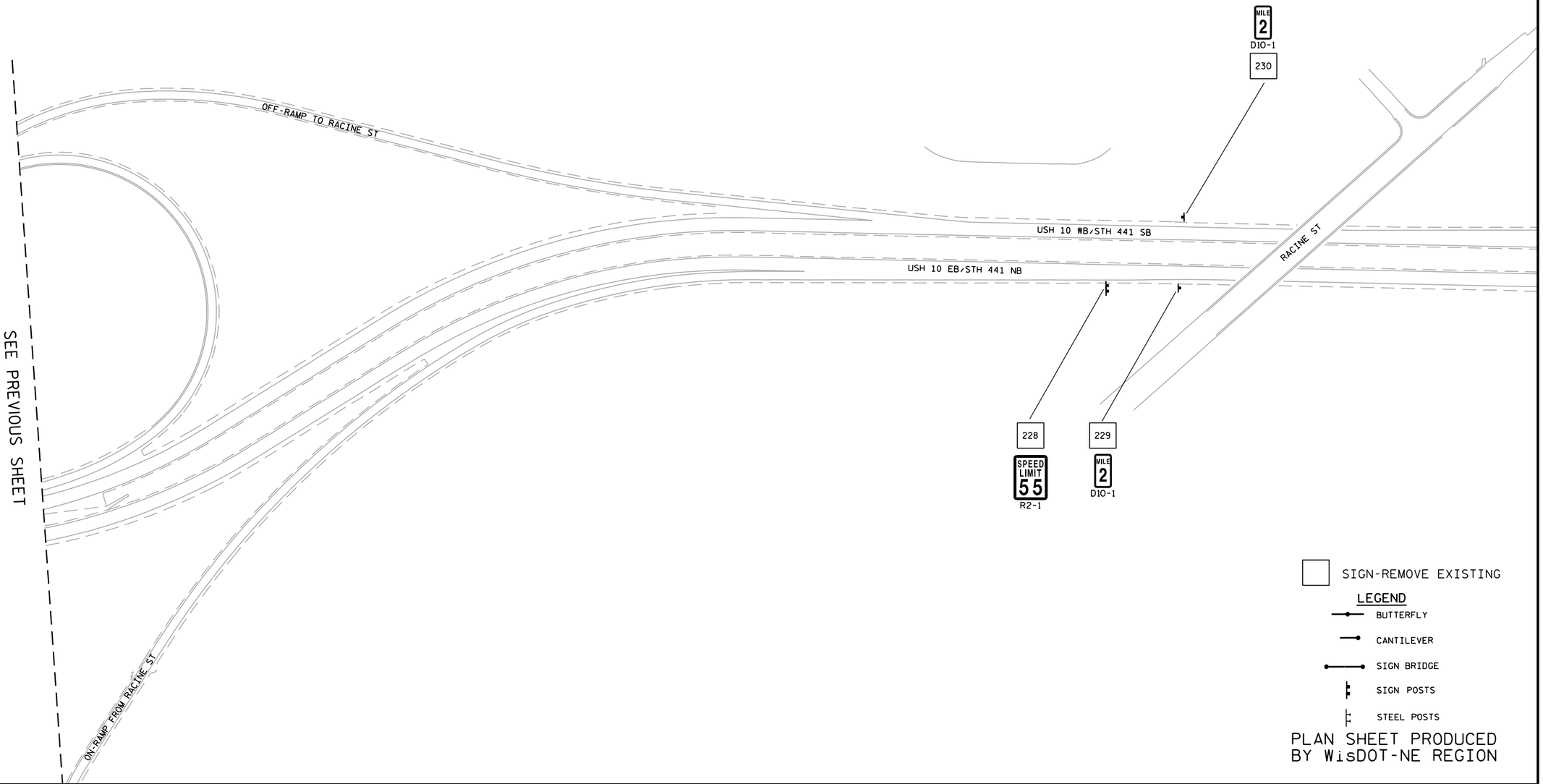
WISDOT/CADDS SHEET 42

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SIGN-REMOVE EXISTING

LEGEND

- BUTTERFLY
- CANTILEVER
- SIGN BRIDGE
- SIGN POSTS
- STEEL POSTS

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 219 E

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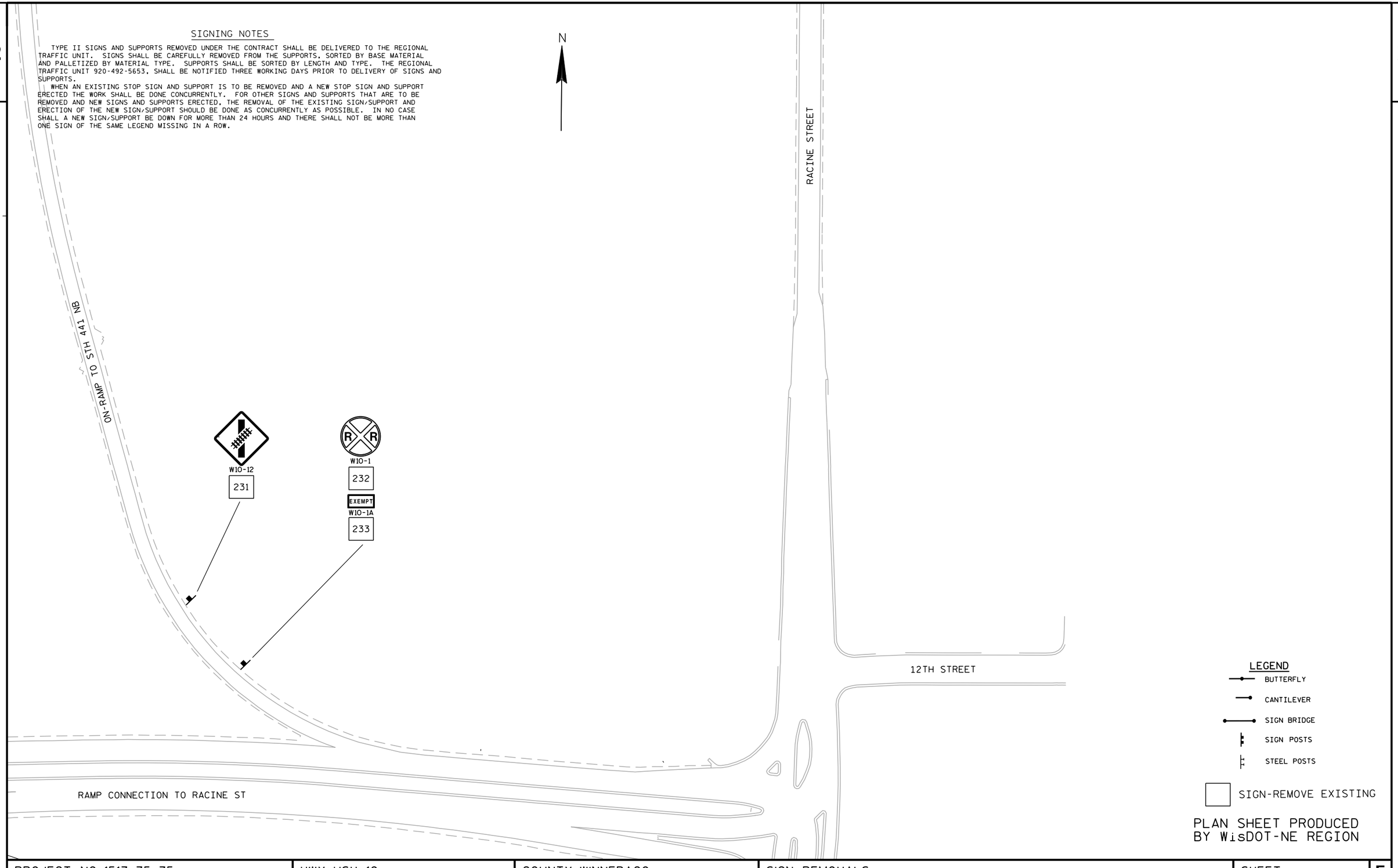
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N



LEGEND

- BUTTERFLY
- CANTILEVER
- SIGN BRIDGE
- SIGN POSTS
- STEEL POSTS
- SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 220	E

LIGHTING PLAN LEGEND

PROPOSED LIGHT POLE LOCATION; CONCRETE BASES TYPE 5 OR 17 WITH TYPE 5 OR 17 ALUMINUM POLE AS SHOWN ON THE PLANS

LOCATION OF ELECTRICAL SERVICE METER BREAKER PEDESTAL WITH EXTENSION AS SHOWN ON PLANS

CONCRETE CONTROL CABINET BASE L-30 FOR ROUNDABOUT LIGHTING CONTROL CABINET

EXISTING DOUBLE CONCRETE CONTROL CABINET BASES INSTALL NEW LIGHTING CONTROL CABINET - FREEWAY

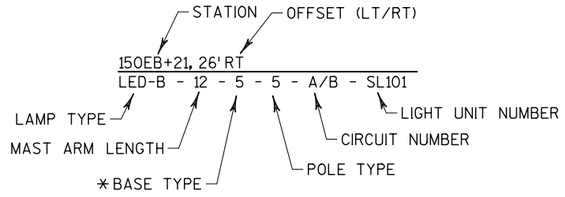
---------- CONDUIT RIGID NONMETALLIC

24"X42" PULL BOX

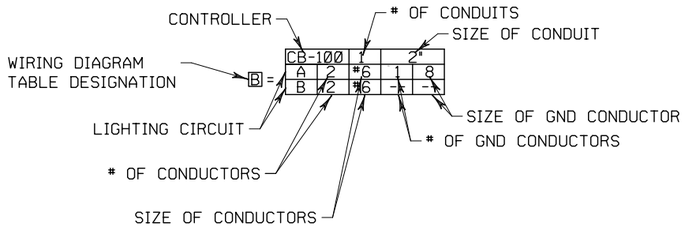
EXISTING 24"X42" LIGHTING PULL BOX (ELPBxx)

V, W / LPBXX

V = STATION, W= OFFSET
LPB= LIGHTING PULL BOX, XX= PULL BOX NUMBER



* WHEN BP IS CALLED OUT, POLE BASE IS IN BRIDGE PARAPET



DIGGERS HOTLINE

Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

LIGHTING GENERAL NOTES

1. VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS WHICH WOULD AFFECT THE WORK UNDER THIS CONTRACT.
2. ALL NEW CONDUITS, CABLE DUCTS, DIRECT BURIAL CABLES, AND ACCESSORIES ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. THE ACTUAL LOCATIONS IN THE FIELD SHALL MEET WITH APPROVAL OF THE ENGINEER.
3. PERFORM THE ELECTRICAL WORK IN ACCORDANCE WITH WISDOT LATEST STANDARDS, THE SPECIAL PROVISIONS AND APPLICABLE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS (LATEST EDITION).
4. INSTALL ALL FOUNDATIONS IN ORDER FOR THE PROPOSED AND FUTURE LUMINAIRES TO BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER.
5. INSTALL CONDUITS AT A MINIMUM 24" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. INCREASE DEPTH OF DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST. COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS AND THE ENGINEER.
6. ALL CONDUIT USED FOR BORED CABLE RUNS UNDER PAVEMENTS SHALL BE POLYVINYL CHLORIDE (PVC), SCHEDULE 40 IN CONFORMANCE WITH SECTION 652.2.3 OF THE WISDOT SPECIFICATIONS.
7. CAP CONDUIT ON BOTH ENDS UNTIL CABLING IS PLACED. FUNISH AND INSTALL A MANUFACTURER APPROVED CAP FOR ALL CONDUITS. DUCT TAPE AND OTHER TAPE IS NOT ACCEPTABLE MEANS OF CONDUIT CAP. EXTEND CONDUIT ONE FOOT BEYOND THE BACK OF CURB EDGE OR TWO FEET BEYOND SHOULDER IF NO CURB.
8. FURNISH AND INSTALL CABLE PULL STRINGS OR WIRES IN ALL CONDUITS. PULL WIRES MUST BE ACCESSIBLE AND ANCHORED AT EACH CONDUIT END FOR EASY FUTURE ACCESS.
9. PITCH ALL CONDUIT TOWARD PULLBOXES. A 2" DRAIN DUCT TO DITCH OR STORM SEWER REQUIRED FOR ALL PULL BOXES IN LOW POINTS. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.
10. ALL POLES ON BREAKAWAY BASES SHALL BE PLACED A MINIMUM OF 12-FEET FROM THE EDGE OF THE OUTSIDE TRAVEL LANE. ALL LIGHTS PLACED BEHIND GUARDRAIL SHALL BE PLACED A MINIMUM OF 4-FEET BEHIND THE FACE OF GUARDRAIL.
11. LIGHTING SYMBOLS ARE ENLARGED FOR CLARITY, USE CENTER OF SYMBOL TO LOCATE EQUIPMENT IN THE FIELD.

LIGHTING PLANS PREPARED BY:

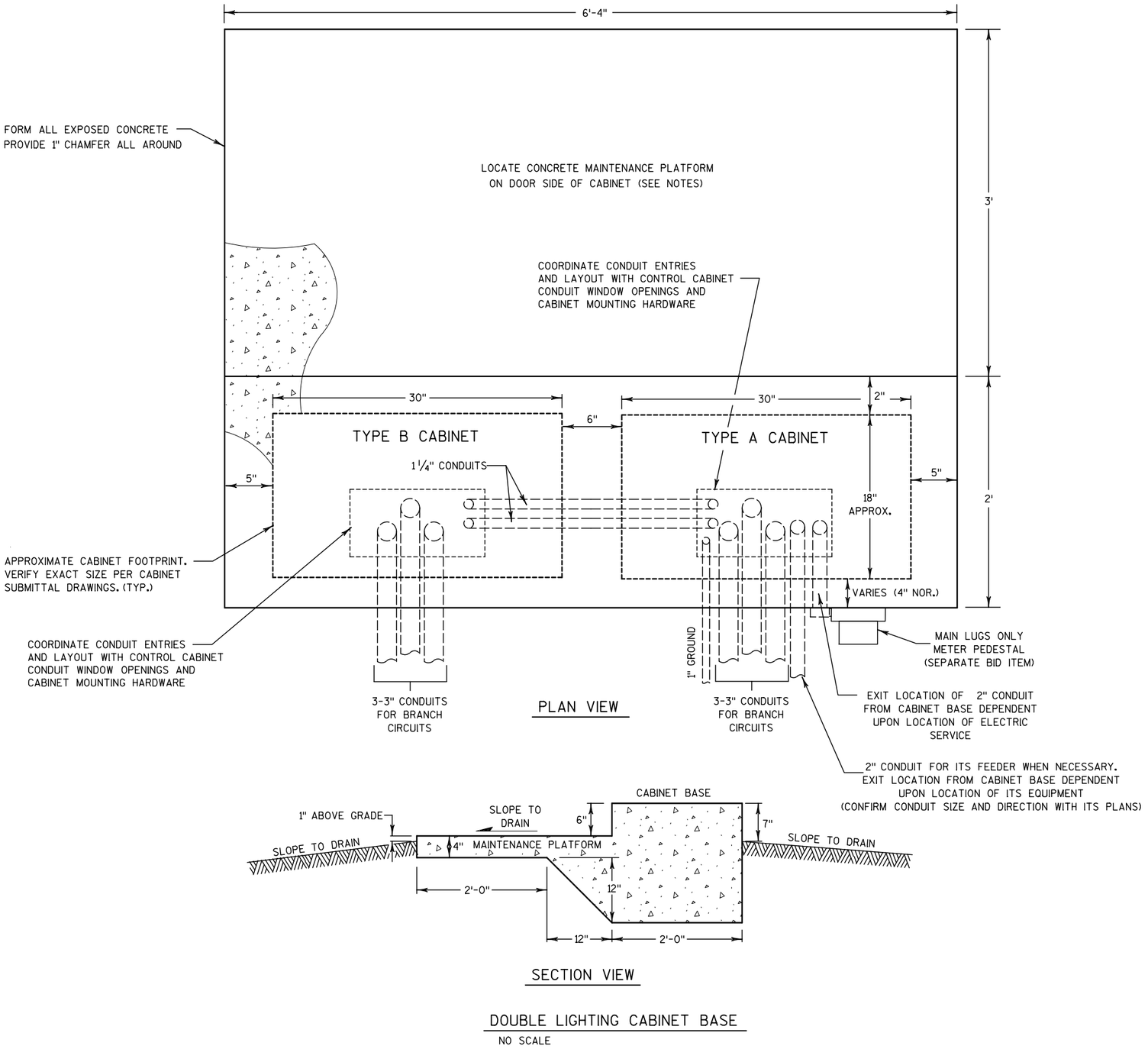
AECOM
342 N Water Street, 7th Floor
Milwaukee, WI 53202
(414) 831-4100

WISCONSIN PROFESSIONAL ENGINEER
MOHAMMED A ELSHOLI
E-37874-6
ORLAND HILLS
ILLINOIS

1/27/2015 (Date)

(Signature)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN - TITLE SHEET	SHEET 221	E



DOUBLE LIGHTING CABINET BASE

NO SCALE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

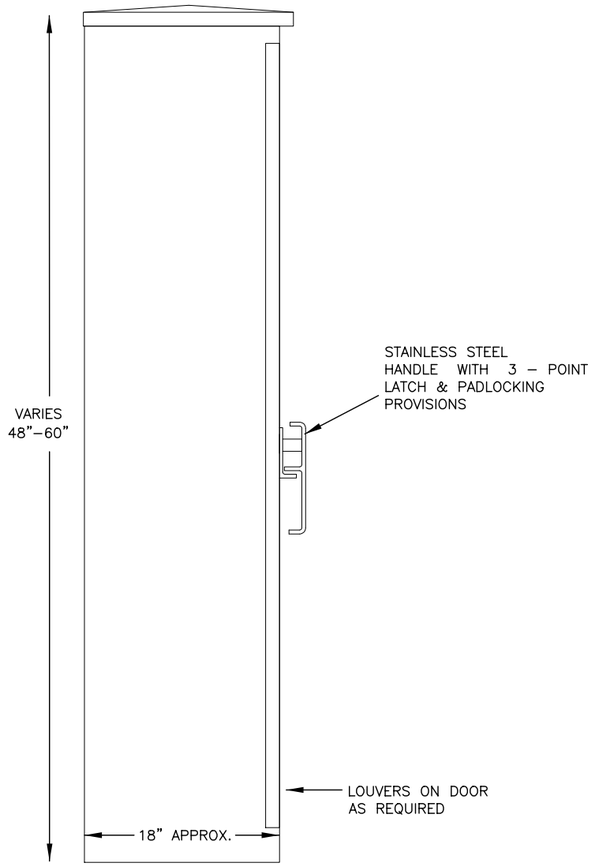
BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

THE CONFIGURATION SHOWN IN THIS DETAIL IS DESIGNED FOR COMPATIBILITY WITH A 200-AMP (MAX.) SERVICE AND PEDESTAL WITH NO MAIN BREAKER.

SEE L-30 LIGHTING CABINET BASE STANDARD DETAIL DRAWING FOR BRANCH CIRCUIT CONDUIT DETAILS.

FREEWAY DOUBLE LIGHTING CABINET BASES ARE BEING BUILT UNDER CONTRACT 1517-07-76. DRAWING IS FOR REFERENCE ONLY

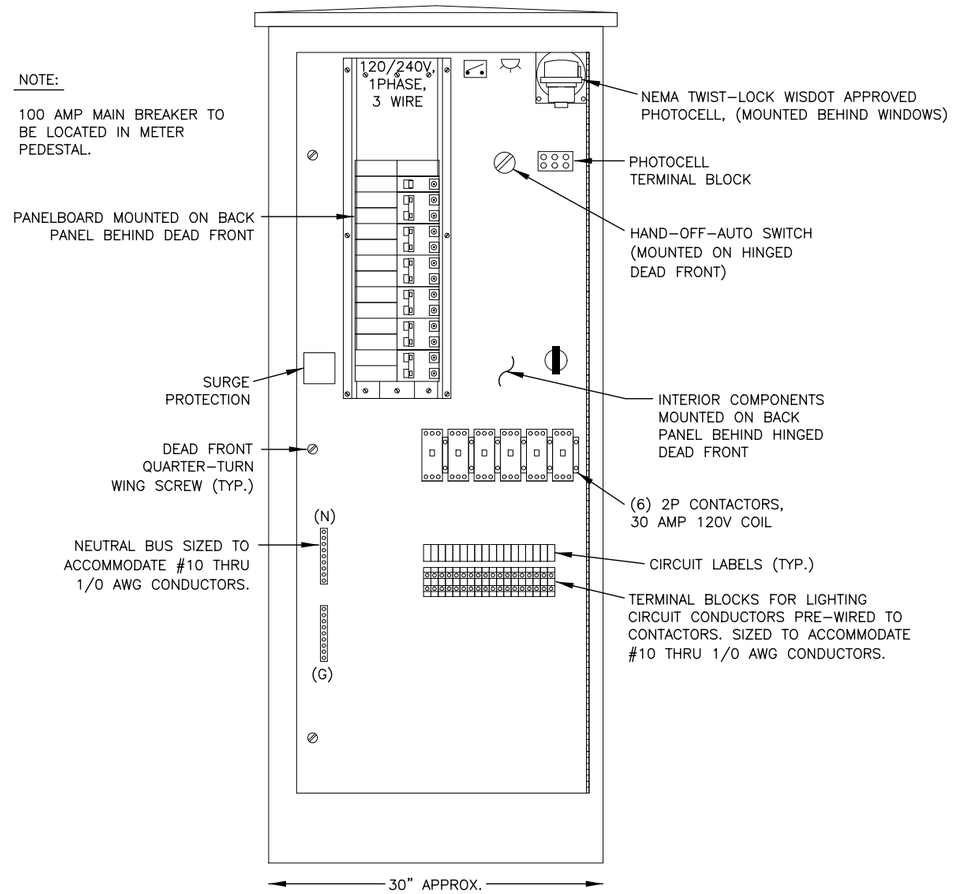
LEFT SIDE VIEW



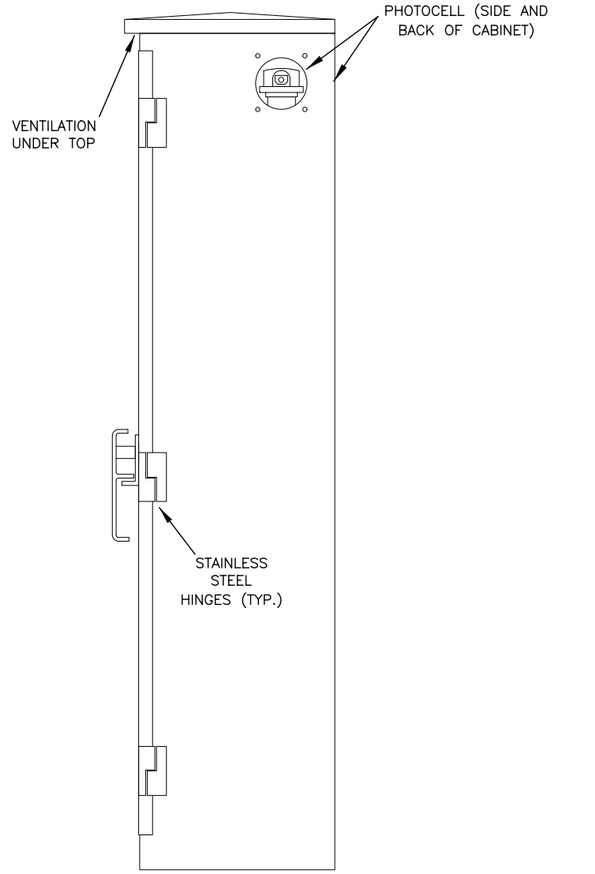
FRONT INTERIOR ELEVATION

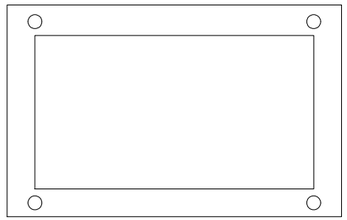
NOTE:

100 AMP MAIN BREAKER TO BE LOCATED IN METER PEDESTAL.



RIGHT SIDE VIEW





BASE FLANGE WITH GASKET

PANELBOARD:

- 30 CIRCUIT MIN.
- 100 AMP MAIN LUGS ONLY
- COPPER BUS
- BOLT–ON BREAKERS
- 22K AIC
- REFER TO SCHEMATICS FOR BREAKERS REQ'D.

BOX CONSTRUCTION:

- NEMA 3R
- UL 508A LISTED AND LABELED
- 1/8" ALUMINUM 5052–H32 ANODIZED CLEAR
- BENT CONSTRUCTION – ONE PIECE SIDES AND BACK
- NEOPRENE GASKETED DOORS
- STAINLESS STEEL HARDWARE
- ETL LISTED IN ACCORDANCE W/UL508A
- DOOR KEEP TO HOLD DOOR WHILE OPEN

NOTES:

1) ALL FEEDER/BRANCH CIRCUITS TO INCLUDE NEC SIZED EQUIPMENT GROUND CONDUCTORS.
2) REFER TO PLAN DRAWINGS FOR FEEDER/BRANCH CIRCUIT WIRE AND CONDUIT SIZES.
3) REFER TO DETAIL DRAWINGS FOR CONCRETE MOUNTING PAD DETAILS.

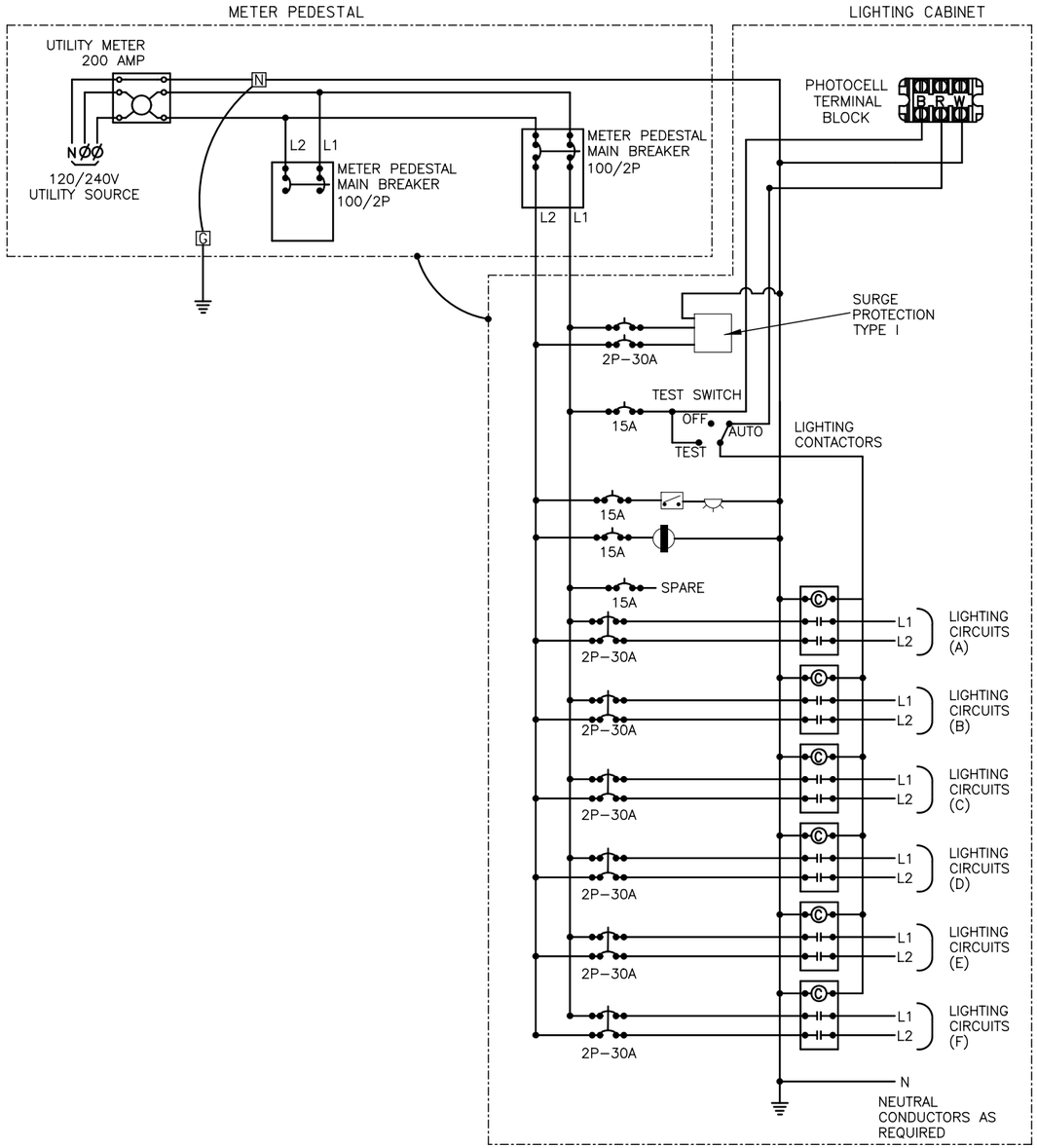
LEGEND

- 20 AMP GFCI DUPLEX RECEPTACLE WITH COVER, 120V
- SPST, 20 AMP SWITCH ON DOOR, TO TURN ON LIGHT WHEN DOOR IS OPEN
- 13 LED, 3 WATT, 120V LIGHT BAR

LIGHTING CONTROL CABINET - ROUNDABOUT

NO SCALE

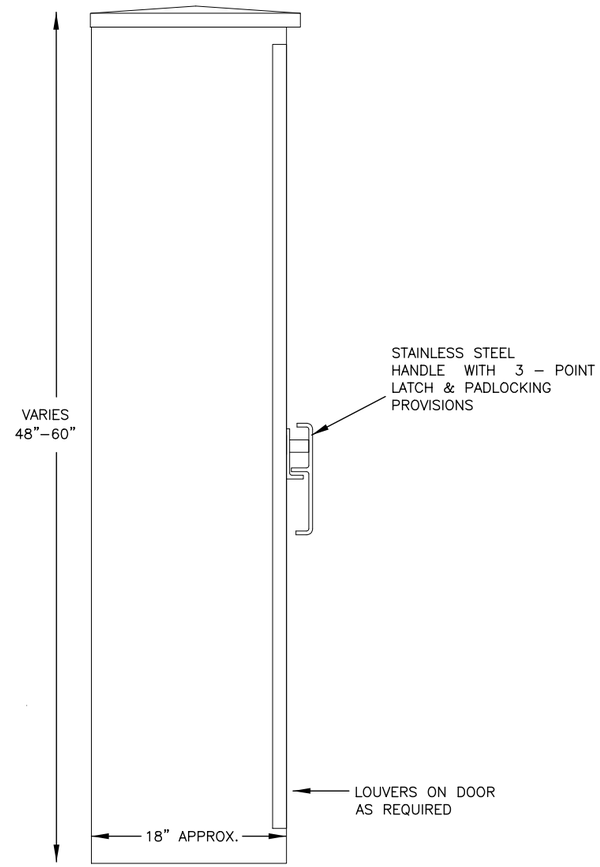
SHEET 1 OF 2



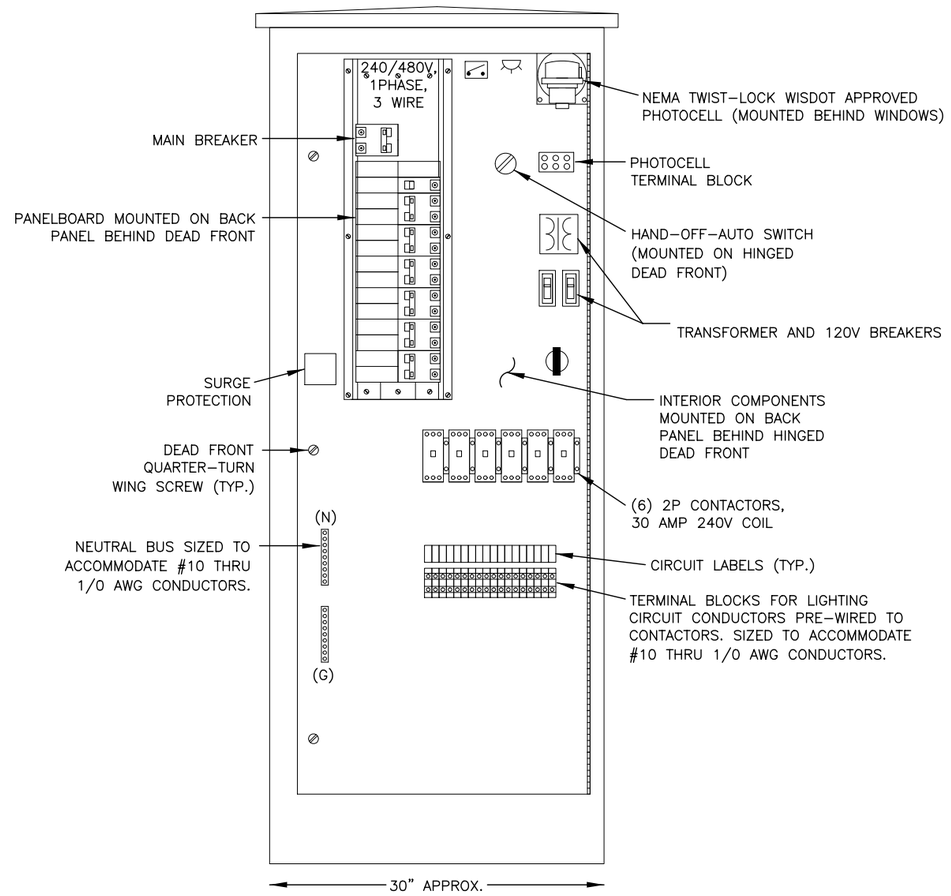
LIGHTING CONTROL CABINET - ROUNDABOUT - SCHEMATICS

NO SCALE SHEET 2 OF 2

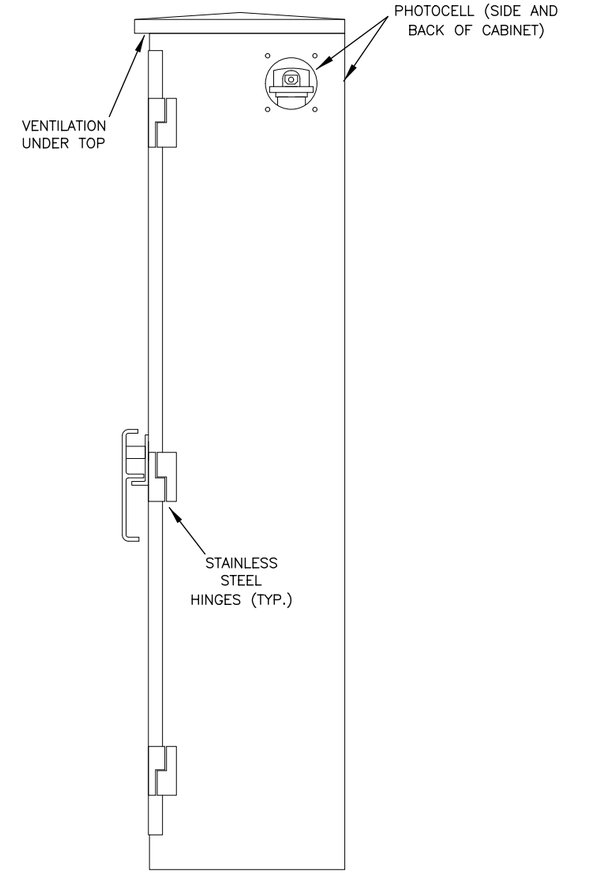
LEFT SIDE VIEW



FRONT INTERIOR ELEVATION



RIGHT SIDE VIEW

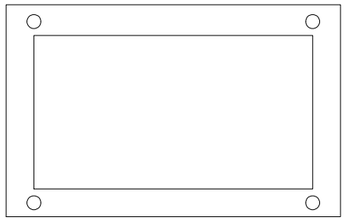


NOTES:

1) ALL FEEDER/BRANCH CIRCUITS TO INCLUDE NEC SIZED EQUIPMENT GROUND CONDUCTORS.
2) REFER TO PLAN DRAWINGS FOR FEEDER/BRANCH CIRCUIT WIRE AND CONDUIT SIZES.
3) REFER TO DETAIL DRAWINGS FOR CONCRETE MOUNTING PAD DETAILS.
4) REFER TO LIGHTING CONTROL CABINET – FREEWAY – SCHEMATICS FOR MORE INFORMATION

LEGEND

- 20 AMP GFCI DUPLEX RECEPTACLE WITH COVER, 120V
- 3 KVA, SINGLE PHASE ENCAPSULATED TRANSFORMER 240/480V – 120/240V, 60HZ
- SPST, 20 AMP SWITCH ON DOOR, TO TURN ON LIGHT WHEN DOOR IS OPEN
- 13 LED, 3 WATT, 120V LIGHT BAR
- 15 AMP/1P CIRCUIT BREAKER



BASE FLANGE WITH GASKET

PANELBOARD: (TYPE A CABINET)

- 200 AMP/20 CIRCUIT PANEL MIN.
- 200 AMP MAIN CIRCUIT BREAKER
- COPPER BUS
- BOLT–ON BREAKERS
- 22K AIC
- REFER TO SCHEMATICS FOR BREAKERS REQ'D.

PANELBOARD: (TYPE B CABINET)

- 100 AMP/20 CIRCUIT PANEL MIN.
- 100 AMP MAIN CIRCUIT BREAKER
- COPPER BUS
- BOLT–ON BREAKERS
- 22K AIC
- REFER TO SCHEMATICS FOR BREAKERS REQ'D.

BOX CONSTRUCTION: (TYPE A & B CABINETS)

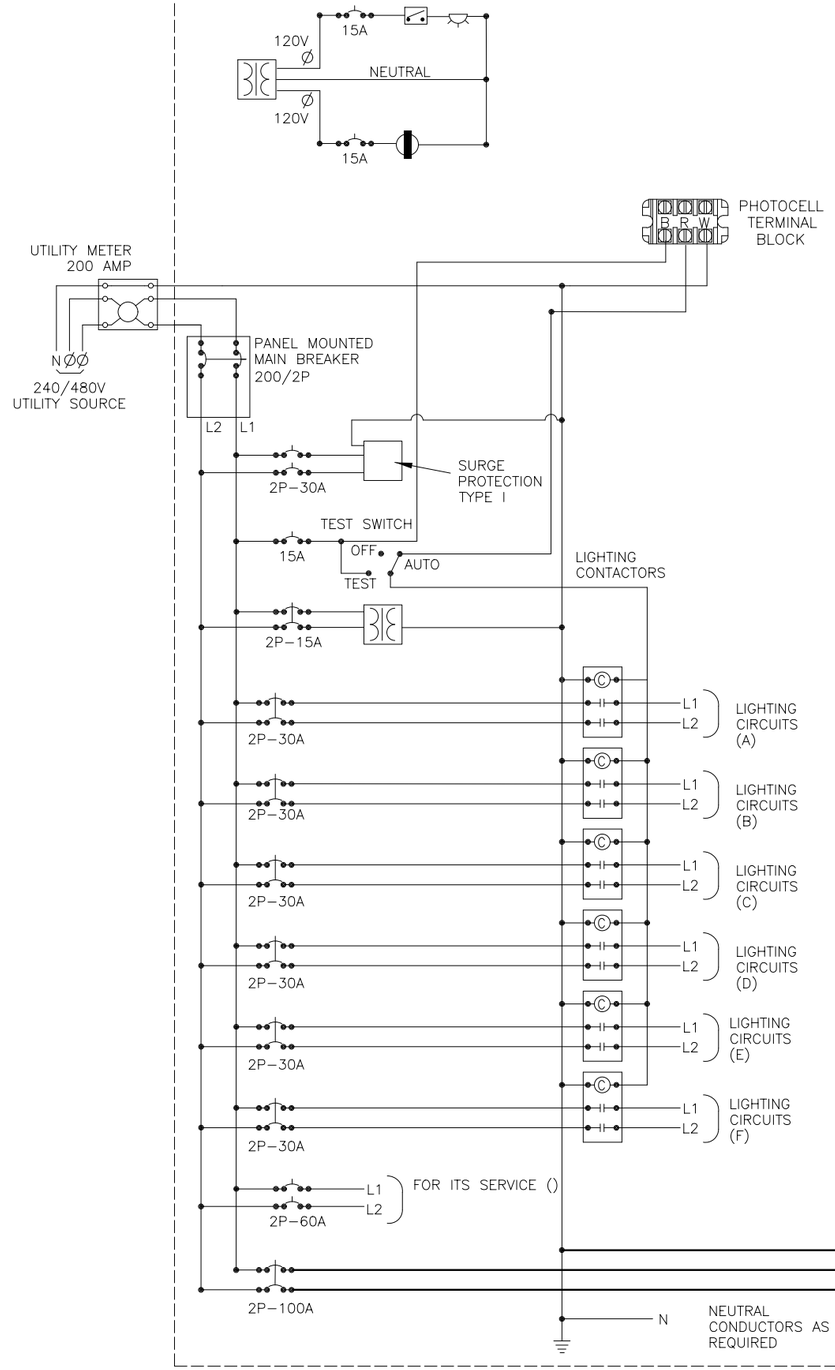
- NEMA 3R
- UL LISTED
- 1/8" ALUMINUM 5052–H32 ANODIZED CLEAR
- BENT CONSTRUCTION – ONE PIECE SIDES AND BACK
- NEOPRENE GASKETED DOORS
- STAINLESS STEEL HARDWARE
- ETL LISTED IN ACCORDANCE W/UL508A
- DOOR KEEP TO HOLD DOOR WHILE OPEN

LIGHTING CONTROL CABINET - FREEWAY

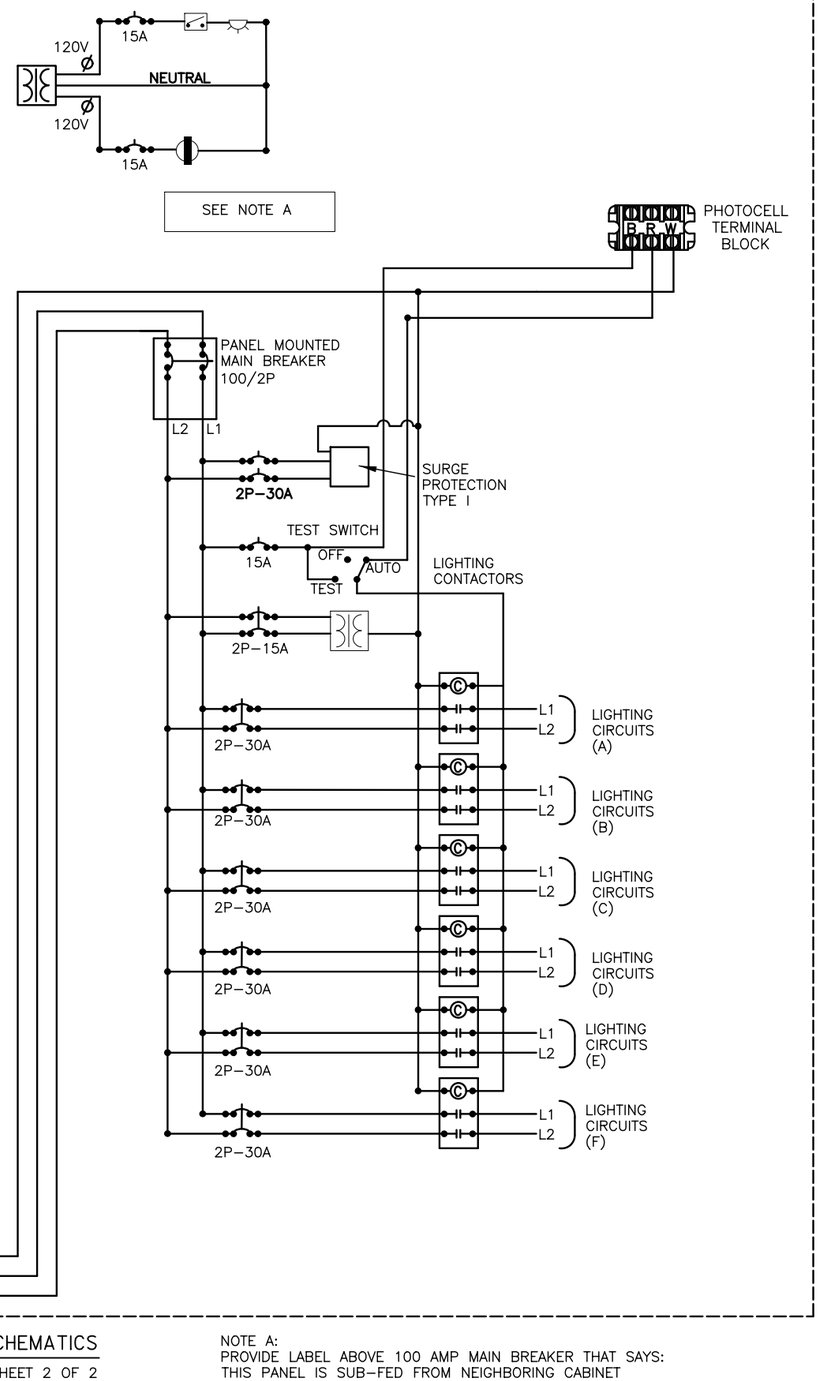
NO SCALE SHEET 1 OF 2

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS - 240/480V LIGHTING CABINET	SHEET 225	E

EXISTING (CB-400)



NEW (CB-401)



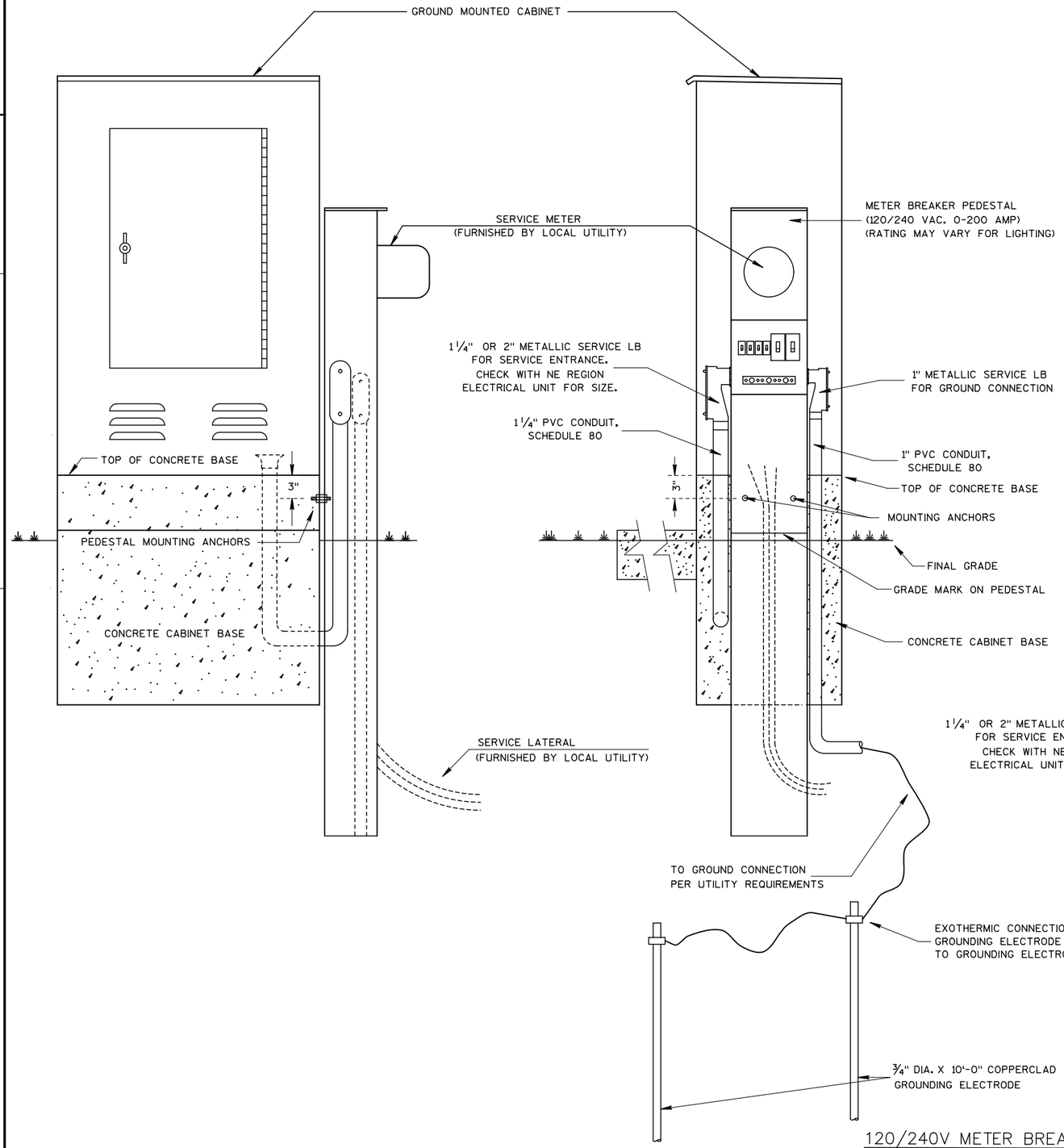
LIGHTING CONTROL CABINET - FREEWAY - SCHEMATICS

NO SCALE SHEET 2 OF 2

NOTE A:
PROVIDE LABEL ABOVE 100 AMP MAIN BREAKER THAT SAYS:
THIS PANEL IS SUB-FED FROM NEIGHBORING CABINET

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS - CONTROL CABINET SCHEMATICS	SHEET 226	E

2



120/240V METER BREAKER PEDESTAL
NOT TO SCALE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

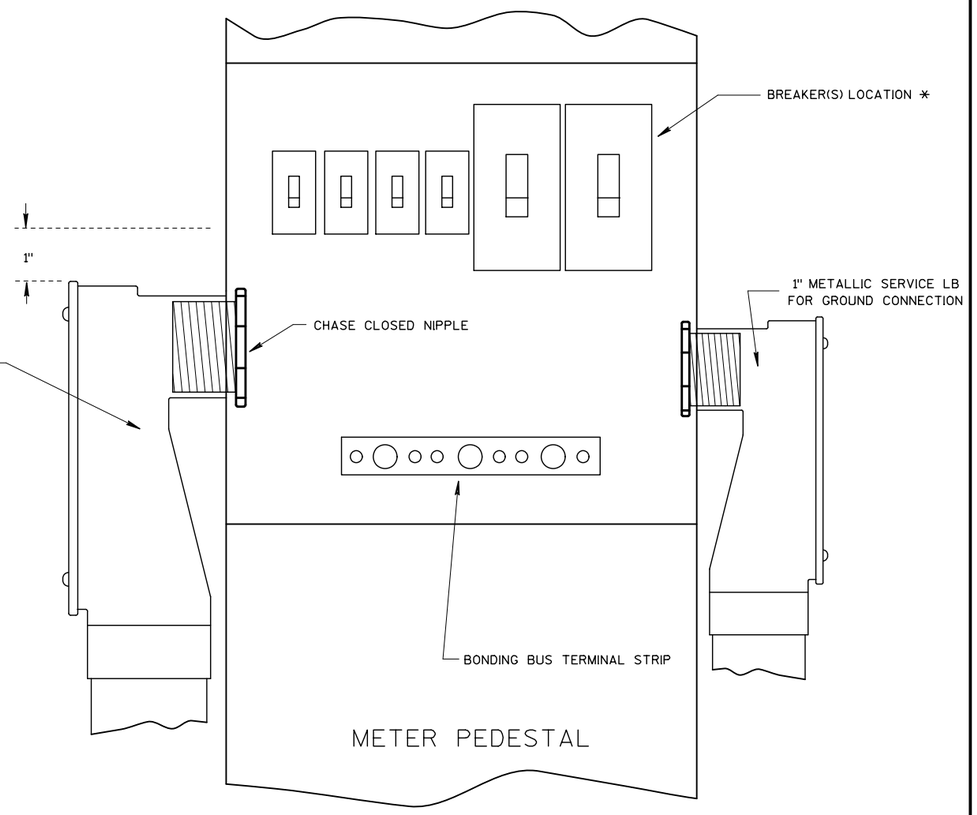
WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT OR SCHEDULE 80 PVC, NIPPLES AND/OR CONDULETS AS REQUIRED. CONDUIT LB SHALL BE OF METALLIC SERVICE ENTRANCE TYPE.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER NEC.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.



2

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS - NER METER PEDESTAL	SHEET 227	E

2

120/240 VOLT, 1-PHASE SERVICE PEDESTAL 441/10 ROUNDABOUT
LOCATION: STA: 195RNW+88, 37' RT

L70-2011 WIS441/US10 ROUNDABOUT LIGHTING CABINET (CB-500)

	CB	W	DESCRIPTION	DESCRIPTION	W	CB	
240V	1	374	CIRCUIT A	CIRCUIT B	374	2	240V
	3	374	CIRCUIT A	CIRCUIT B	374	4	
240V	5	561	CIRCUIT C	CIRCUIT D	583	6	240V
	7	561	CIRCUIT C	CIRCUIT D	583	8	
240V	9	-	SPARE	SPARE	-	10	240V
	11	-	SPARE	SPARE	-	12	
	13					14	
	15					16	
	17					18	
	19					20	
	21					22	
	23					24	
			TOTAL LOAD PHASE A:	1892			
			TOTAL LOAD PHASE B:	1892			
			Total Load:	3784			

240/480 VOLT, 1-PHASE SERVICE PEDESTAL B-70-403 EAST @ TAYCO STREET
LOCATION: STA: 184EB+04, 172 RT

L70-2010 LIGHTING CABINET - FREEWAY (TYPE B) (CB-401)

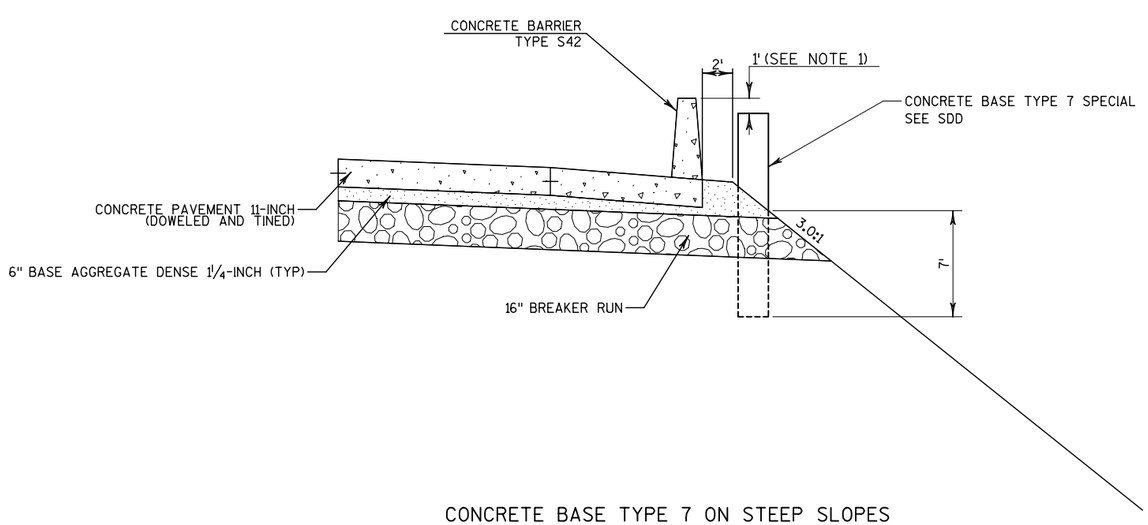
	CB	W	DESCRIPTION	DESCRIPTION	W	CB	
480V	1	920	CIRCUIT A	CIRCUIT B	805	2	480V
	3	920	CIRCUIT A	CIRCUIT B	805	4	
480V	5	1215	CIRCUIT C	CIRCUIT D	1215	6	480V
	7	1215	CIRCUIT C	CIRCUIT D	1215	8	
480V	9	690	CIRCUIT E	CIRCUIT F	690	10	480V
	11	690	CIRCUIT E	CIRCUIT F	690	12	
	13	-	SPARE	SPARE	-	14	
	15	-	SPARE	SPARE	-	16	
	17					18	
	19					20	
	21					22	
	23					24	
			TOTAL LOAD PHASE A:	5535			
			TOTAL LOAD PHASE B:	5535			
			Total Load:	11070			

NOTES:

1. LOADS SHOWN ARE FOR INFORMATION ONLY AND WILL VARY BY FIXTURE AND MANUFACTURER.
2. PROVIDE AND INSTALL A MINIMUM OF TWO (2) ADDITIONAL SPARE CIRCUIT BREAKERS ON EACH SIDE OF EACH PANELBOARD FOR FUTURE USE.

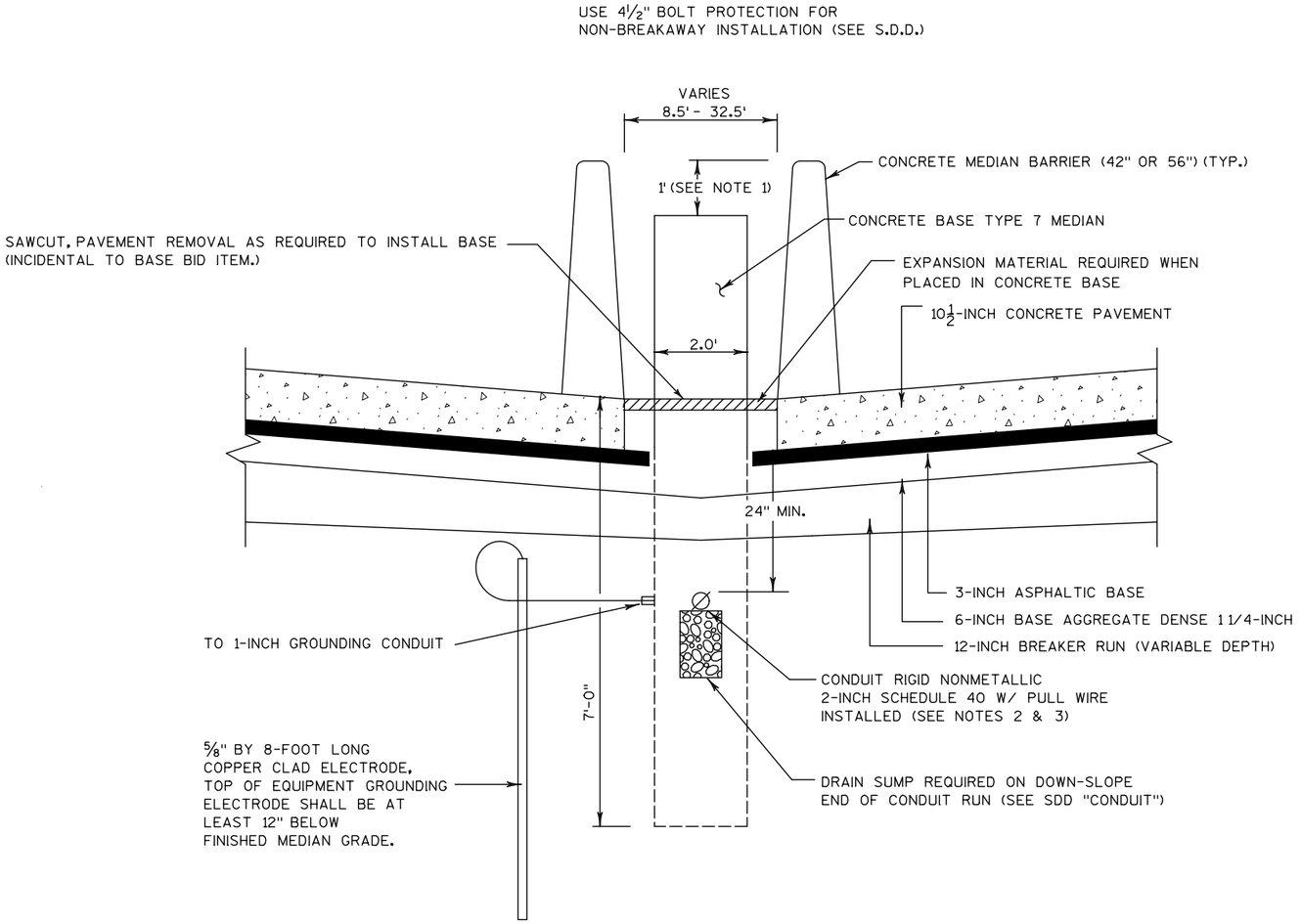
NOTES:

1. TOP OF CONCRETE BASE TO BE 1-FOOT BELOW THE TOP OF THE LOWEST BARRIER.
2. ROUTE CONDUIT ALONG SIDE MEDIAN INLETS, SIGN FOOTINGS & BRIDGE PIERS.
3. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF SECTION 654 OF THE STANDARD SPECIFICATIONS.
4. THE BASES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR CONCRETE BASE, TYPE 7, EXCEPT FOR THE DETAILS AND OTHER INFORMATION AS SPECIFICALLY SHOWN. PROVIDE REINFORCEMENT AS SHOWN IN THE SDD AND ACCOUNT FOR THE ADDITIONAL BASE HEIGHT.
5. ALL CONDUIT ENDS SHALL PROJECT 4" ABOVE THE CONCRETE BASE PRIOR TO INSTALLATION OF THE PVC CAPS AND SHALL BE LOCATED WITHIN A 6" DIA. CIRCLE ABOUT CENTER OF BASE.



CONCRETE BASE TYPE 7 ON STEEP SLOPES

NO SCALE



CONCRETE BASE TYPE 7 MEDIAN

NO SCALE

NOTES:

1) TOP OF CONCRETE BASE TO BE 1-FOOT BELOW THE TOP OF THE LOWEST BARRIER.

2) ROUTE CONDUIT ALONG SIDE MEDIAN INLETS, SIGN FOOTINGS & BRIDGE PIERS.

3) CONDUIT DEPTH TO BE 6" BELOW BOTTOM OF BREAKER RUN. DEPTH WILL VARY.

4) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF SECTION 654 OF THE STANDARD SPECIFICATIONS.

5) THE BASES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR CONCRETE BASE, TYPE 7, EXCEPT FOR THE DETAILS AND OTHER INFORMATION AS SPECIFICALLY SHOWN. PROVIDE REINFORCEMENT AS SHOWN IN THE SDD AND ACCOUNT FOR THE ADDITIONAL BASE HEIGHT.

6) ALL CONDUIT ENDS SHALL PROJECT 4" ABOVE THE CONCRETE BASE PRIOR TO INSTALLATION OF THE PVC CAPS AND SHALL BE LOCATED WITHIN A 6" DIA. CIRCLE ABOUT CENTER OF BASE.

ESTIMATED QUANITIES PER BASE (APPROX.)

APPROX. CUBIC YARDS OF CONCRETE	1.24
LBS. OF HOOP BAR STEEL	44
LBS. OF VERTICAL BAR STEEL	92
1" DIA. X 7.5' ANCHOR RODS	4

NOTES:

ALL QUANTITIES INCIDENTAL TO "CONCRETE BASES TYPE 7 MEDIAN" BID ITEM SPV.0060.354

QUANTITIES ARE APPROXIMATE AND MAY VARY IN SECTIONS WITH GRADE SEPARATION.

WISDOT SYSTEMS

■ 1

A - BLACK
B - RED
C - BLUE
D - BROWN
E - ORANGE
F - YELLOW
240V PHASE-PHASE

- L70-2011 / WIS 441 & USH 10 / CITY OF MENASHA / WINNEBAGO COUNTY
- CB-500 / RACINE RD INTERCHANGE /
- 120/240 VOLT / SINGLE PHASE / 100 AMP SERVICE
- METER BREAKER PEDESTAL
- CIRCUIT DESCRIPTIONS:
  - CTK. A/B - 441/10 ROUNDABOUT / B-70-420/421 UNDERDECK LIGHTS / CONNECTOR ROAD -(WEST SIDE)
  - CTK. C/D - 441/10 ROUNDABOUT / B-70-420/421 UNDERDECK LIGHTS / CONNECTOR ROAD -(EAST SIDE)

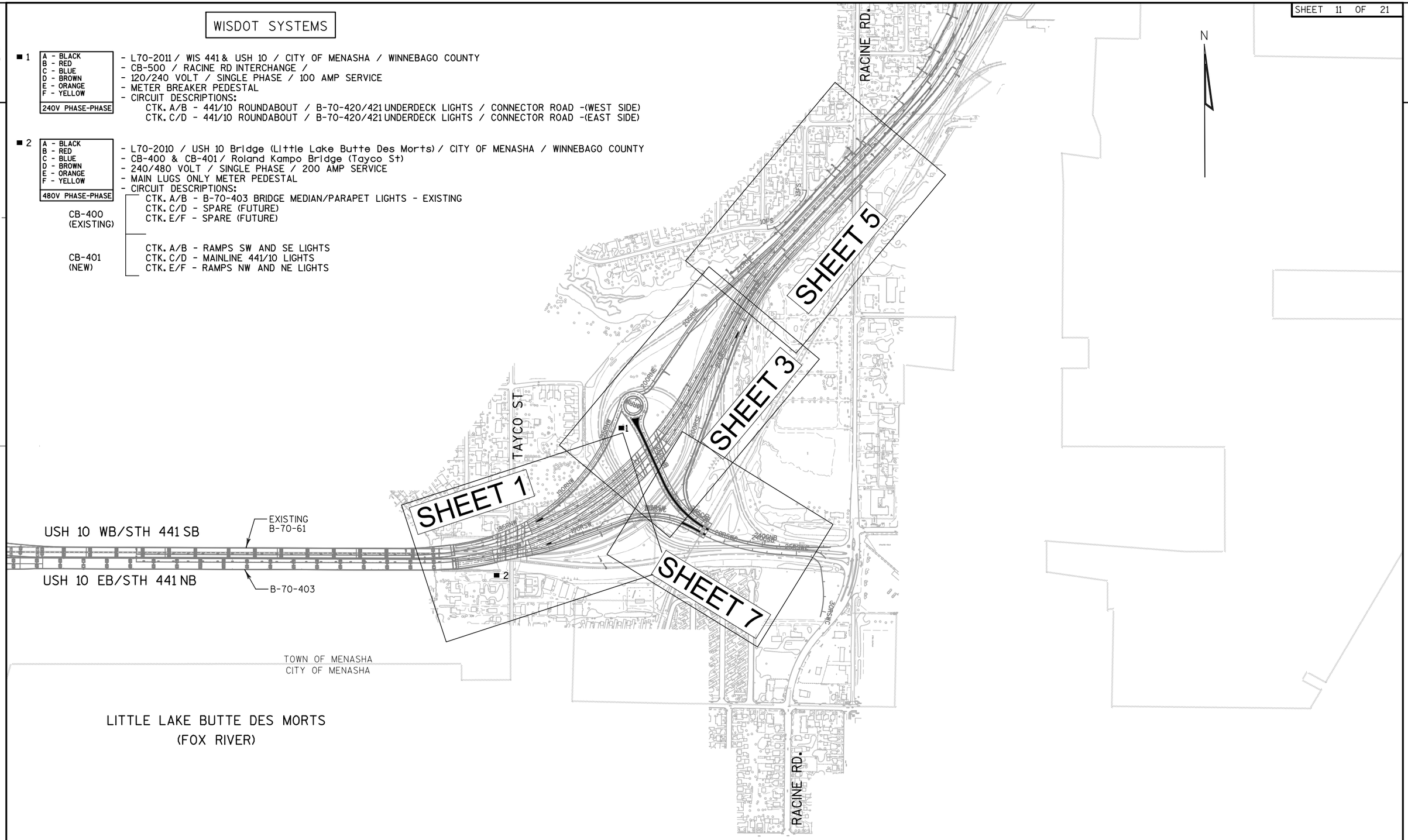
■ 2

A - BLACK
B - RED
C - BLUE
D - BROWN
E - ORANGE
F - YELLOW
480V PHASE-PHASE

- L70-2010 / USH 10 Bridge (Little Lake Butte Des Morts) / CITY OF MENASHA / WINNEBAGO COUNTY
- CB-400 & CB-401 / Roland Kampo Bridge (Tayco St)
- 240/480 VOLT / SINGLE PHASE / 200 AMP SERVICE
- MAIN LUGS ONLY METER PEDESTAL
- CIRCUIT DESCRIPTIONS:

CB-400 (EXISTING)
- CTK. A/B - B-70-403 BRIDGE MEDIAN/PARAPET LIGHTS - EXISTING
- CTK. C/D - SPARE (FUTURE)
- CTK. E/F - SPARE (FUTURE)

CB-401 (NEW)
- CTK. A/B - RAMPS SW AND SE LIGHTS
- CTK. C/D - MAINLINE 441/10 LIGHTS
- CTK. E/F - RAMPS NW AND NE LIGHTS

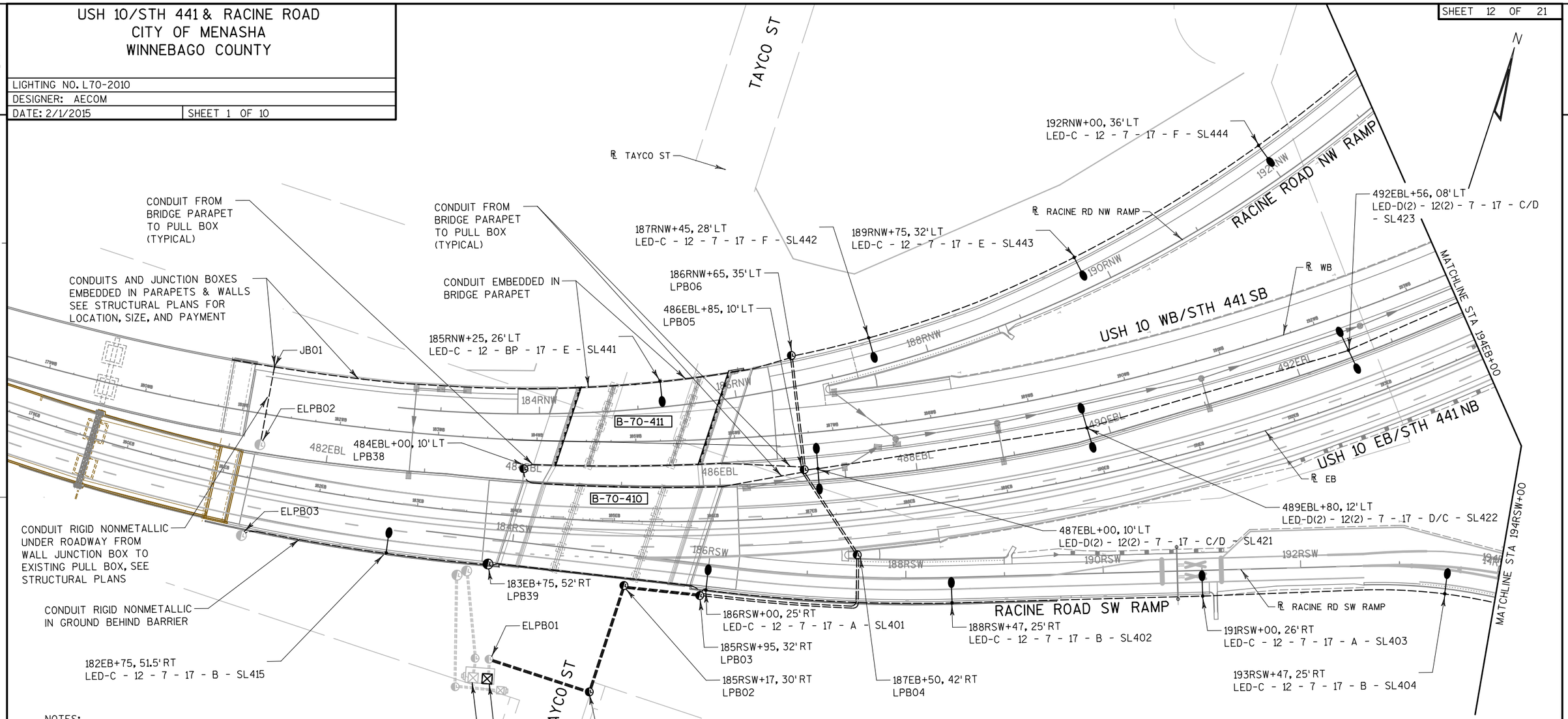


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN OVERVIEW	SHEET 231	E

USH 10/STH 441 & RACINE ROAD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 1 OF 10

2

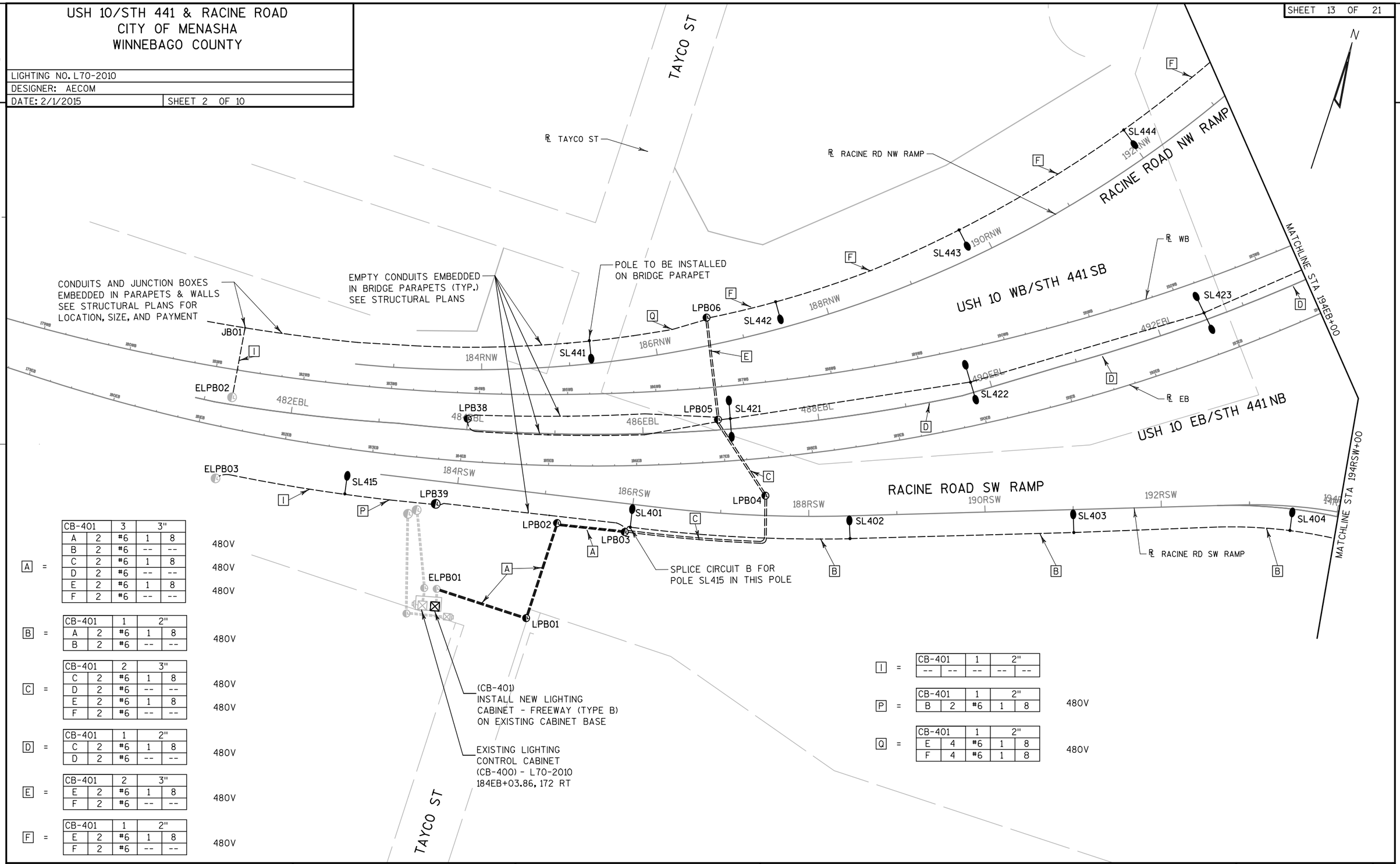


NOTES:

1. COORDINATE ALL LIGHTING AND ELECTRICAL WORK WITH THE STRUCTURAL PLANS. PAYMENT FOR ALL CONDUITS, JUNCTION BOXES BASES AND OTHER MATERIALS EMBEDDED IN STRUCTURES ARE INCLUDED IN THE COST OF THE STRUCTURE.
2. INSTALL LIGHT POLE BASES IN THE LOCATIONS SHOWN. INSTALL POLE FOUNDATIONS SO THAT LIGHTING MAST ARM AND LUMINAIRE CAN BE INSTALLED IN THE ORIENTATION SHOWN ON THESE PLANS.
3. COORDINATE THE UNDERGROUND WORK WITH ELECTRIC AND OTHER UTILITIES BEFORE BEGINNING ANY LIGHTING WORK.
4. QUANTITIES AND PAYMENT FOR ALL ELECTRICAL AND LIGHTING RELATED ITEMS, EQUIPMENT, MATERIALS, AND LABOR INCORPORATED INTO STRUCTURES ARE SHOWN ON THE STRUCTURAL PLANS.
5. INSTALL UNDERGROUND CONDUITS AT A DEPTH OF 24" MINIMUM.
6. FURNISH AND INSTALL ALL ELECTRICAL SERVICE RELATED MATERIALS AND EQUIPMENT INCLUDING METER BREAKER PEDESTAL, LIGHTING CABINETS AND BASES, PULL BOXES, CONDUITS AND FITTINGS, AND WIRING. MAKE ALL CONNECTIONS BETWEEN CONTROL CABINETS, EXISTING EQUIPMENT AND ELECTRIC UTILITY SERVICE IN THIS CONTRACT.

USH 10/STH 441 & RACINE ROAD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 2 OF 10



A =	CB-401	3	3"		
	A	2	#6	1	8
	B	2	#6	--	--
	C	2	#6	1	8
	D	2	#6	--	--
	E	2	#6	1	8
	F	2	#6	--	--

B =	CB-401	1	2"		
	A	2	#6	1	8
	B	2	#6	--	--

C =	CB-401	2	3"		
	C	2	#6	1	8
	D	2	#6	--	--
	E	2	#6	1	8
	F	2	#6	--	--

D =	CB-401	1	2"		
	C	2	#6	1	8
	D	2	#6	--	--

E =	CB-401	2	3"		
	E	2	#6	1	8
	F	2	#6	--	--

F =	CB-401	1	2"		
	E	2	#6	1	8
	F	2	#6	--	--

I =	CB-401	1	2"		
	--	--	--	--	--

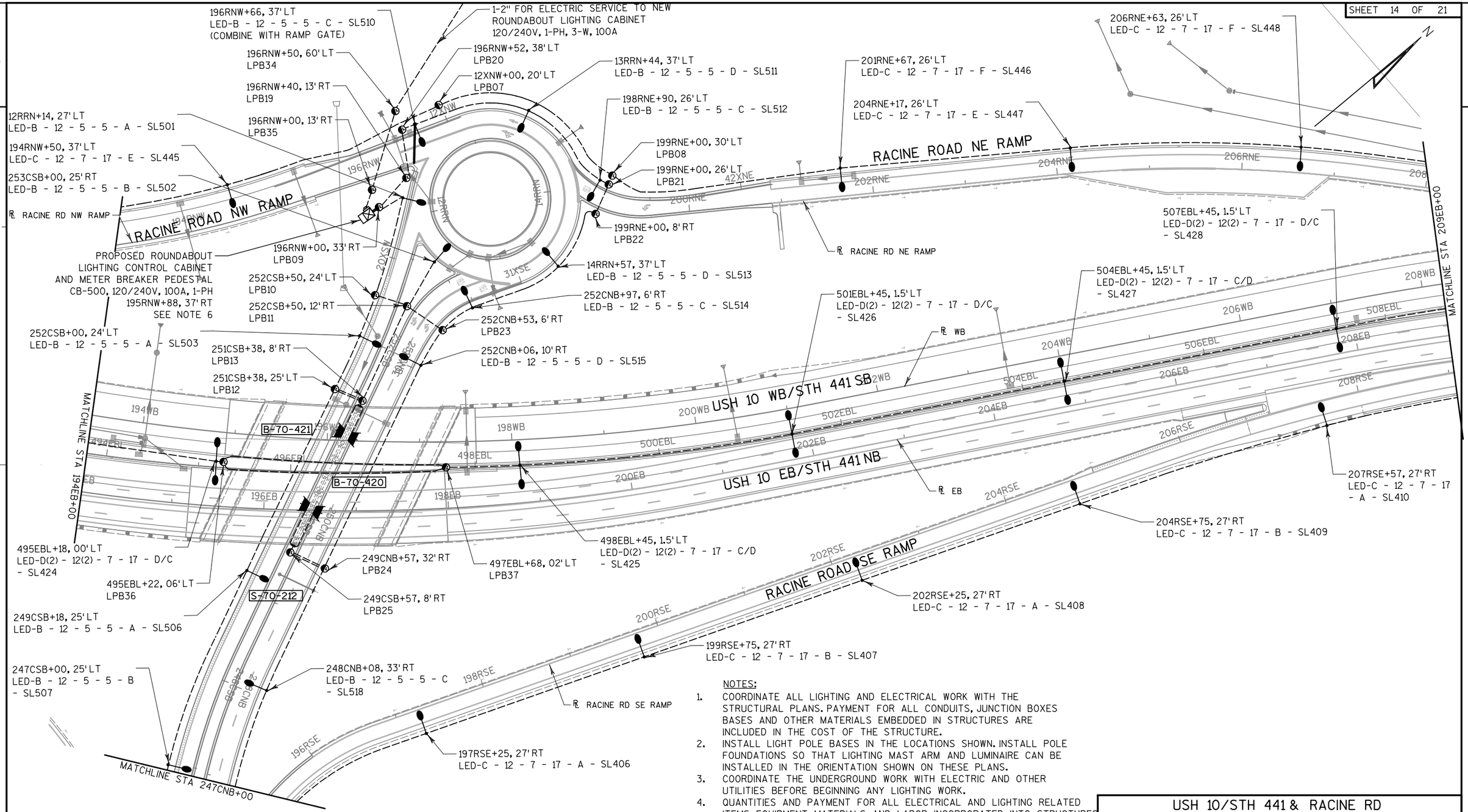
P =	CB-401	1	2"		
	B	2	#6	1	8

480V

Q =	CB-401	1	2"		
	E	4	#6	1	8
	F	4	#6	1	8

480V

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN - WIRING SCHEMATIC	SHEET 233	E



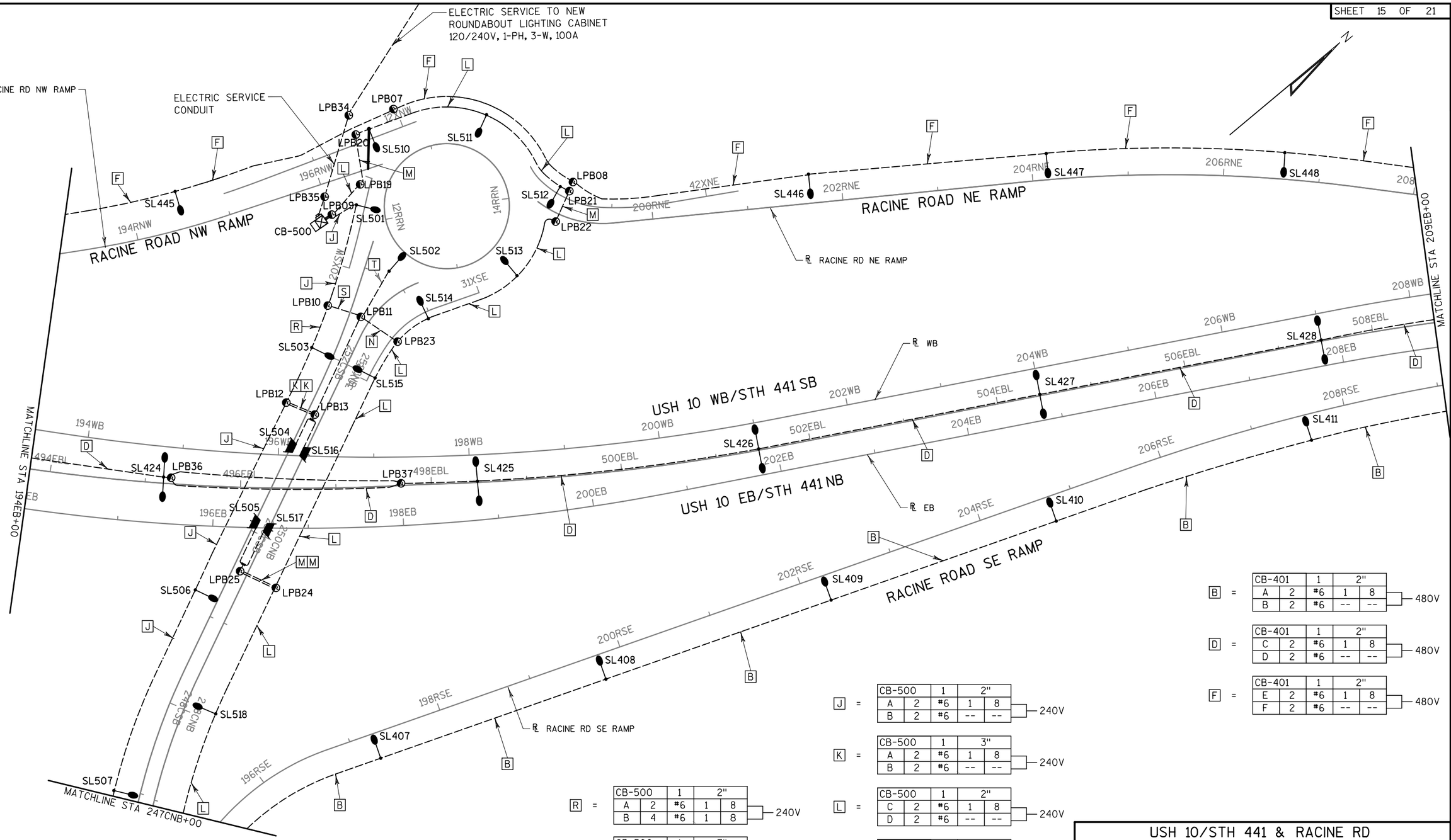
NOTES:

1. COORDINATE ALL LIGHTING AND ELECTRICAL WORK WITH THE STRUCTURAL PLANS. PAYMENT FOR ALL CONDUITS, JUNCTION BOXES BASES AND OTHER MATERIALS EMBEDDED IN STRUCTURES ARE INCLUDED IN THE COST OF THE STRUCTURE.
2. INSTALL LIGHT POLE BASES IN THE LOCATIONS SHOWN. INSTALL POLE FOUNDATIONS SO THAT LIGHTING MAST ARM AND LUMINAIRE CAN BE INSTALLED IN THE ORIENTATION SHOWN ON THESE PLANS.
3. COORDINATE THE UNDERGROUND WORK WITH ELECTRIC AND OTHER UTILITIES BEFORE BEGINNING ANY LIGHTING WORK.
4. QUANTITIES AND PAYMENT FOR ALL ELECTRICAL AND LIGHTING RELATED ITEMS, EQUIPMENT, MATERIALS, AND LABOR INCORPORATED INTO STRUCTURES ARE SHOWN ON THE STRUCTURAL PLANS.
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USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010 / L70-2011
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 3 OF 10

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 234 E



B =	CB-401	1	2"				480V
	A	2	#6	1	8		
	B	2	#6	--	--		

D =	CB-401	1	2"				480V
	C	2	#6	1	8		
	D	2	#6	--	--		

F =	CB-401	1	2"				480V
	E	2	#6	1	8		
	F	2	#6	--	--		

J =	CB-500	1	2"				240V
	A	2	#6	1	8		
	B	2	#6	--	--		

K =	CB-500	1	3"				240V
	A	2	#6	1	8		
	B	2	#6	--	--		

L =	CB-500	1	2"				240V
	C	2	#6	1	8		
	D	2	#6	--	--		

M =	CB-500	1	3"				240V
	C	2	#6	1	8		
	D	2	#6	--	--		

N =	CB-500	1	3"				
	--	--	--	--	--		

R =	CB-500	1	2"				240V
	A	2	#6	1	8		
	B	4	#6	1	8		

S =	CB-500	1	3"				240V
	B	2	#6	1	8		

T =	CB-500	1	2"				240V
	B	2	#6	1	8		

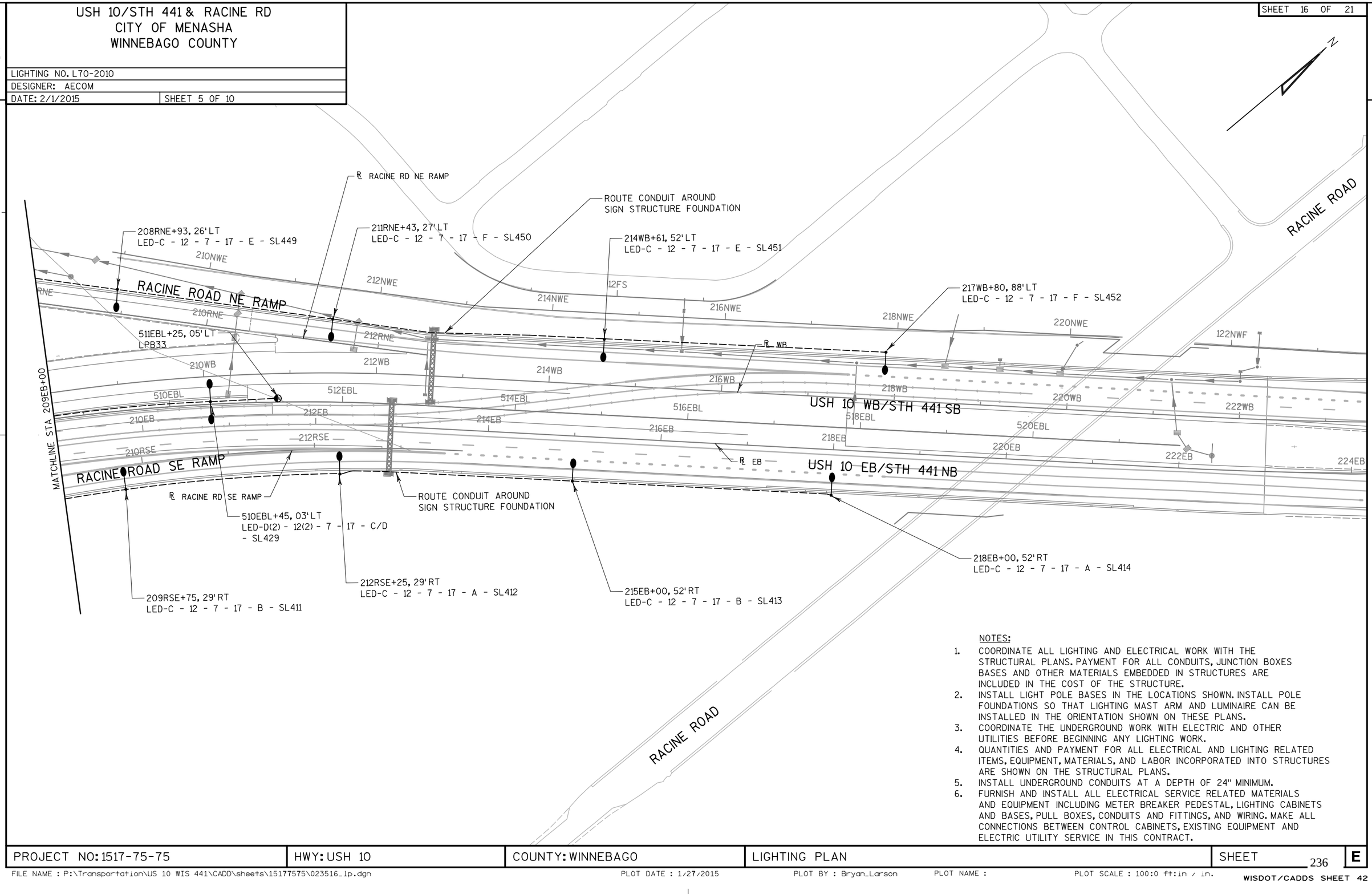
USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010 / L70-2011
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 4 OF 10

2

USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 5 OF 10



NOTES:

1. COORDINATE ALL LIGHTING AND ELECTRICAL WORK WITH THE STRUCTURAL PLANS. PAYMENT FOR ALL CONDUITS, JUNCTION BOXES BASES AND OTHER MATERIALS EMBEDDED IN STRUCTURES ARE INCLUDED IN THE COST OF THE STRUCTURE.
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4. QUANTITIES AND PAYMENT FOR ALL ELECTRICAL AND LIGHTING RELATED ITEMS, EQUIPMENT, MATERIALS, AND LABOR INCORPORATED INTO STRUCTURES ARE SHOWN ON THE STRUCTURAL PLANS.
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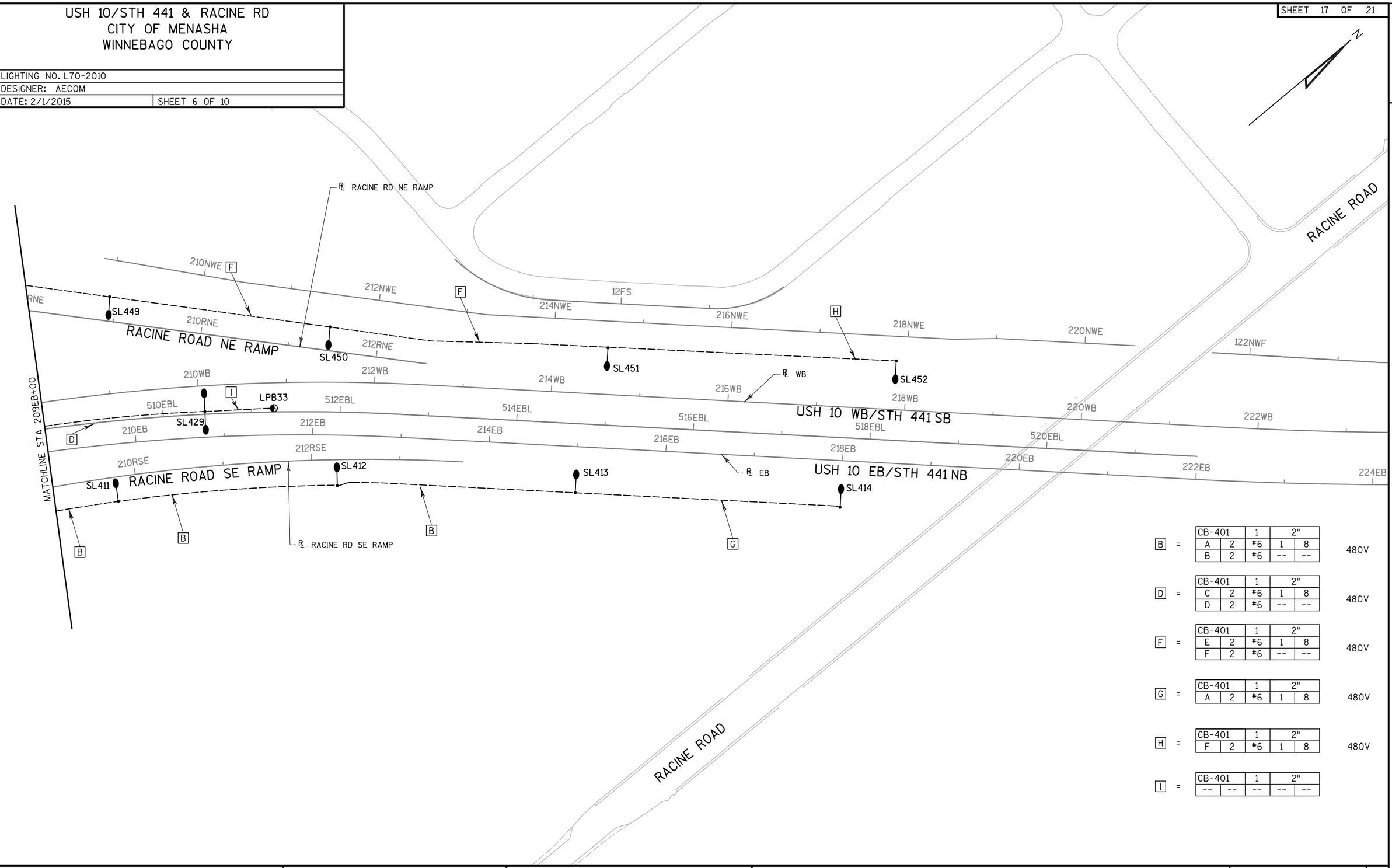
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 236	E

2

USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 6 OF 10

2



B =	CB-401	1	2"			480V
	A	2	#6	1	8	
	B	2	#6	--	--	

D =	CB-401	1	2"			480V
	C	2	#6	1	8	
	D	2	#6	--	--	

F =	CB-401	1	2"			480V
	E	2	#6	1	8	
	F	2	#6	--	--	

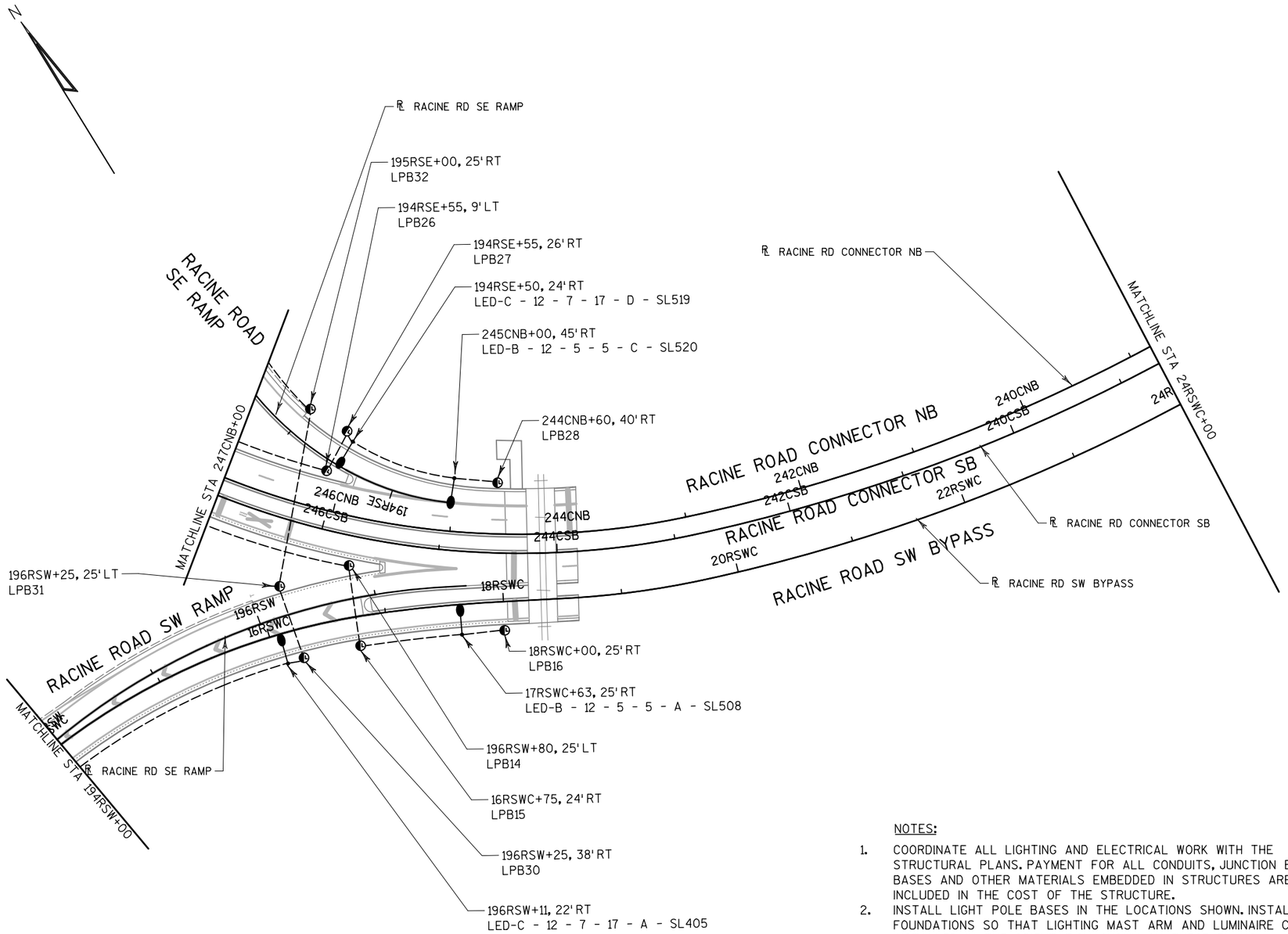
G =	CB-401	1	2"			480V
	A	2	#6	1	8	

H =	CB-401	1	2"			480V
	F	2	#6	1	8	

I =	CB-401	1	2"			
	--	--	--	--	--	

USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010 & L70-2011	
DESIGNER: AECOM	
DATE: 2/1/2015	SHEET 7 OF 10

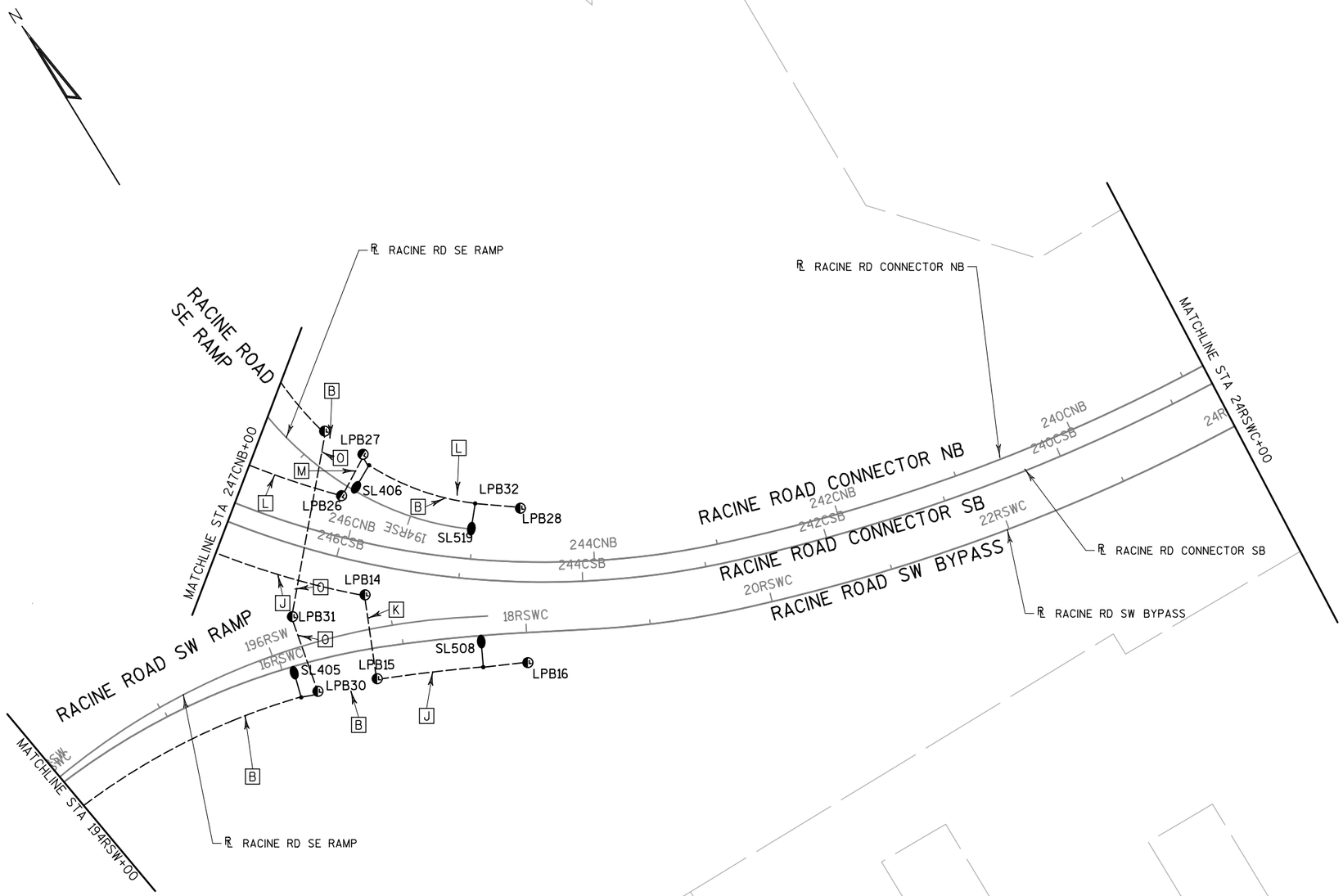


NOTES:

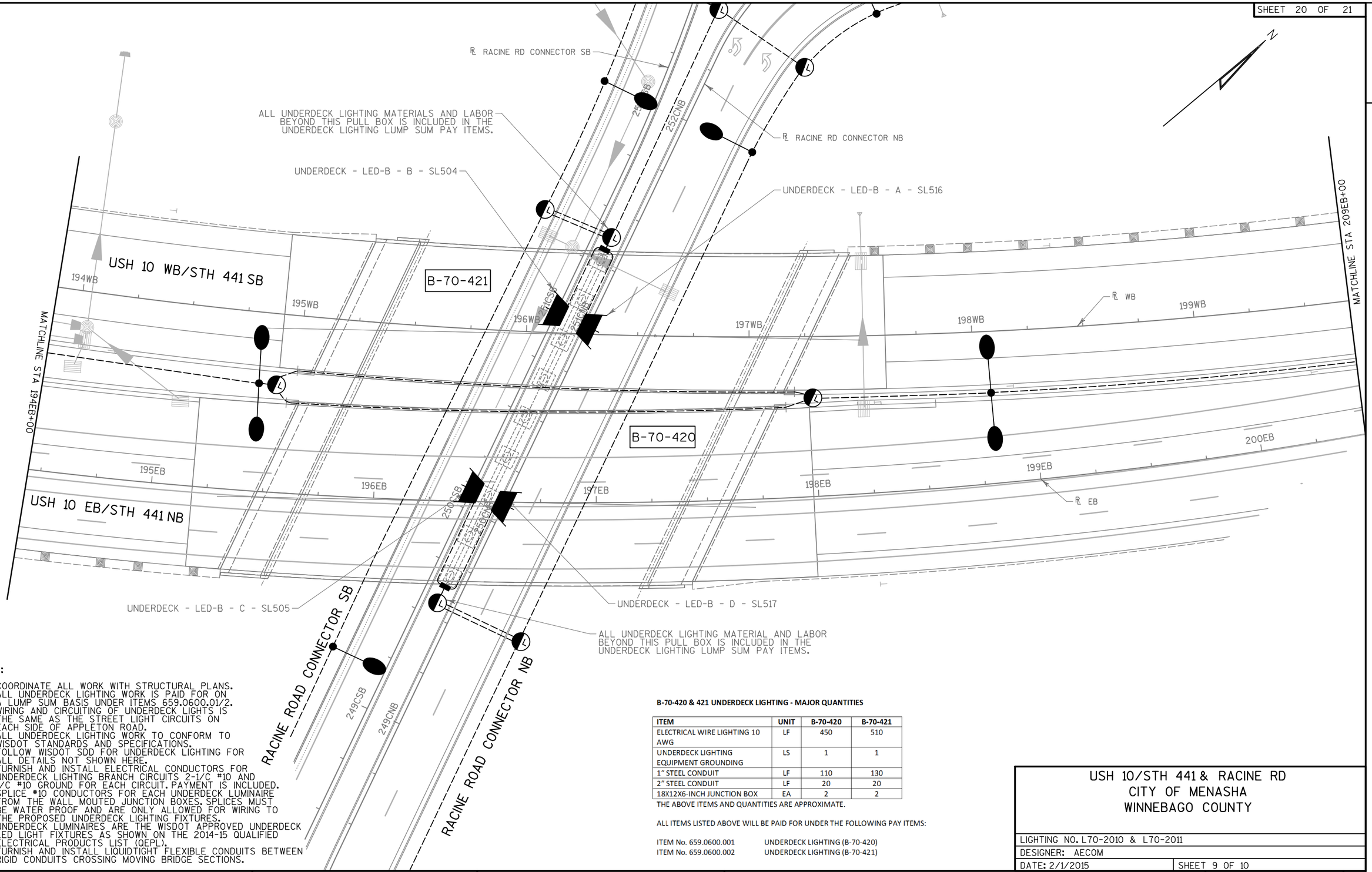
1. COORDINATE ALL LIGHTING AND ELECTRICAL WORK WITH THE STRUCTURAL PLANS. PAYMENT FOR ALL CONDUITS, JUNCTION BOXES BASES AND OTHER MATERIALS EMBEDDED IN STRUCTURES ARE INCLUDED IN THE COST OF THE STRUCTURE.
2. INSTALL LIGHT POLE BASES IN THE LOCATIONS SHOWN. INSTALL POLE FOUNDATIONS SO THAT LIGHTING MAST ARM AND LUMINAIRE CAN BE INSTALLED IN THE ORIENTATION SHOWN ON THESE PLANS.
3. COORDINATE THE UNDERGROUND WORK WITH ELECTRIC AND OTHER UTILITIES BEFORE BEGINNING ANY LIGHTING WORK.
4. QUANTITIES AND PAYMENT FOR ALL ELECTRICAL AND LIGHTING RELATED ITEMS, EQUIPMENT, MATERIALS, AND LABOR INCORPORATED INTO STRUCTURES ARE SHOWN ON THE STRUCTURAL PLANS.
5. INSTALL UNDERGROUND CONDUITS AT A DEPTH OF 24" MINIMUM.
6. FURNISH AND INSTALL ALL ELECTRICAL SERVICE RELATED MATERIALS AND EQUIPMENT INCLUDING METER BREAKER PEDESTAL, LIGHTING CABINETS AND BASES, PULL BOXES, CONDUITS AND FITTINGS, AND WIRING. MAKE ALL CONNECTIONS BETWEEN CONTROL CABINETS, EXISTING EQUIPMENT AND ELECTRIC UTILITY SERVICE IN THIS CONTRACT.

USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2010 & L70-2010
DESIGNER: AECOM
DATE: 2/1/2015 | SHEET 8 OF 10



B =	CB-401		1		2"		480V
	A	2	#6	1	8		
	B	2	#6	--	--		
J =	CB-500		1		2"		240V
	A	2	#6	1	8		
	B	2	#6	--	--		
K =	CB-500		1		3"		240V
	A	2	#6	1	8		
	B	2	#6	--	--		
L =	CB-500		1		2"		240V
	C	2	#6	1	8		
	D	2	#6	--	--		
M =	CB-500		1		3"		240V
	C	2	#6	1	8		
	D	2	#6	--	--		
O =	CB-401		1		3"		480V
	A	2	#6	1	8		
	B	2	#6	--	--		



NOTES:

1. COORDINATE ALL WORK WITH STRUCTURAL PLANS.
2. ALL UNDERDECK LIGHTING WORK IS PAID FOR ON A LUMP SUM BASIS UNDER ITEMS 659.0600.01/2.
3. WIRING AND CIRCUITING OF UNDERDECK LIGHTS IS THE SAME AS THE STREET LIGHT CIRCUITS ON EACH SIDE OF APPLETON ROAD.
4. ALL UNDERDECK LIGHTING WORK TO CONFORM TO WISDOT STANDARDS AND SPECIFICATIONS.
5. FOLLOW WISDOT SDD FOR UNDERDECK LIGHTING FOR ALL DETAILS NOT SHOWN HERE.
6. FURNISH AND INSTALL ELECTRICAL CONDUCTORS FOR UNDERDECK LIGHTING BRANCH CIRCUITS 2-1/C #10 AND 1/C #10 GROUND FOR EACH CIRCUIT. PAYMENT IS INCLUDED.
7. SPLICE #10 CONDUCTORS FOR EACH UNDERDECK LUMINAIRE FROM THE WALL MOUTED JUNCTION BOXES. SPLICES MUST BE WATER PROOF AND ARE ONLY ALLOWED FOR WIRING TO THE PROPOSED UNDERDECK LIGHTING FIXTURES.
8. UNDERDECK LUMINAIRES ARE THE WISDOT APPROVED UNDERDECK LED LIGHT FIXTURES AS SHOWN ON THE 2014-15 QUALIFIED ELECTRICAL PRODUCTS LIST (QEPL).
9. FURNISH AND INSTALL LIQUIDTIGHT FLEXIBLE CONDUITS BETWEEN RIGID CONDUITS CROSSING MOVING BRIDGE SECTIONS.

B-70-420 & 421 UNDERDECK LIGHTING - MAJOR QUANTITIES

ITEM	UNIT	B-70-420	B-70-421
ELECTRICAL WIRE LIGHTING 10 AWG	LF	450	510
UNDERDECK LIGHTING EQUIPMENT GROUNDING	LS	1	1
1" STEEL CONDUIT	LF	110	130
2" STEEL CONDUIT	LF	20	20
18X12X6-INCH JUNCTION BOX	EA	2	2

THE ABOVE ITEMS AND QUANTITIES ARE APPROXIMATE.

ALL ITEMS LISTED ABOVE WILL BE PAID FOR UNDER THE FOLLOWING PAY ITEMS:

ITEM No. 659.0600.001 UNDERDECK LIGHTING (B-70-420)
ITEM No. 659.0600.002 UNDERDECK LIGHTING (B-70-421)

USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

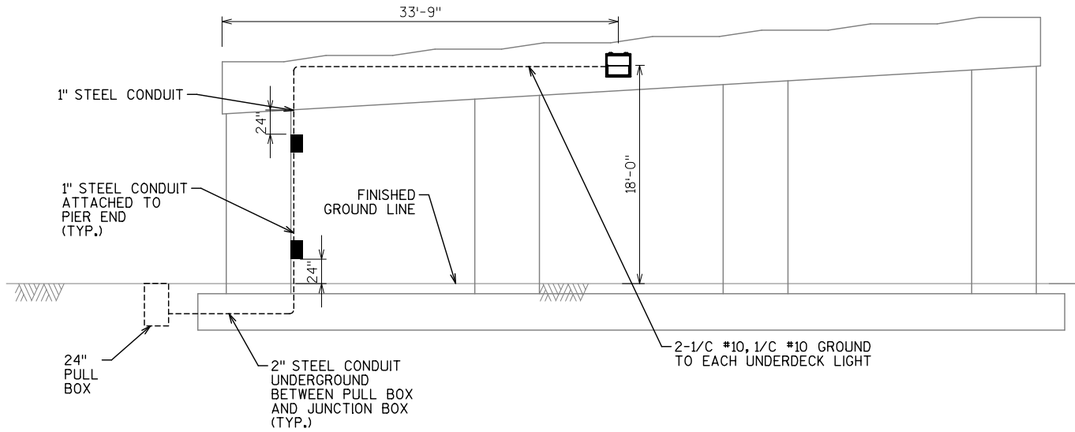
LIGHTING NO. L70-2010 & L70-2011
DESIGNER: AECOM
DATE: 2/1/2015 SHEET 9 OF 10

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN - UNDERDECK LIGHTING PLAN B-70-420/421	SHEET 240	E

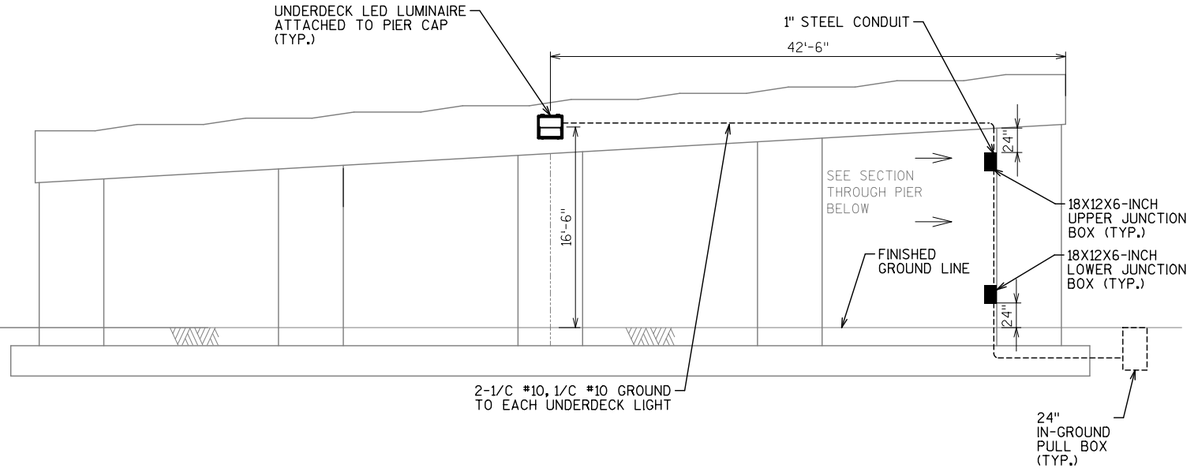
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USH 10/STH 441 & RACINE RD
CITY OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2011
DESIGNER: AECOM
DATE: 2/1/2015 SHEET 10 OF 10



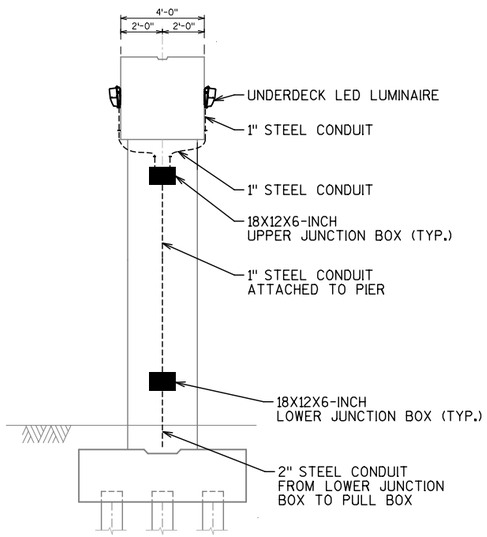
B-70-421



B-70-420

CENTER PIER ELEVATIONS

NOT TO SCALE
(LOOKING EAST)
WEST SIMILAR



SECTION THRU PIER

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN - UNDERDECK LIGHTING ELEVATION B-70-420/421	SHEET 241	E

GENERAL NOTES

THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL 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 TECHNICAL 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 OTHER THAN MINOR ADJUSTMENTS.

BE AWARE THAT NOT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY 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 CONDUITS, PULL BOXES, COMMUNICATIONS VAULTS, 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 (AND/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.

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

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 CONTRACTORS 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 CAMERA BASES, ITS FIELD CABINET BASES, MICROWAVE DETECTOR BASES, CONDUIT, PULL BOXES AND COMMUNICATIONS VAULTS.

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

HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

LEGEND

- VIDEO SENSOR
- CCTV CAMERA
- CONTROL CABINET
- POLE MOUNTED CABINET
- PULL BOX STEEL COMUNICATIONS 24X36
- 12" PULL BOX
- JUNCTION BOX
- TYPE 5 OR CAMERA POLE
- PULL BOX STEEL 24X36 (ELECTRICAL)
- COMMUNICATIONS VAULT
- MANHOLE
- MICROWAVE DETECTOR
- ITS CONDUIT
- ITS CONDUIT DIRECTIONAL BORE
- ITS CONDUIT ON STRUCTURE
- CONDUIT STUB-OUT (CAPPED)
- DYNAMIC MESSAGE SIGN (OVERHEAD)
- DYNAMIC MESSAGE SIGN (GROUND MOUNT)
- ROAD WEATHER INFORMATION SYSTEM (RWIS)
- METER BREAKER PEDESTAL
- BREAKER DISCONNECT BOX
- BARRICADE RACK
- RAMP GATE
- SOLAR RAMP GATE CONTROLLER CABINET
- RADIO LINK (REMOTE DESTINATION)
- TEMPORARY WOOD POLE
- DETECTION ZONE

STANDARD ABBREVIATIONS

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

CONTACTS

WIS. DEPT. OF TRANSPORTATION
NE REGION
MR. RANDY ASMAN
944 VANDERPERREN WAY
GREEN BAY, WI 54304
920-492-7719

WIS. DEPT. OF TRANSPORTATION
NE REGION
MR. SCOTT NELSON
944 VANDERPERREN WAY
GREEN BAY, WI 54304
920-492-5651

WIS. DEPT. OF TRANSPORTATION
STATE TRAFFIC OPERATIONS
MR. DON SCHELL
433 W ST. PAUL AVENUE, SUITE 300
MILWAUKEE, WI 53203
414-227-2148

WIS. DEPT. OF TRANSPORTATION
STATE TRAFFIC OPERATIONS
MR. DEAN BEEKMAN
433 W ST. PAUL AVENUE, SUITE 300
MILWAUKEE, WI 53203
414-227-2154

AECOM
MR. MATT LETOURNEAU
342 NORTH WATER STREET, 7TH FLOOR
MILWAUKEE, WI 53202
312-577-6489

INTELLIGENT TRANSPORTATION SYSTEM PLANS PREPARED BY:

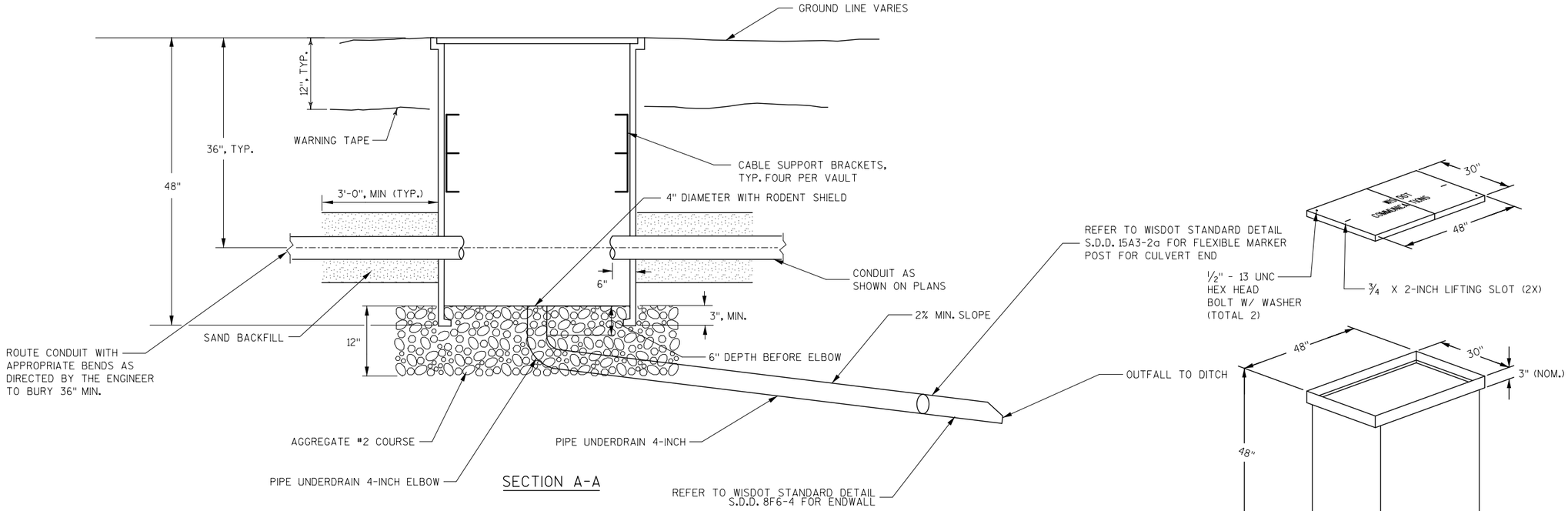
AECOM
342 N Water Street, 7th Floor
Milwaukee, WI 53202
(414) 831-4100

WISCONSIN
MATTHEW J. LETOURNEAU
E- 37209
CHICAGO
ILLINOIS
PROFESSIONAL ENGINEER

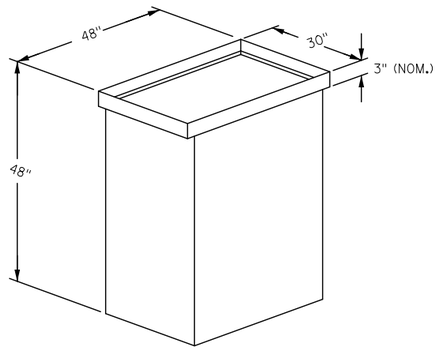
4/24/2015 (Date)

(Signature)

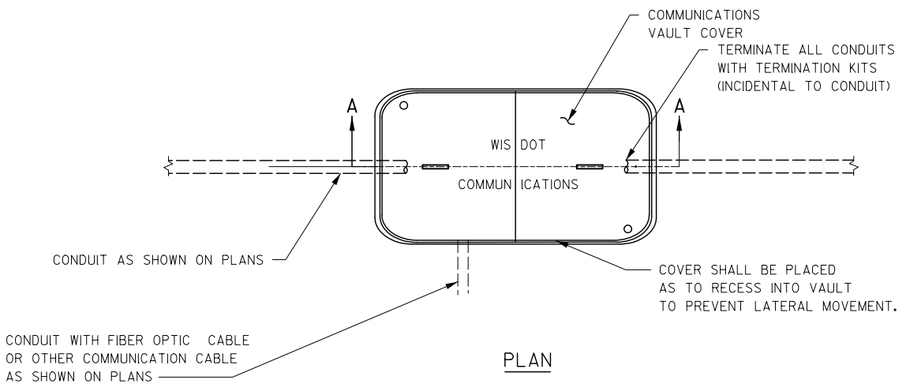
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ITS GENERAL NOTES	SHEET 242	E



SECTION A-A



ISOMETRIC

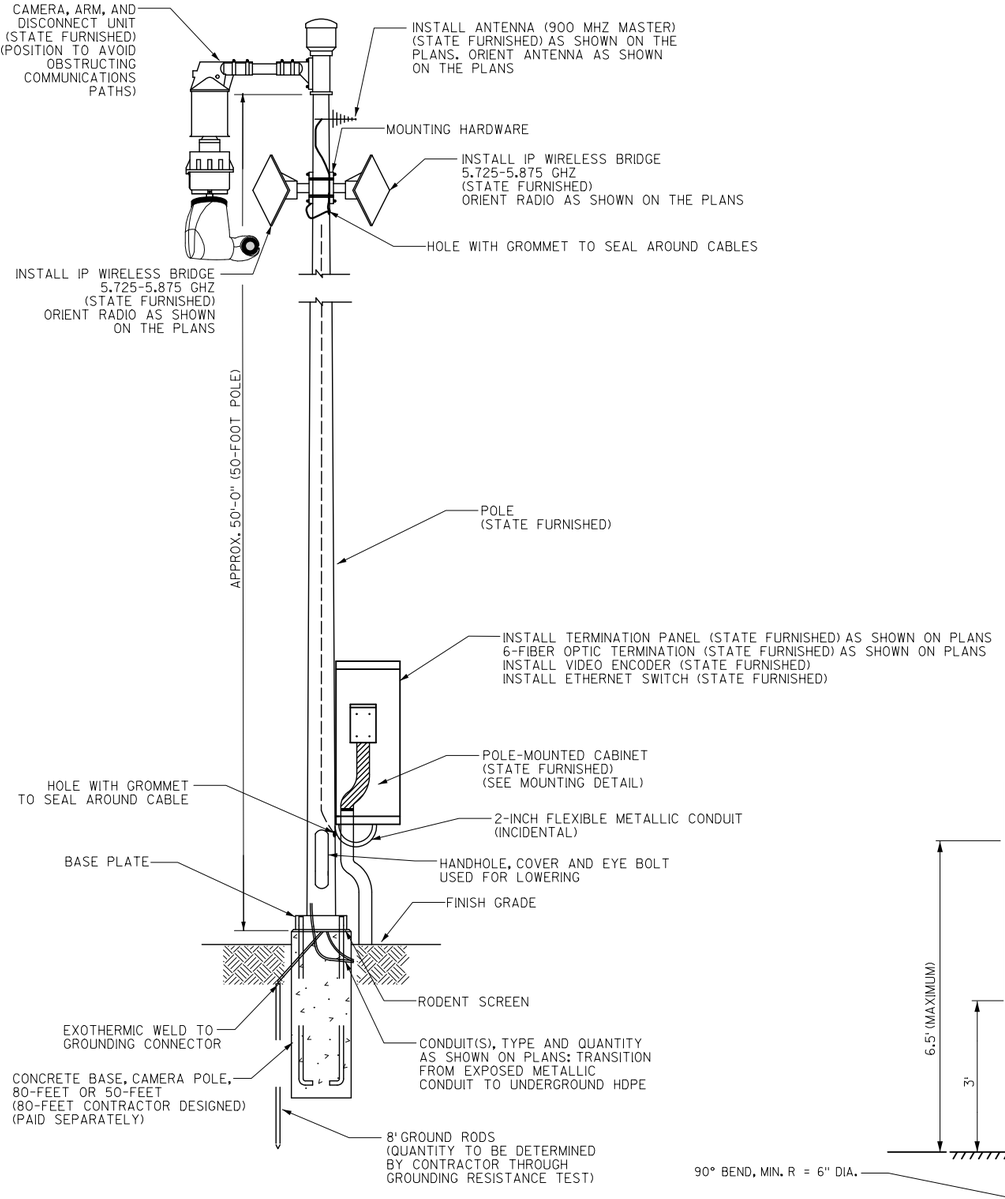


PLAN

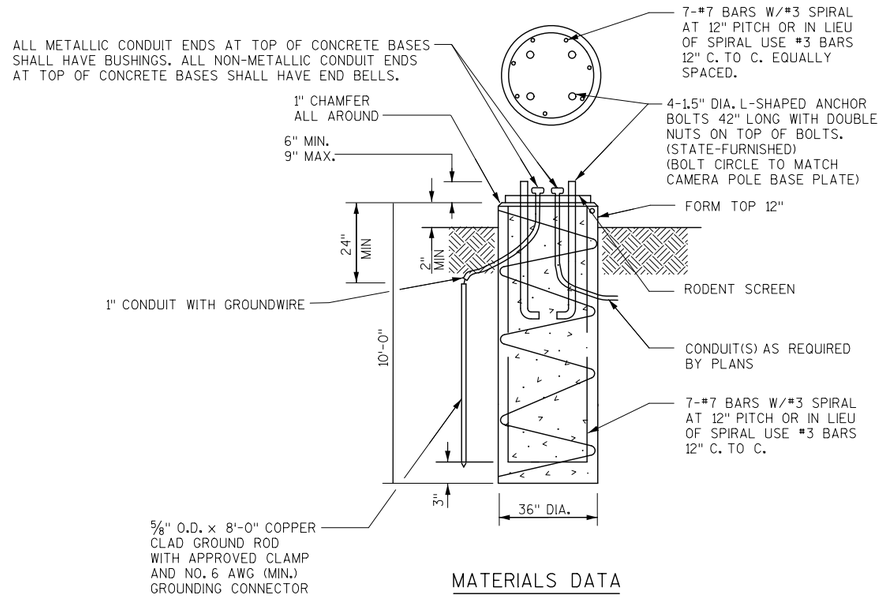
COMMUNICATION VAULT TYPE 1

NOTES

1) BOX SHALL HAVE AN OPEN BASE.
2) COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.
3) ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.
4) VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.
5) FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.
6) VAULT COVERS TO BE IMPRINTED WITH "WISDOT COMMUNICATIONS" IN 2-INCH LETTERING.
7) UNDERDRAIN, ENDWALL, AND MARKER ARE INCIDENTAL TO COMMUNICATION VAULT



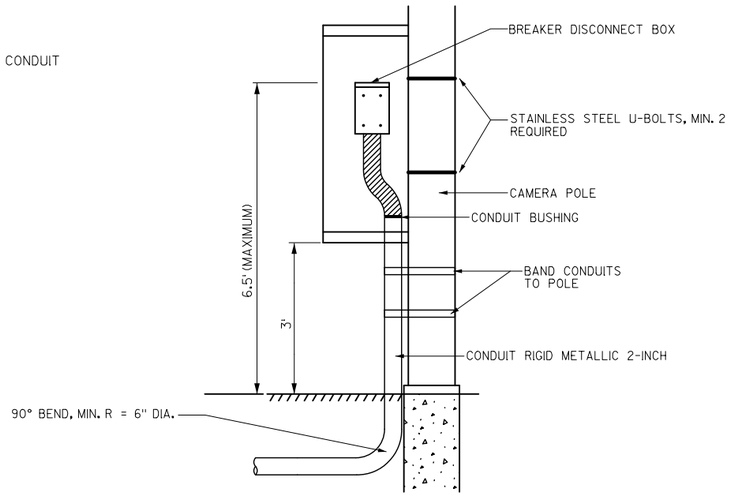
50' CAMERA POLE WITH CAMERA LOWERING HARDWARE



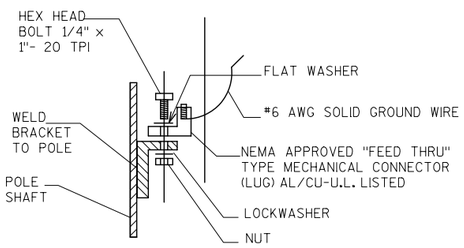
MATERIALS DATA

CONCRETE	f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

CONCRETE BASE, 50' CAMERA POLE



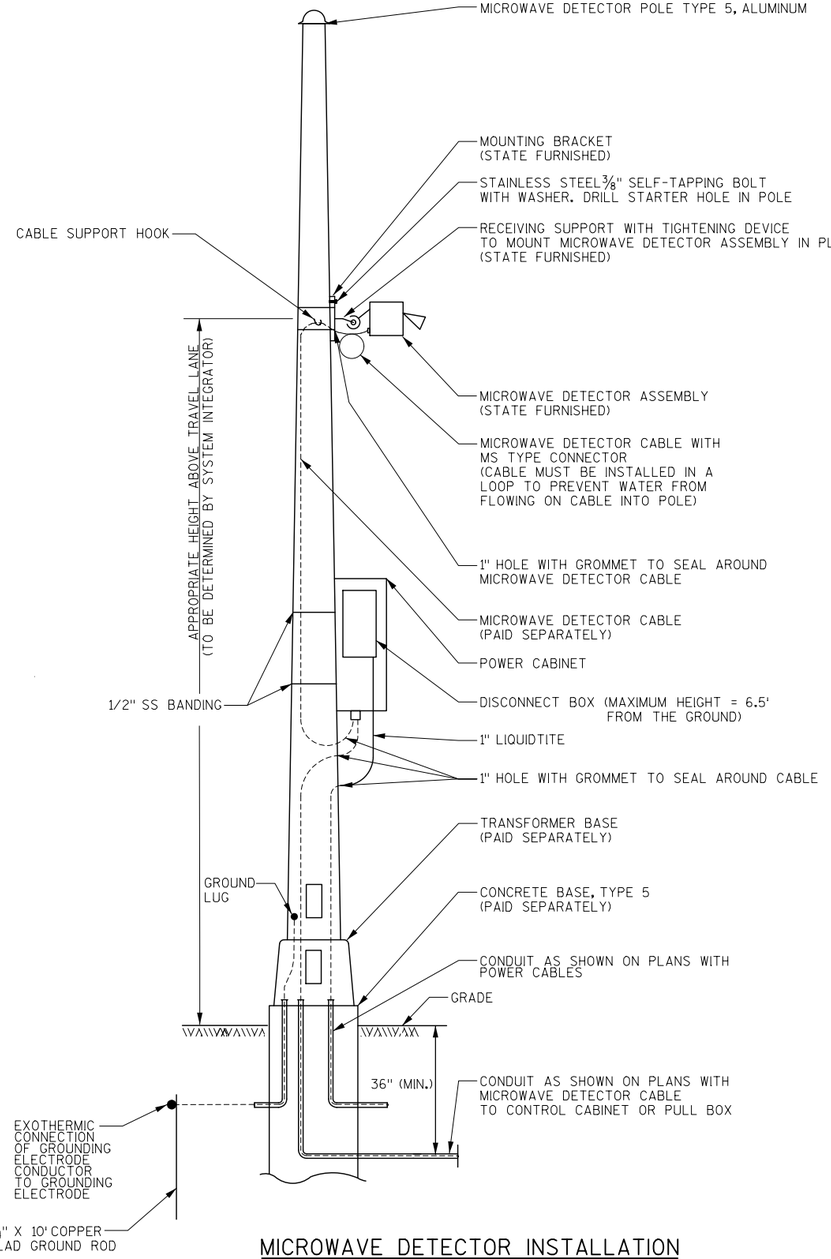
POLE-MOUNTED CABINET MOUNTING DETAIL



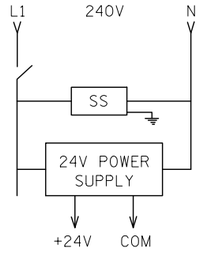
FIELD INSTALLED GROUNDING LUG

NOTES

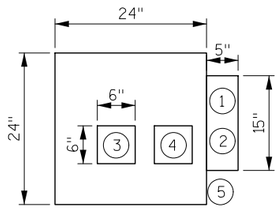
1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE STATE FURNISHED. BASE TO BE CONTRACTOR DESIGNED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN
5) ONLY CONDUIT INFRASTRUCTURE AND FOUNDATIONS INSTALLED IN THIS CONTRACT.



MICROWAVE DETECTOR INSTALLATION ON MICROWAVE DETECTOR POLE WITH SURGE SUPPRESSOR



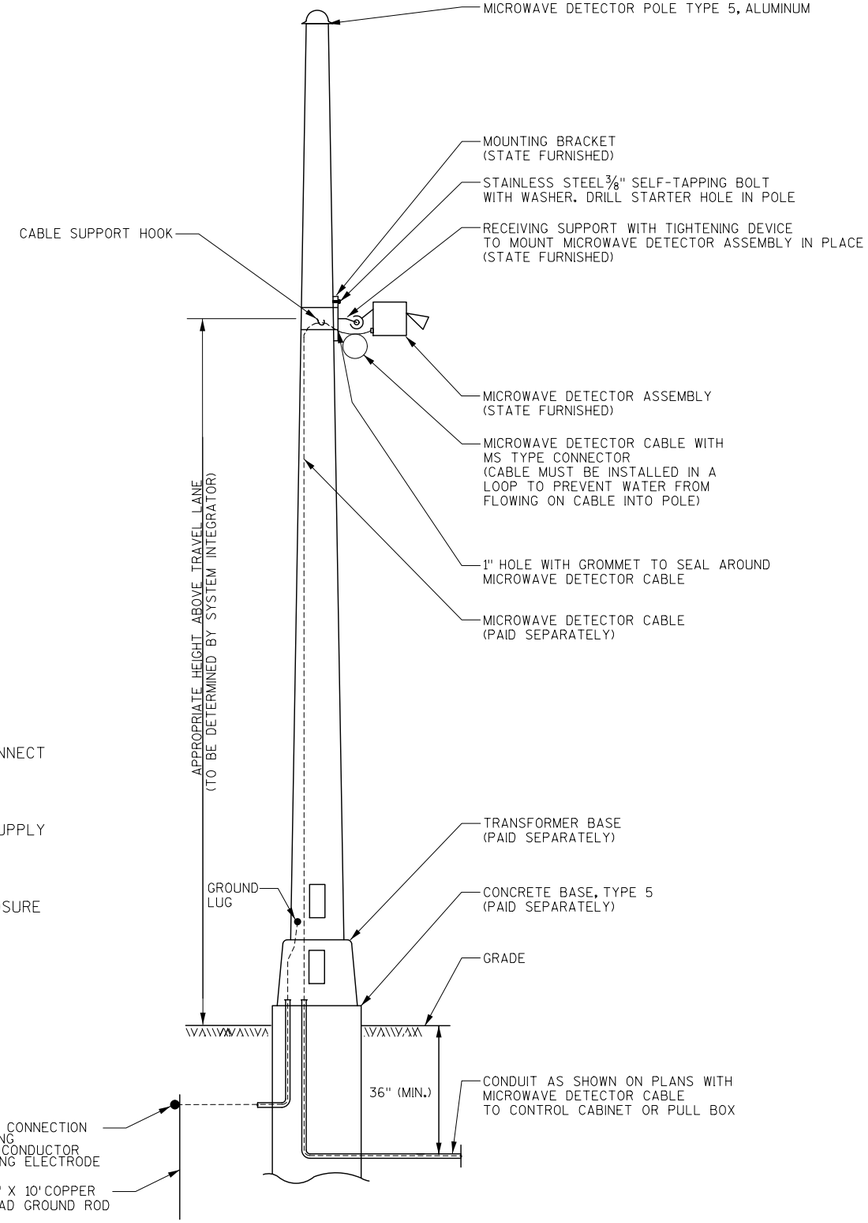
WIRING DIAGRAM



CABINET DETAIL

POWER CABINET BILL OF MATERIALS

DEVICE	QTY.	DESCRIPTION
(1)	1	30A HEAVY DUTY FUSED DISCONNECT
(2)	2	0.5A FUSES, TIME DELAY
(3)	1	240V TO 24VDC, 50W POWER SUPPLY
(4)	1	240V SURGE SUPPRESSOR
(5)	1	24" X 24" X 8" NEMA 4X ENCLOSURE



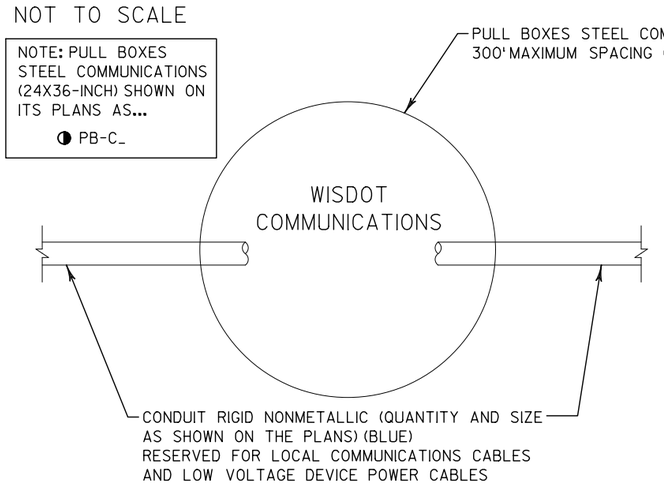
MICROWAVE DETECTOR INSTALLATION ON MICROWAVE DETECTOR POLE

NOTES

1) ONLY CONDUIT INFRASTRUCTURE AND FOUNDATIONS INSTALLED IN THIS CONTRACT.

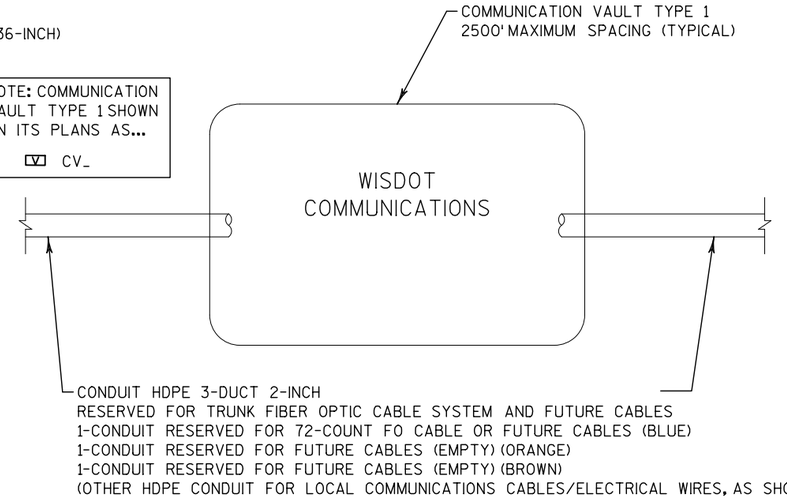
NOT TO SCALE

NOTE: PULL BOXES STEEL COMMUNICATIONS (24X36-INCH) SHOWN ON ITS PLANS AS...
◑ PB-C_



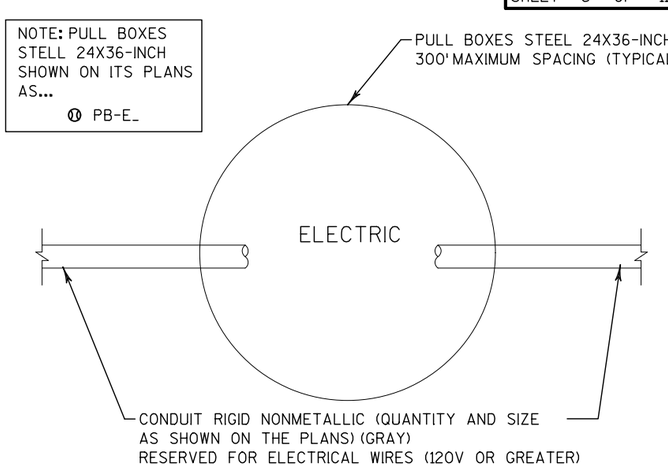
LOCAL COMMUNICATIONS SYSTEM CONDUIT ROUTING

NOTE: COMMUNICATION VAULT TYPE 1 SHOWN ON ITS PLANS AS...
CV_

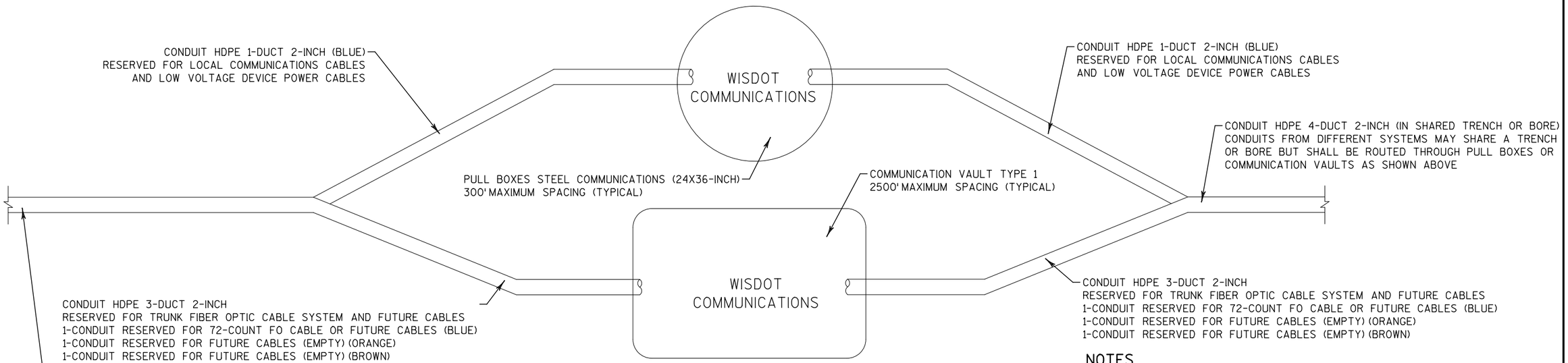


TRUNK COMMUNICATIONS SYSTEM CONDUIT ROUTING

NOTE: PULL BOXES STELL 24X36-INCH SHOWN ON ITS PLANS AS...
ⓧ PB-E_



ELECTRICAL SYSTEM CONDUIT ROUTING



TYPICAL SHARED LOCAL & TRUNK
COMMUNICATIONS SYSTEM CONDUIT ROUTING

NOTES

1) FIBER OPTIC CABLE MARKERS SHALL BE PLACED ALONG CONDUIT CONTAINING FIBER OPTIC CABLE, AS WELL AS CONDUIT SEGMENTS BETWEEN COMMUNICATIONS VAULTS THAT DO NOT CONTAIN FIBER OPTIC CABLE. CONDUIT RUNS OF GREATER THAN 100 FEET BETWEEN A COMMUNICATIONS VAULT AND A CONTROL CABINET SHALL ALSO WARRANT FIBER OPTIC CABLE MARKERS. FIBER OPTIC CABLE WARNING TAPE MAY BE SUBSTITUTED FOR MARKERS WHEN CALLED OUT IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

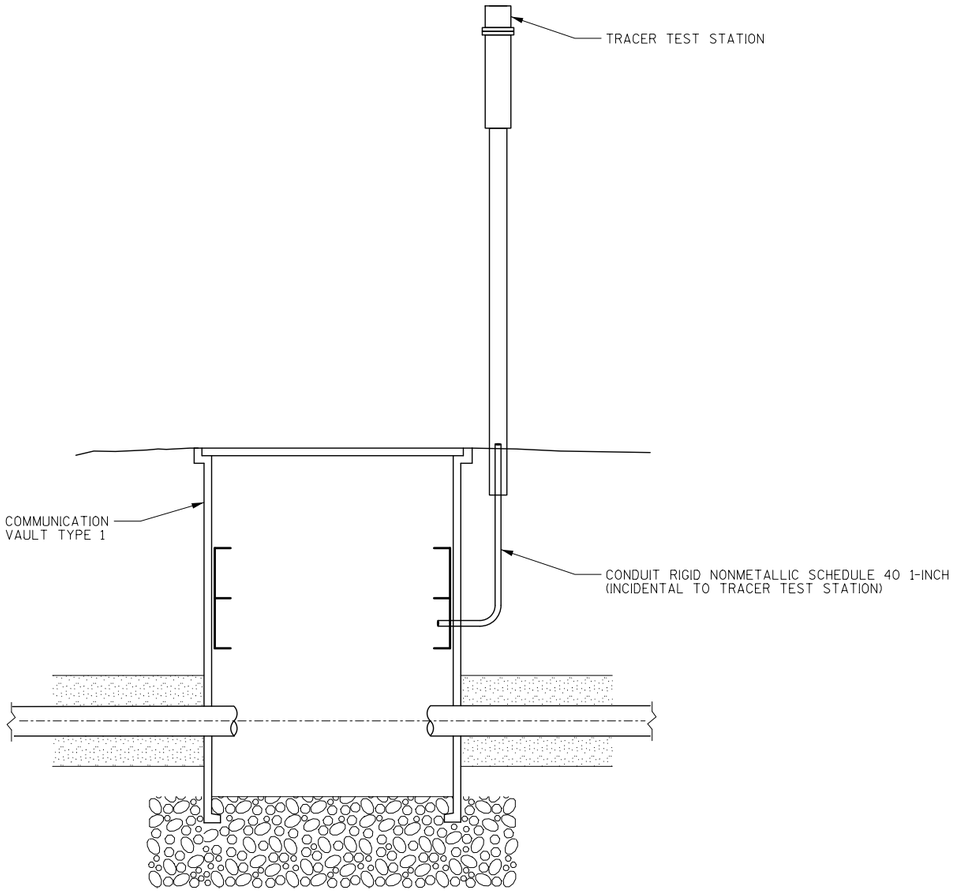
2) ELECTRIC SYSTEM CONDUIT MAY SHARE A TRENCH OR BORE WITH LOCAL AND/OR TRUNK COMMUNICATIONS SYSTEM CONDUIT. HOWEVER, ELECTRIC SYSTEM CONDUIT (GRAY) SHALL BE ROUTED THROUGH ELECTRIC PULL BOXES.

3) A COMMUNICATIONS MANHOLE SHALL BE PLACED IN LIEU OF A COMMUNICATIONS VAULT WHEN ACCESS TO TRUNK COMMUNICATIONS SYSTEM CONDUIT IS DESIRED WITHIN A PAVEMENT STRUCTURE.

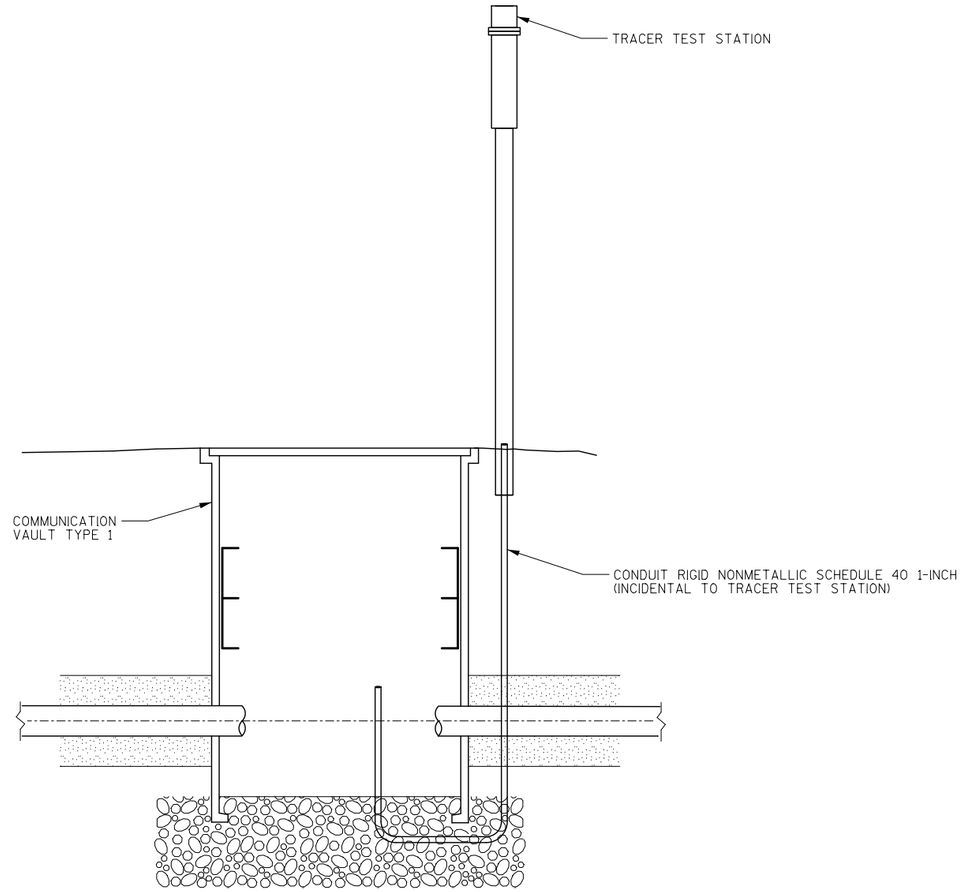
NOTE: COMMUNICATION MANHOLE SHOWN ON ITS PLANS AS...
Ⓜ MH_

ITS TYPICAL CABLE/CONDUIT ROUTING

NOT TO SCALE



INSTALLATION METHOD A



INSTALLATION METHOD B

ELEVATION VIEW

TRACER TEST STATION

NOTES

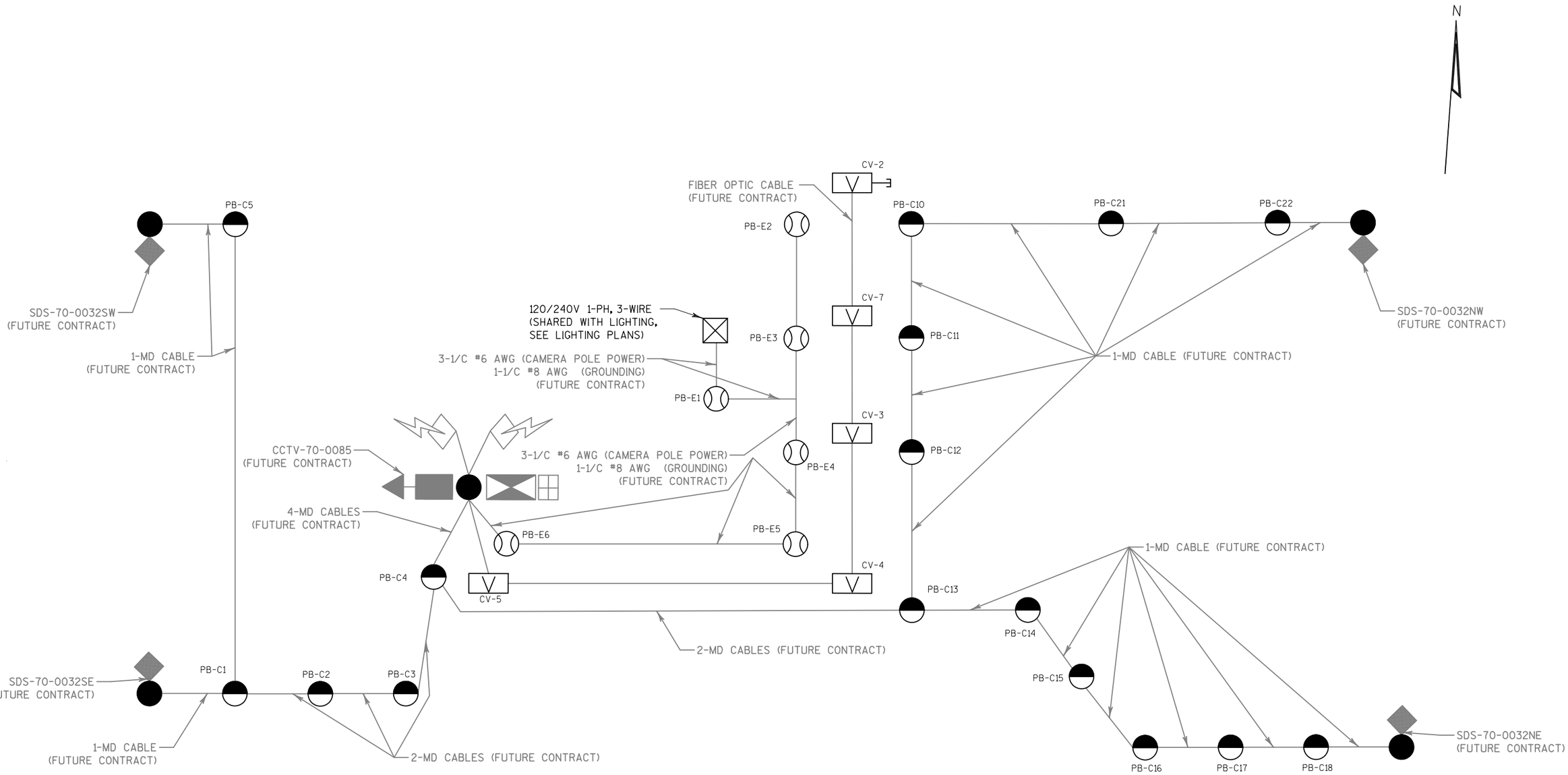
EITHER INSTALLATION METHOD A OR B MAY BE DEPLOYED.

MAKE CONNECTIONS TO TRACER WIRES AS APPROPRIATE.

CAP UNUSED CONDUITS AT GRADE.

NOTE: TRACER TEST STATION SHOWN ON ITS PLANS AS...

V CV__(TTS)



NOTE: CAMERA, MICROWAVE DETECTOR, AND RADIO CABLES INSTALLED FROM EACH DEVICE ON THE POLE TO THE POLE-MOUNTED CABINET.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO/OUTGAMIE	ITS - WIRING DETAILS	SHEET 248	E

2

2

N

LAKESHORE DR.

POWER WAY

PIER

PIER

PIER

PIER

EX R/W

EX R/W

EX R/W

PROP R/W

PROP R/W

MATCHLINE STA 187EB+00

186RNW

186WB

186EB

186RSW

184RNW

184WB

184EB

184RSW

182WB

182EB

180WB

180EB

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

174WB

176WB

178WB

174EB

176EB

178EB

BY OTHERS SEE
PROJECT ID 1517-07-77

℄ USH 10 WB/STH 441 SB

℄ USH 10 EB/STH 441 NB

JB-6

JB-7

CV-50
(TTS)

CONNECT TO EXISTING

CV-1

END PROJECT - 1517-07-76
BEGIN PROJECT - 1517-75-75
STA 181EB+11.78

CONDUIT 3-DUCT 2-INCH
INSTALLED IN PROJECT ID 1517-07-76
(BY OTHERS)

CONDUIT 3-DUCT 2-INCH
(WITHIN BRIDGE PARAPET)
(PAID FOR UNDER BRIDGE)

CONDUIT HDPE 3-DUCT 2-INCH

EXISTING CAMERA CCTV-70-0085
BY OTHERS SEE
PROJECT ID 1517-07-76

TAYCO ST.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ITS - USH 10/STH 441	SHEET 249	E

NOTE:
1. RELOCATE FROM TEMPORARY POLE AFTER PERMANENT POLE AND POWER SOURCE IS INSTALLED.

SDS-70-0032SW
1-CONCRETE BASE TYPE 5

CONDUIT HDPE DIRECTIONAL BORE 5-DUCT 2-INCH

CONDUIT HDPE 4-DUCT 2-INCH

CONDUIT HDPE 4-DUCT 2-INCH

CONDUIT HDPE 4-DUCT 2-INCH

SB RAMP GATE (COMBINE WITH LIGHTING UNIT)
1-RAMP CLOSURE GATE SOLAR POWERED 40-FT
1-CONCRETE BASE TYPE 5
1-TRANSFORMER BASE STANDARD 11.5' BOLT CIRCLE BLACK

ELECTRICAL SERVICE METER BREAKER PEDESTAL (SHARED WITH LIGHTING, SEE LIGHTING PLANS)

CONDUIT HDPE 1-DUCT 2-INCH (FOR FUTURE FLASHER POWER DISTRIBUTION CABLE)

CONDUIT HDPE 5-DUCT 2-INCH

1-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

CONTROLLER CABINET
1-CONCRETE CONTROL CABINET BASE TYPE 10
1-PEDESTAL BASE BLACK
1-TRAFFIC SIGNAL STANDARD ALUMINUM 15-FT BLACK

CONDUIT HDPE DIRECTIONAL BORE 5-DUCT 2-INCH

CCTV-70-0085
BASE CAMERA POLE 50-FT

1-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

CONDUIT HDPE DIRECTIONAL BORE 2-DUCT 2-INCH

COMMUNICATION VAULT TYPE 1

1-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

1-CONDUIT HDPE 4-DUCT 2-INCH

SDS-70-0032SE
1-CONCRETE BASE TYPE 5

CONDUIT HDPE 3-DUCT 2-INCH

CONDUIT HDPE DIRECTIONAL BORE 4-DUCT 2-INCH

CONDUIT HDPE 5-DUCT 2-INCH

2-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
(1 CONDUIT ROUTED TO THE ELECTRICAL PB)
(1 CONDUIT ROUTED TO THE COMMUNICATIONS VAULT)
1-CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
(ROUTED TO THE COMMUNICATIONS PB)

1-CONDUIT HDPE 1-DUCT 2-INCH

CONDUIT HDPE DIRECTIONAL BORE 2-DUCT 2-INCH

PB-C1 PB-C2 PB-C3 PB-C4 PB-C5 PB-C10 PB-C11 PB-C12 PB-C13 PB-C14 PB-C15 PB-C16 PB-C17 PB-C21
PB-E1 PB-E2 PB-E3 PB-E4 PB-E5 PB-E6
CV-1 CV-2 CV-3 CV-4 CV-5 (TTS) CV-6

USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB

MATCHLINE STA 187EB+00
MATCHLINE STA 202EB+00

188RNW 190RNW 192RNW 194RNW 196RNW 12RNW 14RNW 200RNE
188WB 190WB 192WB 194WB 196WB 198WB 200WB 202
188EB 190EB 192EB 194EB 196EB 198EB 200EB
188RSW 190RSW 192RSW 194RSW 196RSW 198RSW 200RSE

2

2

MATCHLINE STA 202EB+00

MATCHLINE STA 217EB+50

1-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

SDS-70-0032NW
1-CONCRETE BASE TYPE 5

CONDUIT HDPE 3-DUCT 2-INCH

PB-C22

EX R/W

TLE

CV-8
(TTS)

N-70-110

CONDUIT HDPE 3-DUCT 2-INCH

202RNE
204RNE
206RNE
208RNE
210RNE
212RNE

USH 10 WB/STH 441 SB

202WB
204WB
206WB
208WB
210WB
212WB
214WB
216WB

℄ USH 10 WB/STH 441 SB

USH 10/STH 441

202EB
204EB
206EB
208EB
210EB
212EB
214EB
216EB

℄ USH 10 EB/STH 441 NB

202RSE
204RSE
206RSE
208RSE
210RSE
212RSE

USH 10 EB/STH 441 NB

EX R/W

CEMETERY

RACINE RD.

SDS-70-0032NE
1-CONCRETE BASE TYPE 5

PB-C18

1-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

1-CONDUIT HDPE 1-DUCT 2-INCH

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ITS - USH 10/STH 441	SHEET 251	E

FILE NAME : \\S1102K306\projects\Transportation\US 10 WIS 441\CADD\sheets\ITS\15177575\021406_fm.dgn PLOT DATE : 4/24/2015 PLOT BY : Bryan_Larson PLOT NAME : PLOT SCALE : 100.0000 sf / in.

2

2

CONDUIT HDPE 3-DUCT 2-INCH

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH

DUNNING ST.

GORDON ST.

RACINE ROAD

END PROJECT 1517-75-75
STA 222WB+31.59

EX R/W

POOL

N-70-110

N-70-121

CV-9

CV-10

218NWE

220NWE

122NWF

124NWF

126NWF

128NWF

130NWF

132NWF

MATCHLINE STA 233EB+00

R USH 10 WB/STH 441 SB

USH 10 WB/STH 441 SB

218WB

220WB

222WB

224WB

226WB

228WB

230WB

232WB

MATCHLINE STA 217EB+50

USH 10/STH 441

218EB

220EB

222EB

224EB

226EB

228EB

230EB

232EB

R USH 10 EB/STH 441 NB

USH 10 EB/STH 441 NB

SIGN

CANADIAN NATIONAL

END PROJECT 1517-75-75

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ITS - USH 10/STH 441	SHEET 252	E

FILE NAME : \\S1102K306\projects\Transportation\US 10 WIS 441\CADD\sheets\ITS\151775 75\021407_fm.dgn PLOT DATE : 4/24/2015 PLOT BY : Bryan_Larson PLOT NAME : PLOT SCALE : 100.0000 sf / in.

2

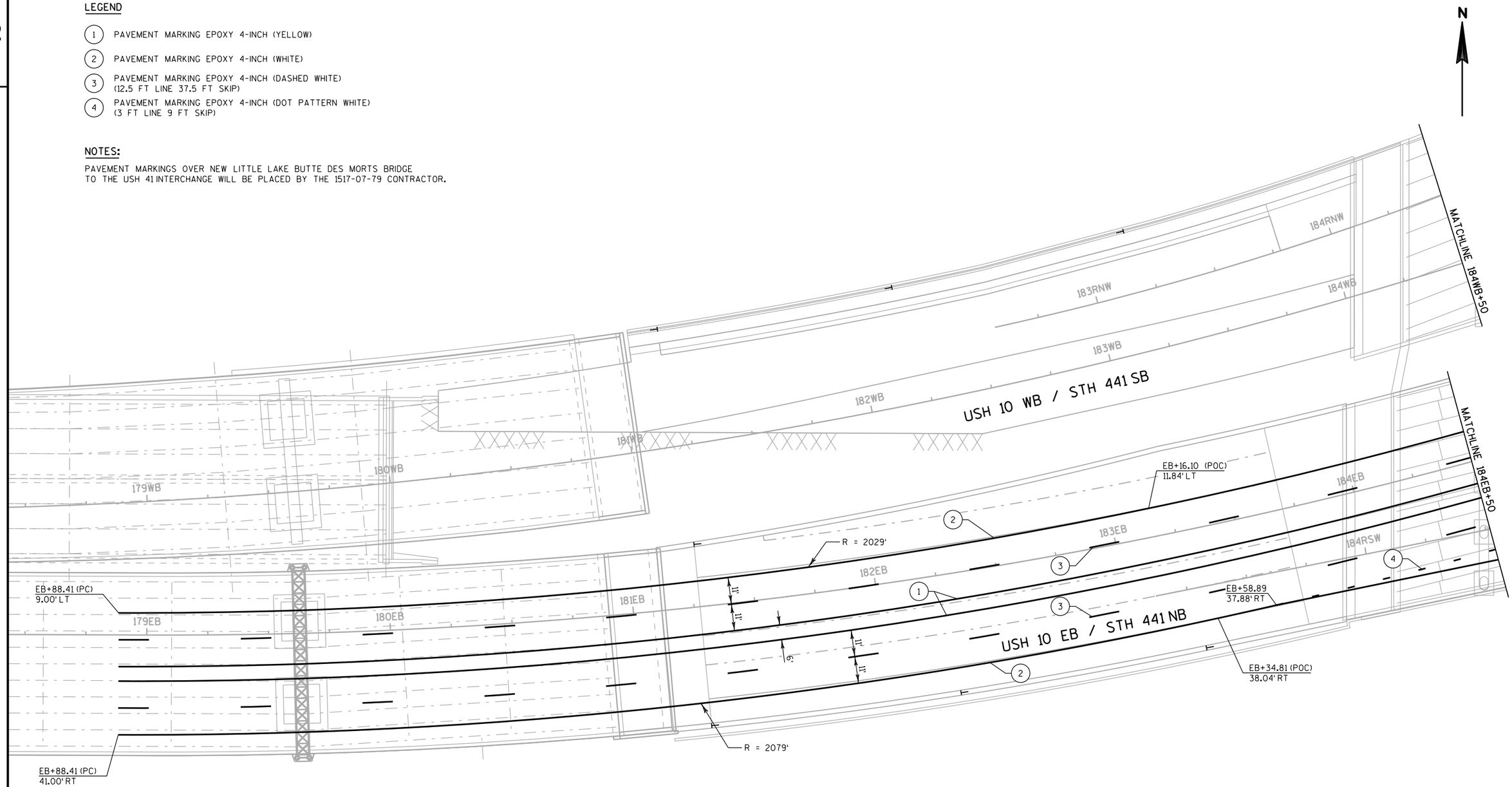
2

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

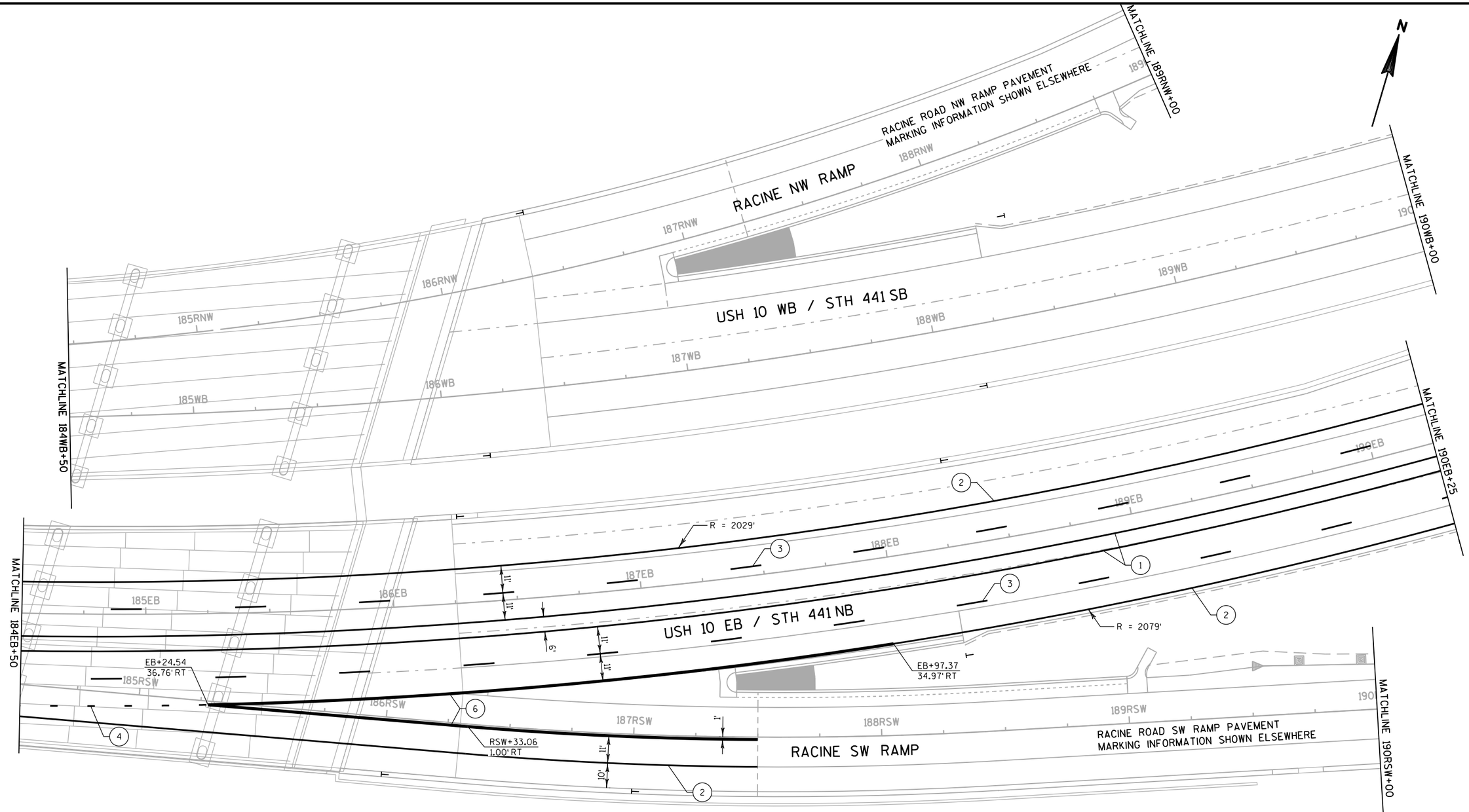
NOTES:

PAVEMENT MARKINGS OVER NEW LITTLE LAKE BUTTE DES MORTS BRIDGE TO THE USH 41 INTERCHANGE WILL BE PLACED BY THE 1517-07-79 CONTRACTOR.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 253	E

2



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 254	E

2

RACINE NW RAMP 190RNW

RACINE ROAD NW RAMP PAVEMENT
MARKING INFORMATION SHOWN ELSEWHERE

MATCHLINE 190WB+00

USH 10 WB / STH 441 SB

191WB 192WB 193WB 194WB 195WB

MATCHLINE 195WB+50

MATCHLINE 190EB+25

191EB 192EB 193EB 194EB 195EB

USH 10 EB / STH 441 NB

R = 2029'

R = 2079'

MATCHLINE 196EB+00

191RSW RACINE SW RAMP 192RSW

RACINE ROAD SW RAMP PAVEMENT
MARKING INFORMATION SHOWN ELSEWHERE

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE)
   (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 255	E

2

2

RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB

RACINE ROAD CONNECTOR PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

N

MATCHLINE 195WB+50

MATCHLINE 201WB+00

USH 10 WB / STH 441 SB

196WB

197WB

198WB

199WB

200WB

201WB

EB+74.88 (PT)
21.98' LT

MATCHLINE 201EB+75

R = 2029'

201EB

200EB

199EB

198EB

197EB

196EB

MATCHLINE 196EB+00

USH 10 EB / STH 441 NB

EB+75.08 (PT)
28.02' RT

R = 2079'

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

RACINE ROAD SE RAMP PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

RACINE SE RAMP

200RSE

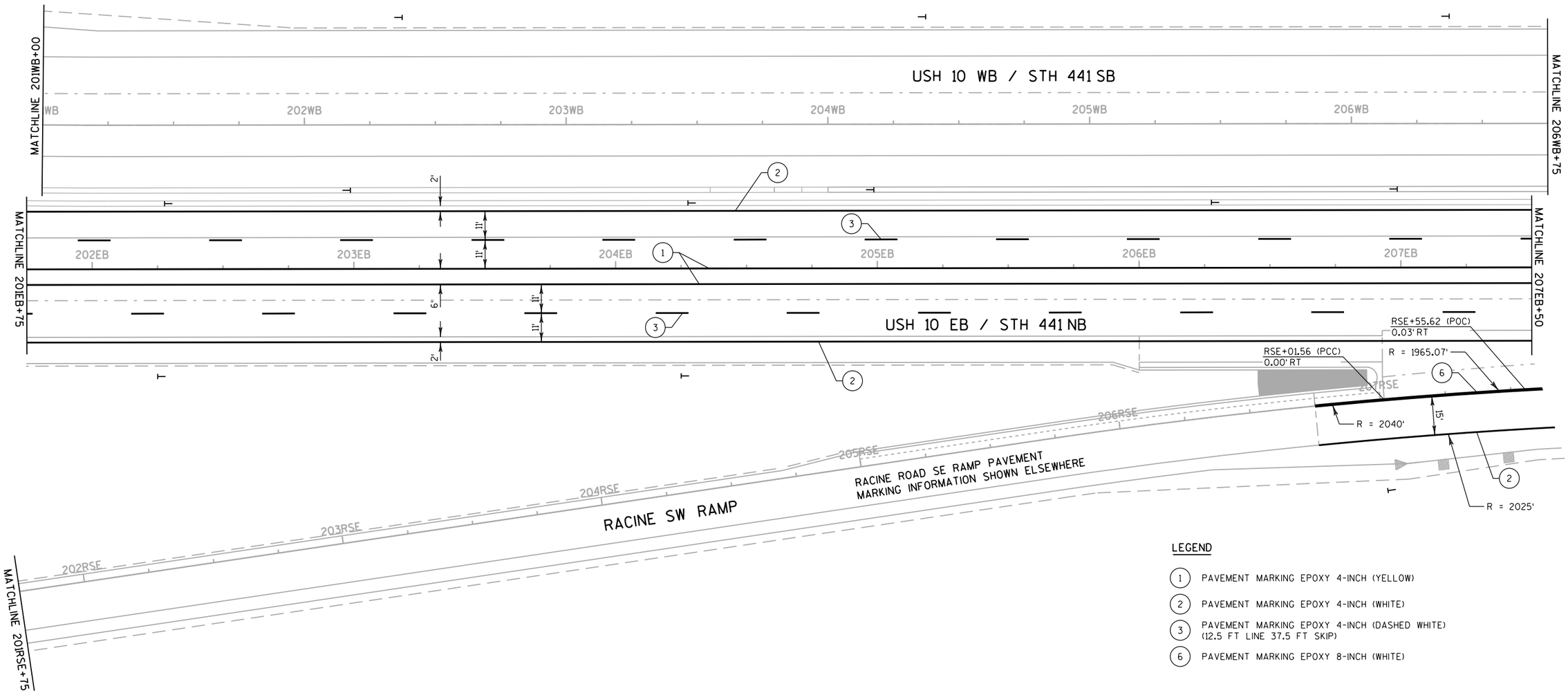
201RSE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 256	E

FILE NAME : I:\56537\1517-75-75\t1\cds\024504_pm.dgn PLOT DATE : 1/26/2015 9:08:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

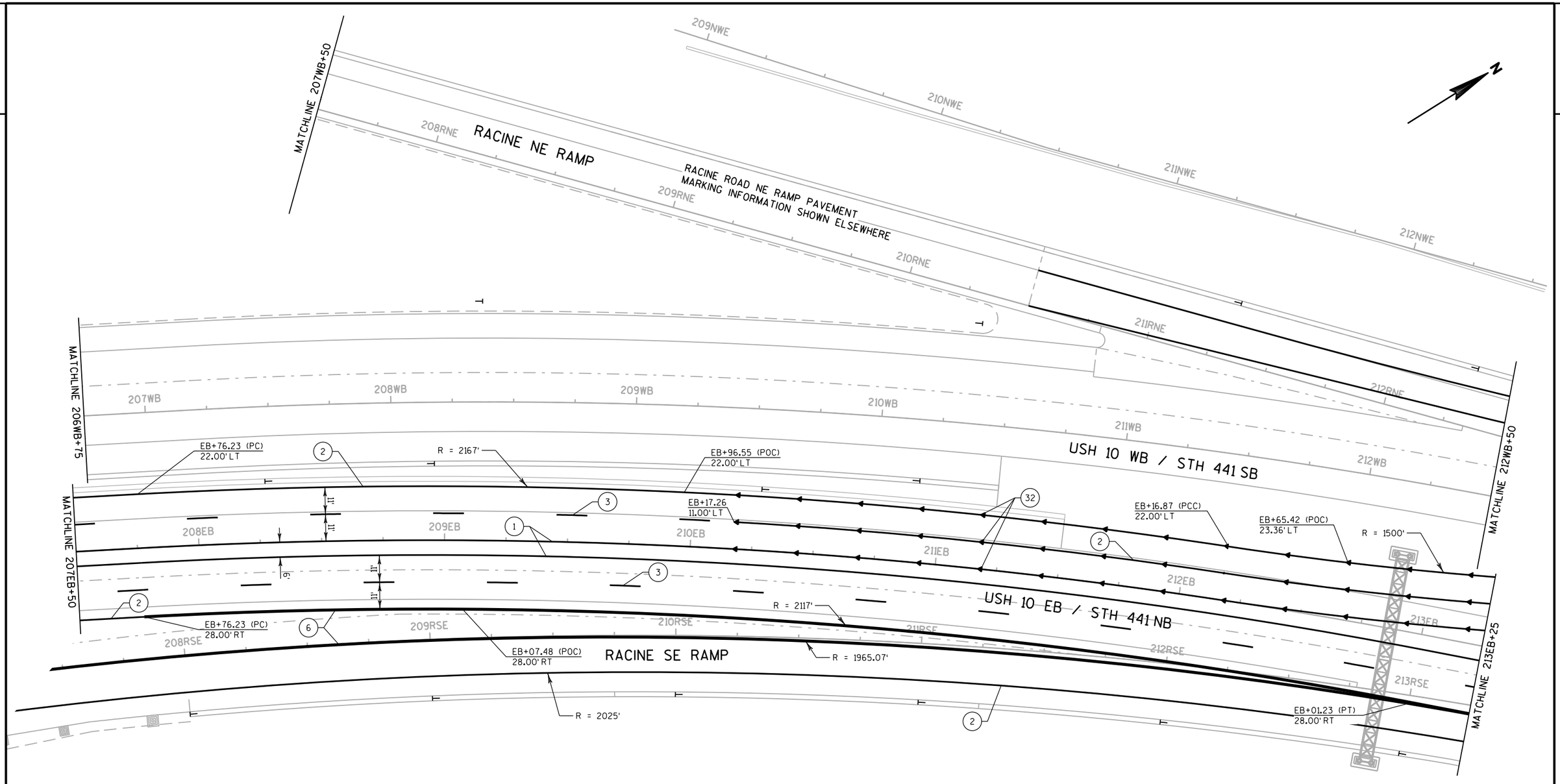


LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 257	E

2

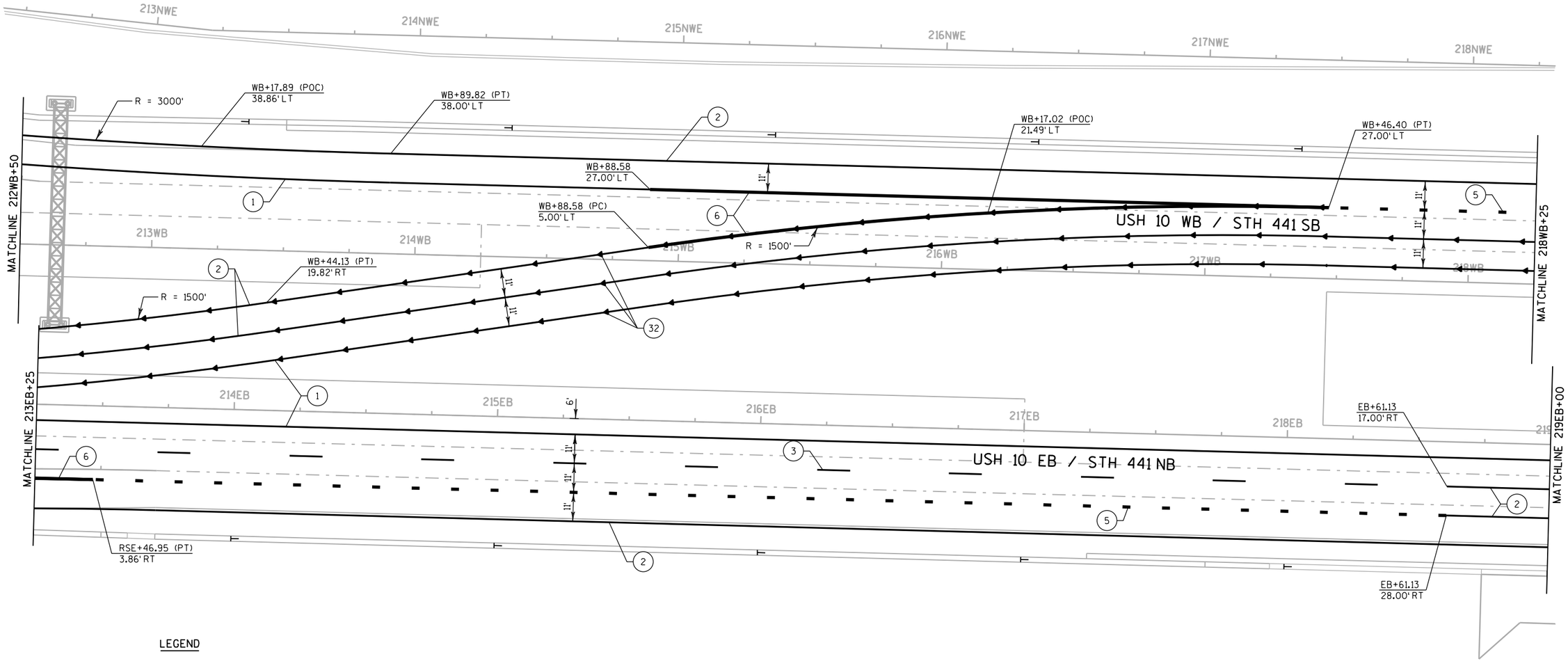


LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
32. RAISED PAVEMENT MARKERS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 258	E

2

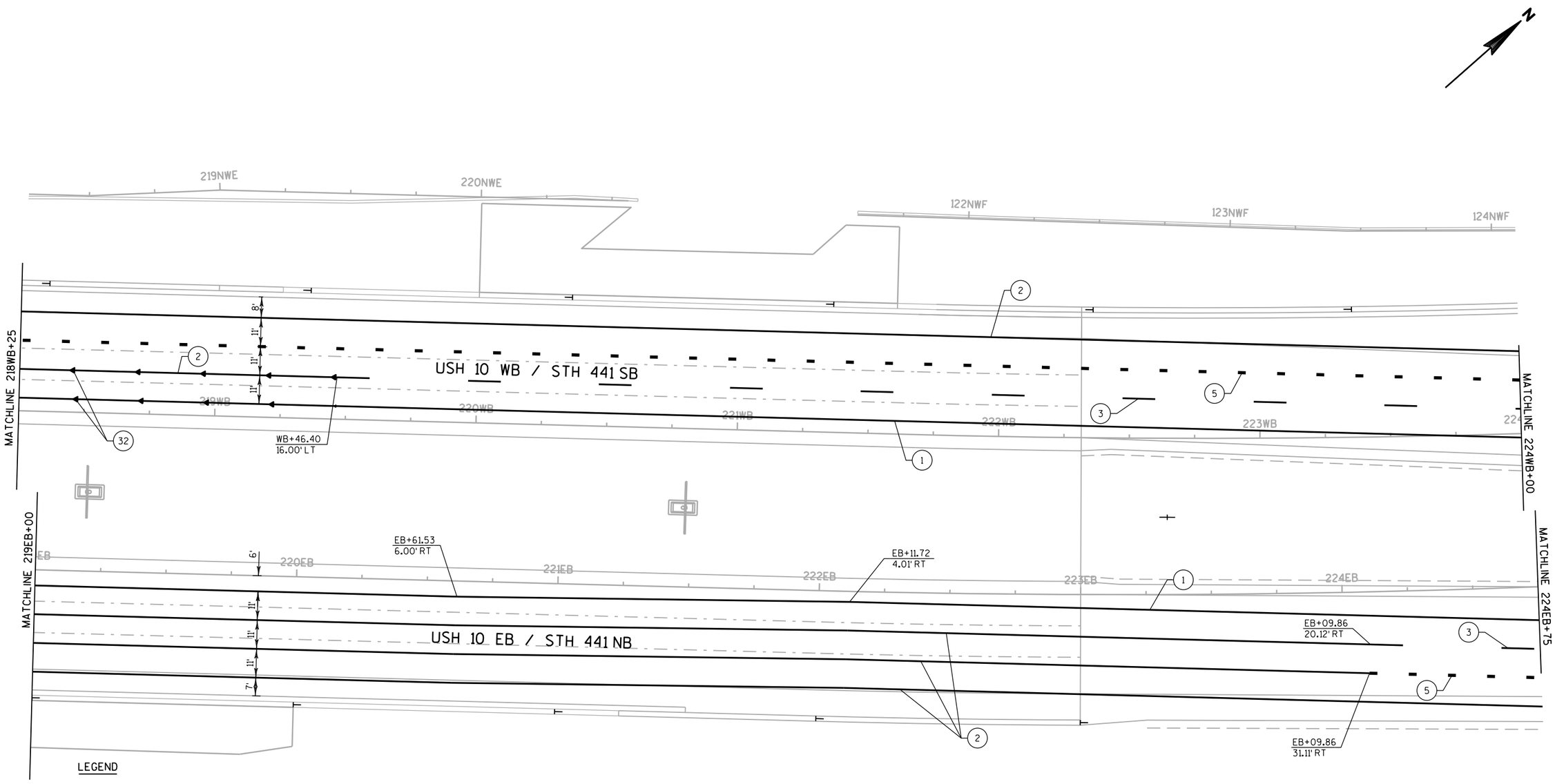


LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
32. RAISED PAVEMENT MARKERS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 259	E

2



LEGEND

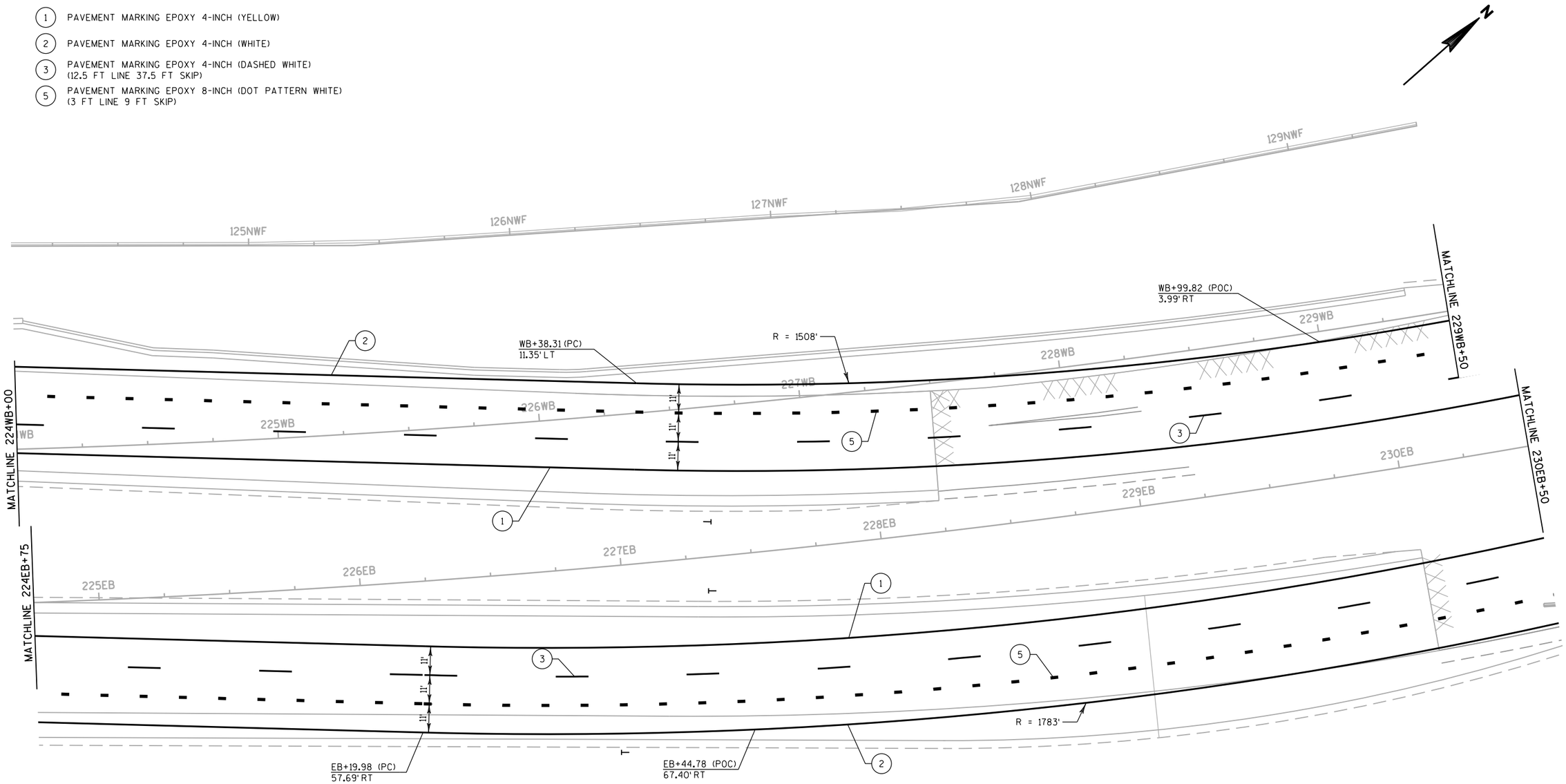
1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
32. RAISED PAVEMENT MARKERS

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 260	E

2

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\024509_pm.dgn PLOT DATE : 1/26/2015 9:08:25 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

N

130NWF
131NWF
132NWF
133NWF
134NWF
135N'

MATCHLINE 229WB+50
230WB
231WB
232WB
233WB
234WB
235
MATCHLINE 235WB+00

MATCHLINE 230EB+50
231EB
232EB
233EB
234EB
235EB
236
MATCHLINE 236EB+00

R = 1508'
R = 989'
R =1519'
R = 1783'

WB+61.38 (PCC)
9.57' LT

WB+62.85 (PCC)
47.17' LT

WB+67.17 (POC)
29.44' LT

WB+62.56
1.37' RT

EB+65
MATCH EXISTING

EB+72
MATCH EXISTING

EB+73
MATCH EXISTING

EB+70.05
28.63' RT

EB+19.45 (PT)
64.43' RT

EB+05.65
55.11' RT

11'
12'

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 262	E

2

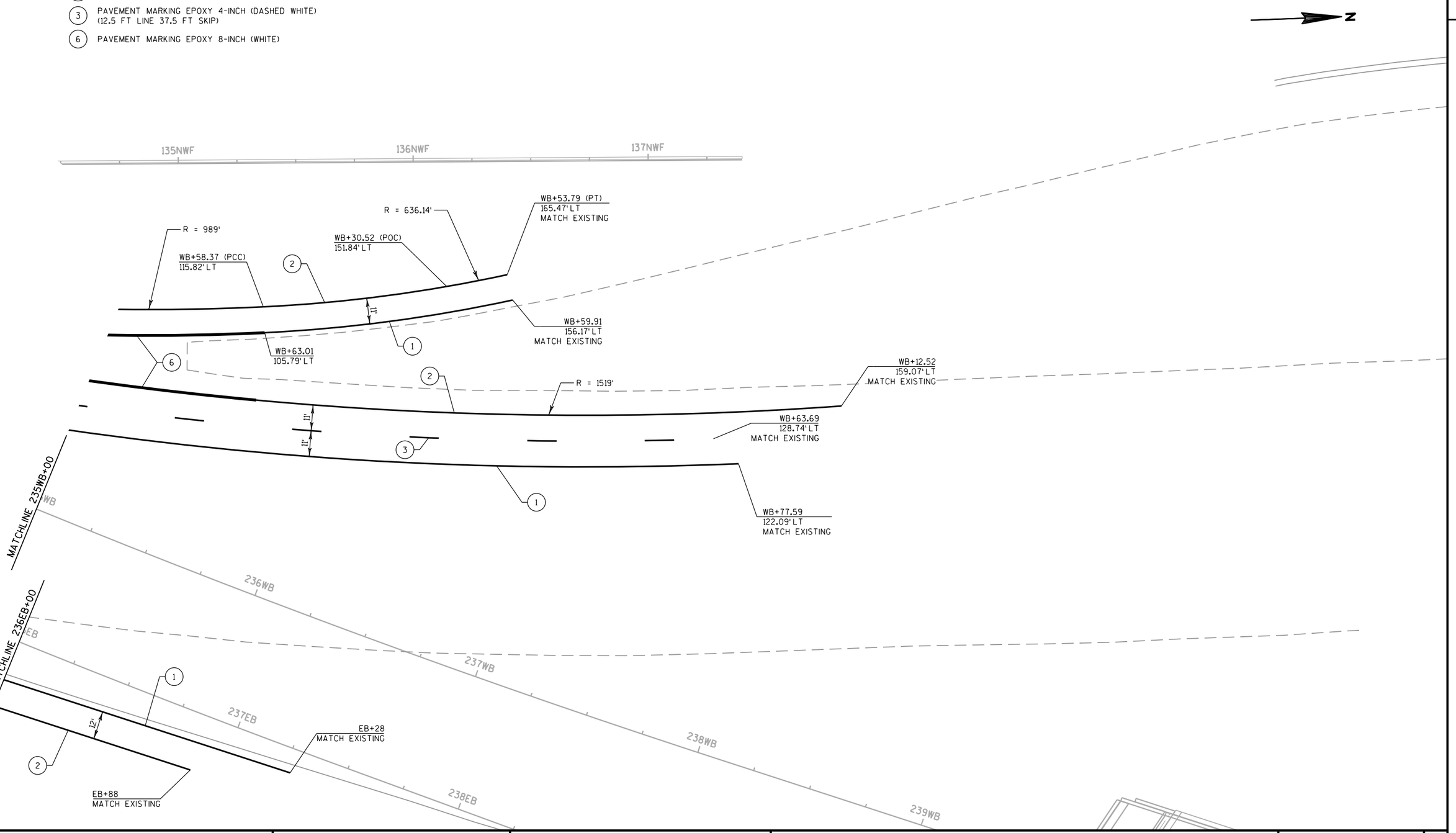
LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

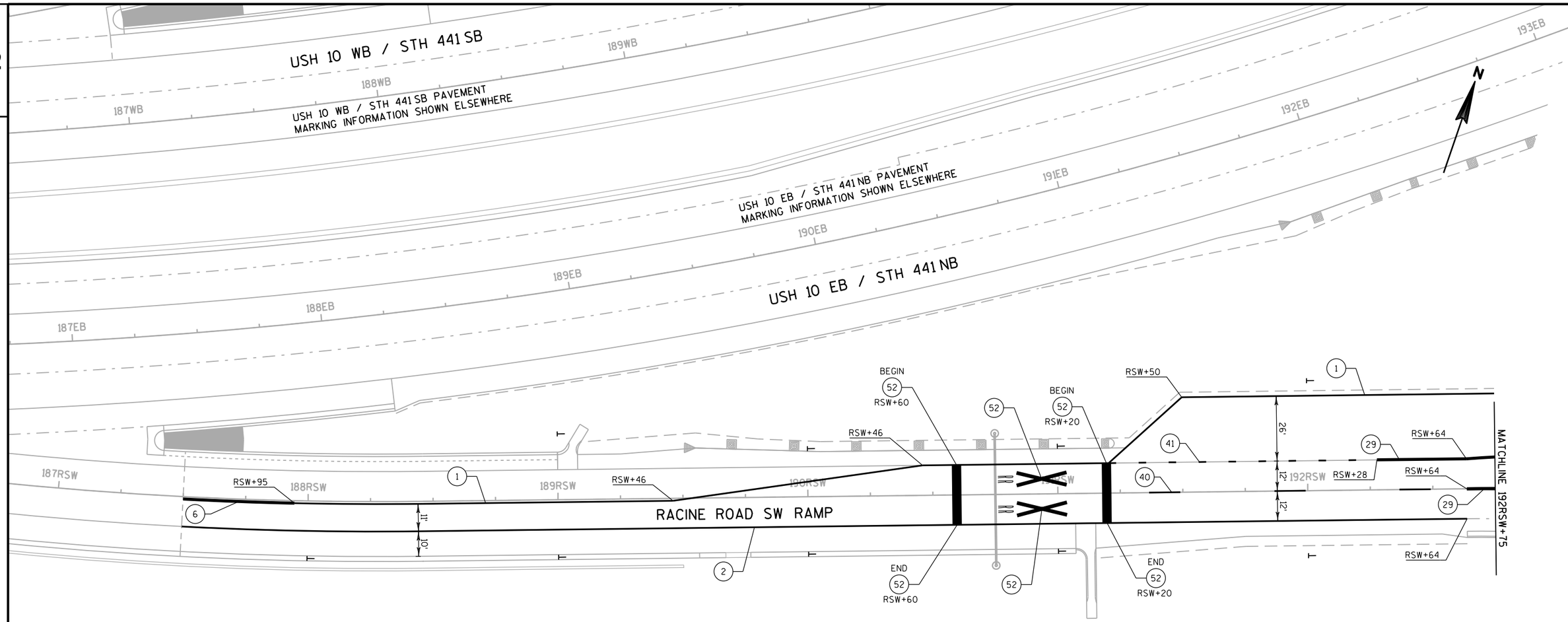
(3) PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)

(6) PAVEMENT MARKING EPOXY 8-INCH (WHITE)



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 263	E

2



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(6) PAVEMENT MARKING EPOXY 8-INCH (WHITE)

(29) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

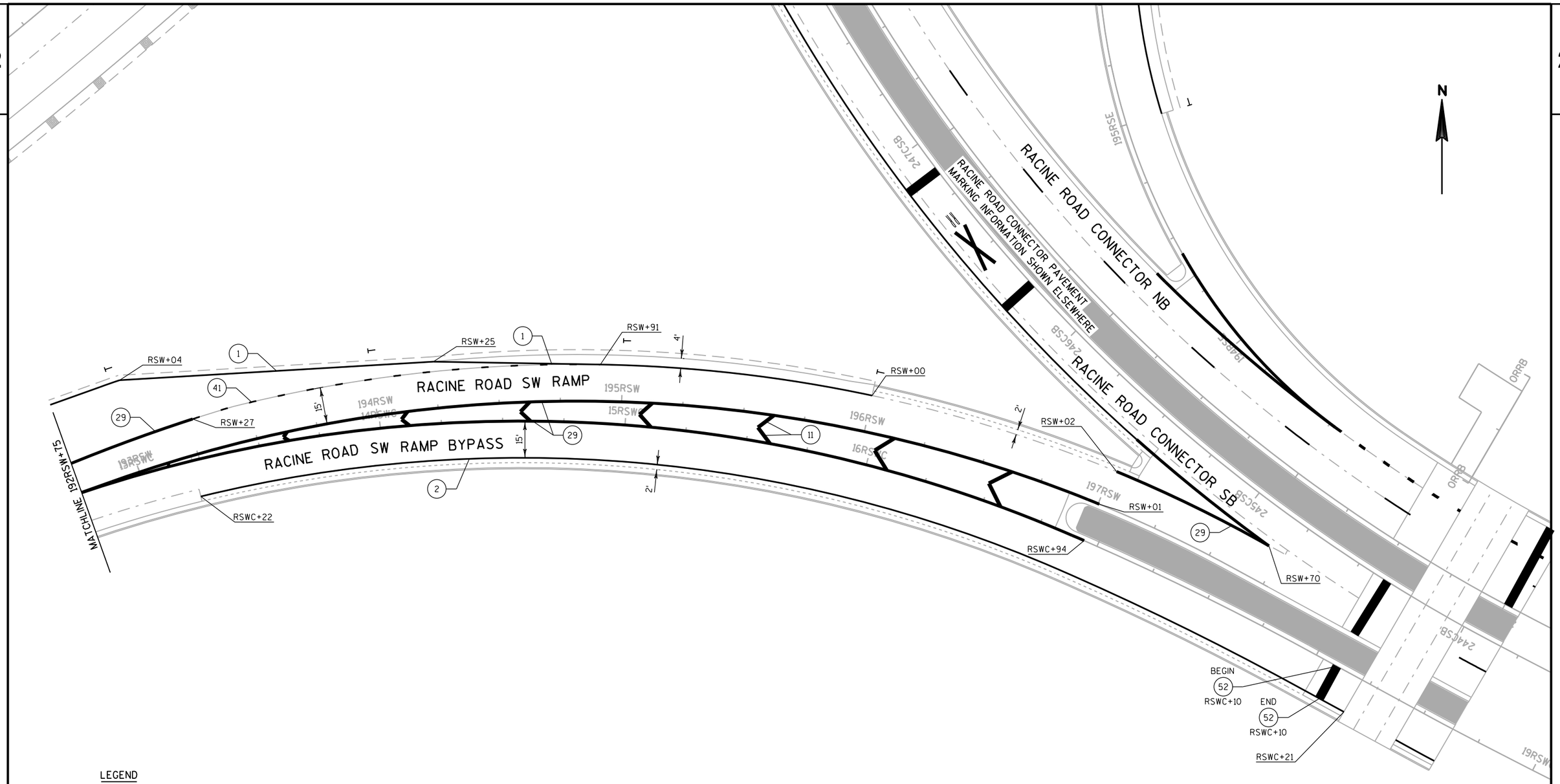
(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP)

(41) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP)

(52) PAVEMENT MARKING RAILROAD CROSSINGS EPOXY

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 264	E

2



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

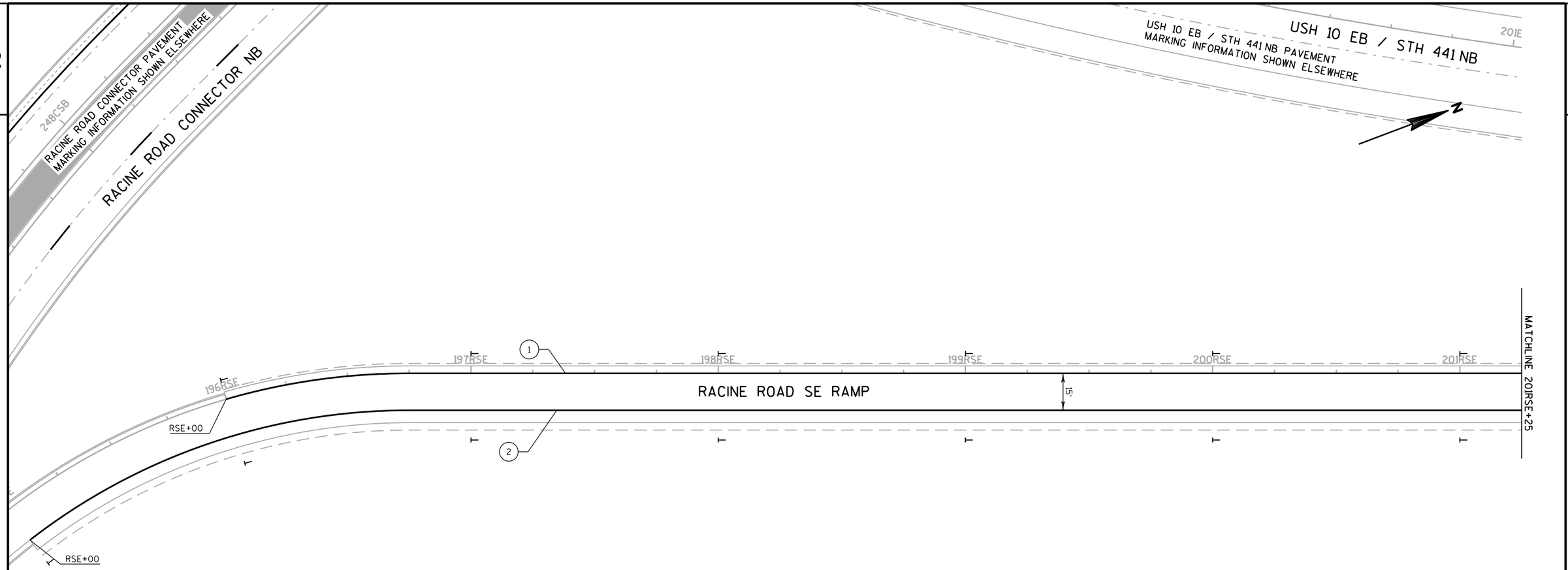
(11) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)

(29) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

(41) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP)

(52) PAVEMENT MARKING RAILROAD CROSSINGS EPOXY

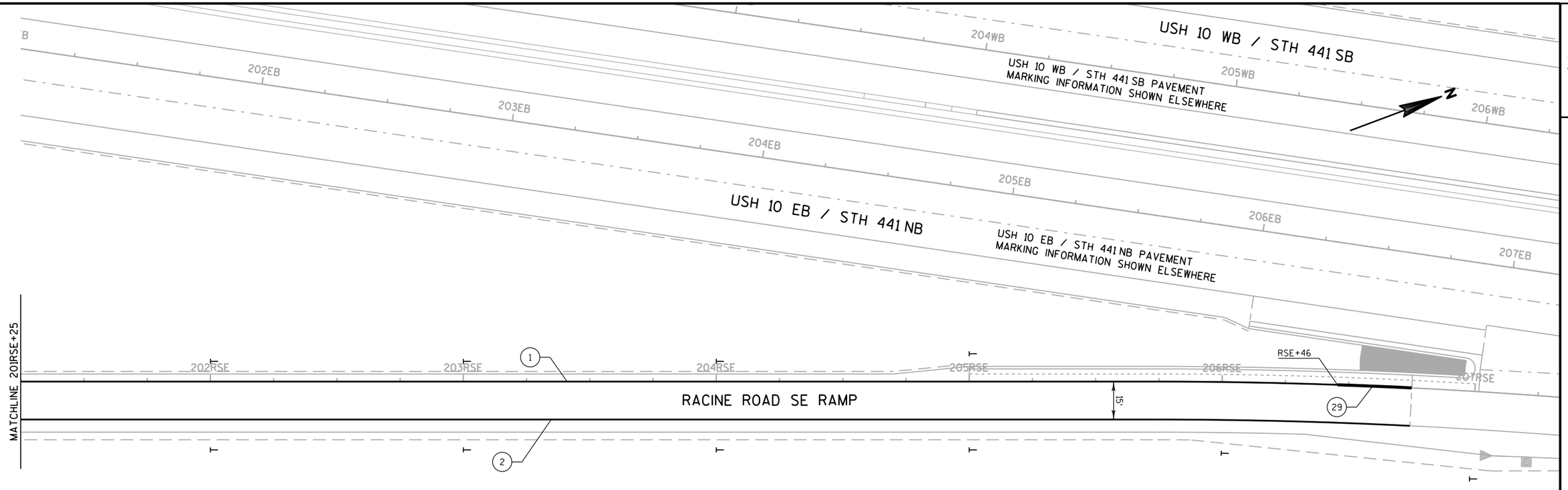
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 265	E



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)



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)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 267	E

2

2

LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

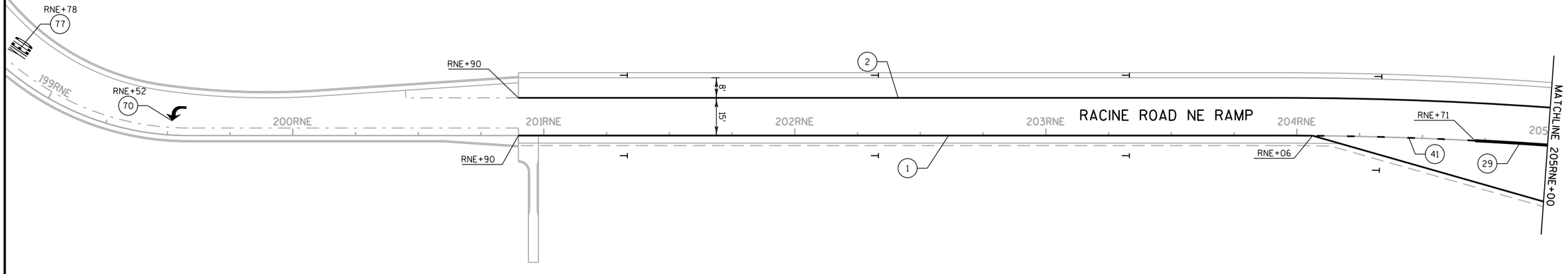
(29) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

(41) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP)

(70) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2

(77) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS

N



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 268	E

FILE NAME : I:\56537\1517-75-75\t1\cds\024518_pm.dgn PLOT DATE : 1/26/2015 9:08:41 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

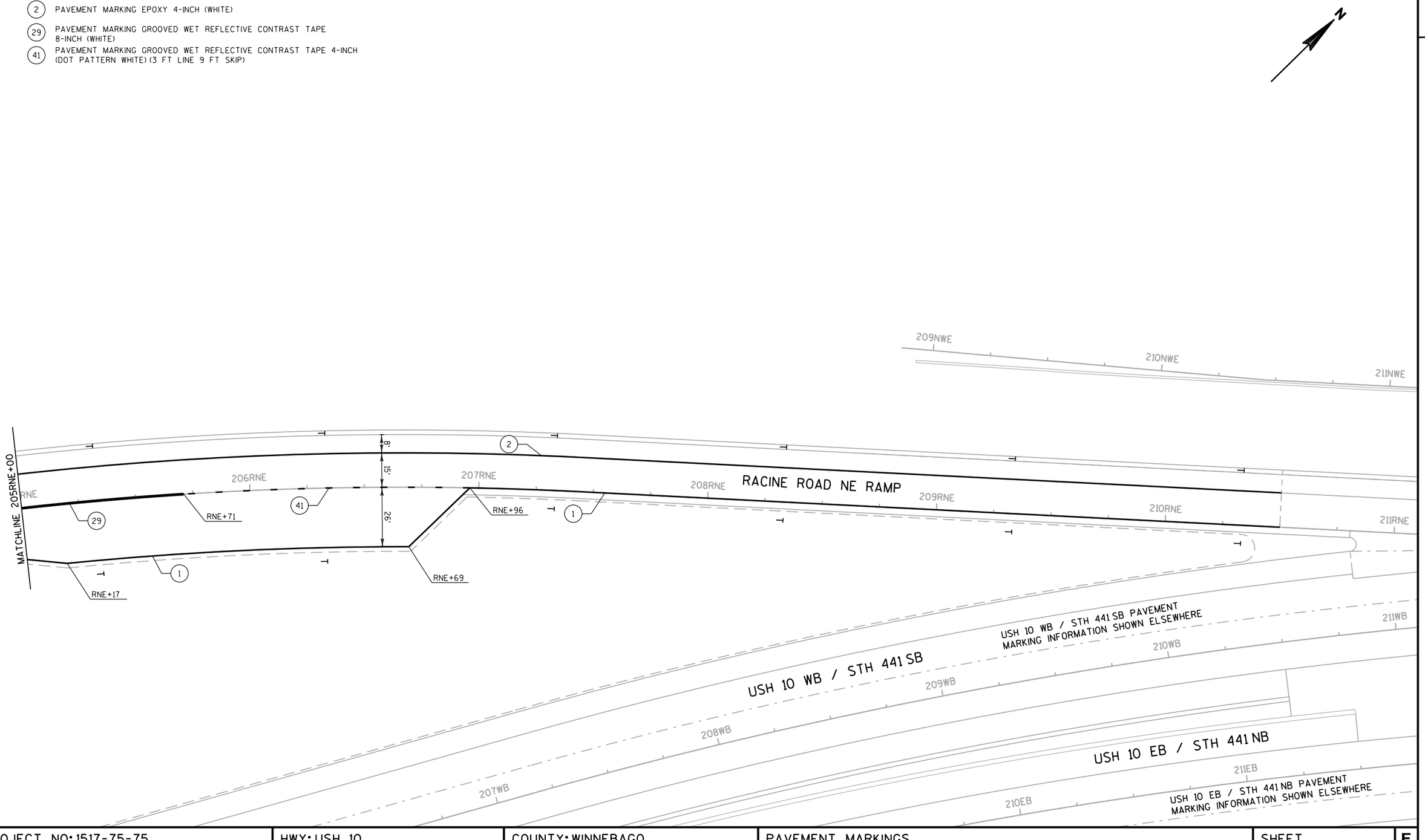
LEGEND

(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)

(41) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP)



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 269	E

2

2

LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)

(29) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

(39) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (3 FT LINE 9 FT SKIP)

(40) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

(52) PAVEMENT MARKING RAILROAD CROSSINGS EPOXY

RACINE ROAD SW RAMP BYPASS

RACINE ROAD SW RAMP BYPASS PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

RACINE ROAD SW RAMP

RACINE ROAD SW RAMP PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

19RSW

19SRSW

19SRSC

19RSC

BEGIN (52) CSB+26

END (52) CSB+26

BEGIN (52) CSB+86

BEGIN (52) CSB+86

RSW+02

CSB+52

246CSB

247CSB

245CSB

248CSB

RACINE ROAD CONNECTOR SB

249CSB

250CSB

19SCB

19SEB

15'

12'

12'

BEGIN (52) CSB+36

END (52) CSB+36

244CSB

CNB+99

RSE+43

194RSE

CNB+99

RACINE ROAD SE RAMP

195RSE

RACINE ROAD CONNECTOR NB

BEGIN (52) CNB+99

END (52) CNB+99

ORRB

ORRB

196RSE

RACINE ROAD SE RAMP PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

197RSE

N

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 270 E

FILE NAME : I:\56537\1517-75-75\t1\cds\024521_pm.dgn PLOT DATE : 1/26/2015 9:08:45 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

(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)

(65) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R

(69) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1

(70) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2

(71) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3

(77) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS

(83) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC, 8-INCH (WHITE SKIP)(6 FT LINE 3FT SKIP)

(93) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC YIELD LINE 18-INCH (WHITE SKIP) (2 FT LINE 2 FT SKIP)

RACINE ROAD NW RAMP

RACINE ROAD NW RAMP PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

RACINE ROAD CONNECTOR SB

RACINE ROAD CONNECTOR NB

USH 10 EB / STH 441 NB

USH 10 EB / STH 441 NB PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

USH 10 WB / STH 441 SB

USH 10 WB / STH 441 SB PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

RACINE ROAD NW RAMP

RACINE ROAD NW RAMP PAVEMENT MARKING INFORMATION SHOWN ELSEWHERE

YIELD

RNW+41

RNW+42

RRN+67

RRN+48

CSB+11

RRN+96

RRN+59

CNB+43

CNB+44

CNB+12

RRN+84

RRN+03

RRN+11

RRN+65

RRN+68

RNW+10

RNE+78

15'

12'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PAVEMENT MARKINGS	SHEET 271	E

GENERAL NOTES FOR TRAFFIC CONTROL

1) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGN DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

2) CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. CONFLICTING SIGNS WILL BE COVERED USING THE APPROPRIATE STANDARD BID ITEM, TRAFFIC CONTROL COVERING SIGNS TYPE I OR TRAFFIC CONTROL COVERING SIGNS TYPE II.

3) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

4) FOR NIGHTTIME OPERATION, ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

5) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE A (LOW INTENSITY FLASHING) LIGHTS.

6) WORK AREAS SHOWN MAY NOT ILLUSTRATE ALL REMOVALS. SEE REMOVAL SHEETS FOR ADDITIONAL INFORMATION.

7) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THAT SEGMENT OR AS DIRECTED BY THE ENGINEER.

8) PAVEMENT MARKING THAT IS SHOWN SHADED ON TRAFFIC CONTROL PLANS ARE THERE FOR REFERENCE ONLY. PAVEMENT MARKING SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

9) ALL PAVEMENT MARKING STATIONING IN TRAFFIC CONTROL PLANS HAVE THE PREFIX OF THE ALIGNMENT THAT IT IS MEASURED OFF OF.

10) FOR ALL CONCRETE BARRIER TEMPORARY PRECAST, THERE WILL BE DELINEATORS ATTACHED PER STANDARD DETAIL DRAWING CONCRETE BARRIER TEMPORARY PRECAST 12'-6". PLACE REFLECTORS OF THE APPROPRIATE COLOR ON BOTH SIDES OF THE DELINATOR. DELINEATORS ARE INCIDENTAL TO THE CONCRETE BARRIER TEMPORARY PRECAST BID ITEM.

11) REMOVING PAVEMENT MARKING ON EXISTING AND NEW PAVEMENT USES THE STANDARD BID ITEM.

GENERAL NOTES FOR FIXED MESSAGE SIGNS FOUND ON TRAFFIC CONTROL SHEETS

1) CONTRACTOR SHALL LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY TYPE I SIGN AND A MINIMUM OF 200' FROM ANY TYPE II SIGN.

2) ALL FIXED MESSAGE SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON STANDARD REFLECTIVE SHEETING-REFERENCE: "WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION", LATEST EDITION.

3) SEE FIXED MESSAGE SIGN CONSTRUCTION DETAIL SHEETS FOR MORE INFORMATION.

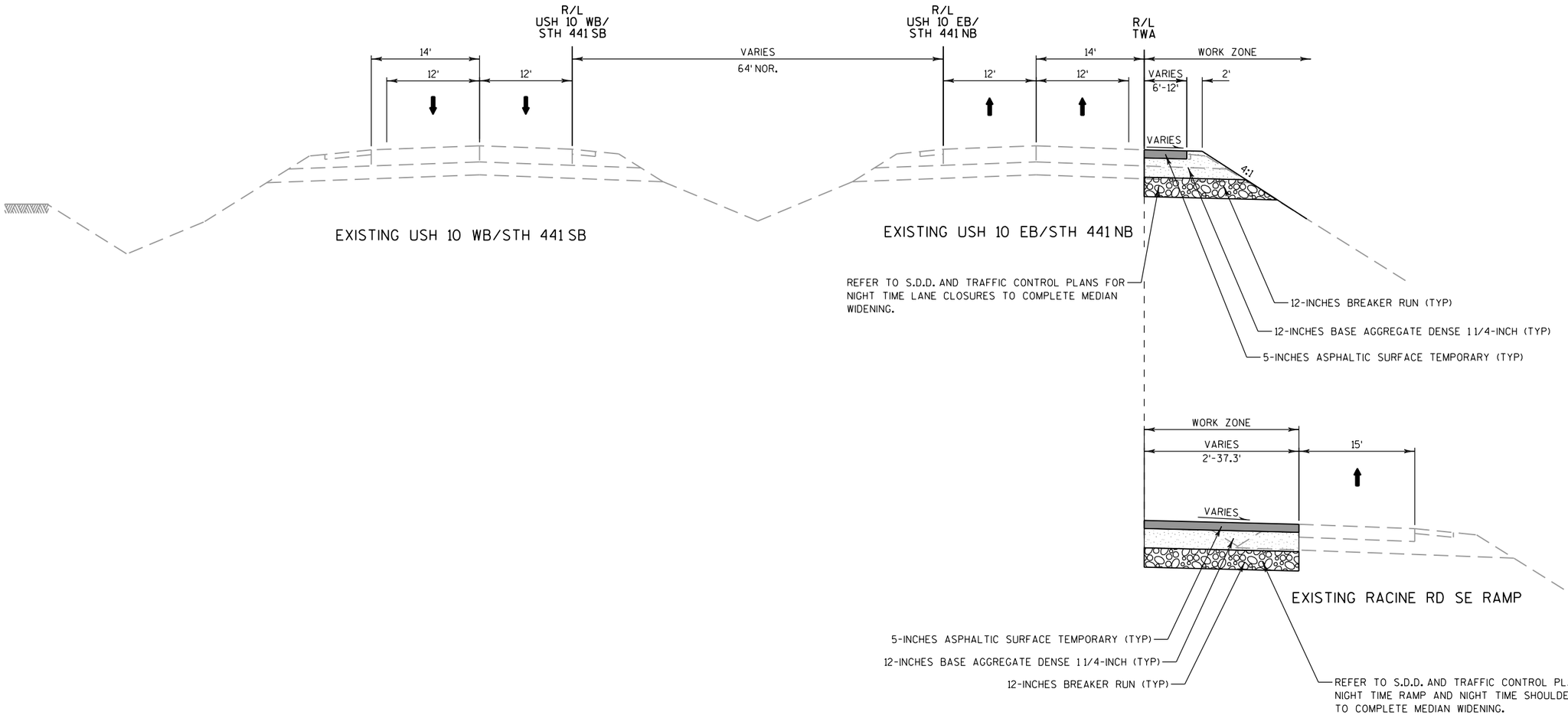
TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- TRAFFIC CONTROL ARROW BOARD
- TRAFFIC CONTROL SIGN(S) ON PERMANENT SUPPORT
- TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- PCMS — TRAFFIC CONTROL SIGNS PORTABLE CHANGABLE MESSAGE
- TRAFFIC FLOW ARROW
- WORK ZONE THIS STAGE
- 5-INCH HMA PAVEMENT TYPE E-10 OVER 12-INCH BASE AGGREGATE DENSE 1 1/4-INCH OVER 12-INCH BREAKER RUN
- TEMPORARY RAISED PAVEMENT MARKERS
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- CONCRETE BARRIER TEMPORARY PRECAST FROM PREVIOUS STAGE
- CONCRETE BARRIER TEMPORARY PRECAST
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY FROM PREVIOUS STAGE

TEMPORARY PAVEMENT MARKING LEGEND

- (1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- (2) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (3) PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (4) PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- (5) PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- (6) PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- (23) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (24) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (25) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (26) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
- (27) TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- (28) TEMPORARY PAVEMENT MARKING 8-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
- (32) TEMPORARY RAISED PAVEMENT MARKERS
- (E) EXISTING PAVEMENT MARKINGS

2



STA 169ML+03.15 TO STA 178ML+20.48

NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

3) TEMPORARY WIDENING A (TWA) BUILT IN THIS STAGE, REFER TO CORRESPONDING CROSS SECTIONS.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 1A - STH 441

STA 159ML+73.11 TO STA 178ML+20.48
(STA 3TWA+85.13 TO STA 22TWA+36.77)

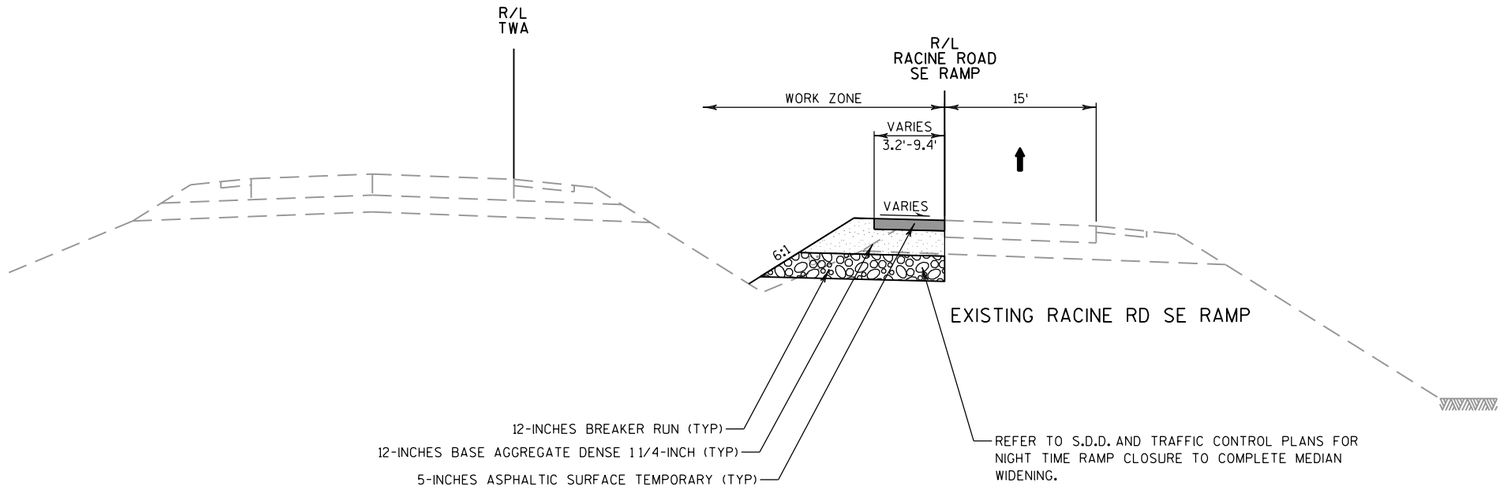
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 273	E

2



NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

3) TEMPORARY WIDENING A (TWA) BUILT IN THIS STAGE, REFER TO CORRESPONDING CROSS SECTIONS.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 1A - RACINE RD SE RAMP

STA 110ERB+84.74 TO STA 111ERB+58.74

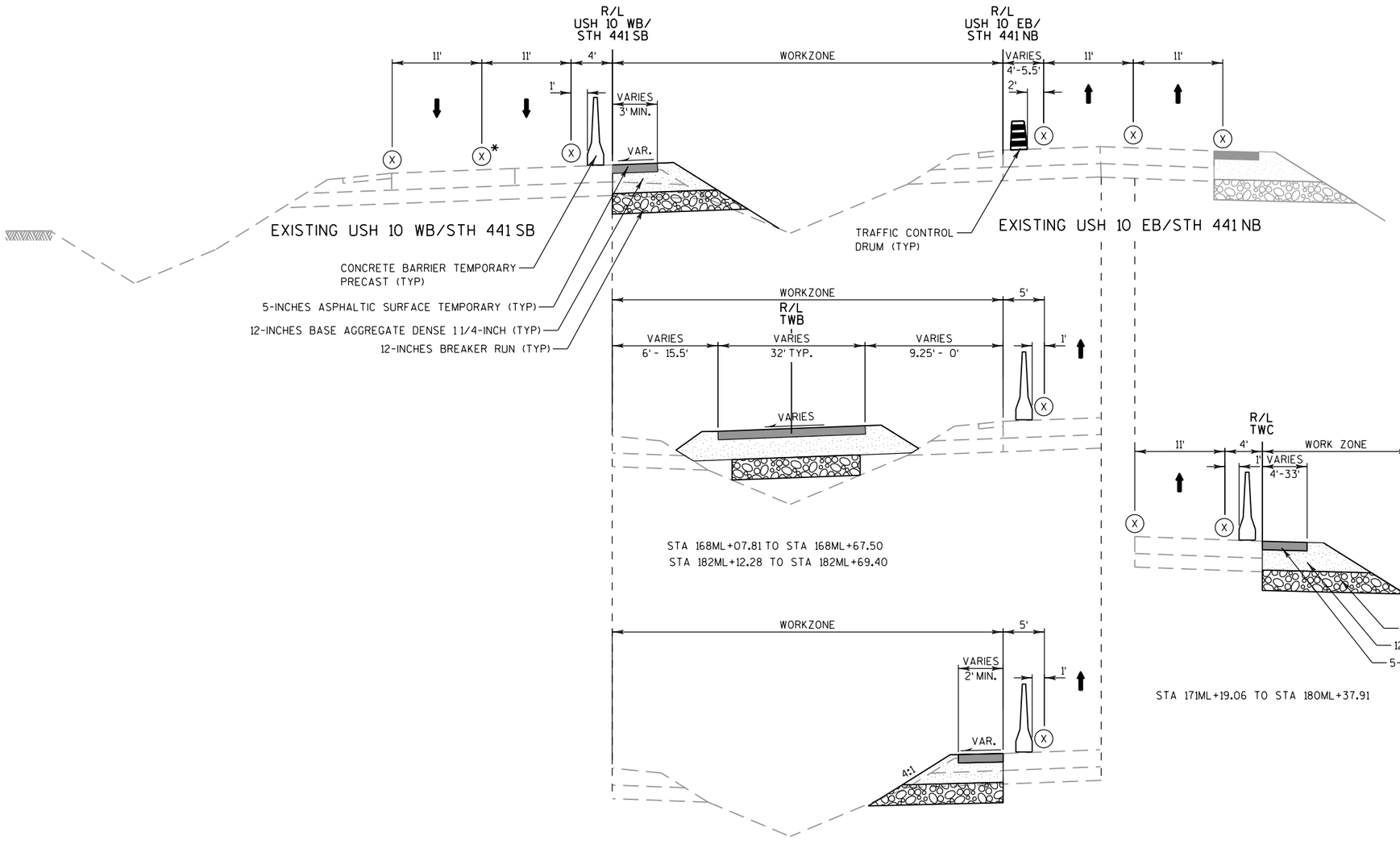
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 274	E

2



NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

3) TEMPORARY WIDENING C (TWC) AND TEMPORARY WIDENING B (TWB) BUILT IN THIS STAGE, REFER TO CORRESPONDING CROSS SECTIONS.

* REFER TO TRAFFIC CONTROL PLAN SHEETS, LINE STYLE CHANGES THROUGHOUT PROJECT.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 1B - STH 441

STA 164ML+38.97 TO STA 204ML+69.25

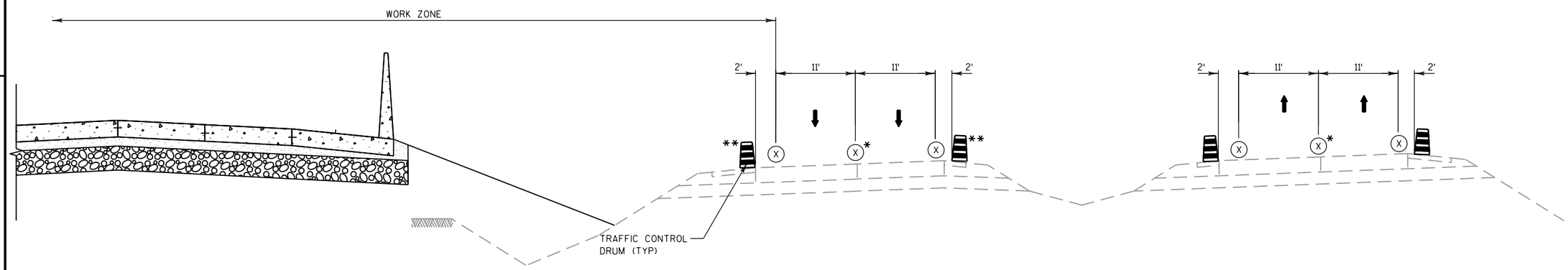
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

⬆ TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 275	E

2



PROPOSED USH 10 WB/STH 441 SB

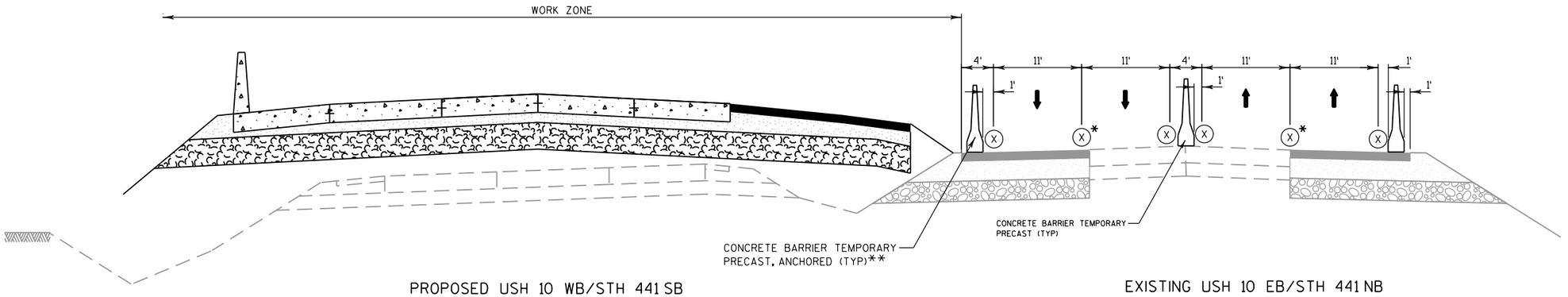
EXISTING USH 10 WB/STH 441 SB

EXISTING USH 10 EB/STH 441 NB

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 2A - STH 441

STA 188WB+25.00 TO STA 194WB+89.65



PROPOSED USH 10 WB/STH 441 SB

EXISTING USH 10 EB/STH 441 NB

NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

* REFER TO TRAFFIC CONTROL PLAN SHEETS, LINE STYLE CHANGES THROUGHOUT PROJECT.

** REFER TO TRAFFIC CONTROL PLAN SHEETS, CHANGES BETWEEN TRAFFIC CONTROL DRUMS AND CONCRETE BARRIER TEMPORARY PRECAST.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 2A - STH 441

STA 209WB+13.15 TO STA 214WB+03.34

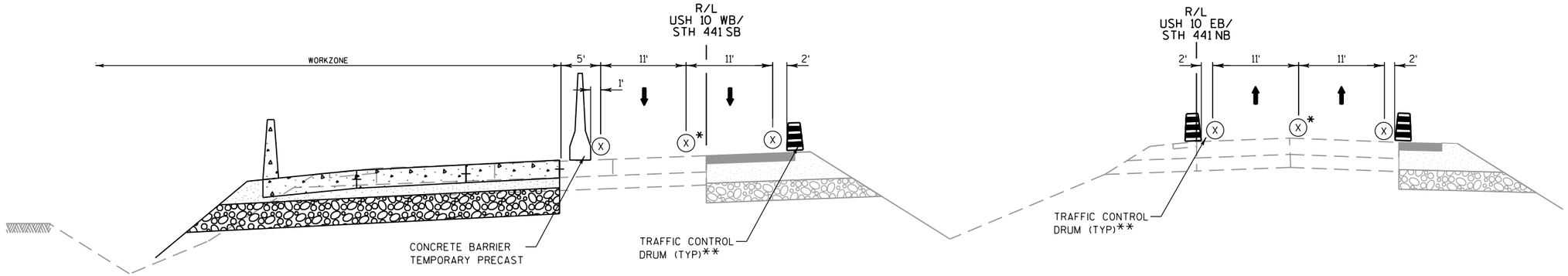
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 276 E

2



PROPOSED USH 10 WB/STH 441 SB

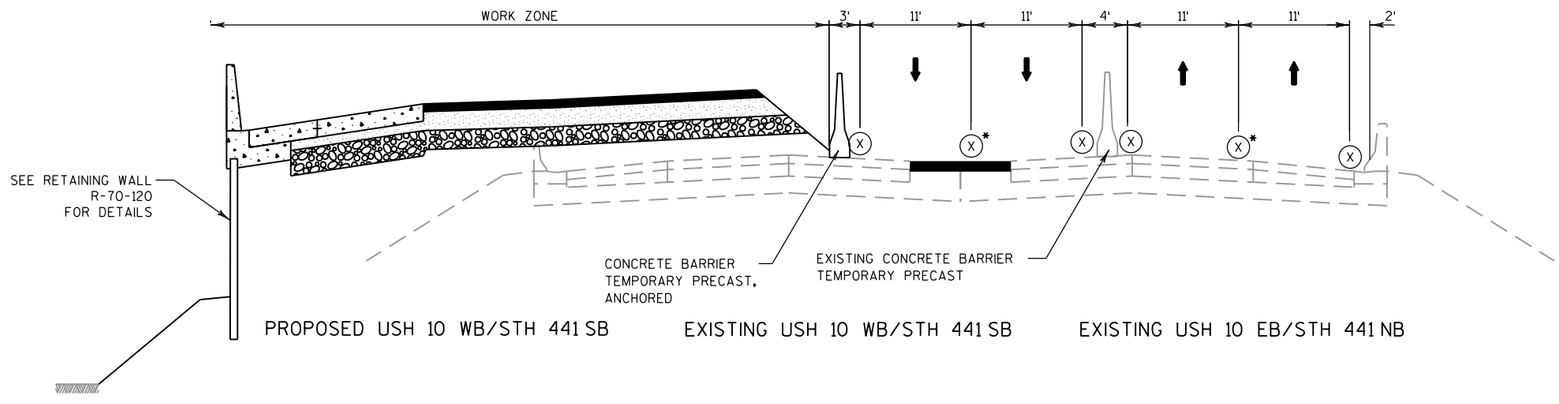
EXISTING USH 10 WB/STH 441 SB

EXISTING USH 10 EB/STH 441 NB

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 2A - STH 441

STA 218WB+24.90 TO STA 204ML+69.52



PROPOSED USH 10 WB/STH 441 SB

EXISTING USH 10 WB/STH 441 SB

EXISTING USH 10 EB/STH 441 NB

NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

* REFER TO TRAFFIC CONTROL PLAN SHEETS, LINE STYLE CHANGES THROUGHOUT PROJECT.

** REFER TO TRAFFIC CONTROL PLAN SHEETS, CHANGES BETWEEN TRAFFIC CONTROL DRUMS AND CONCRETE BARRIER TEMPORARY PRECAST.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 2C - STH 441

STA 180WB+21.94 TO STA 183WB+97.70

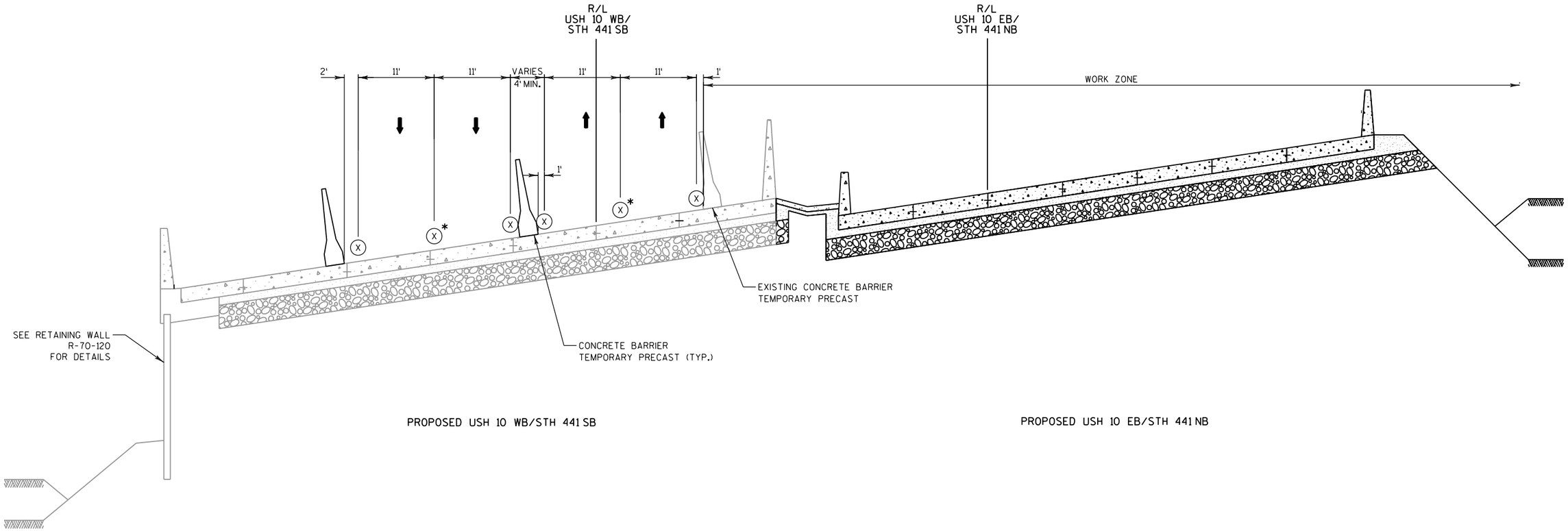
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

↑ TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 277	E

2



PROPOSED USH 10 WB/STH 441 SB

PROPOSED USH 10 EB/STH 441 NB

NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

* REFER TO TRAFFIC CONTROL PLAN SHEETS, LINE STYLE CHANGES THROUGHOUT PROJECT.

** REFER TO TRAFFIC CONTROL PLAN SHEETS, CHANGES BETWEEN TRAFFIC CONTROL DRUMS AND CONCRETE BARRIER TEMPORARY PRECAST.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 3A - STH 441

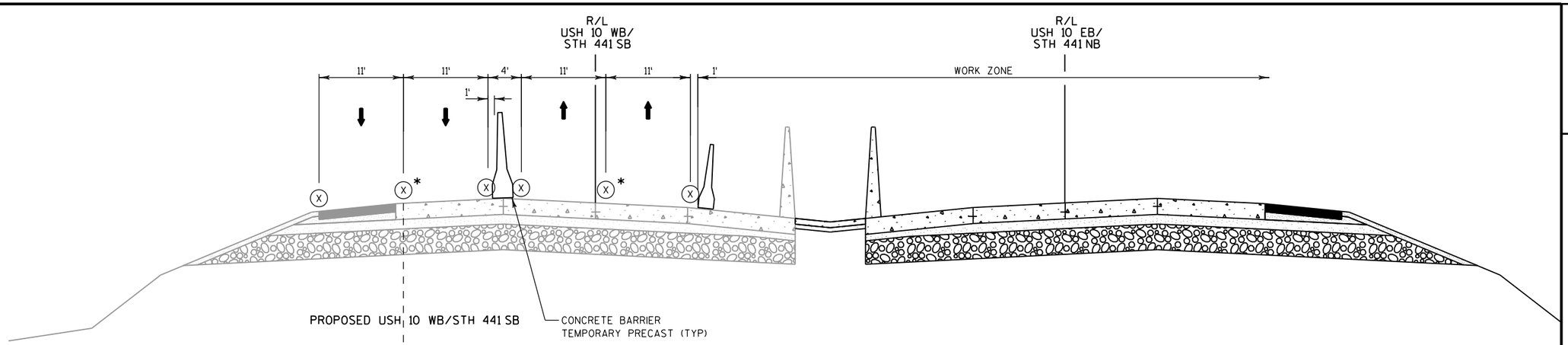
STA 181WB+05.19 TO STA 183WB+97.74

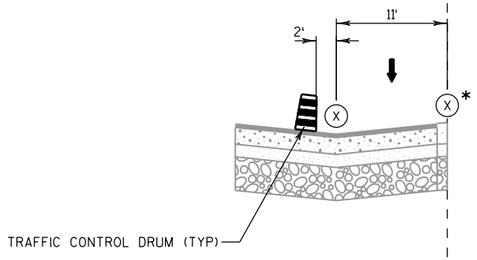
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

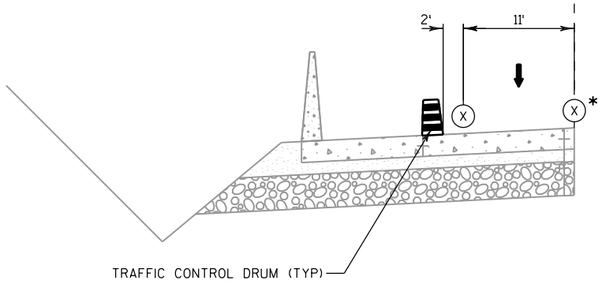
TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 278	E





STA 210WB+83.72 TO STA 212WB+33.63



STA 212WB+33.63 TO STA 214WB+03.34

NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

* REFER TO TRAFFIC CONTROL PLAN SHEETS, LINE STYLE CHANGES THROUGHOUT PROJECT.

** REFER TO TRAFFIC CONTROL PLAN SHEETS, CHANGES BETWEEN TRAFFIC CONTROL DRUMS AND CONCRETE BARRIER TEMPORARY PRECAST.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 3A - STH 441

STA 209WB+13.15 TO STA 214WB+03.34

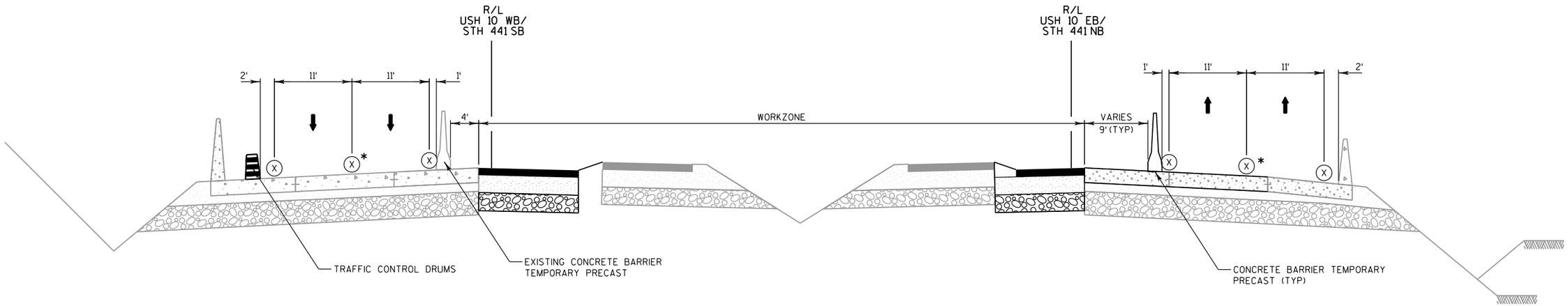
LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 279	E

2



PROPOSED USH 10 WB/STH 441 SB

PROPOSED USH 10 EB/STH 441 NB

NOTES

1) FOR SLOPES THAT ARE LABELED AS "VARIES", REFER TO APPROPRIATE CROSS SECTIONS TO ENSURE THE CORRECT MATCH SLOPES ARE BEING USED.

2) TYPICAL SECTIONS ARE USING A 2.5:1 VERTICAL EXAGGERATION

* REFER TO TRAFFIC CONTROL PLAN SHEETS, LINE STYLE CHANGES THROUGHOUT PROJECT.

TYPICAL SECTION - TRAFFIC CONTROL

STAGE 3B - STH 441

STA 214WB+25.00 TO STA 227WB+50.00

LEGEND

(X) REFER TO PLAN SHEETS AND TEMPORARY PAVEMENT MARKING LEGEND FOR TYPE OF MARKING

TRAFFIC FLOW

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 280	E

2

LEGEND

XXX — FIXED MESSAGE SIGN NUMBER (REFER TO TRAFFIC CONTROL - DETAILS FOR SIGN DETAILS)

SIGN COVERING

SIGN COVERING LEFT IN PLACE FROM PROJECT ID 1517-75-71

W. AMERICAN DRIVE

USH 10

Hwy P 1¼
Hwy AP 2¼
Hwy 47 3¼

105
CLOSED

JACOBSEN ROAD

COLD SPRING ROAD

USH 41

JACOBSEN ROAD

NORTH LAKE STREET

EXIT 250A
P
Racine St
EXIT ¾ MILE

MOVE TO TEMPORARY SIGN SUPPORTS FOR STAGE(S) 1 THROUGH 2B

COVER SIGN FOR STAGE(S) 3A THROUGH 3B

REMOVE SIGN AT END OF PROJECT

COVER SIGN FOR STAGE(S) 2A THROUGH 3B

UNCOVER SIGN AT END OF PROJECT

TO NORTH 441

MIDWAY ROAD

COVER SIGN FOR STAGE(S) 2A THROUGH 3B

UNCOVER SIGN AT END OF PROJECT

TO NORTH 441

AIRPORT ROAD

TO SOUTH 441

9TH STREET

TAYCO STREET

RACINE ROAD

TO WEST 10 | TO SOUTH 441 | COUNTY P

TO NORTH 441 | TO SOUTH 441 | TO 41 | COUNTY P

USE LEFT LANE | USE RIGHT LANE | USE RIGHT LANE | USE RIGHT LANE

APPLETON ROAD

COVER SIGN FOR STAGE(S) 2A THROUGH 3B

UNCOVER SIGN AT END OF PROJECT

2

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - EXISTING SIGNING	SHEET 281	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\025301_tc.dgn PLOT DATE : 4/27/2015 5:04:34 PM PLOT BY : nspitzer PLOT NAME : $FILE$ PLOT SCALE : 1000:1

WISDOT/CADDS SHEET 42

2

NOTES:

1) TRAFFIC CONTROL SIGNS TO BE USED FOR STAGES 2 THRU PROJECT COMPLETION EXCEPT AS NOTED, OR AS DIRECTED BY THE ENGINEER.

2) ADVANCED SIGNING WILL ALREADY BE IN PLACE ON THE WEST SIDE OF THE PROJECT UNDER THE 1517-07-76 PROJECT (LITTLE LAKE BUTTE DES MORTS BRIDGE CONSTRUCTION).

*SEE TRAFFIC CONTROL DETAILS FOR SIGN DIMENSIONS.

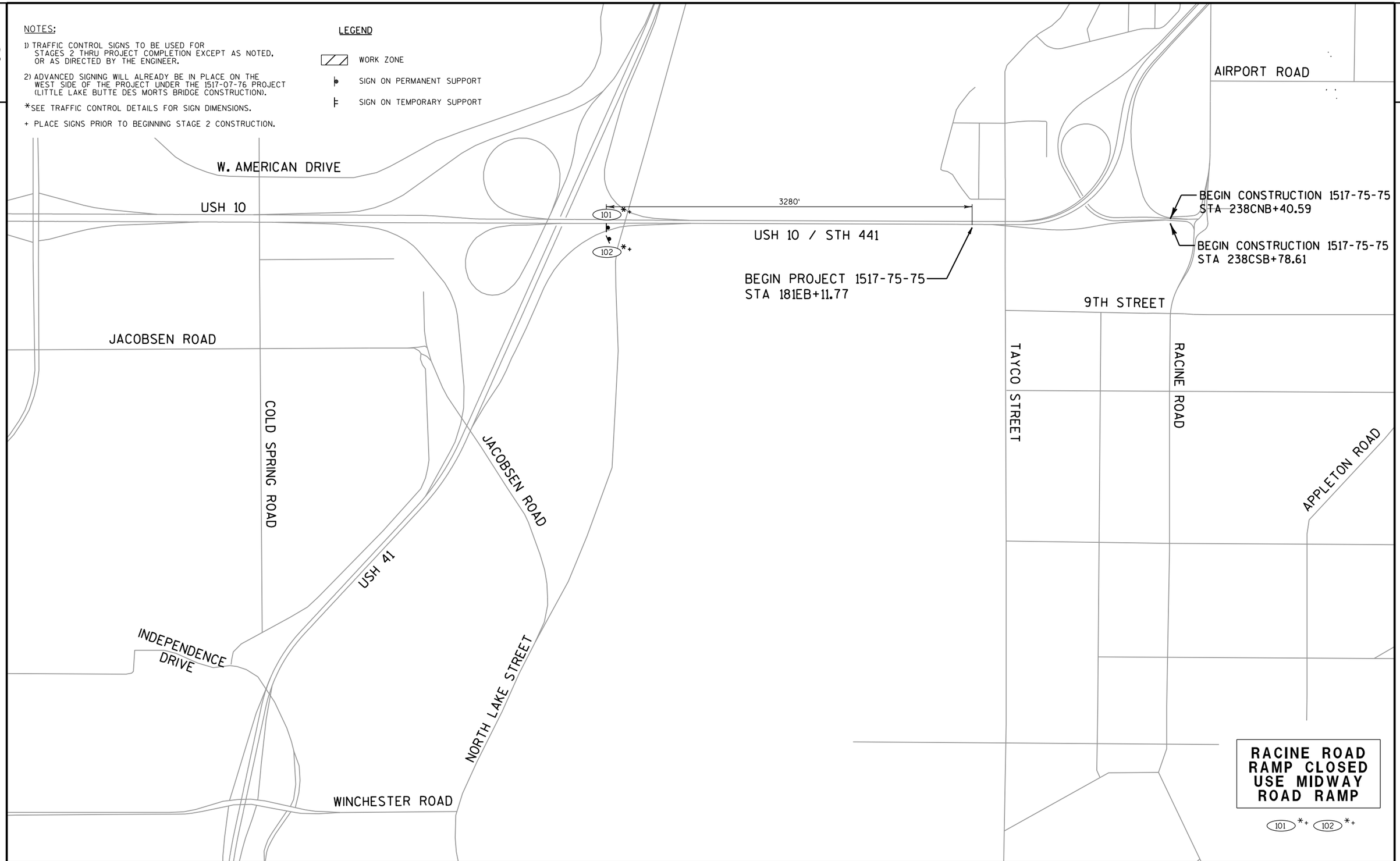
+ PLACE SIGNS PRIOR TO BEGINNING STAGE 2 CONSTRUCTION.

LEGEND

WORK ZONE

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - ADVANCED SIGNING	SHEET 282	E

2

NOTES:

1) TRAFFIC CONTROL SIGNS TO BE USED FOR STAGES 1 THRU 4 EXCEPT AS NOTED, OR AS DIRECTED BY THE ENGINEER.

2) SIGNS SHOWN AS EXISTING WERE PLACED UNDER A PREVIOUS PROJECT, 1517-75-78 OR 1517-75-71.

*SEE TRAFFIC CONTROL DETAILS FOR SIGN DIMENSIONS.

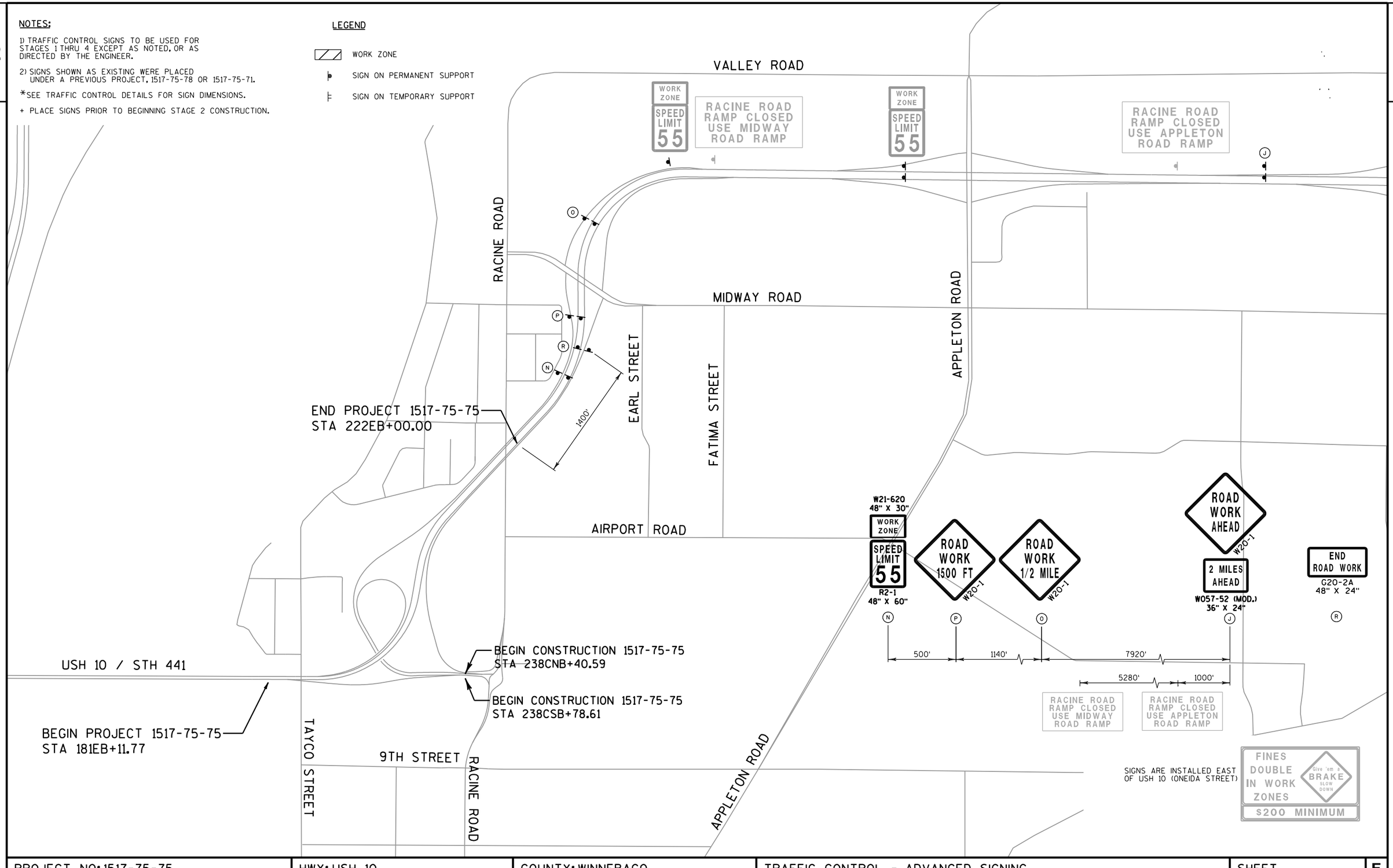
+ PLACE SIGNS PRIOR TO BEGINNING STAGE 2 CONSTRUCTION.

LEGEND

WORK ZONE

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - ADVANCED SIGNING	SHEET 283	E



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 POSTS 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 MEET THE BREAKAWAY REQUIREMENTS OF SECTION 643.2.9.1 OF THE STANDARD SPECIFICATIONS AND SIGN PLATE A4-11.

4) SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".

5) SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE REFLECTIVE BACKGROUND PER STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS UNLESS OTHERWISE NOTED.

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 SECTION 637.2.1.2 AND 643.2.9.3.

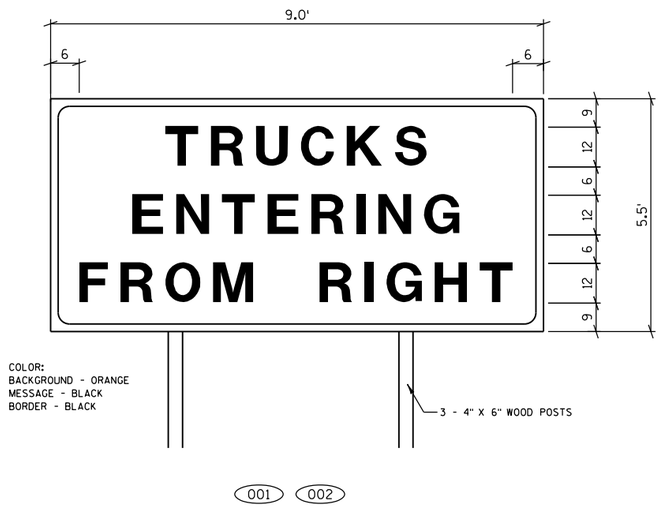
9) DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

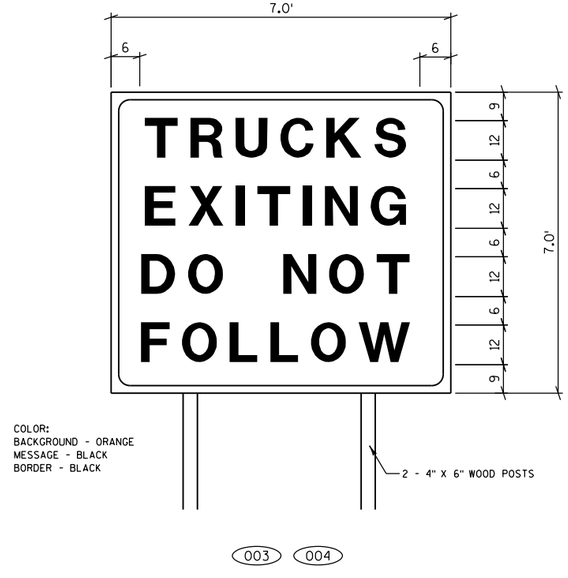
(XXX) = FIXED MESSAGE SIGN NUMBER

10) ALL SIGNS SHALL HAVE A BORDER AND RADIUS (OF BORDERS) AS FOLLOWS:

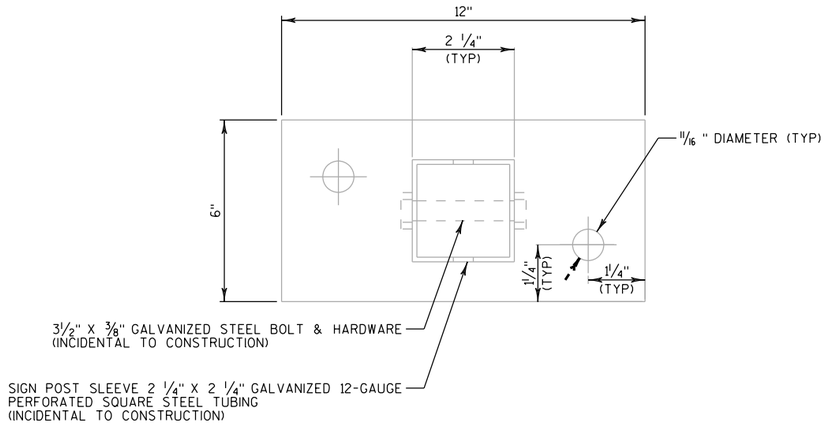
SIGN AREA	WIDTH OF BORDER
GREATER THAN 150 SQ FEET	3"
60-150 SQ FEET	2"
LESS THAN 60 SQ FEET	1"

SMALLEST OUTSIDE DIMENSION	CORNER RADIUS
GREATER THAN 8 FEET	12"
<8 AND GREATER THAN OR EQUAL TO 6 FEET	9"
<6 AND GREATER THAN OR EQUAL TO 4 FEET	6"
LESS THAN 4 FEET	3"

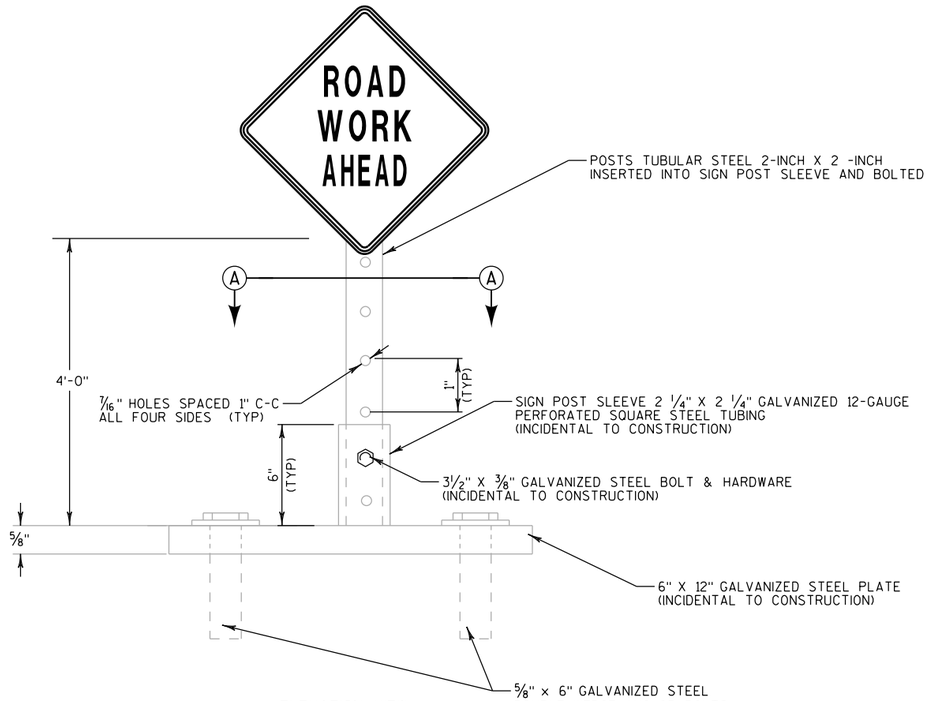




2

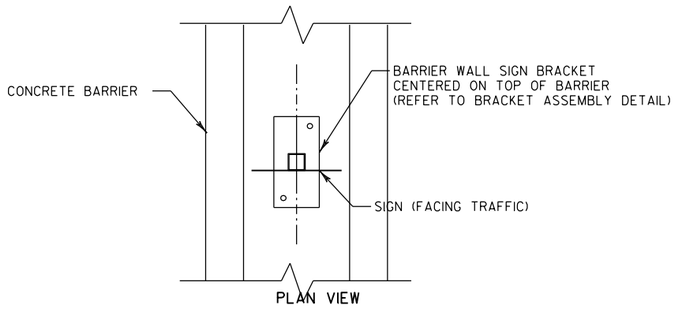


SECTION A-A

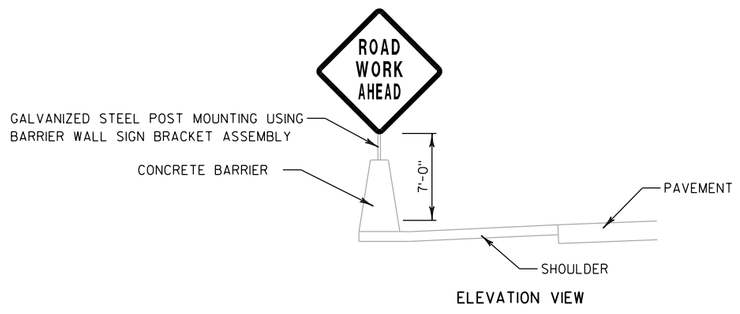


ELEVATION VIEW

BRACKET ASSEMBLY DETAIL



PLAN VIEW



ELEVATION VIEW

MEDIAN BARRIER MOUNTING DETAIL

NOTES:

1) SIGNS SHALL NOT BE MOUNTED ON MEDIAN BARRIER WHEN DISTANCE IS LESS THAN 4'FROM BASE OF BARRIER TO EDGE OF TRAVEL LANE.

2) IF SIGNS ENCROACH ONTO TRAVEL WAY, REDUCE SIZE OF SIGN TO 36" X 36"

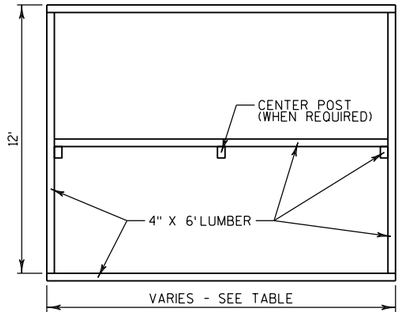
MOUNTING DETAILS FOR SIGNS MOUNTED TO MEDIAN BARRIER

NOT TO SCALE

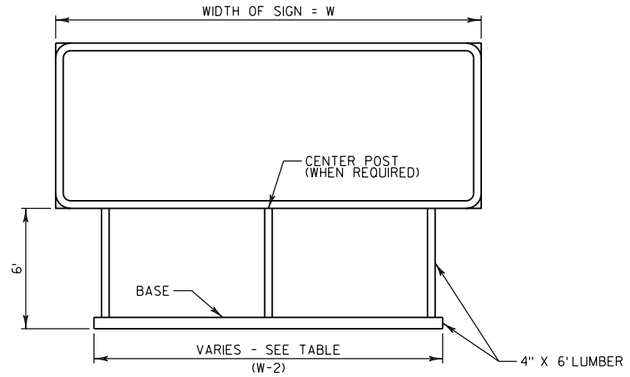
2

NOTE

ONY ALLOWED WHEN BEHIND BARRIER WALL OR GUARDRAIL.

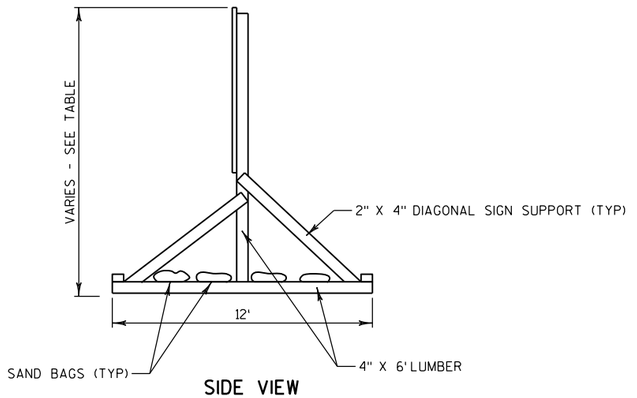


BASE DETAIL



FRONT VIEW

'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)

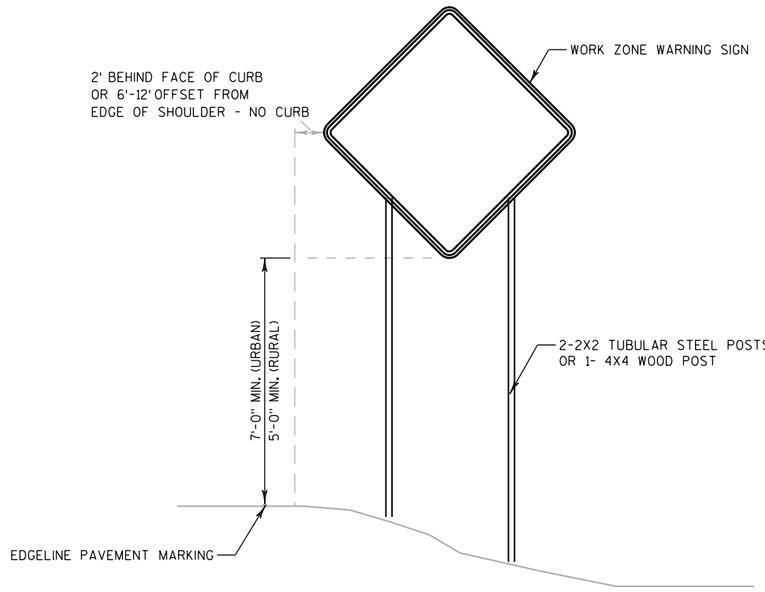


SIDE VIEW

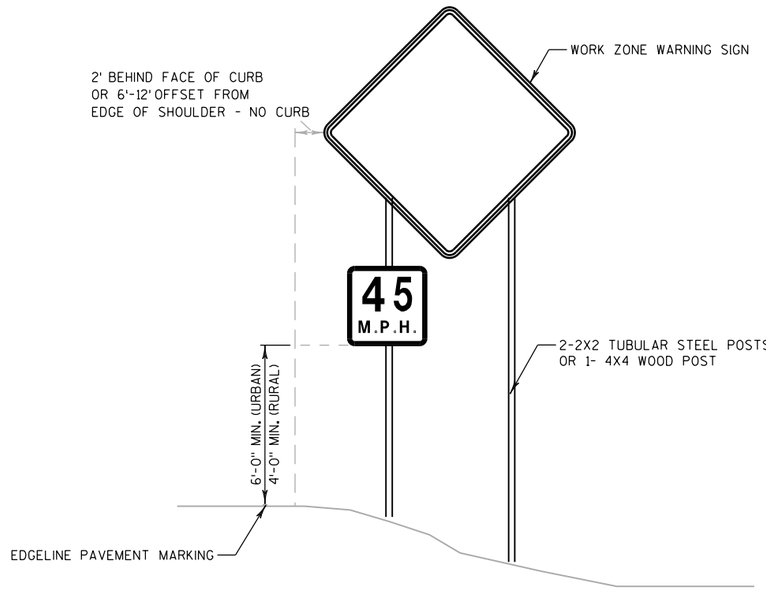
FIXED MESSAGE SIGN PORTABLE SUPPORT

NOTES

1. "SEE TRAFFIC CONTROL - ADVANCED SIGNING" FOR SIGN LOCATIONS.
2. FOUR DIAGONAL SUPPORTS SHALL BE INCLUDED. DIAGONAL SUPPORTS SHALL BE AFFIXED TO THE OUTSIDE SUPPORTS AND ARE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL SIGNS FIXED MESSAGE.
3. LUMBER PAID FOR UNDER TEMPORARY SIGN PORTABLE SUPPORT.
4. PROVIDE AN ADEQUATE NUMBER OF SAND BAGS TO HOLD THE SIGN IN PLACE. SAND BAGS ARE INCIDENAL TO TRAFFIC CONTROL SIGNS FIXED MESSAGE.
5. SEE "TYPICAL INSTALLATION OF TYPE I SIGNS ON MULTIPLE POSTS" SIGN PLATE FOR ADDITIONAL REQUIREMENTS.

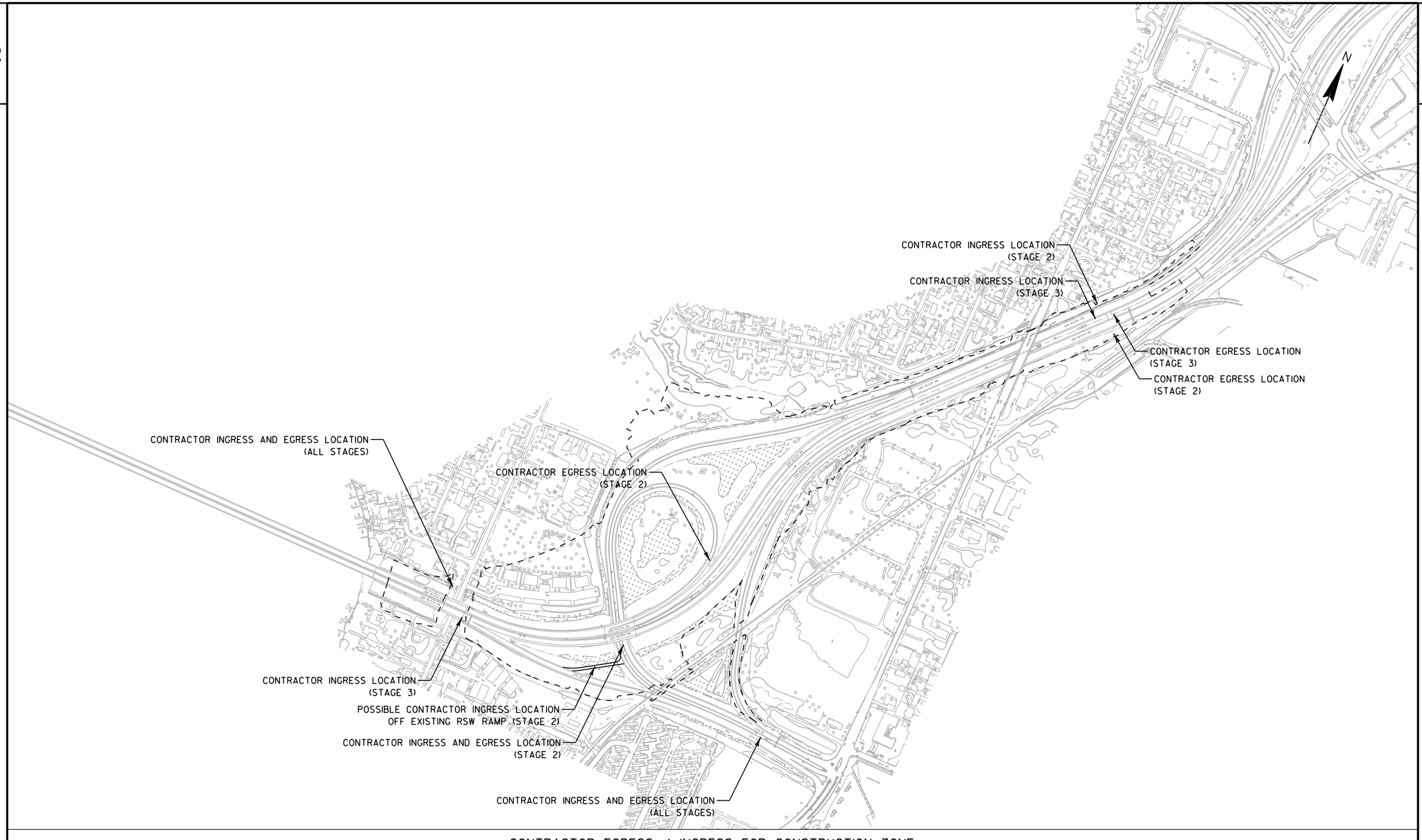


TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON FIXED SUPPORT



TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON FIXED SUPPORT
WITH ADVISORY SPEED PLATE SIGN

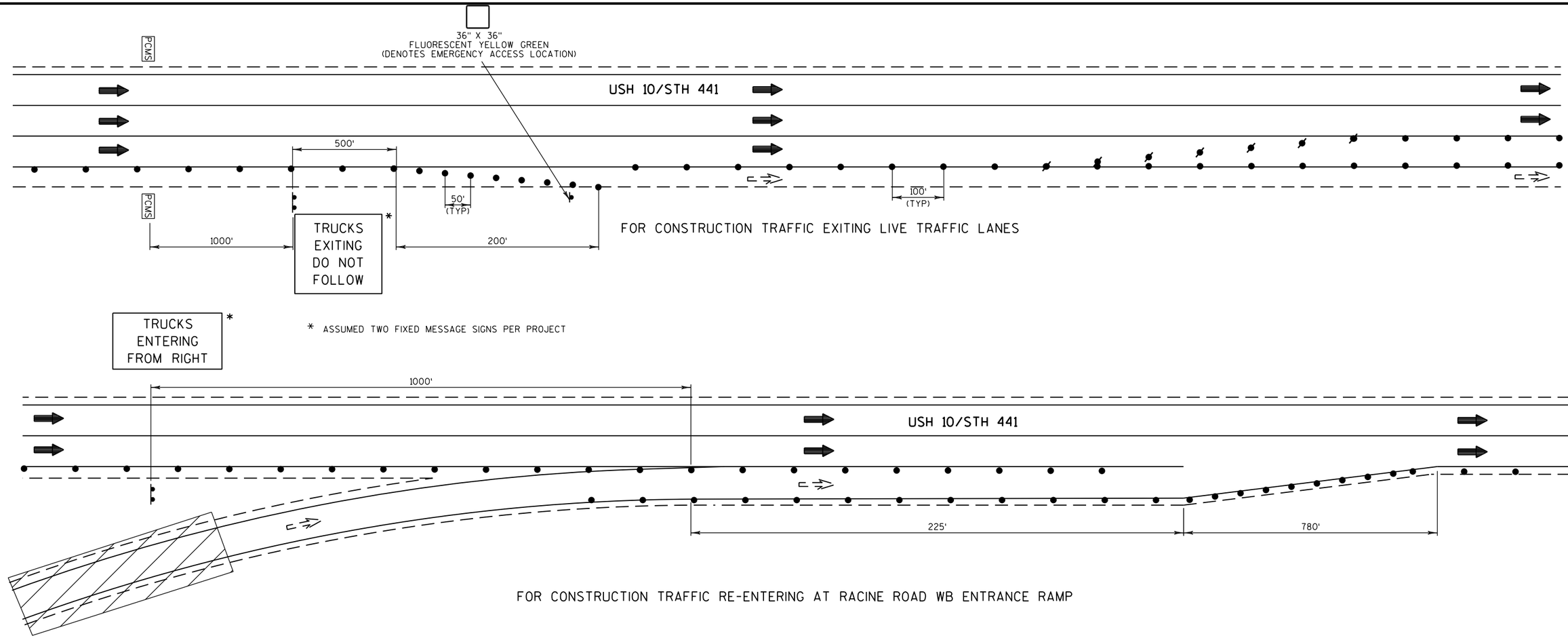
2



CONTRACTOR EGRESS / INGRESS FOR CONSTRUCTION ZONE

SHEET 1 OF 3

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - CONTRACTOR ACCESS POINTS	SHEET 288	E



FOR CONSTRUCTION TRAFFIC EXITING LIVE TRAFFIC LANES

TRUCKS ENTERING FROM RIGHT *

* ASSUMED TWO FIXED MESSAGE SIGNS PER PROJECT

FOR CONSTRUCTION TRAFFIC RE-ENTERING AT RACINE ROAD WB ENTRANCE RAMP

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 WILL BE PLACED 7 DAYS PRIOR TO CONSTRUCTION AND SHOULD READ:

FRAME 1	FRAME 2
TRUCKS EXITING RIGHT	DO NOT FOLLOW

OR

FRAME 1	FRAME 2
TRUCKS ENTERING RIGHT	

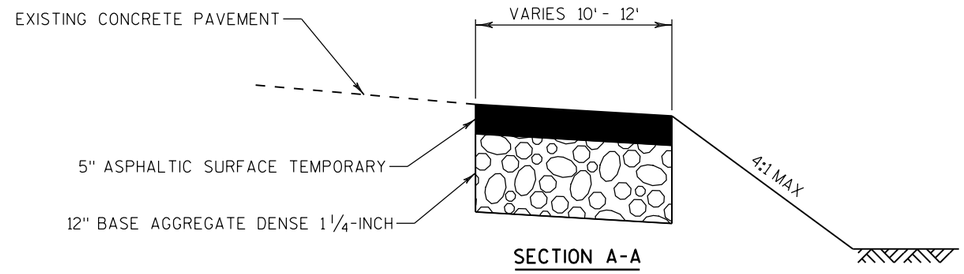
LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- TRAFFIC FLOW ARROW
- TRAFFIC FLOW ARROW
- WORK ZONE THIS STAGE
- FIXED MESSAGE SIGN
- PCMS — TRAFFIC CONTROL SIGNS PORTABLE CHANGABLE MESSAGE

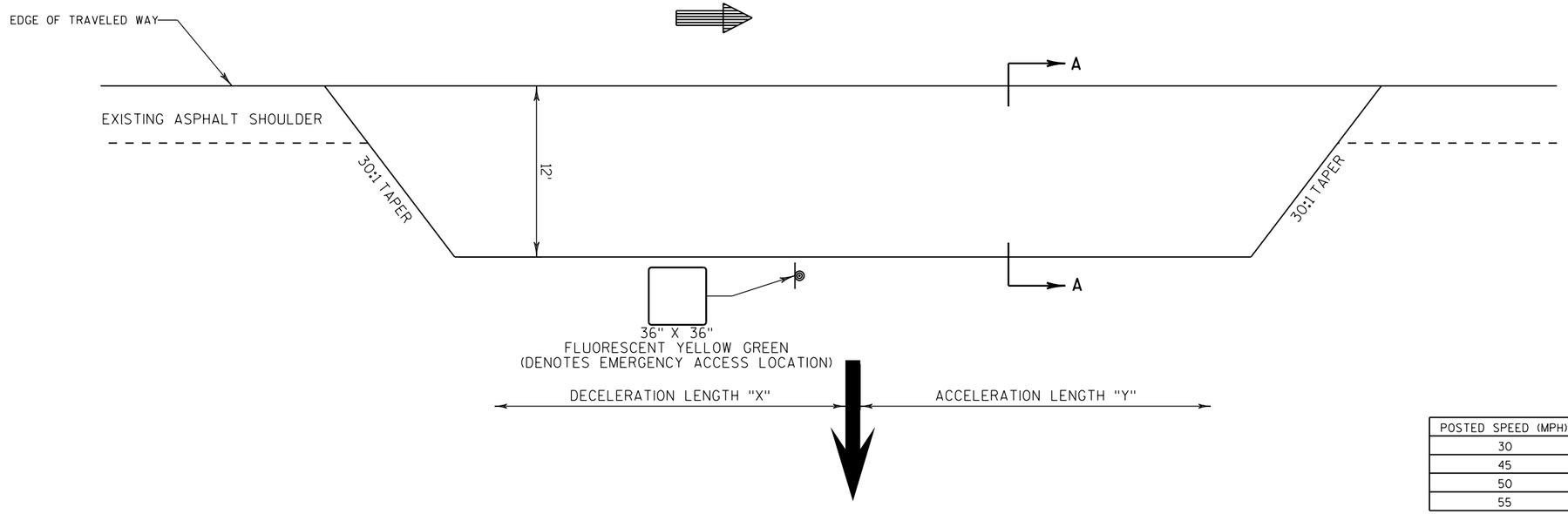
CONTRACTOR EGRESS / INGRESS FOR CONSTRUCTION ZONE

SHEET 2 OF 3

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - CONTRACTOR ACCESS POINTS	SHEET 289	E



SECTION A-A

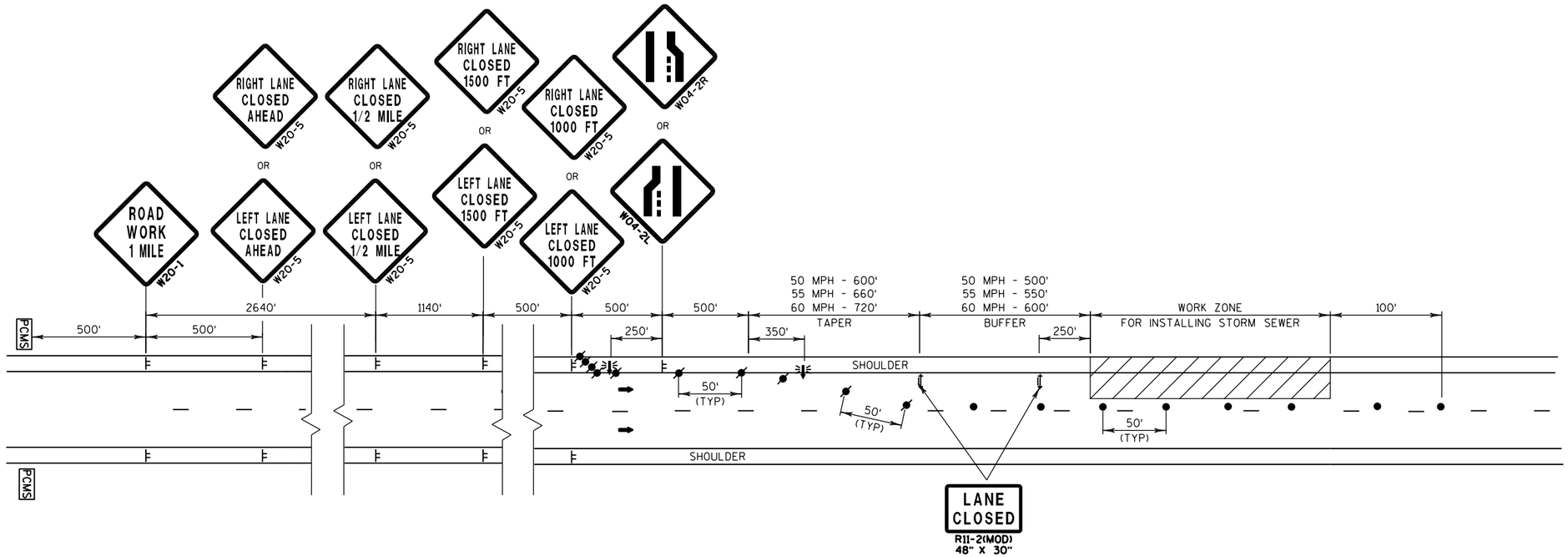


POSTED SPEED (MPH)	X (FEET)	Y (FEET)
30	250'	250'
45	400'	450'
50	450'	600'
55	500'	750'

CONSTRUCTION ACCESS DETAIL

CONTRACTOR EGRESS / INGRESS FOR CONSTRUCTION ZONE

SHEET 3 OF 3



NOTES:

1) THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

2) ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN)

3) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

4) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

5) 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 DIRECTED BY THE ENGINEER.

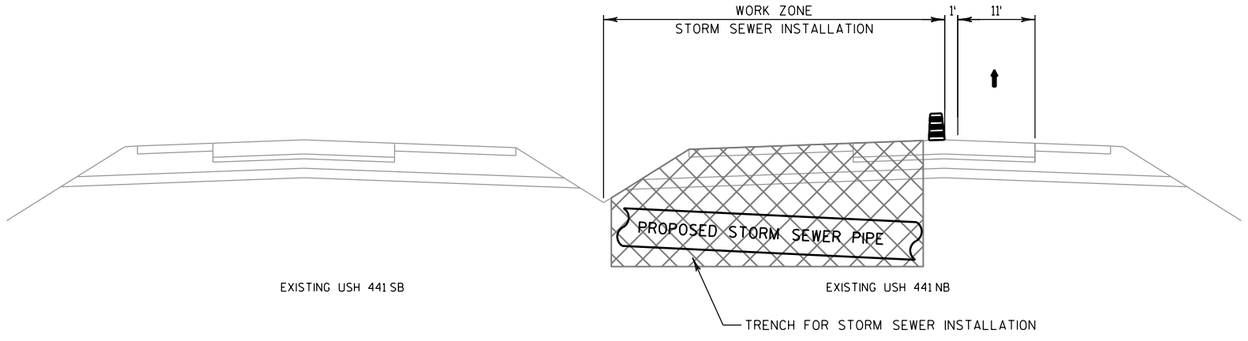
6) ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

7) UTILIZE NIGHT TIME CLOSURE FOR INSTALLATION OF STORM SEWER UNDER EXISTING PAVEMENT. HOURS FOR NIGHT TIME CLOSURE SHALL ADHERE TO THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

8) MEDIAN SHOULDERS WITH FULL DEPTH TEMPORARY PAVEMENT TO ACCOMODATE TRAFFIC TO PROVIDE ADEQUATE WORKZONE WIDTH FOR STORM SEWER CROSSING CONSTRUCTION.

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- WORK ZONE
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHT TYPE A AND ATTACHED SIGN
- TRAFFIC CONTROL ARROW BOARD
- DIRECTION OF TRAFFIC
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE



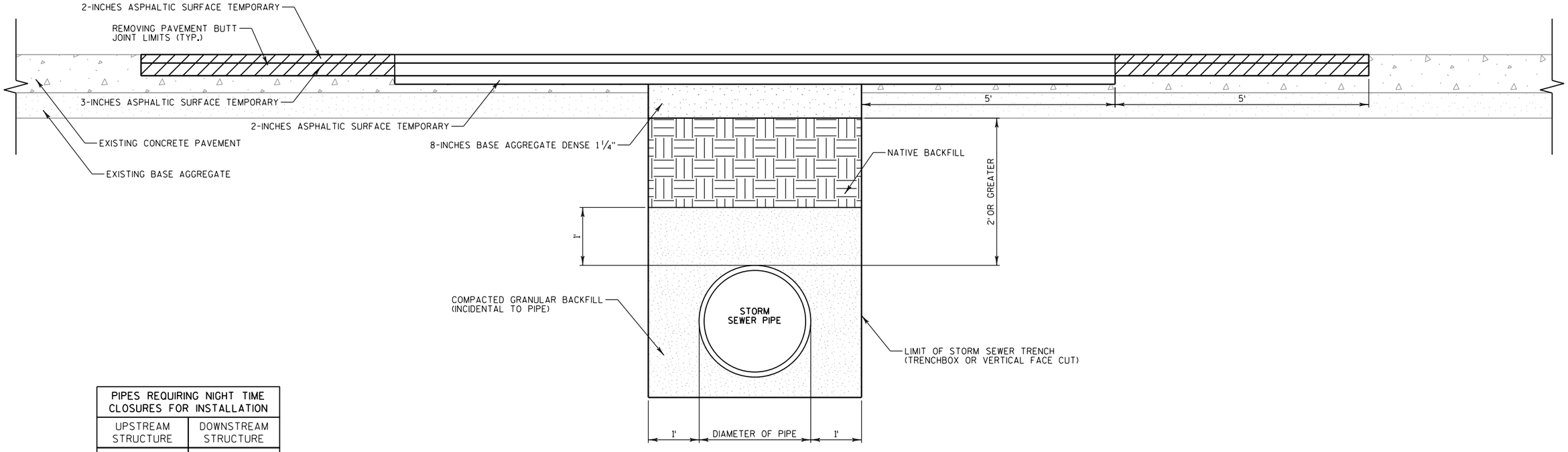
TYPICAL SECTION FOR TRAVELED WAY ALONG USH 441

TYPICAL ONE-LANE NIGHT TIME CLOSURE FOR STORM SEWER INSTALLATION

SHEET 1 OF 2

PROJECT NO: 1517-75-71	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STORM SEWER INSTALLATION	SHEET 291	E

2



PIPES REQUIRING NIGHT TIME CLOSURES FOR INSTALLATION	
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE
301V	305C
364C	364
382	368

NOTES:

1) NATIVE BACKFILL SHALL BE FREE OF LARGE LUMPS, CLODS, OR ROCK.

2) ASPHALTIC SURFACE TEMPORARY AND BASE AGGREGATE DENSE WILL BE PAID FOR UNDER THEIR APPROPRIATE BID ITEMS.

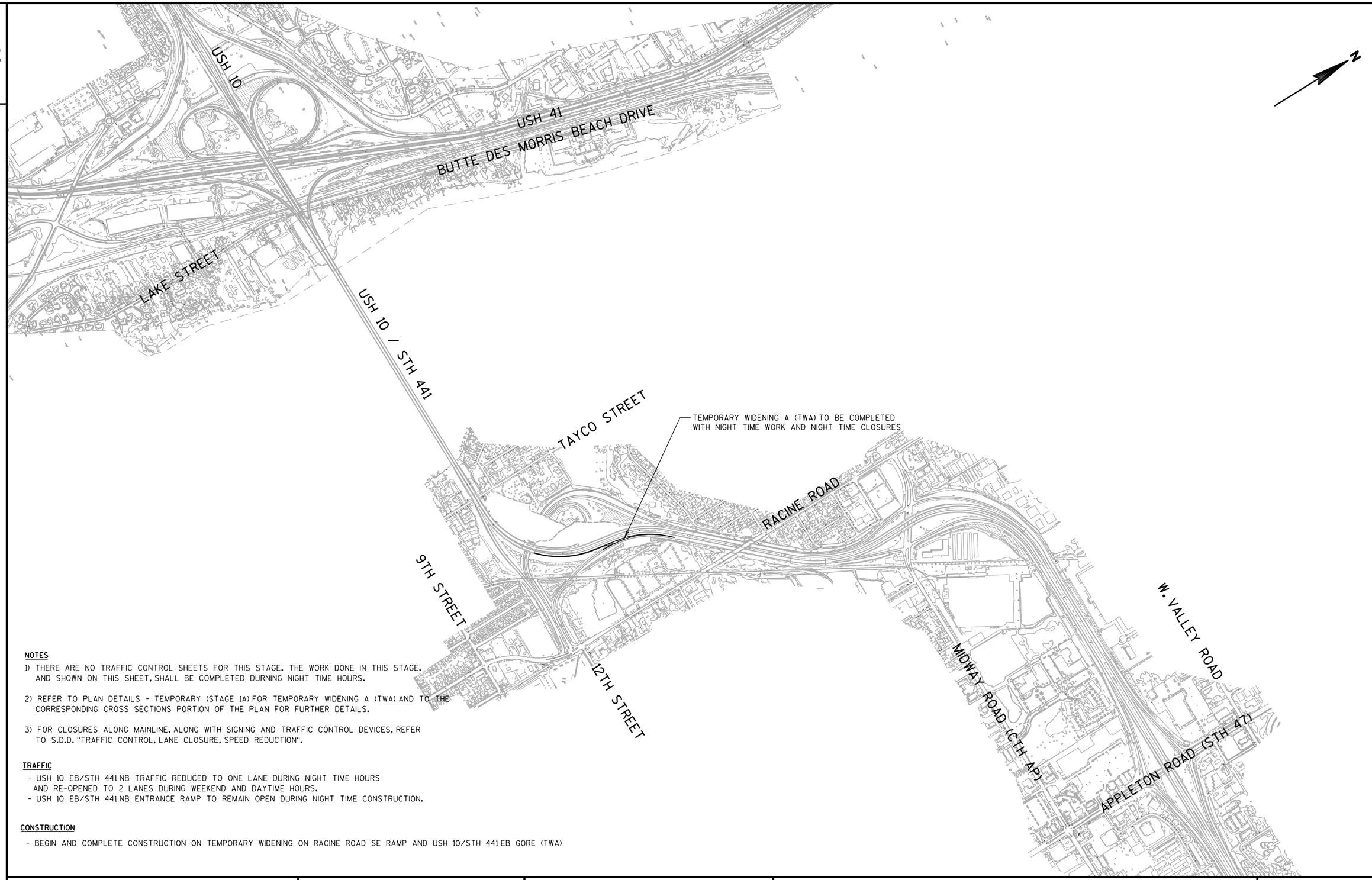
3) REFER TO STORM SEWER PLAN FOR STRUCTURE LOCATIONS.

TYPICAL ONE-LANE NIGHT TIME CLOSURE FOR STORM SEWER INSTALLATION

SHEET 2 OF 2

2

2



NOTES

1) THERE ARE NO TRAFFIC CONTROL SHEETS FOR THIS STAGE. THE WORK DONE IN THIS STAGE, AND SHOWN ON THIS SHEET, SHALL BE COMPLETED DURNING NIGHT TIME HOURS.

2) REFER TO PLAN DETAILS - TEMPORARY (STAGE 1A) FOR TEMPORARY WIDENING A (TWA) AND TO THE CORRESPONDING CROSS SECTIONS PORTION OF THE PLAN FOR FURTHER DETAILS.

3) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION".

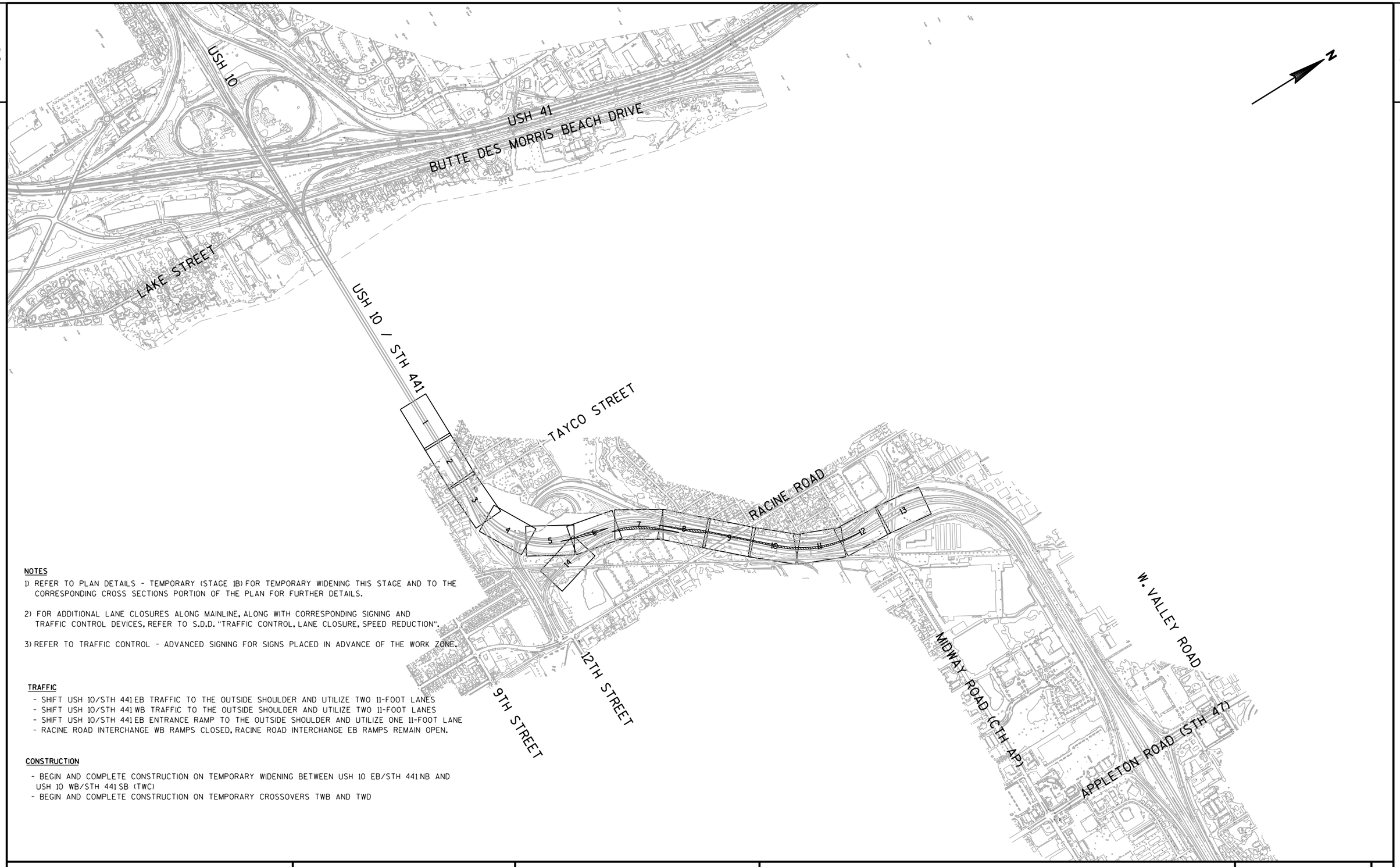
TRAFFIC

- USH 10 EB/STH 441 NB TRAFFIC REDUCED TO ONE LANE DURING NIGHT TIME HOURS AND RE-OPENED TO 2 LANES DURING WEEKEND AND DAYTIME HOURS.
- USH 10 EB/STH 441 NB ENTRANCE RAMP TO REMAIN OPEN DURING NIGHT TIME CONSTRUCTION.

CONSTRUCTION

- BEGIN AND COMPLETE CONSTRUCTION ON TEMPORARY WIDENING ON RACINE ROAD SE RAMP AND USH 10/STH 441 EB GORE (TWA)

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1A KEYMAP OVERVIEW	SHEET 293	E



NOTES

1) REFER TO PLAN DETAILS - TEMPORARY (STAGE 1B) FOR TEMPORARY WIDENING THIS STAGE AND TO THE CORRESPONDING CROSS SECTIONS PORTION OF THE PLAN FOR FURTHER DETAILS.

2) FOR ADDITIONAL LANE CLOSURES ALONG MAINLINE, ALONG WITH CORRESPONDING SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION".

3) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

TRAFFIC

- SHIFT USH 10/STH 441 EB TRAFFIC TO THE OUTSIDE SHOULDER AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10/STH 441 WB TRAFFIC TO THE OUTSIDE SHOULDER AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10/STH 441 EB ENTRANCE RAMP TO THE OUTSIDE SHOULDER AND UTILIZE ONE 11-FOOT LANE
- RACINE ROAD INTERCHANGE WB RAMPS CLOSED, RACINE ROAD INTERCHANGE EB RAMPS REMAIN OPEN.

CONSTRUCTION

- BEGIN AND COMPLETE CONSTRUCTION ON TEMPORARY WIDENING BETWEEN USH 10 EB/STH 441 NB AND USH 10 WB/STH 441 SB (TWC)
- BEGIN AND COMPLETE CONSTRUCTION ON TEMPORARY CROSSOVERS TWB AND TWD

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B KEYMAP OVERVIEW	SHEET 294	E

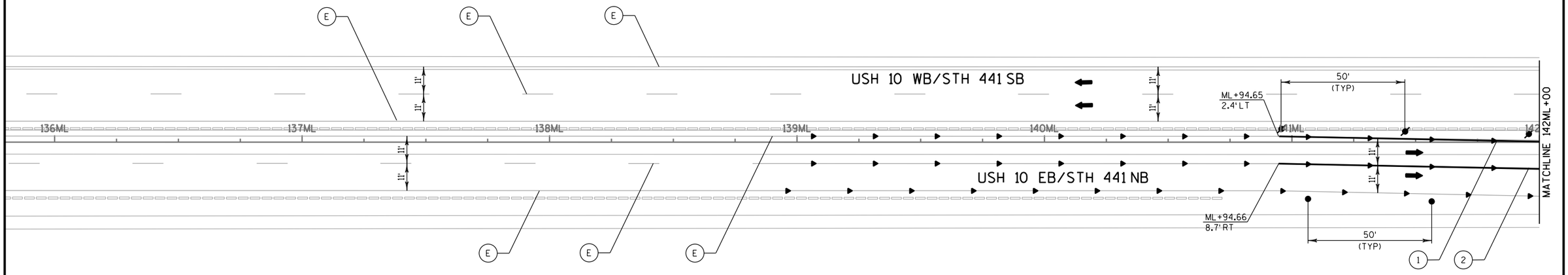
NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

2) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/441 NB: STATION 139ML+00 TO STATION 147ML+10, AT 25' SPACING

3) TRAFFIC CONTROL ITEMS THAT ARE SHOWN SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-07-76. VERIFY WITH FIELD ENGINEER THAT BARRIER PLACED UNDER 1517-07-76 IS TO PLAN AND HAS NOT BEEN CHANGED.



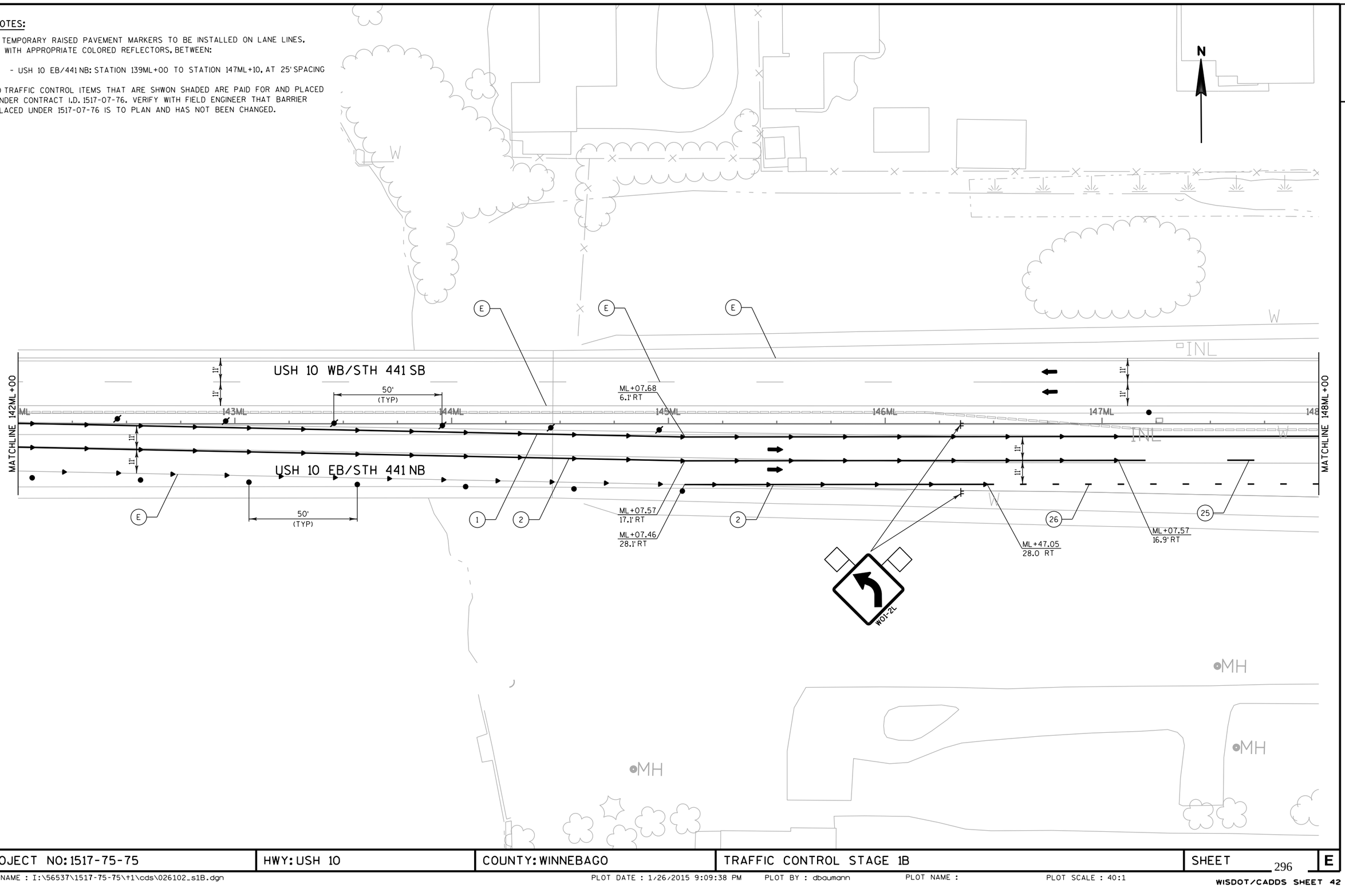
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 295	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/441 NB: STATION 139ML+00 TO STATION 147ML+10, AT 25' SPACING

2) TRAFFIC CONTROL ITEMS THAT ARE SHWON SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-07-76. VERIFY WITH FIELD ENGINEER THAT BARRIER PLACED UNDER 1517-07-76 IS TO PLAN AND HAS NOT BEEN CHANGED.



2

2

N

TAYCO STREET

SIGN

MH

ML+53.27
30.2' LT

ML+53.30
19.2' LT

ML+53.26
8.2' LT

100'
(TYP)

W

11'

11'

USH 10 WB/STH 441 SB

INL

ML+32.81 (PC)
8.2' LT

23

25

24

ML+02.86 (PC)
30.2' LT

R = 1061'

R = 1083'

R = 1362.5'

MH

MATCHLINE 148ML+00

ML

149ML

150ML

151ML

152ML

153ML

MATCHLINE 154ML+00

USH 10 EB/STH 441 NB

26

25

23

INL

27

ML+28.24
27.6' RT

ML+59.51
30.3' RT

ML+34.34 (PC)
5.5' RT

101ERA

25'
(TYP)

27

102ERA

25'
(TYP)

ML+35.00
28.2' LT

R = 1172'

24

SIGN

103ERA

RACINE ROAD SW RAMP

EXIT

E5-1
60" X 48"

EXIT

EXISTING SIGN

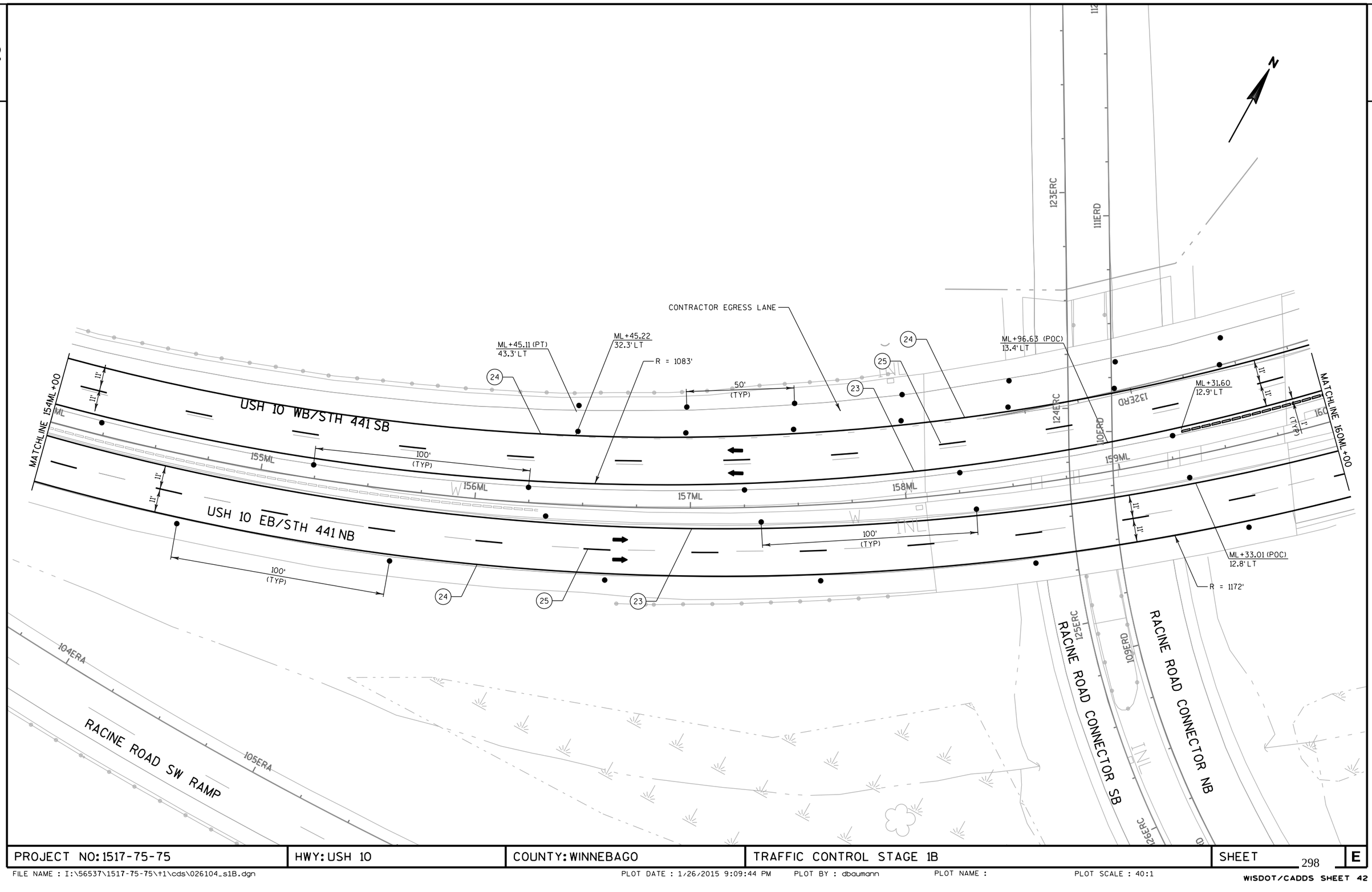
COVER EXISTING
TYPE II SIGN

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 297	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026103_s1B.dgn PLOT DATE : 1/26/2015 9:09:41 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

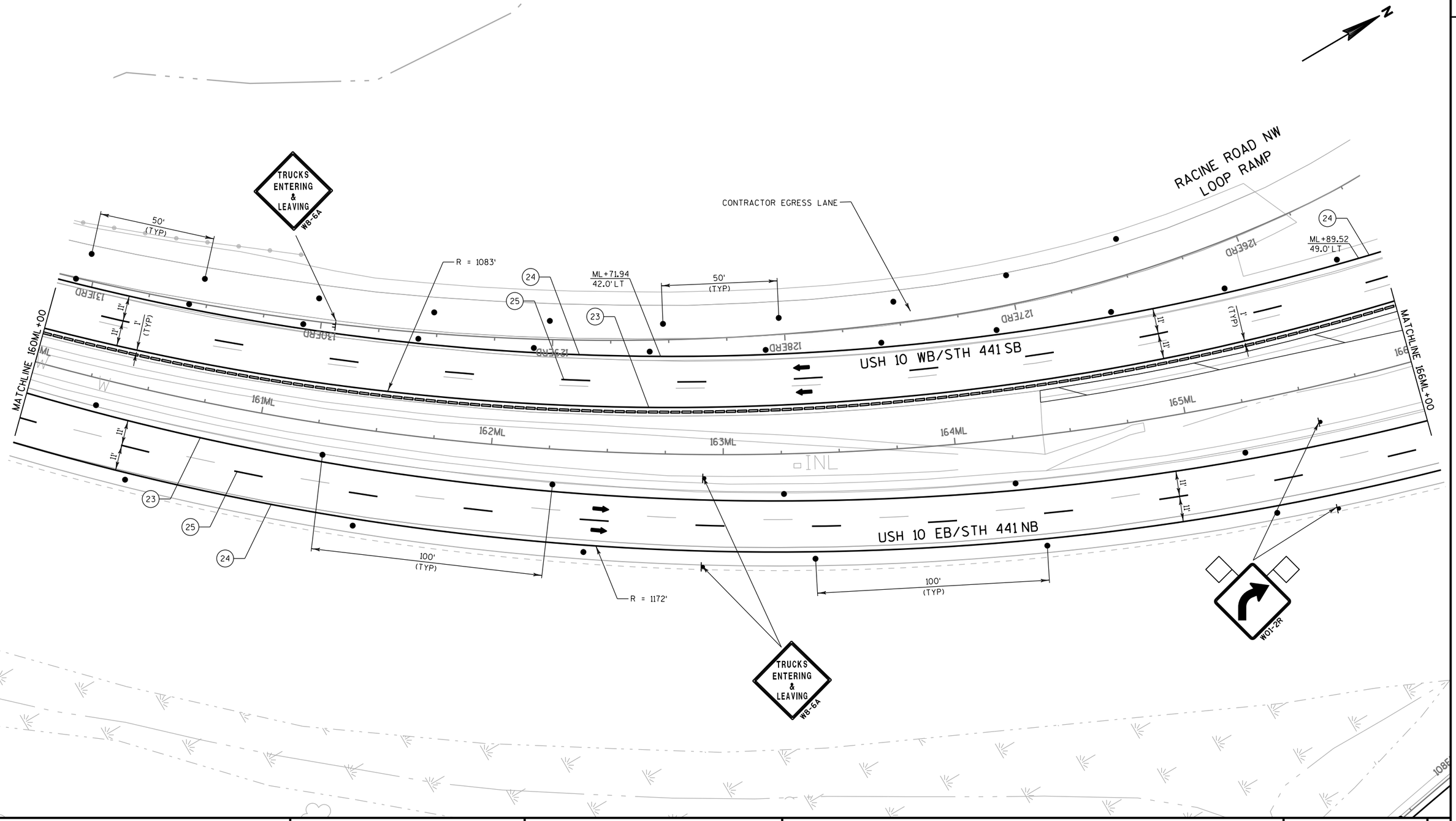
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 298	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 299	E

2

RACINE ROAD NW
LOOP RAMP

125ERD

124ERD

E

E

N

W01-2R

ML+67.79 (PT)
28.8' LT

R = 1061'

R = 1083'

11'

1' (TYP)

11'

W5-52L
12" X 36"

ML+57.77
28.1' LT

23

ML+07.80
26.2' LT

25

24

ML+43.33 (PC)
53.6' LT

R = 1226.25'

11'

11'

USH 10 WB/STH 441 SB

CC

100'
(TYP)

166ML+00
MATCHLINE

167ML

168ML

169ML

170ML

171ML

172ML+00
MATCHLINE

ML+23.61 (PT)
28.8' RT

ML+26.60
24.8' RT

ML+64.28
27.7' RT

ML+47.27
25.6' RT

ML+40.47
19.7' RT

R = 1120'

23

CC

USH 10 EB/STH 441 NB

11'

11'

1' (TYP)

11'

11'

1' (TYP)

R = 1172'

24

25

W5-52L
12" X 36"

ML+96.54
50.40' RT

50'
(TYP)

27

113ERB

114ERB

112ERB

11'

R = 850'

ML+94.90 (POC)
60.8' RT

ML+02.16
73.0' RT

CC

ML+78.25
54.8' RT

W04-1

111ERB

110ERB

RACINE ROAD SE RAMP

ERB+55.43
2.7' LT

ERB+56.54 (PC)
8.3' RT

27

50'
(TYP)

23

24

25'
(TYP)

W01-6
48" X 24"

RIGHT
LANE
ENDS
W09-1R

W5-52R
12" X 36"

106ERB+00
MATCHLINE

ERB

11'

ERB+76.09
15.9' RT

R = 1141.5'

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 300	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026106_s1B.dgn PLOT DATE : 1/26/2015 9:09:49 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

MATCHLINE 105ERC+00

RACINE ROAD NE RAMP

104ERC

103ERC

102ERC

E

N

TRUCKS ENTERING & LEAVING
W8-6A

ML+82.08 (POC)
41.7' LT

R = 1204.25'

23

24

25

50'
(TYP)

ML+20.77
54.0' LT

ML+19.59 (PT)
32.1' LT

USH 10 WB/STH 441 SB

11'

100'
(TYP)

INL

MATCHLINE 172ML+00

173ML

174ML

175ML

176ML

177ML

ML

USH 10 EB/STH 441 NB

CC

ML+36.77
17.1' RT

W5-52L
12" X 36"

INL

178ML

MATCHLINE 178ML+00

1'
(TYP)

117ERB

118ERB

116ERB

119ERB

120ERB

115ERB

R = 1109'

28

24

25

23

27

R = 850'

ML+89.43
38.13' RT

ML+89.64 (PCC)
49.1' RT

ML+01.96 (POC)
49.4' RT

ML+14.30 (PT)
57.8' RT

ML+52.03
48.5' RT

W04-2R

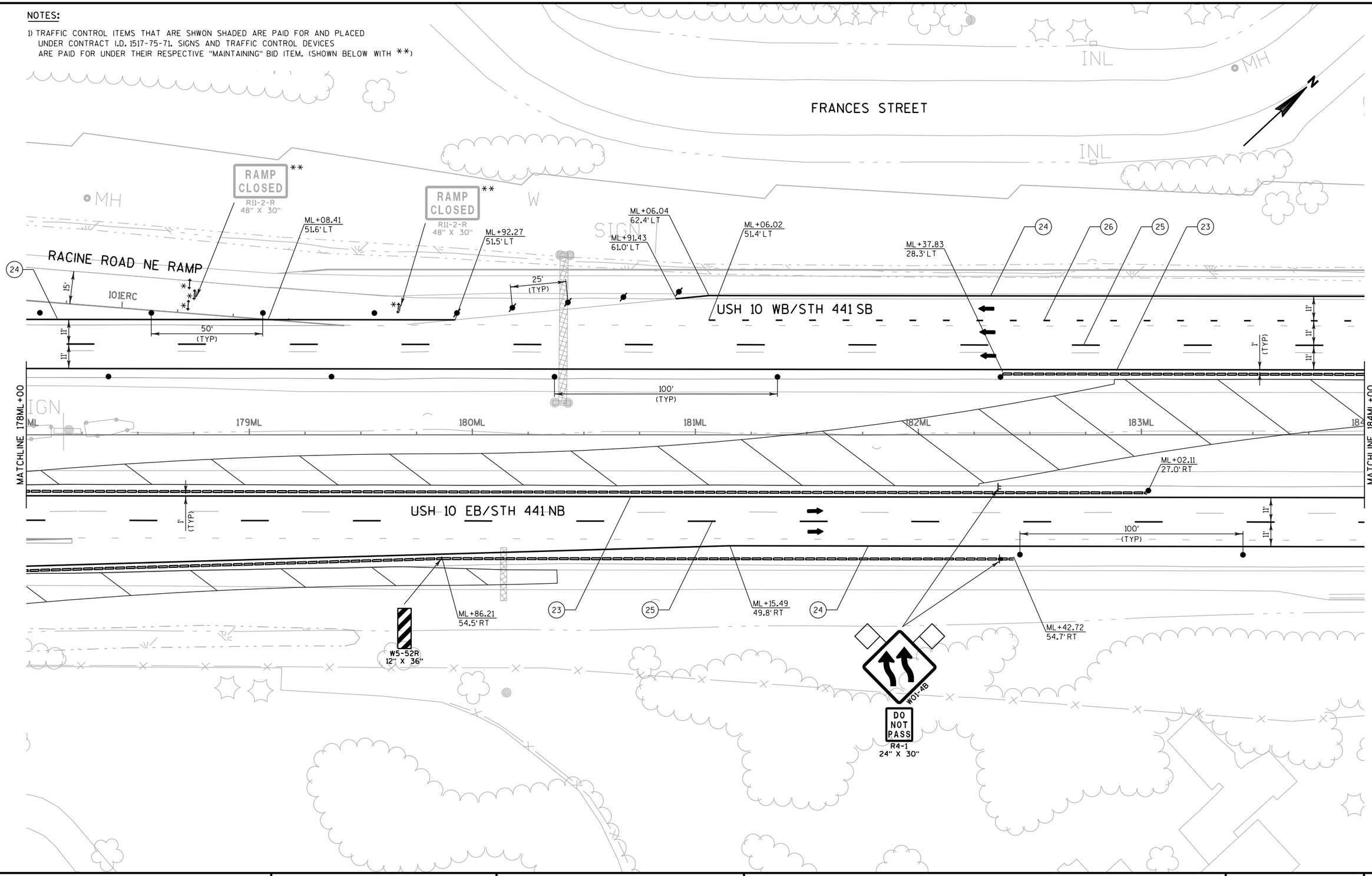
MH

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 301	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026107_s1B.dgn PLOT DATE : 1/26/2015 9:09:51 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

NOTES:

1) TRAFFIC CONTROL ITEMS THAT ARE SHWON SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-75-71. SIGNS AND TRAFFIC CONTROL DEVICES ARE PAID FOR UNDER THEIR RESPECTIVE "MAINTAINING" BID ITEM. (SHOWN BELOW WITH **)



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 302 E

FILE NAME : I:\56537\1517-75-75\t1\cds\026108_s1B.dgn PLOT DATE : 1/26/2015 9:09:53 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

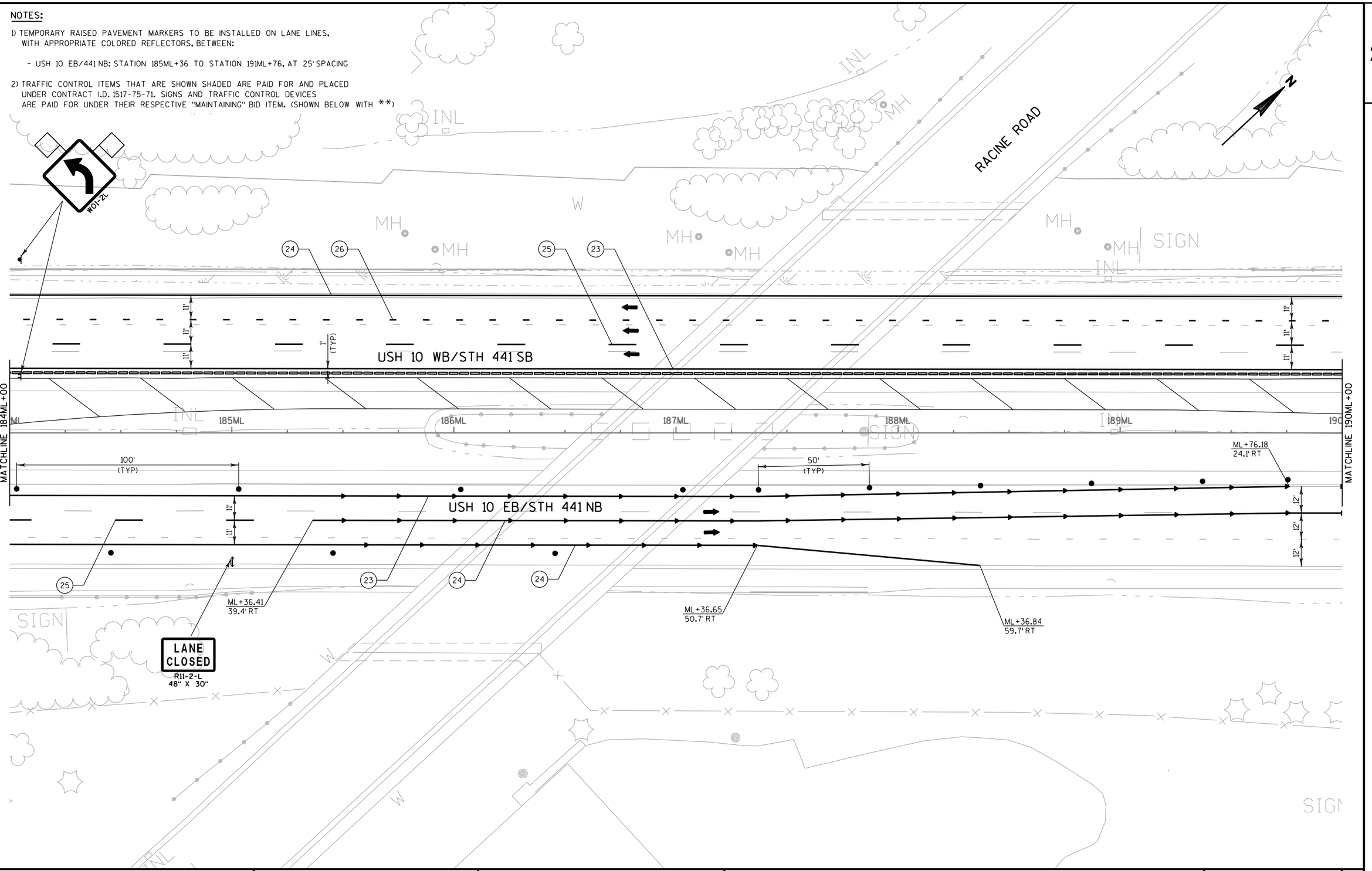
WISDOT/CADDS SHEET 42

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/441 NB: STATION 185ML+36 TO STATION 191ML+76, AT 25' SPACING

2) TRAFFIC CONTROL ITEMS THAT ARE SHOWN SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-75-71. SIGNS AND TRAFFIC CONTROL DEVICES ARE PAID FOR UNDER THEIR RESPECTIVE "MAINTAINING" BID ITEM. (SHOWN BELOW WITH **)



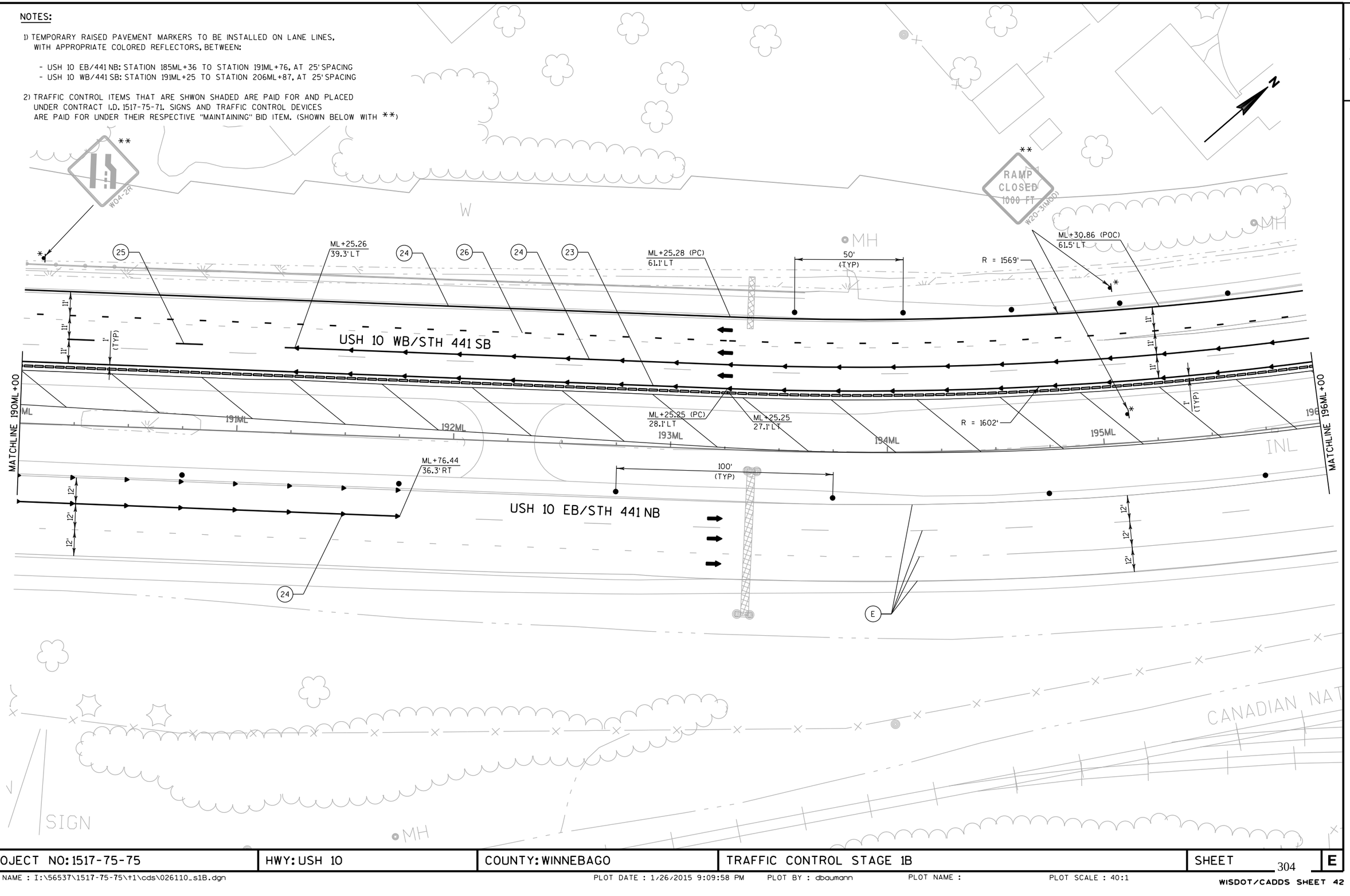
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 303	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/441 NB: STATION 185ML+36 TO STATION 191ML+76, AT 25' SPACING
- USH 10 WB/441 SB: STATION 191ML+25 TO STATION 206ML+87, AT 25' SPACING

2) TRAFFIC CONTROL ITEMS THAT ARE SHWON SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-75-71. SIGNS AND TRAFFIC CONTROL DEVICES ARE PAID FOR UNDER THEIR RESPECTIVE "MAINTAINING" BID ITEM. (SHOWN BELOW WITH **)



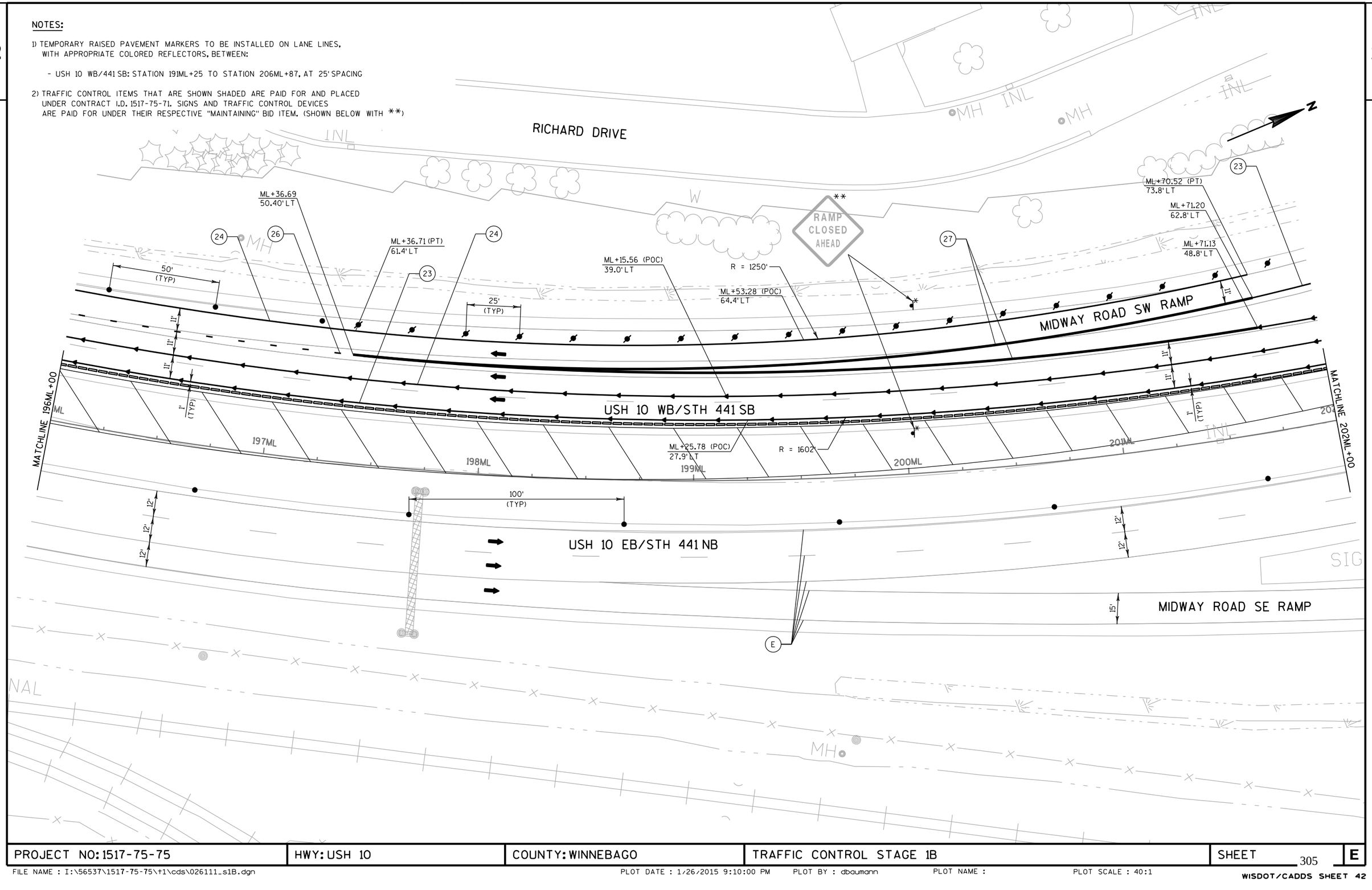
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 304	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

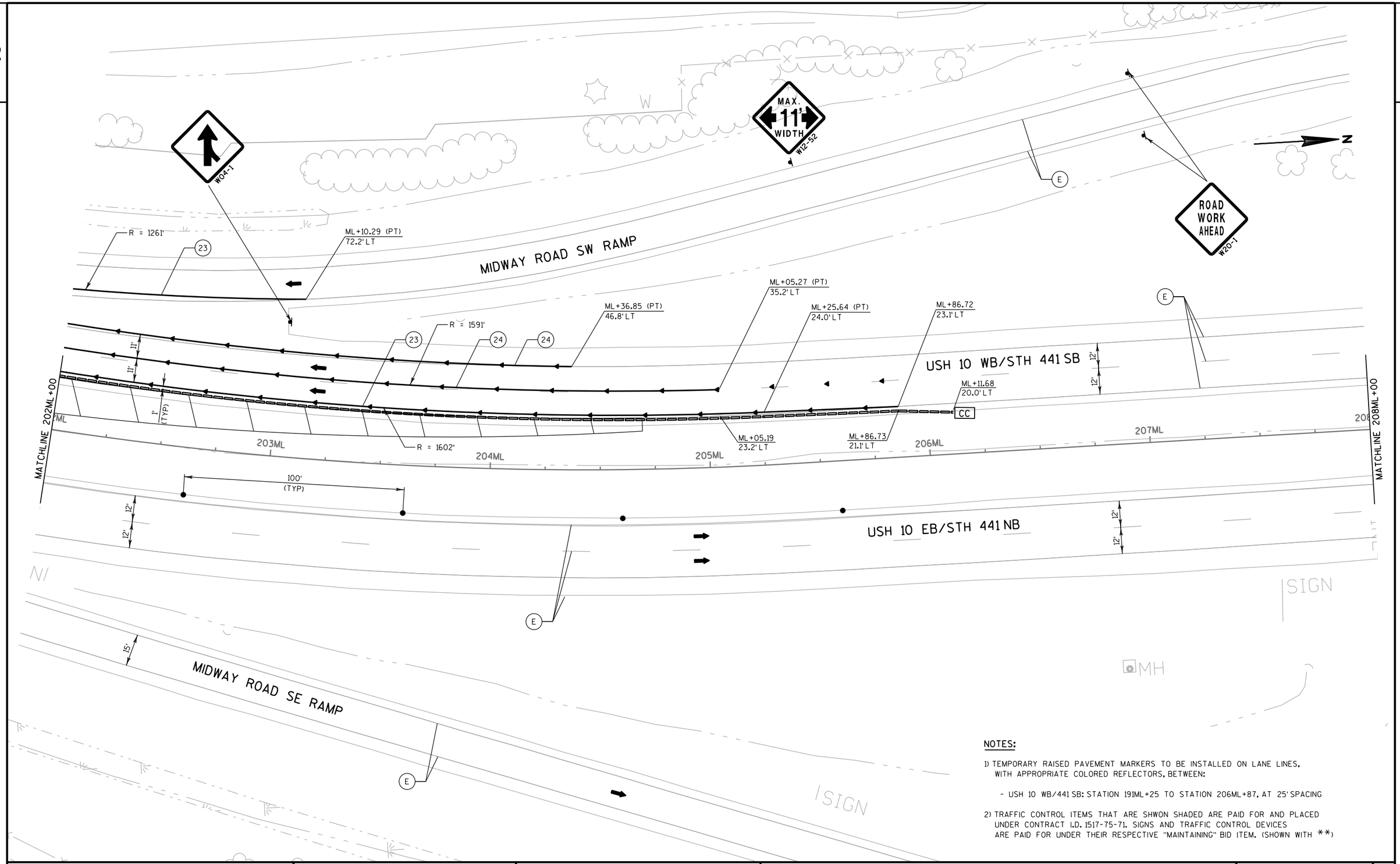
   - USH 10 WB/441 SB: STATION 191ML+25 TO STATION 206ML+87, AT 25' SPACING

2) TRAFFIC CONTROL ITEMS THAT ARE SHOWN SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-75-71. SIGNS AND TRAFFIC CONTROL DEVICES ARE PAID FOR UNDER THEIR RESPECTIVE "MAINTAINING" BID ITEM. (SHOWN BELOW WITH **)



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 305 E

2



NOTES:

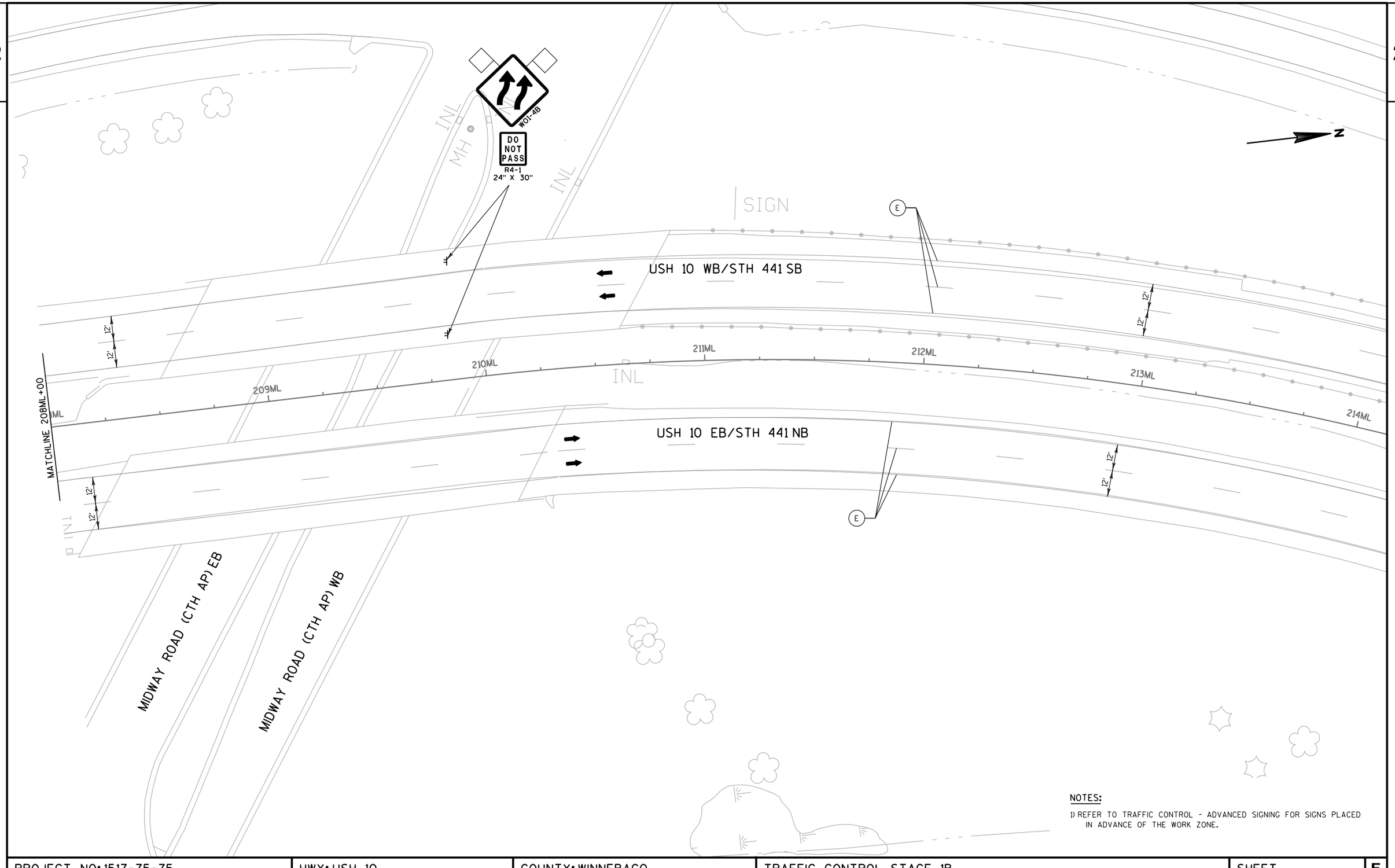
1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

   - USH 10 WB/441 SB: STATION 191ML+25 TO STATION 206ML+87, AT 25' SPACING

2) TRAFFIC CONTROL ITEMS THAT ARE SHWON SHADED ARE PAID FOR AND PLACED UNDER CONTRACT I.D. 1517-75-71. SIGNS AND TRAFFIC CONTROL DEVICES ARE PAID FOR UNDER THEIR RESPECTIVE "MAINTAINING" BID ITEM. (SHOWN WITH **)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 306	E

2



NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 307	E

2

2

USH 10 EB/STH 441 NB

166ML

N

CANADIAN NATIONAL

ROAD WORK AHEAD W20-1

MAX. 11' WIDTH W12-52

104ERB

105ERB

106ERB

107ERB

108ERB

109

ERB+17.97
0.7' LT

25'
(TYP)

ERB+18.18 (PC)
2.8' RT

ERB+47.17 (POC)
3.1' RT

RACINE ROAD SE RAMP

E

350'

23

24

ERB+18.23 (PC)
13.8' RT

50'
(TYP)

R = 1641.5'

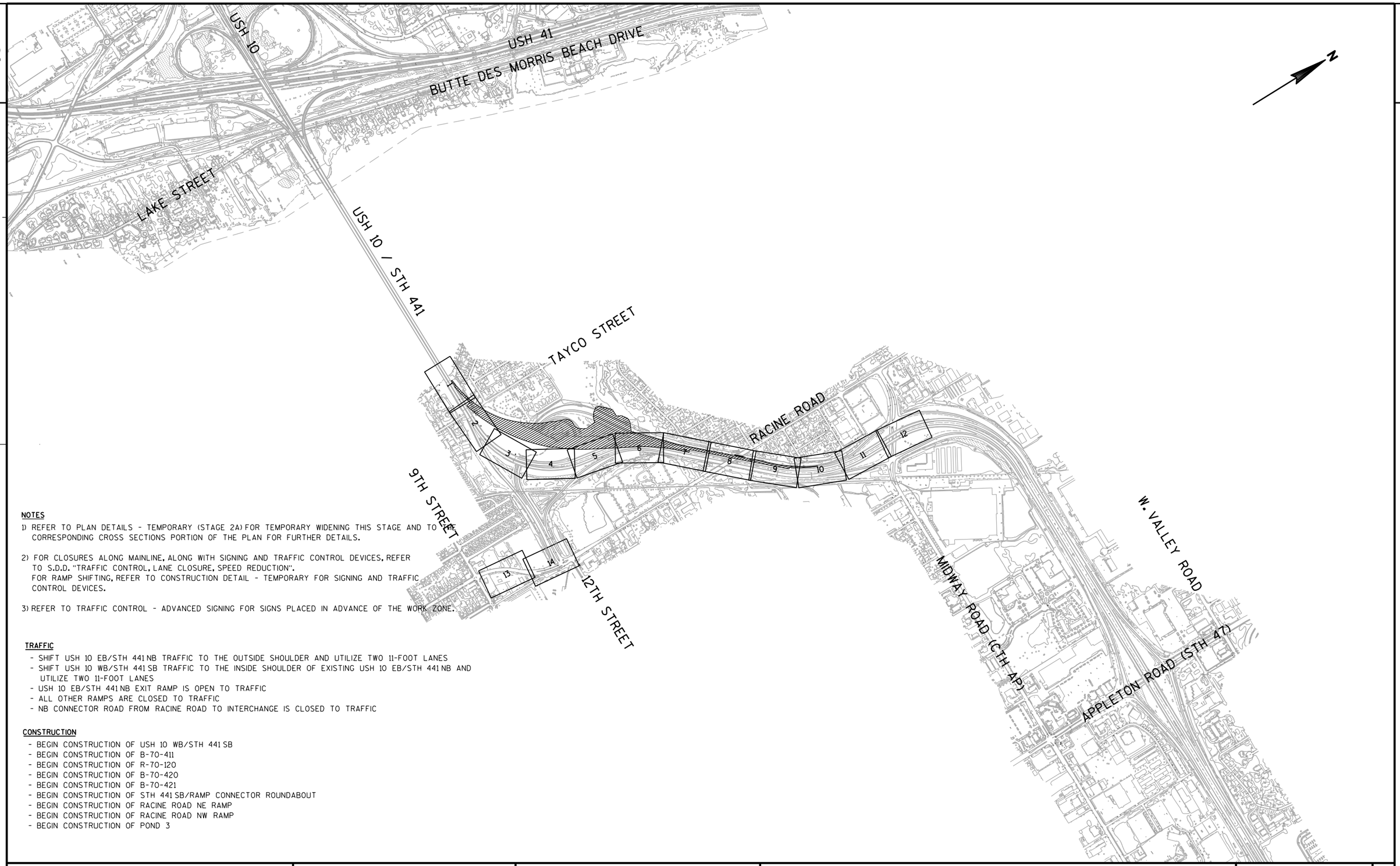
11'

ERB+47.07 (POC)
14.1' RT

RIGHT SHOULDER CLOSED AHEAD W21-5B

MATCHLINE 109ERB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 1B	SHEET 308	E



NOTES

1) REFER TO PLAN DETAILS - TEMPORARY (STAGE 2A) FOR TEMPORARY WIDENING THIS STAGE AND TO THE CORRESPONDING CROSS SECTIONS PORTION OF THE PLAN FOR FURTHER DETAILS.

2) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". FOR RAMP SHIFTING, REFER TO CONSTRUCTION DETAIL - TEMPORARY FOR SIGNING AND TRAFFIC CONTROL DEVICES.

3) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

TRAFFIC

- SHIFT USH 10 EB/STH 441 NB TRAFFIC TO THE OUTSIDE SHOULDER AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10 WB/STH 441 SB TRAFFIC TO THE INSIDE SHOULDER OF EXISTING USH 10 EB/STH 441 NB AND UTILIZE TWO 11-FOOT LANES
- USH 10 EB/STH 441 NB EXIT RAMP IS OPEN TO TRAFFIC
- ALL OTHER RAMPS ARE CLOSED TO TRAFFIC
- NB CONNECTOR ROAD FROM RACINE ROAD TO INTERCHANGE IS CLOSED TO TRAFFIC

CONSTRUCTION

- BEGIN CONSTRUCTION OF USH 10 WB/STH 441 SB
- BEGIN CONSTRUCTION OF B-70-411
- BEGIN CONSTRUCTION OF R-70-120
- BEGIN CONSTRUCTION OF B-70-420
- BEGIN CONSTRUCTION OF B-70-421
- BEGIN CONSTRUCTION OF STH 441 SB/RAMP CONNECTOR ROUNDABOUT
- BEGIN CONSTRUCTION OF RACINE ROAD NE RAMP
- BEGIN CONSTRUCTION OF RACINE ROAD NW RAMP
- BEGIN CONSTRUCTION OF POND 3

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A KEYMAP OVERVIEW	SHEET	E

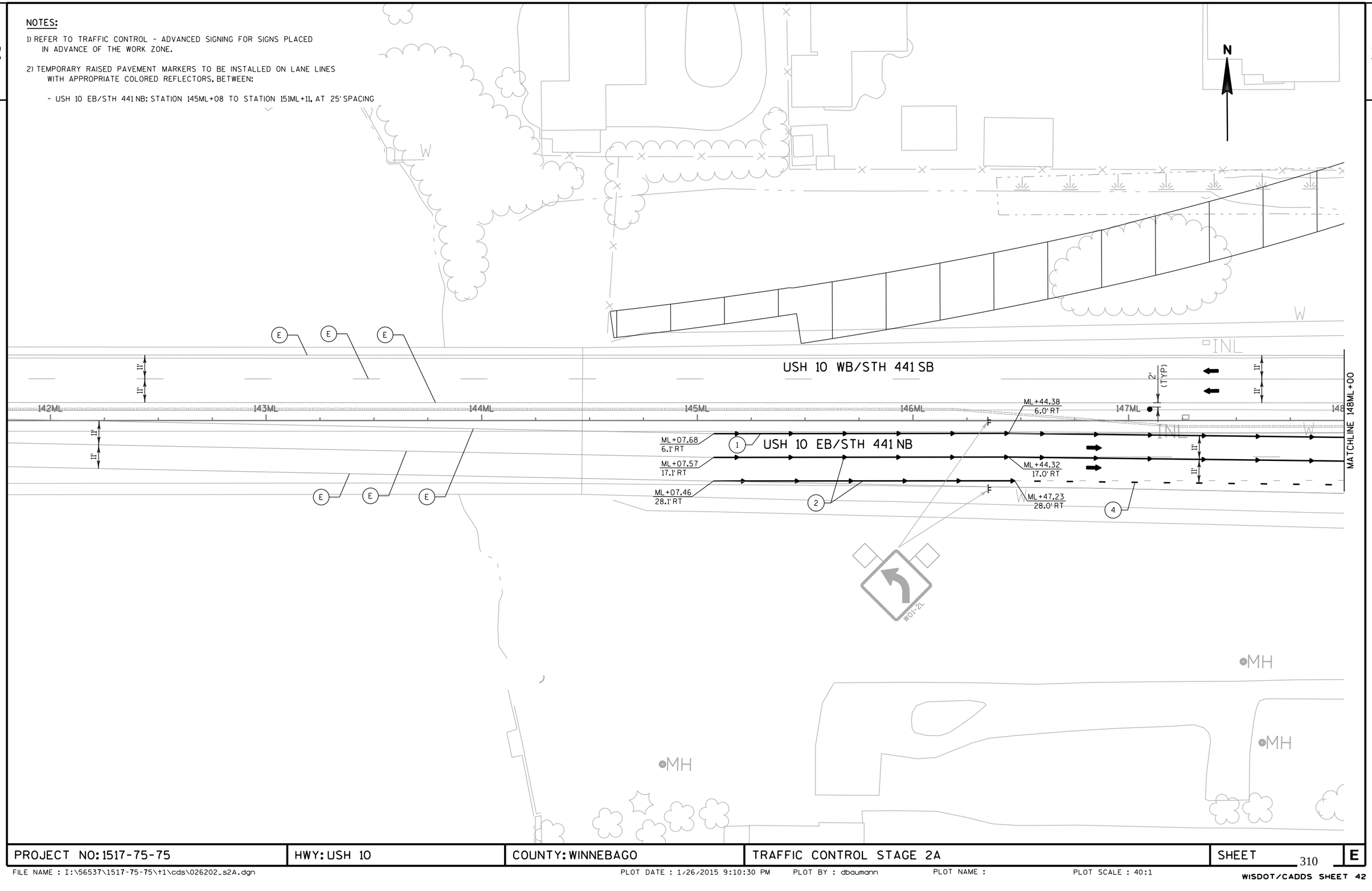
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PLOT DATE : 4/26/2015 1:23:52 PM PLOT BY : nspitzer PLOT NAME : $FILE$ PLOT SCALE : 1150:1
WISDOT/CADDS SHEET 42

NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

2) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/STH 441 NB: STATION 145ML+08 TO STATION 151ML+11, AT 25' SPACING



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 310	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/STH 441 NB: STATION 145ML+08 TO STATION 151ML+11, AT 25' SPACING

2

N

MATCHLINE 148ML+00

MATCHLINE 154ML+00

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

RACINE ROAD SW RAMP

ML+53.27
30.2' LT

ML+53.31
19.2' LT

ML+53.26
8.2' LT

ML+09.48 (PC)
30.1' LT

ML+10.97 (PC)
11.6' RT

ML+94.26
33.4' RT

ML+92.53
33.0' RT

R = 1100'

R = 1175'

50'
(TYP)

100'
(TYP)

25'
(TYP)

11'

2'
(TYP)

149ML

150ML

151ML

152ML

153ML

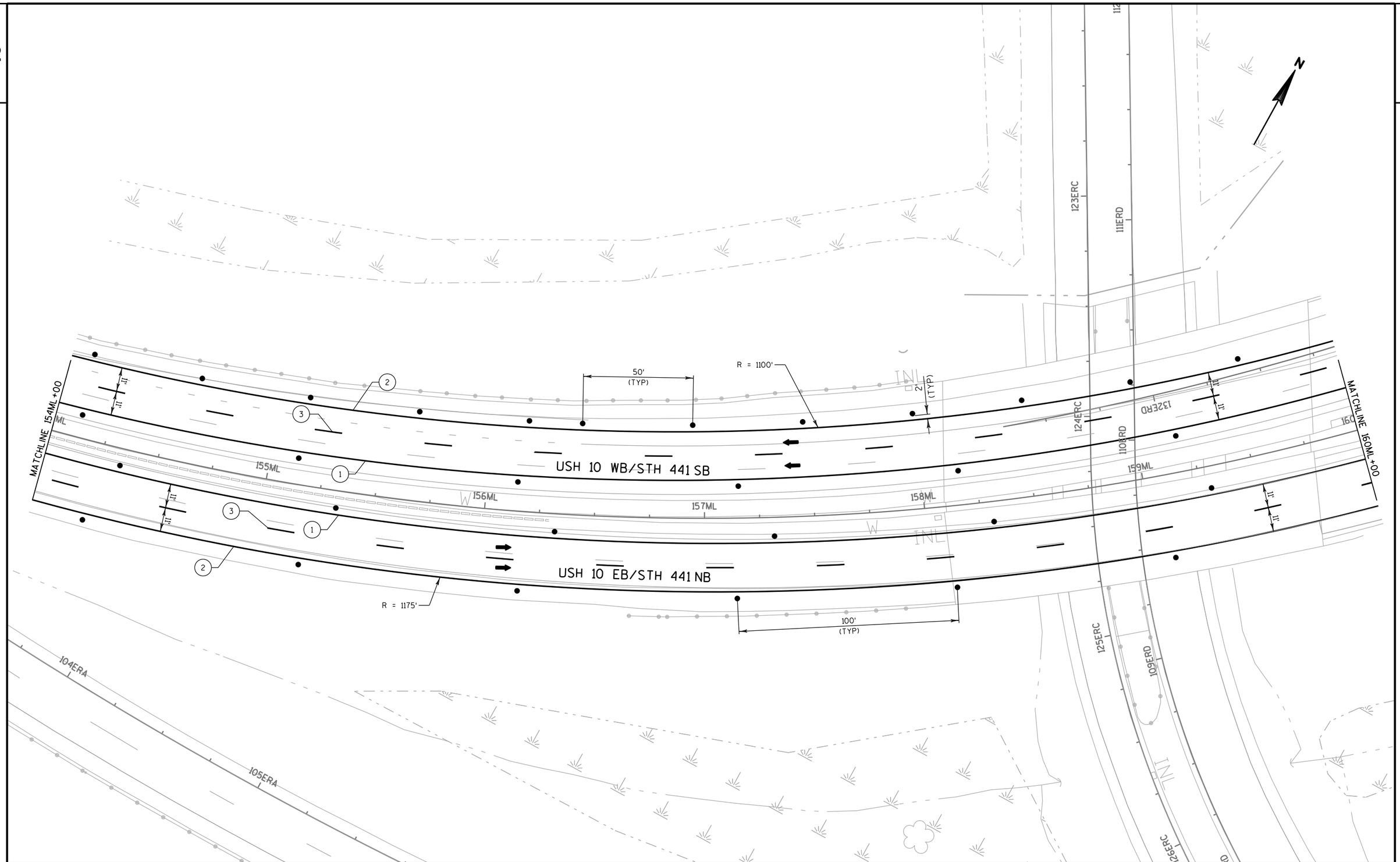
154ML

102ERA

103ERA

EXIT
E5-1
60" X 48"

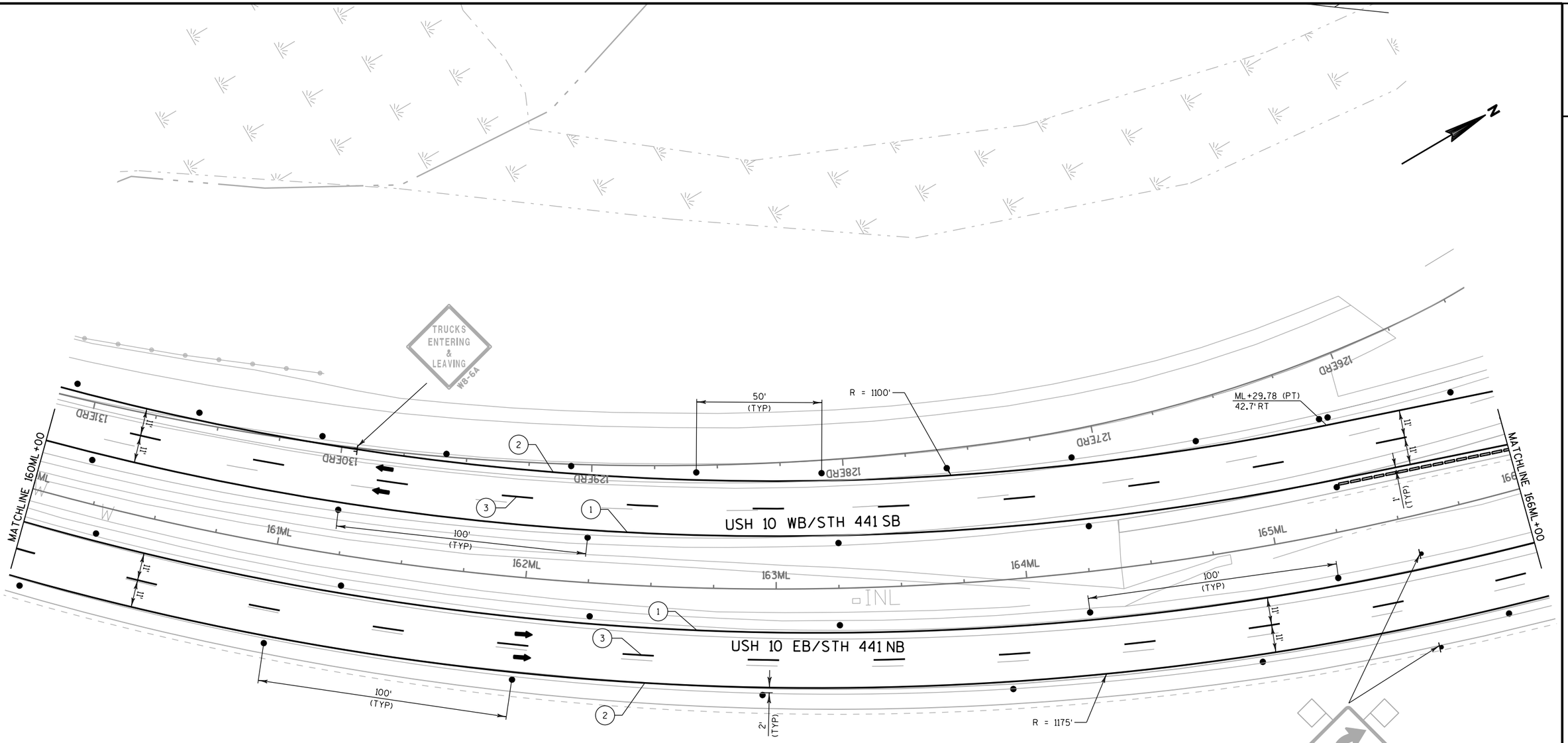
2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 312 E

FILE NAME : I:\56537\1517-75-75\t1\cds\026204_s2A.dgn PLOT DATE : 1/26/2015 9:10:34 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

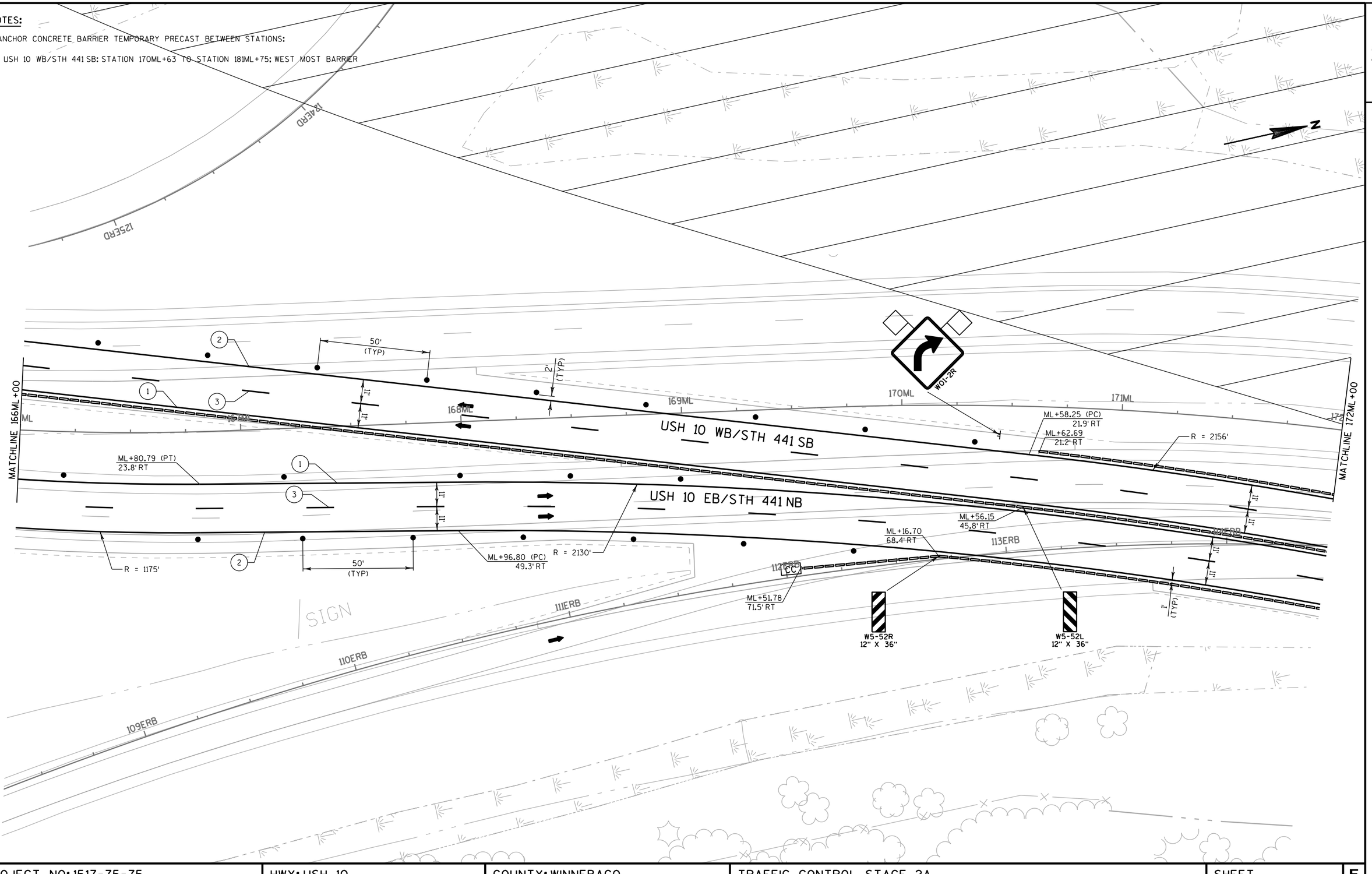


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 313	E

NOTES:

1) ANCHOR CONCRETE BARRIER TEMPORARY PRECAST BETWEEN STATIONS:

- USH 10 WB/STH 441 SB: STATION 170ML+63 TO STATION 181ML+75; WEST MOST BARRIER



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 314 E

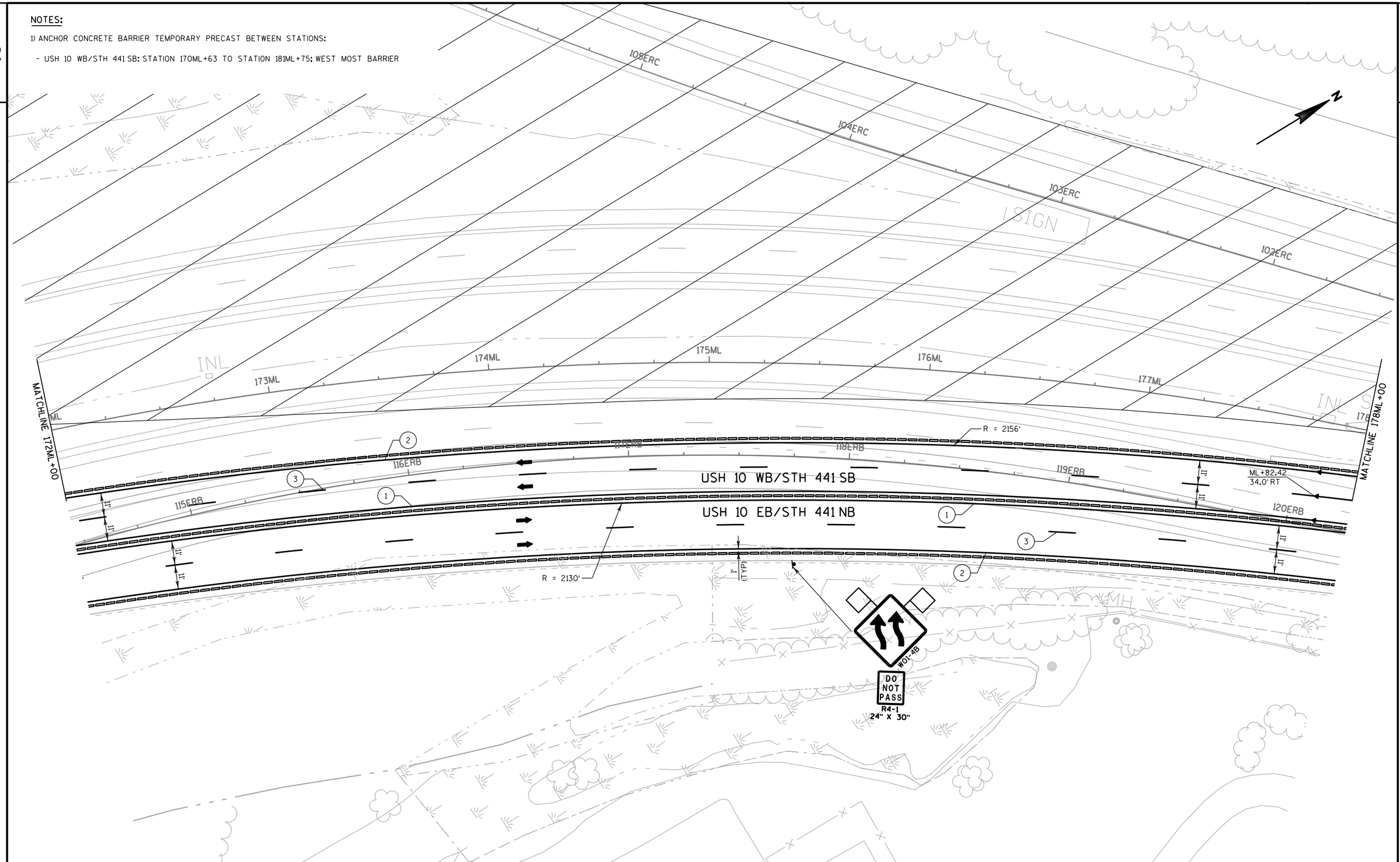
FILE NAME : I:\56537\1517-75-75\t1\cds\026206_s2A.dgn PLOT DATE : 1/26/2015 9:10:39 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

NOTES:

1) ANCHOR CONCRETE BARRIER TEMPORARY PRECAST BETWEEN STATIONS:

- USH 10 WB/STH 441 SB: STATION 170ML+63 TO STATION 181ML+75: WEST MOST BARRIER



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\026207_s2A.dgn PLOT DATE : 1/26/2015 9:10:41 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

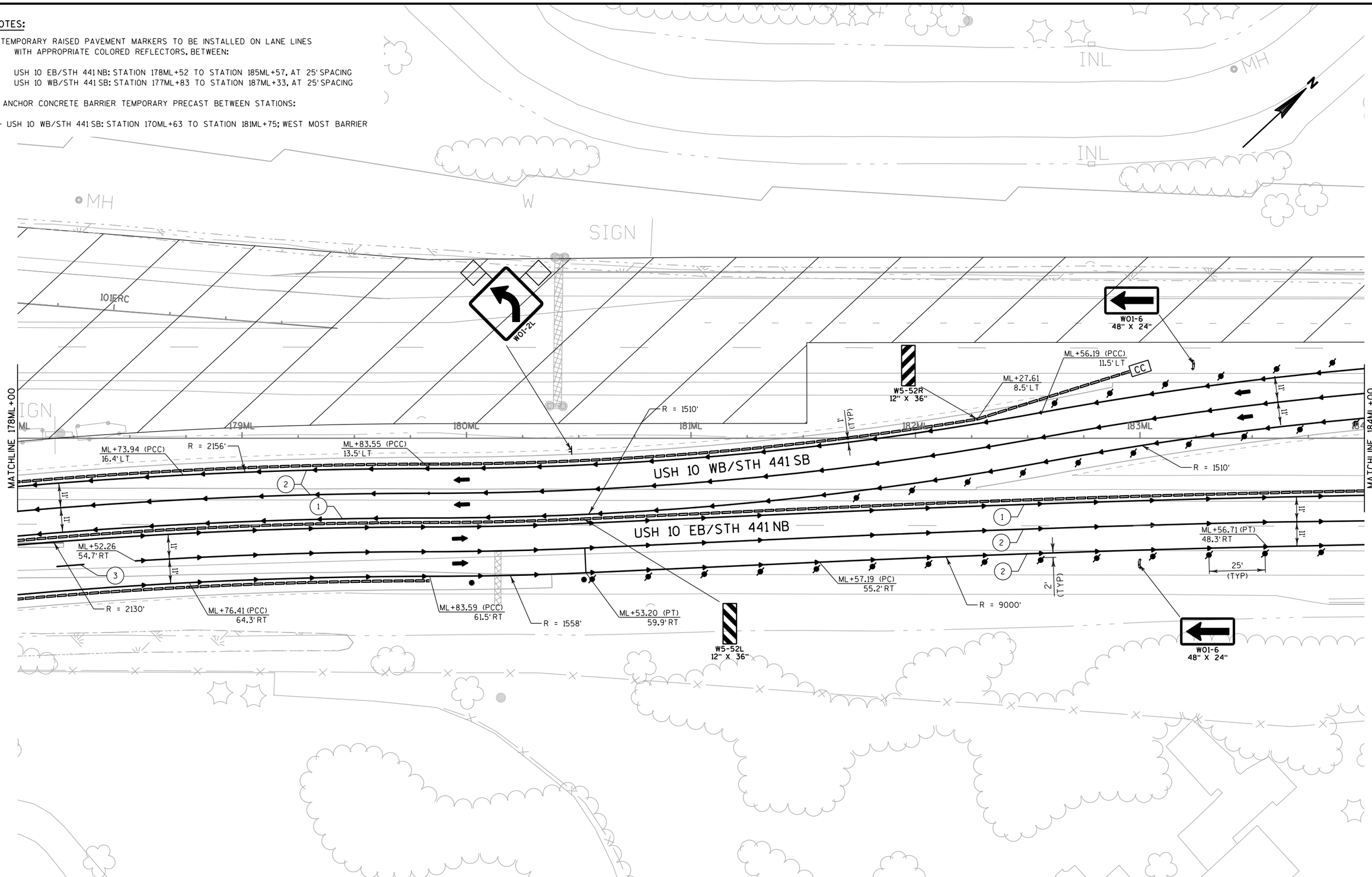
NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

USH 10 EB/STH 441 NB: STATION 178ML+52 TO STATION 185ML+57, AT 25' SPACING
USH 10 WB/STH 441 SB: STATION 177ML+83 TO STATION 187ML+33, AT 25' SPACING

2) ANCHOR CONCRETE BARRIER TEMPORARY PRECAST BETWEEN STATIONS:

- USH 10 WB/STH 441 SB: STATION 170ML+63 TO STATION 181ML+75; WEST MOST BARRIER



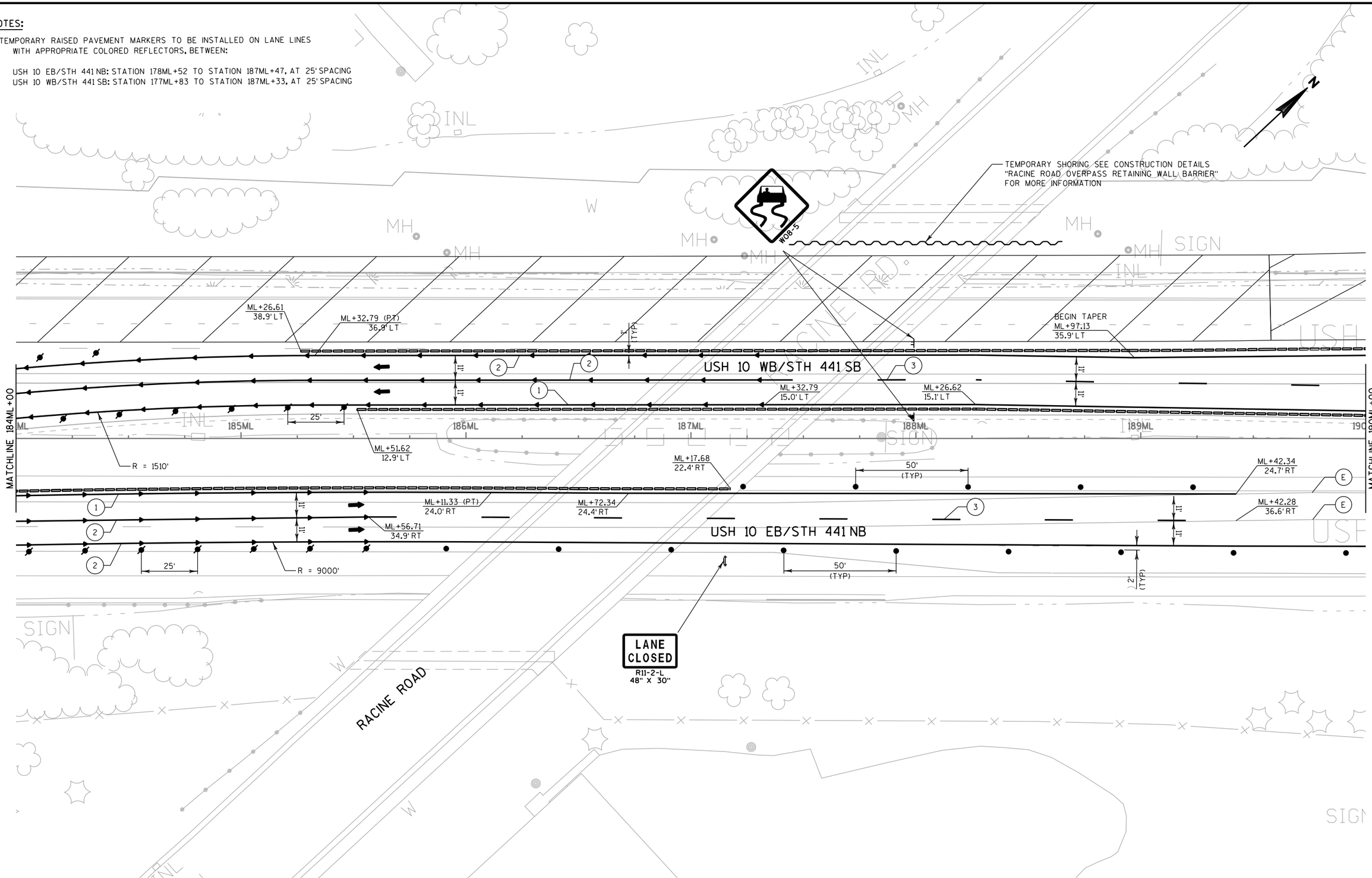
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\026208_s2A.dgn PLOT DATE : 1/26/2015 9:10:43 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

USH 10 EB/STH 441 NB: STATION 178ML+52 TO STATION 187ML+47, AT 25' SPACING
USH 10 WB/STH 441 SB: STATION 177ML+83 TO STATION 187ML+33, AT 25' SPACING

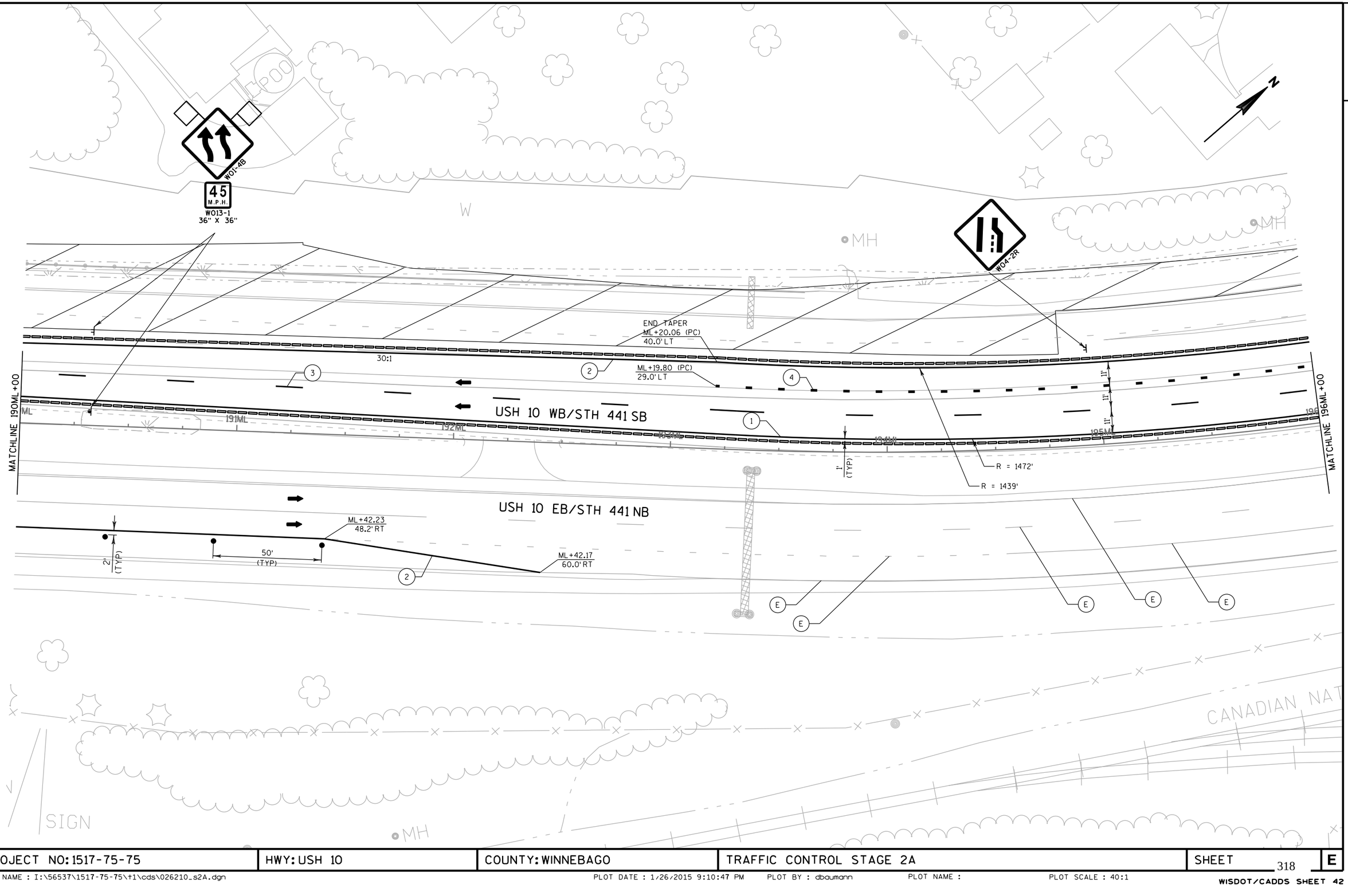


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 317	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026209_s2A.dgn PLOT DATE : 3/23/2015 2:10:52 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 40:1

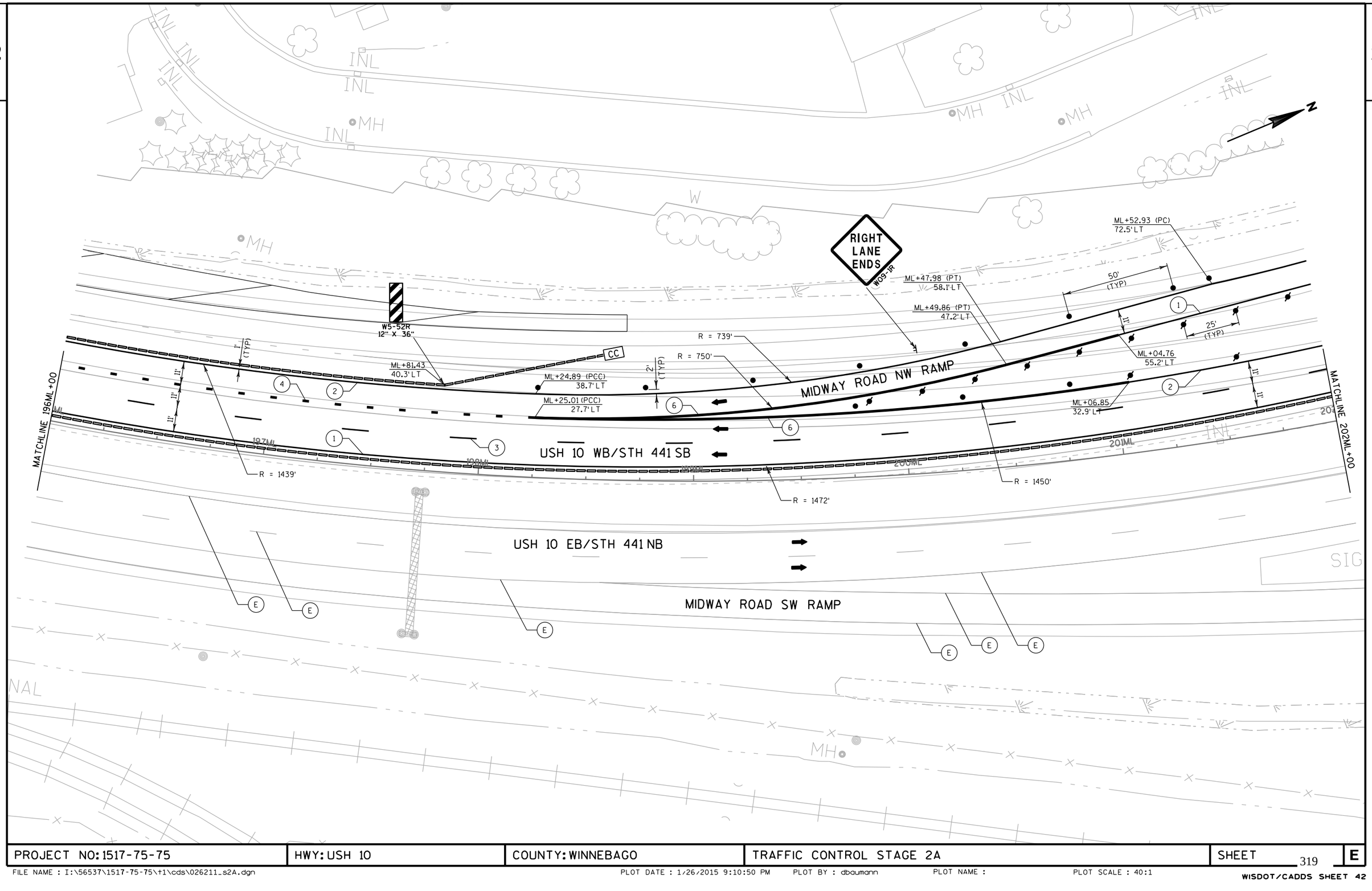
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 318	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\026211_s2A.dgn PLOT DATE : 1/26/2015 9:10:50 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

2

MAX. 11' WIDTH W12-52

W04-3R

ROAD WORK AHEAD W20-1

N

MIDWAY ROAD NW RAMP

ML+09.10
76.2' LT

ML+14.74
65.5' LT

50' (TYP)

2' (TYP)

R = 1450'

ML+62.19 (PT)
45.1' LT

50' (TYP)

ML+09.17
46.3' LT

11'

11'

11'

1' (TYP)

ML+01.96
35.3' LT

ML+63.17
21.1' LT

CC

ML+02.02
24.3' LT

USH 10 WB/STH 441 SB

MATCHLINE 202ML+00

202ML

203ML

204ML

205ML

206ML

207ML

MATCHLINE 208ML+00

USH 10 EB/STH 441 NB

MIDWAY ROAD SW RAMP

SIGN

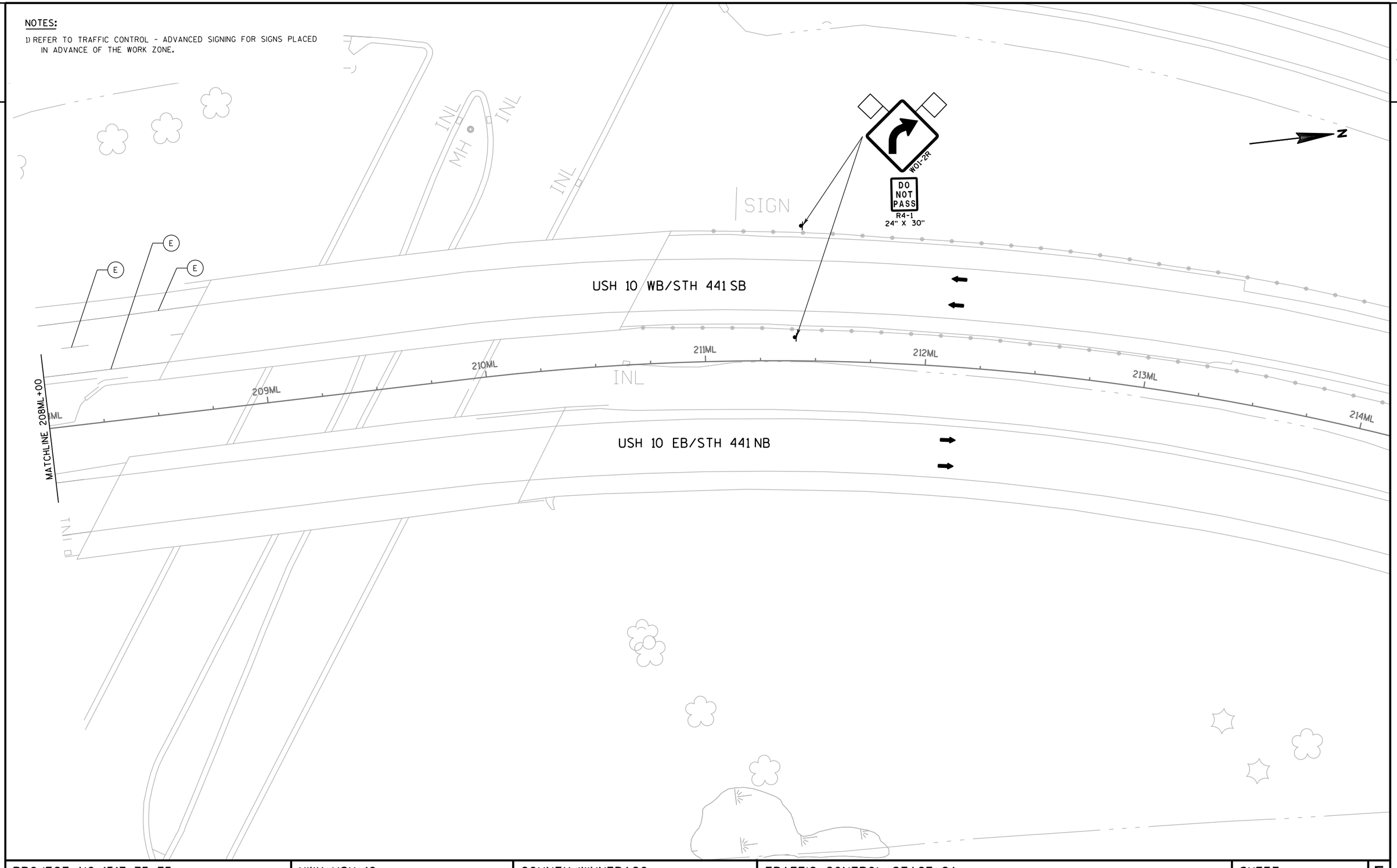
MH

SIGN

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 320	E

NOTES:

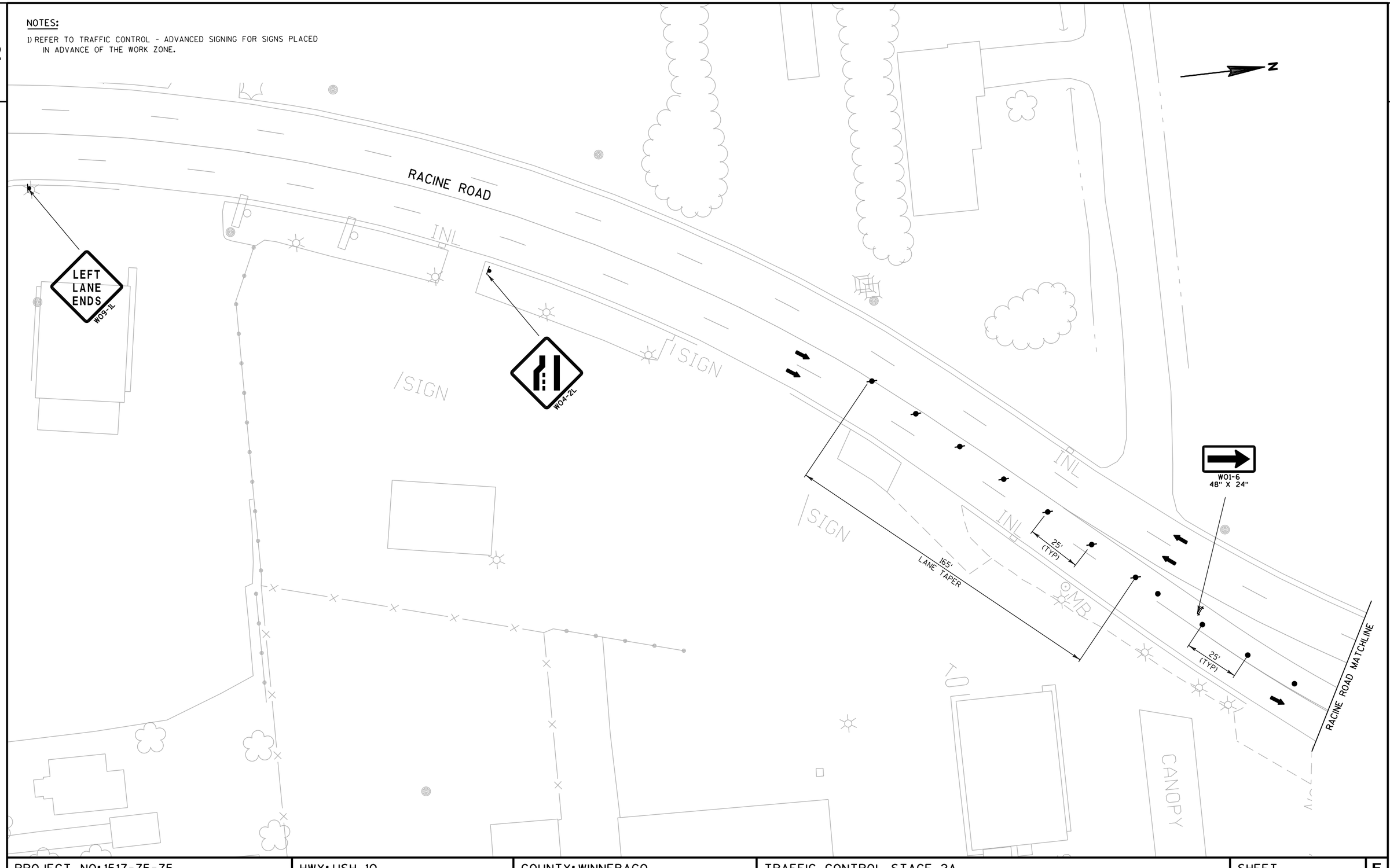
1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 321	E

NOTES:

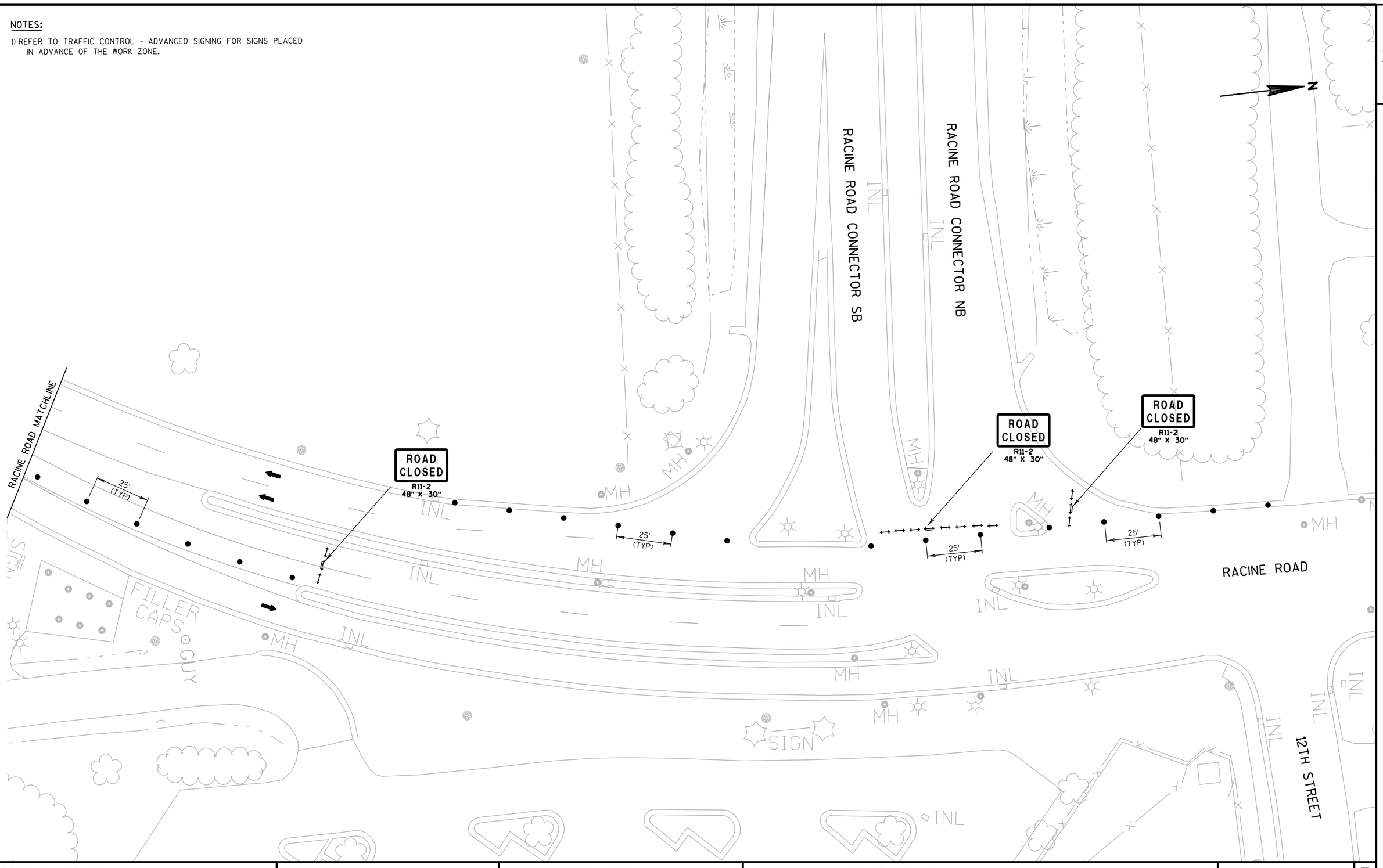
1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET 322 E

NOTES:

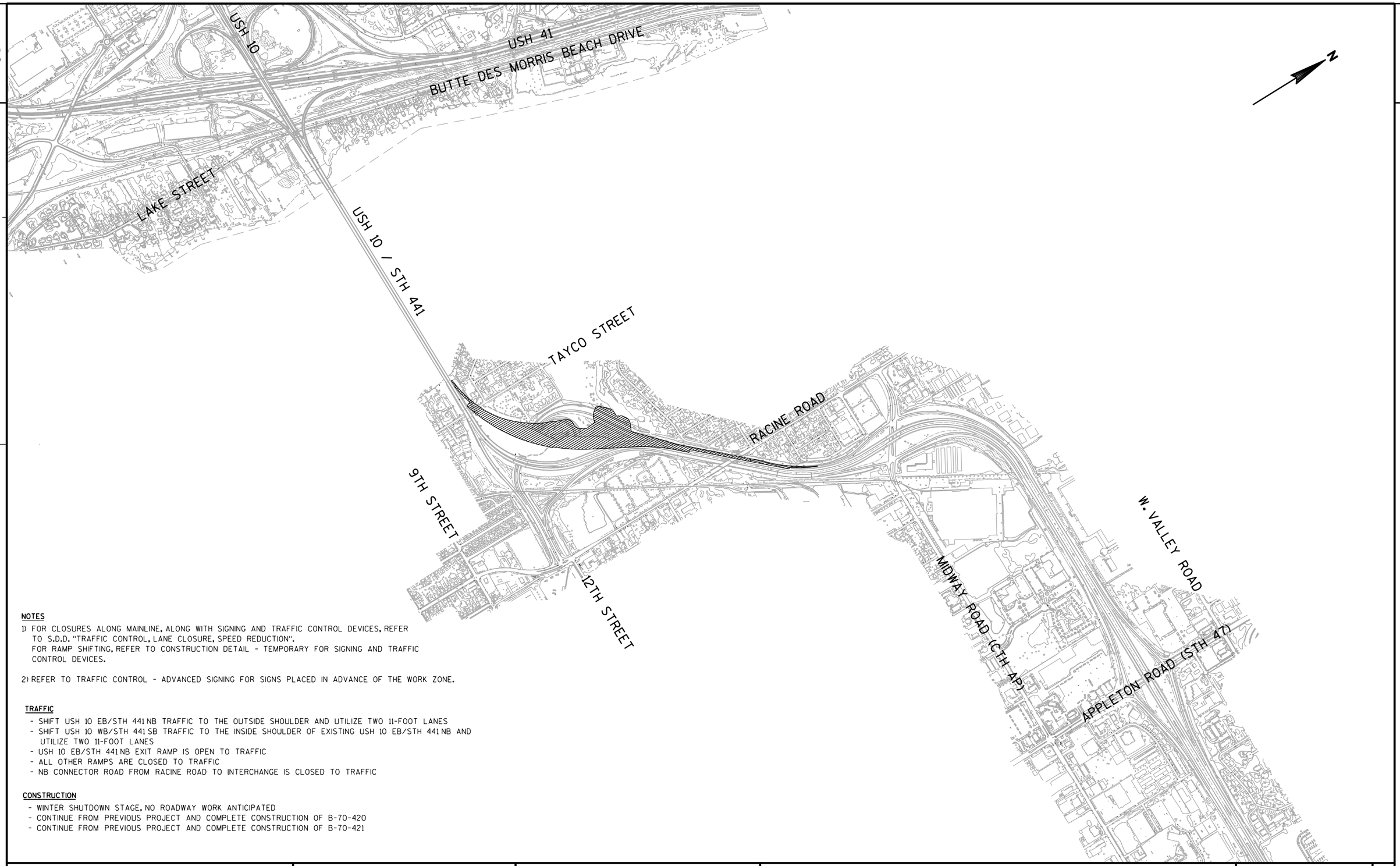
1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2A	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\026215_s2A.dgn PLOT DATE : 1/26/2015 9:10:59 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42



NOTES

1) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". FOR RAMP SHIFTING, REFER TO CONSTRUCTION DETAIL - TEMPORARY FOR SIGNING AND TRAFFIC CONTROL DEVICES.

2) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

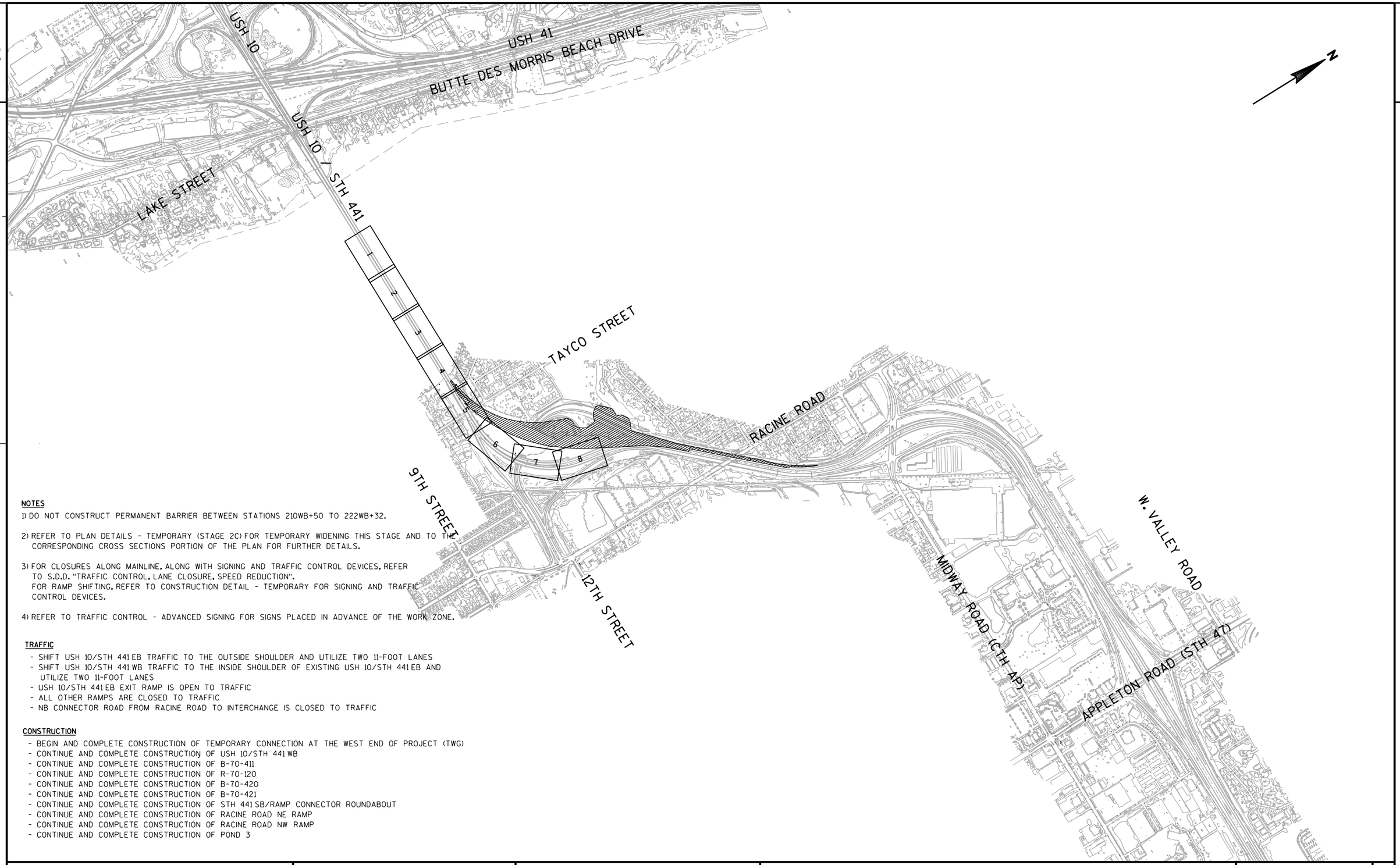
TRAFFIC

- SHIFT USH 10 EB/STH 441 NB TRAFFIC TO THE OUTSIDE SHOULDER AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10 WB/STH 441 SB TRAFFIC TO THE INSIDE SHOULDER OF EXISTING USH 10 EB/STH 441 NB AND UTILIZE TWO 11-FOOT LANES
- USH 10 EB/STH 441 NB EXIT RAMP IS OPEN TO TRAFFIC
- ALL OTHER RAMPS ARE CLOSED TO TRAFFIC
- NB CONNECTOR ROAD FROM RACINE ROAD TO INTERCHANGE IS CLOSED TO TRAFFIC

CONSTRUCTION

- WINTER SHUTDOWN STAGE, NO ROADWAY WORK ANTICIPATED
- CONTINUE FROM PREVIOUS PROJECT AND COMPLETE CONSTRUCTION OF B-70-420
- CONTINUE FROM PREVIOUS PROJECT AND COMPLETE CONSTRUCTION OF B-70-421

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2B KEYMAP OVERVIEW	SHEET 324	E



NOTES

1) DO NOT CONSTRUCT PERMANENT BARRIER BETWEEN STATIONS 210WB+50 TO 222WB+32.

2) REFER TO PLAN DETAILS - TEMPORARY (STAGE 2C) FOR TEMPORARY WIDENING THIS STAGE AND TO THE CORRESPONDING CROSS SECTIONS PORTION OF THE PLAN FOR FURTHER DETAILS.

3) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". FOR RAMP SHIFTING, REFER TO CONSTRUCTION DETAIL - TEMPORARY FOR SIGNING AND TRAFFIC CONTROL DEVICES.

4) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

TRAFFIC

- SHIFT USH 10/STH 441 EB TRAFFIC TO THE OUTSIDE SHOULDER AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10/STH 441 WB TRAFFIC TO THE INSIDE SHOULDER OF EXISTING USH 10/STH 441 EB AND UTILIZE TWO 11-FOOT LANES
- USH 10/STH 441 EB EXIT RAMP IS OPEN TO TRAFFIC
- ALL OTHER RAMPS ARE CLOSED TO TRAFFIC
- NB CONNECTOR ROAD FROM RACINE ROAD TO INTERCHANGE IS CLOSED TO TRAFFIC

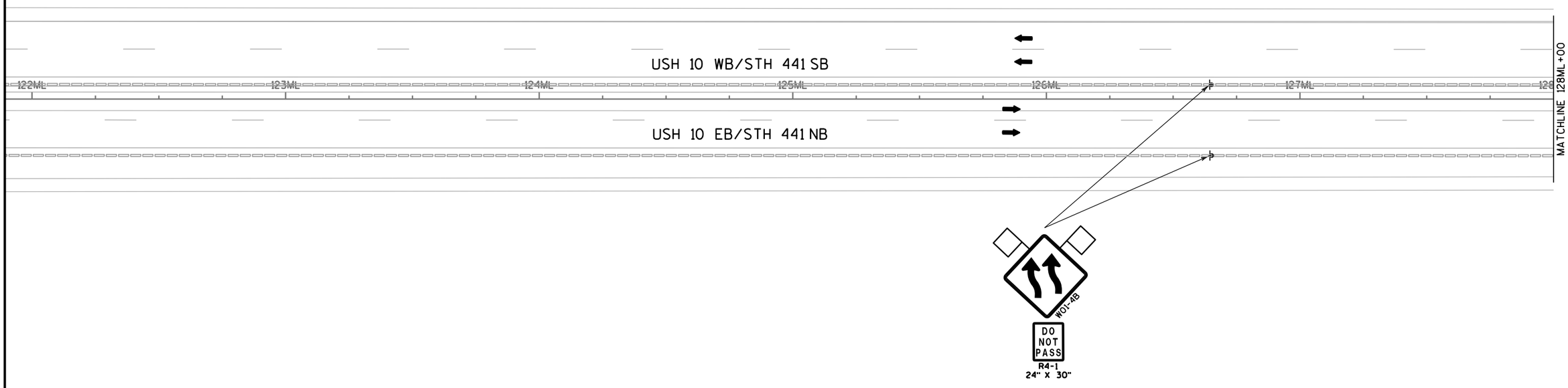
CONSTRUCTION

- BEGIN AND COMPLETE CONSTRUCTION OF TEMPORARY CONNECTION AT THE WEST END OF PROJECT (TWG)
- CONTINUE AND COMPLETE CONSTRUCTION OF USH 10/STH 441 WB
- CONTINUE AND COMPLETE CONSTRUCTION OF B-70-411
- CONTINUE AND COMPLETE CONSTRUCTION OF R-70-120
- CONTINUE AND COMPLETE CONSTRUCTION OF B-70-420
- CONTINUE AND COMPLETE CONSTRUCTION OF B-70-421
- CONTINUE AND COMPLETE CONSTRUCTION OF STH 441 SB/RAMP CONNECTOR ROUNDABOUT
- CONTINUE AND COMPLETE CONSTRUCTION OF RACINE ROAD NE RAMP
- CONTINUE AND COMPLETE CONSTRUCTION OF RACINE ROAD NW RAMP
- CONTINUE AND COMPLETE CONSTRUCTION OF POND 3

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C KEYMAP OVERVIEW	SHEET 325	E

NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

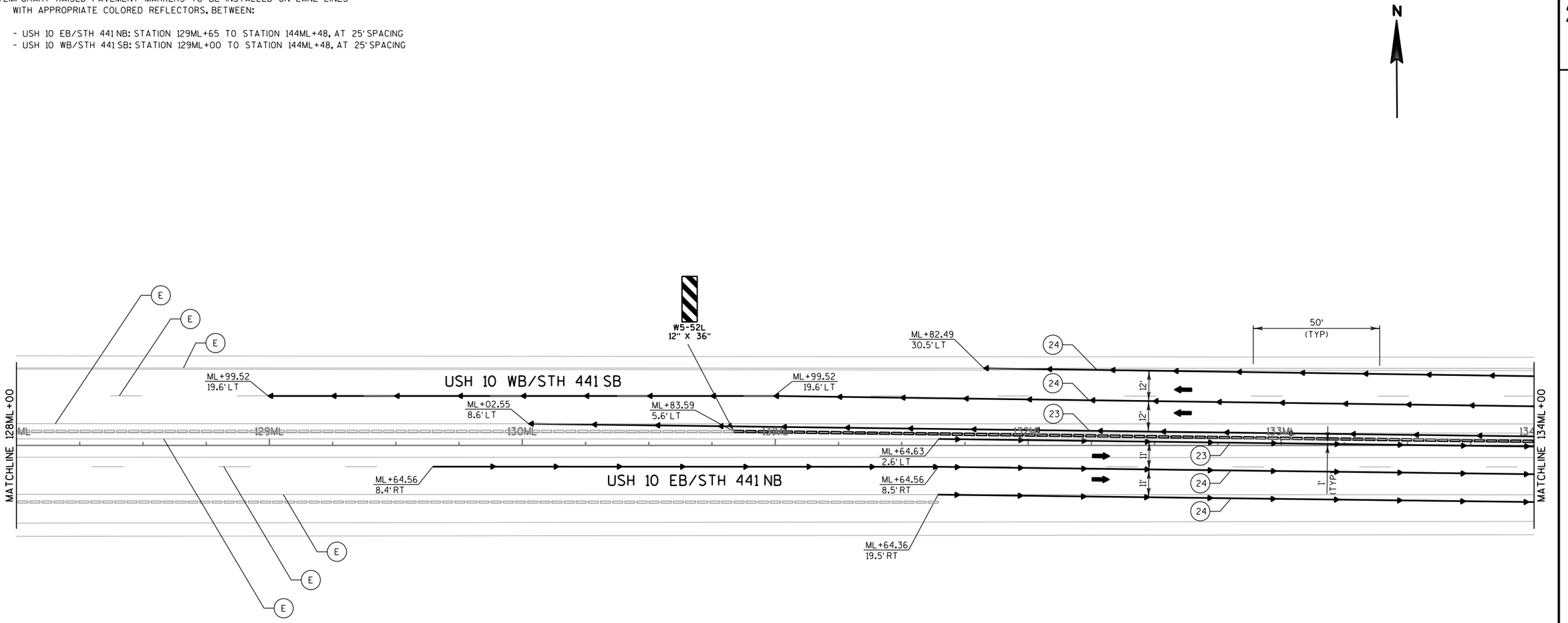


NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/STH 441 NB: STATION 129ML+65 TO STATION 144ML+48, AT 25' SPACING
- USH 10 WB/STH 441 SB: STATION 129ML+00 TO STATION 144ML+48, AT 25' SPACING

2

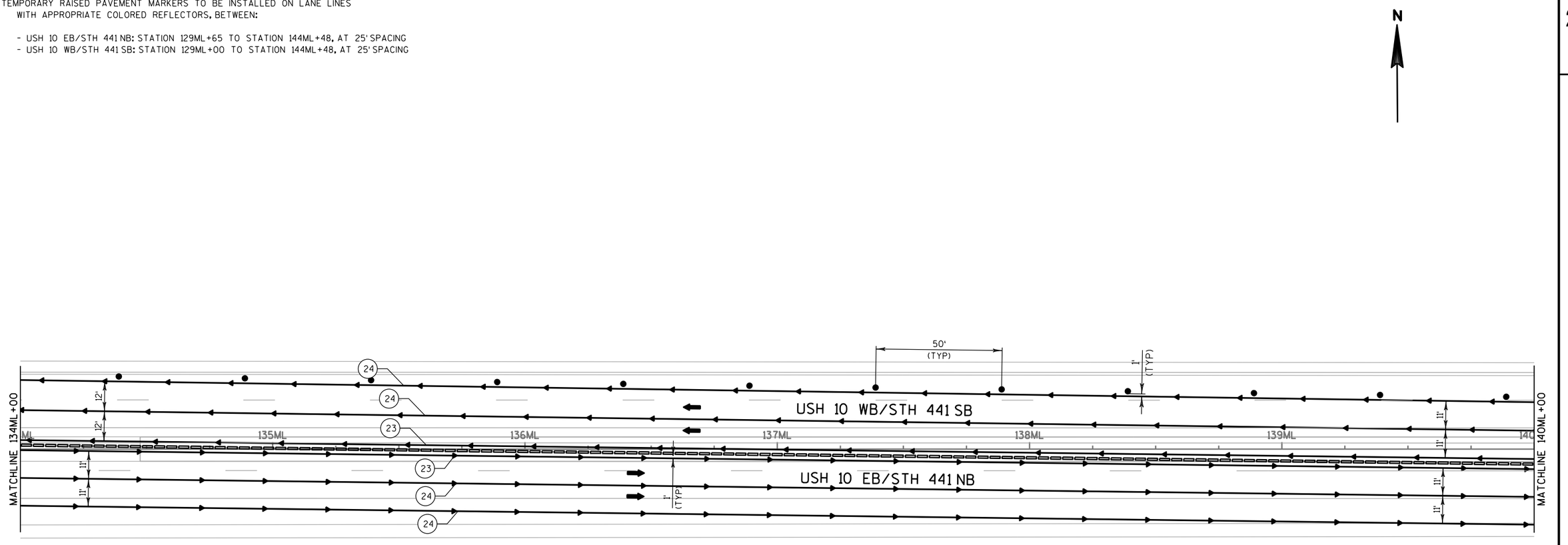


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 327	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/STH 441 NB: STATION 129ML+65 TO STATION 144ML+48, AT 25' SPACING
- USH 10 WB/STH 441 SB: STATION 129ML+00 TO STATION 144ML+48, AT 25' SPACING



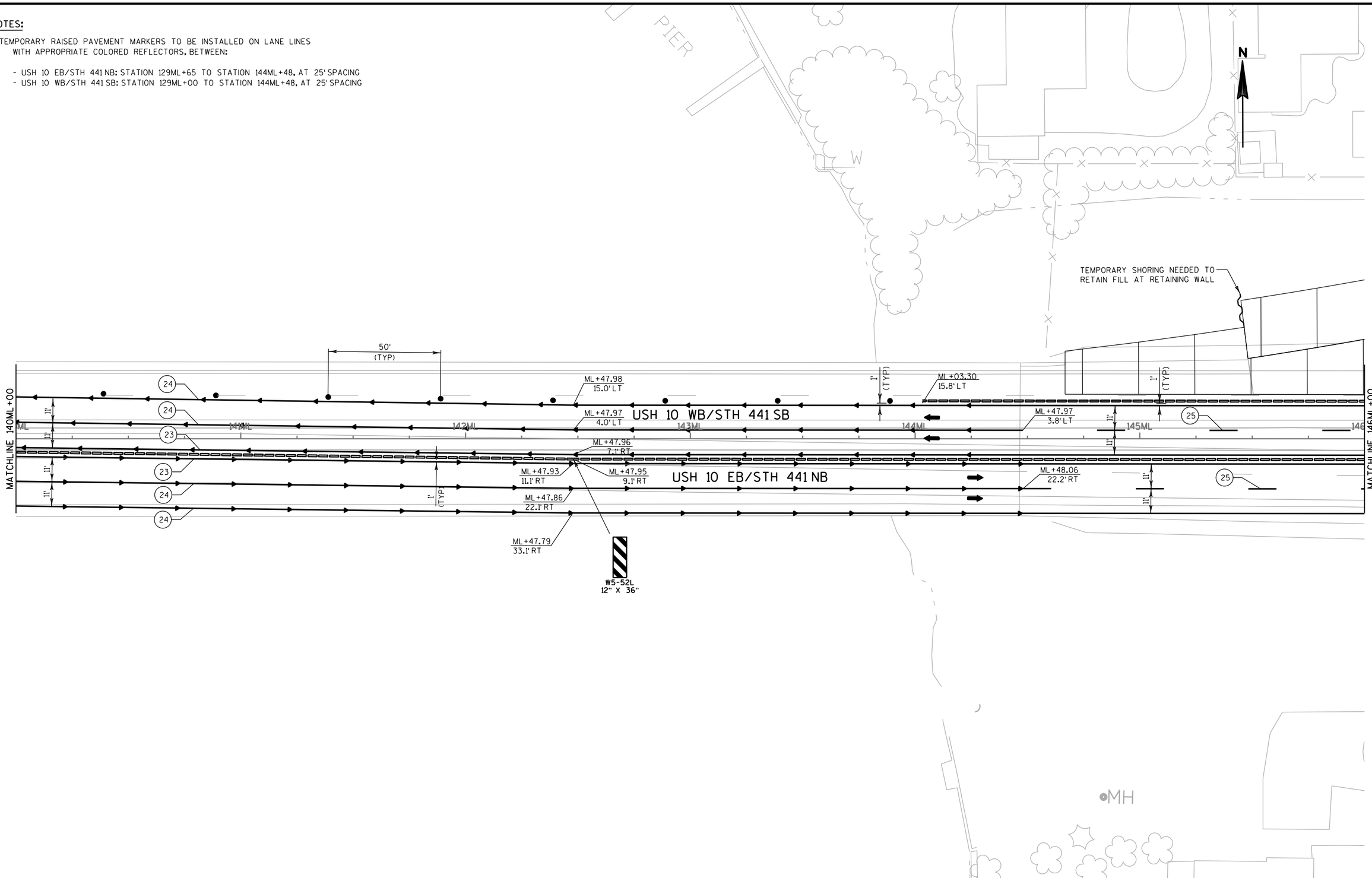
2

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 328	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES WITH APPROPRIATE COLORED REFLECTORS, BETWEEN:

- USH 10 EB/STH 441 NB: STATION 129ML+65 TO STATION 144ML+48, AT 25' SPACING
- USH 10 WB/STH 441 SB: STATION 129ML+00 TO STATION 144ML+48, AT 25' SPACING



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 329	E

2

N

W01-4B
DO NOT PASS
R4-1
24" X 30"

W5-52R
12" X 36"

W5-52L
12" X 36"

TEMPORARY SHORING NEEDED TO
RETAIN FILL AND KEEP POSITIVE DRAINAGE
148ML+08 - 148ML+45

ML+28.27
15.5' LT

100'
(TYP)

ML+03.00
21.8' LT

CC

ML+03.60 (PC)
14.3' LT

R = 1100'

MATCHLINE 146ML+00

MATCHLINE 152ML+00

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

146ML
147ML
148ML
149ML
150ML
151ML
152ML

11'
11'
11'
11'

1'
(TYP)

ML+24.08
9.7' RT

ML+24.08
11.7' RT

ML+24.06 (PC)
33.7' RT

ML+97.32
33.7' RT

ML+82.30
33.4' RT

RACINE ROAD SW RAMP

R = 1175'

W01-2L

MH
INL
SIGN
W

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 330	E

2

N

MH

MATCHLINE 152ML+00

MATCHLINE 158ML+00

152ML

153ML

154ML

155ML

156ML

157ML

158ML

100'
(TYP)

R = 1100'

2'
(TYP)

11'

11'

11'

11'

24

25

23

27

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

1'
(TYP)

R = 1175'

ML+92.53
33.0' RT

25'
(TYP)

102ERA

103ERA

104ERA

105ERA

SIGN

RACINE ROAD SW RAMP

EXIT

E5-1
60" X 48"

E

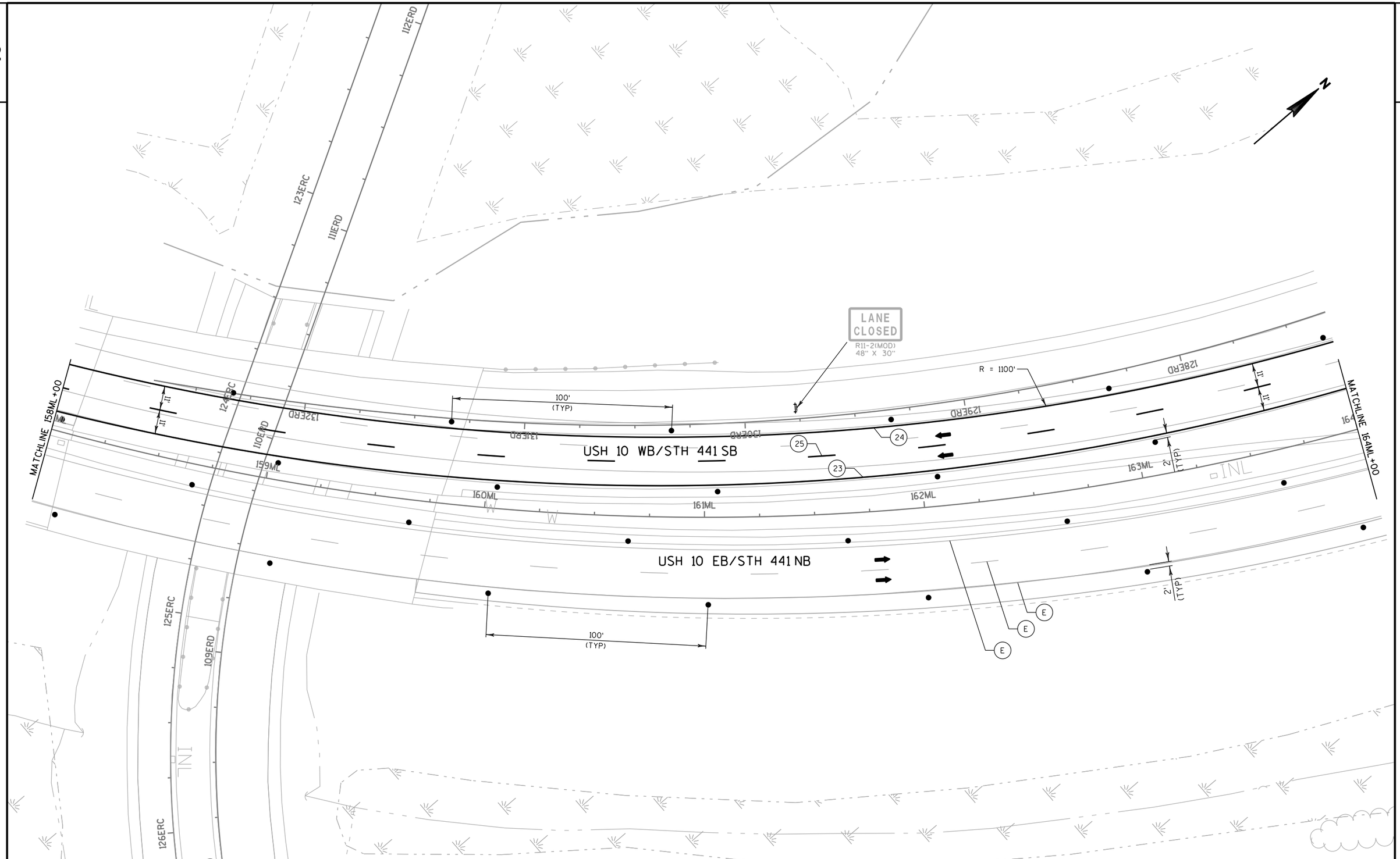
E

E

100'
(TYP)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 331	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 332	E

2

N

R = 1100'

124ERD

125ERD

126ERD

127ERD

ML+12.43 (PT)
42.6' LT

ML+29.78
42.7' LT

ML+29.73
31.7' LT

ML+29.69
20.7' LT

24

25

23

11'

11'

1'
(TYP)

50'
(TYP)

MATCHLINE 164ML+00

ML

165ML

166ML

167ML

168ML

169ML

170ML

USH 10 WB/STH 441 SB

E

E

E

100'

USH 10 EB/STH 441 NB

2'
(TYP)

W01-2R

SIGN

112ERB

111ERB

110ERB

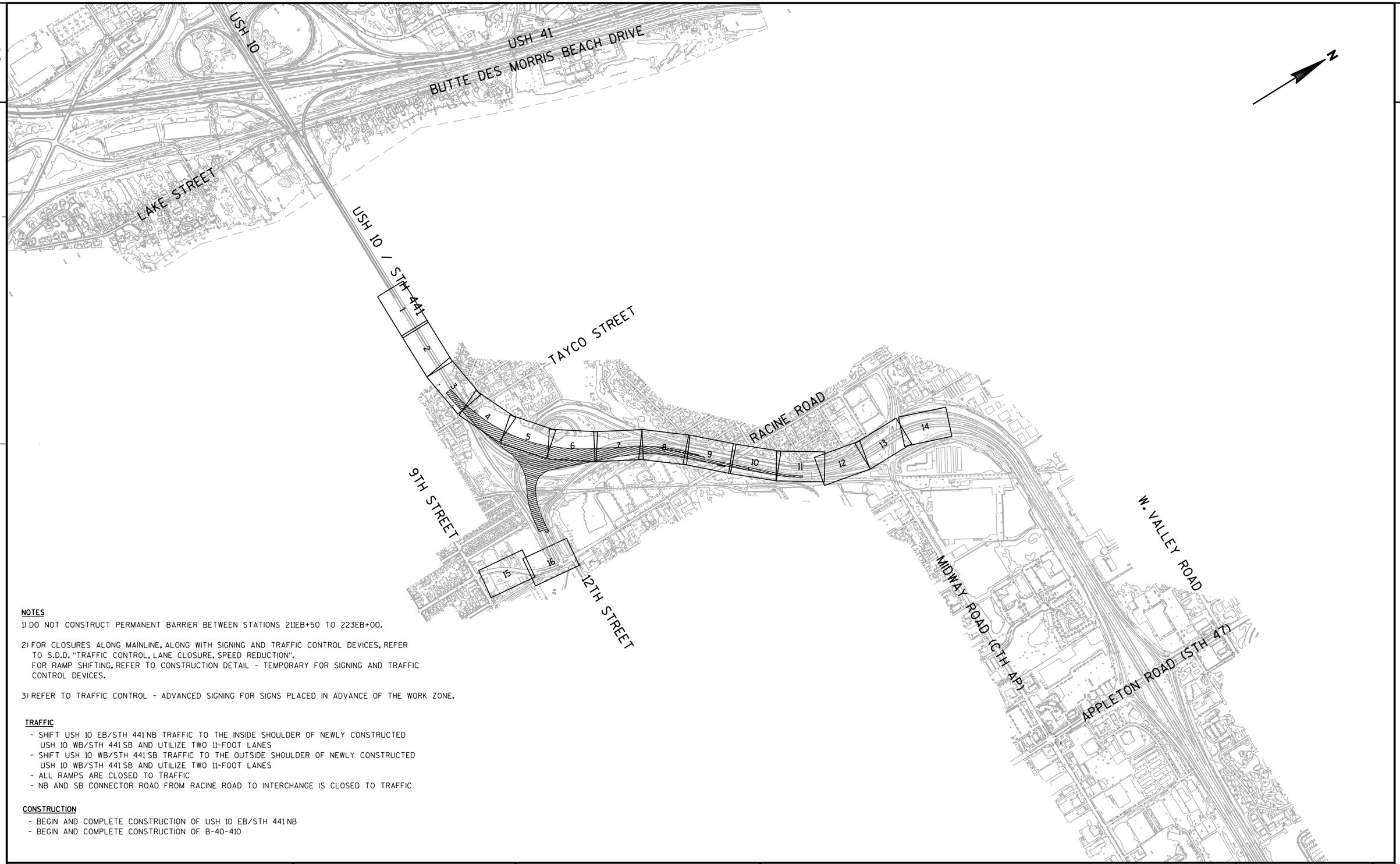
109ERB

108ERB

RACINE ROAD SE RAMP

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 2C	SHEET 333	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026238_s2C.dgn PLOT DATE : 1/26/2015 9:11:35 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1



NOTES

1) DO NOT CONSTRUCT PERMANENT BARRIER BETWEEN STATIONS 211EB+50 TO 223EB+00.

2) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". FOR RAMP SHIFTING, REFER TO CONSTRUCTION DETAIL - TEMPORARY FOR SIGNING AND TRAFFIC CONTROL DEVICES.

3) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

TRAFFIC

- SHIFT USH 10 EB/STH 441 NB TRAFFIC TO THE INSIDE SHOULDER OF NEWLY CONSTRUCTED USH 10 WB/STH 441 SB AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10 WB/STH 441 SB TRAFFIC TO THE OUTSIDE SHOULDER OF NEWLY CONSTRUCTED USH 10 WB/STH 441 SB AND UTILIZE TWO 11-FOOT LANES
- ALL RAMPS ARE CLOSED TO TRAFFIC
- NB AND SB CONNECTOR ROAD FROM RACINE ROAD TO INTERCHANGE IS CLOSED TO TRAFFIC

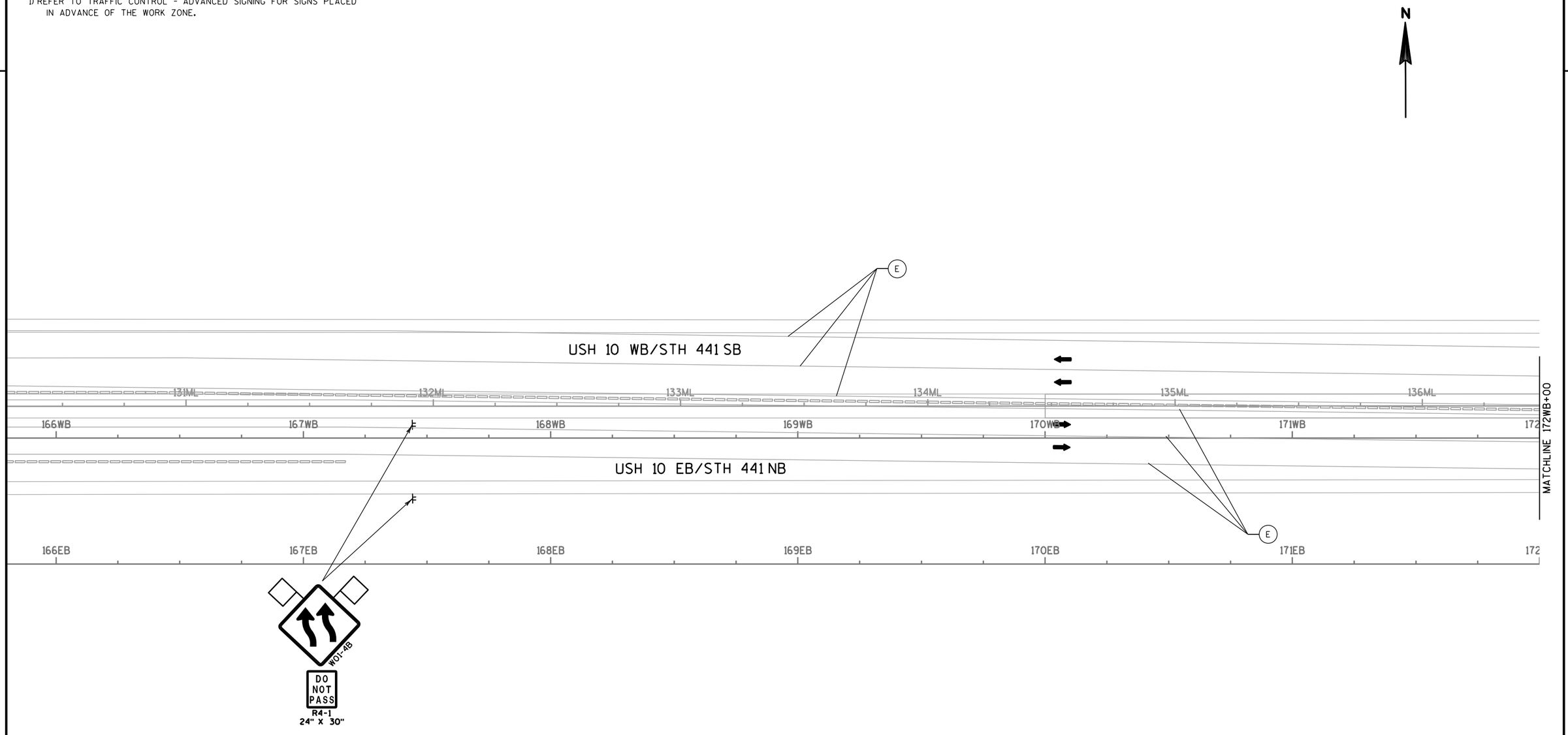
CONSTRUCTION

- BEGIN AND COMPLETE CONSTRUCTION OF USH 10 EB/STH 441 NB
- BEGIN AND COMPLETE CONSTRUCTION OF B-40-410

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A KEYMAP OVERVIEW	SHEET 334	E

NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.



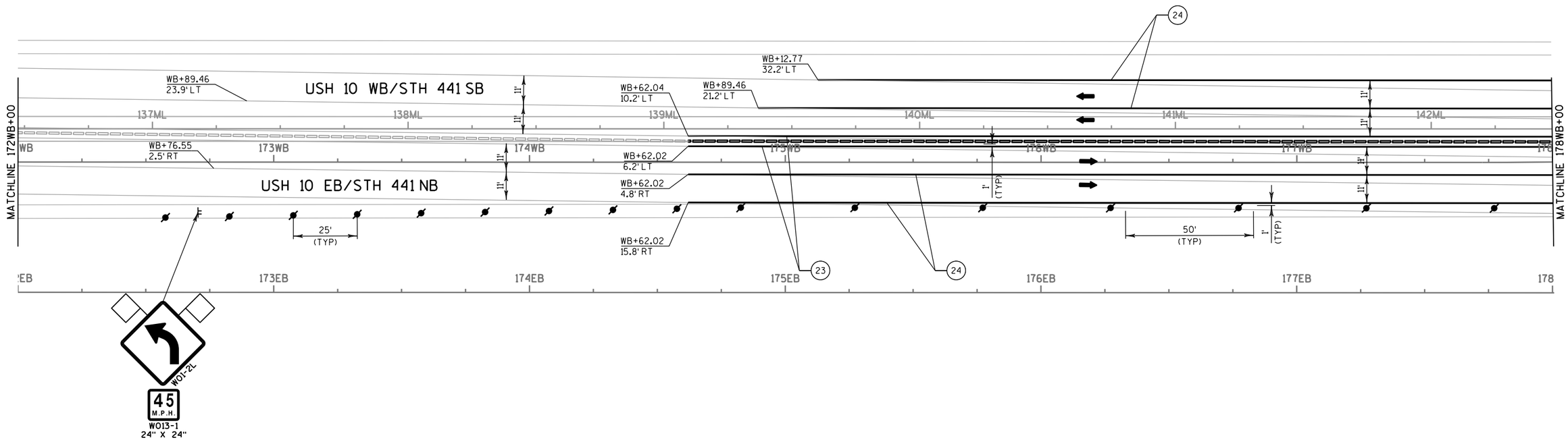
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 335	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 137WB+77 TO STATION 178WB+81, AT 25' SPACING
- USH 10 WB/STH 441 SB: STATION 137WB+89 TO STATION 178ML+83, AT 25' SPACING

2

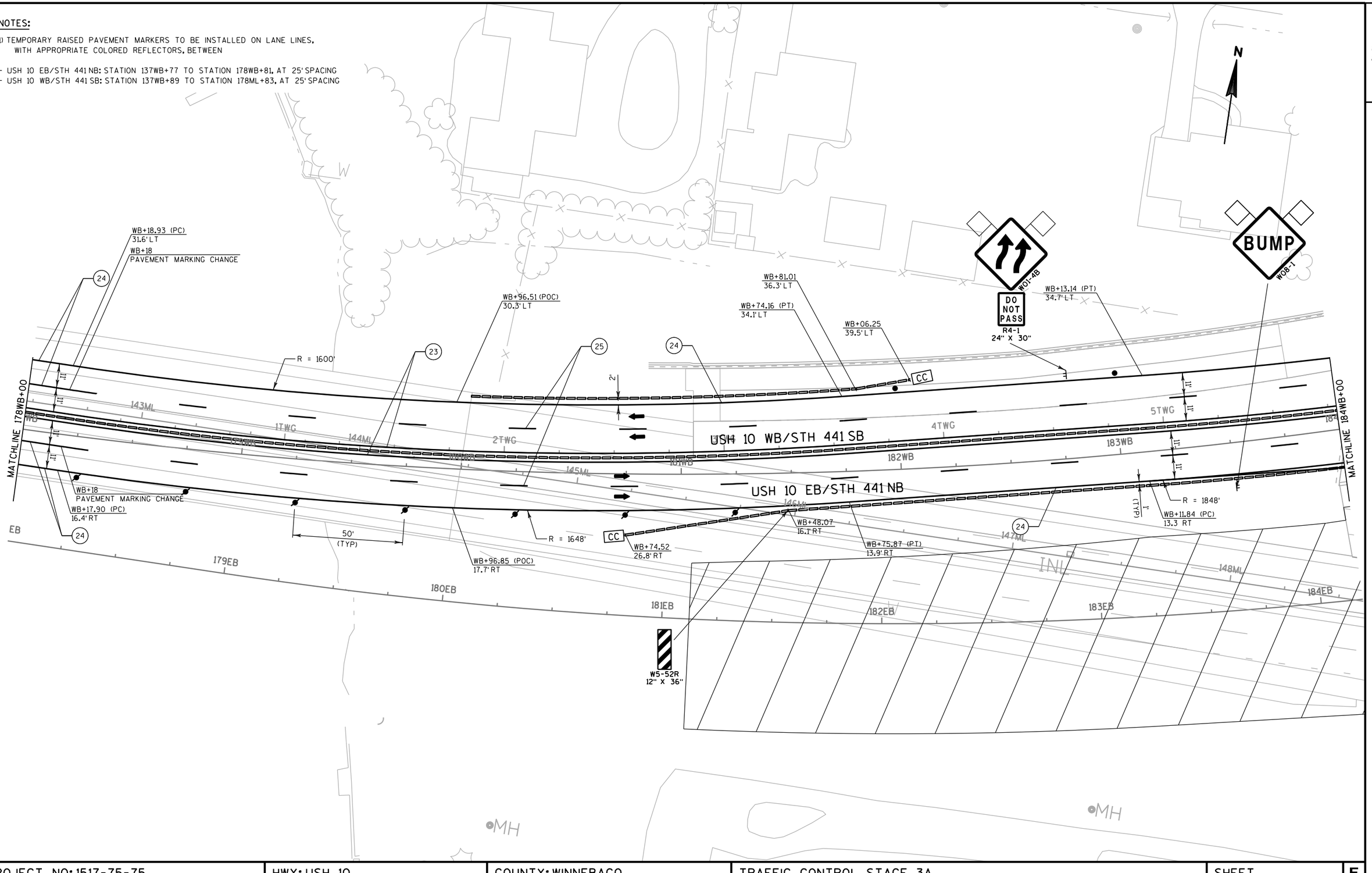


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 336	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 137WB+77 TO STATION 178WB+81, AT 25' SPACING
- USH 10 WB/STH 441 SB: STATION 137WB+89 TO STATION 178ML+83, AT 25' SPACING

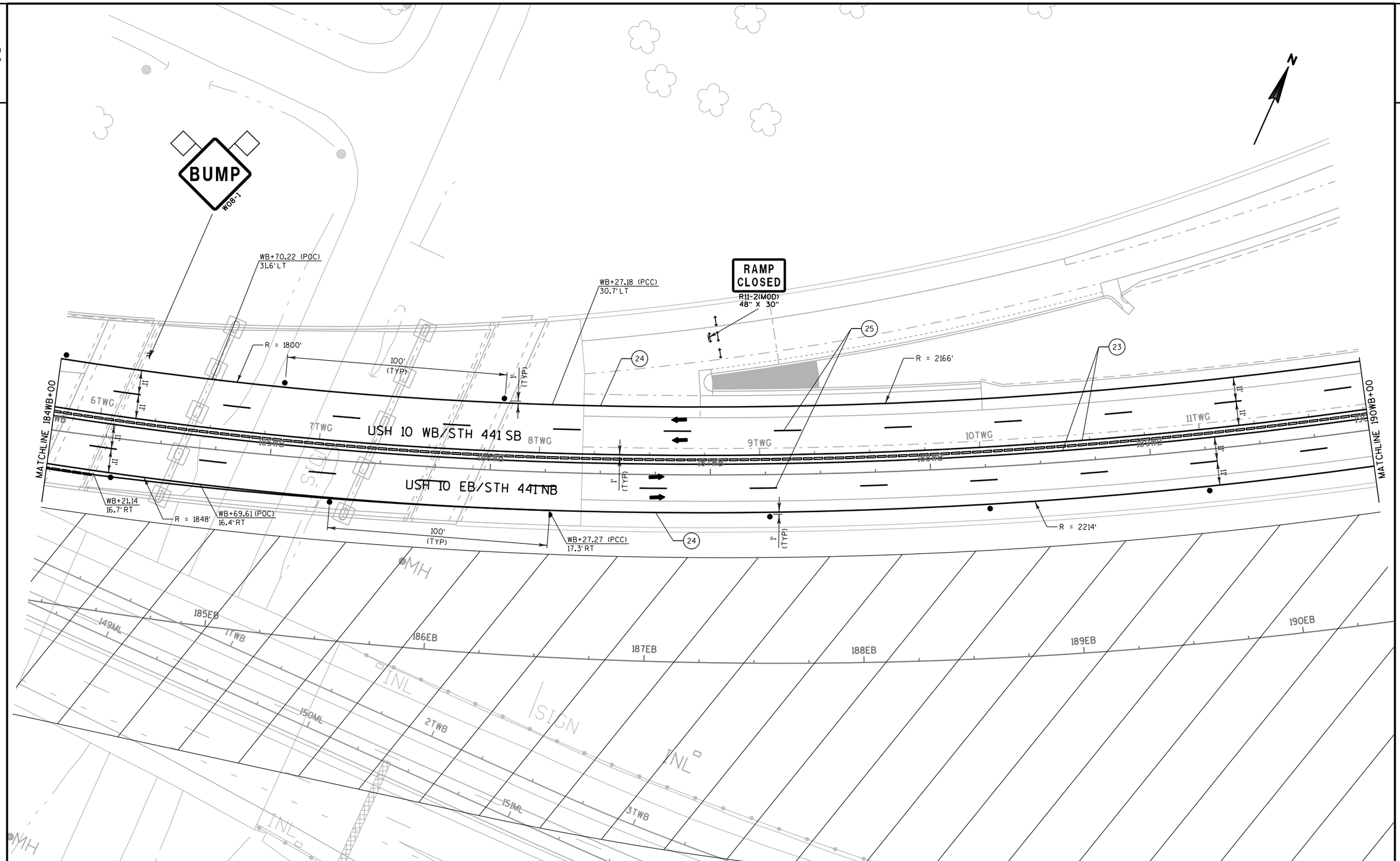


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 337	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026303_s3A.dgn PLOT DATE : 4/15/2015 10:05:32 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

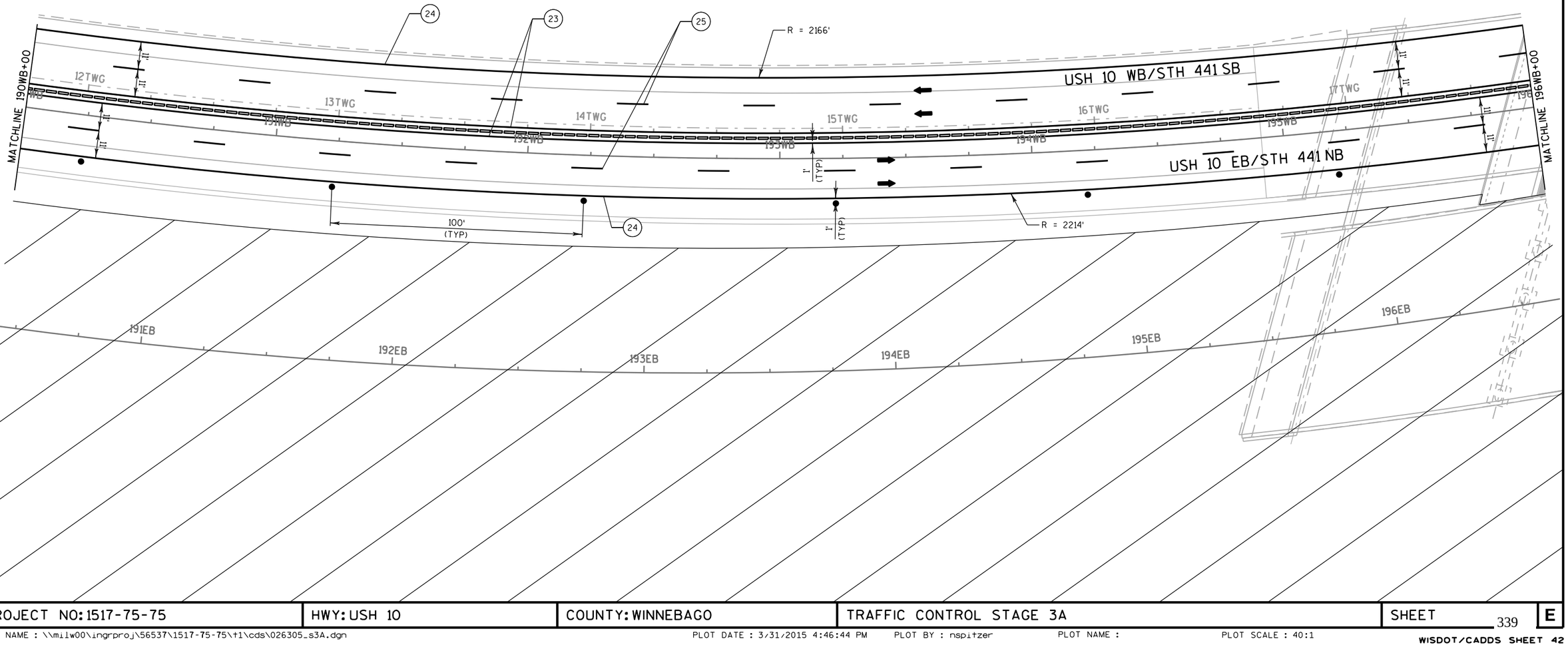
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 338	E

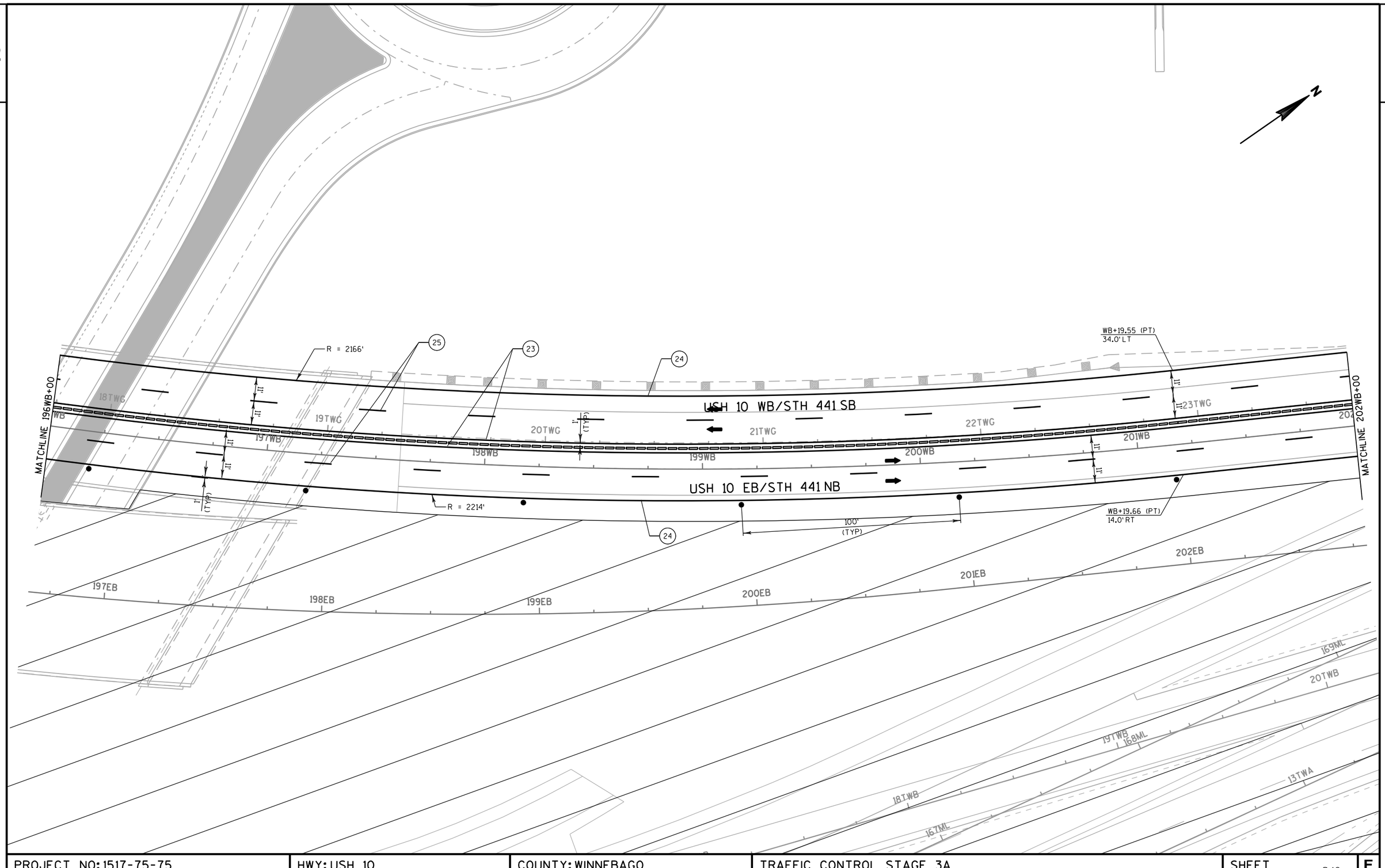
2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 339	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\026305_s3A.dgn PLOT DATE : 3/31/2015 4:46:44 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 40:1

2

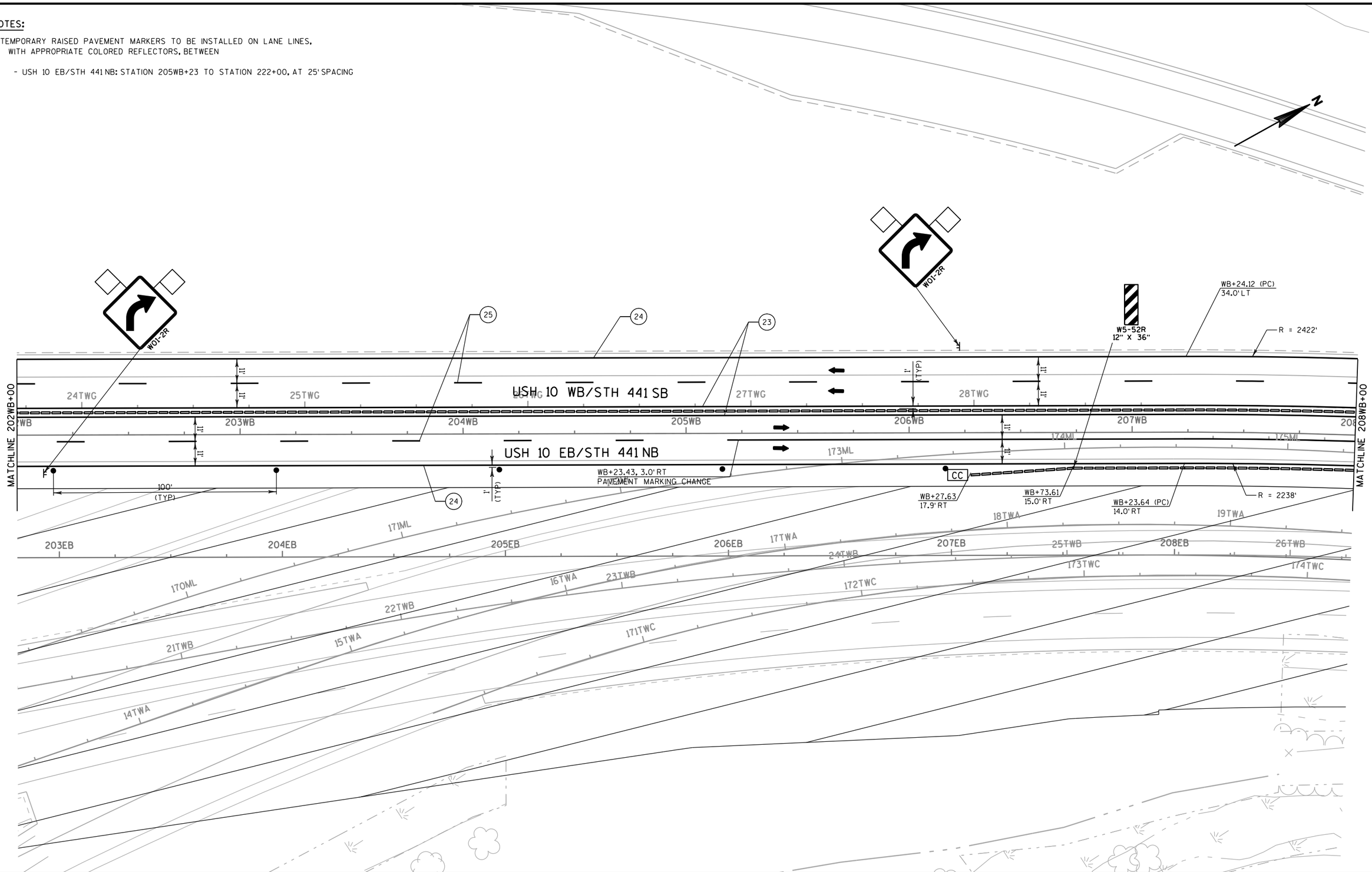


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 340	E

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 205WB+23 TO STATION 222+00, AT 25' SPACING



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET	E

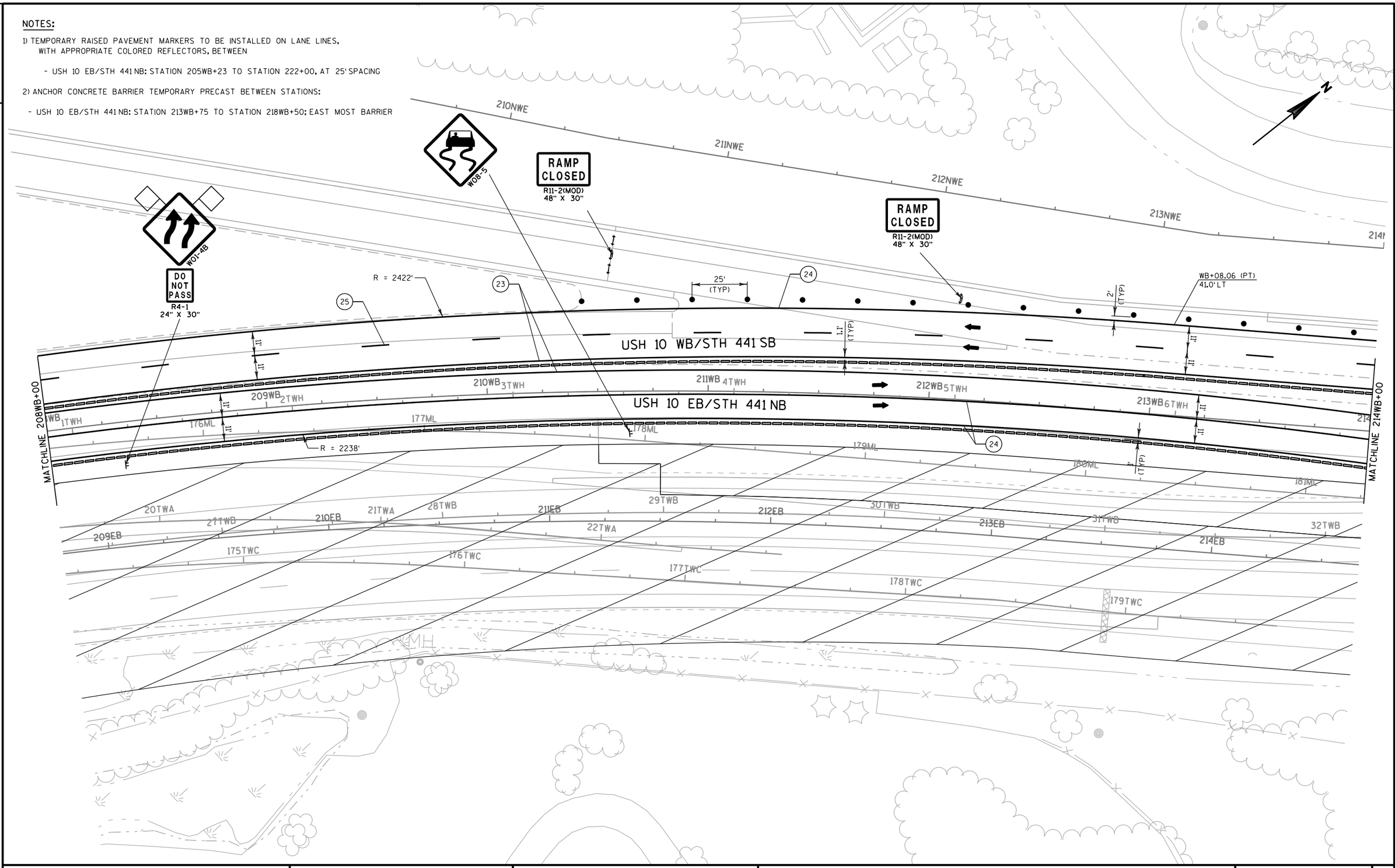
NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 205WB+23 TO STATION 222+00, AT 25' SPACING

2) ANCHOR CONCRETE BARRIER TEMPORARY PRECAST BETWEEN STATIONS:

- USH 10 EB/STH 441 NB: STATION 213WB+75 TO STATION 218WB+50; EAST MOST BARRIER



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 342	E

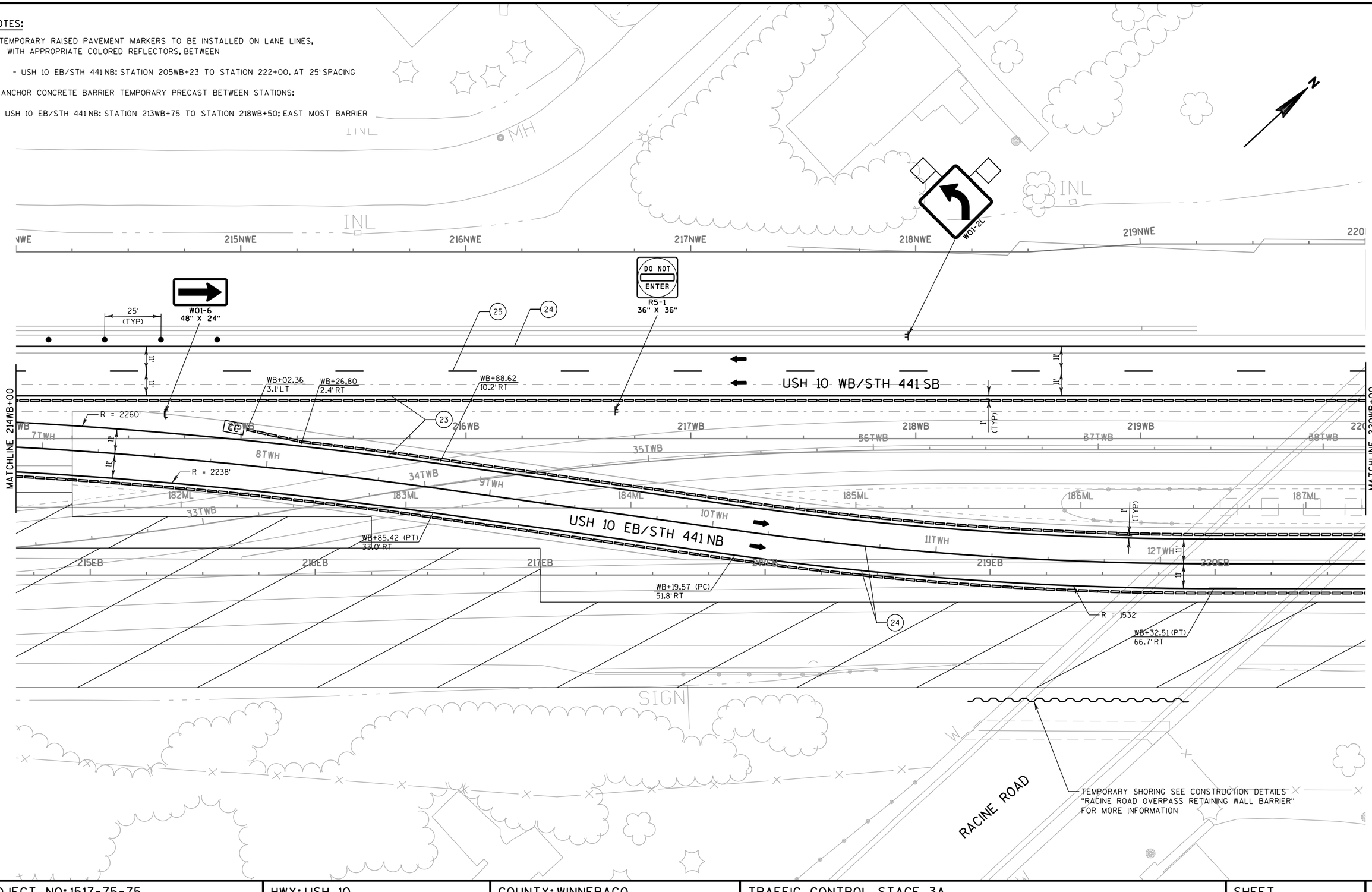
NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 205WB+23 TO STATION 222+00, AT 25' SPACING

2) ANCHOR CONCRETE BARRIER TEMPORARY PRECAST BETWEEN STATIONS:

- USH 10 EB/STH 441 NB: STATION 213WB+75 TO STATION 218WB+50; EAST MOST BARRIER

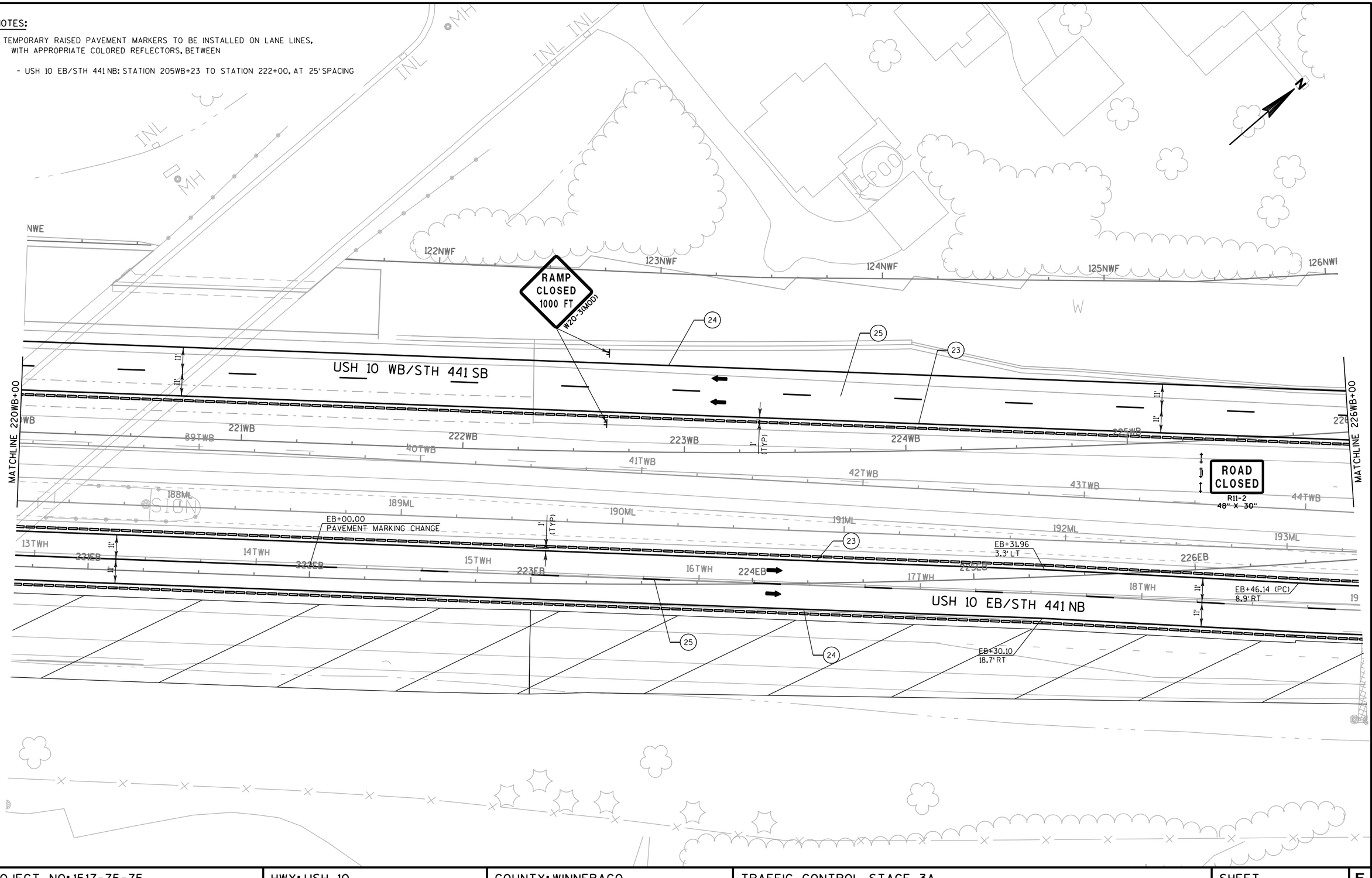


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 343	E

NOTES:

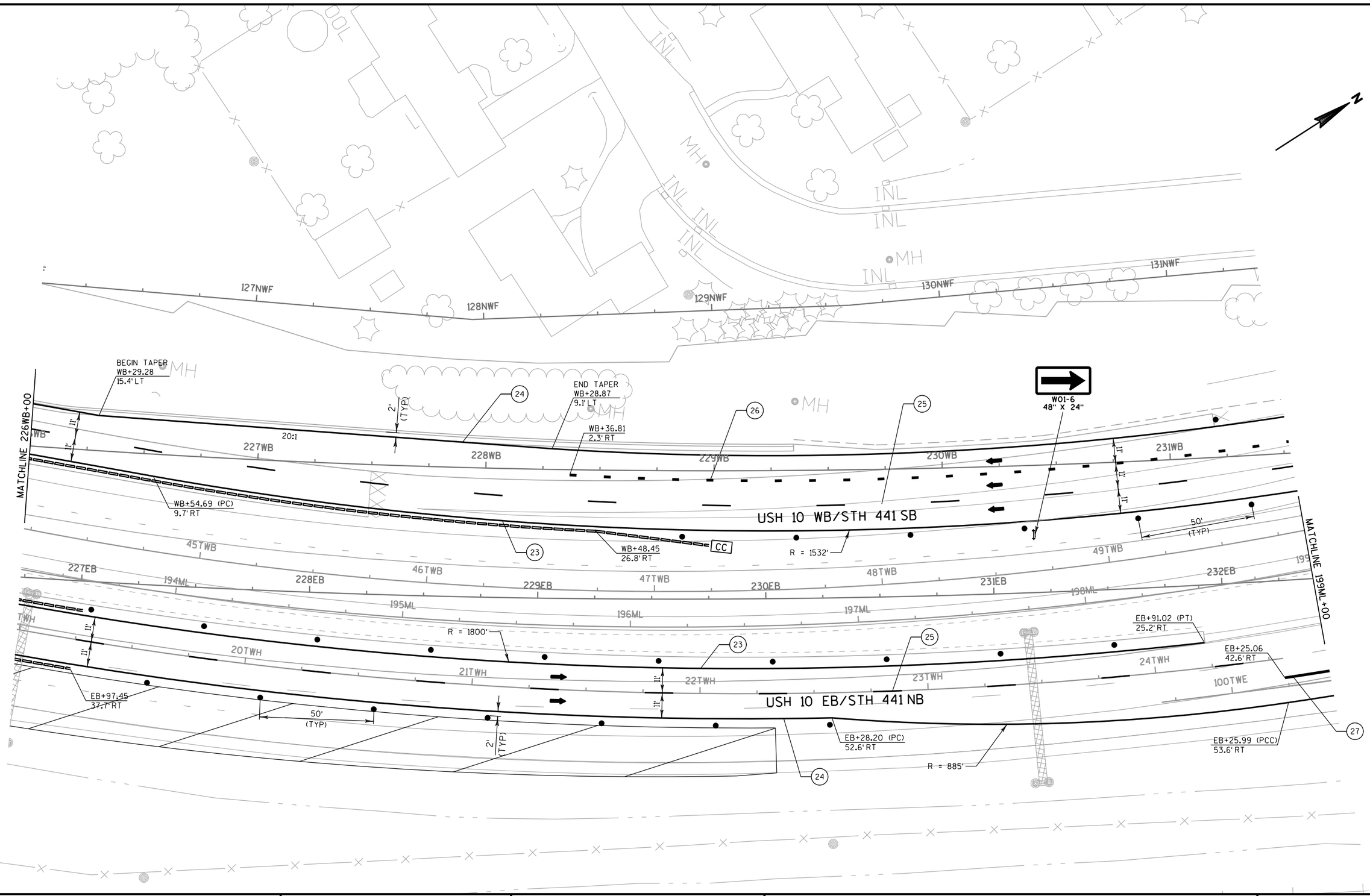
1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 205WB+23 TO STATION 222+00, AT 25' SPACING



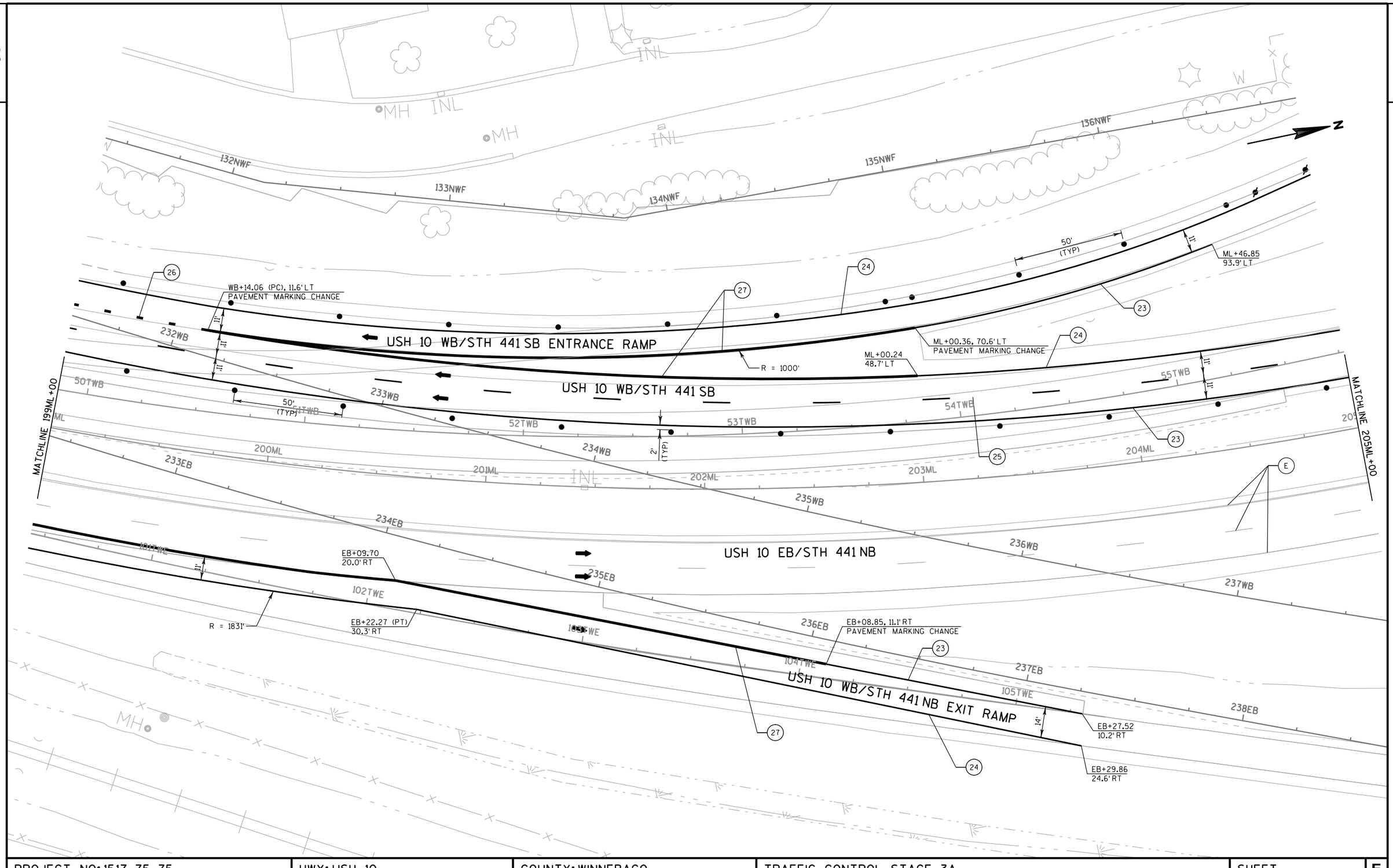
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 344	E

2



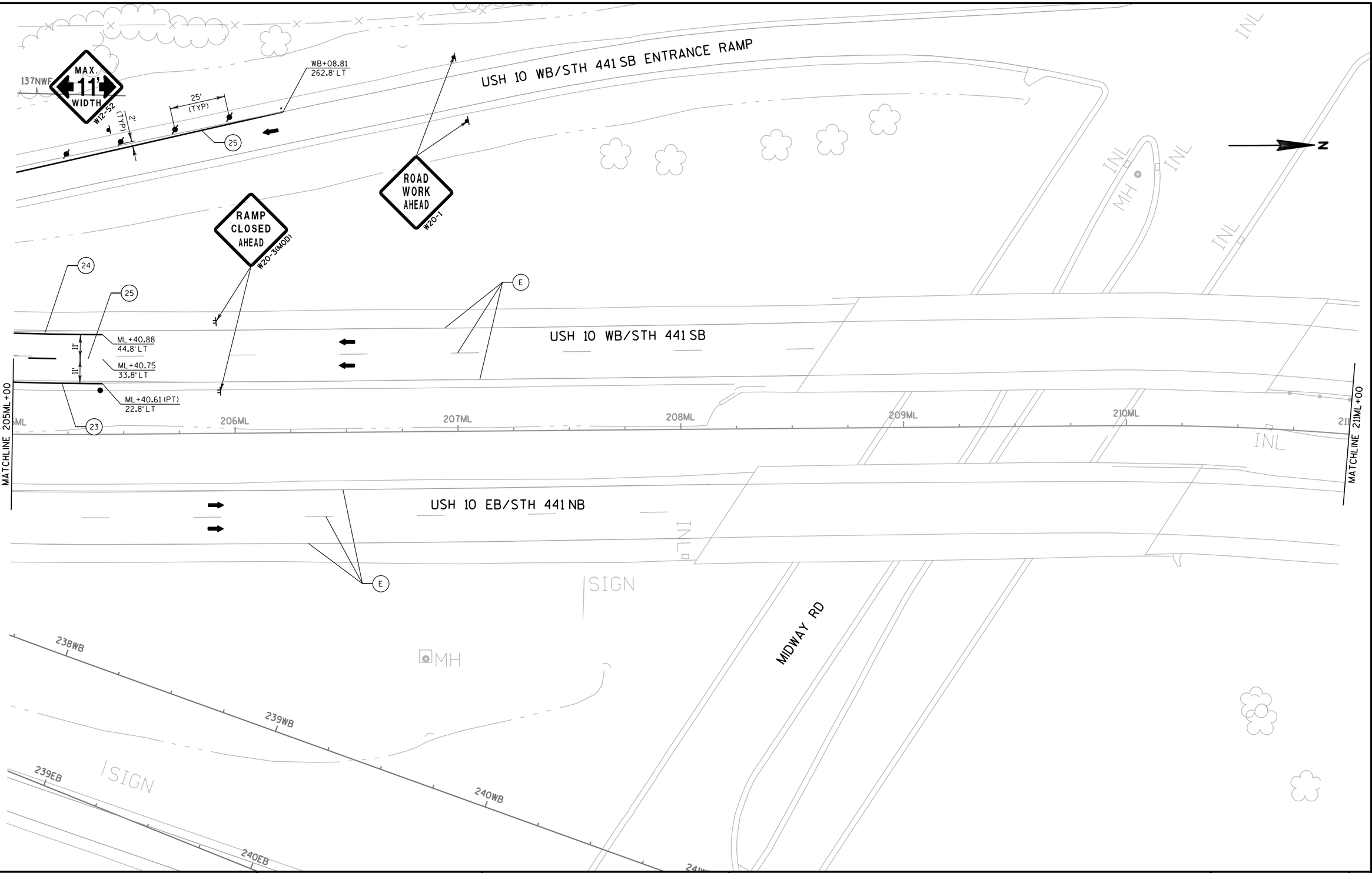
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 345	E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 346 E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 347	E

NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.



SIGN

SIGN

USH 10 WB/STH 441 SB

212ML

213ML

214ML

215ML

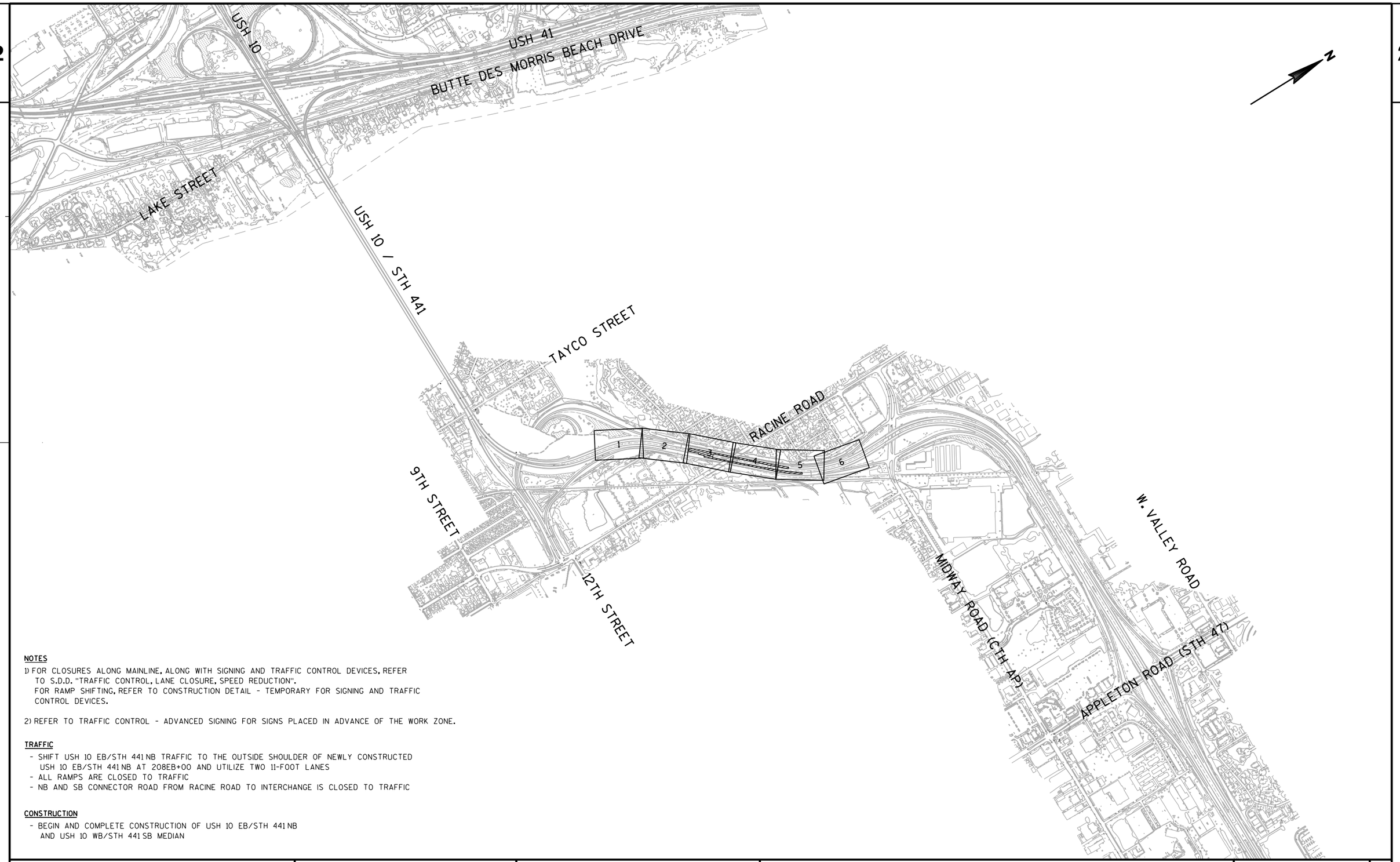
216ML

217ML

MATCHLINE 211ML+00

USH 10 EB/STH 441 NB

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3A	SHEET 348	E



NOTES

1) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION".
FOR RAMP SHIFTING, REFER TO CONSTRUCTION DETAIL - TEMPORARY FOR SIGNING AND TRAFFIC CONTROL DEVICES.

2) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

TRAFFIC

- SHIFT USH 10 EB/STH 441 NB TRAFFIC TO THE OUTSIDE SHOULDER OF NEWLY CONSTRUCTED USH 10 EB/STH 441 NB AT 208EB+00 AND UTILIZE TWO 11-FOOT LANES
- ALL RAMPS ARE CLOSED TO TRAFFIC
- NB AND SB CONNECTOR ROAD FROM RACINE ROAD TO INTERCHANGE IS CLOSED TO TRAFFIC

CONSTRUCTION

- BEGIN AND COMPLETE CONSTRUCTION OF USH 10 EB/STH 441 NB AND USH 10 WB/STH 441 SB MEDIAN

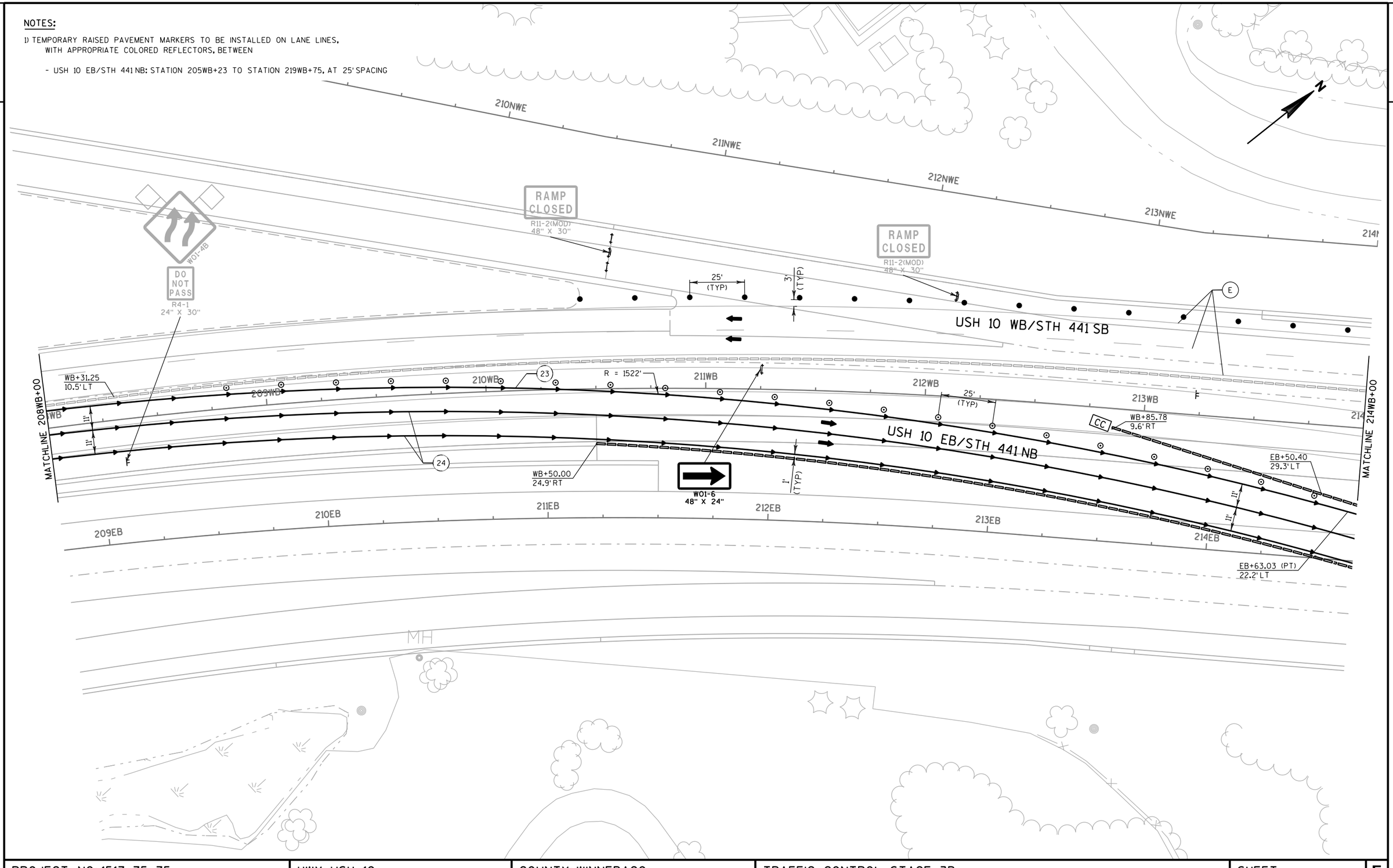
PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3B KEYMAP OVERVIEW	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\026330_s3B.dgn PLOT DATE : 4/26/2015 1:26:08 PM PLOT BY : nspitzer PLOT NAME : $FILE$ PLOT SCALE : 1150:1
WISDOT/CADDS SHEET 42

NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 205WB+23 TO STATION 219WB+75, AT 25' SPACING

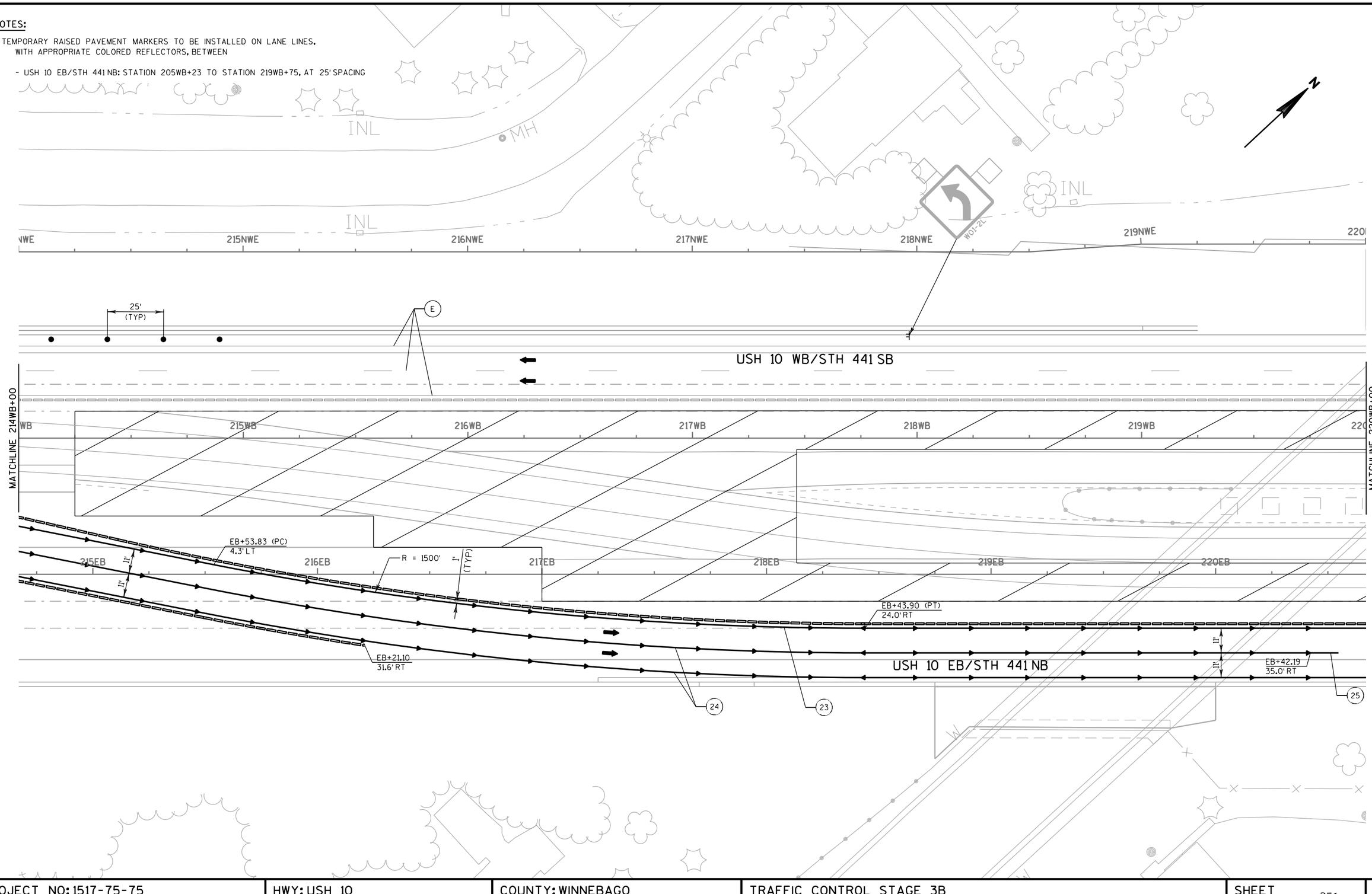


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3B	SHEET 350	E

NOTES:

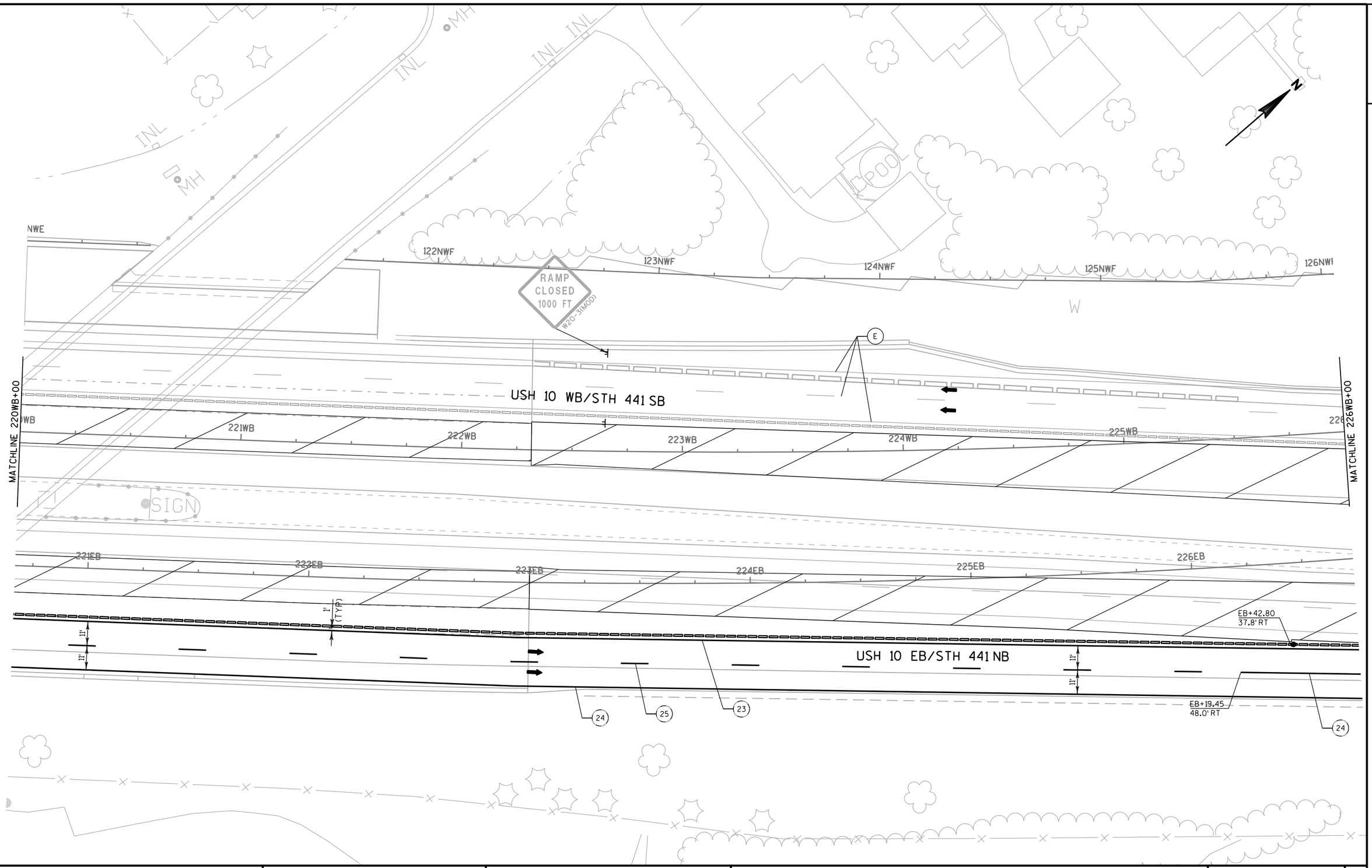
1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

- USH 10 EB/STH 441 NB: STATION 205WB+23 TO STATION 219WB+75, AT 25' SPACING



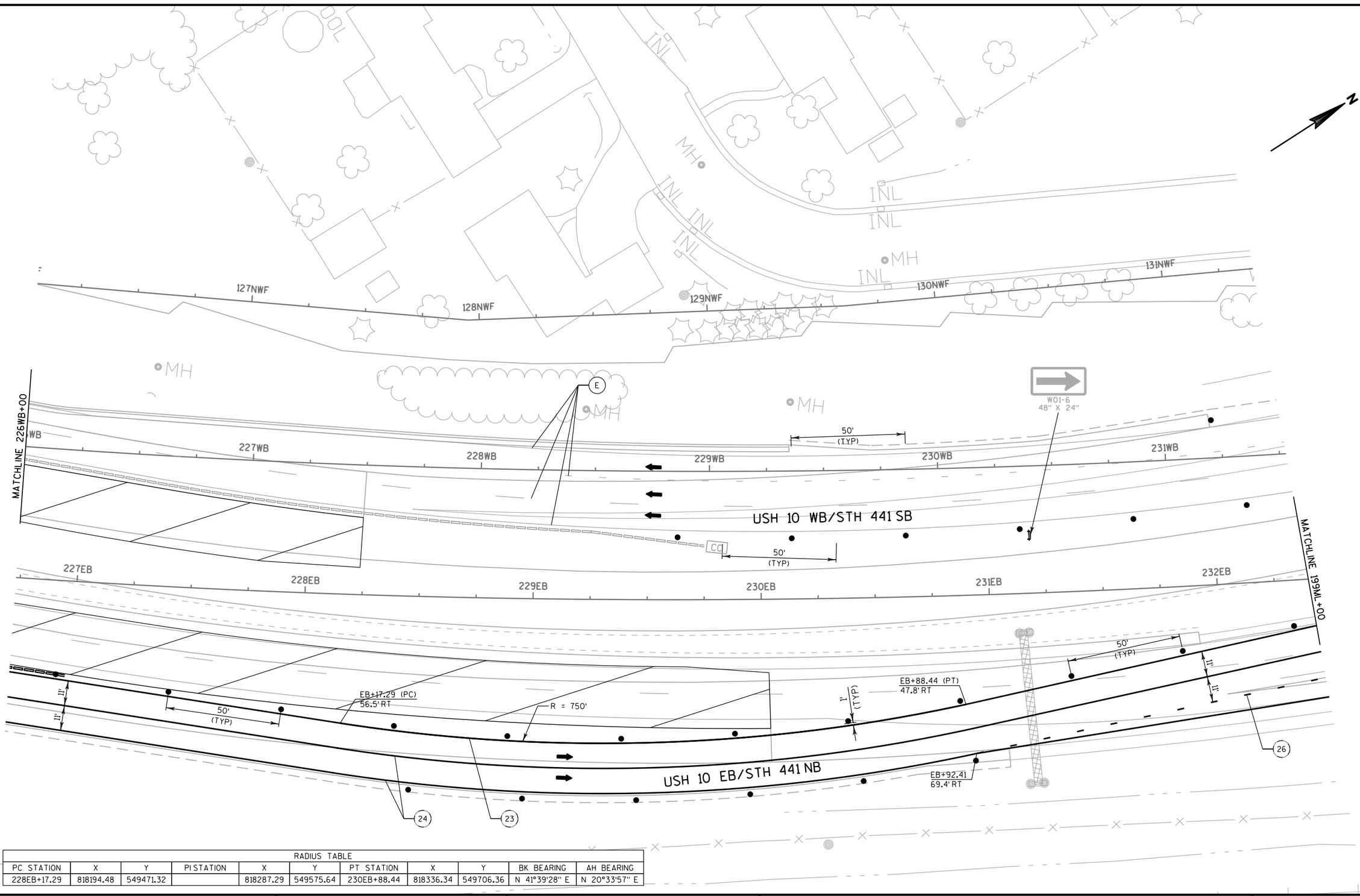
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3B	SHEET 351 E

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3B	SHEET 352	E

2

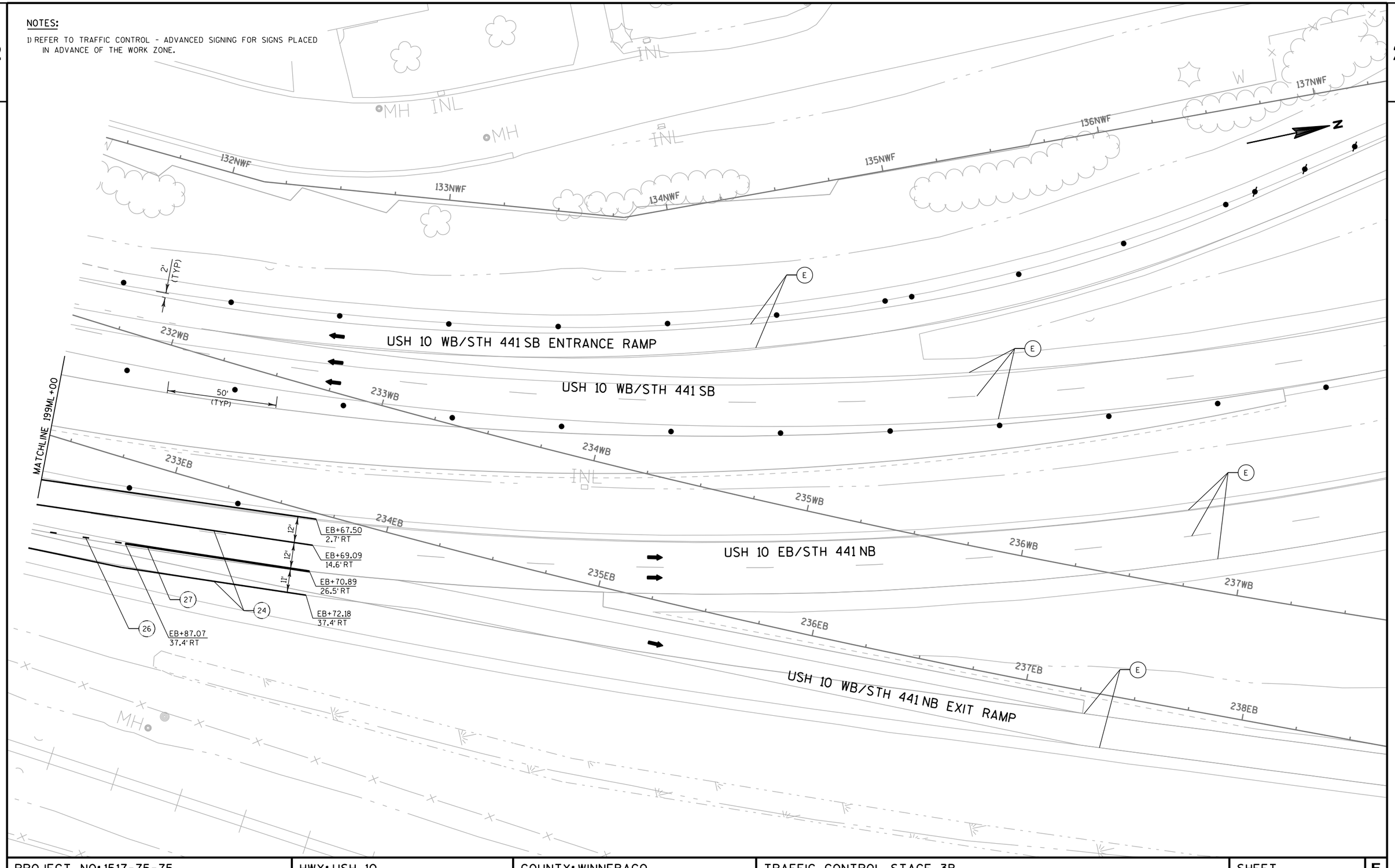


RADIUS TABLE										
PC STATION	X	Y	PI STATION	X	Y	PT STATION	X	Y	BK BEARING	AH BEARING
228EB+17.29	818194.48	549471.32		818287.29	549575.64	230EB+88.44	818336.34	549706.36	N 41°39'28" E	N 20°33'57" E

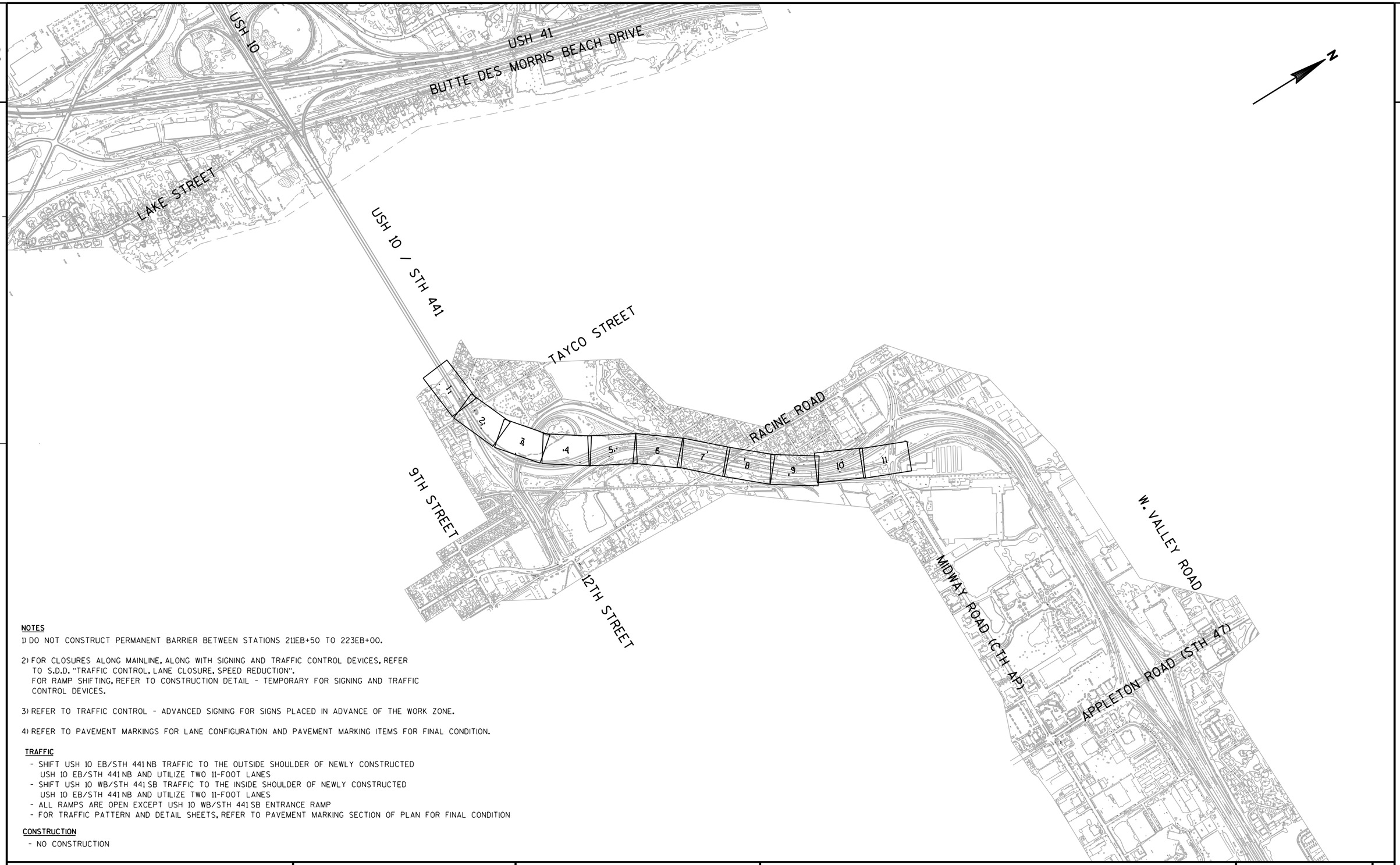
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3B	SHEET 353	E

NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 3B	SHEET 354 E



NOTES

1) DO NOT CONSTRUCT PERMANENT BARRIER BETWEEN STATIONS 211EB+50 TO 223EB+00.

2) FOR CLOSURES ALONG MAINLINE, ALONG WITH SIGNING AND TRAFFIC CONTROL DEVICES, REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". FOR RAMP SHIFTING, REFER TO CONSTRUCTION DETAIL - TEMPORARY FOR SIGNING AND TRAFFIC CONTROL DEVICES.

3) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

4) REFER TO PAVEMENT MARKINGS FOR LANE CONFIGURATION AND PAVEMENT MARKING ITEMS FOR FINAL CONDITION.

TRAFFIC

- SHIFT USH 10 EB/STH 441 NB TRAFFIC TO THE OUTSIDE SHOULDER OF NEWLY CONSTRUCTED USH 10 EB/STH 441 NB AND UTILIZE TWO 11-FOOT LANES
- SHIFT USH 10 WB/STH 441 SB TRAFFIC TO THE INSIDE SHOULDER OF NEWLY CONSTRUCTED USH 10 EB/STH 441 NB AND UTILIZE TWO 11-FOOT LANES
- ALL RAMPS ARE OPEN EXCEPT USH 10 WB/STH 441 SB ENTRANCE RAMP
- FOR TRAFFIC PATTERN AND DETAIL SHEETS, REFER TO PAVEMENT MARKING SECTION OF PLAN FOR FINAL CONDITION

CONSTRUCTION

- NO CONSTRUCTION

PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4 KEYMAP OVERVIEW	SHEET 355	E

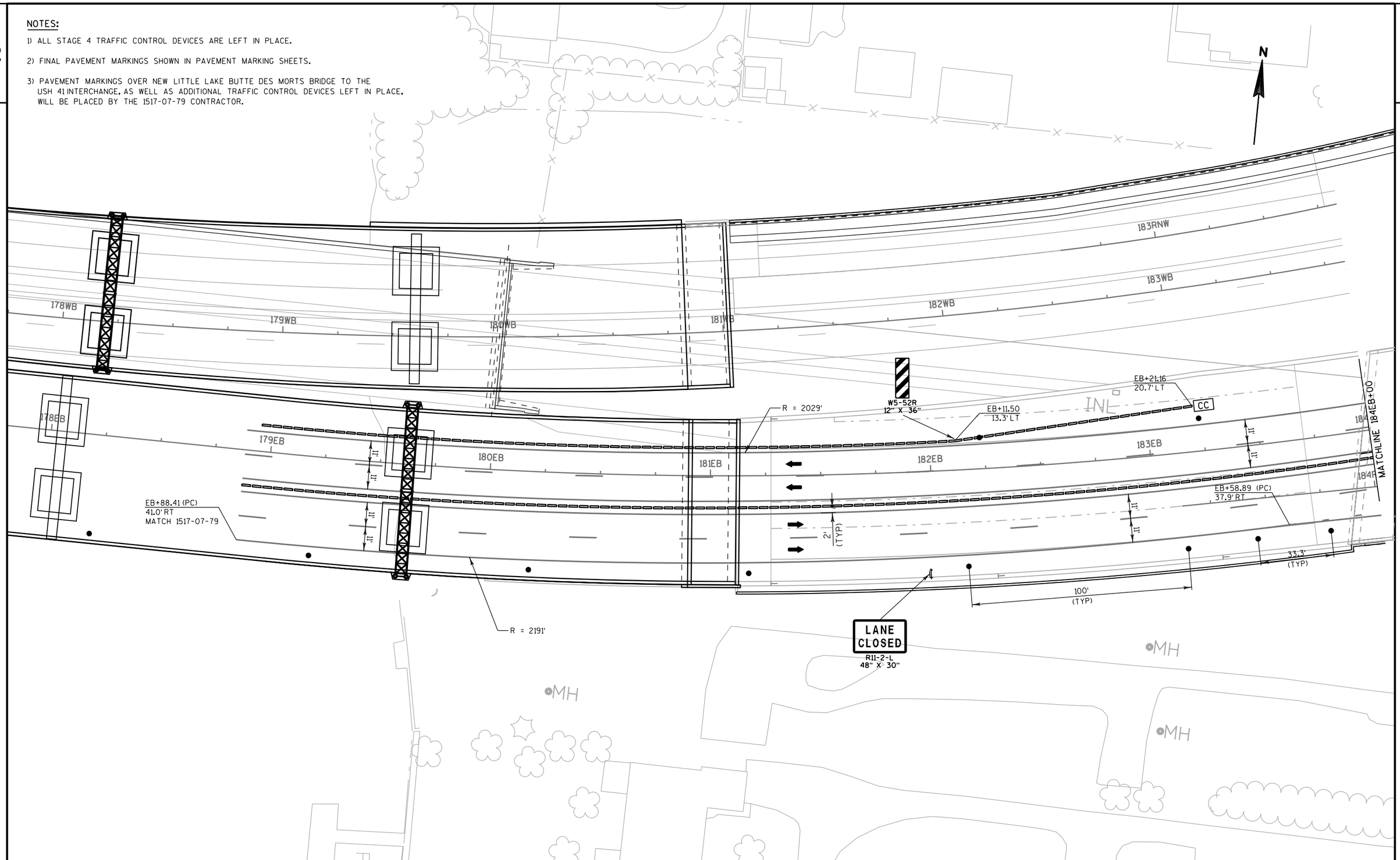
2

NOTES:

1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

3) PAVEMENT MARKINGS OVER NEW LITTLE LAKE BUTTE DES MORTS BRIDGE TO THE USH 41 INTERCHANGE, AS WELL AS ADDITIONAL TRAFFIC CONTROL DEVICES LEFT IN PLACE, WILL BE PLACED BY THE 1517-07-79 CONTRACTOR.

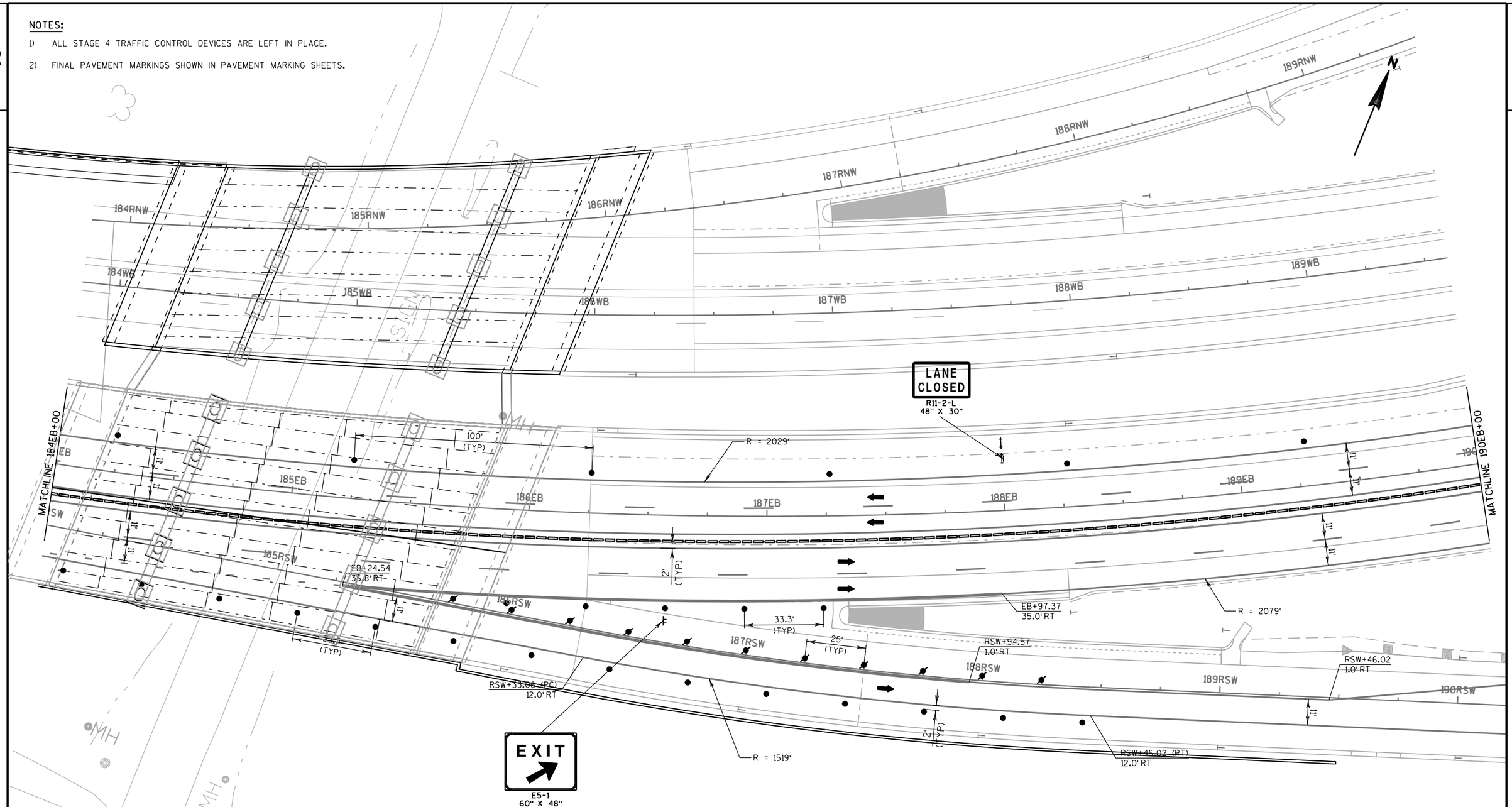


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 356	E

NOTES:

1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

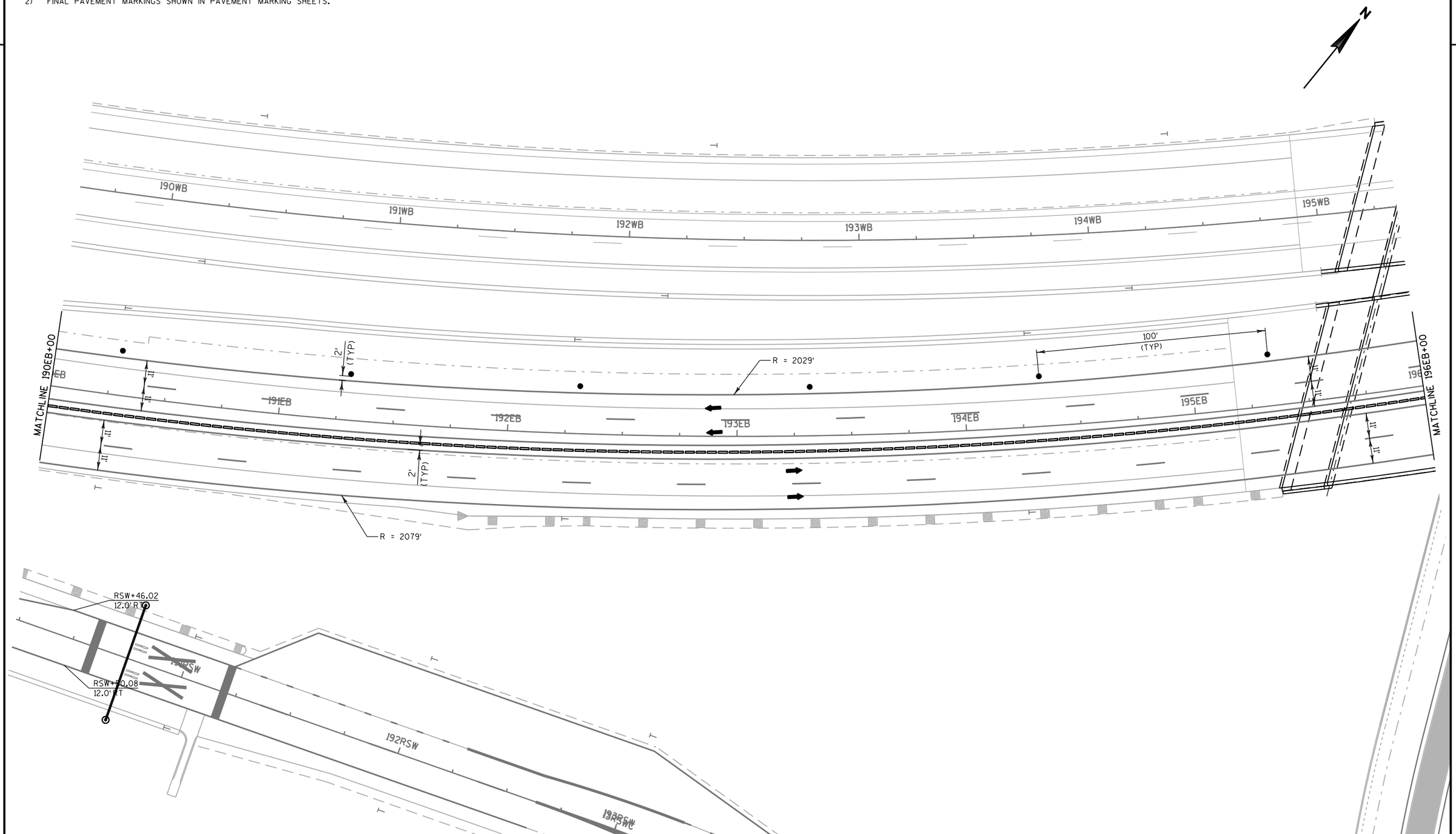


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 357	E

NOTES:

1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.



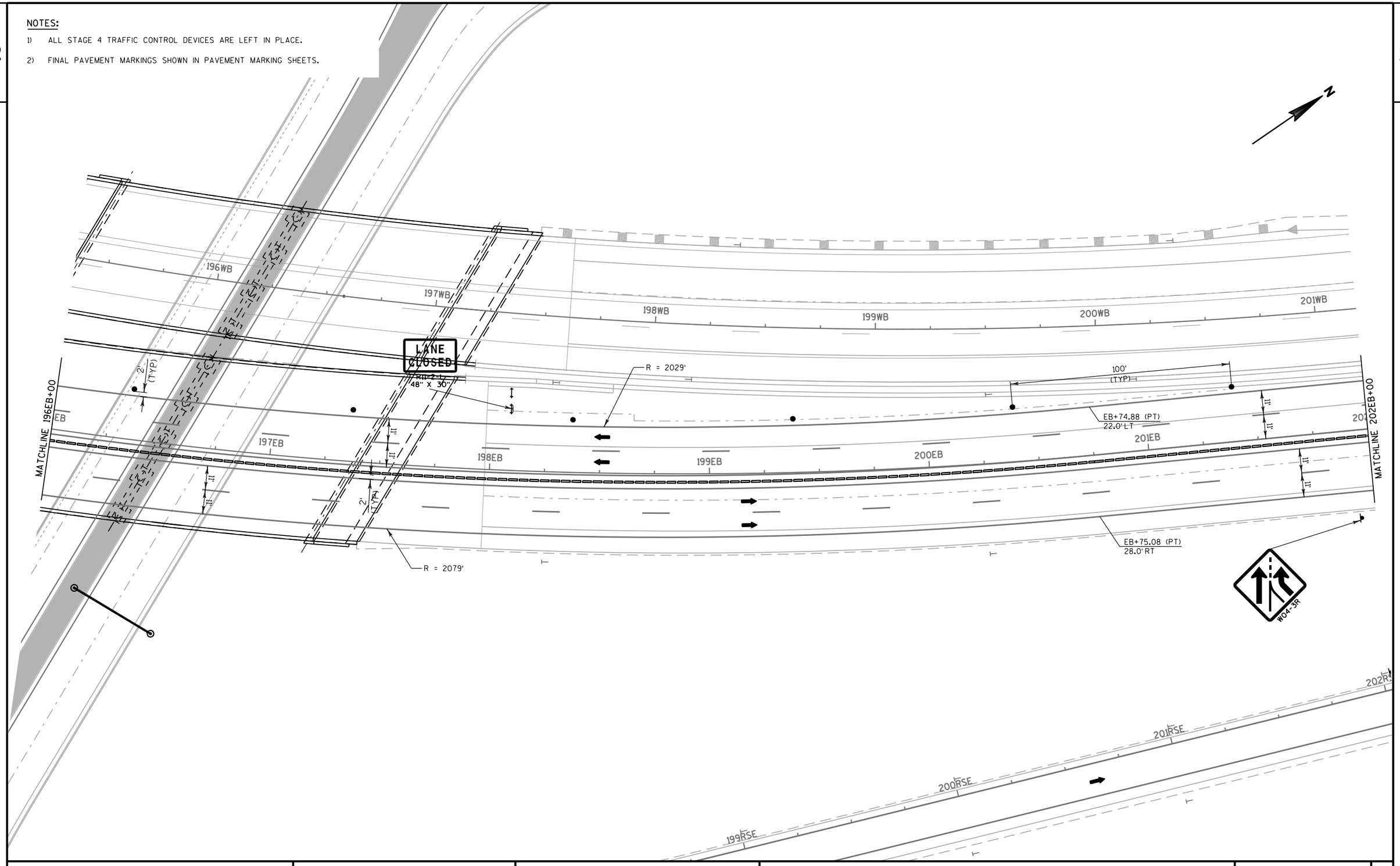
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 358 E

2

NOTES:

1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

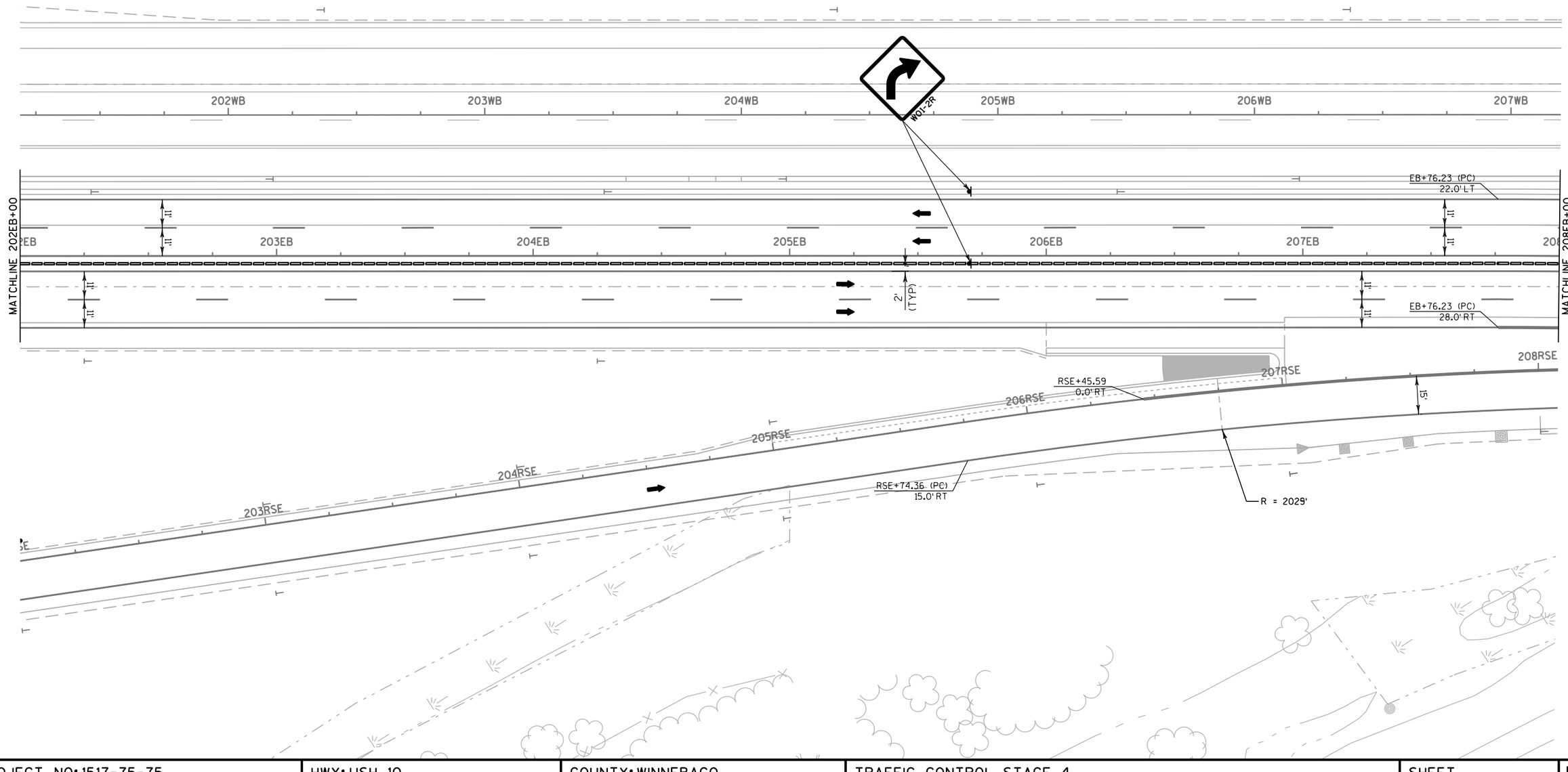


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 359	E

NOTES:

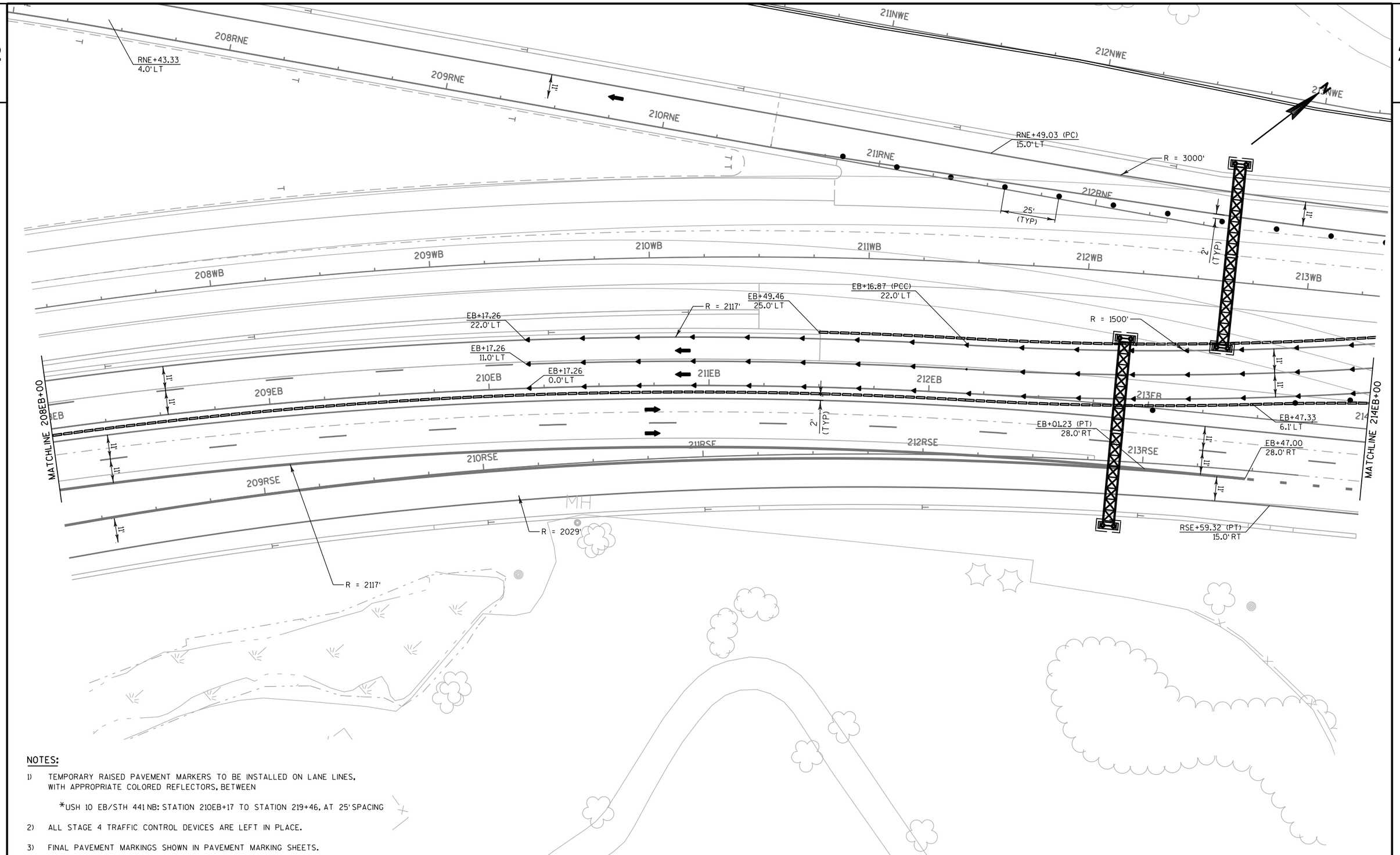
1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 360	E

2



NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

   *USH 10 EB/STH 441 NB: STATION 210EB+17 TO STATION 219+46, AT 25' SPACING

2) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

3) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 361	E

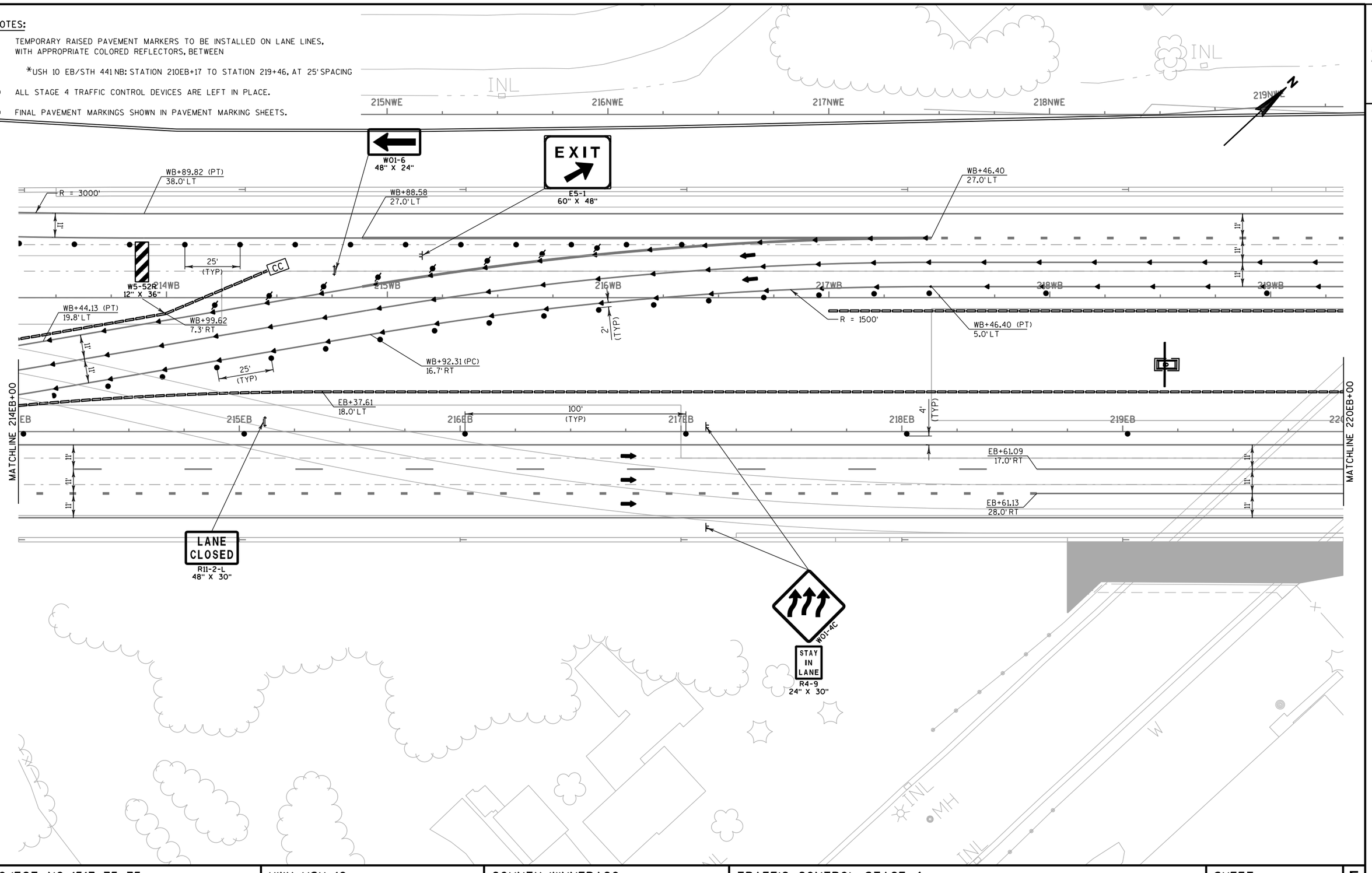
NOTES:

1) TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED ON LANE LINES, WITH APPROPRIATE COLORED REFLECTORS, BETWEEN

*USH 10 EB/STH 441 NB: STATION 210EB+17 TO STATION 219+46, AT 25' SPACING

2) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

3) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

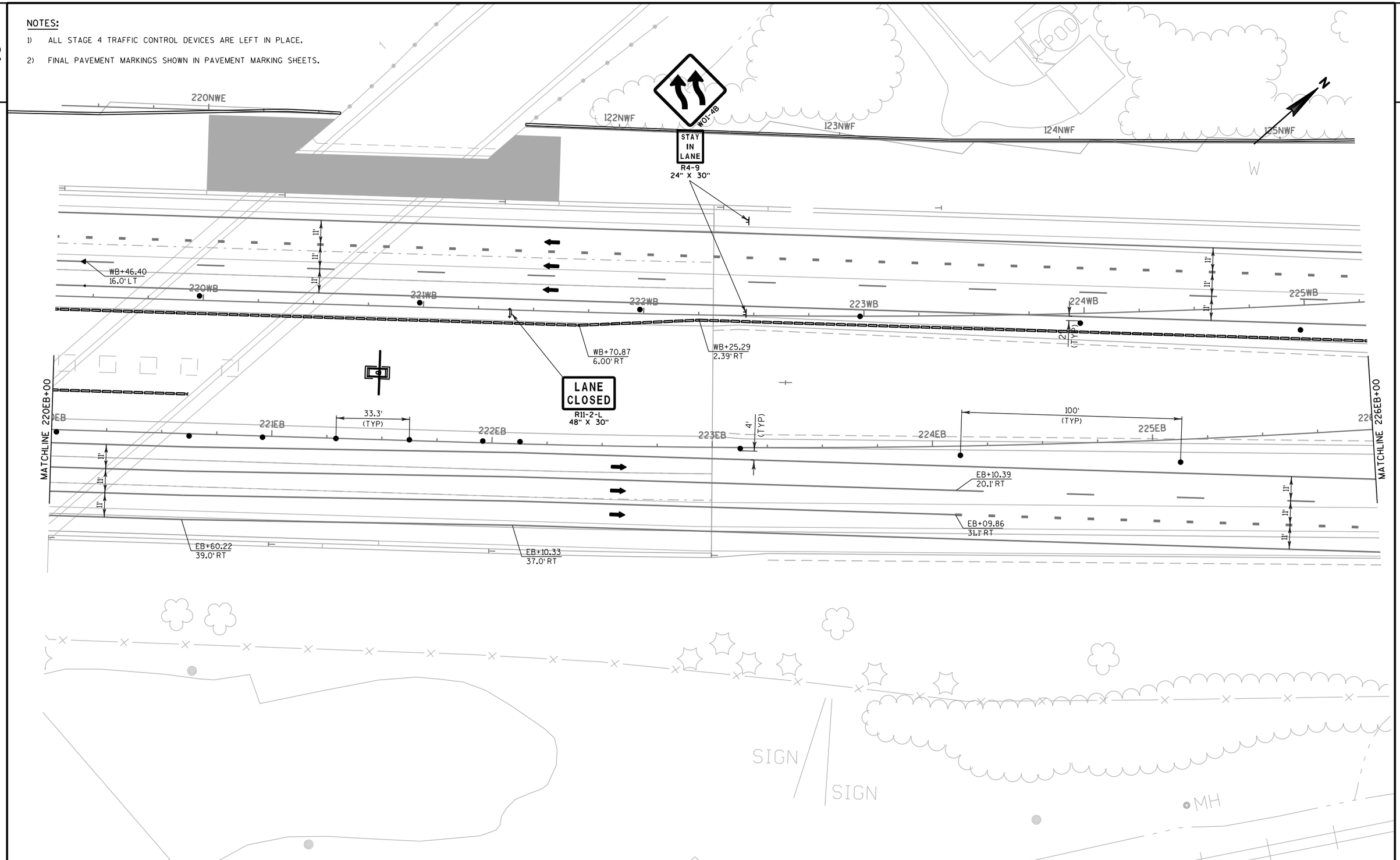


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 362	E

NOTES:

1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

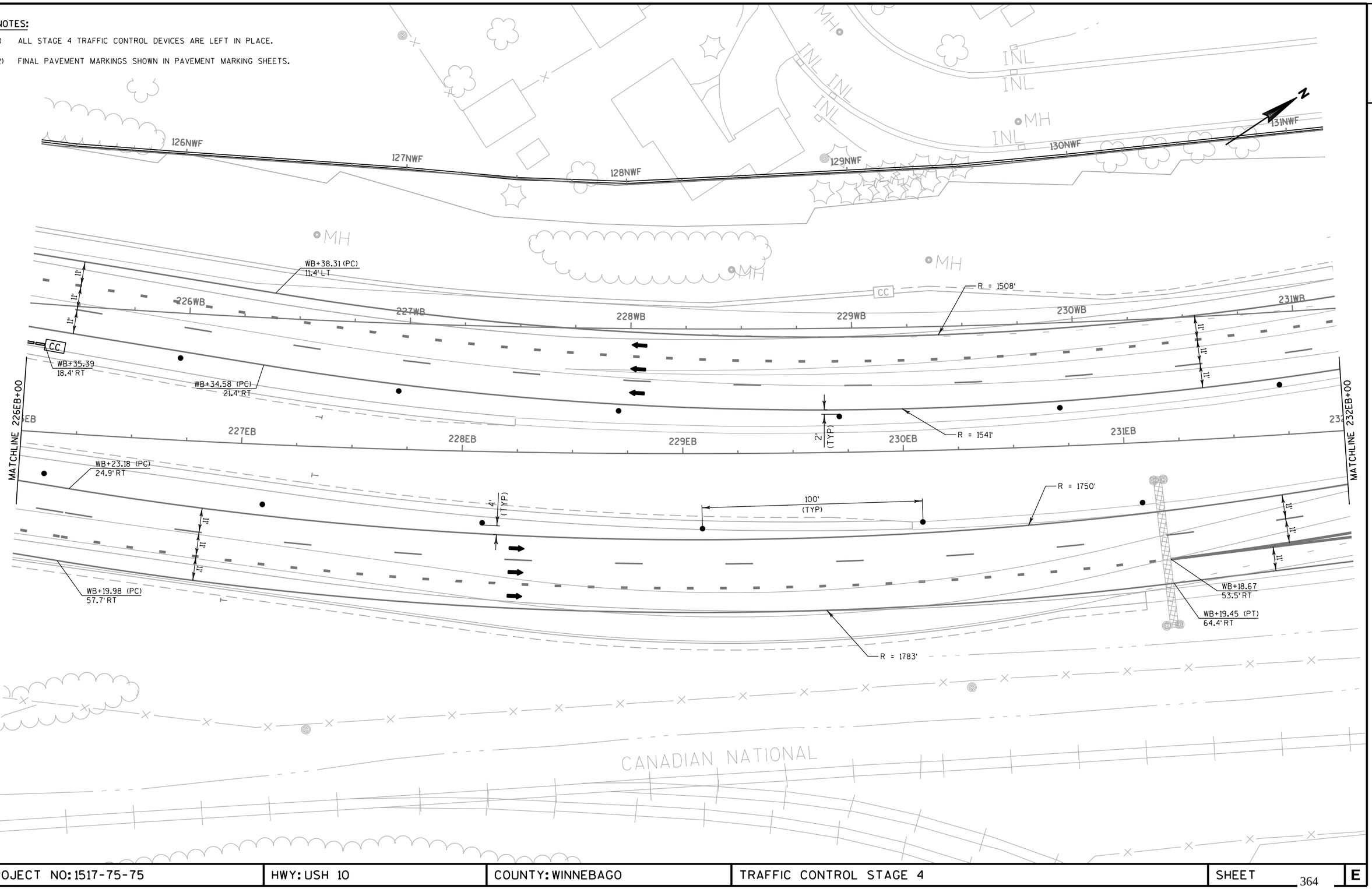


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 363	E

NOTES:

1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

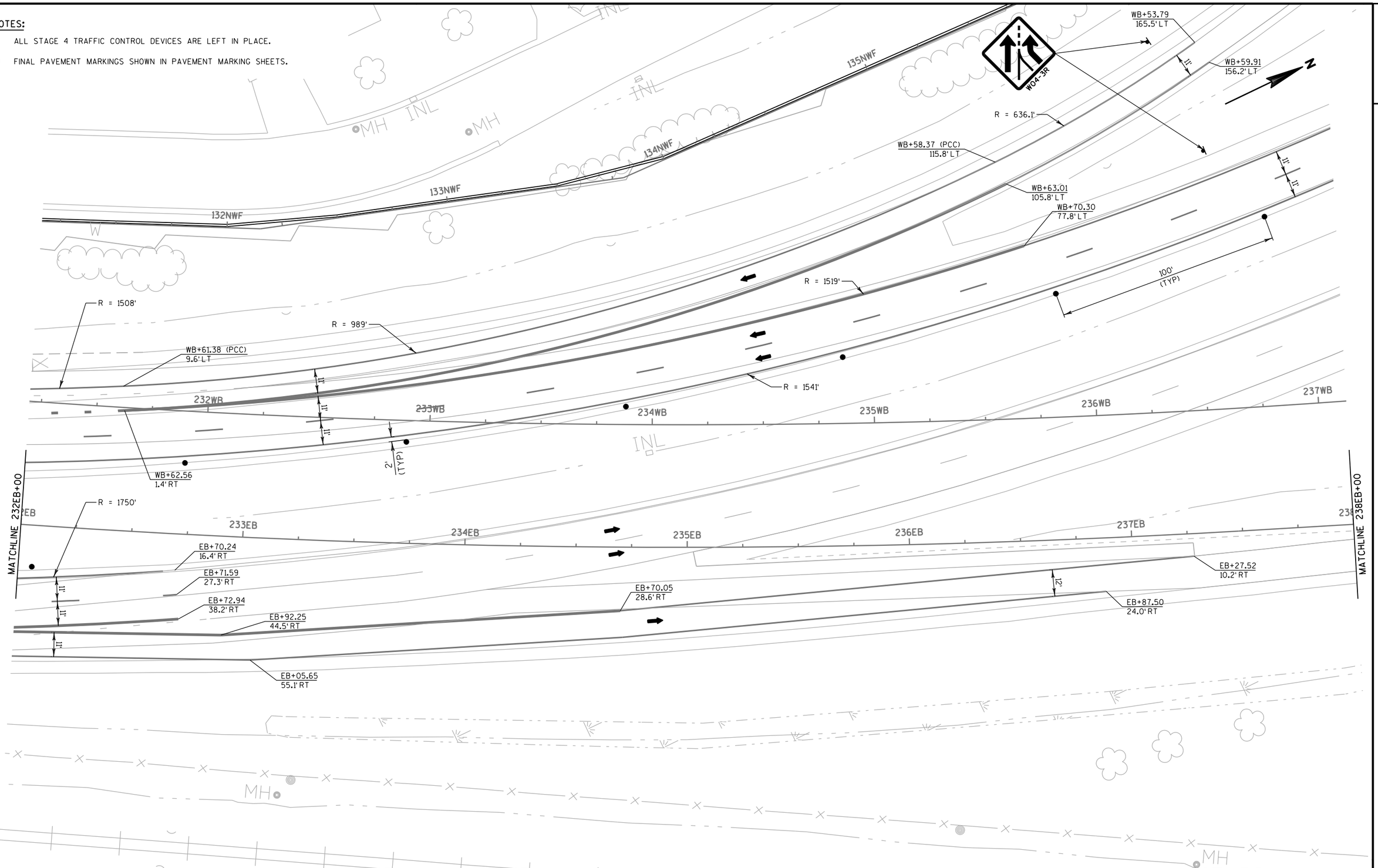


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 364	E

NOTES:

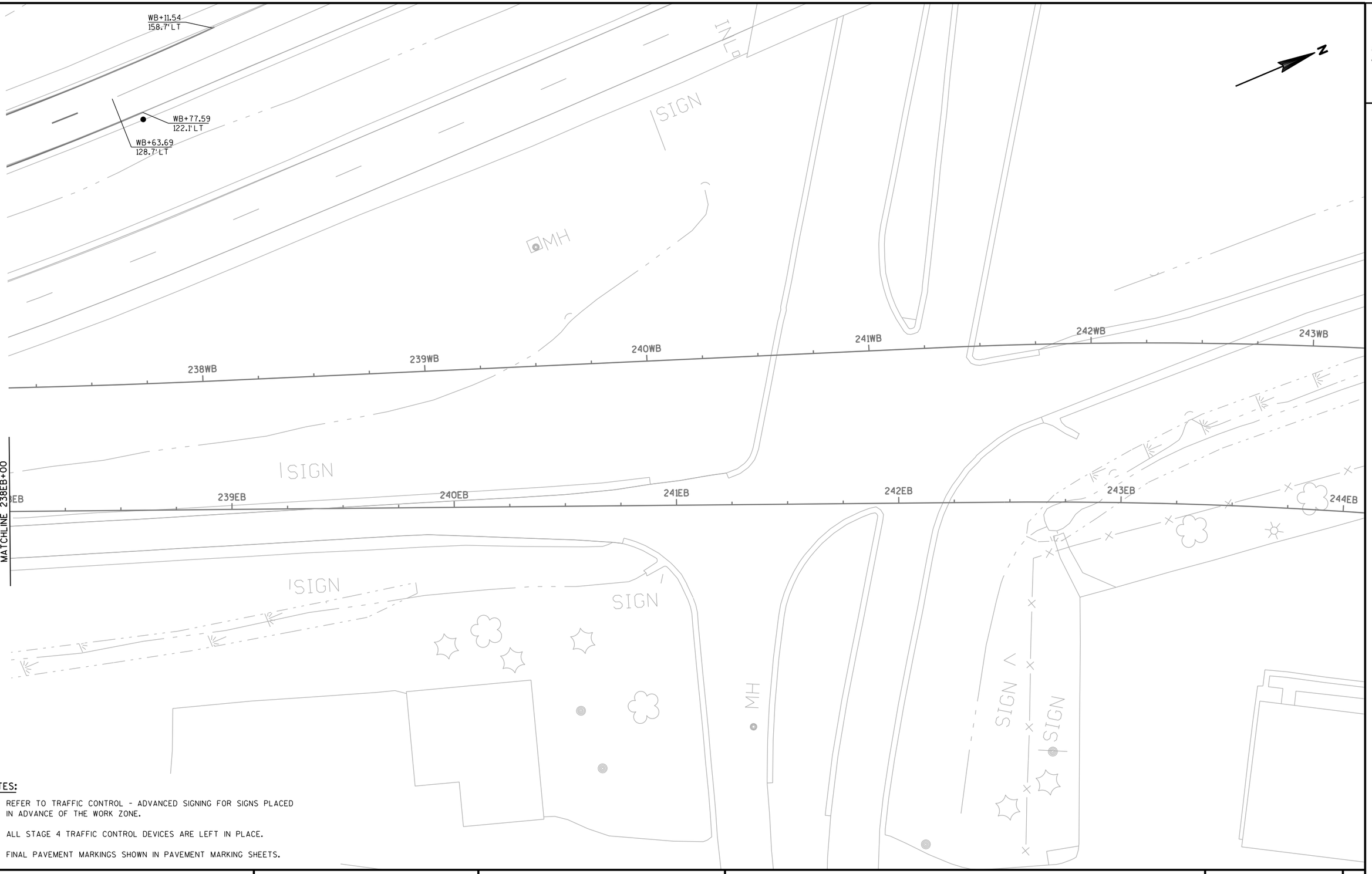
1) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

2) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET 365	E

2



NOTES:

1) REFER TO TRAFFIC CONTROL - ADVANCED SIGNING FOR SIGNS PLACED IN ADVANCE OF THE WORK ZONE.

2) ALL STAGE 4 TRAFFIC CONTROL DEVICES ARE LEFT IN PLACE.

3) FINAL PAVEMENT MARKINGS SHOWN IN PAVEMENT MARKING SHEETS.

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	TRAFFIC CONTROL STAGE 4	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\026416_s4.dgn PLOT DATE : 4/27/2015 2:47:44 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 40:1

NOTE:
1) PROVIDE A 2-FT GAP BETWEEN LAST FENCE POST AND BRIDGE STRUCTURE.

POMER WAY

TAYCO STREET

N

WB+79.84
202.51' LT

WB+47.20
180.67' LT

WB+38.52
149.53' LT

PROPOSED R/W

WB+96.57
65.02' LT

WB+45.82
66.96' LT

WB+25.68
62.16' LT

PROPOSED R/W

WB+42.14
55.21' LT

WB+98.77
67.06' LT

RACINE ROAD NW RAMP

MATCHLINE 192EB+00

178WB
178EB
180WB
180EB
182WB
182EB
184RNW
184WB
184EB
184RSW
186RNW
186WB
186EB
186RSW
188RNW
188WB
188EB
188RSW
190WB
190EB
190RSW
192RSW

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

RACINE ROAD SW RAMP

EB+04.04
52.05' RT

EB+56.44
64.17' RT

EB+68.68
111.76' LT

EXISTING R/W

EB+76.90
171.26' RT

EB+87.10
159.24' RT

SLOPE INTERCEPT (TYP)

LEGEND

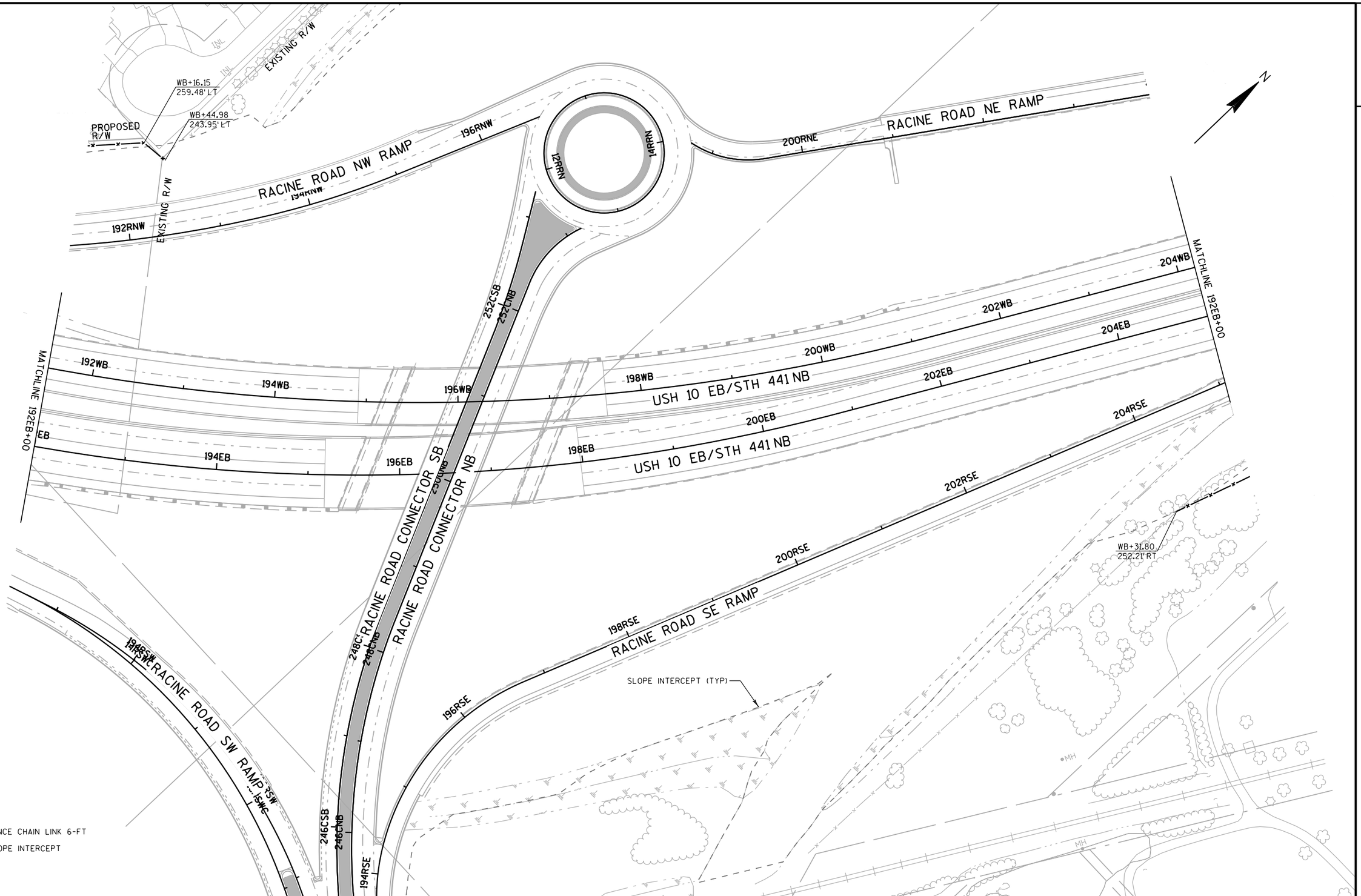
—×— FENCE CHAIN LINK 6-FT

– – SLOPE INTERCEPT

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	FENCING PLAN	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\027101_fn.dgn PLOT DATE : 5/5/2015 3:17:06 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

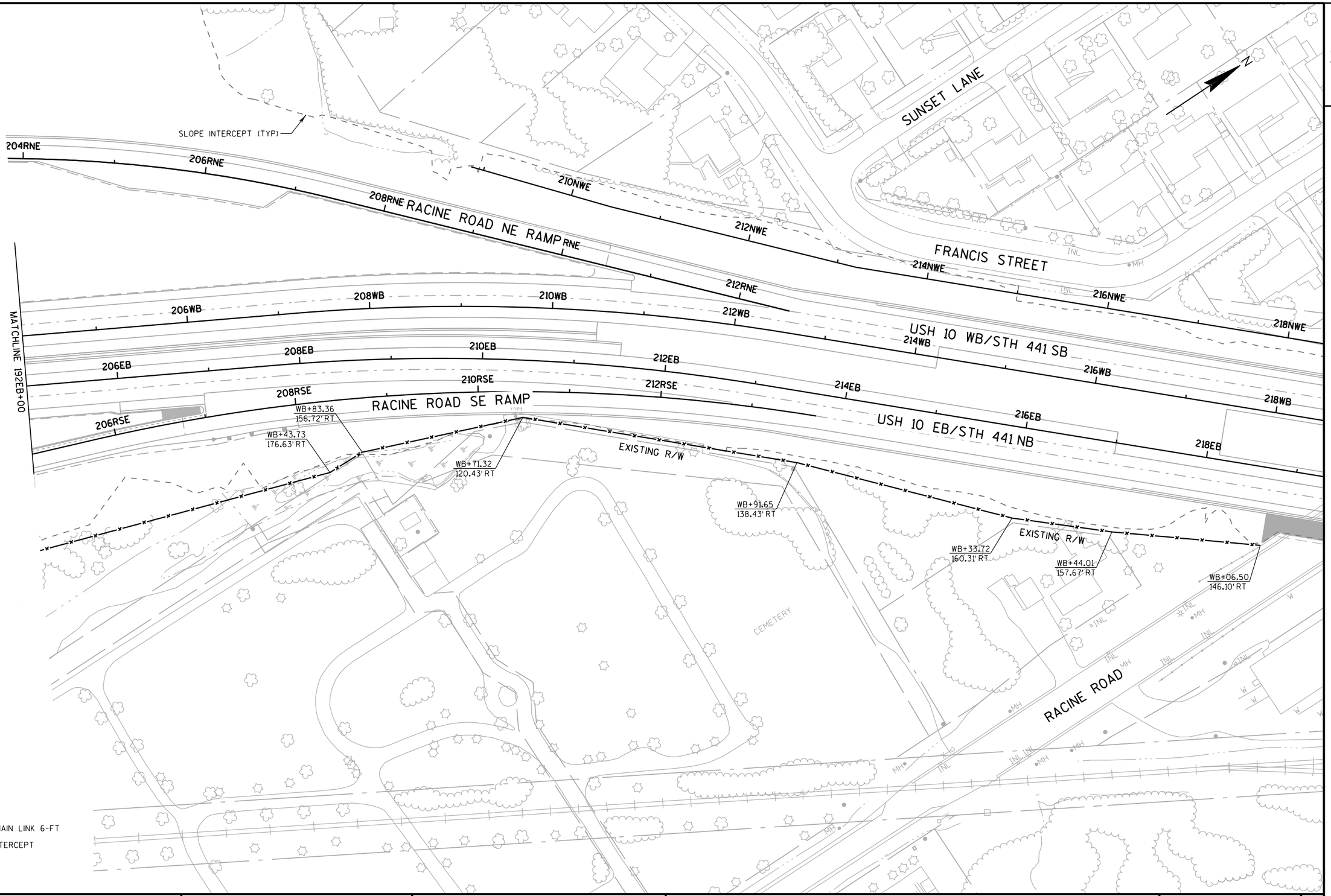
2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	FENCING PLAN	SHEET 368	E

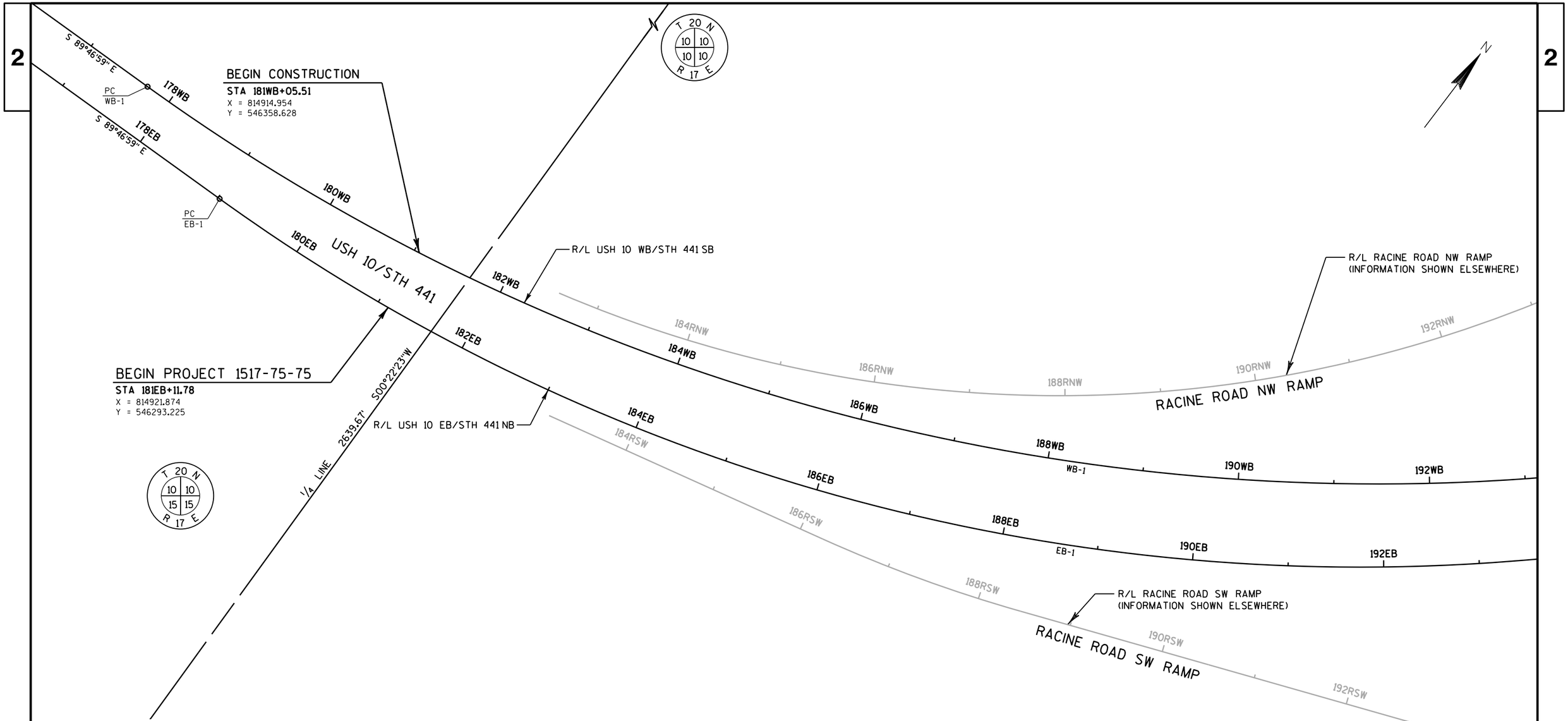
FILE NAME : I:\56537\1517-75-75\t1\cds\027102_fn.dgn PLOT DATE : 2/1/2015 4:18:27 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 100:1

2



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	FENCING PLAN	SHEET 369	E

2



Curve : EB-1

PC = 179EB+02.05
X = 814712.48
Y = 546283.25
PI = 191EB+10.01
X = 815920.43
Y = 546278.67
PT = 200EB+83.29
X = 816505.21
Y = 547335.64
R = 2040.00
DELTA = 61°15'45" LT
D = 2°48'31"
L = 2181.23
T = 1207.95
E = 330.81
BK = S 89°46'59" E
AH = N 28°57'16" E

Curve : WB-1

PC = 177WB+72.55
X = 814583.17
Y = 546334.74
PI = 190WB+75.25
X = 815885.86
Y = 546329.80
PT = 201WB+24.86
X = 816516.51
Y = 547469.67
R = 2200.00
DELTA = 61°15'45" LT
D = 2°36'16"
L = 2352.31
T = 1302.69
E = 356.76
BK = S 89°46'59" E
AH = N 28°57'16" E

2

RACINE ROAD NW RAMP

192RNW 194RNW 196RNW

R/L RACINE ROAD NW RAMP
(INFORMATION SHOWN ELSEWHERE)

12RRN 14RRN

R/L USH 10 WB/STH 441 SB RAMP CONNECTOR ROUNDABOUT
(INFORMATION SHOWN ELSEWHERE)

200RNE 202RNE 204RNE 206RNE

RACINE ROAD NE RAMP

R/L RACINE ROAD NE RAMP
(INFORMATION SHOWN ELSEWHERE)

T 20 N
10 10
10 10
R 17 E

N

1/4 LINE 2642.86' N89°08'21"W

PC
WB-2

R/L RACINE ROAD CONNECTOR NB
(INFORMATION SHOWN ELSEWHERE)

252CSB 252CNB

USH 10 WB/STH 441 SB = STA 196WB+09.00
RACINE ROAD CONNECTOR SB = STA 250CSB+87.11
X = 816216.382
Y = 547051.194

USH 10 WB/STH 441 SB = STA 196WB+26.42
RACINE ROAD CONNECTOR NB = 250CNB+93.99
X = 816228.072
Y = 547064.468

R/L USH 10 WB/STH 441 SB

192WB 194WB 196WB 198WB 200WB 202WB 204WB 206WB

WB-1

PT
WB-1

N 28°57'16" E

PC
EB-2

208EB

USH 10/STH 441

194EB 196EB 198EB 200EB 202EB 204EB 206EB

EB-1

PT
EB-1

R/L USH 10 EB/STH 441 NB

208RSE

T 20 N
10 11
10 11
R 17 E

206RSE

204RSE

USH 10 EB/STH 441 NB = STA 196EB+41.50
RACINE ROAD CONNECTOR SB = STA 250CSB+03.10
X = 816251.314
Y = 546975.156

250CSB 250CNB

USH 10 EB/STH 441 NB = STA 196EB+59.06
RACINE ROAD CONNECTOR NB = STA 250CNB+10.33
X = 816262.859
Y = 546988.383

RACINE ROAD SE RAMP

202RSE

R/L RACINE ROAD CONNECTOR SB
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD SW RAMP
(INFORMATION SHOWN
ELSEWHERE)

R/L RACINE ROAD SW BYPASS
(INFORMATION SHOWN
ELSEWHERE)

R/L RACINE ROAD SE RAMP
(INFORMATION SHOWN ELSEWHERE)

200RSE

198RSE

196RSE

RACINE ROAD CONNECTOR

246CSB 246CNB

194RSE

RACINE ROAD SW RAMP

RACINE ROAD SW BYPASS

194RSW 194RSWC 196RSW 196RSWC

Curve : EB-1
PC = 179EB+02.05
X = 814712.48
Y = 546283.25
PI = 191EB+10.01
X = 815920.43
Y = 546278.67
PT = 200EB+83.29
X = 816505.21
Y = 547335.64
R = 2040.00
DELTA = 61°15'45" LT
D = 2°48'31"
L = 2181.23
T = 1207.95
E = 330.81
BK = S 89°46'59" E
AH = N 28°57'16" E

Curve : EB-2
PC = 207EB+76.23
X = 816840.68
Y = 547941.97
PI = 210EB+40.05
X = 816968.40
Y = 548172.81
PT = 213EB+01.23
X = 817148.25
Y = 548365.83
R = 2145.00
DELTA = 14°01'25" RT
D = 2°40'16"
L = 525.00
T = 263.82
E = 16.16
BK = N 28°57'16" E
AH = N 42°58'41" E

Curve : WB-1
PC = 177WB+72.55
X = 814583.17
Y = 546334.74
PI = 190WB+75.25
X = 815885.86
Y = 546329.80
PT = 201WB+24.86
X = 816516.51
Y = 547469.67
R = 2200.00
DELTA = 61°15'45" LT
D = 2°36'16"
L = 2352.31
T = 1302.69
E = 356.76
BK = S 89°46'59" E
AH = N 28°57'16" E

Curve : WB-2
PC = 207WB+18.45
X = 816803.88
Y = 547989.06
PI = 209WB+89.03
X = 816934.87
Y = 548225.82
PT = 212WB+56.91
X = 817119.33
Y = 548423.78
R = 2200.00
DELTA = 14°01'25" RT
D = 2°36'16"
L = 538.46
T = 270.58
E = 16.58
BK = N 28°57'16" E
AH = N 42°58'41" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - MAINLINE	SHEET 371	E

2

BEGIN CONSTRUCTION
STA 208NWE+85.99
X = 816777.267
Y = 548238.093

210NWE
N 49°42'56" E

PI = STA 213NWE+45.00
X = 816898.569
Y = 548340.908

212NWE
N 47°33'07" E

R/L NOISEWALL - RACINE ROAD TO RACINE ROAD NE RAMP

END CONSTRUCTION
STA 215NWE+00.00
X = 817224.257
Y = 548658.137

214NWE

PI = STA 213NWE+21.00
X = 817102.300
Y = 548527.254

216NWE
N 42°58'41" E

218NWE

220NWE

208RNE

RACINE ROAD
NE RAMP

210RNE

212RNE

R/L RACINE ROAD NE RAMP
(INFORMATION SHOWN ELSEWHERE)

T 20 N
10 10
10 10
R 17 E

PI
WB-2

210WB
WB-2

212WB

R/L USH 10 WB/STH 441 SB

214WB

216WB
N 42°58'41" E

218WB

220WB

END CONSTRUCTION
STA 222WB+31.60
X = 817783.437
Y = 549137.208

222WB

PC
WB-2

208WB

PI
EB-2

210EB
EB-2

212EB

PT
WB-2

60.7'

214EB

USH 10/STH 441

216EB

218EB
N 42°58'41" E

60.7'

220EB

222EB

PC
WB-3

PT
EB-2

PC
EB-2

208EB

208RSE

RACINE ROAD
SE RAMP

210RSE

212RSE

R/L RACINE ROAD SE RAMP
(INFORMATION SHOWN ELSEWHERE)

R/L USH 10 EB/STH 441 NB

T 20 N
3 2
10 11
R 17 E

END PROJECT 1517-75-75
STA 223EB+00.00
X = 817828.287
Y = 549097.307

1/4 LINE 2642.86' N89°08'21"W

SECTION LINE 2646.50' N00°19'59"E

T 20 N
10 11
10 11
R 17 E

T 20 N
10 11
10 11
R 17 E

Curve : EB-2
PC = 207EB+76.23
X = 816840.68
Y = 547941.97
PI = 210EB+40.05
X = 816968.40
Y = 548172.81
PT = 213EB+01.23
X = 817148.25
Y = 548365.83
R = 2145.00
DELTA = 14°01'25" RT
D = 2°40'16"
L = 525.00
T = 263.82
E = 16.16
BK = N 28°57'16" E
AH = N 42°58'41" E

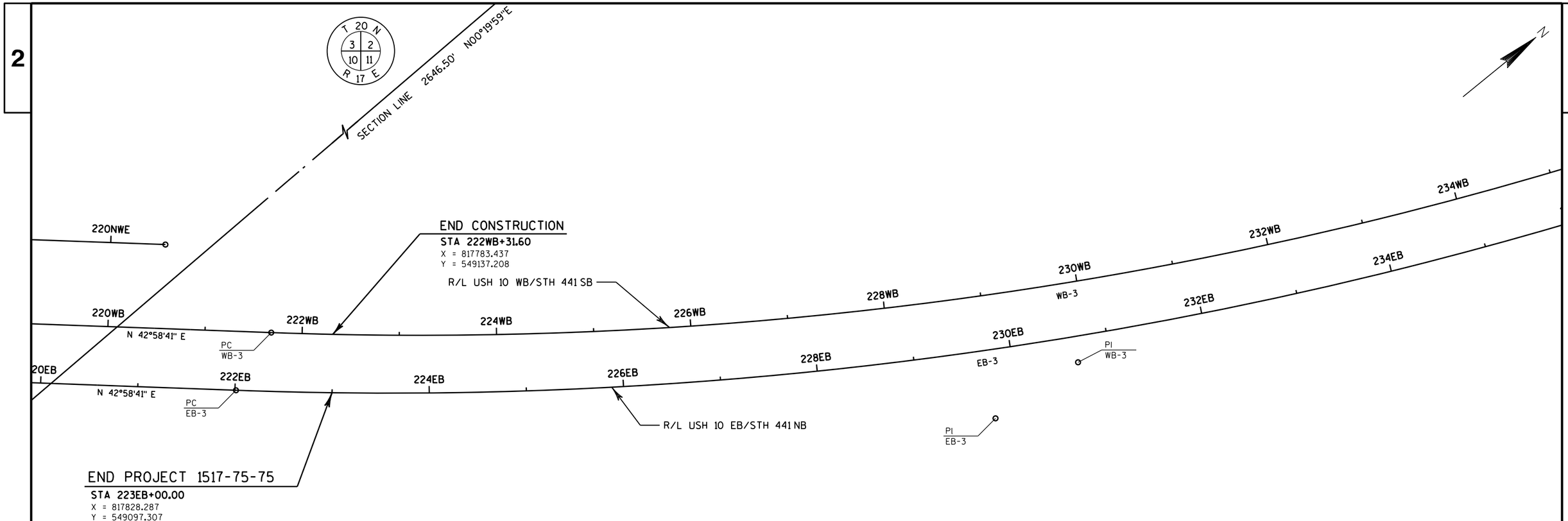
Curve : EB-3
PC = 222EB+01.09
X = 817761.70
Y = 549024.17
PI = 229EB+83.14
X = 818294.84
Y = 549596.34
PT = 237EB+48.23
X = 818591.96
Y = 550319.75
R = 4293.00
DELTA = 20°38'55" LT
D = 1°20'05"
L = 1547.14
T = 782.05
E = 70.65
BK = N 42°58'41" E
AH = N 22°19'46" E

Curve : WB-2
PC = 207WB+18.45
X = 816803.88
Y = 547989.06
PI = 209WB+89.03
X = 816934.87
Y = 548225.82
PT = 212WB+56.91
X = 817119.33
Y = 548423.78
R = 2200.00
DELTA = 14°01'25" RT
D = 2°36'16"
L = 538.46
T = 270.58
E = 16.58
BK = N 28°57'16" E
AH = N 42°58'41" E

Curve : WB-3
PC = 221WB+68.20
X = 817740.58
Y = 549090.50
PI = 229WB+98.80
X = 818306.81
Y = 549698.17
PT = 238WB+07.53
X = 818594.10
Y = 550477.50
R = 4130.00
DELTA = 22°44'33" LT
D = 1°23'14"
L = 1639.33
T = 830.60
E = 82.69
BK = N 42°58'41" E
AH = N 20°14'08" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - MAINLINE	SHEET 372	E

2



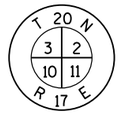
Curve : EB-3

PC = 222EB+01.09
X = 817761.70
Y = 549024.17
PI = 229EB+83.14
X = 818294.84
Y = 549596.34
PT = 237EB+48.23
X = 818591.96
Y = 550319.75
R = 4293.00
DELTA = 20°38'55" LT
D = 1°20'05"
L = 1547.14
T = 782.05
E = 70.65
BK = N 42°58'41" E
AH = N 22°19'46" E

Curve : WB-3

PC = 221WB+68.20
X = 817740.58
Y = 549090.50
PI = 229WB+98.80
X = 818306.81
Y = 549698.17
PT = 238WB+07.53
X = 818594.10
Y = 550477.50
R = 4130.00
DELTA = 22°44'33" LT
D = 1°23'14"
L = 1639.33
T = 830.60
E = 82.69
BK = N 42°58'41" E
AH = N 20°14'08" E

2





R/L USH 10 WB/STH 441 SB

234WB 236WB 238WB 240WB 242WB 244WB 246WB 248WB

PT WB-3

PC WB-4

WB-4

EB 236EB 238EB 240EB 242EB 244EB 246EB 248EB

PT EB-3

R/L USH 10 EB/STH 441 NB

PC EB-4

EB-4

SECTION LINE

2641.43' S89°47'19"E



Curve : EB-3
PC = 222EB+01.09
X = 817761.70
Y = 549024.17
PI = 229EB+83.14
X = 818294.84
Y = 549596.34
PT = 237EB+48.23
X = 818591.96
Y = 550319.75
R = 4293.00
DELTA = 20°38'55" LT
D = 1°20'05"
L = 1547.14
T = 782.05
E = 70.65
BK = N 42°58'41" E
AH = N 22°19'46" E

Curve : EB-4
PC = 242EB+47.50
X = 818781.65
Y = 550781.57
PI = 256EB+56.08
X = 819316.81
Y = 552084.53
PT = 267EB+22.20
X = 820725.29
Y = 552067.45
R = 2074.00
DELTA = 68°21'56.02" RT
D = 2°45'45.27"
L = 2474.71
T = 1408.58
E = 433.10
BK = N 22°19'45.84" E
AH = S 89°18'18.14" E

Curve : WB-3
PC = 221WB+68.20
X = 817740.58
Y = 549090.50
PI = 229WB+98.80
X = 818306.81
Y = 549698.17
PT = 238WB+07.53
X = 818594.10
Y = 550477.50
R = 4130.00
DELTA = 22°44'33" LT
D = 1°23'14"
L = 1639.33
T = 830.60
E = 82.69
BK = N 42°58'41" E
AH = N 20°14'08" E

Curve : WB-4
Curve : WB-6
PC = 241WB+31.18
X = 818706.04
Y = 550781.18
PI = 255WB+80.30
X = 819207.26
Y = 552140.86
PT = B 266WB+52.51
X = 820656.28
Y = 552123.29
EQNBK 266WB+54.63
EQNAHD B 266WB+52.51
X =552123.29
Y =820656.30
R = 2052.00
DELTA = 70°27'33.87" RT
D = 2°47'31.89"
L = 2523.44
T = 1449.12
E = 460.10
BK = N 20°14'07.98" E
AH = S 89°18'18.14" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - MAINLINE	SHEET 374	E

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PI
WB-4

PI
EB-4

N

R/L USH 10 WB/STH 441 SB

248WB 250WB 252WB 254WB 256WB 258WB 260WB 262WB

WB-4

248EB 250EB 252EB 254EB 256EB 258EB 260EB 262EB

EB-4

R/L USH 10 EB/STH 441 NB

T 20 N
2 2
2 2
R 17 E

T 20 N
2 2
11 11
R 17 E

1/4 LINE 2635.17' S00°08'45"E

Curve : EB-4

PC = 242EB+47.50
X = 818781.65
Y = 550781.57
PI = 256EB+56.08
X = 819316.81
Y = 552084.53
PT = 267EB+22.20
X = 820725.29
Y = 552067.45
R = 2074.00
DELTA = 68°21'56.02" RT
D = 2°45'45.27"
L = 2474.71
T = 1408.58
E = 433.10
BK = N 22°19'45.84" E
AH = S 89°18'18.14" E

Curve : WB-4

Curve : WB-6
PC = 241WB+31.18
X = 818706.04
Y = 550781.18
PI = 255WB+80.30
X = 819207.26
Y = 552140.86
PT = B 266WB+52.51
X = 820656.28
Y = 552123.29
EQNBK 266WB+54.63
EQNAHD B 266WB+52.51
X = 552123.29
Y = 820656.30
R = 2052.00
DELTA = 70°27'33.87" RT
D = 2°47'31.89"
L = 2523.44
T = 1449.12
E = 460.10
BK = N 20°14'07.98" E
AH = S 89°18'18.14" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - MAINLINE	SHEET 375	E

2

T 20 N
2 2
2 2
R 17 E

N

1/4 LINE 2635.17' S00°08'45"E

EqnB 266+52.51
Eqn2266+54.63

PT
EB-4

R/L USH 10 WB/STH 441 SB

262WB 264WB 266WB B 268WB B 270WB B 272WB B 274WB B 276WB

WB-4

262EB 264EB 266EB 268EB 270EB 272EB 274EB 276EB

EB-4

PT
EB-4

R/L USH 10 EB/STH 441 NB

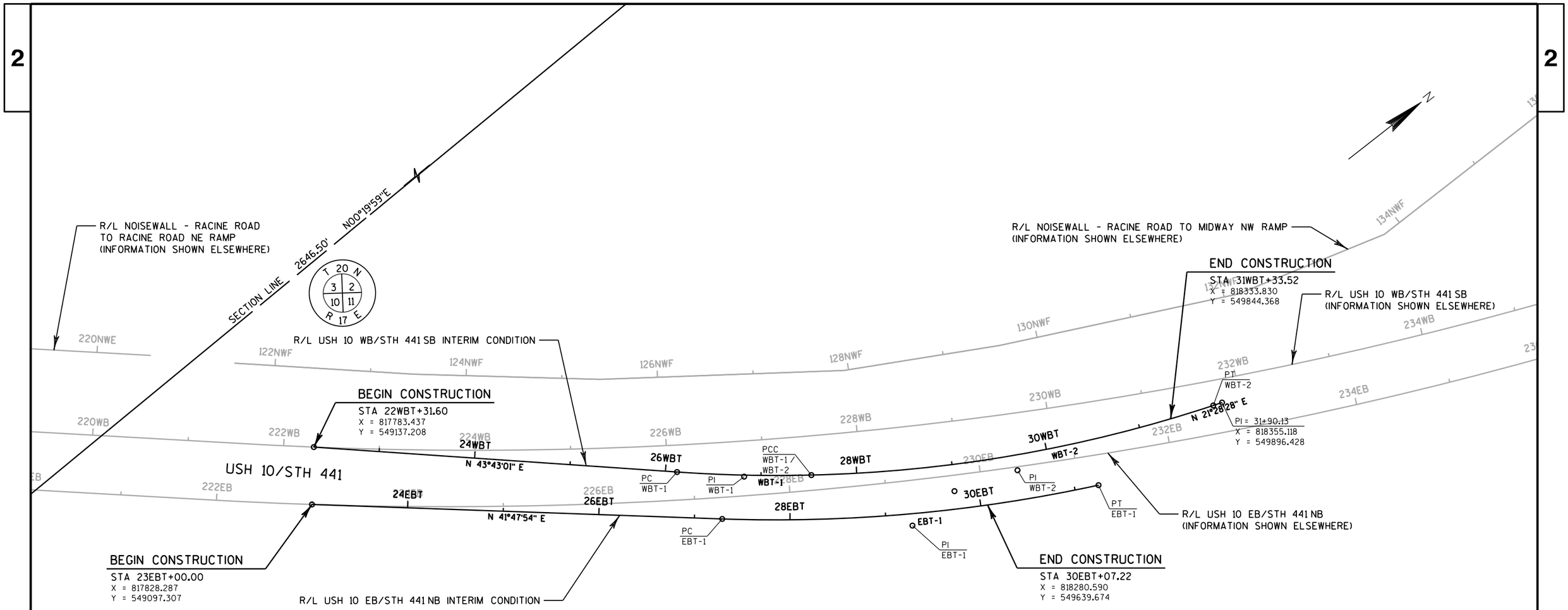
T 20 N
2 2
11 11
R 17 E

Curve : EB-4
PC = 242EB+47.50
X = 818781.65
Y = 550781.57
PI = 256EB+56.08
X = 819316.81
Y = 552084.53
PT = 267EB+22.20
X = 820725.29
Y = 552067.45
R = 2074.00
DELTA = 68°21'56.02" RT
D = 2°45'45.27"
L = 2474.71
T = 1408.58
E = 433.10
BK = N 22°19'45.84" E
AH = S 89°18'18.14" E

Curve : WB-4
Curve : WB-6
PC = 241WB+31.18
X = 818706.04
Y = 550781.18
PI = 255WB+80.30
X = 819207.26
Y = 552140.86
PT = B 266WB+52.51
X = 820656.28
Y = 552123.29
EQNBK 266WB+54.63
EQNAHD B 266WB+52.51
X =552123.29
Y =820656.30
R = 2052.00
DELTA = 70°27'33.87" RT
D = 2°47'31.89"
L = 2523.44
T = 1449.12
E = 460.10
BK = N 20°14'07.98" E
AH = S 89°18'18.14" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - MAINLINE	SHEET 376	E

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Curve EBT-1

PC = 27EBT+29.04
X = 818114.245
Y = 549417.153
PI = 29EBT+28.05
X = 818246.890
Y = 549565.517
PT = 31EBT+25.00
X = 818338.820
Y = 549742.025
R = 1588.00
DELTA = 14°17'11" LT
D = 3°36'29"
L = 395.96
T = 199.01
E = 12.42
BK = N 41°47'54" E
AH = N 27°30'43" E

Curve WBT-1

PC = 26WBT+12.08
X = 818046.38
Y = 549412.20
PI = 26WBT+82.36
X = 818094.96
Y = 549463.00
PCC = 27WBT+52.58
X = 818138.68
Y = 549518.08
R = 1526.35
DELTA = 5°16'27" LT
D = 3°45'14"
L = 140.51
T = 70.30
E = 1.62
BK = N 43°43'01" E
AH = N 38°26'34" E

Curve WBT-2

PCC = 27WBT+52.58
X = 818138.68
Y = 549518.08
PI = 29WBT+68.13
X = 818272.69
Y = 549686.90
PT = 31WBT+80.53
X = 818351.60
Y = 549887.49
R = 1445.00
DELTA = 16°58'06" LT
D = 3°57'54"
L = 427.94
T = 215.55
E = 15.99
BK = N 38°26'34" E
AH = N 21°28'28" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - INTERIM CONDITION	SHEET 377	E

2

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

T 20 N
10 10
10 10
R 17 E

178WB
178EB
180WB
180EB
182WB
182EB
184WB
184EB
186WB
186EB
188WB
188EB
190WB
190EB
192WB
192EB

PI = STA 182RNW+97.94
STA 182WB+56.62, 24.00' LT

PC
RNW-1

BEGIN CONSTRUCTION
STA 186RNW+20.00
X = 815398.331
Y = 546534.588

R/L RACINE ROAD NW RAMP

PCC
RNW-1 / RNW-2

184RNW
186RNW
188RNW
RNW-1
190RNW
192RNW
RACINE ROAD NW RAMP

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

USH 10/STH 441

1/4 LINE 2639.67' N00°22'23"E

PI = STA 183RSW+11.95
STA 183EB+11.95, 24.00' RT
X = 815124.479
Y = 546299.211

184RSW
N 78°42'16" E

PI
RNW-1

186RSW
PC
RSW-1

BEGIN CONSTRUCTION
STA 185RSW+92.30
X=815399.397
Y=546354.123

RSW-1
PI
RSW-1

188RSW
PT
RSW-1

N 70°19'35" E
190RSW
RACINE ROAD SW RAMP
192RSW
N 70°19'35" E

PC
RSW-2

PI
RSW-2

194RSW
194RSWC
RSW-2
RSWC-1

R/L RACINE ROAD SW RAMP

R/L RACINE ROAD SW BYPASS
(INFORMATION SHOWN ELSEWHERE)

T 20 N
10 10
15 15
R 17 E

Curve RNW-1
PC = 182RNW+56.62
X = 815058.40
Y = 546409.40
PI = 188RNW+39.01
X = 815627.22
Y = 546534.36
PCC = 193RNW+54.50
X = 815921.18
Y = 547037.12
R = 1330.00
DELTA = 47°17'45" LT
D = 4°18'29"
L = 1097.88
T = 582.39
E = 121.92
BK = N 77°36'36" E
AH = N 30°18'51" E

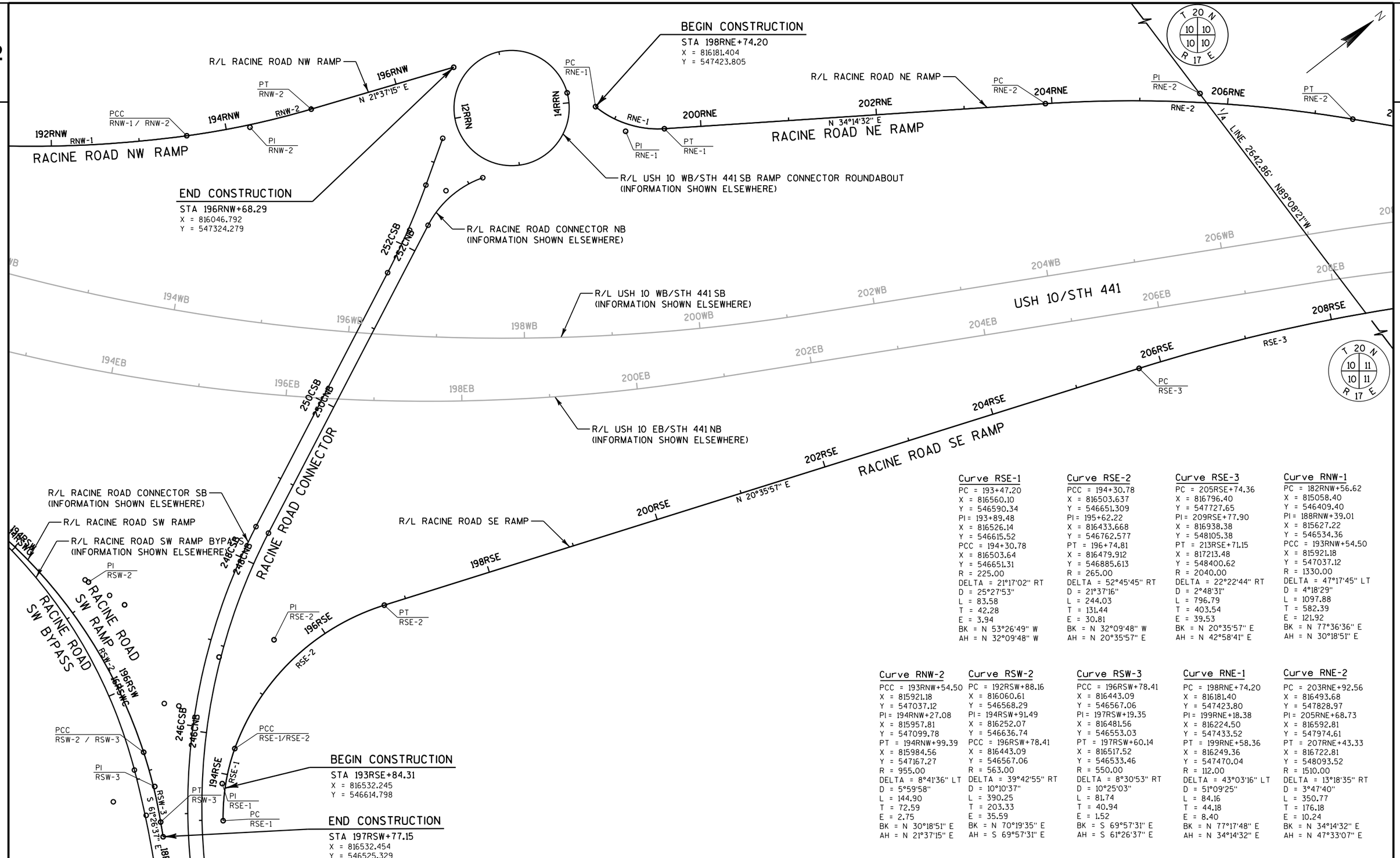
Curve RNW-2
PCC = 193RNW+54.50
X = 815921.18
Y = 547037.12
PI = 194RNW+27.08
X = 815957.81
Y = 547099.78
PT = 194RNW+99.39
X = 815984.56
Y = 547167.27
R = 955.00
DELTA = 8°41'36" LT
D = 5°59'58"
L = 144.90
T = 72.59
E = 2.75
BK = N 30°18'51" E
AH = N 21°37'15" E

Curve RSW-1
PC = 186RSW+25.66
X = 815432.11
Y = 546360.66
PI = 187RSW+36.03
X = 815540.35
Y = 546382.28
PT = 188RSW+46.02
X = 815644.28
Y = 546419.44
R = 1507.00
DELTA = 8°22'41" LT
D = 3°48'07"
L = 220.36
T = 110.38
E = 4.04
BK = N 78°42'16" E
AH = N 70°19'35" E

Curve RSW-2
PC = 192RSW+88.16
X = 816060.61
Y = 546568.29
PI = 194RSW+91.49
X = 816252.07
Y = 546636.74
PCC = 196RSW+78.41
X = 816443.09
Y = 546567.06
R = 563.00
DELTA = 39°42'55" RT
D = 10°10'37"
L = 390.25
T = 203.33
E = 35.59
BK = N 70°19'35" E
AH = S 69°57'31" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - RAMPS & CONNECTOR ROAD	SHEET 378	E

2



Curve RSE-1
PC = 193+47.20
X = 816560.10
Y = 546590.34
PI = 193+89.48
X = 816526.14
Y = 546615.52
PCC = 194+30.78
X = 816503.64
Y = 546651.31
R = 225.00
DELTA = 21°17'02" RT
D = 25°27'53"
L = 83.58
T = 42.28
E = 3.94
BK = N 53°26'49" W
AH = N 32°09'48" W

Curve RSE-2
PCC = 194+30.78
X = 816503.637
Y = 546651.309
PI = 195+62.22
X = 816433.668
Y = 546762.577
PT = 196+74.81
X = 816479.912
Y = 546885.613
R = 265.00
DELTA = 52°45'45" RT
D = 21°37'16"
L = 244.03
T = 131.44
E = 30.81
BK = N 32°09'48" W
AH = N 20°35'57" E

Curve RSE-3
PC = 205RSE+74.36
X = 816796.40
Y = 547727.65
PI = 209RSE+77.90
X = 816938.38
Y = 548105.38
PT = 213RSE+71.15
X = 817213.48
Y = 548400.62
R = 2040.00
DELTA = 22°22'44" RT
D = 2°48'31"
L = 796.79
T = 403.54
E = 39.53
BK = N 20°35'57" E
AH = N 42°58'41" E

Curve RNW-1
PC = 182RNW+56.62
X = 815058.40
Y = 546409.40
PI = 188RNW+39.01
X = 815627.22
Y = 546534.36
PCC = 193RNW+54.50
X = 815921.18
Y = 547037.12
R = 1330.00
DELTA = 47°17'45" LT
D = 4°18'29"
L = 1097.88
T = 582.39
E = 121.92
BK = N 77°36'36" E
AH = N 30°18'51" E

Curve RNW-2
PCC = 193RNW+54.50
X = 815921.18
Y = 547037.12
PI = 194RNW+27.08
X = 815957.81
Y = 547099.78
PT = 194RNW+99.39
X = 815984.56
Y = 547167.27
R = 955.00
DELTA = 8°41'36" LT
D = 5°59'58"
L = 144.90
T = 72.59
E = 2.75
BK = N 30°18'51" E
AH = N 21°37'15" E

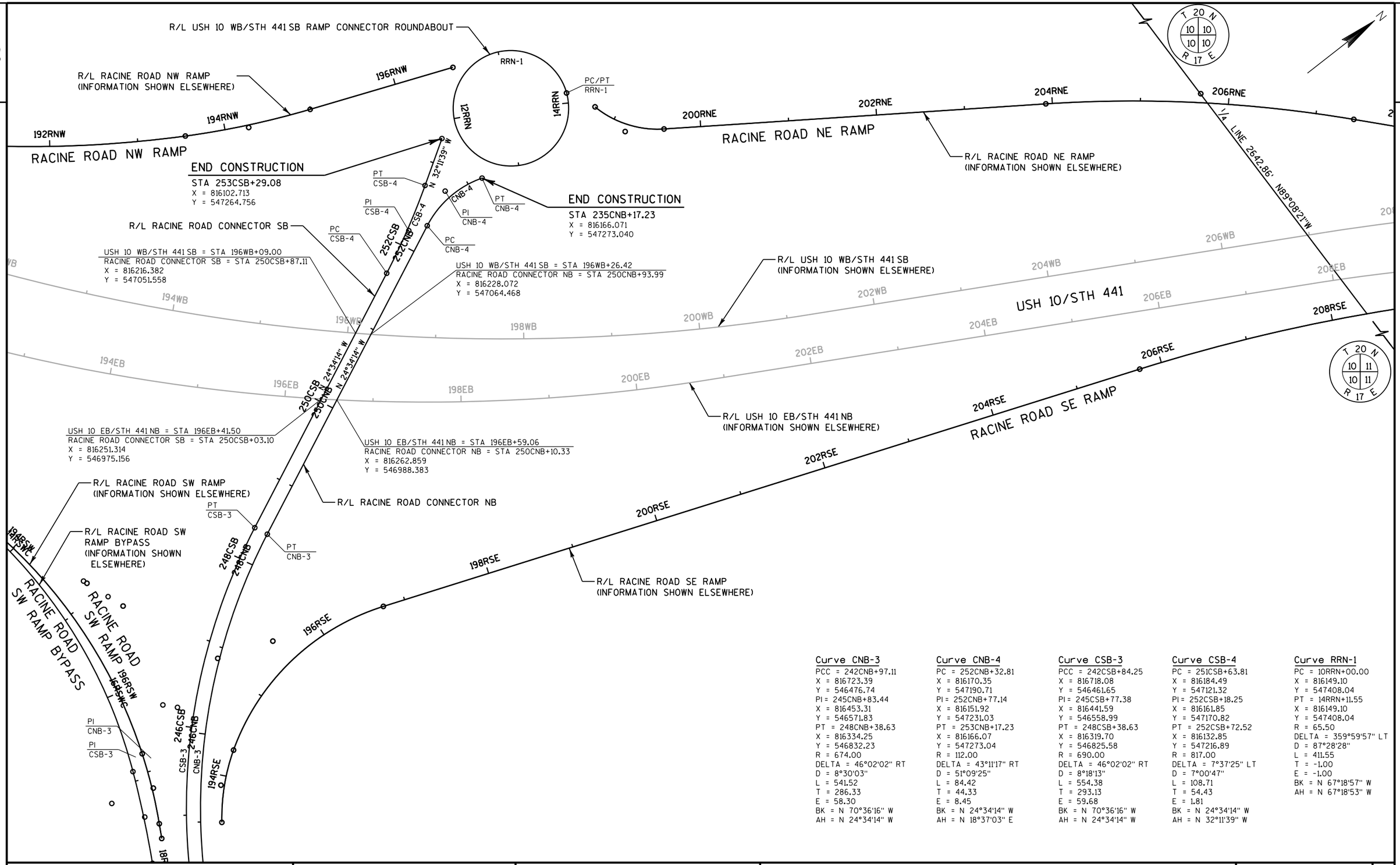
Curve RSW-2
PC = 192RSW+88.16
X = 816060.61
Y = 546568.29
PI = 194RSW+91.49
X = 816252.07
Y = 546636.74
PCC = 196RSW+78.41
X = 816443.09
Y = 546567.06
R = 563.00
DELTA = 39°42'55" RT
D = 10°10'37"
L = 390.25
T = 203.33
E = 35.59
BK = N 70°19'35" E
AH = S 69°57'31" E

Curve RSW-3
PCC = 196RSW+78.41
X = 816443.09
Y = 546567.06
PI = 197RSW+19.35
X = 816481.56
Y = 546553.03
PT = 197RSW+60.14
X = 816517.52
Y = 546533.46
R = 550.00
DELTA = 8°30'53" RT
D = 10°25'03"
L = 81.74
T = 40.94
E = 1.52
BK = S 69°57'31" E
AH = S 61°26'37" E

Curve RNE-1
PC = 198RNE+74.20
X = 816181.40
Y = 547423.80
PI = 199RNE+18.38
X = 816224.50
Y = 547433.52
PT = 199RNE+58.36
X = 816249.36
Y = 547470.04
R = 112.00
DELTA = 43°03'16" LT
D = 51°09'25"
L = 84.16
T = 44.18
E = 8.40
BK = N 77°17'48" E
AH = N 34°14'32" E

Curve RNE-2
PC = 203RNE+92.56
X = 816493.68
Y = 547828.97
PI = 205RNE+68.73
X = 816592.81
Y = 547974.61
PT = 207RNE+43.33
X = 816722.81
Y = 548093.52
R = 1510.00
DELTA = 13°18'35" RT
D = 3°47'40"
L = 350.77
T = 176.18
E = 10.24
BK = N 34°14'32" E
AH = N 47°33'07" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - RAMPS & CONNECTOR ROAD	SHEET 379	E



Curve CNB-3
PCC = 242CNB+97.11
X = 816723.39
Y = 546476.74
PI = 245CNB+83.44
X = 816453.31
Y = 546571.83
PT = 248CNB+38.63
X = 816334.25
Y = 546832.23
R = 674.00
DELTA = 46°02'02" RT
D = 8°30'03"
L = 541.52
T = 286.33
E = 58.30
BK = N 70°36'16" W
AH = N 24°34'14" W

Curve CNB-4
PC = 252CNB+32.81
X = 816170.35
Y = 547190.71
PI = 252CNB+77.14
X = 816151.92
Y = 547231.03
PT = 253CNB+17.23
X = 816166.07
Y = 547273.04
R = 112.00
DELTA = 43°11'17" RT
D = 51°09'25"
L = 84.42
T = 44.33
E = 8.45
BK = N 24°34'14" W
AH = N 18°37'03" E

Curve CSB-3
PCC = 242CSB+84.25
X = 816718.08
Y = 546461.65
PI = 245CSB+77.38
X = 816441.59
Y = 546558.99
PT = 248CSB+38.63
X = 816319.70
Y = 546825.58
R = 690.00
DELTA = 46°02'02" RT
D = 8°18'13"
L = 554.38
T = 293.13
E = 59.68
BK = N 70°36'16" W
AH = N 24°34'14" W

Curve CSB-4
PC = 251CSB+63.81
X = 816184.49
Y = 547121.32
PI = 252CSB+18.25
X = 816161.85
Y = 547170.82
PT = 252CSB+72.52
X = 816132.85
Y = 547216.89
R = 817.00
DELTA = 7°37'25" LT
D = 7°00'47"
L = 108.71
T = 54.43
E = 1.81
BK = N 24°34'14" W
AH = N 32°11'39" W

Curve RRN-1
PC = 10RRN+00.00
X = 816149.10
Y = 547408.04
PT = 14RRN+11.55
X = 816149.10
Y = 547408.04
R = 65.50
DELTA = 359°59'57" LT
D = 87°28'28"
L = 411.55
T = -1.00
E = -1.00
BK = N 67°18'57" W
AH = N 67°18'53" W

END CONSTRUCTION
STA 212RNE+33.28
X = 817084.344
Y = 548424.201

PT
RNE-2

208RNE

RACINE ROAD NE RAMP

210RNE
N 47°33'07" E

212RNE

R/L RACINE ROAD NE RAMP

PI = STA 212RNE+56.90
STA 212WB+56.91, 24.00' LT
X = 817101.774
Y = 548440.143

210NWE
212NWE
214NWE
216NWE
218NWE
220NWE

R/L NOISEWALL - RACINE ROAD TO RACINE NE RAMP
(INFORMATION SHOWN ELSEWHERE)

208WB
210WB
212WB
214WB
216WB
218WB
220WB
222WB

122NWF

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

USH 10/STH 441

PI
RSE-3

210EB
212EB
214EB
216EB
218EB
220EB
222EB

210RSE
212RSE

RACINE ROAD SE RAMP

RSE-3

PT
RSE-3

STA 213RSE+71.15 =
STA 212EB+71.16', 24.00' RT

R/L RACINE ROAD SE RAMP

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

END CONSTRUCTION
STA 212RSE+77.98
X = 817151.539
Y = 548331.029

T 20 N
R 17 E
10 10
10 10

T 20 N
R 17 E
3 2
10 11

T 20 N
R 17 E
10 11
15 14

T 20 N
R 17 E
10 11
10 11

T 20 N
R 17 E
11 11
11 11

1/4 LINE
2642.86'
N89°08'21"W

SECTION LINE
2653.13'
N00°26'18"E

1/4 LINE
2636.87'
N89°43'04"W

SECTION LINE
2646.50'
N00°19'59"E

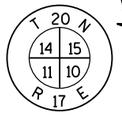
Curve FS-1
PC = 10FS+00.00
X = 817032.12
Y = 548540.97
PI = 10FS+62.19
X = 817093.92
Y = 548547.89
PT = 11FS+19.13
X = 817136.32
Y = 548593.39
R = 168.00
DELTA = 40°37'40" LT
D = 34°06'17"
L = 119.13
T = 62.19
E = 11.14
BK = N 83°36'21" E
AH = N 42°58'41" E

Curve FS-2
PC = 13FS+01.49
X = 817260.64
Y = 548726.81
PI = 13FS+47.08
X = 817291.72
Y = 548760.17
PT = 13FS+89.09
X = 817294.72
Y = 548805.66
R = 128.00
DELTA = 39°12'44" LT
D = 44°45'44"
L = 87.60
T = 45.59
E = 7.88
BK = N 42°58'41" E
AH = N 3°45'57" E

Curve RNE-2
PC = 203RNE+92.56
X = 816493.68
Y = 547828.97
PI = 205RNE+68.73
X = 816592.81
Y = 547974.61
PT = 207RNE+43.33
X = 816722.81
Y = 548093.52
R = 1510.00
DELTA = 13°18'35" RT
D = 3°47'40"
L = 350.77
T = 176.18
E = 10.24
BK = N 34°14'32" E
AH = N 47°33'07" E

Curve RSE-3
PC = 205RSE+74.36
X = 816796.40
Y = 547727.65
PI = 209RSE+77.90
X = 816938.38
Y = 548105.38
PT = 213RSE+71.15
X = 817213.48
Y = 548400.62
R = 2040.00
DELTA = 22°22'44" RT
D = 2°48'31"
L = 796.79
T = 403.54
E = 39.53
BK = N 20°35'57" E
AH = N 42°58'41" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - RAMPS & CONNECTOR ROAD	SHEET 381	E



RACINE ROAD

RACINE ROAD SW BYPASS

1/4 LINE 2653.13' S00°26'18"W

Curve RSE-1
PC = 193RSE+47.20
X = 816560.10
Y = 546590.34
PI = 193RSE+89.48
X = 816526.14
Y = 546615.52
PCC = 194RSE+30.78
X = 816503.64
Y = 546651.31
R = 225.00
DELTA = 21°17'02" RT
D = 25°27'53"
L = 83.58
T = 42.28
E = 3.94
BK = N 53°26'49" W
AH = N 32°09'48" W

Curve RSE-2
PCC = 194RSE+30.78
X = 816503.64
Y = 546651.31
PI = 195RSE+62.22
X = 816433.67
Y = 546762.58
PT = 196RSE+74.81
X = 816479.91
Y = 546885.61
R = 265.00
DELTA = 52°45'45" RT
D = 21°37'16"
L = 244.03
T = 131.44
E = 30.81
BK = N 32°09'48" W
AH = N 20°35'57" E

Curve CNB-3
PCC = 242CNB+97.11
X = 816723.39
Y = 546476.74
PI = 245CNB+83.44
X = 816453.31
Y = 546571.83
PT = 248CNB+38.63
X = 816334.25
Y = 546832.23
R = 674.00
DELTA = 46°02'02" RT
D = 8°30'03"
L = 541.52
T = 286.33
E = 58.30
BK = N 70°36'16" W
AH = N 24°34'14" W

Curve CSB-3
PCC = 242CSB+84.25
X = 816718.08
Y = 546461.65
PI = 245CSB+77.38
X = 816441.59
Y = 546558.99
PT = 248CSB+38.63
X = 816319.70
Y = 546825.58
R = 690.00
DELTA = 46°02'02" RT
D = 8°18'13"
L = 554.38
T = 293.13
E = 59.68
BK = N 70°36'16" W
AH = N 24°34'14" W

24RSWC
22RSWC
20RSWC
238CSB
238CNB
R/L RACINE ROAD SW BYPASS
240CSB
240CNB
RSWC-4
242CSB
242CNB
RSWC-4/RSWC-3
RSWC-3
18RSWC
244CSB
244CNB
RSWC-2
RSW-3
RSWC-1
19RSW
CSB-3
CNB-3
16RSWC
R/L RACINE ROAD SW RAMP
246CSB
246CNB
RSE-1
19RSE
RSE-2
196RSE
198RSE
RACINE ROAD CONNECTOR
RACINE
R/L RACINE ROAD CONNECTOR NB
R/L RACINE ROAD CONNECTOR SB
R/L RACINE ROAD SE RAMP
RACINE ROAD SE RAMP
ORRB

BEGIN CONSTRUCTION
STA 16RSWC+81.36
X = 816445.651
Y = 546549.278

END CONSTRUCTION
STA 197RSW+77.15
X = 816532.454
Y = 546525.329

END CONSTRUCTION
STA 18RSWC+63.37
X = 816608.010
Y = 546467.218

BEGIN CONSTRUCTION
STA 243CSB+82.99
X = 816627.608
Y = 546500.979

BEGIN CONSTRUCTION
STA 243CNB+92.85
X = 816635.649
Y = 546514.830

BEGIN CONSTRUCTION
STA ORRB+3.00
X = 816615.870
Y = 546570.212

END CONSTRUCTION
STA ORRB+43.51
X = 816636.294
Y = 546605.195

PI ORRB+00.00
X = 816614.357
Y = 546567.621

PI ORRB+50.00
X = 816639.567
Y = 546610.802

BEGIN CONSTRUCTION
STA 193RSE+84.31
X = 816532.245
Y = 546614.798

PC RSWC-3
PI RSWC-3
PCC RSWC-1 / RSWC-2
PI CSB-3
PT RSWC-2
PI RSWC-2
PCC RSW-3 / RSW-2
PI RSW-3
PI CNB-3
PCC CSB-2 / CSB-3
PCC CNB-2 / CNB-3
PC RSE-1
PI RSE-1
PCC RSE-1 / RSE-2
PI RSE-2
PT RSE-2

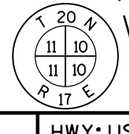
Curve RSWC-1
PC = 12RSWC+63.61
X = 816037.50
Y = 546560.02
PI = 14RSWC+86.88
X = 816247.73
Y = 546635.19
PCC = 16RSWC+88.87
X = 816452.56
Y = 546546.33
R = 565.00
DELTA = 43°07'31" RT
D = 10°08'27"
L = 425.26
T = 223.27
E = 42.52
BK = N 70°19'35" E
AH = S 66°32'54" E

Curve RSWC-2
PCC = 16RSWC+88.87
X = 816452.56
Y = 546546.33
PI = 17RSWC+42.14
X = 816501.43
Y = 546525.13
PT = 17RSWC+95.34
X = 816548.22
Y = 546499.67
R = 1195.00
DELTA = 5°06'17" RT
D = 4°47'41"
L = 106.47
T = 53.27
E = 1.19
BK = S 66°32'54" E
AH = S 61°26'37" E

Curve RSWC-3
PC = 18RSWC+52.86
X = 816598.74
Y = 546472.17
PI = 19RSWC+11.26
X = 816650.04
Y = 546444.26
PCC = 19RSWC+69.41
X = 816705.13
Y = 546424.86
R = 729.00
DELTA = 9°09'38" LT
D = 7°51'34"
L = 116.55
T = 58.40
E = 2.34
BK = S 61°26'37" E
AH = S 70°36'16" E

Curve RSW-2
PC = 192RSW+88.16
X = 816060.61
Y = 546568.29
PI = 194RSW+91.49
X = 816252.08
Y = 546636.74
PCC = 196RSW+78.41
X = 816443.09
Y = 546567.06
R = 563.00
DELTA = 39°42'55" RT
D = 10°10'37"
L = 390.25
T = 203.33
E = 35.59
BK = N 70°19'35" E
AH = S 69°57'31" E

Curve RSW-3
PCC = 196RSW+78.41
X = 816443.09
Y = 546567.06
PI = 197RSW+19.35
X = 816481.56
Y = 546553.03
PT = 197RSW+60.14
X = 816517.52
Y = 546533.46
R = 550.00
DELTA = 8°30'53" RT
D = 10°25'03"
L = 81.74
T = 40.94
E = 1.52
BK = S 69°57'31" E
AH = S 61°26'37" E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - RAMPS & CONNECTOR ROAD	SHEET 382	E

Curve XNE-1
PC = 40XNE+00.00
X = 816146.80
Y = 547440.30
PI = 40XNE+08.29
X = 816154.84
Y = 547438.31
PCC = 40XNE+16.42
X = 816163.10
Y = 547439.02
R = 50.00
DELTA = 18°49'17" LT
D = 114°35'30"
L = 16.42
T = 8.29
E = 0.68
BK = S 76°05'27" E
AH = N 85°05'16" E

Curve XNE-2
PCC = 40XNE+16.42
X = 816163.10
Y = 547439.02
PI = 40XNE+55.55
X = 816202.08
Y = 547442.37
PCC = 40XNE+91.01
X = 816228.44
Y = 547471.29
R = 100.00
DELTA = 42°44'10" LT
D = 57°17'45"
L = 74.59
T = 39.13
E = 7.38
BK = N 85°05'16" E
AH = N 42°21'07" E

Curve XNE-3
PCC = 40XNE+91.01
X = 816228.44
Y = 547471.29
PI = 41XNE+22.34
X = 816249.54
Y = 547494.44
PT = 41XNE+53.45
X = 816265.41
Y = 547521.45
R = 300.00
DELTA = 11°55'25" LT
D = 19°05'55"
L = 62.43
T = 31.33
E = 1.63
BK = N 42°21'07" E
AH = N 30°25'41" E

Curve XNW-1
PC = 10XNW+00.00
X = 815962.25
Y = 547176.11
PI = 10XNW+20.01
X = 815969.62
Y = 547194.71
PT = 10XNW+40.02
X = 815976.19
Y = 547213.62
R = 931.00
DELTA = 2°27'46" LT
D = 6°09'15"
L = 40.02
T = 20.01
E = 0.22
BK = N 21°37'15" E
AH = N 19°09'28" E

Curve XSE-1
PC = 30XSE+00.00
X = 816208.61
Y = 547164.74
PI = 30XSE+21.27
X = 816199.77
Y = 547184.08
PCC = 30XSE+42.46
X = 816193.75
Y = 547204.48
R = 300.00
DELTA = 8°06'35" RT
D = 19°05'55"
L = 42.46
T = 21.27
E = 0.75
BK = N 24°34'13" W
AH = N 16°27'39" W

Curve XSE-2
PCC = 30XSE+42.46
X = 816193.75
Y = 547204.48
PI = 30XSE+75.87
X = 816184.28
Y = 547236.52
PT = 31XSE+06.95
X = 816195.97
Y = 547267.82
R = 100.00
DELTA = 36°57'02" RT
D = 57°17'45"
L = 64.49
T = 33.41
E = 5.43
BK = N 16°27'39" W
AH = N 20°29'23" E

Curve XSW-1
PC = 20XSW+00.00
X = 816106.30
Y = 547226.56
PI = 20XSW+21.47
X = 816094.36
Y = 547244.40
PT = 20XSW+42.93
X = 816081.48
Y = 547261.58
R = 800.00
DELTA = 3°04'28" LT
D = 7°09'43"
L = 42.93
T = 21.47
E = 0.29
BK = N 33°47'37" W
AH = N 36°52'05" W

Curve XSW-2
PC = 20XSW+86.34
X = 816055.44
Y = 547296.31
PI = 20XSW+91.60
X = 816052.28
Y = 547300.52
PT = 20XSW+96.85
X = 816049.66
Y = 547305.08
R = 85.50
DELTA = 7°02'43" RT
D = 67°00'45"
L = 10.51
T = 5.26
E = 0.16
BK = N 36°52'05" W
AH = N 29°49'22" W

2

N

1/4 LINE 2642.86' N89°08'21"W

T 20 N
10 10
10 10
R 17 E

T 20 N
10 11
10 11
R 17 E

R/L USH 10 WB/STH 441 SB RAMP CONNECTOR ROUNDABOUT
(INFORMATION SHOWN ELSEWHERE)

PI 10XNW+77.32
X= 815988.431
Y= 547248.850

END ALIGNMENT
PT 12XNW+15.04
X= 816033.628
Y= 547378.945

12XNW

N 19°09'28" E

PT
XNW-1

BEGIN ALIGNMENT
PC 10XNW+00
X= 815962.249
Y= 547176.109

XNW-1

N 19°09'28" E

PI
XNW-1

END ALIGNMENT
PT 20XSW+96.85
X= 816049.661
Y= 547305.084

PI
XSW-2

XSW-2

N 36°52'05" W

PC
XSW-2

PT
XSW-1

PI
XSW-1

XSW-1

20XSW

BEGIN ALIGNMENT
PC 20XSW+00
X= 816106.302
Y= 547226.562

PI
XSE-2

PT
XSE-2

31XSE

N 20°29'23" E

END ALIGNMENT
PI 31XSE+56.44
X= 816213.297
Y= 547314.176

XSE-2

XSE-1

PCC
XSE-1 / XSE-2

PI
XSE-1

30XSE

BEGIN ALIGNMENT
PC 30XSE+00
X= 816208.615
Y= 547164.743

BEGIN ALIGNMENT
PC 40XNE+00
X= 816146.795
Y= 547440.305

PI
XNE-1

XNE-1

PCC
XNE-1 / XNE-2

XNE-2

42XNE

XNE-3

N 30°25'41" E

END ALIGNMENT
PI 42XNE+33.59
X= 816306.998
Y= 547590.560

PI
XNE-2

PCC
XNE-2 /XNE-3

PT
XNE-3

PI
XNE-3

R/L RACINE ROAD NW RAMP
(INFORMATION SHOWN ELSEWHERE)

RACINE ROAD NW RAMP

190RNW
192RNW
194RNW
196RNW
198RNW
14RRN
15RRN
200RNE
202RNE
204RNE

RACINE ROAD NE RAMP

R/L RACINE ROAD NE RAMP
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD CONNECTOR NB
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD CONNECTOR SB
(INFORMATION SHOWN ELSEWHERE)

252CSB
252CNB
250CSB
250CNB

RACINE ROAD CONNECTOR

190WB
192WB
194WB
196WB
198WB
200WB
202WB
204WB

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

USH 10/STH 441

192EB
194EB
196EB
198EB
200EB
202EB
204EB
206EB

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

RACINE ROAD SW RAMP

R/L RACINE ROAD SW RAMP
(INFORMATION SHOWN ELSEWHERE)

192RSW

R/L RACINE ROAD SE RAMP
(INFORMATION SHOWN ELSEWHERE)

RACINE ROAD SE RAMP

202RSE
204RSE
206RSE

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EDGE OF PAVEMENT	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\027210_ad.dgn
PLOT DATE : 3/31/2015 4:50:43 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

T 20 N
10 10
10 10
R 17 E

N

178WB
178EB
S 89°46'59" E
180WB
180EB
USH 10/STH 441
182WB
182EB
184RNW
184WB
184EB
184RSW
186RNW
186WB
186EB
186RSW
188RNW
188WB
188EB
188RSW
190RNW
190WB
190EB
190RSW
192RNW
192WB
192EB
192RSW

PC
EBL-1
EBL-1
PI
EBL-1
PCC
EBL-1/EBL-2

482EBL
PI
EBL-2
EBL-2
PCC
EBL-2/EBL-3
484EBL
486EBL
EBL-3
PI
EBL-3
488EBL
PT
EBL-3
490EBL
N 55°20'37" E
PC
EBL-4
492EBL
EBL-4

1/4 LINE 2639.67' S00°22'23"W

T 20 N
10 10
15 15
R 17 E

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

R/L USH 10 EB/STH 441
EDGE OF PAVEMENT

R/L USH 10/STH 441 EB
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD NW RAMP
(INFORMATION SHOWN ELSEWHERE)

RACINE ROAD NW RAMP

RACINE ROAD SW RAMP

R/L RACINE ROAD SW RAMP
(INFORMATION SHOWN ELSEWHERE)

RACINE ROAD
SW BYPASS

R/L RACINE ROAD SW BYPASS
(INFORMATION SHOWN ELSEWHERE)

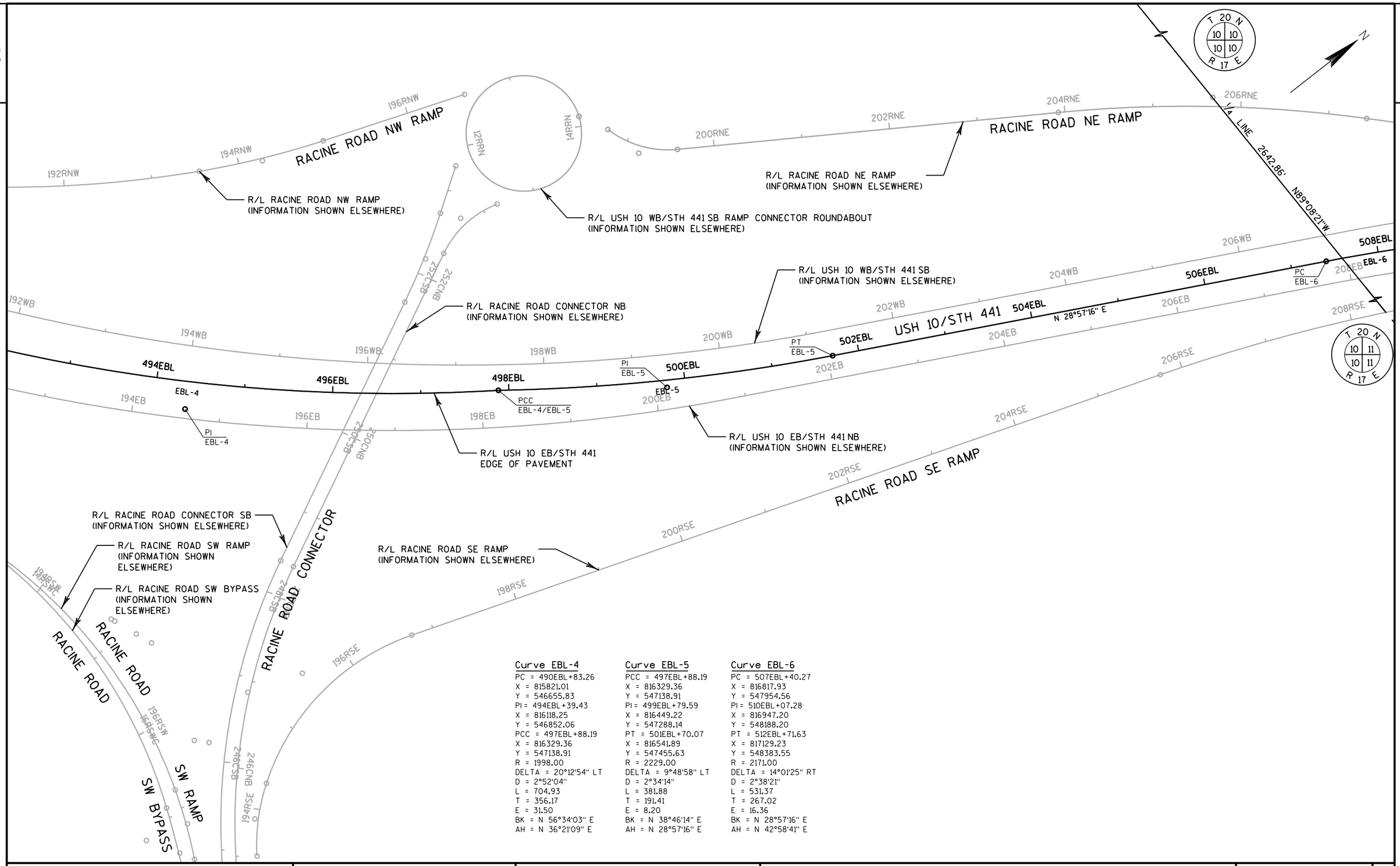
Curve EBL-1
PC = 480EBL+90.00
X = 814897.78
Y = 546317.08
PI = 481EBL+00.83
X = 814908.56
Y = 546318.03
PCC = 481EBL+11.65
X = 814919.34
Y = 546319.10
R = 2014.00
DELTA = 0°36'58" LT
D = 2°50'42"
L = 21.66
T = 10.83
E = 0.03
BK = N 84°56'30" E
AH = N 84°19'32" E

Curve EBL-2
PCC = 481EBL+11.65
X = 814919.34
Y = 546319.10
PI = 482EBL+16.83
X = 815023.42
Y = 546334.22
PCC = 483EBL+21.79
X = 815125.24
Y = 546360.59
R = 1924.25
DELTA = 6°15'25" LT
D = 2°58'39"
L = 210.14
T = 105.18
E = 2.87
BK = N 81°44'11" E
AH = N 75°28'46" E

Curve EBL-3
PCC = 483EBL+21.79
X = 815125.24
Y = 546360.59
PI = 486EBL+46.29
X = 815443.04
Y = 546426.17
PT = 489EBL+65.21
X = 815723.90
Y = 546588.70
R = 2004.00
DELTA = 18°23'44" LT
D = 2°51'33"
L = 643.41
T = 324.50
E = 26.10
BK = N 78°20'22" E
AH = N 59°56'38" E

Curve EBL-4
PC = 490EBL+83.26
X = 815821.01
Y = 546655.83
PI = 494EBL+39.43
X = 816118.25
Y = 546852.06
PCC = 497EBL+88.19
X = 816329.36
Y = 547138.91
R = 1998.00
DELTA = 20°12'54" LT
D = 2°52'04"
L = 704.93
T = 356.17
E = 31.50
BK = N 56°34'03" E
AH = N 36°21'09" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EDGE OF PAVEMENT	SHEET 384	E



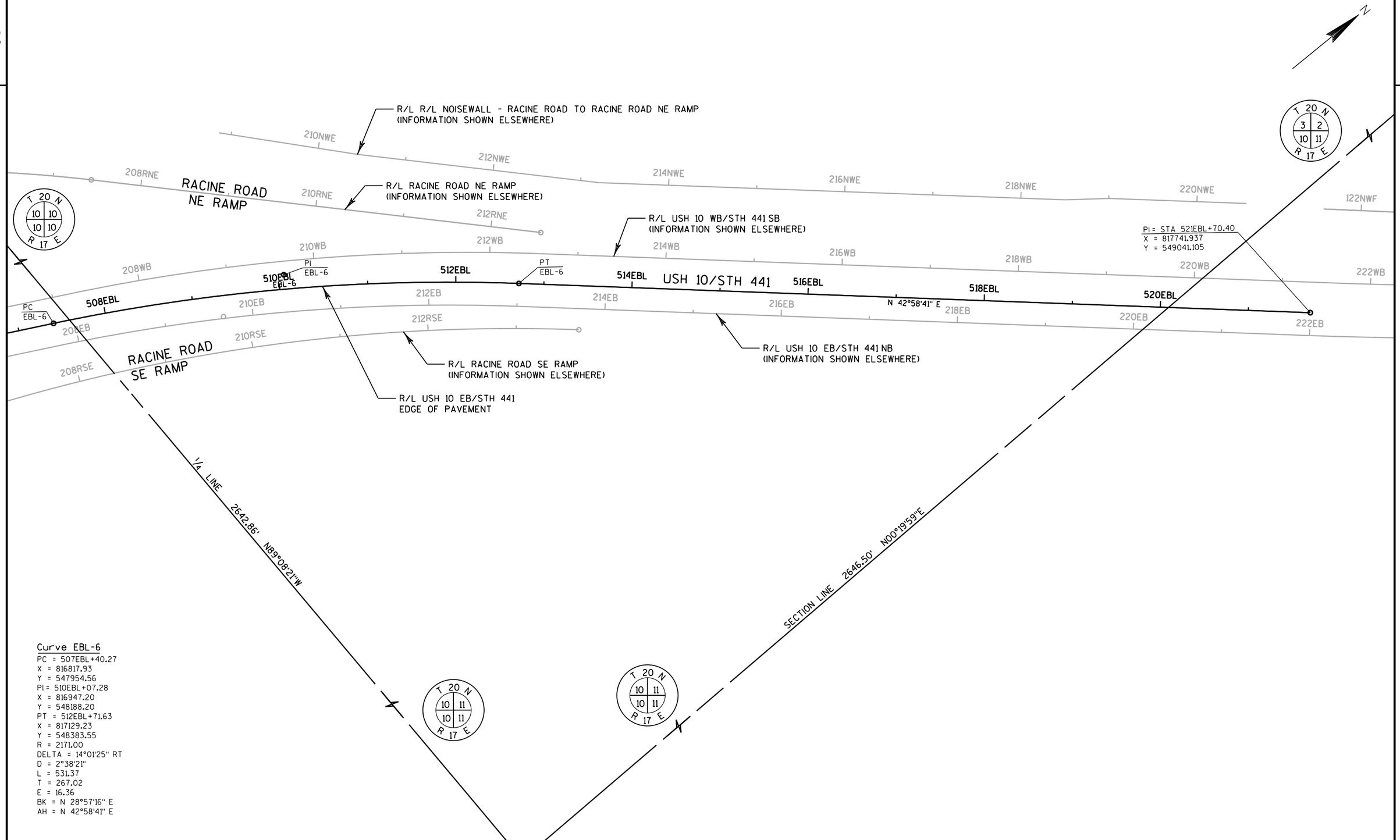
Curve EBL-4
PC = 490EBL+83.26
X = 815821.01
Y = 546655.83
PI = 494EBL+39.43
X = 816118.25
Y = 546852.06
PCC = 497EBL+88.19
X = 816329.36
Y = 547138.91
R = 1998.00
DELTA = 20°12'54" LT
D = 2°52'04"
L = 704.93
T = 356.17
E = 31.50
BK = N 56°34'03" E
AH = N 36°21'09" E

Curve EBL-5
PCC = 497EBL+88.19
X = 816329.36
Y = 547138.91
PI = 499EBL+79.59
X = 816449.22
Y = 547288.14
PT = 501EBL+70.07
X = 816541.89
Y = 547455.63
R = 2229.00
DELTA = 9°48'58" LT
D = 2°34'14"
L = 381.88
T = 191.41
E = 8.20
BK = N 38°46'14" E
AH = N 28°57'16" E

Curve EBL-6
PC = 507EBL+40.27
X = 816817.93
Y = 547954.56
PI = 510EBL+07.28
X = 816947.20
Y = 548188.20
PT = 512EBL+71.63
X = 817129.23
Y = 548383.55
R = 2171.00
DELTA = 14°01'25" RT
D = 2°38'21"
L = 531.37
T = 267.02
E = 16.36
BK = N 28°57'16" E
AH = N 42°58'41" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EDGE OF PAVEMENT	SHEET 385	E

2

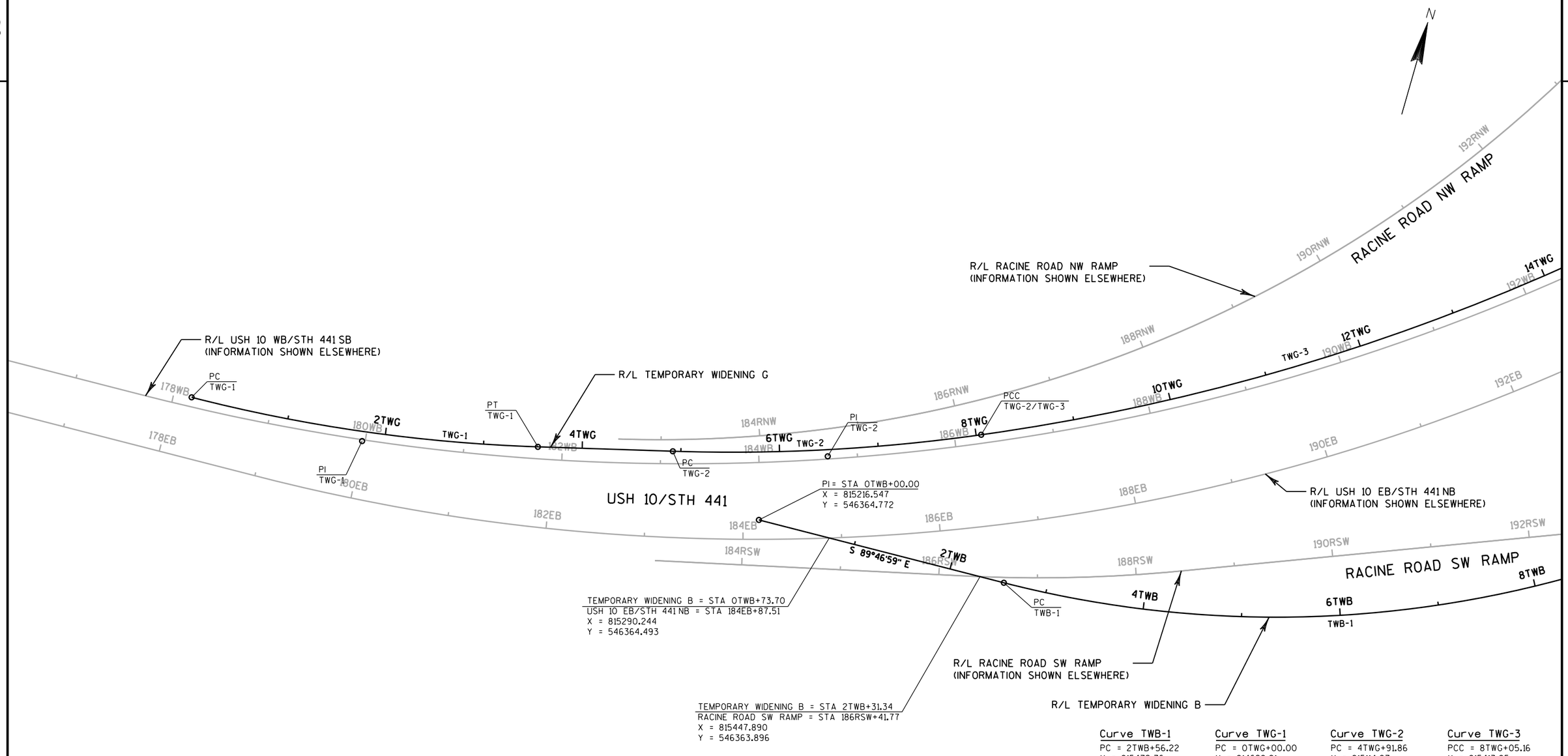


Curve EBL-6

PC = 507EBL+40.27
X = 816817.93
Y = 547954.56
PI = 510EBL+07.28
X = 816947.20
Y = 548188.20
PT = 512EBL+71.63
X = 817129.23
Y = 548383.55
R = 2171.00
DELTA = 14°01'25" RT
D = 2°38'21"
L = 531.37
T = 267.02
E = 16.36
BK = N 28°57'16" E
AH = N 42°58'41" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EDGE OF PAVEMENT	SHEET 386	E

2



Curve TWB-1
PC = 2TWB+56.22
X = 815472.76
Y = 546363.80
PI = 10TWB+54.92
X = 816271.46
Y = 546360.78
PT = 16TWB+41.19
X = 816528.75
Y = 547116.91
R = 1111.00
DELTA = 71°25'30" LT
D = 5°09'26"
L = 1384.98
T = 798.70
E = 257.30
BK = S 89°46'59" E
AH = N 18°47'31" E

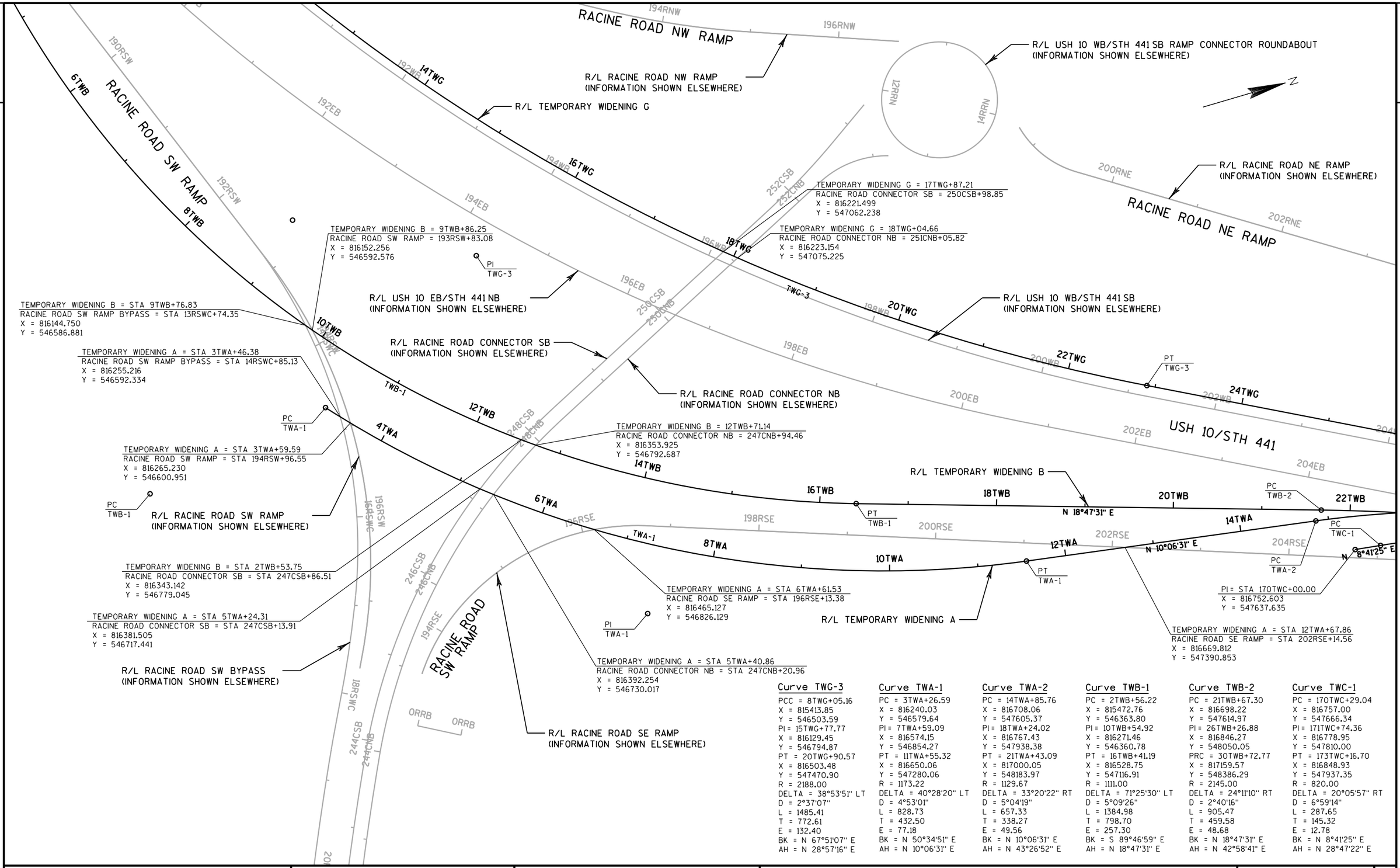
Curve TWG-1
PC = 0TWG+00.00
X = 814628.91
Y = 546344.62
PI = 1TWG+78.25
X = 814807.15
Y = 546343.86
PT = 3TWG+55.07
X = 814981.31
Y = 546381.82
R = 1622.00
DELTA = 12°32'33" LT
D = 3°31'57"
L = 355.07
T = 178.25
E = 9.76
BK = S 89°45'12" E
AH = N 77°42'15" E

Curve TWG-2
PC = 4TWG+91.86
X = 815114.97
Y = 546410.95
PI = 6TWG+48.90
X = 815268.40
Y = 546444.39
PCC = 8TWG+05.16
X = 815413.85
Y = 546503.59
R = 1822.00
DELTA = 9°51'08" LT
D = 3°08'41"
L = 313.30
T = 157.04
E = 6.75
BK = N 77°42'15" E
AH = N 67°50'07" E

Curve TWG-3
PCC = 8TWG+05.16
X = 815413.85
Y = 546503.59
PI = 15TWG+77.77
X = 816129.45
Y = 546794.87
PT = 20TWG+90.57
X = 816503.48
Y = 547470.90
R = 2188.00
DELTA = 38°53'51" LT
D = 2°37'07"
L = 1485.41
T = 772.61
E = 132.40
BK = N 67°51'07" E
AH = N 28°57'16" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - TEMPORARY	SHEET 387	E

2



Curve TWG-3

PCC = 8TWG+05.16
X = 815413.85
Y = 546503.59
PI = 15TWG+77.77
X = 816129.45
Y = 546794.87
PT = 20TWG+90.57
X = 816503.48
Y = 547470.90
R = 2188.00
DELTA = 38°53'51" LT
D = 2°37'07"
L = 1485.41
T = 772.61
E = 132.40
BK = N 67°51'07" E
AH = N 28°57'16" E

Curve TWA-1

PC = 3TWA+26.59
X = 816240.03
Y = 546579.64
PI = 7TWA+59.09
X = 816574.15
Y = 546854.27
PT = 11TWA+55.32
X = 816650.06
Y = 547280.06
R = 1173.22
DELTA = 40°28'20" LT
D = 4°53'01"
L = 828.73
T = 432.50
E = 77.18
BK = N 50°34'51" E
AH = N 10°06'31" E

Curve TWA-2

PC = 14TWA+85.76
X = 816708.06
Y = 547605.37
PI = 18TWA+24.02
X = 816767.43
Y = 547938.38
PT = 21TWA+43.09
X = 817000.05
Y = 548183.97
R = 1129.67
DELTA = 33°20'22" RT
D = 5°04'19"
L = 657.33
T = 338.27
E = 49.56
BK = N 10°06'31" E
AH = N 43°26'52" E

Curve TWB-1

PC = 2TWB+56.22
X = 815472.76
Y = 546363.80
PI = 10TWB+54.92
X = 816271.46
Y = 546360.78
PT = 16TWB+41.19
X = 816528.75
Y = 547116.91
R = 1111.00
DELTA = 71°25'30" LT
D = 5°09'26"
L = 1384.98
T = 798.70
E = 257.30
BK = S 89°46'59" E
AH = N 18°47'31" E

Curve TWB-2

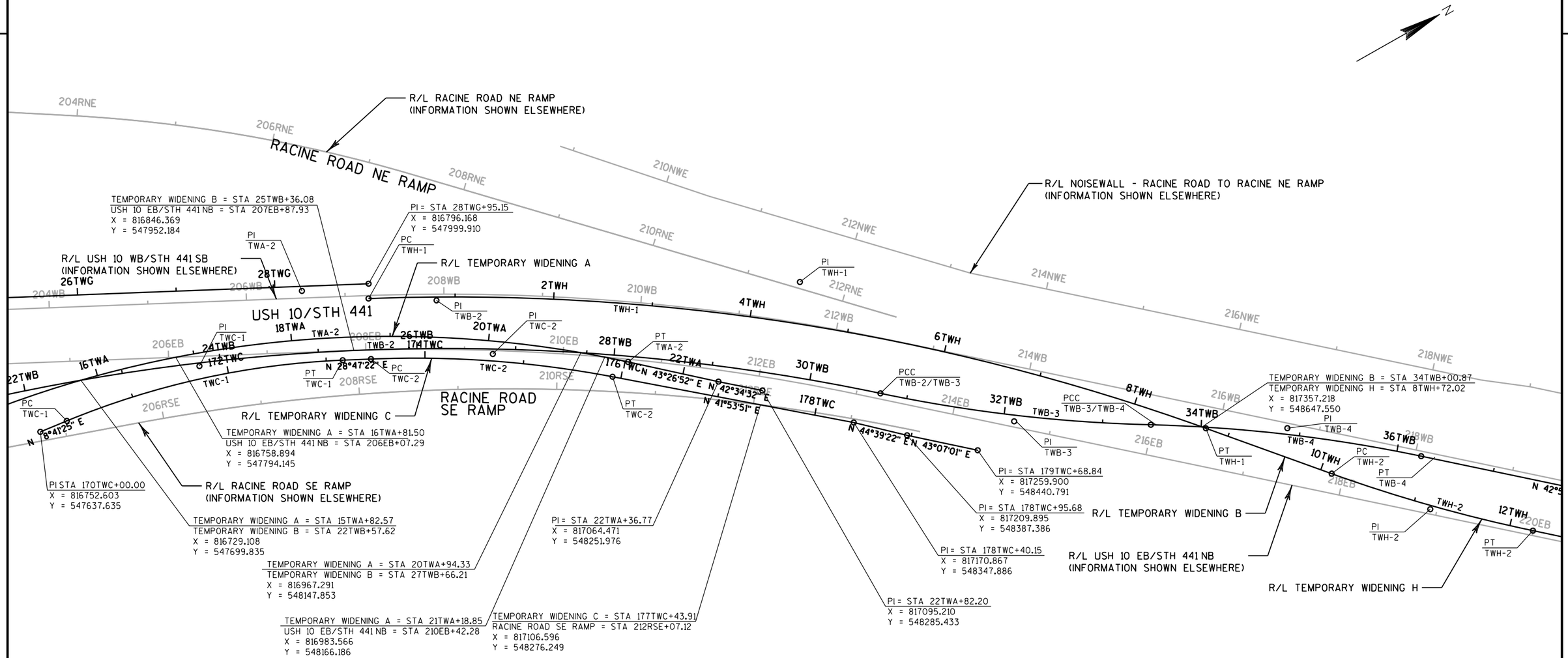
PC = 21TWB+67.30
X = 816698.22
Y = 547614.97
PI = 26TWB+26.88
X = 816846.27
Y = 548050.05
PRC = 30TWB+72.77
X = 817159.57
Y = 548386.29
R = 2145.00
DELTA = 24°11'10" RT
D = 2°40'16"
L = 905.47
T = 459.58
E = 48.68
BK = N 18°47'31" E
AH = N 42°58'41" E

Curve TWC-1

PC = 170TWC+29.04
X = 816757.00
Y = 547666.34
PI = 171TWC+74.36
X = 816778.95
Y = 547810.00
PT = 173TWC+16.70
X = 816848.93
Y = 547937.35
R = 820.00
DELTA = 20°05'57" RT
D = 6°59'14"
L = 287.65
T = 145.32
E = 12.78
BK = N 8°41'25" E
AH = N 28°47'22" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - TEMPORARY	SHEET 388	E

2



Curve TWA-2
PC = 14TWA+85.76
X = 816708.06
Y = 547605.37
PI = 18TWA+24.02
X = 816767.43
Y = 547938.38
PT = 21TWA+43.09
X = 817000.05
Y = 548183.97
R = 1129.67
DELTA = 33°20'22" RT
D = 5°04'19"
L = 657.33
T = 338.27
E = 49.56
BK = N 10°06'31" E
AH = N 43°26'52" E

Curve TWB-2
PC = 21TWB+67.30
X = 816698.22
Y = 547614.97
PI = 26TWB+26.88
X = 816846.27
Y = 548050.05
PRC = 30TWB+72.77
X = 817159.57
Y = 548386.29
R = 2145.00
DELTA = 24°11'10" RT
D = 2°40'16"
L = 905.47
T = 459.58
E = 48.68
BK = N 18°47'31" E
AH = N 42°58'41" E

Curve TWB-3
PRC = 30TWB+72.77
X = 817159.57
Y = 548386.29
PI = 32TWB+14.00
X = 817255.85
Y = 548489.61
PRC = 33TWB+54.43
X = 817331.46
Y = 548608.90
R = 1521.00
DELTA = 10°36'36" LT
D = 3°46'01"
L = 281.66
T = 141.23
E = 6.54
BK = N 42°58'41" E
AH = N 32°22'05" E

Curve TWB-4
PRC = 33TWB+54.43
X = 817331.46
Y = 548608.90
PI = 34TWB+97.27
X = 817407.93
Y = 548729.55
PT = 36TWB+39.28
X = 817505.53
Y = 548833.85
R = 1521.00
DELTA = 10°43'49" RT
D = 3°46'01"
L = 284.85
T = 142.84
E = 6.69
BK = N 32°22'05" E
AH = N 43°05'54" E

Curve TWC-1
PC = 170TWC+29.04
X = 816756.99
Y = 547666.34
PI = 171TWC+74.36
X = 816778.95
Y = 547810.00
PT = 173TWC+16.70
X = 816848.93
Y = 547937.35
R = 820.00
DELTA = 20°05'57" RT
D = 6°59'14"
L = 287.65
T = 145.32
E = 12.78
BK = N 8°41'25" E
AH = N 28°47'22" E

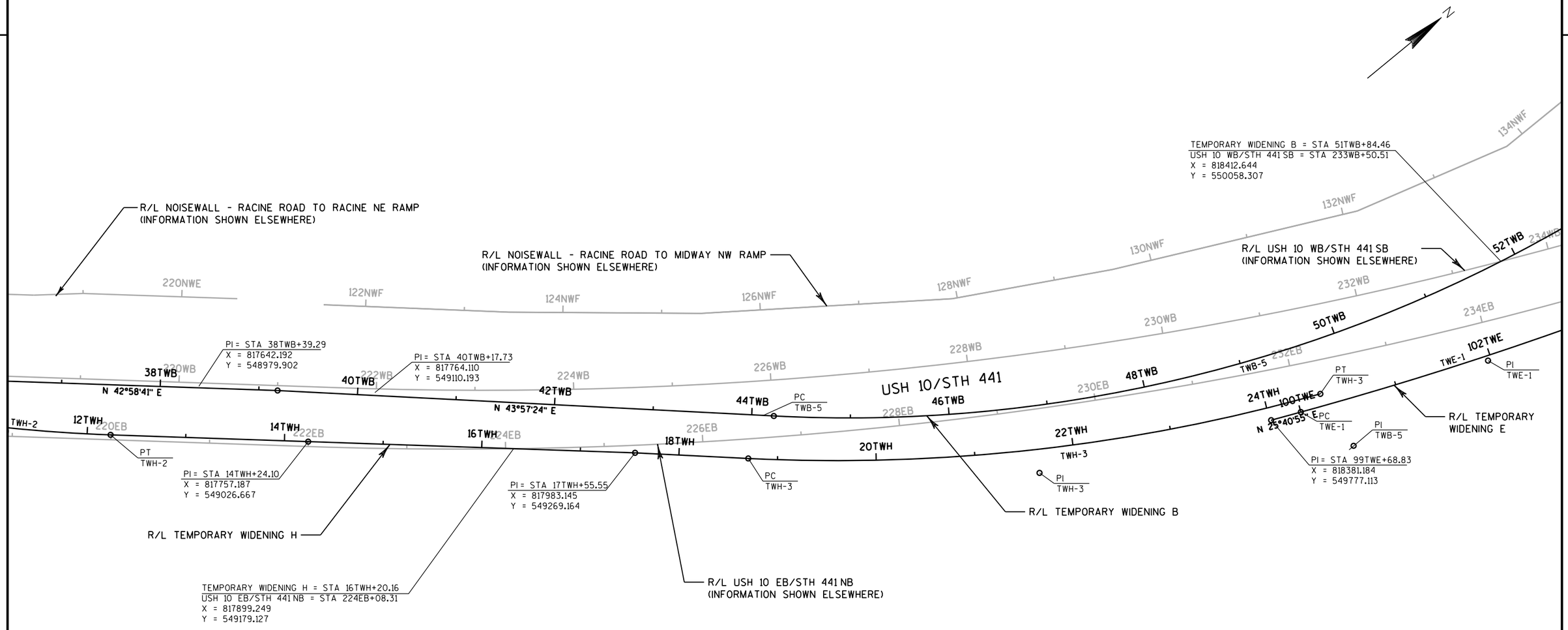
Curve TWC-2
PC = 173TWC+45.43
X = 816862.77
Y = 547962.53
PI = 174TWC+68.93
X = 816922.25
Y = 548070.77
PT = 175TWC+91.36
X = 817004.73
Y = 548162.70
R = 1075.00
DELTA = 13°06'28" RT
D = 5°19'47"
L = 245.93
T = 123.51
E = 7.07
BK = N 28°47'22" E
AH = N 41°53'51" E

Curve TWH-1
PC = 0TWH+12.32
X = 816809.00
Y = 547992.12
PI = 4TWH+49.66
X = 817020.75
Y = 548374.78
PT = 8TWH+76.22
X = 817360.48
Y = 548650.20
R = 2249.00
DELTA = 22°00'31" RT
D = 2°32'51"
L = 863.90
T = 437.34
E = 42.13
BK = N 28°57'33" E
AH = N 50°58'04" E

Curve TWH-2
PC = 10TWH+11.68
X = 817465.70
Y = 548735.50
PI = 11TWH+17.91
X = 817548.22
Y = 548802.40
PT = 12TWH+23.78
X = 817620.63
Y = 548880.11
R = 1521.00
DELTA = 7°59'23" LT
D = 3°46'01"
L = 212.10
T = 106.22
E = 3.70
BK = N 50°58'04" E
AH = N 42°58'41" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - TEMPORARY	SHEET 389	E

2



Curve TWB-5
PC = 44TWB+12.12
X = 818039.91
Y = 549392.11
PI = 50TWB+06.49
X = 818455.56
Y = 549816.98
PT = 55TWB+41.11
X = 818456.55
Y = 550411.36
R = 1461.00
DELTA = 44°16'33" LT
D = 3°55'18"
L = 1129.00
T = 594.38
E = 116.28
BK = N 44°22'17" E
AH = N 0°05'45" E

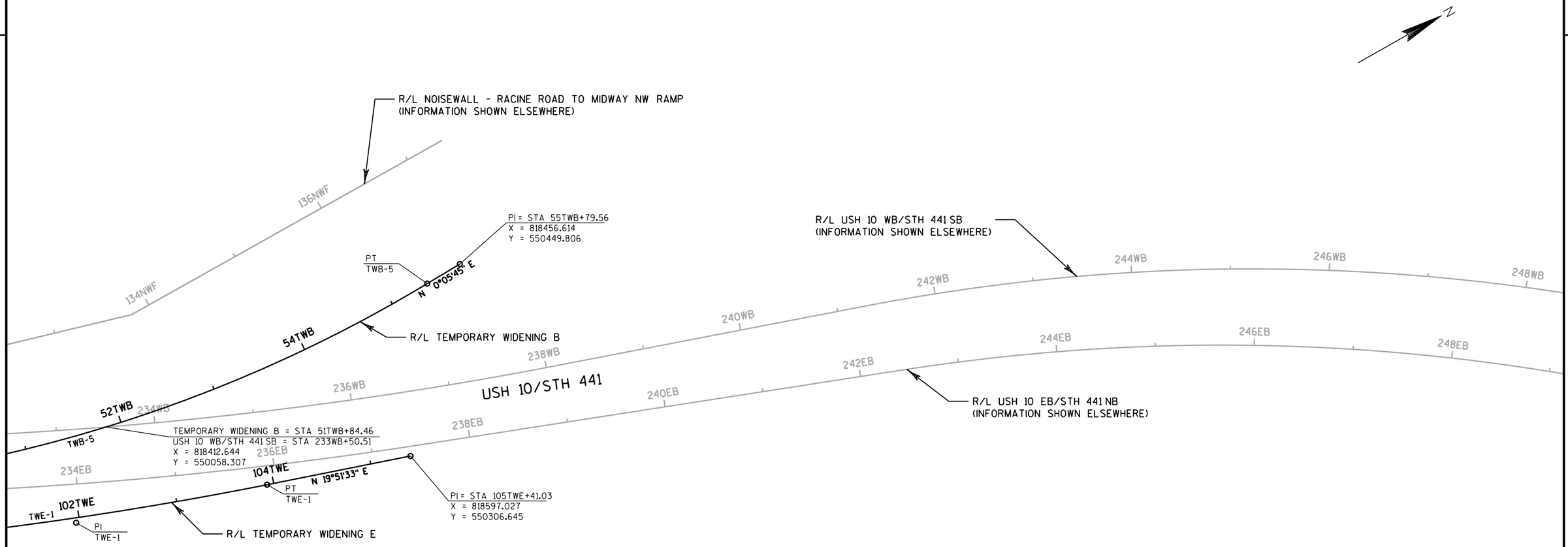
Curve TWE-1
PC = 100TWE+00.00
X = 818394.69
Y = 549805.21
PI = 101TWE+96.73
X = 818479.95
Y = 549982.50
PT = 103TWE+93.11
X = 818546.78
Y = 550167.53
R = 3868.28
DELTA = 5°49'22" LT
D = 1°28'52"
L = 393.11
T = 196.73
E = 5.00
BK = N 25°40'55" E
AH = N 19°51'33" E

Curve TWH-2
PC = 10TWH+11.68
X = 817465.70
Y = 548735.50
PI = 11TWH+17.91
X = 817548.22
Y = 548802.40
PT = 12TWH+23.78
X = 817620.63
Y = 548880.11
R = 1521.00
DELTA = 7°59'23" LT
D = 3°46'01"
L = 212.10
T = 106.22
E = 3.70
BK = N 50°58'04" E
AH = N 42°58'41" E

Curve TWH-3
PC = 18TWH+70.37
X = 818062.69
Y = 549351.96
PI = 21TWH+65.88
X = 818267.43
Y = 549565.06
PT = 24TWH+56.23
X = 818393.80
Y = 549832.18
R = 1811.00
DELTA = 18°32'07" LT
D = 3°09'50"
L = 585.86
T = 295.51
E = 23.95
BK = N 43°51'12" E
AH = N 25°19'05" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - TEMPORARY	SHEET 390	E

2



Curve TWB-5

PC = 44TWB+12.12
X = 818039.91
Y = 549392.11
PI = 50TWB+06.49
X = 818455.56
Y = 549816.98
PT = 55TWB+41.11
X = 818456.55
Y = 550411.36
R = 1461.00
DELTA = 44°16'33" LT
D = 3°55'18"
L = 1129.00
T = 594.38
E = 116.28
BK = N 44°22'17" E
AH = N 0°05'45" E

Curve TWE-1

PC = 100TWE+00.00
X = 818394.69
Y = 549805.21
PI = 101TWE+96.73
X = 818479.95
Y = 549982.50
PT = 103TWE+93.11
X = 818546.78
Y = 550167.53
R = 3868.28
DELTA = 5°49'22" LT
D = 1°28'52"
L = 393.11
T = 196.73
E = 5.00
BK = N 25°40'55" E
AH = N 19°51'33" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - TEMPORARY	SHEET 391	E

2

N

PISTA 100ML+00.00
X = 810363.245
Y = 546362.933

102ML 104ML 106ML 108ML 110ML 112ML

S 89°47'43" E

USH 10/STH 441

R/L EXISTING USH 10/STH 441

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 392	E

2

N

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

112ML 114ML 116ML 118ML 120ML 122ML 124ML 126ML

USH 10/STH 441

R/L EXISTING USH 10/STH 441

160WB 162WB

S 89°47'43" E

160EB 162EB

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 393	E

2

2

N

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

R/L EXISTING USH 10/STH 441

126ML 128ML 130ML 132ML 134ML 136ML 138ML 140ML

162WB 164WB 166WB 168WB 170WB 172WB 174WB 176WB

7'43" E

S 89°47'43" E

USH 10/STH 441

162EB 164EB 166EB 168EB 170EB 172EB 174EB 176EB

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 394	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\027221_ad.dgn PLOT DATE : 3/31/2015 4:51:07 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

RACINE ROAD NW RAMP

R/L RACINE ROAD NW RAMP
(INFORMATION SHOWN ELSEWHERE)

EXISTING MAINLINE = STA 144ML+60.30
USH 10 WB/STH 441 SB = STA 180WB+13.33
X = 814823.519
Y = 546346.989

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

S 89°47'43" E

USH 10/STH 441

R/L RACINE ROAD SW RAMP
(INFORMATION SHOWN ELSEWHERE)

RACINE ROAD SW RAMP

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

EXISTING MAINLINE = STA 148ML+57.44
USH 10 EB/STH 441 NB = STA 184EB+15.39
X = 815220.658
Y = 546345.570

PC
ML-1

EXISTING MAINLINE = STA 149ML+90.97
RACINE ROAD SW RAMP = STA 185RSW+46.19
X = 815354.185
Y = 546345.092

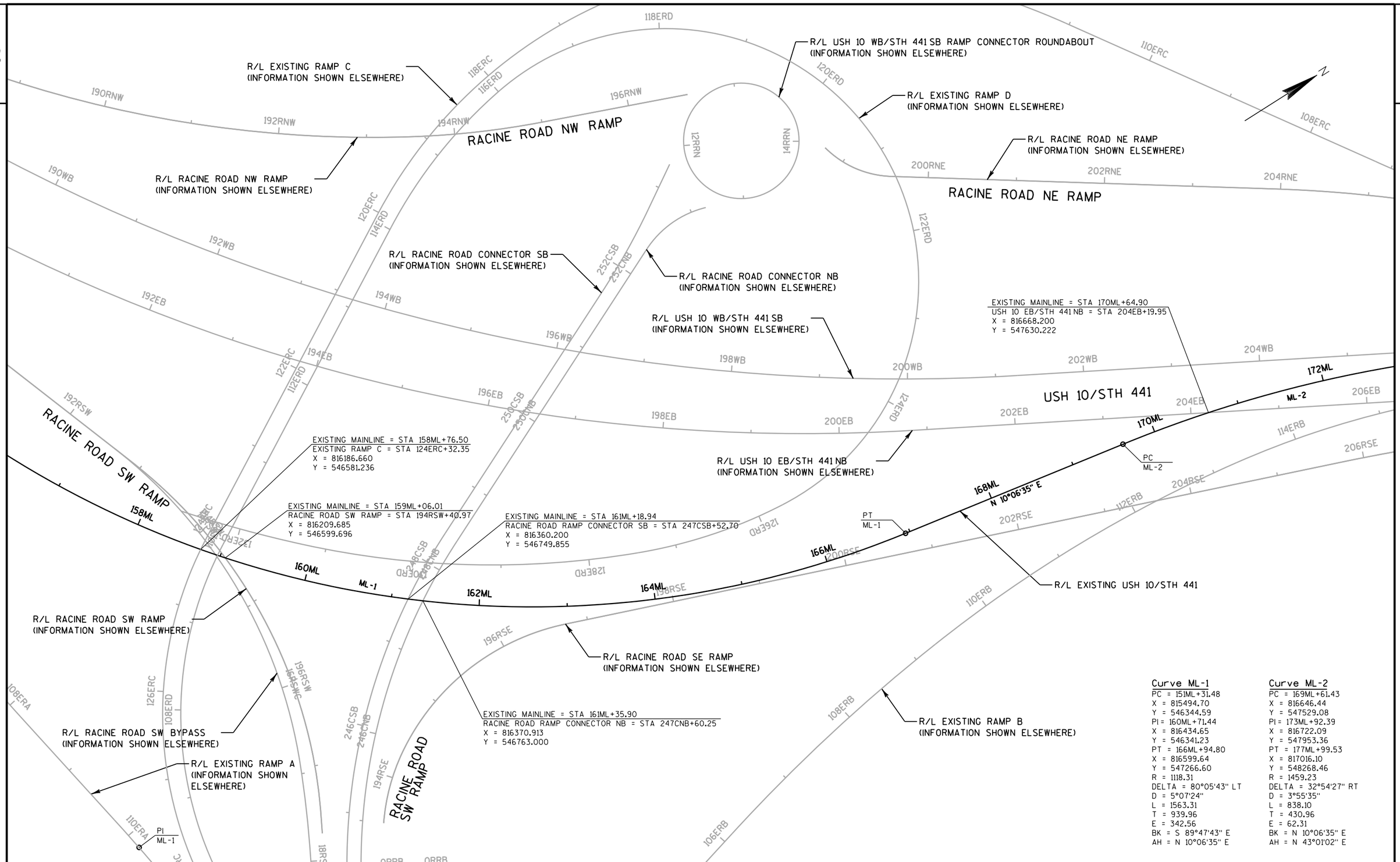
R/L EXISTING USH 10/STH 441

R/L EXISTING RAMP A
(INFORMATION SHOWN ELSEWHERE)

Curve ML-1
PC = 151ML+31.48
X = 815494.70
Y = 546344.59
PI = 160ML+71.44
X = 816434.65
Y = 546341.23
PT = 166ML+94.80
X = 816599.64
Y = 547266.60
R = 1118.31
DELTA = 80°05'43" LT
D = 5°07'24"
L = 1563.31
T = 939.96
E = 342.56
BK = S 89°47'43" E
AH = N 10°06'35" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 395	E

2



Curve ML-1

PC = 151ML+31.48
X = 815494.70
Y = 546344.59
PI = 160ML+71.44
X = 816434.65
Y = 546341.23
PT = 166ML+94.80
X = 816599.64
Y = 547266.60
R = 1118.31
DELTA = 80°05'43" LT
D = 5°07'24"
L = 1563.31
T = 939.96
E = 342.56
BK = S 89°47'43" E
AH = N 10°06'35" E

Curve ML-2

PC = 169ML+61.43
X = 816646.44
Y = 547529.08
PI = 173ML+92.39
X = 816722.09
Y = 547953.36
PT = 177ML+99.53
X = 817016.10
Y = 548268.46
R = 1459.23
DELTA = 32°54'27" RT
D = 3°55'35"
L = 838.10
T = 430.96
E = 62.31
BK = N 10°06'35" E
AH = N 43°01'02" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\027223_ad.dgn PLOT DATE : 3/31/2015 4:51:12 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

N

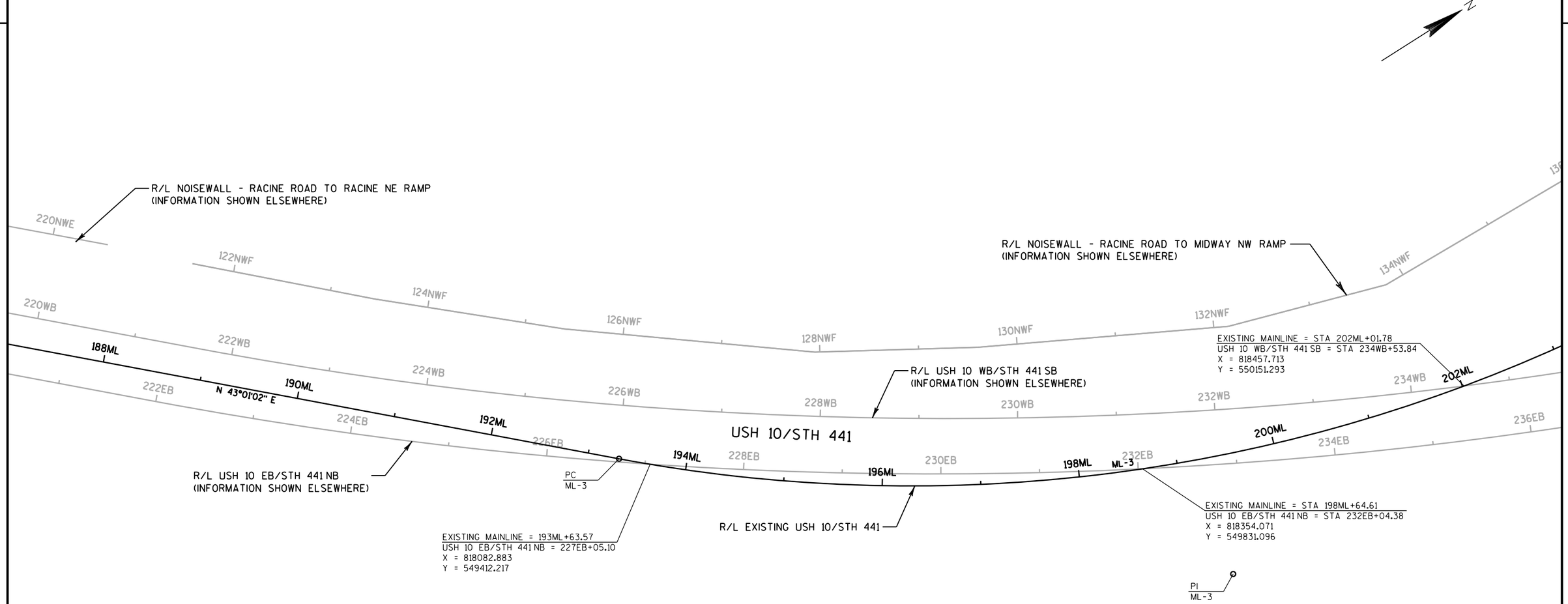
108ERC
106ERC
206RNE
R/L RACINE ROAD NE RAMP
(INFORMATION SHOWN ELSEWHERE)
208RNE
104ERC
RACINE ROAD
NE RAMP
210NWE
212NWE
R/L NOISEWALL - RACINE ROAD TO RACINE NE RAMP
(INFORMATION SHOWN ELSEWHERE)
214NWE
216NWE
218NWE
220NWE
PI
ML-2
R/L EXISTING RAMP C
(INFORMATION SHOWN ELSEWHERE)
210RNE
102ERC
212RNE
212WB
206WB
174ML
208WB
176ML
210WB
172ML
ML-2
178ML
PT
ML-2
180ML
214WB
R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)
206EB
116ERB
208EB
118ERB
210EB
120ERB
212EB
216WB
182ML
208RSE
210RSE
212RSE
214EB
206RSE
RACINE ROAD
SE RAMP
218WB
184ML
USH 10/STH 441
186ML
220WB
N 43°01'02" E
216EB
218EB
220EB
R/L RACINE ROAD SE RAMP
(INFORMATION SHOWN ELSEWHERE)
R/L EXISTING RAMP B
(INFORMATION SHOWN ELSEWHERE)
R/L EXISTING USH 10/STH 441
R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

Curve ML-2
PC = 169ML+61.43
X = 816646.44
Y = 547529.08
PI = 173ML+92.39
X = 816722.09
Y = 547953.36
PT = 177ML+99.53
X = 817016.10
Y = 548268.46
R = 1459.23
DELTA = 32°54'27" RT
D = 3°55'35"
L = 838.10
T = 430.96
E = 62.31
BK = N 10°06'35" E
AH = N 43°01'02" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 397	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\027224_ad.dgn PLOT DATE : 3/31/2015 4:51:14 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

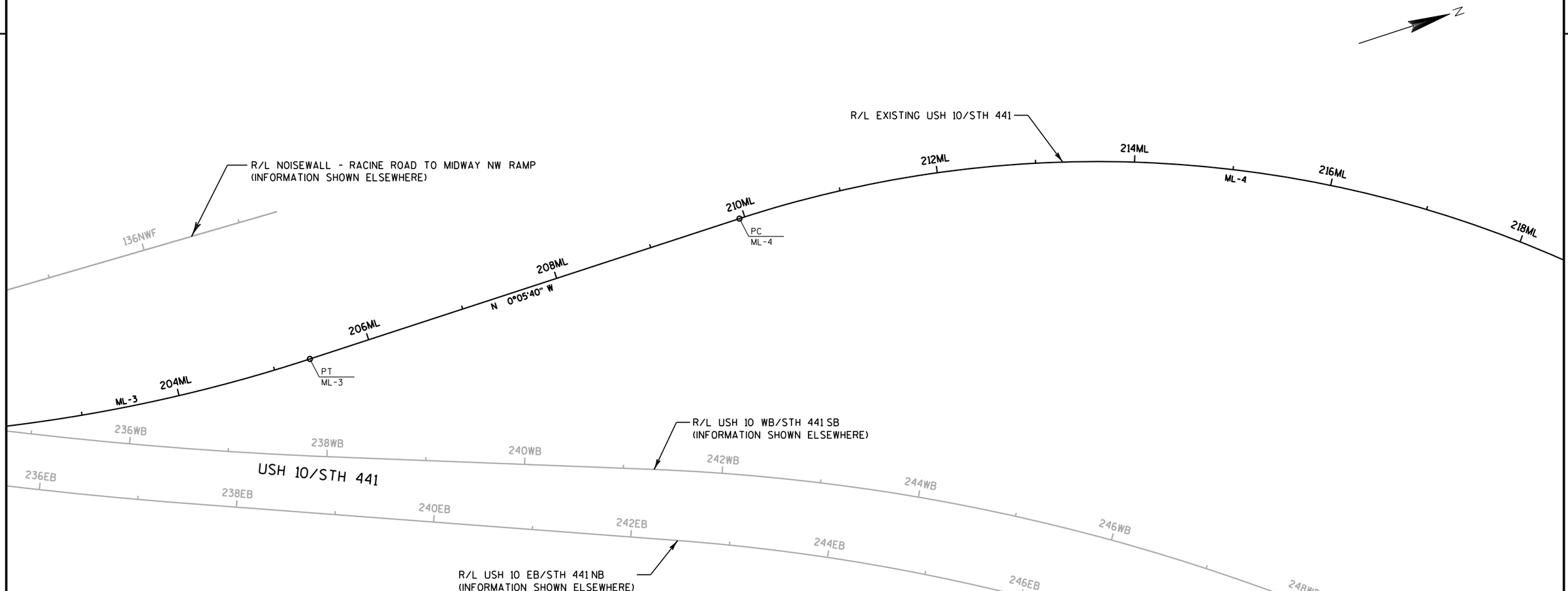
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Curve ML-3
PC = 193ML+31.65
X = 818061.34
Y = 549388.66
PI = 199ML+64.74
X = 818493.24
Y = 549851.54
PT = 205ML+37.52
X = 818492.20
Y = 550484.63
R = 1602.61
DELTA = 43°06'42" LT
D = 3°34'31"
L = 1205.87
T = 633.09
E = 120.51
BK = N 43°01'02" E
AH = N 0°05'40" W

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 398	E

2



Curve ML-3

PC = 193ML+31.65
X = 818061.34
Y = 549388.66
PI = 199ML+64.74
X = 818493.24
Y = 549851.54
PT = 205ML+37.52
X = 818492.20
Y = 550484.63
R = 1602.61
DELTA = 43°06'42" LT
D = 3°34'31"
L = 1205.87
T = 633.09
E = 120.51
BK = N 43°01'02" E
AH = N 0°05'40" W

Curve ML-4

PC = 209ML+94.43
X = 818491.45
Y = 550941.54
PI = 221ML+76.10
X = 818489.50
Y = 552123.21
PT = 228ML+41.32
X = 819671.089
Y = 552108.998
R = 1165.62
DELTA = 90°47'01" RT
D = 4°54'56"
L = 1846.89
T = 1181.67
E = 494.20
BK = N 0°05'40" W
AH = S 89°18'38" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 399	E

2

PI
ML-4

N

R/L EXISTING USH 10/STH 441

218ML
220ML
222ML
224ML
226ML
228ML
230ML
232ML

ML-4

PT
ML-4

S 89°18'38" E

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

248WB
250WB
252WB
254WB
256WB
258WB
260WB

USH 10/STH 441

250EB
252EB
254EB
256EB
258EB
260EB

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

Curve ML-4
PC = 209ML+94.43
X = 818491.45
Y = 550941.55
PI = 221ML+76.10
X = 818489.50
Y = 552123.21
PT = 228ML+41.32
X = 819671.09
Y = 552109.00
R = 1165.62
DELTA = 90°47'01" RT
D = 4°54'56"
L = 1846.89
T = 1181.67
E = 494.20
BK = N 0°05'40" W
AH = S 89°18'38" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 400	E

2

N

EXISTING MAINLINE = STA 234ML+99.58
USH 10 WB/STH 441 SB = STA 263WB+26.54
X = 820329.298
Y = 552101.079

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

PI = STA 243ML+07.13
X = 821136.790
Y = 552091.364

232ML 234ML 236ML 238ML 240ML 242ML

S 89°18'38" E

USH 10/STH 441

260WB 262WB 264WB 266WB B 268WB B 270WB B 272WB B 274WB

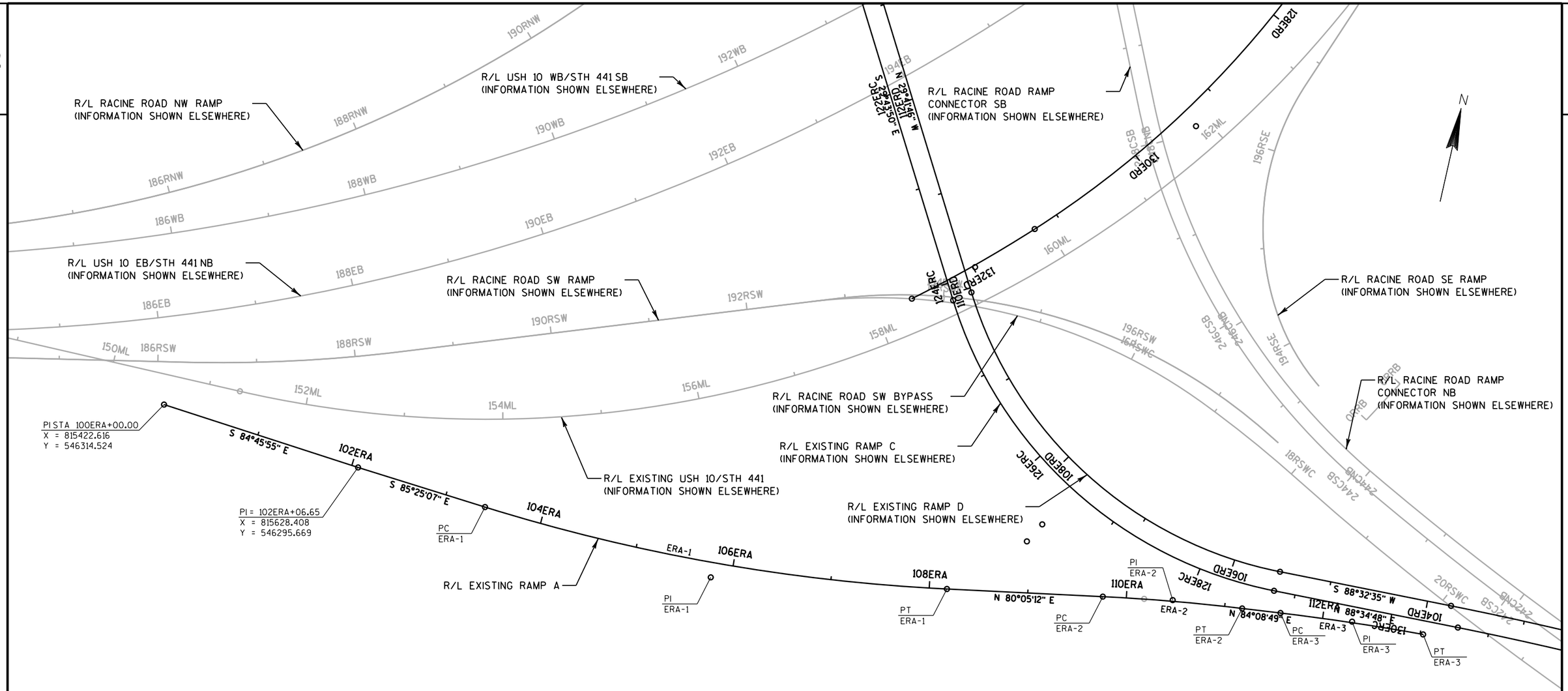
260EB 262EB 264EB 266EB 268EB 270EB 272EB 274EB

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

R/L EXISTING USH 10/STH 441

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 401	E

2



Curve ERA-1
PC = 103ERA+41.40
X = 815762.72
Y = 546284.91
PI = 105ERA+80.97
X = 816001.53
Y = 546265.77
PT = 108ERA+17.99
X = 816237.52
Y = 546307.01
R = 1883.91
DELTA = 14°29'41" LT
D = 3°02'29"
L = 476.59
T = 239.57
E = 15.17
BK = S 85°25'07" E
AH = N 80°05'12" E

Curve ERA-2
PC = 109ERA+76.14
X = 816393.32
Y = 546334.24
PI = 110ERA+47.04
X = 816463.15
Y = 546346.45
PT = 111ERA+17.87
X = 816533.68
Y = 546353.68
R = 2000.00
DELTA = 4°03'36" RT
D = 2°51'53"
L = 141.73
T = 70.89
E = 1.26
BK = N 80°05'12" E
AH = N 84°08'49" E

Curve ERA-3
PC = 111ERA+57.04
X = 816572.64
Y = 546357.67
PI = 112ERA+30.10
X = 816645.32
Y = 546365.12
PT = 113ERA+03.11
X = 816718.31
Y = 546368.32
R = 2500.00
DELTA = 3°20'52" RT
D = 2°17'31"
L = 146.08
T = 73.06
E = 1.07
BK = N 84°08'49" E
AH = N 87°29'41" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 402	E

2

Curve ERC-3
PCC = 113ERC+90.74
X = 816002.97
Y = 547532.46
PI = 117ERC+34.13
X = 815802.27
Y = 547253.82
PT = 120ERC+01.06
X = 815972.56
Y = 546955.63
R = 533.92
DELTA = 65°29'43" LT
D = 10°43'52"
L = 610.33
T = 343.40
E = 100.90
BK = S 35°45'53" W
AH = S 29°43'50" E

Curve ERC-4
PC = 124ERC+17.95
X = 816179.31
Y = 546593.61
PI = 126ERC+73.32
X = 816305.95
Y = 546371.86
PT = 128ERC+78.36
X = 816561.24
Y = 546378.19
R = 427.62
DELTA = 61°41'23" LT
D = 13°23'56"
L = 460.41
T = 255.36
E = 70.45
BK = S 29°43'50" E
AH = N 88°34'48" E

Curve ERC-5
PC = 130ERC+68.32
X = 816751.13
Y = 546382.90
PI = 132ERC+49.92
X = 816932.68
Y = 546387.40
PT = 134ERC+31.15
X = 817113.61
Y = 546371.92
R = 3294.20
DELTA = 6°18'38" RT
D = 1°44'21"
L = 362.83
T = 181.60
E = 5.00
BK = N 88°34'48" E
AH = S 85°06'34" E

Curve ERD-1
PC = 100ERD+00.00
X = 817114.99
Y = 546392.12
PI = 101ERD+88.07
X = 816927.56
Y = 546407.61
PT = 103ERD+75.78
X = 816739.55
Y = 546402.83
R = 3482.21
DELTA = 6°10'59" LT
D = 1°38'43"
L = 375.78
T = 188.07
E = 5.08
BK = N 85°16'26" W
AH = S 88°32'35" W

Curve ERD-2
PC = 105ERD+52.48
X = 816562.90
Y = 546398.34
PI = 107ERD+98.12
X = 816317.34
Y = 546392.094
PT = 109ERD+95.24
X = 816195.65
Y = 546605.47
R = 410.75
DELTA = 61°45'40" RT
D = 13°56'57"
L = 442.76
T = 245.64
E = 67.85
BK = S 88°32'35" W
AH = N 29°41'46" W

Curve ERD-3
PC = 114ERD+03.18
X = 815993.56
Y = 546959.83
PI = 115ERD+04.20
X = 815943.51
Y = 547047.59
PCC = 116ERD+02.90
X = 815928.75
Y = 547147.53
R = 537.43
DELTA = 21°17'31" RT
D = 10°39'40"
L = 199.72
T = 101.02
E = 9.41
BK = N 29°41'46" W
AH = N 8°24'15" W

Curve ERD-4
PCC = 116ERD+02.90
X = 815928.75
Y = 547147.53
PI = 121ERD+08.16
X = 815854.90
Y = 547647.37
PCC = 122ERD+08.26
X = 816322.15
Y = 547455.08
R = 287.19
DELTA = 120°46'23" RT
D = 19°57'02"
L = 605.36
T = 505.27
E = 293.99
BK = N 8°24'15" W
AH = S 67°37'52" E

Curve ERD-5
PCC = 122ERD+08.26
X = 816322.15
Y = 547455.08
PI = 124ERD+18.25
X = 816516.34
Y = 547375.162
PCC = 125ERD+70.19
X = 816497.50
Y = 547166.02
R = 284.94
DELTA = 72°46'42" RT
D = 20°06'30"
L = 361.93
T = 209.99
E = 69.02
BK = S 67°37'52" E
AH = S 5°08'50" W

Curve ERD-6
PCC = 125ERD+70.19
X = 816497.50
Y = 547166.02
PI = 126ERD+57.54
X = 816489.66
Y = 547079.02
PCC = 127ERD+43.50
X = 816455.75
Y = 546998.52
R = 561.03
DELTA = 17°41'57" RT
D = 10°12'45"
L = 173.31
T = 87.35
E = 6.76
BK = S 5°08'50" W
AH = S 22°50'48" W

Curve ERD-7
PCC = 127ERD+43.50
X = 816455.75
Y = 546998.52
PI = 129ERD+37.33
X = 816380.49
Y = 546819.90
PCC = 131ERD+26.44
X = 816244.03
Y = 546682.24
R = 1001.70
DELTA = 21°54'12" RT
D = 5°43'11"
L = 382.94
T = 193.83
E = 18.58
BK = S 22°50'48" W
AH = S 44°45'00" W

Curve ERD-8
PCC = 131ERD+26.44
X = 816244.03
Y = 546682.24
PI = 131ERD+98.07
X = 816193.59
Y = 546631.36
PT = 132ERD+69.58
X = 816138.15
Y = 546586.00
R = 1375.07
DELTA = 5°57'52" RT
D = 4°10'00"
L = 143.14
T = 71.64
E = 1.86
BK = S 44°45'00" W
AH = S 50°42'52" W

R/L EXISTING RAMP A
(INFORMATION SHOWN ELSEWHERE)

EXISTING RAMP C = 124ERC+32.35
EXISTING MAINLINE = 158ML+76.50
X = 816186.660
Y = 546581.236

R/L EXISTING RAMP C

EXISTING RAMP C = 121ERC+05.21
USH 10 WB/STH 441 SB = 193WB+41.14
X = 816024.216
Y = 546865.189

R/L EXISTING RAMP D

EXISTING RAMP D = 110ERD+18.25
EXISTING RAMP D = 132ERD+08.89
X = 816184.257
Y = 546625.454

R/L RACINE ROAD NW RAMP
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD SW RAMP BYPASS
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD SW RAMP
(INFORMATION SHOWN ELSEWHERE)

EXISTING RAMP C = 118ERC+95.54
RACINE ROAD NW RAMP = 193RNW+71.44
X = 815929.599
Y = 547051.825

R/L USH 10 EB/STH 441 NB
(INFORMATION SHOWN ELSEWHERE)

PCC
ERD-3/ERD-4

R/L USH 10 WB/STH 441 SB
(INFORMATION SHOWN ELSEWHERE)

EXISTING RAMP C = 131ERC+58.43
RACINE ROAD SW BYPASS = 21RSWC+11.60
X = 816841.234
Y = 546383.902

R/L RACINE ROAD RAMP CONNECTOR SB
(INFORMATION SHOWN ELSEWHERE)

EXISTING RAMP D = 103ERD+44.83
RACINE ROAD SW BYPASS = 20RSWC+38.19
X = 816770.488
Y = 546403.480

R/L RACINE ROAD RAMP CONNECTOR NB
(INFORMATION SHOWN ELSEWHERE)

R/L USH 10 WB/STH 441 SB RAMP
CONNECTOR ROUNDABOUT
(INFORMATION SHOWN ELSEWHERE)

EXISTING RAMP D = 101ERD+75.21
RACINE ROAD CONNECTOR SB = 240CSB+54.19
X = 816940.088
Y = 546402.155

R/L EXISTING USH 10/STH 441
(INFORMATION SHOWN ELSEWHERE)

R/L EXISTING RAMP B
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD SE RAMP
(INFORMATION SHOWN ELSEWHERE)

R/L RACINE ROAD NE RAMP
(INFORMATION SHOWN ELSEWHERE)

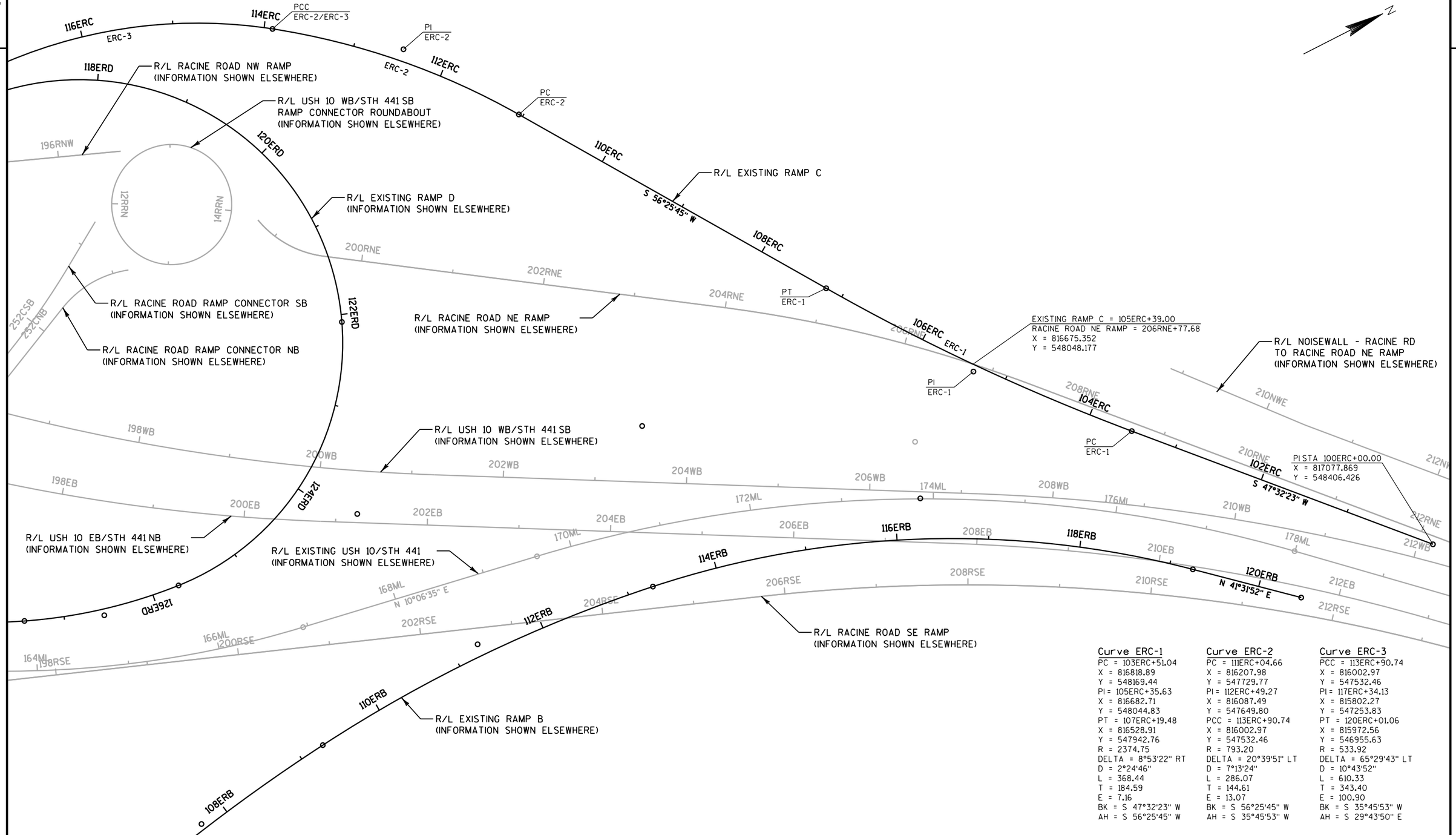
EXISTING RAMP D = 124ERD+41.97
USH 10 EB/STH 441 NB = 200EB+33.07
X = 816480.366
Y = 547292.002

PCC
ERD-4/ERD-5

PI
ERD-5

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 403	E

2



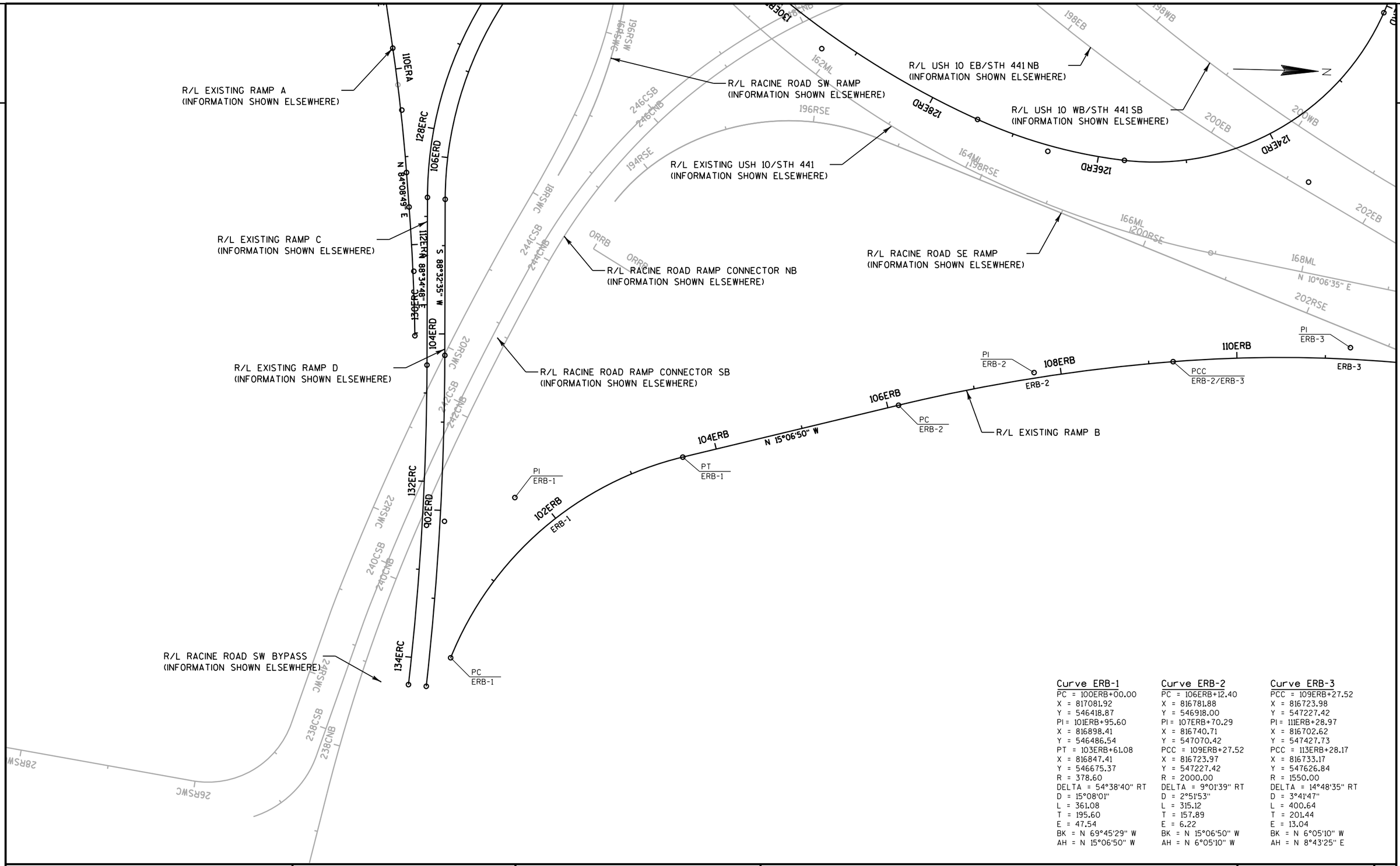
Curve ERC-1
PC = 103ERC+51.04
X = 816818.89
Y = 548169.44
PI = 105ERC+35.63
X = 816682.71
Y = 548044.83
PT = 107ERC+19.48
X = 816528.91
Y = 547942.76
R = 2374.75
DELTA = 8°53'22" RT
D = 2°24'46"
L = 368.44
T = 184.59
E = 7.16
BK = S 47°32'23" W
AH = S 56°25'45" W

Curve ERC-2
PC = 111ERC+04.66
X = 816207.98
Y = 547729.77
PI = 112ERC+49.27
X = 816087.49
Y = 547649.80
PCC = 113ERC+90.74
X = 816002.97
Y = 547532.46
R = 793.20
DELTA = 20°39'51" LT
D = 7°13'24"
L = 286.07
T = 144.61
E = 13.07
BK = S 56°25'45" W
AH = S 35°45'53" W

Curve ERC-3
PCC = 113ERC+90.74
X = 816002.97
Y = 547532.46
PI = 117ERC+34.13
X = 815802.27
Y = 547253.83
PT = 120ERC+01.06
X = 815972.56
Y = 546955.63
R = 533.92
DELTA = 65°29'43" LT
D = 10°43'52"
L = 610.33
T = 343.40
E = 100.90
BK = S 35°45'53" W
AH = S 29°43'50" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 404	E

2



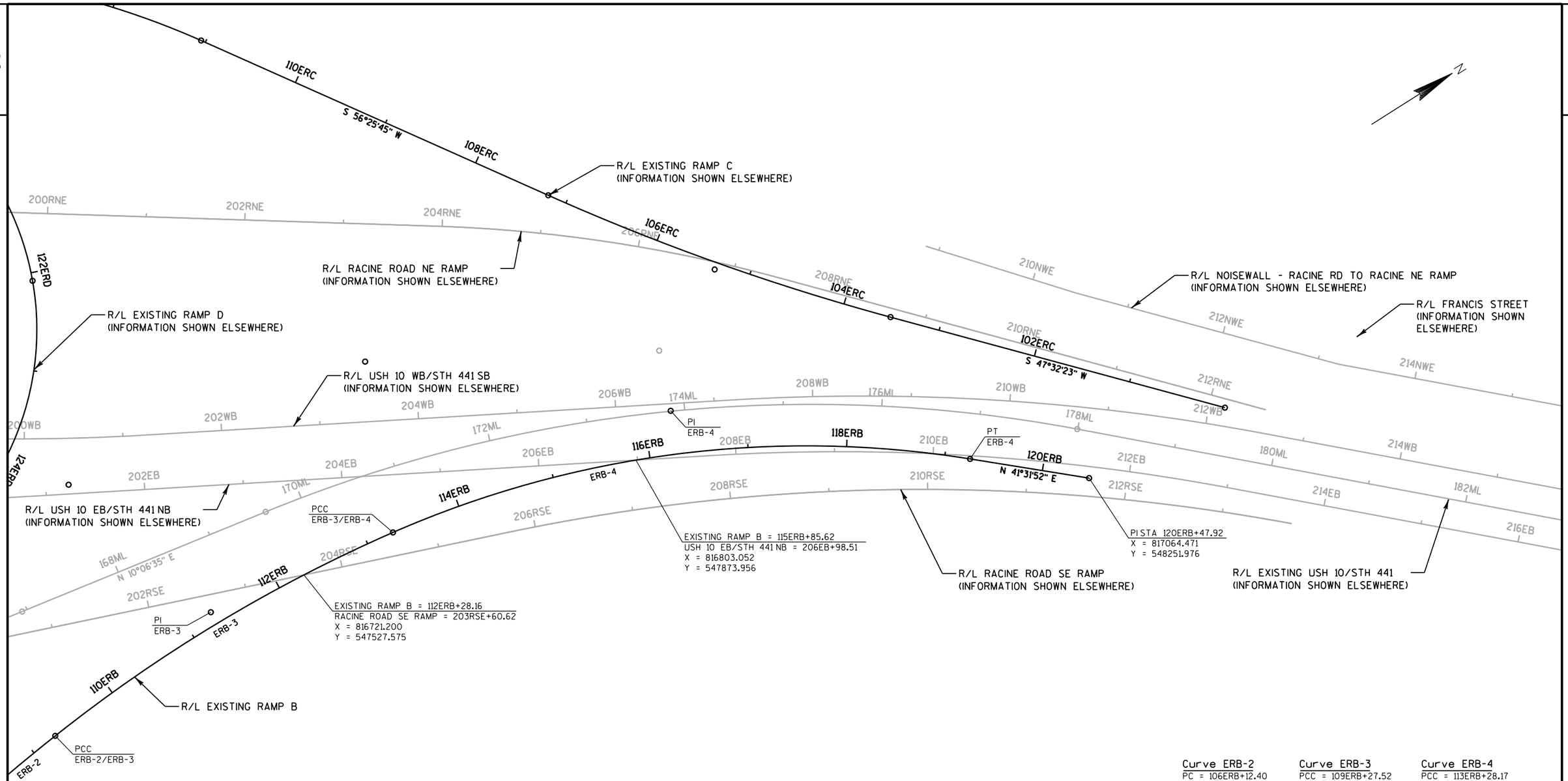
Curve ERB-1
PC = 100ERB+00.00
X = 817081.92
Y = 546418.87
PI = 101ERB+95.60
X = 816898.41
Y = 546486.54
PT = 103ERB+61.08
X = 816847.41
Y = 546675.37
R = 378.60
DELTA = 54°38'40" RT
D = 15°08'01"
L = 361.08
T = 195.60
E = 47.54
BK = N 69°45'29" W
AH = N 15°06'50" W

Curve ERB-2
PC = 106ERB+12.40
X = 816781.88
Y = 546918.00
PI = 107ERB+70.29
X = 816740.71
Y = 547070.42
PCC = 109ERB+27.52
X = 816723.97
Y = 547227.42
R = 2000.00
DELTA = 9°01'39" RT
D = 2°51'53"
L = 315.12
T = 157.89
E = 6.22
BK = N 15°06'50" W
AH = N 6°05'10" W

Curve ERB-3
PCC = 109ERB+27.52
X = 816723.98
Y = 547227.42
PI = 111ERB+28.97
X = 816702.62
Y = 547427.73
PCC = 113ERB+28.17
X = 816733.17
Y = 547626.84
R = 1550.00
DELTA = 14°48'35" RT
D = 3°41'47"
L = 400.64
T = 201.44
E = 13.04
BK = N 6°05'10" W
AH = N 8°43'25" E

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	ALIGNMENT PLAN - EXISTING	SHEET 405	E

2



Curve ERB-2
PC = 106ERB+12.40
X = 816781.88
Y = 546918.00
PI = 107ERB+70.29
X = 816740.71
Y = 547070.42
PCC = 109ERB+27.52
X = 816723.97
Y = 547227.42
R = 2000.00
DELTA = 9°01'39" RT
D = 2°51'53"
L = 315.12
T = 157.89
E = 6.22
BK = N 15°06'50" W
AH = N 6°05'10" W

Curve ERB-3
PCC = 109ERB+27.52
X = 816723.97
Y = 547227.42
PI = 111ERB+28.97
X = 816702.62
Y = 547427.73
PCC = 113ERB+28.17
X = 816733.17
Y = 547626.84
R = 1550.00
DELTA = 14°48'35" RT
D = 3°41'47"
L = 400.64
T = 201.44
E = 13.04
BK = N 6°05'10" W
AH = N 8°43'25" E

Curve ERB-4
PCC = 113ERB+28.17
X = 816733.17
Y = 547626.84
PI = 116ERB+35.41
X = 816779.77
Y = 547930.53
PT = 119ERB+25.77
X = 816983.48
Y = 548160.53
R = 1043.66
DELTA = 32°48'27" RT
D = 5°29'24"
L = 597.60
T = 307.24
E = 44.28
BK = N 8°43'25" E
AH = N 41°31'52" E

2

USH 10 EB/STH 441 NB

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE EB-1					
BEGIN FULL SUPERELEVATION (F.S.)	180EB+22	-6.00%	-6.00%	6.00%	6.00%
BEGIN SHOULDER WARPING (AFTER B-70-410)*	186EB+25	-6.00%	-6.00%	6.00%	6.00%
END SHOULDER WARPING (AFTER B-70-410)*	187EB+46	-6.00%	-6.00%	6.00%	-2.00%
BEGIN SHOULDER WARPING (BEFORE B-70-420)*	193EB+98	-6.00%	-6.00%	6.00%	-2.00%
END SHOULDER WARPING (BEFORE B-70-420)*	195EB+18	-6.00%	-6.00%	6.00%	6.00%
BEGIN SHOULDER WARPING (AFTER B-70-420)*	197EB+98	-6.00%	-6.00%	6.00%	6.00%
END SHOULDER WARPING (AFTER B-70-420)*	199EB+18	-6.00%	-6.00%	6.00%	-2.00%
END FULL SUPERELEVATION (F.S.)	199EB+93	-6.00%	-6.00%	6.00%	-2.00%
REMOVE ADVERSE CROWN (R.C.)	201EB+73	-4.00%	-2.00%	2.00%	-4.00%
END RUNOFF (R.O.)	202EB+63	-4.00%	-2.00%	0.00%	-4.00%
BEGIN NORMAL CROWN (N.C.)	203EB+53	-4.00%	-2.00%	-2.00%	-4.00%
CURVE EB-2					
END NORMAL CROWN (N.C.)	205EB+06	-4.00%	-2.00%	-2.00%	-4.00%
BEGIN RUNOFF (R.O.)	205EB+96	-4.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN (R.C.)	206EB+86	-4.00%	2.00%	-2.00%	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	208EB+66	-2.00%	6.00%	-6.00%	-6.00%
END FULL SUPERELEVATION (F.S.)	211EB+81	-2.00%	6.00%	-6.00%	-6.00%
REMOVE ADVERSE CROWN (R.C.)	214EB+21	-4.00%	2.00%	-2.00%	-4.00%
END RUNOFF (R.O.)	215EB+41	-4.00%	0.00%	-2.00%	-4.00%
BEGIN NORMAL CROWN (N.C.)	216EB+61	-4.00%	-2.00%	-2.00%	-4.00%
CURVE EB-3					
END NORMAL CROWN (N.C.)	219EB+13	-4.00%	-2.00%	-2.00%	-4.00%
BEGIN RUNOFF (R.O.)	220EB+33	-4.00%	-2.00%	0.00%	-4.00%
REMOVE ADVERSE CROWN (R.C.)	221EB+53	-4.00%	-2.00%	2.00%	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	222EB+85	-4.20%	-4.20%	4.20%	-3.80%
END FULL SUPERELEVATION (F.S.)	236EB+85	-4.20%	-4.20%	4.20%	-3.80%

* SEE PLAN DETAILS FOR SHOULDER CROSS SLOPE TRANSITIONS BEFORE AND AFTER CONCRETE PAVEMENT APPROACH SLABS.

2

USH 10 WB/STH 441 SB

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE WB-1					
BEGIN FULL SUPERELEVATION (F.S.)	178WB+93	-6.00%	-6.00%	6.00%	6.00%
BEGIN SHOULDER WARPING (AFTER B-70-411)*	186WB+42	-6.00%	-6.00%	6.00%	6.00%
END SHOULDER WARPING (AFTER B-70-411)*	187WB+62	-6.00%	-6.00%	6.00%	-2.00%
BEGIN SHOULDER WARPING (BEFORE B-70-421)*	193WB+71	-6.00%	-6.00%	6.00%	-2.00%
END SHOULDER WARPING (BEFORE B-70-421)*	194WB+91	-6.00%	-6.00%	6.00%	6.00%
BEGIN SHOULDER WARPING (AFTER B-70-421)*	197WB+61	-6.00%	-6.00%	6.00%	6.00%
END SHOULDER WARPING (AFTER B-70-421)*	198WB+81	-6.00%	-6.00%	6.00%	-2.00%
END FULL SUPERELEVATION (F.S.)	200WB+35	-6.00%	-6.00%	6.00%	-2.00%
REMOVE ADVERSE CROWN (R.C.)	202WB+15	-4.00%	-2.00%	2.00%	-4.00%
END RUNOFF (R.O.)	203WB+05	-4.00%	-2.00%	0.00%	-4.00%
BEGIN NORMAL CROWN (N.C.)	203WB+95	-4.00%	-2.00%	-2.00%	-4.00%
CURVE WB-2					
END NORMAL CROWN (N.C.)	204WB+48	-4.00%	-2.00%	-2.00%	-4.00%
BEGIN RUNOFF (R.O.)	205WB+38	-4.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN (R.C.)	206WB+28	-4.00%	2.00%	-2.00%	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	208WB+08	-2.00%	6.00%	-6.00%	-6.00%
END FULL SUPERELEVATION (F.S.)	211WB+37	-2.00%	6.00%	-6.00%	-6.00%
REMOVE ADVERSE CROWN (R.C.)	213WB+77	-4.00%	2.00%	-2.00%	-4.00%
END RUNOFF (R.O.)	214WB+97	-4.00%	0.00%	-2.00%	-4.00%
BEGIN NORMAL CROWN (N.C.)	216WB+17	-4.00%	-2.00%	-2.00%	-4.00%
CURVE WB-3					
END NORMAL CROWN (N.C.)	218WB+76	-4.00%	-2.00%	-2.00%	-4.00%
BEGIN RUNOFF (R.O.)	219WB+96	-4.00%	-2.00%	0.00%	-4.00%
REMOVE ADVERSE CROWN (R.C.)	221WB+16	-4.00%	-2.00%	2.00%	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	222WB+54	-4.30%	-4.30%	4.30%	-3.70%
END FULL SUPERELEVATION (F.S.)	237WB+43	-4.30%	-4.30%	4.30%	-3.70%

* SEE PLAN DETAILS FOR SHOULDER CROSS SLOPE TRANSITIONS BEFORE AND AFTER CONCRETE PAVEMENT APPROACH SLABS.

2

USH 10 EB/STH 441 NB TEMPORARY CONNECTION

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE EBT-1					
END NORMAL CROWN (N.C.)	24EBT+12	N/A	N/A	N/A	-3.80%
BEGIN RUNOFF (R.O.)	25EBT+19	N/A	N/A	N/A	0.00%
REMOVE ADVERSE CROWN (R.C.)	26EBT+26	N/A	N/A	N/A	2.00%
BEGIN FULL SUPERELEVATION (F.S.)	28EBT+34	-5.90%	-5.90%	5.90%	5.90%
END FULL SUPERELEVATION (F.S.)	30EBT+07	-5.90%	-5.90%	5.90%	5.90%

USH 10 WB/STH 441 SB TEMPORARY CONNECTION

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE WBT-1					
END NORMAL CROWN (N.C.)	22WBT+35	-4.00%	-4.00%	4.00%	4.00%
BEGIN RUNOFF (R.O.)	23WBT+99	N/A	N/A	N/A	0.00%
REMOVE ADVERSE CROWN (R.C.)	23WBT+75	N/A	N/A	N/A	2.00%
BEGIN FULL SUPERELEVATION (F.S.)	27WBT+19	-5.80%	-5.80%	5.80%	5.80%
END FULL SUPERELEVATION (F.S.)	27WBT+53	-5.80%	-5.80%	5.80%	5.80%

FILE NAME: I:\56537\1517-75-75\t1\cds\027250_ad.ppt PLOT DATE : 1/27/2015 9:56:46 AM PLOT BY : HNTB Corp. PLOT NAME : PLOT SCALE : 1:1

2

RACINE ROAD NE RAMP

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE RNE-2					
END NORMAL CROWN (N.C.)	202RNE+65	-4.00%	-2.00%	N/A	-4.00%
BEGIN RUNOFF (R.O.)	203RNE+13	0.00%	0.00%	N/A	-4.00%
REMOVE ADVERSE CROWN (R.C.)	203RNE+61	2.00%	2.00%	N/A	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	204RNE+33	5.00%	5.00%	N/A	-5.00%
END FULL SUPERELEVATION (F.S.)	207RNE+03	5.00%	5.00%	N/A	-5.00%
REMOVE ADVERSE CROWN (R.C.)	207RNE+75	2.00%	2.00%	N/A	-4.00%
BEGIN NORMAL CROWN (N.C.)	208RNE+47	-4.00%	2.00%	N/A	-4.00%

RACINE ROAD NW RAMP

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE RNW-1					
BEGIN FULL SUPERELEVATION (F.S.)	183RNW+37	-6.00%	-6.00%	N/A	6.00%
END FULL SUPERELEVATION (F.S.)	192RNW+88	-6.00%	-6.00%	N/A	-6.00%
CURVE RNW-2					
BEGIN FULL SUPERELEVATION (F.S.)	193RNW+32	-4.90%	-4.90%	N/A	4.90%
END FULL SUPERELEVATION (F.S.)	194RNW+64	-4.90%	-4.90%	N/A	4.90%
REMOVE ADVERSE CROWN (R.C.)	195RNW+54	-2.00%	-2.00%	N/A	-4.00%

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RACINE ROAD SE RAMP

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE RSE-2					
MATCH CONNECTOR NB CROSS SLOPE	193RSE+84	N/A	N/A	-2.51%	N/A
BEGIN FULL SUPERELEVATION (F.S.)	194RSE+42	4.00%	N/A	-4.00%	-4.00%
END FULL SUPERELEVATION (F.S.)	196RSE+50	4.00%	N/A	-4.00%	-4.00%
REMOVE ADVERSE CROWN (R.C.)	196RSE+87	2.00%	N/A	-2.00%	-4.00%
CURVE RSE-3					
END NORMAL CROWN (N.C.)	204RSE+25	-4.00%	N/A	-2.00%	-4.00%
BEGIN RUNOFF (R.O.)	204RSE+78	-2.00%	N/A	-2.00%	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	206RSE+22	N/A	N/A	-5.40%	-5.40%
END FULL SUPERELEVATION (F.S.)	212RSE+15	N/A	N/A	-5.40%	-5.40%
MATCH 'EB 441' CROSS SLOPE	212RSE+78	N/A	N/A	-4.39%	-4.39%

RACINE ROAD SW RAMP

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE RSW-1					
BEGIN FULL SUPERELEVATION (F.S.)	185RSW+75	N/A	-6.00%	6.00%	N/A
MATCH 'EB 441' CROSS SLOPE	186RSW+25	N/A	-6.00%	6.00%	N/A
END FULL SUPERELEVATION (F.S.)	187RSW+93	N/A	-6.00%	6.00%	N/A
REMOVE ADVERSE CROWN (R.C.)	188RSW+99	N/A	-2.00%	2.00%	N/A
END RUNOFF (R.O.)	189RSW+53	N/A	-2.00%	0.00%	N/A
BEGIN NORMAL CROWN (N.C.)	190RSW+06	N/A	-2.00%	-2.00%	N/A
CURVE RSW-2					
END NORMAL CROWN (N.C.)	191RSW+91	-4.00%	-2.00%	-2.00%	-4.00%
BEGIN RUNOFF (R.O.)	192RSW+33	0.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN (R.C.)	192RSW+75	2.00%	2.00%	-2.00%	-4.00%
BEGIN FULL SUPERELEVATION (F.S.)	193RSW+16	4.00%	4.00%	-4.00%	-4.00%
END FULL SUPERELEVATION (F.S.)	196RSW+51	4.00%	4.00%	-4.00%	-4.00%
MATCH INTO 'CSB' CROSS SLOPE	197RSW+62	N/A	2.30%	-2.30%	N/A

2

RACINE ROAD SW RAMP CONNECTOR

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE RSWC-2					
REMOVE ADVERSE CROWN (R.C.)	16RSWC+81	N/A	4.00%	-4.00%	N/A
BEGIN FULL SUPERELEVATION (F.S.)	17RSWC+04	N/A	2.80%	-2.80%	-2.80%
END FULL SUPERELEVATION (F.S.)	17RSWC+69	N/A	2.80%	-2.80%	-2.80%
BEGIN R.R. WARP	18RSWC+21	N/A	0.13%	-0.13%	-0.13%
CURVE RSWC-3					
END R.R. WARP	18RSWC+45	N/A	0.13%	-0.13%	-0.13%
BEGIN FULL SUPERELEVATION (F.S.)	19RSWC+30	N/A	-3.40%	3.40%	3.40%
END FULL SUPERELEVATION (F.S.)	19RSWC+71	N/A	-3.40%	3.40%	3.40%
CURVE RSWC-4					
BEGIN FULL SUPERELEVATION (F.S.)	19RSWC+86	-4.00%	-2.60%	2.60%	2.60%
END FULL SUPERELEVATION (F.S.)	23RSWC+69	-4.00%	-2.60%	2.60%	2.60%
REMOVE ADVERSE CROWN (R.C.)	23RSWC+80	-4.00%	-2.00%	2.00%	2.00%
END RUNOFF (R.O.)	24RSWC+19	-4.00%	-2.00%	0.00%	0.00%

2

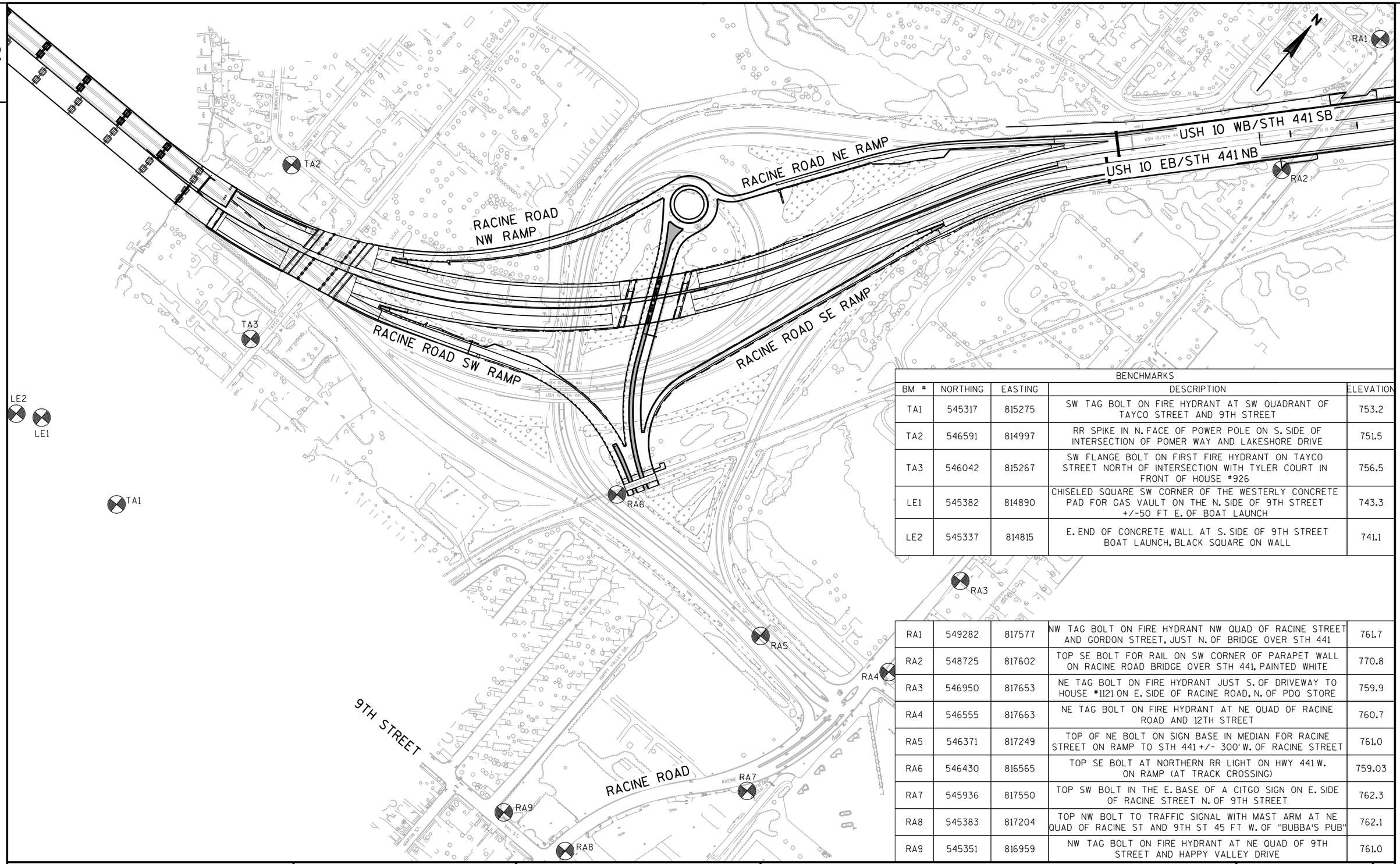
RACINE ROAD CONNECTOR NB

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE CNB-2					
REMOVE ADVERSE CROWN (R.C.)	238CNB+51	N/A	N/A	-2.00%	N/A
BEGIN FULL SUPERELEVATION (F.S.)	238CNB+74	N/A	N/A	-2.60%	N/A
END FULL SUPERELEVATION (F.S.)	242CNB+63	N/A	N/A	-2.60%	N/A
CURVE CNB-3					
END FULL SUPERELEVATION (F.S.)	243CNB+32	N/A	N/A	-2.60%	N/A
BEGIN R.R. WARP	244CNB+11	N/A	N/A	0.13%	N/A
END R.R. WARP	244CNB+34	N/A	N/A	0.13%	N/A
BEGIN FULL SUPERELEVATION (F.S.)	245CNB+39	N/A	N/A	-3.50%	N/A
END FULL SUPERELEVATION (F.S.)	248CNB+05	N/A	N/A	-3.50%	N/A
BEGIN NORMAL CROWN (N.C.)	248CNB+48	N/A	N/A	-2.00%	N/A

RACINE ROAD CONNECTOR SB

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	SHOULDER	TRAVELLED WAY	TRAVELLED WAY	SHOULDER
CURVE CSB-2					
REMOVE ADVERSE CROWN (R.C.)	238CSB+87	N/A	2.00%	N/A	N/A
BEGIN FULL SUPERELEVATION (F.S.)	239CSB+04	N/A	2.60%	N/A	N/A
END FULL SUPERELEVATION (F.S.)	242CSB+59	N/A	2.60%	N/A	N/A
CURVE CSB-3					
END FULL SUPERELEVATION (F.S.)	243CSB+22	N/A	2.60%	N/A	N/A
BEGIN R.R. WARP	244CSB+01	N/A	-0.13%	N/A	N/A
END R.R. WARP	244CSB+25	N/A	-0.13%	N/A	N/A
BEGIN FULL SUPERELEVATION (F.S.)	245CSB+30	N/A	3.50%	N/A	N/A
END FULL SUPERELEVATION (F.S.)	248CSB+05	N/A	3.50%	N/A	N/A
REMOVE ADVERSE CROWN (R.C.)	248CSB+48	N/A	2.00%	N/A	N/A
END RUNOFF (R.O.)	249CSB+07	N/A	0.00%	N/A	N/A
BEGIN NORMAL CROWN (N.C.)	249CSB+65	N/A	-2.00%	N/A	N/A

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BENCHMARKS

BM #	NORTHING	EASTING	DESCRIPTION	ELEVATION
TA1	545317	815275	SW TAG BOLT ON FIRE HYDRANT AT SW QUADRANT OF TAYCO STREET AND 9TH STREET	753.2
TA2	546591	814997	RR SPIKE IN N. FACE OF POWER POLE ON S. SIDE OF INTERSECTION OF POMER WAY AND LAKESHORE DRIVE	751.5
TA3	546042	815267	SW FLANGE BOLT ON FIRST FIRE HYDRANT ON TAYCO STREET NORTH OF INTERSECTION WITH TYLER COURT IN FRONT OF HOUSE #926	756.5
LE1	545382	814890	CHISELED SQUARE SW CORNER OF THE WESTERLY CONCRETE PAD FOR GAS VAULT ON THE N. SIDE OF 9TH STREET +/-50 FT E. OF BOAT LAUNCH	743.3
LE2	545337	814815	E. END OF CONCRETE WALL AT S. SIDE OF 9TH STREET BOAT LAUNCH, BLACK SQUARE ON WALL	741.1
RA1	549282	817577	NW TAG BOLT ON FIRE HYDRANT NW QUAD OF RACINE STREET AND GORDON STREET, JUST N. OF BRIDGE OVER STH 441	761.7
RA2	548725	817602	TOP SE BOLT FOR RAIL ON SW CORNER OF PARAPET WALL ON RACINE ROAD BRIDGE OVER STH 441, PAINTED WHITE	770.8
RA3	546950	817653	NE TAG BOLT ON FIRE HYDRANT JUST S. OF DRIVEWAY TO HOUSE #1121 ON E. SIDE OF RACINE ROAD, N. OF PDQ STORE	759.9
RA4	546555	817663	NE TAG BOLT ON FIRE HYDRANT AT NE QUAD OF RACINE ROAD AND 12TH STREET	760.7
RA5	546371	817249	TOP OF NE BOLT ON SIGN BASE IN MEDIAN FOR RACINE STREET ON RAMP TO STH 441 +/- 300' W. OF RACINE STREET	761.0
RA6	546430	816565	TOP SE BOLT AT NORTHERN RR LIGHT ON HWY 441 W. ON RAMP (AT TRACK CROSSING)	759.03
RA7	545936	817550	TOP SW BOLT IN THE E. BASE OF A CITGO SIGN ON E. SIDE OF RACINE STREET N. OF 9TH STREET	762.3
RA8	545383	817204	TOP NW BOLT TO TRAFFIC SIGNAL WITH MAST ARM AT NE QUAD OF RACINE ST AND 9TH ST 45 FT W. OF "BUBBA'S PUB"	762.1
RA9	545351	816959	NW TAG BOLT ON FIRE HYDRANT AT NE QUAD OF 9TH STREET AND HAPPY VALLEY DRIVE	761.0

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	BENCHMARKS	SHEET 414	E

DATE 15MAY15 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	1517-75-75 QUANTITY
0010	201.0105	Clearing **P**	STA	69.000	69.000
0020	201.0120	Clearing	ID	8.000	8.000
0030	201.0205	Grubbing **P**	STA	69.000	69.000
0040	201.0220	Grubbing	ID	8.000	8.000
0050	203.0100	Removing Small Pipe Culverts	EACH	6.000	6.000
0060	203.0200	Removing Old Structure (station) 001. 185EB+00	LS	1.000	1.000
0070	203.0200	Removing Old Structure (station) 003. 194RSW+00	LS	1.000	1.000
0080	203.0200	Removing Old Structure (station) 004. 194RSW+00	LS	1.000	1.000
0090	204.0100	Removing Pavement **P**	SY	47,646.000	47,646.000
0100	204.0105	Removing Pavement Butt Joints **P**	SY	172.000	172.000
0110	204.0150	Removing Curb & Gutter **P**	LF	860.000	860.000
0120	204.0157	Removing Concrete Barrier **P**	LF	3,174.000	3,174.000
0130	204.0165	Removing Guardrail **P**	LF	2,919.000	2,919.000
0140	204.0170	Removing Fence **P**	LF	2,417.000	2,417.000
0150	204.0180	Removing Delineators and Markers	EACH	87.000	87.000
0160	204.0190	Removing Surface Drains	EACH	2.000	2.000
0170	204.0210	Removing Manholes	EACH	11.000	11.000
0180	204.0220	Removing Inlets	EACH	29.000	29.000
0190	204.0245	Removing Storm Sewer (size) 01. 6 To 18-Inch **P**	LF	1,633.000	1,633.000
0200	204.0245	Removing Storm Sewer (size) 02. 21 To 30-Inch **P**	LF	1,298.000	1,298.000
0210	204.0245	Removing Storm Sewer (size) 03. 36 To 60-Inch **P**	LF	1,317.000	1,317.000
0220	204.0245	Removing Storm Sewer (size) 04. 66 To 96-Inch **P**	LF	57.000	57.000
0230	204.0270	Abandoning Culvert Pipes	EACH	1.000	1.000
0240	204.9090.S	Removing (item description) 01. Noise Barrier	LF	1,856.000	1,856.000
0250	204.9105.S	Removing (item description) 01. Sand Barrels	LS	1.000	1.000
0260	205.0100	Excavation Common	CY	463,875.000	463,875.000
0270	206.1000	Excavation for Structures Bridges (structure) 001. B-70-410	LS	1.000	1.000
0280	206.1000	Excavation for Structures Bridges (structure) 002. B-70-411	LS	1.000	1.000
0290	206.1000	Excavation for Structures Bridges (structure) 003. B-70-420	LS	1.000	1.000
0300	206.1000	Excavation for Structures Bridges (structure) 004. B-70-421	LS	1.000	1.000
0310	209.0100	Backfill Granular	CY	305.000	305.000
0320	209.0300.S	Backfill Coarse Aggregate (size) 01. No 1	CY	72.000	72.000
0330	210.0100	Backfill Structure **P**	CY	1,812.000	1,812.000
0340	213.0100	Finishing Roadway (project) 01. 1517-75-75	EACH	1.000	1.000
0350	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,403.000	4,403.000
0360	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	70,756.000	70,756.000
0370	311.0110	Breaker Run	TON	110,424.000	110,424.000
0380	320.0105	Concrete Base 4-Inch **P**	SY	2,599.000	2,599.000
0390	320.0155	Concrete Base 9-Inch **P**	SY	967.000	967.000
0400	405.0100	Coloring Concrete Red	CY	146.000	146.000
0410	415.0410	Concrete Pavement Approach Slab **P**	SY	2,207.000	2,207.000

3

DATE 15MAY15 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	1517-75-75 QUANTITY
0420	416.0512	Concrete Roundabout Truck Apron 12-Inch	SY	438.000	438.000
0430	416.1010	Concrete Surface Drains	CY	10.000	10.000
0440	416.1110	Concrete Shoulder Rumble Strips **P**	LF	7,805.000	7,805.000
0450	440.4410.S	Incentive IRI Ride	DOL	24,496.000	24,496.000
0460	455.0105	Asphaltic Material PG58-28	TON	130.000	130.000
0470	455.0605	Tack Coat	GAL	1,988.000	1,988.000
0480	460.1100	HMA Pavement Type E-0.3	TON	2,127.000	2,127.000
0490	460.1110	HMA Pavement Type E-10	TON	204.000	204.000
0500	460.2000	Incentive Density HMA Pavement	DOL	1,500.000	1,500.000
0510	460.4000	HMA Cold Weather Paving	TON	430.000	430.000
0520	465.0125	Asphaltic Surface Temporary	TON	9,273.000	9,273.000
0530	465.0400	Asphaltic Shoulder Rumble Strips **P**	LF	3,523.000	3,523.000
0540	501.1000.S	Ice Hot Weather Concreting	LB	7,965.000	7,965.000
0550	502.3200	Protective Surface Treatment **P**	SY	8,174.000	8,174.000
0560	503.0137	Prestressed Girder Type I 36W-Inch	LF	6,593.000	6,593.000
0570	504.0500	Concrete Masonry Retaining Walls **P**	CY	413.000	413.000
0580	505.0405	Bar Steel Reinforcement HS Bridges	LB	60,110.000	60,110.000
0590	505.0605	Bar Steel Reinforcement HS Coated Bridges	LB	857,210.000	857,210.000
0600	505.0615	Bar Steel Reinforcement HS Coated Retaining Walls	LB	29,960.000	29,960.000
0610	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	11,540.000	11,540.000
0620	506.2605	Bearing Pads Elastomeric Non-Laminated **P**	EACH	210.000	210.000
0630	506.4000	Steel Diaphragms (structure) 001. B-70-410 **P**	EACH	44.000	44.000
0640	506.4000	Steel Diaphragms (structure) 002. B-70-411 **P**	EACH	40.000	40.000
0650	506.4000	Steel Diaphragms (structure) 003. B-70-420 **P**	EACH	36.000	36.000
0660	506.4000	Steel Diaphragms (structure) 004. B-70-421 **P**	EACH	28.000	28.000
0670	511.1100	Temporary Shoring	SF	6,929.000	6,929.000
0680	516.0500	Rubberized Membrane Waterproofing **P**	SY	165.000	165.000
0690	517.1010.S	Concrete Staining (structure) 001. B-70-410 **P**	SF	7,705.000	7,705.000
0700	517.1010.S	Concrete Staining (structure) 002. B-70-411 **P**	SF	7,215.000	7,215.000
0710	517.1010.S	Concrete Staining (structure) 003. B-70-420 **P**	SF	5,913.000	5,913.000
0720	517.1010.S	Concrete Staining (structure) 004. B-70-421 **P**	SF	4,982.000	4,982.000
0730	517.1010.S	Concrete Staining (structure) 005. R-70-120 **P**	SF	5,640.000	5,640.000
0740	517.1050.S	Architectural Surface Treatment (structure) 001. B-70-410 **P**	SF	2,095.000	2,095.000
0750	517.1050.S	Architectural Surface Treatment (structure) 002. B-70-411 **P**	SF	1,905.000	1,905.000
0760	517.1050.S	Architectural Surface Treatment (structure) 003. B-70-420 **P**	SF	2,030.000	2,030.000
0770	517.1050.S	Architectural Surface Treatment (structure) 004. B-70-421 **P**	SF	1,557.000	1,557.000
0780	517.1050.S	Architectural Surface Treatment (structure) 005. R-70-120 **P**	SF	4,660.000	4,660.000
0790	520.8000	Concrete Collars for Pipe	EACH	26.000	26.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-75 QUANTITY
0800	521.2005.S	Surface Drain Pipe Corrugated Metal Slotted (inch) 01. 18-Inch	LF	478.000	478.000
0810	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	171.000	171.000
0820	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	132.000	132.000
0830	522.0142	Culvert Pipe Reinforced Concrete Class III 42-Inch	LF	61.000	61.000
0840	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	10.000	10.000
0850	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0860	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	5.000	5.000
0870	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	5.000	5.000
0880	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0890	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	1.000	1.000
0900	522.1060	Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	EACH	1.000	1.000
0910	524.0112	Culvert Pipe Salvaged 12-Inch	LF	13.000	13.000
0920	524.0118	Culvert Pipe Salvaged 18-Inch	LF	150.000	150.000
0930	524.0124	Culvert Pipe Salvaged 24-Inch	LF	303.000	303.000
0940	524.0142	Culvert Pipe Salvaged 42-Inch	LF	51.000	51.000
0950	524.0196	Culvert Pipe Salvaged 96-Inch	LF	218.000	218.000
0960	524.0612	Apron Endwalls for Culvert Pipe Salvaged 12-Inch	EACH	1.000	1.000
0970	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	1.000	1.000
0980	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	3.000	3.000
0990	524.0642	Apron Endwalls for Culvert Pipe Salvaged 42-Inch	EACH	1.000	1.000
1000	550.0500	Pile Points	EACH	59.000	59.000
1010	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	2,970.000	2,970.000
1020	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	14,715.000	14,715.000
1030	601.0409	Concrete Curb & Gutter 30-Inch Type A **P**	LF	4,402.000	4,402.000
1040	601.0411	Concrete Curb & Gutter 30-Inch Type D **P**	LF	216.000	216.000
1050	601.0501	Concrete Curb & Gutter Integral 4-Inch Sloped 36-Inch **P**	LF	535.000	535.000
1060	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A **P**	LF	302.000	302.000
1070	602.0405	Concrete Sidewalk 4-Inch **P**	SF	1,019.000	1,019.000
1080	603.1132	Concrete Barrier Type S32 **P**	LF	2,520.000	2,520.000
1090	603.1142	Concrete Barrier Type S42 **P**	LF	2,425.000	2,425.000
1100	603.1156	Concrete Barrier Type S56 **P**	LF	2,870.000	2,870.000
1110	603.1436	Concrete Barrier Type S36C **P**	LF	948.000	948.000
1120	603.1442	Concrete Barrier Type S42C **P**	LF	622.000	622.000
1130	603.1456	Concrete Barrier Type S56C **P**	LF	611.000	611.000
1140	603.3513	Concrete Barrier Transition Type S32 to S36	EACH	5.000	5.000
1150	603.3535	Concrete Barrier Transition Type S36 to S42	EACH	5.000	5.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-75 QUANTITY
1160	603.3559	Concrete Barrier Transition Type S42 to S56	EACH	6.000	6.000
1170	603.8000	Concrete Barrier Temporary Precast Delivered	LF	14,228.000	14,228.000
1180	603.8125	Concrete Barrier Temporary Precast Installed	LF	18,008.000	18,008.000
1190	604.0400	Slope Paving Concrete **P**	SY	2,005.000	2,005.000
1200	604.0500	Slope Paving Crushed Aggregate **P**	SY	1,988.000	1,988.000
1210	606.0100	Riprap Light	CY	94.000	94.000
1220	606.0200	Riprap Medium	CY	343.000	343.000
1230	606.0300	Riprap Heavy	CY	3,521.000	3,521.000
1240	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	1,283.000	1,283.000
1250	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	1,547.000	1,547.000
1260	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	1,197.000	1,197.000
1270	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,791.000	1,791.000
1280	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	457.000	457.000
1290	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	1,009.000	1,009.000
1300	608.0342	Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	LF	405.000	405.000
1310	608.0354	Storm Sewer Pipe Reinforced Concrete Class III 54-Inch	LF	294.000	294.000
1320	608.0360	Storm Sewer Pipe Reinforced Concrete Class III 60-Inch	LF	437.000	437.000
1330	608.0396	Storm Sewer Pipe Reinforced Concrete Class III 96-Inch	LF	62.000	62.000
1340	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	67.000	67.000
1350	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	12.000	12.000
1360	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	266.000	266.000
1370	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	425.000	425.000
1380	608.0460	Storm Sewer Pipe Reinforced Concrete Class IV 60-Inch	LF	110.000	110.000
1390	610.0138	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 38x60-Inch	LF	203.000	203.000
1400	610.0148	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 48x76-Inch	LF	222.000	222.000
1410	610.0429	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	49.000	49.000
1420	611.0420	Reconstructing Manholes	EACH	4.000	4.000
1430	611.0530	Manhole Covers Type J	EACH	15.000	15.000
1440	611.0535	Manhole Covers Type J-Special	EACH	17.000	17.000
1450	611.0612	Inlet Covers Type C	EACH	3.000	3.000
1460	611.0624	Inlet Covers Type H	EACH	26.000	26.000
1470	611.0639	Inlet Covers Type H-S	EACH	12.000	12.000
1480	611.0642	Inlet Covers Type MS	EACH	14.000	14.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-75 QUANTITY
1490	611.0652	Inlet Covers Type T	EACH	4.000	4.000
1500	611.0654	Inlet Covers Type V	EACH	56.000	56.000
1510	611.2004	Manholes 4-FT Diameter	EACH	11.000	11.000
1520	611.2005	Manholes 5-FT Diameter	EACH	9.000	9.000
1530	611.2006	Manholes 6-FT Diameter	EACH	19.000	19.000
1540	611.2008	Manholes 8-FT Diameter	EACH	9.000	9.000
1550	611.3003	Inlets 3-FT Diameter	EACH	5.000	5.000
1560	611.3004	Inlets 4-FT Diameter	EACH	14.000	14.000
1570	611.3220	Inlets 2x2-FT	EACH	12.000	12.000
1580	611.3225	Inlets 2x2.5-FT	EACH	16.000	16.000
1590	611.3230	Inlets 2x3-FT	EACH	33.000	33.000
1600	611.3901	Inlets Median 1 Grate	EACH	3.000	3.000
1610	611.3902	Inlets Median 2 Grate	EACH	7.000	7.000
1620	611.8120.S	Cover Plates Temporary	EACH	13.000	13.000
1630	611.9800.S	Pipe Grates	EACH	7.000	7.000
1640	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	4,590.000	4,590.000
1650	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	8.000	8.000
1660	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
1670	614.0905	Crash Cushions Temporary	EACH	15.000	15.000
1680	614.2300	MGS Guardrail 3	LF	628.000	628.000
1690	614.2500	MGS Thrie Beam Transition	LF	117.000	117.000
1700	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
1710	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000
1720	616.0206	Fence Chain Link 6-FT	LF	3,778.000	3,778.000
1730	616.0700.S	Fence Safety	LF	4,000.000	4,000.000
1740	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1517-75-75	EACH	1.000	1.000
1750	619.1000	Mobilization	EACH	1.000	1.000
1760	620.0300	Concrete Median Sloped Nose **P**	SF	715.000	715.000
1770	624.0100	Water	MGAL	1,094.000	1,094.000
1780	625.0100	Topsoil	SY	56,689.000	56,689.000
1790	625.0500	Salvaged Topsoil	SY	129,258.000	129,258.000
1800	627.0200	Mulching	SY	120,996.000	120,996.000
1810	628.1104	Erosion Bales	EACH	506.000	506.000
1820	628.1504	Silt Fence	LF	10,405.000	10,405.000
1830	628.1520	Silt Fence Maintenance	LF	10,405.000	10,405.000
1840	628.1905	Mobilizations Erosion Control	EACH	14.000	14.000
1850	628.1910	Mobilizations Emergency Erosion Control	EACH	10.000	10.000
1860	628.2002	Erosion Mat Class I Type A	SY	57,943.000	57,943.000
1870	628.2004	Erosion Mat Class I Type B	SY	750.000	750.000
1880	628.2008	Erosion Mat Urban Class I Type B	SY	14,704.000	14,704.000
1890	628.2023	Erosion Mat Class II Type B	SY	4,250.000	4,250.000
1900	628.6510	Soil Stabilizer Type B	ACRE	4.000	4.000
1910	628.7005	Inlet Protection Type A	EACH	146.000	146.000
1920	628.7010	Inlet Protection Type B	EACH	81.000	81.000
1930	628.7015	Inlet Protection Type C	EACH	46.000	46.000
1940	628.7020	Inlet Protection Type D	EACH	11.000	11.000
1950	628.7504	Temporary Ditch Checks	LF	720.000	720.000
1960	628.7560	Tracking Pads	EACH	6.000	6.000
1970	628.7570	Rock Bags	EACH	44.000	44.000
1980	629.0210	Fertilizer Type B	CWT	90.000	90.000
1990	630.0120	Seeding Mixture No. 20	LB	3,446.000	3,446.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-75 QUANTITY
2000	630.0130	Seeding Mixture No. 30	LB	500.000	500.000
2010	630.0200	Seeding Temporary	LB	4,594.000	4,594.000
2020	631.1000	Sod Lawn	SY	27.000	27.000
2030	633.0100	Delineator Posts Steel	EACH	73.000	73.000
2040	633.0500	Delineator Reflectors	EACH	159.000	159.000
2050	633.1000	Delineator Brackets	EACH	86.000	86.000
2060	633.5200	Markers Culvert End	EACH	35.000	35.000
2070	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	11.000	11.000
2080	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	14.000	14.000
2090	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	26.000	26.000
2100	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	2.000	2.000
2110	636.0100	Sign Supports Concrete Masonry **P**	CY	26.000	26.000
2120	636.1000	Sign Supports Steel Reinforcement HS	LB	880.000	880.000
2130	636.1500	Sign Supports Steel Coated Reinforcement HS	LB	820.000	820.000
2140	637.1220	Signs Type I Reflective SH	SF	713.500	713.500
2150	637.2210	Signs Type II Reflective H	SF	483.560	483.560
2160	637.2215	Signs Type II Reflective H Folding	SF	10.000	10.000
2170	637.2230	Signs Type II Reflective F	SF	106.780	106.780
2180	638.2601	Removing Signs Type I	EACH	14.000	14.000
2190	638.2602	Removing Signs Type II	EACH	25.000	25.000
2200	638.3000	Removing Small Sign Supports	EACH	30.000	30.000
2210	641.6600	Sign Bridge (structure) 800. S-70-219	LS	1.000	1.000
2220	641.6600	Sign Bridge (structure) 801. S-70-255	LS	1.000	1.000
2230	641.8100	Overhead Sign Support (structure) 01. S-70-211	LS	1.000	1.000
2240	641.8100	Overhead Sign Support (structure) 02. S-70-212	LS	1.000	1.000
2250	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 1517-75-75	DAY	316.000	316.000
2260	643.0300	Traffic Control Drums	DAY	92,330.000	92,330.000
2270	643.0420	Traffic Control Barricades Type III	DAY	9,254.000	9,254.000
2280	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	21.000	21.000
2290	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	21.000	21.000
2300	643.0705	Traffic Control Warning Lights Type A	DAY	18,508.000	18,508.000
2310	643.0715	Traffic Control Warning Lights Type C	DAY	25,774.000	25,774.000
2320	643.0900	Traffic Control Signs	DAY	14,070.000	14,070.000
2330	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
2340	643.0920	Traffic Control Covering Signs Type II	EACH	5.000	5.000
2350	643.1000	Traffic Control Signs Fixed Message	SF	356.000	356.000
2360	643.1050	Traffic Control Signs PCMS	DAY	350.000	350.000
2370	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	1,000.000	1,000.000
2380	645.0120	Geotextile Fabric Type HR **P**	SY	5,955.000	5,955.000
2390	645.0130	Geotextile Fabric Type R **P**	SY	391.000	391.000
2400	646.0106	Pavement Marking Epoxy 4-Inch	LF	73,250.000	73,250.000
2410	646.0126	Pavement Marking Epoxy 8-Inch	LF	4,589.000	4,589.000
2420	646.0600	Removing Pavement Markings	LF	62,914.000	62,914.000
2430	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	371.000	371.000
2440	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF	1,643.000	1,643.000
2450	647.0110	Pavement Marking Railroad Crossings Epoxy	EACH	4.000	4.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-75 QUANTITY
2460	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	97.000	97.000
2470	649.0200	Temporary Pavement Marking Reflective Paint 4-Inch	LF	62,446.000	62,446.000
2480	649.0701	Temporary Pavement Marking 8-Inch	LF	3,064.000	3,064.000
2490	649.2100	Temporary Raised Pavement Markers	EACH	1,489.000	1,489.000
2500	652.0125	Conduit Rigid Metallic 2-Inch **P**	LF	274.000	274.000
2510	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch **P**	LF	12,547.000	12,547.000
2520	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch **P**	LF	2,576.000	2,576.000
2530	653.0140	Pull Boxes Steel 24x42-Inch	EACH	36.000	36.000
2540	653.0180	Pull Boxes Steel Communications (inch) 001. 24 X 36-Inch	EACH	22.000	22.000
2550	653.0220	Junction Boxes 18x6x6-Inch	EACH	5.000	5.000
2560	653.0222	Junction Boxes 18x12x6-Inch	EACH	3.000	3.000
2570	654.0105	Concrete Bases Type 5	EACH	18.000	18.000
2580	654.0107	Concrete Bases Type 7	EACH	22.000	22.000
2590	654.0110	Concrete Bases Type 10	EACH	1.000	1.000
2600	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
2610	655.0610	Electrical Wire Lighting 12 AWG **P**	LF	2,817.000	2,817.000
2620	655.0620	Electrical Wire Lighting 8 AWG **P**	LF	14,697.000	14,697.000
2630	655.0625	Electrical Wire Lighting 6 AWG **P**	LF	56,754.000	56,754.000
2640	656.0200	Electrical Service Meter Breaker Pedestal (location) 002. CB-100	LS	1.000	1.000
2650	657.0100	Pedestal Bases	EACH	1.000	1.000
2660	657.0210	Transformer Bases Breakaway 15-17 Inch Bolt Circle	EACH	27.000	27.000
2670	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	14.000	14.000
2680	657.0322	Poles Type 5-Aluminum	EACH	13.000	13.000
2690	657.0337	Poles Type 17-Aluminum	EACH	37.000	37.000
2700	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	1.000	1.000
2710	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	14.000	14.000
2720	657.0730	Luminaire Arms Truss Type 6-Inch Clamp 12-FT	EACH	46.000	46.000
2730	657.6005.S	Anchor Assemblies Light Poles on Structures	EACH	1.000	1.000
2740	659.0600	Underdeck Lighting (location) 001. B-70-420	LS	1.000	1.000
2750	659.0600	Underdeck Lighting (location) 002. B-70-421	LS	1.000	1.000
2760	659.0802	Plaques Sequence Identification	EACH	51.000	51.000
2770	659.1120	Luminaires Utility LED B	EACH	14.000	14.000
2780	659.1125	Luminaires Utility LED C	EACH	28.000	28.000
2790	659.1130	Luminaires Utility LED D	EACH	18.000	18.000
2800	659.1210	Luminaires Underdeck LED B	EACH	4.000	4.000
2810	662.2040.S	Ramp Closure Gates Solar 40-FT	EACH	1.000	1.000
2820	671.0112	Conduit HDPE 1-Duct 2-Inch	LF	515.000	515.000
2830	671.0132	Conduit HDPE 3-Duct 2-Inch	LF	1,995.000	1,995.000
2840	671.0142	Conduit HDPE 4-Duct 2-Inch	LF	1,025.000	1,025.000
2850	671.0222	Conduit HDPE Directional Bore 2-Duct 2-Inch	LF	552.000	552.000
2860	671.0232	Conduit HDPE Directional Bore 3-Duct 2-Inch	LF	163.000	163.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-75 QUANTITY
2870	671.0242	Conduit HDPE Directional Bore 4-Duct 2-Inch	LF	122.000	122.000
2880	672.0250	Base Camera Pole 50-FT	EACH	1.000	1.000
2890	673.0105	Communication Vault Type 1	EACH	10.000	10.000
2900	690.0150	Sawing Asphalt	LF	146.000	146.000
2910	690.0250	Sawing Concrete	LF	13,310.000	13,310.000
2920	715.0415	Incentive Strength Concrete Pavement	DOL	5,922.000	5,922.000
2930	715.0502	Incentive Strength Concrete Structures	DOL	30,756.000	30,756.000
2940	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
2950	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	5,760.000	5,760.000
2960	SPV.0035	Special 002. Roadway Embankment	CY	379,060.000	379,060.000
2970	SPV.0035	Special 003. Drainage Blanket	CY	72,277.000	72,277.000
2980	SPV.0035	Special 100. Pond Liner Clay	CY	27,815.000	27,815.000
2990	SPV.0035	Special 501. Planting Mix	CY	7,854.000	7,854.000
3000	SPV.0035	Special 700. Modified High Performance Concrete (HPC) Masonry Bridges **P**	CY	4,713.000	4,713.000
3010	SPV.0060	Special 004. Vibrating Wire Piezometer Instrumentation System, Delivered	EACH	10.000	10.000
3020	SPV.0060	Special 005. Settlement Gauges	EACH	13.000	13.000
3030	SPV.0060	Special 006. Pavement Marking Grooved Preformed Thermoplastic Arrows, Type 1	EACH	1.000	1.000
3040	SPV.0060	Special 007. Pavement Marking Grooved Preformed Thermoplastic Arrows, Type 2r	EACH	1.000	1.000
3050	SPV.0060	Special 008. Pavement Marking Grooved Preformed Thermoplastic Arrows, Type 2	EACH	2.000	2.000
3060	SPV.0060	Special 009. Pavement Marking Grooved Preformed Thermoplastic Arrows, Type 3	EACH	1.000	1.000
3070	SPV.0060	Special 011. Pavement Marking Grooved Preformed Thermoplastic Words	EACH	3.000	3.000
3080	SPV.0060	Special 028. CPM Baseline Schedule	EACH	1.000	1.000
3090	SPV.0060	Special 029. CPM Schedule Monthly Updates	EACH	14.000	14.000
3100	SPV.0060	Special 101. Pond Outlet Control Manhole	EACH	1.000	1.000
3110	SPV.0060	Special 102. Detention Pond Corrugated Metal Anti-Seep Collar	EACH	2.000	2.000
3120	SPV.0060	Special 104. Flared End Section With Trash Rack	EACH	1.000	1.000
3130	SPV.0060	Special 105. Manholes Special 10-Ft X 10-Ft	EACH	2.000	2.000
3140	SPV.0060	Special 106. Inlet Type Tee Special	EACH	1.000	1.000
3150	SPV.0060	Special 110. Storm Sewer Plug	EACH	13.000	13.000
3160	SPV.0060	Special 111. Apron Endwalls For Culvert Pipe Salvaged 96-Inch	EACH	1.000	1.000
3170	SPV.0060	Special 114. Manholes 12-FT Special	EACH	3.000	3.000
3180	SPV.0060	Special 200. Maintenance And Removal Of Crash Cushions Temp Left In Place By Others	EACH	2.000	2.000
3190	SPV.0060	Special 201. Maintain Traffic Control Signs Left In Place	EACH	14.000	14.000
3200	SPV.0060	Special 202. Maintain Traffic Control Drums Left In Place	EACH	148.000	148.000
3210	SPV.0060	Special 203. Maintain Traffic Control Barricades Left In Place	EACH	14.000	14.000
3220	SPV.0060	Special 204. Maintain Traffic Control Warning Lights Type A Left In Place	EACH	28.000	28.000

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DATE 15MAY15 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	1517-75-75 QUANTITY
3230	SPV.0060	Special 205. Maintain Traffic Control Warning Lights Type C Left In Place	EACH	296.000	296.000
3240	SPV.0060	Special 209. Traffic Control Close-Open Freeway Ramp	EACH	11.000	11.000
3250	SPV.0060	Special 210. Repositioning Traffic Control Devices for Mainline Closures	EACH	75.000	75.000
3260	SPV.0060	Special 212. Traffic Control Signs Left In Place	EACH	19.000	19.000
3270	SPV.0060	Special 213. Traffic Control Drums Left In Place	EACH	154.000	154.000
3280	SPV.0060	Special 214. Traffic Control Barricades Type III Left In Place	EACH	9.000	9.000
3290	SPV.0060	Special 215. Traffic Control Warning Lights Type A Left In Place	EACH	18.000	18.000
3300	SPV.0060	Special 216. Traffic Control Warning Lights Type C Left In Place	EACH	11.000	11.000
3310	SPV.0060	Special 217. Crash Cushions Temporary Left In Place	EACH	4.000	4.000
3320	SPV.0060	Special 351. Lighting Control Cabinet - Roundabout	EACH	1.000	1.000
3330	SPV.0060	Special 352. Lighting Control Cabinet - Freeway	EACH	1.000	1.000
3340	SPV.0060	Special 353. Concrete Bases Type 7 On Steep Slopes	EACH	5.000	5.000
3350	SPV.0060	Special 354. Concrete Bases Type 7 Median	EACH	9.000	9.000
3360	SPV.0060	Special 402. Tracer Test Station	EACH	2.000	2.000
3370	SPV.0060	Special 701. Anchor Assemblies Noise Barriers Structures	EACH	65.000	65.000
3380	SPV.0075	Special 150. Street Sweeping	HRS	100.000	100.000
3390	SPV.0075	Special 151. Mowing	HRS	60.000	60.000
3400	SPV.0085	Special 153. Pond Edge Seed	LB	170.000	170.000
3410	SPV.0090	Special 001. Removing Longitudinal Pavement Markings Water Blasting	LF	36,657.000	36,657.000
3420	SPV.0090	Special 012. Prefabricated Vertical Drains	LF	1,735,321.000	1,735,321.000
3430	SPV.0090	Special 013. Prebored Prefabricated Vertical Drains	LF	145,191.000	145,191.000
3440	SPV.0090	Special 014. Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R Full Depth **P**	LF	399.000	399.000
3450	SPV.0090	Special 015. Concrete Curb & Gutter 30-Inch Integral Type A **P**	LF	1,319.000	1,319.000
3460	SPV.0090	Special 016. Concrete Curb & Gutter 18-Inch Type A Reject Full Depth **P**	LF	317.000	317.000
3470	SPV.0090	Special 017. Pavement Marking Grooved Preformed Thermoplastic 8-Inch	LF	219.000	219.000
3480	SPV.0090	Special 018. Pavement Marking Grooved Preformed Thermoplastic Yield Line 18-In 2-Ft Line	LF	54.000	54.000
3490	SPV.0090	Special 107. Storm Sewer Pipe Reinforced Concrete Class IV 96-Inch	LF	176.000	176.000
3500	SPV.0090	Special 108. Smooth Steel Pipe 42-Inch Jacked	LF	86.000	86.000
3510	SPV.0090	Special 113. Storm Sewer Pipe Reinforced Horizontal Elliptical Class IV 38x60-IN	LF	365.000	365.000

DATE 15MAY15 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	1517-75-75 QUANTITY
3520	SPV.0090	Special 208. Maintain Concrete Barrier Temporary Precast Left In Place	LF	1,221.000	1,221.000
3530	SPV.0090	Special 211. Concrete Barrier Temporary Precast Anchoring	LF	1,745.000	1,745.000
3540	SPV.0090	Special 218. Concrete Barrier Temporary Precast Left In Place	LF	6,451.000	6,451.000
3550	SPV.0090	Special 400. Conduit HDPE 5-Duct 2-Inch	LF	415.000	415.000
3560	SPV.0090	Special 402. Conduit HDPE Directional Bore 5-Duct 2-Inch	LF	321.000	321.000
3570	SPV.0105	Special 020. Geotechnical Instrumentation	LS	1.000	1.000
3580	SPV.0105	Special 021. Survey Project 1517-75-75	LS	1.000	1.000
3590	SPV.0105	Special 022. Concrete Pavement Joint Layout	LS	1.000	1.000
3600	SPV.0105	Special 024. Removing Sign Structure Station 185eb+78	LS	1.000	1.000
3610	SPV.0105	Special 025. Removing Sign Structure Station 211eb+62	LS	1.000	1.000
3620	SPV.0105	Special 026. Removing Sign Structure Station 213eb+55	LS	1.000	1.000
3630	SPV.0105	Special 027. Removing Sign Structure Station 213wb+14	LS	1.000	1.000
3640	SPV.0105	Special 031. Removing Sign Structure Station 220WB+58	LS	1.000	1.000
3650	SPV.0120	Special 150. Water For Seeded Areas	MGAL	3,321.000	3,321.000
3660	SPV.0165	Special 250. Permanent Covering Type I Sign	SF	23.000	23.000
3670	SPV.0165	Special 850. Prestressed Precast Concrete Wall Panel **P**	SF	5,150.000	5,150.000
3680	SPV.0165	Special 851. Wall Wire Faced Mechanically Stabilized Earth Lrfd/Qmp **P**	SF	5,150.000	5,150.000
3690	SPV.0180	Special 001. Modified High Performance Concrete (HPC) Pavement 10-Inch	SY	18,650.000	18,650.000
3700	SPV.0180	Special 002. Modified High Performance Concrete (Hpc) Pavement 11-Inch	SY	44,752.000	44,752.000
3710	SPV.0180	Special 023. Colored Concrete 5-Inch	SY	2,803.000	2,803.000
3720	SPV.0195	Special 030. Cold Patch	TON	40.000	40.000

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CLEARING & GRUBBING

ROADWAY	STATION BEGIN		STATION END	OFFSET	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
STAGE 2A								
USH 10 WB/STH 441 SB	146ML+63	-	147ML+47	LT	2	--	2	--
	148ML+00	-	148ML+65	LT	1	--	1	--
	149ML+60	-	150ML+24	LT	2	--	2	--
	150ML+78	-	158ML+85	LT	9	--	9	--
	179ML+49	-	180ML+64	LT	2	--	2	--
	183ML+19	-	183ML+88	LT	1	--	1	--
	184ML+44	-	185ML+23	LT	2	--	2	--
	186ML+95	-	187ML+84	LT	2	--	2	--
	188ML+96	-	189ML+94	LT	2	--	2	--
USH 10 WB/STH 441 SB EXIT RAMP	102ERC+01	-	105ERC+75	RT	4	--	4	--
	106ERC+47	-	112ERC+46	RT	6	--	6	--
	112ERC+80	-	114ERC+71	RT	3	--	3	--
USH 10 WB/STH 441 SB ENTRANCE RAMP	116ERD+13	-	121ERD+99	RT	6	--	6	--
	120ERD+03	-	121ERD+79	LT	2	--	2	--
STAGE 2A SUBTOTAL					44	--	44	--
STAGE 3A								
USH 10 EB/STH 441 NB	159ML+95	-	163ML+33	RT	5	--	5	--
	179ML+51	-	184ML+91	RT	6	--	6	--
	187ML+09	-	187ML+48	RT	1	--	1	--
	189ML+49	-	191ML+51	RT	3	--	3	--
USH 10 EB/STH 441 NB EXIT RAMP	107ERA+90	-	--	103.2' LT	--	8	--	8
USH 10 EB/STH 441 NB ENTRANCE RAMP	102ERB+18	-	104ERB+78	LT	3	--	3	--
	111ERB+86	-	113ERB+56	RT	3	--	3	--
	117ERB+38	-	119ERB+27	RT	3	--	3	--
	120ERB+10	-	120ERB+44	RT	1	--	1	--
STAGE 3A SUBTOTAL					25	8	25	8
PROJECT 1517-75-76 TOTAL					69	8	69	8

REMOVING SMALL PIPE CULVERTS

ROADWAY	STATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
STAGE 2A				
USH 10 WB/STH 441 SB	175ML+00 - 175ML+53	RT/LT	1	211 LF REINFORCED CONCRETE CULVERT PIPE, 42"
USH 10 WB/STH 441 SB EXIT RAMP	106ERC+61 - 106ERC+70	RT/LT	1	133 LF REINFORCED CONCRETE CULVERT PIPE, 30"
STAGE 2A SUBTOTAL			2	
STAGE 3A				
USH 10 EB/STH 441 NB	164ML+78 - 164ML+87	RT	1	132 LF REINFORCED CONCRETE CULVERT PIPE, 18"
USH 10 EB/STH 441 NB ENTRANCE RAMP	104ERB+75 - 105ERB+26	RT/LT	1	74 LF REINFORCED CONCRETE CULVERT PIPE, 24"
	107ERB+25 - 108ERB+16	RT/LT	1	122 LF REINFORCED CONCRETE CULVERT PIPE, 30"
	117ERB+88 - 118ERB+08	RT/LT	1	67 LF REINFORCED CONCRETE CULVERT PIPE, 42"
STAGE 3A SUBTOTAL			4	
PROJECT 1517-75-75 TOTAL			6	

REMOVING PAVEMENT

ROADWAY	STATION	204.0100 REMOVING PAVEMENT SY	204.0105 REMOVING PAVEMENT BUTT JOINT SY
STAGE 2A			
EXISTING USH 10	170ML+04 - 194ML+81	6,071	-
EXISTING RAMP C	100ERC+00 - 119ERC+76	3,366	-
EXISTING RAMP D	114ERD+33 - 121ERD+88	1,420	-
USH 10 WB/STH 441 SB	149ML+97 - 158ML+09	1,190	-
	182WB+62 - 182WB+86	-	47
	217WB+42 - 217WB+67	-	59
	221WB+16 - 221WB+41	-	66
STAGE 2A SUBTOTAL		12,047	172
STAGE 2B			
EXISTING USH 10	145ML+51 - 148ML+53	315	-
STAGE 2B SUBTOTAL		315	-
STAGE 3A			
EXISTING USH 10 EB	145ML+57 - 148ML+72	780	-
	149ML+97 - 158ML+10	2,283	-
	159ML+74 - 196ML+62	11,000	-
EXISTING USH 10 WB	147ML+03 - 148ML+72	267	-
	149ML+98 - 158ML+13	2,778	-
	159ML+82 - 170ML+76	3,149	-
EXISTING RAMP A	100ERA+00 - 110ERA+87	2,768	-
EXISTING RAMP B	100ERB+00 - 105ERB+45	912	-
	105ERB+51 - 120ERB+48	2,490	-
EXISTING RAMP C	123ERC+49 - 128ERC+30	1,238	-
EXISTING RAMP D	105ERD+84 - 110ERD+71	1,259	-
	125ERD+77 - 131ERD+26	865	-
STAGE 3A SUBTOTAL		29,789	-
STAGE 3B			
EXISTING USH 10 EB	183ML+60 - 196ML+62	2,638	-
EXISTING USH 10 WB	181ML+52 - 194ML+81	2,857	-
STAGE 3B SUBTOTAL		5,495	-
PROJECT 1517-75-75 TOTAL		47,646	172

REMOVING CURB & GUTTER

ROADWAY	STATION	OFFSET	204.0150 REMOVING CURB & GUTTER LF
STAGE 2A			
USH 10 WB/STH 441 SB	179ML+24 - 186ML+59	LT	735
STAGE 2A SUBTOTAL			735
STAGE 3A			
USH 10 EB/STH 441 NB	183ML+84 - 185ML+09	RT	125
STAGE 3A SUBTOTAL			125
PROJECT 1517-75-75 TOTAL			860

REMOVING CONCRETE BARRIER

ROADWAY	STATION	OFFSET	204.0157 REMOVING CONCRETE BARRIER LF
STAGE 2A			
USH 10 WB/STH 441 SB	149ML+97 - 158ML+09	LT	812
	155ML+48 - 158ML+09	RT	261
	186ML+60 - 189ML+02	LT	242
STAGE 2A SUBTOTAL			1,315
STAGE 2B			
USH 10 WB/STH 441 SB	145ML+48 - 148ML+46	LT	298
STAGE 2B SUBTOTAL			298
STAGE 3A			
USH 10 EB/STH 441 NB	144ML+46 - 148ML+72	RT	426
	159ML+78 - 164ML+37	LT	464
	159ML+89 - 164ML+38	RT/LT	447
	185ML+10 - 187ML+34	RT	224
STAGE 3A SUBTOTAL			1,561
PROJECT 1517-75-75 TOTAL			3,174

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REMOVING GUARDRAIL

ROADWAY	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
STAGE 2A			
USH 10 EB/STH 441 NB	177ML+91 - 178ML+11	RT/LT	50
	178ML+26 - 178ML+48	RT/LT	53
STAGE 2A SUBTOTAL			103
STAGE 3A			
USH 10 EB/STH 441 NB	149ML+97 - 152ML+79	RT	295
	156ML+66 - 157ML+96	RT	135
	184ML+14 - 185ML+10	RT	96
USH 10 WB/STH 441 SB	150ML+10 - 158ML+00	LT	762
	160ML+03 - 161ML+07	LT	98
USH 10 EB/STH 441 NB EXIT RAMP	102ERA+35 - 108ERA+17	RT	590
USH 10 WB/STH 441 SB ENTRANCE RAMP	108ERD+73 - 110ERD+65	LT	392
STAGE 3A SUBTOTAL			2,368
STAGE 3B			
USH 10 EB/STH 441 NB	185ML+91 - 188ML+09	RT/LT	448
STAGE 3B SUBTOTAL			448
PROJECT 1517-75-75 TOTAL			2,919

REMOVING FENCE

ROADWAY	STATION	OFFSET	204.0170 REMOVING FENCE LF
STAGE 2A			
USH 10 WB/STH 441 SB	147ML+57 - 148ML+69	LT	111
	149ML+71 - 150ML+11	LT	40
USH 10 WB/STH 441 SB EXIT RAMP	118ERC+79 - 119ERC+89	LT	141
	109ERC+22 - 115ERC+09	RT	676
STAGE 2A SUBTOTAL			968
STAGE 3A			
USH 10 EB/STH 441 NB	149ML+70 - 149ML+97	RT	82
	175ML+02 - 185ML+33	RT	1,013
	188ML+37 - 189ML+66	RT	128
	194ML+76 - 196ML+00	RT	132
USH 10 EB/STH 441 NB ENTRANCE RAMP	112ERB+41 - 113ERB+42	RT	94
STAGE 3A SUBTOTAL			1,449
PROJECT 1517-75-75 TOTAL			2,417

REMOVING DELINEATORS AND MARKERS

ROADWAY	STATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH
STAGE 1A		
USH 10 EB/STH 441 NB	161ML+67 - 169ML+55	4
STAGE 1A SUBTOTAL		4
STAGE 1B		
USH 10 EB/STH 441 NB	171ML+16 - 179ML+55	2
STAGE 1B SUBTOTAL		2
STAGE 2A		
USH 10 WB/STH 441 SB	187ML+86 - 170ML+02	7
USH 10 WB/STH 441 SB OFF RAMP	103ERC+25 - 120ERC+23	8
USH 10 WB/STH 441 SB ENTRANCE RAMP	114ERD+05 - 124ERD+24	12
STAGE 2A SUBTOTAL		27
STAGE 2B		
USH 10 WB/STH 441 SB	148ML+73 - 144ML+46	3
STAGE 2B SUBTOTAL		3
STAGE 3A		
USH 10 EB/STH 441 NB	144ML+52 - 186ML+39	9
USH 10 WB/STH 441 SB	144ML+47 - 168ML+05	7
USH 10 EB/STH 441 NB OFF RAMP	105ERA+09 - 113ERA+03	4
USH 10 EB/STH 441 NB ENTRANCE RAMP	100ERB+00 - 112ERB+66	17
USH 10 WB/STH 441 SB OFF RAMP	123ERC+75 - 127ERC+63	5
USH 10 WB/STH 441 SB ENTRANCE RAMP	103ERD+97 - 125ERD+51	9
STAGE 3A SUBTOTAL		51
PROJECT 1517-75-75 TOTAL		87

REMOVING SURFACE DRAINS

ROADWAY	STATION	OFFSET	204.0190 REMOVING SURFACE DRAINS EACH
STAGE 2A			
USH 10 WB/STH 441 SB ENTRANCE RAMP	117ERD+12	19.5' RT	1
STAGE 2A SUBTOTAL			1
STAGE 3A			
USH 10 EB/STH 441 NB	164ML+60	6.5' RT	1
STAGE 3A SUBTOTAL			1
PROJECT 1517-75-75 TOTAL			2

REMOVING DRAINAGE ITEMS

ROADWAY	STATION	OFFSET	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
STAGE 1A				
USH 10 EB/STH 441 NB	169ML+12	71.4' RT	--	1
STAGE 1A SUBTOTAL			--	1
STAGE 2A				
USH 10 WB/STH 441 SB	147ML+36	36.1' LT	--	1
	172ML+74	11.4' LT	--	1
	177ML+82	1.7' LT	--	1
	182ML+78	76.7' LT	--	1
	182ML+78	96.4' LT	--	1
	184ML+81	92.0' LT	--	1
	185ML+78	89.9' LT	1	--
	185ML+92	82.7' LT	1	--
	185ML+96	136.1' LT	--	1
	187ML+10	88.5' LT	1	--
	187ML+24	81.2' LT	1	--
	188ML+81	91.0' LT	1	--
	188ML+94	83.8' LT	1	--
	188ML+95	69.5' LT	--	1
	189ML+43	133.1' LT	--	1
USH 10 WB/STH 441 SB EXIT RAMP	101ERC+19	47.9' RT	1	--
USH 10 WB/STH 441 SB ENTRANCE RAMP	118ERD+97	15.9' RT	--	1
	121ERD+46	16.0' RT	--	1
STAGE 2A SUBTOTAL			7	11
STAGE 3A				
USH 10 EB/STH 441 NB	147ML+36	32.2' RT	--	1
	149ML+10	112.1' RT	1	--
	150ML+09	86.4' LT	1	--
	150ML+12	50.1' RT	--	1
	150ML+18	38.8' LT	--	1
	151ML+34	121.0' RT	1	--
	151ML+69	60.8' LT	--	1
	153ML+37	54.0' LT	1	--
	153ML+39	3.3' RT	--	1
	153ML+49	3.0' RT	--	1
	157ML+98	54.9' LT	--	1
	158ML+06	4.8' RT	--	1
	163ML+32	5.2' RT	--	1
	184ML+81	71.9' RT	--	1
	185ML+03	71.9' RT	--	1
	188ML+97	0.4' LT	--	1
USH 10 WB/STH 441 SB EXIT RAMP	125ERC+67	3.0' LT	--	1
STAGE 3A SUBTOTAL			4	13

REMOVING DRAINAGE ITEMS (CONTINUED)

ROADWAY	STATION	OFFSET	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
STAGE 3B				
USH 10 EB/STH 441 NB	184ML+81	1.0' LT	--	1
	188ML+95	69.5' LT	--	1
	188ML+97	0.4' LT	--	1
	195ML+79	0.6' RT	--	1
STAGE 3B SUBTOTAL			--	4
PROJECT 1517-75-75 TOTAL			11	29

REMOVING STORM SEWER

ROADWAY	STATION	OFFSET	204.0245.01 REMOVING STORM SEWER 6-INCH - 18-INCH LF	204.0245.02 REMOVING STORM SEWER 21-INCH - 30-INCH LF	204.0245.03 REMOVING STORM SEWER 36-INCH - 60-INCH LF	204.0245.04 REMOVING STORM SEWER 66-INCH - 96-INCH LF
STAGE 1A						
USH 10 EB/STH 441 NB ENTRANCE RAMP	111ERB+68 - 111ERB+69	RT/LT	69	--	--	--
STAGE 1A SUBTOTAL			69	--	--	--
STAGE 2A						
USH 10 WB/STH 441 SB	147ML+36 - 147ML+36	LT	66	--	--	--
	172ML+74 - 173ML+04	LT	124	--	--	--
	177ML+82 - 178ML+27	LT	114	--	--	--
	178ML+27 - 182ML+78	LT	--	--	451	--
	182ML+78 - 182ML+78	LT	20	--	--	--
	182ML+78 - 184ML+81	LT	--	--	65	--
	184ML+81 - 184ML+81	LT	--	8	--	--
	184ML+81 - 185ML+78	LT	--	--	97	--
	185ML+78 - 185ML+92	LT	--	15	--	--
	185ML+78 - 185ML+96	LT	50	--	--	--
	185ML+78 - 187ML+10	LT	--	--	132	--
	185ML+92 - 187ML+24	LT	--	132	--	--
	187ML+10 - 187ML+91	LT	--	--	99	--
	187ML+10 - 188ML+81	LT	--	--	171	--
	187ML+24 - 188ML+94	LT	--	171	--	--
	188ML+81 - 189ML+43	LT	75	--	--	--
	188ML+81 - 189ML+44	LT	--	--	63	--
	188ML+94 - 188ML+95	LT	--	14	--	--
	188ML+95 - 188ML+96	LT	--	26	--	--
USH 10 WB/STH 441 SB EXIT RAMP	101ERC+19 - 103ERC+56	LT	--	--	239	--
	102ERC+97 - 104ERC+43	RT/LT	--	--	--	57
USH 10 WB/STH 441 SB ENTRANCE RAMP	118ERD+97 - 118ERD+97	RT	29	--	--	--
	121ERD+46 - 121ERD+46	RT	48	--	--	--
STAGE 2A SUBTOTAL			525	366	1,317	57

REMOVING STORM SEWER (CONTINUED)

ROADWAY	STATION	OFFSET	204.0245.01 REMOVING STORM SEWER 6-INCH - 18-INCH LF	204.0245.02 REMOVING STORM SEWER 21-INCH - 30-INCH LF	204.0245.03 REMOVING STORM SEWER 36-INCH - 60-INCH LF	204.0245.04 REMOVING STORM SEWER 66-INCH - 96-INCH LF
STAGE 3A						
USH 10 EB/STH 441 NB	149ML+10 - 151ML+34	RT	--	225	--	--
	149ML+63 - 150ML+09	LT	47	--	--	--
	150ML+09 - 150ML+18	LT	47	--	--	--
	150ML+09 - 151ML+69	LT	160	--	--	--
	150ML+11 - 150ML+13	RT	59	--	--	--
	151ML+34 - 152ML+57	RT	--	148	--	--
	151ML+69 - 153ML+34	LT	156	--	--	--
	153ML+37 - 153ML+39	LT	56	--	--	--
	153ML+39 - 153ML+48	RT	8	--	--	--
	157ML+98 - 158ML+06	LT	60	--	--	--
	163ML+25 - 163ML+32	RT	143	--	--	--
	183ML+85 - 184ML+79	RT	--	95	--	--
	184ML+81 - 184ML+81	RT	--	29	--	--
	184ML+83 - 185ML+03	RT	22	--	--	--
	185ML+05 - 186ML+94	RT	189	--	--	--
	188ML+96 - 188ML+97	RT	--	91	--	--
USH 10 WB/STH 441 SB ENTRANCE RAMP	108ERD+38 - 108ERD+62	RT/LT	--	104	--	--
STAGE 3A SUBTOTAL			946	692	--	--
STAGE 3B						
USH 10 EB/STH 441 NB	184ML+81 - 184ML+81	RT	--	40	--	--
	188ML+96 - 188ML+97	RT	--	91	--	--
USH 10 WB/STH 441 SB	184ML+81 - 184ML+81	LT	--	40	--	--
	188ML+95 - 188ML+97	LT	--	69	--	--
	195ML+80 - 195ML+80	LT	93	--	--	--
STAGE 3B SUBTOTAL			93	240	--	--
PROJECT 1517-75-75 TOTAL			1,633	1,298	1,317	57

BACKFILL GRANULAR

ROADWAY	STATION	OFFSET	209.0100 BACKFILL GRANULAR CY	COMMENTS
STAGE 2A				
USH 10 WB/STH 441 SB	213WB+50 - 220WB+00	LT	115	ROADSIDE RETAINING BARRIER
USH 10 WB/STH 441 SB TEMPORARY CONNECTION	22WBT+32 - 24WBT+00	LT	83	ROADSIDE RETAINING BARRIER
RACINE ROAD NE RAMP	203RNE+00 - 203RNE+07	RT/LT	12	30" CULVERT PIPE
RACINE ROAD NW RAMP	195RNW+38 - 195RNW+84	RT/LT	10	30" CULVERT PIPE
STAGE 2 SUBTOTAL			220	
STAGE 3A				
USH 10 EB/STH 441 NB	217EB+25 - 218EB+50	RT	18	ROADSIDE RETAINING BARRIER
	220EB+10 - 221EB+50	RT	61	ROADSIDE RETAINING BARRIER
RACINE ROAD SW RAMP	195RSW+31 - 195RSW+19	RT/LT	5	18" CULVERT PIPE
STAGE 3 SUBTOTAL			85	
PROJECT 1517-75-75 TOTAL			305	

REMOVING SAND BARRELS

ROADWAY	204.9105.S REMOVING SAND BARRELS LS
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

NOTES:

REMOVING 98 TOTAL SAND BARRELS AT 3 LOCATIONS

REMOVING NOISE BARRIER

ROADWAY	STATION	OFFSET	204.9090.S.01 REMOVING NOISE BARRIER LF
STAGE 2A			
USH 10 WB/STH 441 SB	144ML+60 - 148ML+67	LT	409
	179ML+38 - 182ML+26	LT	619
	186ML+81-187ML+86	LT	105
	188ML+71 - 191ML+75	LT	314
STAGE 2A SUBTOTAL			1,447
STAGE 3A			
USH 10 EB/STH 441 NB	144ML+61 - 148ML+66	RT	409
STAGE 3A SUBTOTAL			409
PROJECT 1517-75-75 TOTAL			1,856

FINISHING ROADWAY (PROJECT 1517-75-75)

ROADWAY	213.0100 FINISHING ROADWAY 1517-75-75 EACH
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

Category	Division	From/To Station	Location	Excavation Common (CY) (1) 205.0100		Structure Excavation (CY) (6)	Fill (CY)	Roadway Embankment (CY) (4) SPV.0035.002	Mass Ordinate +/- (5)	Comment:
				Cut (CY) (2)	EBS (CY) (3)					
1000	1A	3TWA+85 - 15TWA+12	TWA	1,819	0	0	15	15	1,804	
	Project 1517-75-75 - Division 1A Subtotal			1,819	0	0	15	15	1,804	
	Project 1517-75-75 - Division 1A Total			1,819		0		15		
1000	1B	16TWB+50 - 21TWB+50	TWB	596	0	0	28	28	568	
		170TWC+24 - 179TWC+15	TWC	3,753	0	0	62	62	3,691	
		28TWB+50 - 55TWB+47	TWD	3,620	0	0	272	272	3,347	
	Project 1517-75-75 - Division 1B Subtotal			7,968	0	0	361	361	7,607	
	Project 1517-75-75 - Division 1B Total			7,968		0		361		
1000	2A	181WB+06 - 184WB+40	WB_a	530	0	1,128	4,010	4,010	-3,480	
		185WB+66 - 195WB+46	WB_b	40	0	0	28,987	28,987	-28,947	
		196WB+97 - 222WB+32	WB_c	11,764	0	0	34,640	34,640	-22,876	
		22WBT+32 - 27WBT+53	WBT	3,342	0	0	149	149	3,194	
		198RNE+74 - 212RNE+33	RNE	12,091	0	0	19,895	19,895	-7,804	
		186RNW+20 - 196RNW+68	RNW	5,088	0	0	28,783	28,783	-23,695	
		250CNB+50 - 253CNB+08	CNB	1,924	0	0	3,125	3,125	-1,200	
		250CSB+50 - 253CSB+16	CSB	1,852	0	0	3,346	3,346	-1,494	
		10RRN+00 - 14RRN+11	RRN	1,881	0	0	8,714	8,714	-6,833	
		208NWE+98 - 220NWE+56	NWE	1,098	0	0	0	0	1,098	
			POND 3	140,293	0	0	2,829	2,829	137,464	
			RNE GRADING	3,431	0	0	1,767	1,767	1,664	
	Project 1517-75-75 - Division 2A Subtotal			183,335	0	1,128	136,245	136,245	47,089	
	Project 1517-75-75 - Division 2A Total			183,335		1,128		136,245		
1000	2C	103TWE+07 - 105TWE+31	TWE	272	0	0	0	0	272	
		7TWH+13 - 24TWH+23	TWH	2,347	0	0	54	54	2,293	
	Project 1517-75-75 - Division 2C Subtotal			2,619	0	0	54	54	2,565	
	Project 1517-75-75 - Division 2C Total			2,619		0		54		

Category	Division	From/To Station	Location	Excavation Common (CY) (1) 205.0100		Structure Excavation (CY) (6)	Fill (CY)	Roadway Embankment (CY) (4) SPV.0035.002	Mass Ordinate +/- (5)	Comment:
				Cut (CY) (2)	EBS (CY) (3)					
1000	3A	180EB+92 - 184EB+25	EB_a	122	0	0	18,738	18,738	-18,616	
		185EB+58 - 195EB+84	EB_b	4,400	0	0	30,642	30,642	-26,242	
		197EB+23 - 223EB+00	EB_c	14,384	0	0	35,509	35,509	-21,126	
		23EBT+00 - 31EBT+00	EBT	2,536	0	0	837	837	1,699	
		193RSE+84 - 212RSE+78	RSE	35,458	0	0	8,608	8,608	26,850	
		185RSW+92 - 197RSW+77	RSW	23,501	0	0	25,983	25,983	-2,482	
		16RSWC+81 - 18RSWC+63	RSWC	875	0	0	216	216	659	
		243CNB+93 - 250CNB+50	CNB	17,620	0	0	683	683	16,937	
		243CSB+83 - 250CSB+50	CSB	12,846	0	0	1,404	1,404	11,442	
		0RRB+03 - 0RRB+44	RRB	1	0	0	27	27	-27	
		124FEN+94 - 131FEN+77	FEN	368	0	0	6,450	6,450	-6,082	
		243EB+50 - 256EB+00	MEF	28,380	0	0	112,359	112,359	-83,978	
			POND 2	105,611	0	0	327	327	105,284	
			RSE GRADING	5,252	0	0	360	360	4,892	
			RSW GRADING	9,582	0	0	11	11	9,572	
	Project 1517-75-75 - Division 3A Subtotal			260,936	0	0	242,155	242,155	18,781	
	Project 1517-75-75 - Division 3A Total			260,936		0		242,155		
1000	3B	23EBT+00 - 31EBT+00	EBT	1,270	0	0	81	81	1,188	
		22WBT+32 - 27WBT+53	WBT	992	0	0	79	79	913	
		211EB+50 - 223EB+00	TES	2,234	0	0	6	6	2,228	
		210WB+50 - 222WB+32	TWS	2,702	0	0	63	63	2,639	
	Project 1517-75-75 - Division 3B Subtotal			7,198	0	0	230	230	6,968	
	Project 1517-75-75 - Division 3B Total			7,198		0		230		
	Project 1517-75-75 Totals			**463,875**		**1,128**		**379,060**		

1) Excavation Common = Cut + EBS Excavation. Item number 205.0100.

2) Cut volume includes concrete and asphaltic surface material.

3) EBS Excavation to be backfilled with roadway embankment unless otherwise noted in plans.

4) Roadway Embankment = (Fill + EBS Excavation)

5) The Mass Ordinate is calculated by division. A positive quantity indicates an excess of material within the Division and a negative quantity indicates a shortage of material within the Division. Structure Excavation is not included in this calculation. Mass Ordinate = Cut - Fill. 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. All EBS material is assumed to be wasted offsite.

6) Structure Excavation limits for Retaining Wall construction are shown in the cross sections and are assumed to be 70% of the retaining wall height. This is for informational purposes only, and will vary depending on shop drawing design.

BASE AGGREGATE ITEMS

ROADWAY	STATION FROM		STATION TO	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON
STAGE 1A						
TWA	3TWA+85	-	22TWA+37	--	1,999	2,066
STAGE 1A TOTAL				--	1,999	2,066
STAGE 1B						
TWB	15TWB+53.05	-	21TWB+87.67	--	1,051	1,072
	28TWB+50.00	-	55TWB+47.00	--	4,832	4,567
TWC	170TWC+24	-	179TWC+15	--	1,707	1,660
STAGE 1B TOTAL				--	7,590	7,299
STAGE 2						
USH 10 WB/STH 441 SB	181WB+05.06	-	184WB+18.62	--	173	409
	182WB+62.09	-	182WB+85.65	--	8	--
	185WB+85.50	-	195WB+29.42	418	3,170	6,603
	197WB+15.54	-	222WB+31.50	674	6,591	14,236
	217WB+42.06	-	217WB+66.56	--	16	--
	221WB+15.99	-	221WB+40.70	--	15	--
RACINE RD NW RAMP	186RNW+07.85	-	196RNW+68.29	210	2,263	4,925
RACINE RD NE RAMP	198RNE+74.20	-	212RNE+33.28	389	2,727	5,723
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	10RRN+00.00	-	14RRN+11.55	--	941	2,051
RACINE ROAD RAMP CONNECTOR SB	250CSB+49.19	-	253CSB+29.08	--	481	777
RACINE ROAD RAMP CONNECTOR NB	250CNB+56.61	-	253CNB+17.23	--	549	867
USH 10 WB/STH 441 SB INTERIM TIEBACK NORTH END	22WBT+31.60	-	198ML+67.80	49	1,870	1,764
TWE	100TWE+00.00	-	105TWE+30.80	--	584	568
TWG	0TWG+03.50	-	3TWG+06.20	--	1,016	1,219
TWH	7TWH+11.98	-	24TWH+23.01	--	3,398	3,432
STAGE 2 TOTAL				1,740	23,802	42,574
STAGE 3A						
USH 10 EB/STH 441 NB	181EB+11.70	-	184EB+05.82	--	1,055	2,318
	185EB+97.51	-	195EB+47.63	344	3,724	7,699
	197EB+60.58	-	223EB+00.00	373	7,255	15,487
USH 10 WB/STH 441 SB	197WB+15.54	-	214WB+25.01	--	487	644
RACINE RD SE RAMP	193RSE+84.31	-	212RSE+77.98	910	3,232	6,959
RACINE RD SW RAMP	185RSW+80.19	-	197RSW+77.15	317	3,384	6,611
RACINE RD SW BYPASS	16RSWC+80.94	-	23RSWC+85.61	--	226	405
RACINE ROAD RAMP CONNECTOR SB	238CSB+78.61	-	250CSB+49.19	--	1,041	1,738
RACINE ROAD RAMP CONNECTOR NB	238CNB+40.59	-	250CNB+56.61	--	1,334	2,406
USH 10 EB/STH 441 NB INTERIM TIEBACK NORTH END	23EBT+00.00	-	30EBT+07.22	59	1,943	2,830
STAGE 3A TOTAL				2,003	23,681	47,097
STAGE 3B						
USH 10 EB/STH 441 NB	216EB+35.00	-	223EB+00.00	--	1,549	1,336
USH 10 WB/STH 441 SB	214WB+25.00	-	222WB+31.65	--	1,182	1,942
USH 10 EB/STH 441 NB INTERIM TIEBACK NORTH END	23EBT+00.00	-	30EBT+07.22	156	1,603	1,730
USH 10 WB/STH 441 SB INTERIM TIEBACK NORTH END	22WBT+31.60	-	27WBT+52.55	104	1,076	1,220
STAGE 3B TOTAL				260	5,410	6,228
UNDISTRIBUTED				400	6,048	5,160
PROJECT 1517-75-76 TOTAL				4,403	68,530	110,424

CONCRETE ITEMS

ROADWAY	STATION			OFFSET	320.0105 CONCRETE BASE 4-INCH SY	320.0155 CONCRETE BASE 9-INCH SY	405.0100 COLORING CONCRETE RED CY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.0512 CONCRETE ROUNDABOUT TRUCK APRON 12-INCH SY	604.0500 SLOPE PAVING CRUSHED AGGREGATE SY	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	SPV.0180.023 COLORED CONCRETE 5-INCH SY	SPV.0180.028 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH SY	SPV.0180.029 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH SY
STAGE 2A														
USH 10 WB/STH 441 SB	181WB+05	-	183WB+79	LT	--	--	--	--	--	--	--	--	--	581
	183WB+79	-	184WB+19	LT	--	--	--	80	--	--	--	--	--	--
	185WB+86	-	186WB+42	RT/LT	--	--	--	396	--	--	--	--	--	--
	185WB+86	-	195WB+07	RT	1,096	--	--	--	--	--	--	--	--	--
	186WB+42	-	186WB+95	LT	--	129	--	--	--	--	--	--	--	--
	186WB+42	-	194WB+91	RT/LT	--	--	--	--	--	--	--	--	--	5,050
	186WB+98	-	--	LT	--	--	--	--	--	--	68	--	--	--
	194WB+91	-	195WB+29	RT/LT	--	--	--	181	--	--	--	--	--	--
	197WB+16	-	197WB+61	RT/LT	--	--	--	216	--	--	--	--	--	--
	197WB+61	-	222WB+32	RT/LT	--	--	--	--	--	--	--	--	--	12,908
	220WB+00	-	221WB+60	LT	--	--	--	--	--	437	--	--	--	--
RACINE ROAD NE RAMP	198RNE+74	-	210RNE+50	LT	--	--	--	--	--	--	--	--	3,081	--
	210RNE+50	-	212RNE+33	LT	--	--	--	--	--	--	--	--	--	506
RACINE ROAD NW RAMP	186RNW+37	-	187RNW+25	RT/LT	--	--	--	--	--	--	--	--	--	277
	187RNW+25	-	196RNW+68	RT/LT	--	--	--	--	--	--	--	--	3,403	--
RACINE ROAD CONNECTOR NB	250CNB+50	-	253CNB+10	LT	--	--	--	--	--	--	--	470	--	--
	250CNB+57	-	253CNB+17	RT	--	--	--	--	--	--	--	--	695	--
	250CNB+69	-	251CNB+52	RT	--	--	--	--	--	--	--	332	--	--
	253CNB+10	-	--	LT	--	--	--	--	--	--	20	--	--	--
RACINE ROAD CONNECTOR SB	250CSB+40	-	251CSB+25	LT	--	--	--	--	--	--	--	339	--	--
	250CSB+42	-	253CSB+29	LT	--	--	--	--	--	--	--	--	538	--
	253CSB+19	-	--	RT	--	--	--	--	--	--	38	--	--	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	10RRN+00	-	14RRN+12	RT	--	--	--	--	--	--	--	--	1,607	--
	10RRN+00	-	14RRN+12	LT	--	--	146	--	438	--	--	--	--	--
STAGE 2A SUBTOTAL					1,096	129	146	873	438	437	126	1,141	9,324	19,322
STAGE 3A														
USH 10 EB/STH 441 NB	181EB+12	-	181EB+28	RT/LT	--	--	--	133	--	--	--	--	--	--
	181EB+28	-	183EB+70	RT/LT	--	--	--	--	--	--	--	--	--	2,226
	183EB+70	-	184EB+06	RT/LT	--	--	--	243	--	--	--	--	--	--
	185EB+75	-	186EB+26	RT/LT	--	--	--	387	--	--	--	--	--	--
	186EB+10	-	195EB+64	LT	987	--	--	--	--	--	--	--	--	--
	186EB+26	-	195EB+18	RT/LT	--	--	--	--	--	--	--	--	--	6,772
	187EB+30	-	--	RT	--	--	--	--	--	--	77	--	--	--
	195EB+18	-	195EB+64	RT/LT	--	--	--	263	--	--	--	--	--	--
	197EB+42	-	197EB+98	RT/LT	--	--	--	308	--	--	--	--	--	--
	197EB+86	-	211EB+22	LT	516	--	--	--	--	--	--	--	--	297
	197EB+98	-	223EB+00	RT/LT	--	--	--	--	--	--	--	--	--	14,111
	206EB+90	-	--	RT	--	--	--	--	--	--	70	--	--	--
	206EB+93	-	212EB+78	RT	--	838	--	--	--	--	--	--	--	--
	218EB+75	-	220EB+00	RT	--	--	--	--	--	261	--	--	--	--

CONCRETE ITEMS (CONTINUED)

ROADWAY	STATION		OFFSET	320.0105 CONCRETE BASE 4-INCH SY	320.0155 CONCRETE BASE 9-INCH SY	405.0100 COLORING CONCRETE RED CY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.0512 CONCRETE ROUNDABOUT TRUCK APRON 12-INCH SY	604.0500 SLOPE PAVING CRUSHED AGGREGATE SY	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	SPV.0180.023 COLORED CONCRETE 5-INCH SY	SPV.0180.028 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 10-INCH SY	SPV.0180.029 MODIFIED HIGH PERFORMANCE CONCRETE (HPC) PAVEMENT 11-INCH SY
RACINE ROAD SE RAMP	193RSE+84	206RSE+75	RT/LT	--	--	--	--	--	--	--	--	2,194	--
	194RSE+35	--	LT	--	--	--	--	--	--	84	--	--	--
	206RSE+75	212RSE+78	RT	--	--	--	--	--	--	--	--	--	1,535
RACINE ROAD SW RAMP	186RSW+30	187RSW+50	RT/LT	--	--	--	--	--	--	--	--	--	489
	187RSW+50	197RSW+77	RT/LT	--	--	--	--	--	--	--	--	3,962	--
	196RSW+91	--	RT	--	--	--	--	--	--	127	--	--	--
	197RSW+10	--	LT	--	--	--	--	--	--	45	--	--	--
RACINE ROAD CONNECTOR NB	244CNB+53	250CNB+68	RT	--	--	--	--	--	--	--	--	1,750	--
	249CNB+75	250CNB+69	RT	--	--	--	--	--	--	--	374	--	--
RACINE ROAD CONNECTOR SB	244CSB+02	--	LT	--	--	--	--	--	--	45	--	--	--
	244CSB+03	--	RT	--	--	--	--	--	--	48	--	--	--
	244CSB+23	--	RT	--	--	--	--	--	--	48	--	--	--
	244CSB+24	--	LT	--	--	--	--	--	--	45	--	--	--
	244CSB+43	250CSB+49	LT	--	--	--	--	--	--	--	--	1,191	--
	244CSB+25	250CSB+55	RT	--	--	--	--	--	--	--	761	--	--
	249CSB+48	250CSB+40	LT	--	--	--	--	--	--	--	368	--	--
RACINE ROAD SW RAMP BYPASS	16RSWC+81	18RSWC+03	RT	--	--	--	--	--	--	--	--	229	--
	16RSWC+89	18RSWC+21	LT	--	--	--	--	--	--	--	158	--	--
STAGE 3A SUBTOTAL				1,503	838	--	1,334	--	261	589	1,662	9,326	25,430
PROJECT 1517-75-75 TOTAL				2,599	967	146	2,207	438	698	715	2,803	18,650	44,752

CONCRETE SURFACE DRAINS

ROADWAY	STATION	OFFSET	416.1010 CONCRETE SURFACE DRAINS CY
STAGE 2			
RACINE ROAD NW RAMP	188RNW+75	0.0' RT	2
RACINE ROAD NE RAMP	200RNE+90	0.0' RT	3
STAGE 2 SUBTOTAL			5
STAGE 3			
RACINE ROAD SW RAMP	189RSW+00	12.0' LT	2
RACINE ROAD SW RAMP	191RSW+00	12.0' RT	3
STAGE 3 SUBTOTAL			5
PROJECT 1517-75-75 TOTAL			10

RUMBLE STRIPS

ROADWAY	STATION		OFFSET	416.1110 CONCRETE SHOULDER RUMBLE STRIPS LF	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF
STAGE 4					
USH 10 EB/STH 441 NB	181EB+27	183EB+70	RT	248	--
	181EB+28	183EB+70	LT	241	--
	186EB+26	195EB+18	LT	887	--
	187EB+27	188EB+25	RT	99	--
	188EB+25	195EB+18	RT	--	703
	197EB+98	206EB+00	RT	--	806
	197EB+98	211EB+50	LT	1,353	--
	206EB+00	206EB+93	RT	93	--
	207EB+59	207EB+93	RT	--	33
	207EB+93	223EB+00	RT	1,496	--
USH 10 WB/STH 441 SB	181WB+18	183WB+79	LT	256	--
	186WB+42	194WB+91	RT	854	--
	186WB+95	188WB+25	LT	128	--
	188WB+25	194WB+91	LT	--	658
	197WB+61	210WB+50	RT	1,289	--
	197WB+61	210WB+84	LT	--	1,323
	213WB+70	222WB+31	LT	861	--
PROJECT 1517-75-75 TOTAL				7,805	3,523

ASPHALT ITEMS

ROADWAY	STATION			OFFSET	455.0105 ASPHALTIC MATERIAL PG 58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	460.4000 HMA COLD WEATHER PAVING TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	SPV.0195.030 COLD PATCH TON
STAGE 1A											
TWA	3TWA+85	-	22TWA+37	RT/LT	--	54	--	--	--	602	--
STAGE 1A SUBTOTAL					--	54	--	--	--	602	--
STAGE 1B											
TWB	15TWB+53	-	21TWB+88	RT/LT	--	30	--	--	--	340	--
	28TWB+50	-	55TWB+47	RT/LT	--	128	--	--	--	1,430	--
TWC	170TWC+24	-	179TWC+15	RT	--	53	--	--	--	595	--
STAGE 1B SUBTOTAL					--	211	--	--	--	2,365	--
STAGE 2											
USH 10 WB/STH 441 SB	181WB+06	-	184WB+12	RT/LT	--	38	--	--	--	427	--
	182WB+62	-	182WB+86	RT	--	--	--	--	--	39	--
	186WB+42	-	186WB+95	LT	1	--	14	--	2	--	--
	188WB+25	-	194WB+91	LT	11	18	205	--	33	--	--
	197WB+61	-	210WB+84	LT	23	89	414	--	66	--	--
	210WB+50	-	214WB+25	RT	--	30	--	--	--	139	--
	210WB+84	-	212WB+34	LT	1	--	20	--	3	--	--
	217WB+42	-	217WB+67	RT/LT	--	--	--	--	--	68	--
	221WB+16	-	221WB+41	RT/LT	--	--	--	--	--	57	--
	222WB+32	-	227WB+50	LT	--	74	--	--	--	343	--
	222WB+32	-	231WB+20	LT	--	85	--	--	--	397	--
RACINE ROAD NE RAMP	200RNE+98	-	210RNE+81	RT	13	53	245	--	39	--	--
RACINE ROAD NW RAMP	188RNW+83	-	195RNW+39	RT	5	18	82	--	13	--	--
EXIST USH 10 /STH 441	149ML+98	-	158ML+10	RT/LT	--	71	--	--	--	333	--
TWE	100TWE+00	-	105TWE+31	RT/LT	--	38	--	--	--	176	--
TWG	0TWG+04	-	3TWG+06	RT	--	91	--	--	--	427	--
TWH	7TWH+12	-	24TWH+23	RT/LT	--	195	--	--	--	911	--
STAGE 2 SUBTOTAL					54	800	980	--	156	3,317	--
STAGE 3A											
USH 10 EB/STH 441 NB	188EB+25	-	195EB+18	RT	12	48	222	--	36	--	--
	197EB+98	-	206EB+00	RT	14	54	251	--	40	--	--
	206EB+93	-	212EB+78	RT	5	--	94	--	15	--	--
	211EB+22	-	216EB+25	LT	--	70	--	--	--	325	--
	223EB+00	-	231EB+06	RT	--	147	--	--	--	687	--
RACINE ROAD SE RAMP	195RSE+00	-	208RSE+00	RT	12	46	217	--	35	--	--
	196RSE+00	-	205RSE+00	LT	5	18	85	--	14	--	--
RACINE ROAD SW RAMP	189RSW+08	-	196RSW+00	LT	14	53	246	--	40	--	--
	191RSW+15	-	192RSW+64	RT	2	7	32	--	5	--	--
RACINE ROAD CONNECTOR NB	243CNB+93	-	244CNB+11	RT	2	9	--	32	13	--	--
	244CNB+35	-	244CNB+53	RT	2	9	--	32	13	--	--
	243CNB+90	-	243CNB+93	RT/LT	1	5	--	17	7	--	--
	243CNB+73	-	243CNB+90	RT/LT	3	13	--	48	20	--	--
RACINE ROAD CONNECTOR SB	243CSB+83	-	244CSB+01	LT	1	6	--	22	9	--	--
	244CSB+25	-	244CSB+43	LT	1	6	--	23	10	--	--
RACINE ROAD SW RAMP BYPASS	18RSWC+03	-	18RSWC+21	LT	1	4	--	15	6	--	--
	18RSWC+45	-	18RSWC+63	RT	1	4	--	15	6	--	--
STAGE 3A SUBTOTAL					76	499	1,147	204	269	1,012	--

ASPHALT ITEMS (CONTINUED)

ROADWAY	STATION			OFFSET	455.0105 ASPHALTIC MATERIAL PG 58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	460.4000 HMA COLD WEATHER PAVING TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	SPV.0195.030 COLD PATCH TON
STAGE 3B											
USH 10 EB/STH 441 NB	214EB+92	-	223EB+00	LT	--	246	--	--	--	1,147	--
	223EB+00	-	230EB+03	RT/LT	--	106	--	--	--	494	--
USH 10 WB/STH 441 SB	222WB+32	-	227WB+49	RT/LT	--	72	--	--	--	336	--
STAGE 3B SUBTOTAL					--	424	--	--	--	1,977	--
UNDISTRIBUTED											40
PROJECT 1517-75-75 TOTAL					130	1,988	2,127	204	430	9,273	40

TEMPORARY SHORING

ROADWAY	STATION	OFFSET	STATION	OFFSET	511.1100 SF	NOTES
STAGE 2A						
USH 10 WB/STH 441 SB	181WB+06	36' LT	184WB+00	5' LT	3,909	WICK DRAIN INSTALLATION AT R-70-120
	`	55' LT	221WB+38	56' LT	1,325	RACINE ROAD RETAINING WALL BARRIER PLACEMENT
MANHOLE #380	220WB+69	103' LT	--	--	160	STORM SEWER INSTALLATION
STAGE 2A SUBTOTAL					5,394	
STAGE 2C						
USH 10 WB/STH 441 SB	181WB+05	38' LT	181WB+05	53' LT	75	PLACED AT END OF NEW RETAINING WALL FOR RETAINING FILL
	183WB+50	33' RT	184WB+11	33' RT	215	PLACED AT END OF NEW BRIDGE FOR GRADING / DRAINAGE PURPOSES
STAGE 2C SUBTOTAL					290	
STAGE 3A						
USH 10 EB/STH 441 NB	218EB+90	56' RT	219EB+88	56' RT	1,070	RACINE ROAD RETAINING WALL BARRIER PLACEMENT
MANHOLE #380	220WB+69	103' LT	--	--	175	STORM SEWER INSTALLATION
STAGE 3A SUBTOTAL					1,245	
PROJECT 1517-75-75 TOTAL					6,929	

CONCRETE SIDEWALK

ROADWAY	STATION			OFFSET	602.0405 CONCRETE SIDEWALK 4-INCH SF
STAGE 2A					
USH 10 WB/STH 441 SB	187WB+01	-	187WB+50	LT	439
STAGE 2A SUBTOTAL					439
STAGE 3A					
USH 10 EB/STH 441 NB	187EB+34	-	187EB+65	RT	252
	206EB+45	-	206EB+87	RT	328
STAGE 3A SUBTOTAL					580
PROJECT 1517-75-75 TOTAL					1,019

FILE NAME: I:\56537\1517-75-75\t1\cds\030201_mq.ppt PLOT DATE : 5/6/2015 4:55:59 PM PLOT BY : HNTB Corp. PLOT NAME : PLOT SCALE : 1:1

CURB & GUTTER ITEMS

ROADWAY	STATION			OFFSET	601.0409 CONCRETE CURB AND GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D LF	601.0501 CONCRETE CURB AND GUTTER INTEGRAL 4-INCH SLOPED 36-INCH LF	601.0551 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	SPV.0090.014 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R FULL DEPTH LF	SPV.0090.015 CONCRETE CURB AND GUTTER 30-INCH INTEGRAL TYPE A LF	SPV.0090.016 CONCRETE CURB AND GUTTER 18-INCH TYPE A REJECT FULL DEPTH LF
STAGE 2A											
USH 10 WB/STH 441 SB	187WB+01	-	188WB+25	LT	--	--	--	122	--	--	--
RACINE ROAD NE RAMP	198RNE+74	-	200RNE+90	LT	201	--	--	--	--	--	--
	198RNE+80	-	200RNE+90	RT	214	--	--	--	--	--	--
RACINE ROAD NW RAMP	186RNW+94	-	188RNW+75	RT	--	--	182	--	--	--	--
	195RNW+39	-	196RNW+50	RT	116	--	--	--	--	--	--
	195RNW+39	-	196RNW+67	LT	128	--	--	--	--	--	--
RACINE ROAD CONNECTOR NB	250CNB+56	-	253CNB+08	LT	254	--	--	--	--	--	--
	250CNB+69	-	253CNB+17	RT	225	--	--	--	--	--	--
RACINE ROAD CONNECTOR SB	250CSB+41	-	252CSB+75	LT	--	--	--	--	--	232	--
	250CSB+50	-	253CSB+16	RT	266	--	--	--	--	--	--
	252CSB+75	-	253CSB+29	LT	54	--	--	--	--	--	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	10RRN+00	-	14RRN+12	LT	--	--	--	--	399	--	317
	11RRN+63	-	12RRN+06	RT	63	--	--	--	--	--	--
	12RRN+23	-	12RRN+60	RT	58	--	--	--	--	--	--
	12RRN+78	-	13RRN+90	RT	171	--	--	--	--	--	--
	14RRN+04	-	11RRN+37	RT	222	--	--	--	--	--	--
STAGE 2A SUBTOTAL					1,972	--	182	122	399	232	317
STAGE 3A											
USH 10 EB/STH 441 NB	187EB+34	-	188EB+25	RT	--	--	--	93	--	--	--
	206EB+00	-	206EB+87	RT	--	--	--	87	--	--	--
RACINE ROAD SE RAMP	193RSE+47	-	195RSE+00	RT	142	--	--	--	--	--	--
	194RSE+34	-	196RSE+00	LT	169	--	--	--	--	--	--
	205RSE+00	-	206RSE+96	LT	--	--	196	--	--	--	--
RACINE ROAD SW RAMP	187RSW+41	-	189RSW+00	LT	--	--	157	--	--	--	--
	192RSW+64	-	193RSW+21	RT	56	--	--	--	--	--	--
	193RSW+21	-	196RSW+86	RT	--	--	--	--	--	347	--
	196RSW+00	-	197RSW+10	LT	--	--	--	--	--	119	--
	196RSW+89	-	197RSW+60	RT	74	--	--	--	--	--	--
RACINE ROAD CONNECTOR NB	243CNB+91	-	244CNB+10	RT	--	18	--	--	--	--	--
	243CNB+93	-	244CNB+11	LT	--	18	--	--	--	--	--
	244CNB+35	-	244CNB+53	LT	--	18	--	--	--	--	--
	244CNB+35	-	250CNB+56	LT	622	--	--	--	--	--	--
	244CNB+36	-	244CNB+55	RT	--	18	--	--	--	--	--
	244CNB+36	-	244CNB+99	RT	60	--	--	--	--	--	--
	245CNB+90	-	250CNB+69	RT	472	--	--	--	--	--	--
RACINE ROAD CONNECTOR SB	243CSB+83	-	244CSB+01	RT	--	18	--	--	--	--	--
	243CSB+84	-	244CSB+01	LT	--	18	--	--	--	--	--
	244CSB+25	-	244CSB+42	LT	--	18	--	--	--	--	--
	244CSB+25	-	244CSB+43	RT	--	18	--	--	--	--	--
	244CSB+25	-	244CSB+91	LT	69	--	--	--	--	--	--
	244CSB+25	-	250CSB+50	RT	624	--	--	--	--	--	--
	245CSB+47	-	250CSB+41	LT	--	--	--	--	--	502	--
RACINE ROAD SW RAMP BYPASS	16RSWC+81	-	18RSWC+03	RT	--	--	--	--	--	120	--
	16RSWC+83	-	18RSWC+21	LT	142	--	--	--	--	--	--
	18RSWC+03	-	18RSWC+21	RT	--	18	--	--	--	--	--
	18RSWC+03	-	18RSWC+21	LT	--	18	--	--	--	--	--
	18RSWC+45	-	18RSWC+63	RT	--	18	--	--	--	--	--
	18RSWC+45	-	18RSWC+63	LT	--	18	--	--	--	--	--
STAGE 3A SUBTOTAL					2,430	216	353	180	--	1,087	--
PROJECT 1517-75-75 TOTAL					4,402	216	535	302	399	1,319	317

BARRIER ITEMS

ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	603.1132 CONCRETE BARRIER TYPE S32 LF	603.1142 CONCRETE BARRIER TYPE S42 LF	603.1156 CONCRETE BARRIER TYPE S56 LF	603.1436 CONCRETE BARRIER TYPE S36C LF	603.1442 CONCRETE BARRIER TYPE S42C LF	603.1456 CONCRETE BARRIER TYPE S56C LF	603.3513 CONCRETE BARRIER TRANSITION TYPE S32 TO S36 EACH	603.3535 CONCRETE BARRIER TRANSITION TYPE S36 TO S42 EACH	603.3559 CONCRETE BARRIER TRANSITION TYPE S42 TO S56 EACH
STAGE 2A													
USH 10 WB/STH 441 SB	185WB+86	25.0' RT	195WB+07	25.0' RT	--	--	931	--	--	--	--	--	--
	212WB+36	49.9' LT	213WB+50	48.8' LT	--	115	--	--	--	--	--	--	--
	213WB+50	48.8' LT	219WB+01	49.0' LT	--	--	--	--	551	--	--	--	--
	219WB+01	49.0' LT	219WB+25	49.0' LT	--	--	--	--	--	--	--	--	1
	219WB+25	49.0' LT	224WB+04	49.0' LT	--	--	--	--	--	305	--	--	--
	222WB+31	49.0' LT	222WB+56	48.5' LT	--	--	--	--	--	--	--	--	1
	222WB+56	49.0' LT	222WB+67	48.3' LT	--	--	--	--	--	--	--	1	--
	222WB+67	48.3' LT	222WB+77	48.0' LT	--	--	--	--	--	--	1	--	--
RACINE ROAD NE RAMP	200RNE+90	24.0' LT	212RNE+33	24.0' LT	--	1,149	--	--	--	--	--	--	--
RACINE ROAD NW RAMP	186RNW+22	26.0' LT	195RNW+39	35.9' LT	895	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL					895	1,264	931	--	551	305	1	1	2
STAGE 3A													
USH 10 EB/STH 441 NB	181EB+12	49.0' RT	183EB+85	49.9' RT	--	280	--	--	--	--	--	--	--
	181EB+12	25.0' LT	184EB+06	35.0' LT	289	--	--	--	--	--	--	--	--
	186EB+10	35.0' LT	186EB+26	35.0' LT	15	--	--	--	--	--	--	--	--
	186EB+26	35.0' LT	186EB+36	35.0' LT	--	--	--	--	--	--	1	--	--
	186EB+36	35.0' LT	195EB+64	41.0' LT	--	--	--	910	--	--	--	--	--
	197EB+82	41.0' LT	198EB+20	41.0' LT	--	--	--	37	--	--	--	--	--
	198EB+20	41.0' LT	198EB+31	40.6' LT	--	--	--	--	--	--	--	1	--
	198EB+31	40.6' LT	198EB+56	39.5' LT	--	--	--	--	--	--	--	--	1
	198EB+56	39.5' LT	211EB+50	25.0' LT	--	--	1,295	--	--	--	--	--	--
	212EB+79	50.0' RT	213EB+51	48.8' RT	72	--	--	--	--	--	--	--	--
	213EB+51	48.8' RT	213EB+61	48.9' RT	--	--	--	--	--	--	1	--	--
	213EB+61	48.9' RT	213EB+71	49.0' RT	--	--	--	--	--	--	--	1	--
	213EB+71	49.0' RT	217EB+25	49.0' RT	--	354	--	--	--	--	--	--	--
	217EB+25	49.0' RT	217EB+70	49.0' RT	--	--	--	--	45	--	--	--	--
	217EB+70	49.0' RT	217EB+95	49.0' RT	--	--	--	--	--	--	--	--	1
	217EB+95	49.0' RT	221EB+00	49.0' RT	--	--	--	--	--	306	--	--	--
	221EB+00	49.0' RT	221EB+25	49.0' RT	--	--	--	--	--	--	--	--	1
	221EB+25	49.0' RT	221EB+50	49.0' RT	--	--	--	--	26	--	--	--	--
	221EB+50	49.0' RT	223EB+00	49.0' RT	--	151	--	--	--	--	--	--	--
USH 10 WB/STH 441 SB	197WB+16	25.0' RT	203WB+55	25.0' RT	--	--	644	--	--	--	--	--	--
	203WB+55	25.0' RT	203WB+80	25.0' RT	--	--	--	--	--	--	--	--	1
	203WB+80	25.0' RT	203WB+90	25.0' RT	--	--	--	--	--	--	--	1	--
	203WB+90	25.0' RT	204WB+00	25.0' RT	--	--	--	--	--	--	1	--	--
	204WB+00	25.0' RT	210WB+50	25.0' RT	646	--	--	--	--	--	--	--	--
RACINE ROAD SE RAMP	208RSE+00	24.0' RT	212RSE+78	24.0' RT	472	--	--	--	--	--	--	--	--
RACINE ROAD SW RAMP	185RSW+83	23.3' RT	189RSW+56	23.0' RT	--	377	--	--	--	--	--	--	--
	189RSW+56	23.0' RT	189RSW+67	23.0' RT	--	--	--	--	--	--	--	1	--
	189RSW+67	23.0' RT	189RSW+77	23.0' RT	--	--	--	--	--	--	1	--	--
	189RSW+77	23.0' RT	191RSW+07	23.0' RT	130	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL					1,625	1,161	1,939	948	71	306	4	4	4
PROJET 1517-75-75 TOTAL					2,520	2,425	2,870	948	622	611	5	5	6

TEMPORARY BARRIER ITEMS

	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	SPV.0090.211* CONCRETE BARRIER TEMPORARY PRECAST ANCHORING EACH
STAGE 1B								
	USH 10 WB/STH 441 SB	159ML+32	11.9' LT	169ML+08	25.2' LT	963	963	--
	USH 10 EB/STH 441 NB	167ML+27	23.8' RT	171ML+40	18.7' RT	411	411	--
		171ML+02	74.0' RT	182ML+43	55.7' RT	1,117	1,117	--
		176ML+37	16.1' RT	183ML+02	26.0' RT	663	663	--
STAGE 1B SUBTOTAL						3,154	3,154	--
STAGE 2A								
	USH 10 EB/STH 441 NB	169ML+52	72.5' RT	179ML+84	63.5' RT	926	986	--
	USH 10 WB/STH 441 SB	165ML+30	18.7' LT	186ML+11	22.0' RT	590	2,054	--
		170ML+58	19.9' RT	182ML+95	29.7' LT	672	1,227	--
		170ML+63	19.9' RT	181ML+75	0.2' RT	--	--	1,112
		185ML+47	40.9' LT	198ML+57	57.9' LT	1,299	1,299	--
STAGE 2A SUBTOTAL						3,487	5,566	1,112
STAGE 2C								
	USH 10 EB/STH 441 NB	130ML+84	5.6' LT	156ML+64	9.2' RT	2,585	2,585	--
	USH 10 WB/STH 441 SB	144ML+03	16.8' LT	150ML+03	22.9' LT	600	600	--
STAGE 2C SUBTOTAL						3,185	3,185	--
STAGE 3A								
	USH 10 EB/STH 441 NB	183EB+01	51.5' LT	184EB+43	61.1' LT	101	138	--
		207EB+31	36.0' LT	226EB+97	38.7' RT	1,543	1,984	--
		216EB+76	50.7' LT	227EB+01	13.0' RT	1,028	1,028	--
	USH 10 WB/STH 441 SB	213WB+75	14.5' RT	218WB+50	65.4' RT	--	--	475
STAGE 3A SUBTOTAL						2,672	3,150	475
STAGE 3B								
	USH 10 EB/STH 441 NB	209EB+89	42.3' LT	216EB+11	34.0' RT	316	635	--
		213EB+53	52.0' LT	226EB+43	36.8' RT	383	1,287	--
	USH 10 WB/STH 441 SB	212WB+96	17.0' LT	223WB+27	14.0' LT	1,031	1,031	--
STAGE 3B SUBTOTAL						1,730	2,953	--
PROJECT 1517-75-75 TOTAL						14,228	18,008	1,587

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

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GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS UNLESS OTHERWISE NOTED.
2) ELEVATIONS ARE GIVEN AT THE CENTER OF STRUCTURE AND MAY DIFFER FROM ELEVATION CALLOUT ON CONSTRUCTION DETAILS.
3) STRUCTURE DEPTH = RIM ELEVATION - INVERT - CASTING - 0.5 FT(RINGS AND MORTER) , EXCEPT MEDIAN INLETS.
4) STRUCTURE CONSTRUCTED BY OTHERS WITH COVER PLATES LEFT IN PLACE, CONTRACTOR TO PROVIDE 0.5' ADJUSTING RINGS AND CASTING AS SPECIFIED
5) PROVIDE 0.5' ADJUSTING RINGS WHERE ONLY A NEW COVER IS CALLED FOR. INCIDENTAL TO COVER.
6) FLAT TOP SLAB REQUIRED ON ALL MANHOLES WITH INLET COVERS. SEE MANHOLE COVER OPENING MATRIX FOR OPENING SIZE.
7) LIMIT QUANTITY OF ADJUSTING RINGS TO TWO PER INLET OR MANHOLE STRUCTURE.
8) PIPE SLOPE SHOWN IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
9) INLET CASTING PLACED NEXT TO CONCRETE BARRIER TO BE CENTERED 2 FOOT OFFSET FROM FACE OF BARRIER UNLESS OTHERWISE SPECIFIED IN CONSTRUCTION DETAILS.

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	HM&H	F	V
OPENING SIZE (FT)	2X3	2.5X3	2X2

ALL ITEMS ARE CATEGORY 1000 UNLESS OTHERWISE SPECIFIED

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ADJUSTING DRAINAGE STRUCTURES

STRUCTURE NUMBER	STATION	LOCATION	OFFSET	611.042 RECONSTRUCTING MANHOLES EACH	PROPOSED RIM OR SUMP	EX-RIM	DIFFERENCE
STAGE 3A							
300M	179EB+85	USH 10/STH 441	98.7' RT	1	748.50	747.50	1.00
301	182EB+93	USH 10/STH 441	124.8' RT	1	756.50	755.00	1.50
301T	184RSW+34	USH 10/STH 441	79.9' RT	1	754.56	753.56	1.00
305D	182EB+87	USH 10/STH 441	29.8' LT	1	779.22	774.85	4.37
PROJECT 1517-75-75 TOTALS				4			

TEMPORARY DRAINAGE ITEMS

STAGE	520.8000 CONCRETE COLLARS FOR PIPE CONCRETE EACH LOCATION	608.0318* STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	611.0642* INLET COVERS TYPE MS EACH	611.2004* MANHOLES 4-FT DIAMETER EACH	611.0535* MANHOLE COVERS TYPE J-SPECIAL EACH	611.3902* INLETS MEDIAN 2 GRATE EACH	STSP.521.2005.S SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED 18-INCH LF
1B	1	375	2	1	1	1	60
3A	1	--	--	--	--	--	418
PROJECT 1517-75-75 TOTALS	2	375	2	1	1	1	478

POND LINER CLAY

LOCATION	SPV.0035.100 POND LINER CLAY CY
POND 2	9590
POND 3	18225
PROJECT 1517-75-75 TOTALS	27815

FLARED END SECTION WITH TRASH RACK

STRUCTURE NUMBER	STATION	OFFSET	SPV.0060.104 FLARED END SECTION WITH TRASH RACK EACH
202T	189RSW+55	206.4' RT	1
PROJECT 1517-75-75 TOTALS			1

ABANDONING CULVERT PIPES

STAGE	LOCATION	204.027 ABANDONING CULVERT PIPES (96-INCH) EACH
STAGE 2A	110ERC+00 LT-104ERC+00 LT	1
PROJECT 1517-75-75 TOTALS		1

DETENTION POND CORRUGATED METAL ANTI-SEEP COLLAR

LOCATION	SPV.0060.102 DETENTION POND CORRUGATED METAL ANTI-SEEP COLLAR EACH
POND 2	1
POND 3	1
PROJECT 1517-75-75 TOTALS	2

FILE NAME: I:\56537\1517-75-72\t1\cds\030201_mq_ss.ppt PLOT DATE : 5/7/2015 3:41:59 PM PLOT BY : PSHEDIVY PLOT NAME : PLOT SCALE : 1:1

SALVAGED STORM SEWER*

ROADWAY	STATION	OFFSET	524.0112 CULVERT PIPE SALVAGED 12-INCH LF	524.0118 CULVERT PIPE SALVAGED 18-INCH LF	524.0124 CULVERT PIPE SALVAGED 24-INCH LF	5240142 CULVERT PIPE SALVAGED 42-INCH LF	524.0196 CULVERT PIPE SALVAGED 96-INCH LF	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 42-INCH EACH	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH EACH
STAGE 2A												
USH 10 WB/STH 441 SB ENTRANCE RAMP	112ERD+12 - 114ERD+88	RT	--	--	86	--	--	--	--	2	--	--
RNE	201RNE+08 - 203RNE+26	LT	--	--	--	--	218	--	--	--	--	--
RNE	201RNE+08	LT	--	--	--	--	--	--	--	--	--	1
STAGE 2A SUBTOTAL			SEE STORM SEWER QUANTITIES									
STAGE 3A												
USH 10/STH 441	153ML+35 - 153ML+39	RT	--	48	--	--	--	--	--	--	--	--
	153ML+35 - 153ML+43	RT	--	12	--	--	--	--	--	--	--	--
	153ML+43 - 154ML+28	RT	--	90	--	--	--	--	--	--	--	--
	157ML+97 - 157ML+98	LT	13	--	--	--	--	--	--	--	--	--
	154ML+28	LT	--	--	--	--	--	--	1	--	--	--
	157ML+97	RT	--	--	--	--	--	1	--	--	--	--
	209RSE+40	RT	--	--	--	51	--	--	--	--	1	--
	13RRN+35	RT	--	--	217	--	--	--	--	1	--	--
STAGE 3A SUBTOTAL			SEE STORM SEWER QUANTITIES									
PROJECT 1517-75-75 TOTAL			SEE STORM SEWER QUANTITIES									

*QUANITIES SHOWN FOR LOCATION ONLY.

CULVERT PIPE ITEMS

STATION	INLET END OFFSET	ELEVATION	DISCHARGE END STATION	OFFSET	ELEVATION	SLOPE	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.0180 CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.0142 CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1030* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1042 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH EACH	633.5200 MARKERS CULVERT END EACH
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD)														
Stage 1B														
209RSE+40	50.5' RT	747.23	209RSE+25	6.9' LT	742.77	7.56%	1	--	--	59	--	--	1	--
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD) SUBTOTALS							1	--	--	59	--	--	1	--
Stage 2A														
203RNE+00	57.1' RT	748.00	203RNE+07	87.0' LT	741.00	5.30%	--	--	132	--	--	2	--	2
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD) SUBTOTALS							--	--	132	--	--	2	--	2
CONNECTOR ROAD (TAYCO - CTH P)														
Stage 3A														
195+31RSW	106.8' LT	752.50	195+19RSW	75.7' RT	751.03	0.86%	--	171	--	2	2	--	--	2
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD) SUBTOTALS							--	171	--	2	2	--	--	2
PROJECT 1517-75-75 TOTALS							1	171	132	61	2	2	1	4

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	524.0112 CULVERT PIPE SALVAGED 12-INCH	524.0118 CULVERT PIPE SALVAGED 18-INCH	524.0124 CULVERT PIPE SALVAGED 24-INCH	5240142.0000 CULVERT PIPE SALVAGED 42-INCH	524.0196 CULVERT PIPE SALVAGED 96-INCH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0354 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 54-INCH LF
USH10/STH 441 MAINLINE																	
STAGE 1B																	
388	398	745.00	744.23	0.48%	--	--	--	--	--	--	--	159	--	--	--	--	--
398	398C	744.23	743.30	0.43%	--	--	--	--	--	--	--	216	--	--	--	--	--
STAGE 1B SUBTOTAL USH10/STH 441 MAINLINE					--	--	--	--	--	--	--	375	--	--	--	--	--
STAGE 2A																	
100	101	756.90	756.68	0.47%	--	--	--	--	--	47	--	--	--	--	--	--	--
101	102	756.68	756.13	1.67%	--	--	--	--	--	33	--	--	--	--	--	--	--
102	108	756.13	756.01	0.35%	--	--	--	--	--	34	--	--	--	--	--	--	--
103	102	756.26	756.13	0.72%	--	--	--	--	--	18	--	--	--	--	--	--	--
104	107	760.30	760.15	0.20%	--	--	--	--	--	75	--	--	--	--	--	--	--
105	106	762.96	761.26	2.00%	--	--	--	--	--	85	--	--	--	--	--	--	--
301V	305C	769.42	769.15	0.60%	--	--	--	--	--	--	--	--	45	--	--	--	--
313C	314	775.46	774.66	0.78%	--	--	--	--	--	--	103	--	--	--	--	--	--
314	315	774.66	774.31	0.90%	--	--	--	--	--	--	39	--	--	--	--	--	--
314P	314	775.05	774.66	4.87%	--	--	--	--	--	--	8	--	--	--	--	--	--
315	316	774.31	774.15	0.80%	--	--	--	--	--	--	20	--	--	--	--	--	--
316	317	774.15	774.13	0.33%	--	--	--	--	--	--	6	--	--	--	--	--	--
317	318	773.39	772.93	0.44%	--	--	86	--	--	--	--	--	18	--	--	--	--
318	319	772.93	772.10	0.39%	--	--	--	--	--	--	--	--	212	--	--	--	--
319	320	772.10	771.11	0.59%	--	--	--	--	--	--	--	--	169	--	--	--	--
320	321	771.11	770.17	0.58%	--	--	--	--	--	--	--	--	162	--	--	--	--
321	331	770.16	768.75	1.62%	--	--	--	--	--	--	--	--	87	--	--	--	--
322C	321	777.13	776.73	0.74%	--	--	--	--	--	--	54	--	--	--	--	--	--
323	317	774.35	774.14	0.27%	--	--	--	--	--	--	78	--	--	--	--	--	--
325C	326	776.76	776.61	0.45%	--	--	--	--	--	33	--	--	--	--	--	--	--
326	318	776.36	776.34	0.33%	--	--	--	--	--	--	6	--	--	--	--	--	--
328	329	779.02	778.28	2.18%	--	--	--	--	--	34	--	--	--	--	--	--	--
327C	319	776.95	776.87	0.25%	--	--	--	--	--	--	32	--	--	--	--	--	--
329	321	778.03	778.00	0.50%	--	--	--	--	--	--	6	--	--	--	--	--	--
330	329	778.34	778.28	0.46%	--	--	--	--	--	13	--	--	--	--	--	--	--
331	384	761.08	760.90	0.47%	--	--	--	--	--	--	--	--	38	--	--	--	--
332C	385	775.40	772.26	3.53%	--	--	--	--	--	89	--	--	--	--	--	--	--
336	386	771.72	771.32	0.50%	--	--	--	--	--	--	80	--	--	--	--	--	--
338	387	765.82	765.24	0.67%	--	--	--	--	--	86	--	--	--	--	--	--	--
346	346M	746.72	745.53	0.58%	--	--	--	--	--	--	--	--	204	--	--	--	--
346M	342	742.33	741.13	1.25%	--	--	--	--	--	--	--	--	--	--	--	--	--
342	342M	740.63	738.98	0.61%	--	--	--	--	--	--	--	--	--	--	--	--	--
342M	342E	738.98	738.18	0.52%	--	--	--	--	--	--	--	--	--	--	--	--	--
361	362	740.18	739.95	0.36%	--	--	--	--	--	--	--	--	64	--	--	--	--
362	513	739.95	739.80	0.18%	--	--	--	--	--	--	--	--	--	--	--	--	--
363	362	740.50	739.95	0.19%	--	--	--	--	--	--	--	--	--	--	--	--	294
364	363	740.91	740.50	0.20%	--	--	--	--	--	--	--	--	--	--	--	--	--
364C	364	741.41	741.13	0.39%	--	--	--	--	--	--	--	--	--	72	--	--	--
365	364	741.05	740.91	0.14%	--	--	--	--	--	--	--	--	--	--	--	--	--
366	365	741.21	741.10	0.17%	--	--	--	--	--	--	--	--	--	--	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	524.0112 CULVERT PIPE SALVAGED 12-INCH	524.0118 CULVERT PIPE SALVAGED 18-INCH	524.0124 CULVERT PIPE SALVAGED 24-INCH	5240142.0000 CULVERT PIPE SALVAGED 42-INCH	524.0196 CULVERT PIPE SALVAGED 96-INCH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0354 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 54-INCH LF
367	366	741.33	741.21	0.17%	--	--	--	--	--	--	--	--	--	--	--	--	--
368	367	741.57	741.33	0.19%	--	--	--	--	--	--	--	--	--	--	--	--	--
390C	512	743.15	742.65	6.25%	--	--	--	--	--	--	--	--	8	--	--	--	--
512	363	742.29	741.61	4.25%	--	--	--	--	--	--	--	--	16	--	--	--	--
380	367	742.48	741.40	2.77%	--	--	--	--	--	--	--	--	--	--	39	--	--
382	368	741.68	741.57	0.18%	--	--	--	--	--	--	--	--	--	--	62	--	--
389	390	744.41	744.31	0.40%	--	--	--	--	--	--	25	--	--	--	--	--	--
390C	370	749.31	749.20	0.73%	--	--	--	--	--	--	--	--	15	--	--	--	--
390	391	744.31	744.00	0.47%	--	--	--	--	--	--	66	--	--	--	--	--	--
391B	610	745.00	742.03	3.81%	--	--	--	--	--	--	78	--	--	--	--	--	--
391	396C	743.94	743.79	1.88%	--	--	--	--	--	--	--	--	8	--	--	--	--
392C	365	741.14	741.05	0.56%	--	--	--	--	--	--	--	16	--	--	--	--	--
394	391	744.31	744.00	0.48%	--	--	--	--	--	--	65	--	--	--	--	--	--
396	394	744.38	744.31	0.39%	--	--	--	--	--	--	18	--	--	--	--	--	--
397	396	745.03	744.63	1.74%	--	--	--	--	--	23	--	--	--	--	--	--	--
399C	380	744.14	743.77	4.63%	--	--	--	--	--	--	--	--	--	--	8	--	--
500	501	754.27	754.00	1.23%	--	--	--	--	--	22	--	--	--	--	--	--	--
502	500	754.55	754.27	0.48%	--	--	--	--	--	58	--	--	--	--	--	--	--
503	523	731.62	731.50	0.14%	--	--	--	--	26	--	--	--	--	--	--	--	--
504	503	732.40	731.87	0.14%	--	--	--	--	192	--	--	--	--	--	--	--	--
508	513	748.69	748.50	0.73%	--	--	--	--	--	--	26	--	--	--	--	--	--
509	511	749.50	749.32	0.58%	--	--	--	--	--	--	31	--	--	--	--	--	--
370	395	743.06	742.85	1.24%	--	--	--	--	--	--	--	17	--	--	--	--	--
510	520	739.18	738.65	0.20%	--	--	--	--	--	--	--	--	--	--	--	--	--
395	512	742.85	742.65	0.41%	--	--	--	--	--	--	--	49	--	--	--	--	--
513	511	739.80	739.52	0.20%	--	--	--	--	--	--	--	--	--	--	--	--	--
520	520C	738.65	738.50	0.14%	--	--	--	--	--	--	--	--	--	--	--	--	--
511	510	739.52	739.18	0.19%	--	--	--	--	--	--	--	--	--	--	--	--	--
601	600	742.12	742.04	0.27%	--	--	--	--	--	--	--	--	--	--	30	--	--
601C	601	743.70	743.63	0.44%	--	--	--	--	--	--	--	16	--	--	--	--	--
600	382	742.04	741.98	0.27%	--	--	--	--	--	--	--	--	--	--	22	--	--
608	699	750.51	748.71	4.62%	--	--	--	--	--	--	--	39	--	--	--	--	--
609	610	742.11	742.03	0.73%	--	--	--	--	--	--	--	--	--	11	--	--	--
610	368	742.03	741.96	0.09%	--	--	--	--	--	--	--	--	--	79	--	--	--
601P	601	743.79	743.62	2.13%	--	--	--	--	--	--	--	8	--	--	--	--	--
699	609	742.46	742.11	1.75%	--	--	--	--	--	--	--	--	--	20	--	--	--
505P	505	743.31	742.32	0.58%	--	--	--	--	--	--	--	--	--	--	--	--	--
507P	507	740.94	740.88	0.08%	--	--	--	--	--	--	--	--	--	--	72	--	--
699C	699	743.46	743.46	0.03%	--	--	--	--	--	--	--	--	--	--	--	4	--
STAGE 2A SUBTOTAL USH10/STH 441 MAINLINE					--	--	86	--	218	650	741	145	1,046	182	233	4	294
STAGE 2C																	
305	305E	769.66	769.42	0.55%	--	--	--	--	--	--	--	--	44	--	--	--	--
309	305	770.57	770.15	1.68%	--	--	--	--	--	--	--	25	--	--	--	--	--
310	309	771.16	770.82	1.26%	--	--	--	--	--	--	27	--	--	--	--	--	--
STAGE 2C SUBTOTAL USH10/STH 441 MAINLINE					--	--	--	--	--	--	27	25	44	--	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	524.0112 CULVERT PIPE SALVAGED 12-INCH	524.0118 CULVERT PIPE SALVAGED 18-INCH	524.0124 CULVERT PIPE SALVAGED 24-INCH	5240142.0000 CULVERT PIPE SALVAGED 42-INCH	524.0196 CULVERT PIPE SALVAGED 96-INCH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0354 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 54-INCH LF
STAGE 3A																	
201	304	744.71	743.71	0.47%	--	--	--	51	--	--	--	--	--	--	--	162	--
202	201	746.30	745.71	0.30%	--	--	--	--	--	--	--	--	--	194	--	--	--
202T	202	746.35	746.30	0.25%	--	--	--	--	--	--	--	--	--	20	--	--	--
203	324	778.93	778.85	0.80%	--	--	--	--	--	--	10	--	--	--	--	--	--
270	201	746.23	745.96	0.55%	--	--	--	--	--	--	--	--	--	49	--	--	--
302	301T	743.05	742.93	0.55%	--	--	--	--	--	--	--	--	--	--	--	22	--
303	302	743.21	743.05	0.43%	--	--	--	--	--	--	--	--	--	--	--	37	--
304	303	743.71	743.21	0.51%	--	--	--	--	--	--	--	--	--	--	--	98	--
306	303D	774.21	773.97	0.89%	--	--	--	--	--	--	27	--	--	--	--	--	--
311	306	774.32	774.21	0.79%	--	--	--	--	--	--	14	--	--	--	--	--	--
312	311	774.64	774.32	0.94%	--	--	--	--	--	--	34	--	--	--	--	--	--
324	314C	778.85	775.05	4.93%	--	--	--	--	--	--	77	--	--	--	--	--	--
334	335	772.03	772.02	0.20%	--	--	--	--	--	--	5	--	--	--	--	--	--
335	335C	772.02	772.00	0.33%	--	--	--	--	--	--	6	--	--	--	--	--	--
337	337C	765.86	765.82	0.36%	--	--	--	--	--	11	--	--	--	--	--	--	--
339	340	757.50	754.17	2.73%	--	--	--	--	--	--	122	--	--	--	--	--	--
340	341	744.13	743.85	0.50%	--	--	--	--	--	--	--	--	56	--	--	--	--
341	342	743.85	743.82	0.25%	--	--	--	--	--	--	--	--	--	12	--	--	--
342	341	756.18	755.97	1.75%	--	--	--	--	--	--	--	--	--	--	--	--	--
345	346C	746.78	746.72	0.43%	--	--	--	--	--	--	--	--	14	--	--	--	--
346	345	749.04	748.99	0.33%	--	--	--	--	--	15	--	--	--	--	--	--	--
347	361C	740.27	740.19	0.47%	--	--	--	--	--	--	--	--	17	--	--	--	--
348	347	740.57	740.27	0.38%	--	--	--	--	--	--	--	--	79	--	--	--	--
353	409	744.63	744.00	4.85%	13	--	--	--	--	--	--	--	--	--	--	--	--
354	348	741.43	740.58	0.40%	--	--	215	--	--	--	--	--	--	--	--	--	--
355	354	741.73	741.43	0.29%	--	--	2	--	--	--	--	--	103	--	--	--	--
357	355	741.95	741.73	0.22%	--	--	--	--	--	--	--	--	98	--	--	--	--
358	357	742.05	741.95	0.24%	--	42	--	--	--	--	--	--	--	--	--	--	--
359	358	742.14	742.05	0.27%	--	33	--	--	--	--	--	--	--	--	--	--	--
360	359	742.57	742.39	0.27%	--	--	--	--	--	--	67	--	--	--	--	--	--
388	355	743.55	742.94	3.21%	--	19	--	--	--	--	--	--	--	--	--	--	--
369	354	743.00	741.43	9.24%	--	--	--	--	--	--	17	--	--	--	--	--	--
636	636P	745.33	744.29	2.08%	--	50	--	--	--	--	--	--	--	--	--	--	--
401	339	757.79	757.75	0.40%	--	--	--	--	--	10	--	--	--	--	--	--	--
406	402	745.39	744.94	0.85%	--	6	--	--	--	--	--	47	--	--	--	--	--
403	345	747.79	746.78	1.94%	--	--	--	--	--	--	52	--	--	--	--	--	--
404	407	746.00	745.91	0.64%	--	--	--	--	--	14	--	--	--	--	--	--	--
405	402	746.17	744.94	2.02%	--	--	--	--	--	--	--	--	61	--	--	--	--
406	402	745.39	744.94	0.85%	--	--	--	--	--	--	--	53	--	--	--	--	--
402	340	744.94	744.63	0.65%	--	--	--	--	--	--	--	--	48	--	--	--	--
STAGE 3A SUBTOTAL USH10/STH 441 MAINLINE					13	150	217	51	--	50	431	100	476	275	--	268	--
STAGE 3B																	
636C	636B	744.29	743.80	1.95%	--	--	--	--	--	--	--	25	--	--	--	--	--
STAGE 3B SUBTOTAL USH10/STH 441 MAINLINE					--	--	--	--	--	--	--	25	--	--	--	--	--
USH10/STH 441 MAINLINE SUBTOTALS					13	150	303	51	218	700	1,199	670	1,566	457	233	272	294

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	524.0112 CULVERT PIPE SALVAGED 12-INCH	524.0118 CULVERT PIPE SALVAGED 18-INCH	524.0124 CULVERT PIPE SALVAGED 24-INCH	5240142.0000 CULVERT PIPE SALVAGED 42-INCH	524.0196 CULVERT PIPE SALVAGED 96-INCH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0354 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 54-INCH LF
CONNECTOR ROAD (TAYCO - CTH P)																	
STAGE 2A																	
233	280	751.23	750.85	0.46%	--	--	--	--	--	--	--	--	--	--	82	--	--
233	233T	752.38	752.00	0.17%	--	--	--	--	--	--	--	--	225	--	--	--	--
248	280	752.64	752.60	0.31%	--	--	--	--	--	--	13	--	--	--	--	--	--
253	280	753.28	752.60	1.42%	--	--	--	--	--	--	48	--	--	--	--	--	--
254	282	755.61	755.49	0.57%	--	--	--	--	--	21	--	--	--	--	--	--	--
255	254	755.85	755.61	0.89%	--	--	--	--	--	27	--	--	--	--	--	--	--
256	258	754.08	753.45	3.32%	--	--	--	--	--	--	19	--	--	--	--	--	--
257	282	756.21	755.49	1.47%	--	--	--	--	--	49	--	--	--	--	--	--	--
274	275	756.99	755.90	3.63%	--	--	--	--	--	30	--	--	--	--	--	--	--
280	280P	750.85	750.47	0.48%	--	--	--	--	--	--	--	--	--	--	80	--	--
282	256	755.24	754.08	3.05%	--	--	--	--	--	--	38	--	--	--	--	--	--
259	233	752.69	752.38	0.47%	--	--	--	--	--	--	--	--	--	--	66	--	--
STAGE 2A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)					--	--	--	--	--	127	118	--	225	--	228	--	--
STAGE 3A																	
212	239	754.27	754.17	0.40%	--	--	--	--	--	25	--	--	--	--	--	--	--
216P	216	748.08	748.07	0.12%	--	--	--	--	--	--	--	--	--	--	--	8	--
216	214	748.07	748.00	0.11%	--	--	--	--	--	--	--	--	--	--	--	64	--
214	215	748.00	747.87	0.15%	--	--	--	--	--	--	--	--	--	--	--	--	--
215	263	746.64	746.35	0.48%	--	--	--	--	--	--	--	--	--	--	--	61	--
207	225	754.30	754.21	0.43%	--	--	--	--	--	21	--	--	--	--	--	--	--
225	226	754.21	753.98	1.77%	--	--	--	--	--	13	--	--	--	--	--	--	--
226	227	753.98	753.77	0.55%	--	--	--	--	--	38	--	--	--	--	--	--	--
227	228	753.52	753.31	0.46%	--	--	--	--	--	--	46	--	--	--	--	--	--
228	229	752.12	751.86	0.46%	--	--	--	--	--	--	--	56	--	--	--	--	--
229	243	748.28	747.84	0.47%	--	--	--	--	--	--	--	--	--	--	93	--	--
230	229	748.91	748.28	0.48%	--	--	--	--	--	--	--	--	--	--	130	--	--
231	230	749.40	748.91	0.47%	--	--	--	--	--	--	--	--	--	--	104	--	--
232	231	750.22	749.40	0.48%	--	--	--	--	--	--	--	--	--	--	170	--	--
234	228	755.98	755.92	0.32%	--	--	--	--	--	19	--	--	--	--	--	--	--
235	234	756.00	755.98	0.22%	--	--	--	--	--	9	--	--	--	--	--	--	--
236	237	753.55	753.44	0.55%	--	--	--	--	--	20	--	--	--	--	--	--	--
237	400	753.44	753.23	0.55%	--	--	--	--	--	38	--	--	--	--	--	--	--
238	229	752.93	752.11	1.71%	--	--	--	--	--	--	48	--	--	--	--	--	--
239	240	754.17	753.83	2.27%	--	--	--	--	--	15	--	--	--	--	--	--	--
240	241	753.83	752.84	2.61%	--	--	--	--	--	38	--	--	--	--	--	--	--
241	242	752.84	752.68	0.42%	--	--	--	--	--	38	--	--	--	--	--	--	--
242	243	752.43	751.74	0.93%	--	--	--	--	--	--	74	--	--	--	--	--	--
243	262	746.51	746.35	0.33%	--	--	--	--	--	--	--	--	--	--	--	--	--
244	231	754.93	754.84	1.12%	--	--	--	--	--	--	--	8	--	--	--	--	--
245	244	753.89	753.22	1.00%	--	--	--	--	--	--	--	--	--	--	--	--	--
246	247	752.47	752.26	0.43%	--	--	--	--	--	49	--	--	--	--	--	--	--
247	232	752.01	751.97	0.31%	--	--	--	--	--	--	13	--	--	--	--	--	--
249	232	751.99	751.97	0.25%	--	--	--	--	--	--	8	--	--	--	--	--	--
250	249	752.04	751.99	0.36%	--	--	--	--	--	--	14	--	--	--	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	524.0112 CULVERT PIPE SALVAGED 12-INCH	524.0118 CULVERT PIPE SALVAGED 18-INCH	524.0124 CULVERT PIPE SALVAGED 24-INCH	5240142.0000 CULVERT PIPE SALVAGED 42-INCH	524.0196 CULVERT PIPE SALVAGED 96-INCH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0354 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 54-INCH LF
251	252	752.71	752.45	0.46%	--	--	--	--	--	56	--	--	--	--	--	--	--
252	250	752.15	752.04	0.41%	--	--	--	--	--	--	27	--	--	--	--	--	--
258	258C	754.14	754.09	0.45%	--	--	--	--	--	11	--	--	--	--	--	--	--
260	244	753.65	753.22	0.49%	--	--	--	--	--	--	--	88	--	--	--	--	--
264	225	756.33	754.21	3.85%	--	--	--	--	--	55	--	--	--	--	--	--	--
400	238	753.23	753.18	0.45%	--	--	--	--	--	11	--	--	--	--	--	--	--
280C	232	750.47	750.22	0.48%	--	--	--	--	--	--	--	--	--	--	51	--	--
STAGE 3A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)					--	--	--	--	--	456	230	152	--	--	548	133	--
CONNECTOR ROAD (TAYCO - CTH P) SUBTOTALS					--	--	--	--	--	583	348	152	225	--	776	133	--
PROJECT 1517-75-75 TOTALS					13	150	303	51	218	1,283	1,547	822	1,791	457	1,009	405	294

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	608.0360 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 60-INCH LF	608.0396 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 96-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	610.0138 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 38X60-INCH LF	SPV.0060.113 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 38X60-INCH LF	610.0148 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 48X76-INCH LF
USH10/STH 441 MAINLINE														
STAGE 1B														
388	398	745.00	744.23	0.48%	--	--	--	--	--	--	--	--	--	--
398	398C	744.23	743.30	0.43%	--	--	--	--	--	--	--	--	--	--
STAGE 1B SUBTOTAL USH10/STH 441 MAINLINE					--	--	--	--	--	--	--	--	--	--
STAGE 2A														
100	101	756.90	756.68	0.47%	--	--	--	--	--	--	--	--	--	--
101	102	756.68	756.13	1.67%	--	--	--	--	--	--	--	--	--	--
102	108	756.13	756.01	0.35%	--	--	--	--	--	--	--	--	--	--
103	102	756.26	756.13	0.72%	--	--	--	--	--	--	--	--	--	--
104	107	760.30	760.15	0.20%	--	--	--	--	--	--	--	--	--	--
105	106	762.96	761.26	2.00%	--	--	--	--	--	--	--	--	--	--
301V	305C	769.42	769.15	0.60%	--	--	--	--	--	--	--	--	--	--
313C	314	775.46	774.66	0.78%	--	--	--	--	--	--	--	--	--	--
314	315	774.66	774.31	0.90%	--	--	--	--	--	--	--	--	--	--
314P	314	775.05	774.66	4.87%	--	--	--	--	--	--	--	--	--	--
315	316	774.31	774.15	0.80%	--	--	--	--	--	--	--	--	--	--
316	317	774.15	774.13	0.33%	--	--	--	--	--	--	--	--	--	--
317	318	773.39	772.93	0.44%	--	--	--	--	--	--	--	--	--	--
318	319	772.93	772.10	0.39%	--	--	--	--	--	--	--	--	--	--
319	320	772.10	771.11	0.59%	--	--	--	--	--	--	--	--	--	--
320	321	771.11	770.17	0.58%	--	--	--	--	--	--	--	--	--	--
321	331	770.16	768.75	1.62%	--	--	--	--	--	--	--	--	--	--
322C	321	777.13	776.73	0.74%	--	--	--	--	--	--	--	--	--	--
323	317	774.35	774.14	0.27%	--	--	--	--	--	--	--	--	--	--
325C	326	776.76	776.61	0.45%	--	--	--	--	--	--	--	--	--	--
326	318	776.36	776.34	0.33%	--	--	--	--	--	--	--	--	--	--
328	329	779.02	778.28	2.18%	--	--	--	--	--	--	--	--	--	--
327C	319	776.95	776.87	0.25%	--	--	--	--	--	--	--	--	--	--
329	321	778.03	778.00	0.50%	--	--	--	--	--	--	--	--	--	--
330	329	778.34	778.28	0.46%	--	--	--	--	--	--	--	--	--	--
331	384	761.08	760.90	0.47%	--	--	--	--	--	--	--	--	--	--
332C	385	775.40	772.26	3.53%	--	--	--	--	--	--	--	--	--	--
336	386	771.72	771.32	0.50%	--	--	--	--	--	--	--	--	--	--
338	387	765.82	765.24	0.67%	--	--	--	--	--	--	--	--	--	--
346	346M	746.72	745.53	0.58%	--	--	--	--	--	--	--	--	--	--
346M	342	742.33	741.13	1.25%	--	--	--	--	96	--	--	--	--	--
342	342M	740.63	738.98	0.61%	--	--	--	--	--	270	--	--	--	--
342M	342E	738.98	738.18	0.52%	--	--	--	--	--	155	--	--	--	--
361	362	740.18	739.95	0.36%	--	--	--	--	--	--	--	--	--	--
362	513	739.95	739.80	0.18%	--	--	--	--	--	--	--	--	--	83
363	362	740.50	739.95	0.19%	--	--	--	--	--	--	--	--	--	--
364	363	740.91	740.50	0.20%	--	--	--	--	--	--	--	203	--	--
364C	364	741.45	741.13	0.50%	--	--	--	--	--	--	--	--	--	--
365	364	741.05	740.91	0.14%	--	--	--	--	--	--	--	--	102	--
366	365	741.21	741.10	0.17%	--	--	--	--	--	--	--	--	64	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	608.0360 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 60-INCH LF	608.0396 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 96-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	610.0138 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 38X60-INCH LF	SPV.0060.113 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 38X60-INCH LF	610.0148 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 48X76-INCH LF
367	366	741.33	741.21	0.17%	--	--	--	--	--	--	--	--	70	--
368	367	741.57	741.33	0.19%	--	--	--	--	--	--	--	--	129	--
390C	512	743.15	742.65	6.25%	--	--	--	--	--	--	--	--	--	--
512	363	742.29	741.61	4.25%	--	--	--	--	--	--	--	--	--	--
380	367	742.48	741.40	2.77%	--	--	--	--	--	--	--	--	--	--
382	368	741.68	741.57	0.18%	--	--	--	--	--	--	--	--	--	--
389	390	744.41	744.31	0.40%	--	--	--	--	--	--	--	--	--	--
390C	370	749.31	749.20	0.73%	--	--	--	--	--	--	--	--	--	--
390	391	744.31	744.00	0.47%	--	--	--	--	--	--	--	--	--	--
391B	610	745.00	742.03	3.81%	--	--	--	--	--	--	--	--	--	--
391	396C	743.94	743.79	1.88%	--	--	--	--	--	--	--	--	--	--
392C	365	741.14	741.05	0.56%	--	--	--	--	--	--	--	--	--	--
394	391	744.31	744.00	0.48%	--	--	--	--	--	--	--	--	--	--
396	394	744.38	744.31	0.39%	--	--	--	--	--	--	--	--	--	--
397	396	745.03	744.63	1.74%	--	--	--	--	--	--	--	--	--	--
399C	380	744.14	743.77	4.63%	--	--	--	--	--	--	--	--	--	--
500	501	754.27	754.00	1.23%	--	--	--	--	--	--	--	--	--	--
502	500	754.55	754.27	0.48%	--	--	--	--	--	--	--	--	--	--
503	523	731.62	731.50	0.14%	--	62	--	--	--	--	--	--	--	--
504	503	732.40	731.87	0.14%	--	--	--	--	--	--	--	--	--	--
508	513	748.69	748.50	0.73%	--	--	--	--	--	--	--	--	--	--
509	511	749.50	749.32	0.58%	--	--	--	--	--	--	--	--	--	--
370	395	743.06	742.85	1.24%	--	--	--	--	--	--	--	--	--	--
510	520	739.18	738.65	0.20%	262	--	--	--	--	--	--	--	--	--
395	512	742.85	742.65	0.41%	--	--	--	--	--	--	--	--	--	--
513	511	739.80	739.52	0.20%	--	--	--	--	--	--	--	--	--	139
520	520C	738.65	738.50	0.14%	--	--	--	--	--	--	110	--	--	--
511	510	739.52	739.18	0.19%	175	--	--	--	--	--	--	--	--	--
601	600	742.12	742.04	0.27%	--	--	--	--	--	--	--	--	--	--
601C	601	743.70	743.63	0.44%	--	--	--	--	--	--	--	--	--	--
600	382	742.04	741.98	0.27%	--	--	--	--	--	--	--	--	--	--
608	699	750.51	748.71	4.62%	--	--	--	--	--	--	--	--	--	--
609	610	742.11	742.03	0.73%	--	--	--	--	--	--	--	--	--	--
610	368	742.03	741.96	0.09%	--	--	--	--	--	--	--	--	--	--
601P	601	743.79	743.62	2.13%	--	--	--	--	--	--	--	--	--	--
699	609	742.46	742.11	1.75%	--	--	--	--	--	--	--	--	--	--
505P	505	743.31	742.32	0.58%	--	--	--	--	170	--	--	--	--	--
507P	507	740.94	740.88	0.08%	--	--	--	--	--	--	--	--	--	--
699C	699	743.46	743.46	0.03%	--	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL USH10/STH 441 MAINLINE					437	62	--	--	266	425	110	203	365	222
STAGE 2C														
305	305E	769.66	769.42	0.55%	--	--	--	--	--	--	--	--	--	--
309	305	770.57	770.15	1.68%	--	--	--	--	--	--	--	--	--	--
310	309	771.16	770.82	1.26%	--	--	--	--	--	--	--	--	--	--
STAGE 2C SUBTOTAL USH10/STH 441 MAINLINE					--	--	--	--	--	--	--	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	608.0360 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 60-INCH LF	608.0396 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 96-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	610.0138 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 38X60-INCH LF	SPV.0060.113 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 38X60-INCH LF	610.0148 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 48X76-INCH LF
STAGE 3A														
201	304	744.71	743.71	0.47%	--	--	--	--	--	--	--	--	--	--
202	201	746.30	745.71	0.30%	--	--	--	--	--	--	--	--	--	--
202T	202	746.35	746.30	0.25%	--	--	--	--	--	--	--	--	--	--
203	324	778.93	778.85	0.80%	--	--	--	--	--	--	--	--	--	--
270	201	746.23	745.96	0.55%	--	--	--	--	--	--	--	--	--	--
302	301T	743.05	742.93	0.55%	--	--	--	--	--	--	--	--	--	--
303	302	743.21	743.05	0.43%	--	--	--	--	--	--	--	--	--	--
304	303	743.71	743.21	0.51%	--	--	--	--	--	--	--	--	--	--
306	303D	774.21	773.97	0.89%	--	--	--	--	--	--	--	--	--	--
311	306	774.32	774.21	0.79%	--	--	--	--	--	--	--	--	--	--
312	311	774.64	774.32	0.94%	--	--	--	--	--	--	--	--	--	--
324	314C	778.85	775.05	4.93%	--	--	--	--	--	--	--	--	--	--
334	335	772.03	772.02	0.20%	--	--	--	--	--	--	--	--	--	--
335	335C	772.02	772.00	0.33%	--	--	--	--	--	--	--	--	--	--
337	337C	765.86	765.82	0.36%	--	--	--	--	--	--	--	--	--	--
339	340	757.50	754.17	2.73%	--	--	--	--	--	--	--	--	--	--
340	341	744.13	743.85	0.50%	--	--	--	--	--	--	--	--	--	--
341	342	743.85	743.82	0.25%	--	--	--	--	--	--	--	--	--	--
342	341	756.18	755.97	1.75%	--	--	--	12	--	--	--	--	--	--
345	346C	746.78	746.72	0.43%	--	--	--	--	--	--	--	--	--	--
346	345	749.04	748.99	0.33%	--	--	--	--	--	--	--	--	--	--
347	361C	740.27	740.19	0.47%	--	--	--	--	--	--	--	--	--	--
348	347	740.57	740.27	0.38%	--	--	--	--	--	--	--	--	--	--
353	409	744.63	744.00	4.85%	--	--	--	--	--	--	--	--	--	--
354	348	741.43	740.58	0.40%	--	--	--	--	--	--	--	--	--	--
355	354	741.73	741.43	0.29%	--	--	--	--	--	--	--	--	--	--
357	355	741.95	741.73	0.22%	--	--	--	--	--	--	--	--	--	--
358	357	742.05	741.95	0.24%	--	--	--	--	--	--	--	--	--	--
359	358	742.14	742.05	0.27%	--	--	--	--	--	--	--	--	--	--
360	359	742.57	742.39	0.27%	--	--	--	--	--	--	--	--	--	--
388	355	743.55	742.94	3.21%	--	--	--	--	--	--	--	--	--	--
369	354	743.00	741.43	9.24%	--	--	--	--	--	--	--	--	--	--
636	636P	745.33	744.29	2.08%	--	--	--	--	--	--	--	--	--	--
401	339	757.79	757.75	0.40%	--	--	--	--	--	--	--	--	--	--
406	402	745.39	744.94	0.85%	--	--	--	--	--	--	--	--	--	--
403	345	747.79	746.78	1.94%	--	--	--	--	--	--	--	--	--	--
404	407	746.00	745.91	0.64%	--	--	--	--	--	--	--	--	--	--
405	402	746.17	744.94	2.02%	--	--	--	--	--	--	--	--	--	--
406	402	745.39	744.94	0.85%	--	--	--	--	--	--	--	--	--	--
402	340	744.94	744.63	0.65%	--	--	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL USH10/STH 441 MAINLINE					--	--	--	12	--	--	--	--	--	--
STAGE 3B														
636C	636B	744.29	743.80	1.95%	--	--	--	--	--	--	--	--	--	--
STAGE 3B SUBTOTAL USH10/STH 441 MAINLINE					-- --	--	--	--	--	--	--	--	--	--
USH10/STH 441 MAINLINE SUBTOTALS					437	62	--	12	266	425	110	203	365	222

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	608.0360 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 60-INCH LF	608.0396 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 96-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	610.0138 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 38X60-INCH LF	SPV.0060.113 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 38X60-INCH LF	610.0148 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 48X76-INCH LF
CONNECTOR ROAD (TAYCO - CTH P)														
STAGE 2A														
233	280	751.23	750.85	0.46%	--	--	--	--	--	--	--	--	--	--
233	233T	752.38	752.00	0.17%	--	--	--	--	--	--	--	--	--	--
248	280	752.64	752.60	0.31%	--	--	--	--	--	--	--	--	--	--
253	280	753.28	752.60	1.42%	--	--	--	--	--	--	--	--	--	--
254	282	755.61	755.49	0.57%	--	--	--	--	--	--	--	--	--	--
255	254	755.85	755.61	0.89%	--	--	--	--	--	--	--	--	--	--
256	258	754.08	753.45	3.32%	--	--	--	--	--	--	--	--	--	--
257	282	756.21	755.49	1.47%	--	--	--	--	--	--	--	--	--	--
274	275	756.99	755.90	3.63%	--	--	--	--	--	--	--	--	--	--
280	280P	750.85	750.47	0.48%	--	--	--	--	--	--	--	--	--	--
282	256	755.24	754.08	3.05%	--	--	--	--	--	--	--	--	--	--
259	233	752.69	752.38	0.47%	--	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)					--	--	--	--	--	--	--	--	--	--
STAGE 3A														
212	239	754.27	754.17	0.40%	--	--	--	--	--	--	--	--	--	--
216P	216	748.08	748.07	0.12%	--	--	--	--	--	--	--	--	--	--
216	214	748.07	748.00	0.11%	--	--	--	--	--	--	--	--	--	--
214	215	748.00	747.87	0.15%	--	--	--	--	--	--	--	--	--	--
215	263	746.64	746.35	0.48%	--	--	--	--	--	--	--	--	--	--
207	225	754.30	754.21	0.43%	--	--	--	--	--	--	--	--	--	--
225	226	754.21	753.98	1.77%	--	--	--	--	--	--	--	--	--	--
226	227	753.98	753.77	0.55%	--	--	--	--	--	--	--	--	--	--
227	228	753.52	753.31	0.46%	--	--	--	--	--	--	--	--	--	--
228	229	752.12	751.86	0.46%	--	--	--	--	--	--	--	--	--	--
229	243	748.28	747.84	0.47%	--	--	--	--	--	--	--	--	--	--
230	229	748.91	748.28	0.48%	--	--	--	--	--	--	--	--	--	--
231	230	749.40	748.91	0.47%	--	--	--	--	--	--	--	--	--	--
232	231	750.22	749.40	0.48%	--	--	--	--	--	--	--	--	--	--
234	228	755.98	755.92	0.32%	--	--	--	--	--	--	--	--	--	--
235	234	756.00	755.98	0.22%	--	--	--	--	--	--	--	--	--	--
236	237	753.55	753.44	0.55%	--	--	--	--	--	--	--	--	--	--
237	400	753.44	753.23	0.55%	--	--	--	--	--	--	--	--	--	--
238	229	752.93	752.11	1.71%	--	--	--	--	--	--	--	--	--	--
239	240	754.17	753.83	2.27%	--	--	--	--	--	--	--	--	--	--
240	241	753.83	752.84	2.61%	--	--	--	--	--	--	--	--	--	--
241	242	752.84	752.68	0.42%	--	--	--	--	--	--	--	--	--	--
242	243	752.43	751.74	0.93%	--	--	--	--	--	--	--	--	--	--
243	262	746.51	746.35	0.33%	--	--	--	--	--	--	--	--	--	--
244	231	754.93	754.84	1.12%	--	--	--	--	--	--	--	--	--	--
245	244	753.89	753.22	1.00%	--	--	67	--	--	--	--	--	--	--
246	247	752.47	752.26	0.43%	--	--	--	--	--	--	--	--	--	--
247	232	752.01	751.97	0.31%	--	--	--	--	--	--	--	--	--	--
249	232	751.99	751.97	0.25%	--	--	--	--	--	--	--	--	--	--
250	249	752.04	751.99	0.36%	--	--	--	--	--	--	--	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	608.0360 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 60-INCH LF	608.0396 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 96-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	610.0138 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 38X60-INCH LF	SPV.0060.113 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 38X60-INCH LF	610.0148 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS III 48X76-INCH LF
251	252	752.71	752.45	0.46%	--	--	--	--	--	--	--	--	--	--
252	250	752.15	752.04	0.41%	--	--	--	--	--	--	--	--	--	--
258	258C	754.14	754.09	0.45%	--	--	--	--	--	--	--	--	--	--
260	244	753.65	753.22	0.49%	--	--	--	--	--	--	--	--	--	--
264	225	756.33	754.21	3.85%	--	--	--	--	--	--	--	--	--	--
400	238	753.23	753.18	0.45%	--	--	--	--	--	--	--	--	--	--
280C	232	750.47	750.22	0.48%	--	--	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)					--	--	67	--	--	--	--	--	--	--
CONNECTOR ROAD (TAYCO - CTH P) SUBTOTALS					--	--	67	--	--	--	--	--	--	--
PROJECT 1517-75-75 TOTALS					-- 437	62	67	12	266	425	110	203	365	222

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	610.0429 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 29X45-INCH LF	SPV.0090.108 SMOOTH STEEL PIPE 42-INCH JACKED LF	SPV.0090.107 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 96-INCH LF
USH10/STH 441 MAINLINE							
STAGE 1B							
388	398	745.00	744.23	0.48%	--	--	--
398	398C	744.23	743.30	0.43%	--	--	--
STAGE 1B SUBTOTAL USH10/STH 441 MAINLINE					--	--	--
STAGE 2A							
100	101	756.90	756.68	0.47%	--	--	--
101	102	756.68	756.13	1.67%	--	--	--
102	108	756.13	756.01	0.35%	--	--	--
103	102	756.26	756.13	0.72%	--	--	--
104	107	760.30	760.15	0.20%	--	--	--
105	106	762.96	761.26	2.00%	--	--	--
301V	305C	769.42	769.15	0.60%	--	--	--
313C	314	775.46	774.66	0.78%	--	--	--
314	315	774.66	774.31	0.90%	--	--	--
314P	314	775.05	774.66	4.87%	--	--	--
315	316	774.31	774.15	0.80%	--	--	--
316	317	774.15	774.13	0.33%	--	--	--
317	318	773.39	772.93	0.44%	--	--	--
318	319	772.93	772.10	0.39%	--	--	--
319	320	772.10	771.11	0.59%	--	--	--
320	321	771.11	770.17	0.58%	--	--	--
321	331	770.16	768.75	1.62%	--	--	--
322C	321	777.13	776.73	0.74%	--	--	--
323	317	774.35	774.14	0.27%	--	--	--
325C	326	776.76	776.61	0.45%	--	--	--
326	318	776.36	776.34	0.33%	--	--	--
328	329	779.02	778.28	2.18%	--	--	--
327C	319	776.95	776.87	0.25%	--	--	--
329	321	778.03	778.00	0.50%	--	--	--
330	329	778.34	778.28	0.46%	--	--	--
331	384	761.08	760.90	0.47%	--	--	--
332C	385	775.40	772.26	3.53%	--	--	--
336	386	771.72	771.32	0.50%	--	--	--
338	387	765.82	765.24	0.67%	--	--	--
346	346M	746.72	745.53	0.58%	--	--	--
346M	342	742.33	741.13	1.25%	--	--	--
342	342M	740.63	738.98	0.61%	--	--	--
342M	342E	738.98	738.18	0.52%	--	--	--
361	362	740.18	739.95	0.36%	--	--	--
362	513	739.95	739.80	0.18%	--	--	--
363	362	740.50	739.95	0.19%	--	--	--
364	363	740.91	740.50	0.20%	--	--	--
364C	364	741.45	741.13	0.50%	--	--	--
365	364	741.05	740.91	0.14%	--	--	--
366	365	741.21	741.10	0.17%	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	610.0429 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 29X45-INCH LF	SPV.0090.108 SMOOTH STEEL PIPE 42-INCH JACKED LF	SPV.0090.107 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 96-INCH LF
367	366	741.33	741.21	0.17%	--	--	--
368	367	741.57	741.33	0.19%	--	--	--
390C	512	743.15	742.65	6.25%	--	--	--
512	363	742.29	741.61	4.25%	--	--	--
380	367	742.48	741.40	2.77%	--	--	--
382	368	741.68	741.57	0.18%	--	--	--
389	390	744.41	744.31	0.40%	--	--	--
390C	370	749.31	749.20	0.73%	--	--	--
390	391	744.31	744.00	0.47%	--	--	--
391B	610	745.00	742.03	3.81%	--	--	--
391	396C	743.94	743.79	1.88%	--	--	--
392C	365	741.14	741.05	0.56%	--	--	--
394	391	744.31	744.00	0.48%	--	--	--
396	394	744.38	744.31	0.39%	--	--	--
397	396	745.03	744.63	1.74%	--	--	--
399C	380	744.14	743.77	4.63%	--	--	--
500	501	754.27	754.00	1.23%	--	--	--
502	500	754.55	754.27	0.48%	--	--	--
503	523	731.62	731.50	0.14%	--	--	--
504	503	732.40	731.87	0.14%	--	--	176
508	513	748.69	748.50	0.73%	--	--	--
509	511	749.50	749.32	0.58%	--	--	--
370	395	743.06	742.85	1.24%	--	--	--
510	520	739.18	738.65	0.20%	--	--	--
395	512	742.85	742.65	0.41%	--	--	--
513	511	739.80	739.52	0.20%	--	--	--
520	520C	738.65	738.50	0.14%	--	--	--
511	510	739.52	739.18	0.19%	--	--	--
601	600	742.12	742.04	0.27%	--	--	--
601C	601	743.70	743.63	0.44%	--	--	--
600	382	742.04	741.98	0.27%	--	--	--
608	699	750.51	748.71	4.62%	--	--	--
609	610	742.11	742.03	0.73%	--	--	--
610	368	742.03	741.96	0.09%	--	--	--
601P	601	743.79	743.62	2.13%	--	--	--
699	609	742.46	742.11	1.75%	--	--	--
505P	505	743.31	742.32	0.58%	--	--	--
507P	507	740.94	740.88	0.08%	--	--	--
699C	699	743.46	743.46	0.03%	--	--	--
STAGE 2A SUBTOTAL USH10/STH 441 MAINLINE					--	--	176
STAGE 2C							
305	305E	769.66	769.42	0.55%	--	--	--
309	305	770.57	770.15	1.68%	--	--	--
310	309	771.16	770.82	1.26%	--	--	--
STAGE 2C SUBTOTAL USH10/STH 441 MAINLINE					--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	610.0429 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 29X45-INCH LF	SPV.0090.108 SMOOTH STEEL PIPE 42-INCH JACKED LF	SPV.0090.107 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 96-INCH LF
STAGE 3A							
201	304	744.71	743.71	0.47%	--	--	--
202	201	746.30	745.71	0.30%	--	--	--
202T	202	746.35	746.30	0.25%	--	--	--
203	324	778.93	778.85	0.80%	--	--	--
270	201	746.23	745.96	0.55%	--	--	--
302	301T	743.05	742.93	0.55%	--	--	--
303	302	743.21	743.05	0.43%	--	--	--
304	303	743.71	743.21	0.51%	--	--	--
306	303D	774.21	773.97	0.89%	--	--	--
311	306	774.32	774.21	0.79%	--	--	--
312	311	774.64	774.32	0.94%	--	--	--
324	314C	778.85	775.05	4.93%	--	--	--
334	335	772.03	772.02	0.20%	--	--	--
335	335C	772.02	772.00	0.33%	--	--	--
337	337C	765.86	765.82	0.36%	--	--	--
339	340	757.50	754.17	2.73%	--	--	--
340	341	744.13	743.85	0.50%	--	--	--
341	342	743.85	743.82	0.25%	--	--	--
342	341	756.18	755.97	1.75%	--	--	--
345	346C	746.78	746.72	0.43%	--	--	--
346	345	749.04	748.99	0.33%	--	--	--
347	361C	740.27	740.19	0.47%	--	--	--
348	347	740.57	740.27	0.38%	--	--	--
353	409	744.63	744.00	4.85%	--	--	--
354	348	741.43	740.58	0.40%	--	--	--
355	354	741.73	741.43	0.29%	--	--	--
357	355	741.95	741.73	0.22%	--	--	--
358	357	742.05	741.95	0.24%	--	--	--
359	358	742.14	742.05	0.27%	--	--	--
360	359	742.57	742.39	0.27%	--	--	--
388	355	743.55	742.94	3.21%	--	--	--
369	354	743.00	741.43	9.24%	--	--	--
636	636P	745.33	744.29	2.08%	--	--	--
401	339	757.79	757.75	0.40%	--	--	--
406	402	745.39	744.94	0.85%	--	--	--
403	345	747.79	746.78	1.94%	--	--	--
404	407	746.00	745.91	0.64%	--	--	--
405	402	746.17	744.94	2.02%	--	--	--
406	402	745.39	744.94	0.85%	--	--	--
402	340	744.94	744.63	0.65%	--	--	--
STAGE 3A SUBTOTAL USH10/STH 441 MAINLINE					--	--	--
STAGE 3B							
636C	636B	744.29	743.80	1.95%	--	--	--
STAGE 3B SUBTOTAL USH10/STH 441 MAINLINE					--	--	--
USH10/STH 441 MAINLINE SUBTOTALS					--	--	176

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	610.0429 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 29X45-INCH LF	SPV.0090.108 SMOOTH STEEL PIPE 42-INCH JACKED LF	SPV.0090.107 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 96-INCH LF
CONNECTOR ROAD (TAYCO - CTH P)							
STAGE 2A							
233	280	751.23	750.85	0.46%	--	--	--
233	233T	752.38	752.00	0.17%	--	--	--
248	280	752.64	752.60	0.31%	--	--	--
253	280	753.28	752.60	1.42%	--	--	--
254	282	755.61	755.49	0.57%	--	--	--
255	254	755.85	755.61	0.89%	--	--	--
256	258	754.08	753.45	3.32%	--	--	--
257	282	756.21	755.49	1.47%	--	--	--
274	275	756.99	755.90	3.63%	--	--	--
280	280P	750.85	750.47	0.48%	--	--	--
282	256	755.24	754.08	3.05%	--	--	--
259	233	752.69	752.38	0.47%	--	--	--
STAGE 2A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)					--	--	--
STAGE 3A							
212	239	754.27	754.17	0.40%	--	--	--
216P	216	748.08	748.07	0.12%	--	--	--
216	214	748.07	748.00	0.11%	--	--	--
214	215	748.00	747.87	0.15%	--	86	--
215	263	746.64	746.35	0.48%	--	--	--
207	225	754.30	754.21	0.43%	--	--	--
225	226	754.21	753.98	1.77%	--	--	--
226	227	753.98	753.77	0.55%	--	--	--
227	228	753.52	753.31	0.46%	--	--	--
228	229	752.12	751.86	0.46%	--	--	--
229	243	748.28	747.84	0.47%	--	--	--
230	229	748.91	748.28	0.48%	--	--	--
231	230	749.40	748.91	0.47%	--	--	--
232	231	750.22	749.40	0.48%	--	--	--
234	228	755.98	755.92	0.32%	--	--	--
235	234	756.00	755.98	0.22%	--	--	--
236	237	753.55	753.44	0.55%	--	--	--
237	400	753.44	753.23	0.55%	--	--	--
238	229	752.93	752.11	1.71%	--	--	--
239	240	754.17	753.83	2.27%	--	--	--
240	241	753.83	752.84	2.61%	--	--	--
241	242	752.84	752.68	0.42%	--	--	--
242	243	752.43	751.74	0.93%	--	--	--
243	262	746.51	746.35	0.33%	49	--	--
244	231	754.93	754.84	1.12%	--	--	--
245	244	753.89	753.22	1.00%	--	--	--
246	247	752.47	752.26	0.43%	--	--	--
247	232	752.01	751.97	0.31%	--	--	--
249	232	751.99	751.97	0.25%	--	--	--
250	249	752.04	751.99	0.36%	--	--	--

FROM STR	TO STR	INVERT ELEV FT	DISCH ELEV FT	SLOPE	610.0429 STORM SEWER PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 29X45-INCH LF	SPV.0090.108 SMOOTH STEEL PIPE 42-INCH JACKED LF	SPV.0090.107 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 96-INCH LF
251	252	752.71	752.45	0.46%	--	--	--
252	250	752.15	752.04	0.41%	--	--	--
258	258C	754.14	754.09	0.45%	--	--	--
260	244	753.65	753.22	0.49%	--	--	--
264	225	756.33	754.21	3.85%	--	--	--
400	238	753.23	753.18	0.45%	--	--	--
280C	232	750.47	750.22	0.48%	--	--	--
STAGE 3A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)					49	86	--
CONNECTOR ROAD (TAYCO - CTH P) SUBTOTALS					49	86	--
PROJECT 1517-75-75 TOTALS					49	86	176

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	SPV.0060.110 STORM SEWER PLUG EACH	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.103* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD)															
STAGE 1B															
388	214EB+47	31.2' LT	747.96	745.00	1.88	--	--	--	--	--	--	--	--	--	--
398	216EB+06	21.0' LT	749.03	744.23	3.97	1	--	--	--	--	--	--	--	--	--
398C	218EB+21	30.7' LT	--	743.30	--	1	1	--	--	--	--	--	--	--	--
STAGE 1B SUBTOTAL USH10/STH 441 MAINLINE						2	1	--	--	--	--	--	--	--	--
STAGE 2A															
100	11RRN+89	1.5' LT	761.17	756.90	3.19	--	--	--	--	--	--	--	--	--	--
101	196RNW+41	1.5' RT	762.54	756.68	5.03	--	--	--	--	--	--	--	--	--	--
102	196RNW+41	30.7' LT	762.45	756.13	5.49	--	--	--	--	--	--	--	--	--	--
103	196RNW+59	31.5' LT	762.32	756.26	5.23	--	--	--	--	--	--	--	--	--	--
104	195RNW+26	32.3' LT	764.47	760.30	2.92	--	--	--	--	--	--	--	--	--	--
105	193RNW+94	32.0' RT	767.47	762.96	3.26	--	--	--	--	--	--	--	--	--	--
106	193RNW+99		--	761.26	--	--	--	1	--	--	--	--	--	--	--
107	195RNW+29	42.3' RT	--	760.15	--	--	--	1	--	--	--	--	--	--	--
108	196RNW+35	64.0' LT	--	756.01	--	--	--	1	--	--	--	--	--	--	--
254	12RRN+66	1.5' LT	760.14	755.61	3.45	--	--	--	--	--	--	--	--	--	--
255	12RRN+55	21.5' RT	760.67	755.85	3.99	--	--	--	--	--	--	--	--	--	--
256	12RRN+92	36.0' RT	760.30	754.08	4.97	--	--	--	--	--	--	--	--	--	--
257	13RRN+38	1.5' LT	760.70	756.21	3.41	--	--	--	--	--	--	--	--	--	--
258	12RRN+95	54.0' RT	--	753.45	--	--	--	--	1	--	--	--	--	--	--
282	12RRN+87	1.5' LT	760.30	755.24	3.98	--	--	--	--	--	--	--	--	--	--
301V	128WB+74	11.0' LT	--	769.42		1	--	--	--	--	--	--	--	--	--
305C	182EB+87	29.8' LT	--	769.15	--	--	1	--	--	--	--	--	--	--	--
313C	186EB+35	32.0' LT	778.90	775.46	2.19	--	--	--	--	--	--	--	--	--	--
314	187WB+08	38.4' RT	780.29	774.66	4.38	--	--	--	--	--	--	--	--	--	--
314P	187EB+38	37.0' LT	--	775.05	--	1	--	--	--	--	--	--	--	--	--
315	187WB+43	22.0' RT	782.23	774.31	6.67	--	--	--	--	--	--	--	--	--	--
316	187WB+62	22.0' RT	782.24	774.15	6.84	--	--	--	--	--	--	--	--	--	--
317	187WB+62	16.0' RT	782.36	773.39	7.73	--	--	--	--	--	--	--	--	--	--
318	188WB+65	16.0' RT	783.01	772.93	8.84	--	--	--	--	--	--	--	--	--	--
319	190WB+75	18.0' RT	783.73	772.10	10.39	--	--	--	--	--	--	--	--	--	--
320	192WB+43	16.5' RT	783.80	771.11	11.45	--	--	--	--	--	--	--	--	--	--
321	194WB+04	16.0' RT	783.48	770.16	12.08	--	--	--	--	--	--	--	--	--	--
322C	195EB+10	38.0' LT	780.90	777.13	2.52	--	--	--	--	--	--	--	--	--	--
323	187EB+06	37.5' LT	779.03	774.35	3.85	--	--	--	--	--	--	--	--	--	--
325C	189EB+02	32.0' LT	779.96	776.76	1.95	--	--	--	--	--	--	--	--	--	--
326	188WB+65	22.0' RT	782.89	776.36	5.28	--	--	--	--	--	--	--	--	--	--
327C	191EB+21	38.0' LT	780.48	776.95	2.28	--	--	--	--	--	--	--	--	--	--
328	193WB+71	22.0' RT	783.40	779.02	3.13	--	--	--	--	--	--	--	--	--	--
329	194WB+04	22.2' RT	783.49	778.28	3.96	--	--	--	--	--	--	--	--	--	--
330	194EB+59	48.5' LT	782.49	778.34	2.90	--	--	--	--	--	--	--	--	--	--
331	194WB+04	70.7' LT	773.60	761.08	11.28	--	--	--	--	--	--	--	--	--	--
332C	198EB+44	37.0' LT	778.60	775.40	1.95	--	--	--	--	--	--	--	--	--	--
336	200WB+43	22.0' RT	777.09	771.72	4.12	--	--	--	--	--	--	--	--	--	--
338	203WB+42	22.0' RT	770.77	765.82	3.70	--	--	--	--	--	--	--	--	--	--
342	207WB+42	22.0' RT	761.25	740.63	19.37	1	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	SPV.0060.110 STORM SEWER PLUG EACH	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.103* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH
342E	204RNE+38	118.3' LT	--	738.18	--	--	--	--	--	--	1	--	--	--	--
342M	204RNW+96	17.0' RT	760.34	738.98	21.36	--	--	--	--	--	--	--	--	--	--
346	210WB+27	22.0' RT	753.48	746.72	5.51	1	--	--	--	--	--	--	--	--	--
346M	208WB+21	17.3' RT	758.49	742.33	16.16	--	1	--	--	--	--	--	--	--	--
361	212WB+58	22.0' RT	750.20	740.18	8.77	1	--	--	--	--	--	--	--	--	--
362	212WB+58	42.4' LT	752.23	739.95	11.03	--	--	--	--	--	--	--	--	--	--
363	215WB+51	42.2' LT	748.38	740.50	6.63	--	--	--	--	--	--	--	--	--	--
364	217WB+54	42.2' LT	746.79	740.91	4.64	--	--	--	--	--	--	--	--	--	--
364C	218EB+21	30.7' LT	--	741.45	--	--	1	--	--	--	--	--	--	--	--
364P	217WB+54	12.2' LT	--	741.81	--	1	--	--	--	--	--	--	--	--	--
365	218WB+56	42.2' LT	746.57	741.05	4.27	--	--	--	--	--	--	--	--	--	--
366	219WB+20	42.2' LT	746.53	741.21	4.07	--	--	--	--	--	--	--	--	--	--
367	219WB+90	42.2' LT	746.61	741.33	4.03	--	--	--	--	--	--	--	--	--	--
368	221WB+19	42.2' LT	747.18	741.57	4.37	--	--	--	--	--	--	--	--	--	--
370	216WB+15	65.6' LT	749.97	743.06	6.24	--	--	--	--	--	--	--	--	--	--
380	220WB+08	75.0' LT	757.81	742.48	14.09	--	--	--	--	--	--	--	--	--	--
382	221EB+96	40.2' LT	746.64	741.68	3.71	--	--	--	--	--	--	--	--	--	--
384	194WB+04	108.8' LT	--	760.90	--	--	--	--	--	--	--	--	--	--	--
385	197WB+72	56.3' LT	--	772.26	--	--	--	1	--	--	--	--	--	--	--
386	200WB+39	58.0' LT	--	771.32	--	--	--	1	--	--	--	--	--	--	--
387	203WB+43	64.3' LT	--	765.24	--	--	--	1	--	--	--	--	--	--	--
389	225WB+63	22.7'LT	748.61	744.41	4.20	--	--	--	--	--	--	--	--	--	--
390	225WB+88	19.7'LT	748.59	744.31	4.28	--	--	--	--	--	--	--	--	--	--
390C	215NWE+52	22.1' LT	--	749.31	--	--	1	--	--	--	--	--	--	--	--
391	226WB+54	22.6'LT	748.59	744.00	4.59	--	--	--	--	--	--	--	--	--	--
391B	222WB+77	51.8' LT	748.97	745.00	3.97	--	--	--	--	--	--	--	--	--	--
392C	218WB+69	103.1' LT	--	741.14	--	1	--	--	--	--	--	--	--	--	--
394	227WB+20	15.2'LT	748.33	744.31	4.02	--	--	--	--	--	--	--	--	--	--
395	216WB+00	57.4' LT	745.71	742.85	2.19	--	--	--	--	--	--	--	--	--	--
396	227WB+37	14.7'LT	748.33	744.38	3.95	--	--	--	--	--	--	--	--	--	--
396C	226WB+56	39.1' LT	--	743.79	--	--	1	--	--	--	--	--	--	--	--
397	227WB+60	22.4'LT	749.30	745.03	4.27	--	--	--	--	--	--	--	--	--	--
399C	220WB+15	79.6' LT	--	744.14	--	--	1	--	--	--	--	--	--	--	--
500	201RNE+23	21.0' LT	758.25	754.27	3.15	--	--	--	--	--	--	--	--	--	--
501	201RNE+23	42.5' LT	--	754.00	--	--	--	1	--	--	--	--	--	--	--
502	201RNE+81	21.0' LT	758.09	754.55	2.71	--	--	--	--	--	--	--	--	--	--
503	204RNE+82	81.8' LT	747.94	731.62	15.08	--	--	--	--	--	--	--	--	--	--
504	208RNE+37	35.2' LT	755.59	732.40	21.95	--	--	--	--	--	--	--	--	--	--
508	211RNE+72	5.0' RT	753.38	748.69	3.44	--	--	--	--	--	--	--	--	--	--
509	210RNE+34	9.8' RT	754.92	749.50	4.75	--	--	--	--	--	--	--	--	--	--
510	208RNE+63	57.9' LT	747.57	739.18	7.15	--	--	--	--	--	--	--	--	--	--
511	210RNE+34	21.0' LT	755.97	741.82	13.65	--	--	--	--	--	--	--	--	--	--
512	215WB+51	58.0' LT	746.28	742.29	3.49	--	--	--	--	--	--	--	--	--	--
513	211RNE+73	21.0' LT	753.49	739.80	12.69	--	--	--	--	--	--	--	--	--	--
520	206RNE+08	74.1' LT	746.50	738.65	6.61	--	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	SPV.0060.110 STORM SEWER PLUG EACH	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.103* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH
520C	205RNE+23	136.2' LT	--	738.50	--	--	--	--	--	--	--	--	1	--	--
523	204RNE+53	163.6' RT	--	731.50	--	--	--	--	--	--	--	--	--	--	--
600	222EB+09	22.5'LT	746.67	742.04	3.38	--	--	--	--	--	--	--	--	--	--
601	222EB+38	16.0' LT	747.06	742.12	4.94	--	--	--	--	--	--	--	--	--	--
601C	222EB+38	29.8' LT	--	743.70	--	--	1	--	--	--	--	--	--	--	--
608	222WB+20	99.9' LT	755.13	750.51	3.95	--	--	--	--	--	--	--	--	--	--
609	221WB+99	54.4' LT	750.42	742.11	7.64	--	--	--	--	--	--	--	--	--	--
610	221WB+99	43.2' LT	747.44	742.03	4.16	--	--	--	--	--	--	--	--	--	--
601P	222EB+38	8.0' LT	--	743.79	--	--	1	--	--	--	--	--	--	--	--
699	222WB+18	60.5' LT	753.20	742.46	9.50	--	--	--	--	--	--	--	--	--	--
699C	222WB+23	60.5' LT	--	743.46	--	--	1	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL USH10/STH 441 MAINLINE						7	9	7	1	--	1	--	1	--	--
STAGE 2C															
305	182WB+74	43.8' LT	775.69	769.66	4.78	--	--	--	--	--	--	--	--	--	--
305E	182WB+74	11.0' LT	--	769.42	--	--	1	--	--	--	--	--	--	--	--
309	182WB+99	46.0' LT	775.67	770.82	3.60	--	--	--	--	--	--	--	--	--	--
310	183WB+26	46.5' LT	775.69	771.16	3.28	--	--	--	--	--	--	--	--	--	--
322	195EB+10	38.0' LT	782.15	777.13	--	--	--	--	--	--	--	--	--	--	--
STAGE 2C SUBTOTAL USH10/STH 441 MAINLINE						--	1	--	--	--	--	--	--	--	--
STAGE 3A															
201	187RSW+72	176.0' RT	758.35	744.71	12.40	--	--	--	--	--	--	--	--	--	--
202	189RSW+75	209.5' RT	751.00	746.30	3.46	--	--	--	--	--	--	--	--	--	--
202T	189RSW+55	206.4' RT	--	746.35	--	--	--	--	--	--	1	--	--	--	--
203	187EB+38	47.0' RT	784.08	778.93	4.32	--	--	--	--	--	--	--	--	--	--
270	187RSW+71	225.0'RT	--	746.23	--	--	--	--	--	--	1	--	--	--	--
270PG	187RSW+71	225.0'RT	--	--	--	--	--	--	--	--	--	--	--	--	--
300M	179EB+85	98.7' RT	748.50	--	--	--	--	--	--	--	--	--	--	--	--
301	182EB+93	124.8' RT	756.50	--	--	--	--	--	--	--	--	--	--	--	--
301T	184RSW+34	79.9' RT	754.56	--	--	--	--	--	--	--	--	--	--	--	--
305D	182EB+87	29.8'LT	779.25	--	--	--	--	--	--	--	--	--	--	--	--
302	184RSW+51	93.5' RT	749.79	743.05	5.91	--	--	--	--	--	--	--	--	--	--
303	184RSW+88	100.7' RT	749.77	743.21	5.73	--	--	--	--	--	--	--	--	--	--
304	185RSW+79	136.0' RT	752.54	743.71	8.16	--	--	--	--	--	--	--	--	--	--
306	183EB+13	40.3' LT	778.91	774.21	3.45	--	--	--	--	--	--	--	--	--	--
311	183EB+24	31.7' LT	779.10	774.32	3.53	--	--	--	--	--	--	--	--	--	--
312	183EB+59	31.7' LT	779.14	774.64	3.25	--	--	--	--	--	--	--	--	--	--
313	186EB+35	32.0' LT	780.08	--	--	--	--	--	--	--	--	--	--	--	--
314C	187EB+38	37.0' LT	--	775.05	--	--	1	--	--	--	--	--	--	--	--
322C	195EB+10	38.0' LT	780.90	777.13	2.52	--	1	--	--	--	--	--	--	--	--
324	187EB+38	37.5' RT	783.79	778.85	4.11	--	--	--	--	--	--	--	--	--	--
325	189EB+01	31.8 'RT	779.98	--	--	--	--	--	--	--	--	--	--	--	--
327	191EB+20	37.8' LT	780.48	--	--	--	--	--	--	--	--	--	--	--	--
332	198EB+23	37.6' LT	778.60	--	--	--	--	--	--	--	--	--	--	--	--
334	201EB+23	23.5' LT	776.74	772.03	3.46	--	--	--	--	--	--	--	--	--	--
335	201EB+23	29.0' RT	777.09	772.02	3.82	--	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	SPV.0060.110 STORM SEWER PLUG EACH	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.103* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH
335C	200WB+43	22.0' RT	--	772.00	--	--	1	--	--	--	--	--	--	--	--
337	204EB+23	22.3' LT	770.30	765.86	3.19	--	--	--	--	--	--	--	--	--	--
337C	203WB+42	22.0' RT	--	765.82	--	--	1	--	--	--	--	--	--	--	--
339	206RSE+92	13.9' LT	762.71	757.50	4.38	--	--	--	--	--	--	--	--	--	--
340	208RSE+13	8.7' LT	758.91	744.13	13.53	--	--	--	--	--	--	--	--	--	--
341	208EB+05	21.0' RT	760.85	743.85	15.75	--	--	--	--	--	--	--	--	--	--
341C	207WB+24	25.4' RT	--	755.97	--	--	1	--	--	--	--	--	--	--	--
342	207WB+24	22.0' RT	--	743.82	--	--	1	--	--	--	--	--	--	--	--
345	211EB+00	22.0' LT	754.11	746.78	6.08	--	--	--	--	--	--	--	--	--	--
346C	210WB+27	22.0' RT	--	746.72	--	--	1	--	--	--	--	--	--	--	--
347	213EB+25	22.0' LT	748.34	740.27	6.83	--	--	--	--	--	--	--	--	--	--
348	214EB+04	22.0' LT	747.91	740.57	6.10	--	--	--	--	--	--	--	--	--	--
349	216EB+19	16.0' LT	747.65	741.25	5.16	--	--	--	--	--	--	--	--	--	--
353	214EB+05	46.0' RT	748.19	744.63	2.31	--	--	--	--	--	--	--	--	--	--
354	216EB+19	22.0' LT	745.31	741.43	2.63	--	--	--	--	--	--	--	--	--	--
355	217EB+00	44.9' RT	746.93	741.73	3.95	--	--	--	--	--	--	--	--	--	--
355P	217EB+00	13.0' LT	--	742.81	--	1	--	--	--	--	--	--	--	--	--
357	217EB+98	44.5' RT	746.54	741.95	3.34	--	--	--	--	--	--	--	--	--	--
358	218EB+40	44.5' RT	746.47	742.05	3.17	--	--	--	--	--	--	--	--	--	--
359	218EB+72	44.5' RT	746.45	742.39	2.81	--	--	--	--	--	--	--	--	--	--
360	219EB+39	44.5' RT	746.63	742.57	2.81	--	--	--	--	--	--	--	--	--	--
361C	213EB+25	37.7' LT	--	740.19	--	--	1	--	--	--	--	--	--	--	--
369	216EB+19	38.7' LT	745.82	743.00	1.57	--	--	--	--	--	--	--	--	--	--
388	217EB+00	61.1' RT	--	743.55	--	--	--	--	--	--	--	--	--	--	1
388PG	217EB+00	63.6' RT	--	--	--	--	--	--	--	--	--	--	--	--	--
401	206RSE+91	4.5' LT	762.20	757.79	3.58	--	--	--	--	--	--	--	--	--	--
402	208RSE+00	38.0' RT	754.54	744.94	8.36	--	--	--	--	--	--	--	--	--	--
403	211RSE+03	2.0' LT	751.79	747.79	2.75	--	--	--	--	--	--	--	--	--	--
404	212RSE+40	21.0' RT	748.88	746.00	1.63	--	--	--	--	--	--	--	--	--	--
405	207EB+49	74.7' RT	--	746.17	--	--	--	--	--	--	--	--	--	--	--
406	208RSE+50	59.9' RT	--	745.39	--	--	--	--	--	1	--	--	--	--	--
406PG	208RSE+50	50.9' RT	--	--	--	--	--	--	--	--	--	--	--	--	--
407	212RSE+40	36.0' RT	--	745.91	--	--	--	--	--	--	--	--	--	1	--
408PG	207EB+49	74.7' RT	--	--	--	--	--	--	--	--	--	--	--	--	--
409	214EB+04	58.6' RT	--	744.00	--	--	--	1	--	--	--	--	--	--	--
636	222EB+41	65.9' RT	--	745.33	--	--	--	--	--	1	--	--	--	--	--
636P	222EB+39	16.0' RT	--	744.29	--	--	1	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL USH10/STH 441 MAINLINE						1	9	1	--	2	2	--	--	1	1
STAGE 3B															
636C	222EB+39	16.0' RT	0.00	743.80		--	1	--	--	--	--	--	--	--	--
636B	222EB+38	8.0' LT	--	744.29	--	--	1	--	--	--	--	--	--	--	--
STAGE 3B SUBTOTAL						--	2	--	--	--	--	--	--	--	--
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD) SUBTOTALS						10	22	8	1	2	3	--	1	1	1

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	SPV.0060.110 STORM SEWER PLUG EACH	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.103* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH
CONNECTOR ROAD (TAYCO - CTH P)															
STAGE 2A															
259	252CSB+45	62.3' RT	--	752.69	--	--	--	--	--	--	--	1	--	--	--
259PG	252CSB+45	62.3' RT	--	--	--	--	--	--	--	--	--	--	--	--	--
233	252CSB+09	6.0' LT	758.37	751.23	5.90	--	--	--	--	--	--	--	--	--	--
233T	13RRN+35	91.9' RT	--	752.00	--	--	--	--	--	--	--	--	--	--	--
248	251CSB+27	18.5' LT	757.05	752.64	3.58	--	--	--	--	--	--	--	--	--	--
253	251CNB+27	25.5' RT	757.43	753.28	3.32	--	--	--	--	--	--	--	--	--	--
274	10RRN+25	31.5' RT	761.41	756.99	3.59	--	--	--	--	--	--	--	--	--	--
275	10RRN+25	61.0' RT	--	755.90	--	--	--	1	--	--	--	--	--	--	--
280	251CSB+27	6.0' RT	757.37	750.85	5.28	--	--	--	--	--	--	--	--	--	--
280P	250CSB+47	6.0' LT	--	750.47	--	1	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)						1	--	1	--	--	--	1	--	--	--
STAGE 3A															
207	244CNB+44	1.5' LT	758.46	754.30	3.33	--	--	--	--	--	--	--	--	--	--
212	18RSWC+17	13.5' LT	758.43	754.27	3.33	--	--	--	--	--	--	--	--	--	--
214	18RSWC+73	69.8' RT	758.23	748.00	8.99	--	--	--	--	--	--	--	--	--	--
215	17RSWC+88	69.5' RT	757.88	746.64	10.00	--	--	--	--	--	--	--	--	--	--
216	19RSWC+28	37.4' RT	758.00	748.07	8.69	--	--	--	--	--	--	--	--	--	--
216P	19RSWC+31	30.2' RT	--	748.08	--	1	--	--	--	--	--	--	--	--	--
225	244CNB+65	1.5' LT	758.49	754.21	3.45	--	--	--	--	--	--	--	--	--	--
226	244CSB+56	1.5' RT	758.68	753.98	3.87	--	--	--	--	--	--	--	--	--	--
227	244CSB+94	1.5' RT	758.96	753.52	4.61	--	--	--	--	--	--	--	--	--	--
228	245CSB+39	4.4' LT	759.41	752.12	6.05	--	--	--	--	--	--	--	--	--	--
229	245CSB+95	6.0' LT	759.53	748.28	10.01	--	--	--	--	--	--	--	--	--	--
230	247CSB+24	6.0' LT	758.85	748.91	8.70	--	--	--	--	--	--	--	--	--	--
231	248CSB+26	6.0' LT	757.96	749.40	7.32	--	--	--	--	--	--	--	--	--	--
232	249CSB+96	6.0' LT	756.75	750.22	5.29	--	--	--	--	--	--	--	--	--	--
280C	250CSB+47	6.0' LT	--	750.47	--	--	1	--	--	--	--	--	--	--	--
234	245CSB+51	18.5' LT	759.79	755.98	2.98	--	--	--	--	--	--	--	--	--	--
235	197RSW+02	18.3' LT	760.25	756.00	3.42	--	--	--	--	--	--	--	--	--	--
236	193RSE+87	15.9' RT	757.80	753.55	3.42	--	--	--	--	--	--	--	--	--	--
237	194RSE+09	16.3' RT	757.79	753.44	3.52	--	--	--	--	--	--	--	--	--	--
238	246CNB+00	25.5' RT	758.36	752.93	4.60	--	--	--	--	--	--	--	--	--	--
239	17RSWC+93	13.5' LT	758.60	754.17	3.60	--	--	--	--	--	--	--	--	--	--
240	17RSWC+84	1.5' LT	758.29	753.83	3.63	--	--	--	--	--	--	--	--	--	--
241	17RSWC+50	18.5' RT	757.76	752.84	4.09	--	--	--	--	--	--	--	--	--	--
242	17RSWC+11	18.5' RT	758.12	752.43	4.86	--	--	--	--	--	--	--	--	--	--
243	16RSWC+35	18.4' RT	759.94	747.84	11.27	--	--	--	--	--	--	--	--	--	--
244	248CSB+26	1.5' RT	757.71	754.93	1.95	--	--	--	--	--	--	--	--	--	--
245	248CSB+93	1.5' RT	757.16	753.89	2.44	--	--	--	--	--	--	--	--	--	--
246	249CSB+47	18.5' LT	756.63	752.47	3.33	--	--	--	--	--	--	--	--	--	--
247	249CSB+96	18.5' LT	756.44	752.01	3.60	--	--	--	--	--	--	--	--	--	--
249	249CSB+96	1.5' RT	756.78	751.99	3.96	--	--	--	--	--	--	--	--	--	--
250	249CNB+92	1.5' LT	757.29	752.04	4.42	--	--	--	--	--	--	--	--	--	--
251	249CNB+37	25.5' RT	756.91	752.71	3.37	--	--	--	--	--	--	--	--	--	--
252	249CNB+92	25.5' RT	756.81	752.15	3.83	--	--	--	--	--	--	--	--	--	--
258	18RSWC+51	1.5' RT	758.41	754.14	3.44	--	--	--	--	--	--	--	--	--	--
258C	18RSWC+63	1.6' LT	0.00	754.09		1	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	SPV.0060.110 STORM SEWER PLUG EACH	520.8000* CONCRETE COLLARS FOR PIPE EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.103* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH
260	248RSE+04	70.3' RT	--	753.65	--	--	--	--	--	1	--	--	--	--	--
260PG	248RSE+04	70.3' RT	--	--	--	--	--	--	--	--	--	--	--	--	--
262	16RSWC+39	66.6' RT	--	746.35	--	--	--	--	--	--	--	1	--	--	--
263	17RSWC+33	103.2' RT	--	746.35	--	--	--	--	--	--	--	--	--	--	--
264	244CNB+68	63.4' RT	--	756.33	--	--	--	1	--	--	--	--	--	--	--
400	194RSE+44	1.5' LT	758.47	753.23	4.41	--	--	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)						2	1	1	--	1	--	1	--	--	--
CONNECTOR ROAD (TAYCO - CTH P) SUBTOTALS						3	1	2	--	1	--	2	--	--	--
PROJECT 1571-75-75 TOTALS						13	23	10	1	3	3	2	1	1	1

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED CONCRETE 42-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0654 INLET COVERS TYPE V EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0652 INLET COVERS TYPE T EACH	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	611.8120.S COVER PLATE TEMPORARY EACH
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD)																				
STAGE 1B																				
388	214EB+47	31.2' LT	747.96	745.00	1.88	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--
398	216EB+06	21.0' LT	749.03	744.23	3.97	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
398C	218EB+21	30.7' LT	--	743.30	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--
STAGE 1B SUBTOTAL USH10/STH 441 MAINLINE						--	--	--	--	--	--	--	--	--	4	1	--	--	--	--
STAGE 2A																				
100	11RRN+89	1.5' LT	761.17	756.90	3.19	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
101	196RNW+41	1.5' RT	762.54	756.68	5.03	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
102	196RNW+41	30.7' LT	762.45	756.13	5.49	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
103	196RNW+59	31.5' LT	762.32	756.26	5.23	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
104	195RNW+26	32.3' LT	764.47	760.30	2.92	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
105	193RNW+94	32.0' RT	767.47	762.96	3.26	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
106	193RNW+99		--	761.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
107	195RNW+29	42.3' RT	--	760.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
108	196RNW+35	64.0' LT	--	756.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
254	12RRN+66	1.5' LT	760.14	755.61	3.45	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
255	12RRN+55	21.5' RT	760.67	755.85	3.99	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
256	12RRN+92	36.0' RT	760.30	754.08	4.97	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
257	13RRN+38	1.5' LT	760.70	756.21	3.41	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
258	12RRN+95	54.0' RT	--	753.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
282	12RRN+87	1.5' LT	760.30	755.24	3.98	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
301V	128WB+74	11.0' LT	--	769.42		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
305C	182EB+87	29.8' LT	--	769.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
313C	186EB+35	32.0' LT	778.90	775.46	2.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
314	187WB+08	38.4' RT	780.29	774.66	4.38	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--
314P	187EB+38	37.0' LT	--	775.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
315	187WB+43	22.0' RT	782.23	774.31	6.67	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
316	187WB+62	22.0' RT	782.24	774.15	6.84	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
317	187WB+62	16.0' RT	782.36	773.39	7.73	--	--	--	1	--	--	--	--	--	--	--	1	--	--	--
318	188WB+65	16.0' RT	783.01	772.93	8.84	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--
319	190WB+75	18.0' RT	783.73	772.10	10.39	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--
320	192WB+43	16.5' RT	783.80	771.11	11.45	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--
321	194WB+04	16.0' RT	783.48	770.16	12.08	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
322C	195EB+10	38.0' LT	780.90	777.13	2.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
323	187EB+06	37.5' LT	779.03	774.35	3.85	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
325C	189EB+02	32.0' LT	779.96	776.76	1.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
326	188WB+65	22.0' RT	782.89	776.36	5.28	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
327C	191EB+21	38.0' LT	780.48	776.95	2.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
328	193WB+71	22.0' RT	783.40	779.02	3.13	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
329	194WB+04	22.2' RT	783.49	778.28	3.96	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
330	194EB+59	48.5' LT	782.49	778.34	2.90	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
331	194WB+04	70.7' LT	773.60	761.08	11.28	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--
332C	198EB+44	37.0' LT	778.60	775.40	1.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
336	200WB+43	22.0' RT	777.09	771.72	4.12	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
338	203WB+42	22.0' RT	770.77	765.82	3.70	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
342	207WB+42	22.0' RT	761.25	740.63	19.37	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED CONCRETE 42-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0654 INLET COVERS TYPE V EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0652 INLET COVERS TYPE T EACH	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH
342E	204RNE+38	118.3' LT	--	738.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
342M	204RNW+96	17.0' RT	760.34	738.98	21.36	--	--	--	1	--	--	--	--	--	--	--	1	--	--
346	210WB+27	22.0' RT	753.48	746.72	5.51	--	--	--	--	1	--	--	--	--	--	1	--	--	--
346M	208WB+21	17.3' RT	758.49	742.33	16.16	--	--	--	1	--	--	--	--	--	--	--	--	--	1
361	212WB+58	22.0' RT	750.20	740.18	8.77	--	--	--	--	1	--	--	--	--	--	--	--	--	--
362	212WB+58	42.4' LT	752.23	739.95	11.03	--	--	--	--	1	--	--	--	--	--	--	--	--	--
363	215WB+51	42.2' LT	748.38	740.50	6.63	--	--	--	--	1	--	--	--	--	--	--	--	--	1
364	217WB+54	42.2' LT	746.79	740.91	4.64	--	--	--	--	1	--	--	--	--	--	--	--	--	1
364C	218EB+21	30.7' LT	--	741.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
364P	217WB+54	12.2' LT	--	741.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
365	218WB+56	42.2' LT	746.57	741.05	4.27	--	--	--	--	1	--	--	--	--	--	--	--	--	1
366	219WB+20	42.2' LT	746.53	741.21	4.07	--	--	--	--	1	--	--	--	--	--	--	--	--	1
367	219WB+90	42.2' LT	746.61	741.33	4.03	--	--	--	--	1	--	--	--	--	--	--	--	--	1
368	221WB+19	42.2' LT	747.18	741.57	4.37	--	--	--	1	--	--	--	--	--	--	--	--	--	1
370	216WB+15	65.6' LT	749.97	743.06	6.24	--	--	1	--	--	--	--	--	--	--	--	--	--	--
380	220WB+08	75.0' LT	757.81	742.48	14.09	--	--	1	--	--	--	--	--	--	--	--	--	1	--
382	221EB+96	40.2' LT	746.64	741.68	3.71	--	--	--	--	--	--	--	--	--	--	--	--	1	--
384	194WB+04	108.8' LT	--	760.90	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
385	197WB+72	56.3' LT	--	772.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
386	200WB+39	58.0' LT	--	771.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
387	203WB+43	64.3' LT	--	765.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
389	225WB+63	22.7'LT	748.61	744.41	4.20	--	--	--	--	1	--	--	--	--	--	--	--	--	--
390	225WB+88	19.7'LT	748.59	744.31	4.28	--	--	--	--	1	--	--	--	--	--	--	--	--	--
390C	215NWE+52	22.1' LT	--	749.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
391	226WB+54	22.6'LT	748.59	744.00	4.59	--	--	1	--	--	--	--	--	--	--	1	--	--	--
391B	222WB+77	51.8' LT	748.97	745.00	3.97	--	--	--	--	--	--	--	--	--	2	--	--	--	--
392C	218WB+69	103.1' LT	--	741.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
394	227WB+20	15.2'LT	748.33	744.31	4.02	--	--	--	--	1	--	--	--	--	--	--	--	--	--
395	216WB+00	57.4' LT	745.71	742.85	2.19	--	--	--	--	--	--	--	--	--	2	--	--	--	--
396	227WB+37	14.7'LT	748.33	744.38	3.95	--	--	--	--	1	--	--	--	--	--	--	--	--	--
396C	226WB+56	39.1' LT	--	743.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
397	227WB+60	22.4'LT	749.30	745.03	4.27	--	--	--	--	--	--	--	--	--	1	--	--	--	--
399C	220WB+15	79.6' LT	--	744.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500	201RNE+23	21.0' LT	758.25	754.27	3.15	--	--	--	--	1	--	--	--	--	--	--	--	--	--
501	201RNE+23	42.5' LT	--	754.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
502	201RNE+81	21.0' LT	758.09	754.55	2.71	--	--	--	--	1	--	--	--	--	--	--	--	--	--
503	204RNE+82	81.8' LT	747.94	731.62	15.08	--	--	1	--	--	--	--	--	--	--	--	--	--	--
504	208RNE+37	35.2' LT	755.59	732.40	21.95	--	--	1	--	--	--	--	--	--	--	--	--	--	--
508	211RNE+72	5.0' RT	753.38	748.69	3.44	--	--	--	--	1	--	--	--	--	--	--	--	--	--
509	210RNE+34	9.8' RT	754.92	749.50	4.75	--	--	--	--	--	--	--	--	--	1	--	--	--	--
510	208RNE+63	57.9' LT	747.57	739.18	7.15	--	--	--	--	--	--	--	--	1	--	--	--	--	1
511	210RNE+34	21.0' LT	755.97	741.82	13.65	--	--	--	--	1	--	--	--	--	--	--	--	--	--
512	215WB+51	58.0' LT	746.28	742.29	3.49	--	--	--	--	--	--	--	--	1	--	--	1	--	--
513	211RNE+73	21.0' LT	753.49	739.80	12.69	--	--	--	--	1	--	--	--	--	--	--	--	--	--
520	206RNE+08	74.1' LT	746.50	738.65	6.61	--	--	1	--	--	--	--	--	--	--	--	--	--	1

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED CONCRETE 42-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0654 INLET COVERS TYPE V EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0652 INLET COVERS TYPE T EACH	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH
520C	205RNE+23	136.2' LT	--	738.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
523	204RNE+53	163.6' RT	--	731.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
600	222EB+09	22.5'LT	746.67	742.04	3.38	--	--	--	--	--	--	--	--	--	--	--	--	1	--
601	222EB+38	16.0' LT	747.06	742.12	4.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
601C	222EB+38	29.8' LT	--	743.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
608	222WB+20	99.9' LT	755.13	750.51	3.95	--	--	--	--	--	--	--	--	--	1	--	--	--	--
609	221WB+99	54.4' LT	750.42	742.11	7.64	--	--	--	--	--	--	--	--	--	2	--	--	--	--
610	221WB+99	43.2' LT	747.44	742.03	4.16	--	--	--	--	1	--	--	--	--	--	--	--	1	--
601P	222EB+38	8.0' LT	--	743.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
699	222WB+18	60.5' LT	753.20	742.46	9.50	--	--	1	--	--	--	--	--	--	--	--	--	1	--
699C	222WB+23	60.5' LT	--	743.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL USH10/STH 441 MAINLINE						1	--	8	8	30	4	2	4	2	6	7	3	7	9
STAGE 2C																			
305	182WB+74	43.8' LT	775.69	769.66	4.78	--	--	--	--	1	--	--	--	--	--	--	--	--	--
305E	182WB+74	11.0' LT	--	769.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
309	182WB+99	46.0' LT	775.67	770.82	3.60	--	--	--	--	1	--	--	--	--	--	--	--	--	--
310	183WB+26	46.5' LT	775.69	771.16	3.28	--	--	--	--	1	--	--	--	--	--	--	--	--	--
322	195EB+10	38.0' LT	782.15	777.13	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
STAGE 2C SUBTOTAL USH10/STH 441 MAINLINE						--	--	--	--	4	--	--	--	--	--	--	--	--	--
STAGE 3A																			
201	187RSW+72	176.0' RT	758.35	744.71	12.40	--	--	1	--	--	--	--	--	--	--	--	--	--	--
202	189RSW+75	209.5' RT	751.00	746.30	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--
202T	189RSW+55	206.4' RT	--	746.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
203	187EB+38	47.0' RT	784.08	778.93	4.32	--	--	--	--	--	--	1	--	--	--	--	--	--	--
270	187RSW+71	225.0'RT	--	746.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
270PG	187RSW+71	225.0'RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300M	179EB+85	98.7' RT	748.50	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
301	182EB+93	124.8' RT	756.50	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
301T	184RSW+34	79.9' RT	754.56	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
305D	182EB+87	29.8'LT	779.25	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
302	184RSW+51	93.5' RT	749.79	743.05	5.91	--	--	--	--	--	--	--	--	--	--	--	--	1	--
303	184RSW+88	100.7' RT	749.77	743.21	5.73	--	--	--	--	--	--	--	--	--	--	--	--	1	--
304	185RSW+79	136.0' RT	752.54	743.71	8.16	--	--	--	--	--	--	--	--	--	2	--	--	--	--
306	183EB+13	40.3' LT	778.91	774.21	3.45	--	--	--	--	1	--	--	--	--	--	--	--	--	--
311	183EB+24	31.7' LT	779.10	774.32	3.53	--	--	--	--	1	--	--	--	--	--	--	--	--	--
312	183EB+59	31.7' LT	779.14	774.64	3.25	--	--	--	--	1	--	--	--	--	--	--	--	--	--
313	186EB+35	32.0' LT	780.08	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
314C	187EB+38	37.0' LT	--	775.05	--	--	--	--	--	--	--	--	--	--					
322C	195EB+10	38.0' LT	780.90	777.13	2.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--
324	187EB+38	37.5' RT	783.79	778.85	4.11	--	--	--	--	--	--	1	--	--	--	--	--	--	--
325	189EB+01	31.8 'RT	779.98	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
327	191EB+20	37.8' LT	780.48	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
332	198EB+23	37.6' LT	778.60	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--
334	201EB+23	23.5' LT	776.74	772.03	3.46	--	--	--	--	1	--	--	--	--	--	--	--	--	--
335	201EB+23	29.0' RT	777.09	772.02	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED CONCRETE 42-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0654 INLET COVERS TYPE V EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0652 INLET COVERS TYPE T EACH	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH
335C	200WB+43	22.0' RT	--	772.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
337	204EB+23	22.3' LT	770.30	765.86	3.19	--	--	--	--	1	--	--	--	--	--	--	--	--	--
337C	203WB+42	22.0' RT	--	765.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
339	206RSE+92	13.9' LT	762.71	757.50	4.38	--	--	--	--	--	--	1	--	--	--	--	--	--	--
340	208RSE+13	8.7' LT	758.91	744.13	13.53	--	--	--	--	1	--	--	--	--	--	--	1	--	--
341	208EB+05	21.0' RT	760.85	743.85	15.75	--	--	--	--	1	--	--	--	--	--	--	--	1	--
341C	207WB+24	25.4' RT	--	755.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
342	207WB+24	22.0' RT	--	743.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
345	211EB+00	22.0' LT	754.11	746.78	6.08	--	--	--	--	1	--	--	--	--	--	--	--	--	--
346C	210WB+27	22.0' RT	--	746.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
347	213EB+25	22.0' LT	748.34	740.27	6.83	--	--	--	--	--	--	--	--	--	--	--	1	--	--
348	214EB+04	22.0' LT	747.91	740.57	6.10	--	--	--	--	1	--	--	--	--	--	1	--	--	--
349	216EB+19	16.0' LT	747.65	741.25	5.16	--	--	--	1	--	--	--	--	--	--	--	--	1	--
353	214EB+05	46.0' RT	748.19	744.63	2.31	--	--	--	--	1	--	--	--	--	--	--	--	--	--
354	216EB+19	22.0' LT	745.31	741.43	2.63	--	--	--	--	--	--	--	--	--	--	--	1	--	--
355	217EB+00	44.9' RT	746.93	741.73	3.95	--	--	--	--	1	--	--	--	--	--	--	1	--	--
355P	217EB+00	13.0' LT	--	742.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
357	217EB+98	44.5' RT	746.54	741.95	3.34	--	--	--	--	1	--	--	--	--	--	--	--	--	--
358	218EB+40	44.5' RT	746.47	742.05	3.17	--	--	--	--	1	--	--	--	--	--	--	--	--	--
359	218EB+72	44.5' RT	746.45	742.39	2.81	--	--	--	--	1	--	--	--	--	--	--	--	--	--
360	219EB+39	44.5' RT	746.63	742.57	2.81	--	--	--	--	1	--	--	--	--	--	--	--	--	--
361C	213EB+25	37.7' LT	--	740.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
369	216EB+19	38.7' LT	745.82	743.00	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
388	217EB+00	61.1' RT	--	743.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
388PG	217EB+00	63.6' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
401	206RSE+91	4.5' LT	762.20	757.79	3.58	--	--	--	--	--	--	1	--	--	--	--	--	--	--
402	208RSE+00	38.0' RT	754.54	744.94	8.36	--	--	1	--	--	--	--	--	--	--	--	1	--	--
403	211RSE+03	2.0' LT	751.79	747.79	2.75	--	--	--	--	1	--	--	--	--	--	--	--	--	--
404	212RSE+40	21.0' RT	748.88	746.00	1.63	--	--	--	--	1	--	--	--	--	--	--	--	--	--
405	207EB+49	74.7' RT	--	746.17	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
406	208RSE+50	59.9' RT	--	745.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
406PG	208RSE+50	50.9' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
407	212RSE+40	36.0' RT	--	745.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
408PG	207EB+49	74.7' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
409	214EB+04	58.6' RT	--	744.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
636	222EB+41	65.9' RT	--	745.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
636P	222EB+39	16.0' RT	--	744.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL USH10/STH 441 MAINLINE						1	--	4	1	22	--	4	--	1	2	1	5	4	--
STAGE 3B																			
636C	222EB+39	16.0' RT	0.00	743.80		--	--	--	--	--	--	--	--	--	--	--	--	--	--
636B	222EB+38	8.0' LT	--	744.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 3B SUBTOTAL						--	--	--	--	--	--	--	--	--	--	--	--	--	--
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD) SUBTOTALS						2	--	12	9	56	4	6	4	3	12	9	8	11	9

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED CONCRETE 42-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0654 INLET COVERS TYPE V EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0652 INLET COVERS TYPE T EACH	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH
CONNECTOR ROAD (TAYCO - CTH P)																			
STAGE 2A																			
259	252CSB+45	62.3' RT	--	752.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
259PG	252CSB+45	62.3' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
233	252CSB+09	6.0' LT	758.37	751.23	5.90	--	--	--	1	--	--	--	--	--	--	--	--	1	--
233T	13RRN+35	91.9' RT	--	752.00	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
248	251CSB+27	18.5' LT	757.05	752.64	3.58	--	--	--	--	--	--	1	--	--	--	--	--	--	--
253	251CNB+27	25.5' RT	757.43	753.28	3.32	--	--	--	--	--	--	1	--	--	--	--	--	--	--
274	10RRN+25	31.5' RT	761.41	756.99	3.59	--	--	--	--	--	--	1	--	--	--	--	--	--	--
275	10RRN+25	61.0' RT	--	755.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
280	251CSB+27	6.0' RT	757.37	750.85	5.28	--	--	--	1	--	--	--	--	--	--	--	--	1	--
280P	250CSB+47	6.0' LT	--	750.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)						1	--	--	2	--	--	3	--	--	--	--	--	2	--
STAGE 3A																			
207	244CNB+44	1.5' LT	758.46	754.30	3.33	--	--	--	--	--	1	--	--	--	--	--	--	--	--
212	18RSWC+17	13.5' LT	758.43	754.27	3.33	--	--	--	--	--	1	--	--	--	--	--	--	--	--
214	18RSWC+73	69.8' RT	758.23	748.00	8.99	--	--	1	--	--	--	--	--	--	--	--	--	1	--
215	17RSWC+88	69.5' RT	757.88	746.64	10.00	--	--	1	--	--	--	--	--	--	--	--	--	1	--
216	19RSWC+28	37.4' RT	758.00	748.07	8.69	--	--	1	--	--	--	--	--	--	--	--	--	1	--
216P	19RSWC+31	30.2' RT	--	748.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
225	244CNB+65	1.5' LT	758.49	754.21	3.45	--	--	--	--	--	--	1	--	--	--	--	--	--	--
226	244CSB+56	1.5' RT	758.68	753.98	3.87	--	--	--	--	--	--	1	--	--	--	--	--	--	--
227	244CSB+94	1.5' RT	758.96	753.52	4.61	--	--	--	--	--	--	1	--	--	--	--	--	--	--
228	245CSB+39	4.4' LT	759.41	752.12	6.05	--	--	--	1	--	--	--	--	--	--	1	--	--	--
229	245CSB+95	6.0' LT	759.53	748.28	10.01	--	--	--	1	--	--	--	--	--	--	--	--	1	--
230	247CSB+24	6.0' LT	758.85	748.91	8.70	--	--	--	1	--	--	--	--	--	--	--	1	--	--
231	248CSB+26	6.0' LT	757.96	749.40	7.32	--	--	--	1	--	--	--	--	--	--	--	--	1	--
232	249CSB+96	6.0' LT	756.75	750.22	5.29	--	--	--	1	--	--	--	--	--	--	--	--	1	--
280C	250CSB+47	6.0' LT	--	750.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
234	245CSB+51	18.5' LT	759.79	755.98	2.98	--	--	--	--	--	--	1	--	--	--	--	--	--	--
235	197RSW+02	18.3' LT	760.25	756.00	3.42	--	--	--	--	--	--	1	--	--	--	--	--	--	--
236	193RSE+87	15.9' RT	757.80	753.55	3.42	--	--	--	--	--	--	1	--	--	--	--	--	--	--
237	194RSE+09	16.3' RT	757.79	753.44	3.52	--	--	--	--	--	1	--	--	--	--	--	--	--	--
238	246CNB+00	25.5' RT	758.36	752.93	4.60	--	--	--	--	--	--	1	--	--	--	--	--	--	--
239	17RSWC+93	13.5' LT	758.60	754.17	3.60	--	--	--	--	--	--	1	--	--	--	--	--	--	--
240	17RSWC+84	1.5' LT	758.29	753.83	3.63	--	--	--	--	--	--	1	--	--	--	--	--	--	--
241	17RSWC+50	18.5' RT	757.76	752.84	4.09	--	--	--	--	--	--	1	--	--	--	--	--	--	--
242	17RSWC+11	18.5' RT	758.12	752.43	4.86	--	--	--	--	--	--	1	--	--	--	--	--	--	--
243	16RSWC+35	18.4' RT	759.94	747.84	11.27	--	--	--	--	--	--	1	--	--	--	--	--	--	--
244	248CSB+26	1.5' RT	757.71	754.93	1.95	--	--	--	--	--	--	1	--	--	--	--	--	--	--
245	248CSB+93	1.5' RT	757.16	753.89	2.44	--	--	--	--	--	--	1	--	--	--	--	--	--	--
246	249CSB+47	18.5' LT	756.63	752.47	3.33	--	--	--	--	--	--	1	--	--	--	--	--	--	--
247	249CSB+96	18.5' LT	756.44	752.01	3.60	--	--	--	--	--	1	--	--	--	--	--	--	--	--
249	249CSB+96	1.5' RT	756.78	751.99	3.96	--	--	--	--	--	1	--	--	--	--	--	--	--	--
250	249CNB+92	1.5' LT	757.29	752.04	4.42	--	--	--	--	--	1	--	--	--	--	--	--	--	--
251	249CNB+37	25.5' RT	756.91	752.71	3.37	--	--	--	--	--	--	1	--	--	--	--	--	--	--
252	249CNB+92	25.5' RT	756.81	752.15	3.83	--	--	--	--	--	1	--	--	--	--	--	--	--	--
258	18RSWC+51	1.5' RT	758.41	754.14	3.44	--	--	--	--	--	1	--	--	--	--	--	--	--	--
258C	18RSWC+63	1.6' LT	0.00	754.09		--	--	--	--	--	--	--	--	--	--	--	--	--	--

STRUCTURE			FLANGE OR RIM	LOWEST INVERT	DEPTH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED CONCRETE 42-INCH	611.0530 MANHOLE COVERS TYPE J	611.0535 MANHOLE COVERS TYPE J-SPECIAL	611.0654 INLET COVERS TYPE V	611.0639 INLET COVERS TYPE H-S	611.0624 INLET COVERS TYPE H	611.0652 INLET COVERS TYPE T	611.0612 INLET COVERS TYPE C	611.0642 INLET COVERS TYPE MS	611.2004 MANHOLES 4-FT DIAMETER	611.2005 MANHOLES 5-FT DIAMETER	611.2006 MANHOLES 6-FT DIAMETER	611.2008 MANHOLES 8-FT DIAMETER
NUMBER	STATION	OFFSET	ELEV	INVERT	DEPTH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
260	248RSE+04	70.3' RT	--	753.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
260PG	248RSE+04	70.3' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
262	16RSWC+39	66.6' RT	--	746.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
263	17RSWC+33	103.2' RT	--	746.35	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
264	244CNB+68	63.4' RT	--	756.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
400	194RSE+44	1.5' LT	758.47	753.23	4.41	--	--	--	--	--	--	1	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)						--	1	3	5	--	8	17	--	--	--	1	1	6	--
CONNECTOR ROAD (TAYCO - CTH P) SUBTOTALS						1	1	3	7	--	8	20	--	--	--	1	1	8	--
PROJECT 1571-75-75 TOTALS						3	1	15	16	56	12	26	4	3	12	10	9	19	9

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	611.8120.S COVER PLATE TEMPORARY EACH	611.9800.S PIPE GRATES EACH	SPV.0060.106 INLET TYPE TEE SPECIAL EACH	SPV.0060.101 POND OUTLET CONTROL MANHOLE EACH	SPV.0060.105 MANHOLES 10-FT X 10-FT EACH	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH EACH	SPV.0060.114 MANHOLES 12-FT SPECIAL EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3225 INLETS 2x2.5-FT EACH	611.323 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT EACH
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD)																				
STAGE 1B																				
388	214EB+47	31.2' LT	747.96	745.00	1.88	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
398	216EB+06	21.0' LT	749.03	744.23	3.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
398C	218EB+21	30.7' LT	--	743.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
STAGE 1B SUBTOTAL USH10/STH 441 MAINLINE						--	--	--	--	--	--	--	--	--	--	--	--	--	2	--
STAGE 2A																				
100	11RRN+89	1.5' LT	761.17	756.90	3.19	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
101	196RNW+41	1.5' RT	762.54	756.68	5.03	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
102	196RNW+41	30.7' LT	762.45	756.13	5.49	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
103	196RNW+59	31.5' LT	762.32	756.26	5.23	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
104	195RNW+26	32.3' LT	764.47	760.30	2.92	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
105	193RNW+94	32.0' RT	767.47	762.96	3.26	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
106	193RNW+99		--	761.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
107	195RNW+29	42.3' RT	--	760.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
108	196RNW+35	64.0' LT	--	756.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
254	12RRN+66	1.5' LT	760.14	755.61	3.45	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
255	12RRN+55	21.5' RT	760.67	755.85	3.99	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
256	12RRN+92	36.0' RT	760.30	754.08	4.97	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
257	13RRN+38	1.5' LT	760.70	756.21	3.41	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
258	12RRN+95	54.0' RT	--	753.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
282	12RRN+87	1.5' LT	760.30	755.24	3.98	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
301V	128WB+74	11.0' LT	--	769.42		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
305C	182EB+87	29.8' LT	--	769.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
313C	186EB+35	32.0' LT	778.90	775.46	2.19	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--
314	187WB+08	38.4' RT	780.29	774.66	4.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
314P	187EB+38	37.0' LT	--	775.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
315	187WB+43	22.0' RT	782.23	774.31	6.67	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
316	187WB+62	22.0' RT	782.24	774.15	6.84	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
317	187WB+62	16.0' RT	782.36	773.39	7.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
318	188WB+65	16.0' RT	783.01	772.93	8.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
319	190WB+75	18.0' RT	783.73	772.10	10.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
320	192WB+43	16.5' RT	783.80	771.11	11.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
321	194WB+04	16.0' RT	783.48	770.16	12.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
322C	195EB+10	38.0' LT	780.90	777.13	2.52	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--
323	187EB+06	37.5' LT	779.03	774.35	3.85	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
325C	189EB+02	32.0' LT	779.96	776.76	1.95	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--
326	188WB+65	22.0' RT	782.89	776.36	5.28	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
327C	191EB+21	38.0' LT	780.48	776.95	2.28	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--
328	193WB+71	22.0' RT	783.40	779.02	3.13	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
329	194WB+04	22.2' RT	783.49	778.28	3.96	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
330	194EB+59	48.5' LT	782.49	778.34	2.90	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
331	194WB+04	70.7' LT	773.60	761.08	11.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
332C	198EB+44	37.0' LT	778.60	775.40	1.95	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--
336	200WB+43	22.0' RT	777.09	771.72	4.12	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
338	203WB+42	22.0' RT	770.77	765.82	3.70	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
342	207WB+42	22.0' RT	761.25	740.63	19.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	611.8120.S COVER PLATE TEMPORARY EACH	611.9800.S PIPE GRATES EACH	SPV.0060.106 INLET TYPE TEE SPECIAL EACH	SPV.0060.101 POND OUTLET CONTROL MANHOLE EACH	SPV.0060.105 MANHOLES 10-FT X 10-FT EACH	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH EACH	SPV.0060.114 MANHOLES 12-FT SPECIAL EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3225 INLETS 2x2.5-FT EACH	611.323 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT EACH
342E	204RNE+38	118.3' LT	--	738.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
342M	204RNW+96	17.0' RT	760.34	738.98	21.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
346	210WB+27	22.0' RT	753.48	746.72	5.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
346M	208WB+21	17.3' RT	758.49	742.33	16.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
361	212WB+58	22.0' RT	750.20	740.18	8.77	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
362	212WB+58	42.4' LT	752.23	739.95	11.03	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
363	215WB+51	42.2' LT	748.38	740.50	6.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
364	217WB+54	42.2' LT	746.79	740.91	4.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
364C	218EB+21	30.7' LT	--	741.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
364P	217WB+54	12.2' LT	--	741.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
365	218WB+56	42.2' LT	746.57	741.05	4.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
366	219WB+20	42.2' LT	746.53	741.21	4.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
367	219WB+90	42.2' LT	746.61	741.33	4.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
368	221WB+19	42.2' LT	747.18	741.57	4.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
370	216WB+15	65.6' LT	749.97	743.06	6.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
380	220WB+08	75.0' LT	757.81	742.48	14.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
382	221EB+96	40.2' LT	746.64	741.68	3.71	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
384	194WB+04	108.8' LT	--	760.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
385	197WB+72	56.3' LT	--	772.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
386	200WB+39	58.0' LT	--	771.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
387	203WB+43	64.3' LT	--	765.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
389	225WB+63	22.7'LT	748.61	744.41	4.20	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
390	225WB+88	19.7'LT	748.59	744.31	4.28	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
390C	215NWE+52	22.1' LT	--	749.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
391	226WB+54	22.6'LT	748.59	744.00	4.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
391B	222WB+77	51.8' LT	748.97	745.00	3.97	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
392C	218WB+69	103.1' LT	--	741.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
394	227WB+20	15.2'LT	748.33	744.31	4.02	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
395	216WB+00	57.4' LT	745.71	742.85	2.19	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
396	227WB+37	14.7'LT	748.33	744.38	3.95	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
396C	226WB+56	39.1' LT	--	743.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
397	227WB+60	22.4'LT	749.30	745.03	4.27	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
399C	220WB+15	79.6' LT	--	744.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500	201RNE+23	21.0' LT	758.25	754.27	3.15	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
501	201RNE+23	42.5' LT	--	754.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
502	201RNE+81	21.0' LT	758.09	754.55	2.71	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
503	204RNE+82	81.8' LT	747.94	731.62	15.08	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
504	208RNE+37	35.2' LT	755.59	732.40	21.95	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
508	211RNE+72	5.0' RT	753.38	748.69	3.44	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
509	210RNE+34	9.8' RT	754.92	749.50	4.75	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
510	208RNE+63	57.9' LT	747.57	739.18	7.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
511	210RNE+34	21.0' LT	755.97	741.82	13.65	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
512	215WB+51	58.0' LT	746.28	742.29	3.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
513	211RNE+73	21.0' LT	753.49	739.80	12.69	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
520	206RNE+08	74.1' LT	746.50	738.65	6.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

STRUCTURE			FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	611.8120.S COVER PLATE TEMPORARY	611.9800.S PIPE GRATES	SPV.0060.106 INLET TYPE TEE SPECIAL	SPV.0060.101 POND OUTLET CONTROL MANHOLE	SPV.0060.105 MANHOLES 10-FT X 10-FT	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH	SPV.0060.114 MANHOLES 12-FT SPECIAL	611.3003 INLETS 3-FT DIAMETER	611.3004 INLETS 4-FT DIAMETER	611.3220 INLETS 2x2-FT	611.3225 INLETS 2x2.5-FT	611.323 INLETS 2x3-FT	611.3901 INLETS MEDIAN 1 GRATE	611.3902 INLETS MEDIAN 2 GRATE	633.5200 MARKERS CULVERT
NUMBER	STATION	OFFSET				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
520C	205RNE+23	136.2' LT	--	738.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
523	204RNE+53	163.6' RT	--	731.50	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
600	222EB+09	22.5'LT	746.67	742.04	3.38	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
601	222EB+38	16.0' LT	747.06	742.12	4.94	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
601C	222EB+38	29.8' LT	--	743.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
608	222WB+20	99.9' LT	755.13	750.51	3.95	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
609	221WB+99	54.4' LT	750.42	742.11	7.64	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
610	221WB+99	43.2' LT	747.44	742.03	4.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
601P	222EB+38	8.0' LT	--	743.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
699	222WB+18	60.5' LT	753.20	742.46	9.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
699C	222WB+23	60.5' LT	--	743.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL USH10/STH 441 MAINLINE						8	--	--	--	2	1	3	4	6	9	8	6	3	3	11
STAGE 2C																				
305	182WB+74	43.8' LT	775.69	769.66	4.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
305E	182WB+74	11.0' LT	--	769.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
309	182WB+99	46.0' LT	775.67	770.82	3.60	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
310	183WB+26	46.5' LT	775.69	771.16	3.28	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
322	195EB+10	38.0' LT	782.15	777.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 2C SUBTOTAL USH10/STH 441 MAINLINE						--	--	--	--	--	--	--	--	--	--	2	--	--	--	--
STAGE 3A																				
201	187RSW+72	176.0' RT	758.35	744.71	12.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
202	189RSW+75	209.5' RT	751.00	746.30	3.46	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
202T	189RSW+55	206.4' RT	--	746.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
203	187EB+38	47.0' RT	784.08	778.93	4.32	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
270	187RSW+71	225.0'RT	--	746.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
270PG	187RSW+71	225.0'RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
300M	179EB+85	98.7' RT	748.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
301	182EB+93	124.8' RT	756.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
301T	184RSW+34	79.9' RT	754.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
305D	182EB+87	29.8'LT	779.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
302	184RSW+51	93.5' RT	749.79	743.05	5.91	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
303	184RSW+88	100.7' RT	749.77	743.21	5.73	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
304	185RSW+79	136.0' RT	752.54	743.71	8.16	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
306	183EB+13	40.3' LT	778.91	774.21	3.45	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
311	183EB+24	31.7' LT	779.10	774.32	3.53	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
312	183EB+59	31.7' LT	779.14	774.64	3.25	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
313	186EB+35	32.0' LT	780.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
314C	187EB+38	37.0' LT	--	775.05	--	--					--	--								--
322C	195EB+10	38.0' LT	780.90	777.13	2.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
324	187EB+38	37.5' RT	783.79	778.85	4.11	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
325	189EB+01	31.8 'RT	779.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
327	191EB+20	37.8' LT	780.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
332	198EB+23	37.6' LT	778.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
334	201EB+23	23.5' LT	776.74	772.03	3.46	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
335	201EB+23	29.0' RT	777.09	772.02	3.82	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--

STRUCTURE NUMBER	STATION	OFFSET	FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	611.8120.S COVER PLATE TEMPORARY EACH	611.9800.S PIPE GRATES EACH	SPV.0060.106 INLET TYPE TEE SPECIAL EACH	SPV.0060.101 POND OUTLET CONTROL MANHOLE EACH	SPV.0060.105 MANHOLES 10-FT X 10-FT EACH	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH EACH	SPV.0060.114 MANHOLES 12-FT SPECIAL EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3225 INLETS 2x2.5-FT EACH	611.323 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT EACH
335C	200WB+43	22.0' RT	--	772.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
337	204EB+23	22.3' LT	770.30	765.86	3.19	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
337C	203WB+42	22.0' RT	--	765.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
339	206RSE+92	13.9' LT	762.71	757.50	4.38	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
340	208RSE+13	8.7' LT	758.91	744.13	13.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
341	208EB+05	21.0' RT	760.85	743.85	15.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
341C	207WB+24	25.4' RT	--	755.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
342	207WB+24	22.0' RT	--	743.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
345	211EB+00	22.0' LT	754.11	746.78	6.08	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
346C	210WB+27	22.0' RT	--	746.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
347	213EB+25	22.0' LT	748.34	740.27	6.83	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
348	214EB+04	22.0' LT	747.91	740.57	6.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
349	216EB+19	16.0' LT	747.65	741.25	5.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
353	214EB+05	46.0' RT	748.19	744.63	2.31	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
354	216EB+19	22.0' LT	745.31	741.43	2.63	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
355	217EB+00	44.9' RT	746.93	741.73	3.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
355P	217EB+00	13.0' LT	--	742.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
357	217EB+98	44.5' RT	746.54	741.95	3.34	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
358	218EB+40	44.5' RT	746.47	742.05	3.17	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
359	218EB+72	44.5' RT	746.45	742.39	2.81	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
360	219EB+39	44.5' RT	746.63	742.57	2.81	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
361C	213EB+25	37.7' LT	--	740.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
369	216EB+19	38.7' LT	745.82	743.00	1.57	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--
388	217EB+00	61.1' RT	--	743.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
388PG	217EB+00	63.6' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
401	206RSE+91	4.5' LT	762.20	757.79	3.58	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
402	208RSE+00	38.0' RT	754.54	744.94	8.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
403	211RSE+03	2.0' LT	751.79	747.79	2.75	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
404	212RSE+40	21.0' RT	748.88	746.00	1.63	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
405	207EB+49	74.7' RT	--	746.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
406	208RSE+50	59.9' RT	--	745.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
406PG	208RSE+50	50.9' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
407	212RSE+40	36.0' RT	--	745.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
408PG	207EB+49	74.7' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
409	214EB+04	58.6' RT	--	744.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
636	222EB+41	65.9' RT	--	745.33	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1
636P	222EB+39	16.0' RT	--	744.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL USH10/STH 441 MAINLINE						5	5	1	1	--	--	--	1	1	3	6	7	--	1	6
STAGE 3B																				
636C	222EB+39	16.0' RT	0.00	743.80		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
636B	222EB+38	8.0' LT	--	744.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 3B SUBTOTAL						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
USH10/STH 441 MAINLINE (TAYCO ST - RACINE ROAD) SUBTOTALS						13	5	1	1	2	1	3	5	7	12	16	13	3	6	17

STRUCTURE			FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	611.8120.S COVER PLATE TEMPORARY EACH	611.9800.S PIPE GRATES EACH	SPV.0060.106 INLET TYPE TEE SPECIAL EACH	SPV.0060.101 POND OUTLET CONTROL MANHOLE EACH	SPV.0060.105 MANHOLES 10-FT X 10-FT EACH	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH EACH	SPV.0060.114 MANHOLES 12-FT SPECIAL EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3225 INLETS 2x2.5-FT EACH	611.323 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT EACH
NUMBER	STATION	OFFSET																		
CONNECTOR ROAD (TAYCO - CTH P)																				
STAGE 2A																				
259	252CSB+45	62.3' RT	--	752.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
259PG	252CSB+45	62.3' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
233	252CSB+09	6.0' LT	758.37	751.23	5.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
233T	13RRN+35	91.9' RT	--	752.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
248	251CSB+27	18.5' LT	757.05	752.64	3.58	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
253	251CNB+27	25.5' RT	757.43	753.28	3.32	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
274	10RRN+25	31.5' RT	761.41	756.99	3.59	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
275	10RRN+25	61.0' RT	--	755.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
280	251CSB+27	6.0' RT	757.37	750.85	5.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
280P	250CSB+47	6.0' LT	--	750.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)						--	1	--	--	--	--	--	--	--	--	--	3	--	--	3
STAGE 3A																				
207	244CNB+44	1.5' LT	758.46	754.30	3.33	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
212	18RSWC+17	13.5' LT	758.43	754.27	3.33	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
214	18RSWC+73	69.8' RT	758.23	748.00	8.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
215	17RSWC+88	69.5' RT	757.88	746.64	10.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
216	19RSWC+28	37.4' RT	758.00	748.07	8.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
216P	19RSWC+31	30.2' RT	--	748.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
225	244CNB+65	1.5' LT	758.49	754.21	3.45	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
226	244CSB+56	1.5' RT	758.68	753.98	3.87	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
227	244CSB+94	1.5' RT	758.96	753.52	4.61	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
228	245CSB+39	4.4' LT	759.41	752.12	6.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
229	245CSB+95	6.0' LT	759.53	748.28	10.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
230	247CSB+24	6.0' LT	758.85	748.91	8.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
231	248CSB+26	6.0' LT	757.96	749.40	7.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
232	249CSB+96	6.0' LT	756.75	750.22	5.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
280C	250CSB+47	6.0' LT	--	750.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
234	245CSB+51	18.5' LT	759.79	755.98	2.98	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
235	197RSW+02	18.3' LT	760.25	756.00	3.42	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
236	193RSE+87	15.9' RT	757.80	753.55	3.42	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
237	194RSE+09	16.3' RT	757.79	753.44	3.52	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
238	246CNB+00	25.5' RT	758.36	752.93	4.60	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
239	17RSWC+93	13.5' LT	758.60	754.17	3.60	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
240	17RSWC+84	1.5' LT	758.29	753.83	3.63	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
241	17RSWC+50	18.5' RT	757.76	752.84	4.09	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
242	17RSWC+11	18.5' RT	758.12	752.43	4.86	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
243	16RSWC+35	18.4' RT	759.94	747.84	11.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
244	248CSB+26	1.5' RT	757.71	754.93	1.95	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
245	248CSB+93	1.5' RT	757.16	753.89	2.44	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
246	249CSB+47	18.5' LT	756.63	752.47	3.33	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
247	249CSB+96	18.5' LT	756.44	752.01	3.60	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
249	249CSB+96	1.5' RT	756.78	751.99	3.96	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
250	249CNB+92	1.5' LT	757.29	752.04	4.42	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
251	249CNB+37	25.5' RT	756.91	752.71	3.37	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
252	249CNB+92	25.5' RT	756.81	752.15	3.83	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
258	18RSWC+51	1.5' RT	758.41	754.14	3.44	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
258C	18RSWC+63	1.6' LT	0.00	754.09		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

STRUCTURE			FLANGE OR RIM ELEV	LOWEST INVERT	DEPTH	611.8120.S COVER PLATE TEMPORARY EACH	611.9800.S PIPE GRATES EACH	SPV.0060.106 INLET TYPE TEE SPECIAL EACH	SPV.0060.101 POND OUTLET CONTROL MANHOLE EACH	SPV.0060.105 MANHOLES 10-FT X 10-FT EACH	SPV.0060.111 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 96-INCH EACH	SPV.0060.114 MANHOLES 12-FT SPECIAL EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3225 INLETS 2x2.5-FT EACH	611.323 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT EACH
NUMBER	STATION	OFFSET																		
260	248RSE+04	70.3' RT	--	753.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
260PG	248RSE+04	70.3' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
262	16RSWC+39	66.6' RT	--	746.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
263	17RSWC+33	103.2' RT	--	746.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
264	244CNB+68	63.4' RT	--	756.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
400	194RSE+44	1.5' LT	758.47	753.23	4.41	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--
STAGE 3A SUBTOTAL CONNECTOR ROAD (TAYCO - CTH P)						--	1	--	--	--	--	--	--	7	--	--	17	--	--	3
						--														
CONNECTOR ROAD (TAYCO - CTH P) SUBTOTALS						--	2	--	--	--	--	--	--	7	--	--	20	--	--	6
PROJECT 1571-75-75 TOTALS						13	7	1	1	2	1	3	5	14	12	16	33	3	6	23

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

PIPE UNDERDRAIN

ROADWAY	STRUCTURE NUMBER	STATION	OFFSET	STATION	OFFSET	209.0300.S BACKFILL COURSE AGGREGATE SIZE NO. 1 CY	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	633.5200* MARKERS CULVERT END EACH
STAGE 2A									
USH 10 WB/STH 441 SB	315	187WB+43	22' RT	--	--	2	66	--	--
	316	187WB+62	22' RT	--	--	1	50	--	--
	365	218WB+56	42' LT	--	--	3	103	--	--
	367	219WB+90	41' LT	--	--	3	101	--	--
	--	219WB+90	51' LT	221WB+70	51' LT	5	180	--	--
RACINE RD NW RAMP	102	196RNW+41	31' LT	--	--	2	65	--	--
	101	196RNW+41	2' RT	--	--	1	50	--	--
	103	196RNW+59	32' LT	--	--	1	50	--	--
RACINE RD NE RAMP	502	201RNE+81	21' LT	--	--	3	100	--	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	254	12RRN+66	2' LT	--	--	2	68	--	--
B-70-410						-- --	--	2	2
B-70-420						-- --	--	2	2
STAGE 2A SUBTOTAL						23	833	4	4
STAGE 2C									
USH 10 WB/STH 441 SB	305	182WB+74	44' LT	--	--	2	83	--	--
	309	182WB+99	46' LT	--	--	1	11	--	--
	310	183WB+26	47' LT	--	--	3	86	--	--
STAGE 2A SUBTOTAL						6	180	--	--
STAGE 3A									
USH 10 EB/STH 441 NB	301V	182EB+87	30' LT	--	--	3	85	--	--
	312	183EB+59	32' LT	--	--	2	82	--	--
	357	217EB+98	44' RT	--	--	3	88	--	--
	359	218EB+72	44' RT	--	--	2	79	--	--
	--	218EB+65	51' RT	220EB+10	51' RT	4	145	--	--
RACINE RD SE RAMP	236	193RSE+87	16' RT	--	--	1	50	--	--
	237	194RSE+09	16' RT	--	--	2	69	--	--
RACINE RD SW BYPASS									
	242	17RSWC+12	19' RT	--	--	3	84	--	--
	241	17RSWC+50	19' LT	--	--	1	50	--	--

PIPE UNDERDRAIN (CONTINUED)

ROADWAY	STRUCTURE NUMBER	STATION	OFFSET	STATION	OFFSET	209.0300.S BACKFILL COURSE AGGREGATE SIZE NO. 1 CY	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH EACH	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	633.5200* MARKERS CULVERT END EACH
STAGE 3A									
RACINE ROAD RAMP CONNECTOR SB	246	249CSB+47	19' LT	--	--	1	50	--	--
	247	249CSB+96	19' LT	--	--	3	96	--	--
	249	249CSB+96	2' RT	--	--	3	100	--	--
RACINE ROAD RAMP CONNECTOR NB	251	249CNB+37	26' RT	--	--	1	50	--	--
	252	249CNB+92	26' RT	--	--	3	103	--	--
	250	249CNB+92	2' LT	--	--	3	100	--	--
B-70-411						--	--	2	2
B-70-421						--	--	2	2
						--			
STAGE 3A SUBTOTAL						35	1,231	4	4
UNDISTRIBUTED						8	226	--	--
PROJECT 1517-75-75 TOTAL						72	2,470	8	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

GUARDRAIL ITEMS

ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO 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 2A								
USH 10 WB/STH 441 SB	197WB+43	36.0' LT	197WB+83	36.0' LT	--	39	--	--
	197WB+83	36.0' LT	200WB+36	36.0' LT	250	--	--	--
	200WB+36	36.0' LT	200WB+90	38.0' LT	--	--	1	--
STAGE 2A SUBTOTAL					250	39	1	--
STAGE 3A								
USH 10 EB/STH 441 NB	191EB+85	38.0' RT	192EB+37	36.0' RT	--	--	1	--
	192EB+37	36.0' RT	194EB+98	36.0' RT	265	--	--	--
	194EB+98	36.0' RT	195EB+36	36.0' RT	--	39	--	--
RACINE ROAD SE RAMP	207RSE+08	25.0' RT	207RSE+62	23.0' RT	--	--	1	--
	207RSE+62	23.0' RT	208RSE+02	23.0' RT	--	39	--	--
RACINE ROAD SW RAMP	189RSW+55	20.0' LT	190RSW+08	18.0' LT	--	--	1	--
	190RSW+08	18.0' LT	191RSW+21	18.0' LT	113	--	--	--
	191RSW+21	18.0' LT	--	--	--	--	--	1
STAGE 3A SUBTOTAL					378	78	3	1
PROJECT 1517-75-75 TOTAL					628	117	4	1

FENCE CHAIN LINK 6-FT

ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	616.0206 FENCE CHAIN LINK 6-FT LF
STAGE 2A					
USH 10 WB/STH 441 SB	183WB+26	62.2' LT	184WB+42	55.2' LT	258
RACINE ROAD NW RAMP	185RNW+97	26.3' LT	192RNW+51	80.8' LT	1,379
STAGE 2A SUBTOTAL					1,637
STAGE 3A					
USH 10 EB/STH 441 NB	179EB+69	111.8' RT	184EB+04	52.1' RT	562
	184EB+87	159.2' RT	185EB+56	64.2' RT	120
	212EB+78	77.5' RT	218EB+74	85.4' RT	596
RACINE ROAD SE RAMP	204RSE+03	108.4' RT	212RSE+76	51.5' RT	862
STAGE 3A SUBTOTAL					2,141
PROJECT 1517-75-75 TOTAL					3,778

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RIPRAP

ROADWAY	STATION	STRUCTURE	OFFSET	606.0100 RIPRAP LIGHT CY	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY	645.0130 GEOTEXTILE FABRIC TYPE R SY
STAGE 2A								
USH 10 WB/STH 441 SB	194WB+04	384	108.8' LT	--	4	--	8	--
	197WB+51	385	61.8' LT	--	2	--	4	--
	200WB+39	386	58.0' LT	--	4	--	8	--
	203WB+43	387	64.3' LT	--	4	--	8	--
RACINE RD NW RAMP	188RNW+75	CONC SURFACE DRAIN	0.0' RT	--	1	--	--	15
	193RNW+99	106	52.9' RT	--	2	--	4	--
	195RNW+28	107	42.7' RT	--	2	--	4	--
	196RNW+36	108	61.9' LT	--	2	--	4	--
RACINE RD NE RAMP	200RNE+90	CONC SURFACE DRAIN	0.0' RT	--	1	--	--	31
	200RNE+92	523	464' LT	--	32	--	63	--
	201RNE+23	501	42.4' LT	--	2	--	4	--
	201RNE+81	278	265.6' LT	--	9	--	18	--
	202RNE+69	CULV	259.6' LT	--	95	--	189	--
	203RNE+07	CULV	87.0' LT	--	12	--	25	--
	205RNE+46	515	96.0' LT	--	21	--	41	--
	205RNE+58	513	98.6' LT	--	28	--	56	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	10RRN+24	275	61.0' RT	--	2	--	4	--
	12RRN+61	258	57.7' RT	--	3	--	5	--
POND 3	--	POND	--	--	--	1,666	2,499	--
STAGE 2A SUBTOTALS				--	226	1,666	2,944	46
STAGE 3A								
RACINE RD SW RAMP	189RSW+00	CONC SURFACE DRAIN	12.0' LT	--	1	--	--	16
	191RSW+00	CONC SURFACE DRAIN	12.0' RT	--	1	--	--	26
	193RSW+98	DITCH	76.4' LT	75	--	--	--	225
	195RSW+19	CULV	75.7' RT	--	7	--	14	--
RACINE RD SW BYPASS	16RSWC+39	262	74.3' RT	--	16	--	33	--
	17RSWC+25	263	107.6' RT	--	18	--	37	--
RACINE RD SE RAMP	208RSE+25	405	63.8' RT	--	3	--	6	--
	212RSE+40	407	36.0' RT	--	2	--	4	--
POND 2	--	POND	--	--	--	1,151	1,726	--
STAGE 3A SUBTOTALS				75	48	1,151	1,820	267
UNDISTRIBUTED				19	69	704	1,191	78
PROJECT 1517-75-75 TOTAL				94	343	3,521	5,955	391

TEMPORARY CRASH CUSHION

ROADWAY	STATION	OFFSET	614.0905 CRASH CUSHIONS TEMPORARY EACH	SPV.0060.217 CRASH CUSHIONS TEMPORARY LEFT IN PLACE EACH	BACK WIDTH ***	OBJECT MARKING PATTERN ***	CRASH TEST LEVEL ***	TRAFFIC DIRECTION ***	TRAFFIC LOCATION ***	CRASH CUSHION SHIELDS ***
STAGE 1B										
USH 10 WB/STH 441 SB	169ML+08	26.2' LT	1	--	2	OM-3L (WO5-58L)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
USH 10 EB/STH 441 NB	167ML+27	24.8' RT	1	--	2	OM-3L (WO5-58L)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	171ML+02	73.0' RT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	176ML+37	17.1' RT	1	--	2	OM-3L (WO5-58L)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
STAGE 1B SUBTOTAL			4	--						
STAGE 2A										
USH 10 EB/STH 441 NB	169ML+52	71.5' RT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
USH 10 WB/STH 441 SB	182ML+96	28.8' LT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	198ML+56	56.9' LT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	205ML+01	20.2' LT	1	--	2	OM-3L (WO5-58L)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	229WB+10	14.9' LT	--	1	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
STAGE 2A SUBTOTAL			4	1						
STAGE 2C										
USH 10 WB/STH 441 SB	150ML+03	21.8' LT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
STAGE 2C SUBTOTAL			1	--						
STAGE 3A										
USH 10 WB/STH 441 SB	180WB+75	26.8' RT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	182WB+06	39.5' LT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	206WB+28	17.9' RT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	215WB+02	3.1' LT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	228WB+98	31.7' RT	1	--	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
STAGE 3A SUBTOTAL			5	--						

TEMPORARY CRASH CUSHION (CONTINUED)

ROADWAY	STATION	OFFSET	614.0905 CRASH CUSHIONS TEMPORARY EACH	SPV.0060.217 CRASH CUSHIONS TEMPORARY LEFT IN PLACE EACH	BACK WIDTH ***	OBJECT MARKING PATTERN ***	CRASH TEST LEVEL ***	TRAFFIC DIRECTION ***	TRAFFIC LOCATION ***	CRASH CUSHION SHIELDS ***
STAGE 3B										
USH 10 EB/STH 441 NB	212EB+86	9.6' LT	1	--	2	OM-3L (WO5-58L)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
STAGE 3B SUBTOTAL			1	--						
STAGE 4										
USH 10 EB/STH 441 NB	183EB+21	19.7' LT	--	1	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
USH 10 WB/STH 441 SB	214WB+46	11.3' LT	--	1	2	OM-3R (WO5-58R)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
	225WB+35	17.4' RT	--	1	2	OM-3L (WO5-58L)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY BARRIER; CONSTRUCTION ACTIVITY
STAGE 4 SUBTOTAL			--	3						
PROJECT 1517-75-75 TOTAL			15	4						

*** FOR INFORMATION ONLY

FENCE SAFETY

ROADWAY	616.0700.S FENCE SAFETY LF
PROJECT 1517-75-75	
UNDISTRIBUTED	4,000
PROJECT 1517-75-75 TOTAL	4,000

MAINTENANCE AND REPAIR OF HAUL ROADS (1517-75-75)

ROADWAY	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS 1517-75-75 EACH
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

MOBILIZATION

ROADWAY	619.1000 MOBILIZATION EACH
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

WATER

ROADWAY	624.0100 WATER EACH
BASE AGGREGATE COMPACTION	1,094
PROJECT 1517-75-75 TOTALS	1,094

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FINISHING MATERIALS

ROADWAY	STATION	OFFSET	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	631.1000 SOD LAWN SY	SPV.0035.501 PLANTING MIX SF	SPV.0085.153 POND EDGE SEED LB	SPV.0120.150 WATER FOR SEEDED AREAS MGAL
STAGE 2A													
USH 10 WB/STH 441 SB	180WB+85 - 184WB+40	LT	--	977	--	0.6	26	--	26	--	--	--	--
	187WB+50 - 195WB+49	LT	--	2,742	776	1.7	74	--	74	--	--	--	--
	197WB+46 - 231WB+19	LT	--	13,462	5,493	8.5	364	--	364	--	--	--	--
RACINE RD NW RAMP	186RNW+30 - 196RNW+62	LT	--	7,500	3,063	4.7	203		203	--	--	--	--
	187RNW+42 - 196RNW+47	RT	--	3,787	3,787	2.4	102	--	102	--	--	--	--
	188RNW+75	RT	--	--	--	--	--	--	--	5.3	--	--	--
RACINE RD NE RAMP	198RNE+74 - 212RNE+33	LT	--	5,501	1,974	3.5	149	--	149	--	--	--	--
	198RNE+74 - 208RNE+81	RT	--	2,941	2,941	1.9	79	--	79	--	--	--	--
	200RNE+90	RT	--	--	--	--	--	--	--	5.3	--	--	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	10RRN+00 - 14RRN+12	RT	--	3,420	3,420	2.2	92	--	92	--	7,854	--	--
RACINE ROAD RAMP CONNECTOR NB	250CNB+57 - 253CNB+17	RT	--	516	516	0.3	14	--	14	--	--	--	--
RACINE ROAD RAMP CONNECTOR SB	250CSB+49 - 253CSB+41	LT	--	1,469	1,469	0.9	40	--	40	--	--	--	--
NOISEWALL N-70-110	208NWE+95 - 215NWE+00	LT & RT	--	1,459	1,459	0.9	39	--	39	--	--	--	--
POND 3	--	--	--	11,140	--	7.0	--	--	301	--	--	129	--
STAGE 2A SUBTOTAL			--	54,914	24,898	34.60	1,182	--	1,483	11	7,854	129	--
STAGE 3A													
USH 10 EB/STH 441 NB	180EB+92 - 184EB+04	RT	--	2,632	--	1.7	71	--	71	--	--	--	--
	187EB+65 - 195EB+52	RT	--	4,295	2,786	2.7	116	--	116	--	--	--	--
	197EB+23 - 230EB+04	RT	--	8,853	2,445	5.6	239	--	239	--	--	--	--
RACINE RD SE RAMP	193RSE+84 - 212RSE+78	RT	--	13,501	9,616	8.5	365	--	365	--	--	--	--
	194RSE+39 - 206RSE+54	LT	--	2,584	2,584	1.6	70	--	70	--	--	--	--
RACINE RD SW RAMP	185RSW+79 - 196RSW+85	RT	10,444	5,143	9,276	9.8	421	--	421	--	--	--	--
	187RSW+73 - 197RSW+07	LT	--	1,823	1,823	1.1	49	--	49	--	--	--	--
	189RSW+00	LT	--	--	--	--	--	--	--	5.3	--	--	--
	191RSW+00	RT	--	--	--	--	--	--	--	5.3	--	--	--
RACINE RD SW BY PASS	16RSWC+81 - 23RSWC+86	RT	--	2,444	2,444	1.5	66	--	66	--	--	--	--
RACINE ROAD RAMP CONNECTOR NB	238CNB+41 - 250CNB+57	RT	--	5,169	4,796	3.3	140	--	140	--	--	--	--
RACINE ROAD RAMP CONNECTOR SB	245CSB+47 - 250CSB+49	LT	--	1,425	1,222	0.9	39	--	39	--	--	--	--
MIDWAY EARLY FILL	246EB+50 - 256EB+00	RT/LT	34,907	--	34,907	--	--	400	601	--	--	--	500
POND 2	--	--	--	623	--	0.4	--	--	17	--	--	7	--
STAGE 3A SUBTOTAL			45,351	48,492	71,899	37	1,575	400	2,192	11	--	7	500
UNDISTRIBUTED			11,338	25,852	24,199	18	689	100	919	5	--	34	2,821
PROJECT 1517-75-75 TOTAL			56,689	129,258	120,996	90	3,446	500	4,594	27	7,854	170	3,321

EROSION CONTROL

ROADWAY	START STATION	START OFFSET	END STATION	END OFFSET	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2002 EROSION MAT CLASS I TYPE A SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE	628.7504 TEMPORARY DITCH CHECKS LF	628.7570 ROCK BAGS EACH
STAGE 1A																
TEMPORARY WIDENING A	3TWA+80	48' RT	12TWA+64	45' RT	--	987	987	--	--	--	--	--	--	--	--	--
STAGE 1A SUBTOTAL					--	987	987	--	--	--	--	--	--	--	--	--
STAGE 1B																
TEMPORARY WIDENING C	170TWC+24	19' RT	179TWC+20	29' RT	--	873	873	--	--	--	--	--	--	--	--	--
STAGE 1B SUBTOTAL					--	873	873	--	--	--	--	--	--	--	--	--
STAGE 2A																
USH 10 WB/STH 441 SB	180WB+85	100' LT	184WB+40	100' LT	--	--	--	--	--	977	--	--	--	--	--	--
	180WB+86	104' LT	184WB+06	78' LT	96	317	317	--	--	--	--	--	--	--	--	--
	191WB+75	63' LT	195WB+56	101' LT	--	--	--	--	--	1,966	--	--	--	--	--	--
	197WB+46	91' LT	206WB+00	91' LT	--	--	--	--	--	4,928	--	--	--	--	--	--
	197WB+46	116' LT	--	--	--	--	--	--	--	--	--	--	--	--	41	--
	210WB+90	79' LT	220WB+00	52' LT	--	--	--	--	--	2,270	--	--	--	--	--	--
	212WB+50	63' LT	--	--	--	--	--	--	--	--	--	--	--	--	7	--
	221WB+60	81' LT	224WB+00	76' LT	--	--	--	--	--	739	--	--	--	--	--	--
RACINE RD NW RAMP	186RNW+30	83' LT	194RNW+25	111' LT	40	86	86	--	--	4,437	--	--	--	--	--	--
	188RNW+29	87' LT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	190RNW+29	89' LT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	192RNW+29	86' LT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	193RNW+26	88' LT	--	--	--	--	--	--	--	--	--	--	--	--	12	--
	195RNW+26	100' LT	--	--	--	--	--	--	--	--	--	--	--	--	13	--
	195RNW+38	102.4' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5
RACINE RD NE RAMP	199RNE+40	49' RT	--	--	--	--	--	--	--	--	--	--	--	--	62	--
	202RNE+00	67' LT	212RNE+33	60' LT	--	--	--	--	--	3,528	--	--	--	--	--	--
	203RNE+00	57' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5
	203RNE+70	55' RT	--	--	--	--	--	--	--	--	--	--	--	--	39	--
	204RNE+75	62' RT	--	--	--	--	--	--	--	--	--	--	--	--	28	--
	205RNE+80	65' RT	--	--	--	--	--	--	--	--	--	--	--	--	18	--
	206RNE+32	94' LT	208RNE+90	77' LT	120	275	275	--	--	--	--	--	--	--	--	--
	210RNE+35	45' LT	--	--	--	--	--	--	--	--	--	--	--	--	7	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	13RRN+07	66' RT	--	--	--	--	--	--	--	--	--	--	--	--	31	--
	13RRN+25	72' RT	--	--	--	--	--	--	--	--	--	--	--	--	31	--
	13RRN+45	77' RT	--	--	--	--	--	--	--	--	--	--	--	--	79	--
FEN RAMP	124FEN+94	--	131FEN+85	--	--	475	475	--	--	--	600	--	--	--	--	--
POND 3	--	--	--	--	--	2,157	2,157	--	--	--	--	11,140	--	--	--	--
STAGE 2A SUBTOTAL					256	3,310	3,310	--	--	18,845	600	11,140	--	--	392	10

EROSION CONTROL (CONTINUED)

ROADWAY	START STATION	START OFFSET	END STATION	END OFFSET	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2002 EROSION MAT CLASS I TYPE A SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE	628.7504 TEMPORARY DITCH CHECKS LF	628.7570 ROCK BAGS EACH
STAGE 3A																
USH 10 EB/STH 441 NB	180EB+92	51' RT	182EB+00	136' RT	--	--	--	--	--	--	--	--	2,602	--	--	--
	183EB+00	133' RT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	194EB+00	132' RT	195EB+52	72' RT	--	--	--	--	--	1,509	--	--	--	--	--	--
	197EB+23	99' RT	200EB+00	109' RT	--	--	--	--	--	2,314	--	--	--	--	--	--
	212EB+79	73' RT	218EB+75	82' RT	--	--	--	--	--	1,263	--	--	--	--	--	--
	216EB+00	62' RT	--	--	--	--	--	--	--	--	--	--	--	--	7	--
	217EB+00	64' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	2
	221EB+00	83' RT	223EB+00	100' RT	--	--	--	--	--	--	--	--	798	--	--	--
	221EB+28	59' RT	--	--	--	--	--	--	--	--	--	--	--	--	7	--
	222EB+41	66' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	2
	223EB+00	100' RT	230EB+04	94' RT	--	--	--	--	--	2,030	--	--	--	--	--	--
RACINE RD SW RAMP	185RSW+79	136' RT	186RSW+75	168' RT	--	100	100	--	--	1,256	--	--	--	--	--	--
	187RSW+71	225' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	5
	188RSW+45	32' LT	--	--	--	--	--	--	--	--	--	--	--	--	14	--
	189RSW+49	32' LT	--	--	--	--	--	--	--	--	--	--	--	--	11	--
	189RSW+64	150' RT	196RSW+85	65' RT	--	684	684	--	--	4,971	--	--	--	--	--	--
	190RSW+51	35' LT	--	--	--	--	--	--	--	--	--	--	--	--	14	--
	191RSW+47	45' LT	--	--	--	--	--	--	--	--	--	--	--	--	12	--
	192RSW+21	49' LT	--	--	--	--	--	--	--	--	--	--	--	--	12	--
	192RSW+76	57' LT	--	--	--	--	--	--	--	--	--	--	--	--	12	--
RACINE RD SW BYPASS	16RSWC+81	49' RT	17RSWC+05	57' RT	--	27	27	--	--	85	--	--	--	--	--	--
RACINE RD SE RAMP	197RSE+33	55' LT	--	--	--	--	--	--	--	--	--	--	--	--	14	--
	199RSE+02	50' LT	--	--	--	--	--	--	--	--	--	--	--	--	11	--
	200RSE+58	34' LT	--	--	--	--	--	--	--	--	--	--	--	--	11	--
	201RSE+50	55' RT	212RSE+78	52' RT	--	--	--	--	--	3,889	--	--	--	--	--	--
	202RSE+57	23' LT	--	--	--	--	--	--	--	--	--	--	--	--	11	--
	202RSE+77	117' RT	210RSE+22	40' RT	--	778	778	--	--	--	--	--	--	--	--	--
	204RSE+50	17' LT	--	--	--	--	--	--	--	--	--	--	--	--	14	--
	205RSE+50	89' RT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	207RSE+29	82' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	3
	207RSE+50	77' RT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	208RSE+57	63' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	2
	211RSE+92	34' RT	--	--	--	--	--	--	--	--	--	--	--	--	8	--
RACINE ROAD RAMP CONNECTOR NB	244CNB+68	63' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	248CNB+04	70' RT	--	--	--	--	--	--	--	--	--	--	--	--	--	2
	249CNB+43	104' RT	250CNB+04	74' RT	--	--	--	--	--	373	--	--	--	--	--	--
RACINE ROAD RAMP CONNECTOR SB	249CSB+01	56' LT	249CSB+54	20' LT	--	--	--	--	--	208	--	--	--	--	--	--
MIDWAY EARLY FILL	246EB+00	--	256EB+00	--	--	1,565	1,565	2	2	9,611	--	--	--	--	--	12
POND 2	--	--	--	--	--	--	--	--	--	--	--	623	--	--	--	--
STAGE 3A SUBTOTAL					--	3,154	3,154	2	2	27,509	--	623	3,400	--	184	29
UNDISTRIBUTED					250	2,081	2,081	12	8	11,589	150	2,941	850	4	144	5
PROJECT 1517-75-75 TOTAL					506	10,405	10,405	14	10	57,943	750	14,704	4,250	4	720	44

INLET PROTECTION

ROADWAY	STATION	OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
STAGE 1A						
EXISTING USH 10	157ML+98	53' LT	--	1	--	--
	158ML+06	5' RT	--	1	--	--
	163ML+32	5' RT	--	1	--	--
	164ML+78	7' RT	--	1	--	--
	172ML+75	11' LT	1	--	--	--
	177ML+82	1' LT	1	--	--	--
STAGE 1A SUBTOTAL			2	4	--	--
STAGE 1B						
EXISTING USH 10	181ML+07	1' LT	1	--	--	--
	184ML+81	1' LT	1	--	--	--
	188ML+97	0' LT	1	--	--	--
	195ML+79	1' RT	1	--	--	--
	201ML+45	0' RT	1	--	--	--
STAGE 1B SUBTOTAL			5	--	--	--
STAGE 2A						
	182+87	29.5' lt	1	--	--	--
USH 10 EB/STH 441 NB	186EB+35	32' LT	1	1	--	--
	187EB+25	41' RT	1	1	--	--
	189EB+02	32' LT	1	1	--	--
	191EB+21	38' LT	1	1	--	--
	194EB+59	48' LT	1	1	--	--
	195EB+10	38' LT	1	1	--	--
	198EB+43	38' LT	1	1	--	--
	221EB+96	40' LT	1	1	--	--
	222EB+09	23' LT	1	1	--	--
USH 10 WB/STH 441 SB	187WB+06	38' LT	1	--	1	--
	187WB+08	38' RT	1	1	--	--
	187WB+43	22' RT	1	1	--	--
	187WB+62	22' RT	1	1	--	--
	188WB+65	22' RT	1	1	--	--
	193WB+71	22' RT	1	1	--	--
	194WB+04	22' RT	1	1	--	--
	197WB+51	33' LT	1	1	--	--
	200WB+42	22' RT	1	1	--	--
	203WB+42	22' RT	1	1	--	--
	207WB+24	22' RT	1	1	--	--
	210WB+27	22' RT	1	1	--	--
	210WB+43	71' LT	1	1	--	--
	211WB+78	59' LT	1	1	--	--
	212WB+58	22' RT	1	1	--	--
	212WB+58	42' LT	1	1	--	--
	215WB+52	43' LT	1	1	--	--
	216WB+01	57' LT	1	1	--	--
	217WB+54	42' LT	1	1	--	--
	218WB+57	42' LT	1	1	--	--
	218WB+70	105' LT	1	1	--	--

INLET PROTECTION (CONTINUED)

ROADWAY	STATION	OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
USH 10 WB/STH 441 SB	219WB+20	42' LT	1	1	--	--
	219WB+90	41' LT	1	1	--	--
	221WB+19	40' LT	1	1	--	--
	221WB+99	43' LT	1	1	--	--
	221WB+99	54' LT	1	1	--	--
	222WB+20	100' LT	1	1	--	--
	225WB+63	22' LT	1	--	1	--
USH 10 WB/STH 441 SB	225WB+88	19' LT	1	--	1	--
	227WB+20	14' LT	1	--	1	--
	227WB+37	14' LT	1	--	1	--
	227WB+60	23' LT	1	1	--	--
RACINE RD NW RAMP	193RNW+95	32' LT	1	1	--	--
	195RNW+26	32' LT	1	1	--	--
	196RNW+41	31' LT	1	--	1	--
	196RNW+41	1' RT	1	--	1	--
	196RNW+59	32' LT	1	--	1	--
RACINE RD NE RAMP	201RNE+24	21' LT	1	1	--	--
	201RNE+81	21' LT	1	--	--	1
	208RNE+63	58' LT	1	1	--	--
	210RNE+34	10' RT	1	1	--	--
	211RNE+72	5' RT	1	1	--	--
USH 10 WB/STH 441 SB RAMP ROUNDABOUT	10RRN+25	32' RT	1	--	1	--
	11RRN+89	2' LT	1	--	1	--
	12RRN+55	22' RT	1	--	1	--
	12RRN+65	2' LT	1	--	--	1
	12RRN+87	2' LT	1	--	--	1
	12RRN+92	36' RT	1	--	1	--
	13RRN+39	2' LT	1	--	1	--
NOISEWALL N-70-110	215NWE+52	7' LT	1	1	--	--
RACINE ROAD RAMP CONNECTOR SB	251CSB+27	19' LT	1	--	1	--
RACINE ROAD RAMP CONNECTOR NB	251CNB+27	26' RT	1	--	1	--
FEN RAMP	127FEN+91	51' LT	1	--	--	--
	130FEN+03	59' LT	1	--	--	--
	130FEN+31	112' RT	1	--	--	--
STAGE 2A SUBTOTAL			65	43	15	3
STAGE 2C						
	182WB+74	45' LT	1	--	--	1
	182WB+99	46' LT	1	--	--	1
	183WB+26	47' LT	1	--	--	1
STAGE 2A SUBTOTAL			3	--	--	3
STAGE 3A						
USH 10 EB/STH 441 NB	182EB+87	30' LT	1	--	--	1
	183EB+13	40' LT	1	1	--	--
	183EB+24	32' LT	1	1	--	--

INLET PROTECTION (CONTINUED)

ROADWAY	STATION	OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
USH 10 EB/STH 441 NB	183EB+59	32' LT	1	1	--	--
	184EB+28	108' RT	1	1	--	--
	184EB+44	122' RT	1	1	--	--
	184EB+77	131' RT	1	1	--	--
	185EB+58	177' RT	1	1	--	--
	187EB+38	37' RT	1	--	1	--
	201EB+23	24' LT	1	1	--	--
	204EB+23	22' LT	1	1	--	--
	206EB+83	37' RT	1	--	1	--
	208EB+05	21' LT	1	1	--	--
	209EB+04	21' LT	1	1	--	--
	211EB+00	22' LT	1	1	--	--
	213EB+24	16' LT	1	1	--	--
	214EB+03	16' LT	1	1	--	--
	214EB+04	46' RT	1	1	--	--
	216EB+18	39' LT	1	1	--	--
	216EB+19	22' LT	1	1	--	--
	217EB+00	44' RT	1	--	--	1
	217EB+98	44' RT	1	1	--	--
	218EB+39	44' RT	1	1	--	--
	218EB+72	44' RT	1	1	--	--
	219EB+40	44' RT	1	1	--	--
USH 10 WB/STH 441 SB	200WB+43	28' RT	1	1	--	--
RACINE RD SW RAMP	187RSW+46	18' LT	1	--	1	--
	197RSW+02	19' LT	1	--	1	--
RACINE RD SE RAMP	193RSE+88	16' RT	1	--	1	--
	194RSE+09	17' RT	1	--	1	--
	194RSE+44	2' LT	1	--	1	--
	206RSE+40	9' LT	1	1	--	--
	206RSE+91	5' LT	1	--	1	--
	208RSE+12	9' LT	1	1	--	--
	211RSE+02	2' LT	1	1	--	--
	212RSE+40	21' RT	1	1	--	--
RACINE RD SW BYPASS	16RSWC+35	19' RT	1	--	1	--
	17RSWC+11	18' RT	1	--	1	--
	17RSWC+50	19' LT	1	--	1	--
	17RSWC+84	1' LT	1	--	1	--
	18RSWC+51	2' LT	1	--	1	--
RACINE ROAD RAMP CONNECTOR SB	244CSB+29	26' LT	1	--	1	--
	244CSB+53	28' LT	1	--	1	--
	244CSB+56	2' RT	1	--	1	--
	244CSB+94	1' RT	1	--	1	--
	245CSB+52	19' LT	1	--	1	--
	248CSB+26	2' RT	1	--	1	--
	248CSB+93	2' RT	1	--	1	--
	249CSB+89	19' LT	1	--	1	--
	249CSB+96	19' LT	1	--	1	--
	249CSB+96	2' RT	1	--	--	1

INLET PROTECTION (CONTINUED)

ROADWAY	STATION	OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
RACINE ROAD RAMP CONNECTOR NB	244CNB+44	2' LT	1	--	1	--
	244CNB+65	1' LT	1	--	1	--
	246CNB+00	26' RT	1	--	1	--
	249CNB+37	26' RT	1	--	1	--
	249CNB+92	26' RT	1	--	1	--
	249CNB+92	1' LT	1	--	--	1
STAGE 3A SUBTOTAL			57	26	27	4
STAGE 3B						
USH 10 EB/STH 441 NB	226EB+33	8' LT	1	1	--	--
STAGE 3B SUBTOTAL			1	1	--	--
UNDISTRIBUTED			13	7	4	1
PROJECT 1517-75-75 TOTAL			146	81	46	11

DELINEATORS

ROADWAY	STATION	OFFSET	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATORS REFLECTORS YELLOW EACH	633.0500 DELINEATORS REFLECTORS WHITE EACH	633.1000 DELINEATORS BRACKETS EACH
STAGE 2A						
USH 10 WB/STH 441 SB	181WB+18 - 183WB+18	LT	--	--	3	3
	186WB+18 - 194WB+18	RT	--	5	--	5
	188WB+37 - 210WB+37	LT	11	--	11	--
	213WB+36 - 223WB+36	LT	--	--	11	11
USH 10 WB/STH 441 SB TEMPORARY TIEBACK	22WBT+66 - 26WBT+66	RT	3	3	--	--
RACINE ROAD NE RAMP	201RNE+33 - 212RNE+33	RT	10	--	10	--
	201RNE+33 - 212RNE+33	LT	--	--	12	12
RACINE ROAD NW RAMP	186RNW+39 - 195RNW+39	LT	--	--	10	10
	189RNW+39 - 195RNW+39	RT	7	--	7	--
STAGE 2A SUBTOTAL			31	8	64	41
STAGE 3A						
USH 10 EB/STH 441 NB	181EB+27 - 183EB+27	RT	--	3	--	3
	181EB+28 - 183EB+28	LT	--	1	--	1
	186EB+28 - 210EB+28	LT	--	12	--	12
	188EB+25 - 204EB+25	RT	8	--	8	--
	214EB+00 - 223EB+00	RT	--	--	10	10
	223EB+00 - 227EB+00	RT	1	--	1	--
USH 10 WB/STH 441 SB	198WB+18 - 210WB+18	RT	--	7	--	7
USH 10 EB/STH 441 NB TEMPORARY TIEBACK	23EBT+33 - 27EBT+33	LT	1	1	--	--
RACINE ROAD SE RAMP	195RSE+00 - 213RSE+00	RT	13	--	19	6
	196RSE+00 - 205RSE+00	LT	10	--	10	--
RACINE ROAD SW RAMP	186RSW+00 - 192RSW+00	RT	1	--	7	6
	189RSW+00 - 196RSW+00	LT	8	--	8	--
STAGE 3A SUBTOTAL			42	24	63	45
PROJECT 1517-75-75 TOTAL			73	159		86

FILE NAME: I:\56537\1517-75-75\t1\cds\030201_mq.ppt PLOT DATE : 5/6/2015 4:55:59 PM PLOT BY : HNTB Corp. PLOT NAME : PLOT SCALE : 1:1

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3

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
1	USH 10/STH 441, OFF-RAMP TO RACINE ST	E5-1A	108" X 60"	45.00	---	---	---	---	---	2	EXIT 289A
1A	USH 10/STH 441, N. OF NB OFF-RAMP TO RACINE ST	D10-5	21" X 60"	8.75	---	---	---	---	1	---	EAST USH 10 MILE 288.8
1B	"	D10-5	21" X 60"	8.75	---	---	---	---	1	---	WEST USH 10 MILE 288.8
1C	"	W4-3	48" X 48"	---	---	16.00	---	---	2	---	
2	OFF-RAMP TO RACINE ST	D4-56R	36" X 36"	9.00	---	---	---	---	---	---	MOUNT TO LEFT VERTICAL COLUMN OF S-70-211
3	"	J13-1	24" X 45"	7.50	---	---	---	1	---	---	SEE PLAN SHEET
4	"	W10-1	36" X 36"	---	---	7.07	---	1	---	---	
5	"	W10-1A	24" X 12"	---	---	2.00	---	---	---	---	MOUNT BELOW SIGN #4
6	"	W10-1	36" X 36"	---	---	7.07	---	1	---	---	
7	"	W10-1A	24" X 12"	---	---	2.00	---	---	---	---	MOUNT BELOW SIGN #6
8	"	W4-3L	30" X 30"	---	---	6.25	1	---	---	---	
9	"	W12-1D	24" X 24"	---	---	4.00	1	---	---	---	
10	RACINE ST, APPROACH TO WEST RAB	R3-8II	36" X 30"	7.50	---	---	---	---	---	---	MOUNT TO LEFT VERTICAL COLUMN OF S-70-212
11	RACINE ST, APPROACH TO EAST RAB	W4-3R	30" X 30"	---	---	6.25	---	1	---	---	
12	RACINE ST, APPROACH TO WEST RAB	R3-8II	36" X 30"	7.50	---	---	---	---	---	---	MOUNT TO RIGHT VERTICAL COLUMN OF S-70-212
13	"	J4-2	48" X 36"	12.00	---	---	---	1	---	---	WEST USH 10, SOUTH STH 441, SEE PLAN SHEET
14	RACINE ST, SPLIT FOR WEST & EAST USH 10	J3-4	92" X 57"	36.42	---	---	---	---	2	---	WEST USH 10, SOUTH STH 441, EAST USH 10, NORTH STH 441, SEE PLAN SHEET
15	VACANT	---	---	---	---	---	---	---	---	---	
16	VACANT	---	---	---	---	---	---	---	---	---	
17	RACINE ST ON-RAMP TO USH 10 EB/STH 441 NB	R5-57	36" X 36"	9.00	---	---	1	---	---	---	
18	RACINE ST, WEST OF EAST RAB	D1-2	90" X 36"	22.50	---	---	---	2	---	---	SEE SIGN DETAIL SHEET
19	"	W10-1	36" X 36"	---	---	7.07	---	1	---	---	
20	"	W10-1A	24" X 12"	---	---	2.00	---	---	---	---	MOUNT BELOW SIGN #19
21	"	W10-1	36" X 36"	---	---	7.07	---	1	---	---	
22	"	W10-1A	24" X 12"	---	---	2.00	---	---	---	---	MOUNT BELOW SIGN #21
23	WEST RAB TO USH 10/STH 441	R1-2	36" X 31"	3.88	---	---	---	---	1	---	
24	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	MOUNT BELOW SIGN #23
25	"	R1-2	36" X 31"	7.75	---	---	---	---	1	---	
26	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	MOUNT BELOW SIGN #25
27	CENTRAL ISLAND OF WEST RAB	R6-1R	36" X 12"	3.00	---	---	2	---	---	---	
28	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	MOUNT BELOW SIGN #27
29	WEST RAB TO USH 10/STH 441	D1-3	84" X 30"	17.50	---	---	---	2	---	---	SEE SIGN DETAIL SHEET
30	"	D1-2	72" X 30"	15.00	---	---	---	---	---	---	SEE SIGN DETAIL SHEET
31	"	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	MOUNT BELOW SIGN #30
32	"	R5-57	36" X 36"	9.00	---	---	---	1	---	---	
33	CENTRAL ISLAND OF WEST RAB	R6-1R	36" X 12"	3.00	---	---	2	---	---	---	
	PAGE SUBTOTAL			250.55	10.00	68.78	7	12	8	2	

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

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ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
34	CENTRAL ISLAND OF WEST RAB	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	MOUNT BELOW SIGN #33
35	WEST RAB TO USH 10/STH 441	R5-1	30" X 30"	6.25	---	---	1	---	---	---	
36	USH 10 WB OFF-RAMP TO RACINE ST	R1-2	36" X 31"	3.88	---	---	---	---	1	---	
37	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	MOUNT BELOW SIGN #36
38	"	R1-2	36" X 31"	3.88	---	---	---	---	1	---	
39	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	MOUNT BELOW SIGN #38
40	WEST RAB TO USH 10/STH 441	R3-1	24" X 24"	4.00	---	---	1	---	---	---	
41	USH 10 WB OFF-RAMP TO RACINE ST	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	
42	"	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	
43	"	W3-2	36" X 36"	---	---	9.00	---	1	---	---	
44	"	D1-62	96" X 48"	32.00	---	---	---	---	2	---	SEE SIGN DETAIL SHEET
45	"	D4-56L	36" X 36"	9.00	---	---	---	1	---	---	
46	"	W2-6	36" X 36"	---	---	9.00	---	---	1	---	
47	"	W13-1	24" X 24"	---	---	4.00	---	---	---	---	15 MPH, MOUNT BELOW SIGN #47
48	USH 10 WB/STH 441 SB, GORE TO RACINE ST	E5-1A	108" X 60"	45.00	---	---	---	---	2	---	EXIT 289A
49	USH 10 EB/STH 441 NB, E. OF RACINE ST STRUCTURE	D10-5	21" X 60"	8.75	---	---	---	---	1	---	EAST USH 10 MILE 289.0
50	"	W4-3R	48" X 48"	---	---	16.00	---	---	2	---	
51	USH 10 WB/STH 441 SB, E. OF RACINE ST STRUCTURE	D10-5	21" X 60"	8.75	---	---	---	---	1	---	WEST USH 10 MILE 289.0
52	USH 10 EB/STH 441 NB, E. OF RACINE ST STRUCTURE	D10-5	21" X 60"	8.75	---	---	---	---	1	---	EAST USH 10 MILE 289.2
53	USH 10 WB/STH 441 SB, E. OF RACINE ST STRUCTURE	D10-5	21" X 60"	8.75	---	---	---	---	1	---	WEST USH 10 MILE 289.2
54	USH 10 EB/STH 441 NB, E. OF RACINE ST	J4-2	72" X 54"	27.00	---	---	---	---	1	---	EAST USH 10, NORTH STH 441
55	"	R2-1	48" X 60"	20.00	---	---	---	---	2	---	65 MPH
56	"	D10-5	21" X 60"	8.75	---	---	---	---	1	---	EAST USH 10 MILE 289.4
57	"	D10-5	21" X 60"	8.75	---	---	---	---	1	---	WEST USH 10 MILE 289.4
	PAGE SUBTOTAL			233.01	0.00	38.00	4	2	18	0	
	PROJECT TOTALS			**483.56**	**10.00**	**106.78**	**11**	**14**	**26**	**2**	

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ERECTION 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 SIGNS TYPE I REFLECTIVE SH S.F.	638.2601 REMOVING SIGNS TYPE I EACH	SPV.0105.-- REMOVING SIGN STRUCTURE (STATION) LS	SPV.0165.250 PERMANENT SIGN COVERING TYPE I S.F.	FOR INFORMATION USE ONLY STEEL SUPPORTS STEEL REINFORCEMENT HS LB	FOR INFORMATION USE ONLY REMOVING STRUCT. STEEL SIGN SUPPORTS EACH	FOR INFORMATION USE ONLY SIGN BRIDGE SINGLE POLE SIGN SUPPORT LS	FOR INFORMATION USE ONLY SIGN BRIDGE (STRUCTURE) LS	REMARKS
100	USH 10 EB/STH 441 NB, AT RACINE ST EXIT	E7-2	---	---	3	---	---	---	---	---	---	ALSO REMOVE E6-1 & E1-5 SIGNS ON STRUCTURE
101	"	---	---	---	---	SPV.0105.024 - 185EB+78	---	---	---	---	---	REMOVE EXISTING SIGN STRUCTURE S-70-12
102	USH 10 WB/STH 441 SB, AT TAYCO ST	E1-51A	---	---	2	---	---	---	---	---	---	ALSO REMOVE E1-5 SIGN ON GROUND MOUNT
103	"	---	---	---	---	---	---	---	2	---	---	
104	USH 10/STH 441, OFF-RAMP TO CTH P/RACINE ST	E7-1	156" X 120"	130.00	---	---	---	1960	---	---	1 (S-70-211)	STA. 190+75RSW, MOUNT CENTERED OVER LEFT LANE ON S-70-211, SEE SIGN DETAIL SHEET
105	"	E6-54R	108" X 90"	67.50	---	---	---	---	---	---	---	MOUNT CENTERED OVER RIGHT LANE ON S-70-211, SEE SIGN DETAIL SHEET
106	CTH P/RACINE ST, RAB TO WEST USH 10	E6-54L	192" X 90"	120.00	---	---	---	1960	---	---	1 (S-70-212)	STA. 249+30CNB, MOUNT CENTERED OVER LANES, SEE SIGN SIGN DETAIL SHEET
107	USH 10 EB/STH 441 NB, GORE AREA OF RACINE ST ON-RAMP	E1-51A	---	---	2	---	---	---	---	---	---	ALSO REMOVE E1-5 SIGN ON GROUND MOUNT
108	"	---	---	---	---	---	---	---	2	---	---	
109	USH 10/STH 441 MEDIAN, AT RACINE ST EXIT	E8-1	---	---	1	---	---	---	---	---	---	
110	"	---	---	---	---	SPV.0105.025 - 211EB+62	---	---	---	---	---	REMOVE EXISTING SIGN STRUCTURE S-70-16
111	USH 10 WB/STH 441 SB, E. OF RACINE ST OFF-RAMP	E7-2	---	---	3	---	---	---	---	---	---	ALSO REMOVE E6-1 & E1-5 SIGNS ON STRUCTURE
112	"	---	---	---	---	SPV.0105.027 - 213WB+14	---	---	---	---	---	REMOVE EXISTING SIGN STRUCTURE S-70-156
113	USH 10 EB/STH 441 NB, E. OF RACINE ST ON-RAMP	E6-1	---	---	2	---	---	---	---	---	---	ALSO REMOVE E1-5 SIGN ON STRUCTURE
114	"	---	---	---	---	SPV.0105.026 - 213EB+55	---	---	---	---	---	REMOVE EXISTING SIGN STRUCTURE S-70-157
115	USH 10/STH 441 MEDIAN, W. OF RACINE ST OVERPASS	E8-1	252" X 108"	189.00	---	---	---	980	---	1 (S-70-255)	---	STA. 219+20EB, S-70-255, MOUNT SIGN TO S-70-255, SEE SIGN DETAIL SHEET
116	USH 10/STH 441 MEDIAN, E. OF RACINE ST OVERPASS	---	---	---	---	SPV.0105.031 - 220WB+58	---	---	---	---	---	REMOVE EXISTING SIGN STRUCTURE S-70-17
117	"	E8-1	276" X 108"	207.00	1	---	23	980	---	1 (S-70-219)	---	STA. 220+80WB, S-70-219, MOUNT SIGN TO S-70-219, SEE SIGN DETAIL SHEET
	PROJECT TOTALS			**713.50**	**14**	**5**	**23**					

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

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REMOVING TYPE II SIGNS
REMOVING SIGNS AND SMALL SIGN SUPPORTS

SIGN	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
200	USH 10/STH 441, N. OF NB OFF-RAMP TO RACINE ST	W1-6	1	2	
201	USH 10/STH 441, OFF-RAMP TO RACINE ST	E5-1A	1	2	
202	"	W10-1	1	1	
203	"	W10-1A	---	---	PART OF REMOVAL FOR SIGN #202
204	"	W10-1	1	1	
205	"	W10-1A	---	---	PART OF REMOVAL FOR SIGN #204
206	"	W4-3L	1	1	
207	RAMP CONNECTION TO RACINE ST	W10-1	1	1	
208	"	W10-1A	---	---	PART OF REMOVAL FOR SIGN #207
209	RAMP CONNECTION TO USH 10/STH 441	W1-2R	1	1	
210	"	W13-1	---	---	PART OF REMOVAL FOR SIGN #209
211	"	W1-2R	1	1	
212	"	W13-1	---	---	PART OF REMOVAL FOR SIGN #211
213	"	W4-2R	1	1	
214	"	J4-2	1	1	
215	RAMP CONNECTION TO RACINE ST	J1-1	1	1	
216	USH 10/STH 441, N. OF NB OFF-RAMP TO RACINE ST	D10-3	1	1	
217	"	D10-3	1	1	
218	USH 10/STH 441, OFF-RAMP TO RACINE ST	W1-2L	1	1	
219	"	W13-1	---	---	PART OF REMOVAL FOR SIGN #218
220	ON-RAMP TO USH 10/STH 441	W1-6	1	1	
221	USH 10/STH 441, S. OF SB OFF-RAMP TO RACINE ST	W4-1	1	2	
222	"	W4-3	1	2	
223	USH 10/STH 441, OFF-RAMP TO RACINE ST	W1-2L	1	1	
224	"	W13-1	---	---	PART OF REMOVAL FOR SIGN #223
225	"	W1-2L	1	1	
226	"	W13-1	---	---	PART OF REMOVAL FOR SIGN #225
227	"	E5-1A	1	2	
228	USH 10/STH 441, N. OF SB OFF-RAMP TO RACINE ST	R2-1	1	1	
229	"	D10-1	1	1	
230	"	D10-1	1	1	
231	ON-RAMP TO USH 10/STH 441	W10-12	1	1	
232	"	W10-1	---	---	PART OF REMOVAL FOR SIGN #233
233	"	W10-1A	1	1	
	PROJECT TOTALS		**25**	**30**	

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

TRAFFIC CONTROL ITEMS

ROADWAY	STAGE DURATION DAYS	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (1517-75-75) DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH*	643.0300 DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH*	643.0420 DAYS	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH*	643.0705 DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH*	643.0715 DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH*	643.0900 DAYS	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0910 NO. OF CYCLES	643.0910 NO. OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.0920 NO. OF CYCLES	643.0920 NO. OF SIGNS	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH*	643.1050 DAYS
STAGE 1A CONSTRUCTION	14	14																				
USH 10 EB/STH 441 NB		--	22	308	--	--	--	--	--	--	10	140	--	--	--	--	--	--	--	--	--	--
STAGE 1A SUBTOTAL		14		308		--	--	--		--		140		--	--			--				--
STAGE 1B CONSTRUCTION	28	28																				
USH 10 EB/STH 441 NB		--	98	2,744	1	28	--	--	2	56	19	532	10	280	--	--	--	--	--	--	--	--
USH 10 WB/STH 441 SB		--	86	2,408	4	112	--	--	8	224	23	644	20	560	--	--	--	--	--	--	--	--
RACINE RD SW RAMP		--	7	196	--	--	--	--	--	--	7	196	--	--	--	--	--	--	--	--	--	--
RACINE RD SE RAMP		--	44	1,232	2	56	--	--	4	112	24	672	9	252	--	--	--	--	--	--	--	--
RACINE RD NW RAMP		--	17	476	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE 1B SUBTOTAL		28		7,056		196	--	--		392		2,044		1,092	--			--				--
STAGE 2A CONSTRUCTION	49	49																				
USH 10 EB/STH 441 NB		--	85	4,165	2	98	--	--	4	196	21	1,029	8	392	--	--	--	4	1	4	2	40
USH 10 WB/STH 441 SB		--	101	4,949	1	28	--	--	2	56	34	1,666	11	539	--	--	--	--	--	--	2	54
RACINE RD SW RAMP		--	7	343	--	--	--	--	--	--	7	343	--	--	--	--	--	--	--	--	2	14
RACINE ROAD		--	29	1,421	15	420	--	--	30	840	6	294	6	294	--	--	--	--	--	--	--	--
MIDWAY RD SW RAMP		--	24	1,176	--	--	--	--	--	--	10	490	5	245	--	--	--	--	--	--	--	--
STAGE 2A SUBTOTAL		49		12,054		546	--	--		1,092		3,822		1,470	--			4				108
STAGE 2B CONSTRUCTION	112	112																				
USH 10 EB/STH 441 NB		--	85	9,520	2	224	--	--	4	448	21	2,352	8	896	--	--	--	--	--	--	--	--
USH 10 WB/STH 441 SB		--	122	13,664	2	224	--	--	4	448	34	3,808	11	1,232	--	--	--	--	--	--	--	--
RACINE RD SW RAMP		--	7	784	--	--	--	--	--	--	7	784	--	--	--	--	--	--	--	--	--	--
RACINE ROAD		--	29	3,248	15	1,680	--	--	30	3,360	6	672	6	672	--	--	--	--	--	--	--	--
MIDWAY RD SW RAMP		--	24	2,688	--	--	--	--	--	--	10	1,120	5	560	--	--	--	--	--	--	--	--
STAGE 2B SUBTOTAL		112		29,904		2,128	--	--		4,256		8,736		3,360	--			--				--
STAGE 2C CONSTRUCTION	56	56																				
USH 10 EB/STH 441 NB		--	77	4,312	2	112	--	--	4	224	21	1,176	7	392	--	--	--	--	--	--	--	--
USH 10 WB/STH 441 SB		--	76	4,256	2	112	--	--	4	224	34	1,904	12	672	--	--	--	--	--	--	--	--
RACINE RD SW RAMP		--	7	392	--	--	--	--	--	--	7	392	--	--	--	--	--	--	--	--	--	--
RACINE ROAD		--	29	1,624	15	840	--	--	30	1,680	6	336	6	336	--	--	--	--	--	--	--	--
MIDWAY RD SW RAMP		--	24	1,344	--	--	--	--	--	--	10	560	5	280	--	--	--	--	--	--	--	--
STAGE 2C SUBTOTAL		56		11,928		1,064	--	--		2,128		4,368		1,680	--			--				--

TRAFFIC CONTROL ITEMS (CONTINUED)

ROADWAY	STAGE DURATION DAYS	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (1517-75-75) DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH*	643.0300 DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH*	643.0420 DAYS	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH*	643.0705 DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH*	643.0715 DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH*	643.0900 DAYS	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0910 NO. OF CYCLES	643.0910 NO. OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.0920 NO. OF CYCLES	643.0920 NO. OF SIGNS	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH*	643.1050 DAYS
STAGE 3A CONSTRUCTION	140	1																				
USH 10 EB/STH 441 NB		--	61	8,540	1	140	--	--	2	280	21	2,940	9	1,260	1	1	1	--	--	--	2	48
USH 10 WB/STH 441 SB		--	48	6,720	12	1,680	--	--	24	3,360	--	--	15	2,100	--	--	--	--	--	--	2	34
RACINE ROAD		--	29	4,060	15	2,100	--	--	30	4,200	6	840	6	840	--	--	--	--	--	--	--	--
MIDWAY RD SW RAMP		--	20	2,800	--	--	--	--	--	--	7	980	3	420	--	--	--	--	--	--	--	--
STAGE 3A SUBTOTAL		1		22,120		3,920	--	--		7,840		4,760		4,620	1			--				82
STAGE 3B CONSTRUCTION	56	56																				
USH 10 EB/STH 441 NB		--	63	3,528	1	56	21	21	2	112	21	1,176	10	560	--	--	--	--	--	--	2	48
USH 10 WB/STH 441 SB		--	48	2,688	9	504	--	--	18	1,008	--	--	14	784	--	--	--	--	--	--	2	48
RACINE ROAD		--	29	1,624	15	840	--	--	30	1,680	6	336	6	336	--	--	--	--	--	--	--	--
MIDWAY RD SW RAMP		--	20	1,120	--	--	--	--	--	--	7	392	3	168	--	--	--	--	--	--	--	--
STAGE 3B SUBTOTAL		56		8,960		1,400	21	21		2,800		1,904		1,848	--			--				96
UNDISTRIBUTED		--		--		--	--	--		--		--		--	1			1			2	64
PROJECT 1517-75-75 TOTAL		316		92,330		9,254	21	21		18,508		25,774		14,070	2			5				350

* FOR INFORMATION ONLY

TRACKING PADS

ROADWAY	628.7560 TRACKING PADS EACH
UNDISTRIBUTED	6
PROJECT 1517-75-75 TOTAL	6

TRAFFIC CONTROL SIGNS FIXED MESSAGE

ROADWAY	SIGN NO.	SIGN SIZE W X H (FT X FT)	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	SIGN MESSAGE
USH 10 EB/STH 441 NB	001	9 X 5.5	49.50	TRUCKS ENTERING FROM RIGHT
	003	7 X 7.0	49.00	TRUCKS EXITING DO NOT FOLLOW
	101	10.5 X 7.0	73.50	RACINE STREET RAMP CLOSED USE MIDWAY ROAD RAMP
	102	10.5 X 7.0	73.50	RACINE STREET RAMP CLOSED USE MIDWAY ROAD RAMP
	105	6.0 X 2.0	12.00	CLOSED
USH 10 WB/STH 441 SB	002	9 X 5.5	49.50	TRUCKS ENTERING FROM RIGHT
	004	7 X 7.0	49.00	TRUCKS EXITING DO NOT FOLLOW
PROJECT 1517-75-75 TOTAL			356.00	

PAVEMENT MARKING

STAGE	ROADWAY	646.0106* PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH 12.5 FT LINE WHITE LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH 3 FT LINE WHITE LF	646.0126* PAVEMENT MARKING EPOXY 8-INCH WHITE LF	646.0841.S PAVMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH 12.5 FT LINE WHITE LF	646.0841.S PAVMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH 3 FT LINE WHITE LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH WHITE LF	647.0110 PAVEMENT MARKING RAILROAD CROSSINGS EPOXY EACH	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH LF	649.2100* TEMPORARY RAISED PAVEMENT MARKERS WHITE EACH	649.2100* TEMPORARY RAISED PAVEMENT MARKERS YELLOW EACH
STAGE 4													
	USH 10 EB/STH 441 NB												
	178EB+88 TO 210EB+17	6,276	6,326	1,569	42	1,084	--	--	--	--	--	--	--
	210EB+17 TO 237EB+28	2,514	3,786	308	428	1,164	--	--	--	--	--	--	--
	USH 10 WB/STH 441 SB												
	USH 10 WB/STH 441 SB	3,397	4,417	458	354	1,342	--	--	--	--	--	74	41
	RACINE ROAD NE RAMP	970	964	--	--	--	--	47	100	--	--	--	--
	RACINE ROAD SE RAMP	1,046	1,164	--	--	--	--	--	125	--	--	--	--
	RACINE ROAD SW RAMP	1,086	514	--	--	45	36	69	606	1	97	--	--
	RACINE ROAD SW RAMP BYPASS	--	506	--	--	--	--	--	431	1	--	--	--
	RACINE ROAD CONNECTOR NB	--	--	--	--	--	208	6	188	1	--	--	--
	RACINE ROAD CONNECTOR SB	--	839	--	--	--	5	--	88	1	--	--	--
	USH 10 WB/STH 441 SB RAMP ROUNDABOUT	--	--	--	--	--	--	--	106	--	--	--	--
STAGE 4 SUBTOTAL		15,289	18,517		824	3,634	249	122	1,643	4	97	74	41
PROJECT 1517-75-75 TOTAL				34,630		3,634		371	1,643	4	97	115	

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

PAVEMENT MARKING (CONTINUED)

STAGE	ROADWAY	SPV.0060.006 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS, TYPE 1 EACH	SPV.0060.007 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS, TYPE 2R EACH	SPV.0060.008 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS, TYPE 2 EACH	SPV.0060.009 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS, TYPE 3 EACH	SPV.0060.011 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS EACH	SPV.0090.017 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH 6 FT LINE WHITE LF	SPV.0090.018 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC YIELD LINE 18-INCH 2 FT LINE WHITE LF
STAGE 4								
	USH 10 EB/STH 441 NB							
	178EB+88 TO 210EB+17	--	--	--	--	--	--	--
	210EB+17 TO 237EB+28	--	--	--	--	--	--	--
	USH 10 WB/STH 441 SB							
	USH 10 WB/STH 441 SB	--	--	--	--	--	--	--
	RACINE ROAD NE RAMP	--	--	1	--	1	--	--
	RACINE ROAD SE RAMP	--	--	--	--	--	--	--
	RACINE ROAD SW RAMP	--	--	--	--	--	--	--
	RACINE ROAD SW RAMP BYPASS	--	--	--	--	--	--	--
	RACINE ROAD CONNECTOR NB	--	1	1	--	2	--	--
	RACINE ROAD CONNECTOR SB	--	--	--	--	--	--	--
	USH 10 WB/STH 441 SB RAMP ROUNDABOUT	1	--	--	1	--	219	54
STAGE 4 SUBTOTAL		1	1	2	1	3	219	54
PROJECT 1517-75-75 TOTAL		1	1	2	1	3	219	54

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

TEMPORARY PAVEMENT MARKING

	646.0600	646.0106*				646.0126*	649.0200				649.0701	649.2100*		SPV.0090.001
	REMOVING PAVEMENT MARKINGS	PAVEMENT MARKING EPOXY 4-INCH				PAVEMENT MARKING EPOXY 8-INCH	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH				TEMPORARY PAVEMENT MARKING 8-INCH	TEMPORARY RAISED PAVEMENT MARKERS		REMOVING LONGITUDINAL PAVEMENT MARKINGS WATER BLASTING
				3 FT LINE	12.5 FT LINE				3 FT LINE	12.5 FT LINE	REFLECTIVE			
		YELLOW	WHITE	WHITE	WHITE	WHITE	YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	YELLOW	
STAGE	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	LF
STAGE 1B	27,489	--	--	--	--	--	11,374	11,344	696	2,028	1,942	167	117	--
STAGE 2A	22,790	10,128	12,117	237	1,939	755	--	--	--	--	--	167	93	--
STAGE 2C	12,635	5,477	7,961	79	682	200	--	--	--	--	--	225	110	--
STAGE 3A	--	--	--	--	--	--	12,248	15,202	97	2,391	1,037	228	114	17,139
STAGE 3B	--	--	--	--	--	--	2,415	4,456	50	145	85	102	51	6,358
STAGE 4	--	--	--	--	--	--	--	--	--	--	--	--	--	13,160
TOTALS	62,914	15,605	20,078	316	2,621	955	26,037	31,002	843	4,564	3,064	889	485	36,657
PROJECT 1517-75-75 TOTALS	62,914		38,620			955		62,446			3,064	1,374		36,657

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

PIEZOMETERS

ROADWAY	STATION	OFFSET	SPV.0060.004 VIBRATING WIRE PIEZOMETERS INSTRUMENTATION SYSTEM, DELIVERED EACH	COMMENTS
PROJECT 1517-75-75				
USH 10 EB/STH 441 NB	201EB+50	30' RT	1	Instrumentation Elev. 730
	206EB+00	30' RT	1	Instrumentation Elev. 735
	245EB+50	50' RT	1	Instrumentation Elev. 750
	249EB+00	55' RT	1	Instrumentation Elev. 750
USH 10 WB/STH 441 SB	182WB+10	44' LT	1	Instrumentation Elev. 730
	184WB+00	47' LT	1	Instrumentation Elev. 735
	248WB+00	40' LT	1	Instrumentation Elev. 750
	252WB+50	40' LT	1	Instrumentation Elev. 750
RACINE ROAD SW RAMP	188RSW+00	25' RT	1	Instrumentation Elev. 730
	194RSW+00	25' RT	1	Instrumentation Elev. 730
PROJECT 1517-75-75 TOTAL			10	

SETTLEMENT GAUGES

ROADWAY	STATION	OFFSET	SPV.0060.005 SETTLEMENT GAUGES EACH	COMMENTS
PROJECT 1517-75-75				
USH 10 EB/STH 441 NB	201EB+00	30' RT	1	Instrumentation Elev. Existing Grade
	203EB+00	40' RT	1	Instrumentation Elev. 761
	204EB+50	35' RT	1	Instrumentation Elev. Existing Grade
	245EB+50	50' RT	1	Instrumentation Elev. 766
	249EB+00	55' RT	1	Instrumentation Elev. 768
USH 10 WB/STH 441 SB	182WB+10	44' LT	1	Instrumentation Elev. Existing Grade
	184WB+00	47' LT	1	Instrumentation Elev. Existing Grade
	248WB+00	40' LT	1	Instrumentation Elev. 767
	252WB+50	40' LT	1	Instrumentation Elev. 771
RACINE ROAD SE RAMP	204RSE+50	30' RT	1	Instrumentation Elev. Existing Grade
RACINE ROAD SW RAMP	186RSW+00	30' RT	1	Instrumentation Elev. Existing Grade
	189RSW+50	35' RT	1	Instrumentation Elev. Existing Grade
	192RSW+00	0' RT	1	Instrumentation Elev. Existing Grade
PROJECT 1517-75-75 TOTAL			13	

ITS PULL BOX, COMMUNICATION VAULT & MANHOLE ITEMS

				653.0180		673.0105
				PULL BOXES STEEL COMMUNICATIONS 24X36-INCH		COMMUNICATION VAULT TYPE 1
INTERCHANGE	STATION	LOCATION	ITEM ID	COMM PB EACH	ELECTRICAL PB EACH	EACH
CATEGORY 1200						
TAYCO ST	186RSW+35	RT	CV-1	-	-	1
	188RSW+7	RT	PB-C1	1	-	-
	190RSW+72	RT	PB-C2	1	-	-
	192RSW+80	RT	PB-C3	1	-	-
	192RSW+94	RT	CV-6	-	-	1
	192EB+71	RT	PB-C4	1	-	-
	192EB+87	RT	CV-5	-	-	1
	193EB+00	RT	PB-E6	-	1	-
	195EB+37	RT	PB-E5	-	1	-
	195EB+56	RT	PB-C13	1	-	-
	195EB+72	RT	CV-4	-	-	1
	197EB+93	RT	PB-C14	1	-	-
	197RSE+74	LT	PB-C15	1	-	-
	197EB+76	RT	PB-C16	1	-	-
	199RSE+49	RT	PB-C17	1	-	-
	201RSE+66	RT	PB-C18	1	-	-
	187RNW+42	LT	PB-C5	1	-	-
	196RNW+44	RT	PB-C10	1	-	-
	196RNW+16	RT	PB-E3	-	1	-
	196RNW+10	RT	PB-C11	1	-	-
	195RNW+96	RT	CV-7	-	-	1
	195WB+75	LT	PB-C12	1	-	-
	195WB+89	LT	CV-3	-	-	1
	195WB+50	LT	PB-E4	-	1	-
	196RNW+55	LT	PB-E2	-	1	-
	195RNW+77	RT	PB-E1	-	1	-
	196RNW+66	LT	CV-2	-	-	1
	200RNE+00	LT	PB-C21	1	-	-
	202RNE+00	LT	PB-C22	1	-	-
	209RNE+75	LT	CV-8	-	-	1
	220WB+00	LT	CV-9	-	-	1
	221WB+68	LT	CV-10	-	-	1
	SUBTOTAL			16	6	10
TOTALS				22		10

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ITS CABLE ITEMS

INTERCHANGE	FROM	SPV.0060.402 TRACER TEST STATION EACH
CATEGORY 1200		
TAYCO ST	CV-50	1
	CV-5	1
	CV-8	1
	SUBTOTAL	2
	TOTALS	2

ITS CCTV ITEMS

INTERCHANGE	STATION		ITEM ID	654.0105 CONCRETE BASES TYPE 5 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	657.0100 PEDESTAL BASES BLACK EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMNINUM 15-FT BLACK EACH	662.2040.S RAMP CLOSURE SOLAR POWERED 40-FT EACH	672.0250 BASE CAMERA POLE 50-FT EACH
CATEGORY 1200										
	187RSW+72	RT	SDS-70-0032SE	1	-	-	-	-	-	-
	187RNW+19	LT	SDS-70-0032SW	1	-	-	-	-	-	-
	192EB+74	RT	CCTV-70-0085	-	-	-	-	-	-	1
	196RNW+60	LT	SB RAMP GATE	1	-	-	1	-	1	-
	196RNW+00	LT	CONTROLLER CABINET	-	1	1	-	1	-	-
	201RSE+00	RT	SDS-70-0032NE	1	-	-	-	-	-	-
	202RNE+23	LT	SDS-70-0032NW	1	-	-	-	-	-	-
TOTALS				5	1	1	1	1	1	1

ITS CONDUIT ITEMS

INTERCHANGE	FROM	TO	LINEAR DISTANCE	NO. OF CONDUIT	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	SPV.0090.402 CONDUIT HDPE DIRECTIONAL BORE 5-DUCT 2-INCH LF	671.0242 CONDUIT HDPE DIRECTIONAL BORE 4-DUCT 2-INCH LF	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH LF	671.0222 CONDUIT HDPE DIRECTIONAL BORE 2-DUCT 2-INCH LF	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0132 CONDUIT HDPE 3-DUCT 2-INCH LF	671.0142 CONDUIT HDPE 4-DUCT 2-INCH LF	SPV.0090.400 CONDUIT HDPE 5-DUCT 2-INCH LF
CATEGORY 1200														
TAYCO ST	BRIDGE	CV-1	54	1	-	-	-	-	-	-	-	54	-	
	CV-1	PB-C1	179	1	-	-	-	-	-	-	-	179	-	
	SDS-70-0032SE	PB-C1	32	1	32	-	-	-	-	-	-	-	-	-
	PB-C1	PB-C2	259	1	-	-	-	-	-	-	-	-	259	-
	PB-C2	PB-C3/CV-6	201	1	-	-	-	-	-	-	-	-	201	-
	PB-C3/CV-6	PB-C4	122	1	-	-	-	122	-	-	-	-	-	-
	PB-C4	CCTV-70-0085	17	1	-	17	-	-	-	-	-	-	-	-
	CV-5	CCTV-70-0085	25	1	25	-	-	-	-	-	-	-	-	-
	PB-E6	CCTV-70-0085	24	1	24	-	-	-	-	-	-	-	-	-
	PB-C4/CV-5	PB-C13/CV-4	245	1	-	-	-	-	-	-	-	-	-	245
	PB-C13/CV-4	PB-C14	220	1	-	-	-	-	-	220	-	-	-	-
	PB-C14	PB-C15	100	1	-	-	-	-	-	-	100	-	-	-
	PB-C15	PB-C16	47	1	-	-	-	-	-	47	-	-	-	-
	PB-C16	PB-C17	165	1	-	-	-	-	-	-	165	-	-	-
	PB-C17	PB-C18	210	1	-	-	-	-	-	-	210	-	-	-
	PB-C18	SDS-70-0032NE	30	1	30	-	-	-	-	-	-	-	-	-
	SDS-70-0032SW	PB-C5	20	1	20	-	-	-	-	-	-	-	-	-
	PB-C5	PB-C1	285	1	-	-	-	-	-	285	-	-	-	-
	ELECTRICAL SERVICE METER BREAKER PEDESTAL	PB-E1	5	1	5	-	-	-	-	-	-	-	-	-
	PB-E1	CV-7/PB-C11/PB-E3	37	1	-	-	-	-	-	-	-	-	37	
	PB-C10	PB-C11	74	1	-	-	74	-	-	-	-	-	-	-
	PB-E1	PB-C12	170	1	-	-	-	-	-	-	-	-	-	170
	PB-C12/PB-E4	PB-C13/PB-E5	247	1	-	-	247	-	-	-	-	-	-	-
	PB-10/CV-2	PB-C21	330	1	-	-	-	-	-	-	-	-	330	-
	PB-E3	CONTROLLER CABINET	20	1	-	-	-	-	-	-	20	-	-	-
	PB-E2	SB RAMP GATE	20	1	-	-	-	-	-	-	20	-	-	-
	PB-C21	PB-C22	198	1	-	-	-	-	-	-	-	-	198	-
	PB-C22	CV-8	760	1	-	-	-	-	-	-	-	760	-	-
	PB-C22	SDS-70-0032NW	27	1	27	-	-	-	-	-	-	-	-	-
	CV-8	CV-9	1002	1	-	-	-	-	-	-	-	1002	-	-
	CV-9	CV-10	163	1	-	-	-	-	163	-	-	-	-	-
TOTALS					163	17	321	122	163	552	515	1,995	1,025	415

POLES, ARMS, & LUMINAIRES

CATEGORY		LOCATION	STATION	654.0105 CONCRETE BASES TYPE 5	654.0107 CONCRETE BASES TYPE 7	657.0210 TRANSFORMER BASES BREAKAWAY 15-17 INCH BOLT CIRCLE	657.0255 TRANSFORMERS BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	657.0322 POLES TYPE 5-ALUMINUM	657.0337 POLES TYPE 17-ALUMINUM	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	657.0730 LUMINAIRE ARMS TRUSS TYPE 6-INCH CLAMP 12-FT	659.0600 Underdeck Lighting (B-70-420)	659.0600 Underdeck Lighting (B-70-421)	659.1120 Luminaires Utility LED B	659.1125 Luminaires Utility LED C	659.1130 Luminaires Utility LED D	659.1210 Luminaires Underdeck LED B	659.0802 PLAQUES SEQUENCE IDENTIFICATION	SPV.0060.353 CONCRETE BASES TYPE 7 ON STEEP SLOPES	SPV.0060.354 CONCRETE BASES TYPE 7 MEDIAN
				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LS	LS	EACH	EACH	EACH	EACH	EACH	EACH	EACH
1100	RAMPS SW & SE	SL401	STA 186+00	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL402	STA 188+47	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL403	STA 191+00	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL404	STA 193+47	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL405	STA 196+11	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL406	STA 197+25	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL407	STA 199+75	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL408	STA 202+25	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL409	STA 204+75	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL410	STA 207+57	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL411	STA 209+75	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL412	STA 212+25	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL413	STA 215+00	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL414	STA 218+00	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL415	STA 182+75	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
	MAINLINE	SL421	STA 487+00	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL422	STA 489+80	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL423	STA 492+56	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL424	STA 495+18	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL425	STA 498+45	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL426	STA 501+45	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL427	STA 504+45	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL428	STA 507+45	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
		SL429	STA 510+45	-	-	-	-	-	1	-	2	-	-	-	-	2	-	1	-	1
	RAMPS NW AND N	SL441	STA 185+25	-	-	-	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL442	STA 187+45	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL443	STA 189+75	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL444	STA 192+00	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL445	STA 194+50	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL446	STA 201+67	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL447	STA 204+17	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL448	STA 206+63	-	-	1	-	-	1	-	1	-	-	-	1	-	-	1	1	-
		SL449	STA 208+93	-	-	1	-	-	1	-	1	-	-	-	1	-	-	1	1	-
		SL450	STA 211+43	-	-	1	-	-	1	-	1	-	-	-	1	-	-	1	1	-
		SL451	STA 214+61	-	-	1	-	-	1	-	1	-	-	-	1	-	-	1	1	-
		SL452	STA 217+80	-	-	1	-	-	1	-	1	-	-	-	1	-	-	1	1	-
MAINLINE AND RAMPS				0	21	26	0	0	36	0	45	0	0	0	27	18	0	36	5	9
1100	ROUNDABOUT & CONNECTOR RD	SL501	STA 12+14	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL502	STA 253+00	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL503	STA 252+00	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
	UNDERDECK	SL504	STA 250+97	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	UNDERDECK	SL505	STA 250+09	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-
		SL506	STA 249+18	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL507	STA 247+00	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL508	STA 17+63	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL510	STA 196+66	W/GATE	-	-	W/GATE	W/GATE	-	1	-	-	-	1	-	-	-	1	-	-
		SL511	STA 13+44	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL512	STA 198+90	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL513	STA 14+57	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL514	STA 252+97	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL515	STA 252+06	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
	UNDERDECK	SL516	STA 250+97	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
	UNDERDECK	SL517	STA 250+09	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
		SL518	STA 248+08	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
		SL519	STA 194+50	-	1	1	-	-	1	-	1	-	-	-	1	-	-	1	-	-
		SL520	STA 245+00	1	-	-	1	1	-	1	-	-	-	1	-	-	-	1	-	-
ROUNDABOUT & CONNECTOR ROAD				13	1	1	13	13	1	14	1	1	1	14	1	0	4	15	0	0
			PROJECT TOTA	**13**	**22**	**27**	**13**	**13**	**37**	**14**	**46**	**1**	**1**	**14**	**28**	**18**	**4**	**51**	**5**	**9**

WIRING

CATEGORY 1100

SYSTEM	POLE	FROM (POLE LOCATION)	POLE	TO (POLE LOCATION)	# of CONDUITS	# of PHASE CONDUCTORS	# of GROUND CONDUCTORS	652.0225 CNODUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	652.0235 CNODUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG
								LF	LF	LF	LF	LF
	ELPB01	STA 183+90	LPB01	STA 185+00	1	4	1	-	107	-	132	528
RAMPS	LPB01	STA 185+00	LPB02	STA 185+17	1	4	1	-	114	-	119	476
SW & SE	LPB02	STA 185+17	LPB03	STA 185+95	1	4	1	-	80	-	85	340
	LPB03	STA 185+95	SL401	STA 186+00	1	4	1	10	-	55	15	60
	SL401	STA 186+00	SL402	STA 188+47	1	4	1	247	-	55	252	1008
	SL402	STA 188+47	SL403	STA 191+00	1	4	1	253	-	55	258	1032
	SL403	STA 191+00	SL404	STA 193+47	1	4	1	247	-	55	252	1008
	SL404	STA 193+47	SL405	STA 196+11	1	4	1	264	-	55	269	1076
	SL405	STA 196+11	LPB30	STA 196+25	1	4	1	14	-	-	19	76
	LPB30	STA 196+25	LPB31	STA 196+25	1	4	1	-	63	-	68	272
	LPB31	STA 196+25	LPB32	STA 195+00	1	4	1	-	152	-	157	628
	LPB32	STA 195+00	SL406	STA 197+25	1	4	1	225	-	55	230	920
	SL406	STA 197+25	SL407	STA 199+75	1	4	1	250	-	55	255	1020
	SL407	STA 199+75	SL408	STA 202+25	1	4	1	250	-	55	255	1020
	SL408	STA 202+25	SL409	STA 204+75	1	4	1	250	-	55	255	1020
	SL409	STA 204+75	SL410	STA 207+57	1	4	1	282	-	55	287	1148
	SL410	STA 207+57	SL411	STA 209+75	1	4	1	218	-	55	223	892
	SL411	STA 209+75	SL412	STA 212+25	1	4	1	250	-	55	255	1020
	SL412	STA 212+25	SL413	STA 215+00	1	4	1	275	-	55	280	1120
	SL413	STA 215+00	SL414	STA 218+00	1	2	1	300	-	55	305	610
	SL401	STA 186+00	LPB03	STA 185+95	1	2	1	10	-	-	15	30
	LPB03	STA 185+95	LPB39	STA 183+75	1	2	1	BRIDGE PARAPET	-	-	220	450
	LPB39	STA 183+75	SL415	STA 182+75	1	2	1	105	-	55	110	220
	SL415	STA 182+75	ELPB03	STA 181+32	1	-	-	155	-	-	-	-
MAINLINE	ELPB01	STA 183+90	LPB01	STA 185+00	1	4	1	-	107	-	132	528
	LPB01	STA 185+00	LPB02	STA 185+17	1	4	1	-	114	-	119	476
	LPB02	STA 185+17	LPB03	STA 185+95	1	4	1	-	80	-	85	340
	LPB03	STA 185+95	LPB04	STA 187+50	1	4	1	-	215	-	220	880
	LPB04	STA 187+50	LPB05	STA 486+85	1	4	1	-	102	-	107	428
	LPB05	STA 486+85	SL421	STA 487+00	1	4	1	15	-	73	20	80
	SL421	STA 487+00	SL422	STA 489+80	1	4	1	280	-	73	285	1140
	SL422	STA 489+80	SL423	STA 492+56	1	4	1	276	-	73	281	1124
	SL423	STA 492+56	SL424	STA 495+18	1	4	1	262	-	73	267	1068
	SL424	STA 495+18	LPB36	STA 495+22	1	4	1	4	-	-	9	36
	LPB36	STA 495+22	LPB37	STA 497+68	2	4	1	PARAPET	-	-	250	1000
	LPB37	STA 497+68	SL425	STA 498+45	1	4	1	77	-	73	82	328
	SL425	STA 498+45	SL426	STA 501+45	1	4	1	300	-	73	305	1220
	SL426	STA 501+45	SL427	STA 504+45	1	4	1	300	-	73	305	1220
	SL427	STA 504+45	SL428	STA 507+45	1	4	1	300	-	73	305	1220
	SL428	STA 507+45	SL429	STA 510+45	1	4	1	300	-	73	305	1220
	SL429	STA 510+45	LPB33	STA 511+25	1	-	-	80	-	-	-	-
RAMPS	ELPB01	STA 183+90	LPB01	STA 185+00	1	4	1	-	107	-	132	528
NW & NE	LPB01	STA 185+00	LPB02	STA 185+17	1	4	1	-	114	-	119	476
	LPB02	STA 185+17	LPB03	STA 185+95	1	4	1	-	80	-	85	340
	LPB03	STA 185+95	LPB04	STA 187+50	1	4	1	-	215	-	220	880
	LPB04	STA 187+50	LPB05	STA 486+85	1	4	1	-	102	-	107	428
	LPB05	STA 486+85	LPB06	STA 186+65	2	4	1	-	240	-	125	500
	LPB06	STA 186+65	SL441	STA 185+25	1	4	1	PARAPET	-	55	140	560
	SL441	STA 185+25	LPB06	STA 186+65	1	4	1	PARAPET	-	-	140	560
	LPB06	STA 186+65	SL442	STA 187+45	1	4	1	80	-	55	85	340
	SL442	STA 187+45	SL443	STA 189+75	1	4	1	230	-	55	235	940
	SL443	STA 189+75	SL444	STA 192+00	1	4	1	225	-	55	230	920
	SL444	STA 192+00	SL445	STA 194+50	1	4	1	250	-	55	255	1020
	SL445	STA 194+50	LPB07	STA 12+00	1	4	1	245	-	-	250	1000
	LPB07	STA 12+00	LPB08	STA 199+00	1	4	1	225	-	-	230	920
	LPB08	STA 199+00	SL446	STA 201+67	1	4	1	267	-	55	272	1088
	SL446	STA 201+67	SL447	STA 204+17	1	4	1	250	-	55	255	1020
	SL447	STA 204+17	SL448	STA 206+63	1	4	1	246	-	55	251	1004
	SL448	STA 206+63	SL449	STA 208+93	1	4	1	230	-	55	235	940
	SL449	STA 208+93	SL450	STA 211+43	1	4	1	250	-	55	255	1020
	SL450	STA 211+43	SL451	STA 214+61	1	4	1	318	-	55	323	1292
	SL451	STA 214+61	SL452	STA 217+80	1	2	1	319	-	55	324	648
	JB01	STA 181+20	ELPB02	STA 181+31	1	-	-	80	-	-	-	-
MAINLINE AND RAMPS								9014	1992	2142	11661	44706

WIRING

CATEGORY 1100

SYSTEM	POLE	FROM (POLE LOCATION)	POLE	TO (POLE LOCATION)	# of CONDUITS	# of PHASE CONDUCTORS	# of GROUND CONDUCTORS	652.0225 CNODUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	652.0235 CNODUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG
								LF	LF	LF	LF	LF
ROUNDABOUT &	CB-500	STA 195+88	SL501	STA 12+14	1	4	1	41		45	46	184
CONNECTOR RD	SL501	STA 12+14	LPB10	STA 252+50	1	4	1	110		-	115	460
	LPB10	STA 252+50	LPB11	STA 252+50	1	2	1	-	37	-	42	84
	LPB11	STA 252+50	SL502	STA 253+00	1	2	1	56		45	61	122
	LPB10	STA 252+50	SL503	STA 252+00	1	6	1	50		45	55	330
	SL503	STA 252+00	LPB12	STA 251+38	1	4	1	64		-	69	276
	LPB12	STA 251+38	LPB13	STA 251+38	2	8	2	-	66	-	76	304
	LPB12	STA 251+38	SL506	STA 249+18	1	4	1	220		45	255	1020
	SL506	STA 249+18	SL507	STA 247+00	1	4	1	218		45	223	892
	SL507	STA 247+00	LPB14	STA 196+80	1	4	1	135		-	140	560
	LPB14	STA 196+80	LPB15	STA 16+75	1	4	1	-	70	-	75	300
	LPB15	STA 16+75	SL508	STA 17+63	1	4	1	86	-	45	91	364
	SL508	STA 17+63	LPB16	STA 18+00	1	4	1	36	-	-	41	164
	CB-500	STA 195+88	LPB19	STA 196+40	1	4	1	-	57	-	62	248
	LPB19	STA 196+40	LPB20	STA 196+52	1	4	1	-	53	-	58	232
	LPB20	STA 196+52	SL510	STA 196+66	1	4	1	15		45	20	80
	SL510	STA 196+66	SL511	STA 13+44	1	4	1	128		45	133	532
	SL511	STA 13+44	SL512	STA 198+90	1	4	1	110		45	115	460
	SL512	STA 198+90	LPB21	STA 199+00	1	4	1	12		-	17	68
	LPB21	STA 199+00	LPB22	STA 199+00	1	4	1	-	35	-	40	160
	LPB22	STA 199+00	SL513	STA 14+57	1	4	1	76		45	81	324
	SL513	STA 14+57	SL514	STA 252+97	1	4	1	105		45	110	440
	SL514	STA 252+97	LPB23	STA 252+53	1	4	1	44		-	49	196
	LPB23	STA 252+53	LPB11	STA 252+50	1	-	-	-	47	-	-	-
	LPB23	STA 252+53	SL515	STA 252+06	1	4	1	47		45	52	208
	SL515	STA 252+06	LPB24	STA 249+57	1	4	1	249		-	254	1016
	LPB24	STA 249+57	LPB25	STA 249+57	2	8	2	-	84	-	94	376
	LPB24	STA 249+57	SL518	STA 248+08	1	4	1	149		45	194	776
	SL518	STA 248+08	LPB26	STA 194+55	1	4	1	188		-	193	772
	LPB26	STA 194+55	LPB27	STA 194+55	1	4	1	-	38	-	43	172
	LPB27	STA 194+55	SL519	STA 194+50	1	4	1	100	-	45	105	420
	SL519	STA 194+50	SL520	STA 245+00	1	4	1	37	-	45	42	168
	SL520	STA 245+00	LPB28	STA 244+60	1	4	1	-	80	-	85	340
ROUNDABOUT AND CONNECTOR RD								2276	567	675	3036	12048
				PROJECT TOTAL				**11290**	**2559**	**2817**	**14697**	**56754**

PULL BOXES

CATEGORY	DESCRIPTION	STATION	OFFSET		653.0140.001 PULL BOXES STEEL 24x42 - INCH
					EACH
1100					
	LPB01	STA 185+00	145.00	RT	1
	LPB02	STA 185+17	30.00	RT	1
	LPB03	STA 185+95	32.00	RT	1
	LPB04	STA 187+50	42.00	RT	1
	LPB05	STA 486+85	10.00	LT	1
	LPB06	STA 186+65	35.00	LT	1
	LPB07	STA 12+00	20.00	LT	1
	LPB08	STA 199+00	30.00	LT	1
	LPB09	STA 196+00	33.00	RT	1
	LPB10	STA 252+50	24.00	LT	1
	LPB11	STA 252+50	12.00	RT	1
	LPB12	STA 251+38	25.00	LT	1
	LPB13	STA 251+38	8.00	RT	1
	LPB14	STA 196+80	25.00	LT	1
	LPB15	STA 16+75	24.00	RT	1
	LPB16	STA 18+00	25.00	RT	1
	LPB19	STA 196+40	13.00	RT	1
	LPB20	STA 196+52	38.00	LT	1
	LPB21	STA 199+00	26.00	LT	1
	LPB22	STA 199+00	8.00	RT	1
	LPB23	STA 252+53	6.00	RT	1
	LPB24	STA 249+57	32.00	RT	1
	LPB25	STA 249+57	8.00	RT	1
	LPB26	STA 194+55	9.00	LT	1
	LPB27	STA 194+55	26.00	RT	1
	LPB28	STA 244+60	40.00	RT	1
	LPB30	STA 196+25	38.00	RT	1
	LPB31	STA 196+25	25.00	LT	1
	LPB32	STA 195+00	25.00	RT	1
	LPB33	STA 511+25	5.00	LT	1
	LPB34	STA 196+50	60.00	LT	1
	LPB35	STA 196+00	13.00	RT	1
	LPB36	STA 495+22	6.00	LT	1
	LPB37	STA 497+68	2.00	LT	1
	LPB38	STA 484+00	10.00	LT	1
	LPB39	STA 183+75	52.00	RT	1
PROJECT TOTAL					**36**

LIGHTING CABINETS & SERVICE PEDESTALS

WIS 441 Lighting - Contract 1517-75-75

CATEGORY	STATION	OFFSET			654.0230 CONCRETE CONTROL CABINET BASES TYPE L30	656.0200 Electrical Service Meter Breaker Pedestal (CB-500)	SPV.0060.351 LIGHTING CONTROL CABINET * ROUNDABOUT	SPV.0060.352 Lighting Control Cabinet * Freeway
					EACH	LS	EACH	EACH
1100	STA 195+88	37.00	RT		1	1	1	-
1100	STA 184+04	172.00	RT		EXISTING	EXISTING	-	1
					1	1	1	1
				PROJECT TOTAL	**1**	**1**	**1**	**1**

SAWING PAVEMENT

STAGE	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
STAGE 1A							
	USH 10 EB/STH 441 NB	159ML+73	35.5' RT	178ML+20	46.6' RT	--	2,817
STAGE 1A SUBTOTAL						--	2,817
STAGE 1B							
	USH 10 WB/STH 441 SB	164ML+39	19.1' LT	168ML+08	24.5' LT	--	364
	USH 10 EB/STH 441 NB	168ML+68	23.4' RT	170ML+79	19.0' RT	--	210
	USH 10 EB/STH 441 NB	171ML+19	76.8' RT	180ML+38	60.6' RT	--	891
	USH 10 EB/STH 441 NB	177ML+59	21.7' RT	182ML+12	22.9' RT	--	453
	USH 10 WB/STH 441 SB	182ML+69	24.7' LT	204ML+69	23.3' LT	--	2,183
STAGE 1B SUBTOTAL						--	4,101
STAGE 2A							
	USH 10 WB/STH 441	156ML+30	2.7' LT	158ML+09	4.2' LT	--	368
	USH 10 EB/STH 441 NB	173ML+06	11.1' RT	175ML+91	14.3' RT	--	282
	USH 10 WB/STH 441 SB	214WB+25	5.6' RT	231WB+20	13.5' LT	--	1,717
STAGE 2A SUBTOTAL						--	2,367
STAGE 2B							
	USH 10 WB/STH 441 SB	145WB+48	35.7' LT	148ML+53	19.5' LT	--	341
	RACINE ROAD CONNECTOR NB	238CSB+79	8.1' LT	238CSB+79	43.7' LT	--	36
	RACINE ROAD CONNECTOR SB	238CNB+41	5.7' LT	238CNB+41	18.4' RT	--	24
STAGE 2B SUBTOTAL						--	401
STAGE 2C							
	USH 10 WB/STH 441 SB	181ML+52	25.0' LT	183ML+18	24.9' LT	--	185
	USH 10 EB/STH 441 NB	184ML+25	23.1' RT	198ML+49	24.2' RT	--	1,432
	USH 10 EB/STH 441 NB	198ML+58	47.7' RT	203ML+62	111.4' RT	--	537
STAGE 2C SUBTOTAL						--	2,154
STAGE 3A							
	USH 10 EB/STH 441 NB	214EB+92	31.1' LT	216EB+25	18.2' LT	146	--
	USH 10 EB/STH 441 NB	216EB+25	12.0' LT	230EB+04	56.6' RT	--	1,412
	USH 10 EB/STH 441 NB	230EB+04	56.6' RT	230EB+04	71.4' RT	--	15
STAGE 3A SUBTOTAL						146	1,427
STAGE 3B							
	USH 10 WB/STH 441 SB	227WB+49	23.0' RT	227WB+48	44.9' RT	--	22
	USH 10 EB/STH 441 NB	230EB+03	35.4' RT	230EB+04	56.6' RT	--	21
STAGE 3B SUBTOTAL						--	43
PROJECT 1517-75-75 TOTAL						146	13,310

TRAFFIC CONTROL ITEMS LEFT IN PLACE

ROADWAY	SPV.0060.212 TRAFFIC CONTROL SIGNS LEFT IN PLACE EACH	SPV.0060.213 TRAFFIC CONTROL DRUMS LEFT IN PLACE EACH	SPV.0060.214 TRAFFIC CONTROL BARRICADES TYPE III LEFT IN PLACE EACH	SPV.0060.215 TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE EACH	SPV.0060.216 TRAFFIC CONTROL WARNING LIGHTS TYPE C LEFT IN PLACE EACH	SPV.0090.218 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF	SPV.0090.211* CONCRETE BARRIER TEMPORARY PRECAST ANCHORING EACH
STAGE 2A CONSTRUCTION							
USH 10 WB/STH 441 SB	--	--	--	--	--	631	--
STAGE 2A SUBTOTAL	--	--	--	--	--	631	--
STAGE 4 CONSTRUCTION							
USH 10 EB/STH 441 NB	6	36	1	2	--	4,183	--
USH 10 WB/STH 441 SB	12	68	8	16	--	1,637	158
RACINE RD SW RAMP	--	27	--	--	11	--	--
RACINE RD NE RAMP	--	23	--	--	--	--	--
MIDWAY RD SW RAMP	1	--	--	--	--	--	--
STAGE 4 SUBTOTAL	19	154	9	18	11	5,820	158
PROJECT 1517-75-75 TOTAL	19	154	9	18	11	6,451	158

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

CPM BASELINE SCHEDULE

ROADWAY	SPV.0060.028 CPM BASE SCHEDULE EACH
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

CPM SCHEDULE MONTHLY UPDATES

ROADWAY	SPV.0060.029 CPM SCHEDULE MONTHLY UPDATES EACH
PROJECT 1517-75-75	14
PROJECT 1517-75-75 TOTAL	14

DRAINAGE BLANKET

ROADWAY	STATION	SPV.0035.003 DRAINAGE BLANKET CY
STAGE 2A		
USH 10 WB/STH 441 SB	181WB+06 - 184WB+16	2,557
	202WB+50 - 208WB+00	4,241
RACINE ROAD NE RAMP	199RNE+17 - 206RNE+00	5,571
RACINE ROAD NW RAMP	191RNW+50 - 196RNW+68	5,823
RACINE ROAD CONNECTOR / ROUNDABOUT		4,659
FEN RAMP	124FEN+94 - 131FEN+85	5,300
		28,151
STAGE 3A		
USH 10 EB/STH 441 NB	197EB+22 - 209EB+00	6,493
	243EB+15 - 256EB+31	30,348
RACINE ROAD SE RAMP	202RSE+50 - 209RSE+75	2,394
RACINE ROAD SW RAMP	185RSW+92 - 195RSW+00	4,891
STAGE 3A TOTALS		44,126
PROJECT 1517-75-75 TOTAL		72,277

PREFABRICATED VERTICAL DRAINS

ROADWAY	STATION	SPV.0090.012 PREFABRICATED VERTICAL DRAINS LF
STAGE 2A		
USH 10 WB/STH 441 SB	202WB+50 - 208WB+00	75,612
	181WB+06 - 184WB+16	54,121
RACINE ROAD NE RAMP	200RNE+50 - 206RNE+00	79,573
RACINE ROAD NW RAMP	191RNW+50 - 196RNW+68	74,135
RACINE ROAD CONNECTOR / ROUNDABOUT		60,755
FEN RAMP	124FEN+94 - 131FEN+85	63,600
STAGE 2A SUBTOTAL		407,796
STAGE 3A		
USH 10 EB/STH 441 NB	197EB+22 - 209EB+00	330,478
	243EB+15 - 256EB+31	565,390
RACINE ROAD SE RAMP	202RSE+50 - 205RSE+06	88,004
	208RSE+55 - 209RSE+75	14,182
RACINE ROAD SW RAMP	185RSW+92 - 193RSW+00	242,020
	193RSW+00 - 195RSW+00	87,451
STAGE 3A SUBTOTAL		1,327,525
PROJECT 1517-75-75 TOTAL		1,735,321

TRAFFIC CONTROL FOR CLOSURES

ROADWAY	SPV.0060.209 TRAFFIC CONTROL CLOSE-OPEN FREEWAY RAMP EACH	SPV.0060.210 REPOSITIONING TRAFFIC CONTROL DEVICE FOR MAINLINE CLOSURE EACH
STAGE 1A	5	--
STAGE 1B	5	20
STAGE 2A	1	20
STAGE 2C	--	5
STAGE 3A	--	20
STAGE 3C	--	10
PROJECT 1517-75-75 TOTAL	11	75

STREET SWEEPING

SPV.0075.150

LOCATION	STREET SWEEPING HRS
UNDISTRIBUTED	100
PROJECT 1517-75-75	100

TRAFFIC CONTROL MAINTENANCE

LOCATION	SPV.0060.200 MAINTENANCE AND REMOVAL OF CRASH CUSHIONS TEMPORARY LEFT IN PLACE BY OTHERS EACH	SPV.0060.201 MAINTAIN TRAFFIC CONTROL SIGNS LEFT IN PLACE EACH	SPV.0060.202 MAINTAIN TRAFFIC CONTROL DRUMS LEFT IN PLACE EACH	SPV.0060.203 MAINTAIN TRAFFIC CONTROL BARRICADES LEFT IN PLACE EACH	SPV.0060.204 MAINTAIN TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE EACH	SPV.0060.205 MAINTAIN TRAFFIC CONTROL WARNING LIGHTS TYPE C LEFT IN PLACE EACH	SPV.0090.208 MAINTAIN CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF
UNDISTRIBUTED	2	14	148	14	28	296	1,221
PROJECT 1517-75-75	2	14	148	14	28	296	1,221

MOWING

SPV.0075.151

LOCATION	MOWING HRS
UNDISTRIBUTED	60
PROJECT 1517-75-75	60

FILE NAME: I:\56537\1517-75-75\t1\cds\030201_mq.ppt PLOT DATE : 5/14/2015 10:40:53 AM PLOT BY : HNTB Corp. PLOT NAME : PLOT SCALE : 1:1

PREBORED PREFABRICATED VERTICAL DRAINS

ROADWAY	STATION	SPV.0090.013 PREBORED PREFABRICATED VERTICAL DRAINS LF	NOTES
STAGE 2A			
USH 10 WB/STH 441 SB	202WB+50 - 208WB+00	2,953	
	181WB+06 - 184WB+16	6,767	
RACINE ROAD NE RAMP	200RNE+50 - 206RNE+00	277	POSSIBLE PREBORING NEEDED AT EXISTING LOOP RAMP
RACINE ROAD NW RAMP	191RNW+50 - 196RNW+68	4,340	
RACINE ROAD CONNECTOR / ROUNDABOUT		231	POSSIBLE PREBORING NEEDED AT EXISTING LOOP RAMP
FEN RAMP	124FEN+94 - 131FEN+85	10,600	
STAGE 2A SUBTOTAL		25,169	
STAGE 3A			
USH 10 EB/STH 441 NB	197EB+22 - 209EB+00	15,384	
	243EB+15 - 256EB+31	52,770	
RACINE ROAD SE RAMP	202RSE+50 - 205RSE+06	4,406	
	208RSE+55 - 209RSE+75	920	
RACINE ROAD SW RAMP	185RSW+92 - 193RSW+00	40,337	
	193RSW+00 - 195RSW+00	6,206	
STAGE 3A SUBTOTAL		120,022	
PROJECT 1517-75-75 TOTAL		145,191	

GEOTECHNICAL INSTRUMENTATION

ROADWAY	SPV.0105.020 GEOTECHNICAL INSTRUMENTATION LS
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

SURVEY PROJECT

ROADWAY	SPV.0105.021 SURVEY PROJECT 1517-75-75 LS
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

TRUCK OR TRAILER-MOUNTED ATTENUATOR

LOCATION	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR DAYS
UNDISTRIBUTED	1,000
PROJECT 1517-75-75 TOTAL	1,000

CONCRETE PAVEMENT JOINT LAYOUT

ROADWAY	SPV.0105.022 CONCRETE PAVEMENT JOINT LAYOUT LS
PROJECT 1517-75-75	1
PROJECT 1517-75-75 TOTAL	1

FILE NAME: I:\56537\1517-75-75\t1\cds\030201_mq.ppt PLOT DATE : 5/15/2015 10:02:15 AM PLOT BY : HNTB Corp. PLOT NAME : PLOT SCALE : 1:1

TRANSPORTATION PROJECT PLAT NO: 1517-07-21- 4.10

USH 10 / STH 441, CTH CB - S. ONEIDA ST.

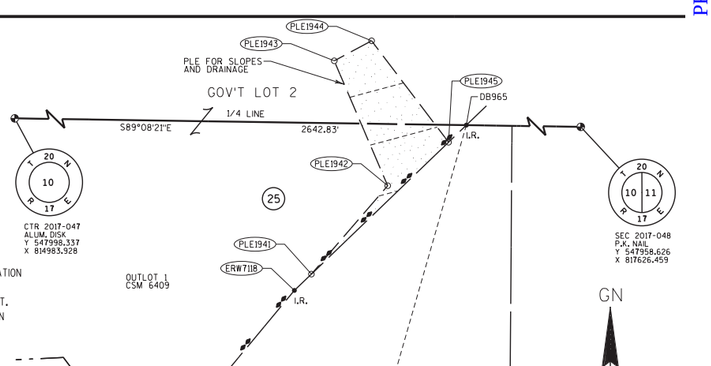
PART OF LOTS 20 AND 21 OF THE TOWN OF MENASHA ASSESSORS PLAT NO. 7, AND LOT 3 OF CSM 1246 ALL IN GOVERNMENT LOT 4. OUTLOT 1 OF CSM 6409 IN GOVERNMENT LOT 2 AND GOVERNMENT LOT 3, AND LANDS IN GOVERNMENT LOT 3, ALL IN SECTION 10, TOWNSHIP 20 NORTH, RANGE 17 EAST IN THE TOWN OF MENASHA, AND PART OF LOTS 1, 2 AND 3 OF CSM 3354 IN GOVERNMENT LOT 3 AND GOVERNMENT LOT 4, AND LOTS 1 AND 2 OF CSM 1336 IN GOVERNMENT LOT 4, ALL IN SECTION 10, TOWNSHIP 20 NORTH, RANGE 17 EAST IN THE CITY OF MENASHA, ALL IN WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER USH 10/STH 441 WINNEBAGO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES
C1	1664.36'	N63°23'28"W	2040.00'	1714.37'	X 815720.975 Y 546325.524
C2	63.83'	N85°53'12"E	1085.92'	63.84'	X 815422.259 Y 546677.048

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	VOL
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	PG		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

RL USH-10/STH-441
PI STA. 191+10.01
Y :546278.673
X : 815920.425
DELTA = 67°15'45"
D = 2°48'31"
T = 1207.95
L = 2181.23
R = 2040.00

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(3/4" IRON REBAR UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	● =(SET)	EXISTING H.E. LINE	
R/W STANDARD	▲ =(SET)	PROPERTY LINE	
SIGN	ISIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
SECTION CORNER SYMBOL		CORPORATE LIMITS	
		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PRW000	QUARTER LINE	
PARCEL NUMBER	03	SIXTEENTH LINE	
UTILITY NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

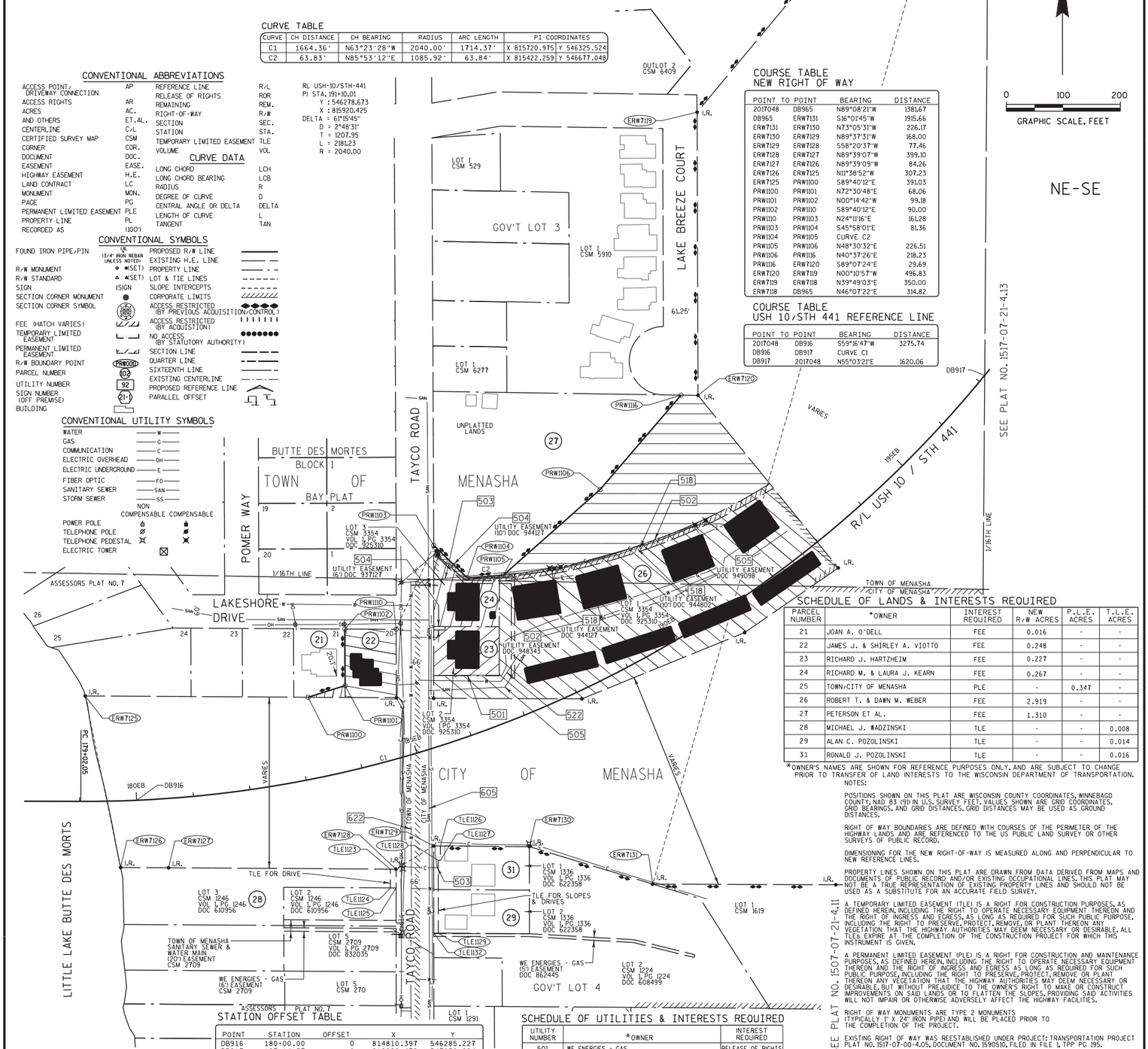
WATER	W	
GAS	G	
COMMUNICATION	C	
ELECTRIC OVERHEAD	OH	
ELECTRIC UNDERGROUND	E	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

COURSE TABLE NEW RIGHT OF WAY

POINT TO POINT		BEARING	DISTANCE
2017048	DB965	N89°08'21"W	138.67
DB965	ERW7131	S16°01'45"W	1915.66
ERW7131	ERW7130	N73°05'31"W	226.17
ERW7130	ERW7129	N89°37'31"W	168.00
ERW7129	ERW7128	S58°20'37"W	77.46
ERW7128	ERW7127	N89°39'07"W	399.10
ERW7127	ERW7126	N89°39'09"W	84.26
ERW7126	ERW7125	N11°38'52"W	307.23
ERW7125	PRW1100	S89°40'12"E	391.03
PRW1100	PRW1101	N72°30'48"E	68.06
PRW1101	PRW1102	N00°14'42"W	99.18
PRW1102	PRW1110	S89°40'12"E	90.00
PRW1110	PRW1103	N24°11'16"E	161.28
PRW1103	PRW1104	S45°58'01"E	81.36
PRW1104	PRW1105	CURVE C2	
PRW1105	PRW1106	N48°30'32"E	226.51
PRW1106	PRW1116	N40°37'26"E	218.23
PRW1116	ERW7120	S89°07'24"E	29.69
ERW7120	ERW7119	N00°10'57"W	496.83
ERW7119	ERW7118	N39°49'03"E	350.00
ERW7118	DB965	N46°07'22"E	314.82

COURSE TABLE USH 10/STH 441 REFERENCE LINE

POINT TO POINT		BEARING	DISTANCE
2017048	DB916	S59°16'47"W	3275.74
DB916	DB917	CURVE C1	
DB917	2017048	N55°03'21"E	1620.06



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	NEW R/W ACRES	P.L.E. ACRES	T.L.E. ACRES
21	JOAN A. O'DELL	FEE	0.016	-	-
22	JAMES J. & SHIRLEY A. VIOTTO	FEE	0.248	-	-
23	RICHARD J. HARTZHEIM	FEE	0.227	-	-
24	RICHARD M. & LAURA J. KEARN	FEE	0.267	-	-
25	TOWN/CITY OF MENASHA	PLE	-	0.347	-
26	ROBERT T. & DAWN M. WEBER	FEE	2.919	-	-
27	PETERSON ET AL.	FEE	1.310	-	-
28	MICHAEL J. WADZINSKI	TLE	-	-	0.008
29	ALAN C. POZOLINSKI	TLE	-	-	0.014
31	RONALD J. POZOLINSKI	TLE	-	-	0.016

*OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD 83 (91) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING RIGHT OF WAY WAS REESTABLISHED UNDER PROJECT: TRANSPORTATION PROJECT PLAT NO. 1517-07-00-4.05, DOCUMENT NO. 1590510, FILED IN FILE 1, TPP PG 195.

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT: 4685-04-00, NOTICE OF NON-ACCESS DOC. 430395, 430398 & 4686-01-00. STH 441 IN WINNEBAGO COUNTY WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.295 OF THE WISCONSIN STATE STATUTES BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION ON JUNE 26, 1986.

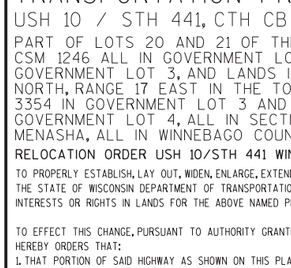
THE REFERENCE LINE SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE LINE SHOWN ON THE CONSTRUCTION PLAN.

STATION OFFSET TABLE

POINT	STATION	OFFSET		X	Y
DB916	180+00.00	0		814810.397	546285.227
DB917	197+14.37	0		816298.479	547030.694
DB965	205+20.57	539.39	L	816244.942	547979.387
PRW1100	184+33.17	142.05	L	815111.294	546466.014
PRW1101	184+06.20	147.47	L	815176.210	546486.465
PRW1102	184+32.87	243.68	L	815175.786	546585.642
PRW1103	186+58.53	335.49	L	815331.866	546732.246
PRW1104	186+97.87	261.38	L	815390.359	546675.695
PRW1105	187+66.70	240.61	L	815454.023	546680.274
PRW1106	190+20.00	295.00	L	815623.690	546830.335
PRW1110	185+30.25	218.28	L	815265.784	546585.124
PRW1116	192+70.95	350.37	L	815765.780	546995.974
TLE1123	184+05.76	184.16	R	815255.648	546164.490
TLE1124	183+98.62	216.21	R	815255.701	546131.490
TLE1125	184+07.38	218.66	R	815265.701	546131.429
TLE1126	184+93.65	168.05	R	815343.583	546205.004
TLE1127	184+87.24	192.06	R	815343.623	546180.003
TLE1128	184+83.73	190.92	R	815339.623	546180.029
TLE1129	184+53.14	314.04	R	815339.828	546052.200
TLE1132	184+46.46	311.90	R	815331.828	546052.252
PLE1941	202+49.58	623.11	L	816040.494	547782.800
PLE1942	204+00.33	591.54	L	816141.103	547899.425
PLE1943	205+10.42	733.08	L	816070.552	548064.275
PLE1944	205+57.45	702.75	L	816119.852	548090.747
PLE1945	204+89.48	549.00	L	816221.484	547956.832
ERW7118	202+19.77	632.32	L	816018.008	547761.178
ERW7119	197+70.66	682.37	L	815793.888	547492.347
ERW7120	192+98.46	331.49	L	815795.471	546995.520
ERW7125	179+09.85	185.03	L	814720.271	546468.266
ERW7126	179+68.52	116.76	R	814782.298	546167.364
ERW7127	180+48.02	121.34	R	814866.555	546166.853
ERW7128	184+14.64	186.64	R	815265.648	546164.429
ERW7129	184+83.02	164.62	R	815331.583	546205.082
ERW7130	186+28.69	218.02	R	815499.580	546203.983
ERW7131	187+82.09	361.23	R	815715.973	546138.205

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	*OWNER	INTEREST REQUIRED
501	WE ENERGIES - GAS	RELEASE OF RIGHTS
502	TIME WARNER	RELEASE OF RIGHTS
503	AT&T WISCONSIN	RELEASE OF RIGHTS
504	CITY OF MENASHA - UTILITY	RELEASE OF RIGHTS
505	TOWN OF MENASHA - SANITARY SEWER	RELEASE OF RIGHTS
518	MENASHA UTILITIES - ELECTRIC	RELEASE OF RIGHTS
522	TOWN OF MENASHA - WATER	RELEASE OF RIGHTS
605	TOWN OF MENASHA - SANITARY SEWER	UTILITY AGREEMENT
622	TOWN OF MENASHA - WATER	UTILITY AGREEMENT



KAPUR & ASSOCIATES, INC.
CONSULTING ENGINEERS
MILWAUKEE, WISCONSIN
414.351.6668

I, GARY R. SPLINTER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTIONS OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1517-07-21-4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN GARY R. SPLINTER S-2239 OAK CREEK, WI LAND SURVEYOR

SIGNATURE _____ DATE 01/27/14
GARY R. SPLINTER, R.L.S. S-2239

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE _____ DATE 02/05/14
PRINT CURT VAN EREM

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1517-07-21-4.10
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN WINNEBAGO COUNTY, WISCONSIN AT 2:18 PM ON 2/10/2014 AS DOCUMENT # 1657785 AND FILED IN FILE 1657785 132
Judi Gagel
SIGNATURE OF REGISTER OF DEEDS
657725

PRT 503
4.10
PLOT SCALE : 1:100
PLOT NAME :
PLOT BY : g_splinter
PLOT DATE : 2/5/2014
FILE NAME : S:\DOT\DOT_NE\120012-Trl County Freeway\Plat\Plats\040410_RP.dgn
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 1517-07-21 - 4.14

USH 10 / STH 441, CTH CB - S. ONEIDA ST.

PART OF LOT 1 OF CSM 2823 AND LOTS 4 AND 5, BLOCK 1 OF FIRST ADDITION TO PAGE'S BAY PLAT IN GOVERNMENT LOT 2 OF SECTION 10, TOWNSHIP 20 NORTH, RANGE 17 EAST, TOWN OF MENASHA, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER USH 10/STH 441 WINNEBAGO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	NEW R/W ACRES	P.L.E. ACRES	T.L.E. ACRES
82	GERALD C. & JUDITH CLISH	TLE	-	-	0.024
83	COLLEEN REMTER	TLE	-	-	0.040

*OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES	
C1	523.69'	N35°57'59"E	2145.00'	525.00'	X 548172.811	Y 816968.400
C2	338.02'	N40°43'18"E	4293.00'	338.11'	X 817931.948	Y 549206.885

STATION OFFSET TABLE

POINT	STATION	OFFSET		X	Y
DB920	207+76.23	0		816840.681	547941.968
DB922	209+02.57	155.50	R	817036.455	547967.492
DB925	213+01.23	0		817148.250	548365.825
DB926	222+01.09	0		817761.699	549024.175
DB963	225+39.20	0		817982.221	549280.358
DB965	205+20.57	539.39	L	816244.942	547979.387
TLE1312	212+14.58	189.78	L	816946.514	548424.911
TLE1313	213+29.21	194.45	L	817025.056	548518.853
TLE1314	217+74.18	172.25	L	817344.644	548829.266
TLE1315	219+07.97	176.77	L	817432.543	548930.232
ERW7076	217+52.16	149.66	R	817565.143	548593.701
ERW7077	217+08.86	102.06	R	817500.805	548594.475
ERW7078	216+02.73	104.60	R	817430.314	548515.096
ERW7079	214+73.69	223.46	R	817429.302	548339.659
ERW7080	213+56.32	82.76	R	817246.348	548349.709
ERW7081	210+47.02	67.69	R	817040.991	548130.053
ERW7082	209+92.52	79.78	R	817020.306	548080.171
ERW7092	222+83.51	172.33	L	817688.997	549200.048
ERW7093	224+16.03	150.28	L	817789.290	549281.844
ERW7113	213+61.03	159.58	L	817072.266	548518.364
ERW7114	213+44.22	178.07	L	817047.276	548518.665
ERW7115	210+90.28	209.02	L	816846.078	548331.460
ERW7116	208+95.68	270.06	L	816672.724	548188.514
ERW7117	208+12.63	447.19	L	816471.012	548196.766
ERW7151	218+61.93	225.29	R	817695.312	548622.453
ERW7152	219+99.22	98.84	R	817696.396	548809.103
ERW7153	222+35.86	99.39	R	817858.559	548982.549
ERW7154	223+19.15	195.83	R	817987.875	548982.133
ERW7237	222+13.43	281.22	L	817563.803	549224.339
ERW7238	221+24.56	200.13	L	817563.108	549104.620
ERW7239	219+83.92	176.16	L	817484.766	548985.384
ERW7240	219+48.93	214.47	L	817432.889	548985.893
ERW7241	218+89.90	160.14	L	817432.390	548905.674
ERW7242	217+85.77	159.45	L	817361.914	548829.018
ERW7243	217+52.13	196.44	L	817311.918	548829.620
ERW7244	217+11.45	159.00	L	817311.574	548774.336

RL USH-10/STH-441
PI STA. 210+40.05
Y : 548172.811
X : 816968.400
DELTA = 14°01'25"
D = 2°40'16"
T = 263.82
L = 525.00
R = 2145.00

RL USH-10/STH-441
PI STA. 229+83.14
Y : 549596.336
X : 818294.839
DELTA = 20°38'55"
D = 1°20'05"
T = 782.05
L = 1547.14
R = 4293.00

COURSE TABLE NEW RIGHT OF WAY

POINT TO POINT		BEARING	DISTANCE
2017048	DB922	N89°08'21"W	590.07
DB922	DB965	N89°08'21"W	791.60
DB965	ERW7117	N46°07'22"E	313.63
ERW7117	ERW7116	S87°39'26"E	201.88
ERW7116	ERW7115	N50°29'29"E	224.69
ERW7115	ERW7114	N47°03'48"E	274.82
ERW7114	ERW7113	S89°18'35"E	24.99
ERW7113	ERW7244	N43°04'23"E	350.41
ERW7244	ERW7243	N00°21'23"E	55.29
ERW7243	ERW7242	S89°18'37"E	50.00
ERW7242	ERW7241	N42°35'41"E	104.13
ERW7241	ERW7240	N00°21'23"E	80.22
ERW7240	ERW7239	S89°26'16"E	51.88
ERW7239	ERW7238	N33°18'23"E	142.67
ERW7238	ERW7237	N00°19'57"E	119.72
ERW7237	ERW7092	S79°01'10"E	127.53
ERW7092	ERW7093	N50°48'01"E	129.42
ERW7093	ERW7154	S33°31'41"E	359.53
ERW7154	ERW7153	N89°48'56"W	129.32
ERW7153	ERW7152	S43°04'28"W	237.45
ERW7152	ERW7151	S00°19'58"W	186.65
ERW7151	ERW7076	S77°32'40"W	133.31
ERW7076	ERW7077	N89°18'39"W	64.34
ERW7077	ERW7078	S41°36'22"W	106.16
ERW7078	ERW7079	S00°19'50"W	175.44
ERW7079	ERW7080	N86°51'21"W	183.23
ERW7080	ERW7081	S43°04'23"W	300.70
ERW7081	ERW7082	S22°31'22"W	54.00
ERW7082	DB922	S08°09'22"E	113.83

COURSE TABLE USH 10/STH 441 REFERENCE LINE

POINT TO POINT		BEARING	DISTANCE
2017048	DB920	S88°47'08"W	785.95
DB920	DB925	CURVE C1	
DB925	DB926	N42°58'41"E	899.86
DB926	DB963	CURVE C2	
DB963	2017048	S15°03'54"W	1368.77

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	*OWNER	INTEREST REQUIRED
505	TOWN OF MENASHA - SANITARY SEWER	RELEASE OF RIGHTS
605	TOWN OF MENASHA - SANITARY SEWER	UTILITY AGREEMENT
622	TOWN OF MENASHA - WATER	UTILITY AGREEMENT

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD 83 (91) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

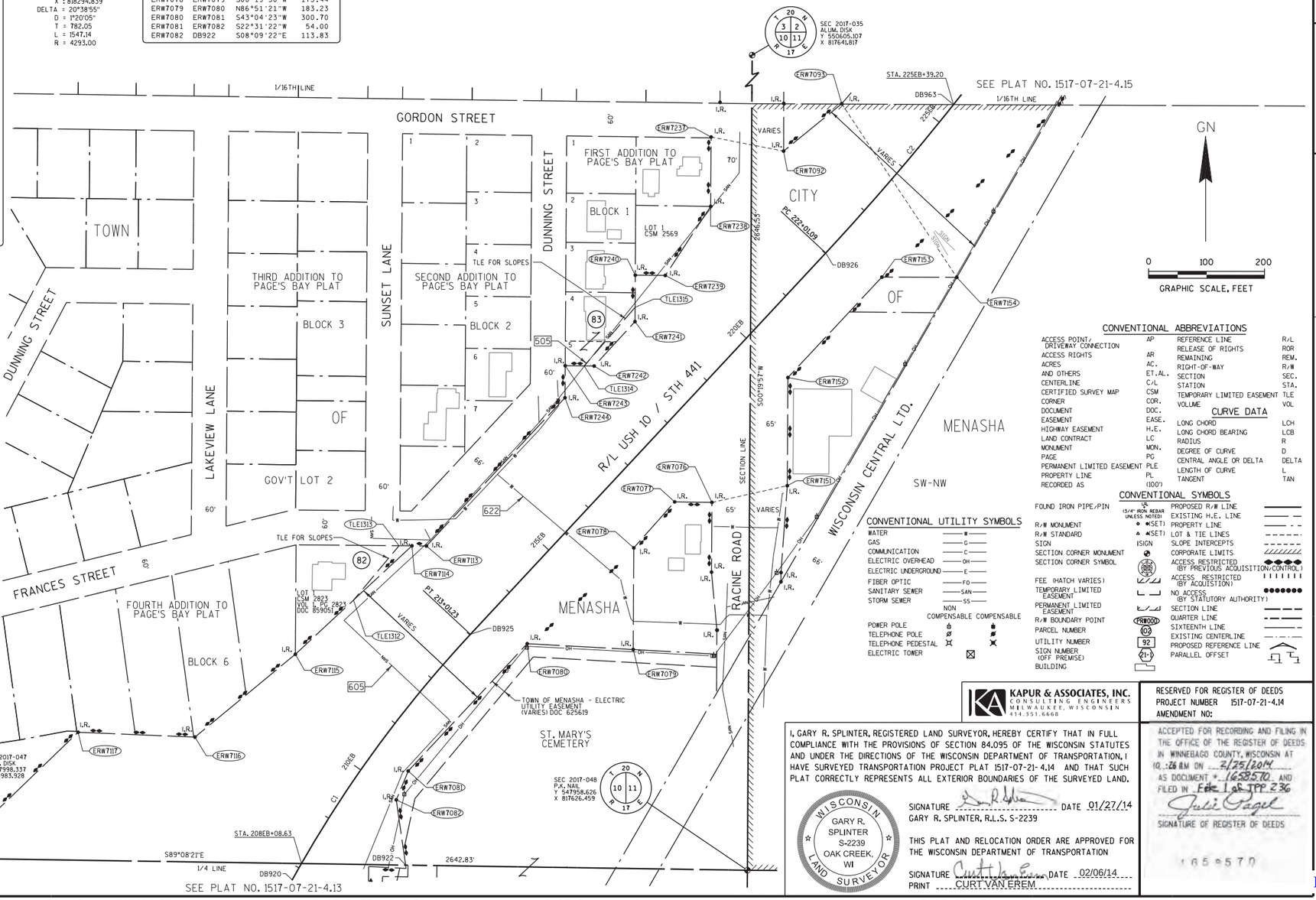
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLEs EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

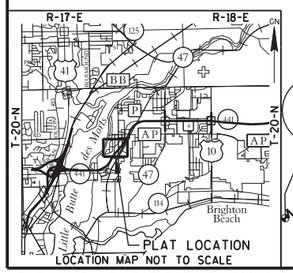
RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING RIGHT OF WAY WAS REESTABLISHED UNDER PROJECT: TRANSPORTATION PROJECT PLAT NO. 1517-07-00-4.07, DOCUMENT NO. 1590512, FILED IN FILE 1, TPP PG 197 AND TRANSPORTATION PROJECT PLAT NOS. 1517-07-00-4.08, DOCUMENT NO. 1590513, FILED IN FILE 1, TPP PG 198.

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT: 4685-04-00, STH 441 IN WINNEBAGO COUNTY WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.295 OF THE WISCONSIN STATE STATUTES BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION ON JUNE 26, 1986.

THE REFERENCE LINE SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE LINE SHOWN ON THE CONSTRUCTION PLAN.





CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	VOL
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	PG	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
COMMUNICATION	C
ELECTRIC OVERHEAD	OH
ELECTRIC UNDERGROUND	E
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
	NON COMPENSABLE COMPENSABLE
POWER POLE	
TELEPHONE POLE	
TELEPHONE PEDESTAL	
ELECTRIC TOWER	

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(3/4" IRON REBAR UNLESS NOTED)
R/W MONUMENT	●(SET)
R/W STANDARD	▲(SET)
SIGN	ISIGN
SECTION CORNER MONUMENT	
SECTION CORNER SYMBOL	
FEE (HATCH VARIES)	
TEMPORARY LIMITED EASEMENT	
PERMANENT LIMITED EASEMENT	
R/W BOUNDARY POINT	PKWOOD
PARCEL NUMBER	03
UTILITY NUMBER	92
SIGN NUMBER (OFF PREMISE)	21
BUILDING	
PROPOSED R/W LINE	
EXISTING H.E. LINE	
PROPERTY LINE	
LOT & TIE LINES	
SLOPE INTERCEPTS	
CORPORATE LIMITS	
ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
ACCESS RESTRICTED (BY ACQUISITION)	
NO ACCESS (BY STATUTORY AUTHORITY)	
SECTION LINE	
QUARTER LINE	
SIXTEENTH LINE	
EXISTING CENTERLINE	
PROPOSED REFERENCE LINE	
PARALLEL OFFSET	

KAPUR & ASSOCIATES, INC.
CONSULTING ENGINEERS
MILWAUKEE, WISCONSIN
414.351.6668

I, GARY R. SPLINTER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTIONS OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1517-07-21- 4.14 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN GARY R. SPLINTER S-2239 OAK CREEK, WI LAND SURVEYOR

SIGNATURE _____ DATE 01/27/14
GARY R. SPLINTER, R.L.S. S-2239

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE _____ DATE 02/06/14
PRINT CURT VAN EREM

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1517-07-21-4.14
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN WINNEBAGO COUNTY, WISCONSIN AT 10:26 AM ON 2/25/2014 AS DOCUMENT # 1658570 AND FILED IN File 1 of TPP 236
Julie Pagel
SIGNATURE OF REGISTER OF DEEDS
1658570

FILE NAME : S:\DOT\DOT_NE\120012-Tri County Freeway\Plat\Plats\040414_RP.dgn
PLOT DATE : 2/6/2014
PLOT BY : g_splinter
PLOT NAME :
PLOT SCALE : 1:100
APPRAISAL PLAT DATE :

4.14

TRANSPORTATION PROJECT PLAT NO: 1517-07-21 - 4.17

USH 10 / STH 441, CTH CB - S. ONEIDA ST.

PART OF THE SE 1/4 OF THE SW 1/4 AND THE SW 1/4 OF THE SW 1/4 OF SECTION 2, TOWNSHIP 20 NORTH, RANGE 17 EAST, CITY OF MENASHA, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER USH 10/STH 441 WINNEBAGO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

COURSE TABLE
USH 10/STH 441 REFERENCE LINE

POINT	TO POINT	BEARING	DISTANCE
2017036	930	N89°47'10"W	1575.71
DB930	DB954	N22°19'46"E	195.07
DB954	DB955	CURVE C1	
DB955	2017036	S00°08'55"E	1429.26

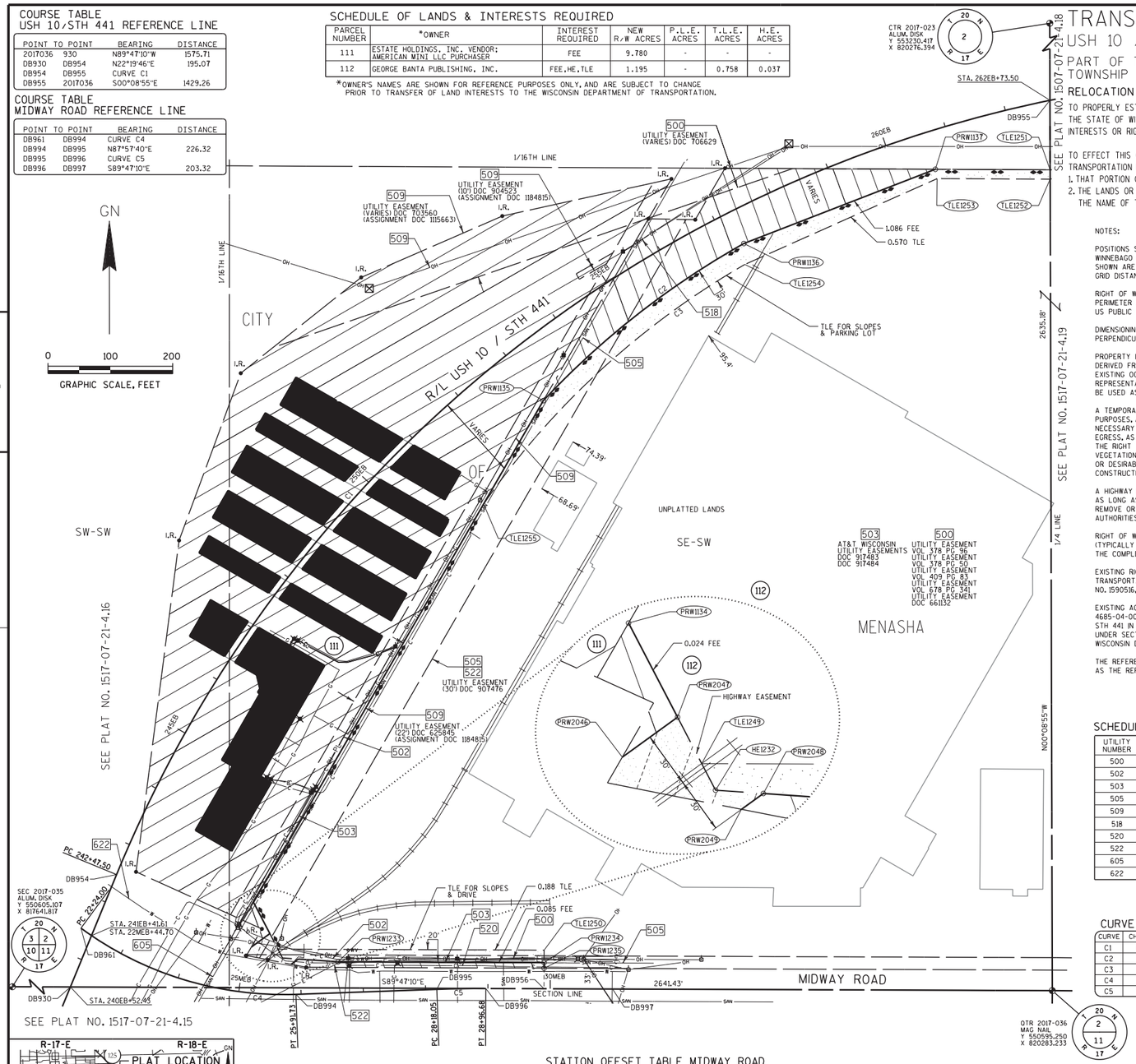
COURSE TABLE
MIDWAY ROAD REFERENCE LINE

POINT	TO POINT	BEARING	DISTANCE
DB961	DB994	CURVE C4	
DB994	DB995	N87°57'40"E	226.32
DB995	DB996	CURVE C5	
DB996	DB997	S89°47'10"E	203.32

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	NEW R/W ACRES	P.L.E. ACRES	T.L.E. ACRES	H.E. ACRES
111	ESTATE HOLDINGS, INC. VENDOR; AMERICAN MINI LLC PURCHASER	FEE	9.780	-	-	-
112	GEORGE BANTA PUBLISHING, INC.	FEE,HE,TLE	1.195	-	0.758	0.037

*OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



CONVENTIONAL ABBREVIATIONS

ACCESS POINT, DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	VOL
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	PG	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	⅝ (5/4" IRON REBAR UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	●(SET)	EXISTING H.E. LINE	
R/W STANDARD	▲(SET)	PROPERTY LINE	
SIGN	ISIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT	●	SLOPE INTERCEPTS	
SECTION CORNER SYMBOL	(1/4)	CORPORATE LIMITS	
		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PRW000	QUARTER LINE	
PARCEL NUMBER	103	SIXTEENTH LINE	
UTILITY NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-Y	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	—W—
GAS	—G—
COMMUNICATION	—C—
ELECTRIC OVERHEAD	—OH—
ELECTRIC UNDERGROUND	—E—
FIBER OPTIC	—FO—
SANITARY SEWER	—SAN—
STORM SEWER	—SS—
	NON COMPENSABLE COMPENSABLE
POWER POLE	
TELEPHONE POLE	
TELEPHONE PEDESTAL	
ELECTRIC TOWER	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD 83 (91) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

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A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLEs EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING RIGHT OF WAY WAS REESTABLISHED UNDER PROJECT: TRANSPORTATION PROJECT PLAT NO. 1517-07-00-4.11, DOCUMENT NO. 1590516, FILED IN FILE 1, TPP PG 201.

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT: 4685-04-00.
STH 441 IN WINNEBAGO COUNTY WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.295 OF THE WISCONSIN STATE STATUTES BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION ON JUNE 26, 1986.

THE REFERENCE LINE SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE LINE SHOWN ON THE CONSTRUCTION PLAN.

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	*OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
502	TIME WARNER	RELEASE OF RIGHTS
503	AT&T WISCONSIN	RELEASE OF RIGHTS
505	TOWN OF MENASHA - SANITARY SEWER	RELEASE OF RIGHTS
509	AMERICAN TRANSMISSION COMPANY	RELEASE OF RIGHTS
518	TOWN OF MENASHA - ELECTRIC	RELEASE OF RIGHTS
520	TDS METROCOM	RELEASE OF RIGHTS
522	MENASHA UTILITIES - WATER	RELEASE OF RIGHTS
605	TOWN OF MENASHA - SANITARY SEWER	UTILITY AGREEMENT
622	TOWN OF MENASHA - WATER	UTILITY AGREEMENT

RL USH-10/STH-441
PI STA. 256+56.08
Y : 552084.530
X : 819316.813
DELTA = 68°21'56"
D = 2°45'45"
T = 1408.58
L = 2474.71
R = 2074.00

RL MIDWAY ROAD
PI STA. 24+15.03
Y : 550582.540
X : 818878.528
DELTA = 38°18'27"
D = 10°25'03"
T = 191.03
L = 367.72
R = 550.00

RL MIDWAY ROAD
PI STA. 28+57.37
Y : 550598.789
X : 819334.913
DELTA = 2°15'10"
D = 2°51'53"
T = 39.32
L = 78.64
R = 2000.00

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES
C1	1946.40'	N50°18'52"E	2074.00'	2026.00'	X 819200.359 Y 551801.001
C2	409.03'	S51°54'12"W	1336.25'	410.65'	X 819607.778 Y 551693.333
C3	568.93'	S47°27'57"W	1306.25'	573.53'	X 819537.282 Y 551615.417
C4	360.91'	S72°53'07"E	550.00'	367.72'	X 818878.528 Y 550582.540
C5	78.63'	N89°05'15"E	2000.00'	78.64'	X 819334.913 Y 550598.789

STATION OFFSET TABLE

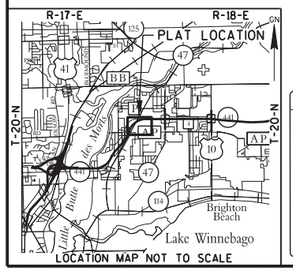
POINT	STATION	OFFSET		X	Y
DB930	240+52.43	0		818707.537	550601.130
DB954	242+47.50	0		818781.651	550781.575
DB955	262+73.50	0		820279.524	552024.500
PRW1134	242+94.89	219.70	R	819001.419	550737.114
PRW1135	253+01.84	94.00	R	819466.372	551542.220
PRW1136	257+25.00	55.32	R	819788.271	551794.590
PRW1137	260+64.38	60.92	R	820095.525	551913.743
TLE1251	262+49.89	109.28	R	820279.814	551912.833
TLE1252	262+46.52	123.94	R	820279.852	551897.833
TLE1253	260+62.44	76.07	R	820098.295	551898.729
TLE1254	257+10.58	85.98	R	819789.807	551760.953
TLE1255	251+08.79	155.75	R	819370.575	551376.339

STATION OFFSET TABLE MIDWAY ROAD

POINT	STATION	OFFSET		X	Y
DB956	29+90.00	0		819467.553	550598.294
DB961	22+24.00	0		818724.508	550695.549
DB994	25+91.73	0		819069.439	550589.337
DB995	28+18.05	0		819295.614	550597.390
DB996	28+96.68	0		819374.237	550598.642
DB997	31+00.00	0		819577.552	550597.883
HE1232	25+70.02	58.68	L	819047.968	550647.674
PRW1233	26+61.13	49.75	L	819137.024	550641.528
PRW1234	29+90.00	42.00	L	819467.710	550640.294
PRW1235	29+90.00	33.00	L	819467.676	550631.294
TLE1249	25+61.43	72.81	L	819040.570	550661.888
TLE1250	29+90.00	62.00	L	819467.784	550660.293
PRW2046	25+12.25	73.53	L	818998.077	550665.341
PRW2047	25+45.13	97.22	L	819027.630	550686.752
PRW2048	25+97.82	56.39	L	819073.525	550645.910
PRW2049	25+85.27	48.31	L	819061.834	550637.441

COURSE TABLE
NEW RIGHT OF WAY

POINT	TO POINT	BEARING	DISTANCE
2017036	DB956	N89°47'10"W	815.69
DB956	DB930	N89°47'10"W	760.02
DB930	DB954	N22°19'46"E	195.07
DB954	DB955	CURVE C1	
DB955	PRW1137	S58°57'15"W	214.76
PRW1137	PRW1136	S68°48'13"W	329.55
PRW1136	PRW1135	CURVE C2	
PRW1135	PRW1134	S30°00'24"W	929.72
PRW1134	HE1232	S27°29'40"E	100.83
HE1232	PRW1233	S86°03'06"E	89.27
PRW1233	PRW1234	S89°47'10"E	330.69
PRW1234	DB956	S 0°12'50" W	42.00



KAPUR & ASSOCIATES, INC.
CONSULTING ENGINEERS
MILWAUKEE, WISCONSIN
414.351.6668

I, GARY R. SPLINTER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTIONS OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1517-07-21- 4.17 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN GARY R. SPLINTER S-2239 OAK CREEK, WI LAND SURVEYOR

SIGNATURE _____ DATE 01/27/14
GARY R. SPLINTER, R.L.S. S-2239

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE _____ DATE 02/06/14
PRINT CURT VAN EREM

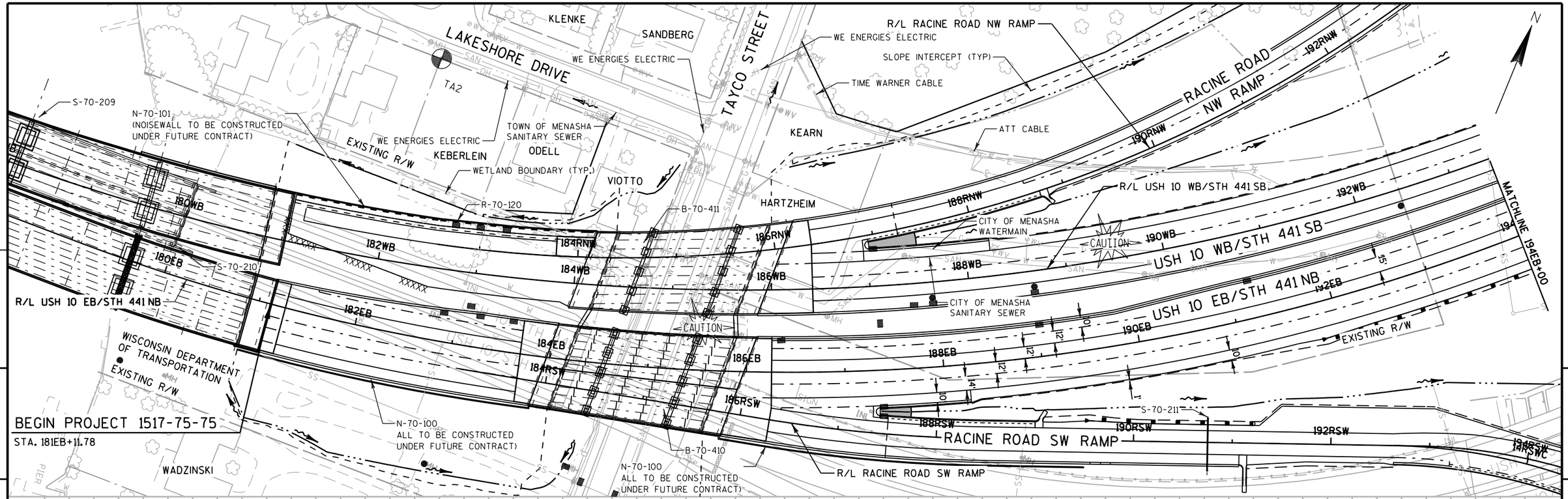
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1517-07-21-4.17
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN WINNEBAGO COUNTY, WISCONSIN AT 10:26 AM ON 2/25/2014 AS DOCUMENT # 1658573 AND FILED IN File 1 of TPP 239

SIGNATURE OF REGISTER OF DEEDS

FEE EXEMPT

FILE NAME : S:\DOT\DOT_NE\120012-Tri County Freeway\Plat\Plats\040417_RP.dgn
PLOT DATE : 2/18/2014
PLOT BY : g_splinter
PLOT NAME :
PLOT SCALE : 1:100
APPRAISAL PLAT DATE :



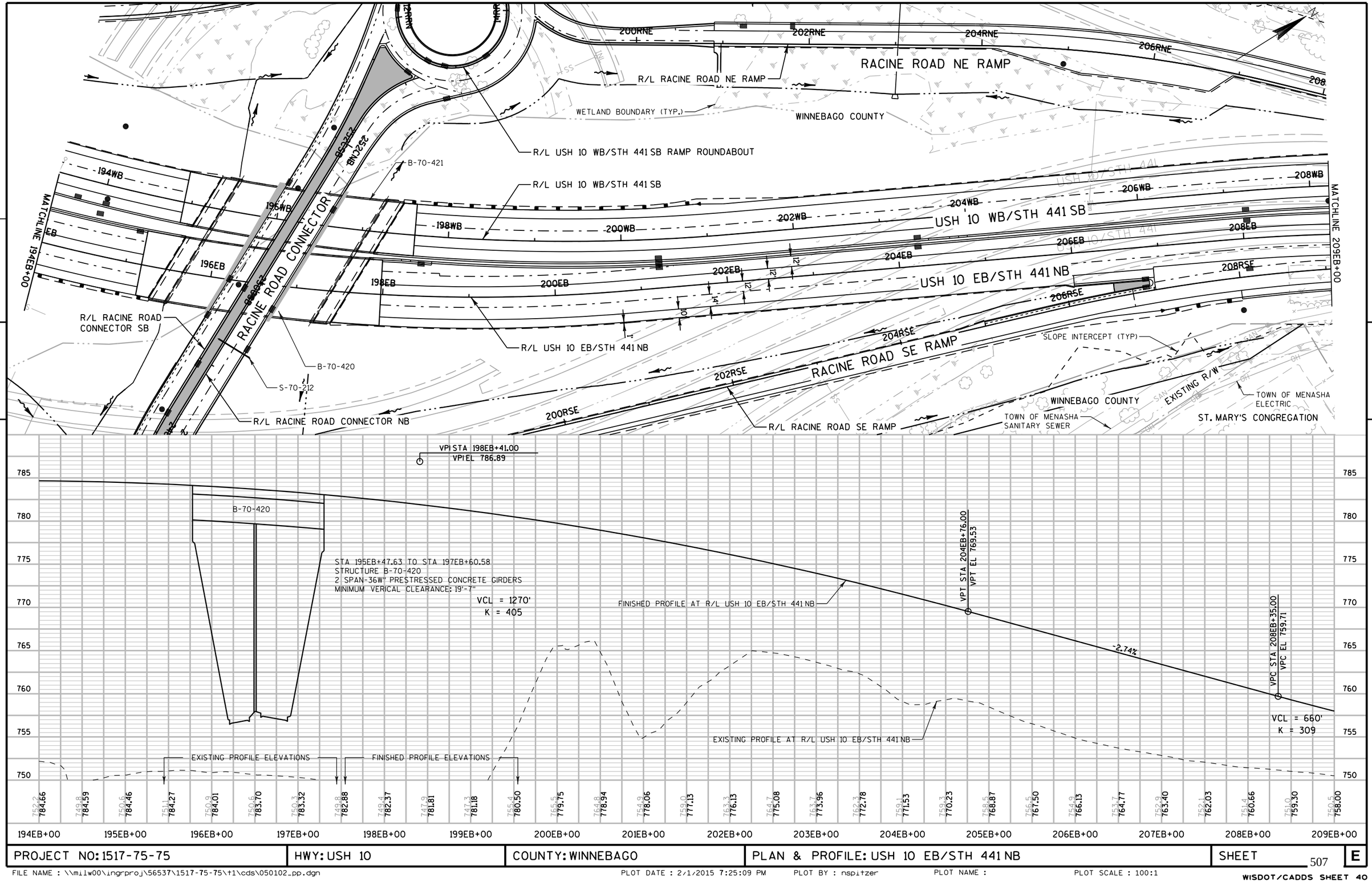
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5

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 EB/STH 441 NB	SHEET 506 E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\050101_pp.dgn PLOT DATE : 2/1/2015 7:25:04 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 EB/STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\050102_pp.dgn PLOT DATE : 2/1/2015 7:25:09 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 40

MORRISON
CLISH
RYAN
RYAN
JULIUS
JULIUS
FRANCES STREET
OLSON
KRENTZ
REMTER
HUOLIHAN
N-70-110 (NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)
EXISTING NOISE WALL
SLOPE INTERCEPT (TYP)
END PROJECT 1517-75-75
STA. 223EB+00.00
EXISTING R/W
EXISTING NOISE WALL
R/L RACINE ROAD NE RAMP
TOWN OF MENASHA SANITARY SEWER
R/L USH 10 WB/STH 441 SB
USH 10 WB/STH 441 SB
SEE STORM SEWER PLAN FOR EXISTING STORM SEWER PIPES
MATCHLINE 209EB+00
TOWN OF MENASHA WATERMAIN
USH 10 EB/STH 441 NB
B-70-110 (EXISTING STRUCTURE TO REMAIN)
S-70-255
S-70-219
R/L USH 10 EB/STH 441 NB
WE ENERGIES ELECTRIC
SLOPE INTERCEPT (TYP)
EXISTING R/W
EXISTING SANITARY SEWER MANHOLE TO REMAIN IN PLACE. EXISTING COVER AND CONE TO BE ROTATED AWAY FROM PROPOSED BARRIER BY OTHERS.
ST. MARY'S CONGREGATION
EXISTING STORM SEWER
WHITE
TOWN OF MENASHA WATERMAIN
RACINE ROAD
EXISTING R/W
WETLAND BOUNDARY (TYP.)
R/L RACINE ROAD SE RAMP

STA 219EB+66.73 TO STA 220EB+54.70
STRUCTURE B-70-110
TO REMAIN
2 SPAN STEEL GIRDER
WIDTH 60'
LENGTH 290'
SKEW 47° 15' 25"

FINISHED PROFILE AT R/L USH 10 EB/STH 441 NB INTERIM CONNECTION
ULTIMATE FINISHED PROFILE AT R/L USH 10 EB/STH 441 NB
END PROJECT 1517-75-75
STA. 223EB+00.00
X = 817828.287
Y = 549097.307
VPI STA 23EB+00.00
VPI EL 750.08
VPC STA 23EB+00.00
VPC EL 750.08
VPI STA 23EBT+00.00
VPI EL 750.08
VPC STA 23EBT+27.00
VPC EL 750.46
VCL = 296'
K = 153
1.43%
VCL = 660'
K = 309
VPI STA 211EB+65.00
VPI EL 750.68
VPT STA 214EB+95.00
VPT EL 748.71
IVPC STA 216EB+93.00
VPC EL 747.53
-0.60%
EXISTING PROFILE AT R/L USH 10 EB/STH 441 NB
VCL = 900'
K = 298
-0.33%
-0.32%
VPI STA 221EB+43.00
VPI EL 744.84
SPECIAL DITCH RIGHT
FINISHED PROFILE AT R/L USH 10 EB/STH 441 NB
SPECIAL DITCH RIGHT
EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS

770 765 760 755 750 745 740 735

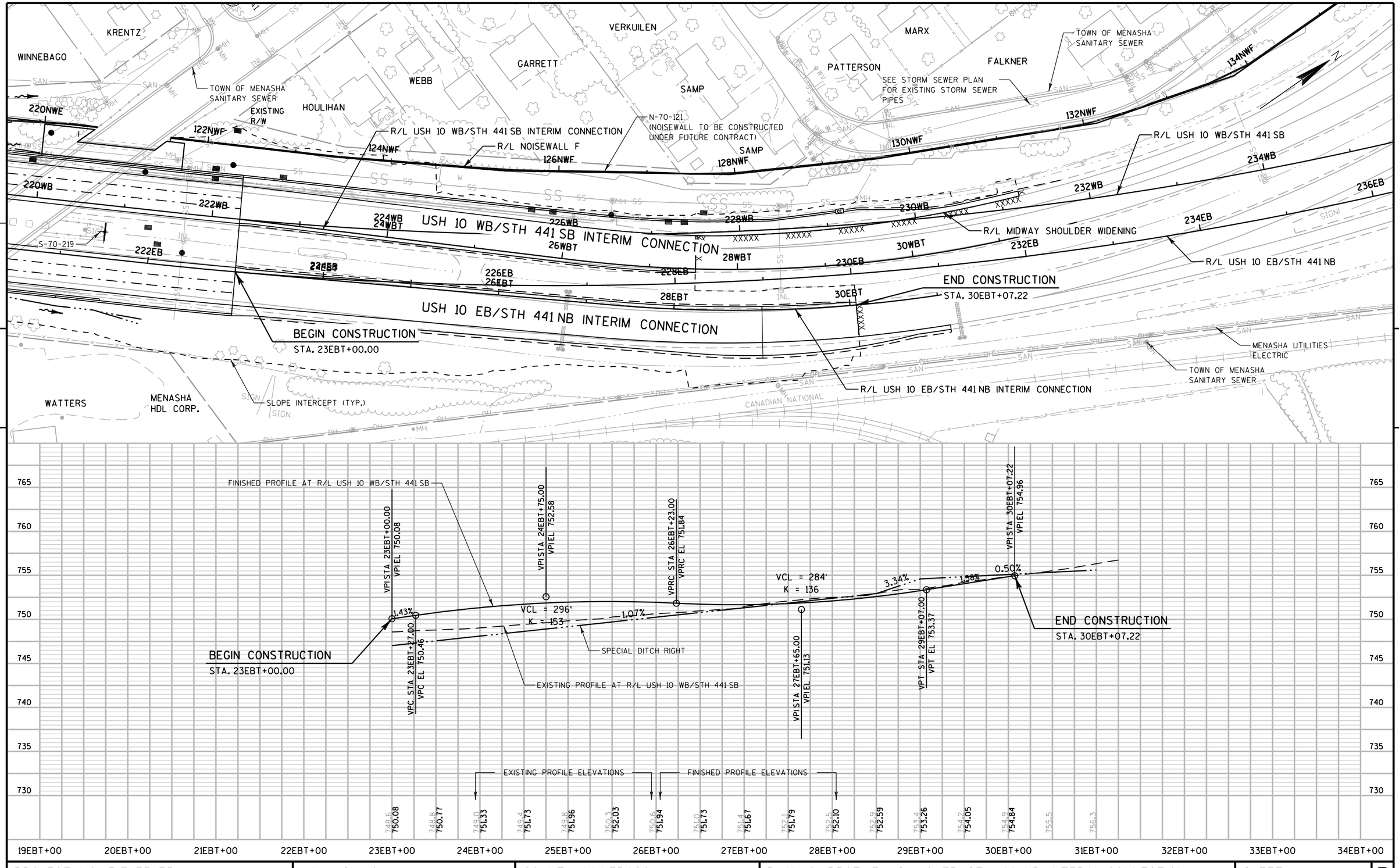
750.5 758.00 | 750.3 756.77 | 750.6 755.63 | 750.8 754.57 | 751.3 753.60 | 751.5 752.70 | 751.4 751.88 | 751.2 751.14 | 750.7 750.49 | 750.5 749.92 | 750.2 749.42 | 749.9 749.01 | 749.7 748.68 | 749.4 748.38 | 748.1 748.08 | 748.9 747.78 | 748.6 747.48 | 748.4 747.24 | 748.3 747.08 | 748.6 747.00 | 748.5 747.01 | 748.5 747.10 | 748.5 747.27 | 748.5 747.53 | 748.6 747.87 | 748.6 748.30 | 748.6 748.80 | 748.4 749.40 | 748.6 750.07 | 748.8 750.84 | 749.0 751.68

209EB+00 210EB+00 211EB+00 212EB+00 213EB+00 214EB+00 215EB+00 216EB+00 217EB+00 218EB+00 219EB+00 220EB+00 221EB+00 222EB+00 223EB+00 224EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 EB/STH 441 NB	SHEET 508 E

FILE NAME : I:\56537\1517-75-75\t1\cds\050103_pp.dgn PLOT DATE : 4/26/2015 9:09:58 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40



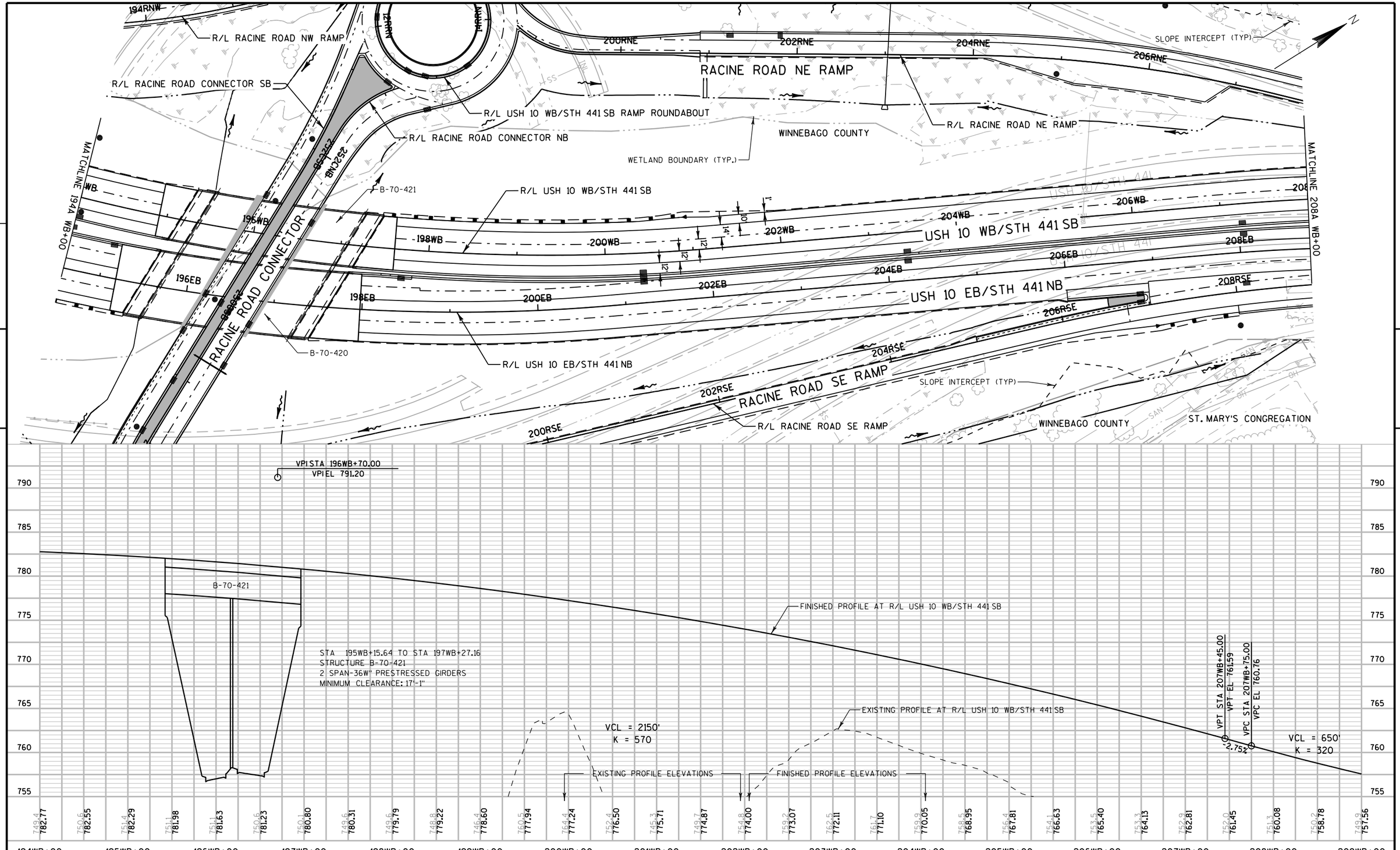
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 EB/STH 441 NB INTERIM CONNECTION	SHEET 509 E

FILE NAME : I:\S6537\1517-75-75\t1\cds\050103a_pp.dgn PLOT DATE : 4/26/2015 9:10:03 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40

KLENKE
SANDBERG
WE ENERGIES ELECTRIC
TAYCO STREET
FRANZOI
N-70-101 (NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)
KEBERLEIN
TA2
LAKESHORE DRIVE
WE ENERGIES ELECTRIC
TOWN OF MENASHA SANITARY SEWER
KEBERLEIN
ODELL
VIOTTO
EXISTING R/W
WETLAND BOUNDARY (TYP.)
SLOPE INTERCEPT (TYP)
TIME WARNER CABLE
ATT CABLE
RACINE ROAD NW RAMP
MATCHLINE 194A WB+00
BEGIN CONSTRUCTION
STA. 181WB+05.51
R-70-120
B-70-411
R/L RACINE ROAD NW RAMP
R/L USH 10 WB/STH 441 SB
CAUTION
WE ENERGY GAS LINE
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
S-70-210
WISCONSIN DEPARTMENT OF TRANSPORTATION
N-70-100
B-70-410
R/L USH 10 EB/STH 441 NB
S-70-211
RACINE ROAD SW RAMP
R/L RACINE ROAD SW RAMP
N-70-100
WORK DONE BY OTHERS
ULTIMATE FINISHED PROFILE AT R/L USH 10 WB/STH 441 SB
VCL = 440'
K = 290
VPI STA 184WB+00.00
VPI EL 778.73
VPC STA 181WB+20.00
VPC EL 778.77
VPT STA 185WB+60.00
VPT EL 779.91
VPC STA 185WB+95.00
VPC EL 780.27
0.50%
1.02%
1.35%
-0.47%
B-70-61
B-70-411
FINISHED PROFILE AT R/L USH 10 WB/STH 441 SB
VCL = 2150'
K = 570
VPC STA 181WB+50.00
VPC EL 776.99
VCL = 180'
K = 99
VPI STA 182WB+40.00
VPI EL 776.57
VPT STA 183WB+30.00
VPT EL 777.78
VPI STA 183WB+40.00
VPI EL 777.67
BEGIN CONSTRUCTION
STA. 181WB+05.51
INTERIM FINISHED PROFILE AT R/L USH 10 WB/STH 441 SB
STA 184WB+24.40 TO STA 185WB+95.45
STRUCTURE B-70-411
3 SPAN-36W" PRESTRESSED GIRDERS
MINIMUM CLEARANCE: 16'-0"
EXISTING PROFILE AT R/L USH 10 WB/STH 441 SB
SPECIAL DITCH LEFT
0.41%
0.36%
EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS

| | | |



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\050105_pp.dgn
PLOT DATE : 2/1/2015 7:25:27 PM
PLOT BY : nspitzer
PLOT NAME :
PLOT SCALE : 100:1
WISDOT/CADDS SHEET 40

SLOPE INTERCEPT (TYP)
MORRISON
CLISH
RYAN
RYAN
JULIUS
JULIUS
OLSON
KRENTZ
REMTER
TOWN OF MENASHA SANITARY SEWER
TOWN OF MENASHA SANITARY SEWER
TOWN OF MENASHA SANITARY SEWER
FRANCES STREET
EXISTING R/W
END CONSTRUCTION
STA. 222WB+31.60
N-70-110 (NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)
R/L RACINE ROAD NE RAMP
TOWN OF MENASHA SANITARY SEWER
R/L USH 10 WB/STH 441 SB
EXISTING NOISE WALL
208RNE
210RNE
210NWE
212NWE
212RNE
212WB
210WB
214WB
216NWE
218NWE
220NWE
222NWF
216WB
218WB
220WB
222WB
MATCHLINE 208A WB+00
SEE STORM SEWER PLAN FOR EXISTING STORM SEWER PIPES
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
212EB
210EB
212RSE
210RSE
214EB
216EB
218EB
220EB
222EB
S-70-219
S-70-255
TOWN OF MENASHA WATERMAIN
R/L RACINE ROAD SE RAMP
WETLAND BOUNDARY (TYP.)
R/L USH 10 EB/STH 441 NB
WE ENERGIES ELECTRIC
SLOPE INTERCEPT (TYP)
RA2
B-70-110 (EXISTING STRUCTURE TO REMAIN)
WHITE
TOWN OF MENASHA WATERMAIN
ST. MARY'S CONGREGATION
RACINE ROAD
EXISITNG R/W
WATTERS
MENASHA MATERIAL HDL CORP.
SIGN
SIGN

STA 219WB+65.32 TO 220WB+53.52
STRUCTURE B-70-110
TO REMAIN
2 SPAN STEEL GIRDER
WIDTH 60'
LENGTH 290'
SKEW 47° 15' 25"

FINISHED PROFILE AT R/L USH 10 WB/STH 441 SB INTERIM CONNECTION
ULTIMATE FINISHED PROFILE AT R/L USH 10 WB/STH 441 SB
EXISTING PROFILE AT R/L USH 10 WB/STH 441 SB
FINISHED PROFILE AT R/L USH 10 WB/STH 441 SB
VCL = 650'
K = 320
VCL = 914'
K = 288
VCL = 270'
K = 158
VPI STA 211WB+00.00
VPI EL 751.81
VPT STA 214WB+25.00
VPT EL 749.46
VPC STA 216WB+58.00
VPC EL 747.77
VPOC STA 221WB+31.60
VPOC EL 749.33
VPI STA 221WB+15.00
VPI EL 744.46
VPI STA 22WBT+31.60
VPI EL 749.33
VPC STA 22WBT+50.00
VPC EL 749.57
-0.53%
-0.72%
2.45%
1.30%
SPECIAL DITCH LEFT
EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS
END CONSTRUCTION
STA. 222WB+31.60

749.9 757.56	750.2 756.42	751.3 755.36	751.6 754.37	751.6 753.46
751.6 752.63	751.3 751.88	750.8 751.20	750.6 750.61	750.2 750.09
750.0 749.65	749.7 749.28	749.4 748.91	749.2 748.55	748.9 748.19
748.7 747.83	748.5 747.50	748.3 747.25	748.2 747.09	748.2 747.02
748.5 747.04	748.4 747.14	748.4 747.33	748.4 747.60	748.5 747.96
748.6 748.41	748.5 748.95	748.5 749.57	748.7 750.28	749.0 751.08
749.3 751.97				

209WB+00 210WB+00 211WB+00 212WB+00 213WB+00 214WB+00 215WB+00 216WB+00 217WB+00 218WB+00 219WB+00 220WB+00 221WB+00 222WB+00 223WB+00 224WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 WB/STH 441 SB	SHEET 512 E

FILE NAME : I:\56537\1517-75-75\t1\cds\050106_pp.dgn
PLOT DATE : 4/26/2015 9:10:28 AM
PLOT BY : nspitzer
PLOT NAME :
PLOT SCALE : 100:1
WISDOT/CADDS SHEET 40

KRENTZ
WINNEBAGO
VERKUILEN
GARRETT
WEBB
HOULIHAN
SAMP
PATTERSON
MARX
FALKNER
WATTERS
MENASHA HDL CORP.
CANADIAN NATIONAL

TOWN OF MENASHA SANITARY SEWER
EXISTING R/W
N-70-121 (NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)
SEE STORM SEWER PLAN FOR EXISTING STORM SEWER PIPES
TOWN OF MENASHA SANITARY SEWER
MENASHA UTILITIES ELECTRIC
TOWN OF MENASHA SANITARY SEWER
S-70-219
SLOPE INTERCEPT (TYP.)

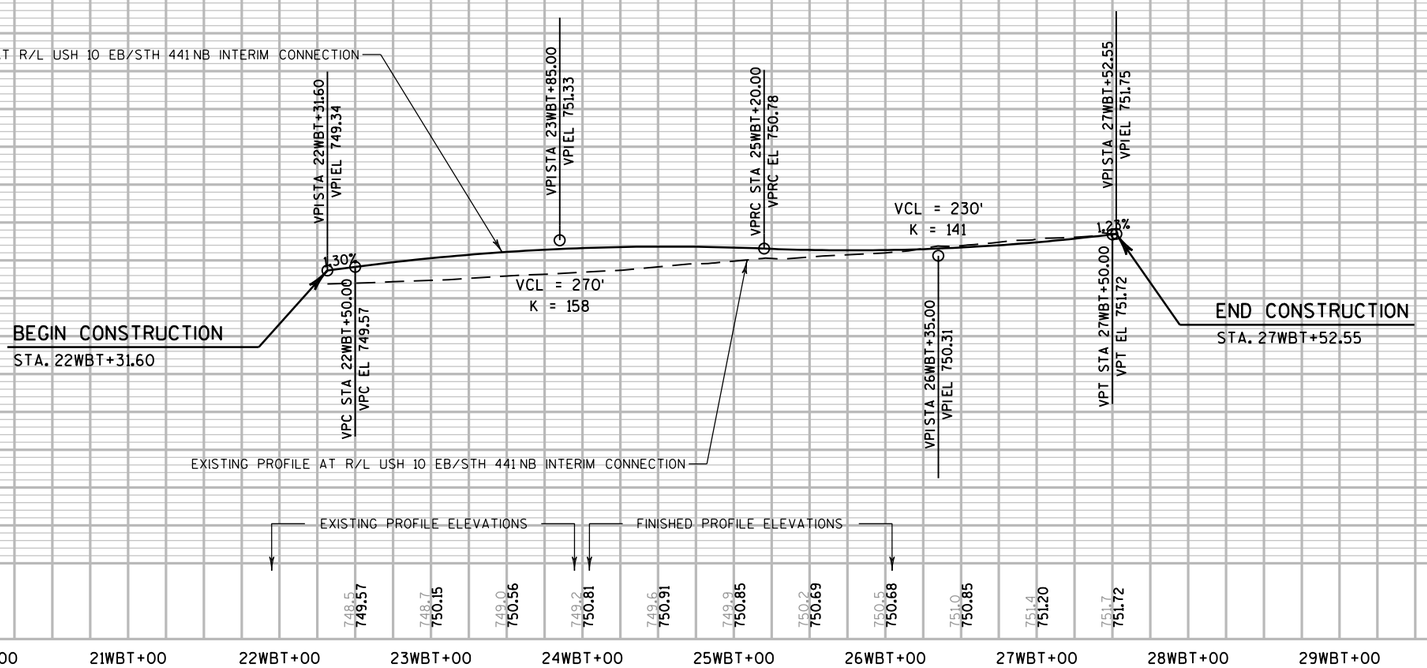
R/L USH 10 WB/STH 441 SB INTERIM CONNECTION
R/L NOISEWALL F
R/L USH 10 WB/STH 441 SB
R/L MIDWAY SHOULDER WIDENING
R/L USH 10 EB/STH 441 NB
R/L USH 10 EB/STH 441 NB INTERIM CONNECTION

USH 10 WB/STH 441 SB INTERIM CONNECTION
USH 10 EB/STH 441 NB INTERIM CONNECTION

220NWE 122NWF 124NWF 126NWF 128NWF 130NWF 132NWF 134NWF
220WB 222WB 224WB 226WB 228WB 230WB 232WB 234WB 236EB
222EB 224EB 226EB 228EB 230EB 232EB 234EB
22WBT 24WBT 26WBT 28WBT 30WBT
24EBT 26EBT 28EBT 30EBT

BEGIN CONSTRUCTION
STA. 22WBT+31.60

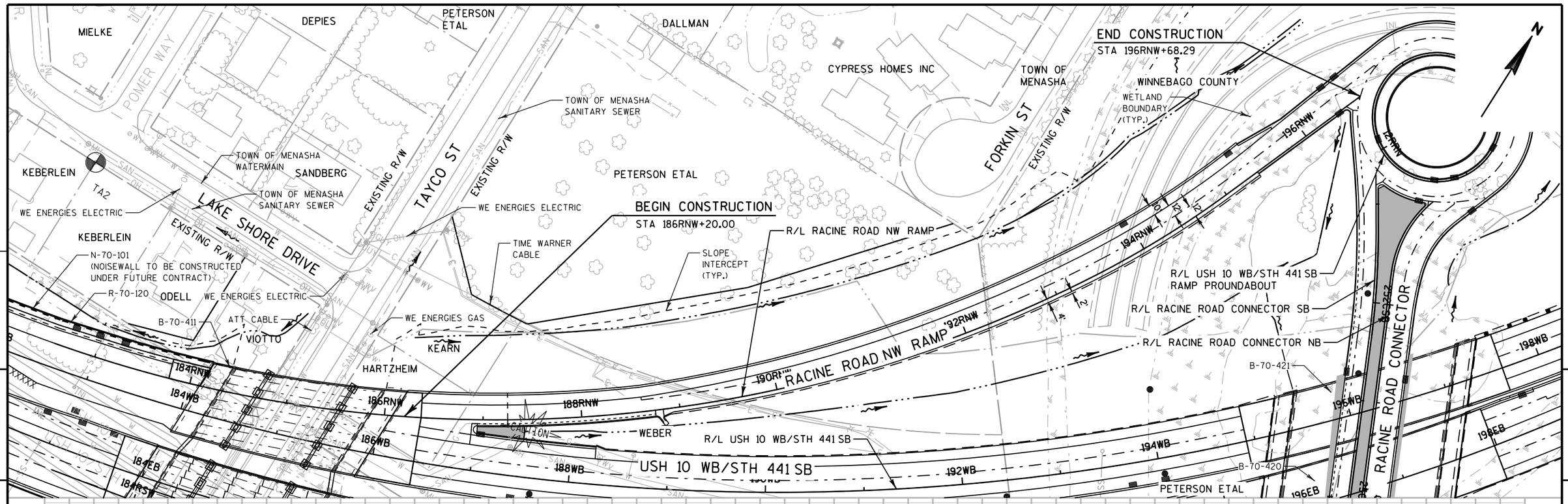
END CONSTRUCTION
STA. 27WBT+52.55

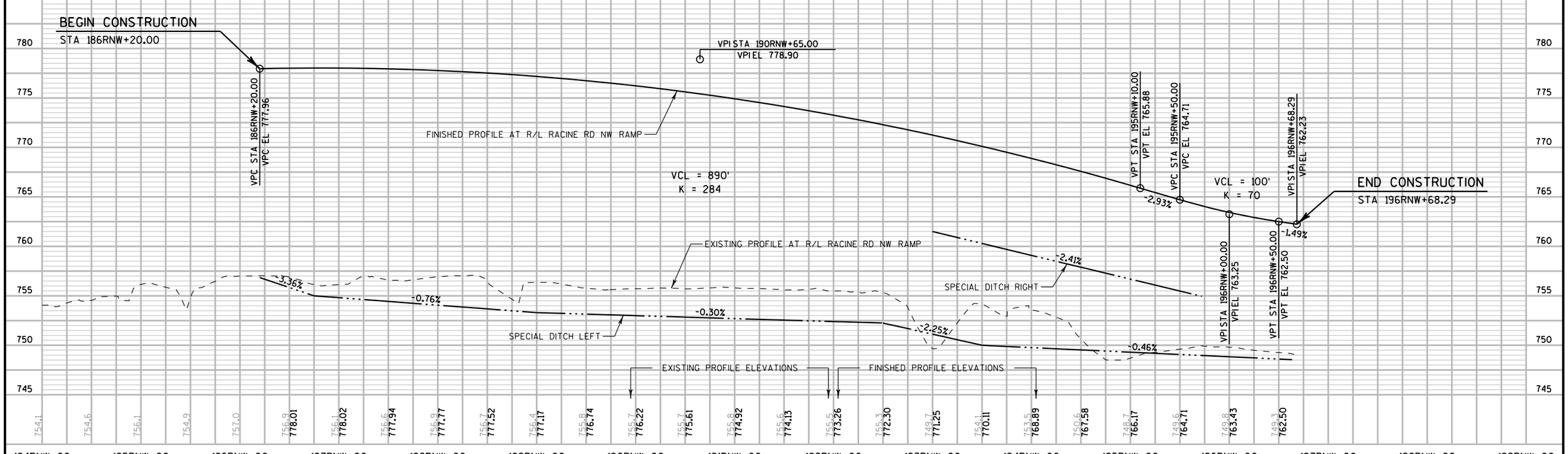


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: USH 10 WB/STH 441 SB INTERIM CONNECTION	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\050106a_pp.dgn PLOT DATE : 4/26/2015 9:10:33 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40





PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE: RACINE ROAD NW RAMP	SHEET 514	E

WINNEBAGO COUNTY

BEGIN CONSTRUCTION
STA 198RNE+74.20

THORN

DRAINAGE POND 3

SLOPE INTERCEPT (TYP.)

EXISTING R/W

NIGBOR

GOSTAS

MORRISON

SCHOEPEL

N-70-110
(NOISEWALL TO BE CONSTRUCTED
UNDER FUTURE CONTRACT)

END CONSTRUCTION
STA 212RNE+33.28

TOWN OF MENASHA
WATERMAIN

CLISH

TOWN OF MENASHA
SANITARY SEWER

TOWN OF
MENASHA

200RNE
202RNE
204RNE
206RNE
208RNE
210RNWE
212RNWE
210RNE
212RNE

R/L RACINE ROAD NE RAMP

R/L USH 10 WB/STH 441 SB RAMP ROUDABOUT

R/L RACINE ROAD NE RAMP

CRASH INVESTIGATION SITE

TOWN OF MENASHA
SANITARY SEWER

WINNEBAGO COUNTY

WINNEBAGO COUNTY

WETLAND
BOUNDARY
(TYP.)

R/L USH 10 WB/STH 441 SB

198WB
200WB
202WB
204WB
206WB
208WB
210WB
212WB

USH 10 WB/STH 441 SB

EXISTING
NOISE WALL

198EB
200EB
202EB
204EB
206EB
208EB
210EB
212EB
214EB

USH 10 EB/STH 441 NB

R/L RACINE ROAD SE RAMP

206RSE
208RSE
210RSE
212RSE

RACINE ROAD SE RAMP

R/L USH 10 EB/STH 441 NB

EXISTING R/W

TOWN OF MENASHA
SANITARY SEWER

ST MARYS CONGREGATION

TOWN OF MENASHA
ELECTRIC

WHITE

5

5

BEGIN CONSTRUCTION
STA 198RNE+74.20

VPI STA 198RNE+74.20
VPI EL 761.17

VPC STA 200RNE+75.00
VPC EL 759.16

VPT STA 202RNE+75.00
VPT EL 759.05

VPC STA 203RNE+92.50
VPC EL 760.10

VPI STA 205RNE+50.00
VPI EL 761.50

VPT STA 207RNE+07.50
VPT EL 759.77

VPC STA 209RNE+10.00
VPC EL 757.54

VPI STA 210RNE+00.00
VPI EL 756.55

VPT STA 210RNE+90.00
VPT EL 754.93

VPI STA 212RNE+33.28
VPI EL 752.35

END CONSTRUCTION
STA 212RNE+33.28

VCL = 200'
K = 106

VCL = 315'
K = 158

VCL = 180'
K = 257

-1.00%
0.89%
-1.10%
-1.80%

VPI STA 201RNE+75.00
VPI EL 758.16

FINISHED PROFILE AT R/L RACINE RD NE RAMP

-1.71%

203RNE+00.00
1 - 30" RCCP
2 - 30" APRON ENDWALL
SLOPE: 2.92%
SKEW: 0°0'0"
I.E. 748.02'

0.98%

SPECIAL DITCH RIGHT

EXISTING PROFILE AT
R/L RACINE RD NE RAMP

0.52%
1.53%
-0.77%

SPECIAL DITCH LEFT

-0.31%

SPECIAL DITCH LEFT

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

775 770 765 760 755 750 745 740

753.0 760.91 | 758.7 760.41 | 754.5 759.91 | 749.1 759.41 | 748.2 758.94 | 747.7 758.68 | 747.0 758.65 | 746.6 758.86 | 746.8 759.27 | 746.0 759.72 | 744.5 760.16 | 746.0 760.50 | 748.8 760.69 | 753.3 760.71 | 756.1 760.58 | 757.4 760.29 | 756.7 759.85 | 755.8 759.30 | 755.1 758.75 | 754.8 758.20 | 754.2 757.65 | 753.2 757.07 | 752.7 756.39 | 752.1 755.62 | 751.6 754.75 | 751.3 753.85 | 751.2 752.95 | 750.9

198RNE+00 199RNE+00 200RNE+00 201RNE+00 202RNE+00 203RNE+00 204RNE+00 205RNE+00 206RNE+00 207RNE+00 208RNE+00 209RNE+00 210RNE+00 211RNE+00 212RNE+00 213RNE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE: RACINE ROAD NE RAMP	SHEET 515	E

PETERSON ETAL
DRAINAGE POND 2
R/L RACINE ROAD CONNECTOR SB
R/L RACINE ROAD CONNECTOR NB
S-70-212
RACINE ROAD CONNECTOR
RACINE ROAD SW RAMP
R/L RACINE ROAD SW RAMP
CITY OF MENASHA
R/L RACINE ROAD SW RAMP BYPASS
TOWN OF MENASHA SANITARY SEWER
WISCONSIN CENTRAL LTD
WINNEBAGO COUNTY
BEGIN CONSTRUCTION
STA 193RSE+84.31
WE ENERGIES ELECTRIC
CANADIAN NATIONAL
USH 10 WB/STH 441 SB
USH 10 EB/STH 441 NB
R/L USH 10 WB/STH 441 SB
R/L USH 10 EB/STH 441 NB
RACINE ROAD SE RAMP
R/L RACINE ROAD SE RAMP
WETLAND BOUNDARY (TYP.)
SLOPE INTERCEPT (TYP.)
EXISTING R/W
WINNEBAGO COUNTY
TOWN OF MENASHA SANITARY SEWER
ST MARYS CONGREGATION
ATC ELECTRIC
MATCHLINE 207RSE+00

VPI STA 193RSE+84.31
VPI EL 758.26
VPC STA 193RSE+95.00
VPC EL 758.28
VCL = 190'
K = 76
VPI STA 194RSE+90.00
VPI EL 758.53
VPT STA 195RSE+85.00
VPT EL 761.14
VPC STA 196RSE+35.00
VPC EL 762.51
0.26%
2.75%
1.84%
SPECIAL DITCH LEFT
BEGIN CONSTRUCTION
STA 193RSE+84.31
VPI STA 201RSE+60.00
VPI EL 776.93
VCL = 1050'
K = 191
FINISHED PROFILE AT R/L RACINE RD SE RAMP
EXISTING PROFILE AT R/L RACINE RD SE RAMP
VPT STA 206RSE+85.00
VPT EL 762.51
-2.75%
-0.76%
-0.29%
SPECIAL DITCH RIGHT

775 770 765 760 755 750 745 740

759.8 760.5 758.30 753.0 758.62 759.8 759.28 771.5 760.26 779.3 761.55 777.8 762.92 776.5 764.19 775.4 765.32 774.7 766.33 770.9 767.21 770.5 767.95 769.8 768.57 769.6 769.05 769.3 769.40 768.6 769.63 767.4 769.72 766.4 769.68 765.1 769.51 761.4 769.21 760.1 768.77 758.8 768.21 757.0 767.52 754.1 766.69 750.7 765.74 748.4 764.65 746.5 763.44 745.6 762.09

192RSE+00 193RSE+00 194RSE+00 195RSE+00 196RSE+00 197RSE+00 198RSE+00 199RSE+00 200RSE+00 201RSE+00 202RSE+00 203RSE+00 204RSE+00 205RSE+00 206RSE+00 207RSE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE: RACINE ROAD SE RAMP	SHEET 516 E

NIGBOR
GOSTAS
MORRISON
CLISH
TOWN OF MENASHA
RYAN
RYAN
JULIUS
JULIUS
OLSON REV TST
KRENTZ
REMTER
WINNEBAGO COUNTY
N-70-110 (NOISEWALL TO BE CONSTRUCTED UNDER FUTURE CONTRACT)
EXISTING R/W
TOWN OF MENASHA SANITARY SEWER
TOWN OF MENASHA SANITARY SEWER
SLOPE INTERCEPT (TYP.)
EXISTING R/W
FRANCES ST
EXISTING NOISE WALL
206RNE
208RNE
210RNE
212RNE
214NWE
216NWE
218NWE
220NWE
RACINE ROAD NE RAMP
N 47°33'07" E
R/L RACINE ROAD NE RAMP
R/L USH 10 WB/STH 441 SB
210WB
212WB
214WB
216WB
218WB
220WB
208WB
USH 10 WB/STH 441 SB
212EB
214EB
USH 10 EB/STH 441 NB
218EB
220EB
222EB
S-70-255
S-70-219
210EB
208EB
212RSE
210RSE
208RSE
15'
66'
RACINE ROAD SE RAMP
EXISTING R/W
R/L RACINE ROAD SE RAMP
TOWN OF MENASHA SANITARY SEWER
R/L USH 10 EB/STH 441 NB
SLOPE INTERCEPT (TYP.)
RA2
END CONSTRUCTION
STA. 212RSE+77.98
MATCHLINE 207RSE+00
ST MARYS CONGREGATION
TOWN OF MENASHA ELECTRIC
EXISTING R/W
WHITE
EXISTING R/W
RACINE ROAD
EXISTING R/W
WATTERS
MENASHA MATERIAL HDL CORP.
N

5
5

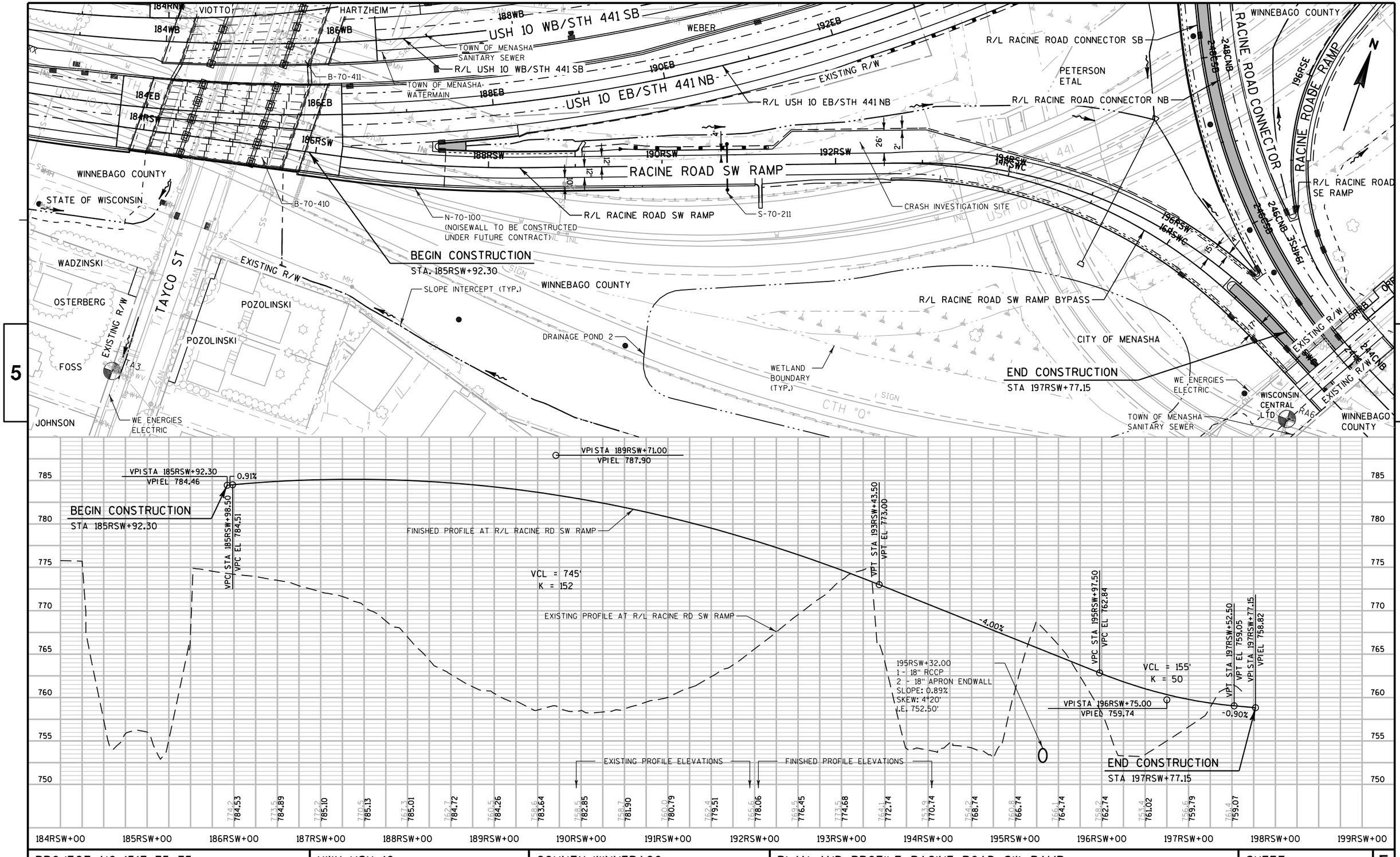
775
770
765
760
755
750
745
740

VPC STA 209RSE+47.50
VPC EL 755.29
VPI STA 211RSE+10.00
VPI EL 750.83
VPT STA 212RSE+72.50
VPT EL 749.67
VPI STA 212RSE+77.98
VPI EL 749.63
VCL = 325'
K = 160
-2.75%
-0.30%
1.60%
-3.07%
2.07%
1.53%
-0.32%
-2.22%
-0.71%
-2.85%
FINISHED PROFILE AT R/L RACINE RD SE RAMP
EXISTING PROFILE AT R/L RACINE RD SE RAMP
SPECIAL DITCH RIGHT
SPECIAL DITCH RIGHT
END CONSTRUCTION
STA 212RSE+77.98
EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS

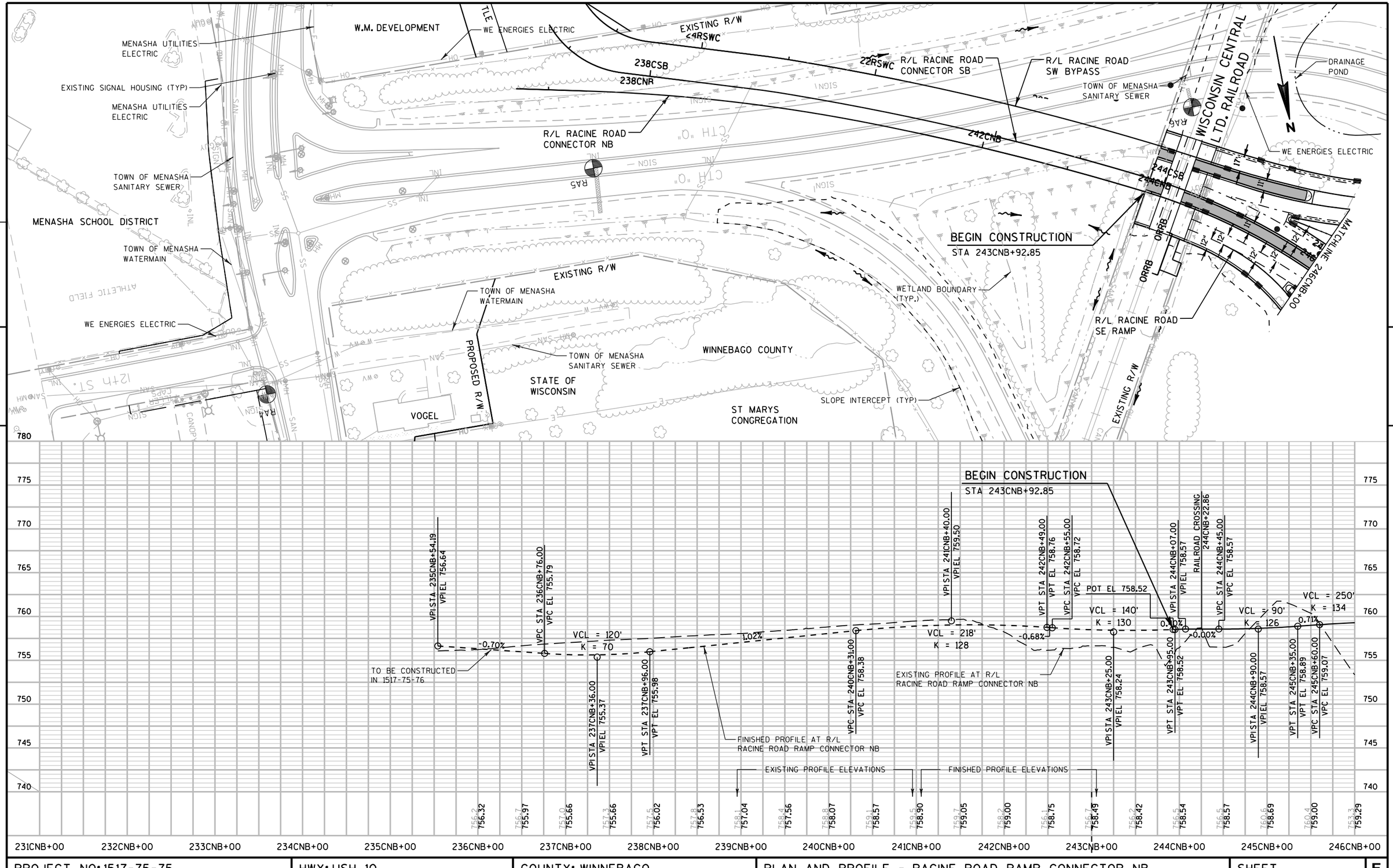
745.6 762.09	745.3 760.72	745.3 759.35	745.5 757.97	744.9 756.60
745.6 755.22	747.0 753.94	748.6 752.81	750.3 751.83	750.7 751.01
750.7 750.35	750.9 749.85			

207RSE+00 208RSE+00 209RSE+00 210RSE+00 211RSE+00 212RSE+00 213RSE+00 214RSE+00 215RSE+00 216RSE+00 217RSE+00 218RSE+00 219RSE+00 220RSE+00 221RSE+00 222RSE+00

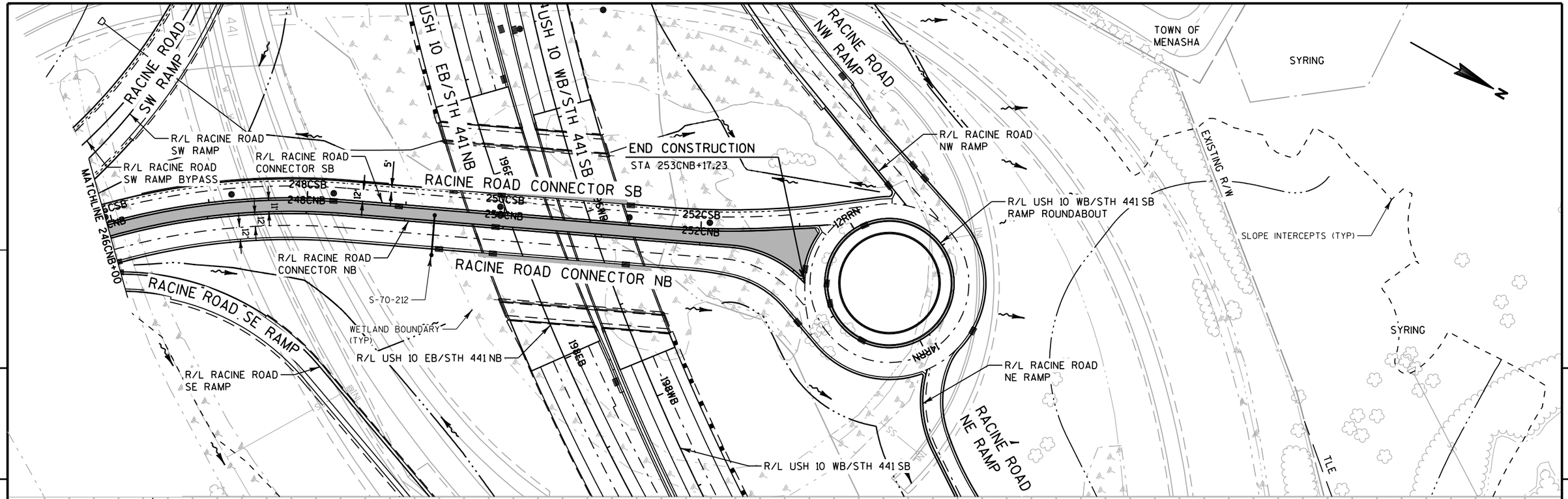
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE: RACINE ROAD SE RAMP	SHEET 517 E

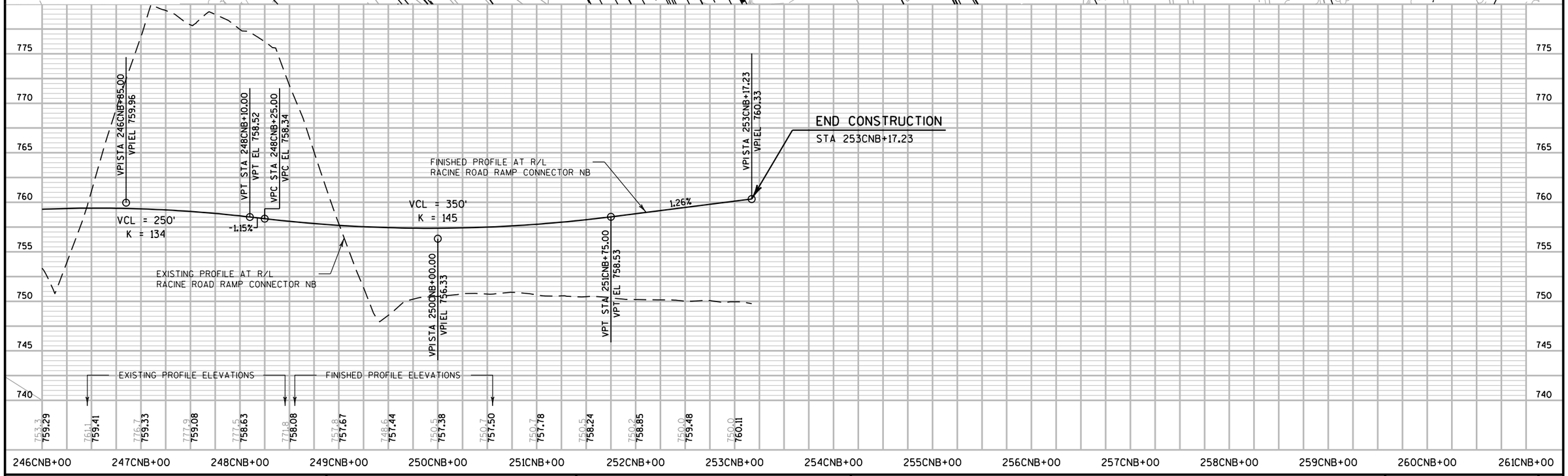


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE: RACINE ROAD SW RAMP	SHEET 518 E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE - RACINE ROAD RAMP CONNECTOR NB	SHEET 519 E





PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE - RACINE ROAD RAMP CONNECTOR NB	SHEET 520 E

TOWN OF MENASHA WATERMAIN
MENASHA UTILITIES ELECTRIC
MENASHA UTILITIES ELECTRIC
TOWN OF MENASHA SANITARY SEWER
MENASHA SCHOOL DISTRICT
EXISTING R/W
PROPOSED R/W
26' W.M. DEVELOPMENT
WE ENERGIES ELECTRIC
EXISTING R/W
MEADOWS DEVELOPMENT
R/L RACINE ROAD SW BYPASS
238CSB
238CNR
22RSWC
BEGIN CONSTRUCTION
STA 243CSB+82.99
R/L RACINE ROAD CONNECTOR SB
242CNB
R/L RACINE ROAD CONNECTOR NB
RA5
RA6
WETLAND BOUNDARY (TYP.)
EXISTING R/W
SLOPE INTERCEPT (TYP)
WE ENERGIES ELECTRIC
TOWN OF MENASHA SANITARY SEWER
WISCONSIN CENTRAL LTD. RAILROAD
N
WE ENERGIES ELECTRIC
EXISTING R/W
DRAINAGE POND
R/L RACINE ROAD SW RAMP
244CSB
244CNB
17'
12'
ORRB
RRB
R/L RACINE ROAD SE RAMP
MATCHLINE 246CSB+00

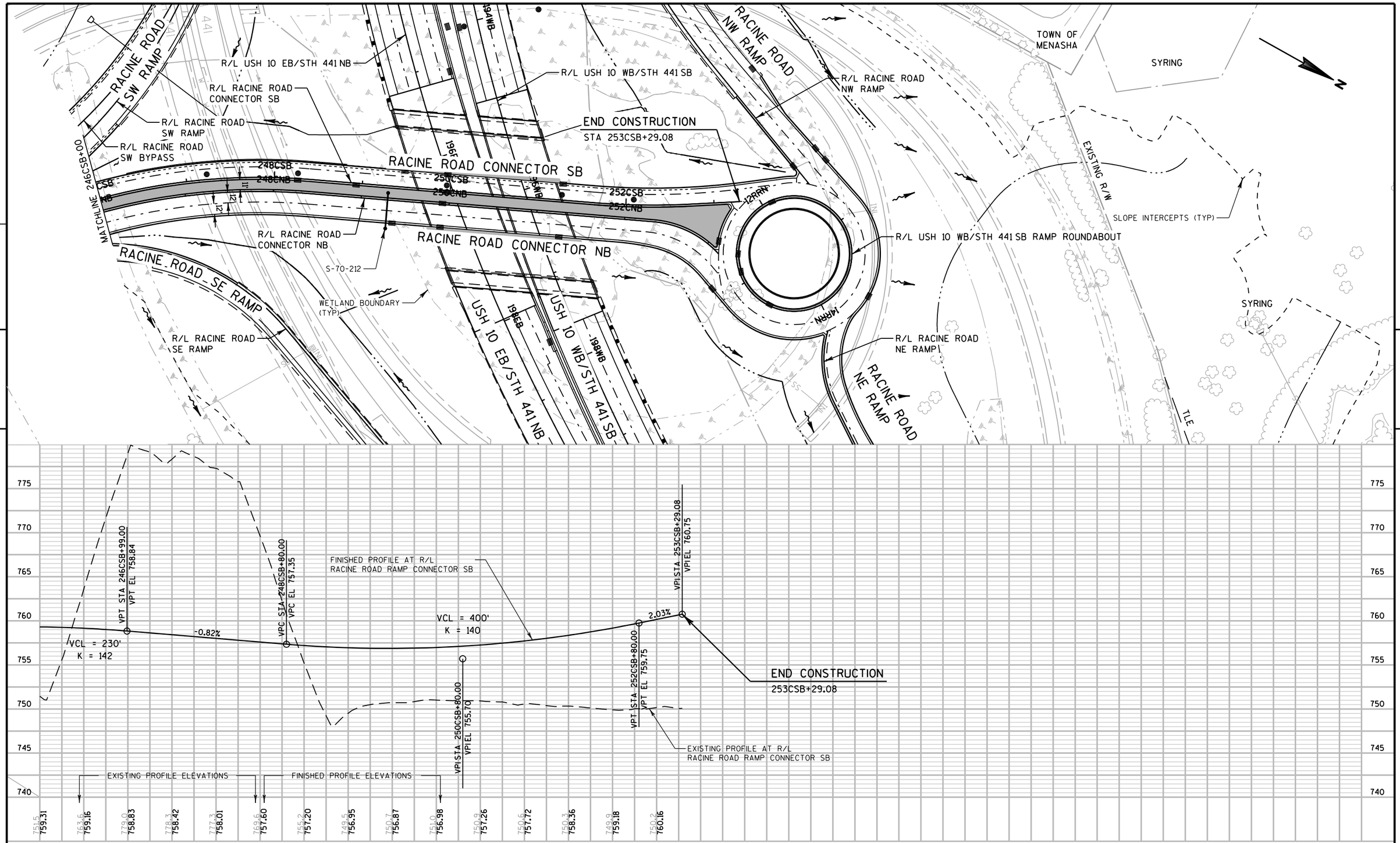
780
775
770
765
760
755
750
745
740

BEGIN CONSTRUCTION
STA 243CSB+82.99

VPI STA 235CSB+51.67
VPI EL 756.04
VPC STA 235CSB+59.00
VPC EL 755.99
-0.70%
VCL = 270'
K = 135
1.30%
TO BE CONSTRUCTED IN 1517-75-76
VPI STA 236CSB+94.00
VPI EL 755.05
VPT STA 238CSB+29.00
VPT EL 756.80
VPC STA 240CSB+20.00
VPC EL 759.29
VPI STA 241CSB+20.00
VPI EL 760.59
VCL = 200'
K = 83
VPT STA 242CSB+20.00
VPT EL 759.48
-1.11%
VPC STA 242CSB+82.50
VPC EL 758.78
EXISTING PROFILE AT R/L RACINE ROAD RAMP CONNECTOR SB
VCL = 105'
K = 63
0.66%
-0.00%
0.79%
VPI STA 243CSB+98.00
VPI EL 758.55
RAILROAD CROSSING
244CSB+13.00
VPI STA 244CSB+28.00
VPI EL 758.55
VCL = 230'
K = 142
VPI STA 245CSB+84.00
VPI EL 759.79
VPI STA 243CSB+35.00
VPI EL 758.20
POT EL 758.47
VPT STA 243CSB+87.50
VPT EL 758.49
VPC STA 244CSB+69.00
VPC EL 758.88
FINISHED PROFILE AT R/L RACINE ROAD RAMP CONNECTOR SB

EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS

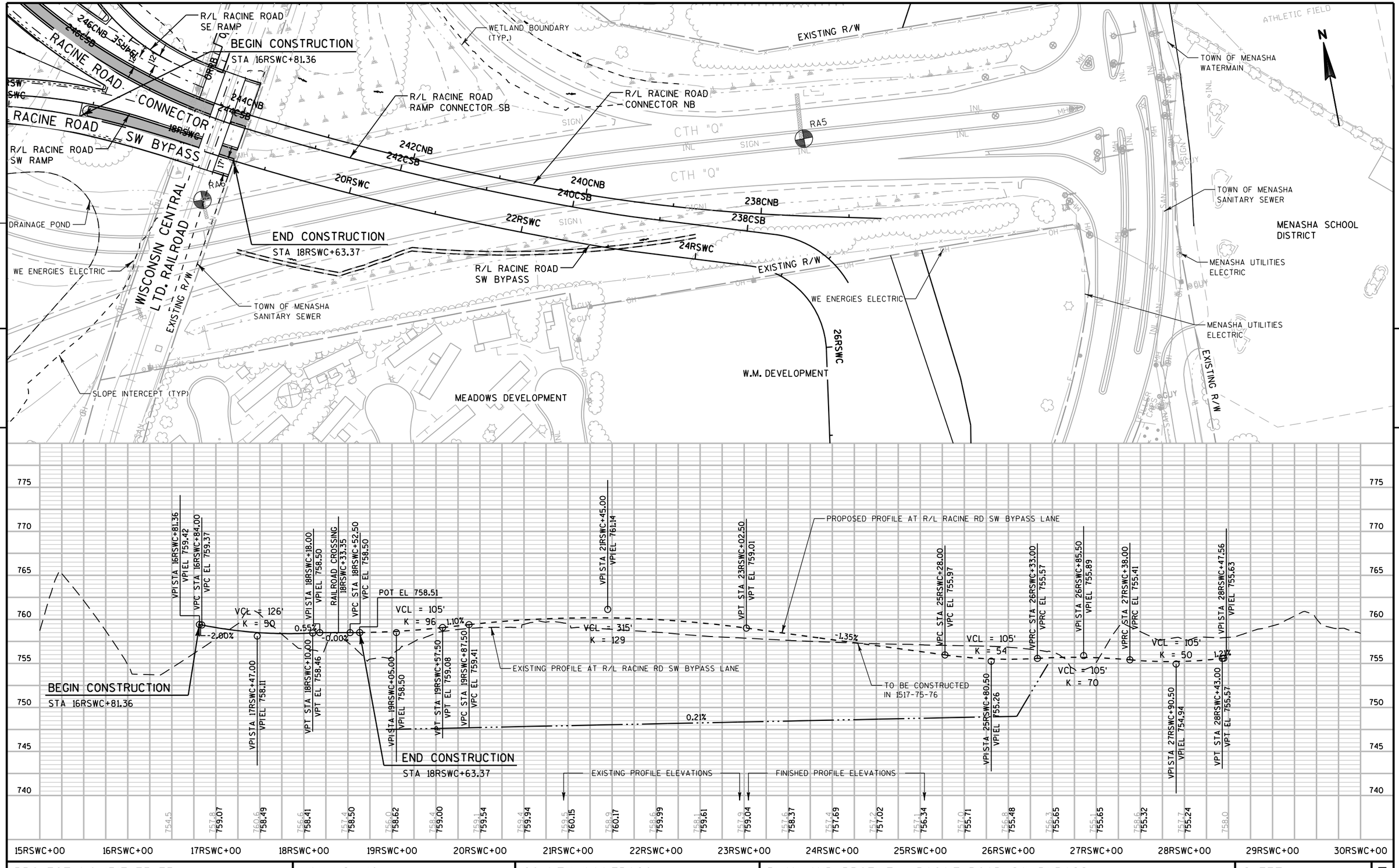
| | | |



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE - RACINE ROAD RAMP CONNECTOR SB	SHEET 522	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\050115_pp.dgn PLOT DATE : 2/1/2015 7:26:19 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE - RACINE ROAD SW BYPASS	SHEET 523 E

PETERSON
CYPRESS HOMES INC
TOWN OF MENASHA
SYRING
PROPOSED R/W
SLOPE INTERCEPT (TYP)
EXISTING R/W
EXISTING R/W
R/L USH 10 WB/STH 441 SB RAMP ROUNDABOUT
END CONSTRUCTION
STA 14RRN+11.55
BEGIN CONSTRUCTION
STA 10RRN+00.00
POND 3
R/L RACINE ROAD NW RAMP
RACINE ROAD NW RAMP
WEBER
R/L RACINE ROAD CONNECTOR SB
12RRN
14RRN
15'
15'
R/L RACINE ROAD NE RAMP
RACINE ROAD NE RAMP
190WB
R/L USH 10 WB/STH 441 SB
192WB
USH 10 WB/STH 441 SB
192EB
USH 10 EB/STH 441 NB
194EB
R/L USH 10 EB/STH 441 NB
RACINE ROAD CONNECTOR SB
252SB
252NB
RACINE ROAD CONNECTOR NB
R/L RACINE ROAD CONNECTOR NB
WETLAND BOUNDARY (TYP)
N
5
5

775
770
765
760
755
750
745
740

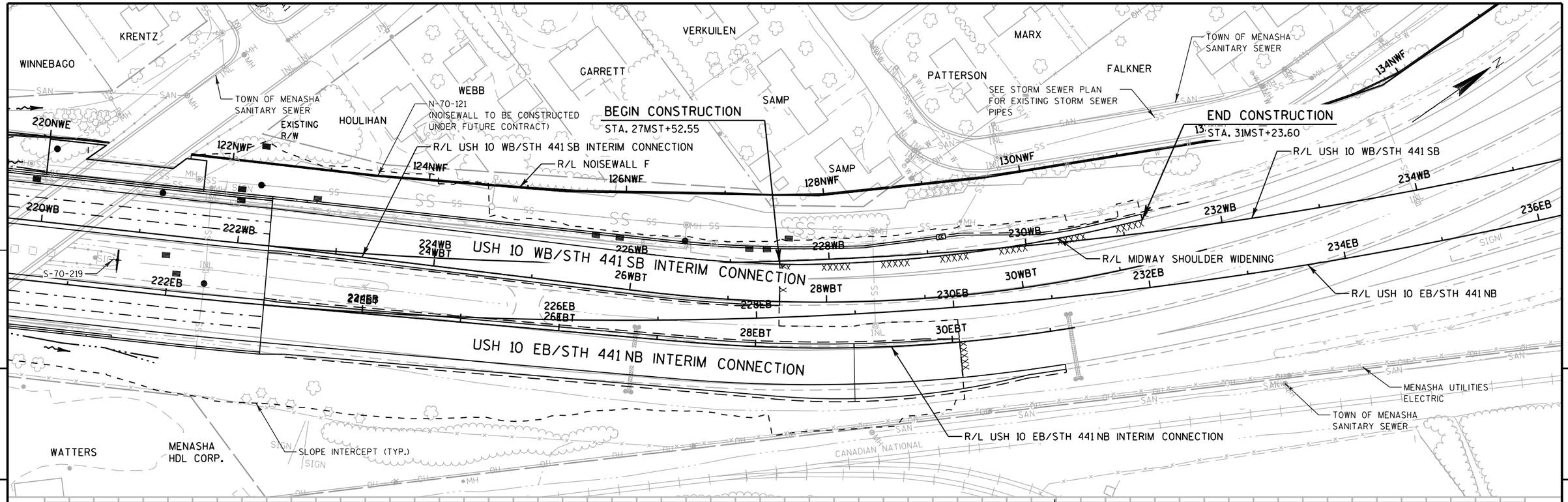
VPI STA 10RRN+00.00
VPI EL 761.30
VPI STA 11RRN+40.00
VPI EL 762.42
VPRC STA 11RRN+90.00
VPRC EL 761.17
VPI STA 14RRN+11.55
VPI EL 761.30
END CONSTRUCTION
STA 14RRN+11.55
0.80%
VCL = 100'
K = 30
VCL = 100'
K = 30
0.80%
BEGIN CONSTRUCTION
STA 10RRN+00.00
VPC STA 10RRN+90.00
VPC EL 762.02
VPI STA 12RRN+40.00
VPI EL 759.93
VPT STA 12RRN+90.00
VPT EL 760.33
-9.60%
FINISHED PROFILE AT R/L RACINE ROAD RAMP/STH 441 SB ROUNDABOUT
SPECIAL DITCH RIGHT
EXISTING PROFILE AT R/L RACINE ROAD RAMP/STH 441 SB ROUNDABOUT
0.58%
SPECIAL DITCH RIGHT

EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS

748.3	752.3	749.8	749.3	750.0	749.9	749.6	748.8	747.3
761.30	761.70	762.08	761.91	760.94	760.27	760.41	760.81	761.21

5RRN+00 6RRN+00 7RRN+00 8RRN+00 9RRN+00 10RRN+00 11RRN+00 12RRN+00 13RRN+00 14RRN+00 15RRN+00 16RRN+00 17RRN+00 18RRN+00 19RRN+00 20RRN+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN AND PROFILE - RACINE ROAD/STH 441 SB RAMP ROUNDABOUT	SHEET 524	E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	PLAN & PROFILE: MIDWAY SHOULDER WIDENING	SHEET 525	E

FILE NAME : I:\S6537\1517-75-75\t1\cds\050123_pp.dgn PLOT DATE : 4/26/2015 9:11:18 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40

Standard Detail Drawing List

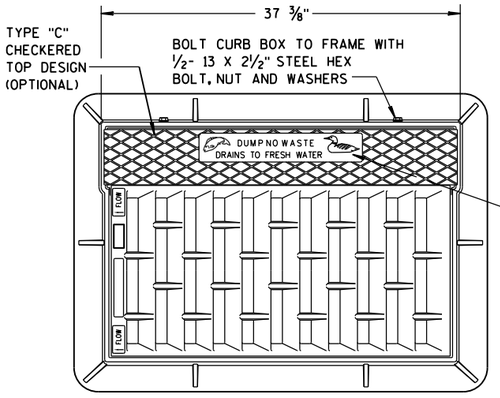
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
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
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
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
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
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
09B02-08	CONDUIT UNDER PAVED HIGHWAYS
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-09	CONCRETE CONTROL CABINET BASES
09C08-05	CONCRETE BASE, TYPE 7
09C10-03	TRANSFORMER BASE FOR 15" BOLT CIRCLE
09C11-05	CONCRETE BASE TYPE 10
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09E01-13D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-13F	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)
09E01-13G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E02-04	FREEWAY LIGHTING UNIT POLE WIRING
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
10A01-03	ELECTRICAL HANDHOLE WIRING
10A02-02	IDENTIFICATION PLAQUES LIGHT POLES
10A04-02	IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING
10A15-04A	ELECTRICAL DETAILS UNDERDECK LIGHTING
10A15-04B	ELECTRICAL DETAILS UNDERDECK LIGHTING
11B02-02	CONCRETE MEDIAN NOSE
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
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
13B02-07A	CONCRETE BRIDGE APPROACH
13B02-07B	STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
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

6

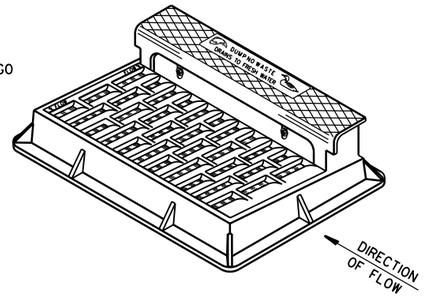
Standard Detail Drawing List

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
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)
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
14B39-01A	32-INCH SSCB TO 36-INCH SSCB HEIGHT TRANSITION
14B39-01C	36-INCH SSCB TO 42-INCH SSCB HEIGHT TRANSITION
14B39-01E	42-INCH SSCB TO 56-INCH SSCB HEIGHT TRANSITION
14B41-01A	SINGLE SLOPE ROADSIDE RETAINING WALL
14B41-01B	SINGLE SLOPE ROADSIDE RETAINING WALL
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
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
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A06-02	DELINEATOR LAYOUT
15B03-14A	FENCE CHAIN LINK
15B03-14B	FENCE CHAIN LINK
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C07-12D	ROUNDABOUT ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D12-04	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D16-02	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D34-01A	RAMP GATE SOLAR POWER
15D34-01B	RAMP GATE SOLAR POWER
15D34-01C	RAMP GATE SOLAR POWER
15D34-01D	RAMP GATE SOLAR POWER

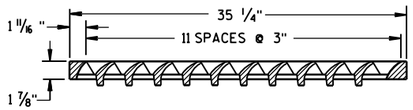
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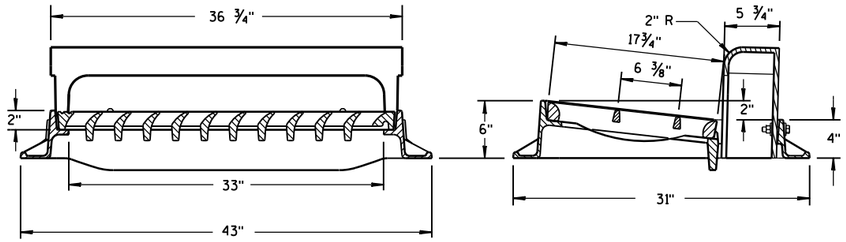


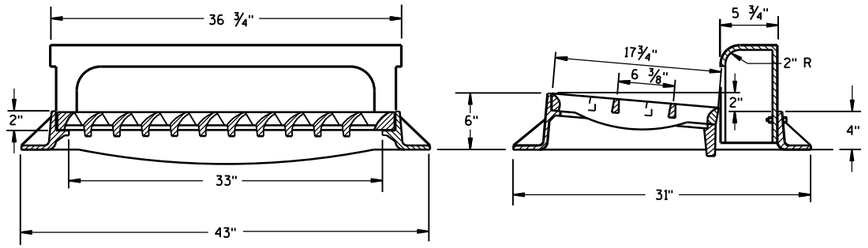
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

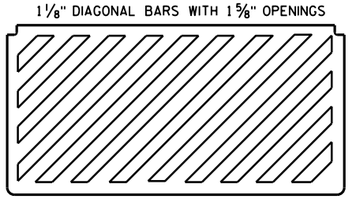






TYPE "H"

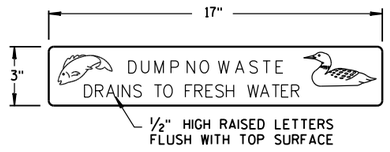
NOTE: EITHER CASTING IS ACCEPTABLE



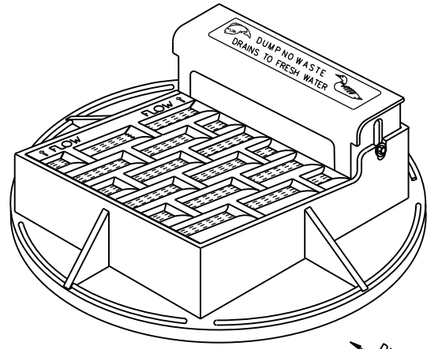
SPECIAL GRATE FOR TYPE "H" COVER

(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"

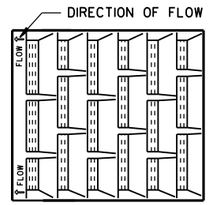
NOTE:
GRATE IS REVERSIBLE.

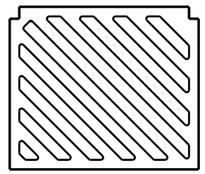
GENERAL NOTES

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.

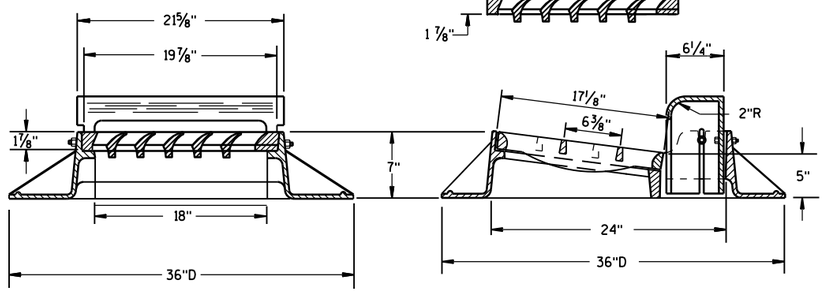




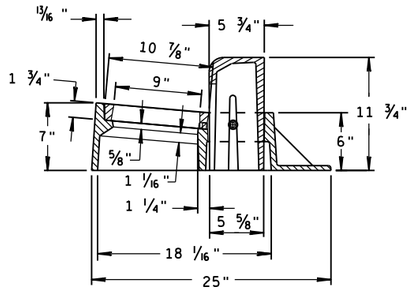
SPECIAL GRATE FOR TYPE "A" COVER

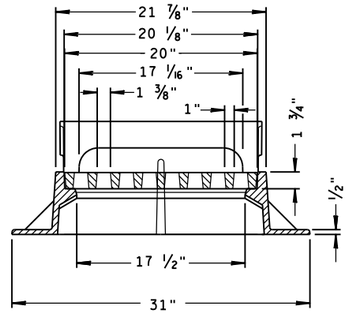
(MEASURES 19 3/4" X 17" X 1 7/8")

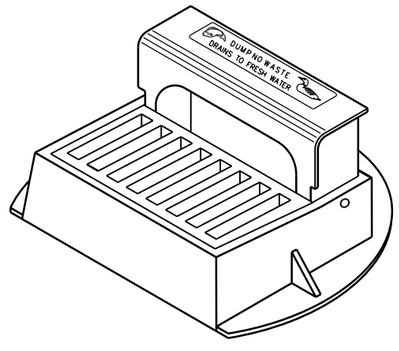
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

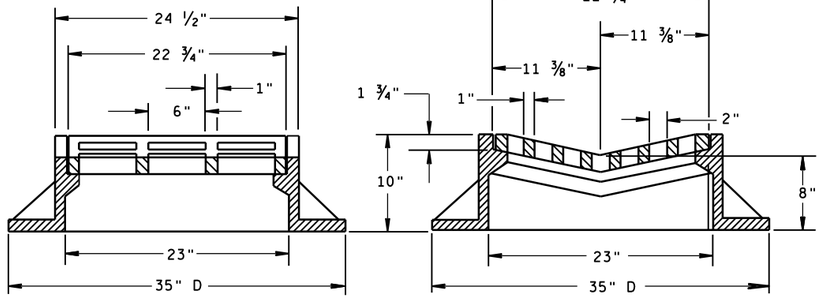
INLET COVERS
TYPE A, H, A-S, H-S & Z

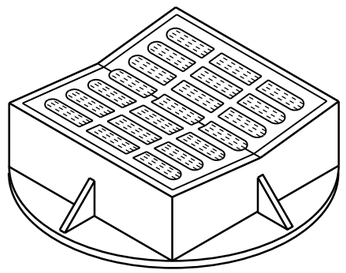
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

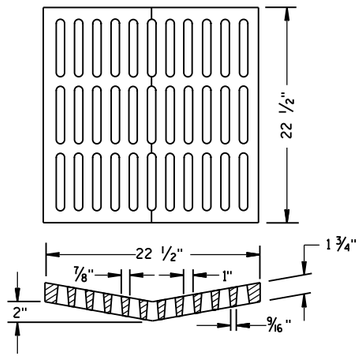
6

S.D.D. 8 A 5-19a



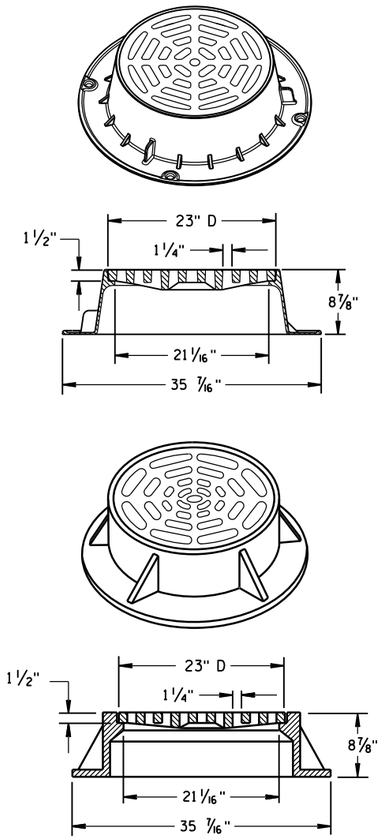


TYPE "B"



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"

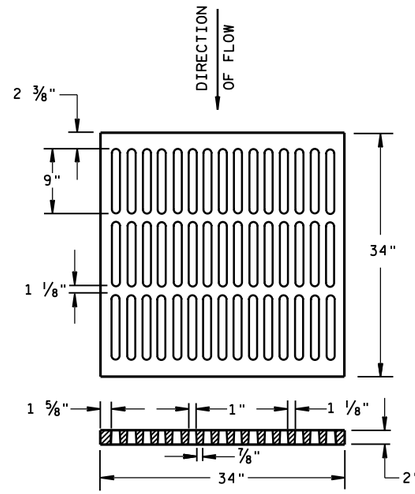
NOTE: EITHER CASTING IS ACCEPTABLE

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.

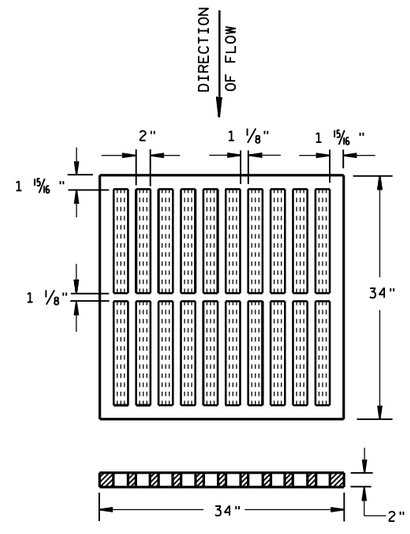
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



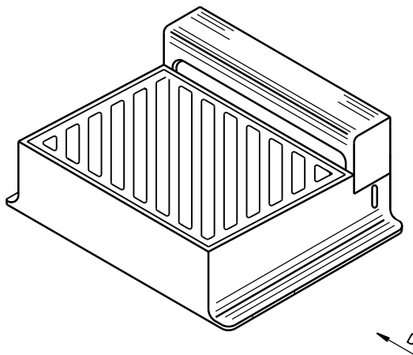
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

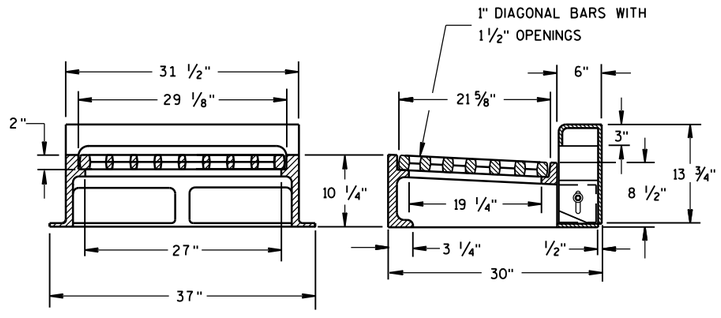


TYPE "MS"

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"

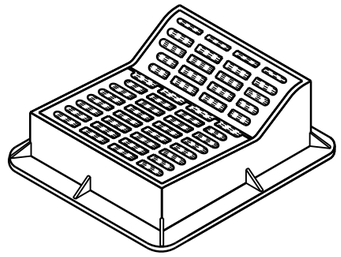
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

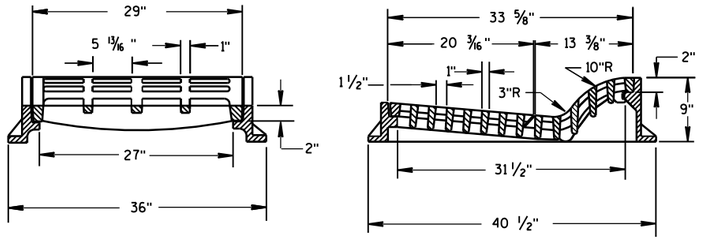
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

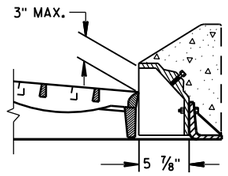
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

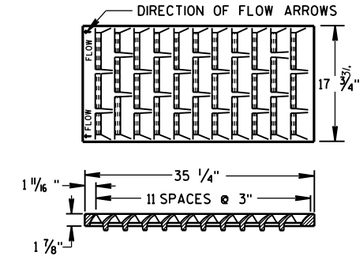
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

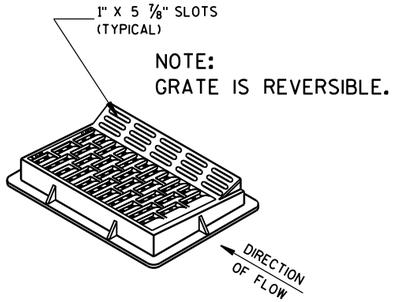
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

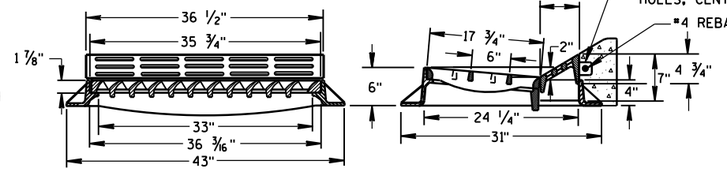
GENERAL NOTES

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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.



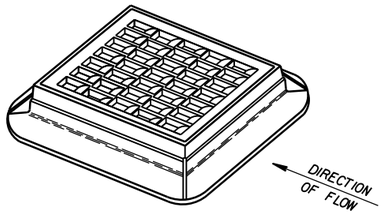


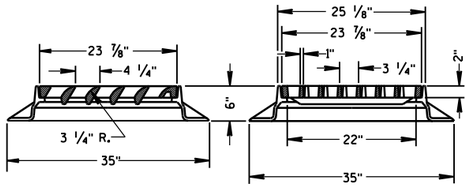


TYPE "HM"

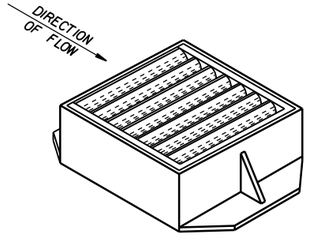
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

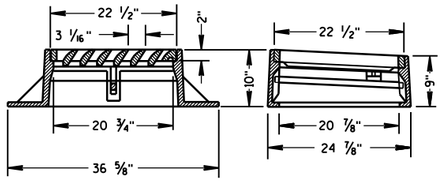
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



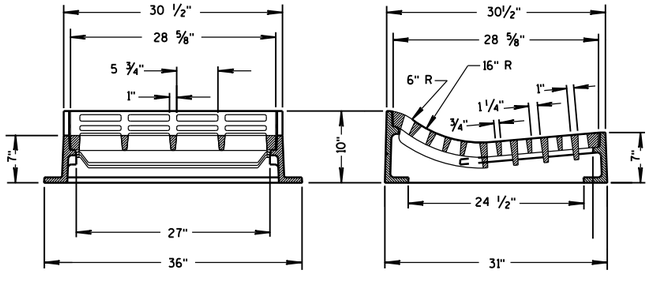


TYPE "S"



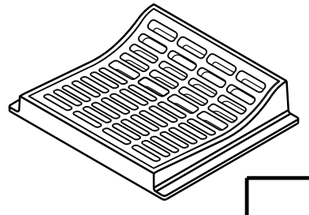


TYPE "V"



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

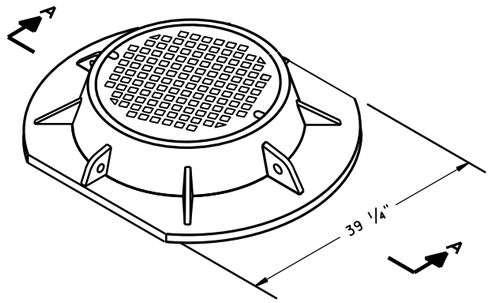
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

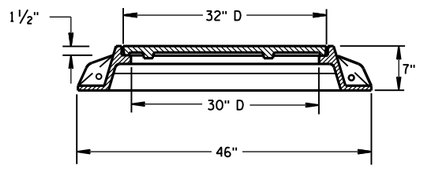
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

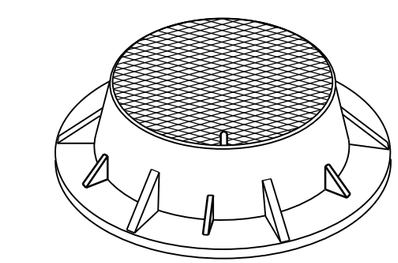
FHWA

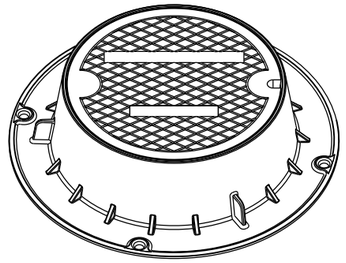
6
S.D.D. 8 A 5-19c

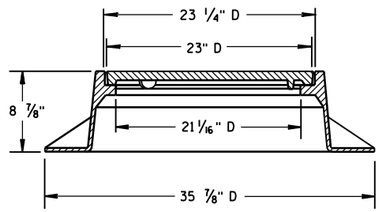


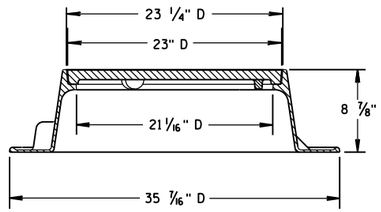


SECTION A-A
TYPE "K"









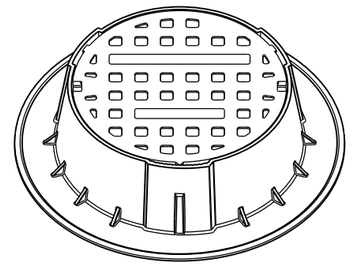
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

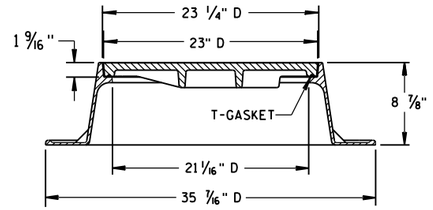
GENERAL NOTES

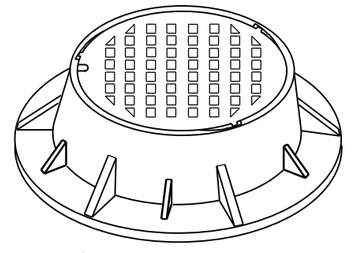
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

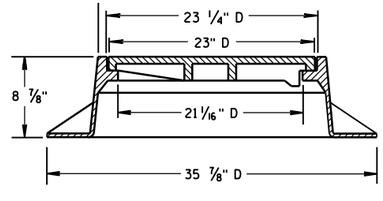
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

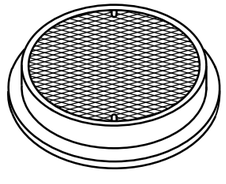


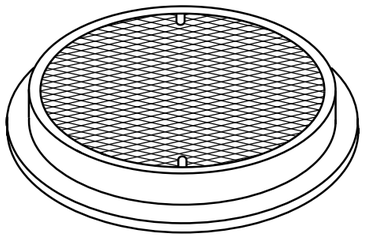


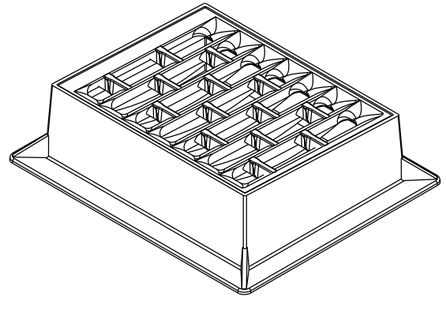


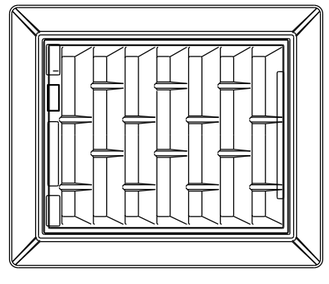


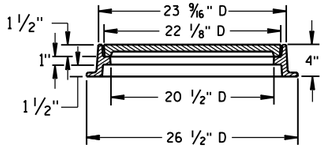
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



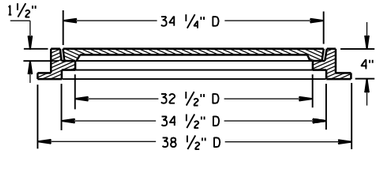




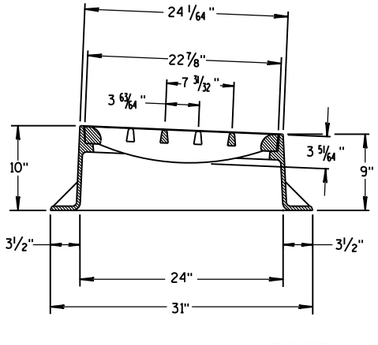


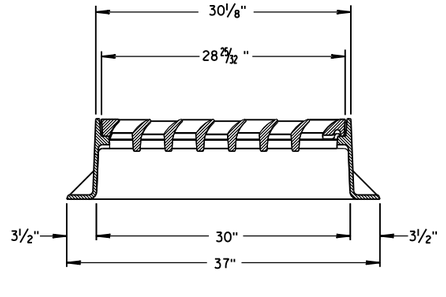


TYPE "L"



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
FHWA

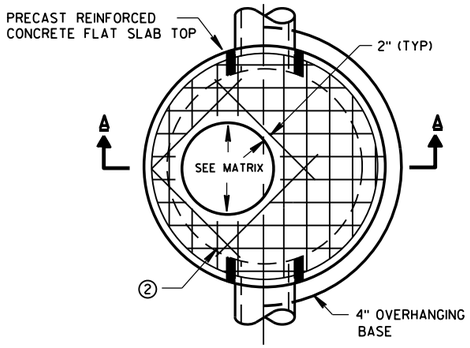
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

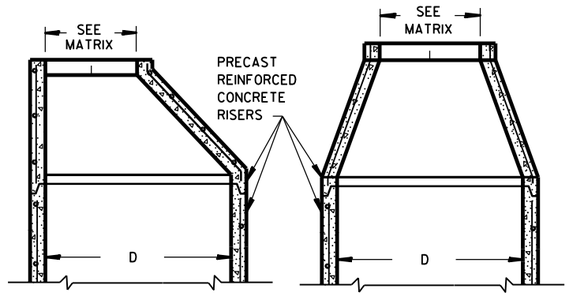
S.D.D. 8 A 5-19d

6

S.D.D. 8 A 5-19d

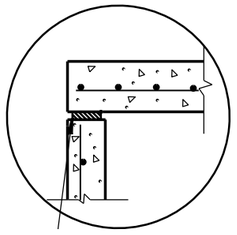


PLAN VIEW CIRCULAR OPENING

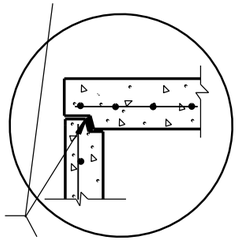


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

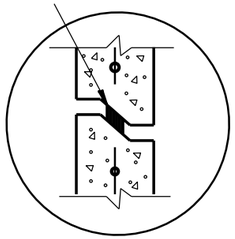


TOP WITH PLAIN END JOINT



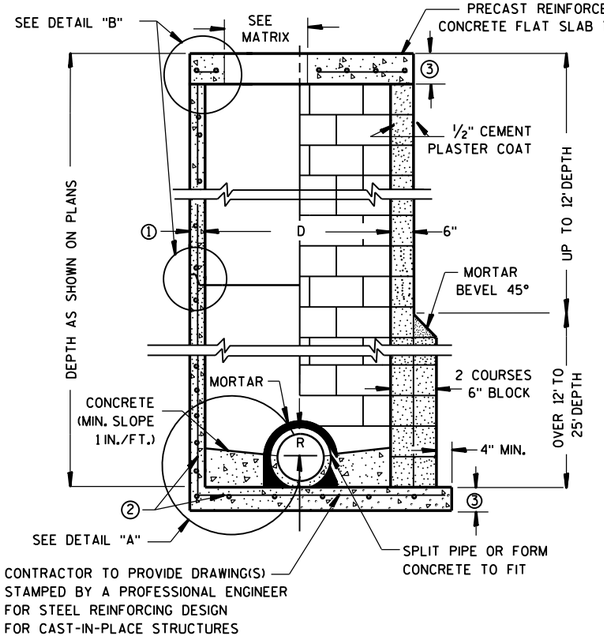
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



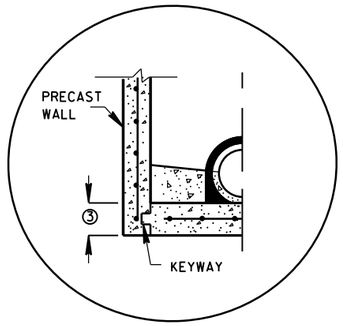
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

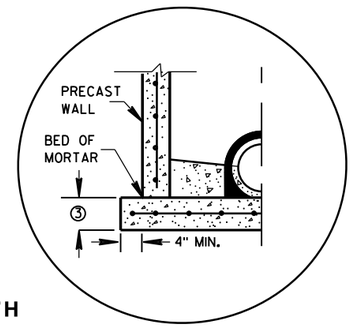


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

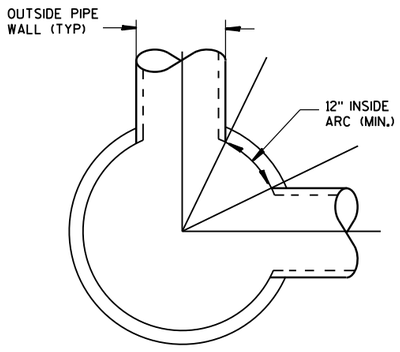


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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

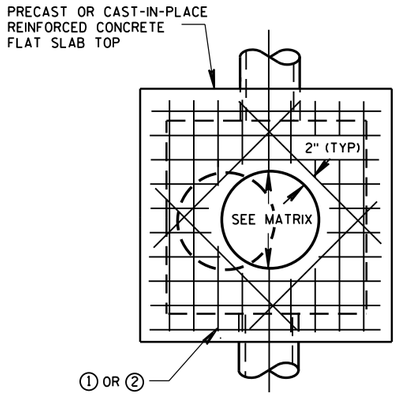
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

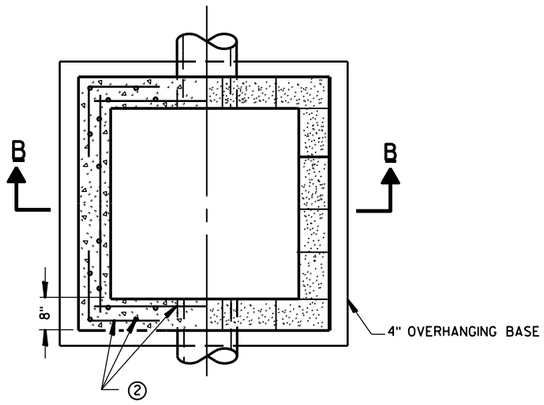
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

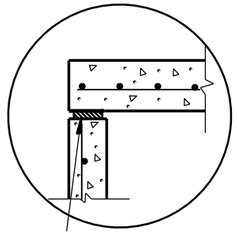
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S.D.D. 8 B 9-1



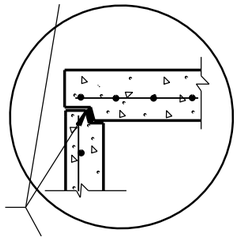
PLAN VIEW
CIRCULAR OPENING



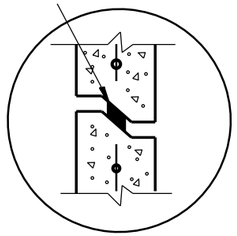
SECTION A-A
PLAN VIEW



TOP WITH PLAIN END JOINT

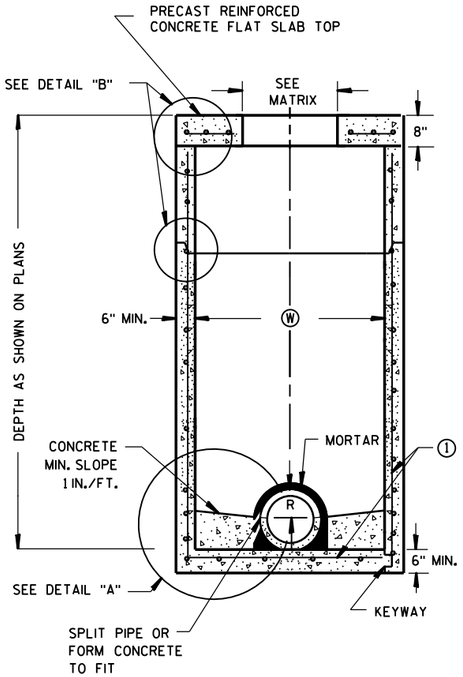


TOP WITH TONGUE AND GROOVE JOINT

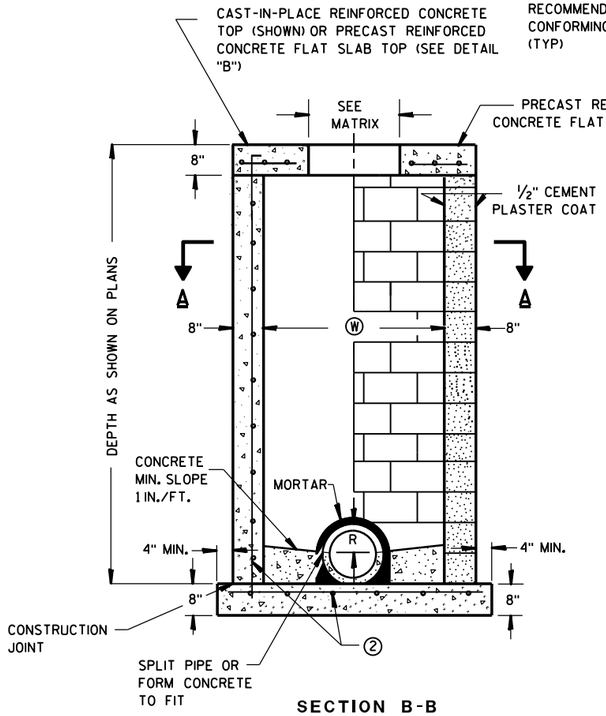


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

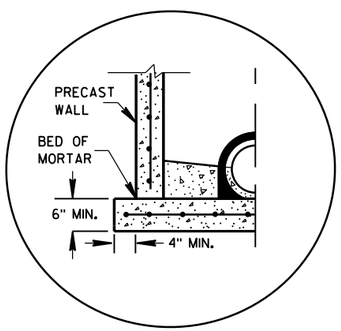


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

SECTION B-B

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "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.

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.

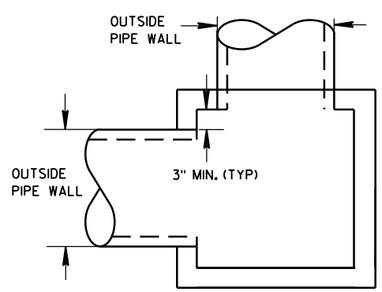
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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

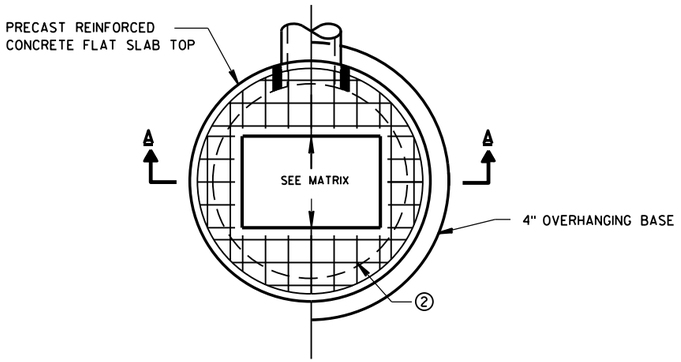
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

6

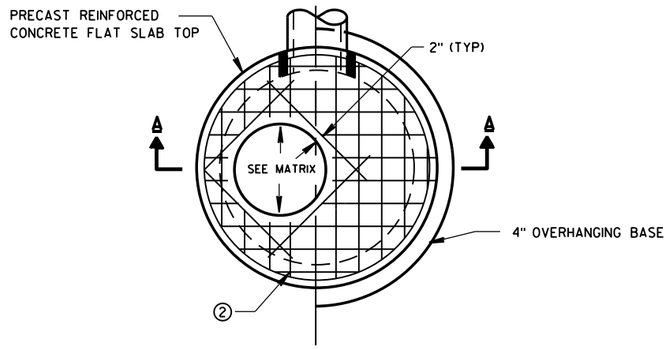
S.D.D. 8 B 10-1

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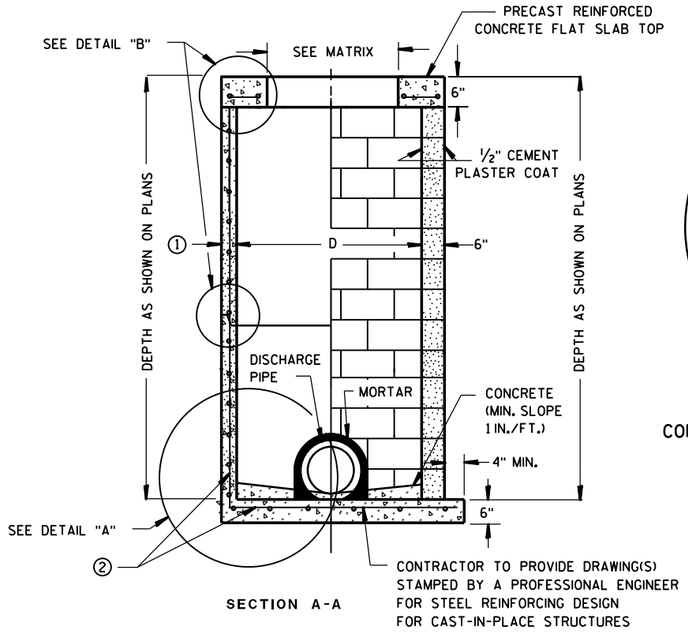
S.D.D. 8 B 10-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

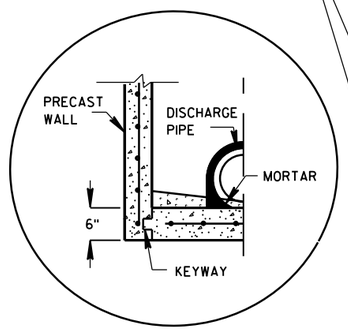


SECTION A-A

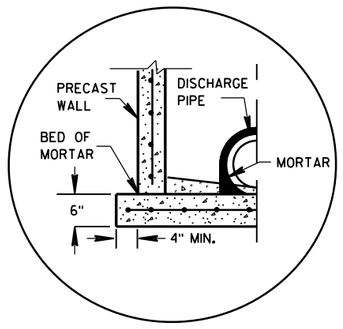
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

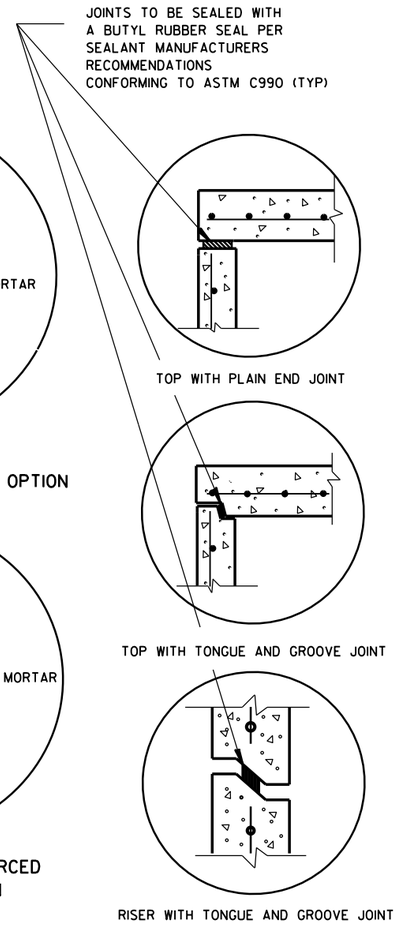


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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.

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.

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.

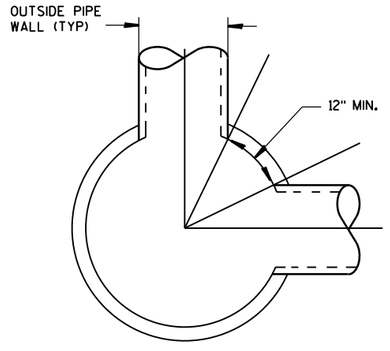
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

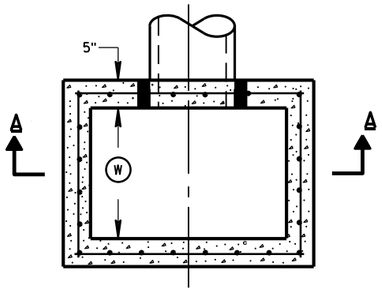
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

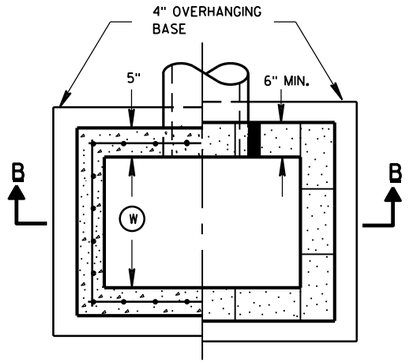
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

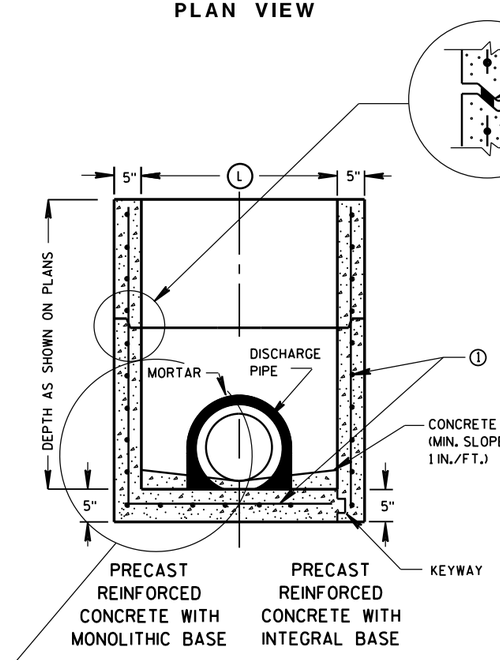
S.D.D. 8 C 6-1



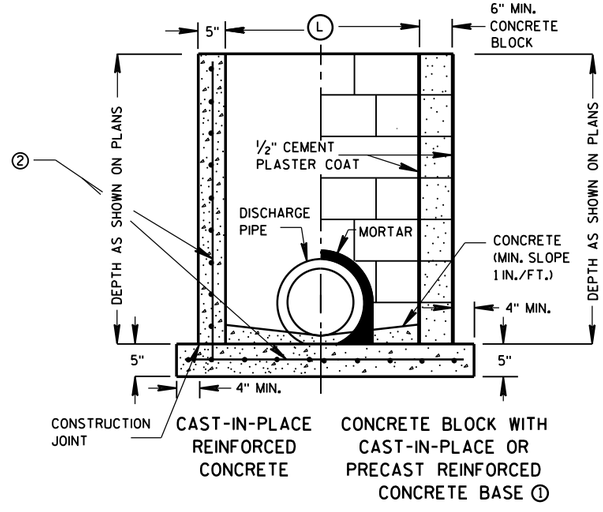
PLAN VIEW



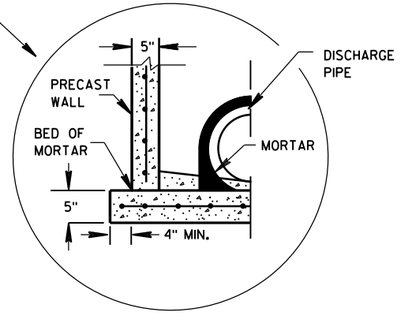
PLAN VIEW



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.

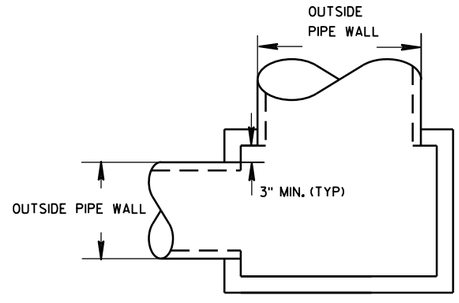
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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"

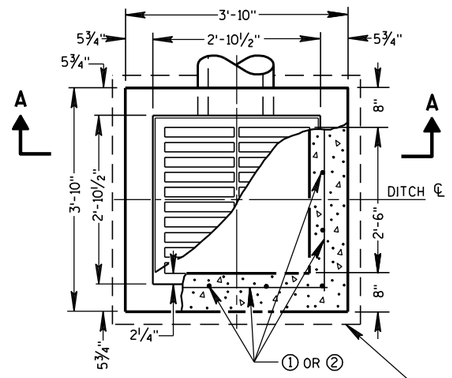
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

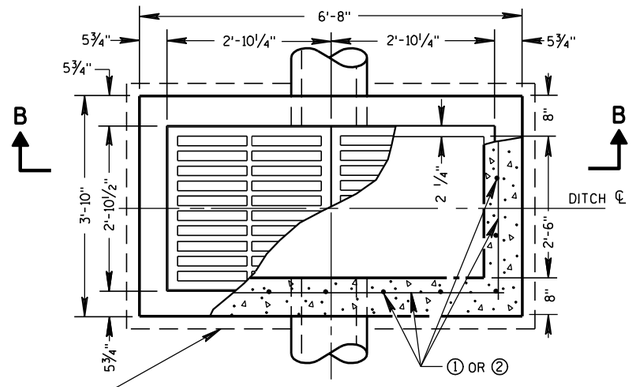
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE ENGINEER
FHWA

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S.D.D. 8 C 7-1

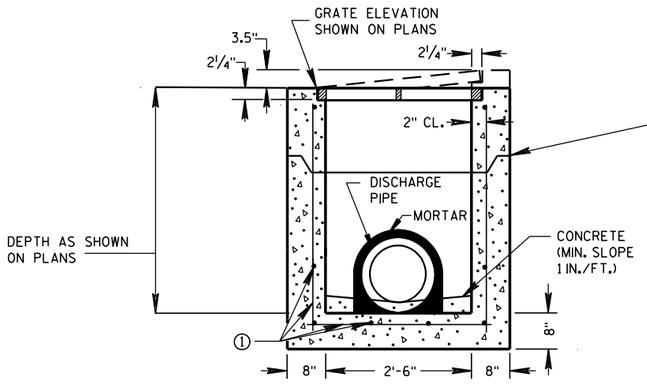


PLAN VIEW

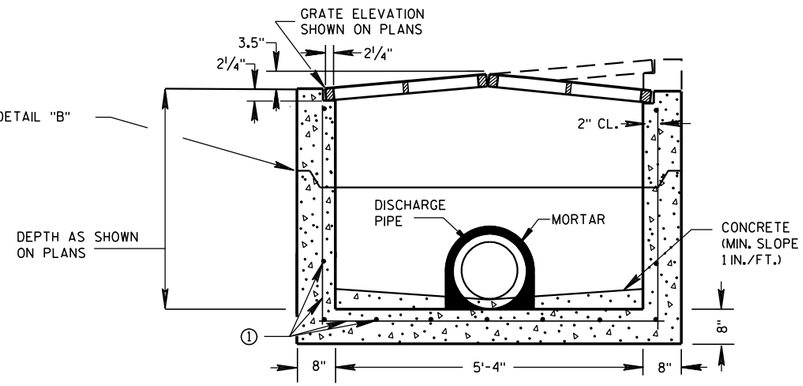


PLAN VIEW

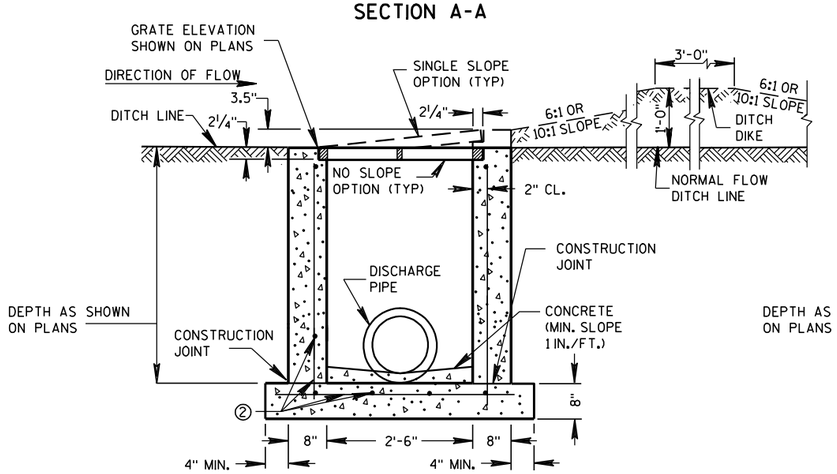
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



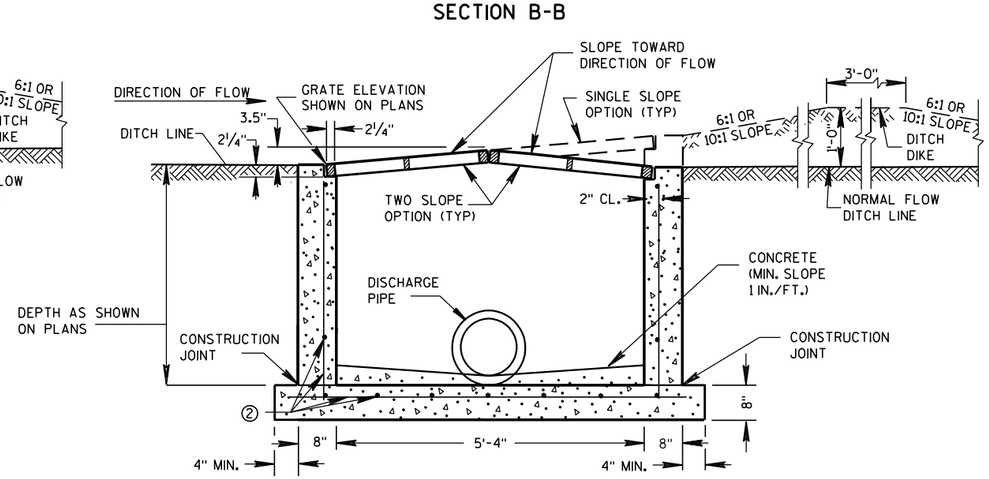
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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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 INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

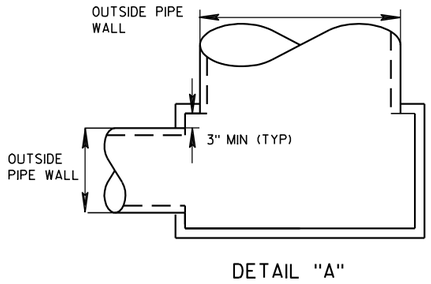
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

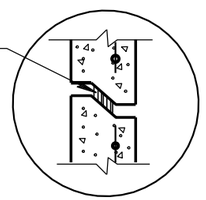
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

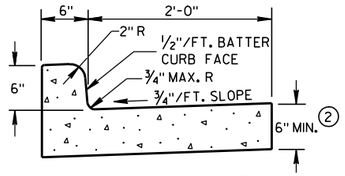
FHWA

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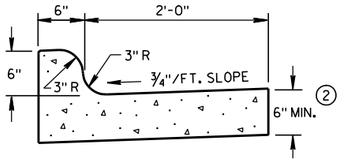
S.D.D. 8 C 8-1

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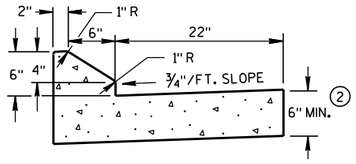
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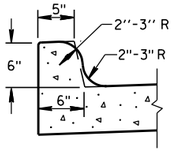
TYPES A & D (1)



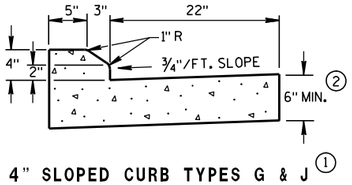
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

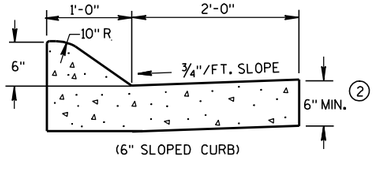


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

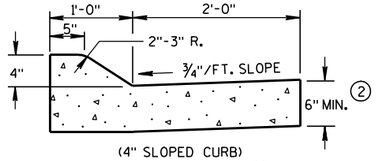


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

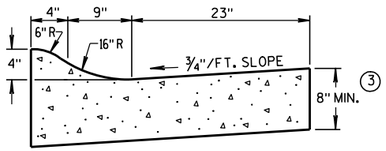


(6" SLOPED CURB)



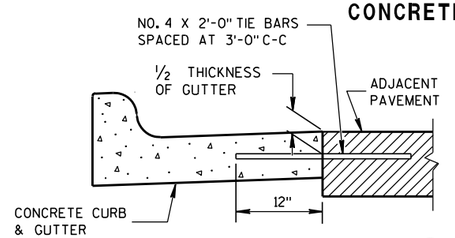
(4" SLOPED CURB)

TYPES A & D (1)

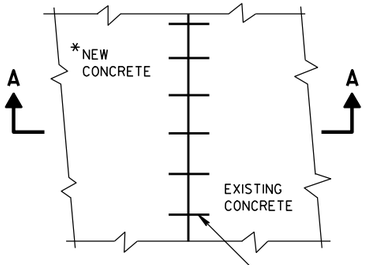


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

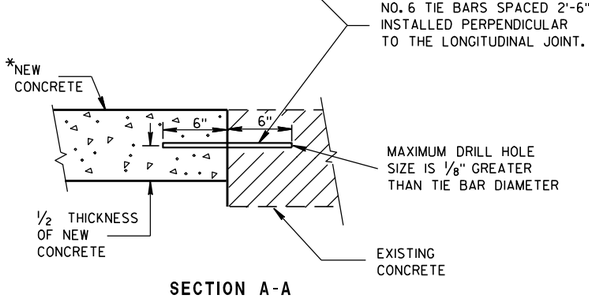


TYPICAL TIE BAR LOCATION (1)



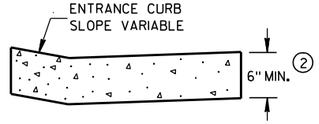
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

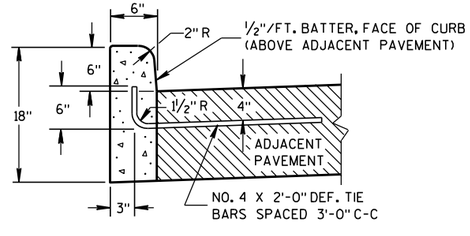


SECTION A-A

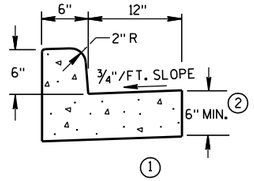
TIE BARS DRILLED INTO EXISTING PAVEMENT



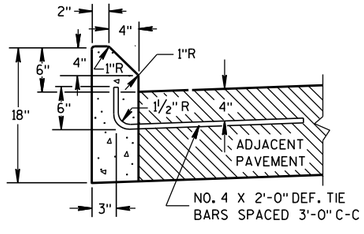
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

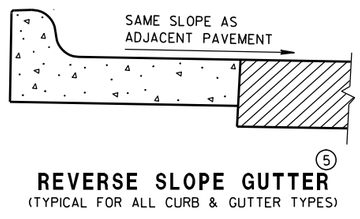


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(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.

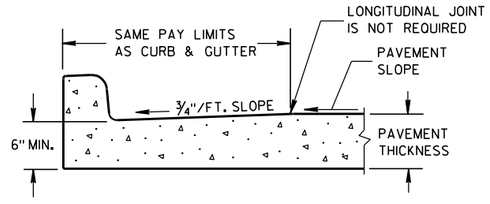
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

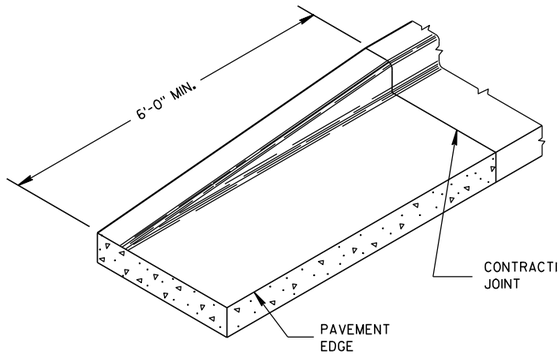
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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

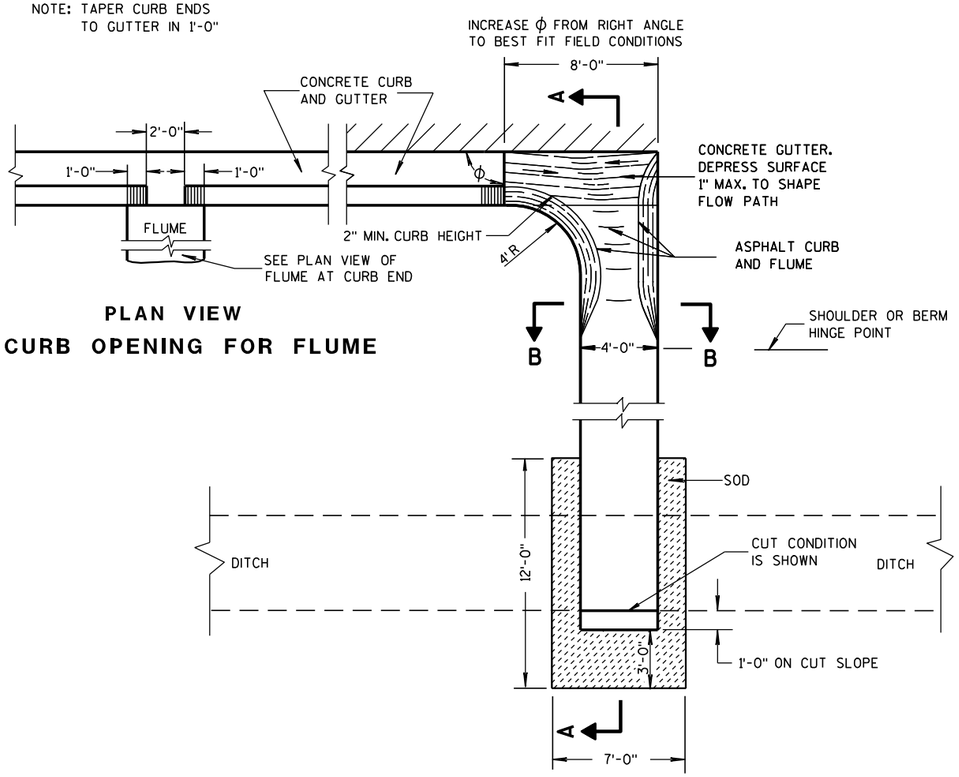
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
537
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FHWA

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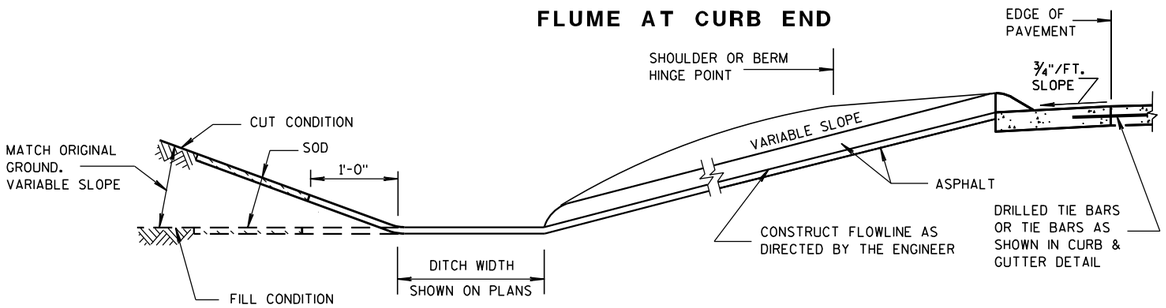
S.D.D. 8 D 1-17

ASPHALTIC FLUME

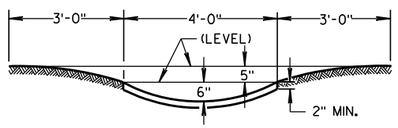


PLAN VIEW
CURB OPENING FOR FLUME

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.

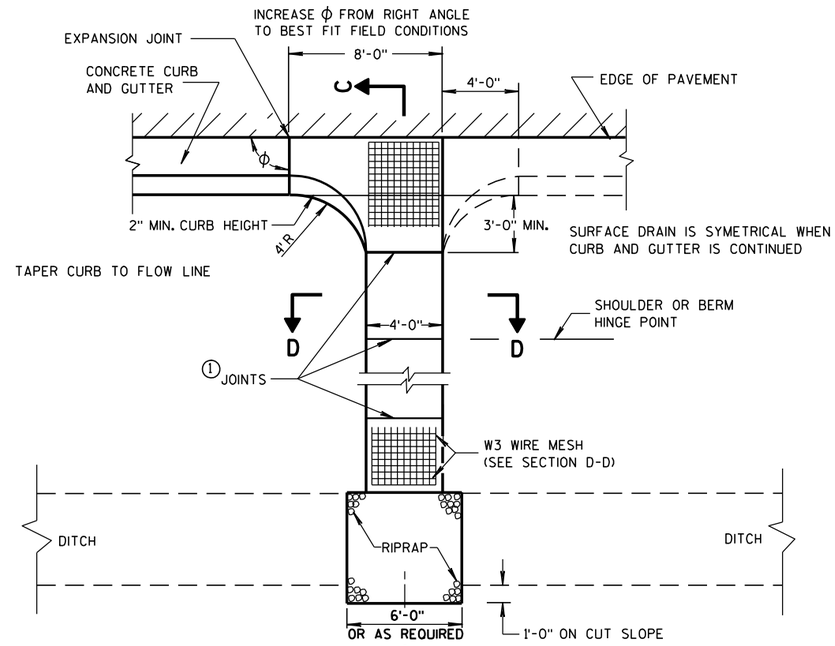
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

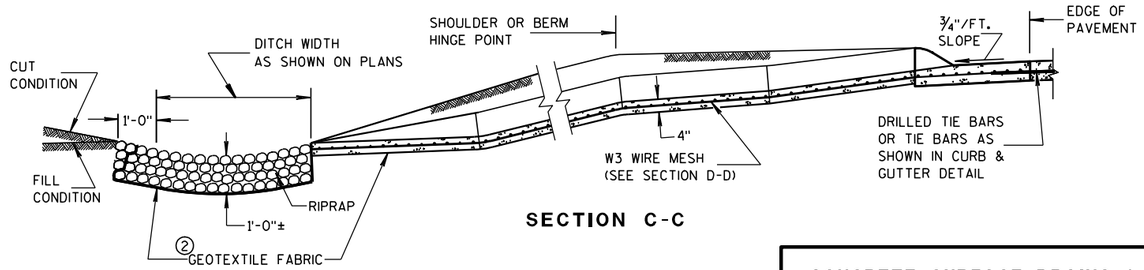
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

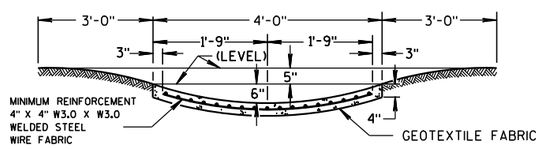
③ CONCRETE SURFACE DRAIN



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. ... ROADWAY STANDARDS ENGINEER — MENT

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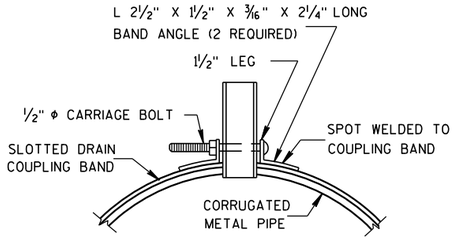
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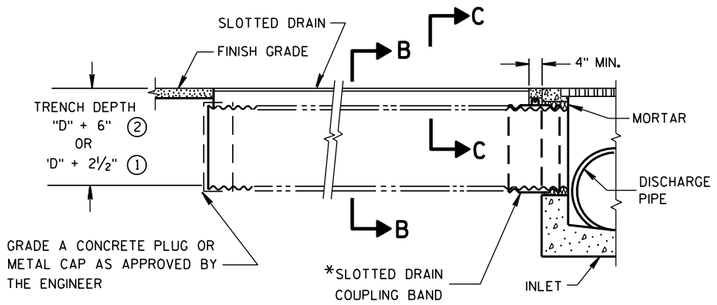
S.D.D. 8 D 4-5

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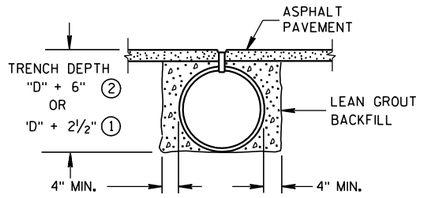
S.D.D. 8 D 4-5



SECTION A-A



SLOTTED DRAIN INSTALLATION TYPE "A"



SECTION B-B

GENERAL NOTES

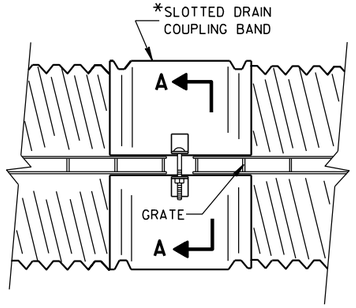
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BACKFILL MATERIAL

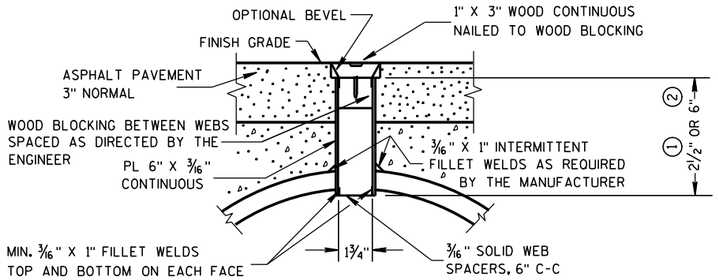
THE LEAN GROUT BACKFILL MATERIAL SHALL BE A FINE AGGREGATE, IN ACCORDANCE WITH SUBSECTION 501.3.6.3.6 OF THE STANDARD SPECIFICATIONS, MIXED WITH 150 POUNDS OF CEMENT AND APPROXIMATELY 30 GALLONS OF WATER FOR EACH 3000 POUNDS OF FINE AGGREGATE.

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.

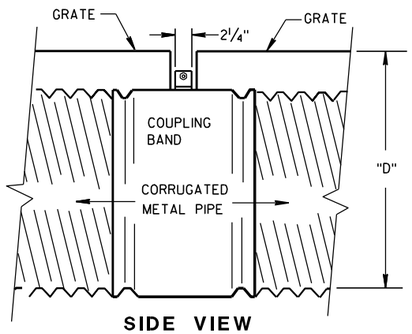


PLAN VIEW



SECTION C-C

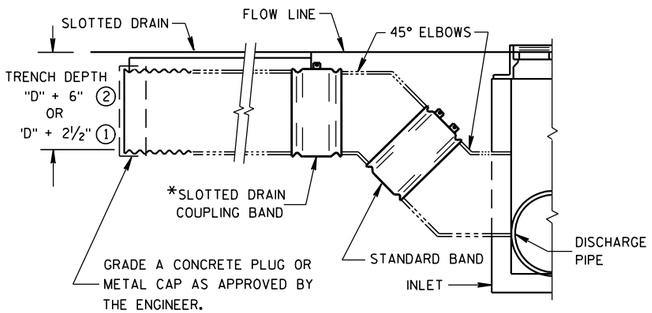
GRATE SLOT DETAIL



SIDE VIEW

*TYPICAL COUPLING BAND FOR SLOTTED DRAIN

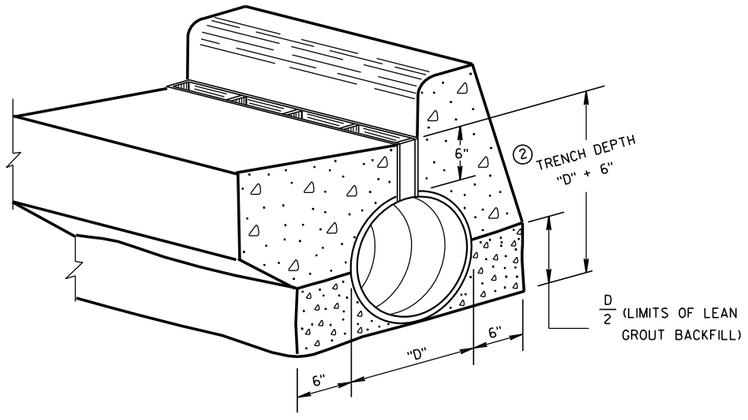
(ALTERNATES PERMITTED AS APPROVED BY THE ENGINEER)



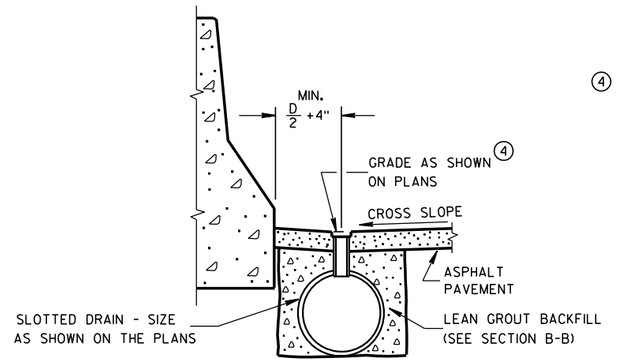
NOTE:

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.

SLOTTED DRAIN INSTALLATION TYPE "B"



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

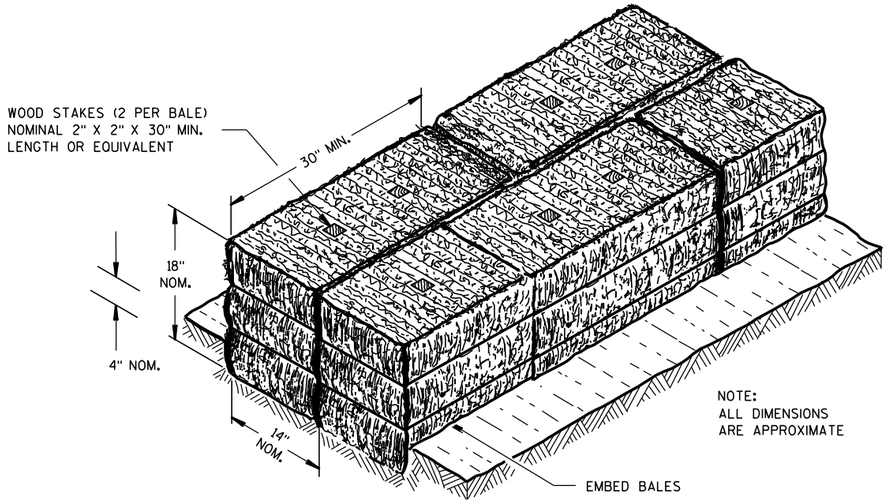
8/30/79 — DATE

/S/ D. L. Str--- — CHIEF ROADWAY DEVELOP ENGINEER

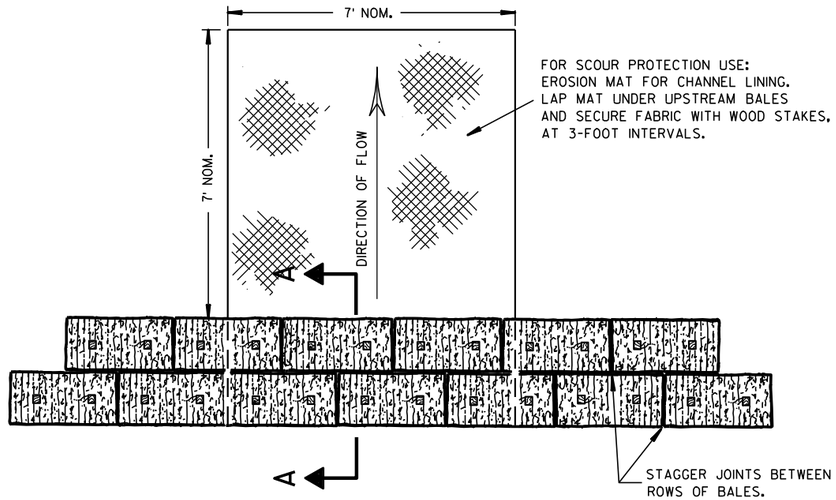
FHWA

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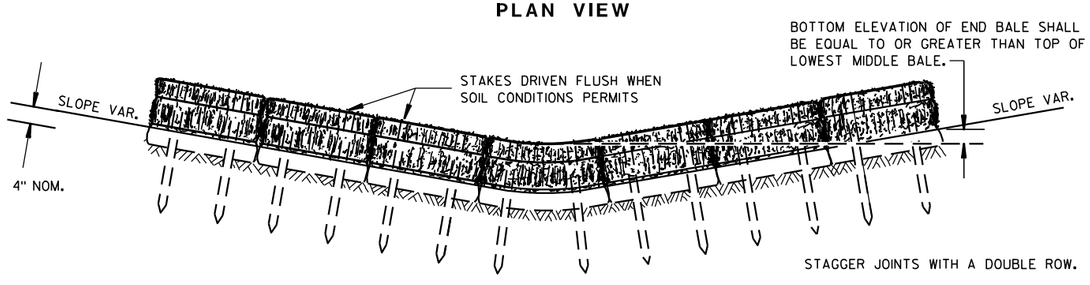
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SECTION A-A



PLAN VIEW



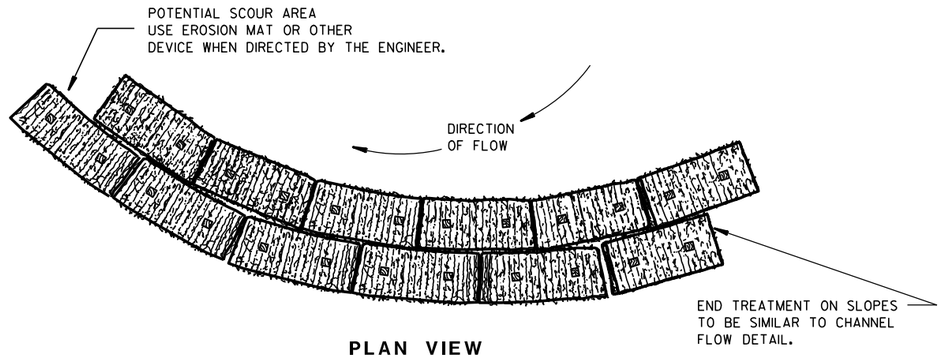
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

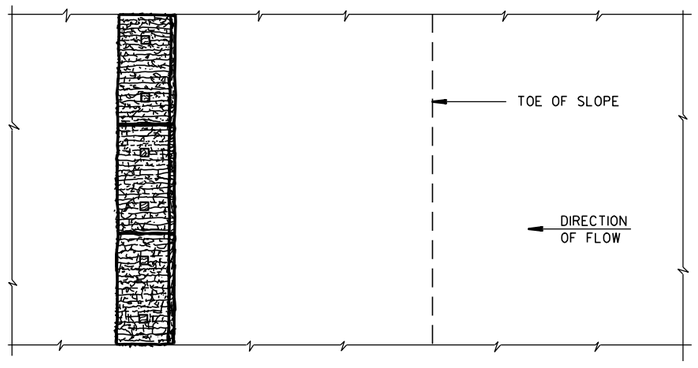
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

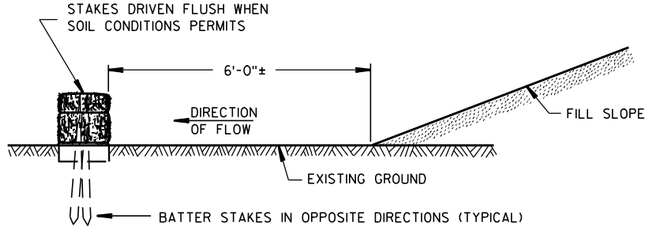


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

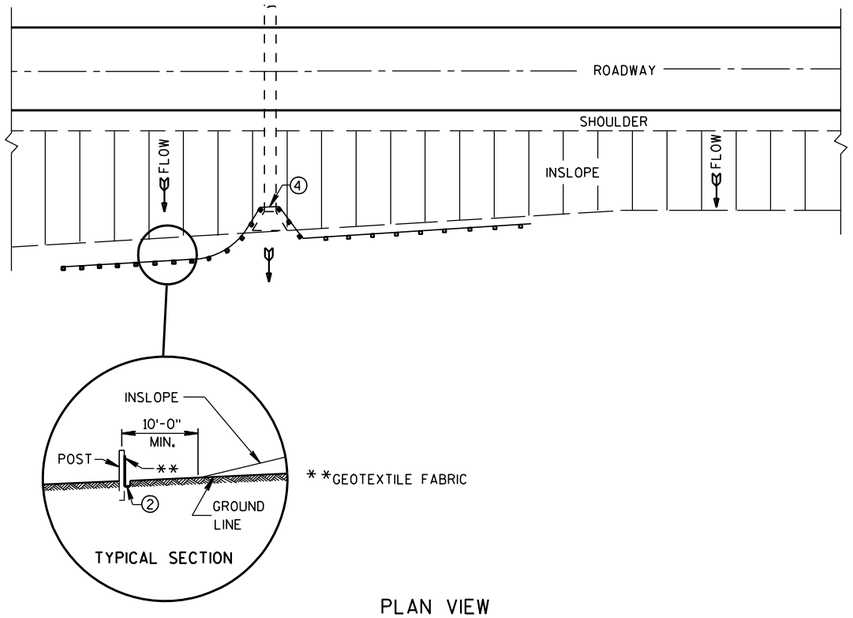
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S.D.D. 8 E 8-3

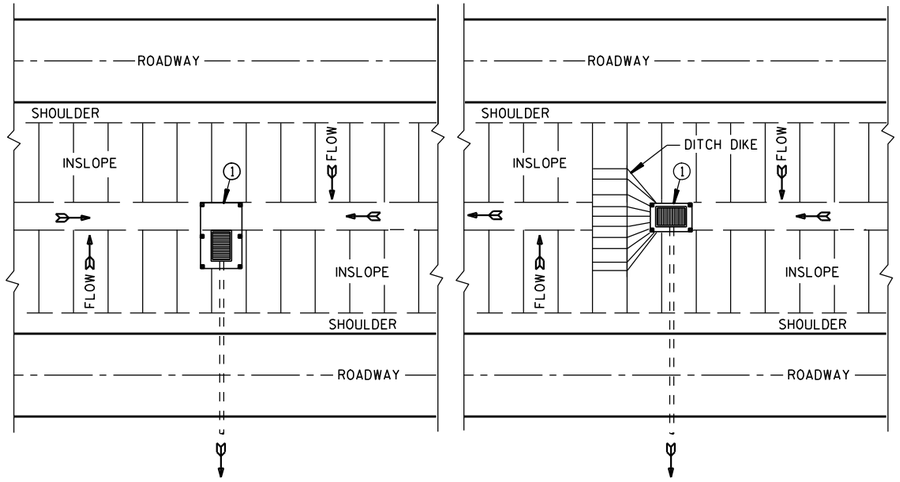
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S.D.D. 8 E 8-3



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.

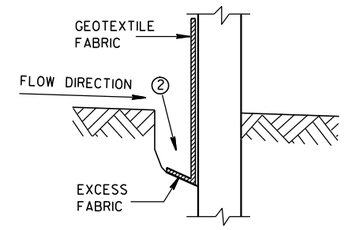
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

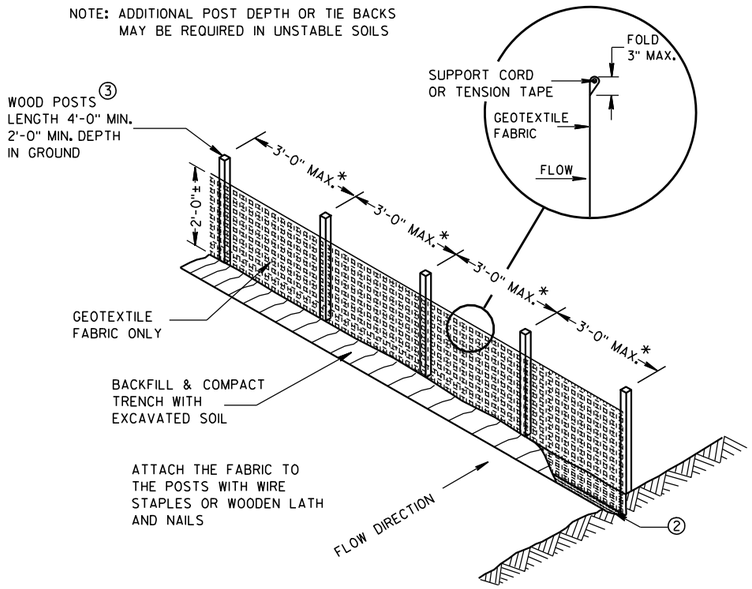
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

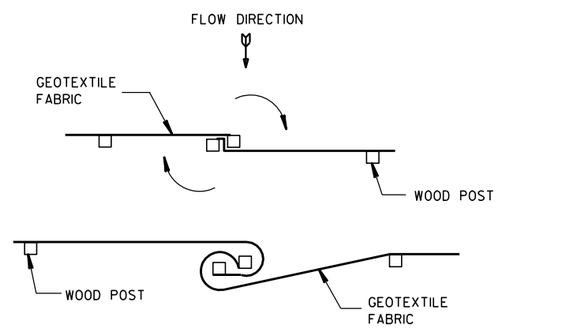
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



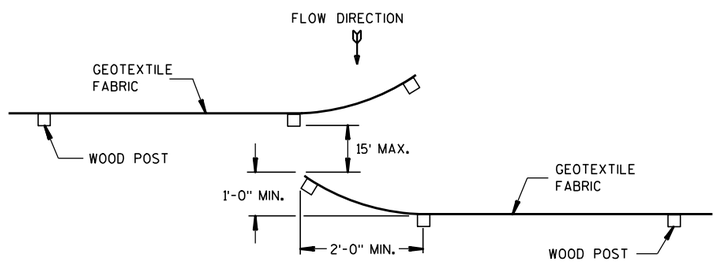
TRENCH DETAIL



SILT FENCE

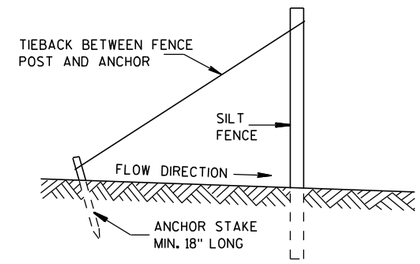


TWIST METHOD



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

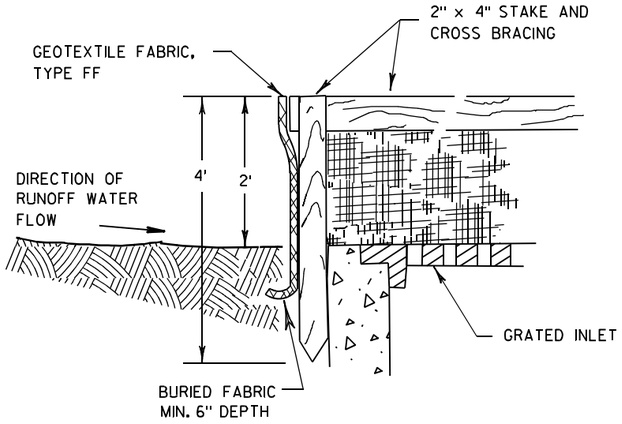
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

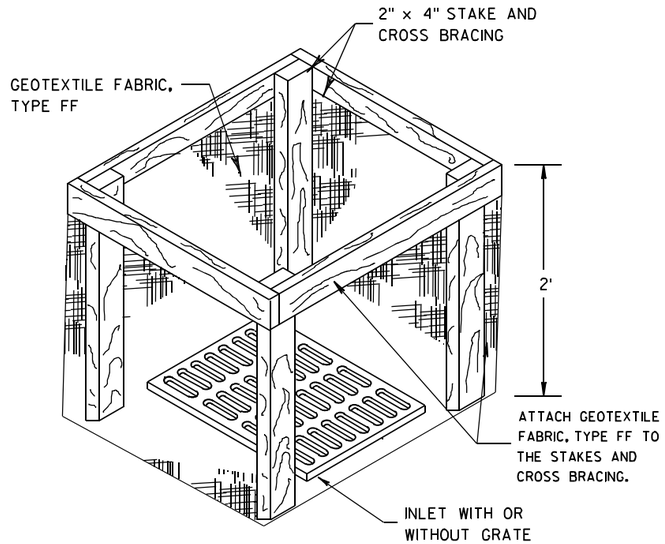
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S.D.D. 8 E 9-6

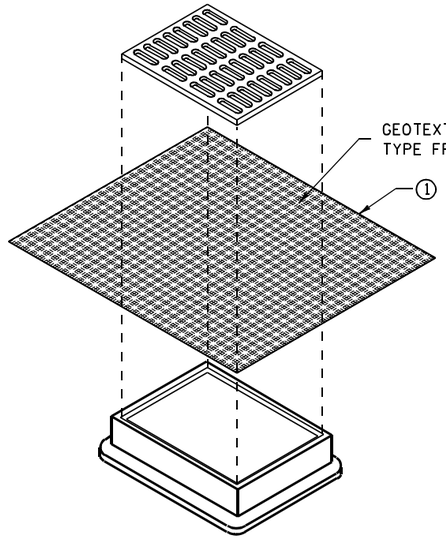
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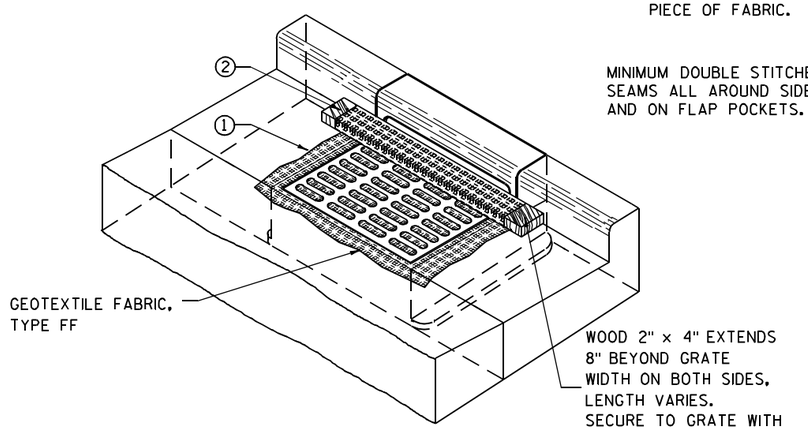


INLET PROTECTION, TYPE A

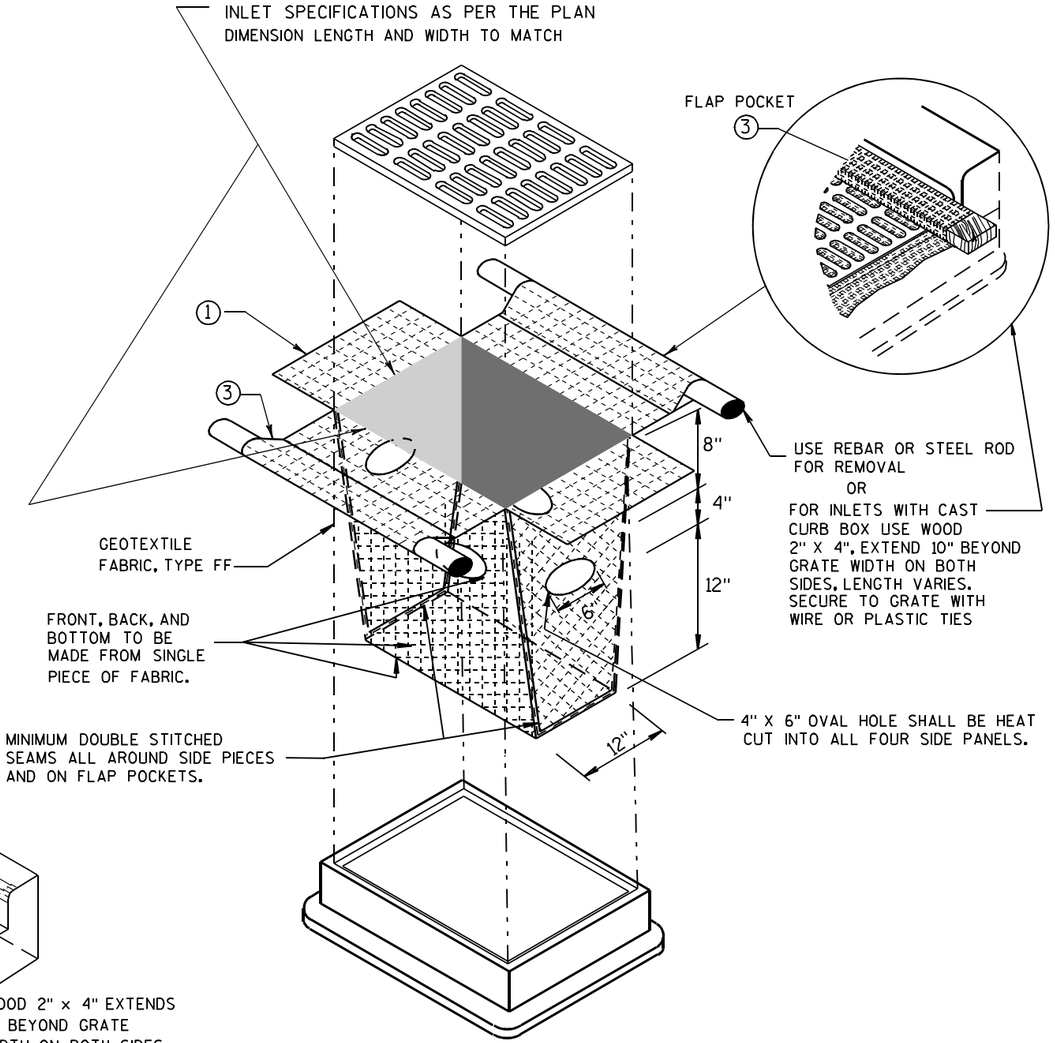


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

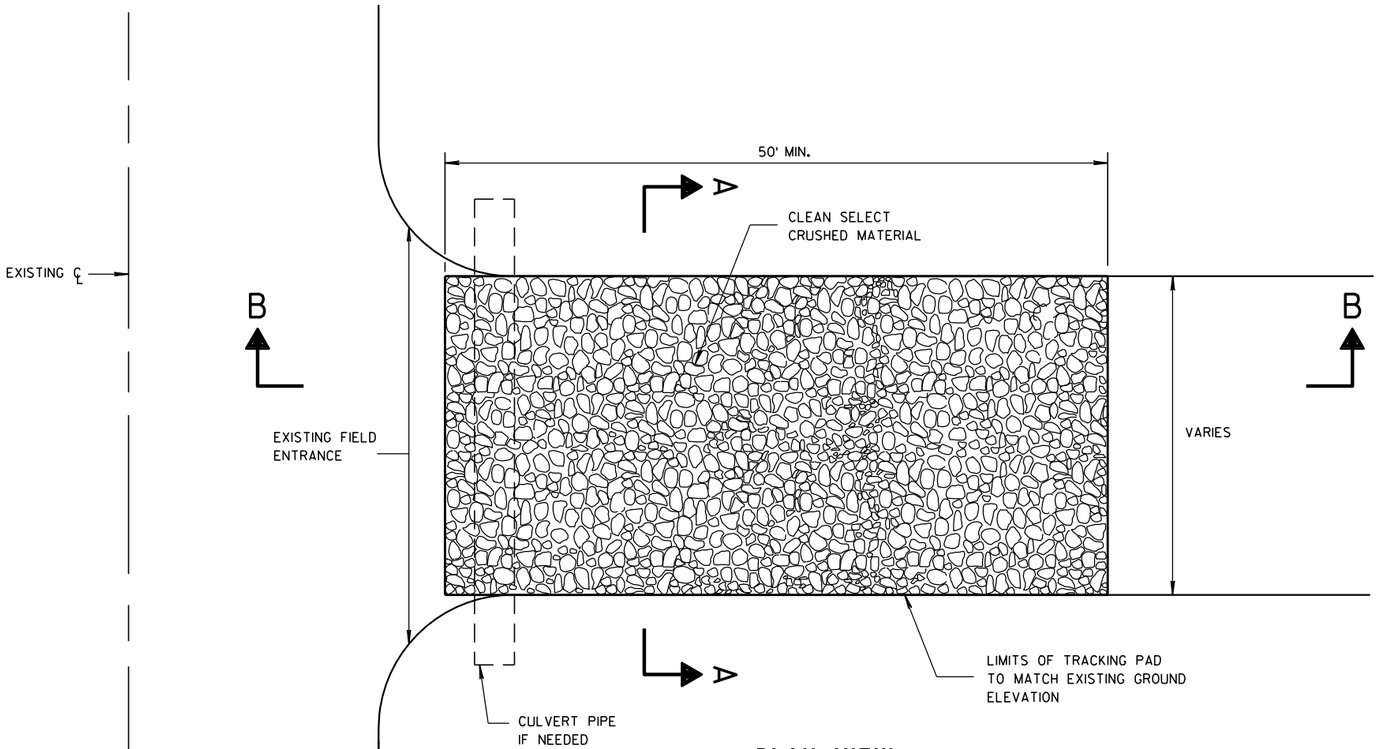
FHWA

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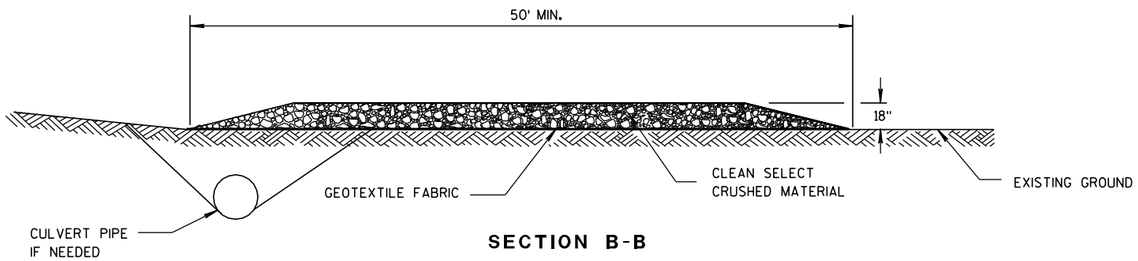
S.D.D. 8 E 10-2

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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.

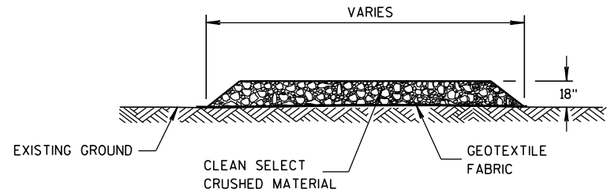
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 E 14-1

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S.D.D. 8 E 14-1

METAL APRON ENDWALLS

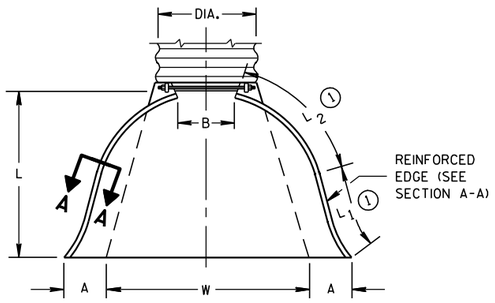
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

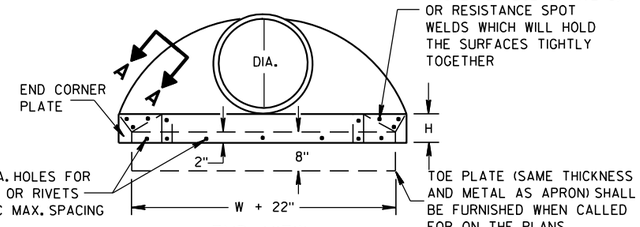
REINFORCED CONCRETE APRON ENDWALLS

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

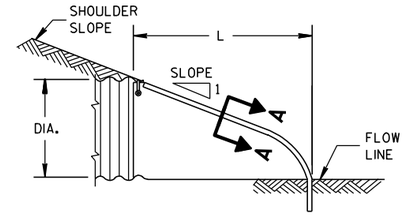
*MINIMUM
**MAXIMUM



PLAN VIEW

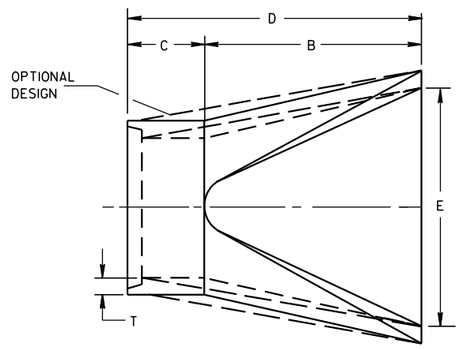


END VIEW

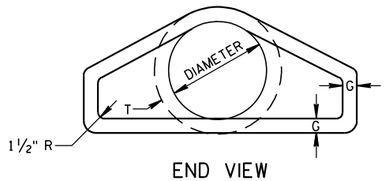


SIDE ELEVATION

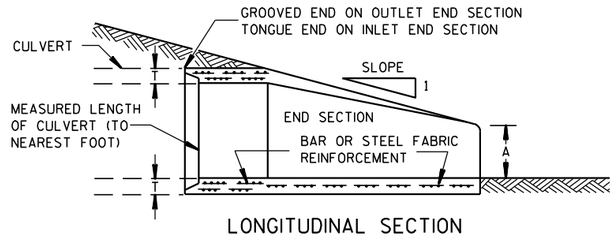
METAL ENDWALLS



PLAN

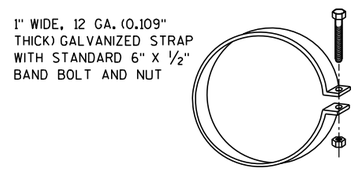


END VIEW



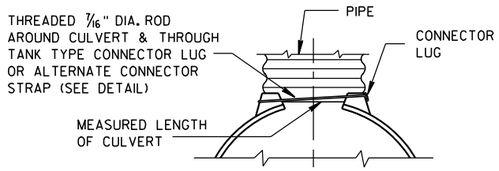
LONGITUDINAL SECTION

CONCRETE ENDWALLS

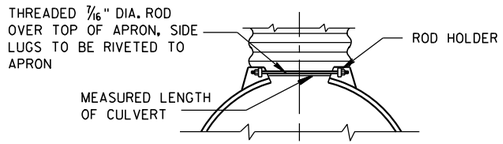


ALTERNATE FOR TYPE 1 CONNECTION

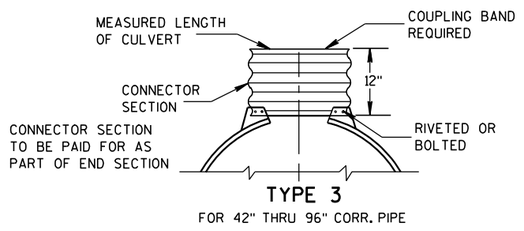
END SECTION CONNECTOR STRAP



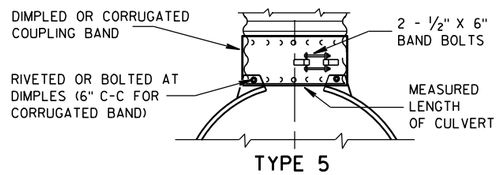
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

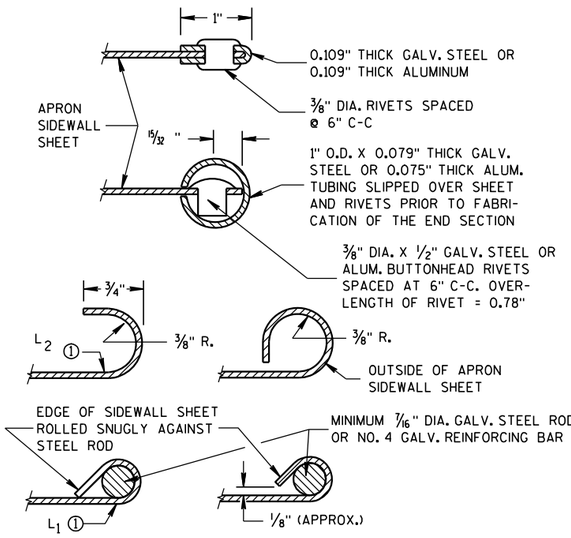
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

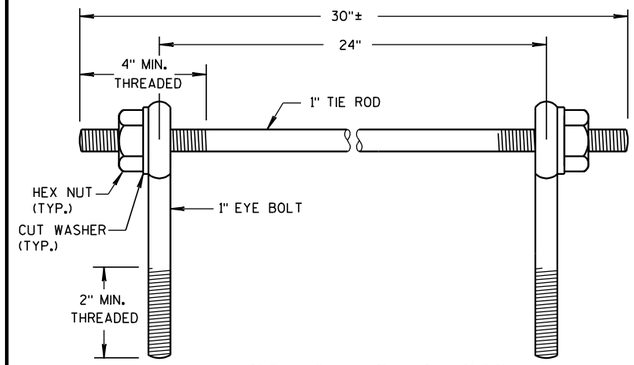
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

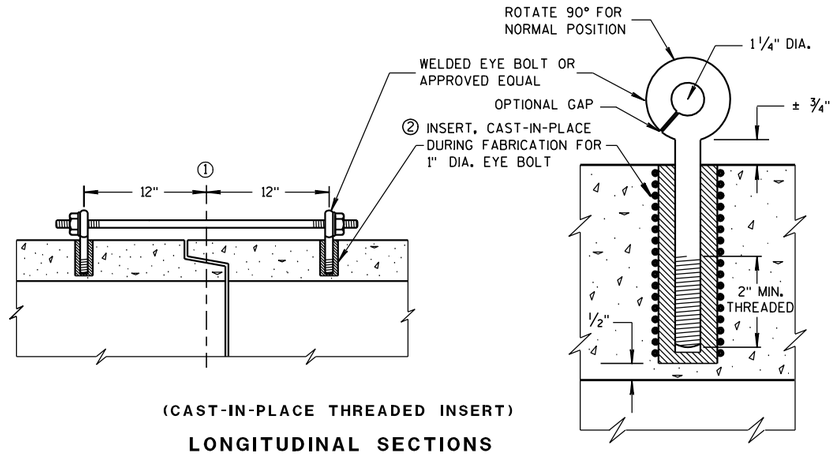
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

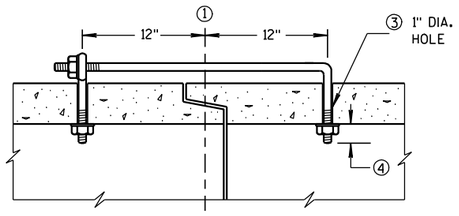
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

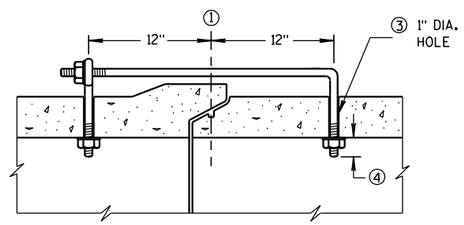
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

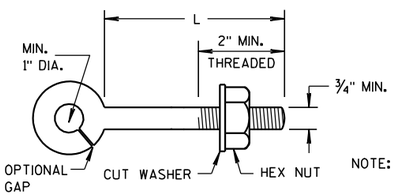


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

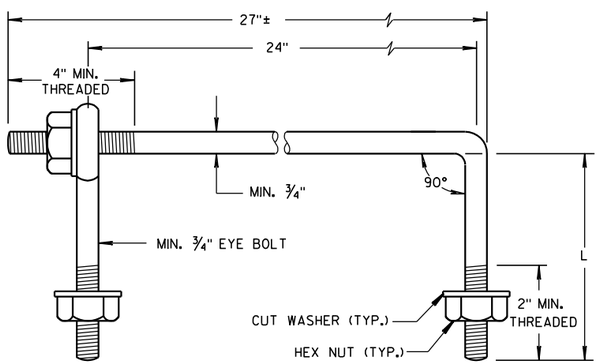
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

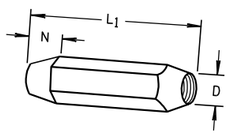
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

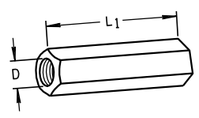
ADJUSTABLE TIE ROD TABLE

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



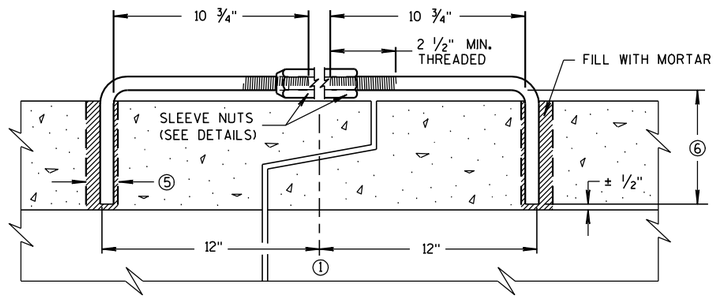
TAPERED



PLAIN

RIGHT AND LEFT THREADS

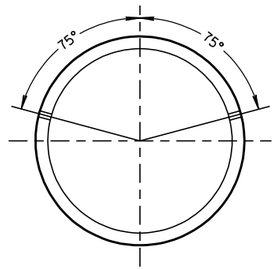
SLEEVE NUTS



LONGITUDINAL SECTION

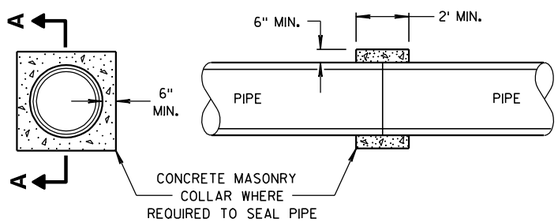
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

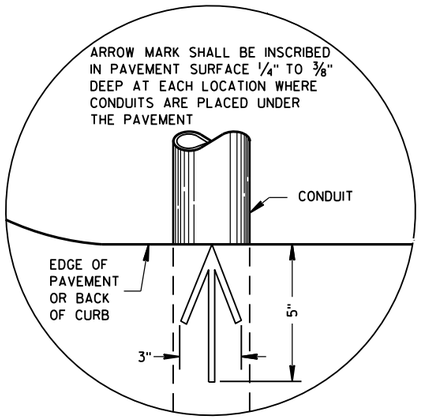
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
545 — FHWA

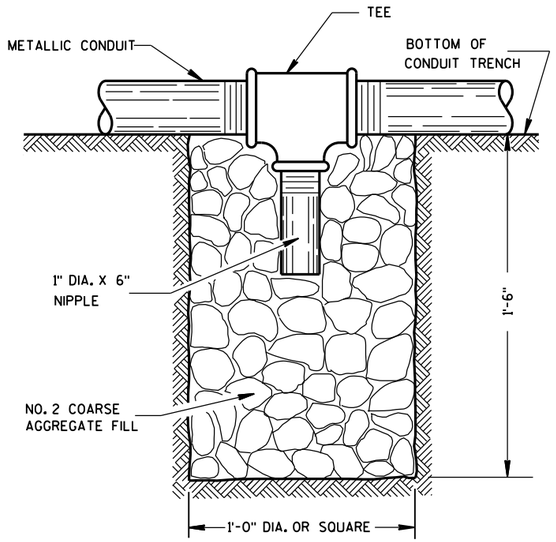
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S.D.D. 8 F 4-7



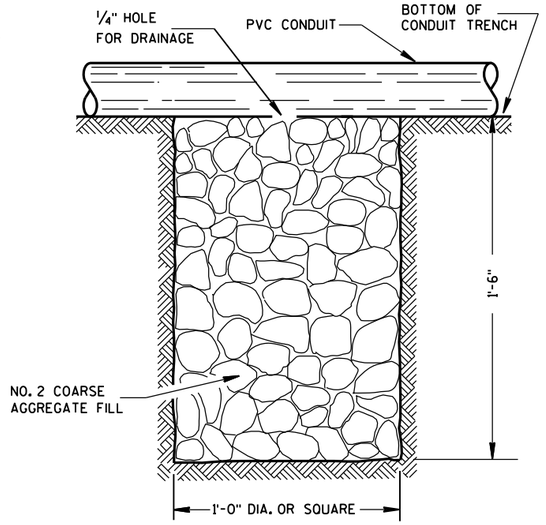
PLAN VIEW

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.

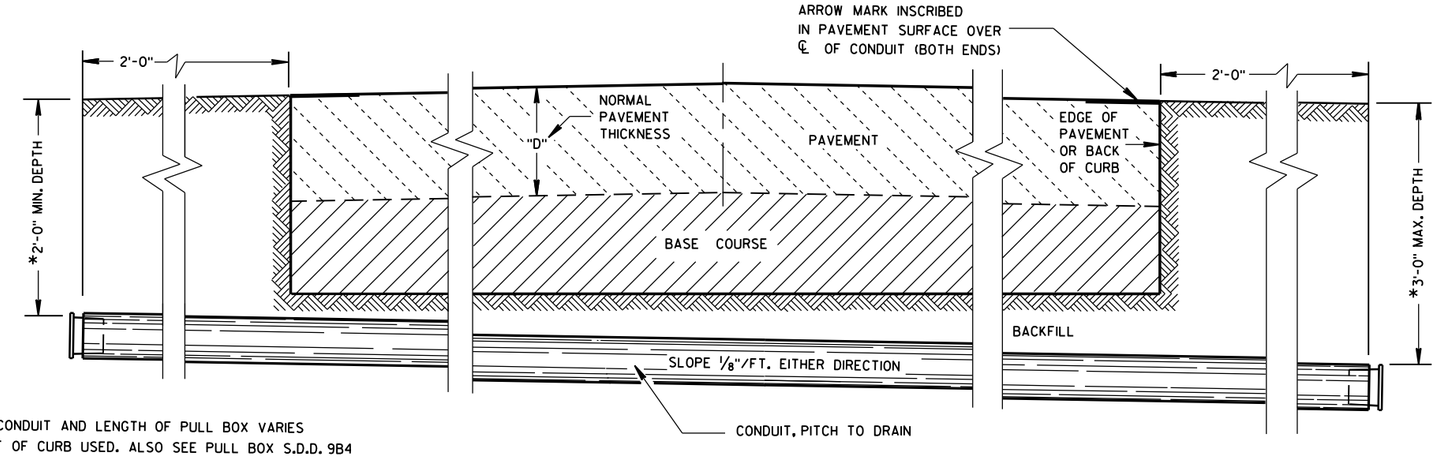
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

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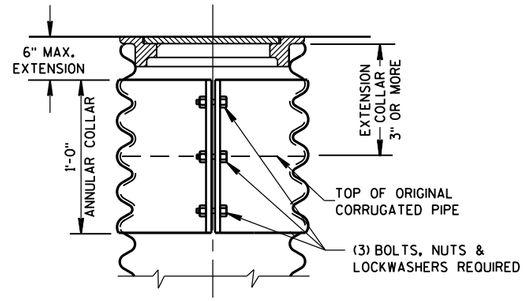
S.D.D. 9 B 2-8

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

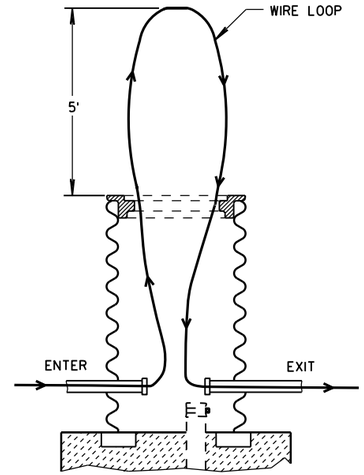
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

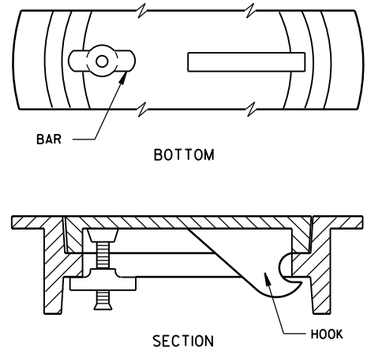
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

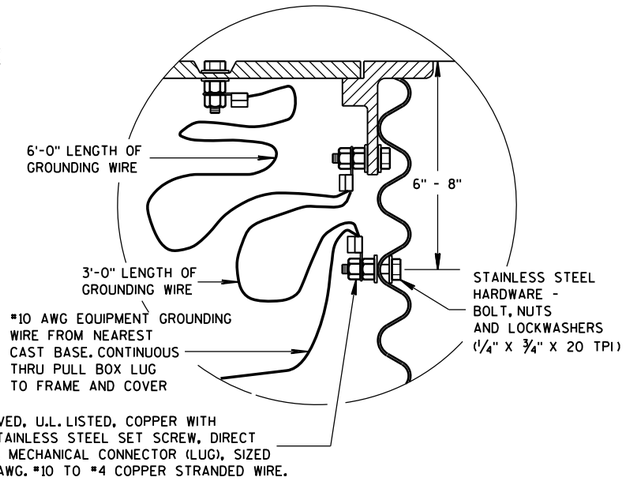


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

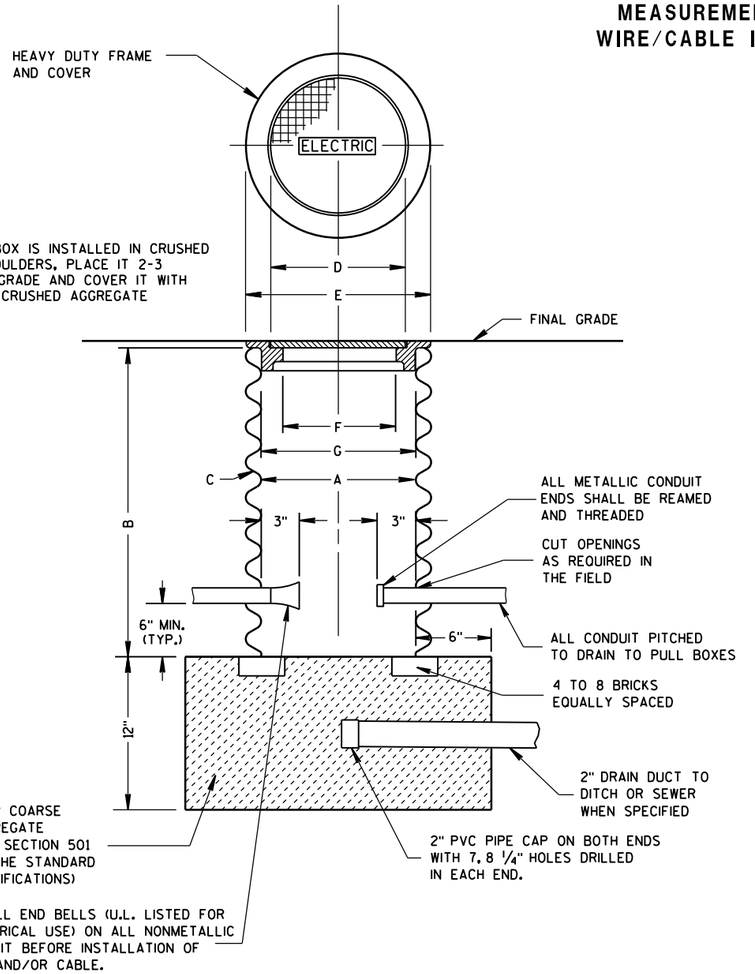


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

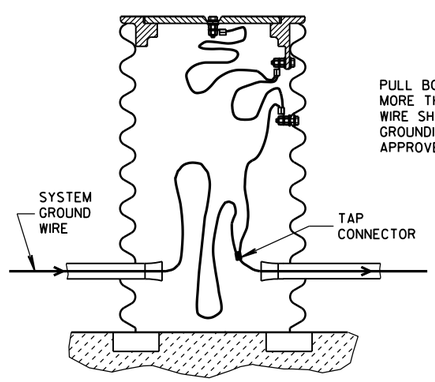
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

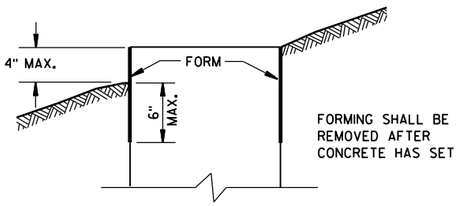
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DEPARTMENT OF TRANSPORTATION

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S.D.D. 9 B 4-11

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

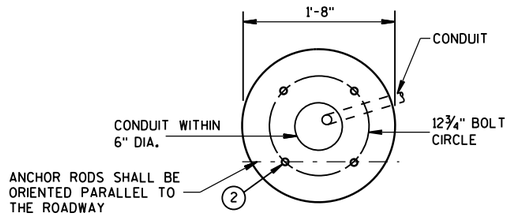
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

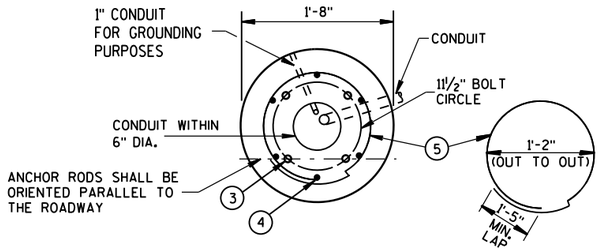
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

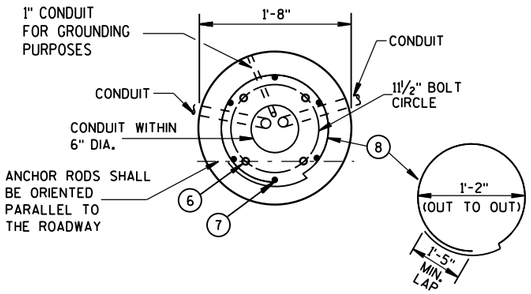
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



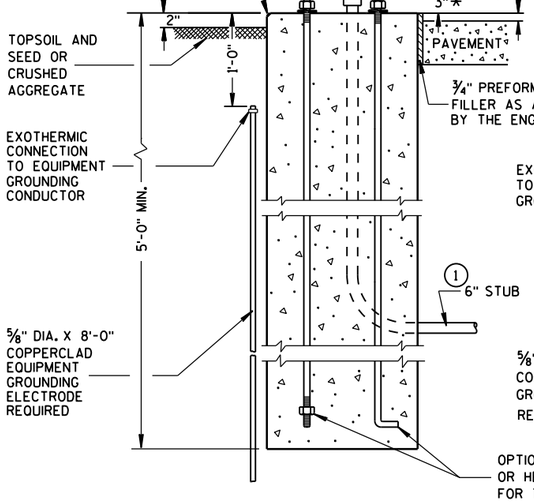




FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

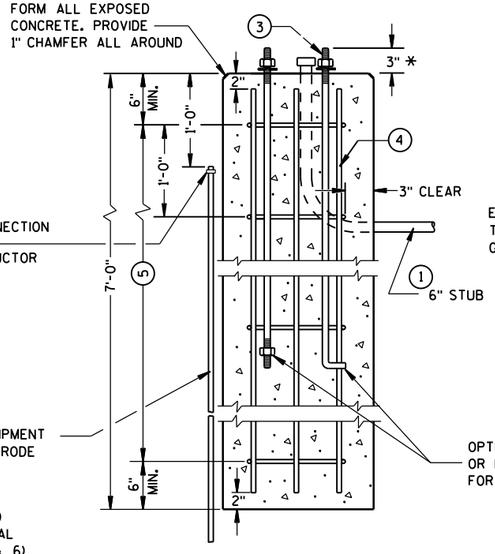
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

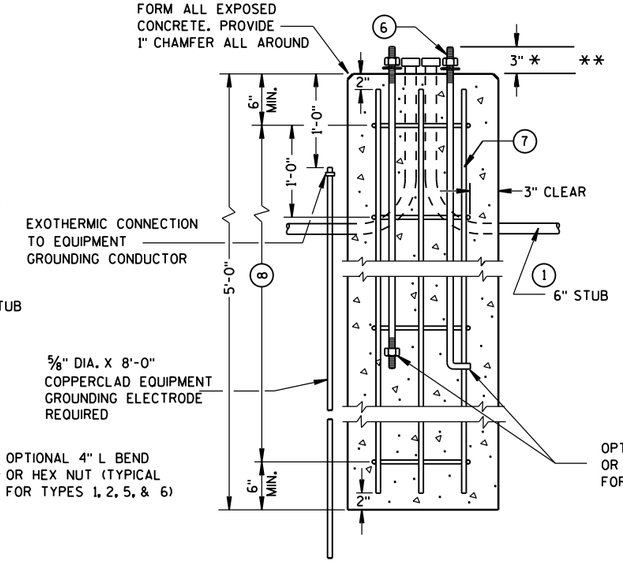


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

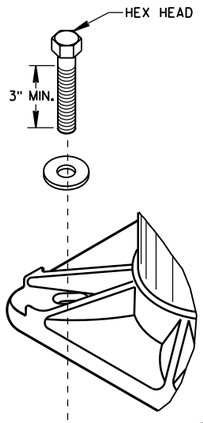
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

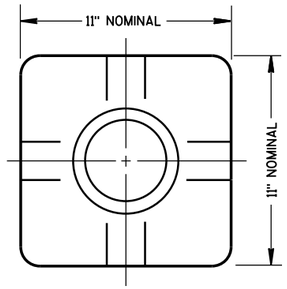
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

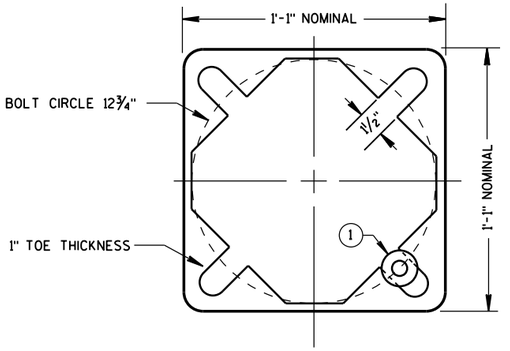
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

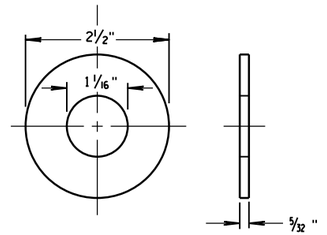




TOP VIEW
(PEDESTAL BASE)

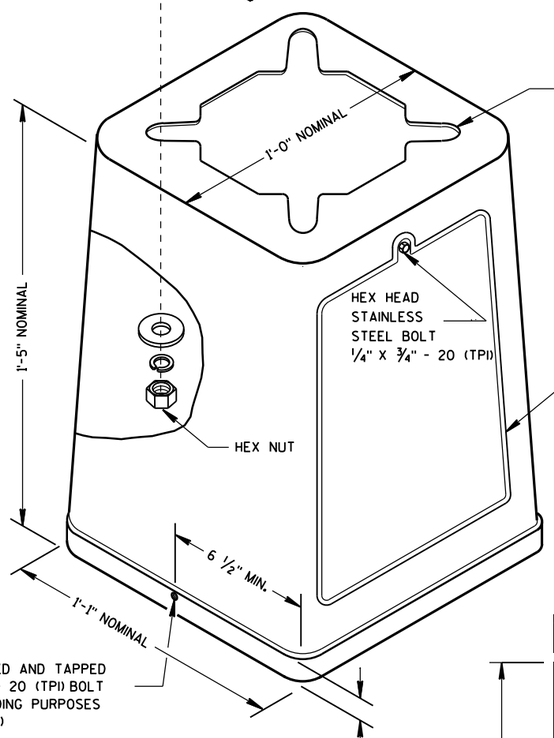


BOTTOM VIEW
(PEDESTAL BASE)

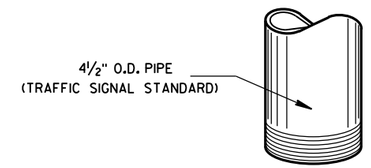


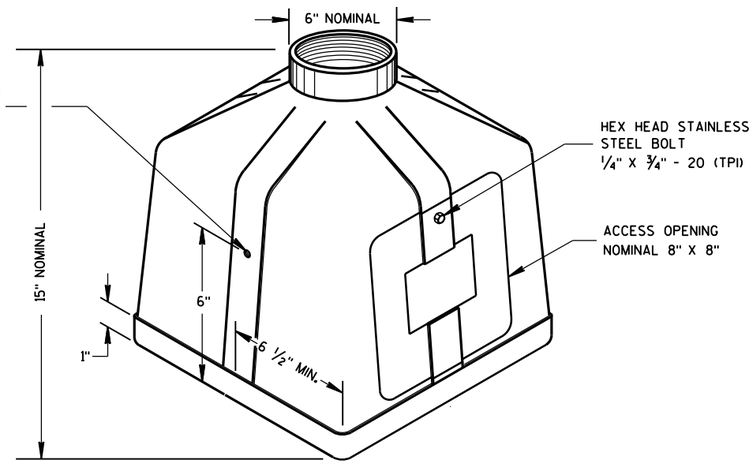
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



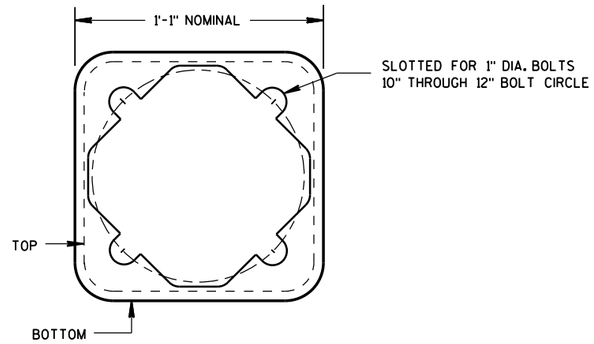
ISOMETRIC VIEW



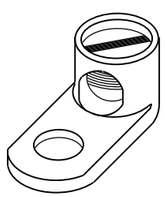


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

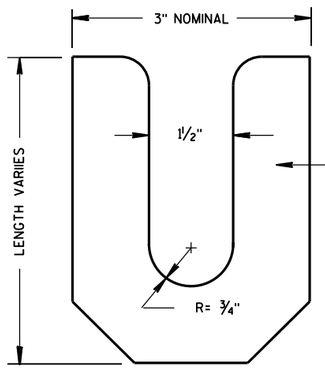


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
549

FHWA

6

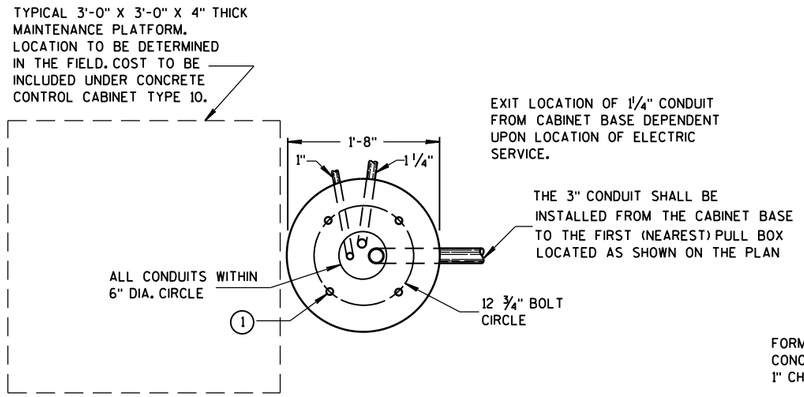
S.D.D. 9 C 3-4

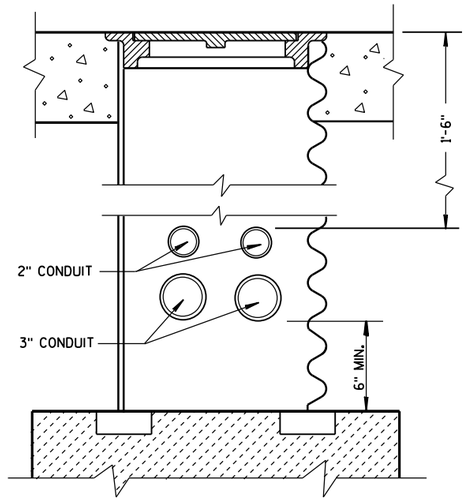
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S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

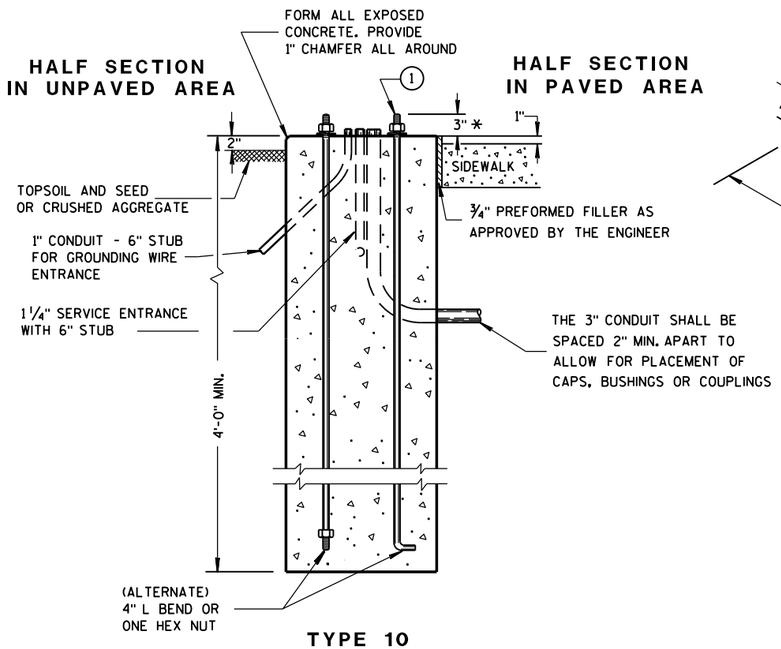
* INCLUDES MAINTENANCE PLATFORM.



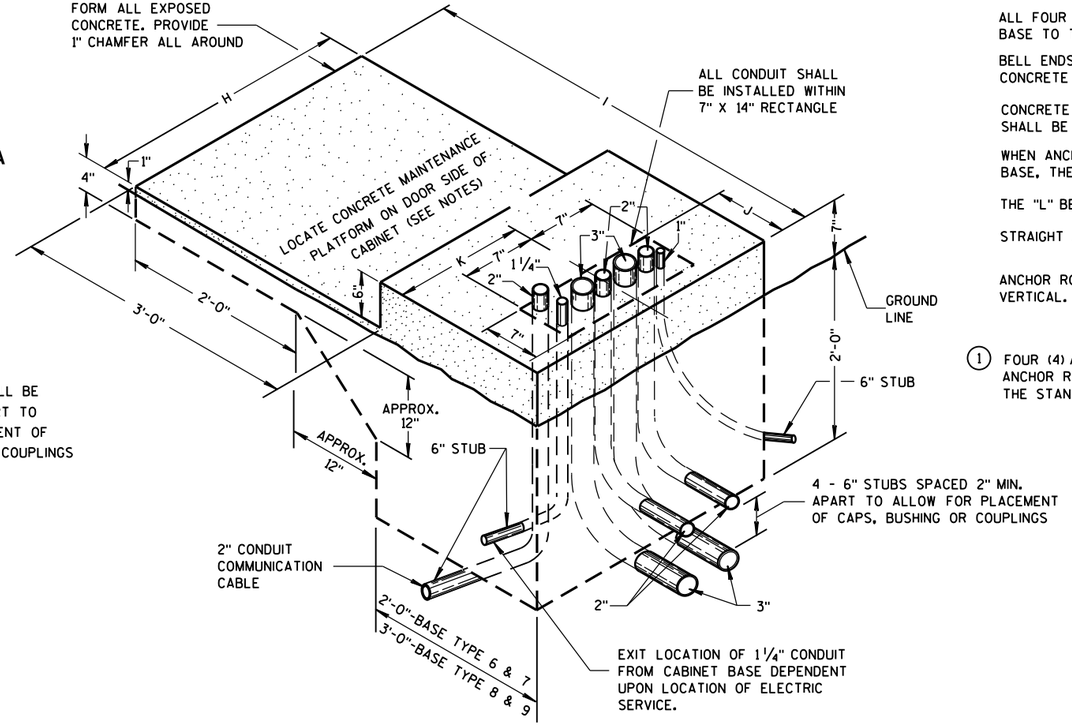


CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

CONCRETE CONTROL CABINET BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 550
FHWA	

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE 1" X 60".

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

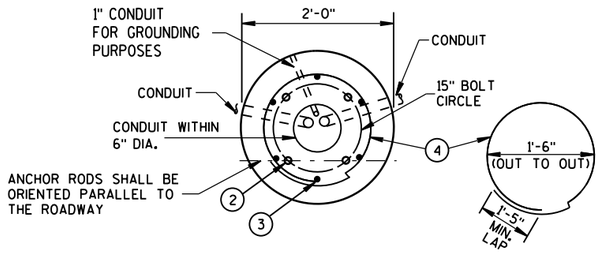
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

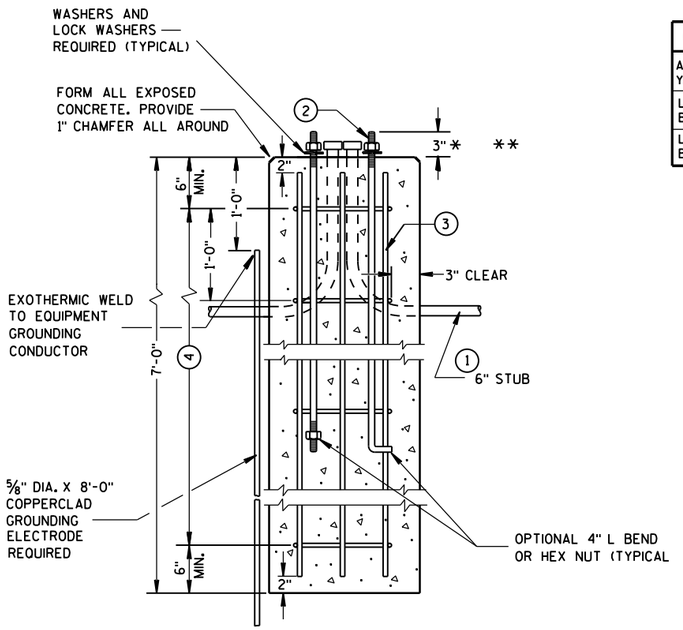
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 5'-0" ANCHOR RODS.

(3) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

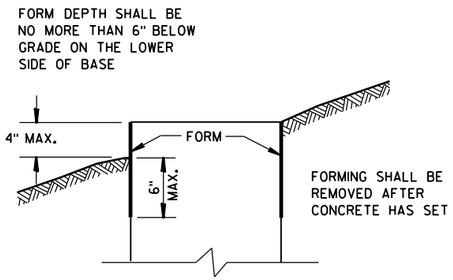




CONCRETE BASE, TYPE 7 (FOR 40' LIGHT POLES)

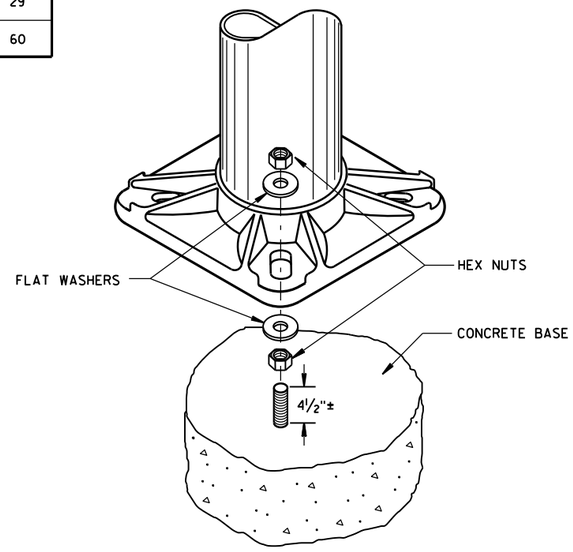
* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.



FORMING DETAIL

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	0.8
LBS. OF HOOP BAR STEEL	29
LBS. OF VERTICAL BAR STEEL	60



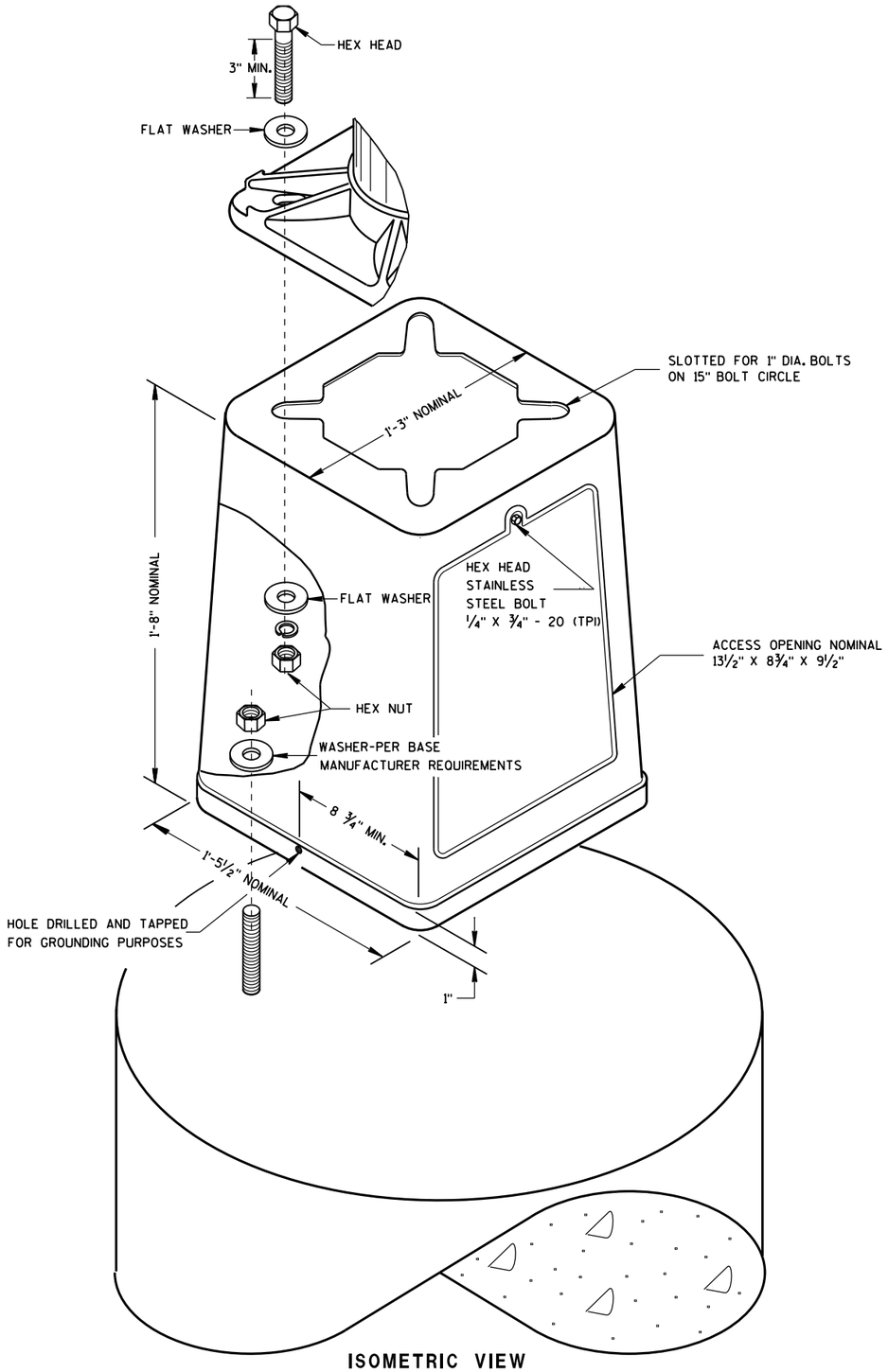
NON-BREAKAWAY INSTALLATION (LEVELING NUT)

CONCRETE BASE, TYPE 7

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

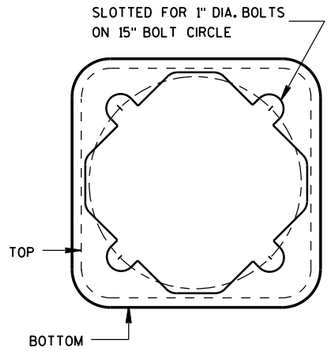
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 8-5



ISOMETRIC VIEW

TRANSFORMER BASE



BOTTOM VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BREAKAWAY BASES (WHERE REQUIRED) WILL BE MEASURED AND PAID AS SEPARATE ITEMS OF WORK IN ADDITION TO THE LIGHT POLE.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIMS SHALL BE SIZED TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

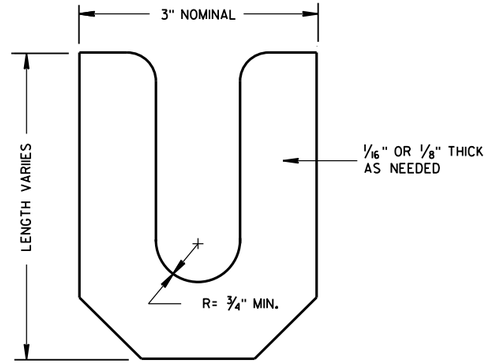
A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE TRANSFORMER BASE.

THE MECHANICAL CONNECTOR (GROUNDING LUG) SHALL BE INSTALLED USING THE TAPPED HOLE PROVIDED BY THE MANUFACTURER. THE MOUNTING BOLT HEXHEAD), NUT, WASHER AND LOCK WASHER SHALL BE STAINLESS STEEL, SIZED TO FIT THE THREADING AND HOLE SIZE, AND BE OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

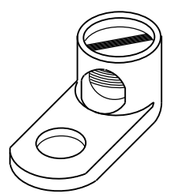
SHOULD A GROUNDING LUG MOUNTING HOLE NOT BE PROVIDED, THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" X 3/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE. IT SHALL BE MOUNTED IN THE SAME LOCATION AS IS SHOWN ON THE DRAWING.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, AND LOCK WASHERS, THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

THE ACCESS DOOR SHALL BE MANUFACTURED OF THE SAME MATERIAL AS THE BASE.



LEVELING SHIM



TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE FOR 15" BOLT CIRCLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 10-3

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

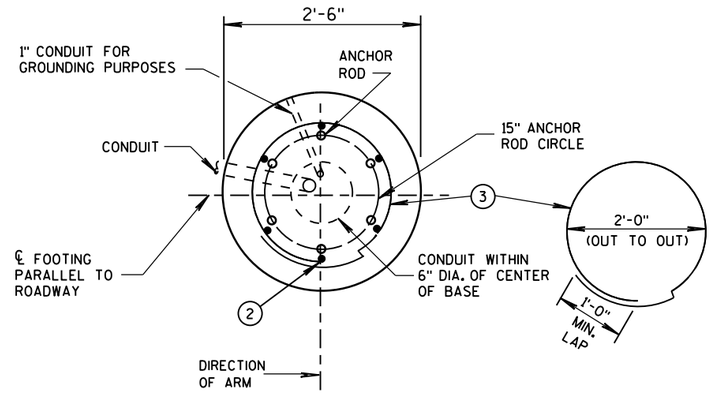
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

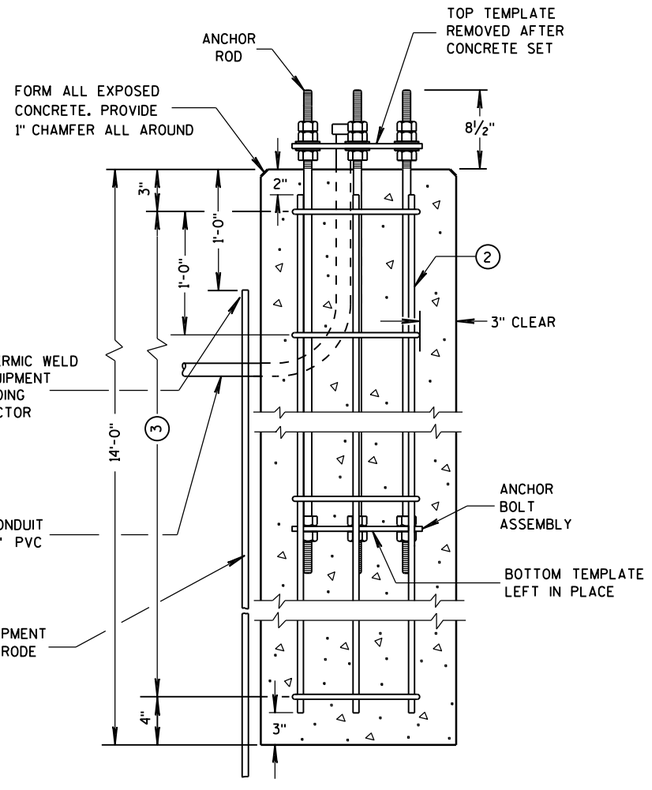
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

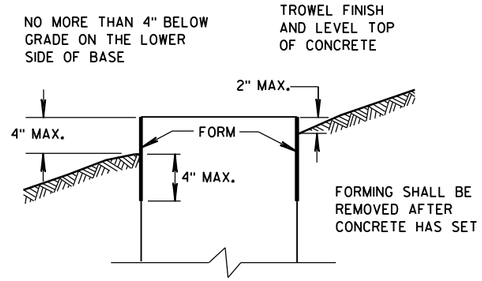
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



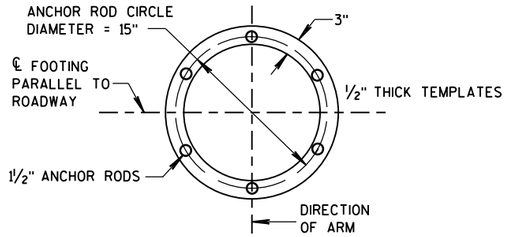


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

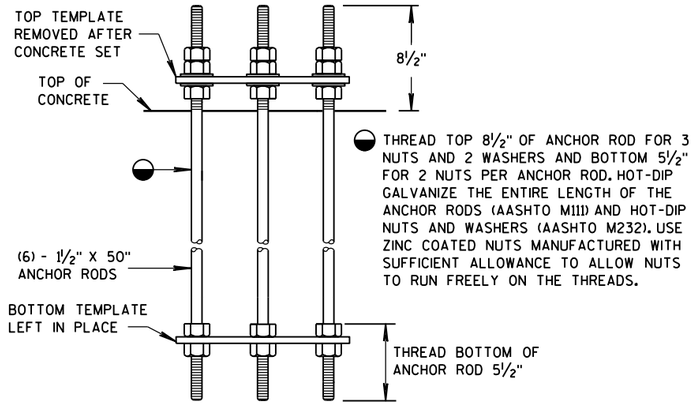
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10
ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

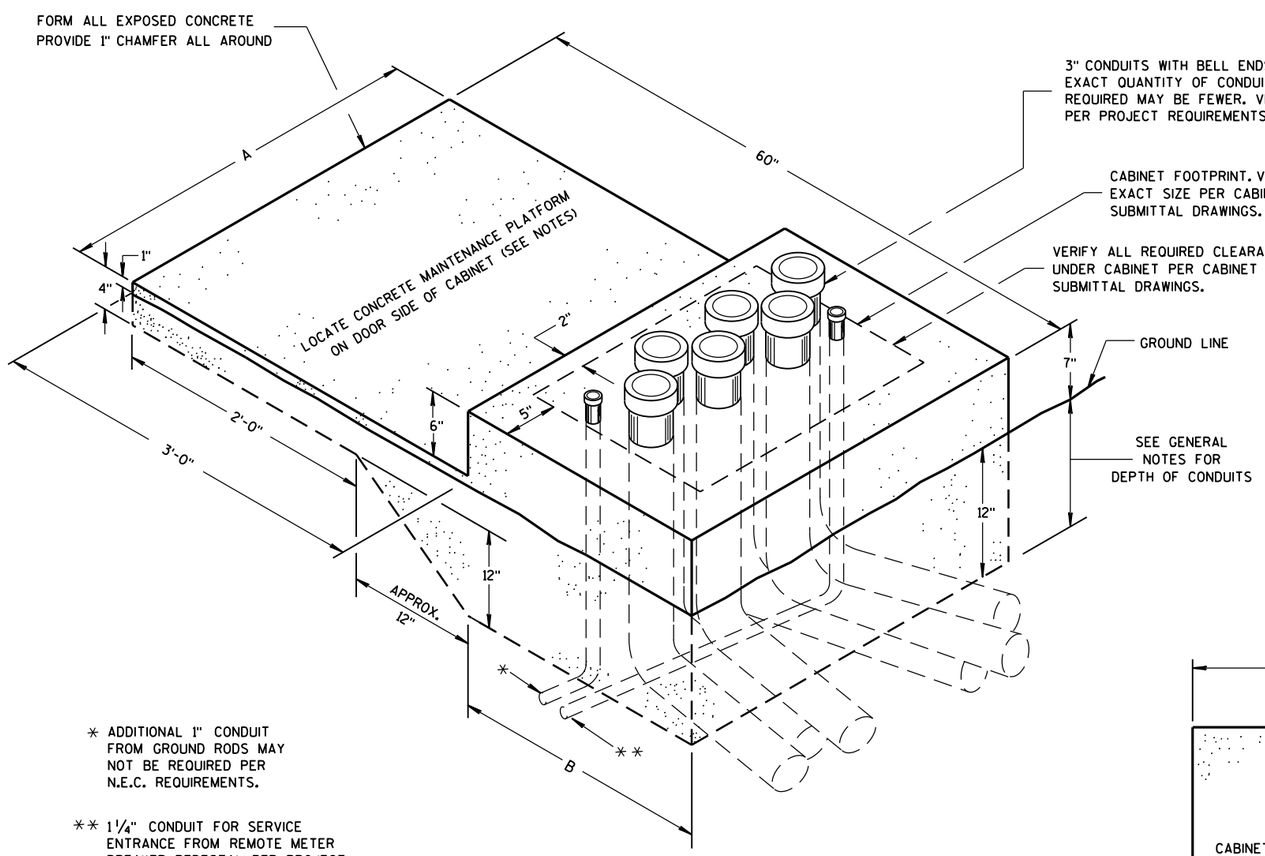
CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 C 11-5



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

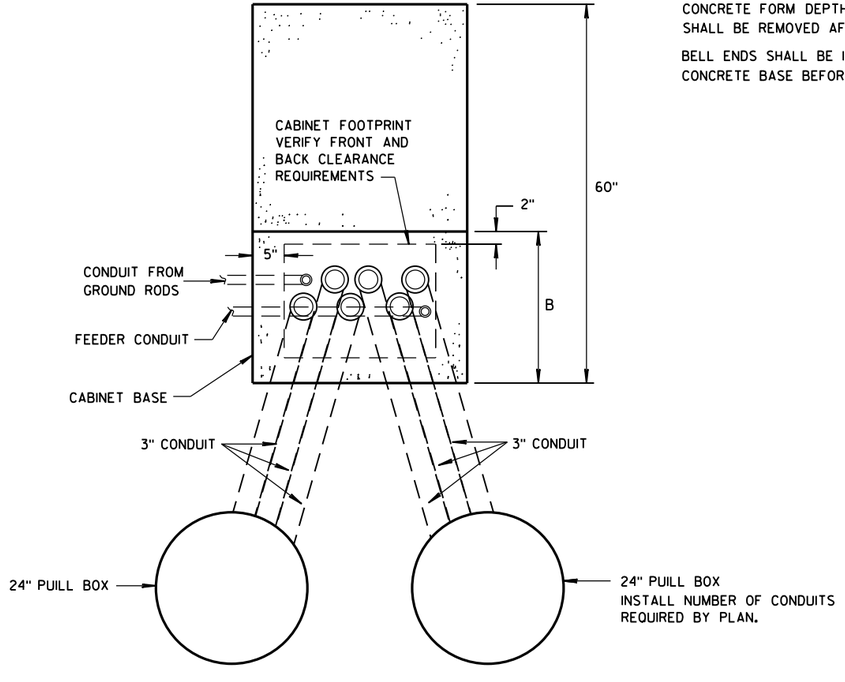
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
554
WYS
FHWA

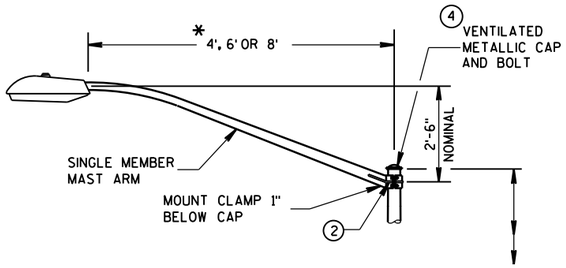
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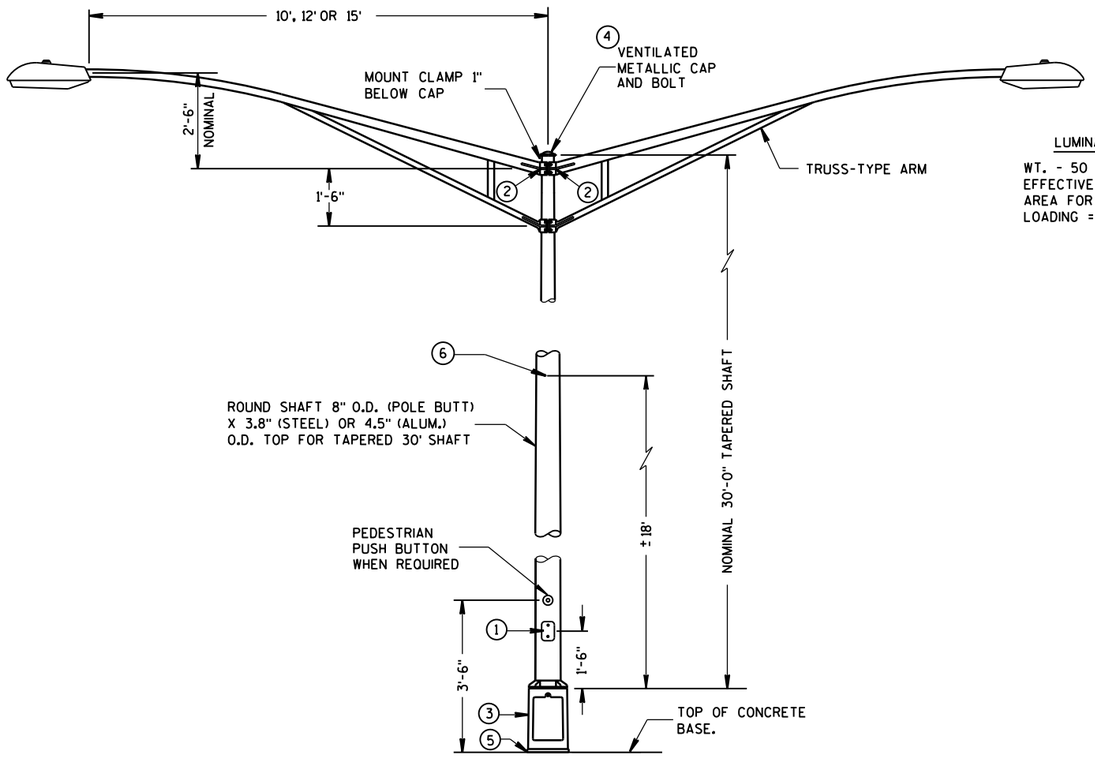
S.D.D. 9 C 14-2

6

S.D.D. 9 C 14-2

*RISE FOR 4' ARM SHALL BE 2'-0".

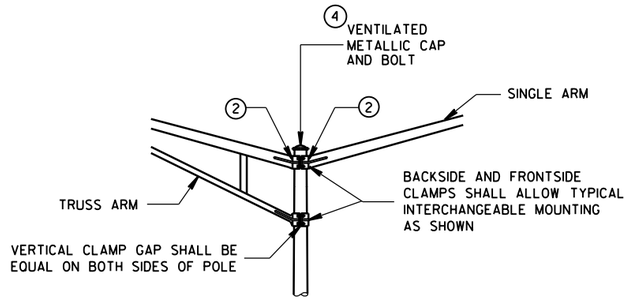




TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

S.D.D. 9 E 1-13d

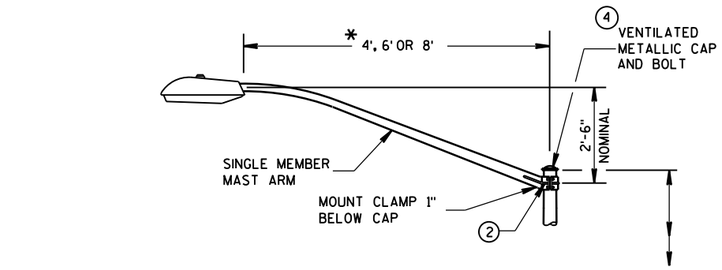
POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

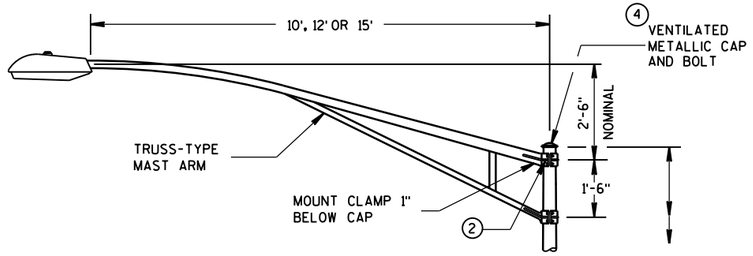
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

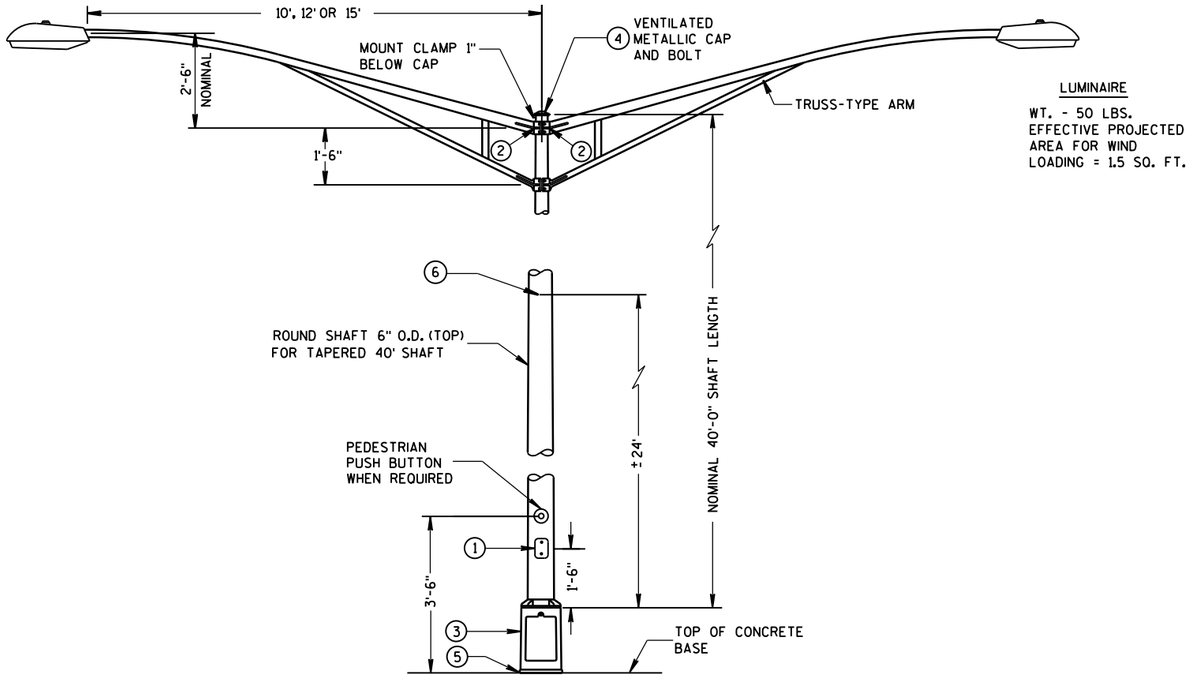
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S.D.D. 9 E 1-13d

*RISE FOR 4' ARM SHALL BE 2'-0".

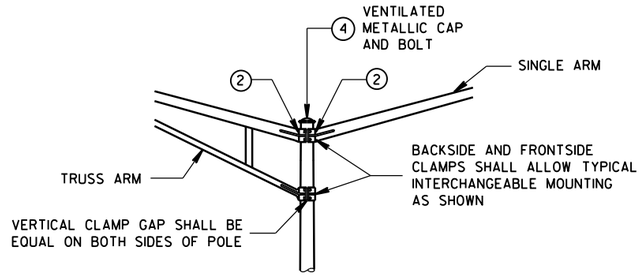






TYPE 17 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED FOR TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR A 1⅜" HOLE IN THE POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

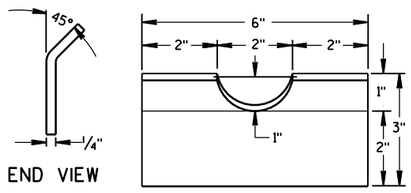
(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNIT, TYPE 17 (40 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 9 E 1-13f

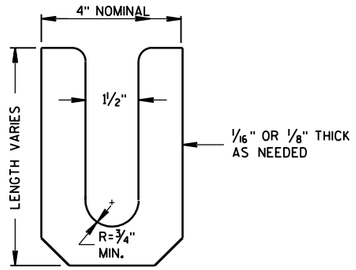


END VIEW

FRONT VIEW

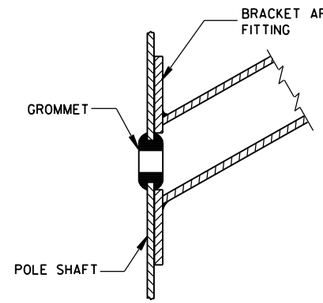
RECTANGULAR CLAMP SHIM

(4 TO A SET)

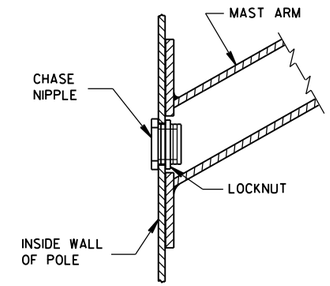


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

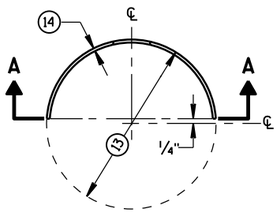
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

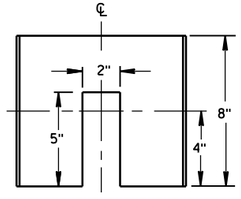
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



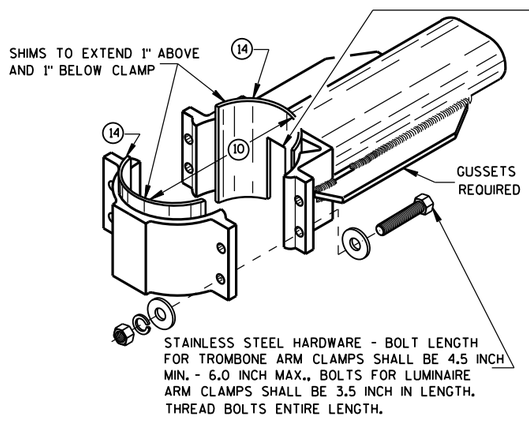
PLAN VIEW



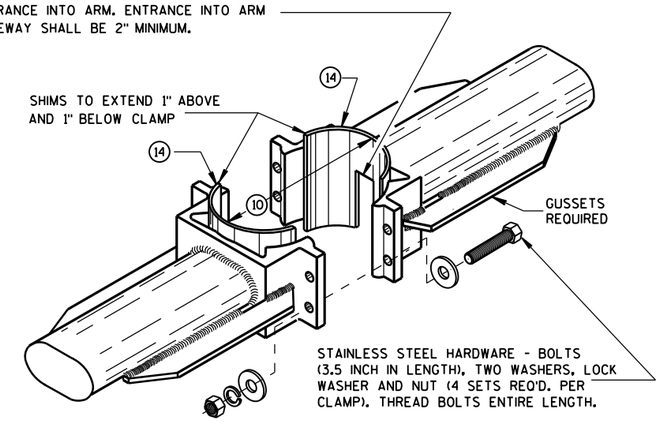
SECTION A-A

CIRCULAR CLAMP SHIM

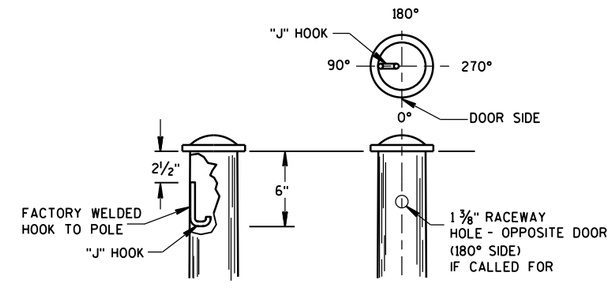
(2 TO A SET)



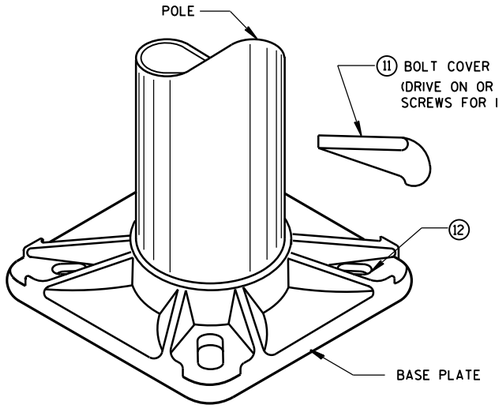
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



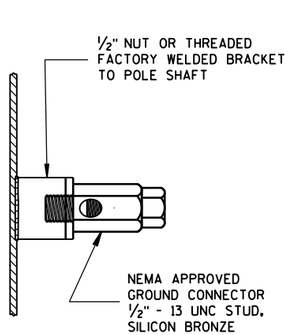
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

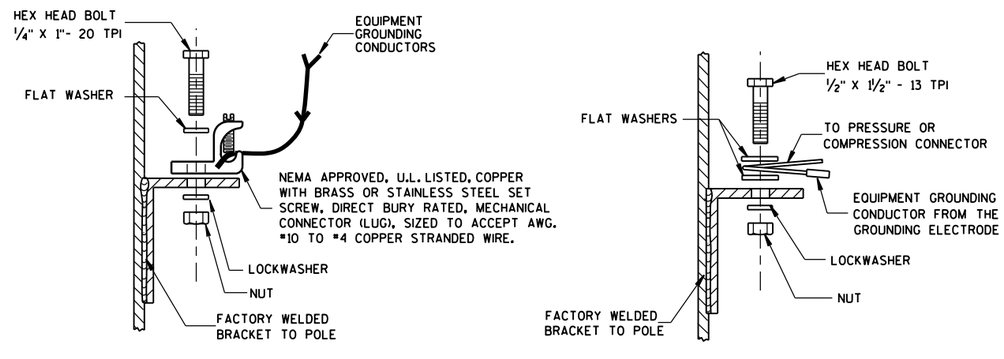


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

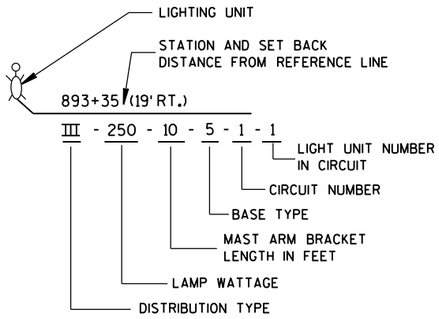
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

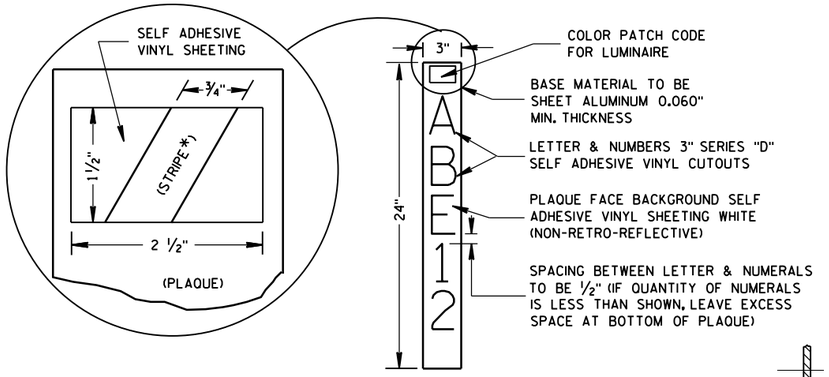
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 557
FHWA

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S.D.D. 9 E 1-13g



LIGHTING UNIT CODE
(TYPICAL)



COLOR PATCH CODE FOR LUMINAIRES

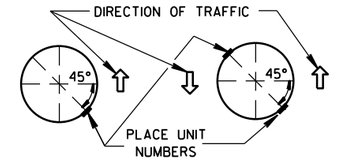
(HIGH PRESSURE SODIUM)

1000 WATT - NO PATCH
400 WATT - ORANGE
310 WATT - BLUE
250 WATT - ORANGE W/WHITE STRIPE*
200 WATT - RED
150 WATT - GREEN
100 WATT - BROWN

(MERCURY VAPOR)

400 WATT - (NO PATCH)
250 WATT - YELLOW

IDENTIFICATION PLAQUE



NOTES:

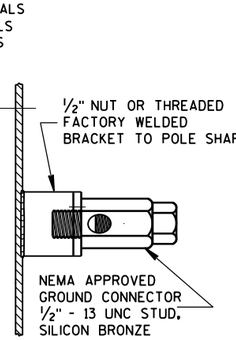
1) PLACE BOTTOM OF UNIT NUMBER PLAQUE 5'-0" ABOVE ELEVATION OF ADJACENT CURB OR SHOULDER.

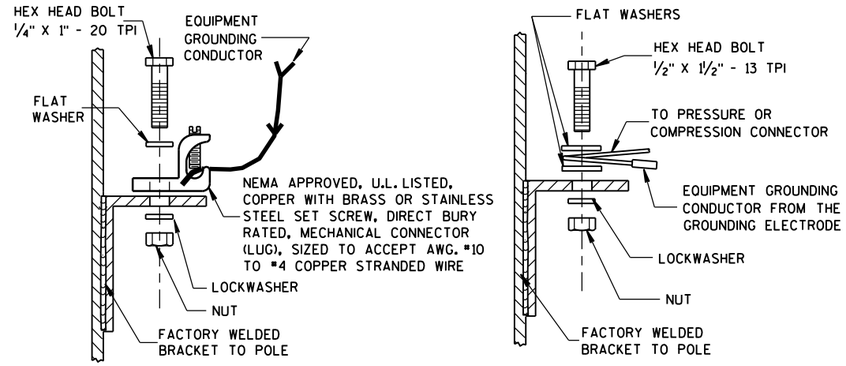
2) UNIT NUMBERS: ONE REQUIRED FOR SINGLE ARM POLES TWO REQUIRED FOR MEDIAN MOUNT POLES.

LIGHTING UNIT IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENT

(TYPICAL ALL LIGHTING UNITS)

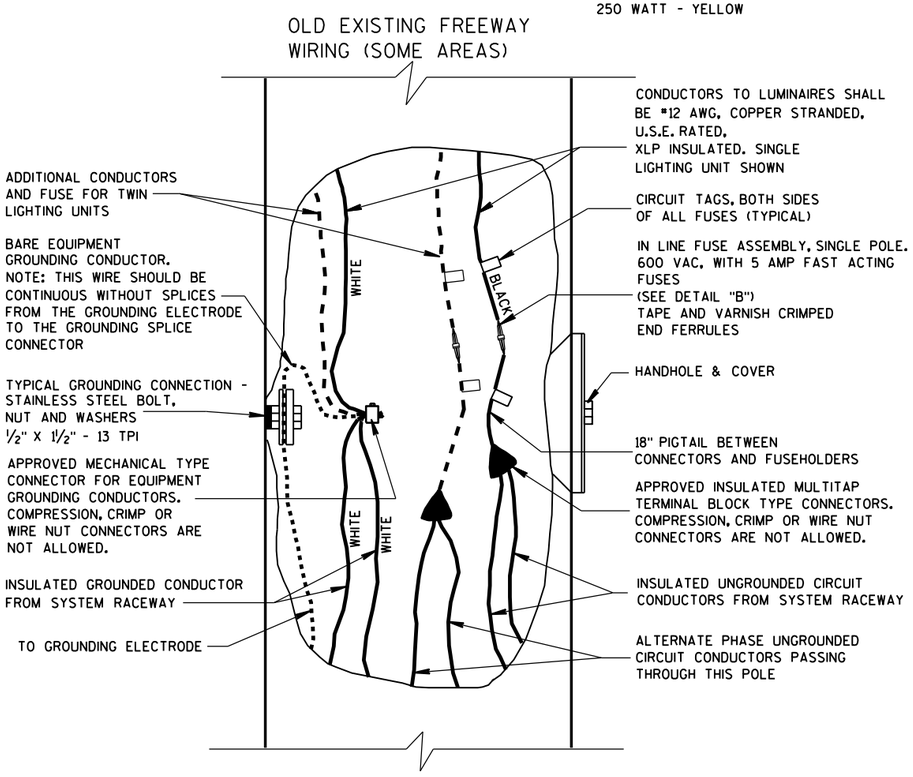
FURNISH PLAQUE WHEN CALLED FOR BY SPECIAL PROVISIONS



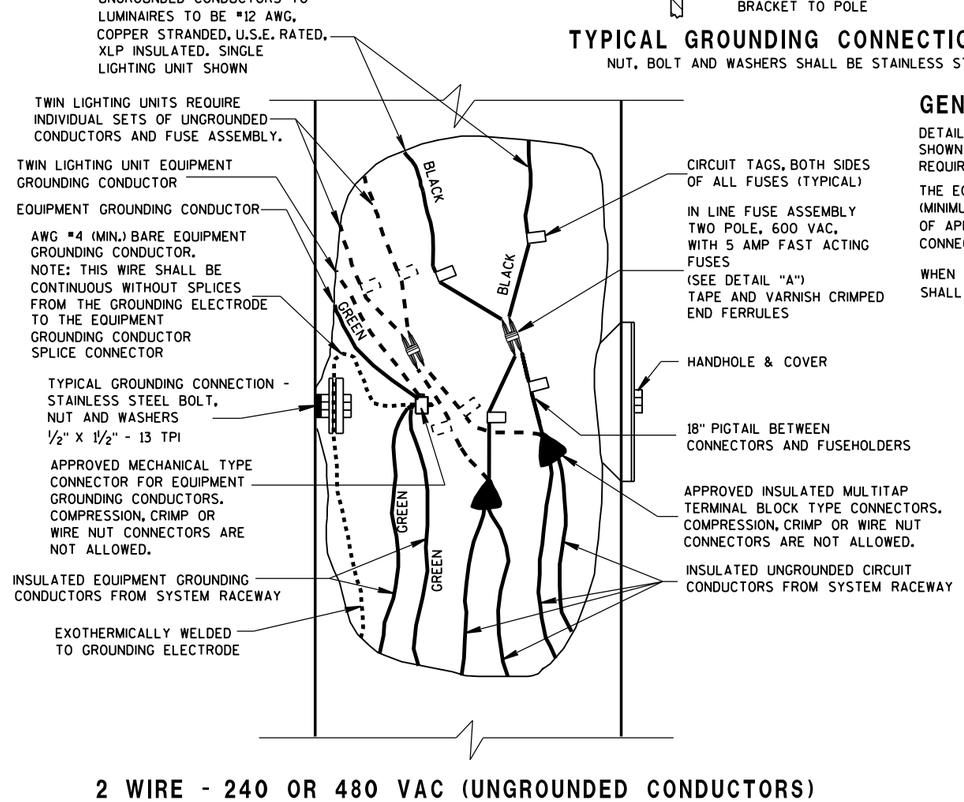


TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



2 WIRE - 120, 240 OR 480 VAC TO GROUND



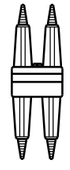
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

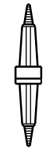
THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



DETAIL "A"

BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



DETAIL "B"

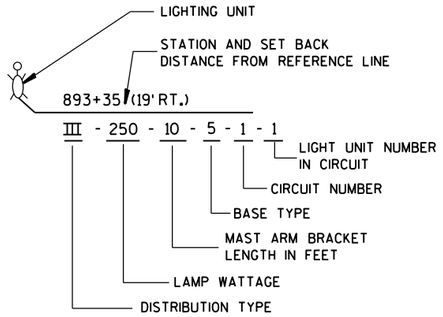
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT

FREEWAY LIGHTING UNIT POLE WIRING

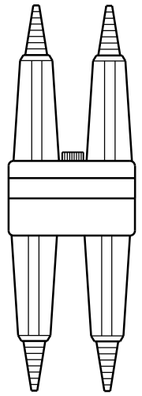
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

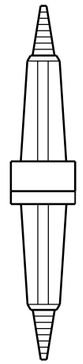
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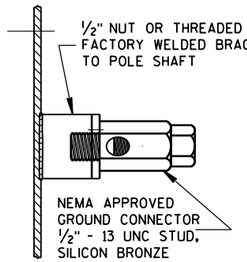
LIGHTING UNIT CODE
(TYPICAL)

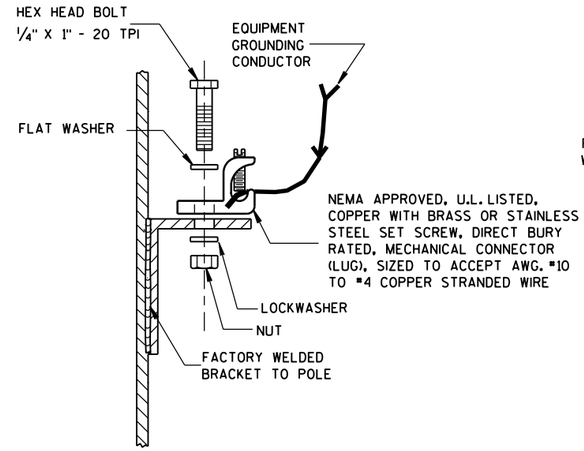


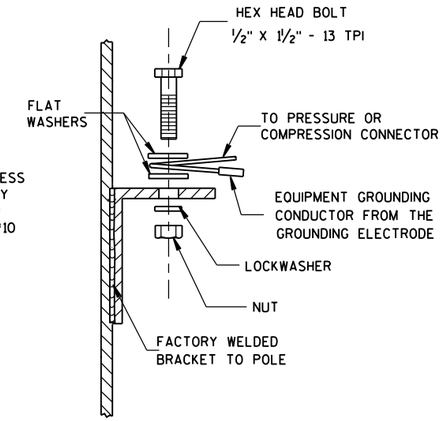
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



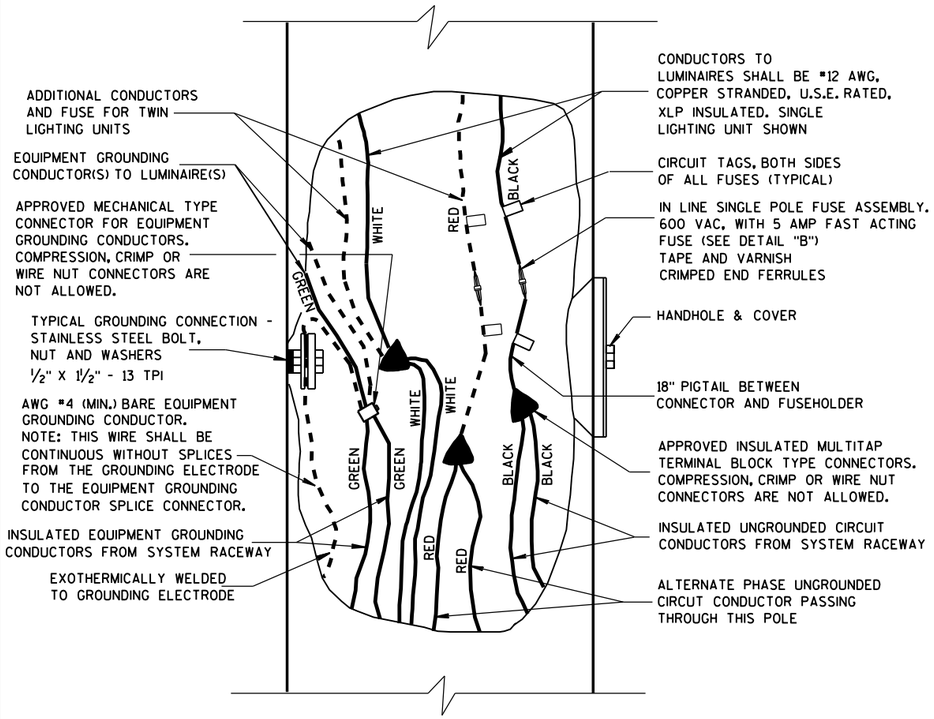
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



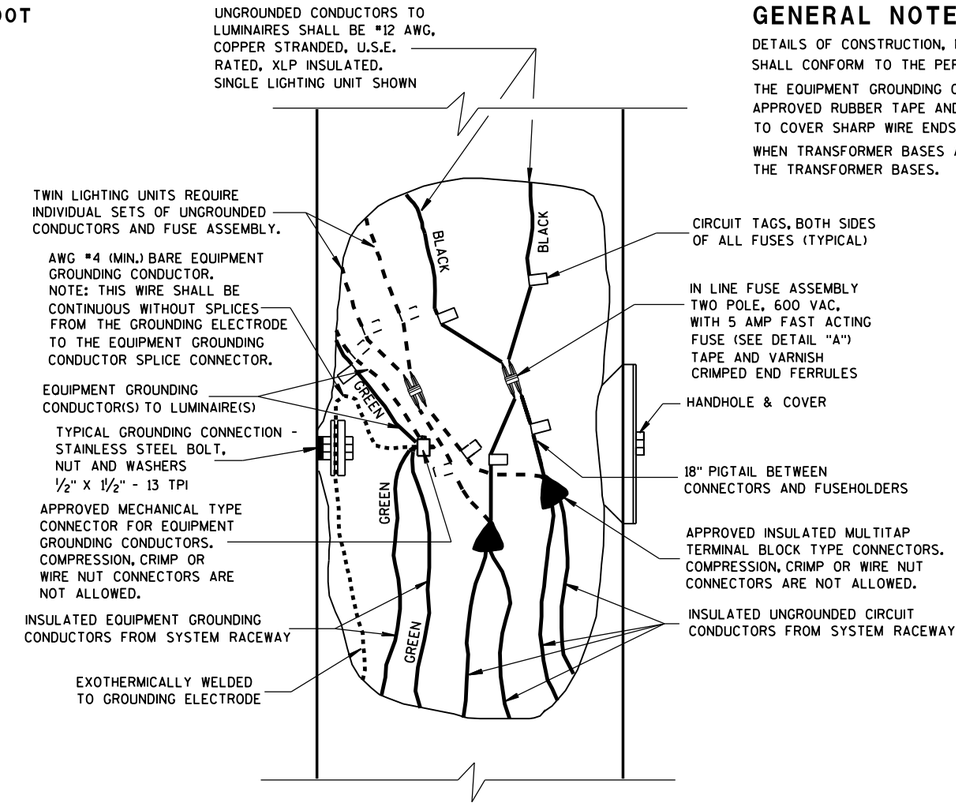




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

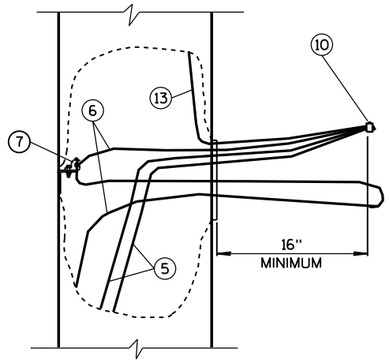
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

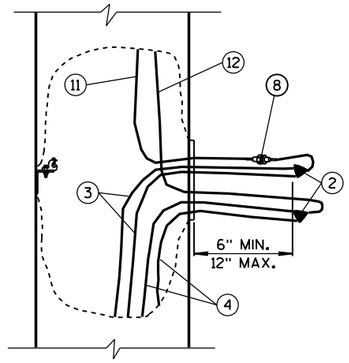
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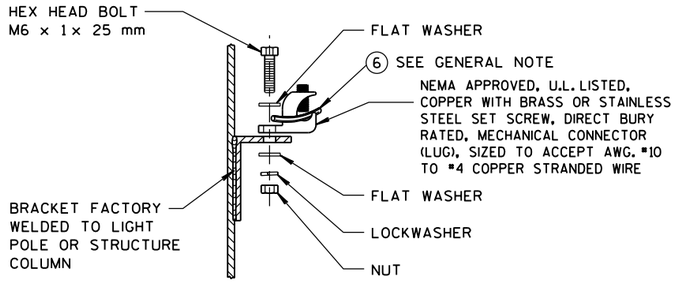


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



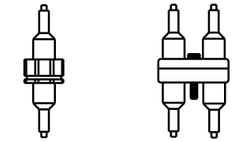
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



FUSE ASSEMBLIES

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

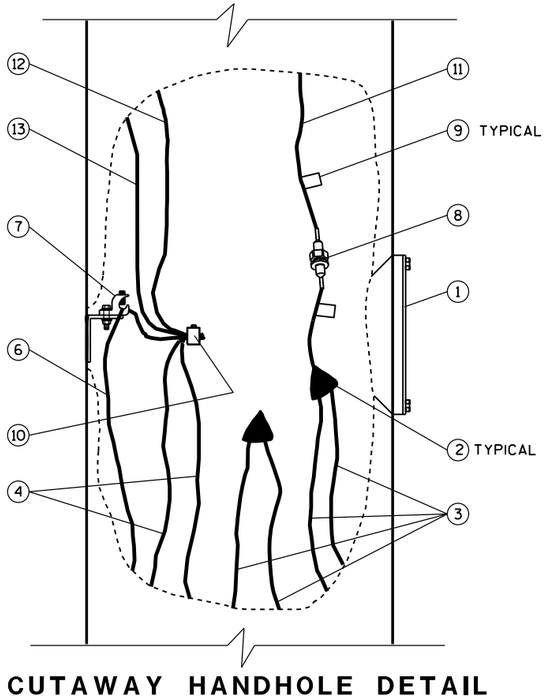
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

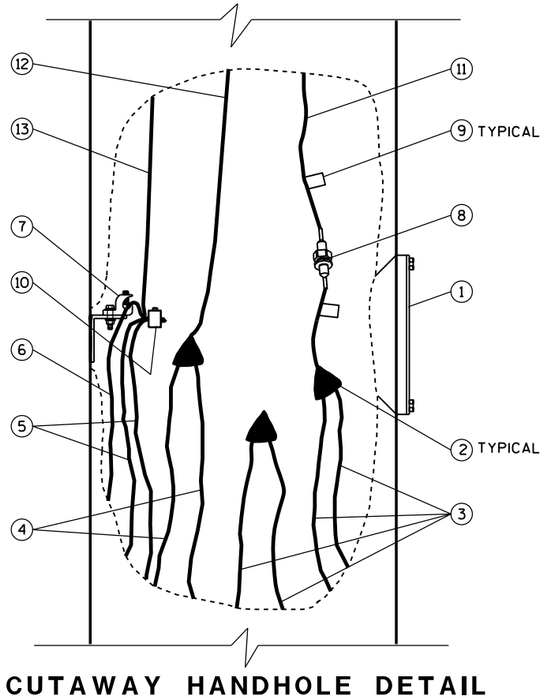
IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



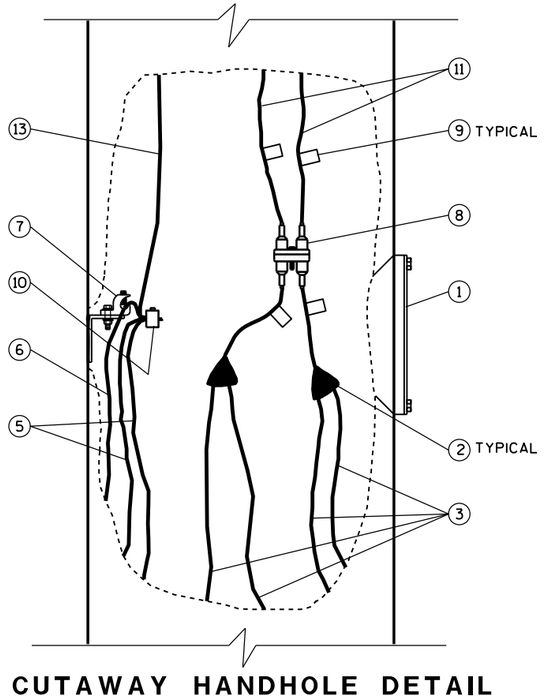
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

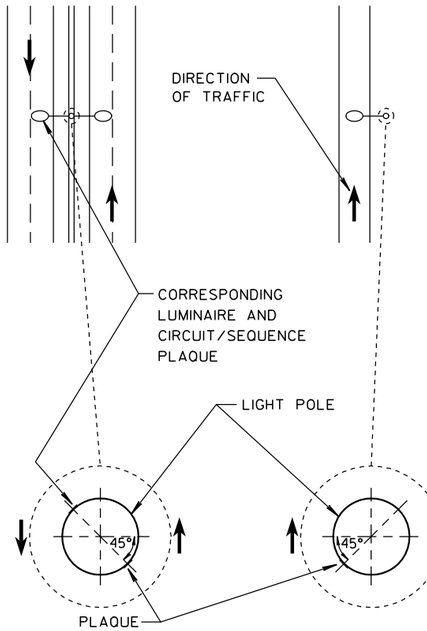
ELECTRICAL HANDHOLE WIRING

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MEDIAN POLE SINGLE ARM POLE

LOCATION OF LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

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.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 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-RETRORFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

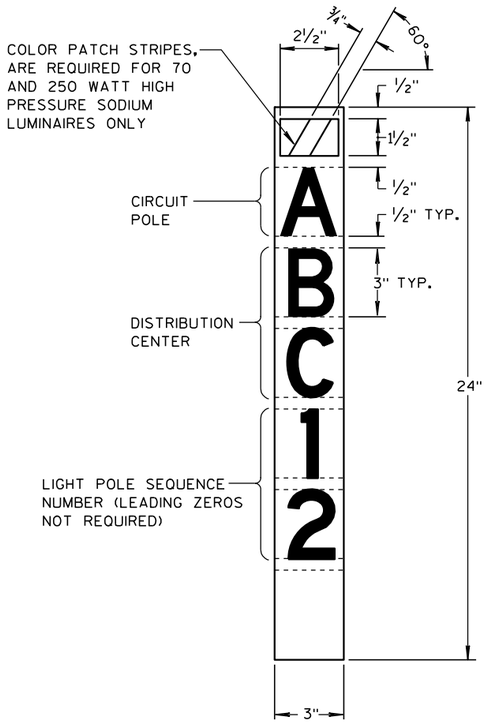
COLOR PATCHES - VARIOUS COLORS, SELF-ADHESIVE VINYL SHEETING

WITH THE APPROVAL OF THE ENGINEER, THE BASE MATERIAL MAY BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE SURFACE, IN CASES SUCH AS SMOOTH, CLEAN ALUMINUM POLES.

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.

COLOR PATCH CODE FOR HPS LUMINAIRES

1000 WATT - NO PATCH
400 WATT - ORANGE
310 WATT - BLUE
250 WATT - ORANGE WITH WHITE STRIPE
200 WATT - RED
150 WATT - GREEN
100 WATT - BROWN
70 WATT - BROWN WITH WHITE STRIPE



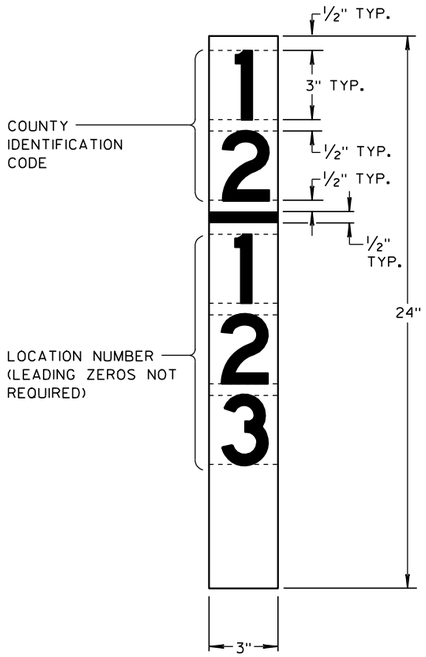
LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

IDENTIFICATION PLAQUES LIGHT POLES

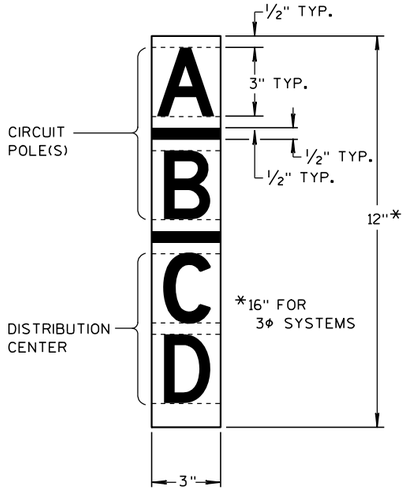
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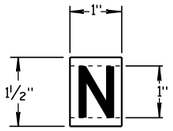
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HIGH MAST LIGHT TOWER STRUCTURE PLAQUE

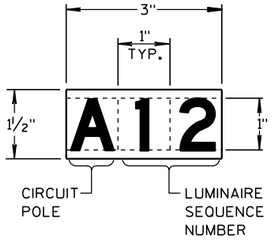


UNDERDECK LIGHTING OR HIGH MAST LIGHT TOWER CIRCUIT PLAQUE



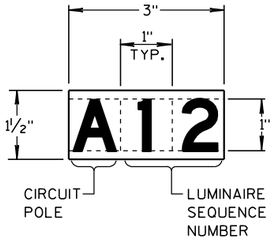
HIGH MAST LIGHT TOWER NORTH PLAQUE

(MOUNT ON LOWERING RING - INDICATING NORTH HEADING ^{2} ± $10^{\circ 3}$ WHEN RING IS RAISED AND LATCHED)



HIGH MAST LIGHT TOWER LUMINAIRE SEQUENCE PLAQUE

(MOUNT ON LUMINAIRE RING)



UNDER DECK LUMINAIRE SEQUENCE DECAL

(MOUNT ON LUMINAIRE)

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.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

CONCRETE SURFACE - MASONRY ANCHORS

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

PLAQUE MATERIALS:

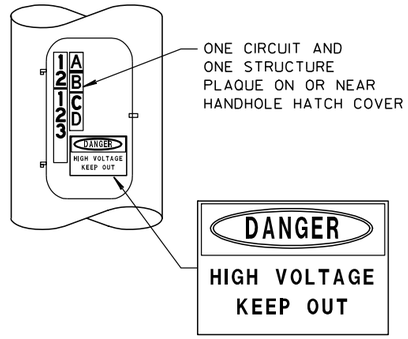
BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

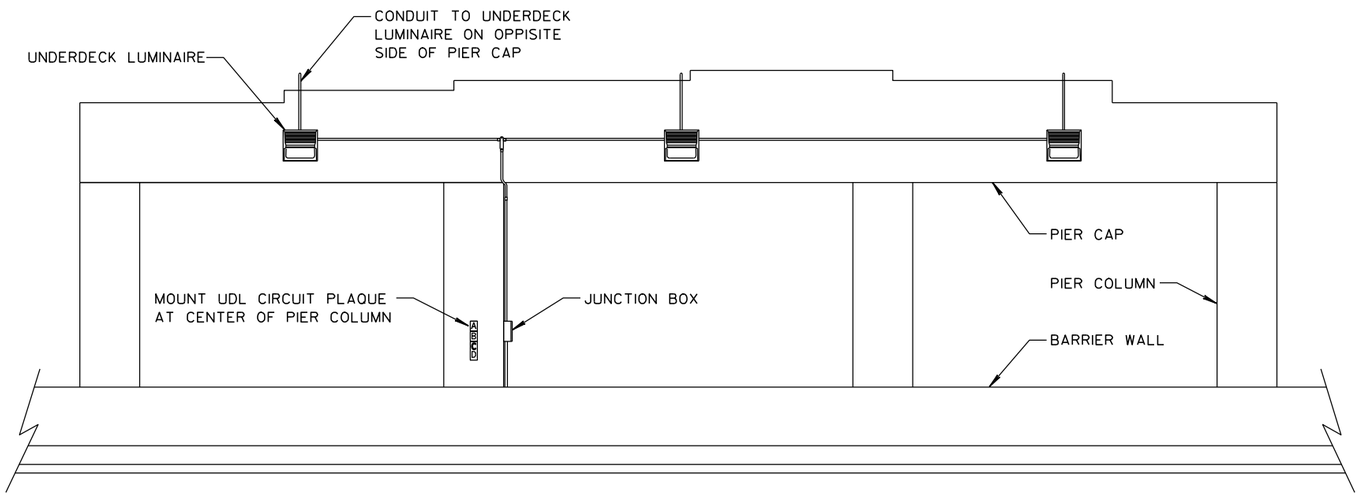
CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.



NOTE: NEMA PLAQUE SHOWN ABOVE IS REQUIRED ONLY IN PARK AND RIDE LOTS OR IN OTHER PEDESTRIAN ACCESSIBLE AREAS.

LOCATION OF HIGH MAST LIGHT TOWER STRUCTURE PLAQUE AND CIRCUIT PLAQUE



LOCATION OF UNDERDECK LIGHTING CIRCUIT PLAQUE

IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING

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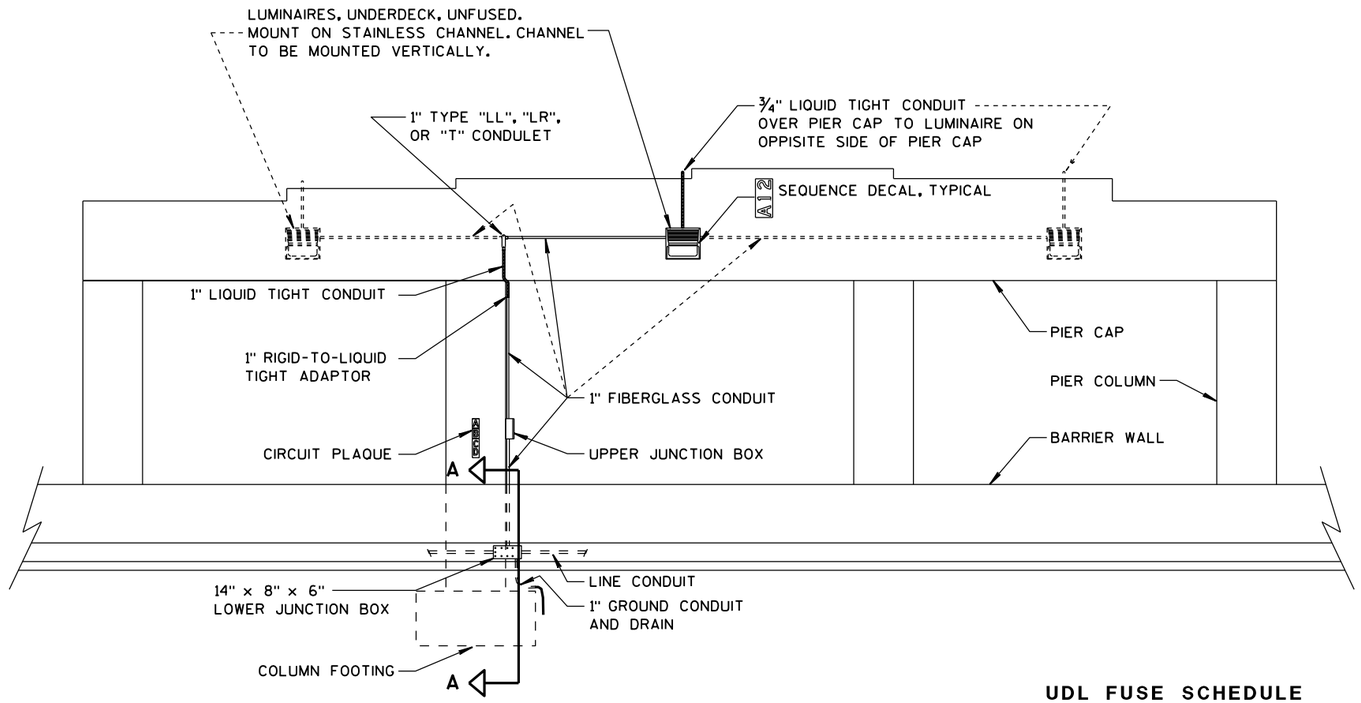
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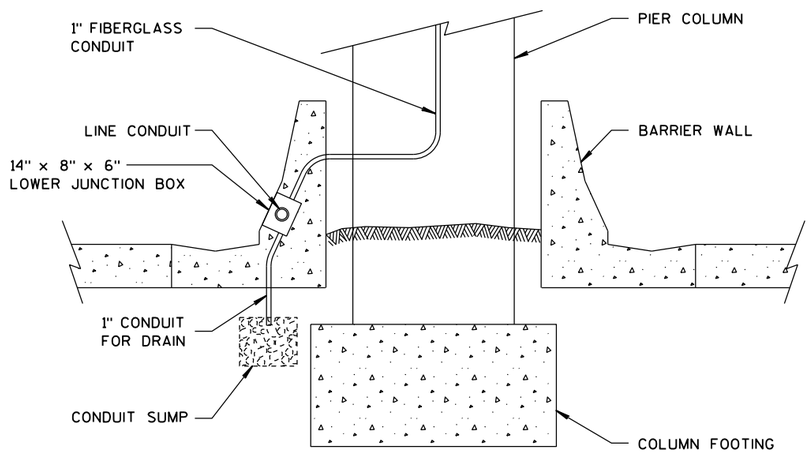
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S.D.D. 10 A 4-2



TYPICAL UNDERDECK LIGHTING INSTALLATION



SECTION "A-A"

UDL FUSE SCHEDULE

LINE VOLTAGE ϕ-GROUND	TOP JUNCTION BOX FUSES
120VAC	5 A
208VAC	5 A
240VAC	5 A
480VAC	3 A

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING, SUBSTITUTING THE LOWER JUNCTION BOX FOR THE HANDHOLE SHOWN IN THAT DETAIL.

THE PLANS WILL SHOW WHICH CIRCUIT LEGS(S) ARE CONNECTED TO EACH INSTALLATION AND THE REQUIRED NUMBER OF LUMINAIRES.

THE UPPER JUNCTION BOX (FOR FUSE ASSEMBLIES) SHALL CONFORM TO THE APPLICABLE PROVISIONS OF SECTION 653.2.2 OF THE STANDARD SPECIFICATIONS; SHALL BE SUITABLE FOR SURFACE MOUNTING WITH EXTERNAL MOUNTING LUGS; AND SHALL HAVE A HINGED COVER, WING-NUT FASTENERS, AND PADLOCK HASP. ALL HARDWARE SHALL BE STAINLESS STEEL. FURNISH O-Z/GEDNEY YW-120603, SPRING CITY HC-12-06-04, CROUSE-HINDS WTB-120604, OR APPROVED EQUAL.

MEDIAN CONFIGURATIONS VARY; NOT ALL CASES CAN BE SHOWN IN THIS DETAIL.

WIRING FOR THE FIRST LUMINAIRE PAIR IS SHOWN IN SOLID LINES. WIRING FOR ADDITIONAL LUMINAIRE PAIRS, WHERE REQUIRED, IS SHOWN IN DOTTED LINES.

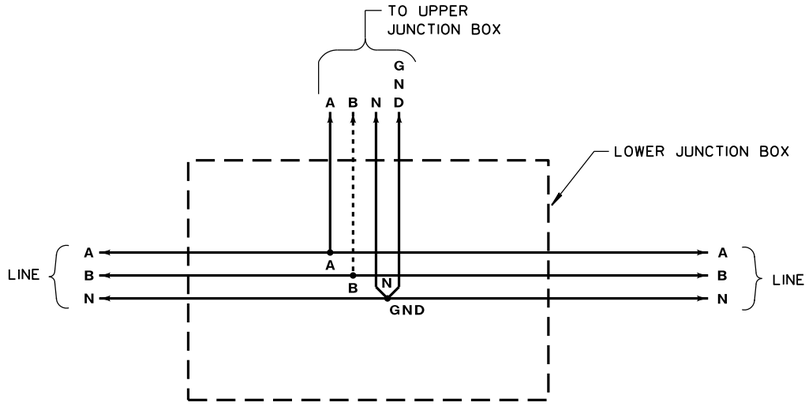
LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	UNFUSED LUMINAIRE
	SINGLE POLE (1P) FUSE ASSEMBLY
	TERMINAL
	SPLICE
	CONDUCTOR

ELECTRICAL DETAILS
UNDERDECK LIGHTING

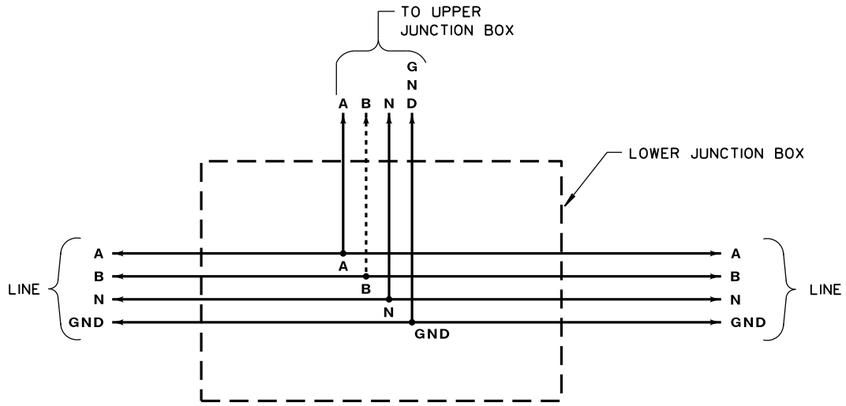
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 563

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S.D.D. 10 A 15-4a



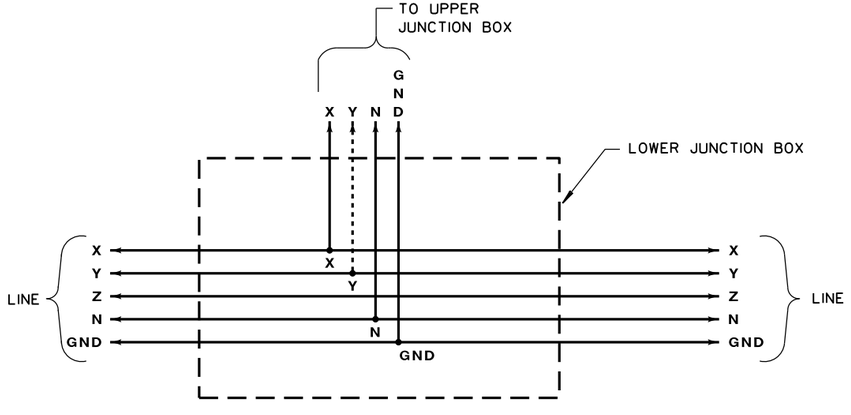
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC OR 3 WIRE OR 480VAC 2 WIRE



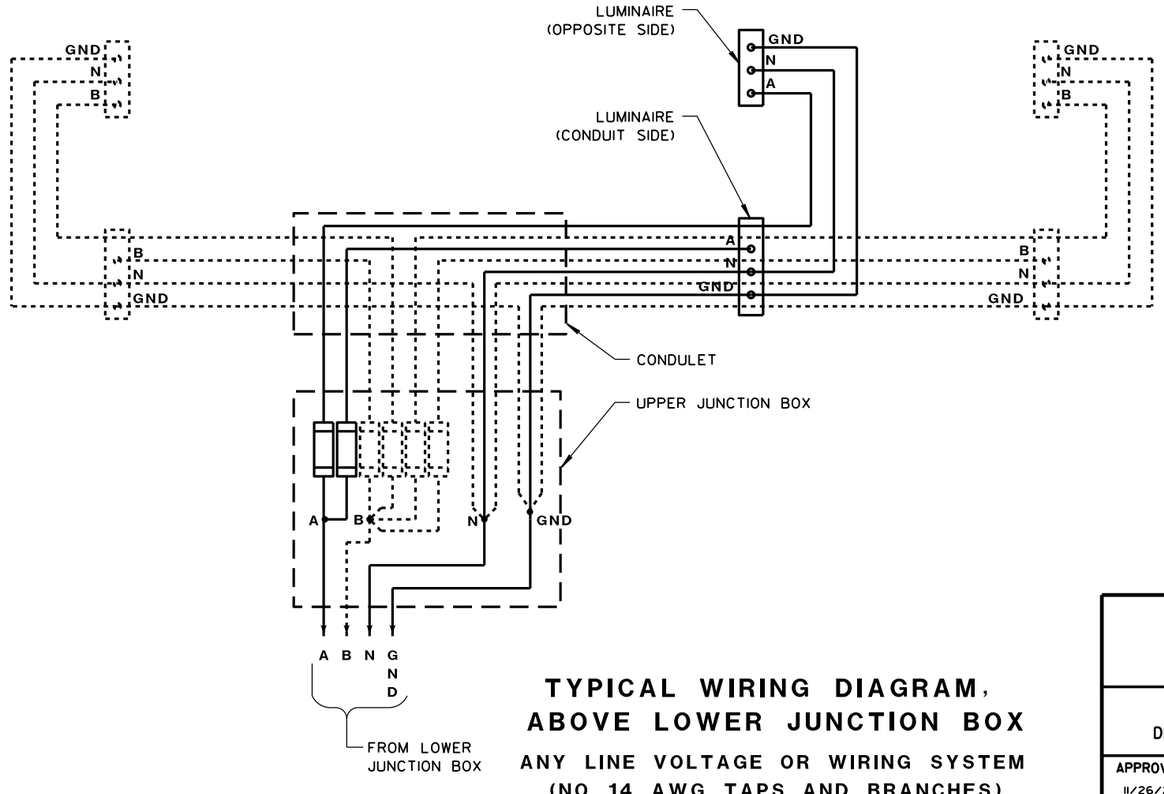
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

ISOLATED NEUTRAL SYSTEM
1-ϕ 120/240VAC OR 240/480VAC 3 WIRE



TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

ISOLATED NEUTRAL SYSTEM
3-ϕ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM, ABOVE LOWER JUNCTION BOX

ANY LINE VOLTAGE OR WIRING SYSTEM
(NO. 14 AWG TAPS AND BRANCHES)

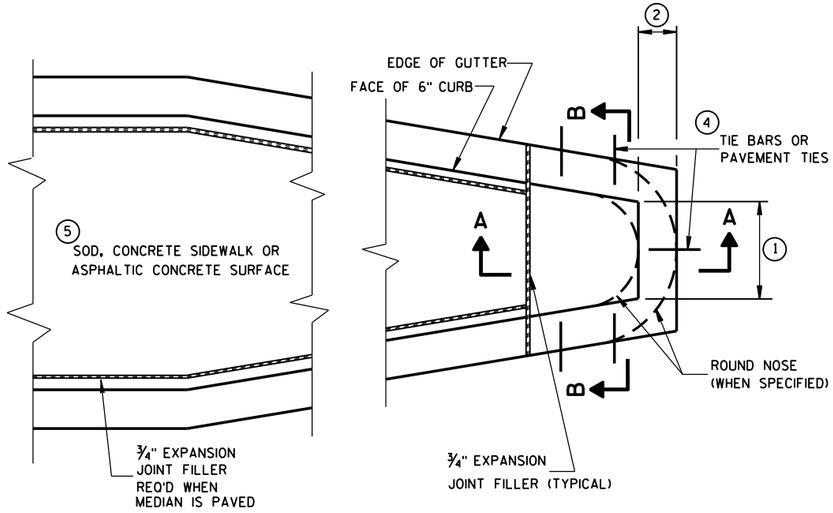
ELECTRICAL DETAILS
UNDERDECK LIGHTING

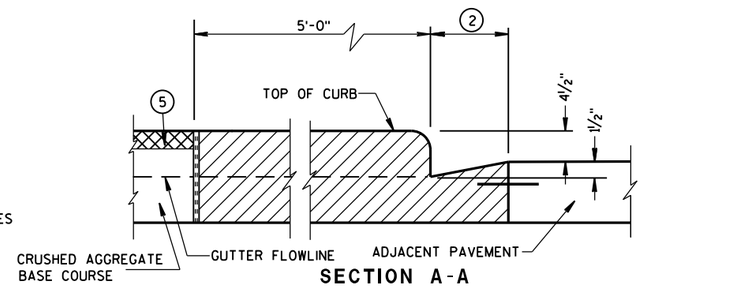
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APPROVED
11/26/2013
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CONCRETE MEDIAN BLUNT NOSE DETAIL

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) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

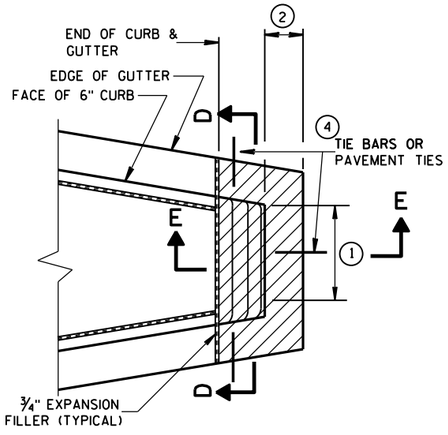
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

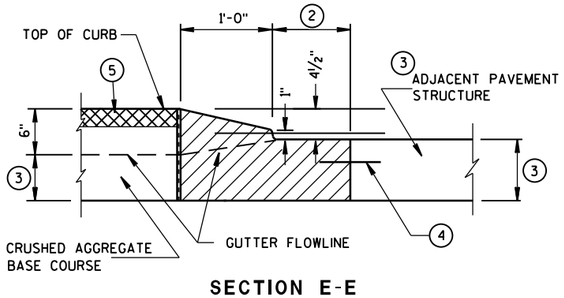
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

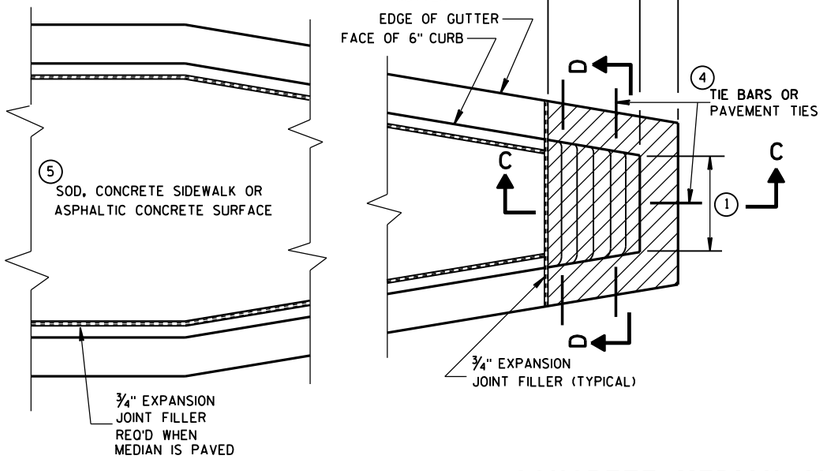
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

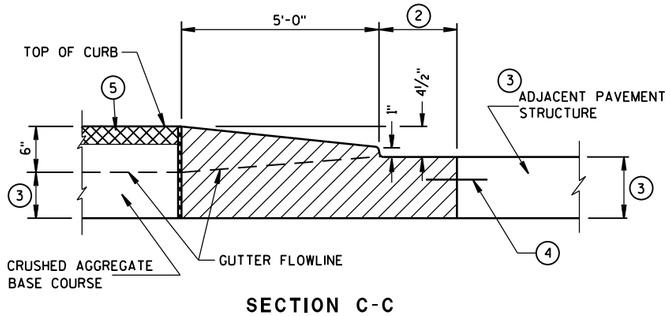




SECTION E-E

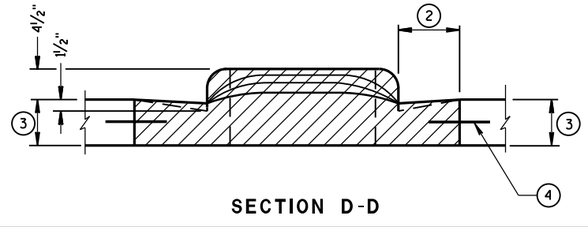
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

565

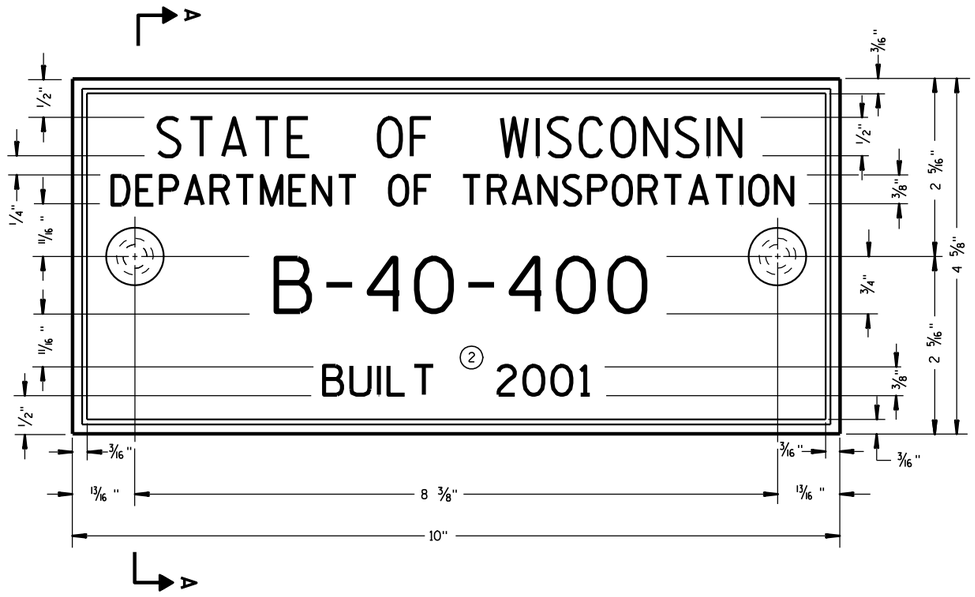
FHWA

6

S.D.D. 11 B 2-2

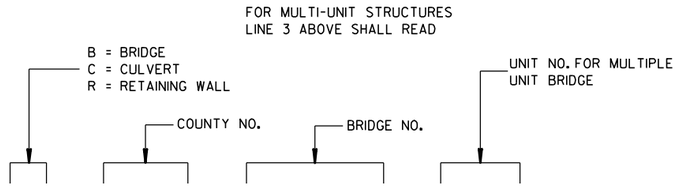
6

S.D.D. 11 B 2-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

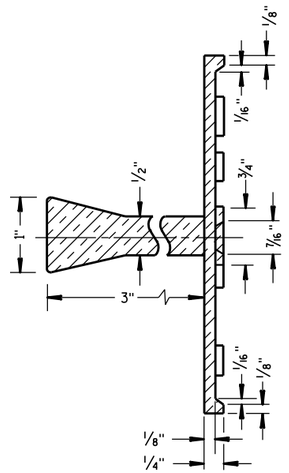
GENERAL NOTES

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.

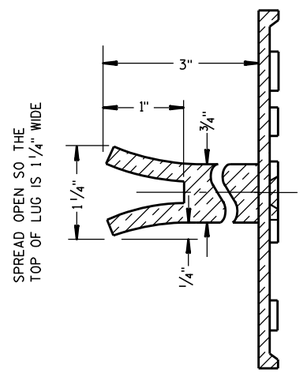
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

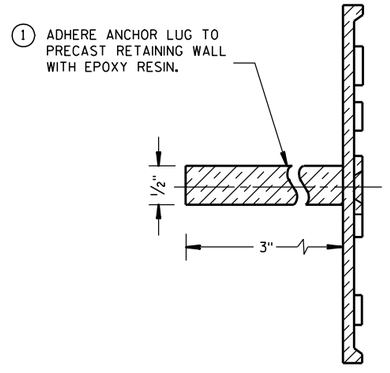
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

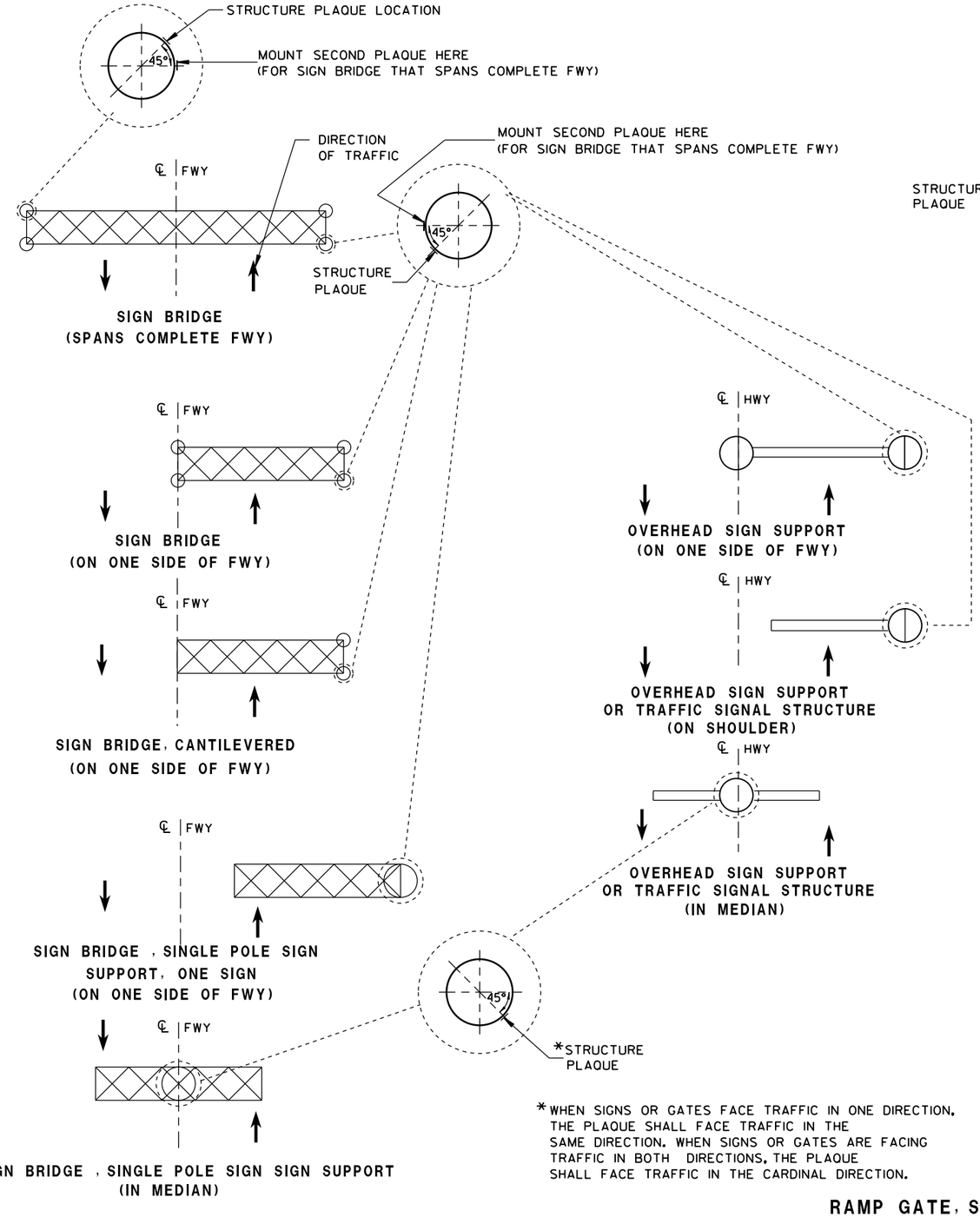
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER
FHWA	

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S.D.D. 12 A 3-10

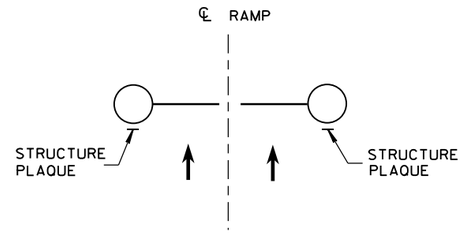
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S.D.D. 12 A 3-10

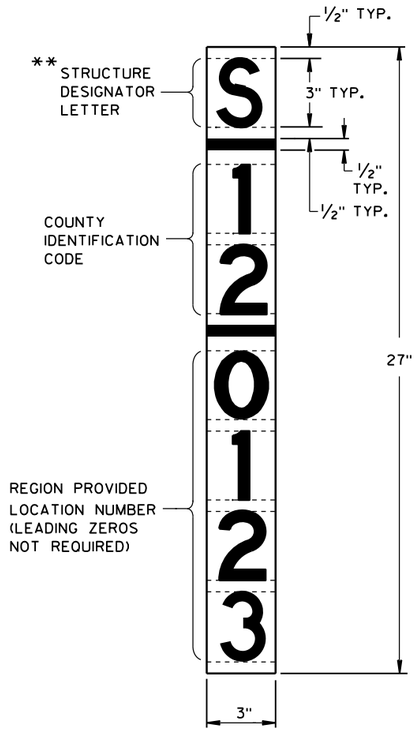


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* 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.



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.

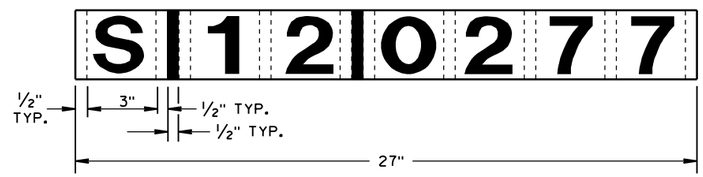
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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

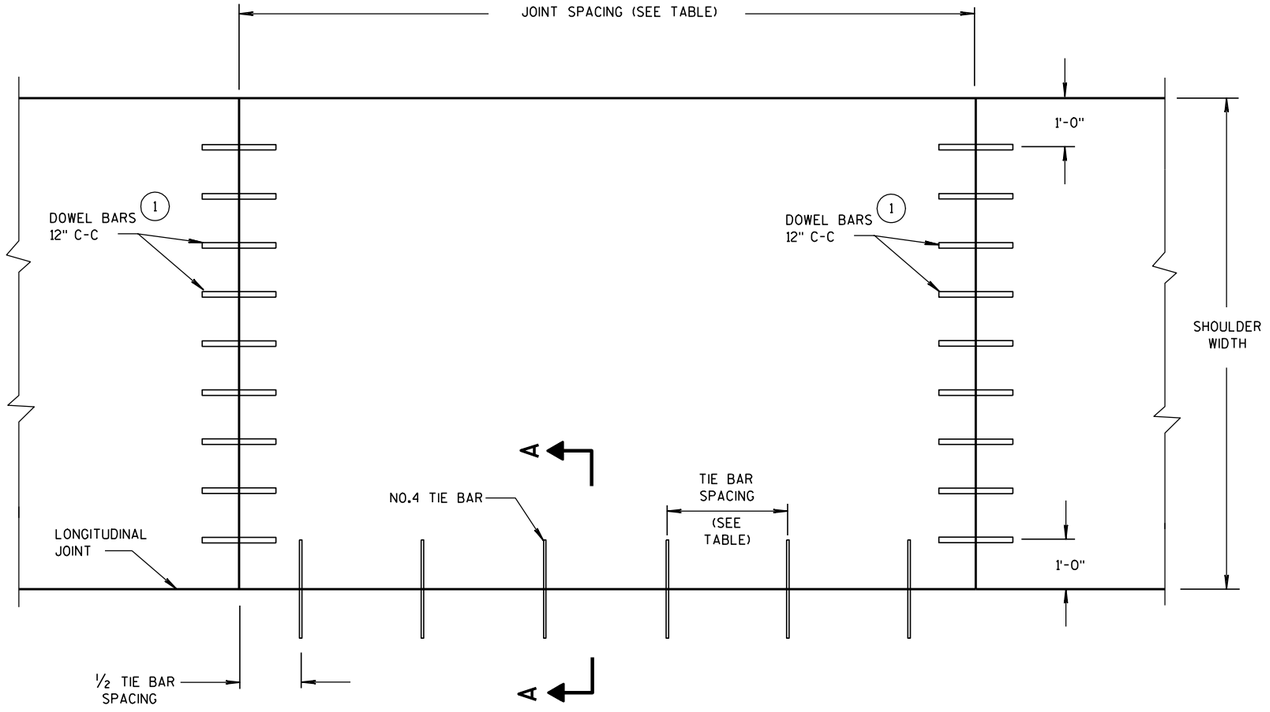
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

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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

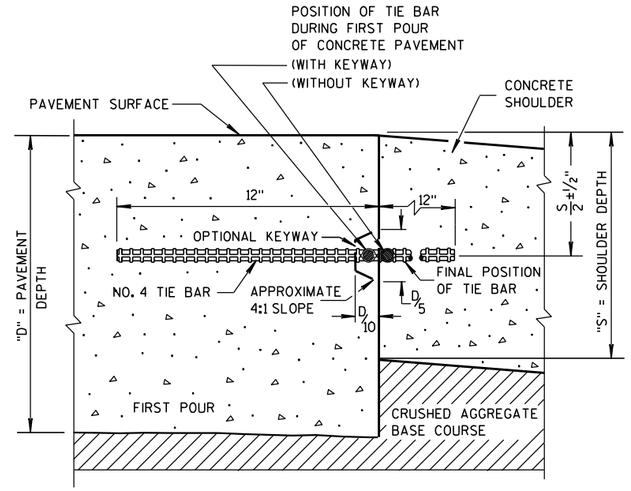
GENERAL NOTES

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 — ENGINEER
FHWA

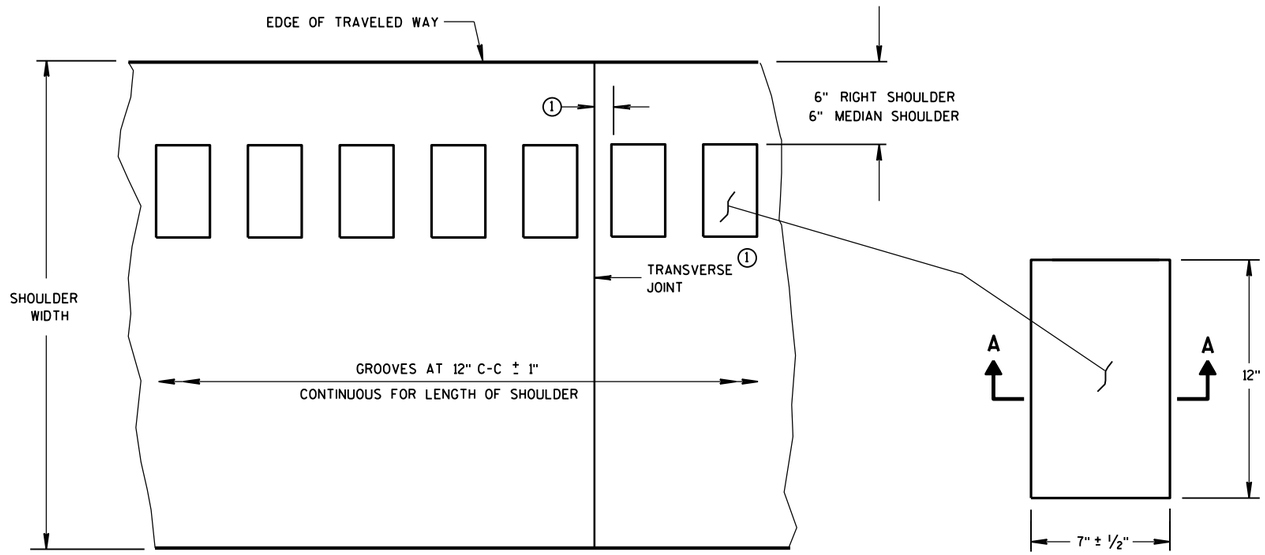
568

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S.D.D. 13 A 3-5

6

S.D.D. 13 A 3-5



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

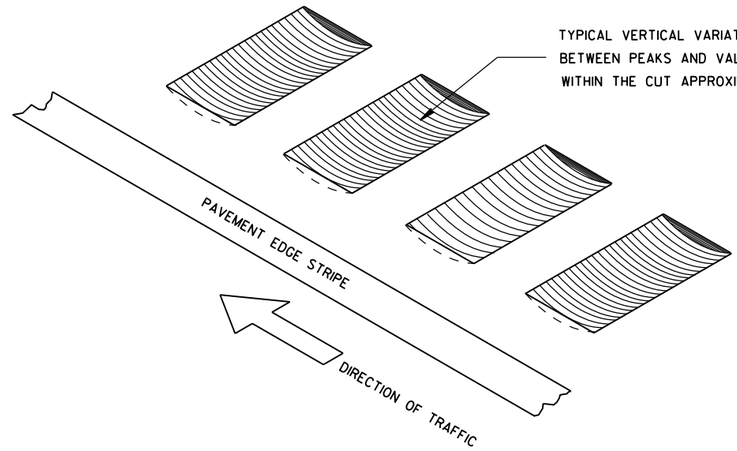
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

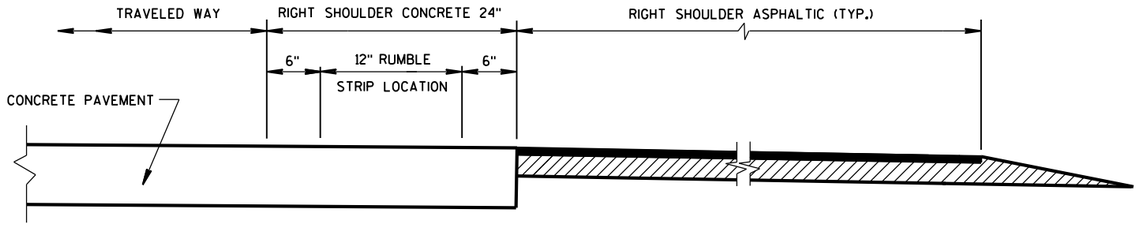
RUMBLE STRIPS ON EXPRESSWAYS

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.

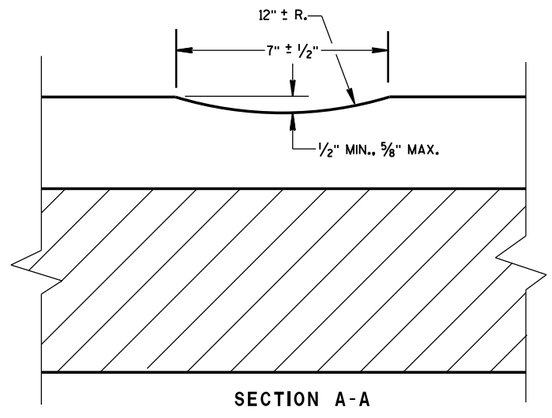
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



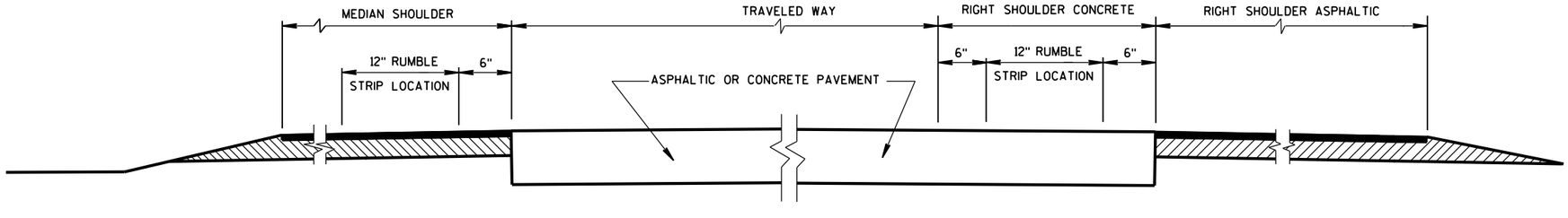
ISOMETRIC



SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION A-A



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIP, MILLING

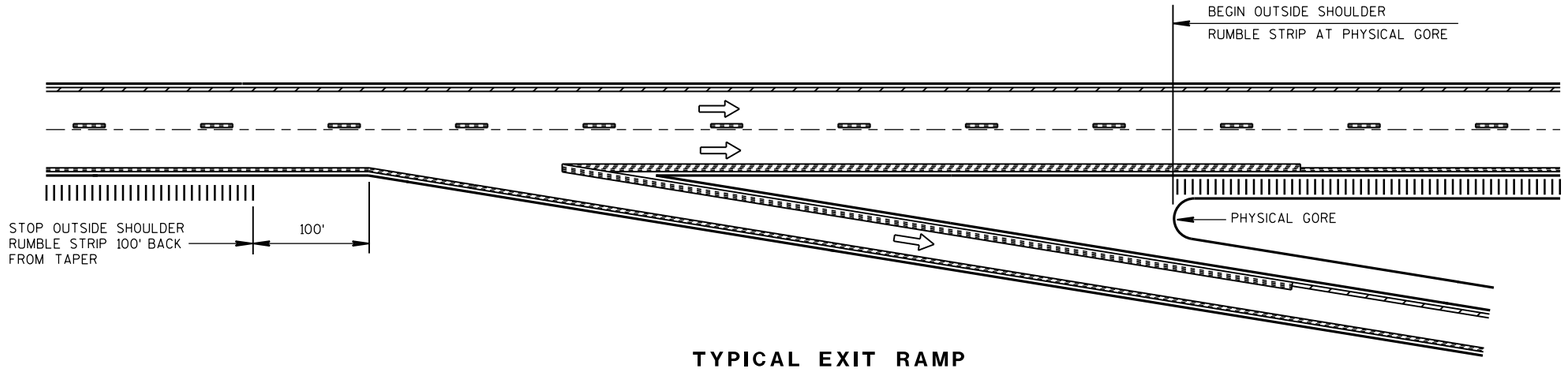
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

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S.D.D. 13 A 5-5a



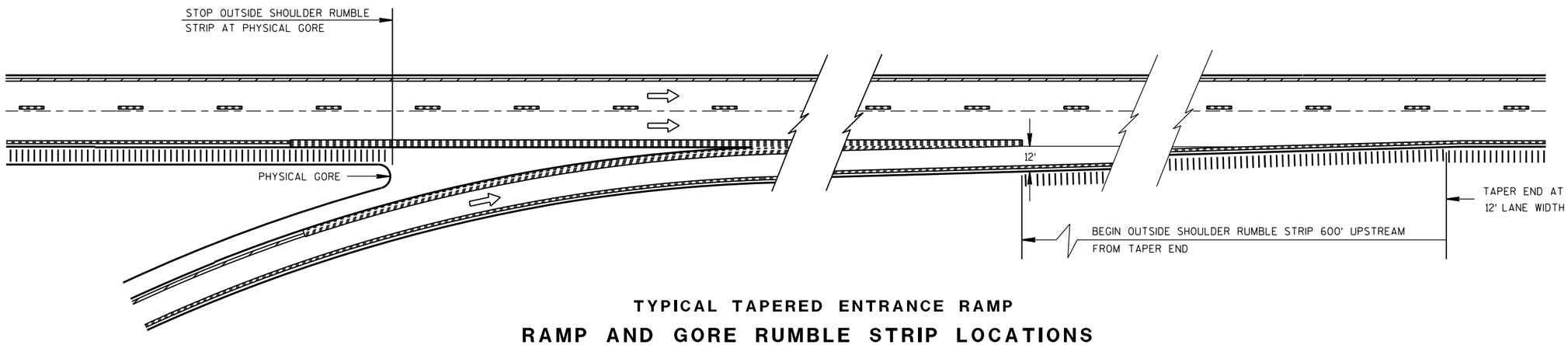
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

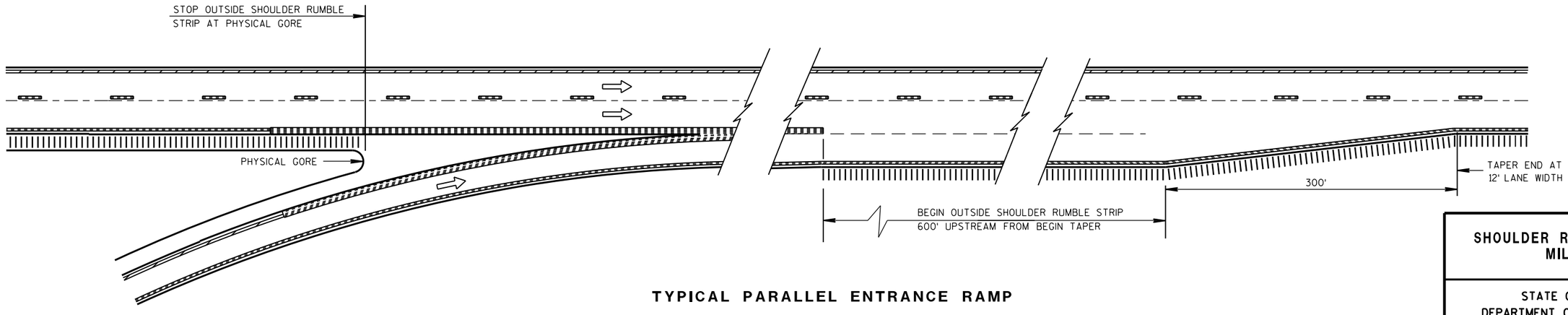
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

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

570

FHWA

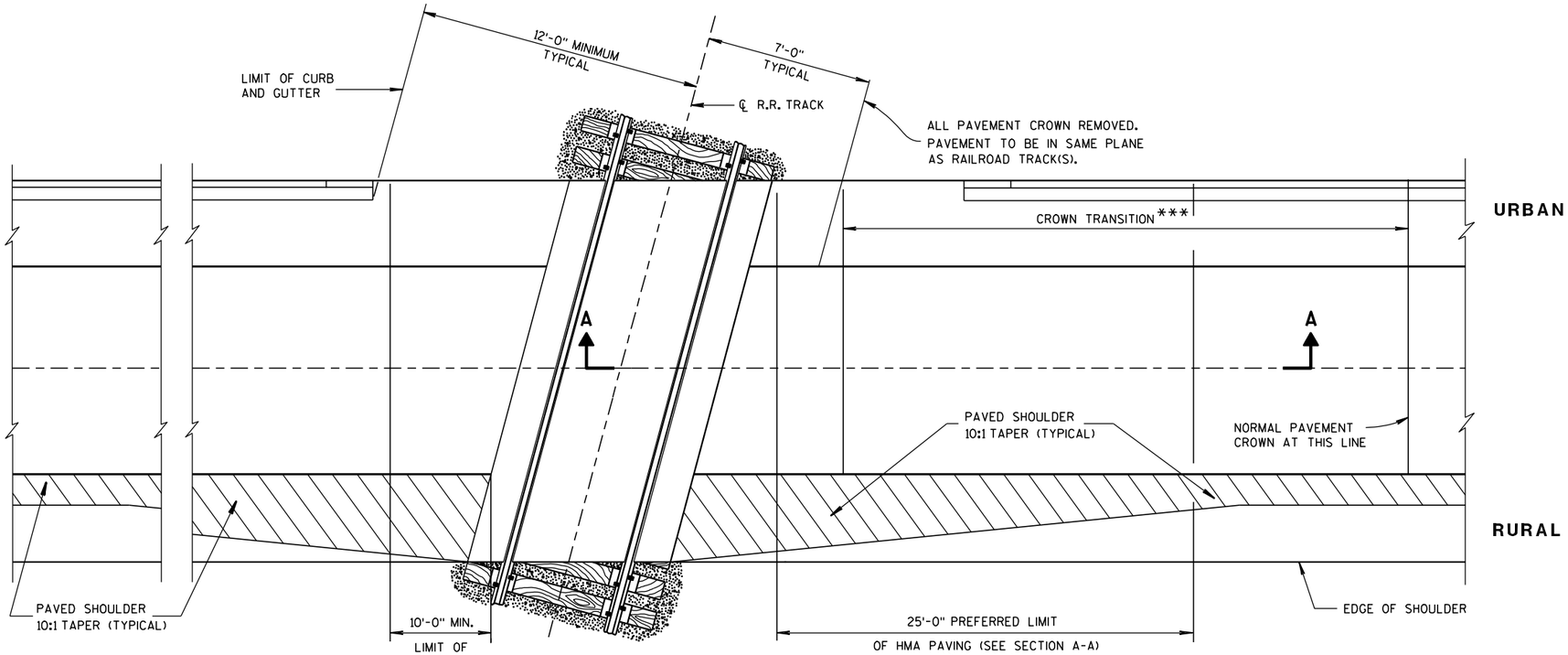
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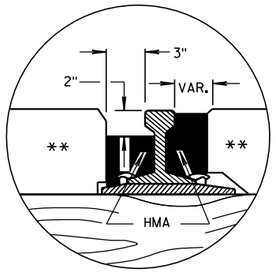
6

S.D.D. 13 A 5-5b

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S.D.D. 13 A 5-5b





DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

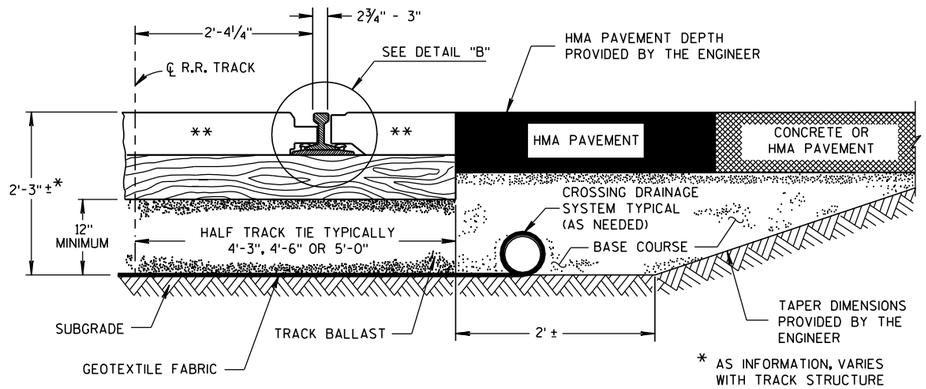
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

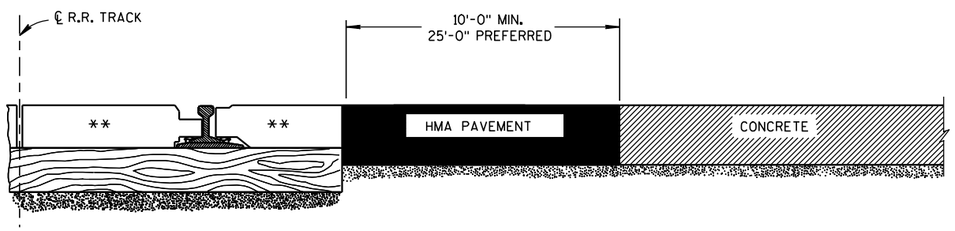
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.



TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH



SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

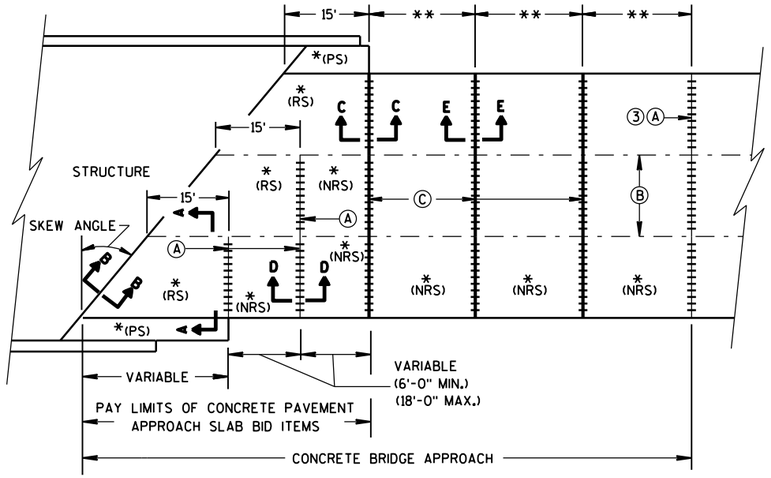
APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI 571 CTION
FHWA

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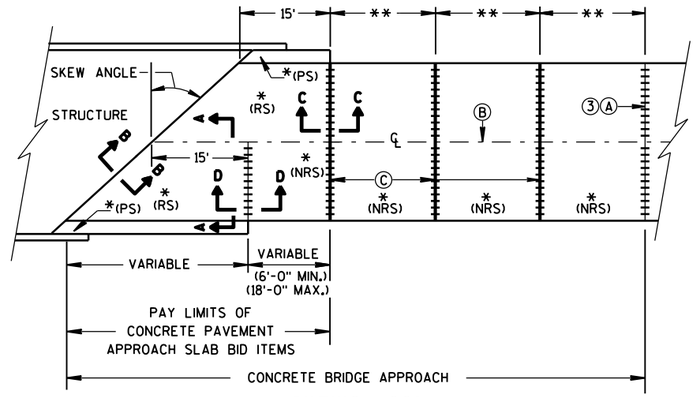
S.D.D. 13 B 1-10

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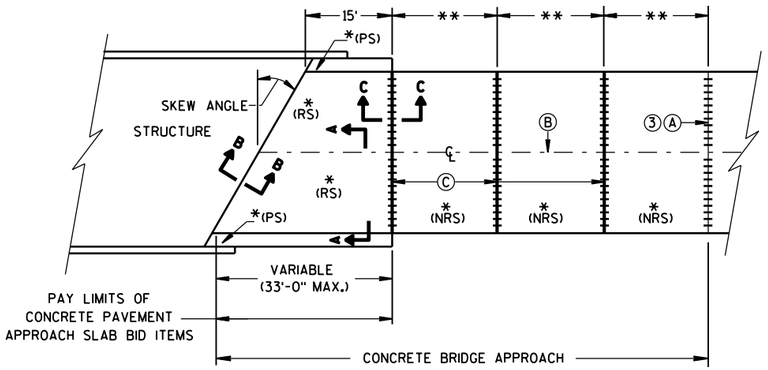
S.D.D. 13 B 1-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



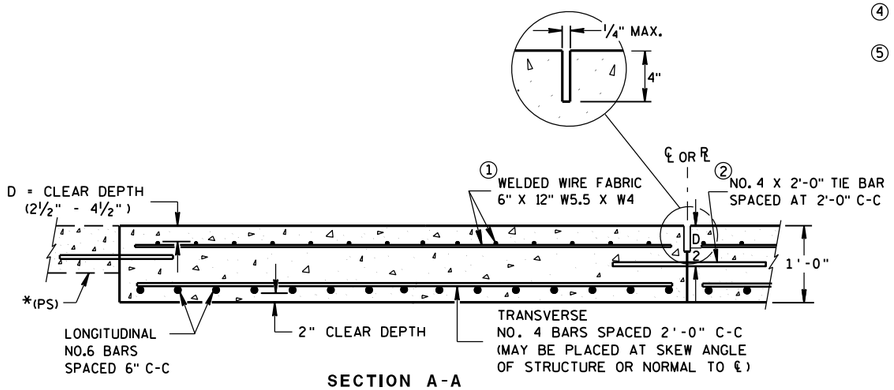
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

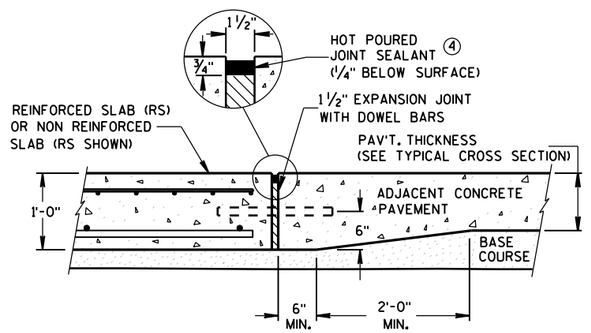
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

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

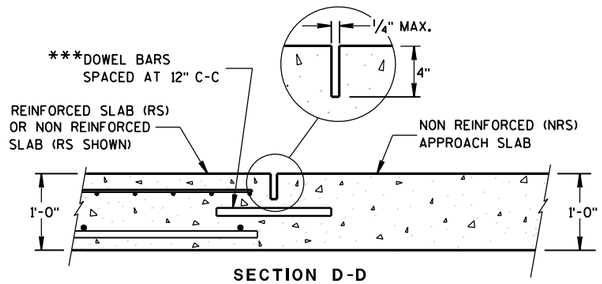
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) STANDARD LONGITUDINAL JOINT AND TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



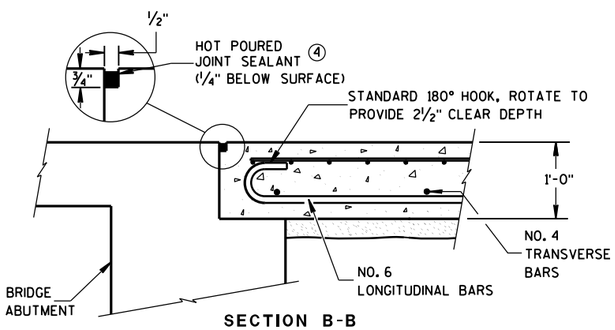
SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

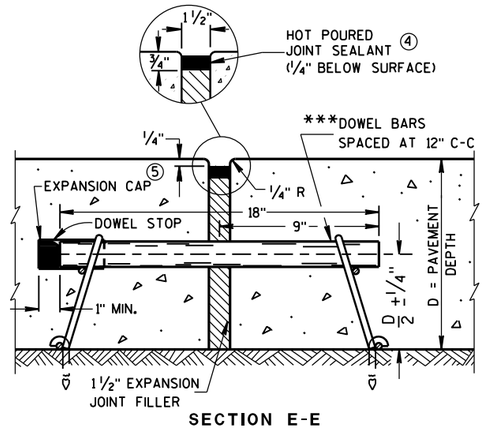
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

1. THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
2. THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
3. DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.
4. USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
5. PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION E-E
EXPANSION JOINT

CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

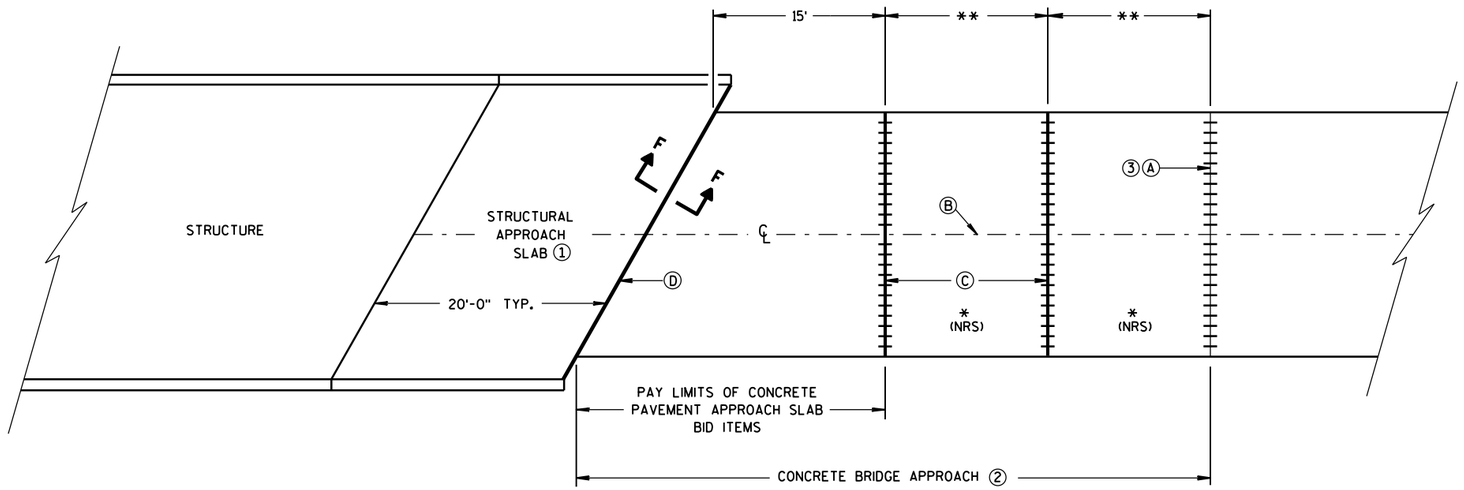
APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
572
EER
FHWA

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S.D.D. 13 B 2-7a

6

S.D.D. 13 B 2-7a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE BRIDGE APPROACH.

① CONFORM TO APPLICABLE BRIDGE MANUAL STANDARD DRAWINGS FOR *STRUCTURAL APPROACH SLABS* (SEE CHAPTER 12 - ABUTMENTS).

② CONFORM TO SHEET (a) OF THIS SET FOR *CONCRETE BRIDGE APPROACH* DETAILS, WITH ONE EXCEPTION — WHEN CONSTRUCTING A *CONCRETE BRIDGE APPROACH* NEXT TO A *STRUCTURAL APPROACH SLAB*, AS SHOWN IN THE DETAIL DRAWING, THE *CONCRETE BRIDGE APPROACH* WILL ONLY HAVE TWO EXPANSION JOINTS; THE THIRD EXPANSION JOINT IS AT THE END OF THE *STRUCTURAL APPROACH SLAB*.

③ DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.

*(NRS) = NON-REINFORCED CONCRETE SLAB

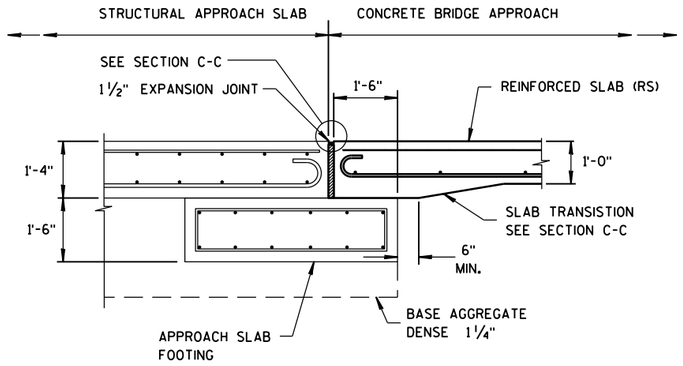
**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)

Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT AND TIE BARS.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION F-F

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

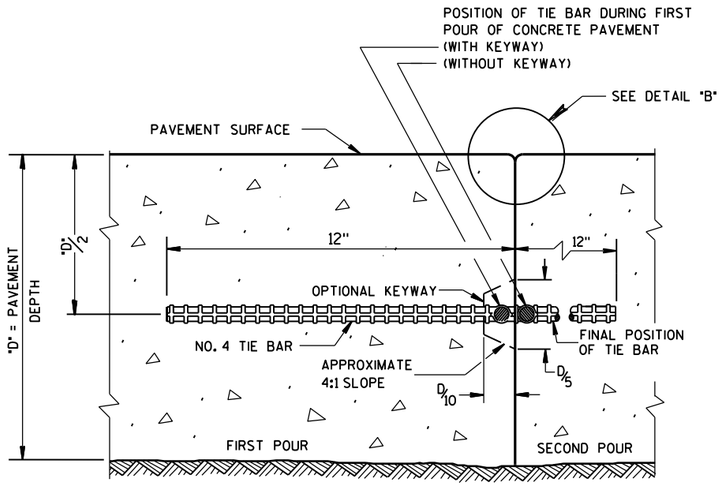
STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

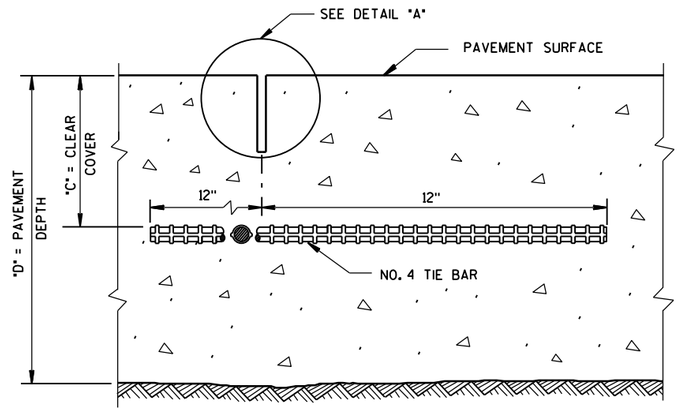
APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
EER
FHWA

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S.D.D. 13 B 2-7b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

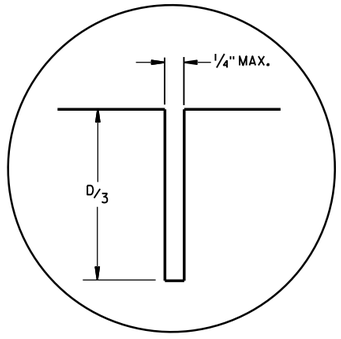
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

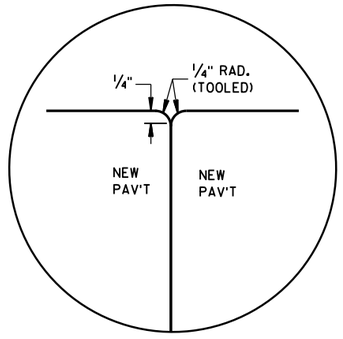
PLAN VIEW

SECTION A-A

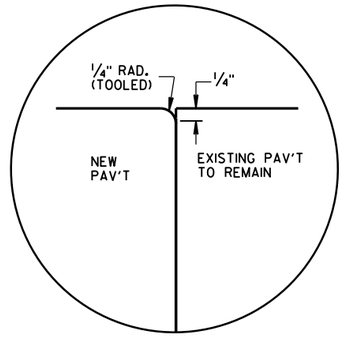
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



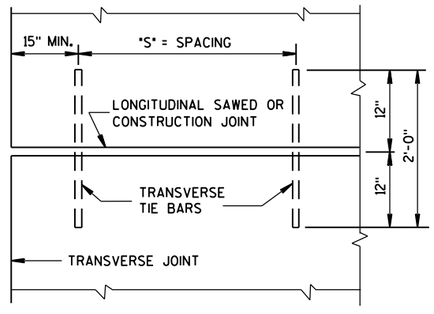
DETAIL "B"



DETAIL "C"

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

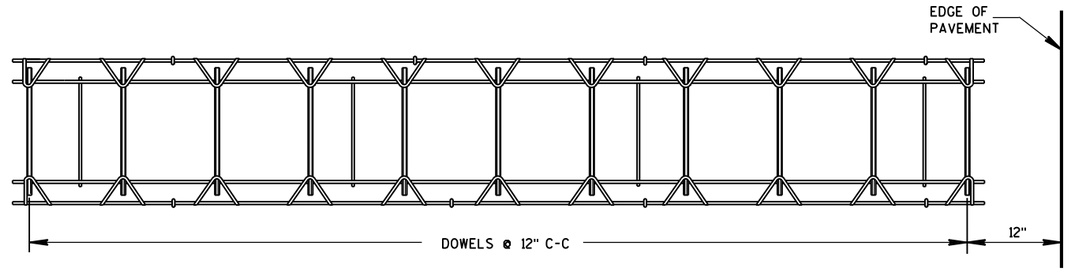
9/2014 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER

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S.D.D. 13 C 1-17

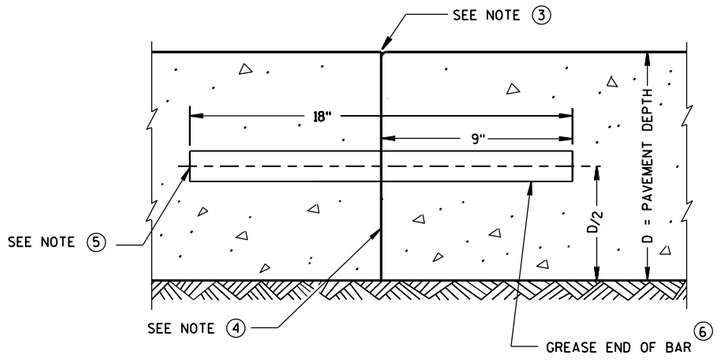


PLAN VIEW

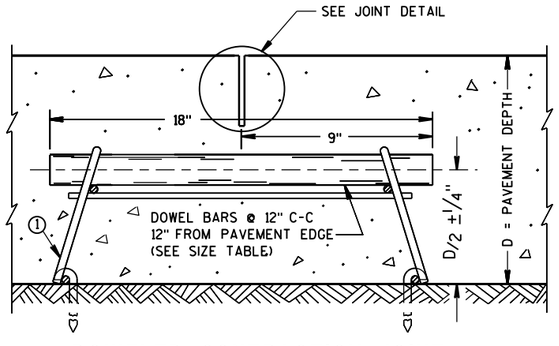


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



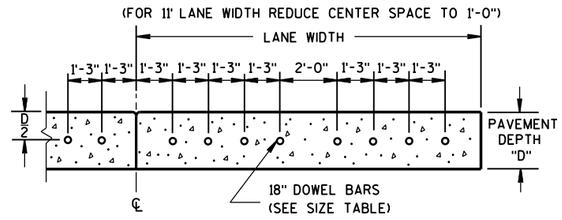
TRANSVERSE CONSTRUCTION JOINT



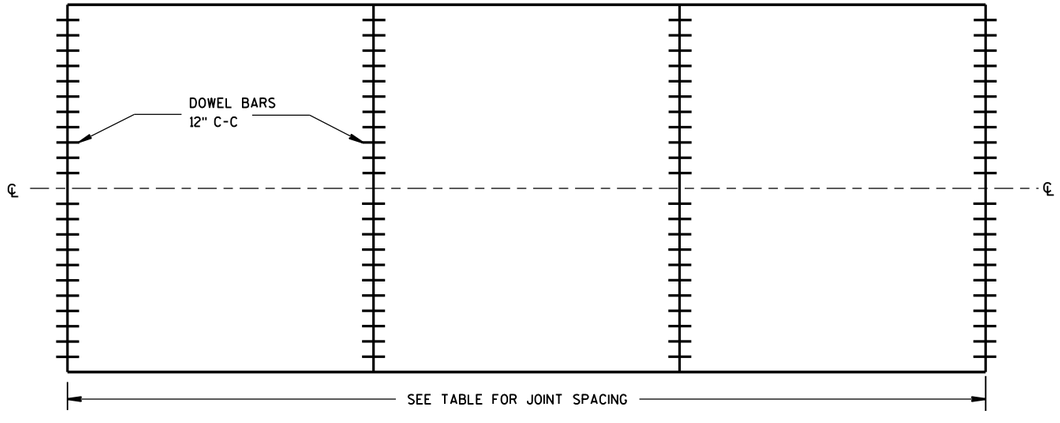
DOWELED CONTRACTION JOINT

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.

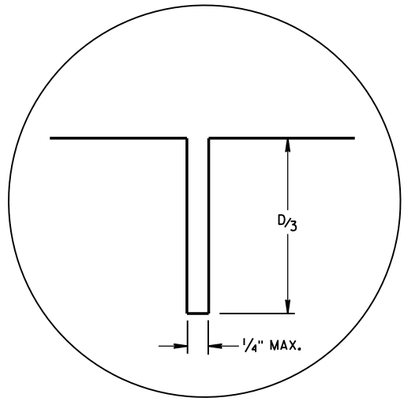
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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

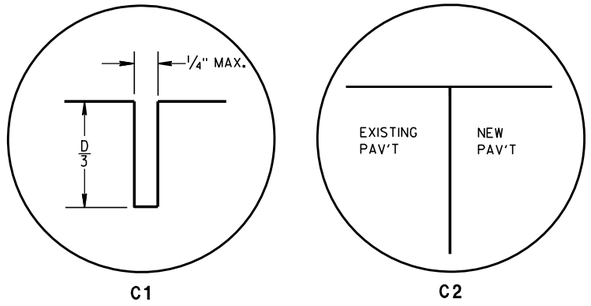
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

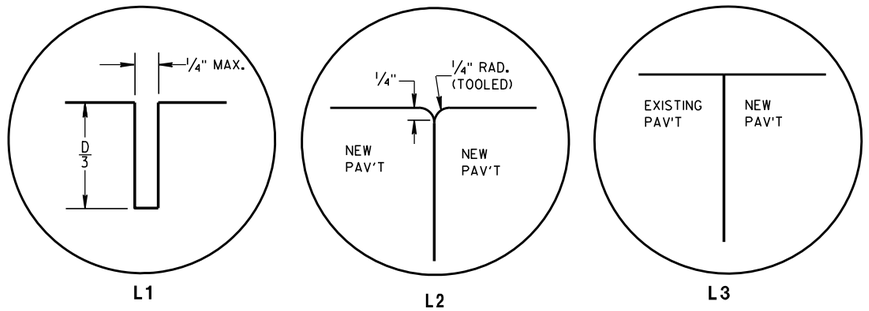
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

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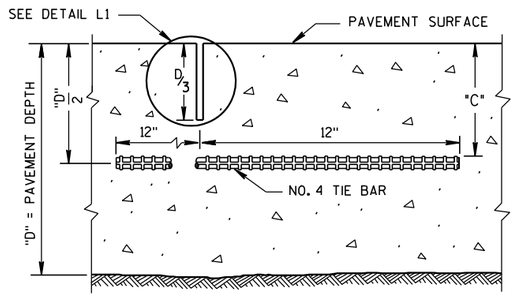
S.D.D. 13 C 13-8



TRANSVERSE JOINTS

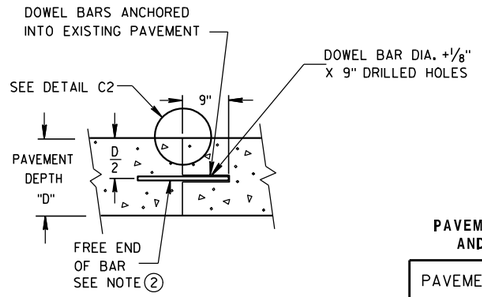


LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

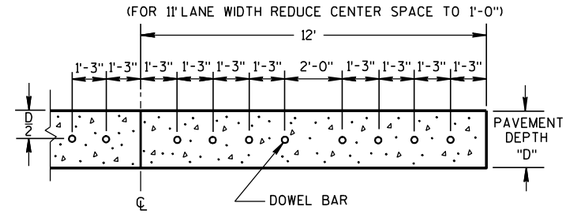
GENERAL NOTES

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

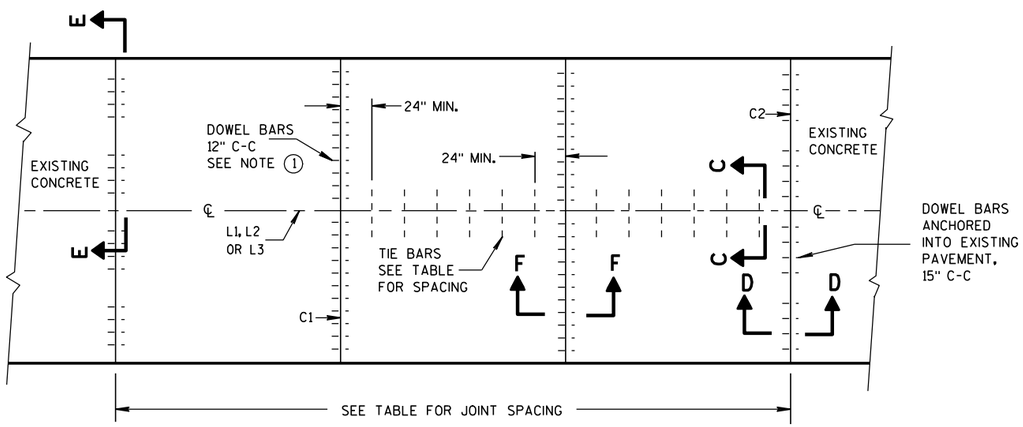
SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

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'

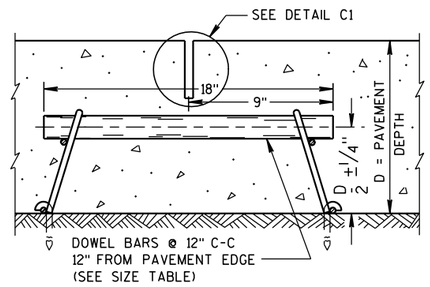
TIE BAR LOCATION TABLE

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

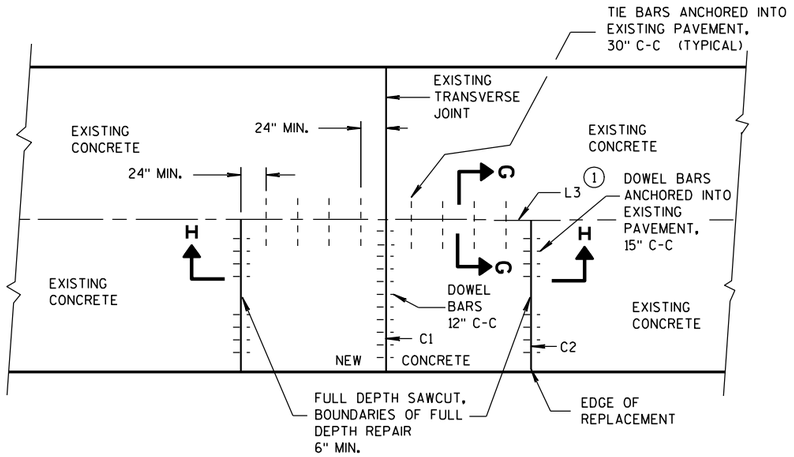
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 15-5a

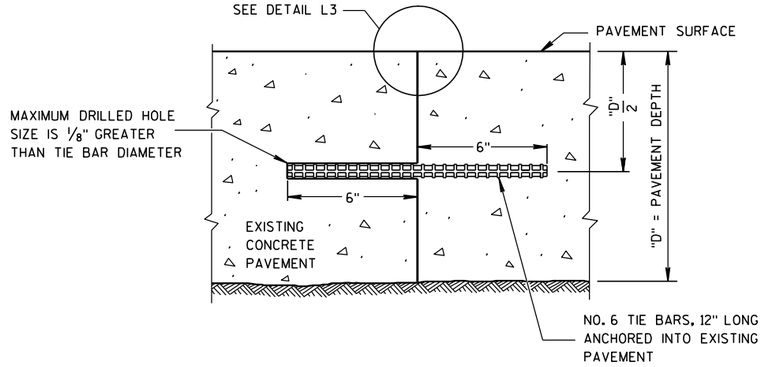
GENERAL NOTES

(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.



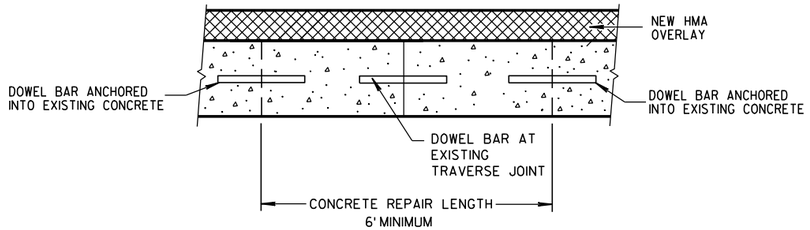
PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR



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 & D577 ENGINEER

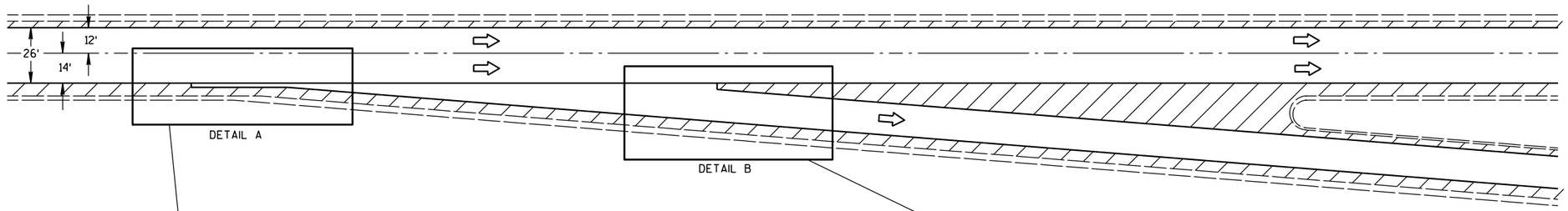
FHWA

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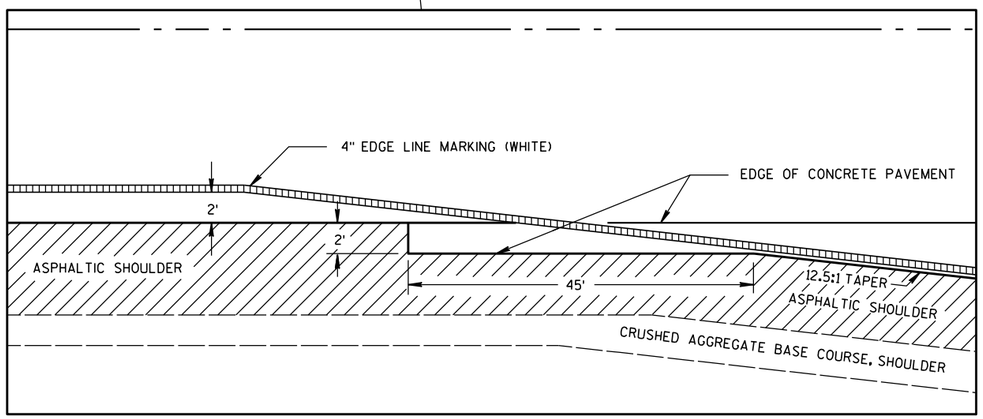
S.D.D. 13 C 15-5b

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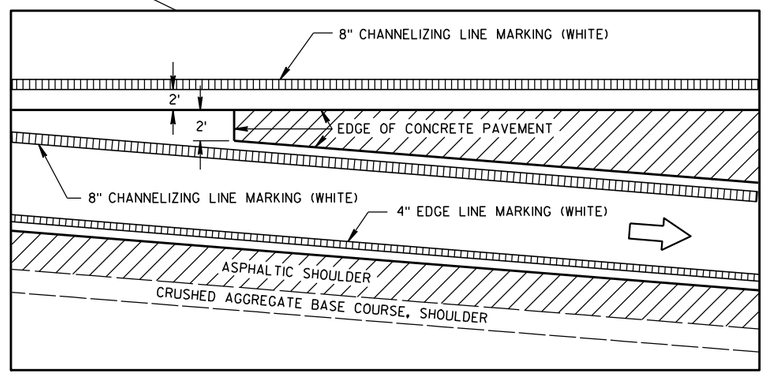
S.D.D. 13 C 15-5b



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

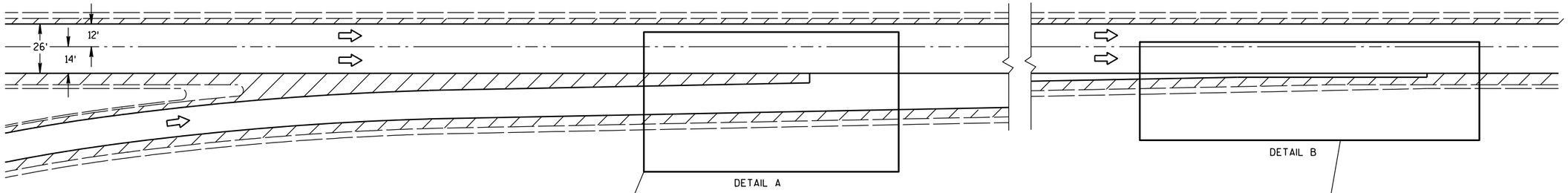
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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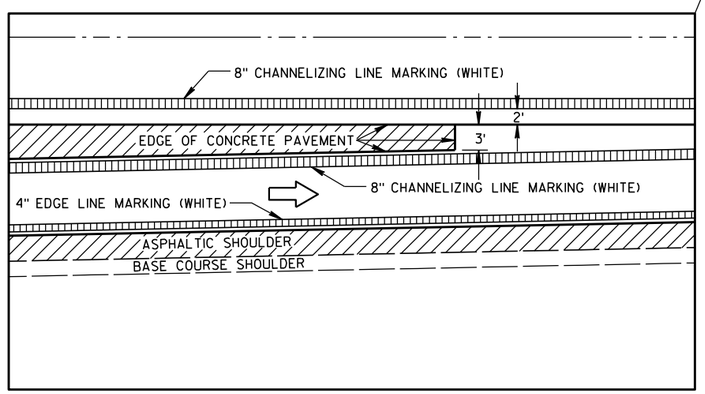
S.D.D. 13 C 17-1a

6

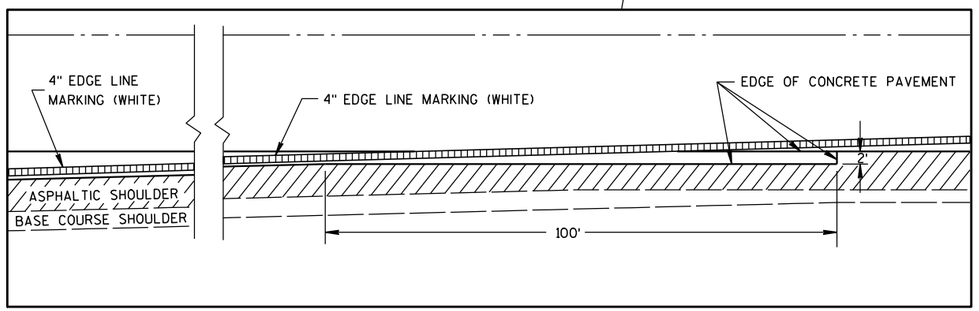
S.D.D. 13 C 17-1a



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

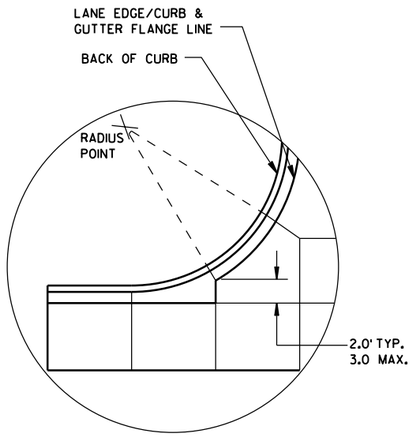
5/27/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

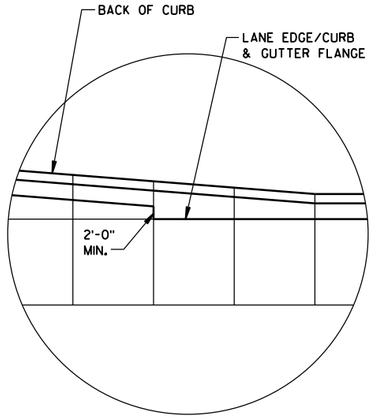
FHWA

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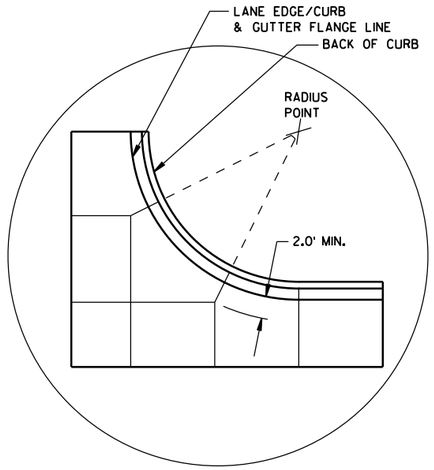
S.D.D. 13 C 17-1b



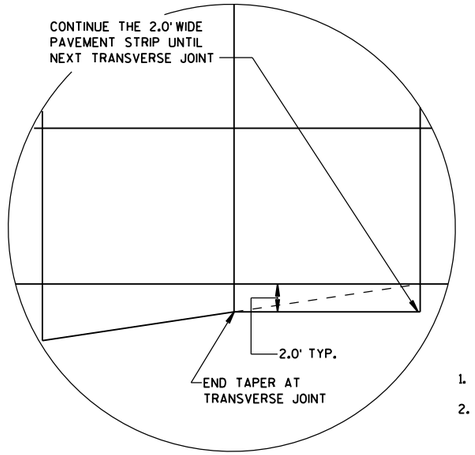
DETAIL "A"



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.

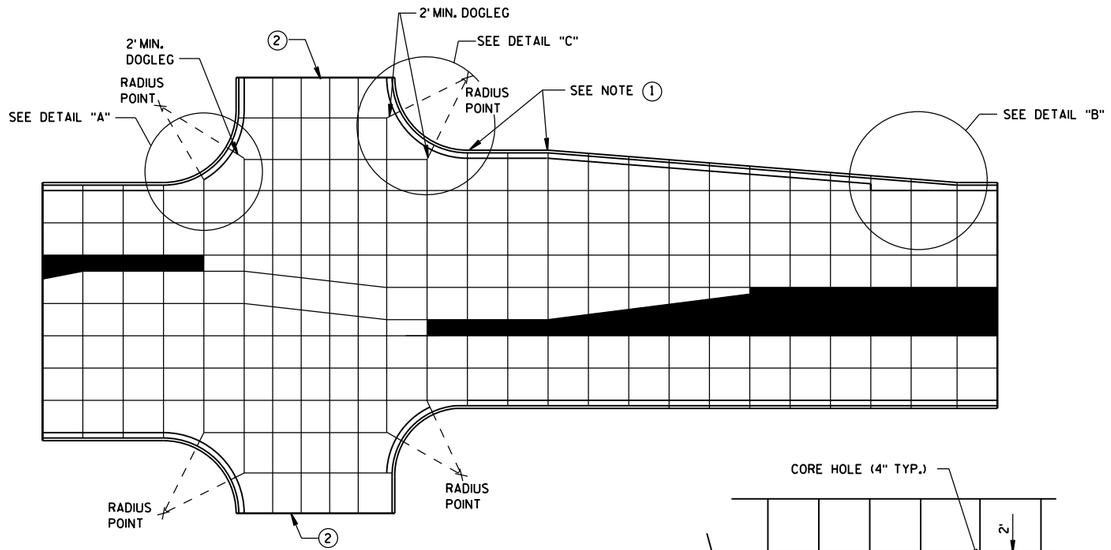
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

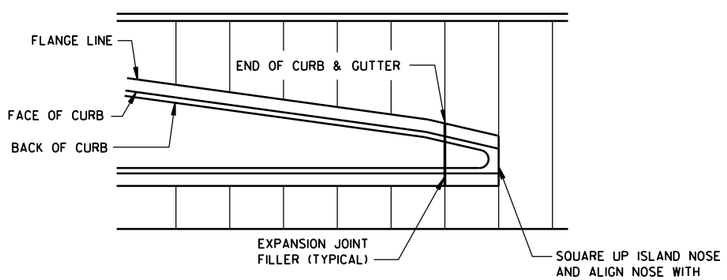


STANDARD INTERSECTION

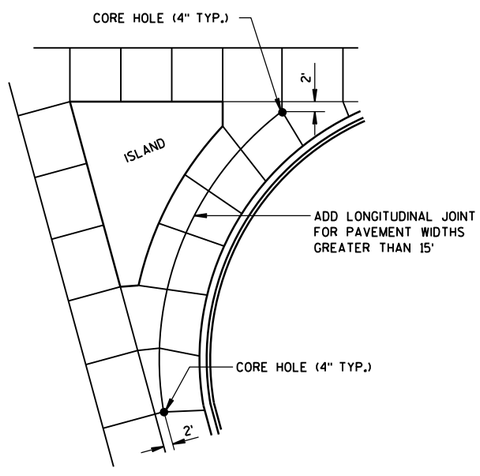
PAVEMENT DEPTH AND JOINT SPACING TABLE

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 580

6

S.D.D. 13 C 18-2a

6

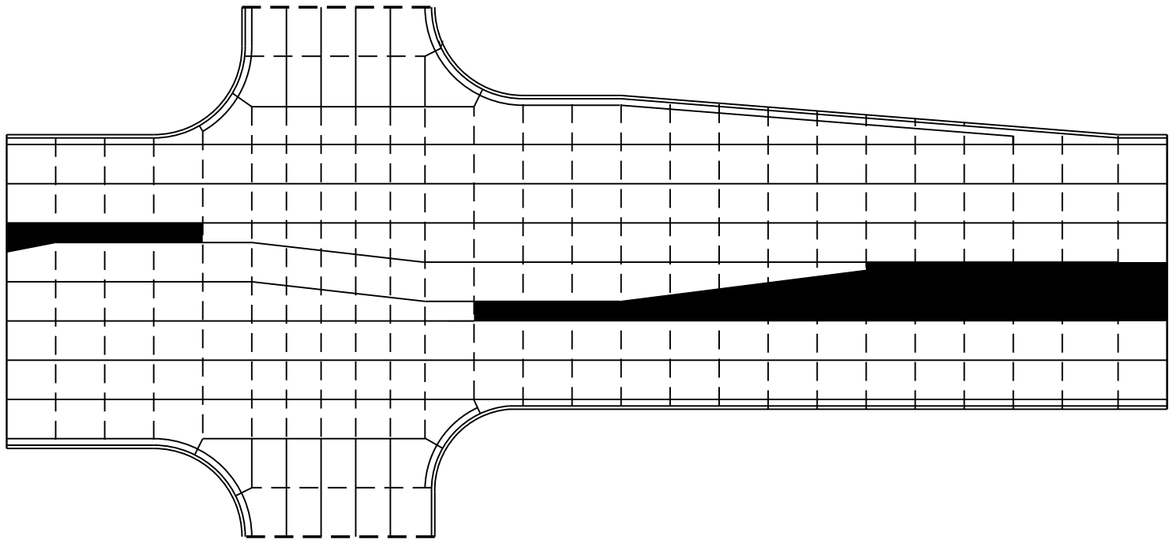
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

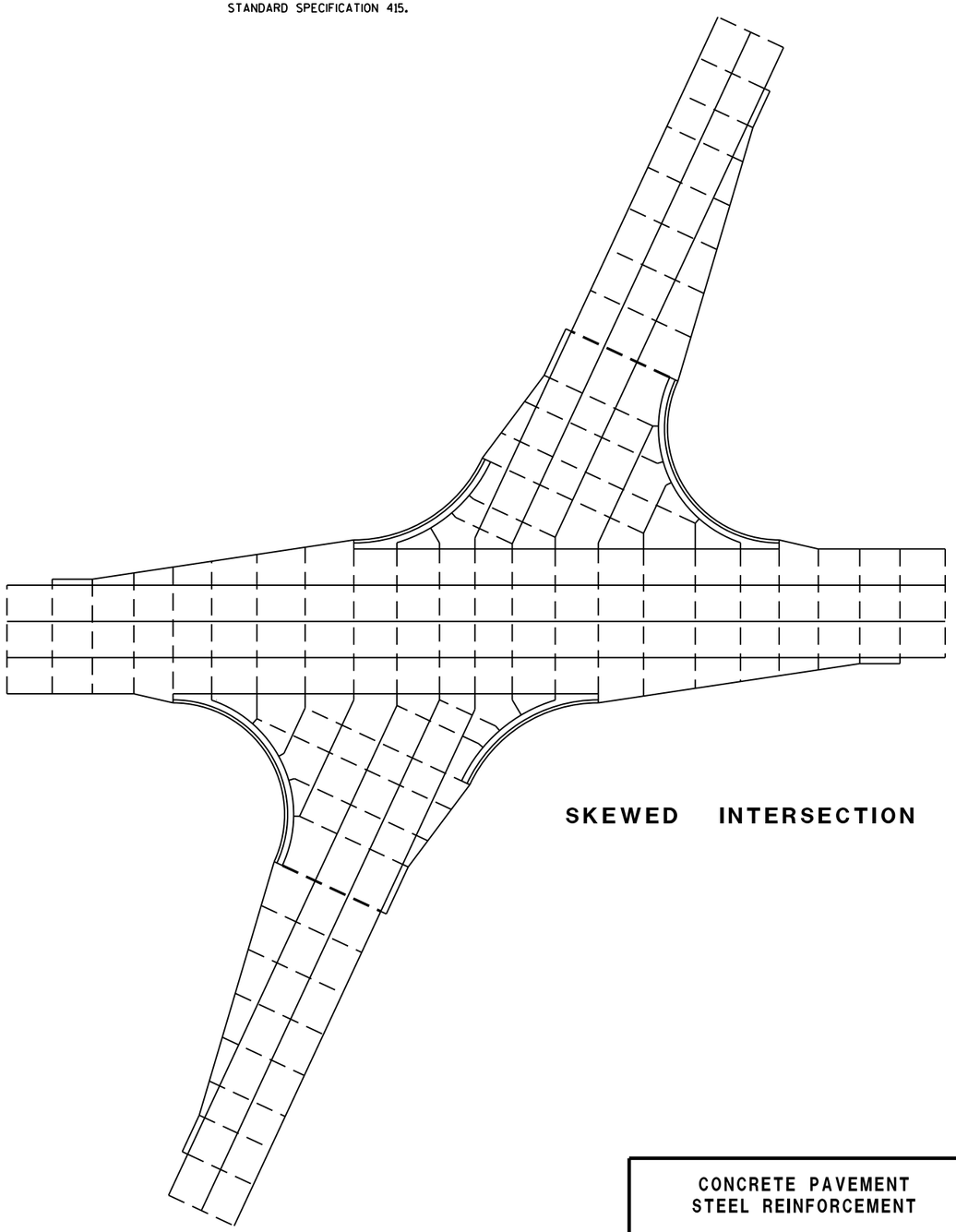
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

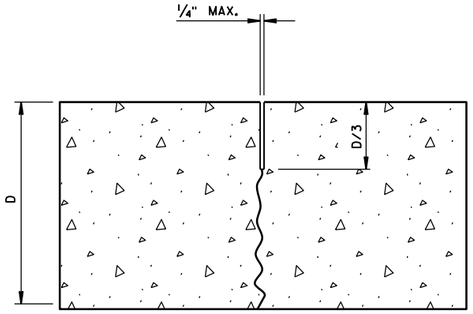
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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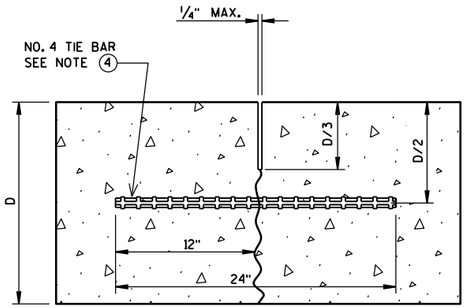
S.D.D. 13 C 18-2b

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S.D.D. 13 C 18-2b



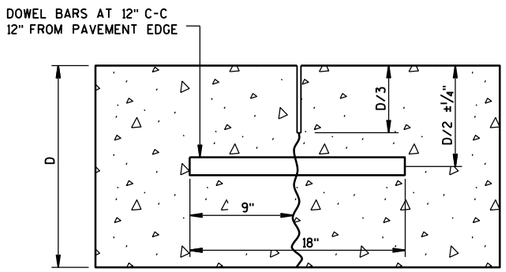
UNDOWELED-TRANSVERSE



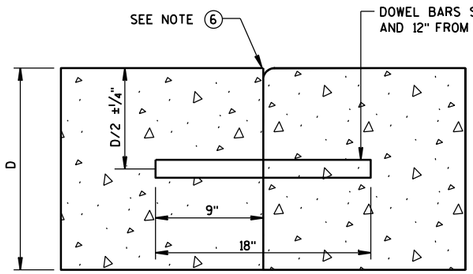
TIED LONGITUDINAL

GENERAL NOTES

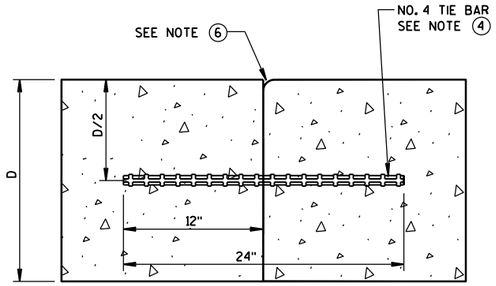
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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



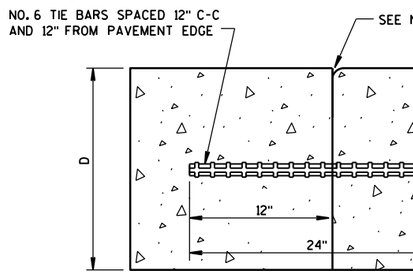
DOWELED TRANSVERSE



TIED LONGITUDINAL

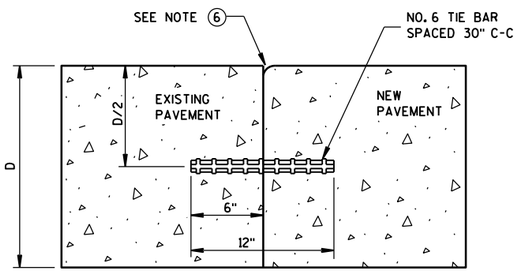
CONTRACTION JOINTS

SEE NOTE (2)



TIED TRANSVERSE

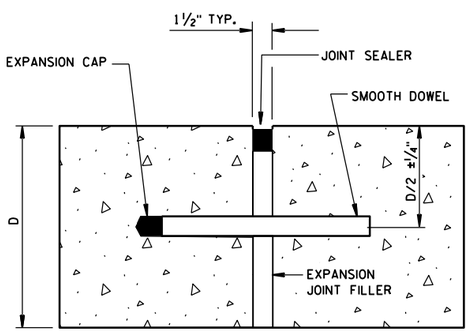
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

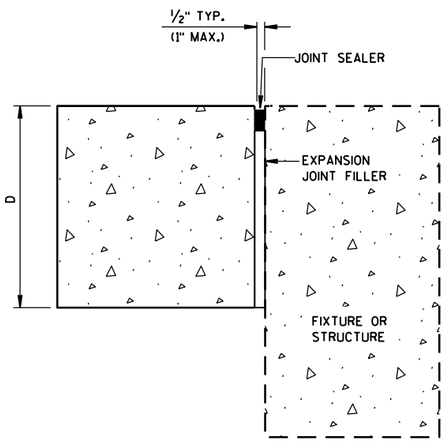
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

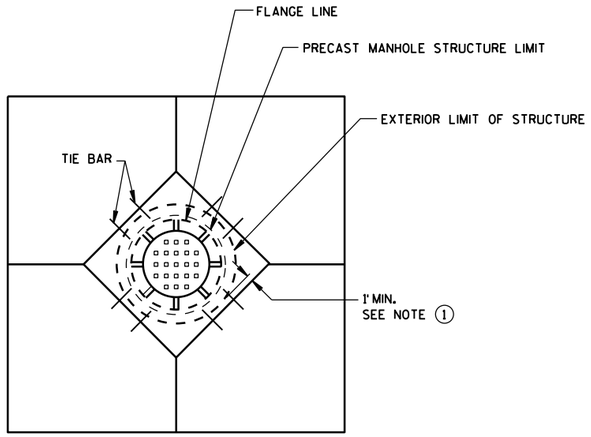
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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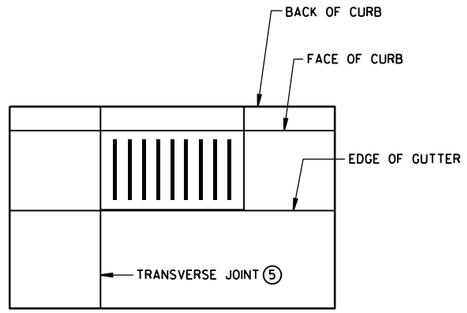
S.D.D. 13 C 18-2c

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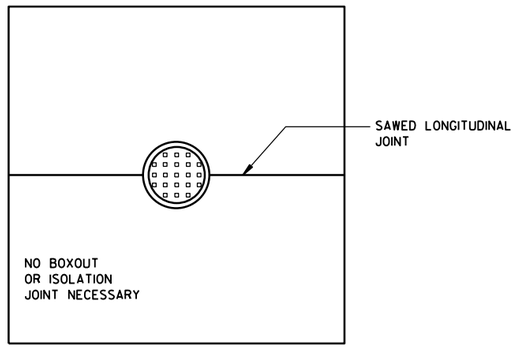
S.D.D. 13 C 18-2c



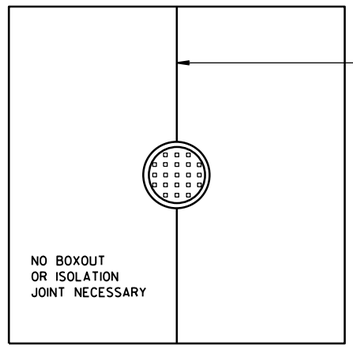
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



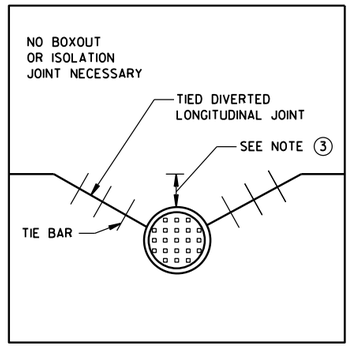
INLET WITH TRANSVERSE JOINT



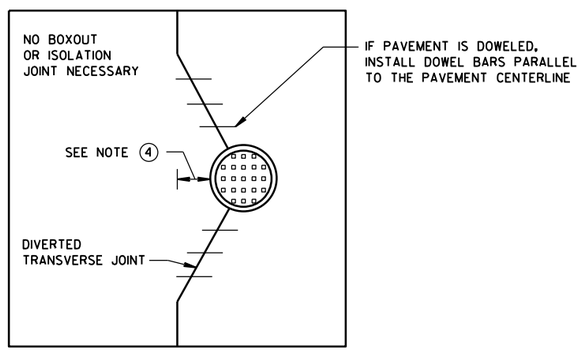
MANHOLE WITH LONGITUDINAL JOINT



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

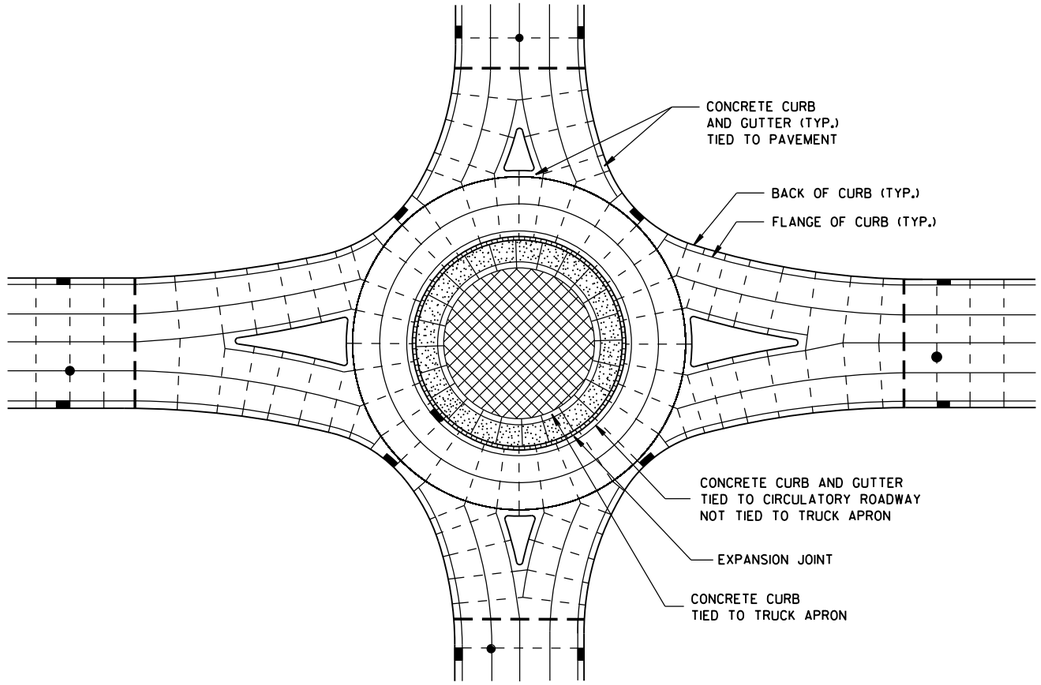
FHWA

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S.D.D. 13 C 18-2d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES



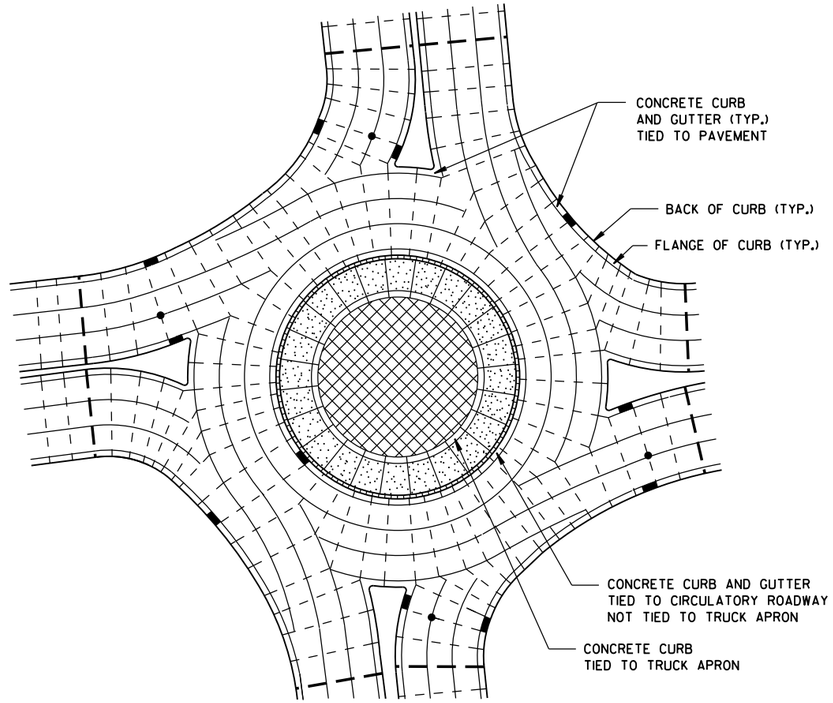
ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

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

6

6

S.D.D. 13 C 18-2e

S.D.D. 13 C 18-2e

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

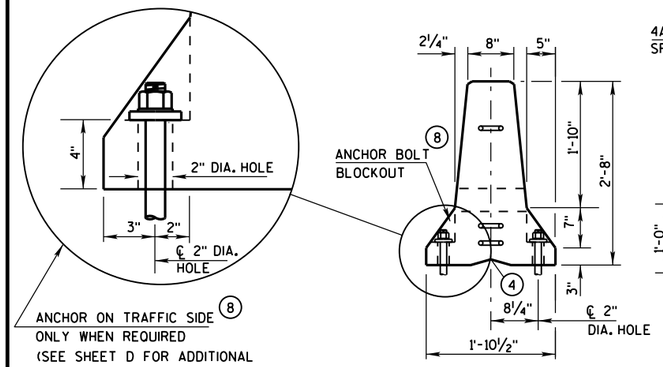
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

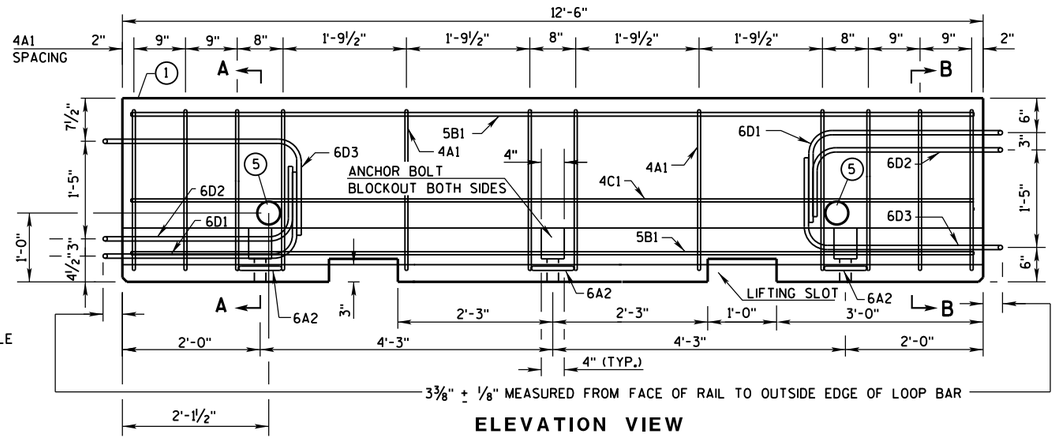
5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER

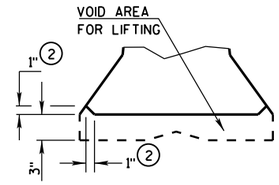
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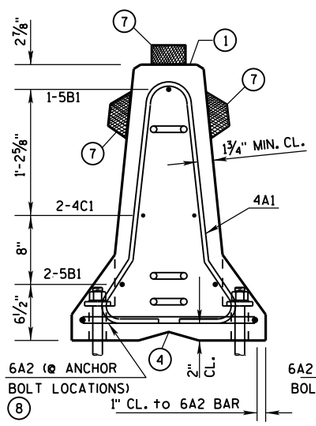
END VIEW



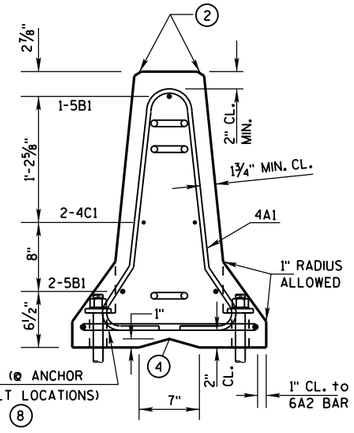
ELEVATION VIEW



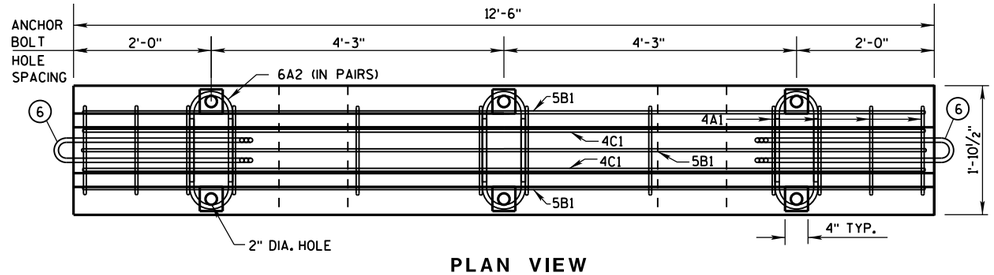
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

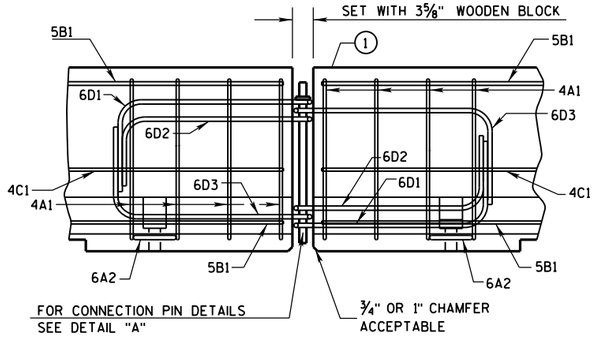


SECTION B-B
(STIRRUP PLACEMENT)

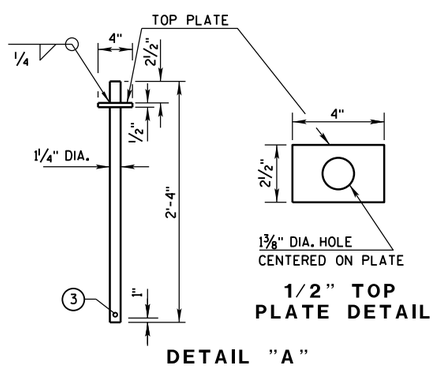


PLAN VIEW

DETAILS OF BARRIER SECTION

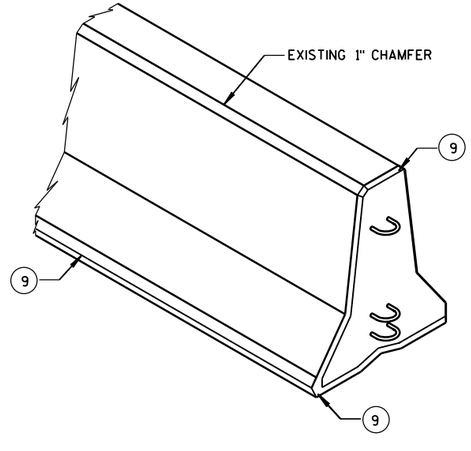


DETAILS OF BARRIER CONNECTION



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.

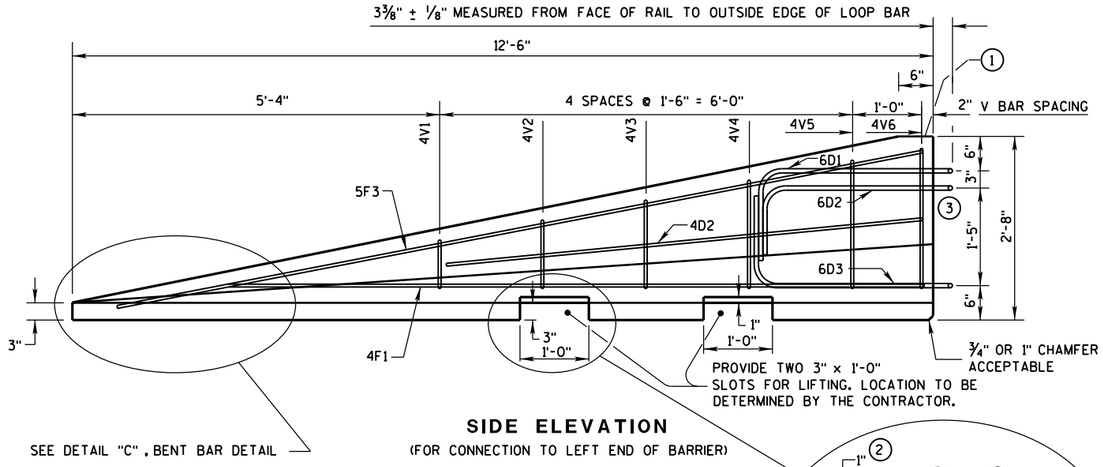
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED 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.

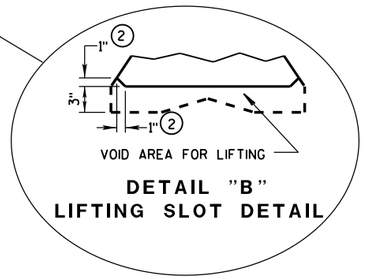
(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

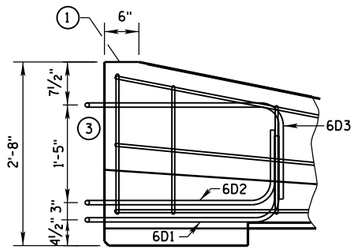
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 585



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



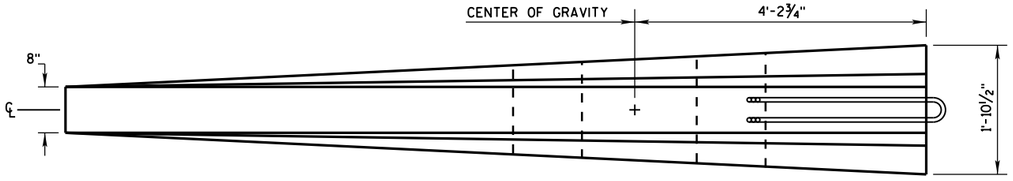
DETAIL "B"
LIFTING SLOT DETAIL



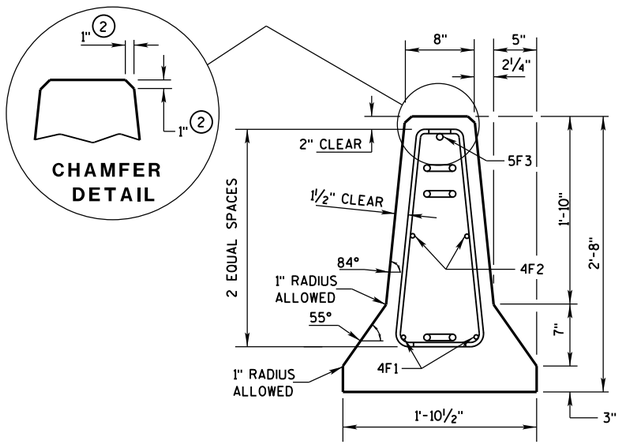
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

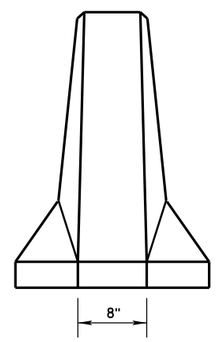
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



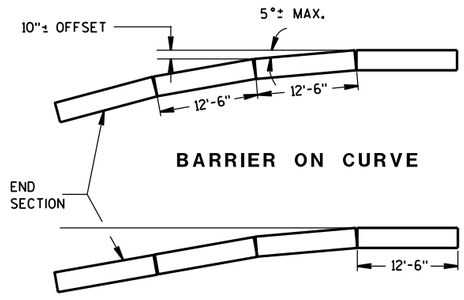
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

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

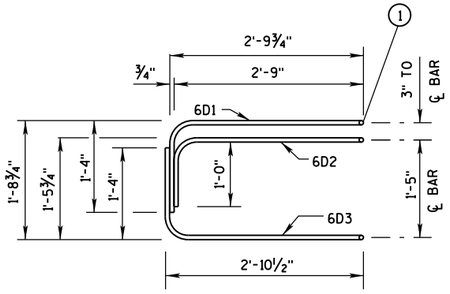
6

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"



ELEVATION
LOOP BAR ASSEMBLY

DETAIL "C"
BENT BAR DETAIL

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

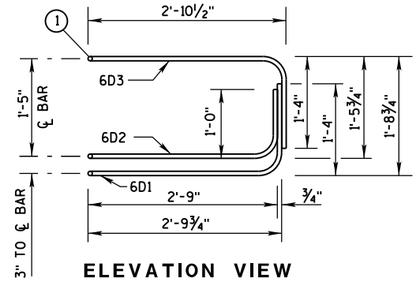
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

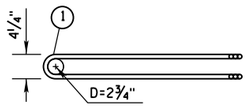
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

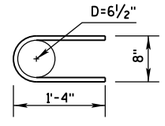
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



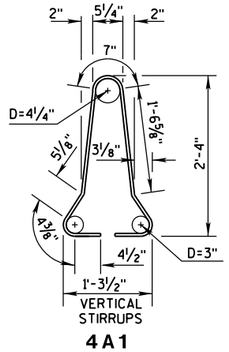
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

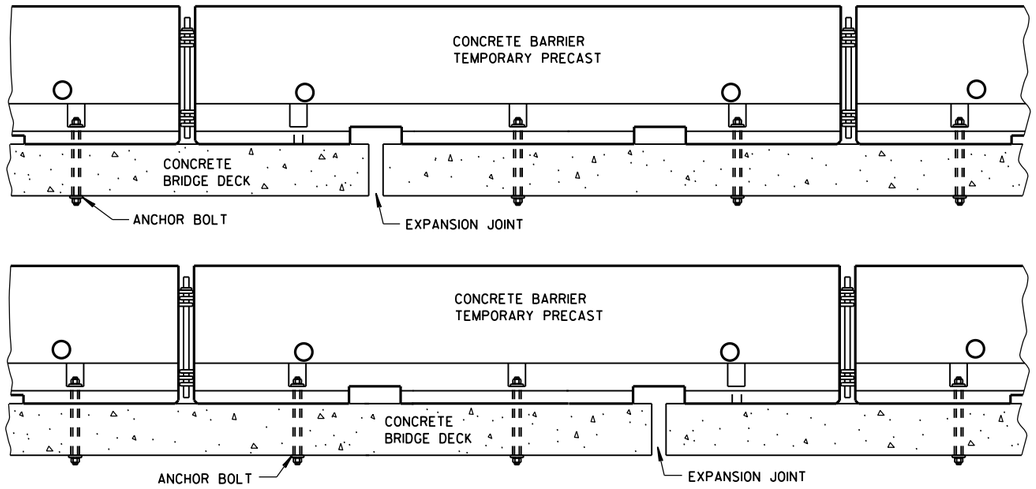
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

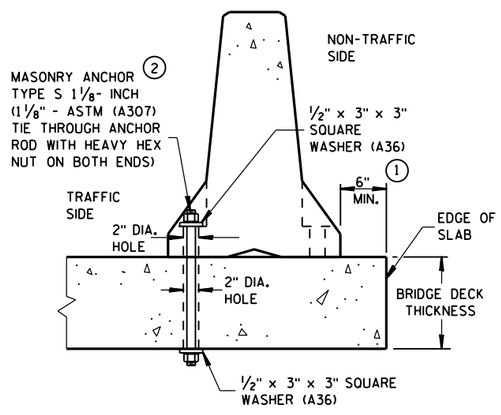
6

S.D.D. 14 B 7-14c



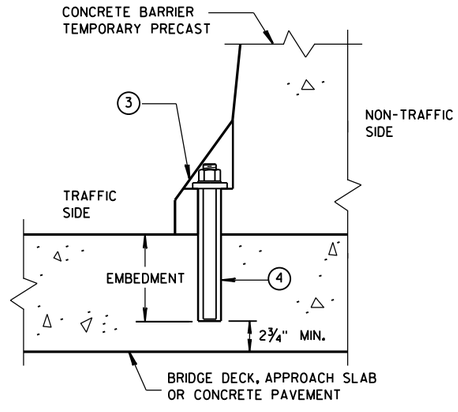
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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.)



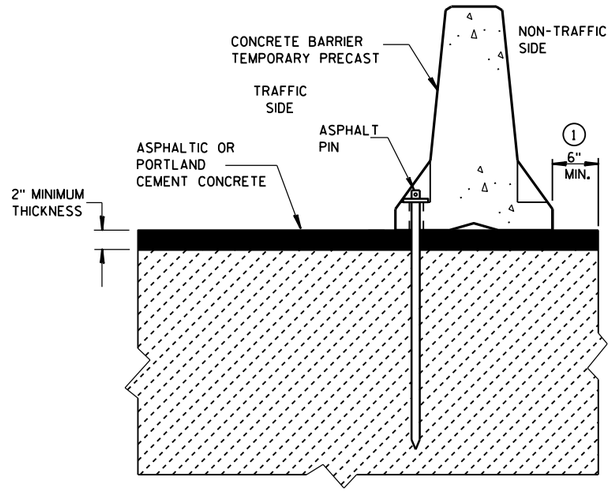
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



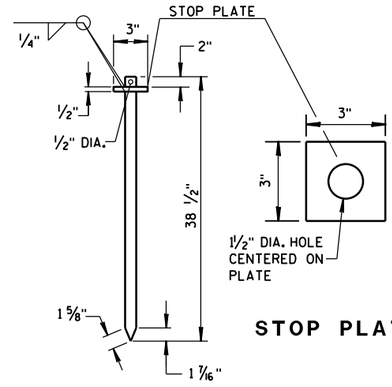
REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

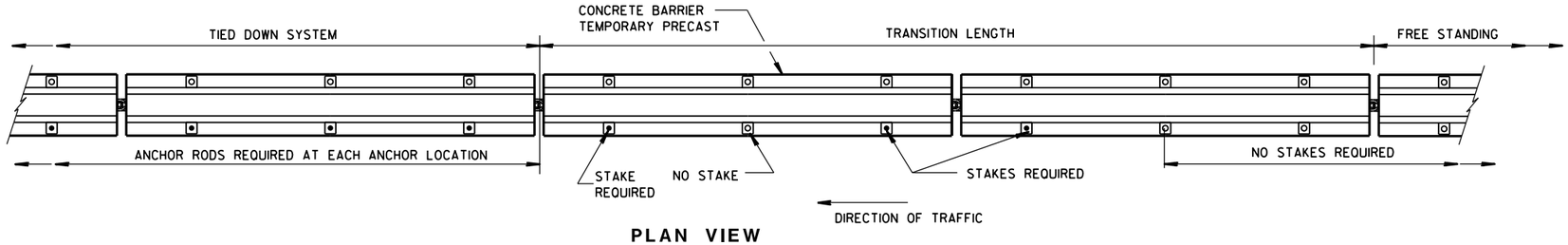
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



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.)

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.

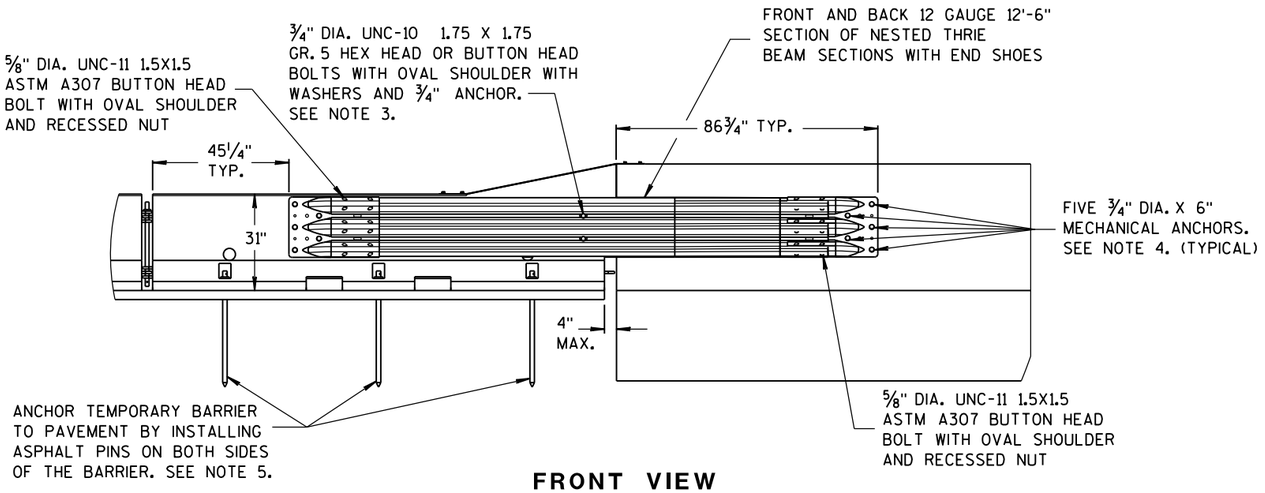
④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

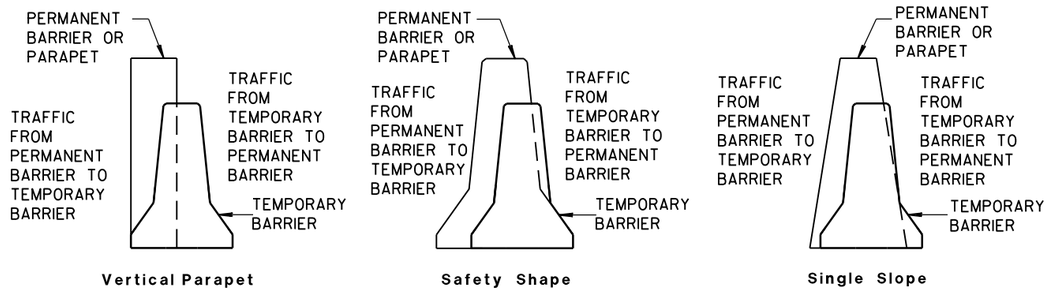
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW



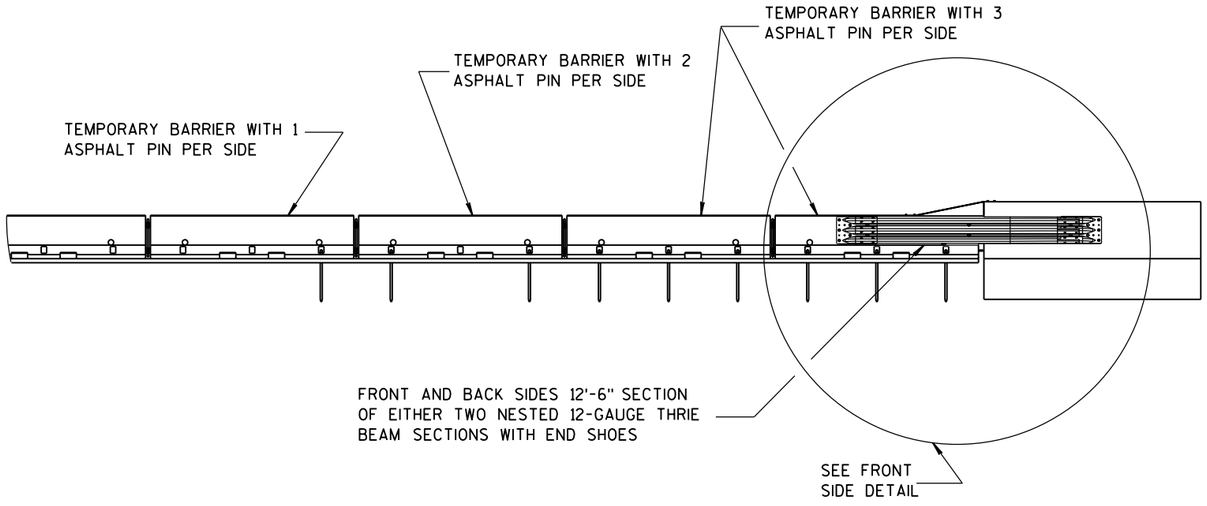
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

NOTES

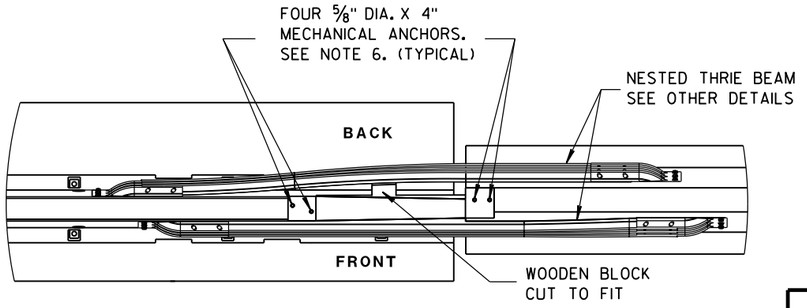
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

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"

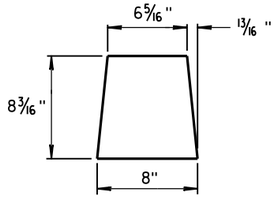
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

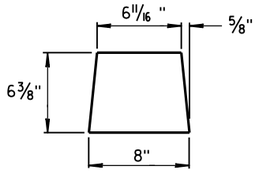
S.D.D. 14 B 7-14e

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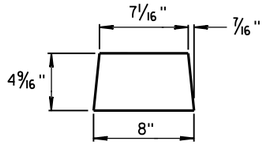
S.D.D. 14 B 7-14e



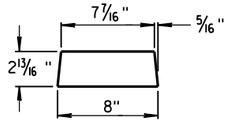
GUSSET 1



GUSSET 2

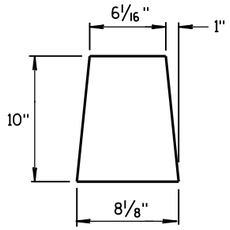


GUSSET 3

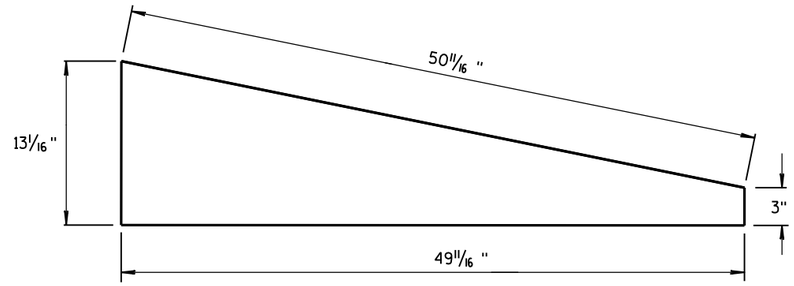


GUSSET 4

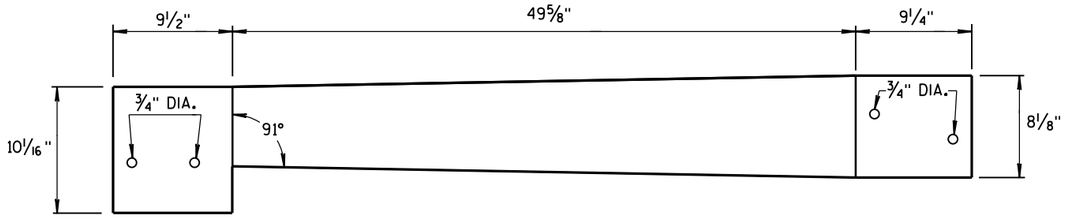
GUSSETS

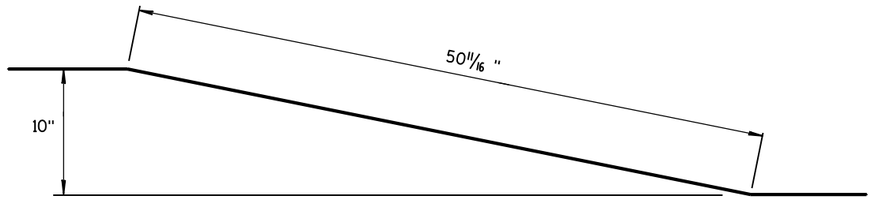


END PLATE



SIDE PLATE

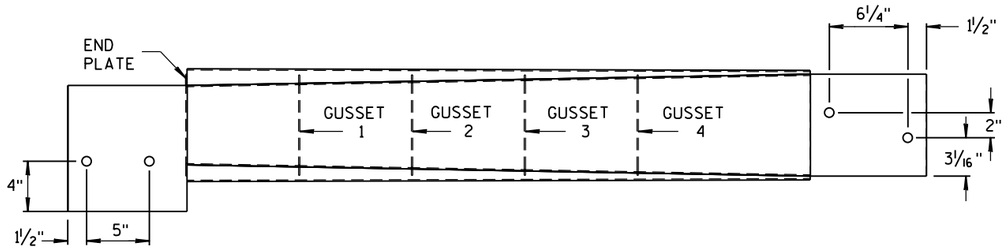


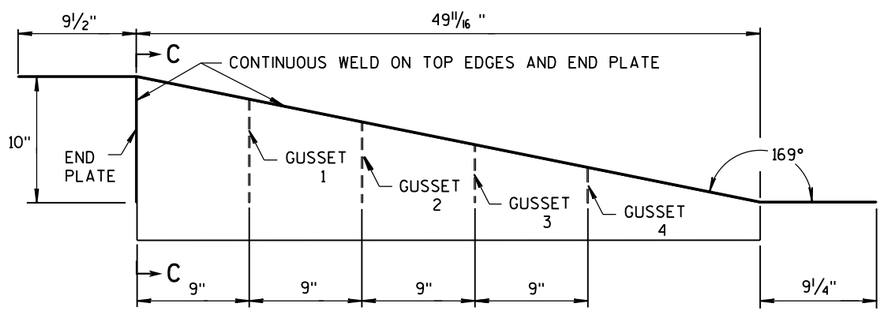


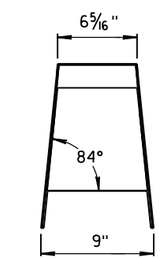
TOP PLATE

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

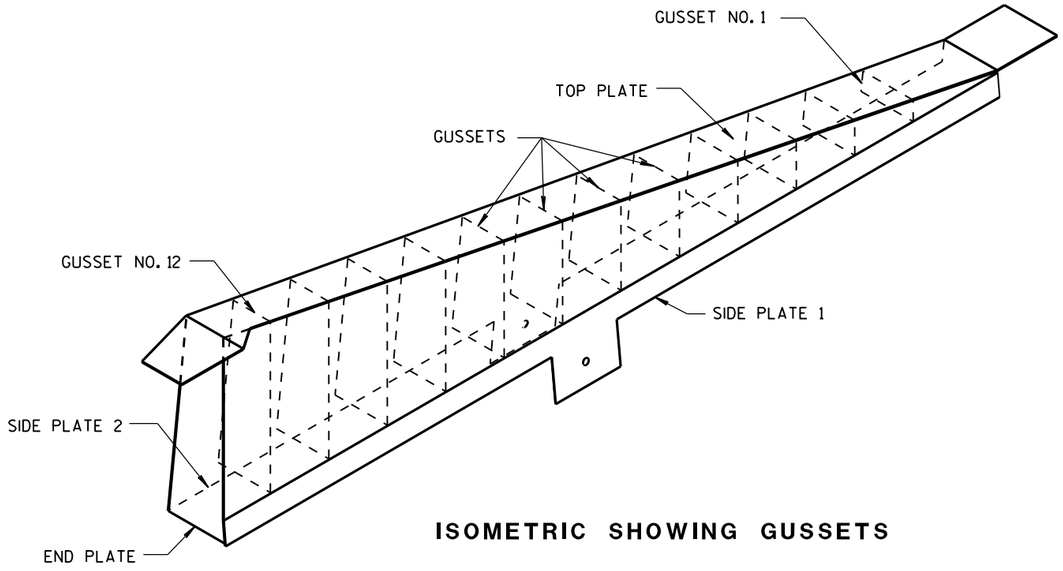
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

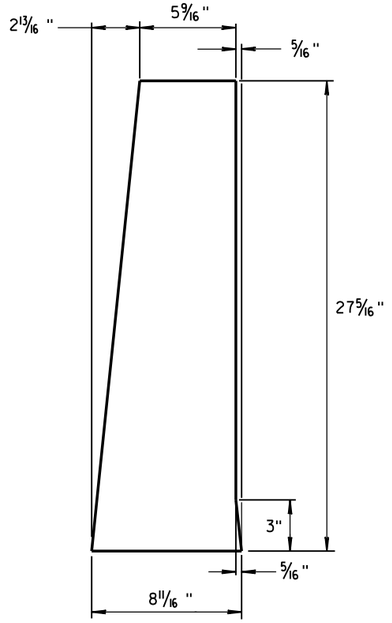
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14f

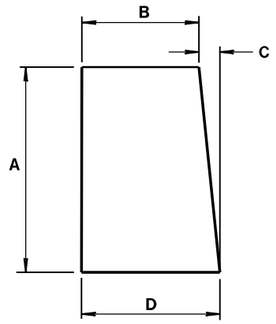


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



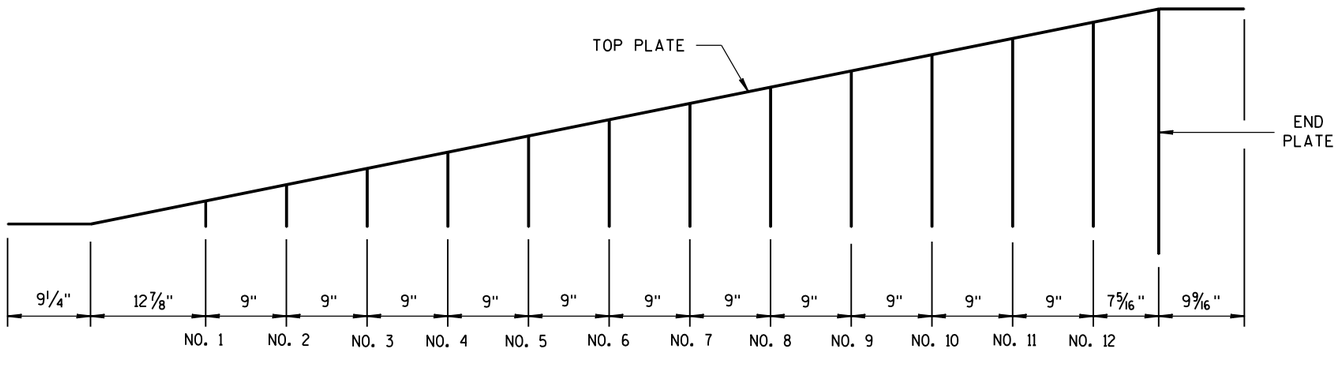
GUSSETS 1 - 12

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

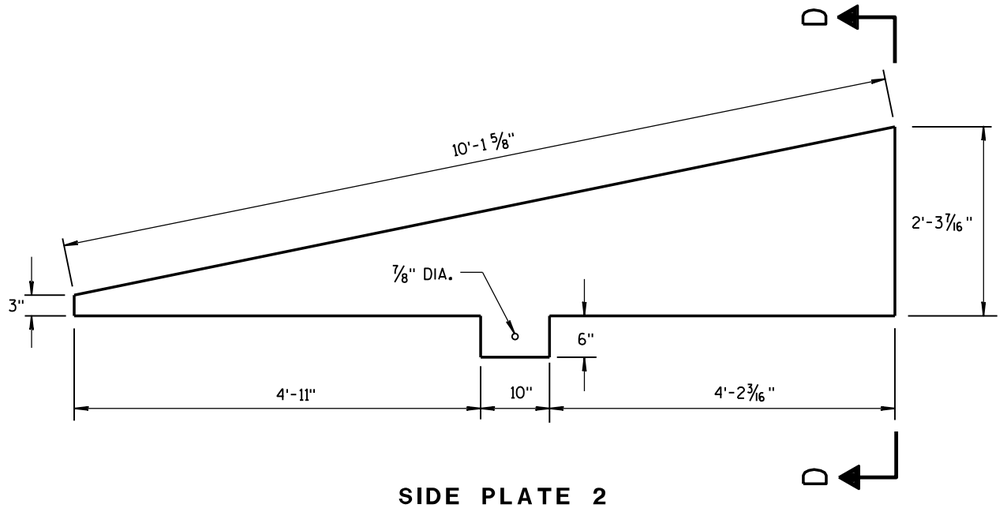
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

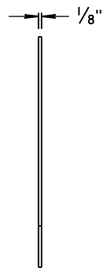
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

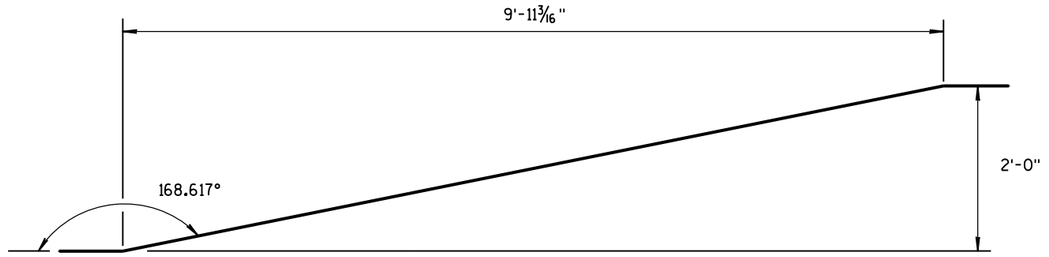
S.D.D. 14 B 7-14g



SIDE PLATE 2

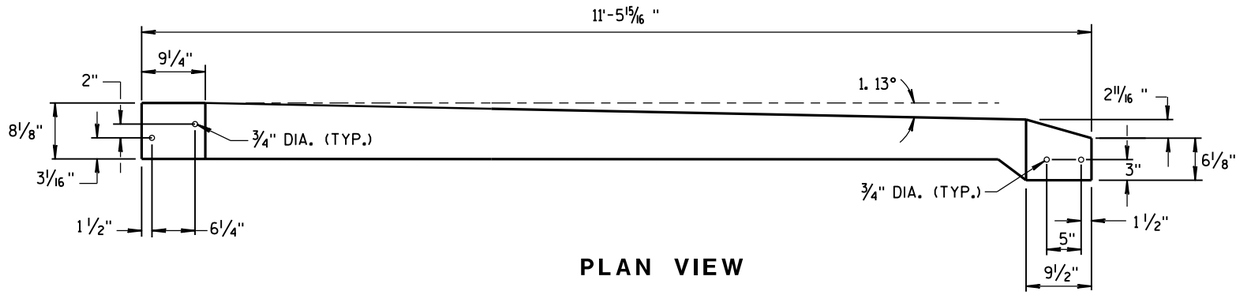


END VIEW



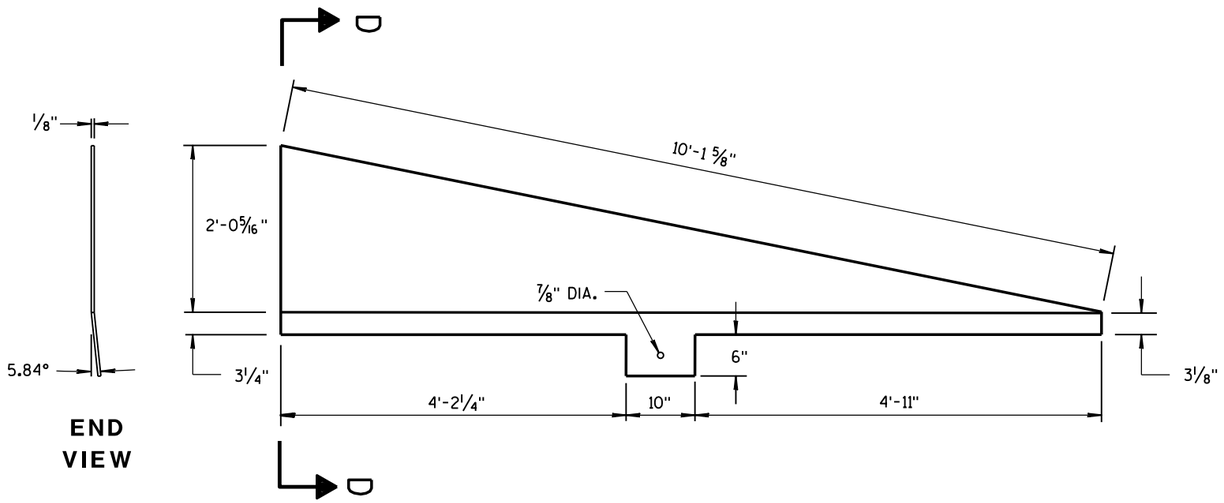
SIDE VIEW

TOP PLATE



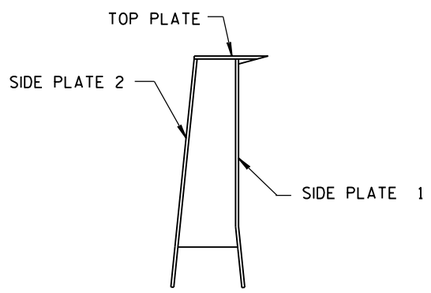
PLAN VIEW

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

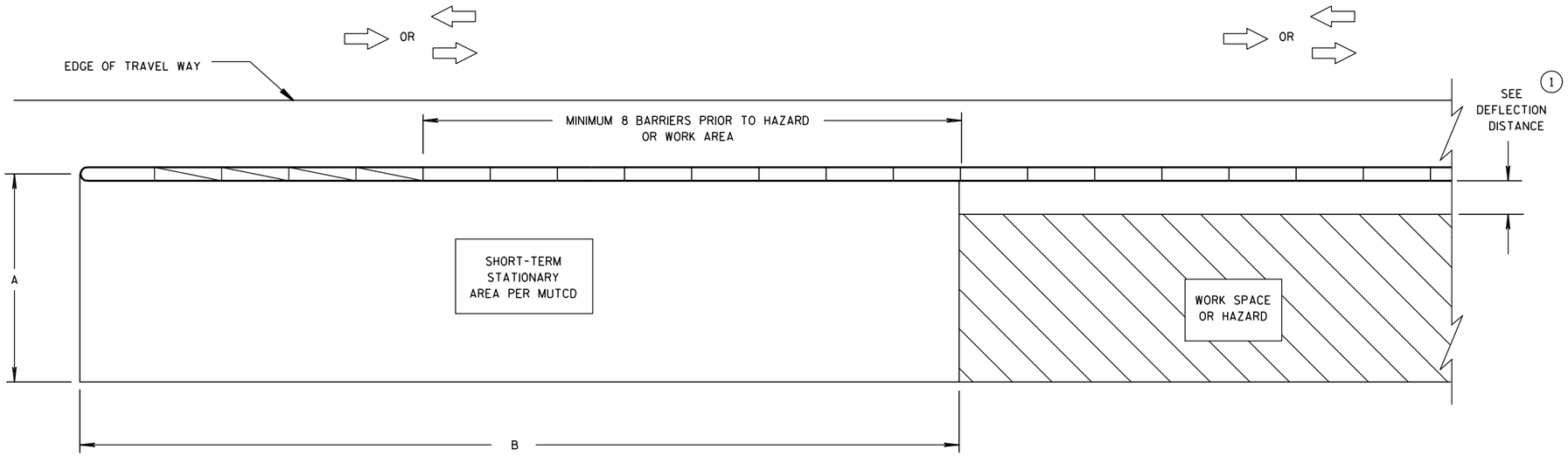
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 7-14h

6

S.D.D. 14 B 7-14h



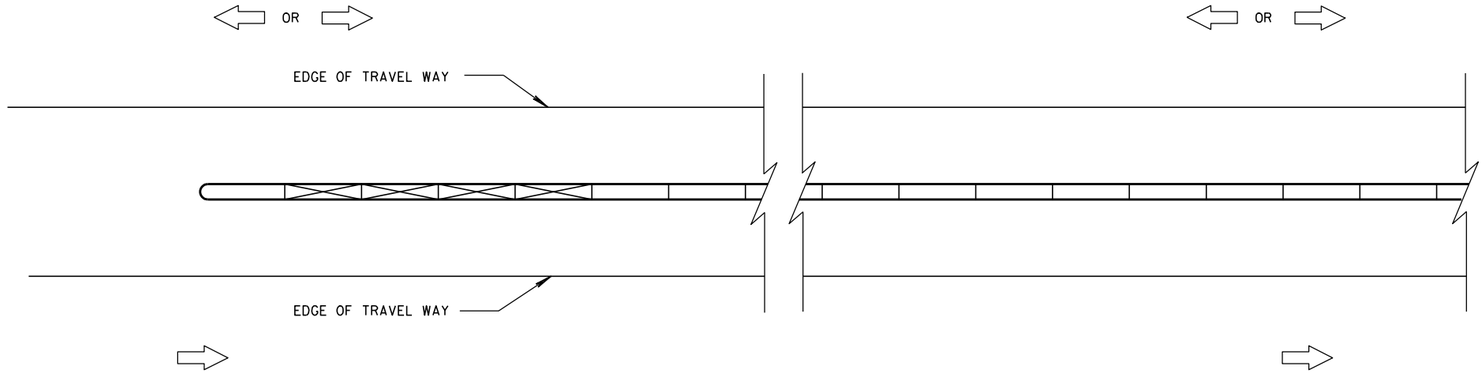
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

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.

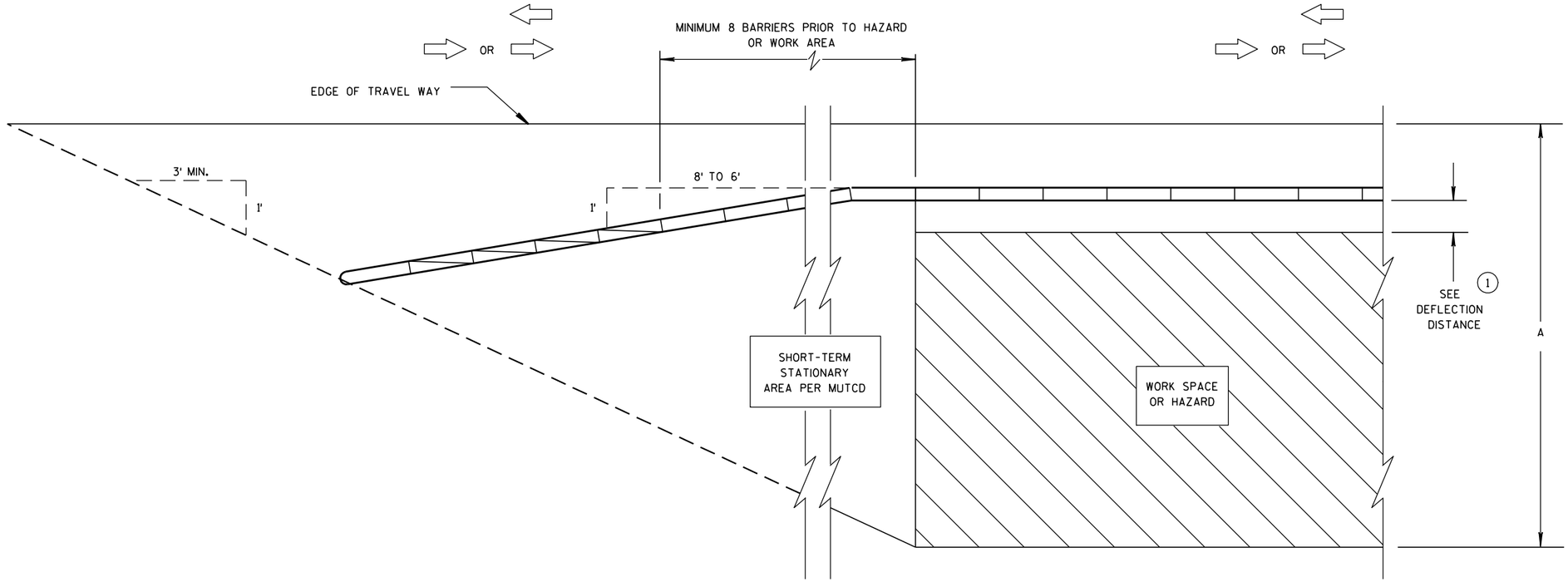
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

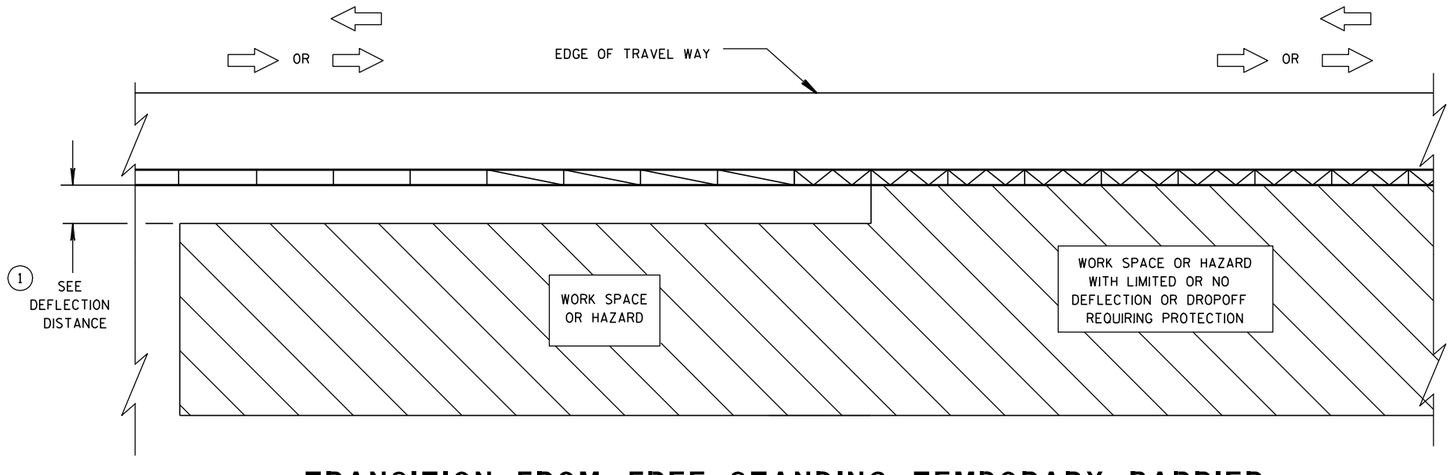
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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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

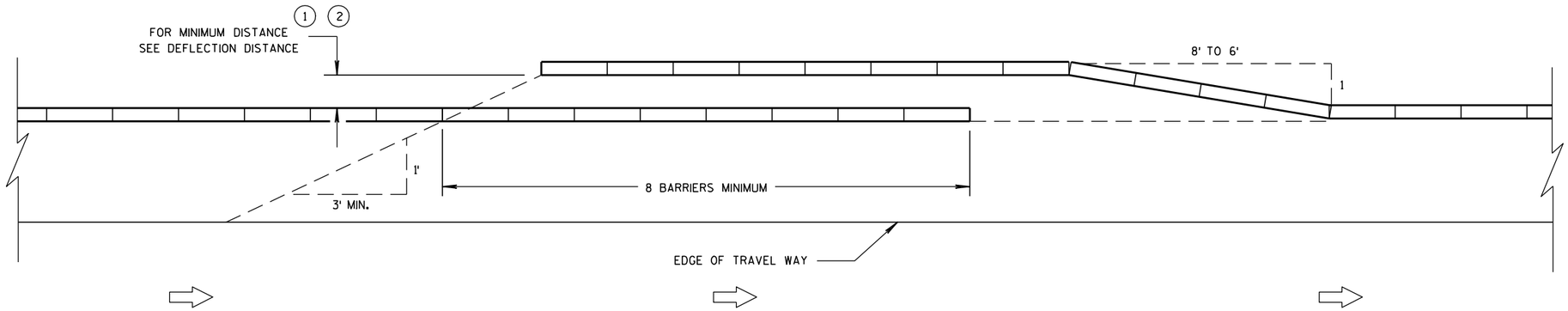
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

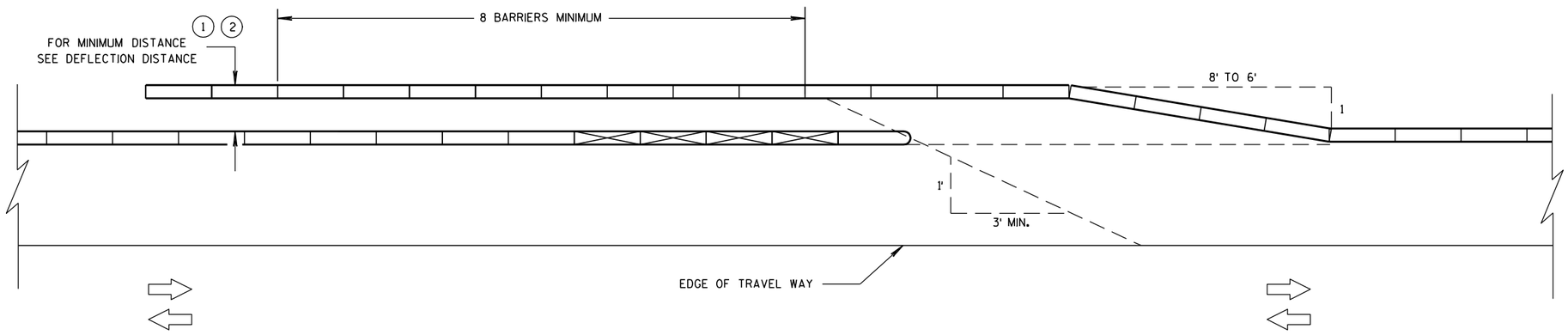
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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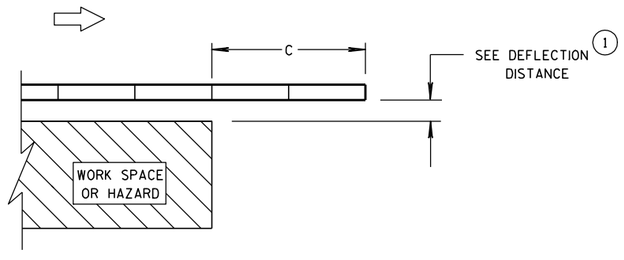
S.D.D. 14 B 8-1b



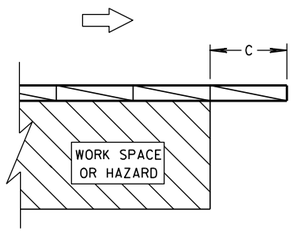
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

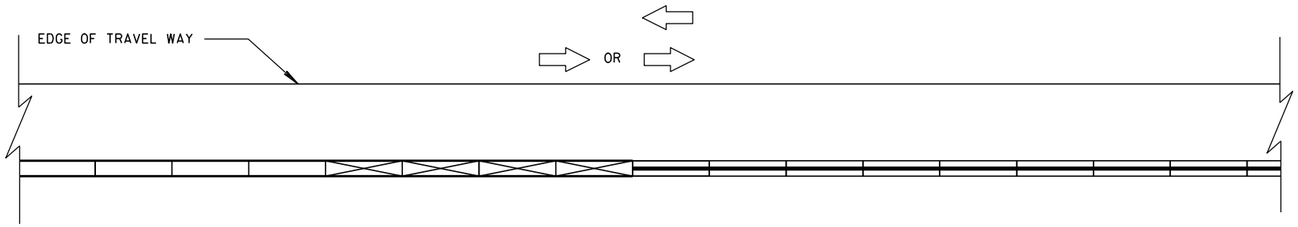
LEGEND

- 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

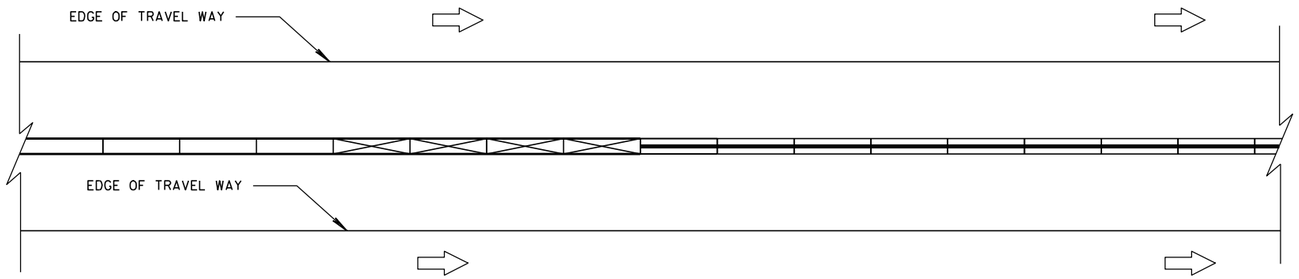
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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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

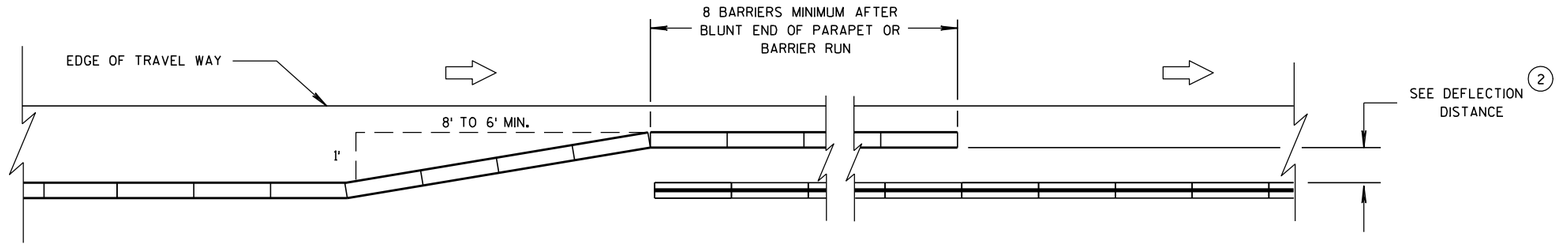
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

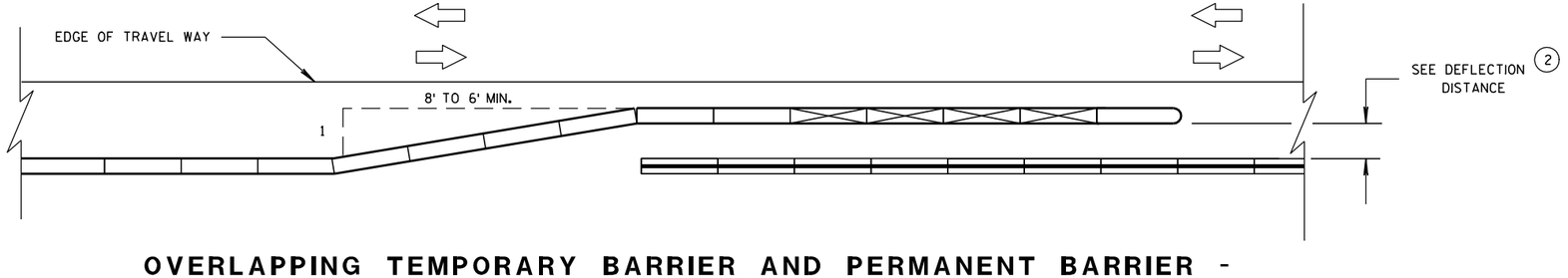
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

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 TRANSPO...

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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

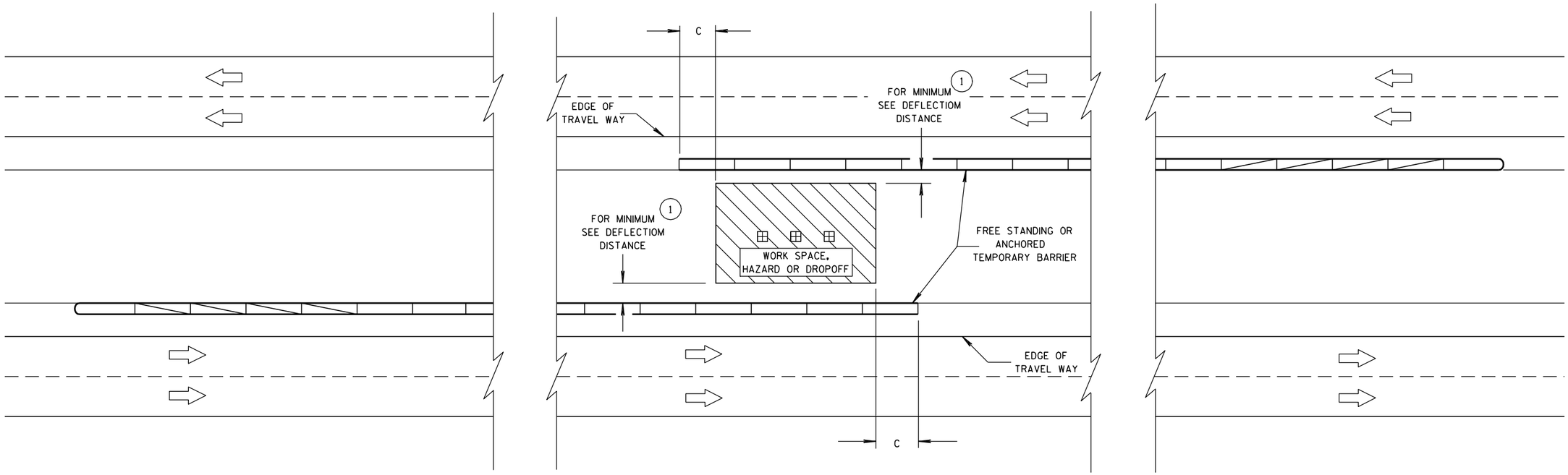
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

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



6

6

S.D.D. 14 B 8-1e

S.D.D. 14 B 8-1e

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

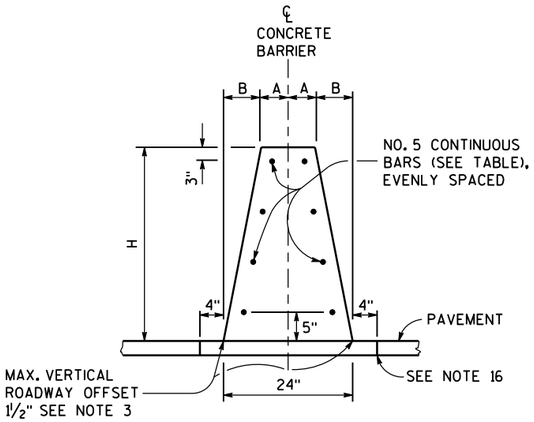
APPROVED

8/31/2012
DATE

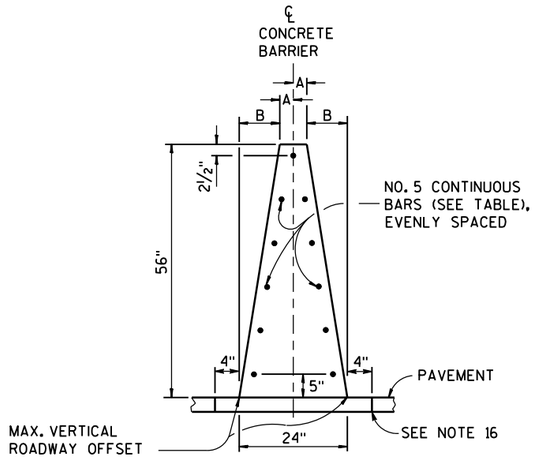
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

597

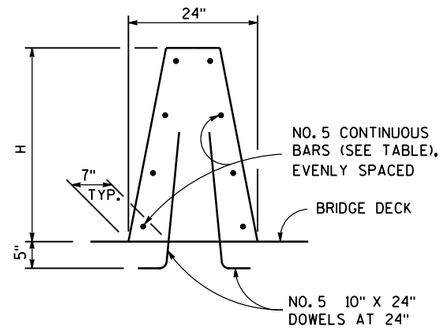
FHWA



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)



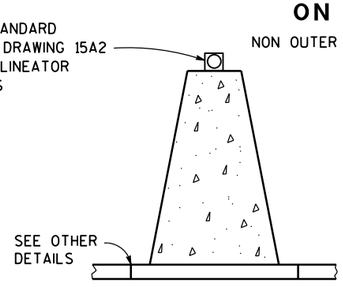
SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

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



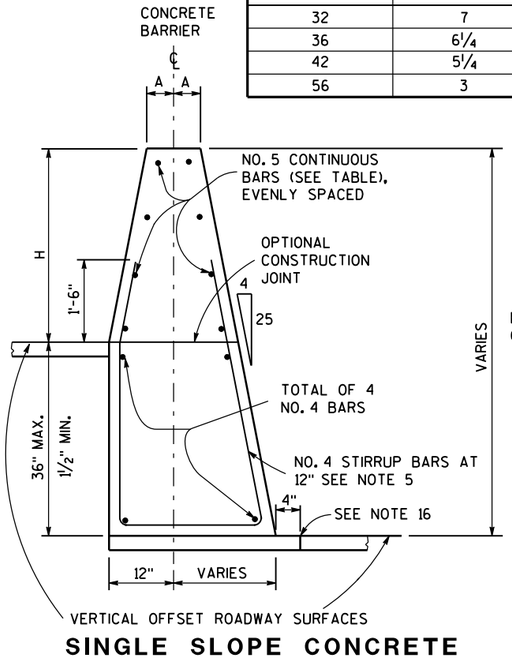
DELINEATION

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

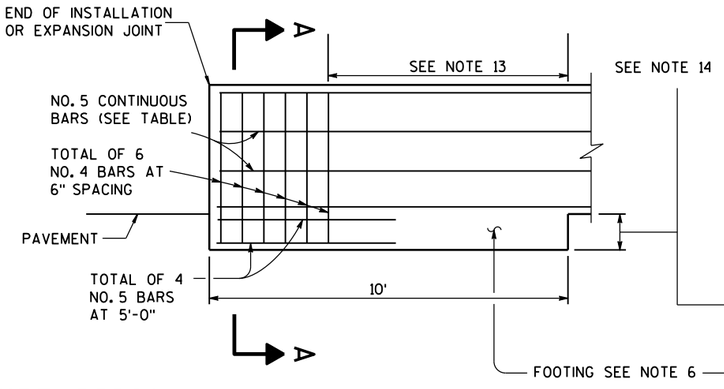
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	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	



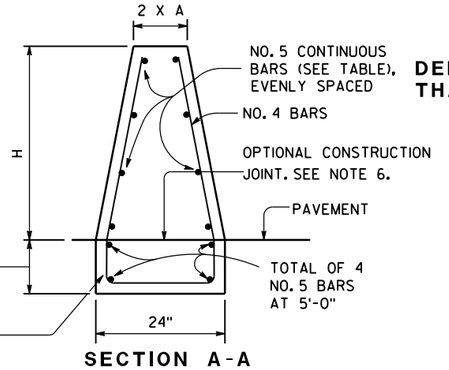
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT

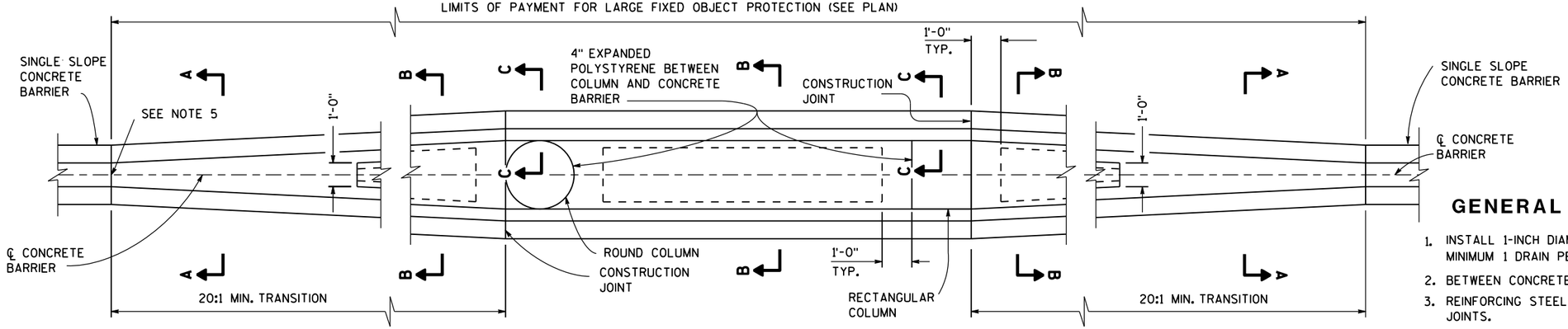


SECTION A-A

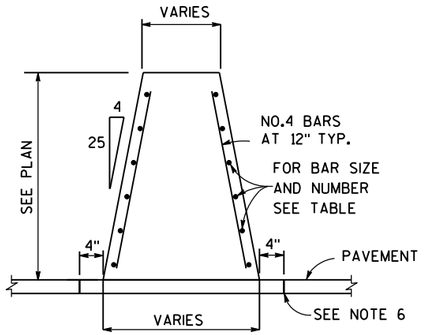
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

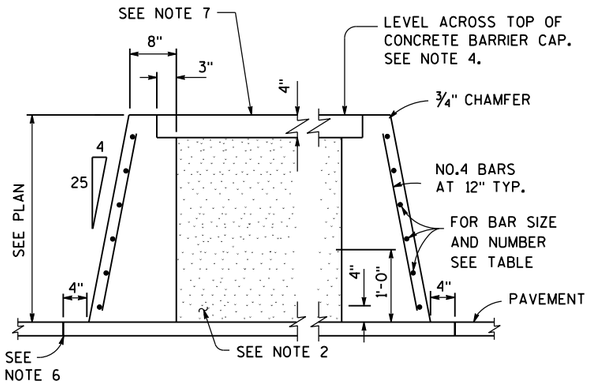
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S.D.D. 14 B 32-3a



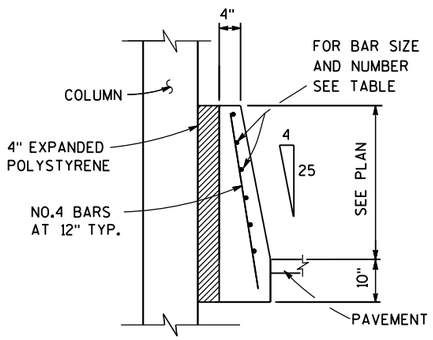
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



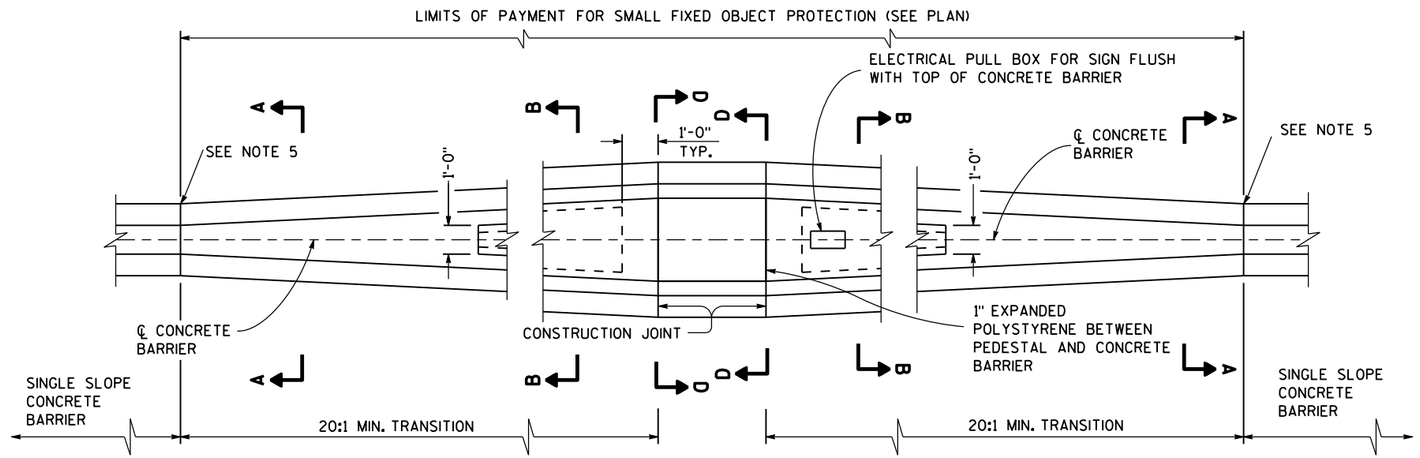
SECTION A-A



SECTION B-B



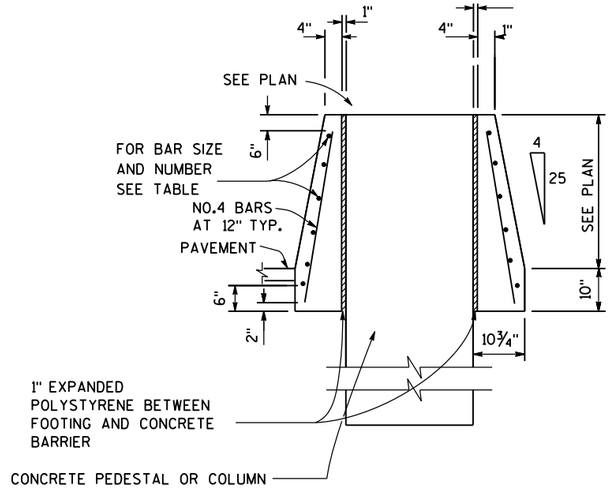
SECTION C-C



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

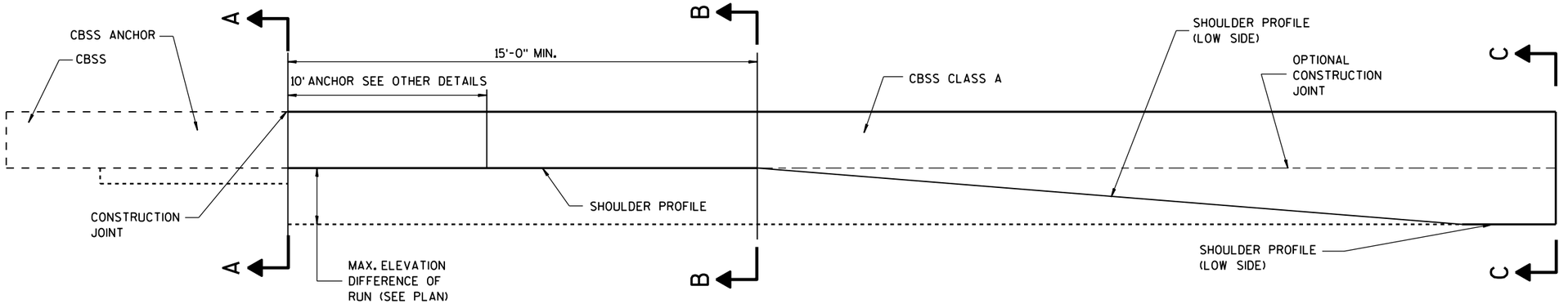
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

CONCRETE BARRIER SINGLE SLOPE (CBSS)

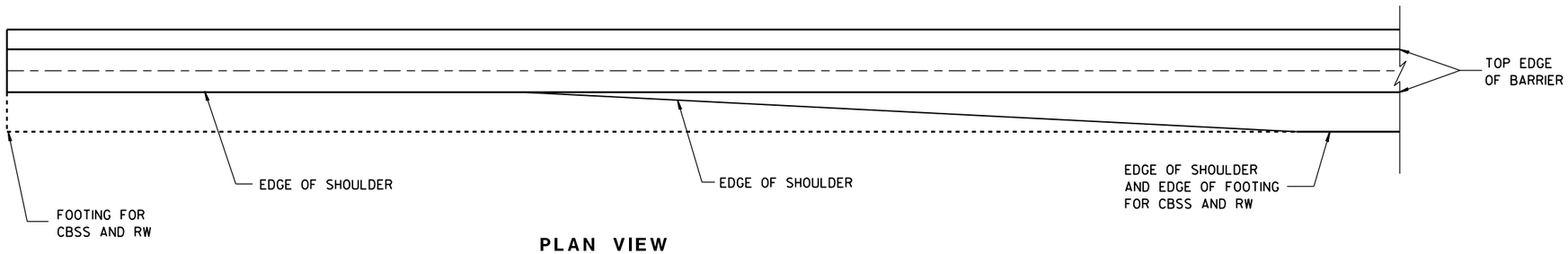
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

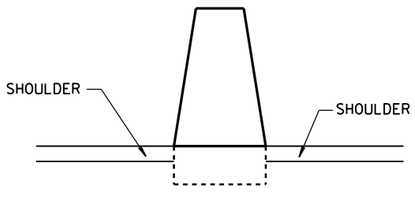
S.D.D. 14 B 32-3b



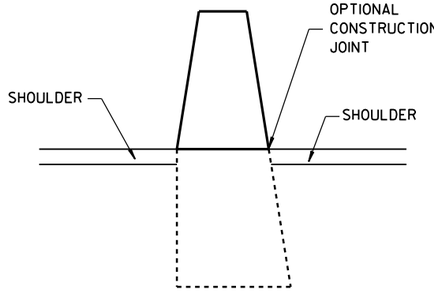
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



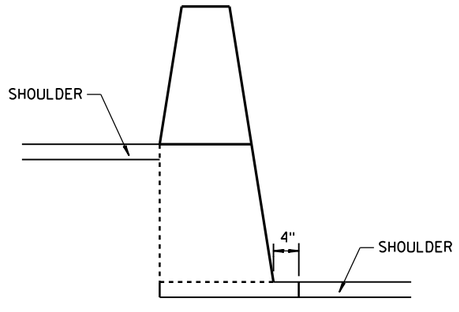
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



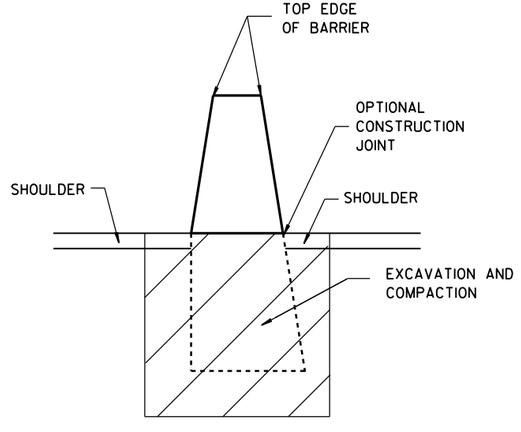
SECTION A-A



SECTION B-B



SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

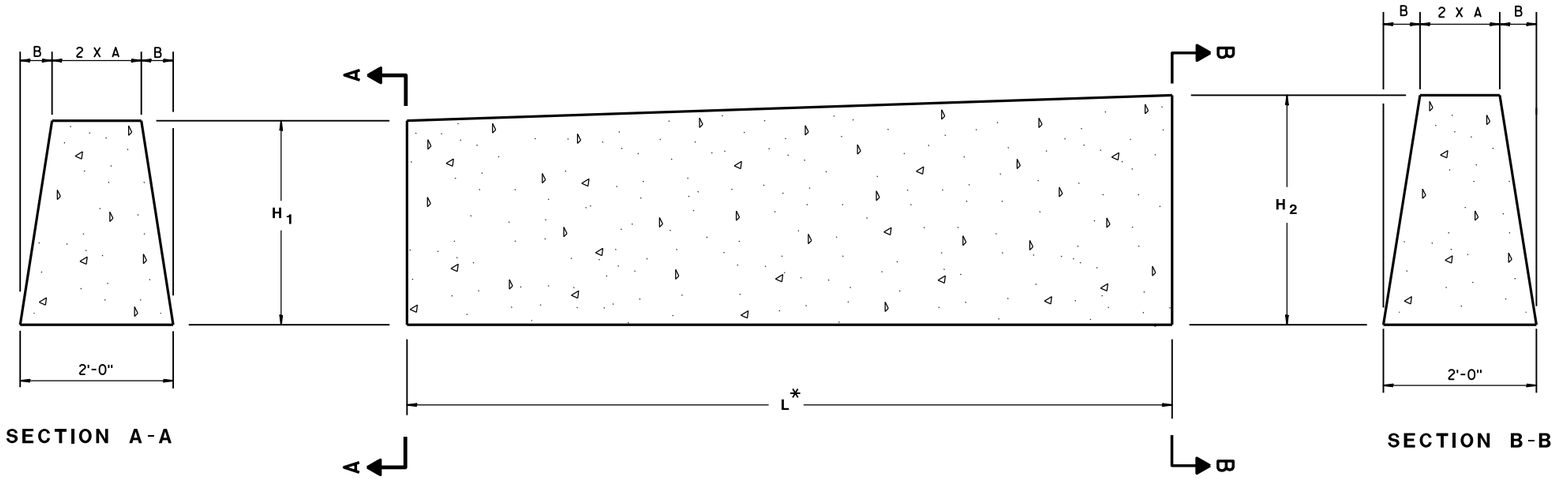
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 600

6

S.D.D. 14 B 32-3c

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

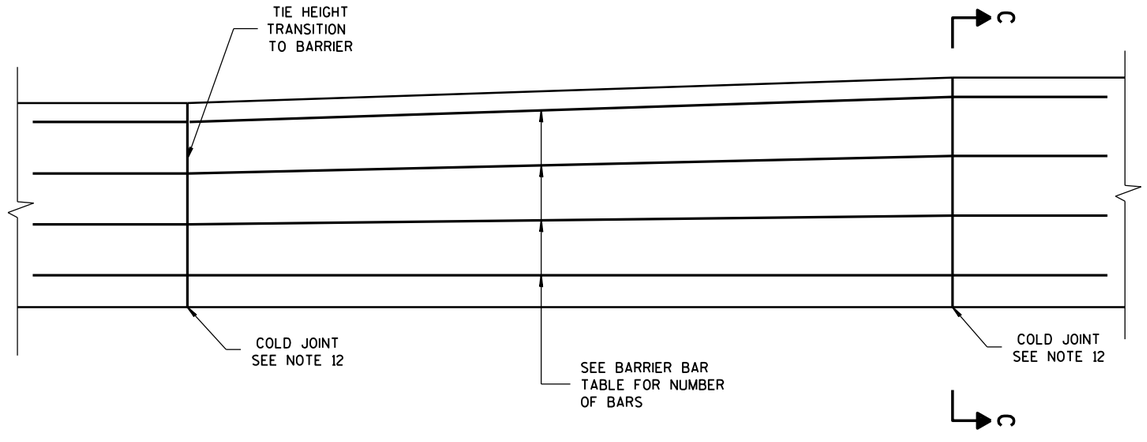
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

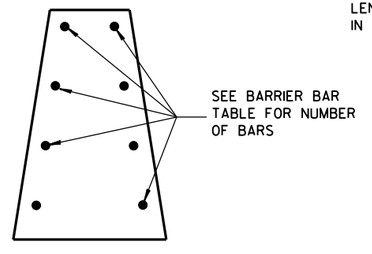
BARRIER BARS

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.



STEEL REINFORCEMENT DETAIL



SECTION C-C

CONCRETE BARRIER SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2014 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

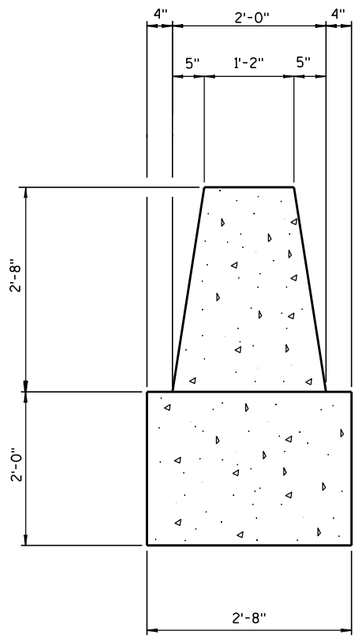
FHWA

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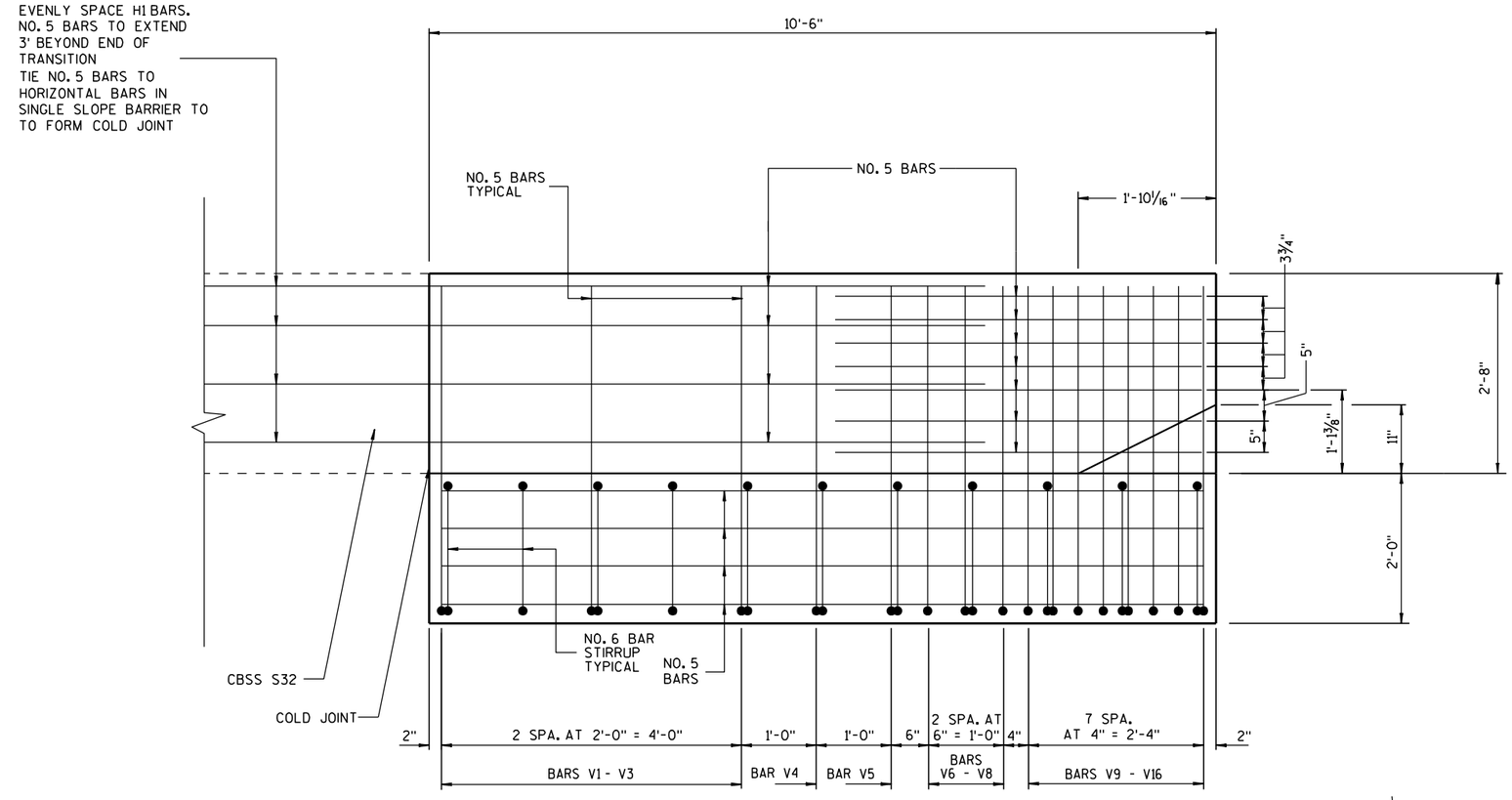
S.D.D. 14 B 32-3d

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S.D.D. 14 B 32-3d

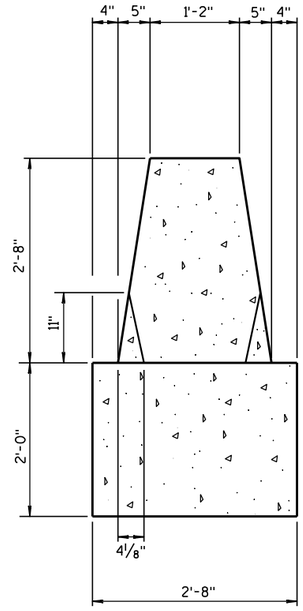


SECTION A-A

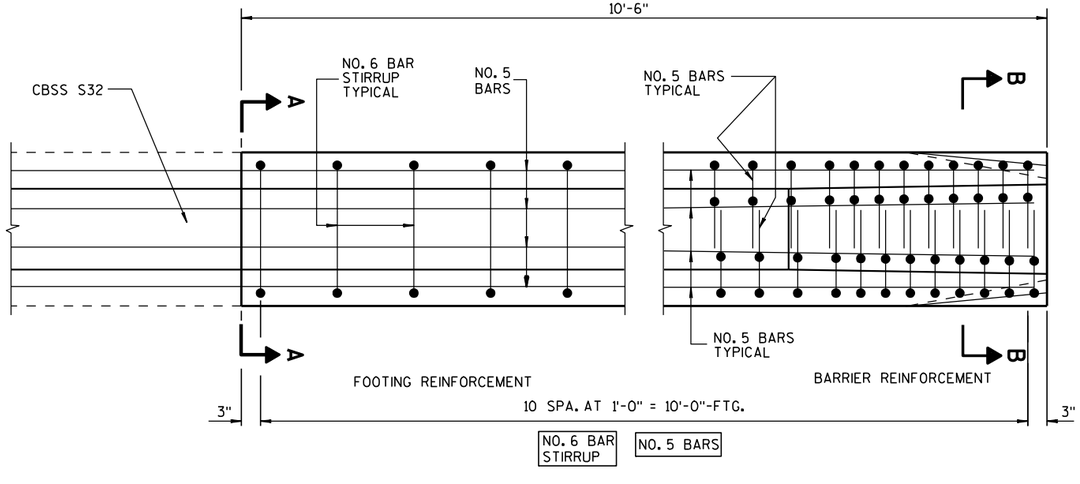


SEE SECTIONS (1) THRU (16)

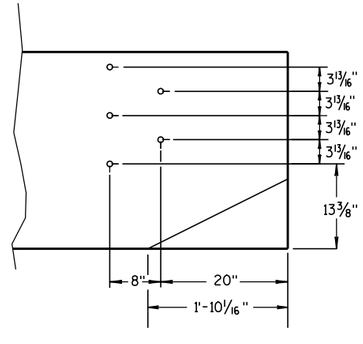
ELEVATION VIEW



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.

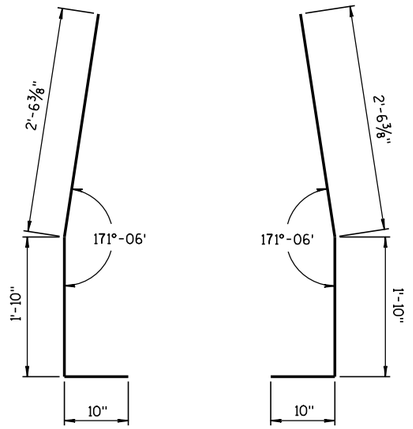
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

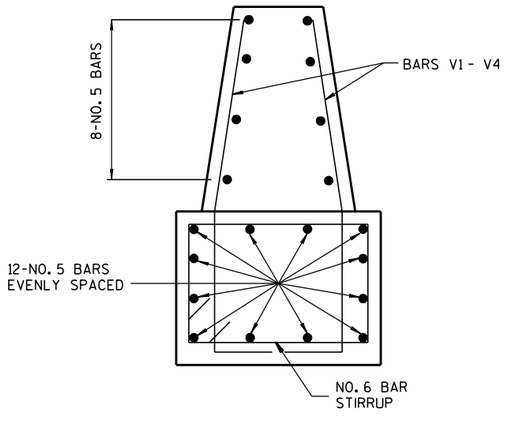
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

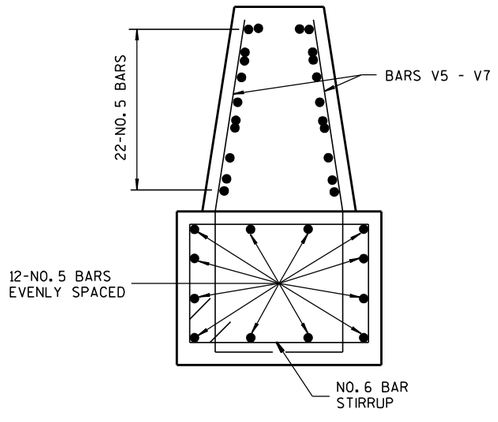
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S.D.D. 14 B 33-1a



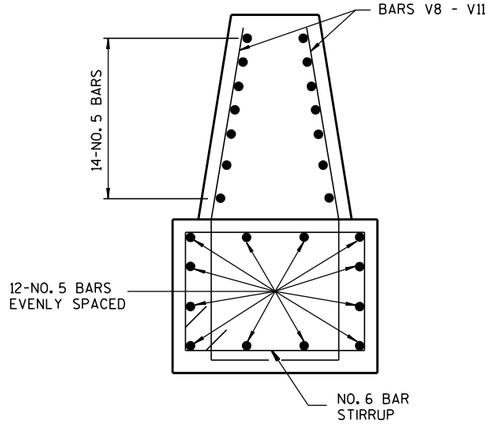
BAR BENDING DETAIL
FOR BARS V1 - V11



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

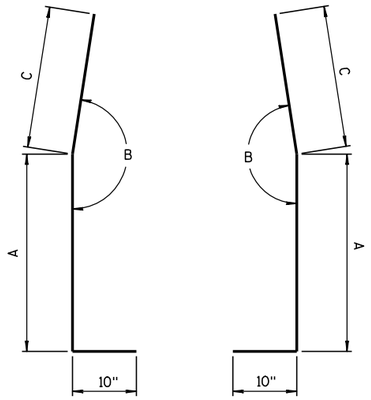
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 33-1b

BAR CHART
SECTIONS V12 - V13

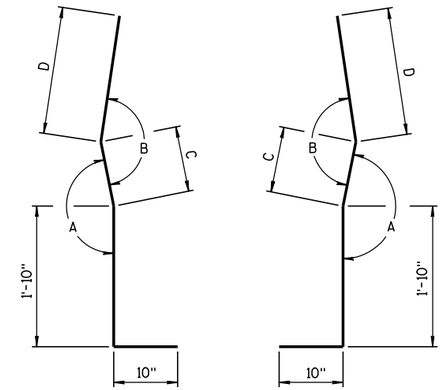
BAR	A	B	C
V12	2'-2"	171°-15'	2'-1 3/4"
V13	2'-7"	171°-05'	1'-9 3/8"



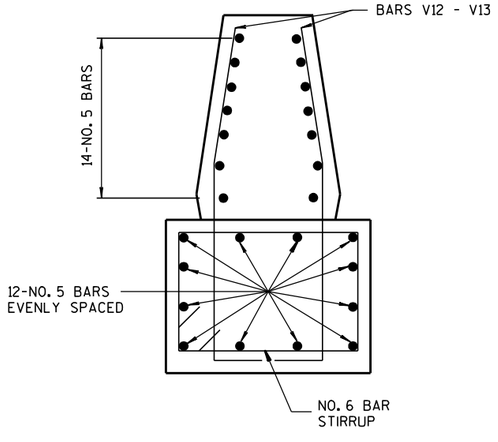
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

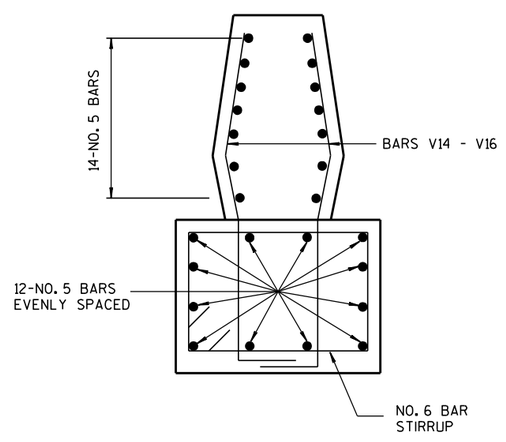
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



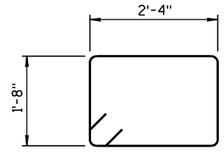
BAR BENDING DETAIL
FOR BARS V14 - V16



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

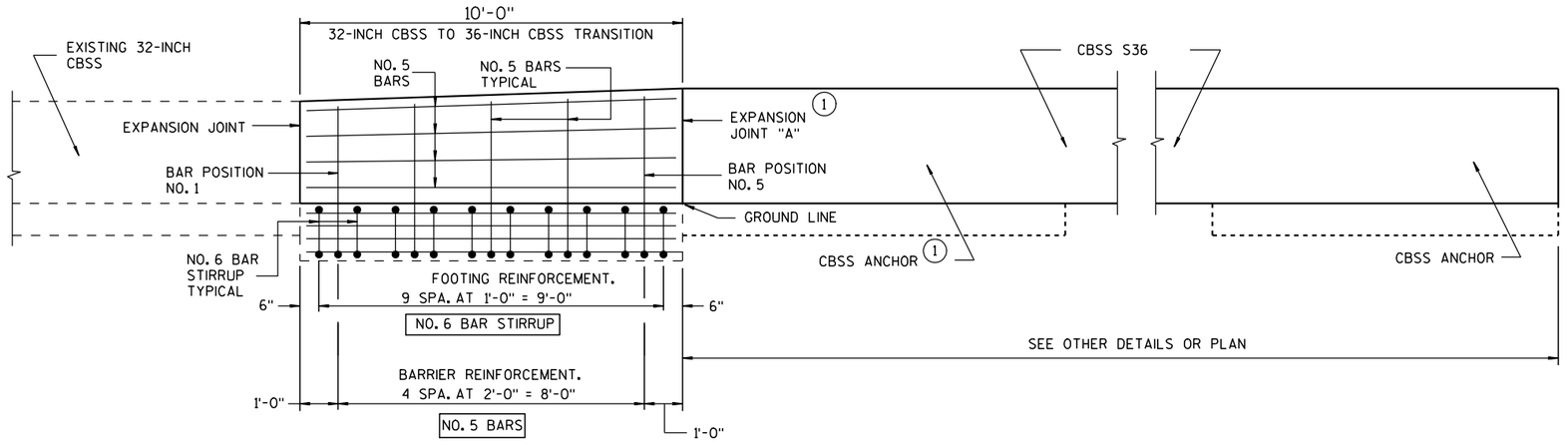
APPROVED

6-3-2010
DATE

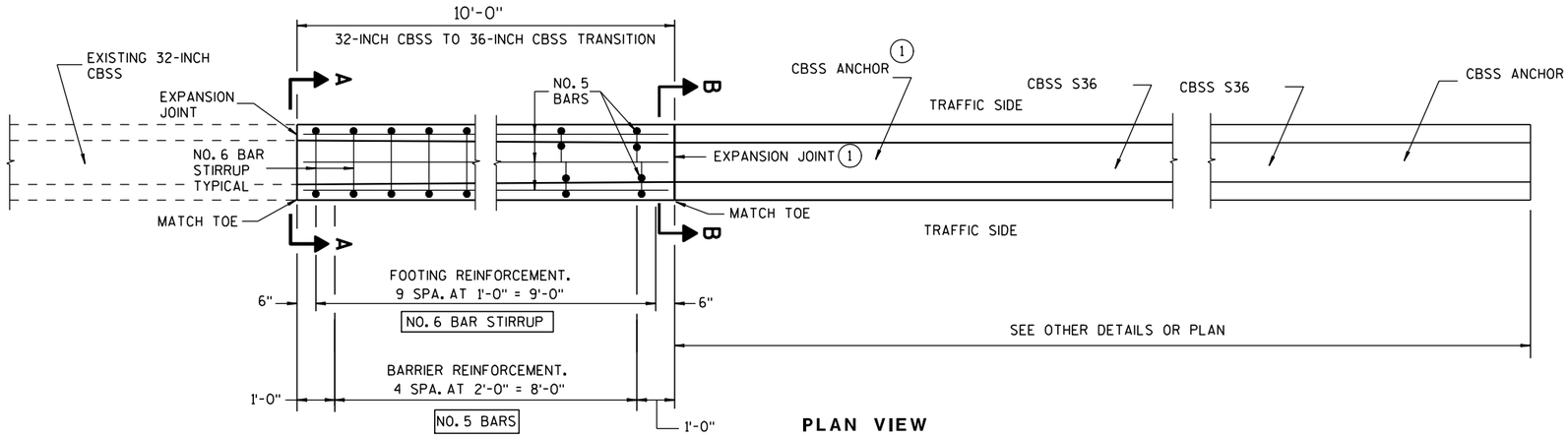
/S/ Jerry H. Zoss
ROADWAY STANDARDS ENGINEER

FHWA

6
S.D.D. 14 B 33-1c



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

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

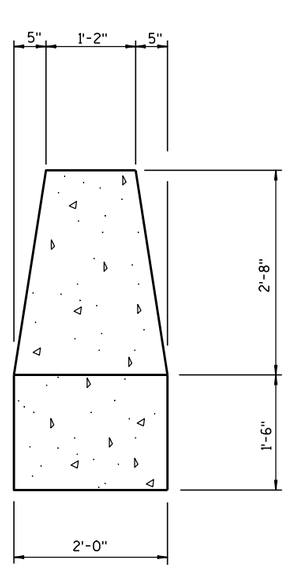
4000 PSICONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

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

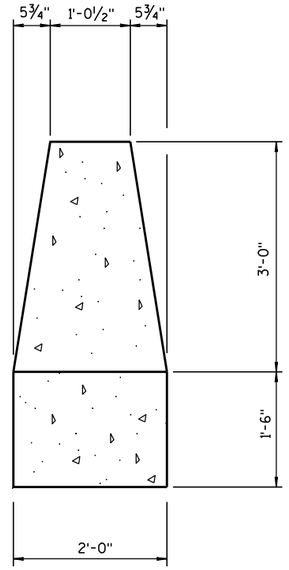
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

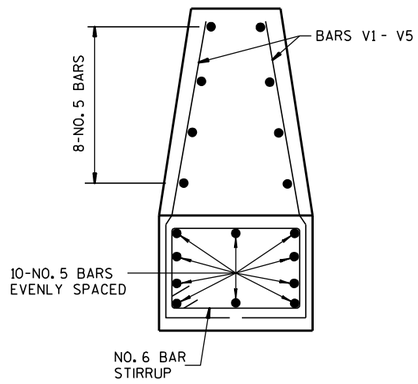
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



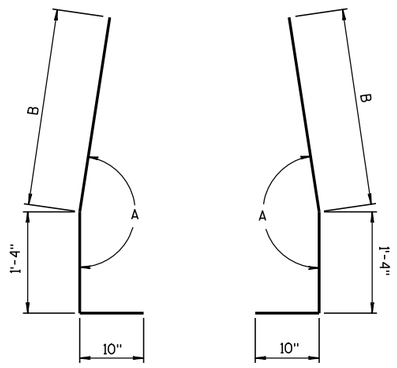
SECTION A-A



SECTION B-B



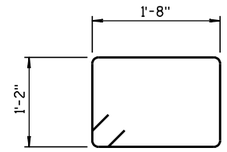
BAR DETAIL
BAR POSITION NO. 1 - NO. 5



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

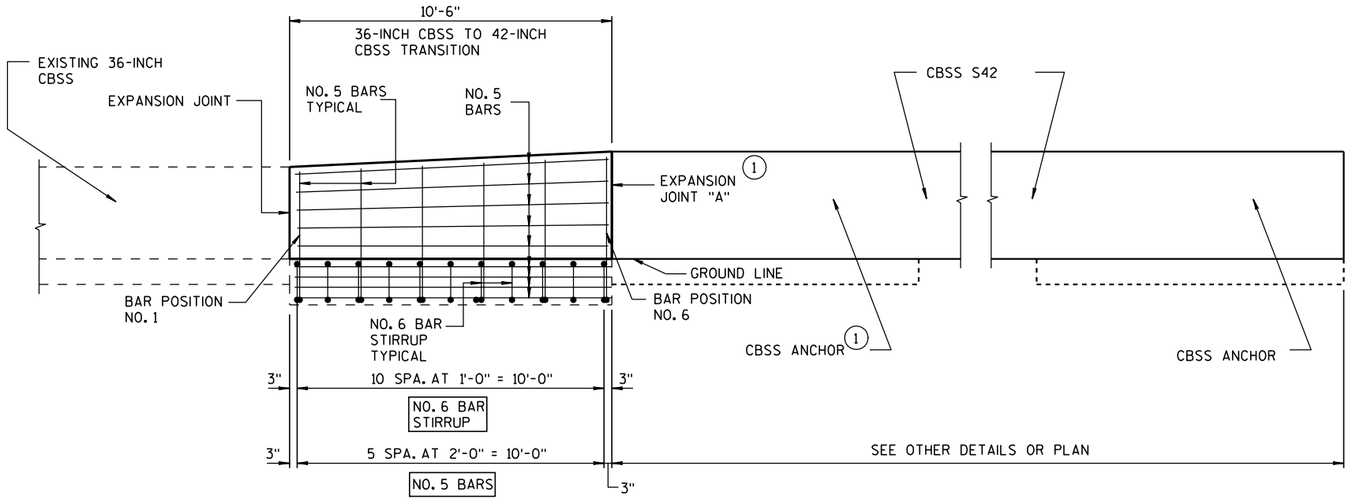
APPROVED
6-3-2010
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS I605 ENGINEER
FHWA

6

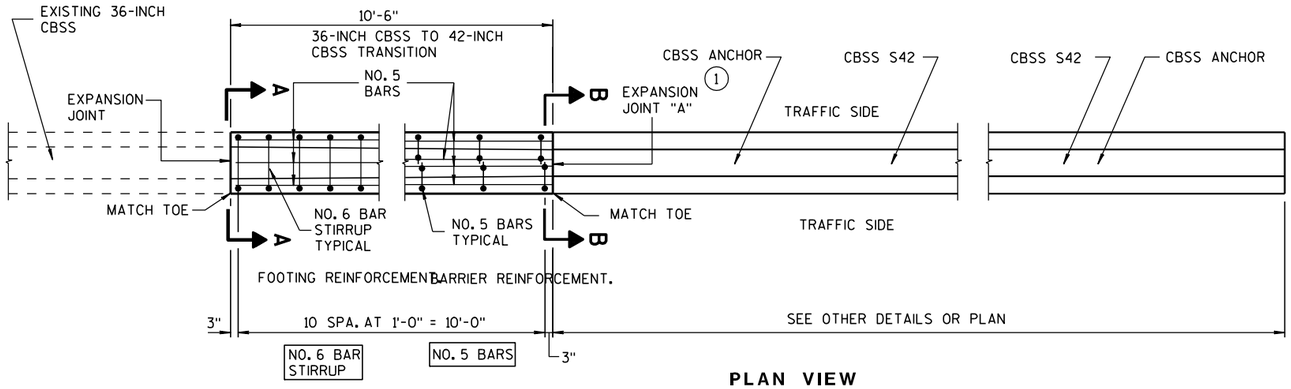
S.D.D. 14 B 39-1a

6

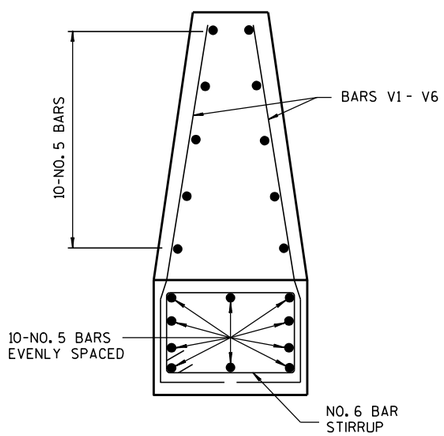
S.D.D. 14 B 39-1a



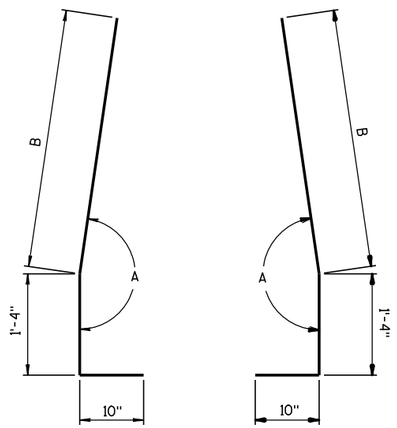
ELEVATION VIEW



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.

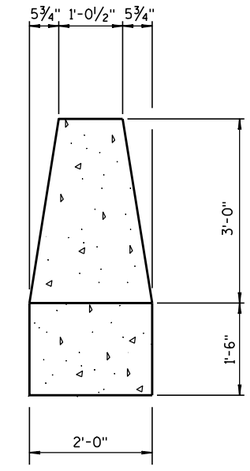
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

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

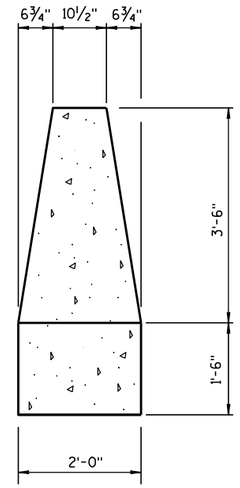
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

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.



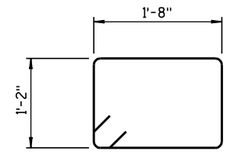
SECTION A-A



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"



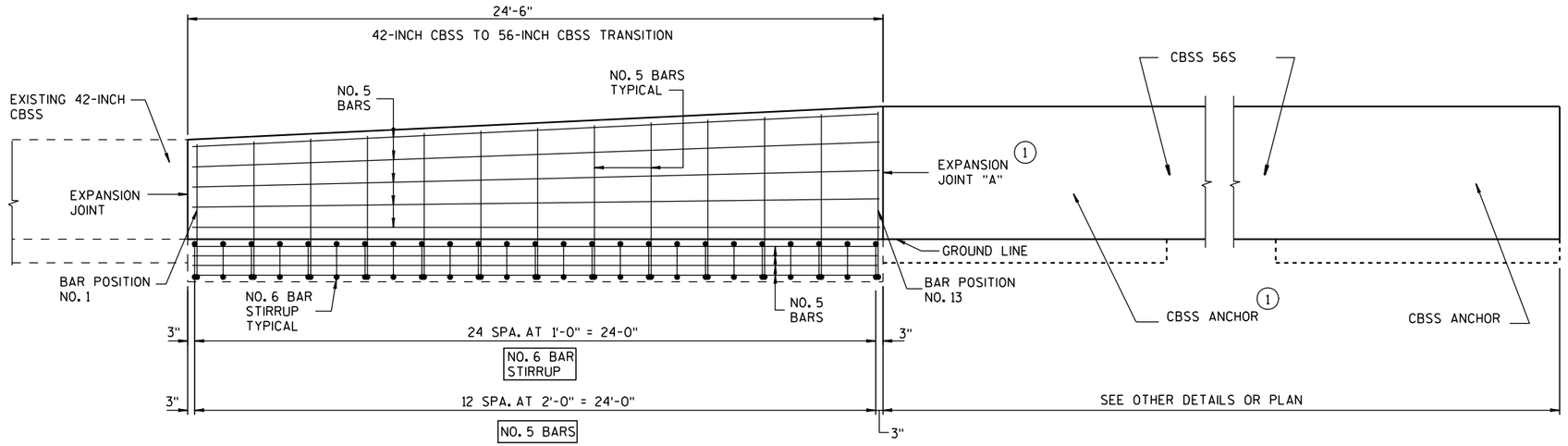
STIRRUP BAR
BENDING DETAIL

36-INCH SINGLE SLOPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

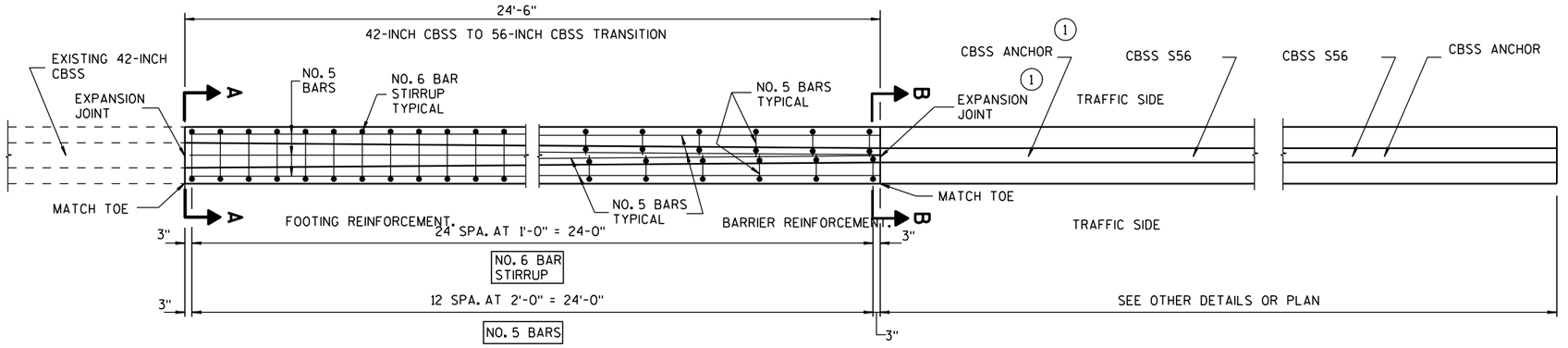
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

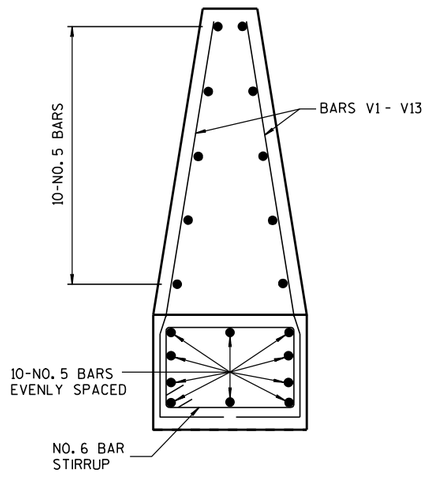
6
S.D.D. 14 B 39-1c



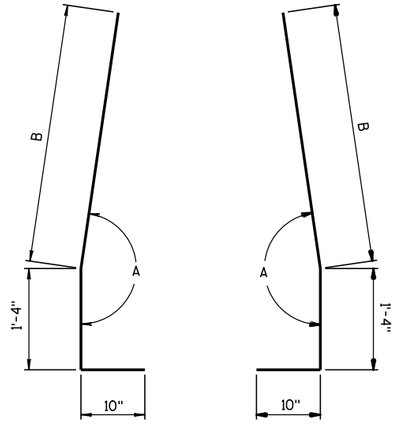
ELEVATION VIEW



PLAN VIEW



BAR DETAIL
BAR POSITION NO. 1 - NO. 13



BAR BENDING DETAIL
FOR BARS V1 - V13

BAR CHART SECTIONS V1 - V13

BAR	A	B
V1	170°-50'	3'-4½"
V2	170°-50'	3'-6"
V3	170°-55'	3'-7"
V4	171°	3'-8"
V5	170°-55'	3'-9½"
V6	170°-50'	3'-10½"
V7	170°-50'	3'-11½"

BAR	A	B
V8	170°-55'	4'-0½"
V9	170°-50'	4'-2"
V10	170°-50'	4'-3"
V11	170°-50'	4'-4½"
V12	170°-55'	4'-5½"
V13	170°-50'	4'-6½"

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

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

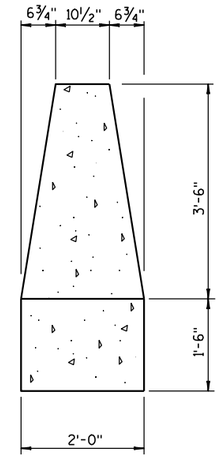
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

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

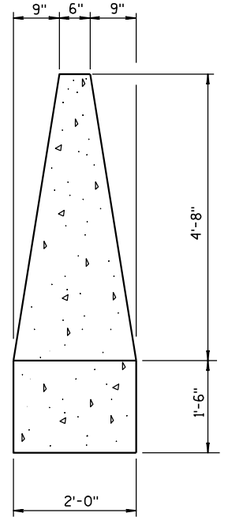
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

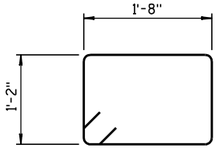
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



SECTION A-A



SECTION B-B



STIRRUP BAR
BENDING DETAIL

42-INCH SINGLE SLOPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

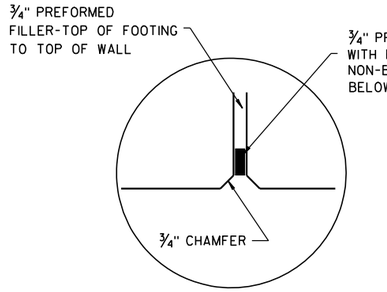
APPROVED
6-3-2010 DATE
/S/ Jerry H. Zaa
ROADWAY STANDARDS ENGINEER 607 ENT
FHWA

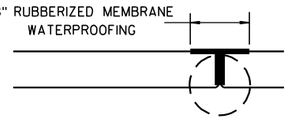
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S.D.D. 14 B 39-1e

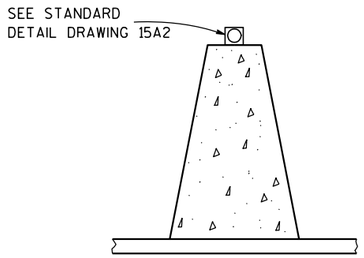
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S.D.D. 14 B 39-1e





VERTICAL EXPANSION JOINT



DELINEATION

SPACING FOR DELINEATORS ON HORIZONTAL CURVES

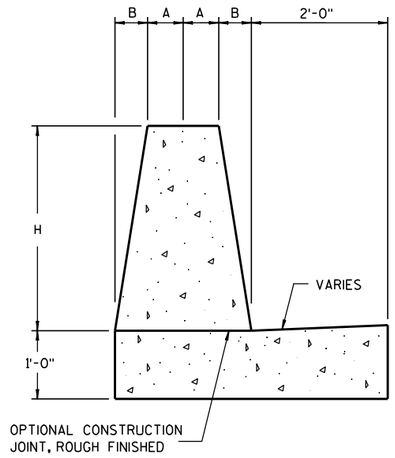
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

GENERAL NOTES

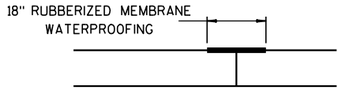
PROVIDE EXPANSION JOINTS WHERE EXISTING EXPANSION JOINTS OR AT THE END OF EACH POUR.

NO HORIZONTAL STEEL CROSSES EXPANSION JOINTS.

CONSTRUCT PER STANDARD SPECIFICATION 603.
SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASETENED TOGETHER UNLESS NOTED OTHERWISES.
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.
USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.
2" CLEAR COVER (TYP.)



ROADSIDE RETAINING WALL



CONSTRUCTION JOINT

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11

V1 BAR BENDING DETAIL

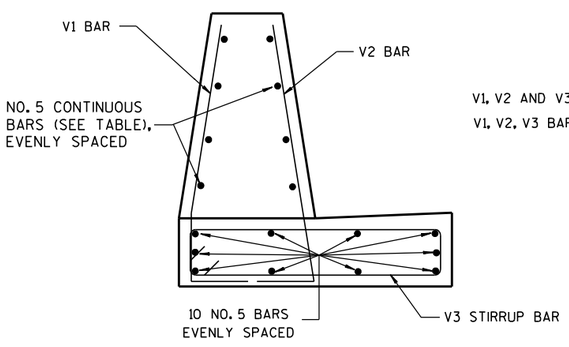
V2 BAR BENDING DETAIL

REFLECTOR SPACING

	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

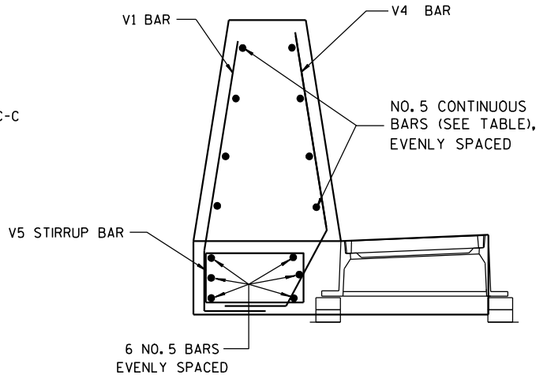
BAR CHART ROADSIDE RETAINING WALL

BARRIER HEIGHT	V1 BAR D	V2 BAR E	V4 BAR F
36"	2'-9⅝"	3'-9¾"	2'-8"
42"	3'-3⅝"	4'-2⅝"	3'-2⅛"
56"	4'-7½"	5'-6½"	4'-4⅜"

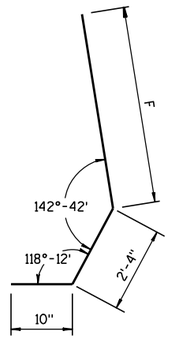


V1, V2 AND V3 ARE SPACED 18" C-C
V1, V2, V3 BARS ARE NO. 5 BARS

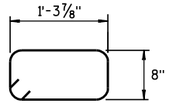
ROADSIDE RETAINING WALL NORMAL BAR PLACEMENT



ROADSIDE RETAINING WALL BAR PLACEMENT NEAR INLET



V4 BAR BENDING DETAIL



V5 STIRRUP BAR BENDING DETAIL

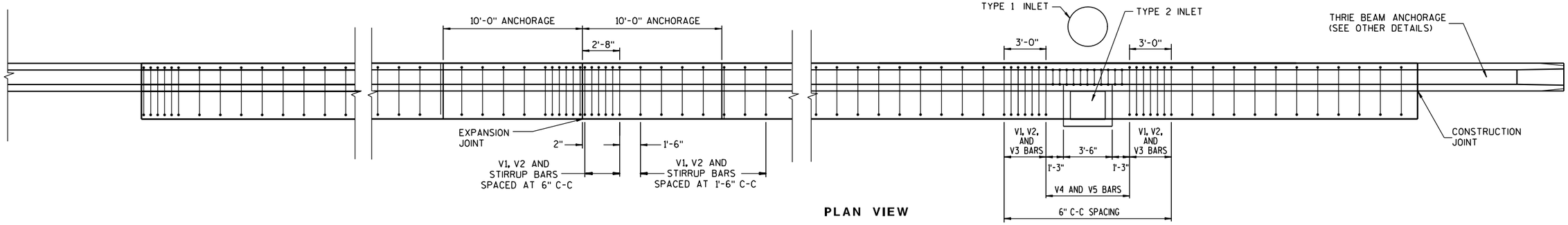


V3 STIRRUP BAR BENDING DETAIL

SINGLE SLOPE ROADSIDE RETAINING WALL

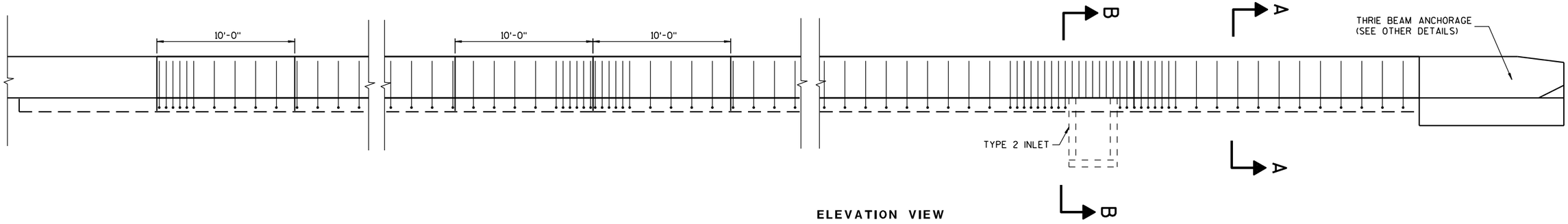
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 41-1a



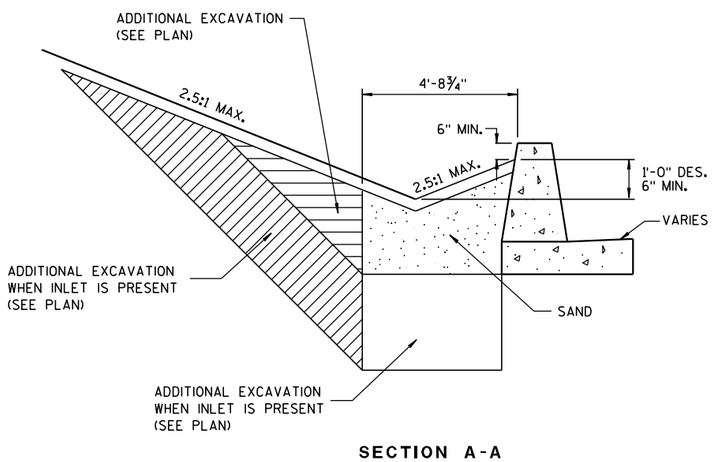
PLAN VIEW

NOTE: HORIZONTAL BARS ARE NOT SHOWN
SEE OTHER DETAILS FOR HORIZONTAL BARS.

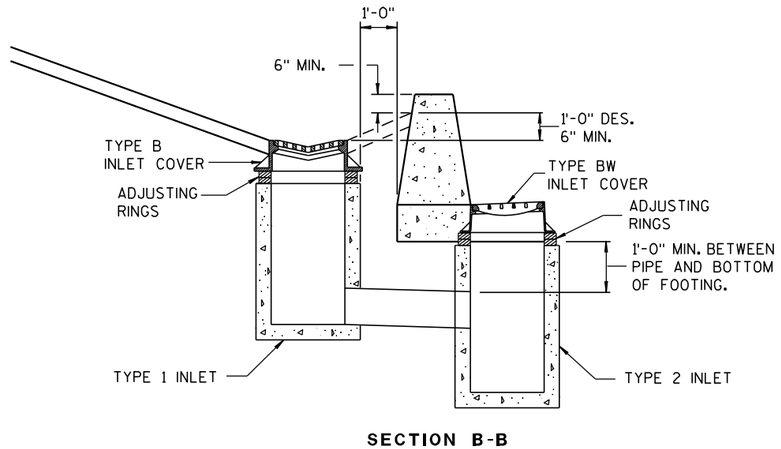


ELEVATION VIEW

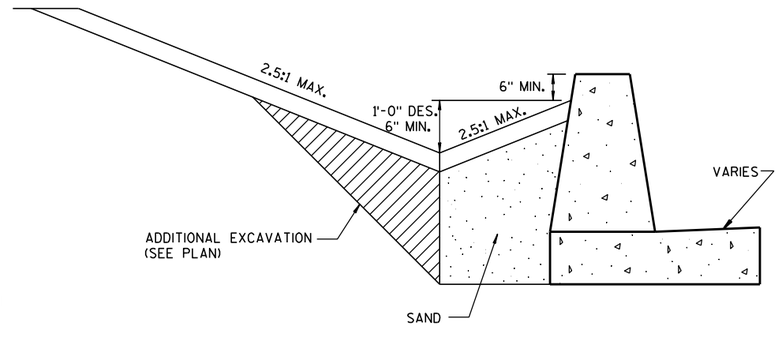
NOTE: HORIZONTAL BARS ARE NOT SHOWN
SEE OTHER DETAILS FOR HORIZONTAL BARS.



SECTION A-A



SECTION B-B



MINIMUM DESIGN OF EARTH WORK

MINIMUM DESIGN OF EARTH WORK FOR INLET

SINGLE SLOPE ROADSIDE RETAINING WALL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/13/2011
DATE
FHWA

/S/ Jerry H. Zaga
ROADWAY STANDARDS ENGINEER
609
ENT

6

S.D.D. 14 B 41-1b

6

S.D.D. 14 B 41-1b

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.

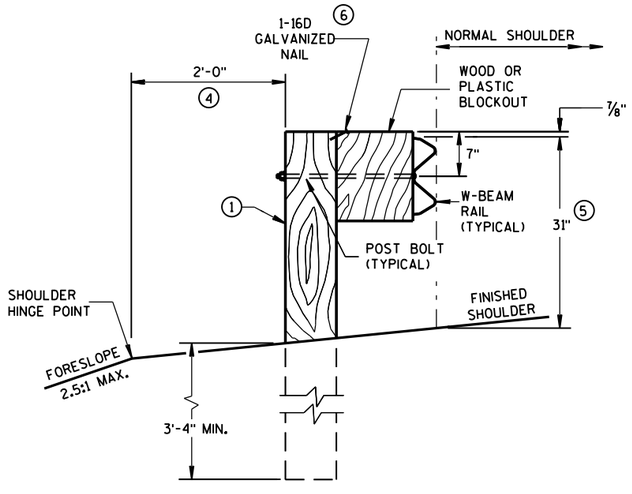
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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).

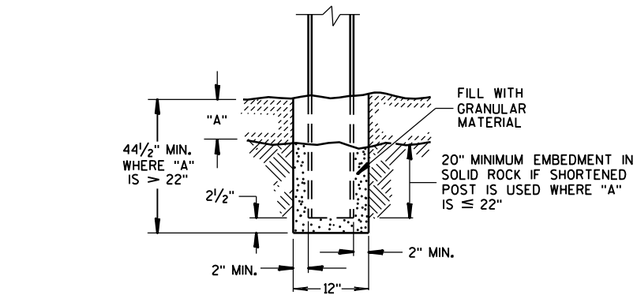
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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.



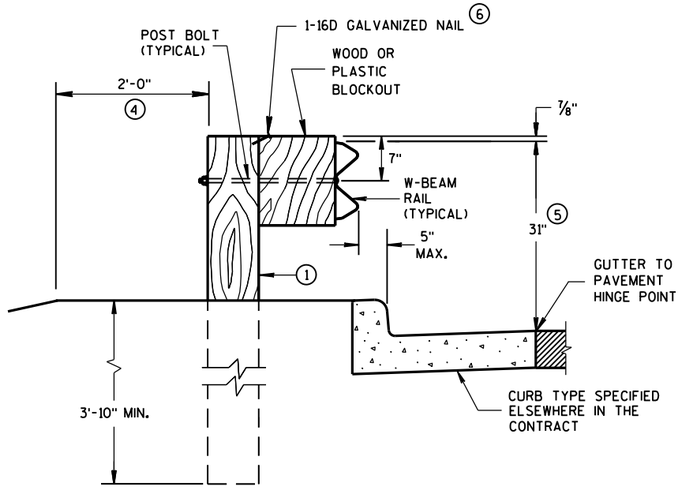
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



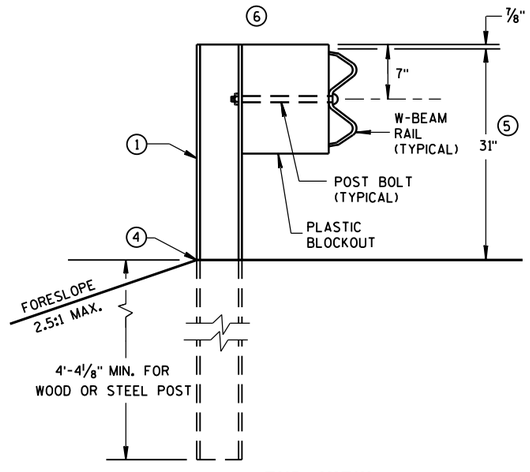
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



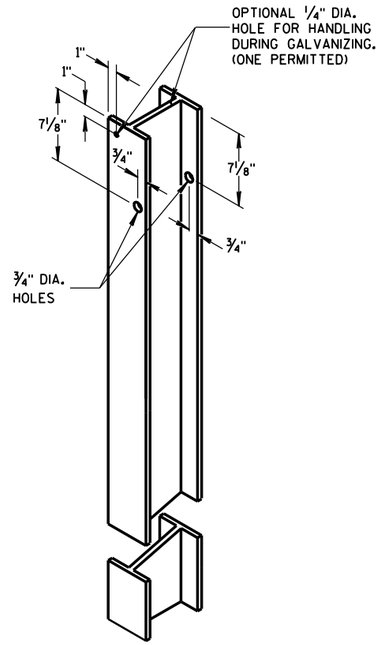
END VIEW

LOCATED ALONG A CURBED ROADWAY

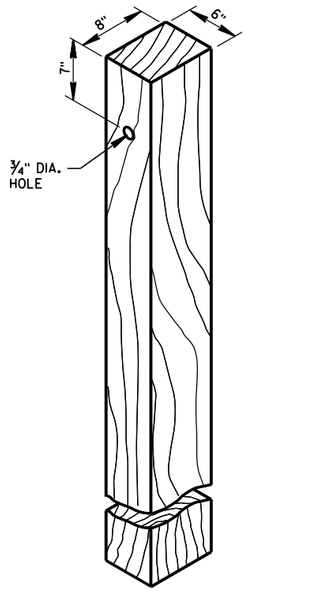


END VIEW

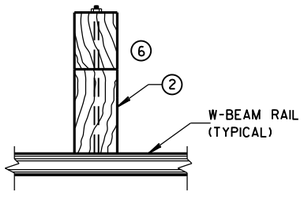
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



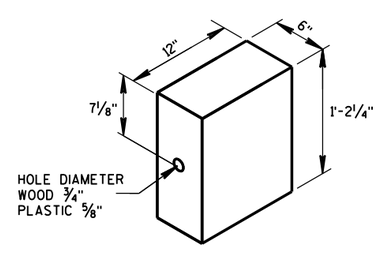
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



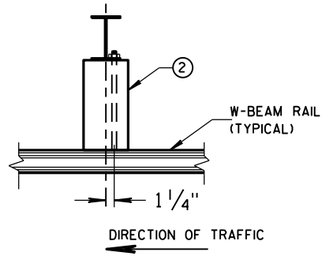
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

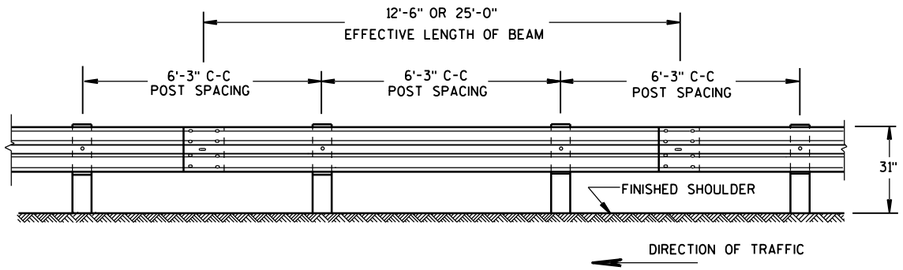


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

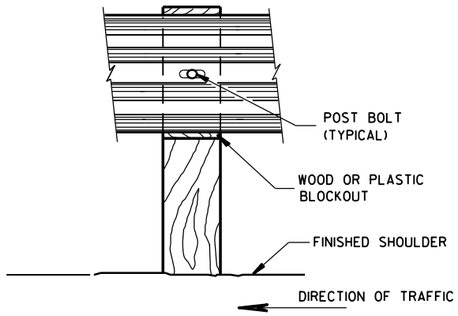
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S.D.D. 14 B 42-3a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

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.

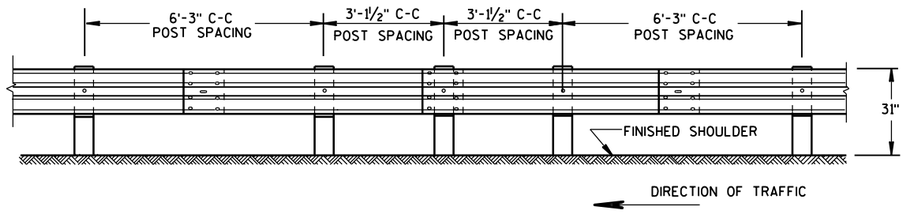
(9) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(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.

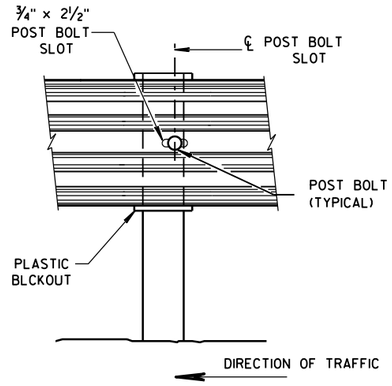
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

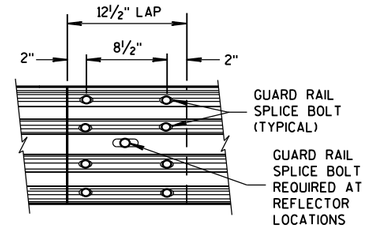


FRONT VIEW

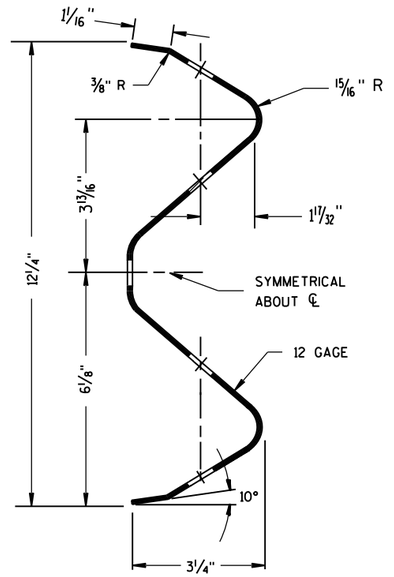
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



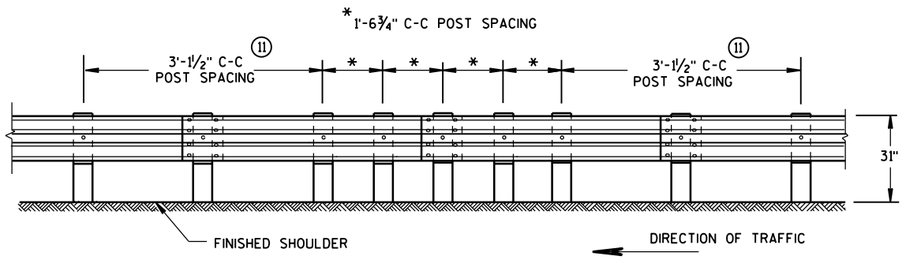
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

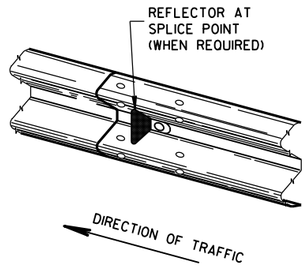


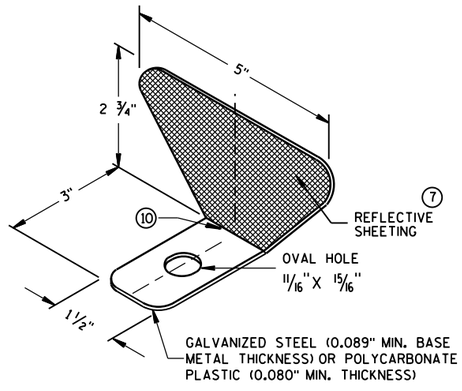
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

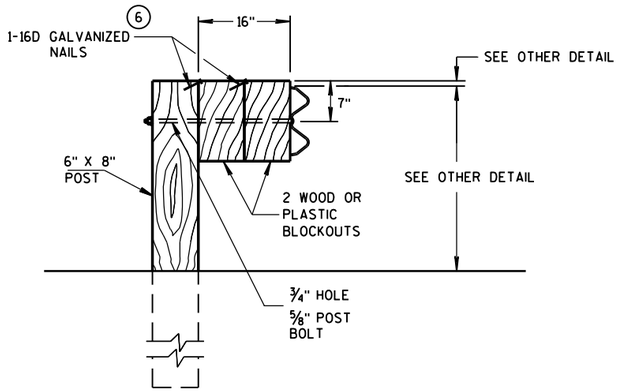
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

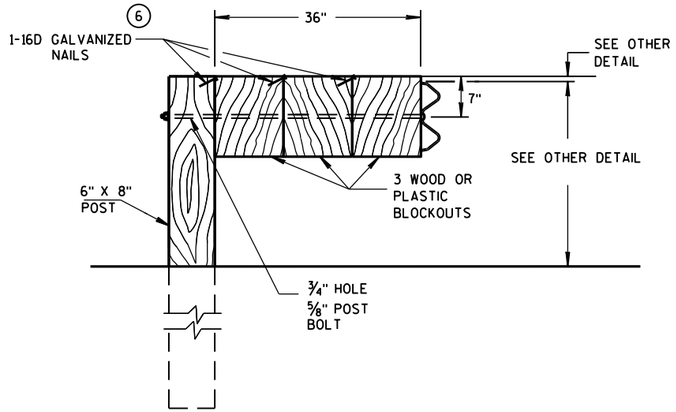
6

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.

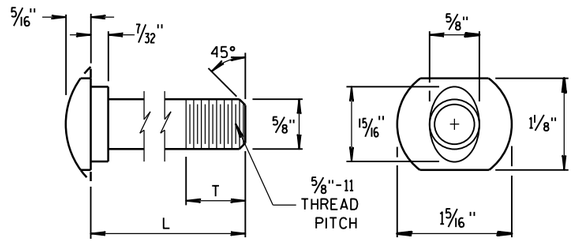


DETAIL FOR 36" BLOCKOUT DEPTH

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.

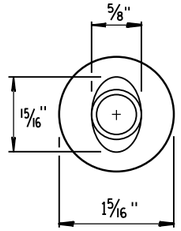
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

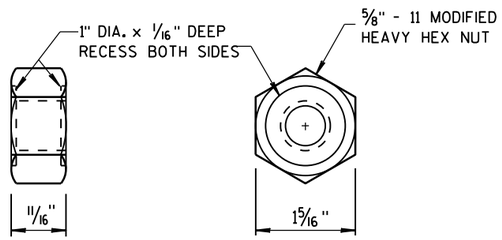


POST BOLT TABLE

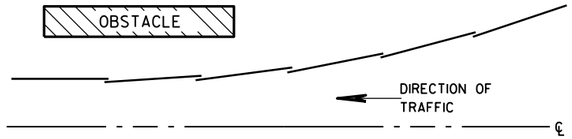
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

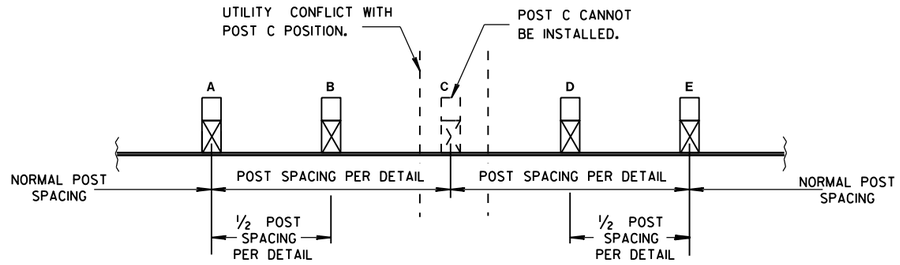


POST BOLT AND RECESS NUT

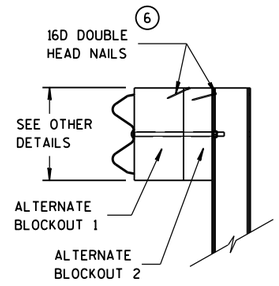


PLAN VIEW

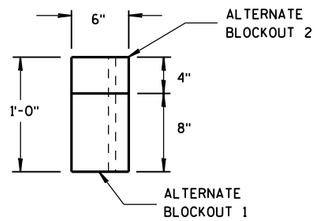
BEAM LAPPING DETAIL



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
FHWA

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.

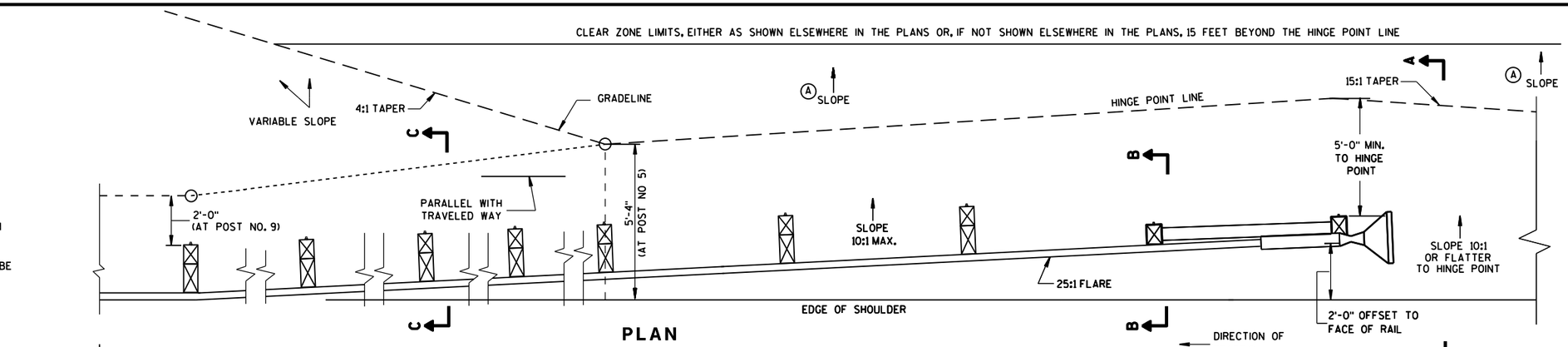
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

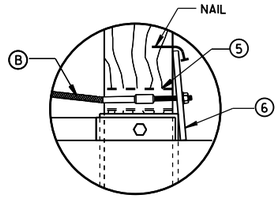
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

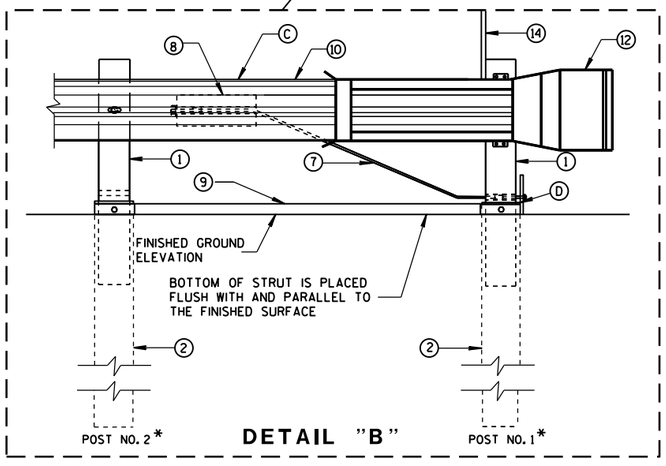
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

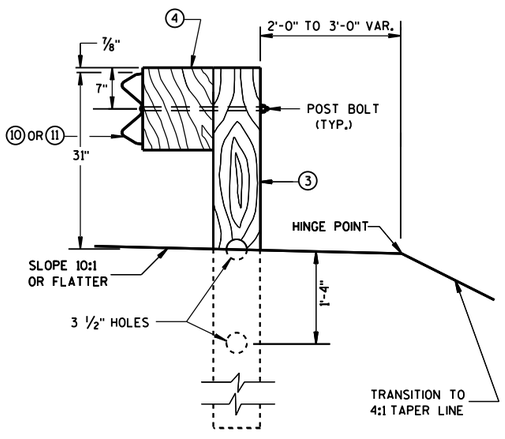
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



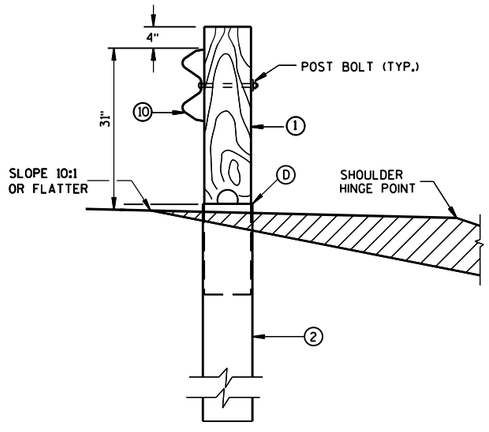
ELEVATION



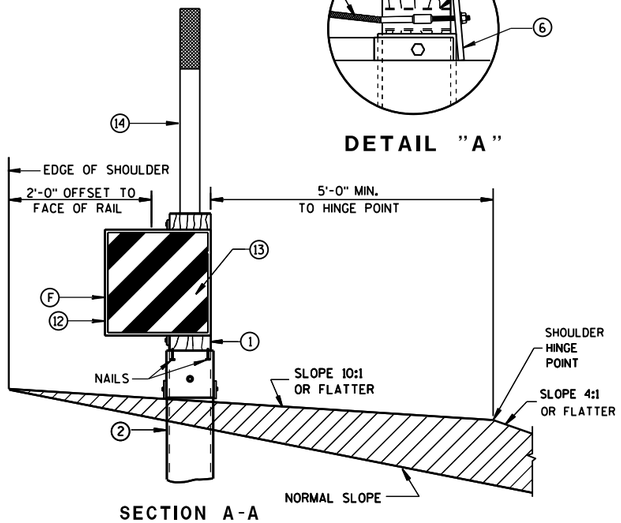




SECTION C-C
TYPICAL AT POST NOS. 3-9



SECTION B-B
TYPICAL AT POST NO. 2*



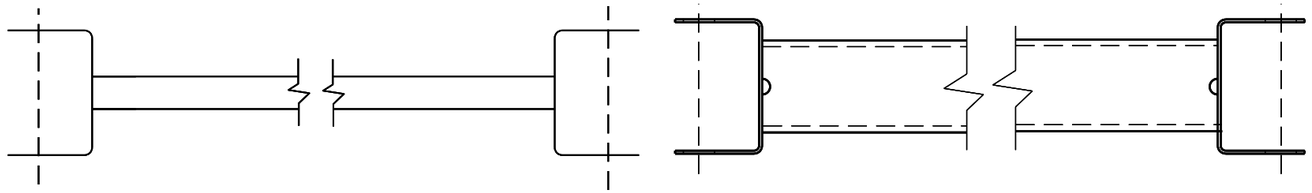
SECTION A-A
TYPICAL AT POST NO. 1*

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

S.D.D. 14 B 44-2a

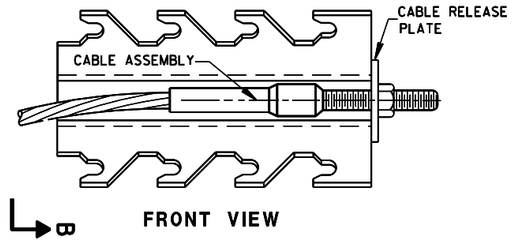
S.D.D. 14 B 44-2a



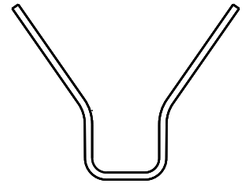
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

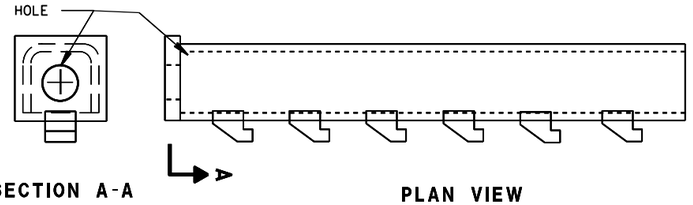
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR 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)



FRONT VIEW



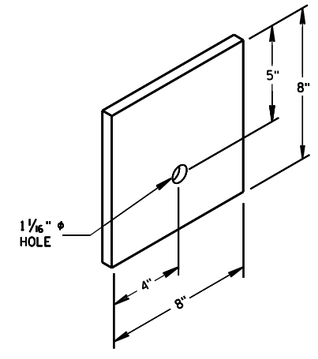
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



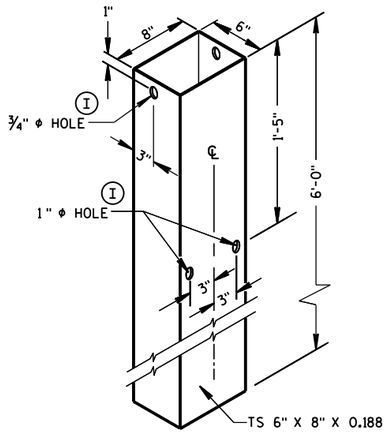
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

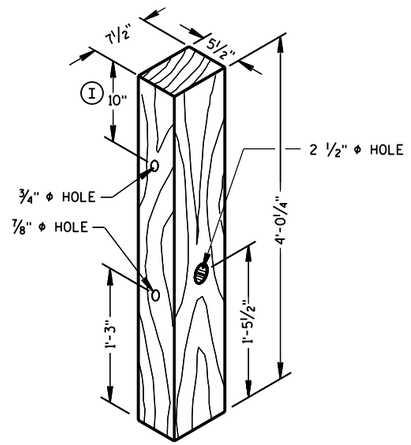
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 44-2b

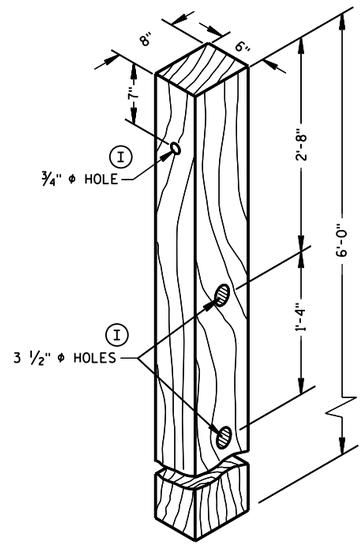


FOUNDATION TUBE (2)



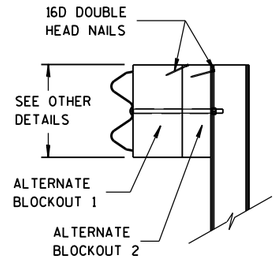
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

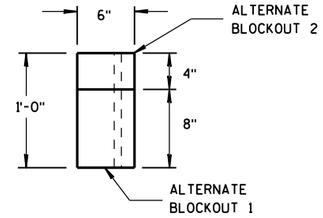


POSTS NUMBER 3-9

WOOD CRT POST (3)

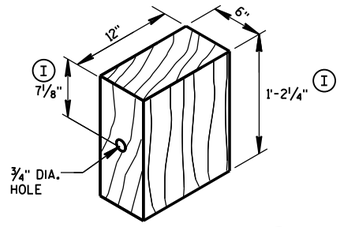


SIDE VIEW



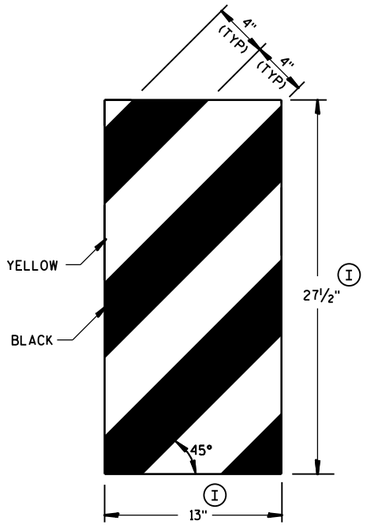
TOP VIEW

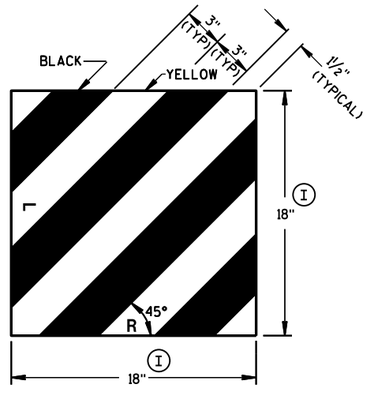
ALTERNATE WOOD BLOCKOUT DETAIL



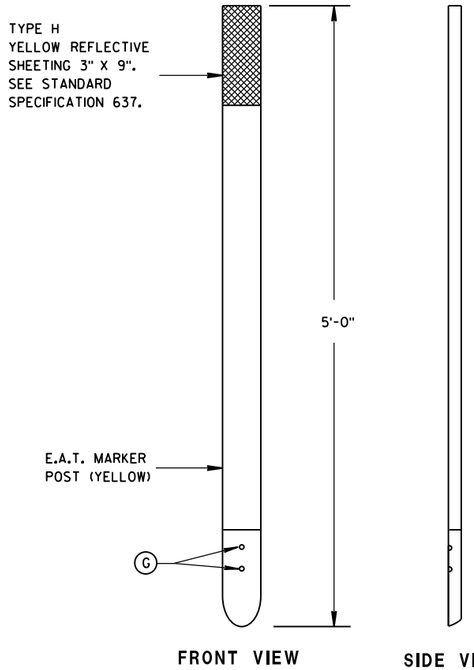
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





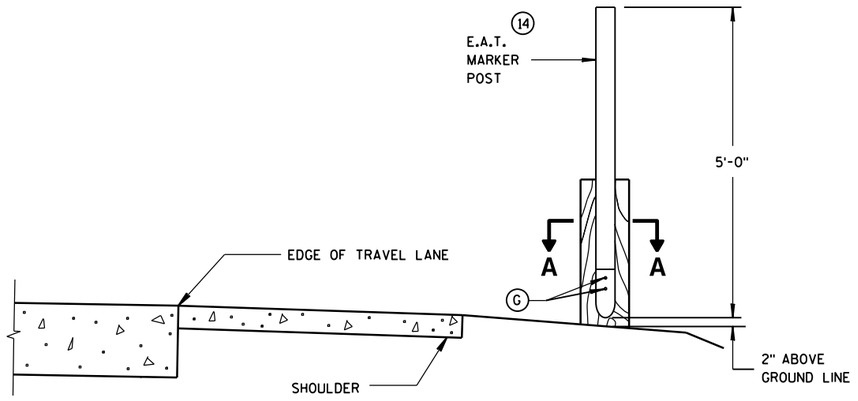
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

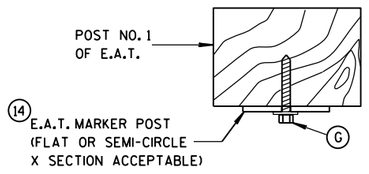
SIDE VIEW

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

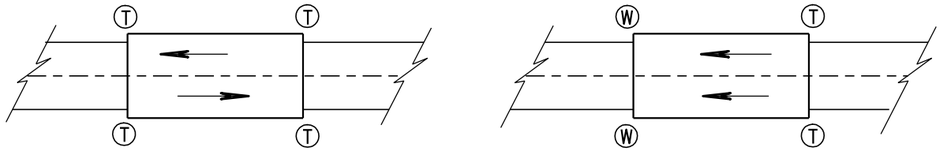
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

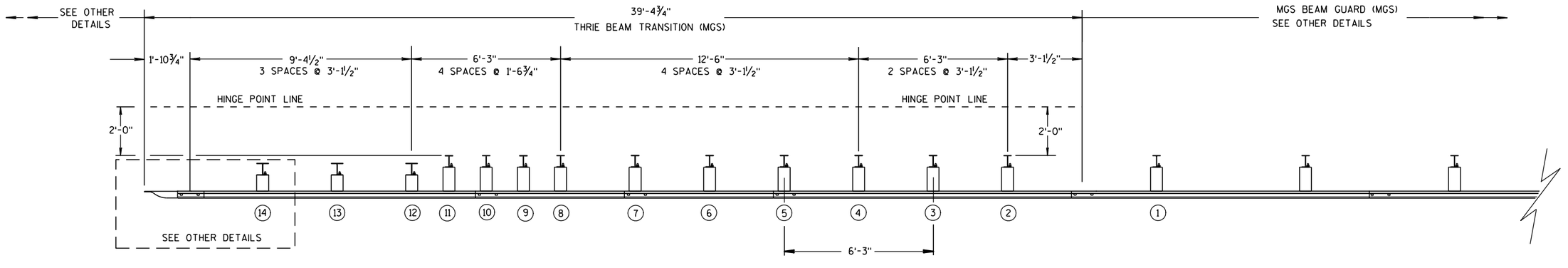
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

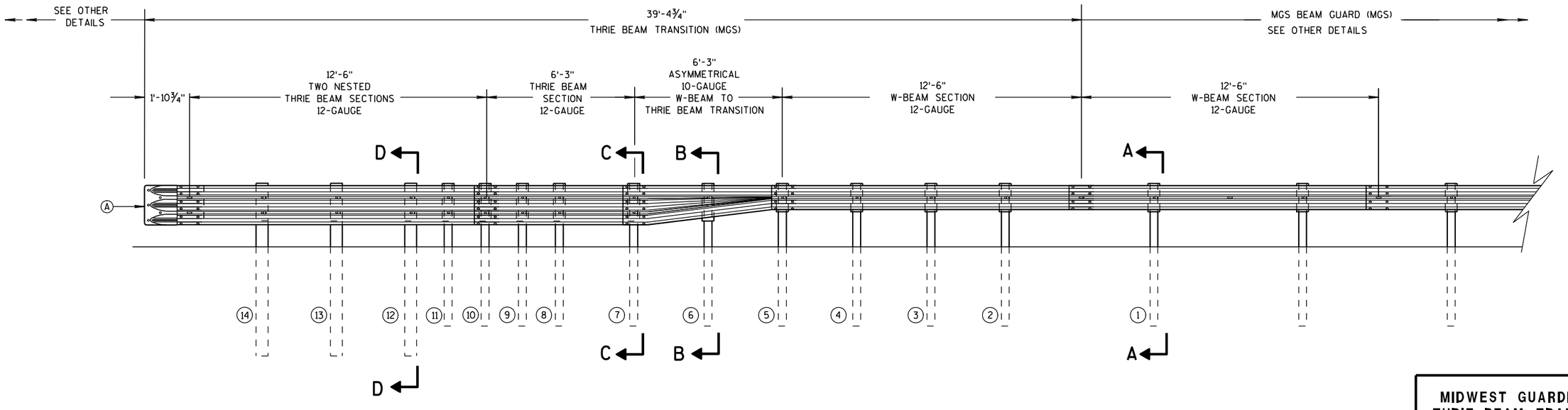
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

(A) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

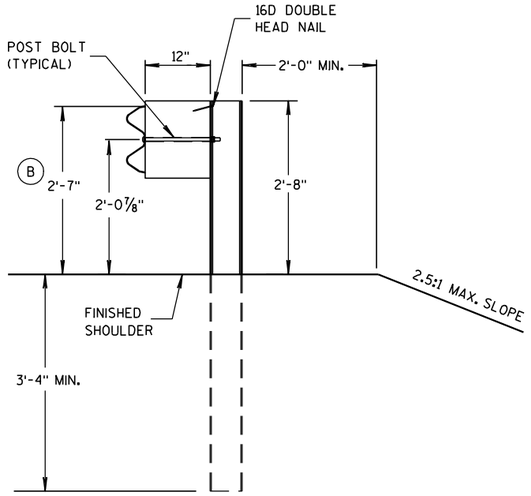
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 45-3a

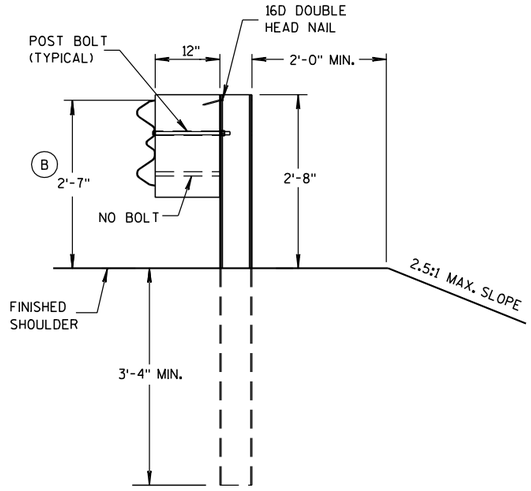
GENERAL NOTES

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



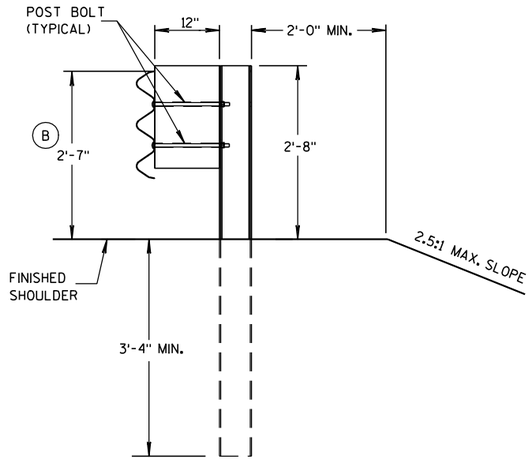
SECTION A-A

POSTS 1-5



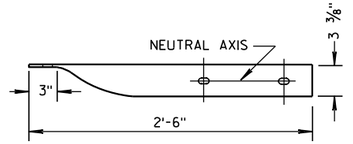
SECTION B-B

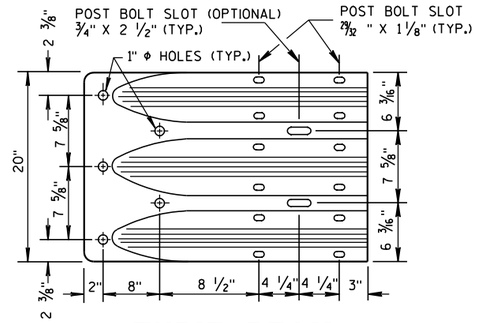
POST 6



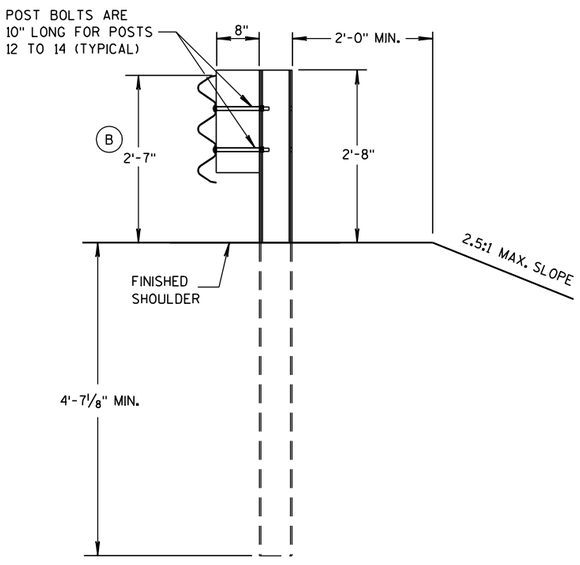
SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-14

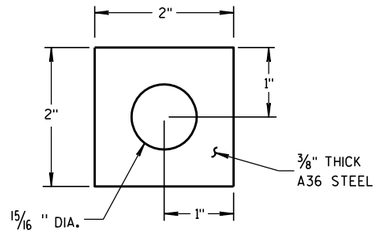
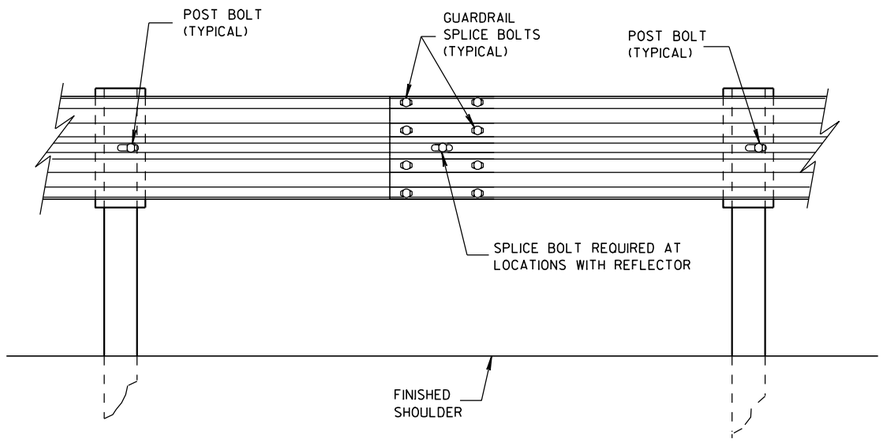
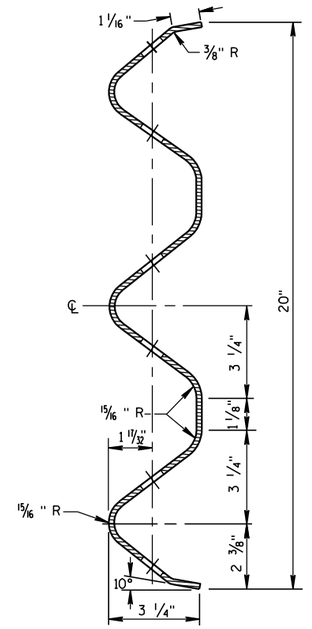


PLATE WASHER DETAIL



SPLICE DETAIL



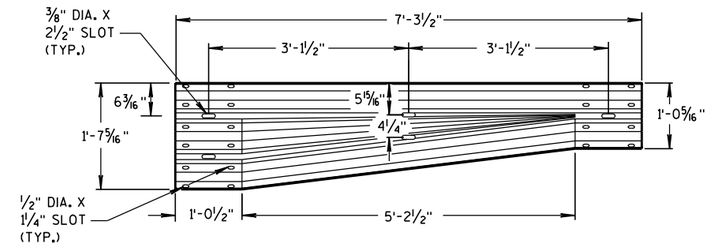
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

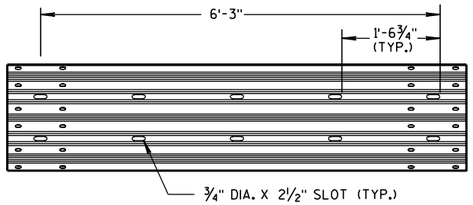
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

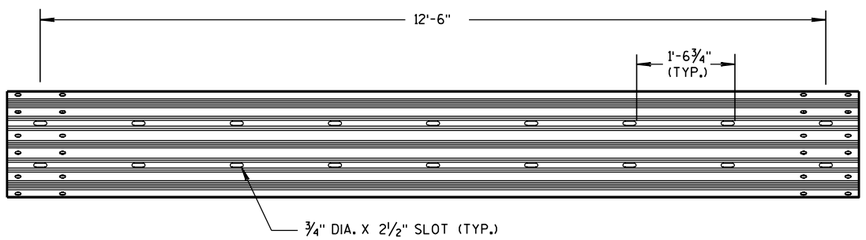
S.D.D. 14 B 45-3b



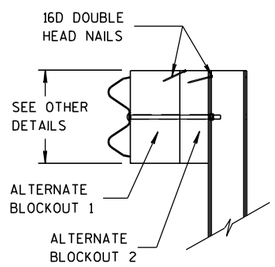
W-BEAM TO THRIE BEAM TRANSITION SECTION



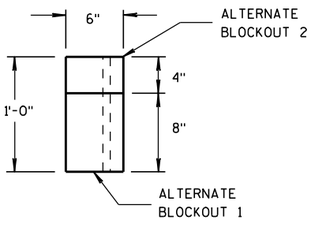
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

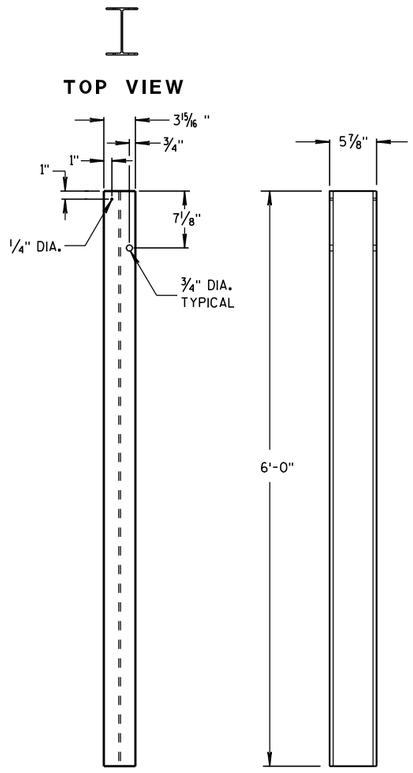


SIDE VIEW



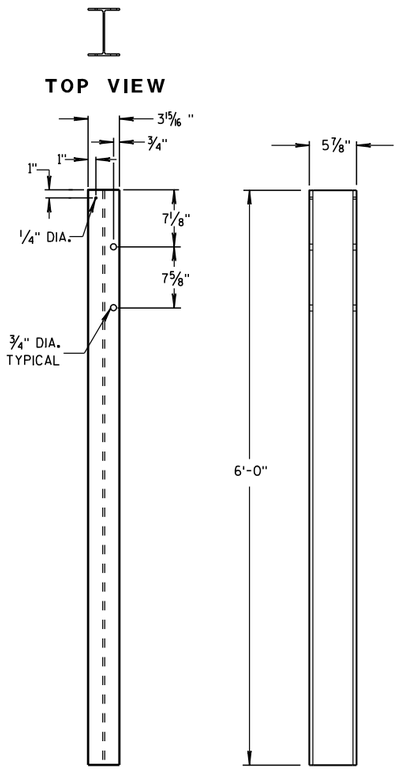
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



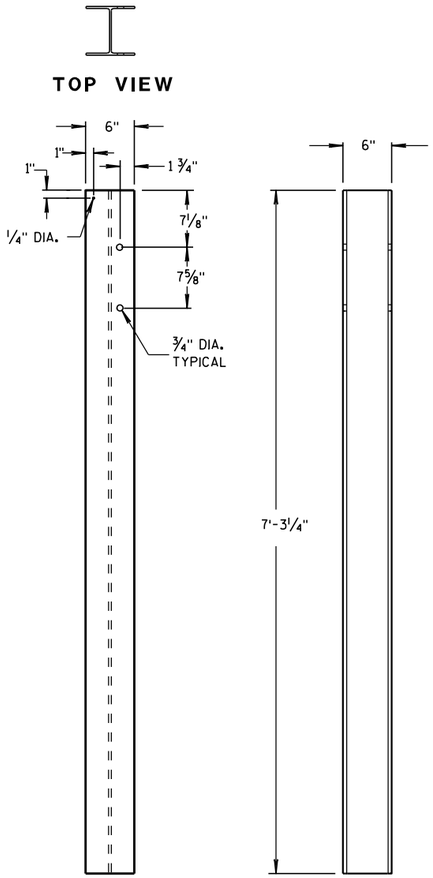
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5



FRONT VIEW SIDE VIEW

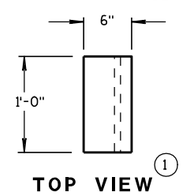
STEEL POSTS 6-11



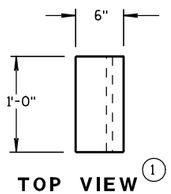
FRONT VIEW SIDE VIEW

STEEL POSTS 12-14

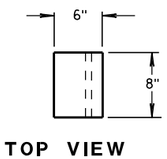
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



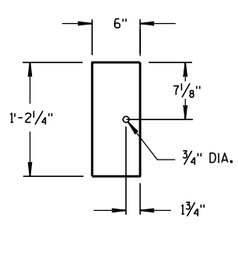
TOP VIEW (1)



TOP VIEW (1)

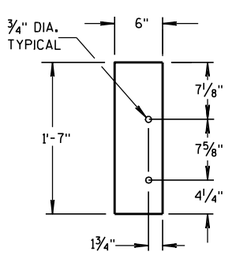


TOP VIEW



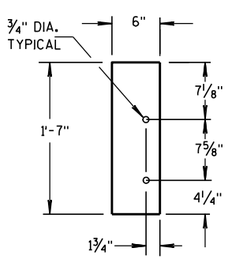
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

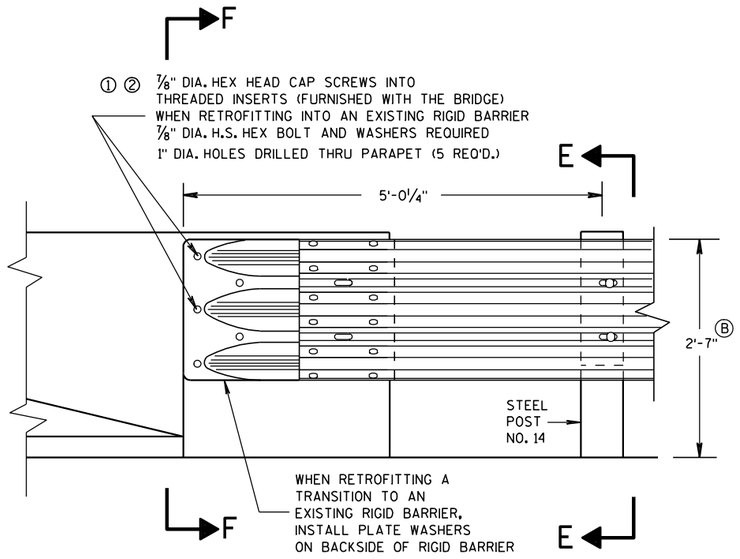
STEEL POST SIZES

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"

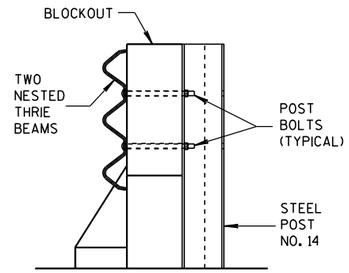
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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.

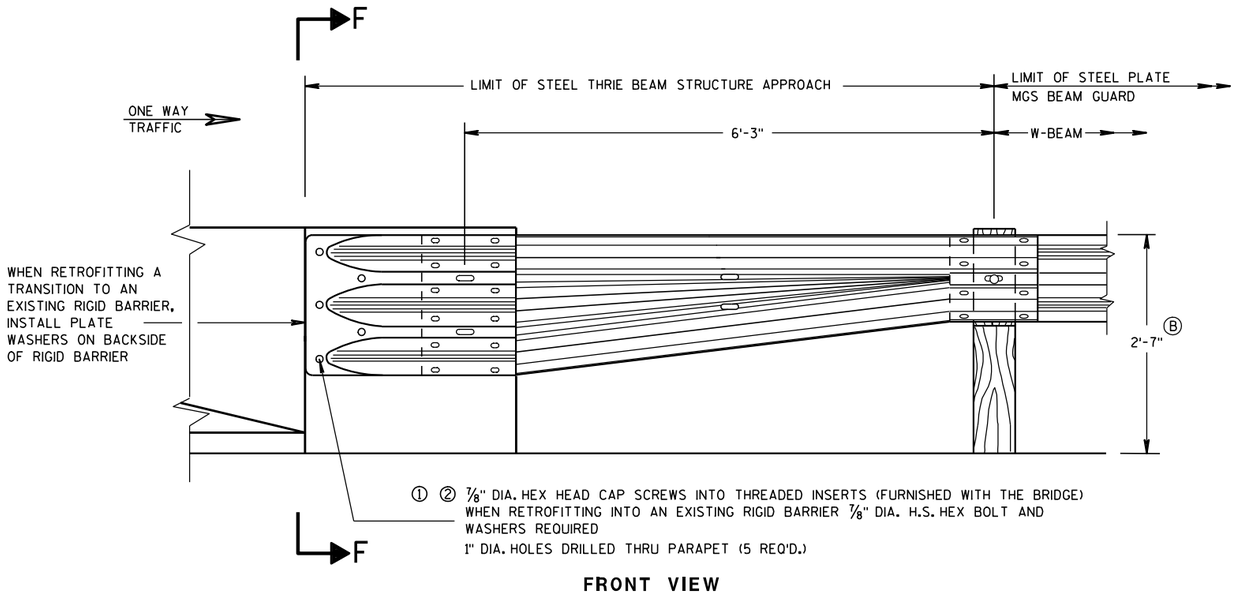
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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.

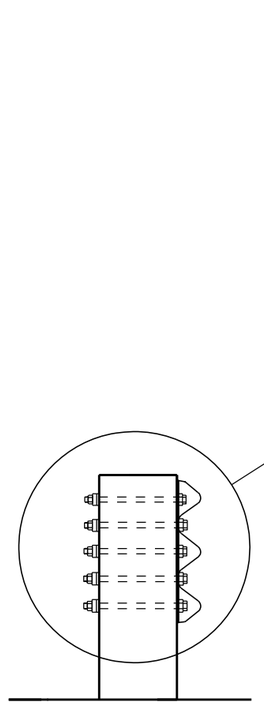
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

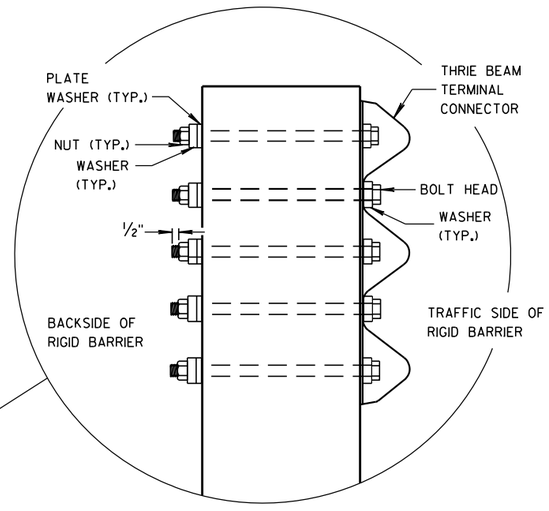
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



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 [illegible] 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.

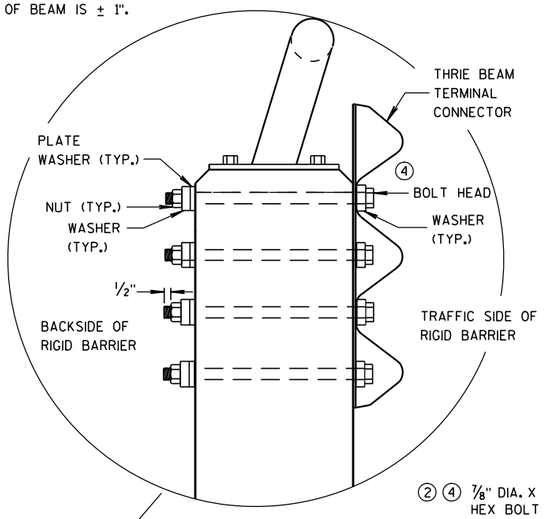
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

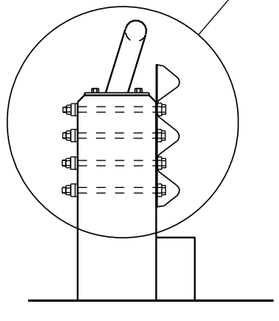
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.

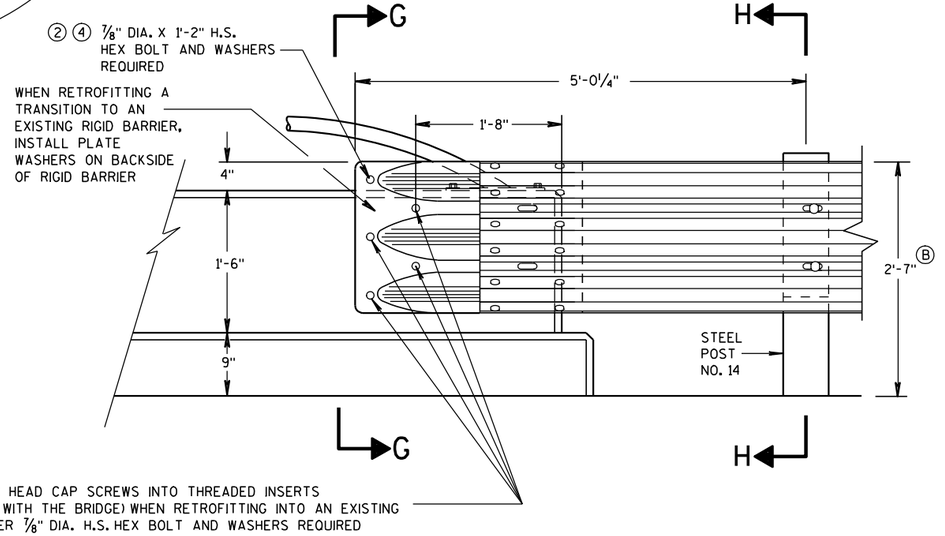
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

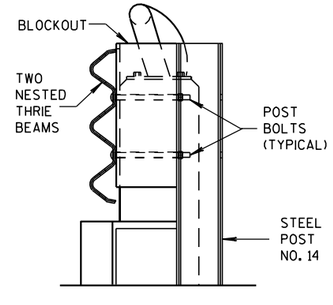




SECTION G-G

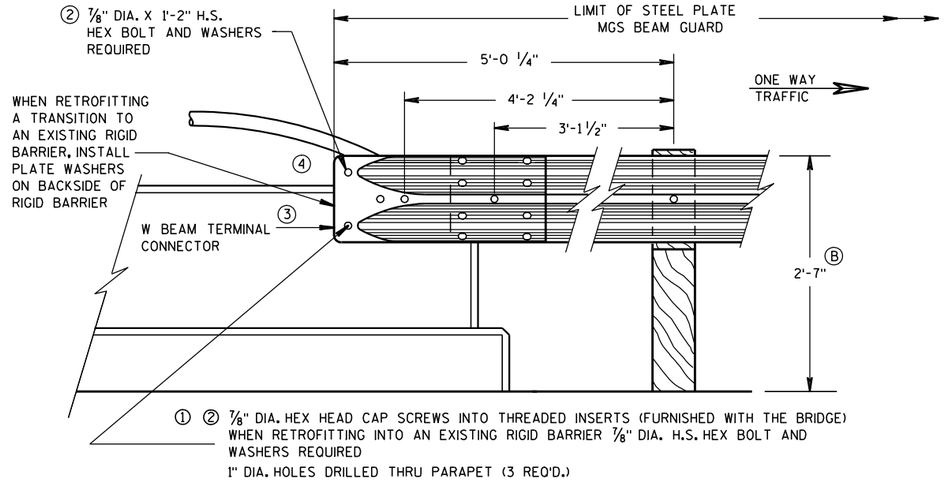


FRONT VIEW



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

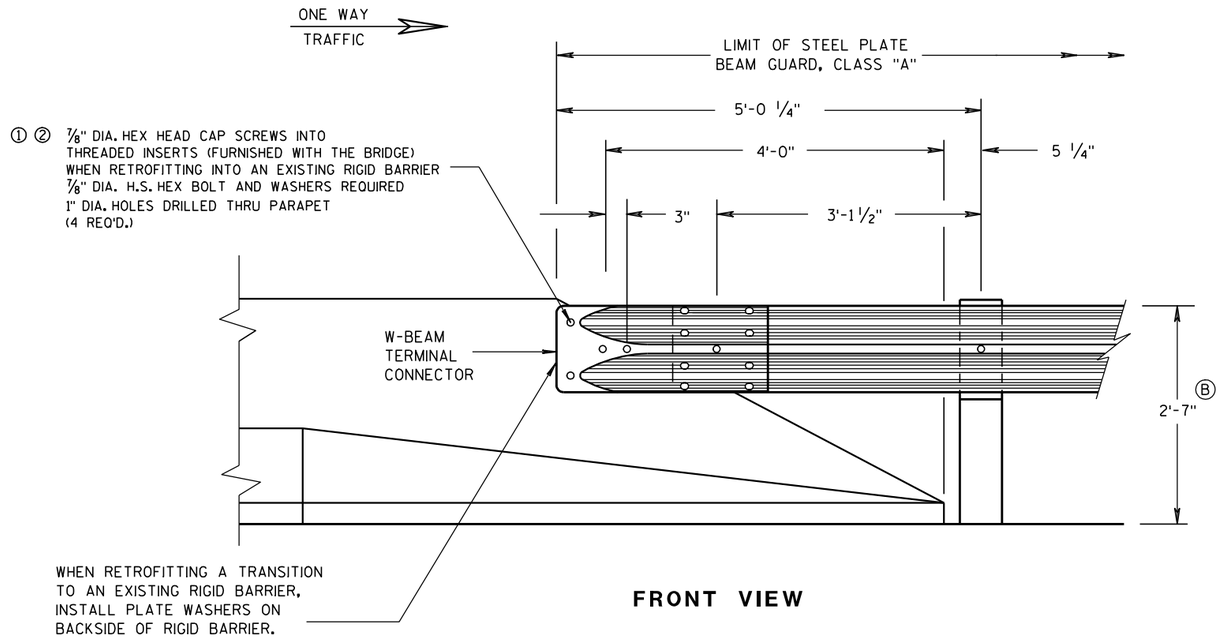
FHWA

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S.D.D. 14 B 45-3e

6

S.D.D. 14 B 45-3e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

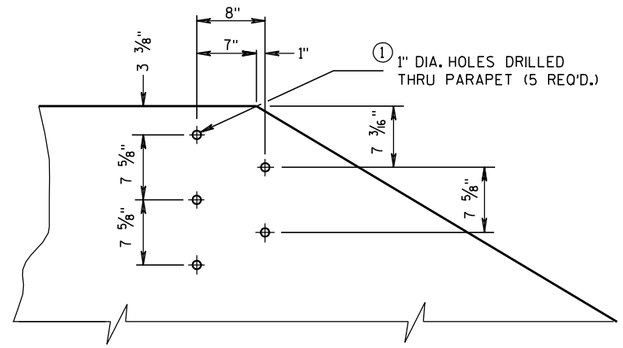
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

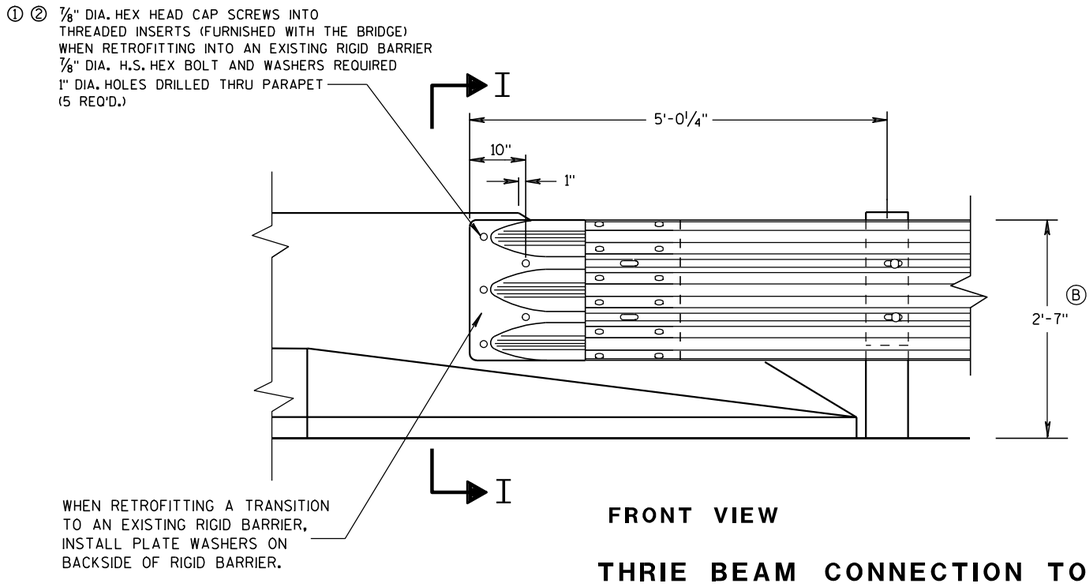
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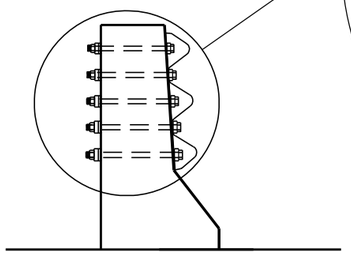
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



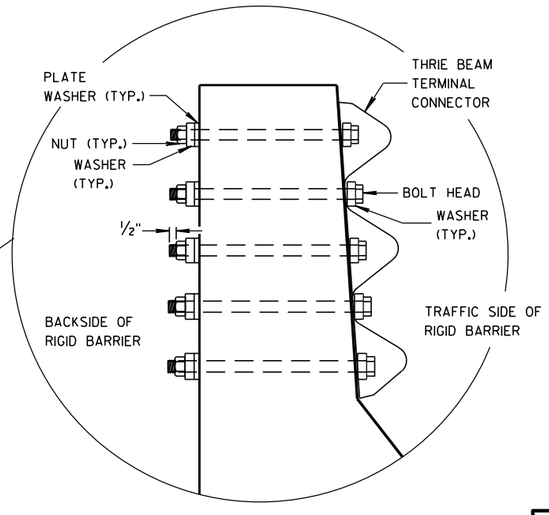
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



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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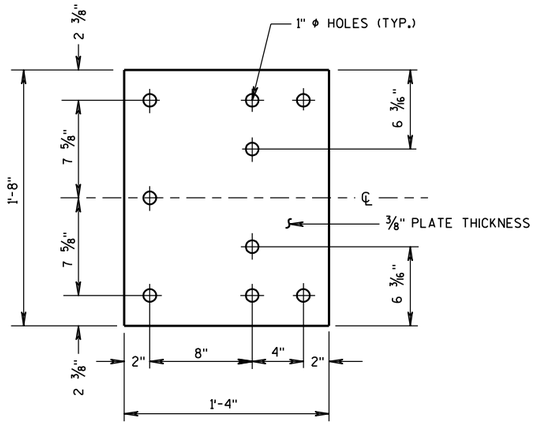
FHWA

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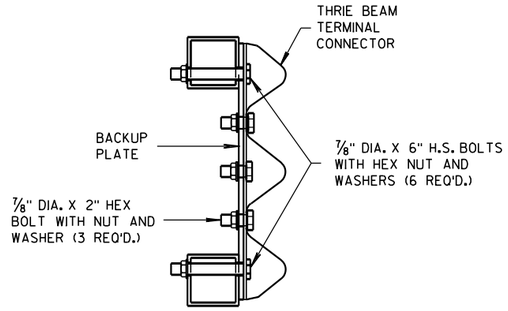
S.D.D. 14 B 45-3f

6

S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

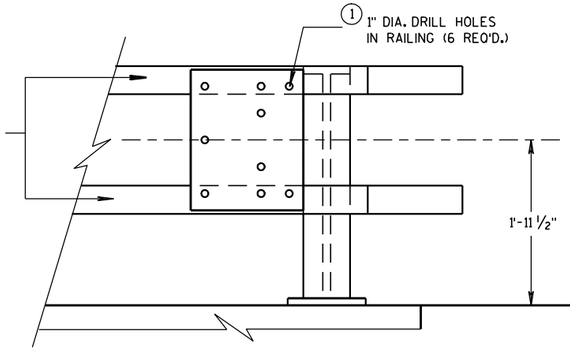


SECTION J-J

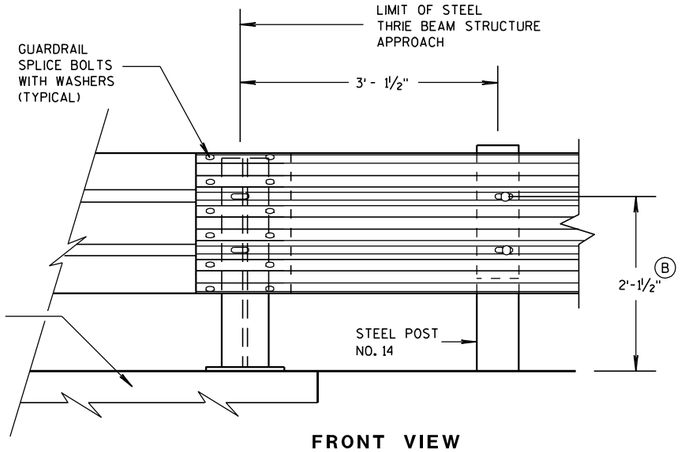
GENERAL NOTES

(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".

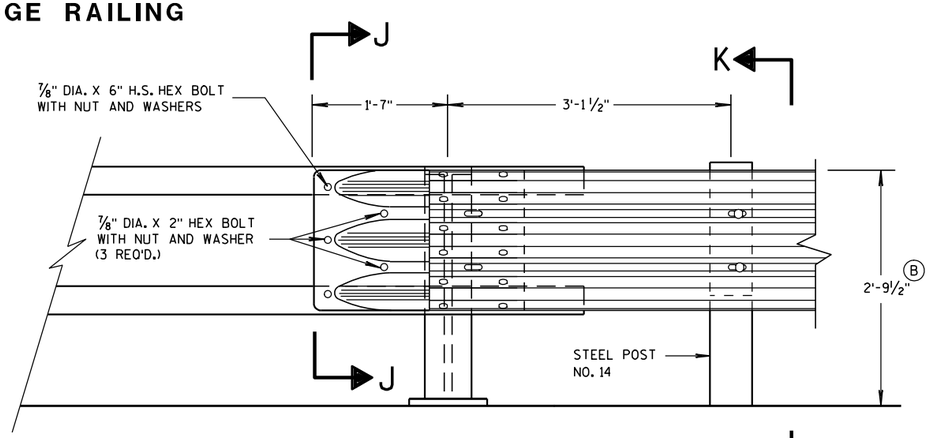


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

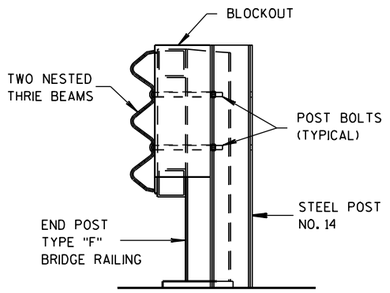


FRONT VIEW

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
FHWA	622

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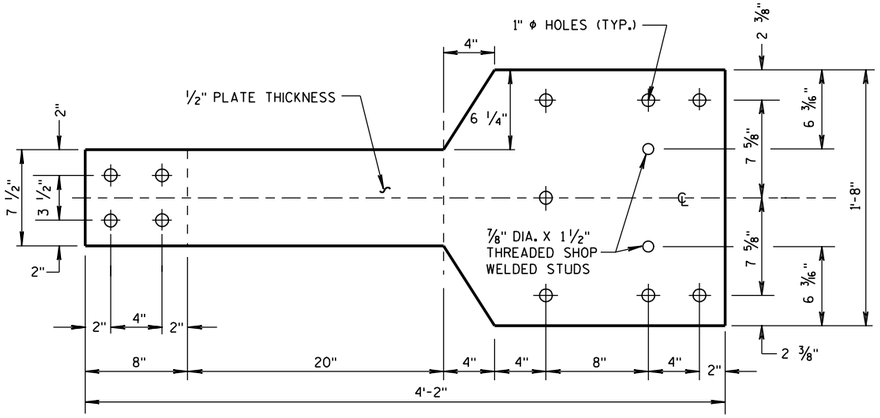
S.D.D. 14 B 45-3g

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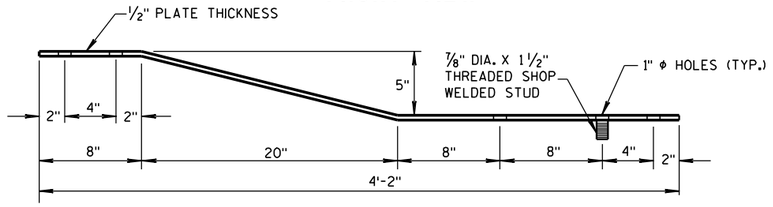
S.D.D. 14 B 45-3g

GENERAL NOTES

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

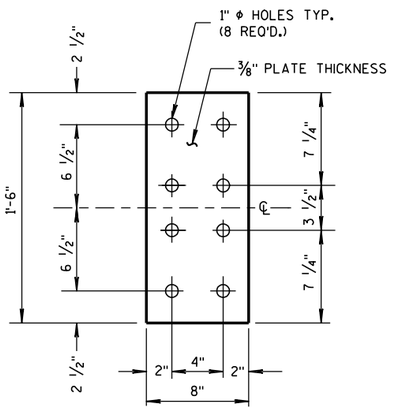


FRONT VIEW



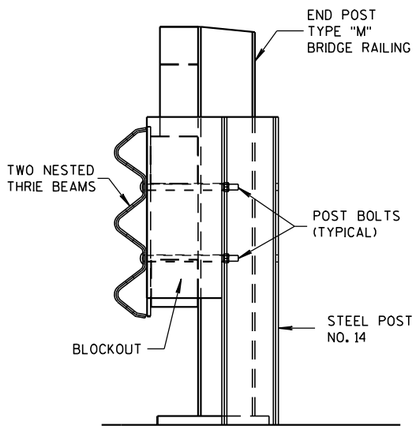
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

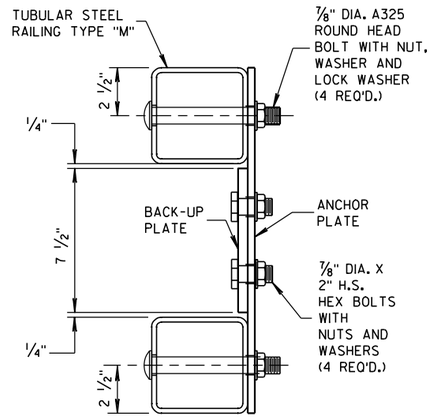


FRONT VIEW

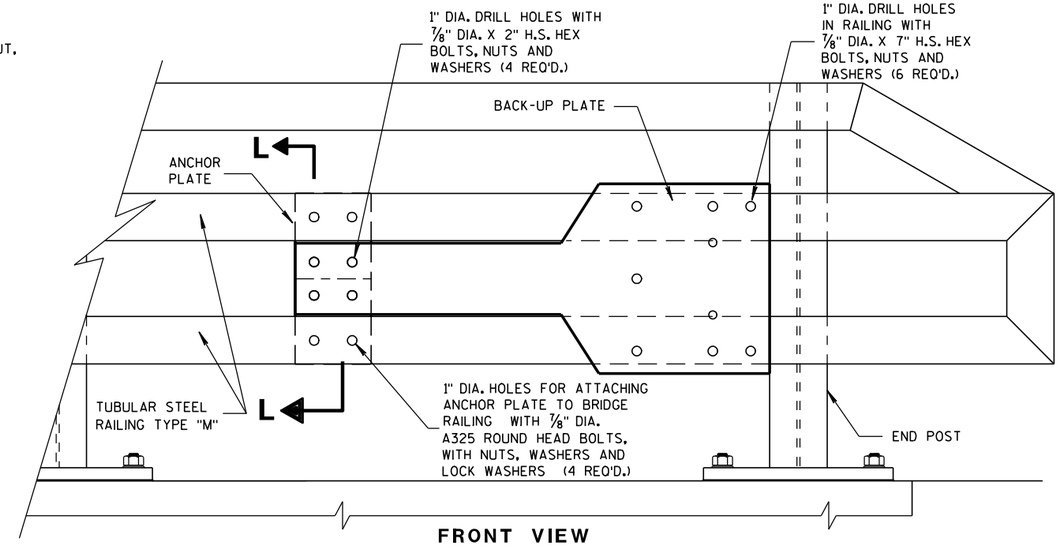
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

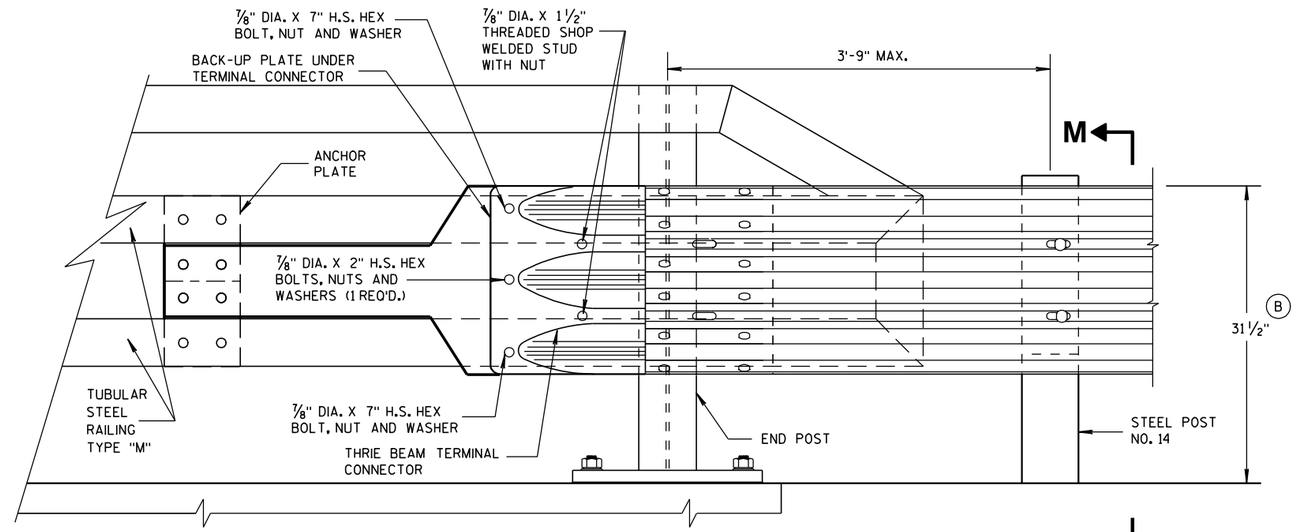


SECTION L-L

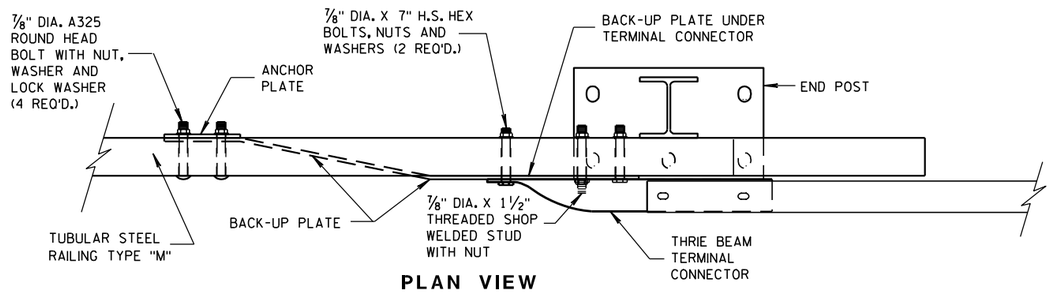


FRONT VIEW

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. [illegible]
ROADWAY STANDARDS ENGINEER
623 ENT
FHWA

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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.

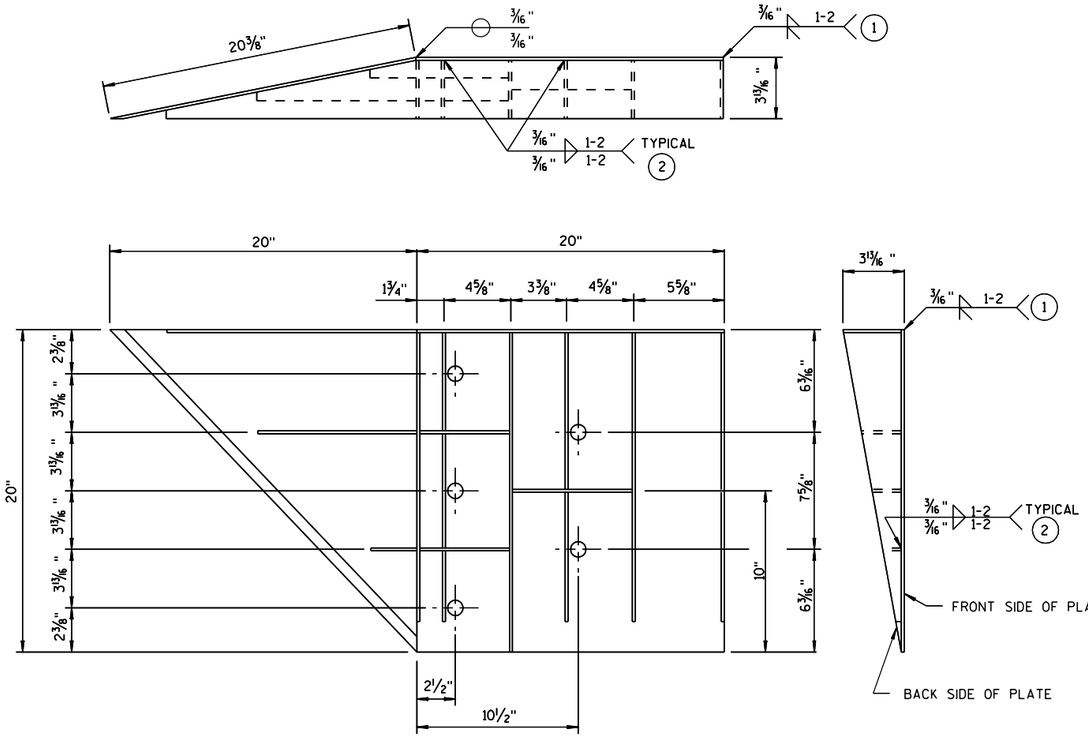
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

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)

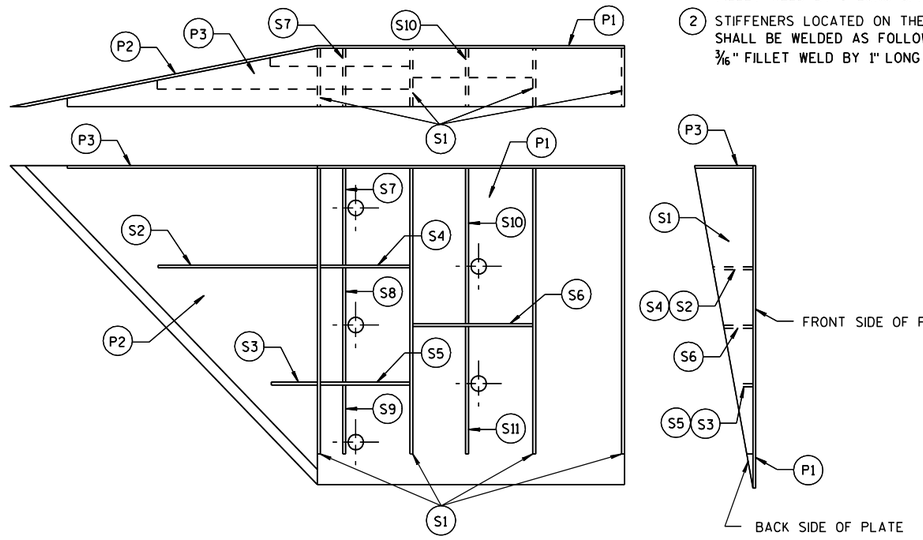


PLATE AND STIFFENER IDENTIFICATION

(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

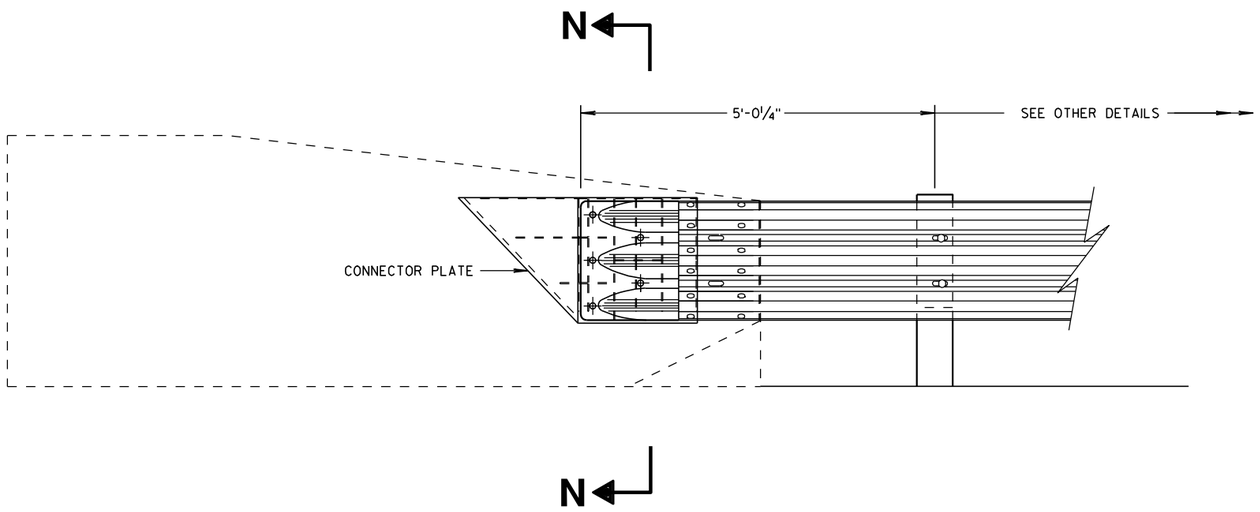
APPROVED
8/31/2012
DATE
/S/ Jerry H ...
ROADWAY STANDARDS 624
ENGINEER
...MENT
FHWA

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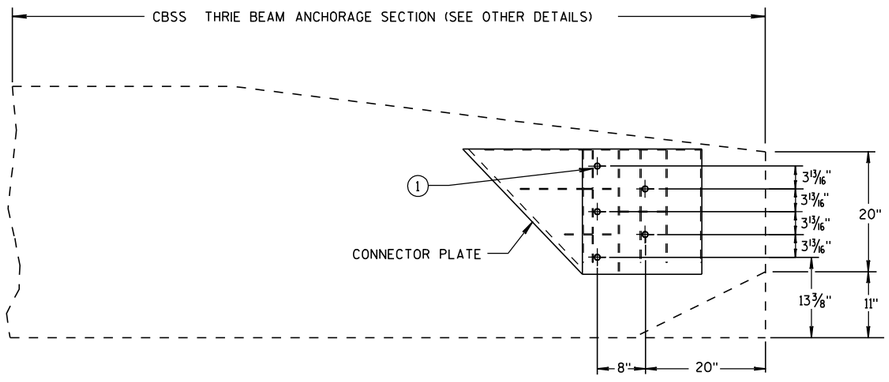
S.D.D. 14 B 45-3i

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S.D.D. 14 B 45-3i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

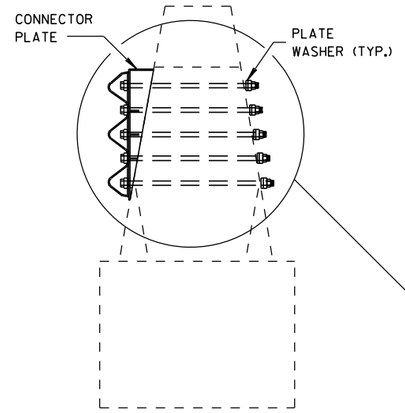


SINGLE SLOPE CONNECTION PLATE PLACEMENT

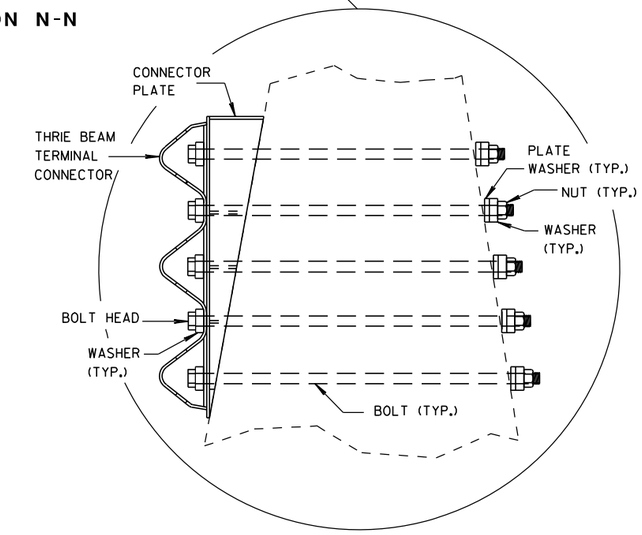
GENERAL NOTES

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

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8/31/2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible]625
ENGINEER

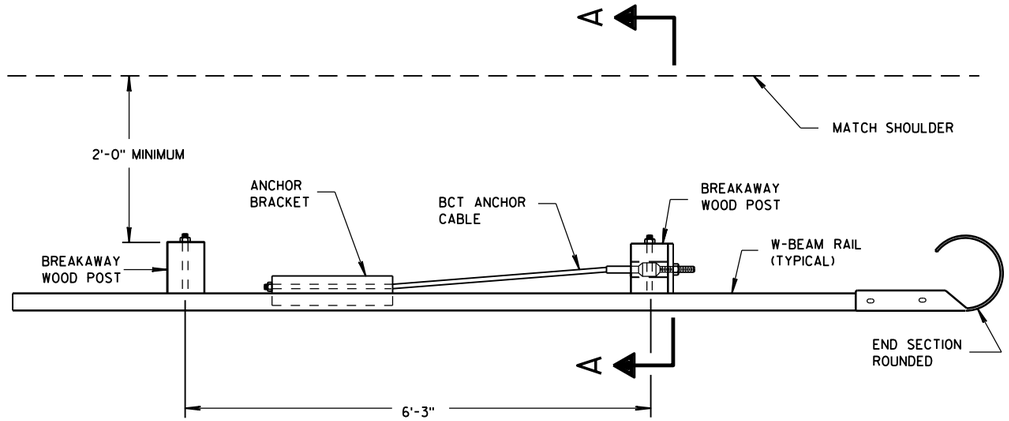
FHWA

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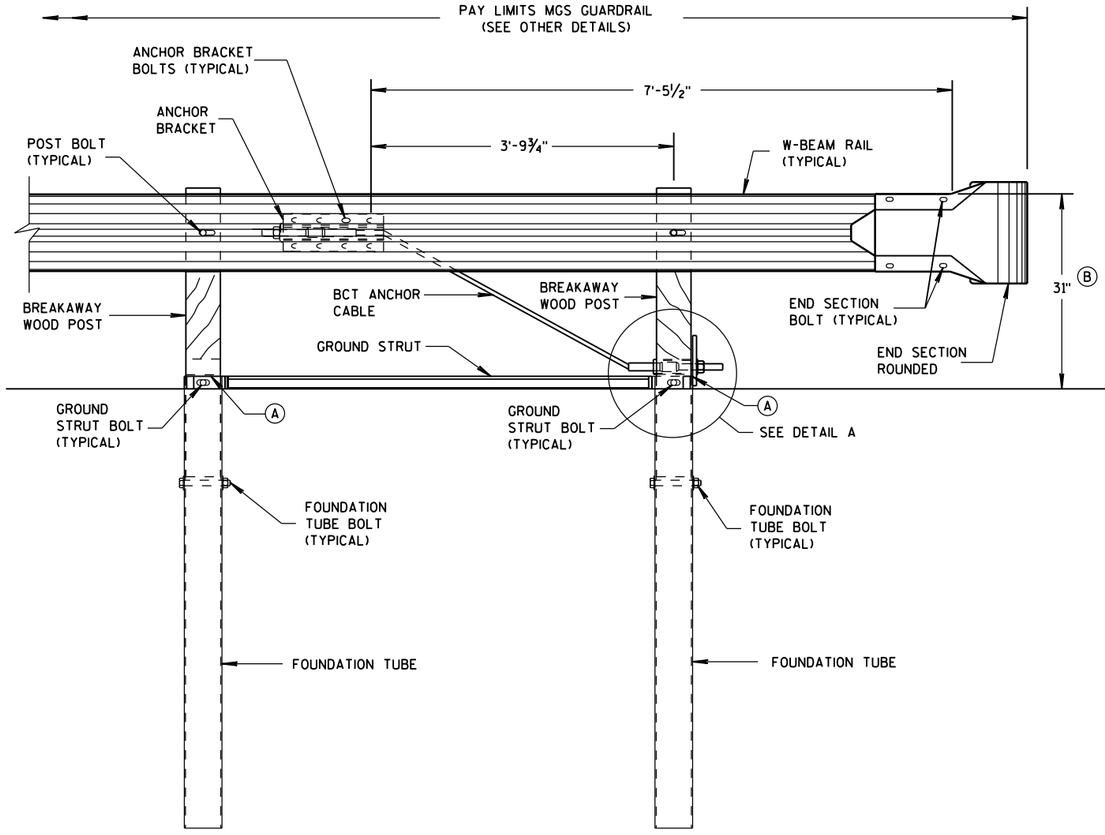
S.D.D. 14 B 45-3j

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S.D.D. 14 B 45-3j

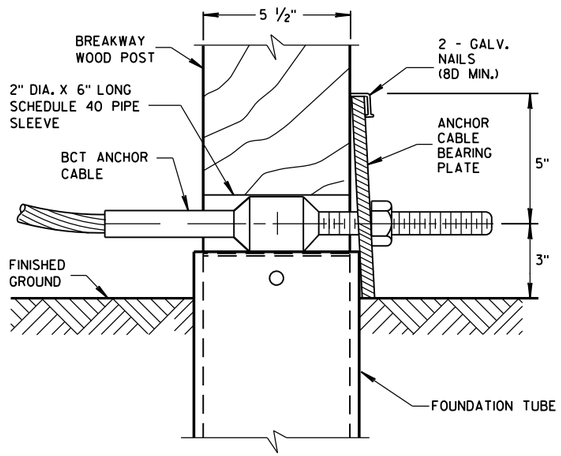


PLAN VIEW



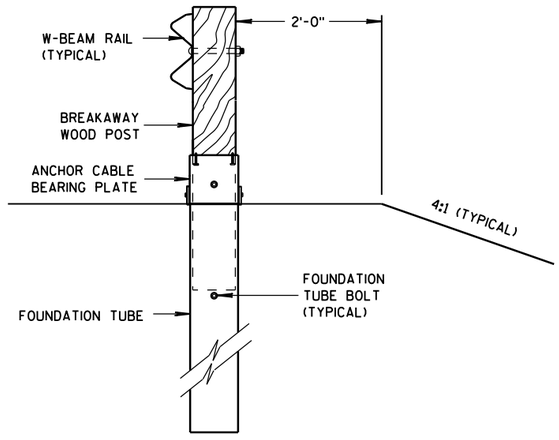
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

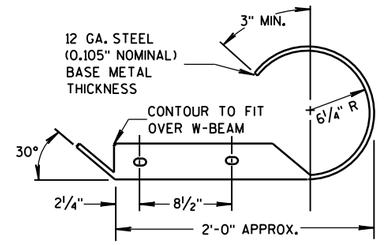
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

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.

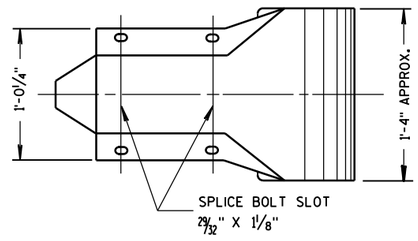
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(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".



PLAN VIEW



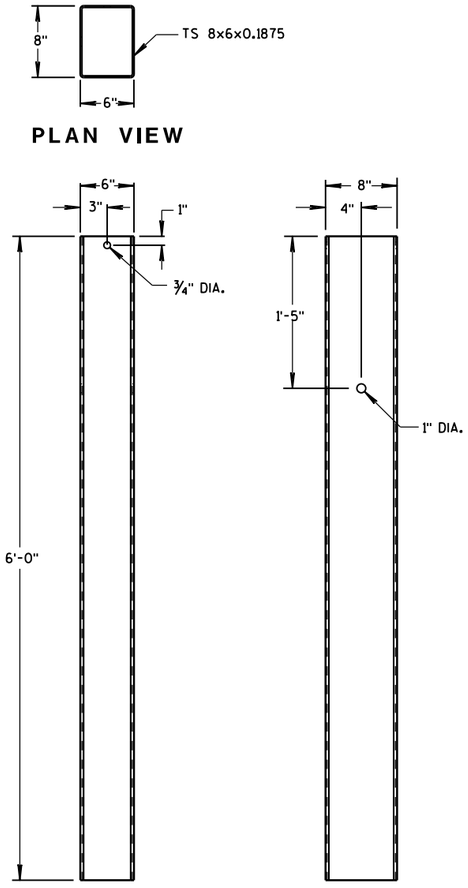
FRONT VIEW

W BEAM END SECTION ROUNDED

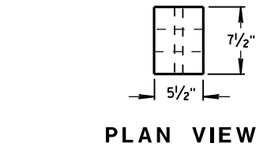
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

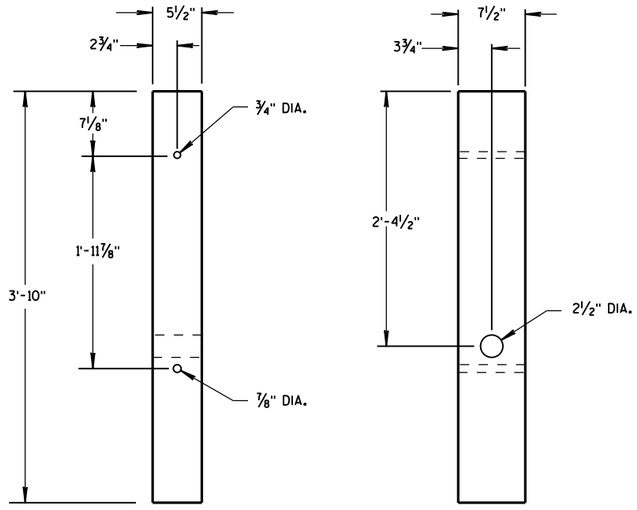
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 14 B 47-2a



FOUNDATION TUBE



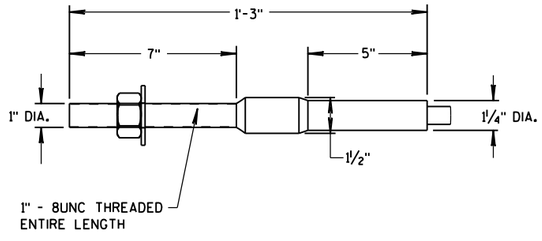


BREAKAWAY WOOD POST

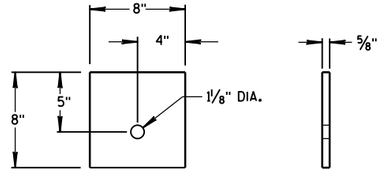
GENERAL NOTES

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

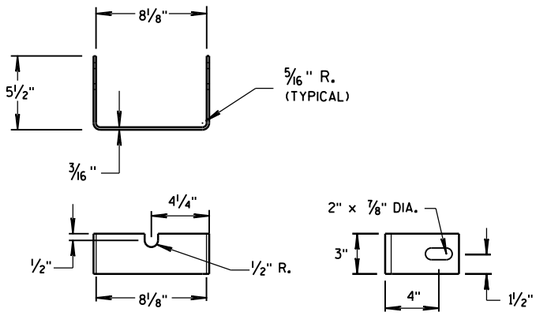
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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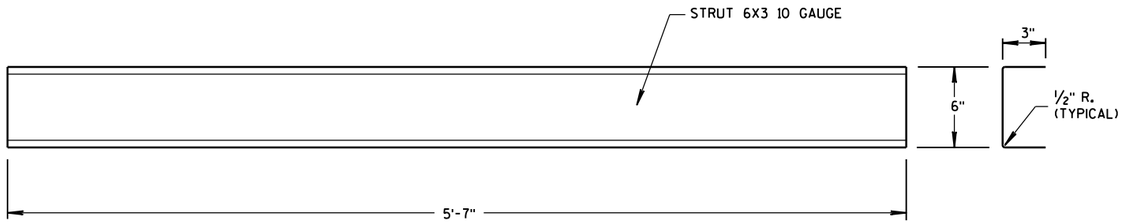
S.D.D. 14 B 47-2b

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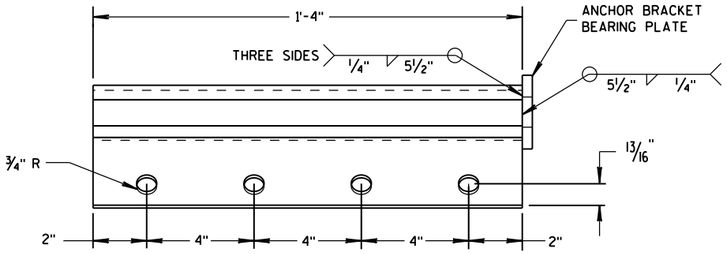
S.D.D. 14 B 47-2b

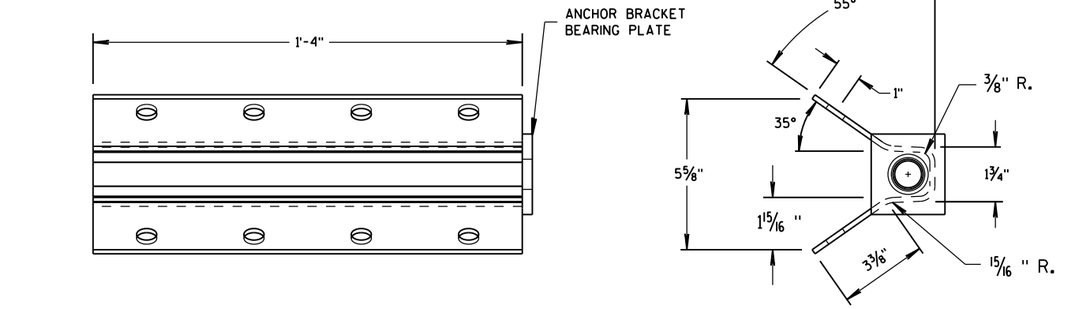


YOKE DETAIL

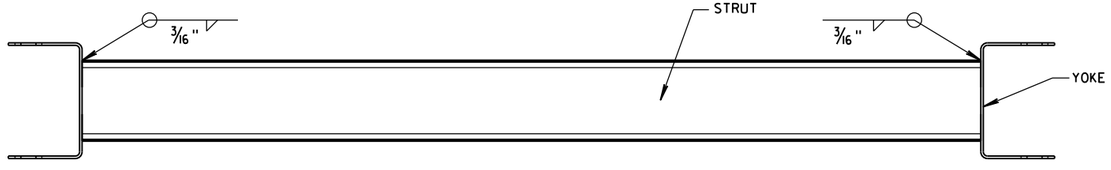


STRUT DETAIL

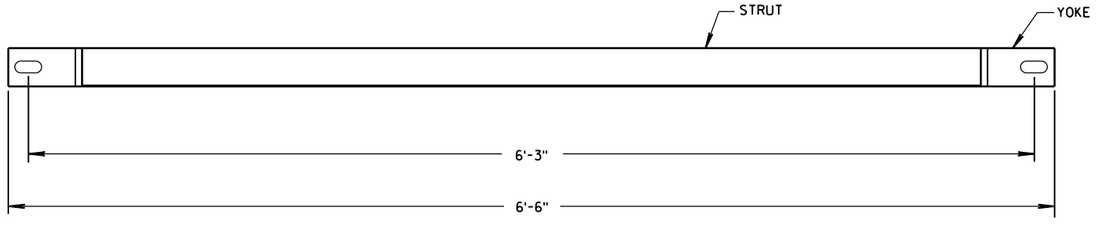




ANCHOR BRACKET

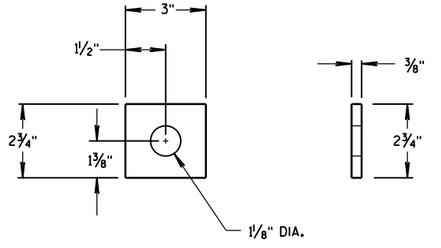


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

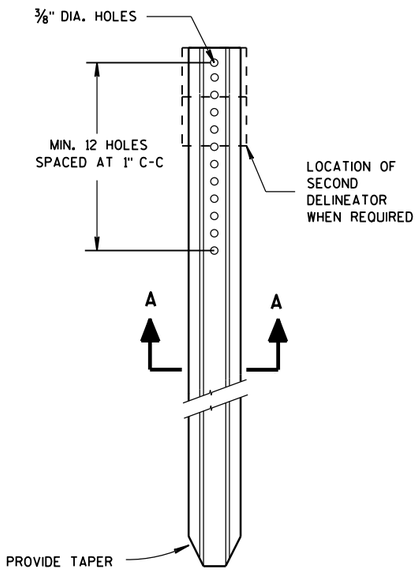
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

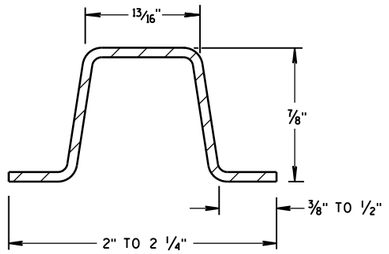
APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 14 B 47-2c

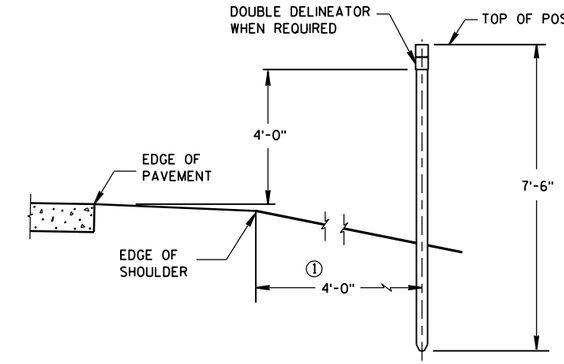


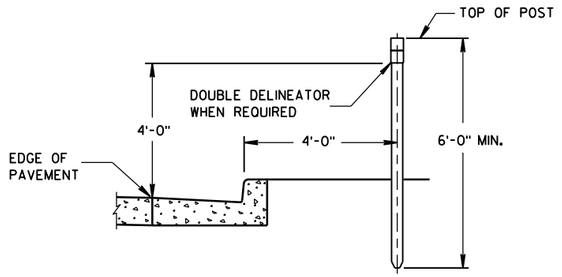
DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



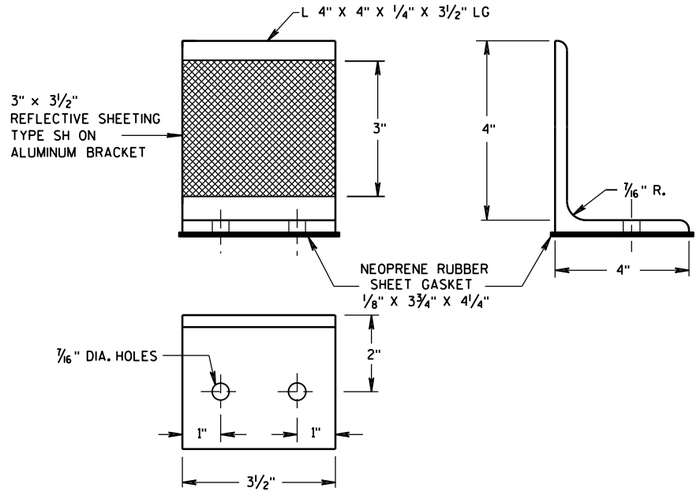


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

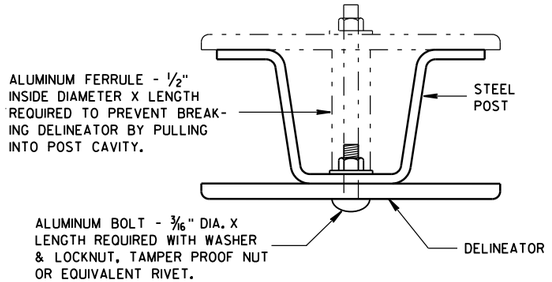
GENERAL NOTES

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

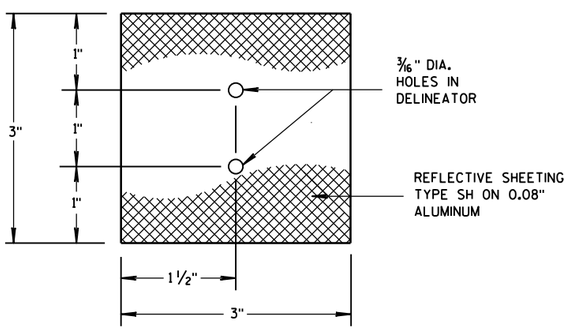
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



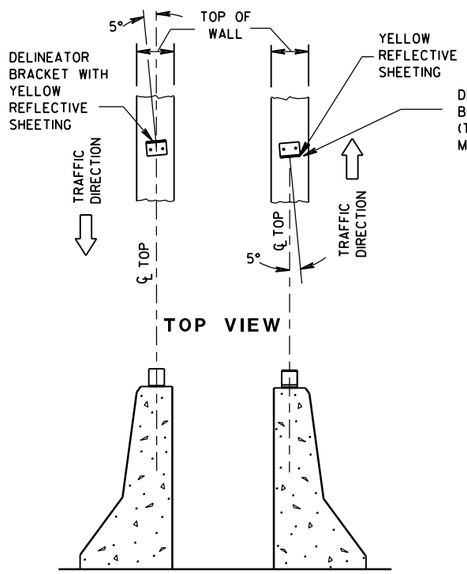
DELINEATOR BRACKET



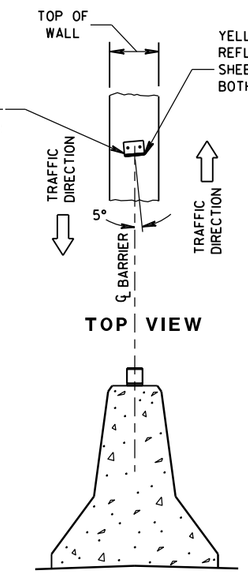
MOUNTING DETAIL FOR DELINEATOR



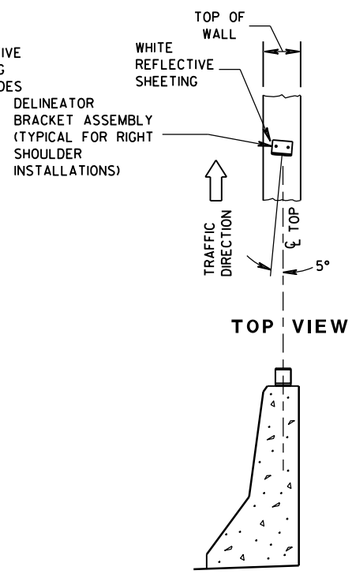
3"x 3" DELINEATOR



DOUBLE BARRIERS IN MEDIAN

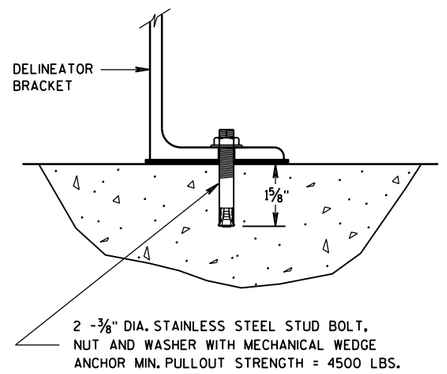


MEDIAN BARRIER



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

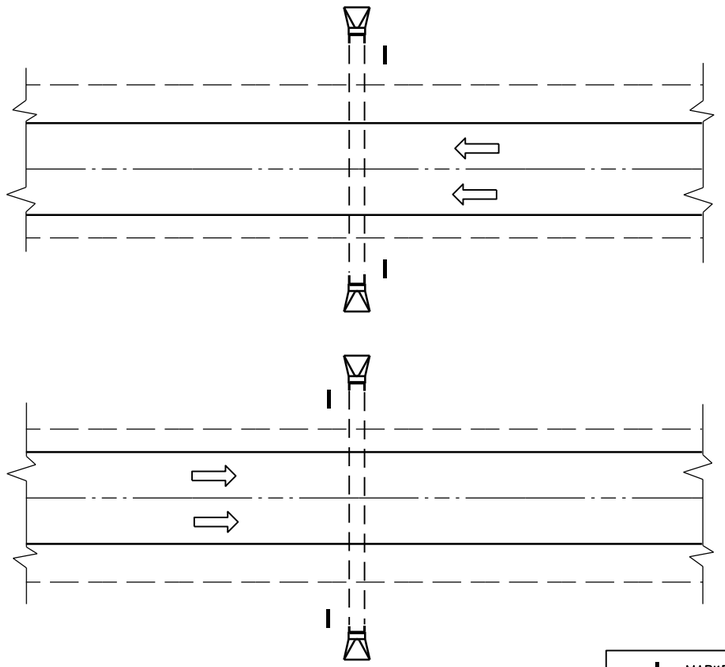
APPROVED
7/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC E
FHWA

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S.D.D. 15 A 2-8

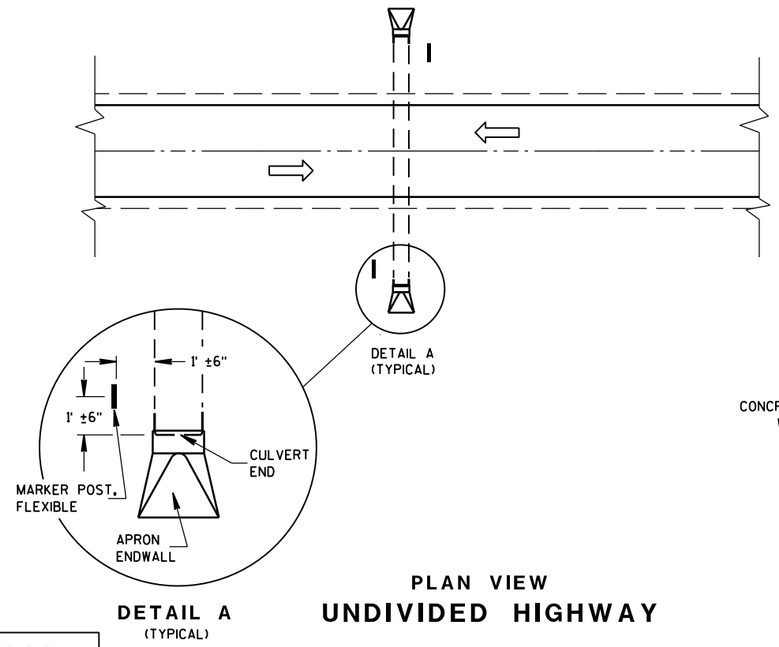
6

S.D.D. 15 A 2-8



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

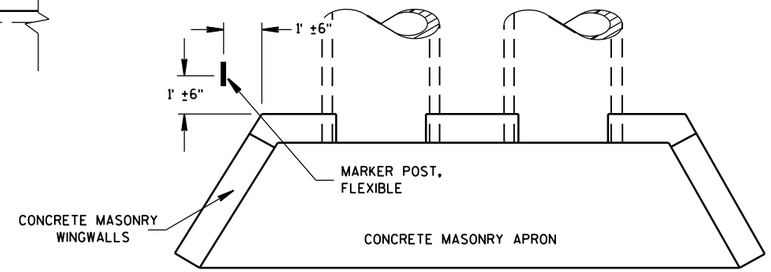
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

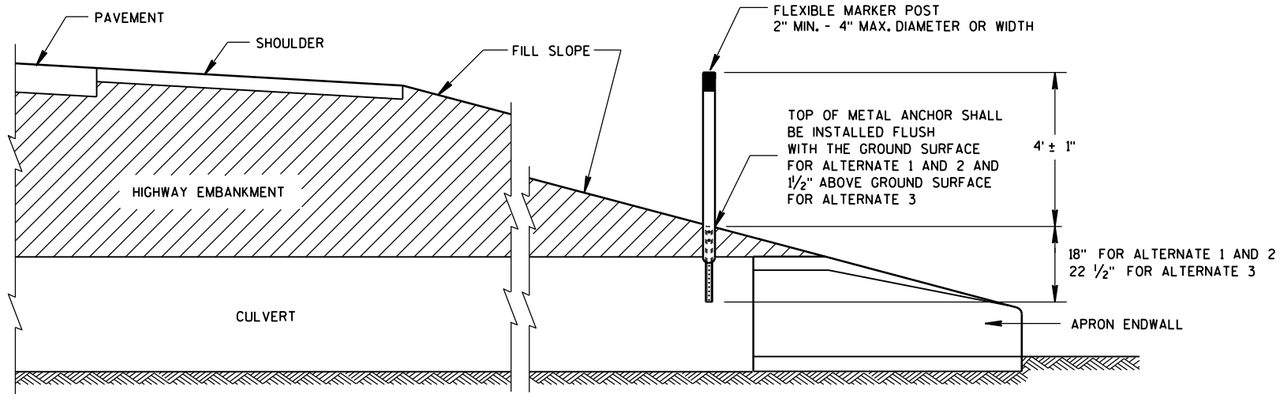
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

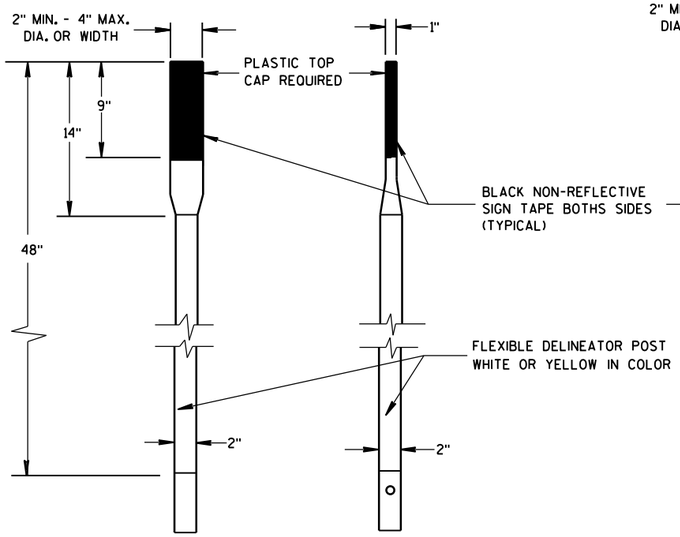
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

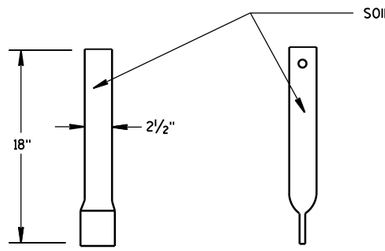
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S.D.D. 15 A 3-2a

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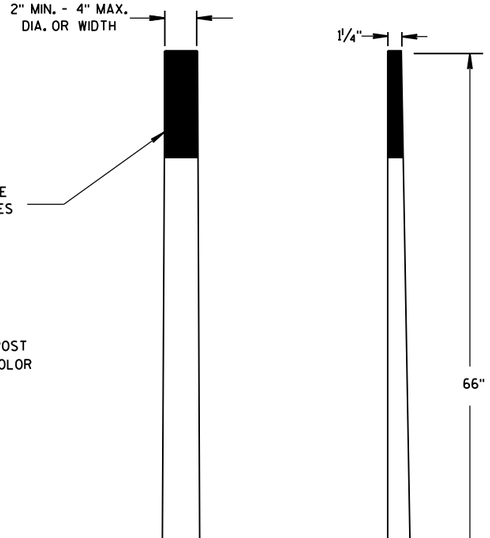
S.D.D. 15 A 3-2a





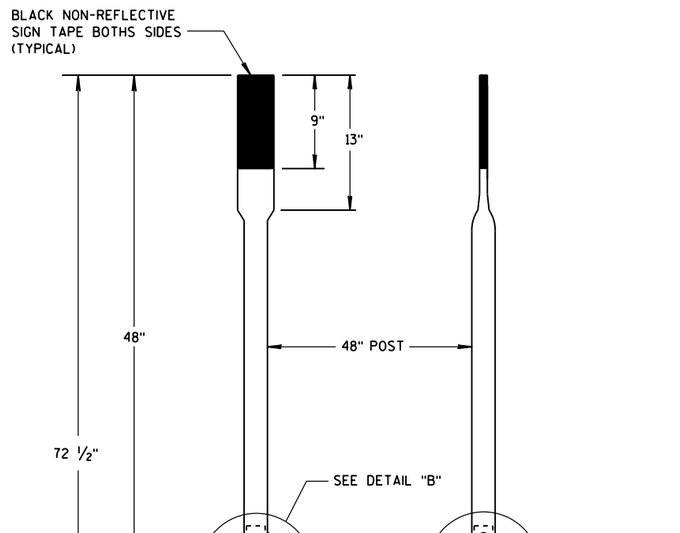
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

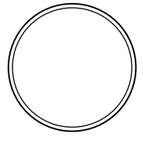
ALTERNATE 2



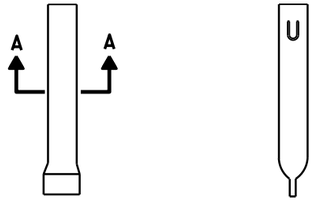
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

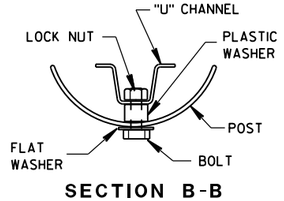


SECTION A-A

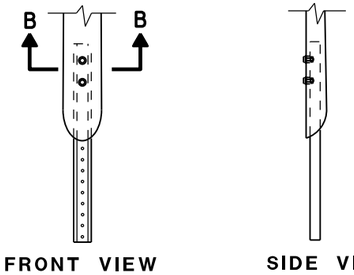


FRONT VIEW SIDE VIEW

ALTERNATE 1

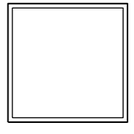


SECTION B-B

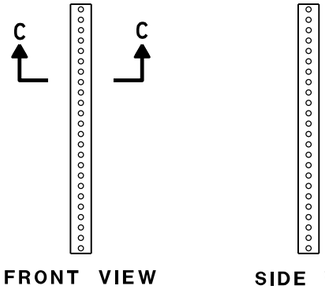


FRONT VIEW SIDE VIEW

ALTERNATE 2



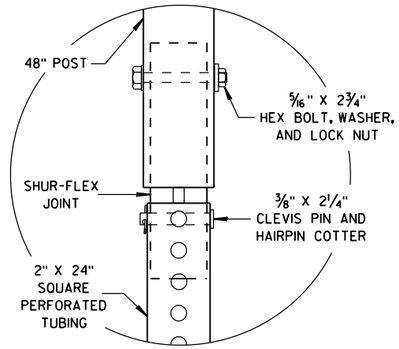
SECTION C-C



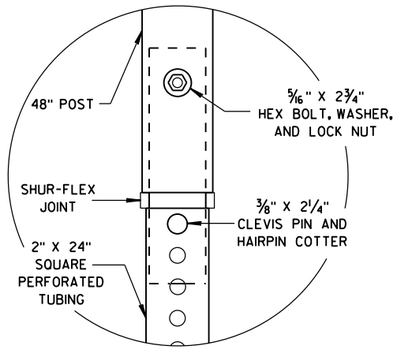
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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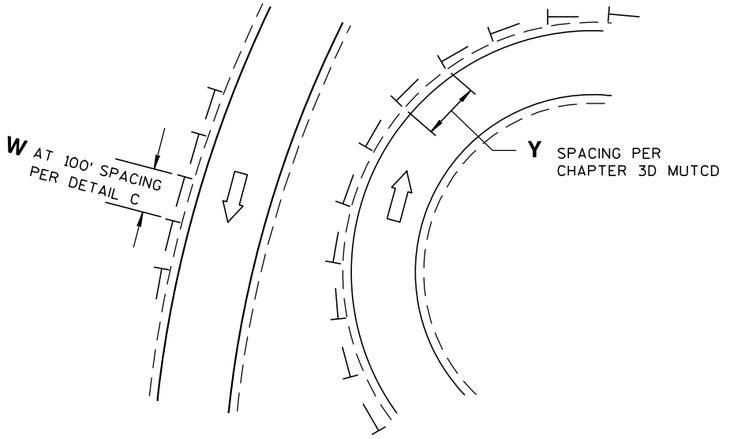
S.D.D. 15 A 3-2b

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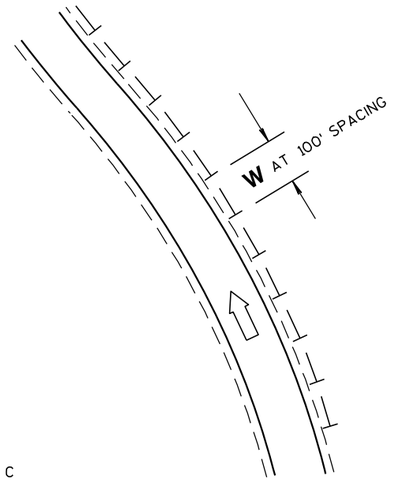
S.D.D. 15 A 3-2b

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



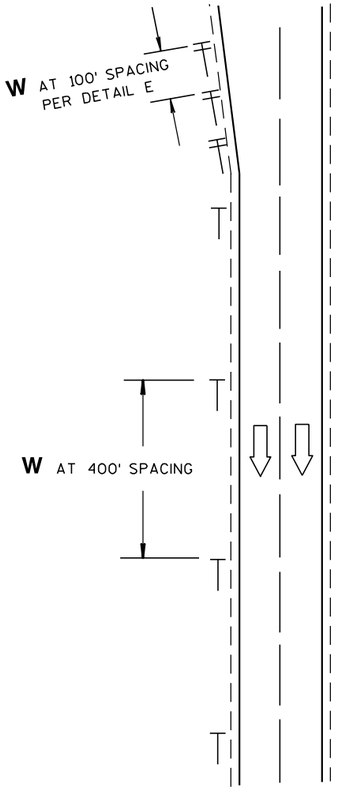
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



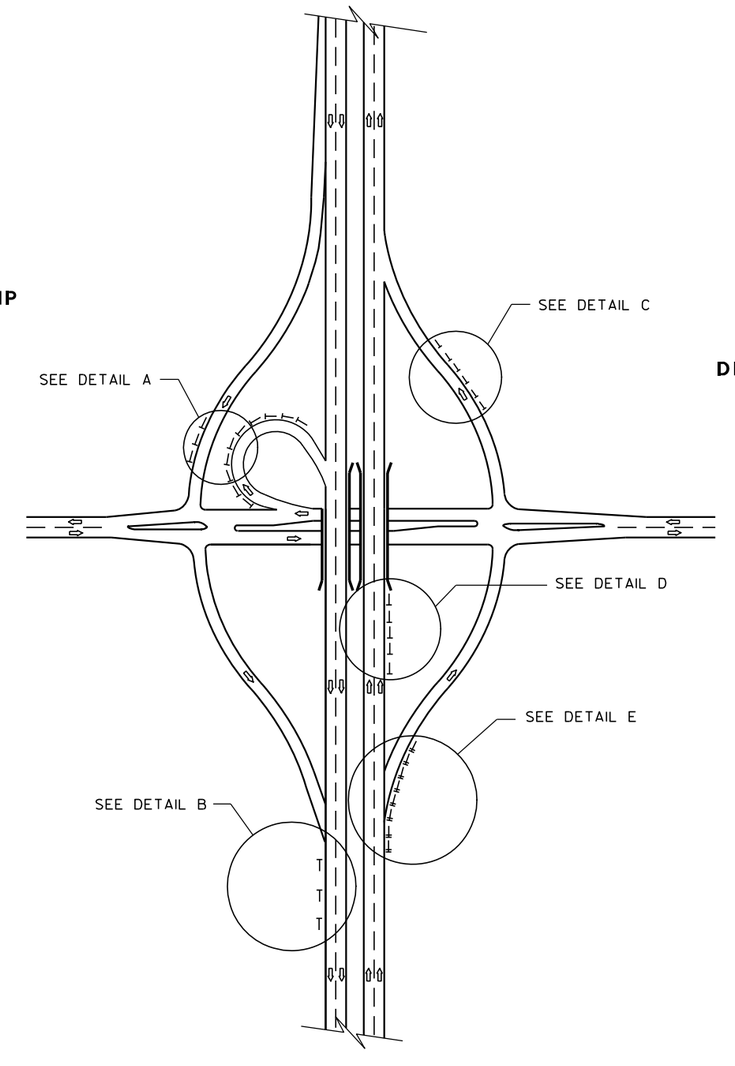
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

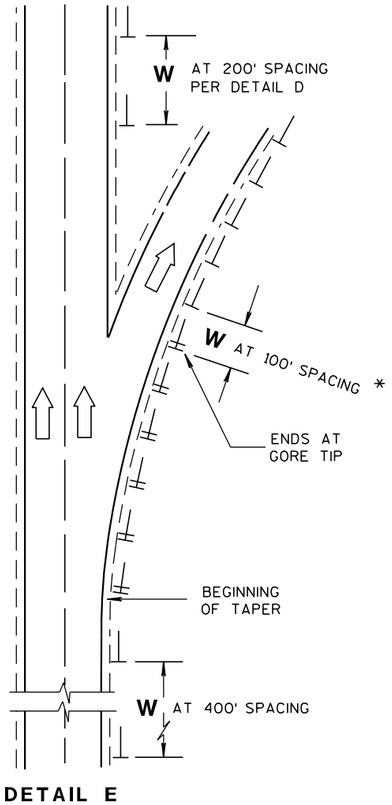
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



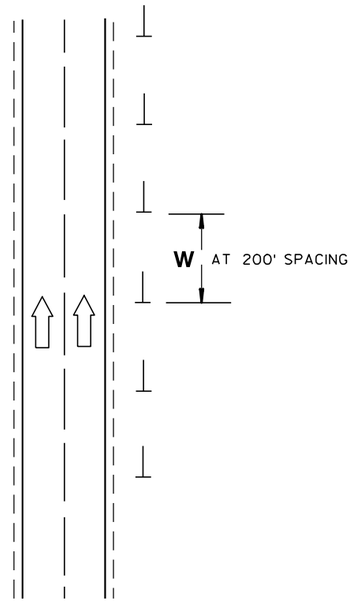
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



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

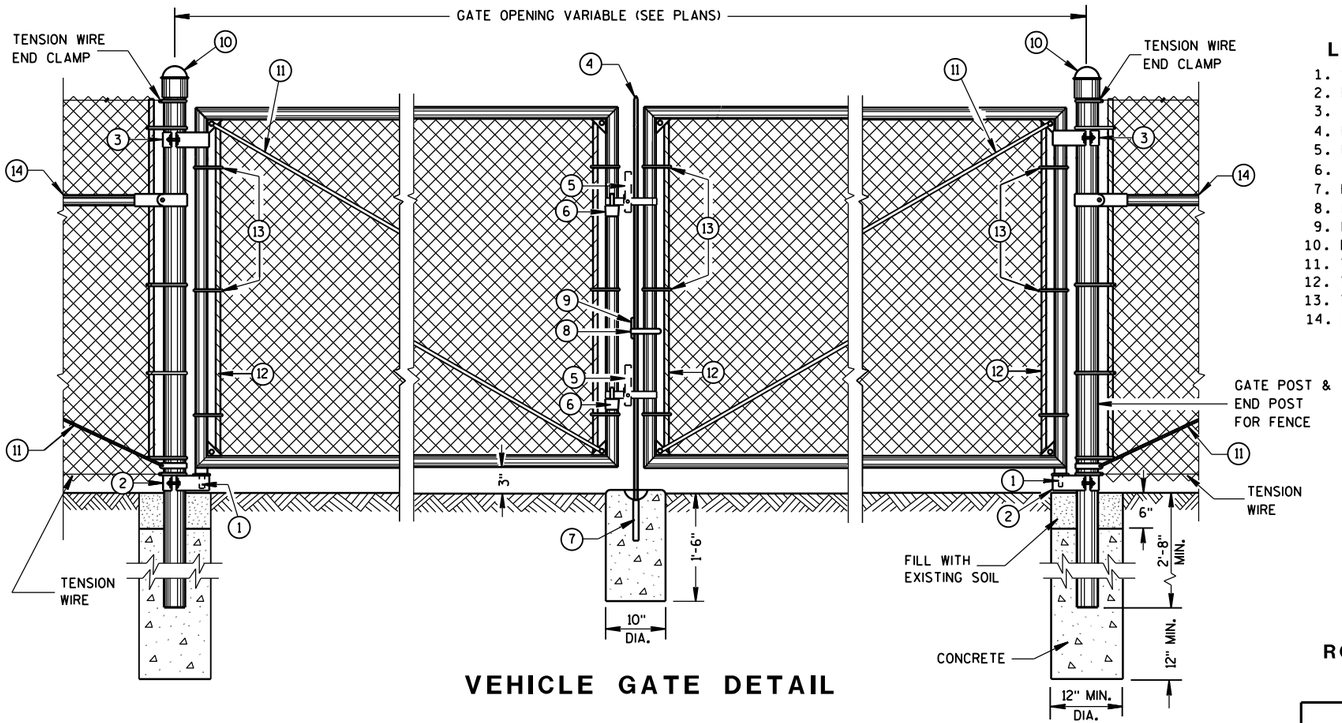
APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft
STATE TRAFFIC ENGINEER
FHWA

6

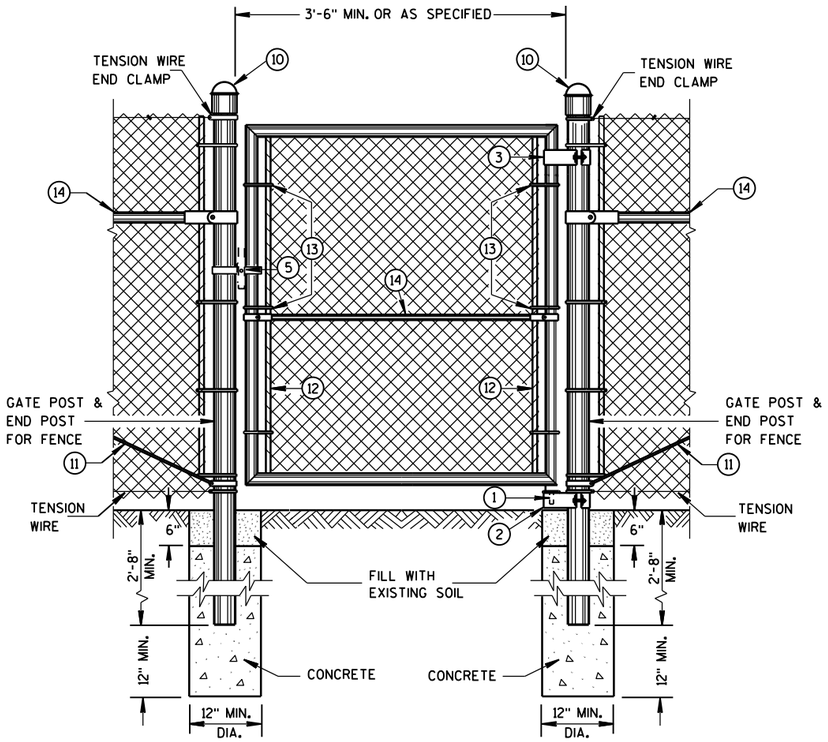
S.D.D. 15 A 6-2

6

S.D.D. 15 A 6-2



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

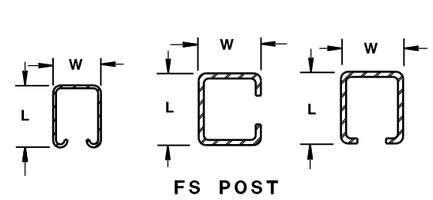
FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

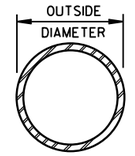
FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

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

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

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

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

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

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

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

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

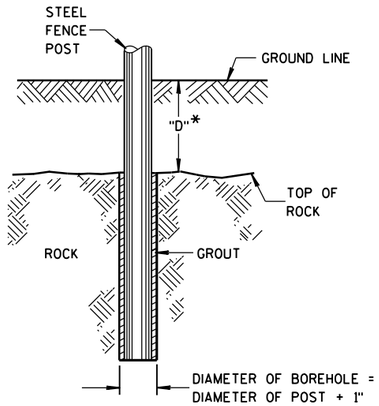
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 B 3-14a

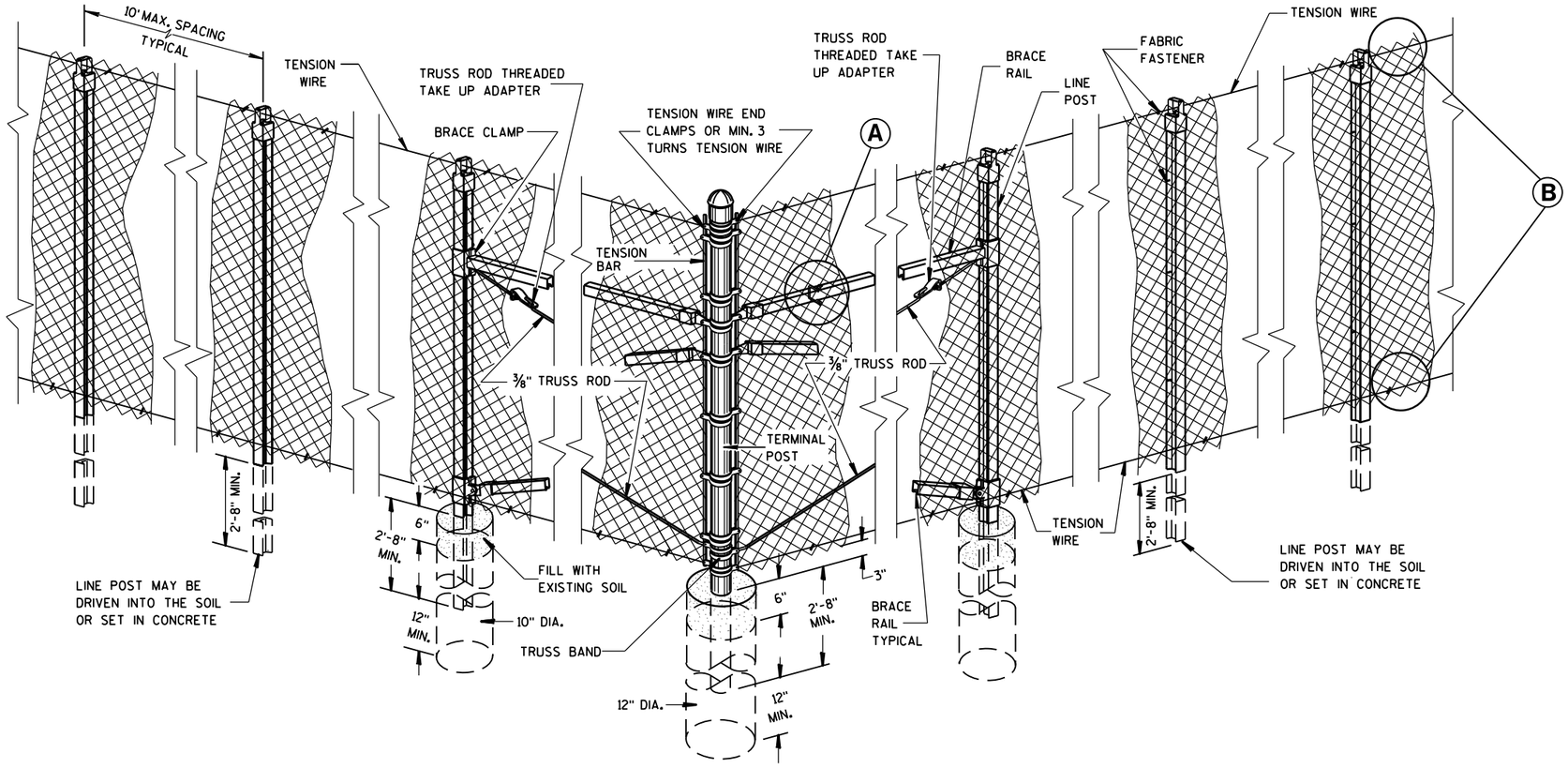
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S.D.D. 15 B 3-14a

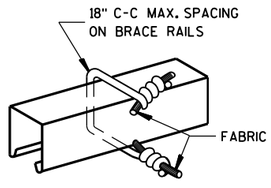


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



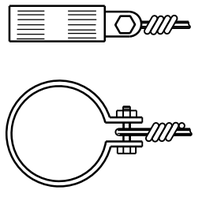
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



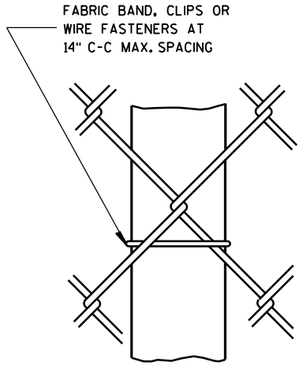
BRACE RAIL

FABRIC FASTENER

Ⓐ



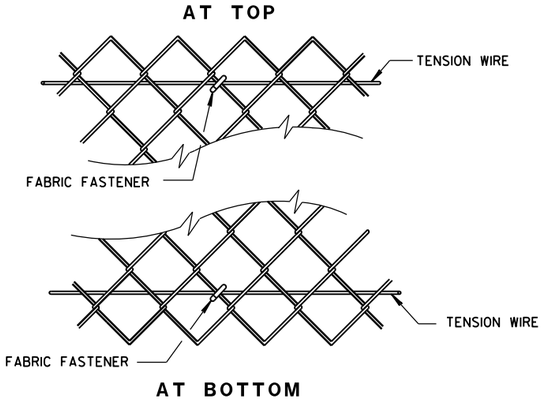
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

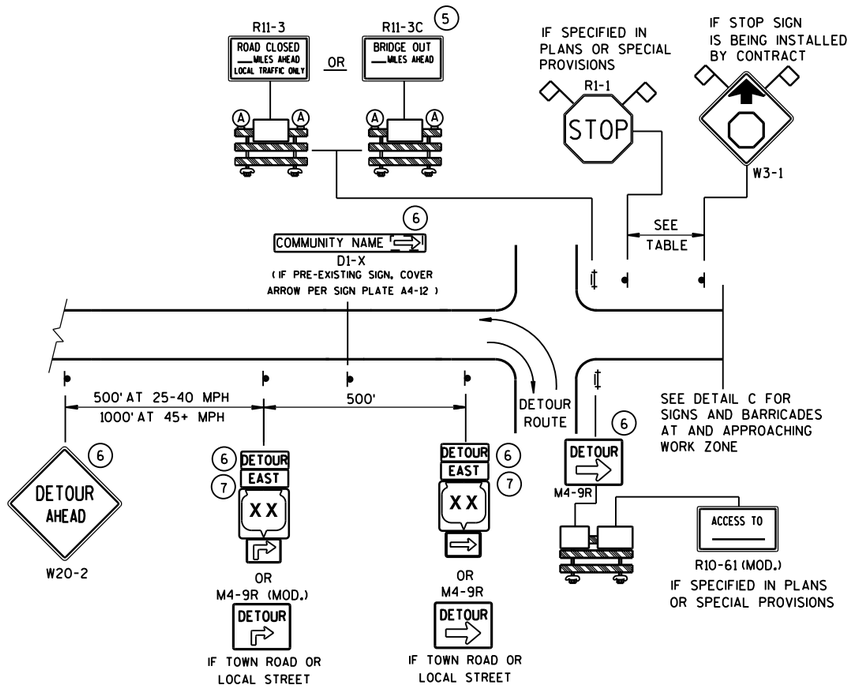
634

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S.D.D. 15 B 3-14b

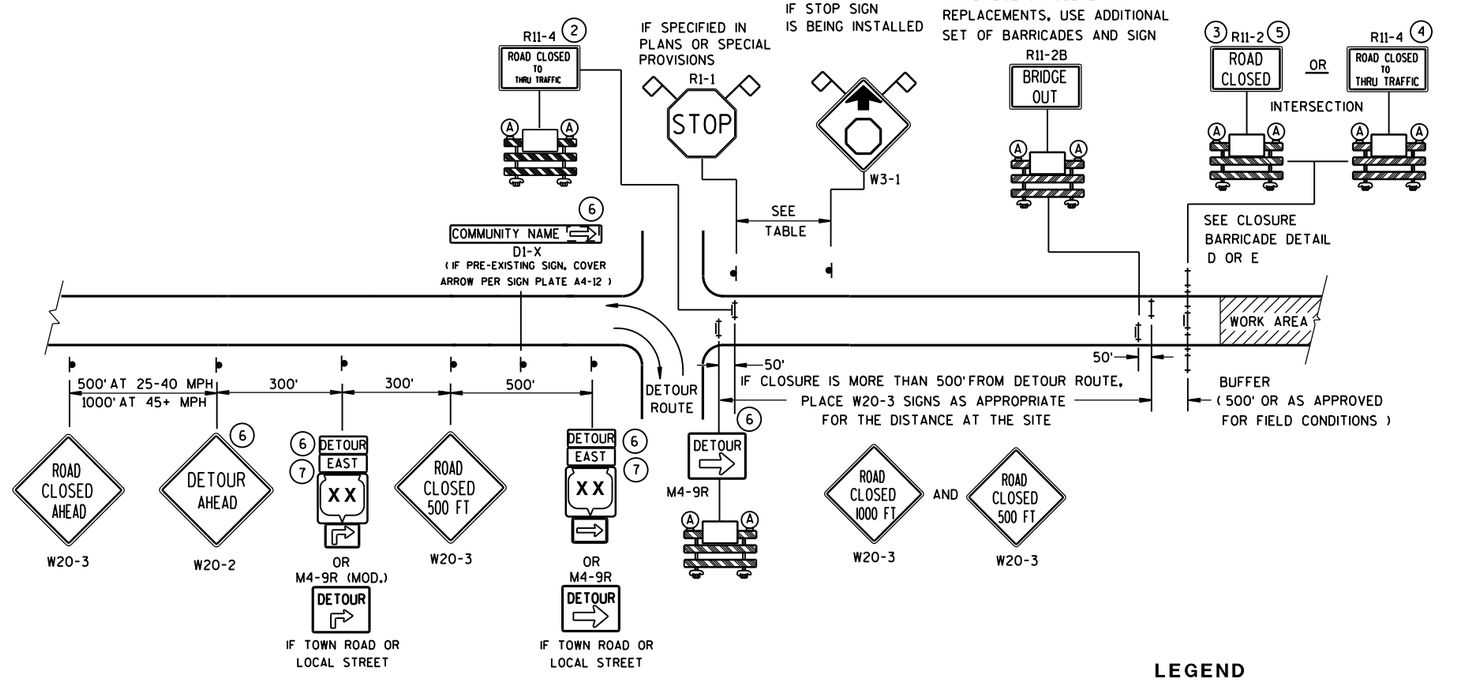
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S.D.D. 15 B 3-14b



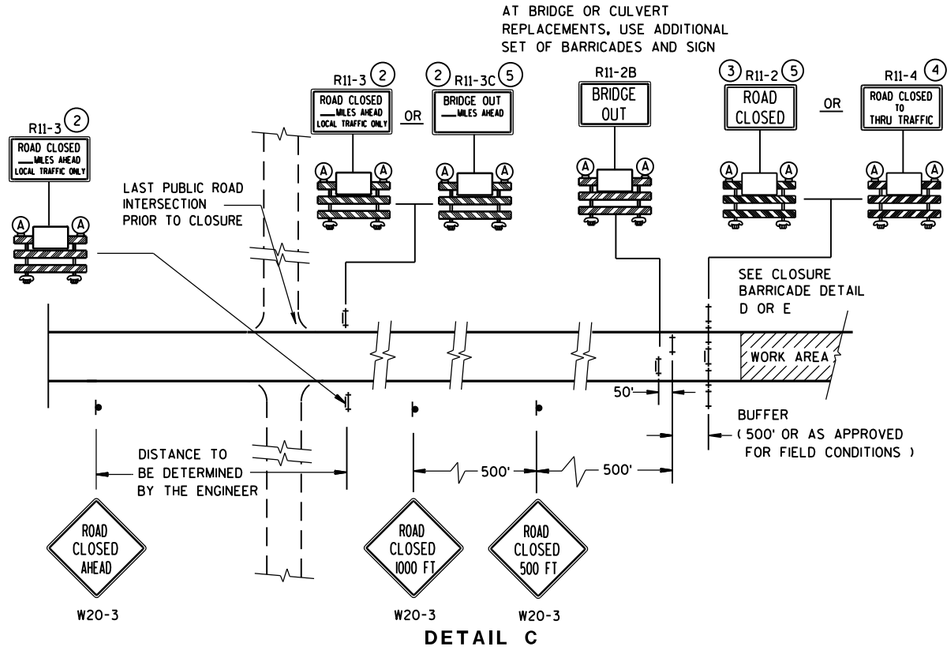
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

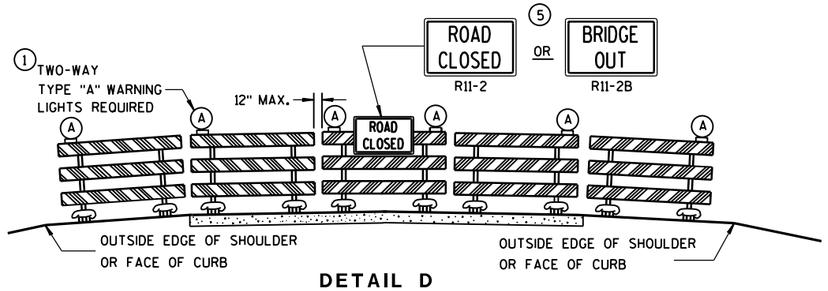
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

635 DESIGN

FHWA

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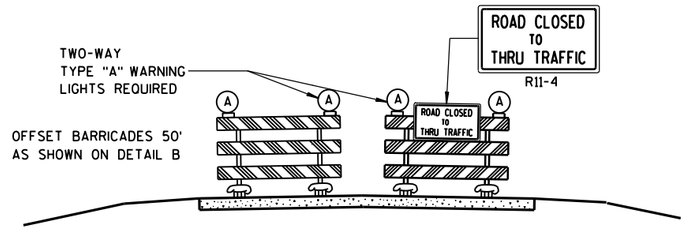
S.D.D. 15 C 2-5a



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

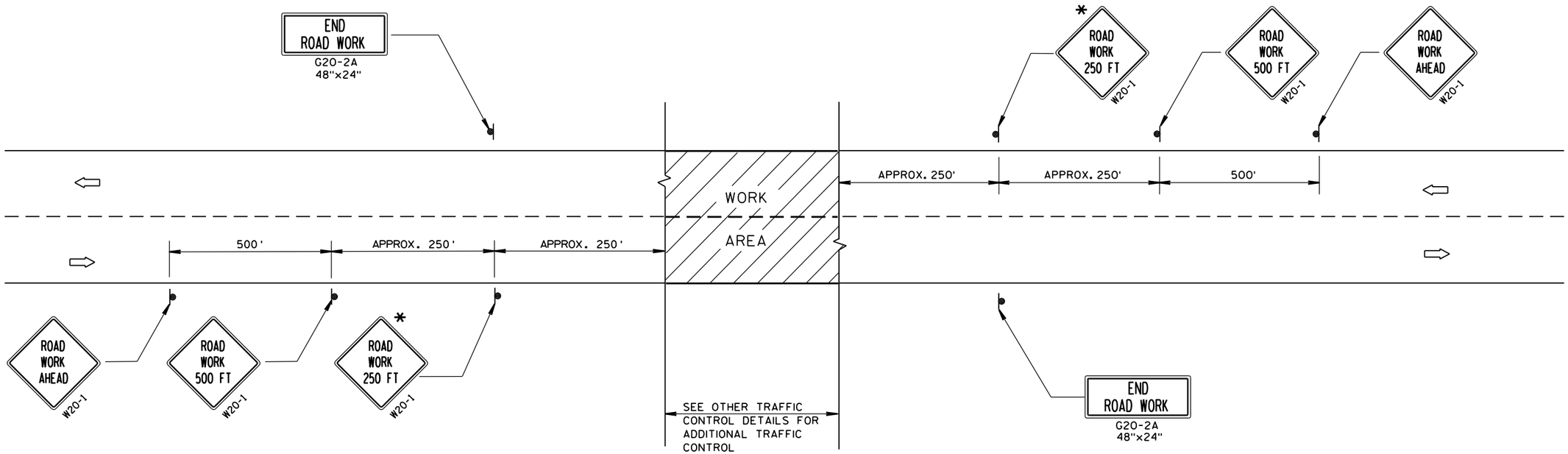
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

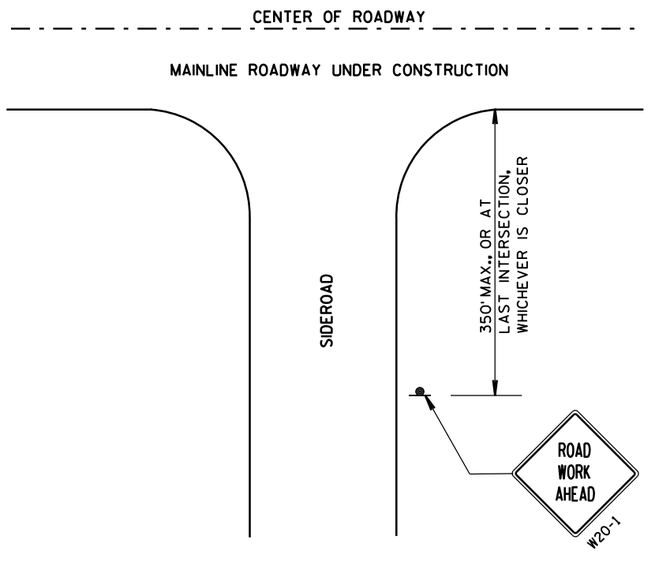
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S.D.D. 15 C 2-5b



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

637

SIGN

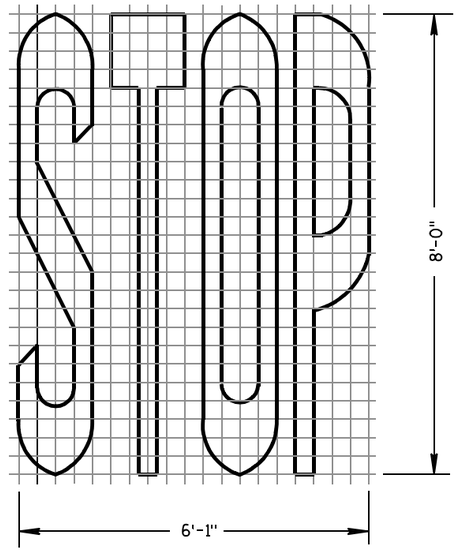
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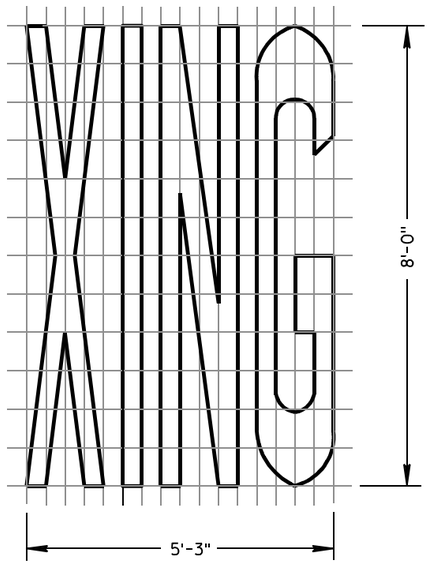
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S.D.D. 15 C 5-2

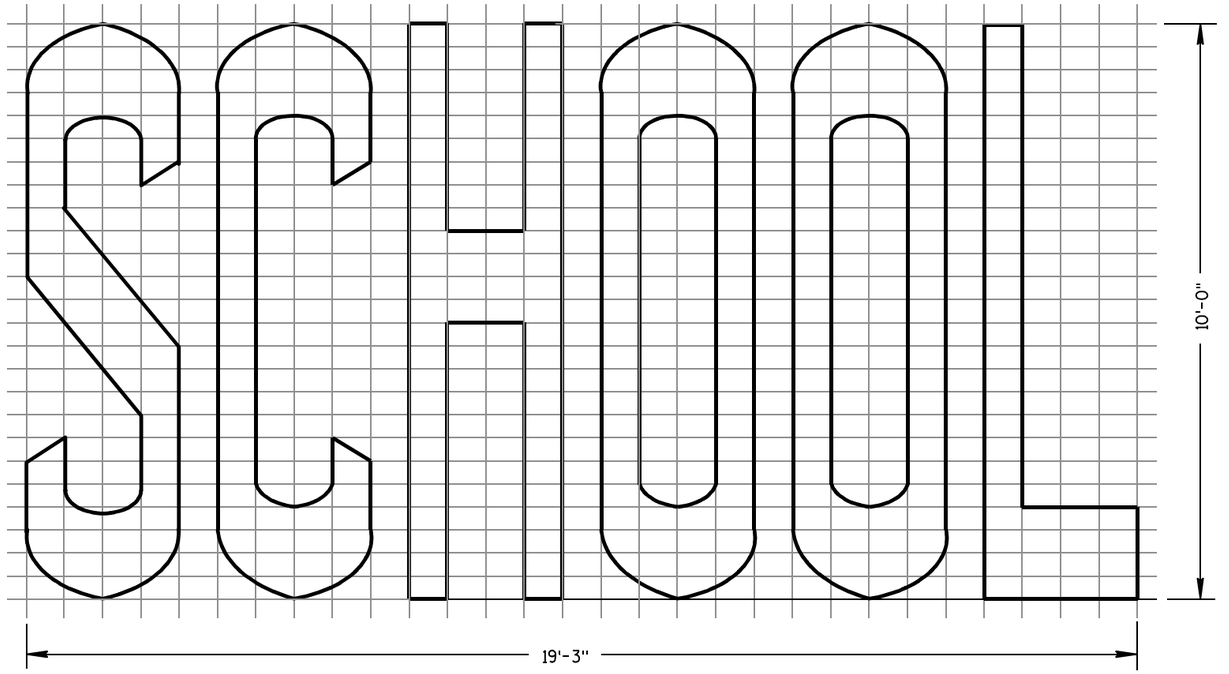
GENERAL NOTES

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.

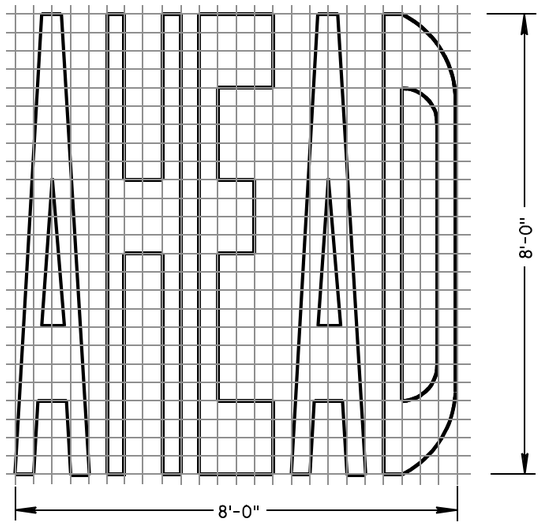
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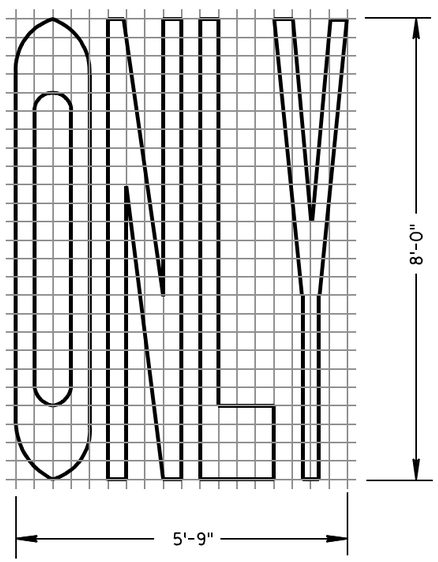


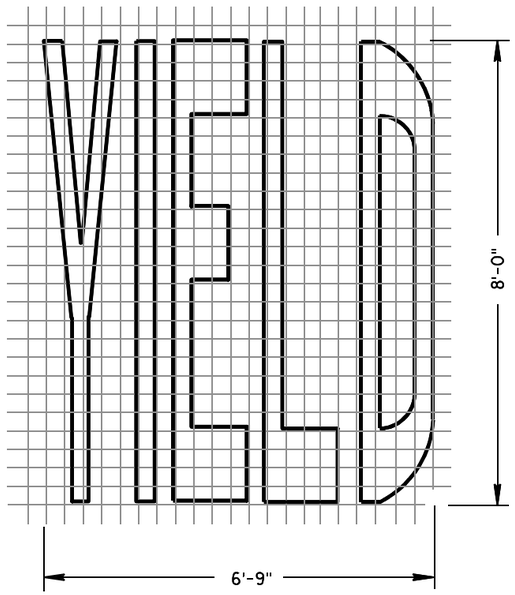


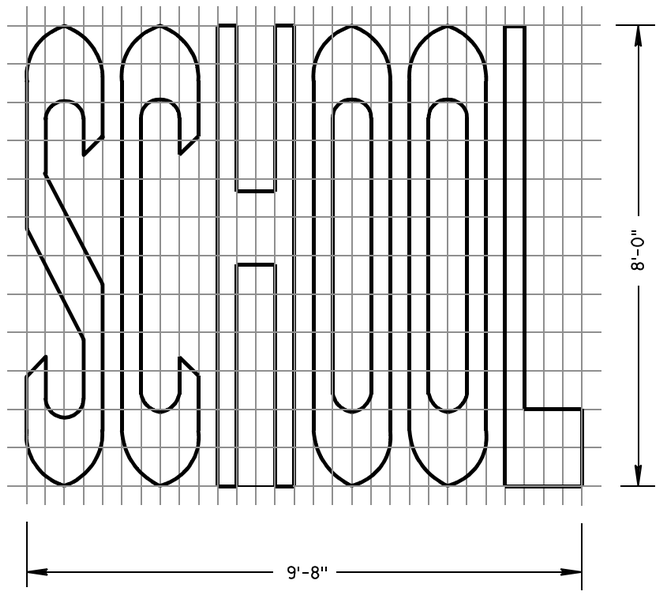


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

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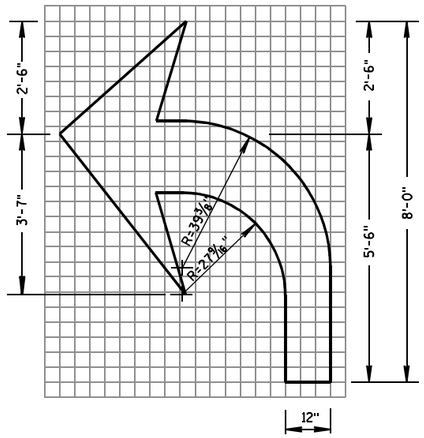
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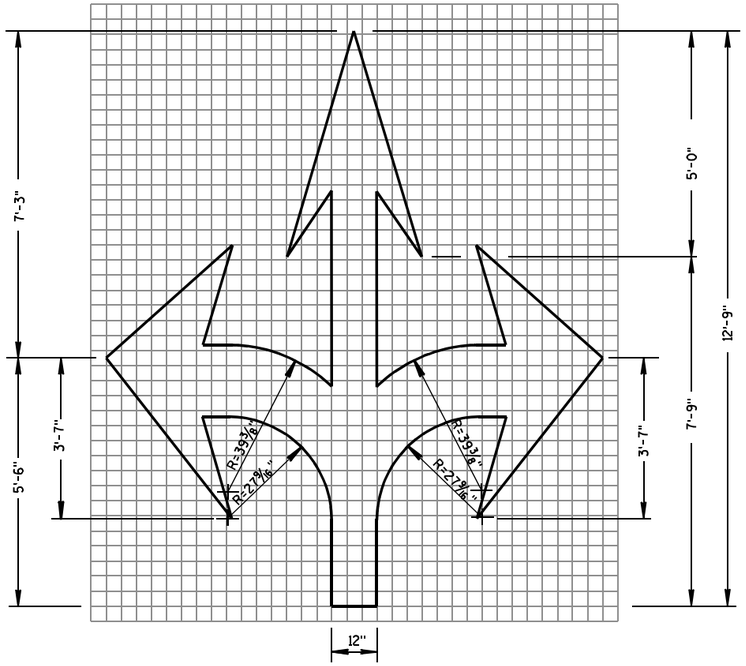
S.D.D. 15 C 7-12b

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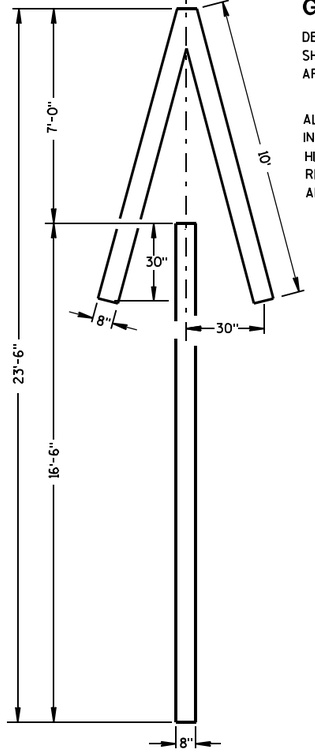
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TYPE 2



TYPE 6

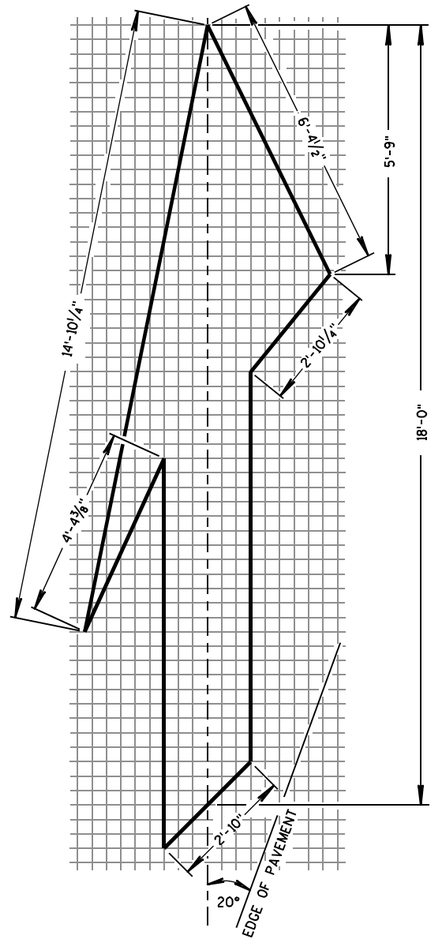


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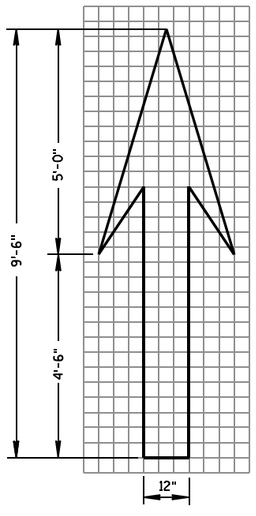
GENERAL NOTES

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.

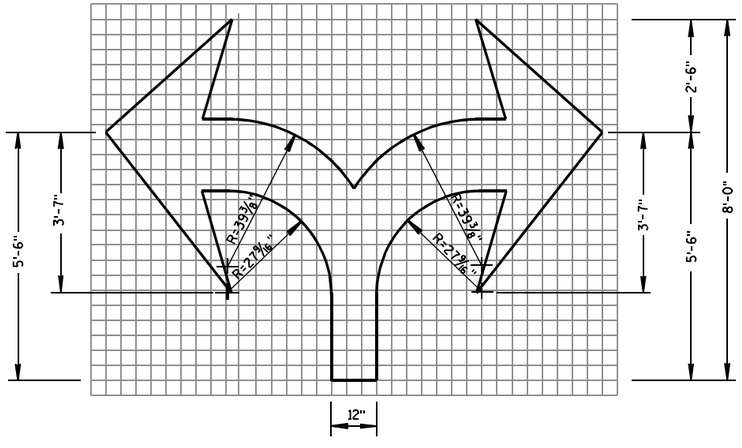
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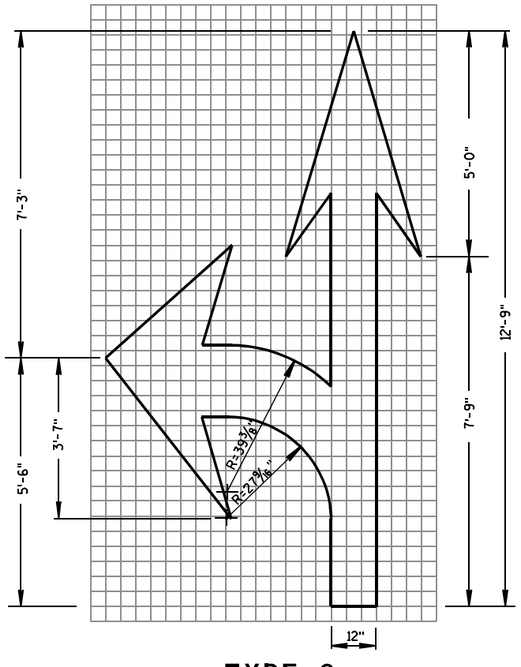
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

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S.D.D. 15 C 7-12c

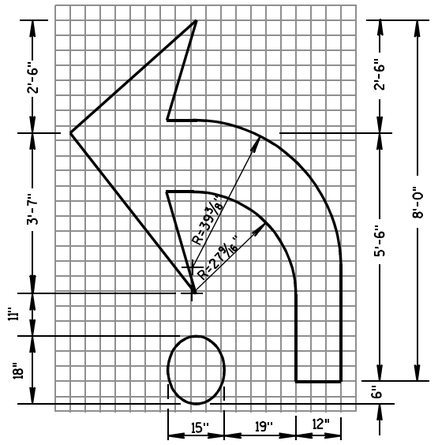
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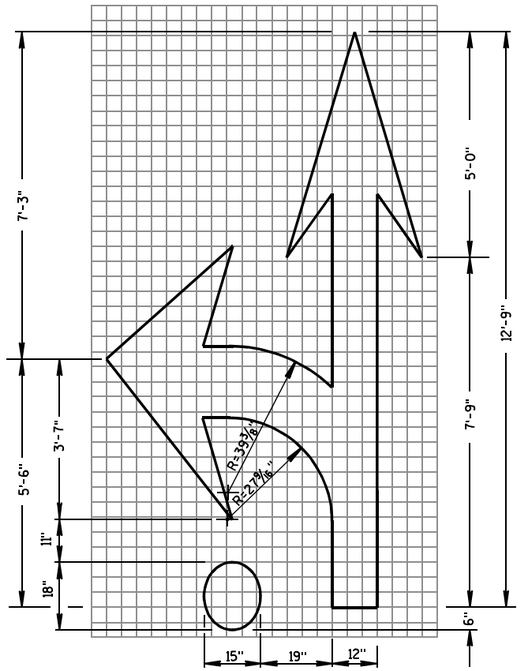
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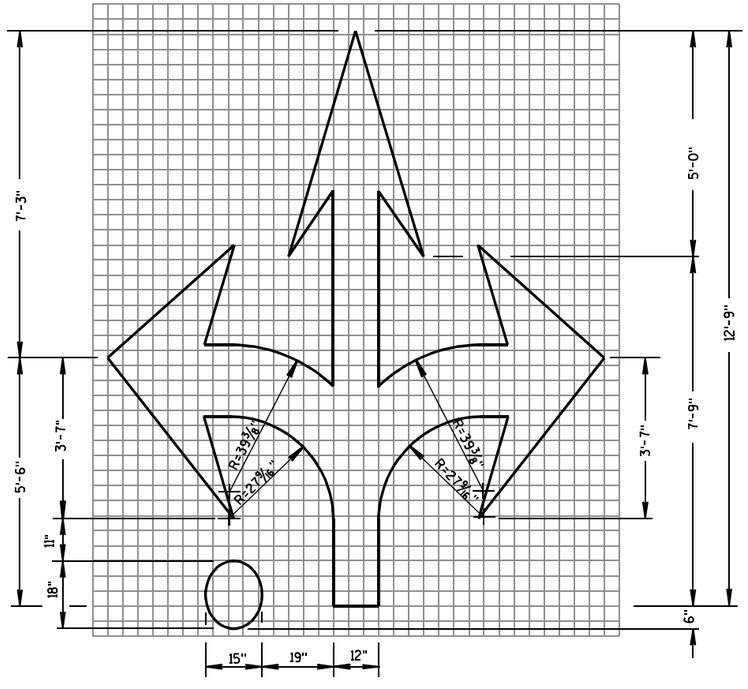
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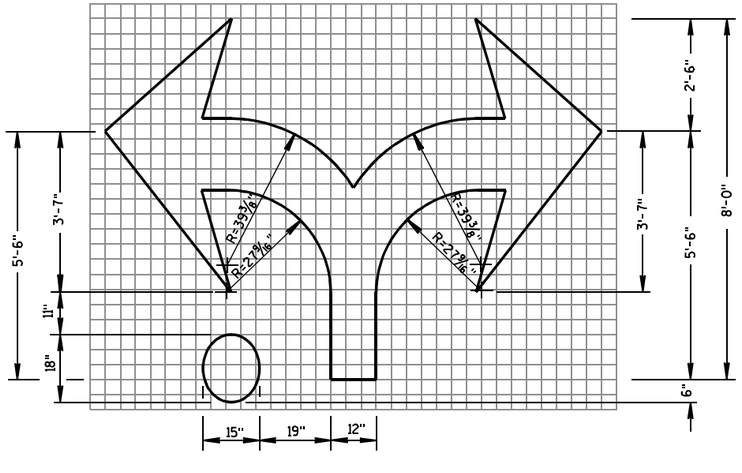
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

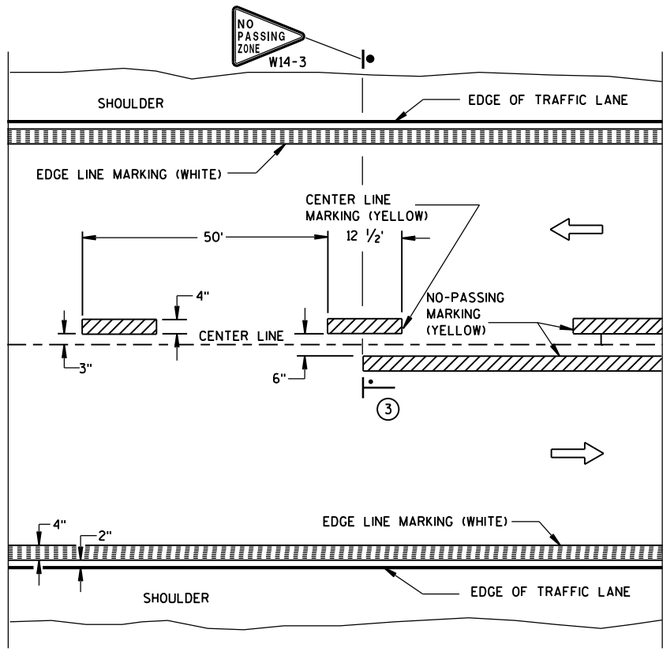
7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

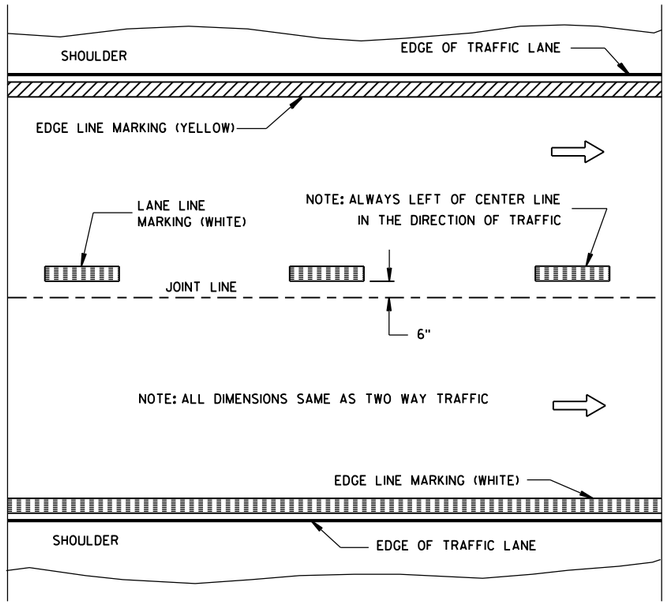
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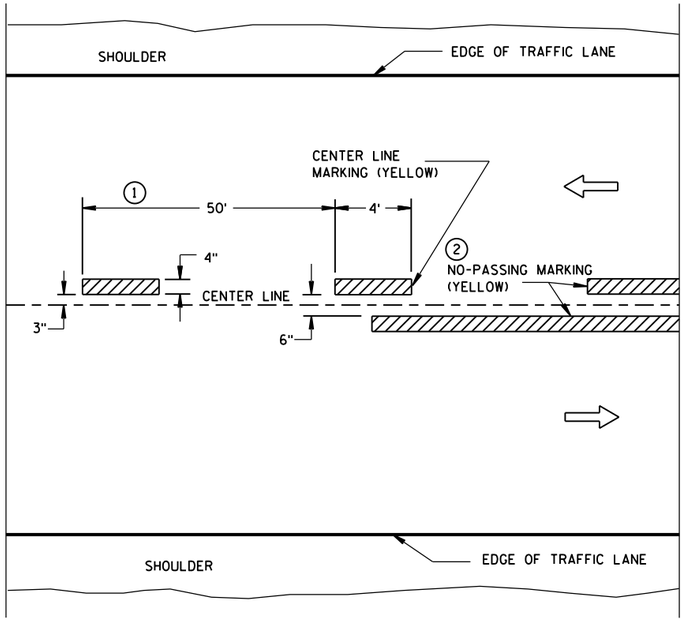


TWO WAY TRAFFIC

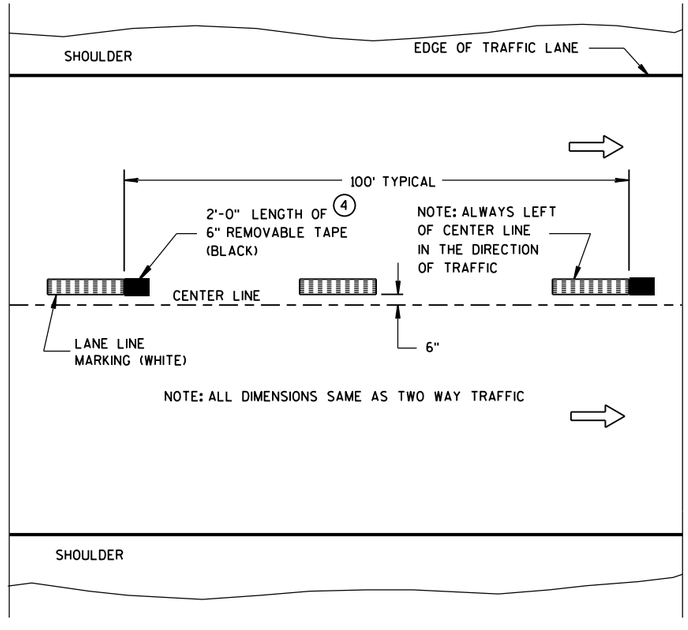


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

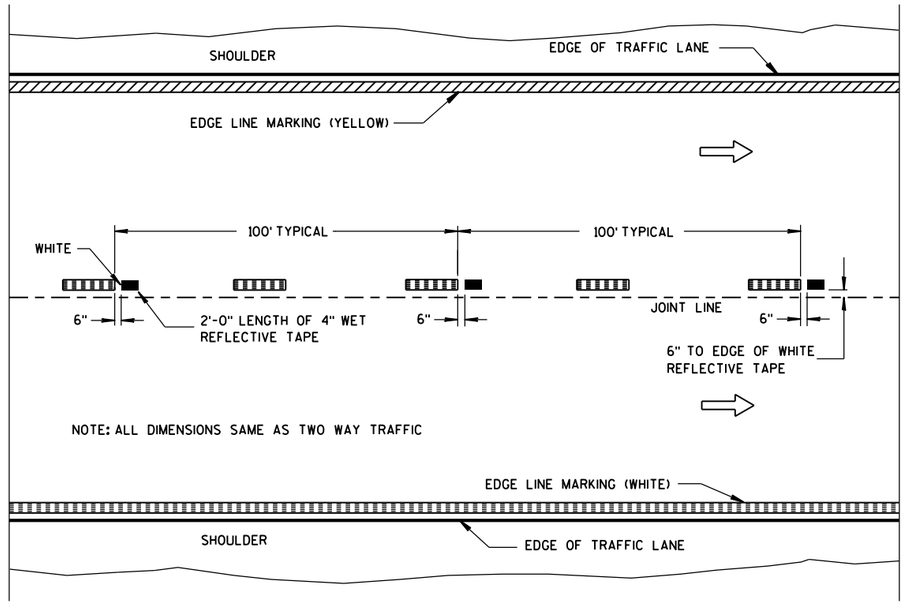
GENERAL NOTES

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

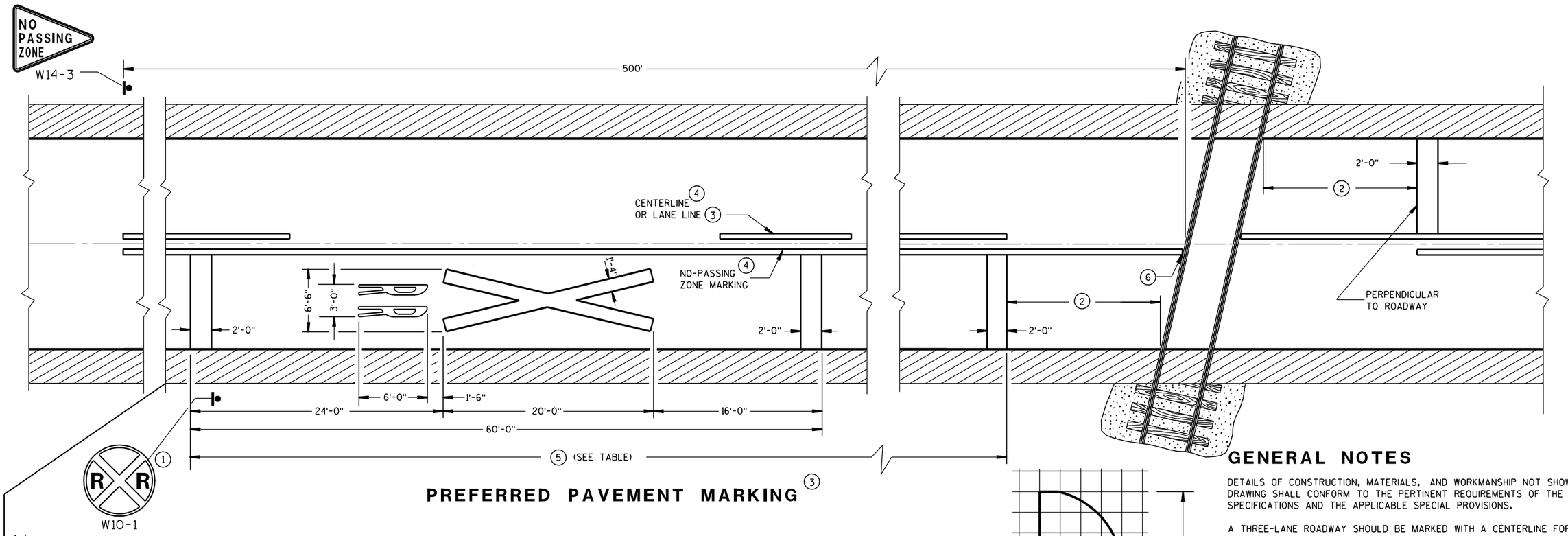
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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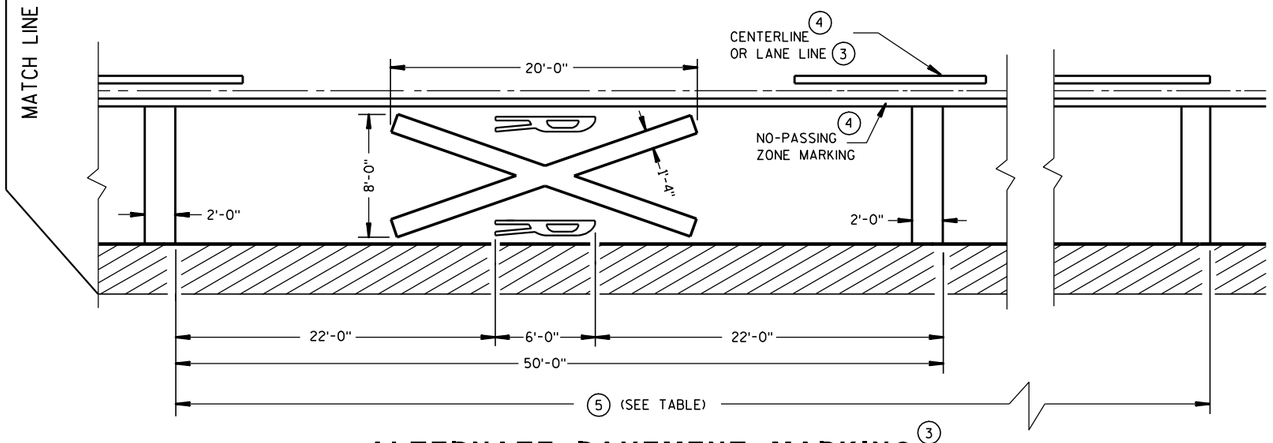
S.D.D. 15 C 8-16a

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S.D.D. 15 C 8-16a



PREFERRED PAVEMENT MARKING 3

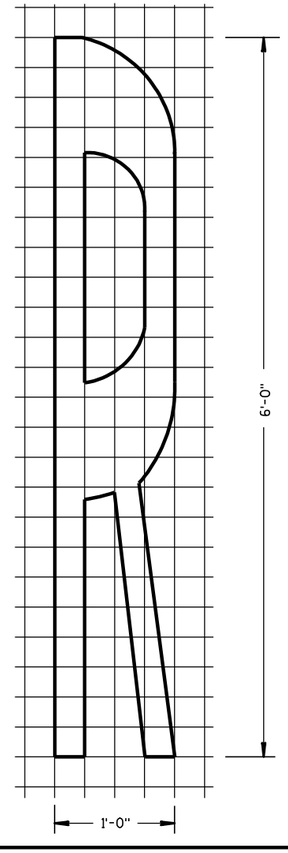


ALTERNATE PAVEMENT MARKING 3

5

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



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.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

1. A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
2. MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
3. REFLECTIVE WHITE.
4. REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
5. TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
6. FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1-9-2012
DATE

/S/ Thomas N. [illegible]
STATE TRAFFIC ENGINEER 642 DESIGN

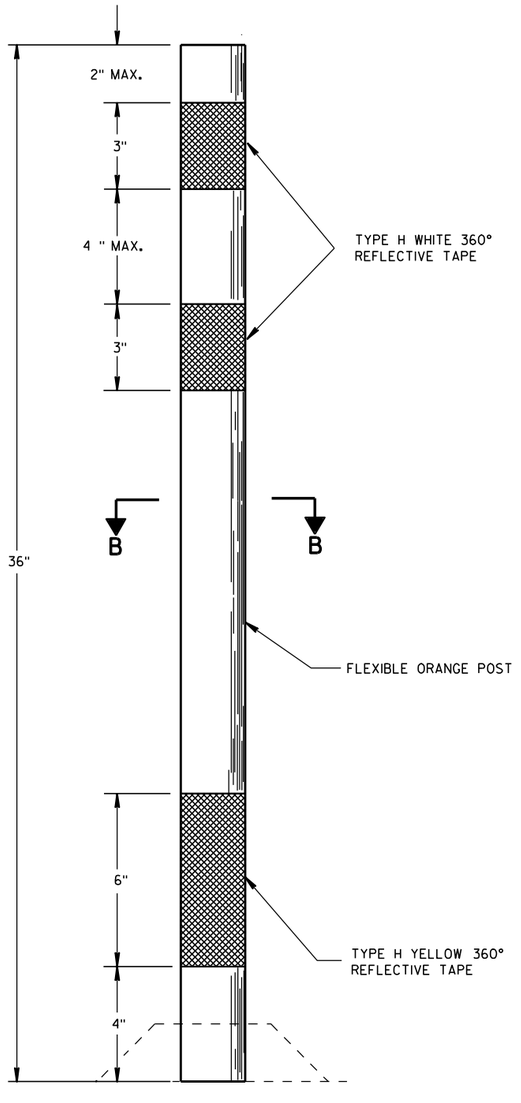
FHWA

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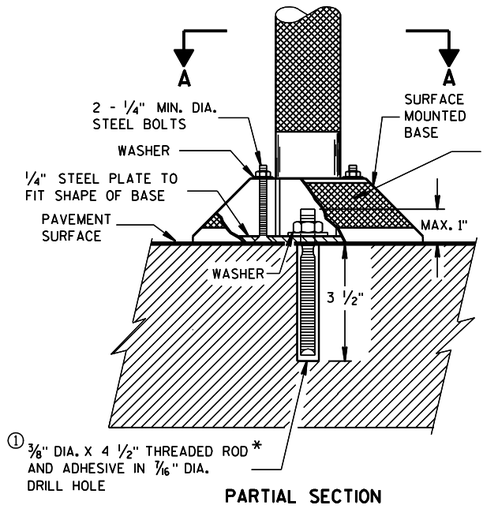
S.D.D. 15 C 9-9a

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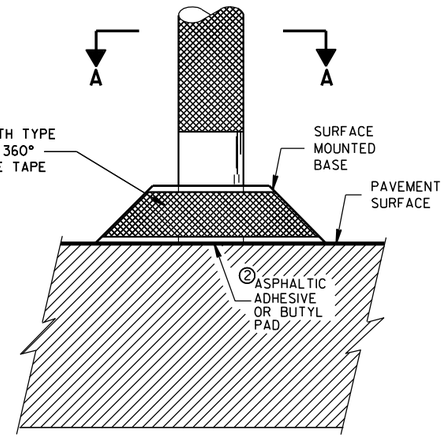
S.D.D. 15 C 9-9a



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

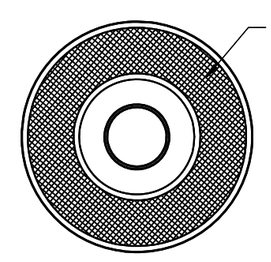
GENERAL NOTES

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

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.

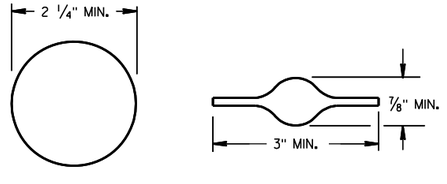
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



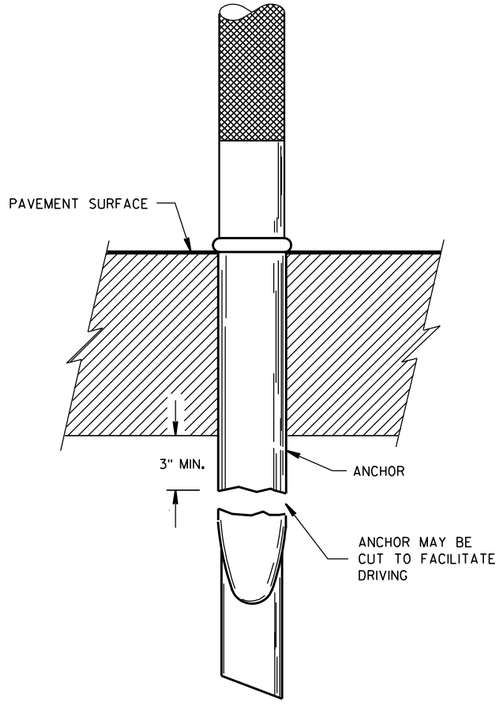
SECTION A-A

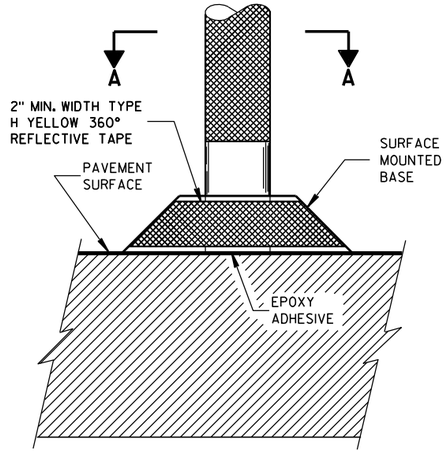
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

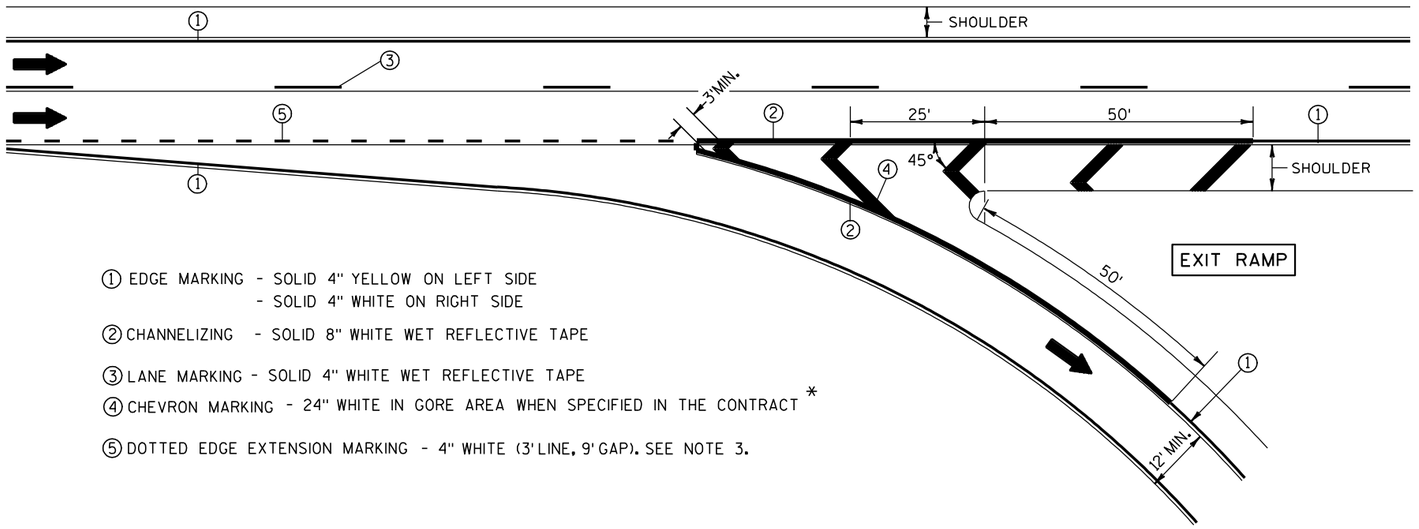
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S.D.D. 15 C 11-5

6

S.D.D. 15 C 11-5



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:

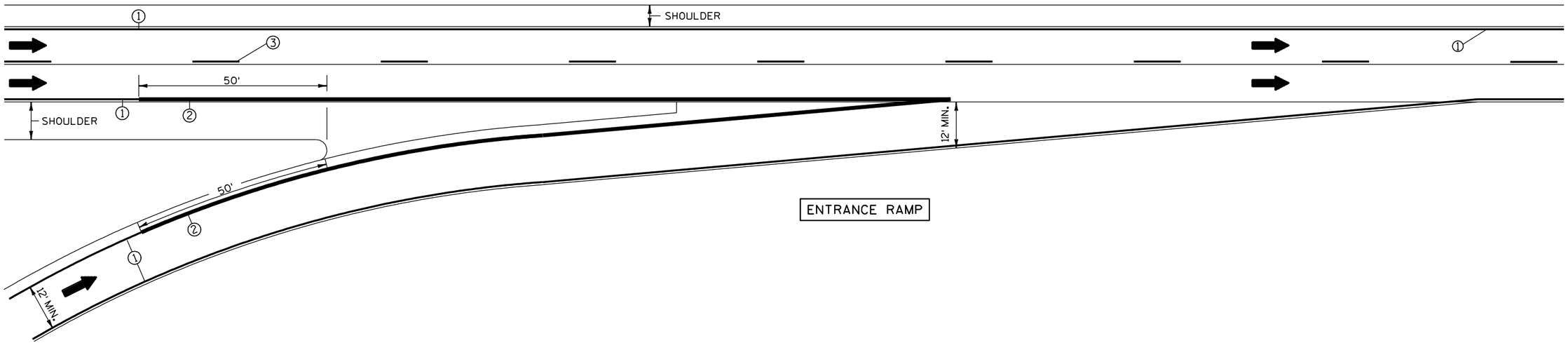
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

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

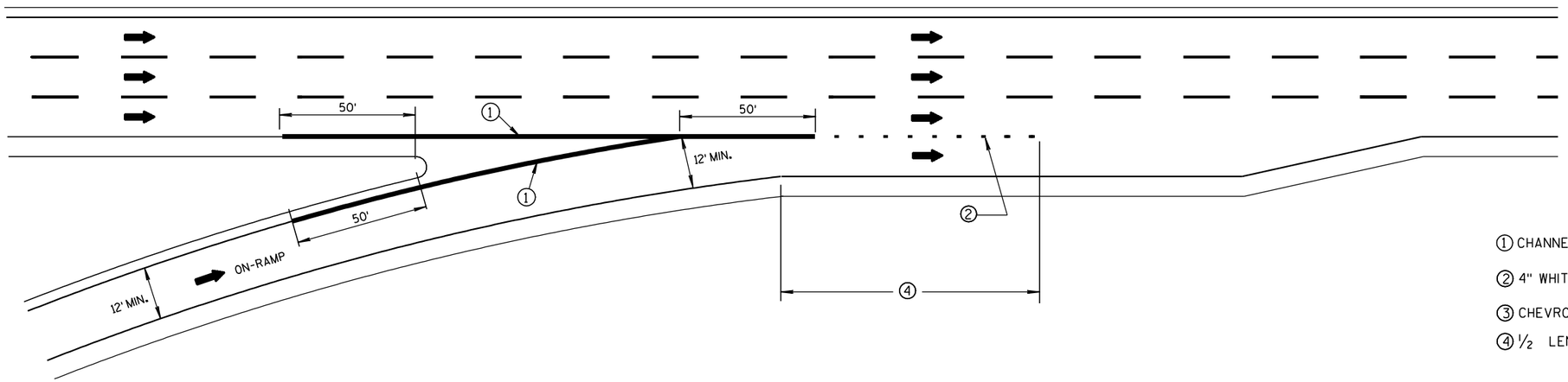
S.D.D. 15 C 31-1a

PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

NOTES:

1. 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.



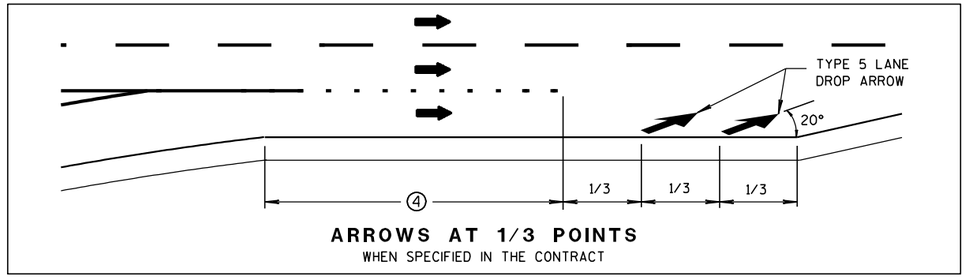
① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.

② 4" WHITE (3' LINE, 9' GAP).

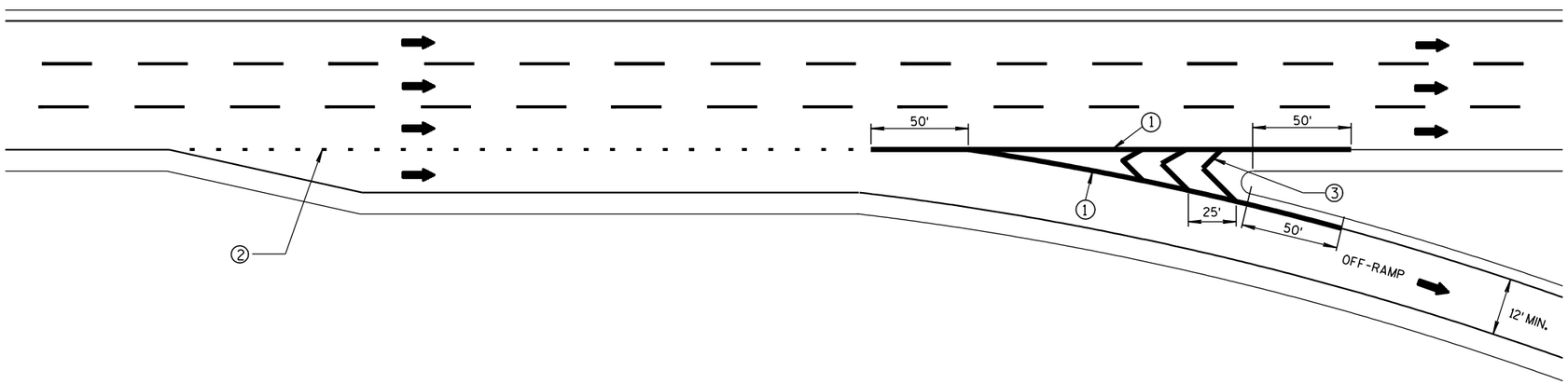
③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.

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 645 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.

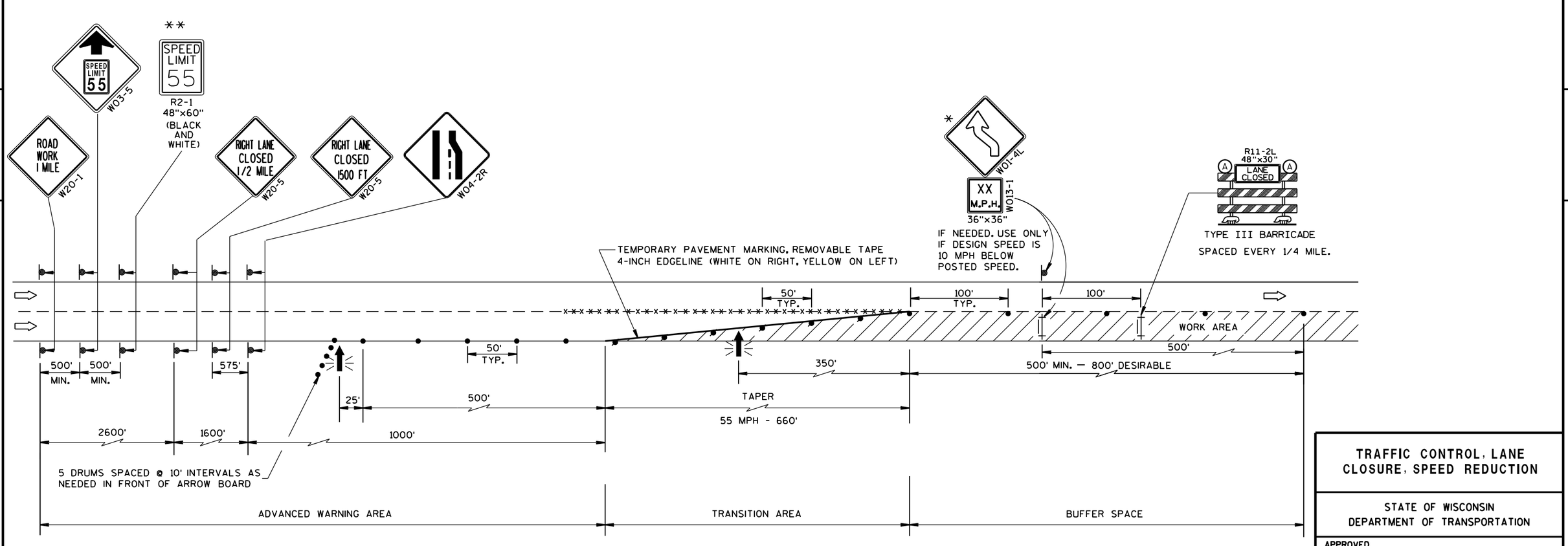
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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
FHWA

6

S.D.D. 15 D 12-4

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.

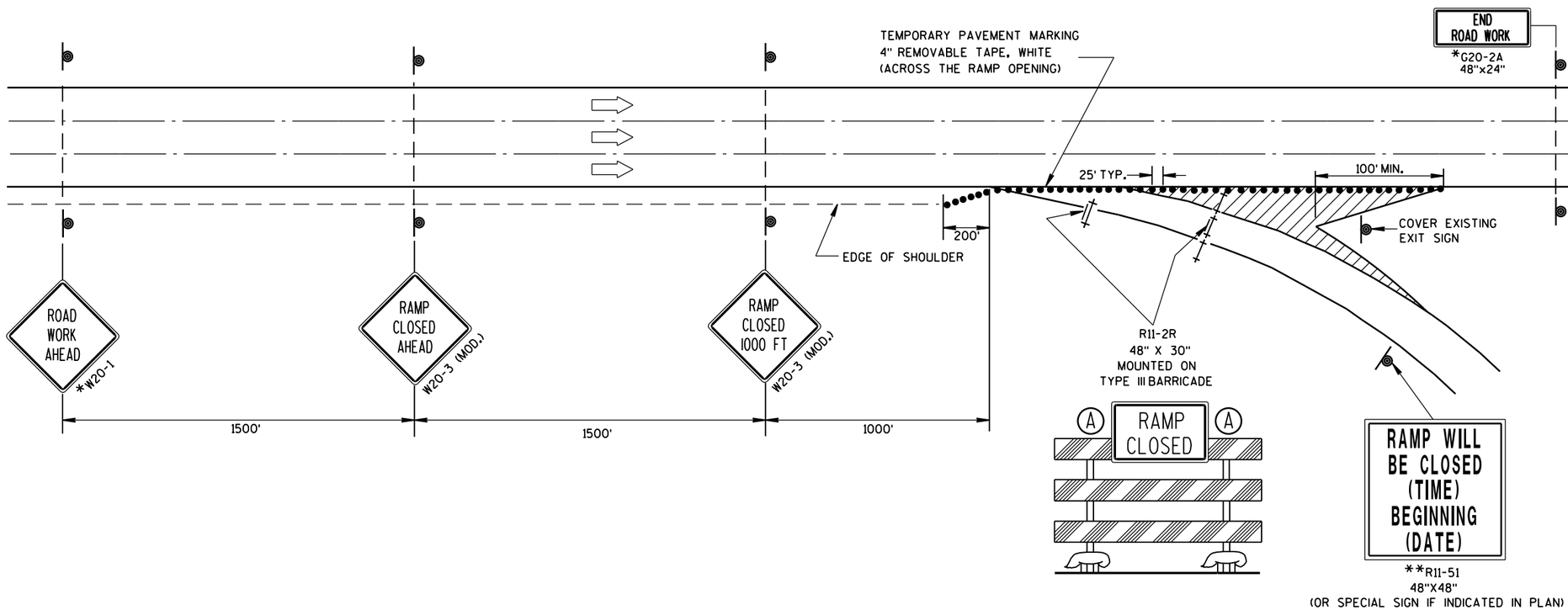
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

6

S.D.D. 15 D 16-2

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.

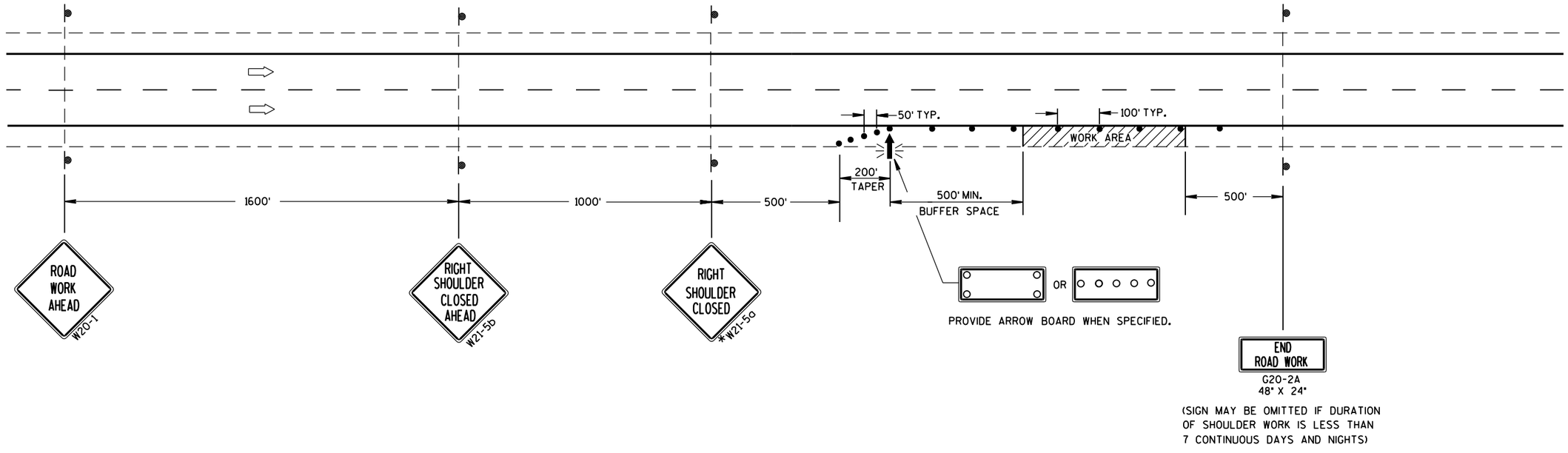
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

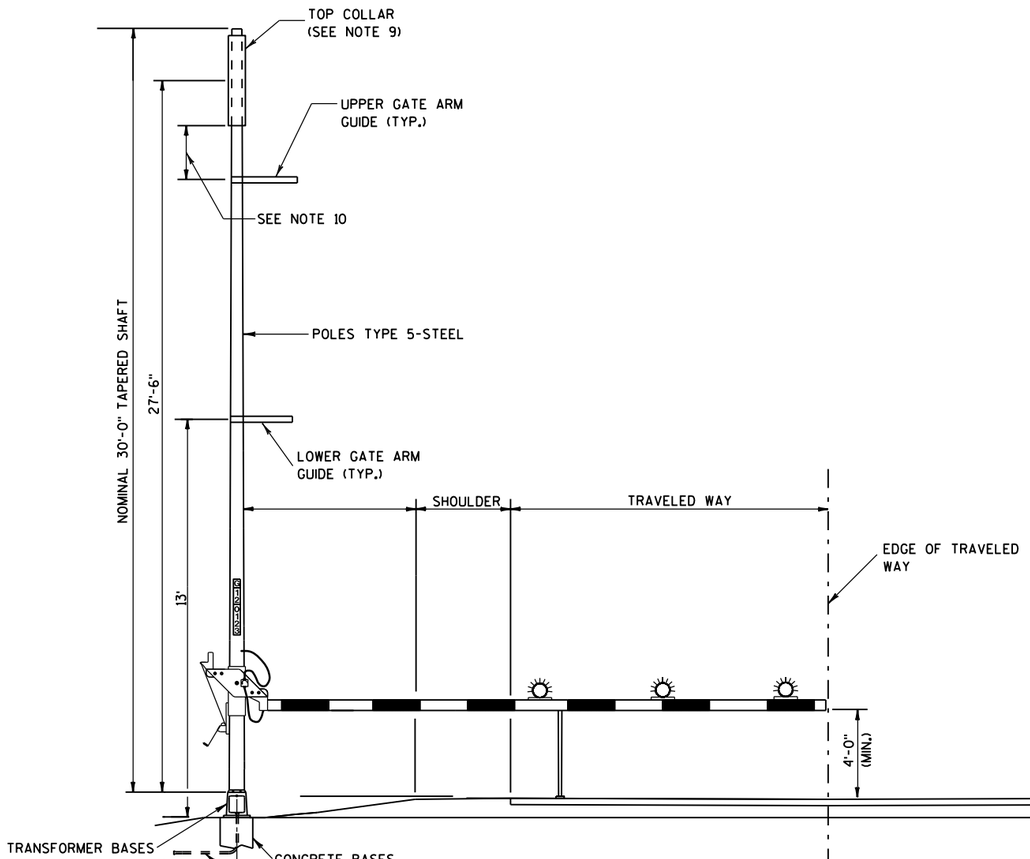
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

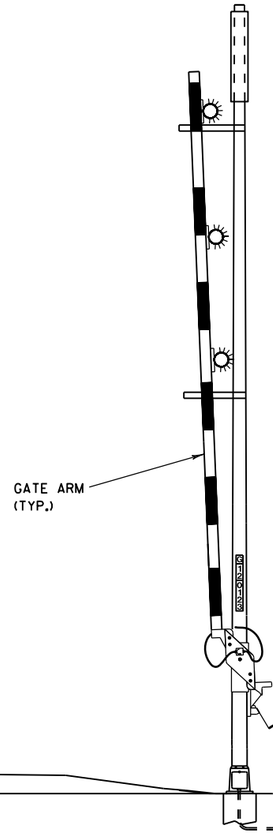
FHWA

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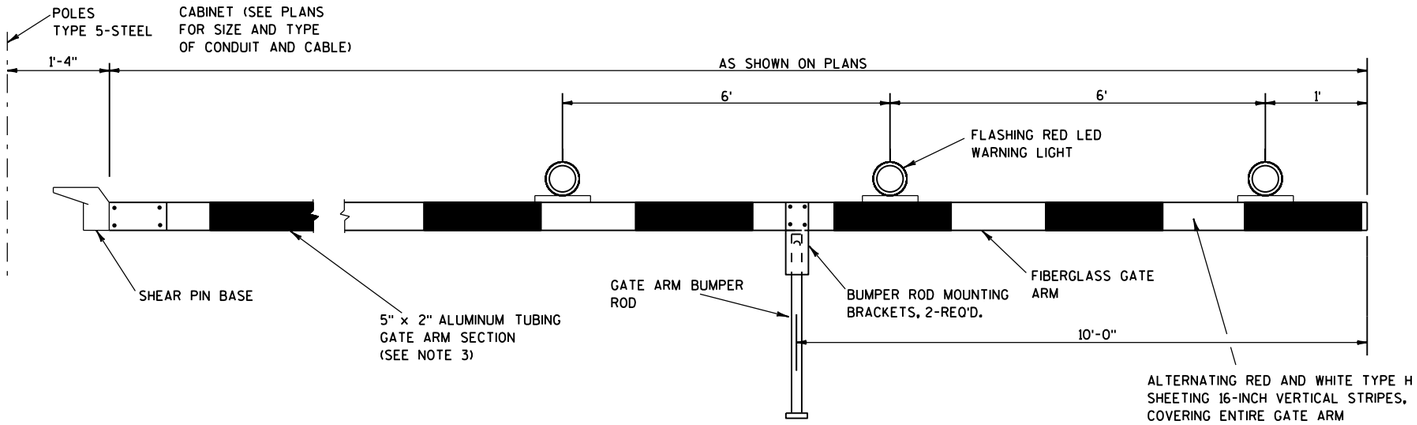
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TYPICAL LOWERED POSITION



TYPICAL RAISED POSITION

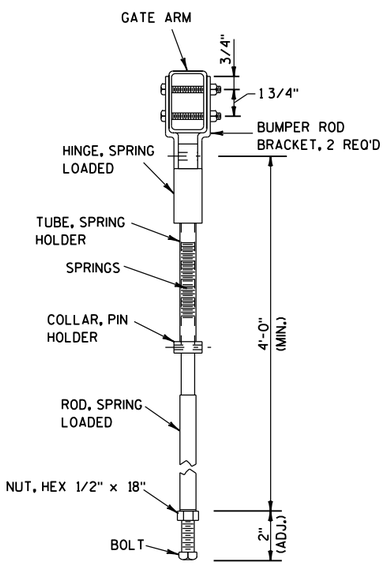


GATE DETAIL

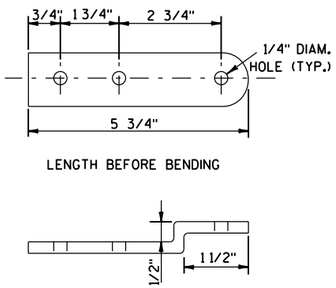
(SOLAR POWER OPTION)

GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.



GATE ARM BUMPER ROD DETAIL



BUMPER ROD MOUNTING
BRACKET DETAIL

RAMP GATE
SOLAR POWER

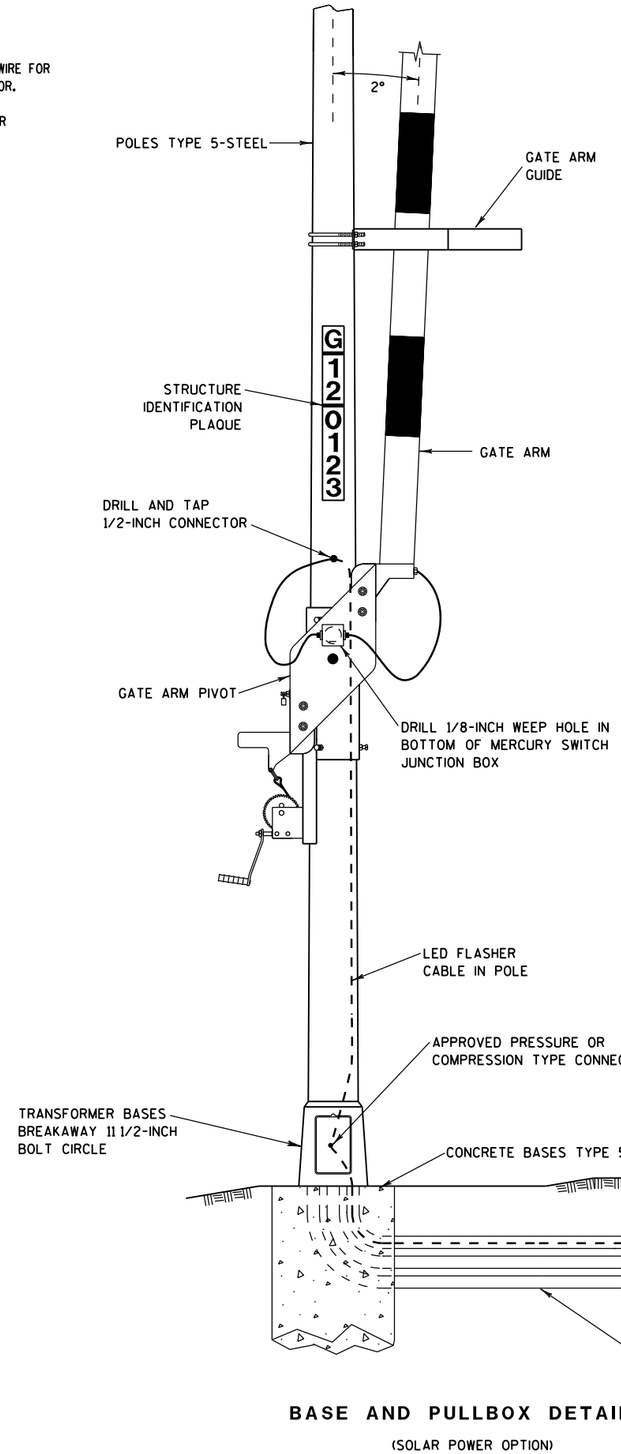
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 15 D 34-1a

WIRING NOTES

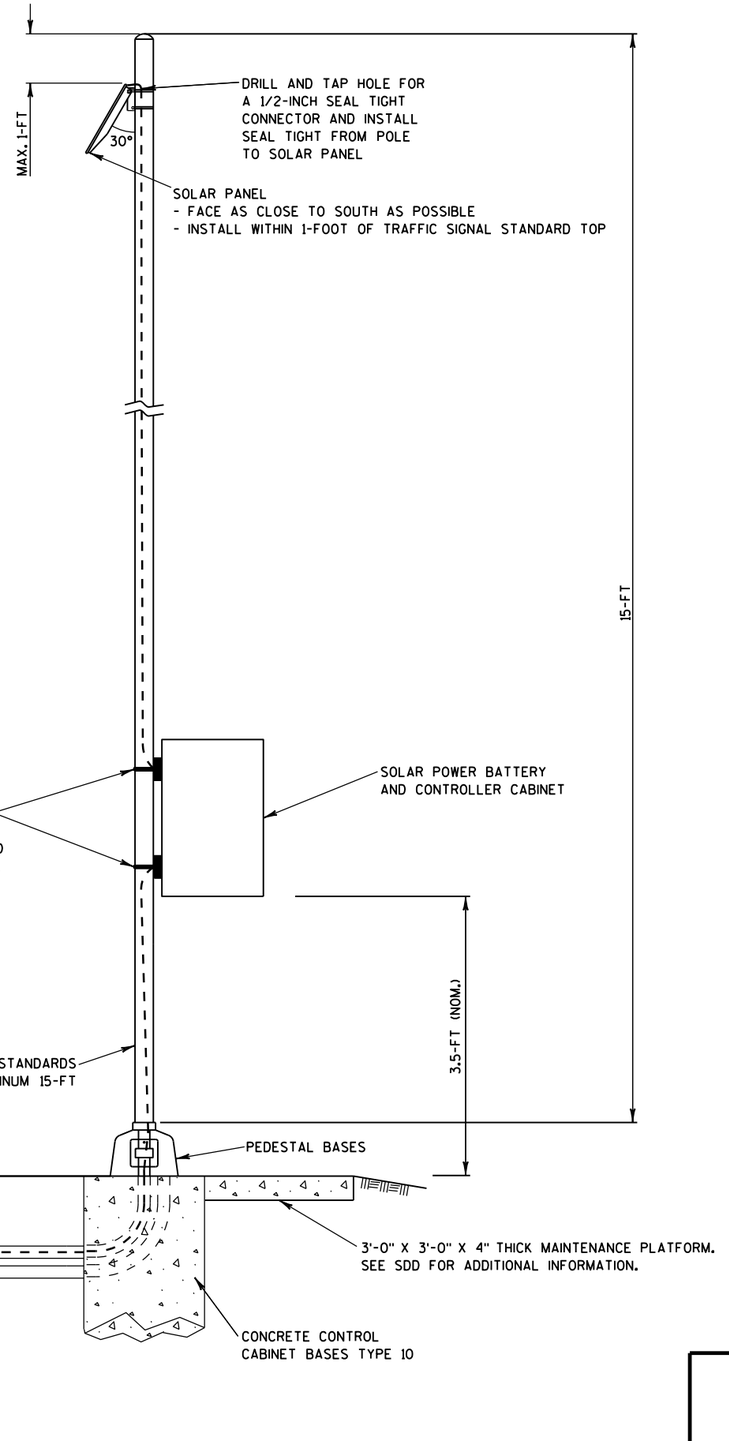
1. WIRING FROM SOLAR PANEL TO CABINET SHALL BE BLUE #10 XLP WIRE FOR POSITIVE CONDUCTOR AND WHITE #10 XLP FOR NEGATIVE CONDUCTOR.

2. WIRING FROM CABINET TO GATE ARM SHALL BE WHITE #10 XLP FOR COMMON, RED #10 XLP FOR FLASHER CIRCUIT 1, AND BLUE #10 XLP FOR FLASHER CIRCUIT 2.



BASE AND PULLBOX DETAIL

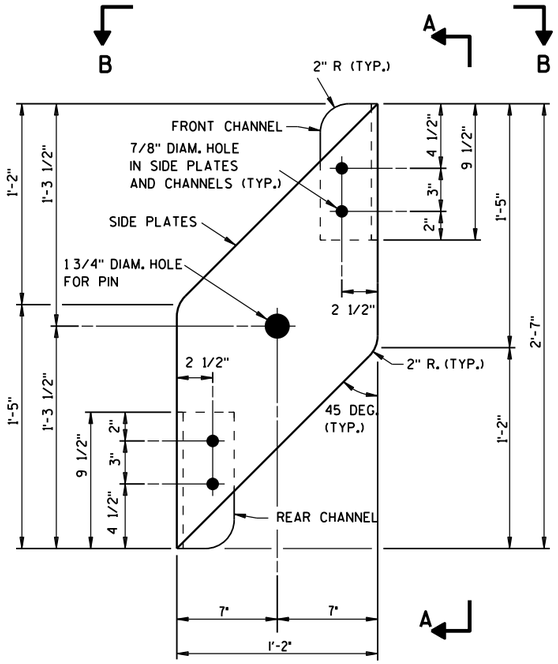
(SOLAR POWER OPTION)



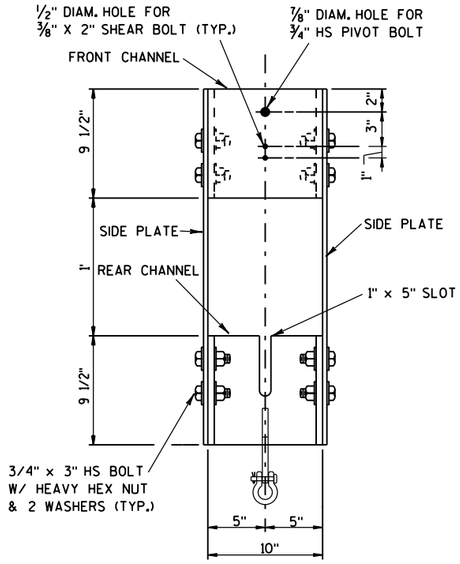
RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

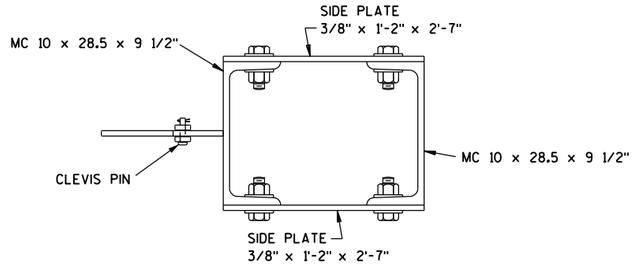
6
S.D.D. 15 D 34-1b



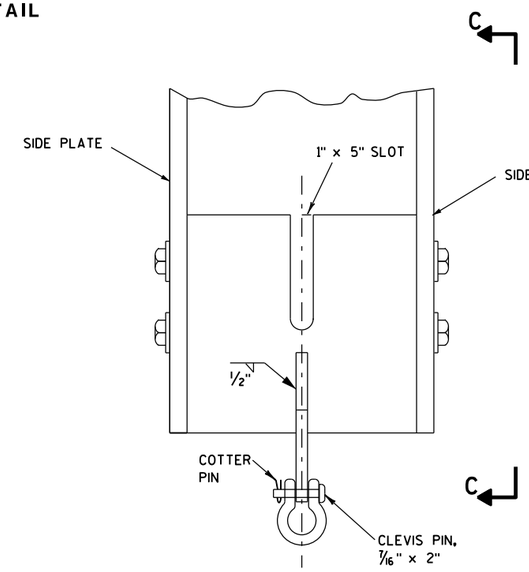
SIDE PLATE DETAIL



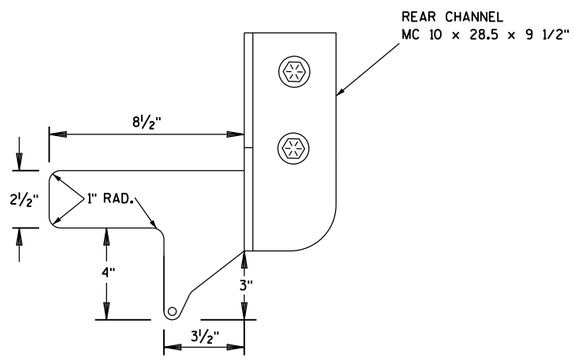
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 651

6

S.D.D. 15 D 34-1c

6

S.D.D. 15 D 34-1c

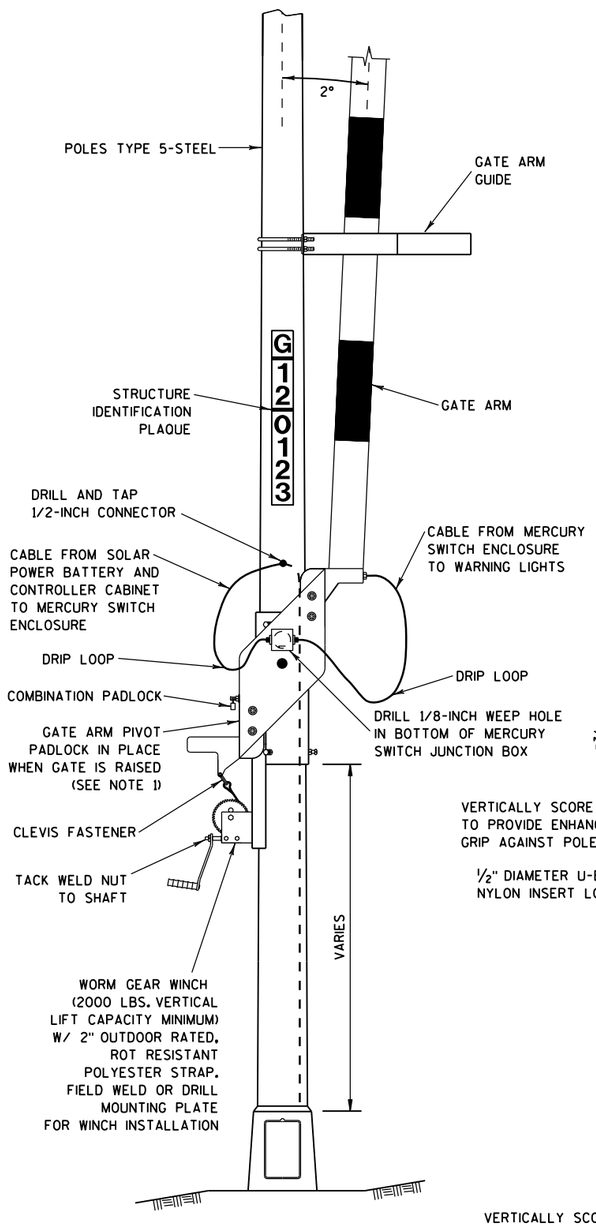
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE.

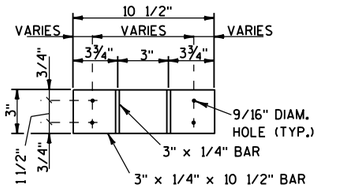
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

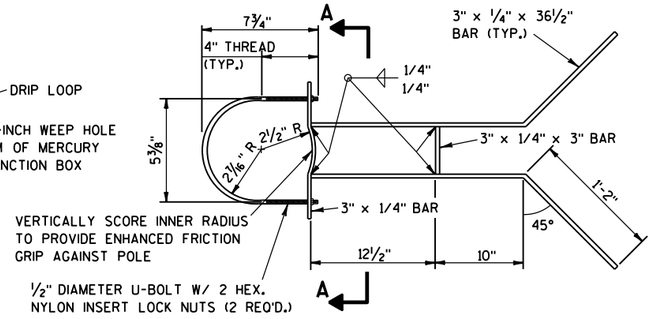
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF 1/2" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



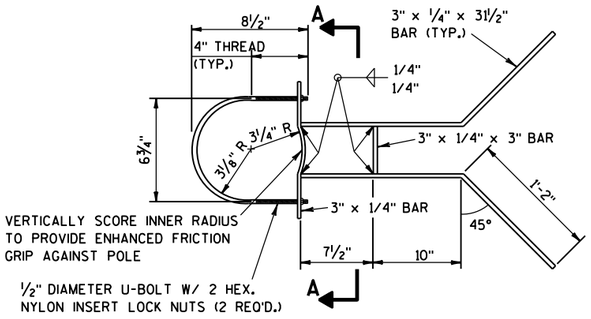
GATE PIVOT ASSEMBLY



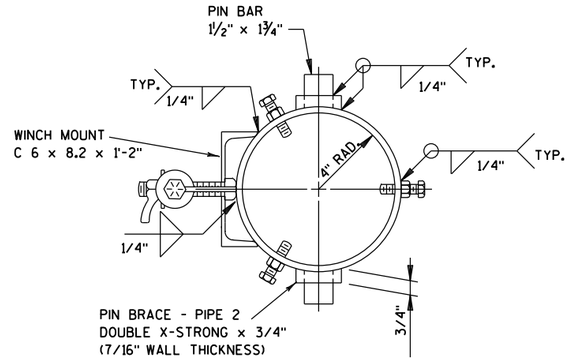
SECTION A-A
U-BOLTS NOT SHOWN



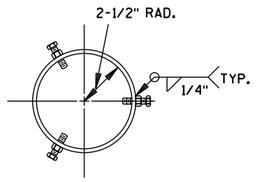
UPPER GATE ARM GUIDE DETAIL



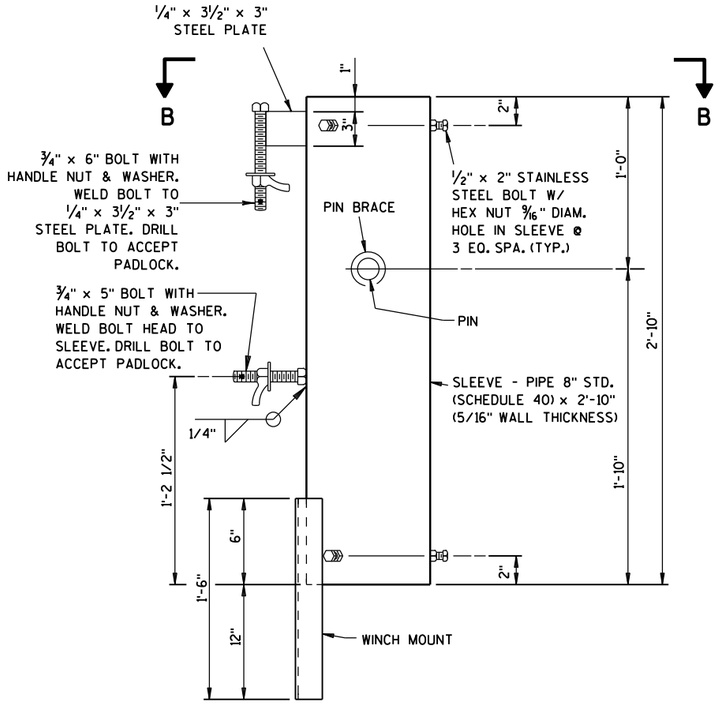
LOWER GATE ARM GUIDE DETAIL



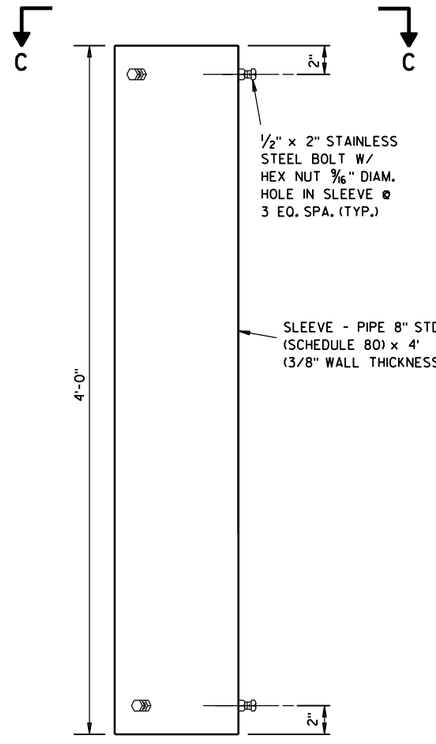
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



TOP COLLAR

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-30-2013
DATE
/S/ Bill Wondrachek
STATE TRAFFIC I
MANAGEMENT EN
FHWA

6

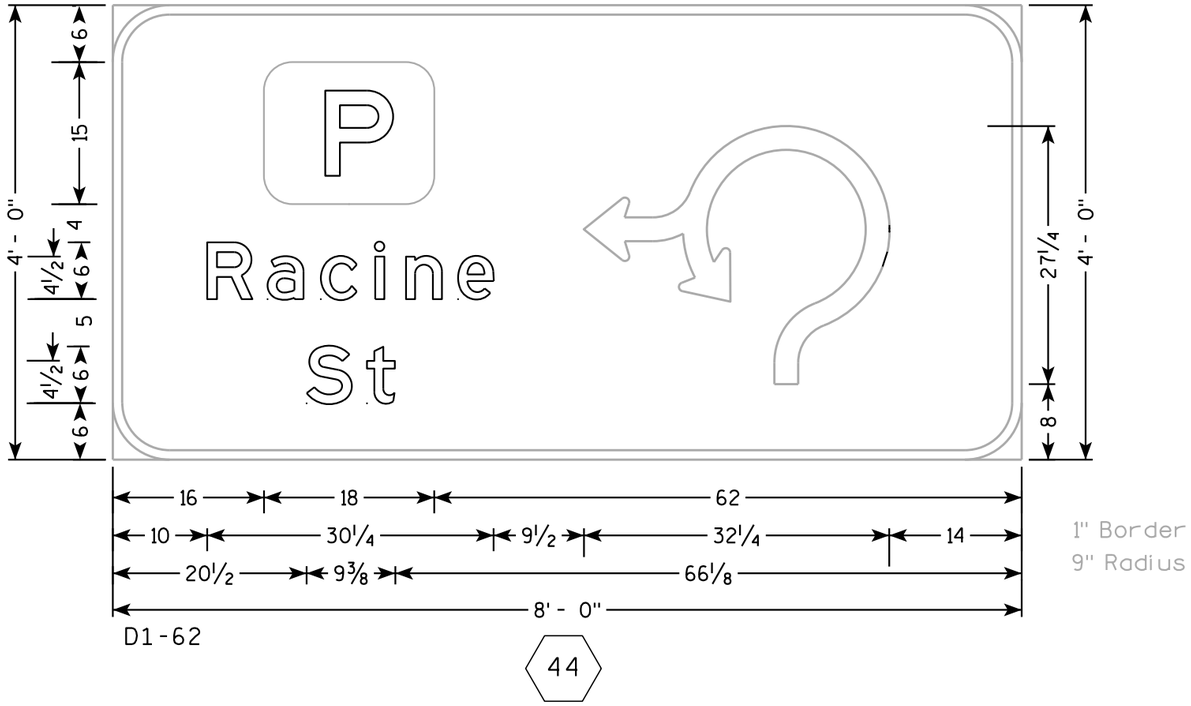
S.D.D. 15 D 34-1d

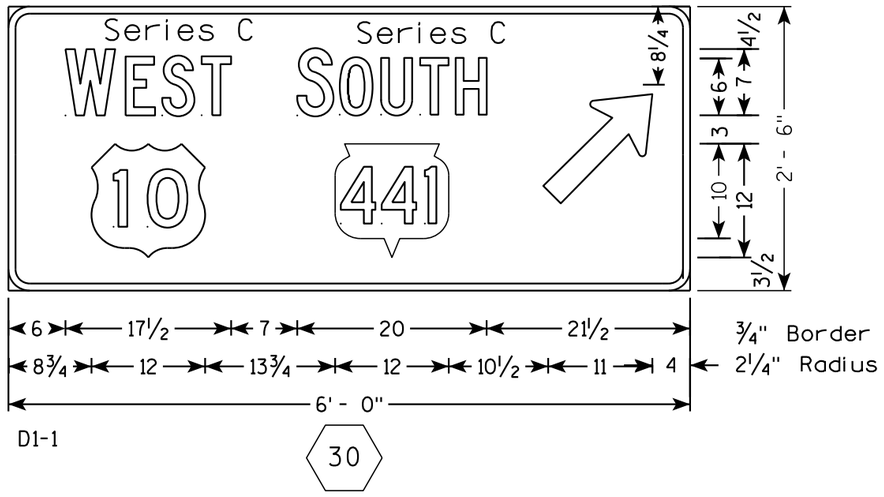
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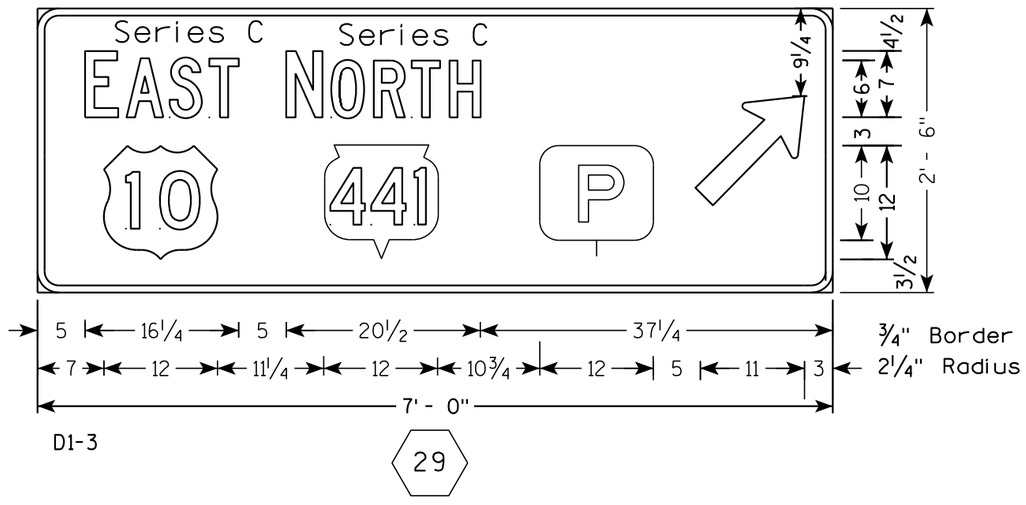
S.D.D. 15 D 34-1d

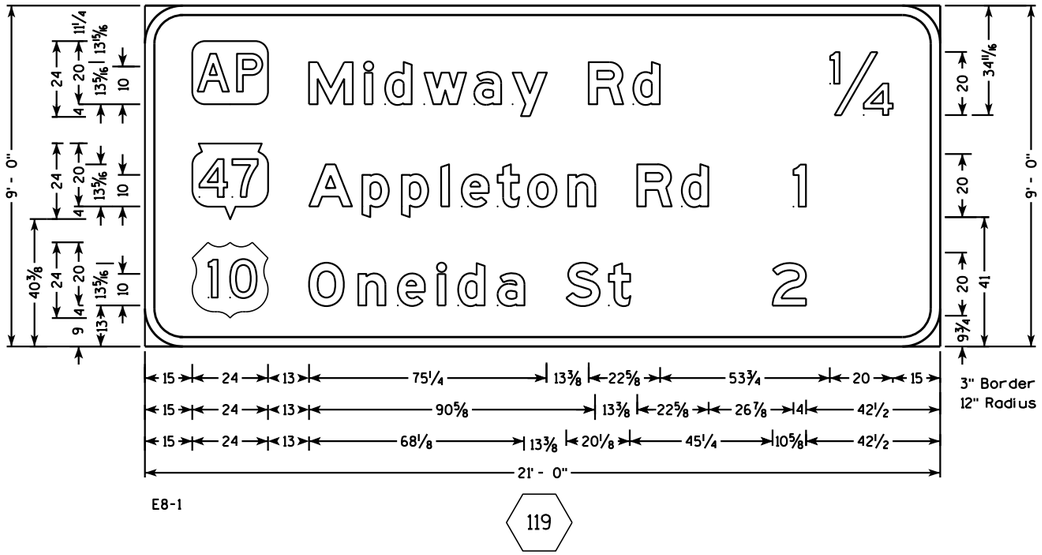
NOTES

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

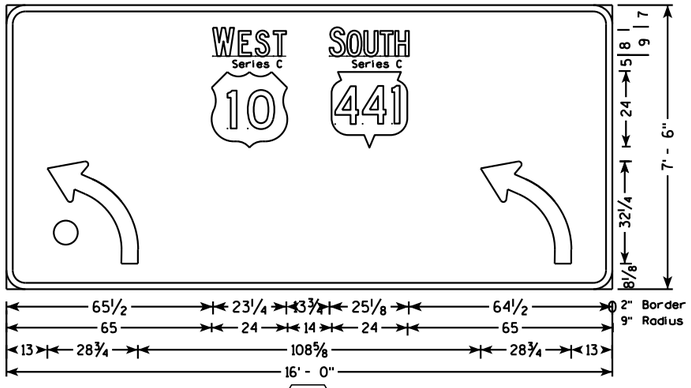




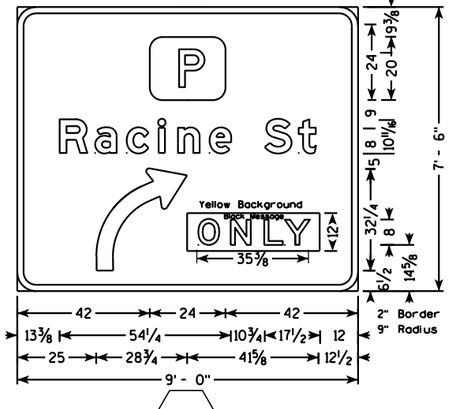




119



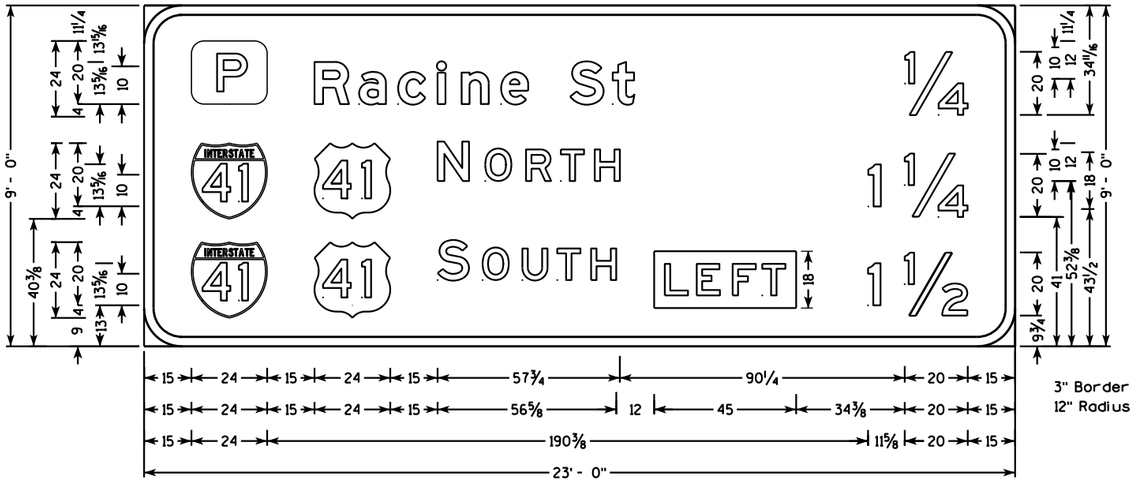
106



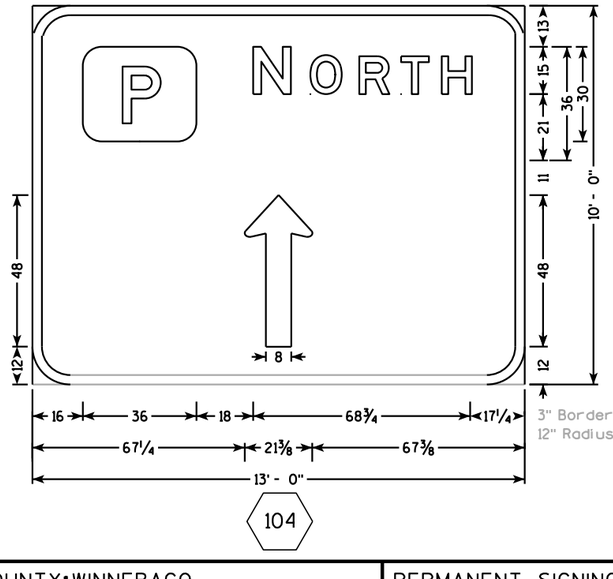
105

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
   Message - White
3. Message Series - E Modified except all cap WORDS are Series E



121



104

7

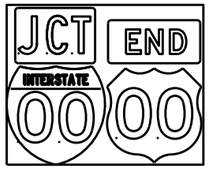
7

PROJECT NO:1517-75-75	HWY:USH 10	COUNTY:WINNEBAGO	PERMANENT SIGNING	SHEET NO: 654	E

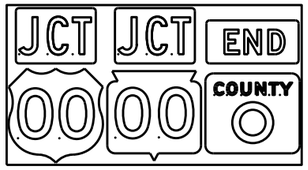
TYPICAL ASSEMBLIES



J1-1



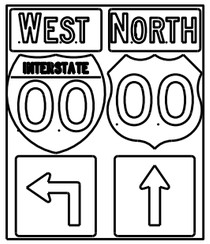
J1-2



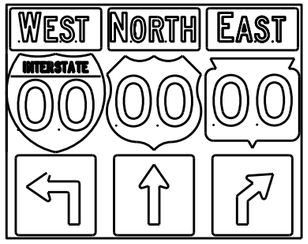
J1-3



J2-1



J2-2

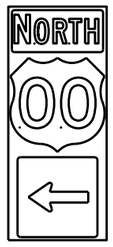


J2-3

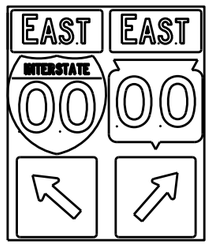


JV

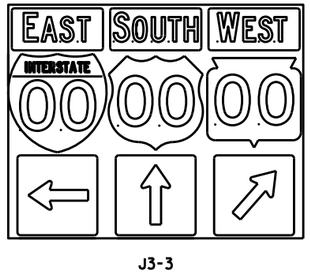
(Typical Vertical J-Assembly
See Note 10 and 11)



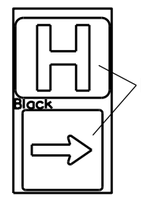
J3-1



J3-2



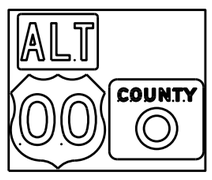
J3-3



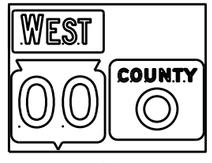
JH-1



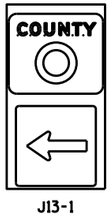
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

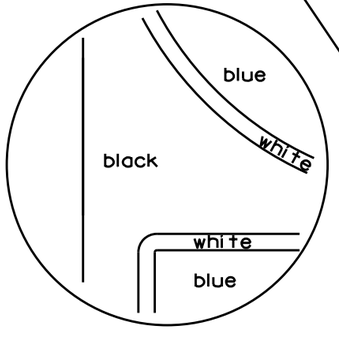


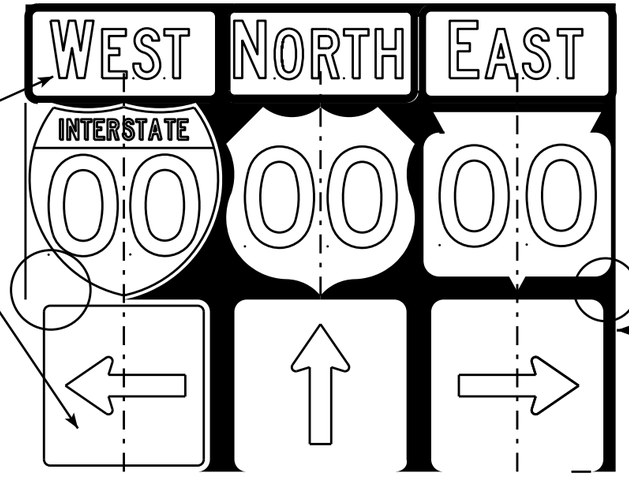
J23-1

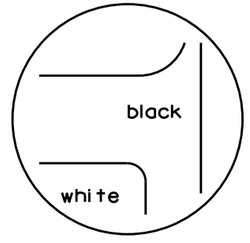


J22-1

[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

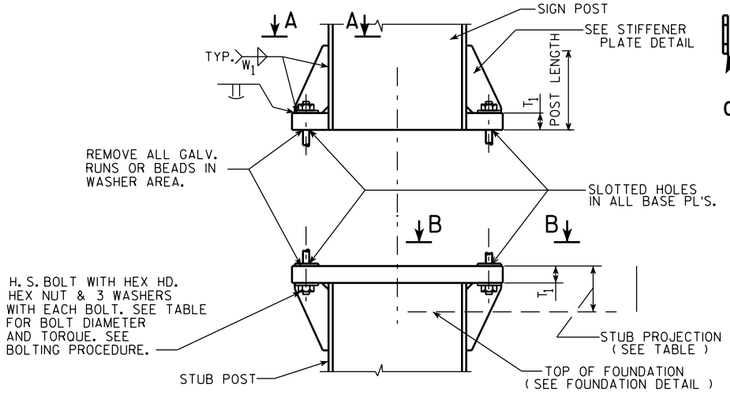
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

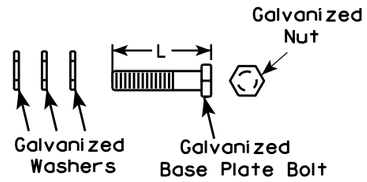
PROJECT NO: | SHEET NO: E

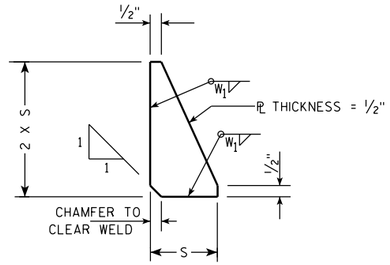
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



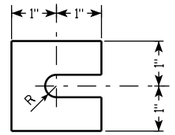
SIGN POST AND STUB POST ELEVATION





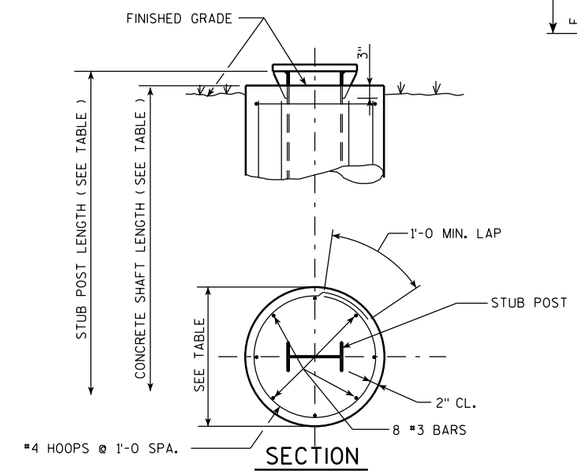
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

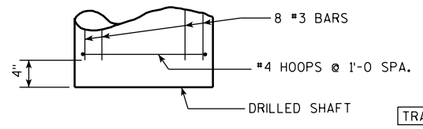


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

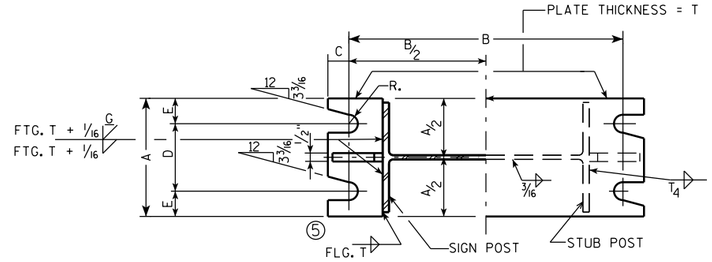
SHIM DETAIL



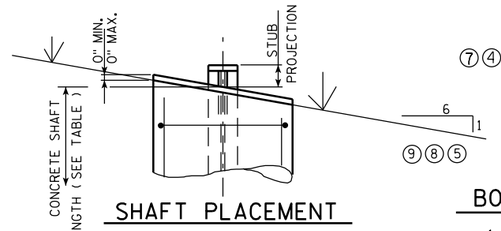
SECTION



FOUNDATION DETAIL



SECTION A-A SECTION B-B



SHAFT PLACEMENT

⑦④

⑨⑧⑤

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & ½ WIND[4]	140 [4]25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.

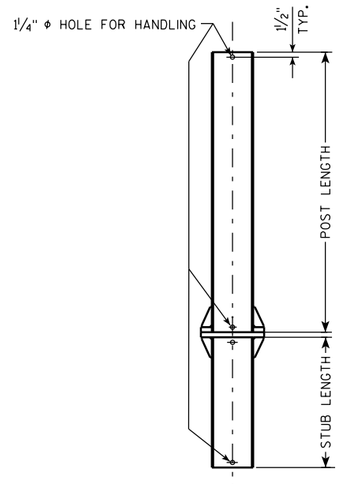
BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
5. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

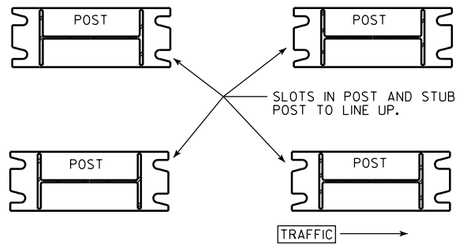
QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
⑦ E	1.0	62

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
⑦	E	8 @ 7'-11	9 @ 6'-3



POST DETAIL

TRAFFIC →



POST ON THE RIGHT POST ON THE LEFT

POST SLOT ORIENTATION ⑦

L	X	TYPE	DIMENSION / POST SIZE	BASE CONNECTION DATA TABLE: BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	FOUNDATION DATA: STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	② K
3 ¾	④	A	W10"X12.0 #/FT.	¾" Φ @ 75#-FT.	5¼"	1'-0⅜"	⅞"	3½"	⅞"	1"	3/16"	5/16"	13/32"	2⅛"	3'-6	3"	2'-0 Φ	5'-0	76.0# ④
4 ¾	④	B	W12"X16.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼"	1"	3½"	1"	1¼"	¼"	5/16"	15/32"	3"	5'-6	3"	2'-0 Φ	7'-0	146.5# ④
5		C	W12"X19.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼"	1"	3½"	1"	1½"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 Φ	7'-6	182.1#
5		D	W12"X22.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼"	1"	3½"	1"	1½"	3/8"	5/16"	15/32"	3"	6'-6	3"	2'-0 Φ	8'-0	210.5#
5	③	E	W12"X26.0 #/FT.	1" Φ @ 90#-FT.	7"	1'-4¼"	1¼"	4"	1½"	1½"	3/8"	5/16"	11/32"	3"	7'-0	3"	2'-0 Φ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO. A3-1.15

NO.	DATE	REVISION
⑩	1-21-14	LUBRICATION OF BASE BOLTS
⑨	4-26-11	REMOVE NON-GALVANIZED
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC. 2011	DRAWN BY JPH	PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

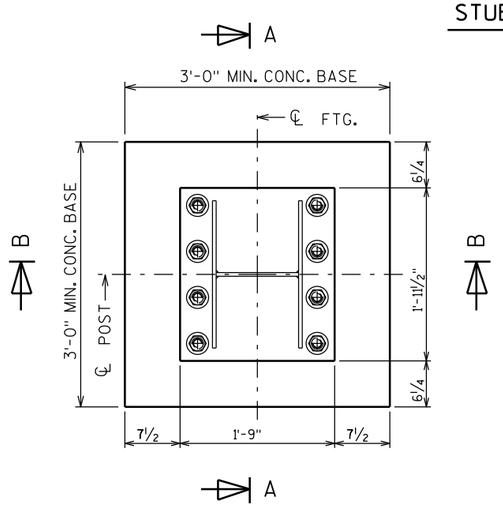
SHEET 656

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

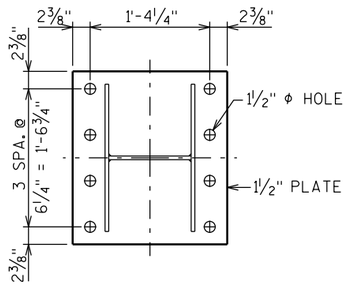
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WISDOT/CADDS SHEET 42

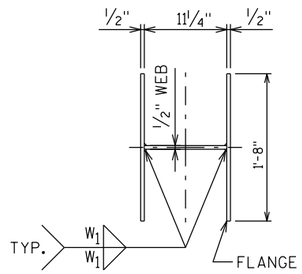
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



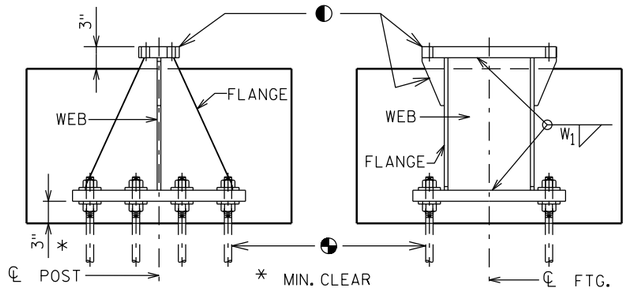
BASE PLATE



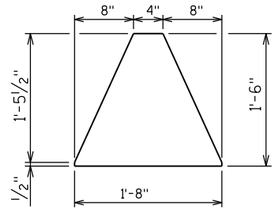
STUB

◐ SEE PLATE NO. A3-1 FOR DETAILS

◒ MASONRY ANCHORS TYPE S 1¼-INCHES (ADHESIVE). ALLOWABLE PULL OUT CAPACITY 14,995 KIPS. EMBED 1'-3" IN ROCK.



SECTION A SECTION B



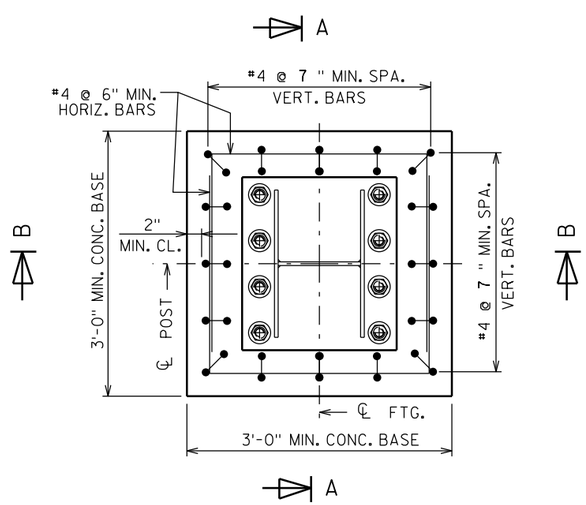
FLANGE

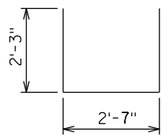
GENERAL NOTES

1. Quantities per Base:
   - REINFORCING BAR STEEL = 62 LBS
   - CONCRETE = 0.6 C.Y.
   - STEEL WEIGHT = 335 LBS
2. All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
3. If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS

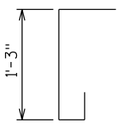
CONCRETE BASE SECTION





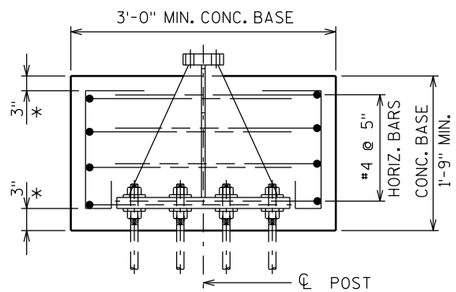
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



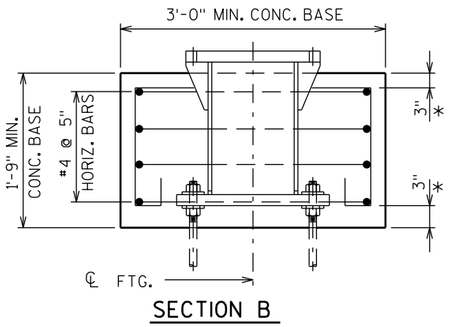
VERTICAL BARS

16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A

* MIN. CLEAR



SECTION B

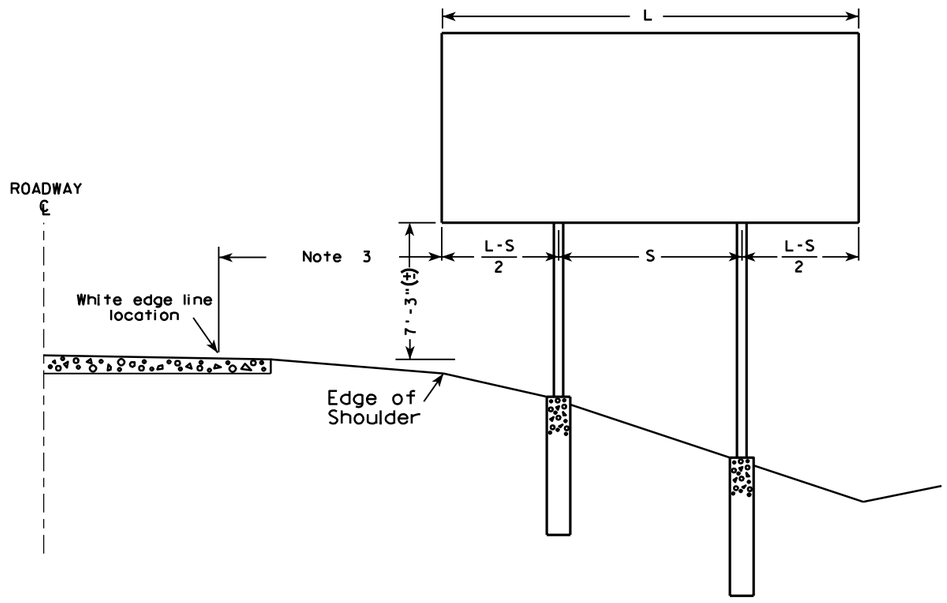
ALTERNATE BREAK-AWAY BASE ON ROCK
A3-1M

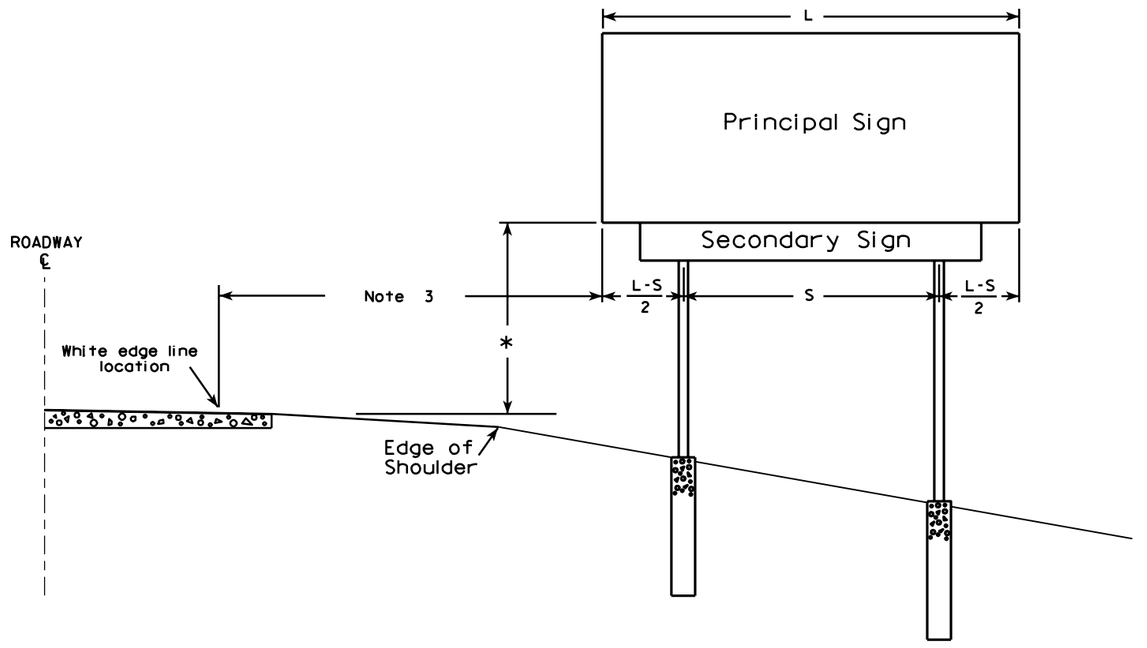
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/2014 PLATE 657 A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

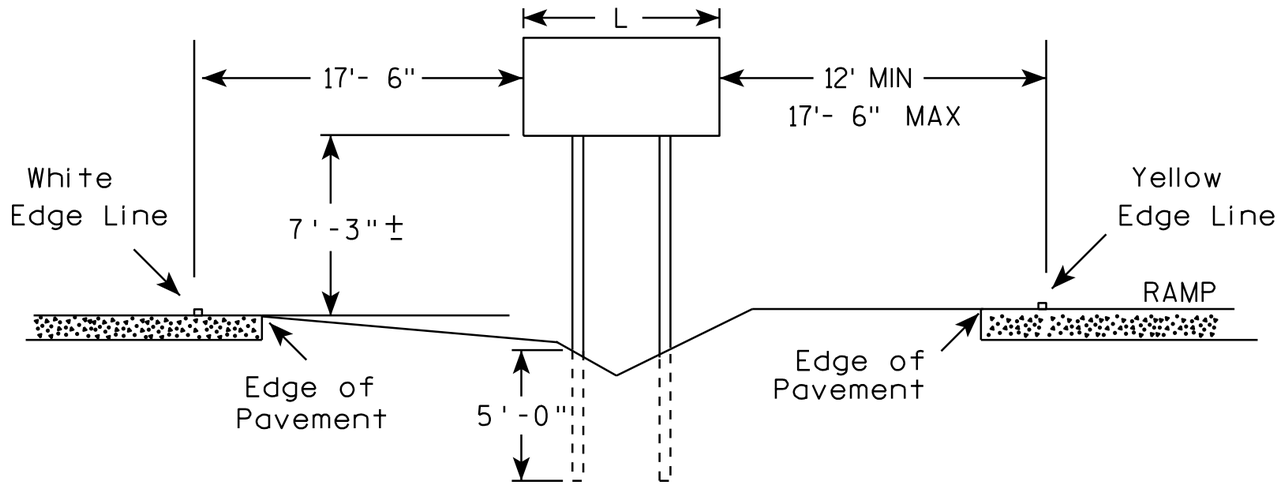
TYPICAL INSTALLATION
OF TYPE I SIGNS

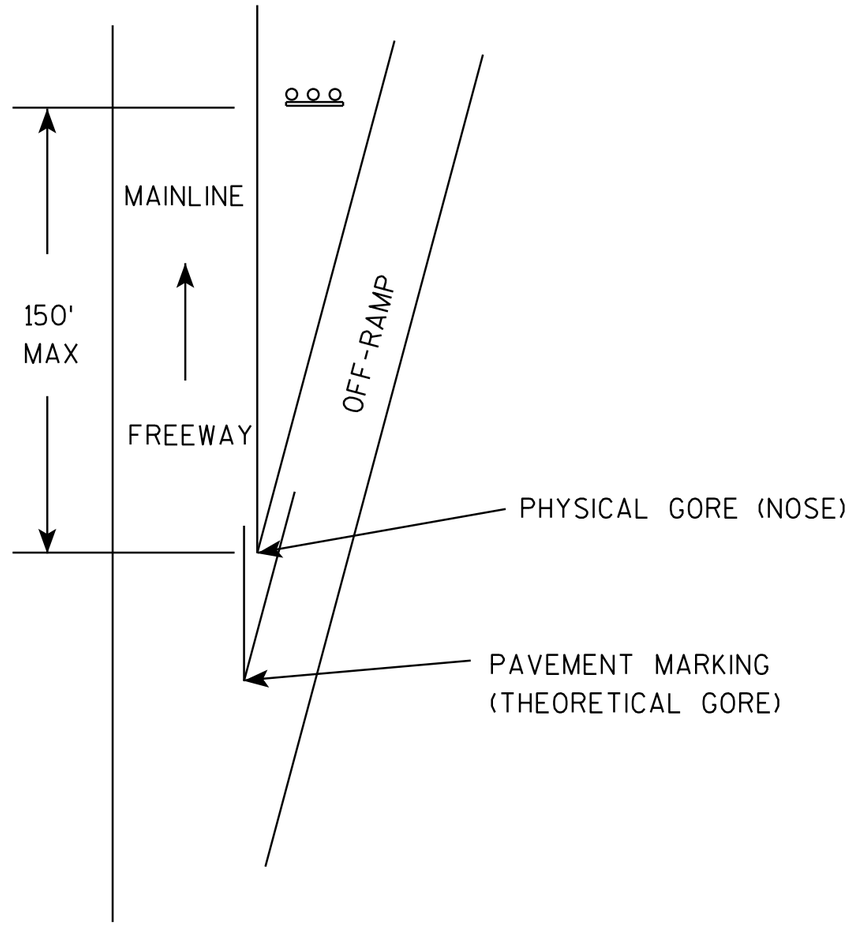
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 658	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

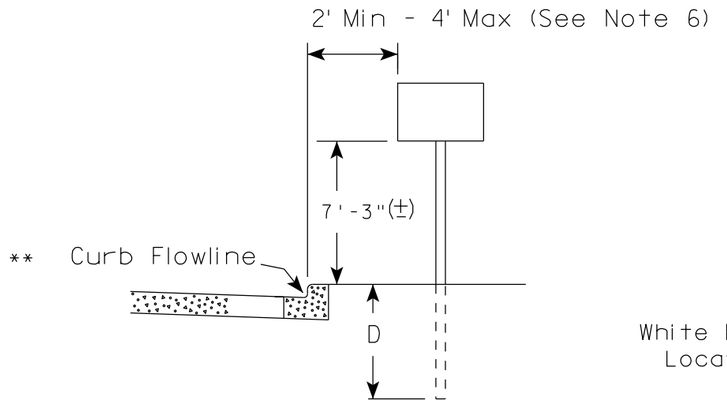
DATE 2/06/14 PLA 659 A4-2.3

PROJECT NO: | SHEET NO: E

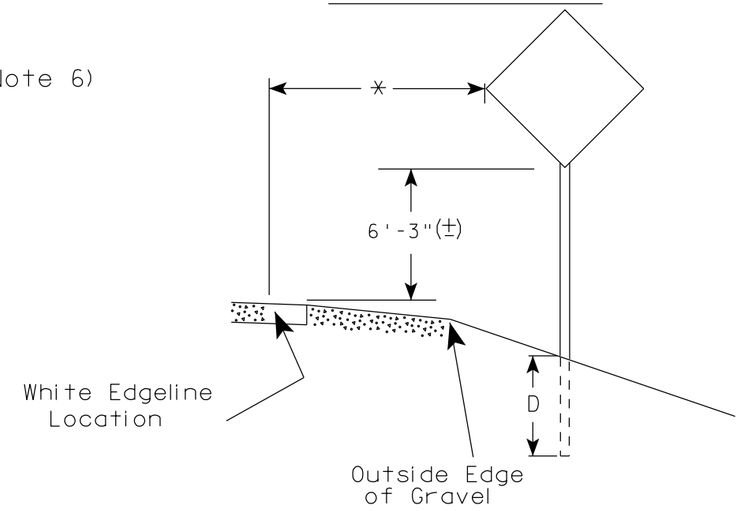
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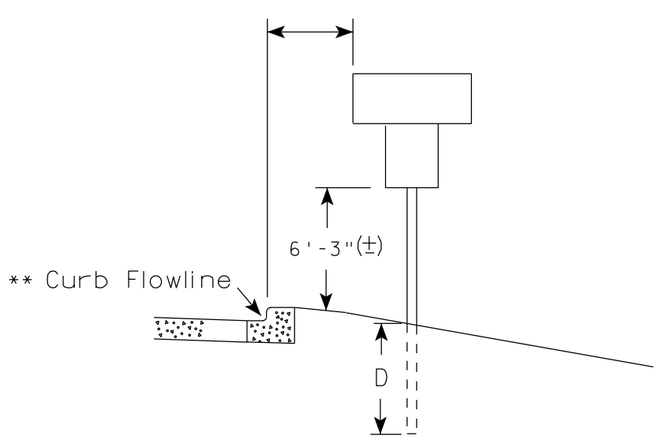
WISDOT/CADDS SHEET 42

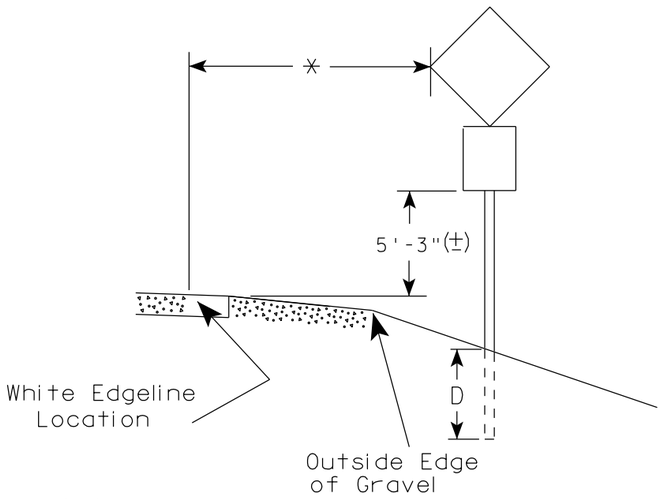
URBAN AREA



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 signs shall be mounted at a height of 5'-3" (±) or as directd 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

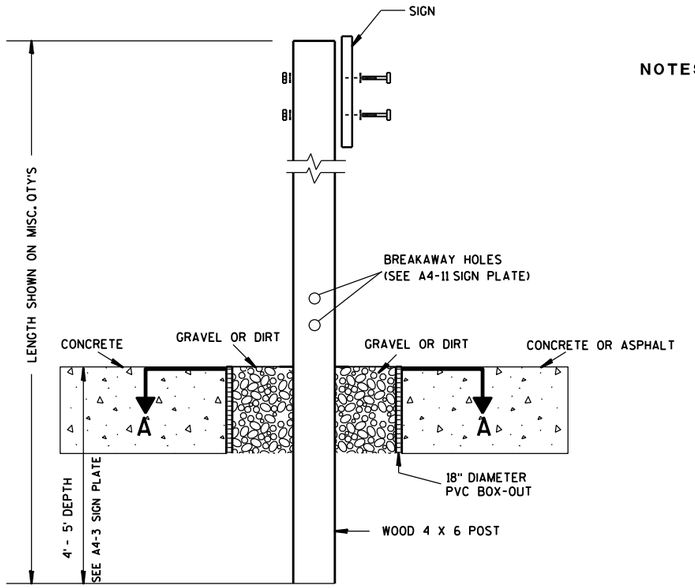
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

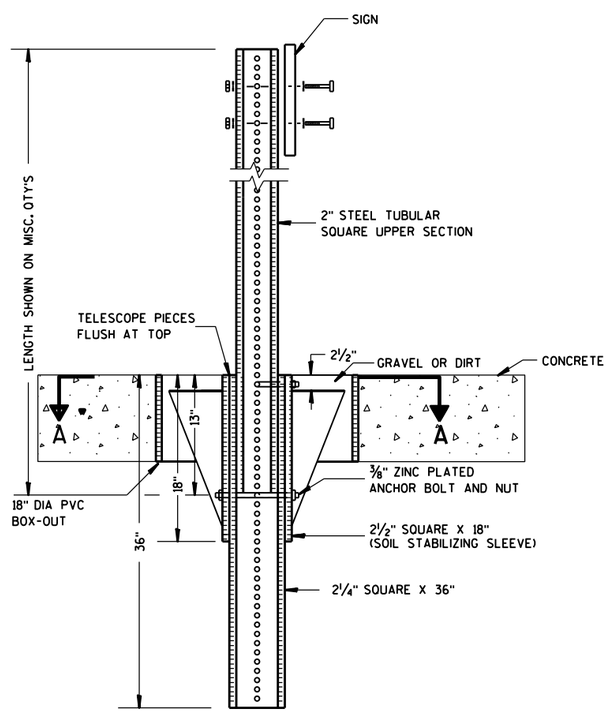
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 12-NOV-2014 14:03 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 99.237937:1.000000
WISDOT/CADDS SHEET 42



ELEVATION VIEW

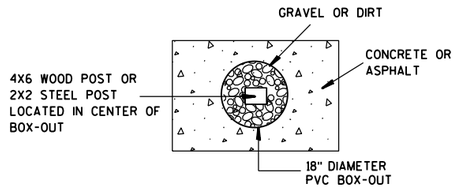
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

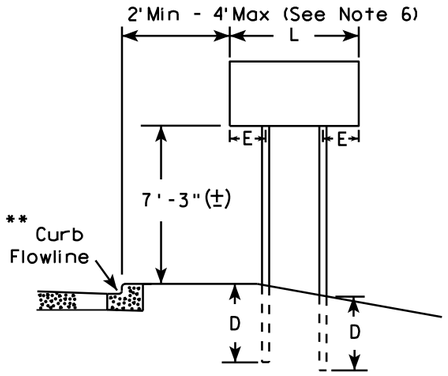
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

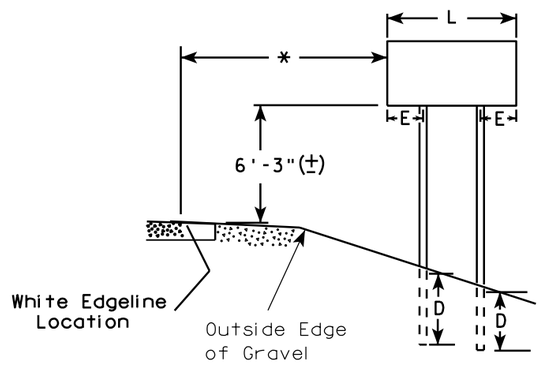
DATE 1/27/14 PLATE NO. A4-3B.1

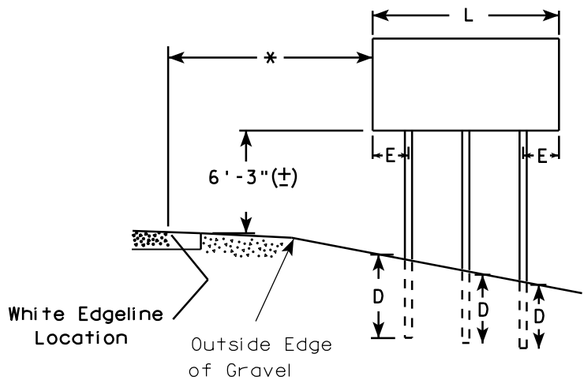
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

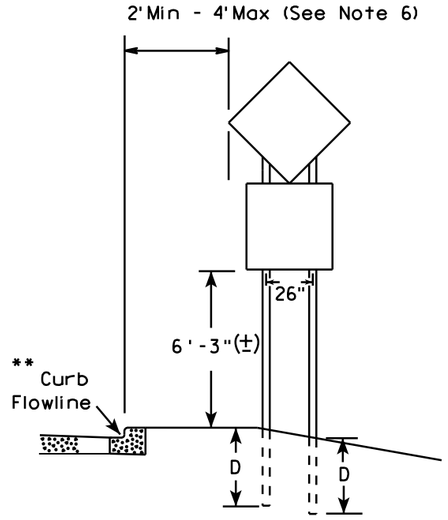
URBAN AREA



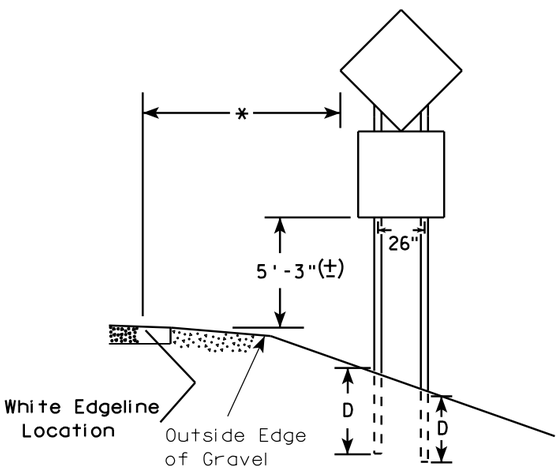
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



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 signs 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

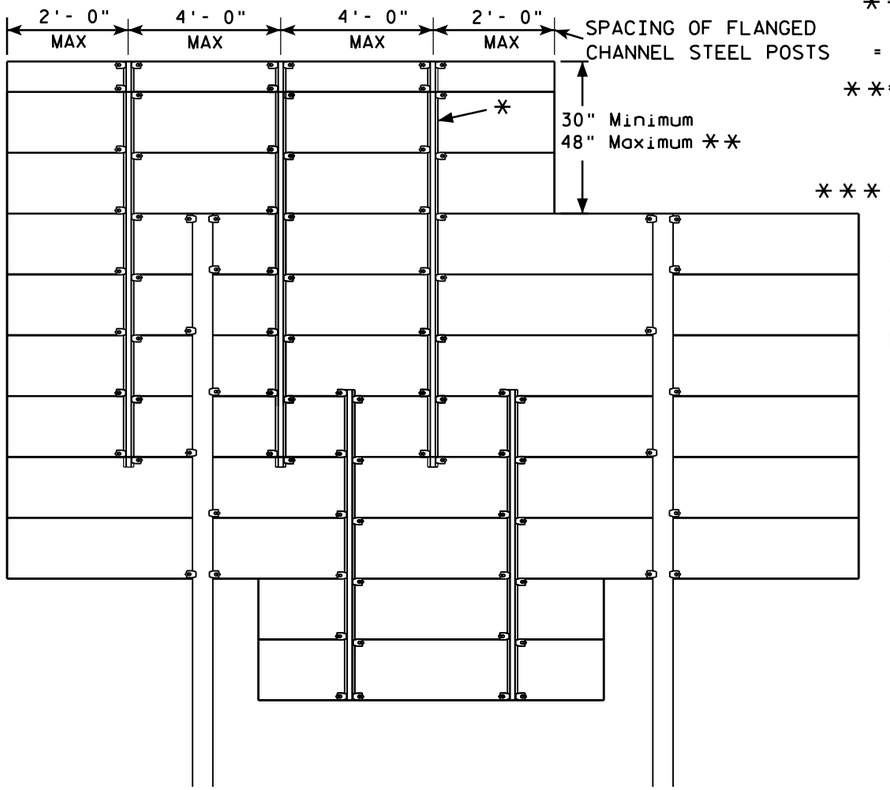
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. AA-1 662 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

GROUND MOUNTED SIGN

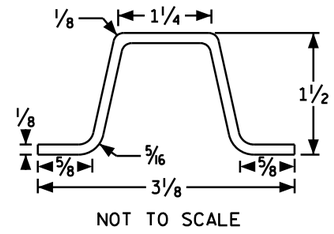


* =2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

** =FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

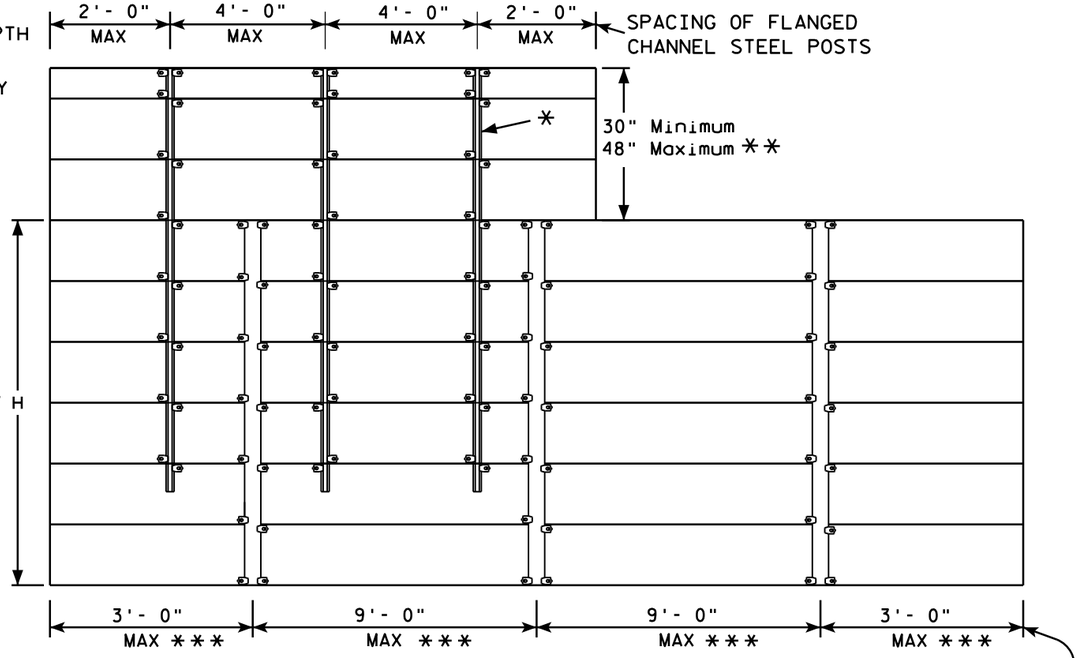
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

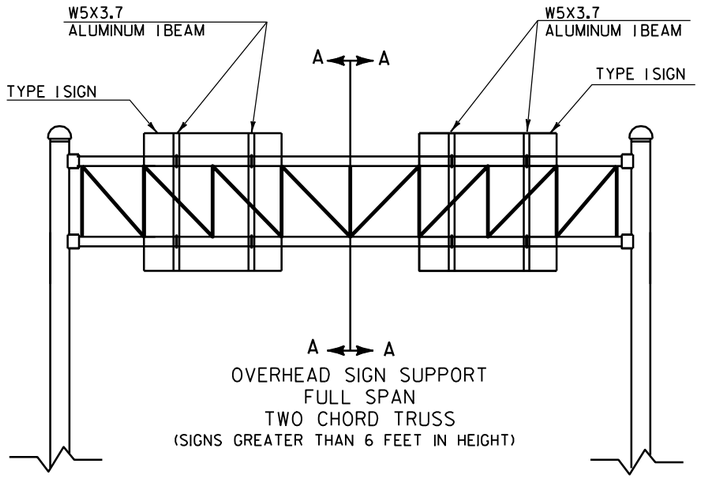
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

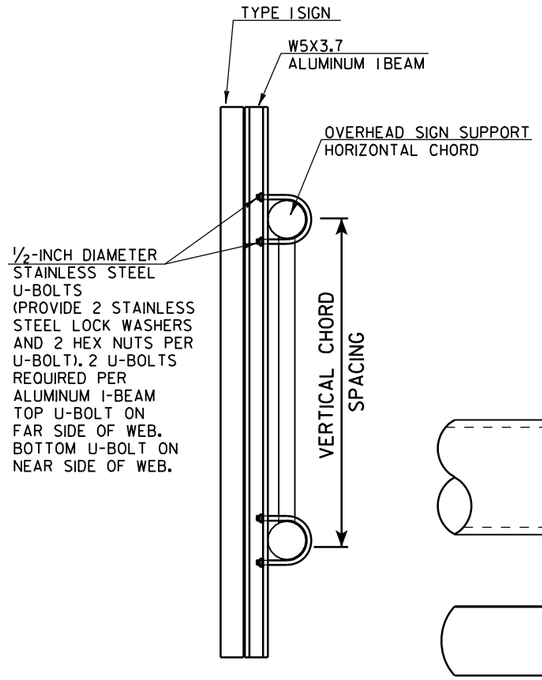
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 663 A4-6.12

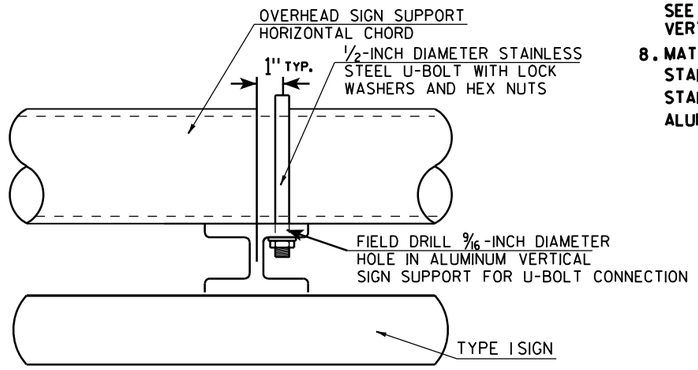
PROJECT NO:				SHEET NO:	E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



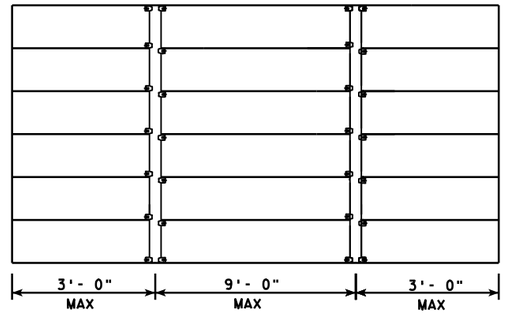
CUT SECTION A-A



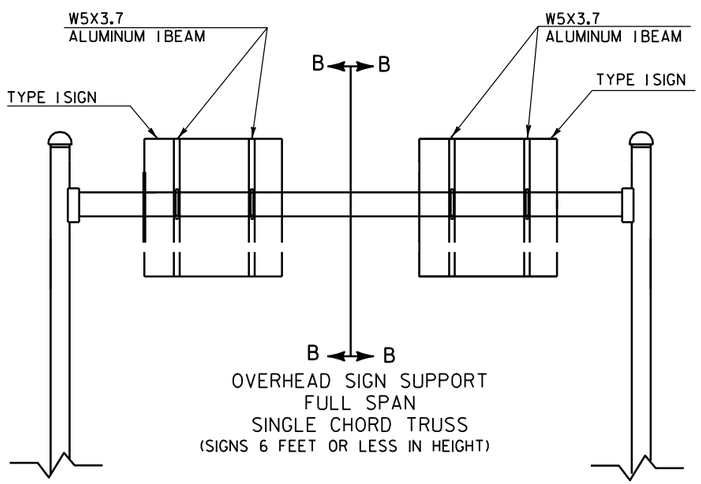
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

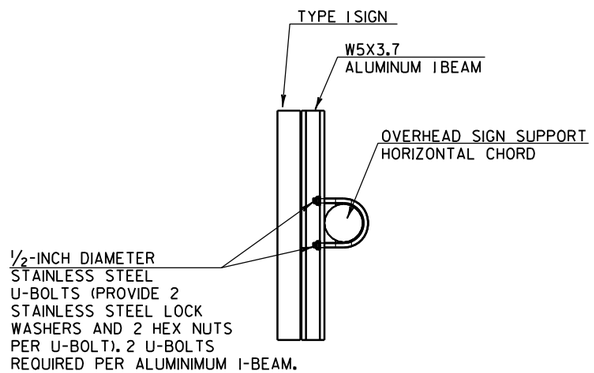
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.



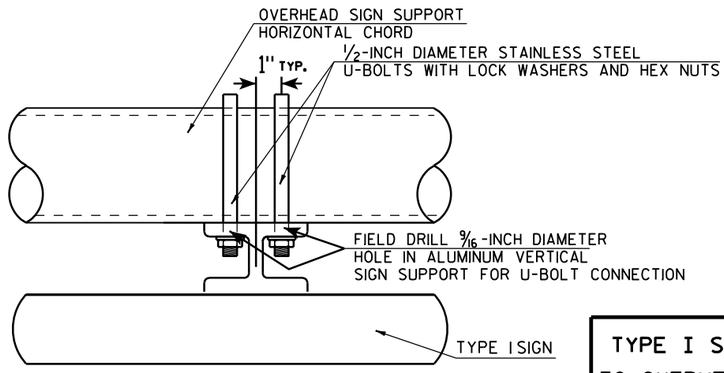
SPACING OF W5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

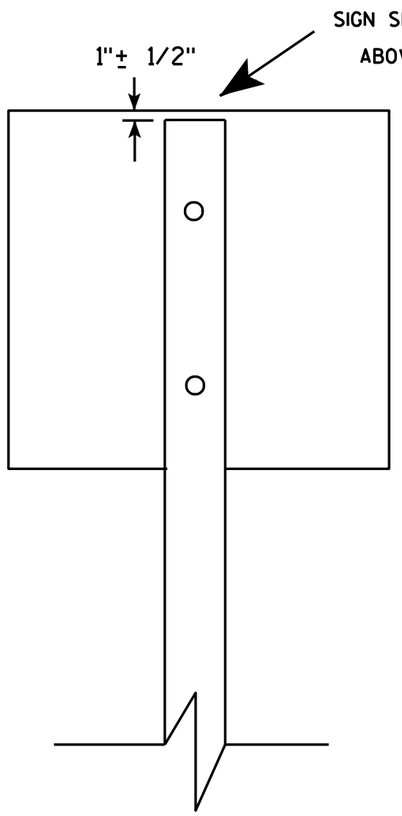
TYPE I SIGN CONNECTION TO OVERHEAD SIGN SUPPORT

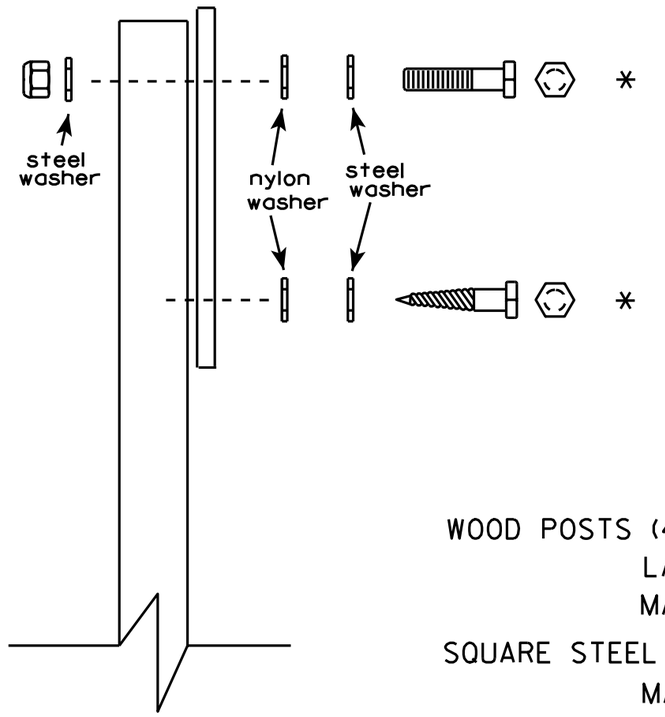
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/12/12 PLATE NO. A4-7.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 664	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

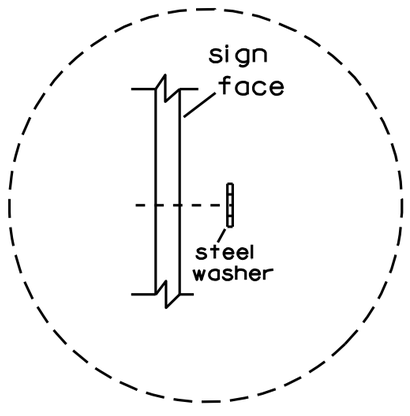
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

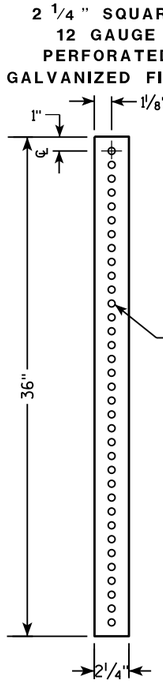
7

PROJECT NO:

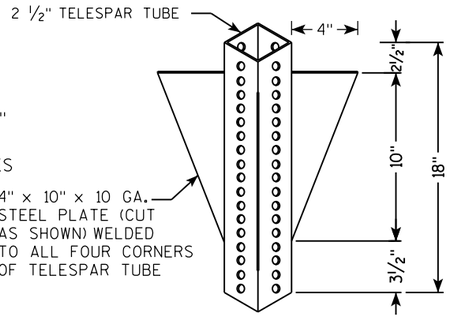
SHEET NO: 665 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

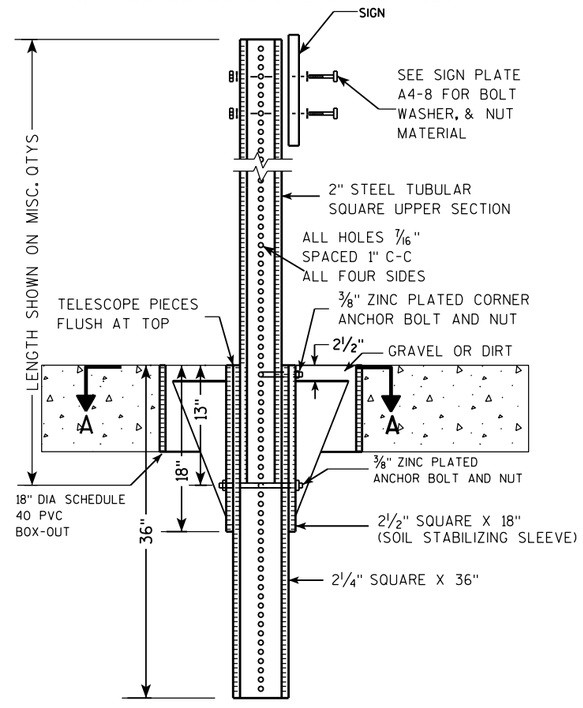
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



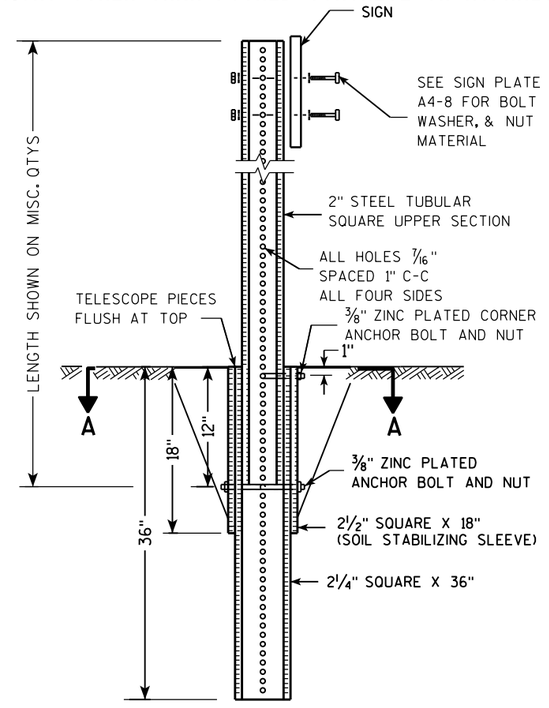
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

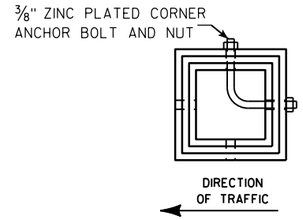


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

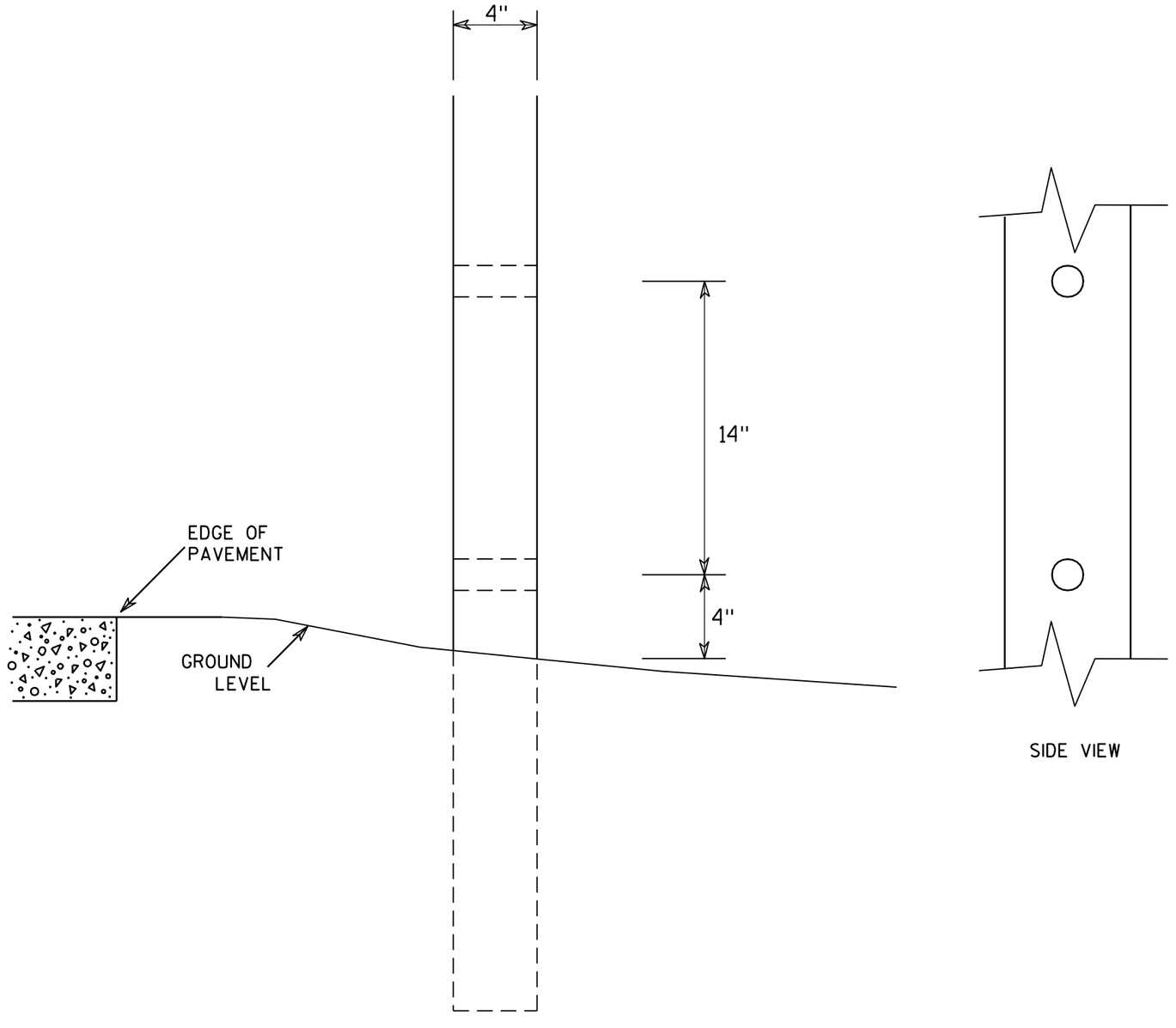
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 666 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



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

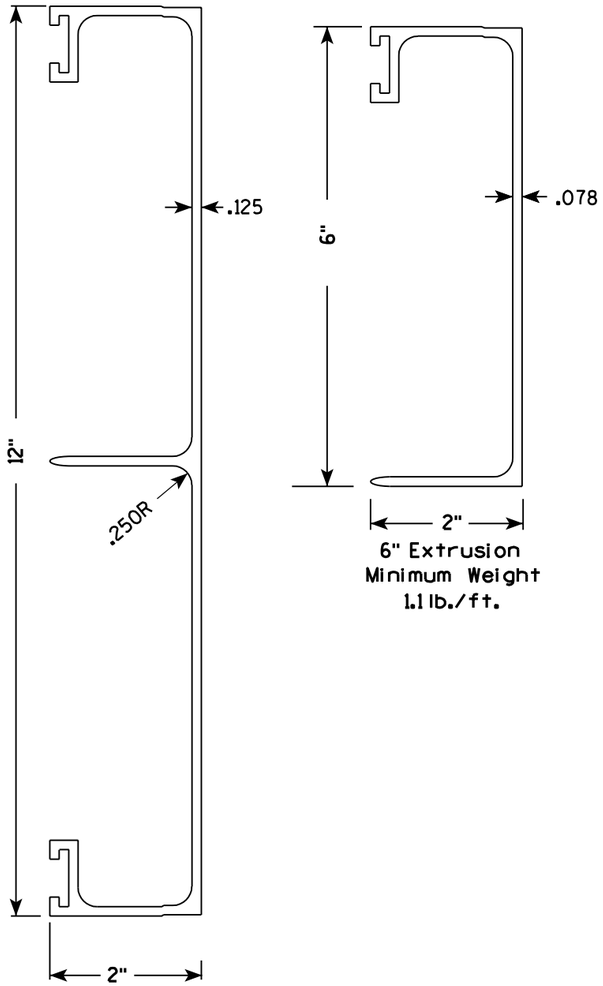
WISCONSIN DEPT OF TRANSPORTATION

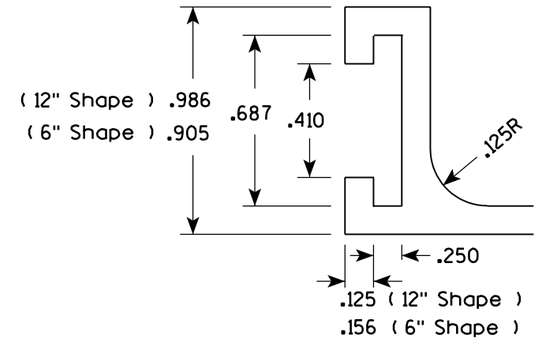
APPROVED Chester J Spang for State Traffic Engineer

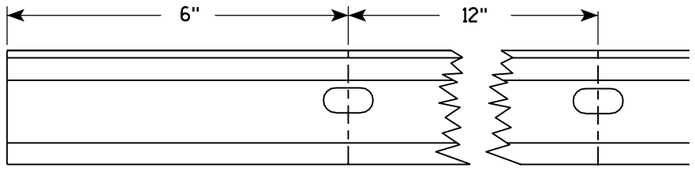
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 667	E

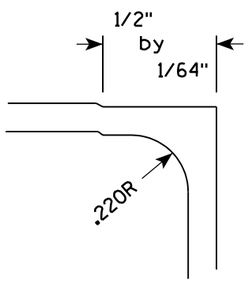
Extruded Shape







Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

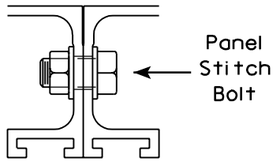


Hardware

STITCH BOLT, WASHER & NUT

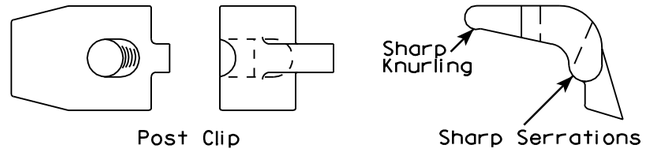
The hardware includes:

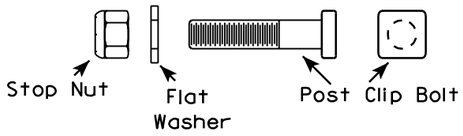
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

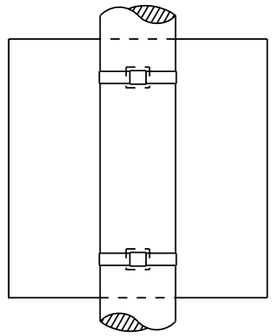
DATE 11/18/99 PLATE NO. A5-2.9

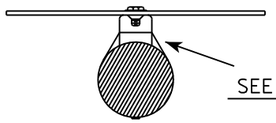
PROJECT NO:

SHEET NO: 668 E

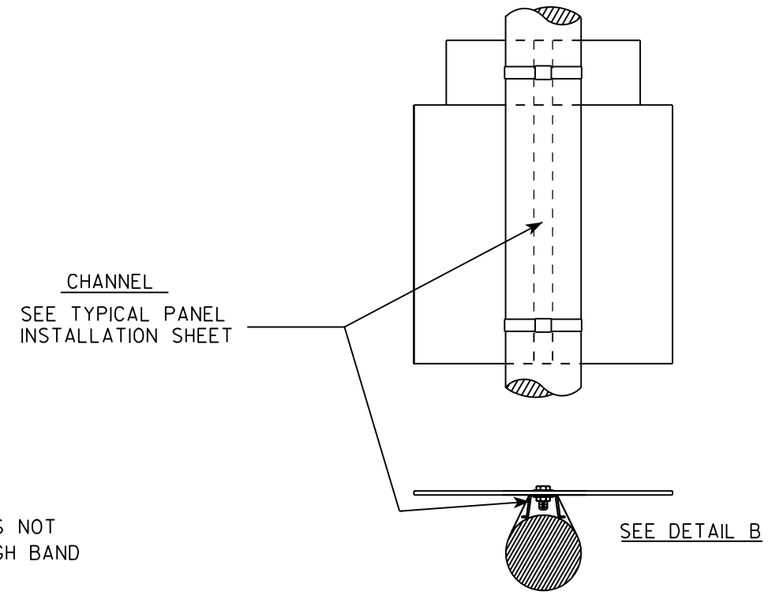
BANDING

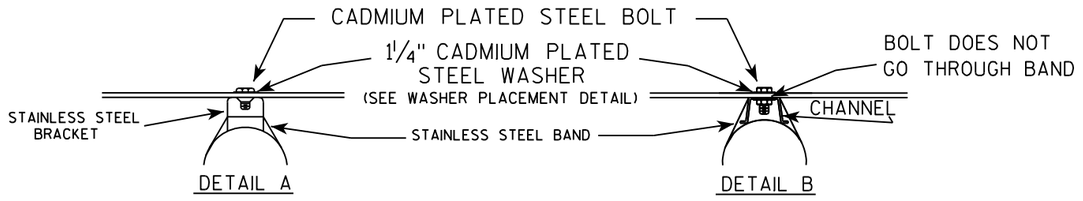
SINGLE SIGN



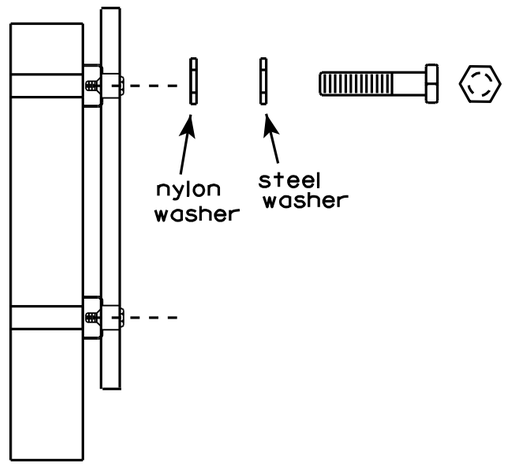


"J" ASSEMBLY





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.

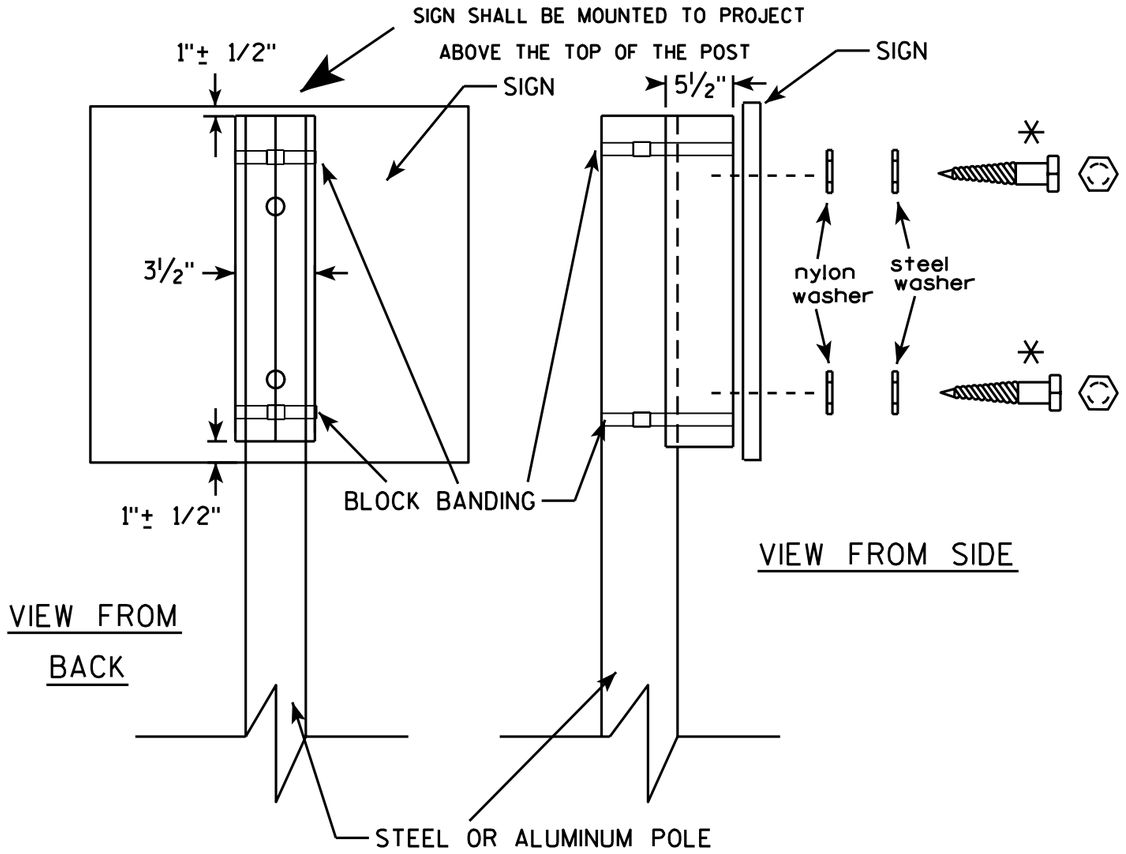
STANDARD SIGN
SIGN BANDING DETAILS

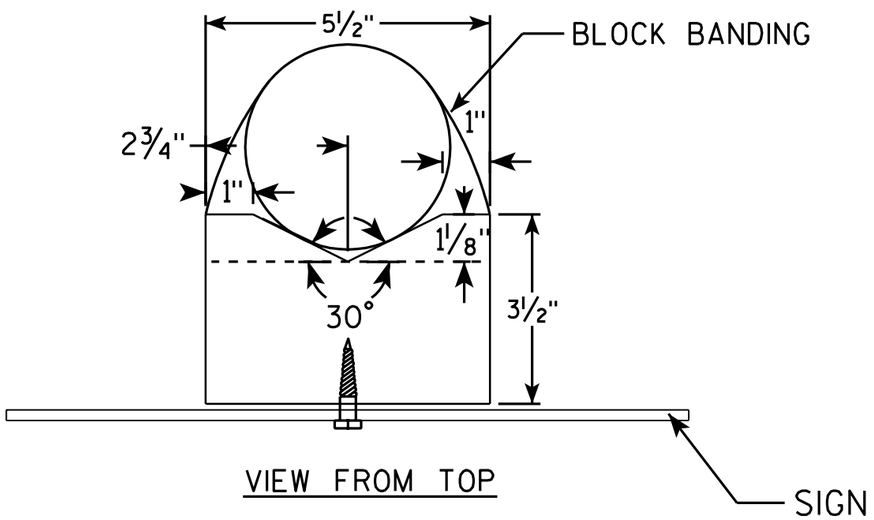
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 669	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)

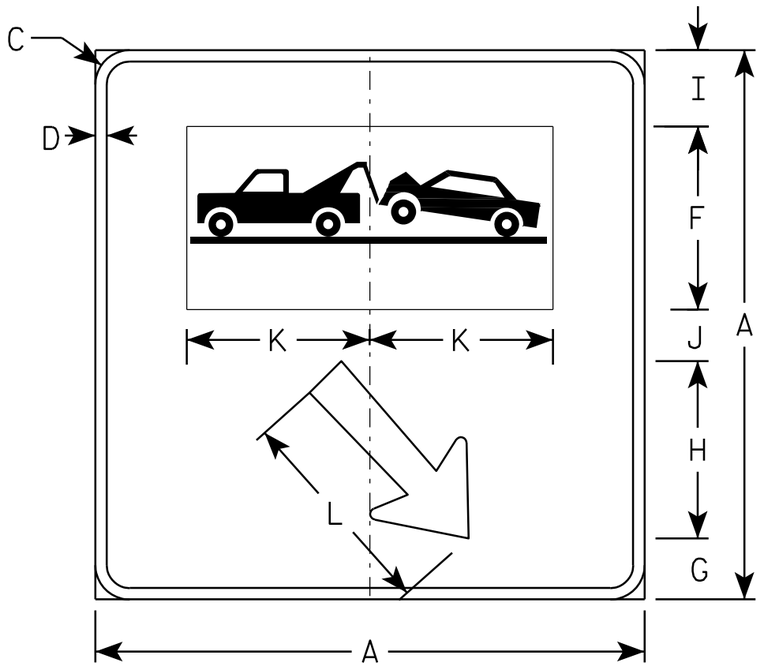
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

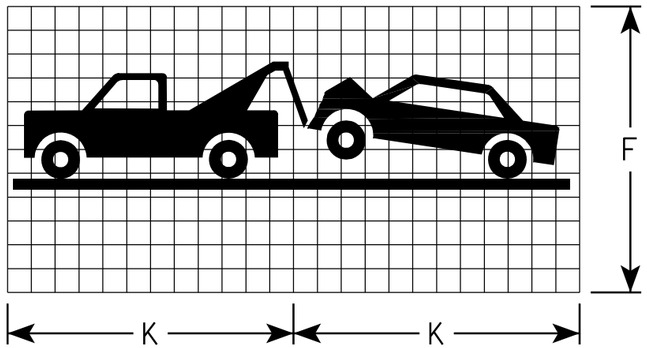
SHEET NO: 670 E



D4-56R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLUE
   Message - WHITE
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. D4-56L is same as D4-56R except arrow is reversed.
6. Arrow is from A1-2 Lower Case 4½ Series D & E, with a modified length.



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	36		2 1/4	3/4		12	4	11 5/8	5	3 3/8	12	14															9.0
3																											
4																											
5																											

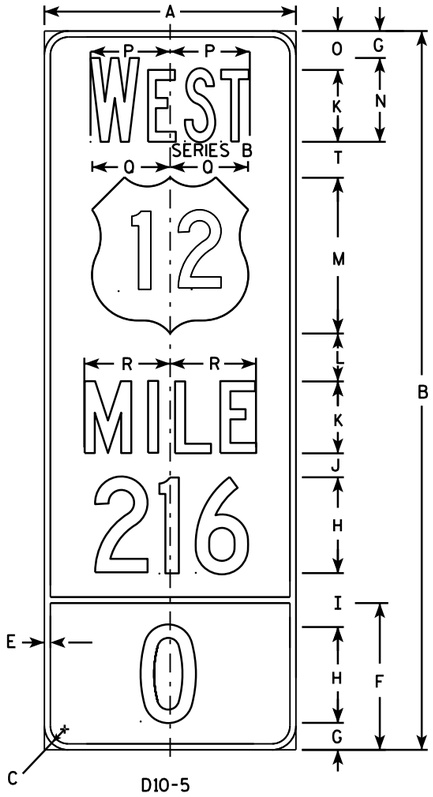
STANDARD SIGN
D4-56 L & R

WISCONSIN DEPT OF TRANSPORTATION

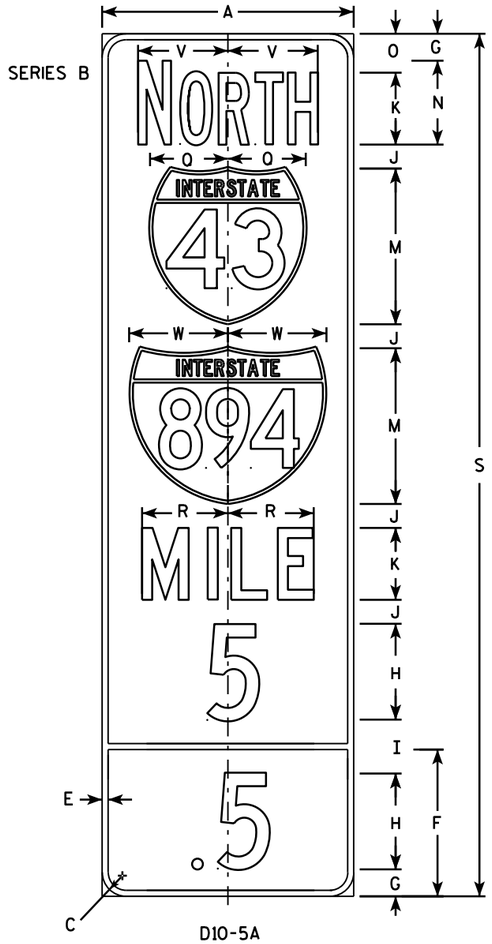
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/14/2011 PLATE NO. D4-56.1

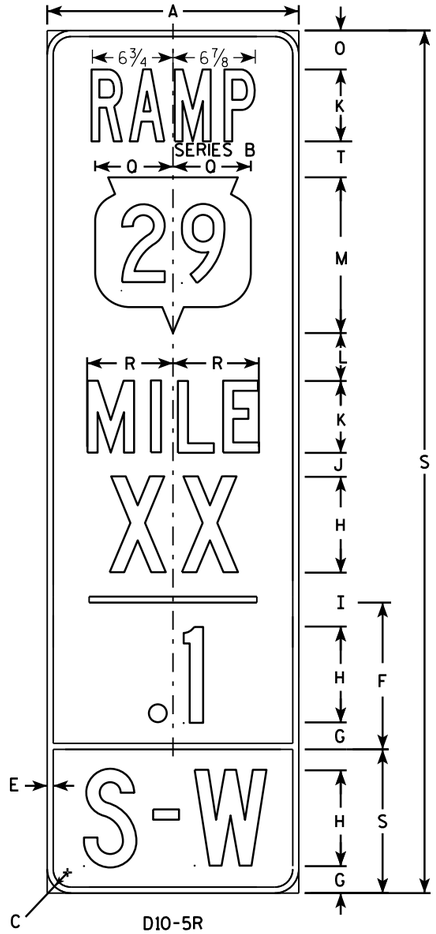
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 671	E



D10-5



D10-5A



D10-5R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLUE
   Message - WHITE
3. Interstate Shield Color
   Background - Top Red
   - Bottom Blue
   Message - White
4. Message Series - C or as noted on the Sign.
5. 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.
6. The decimal point is required for all digits except "0".
7. Optically adjust mileage numbers about the centerline of the sign to achieve proper balance.
8. Optically adjust Ramp direction letters about the centerline of the sign to achieve proper balance.



SERIES B



SERIES B

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	D10-5 Area sq. ft.	D10-5A Area sq. ft.	D10-5R Area sq. ft.
1																													
2																													
3																													
4	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	10.5	10.5
5	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	10.5	10.5

STANDARD SIGN
D10-5

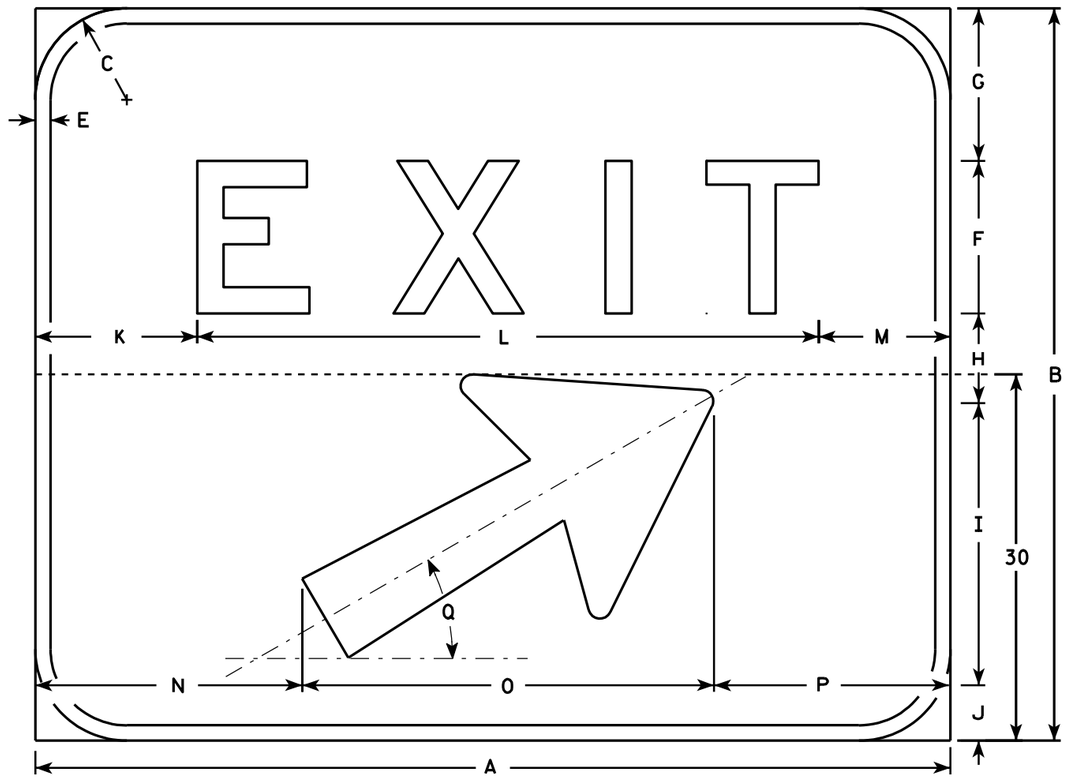
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/26/14 PL 672 D10-5.2

PROJECT NO:

SHEET NO: 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

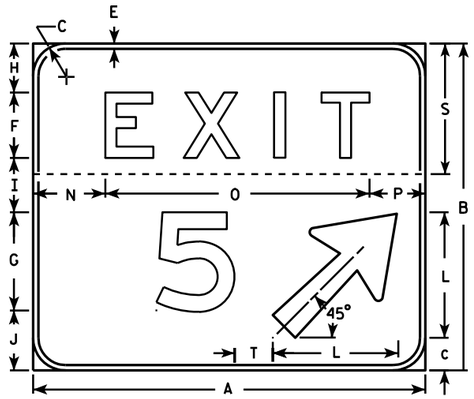
STANDARD SIGN
E5 - 1

WISCONSIN DEPT OF TRANSPORTATION

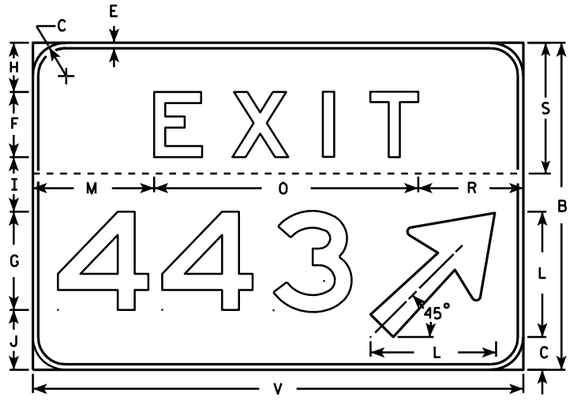
APPROVED Chester J Spang for State Traffic Engineer

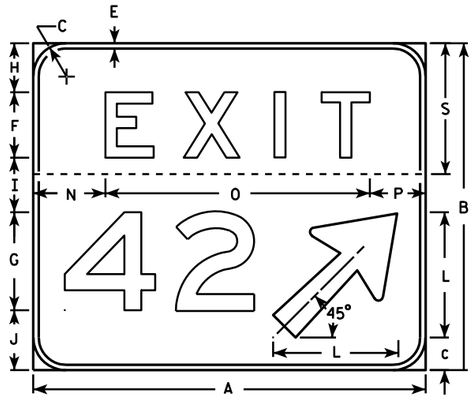
DATE 6/22/00 PLATE NO. E5-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 673	E



NOTE: T diminision shall be measured from the back of the number to the front of the arrow





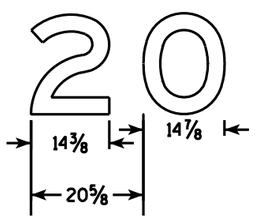
NOTES

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 the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14			
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8			
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4			
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8			
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8			
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8			
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4			
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8			
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4			
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

EXAMPLE FOR USING SPACING CHART



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
2																										
3																										
4																										
5	72	60	6		1	12	18	9	10	11	8 7/8	23	22 1/4	13 1/4	48 1/2	10 1/4		19 1/4	24	7		90		96	7 1/2	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

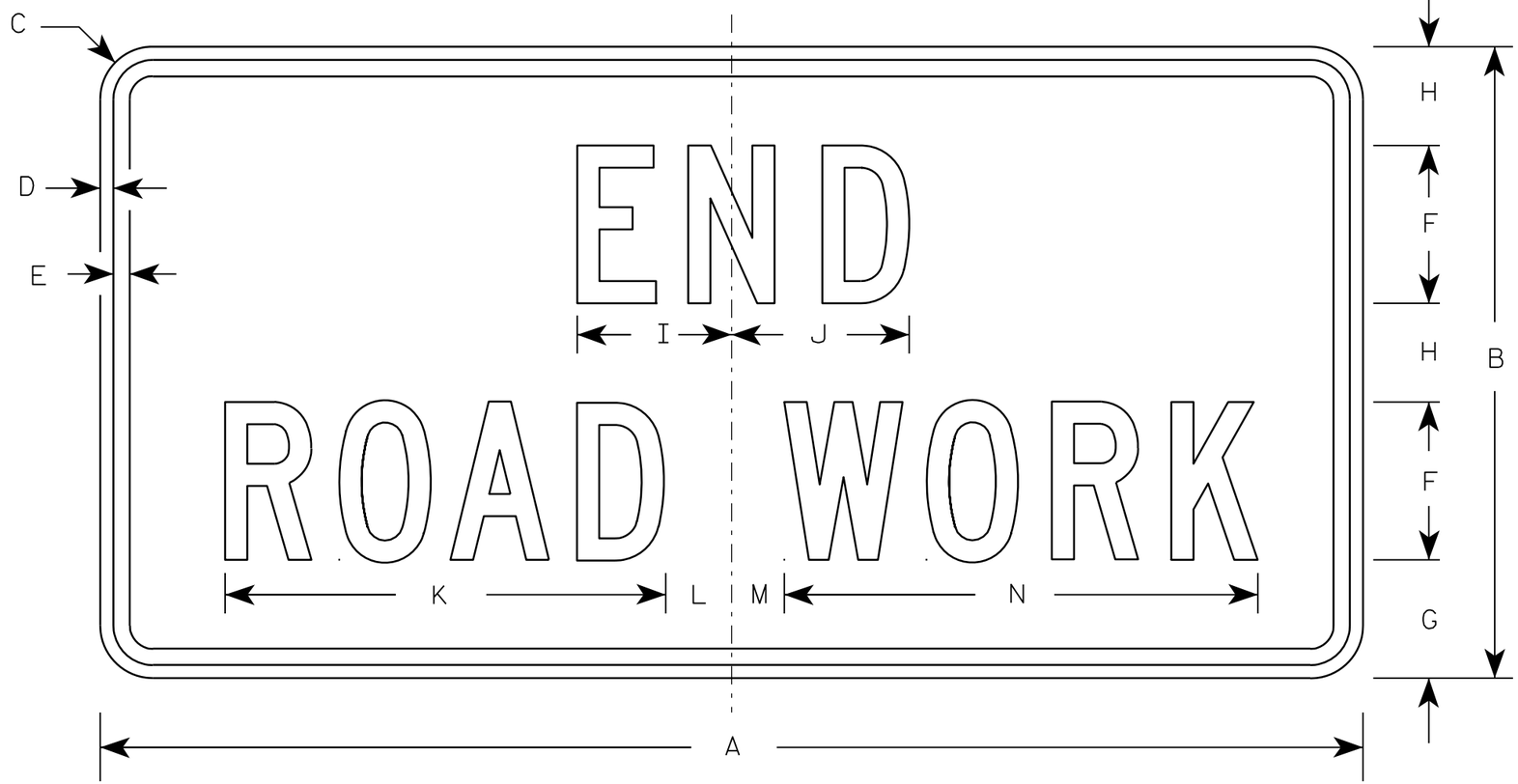
STANDARD SIGN E5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/11/10 PLATE NO. E5-1A.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 674 | 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

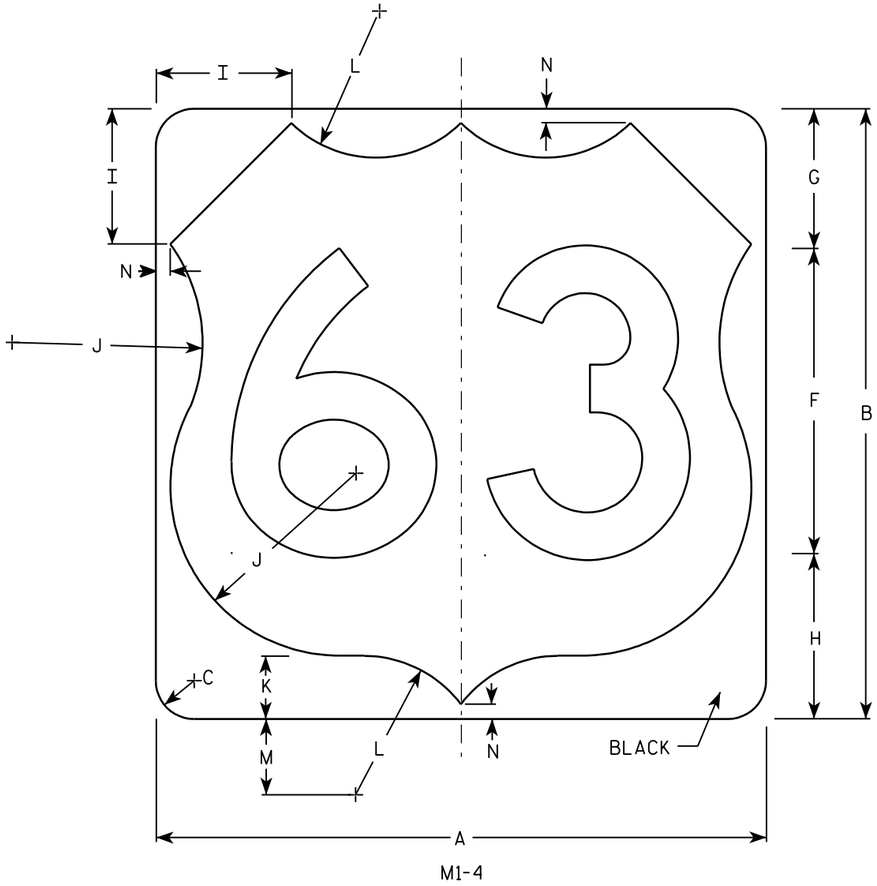
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

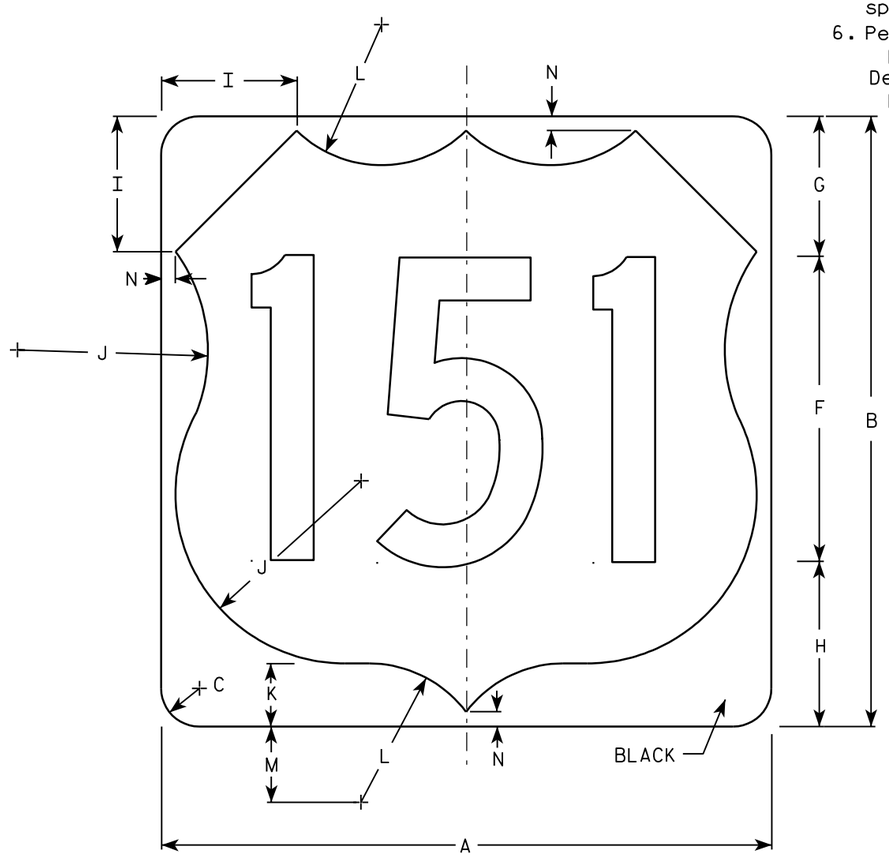
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 675	E

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

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

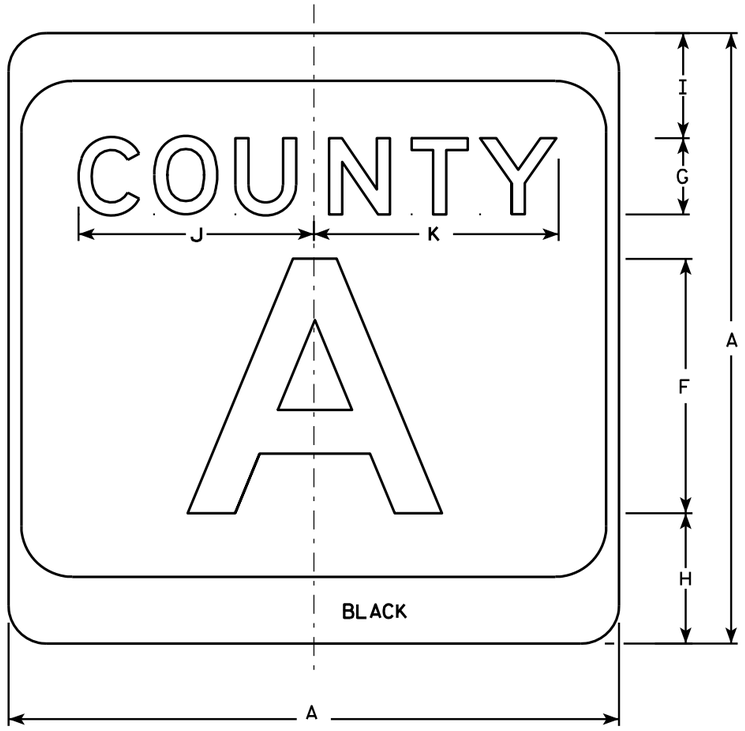
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

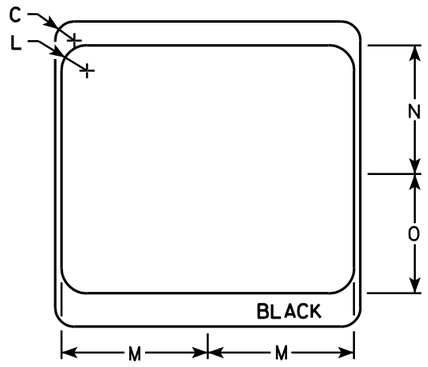
APPROVED Matthew R Rauch
for State Traffic Engineer

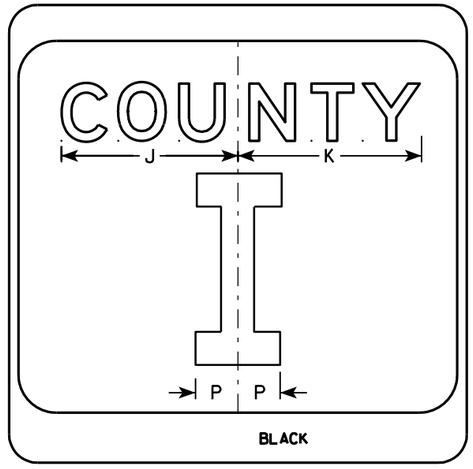
DATE 08/25/05 PLATE NO. M1-4.9

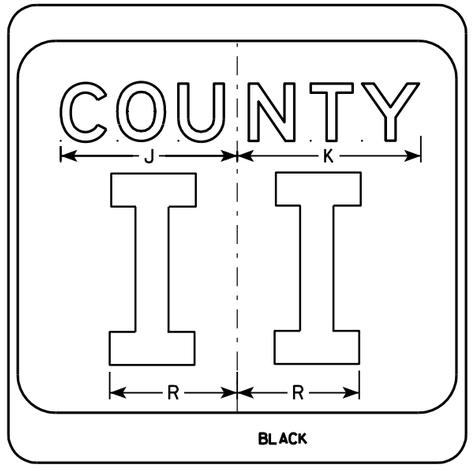
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 676 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

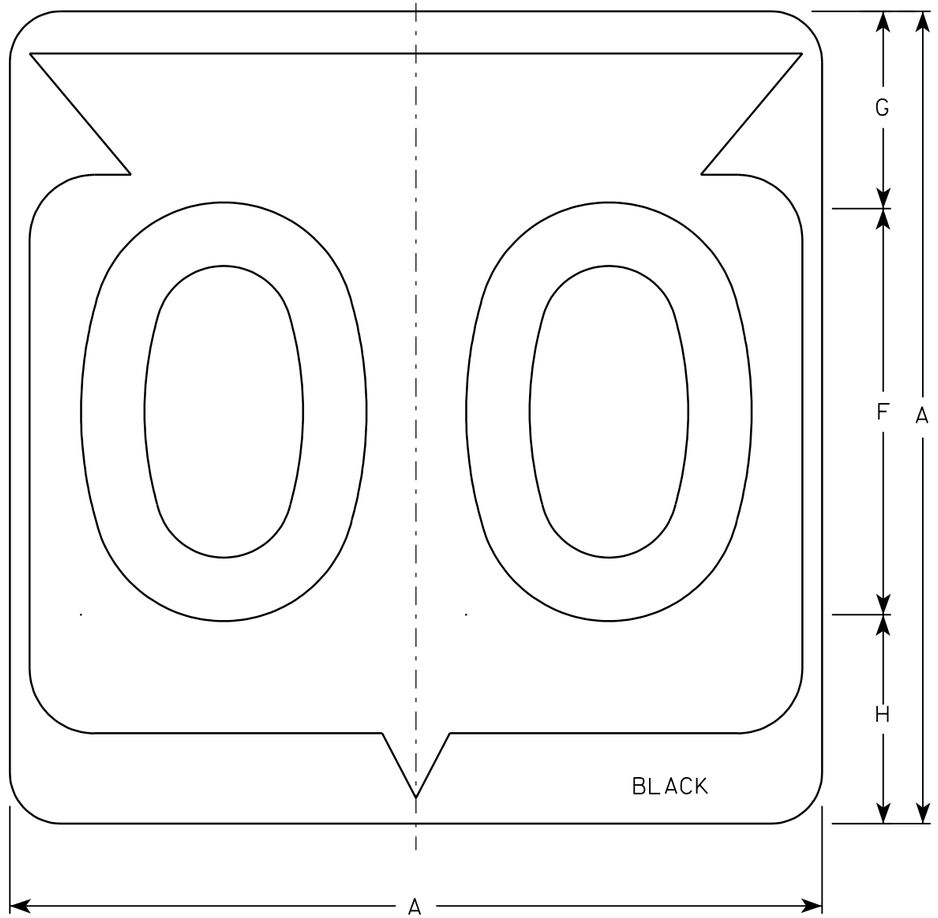
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 677	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN PLOT DATE : 29-SEP-2011 11:25 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

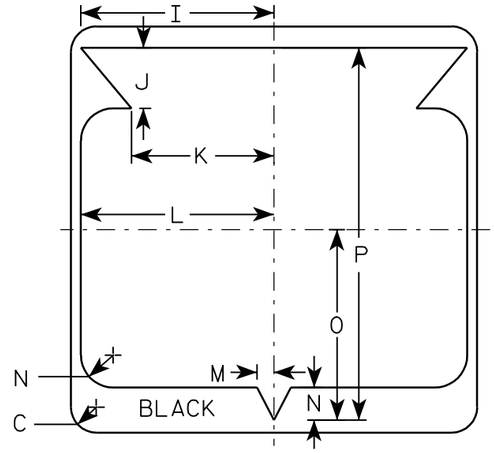
7



M1-6

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 Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



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	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

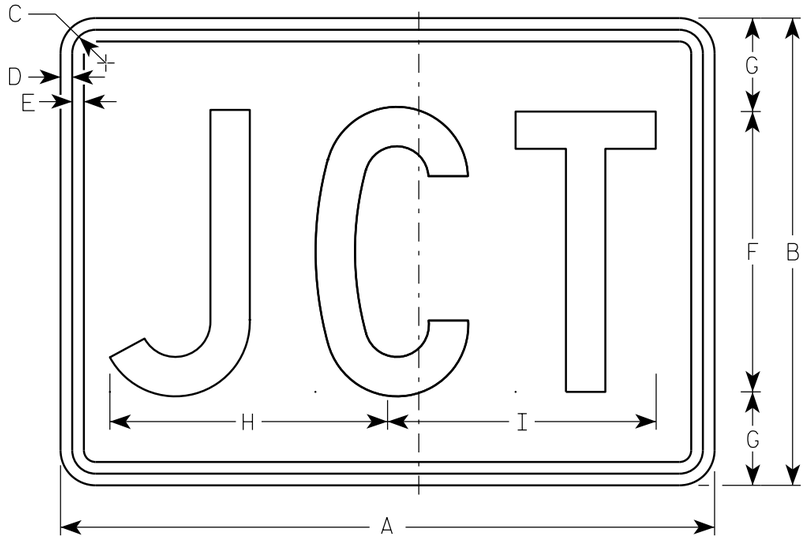
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

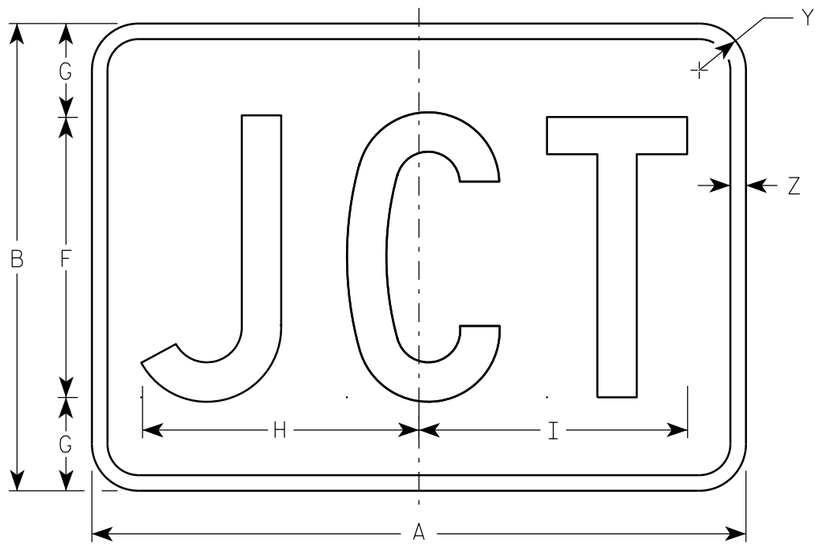
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 678	E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is 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. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

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	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

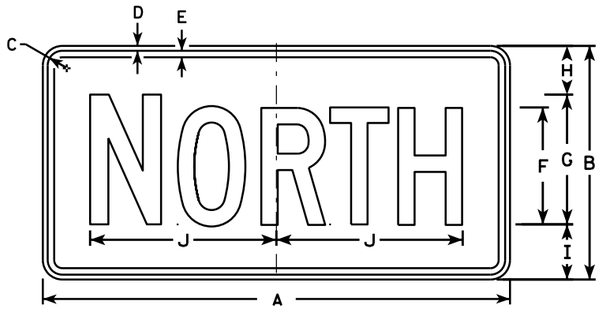
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

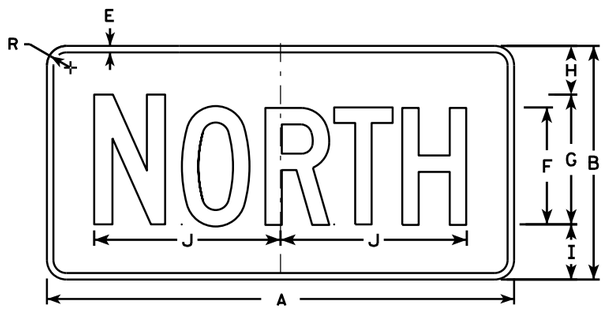
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 679 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M3-1
MK3-1
MM3-1
MN3-1



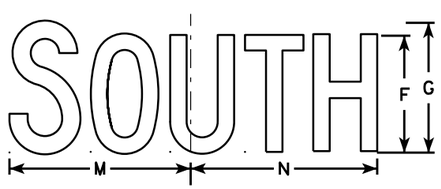
MB3-1



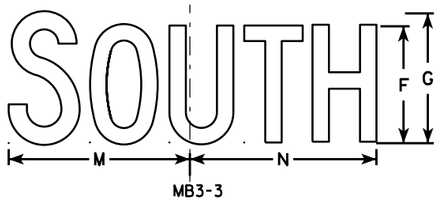
M3-2
MK3-2
MM3-2
MN3-2



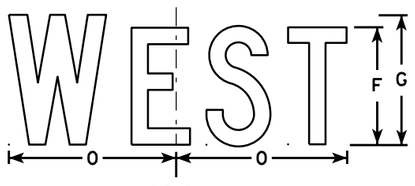
MB3-2



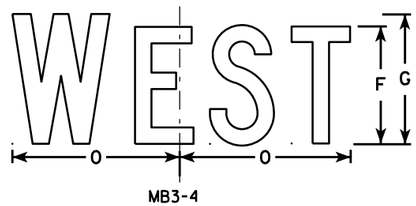
M3-3
MK3-3
MM3-3
MN3-3



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

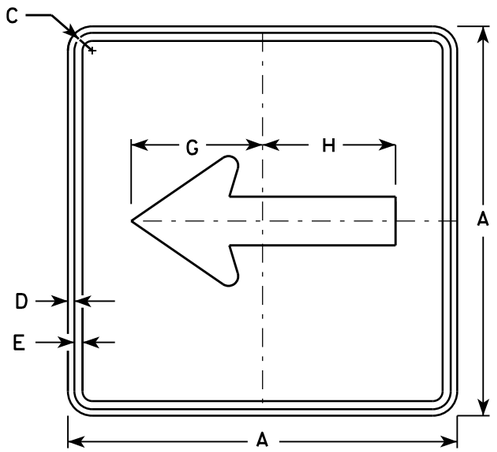
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

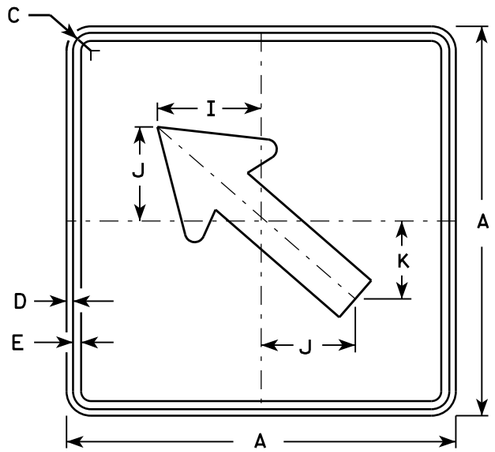
DATE 6/30/14 PLATE NO M3-1.13

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

7



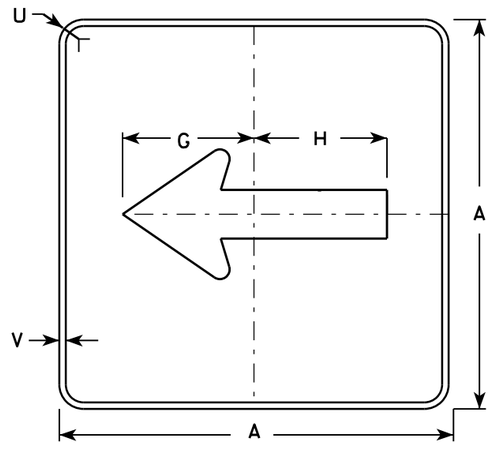
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



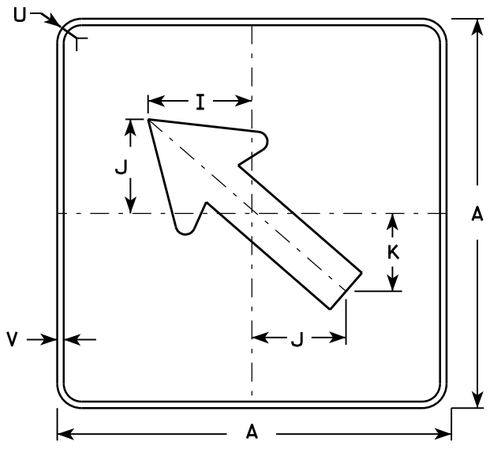
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

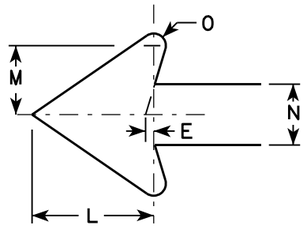
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1



MB6-2



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	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

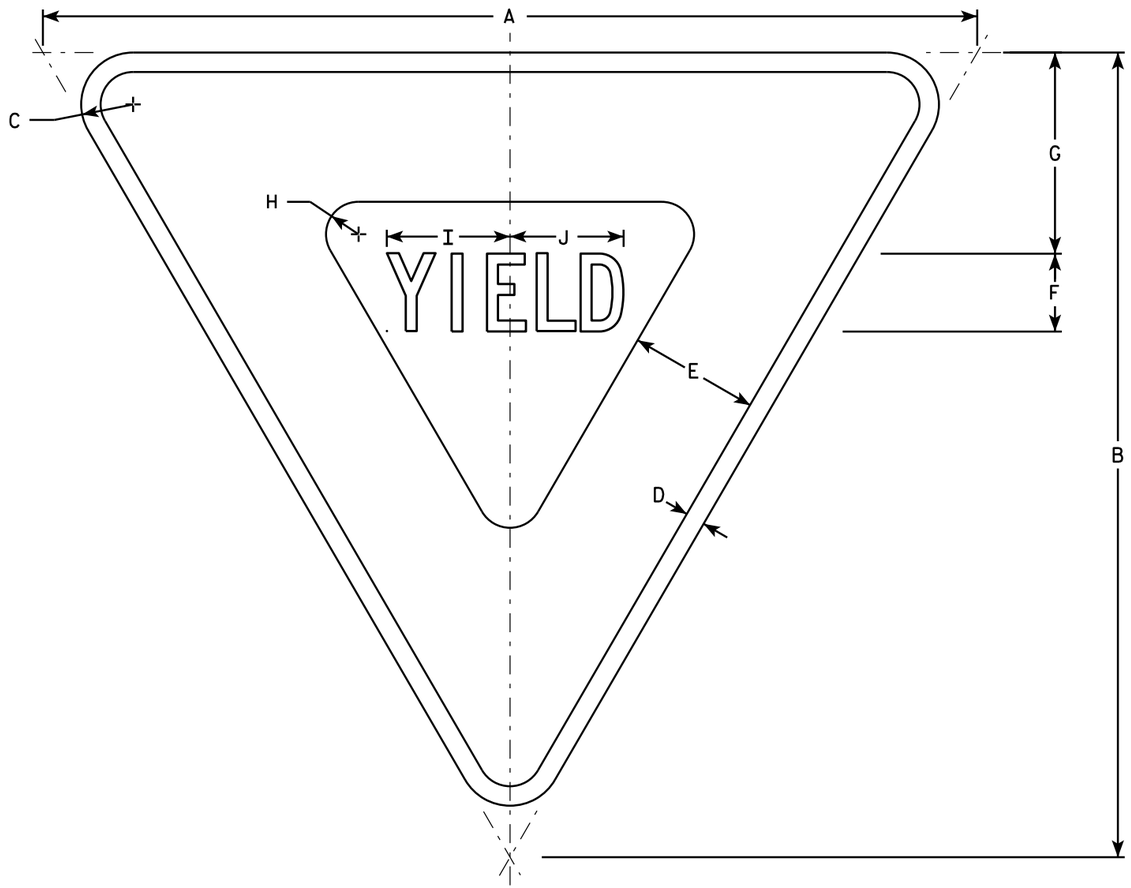
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE 681 M6-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 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

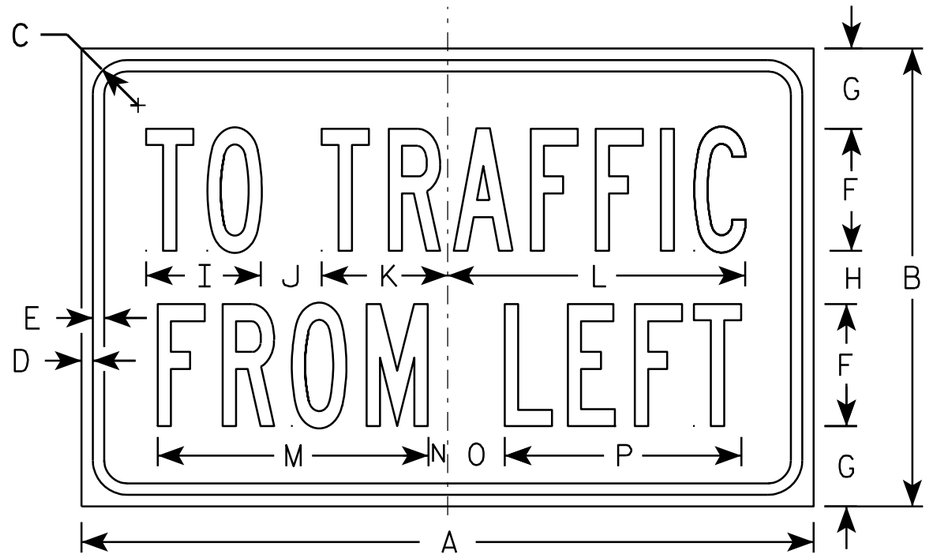
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

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
WISDOT/CADDS SHEET 42



R1-54

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 - B

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	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

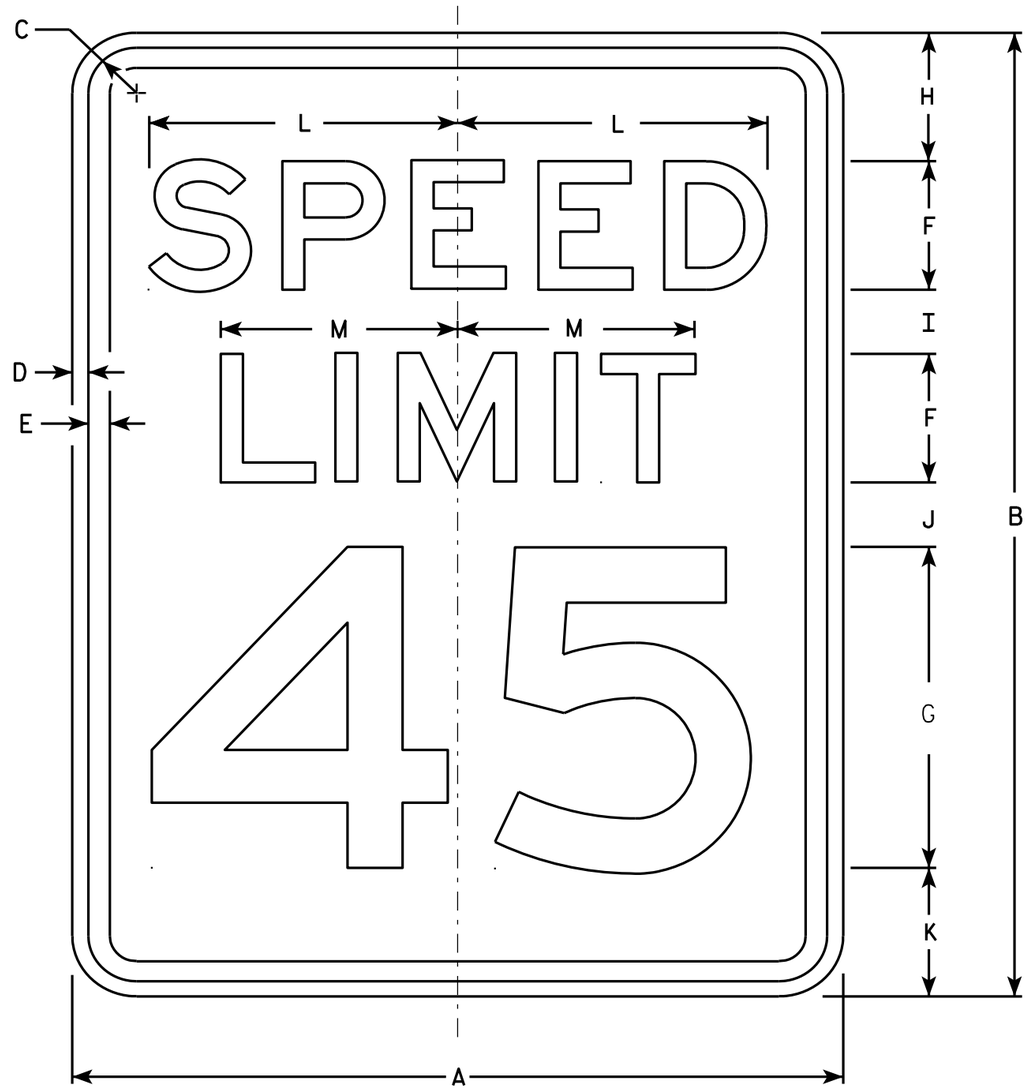
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 683	E



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

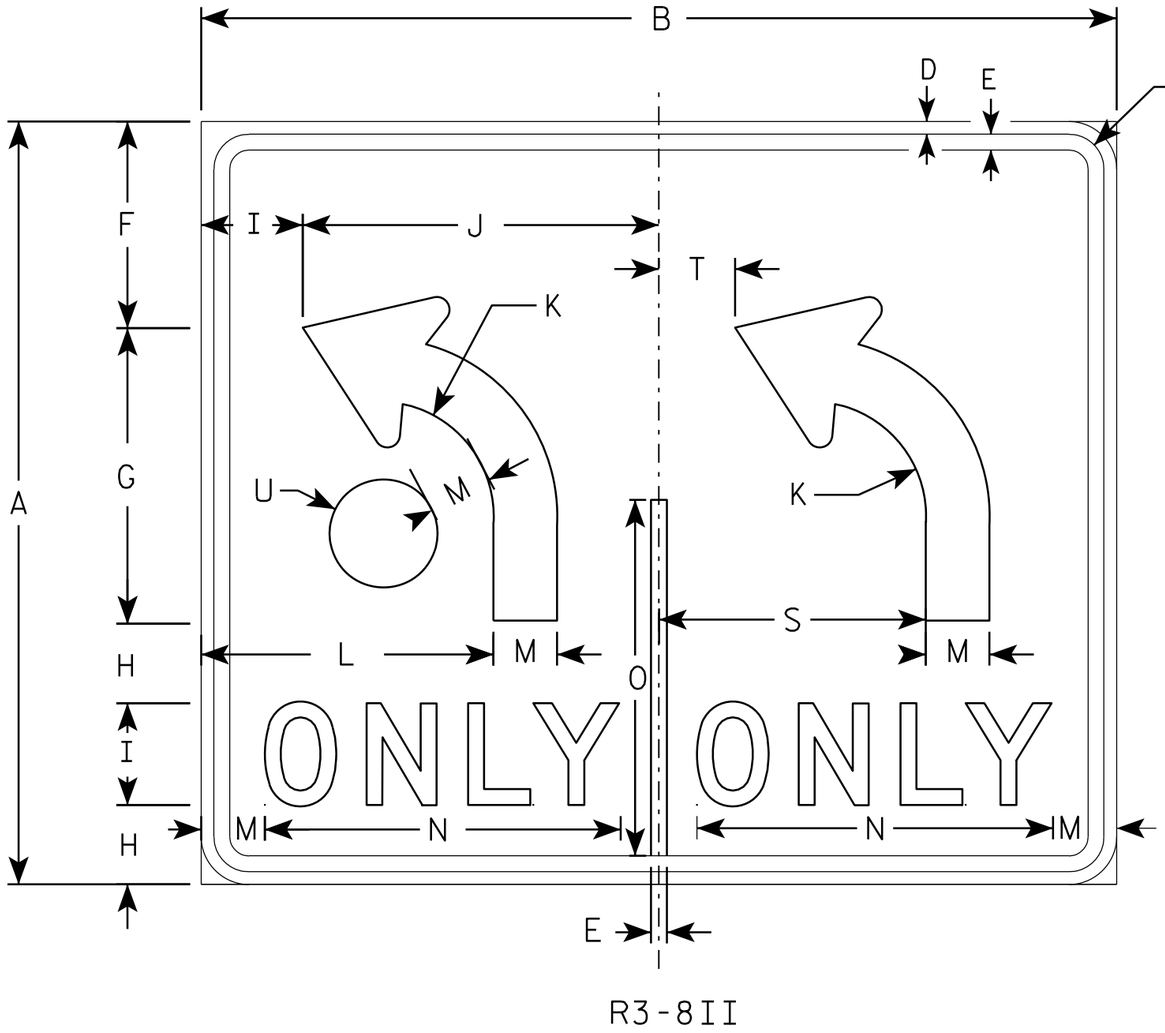
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

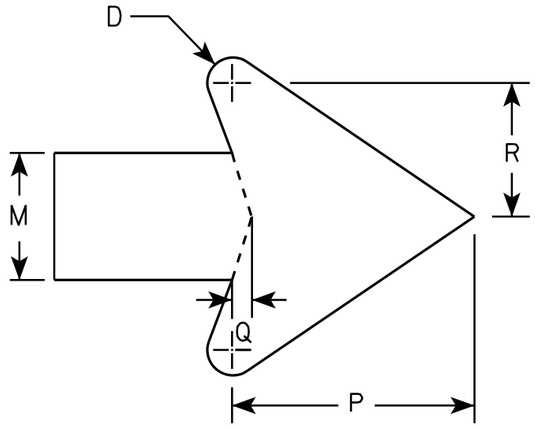
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 684 | E



R3-8II

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.



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																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	10 1/2	3	4 1/4						7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	10 1/2	3	4 1/4						7.5
3																											
4																											
5																											

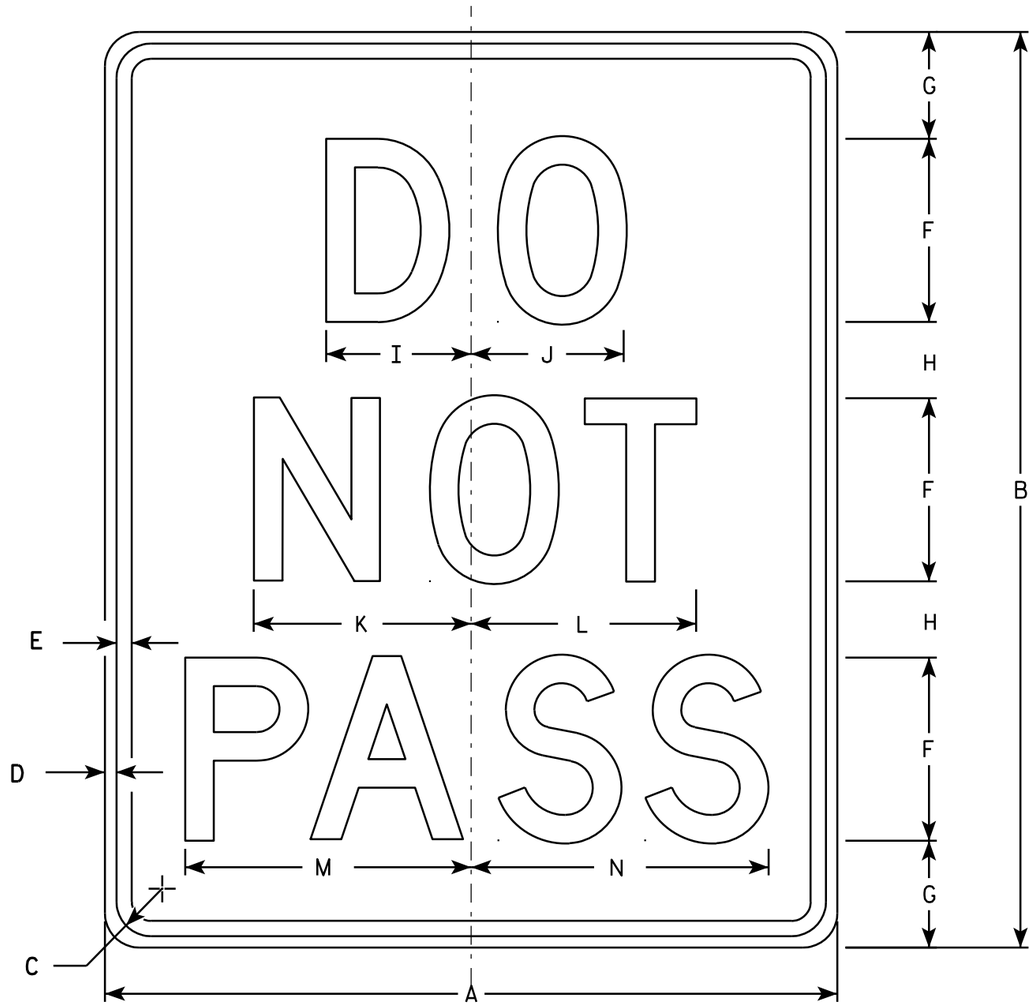
STANDARD SIGN
R3-8II

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/2011 PLATE NO. R3-8II.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 685	E



R4-1

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 - 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	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

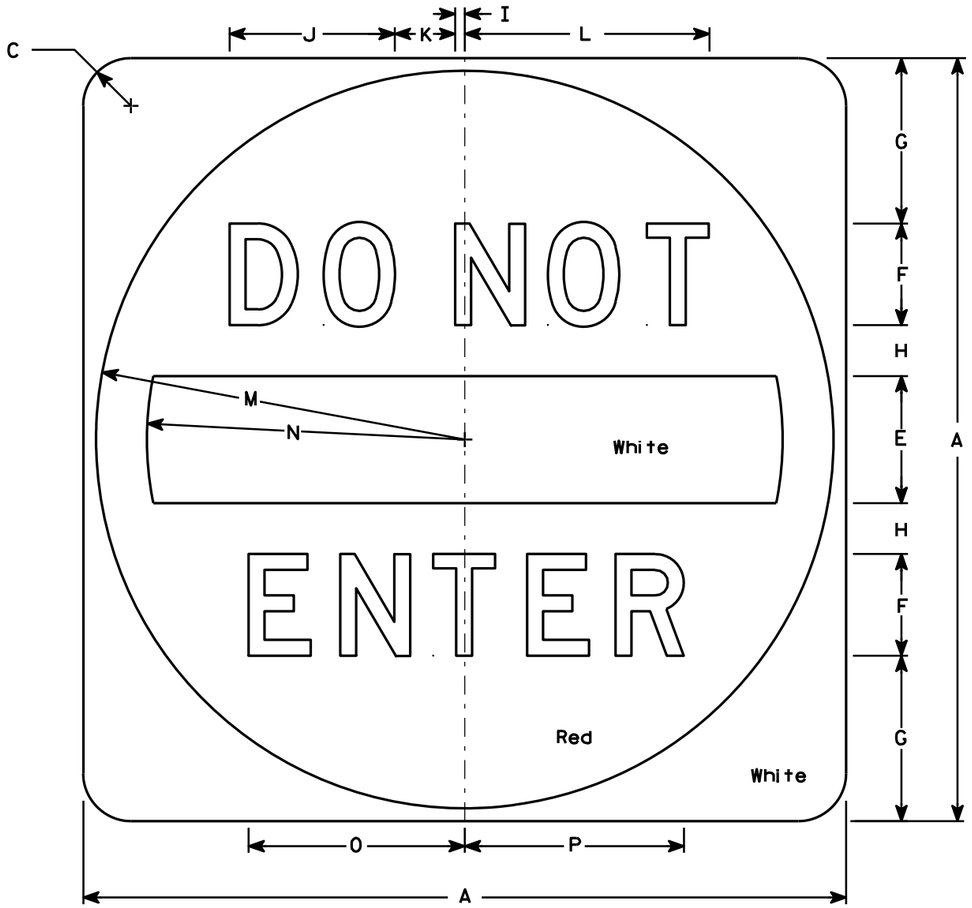
STANDARD SIGN
R4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 686 | E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors 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	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

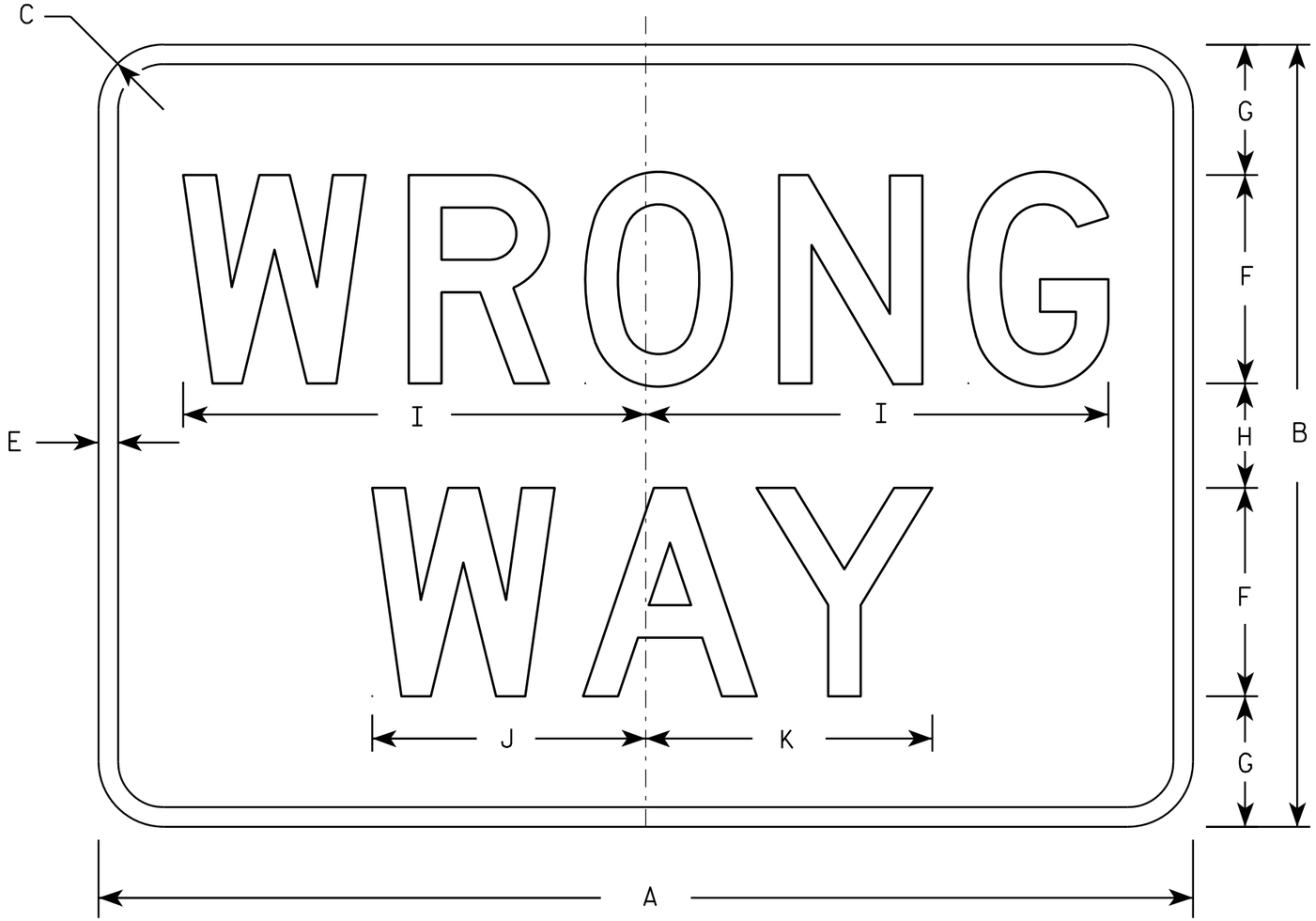
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 687 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 688 | E



R5-57

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 - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are 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																											
2M																											
3																											
4	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0
5	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0

STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

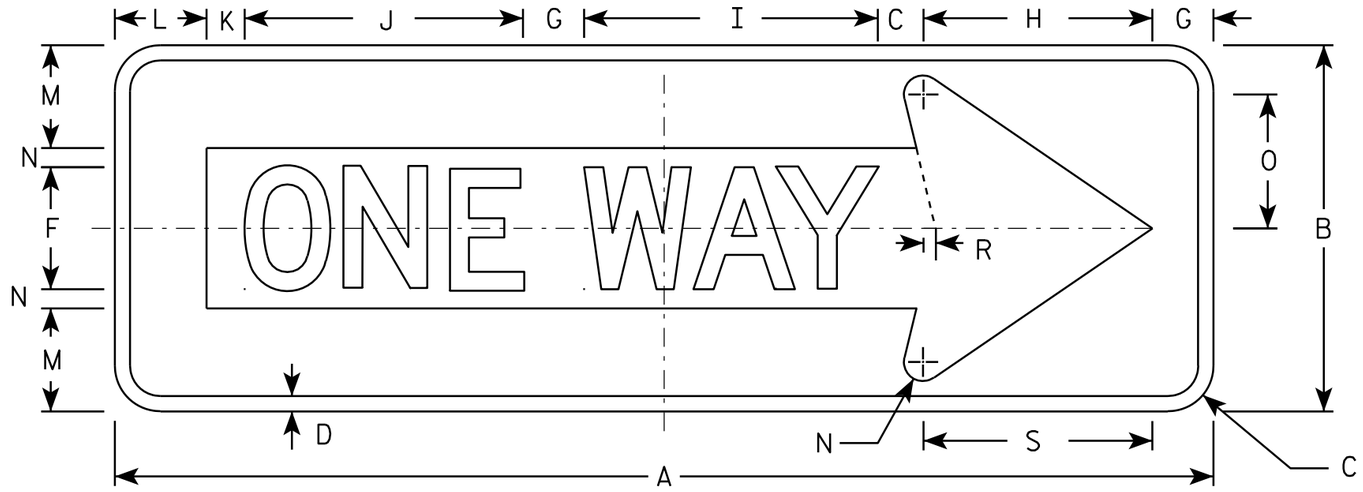
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 689 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R557.DGN PLOT DATE : 29-MAR-2011 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

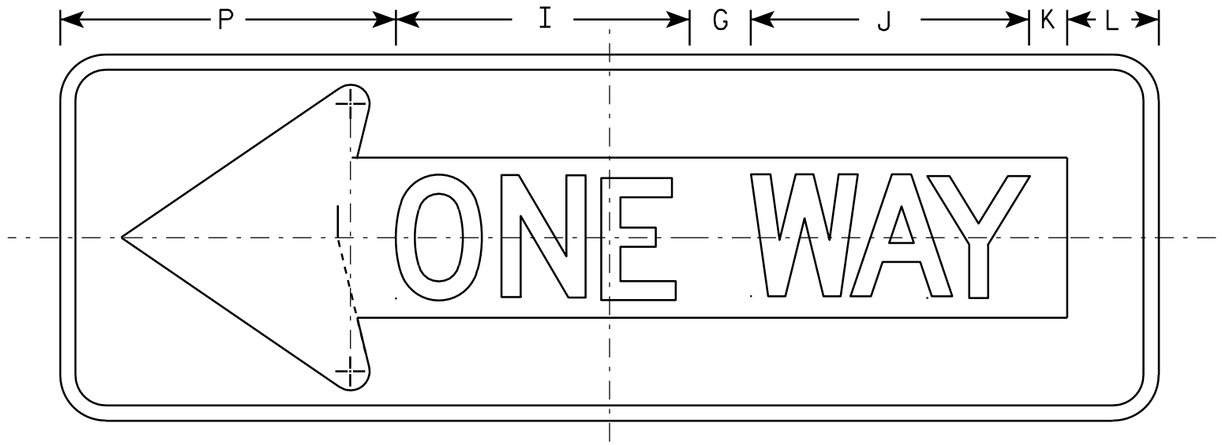
7



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
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.



R6-1L

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	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

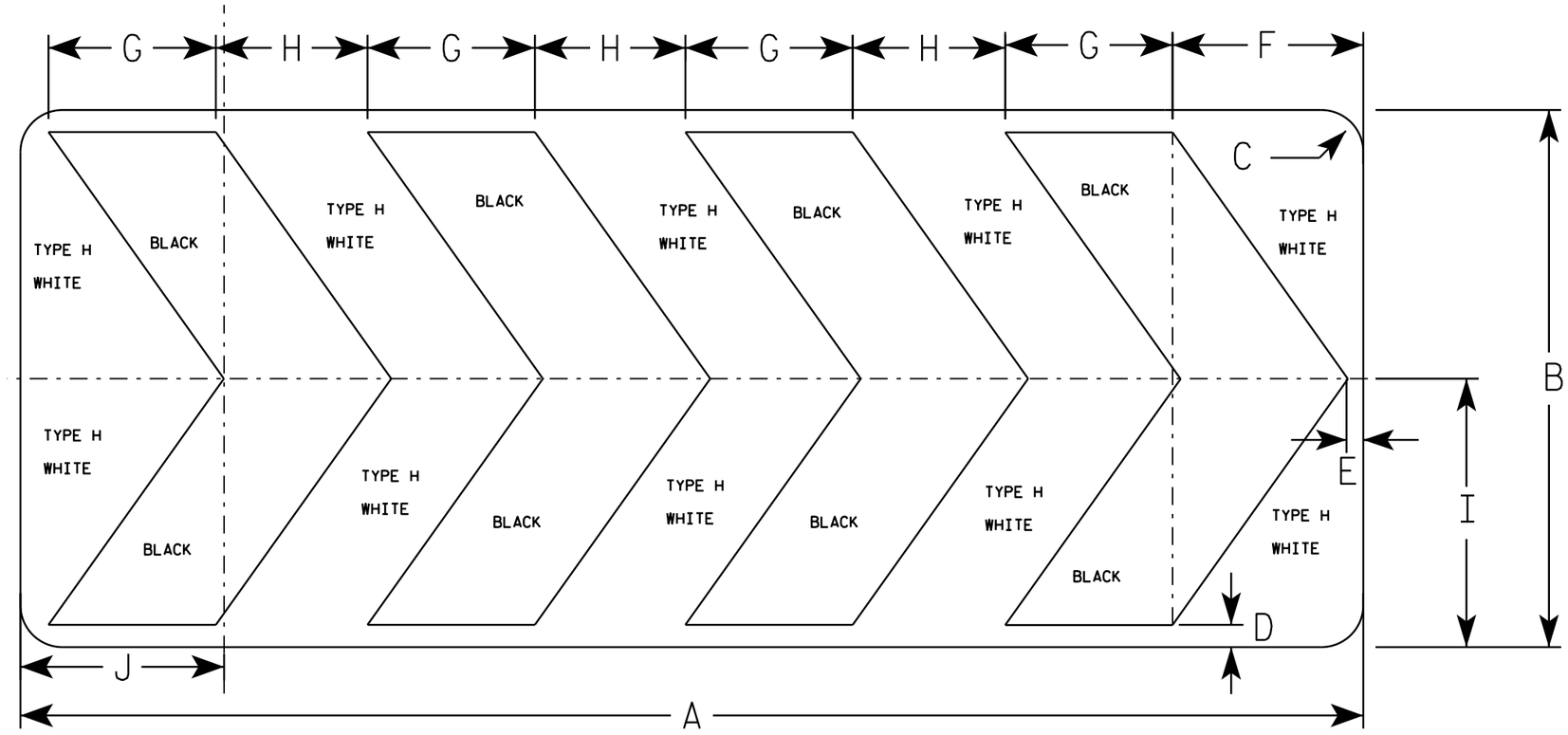
SHEET NO: 690 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R61.DGN PLOT DATE : 17-DEC-2010 14:11 PLOT BY : dotsja

WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   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.



R6-4B

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	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

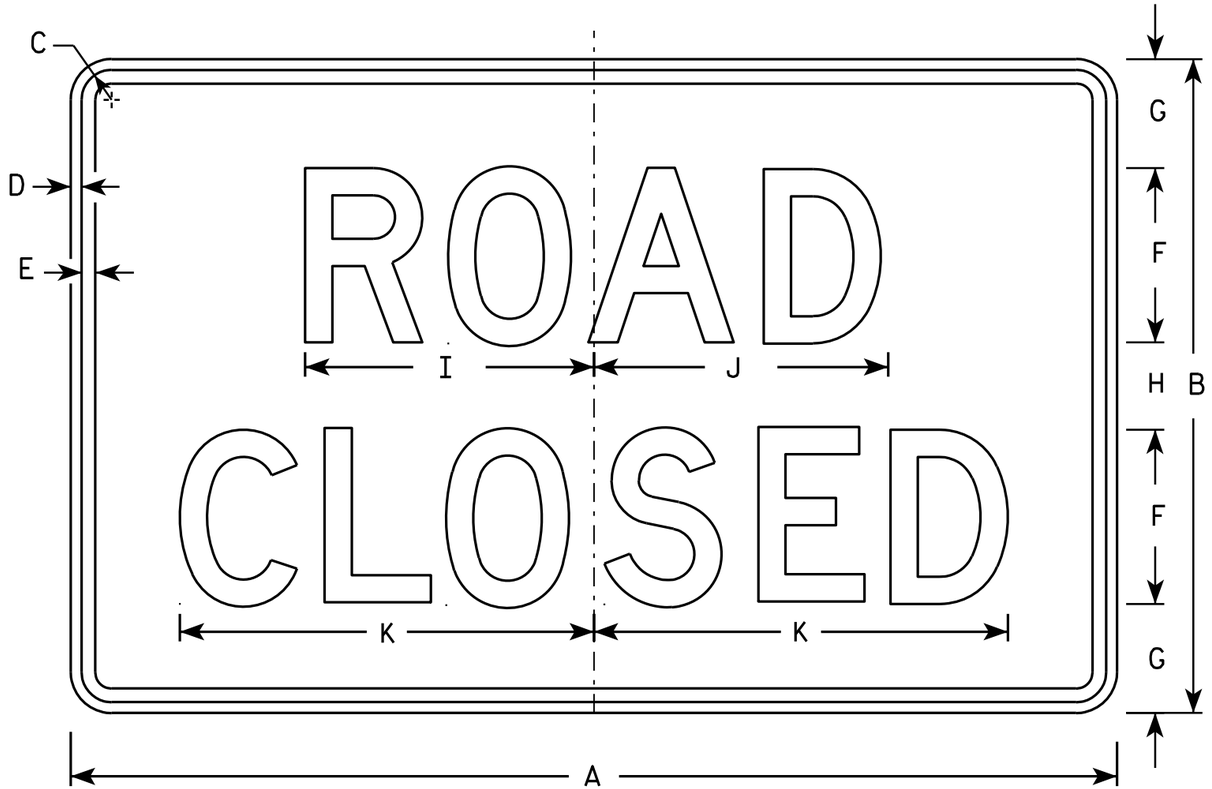
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

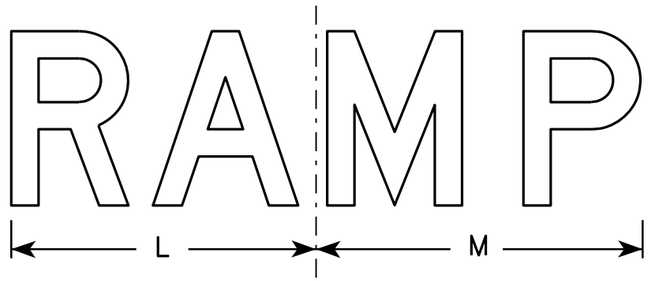
WISDOT/CADDS SHEET 42



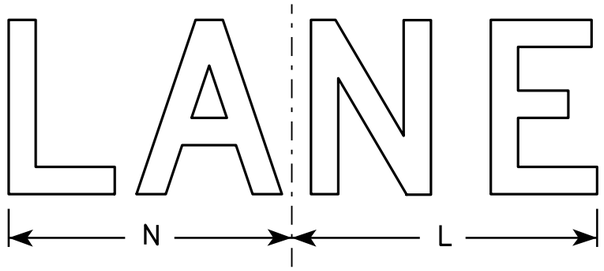
R11-2

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

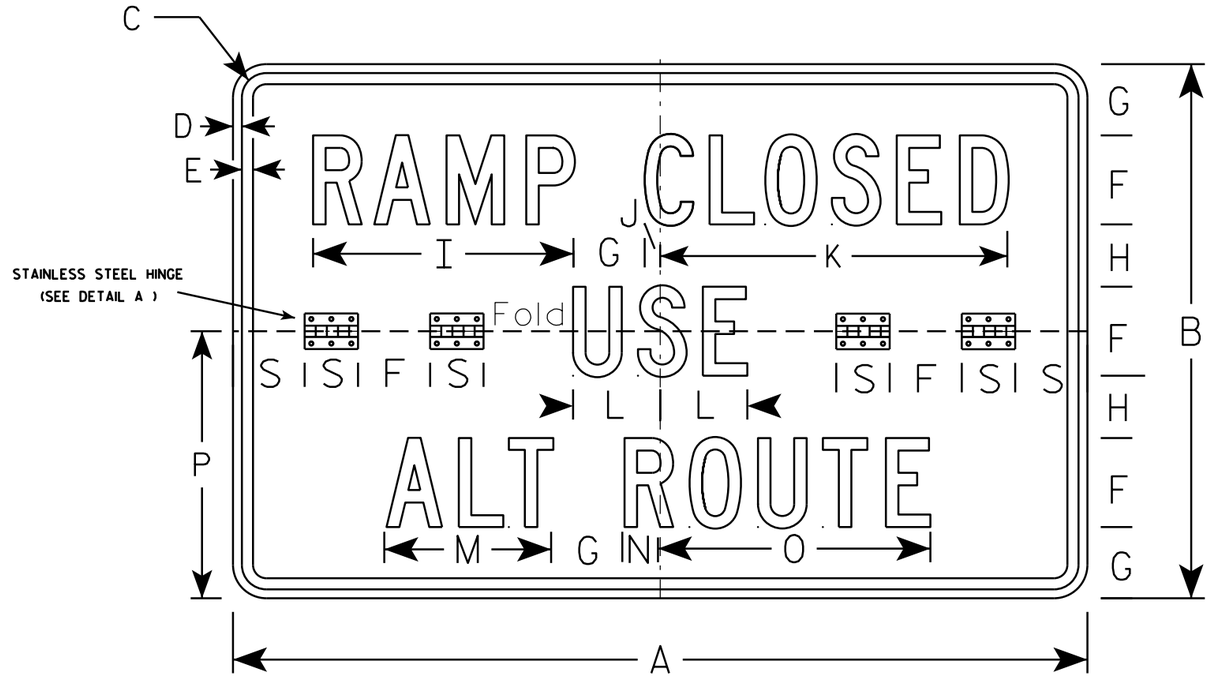
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

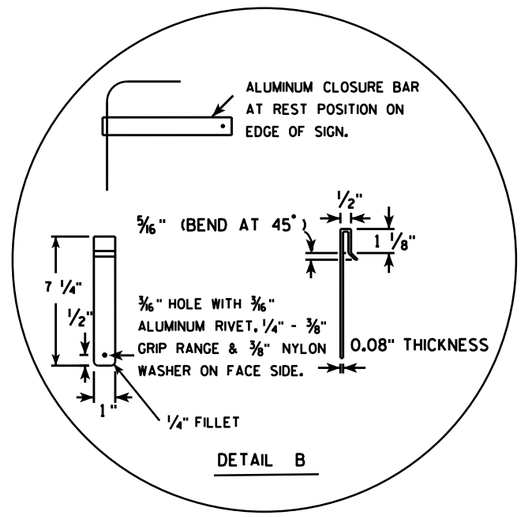
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 692	E



R11-54F

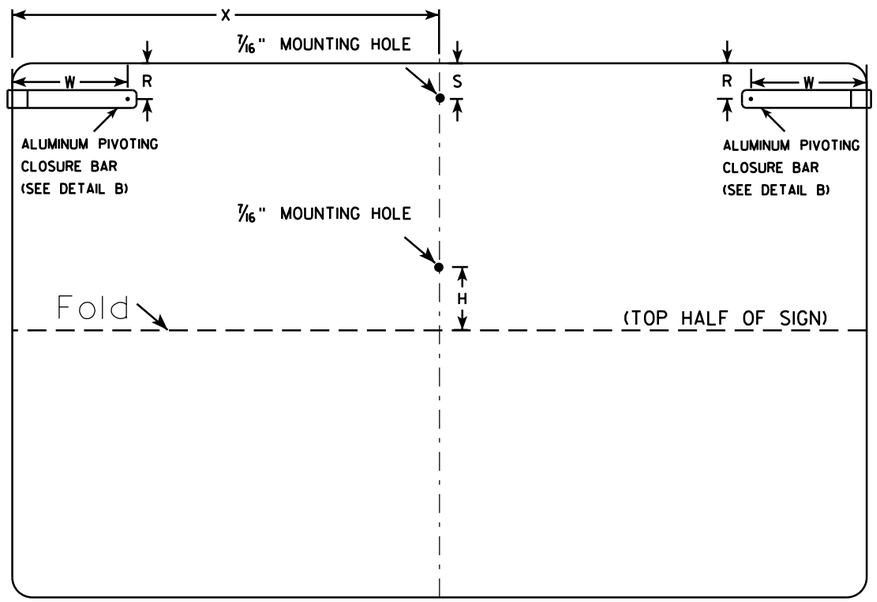
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

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	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

STANDARD SIGN
R11-54F

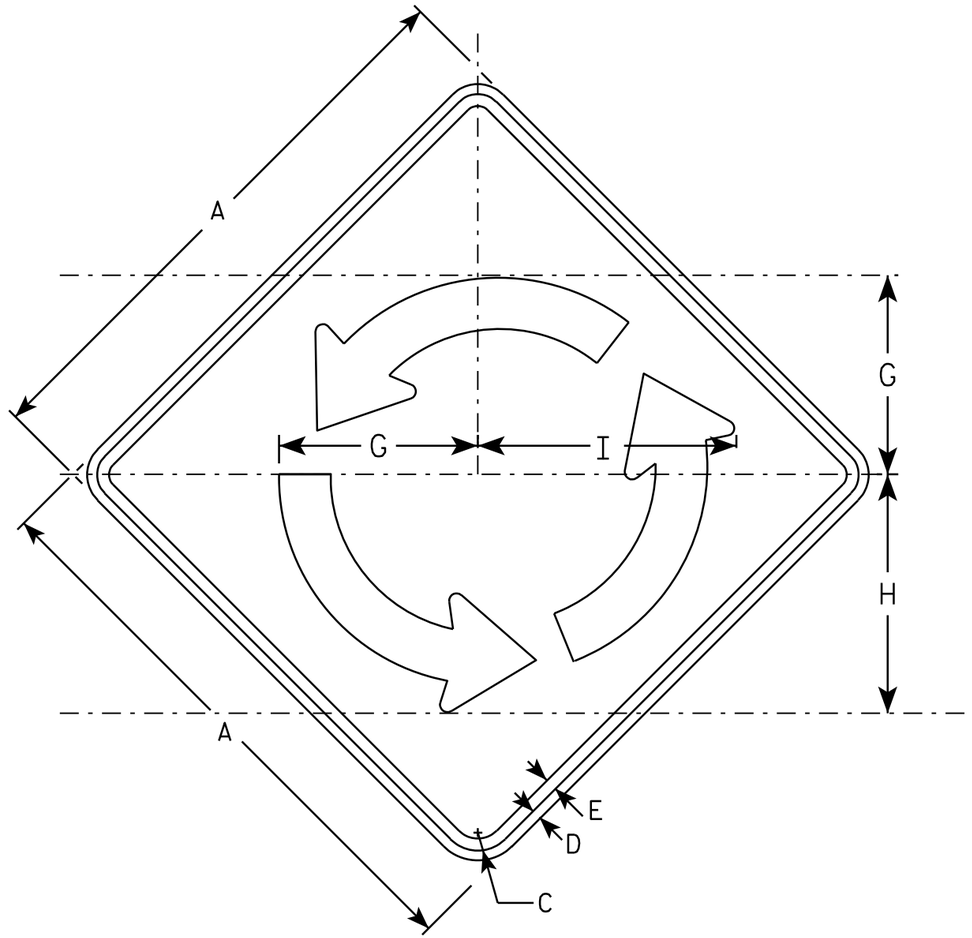
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

693

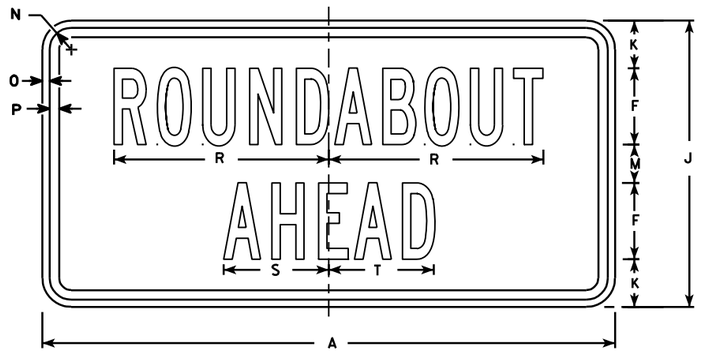
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W2-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Message - BLACK
3. Message 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.



W2-6P

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	W2-6 Area sq. ft.	W2-6P Area sq. ft.
1																										
2S	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
2M	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
3	36		1 5/8	5/8	3/4	5	12 1/2	15	16 1/4	18	2 5/8		2 3/4	1 1/8	3/8	1/2		14	7	6 3/4					9.00	4.50
4	48		2 1/4	3/4	1	6	16 5/8	20	16 1/4	24	4 3/8		3 5/8	1 3/8	1/2	5/8		17	8 1/4	8 1/4					16.0	8.0
5																										

STANDARD SIGN
W2-6

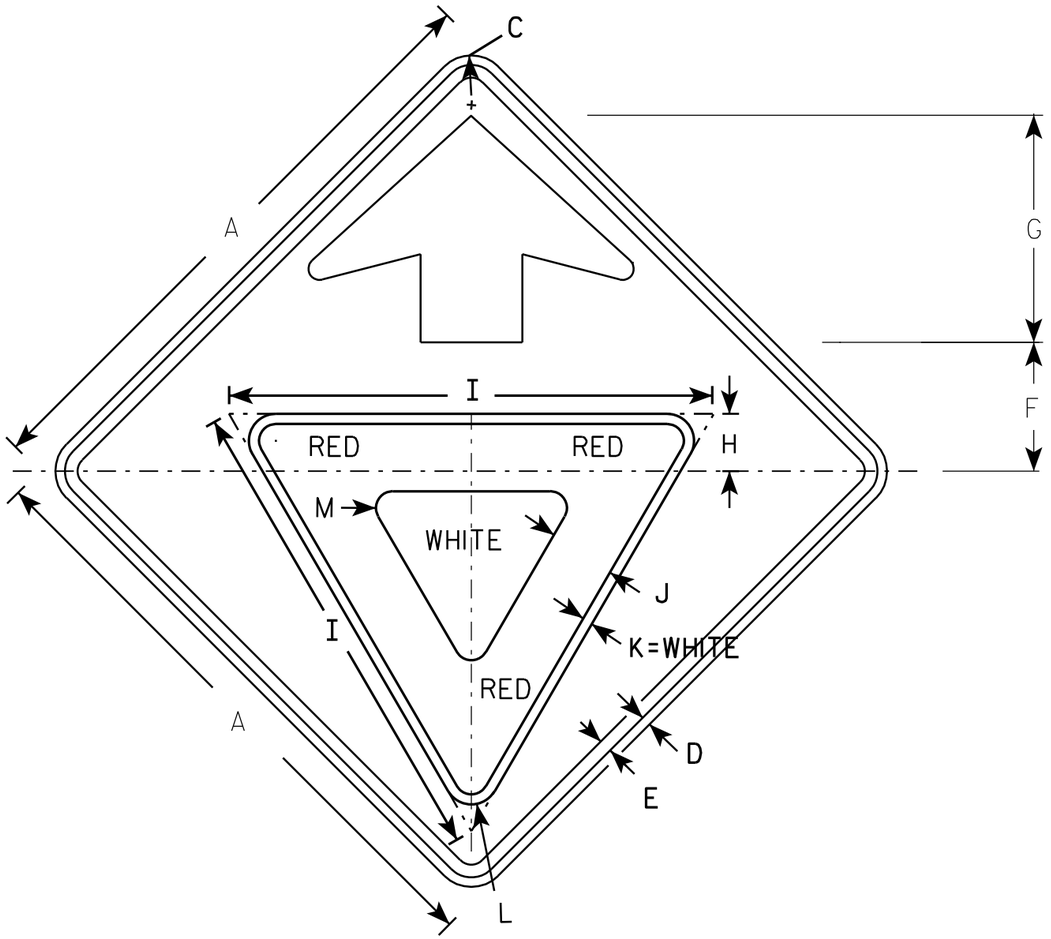
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5

PROJECT NO:

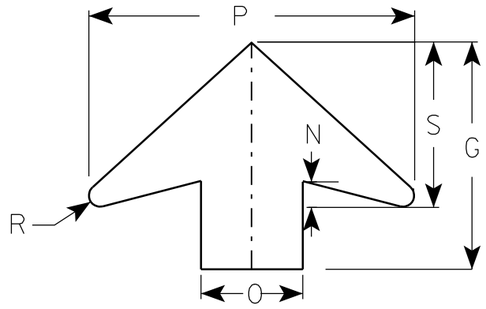
SHEET NO: 694 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	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
2M	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
3	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
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
W3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

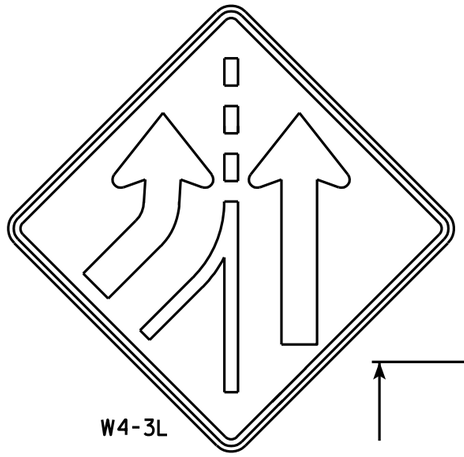
SHEET NO: 695 E

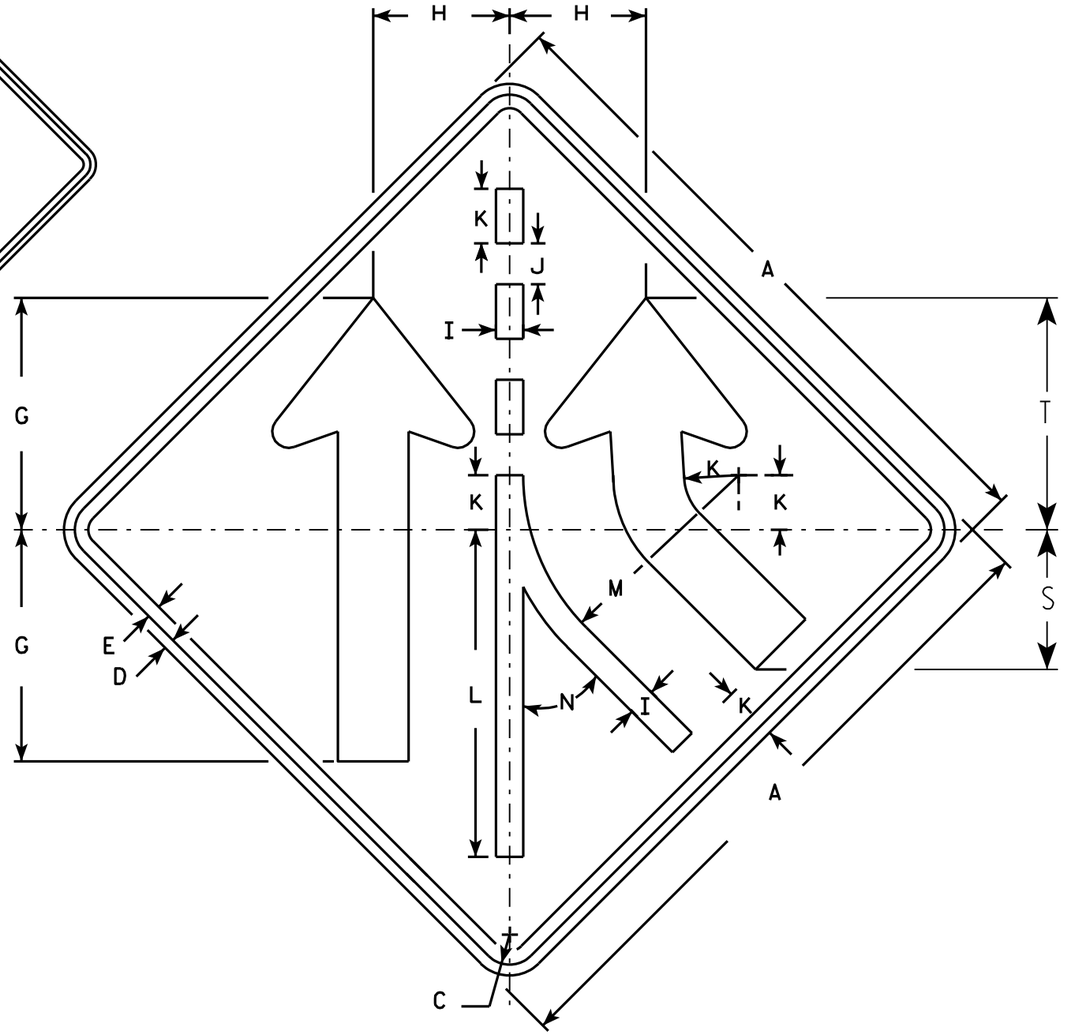
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W32.DGN PLOT DATE : 07-JUN-2010 13:03 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7

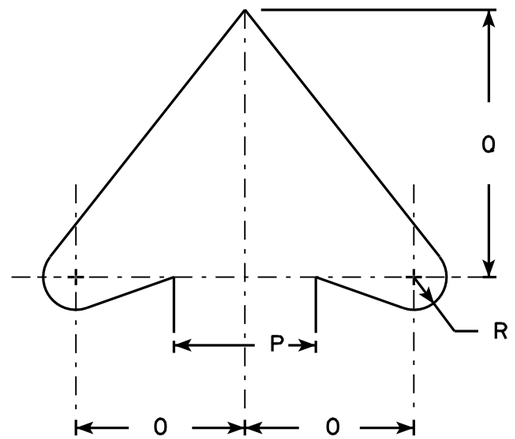




W4-3R

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

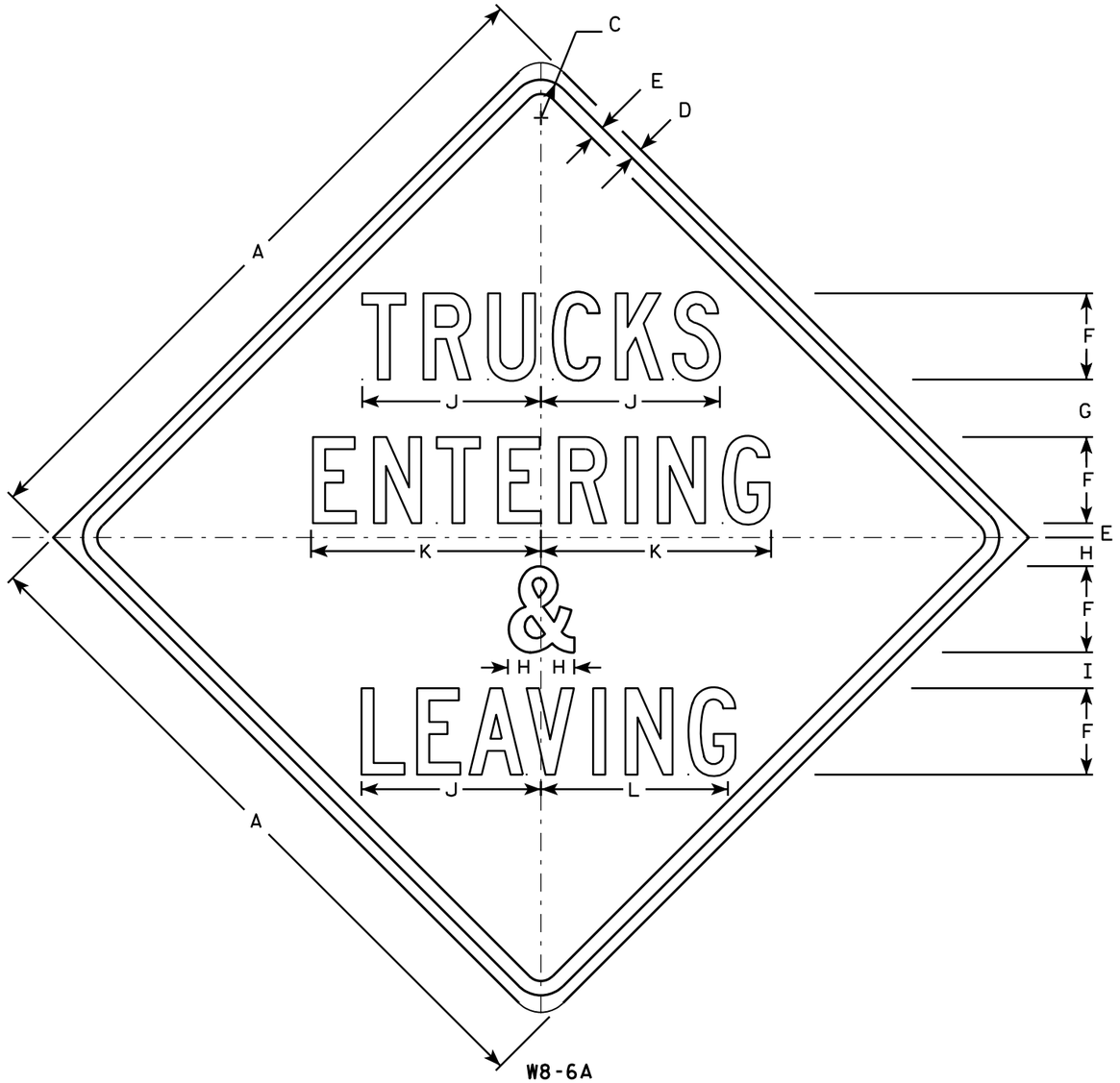
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-3.8

PROJECT NO:

SHEET NO: 696 E



W8-6A

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	4 1/2	3	1 1/2	1 7/8	9 3/8	12	9 3/4															9
2S	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
2M	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
3	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
4	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
5	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16

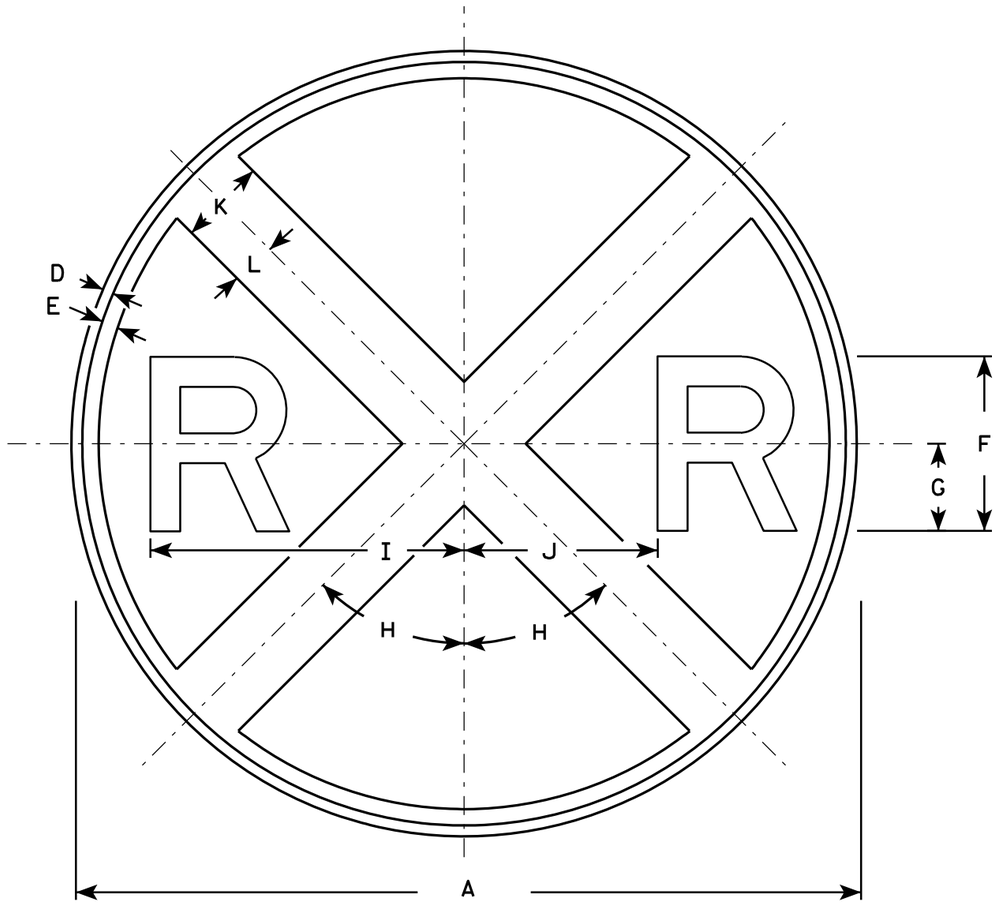
STANDARD SIGN
W8-6A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/11 PLATE NO. W8-6A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 697	E



W10-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message 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	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

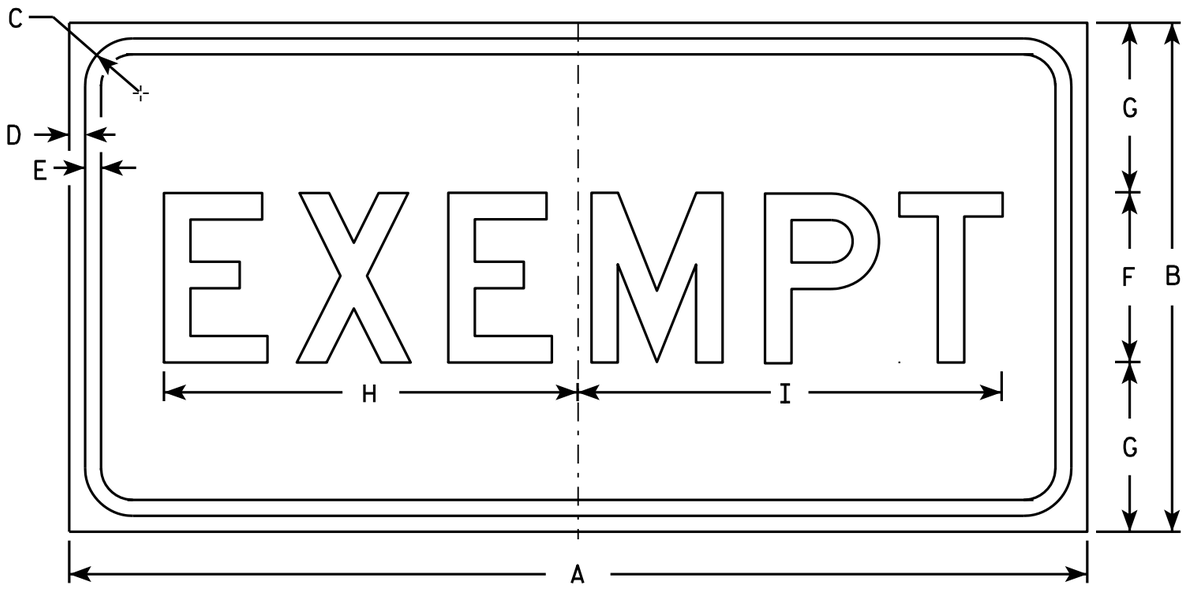
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 698	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 - See Note 5
   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. Background - R15-3 is White Type H Reflective
   W10-1A is Yellow.



R15-3
and
W10-1A

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	12	1 1/8	3/8	3/8	4	4	9 3/4	10																		2
2M	24	12	1 1/8	3/8	3/8	4	4	9 3/4	10																		2
3																											
4																											
5																											

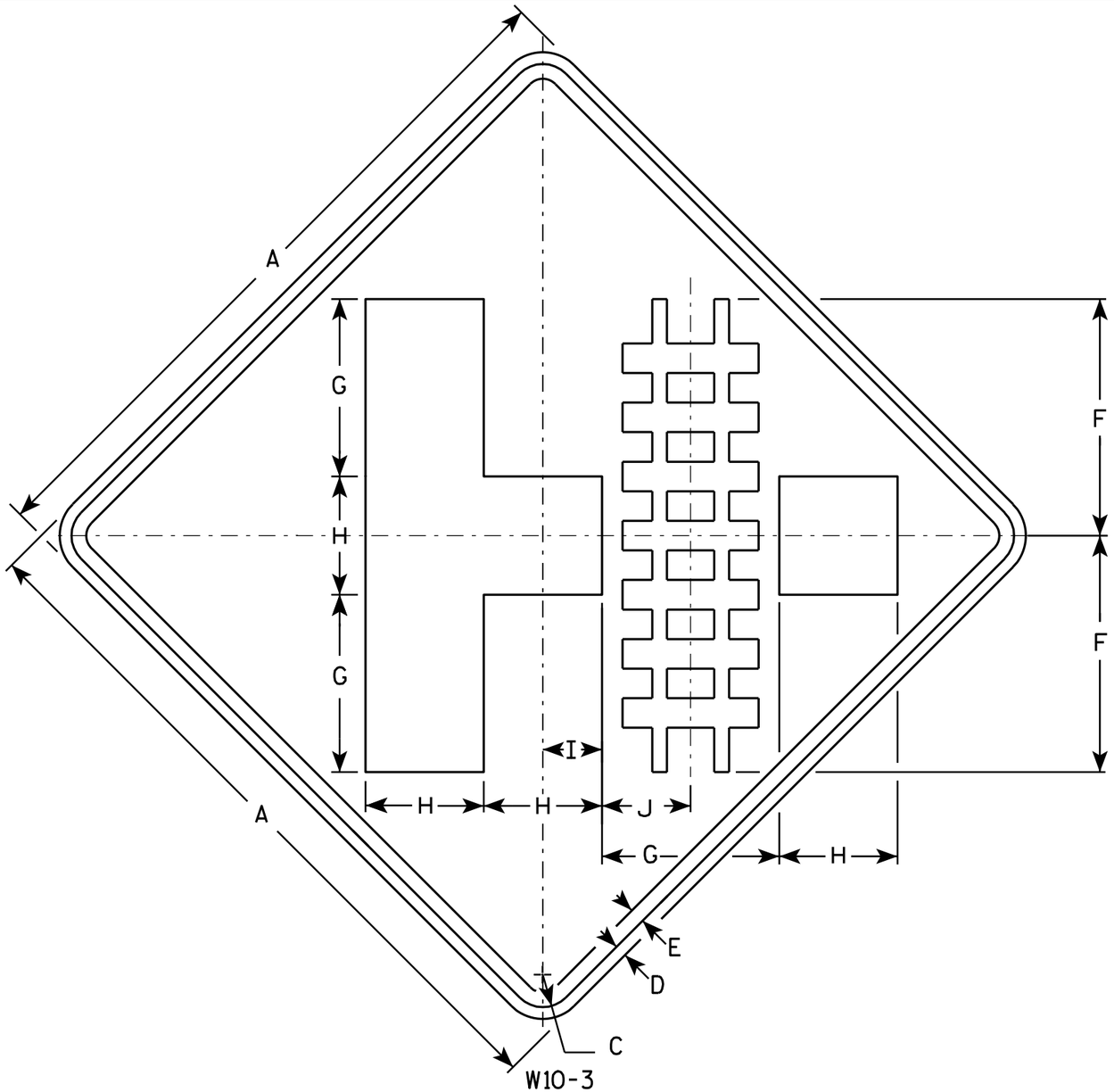
STANDARD SIGN
R15-3 & W10-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

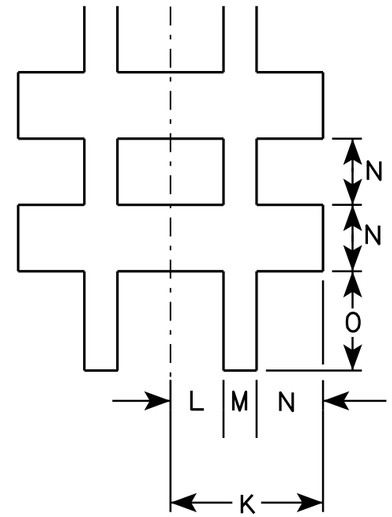
DATE 3/13/13 PLATE NO. R15-3.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 699	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 - 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.



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	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

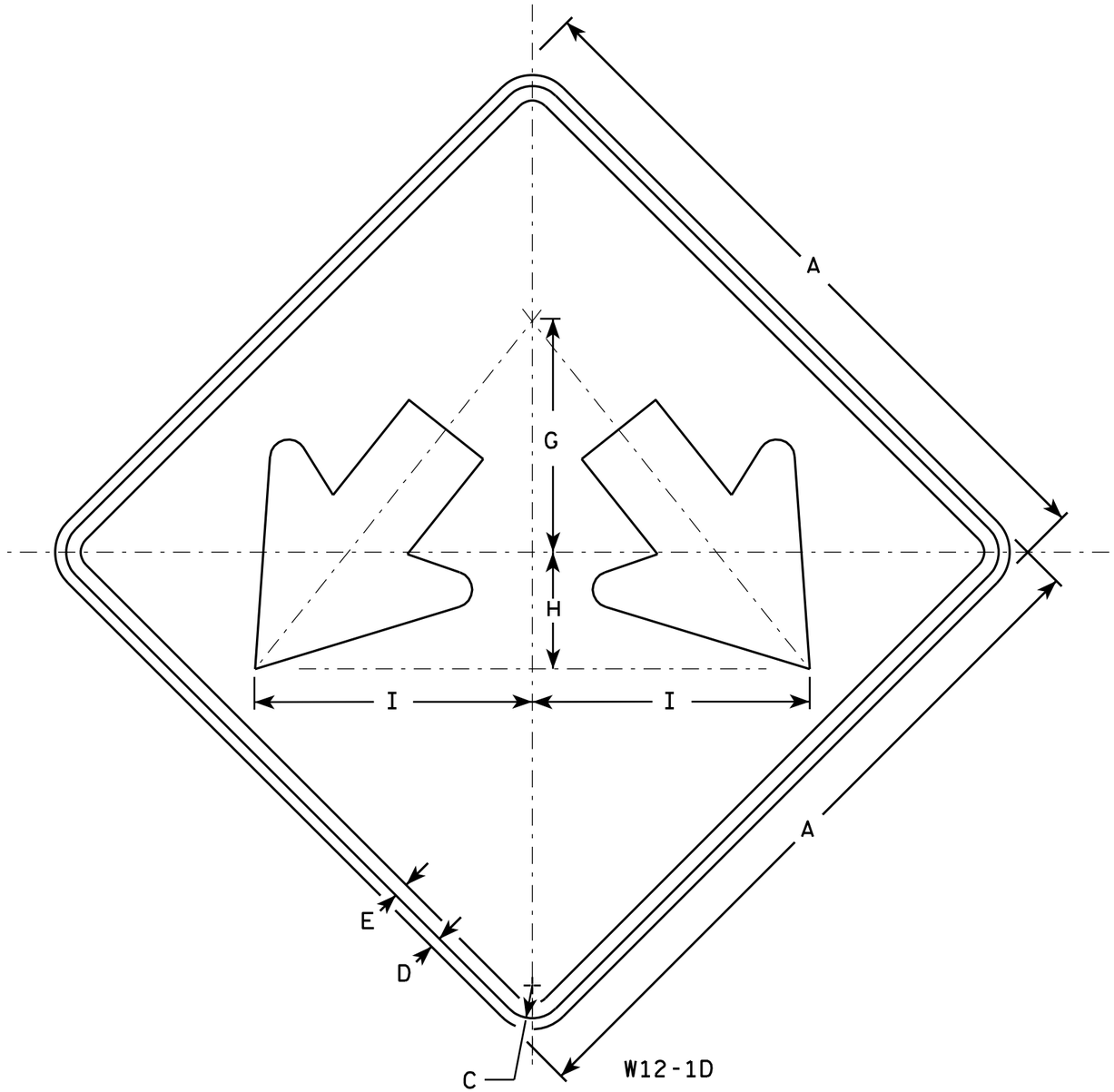
STANDARD SIGN
W10-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

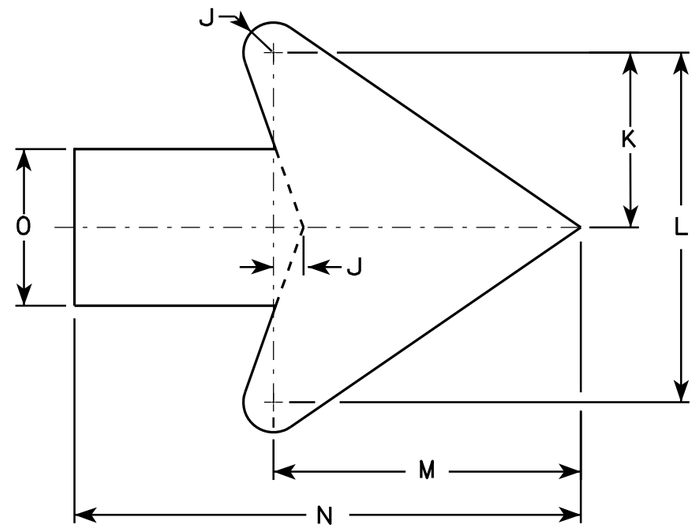
DATE 3/13/13 PLATE NO. W10-3.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 700	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 - 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.



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																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

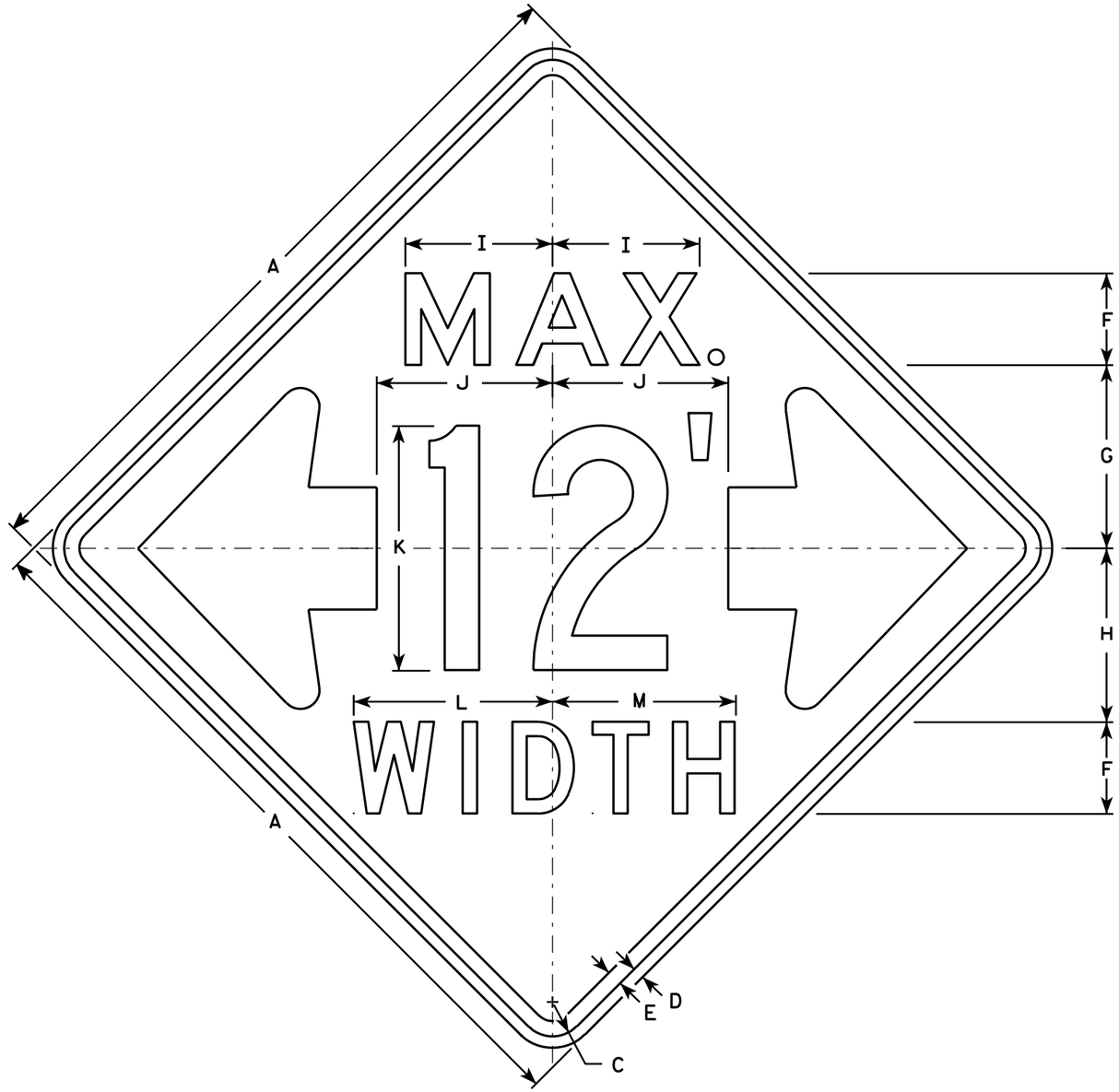
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

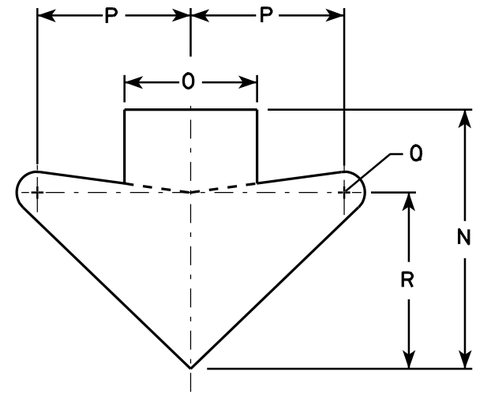
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 701	E



W12-52

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 - 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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



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																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

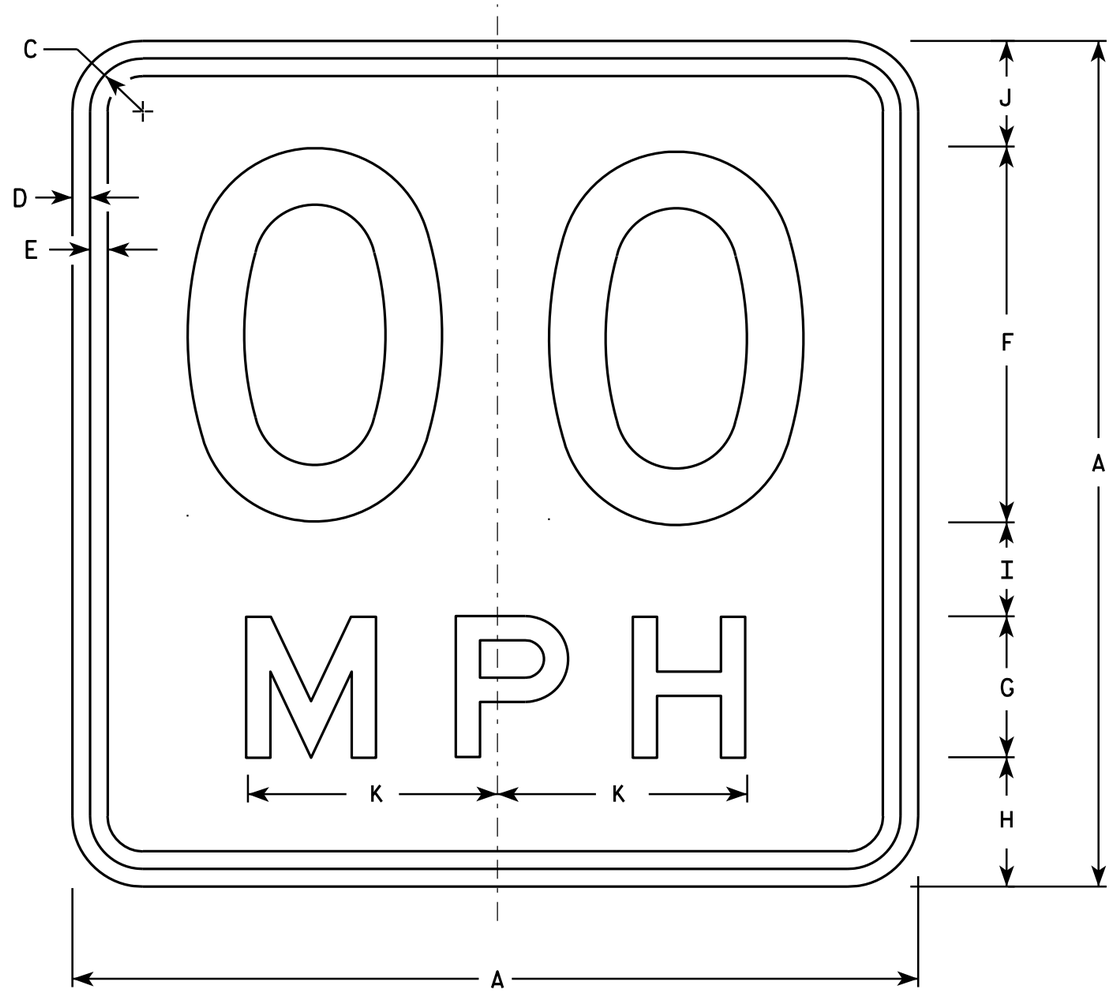
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 702 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000

WISDOT/CADDS SHEET 42

7

7



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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. 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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	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

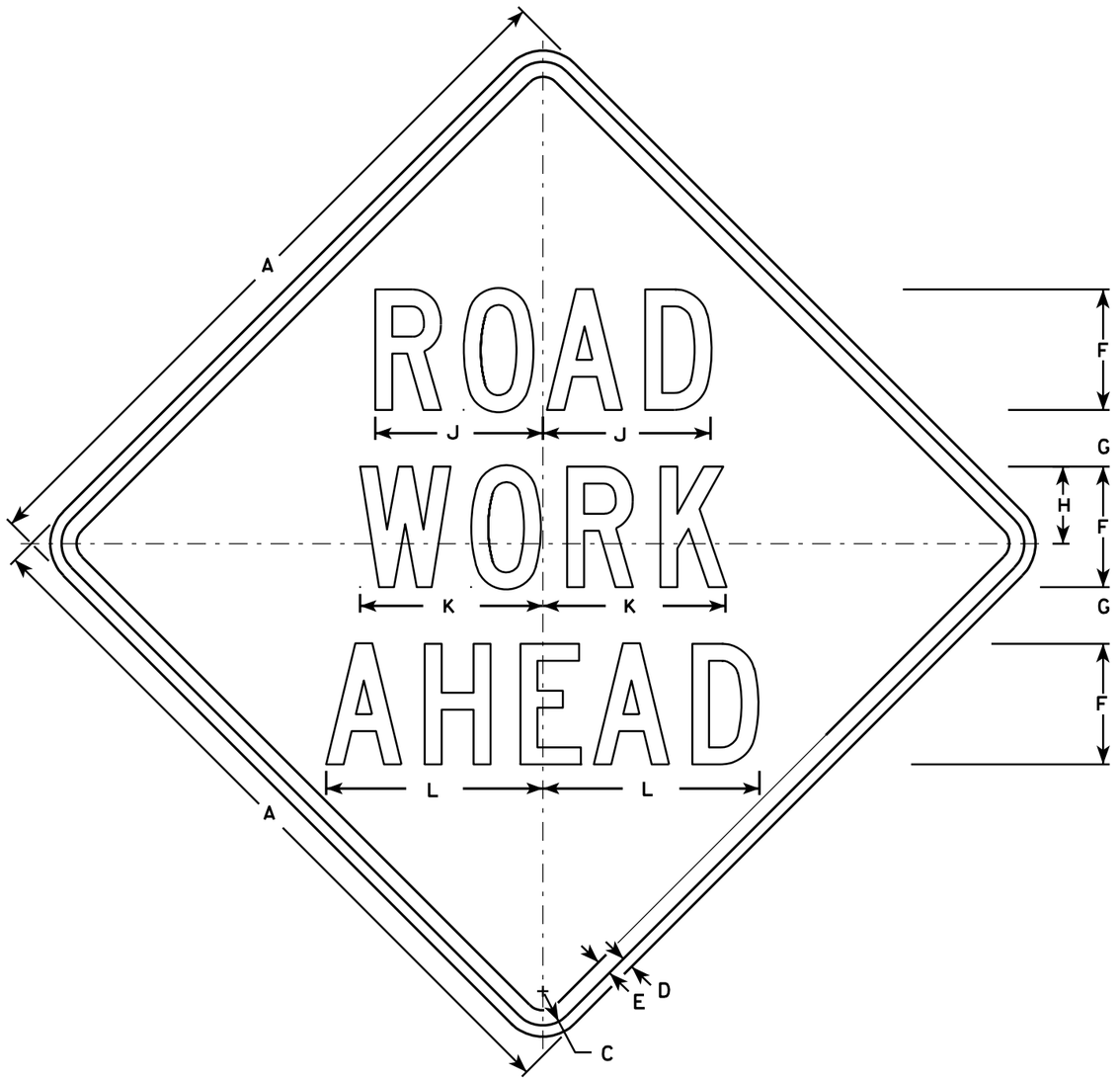
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

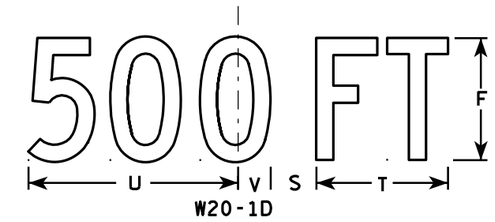
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

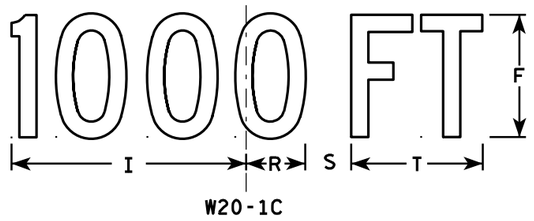
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 703 | E



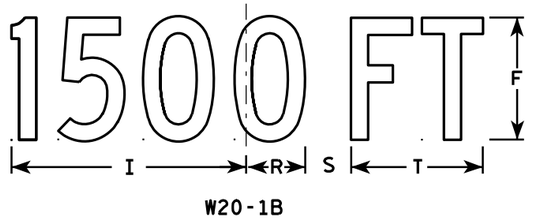
W20-1A



W20-1D



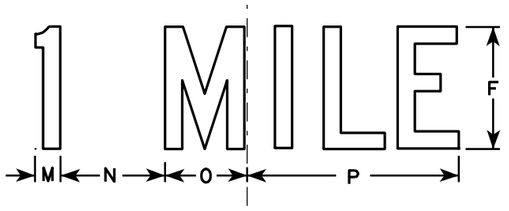
W20-1C



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:

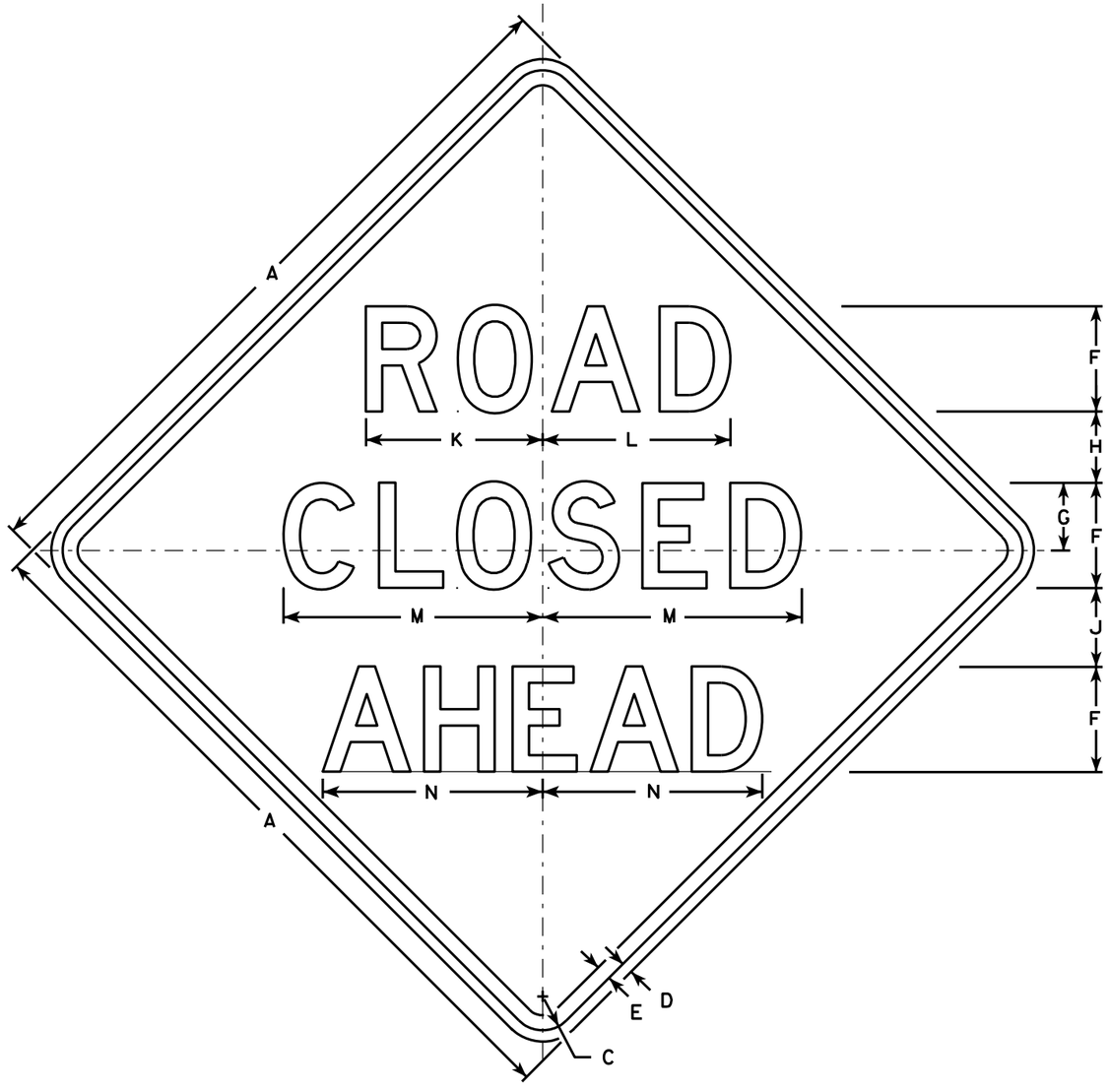
SHEET NO: 704 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W201.DGN PLOT DATE : 18-MAR-2011 09:56 PLOT BY : mscj9h

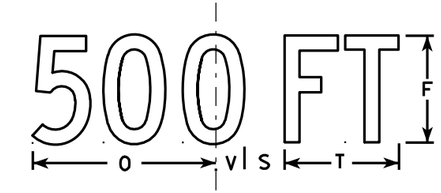
WISDOT/CADDS SHEET 42

7

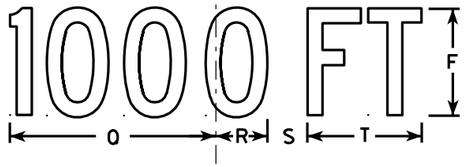
7



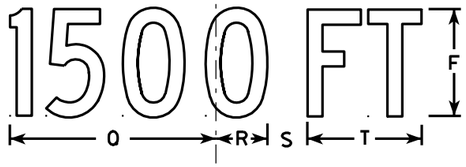
W20-3A



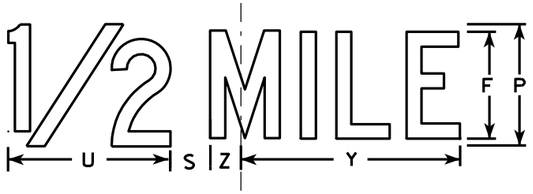
W20-3D



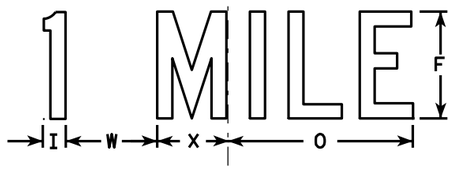
W20-3C



W20-3B



W20-3G



W20-3F

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. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

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	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

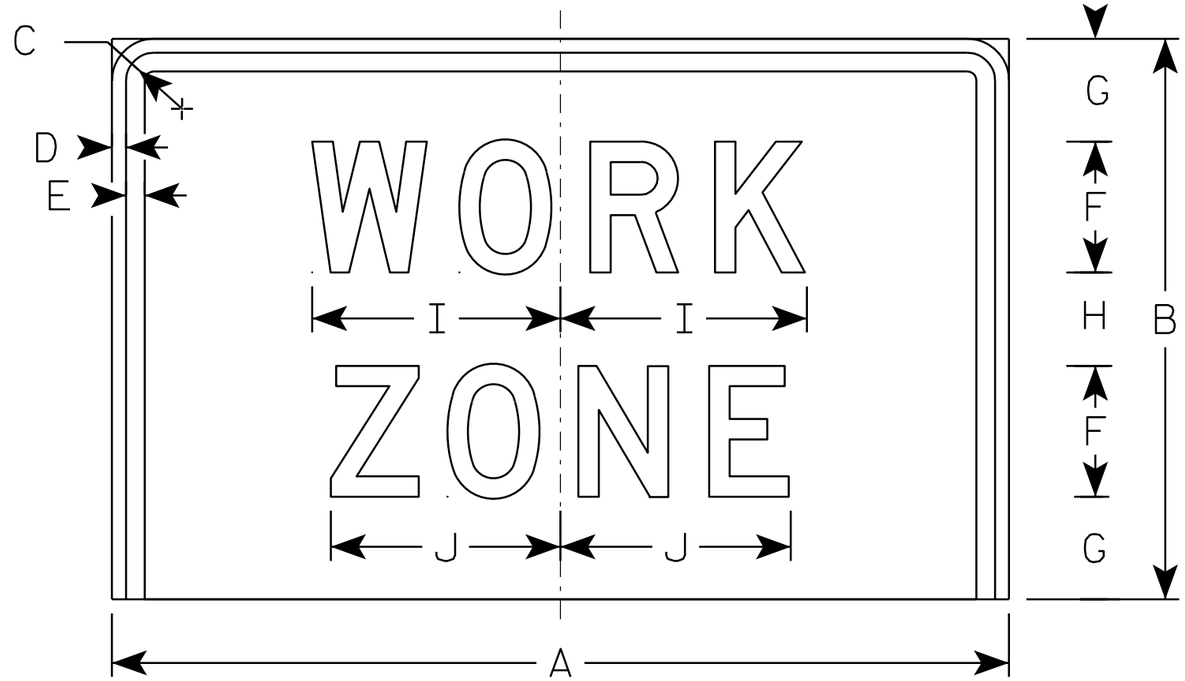
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 705 | 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																											

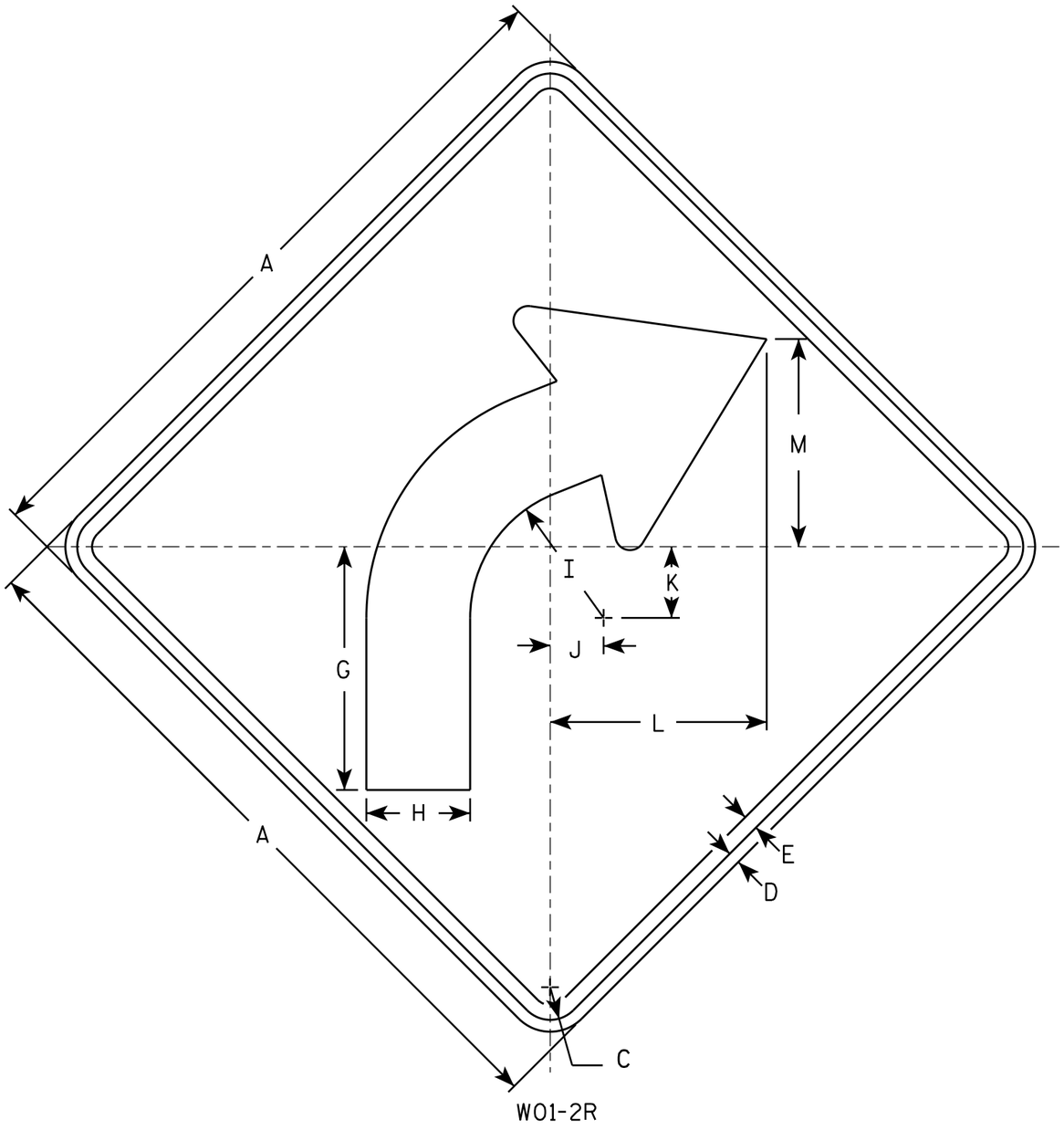
STANDARD SIGN
W21-620

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-620.2

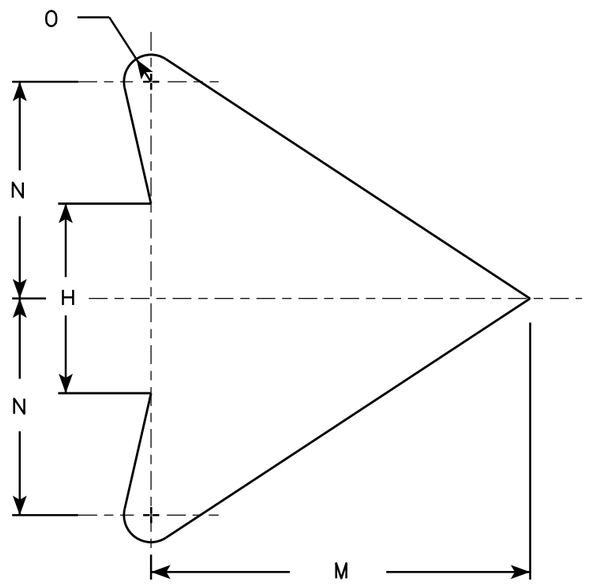
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 706	E



W01-2R

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. W01-2L is the same as W01-2R 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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												4.0
2S	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
2M	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
3	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
4	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W01-2

WISCONSIN DEPT OF TRANSPORTATION

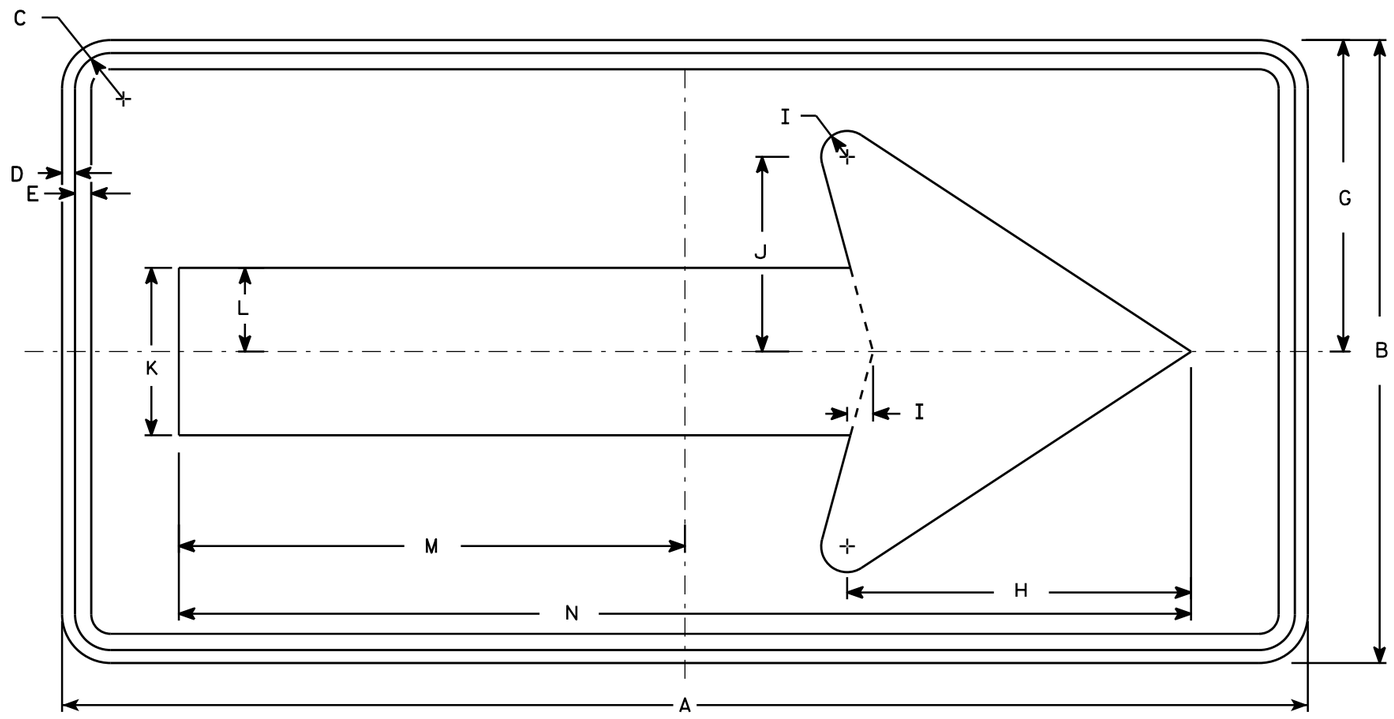
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000
WISDOT/CADDS SHEET 42



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

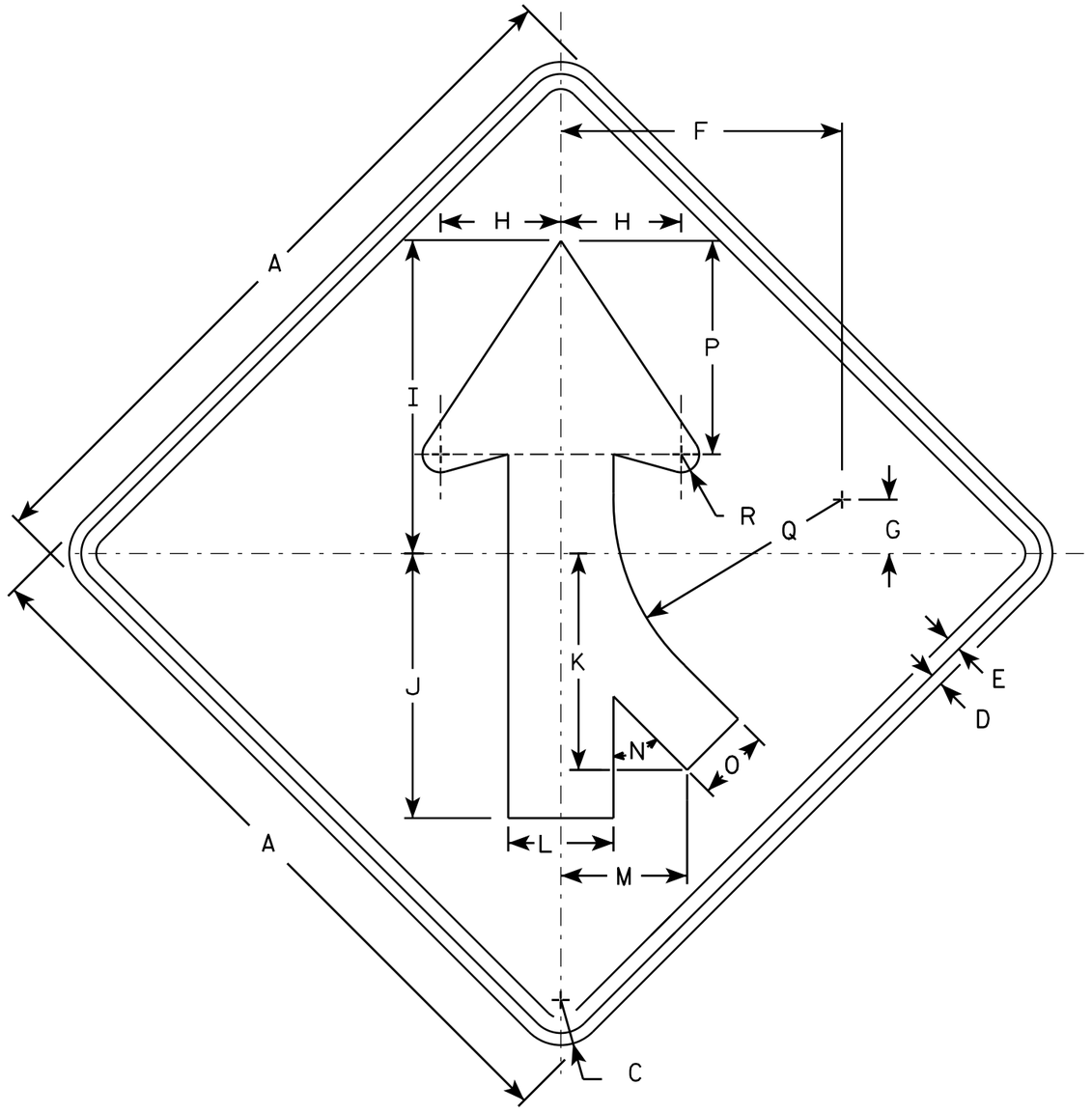
WISCONSIN DEPT OF TRANSPORTATION

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



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

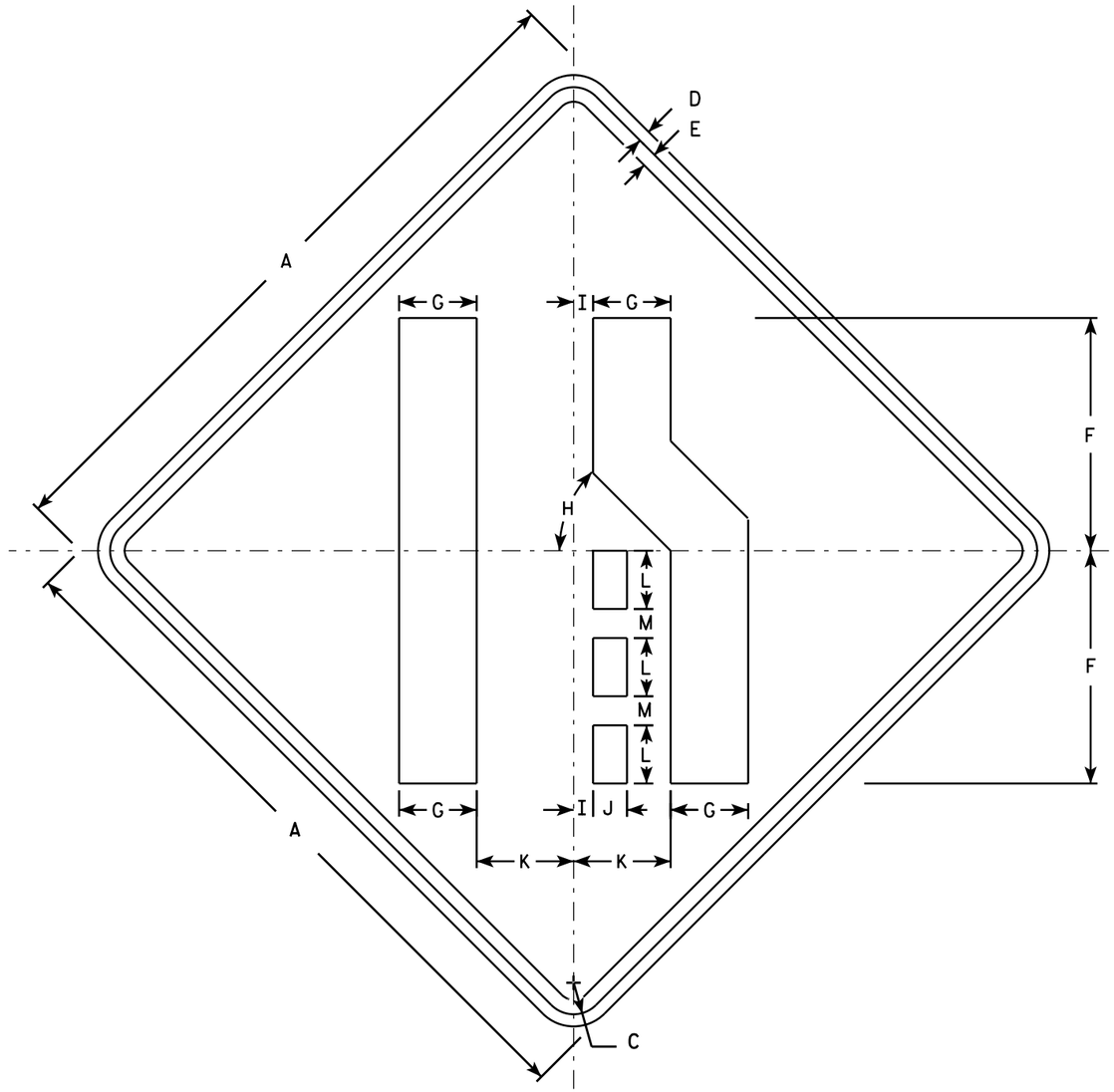
STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1

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

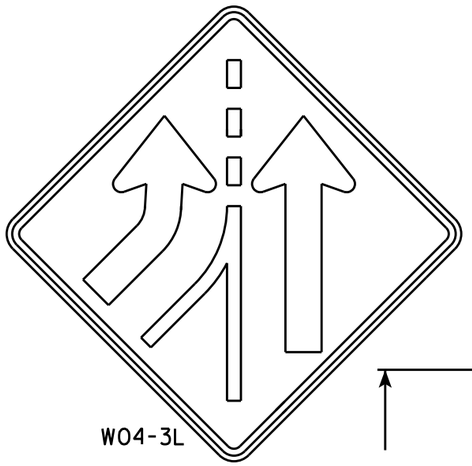
STANDARD SIGN
W04-2

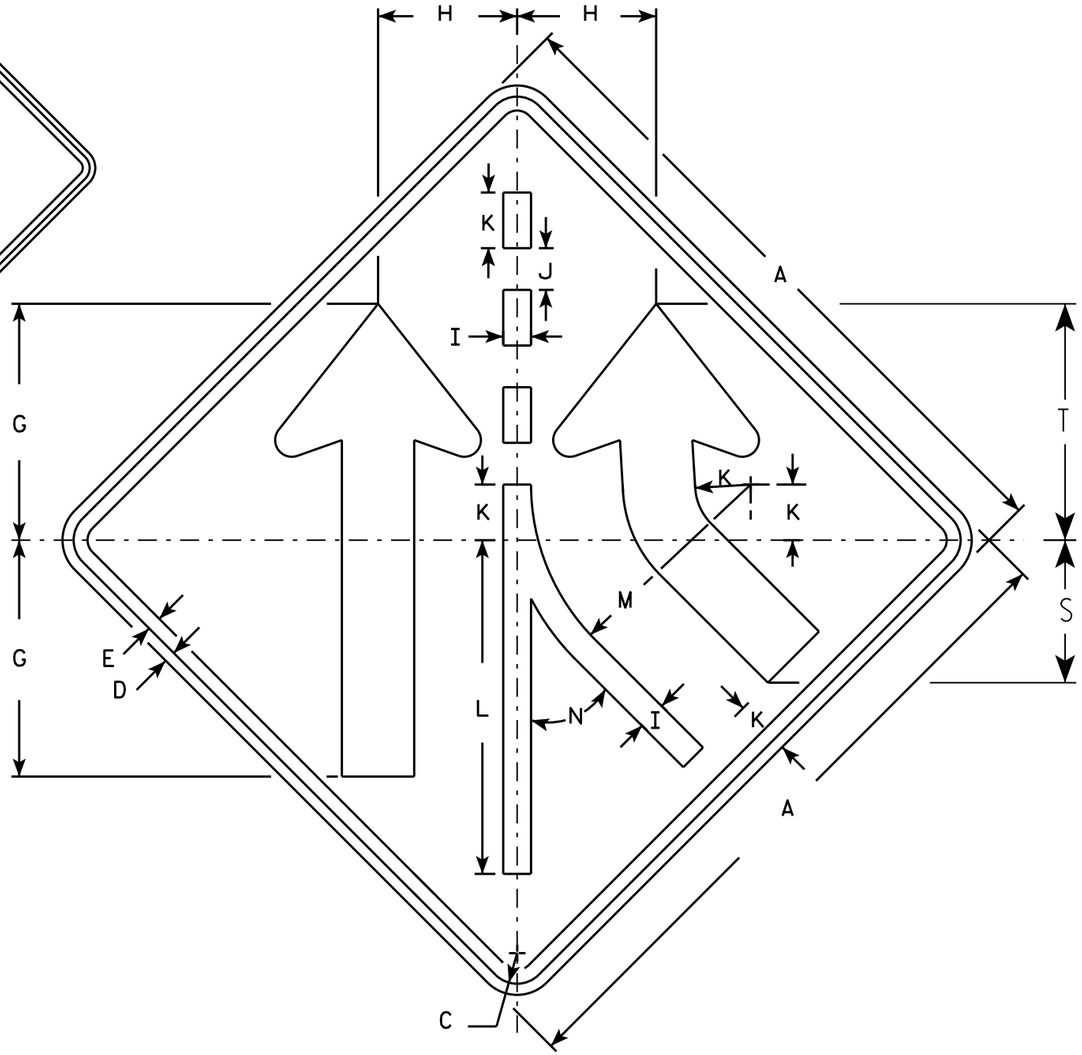
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 710 W04-2.1

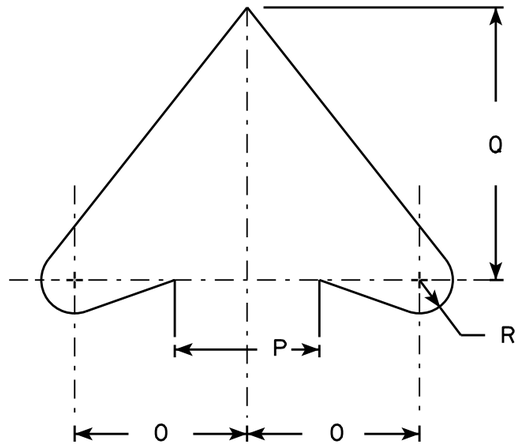
PROJECT NO: | SHEET NO: E





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. 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. W04-3 L is the same as W04-3 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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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
2S	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
2M	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
3	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
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

W0433

WISCONSIN DEPT OF TRANSPORTATION

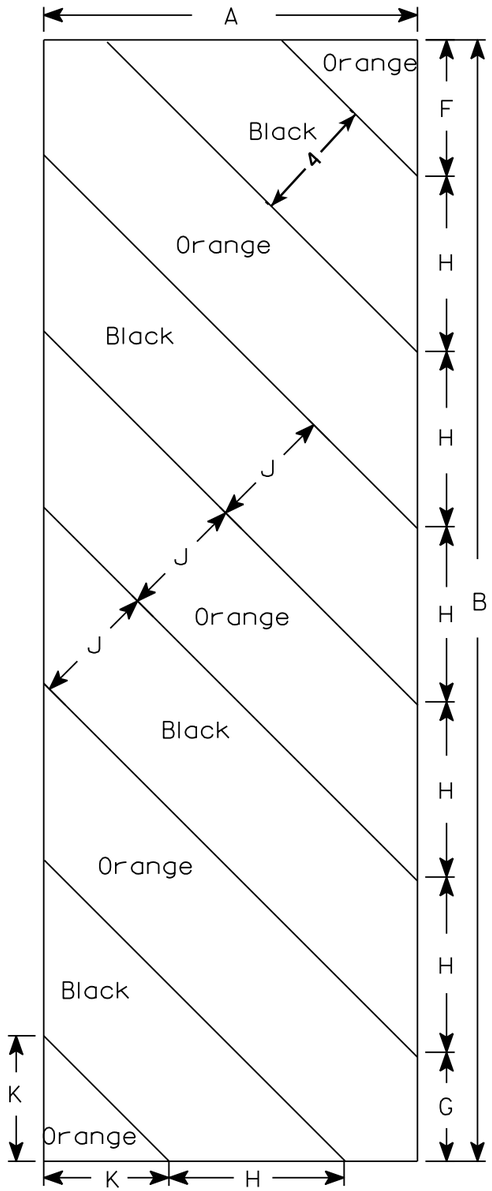
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W04-3.1

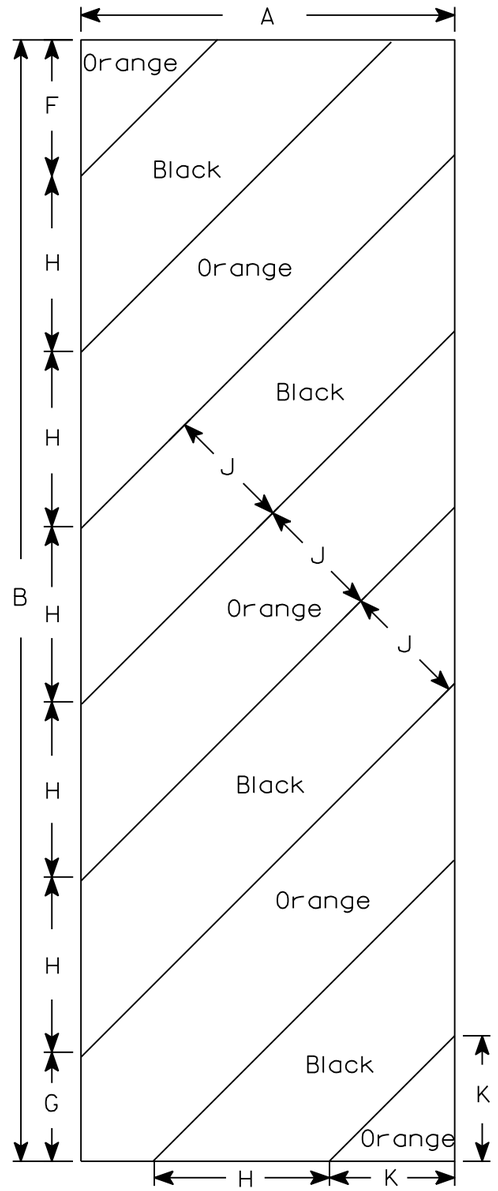
PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W043.DGN PLOT DATE : 20-NOV-2013 11:49 PLOT BY : mscsja 6.810449:1.000000



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

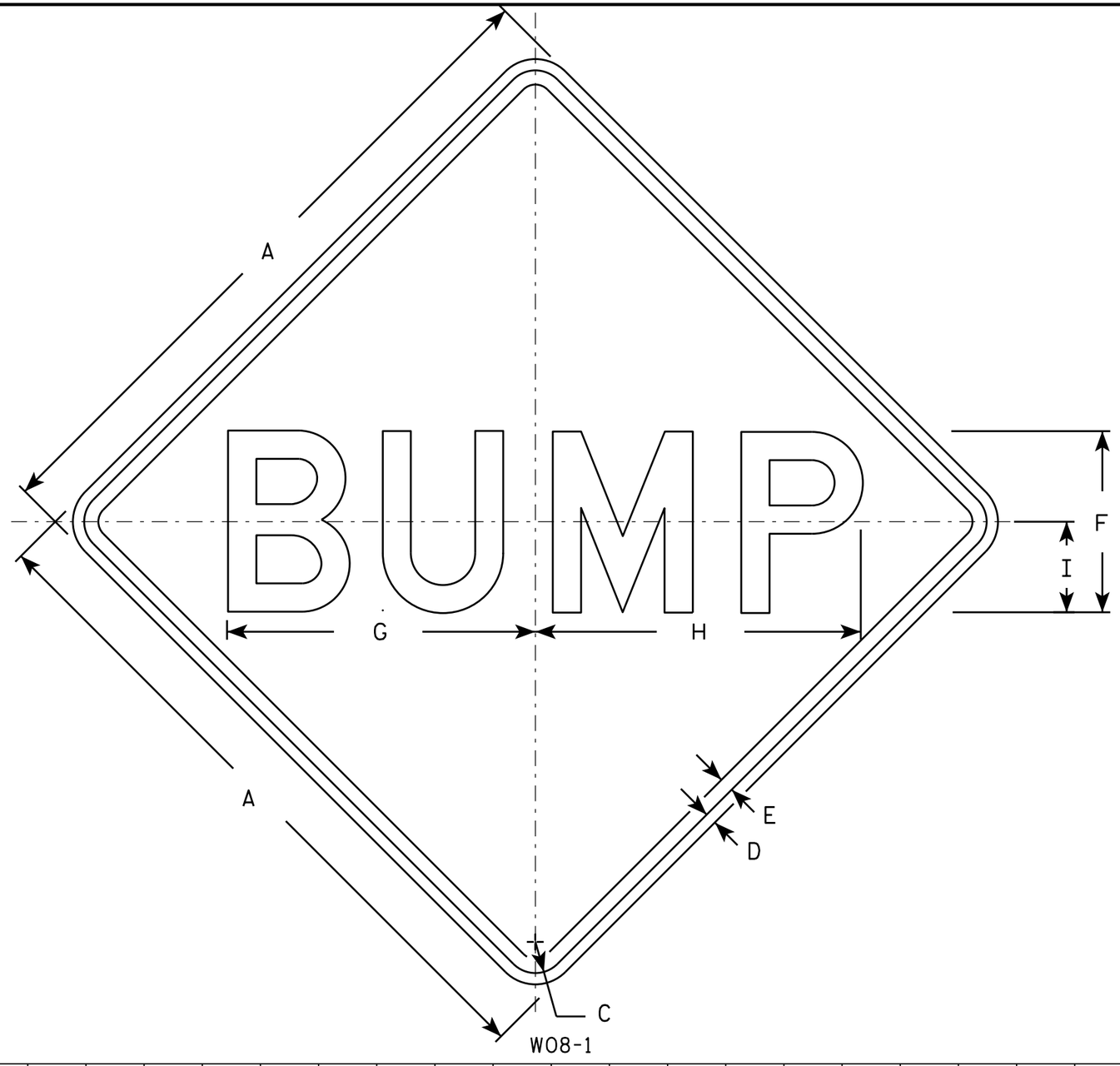
W05-52L & W05-52R

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



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	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

STANDARD SIGN
W08-1

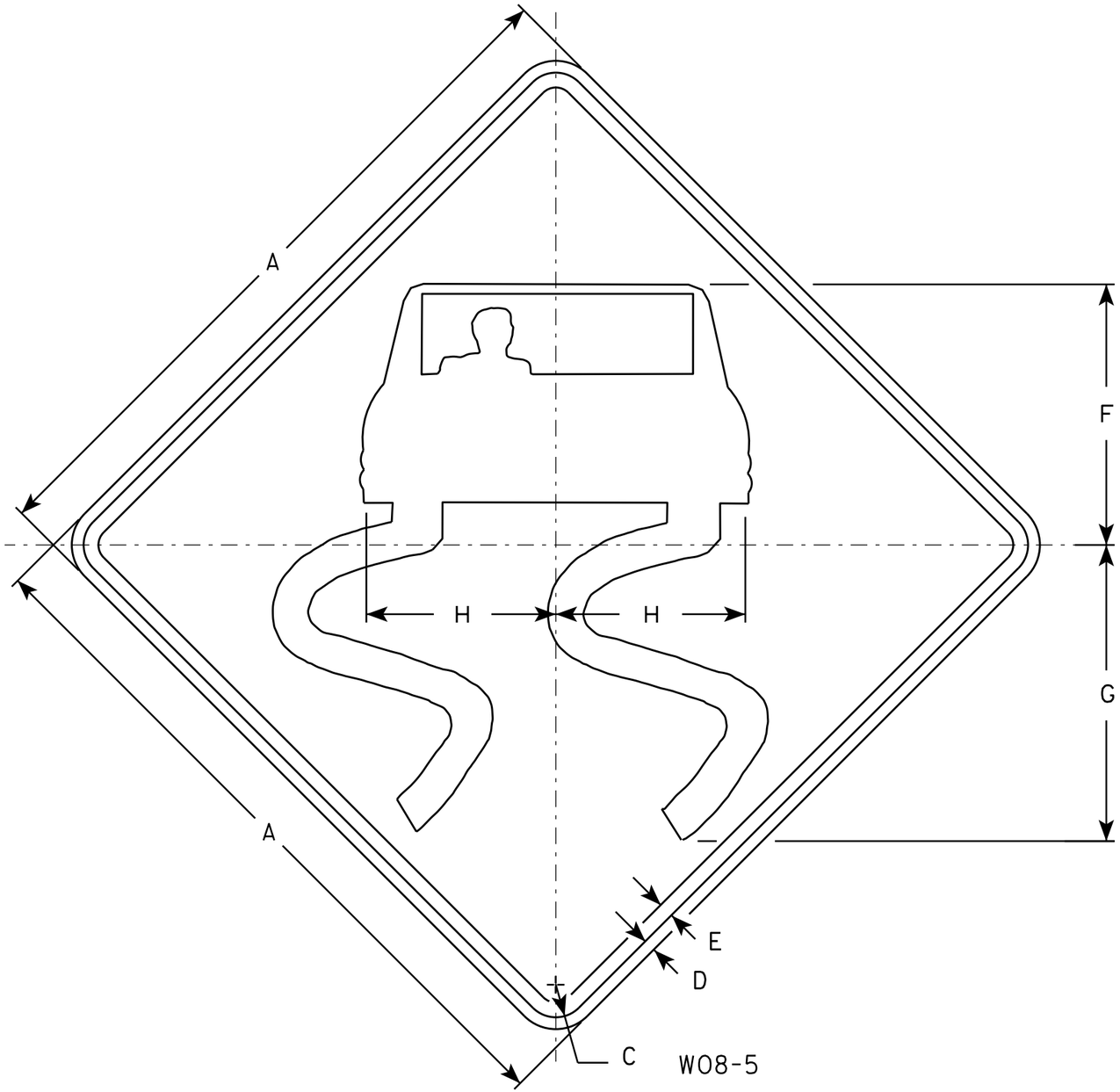
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 1713 W08-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W081.DGN PLOT DATE : 20-NOV-2013 12:24 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.688833:1.000000 WISDOT/CADDS SHEET 42



W08-5

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. 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	13	14 7/8	9 1/2																			9.0
2S	48		2 1/4	3/4	1	17 3/8	19 3/4	12 5/8																			16.0
2M	48		2 1/4	3/4	1	17 3/8	19 3/4	12 5/8																			16.0
3	48		2 1/4	3/4	1	17 3/8	19 3/4	12 5/8																			16.0
4	48		2 1/4	3/4	1	17 3/8	19 3/4	12 5/8																			16.0
5	48		2 1/4	3/4	1	17 3/8	19 3/4	12 5/8																			16.0

STANDARD SIGN
W08-5

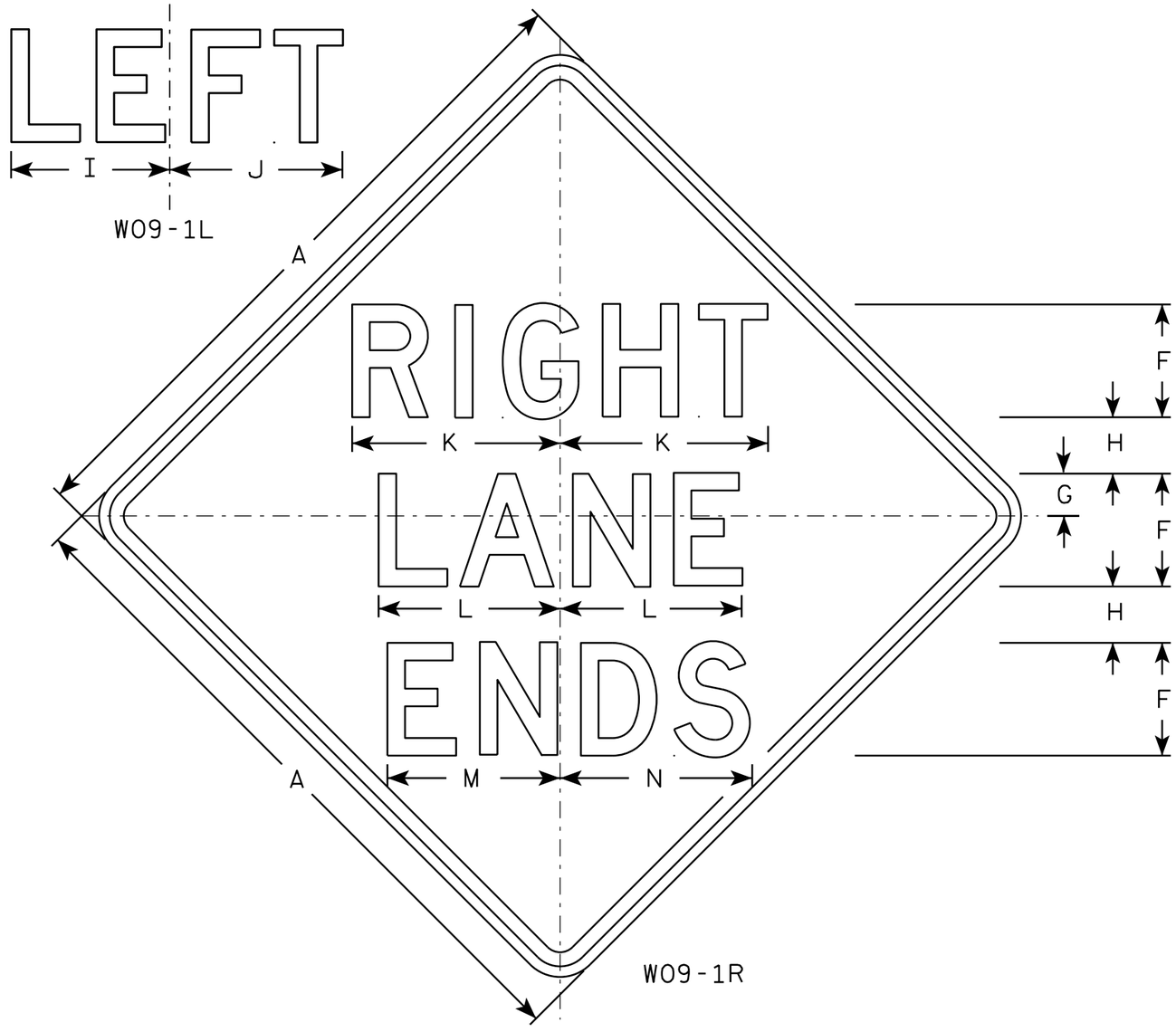
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W05-5.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W085.DGN PLOT DATE : 20-NOV-2013 13:34 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.742482:1.000000
WISDOT/CADDS SHEET 42



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	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2S	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0
2M	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0
3	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0
4	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W09-1

WISCONSIN DEPT OF TRANSPORTATION

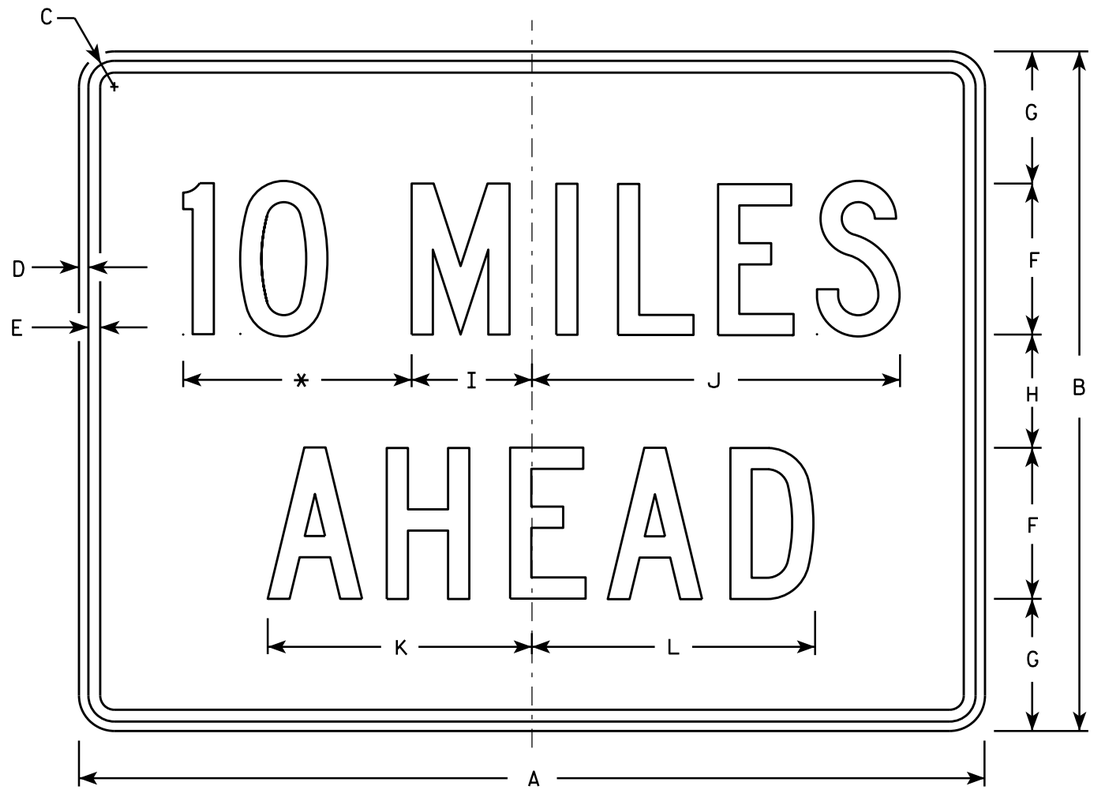
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W09-1.1

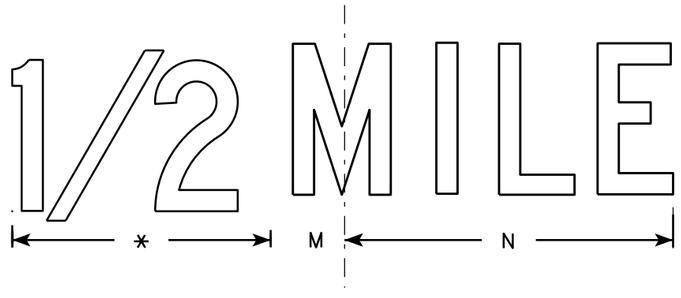
PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W091.DGN PLOT DATE : 20-NOV-2013 14:18 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



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

STATE PROJECT NUMBER
1517-75-75

NOTES

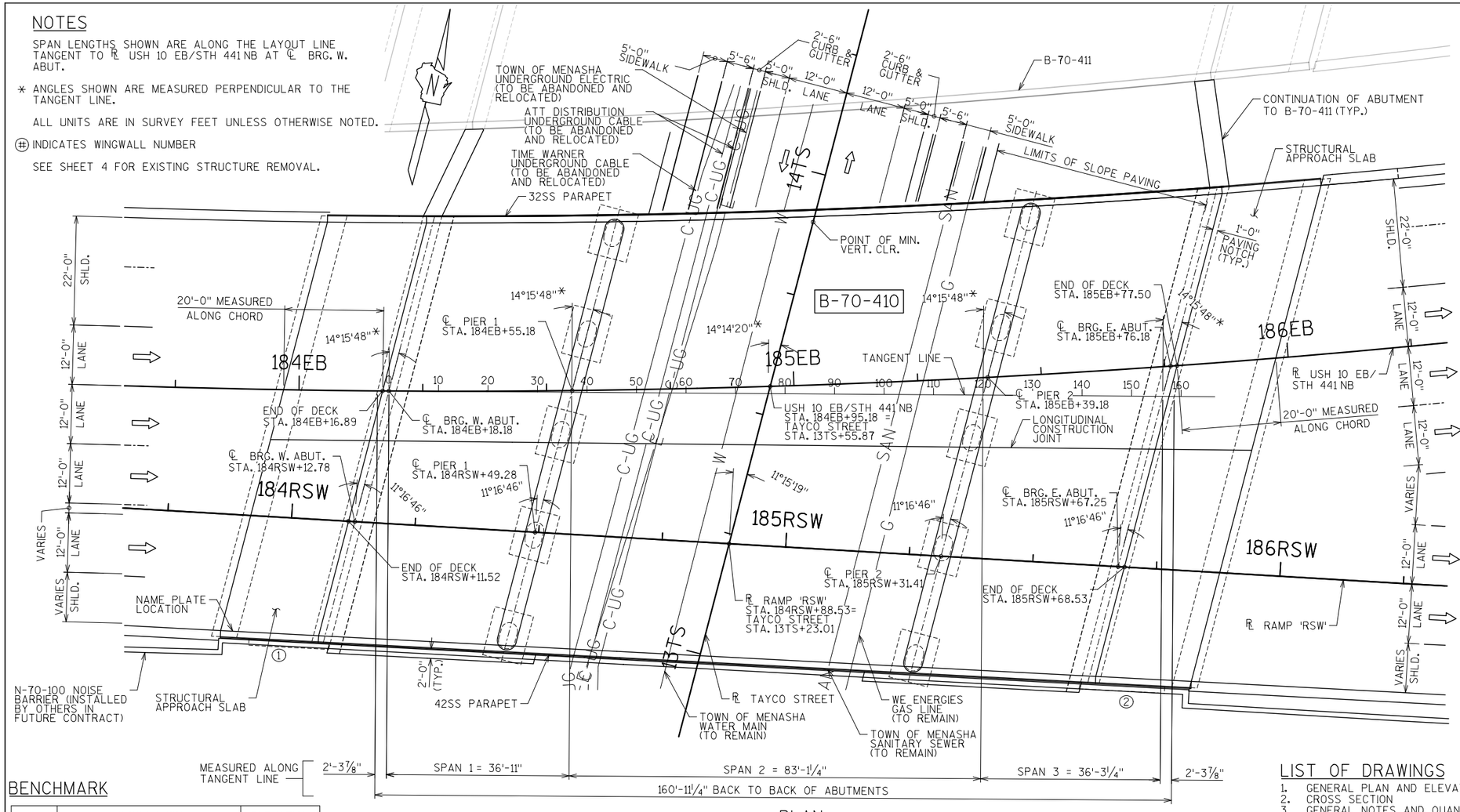
SPAN LENGTHS SHOWN ARE ALONG THE LAYOUT LINE TANGENT TO ℄ USH 10 EB/STH 441 NB AT ℄ BRG. W. ABUT.

* ANGLES SHOWN ARE MEASURED PERPENDICULAR TO THE TANGENT LINE.

ALL UNITS ARE IN SURVEY FEET UNLESS OTHERWISE NOTED.

(#) INDICATES WINGWALL NUMBER

SEE SHEET 4 FOR EXISTING STRUCTURE REMOVAL.



MEASURED ALONG TANGENT LINE — 2'-3⅞" — SPAN 1 = 36'-11" — SPAN 2 = 83'-1¼" — SPAN 3 = 36'-3¼" — 2'-3⅞"

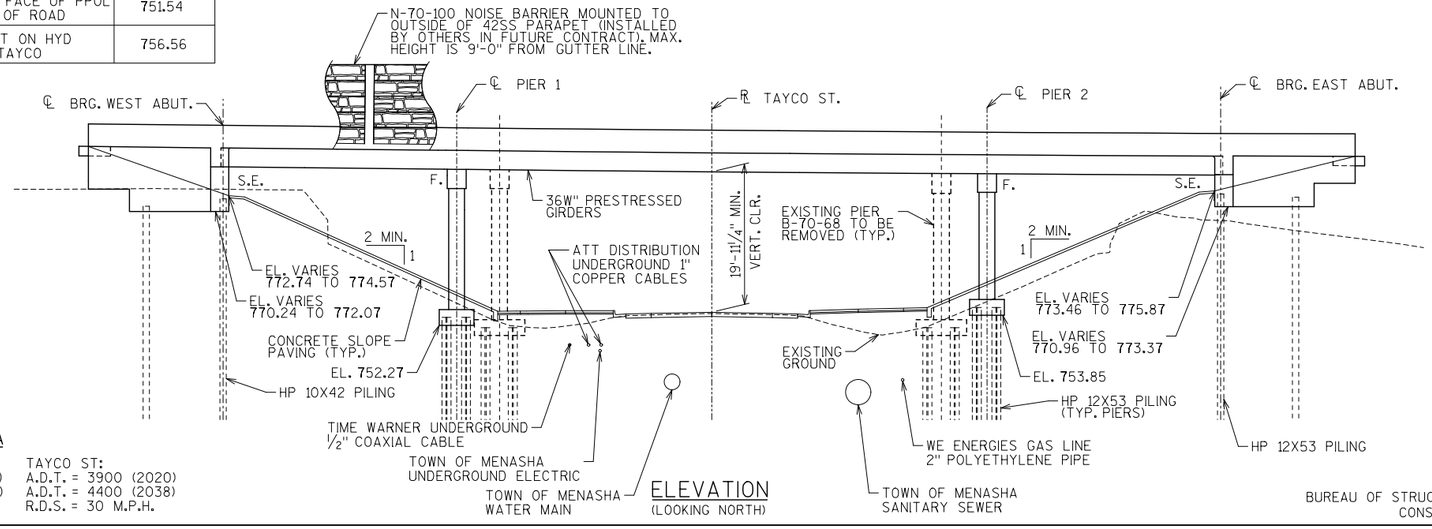
160'-11¼" BACK TO BACK OF ABUTMENTS

PLAN

(3 SPAN - 36W" PRESTRESSED GIRDERS)

BENCHMARK

NO.	DESCRIPTION	ELEVATION
TA2	SPIKE IN NORTH FACE OF PPOL ON SOUTH SIDE OF ROAD	751.54
TA3	NE FLANGE BOLT ON HYD WEST SIDE OF TAYCO	756.56



ELEVATION

(LOOKING NORTH)

TRAFFIC DATA

USH 10/STH 441:
A.D.T. = 77000 (2020)
A.D.T. = 101000 (2038)
R.D.S. = 70 M.P.H.

TAYCO ST:
A.D.T. = 3900 (2020)
A.D.T. = 4400 (2038)
R.D.S. = 30 M.P.H.

DESIGN DATA

NOISE BARRIER LOADS:

DEAD LOAD: 60 PSF
WIND LOAD: 42 PSF
MAXIMUM HEIGHT OF THE NOISE BARRIER IS 9'-0" FROM GUTTER LINE

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING FACTOR: 1.38
OPERATING RATING FACTOR: 1.79
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY (HPC)
SUPERSTRUCTURE ..... f'c = 4,000 PSI
ALL OTHER ..... f'c = 4,000 PSI

BAR STEEL REINFORCEMENT, HIGH STRENGTH, GRADE 60 .....fy = 60,000 PSI

36W"-INCH PRESTRESSED GIRDERS, CONCRETE MASONRY .....f'c = 8,000 PSI
.....f'ci = 6,800 PSI

0.6" DIA. PRESTRESSING STRANDS ....f's = 270,000 PSI

FOUNDATION DATA

SUPPORT WEST ABUTMENT ON HP 10X42 DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS** PER PILE AND EAST ABUTMENT ON HP 12X53 DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 65 FEET FOR BOTH ABUTMENTS.

SUPPORT BOTH PIERS ON HP 12X53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 50 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.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. CROSS SECTION
3. GENERAL NOTES AND QUANTITIES
4. EXISTING STRUCTURE REMOVAL
5. SUBSURFACE EXPLORATION
6. WEST ABUTMENT
7. WEST ABUTMENT DETAILS 1
8. WEST ABUTMENT DETAILS 2
9. WINGWALL 1
10. EAST ABUTMENT
11. EAST ABUTMENT DETAILS 1
12. EAST ABUTMENT DETAILS 2
13. WINGWALL 2
14. PIER 1
15. PIER 1 DETAILS
16. PIER 2
17. PIER 2 DETAILS
18. 36W" PRESTRESSED GIRDER
19. 36W" PRESTRESSED GIRDER DETAILS
20. STEEL DIAPHRAGM
21. FRAMING PLAN
22. SUPERSTRUCTURE
23. SUPERSTRUCTURE DETAILS 1
24. SUPERSTRUCTURE DETAILS 2
25. SUPERSTRUCTURE DETAILS 3
26. STRUCTURAL APPROACH SLAB W. ABUT. 1
27. STRUCTURAL APPROACH SLAB W. ABUT. 2
28. STRUCTURAL APPROACH SLAB E. ABUT. 1
29. STRUCTURAL APPROACH SLAB E. ABUT. 2
30. SINGLE SLOPE PARAPET 32SS
31. SINGLE SLOPE PARAPET 32SS ELECTRICAL
32. SINGLE SLOPE PARAPET 42SS
33. SINGLE SLOPE PARAPET 42SS ELECTRICAL
34. NOISE BARRIER POST ANCHORAGE
35. SLOPE PAVING CONCRETE
36. ALTERNATE CONSTRUCTION JOINT
37. AESTHETIC DETAILS

NE REGION CONTACT - SCOTT EBEL (920) 492-2240
BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL ARNOLD (414) 831-4179

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
WI
PROFESSIONAL ENGINEER
05/05/2015

NO.	DATE	REVISION	BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 05/06/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-70-410

USH 10 EB/STH 441 NB OVER TAYCO ST

COUNTY	TOWN ~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MRL	NPP	MRL	MJA

GENERAL PLAN AND ELEVATION

SHEET 1 OF 37
717

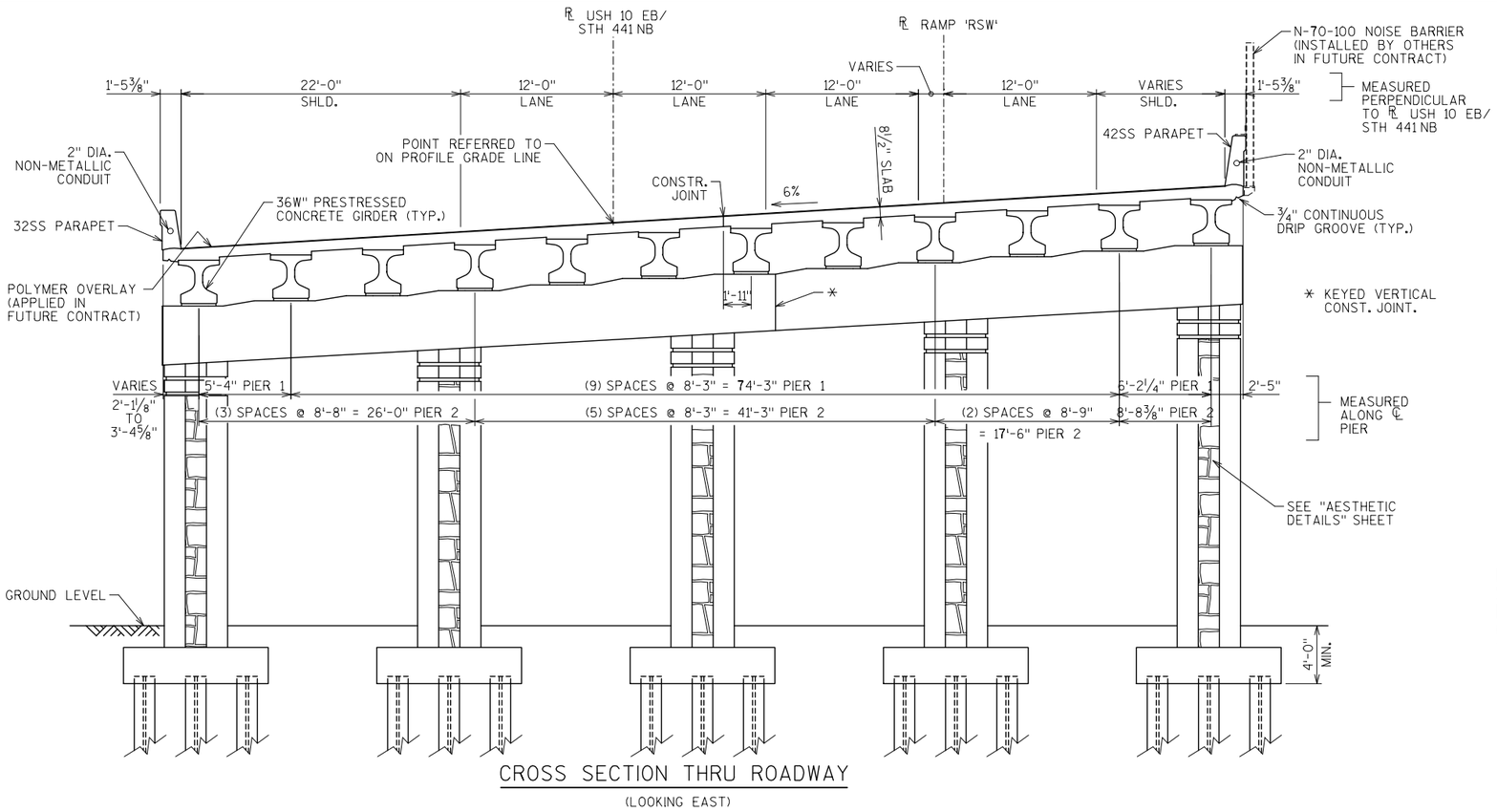
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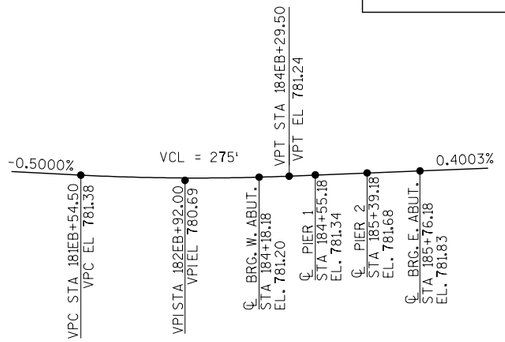
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STATE PROJECT NUMBER
1517-75-75



CROSS SECTION THRU ROADWAY

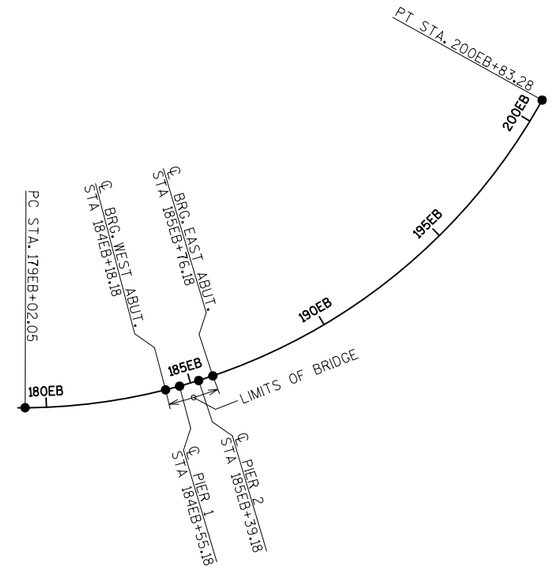
(LOOKING EAST)



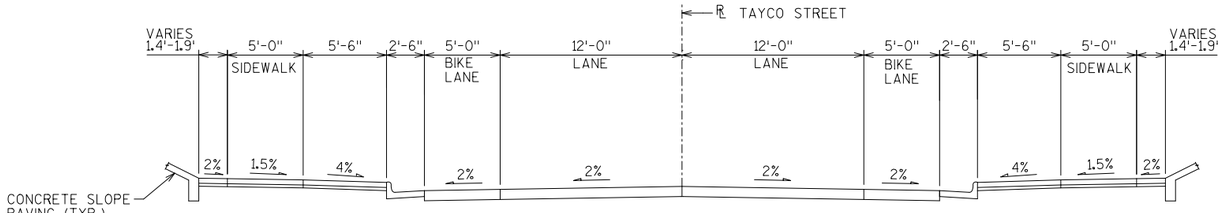
PROFILE GRADE LINE USH 10 EB/STH 441 NB

USH 10 EB/ STH 441 NB HORIZONTAL CURVE DATA

PC = 179EB+02.05
X = 814712.48
Y = 546283.25
PI = 191+10.00
X = 815920.42
Y = 546278.67
PT = 200+83.28
X = 816505.21
Y = 547335.64
R = 2040.00
DELTA = 61°15'45" LT
D = 2°48'31"
L = 2181.23

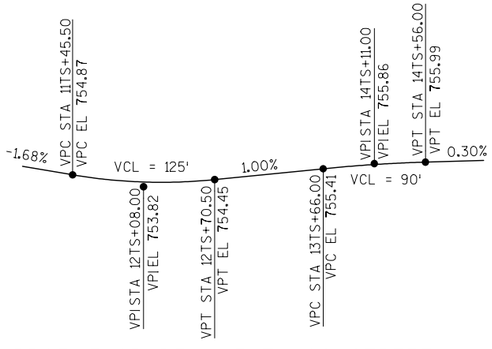


HORIZONTAL ALIGNMENT USH 10 EB/STH 441 NB

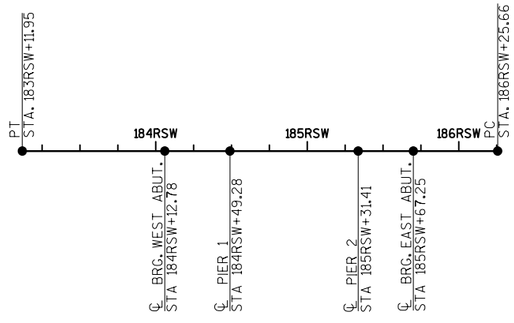


TYPICAL SECTION TAYCO STREET

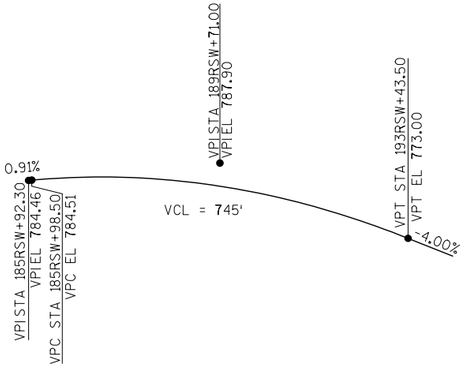
(LOOKING NORTH)



PROFILE GRADE LINE TAYCO STREET



HORIZONTAL ALIGNMENT RAMP 'RSW'



PROFILE GRADE LINE RAMP 'RSW'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY MRL | PLANS CK'D. MJA

CROSS SECTION

SHEET 2 OF 37
718

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DATE: 5/5/2015
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STATE PROJECT NUMBER

1517-75-75

GENERAL NOTES

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS ARE IN SURVEY FEET AND SURVEY INCHES. ALL STATIONS AND ELEVATIONS ARE IN SURVEY FEET.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WINNEBAGO COUNTY - NAD 1983 (1991).

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR CONSIDERED ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153, TYPE I, II, OR III OR M213.

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

* AT ABUTMENTS, BACKFILL ALL EXCAVATED VOLUME NOT OCCUPIED BY NEW STRUCTURE WITH BACKFILL STRUCTURE. THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

** AT THE DAYLIGHT END OF PIPE UNDERDRAIN, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

REINFORCING STEEL

ALL REINFORCING BARS ARE ENGLISH AND THE FIRST OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE.

REINFORCING STEEL SHALL BE HIGH STRENGTH, GRADE 60 WITH Fy=60 ksi. PROVIDE STAINLESS STEEL REINFORCEMENT CONFORMING TO ASTM A615, GRADE 60 REQUIREMENTS.

REINFORCING STEEL SHALL BE UNCOATED IN FOOTINGS (EXCEPT PIER SHAFT DOWELS) AND EPOXY COATED IN ALL OTHER LOCATIONS (INCLUDING PIER SHAFT DOWELS).

PLACE ALL REINFORCEMENT WITH A MINIMUM CLEAR COVER OF 2" UNLESS NOTED OTHERWISE.

PLACE REINFORCEMENT IN FOOTINGS AND PILECAPS WITH A MINIMUM CLEAR COVER OF 3" BOTTOM AND 2" TOP AND SIDES UNLESS NOTED OTHERWISE.

PLACE TOP LAYER OF REINFORCING STEEL IN THE DECK SURFACE WITH 2½" CLEAR COVER TO TOP OF SLAB.

PLACE BOTTOM LAYER OF REINFORCING STEEL IN THE DECK WITH 1½" CLEAR COVER TO BOTTOM OF SLAB.

ONLY REINFORCEMENT REQUIRED BY DESIGN IS SHOWN EXPLICITLY ON THE DRAWINGS. ADDITIONAL REINFORCEMENT MAY BE USED TO SIMPLIFY ASSEMBLY AND ERECTION OF THE REINFORCING STEEL AND MAY BE REQUIRED TO ENSURE STABILITY AND POSITIONING OF THE COMPLETED REINFORCEMENT CAGE. REINFORCEMENT IN ADDITION TO THAT SHOWN WILL NOT BE INCLUDED FOR PAYMENT.

LAP SPLICE LENGTHS SHALL BE CLASS C UNLESS NOTED OTHERWISE.

CONCRETE

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

CHAMFER ALL EXPOSED OUTSIDE CORNERS ¾" UNLESS NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE INSIDE OF PARAPETS, TOP OF PARAPETS, AND TOP OF DECK AND APPROACH SLABS.

IF OPTIONAL CONSTRUCTION JOINT IS USED IN ABUTMENT OR PIER DIAPHRAGMS, DECK POUR MUST BE WITHIN TWO WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

OTHER DESIGN LOADS

THE STRUCTURE IS DESIGNED FOR THE DECK THICKNESS SHOWN. AN ADDITIONAL LOAD OF 20 PSF FOR A FUTURE WEARING SURFACE AND 5 PSF FOR POLYMER OVERLAY IS CONSIDERED IN THE DESIGN.

TEMPERATURE CHANGE FOR DETERMINING THERMAL FORCES ON SUBSTRUCTURES = 45°F.

PARAPETS WERE ASSUMED TO WEIGH 563 PLF FOR 42SS PARAPET AND 464 PLF FOR 32SS PARAPET.

LOADS FROM THE NOISE BARRIER WERE ASSUMED AS FOLLOWS: 60 PSF DEAD LOAD AND 42 PSF WIND LOAD. MAXIMUM HEIGHT OF THE NOISE BARRIER IS 9'-0".

ALL OTHER LOADS IN ACCORDANCE WITH AASHTO.

DESIGN CRITERIA

DESIGN IS IN ACCORDANCE WITH AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATIONS AND THE WISDOT BRIDGE MANUAL.

ALL DETAILS, MATERIALS, AND FABRICATION SHALL CONFORM TO THE THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. USE THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS AT THE TIME OF CONSTRUCTION.

LIVE LOAD PLUS DYNAMIC LOAD DEFLECTION LIMIT = SPAN / 800 (HL93).

TOTAL ESTIMATED QUANTITIES

	BID ITEM #	BID ITEM	UNIT	SUPER.	W. ABUT.	PIER 1	PIER 2	E. ABUT.	TOTAL
	203.0200	REMOVING OLD STRUCTURE STA. 185EB+00	LS	1	--	--	--	--	1
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-410	LS	1	--	--	--	--	1
*	210.0100	BACKFILL STRUCTURE	CY	--	270	--	--	310	580
	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	--	287	--	--	328	615
	501.1000.S	ICE HOT WEATHER CONCRETING	LB	6,375	--	790	800	--	7,965
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	2,165	--	--	--	--	2,165
	503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	1,881	--	--	--	--	1,881
	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	--	--	3,755	3,755	--	7,510
	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	202,520	9,280	21,730	21,460	10,210	265,200
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	3,150	--	--	--	--	3,150
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	72	--	--	--	--	72
	506.4000	STEEL DIAPHRAGMS B-70-410	EACH	44	--	--	--	--	44
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	--	21	--	--	23	44
	517.1010.S	CONCRETE STAINING B-70-410	SF	1,465	715	2,350	2,370	805	7,705
	517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-410	SF	--	680	335	315	765	2,095
	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	--	1,105	--	--	--	1,105
	550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	--	--	2,000	2,000	1,235	5,235
	604.0400	SLOPE PAVING CONCRETE	SY	--	559	--	--	657	1,216
**	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	--	345	--	--	390	735
	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	105	--	--	--	--	105
	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	310	--	--	--	--	310
	653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	2	--	--	--	--	2
	SPV.0035.700	MODIFIED HIGH PERFORMANCE CONCRETE (HPC) MASONRY BRIDGES	CY	850	120	142	144	139	1,395
	SPV.0060.701	ANCHOR ASSEMBLIES NOISE BARRIERS STRUCTURES	EACH	26	--	--	--	--	26
		NON BID ITEMS							
		FILLER	SIZE						1/2" & 3/4"
		NAME PLATE	EACH						1
		EXPANDED POLYSTYRENE	SIZE						1"

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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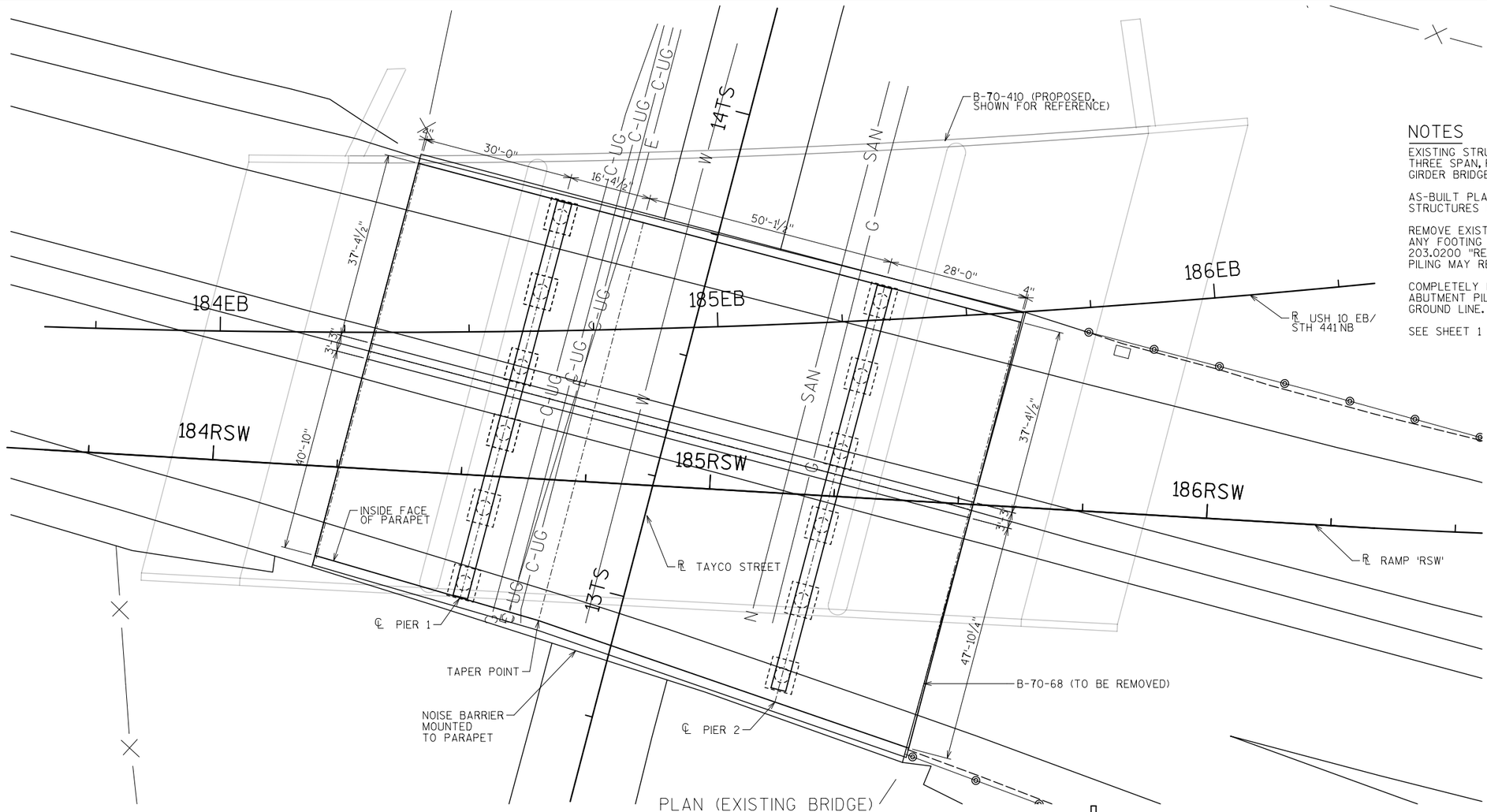
GENERAL NOTES AND QUANTITIES

SHEET 3 OF 37
719

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DATE: 5/5/2015
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STATE PROJECT NUMBER
1517-75-75



PLAN (EXISTING BRIDGE)
(3 SPAN - 45" PRESTRESSED GIRDERS)

NOTES

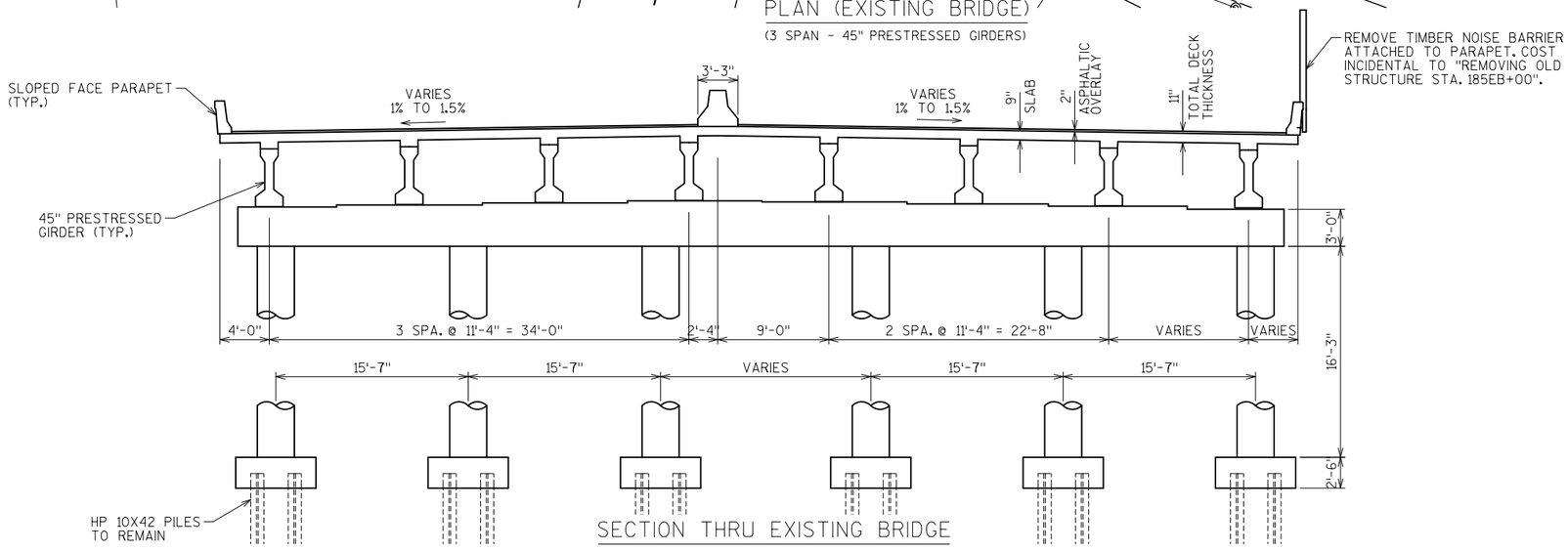
EXISTING STRUCTURE B-70-68 IS A THREE SPAN, PRESTRESSED CONCRETE GIRDER BRIDGE.

AS-BUILT PLANS ARE AVAILABLE ON THE WISDOT HIGHWAY STRUCTURES INFORMATION (HSI) WEBSITE.

REMOVE EXISTING PIERS TO TOP OF FOOTINGS. THE COST OF ANY FOOTING REMOVAL REQUIRED IS INCLUDED IN BID ITEM 203.0200 "REMOVING OLD STRUCTURE STA. 185EB+00." PILING MAY REMAIN IN PLACE.

COMPLETELY REMOVE BOTH ABUTMENTS AND CUT OFF ABUTMENT PILES TO A DEPTH OF 2' BELOW PROPOSED GROUND LINE.

SEE SHEET 1 FOR UTILITY INFORMATION.



SECTION THRU EXISTING BRIDGE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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EXISTING STRUCTURE REMOVAL

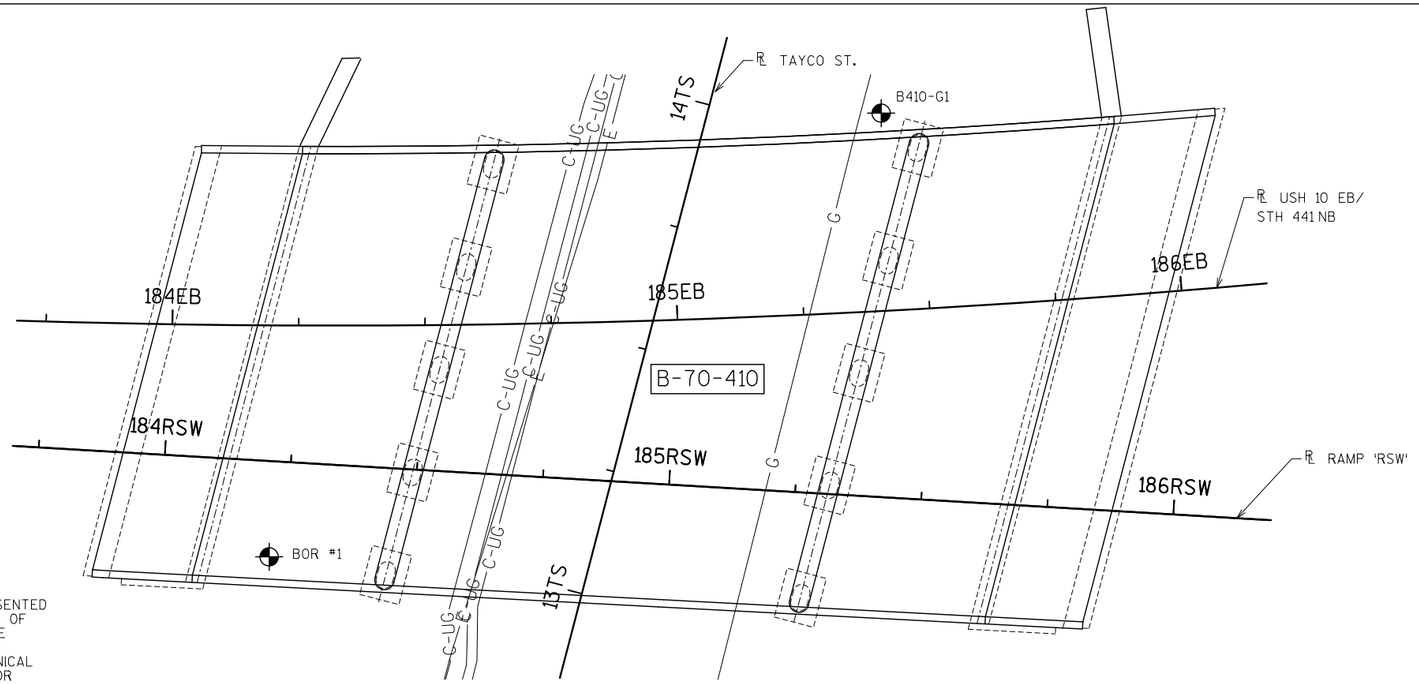
SHEET 4 OF 37
720

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DATE: 5/5/2015
I.D.



PLAN

(3 SPAN - 36W" PRESTRESSED GIRDERS)

NOTE:

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 BEARING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

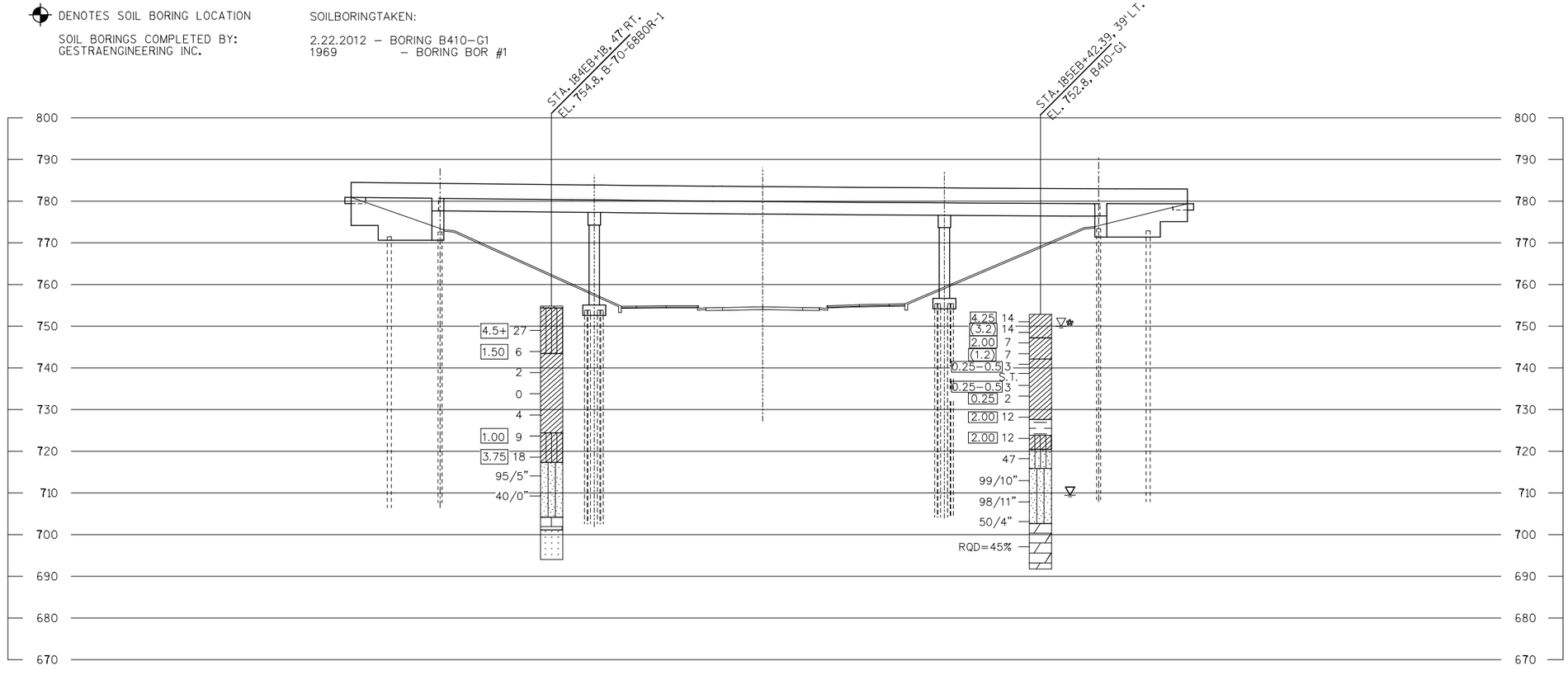
BORING STATIONS AND OFFSETS ARE BASED ON ℄ EB

⊕ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRAENGINEERING INC.

SOILBORINGTAKEN:

2.22.2012 – BORING B410-G1
1969 – BORING BOR #1



STATE PROJECT NUMBER

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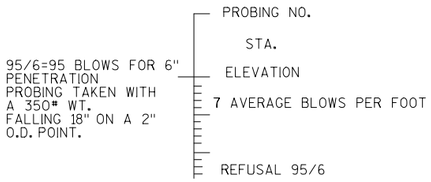
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

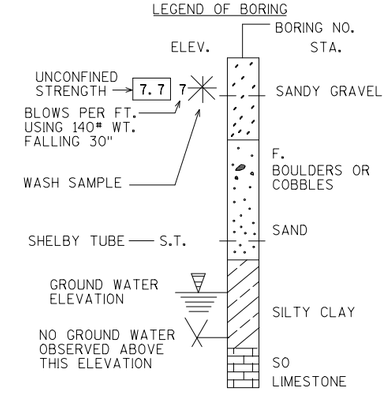
MATERIAL SYMBOLS

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 B-70-410

DRAWN BY RHE | PLANS CK'D. SL

SUBSURFACE EXPLORATION

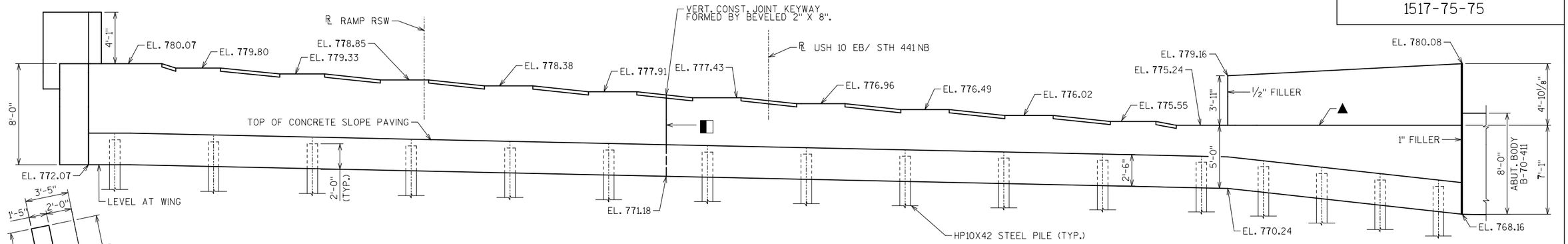
SHEET 5 OF 37
721

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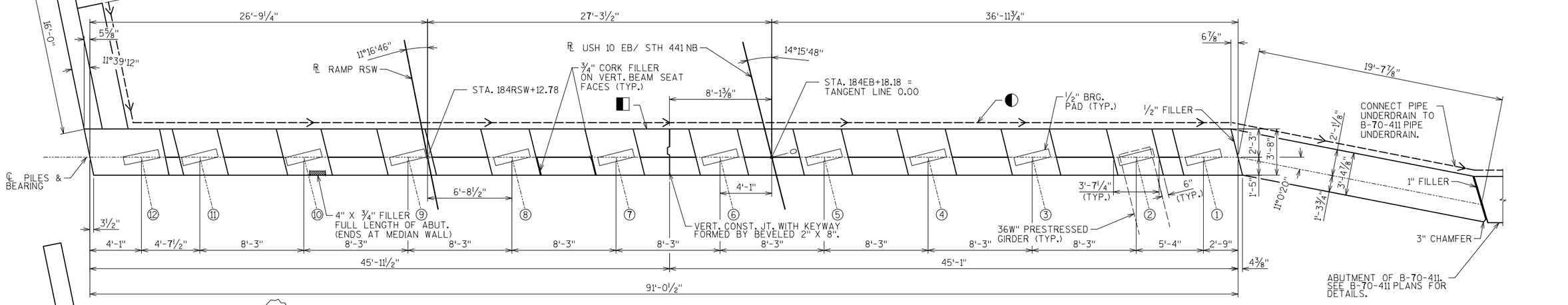
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STATE PROJECT NUMBER
1517-75-75

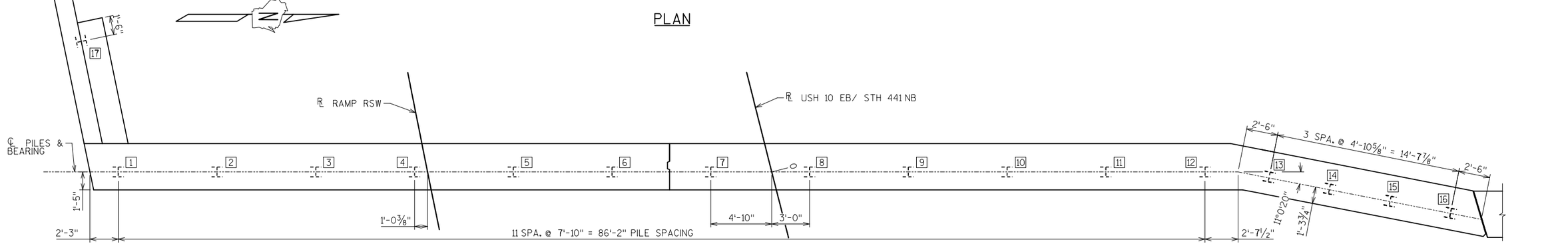


FRONT ELEVATION

(LOOKING WEST)



PLAN



PILE PLAN

FOUNDATION DATA

SUPPORT ON HP 10X42 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 65 FEET.

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO CONNECT WITH PIPE UNDERDRAIN OF B-70-411. FOR RODENT SCREEN DETAILS SEE B-70-411 PLANS. AT THE DAYLIGHT END OF PIPE UNDERDRAIN, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- (#) INDICATES GIRDER NUMBER
- [#] INDICATES PILE NUMBER
- ▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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WEST ABUTMENT

SHEET 6 OF 37
722

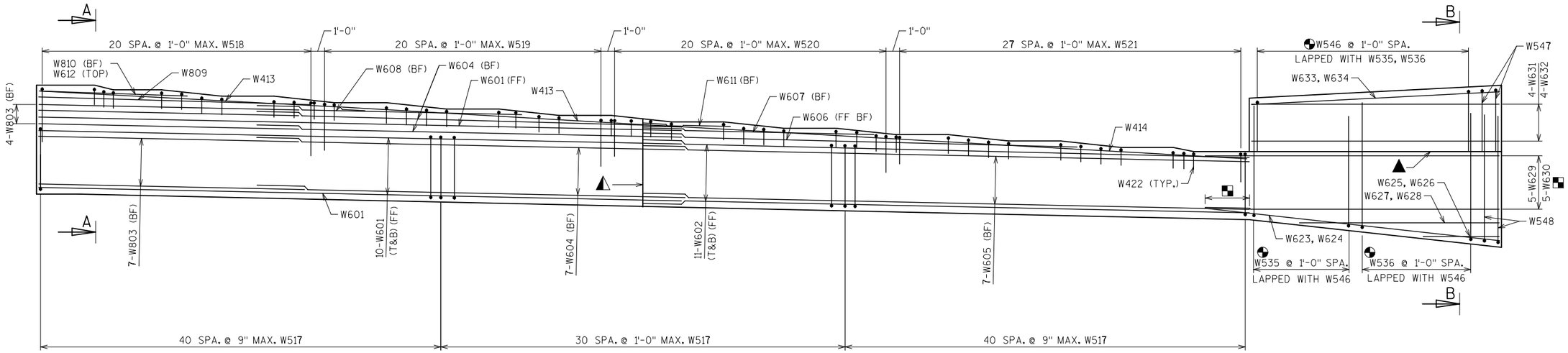
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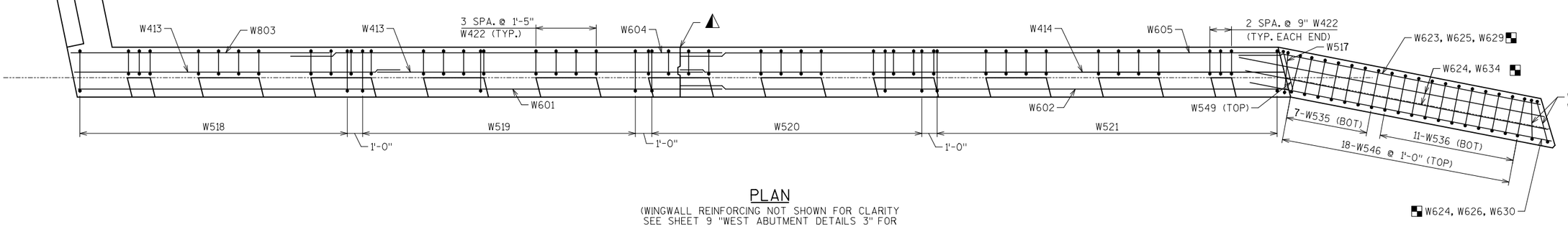
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STATE PROJECT NUMBER
1517-75-75



ELEVATION
(PILES NOT SHOWN FOR CLARITY)



PLAN
(WINGWALL REINFORCING NOT SHOWN FOR CLARITY
SEE SHEET 9 "WEST ABUTMENT DETAILS 3" FOR
WINGWALL REINFORCEMENT DETAILS.)

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8".
- LAP LENGTHS = 2'-4" FOR #4 BARS
  2'-7" FOR #5 BARS
  3'-6" FOR #6 BARS
  5'-9" FOR #8 BARS
- LAP LENGTH WILL VARY, 2'-7" MINIMUM.
- HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

NOTES

FOR SECTION A-A, SECTION B-B, BILL OF BARS, BEND DIAGRAMS, AND PILE SPLICE DETAILS SEE SHEET 8 "WEST ABUTMENT DETAILS 2."

WHEN LAPPING #8 BAR WITH #6 BAR USE MIN. LAP LENGTH OF 3'-6".

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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WEST ABUTMENT DETAILS 1

SHEET 7 OF 37
723

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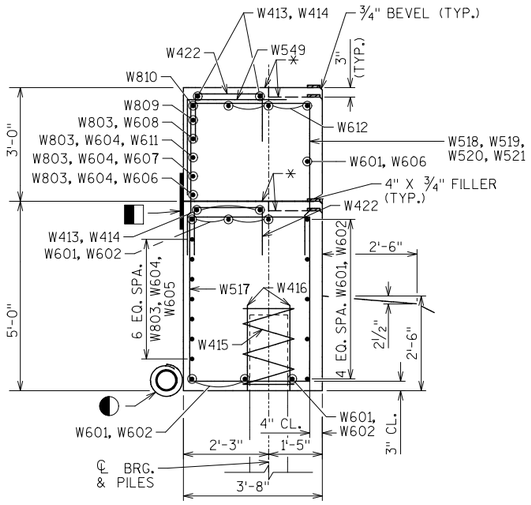
STATE PROJECT NUMBER
1517-75-75

BILL OF BARS

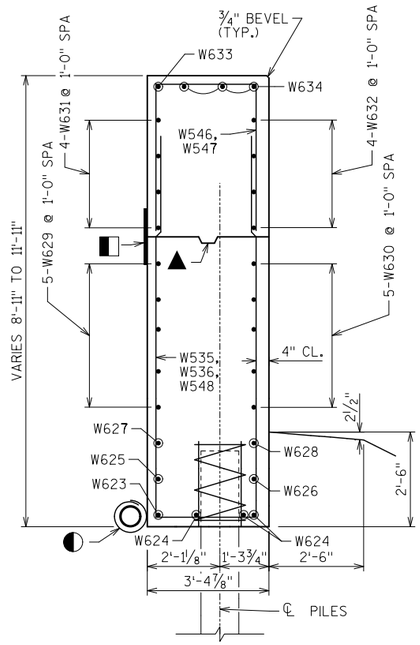
ALL BARS EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
W601	12	49'-0"			BODY HORIZ. FRONT FACE
W602	11	45'-6"			BODY HORIZ. FRONT FACE
W803	11	19'-6"			BODY HORIZ. BACK FACE
W604	10	33'-9"			BODY HORIZ. BACK FACE
W605	7	44'-6"			BODY HORIZ. BACK FACE
W606	2	31'-11"			BODY HORIZ. FRONT AND BACK FACE
W607	1	16'-10"			BODY HORIZ. BACK FACE
W608	1	19'-4"			BODY HORIZ. BACK FACE
W809	1	20'-0"			BODY HORIZ. BACK FACE
W810	1	10'-11"			BODY HORIZ. BACK FACE
W611	1	6'-5"			BODY HORIZ. BACK FACE
W612	3	10'-11"			BODY HORIZ. TOP
W413	4	25'-2"			BODY HORIZ. BEAM SEAT REINF.
W414	2	44'-7"			BODY HORIZ. BEAM SEAT REINF.
W415	17	28'-0"	X		SPIRAL REINF. AT PILES
W416	34	2'-3"			PILE REINF.
W517	112	15'-7"	X		BODY VERT.
W518	21	10'-11"	X		BODY VERT.
W519	21	9'-3"	X		BODY VERT.
W520	21	7'-11"	X		BODY VERT.
W521	27	6'-3"	X		BODY VERT.
W422	42	4'-3"	X		BEAM SEAT VERT.
W623	1	23'-1"	X		BODY HORIZ. BACK FACE BOTTOM
W624	3	23'-0"			BODY HORIZ. BOTTOM
W625	1	5'-8"			BODY HORIZ. BACK FACE
W626	1	5'-7"			BODY HORIZ. FRONT FACE
W627	1	14'-11"			BODY HORIZ. BACK FACE
W628	1	14'-8"			BODY HORIZ. FRONT FACE
W629	5	22'-11"	X		BODY HORIZ. BACK FACE
W630	5	23'-1"	X		BODY HORIZ. FRONT FACE
W631	4	19'-3"			BODY HORIZ. BACK FACE
W632	4	19'-2"			BODY HORIZ. FRONT FACE
W633	1	19'-4"			BODY HORIZ. BACK FACE
W634	3	19'-3"			BODY HORIZ. FRONT FACE
W535	7	19'-0"	X		BODY VERT.
W536	11	21'-6"	X		BODY VERT.
W537	9	12'-11"			WINGWALL BODY HORIZ. FRONT FACE
W538	10	21'-7"	X		WINGWALL BODY VERT.
W539	19	13'-8"	X		WINGWALL TOP VERT.
W440	6	15'-8"			WINGWALL TOP HORIZ.
W441	8	7'-9"			WINGWALL BODY FRONT AND BACK FACE
W742	9	12'-1"			WINGWALL BODY HORIZ. BACK FACE
W543	4	11'-6"	X		WINGWALL TOP VERT.
W444	3	4'-10"			WINGWALL TOP HORIZ.
W445	3	5'-10"			WINGWALL TOP HORIZ.
W546	18	11'-0"	X	X	BODY VERT.
W547	2	11'-10"	X		BODY VERT.
W548	2	21'-6"	X		BODY VERT.
W549	1	9'-0"	X		BODY VERT.

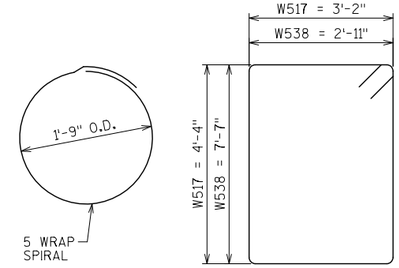
TOTAL WEIGHT= 9,280 LB



SECTION A-A

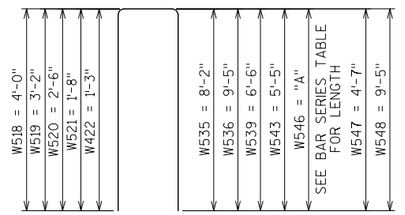


SECTION B-B



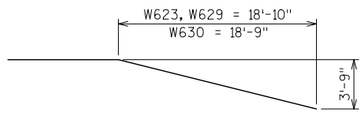
W415

W517, W538

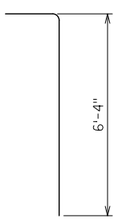


W518, W519, W520, W521, W422, W535, W536, W539, W543, W546, W547, W548

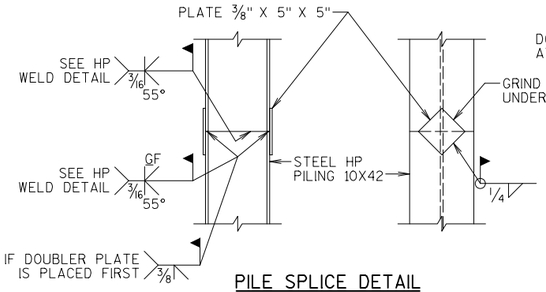
BAR SERIES TABLE		
MARK	NO. REQ'D	"A" LENGTH
W546	1 SERIES OF 18	3'-9" TO 4'-7"



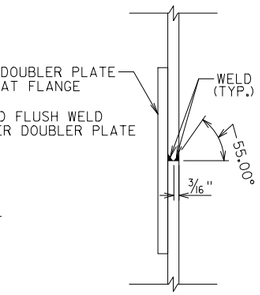
W623, W629, W630



W549



PILE SPLICE DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO CONNECT WITH PIPE UNDERDRAIN OF B-70-411. FOR RODENT SCREEN DETAILS SEE B-70-411 PLANS. AT THE DAYLIGHT END OF PIPE UNDERDRAIN, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- LAP LENGTHS = 2'-4" FOR #4 BARS
  2'-7" FOR #5 BARS
  3'-6" FOR #6 BARS
  5'-9" FOR #8 BARS
- * 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".
- ▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

NOTES

WHEN LAPPING #8 BAR WITH #6 BAR USE MIN. LAP LENGTH OF 3'-6".

FOR LOCATIONS OF SECTION A-A AND SECTION B-B SEE SHEET 7, "WEST ABUTMENT DETAILS 1".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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WEST ABUTMENT DETAILS 2

SHEET 8 OF 37
724

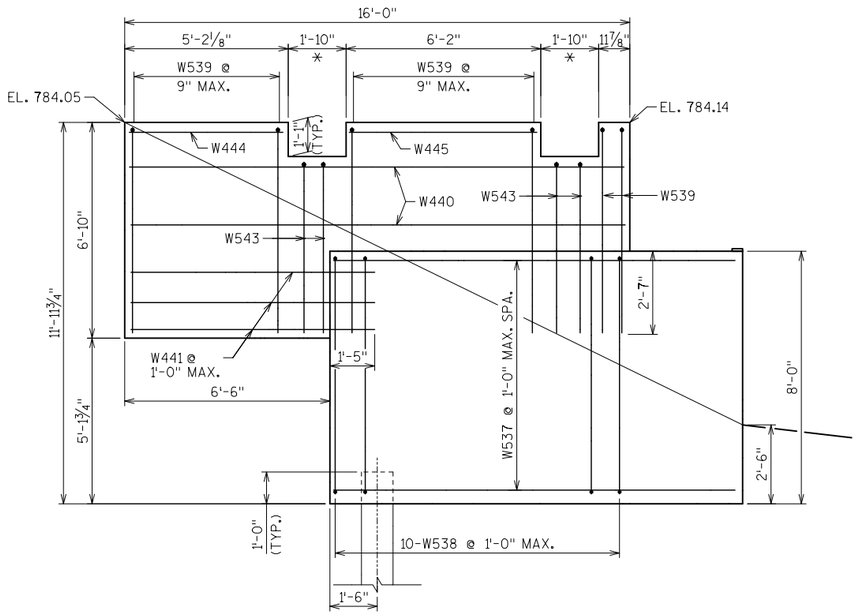
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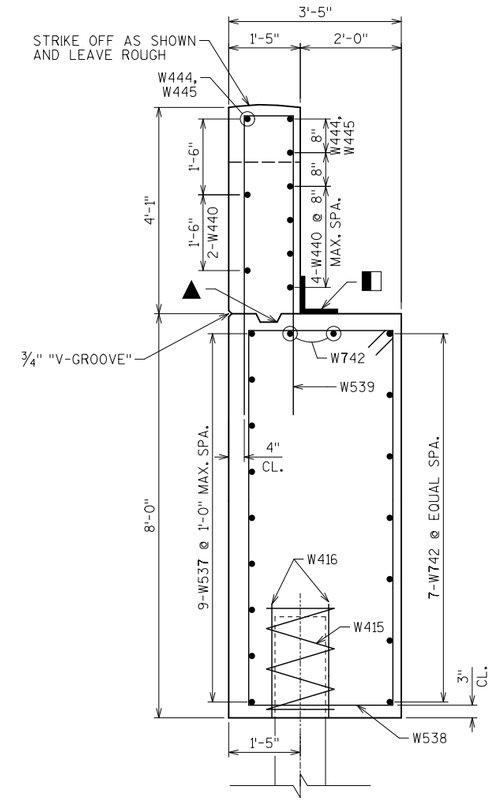
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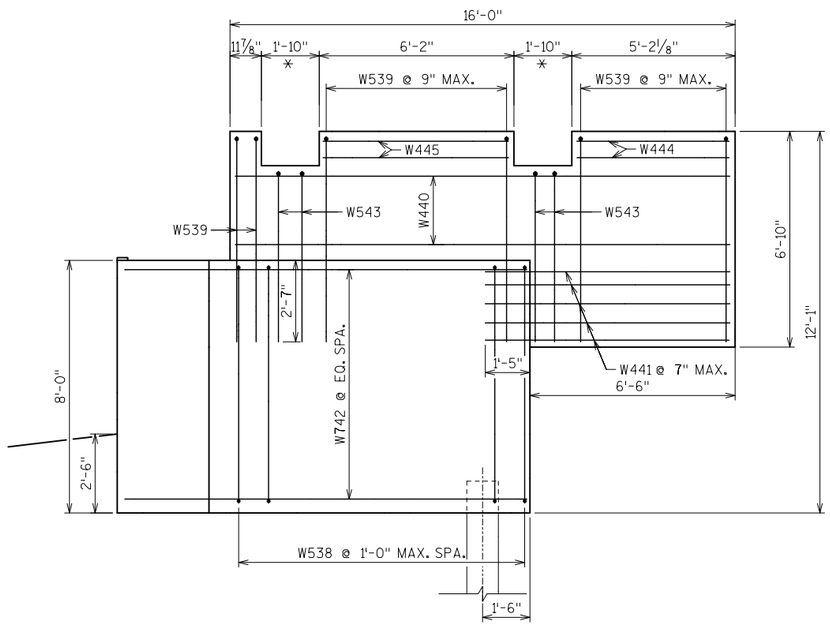
STATE PROJECT NUMBER
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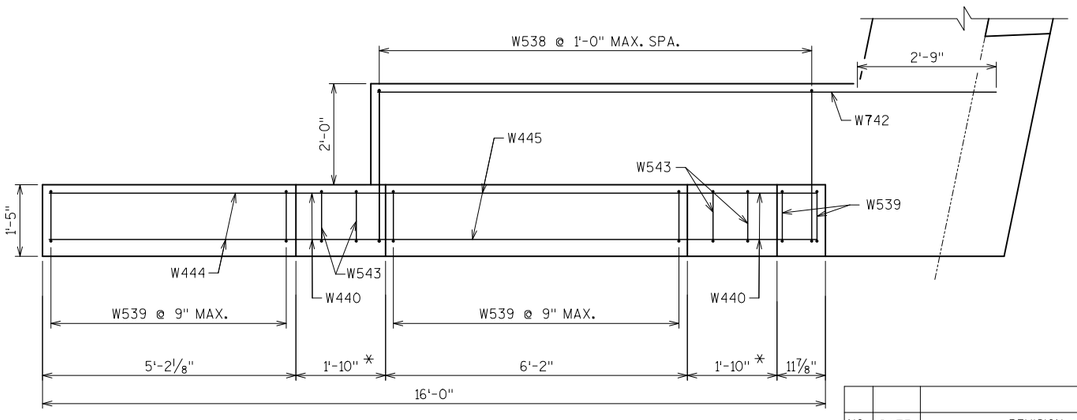
FRONT ELEVATION



SECTION THRU BODY



BACK ELEVATION



PLAN

LEGEND

▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

◧ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

NOTES:

* FOR NOISE BARRIER ANCHOR POST DETAILS, SEE SHEET 34 "NOISE BARRIER POST ANCHORAGE."

FOR BILL OF BARS, BEND DIAGRAMS, AND PILE SPLICE DETAIL SEE SHEET 8 "WEST ABUTMENT DETAILS 2."

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-70-410

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WINGWALL 1

SHEET 9 OF 37
725

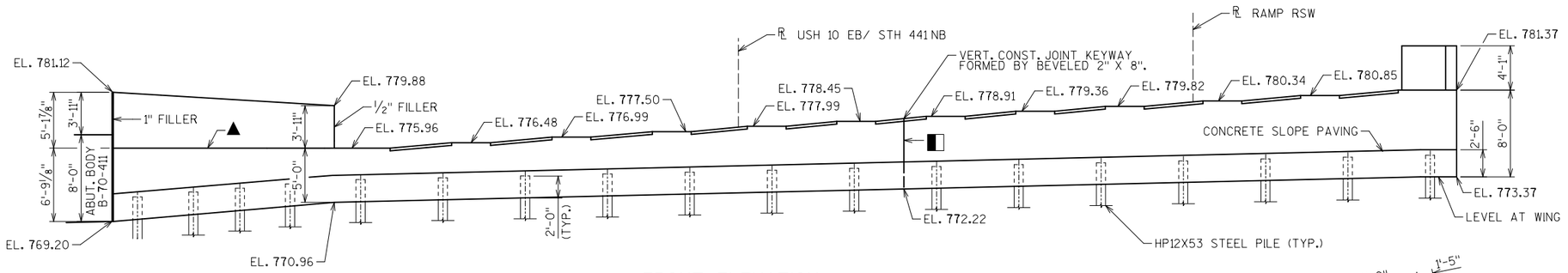
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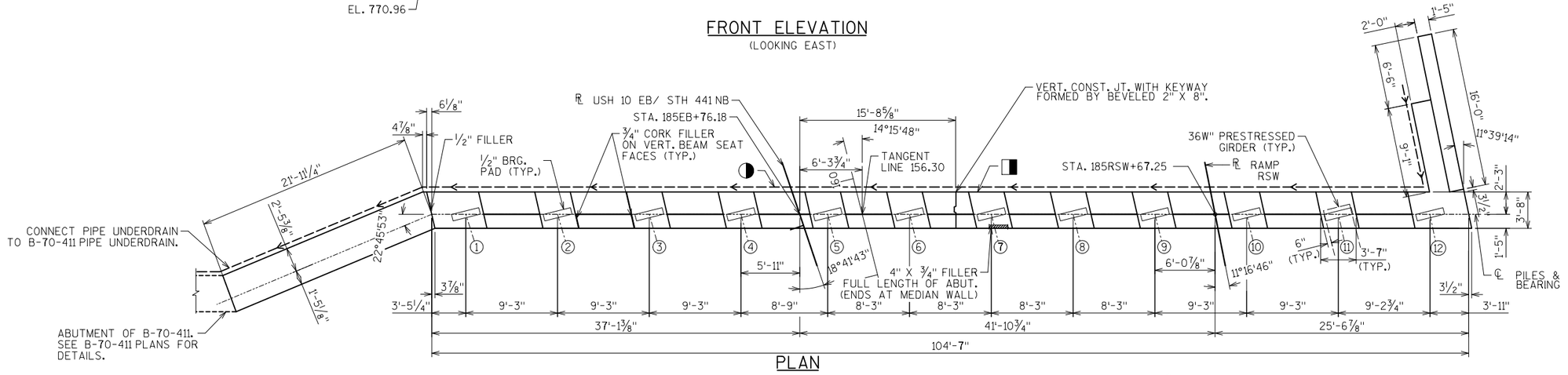
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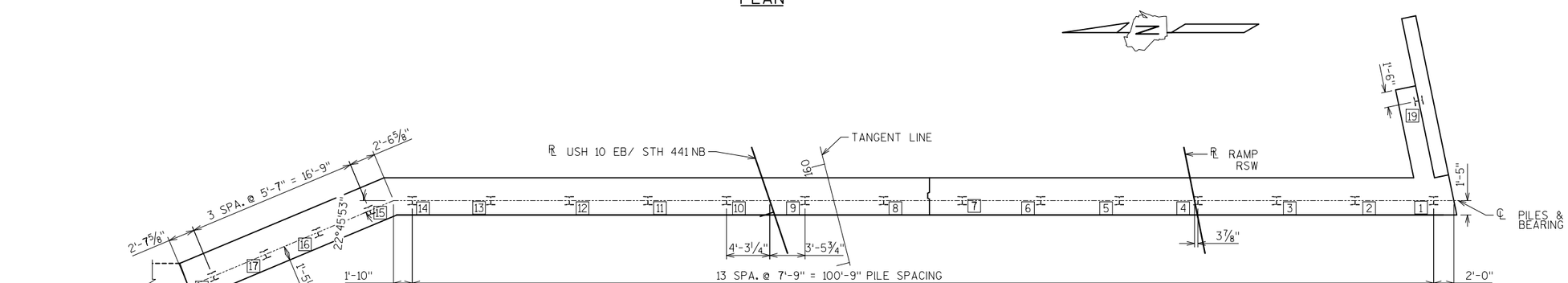
STATE PROJECT NUMBER
1517-75-75



FRONT ELEVATION
(LOOKING EAST)



PLAN



PILE PLAN

FOUNDATION DATA

SUPPORT ON HP 12X53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 65 FEET.

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO CONNECT WITH PIPE UNDERDRAIN OF B-70-411. FOR RODENT SCREEN DETAIL SEE B-70-411 PLANS. AT THE DAYLIGHT END OF PIPE UNDERDRAIN, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- (#) INDICATES GIRDER NUMBER
- [#] INDICATES PILE NUMBER
- ▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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EAST ABUTMENT

SHEET 10 OF 37
726

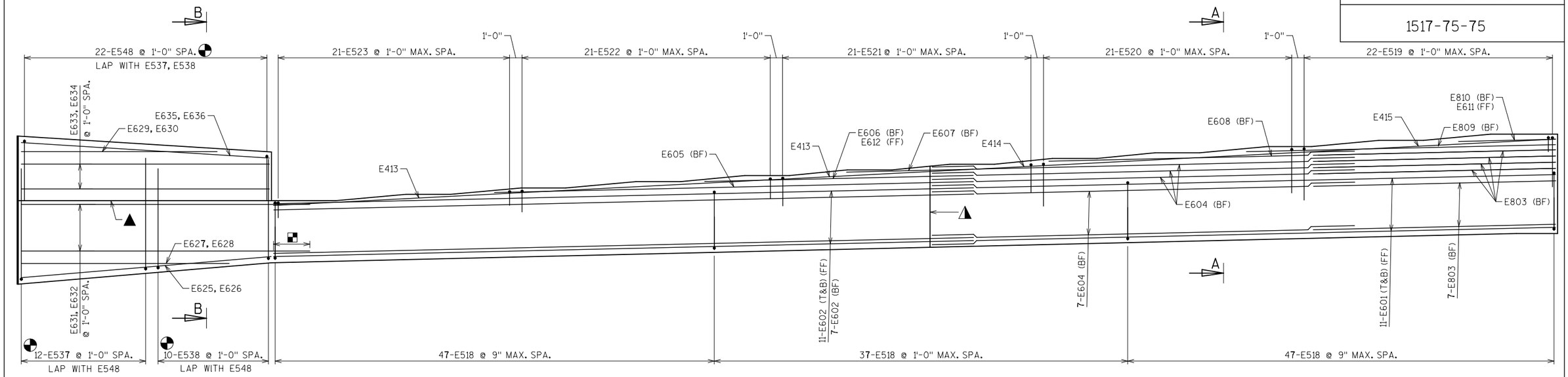
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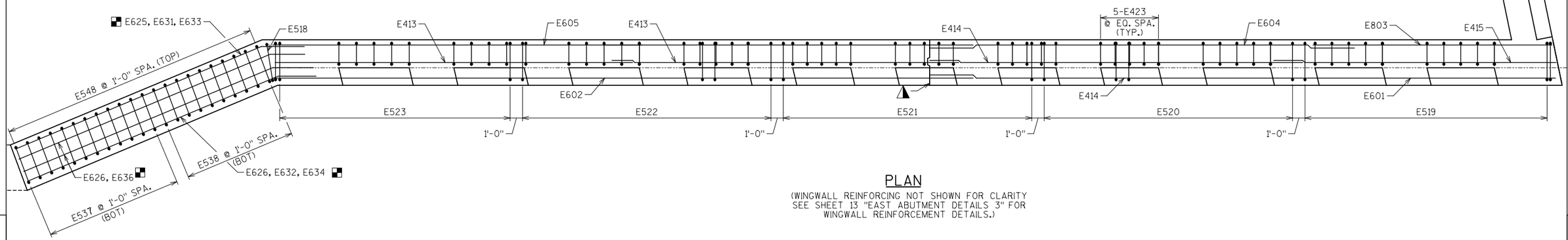
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STATE PROJECT NUMBER
1517-75-75



ELEVATION
(LOOKING EAST)



PLAN
(WINGWALL REINFORCING NOT SHOWN FOR CLARITY
SEE SHEET 13 "EAST ABUTMENT DETAILS 3" FOR
WINGWALL REINFORCEMENT DETAILS.)

NOTES

FOR PILE SPLICE DETAIL SEE SHEET 16 "PIER 2".

FOR SECTION A-A, SECTION B-B, BILL OF BARS AND BEND DIAGRAMS SEE SHEET 12, "EAST ABUTMENT DETAILS 2".

WHEN LAPPING #8 BAR WITH #6 BAR USE MIN. LAP LENGTH OF 3'-6".

LEGEND

▲ VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8".

■ LAP LENGTHS = 2'-4" FOR #4 BARS
2'-7" FOR #5 BARS
3'-6" FOR #6 BARS
5'-9" FOR #8 BARS

▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

◕ LAP LENGTH WILL VARY, 2'-7" MINIMUM.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY	JDL	PLANS CK'D.	MRL

EAST ABUTMENT DETAILS 1

SHEET 11 OF 37
727

DATE: 5/5/2015
I.D.

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STATE PROJECT NUMBER

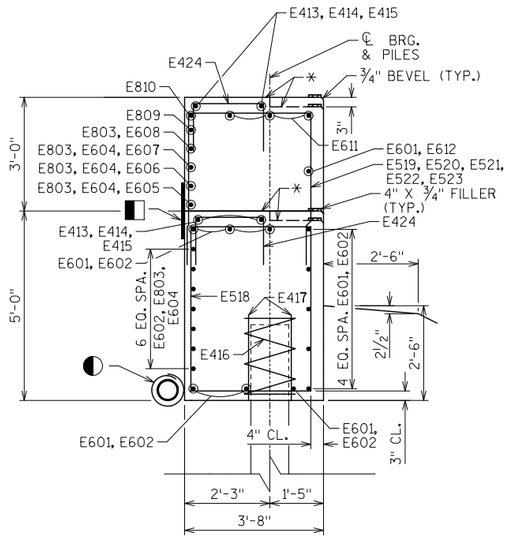
1517-75-75

BILL OF BARS

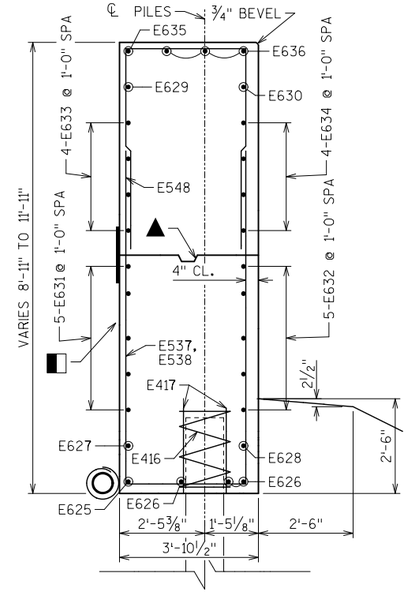
ALL BARS EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
E601	12	51'-8"			BODY HORIZ. FRONT FACE
E602	18	56'-11"			BODY HORIZ. FRONT FACE
E803	11	20'-10"			BODY HORIZ. BACK FACE
E604	10	33'-7"			BODY HORIZ. BACK FACE
E605	1	38'-4"			BODY HORIZ. BACK FACE
E606	1	20'-7"			BODY HORIZ. BACK FACE
E607	1	19'-9"			BODY HORIZ. BACK FACE
E608	1	22'-2"			BODY HORIZ. BACK FACE
E809	1	26'-2"			BODY HORIZ. BACK FACE
E810	1	10'-1"			BODY HORIZ. BACK FACE
E611	3	10'-1"			BODY HORIZ. TOP
E612	1	19'-9"			BODY HORIZ. FRONT FACE
E413	4	28'-8"			BODY HORIZ. FRONT FACE
E414	2	30'-0"			BODY HORIZ. BEAM SEAT REINF.
E415	2	23'-10"			BODY HORIZ. BEAM SEAT REINF.
E416	19	28'-0"	X		SPIRAL RIENF. AT PILES
E417	38	2'-3"			PILE REINF.
E518	131	15'-7"	X		BODY VERT.
E519	22	10'-11"	X		BODY VERT.
E520	21	10'-1"	X		BODY VERT.
E521	21	8'-7"	X		BODY VERT.
E522	21	7'-1"	X		BODY VERT.
E523	21	5'-11"	X		BODY VERT.
E424	55	4'-3"	X		BEAM SEAT VERT.
E625	1	25'-3"	X		BODY HORIZ. BOTTOM
E626	3	25'-3"	X		BODY HORIZ. BOTTOM
E627	1	12'-9"			BODY HORIZ. BACK FACE
E628	1	12'-9"			BODY HORIZ. FRONT FACE
E629	1	15'-9"			BODY HORIZ. BACK FACE
E630	1	15'-9"			BODY HORIZ. FRONT FACE
E631	5	25'-3"	X		BODY HORIZ. BACK FACE
E632	5	25'-3"	X		BODY HORIZ. FRONT FACE
E633	4	21'-5"			BODY HORIZ. BACK FACE
E634	4	21'-5"			BODY HORIZ. FRONT FACE
E635	1	21'-8"			BODY HORIZ. BACK FACE
E636	3	21'-8"			BODY HORIZ. FRONT FACE
E537	12	21'-5"	X		BODY VERT.
E538	10	20'-3"	X		BODY VERT.
E539	9	13'-2"			WINGWALL BODY HORIZ. FRONT FACE
E540	10	21'-7"	X		WINGWALL BODY VERT.
E541	18	13'-8"	X		WINGWALL TOP VERT.
E442	6	15'-8"			WINGWALL TOP HORIZ.
E443	8	7'-9"			WINGWALL BODY FRONT AND BACK FACE
E744	9	12'-1"			WINGWALL BODY HORIZ. BACK FACE
E545	4	11'-6"	X		WINGWALL TOP VERT.
E446	3	5'-1"			WINGWALL TOP HORIZ.
E447	3	5'-10"			WINGWALL TOP HORIZ.
E548	22	11'-10"	X	X	BODY VERT.

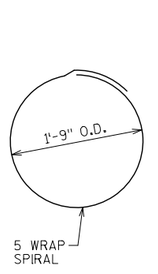
TOTAL WEIGHT= 10,210 LB



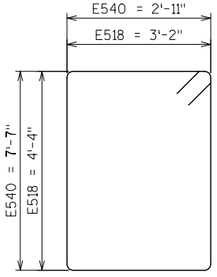
SECTION A-A



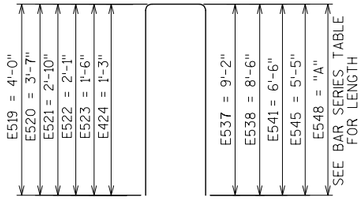
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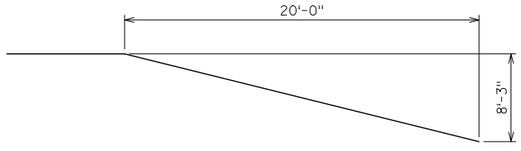
E416



E518, E540



E519, E520, E521, E522, E523, E424, E537, E538, E541, E545, E548



E625, E626, E631, E632

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO CONNECT WITH PIPE UNDERDRAIN OF B-70-411. FOR RODENT SCREEN DETAILS SEE B-70-411 PLANS. AT THE DAYLIGHT END OF PIPE UNDERDRAIN, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- LAP LENGTHS = 2'-4" FOR #4 BARS
  2'-7" FOR #5 BARS
  3'-6" FOR #6 BARS
  5'-9" FOR #8 BARS
- ✳ 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".
- ▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

BAR SERIES TABLE		
MARK	NO. REQ'D	"A" LENGTH
E548	1 SERIES OF 22	3'-9" TO 5'-0"

NOTES

WHEN LAPPING #8 BAR WITH #6 BAR USE MIN. LAP LENGTH OF 3'-6".

FOR LOCATIONS OF SECTION A-A AND SECTION B-B SEE SHEET 11, "EAST ABUTMENT DETAILS 1".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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EAST ABUTMENT DETAILS 2

SHEET 12 OF 37
728

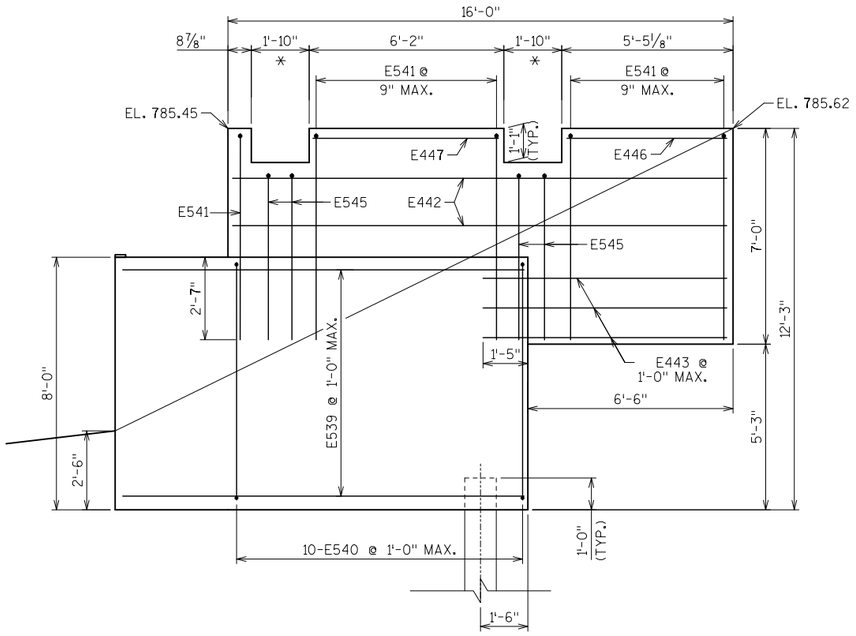
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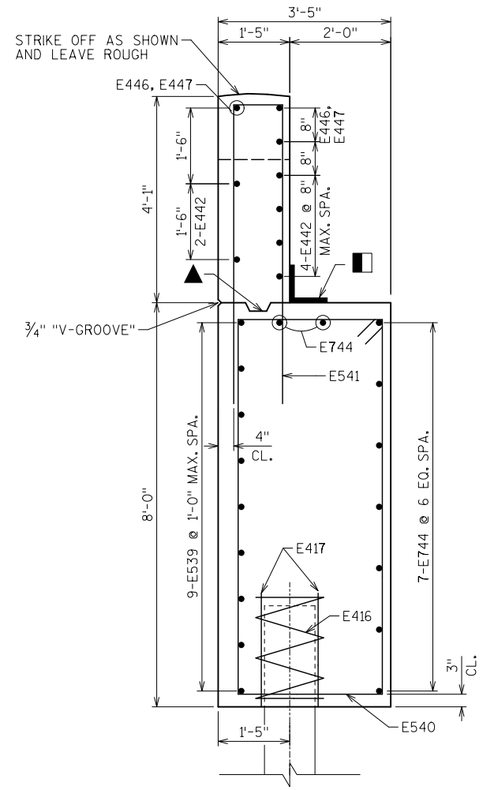
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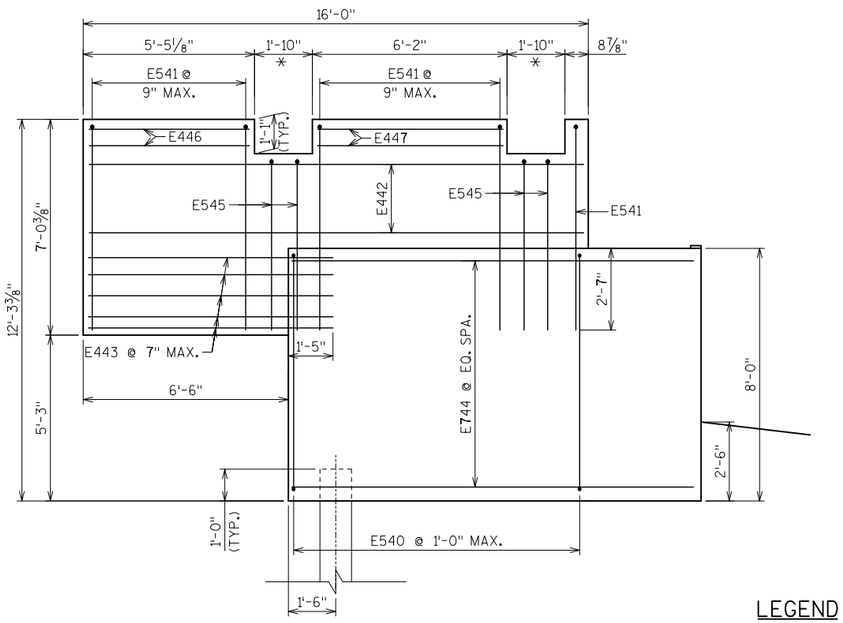
STATE PROJECT NUMBER
1517-75-75



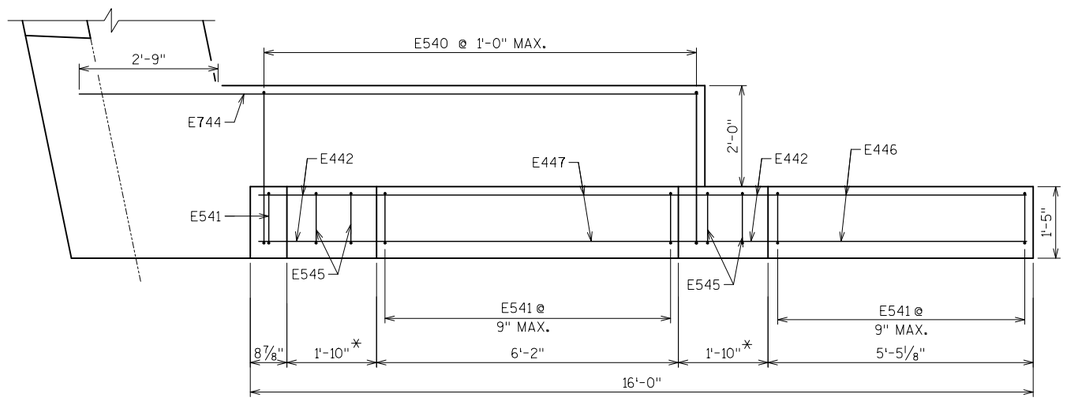
FRONT ELEVATION



SECTION THRU BODY



BACK ELEVATION



PLAN

LEGEND

▲ HORIZONTAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 6".

◧ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

NOTES:

* FOR NOISE BARRIER ANCHOR POST DETAILS, SEE SHEET 34 "NOISE BARRIER POST ANCHORAGE."

FOR BILL OF BARS AND BEND DIAGRAMS, SEE SHEET 12 "EAST ABUTMENT DETAILS 2".

FOR PILE SPLICE DETAIL SEE SHEET 16 "PIER 2".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-70-410

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WINGWALL 2

SHEET 13 OF 37
729

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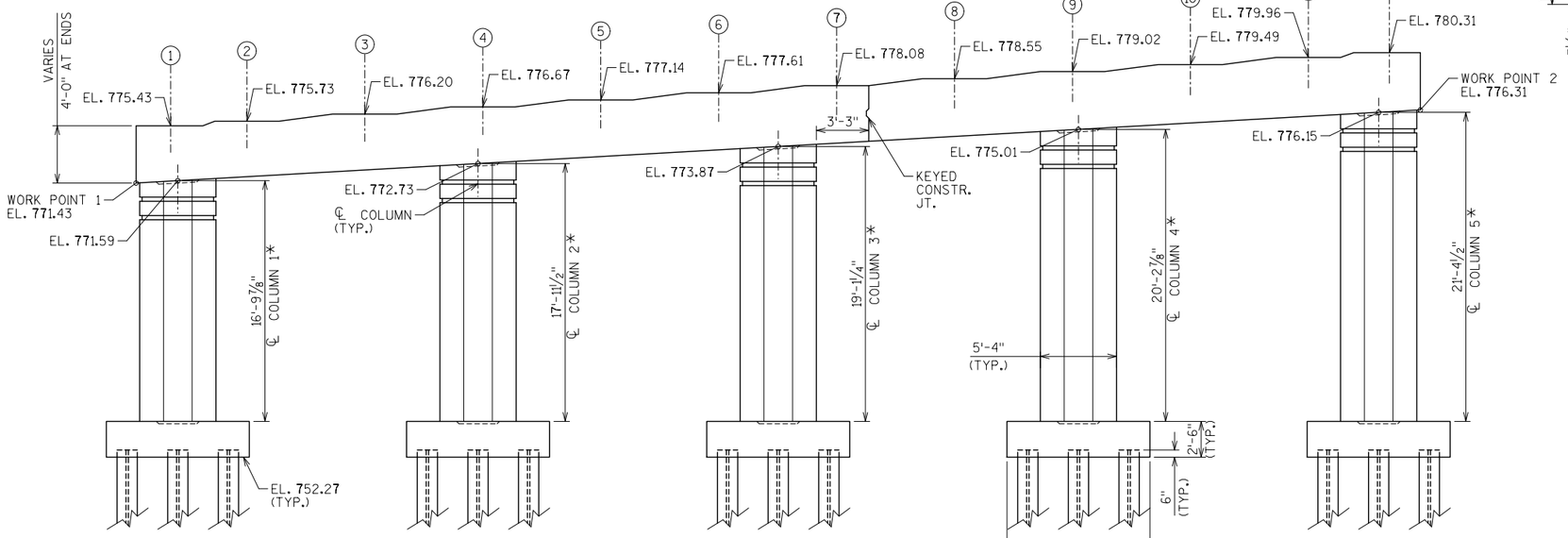
DATE: 5/5/2015
I.D.

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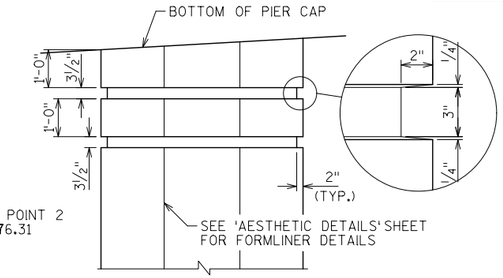
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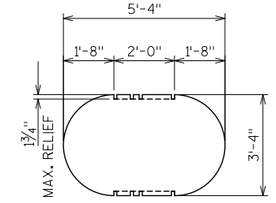


ELEVATION - PIER 1

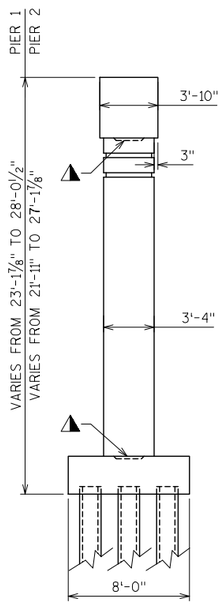
(LOOKING EAST)



TYP. TOP OF COLUMN



TYP. SECTION THRU COLUMN



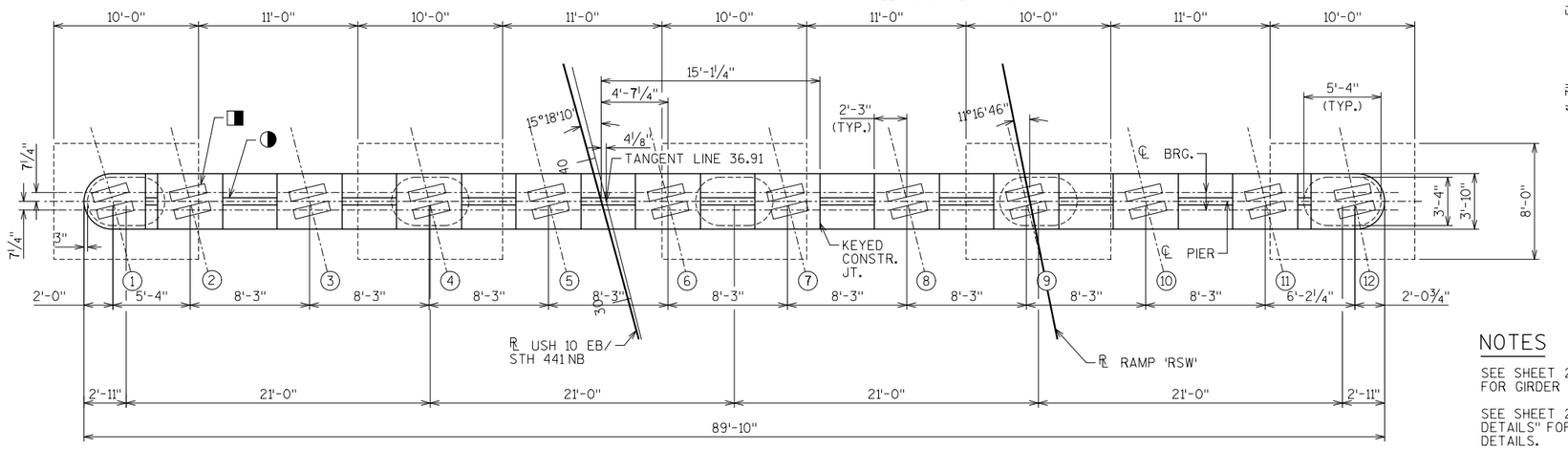
TYP. END VIEW

LEGEND

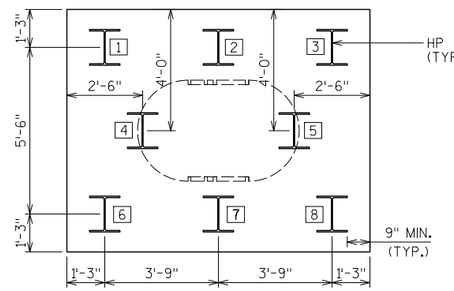
- * SLOPE TOP OF COLUMNS TO MATCH CAP SLOPE
- (#) INDICATES GIRDER NUMBER
- [#] INDICATES PILE NUMBER
- 2'-8" X 1'-8" X 2" CONST. JT. FORMED BY BEVELED KEYWAY
- 2" X 6" BEVELED KEYWAY BETWEEN GIRDERS
- ½" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD (TYP.)

FOUNDATION DATA

SUPPORT PIER 1 ON HP 12X53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 50 FEET.



PLAN - PIER 1



TYP. PILE PLAN

NOTES

SEE SHEET 21 "FRAMING PLAN" FOR GIRDER SKEW ANGLES.

SEE SHEET 22 "SUPERSTRUCTURE DETAILS" FOR PREFORMED FILLER DETAILS.

SEE SHEET 37 FOR AESTHETIC DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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PIER 1

SHEET 14 OF 37
730

DATE: 5/5/2015
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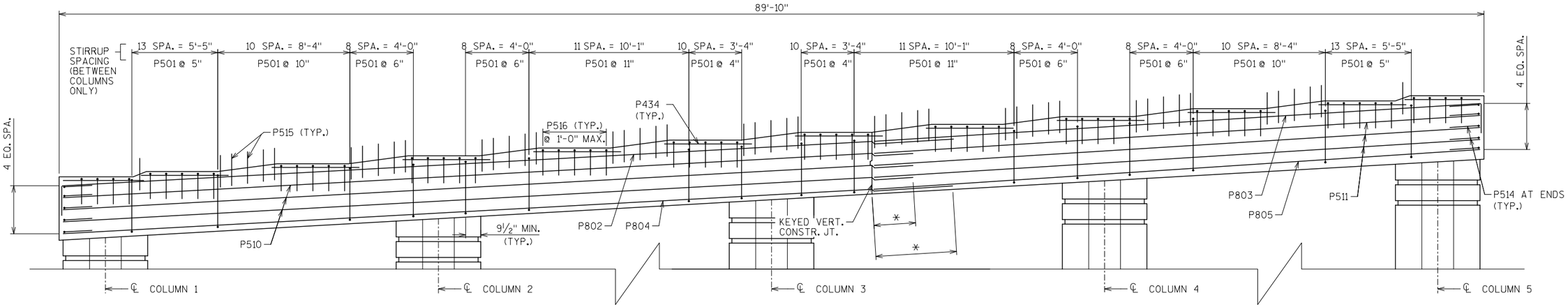
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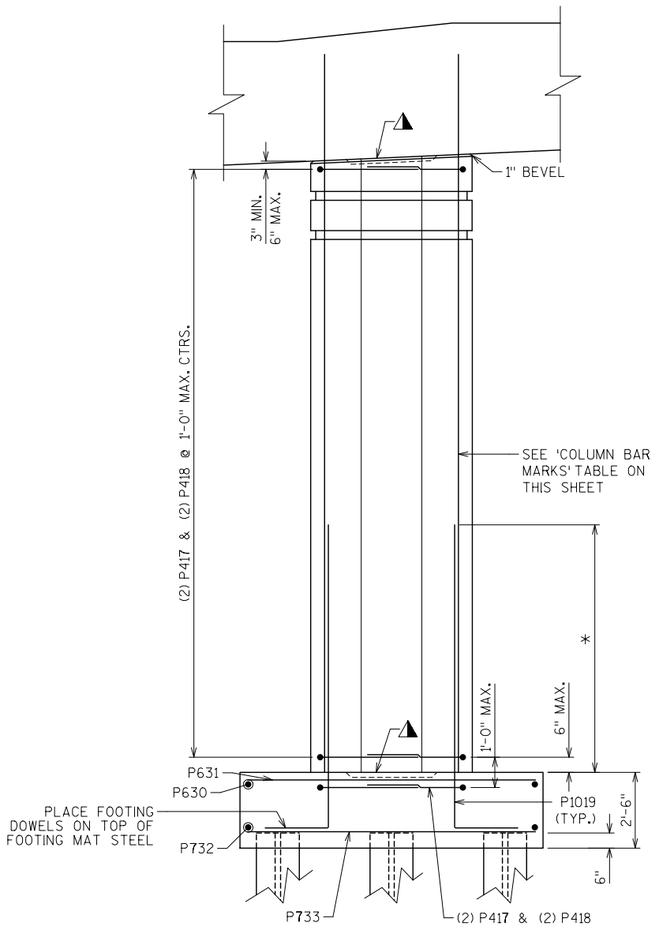
STATE PROJECT NUMBER

1517-75-75

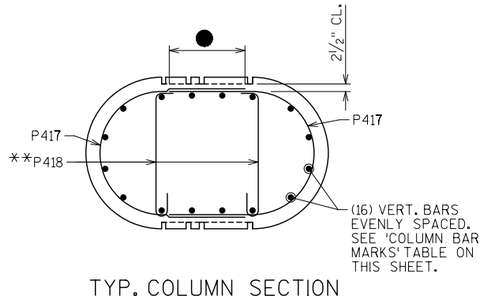


ELEVATION - PIER 1 CAP

(LOOKING EAST)



TYP. COLUMN/FOOTING - ELEVATION



TYP. COLUMN SECTION

PIER #	COLUMN #	VERT. COLUMN BAR
1	1	P1020
1	2	P1021
1	3	P1022
1	4	P1023
1	5	P1024
2	1	P1025
2	2	P1026
2	3	P1027
2	4	P1028
2	5	P1029

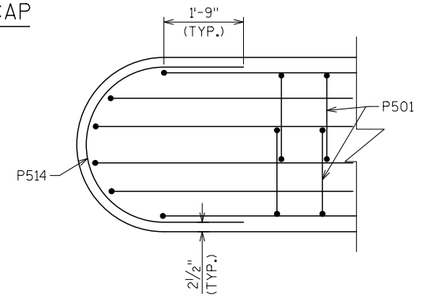
COLUMN BAR MARKS

LEGEND

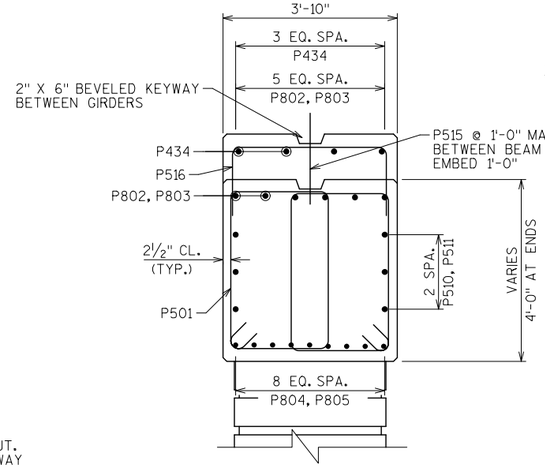
- ◭ 2'-8" X 1'-8" X 2" CONST. JT. FORMED BY BEVELED KEYWAY
- ● SEE SHEET 37 FOR AESTHETIC DETAILS.
- ** ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES
- * 1'-8" MIN. FOR #4 BARS
  2'-7" MIN. FOR #5 BARS
  5'-1" MIN. FOR #8 BARS (P804, P805)
  5'-9" MIN. FOR #8 BARS (P802, P803)
  8'-2" MIN. FOR #10 BARS

NOTES

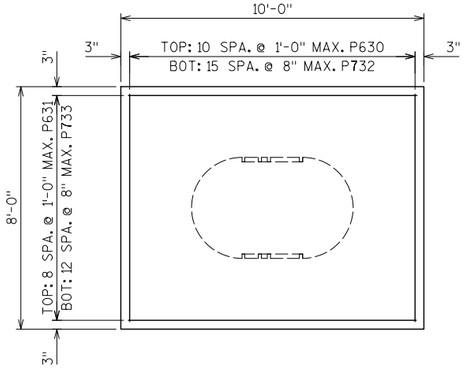
SEE "PIER 2 DETAILS" SHEET FOR BILL OF BARS.



TYP. PIER CAP END PLAN VIEW



PIER 1 CAP SECTION



TYP. FOOTING PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY: MRL | PLANS CK'D.: NPP

PIER 1 DETAILS

SHEET 15 OF 37
731

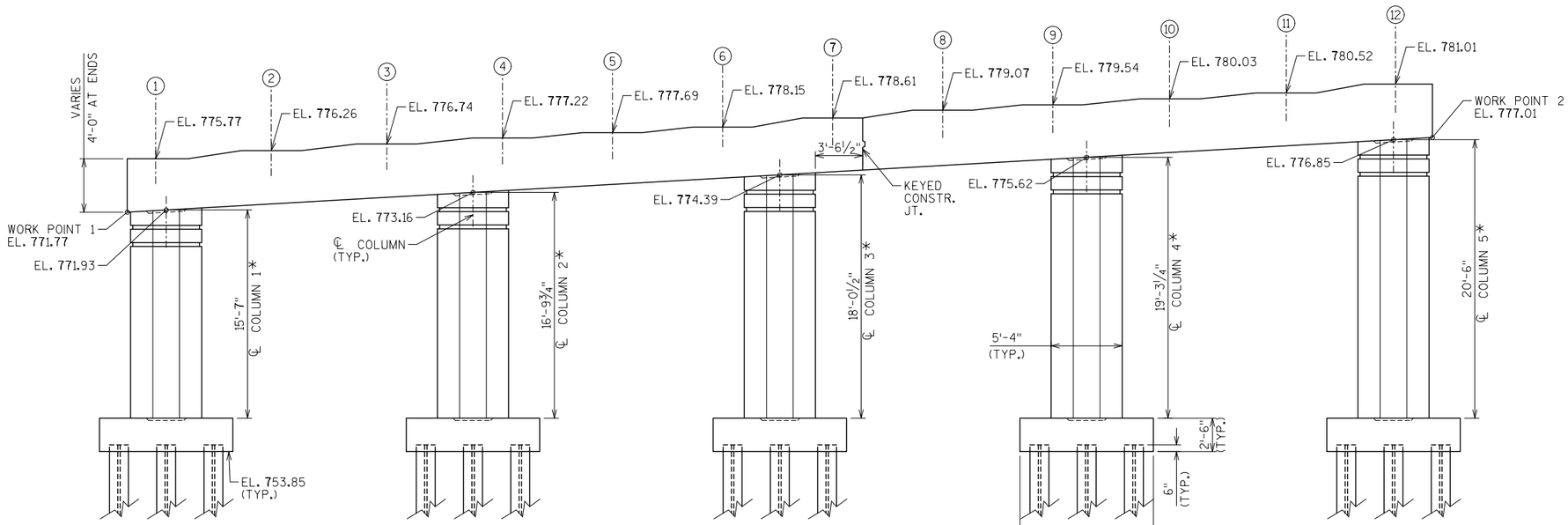
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I.D.

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8

STATE PROJECT NUMBER
1517-75-75



ELEVATION - PIER 2

(LOOKING EAST)

FOUNDATION DATA

SUPPORT PIER 2 ON HP 12X53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 50 FEET.

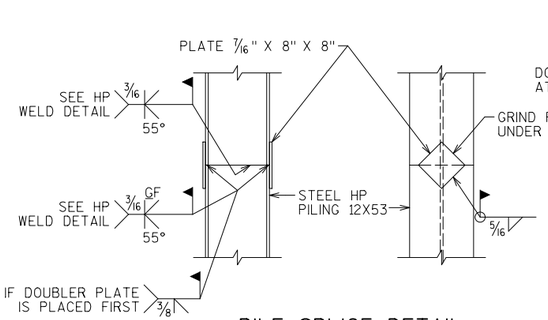
LEGEND

* SLOPE TOP OF COLUMNS TO MATCH CAP SLOPE

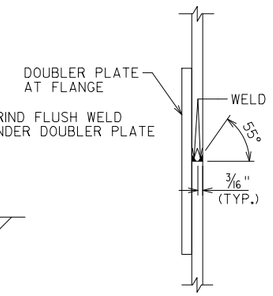
(#) INDICATES GIRDER NUMBER

2" X 6" BEVELED KEYWAY BETWEEN GIRDERS

½" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD (TYP.)

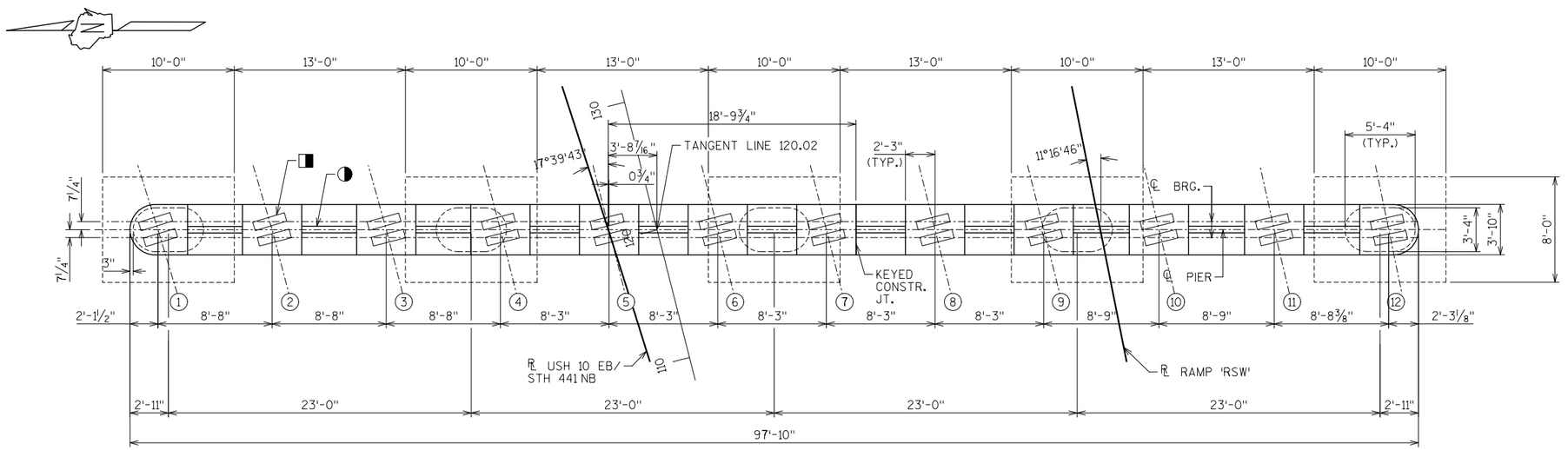


PILE SPLICE DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR



PLAN - PIER 2

NOTES

SEE SHEET 14 "PIER 1" FOR TYPICAL FOOTING PILE PLAN.

SEE SHEET 21 "FRAMING PLAN" FOR GIRDER SKEW ANGLES.

SEE SHEET 22 "SUPERSTRUCTURE DETAILS" FOR PREFORMED FILLER DETAILS.

SEE SHEET 37 FOR AESTHETIC DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-70-410

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PIER 2

SHEET 16 OF 37
732

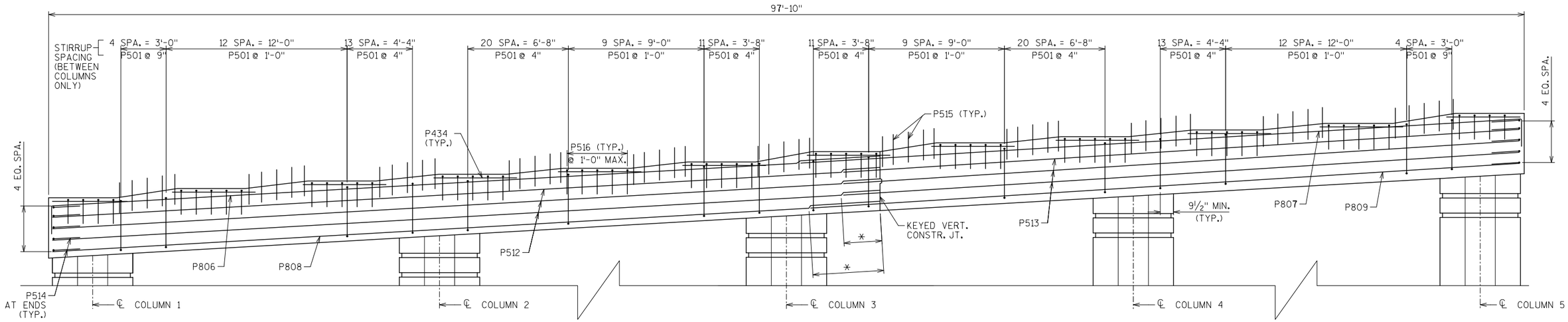
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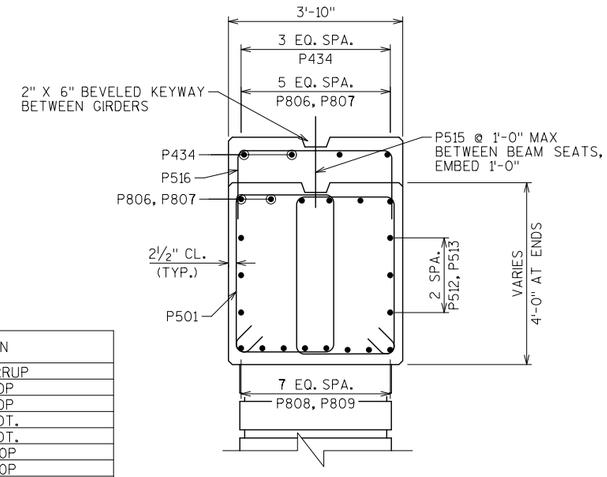
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STATE PROJECT NUMBER
1517-75-75

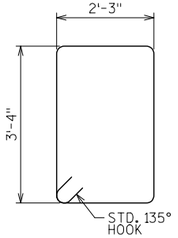


ELEVATION - PIER 2 CAP

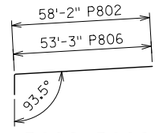
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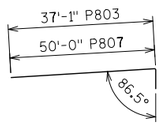
PIER 2 CAP SECTION



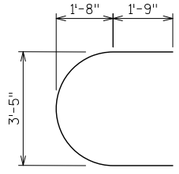
P501



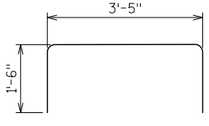
P802, P806



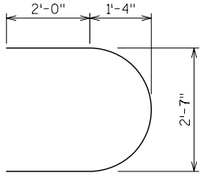
P803, P807



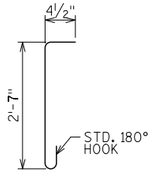
P514



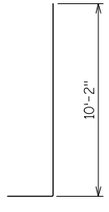
P516



P417



P418



P1019

BAR DETAILS

BILL OF BARS

BAR MARK	NO. REQ'D	LENGTH	COAT	BENT	LOCATION
P501	532	11'-8"	X	X	PIER CAP VERT. STIRRUP
P802	6	59'-4"	X	X	PIER 1 CAP HORIZ. TOP
P803	6	38'-3"	X	X	PIER 1 CAP HORIZ. TOP
P804	9	57'-6"	X		PIER 1 CAP HORIZ. BOT.
P805	9	37'-1"	X		PIER 1 CAP HORIZ. BOT.
P806	6	54'-5"	X	X	PIER 2 CAP HORIZ. TOP
P807	6	51'-2"	X	X	PIER 2 CAP HORIZ. TOP
P808	8	53'-3"	X		PIER 2 CAP HORIZ. BOT.
P809	8	49'-4"	X		PIER 2 CAP HORIZ. BOT.
P510	6	51'-6"	X		PIER 1 CAP HORIZ. SIDE
P511	6	37'-1"	X		PIER 1 CAP HORIZ. SIDE
P512	6	53'-2"	X		PIER 2 CAP HORIZ. SIDE
P513	6	43'-5"	X		PIER 2 CAP HORIZ. SIDE
P514	20	8'-11"	X	X	PIER CAP HORIZ. ENDS
P515	102	2'-0"	X		PIER CAP VERT. DOWEL
P516	116	6'-2"	X	X	PIER CAP HORIZ. TOP
P417	422	8'-0"	X	X	PIER COLUMN HORIZ. STIRRUP
P418	422	3'-5"	X	X	PIER COLUMN HORIZ. TIE
P1019	160	11'-8"	X	X	FOOTING VERT. DOWEL
P1020	16	20'-2"	X		PIER 1 COLUMN 1 VERT.
P1021	16	21'-4"	X		PIER 1 COLUMN 2 VERT.
P1022	16	22'-5"	X		PIER 1 COLUMN 3 VERT.
P1023	16	23'-7"	X		PIER 1 COLUMN 4 VERT.
P1024	16	24'-9"	X		PIER 1 COLUMN 5 VERT.
P1025	16	18'-11"	X		PIER 2 COLUMN 1 VERT.
P1026	16	20'-2"	X		PIER 2 COLUMN 2 VERT.
P1027	16	21'-5"	X		PIER 2 COLUMN 3 VERT.
P1028	16	22'-7"	X		PIER 2 COLUMN 4 VERT.
P1029	16	23'-10"	X		PIER 2 COLUMN 5 VERT.
P630	110	7'-6"			FOOTING HORIZ. TOP
P631	90	9'-6"			FOOTING HORIZ. TOP
P732	160	7'-6"			FOOTING HORIZ. BOT.
P733	130	9'-6"			FOOTING HORIZ. BOT.
P434	96	5'-6"	X		PIER CAP HORIZ. TOP

TOTAL WEIGHT= 7,510 LB UNCOATED BARS
TOTAL WEIGHT= 43,190 LB COATED BARS

LEGEND

* 1'-8" MIN. FOR #4 BARS
2'-7" MIN. FOR #5 BARS
5'-1" MIN. FOR #8 BARS (P808, P809)
5'-9" MIN. FOR #8 BARS (P806, P807)
8'-2" MIN. FOR #10 BARS

NOTES

SEE "PIER 1 DETAILS" SHEET FOR COLUMN AND FOOTING DETAILS.

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STRUCTURE B-70-410

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PIER 2 DETAILS

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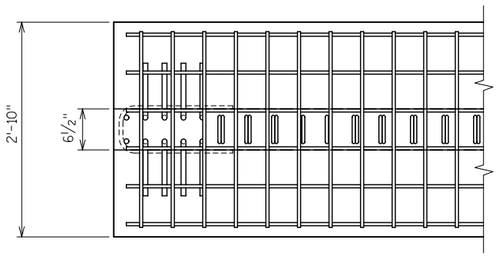
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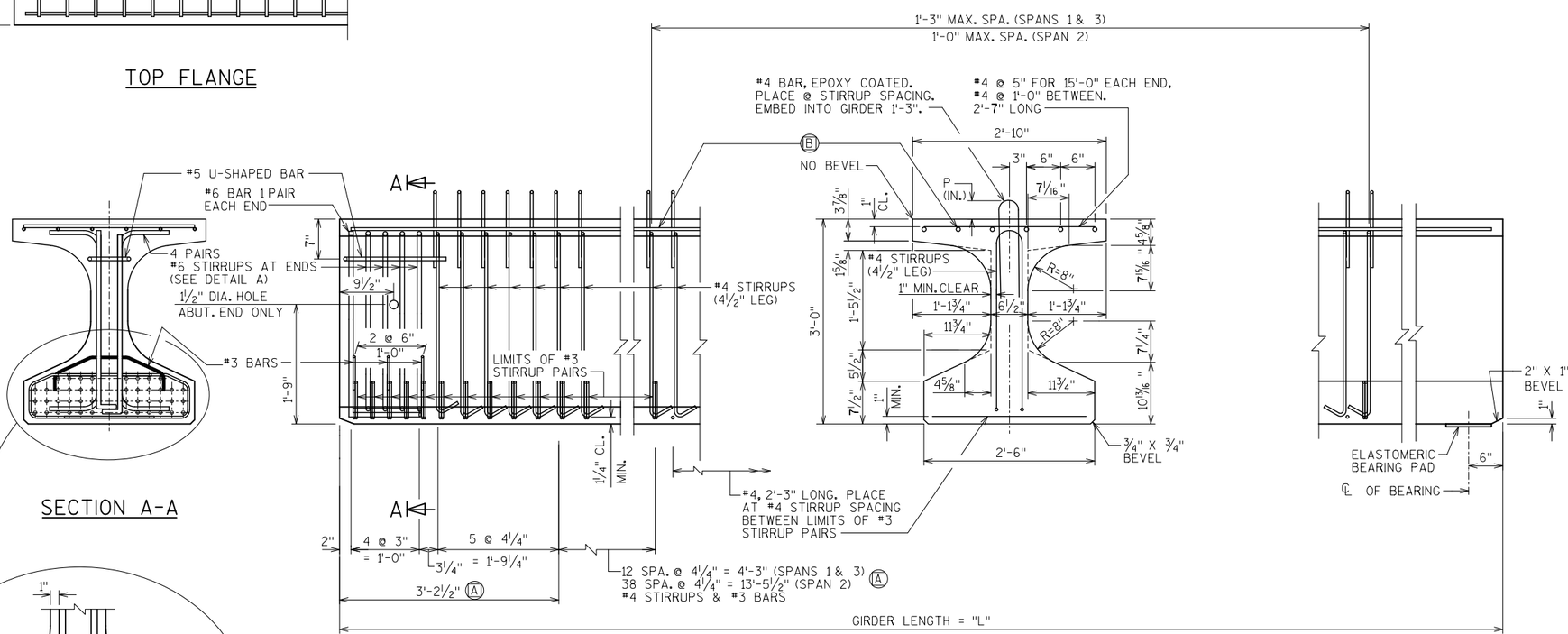
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TOP FLANGE



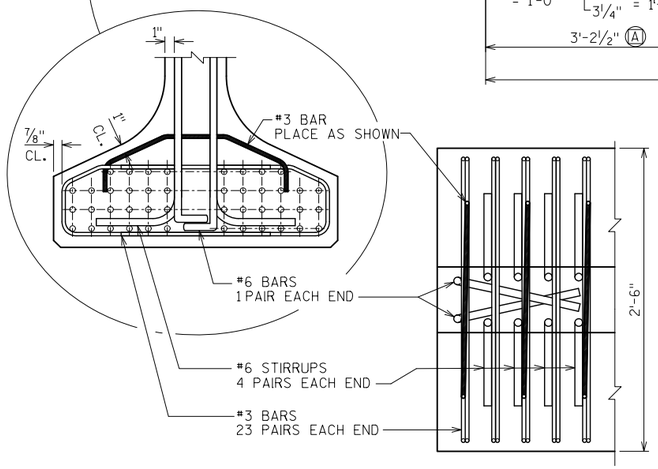
SECTION A-A

SIDE VIEW & TYPICAL SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

(B) 6 #6 BARS, FULL LENGTH, MIN. LAP = 2'-11"

NOTE: FOR GIRDER DATA AND STRAND PATTERN DETAILS, SEE SHEET "36W" PRESTRESSED GIRDER DETAILS"



DETAIL A
BOTTOM FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE 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 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.

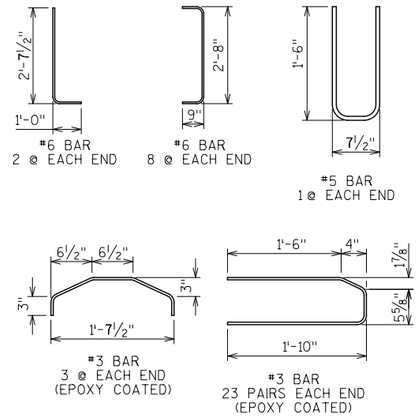
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

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.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.



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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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36W" PRESTRESSED GIRDER

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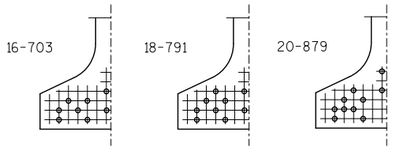
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GIRDER DATA

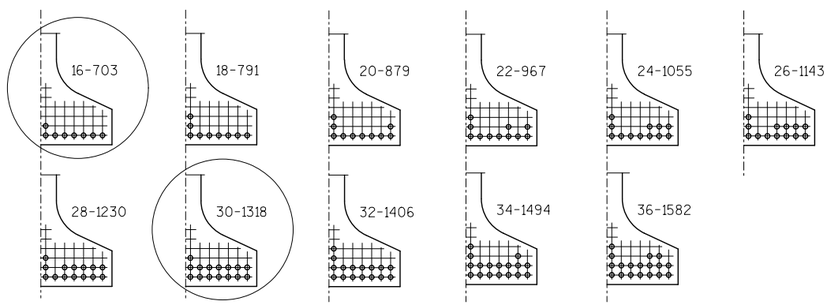
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. 0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	F'C (PSI)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN)	TOTAL NO. STRANDS	DRAPED NO. STRANDS	DRAPED *F'CI (PSI)	DRAPED "A"	DRAPED "B" MIN	DRAPED "B" MAX	DRAPED "C"	UNDRAPED NO. STRANDS	UNDRAPED *F'CI (PSI)
1	1	37'-3 1/8"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"	8000	7"	7"	7"	0.6	16	4	6800	23"	8"	11"	3"	--	--
	2	37'-3 1/8"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
	3	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	4	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	5	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	6	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	7	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	8	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	9	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	10	37'-3 1/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	11	37'-3 1/8"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
	12	36'-10 3/4"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
2	1	83'-10 3/8"	7/16"	13/16"	1 3/16"	1 3/8"	1 7/16"	1 3/8"	1 3/16"	7/8"	7/16"	8000	7"	7"	7"	0.6	30	6	6800	32"	11"	14"	4"	--	--
	2	82'-11 5/8"	7/16"	7/8"	1 3/16"	1 7/16"	1 1/2"	1 7/16"	1 1/4"	7/8"	7/16"														
	3	82'-10 3/8"	1/2"	15/16"	1 5/16"	1 9/16"	1 5/8"	1 9/16"	1 5/16"	15/16"	1/2"														
	4	82'-9 1/8"	1/2"	15/16"	1 5/16"	1 9/16"	1 5/8"	1 9/16"	1 5/16"	15/16"	1/2"														
	5	82'-9 1/8"	1/2"	15/16"	1 5/16"	1 1/2"	1 5/8"	1 1/2"	1 5/16"	15/16"	1/2"														
	6	82'-9 1/8"	1/2"	15/16"	1 5/16"	1 1/2"	1 5/8"	1 1/2"	1 5/16"	15/16"	1/2"														
	7	82'-9 1/8"	1/2"	15/16"	1 5/16"	1 1/2"	1 5/8"	1 1/2"	1 5/16"	15/16"	1/2"														
	8	82'-9 1/8"	1/2"	15/16"	1 5/16"	1 1/2"	1 5/8"	1 1/2"	1 5/16"	15/16"	1/2"														
	9	82'-9 1/8"	1/2"	15/16"	1 5/16"	1 9/16"	1 5/8"	1 9/16"	1 5/16"	15/16"	1/2"														
	10	82'-9 3/4"	1/2"	15/16"	1 5/16"	1 9/16"	1 5/8"	1 9/16"	1 5/16"	15/16"	1/2"														
	11	82'-6 1/4"	7/16"	7/8"	1 1/4"	1 7/16"	1 1/2"	1 7/16"	1 1/4"	7/8"	7/16"														
	12	81'-11 7/8"	3/8"	3/4"	1"	1 3/16"	1 1/4"	1 3/16"	1"	3/4"	3/8"														
3	1	37'-2 7/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	8000	7"	7"	7"	0.6	16	4	6800	23"	8"	11"	3"	--	--
	2	37'-0 3/4"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	3	36'-10 3/4"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	4	36'-8 7/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	5	36'-7 3/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	6	36'-7 3/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	7	36'-7 3/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	8	36'-7 3/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	9	36'-7 3/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	10	36'-5 7/8"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	11	36'-4 1/2"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0"														
	12	36'-3 1/4"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														

*MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.



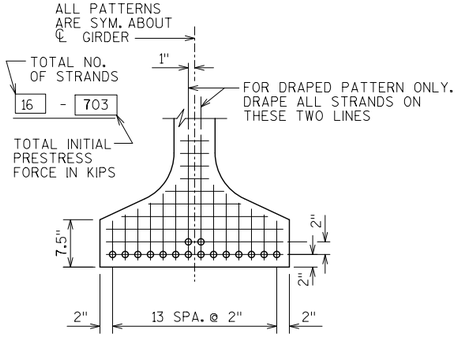
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"ϕ STRANDS

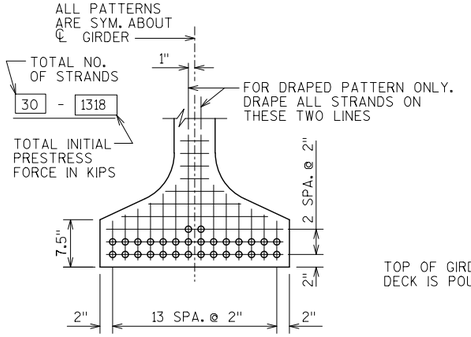


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

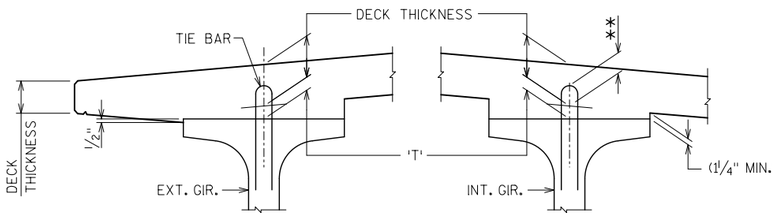
0.6"ϕ STRANDS



STRAND PATTERN - SPANS 1 & 3



STRAND PATTERN - SPAN 2



DECK HAUNCH DETAIL

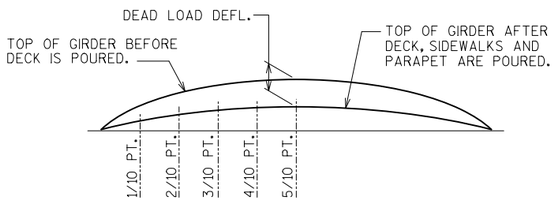
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

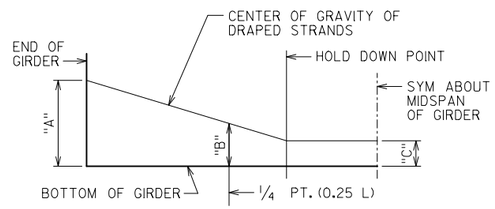
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

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 3½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

◑ 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	½"
2	3⅛"
3	½"

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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STRUCTURE B-70-410

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36W" PRESTRESSED GIRDER DETAILS

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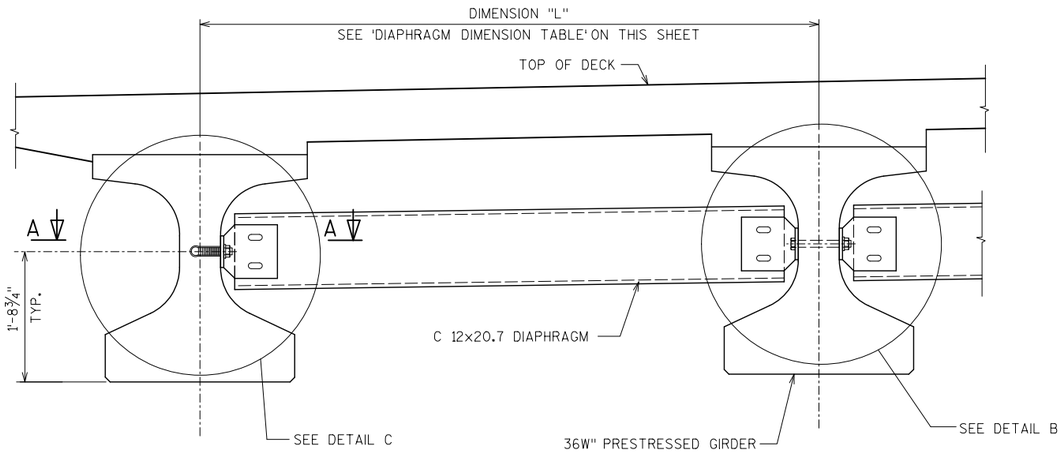
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PART TRANSVERSE SECTION AT DIAPHRAGM

DIAPHRAGM DIMENSION TABLE

LOCATION		DIMENSION "L"	NO. OF DIAPH. REQ'D
SPAN 1	G1-2	5'-2 1/8"	1
	G2-11	8'-0"	9
	G11-12	5'-0 5/8"	1
SPAN 2 (LINE 1)	G1-2	6'-2 1/2"	1
	G2-3	8'-1 1/2"	1
	G3-4	8'-1 5/8"	1
	G4-9	8'-0"	5
	G9-10	8'-2"	1
	G10-11	8'-2 1/4"	1
	G11-12	6'-3 7/8"	1
SPAN 2 (LINE 2)	G1-2	7'-3 1/4"	1
	G2-3	8'-3 1/8"	1
	G3-4	8'-3 1/4"	1
	G4-9	8'-0"	5
	G9-10	8'-4"	1
	G10-11	8'-4 1/8"	1
	G11-12	7'-5 1/4"	1
SPAN 3	G1-2	8'-6 3/4"	1
	G2-3	8'-7 1/4"	1
	G3-4	8'-7 3/4"	1
	G4-5	8'-2 3/4"	1
	G5-9	8'-0"	4
	G9-10	8'-7 3/8"	1
	G10-11	8'-7 5/8"	1
	G11-12	8'-7 3/4"	1

NOTES

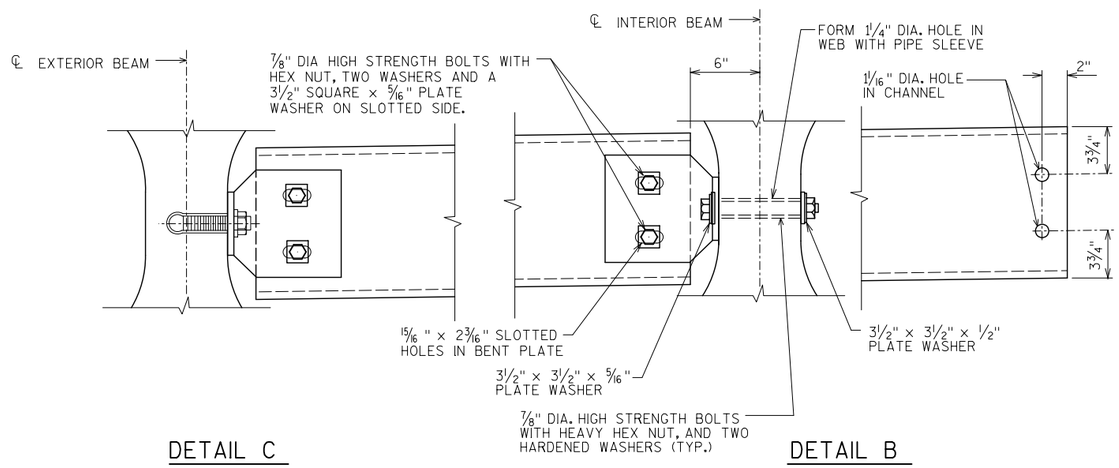
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-70-410", EACH.

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.

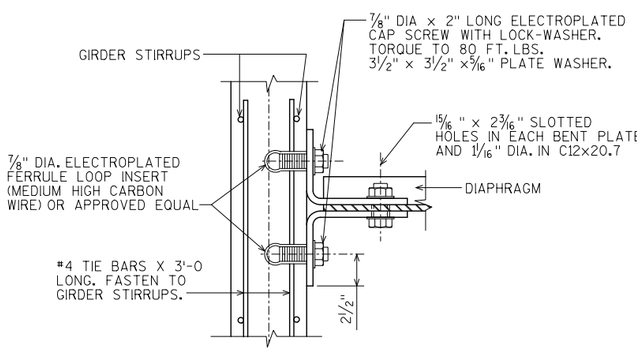
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

FOR GIRDERS NOT PARALLEL TO EACH OTHER, MAKE STEEL DIAPHRAGM PERPENDICULAR TO THE GIRDER TO THE SOUTH. SEE "FRAMING PLAN" SHEET FOR MORE DETAILS.



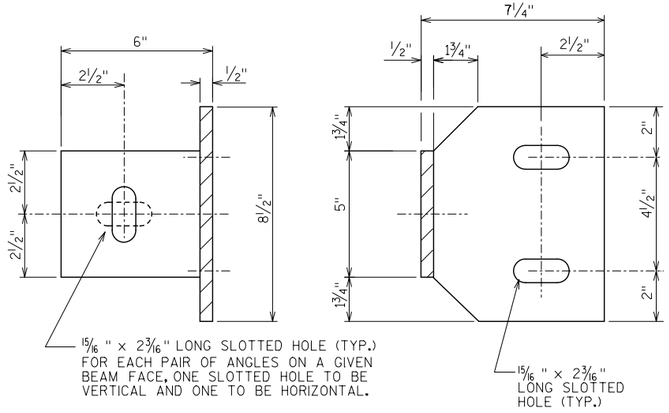
DETAIL C

DETAIL B



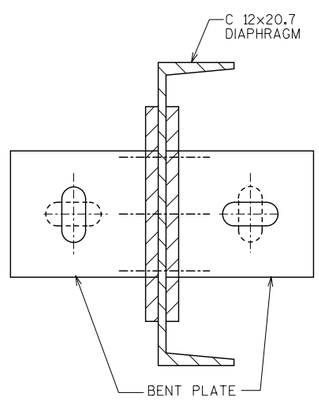
SECTION A-A

(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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STEEL DIAPHRAGM

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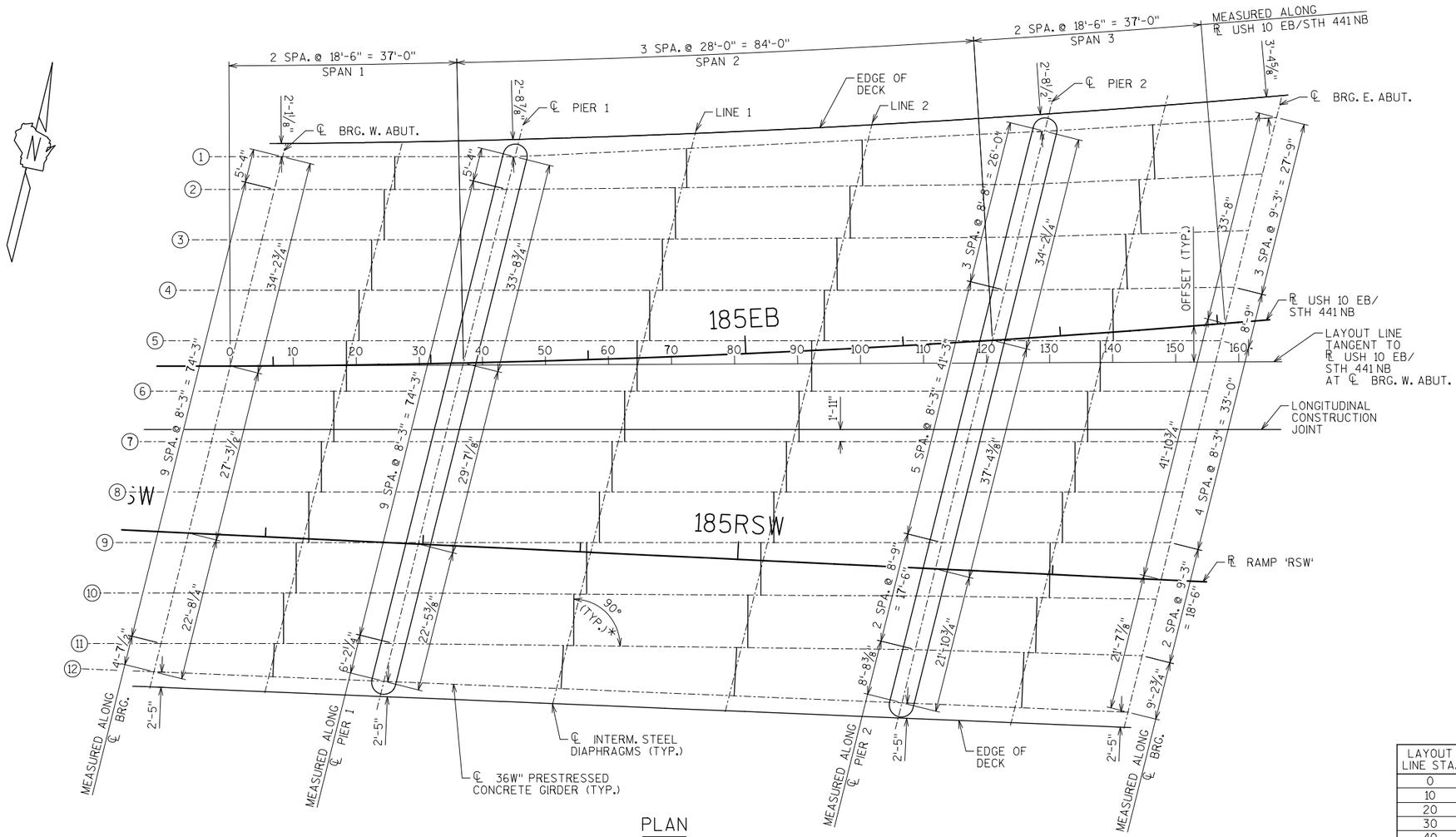
DATE: 5/5/2015

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STATE PROJECT NUMBER
1517-75-75

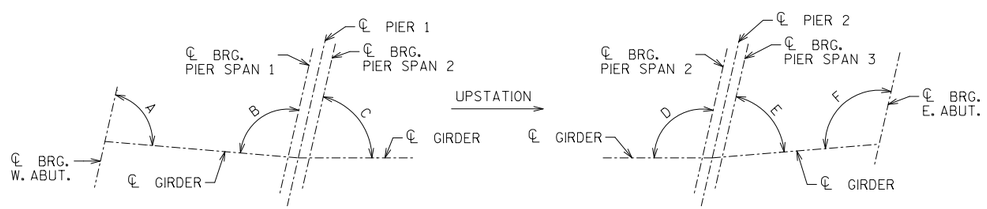


PLAN

* WHEN GIRDERS ARE NOT PARALLEL, MAKE INTERM. STEEL DIAPHRAGM PERPENDICULAR TO THE GIRDER TO THE SOUTH.

LAYOUT LINE TABLE

LAYOUT LINE STA.	OFFSET TO LT EDGE OF DECK	OFFSET TO RL 'EB'	OFFSET TO RT EDGE OF DECK
0	N/A	0.00'	51.42'
10	35.28'	0.02'	51.88'
20	35.35'	0.10'	52.33'
30	35.47'	0.22'	52.79'
40	35.65'	0.39'	53.24'
50	35.87'	0.61'	53.70'
60	36.15'	0.88'	54.16'
70	36.47'	1.20'	54.61'
80	36.85'	1.57'	55.07'
90	37.27'	1.99'	55.52'
100	37.75'	2.45'	55.98'
110	38.27'	2.97'	56.44'
120	38.85'	3.53'	56.89'
130	39.47'	4.15'	57.35'
140	40.14'	4.81'	57.80'
150	40.87'	5.52'	N/A
160	41.65'	6.28'	N/A



GIRDER SKEW ANGLES TABLE

GIRDER NUMBER	W. ABUT.	PIER 1		PIER 2		E. ABUT.
		SPAN 1	SPAN 2	SPAN 2	SPAN 3	
	A	B	C	D	E	F
1	75.97°	104.03°	73.22°	106.78°	72.58°	107.43°
2	75.97°	104.03°	75.42°	104.58°	73.45°	106.55°
3	75.97°	104.03°	75.69°	104.30°	74.32°	105.68°
4	75.97°	104.03°	75.97°	104.03°	75.21°	104.79°
5-9	75.97°	104.03°	75.97°	104.03°	75.97°	104.03°
10	75.97°	104.03°	76.31°	103.69°	76.74°	103.27°
11	75.97°	104.03°	76.65°	103.35°	77.52°	102.48°
12	78.35°	101.65°	78.35°	101.65°	78.35°	101.65°

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY: MRL | PLANS CK'D.: NPP

FRAMING PLAN

SHEET 21 OF 37
737

DATE: 5/5/2015
I.D.

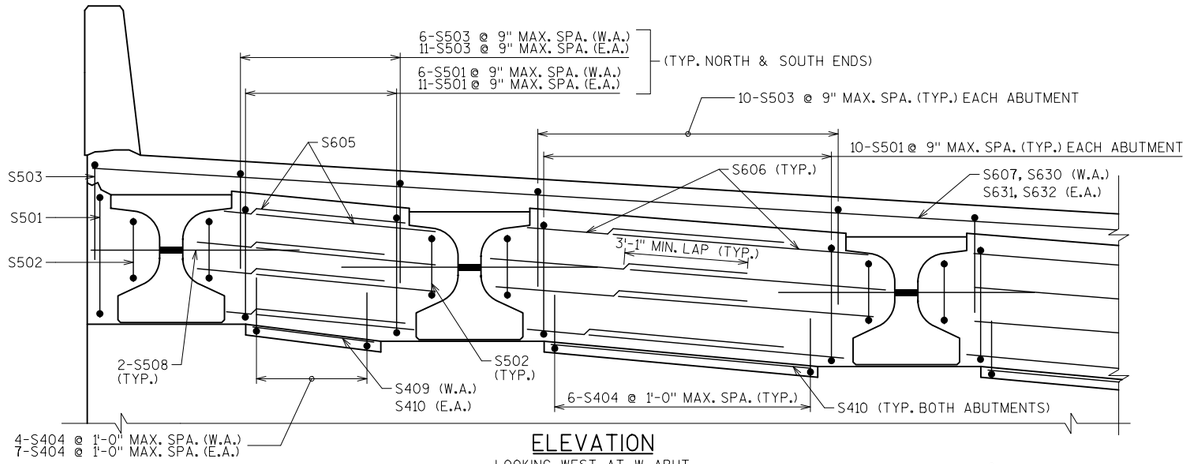
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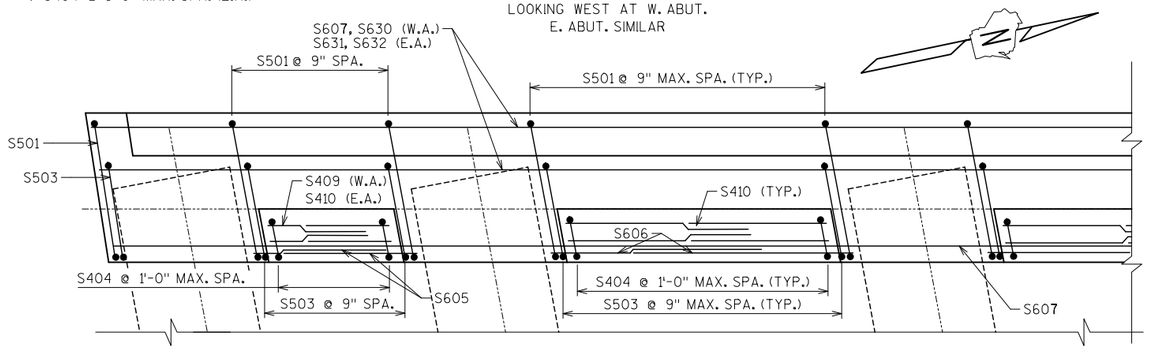
STATE PROJECT NUMBER

1517-75-75



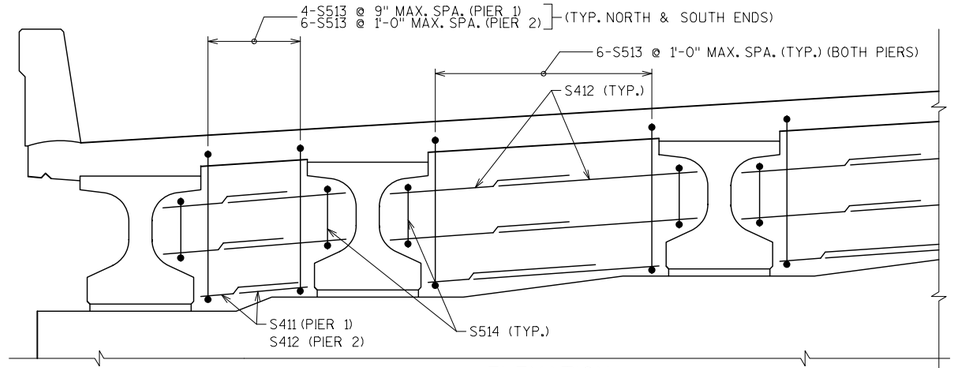
ELEVATION

LOOKING WEST AT W. ABUT.
E. ABUT. SIMILAR



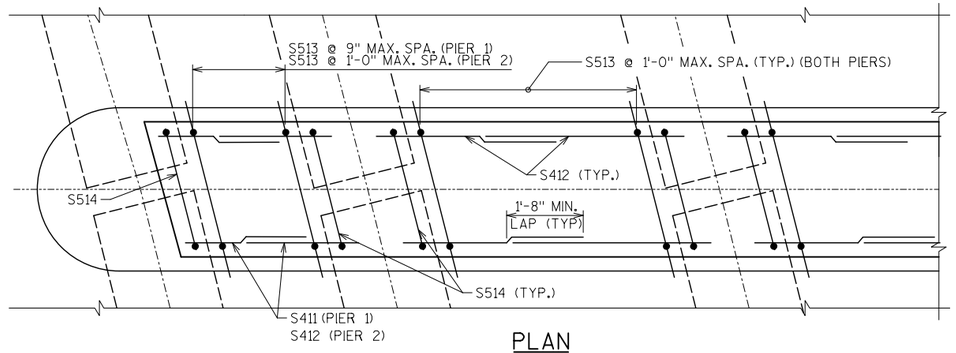
PLAN

ABUTMENT DIAPHRAGM



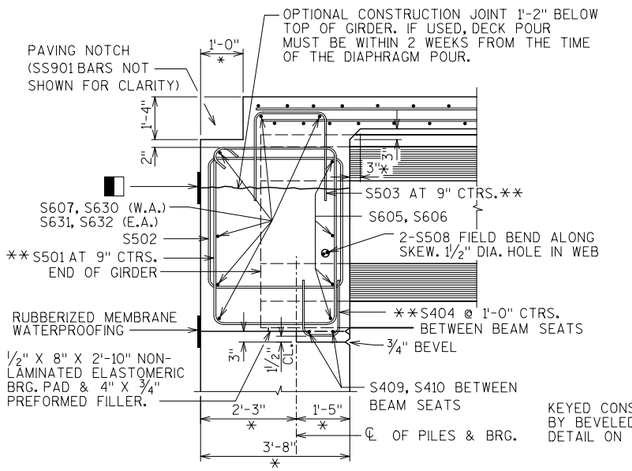
ELEVATION

LOOKING EAST

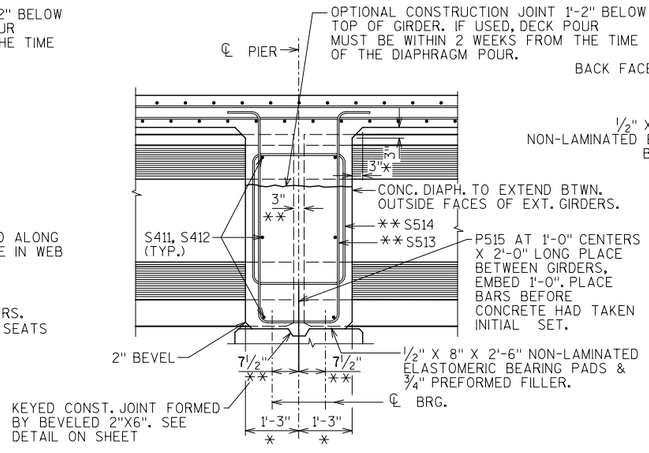


PLAN

PIER DIAPHRAGM

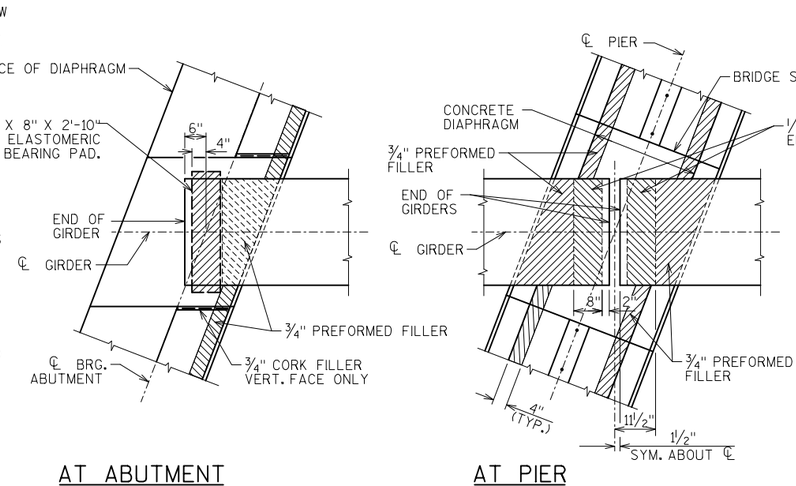


AT ABUTMENT DIAPHRAGM



AT PIER DIAPHRAGM

PART LONGIT. SECTION



AT ABUTMENT

AT PIER

BEARING PAD DETAIL

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

RUBBERIZED MEMBRANE WATERPROOFING IF CONST. JOINT IS USED (COST INCIDENTAL TO BID ITEM "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY	JDL	PLANS CK'D.	MRL

SUPERSTRUCTURE DETAILS

SHEET 22 OF 37
738

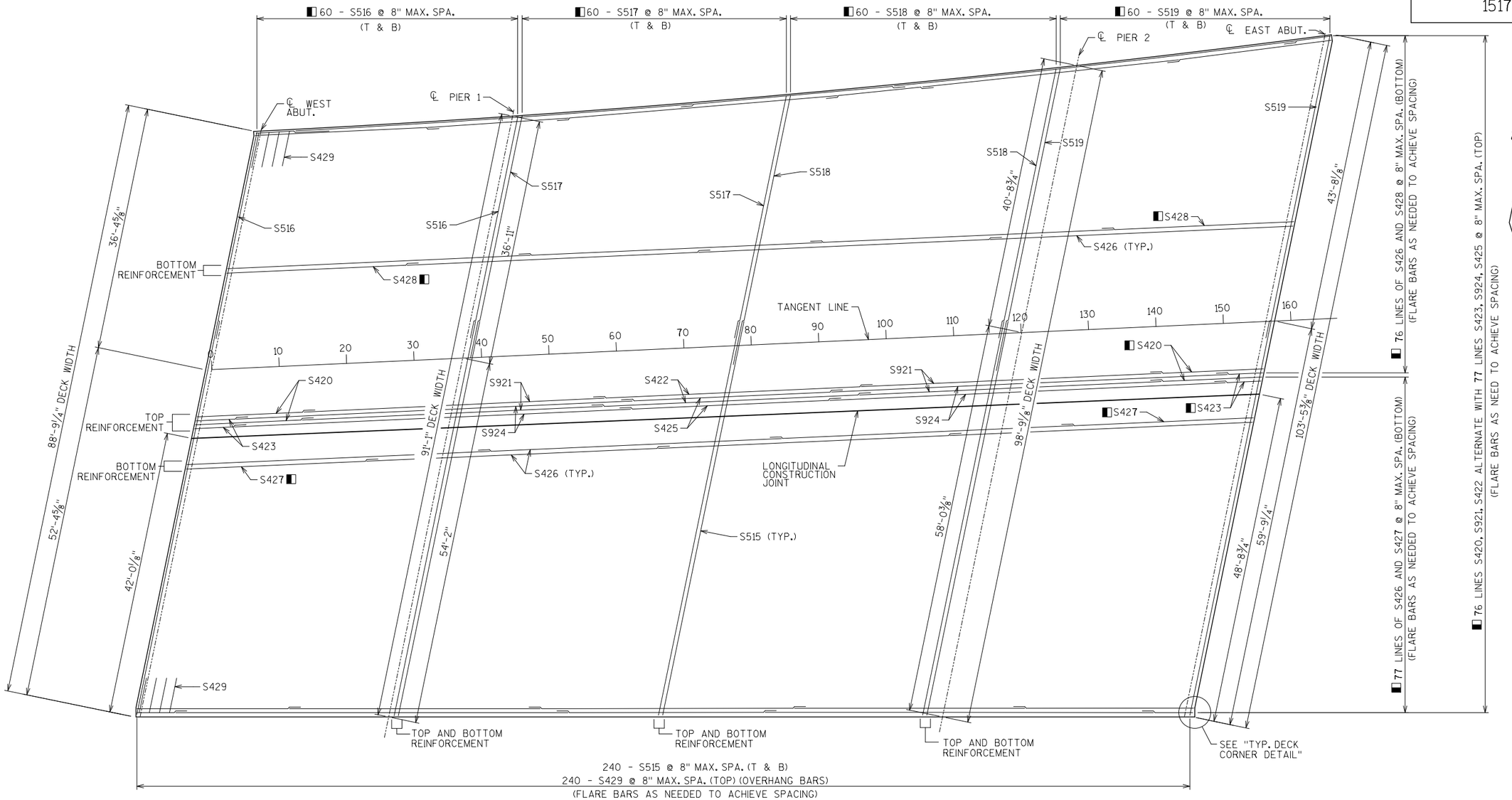
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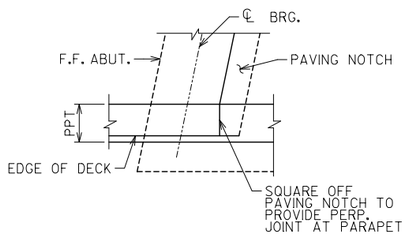
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DATE: 5/5/2015
I.D.

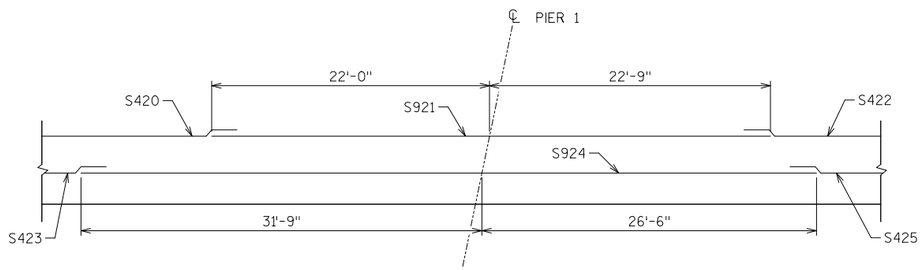
STATE PROJECT NUMBER
1517-75-75



PLAN



TYP. DECK CORNER DETAIL



CONTINUITY REINFORCEMENT PLAN DETAIL

(PIER 1 SHOWN, PIER 2 OPPOSITE)

NOTES

SEE SHEET 24 "SUPERSTRUCTURE DETAILS 2" FOR BEND DIAGRAM AND BILL OF BARS.

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.

THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BE CONTIUOUS BAR CHAIRS IN THE TRANSVERSE DIRECTION ON 4'-0" CENTERS.

ALL DECK REINFORCING SHALL HAVE LAP LENGTHS OF:
NO. 4 BARS = 1'-8"
NO. 5 BARS = 2'-7"
UNLESS NOTED OTHERWISE.

USE LAP LENGTH OF 1'-8" WHEN LAPPING NO. 4 BAR WITH NO. 9 BAR.

ALTERNATE LAPS IN ALL BAR LINES.

LEGEND

BAR LENGTH IS CONSTANT AND LAP LENGTH WILL INCREASE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY JDL | PLANS CK'D. MRL

SUPERSTRUCTURE DETAILS 1

SHEET 23 OF 37
739

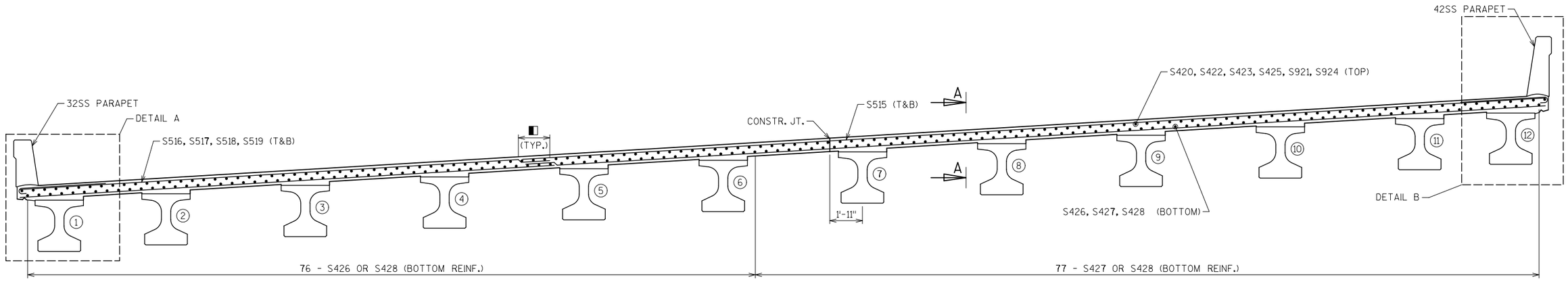
DATE: 5/5/2015
I.D.

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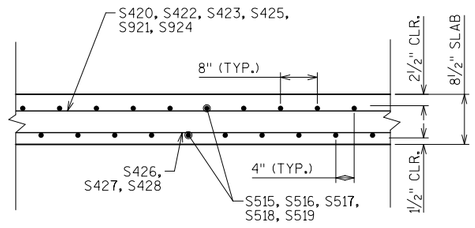
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STATE PROJECT NUMBER
1517-75-75

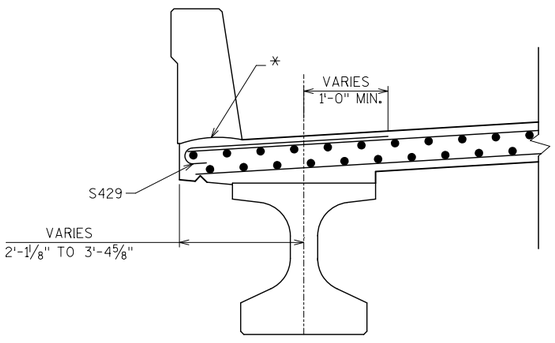


SECTION THRU DECK

(LOOKING EAST, UPSTATION)

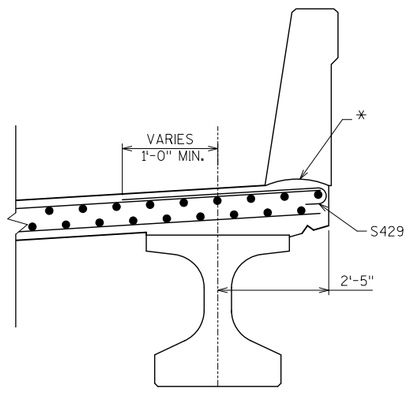


SECTION A-A



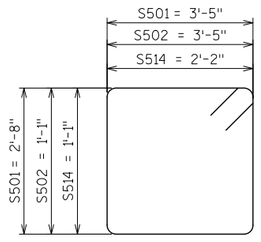
DETAIL A

(PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY)

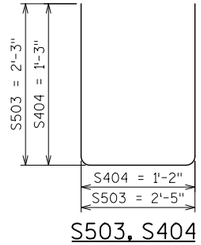


DETAIL B

(PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY)



S501, S502, S514



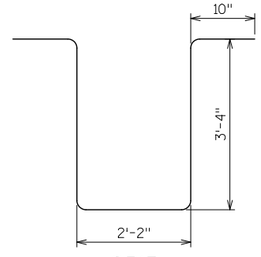
S503, S404

BILL OF BARS

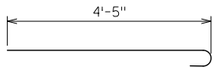
ALL BARS SHALL BE EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
S501	218	12'-1"	X	ABUT. DIAPHRAGM VERT.
S502	48	9'-7"	X	ABUT. DIAPHRAGM VERT.
S503	218	6'-8"	X	ABUT. DIAPHRAGM VERT.
S404	130	3'-6"	X	ABUT. DIAPHRAGM VERT.
S605	16	4'-0"		ABUT. DIAPHRAGM HORIZ.
S606	160	5'-6"		ABUT. DIAPHRAGM HORIZ.
S607	6	41'-10"		WEST ABUT. DIAPHRAGM HORIZ. (SOUTH)
S508	48	6'-0"		ABUT. DIAPHRAGM HORIZ.
S409	8	3'-4"		ABUT. DIAPHRAGM HORIZ.
S410	80	3'-11"		ABUT. DIAPHRAGM HORIZ.
S411	24	3'-0"		PIER DIAPHRAGM HORIZ.
S412	240	4'-7"		PIER DIAPHRAGM HORIZ.
S513	128	10'-0"	X	PIER DIAPHRAGM VERT.
S514	44	7'-1"	X	PIER DIAPHRAGM VERT.
S515	480	60'-0"		DECK TRANS.REINF. - TOP AND BOTTOM
S516	120	33'-4"		DECK TRANS.REINF. - TOP AND BOTTOM
S517	120	37'-2"		DECK TRANS.REINF. - TOP AND BOTTOM
S518	120	41'-0"		DECK TRANS.REINF. - TOP AND BOTTOM
S519	120	45'-9"		DECK TRANS.REINF. - TOP AND BOTTOM
S420	152	17'-7"		DECK LONGIT. REINF. - TOP
S921	152	44'-9"		DECK CONTINUITY REINF. - TOP
S422	76	42'-4"		DECK LONGIT. REINF. - TOP
S423	154	7'-11"		DECK LONGIT. REINF. - TOP
S924	154	58'-3"		DECK CONTINUITY REINF. - TOP
S425	77	34'-8"		DECK LONGIT. REINF. - TOP
S426	459	45'-0"		DECK LONGIT. REINF. - BOT
S427	77	28'-5"		DECK LONGIT. REINF. - BOT
S428	76	30'-4"		DECK LONGIT. REINF. - BOT
S429	480	4'-11"	X	OVERHANG REINF. - TOP
S630	6	50'-1"		WEST ABUT. DIAPHRAGM HORIZ. (NORTH)
S631	6	48'-6"		EAST ABUT. DIAPHRAGM HORIZ. (SOUTH)
S632	6	58'-1"		EAST ABUT. DIAPHRAGM HORIZ. (NORTH)

TOTAL WEIGHT= 139,480 LB



S513



S429

LEGEND

◧ LAP LENGTH VARIES, BAR LENGTHS CONSTANT.

MIN. LAP LENGTH:
NO. 4 BARS = 1'-8"
NO. 5 BARS = 2'-7"
NO. 6 BARS = 3'-1"
NO. 4 BARS ONTO NO. 9 BARS = 1'-8"

ALTERNATE LAPS IN ALL BAR LINES.

* CONSTRUCTION JOINT STRIKE OFF AS SHOWN AND LEAVE ROUGH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY	JDL	PLANS CK'D.	MRL

SUPERSTRUCTURE DETAILS 2

SHEET 24 OF 37
740

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DATE: 5/5/2015
I.D.

STATE PROJECT NUMBER

1517-75-75

TOP OF DECK ELEVATIONS

LOCATION	APRON START	APRON MIDPT.	APRON END	CL BRG W. ABUT	0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	0.5 SPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	CL PIER #1	0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	0.5 SPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	CL PIER #2
N. EDGE OF DECK	779.12	779.15	779.19	779.19	779.21	779.22	779.24	779.25	779.27	779.28	779.30	779.31	779.33	779.34	779.38	779.41	779.45	779.48	779.52	779.55	779.58	779.62	779.65	779.69
N. GUTTER LINE	779.12	779.15	779.19	779.19	779.21	779.22	779.24	779.25	779.27	779.28	779.30	779.31	779.33	779.34	779.38	779.41	779.45	779.48	779.52	779.55	779.58	779.62	779.65	779.69
GIRDER 1	---	---	---	779.24	779.26	779.28	779.30	779.32	779.34	779.36	779.38	779.39	779.41	779.43	779.47	779.50	779.53	779.57	779.60	779.64	779.67	779.70	779.74	779.77
GIRDER 2	---	---	---	779.55	779.57	779.59	779.60	779.62	779.64	779.66	779.68	779.70	779.72	779.73	779.79	779.84	779.89	779.94	780.00	780.05	780.10	780.15	780.20	780.26
GIRDER 3	---	---	---	780.02	780.04	780.06	780.07	780.09	780.11	780.13	780.15	780.17	780.18	780.20	780.26	780.31	780.36	780.42	780.47	780.53	780.58	780.63	780.69	780.74
GIRDER 4	---	---	---	780.49	780.51	780.53	780.54	780.56	780.58	780.60	780.62	780.63	780.65	780.67	780.73	780.78	780.84	780.89	780.95	781.00	781.06	781.11	781.17	781.22
GIRDER 5	---	---	---	780.96	780.98	781.00	781.01	781.03	781.05	781.07	781.09	781.10	781.12	781.14	781.19	781.25	781.30	781.36	781.41	781.47	781.52	781.58	781.63	781.69
'EB' STA	183+96.90	184+06.90	184+16.89	184+18.18	184+21.88	184+25.58	184+29.28	184+32.98	184+36.68	184+40.38	184+44.08	184+47.78	184+51.48	184+55.18	184+63.58	184+71.98	184+80.38	184+88.78	184+97.18	185+05.58	185+13.98	185+22.38	185+30.78	185+39.18
PGL 'EB'	781.13	781.16	781.20	781.20	781.21	781.23	781.24	781.26	781.27	781.29	781.30	781.32	781.33	781.35	781.38	781.41	781.45	781.48	781.51	781.55	781.58	781.62	781.65	781.68
GIRDER 6	---	---	---	781.44	781.45	781.47	781.49	781.50	781.52	781.54	781.56	781.57	781.59	781.61	781.66	781.72	781.77	781.82	781.88	781.93	781.99	782.04	782.09	782.15
CONSTR. JT.	781.73	781.76	781.79	781.79	781.81	781.83	781.84	781.86	781.88	781.89	781.91	781.93	781.94	781.96	782.02	782.07	782.12	782.18	782.23	782.28	782.34	782.39	782.44	782.50
GIRDER 7	---	---	---	781.91	781.92	781.94	781.96	781.97	781.99	782.01	782.03	782.04	782.06	782.08	782.13	782.18	782.24	782.29	782.34	782.40	782.45	782.50	782.56	782.61
GIRDER 8	---	---	---	782.38	782.40	782.41	782.43	782.45	782.46	782.48	782.50	782.51	782.53	782.55	782.60	782.65	782.70	782.76	782.81	782.86	782.91	782.97	783.02	783.07
GIRDER 9	---	---	---	782.85	782.87	782.88	782.90	782.92	782.93	782.95	782.97	782.98	783.00	783.02	783.07	783.12	783.17	783.22	783.28	783.33	783.38	783.43	783.48	783.54
GIRDER 10	---	---	---	783.33	783.34	783.36	783.37	783.39	783.40	783.42	783.44	783.45	783.47	783.49	783.54	783.59	783.65	783.70	783.76	783.81	783.86	783.92	783.97	784.03
GIRDER 11	---	---	---	783.80	783.82	783.83	783.84	783.86	783.88	783.89	783.91	783.92	783.94	783.96	784.01	784.07	784.12	784.18	784.24	784.29	784.35	784.40	784.46	784.52
GIRDER 12	---	---	---	784.07	784.09	784.11	784.14	784.16	784.18	784.21	784.23	784.26	784.28	784.31	784.38	784.45	784.52	784.59	784.66	784.73	784.80	784.87	784.94	785.01
S. GUTTER LINE	784.03	784.08	784.13	784.14	784.16	784.18	784.20	784.23	784.25	784.28	784.30	784.33	784.35	784.38	784.44	784.51	784.58	784.65	784.72	784.79	784.86	784.93	785.00	785.07
S. EDGE OF DECK	784.03	784.08	784.13	784.14	784.16	784.18	784.20	784.23	784.25	784.28	784.30	784.33	784.35	784.37	784.44	784.51	784.58	784.65	784.72	784.79	784.86	784.93	785.00	785.07

LOCATION	CL PIER #2	0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	0.5 SPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	CL BRG E. ABUT	APRON START	APRON MIDPT.	APRON END
N. EDGE OF DECK	779.69	779.70	779.72	779.73	779.75	779.76	779.78	779.79	779.81	779.82	779.84	779.84	779.88	779.92
N. GUTTER LINE	779.69	779.70	779.72	779.73	779.75	779.76	779.78	779.79	779.81	779.82	779.84	779.84	779.88	779.92
GIRDER 1	779.77	779.79	779.81	779.83	779.85	779.87	779.89	779.91	779.93	779.94	779.96	---	---	---
GIRDER 2	780.26	780.28	780.30	780.32	780.34	780.37	780.39	780.41	780.43	780.45	780.48	---	---	---
GIRDER 3	780.74	780.77	780.79	780.82	780.84	780.86	780.89	780.91	780.94	780.96	780.99	---	---	---
GIRDER 4	781.22	781.25	781.28	781.31	781.34	781.36	781.39	781.42	781.45	781.47	781.50	---	---	---
GIRDER 5	781.69	781.72	781.75	781.78	781.81	781.84	781.87	781.90	781.93	781.96	781.99	---	---	---
'EB' STA	185+39.18	185+42.88	185+46.58	185+50.28	185+53.98	185+57.68	185+61.38	185+65.08	185+68.78	185+72.48	185+76.18	185+77.50	185+87.51	185+97.51
PGL 'EB'	781.68	781.70	781.71	781.73	781.74	781.76	781.77	781.79	781.80	781.82	781.83	781.84	781.88	781.92
GIRDER 6	782.15	782.18	782.21	782.24	782.27	782.30	782.33	782.36	782.39	782.42	782.45	---	---	---
CONSTR. JT.	782.50	782.52	782.55	782.58	782.61	782.64	782.67	782.70	782.73	782.76	782.79	782.81	782.89	782.98
GIRDER 7	782.61	782.64	782.67	782.70	782.73	782.76	782.79	782.82	782.85	782.88	782.91	---	---	---
GIRDER 8	783.07	783.10	783.13	783.16	783.19	783.22	783.25	783.28	783.31	783.34	783.36	---	---	---
GIRDER 9	783.54	783.56	783.59	783.62	783.65	783.68	783.71	783.74	783.77	783.80	783.82	---	---	---
GIRDER 10	784.03	784.06	784.09	784.12	784.15	784.18	784.21	784.25	784.28	784.31	784.34	---	---	---
GIRDER 11	784.52	784.55	784.58	784.62	784.65	784.69	784.72	784.75	784.79	784.82	784.85	---	---	---
GIRDER 12	785.01	785.04	785.08	785.12	785.15	785.19	785.22	785.26	785.30	785.33	785.37	---	---	---
S. GUTTER LINE	785.07	785.11	785.15	785.18	785.22	785.25	785.29	785.33	785.36	785.40	785.44	785.45	785.56	785.66
S. EDGE OF DECK	785.07	785.11	785.14	785.18	785.22	785.25	785.29	785.33	785.36	785.40	785.43	785.45	785.55	785.66

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY JDL | PLANS CK'D. MRL

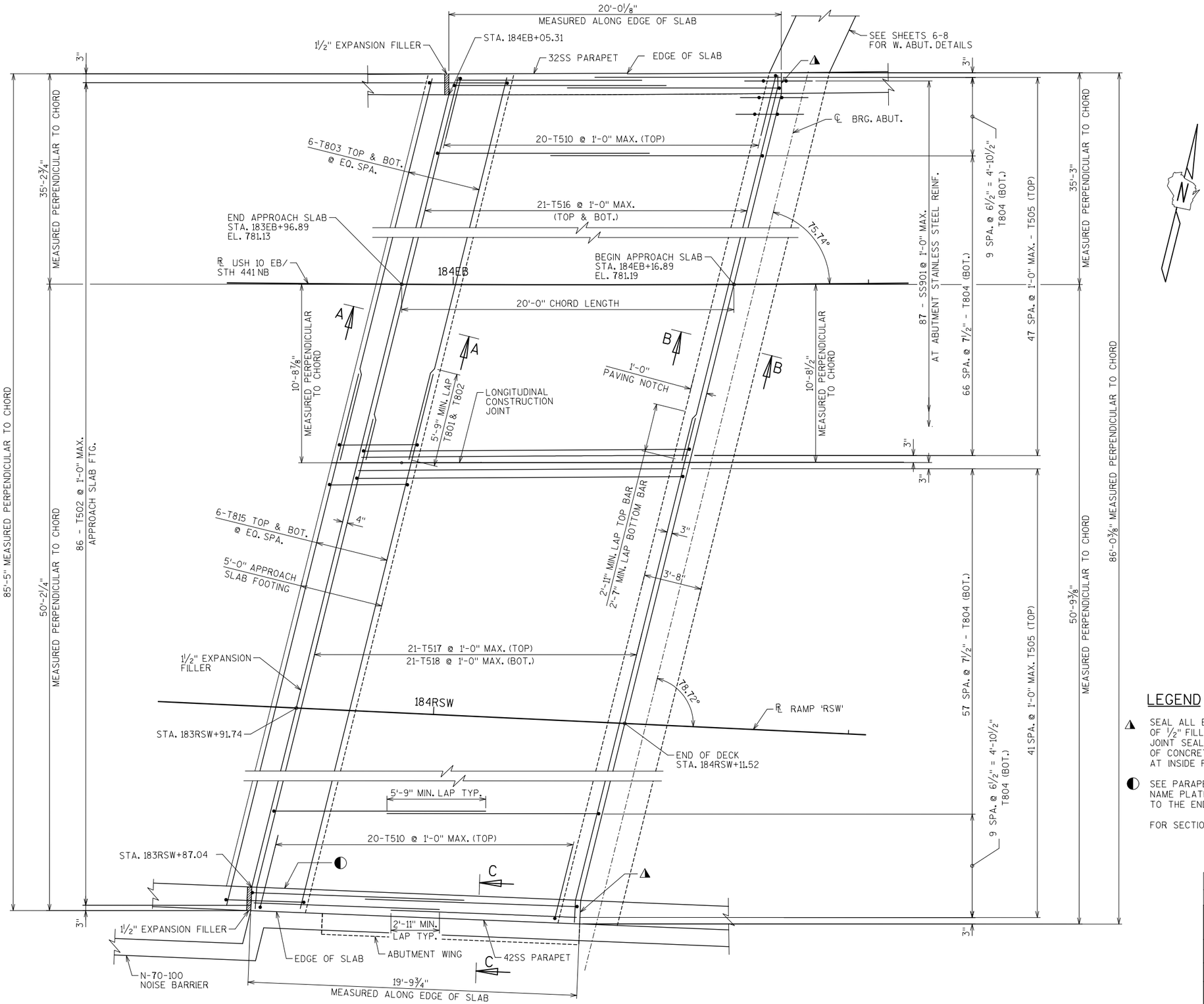
SUPERSTRUCTURE DETAILS 3

SHEET 25 OF 37
741

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DATE: 5/5/2015
I.D.

STATE PROJECT NUMBER
1517-75-75



APPROACH SLAB PLAN

LEGEND

▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

◐ SEE PARAPET SHEETS FOR LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET.

FOR SECTIONS A-A, B-B & C-C SEE SHEET 27.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY KJZ | PLANS CK'D. NPP

STRUCTURAL APPROACH SLAB W. ABUT.

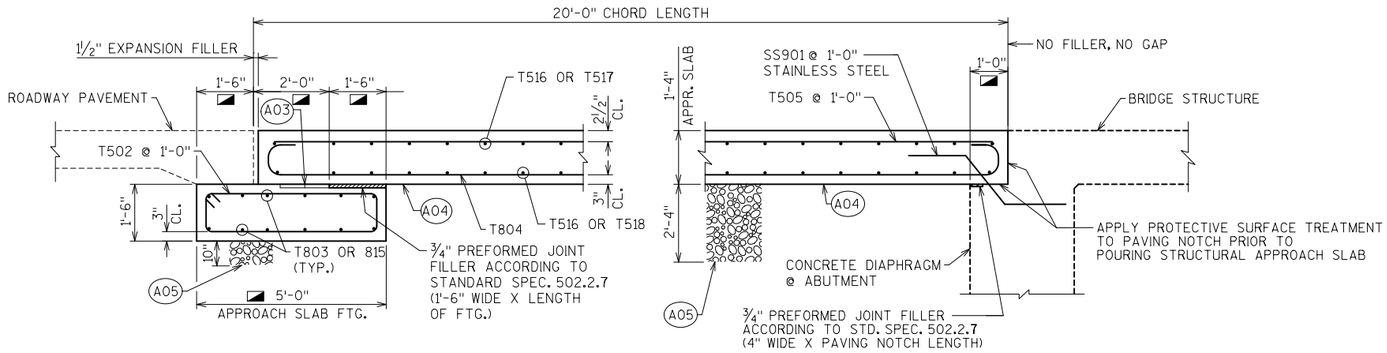
SHEET 26 OF 37
742

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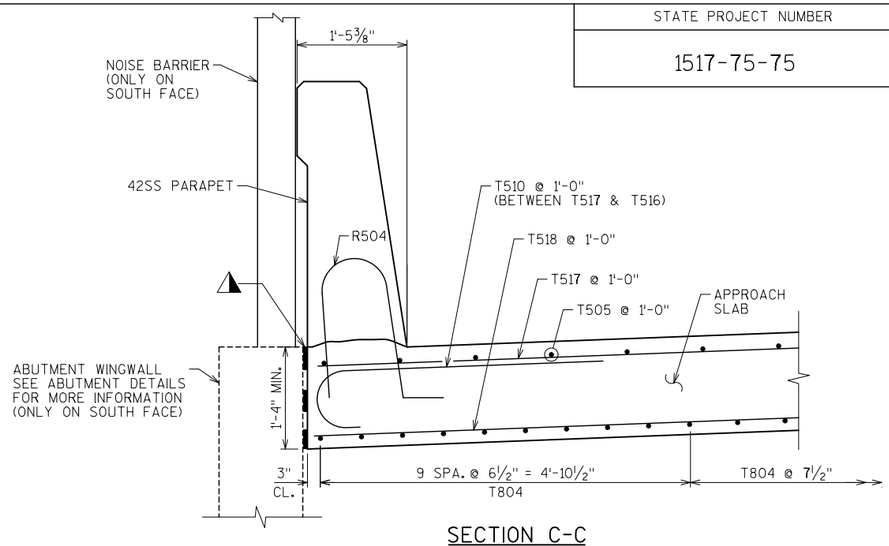
DATE: 5/5/2015
I.D.



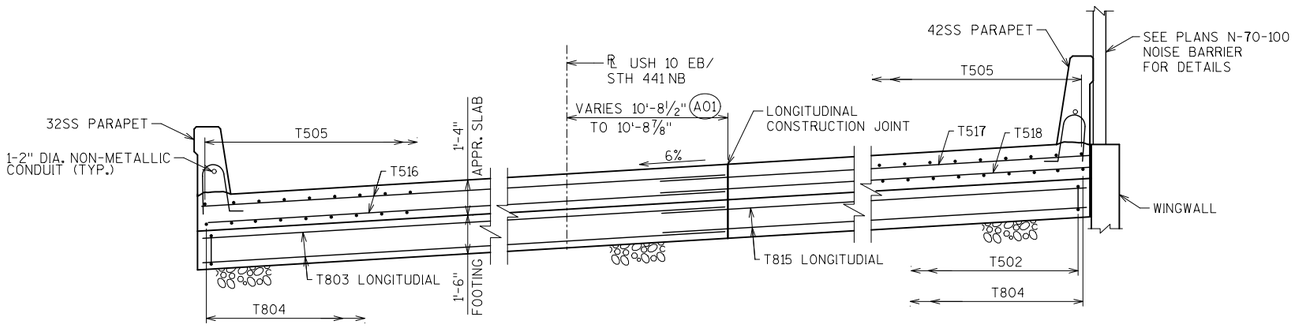
SECTION A-A

SECTION B-B

TRANSVERSE SECTION THRU APPROACH APRON



SECTION C-C



CROSS SECTION THRU APPROACH SLAB

(LOOKING UPSTATION)

NOTES:

SEE SHEET 29 FOR BAR BILLS TABLE.

SEE SHEET 26 FOR LOCATIONS OF SECTIONS A-A, B-B AND C-C.

DESIGN DATA:

ALLOWABLE SOIL BEARING PRESSURE:	2,000 PSF
MODIFIED HPC MASONRY BRIDGES, F'C:	4,000 PSI
BAR STEEL REINFORCEMENT, GRADE 60, FY:	60,000 PSI

LEGEND

◢ MEASURED NORMAL TO ABUTMENT

◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES 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.

(A01) MEASURED NORMAL TO ℄ 'SMC'

(A03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE FOOTING.

(A04) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

(A05) PROVIDE BASE AGGREGATE DENSE 1¼" UNDER STRUCTURAL APPROACH SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY KJZ | PLANS CK'D. NPP

STRUCTURAL APPROACH SLAB DETAILS W. ABUT.

SHEET 27 OF 37
743

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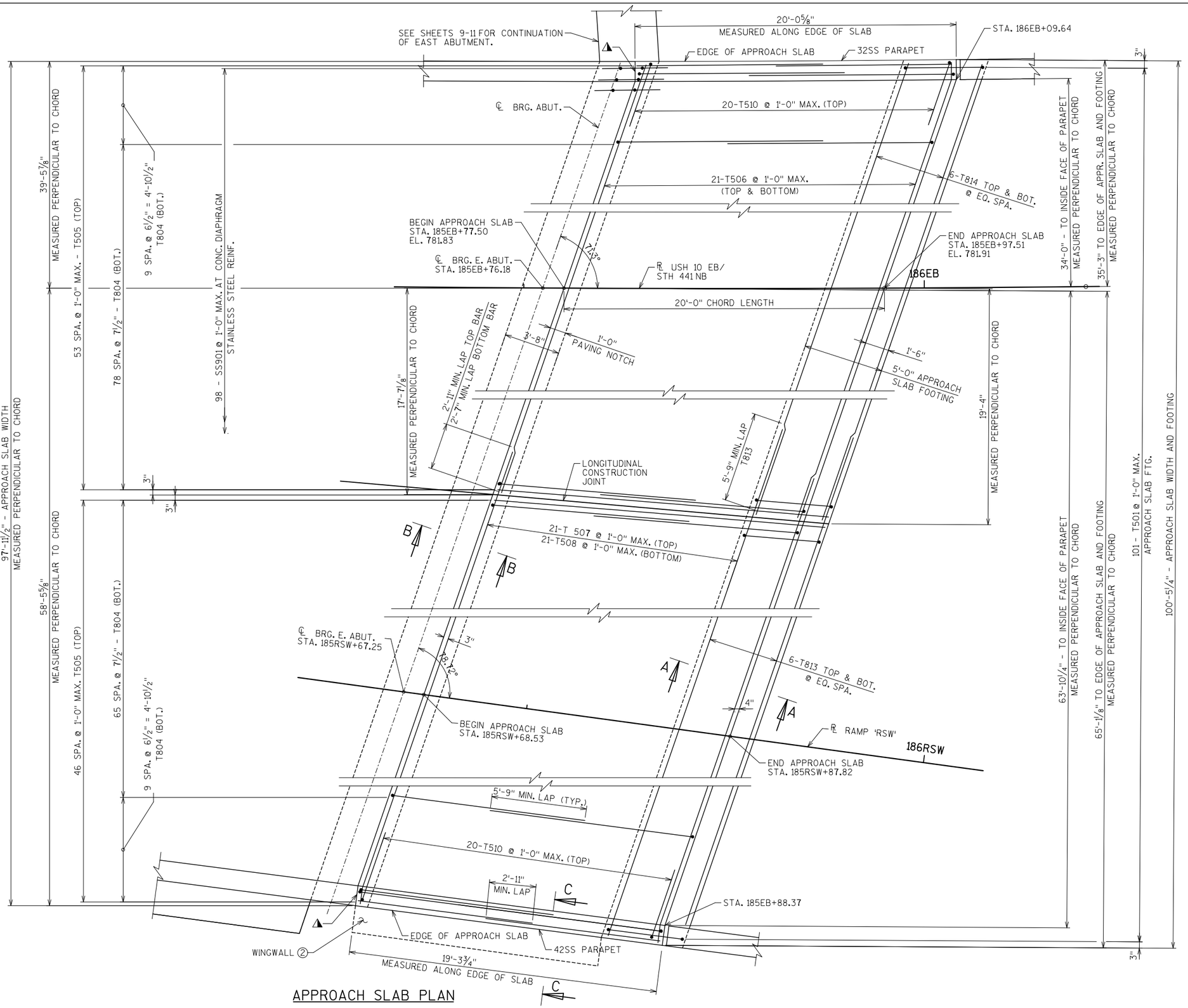
DATE: 5/5/2015
I.D.

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8

STATE PROJECT NUMBER

1517-75-75



APPROACH SLAB PLAN

LEGEND

▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

SEE PARAPET SHEETS FOR LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET.

FOR SECTIONS A-A, B-B & C-C SEE SHEET 29.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY KJZ | PLANS CK'D. NPP

STRUCTURAL APPROACH SLAB E. ABUT.

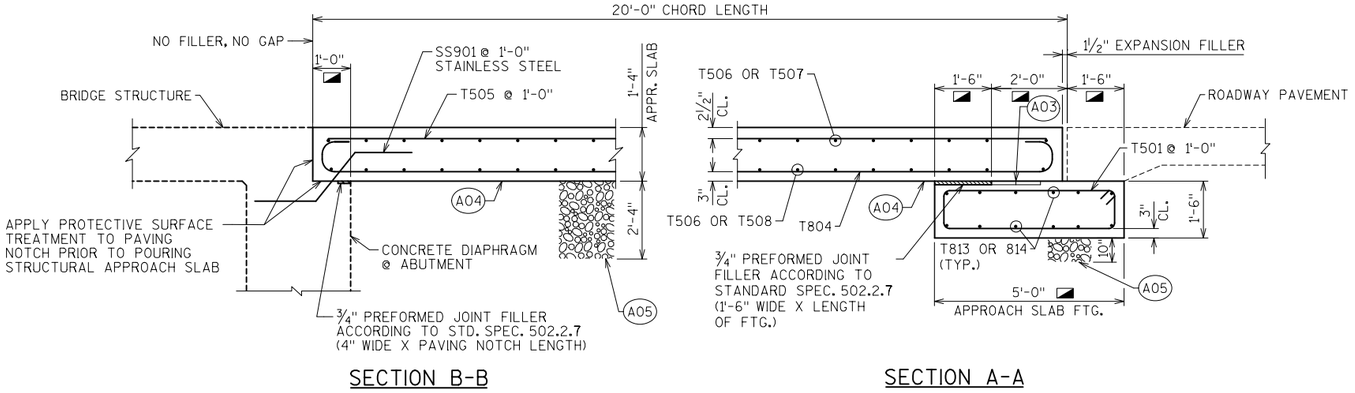
SHEET 28 OF 37
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DATE: 5/5/2015
I.D.

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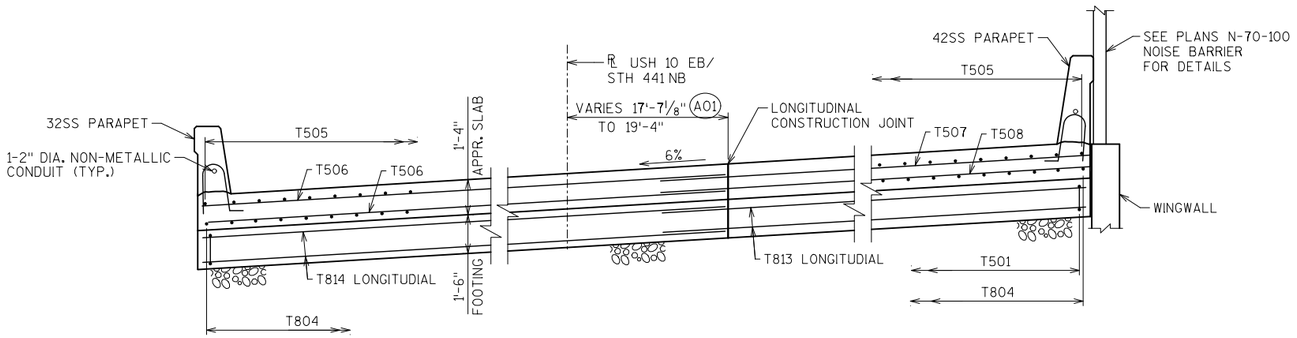
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SECTION B-B

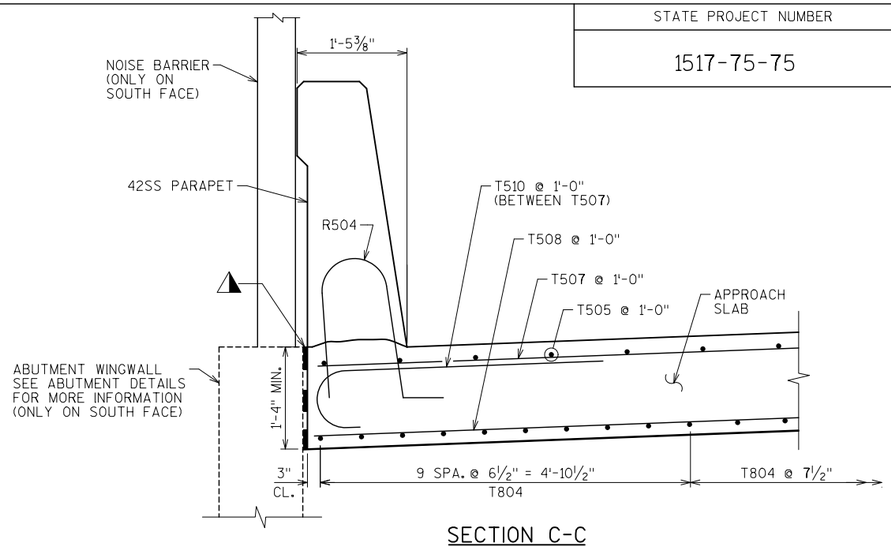
SECTION A-A

TRANSVERSE SECTION THRU APPROACH SLAB

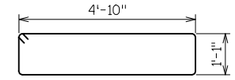


CROSS SECTION THRU APPROACH SLAB

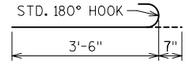
(LOOKING UPSTATION)



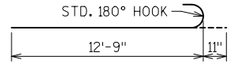
SECTION C-C



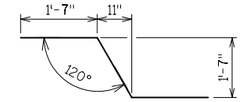
T501, T502



T510



T804



SS901

BILL OF BARS

ALL BARS SHALL BE EPOXY COATED

BAR MARK	NO. REQ'D W. APPR.	NO. REQ'D E. APPR.	LENGTH	BENT	LOCATION
T501	0	101	12'-4"	X	FOOTING - STIRRUP
T502	86	0	12'-4"	X	FOOTING - STIRRUP
T803	12	0	47'-2"		FOOTING - LONGITUDINAL
T804	286	326	13'-8"	X	LONGITUDINAL BOTTOM
T505	180	202	11'-3"		LONGITUDINAL TOP
T506	0	42	54'-10"		TRANSVERSE TOP & BOTTOM
T507	0	42	52'-0"		TRANSVERSE TOP
T508	0	42	51'-8"		TRANSVERSE BOTTOM
T510	40	40	4'-1"		TRANSVERSE TOP
T813	0	12	57'-0"		FOOTING - LONGITUDINAL
T814	0	12	54'-0"		FOOTING - LONGITUDINAL
T815	12	0	47'-0"		FOOTING - LONGITUDINAL
T516	42	0	47'-2"		TRANSVERSE TOP & BOTTOM
T517	42	0	43'-5"		TRANSVERSE TOP
T518	42	0	43'-1"		TRANSVERSE BOTTOM

TOTAL WEIGHT= 48,940 LB

SS901	87	98	5'-0"	X	CONC. DIAPHRAGM

TOTAL WEIGHT= 3,150 LB

LEGEND

MEASURED NORMAL TO ABUTMENT

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES 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.

(A01) MEASURED NORMAL TO ℄ 'SMC'

(A03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE FOOTING.

(A04) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

(A05) PROVIDE BASE AGGREGATE DENSE 1¼" UNDER STRUCTURAL APPROACH SLAB.

DESIGN DATA:

ALLOWABLE SOIL BEARING PRESSURE:	2,000 PSF
MODIFIED HPC MASONRY BRIDGES, F'C:	4,000 PSI
BAR STEEL REINFORCEMENT, GRADE 60, FY:	60,000 PSI

NOTE:

SEE SHEET 28 FOR LOCATIONS OF SECTIONS S-S, B-B AND C-C.

SEE SHEET 34 FOR DETAILS OF NOISE BARRIER POST ATTACHMENT.

STATE PROJECT NUMBER

1517-75-75

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY KJZ | PLANS CK'D. NPP

STRUCTURAL APPROACH SLAB DETAILS E. ABUT.

SHEET 29 OF 37
745

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DATE: 5/5/2015
I.D.

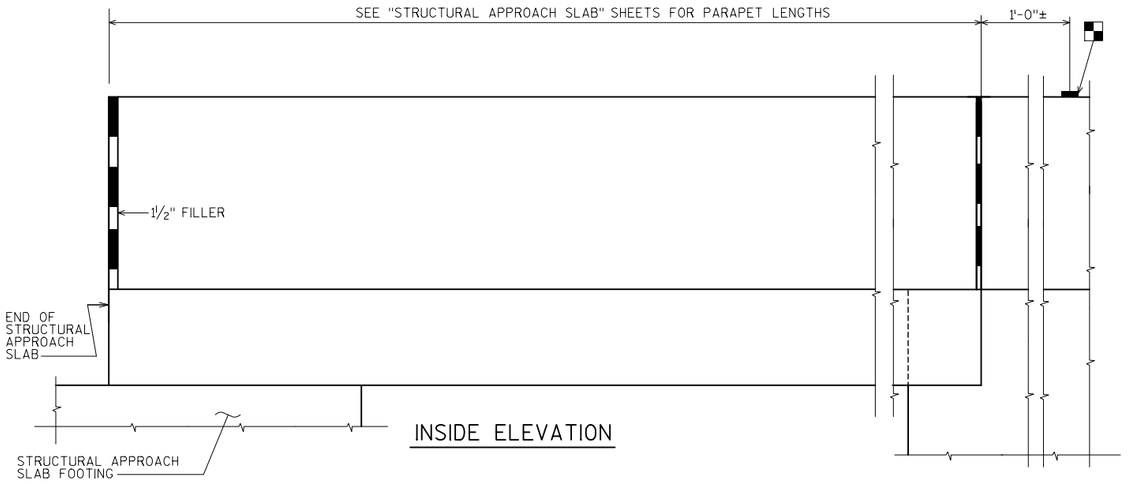
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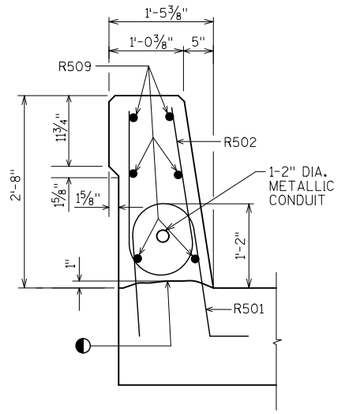
STATE PROJECT NUMBER

1517-75-75

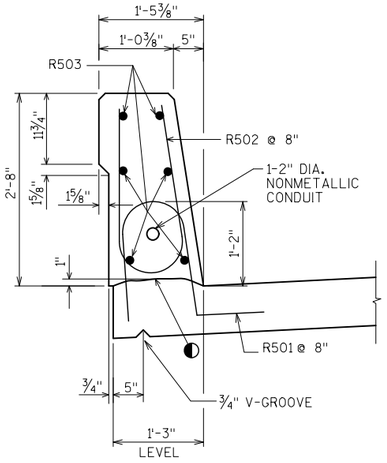
BENCH MARK CAP (WHEN SUPPLIED).
AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.



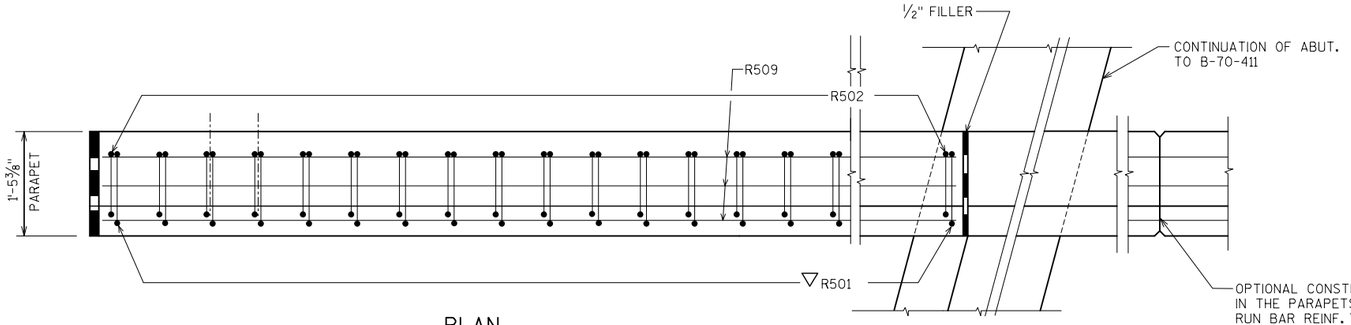
INSIDE ELEVATION



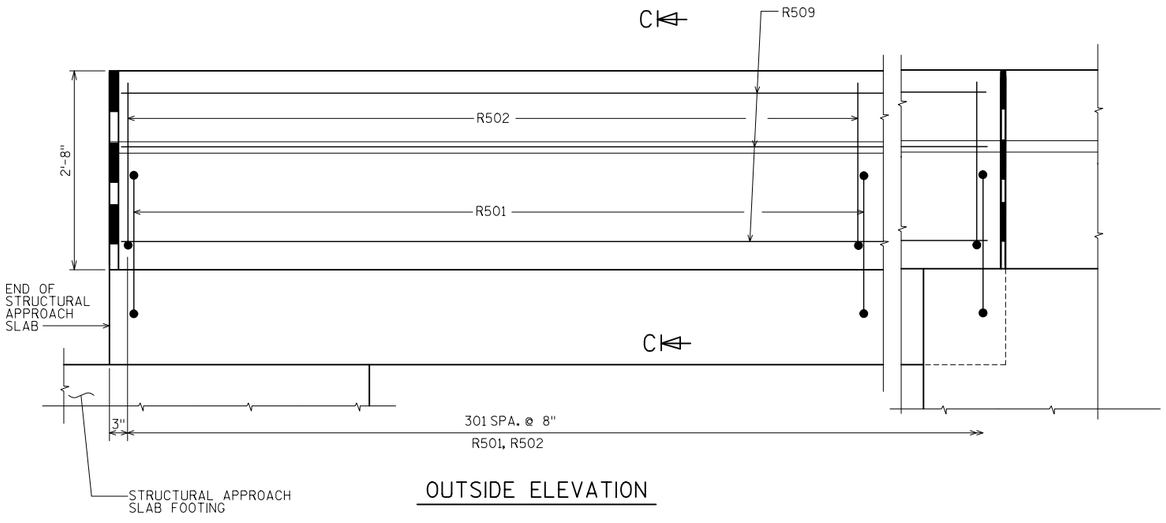
SECTION C



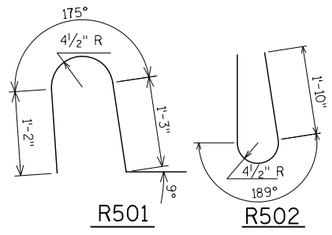
SECTION THRU PARAPET ON BRIDGE



PLAN



OUTSIDE ELEVATION



BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS AND PARAPET ON BRIDGE.
ALL BARS IN THIS TABLE SHALL BE EPOXY COATED.

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
R501	302	4'-5"	X	32SS PARAPET VERT.
R502	302	5'-0"	X	32SS PARAPET VERT.
R503	18	55'-3"		32SS PARAPET HORIZ.
R509	12	19'-6"		32SS PARAPET HORIZ. ON APPR.

TOTAL WEIGHT= 4,250 LB

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽ R501 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-70-410

DRAWN BY MRL | PLANS CK'D. JDL

SINGLE SLOPE PARAPET 32SS

SHEET 30 OF 37
746

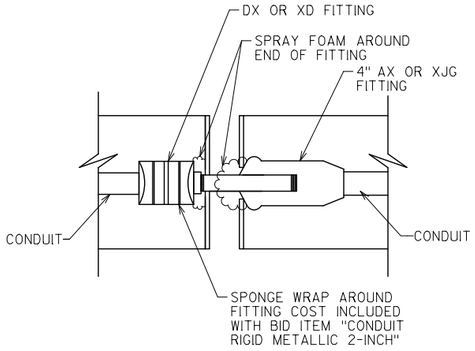
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DATE: 5/5/2015
I.D.

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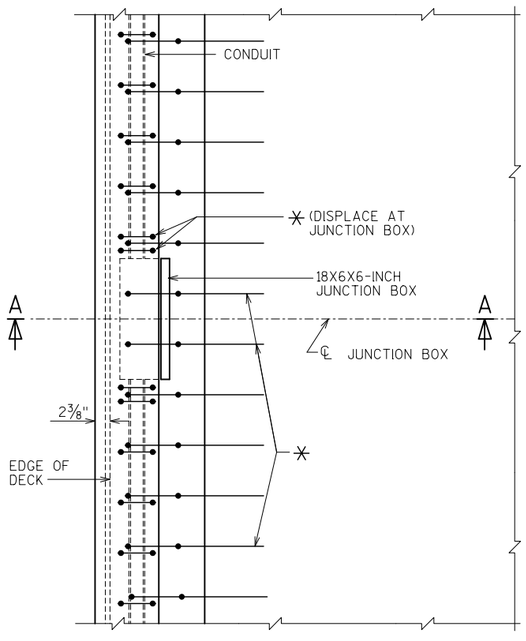
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STATE PROJECT NUMBER
1517-75-75

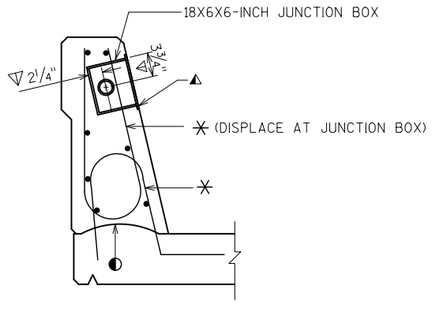


DETAIL 1
ELECTRICAL FITTING - AX/DX CONNECTION

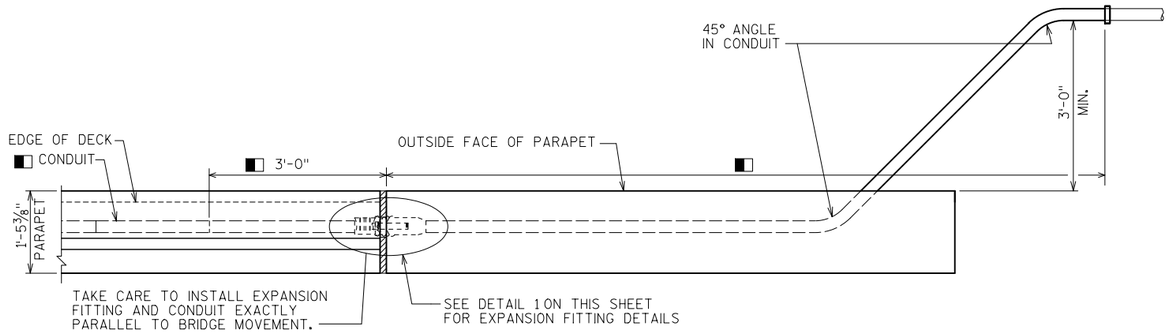
XD FITTING IS GOOD FOR 3/4" MOVEMENT IN ANY DIRECTION. THE XD FITTING WILL ALLOW FOR ANGULAR MOVEMENT WITH A DEFLECTION OF UP TO 30 DEGREES FROM THE NORMAL IN ANY DIRECTION.



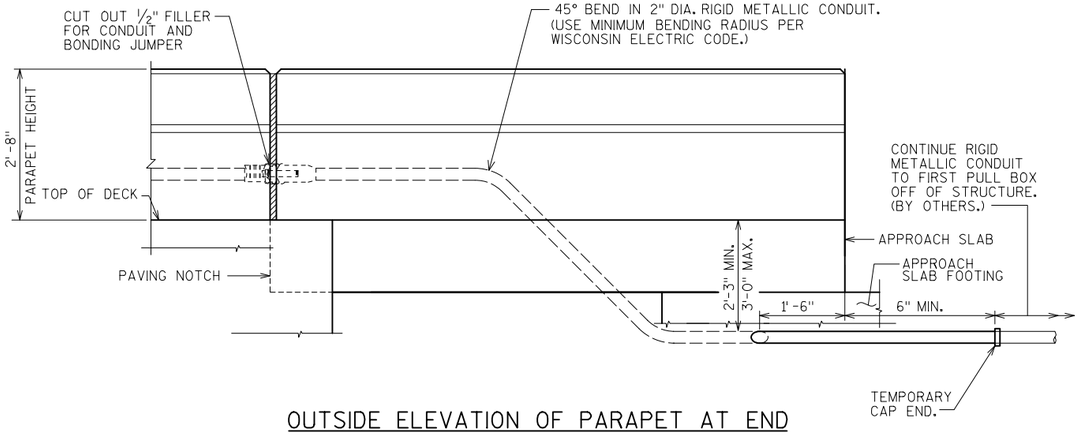
PLAN AT JUNCTION BOX



SECTION A-A



PLAN OF PARAPET AT END



OUTSIDE ELEVATION OF PARAPET AT END

- USE RIGID METALLIC CONDUIT 3'-0" ON BOTH SIDES OF JOINT OPENINGS AND FULL LENGTH PAST ABUTMENTS.
- CONST. 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 32SS" SHEET FOR BAR STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X6X6-INCH", EACH.

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

AT END OF APPROACH SLABS AND PAVING NOTCHES, USE APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING: O-Z/GEDNEY TYPE AXDX-200 AND BONDING JUMPER (4 3/4" TOTAL CONDUIT MOVEMENT).

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

JUNCTION BOX LOCATIONS

℄ JUNCTION BOX
STA. 185EB+00.00

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

DRAWN BY MRL | PLANS CK'D. JDL

SINGLE SLOPE PARAPET 32SS ELECTRICAL

SHEET 31 OF 37
747

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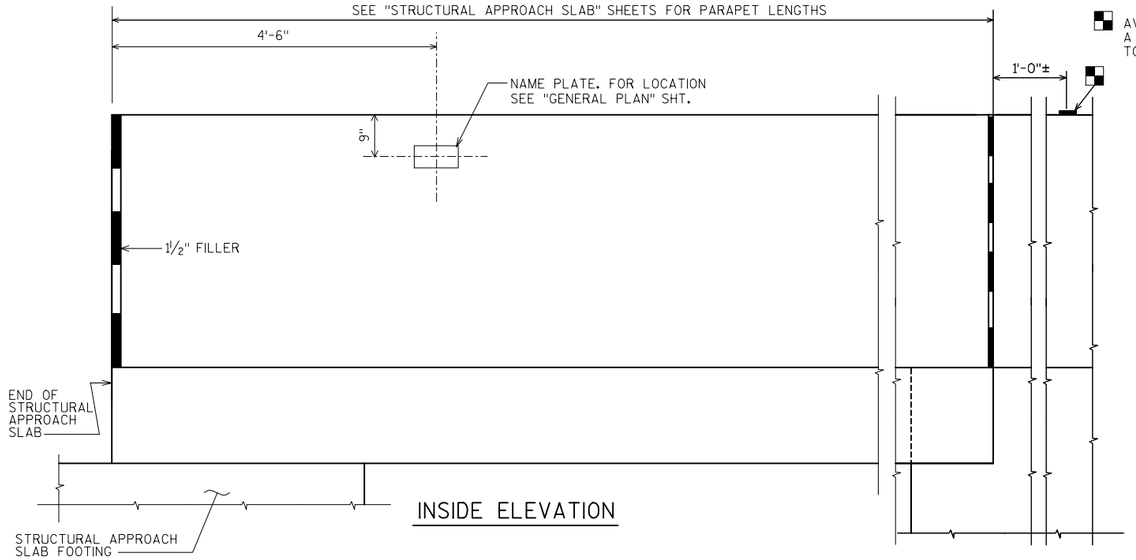
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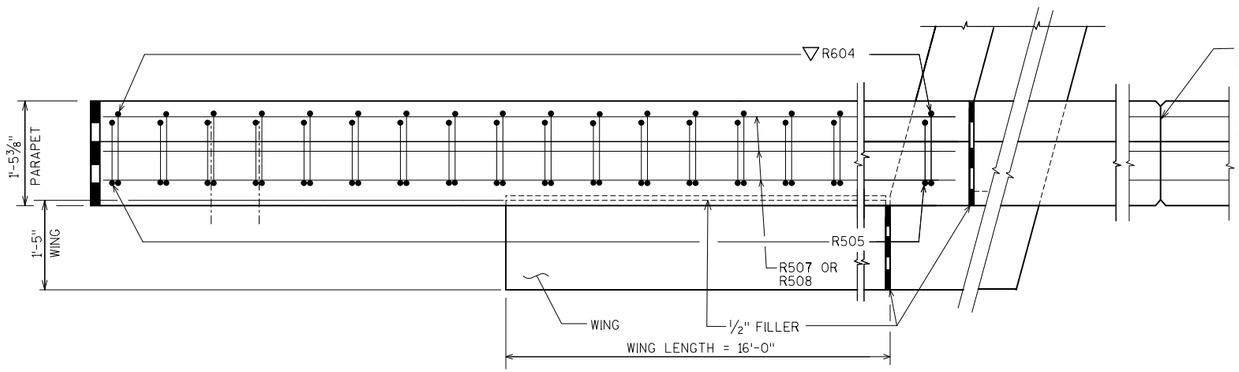
DATE: 5/5/2015
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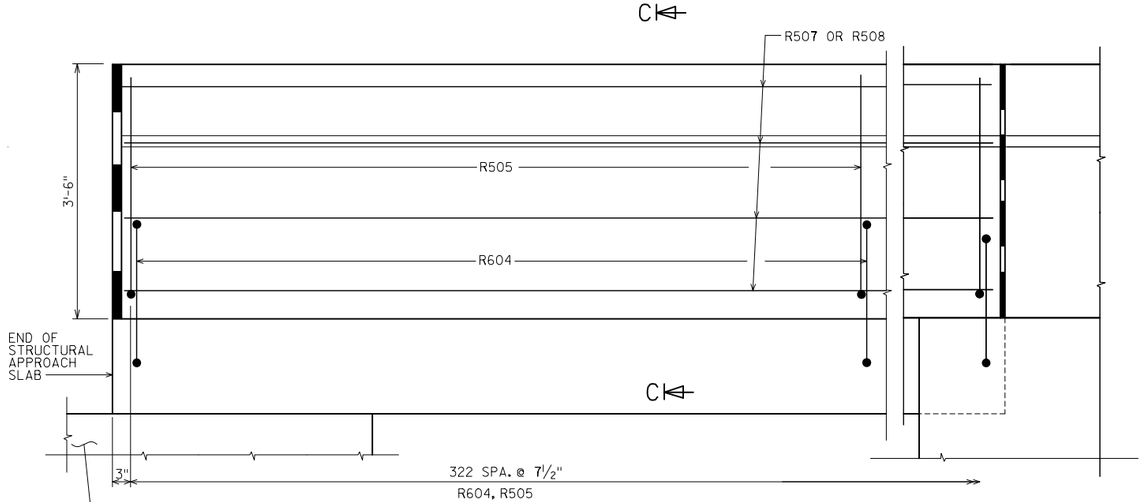
1517-75-75



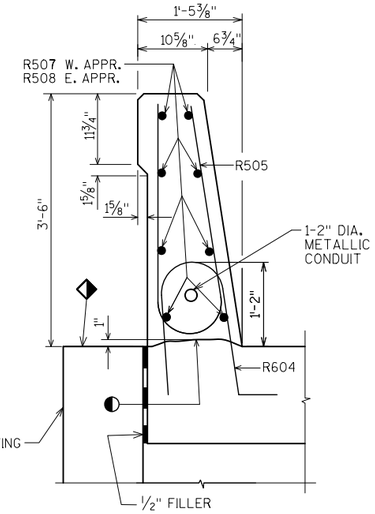
INSIDE ELEVATION



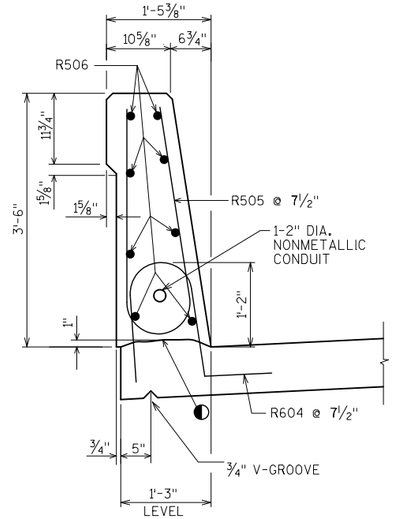
PLAN



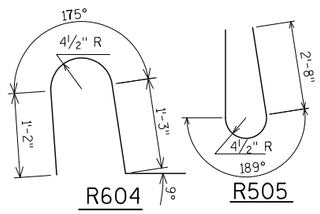
OUTSIDE ELEVATION
(WING NOT SHOWN FOR CLARITY)



SECTION C



SECTION THRU PARAPET ON BRIDGE



BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS AND PARAPET ON BRIDGE.
ALL BARS IN THIS TABLE SHALL BE EPOXY COATED.

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
R604	323	4'-5"	X	42SS PARAPET VERT.
R505	323	6'-8"	X	42SS PARAPET VERT.
R506	24	54'-1"		42SS PARAPET HORIZ.
R507	8	19'-3"		42SS PARAPET HORIZ. ON W. APPR.
R508	8	18'-9"		42SS PARAPET HORIZ. ON E. APPR.

TOTAL WEIGHT= 6,060 LB

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

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STRUCTURE B-70-410

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SINGLE SLOPE PARAPET 42SS

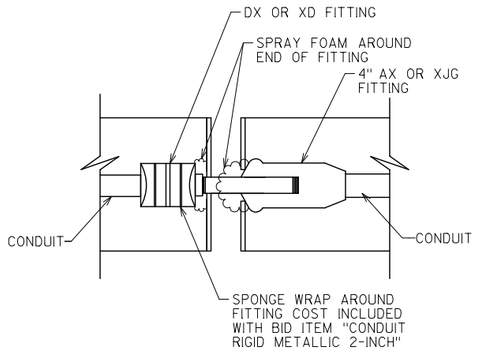
SHEET 32 OF 37
748

8

8

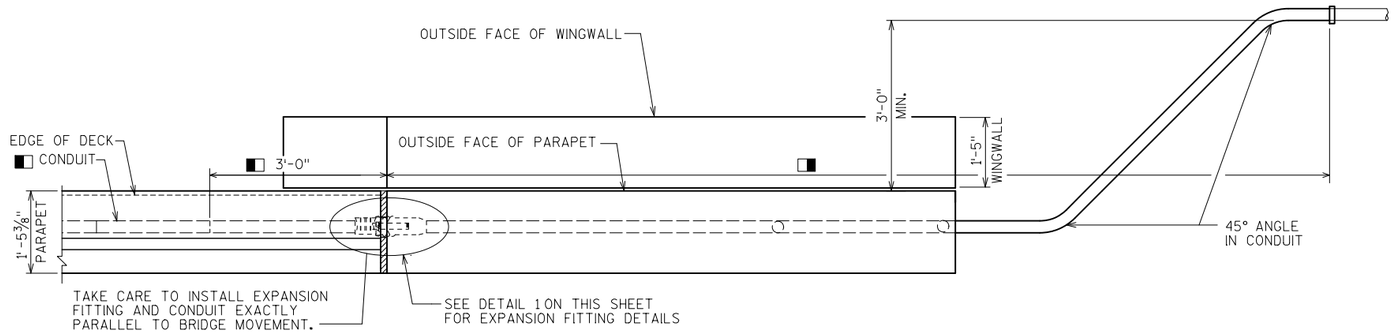
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DATE: 5/5/2015
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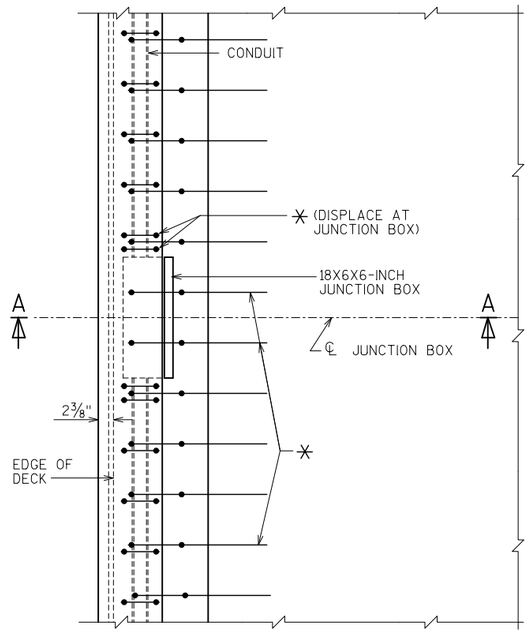


DETAIL 1
ELECTRICAL FITTING - AX/DX CONNECTION

XD FITTING IS GOOD FOR 3/4" MOVEMENT IN ANY DIRECTION. THE XD FITTING WILL ALLOW FOR ANGULAR MOVEMENT WITH A DEFLECTION OF UP TO 30 DEGREES FROM THE NORMAL IN ANY DIRECTION.



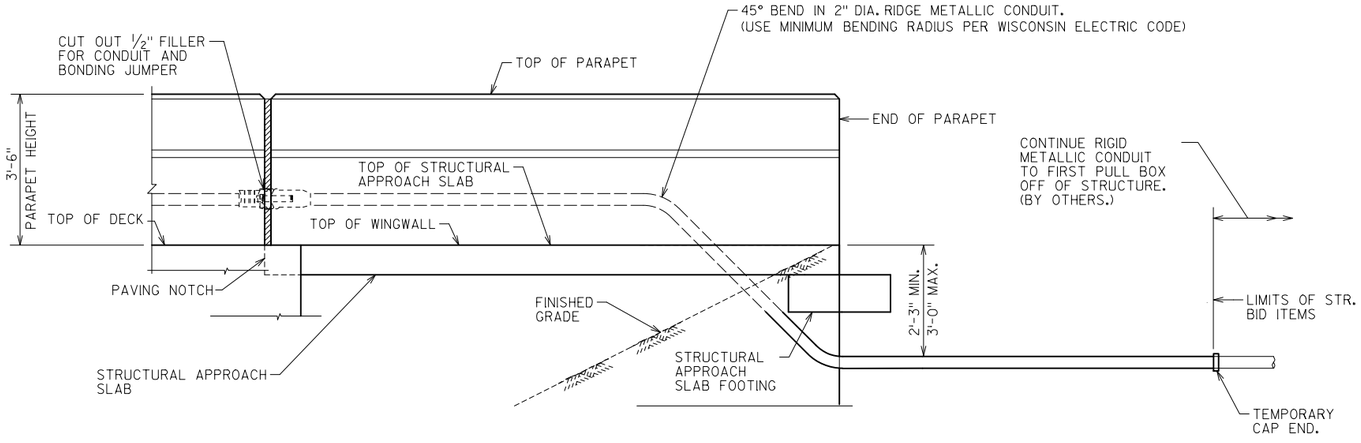
PLAN OF PARAPET AT APPROACH SLAB



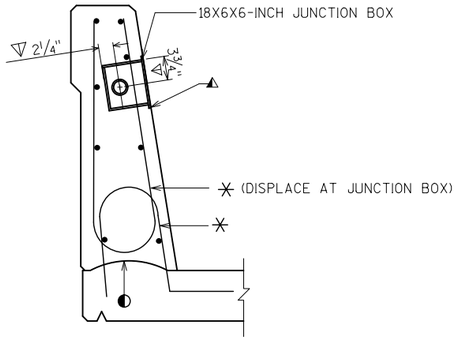
PLAN AT JUNCTION BOX

JUNCTION BOX LOCATIONS

℄ JUNCTION BOX
STA. 184RSW+85.00



INSIDE ELEVATION OF PARAPET AT APPROACH SLAB



SECTION A-A

- USE RIGID METALLIC CONDUIT 3'-0" ON BOTH SIDES OF JOINT OPENINGS AND FULL LENGTH PAST ABUTMENTS.
- 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 42SS" SHEET FOR BAR STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X6X6-INCH", EACH.

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

AT END OF APPROACH SLABS AND PAVING NOTCHES, USE APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AXDX-200 AND BONDING JUMPER (4 3/4" TOTAL CONDUIT MOVEMENT).

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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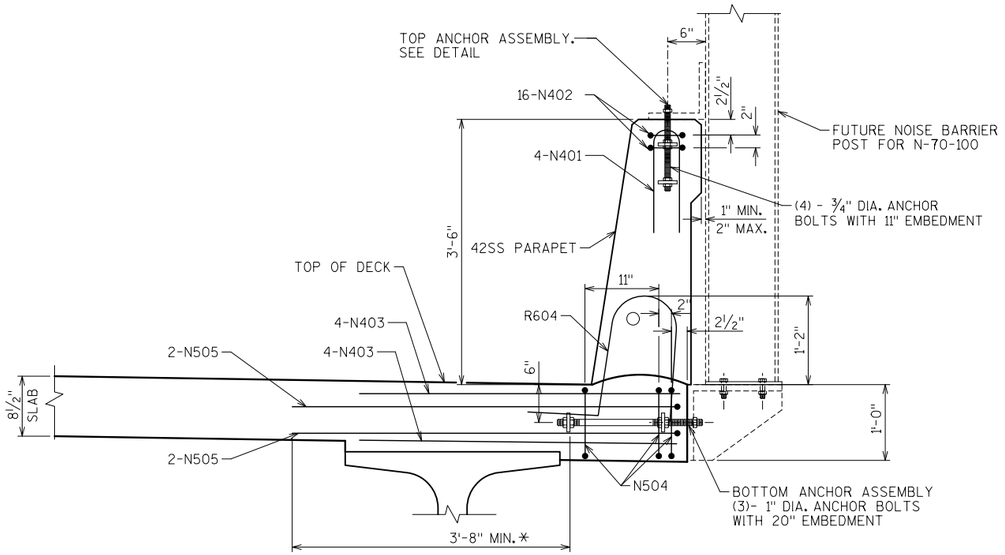
SINGLE SLOPE PARAPET 42SS ELECTRICAL

SHEET 33 OF 37
749

FILE= P:\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-410\Sheets\Final\33-B-70-410_42SS parapet electrical.DGN
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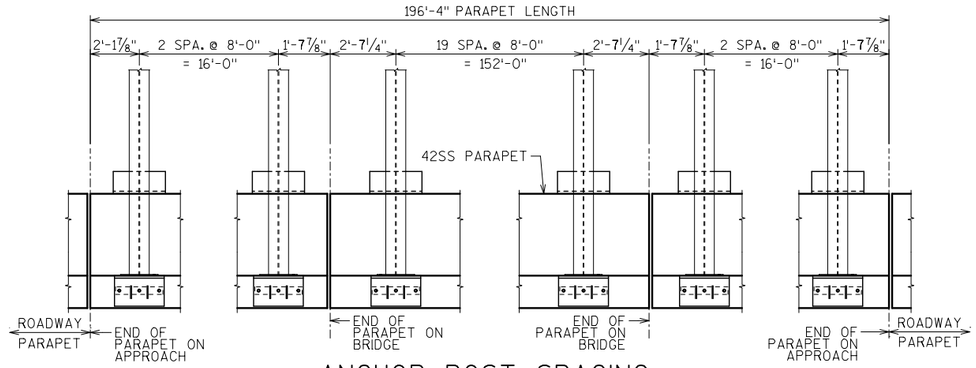
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STATE PROJECT NUMBER
1517-75-75



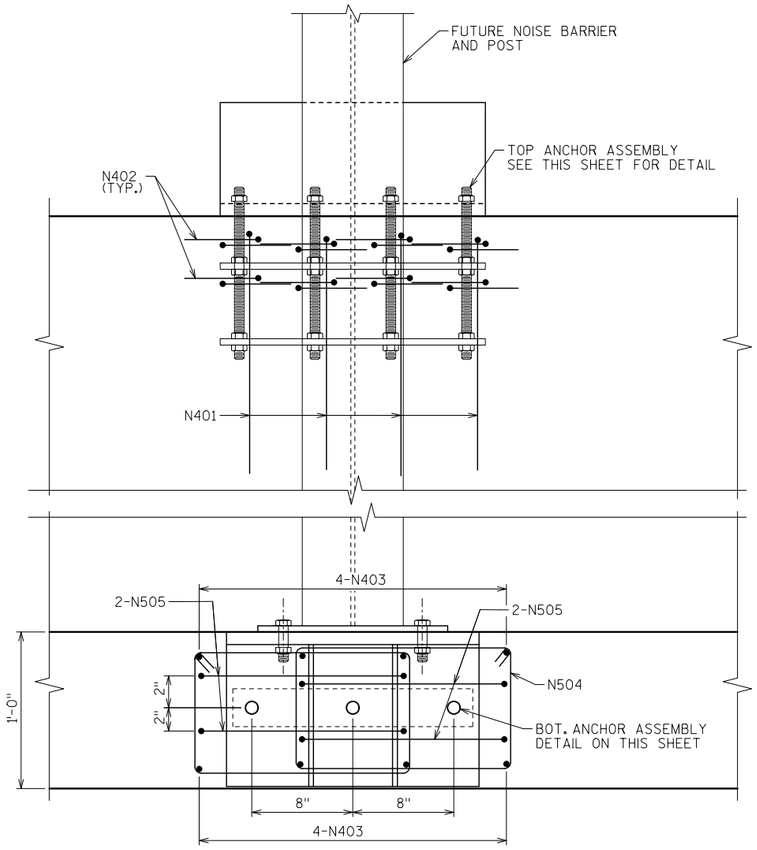
SECTION AT NOISE BARRIER ON BRIDGE DECK

TYPICAL AT EACH POST LOCATION (FOR ALL NOISE BARRIER HEIGHTS)
*HOOK DEVELOPMENT LENGTH, IF STANDARD HOOK IS PROVIDED



ANCHOR POST SPACING

(ELEVATION VIEW - LOOKING NORTH)



ELEVATION AT NOISE BARRIER POST

(TYPICAL AT EACH POST LOCATION)

NOTES

CONNECTIONS OF THE NOISE BARRIER POST ARE DESIGNED FOR WIND LOAD EQUAL TO 42 PSF AND DEAD LOAD EQUAL TO 60 PSF. MAXIMUM HEIGHT OF THE NOISE BARRIER IS 9'-0" FROM GUTTER LINE.

REINFORCEMENT BARS SHOWN ARE ONLY SUPPORTING THE NOISE BARRIER POSTS AND DEVELOPING THEIR ANCHORAGE SYSTEMS.

BID ITEM "ANCHOR ASSEMBLIES NOISE BARRIERS STRUCTURES", EACH, INCLUDES UPPER AND LOWER ANCHORAGES AT EACH POST LOCATION.

NOISE BARRIER AND NOISE BARRIER POST WILL BE PART OF A FUTURE CONTRACT.

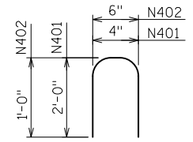
THE NOISE BARRIER SYSTEM INCLUDING SUPPORTING POSTS WILL BE DESIGNED, DETAILED AND PROVIDED BY OTHERS AS PART OF A SEPARATE CONTRACT. THE NUMBER OF THE BID ITEM "ANCHOR NOISE BARRIER POST, EACH" IS BASED ON A SPACING OF 8'-0".

BILL OF BARS

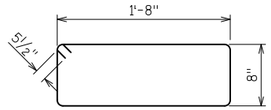
ALL BARS IN THIS TABLE SHALL BE EPOXY COATED.

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
N401	104	4'-4"	X	VERT. U-BAR @ NOISEWALL
N402	416	2'-6"	X	HORIZ. U-BAR @ NOISEWALL
N403	208	5'-0"		TOP & BOT. LONGIT. BAR IN SLAB
N504	156	5'-3"	X	STIRRUP IN SLAB
N505	104	11'-5"	X	HORIZ. U-BAR IN SLAB

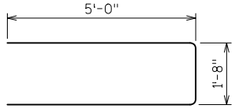
TOTAL WEIGHT= 3,790 LB



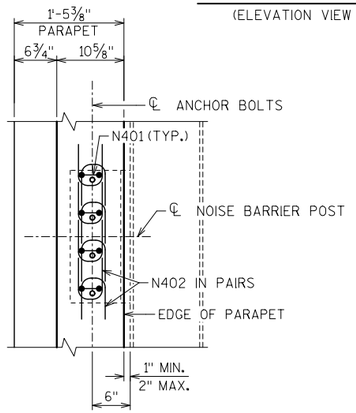
N401, N402



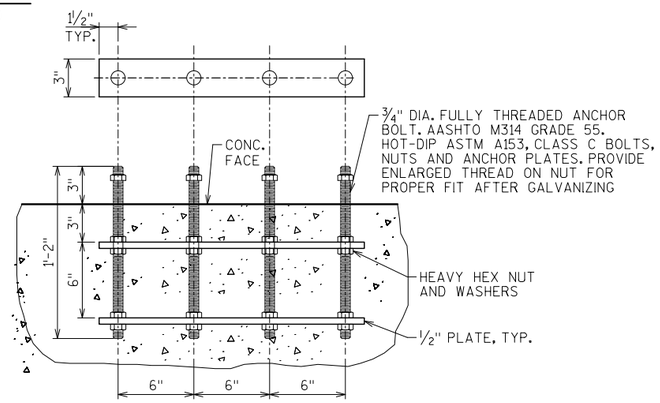
N504



N505

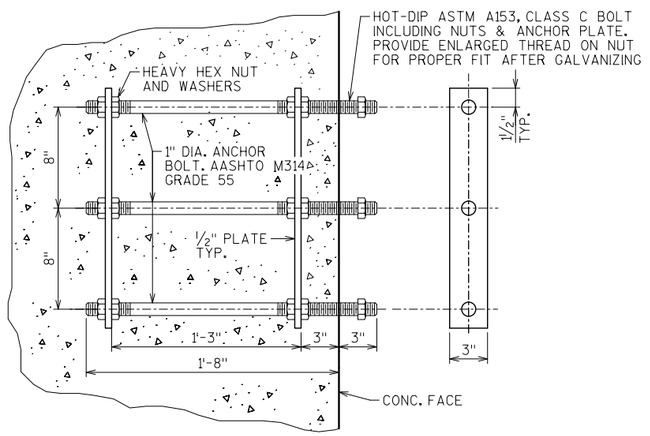


TOP VIEW AT PARAPET



ELEVATION
TOP ANCHOR BOLT ASSEMBLY

(26 REQUIRED)



PLAN
BOTTOM ANCHOR BOLT ASSEMBLY

(26 REQUIRED)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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NOISE BARRIER POST ANCHORAGE

SHEET 34 OF 37
750

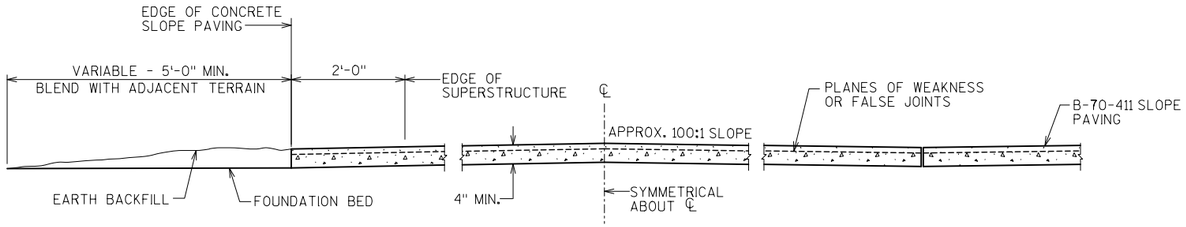
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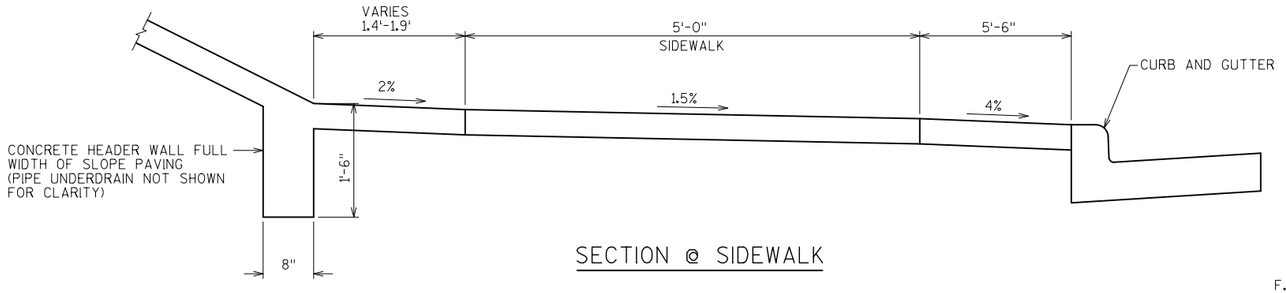
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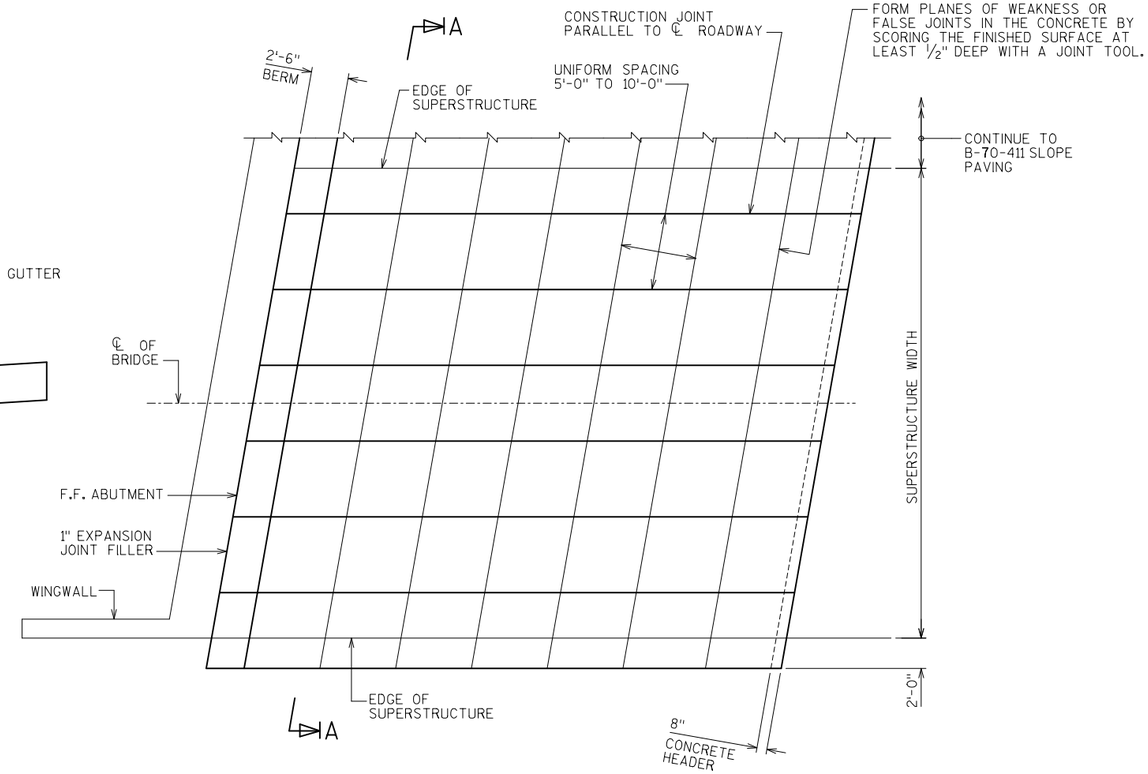
STATE PROJECT NUMBER
1517-75-75



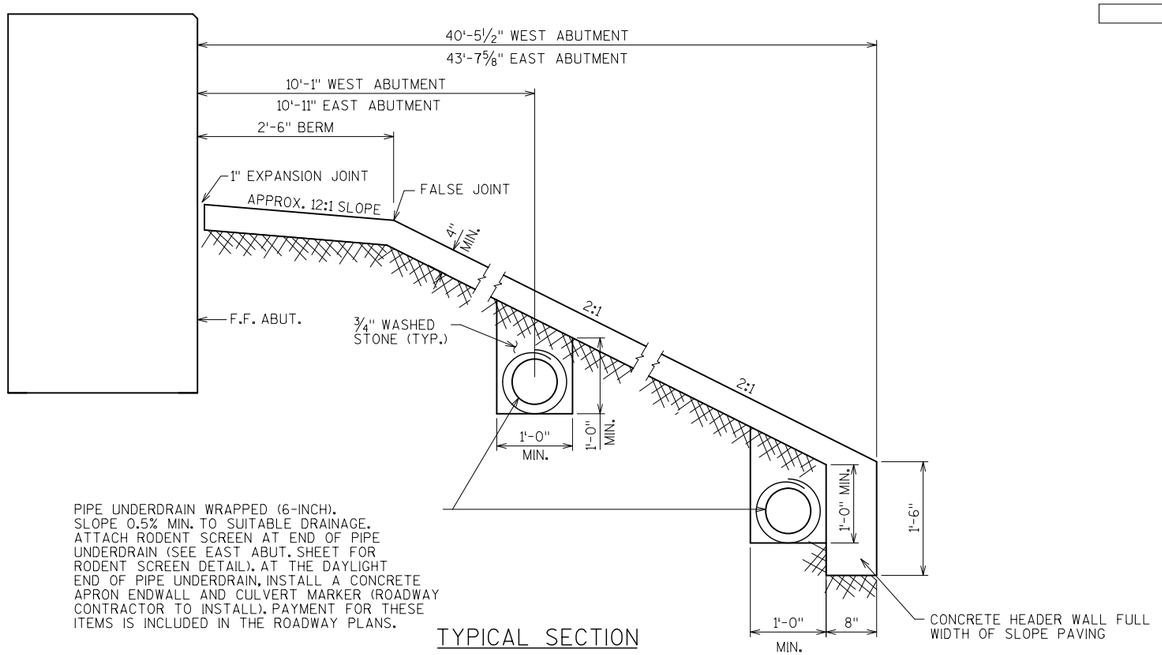
SECTION A-A



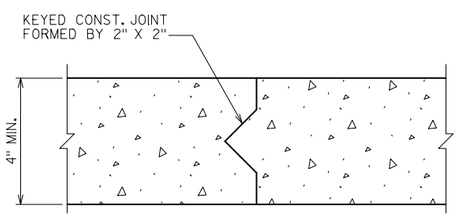
SECTION @ SIDEWALK



CONSTRUCTION JOINT DESIGN



TYPICAL SECTION



CONSTRUCTION JOINT

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN HEREON SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

NO.	DATE	REVISION	BY

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STRUCTURE B-70-410

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SLOPE PAVING CONCRETE

SHEET 35 OF 37
751

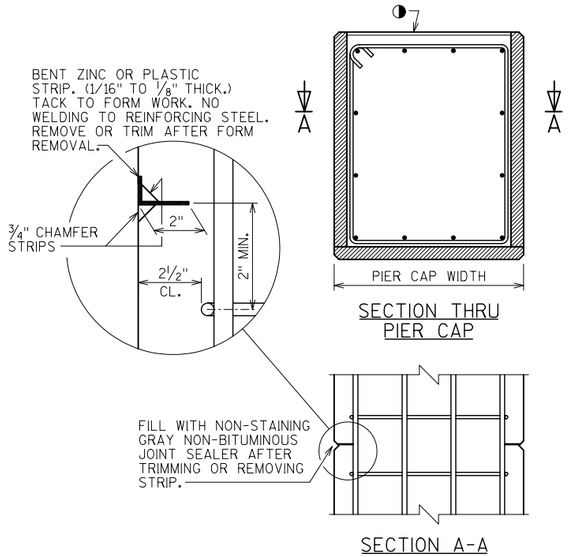
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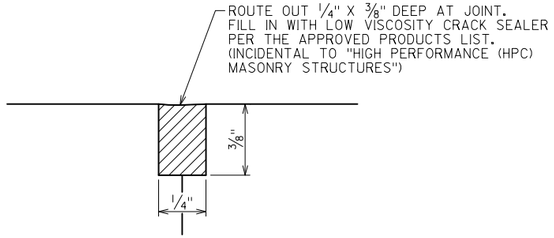
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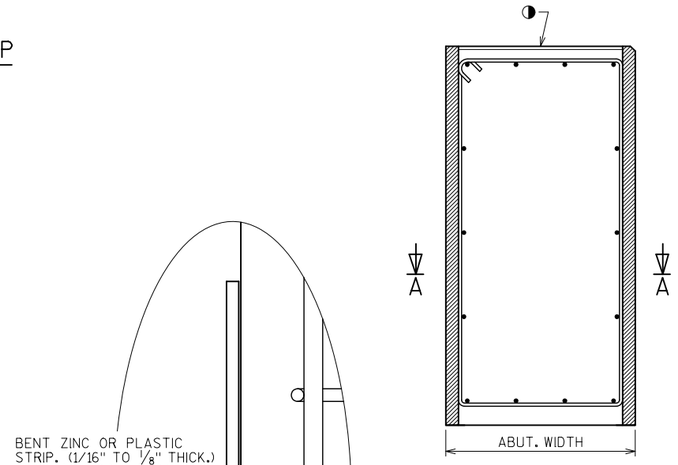
SECTION THRU PIER CAP

SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT PIER CAP



LONGITUDINAL CONSTRUCTION JOINT DETAIL



SECTION THRU ABUTMENT BODY

SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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ALTERNATE CONSTRUCTION JOINT

SHEET 36 OF 37
752

8

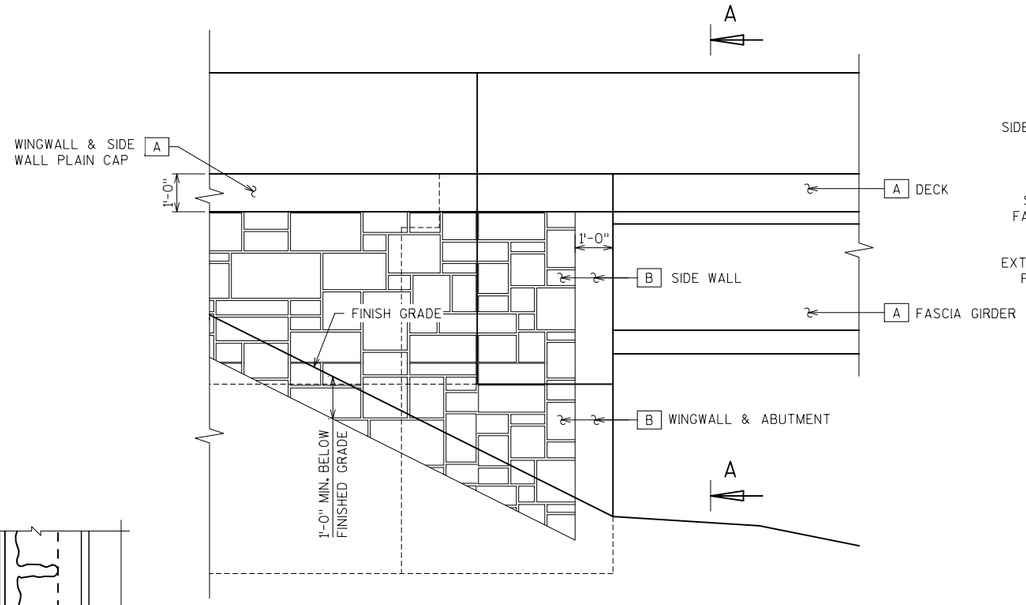
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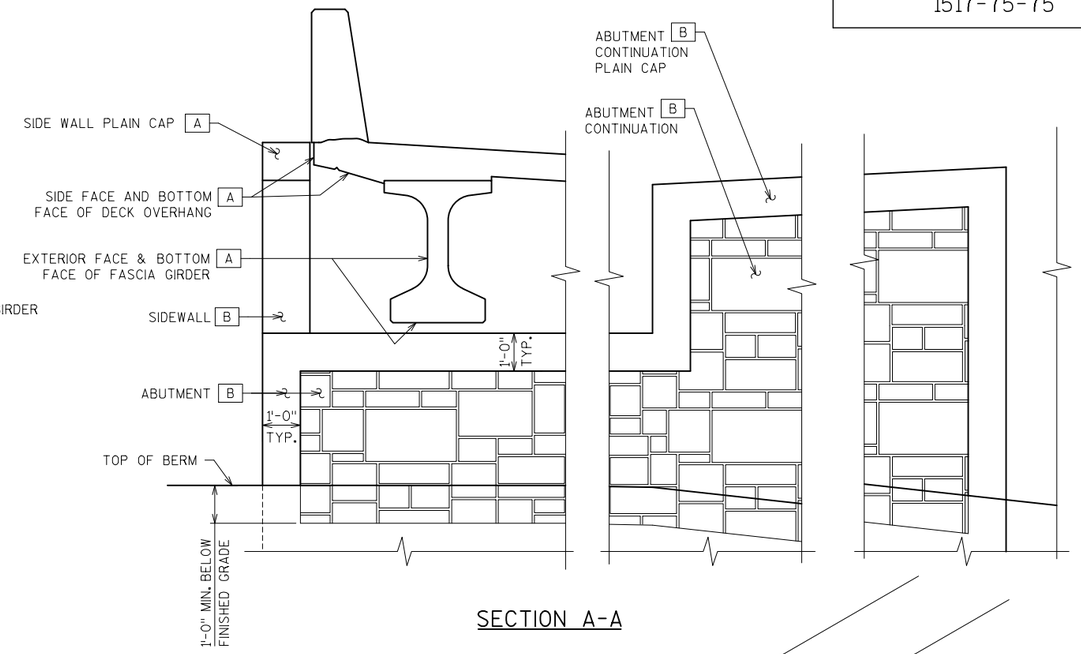
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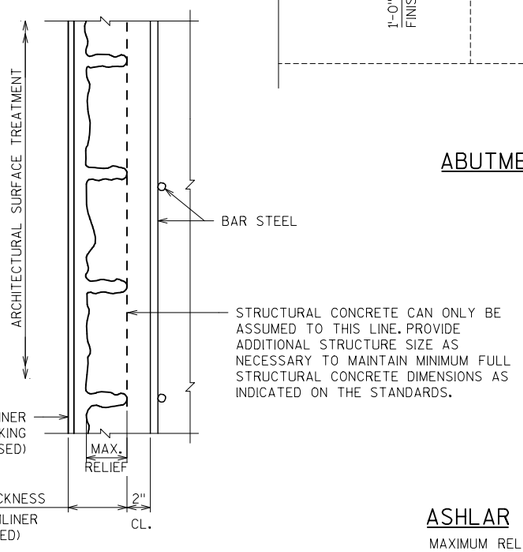
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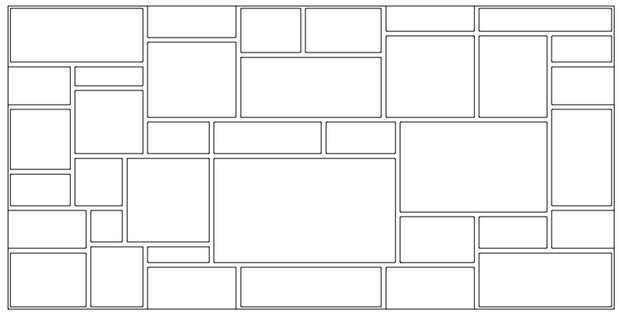
ABUTMENT STAINING DETAIL



SECTION A-A



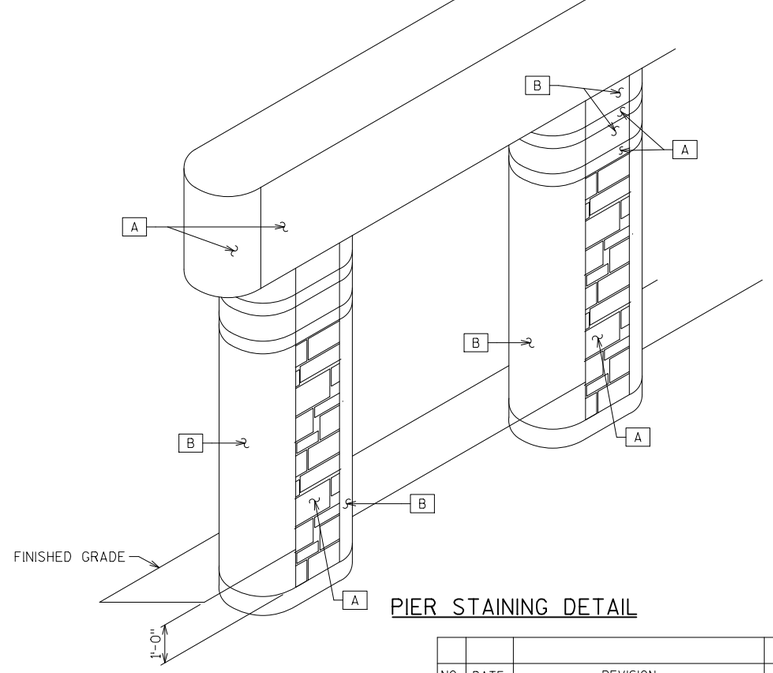
SECTION THROUGH FORMLINER



ASHLAR

MAXIMUM RELIEF:	1⅝"
AVERAGE RELIEF:	1¼"
LINER THICKNESS*:	2½"
STONE SIZE:	H: 3" - 17"
	W: 5"-29"

* INCLUDES INTERNAL PLYWOOD BACKING

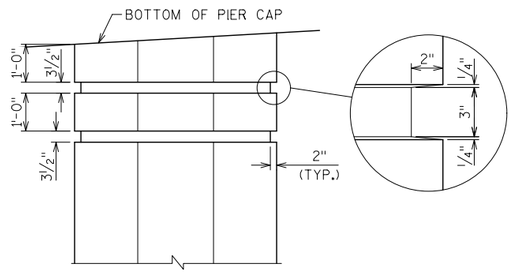


PIER STAINING DETAIL

CONCRETE STAINING SCHEDULE

MARK	COLOR	FED. COLOR NO.	LOCATION
A	BASKET BEIGE	33564	FASCIA GIRDERS, DECK EDGE, WING PLAIN CAPS, PIER CAPS AND COLUMN STRIPS
B	LATTE	33522	WINGWALLS, SIDE WALLS, ABUTMENTS, COLUMN SIDES

NOTE: 1. FINISH ON COLORS IS FLAT (LUSTERLESS)



TYP. TOP OF PIER COLUMN

NOTES

FORMLINER COURSING ON PIERS, ABUTMENTS, AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-410

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AESTHETIC DETAILS

SHEET 37 OF 37
753

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BENCHMARK

NO.	DESCRIPTION	ELEVATION
TA2	SPIKE IN NORTH FACE OF PPOL ON SOUTH SIDE OF ROAD	751.54
TA3	NE FLANGE BOLT ON HYD WEST SIDE OF TAYCO	756.56

NOTES

SPAN LENGTHS SHOWN ARE MEASURED ALONG TANGENT LINE A.

ALL UNITS ARE IN SURVEY FEET UNLESS OTHERWISE NOTED.

(#) INDICATES WINGWALL NUMBER

*** LONGITUDINAL DECK JOINT IS LOCATED IN THE GORE AREA.

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING FACTOR: 1.34
OPERATING RATING FACTOR: 1.75
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 238 KIPS

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY (HPC)
SUPERSTRUCTURE ..... f'c = 4,000 PSI
ALL OTHER ..... f'c = 4,000 PSI

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 .....fy = 60,000 PSI

36W"-INCH PRESTRESSED GIRDERS,
CONCRETE MASONRY .....f'c = 8,000 PSI
.....f'ci = 6,800 PSI

0.6" DIA. PRESTRESSING STRANDS ....f's = 270,000 PSI

STATE PROJECT NUMBER
1517-75-75

FOUNDATION DATA

SEE PROJECT SPECIAL PROVISIONS TO DETERMINE IF A FILL SETTLEMENT WAIT PERIOD IS REQUIRED BEFORE ABUTMENT PILES MAY BE DRIVEN.

WEST ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 160 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FEET LONG.

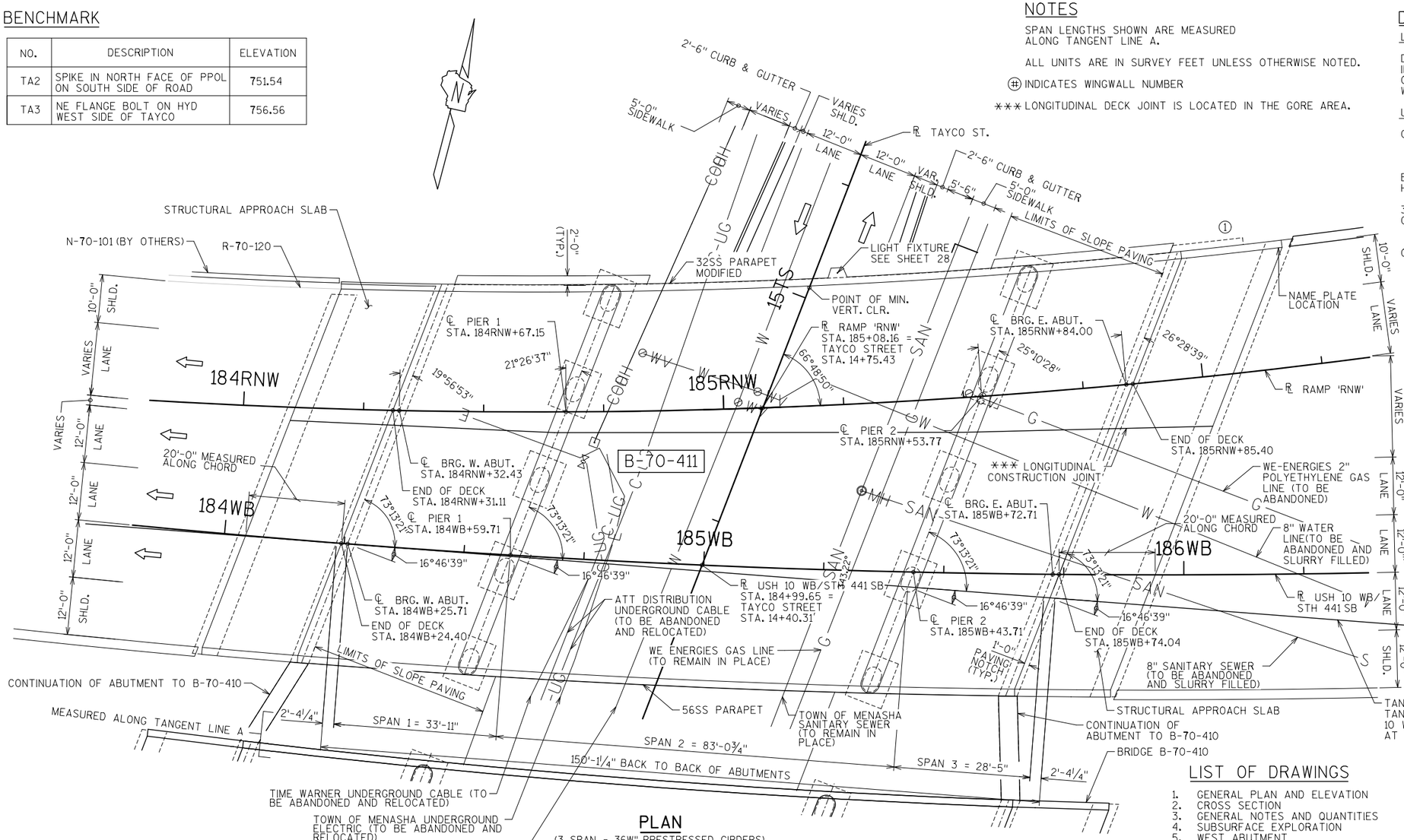
EAST ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FEET LONG.

PIER 1 TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 190 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50 FEET LONG.

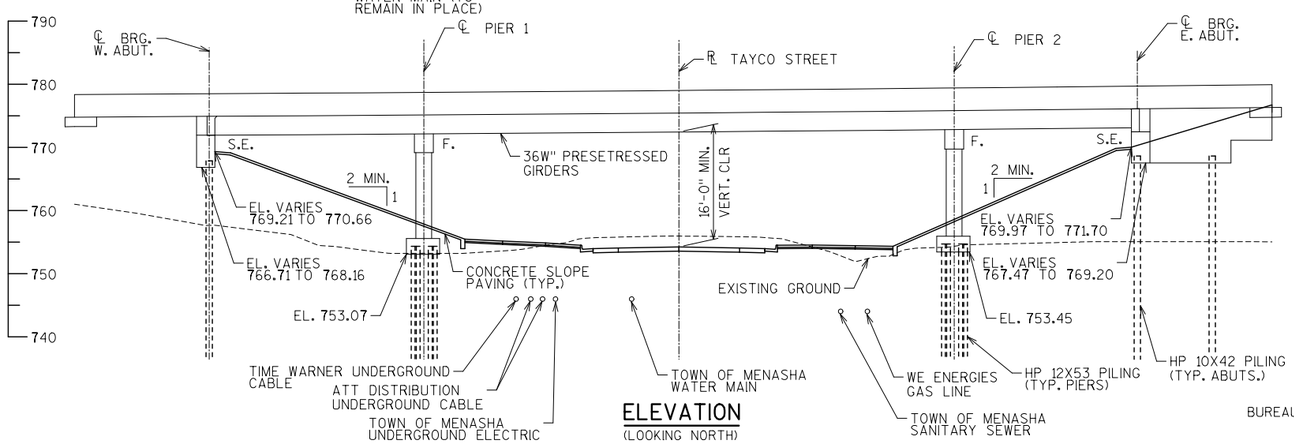
PIER 2 TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50 FEET LONG.

** 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 MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

THE EMBANKMENT AT BOTH ABUTMENTS MUST BE COMPLETED AND 90% CONSOLIDATION OF THE UNDERLYING SOIL FROM THE WEIGHT OF THE NEW FILL MUST BE ACHIEVED PRIOR TO DRIVING PILES.



PLAN
(3 SPAN - 36W" PRESTRESSED GIRDERS)



ELEVATION
(LOOKING NORTH)

TRAFFIC DATA:

USH 10/STH 441:
A.D.T. = 77000 (2020)
A.D.T. = 101000 (2038)
R.D.S. = 70 M.P.H.

TAYCO ST:
A.D.T. = 3900 (2020)
A.D.T. = 4400 (2038)
R.D.S. = 30 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. CROSS SECTION
3. GENERAL NOTES AND QUANTITIES
4. SUBSURFACE EXPLORATION
5. WEST ABUTMENT
6. WEST ABUTMENT DETAILS 1
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9. EAST ABUTMENT DETAILS 1
10. EAST ABUTMENT DETAILS 2
11. PIER 1
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13. PIER 2
14. PIER 2 DETAILS
15. 36W" PRESTRESSED GIRDER
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19. SUPERSTRUCTURE
20. SUPERSTRUCTURE DETAILS 1
21. SUPERSTRUCTURE DETAILS 2
22. SUPERSTRUCTURE DETAILS 3
23. STRUCTURAL APPROACH SLAB W. ABUT. 1
24. STRUCTURAL APPROACH SLAB W. ABUT. 2
25. STRUCTURAL APPROACH SLAB E. ABUT. 1
26. STRUCTURAL APPROACH SLAB E. ABUT. 2
27. SINGLE SLOPE PARAPET 32SS MODIFIED
28. SINGLE SLOPE PARAPET 32SS MODIFIED ELECTRICAL
29. SINGLE SLOPE PARAPET 56SS
30. SINGLE SLOPE PARAPET 56SS ELECTRICAL
31. SLOPE PAVING CONCRETE
32. ALTERNATE CONSTRUCTION JOINT
33. AESTHETIC DETAILS

NE REGION CONTACT - SCOTT EBEL (920) 492-2240
BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL ARNOLD (414) 831-4179

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
WI
PROFESSIONAL ENGINEER

05/05/2015

NO.	DATE	REVISION	BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 05/06/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-70-411

USH 10 WB/STH 441 SB OVER TAYCO ST

COUNTY	TOWN/~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JLB	CBO	JAS	CBO

GENERAL PLAN AND ELEVATION

SHEET 1 OF 33
754

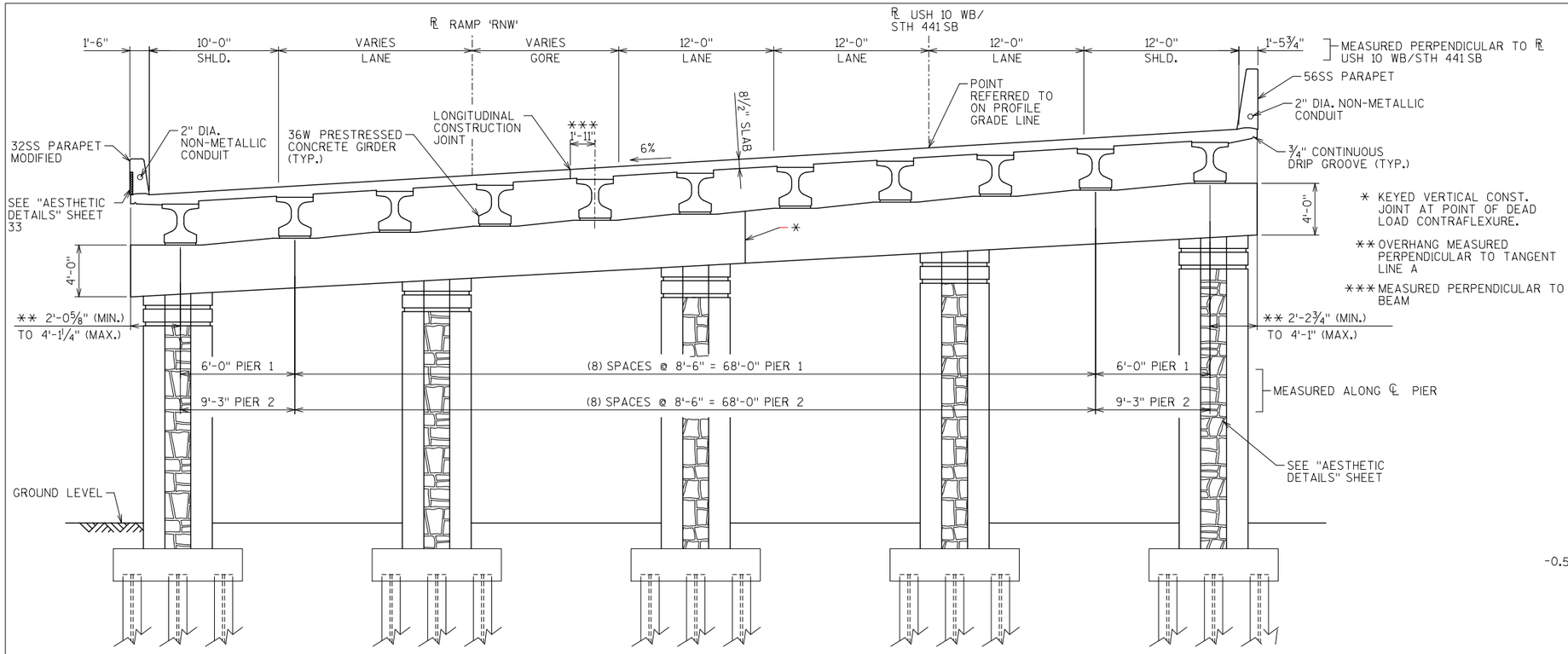
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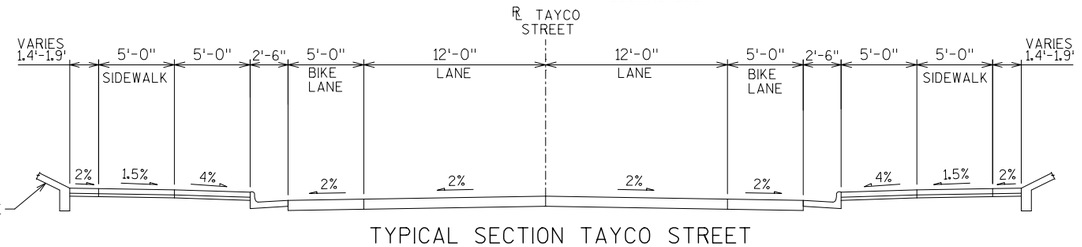
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STATE PROJECT NUMBER
1517-75-75



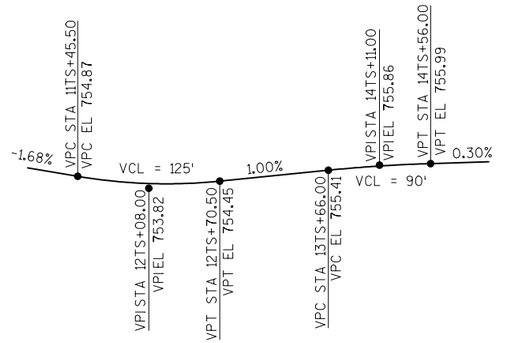
CROSS SECTION THRU ROADWAY

(LOOKING EAST)

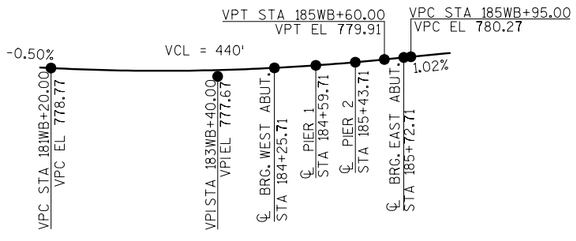


TYPICAL SECTION TAYCO STREET

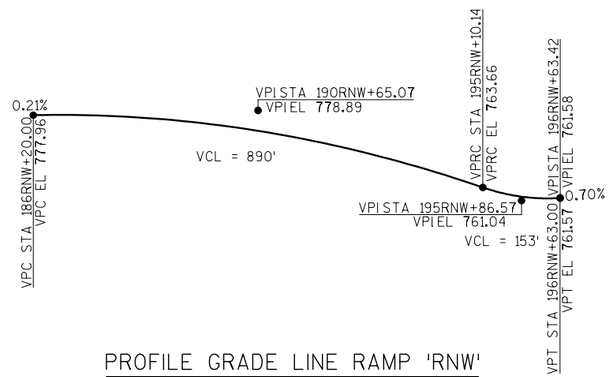
(LOOKING NORTH)



PROFILE GRADE LINE TAYCO STREET



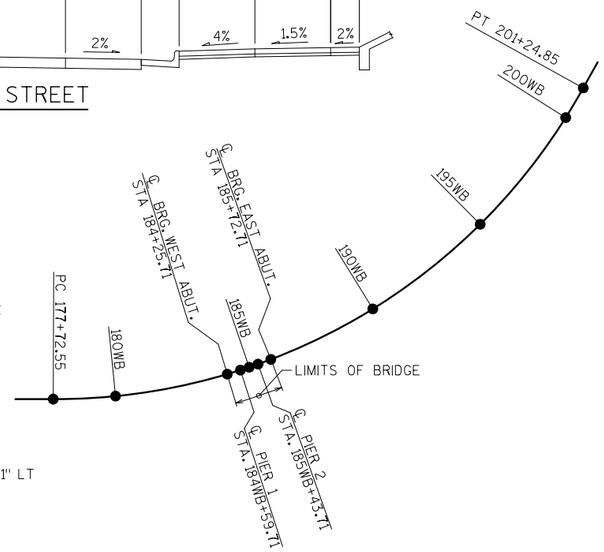
PROFILE GRADE LINE USH 10 WB/STH 441 SB



PROFILE GRADE LINE RAMP 'RNW'

USH 10 WB/ STH 441 SB HORIZONTAL CURVE DATA

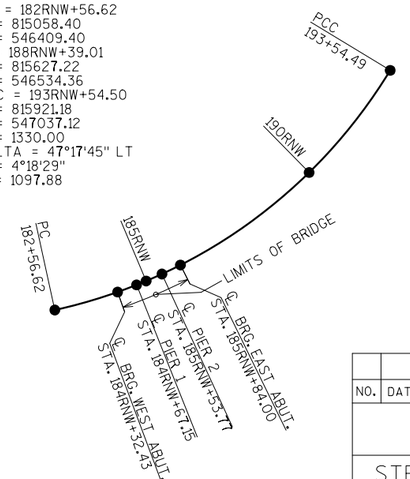
PC = 177+72.55
X = 814583.17
Y = 546334.74
PI = 190+75.25
X = 815885.86
Y = 546329.80
PT = 201+24.86
X = 816516.51
Y = 547469.67
R = 2200.00
DELTA = 61°15'44.61" LT
D = 2°36'15.67"
L = 2352.31



HORIZONTAL ALIGNMENT USH 10 WB/STH 441 SB

RACINE RD NW RAMP ('RNW') HORIZONTAL CURVE DATA

PC = 182RNW+56.62
X = 815058.40
Y = 546409.40
PI = 188RNW+39.01
X = 815627.22
Y = 546534.36
PCC = 193RNW+54.50
X = 815921.18
Y = 547037.12
R = 1330.00
DELTA = 47°17'45" LT
D = 4°18'29"
L = 1097.88



HORIZONTAL ALIGNMENT 'RNW'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

CROSS SECTION

SHEET 2 OF 33
755

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DATE: 5/5/2015
I.D.

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STATE PROJECT NUMBER

1517-75-75

GENERAL NOTES

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS ARE IN SURVEY FEET AND SURVEY INCHES. ALL STATIONS AND ELEVATIONS ARE IN SURVEY FEET.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WINNEBAGO COUNTY - NAD 1983 (1991).

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR CONSIDERED ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153, TYPE I, II, OR III OR M213.

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

AT ABUTMENTS, BACKFILL ALL EXCAVATED VOLUME NOT OCCUPIED BY NEW STRUCTURE WITH BACKFILL STRUCTURE.

✳ THE QUANTITY OF BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

✳✳ AT THE DAYLIGHT END OF PIPE UNDERDRAINS, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER. THIS WORK TO BE PERFORMED BY THE ROADWAY CONTRACTOR. PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

REINFORCING STEEL

ALL REINFORCING BARS ARE ENGLISH AND THE FIRST OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE.

REINFORCING STEEL SHALL BE HIGH STRENGTH, GRADE 60 WITH Fy=60 ksi. PROVIDE STAINLESS STEEL REINFORCEMENT CONFORMING TO ASTM A615, GRADE 60 REQUIREMENTS.

REINFORCING STEEL SHALL BE UNCOATED IN FOOTINGS (EXCEPT PIER SHAFT DOWELS) AND EPOXY COATED IN ALL OTHER LOCATIONS (INCLUDING PIER SHAFT DOWELS).

PLACE ALL REINFORCEMENT WITH A MINIMUM CLEAR COVER OF 2" UNLESS NOTED OTHERWISE.

PLACE REINFORCEMENT IN FOOTINGS AND PILECAPS WITH A MINIMUM CLEAR COVER OF 3" BOTTOM AND 2" TOP AND SIDES UNLESS NOTED OTHERWISE.

PLACE TOP LAYER OF REINFORCING STEEL IN THE DECK SURFACE WITH 2½" CLEAR COVER TO TOP OF SLAB.

PLACE BOTTOM LAYER OF REINFORCING STEEL IN THE DECK WITH 1½" CLEAR COVER TO BOTTOM OF SLAB.

ONLY REINFORCEMENT REQUIRED BY DESIGN IS SHOWN EXPLICITLY ON THE DRAWINGS. ADDITIONAL REINFORCEMENT MAY BE USED TO SIMPLIFY ASSEMBLY AND ERECTION OF THE REINFORCING STEEL AND MAY BE REQUIRED TO ENSURE STABILITY AND POSITIONING OF THE COMPLETED REINFORCEMENT CAGE. REINFORCEMENT IN ADDITION TO THAT SHOWN WILL NOT BE INCLUDED FOR PAYMENT.

LAP SPLICE LENGTHS SHALL BE CLASS C UNLESS NOTED OTHERWISE.

CONCRETE

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

CHAMFER ALL EXPOSED OUTSIDE CORNERS ¾" UNLESS NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE INSIDE OF PARAPETS, TOP OF PARAPETS, AND TOP OF DECK AND APPROACH SLABS.

IF OPTIONAL CONSTRUCTION JOINT IS USED IN ABUTMENT OR PIER DIAPHRAGMS, DECK POUR MUST BE WITHIN TWO WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

OTHER DESIGN LOADS

THE STRUCTURE IS DESIGNED FOR THE DECK THICKNESS SHOWN. AN ADDITIONAL LOAD OF 20 PSF FOR A FUTURE WEARING SURFACE AND 5 PSF FOR POLYMER OVERLAY IS CONSIDERED IN THE DESIGN.

TEMPERATURE CHANGE FOR DETERMINING THERMAL FORCES ON SUBSTRUCTURES = 45°F.

PARAPETS WERE ASSUMED TO WEIGH 774 PLF FOR 56SS PARAPET AND 516 PLF FOR 32SS PARAPET MODIFIED.

ALL OTHER LOADS IN ACCORDANCE WITH AASHTO.

DESIGN CRITERIA

DESIGN IS IN ACCORDANCE WITH AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATIONS AND THE WISDOT BRIDGE MANUAL.

ALL DETAILS, MATERIALS, AND FABRICATION SHALL CONFORM TO THE THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. USE THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS AT THE TIME OF CONSTRUCTION.

LIVE LOAD PLUS DYNAMIC LOAD DEFLECTION LIMIT = SPAN / 800 (HL93).

TOTAL ESTIMATED QUANTITIES

	BID ITEM #	BID ITEM	UNIT	SUPER.	W. ABUT.	PIER 1	PIER 2	E. ABUT.	TOTAL
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-411	LS	1	--	--	--	--	1
✳	210.0100	BACKFILL STRUCTURE	CY	--	183	--	--	244	427
	305.0120	BASE AGGREGATE DENSE 1 1/4 INCH	TON		254	--	--	297	551
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	2,040	--	--	--	--	2,040
	503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	1,645	--	--	--	--	1,645
	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	--	--	3,755	3,755	--	7,510
	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	193,460	5,900	20,010	20,410	7,770	247,550
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	3,120	--	--	--	--	3,120
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	66	--	--	--	--	66
	506.4000	STEEL DIAPHRAGMS B-70-411	EACH	40	--	--	--	--	40
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	--	15	--	--	17	32
	517.1010.S	CONCRETE STAINING B-70-411	SF	1,833	441	2,132	2,241	568	7,215
	517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-411	SF	311	448	294	311	541	1,905
	550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	--	720	--	--	900	1,620
	550.1120	PILING STEEL HP 12-INCH x 53 LB	LF	--	--	2,000	2,000	--	4,000
	604.0400	SLOPE PAVING CONCRETE	SY	--	383	--	--	406	789
✳✳	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	--	262	--	--	302	564
	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	90	--	--	--	--	90
	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	328	--	--	--	--	328
	653.0220	JUNCTION BOXES 18x6x6-INCH	EACH	1	--	--	--	--	1
	653.0222	JUNCTION BOXES 18x12x6-INCH	EACH	1	--	--	--	--	1
	657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURE	EACH	1	--	--	--	--	1
	SPV.0035.700	MODIFIED HIGH PERFORMANCE CONCRETE (HPC) MASONRY BRIDGES	CY	785	93	130	136	107	1,251
		NON BID ITEMS							
		FILLER	SIZE						1/2" & 3/4"
		NAME PLATE	EACH						1
		EXPANDED POLYSTYRENE	SIZE						1"

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

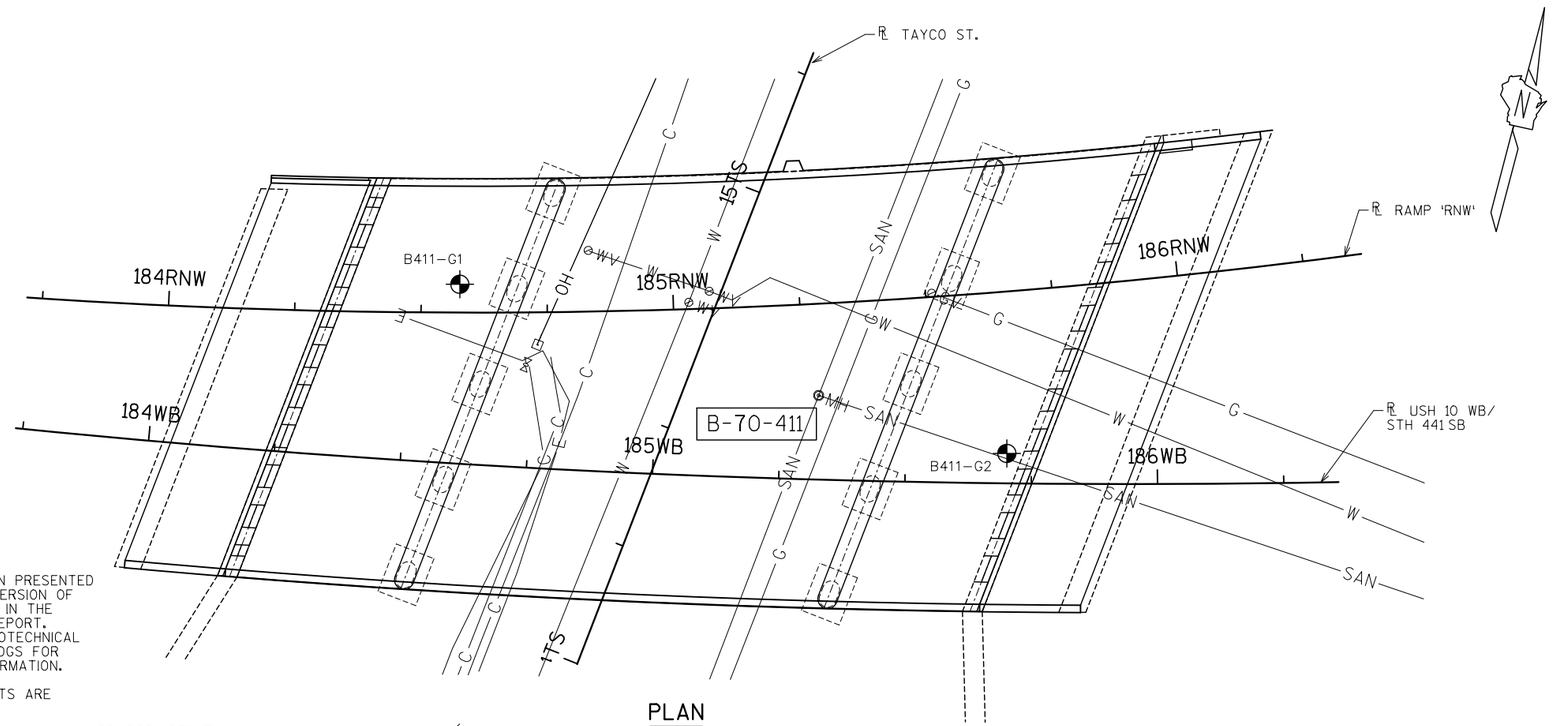
DRAWN BY JAS | PLANS CK'D. CBO

GENERAL NOTES AND QUANTITIES

SHEET 3 OF 33
756

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DATE: 5/5/2015
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PLAN

(3 SPAN - 36W" PRESTRESSED GIRDERS)

NOTE:

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 BEARING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

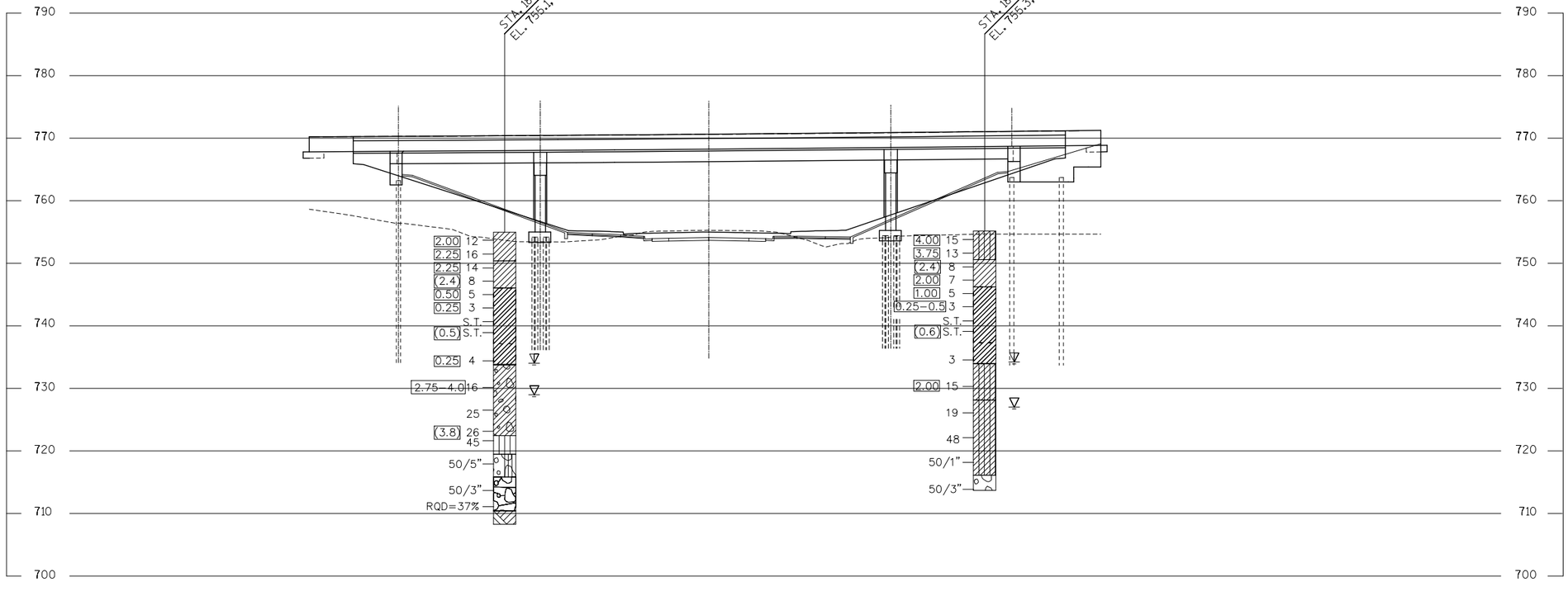
BORING STATIONS AND OFFSETS ARE BASED ON ℄ WB

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRAENGINEERING INC.

SOILBORINGTAKEN:

2.22.2012 – BORING B411–G1
2.21.2012 – BORING B411–G2



STATE PROJECT NUMBER

1517-75-75

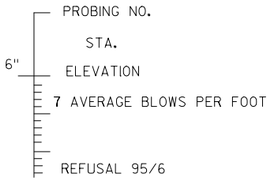
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

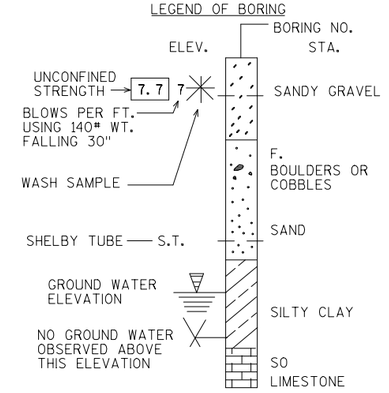
TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

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-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SUBSURFACE EXPLORATION

SHEET 4 OF 33
757

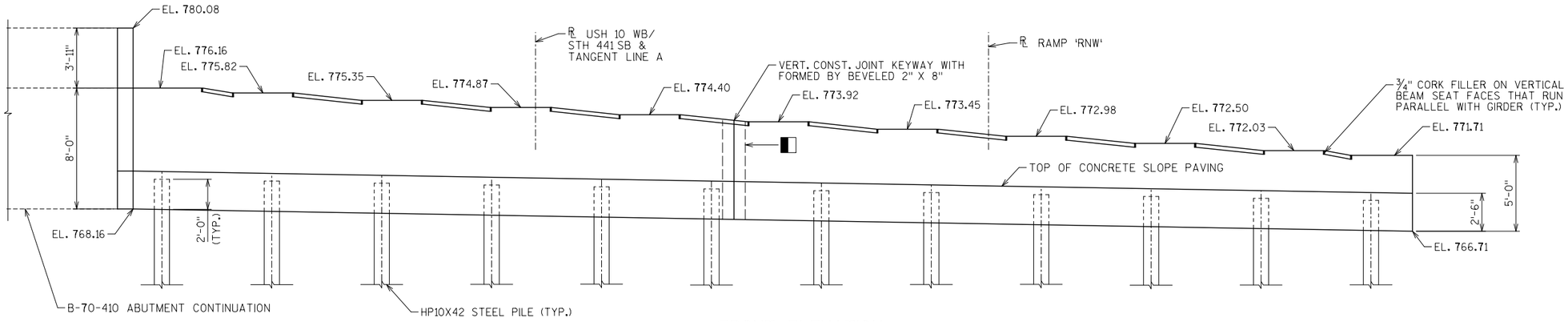
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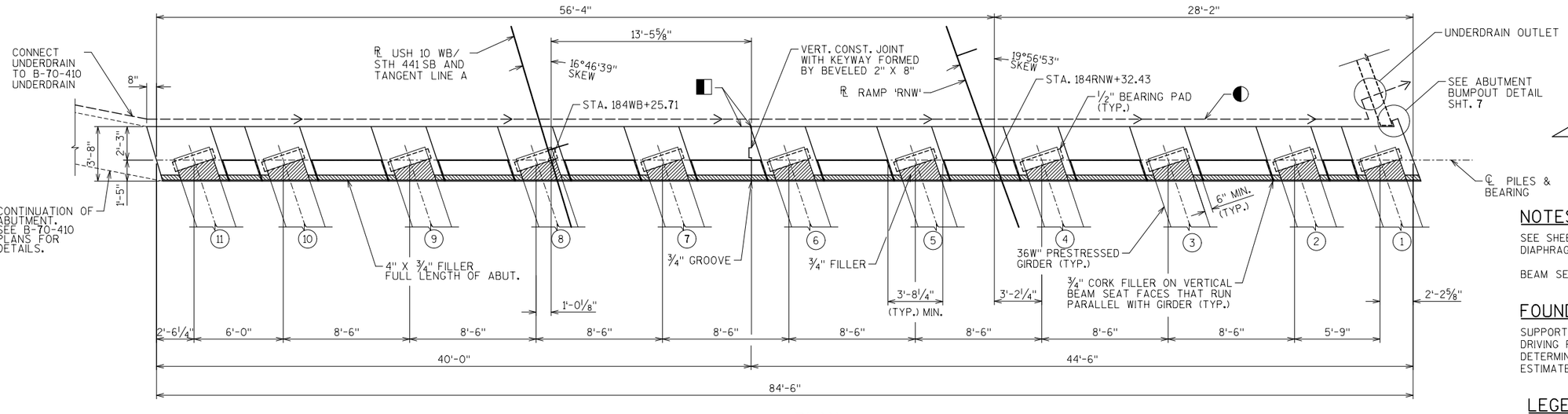
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STATE PROJECT NUMBER
1517-75-75



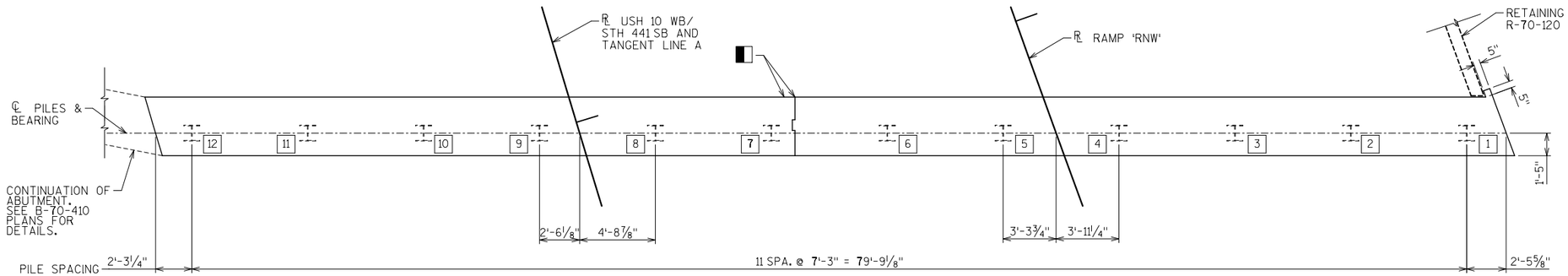
FRONT ELEVATION

(LOOKING WEST)



PLAN

(PILES NOT SHOWN FOR CLARITY)



PILE PLAN

NOTES

SEE SHEET 19, "SUPERSTRUCTURE DETAILS" FOR DIAPHRAGM AND BEARING PAD DETAILS.

BEAM SEAT ELEVATIONS ARE BASED ON 3½" HAUNCHES.

FOUNDATION DATA

SUPPORT ON HP 10X42 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 60 FEET.

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT EXPOSED END OF PIPE UNDERDRAIN. SEE RODENT SHIELD DETAIL, SHEET 31. AT THE DAYLIGHT END OF PIPE UNDERDRAINS, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- (#) INDICATES BEAM NUMBER
- [#] INDICATES PILE NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

WEST ABUTMENT

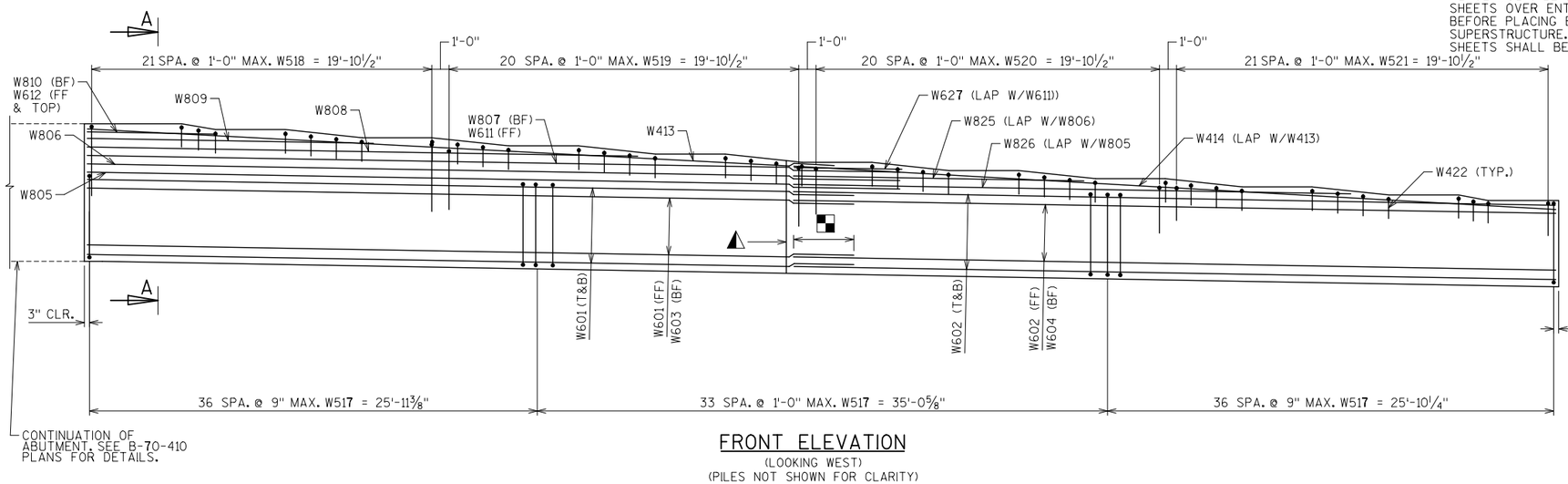
SHEET 5 OF 33
758

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DATE: 5/5/2015
I.D.

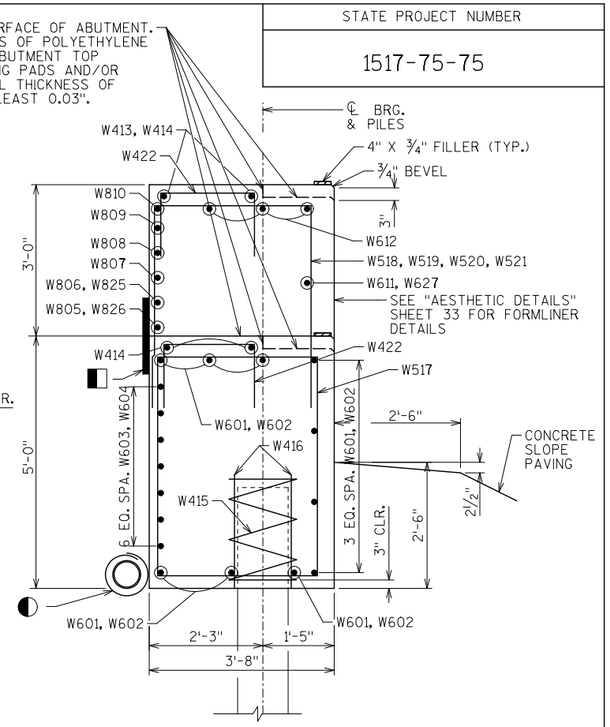
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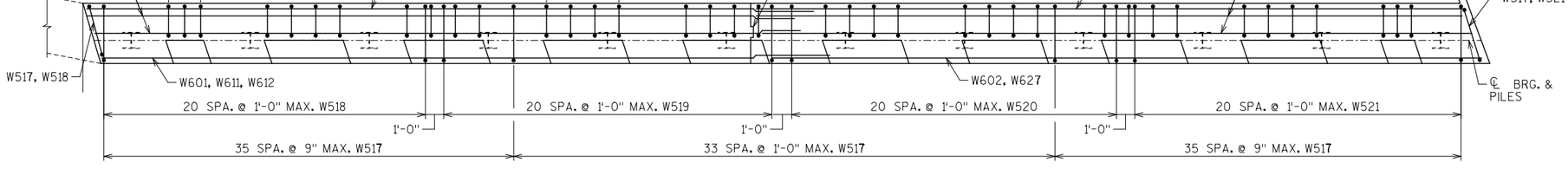


FRONT ELEVATION

(LOOKING WEST)
(PILES NOT SHOWN FOR CLARITY)



SECTION A-A



PLAN

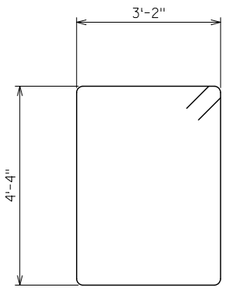
(RETAINING WALL BUMPOUT REINFORCING NOT SHOWN FOR CLARITY)
(SEE SHEET 7 "WEST ABUTMENT DETAILS 2" FOR RETAINING WALL BUMPOUT REINFORCEMENT DETAILS)

BILL OF BARS

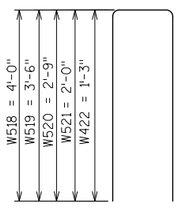
ALL BARS EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
W601	10	44'-3"		BODY HORIZ. FRONT FACE
W602	10	43'-8"		BODY HORIZ. FRONT FACE
W603	7	44'-2"		BODY HORIZ. BACK FACE
W604	7	43'-8"		BODY HORIZ. BACK FACE
W805	1	46'-0"		BODY HORIZ. BACK FACE
W806	1	46'-0"		BODY HORIZ. BACK FACE
W807	1	45'-6"		BODY HORIZ. BACK FACE
W808	1	31'-10"		BODY HORIZ. BACK FACE
W809	1	16'-7"		BODY HORIZ. BACK FACE
W810	1	7'-5"		BODY HORIZ. BACK FACE
W611	1	44'-3"		BODY HORIZ. FRONT FACE
W612	3	11'-9"		BODY HORIZ. FRONT FACE
W413	2	43'-0"		BODY HORIZ. BEAM SEAT REINF.
W414	2	44'-2"		BODY HORIZ. BEAM SEAT REINF.
W415	12	28'-0"	X	SPIRAL REINF. AT PILES
W416	24	2'-3"		PILE REINF.
W517	106	15'-7"	X	BODY VERT.
W518	22	10'-11"	X	BODY VERT.
W519	21	9'-11"	X	BODY VERT.
W520	21	8'-5"	X	BODY VERT.
W521	22	6'-11"	X	BODY VERT.
W422	38	4'-3"	X	BEAM SEAT VERT.
W423	2	4'-8"		BUMP OUT VERT.
W424	6	5'-0"	X	BUMP OUT
W825	1	16'-10"		BODY HORIZ. BACK FACE
W826	1	32-1		BODY HORIZ. BACK FACE
W627	1	6'-3"		BODY HORIZ. FRONT FACE

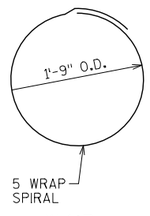
TOTAL WEIGHT= 5,900 LB



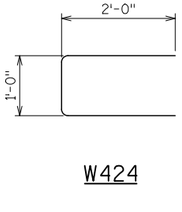
W517



W518, W519, W520, W521, W422



W415



W424

NOTES

FOR PILING SPLICE DETAIL, SEE SHEET 7 "WEST ABUTMENT DETAILS 2".

WHEN LAPPING #8 BAR WITH #6 BAR, USE MINIMUM LAP OF 3'-6".

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT EXPOSED END OF PIPE UNDERDRAIN. SEE RODENT SHIELD DETAIL, SHEET 31. AT THE DAYLIGHT END OF PIPE UNDERDRAINS, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- VERTICAL CONSTRUCTION JOINT WITH KEYWAY FORMED BY BEVELED 2" X 8".
- LAP LENGTHS = 2'-4" FOR #4 BARS
  3'-6" FOR #6 BARS
  5'-9" FOR #8 BARS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

WEST ABUTMENT DETAILS 1

SHEET 6 OF 33
759

STATE PROJECT NUMBER
1517-75-75

8

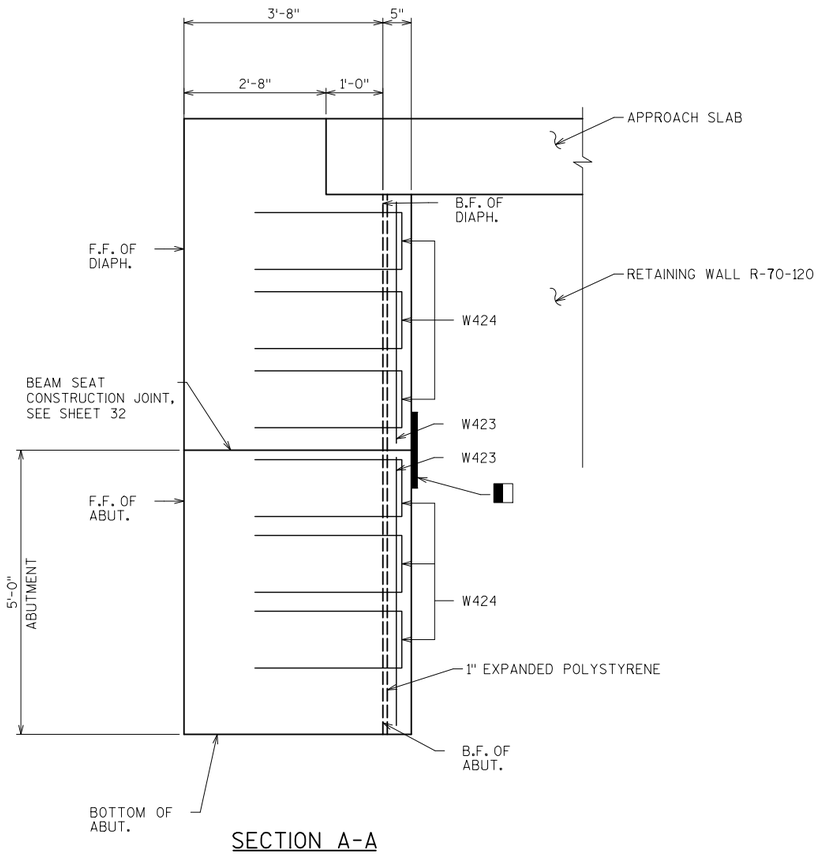
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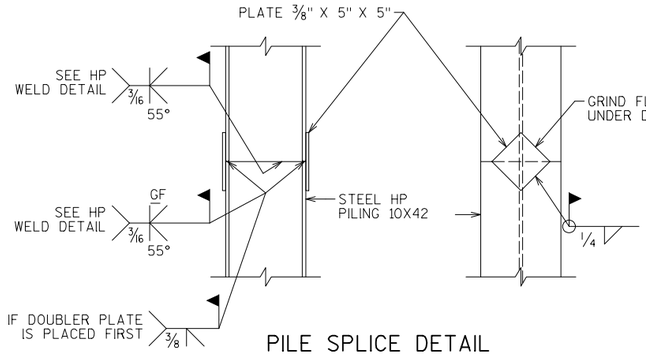
DATE: 5/5/2015
I.D.

STATE PROJECT NUMBER

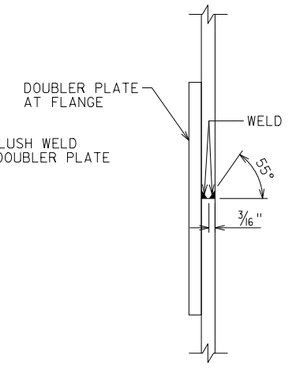
1517-75-75



SECTION A-A



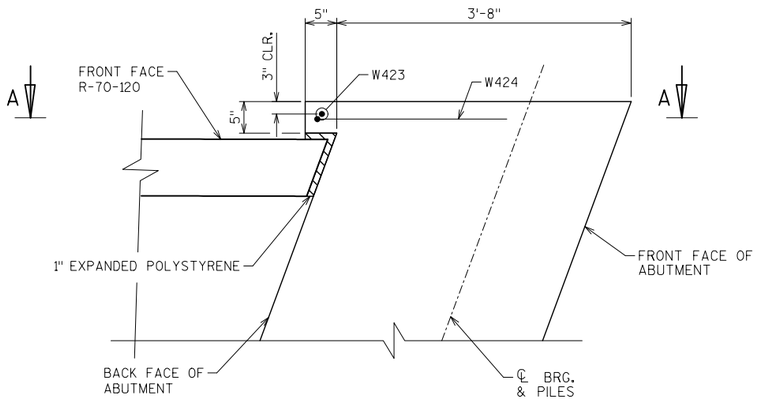
PILE SPLICE DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR





ANCHOR AND APPROACH SLAB PLAN

NOTES

SEE WEST APPROACH SLAB PLAN AND DETAILS ON SHEET 23 AND 24 FOR MORE DETAILS.

LEGEND

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

WEST ABUTMENT DETAILS 2

SHEET 7 OF 33
760

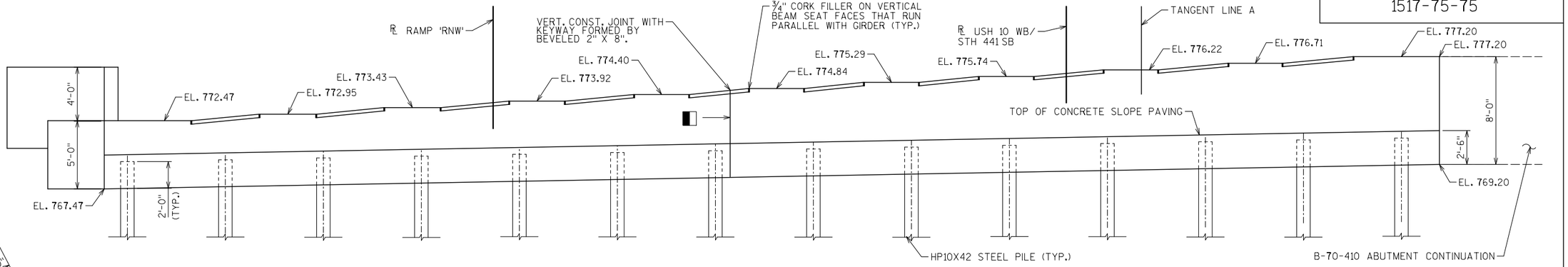
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DATE: 5/5/2015
I.D.

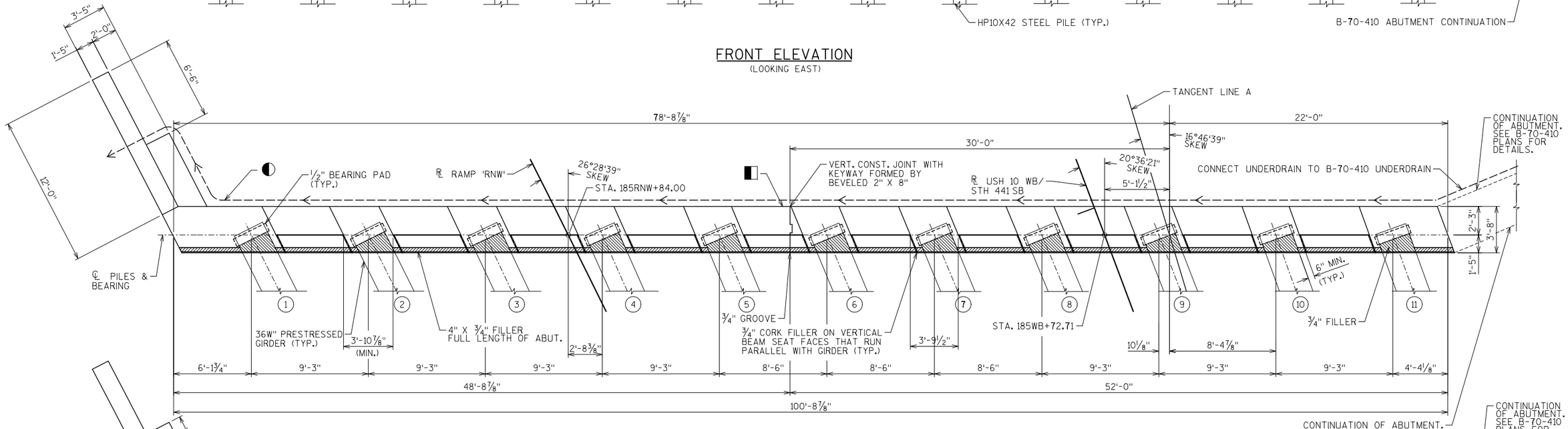
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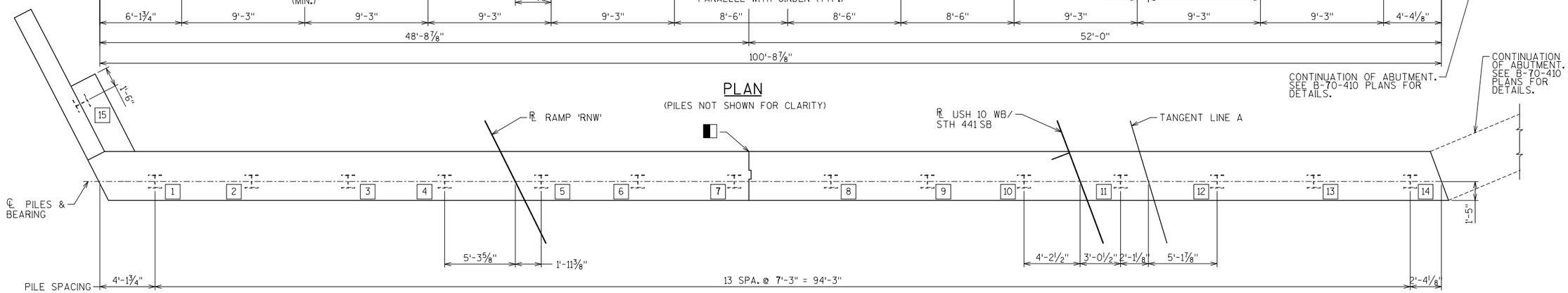
STATE PROJECT NUMBER
1517-75-75



FRONT ELEVATION
(LOOKING EAST)



PLAN
(PILES NOT SHOWN FOR CLARITY)



PILE PLAN

NOTES

SEE SHEET 19, "SUPERSTRUCTURE DETAILS" FOR DIAPHRAGM AND BEARING PAD DETAILS.

BEAM SEAT ELEVATIONS ARE BASED ON 3½" HAUNCHES.

FOUNDATION DATA

SUPPORT ON HP 10X42 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 60 FEET.

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT EXPOSED END OF PIPE UNDERDRAIN. SEE RODENT SHIELD DETAIL, SHEET 31. AT THE DAYLIGHT END OF PIPE UNDERDRAINS, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- (#) INDICATES BEAM NUMBER
- [#] INDICATES PILE NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

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EAST ABUTMENT

SHEET 8 OF 33
761

DATE: 5/5/2015
I.D.

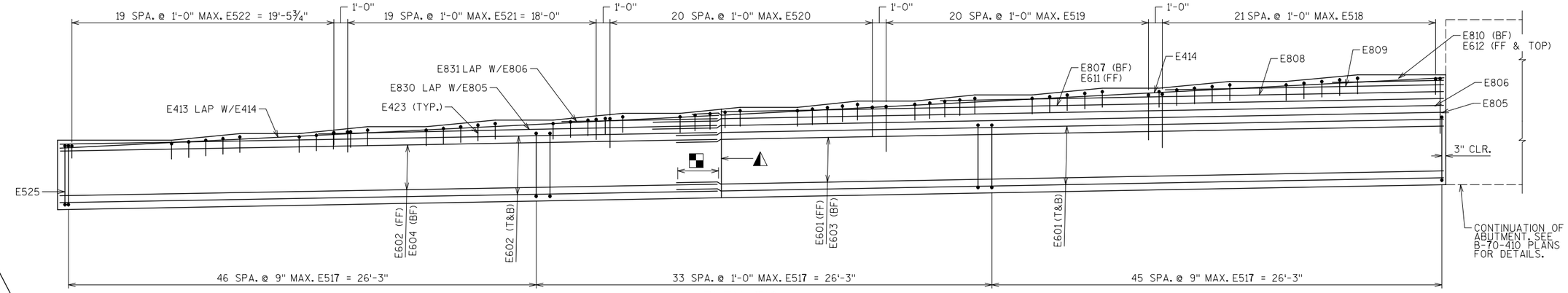
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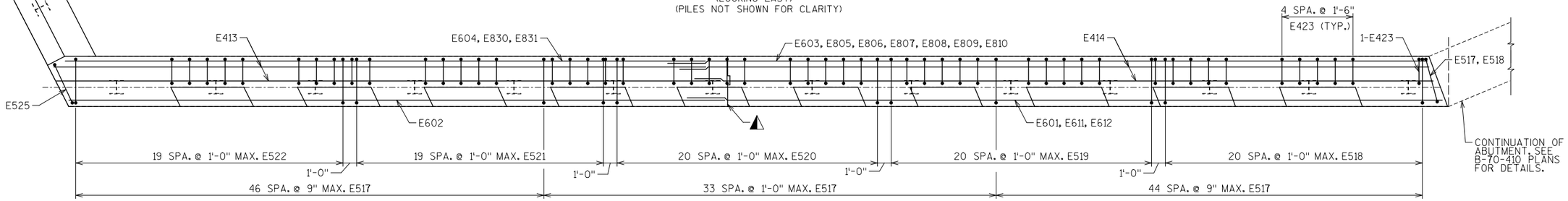
STATE PROJECT NUMBER

1517-75-75



ELEVATION

(LOOKING EAST)
(PILES NOT SHOWN FOR CLARITY)



PLAN

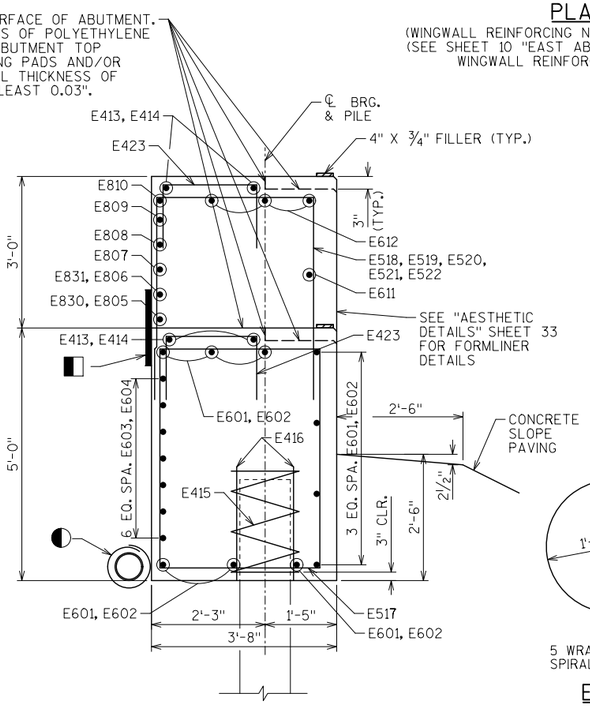
(WINGWALL REINFORCING NOT SHOWN FOR CLARITY)
(SEE SHEET 10 "EAST ABUTMENT DETAILS 2" FOR WINGWALL REINFORCEMENT DETAILS.)

BILL OF BARS

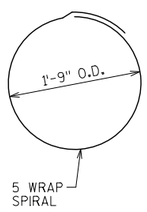
ALL BARS EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
E601	10	55'-10"		BODY HORIZ. FRONT FACE
E602	10	47'-9"		BODY HORIZ. FRONT FACE
E603	7	55'-10"		BODY HORIZ. BACK FACE
E604	7	47'-9"		BODY HORIZ. BACK FACE
E805	1	58'-5"		BODY HORIZ. BACK FACE
E806	1	58'-5"		BODY HORIZ. BACK FACE
E807	1	52'-4"		BODY HORIZ. BACK FACE
E808	1	36'-5"		BODY HORIZ. BACK FACE
E809	1	20'-1"		BODY HORIZ. BACK FACE
E810	1	8'-0"		BODY HORIZ. BACK FACE
E611	1	52'-4"		BODY HORIZ. FRONT FACE
E612	3	8'-0"		BODY HORIZ. FRONT FACE
E413	2	48'-0"		BODY HORIZ. BEAM SEAT REINF.
E414	2	56'-10"		BODY HORIZ. BEAM SEAT REINF.
E415	15	28'-0"	X	SPIRAL RIENF. AT PILES
E416	30	2'-3"		PILE REINF.
E517	125	15'-7"	X	BODY VERT.
E518	22	10'-11"	X	BODY VERT.
E519	21	9'-11"	X	BODY VERT.
E520	21	8'-5"	X	BODY VERT.
E521	21	7'-5"	X	BODY VERT.
E522	21	6'-11"	X	BODY VERT.
E423	51	4'-3"	X	BEAM SEAT VERT.
E524	6	11'-7"		WINGWALL BODY HORIZ. FRONT FACE
E525	7	15'-1"	X	WINGWALL BODY VERT. AND BODY VERT. AT END
E526	17	12'-10"	X	WINGWALL TOP VERT.
E427	10	11'-8"		WINGWALL TOP HORIZ.
E428	5	7'-9"		WINGWALL TOP HORIZ.
E729	8	9'-2"		WINGWALL BODY HORIZ. BACK FACE
E830	1	30'-3"		BODY HORIZ. BACK FACE
E831	1	12'-8"		BODY HORIZ. BACK FACE

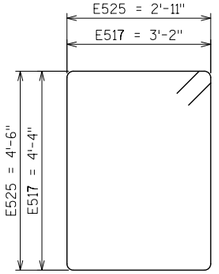
TOTAL WEIGHT= 7,770 LB



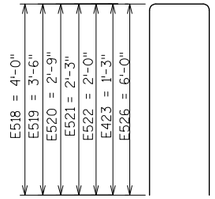
SECTION THRU ABUTMENT



E415



E517, E525



E518, E519, E520, E521, E522, E423, E526

NOTES

FOR PILING SPLICE DETAIL, SEE SHEET 7 "WEST ABUTMENT DETAILS 2".

WHEN LAPPING #8 BAR WITH #6 BAR, USE MINIMUM LAP OF 3'-6".

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT EXPOSED END OF PIPE UNDERDRAIN, SEE RODENT SHIELD DETAIL, SHEET 31. AT THE DAYLIGHT END OF PIPE UNDERDRAINS, INSTALL A CONCRETE APRON ENDWALL AND CULVERT MARKER (ROADWAY CONTRACTOR TO INSTALL). PAYMENT FOR THESE ITEMS IS INCLUDED IN THE ROADWAY PLANS.
- VERTICAL CONSTRUCTION JOINT WITH KEYWAY FORMED BY BEVELED 2" X 8".
- LAP LENGTHS = 2'-4" FOR #4 BARS
  3'-6" FOR #6 BARS
  5'-9" FOR #8 BARS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

EAST ABUTMENT DETAILS 1

SHEET 9 OF 33
762

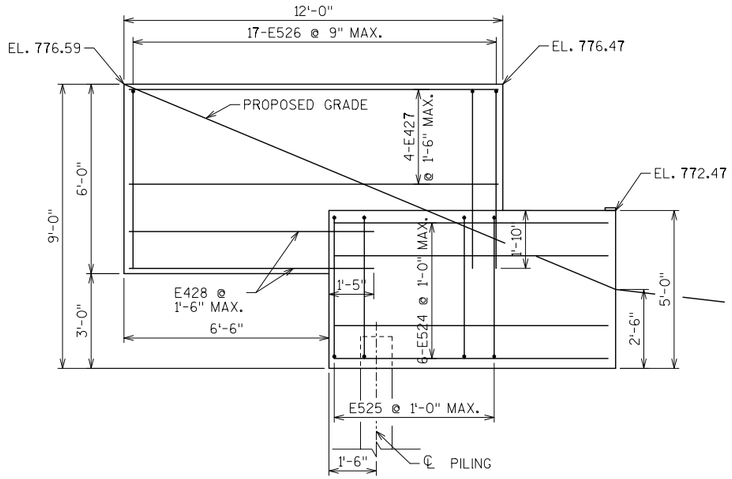
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8

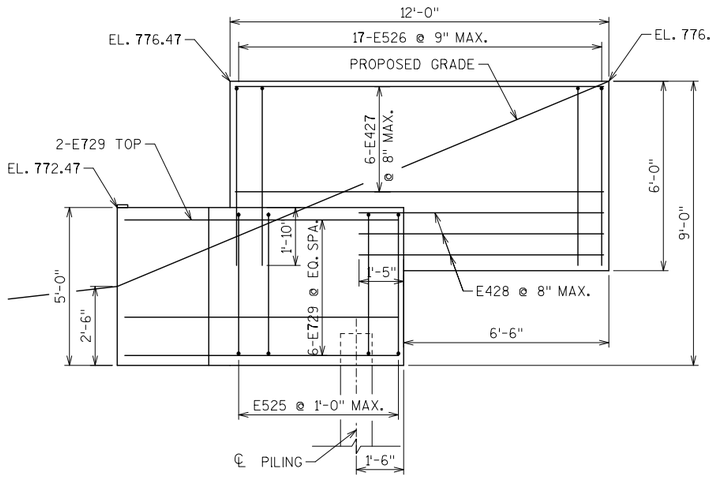
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I.D.

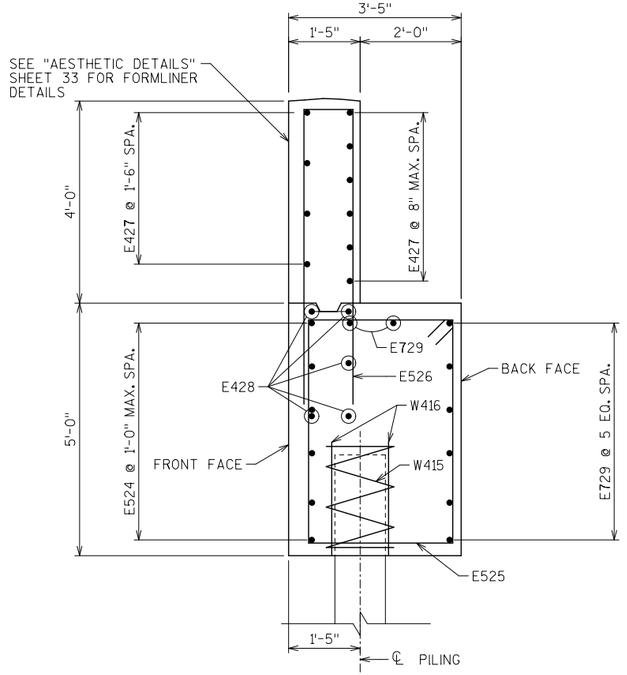
STATE PROJECT NUMBER
1517-75-75



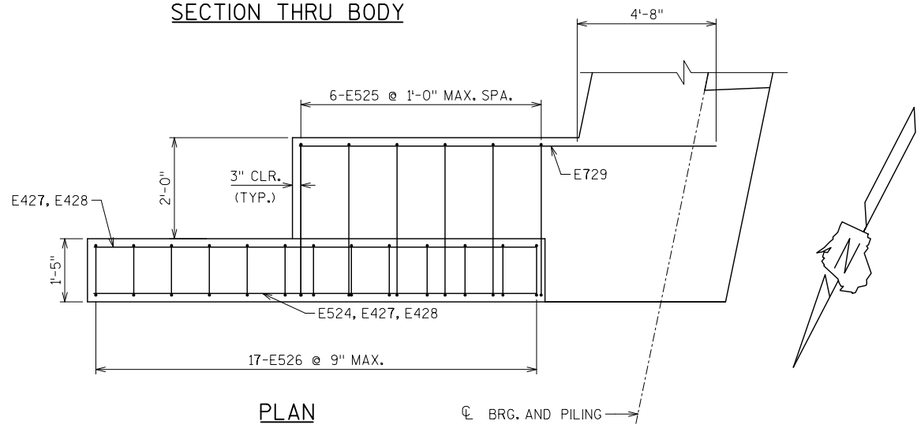
FRONT ELEVATION



BACK ELEVATION



SECTION THRU BODY



PLAN

FOR BILL OF BARS AND BEND DIAGRAMS, SEE SHEET 9 "EAST ABUTMENT DETAILS 1".

FOR PILE SPLICE DETAIL, SEE SHEET 7 "WEST ABUTMENT DETAILS 2".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

EAST ABUTMENT DETAILS 2

SHEET 10 OF 33
763

8

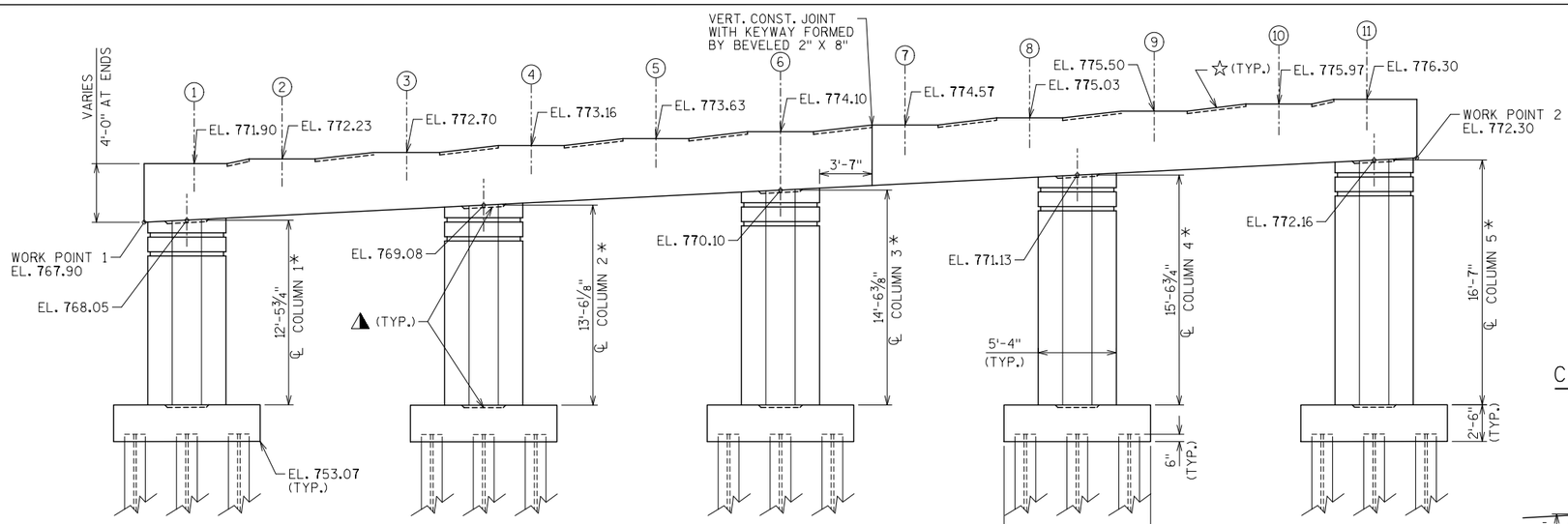
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I.D.

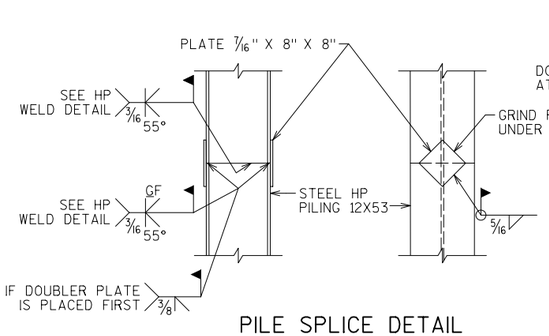
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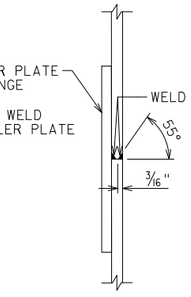


ELEVATION - PIER 1

(LOOKING EAST)



PILE SPLICE DETAIL



HP WELD DETAIL

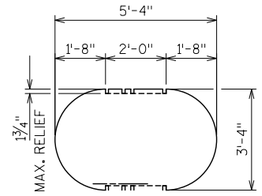
FLANGE SHOWN, WEB SIMILAR

FOUNDATION DATA

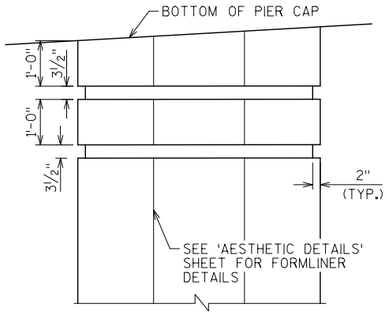
SUPPORT ON HP 12X53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 50 FEET.

LEGEND

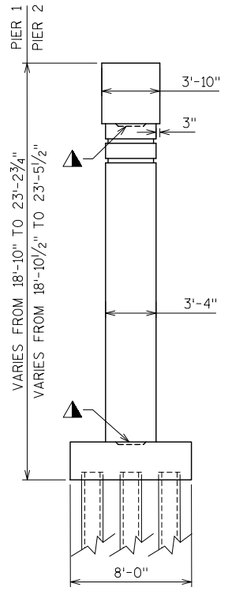
- * SLOPE TOP OF COLUMNS TO MATCH CAP SLOPE
- (#) INDICATES GIRDER NUMBER
- ◭ 2'-8" X 1'-8" X 2" CONST. JT. FORMED BY BEVELED KEYWAY
- ☆ 2" X 6" BEVELED KEYWAY BETWEEN GIRDERS
- ◨ ½" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD (TYP.)
- ** MEASURED FROM TANGENT LINE A
- [#] INDICATES PILE NUMBER



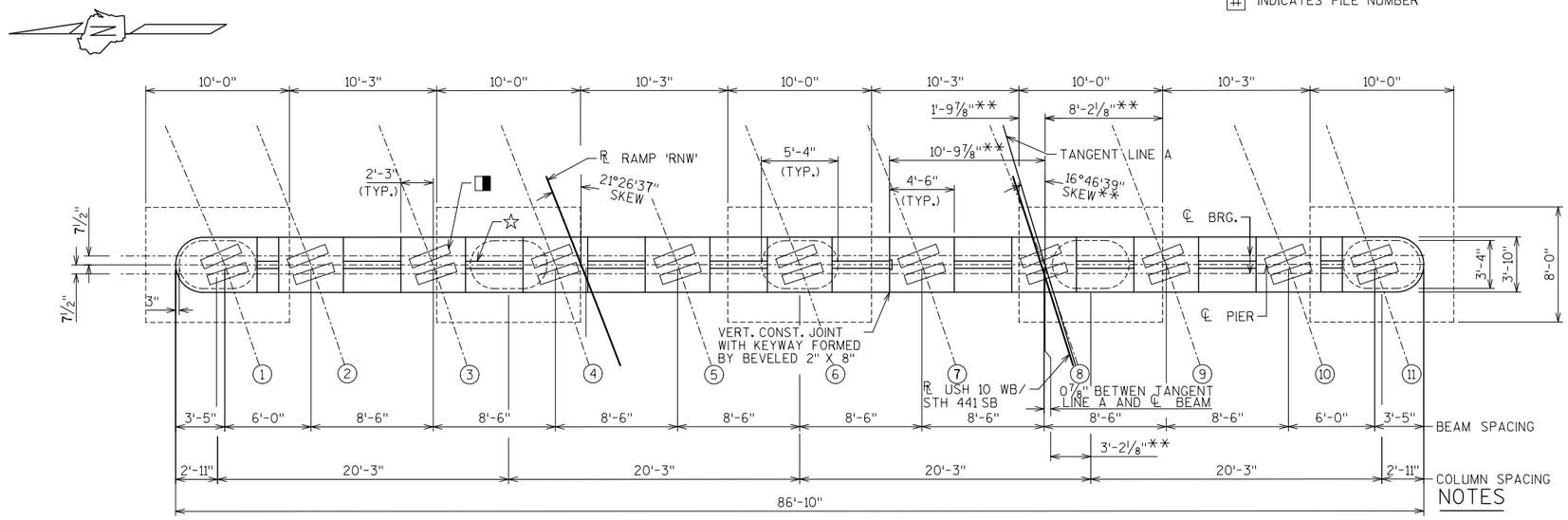
CROSS SECTION THRU COLUMN



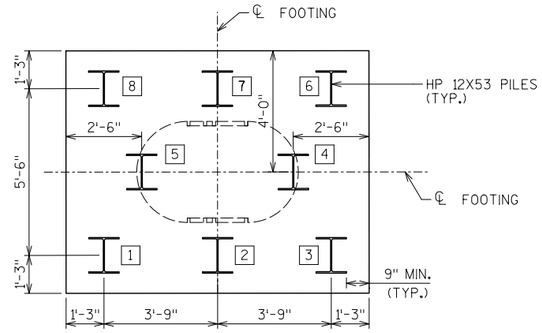
TYP. TOP OF PIER COLUMN



TYP. END VIEW



PLAN - PIER 1



TYP. PILE PLAN

NOTES

SEE SHEET 18 "FRAMING PLAN" FOR GIRDER SKEW ANGLES.

SEE SHEET 19 "SUPERSTRUCTURE DETAILS" FOR PREFORMED FILLER DETAILS.

PIER BEAM SEAT ELEVATIONS ARE BASED ON 3½" HAUNCHES.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

PIER 1

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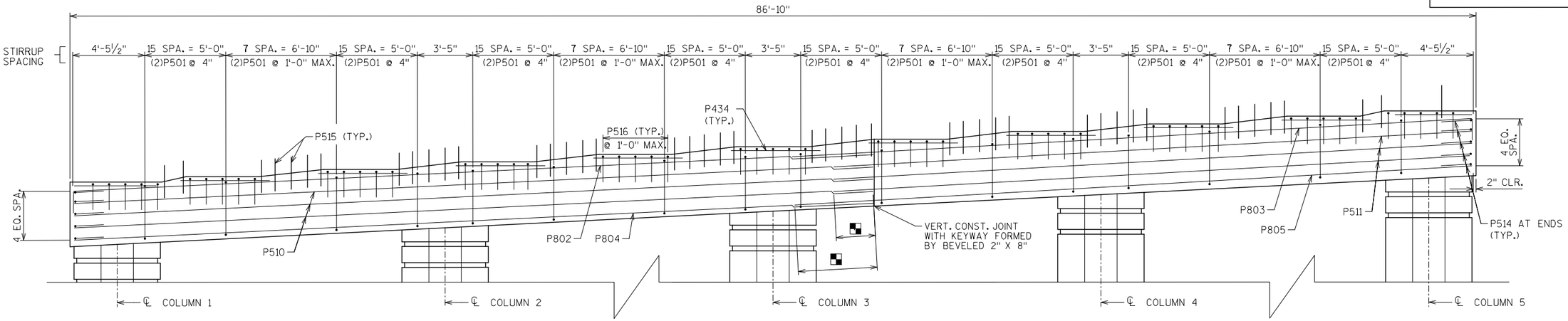
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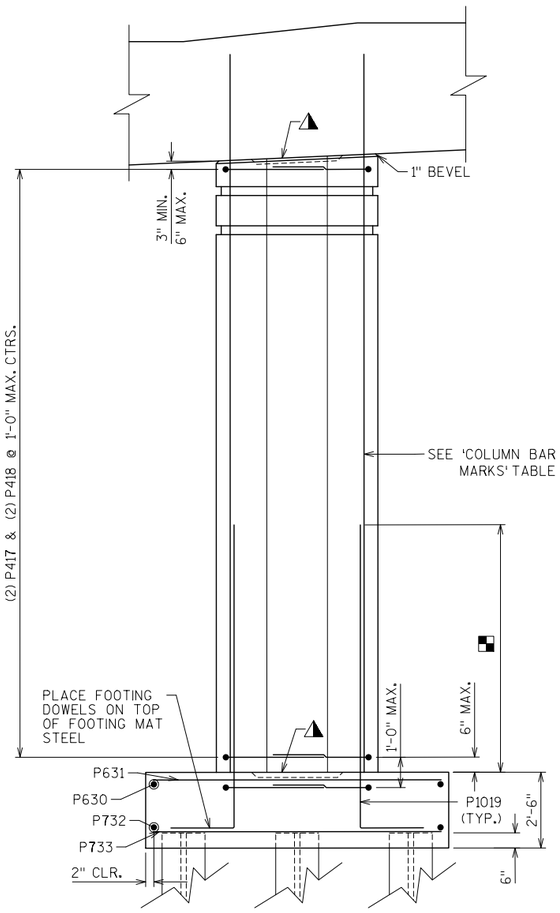
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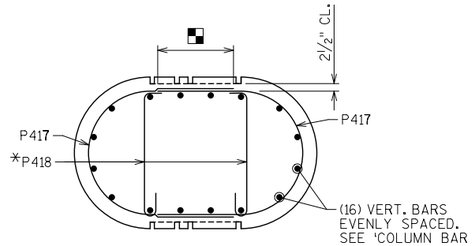


ELEVATION - PIER 1 CAP

(LOOKING EAST)



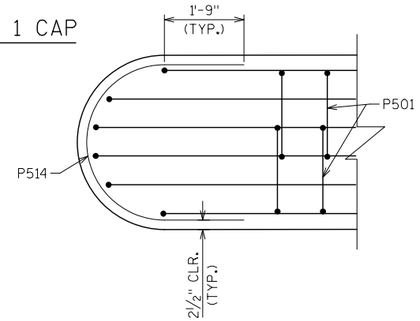
TYP. COLUMN/FOOTING - ELEVATION



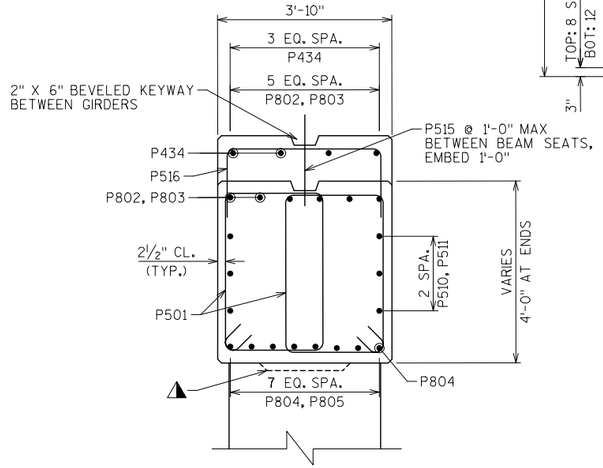
TYP. COLUMN SECTION

PIER #	COLUMN #	VERT. COLUMN BAR
1	1	P1020
1	2	P1021
1	3	P1022
1	4	P1023
1	5	P1024
2	1	P1025
2	2	P1026
2	3	P1027
2	4	P1028
2	5	P1029

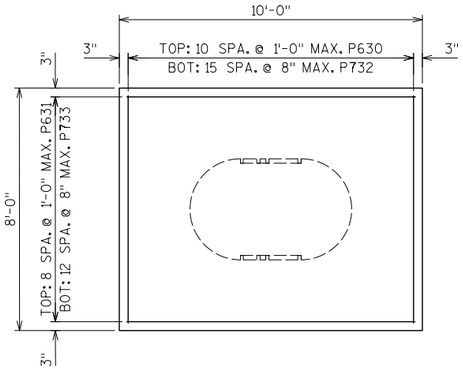
COLUMN BAR MARKS



TYP. PIER CAP END PLAN VIEW



PIER 1 CAP SECTION



TYP. FOOTING PLAN

LEGEND

- ▲ 2'-8" X 1'-8" X 2" CONST. JT. FORMED BY BEVELED KEYWAY
- * ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES
- ■ 1'-8" MIN. FOR #4 BARS
  2'-11" MIN. FOR #5 BARS
  5'-1" MIN. FOR #8 BARS (P802, P803)
  5'-9" MIN. FOR #8 BARS (P804, P805)
  8'-2" MIN. FOR #10 BARS

NOTES

SEE "PIER 2 DETAILS" SHEET 14 FOR BILL OF BARS.

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PIER 1 DETAILS

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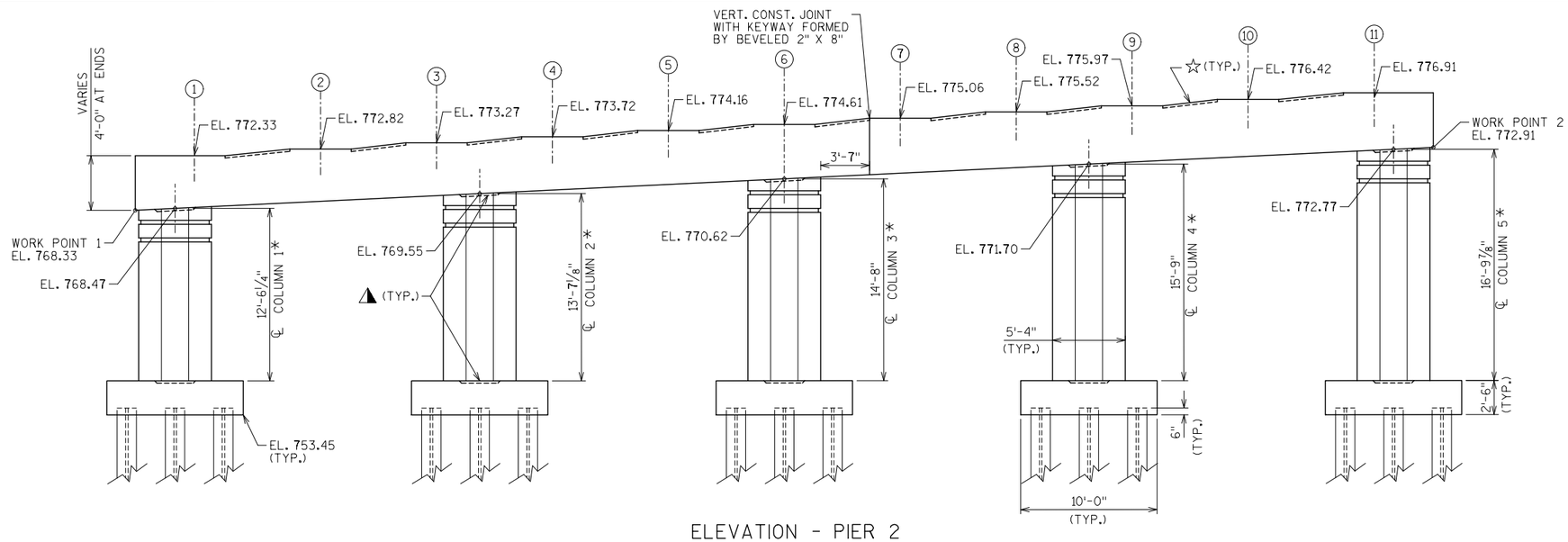
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DATE: 5/5/2015
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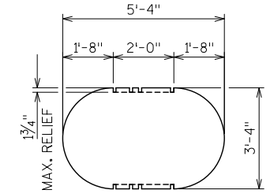
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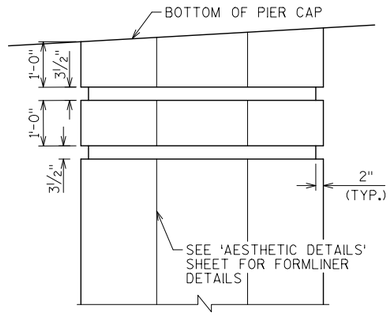


ELEVATION - PIER 2

(LOOKING EAST)



CROSS SECTION THRU COLUMN



TYP. TOP OF PIER COLUMN

NOTES

SEE SHEET 18 "FRAMING PLAN" FOR GIRDER SKEW ANGLES.

SEE SHEET 19 "SUPERSTRUCTURE DETAILS" FOR PREFORMED FILLER DETAILS.

PIER BEAM SEAT ELEVATIONS ARE BASED ON 3½" HAUNCHES.

SEE SHEET 11 "PIER 1" FOR TYPICAL PIER END VIEW.

SEE SHEET 11 "PIER 1" FOR PILE SPLICE DETAILS.

FOUNDATION DATA

SUPPORT ON HP 12X53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 50 FEET.

LEGEND

* SLOPE TOP OF COLUMNS TO MATCH CAP SLOPE

(#) INDICATES GIRDER NUMBER

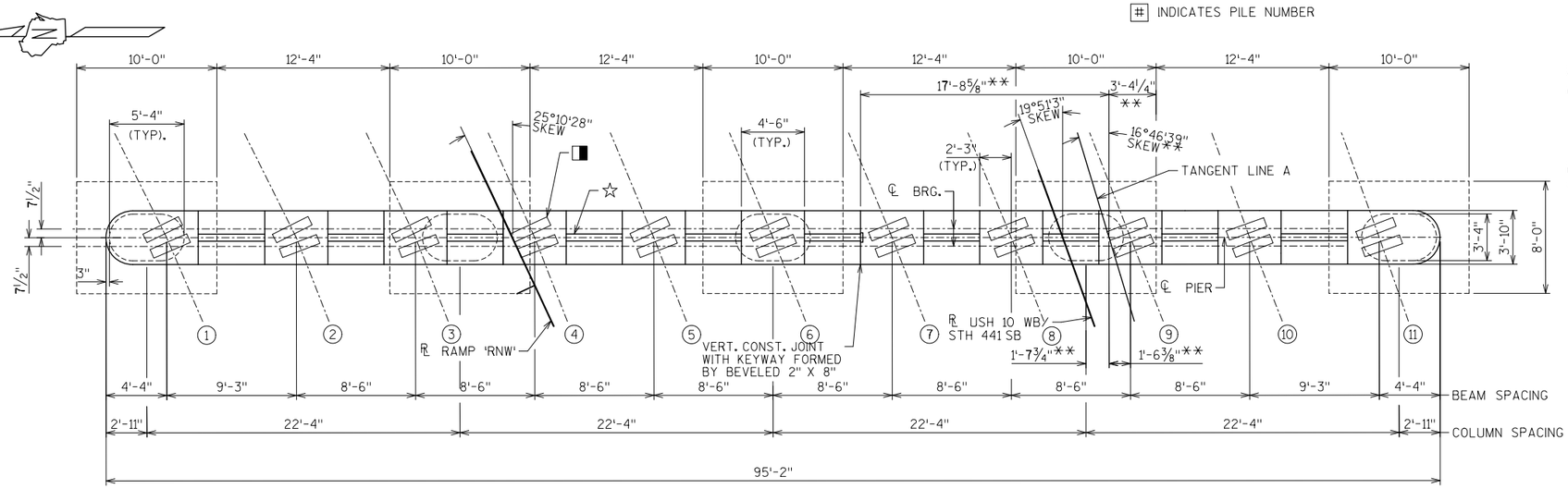
◭ 2'-8" X 1'-8" X 2" CONST. JT. FORMED BY BEVELED KEYWAY

☆ 2" X 6" BEVELED KEYWAY BETWEEN GIRDERS

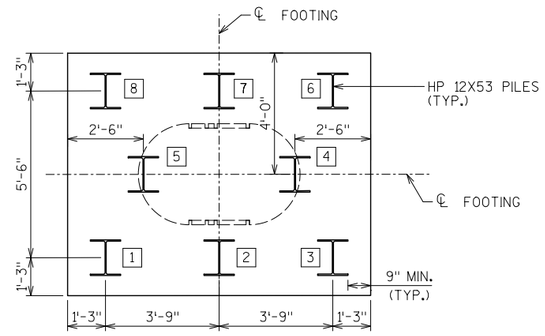
◨ ½" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD (TYP.)

** MEASURED FROM TANGENT LINE A

[#] INDICATES PILE NUMBER



PLAN - PIER 2



TYP. PILE PLAN

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PIER 2

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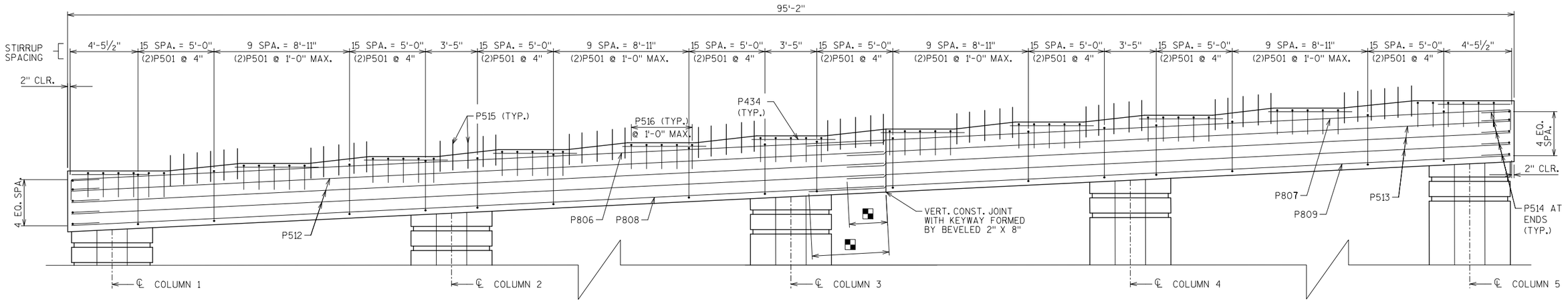
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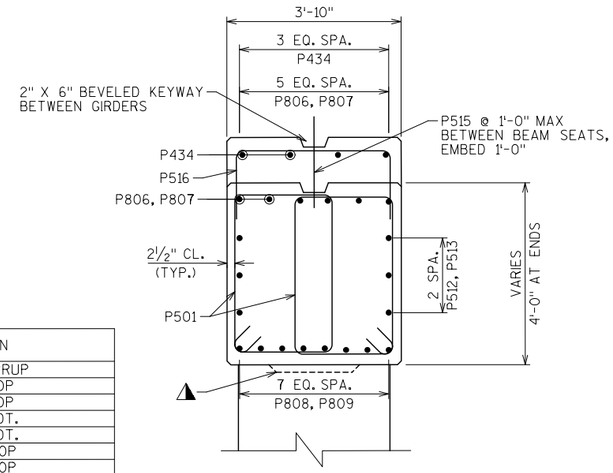
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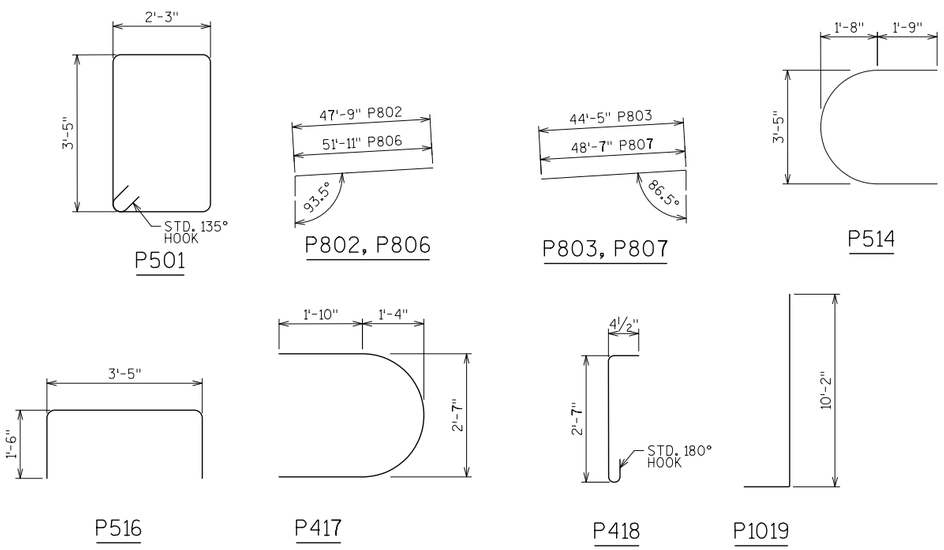


ELEVATION - PIER 2 CAP

(LOOKING EAST)



PIER 2 CAP SECTION



BAR DETAILS

BILL OF BARS

BAR MARK	NO. REQ'D	LENGTH	COAT	BENT	LOCATION
P501	624	12'-1"	X	X	PIER CAP VERT. STIRRUP
P802	6	48'-11"	X	X	PIER 1 CAP HORIZ. TOP
P803	6	45'-7"	X	X	PIER 1 CAP HORIZ. TOP
P804	8	47'-9"	X		PIER 1 CAP HORIZ. BOT.
P805	8	43'-9"	X		PIER 1 CAP HORIZ. BOT.
P806	6	53'-1"	X	X	PIER 2 CAP HORIZ. TOP
P807	6	49'-9"	X	X	PIER 2 CAP HORIZ. TOP
P808	8	51'-11"	X		PIER 2 CAP HORIZ. BOT.
P809	8	47'-11"	X		PIER 2 CAP HORIZ. BOT.
P510	6	47'-9"	X		PIER 1 CAP HORIZ. SIDE
P511	6	38'-2"	X		PIER 1 CAP HORIZ. SIDE
P512	6	51'-11"	X		PIER 2 CAP HORIZ. SIDE
P513	6	42'-4"	X		PIER 2 CAP HORIZ. SIDE
P514	20	8'-11"	X	X	PIER CAP HORIZ. ENDS
P515	97	2'-0"	X		PIER CAP VERT. DOWEL
P516	112	6'-5"	X	X	PIER CAP HORIZ. TOP
P417	300	7'-10"	X	X	PIER COLUMN HORIZ. STIRRUP
P418	300	3'-4"	X	X	PIER COLUMN HORIZ. TIE
P1019	160	12'-2"	X	X	FOOTING VERT. DOWEL
P1020	16	15'-6"	X		PIER 1 COLUMN 1 VERT.
P1021	16	16'-6"	X		PIER 1 COLUMN 2 VERT.
P1022	16	17'-6"	X		PIER 1 COLUMN 3 VERT.
P1023	16	18'-6"	X		PIER 1 COLUMN 4 VERT.
P1024	16	19'-6"	X		PIER 1 COLUMN 5 VERT.
P1025	16	15'-7"	X		PIER 2 COLUMN 1 VERT.
P1026	16	16'-7"	X		PIER 2 COLUMN 2 VERT.
P1027	16	17'-7"	X		PIER 2 COLUMN 3 VERT.
P1028	16	18'-9"	X		PIER 2 COLUMN 4 VERT.
P1029	16	19'-9"	X		PIER 2 COLUMN 5 VERT.
P630	110	7'-6"			FOOTING HORIZ. TOP
P631	90	9'-6"			FOOTING HORIZ. TOP
P732	160	7'-6"			FOOTING HORIZ. BOT.
P733	130	9'-6"			FOOTING HORIZ. BOT.
P434	88	5'-6"	X		PIER CAP HORIZ. TOP

TOTAL WEIGHT= 7,510 LB UNCOATED BARS
TOTAL WEIGHT= 40,420 LB COATED BARS

LEGEND

▲ 2'-8" X 1'-8" X 2" CONST. JT. FORMED BY BEVELED KEYWAY

■ 1'-8" MIN. FOR #4 BARS
2'-11" MIN. FOR #5 BARS
5'-1" MIN. FOR #8 BARS (P808, P809)
5'-9" MIN. FOR #8 BARS (P806, P807)
8'-2" MIN. FOR #10 BARS

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PIER 2 DETAILS

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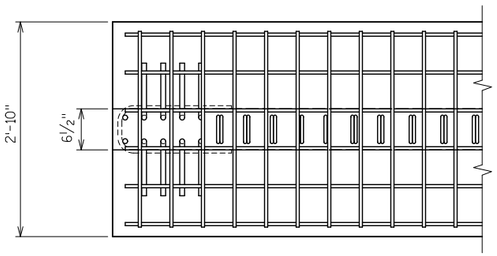
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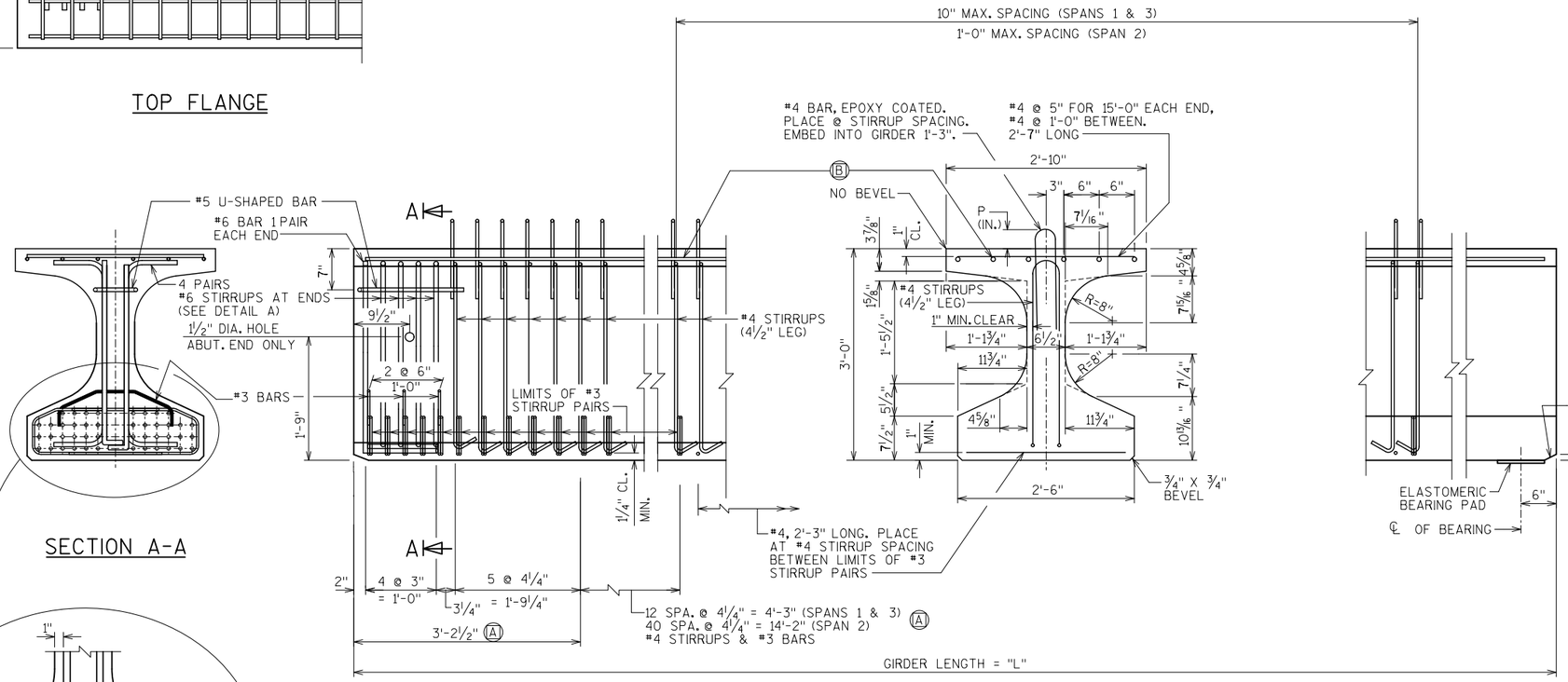
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TOP FLANGE

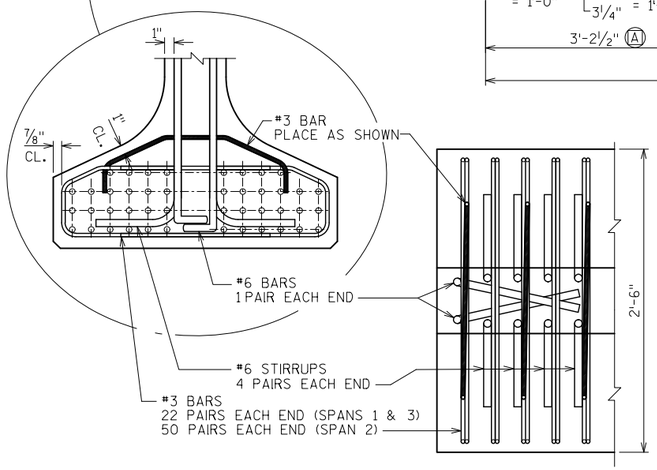


SECTION A-A

SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #6 BARS, FULL LENGTH, MIN. LAP = 2'-11"



DETAIL A
BOTTOM FLANGE

NOTE: FOR GIRDER DATA AND STRAND PATTERN DETAILS, SEE SHEET "36W" PRESTRESSED GIRDER DETAILS"

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE 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 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.

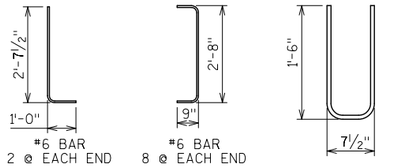
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

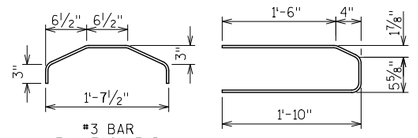
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

THE GIRDERS HAVE BEEN DESIGNED FOR BOTH SIMPLY SUPPORTED AND CONTINUOUS CONDITIONS.





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36W" PRESTRESSED GIRDER

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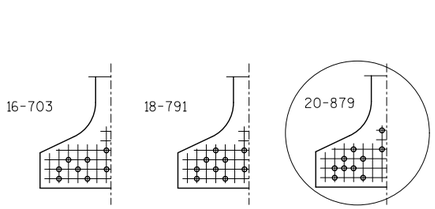
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GIRDER DATA																									
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL.									F'C (PSI)	F'C✳ (PSI)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF	DIA. OF STRAND (IN)	TOTAL NO. OF STRA	DRAPED					UNDRAPED	
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9								NO. STRA	"A"	"B" (MIN)	"B" (MAX)	"C"	NO. STRA	"C"✳✳✳
1	1	34'-8"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"	8000	6800	7"	7"	7"	0.6	20	--	--	--	--	--	20	5.6"
1	2	34'-7 "	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
1	3	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	4	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	5	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	6	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	7	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	8	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	9	34'-7 "	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
1	10	34'-7 "	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
1	11	34'-7 "	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
2	1	86'-2 1/4"	7/16"	7/8"	1 1/4"	1 7/16"	1 9/16"	1 7/16"	1 1/4"	7/8"	7/16"	8000	6800	7"	7"	7"	0.6	32	8	31"	11.5"	14.5"	5"	24	3"
2	2	84'-11 3/4"	1/2"	1"	1 3/8"	1 5/8"	1 3/4"	1 5/8"	1 7/16"	1"	1/2"														
2	3	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	4	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	5	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	6	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	7	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	8	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	9	84'-11 3/4"	9/16"	1 1/16"	1 1/2"	1 3/4"	1 13/16"	1 3/4"	1 1/2"	1 1/16"	9/16"														
2	10	84'-11 3/4"	1/2"	1"	1 3/8"	1 5/8"	1 3/4"	1 5/8"	1 3/8"	1"	1/2"														
2	11	83'-10 1/2"	3/8"	13/16"	1 1/16"	1 5/16"	1 3/8"	1 5/16"	1 1/8"	13/16"	3/8"														
3	1	30'-8 1/2"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"	8000	6800	7"	7"	7"	0.6	20	--	--	--	--	--	20	5.6"
3	2	30'-8 1/2"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
3	3	30'-4 5/8"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
3	4	30'-1"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
3	5	29'-9 1/2"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
3	6	29'-9 1/2"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
3	7	29'-9 1/2"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
3	8	29'-9 1/2"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"														
3	9	29'-6 1/4"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
3	10	29'-3 1/4"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														
3	11	29'-3 1/4"	0"	0"	0"	1/16"	1/16"	1/16"	0"	0"	0"														

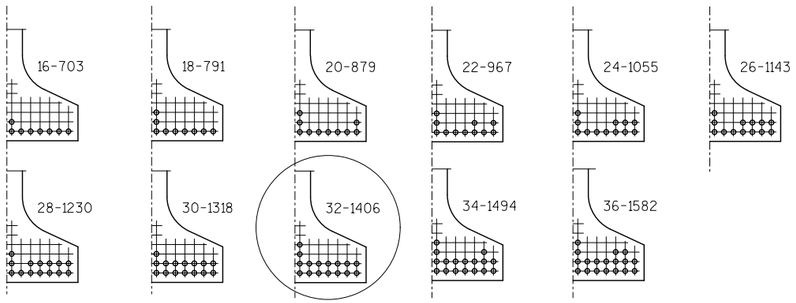
✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

✳✳✳ 'C" VALUE FOR UNDRAPED STRANDS IS THE CENTROID OF THESE STRANDS MEASURED FROM THE BOTTOM OF THE GIRDER.



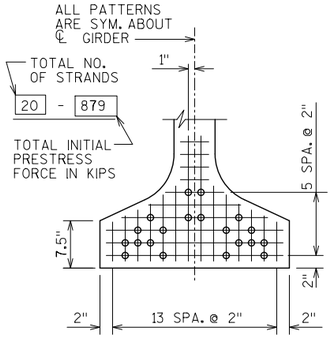
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"ϕ STRANDS

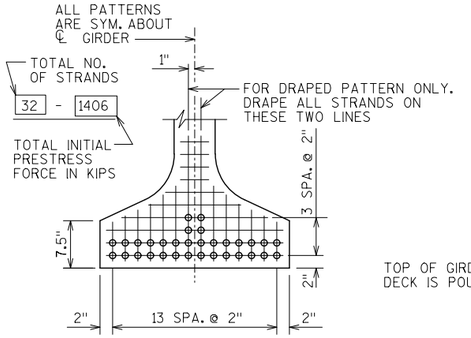


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

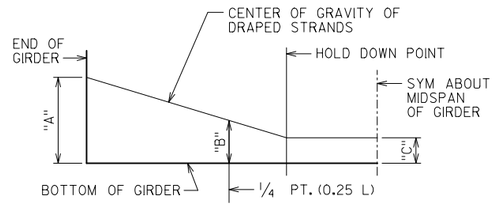
0.6"ϕ STRANDS



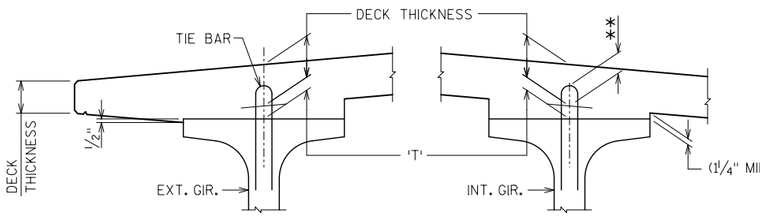
STRAND PATTERN - SPANS 1 & 3



STRAND PATTERN - SPAN 2



DRAPED STRAND PROFILE



DECK HAUNCH DETAIL

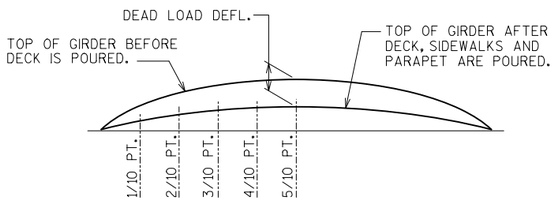
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

✳✳ 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 3½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM

◑ 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	½"
2	3"
3	½"

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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36W" PRESTRESSED GIRDER DETAILS

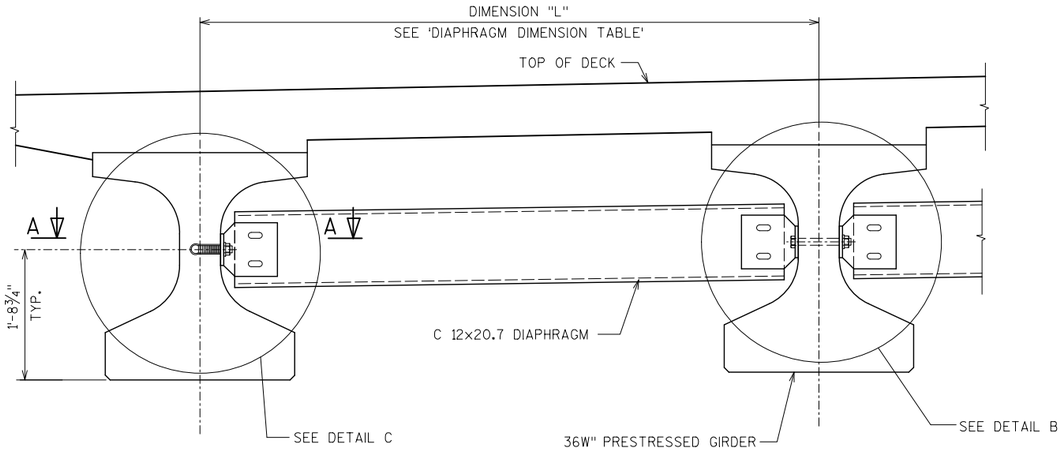
SHEET 16 OF 33
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I.D.

FILE= P:\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-411\Sheets\Final\16-B-70-411_36W girder details.dgn

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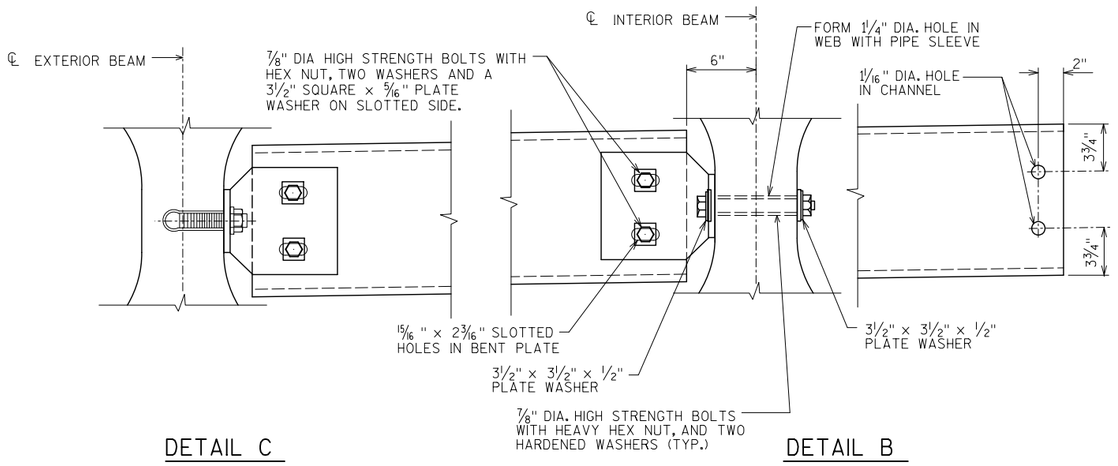
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EXTERIOR GIRDER

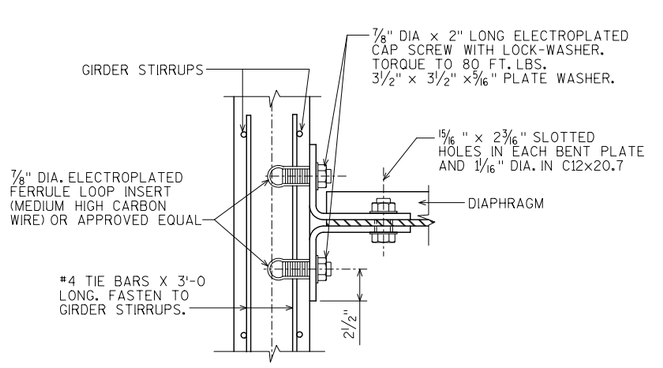
INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM

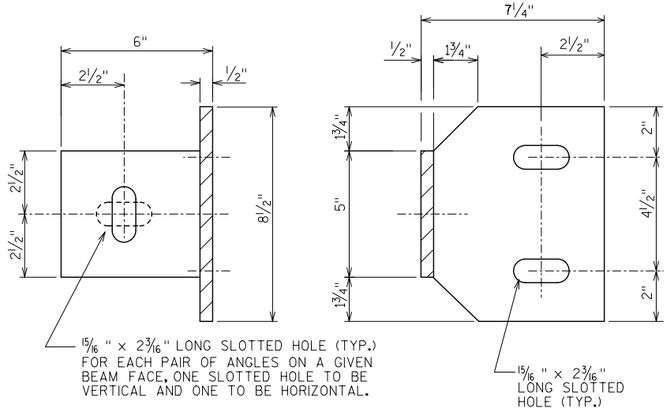


DETAIL C

DETAIL B

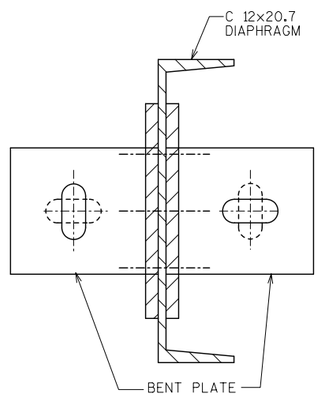


SECTION A-A
(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

DIAPHRAGM DIMENSION TABLE

LOCATION		DIMENSION "L"	NO. OF DIAPH.
SPAN 1	G1-2	5'-6 6/8"	1
	G2-10	8'-6/8"	8
	G10-11	5'-8 2/8"	1
SPAN 2 (LINE 1)	G1-2	6'-6 6/8"	1
	G2-10	7'-11 1/8"	8
	G10-11	6'-7 6/8"	1
SPAN 2 (LINE 2)	G1-2	7'-6 6/8"	1
	G2-10	7'-11 1/8"	8
	G10-11	7'-8"	1
SPAN 3	G1-2	8'-3 3/8"	1
	G2-3	7'-11 7/8"	1
	G3-4	8'-7/8"	1
	G4-5	8'-1 7/8"	1
	G5-8	7'-10 1/8"	3
	G8-9	8'-2 7/8"	1
	G9-10	8'-3 6/8"	1
	G10-11	8'-8 3/8"	1

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-70-411", 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.

FOR GIRDERS NOT PARALLEL TO EACH OTHER, MAKE STEEL DIAPHRAGM PERPENDICULAR TO THE GIRDER TO THE SOUTH. SEE "FRAMING PLAN" SHEET 18 FOR MORE DETAILS.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

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STEEL DIAPHRAGM

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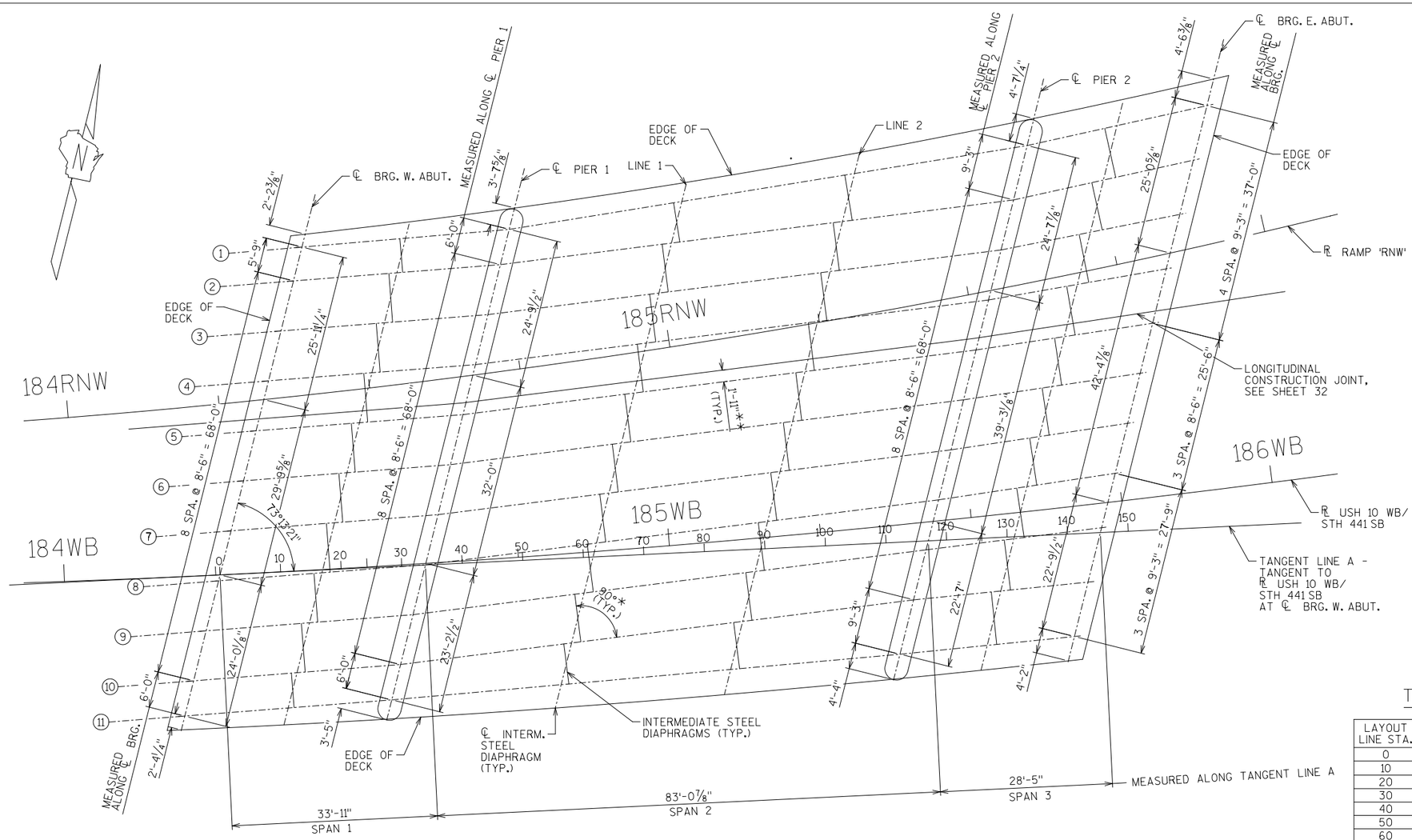
DATE: 5/5/2015
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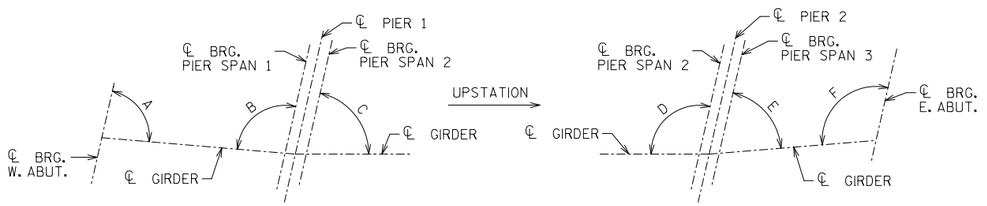
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TANGENT LINE A TABLE

LAYOUT LINE STA.	OFFSET TO LT EDGE OF DECK	OFFSET TO RL 'WB'	OFFSET TO RT EDGE OF DECK
0	N/A	0.00'	23.25'
10	N/A	0.02'	25.23'
20	55.57'	0.09'	25.16'
30	56.23'	0.20'	25.05'
40	56.97'	0.36'	24.89'
50	57.78'	0.57'	24.68'
60	58.66'	0.82'	24.43'
70	59.61'	1.11'	24.14'
80	60.64'	1.45'	23.80'
90	61.74'	1.84'	23.41'
100	62.91'	2.27'	22.98'
110	64.15'	2.75'	22.50'
120	65.46'	3.27'	21.98'
130	66.85'	3.84'	21.41'
140	68.31'	4.45'	20.80'
150	69.84'	5.10'	N/A

* WHEN GIRDERS ARE NOT PARALLEL, MAKE INTERMEDIATE STEEL DIAPHRAGM PERPENDICULAR TO THE GIRDER TO THE SOUTH.



GIRDER SKEW ANGLES TABLE

GIRDER NUMBER	W. ABUT.	PIER 1		PIER 2		E. ABUT.
		SPAN 1	SPAN 2	SPAN 2	SPAN 3	
	A	B	C	D	E	F
1	71.10°	108.90°	66.78°	113.22°	63.49°	116.51°
2	71.49°	108.51°	68.78°	111.22°	63.49°	116.51°
3	71.49°	108.51°	68.78°	111.22°	64.77°	115.23°
4	71.49°	108.51°	68.78°	111.22°	66.07°	113.93°
5-8	71.49°	108.51°	68.78°	111.22°	67.41°	112.59°
9	71.49°	108.51°	68.78°	111.22°	68.77°	111.23°
10	71.49°	108.51°	68.78°	111.22°	70.15°	109.85°
11	71.49°	108.51°	70.84°	109.16°	70.15°	109.85°

NOTES

SEE "ALTERNATE CONSTRUCTION JOINT" SHEET 32 FOR LONGITUDINAL CONSTRUCTION JOINT DETAIL.

* * LONGITUDINAL JOINT IS LOCATED IN THE GORE AREA.

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STRUCTURE B-70-411

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FRAMING PLAN

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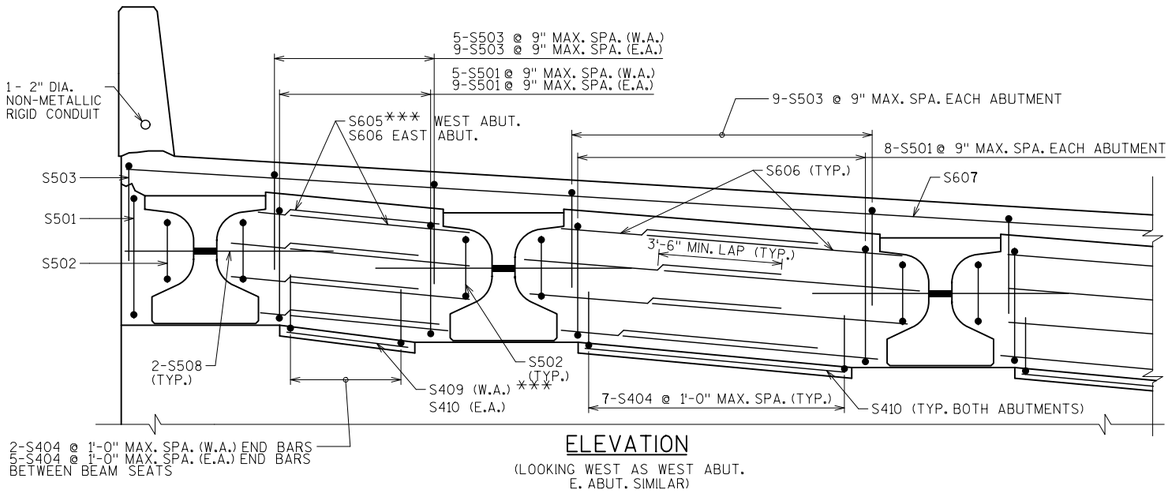
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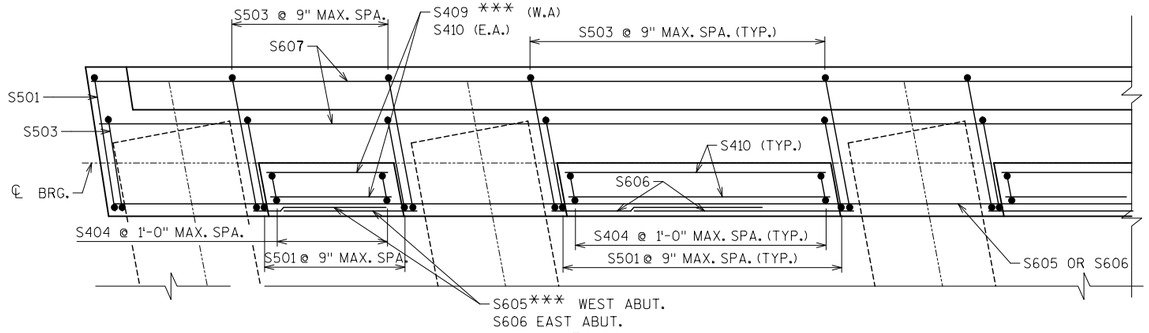
STATE PROJECT NUMBER

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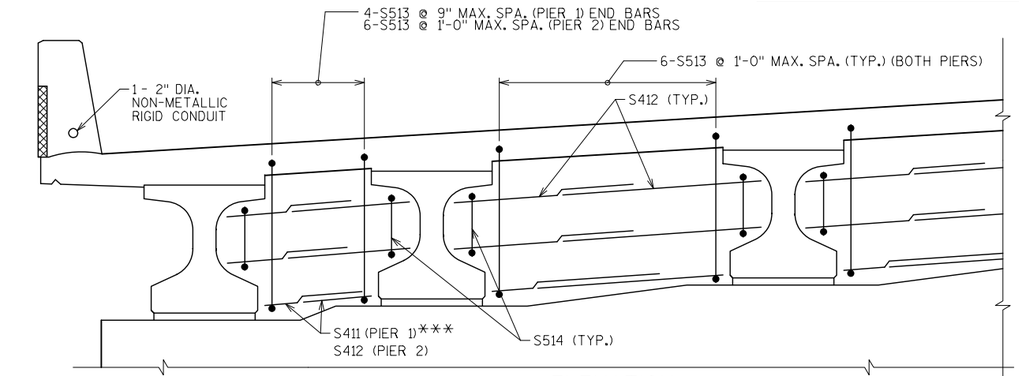
ELEVATION

(LOOKING WEST AS WEST ABUT. E. ABUT. SIMILAR)



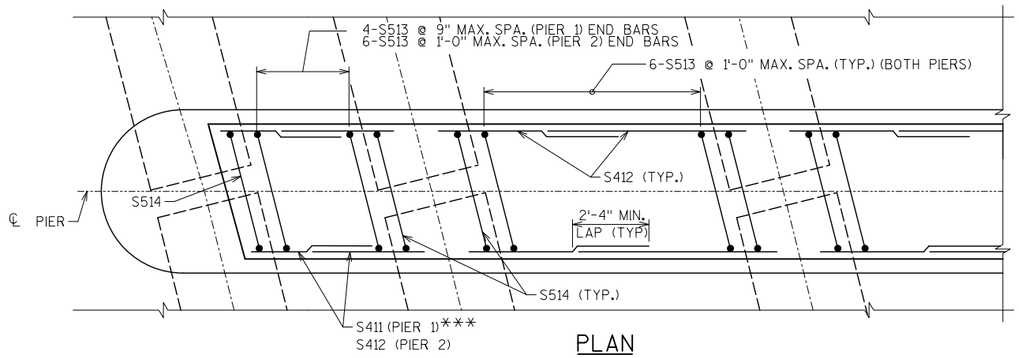
PLAN

ABUTMENT DIAPHRAGM



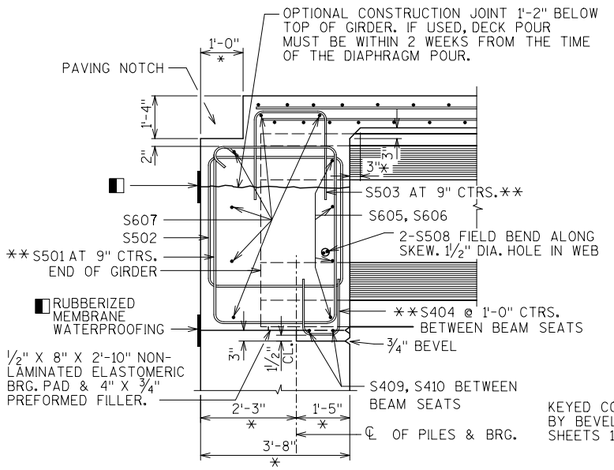
ELEVATION

(LOOKING EAST)



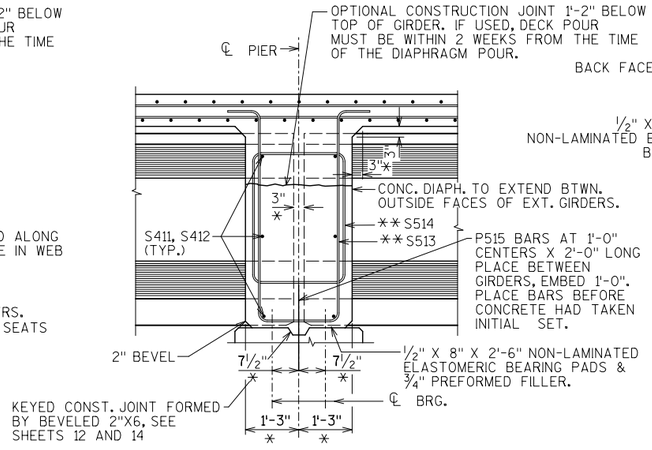
PLAN

PIER DIAPHRAGM

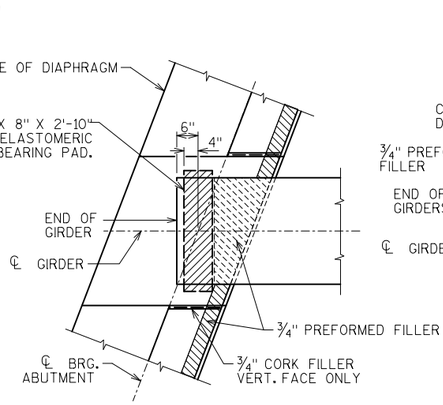


AT ABUTMENTS

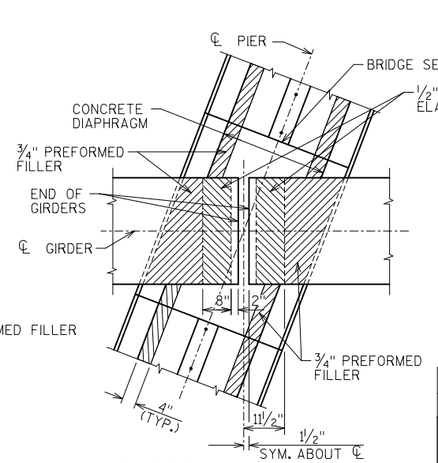
PART LONGIT. SECTION



AT PIER DIAPHRAGM



AT ABUTMENT



AT PIER

BEARING PAD DETAIL

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

*** SHORTER BARS USED IN END BAYS OF W. ABUT. AND PIER 1 DUE TO SHORTER BEAM SPACING.

RUBBERIZED MEMBRANE WATERPROOFING IF CONST. JOINT IS USED (COST INCIDENTAL TO BID ITEM "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES"

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STRUCTURE B-70-411

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SUPERSTRUCTURE

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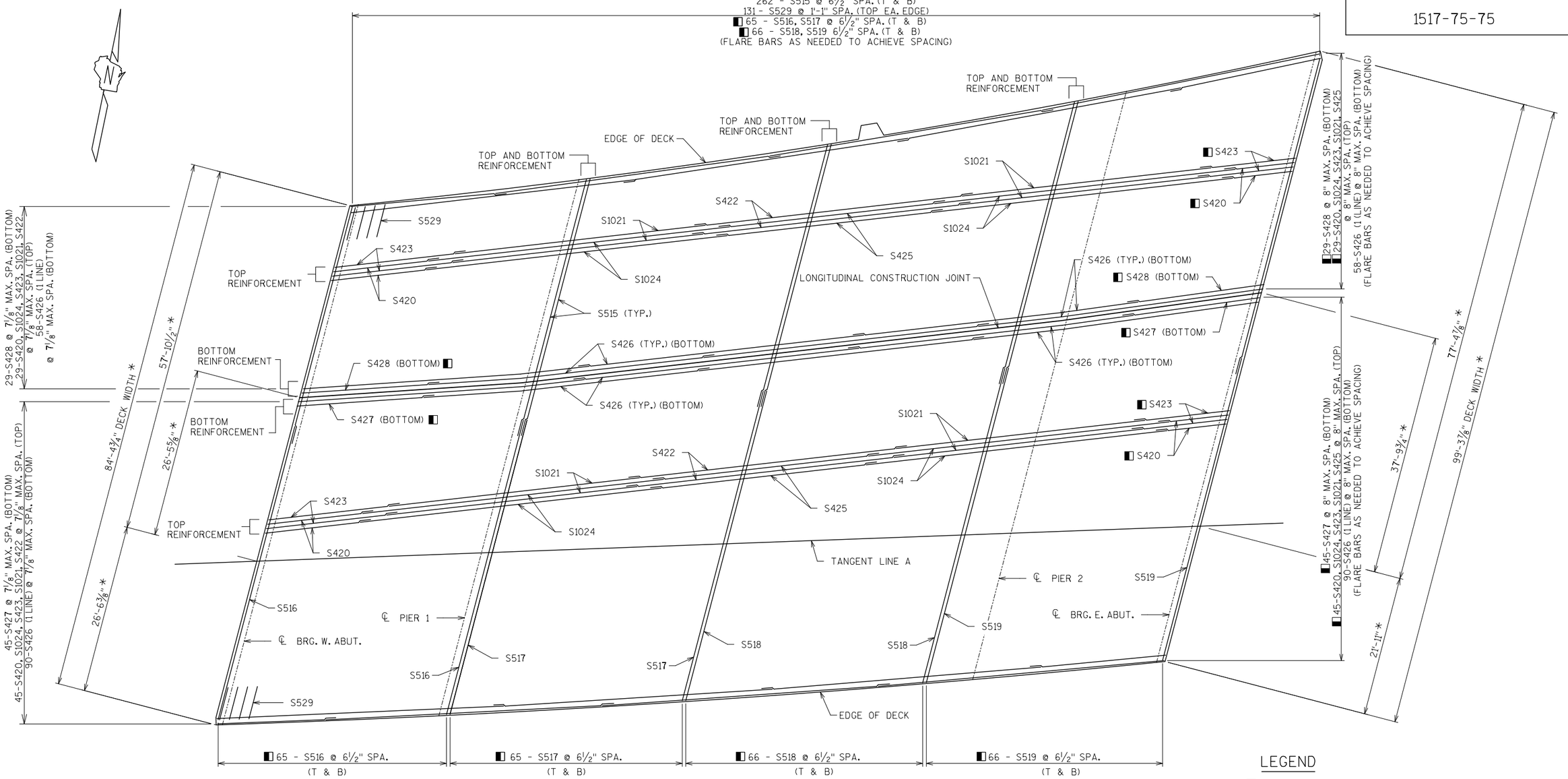
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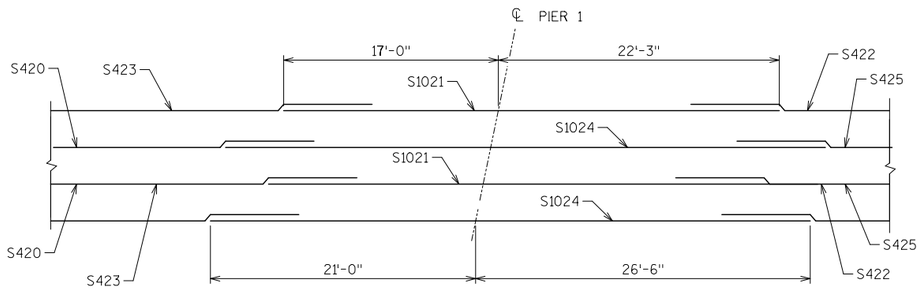
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LEGEND

■ BAR LENGTH IS CONSTANT AND LAP LENGTH WILL INCREASE.

* MEASURED ALONG DECK EDGE.



CONTINUITY REINFORCEMENT PLAN DETAIL

(PIER 1 SHOWN, PIER 2 OPPOSITE)

PLAN

NOTES

SEE SHEET 21 "SUPERSTRUCTURE DETAILS 2" FOR BEND DIAGRAM AND BILL OF BARS.

SEE "ALTERNATE CONSTRUCTION JOINT" SHEET 32 FOR LONGITUDINAL CONSTRUCTION JOINT DETAIL.

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.

THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BE CONTIUOUS BAR CHAIRS IN THE TRANSVERSE DIRECTION ON 4'-0" CENTERS.
ALL DECK REINFORCING SHALL HAVE LAP LENGTHS OF:
NO. 4 BARS = 1'-8"
NO. 5 BARS = 2'-7"
UNLESS NOTED OTHERWISE.

USE LAP LENGTH OF 1'-8" WHEN LAPPING NO. 4 BAR WITH NO. 10 BAR.

ALTERNATE LAPS IN ALL BAR LINES.

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STRUCTURE B-70-411

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SUPERSTRUCTURE DETAILS 1

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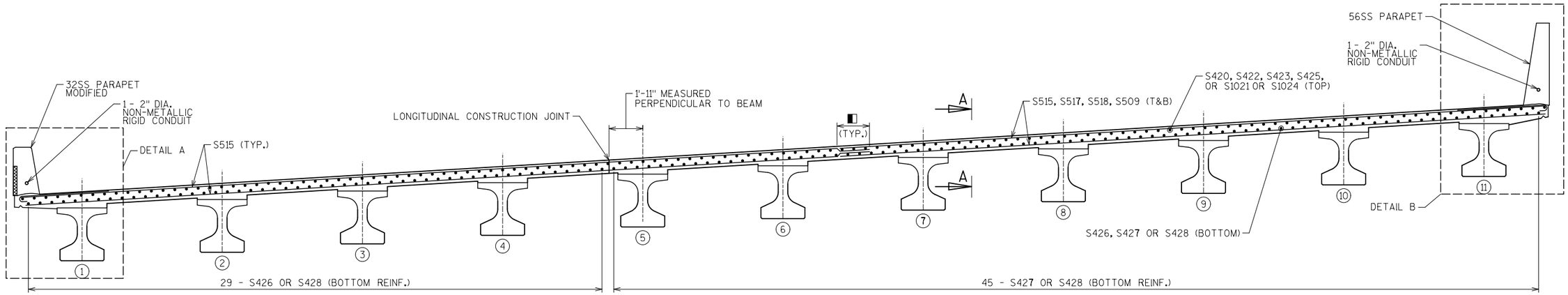
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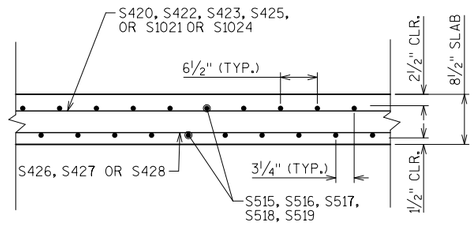
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STATE PROJECT NUMBER
1517-75-75

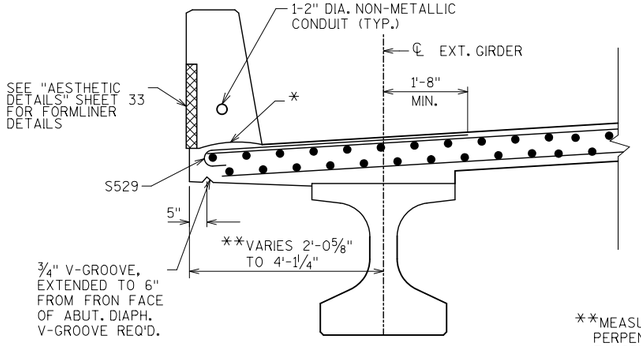


SECTION THRU DECK

(LOOKING EAST, UPSTATION)

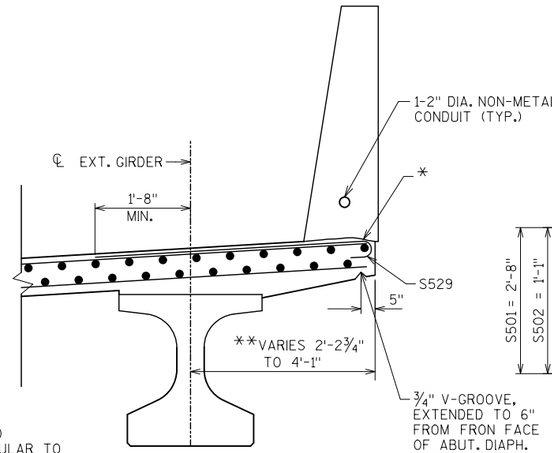


SECTION A-A



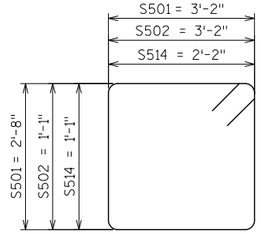
DETAIL A

(PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY)

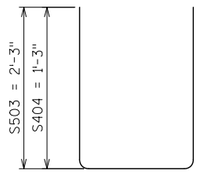


DETAIL B

(PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY)



S501, S502, S514



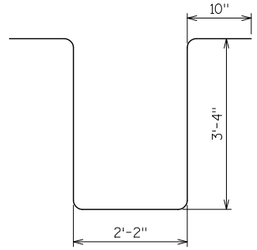
S503, S404

BILL OF BARS

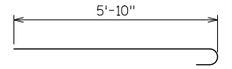
ALL BARS IN THIS TABLE SHALL BE EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
S501	172	12'-3"	X	ABUT. DIAPHRAGM VERT.
S502	44	9'-1"	X	ABUT. DIAPHRAGM VERT.
S503	172	7'-5"	X	ABUT. DIAPHRAGM VERT.
S404	126	3'-3"	X	ABUT. DIAPHRAGM VERT.
S605	16	3'-0"		ABUT. DIAPHRAGM HORIZ.
S606	144	5'-3"		ABUT. DIAPHRAGM HORIZ.
S607	20	47'-6"		ABUT. DIAPHRAGM HORIZ.
S508	44	6'-0"		ABUT. DIAPHRAGM HORIZ.
S409	4	1'-3"		ABUT. DIAPHRAGM HORIZ.
S410	36	4'-3"		ABUT. DIAPHRAGM HORIZ.
S411	24	3'-0"		PIER DIAPHRAGM HORIZ.
S412	216	4'-4"		PIER DIAPHRAGM HORIZ.
S513	116	10'-0"	X	PIER DIAPHRAGM VERT.
S514	40	7'-1"	X	PIER DIAPHRAGM VERT.
S515	524	60'-0"		DECK TRANS.REINF. - TOP AND BOTTOM
S516	130	30'-3"		DECK TRANS.REINF. - TOP AND BOTTOM
S517	130	32'-6"		DECK TRANS.REINF. - TOP AND BOTTOM
S518	132	37'-7"		DECK TRANS.REINF. - TOP AND BOTTOM
S519	132	41'-3"		DECK TRANS.REINF. - TOP AND BOTTOM
S420	148	16'-6"		DECK LONGIT. REINF. - TOP
S1021	148	39'-3"		DECK CONTINUITY REINF. - TOP
S422	74	43'-6"		DECK LONGIT. REINF. - TOP
S423	148	20'-5"		DECK LONGIT. REINF. - TOP
S1024	148	47'-6"		DECK CONTINUITY REINF. - TOP
S425	74	35'-2"		DECK LONGIT. REINF. - TOP
S426	424	45'-0"		DECK LONGIT. REINF. - BOT
S427	90	21'-7"		DECK LONGIT. REINF. - BOT
S428	58	24'-7"		DECK LONGIT. REINF. - BOT
S529	262	6'-5"	X	OVERHANG REINF. - TOP

TOTAL WEIGHT= 141,100 LB



S513



S529

LEGEND

◧ LAP LENGTH VARIES, BAR LENGTHS CONSTANT.

MIN. LAP LENGTH:
NO. 4 BARS = 1'-8"
NO. 5 BARS = 2'-7"
NO. 6 BARS = 3'-1"
NO. 4 BARS ONTO NO. 10 BARS = 1'-8"

ALTERNATE LAPS IN ALL BAR LINES.

* CONSTRUCTION JOINT STRIKE OFF AS SHOWN AND LEAVE ROUGH

(#) BEAM NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SUPERSTRUCTURE DETAILS 2

SHEET 21 OF 33
774

FILE= P:\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-411\Sheets\Final\21-B-70-411_superstructure details 2.dgn

DATE: 5/5/2015
I.D.

8

8

STATE PROJECT NUMBER

1517-75-75

TOP OF DECK ELEVATIONS

LOCATION	APRON START	APRON MIDPT.	APRON END	CL BRG W. ABUT	0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	0.5 SPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	CL PIER #1	0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	0.5 SPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	CL PIER #2
N. DECK EDGE	---	---	---	775.72	775.73	775.74	775.75	775.76	775.77	775.78	775.80	775.81	775.82	775.84	775.86	775.89	775.92	775.96	776.00	776.04	776.08	776.12	776.17	776.22
N. GUTTER LINE	775.65	775.68	775.71	775.72	775.72	775.73	775.75	775.76	775.77	775.78	775.79	775.80	775.82	775.83	775.86	775.89	775.92	775.95	775.99	776.03	776.07	776.12	776.17	776.21
GIRDER 1	---	---	---	775.75	775.77	775.78	775.80	775.82	775.84	775.86	775.88	775.90	775.92	775.95	775.98	776.01	776.05	776.09	776.13	776.17	776.22	776.27	776.32	776.37
GIRDER 2	---	---	---	776.07	776.09	776.11	776.13	776.15	776.17	776.19	776.21	776.23	776.25	776.27	776.32	776.37	776.42	776.48	776.54	776.60	776.66	776.72	776.79	776.86
GIRDER 3	---	---	---	776.54	776.56	776.58	776.60	776.62	776.64	776.66	776.68	776.70	776.72	776.74	776.79	776.83	776.88	776.94	776.99	777.05	777.11	777.17	777.24	777.31
GIRDER 4	---	---	---	777.02	777.03	777.05	777.07	777.09	777.11	777.13	777.14	777.16	777.19	777.21	777.25	777.30	777.34	777.40	777.45	777.51	777.56	777.63	777.69	777.76
LONG. CONST. JT.	777.30	777.33	777.37	777.38	777.39	777.41	777.43	777.45	777.46	777.48	777.50	777.52	777.54	777.56	777.60	777.65	777.69	777.74	777.80	777.85	777.91	777.97	778.03	778.10
GIRDER 5	---	---	---	777.49	777.51	777.52	777.54	777.56	777.58	777.59	777.61	777.63	777.65	777.67	777.71	777.76	777.81	777.86	777.91	777.96	778.02	778.08	778.14	778.21
GIRDER 6	---	---	---	777.96	777.98	778.00	778.01	778.03	778.05	778.06	778.08	778.10	778.12	778.14	778.18	778.22	778.27	778.32	778.37	778.42	778.47	778.53	778.59	778.66
GIRDER 7	---	---	---	778.44	778.45	778.47	778.48	778.50	778.52	778.53	778.55	778.57	778.59	778.61	778.65	778.69	778.73	778.78	778.83	778.88	778.93	778.99	779.05	779.11
GIRDER 8	---	---	---	778.91	778.93	778.94	778.96	778.97	778.99	779.01	779.02	779.04	779.06	779.08	779.11	779.15	779.19	779.24	779.29	779.33	779.39	779.44	779.50	779.56
'WB' STA	184+04.40	184+14.40	184+24.40	184+25.71	184+29.11	184+32.51	184+35.91	184+39.31	184+42.71	184+46.11	184+49.51	184+52.91	184+56.31	184+59.71	184+68.11	184+76.51	184+84.91	184+93.31	185+01.71	185+10.11	185+18.51	185+26.91	185+35.31	185+43.71
'WB' PGL	778.75	778.80	778.85	778.86	778.87	778.89	778.91	778.93	778.96	778.98	779.00	779.02	779.04	779.06	779.12	779.18	779.25	779.31	779.38	779.45	779.52	779.60	779.67	779.75
GIRDER 9	---	---	---	779.39	779.40	779.42	779.43	779.45	779.46	779.48	779.49	779.51	779.53	779.54	779.58	779.62	779.66	779.70	779.75	779.79	779.84	779.90	779.95	780.01
GIRDER 10	---	---	---	779.86	779.88	779.89	779.90	779.92	779.93	779.95	779.96	779.98	780.00	780.01	780.05	780.08	780.12	780.16	780.21	780.25	780.30	780.35	780.41	780.46
GIRDER 11	---	---	---	780.20	780.21	780.22	780.24	780.25	780.27	780.28	780.30	780.31	780.33	780.35	780.40	780.45	780.50	780.56	780.62	780.68	780.75	780.81	780.88	780.96
S. GUTTER LINE	780.15	780.20	780.25	780.26	780.27	780.29	780.31	780.33	780.35	780.37	780.39	780.41	780.43	780.45	780.51	780.57	780.63	780.69	780.75	780.82	780.89	780.96	781.03	781.11
S. DECK EDGE	---	---	---	780.25	780.27	780.29	780.30	780.32	780.34	780.36	780.38	780.40	780.43	780.45	780.50	780.56	780.62	780.68	780.74	780.81	780.88	780.95	781.03	781.10

LOCATION	CL PIER #2	0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	0.5 SPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	CL BRG E. ABUT	APRON START	APRON MIDPT.	APRON END
N. DECK EDGE	776.22	776.23	776.25	776.26	776.27	776.29	776.30	776.32	776.33	776.35	776.36	---	---	---
N. GUTTER LINE	776.21	776.23	776.24	776.25	776.27	776.28	776.30	776.31	776.33	776.34	776.35	776.36	776.41	776.45
GIRDER 1	776.37	776.38	776.40	776.41	776.43	776.44	776.45	776.47	776.48	776.49	776.51	---	---	---
GIRDER 2	776.86	776.87	776.88	776.90	776.91	776.92	776.94	776.95	776.96	776.98	776.99	---	---	---
GIRDER 3	777.31	777.32	777.34	777.36	777.37	777.39	777.41	777.42	777.44	777.46	777.47	---	---	---
GIRDER 4	777.76	777.78	777.79	777.81	777.83	777.86	777.88	777.90	777.92	777.94	777.96	---	---	---
LONG. CONST. JT.	778.10	778.12	778.14	778.16	778.19	778.21	778.24	778.26	778.28	778.31	778.33	778.34	778.43	778.52
GIRDER 5	778.21	778.23	778.25	778.27	778.30	778.32	778.35	778.37	778.39	778.42	778.44	---	---	---
GIRDER 6	778.66	778.68	778.70	778.73	778.74	778.77	778.79	778.82	778.84	778.86	778.89	---	---	---
GIRDER 7	779.11	779.13	779.15	779.17	779.20	779.22	779.24	779.26	779.29	779.31	779.33	---	---	---
GIRDER 8	779.56	779.58	779.60	779.62	779.65	779.67	779.69	779.71	779.73	779.76	779.78	---	---	---
'WB' STA	185+43.71	185+46.61	185+49.51	185+52.41	185+55.31	185+58.21	185+61.11	185+64.01	185+66.91	185+69.81	185+72.71	185+74.04	185+84.04	185+94.04
'WB' PGL	779.75	779.78	779.81	779.84	779.87	779.90	779.92	779.95	779.98	780.01	780.04	780.05	780.16	780.26
GIRDER 9	780.01	780.03	780.06	780.08	780.11	780.14	780.16	780.19	780.21	780.24	780.27	---	---	---
GIRDER 10	780.46	780.49	780.52	780.55	780.58	780.61	780.64	780.67	780.69	780.72	780.75	---	---	---
GIRDER 11	780.96	780.98	781.01	781.04	781.07	781.10	781.12	781.15	781.18	781.21	781.24	---	---	---
S. GUTTER LINE	781.11	781.14	781.17	781.19	781.22	781.25	781.28	781.31	781.33	781.36	781.39	781.40	781.50	781.60
S. DECK EDGE	781.10	781.13	781.16	781.18	781.21	781.24	781.27	781.30	781.32	781.35	781.38	---	---	---

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SUPERSTRUCTURE DETAILS 3

SHEET 22 OF 33
775

DATE: 5/5/2015
I.D.

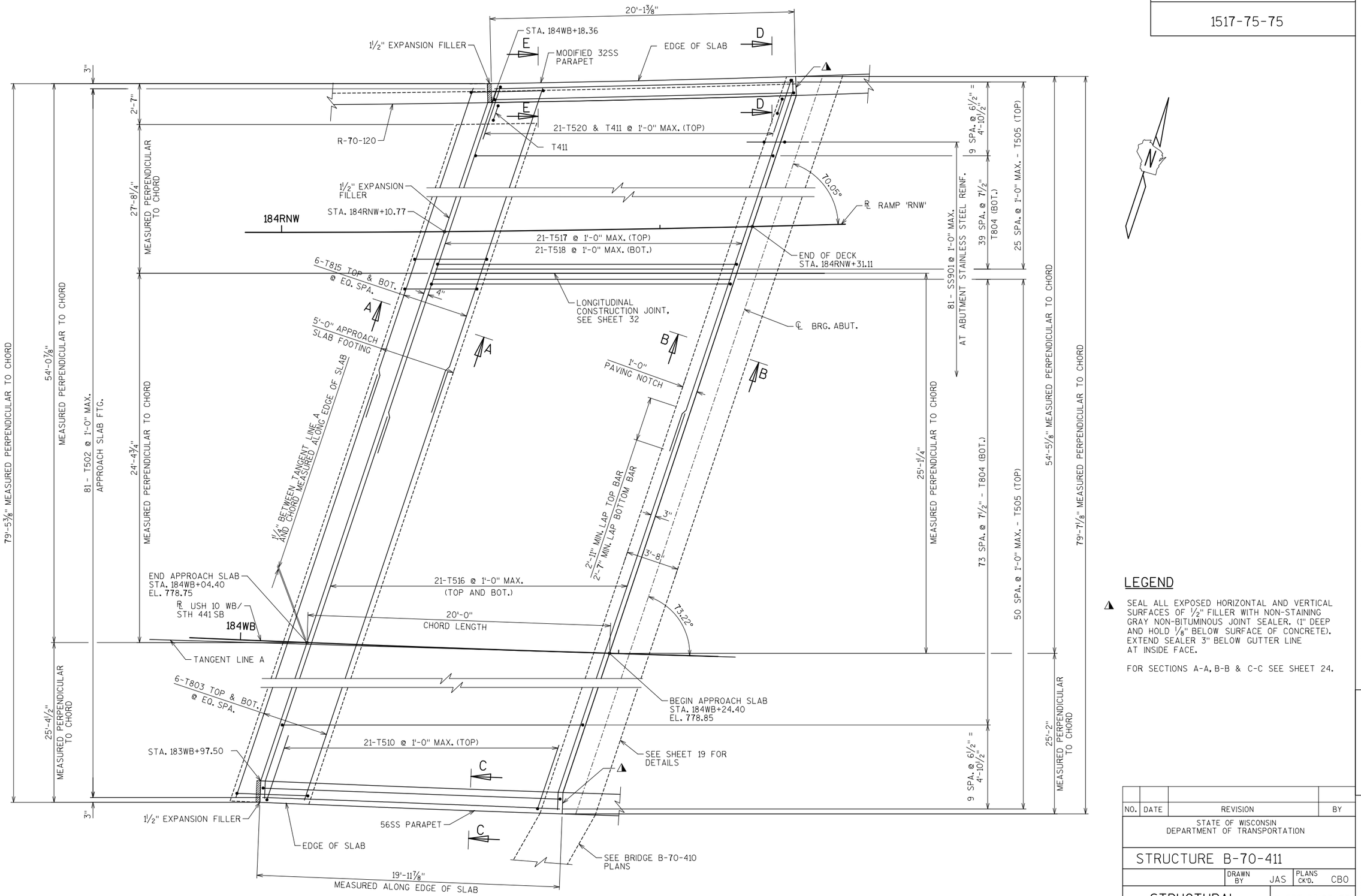
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STATE PROJECT NUMBER

1517-75-75



APPROACH SLAB PLAN

LEGEND

▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

FOR SECTIONS A-A, B-B & C-C SEE SHEET 24.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

STRUCTURAL APPROACH SLAB W. ABUT. 1

SHEET 23 OF 33
776

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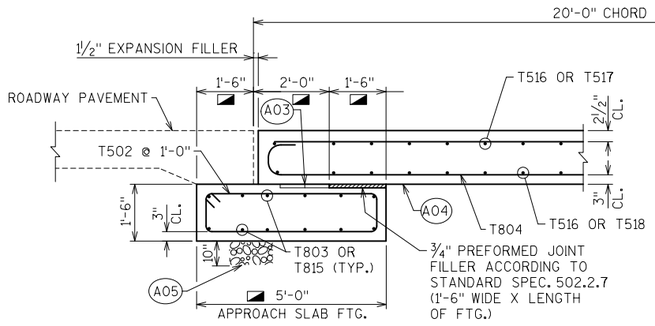
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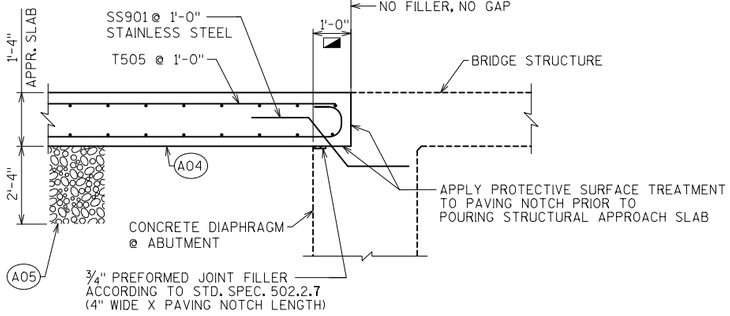
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STATE PROJECT NUMBER

1517-75-75

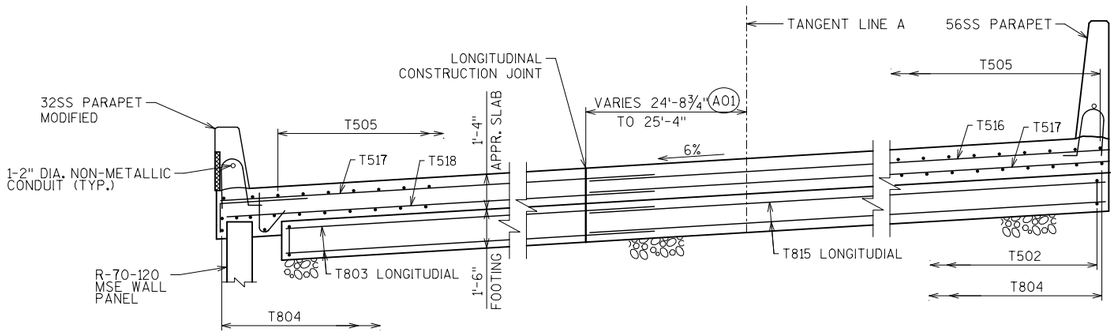


SECTION A-A



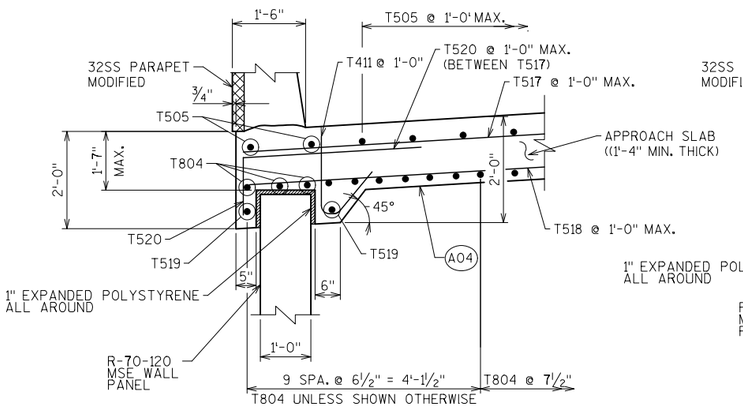
SECTION B-B

TRANSVERSE SECTION THRU APPROACH APRON

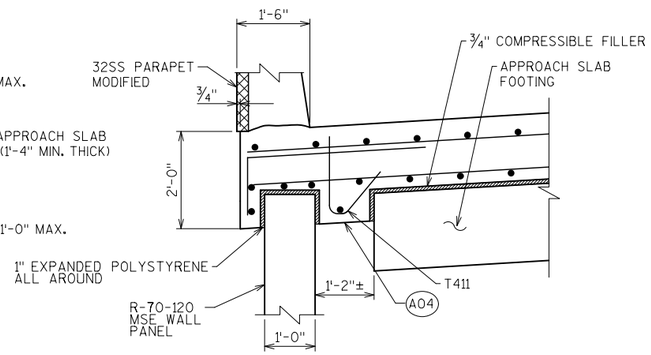


CROSS SECTION THRU APPROACH SLAB

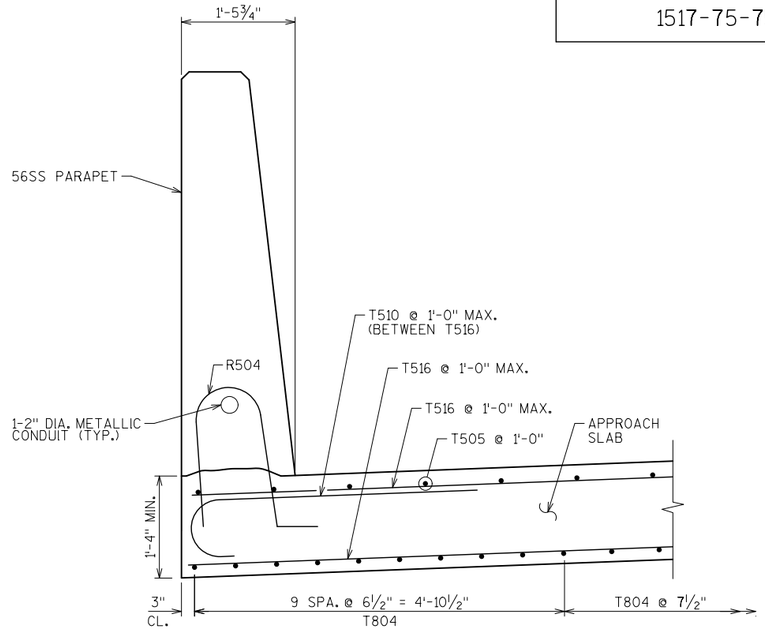
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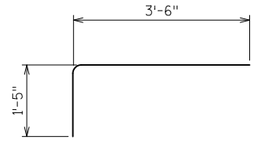
SECTION D-D



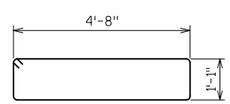
SECTION E-E



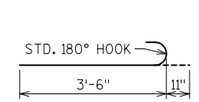
SECTION C-C



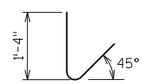
T520



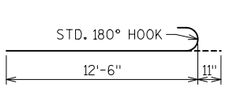
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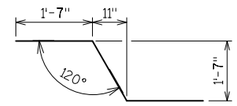
T510



T411



T804



SS901

LEGEND

MEASURED NORMAL TO ABUTMENT

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES 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.

(A01) MEASURED NORMAL TO TANGENT LINE A

(A03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE FOOTING.

(A04) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

(A05) PROVIDE BASE AGGREGATE DENSE 1¼" UNDER STRUCTURAL APPROACH SLAB.

NOTES:

SEE SHEET 26 FOR BAR BILLS TABLE.

SEE SHEET 23 FOR LOCATIONS OF SECTIONS A-A, B-B, C-C, D-D AND E-E.

DESIGN DATA:

ALLOWABLE SOIL BEARING PRESSURE:	2,000 PSF
HPC MASONRY STRUCTURES, F'C:	4,000 PSI
BAR STEEL REINFORCEMENT, GRADE 60, FY:	60,000 PSI

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

STRUCTURAL APPROACH SLAB DETAILS W. ABUT. 2

SHEET 24 OF 33
777

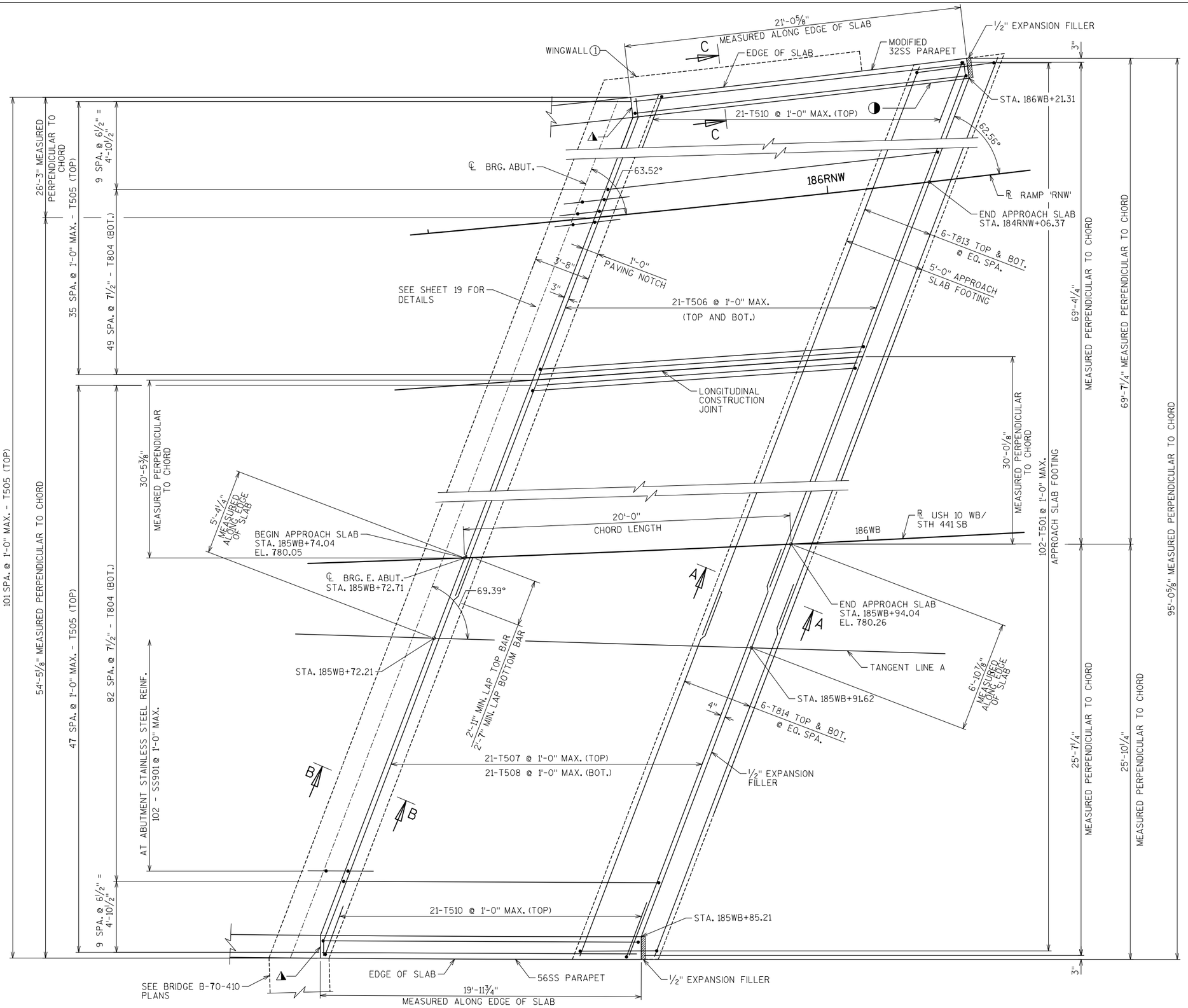
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STATE PROJECT NUMBER
1517-75-75



LEGEND

▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES 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.

◐ SEE SHEET 27 FOR LOCATION OF NAME PLATE AND/OR BENCH MARK WITH RESPECT TO THE END OF PARAPET.

FOR SECTIONS A-A, B-B & C-C SEE SHEET 26.

Ⓦ WINGWALL NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY	JAS	PLANS CK'D.	CBO

STRUCTURAL APPROACH SLAB E. ABUT. 1

SHEET 25 OF 33
778

8

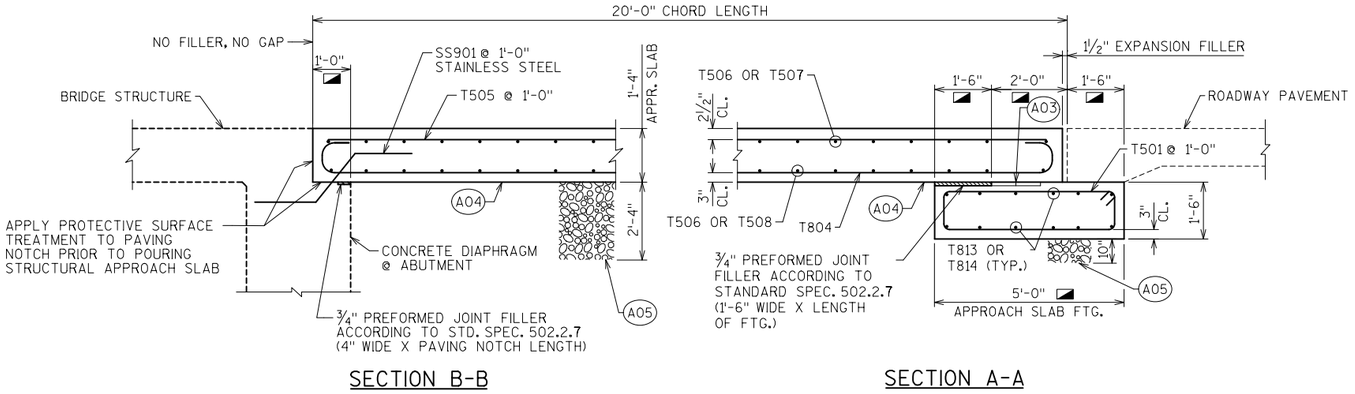
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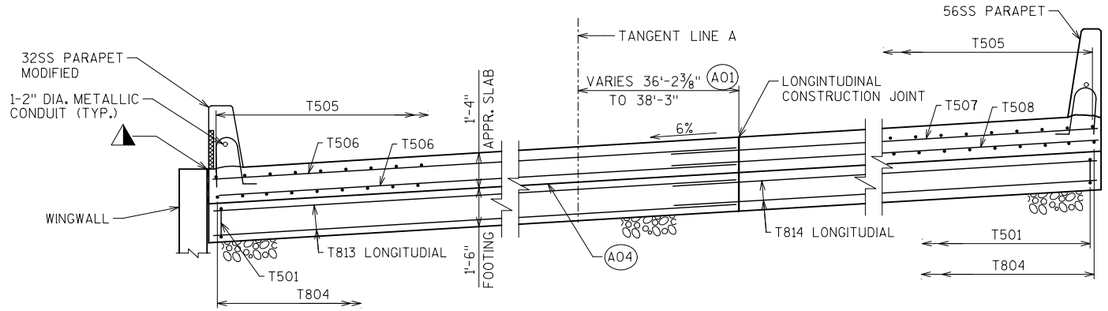
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STATE PROJECT NUMBER

1517-75-75

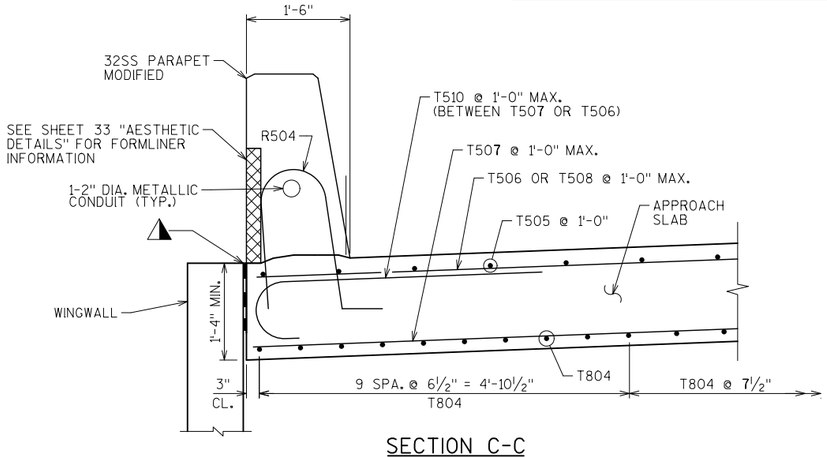


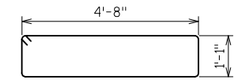
TRANSVERSE SECTION THRU APPROACH SLAB



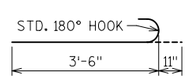
CROSS SECTION THRU APPROACH SLAB

(LOOKING UPSTATION)

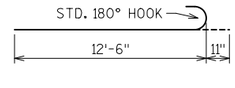




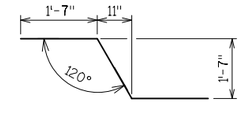
T501



T510



T804



SS901

BILL OF BARS

ALL BARS SHALL BE EPOXY COATED

BAR MARK	NO. REQ'D W. APPR	NO. REQ'D E. APPR	LENGTH	BENT	BAR SERIES	LOCATION
T501	0	102	12'-5"	X		FOOTING - STIRRUP
T502	81	0	12'-5"	X		FOOTING - STIRRUP
T803	12	0	40'-0"			FOOTING - LONGITUDINAL
T804	264	356	13'-5"	X		LONGITUDINAL - BOTTOM
T505	83	102	12'-9"			LONGITUDINAL - TOP
T506	0	42	54'-10"			TRANSVERSE TOP & BOTTOM
T507	0	21	45'-6"			TRANSVERSE TOP
T508	0	21	45'-6"			TRANSVERSE BOTTOM
T510	21	42	4'-1"	X		TRANSVERSE TOP AT ENDS
T411	21	0	2'-4"	X		VERTICAL AT RETAINING WALL
T813	0	12	56'-0"			FOOTING - LONGITUDINAL
T814	0	12	50'-0"			FOOTING - LONGITUDINAL
T815	12	0	43'-0"			FOOTING - LONGITUDINAL
T516	42	0	42'-0"			TRANSVERSE TOP & BOTTOM
T517	21	0	43'-0"			TRANSVERSE TOP
T518	21	0	43'-0"			TRANSVERSE BOTTOM
T519	2	0	19'-6"			LONGITUDINAL BOTTOM AT RETAINING WALL
T520	21	0	4'-10"	X		TRANSVERSE TOP AT RETAINING WALL END

TOTAL WEIGHT= 41,670 LB

BAR MARK	NO. REQ'D W. APPR	NO. REQ'D E. APPR	LENGTH	BENT	BAR SERIES	LOCATION
SS901	81	102	5'-0"	X		CONC. DIAPHRAGM

LEGEND

MEASURED NORMAL TO ABUTMENT

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES 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.

(A01) MEASURED NORMAL TO TANGENT LINE A

(A03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE FOOTING.

(A04) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

(A05) PROVIDE BASE AGGREGATE DENSE 1¼" UNDER STRUCTURAL APPROACH SLAB.

NOTE:

SEE SHEET 25 FOR LOCATIONS OF SECTIONS A-A, B-B AND C-C.

DESIGN DATA:

ALLOWABLE SOIL BEARING PRESSURE:	2,000 PSF
HPC MASONRY STRUCTURES, F'C:	4,000 PSI
BAR STEEL REINFORCEMENT, GRADE 60, FY:	60,000 PSI

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

STRUCTURAL APPROACH SLAB DETAILS E. ABUT. 2

SHEET 26 OF 33
779

DATE: 5/5/2015
I.D.

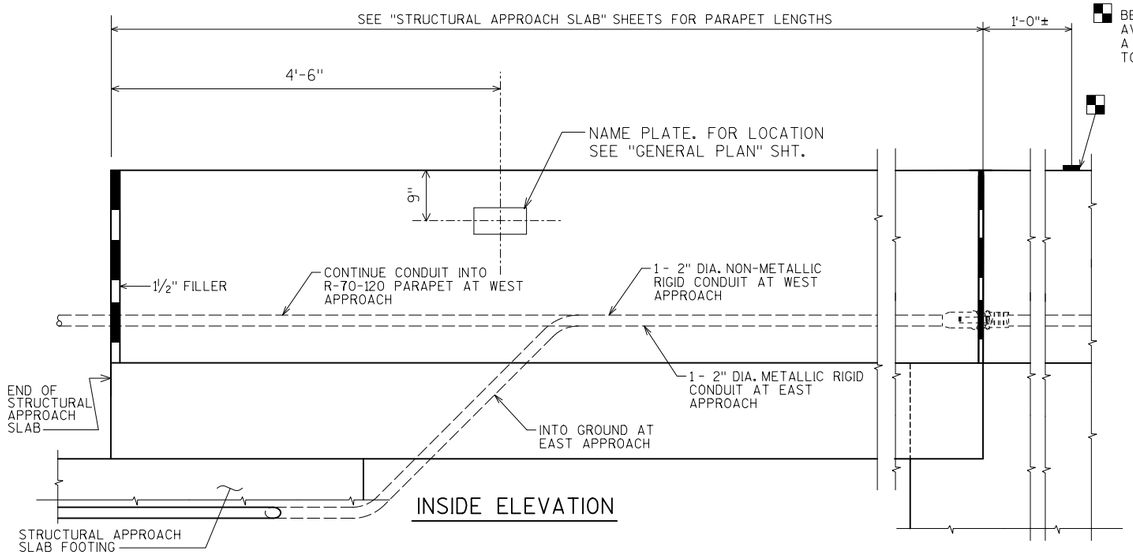
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8

8

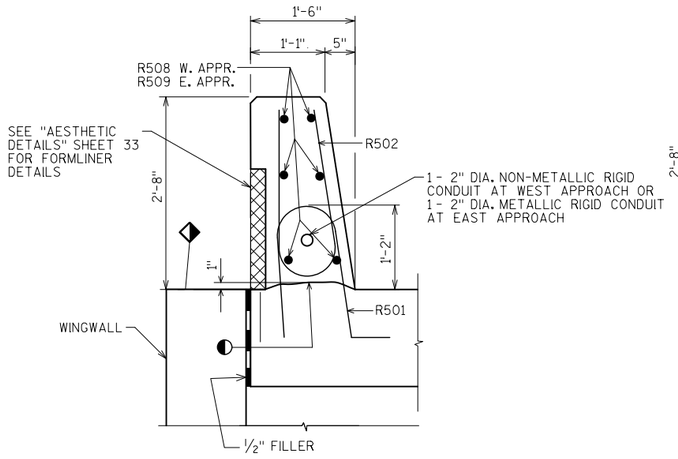
STATE PROJECT NUMBER

1517-75-75

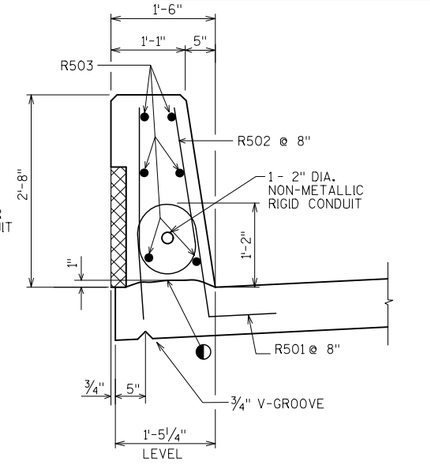


INSIDE ELEVATION

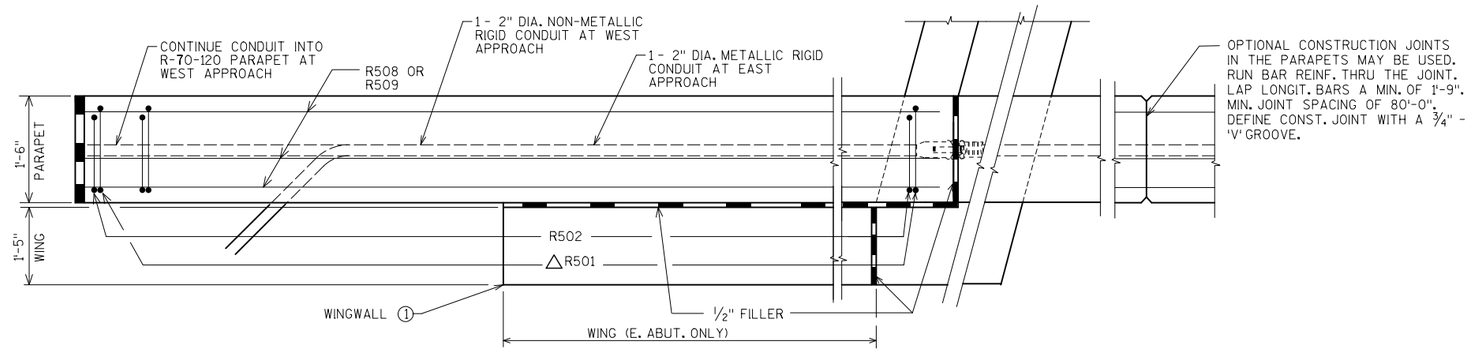
BENCH MARCK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.



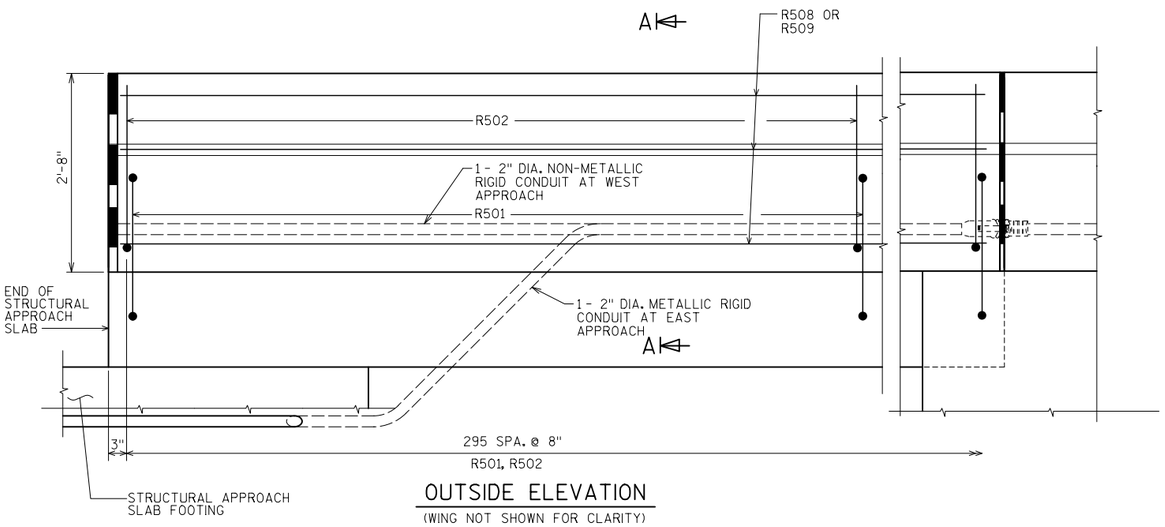
SECTION A-A



SECTION THRU PARAPET ON BRIDGE



PLAN



OUTSIDE ELEVATION

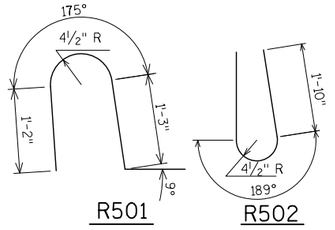
(WING NOT SHOWN FOR CLARITY)

BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS AND PARAPET ON BRIDGE. ALL BARS IN THIS TABLE SHALL BE EPOXY COATED.

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
R501	296	4'-5"	X		32SS PARAPET VERT.
R502	296	5'-0"	X		32SS PARAPET VERT.
R503	18	52'-8"			32SS PARAPET HORIZ.
R508	6	19'-7"			32SS PARAPET HORIZ. W. APPR.
R509	6	20'-6"			32SS PARAPET HORIZ. E. APPR.

TOTAL WEIGHT= 4,150 LB



◆ SLOPE FOR DRAINAGE

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽ R501 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

WING IS ON EAST ABUTMENT ONLY.

⊕ WINGWALL NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SINGLE SLOPE PARAPET 32SS MODIFIED

SHEET 27 OF 33
780

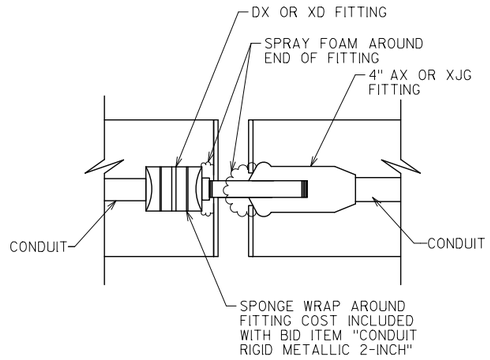
DATE: 5/5/2015
I.D.

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8

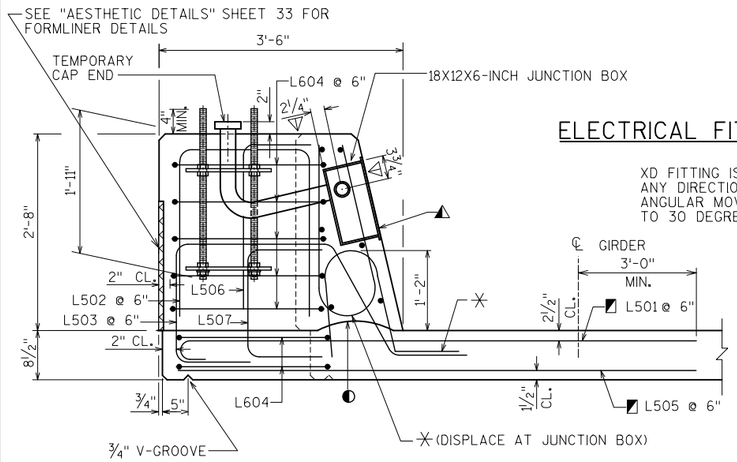
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STATE PROJECT NUMBER
1517-75-75



DETAIL 1
ELECTRICAL FITTING - AX/DX CONNECTION

XD FITTING IS GOOD FOR 3/4" MOVEMENT IN ANY DIRECTION. THE XD FITTING WILL ALLOW FOR ANGULAR MOVEMENT WITH A DEFLECTION OF UP TO 30 DEGREES FROM THE NORMAL IN ANY DIRECTION.



SECTION A-A

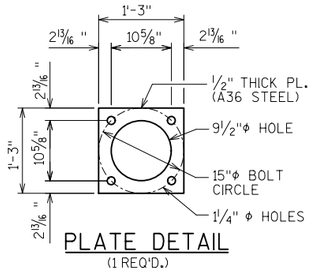
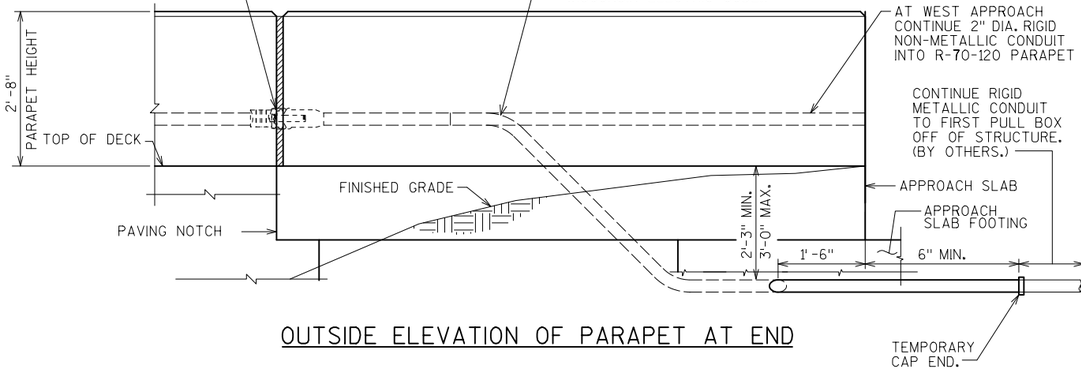
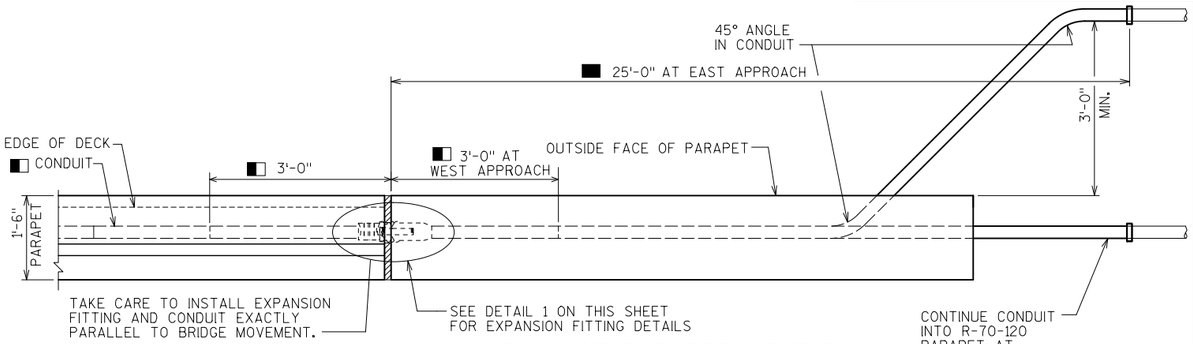


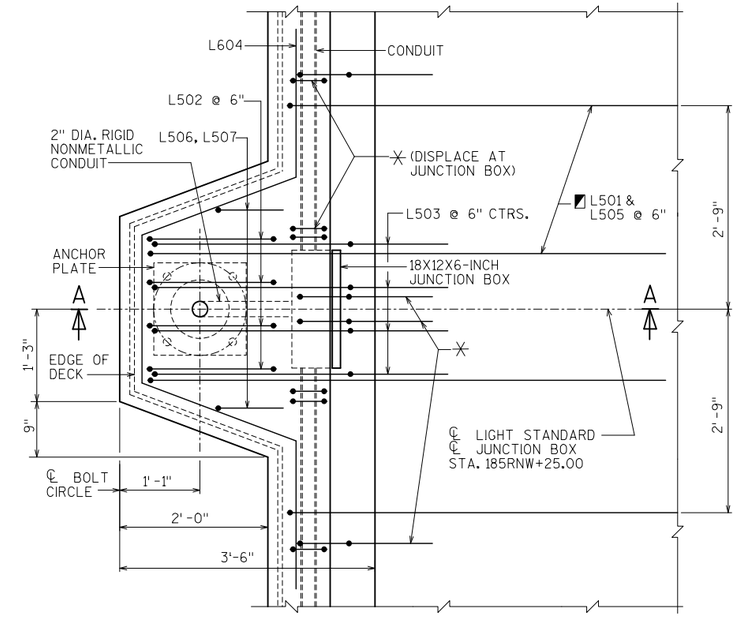
PLATE DETAIL
(1 REQ'D.)



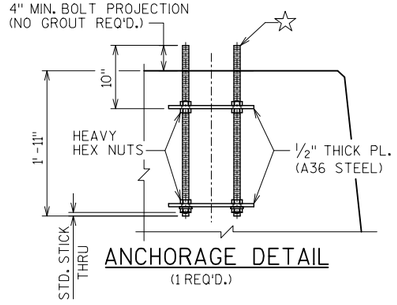
OUTSIDE ELEVATION OF PARAPET AT END



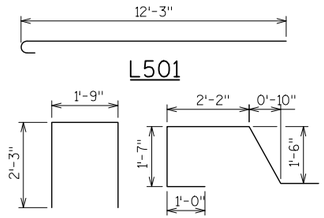
PLAN OF PARAPET AT END

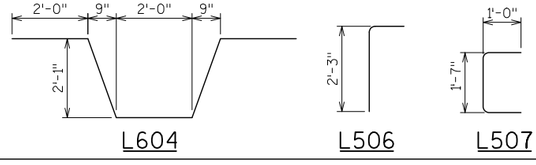


PLAN AT LIGHT STANDARD



ANCHORAGE DETAIL
(1 REQ'D.)





- ■ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK SIDE OF JOINT OPENING AND TO END OF CONDUIT AT WING SIDE OF JOINT OPENING AT EAST APPROACH.
- ◧ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND APPROACH SIDES OF THE JOINT OPENING AT WEST ABUTMENT.
- ◐ CONST. 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.
- ◩ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.
- ✳ SEE SINGLE SLOPE PARAPET SHEET FOR ADDITIONAL BAR STEEL DETAILS
- ☆ 1"φ THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

BILL OF BARS

ALL BARS ARE EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
L501	12	12'-10"	X		DECK TRANSV. @ LIGHT STD.
L502	4	6'-0"	X		32SS PARAPET VERT. @ LIGHT STD.
L503	4	7'-0"	X		32SS PARAPET VERT. @ LIGHT STD.
L604	7	10'-0"	X		32SS PARAPET HORIZ. @ LIGHT STD.
L505	12	12'-10"			DECK TRANSV. @ LIGHT STD.
L506	2	3'-2"	X		32SS PARAPET VERT. @ LIGHT STD.
L507	2	3'-4"	X		32SS PARAPET VERT. @ LIGHT STD.

TOTAL WEIGHT= 500 LB

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

AT END OF APPROACH SLABS AND PAVING NOTCHES, USE APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING: O-Z/GEDNEY TYPE AXDX-200 AND BONDING JUMPER (4 3/4" TOTAL CONDUIT MOVEMENT).

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SINGLE SLOPE PARAPET 32SS MODIFIED ELECTRICAL

SHEET 28 OF 33
781

DATE: 5/5/2015
I.D.

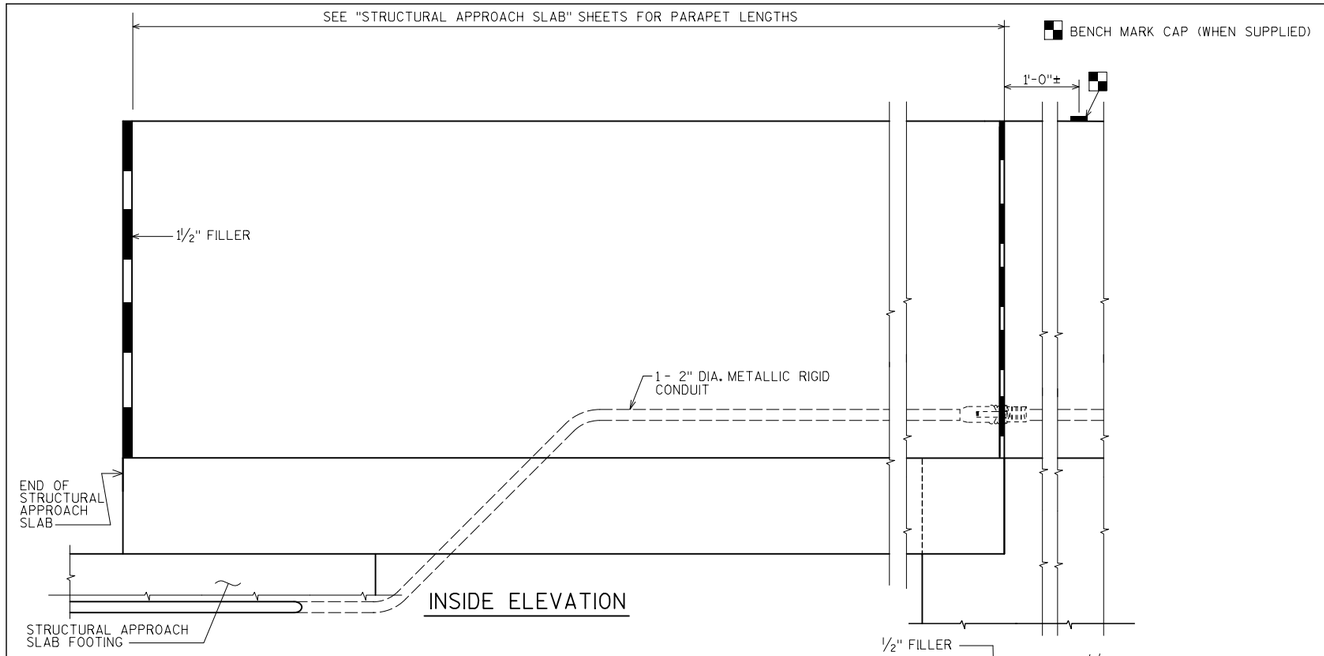
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SS32ELEC
1-14

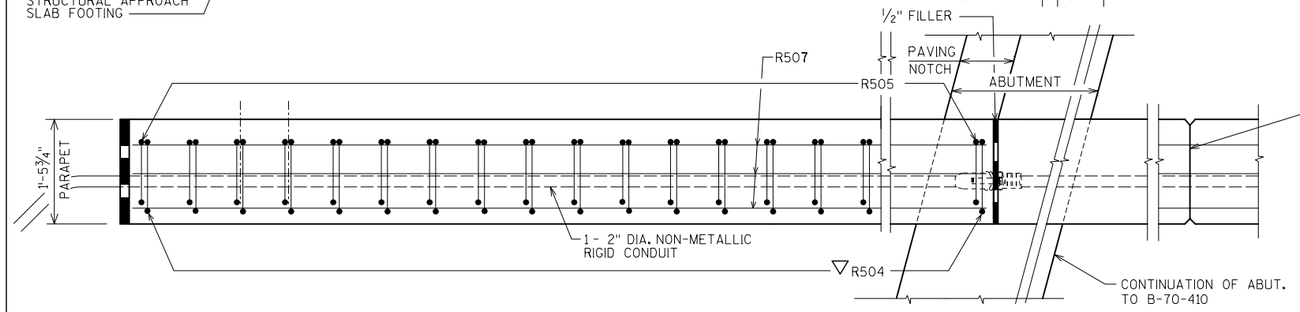
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STATE PROJECT NUMBER

1517-75-75

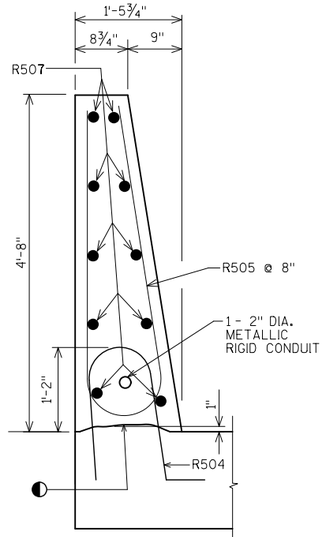


INSIDE ELEVATION

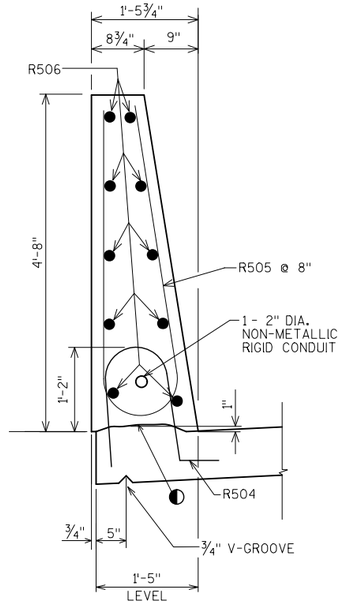


PLAN

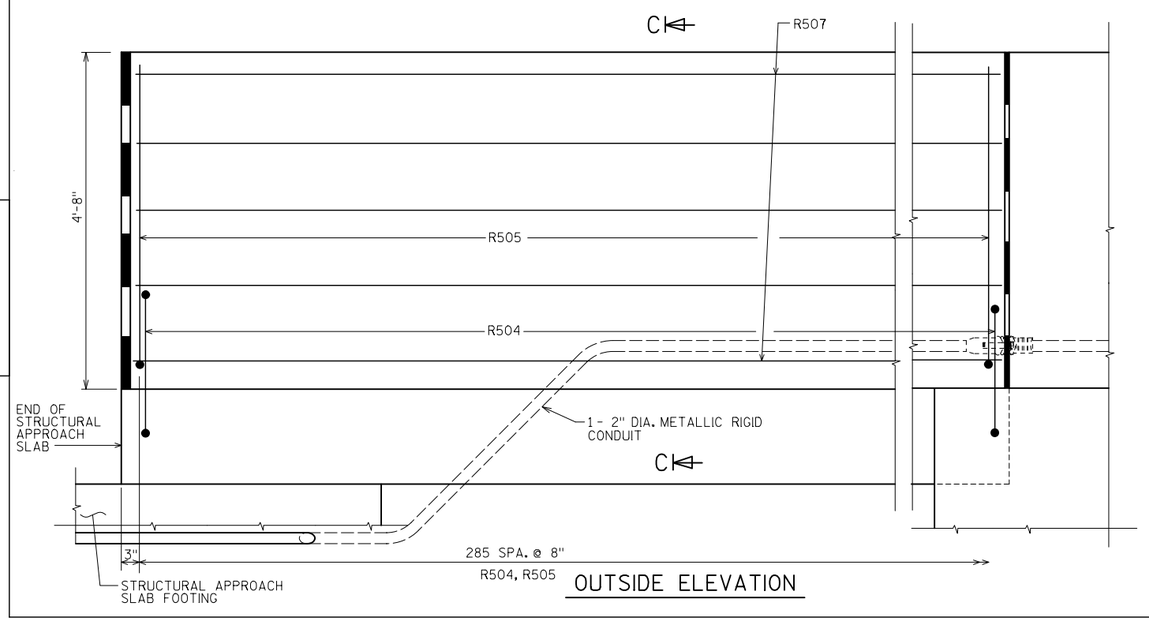
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.



SECTION C-C



SECTION THRU PARAPET ON BRIDGE



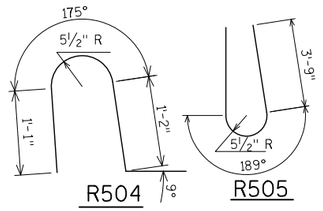
OUTSIDE ELEVATION

BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS AND PARAPET ON BRIDGE.
ALL BARS IN THIS TABLE SHALL BE EPOXY COATED.

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
R504	286	4'-6"	X		56SS PARAPET VERT.
R505	286	9'-1"	X		56SS PARAPET VERT.
R506	30	50'-10"			56SS PARAPET HORIZ.
R507	20	19'-5"			56SS PARAPET HORIZ. ON APPR.

TOTAL WEIGHT= 6,050 LB



AREA = 5.16 S.F.
WEIGHT = 774 LB./FT.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽ R504 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-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SINGLE SLOPE PARAPET 56SS

SHEET 29 OF 33
782

DATE: 5/5/2015
I.D.

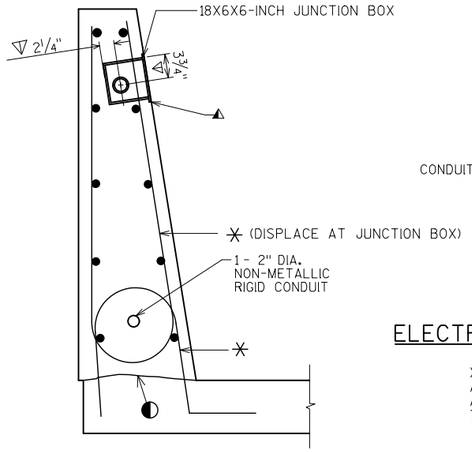
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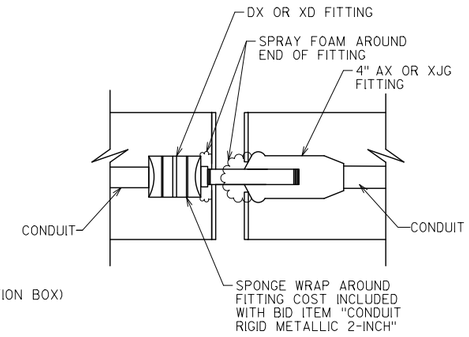
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STATE PROJECT NUMBER

1517-75-75

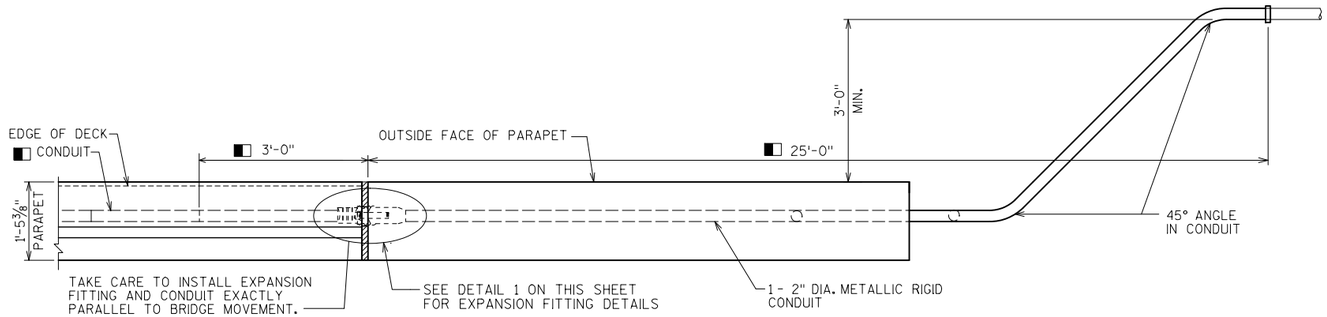


SECTION A

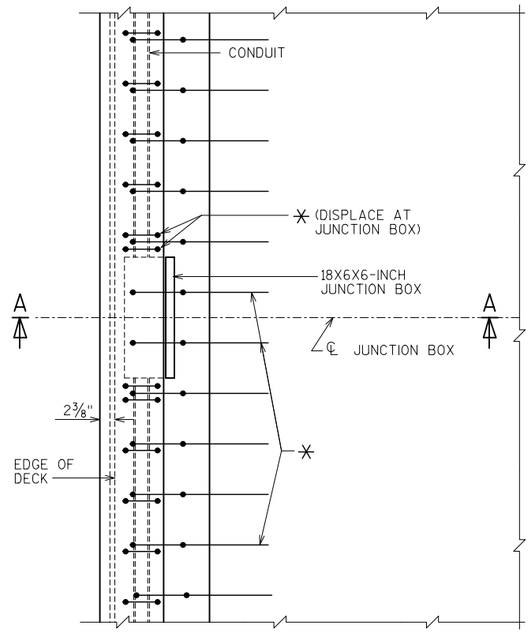


DETAIL 1
ELECTRICAL FITTING - AX/DX CONNECTION

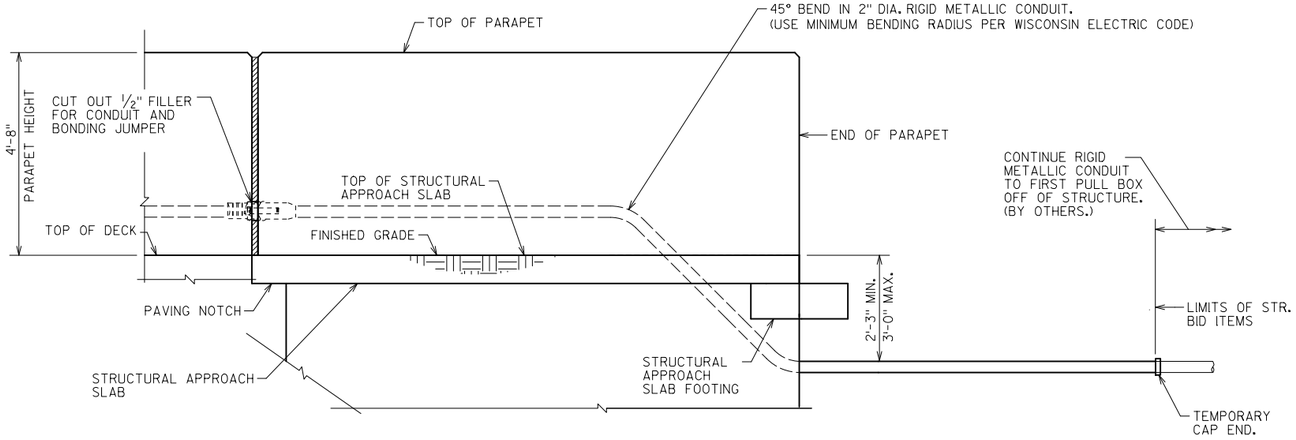
XD FITTING IS GOOD FOR 3/4" MOVEMENT IN ANY DIRECTION. THE XD FITTING WILL ALLOW FOR ANGULAR MOVEMENT WITH A DEFLECTION OF UP TO 30 DEGREES FROM THE NORMAL IN ANY DIRECTION.



PLAN OF PARAPET AT APPROACH SLAB



PLAN AT JUNCTION BOX



INSIDE ELEVATION OF PARAPET AT APPROACH SLAB

JUNCTION BOX LOCATIONS

℄ JUNCTION BOX	
STA. 185WB+00.00	

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X6X6-INCH", EACH.

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

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).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

◧ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND SIDE OF THE JOINT OPENING AND TO END OF CONDUIT ON APPROACH SIDE OF JOINT OPENING.

◐ 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 SHEET FOR BAR STEEL DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

SINGLE SLOPE PARAPET 56SS ELECTRICAL

SHEET 30 OF 33
783

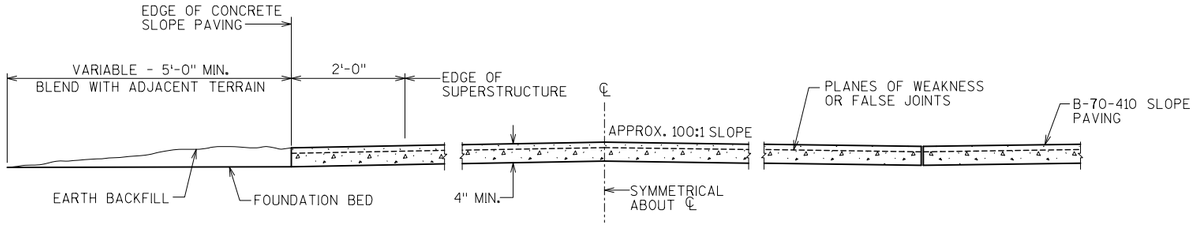
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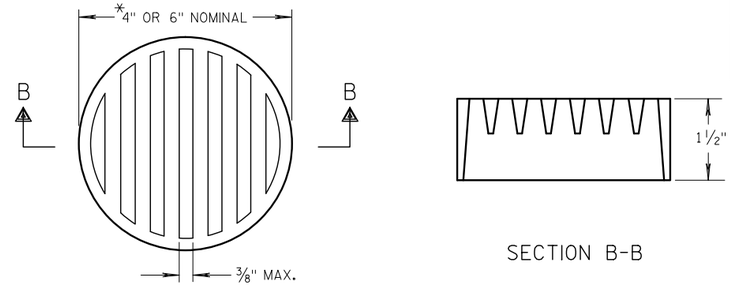
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DATE: 5/5/2015
I.D.

STATE PROJECT NUMBER
1517-75-75



SECTION A-A



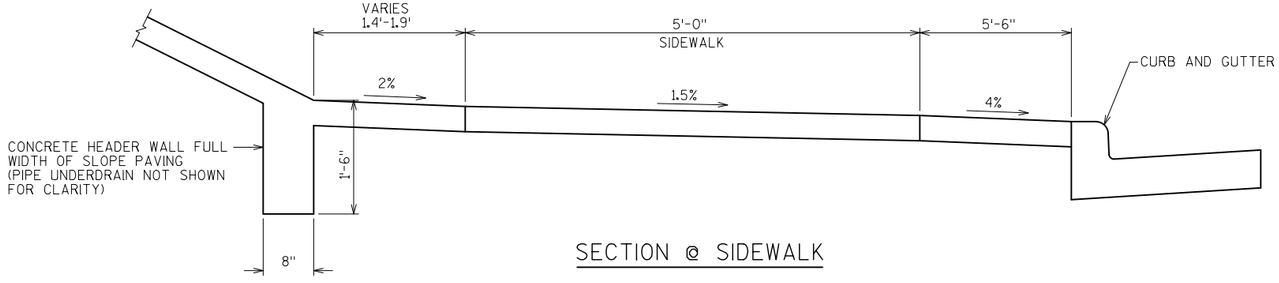
SECTION B-B

RODENT SHIELD

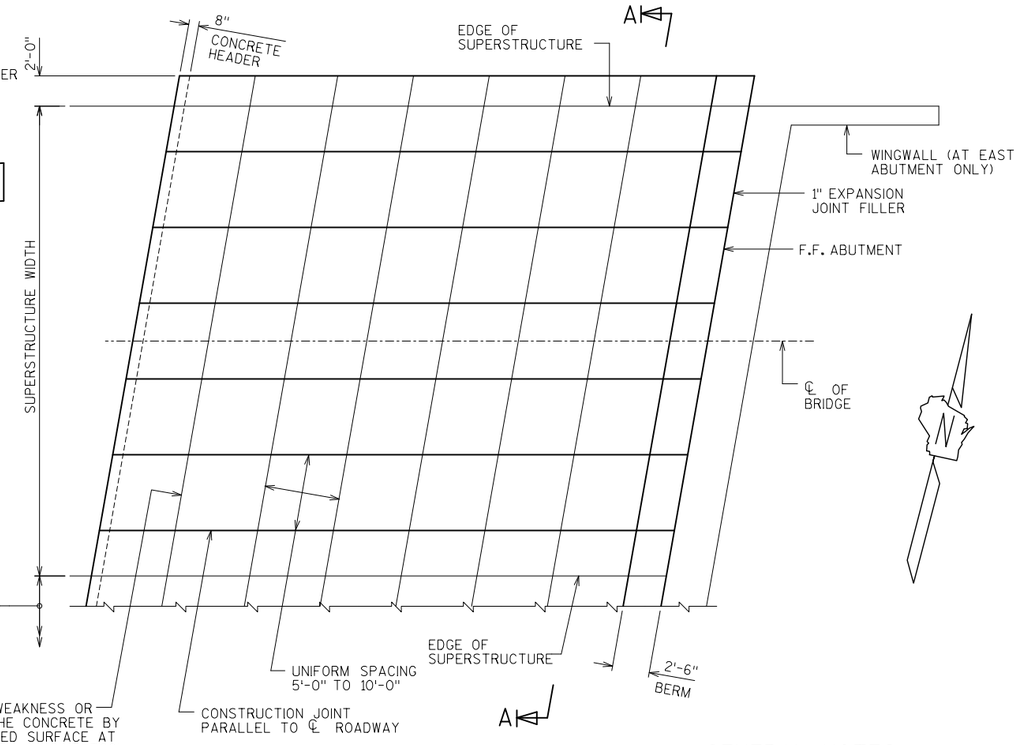
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

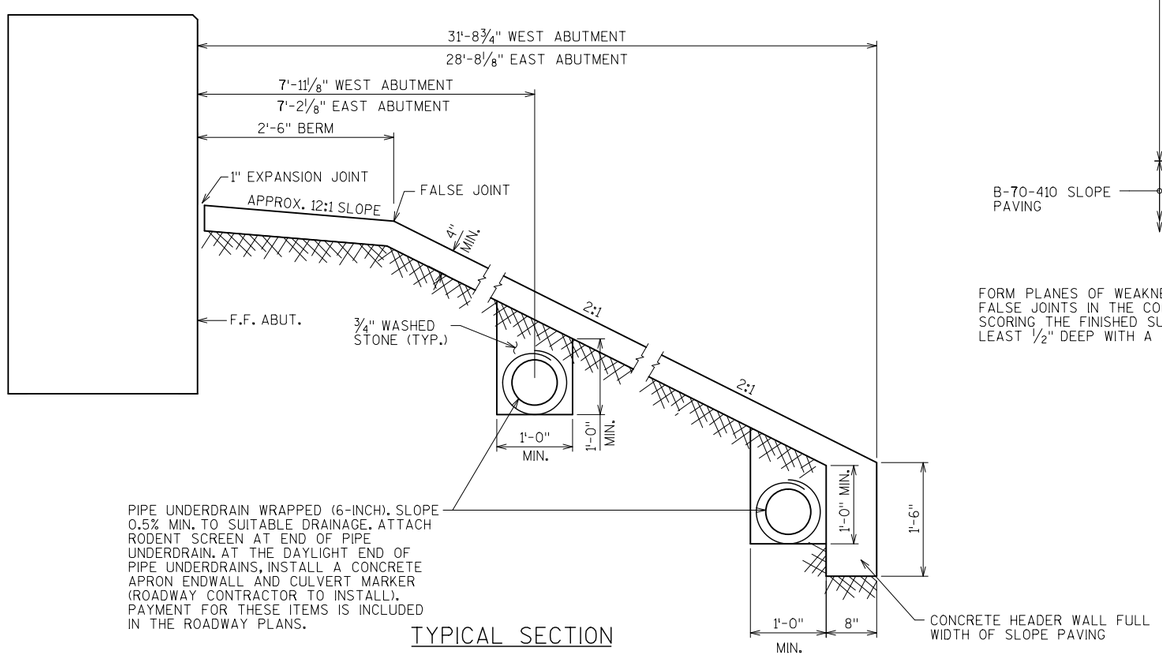
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



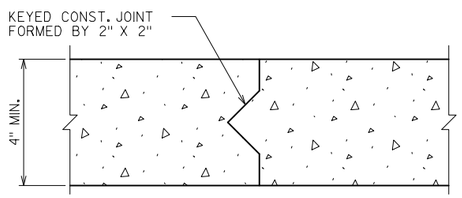
SECTION @ SIDEWALK



CONSTRUCTION JOINT DESIGN



TYPICAL SECTION



CONSTRUCTION JOINT

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN HEREON SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY	JAS	PLANS CK'D.	CBO

SLOPE PAVING CONCRETE

SHEET 31 OF 33
784

DATE: 5/5/2015
I.D.

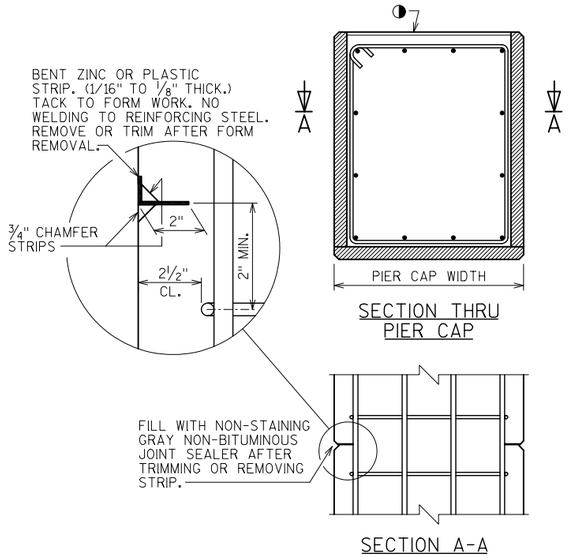
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STATE PROJECT NUMBER

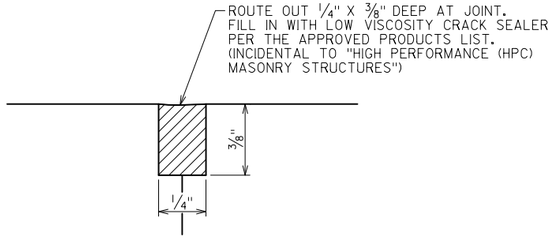
1517-75-75



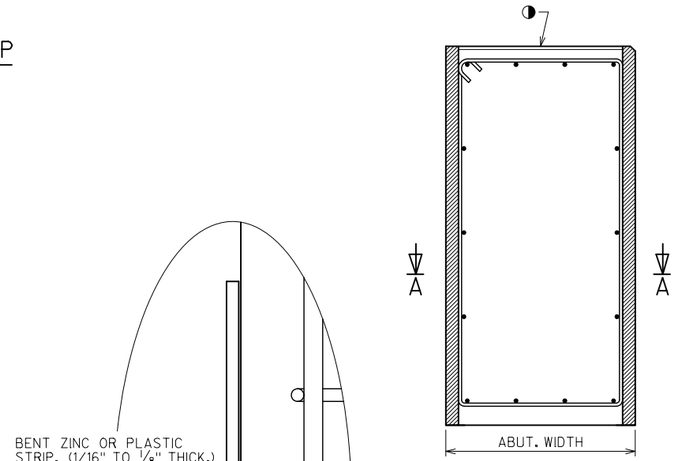
SECTION THRU PIER CAP

SECTION A-A

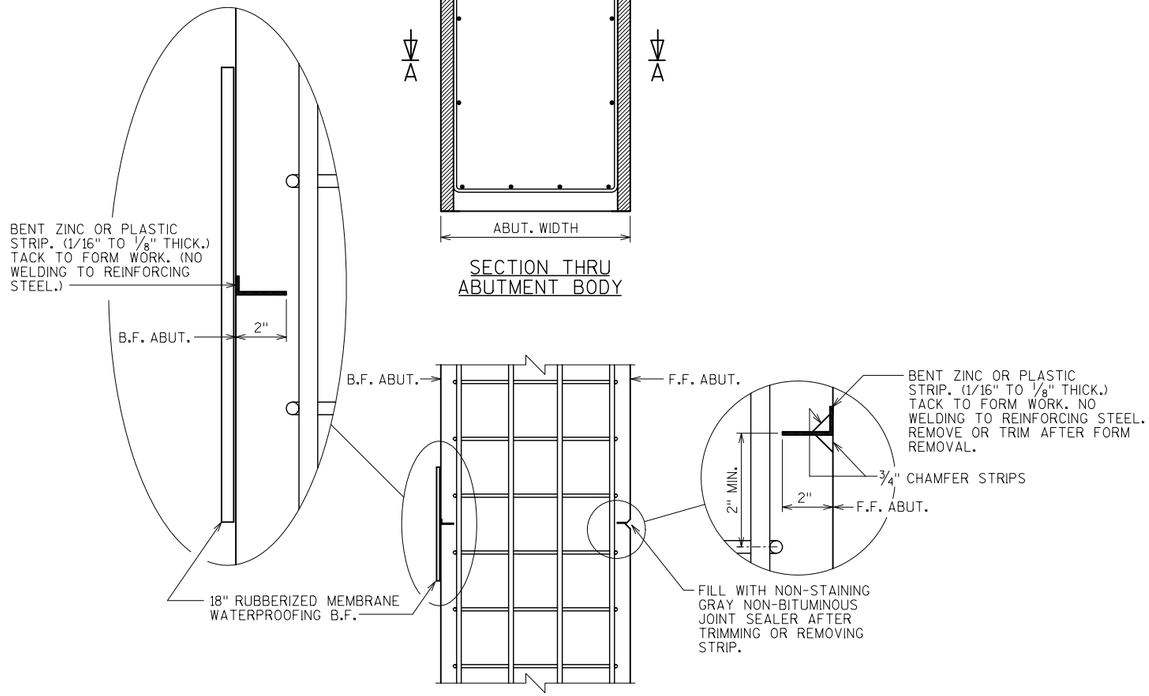
ALTERNATE CONSTRUCTION JOINT AT PIER CAP



LONGITUDINAL CONSTRUCTION JOINT DETAIL



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

ALTERNATE CONSTRUCTION JOINT

SHEET 32 OF 33

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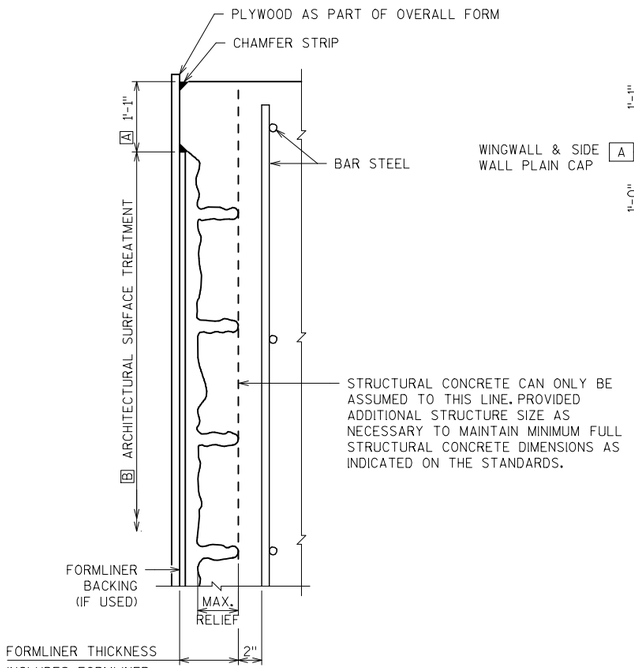
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DATE: 5/5/2015

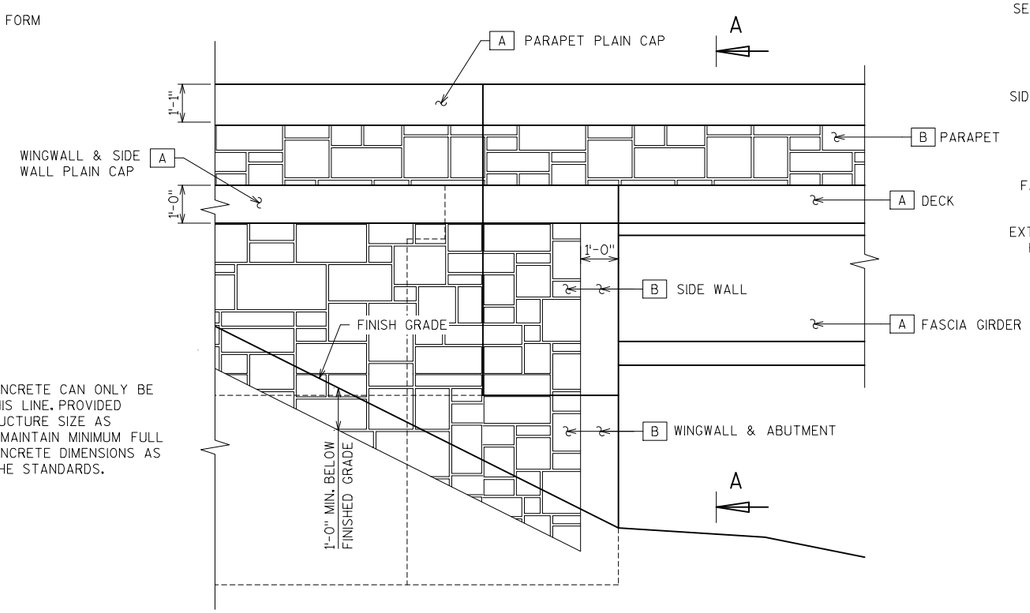
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STATE PROJECT NUMBER

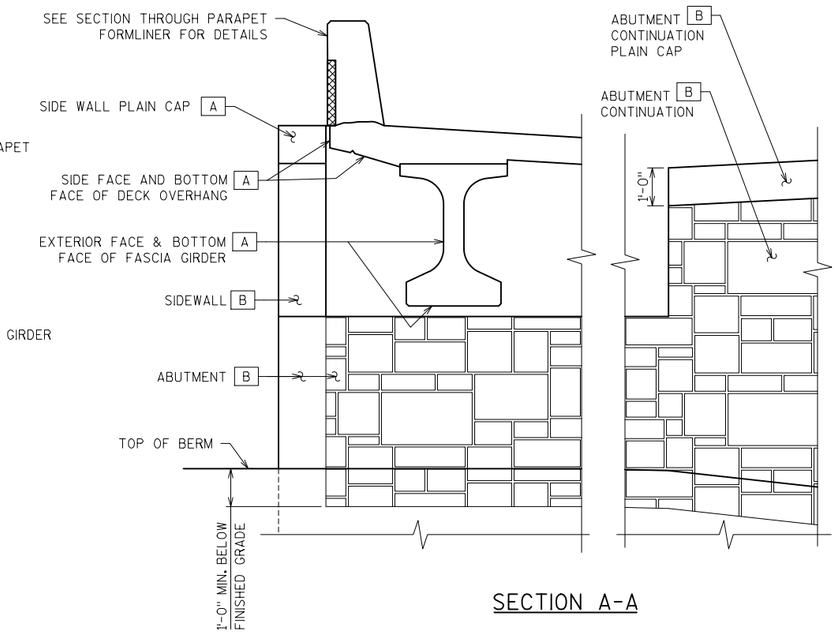
1517-75-75



SECTION THROUGH PARAPET FORMLINER



ABUTMENT STAINING DETAIL



SECTION A-A

CONCRETE STAINING SCHEDULE

MARK	COLOR	FED. COLOR NO.	LOCATION
A	BASKET BEIGE	33564	FASCIA GIRDERS, DECK EDGE, WING AND PARAPET PLAIN CAPS, PIER CAPS AND COLUMN STRIPS
B	LATTE	33522	WINGWALLS, SIDE WALLS, ABUTMENTS, PARAPETS, COLUMN SIDES

NOTE: 1. FINISH ON COLORS IS FLAT (LUSTERLESS)

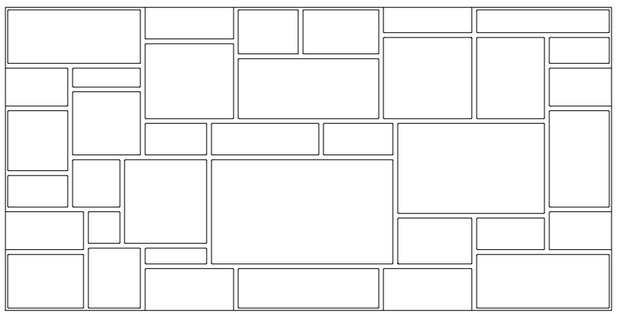
NOTES

FORMLINER COURSING ON PIERS, ABUTMENTS, AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

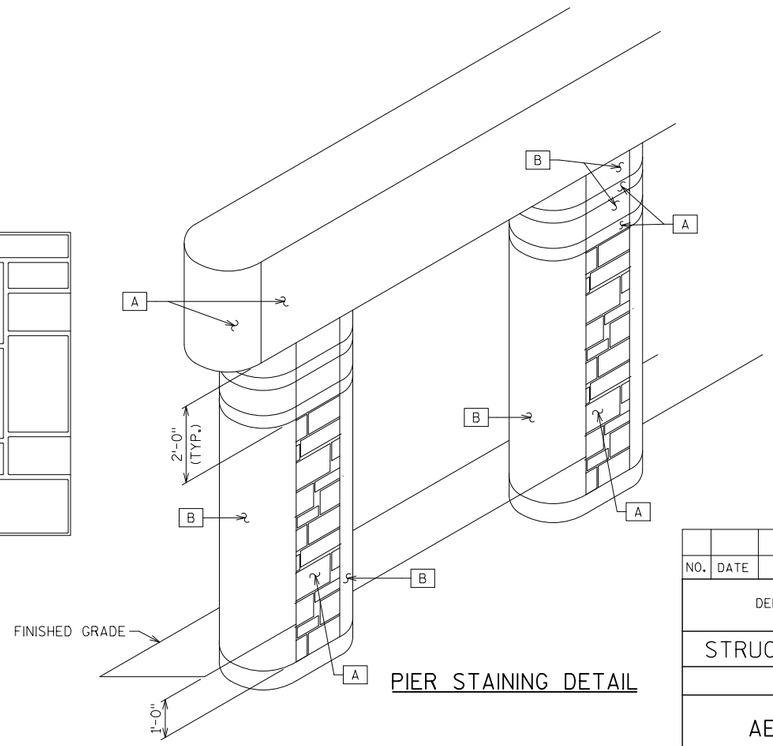
FORMLINER COURSING ON PARAPET SHALL BE PARALLEL TO TOP OF PARAPET.



ASHLAR

MAXIMUM RELIEF:	1⅝"
AVERAGE RELIEF:	1¼"
LINER THICKNESS*:	2½"
STONE SIZE:	H: 3" - 17"
	W: 5"-29"

* INCLUDES INTERNAL PLYWOOD BACKING



PIER STAINING DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-411

DRAWN BY JAS | PLANS CK'D. CBO

AESTHETIC DETAILS

SHEET 33 OF 33
786

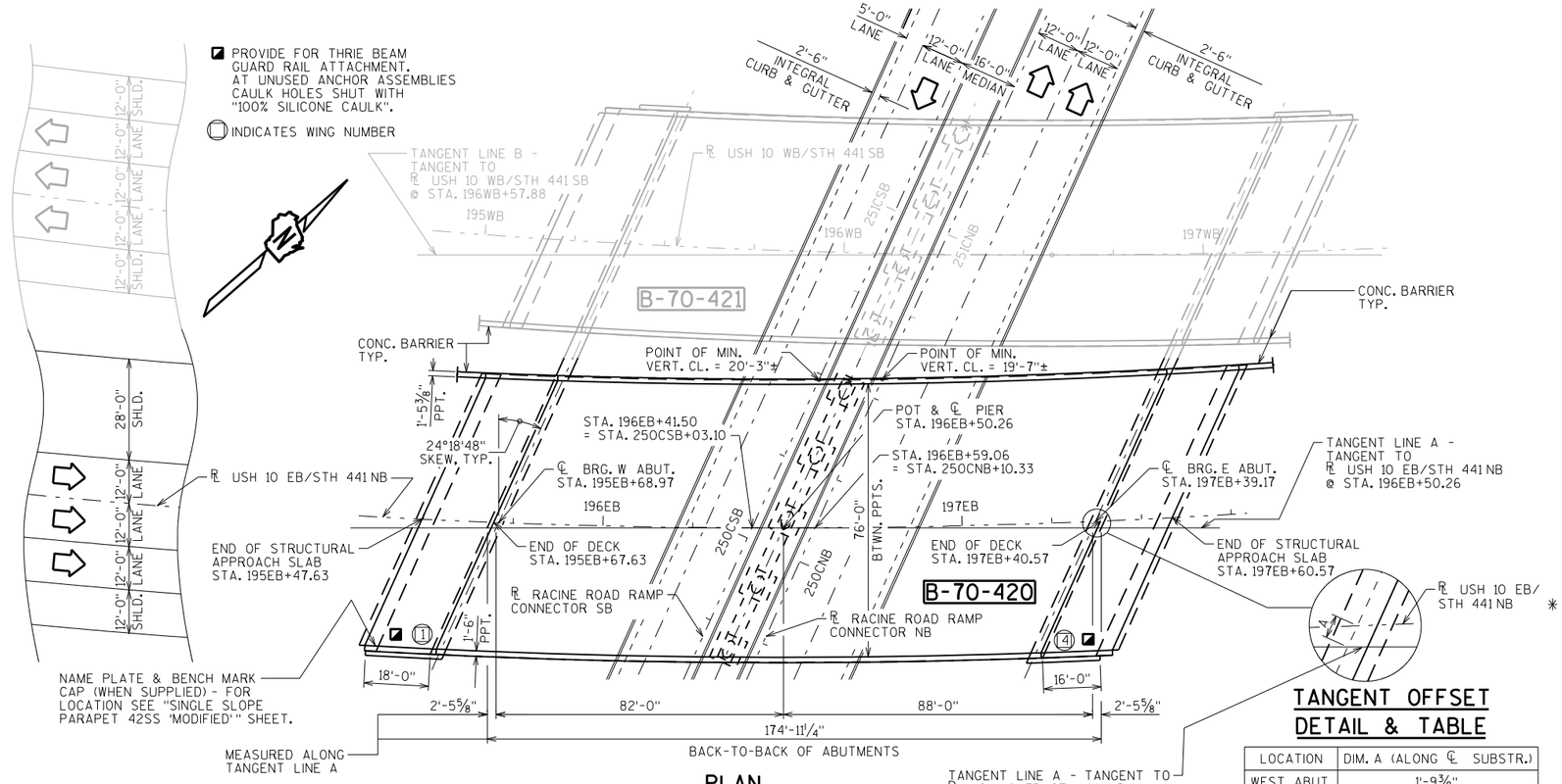
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DATE: 5/5/2015

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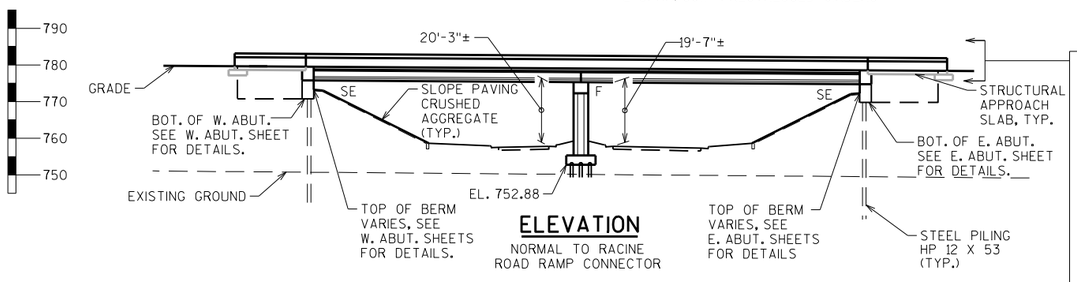
STATE PROJECT NUMBER
1517-75-75



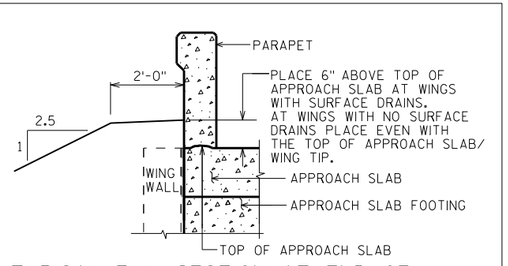
PLAN
2-SPAN, 36W" PRESTRESSED GIRDERS

TANGENT OFFSET DETAIL & TABLE

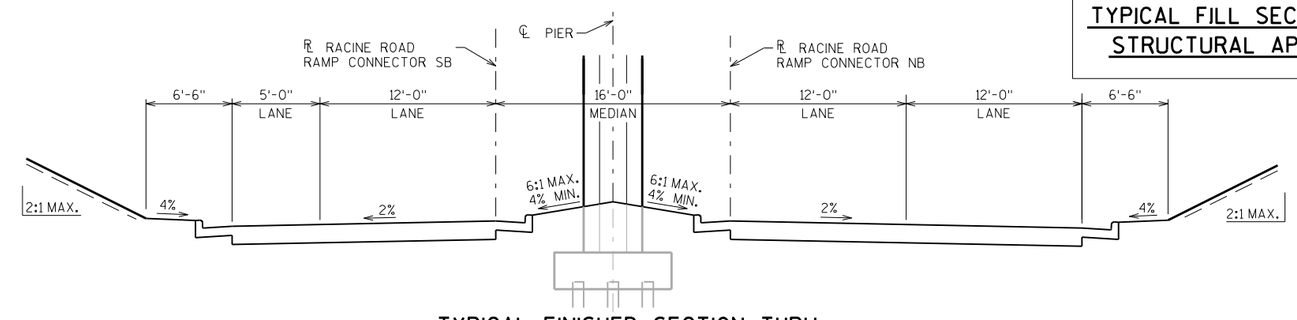
LOCATION	DIM. A (ALONG ℄ SUBSTR.)
WEST ABUT.	1'-9 3/8"
PIER	0'-0"
EAST ABUT.	2'-1 1/2"



ELEVATION
NORMAL TO RACINE ROAD RAMP CONNECTOR



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS



TYPICAL FINISHED SECTION THRU RACINE ROAD RAMP CONNECTOR
LOOKING NORTH

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.03
OPERATING RATING FACTOR: RF=1.33
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 230 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

B-70-420 IS DESIGNED FOR A POLYMER OVERLAY THAT WILL BE APPLIED TO THE BRIDGE DECK IN A LATER CONTRACT.

MATERIAL PROPERTIES:

CONCRETE MASONRY SUPERSTRUCTURE (HPC) — f'c = 4,000 P.S.I.
CONCRETE MASONRY ALL OTHER (HPC) — f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
BAR STEEL REINFORCEMENT STAINLESS, GRADE 60 — fy = 60,000 P.S.I.
36W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS - 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

WEST ABUTMENT TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 65 FEET LONG.

EAST ABUTMENT TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 65 FEET LONG.

PIER TO BE SUPPORTED ON 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 45 FEET 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.

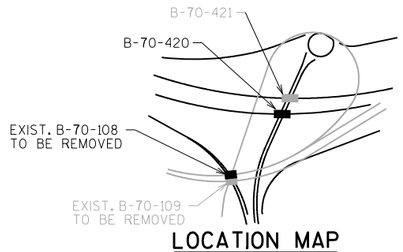
TRAFFIC VOLUME

USH 10 EB/STH 441 NB	USH 10 WB/STH 441 SB	RACINE ROAD RAMP CONNECTOR
A.D.T.=36,400 (2038) R.D.S.=70 M.P.H.	A.D.T.=54,700 (2038) R.D.S.=70 M.P.H.	A.D.T.=22,400 (2038) R.D.S.=35 M.P.H.

CURVE DATA

℄ USH 10 EB/STH 441 NB

P.I. = 191+10.01
Δ = 61° 15' 44.61"
D = 2° 48' 31.02"
T = 1207.95
L = 2181.23
R = 2040.00
S.E. = 6.0%
P.C. = 179+02.05
P.T. = 200+83.29



LOCATION MAP

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES, NOTES, & PROFILES
3. CROSS SECTIONS
4. SUBSURFACE EXPLORATION
5. WEST ABUTMENT
6. WEST ABUTMENT DETAILS
7. EAST ABUTMENT
8. EAST ABUTMENT DETAILS
9. PIER
10. PIER DETAILS
11. 36W" PRESTRESSED GIRDER DETAILS 1
12. 36W" PRESTRESSED GIRDER DETAILS 2
13. STEEL DIAPHRAGM
14. SUPERSTRUCTURE CROSS SECTION
15. SUPERSTRUCTURE PLAN
16. SUPERSTRUCTURE DETAILS
17. SINGLE SLOPE PARAPET 36SS
18. SINGLE SLOPE PARAPET 42SS "MODIFIED"
19. CONDUIT DETAILS
20. AESTHETIC DETAILS
21. SLOPE PAVING (CRUSHED AGGREGATE)
22. ALTERNATE CONSTRUCTION JOINT
23. WEST STRUCTURAL APPROACH SLAB
24. EAST STRUCTURAL APPROACH SLAB

STRUCTURE DESIGN CONTACT:
JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES
ACCEPTED William C. Dreher LES 4/20/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-70-420

USH 10 EB/STH 441 NB OVER CTH P INTERCHANGE

COUNTY	TOWN/~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC. AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JLR	PMM	JLR	JLR

GENERAL PLAN

SHEET 1 OF 24

787

I.D. 1517-07-04E

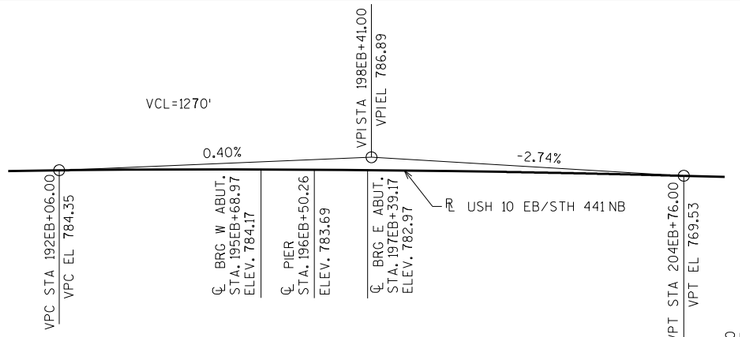
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SCALE = 20

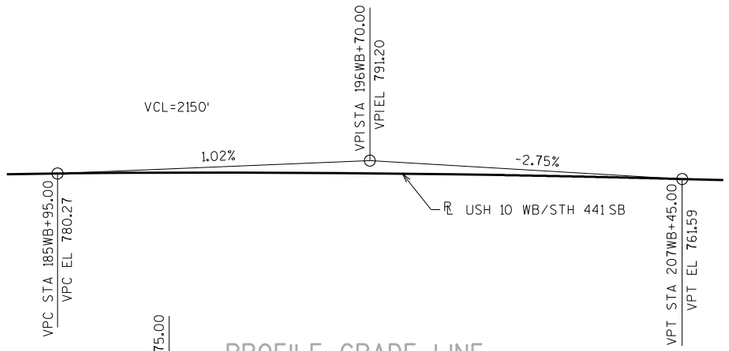
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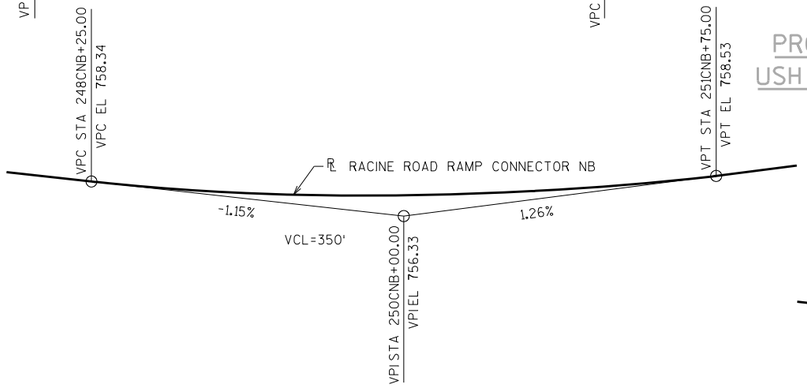
STATE PROJECT NUMBER
1517-75-75



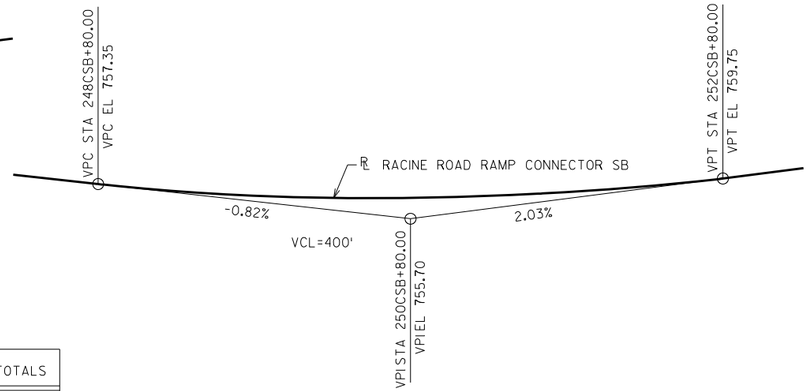
PROFILE GRADE LINE
USH 10 EB/STH 441 NB



PROFILE GRADE LINE
USH 10 WB/STH 441 SB



PROFILE GRADE LINE
RACINE ROAD RAMP CONNECTOR NB



PROFILE GRADE LINE
RACINE ROAD RAMP CONNECTOR SB

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST APPROACH	WEST ABUT.	PIER 1	EAST ABUT.	EAST APPROACH	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 194RSW+00	LS	———	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-420	LS	———	———	———	———	———	———	1
* 210.0100	BACKFILL STRUCTURE	CY	———	———	250	———	210	———	460
305.0120	BASE AGGREGATE DENSE 1¼-INCH	TON	———	290	———	———	———	300	590
502.3200	PROTECTIVE SURFACE TREATMENT	SY	1,632	190	———	———	———	190	2,012
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	1,711	———	———		———	———	1,711
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	———	8,070	10,140	7,620	———	25,830
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	119,190	17,580	2,010	31,330	1,330	18,100	189,540
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	2,960	———	———	———	———	———	2,960
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	———	10	20	10	———	40
506.4000	STEEL DIAPHRAGMS B-70-420	EACH	36	———	———	———	———	———	36
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	20	———	20	———	40
517.1010.S	CONCRETE STAINING B-70-420	SF	2,513	70	590	2,110	560	70	5,913
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-420	SF	435	50	590	345	560	50	2,030
550.0500	PILE POINTS	EACH	———	———	———	33	———	———	33
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	———	———	975	1,485	845	———	3,305
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	———	———	370	———	350	———	720
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	———	124	———	117	———	241
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	1	———	———	———	1	2
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	———	6	———	———	———	6	12
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	168	18	———	———	———	18	204
653.0222	JUNCTION BOXES 18 X 12 X 6-INCH	EACH	1	———	———	———	———	———	1
SPV.0035	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	552	110	100	177	92	110	1,141
	NON-BID ITEMS								
						———			
	FILLER	SIZE	———	———	———	———	———	———	½",¾",1½"

* THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

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.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE AND THE FRONT FACE AND THE TOP OF THE PARAPET, INCLUDING PARAPETS ON STRUCTURAL APPROACH SLABS. DO NOT SEAL SURFACES WHERE THE PLANS OR SPECIAL PROVISIONS REQUIRE STAINING OR OTHER TREATMENTS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

THE EXISTING BRIDGE B-70-108 IS A 2-SPAN PRESTRESSED GIRDER BRIDGE, WITH FULL RETAINING ABUTS., AND A MULTI-COLUMN PIER ON PILE FOOTINGS. THE ENTIRETY OF THE STRUCTURE WILL BE REMOVED AND PAID FOR UNDER "REMOVING OLD STRUCTURE STA. 194RSW+00".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY JLR | PLANS CK'D. JLR

QUANTITIES, NOTES, & PROFILES

SHEET 2

788

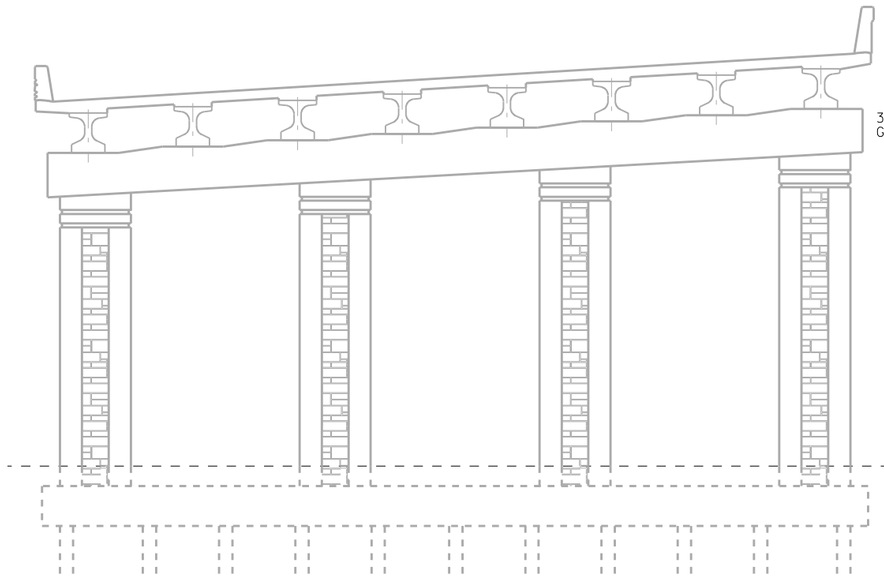
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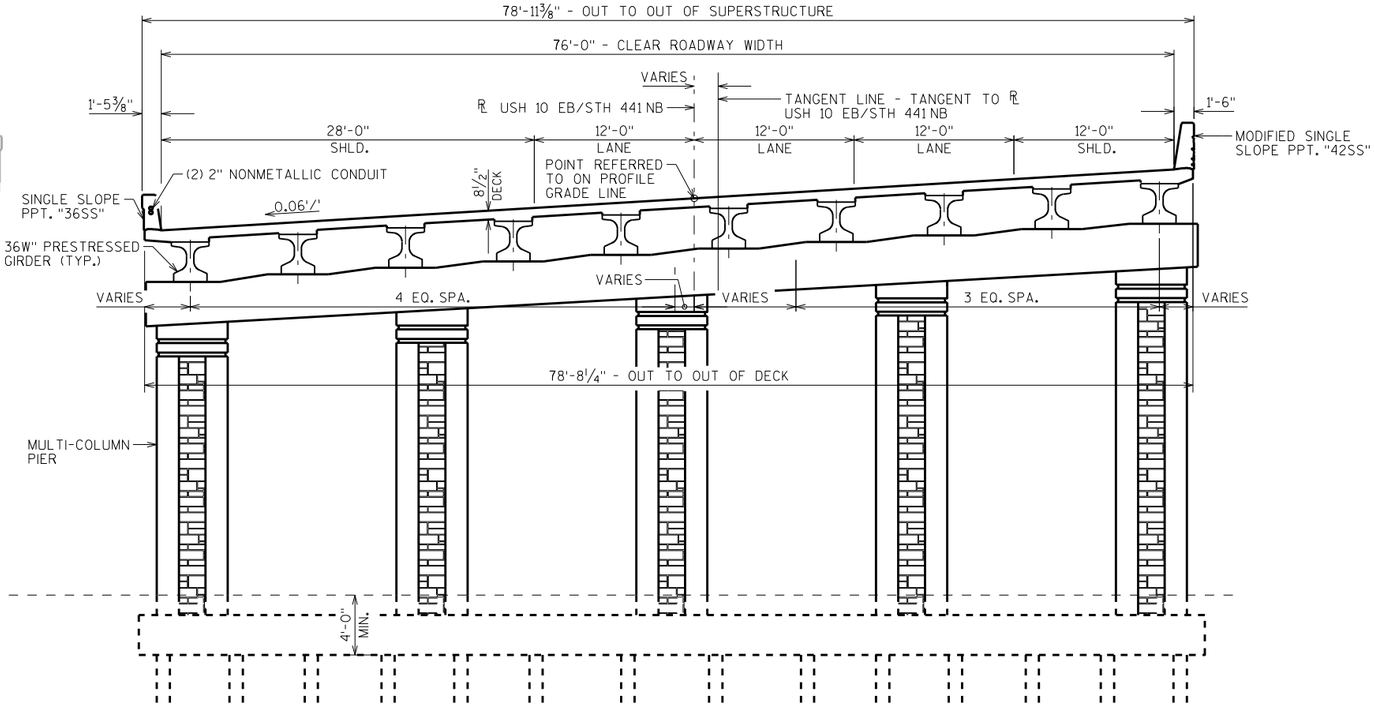
STATE PROJECT NUMBER

1517-75-75



CROSS SECTION THRU ROADWAY LOOKING EAST

B-70-421



CROSS SECTION THRU ROADWAY LOOKING EAST

B-70-420

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY JLR | PLANS CK'D. JLR

CROSS SECTIONS

SHEET 3

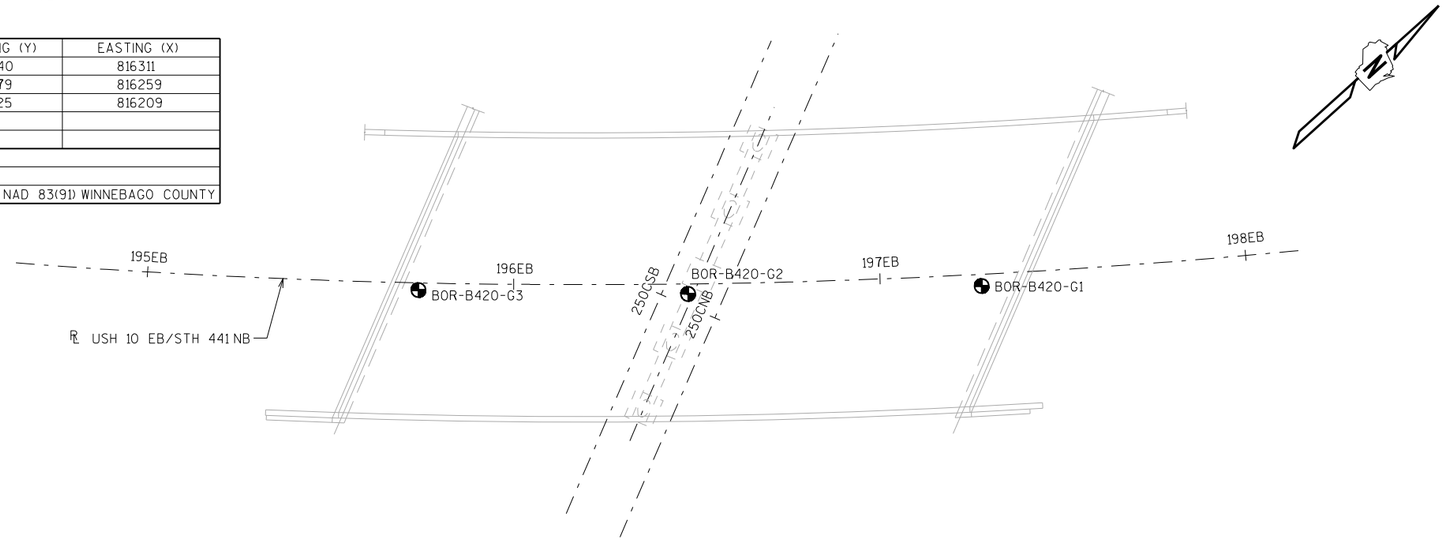
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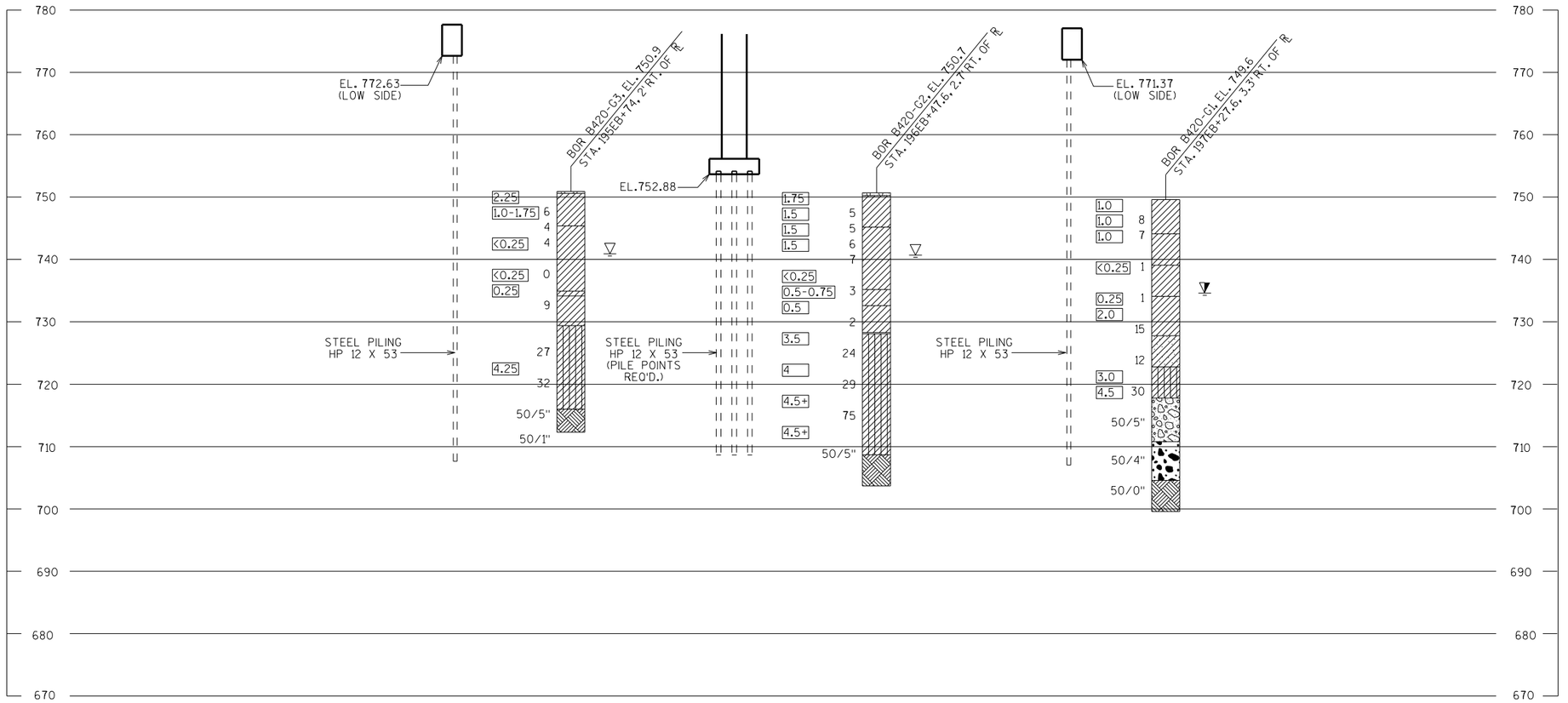
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USH 10 EB/STH 441 NB OVER CTH P INTERCHANGE

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B420-G1	1/27/2012	547040	816311
B420-G2	1/30/2012	546979	816259
B420-G3	1/31/2012	546925	816209

BORINGS COMPLETED BY: GESTRA
REPORT COMPLETED BY: HNTB
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY





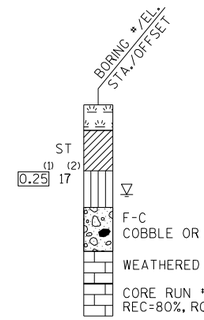
STATE PROJECT NUMBER

1517-75-75

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY PR/WWR | PLANS CK'D. JLR

SUBSURFACE EXPLORATION

SHEET 4

790

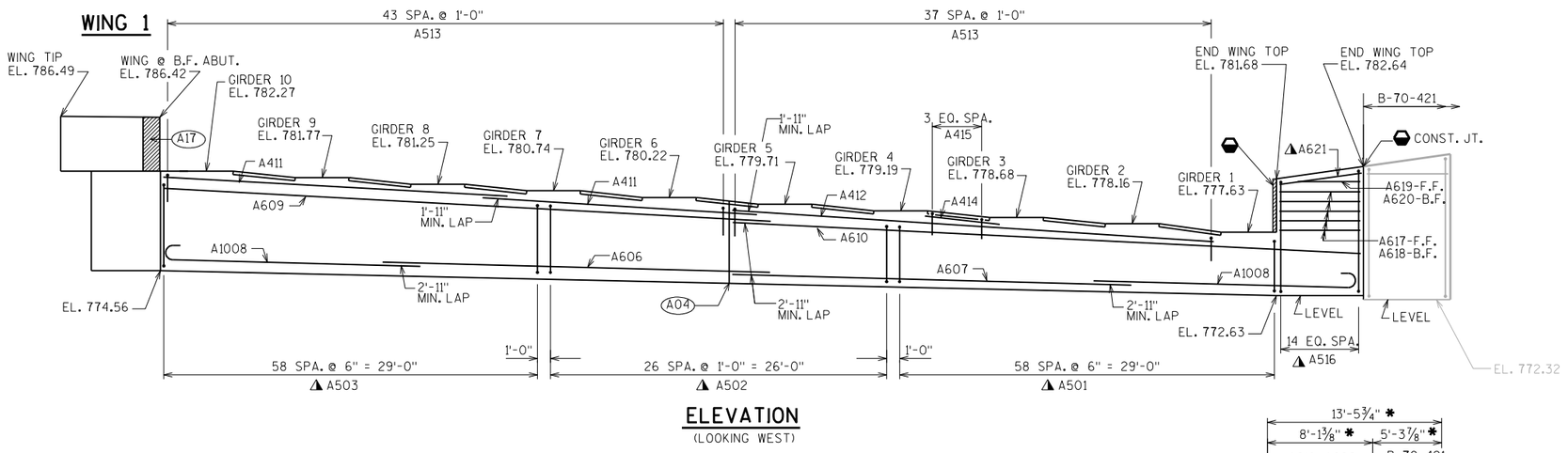
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8

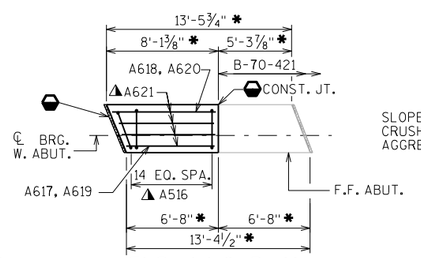
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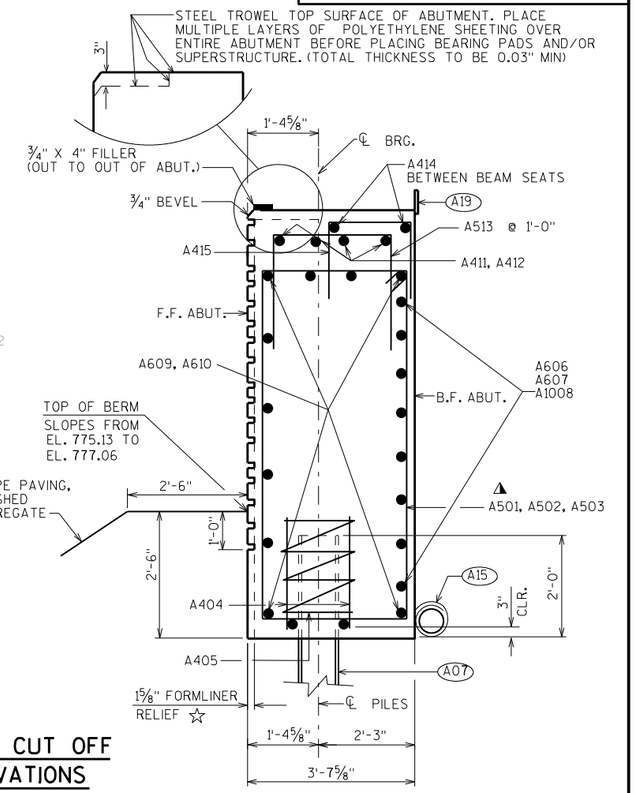
1517-75-75



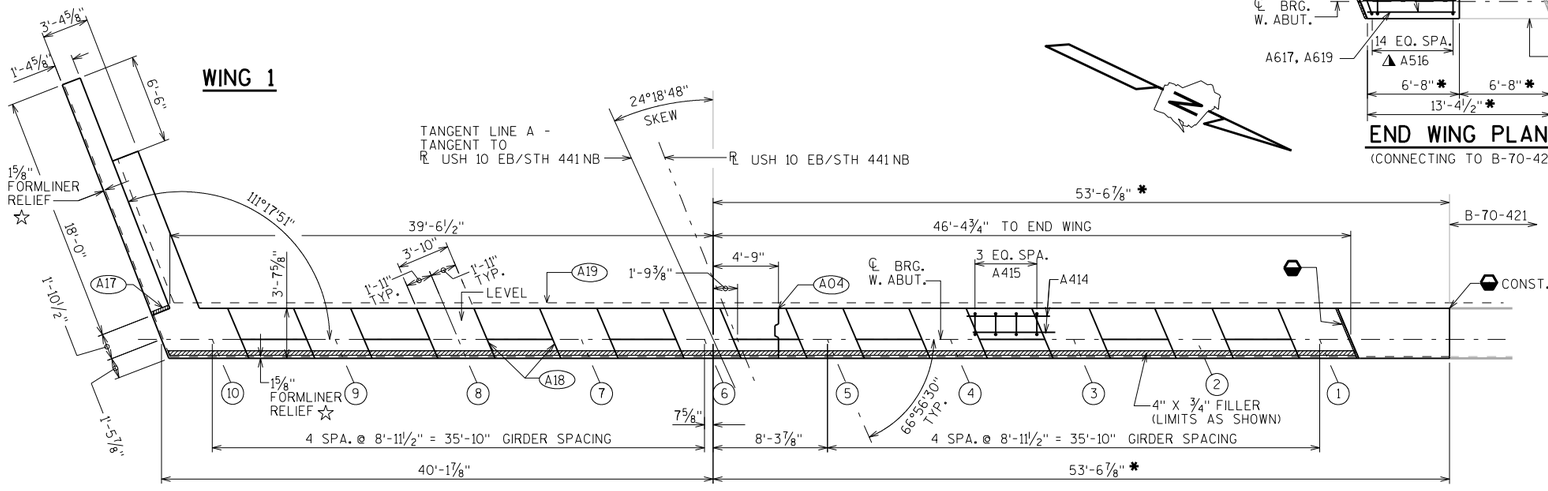
ELEVATION
(LOOKING WEST)



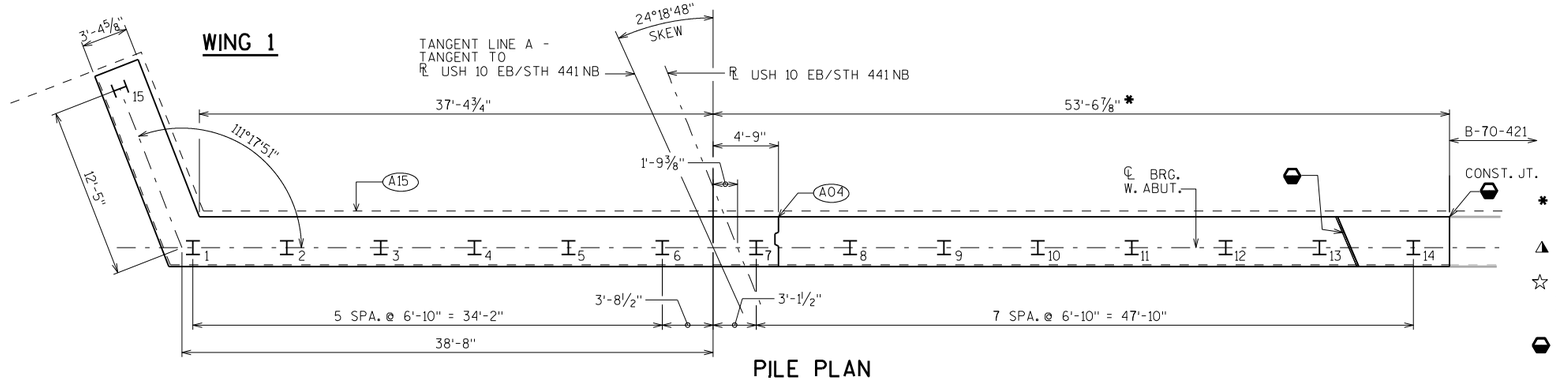
END WING PLAN
(CONNECTING TO B-70-421)



SECTION THRU BODY



PLAN



PILE PLAN

PILE CUT OFF ELEVATIONS

PILE #	TOP OF PILE
15	EL. 775.56
1	EL. 776.53
2	EL. 776.38
3	EL. 776.23
4	EL. 776.07
5	EL. 775.92
6	EL. 775.77
7	EL. 775.61
8	EL. 775.46
9	EL. 775.31
10	EL. 775.16
11	EL. 775.00
12	EL. 774.85
13	EL. 774.70
14	EL. 774.63

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 X 53 STEEL PILING, ESTIMATED 65 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. SEE "PILE LENGTH CUT OFF DETAIL".

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

* DIMENSION DOES NOT INCLUDE 1/2" FILLER

◭ BAR SERIES

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

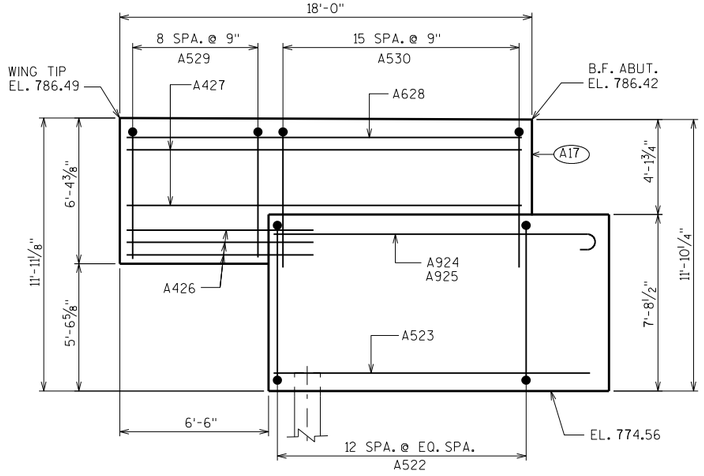
DRAWN BY WWR | PLANS CK'D. JLR

WEST ABUTMENT

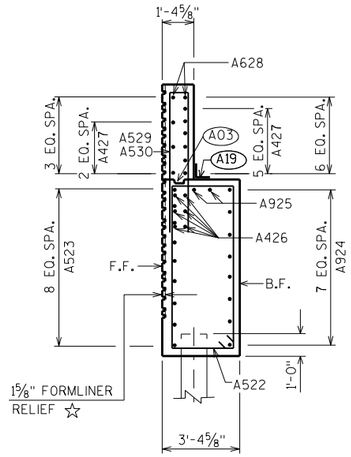
SHEET 5

791

SCALE =



WING 1 ELEVATION

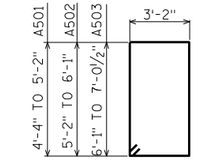


WING 1 SECTION

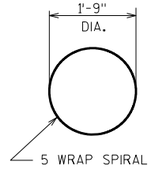
(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

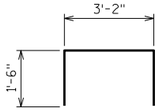
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



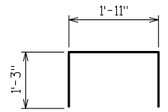
A501, A502, A503



A405



A513



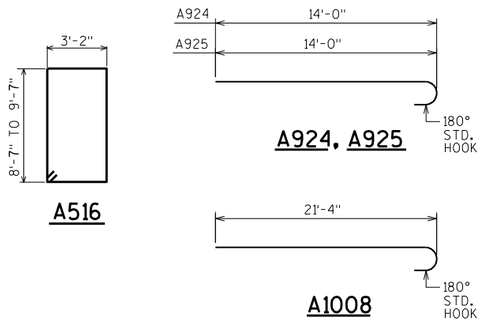
A415

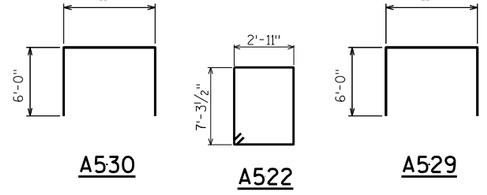
BILL OF BARS

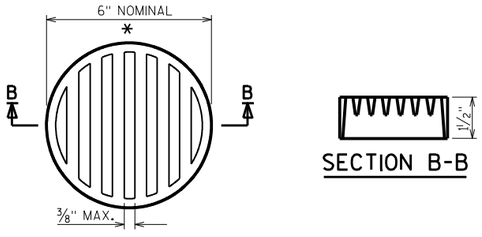
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		59	16'-6"	X	⚠	BODY-STIRRUP
A502		27	18'-3"	X	⚠	BODY-STIRRUP
A503		59	20'-1"	X	⚠	BODY-STIRRUP
A404		28	2'-3"			BODY-VERT.-2 PER BODY PILE
A405		14	28'-0"	X		BODY-1 PER BODY PILE
A606		8	30'-0"			BODY-HORIZ.-B.F.
A607		8	34'-10"			BODY-HORIZ.-B.F.
A1008		16	22'-9"	X		BODY-HORIZ.-B.F.
A609		12	48'-2"			BODY- HORIZ.
A610		12	48'-7"			BODY-HORIZ.
A411		8	24'-9"			BODY- HORIZ. TOP
A412		4	37'-4"			BODY- HORIZ. TOP
A513		82	5'-11"	X		BODY- HORIZ. TOP U-BAR
A414		18	6'-0"			BODY-HORIZ. BTWN. GIRDERS
A415		36	4'-3"	X		BODY-VERT. BTWN. GIRDERS
A516	X	15	25'-2"	X	⚠	END WING- STIRRUP
A617	X	5	6'-4"			END WING-HORIZ. F.F.
A618	X	5	7'-8"			END WING-HORIZ. B.F.
A619	X	1	5'-7"			END WING-HORIZ. F.F.
A620	X	1	6'-7"			END WING-HORIZ. B.F.
A621	X	4	7'-1"		⚠	END WING-HORIZ. TOP
A522	X	13	21'-1"	X		WING BODY 1-STRIRRUP
A523	X	9	13'-7"			WING BODY 1-HORIZ. F.F.
A924	X	8	15'-3"	X		WING BODY 1-HORIZ. B.F.
A925	X	2	15'-3"	X		WING BODY 1-HORIZ. TOP
A426	X	6	7'-11"			WING WALL 1-HORIZ. BOT.
A427	X	9	17'-8"			WING WALL 1-HORIZ.
A628	X	2	17'-8"			WING WALL 1-HORIZ. TOP
A529	X	9	12'-8"	X		WING WALL 1-VERT. U-BAR
A530	X	16	12'-8"	X		WING WALL 1-VERT. U-BAR

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.







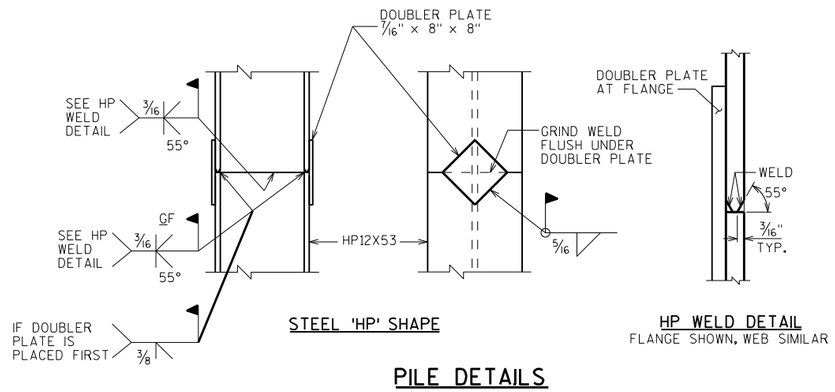
SECTION B-B

RODENT SHIELD DETAIL

* 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 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 EXPOSED END OF 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.



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
A501	1 SERIES OF 59	15'-8" TO 17'-4"
A502	1 SERIES OF 27	17'-4" TO 19'-2"
A503	1 SERIES OF 59	19'-2" TO 21'-1"
A516	1 SERIES OF 15	24'-2" TO 26'-2"
A621	1 SERIES OF 4	6'-5" TO 7'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY.

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY WWR | PLANS CK'D. JLR

WEST ABUTMENT DETAILS

SHEET 6

792

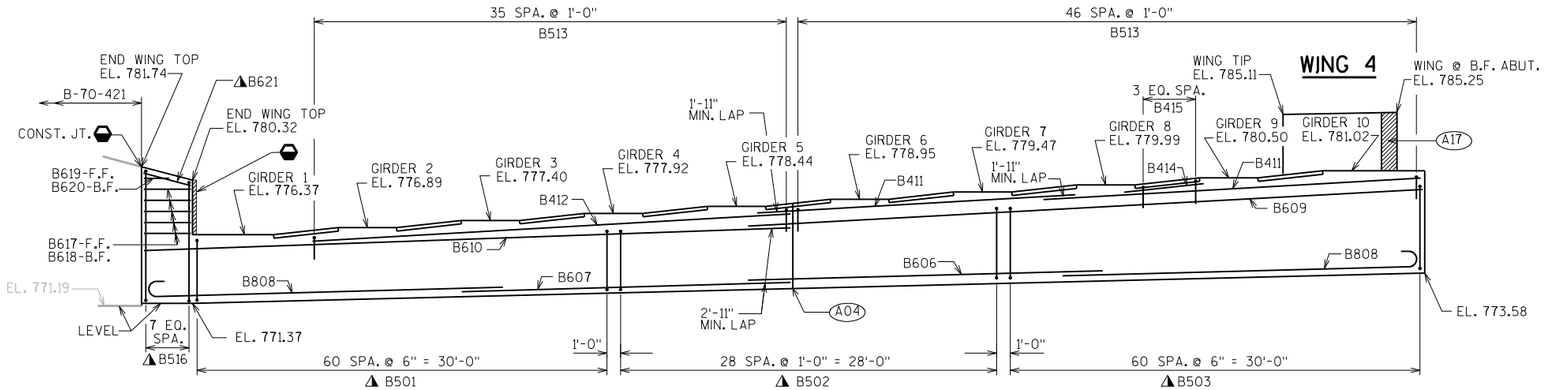
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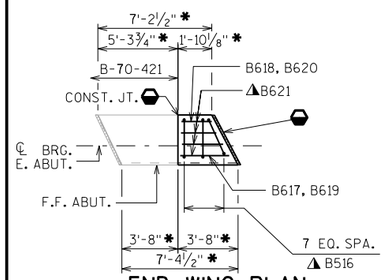
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STATE PROJECT NUMBER

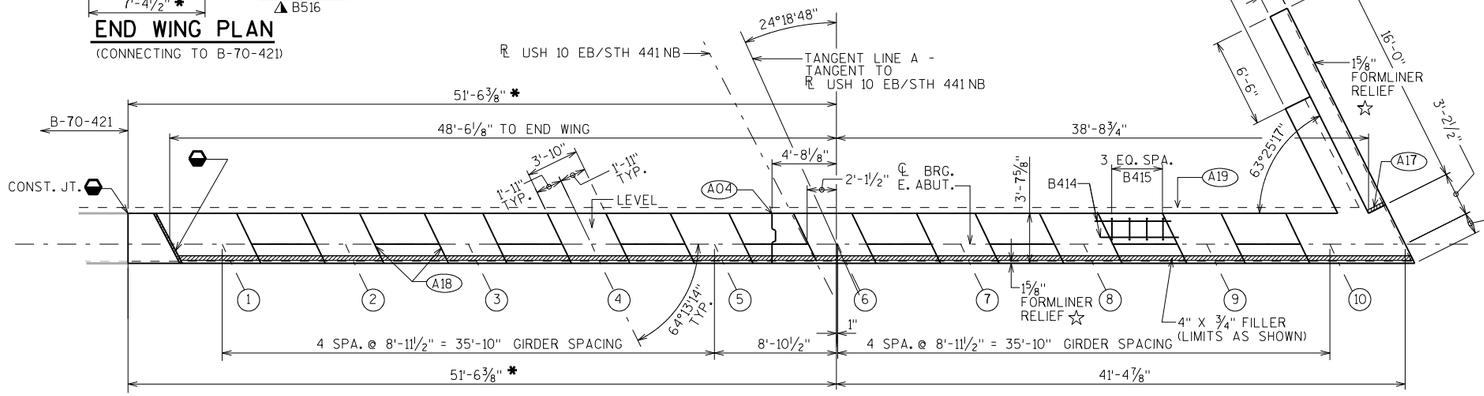
1517-75-75



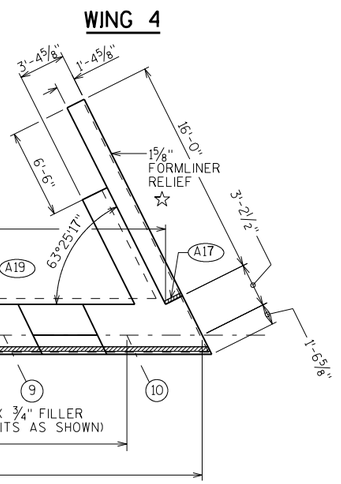
ELEVATION
(LOOKING EAST)

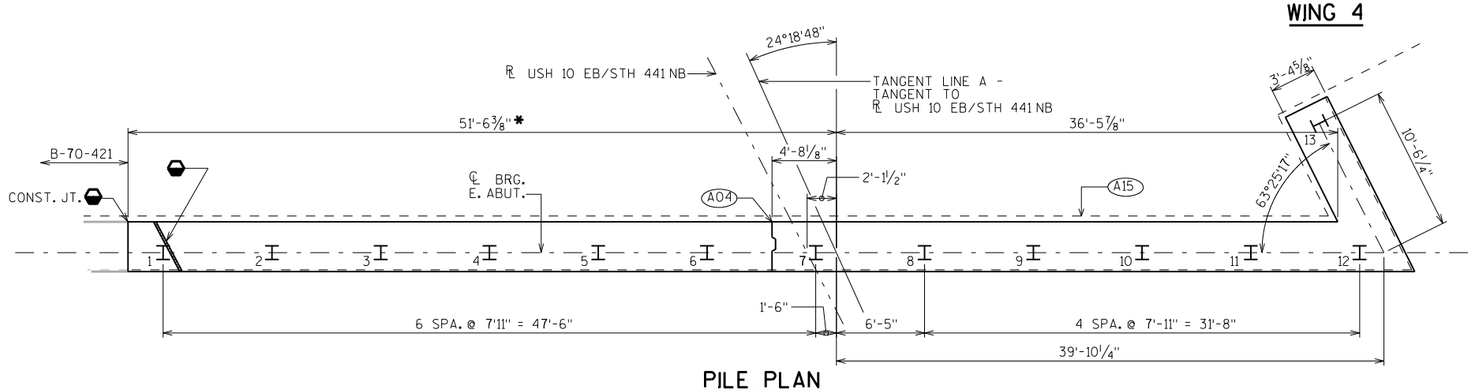


END WING PLAN
(CONNECTING TO B-70-421)

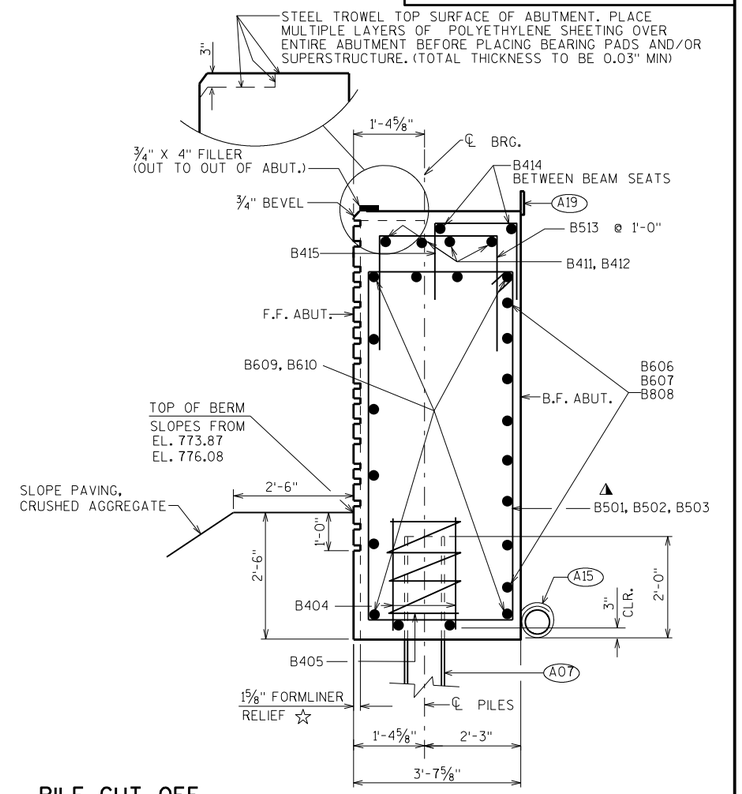


PLAN





PILE PLAN



SECTION THRU BODY

PILE CUT OFF ELEVATIONS

PILE #	TOP OF PILE
1	EL. 773.37
2	EL. 773.54
3	EL. 773.73
4	EL. 773.93
5	EL. 774.12
6	EL. 774.32
7	EL. 774.51
8	EL. 774.71
9	EL. 774.90
10	EL. 775.10
11	EL. 775.29
12	EL. 775.51
13	EL. 774.58

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 X 53 STEEL PILING, ESTIMATED 65 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. SEE "PILE LENGTH CUT OFF DETAIL".

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

* DIMENSION DOES NOT INCLUDE ½" FILLER

▲ BAR SERIES

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

⬭ 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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EAST ABUTMENT

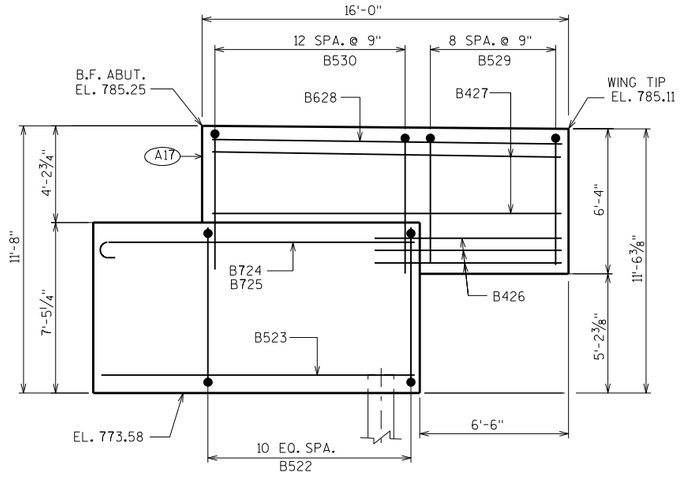
SHEET 7

793

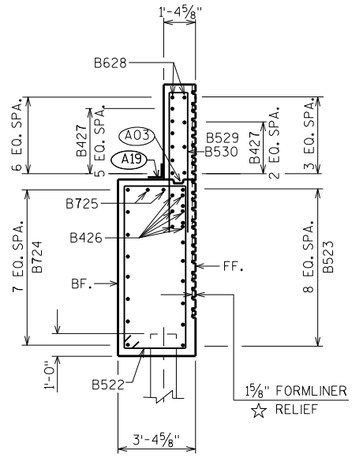
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STATE PROJECT NUMBER

1517-75-75



WING 4 ELEVATION

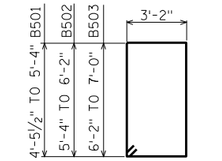


WING 4 SECTION

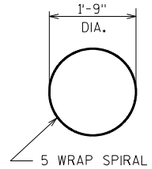
(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

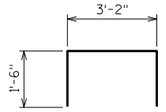
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



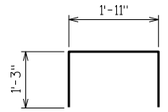
B501, B502, B503



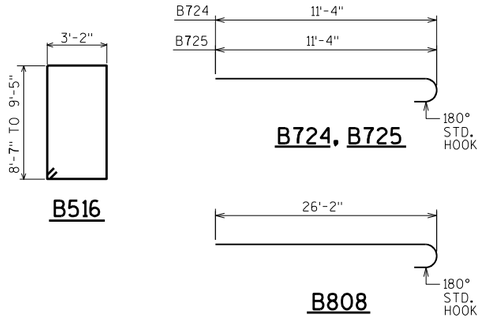
B405



B513



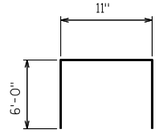
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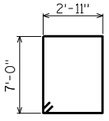
B724, B725

B516

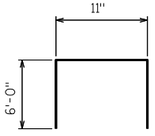
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B530



B522



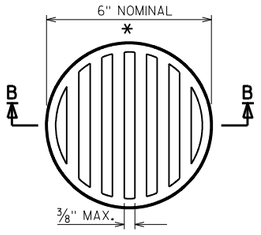
B529

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
B501		61	16'-9"	X	◭	BODY-STIRRUP
B502		29	18'-6"	X	◭	BODY-STIRRUP
B503		61	20'-2"	X	◭	BODY-STIRRUP
B404		24	2'-3"			BODY-VERT.-2 PER BODY PILE
B405		12	28'-0"	X		BODY-1 PER BODY PILE
B606		8	25'-9"			BODY-HORIZ.-B.F.
B607		8	25'-9"			BODY-HORIZ.-B.F.
B808		16	27'-7"	X		BODY-HORIZ.-B.F.
B609		12	49'-6"			BODY- HORIZ.
B610		12	46'-8"			BODY-HORIZ.
B411		8	25'-9"			BODY- HORIZ. TOP
B412		4	35'-0"			BODY- HORIZ. TOP
B513		83	5'-11"	X		BODY- HORIZ. TOP U-BAR
B414		18	6'-0"			BODY-HORIZ. BTWN. GIRDERS
B415		36	4'-3"	X		BODY-VERT. BTWN. GIRDERS
B516	X	8	25'-0"	X	◭	END WING- STIRRUP
B617	X	5	3'-4"			END WING-HORIZ. F.F.
B618	X	5	1'-6"			END WING-HORIZ. B.F.
B619	X	1	3'-6"			END WING-HORIZ. F.F.
B620	X	1	1'-8"			END WING-HORIZ. B.F.
B621	X	4	2'-5"		◭	END WING-HORIZ. TOP
B522	X	11	20'-6"	X		WING BODY 4-STRIRRUP
B523	X	9	12'-4"			WING BODY 4-HORIZ. F.F.
B724	X	8	12'-2"	X		WING BODY 4-HORIZ. B.F.
B725	X	2	12'-2"	X		WING BODY 4-HORIZ. TOP
B426	X	6	7'-11"			WING WALL 4-HORIZ. BOT.
B427	X	9	15'-8"			WING WALL 4-HORIZ.
B628	X	2	15'-8"			WING WALL 4-HORIZ. TOP
B529	X	9	12'-8"	X		WING WALL 4-VERT. U-BAR
B530	X	13	12'-8"	X		WING WALL 4-VERT. U-BAR

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.





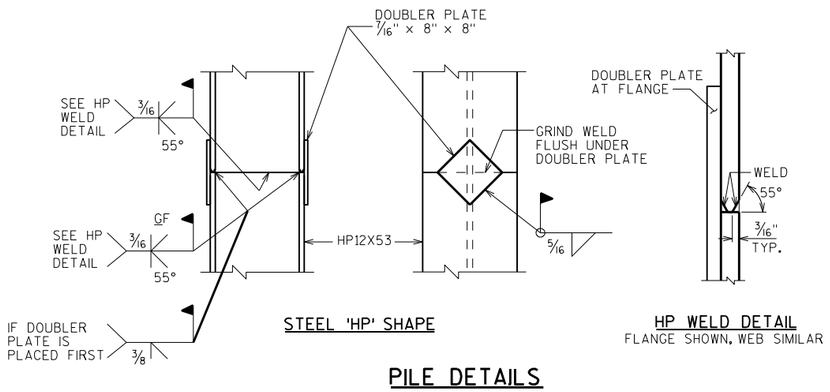
SECTION B-B

RODENT SHIELD DETAIL

* 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 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 EXPOSED END OF 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.



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
B501	1 SERIES OF 61	15'-11" TO 17'-8"
B502	1 SERIES OF 29	17'-8" TO 19'-4"
B503	1 SERIES OF 61	19'-4" TO 21'-0"
B516	1 SERIES OF 8	24'-2" TO 25'-10"
B621	1 SERIES OF 4	1'-6" TO 3'-4"

BUNDLE AND TAG EACH SERIES SEPARATELY.

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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EAST ABUTMENT DETAILS

SHEET 8

794

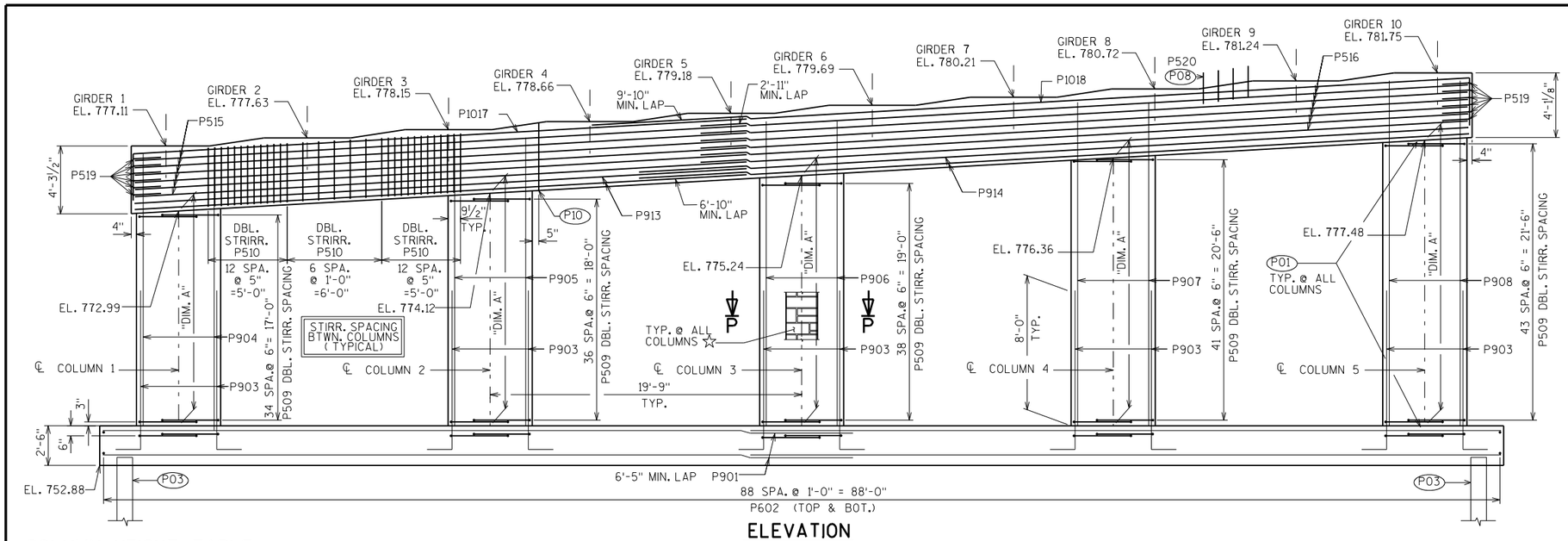
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STATE PROJECT NUMBER

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ELEVATION

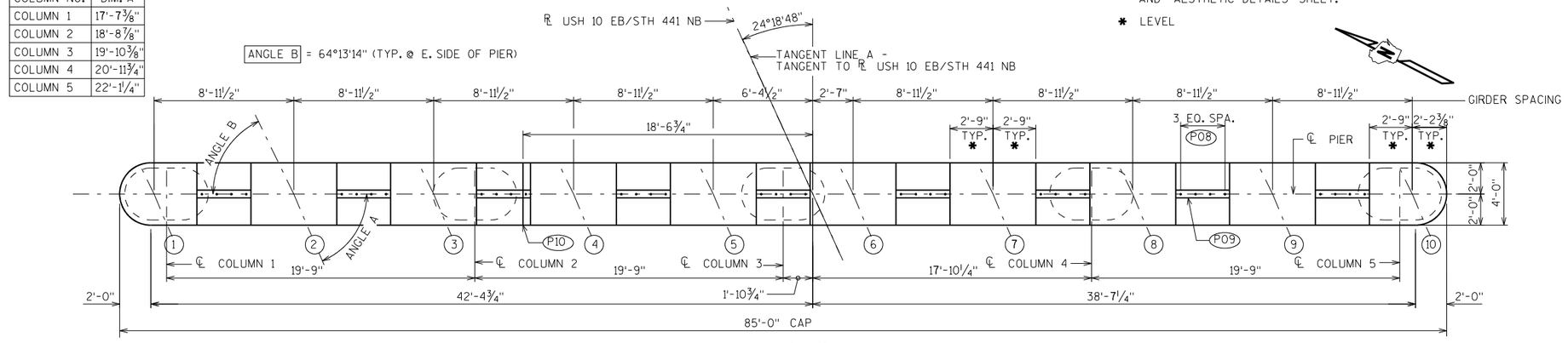
(LOOKING EAST)

COLUMN HEIGHT TABLE

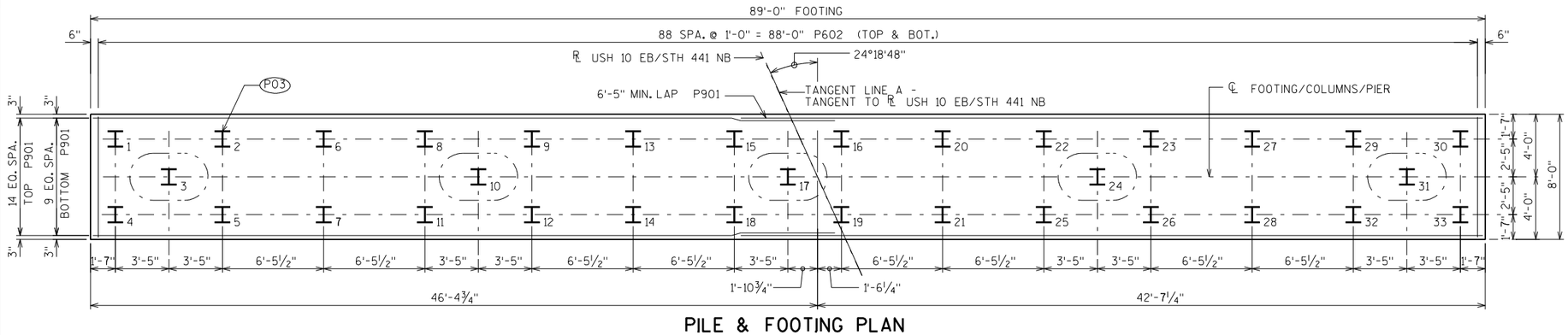
COLUMN NO.	"DIM. A"
COLUMN 1	17'-7⅜"
COLUMN 2	18'-8⅜"
COLUMN 3	19'-10⅜"
COLUMN 4	20'-11¾"
COLUMN 5	22'-1¼"

☆ ASHLAR FORMLINER. SEE "PIER DETAILS" SHEET AND "AESTHETIC DETAILS" SHEET.

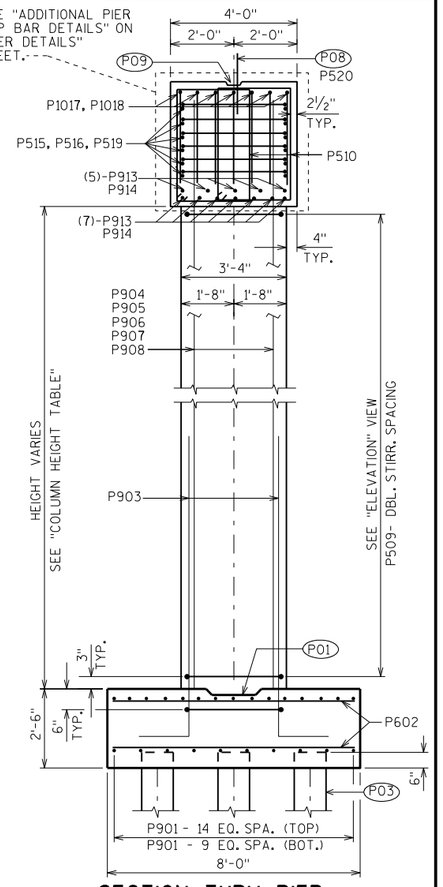
✱ LEVEL



CAP PLAN



PILE & FOOTING PLAN



SECTION THRU PIER

(P01) 1'-3" X 1'-3" X 2" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING. ESTIMATED 45 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PILE POINTS REQUIRED.

(P08) P520 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

(P10) VERT. CONST. JOINT FORMED BY SURFACED BEVELED 2" X 6" X 2'-0" KEYWAY

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STRUCTURE B-70-420

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PIER

SHEET 9

795

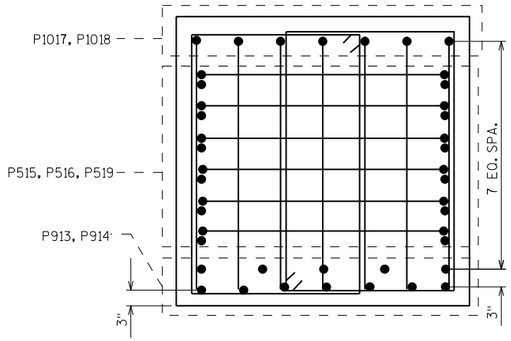
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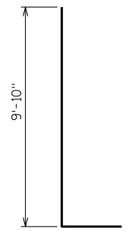
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STATE PROJECT NUMBER

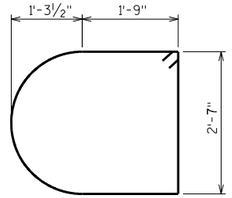
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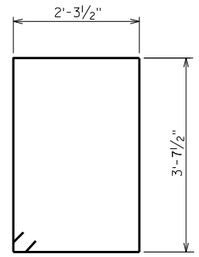
ADDITIONAL PIER CAP BAR DETAILS



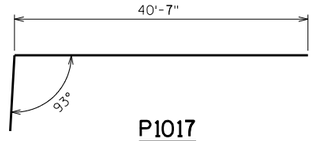
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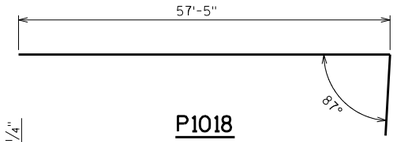
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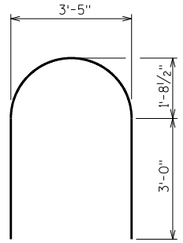
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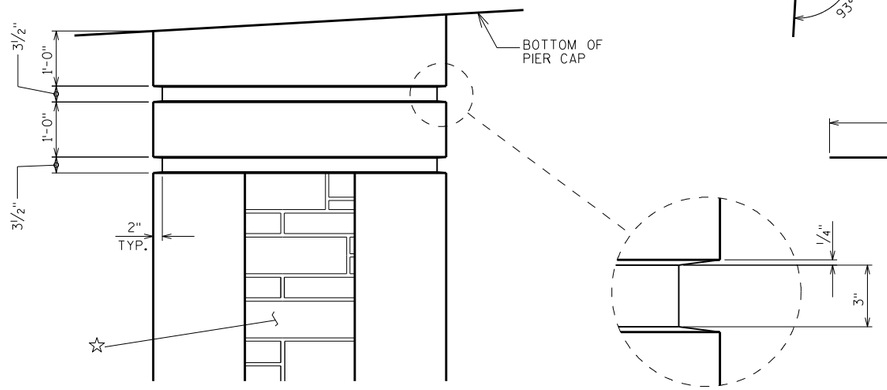
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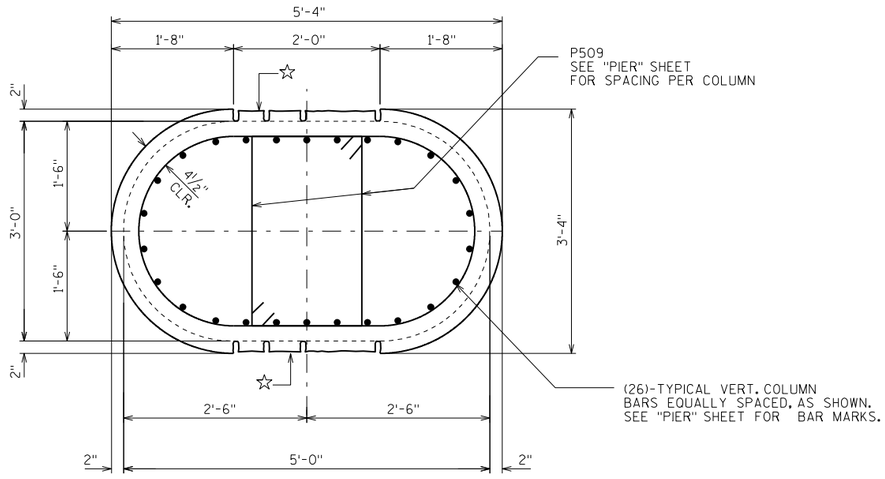
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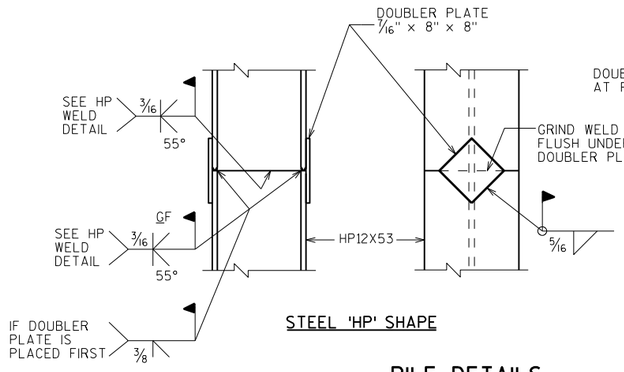


PART. ELEV. TOP OF PIER COLUMN

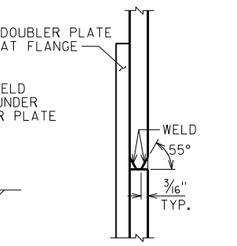


SECTION P-P

(TYP. COLUMN SECTION)



STEEL 'HP' SHAPE



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

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
P901		50	47'-7"			FOOTING-LONGIT.
P602		178	7'-8"			FOOTING-TRANS.
P903	X	130	11'-2"	X		FOOTING/COLUMN-VERT.
P904	X	26	21'-3"			COLUMN 1-VERT.
P905	X	26	22'-3"			COLUMN 2-VERT.
P906	X	26	23'-4"			COLUMN 3-VERT.
P907	X	26	24'-4"			COLUMN 4-VERT.
P908	X	26	25'-10			COLUMN 5-VERT.
P509	X	404	10'-7"	X		COLUMN & FOOTING STIRRUPS
P510	X	248	12'-6"	X		CAP STIRRUPS BTWN. COLUMNS
~~P511~~		NOT	USED			
~~P512~~		NOT	USED			
P913	X	12	40'-7"			CAP-BOTTOM
P914	X	12	54'-5"			CAP-BOTTOM
P515	X	12	40'-5"			CAP-MIDDLE
P516	X	12	50'-6"			CAP-MIDDLE
P1017	X	7	44'-0"	X		CAP-TOP
P1018	X	7	60'-0"	X		CAP-TOP
P519	X	12	11'-4"	X		CAP-END U-BAR
P520	X	36	2'-0"			CAP-TOP DOWEL

☆ ASHLAR FORMLINER.
SEE "PIER" SHEET AND
"AESTHETIC DETAILS" SHEET.

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STRUCTURE B-70-420

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PIER DETAILS

SHEET 10

796

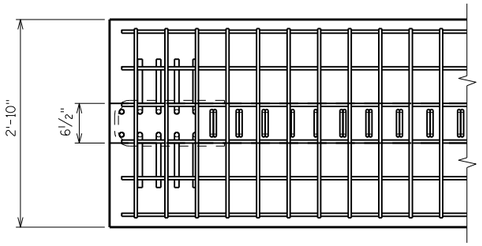
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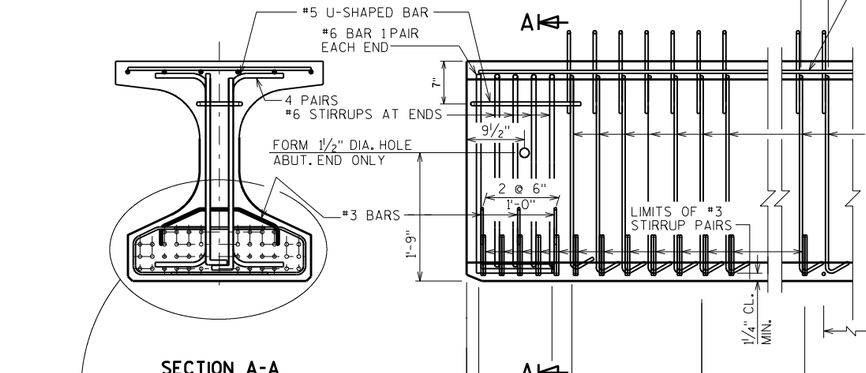
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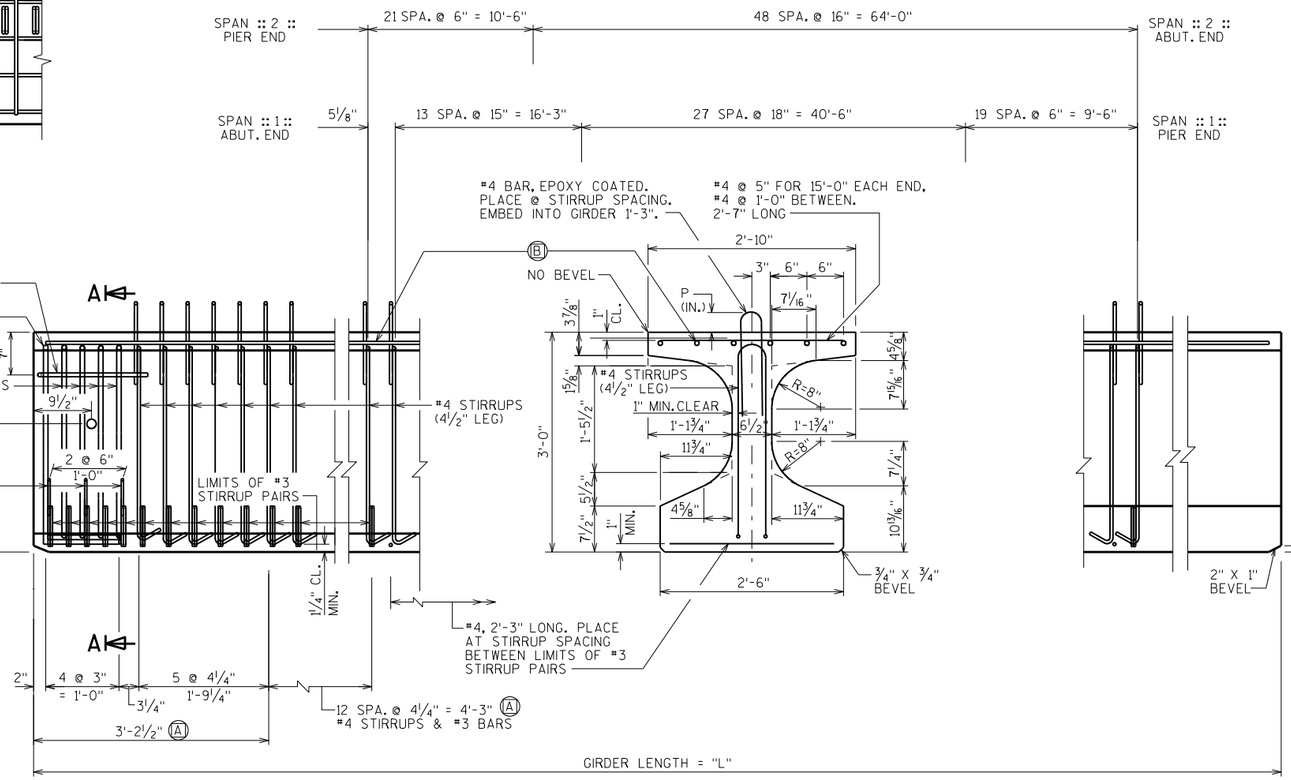
STATE PROJECT NUMBER

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TOP FLANGE

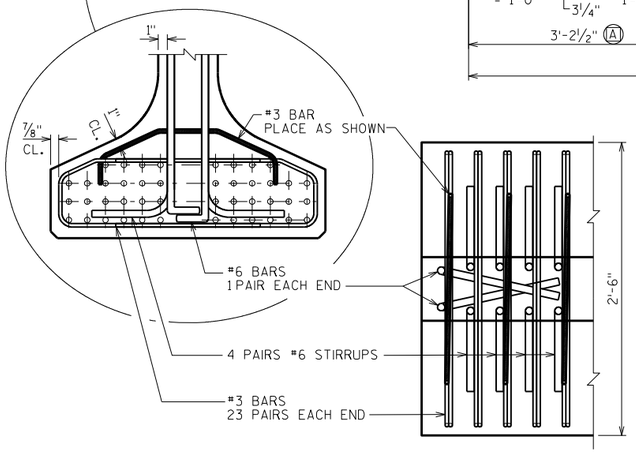




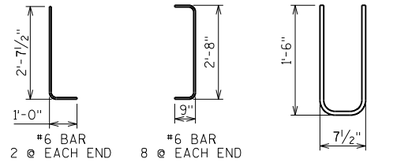
SIDE VIEW & TYP. SECTION IN SPAN

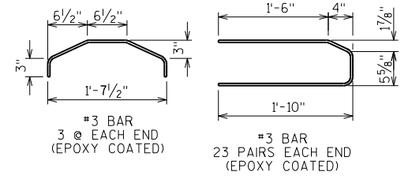
Ⓐ DETAIL TYP. AT EACH END

Ⓑ (SPAN 1) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"
(SPAN 2) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



BOTTOM FLANGE





NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE 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 SECTION.

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 "STEEL DIAPHRAGM" SHEET.

✳ 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	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	1-10	81.59	0.5	0.9	1.3	1.5	1.6	1.5	1.3	0.9	0.5	8000	8	7.5	8.5	0.6	26	6400	32	11	14	4		
2	1-10	89.43	0.7	1.3	1.8	2.1	2.2	2.1	1.8	1.3	0.7	8000	8.5	8	8.5	0.6	34	6400	31	11.5	14.5	5		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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36W" PRESTRESSED GIRDER DETAILS 1

SHEET 11

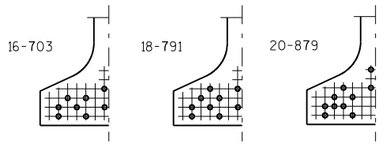
797

MON OCT 13 11:21:39 2014 *1-13
G36W

SCALE =

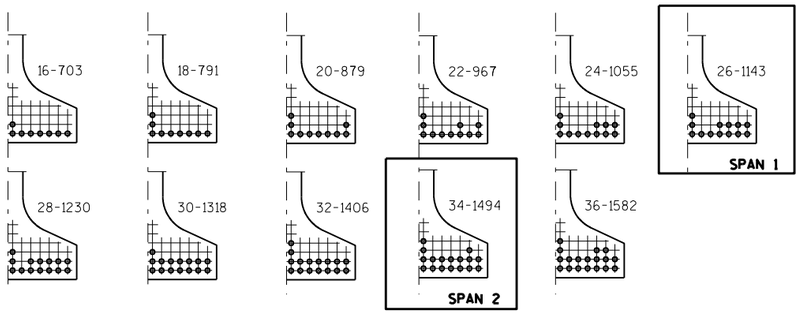
STATE PROJECT NUMBER

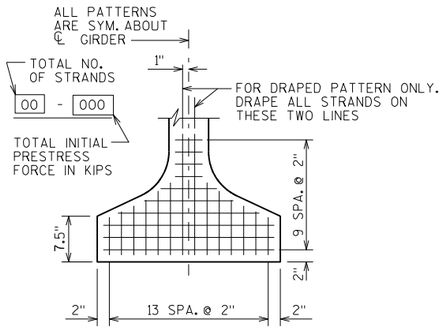
1517-75-75



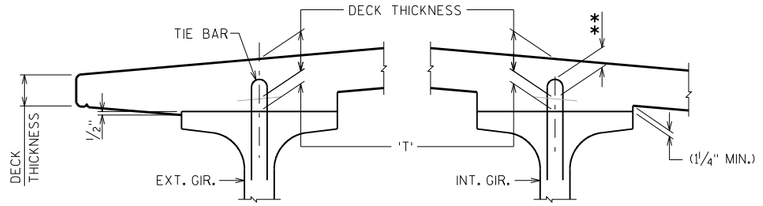
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS





TYP. STRAND PATTERN



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.

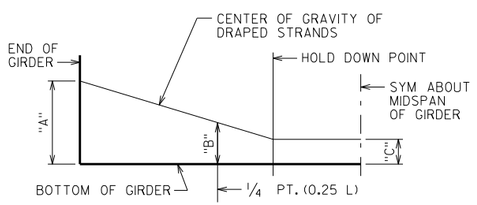
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

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 3.79" WAS USED IN THE QUANTITY "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES".

ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



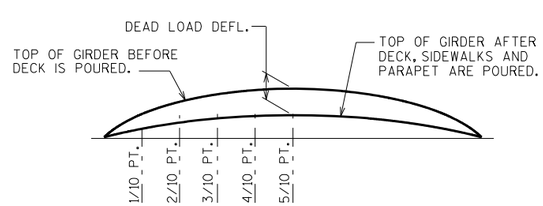
DRAPED STRAND PROFILE

*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	1.86
2	2.78

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

8

8

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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36W" PRESTRESSED GIRDER DETAILS 2

SHEET 12

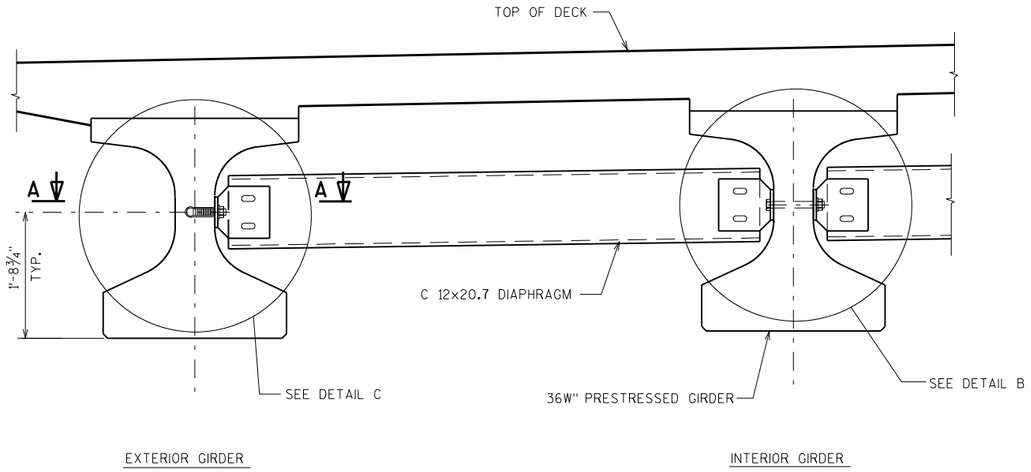
798

G36W
1-14

SCALE =

STATE PROJECT NUMBER

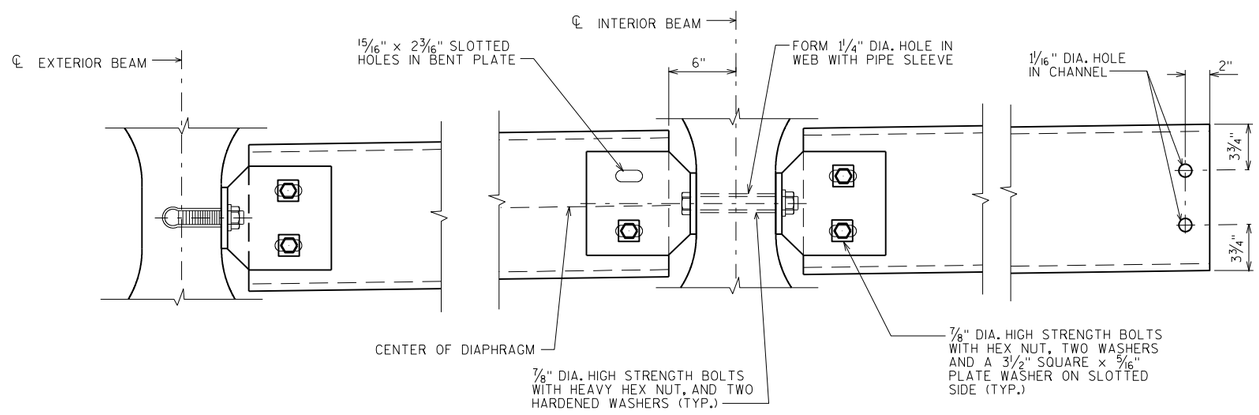
1517-75-75



EXTERIOR GIRDER

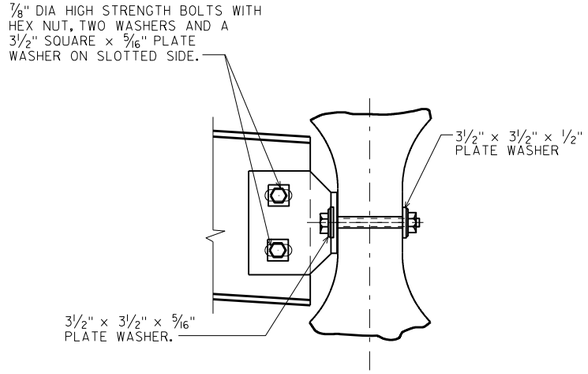
INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL C

DETAIL B



SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°

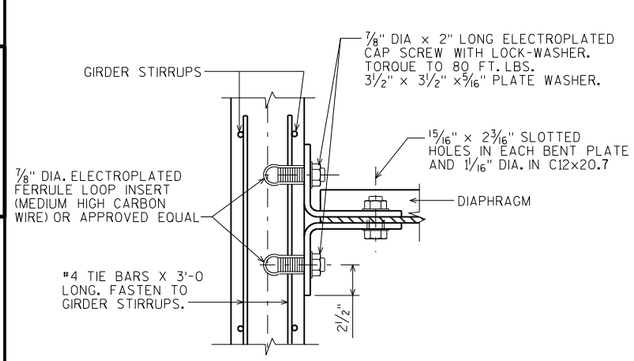
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-70-420", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

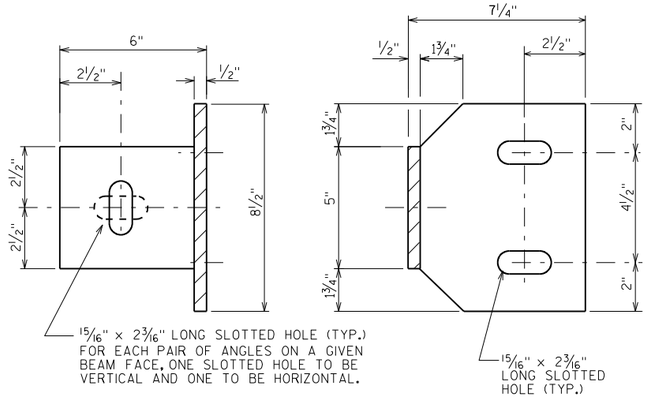
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

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.



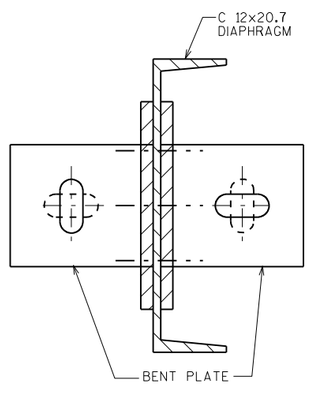
SECTION A-A

(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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STEEL DIAPHRAGM

SHEET 13

799

SCALE =

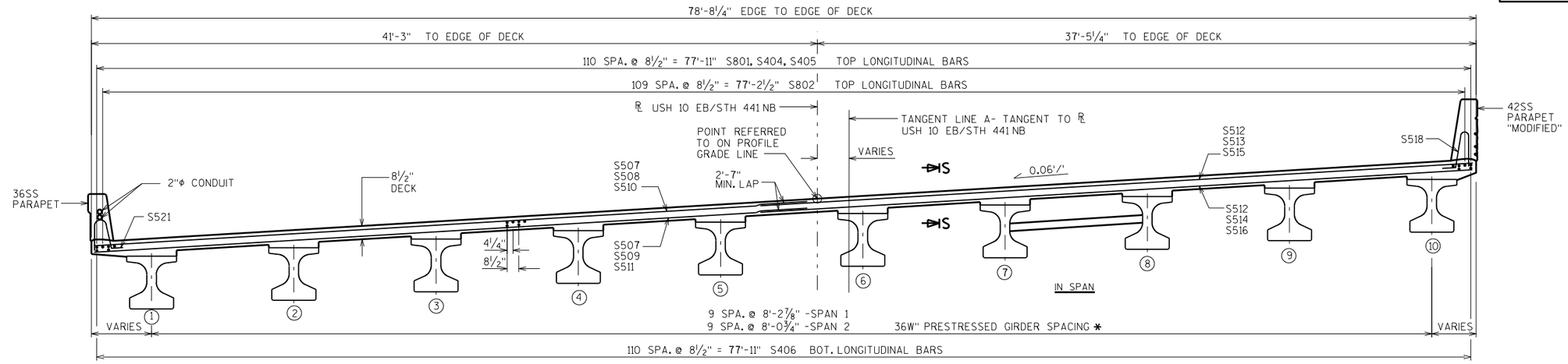
GSTDIA36W
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STATE PROJECT NUMBER

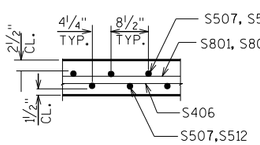
1517-75-75



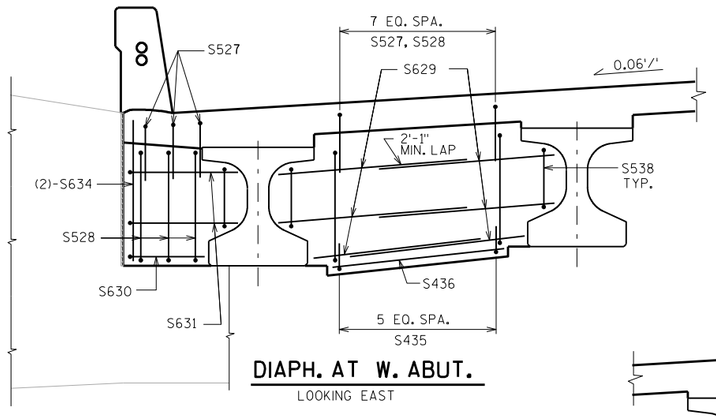
CROSS SECTION THRU DECK

LOOKING EAST

* SPACING PERPENDICULAR TO GIRDERS

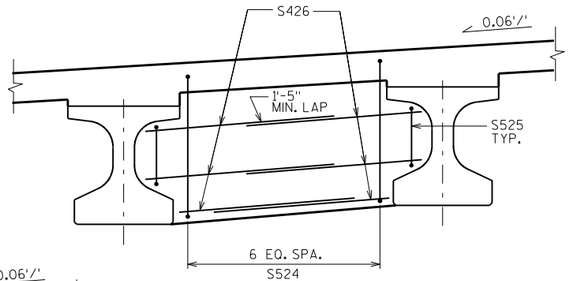


SECTION S-S



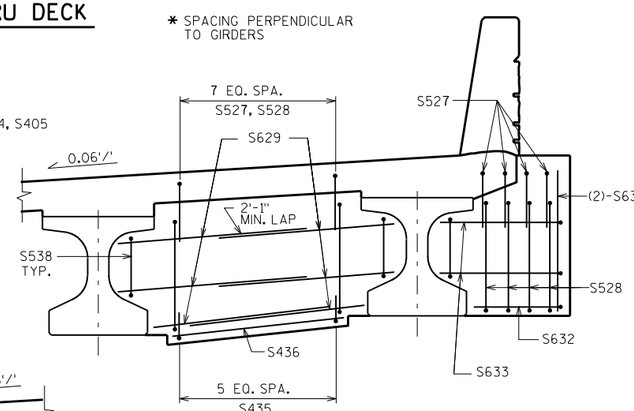
DIAPH. AT W. ABUT.

LOOKING EAST



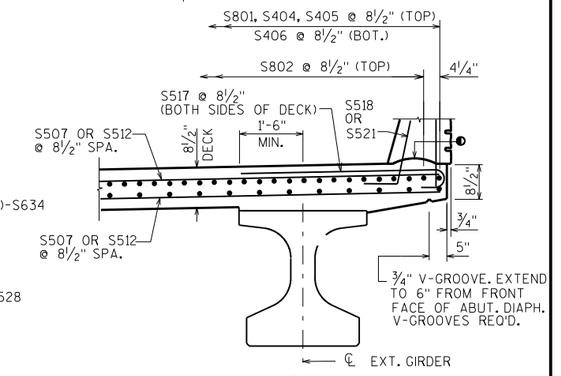
DIAPH. AT PIER

LOOKING EAST



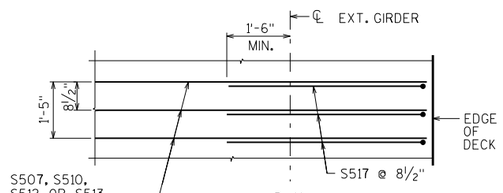
DIAPH. AT W. ABUT.

LOOKING EAST



SECTION

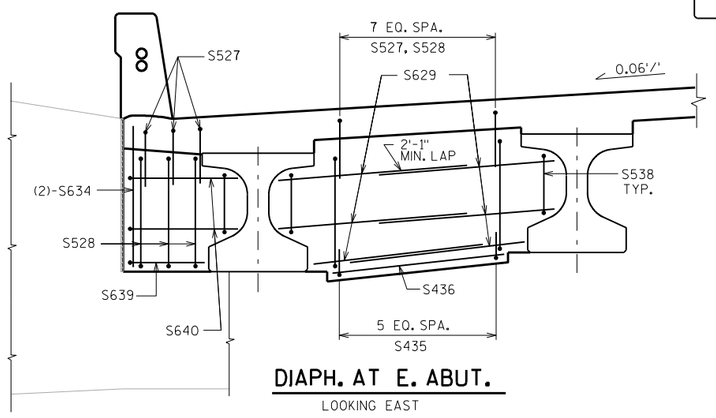
● HORIZ. CONST. JOINT STRIKE OFF AND LEAVE ROUGH AS SHOWN



PLAN

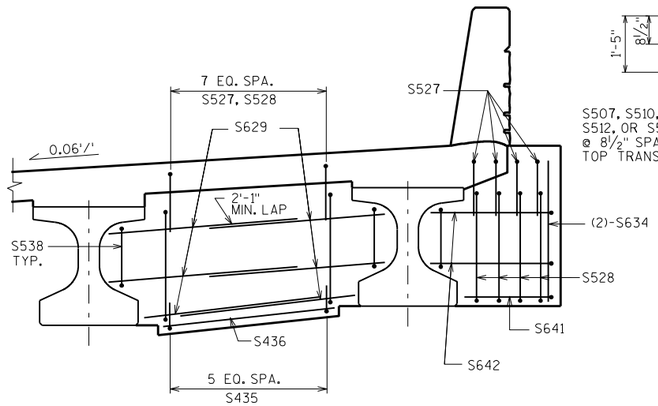
ADDITIONAL REINF. DETAIL

SHOWS TOP TRANSVERSE STEEL ONLY.



DIAPH. AT E. ABUT.

LOOKING EAST



DIAPH. AT E. ABUT.

LOOKING EAST

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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SUPERSTRUCTURE CROSS SECTION

SHEET 14

800

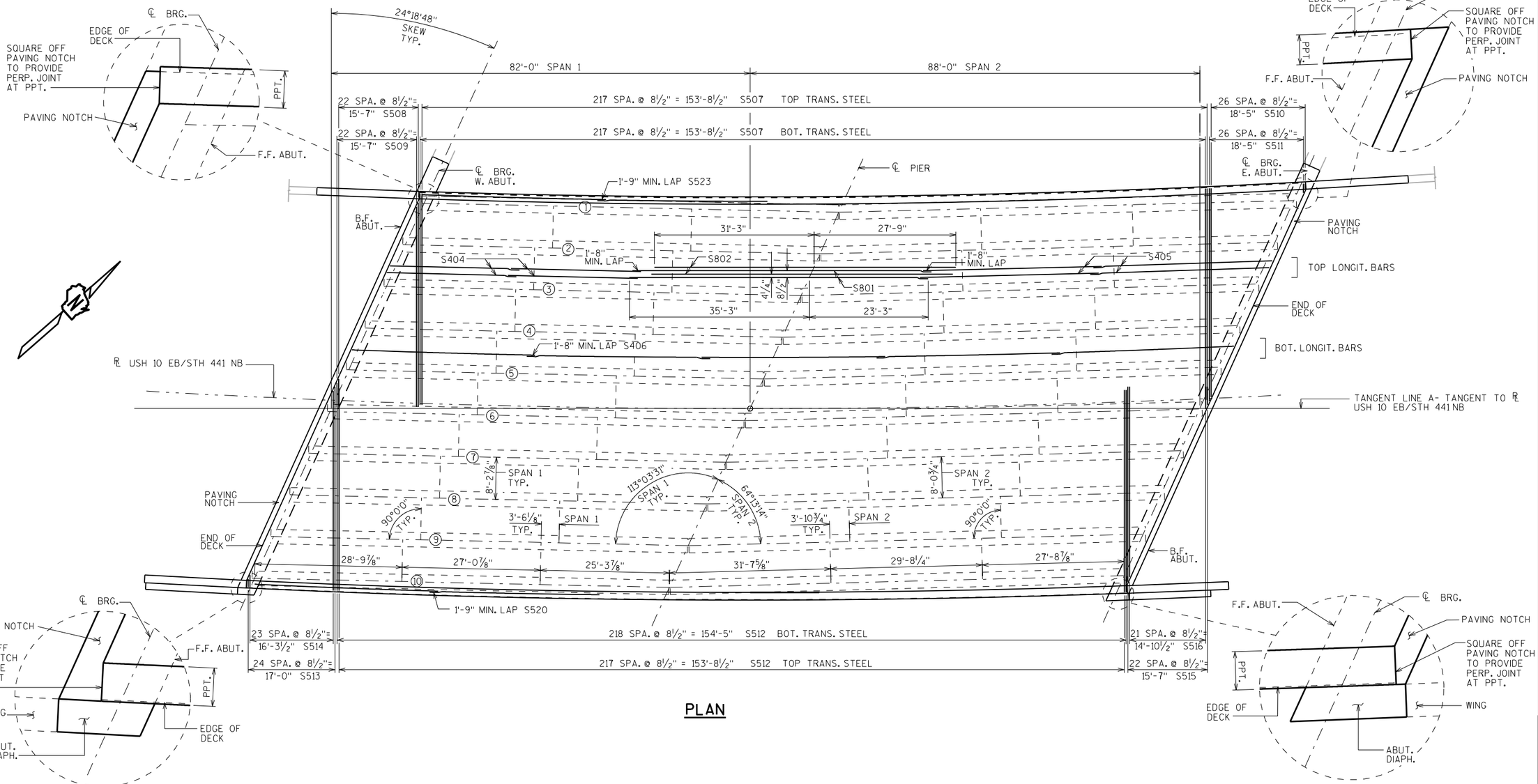
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STATE PROJECT NUMBER

1517-75-75



PLAN

TOP OF DECK ELEVATIONS

	W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	E. ABUT.
N. EOD	781.68	781.64	781.59	781.54	781.49	781.44	781.39	781.33	781.27	781.21	781.15	781.08	781.01	780.94	780.86	780.79	780.71	780.63	780.54	780.46	780.37
GIR. 1	781.74	781.69	781.64	781.59	781.54	781.49	781.45	781.40	781.35	781.30	781.26	781.18	781.10	781.03	780.95	780.88	780.80	780.73	780.66	780.58	780.51
GIR. 2	782.25	782.20	782.15	782.11	782.06	782.01	781.96	781.91	781.87	781.82	781.77	781.70	781.62	781.55	781.47	781.40	781.32	781.23	781.17	781.10	781.03
GIR. 3	782.77	782.72	782.67	782.62	782.57	782.52	782.48	782.43	782.38	782.34	782.29	782.21	782.14	782.06	781.99	781.91	781.84	781.76	781.69	781.62	781.55
GIR. 4	783.28	783.23	783.18	783.14	783.09	783.04	782.99	782.94	782.90	782.85	782.80	782.73	782.65	782.58	782.50	782.43	782.35	782.28	782.21	782.13	782.06
GIR. 5	783.80	783.75	783.70	783.65	783.60	783.55	783.51	783.46	783.41	783.37	783.32	783.24	783.17	783.09	783.02	782.95	782.87	782.80	782.72	782.65	782.58
GIR. 6	784.31	784.26	784.21	784.17	784.12	784.07	784.02	783.98	783.93	783.88	783.84	783.76	783.69	783.61	783.54	783.46	783.39	783.31	783.24	783.17	783.10
GIR. 7	784.83	784.78	784.73	784.68	784.63	784.59	784.54	784.49	784.44	784.40	784.35	784.28	784.20	784.13	784.05	783.98	783.90	783.83	783.76	783.68	783.61
GIR. 8	785.34	785.29	785.24	785.20	785.15	785.10	785.05	785.01	784.96	784.91	784.87	784.79	784.72	784.64	784.57	784.49	784.42	784.35	784.27	784.20	784.13
GIR. 9	785.86	785.81	785.76	785.71	785.66	785.61	785.57	785.52	785.47	785.43	785.38	785.31	785.23	785.16	785.08	785.01	784.94	784.86	784.79	784.72	784.65
GIR. 10	786.37	786.32	786.27	786.22	786.18	786.13	786.08	786.04	785.99	785.94	785.90	785.82	785.75	785.67	785.60	785.52	785.45	785.38	785.30	785.23	785.16
S. EOD	786.40	786.37	786.33	786.29	786.25	786.20	786.16	786.11	786.06	786.01	785.96	785.90	785.84	785.78	785.80	785.65	785.58	785.52	785.44	785.37	785.29

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STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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SUPERSTRUCTURE PLAN

SHEET 15

801

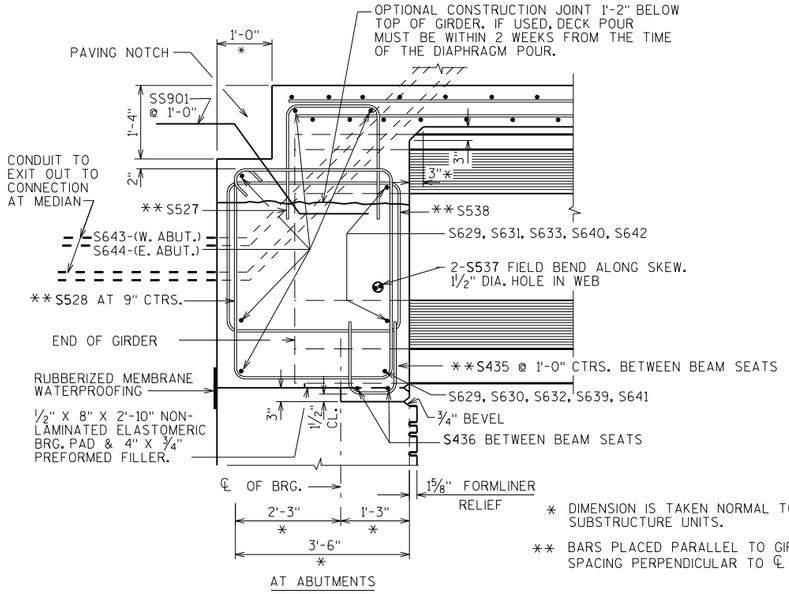
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SCALE =

STATE PROJECT NUMBER

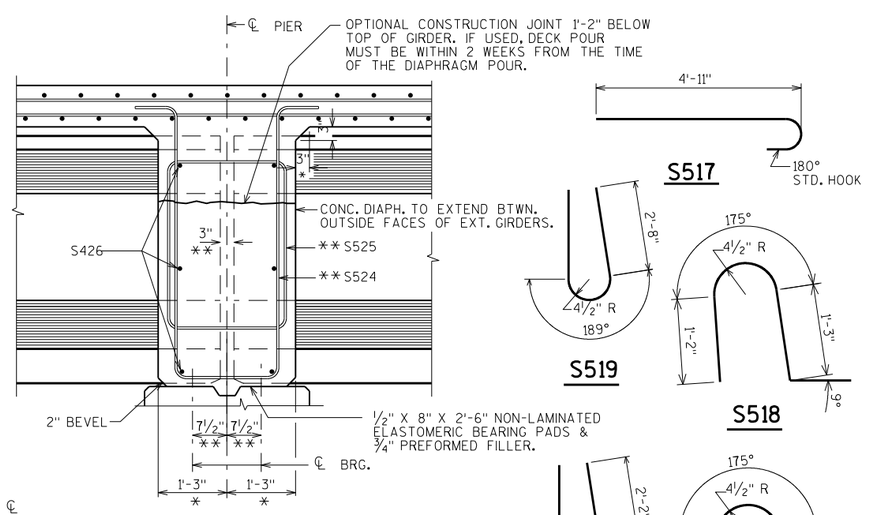
1517-75-75



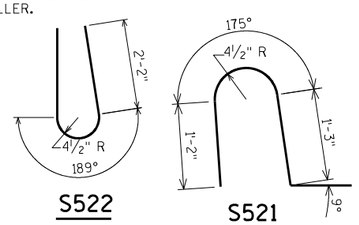
PART LONGIT. SECTION

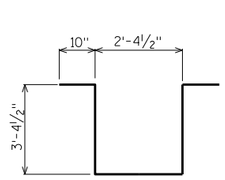
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

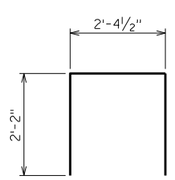
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

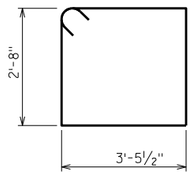


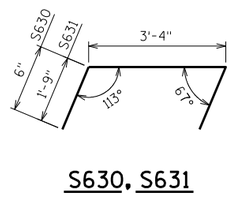
AT PIER DIAPHRAGM

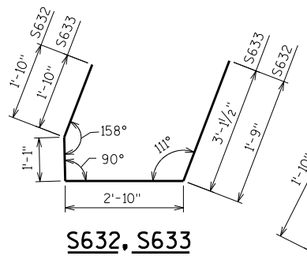


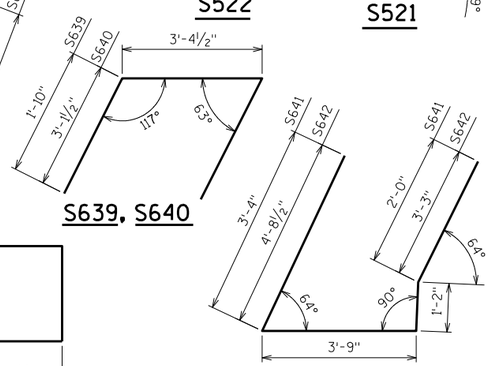


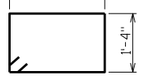


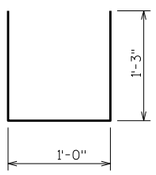


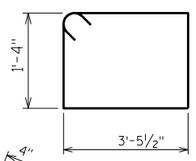


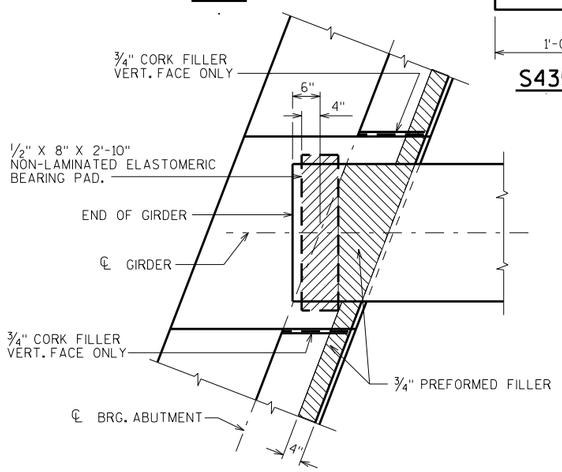


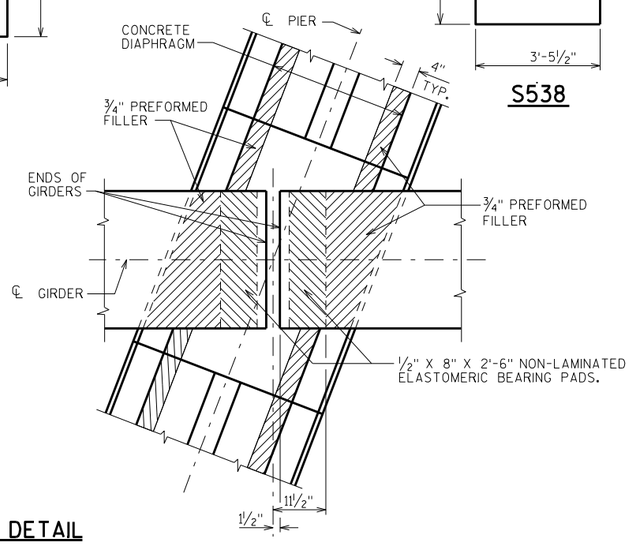












BEARING PAD DETAIL

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
S508	1 SERIES OF 23	5'-6" TO 40'-0"
S509	1 SERIES OF 23	4'-9" TO 39'-3"
S510	1 SERIES OF 27	1'-0" TO 40'-10"
S511	1 SERIES OF 27	1'-9" TO 41'-8"
S513	1 SERIES OF 25	1'-7" TO 39'-11"
S514	1 SERIES OF 24	2'-4" TO 39'-2"
S515	1 SERIES OF 23	3'-7" TO 38'-1"
S516	1 SERIES OF 22	4'-5" TO 37'-4"

BUNDLE AND TAG EACH SERIES SEPARATELY.

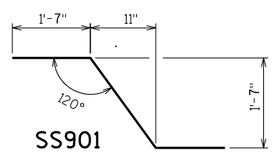
BILL OF BARS

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
S801	X	111	58'-6"			LONGITUDINAL CONTINUITY
S802	X	110	59'-0"			LONGITUDINAL CONTINUITY
~~S803~~		NOT	USED			~~LONGITUDINAL CONTINUITY~~
S404	X	222	25'-7"			LONGITUDINAL TOP
S405	X	222	35'-6"			LONGITUDINAL TOP
S406	X	555	36'-0"			LONGITUDINAL BOTTOM
S507	X	436	41'-5"			TRANSVERSE TOP & BOTTOM
S508	X	23	22'-9"		⚠	TRANSVERSE TOP
S509	X	23	22'-0"		⚠	TRANSVERSE BOTTOM
S510	X	27	20'-11"		⚠	TRANSVERSE TOP
S511	X	27	21'-9"		⚠	TRANSVERSE BOTTOM
S512	X	437	39'-8"			TRANSVERSE TOP & BOTTOM
S513	X	25	20'-9"		⚠	TRANSVERSE TOP
S514	X	24	20'-9"		⚠	TRANSVERSE BOTTOM
S515	X	23	20'-10"		⚠	TRANSVERSE TOP
S516	X	22	20'-11"		⚠	TRANSVERSE BOTTOM
S517	X	483	5'-6"	X		TRANSVERSE-DECK EDGE
S518	X	258	4'-5"	X		PPT. 42SS MOD.-VERT.
S519	X	258	6'-8"	X		PPT. 42SS MOD.-VERT.
S520	X	40	36'-0"			PPT. 42SS MOD.-HORIZ.
S521	X	260	4'-5"	X		PPT. 36SS-VERT.
S522	X	260	5'-8"	X		PPT. 36SS-VERT.
S523	X	40	36'-0"			PPT. 36SS-HORIZ.
S524	X	63	10'-4"	X		PIER DIAPH.
S525	X	18	8'-1"	X		PIER DIAPH.
S426	X	108	4'-9"			PIER DIAPH.
S527	X	158	6'-6"	X		ABUT. DIAPH.
S528	X	158	12'-11"	X		ABUT. DIAPH.
S629	X	108	5'-1"			ABUT. DIAPH.
S630	X	1	4'-0"	X		ABUT. DIAPH.
S631	X	2	6'-6"	X		ABUT. DIAPH.
S632	X	1	7'-2"	X		ABUT. DIAPH.
S633	X	2	8'-7"	X		ABUT. DIAPH.
S634	X	8	3'-6"			ABUT. DIAPH.
S435	X	108	3'-4"	X		ABUT. DIAPH.
S436	X	36	4'-5"			ABUT. DIAPH.
S537	X	40	6'-0"			ABUT. DIAPH.
S538	X	40	10'-3"	X		ABUT. DIAPH.
S639	X	1	6'-9"	X		ABUT. DIAPH.
S640	X	2	9'-4"	X		ABUT. DIAPH.
S641	X	1	9'-11"	X		ABUT. DIAPH.
S642	X	2	12'-7"	X		ABUT. DIAPH.
S643	X	9	45'-1"			ABUT. DIAPH. WEST
S644	X	9	46'-9"			ABUT. DIAPH. EAST

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

STAINLESS STEEL →	SS901		174	5'-0"	X		ABUT. DIAPH.



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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY WWR | PLANS CK'D. JLR

SUPERSTRUCTURE DETAILS

SHEET 16

802

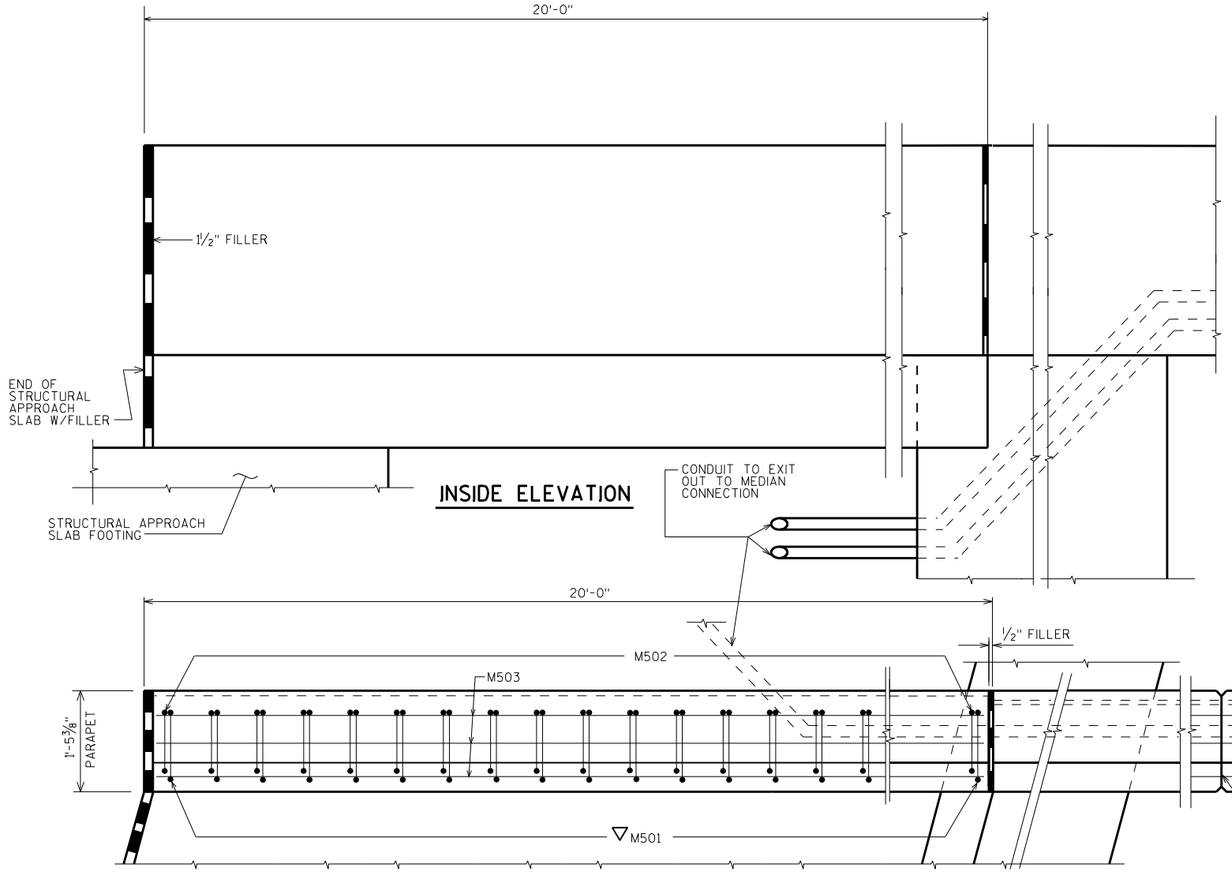
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SCALE =

STATE PROJECT NUMBER

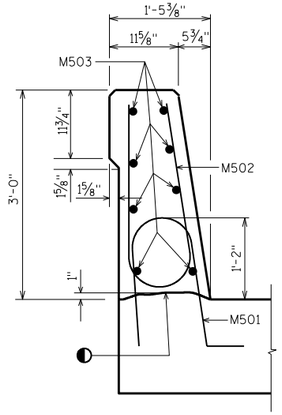
1517-75-75



INSIDE ELEVATION

PLAN

PARAPET AT WEST APPROACH SHOWN.
(EAST APPROACH WILL HAVE OBTUSE SKEW)

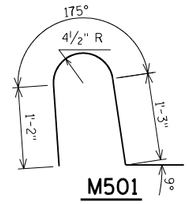


SECTION C

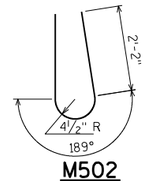
BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS

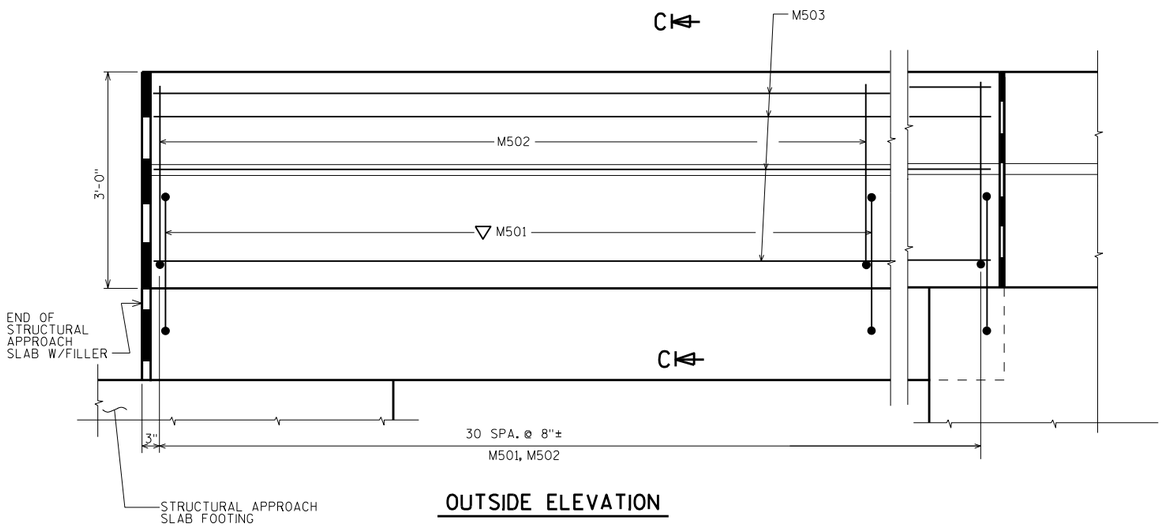
BAR MARK	COAT	WEST APPR.	EAST APPR.	LENGTH	BENT	BAR SERIES	LOCATION
M501	X	31	31	4'-5"	X		PARAPET VERT.
M502	X	31	31	5'-8"	X		PARAPET VERT.
M503	X	8	8	19'-8"			PARAPET HORIZ.



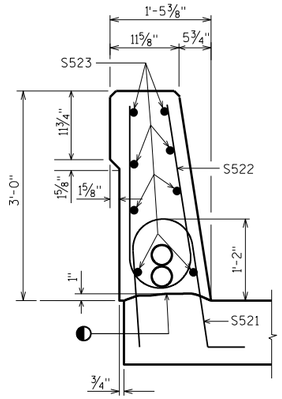
M501



M502



OUTSIDE ELEVATION



SECTION THRU PARAPET
36SS ON DECK

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽M501 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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

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SINGLE SLOPE PARAPET 36SS

SHEET 17

803

SS36APP
7-14

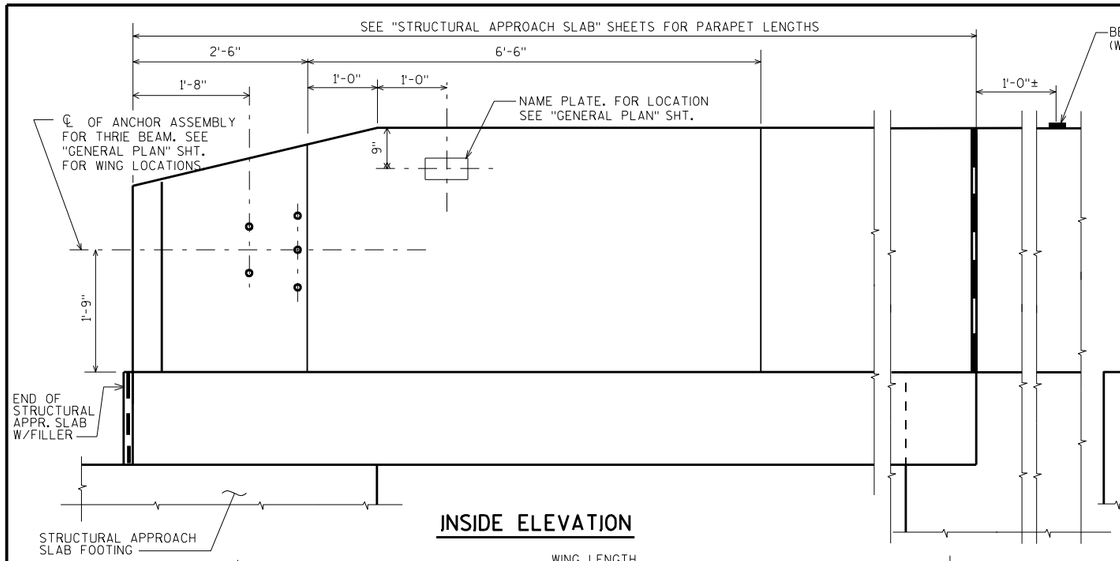
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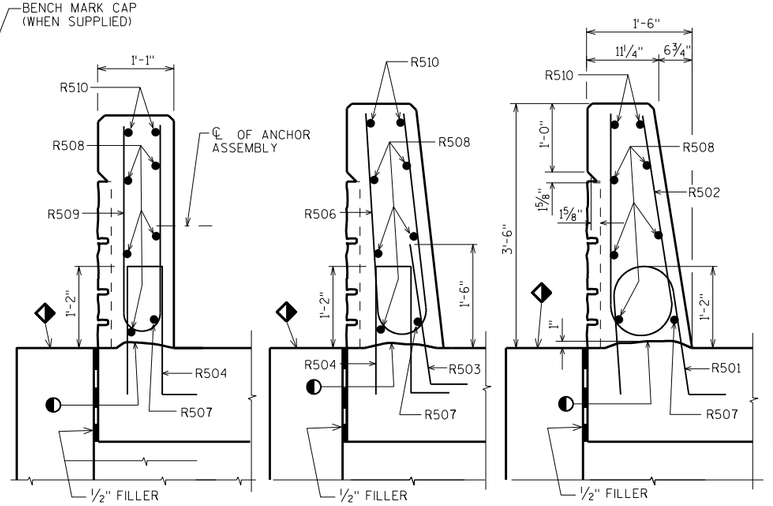
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STATE PROJECT NUMBER

1517-75-75



INSIDE ELEVATION



SECTION A

SECTION B

SECTION C

BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS

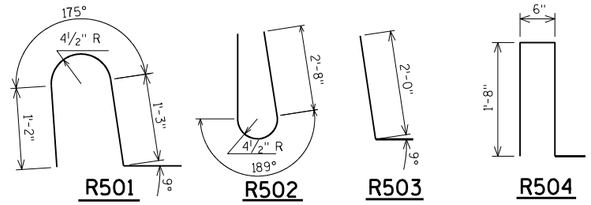
BAR MARK	COAT	WEST APPR.	EAST APPR.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	18	18	4'-5"	X		PARAPET VERT.
R502	X	18	18	6'-8"	X		PARAPET VERT.
R503	X	12	12	2'-9"	X		PARAPET VERT.
R504	X	17	17	4'-4"	X		PARAPET VERT.
R505	X	6	6	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	19'-6"	X		PARAPET HORIZ.
R508	X	5	5	19'-7"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	19'-6"	X		PARAPET HORIZ

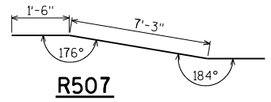
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

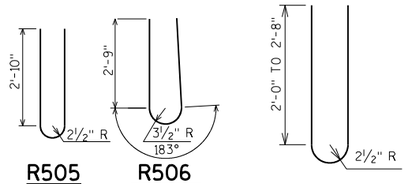
BAR SERIES TABLE

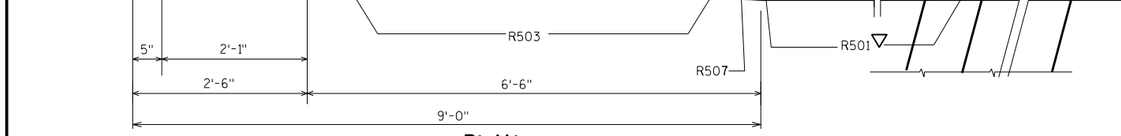
MARK	NO. REQD.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.





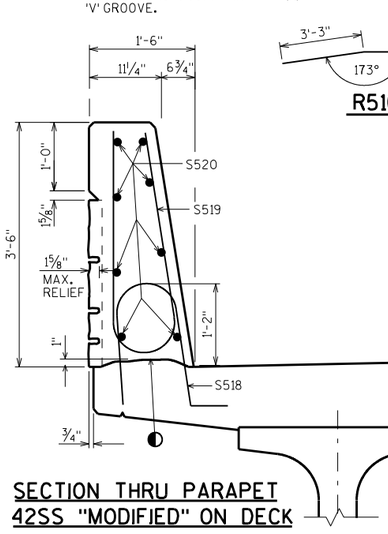




PLAN

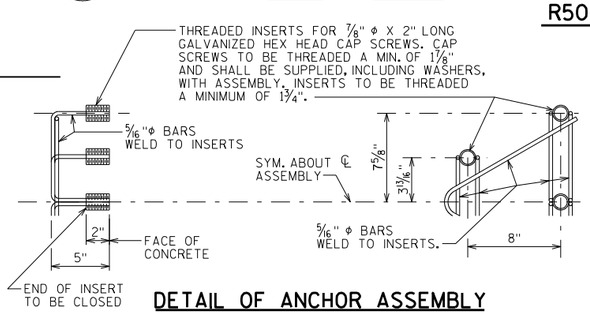
PARAPET AT EAST APPROACH SHOWN.
(WEST APPROACH HAS OBTUSE SKEW)

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.



SECTION THRU PARAPET 42SS "MODIFIED" ON DECK

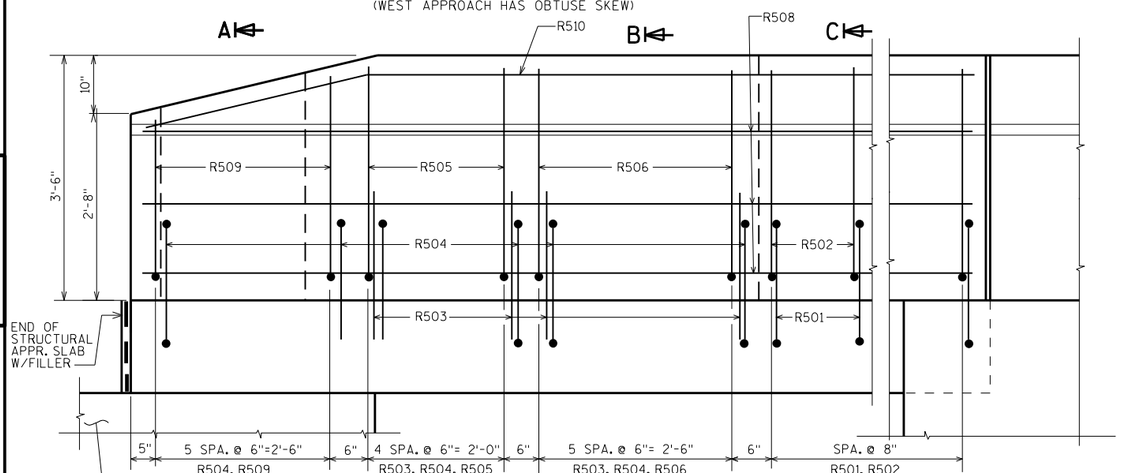




DETAIL OF ANCHOR ASSEMBLY

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.



OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ R501 AND R504 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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY WWR | PLANS CK'D. JLR

SINGLE SLOPE PARAPET 42SS "MODIFIED"

SHEET 18

804

SS42APP
7-14

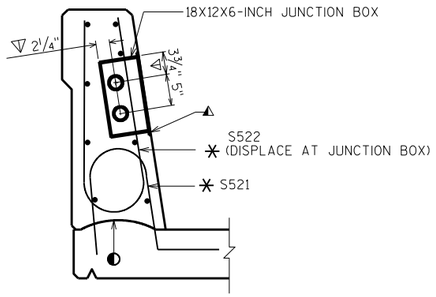
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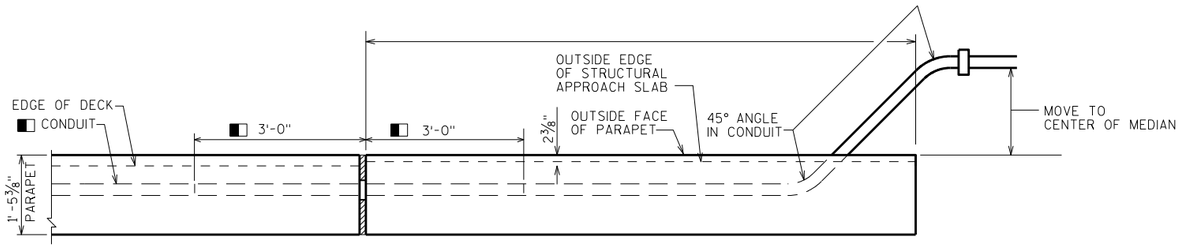
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STATE PROJECT NUMBER

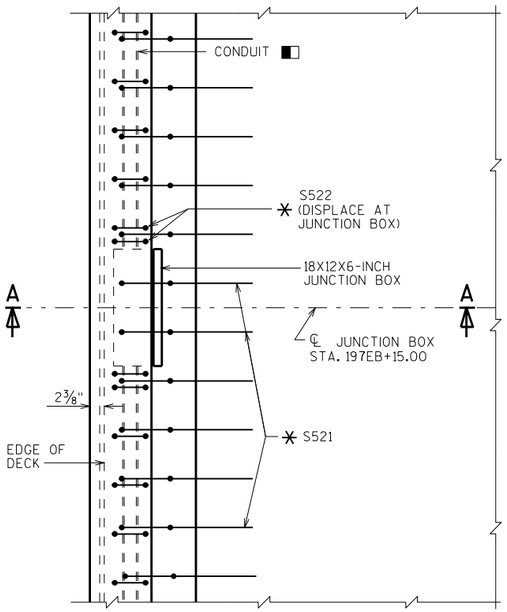
1517-75-75



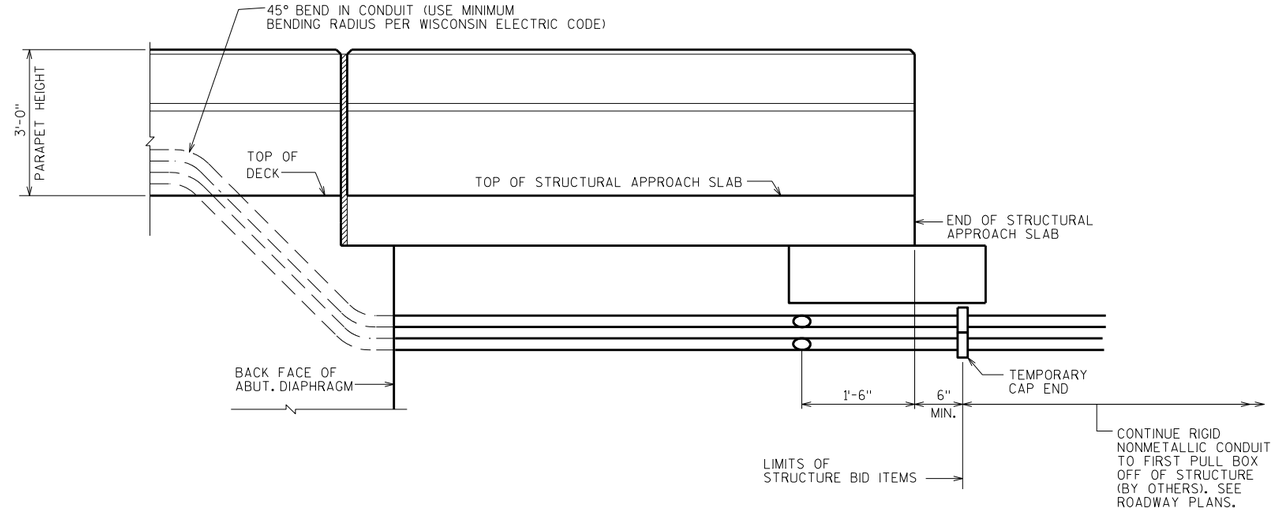
SECTION A-A



PLAN OF PARAPET AT STRUCTURAL APPROACH SLAB



PLAN AT JUNCTION BOX



OUTSIDE ELEVATION OF PARAPET AT STRUCTURAL APPROACH SLAB

■ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND APPROACH SLAB SIDES OF THE JOINT OPENING.

◐ 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 36SS" SHEET FOR ADDITIONAL BAR STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

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)

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY WWR | PLANS CK'D. JLR

CONDUIT DETAILS

SHEET 19

805

SS36ELEC
1-14

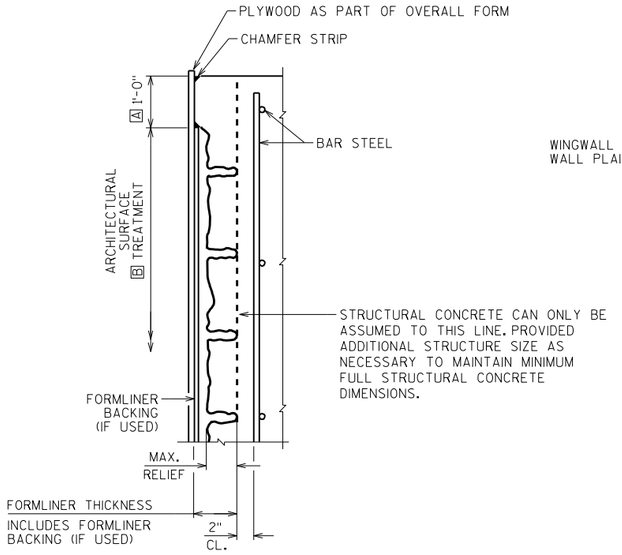
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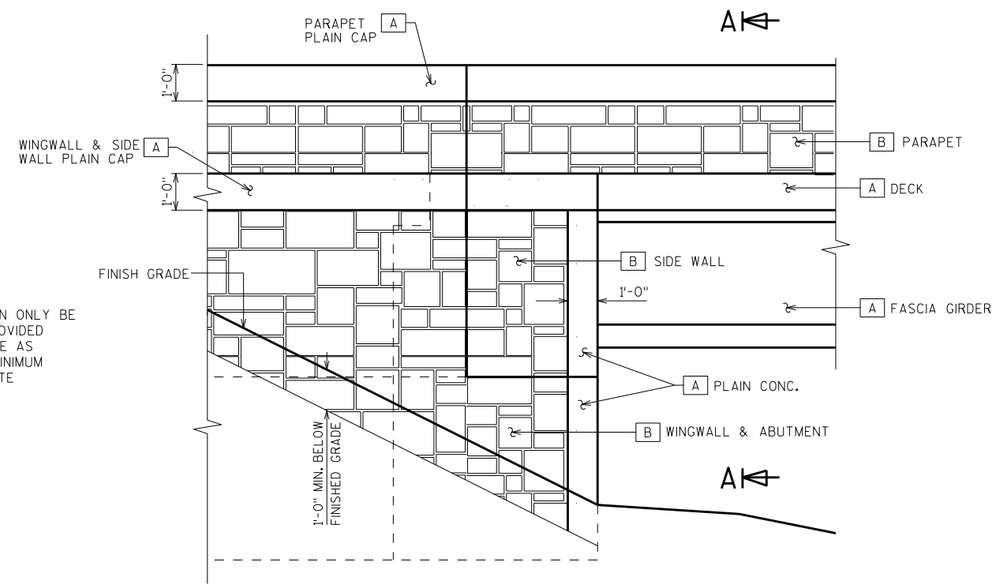
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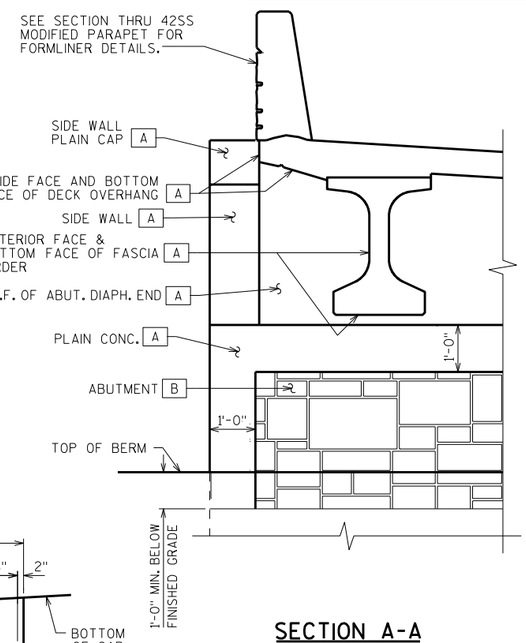
1517-75-75



SECTION THROUGH PARAPET FORMLINER



ABUTMENT STAINING DETAIL

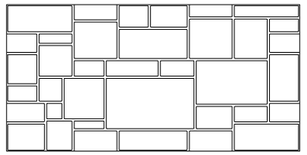


SECTION A-A

CONCRETE STAINING SCHEDULE

MARK	COLOR	FED. COLOR NO.	LOCATION
A	BASKET BEIGE	33564	FASCIA GIRDERS, DECK EDGE, WING PLAIN CAPS, PIER CAPS, AND COLUMNS
B	LATTE	33522	WINGWALLS, SIDEWALLS, ABUTMENTS, COLUMN SIDES

NOTE: 1. FINISH ON COLORS IS FLAT (LUSTERLESS)



ASHLAR

MAXIMUM RELIEF: 1⅝"
AVERAGE RELIEF: 1¼"
LINER THICKNESS*: 2½"
STONE SIZE: H: 3" - 17"
W: 5"-29"

* INCLUDES INTERNAL PLYWOOD BACKING

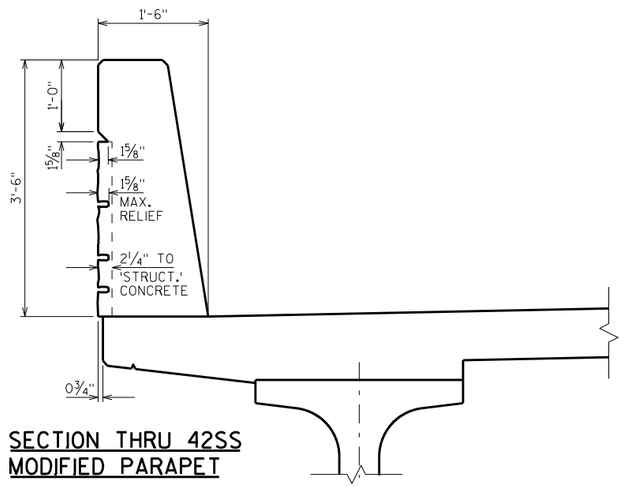
NOTES

FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

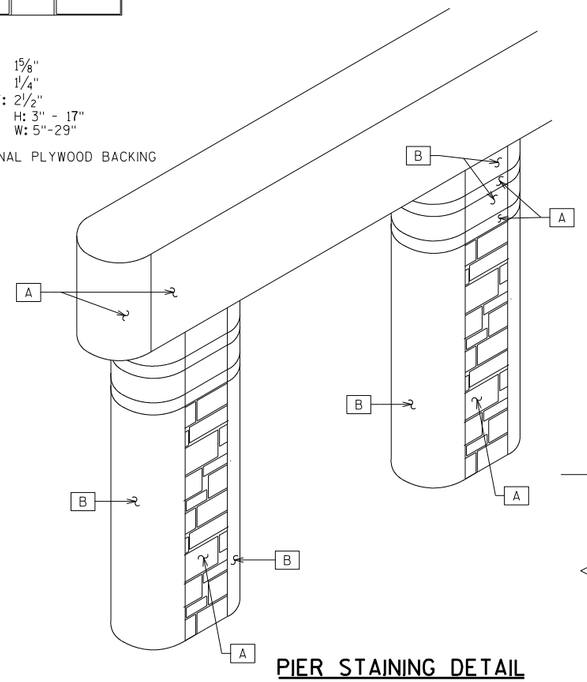
THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

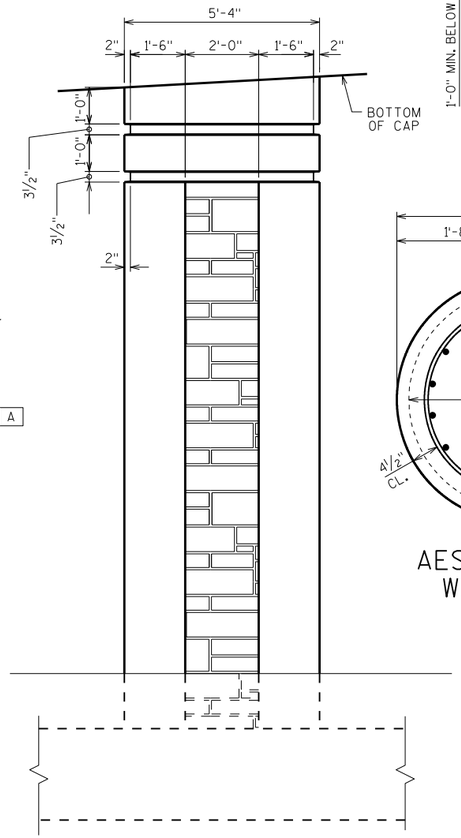
WRAPAROUND/MATCH FORMLINER PATTERN AT CORNERS.



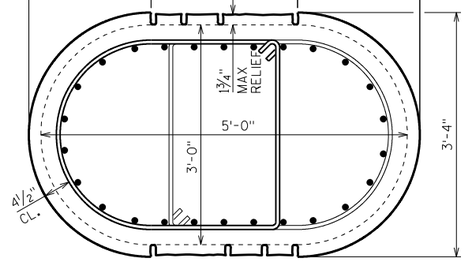
SECTION THRU 42SS MODIFIED PARAPET



PIER STAINING DETAIL



PIER COLUMN DETAILS



AESTHETIC OVAL COLUMN W/ASHLAR FORMLINER

AREA = 13.07 SF (STRUCTURAL)
AREA = 15.39 SF (TOTAL)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY WWR | PLANS CK'D. JLR

AESTHETIC DETAILS

SHEET 20

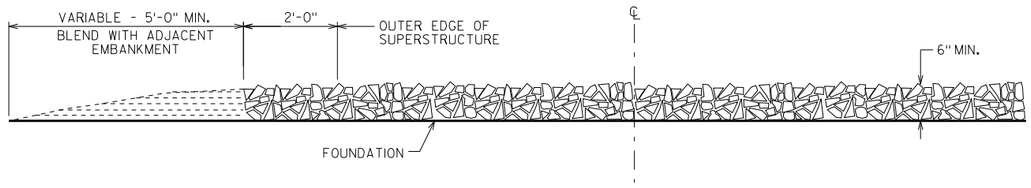
806

SCALE =

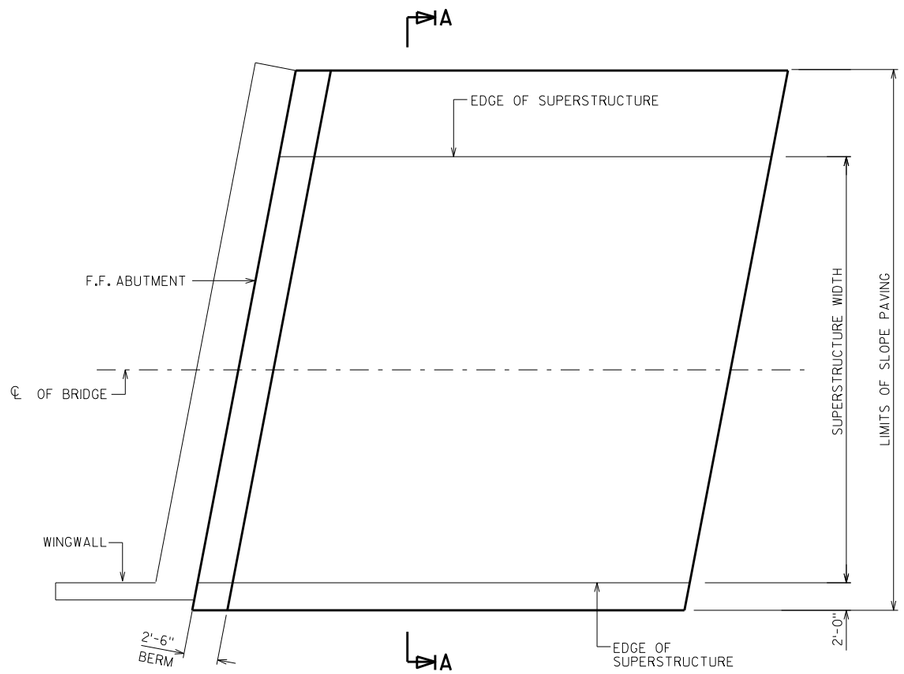
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8

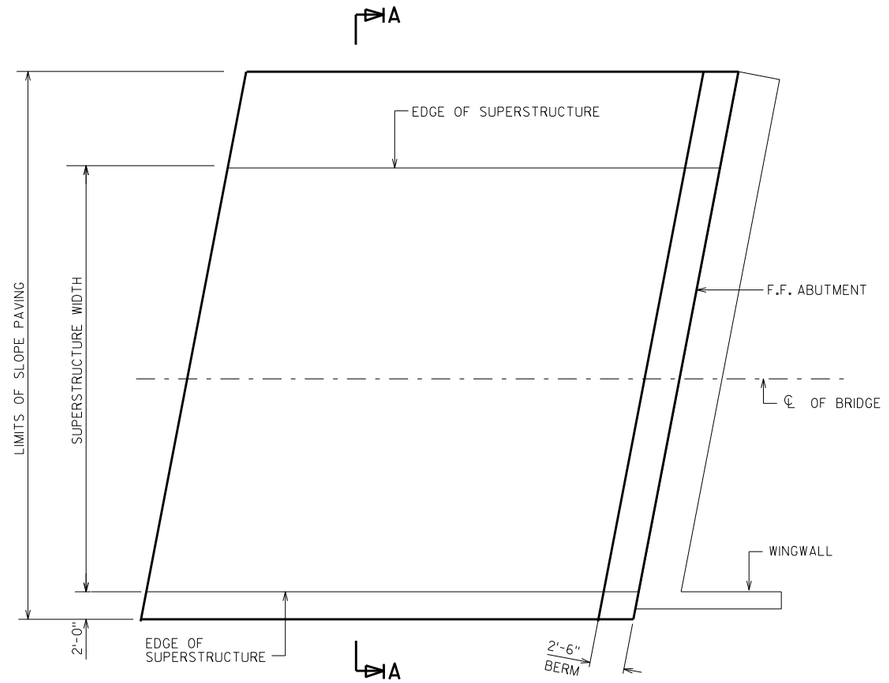
STATE PROJECT NUMBER
1517-75-75



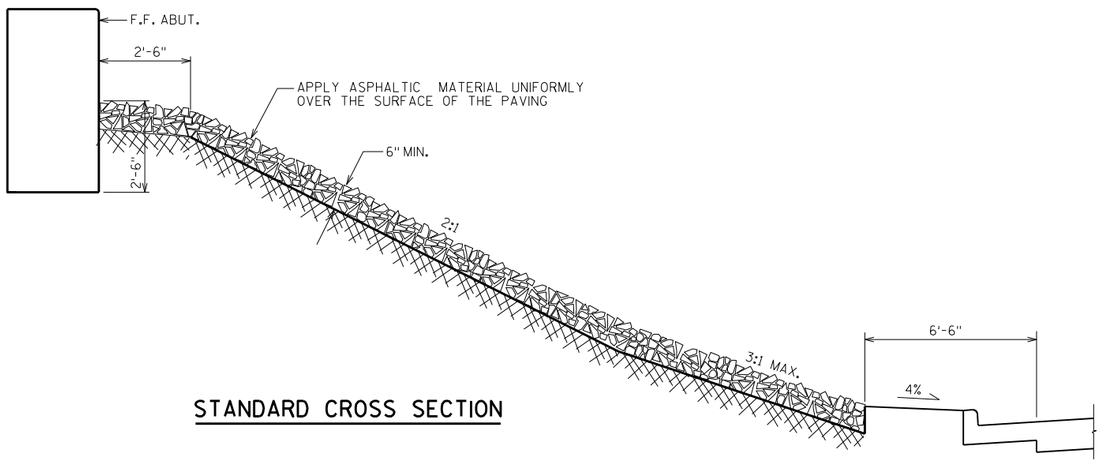
SECTION A-A



WEST PLAN



EAST PLAN



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-70-420

DRAWN BY WWR | PLANS CK'D. JLR

SLOPE PAVING (CRUSHED AGGREGATE)

SHEET 21

807

SLPPAVCRAG

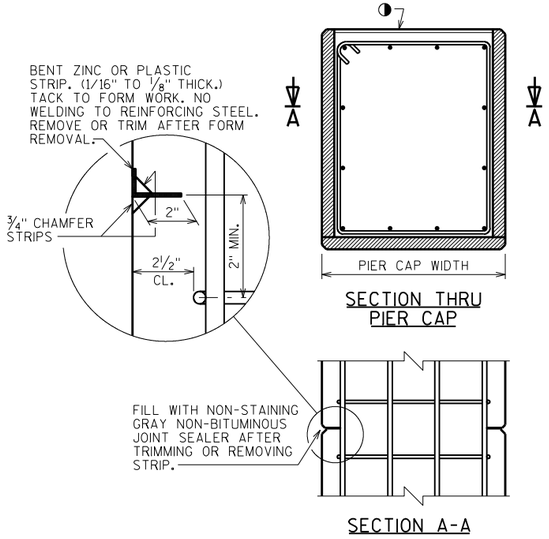
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SCALE =

STATE PROJECT NUMBER

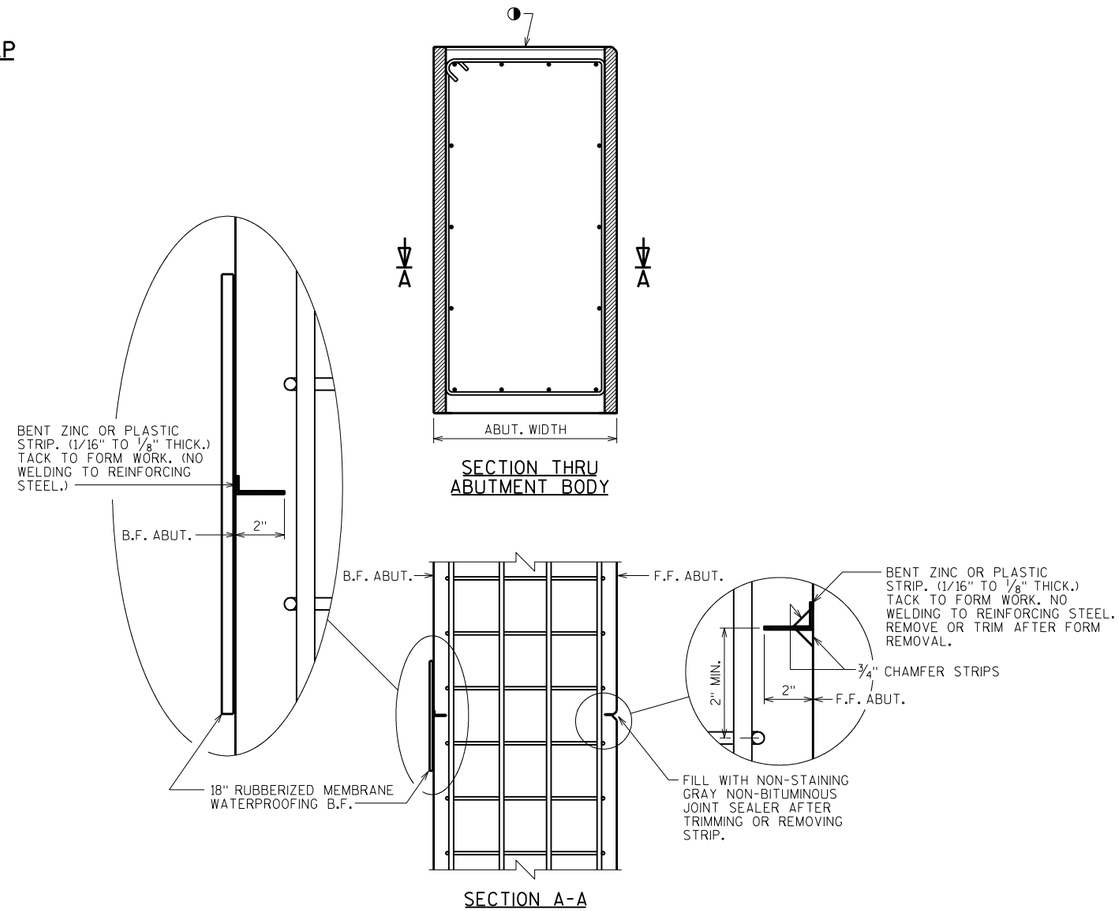
1517-75-75



SECTION THRU PIER CAP

SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT PIER CAP



SECTION THRU ABUTMENT BODY

SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY WWR | PLANS CK'D. JLR

ALTERNATE CONSTRUCTION JOINT

SHEET 22

808

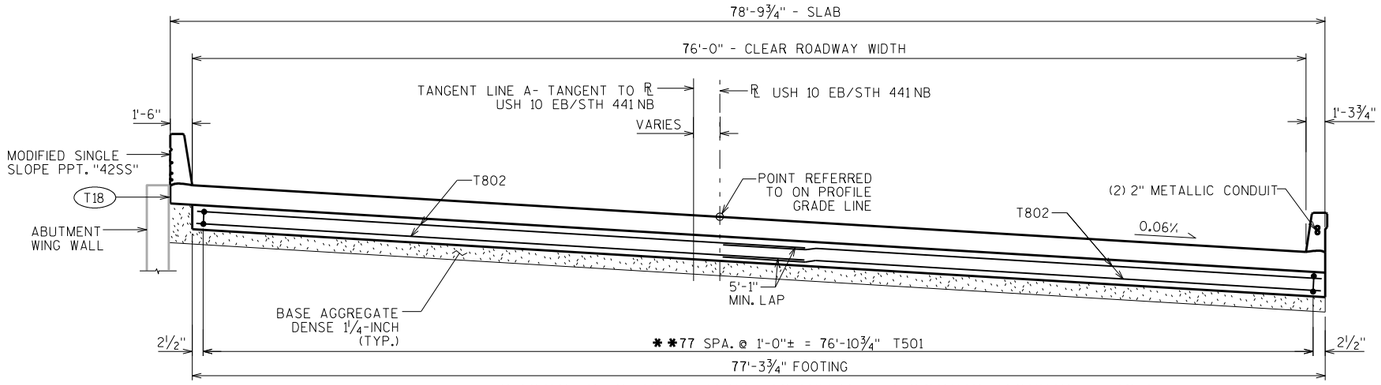
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SCALE =

ALTJOINT
10-08

STATE PROJECT NUMBER
1517-75-75



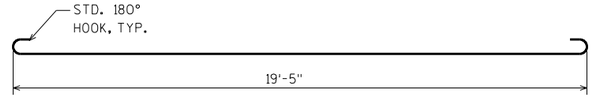
CROSS SECTION THRU RODWAY - LOOKING DOWNSTATION

(SHOWING FOOTING STEEL ONLY)

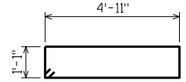
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

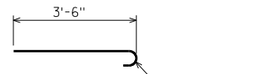
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	78	12'-8"	X		APPROACH SLAB FTG. - STIRRUP
T802	X	24	44'-0"			APPROACH SLAB FTG. - TRANS.
T803	X	128	21'-3"	X		APPROACH SLAB - LONG. - BOT.
T504	X	77	19'-5"			APPROACH SLAB - LONG. - TOP
T505	X	80	43'-10"			APPROACH SLAB - LONG - TOP & BOT.
T506	X	38	4'-1"	X		APPROACH SLAB - TRANS - TOP.



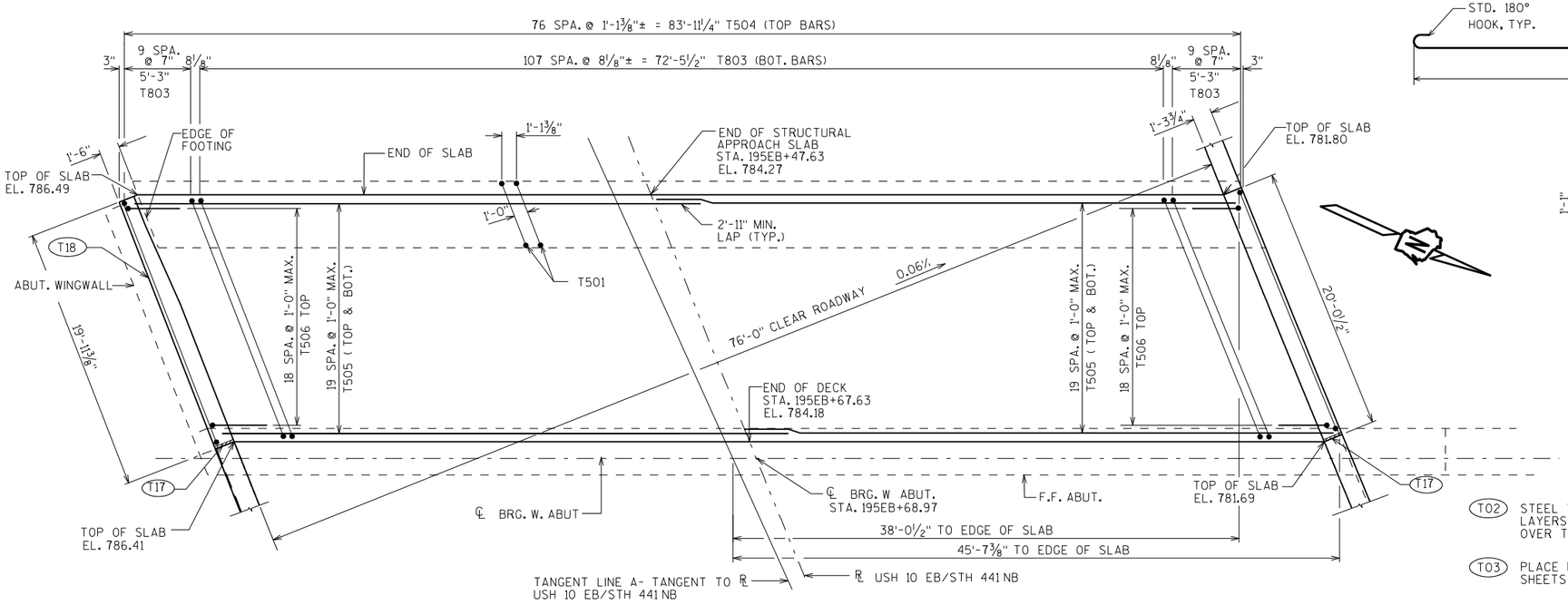
T803



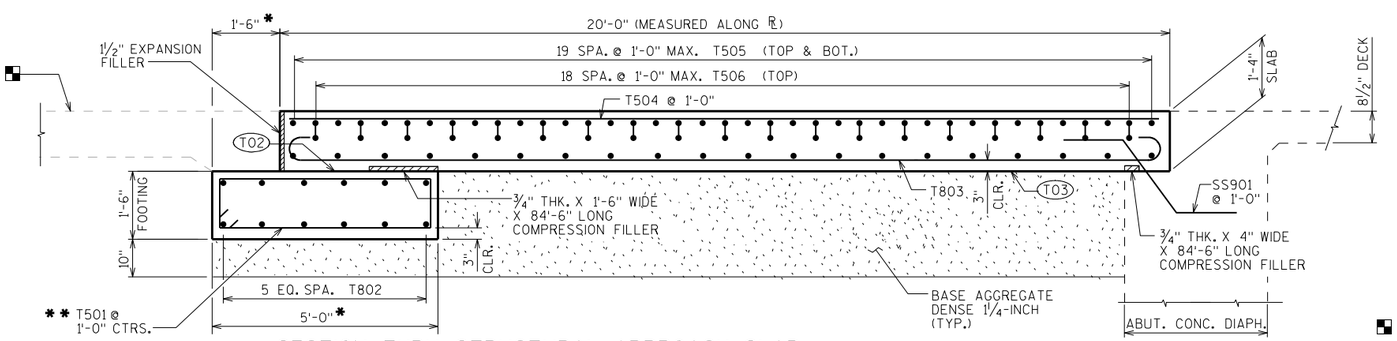
T501



T506



WEST STRUCTURAL APPROACH SLAB PLAN



SECTION THRU STRUCTURAL APPROACH SLAB

T02 STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

T03 PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

T17 ½" FILLER (INCLUDED IN PARAPET LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES 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.

T18 ½" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES 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.

* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄

▪ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY MJH | PLANS CK'D. JLR

WEST STRUCTURAL APPROACH SLAB

SHEET 23

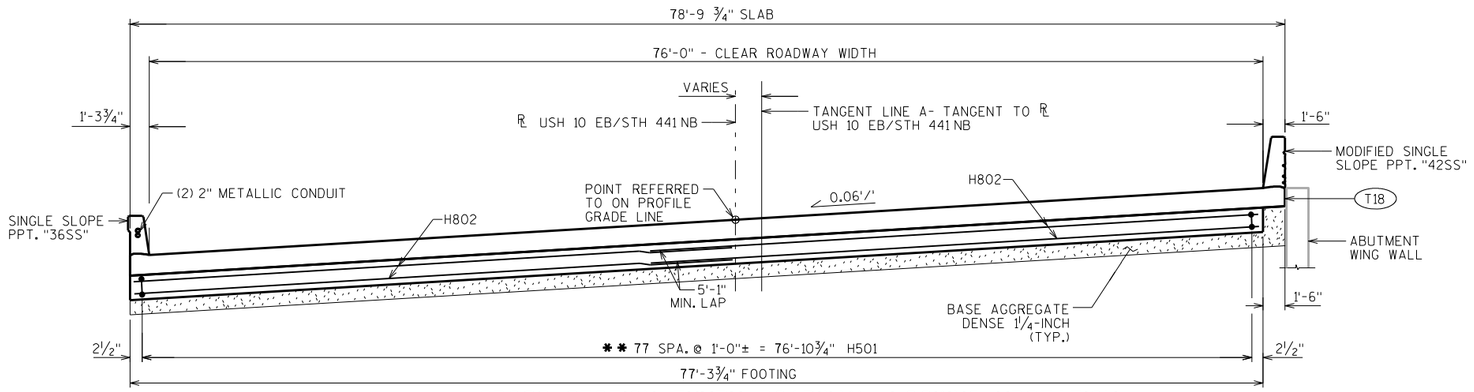
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SCALE = 5

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8

STATE PROJECT NUMBER
1517-75-75



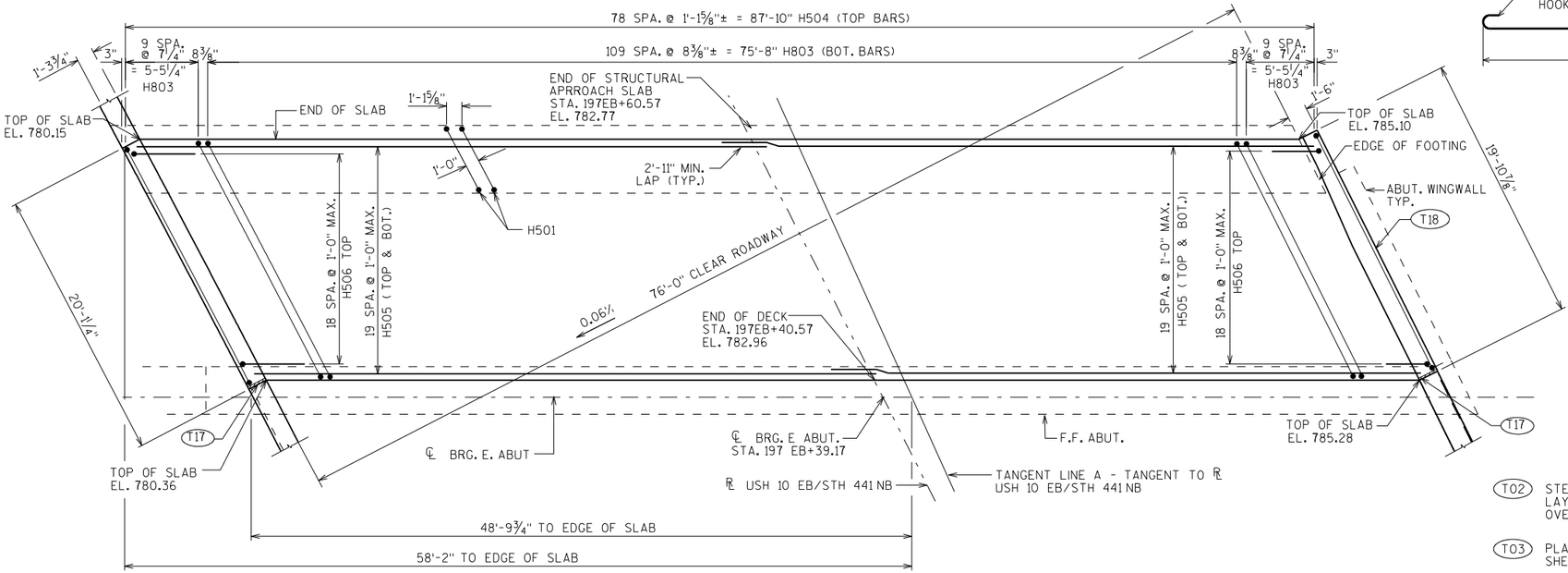
CROSS SECTION THURU ROADWAY -LOOKING UPSTATION

(SHOWING FOOTING STEEL ONLY)

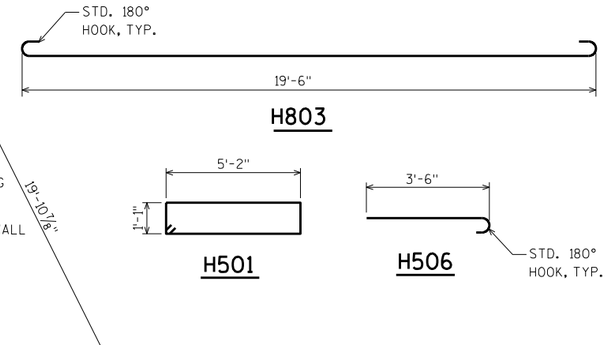
BILL OF BARS

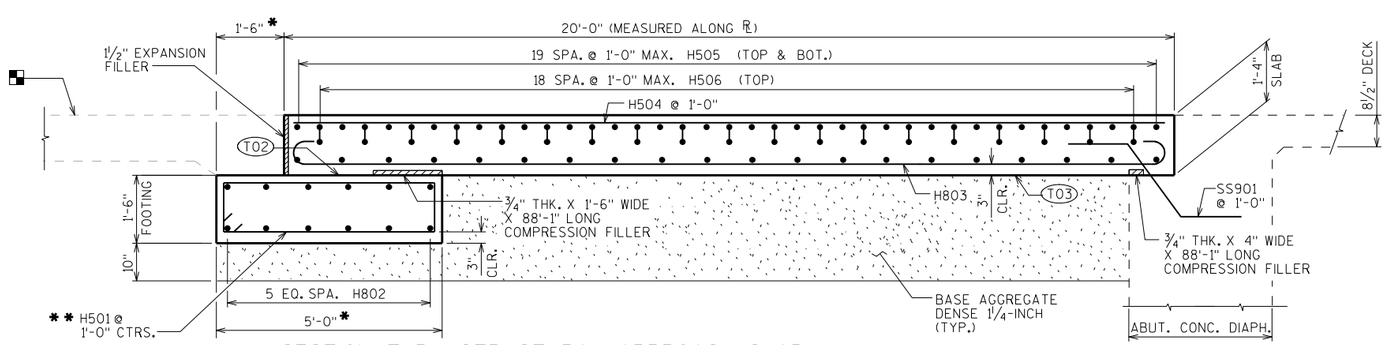
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
H501	X	78	13'-2"	X		APPROACH SLAB FTG. - STIRRUP
H802	X	24	46'-0"			APPROACH SLAB FTG. - TRANS.
H803	X	130	21'-4"	X		APPROACH SLAB - LONG. - BOT.
H504	X	79	19'-6"			APPROACH SLAB - LONG. - TOP
H505	X	80	45'-9"			APPROACH SLAB - LONG - TOP & BOT.
H506	X	38	4'-1"	X		APPROACH SLAB - TRANS - TOP.



EAST STRUCTURAL APPROACH SLAB PLAN





SECTION THRU STRUCTURAL APPROACH SLAB

T02 STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

T03 PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

T17 1/2" FILLER (INCLUDED IN PARAPET LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

T18 1/2" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄

CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-420

DRAWN BY MJH | PLANS CK'D. JLR

EAST STRUCTURAL APPROACH SLAB

SHEET 24

810

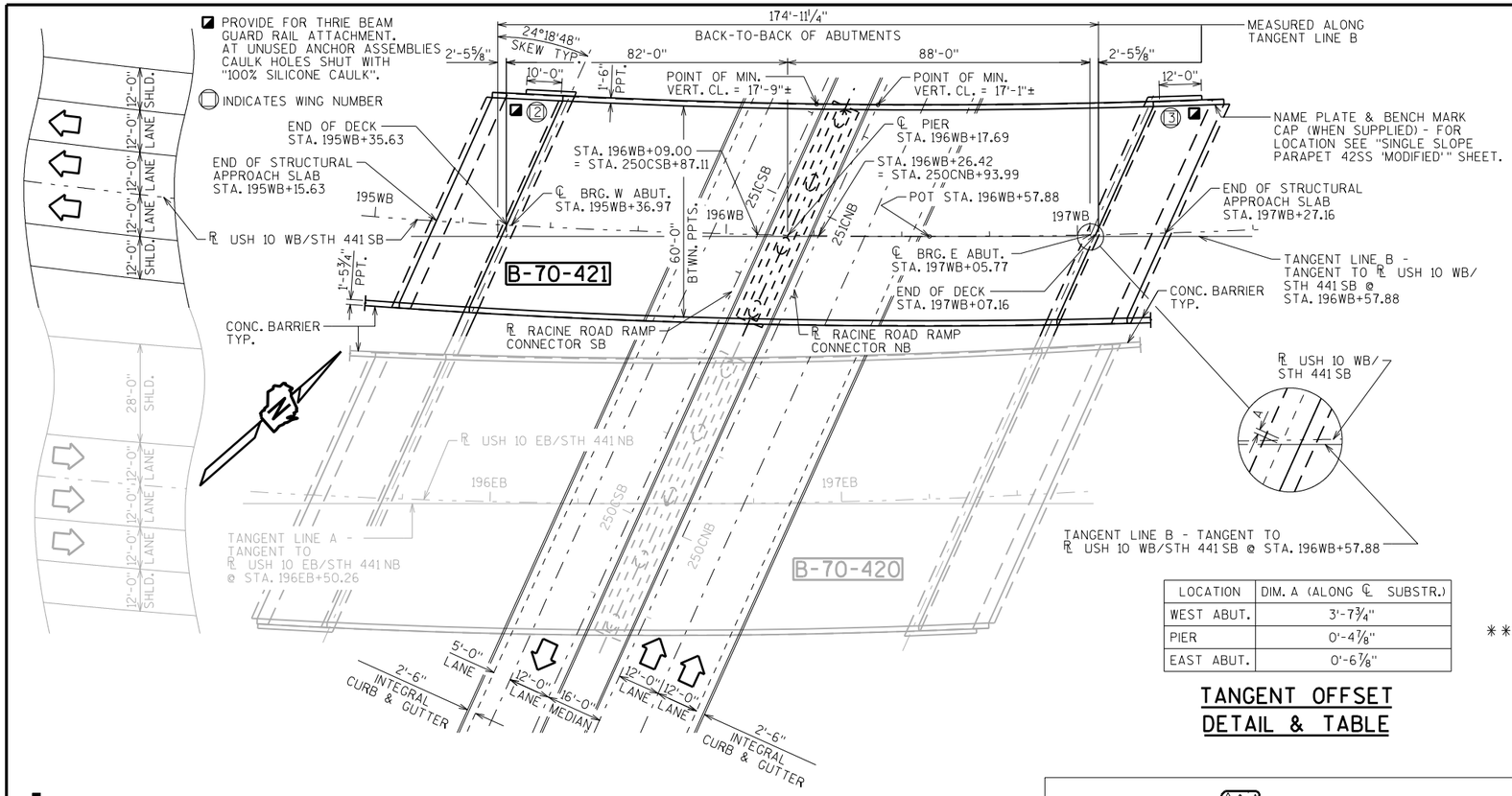
SCALE = 5

8

8

STATE PROJECT NUMBER

1517-75-75



LOCATION	DIM. A (ALONG ℄ SUBSTR.)
WEST ABUT.	3'-7¾"
PIER	0'-4⅞"
EAST ABUT.	0'-6⅞"

TANGENT OFFSET DETAIL & TABLE

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR: RF=1.01
OPERATING RATING FACTOR: RF=1.32
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 240 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

B-70-421 IS DESIGNED FOR A POLYMER OVERLAY THAT WILL BE APPLIED TO THE BRIDGE DECK IN A LATER CONTRACT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE (HPC)	f'c = 4,000 P.S.I.
CONCRETE MASONRY ALL OTHER (HPC)	f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60	fy = 60,000 P.S.I.
BAR STEEL REINFORCEMENT STAINLESS, GRADE 60	fy = 60,000 P.S.I.
36W" PRESTRESSED GIRDERS, CONCRETE MASONRY STRANDS - 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.	f'c = 8,000 P.S.I.

FOUNDATION DATA

WEST ABUTMENT TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 55 FEET LONG.

EAST ABUTMENT TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 210 TONS **PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FEET LONG.

PIER TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35 FEET LONG. PILE POINTS REQUIRED.

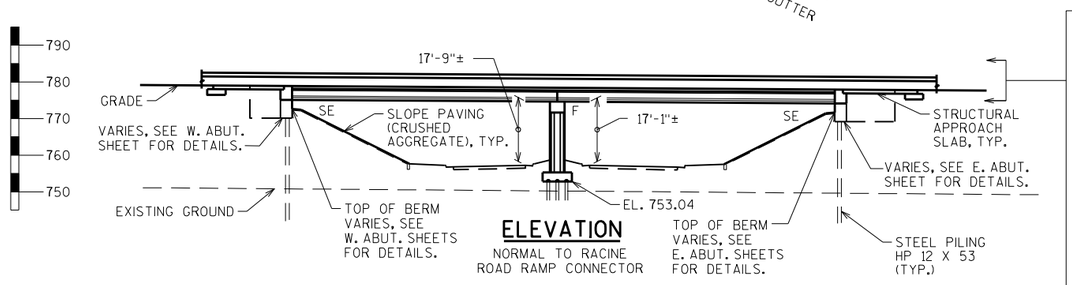
** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC VOLUME

USH 10 WB/STH 441 SB
A.D.T.=54,700 (2038)
R.D.S.=70 M.P.H.

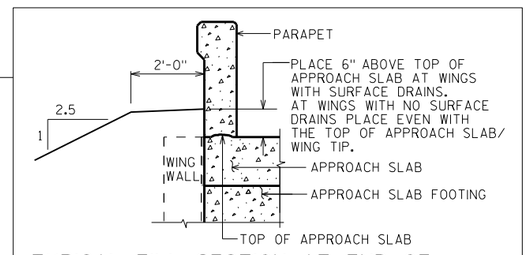
USH 10 EB/STH 441 NB
A.D.T.=36,400 (2038)
R.D.S.=70 M.P.H.

RACINE ROAD RAMP CONNECTOR
A.D.T.=22,400 (2038)
R.D.S.=45 M.P.H.



ELEVATION

NORMAL TO RACINE ROAD RAMP CONNECTOR

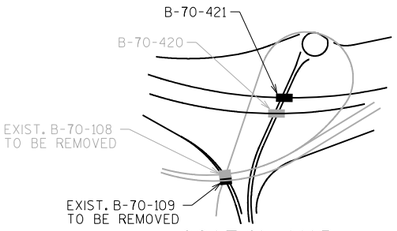


TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

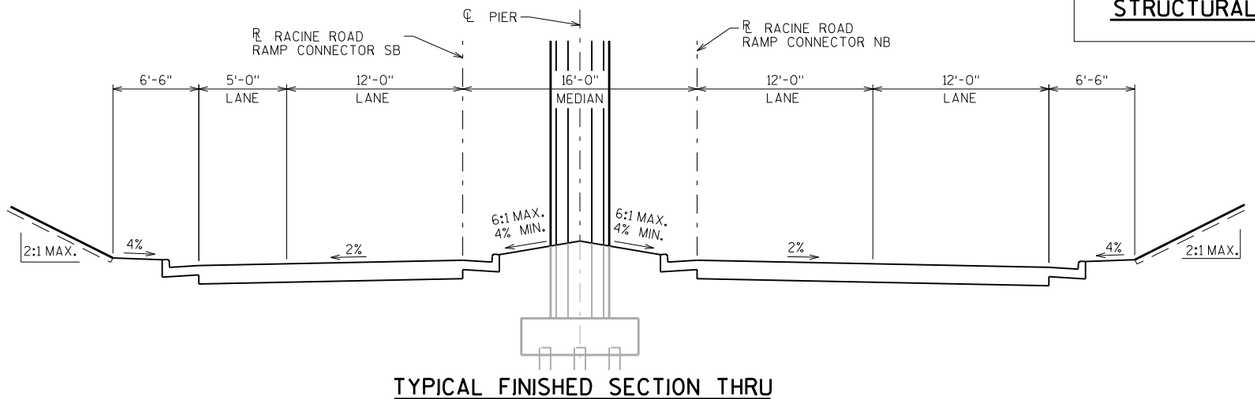
CURVE DATA

℄ USH 10 WB/STH 441 SB

P.I. = 190+75.25
Δ = 61° 15' 44.61"
D = 2° 36' 15.67"
T = 1302.69
L = 2352.31
R = 2200.00
S.E. = 6.0%
P.C. = 177+72.55
P.T. = 201+24.86



LOCATION MAP



TYPICAL FINISHED SECTION THRU RACINE ROAD RAMP CONNECTOR

LOOKING NORTH

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES, NOTES, & PROFILES
3. CROSS SECTIONS
4. SUBSURFACE EXPLORATION
5. WEST ABUTMENT
6. WEST ABUTMENT DETAILS
7. EAST ABUTMENT
8. EAST ABUTMENT DETAILS
9. PIER
10. PIER DETAILS
11. 36W" PRESTRESSED GIRDER DETAILS 1
12. 36W" PRESTRESSED GIRDER DETAILS 2
13. STEEL DIAPHRAGM
14. SUPERSTRUCTURE CROSS SECTION
15. SUPERSTRUCTURE PLAN
16. SUPERSTRUCTURE DETAILS
17. SINGLE SLOPE PARAPET 56SS
18. SINGLE SLOPE PARAPET 42SS "MODIFIED"
19. AESTHETIC DETAILS
20. SLOPE PAVING (CRUSHED AGGREGATE)
21. ALTERNATE CONSTRUCTION JOINT
22. WEST STRUCTURAL APPROACH SLAB
23. EAST STRUCTURAL APPROACH SLAB

STRUCTURE DESIGN CONTACT:
JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 4/20/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-70-421

USH 10 WB STH/441 SB OVER CTH P INTERCHANGE

COUNTY: WINNEBAGO	TOWN/~~CITY/VILLAGE~~: MENASHA
DESIGN SPEC.: AASHTO LRFD DESIGN SPEC.	
DESIGNED BY: JLR	DESIGN CK'D.: PMM
DRAWN BY: WWR	PLANS CK'D.: JLR

GENERAL PLAN

SHEET 1 OF 23

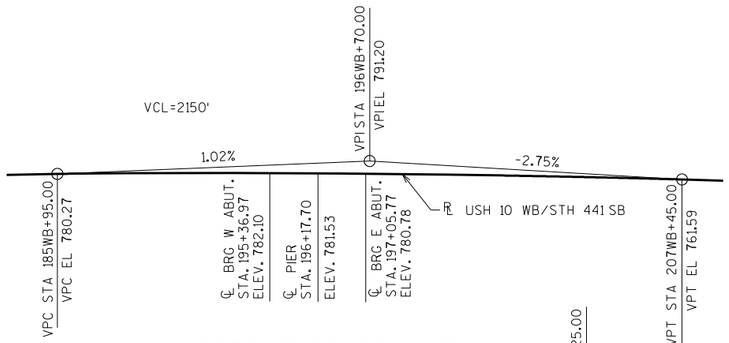
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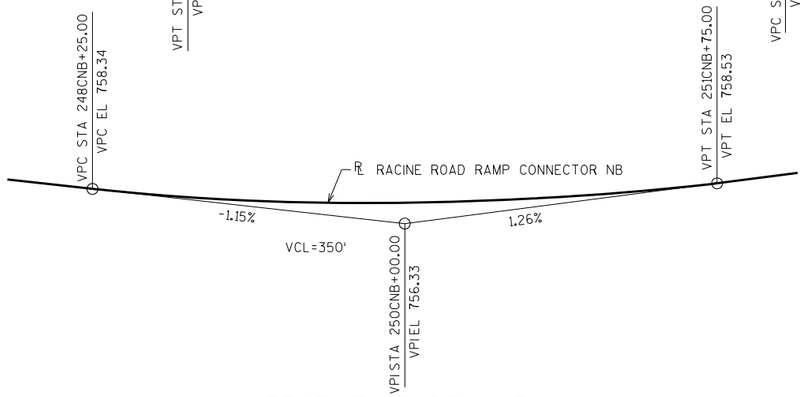
I.D. 1517-07-04F

DATE: JAN. 2014

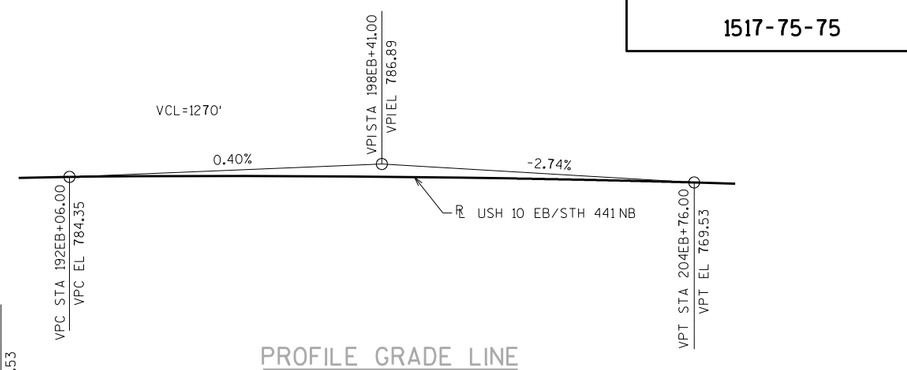
STATE PROJECT NUMBER
1517-75-75



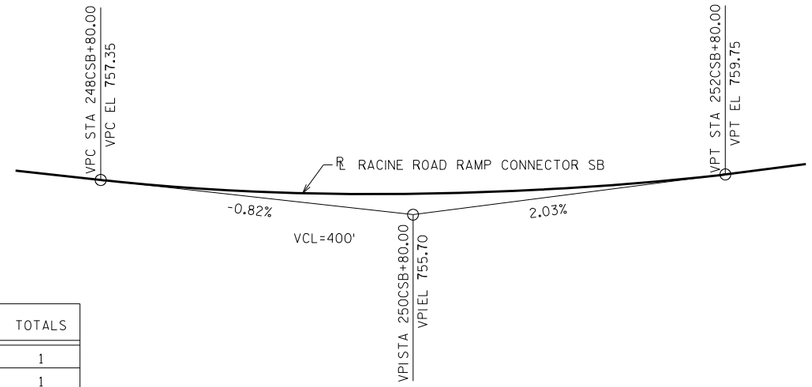
PROFILE GRADE LINE
USH 10 WB/STH 441 SB



PROFILE GRADE LINE
RACINE ROAD RAMP CONNECTOR NB



PROFILE GRADE LINE
USH 10 EB/STH 441 NB



PROFILE GRADE LINE
RACINE ROAD RAMP CONNECTOR SB

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST APPROACH	WEST ABUT.	PIER 1	EAST ABUT.	EAST APPROACH	TOTALS
	203.0200	REMOVING OLD STRUCTURE STA. 194RSW+00	LS	—	—	—	—	—	—	1
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-421	LS	—	—	—	—	—	—	1
*	210.0100	BACKFILL STRUCTURE	CY	—	—	170	—	175	—	345
	305.0120	BASE AGGREGATE DENSE 1¼-INCH	TON	—	230	—	—	—	240	470
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	1,345	156	—	—	—	156	1,657
	503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	1,356	—	—	—	—	—	1,356
	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	—	—	4,680	9,770	4,810	—	19,260
	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	100,520	14,620	1,190	22,920	920	14,750	154,920
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	2,310	—	—	—	—	—	2,310
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	—	—	8	16	8	—	32
	506.4000	STEEL DIAPHRAGMS B-70-421	EACH	28	—	—	—	—	—	28
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	—	—	17	—	17	—	34
	517.1010.S	CONCRETE STAINING B-70-421	SF	2,505	70	420	1,545	372	70	4,982
	517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-421	SF	435	50	420	230	372	50	1,557
	550.0500	PILE POINTS	EACH	—	—	—	26	—	—	26
	550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	—	—	605	910	660	—	2,175
	604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	—	—	295	—	275	—	570
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	—	—	100	—	100	—	200
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	—	1	—	—	—	1	2
	SPV.0035	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	445	88	74	160	71	88	926
		NON-BID ITEMS								
		FILLER	SIZE	—	—	—	—	—	—	½",¾",1½"

* THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

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.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE AND THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON STURCTURAL APPROACH SLABS. DO NOT SEAL SURFACES WHERE THE PLANS OR SPECIAL PROVISIONS REQUIRE STAINING OR OTHER TREATMENT.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

THE EXISTING BRIDGE B-70-109 IS A 2-SPAN PRESTRESSED GIRDER BRIDGE, WITH FULL RETAINING ABUTS., AND A MULTI-COLUMN PIER ON PILE FOOTINGS. THE ENTIRETY OF THE STRUCTURE WILL BE REMOVED AND PAID FOR UNDER "REMOVING OLD STRUCTURE STA. 194RSW+00".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY WWR | PLANS CK'D. JLR

QUANTITIES, NOTES, & PROFILES

SHEET 2

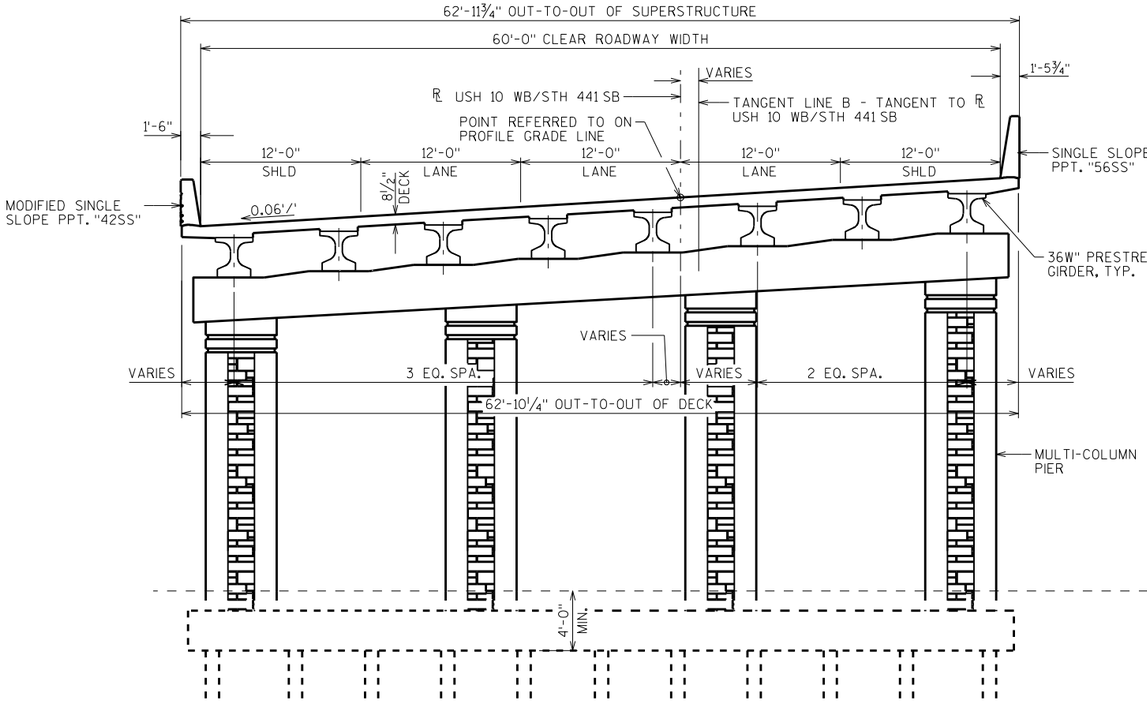
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8

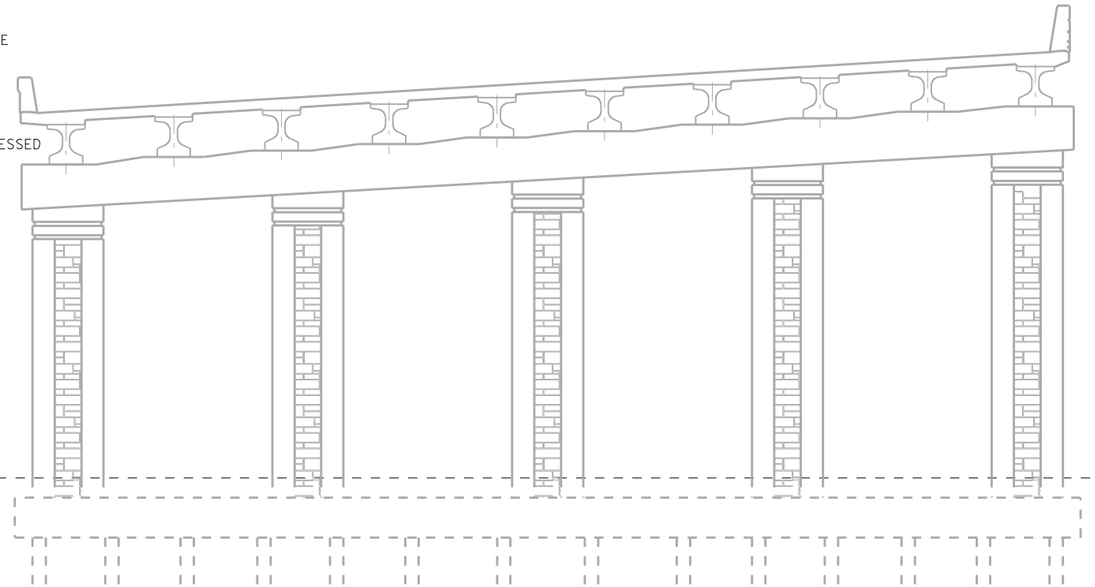
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STATE PROJECT NUMBER
1517-75-75



CROSS SECTION THRU ROADWAY LOOKING EAST

B-70-421



CROSS SECTION THRU ROADWAY LOOKING EAST

B-70-420

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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CROSS SECTIONS

SHEET 3

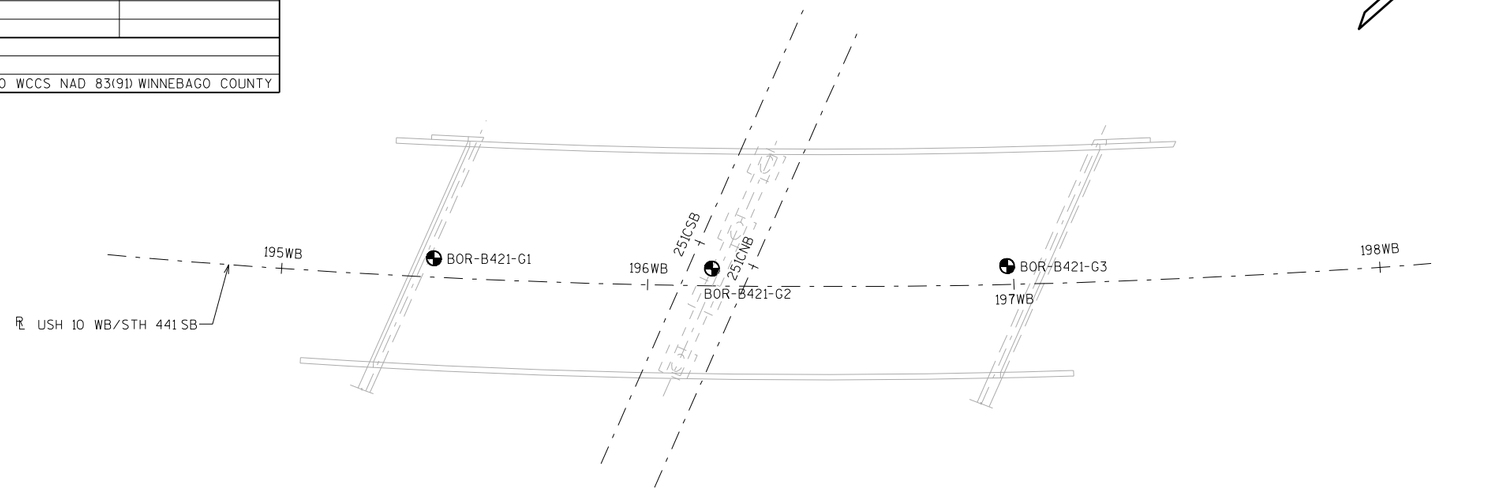
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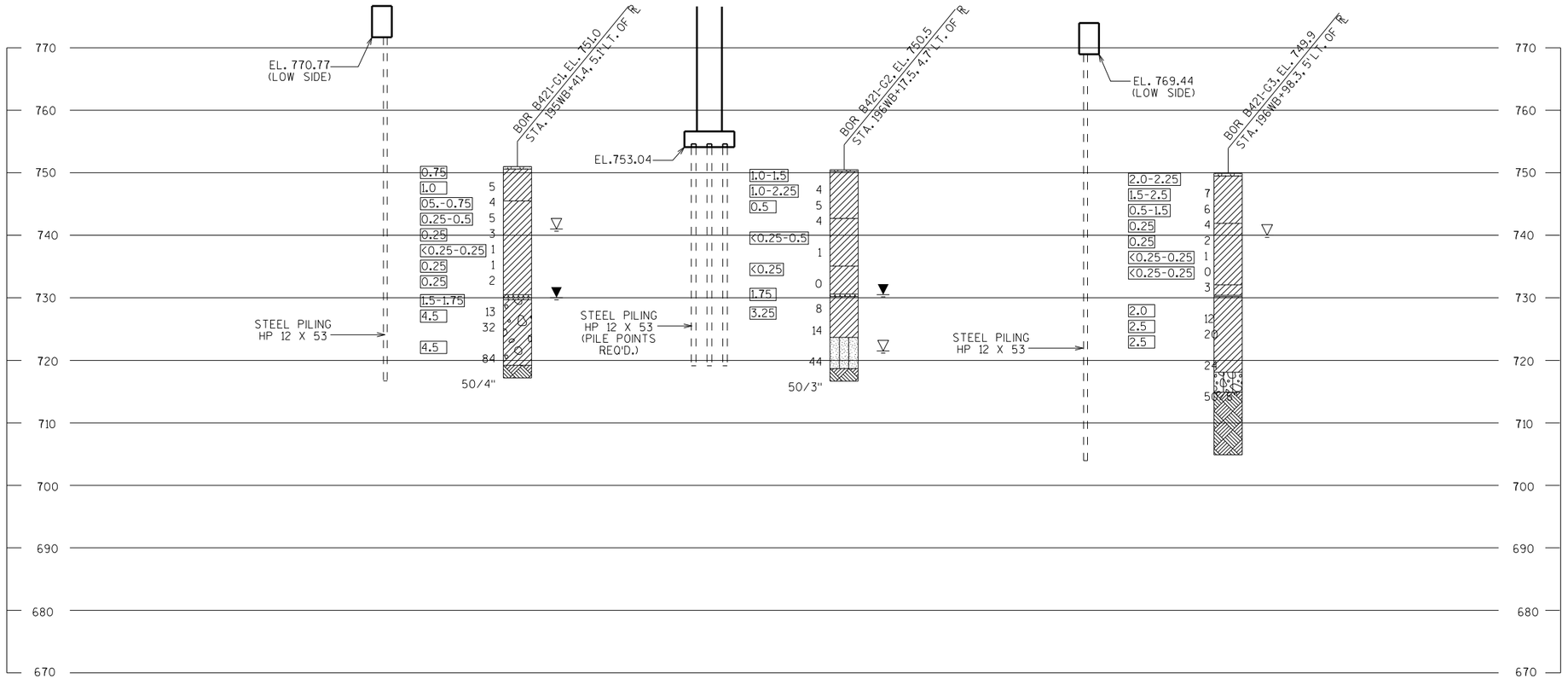
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USH 10 WB/STH 441 SB OVER CTH P INTERCHANGE

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B421-G1	2/1/2012	547007	816168
B421-G2	2/1/2012	547062	816220
B421-G3	2/2/2012	547123	816273

BORINGS COMPLETED BY: GESTRA
REPORT COMPLETED BY: HNTB
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY





8

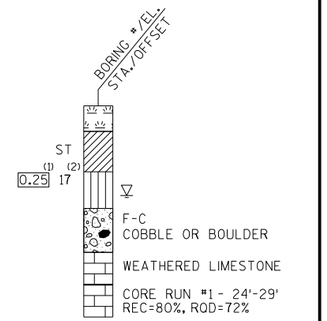
STATE PROJECT NUMBER

1517-75-75

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY PR/WWR | PLANS CK'D. JLR

SUBSURFACE EXPLORATION

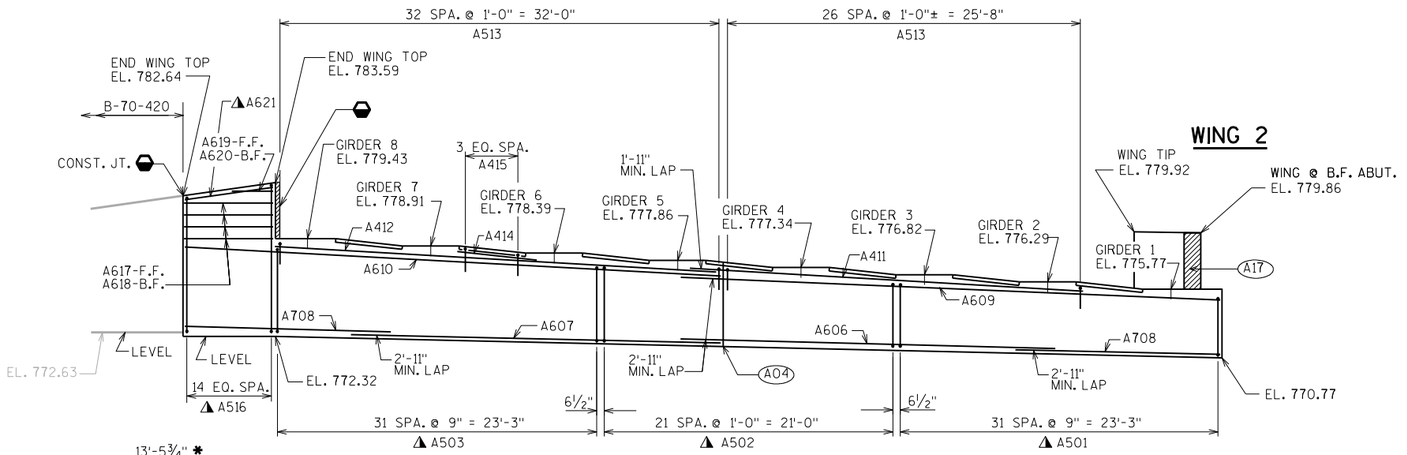
SHEET 4

814

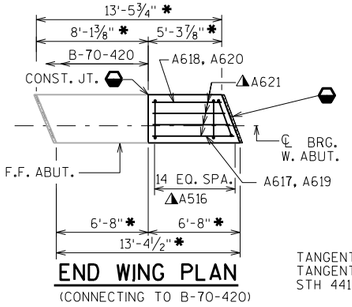
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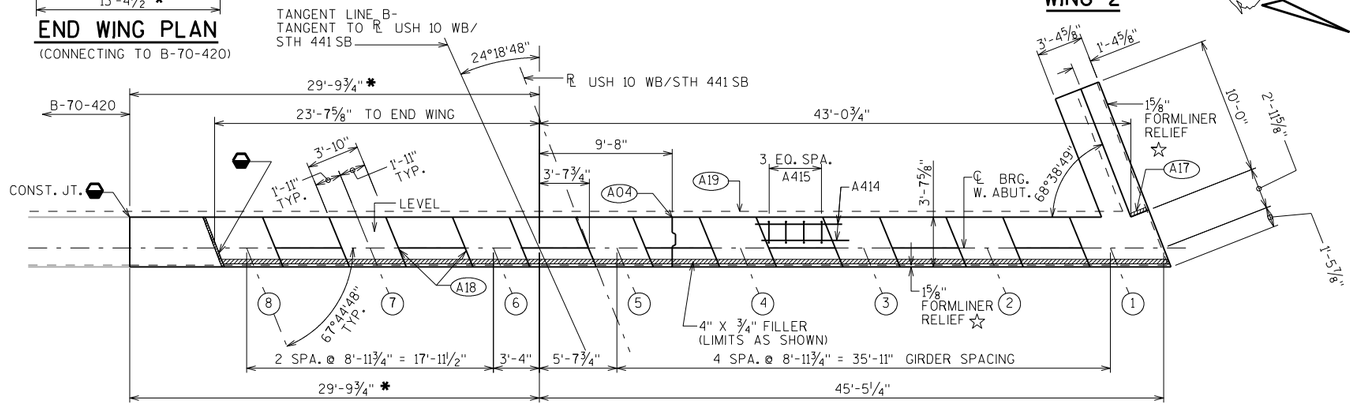
1517-75-75



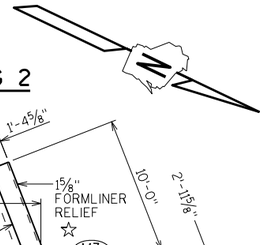
ELEVATION
(LOOKING WEST)

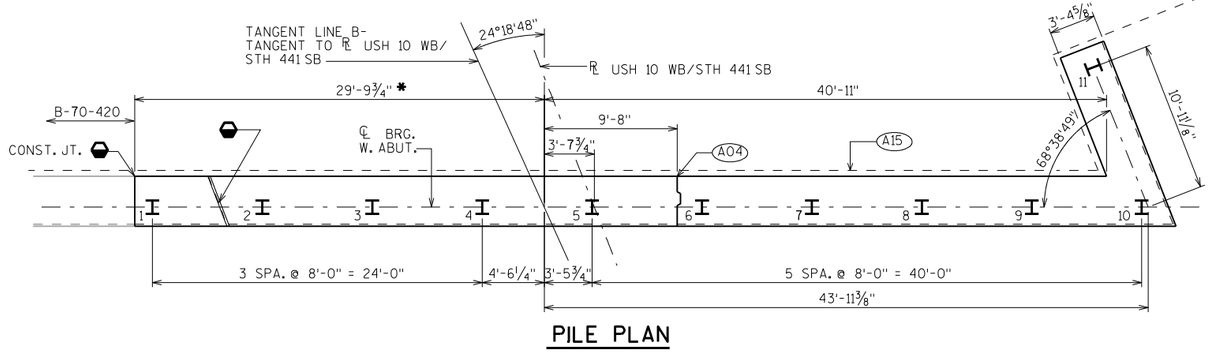


END WING PLAN
(CONNECTING TO B-70-420)

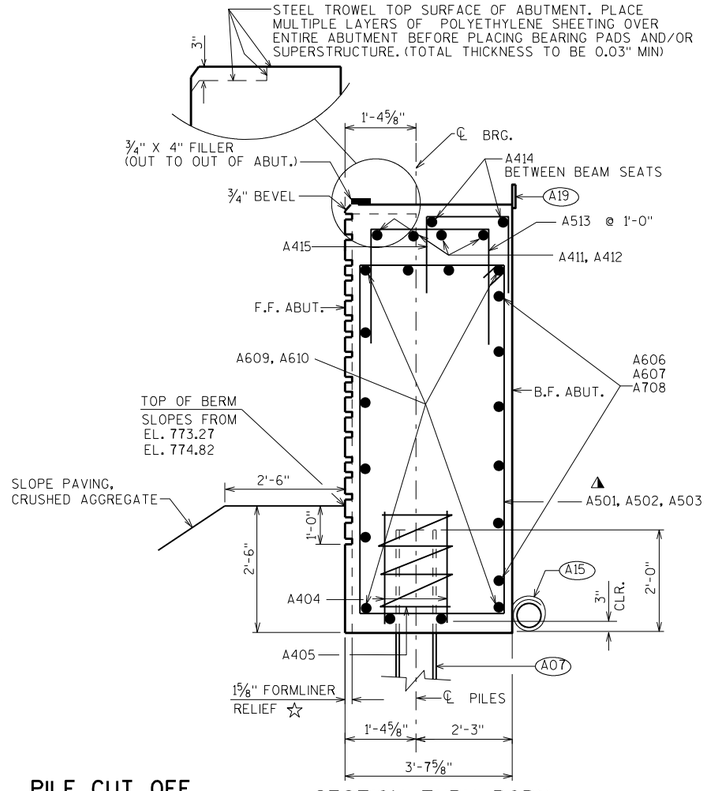


PLAN





PILE PLAN



SECTION THRU BODY

PILE CUT OFF ELEVATIONS

PILE #	TOP OF PILE
1	EL. 774.32
2	EL. 774.26
3	EL. 774.08
4	EL. 773.90
5	EL. 773.72
6	EL. 773.54
7	EL. 773.36
8	EL. 773.18
9	EL. 773.00
10	EL. 772.82
11	EL. 771.77

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 X 53 STEEL PILING, ESTIMATED 55 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. SEE "PILE LENGTH CUT OFF DETAIL".

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

* DIMENSION DOES NOT INCLUDE ½" FILLER

◭ BAR SERIES

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

⬭ 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY WWR | PLANS CK'D. JLR

WEST ABUTMENT

SHEET 5

815

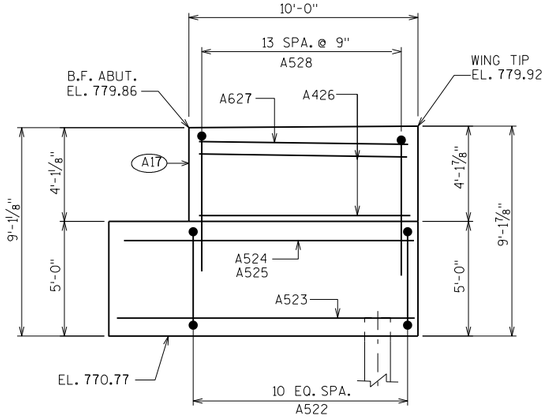
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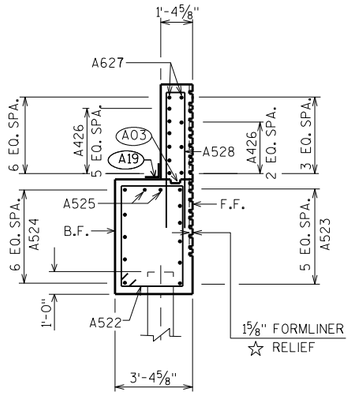
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STATE PROJECT NUMBER

1517-75-75



WING 2 ELEVATION

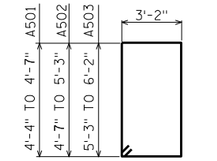


WING 2 SECTION

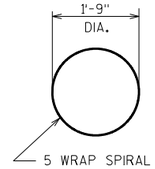
(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

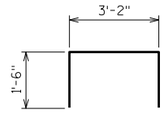
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



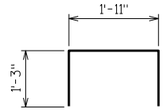
A501, A502, A503



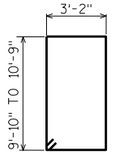
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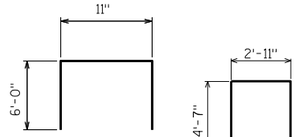
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A415



A516



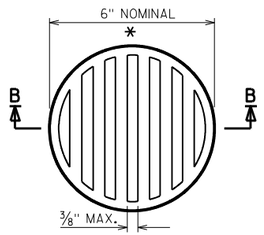
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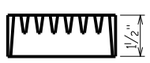
BILL OF BARS

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
A501		32	15'-11	X	⚠	BODY-STIRRUP
A502		22	16'-10"	X	⚠	BODY-STIRRUP
A503		32	18'-5"	X	⚠	BODY-STIRRUP
A404		20	2'-3"			BODY-VERT.-2 PER BODY PILE
A405		10	28'-0"	X		BODY-1 PER BODY PILE
A606		6	26'-8"			BODY-HORIZ.-B.F.
A607		6	27'-8"			BODY-HORIZ.-B.F.
A708		12	15'-0"			BODY-HORIZ.-B.F.
A609		12	39'-0"			BODY- HORIZ.
A610		12	39'-1"			BODY-HORIZ.
A411		4	28'-8"			BODY- HORIZ. TOP
A412		4	32'-2"			BODY- HORIZ. TOP
A513		60	5'-11"	X		BODY- HORIZ. TOP U-BAR
A414		14	6'-0"			BODY-HORIZ. BTWN. GIRDERS
A415		28	4'-3"	X		BODY-VERT. BTWN. GIRDERS
A516	X	15	27'-7"	X	⚠	END WING- STIRRUP
A617	X	4	6'-4"			END WING-HORIZ. F.F.
A618	X	4	5'-0"			END WING-HORIZ. B.F.
A619	X	1	3'-0"			END WING-HORIZ. F.F.
A620	X	1	1'-8"			END WING-HORIZ. B.F.
A621	X	4	5'-8"		⚠	END WING-HORIZ. TOP
A522	X	11	15'-8"	X		WING BODY 2-STRIRRUP
A523	X	6	13'-4"			WING BODY 2-HORIZ. F.F.
A524	X	7	12'-3"			WING BODY 2-HORIZ. B.F.
A525	X	2	12'-3"			WING BODY 2-HORIZ. TOP
A426	X	9	9'-8"			WING WALL 2-HORIZ.
A627	X	2	9'-8"			WING WALL 2-HORIZ. TOP
A528	X	14	12'-8"	X		WING WALL 2-VERT. U-BAR

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.





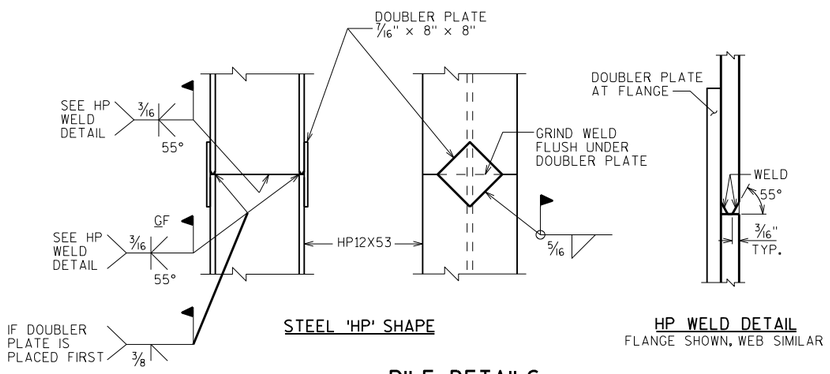
SECTION B-B

RODENT SHIELD DETAIL

* 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 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 EXPOSED END OF 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.



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
A501	1 SERIES OF 32	15'-8" TO 16'-2"
A502	1 SERIES OF 22	16'-2" TO 17'-6"
A503	1 SERIES OF 32	17'-6" TO 19'-4"
A516	1 SERIES OF 15	26'-8" TO 28'-6"
A621	1 SERIES OF 4	5'-0" TO 6'-4"

BUNDLE AND TAG EACH SERIES SEPARATELY.

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY WWR | PLANS CK'D. JLR

WEST ABUTMENT DETAILS

SHEET 6

816

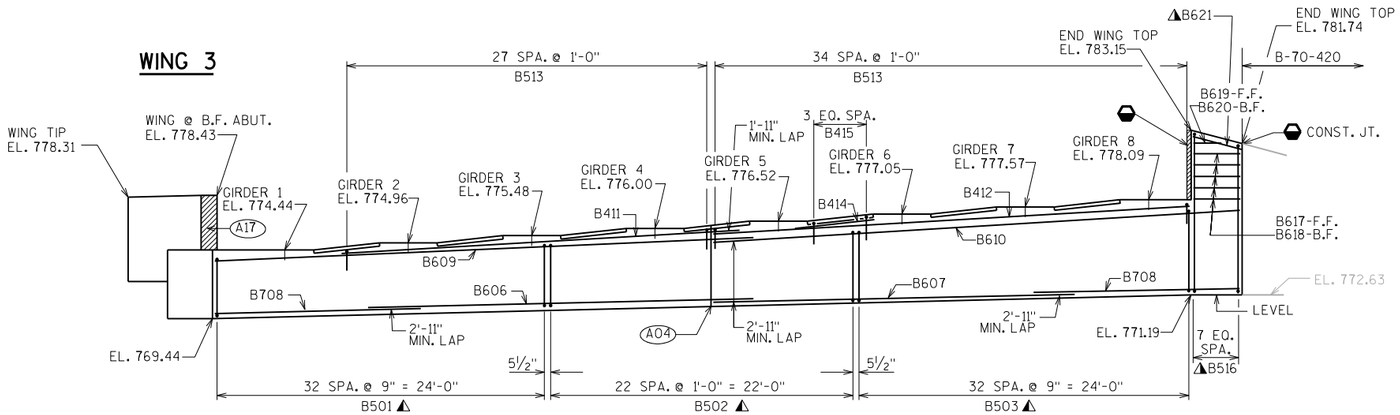
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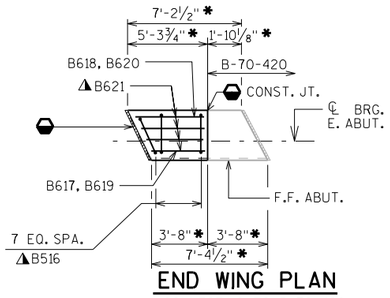
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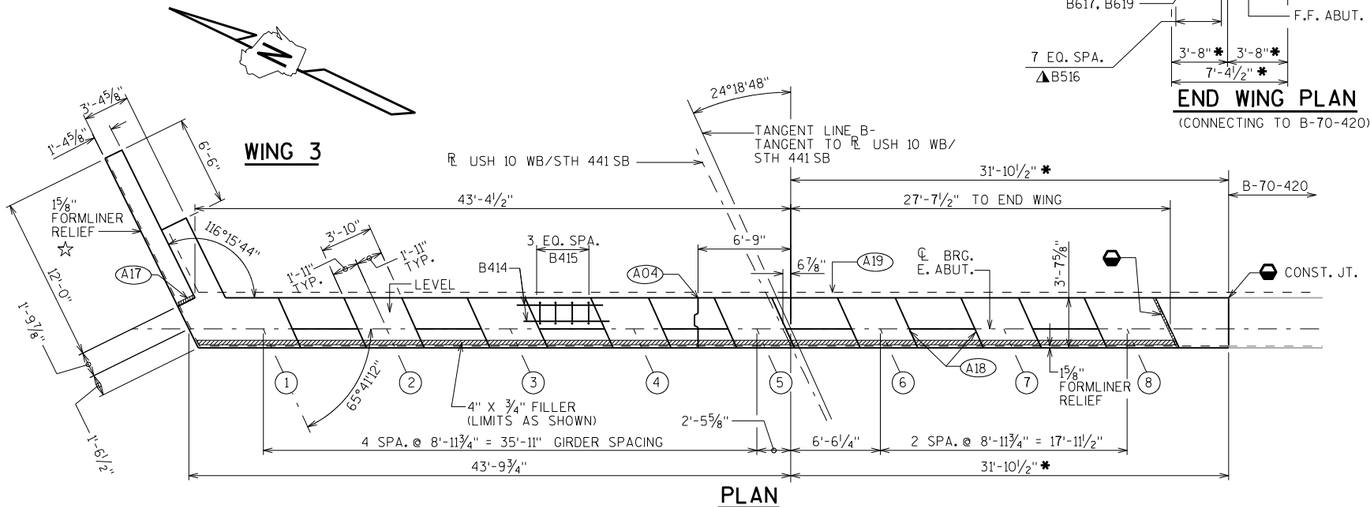
1517-75-75



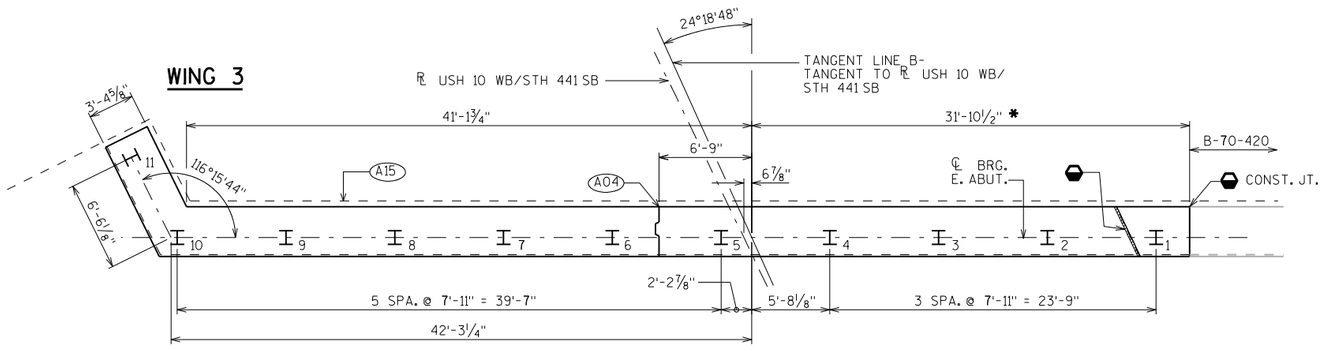
ELEVATION
(LOOKING EAST)



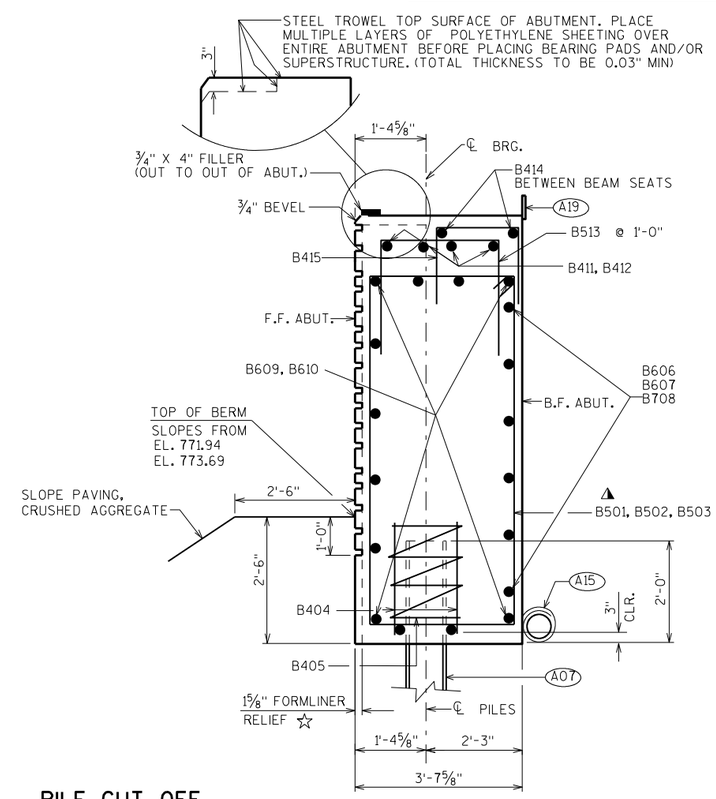
END WING PLAN
(CONNECTING TO B-70-420)



PLAN



PILE PLAN



SECTION THRU BODY

PILE CUT OFF ELEVATIONS

PILE #	TOP OF PILE
1	EL. 773.19
2	EL. 773.81
3	EL. 773.52
4	EL. 773.24
5	EL. 772.95
6	EL. 772.67
7	EL. 772.38
8	EL. 772.10
9	EL. 771.81
10	EL. 771.52
11	EL. 770.44

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 X 53 STEEL PILING, ESTIMATED 60 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE. SEE "PILE LENGTH CUT OFF DETAIL".

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

* DIMENSION DOES NOT INCLUDE ½" FILLER

◭ BAR SERIES

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

⬬ 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

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STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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EAST ABUTMENT

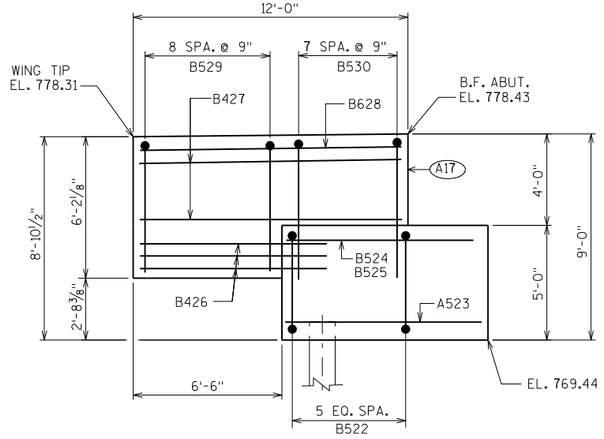
SHEET 7

817

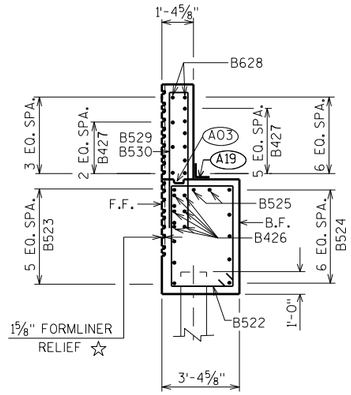
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SCALE =



WING 3 ELEVATION

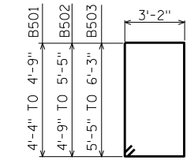


WING 3 SECTION

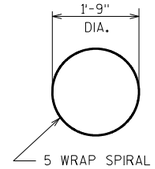
A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

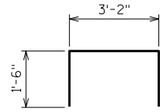
A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



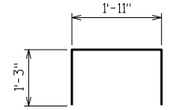
B501, B502, B503



B405

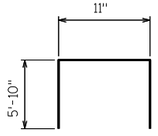


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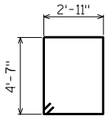


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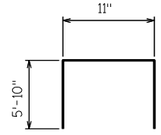
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B530



B522



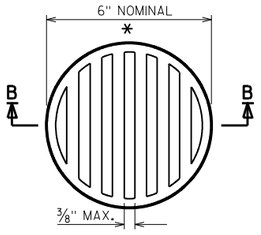
B529

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
B501		33	16'-1"	X	⚠	BODY-STIRRUP
B502		23	17'-2"	X	⚠	BODY-STIRRUP
B503		33	18'-8"	X	⚠	BODY-STIRRUP
B404		20	2'-3"			BODY-VERT.-2 PER BODY PILE
B405		10	28'-0"	X		BODY-1 PER BODY PILE
B606		6	29'-7"			BODY-HORIZ.-B.F.
B607		6	26'-4"			BODY-HORIZ.-B.F.
B708		12	15'-0"			BODY-HORIZ.-B.F.
B609		12	40'-9"			BODY- HORIZ.
B610		12	38'-5"			BODY-HORIZ.
B411		4	30'-0"			BODY- HORIZ. TOP
B412		4	33'-0"			BODY- HORIZ. TOP
B513		63	5'-11"	X		BODY- HORIZ. TOP U-BAR
B414		14	6'-0"			BODY-HORIZ. BTWN. GIRDERS
B415		28	4'-2"	X		BODY-VERT. BTWN. GIRDERS
B516	X	8	29'-2"	X	⚠	END WING- STIRRUP
B617	X	5	3'-4"			END WING-HORIZ. F.F.
B618	X	5	4'-11"			END WING-HORIZ. B.F.
B619	X	1	2'-1"			END WING-HORIZ. F.F.
B620	X	1	3'-9"			END WING-HORIZ. B.F.
B621	X	4	4'-3"		⚠	END WING-HORIZ. TOP
B522	X	6	15'-8"	X		WING BODY 3-STRIRRUP
B523	X	6	8'-0"			WING BODY 3-HORIZ. F.F.
B524	X	7	8'-1"			WING BODY 3-HORIZ. B.F.
B525	X	2	8'-1"			WING BODY 3-HORIZ. TOP
B426	X	6	7'-11"			WING WALL 3-HORIZ. BOT.
B427	X	9	11'-8"			WING WALL 3-HORIZ.
B628	X	2	11'-8"			WING WALL 3-HORIZ. TOP
B529	X	9	12'-4"	X		WING WALL 3-VERT. U-BAR
B530	X	8	12'-4"	X		WING WALL 3-VERT. U-BAR

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.





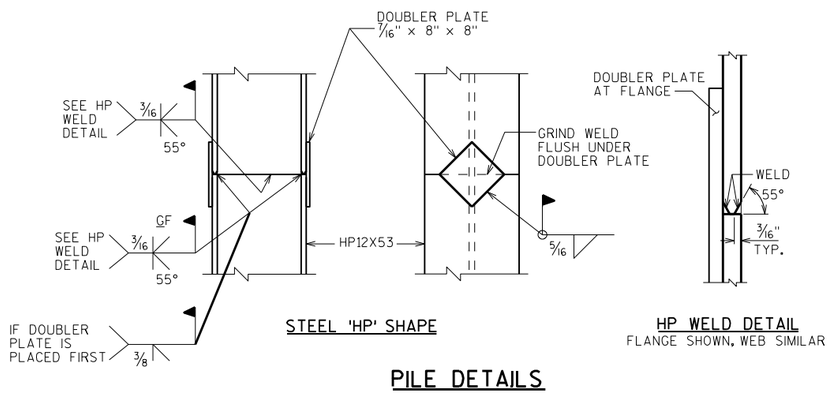
SECTION B-B

RODENT SHIELD DETAIL

* 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 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 EXPOSED END OF 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.



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
B501	1 SERIES OF 33	15'-8" TO 16'-6"
B502	1 SERIES OF 23	16'-6" TO 17'-10"
B503	1 SERIES OF 33	17'-10" TO 19'-6"
B516	1 SERIES OF 8	28'-2" TO 30'-2"
B621	1 SERIES OF 4	3'-5" TO 5'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.

☆ ASHLAR FORMLINER. SEE "AESTHETIC DETAILS" SHEET.

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STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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EAST ABUTMENT DETAILS

SHEET 8

818

STATE PROJECT NUMBER

1517-75-75

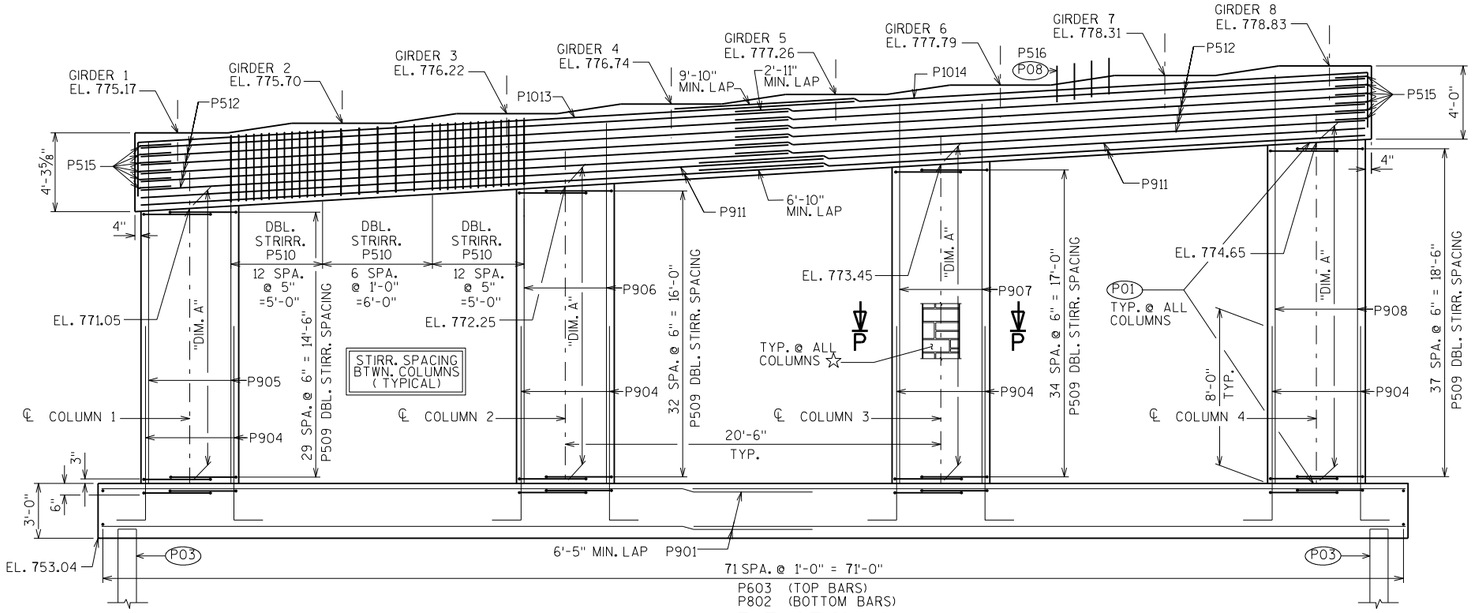
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STATE PROJECT NUMBER

1517-75-75

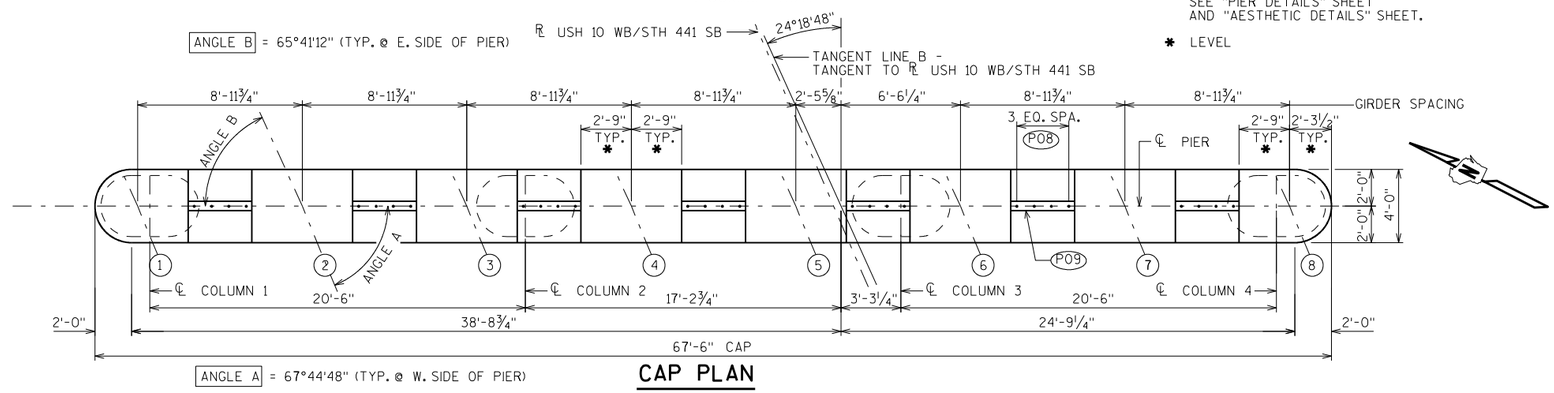


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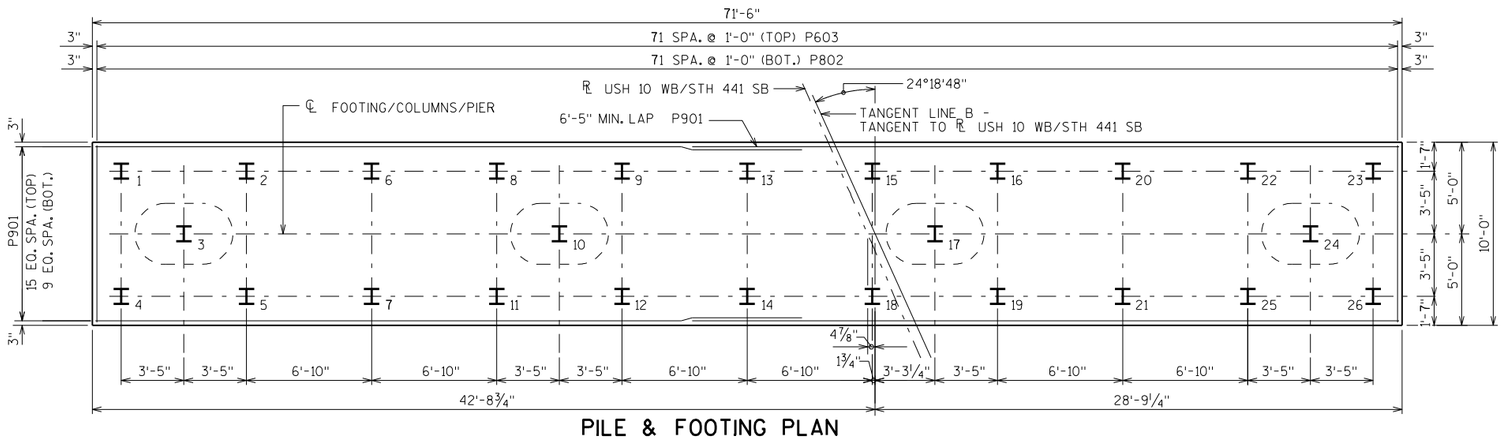
(LOOKING EAST)

☆ ASHLAR FORMLINER. SEE "PIER DETAILS" SHEET AND "AESTHETIC DETAILS" SHEET.

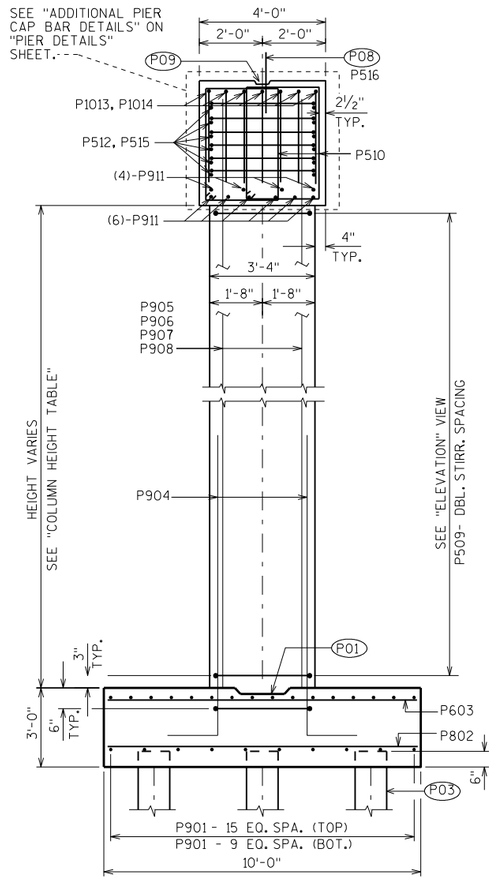
✱ LEVEL



CAP PLAN



PILE & FOOTING PLAN



SECTION THRU PIER

(P01) 1'-3" X 1'-3" X 2" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING. ESTIMATED 35 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PILE POINTS REQUIRED.

(P08) P516 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

COLUMN HEIGHT TABLE

COLUMN NO.	"DIM. A"
COLUMN 1	15'-0⅛"
COLUMN 2	16'-2½"
COLUMN 3	17'-5"
COLUMN 4	18'-7⅜"

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STRUCTURE B-70-421

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PIER

SHEET 9

819

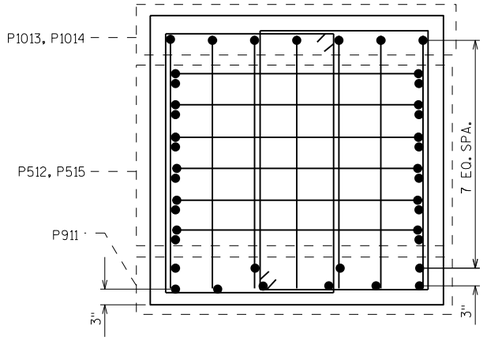
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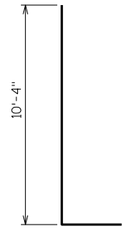
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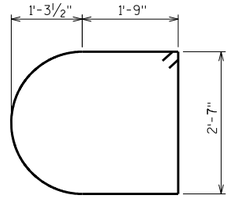
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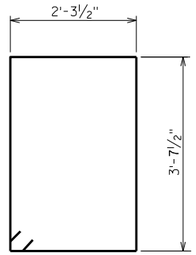
ADDITIONAL PIER CAP BAR DETAILS



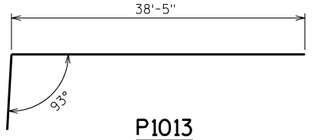
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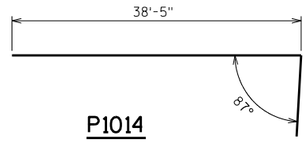
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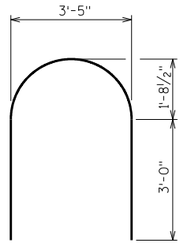
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P1013



P1014

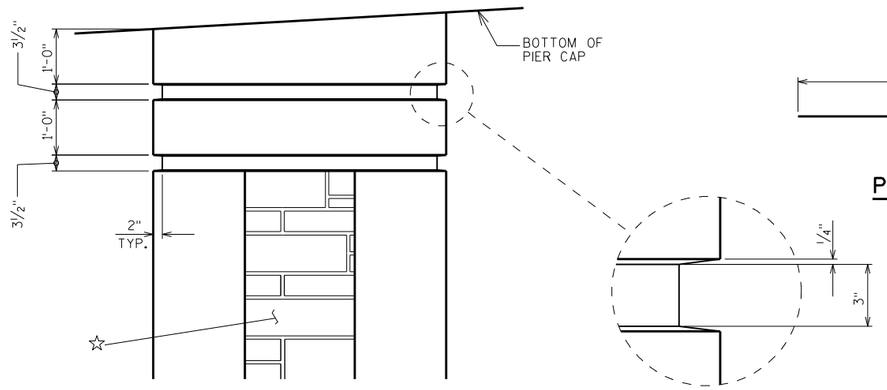


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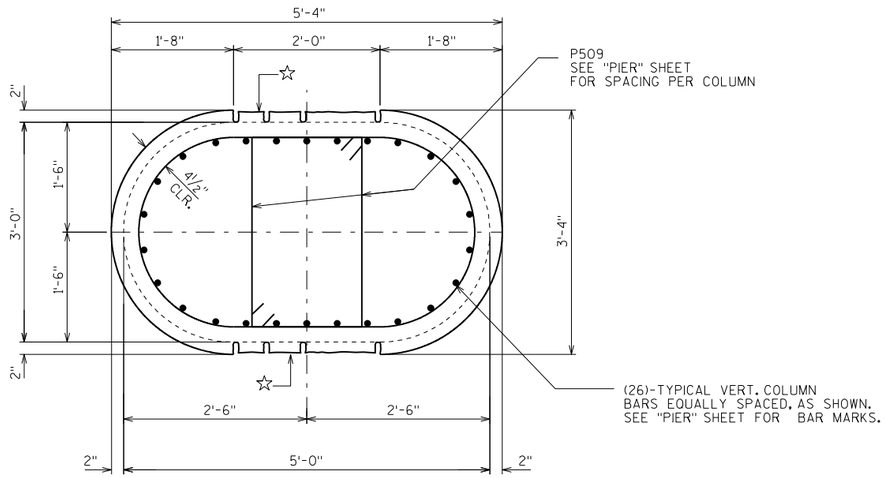
BILL OF BARS

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
P901		52	38'-10"			FOOTING-LONGIT.
P802		72	9'-8"			FOOTING-TRANS. BOT.
P603		72	9'-8"			FOOTING-TRANS. TOP
P904	X	104	11'-8"	X		FOOTING/COLUMN-VERT.
P905	X	26	18'-8"			COLUMN 1-VERT.
P906	X	26	19'-8"			COLUMN 2-VERT.
P907	X	26	20'-9"			COLUMN 3-VERT.
P908	X	26	22'-3"			COLUMN 4-VERT.
P509	X	280	10'-7"	X		COLUMN & FOOTING STIRRUPS
P510	X	186	12'-6"	X		CAP STIRRUPS BTWN. COLUMNS
P911	X	20	37'-0"			CAP-BOTTOM
P512	X	24	35'-1"			CAP-MIDDLE
P1013	X	7	41'-5"	X		CAP-TOP
P1014	X	7	41'-5"	X		CAP-TOP
P515	X	12	11'-4"	X		CAP-END U-BAR
P516	X	28	2'-0"			CAP-TOP DOWEL

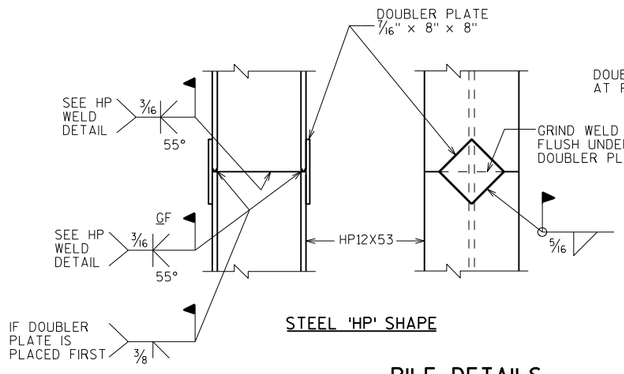


PART. ELEV. TOP OF PIER COLUMN

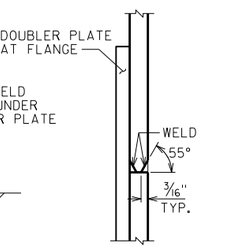


SECTION P-P

(TYP. COLUMN SECTION)



STEEL 'HP' SHAPE



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

☆ ASHLAR FORMLINER.
SEE "PIER" SHEET AND
"AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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PIER DETAILS

SHEET 10

820

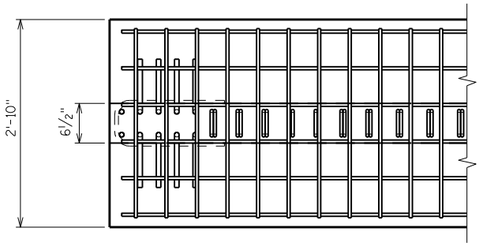
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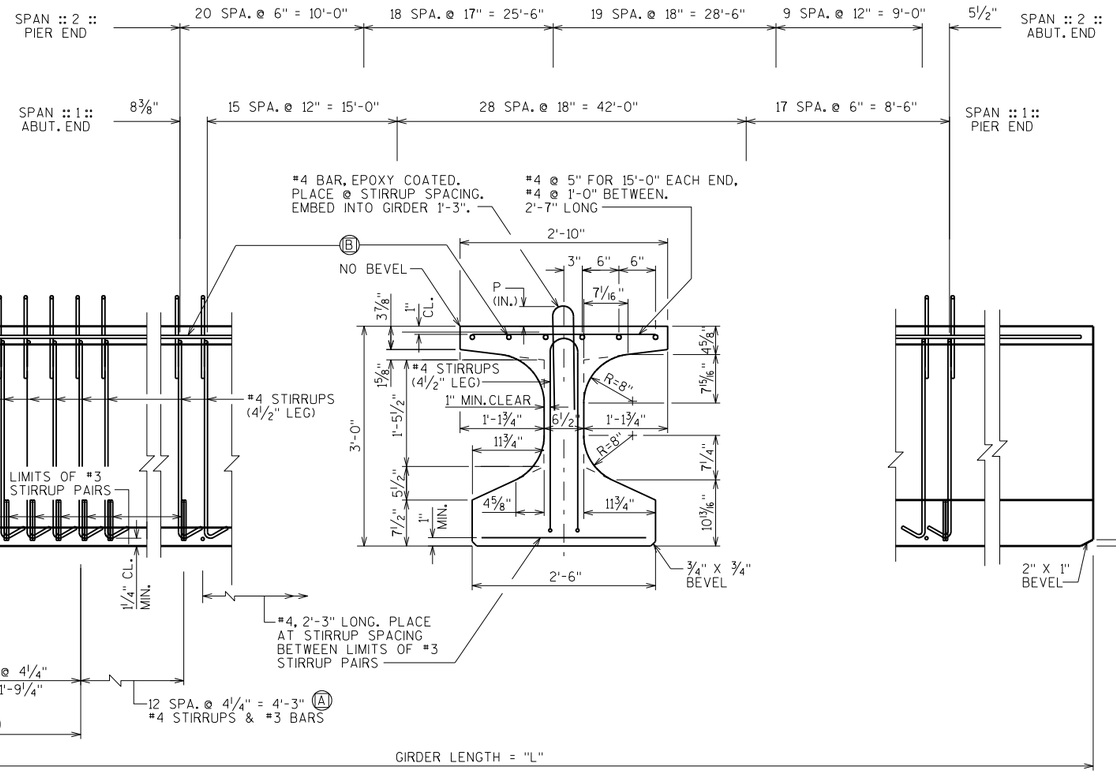
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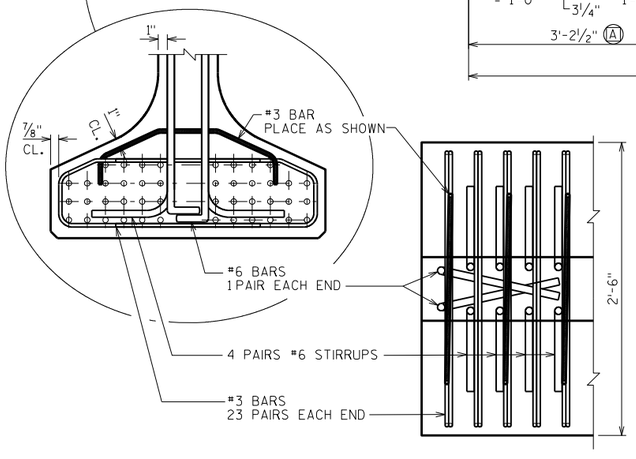
1517-75-75



TOP FLANGE



SECTION A-A

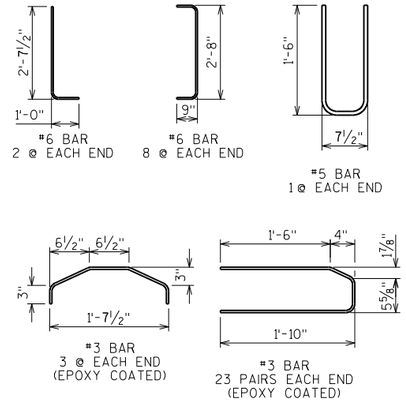


BOTTOM FLANGE

SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ (SPAN 1) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"
(SPAN 2) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE 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 SECTION.

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 "STEEL DIAPHRAGM" SHEET.

✳ 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	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	1-8	81.12	0.5	0.9	1.3	1.5	1.5	1.5	1.3	0.9	0.5	8000	8.5	8	9	0.6	28	6400	32	11	14	4		
2	1-8	88.38	0.7	1.3	1.8	2.1	2.2	2.1	1.8	1.3	0.7	8000	9	8	9	0.6	34	6400	31	11.5	14.5	5		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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36W" PRESTRESSED GIRDER DETAILS 1

SHEET 11

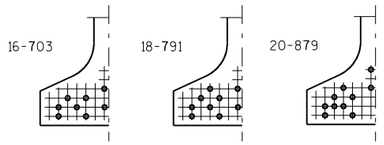
821

MON OCT 13 09:27:51 2014 *1-13 G36W

SCALE =

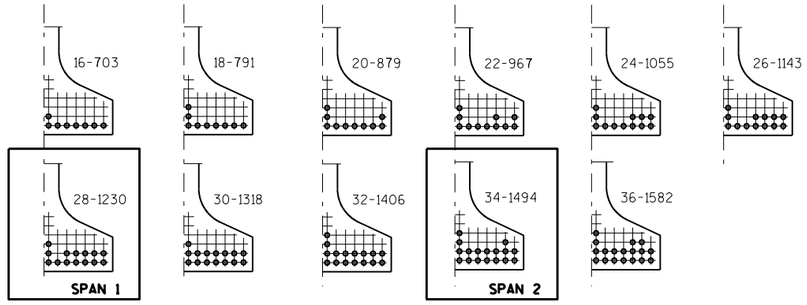
STATE PROJECT NUMBER

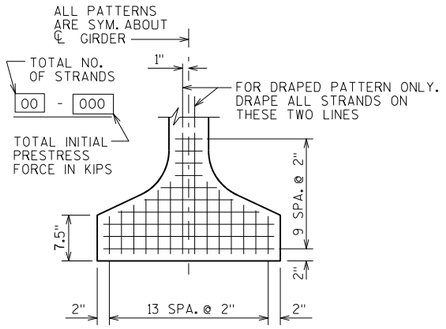
1517-75-75



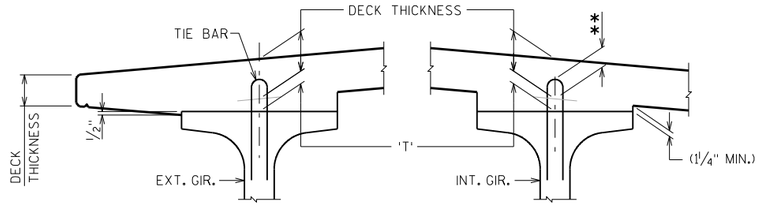
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS





TYP. STRAND PATTERN



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.

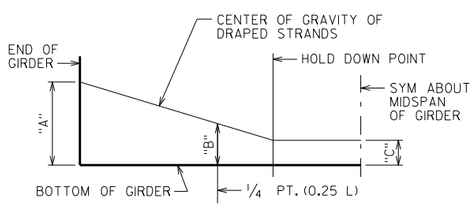
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

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 3.86" WAS USED IN THE QUANTITY "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES".

ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



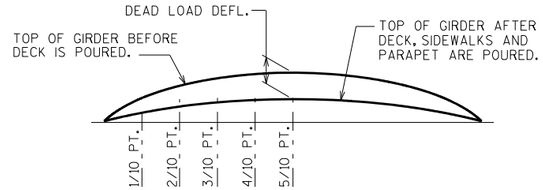
DRAPED STRAND PROFILE

*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	2.07
2	2.76

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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36W" PRESTRESSED GIRDER DETAILS 2

SHEET 12

822

G36W
1-14

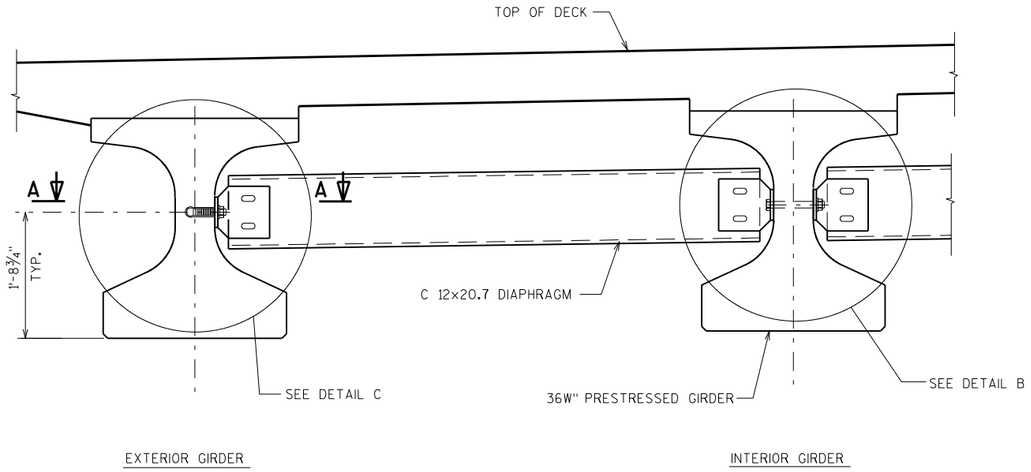
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STATE PROJECT NUMBER

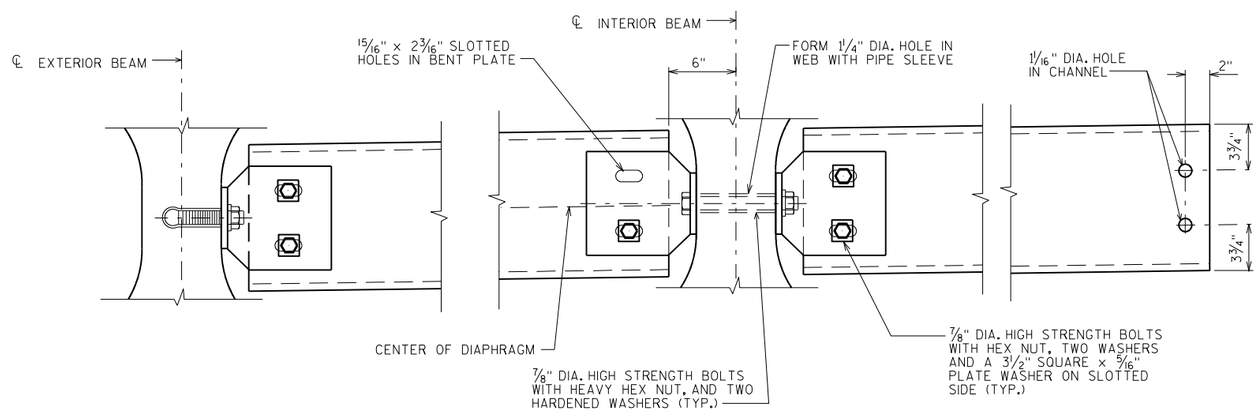
1517-75-75



EXTERIOR GIRDER

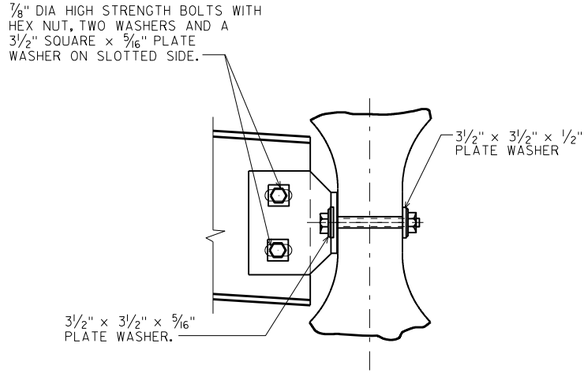
INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL C

DETAIL B



SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°

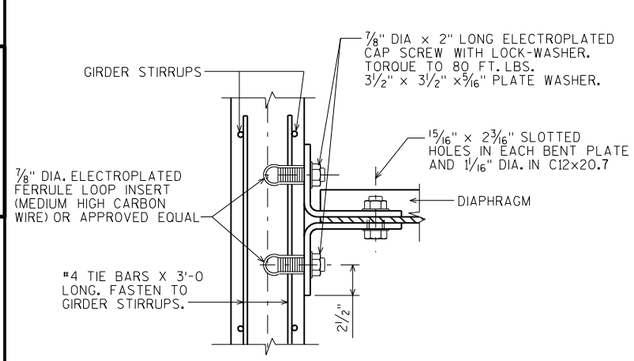
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-70-421", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

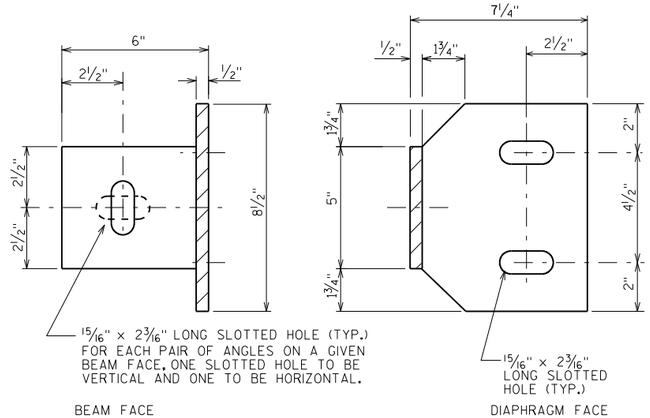
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

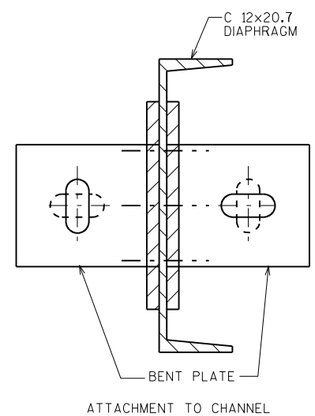
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563. LUBRICANT AND TEST FOR COATED NUTS.



SECTION A-A

(FOR EXTERIOR ATTACHMENT)





ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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STEEL DIAPHRAGM

SHEET 13

823

SCALE =

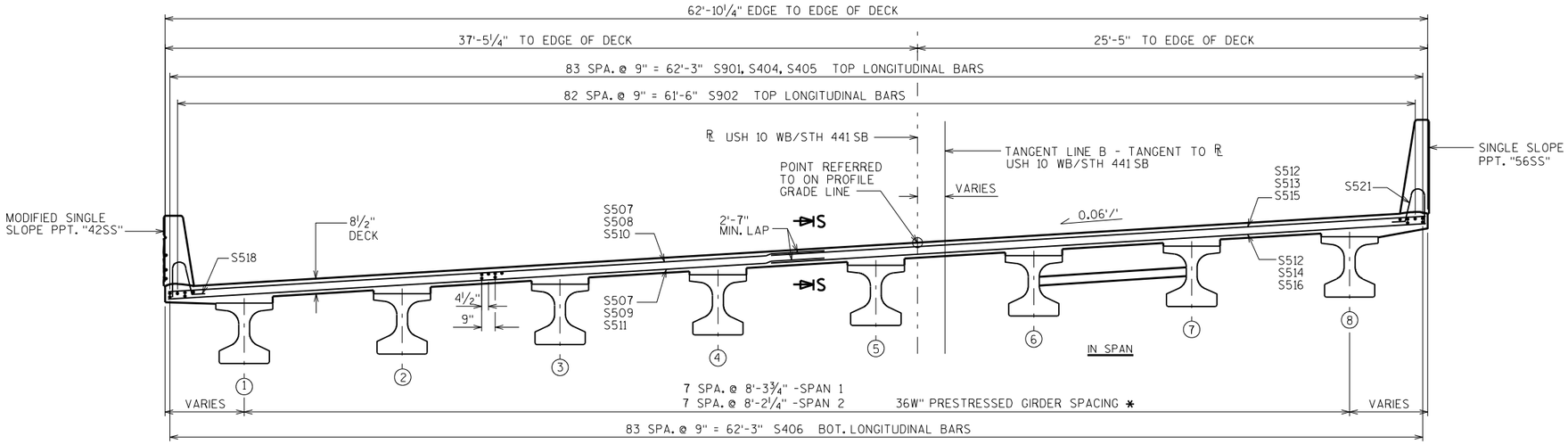
GSTDIA36W
1-13

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STATE PROJECT NUMBER

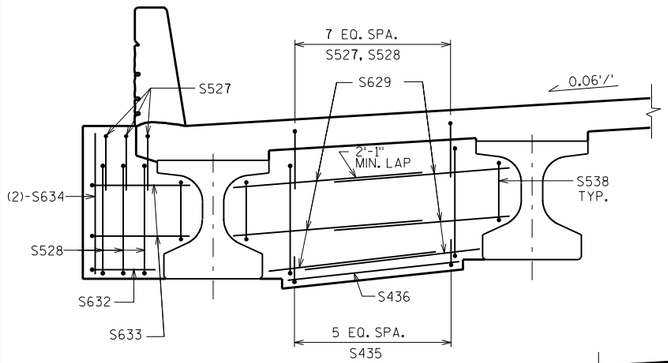
1517-75-75



CROSS SECTION THRU DECK

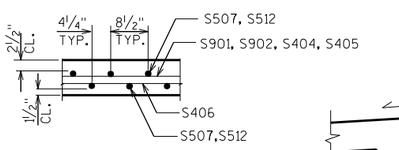
LOOKING EAST

* SPACING PERPENDICULAR TO GIRDERS

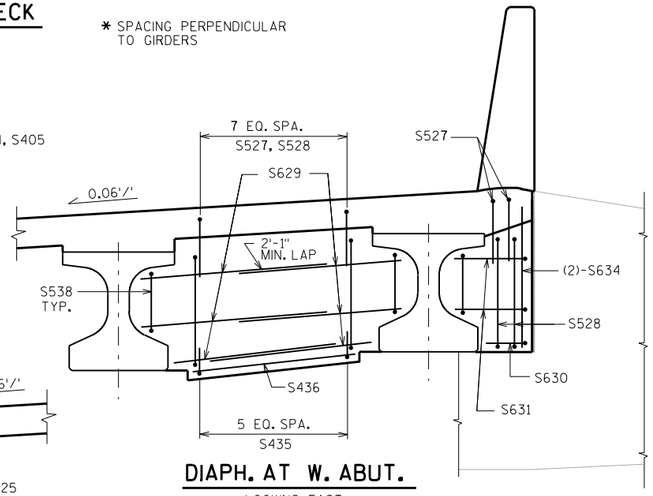


DIAPH. AT W. ABUT.

LOOKING EAST

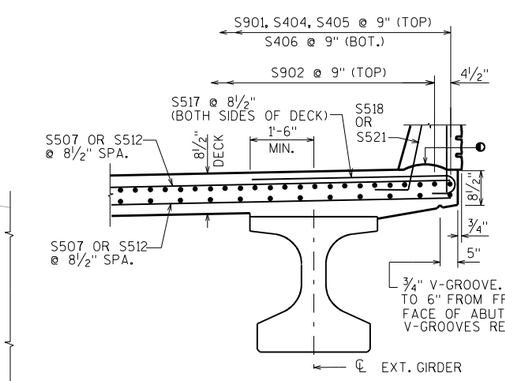


SECTION S-S



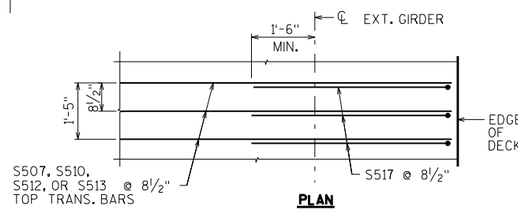
DIAPH. AT W. ABUT.

LOOKING EAST



SECTION

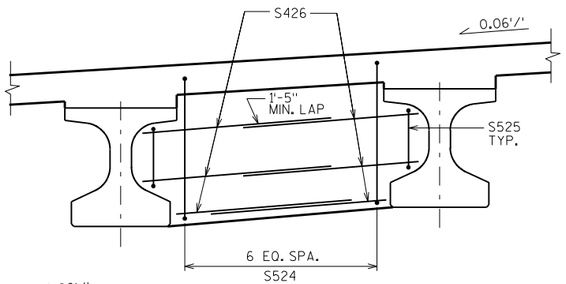
◐ HORIZ. CONST. JOINT STRIKE OFF AND LEAVE ROUGH AS SHOWN



PLAN

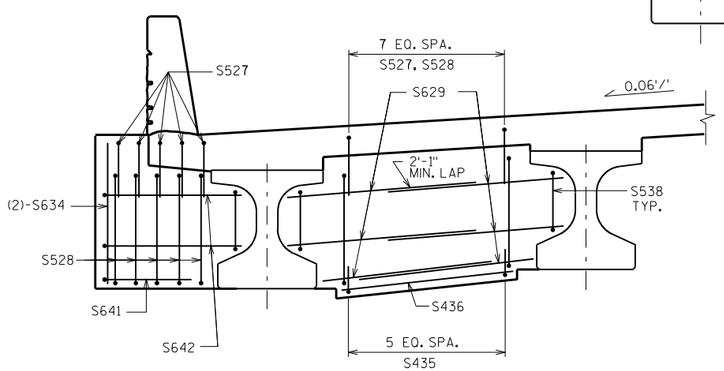
ADDITIONAL REINF. DETAIL

SHOWS TOP TRANSVERSE STEEL ONLY.



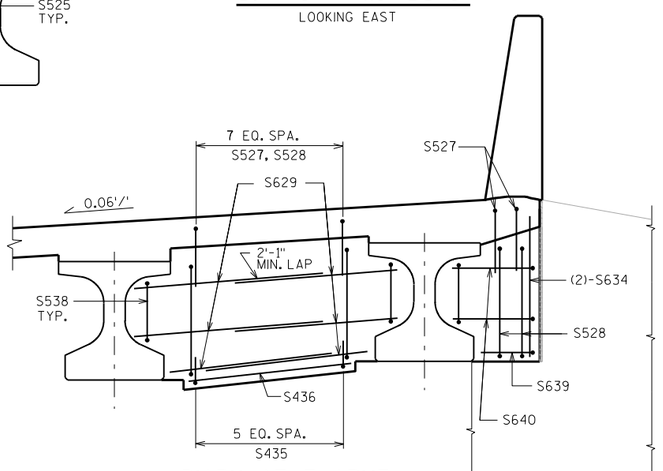
DIAPH. AT PIER

LOOKING EAST



DIAPH. AT E. ABUT.

LOOKING EAST



DIAPH. AT E. ABUT.

LOOKING EAST

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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SUPERSTRUCTURE CROSS SECTION

SHEET 14

824

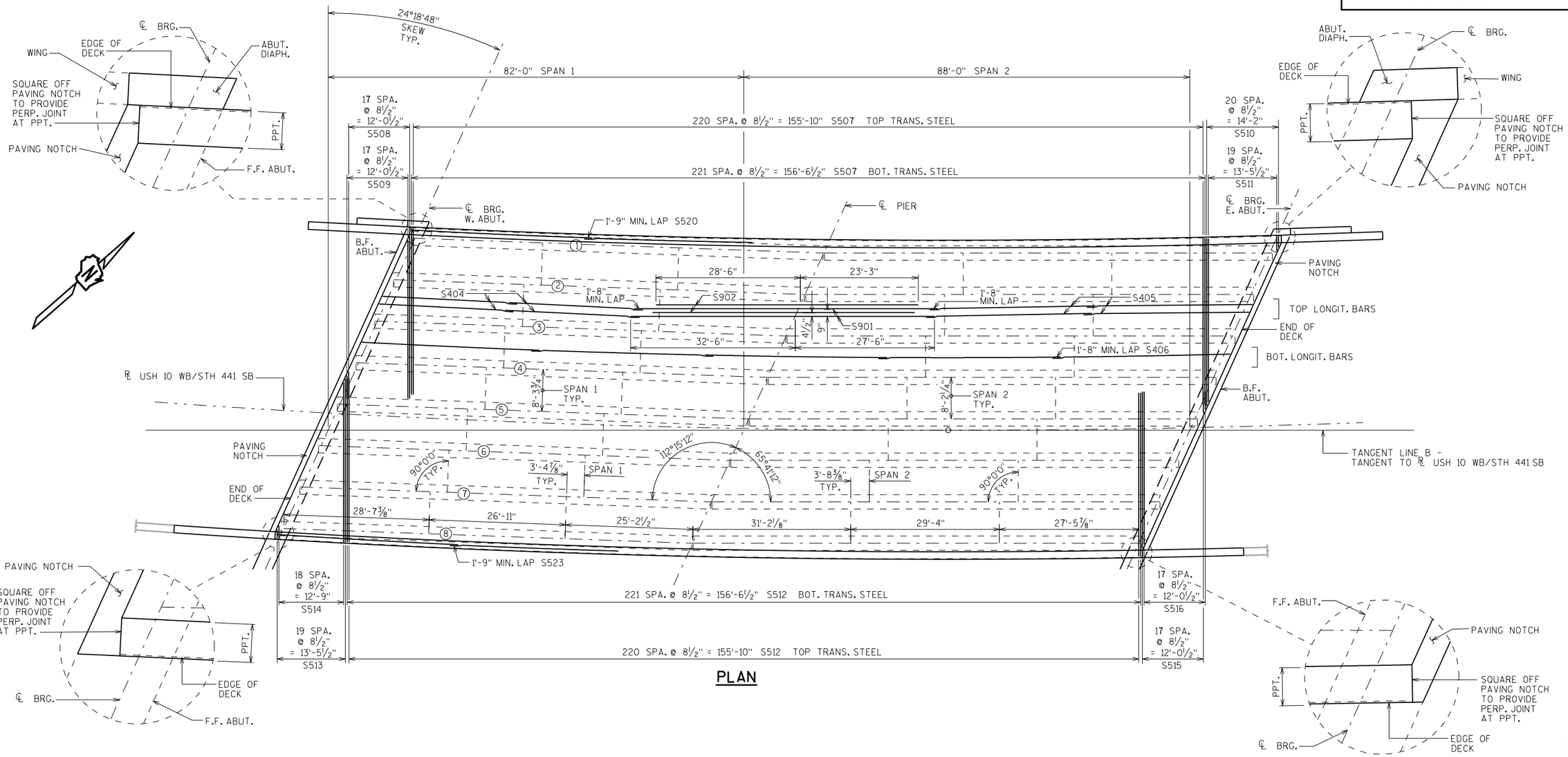
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SCALE =

STATE PROJECT NUMBER

1517-75-75



PLAN

TOP OF DECK ELEVATIONS

	W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	E. ABUT.
N. EOD	779.84	779.79	779.73	779.68	779.62	779.56	779.50	779.44	779.37	779.31	779.24	779.17	779.10	779.02	778.94	778.87	778.79	778.70	778.62	778.54	778.45
GIR. 1	779.89	779.83	779.77	779.71	779.65	779.60	779.54	779.48	779.43	779.37	779.32	779.24	779.17	779.09	779.02	778.94	778.87	778.80	778.72	778.65	778.58
GIR. 2	780.41	780.35	780.29	780.24	780.18	780.12	780.06	780.01	779.95	779.90	779.84	779.77	779.69	779.61	779.54	779.47	779.39	779.32	779.25	779.18	779.11
GIR. 3	780.94	780.88	780.82	780.76	780.70	780.64	780.59	780.53	780.48	780.42	780.37	780.29	780.21	780.14	780.06	779.99	779.91	779.84	779.77	779.70	779.63
GIR. 4	781.46	781.40	781.34	781.28	781.22	781.17	781.11	781.05	781.00	780.94	780.89	780.81	780.74	780.66	780.58	780.51	780.44	780.36	780.29	780.22	780.15
GIR. 5	781.98	781.92	781.86	781.80	781.75	781.69	781.63	781.58	781.52	781.47	781.41	781.33	781.26	781.18	781.11	781.03	780.96	780.89	780.81	780.74	780.67
GIR. 6	782.50	782.45	782.39	782.33	782.27	782.21	782.15	782.10	782.04	781.99	781.93	781.85	781.78	781.70	781.63	781.55	781.48	781.41	781.34	781.27	781.19
GIR. 7	783.03	782.97	782.91	782.85	782.79	782.73	782.68	782.62	782.57	782.51	782.46	782.38	782.30	782.23	782.15	782.08	782.00	781.93	781.86	781.79	781.72
GIR. 8	783.55	783.49	783.43	783.37	783.31	783.26	783.20	783.14	783.09	783.03	782.98	782.90	782.82	782.75	782.67	782.60	782.53	782.45	782.38	782.31	782.24
S. EOD	783.60	783.55	783.50	783.45	783.40	783.34	783.29	783.23	783.17	782.29	783.05	782.99	782.92	782.85	782.78	782.71	782.64	782.56	782.49	782.41	782.33

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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SUPERSTRUCTURE PLAN

SHEET 15

825

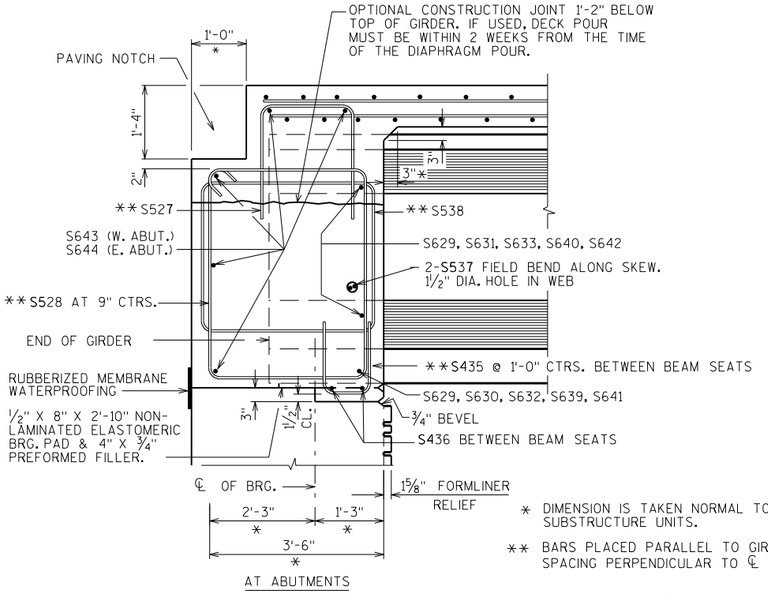
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STATE PROJECT NUMBER

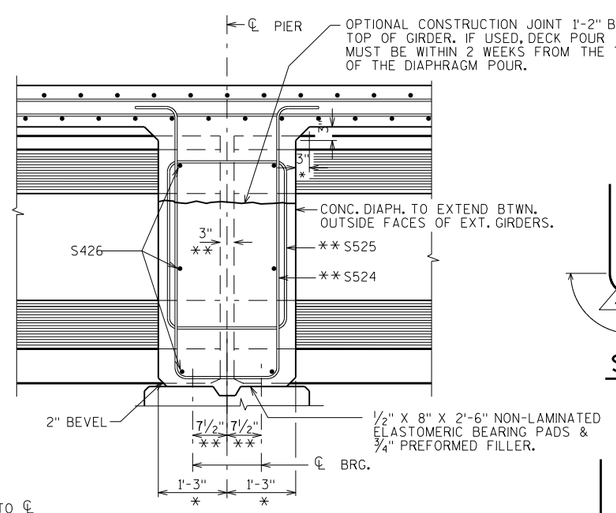
1517-75-75



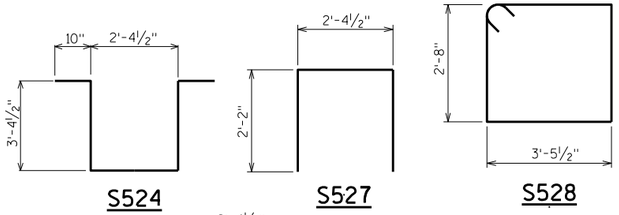
PART LONGIT. SECTION

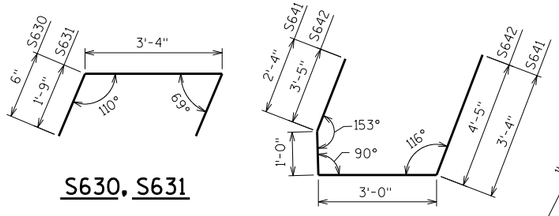
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

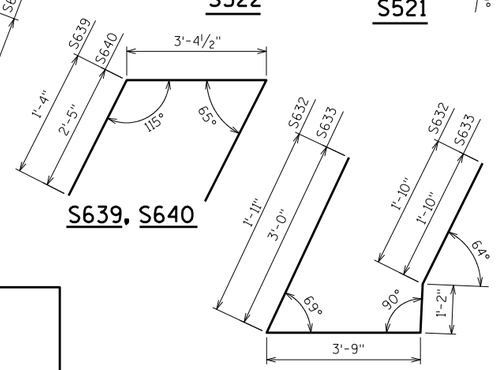
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

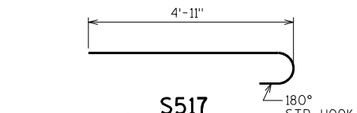


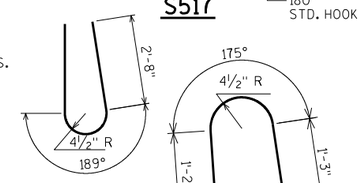
AT PIER DIAPHRAGM

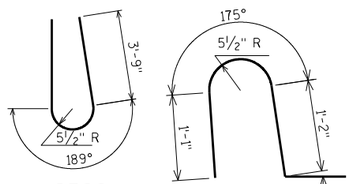


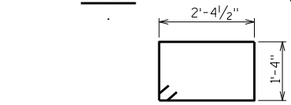


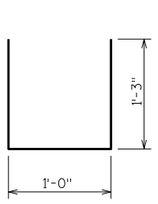


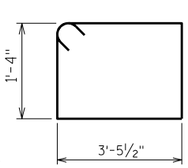


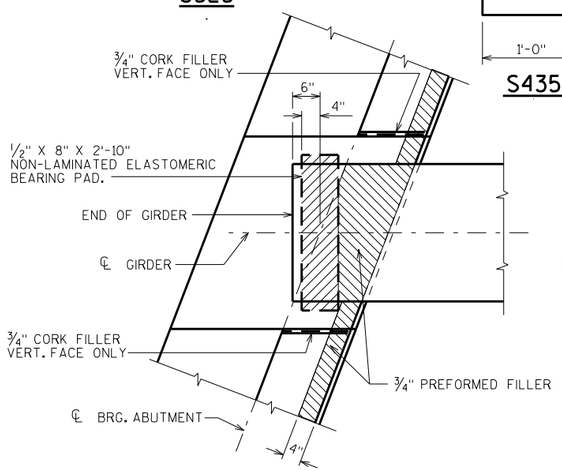


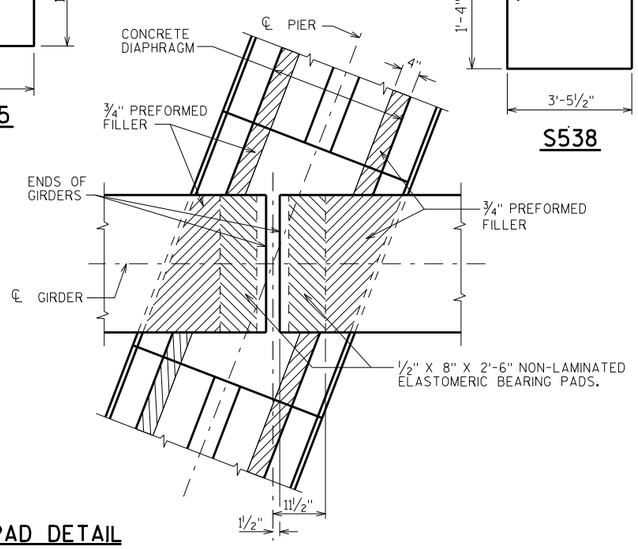












BEARING PAD DETAIL

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
S508	1 SERIES OF 18	5'-5" TO 32'-10"
S509	1 SERIES OF 18	4'-7" TO 31'-3"
S510	1 SERIES OF 21	2'-2" TO 33'-2"
S511	1 SERIES OF 20	2'-11" TO 32'-4"
S513	1 SERIES OF 20	1'-8" TO 32'-3"
S514	1 SERIES OF 19	2'-6" TO 31'-5"
S515	1 SERIES OF 18	4'-4" TO 31'-0"
S516	1 SERIES OF 18	3'-6" TO 30'-2"

BUNDLE AND TAG EACH SERIES SEPARATELY.

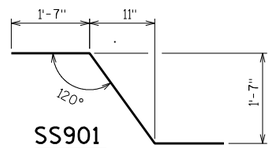
BILL OF BARS

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
S901	X	84	60'-0"			LONGITUDINAL CONTINUITY
S902	X	83	51'-9"			LONGITUDINAL CONTINUITY
~~S903~~		NOT	USED			~~LONGITUDINAL CONTINUITY~~
S404	X	168	26'-8"			LONGITUDINAL TOP
S405	X	168	32'-10			LONGITUDINAL TOP
S406	X	420	35'-9"			LONGITUDINAL BOTTOM
S507	X	443	32'-10"			TRANSVERSE TOP & BOTTOM
S508	X	18	19'-0"		⚠	TRANSVERSE TOP
S509	X	18	17'-11"		⚠	TRANSVERSE BOTTOM
S510	X	21	17'-8"		⚠	TRANSVERSE TOP
S511	X	20	17'-8"		⚠	TRANSVERSE BOTTOM
S512	X	443	32'-4"			TRANSVERSE TOP & BOTTOM
S513	X	20	17'-0"		⚠	TRANSVERSE TOP
S514	X	19	17'-0"		⚠	TRANSVERSE BOTTOM
S515	X	18	17'-8"		⚠	TRANSVERSE TOP
S516	X	18	16'-10"		⚠	TRANSVERSE BOTTOM
S517	X	486	5'-6"	X		TRANSVERSE-DECK EDGE
S518	X	258	4'-5"	X		PPT. 42SS MOD.-VERT.
S519	X	258	6'-8"	X		PPT. 42SS MOD.-VERT.
S520	X	40	36'-0"			PPT. 42SS MOD.-HORIZ.
S521	X	257	4'-6"	X		PPT. 56SS-VERT.
S522	X	257	9'-1"	X		PPT. 56SS-VERT.
S523	X	50	36'-0"			PPT. 56SS-HORIZ.
S524	X	42	10'-4"	X		PIER DIAPH.
S525	X	14	8'-1"	X		PIER DIAPH.
S426	X	84	4'-10"			PIER DIAPH.
S527	X	124	6'-6"	X		ABUT. DIAPH.
S528	X	124	12'-11"	X		ABUT. DIAPH.
S629	X	84	5'-2"			ABUT. DIAPH.
S630	X	1	4'-1"	X		ABUT. DIAPH.
S631	X	2	6'-7"	X		ABUT. DIAPH.
S632	X	1	8'-3"	X		ABUT. DIAPH.
S633	X	2	9'-4"	X		ABUT. DIAPH.
S634	X	8	3'-6"			ABUT. DIAPH.
S435	X	84	3'-4"	X		ABUT. DIAPH.
S436	X	28	4'-6"			ABUT. DIAPH.
S537	X	32	6'-0"			ABUT. DIAPH.
S538	X	32	10'-3"	X		ABUT. DIAPH.
S639	X	1	5'-9"	X		ABUT. DIAPH.
S640	X	2	7'-11"	X		ABUT. DIAPH.
S641	X	1	9'-4"	X		ABUT. DIAPH.
S642	X	2	11'-6"	X		ABUT. DIAPH.
S643	X	10	45'-1"			ABUT. DIAPH. WEST
S644	X	10	46'-9"			ABUT. DIAPH. EAST

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

STAINLESS STEEL →						
SS901		136	5'-0"	X		ABUT. DIAPH.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

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SUPERSTRUCTURE DETAILS

SHEET 16

826

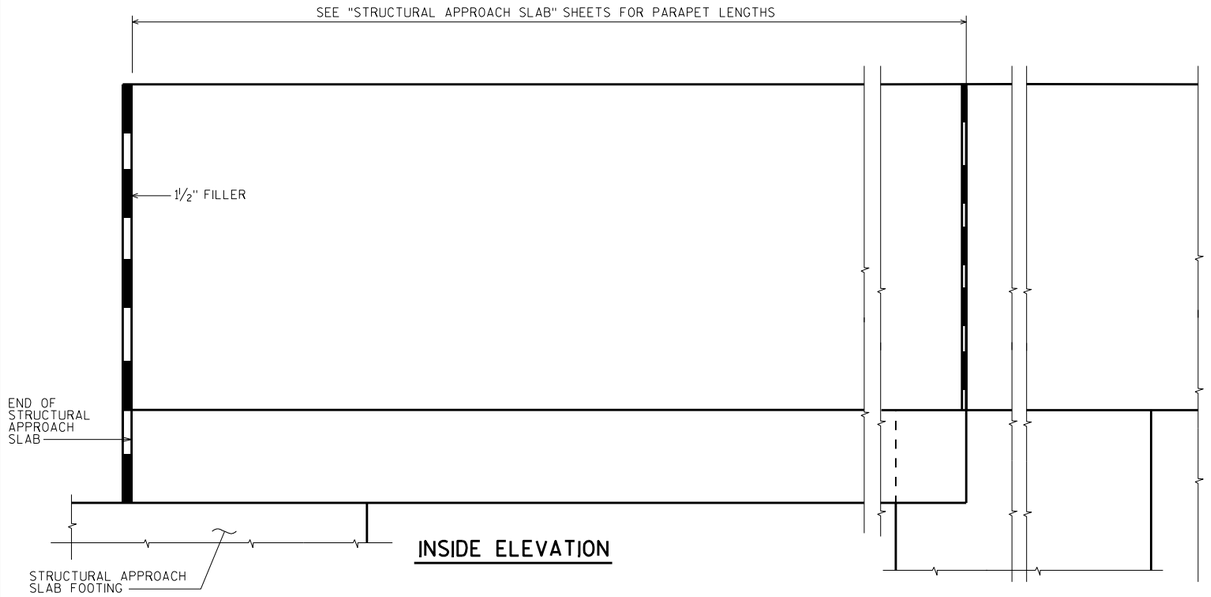
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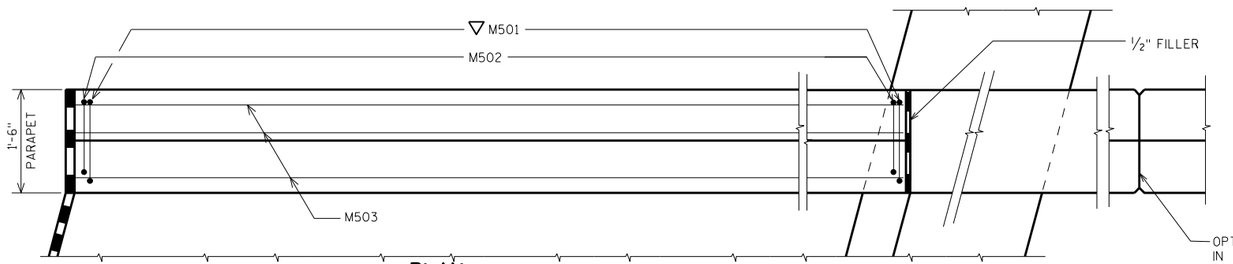
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STATE PROJECT NUMBER

1517-75-75

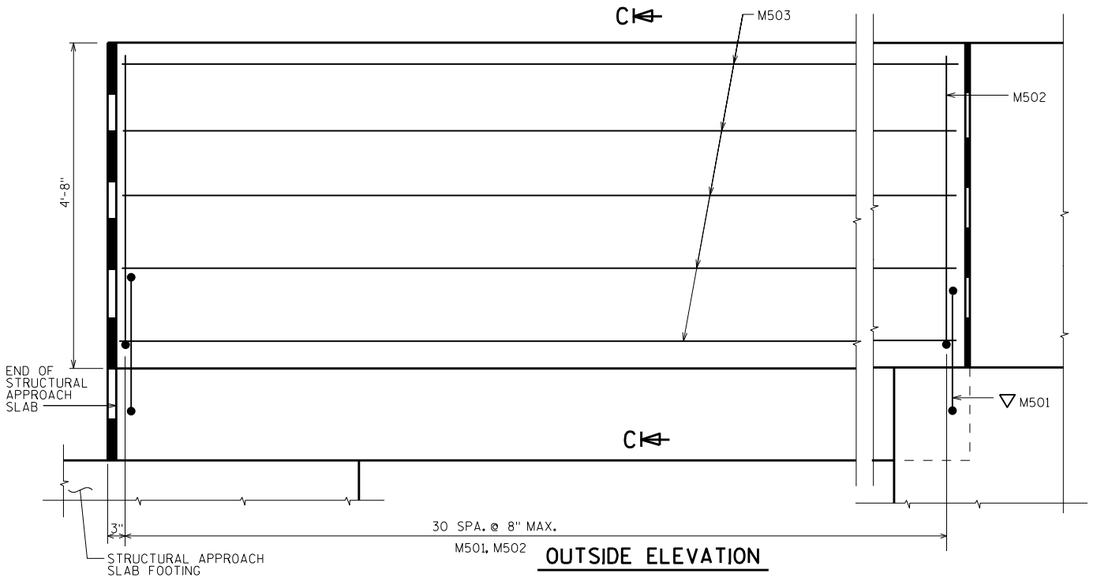


INSIDE ELEVATION

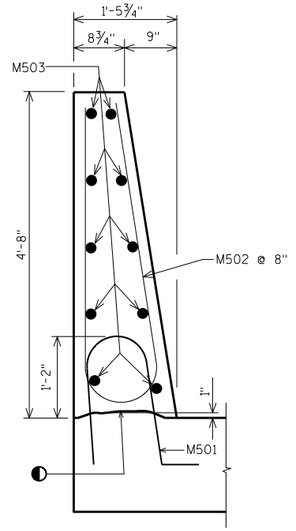


PLAN

PARAPET AT EAST APPROACH SHOWN
(WEST APPROACH HAS OBTUSE SKEW)



OUTSIDE ELEVATION

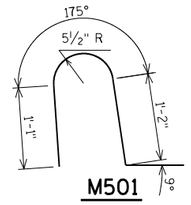


SECTION C

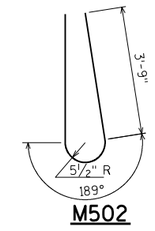
BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS

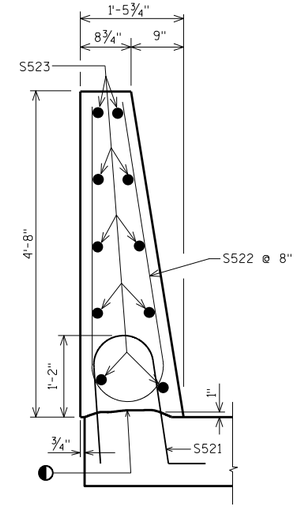
BAR MARK	COAT	WEST APPR.	EAST APPR.	LENGTH	BENT	BAR SERIES	LOCATION
M501	X	31	31	4'-6"	X		PARAPET VERT.
M502	X	31	31	9'-1"	X		PARAPET VERT.
M503	X	10	10	19'-6"			PARAPET HORIZ.



M501



M502



SECTION THRU PARAPET
56SS ON DECK

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽ M501 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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY WWR | PLANS CK'D. JLR

SINGLE SLOPE PARAPET 56SS

SHEET 17

827

SCALE = 1:1

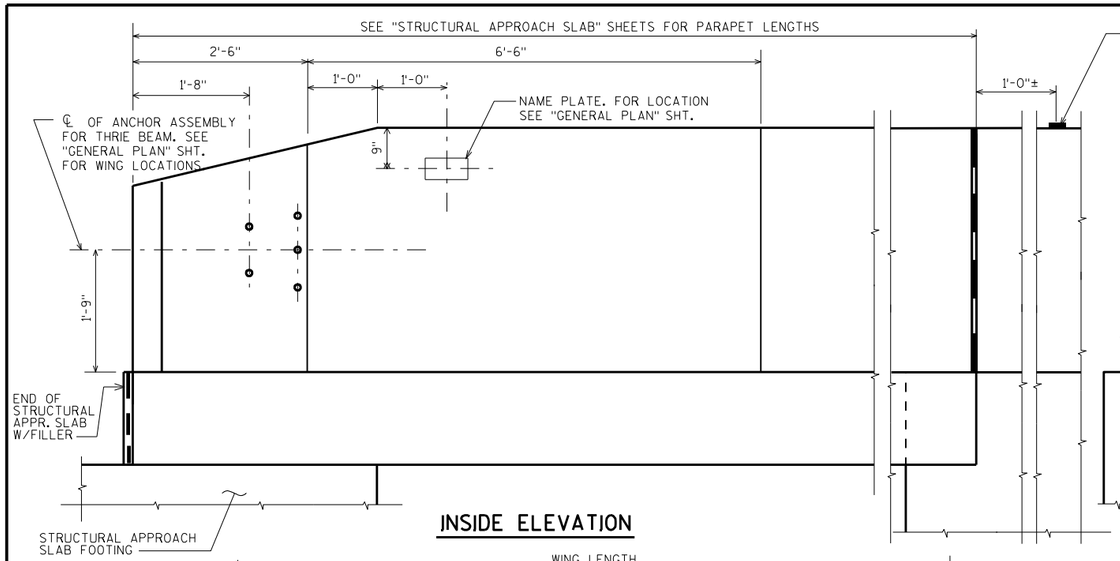
SS56APP
7-14

8

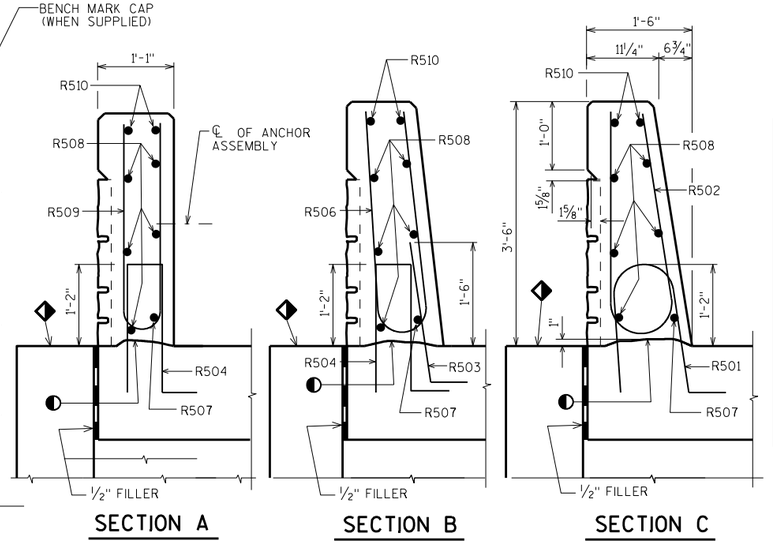
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STATE PROJECT NUMBER

1517-75-75



INSIDE ELEVATION



SECTION A

SECTION B

SECTION C

BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS

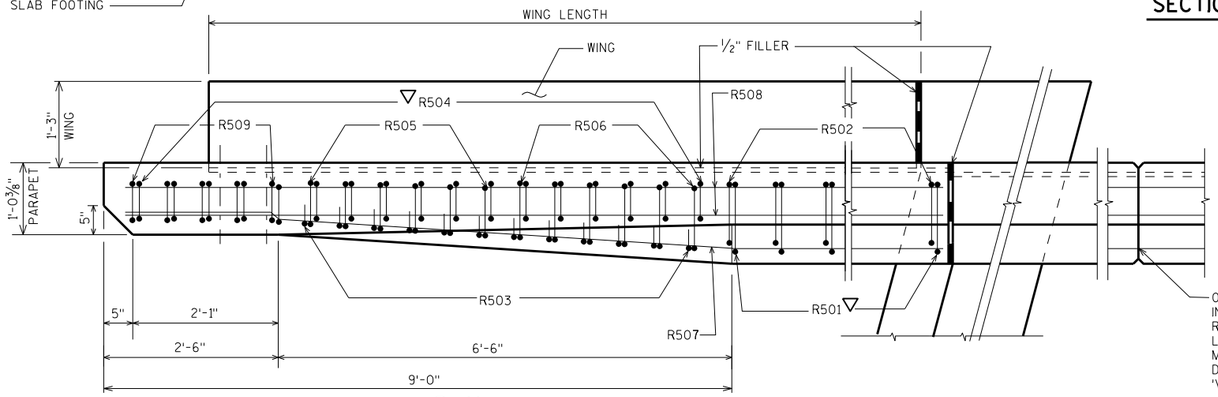
BAR MARK	COAT	WEST APPR.	EAST APPR.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	18	18	4'-5"	X		PARAPET VERT.
R502	X	18	18	6'-8"	X		PARAPET VERT.
R503	X	12	12	2'-9"	X		PARAPET VERT.
R504	X	17	17	4'-4"	X		PARAPET VERT.
R505	X	6	6	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	19'-6"	X		PARAPET HORIZ.
R508	X	5	5	19'-7"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	19'-6"	X		PARAPET HORIZ

⚠ 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 TABLE

MARK	NO. REQD.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"

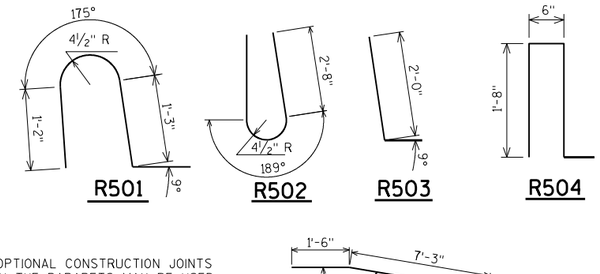
BUNDLE AND TAG EACH SERIES SEPARATELY.

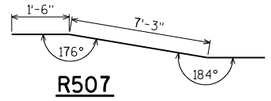


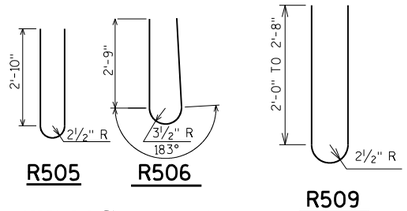
PLAN

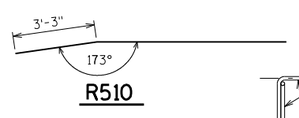
PARAPET AT WEST APPROACH SHOWN. (EAST APPROACH HAS OBTUSE SKEW)

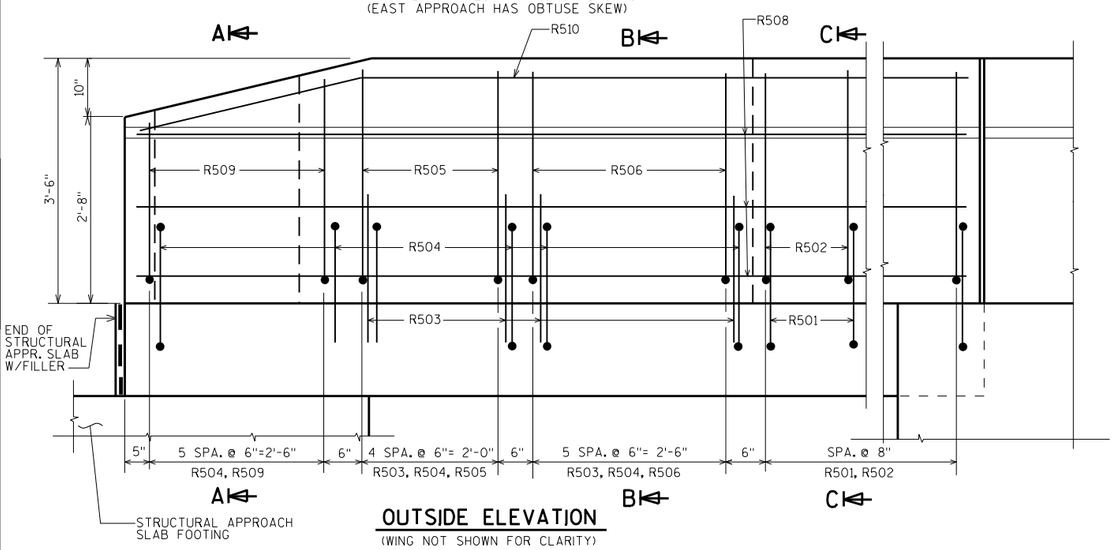
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.





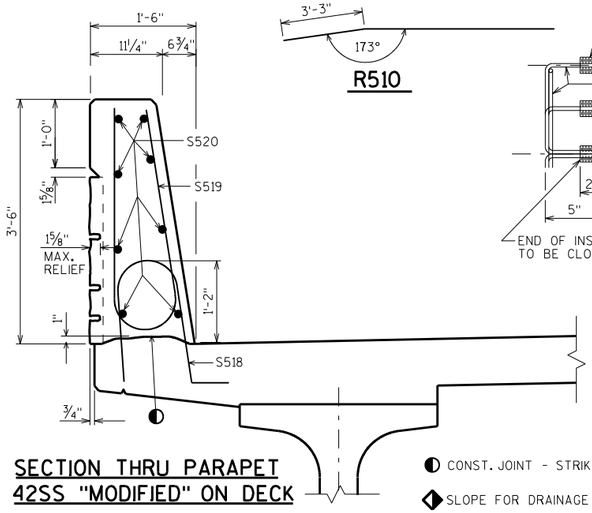






OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)

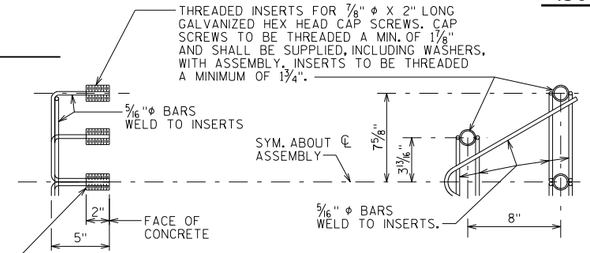


SECTION THRU PARAPET 42SS "MODIFIED" ON DECK

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ R501 AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.



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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY WWR | PLANS CK'D. JLR

SINGLE SLOPE PARAPET 42SS "MODIFIED"

SHEET 18

828

SCALE = 1:1

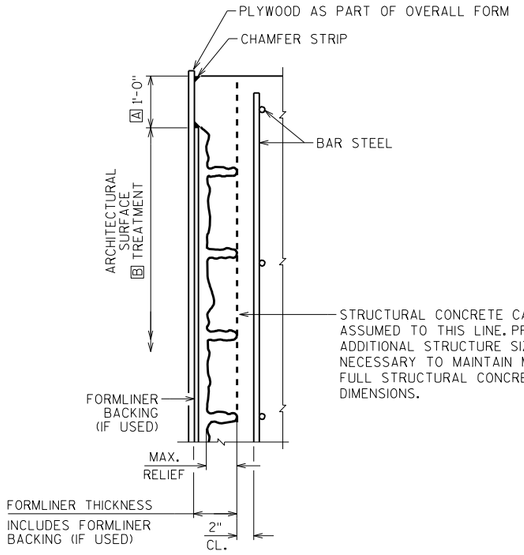
SS42APP
7-14

8

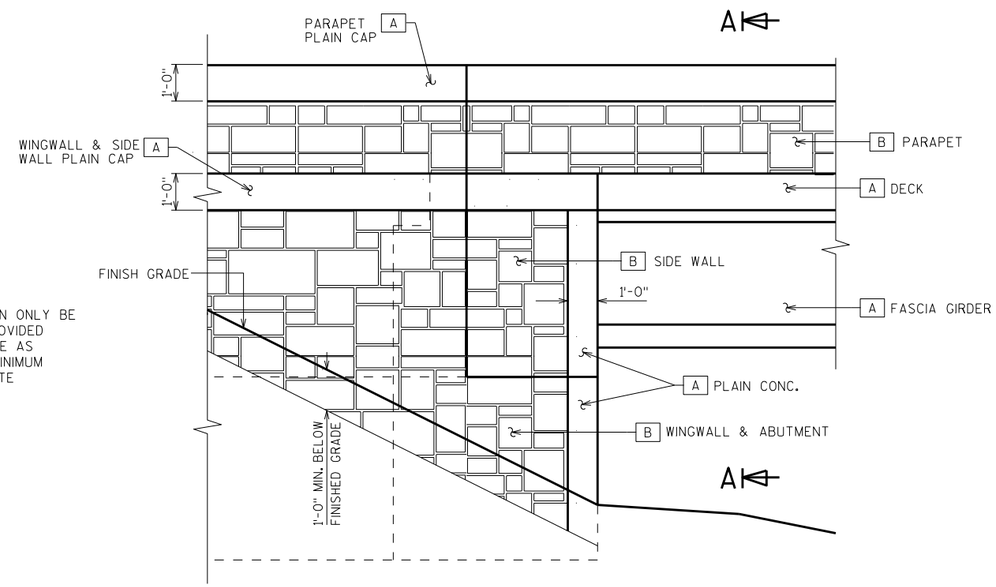
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STATE PROJECT NUMBER

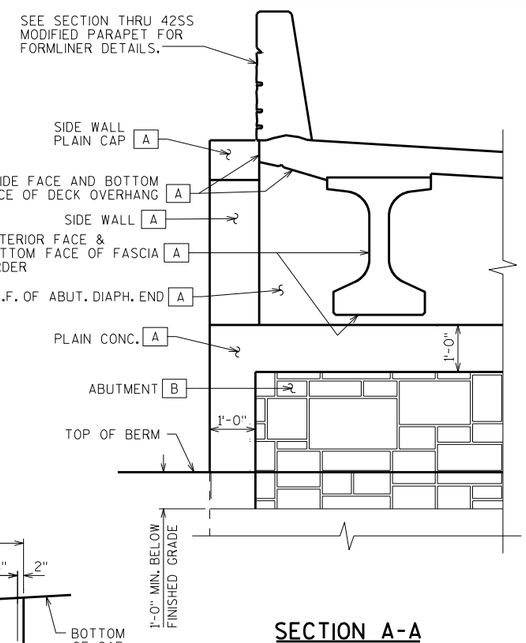
1517-75-75



SECTION THROUGH PARAPET FORMLINER



ABUTMENT STAINING DETAIL

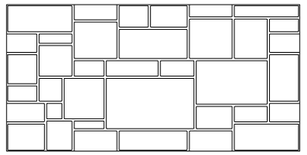


SECTION A-A

CONCRETE STAINING SCHEDULE

MARK	COLOR	FED. COLOR NO.	LOCATION
A	BASKET BEIGE	33564	FASCIA GIRDERS, DECK EDGE, WING PLAIN CAPS, PIER CAPS, AND COLUMNS
B	LATTE	33522	WINGWALLS, SIDE WALLS, PIER COLUMN SIDES

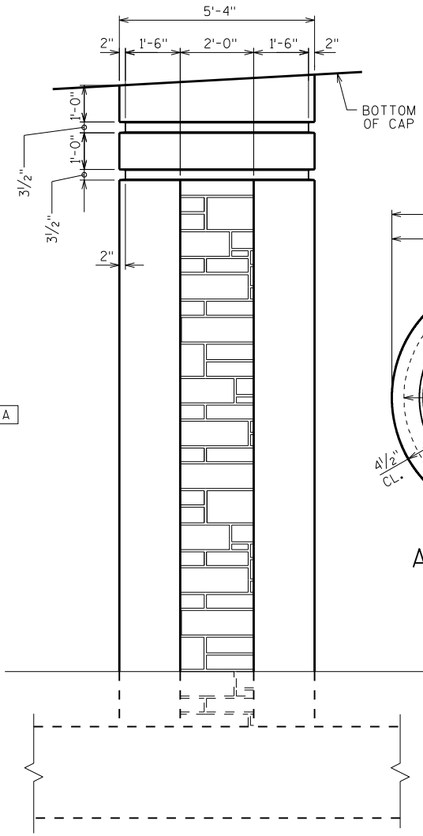
NOTE: 1. FINISH ON COLORS IS FLAT (LUSTERLESS)

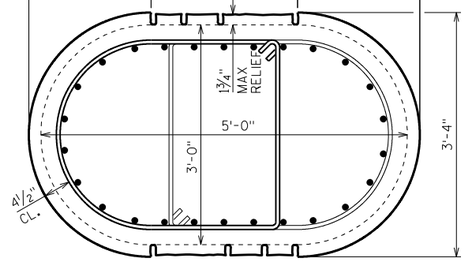


ASHLAR

MAXIMUM RELIEF: 1⅝"
AVERAGE RELIEF: 1¼"
LINER THICKNESS*: 2½"
STONE SIZE: H: 3" - 17"
W: 5"-29"

* INCLUDES INTERNAL PLYWOOD BACKING





AESTHETIC OVAL COLUMN W/ASHLAR FORMLINER

AREA = 13.07 SF (STRUCTURAL)
AREA = 15.39 SF (TOTAL)

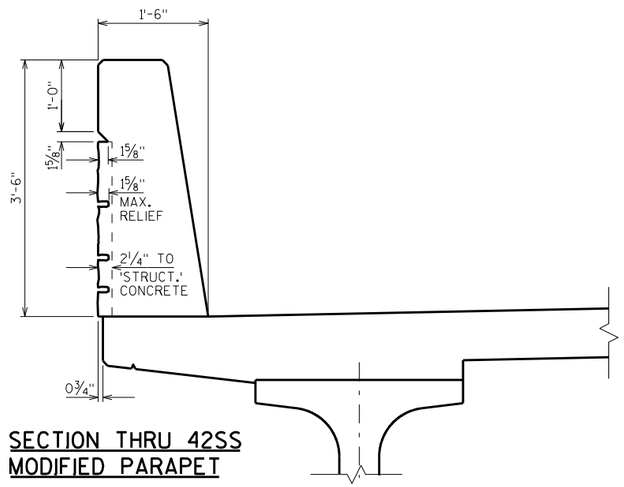
NOTES

FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

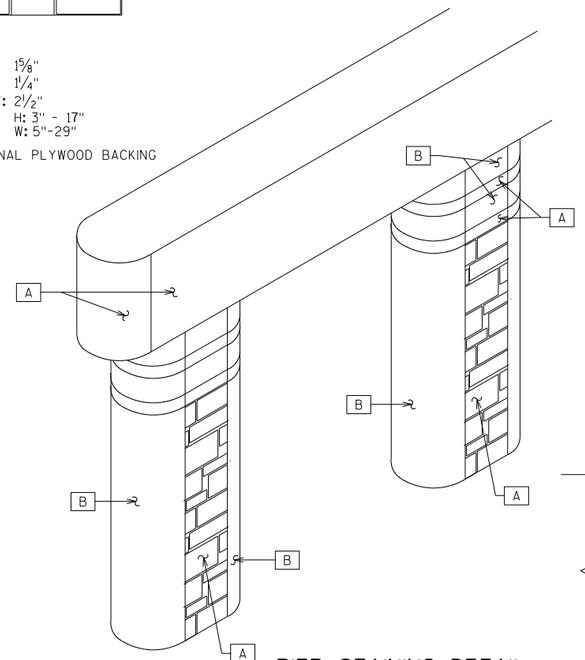
THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAPAROUND/MATCH FORMLINER PATTERN AT CORNERS.



SECTION THRU 42SS MODIFIED PARAPET



PIER STAINING DETAIL

PIER COLUMN DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY WWR | PLANS CK'D. JLR

AESTHETIC DETAILS

SHEET 19

829

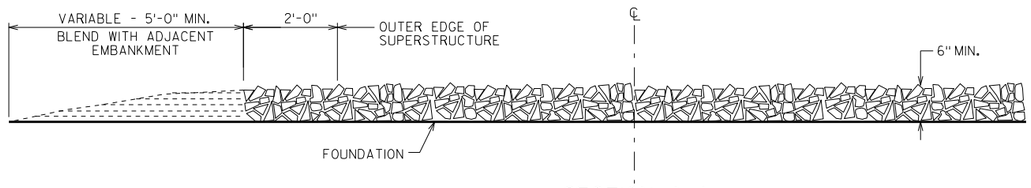
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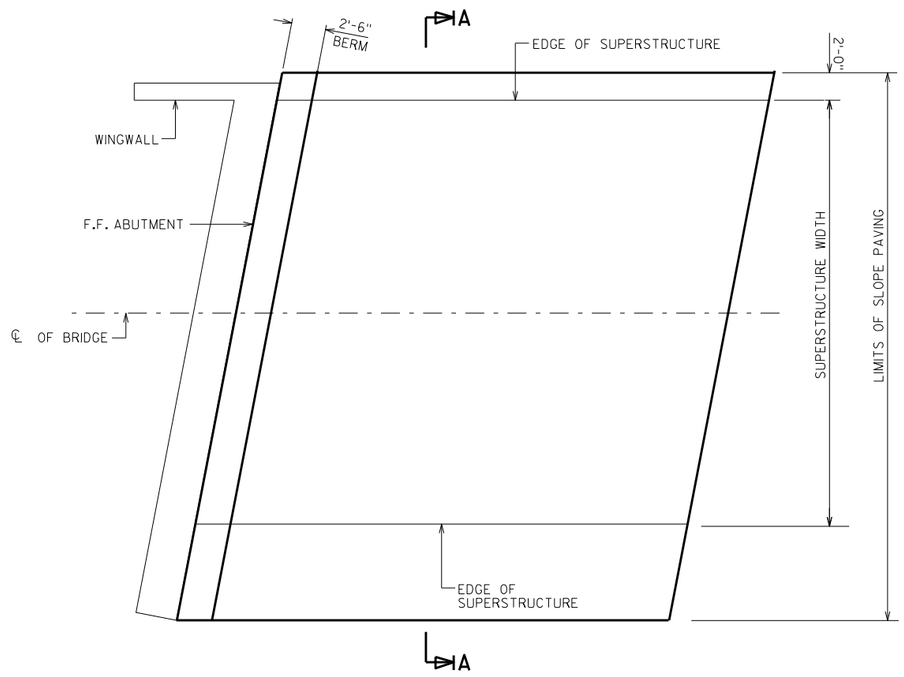
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STATE PROJECT NUMBER

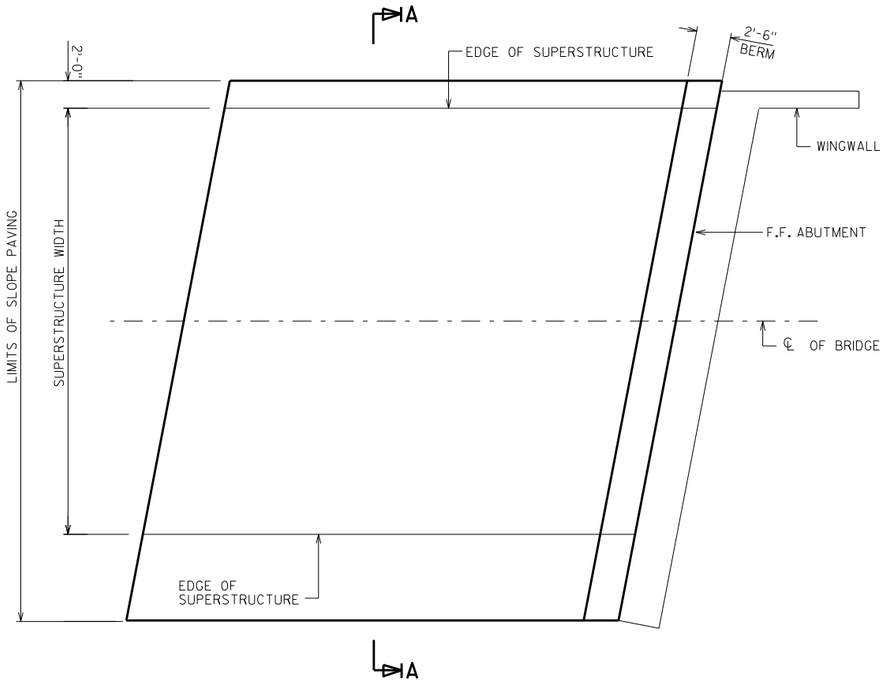
1517-75-75



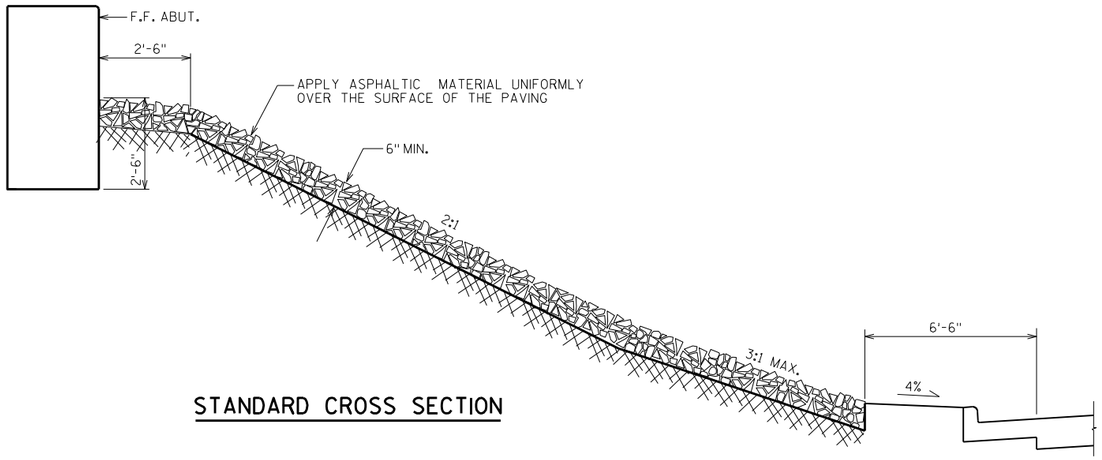
SECTION A-A



WEST PLAN



EAST PLAN



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-70-421

DRAWN BY WWR | PLANS CK'D. JLR

SLOPE PAVING (CRUSHED AGGREGATE)

SHEET 20

830

SCALE =

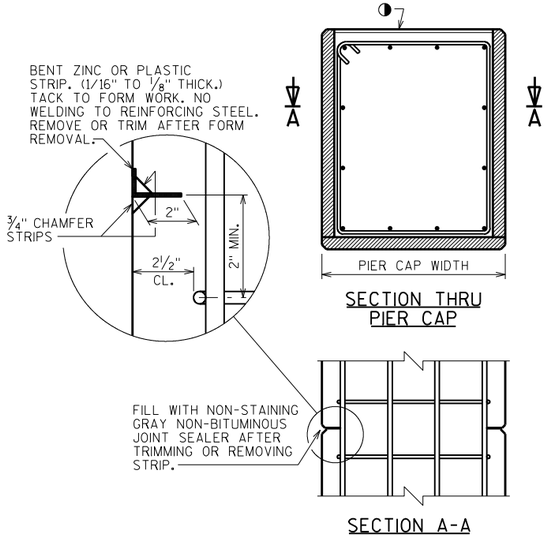
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STATE PROJECT NUMBER

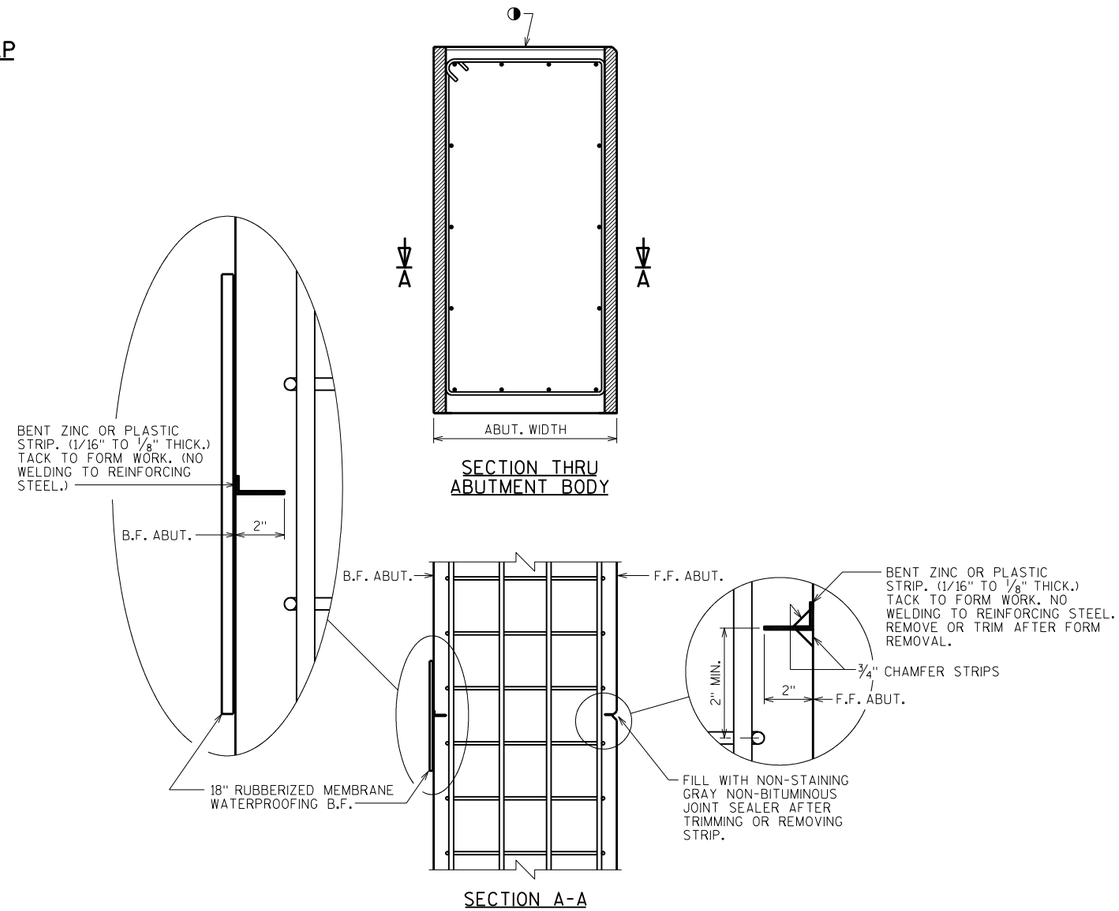
1517-75-75



SECTION THRU PIER CAP

SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT PIER CAP



SECTION THRU ABUTMENT BODY

SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

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STRUCTURE B-70-421

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ALTERNATE CONSTRUCTION JOINT

SHEET 21

831

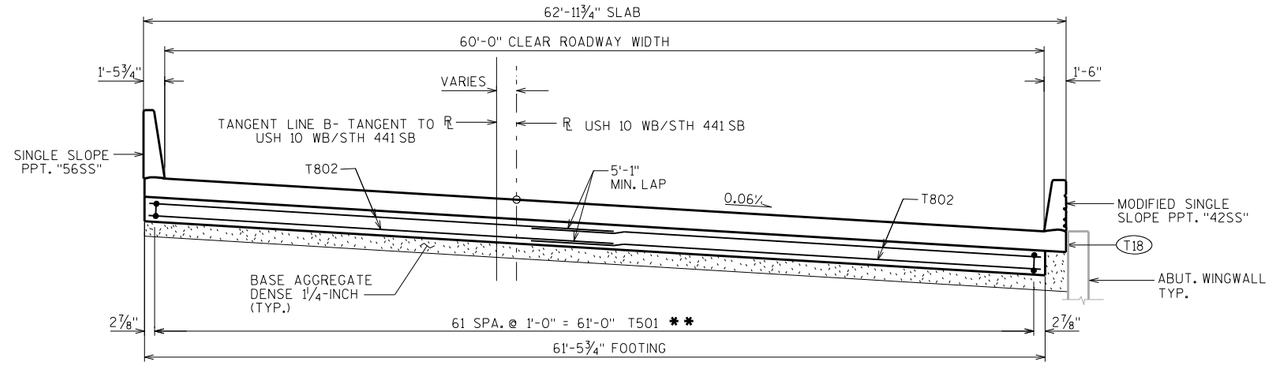
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STATE PROJECT NUMBER
1517-75-75



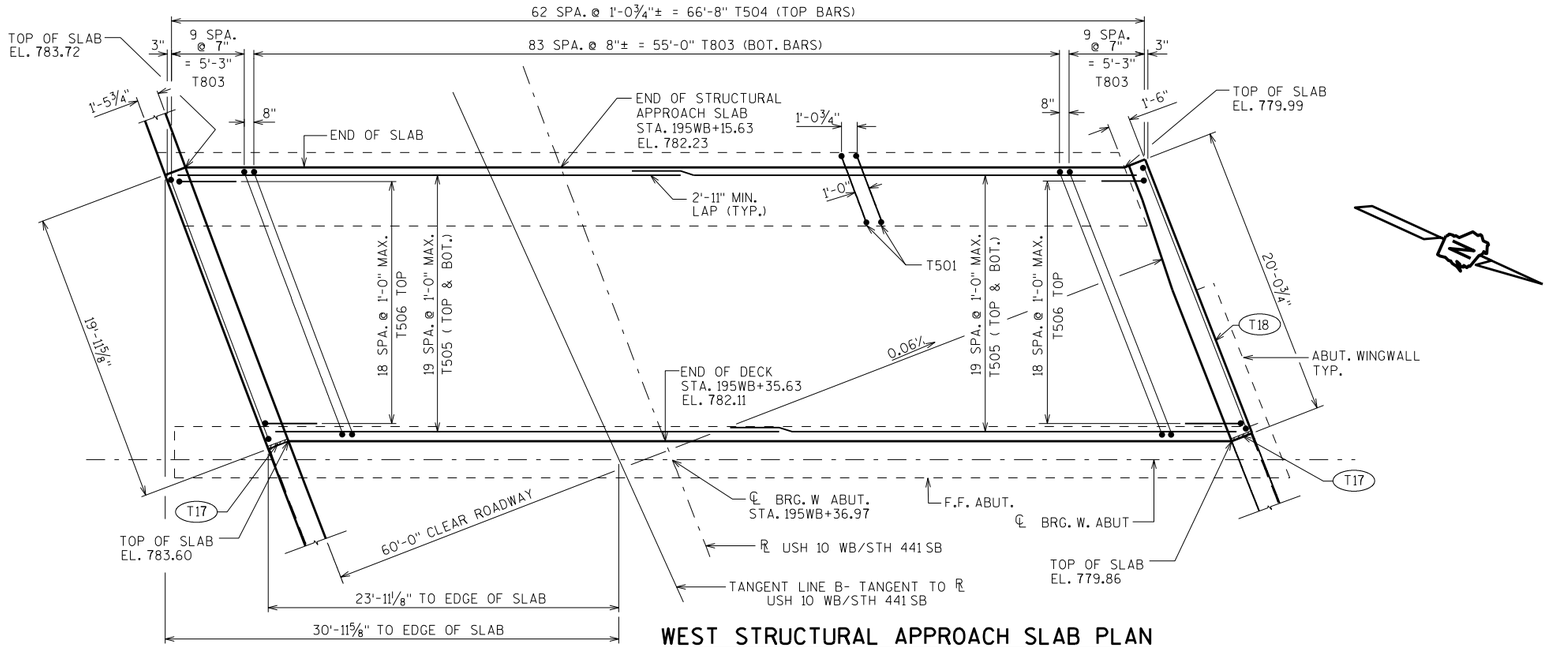
CROSS SECTION THRU ROADWAY-LOOKING DOWNSTATION

(SHOWING FOOTING STEEL ONLY)

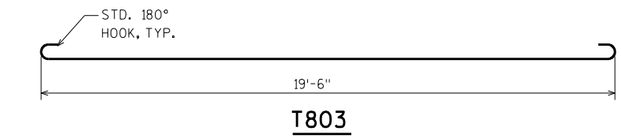
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

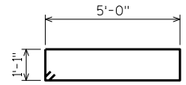
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	62	12'-10"	X		APPROACH SLAB FTG. - STIRRUP
T802	X	24	35'-3"			APPROACH SLAB FTG. - TRANS.
T803	X	104	21'-4"	X		APPROACH SLAB - LONG. - BOT.
T504	X	63	19'-6"			APPROACH SLAB - LONG. - TOP
T505	X	80	35'-0"			APPROACH SLAB - LONG - TOP & BOT.
T506	X	38	4'-1"	X		APPROACH SLAB - TRANS - TOP.



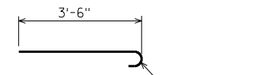
WEST STRUCTURAL APPROACH SLAB PLAN



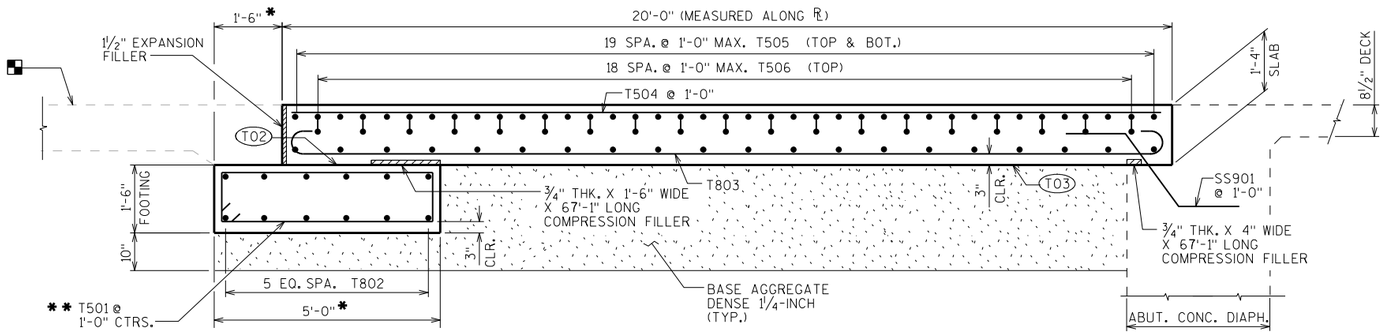
T803



T501



T506



SECTION THRU STRUCTURAL APPROACH SLAB

T02 STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

T03 PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

T17 ½" FILLER (INCLUDED IN PARAPET LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES 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.

T18 ½" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES 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.

* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄

■ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY MJH | PLANS CK'D. JLR

WEST STRUCTURAL APPROACH SLAB

SHEET 22

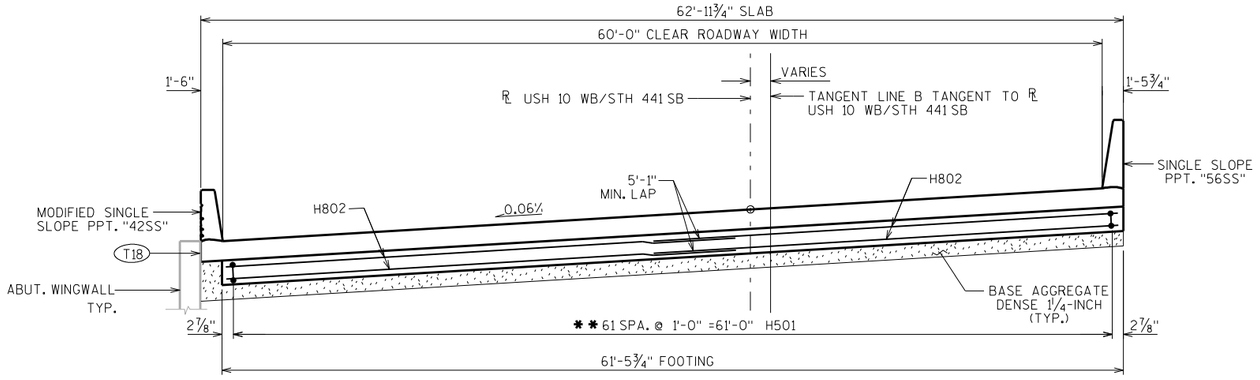
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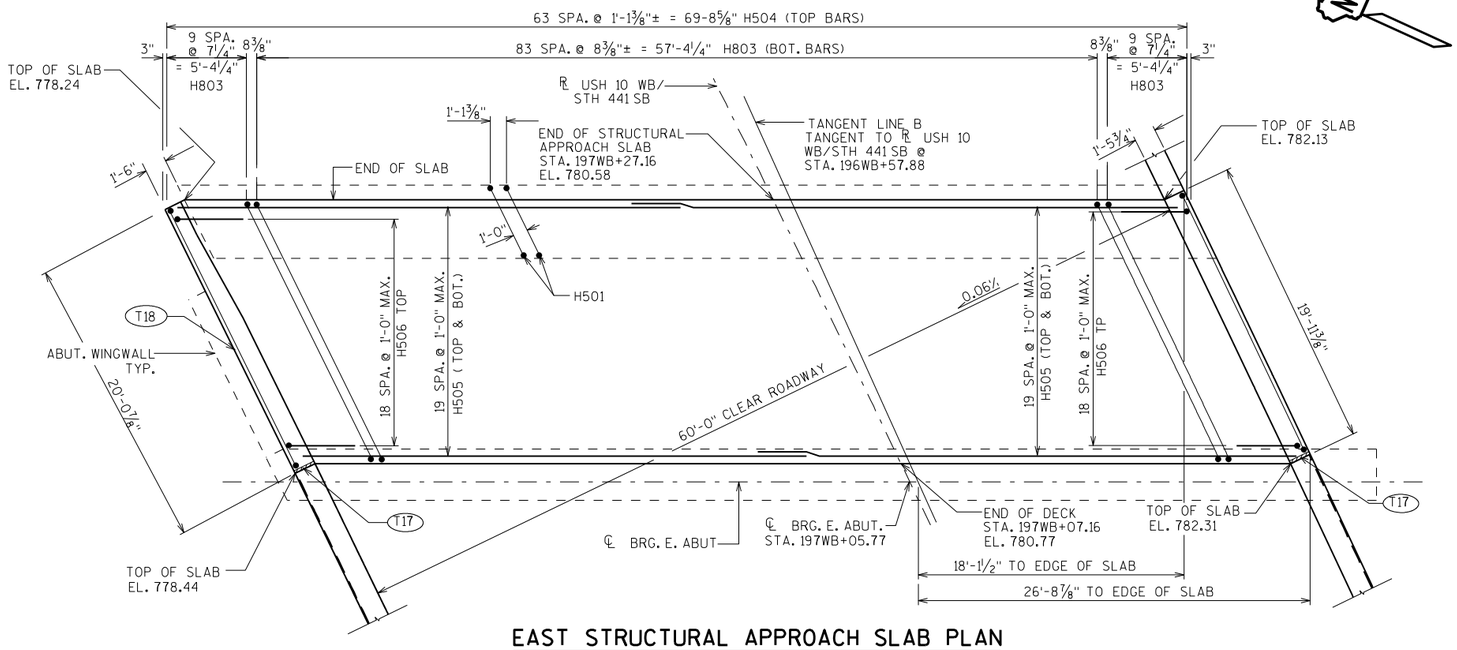
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STATE PROJECT NUMBER
1517-75-75

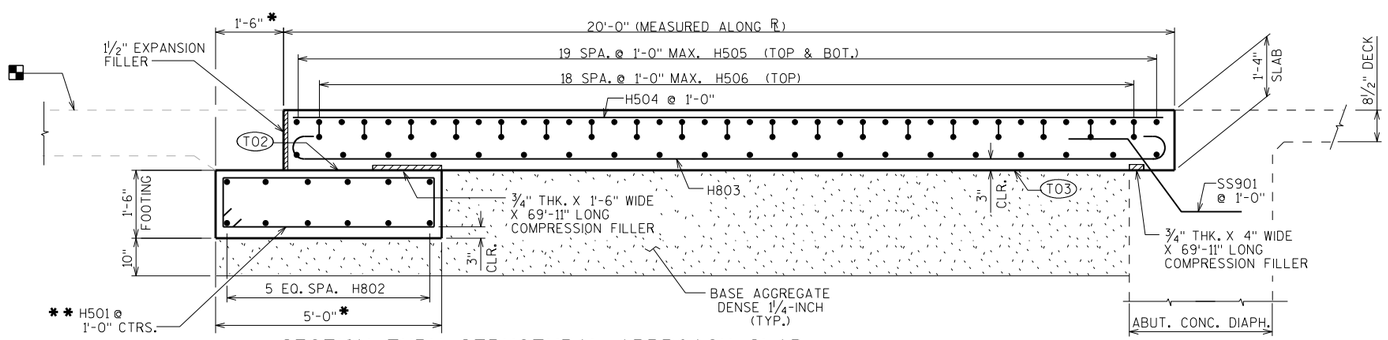


CROSS SECTION THRU ROADWAY- LOOKING UPSTATION

(SHOWING FOOTING STEEL ONLY)



EAST STRUCTURAL APPROACH SLAB PLAN

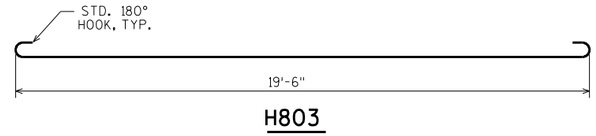


SECTION THRU STRUCTURAL APPROACH SLAB

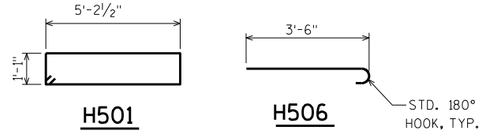
BILL OF BARS

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
H501	X	62	13'-3"	X		APPROACH SLAB FTG. - STIRRUP
H802	X	24	36'-8"			APPROACH SLAB FTG. - TRANS.
H803	X	104	21'-4"	X		APPROACH SLAB - LONG. - BOT.
H504	X	64	19'-6"			APPROACH SLAB - LONG. - TOP
H505	X	80	34'-11"			APPROACH SLAB - LONG - TOP & BOT.
H506	X	38	4'-1"	X		APPROACH SLAB - TRANS - TOP.



H803



H501 H506

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

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* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄

▪ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-421

DRAWN BY MJH | PLANS CK'D. JLR

EAST STRUCTURAL APPROACH SLAB

SHEET 23

833

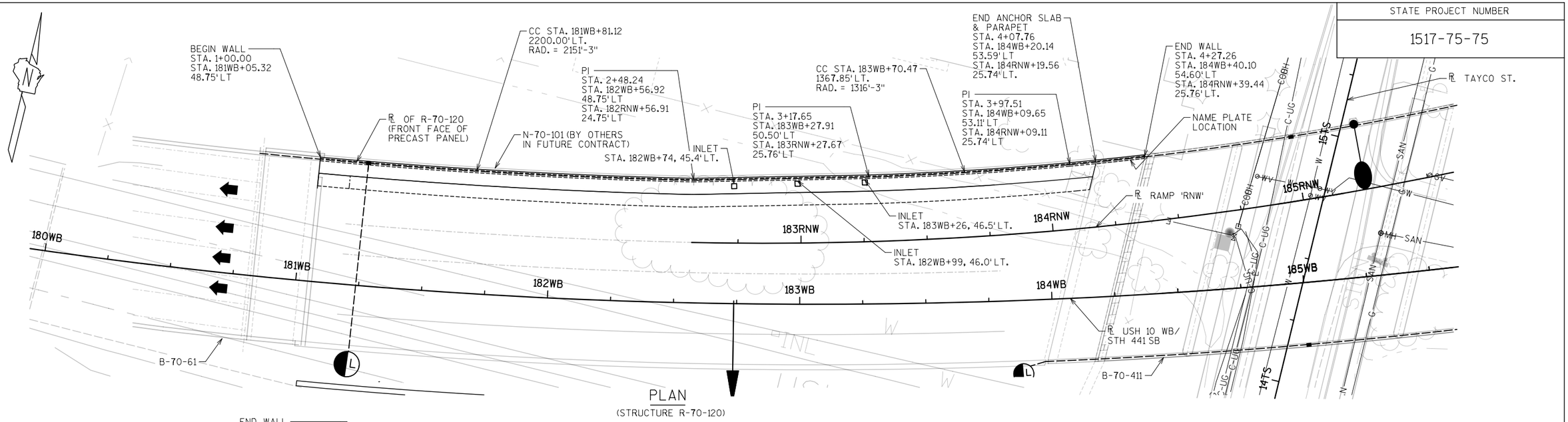
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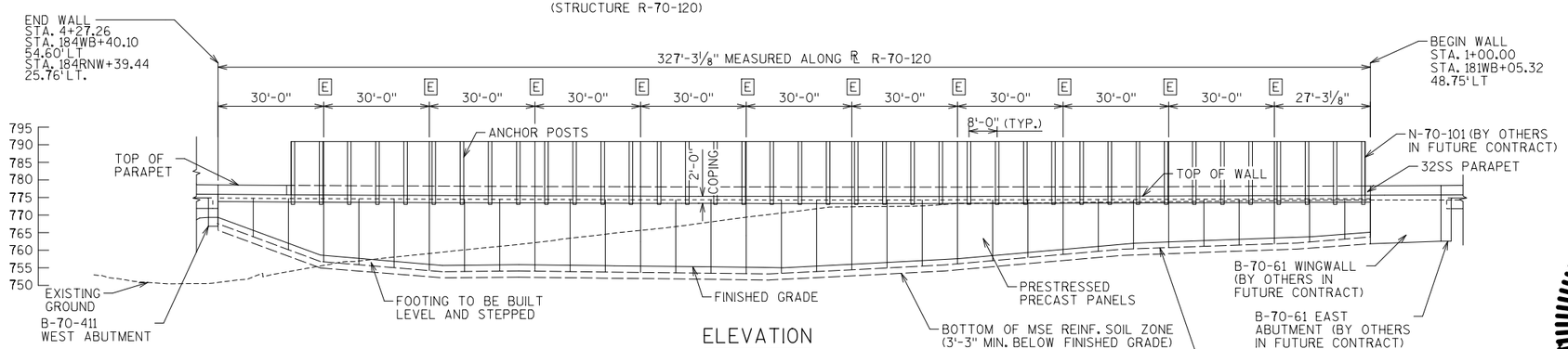
STATE PROJECT NUMBER

1517-75-75



PLAN

(STRUCTURE R-70-120)



ELEVATION

(LOOKING SOUTH AT FRONT FACE OF WALL)

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. DESIGN DATA AND QUANTITIES
3. WALL DETAILS 1
4. WALL DETAILS 2
5. WALL DETAILS 3
6. NOISE BARRIER POST ANCHORAGE
7. SINGLE SLOPE PARAPET 32SS
8. SINGLE SLOPE PARAPET 32SS ELECTRICAL
9. END OF ANCHOR SLAB DETAILS
10. ANCHOR SLAB AT INLET
11. AESTHETIC DETAILS
12. SUBSURFACE EXPLORATION

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND DIMENSIONS ARE IN SURVEY FEET, ALL ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NGVD 29 DATUM.

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 WALL, AND MSE WALL REINFORCEMENT IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL SUPPLIER 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/QMP."

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 IN THE GEOMETRY TABLE.

DESIGN FOR RETAINING WALL TO PROVIDE FOR A FINISHED GRADE SLOPE BEHIND THE WALL AS SHOWN IN THE ROADWAY CROSS SECTIONS.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

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 A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

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.

AT BEGINNING OF WALL, FILL CAVITY BETWEEN WIRE-FACED WALL AND PRECAST PANEL WITH A COLUMN OF CONCRETE 1'-6" WIDE. PAYMENT FOR THIS WORK IS INCLUDED WITH BID ITEM FOR "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP".

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.

HOT DIP GALVANIZE ALL STRUCTURAL STEEL IN ACCORDANCE WITH ASTM A123.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP AND INSIDE FACES OF PARAPETS AND EXPOSED PORTION OF ANCHOR SLAB.

THE COST OF FURNISHING AND PLACING THE FOOTING UNDER THE PRESTRESSED 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 PAID FOR UNDER THE ITEM "CONCRETE MASONRY RETAINING WALLS"

ALL STATIONS ARE ALONG THE ℄ FOR R-70-120 ALONG THE FRONT FACE OF WALL UNLESS SHOWN OTHERWISE.

THE SOILS AT THE BASE OF THE WALL SHALL BE REVIEWED BY THE NORTHEAST REGION SOILS ENGINEER TO DETERMINE IF THE SOILS HAVE ADEQUATE STRENGTH TO SUPPORT THE MSE WALL.

WICK DRAINS WILL BE INSTALLED BETWEEN STA. 182WB+00 TO 184WB+19. AN ESTIMATED MINIMUM WAIT PERIOD BETWEEN PLACEMENT OF WALL BACKFILL AND INSTALLATION OF WALL PANEL FACING IS TWO MONTHS. SETTLEMENT MONITORING IS TO BE USED FOR MEASUREMENT OF ACTUAL SETTLEMENT.

MONITOR SETTLEMENT DURING AND AFTER CONSTRUCTION TO MEASURE THE ACTUAL MAGNITUDES AND RATES OF SETTLEMENT.

SEE ROADWAY PLANS FOR SETTLEMENT MONITORING DETAILS.

THE CONTRACTOR MUST COORDINATE THE CONSTRUCTION OF RETAINING WALL R-70-120 WITH BRIDGE B-70-411.

PRESTRESSED PRECAST PANELS SHALL BE 10'-0" WIDE EXCEPT FOR END PANELS. THEY SHALL BE FABRICATED WITHOUT CURVATURE. PANELS SHALL BE PLACED SO THAT THEY ARE TANGENT TO THE WALL ALIGNMENT AT THE PANEL CENTER. DEVIATION OF THE PANEL FROM THE CURVED ALIGNMENT SHALL BE TAKEN UP IN THE COPING OVERHANG."

DESIGN DATA

LIVE LOAD
- LIVE LOAD SURCHARGE (ROADWAY).....240 PSF
- NOISE BARRIER WIND LOAD (15'MAX NOISE BARRIER HEIGHT).....42 PSF

DEAD LOAD
- NOISE BARRIER PANEL.....60 PSF

MATERIAL PROPERTIES
- CONCRETE MASONRY RETAINING WALL.....F'C = 3,500 PSI
- PRESTRESSED PRECAST CONCRETE WALL PANELS.....F'C = 5,000 PSI
- BAR STEEL REINFORCEMENT.....F'C = 60,000 PSI

FOUNDATION DATA - FACTORED SOIL BEARING RESISTANCE
- RETAINING WALL.....5,300 PSF

NOTE: THE WALL HAS BEEN DESIGNED FOR TRAFFIC LOADING AND NOISE BARRIER LOADS ONLY. IF DURING CONSTRUCTION HEAVY EQUIPMENT IS OPERATING IN CLOSE PROXIMITY TO THE WALL OR IF MATERIAL IS STOCKPILED NEAR THE WALL, THE SAFETY FACTOR FOR THIS WALL WILL SIGNIFICANTLY DECREASE.

NE REGION CONTACT - SCOTT EBEL (920) 492-2240
BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL ARNOLD (414) 831-4179

LEGEND

E = EXPANSION JOINT

⬅ = DIRECTION OF TRAFFIC

WISCONSIN
MICHAEL J.
ARNOLD
E-41717
GREENDALE
WI
PROFESSIONAL ENGINEER

5/5/2015

NO.	DATE	REVISION	BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 05/06/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-70-120

RETAINING WALL ALONG USH 10 WB/STH 441 SB

COUNTY	TOWN/~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MRL	MJA	MRL	MJA

GENERAL PLAN AND ELEVATION

SHEET 1 OF 12
834

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DATE: 5/5/2015

I.D.

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STATE PROJECT NUMBER

1517-75-75

TOTAL ESTIMATED QUANTITIES

BID ITEM #	BID ITEM	UNIT	TOTAL
502.3200	PROTECTIVE SURFACE TREATMENT	SY	300
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	413
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	29,960
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	15
517.1010.S	CONCRETE STAINING R-70-120	SF	5,640
517.1050.S	ARCHITECTURAL SURFACE TREATMENT R-70-120	SF	4,660
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	380
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	67
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	252
653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	2
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	1
SPV.0060.701	ANCHOR ASSEMBLIES NOISE BARRIERS STRUCTURES	EACH	39
SPV.0165.850	PRESTRESSED PRECAST CONCRETE WALL PANEL	SF	5,150
SPV.0165.851	WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	5,150
	NON BID ITEMS		
	FILLER	SIZE	1/2", 1", & 1 1/2"
	NAME PLATE	EACH	1
	EXPANDED POLYSTYRENE	SIZE	1"

WALL EXTERNAL AND OVERALL STABILITY EVALUATION

WALL DIMENSIONS			
MAX. WALL HEIGHT [1] (FEET)	8.0	22.2	12.2
MAX. EXPOSED WALL HEIGHT (FEET)	6.5	20.7	10.7
MIN. LENGTH OF REINFORCEMENT [2,4] (FEET)	8.0	18.8	12.2
LENGTH OF REIN./WALL HEIGHT	1.0	0.85	1.0
DESIGN SLOPE ANGLE AT FRONT (DEGREE)	22.6	0	21.8
DESIGN SLOPE ANGLE AT BACK (DEGREE)	3.4	3.4	3.4
WALL SECTION FOR ANALYSIS	1+05 (181WB+10)	3+55 (183WB+65)	4+18 (184WB+30)
APPLIED BORING LOG	R120-G2	B411-G1	B411-G1
CAPACITY TO DEMAND RATIO [3] (*1.0) AND FACTORED BEARING RESISTANCE [3] (PSF)			
GLOBAL STABILITY	1.0 *	1.0 *	1.0 *
ECCENTRICITY	2.26	1.86	2.43
SLIDING	1.63	1.60	1.81
BEARING RESISTANCE	2.47	1.06 *	2.05
FACTORED BEARING RESISTANCE (PSF)	5300	5300	5300

NOTES
1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET AND EXTENDS TO THE ROADWAY ELEVATION
2. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH
3. SELECTION OF THE LOWER VALUE BETWEEN DRAINED AND UNDRAINED ANALYSIS RESULTS
4. MIN. LENGTH APPLIES ONLY AT CORRESPONDING WALL STATIONS. FINAL DESIGN FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND ECCENTRCITY AT OTHER WALL STATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

* CONTROLLING DESIGN ISSUE

SOIL PARAMETERS

R120-G1 (APPROXIMATE ROADWAY STATION 182WB+10; APPROXIMATELY 78 FEET NORTH OF WB R/L)

STRATUM LOCATION & SOIL DESCRIPTIONS	UNIT WEIGHT (PCF)	UNDRAINED PARAMETERS		DRAINED PARAMETERS	
		COHESION, C PSF	FRICTION ANGLE, DEGREES	COHESION, C' PSF	FRICTION ANGLE, DEGREES
FILL (EL. 752.5 - 751.0 FT)	130	2000	0	0	32
V. STIFF TO HARD FAT CLAY (EL. 751.0 - 742.5 FT)	126	2500	0	50	30
M. STIFF TO STIFF FAT CLAY (EL. 742.5 - 736.5 FT)	119	1400	0	50	28
V. SOFT TO SOFT FAT CLAY (EL. 736.5 - 728.5 FT)	103	500	0	50	24
FIBROUS PEAT (EL. 728.5 - 728.0 FT)	103	500	0	50	24
STIFF TO HARD LEAN CLAY (EL. 728.0 - 711.0 FT)	130	2000	0	50	30
VERY DENSE SANDY SILT (EL. 711.0 - 685.5 FT)	120	0	32	0	32
WEATHERED SANDSTONE BEDROCK (EL. 685.5 - 662.5 FT) [1]	150	--	--	--	--
ASSUMED DESIGN GROUNDWATER ELEVATION = 741					

[1]ASSUME IMPENETRABLE

R120-G2 (APPROXIMATE ROADWAY STATION 181WB+05; APPROXIMATELY 90 FEET NORTH OF WB R/L)

STRATUM LOCATION & SOIL DESCRIPTIONS	UNIT WEIGHT (PCF)	UNDRAINED PARAMETERS		DRAINED PARAMETERS	
		COHESION, C PSF	FRICTION ANGLE, DEGREES	COHESION, C' PSF	FRICTION ANGLE, DEGREES
FILL (EL. 752.0 - 749.5 FT)	130	2000	0	50	32
V. STIFF TO HARD FAT CLAY (EL. 749.5 - 741.4 FT)	125	2500	0	50	30
M. STIFF TO STIFF FAT CLAY (EL. 741.4 - 734.0 FT)	124	1400	0	50	28
V. SOFT TO SOFT FAT CLAY (EL. 734.0 - 727.5 FT)	103	500	0	50	24
FIBROUS PEAT (EL. 727.5 - 727.0 FT)	103	500	0	50	24
STIFF FAT CLAY (EL. 727.0 - 724.5 FT)	123	1400	0	50	28
STIFF TO HARD LEAN CLAY (EL. 724.5 - 710.0 FT)	130	2000	0	50	30
DENSE TO V. DENSE SILTY CLAYEY SAND (EL. 710.0 - 701.8 FT	120	0	32	0	32
V. DENSE SILTY SAND WITH GRAVEL (EL 701.8 - 697.9 FT)	120	0	32	0	32
SANDSTONE BEDROCK (EL. 697.9 - 678.4 FT) [1]	150	--	--	--	--
ASSUMED DESIGN GROUNDWATER ELEVATION = 741					

[1]ASSUME IMPENETRABLE

B411-G1 (APPROXIMATE ROADWAY STATION 184WB+60; APPROXIMATELY 35 FEET NORTH OF WB R/L)

STRATUM LOCATION & SOIL DESCRIPTIONS	UNIT WEIGHT (PCF)	UNDRAINED PARAMETERS		DRAINED PARAMETERS	
		COHESION, C PSF	FRICTION ANGLE, DEGREES	COHESION, C' PSF	FRICTION ANGLE, DEGREES
FILL (EL. 755.1 - 749.7 FT)	130	2000	0	50	32
V. STIFF LEAN CLAY (EL. 749.7 - 744.6 FT)	125	2400	0	50	30
M. STIFF FAT CLAY (EL. 744.6 - 730.2 FT)	108	500	0	50	24
ORGANIC SOIL (EL. 730.2 - 730.1 FT)	108	500	0	50	24
V. STIFF TO HARD LEAN CLAY (EL. 730.1 - 716.8 FT)	133	3800	0	50	30
DENSE SILT (EL. 716.8 - 713.3 FT)	120	0	30	0	30
V. DENSE GRAVEL WITH SILT (EL. 713.3 - 709.0 FT)	120	0	32	0	32
V. DENSE COBBLES AND BOULDERS (EL. 709.0 - 702.6 FT)	120	0	34	0	34
DOLOMITE BEDROCK (EL. 702.6 - 700.1 FT) [1]	150	--	--	--	--
ASSUMED DESIGN GROUNDWATER ELEVATION = 745					

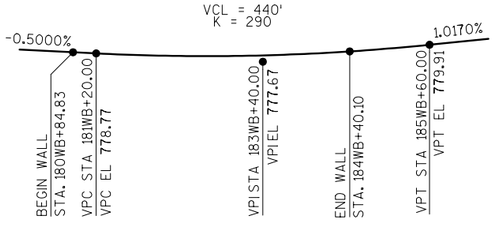
[1]ASSUME IMPENETRABLE

BENCHMARK

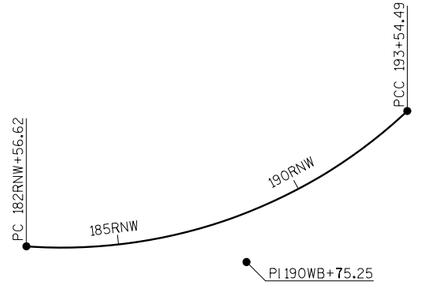
NO.	DESCRIPTION	ELEVATION
TA2	SPIKE IN N. FACE OF PPOL ON SOUTH SIDE OF ROAD FROM POWERWAY & LAKESHORE DR	751.54
TA3	NE FLANGE BOLT ON HYD WEST SIDE OF TAYCO (S OF 441 BRIDGE) FIRST HYD NORTH OF TAYCO & TYLER COURT INTERSECTION IN FRONT OF HSE # 926	756.56

GEOMETRY TABLE

WALL STATION	STH 441 WB STATION	OFFSET TO R/L OF WALL	TOP OF WALL	FINISHED GRADE
1+00.00	181+05.32	48.75	775.97	767.83
1+25.00	181+30.32	48.75	775.84	766.87
1+50.00	181+55.32	48.75	775.74	765.56
1+75.00	181+80.32	48.75	775.66	762.92
2+00.00	182+05.32	48.75	775.59	760.51
2+25.00	182+30.32	48.75	775.55	758.97
2+48.24	182+56.92	48.75	775.53	757.46
2+50.00	182+58.68	48.75	775.53	757.38
2+75.00	182+83.68	48.75	775.54	756.28
3+00.00	183+08.68	49.74	775.50	755.44
3+17.65	183+27.91	50.50	775.49	755.15
3+25.00	183+35.26	50.73	775.50	755.03
3+50.00	183+60.26	51.53	775.52	755.25
3+75.00	183+85.26	52.33	775.57	756.31
3+97.51	184+09.65	53.11	775.63	758.36
4+00.00	184+12.14	53.23	775.64	758.75
4+25.00	184+37.14	54.46	775.70	769.18
4+27.26	184+40.10	54.60	775.71	769.30



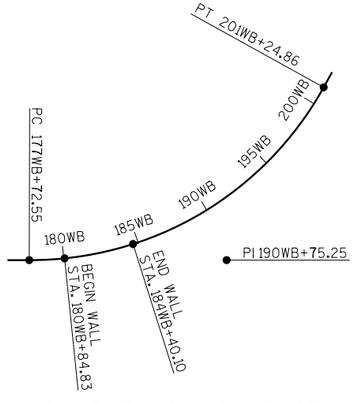
PROFILE GRADE LINE USH 10 WB/STH 441 SB



RAMP RNW HORIZONTAL CURVE DATA

PC = 182RNW+56.62
X = 815058.40
Y = 546409.40
PI = 188RNW+39.01
X = 815627.22
Y = 546534.36
PCC = 193RNW+54.49
X = 815921.18
Y = 547037.12
R = 1330.00
DELTA = 47°17'45" LT
D = 4°18'29"
L = 1097.88

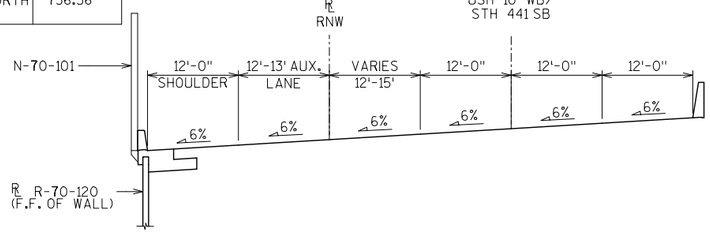
HORIZONTAL ALIGNMENT RAMP RNW



USH 10 WB/ STH 441 SB HORIZONTAL CURVE DATA

PC = 177WB+72.55
X = 814583.17
Y = 546334.74
PI = 190WB+75.25
X = 815885.86
Y = 546329.80
PT = 201WB+24.86
X = 816516.51
Y = 547469.67
R = 2200.00
DELTA = 61°15'45" LT
D = 2°36'16"
L = 2352.31

HORIZONTAL ALIGNMENT USH 10 WB/STH 441 SB



TYPICAL SECTION

(LOOKING EAST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY: MRL | PLANS CK'D.: MJA

DESIGN DATA AND QUANTITIES

SHEET 2 OF 12
835

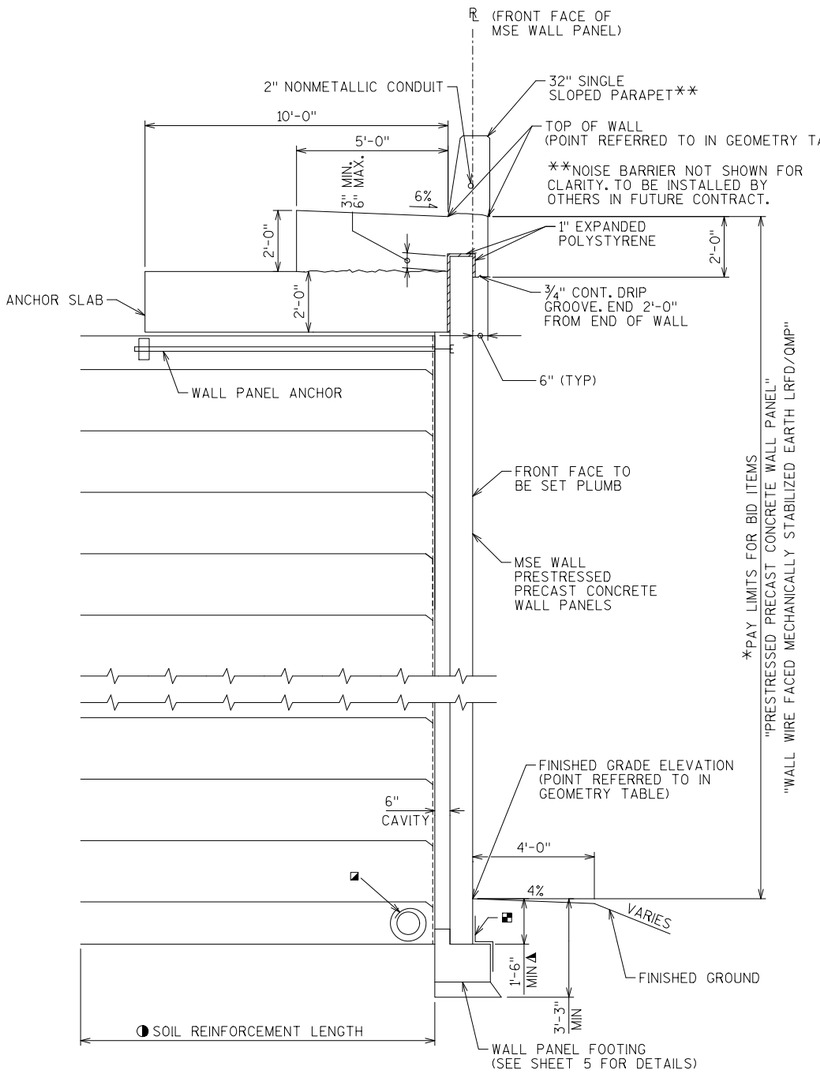
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STATE PROJECT NUMBER
1517-75-75



TYPICAL WALL SECTION

(PRESTRESSED PRECAST TILT-UP PANEL WALL)

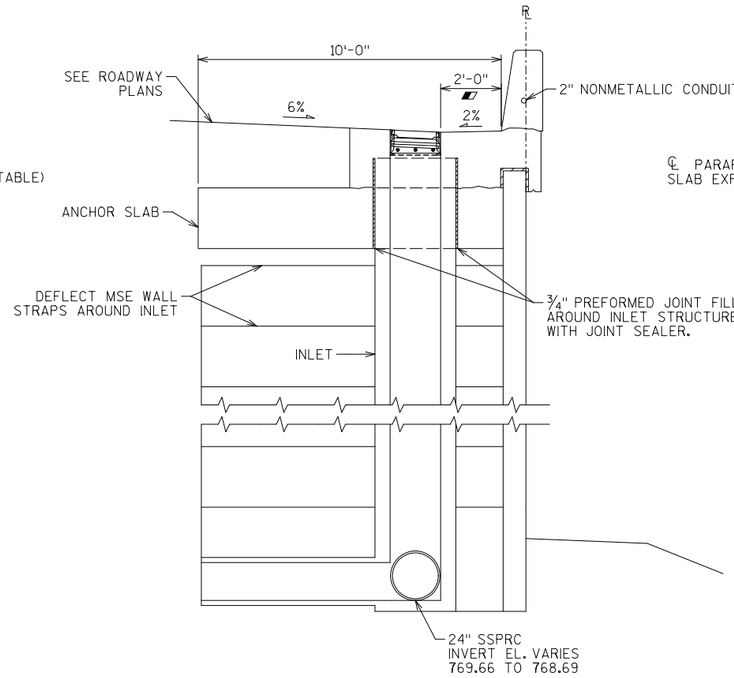
⚹ THE PLAN QUANTITY FOR THE BID ITEM "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP" AND "PRESTRESSED PRECAST CONCRETE WALL PANEL" IS BASED ON A WALL HEIGHT MEASURED FROM THE FINISHED GRADE TO THE TOP OF THE WALL AS SHOWN. FOOTING CONCRETE AND REINFORCEMENT ARE TO BE INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL."

▲ MINIMUM EMBEDMENT BASED ON SITE SPECIFIC PARAMETERS. FIELD EMBEDMENTS SHALL MEET OR EXCEED THE MINIMUM EMBEDMENT. FIELD EMBEDMENTS BELOW MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS.

◑ SEE "WALL EXTERNAL AND OVERALL STABILITY EVALUATION" TABLE ON SHEET 2 FOR SOIL REINFORCEMENT LENGTH.

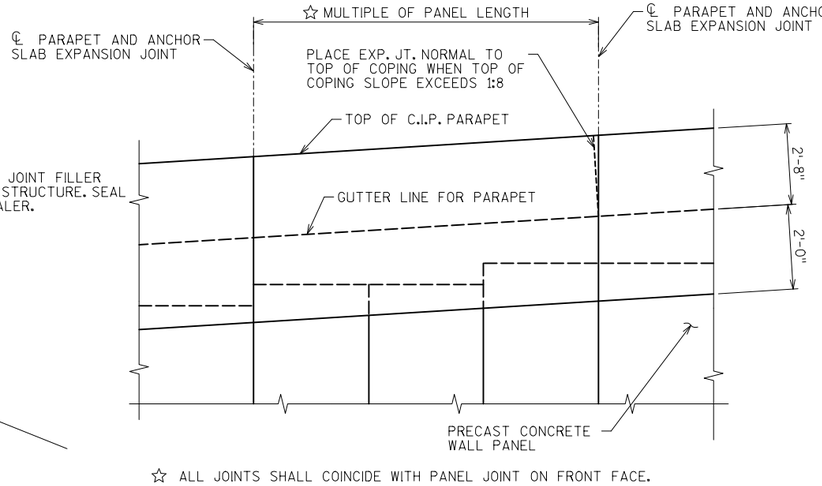
◪ PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELDS AT EXPOSED ENDS OF PIPE UNDERDRAIN. SEE RODENT SHIELD DETAIL.

◘ GEOTEXTILE FABRIC TYPE DF, LENGTH OF FOOTING, TO BE INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL."



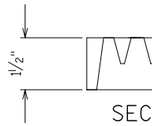
TYPICAL WALL SECTION AT INLET STRUCTURE

◪ TRANSITION PAN AND SLOPE OVER 10'-0" ON EACH SIDE OF THE INLET.

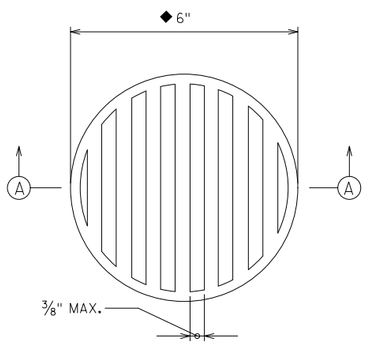


☆ ALL JOINTS SHALL COINCIDE WITH PANEL JOINT ON FRONT FACE.

C.I.P. PARAPET PARTIAL ELEVATION



SECTION A-A

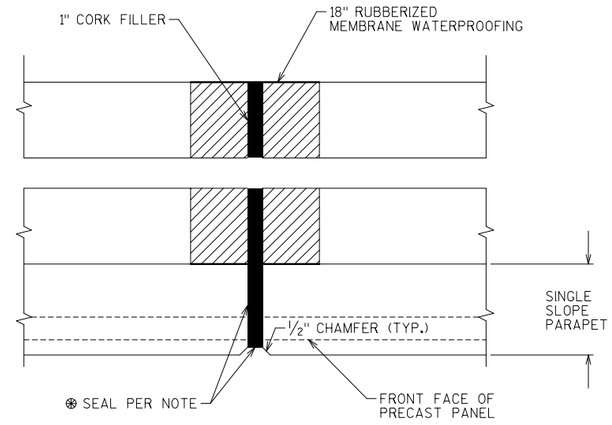


RODENT SHIELD

◆ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. FASTEN TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

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."



ANCHOR SLAB EXPANSION JOINT DETAIL

⊛ 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.)

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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY MRL | PLANS CK'D. MJA

WALL DETAILS 1

SHEET 3 OF 12
836

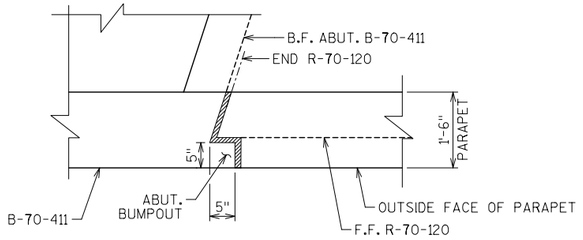
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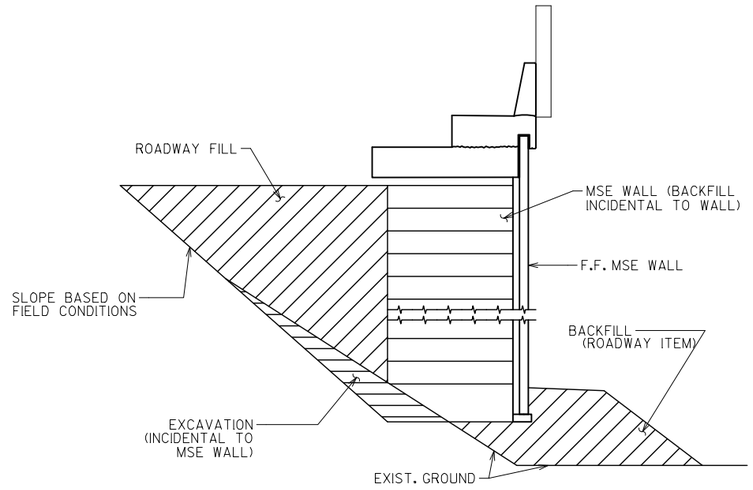
DATE: 5/5/2015
I.D.

STATE PROJECT NUMBER
1517-75-75



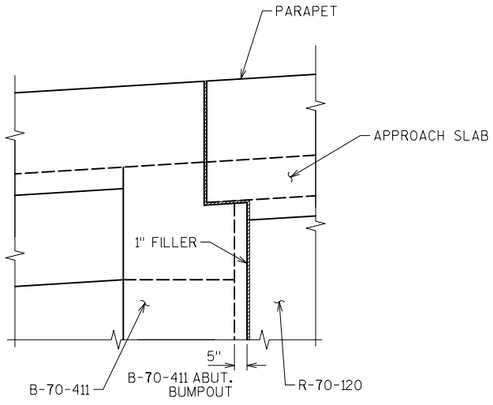
DETAIL AT B-70-411 ABUT.

(PLAN VIEW)



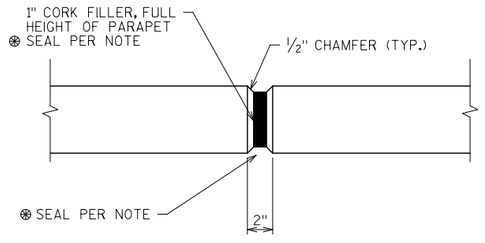
EXCAVATION/BACKFILL DETAIL

(AT MSE WALL)



DETAIL AT B-70-411 ABUT.

(ELEVATION VIEW)



TRAFFIC BARRIER EXPANSION JOINT DETAIL

⊛ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH STAIN. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY JDL | PLANS CK'D. MJA

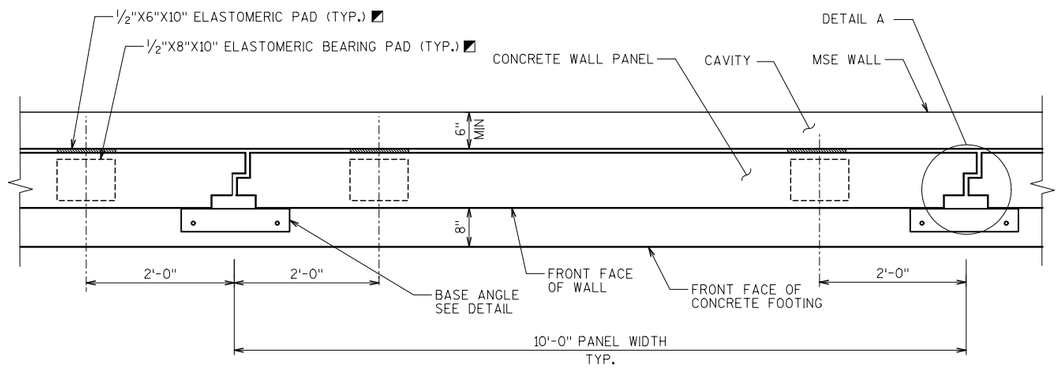
WALL DETAILS 2

SHEET 4 OF 12
837

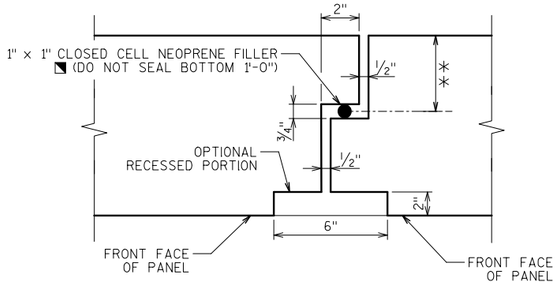
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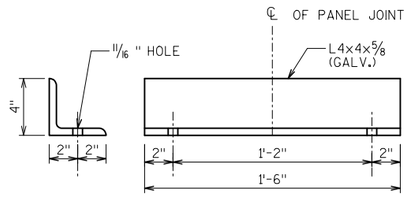


TYPICAL WALL PANEL CONNECTION



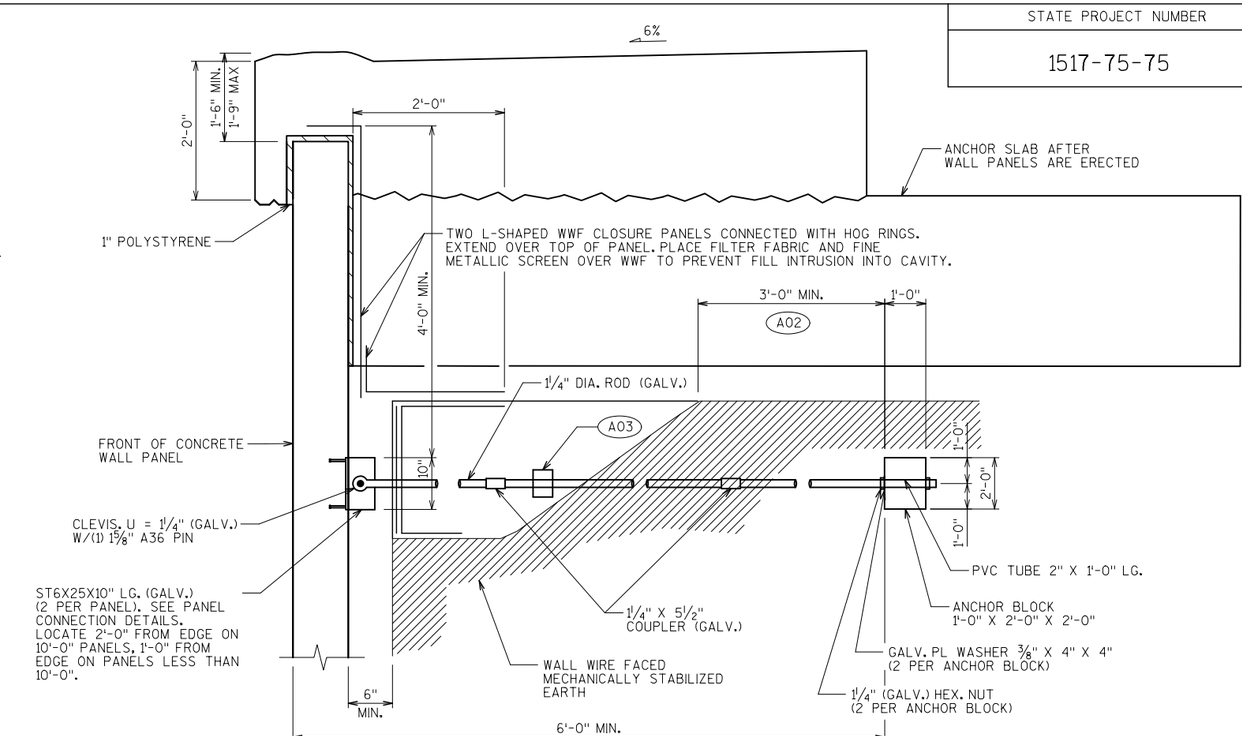
DETAIL A

** 4" FOR 9½" PANEL
3" FOR 7½" PANEL



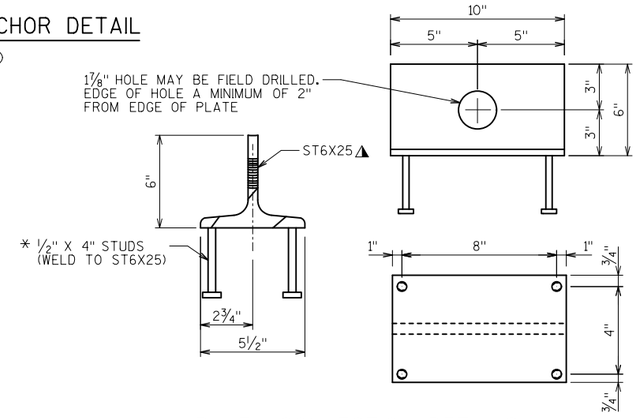
BASE ANGLE DETAIL

(1 AT EACH PANEL JOINT) ◩



WALL PANEL ANCHOR DETAIL

A01



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".

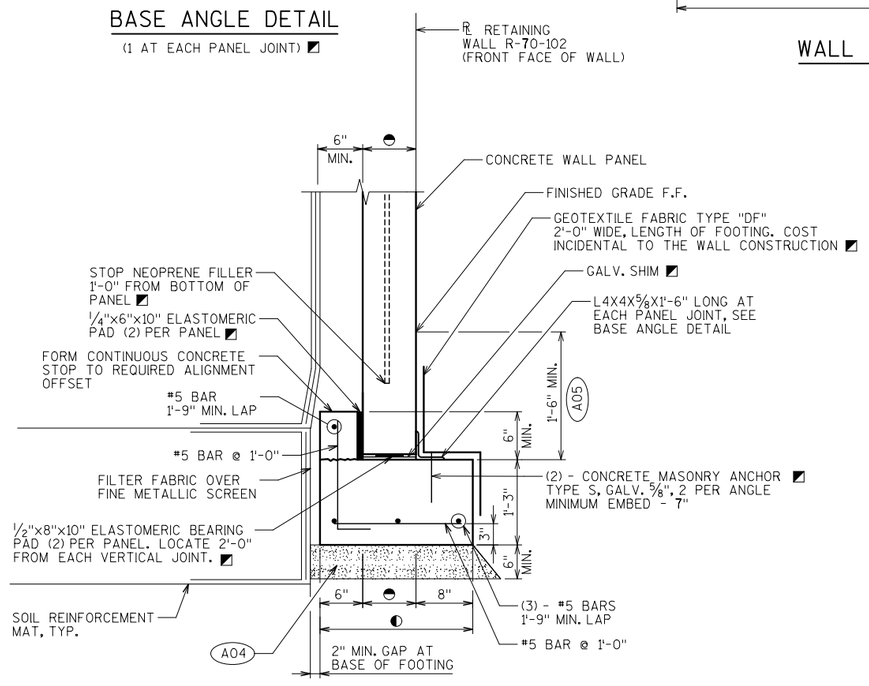
(A05) MINIMUM DIMENSION FROM FINISHED GRADE AT FRONT FACE OF WALL TO BOTTOM OF WALL PANEL FOOTING IS SHOWN. THE FOOTING MAY BE CONSTRUCTED ON A SLOPE PARALLEL TO THE PROPOSED GRADE, OR MAY BE STEPPED. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THE WALL PANEL FOOTING WITH FABRICATION OF THE CONCRETE PANELS.

◩ INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL 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 LOCATION ALLOWS.



WALL PANEL FOOTING DETAIL

CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "PRESTRESSED PRECAST CONCRETE WALL PANEL."

◓ = 7½" OR 9½"

◐ FOOTING DIMENSION EQUALS PANEL THICKNESS PLUS 1'-2"

STATE PROJECT NUMBER

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

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WALL DETAILS 3

SHEET 5 OF 12
838

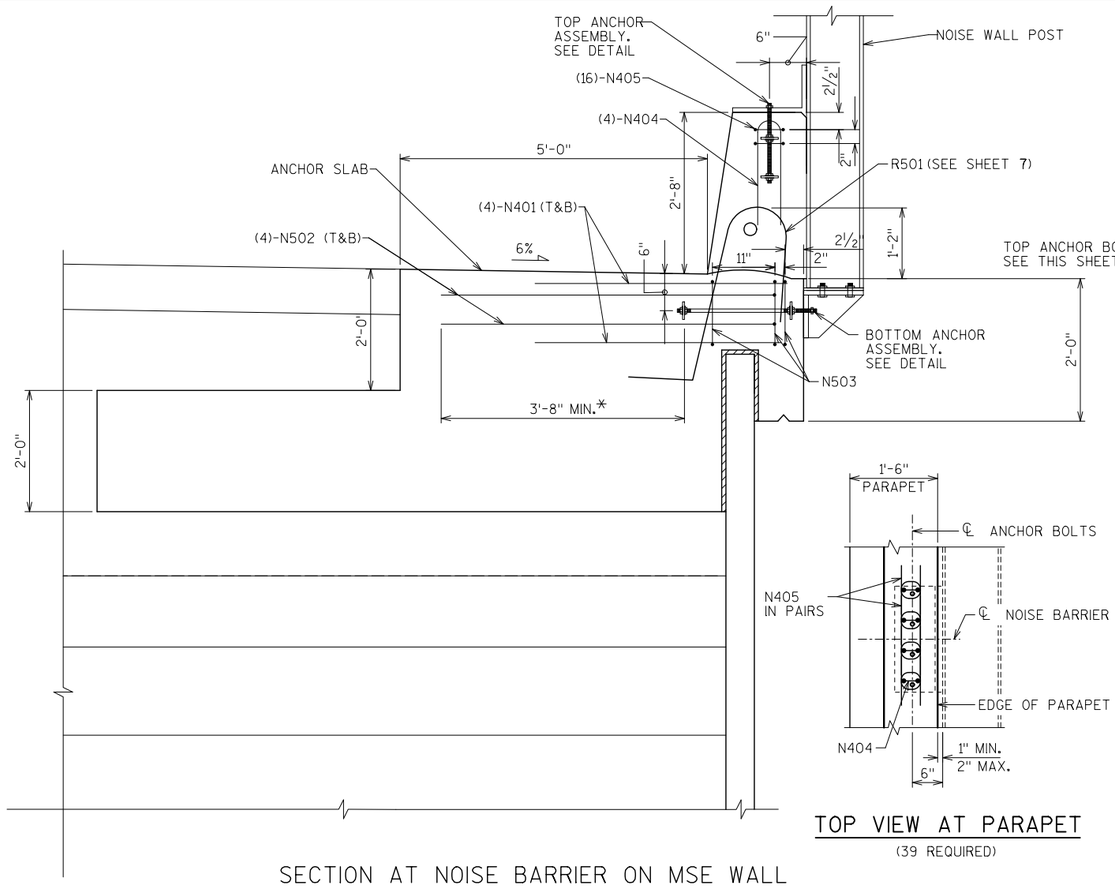
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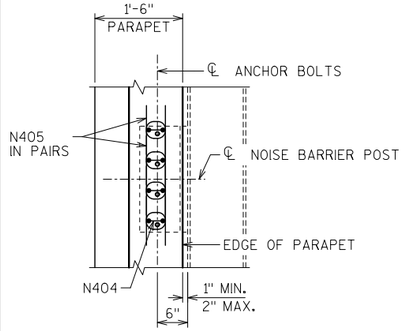
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STATE PROJECT NUMBER
1517-75-75



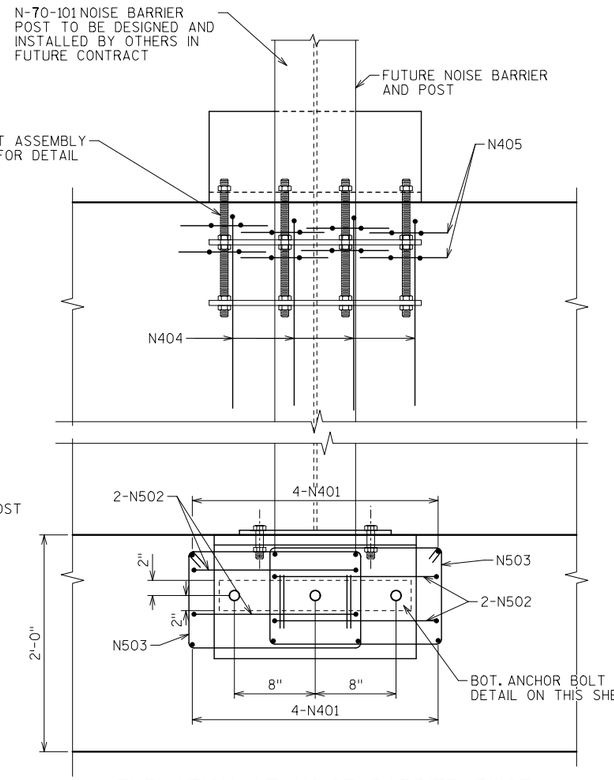
SECTION AT NOISE BARRIER ON MSE WALL

TYPICAL AT EACH POST LOCATION (FOR ALL NOISE WALL HEIGHTS)
OTHER ANCHOR SLAB AND PARAPET REINFORCING NOT SHOWN FOR CLARITY
* HOOK DEVELOPMENT LENGTH, IF STANDARD HOOK IS PROVIDED



TOP VIEW AT PARAPET

(39 REQUIRED)



ELEVATION AT NOISE BARRIER POST

(TYPICAL AT EACH POST LOCATION)

NOTES

CONNECTIONS OF THE NOISE BARRIER POST ARE DESIGNED FOR WIND LOAD EQUAL TO 42 PSF AND DEAD LOAD EQUAL TO 60 PSF. MAXIMUM HEIGHT OF THE NOISE BARRIER IS 15'-0".

REINFORCEMENT BARS SHOWN ARE ONLY SUPPORTING THE NOISE BARRIER POSTS AND DEVELOPING THEIR ANCHORAGE SYSTEMS.

BID ITEM "ANCHOR ASSEMBLIES NOISE BARRIERS STRUCTURES", EACH, INCLUDES UPPER AND LOWER ANCHORAGES AT EACH POST LOCATION.

THE NOISE BARRIER SYSTEM INCLUDING SUPPORTING POSTS WILL BE DESIGNED, DETAILED AND INSTALLED BY OTHERS AS PART OF A FUTURE CONTRACT.

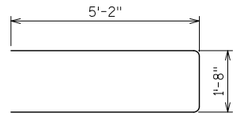
INSTALL ANCHOR BOLT ASSEMBLIES IN LEVEL POSISTION TO ACCOMMODATE POSTS SET VERTICALLY.

BILL OF BARS

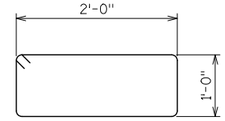
ALL BARS ARE EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
N401	312	5'-0"		TOP & BOT. LONGIT. BAR IN SLAB
N502	156	11'-9"	X	HORIZ. U-BAR IN SLAB
N503	234	6'-8"	X	STIRRUP IN SLAB
N404	156	2'-9"	X	VERT. U-BAR AT NOISEWALL
N405	624	2'-3"	X	HORIZ. U-BAR AT NOISEWALL

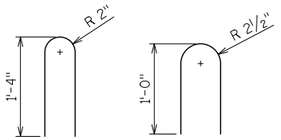
TOTAL WEIGHT = 5,810 LB



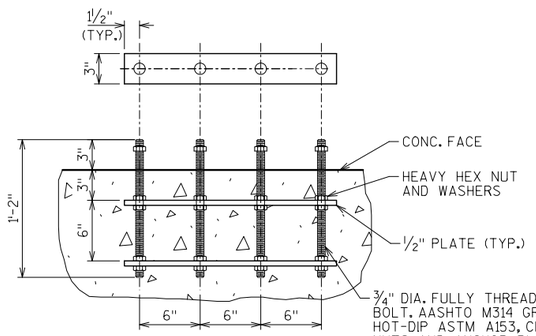
N502



N503

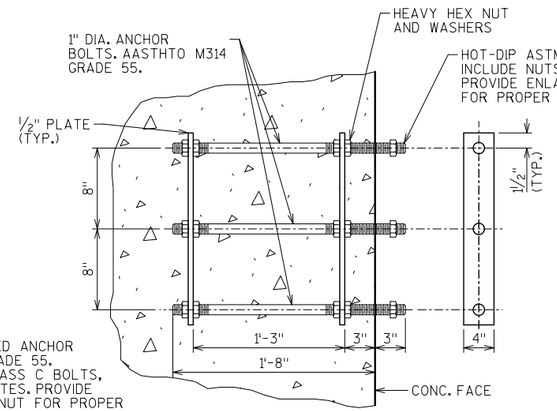


N404 N405



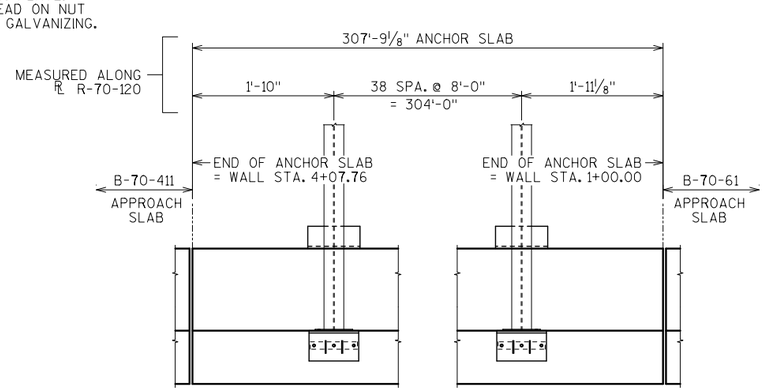
ELEVATION
TOP ANCHOR BOLT ASSEMBLY

(39 REQUIRED)



PLAN
BOTTOM ANCHOR BOLT ASSEMBLY

(39 REQUIRED)



ANCHOR POST SPACING

(ELEVATION VIEW)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY MRL | PLANS CK'D. MJA

NOISE BARRIER POST ANCHORAGE

SHEET 8 OF 12
839

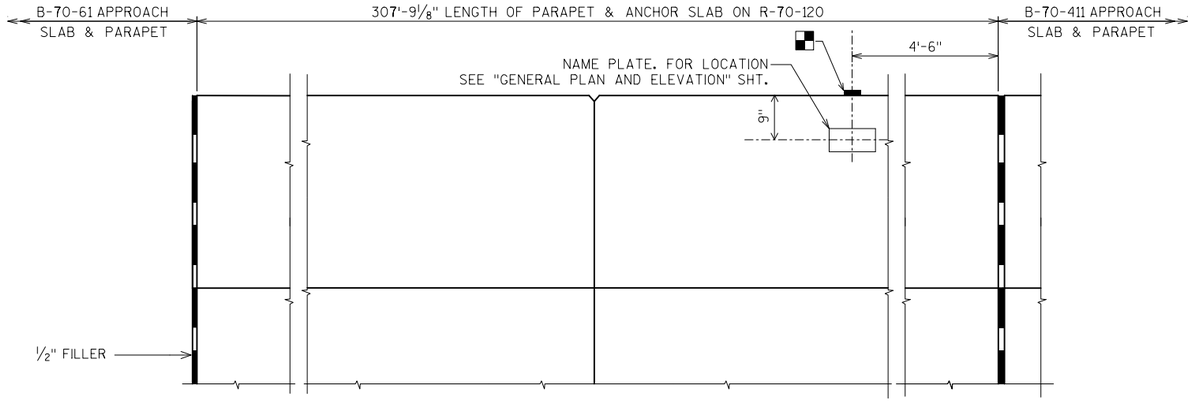
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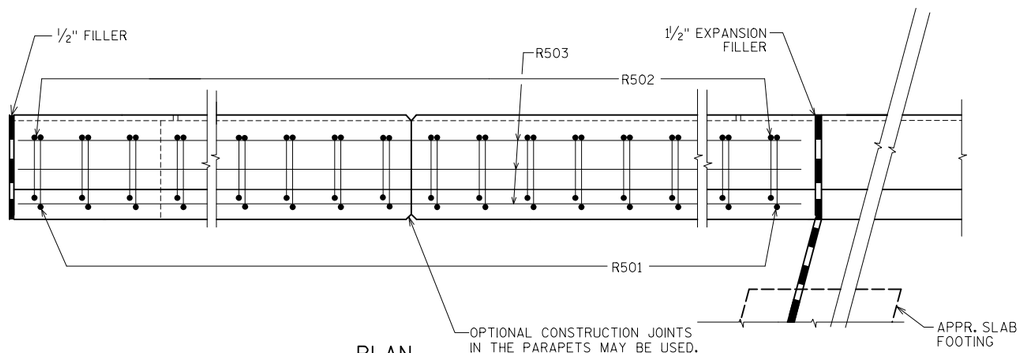
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DATE: 5/5/2015
I.D.

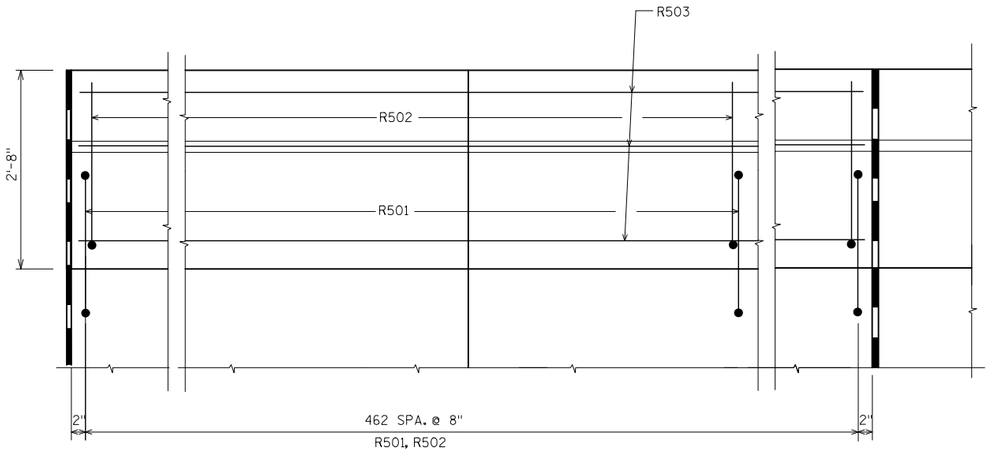
STATE PROJECT NUMBER
1517-75-75



INSIDE ELEVATION

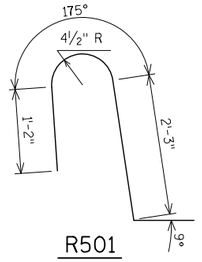


PLAN

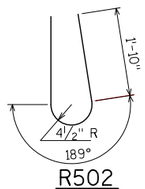


OUTSIDE ELEVATION

■ BENCH MARK CAP (WHEN SUPPLIED).



R501



R502

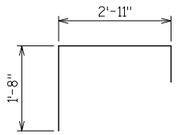
BILL OF BARS

ALL BARS ARE EPOXY COATED

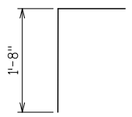
	BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
	R501	463	5'-5"	X	PARAPET VERT.
	R502	463	5'-0"	X	PARAPET VERT.
*	R503	6	307'-5"		PARAPET LONGIT.
	R404	463	3'-3"	X	ANCHOR SLAB VERT.
	R505	463	8'-6"	X	ANCHOR SLAB HORIZ.
	R406	463	5'-10"	X	ANCHOR SLAB VERT.
	R407	247	3'-9"	X	ANCHOR SLAB VERT.
	R508	463	6'-1"		ANCHOR SLAB HORIZ.
	R409	247	9'-10"		ANCHOR SLAB HORIZ.
*	R410	23	307'-5"		ANCHOR SLAB LONGIT.
	R511	18	9'-0"		ANCHOR SLAB LONGIT. @ INLET
	R512	12	9'-8"		ANCHOR SLAB HORIZ. @ INLET
	R413	24	5'-1"	X	ANCHOR SLAB VERT. @ INLET

TOTAL WEIGHT = 24,150 LB

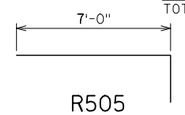
* FIGURE SHOWN IN THE "NO. REQ'D" AND "LENGTH" COLUMNS OF THE TABLE SHOULD BE USED FOR BAR WEIGHT CALCULATIONS ONLY. INDIVIDUAL BAR LENGTHS TO BE DETERMINED BY THE CONTRACTOR BASED ON THE ACTUAL DISTANCE BETWEEN ANCHOR SLAB EXPANSION JOINTS.



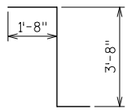
R413



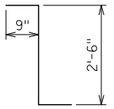
R404



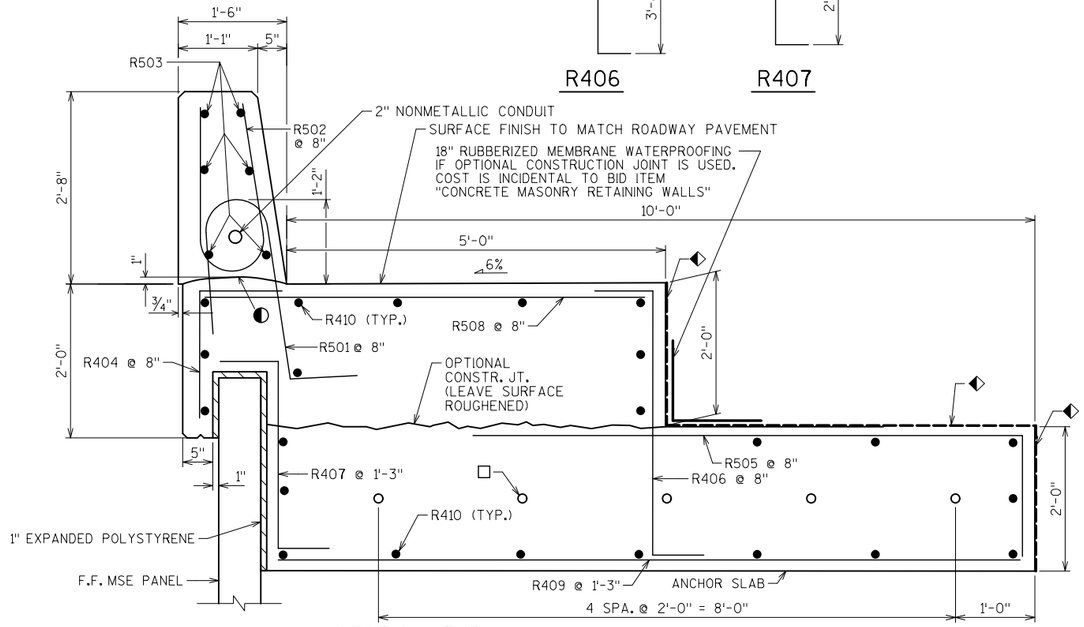
R505



R406



R407



SECTION THRU WALL

(ANCHOR SLAB RUNS ENTIRE LENGTH OF PARAPET. ROADWAY SLAB NOT SHOWN FOR CLARITY.)

LEGEND

□ (5) - ¾" ϕ SMOOTH DOWEL BARS, 1'-6" LONG, AT EXPANSION JOINT. EMBED 9". USE APPROVED DEBONDER ON ½ OF BAR LENGTH. COST INCLUDED IN "CONCRETE MASONRY RETAINING WALLS".

◆ 18" RUBBERIZED MEMBRANE WATERPROOFING TO BE PLACED ON THESE SURFACES AT EACH JOINT.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

PARAPET CONCRETE AND REINF. ON B-70-411 APPROACH SLAB ARE PROVIDED AND PAID FOR UNDER THE B-70-411 STRUCTURE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY MRL | PLANS CK'D. MJA

SINGLE SLOPE PARAPET 32SS

SHEET 7 OF 12
840

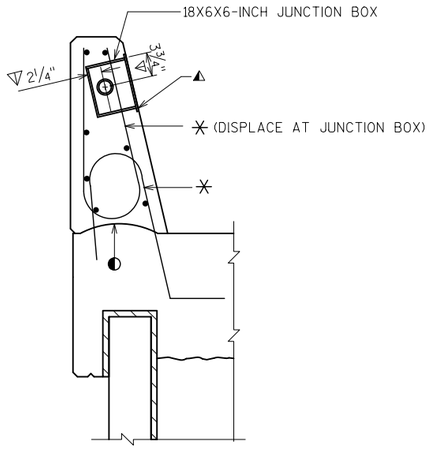
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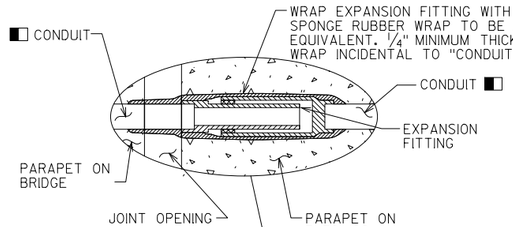
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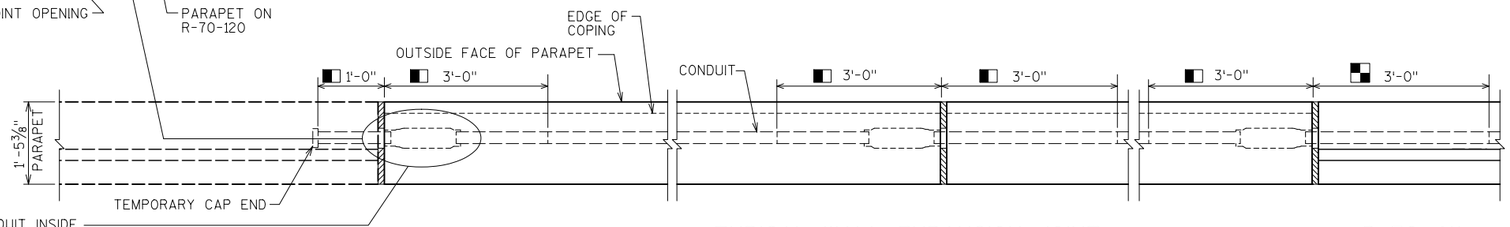
DATE: 5/5/2015
I.D.

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1517-75-75



SECTION A-A





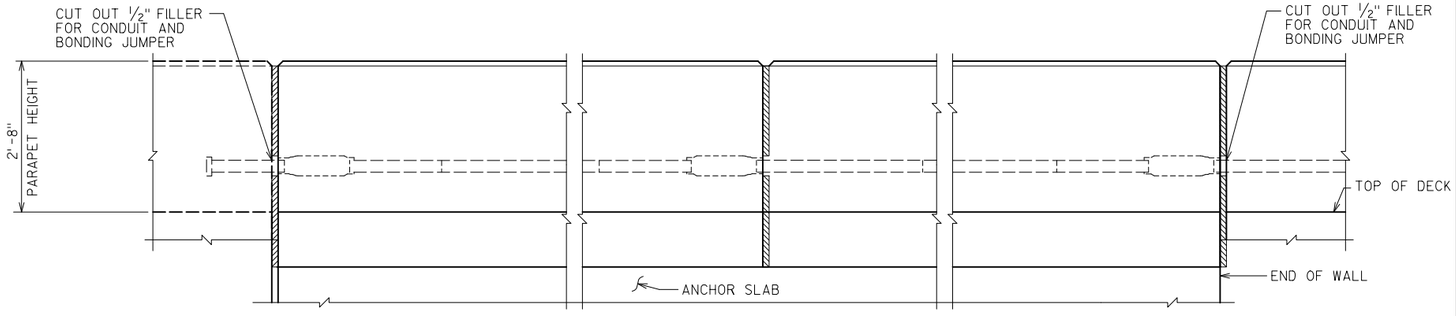
POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE THE SAME ALLOWANCE FOR MOVEMENT (EXPANSION/CONTRACTION) AS THE EXPANSION JOINT. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO WALL MOVEMENT. (TYP. AT EVERY EXP. JT.)

FUTURE B-70-61

TYPICAL WALL EXPANSION JOINT

B-70-411

PLAN OF PARAPET

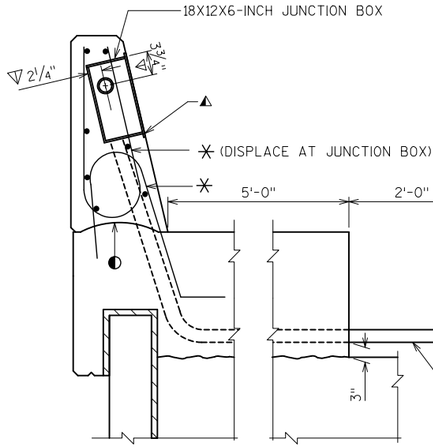


FUTURE B-70-61

TYPICAL WALL EXPANSION JOINT

B-70-411

INSIDE ELEVATION OF PARAPET



SECTION B-B

JUNCTION BOX TABLE

℄ 18x12x6-INCH JUNCTION BOX
STA. 181WB+20

℄ 18x6x6-INCH JUNCTION BOX
STA. 182WB+50
STA. 184WB+05

NOTES

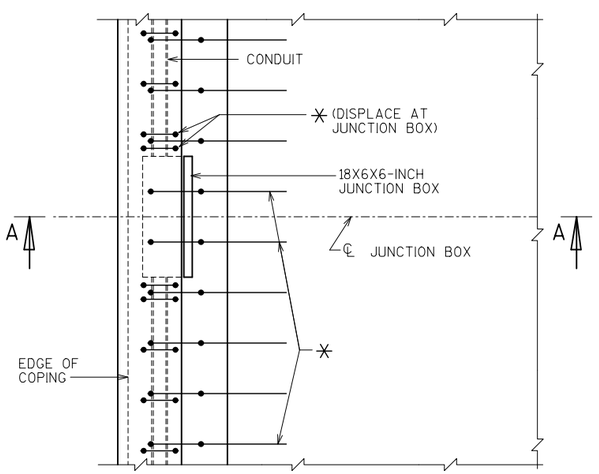
BID ITEMS SHALL BE:
"JUNCTION BOXES 18X6X6-INCH", EACH.
"JUNCTION BOXES 18X12X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

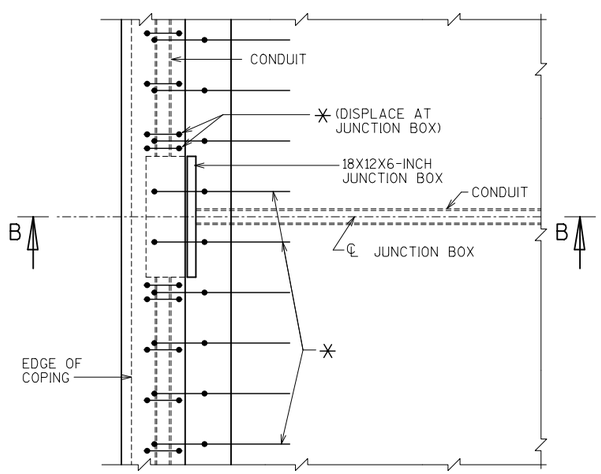
APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.



PLAN AT 6" JUNCTION BOX



PLAN AT 12" JUNCTION BOX

LEGEND

- USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON EITHER SIDE OF THE JOINT OPENING. ON WEST END, EXTEND METALLIC CONDUIT 1'-0" PAST THE END OF PARAPET TO ALLOW FOR CONNECTION OF FUTURE B-70-61 CONDUIT.
- RIGID METALLIC CONDUIT PROVIDED FOR UNDER B-70-411 STRUCTURE PLANS. SEE PLANS FOR DETAILS.
- CONST. 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 32SS" SHEET FOR BAR STEEL DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY MRL | PLANS CK'D. MJA

SINGLE SLOPE PARAPET 32SS ELECTRICAL

SHEET 8 OF 12
841

DATE: 5/5/2015
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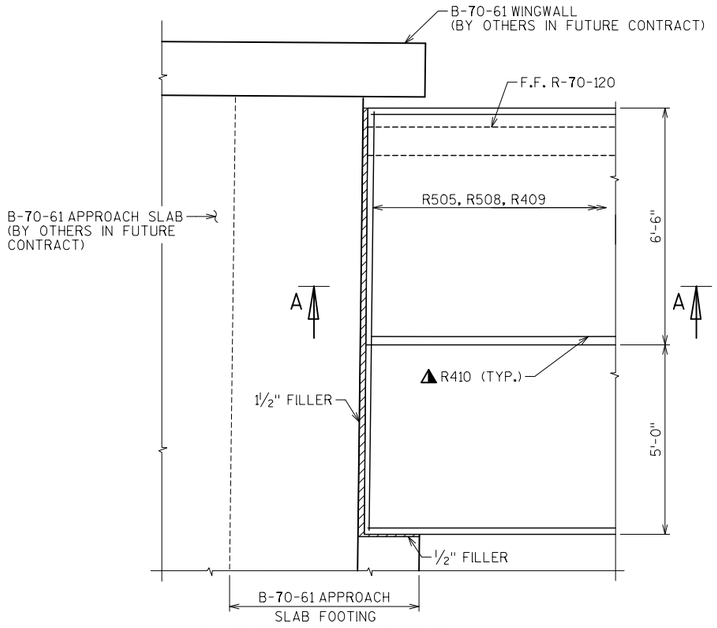
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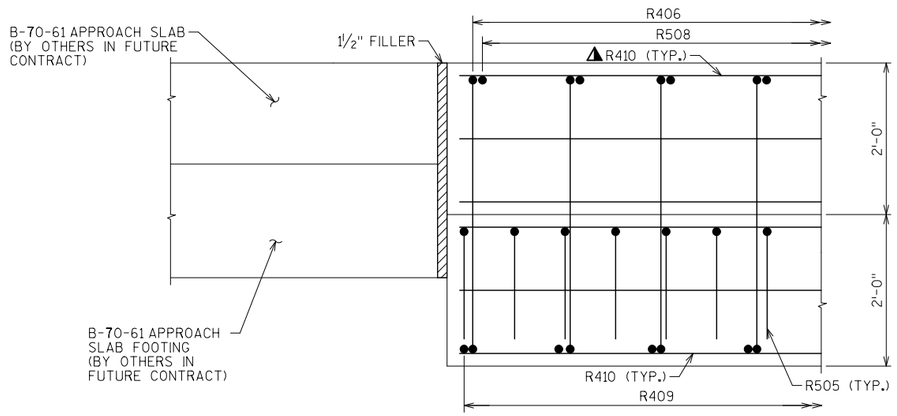
STATE PROJECT NUMBER

1517-75-75



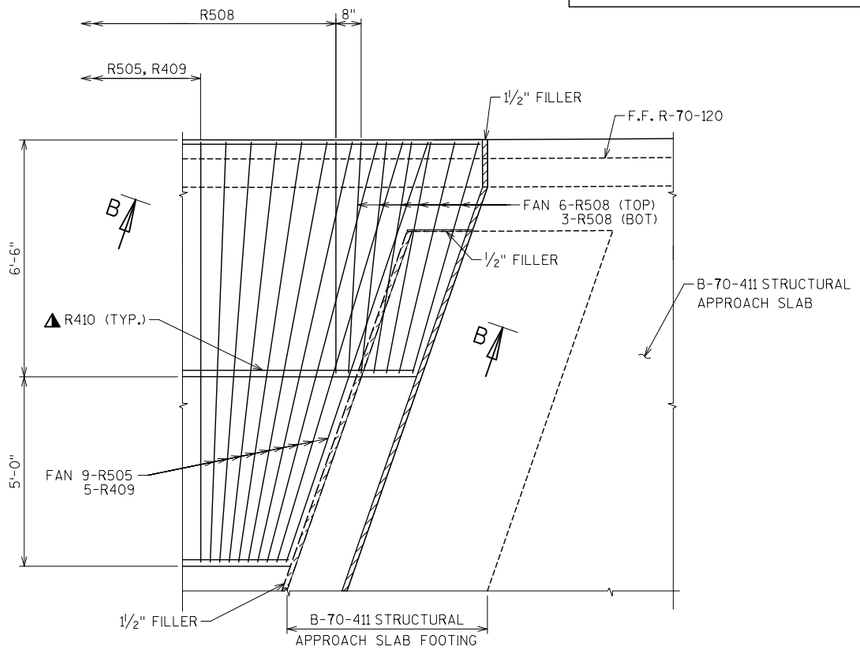
PLAN AT B-70-61

(W. END OF WALL)
(PAVEMENT NOT SHOWN)



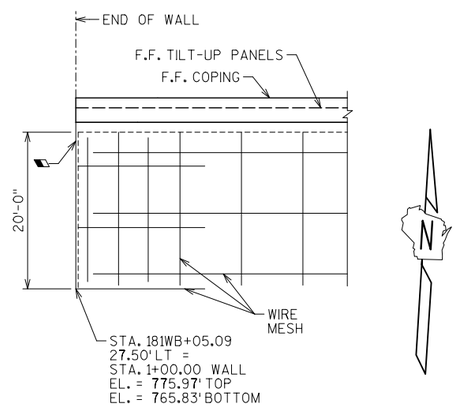
SECTION A-A

(W. END OF WALL)



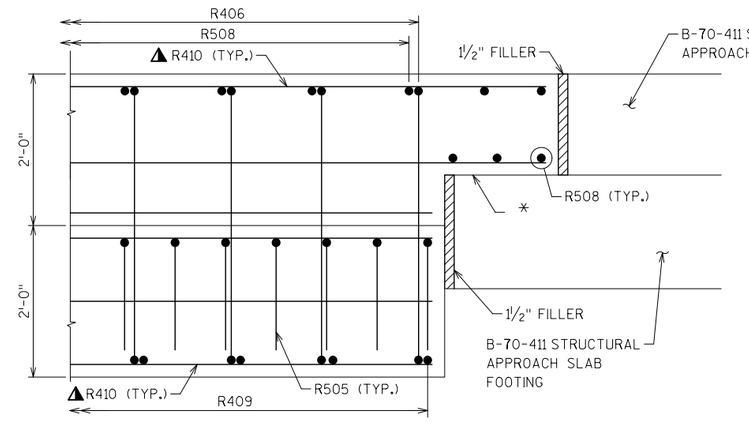
PLAN AT B-70-411

(E. END OF WALL)
(PAVEMENT NOT SHOWN)



DETAIL OF WALL END AT B-70-61

(PLAN VIEW)



SECTION B-B

(E. END OF WALL)

LEGEND

- PROVIDE WELDED WIRE FABRIC CLOSURE PANEL TO RETAIN FILL. COST INCLUDED IN "WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP."
- ▲ ORDER R410 BARS TO LENGTH BASED ON EXP. JT. SPACING.
- ✳ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS WITH TOTAL THICKNESS OF 0.3" MIN. COST INCLUDED IN BID ITEM "CONCRETE MASONRY RETAINING WALLS."

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY JDL | PLANS CK'D. MJA

END OF ANCHOR SLAB DETAILS

SHEET 8 OF 12
842

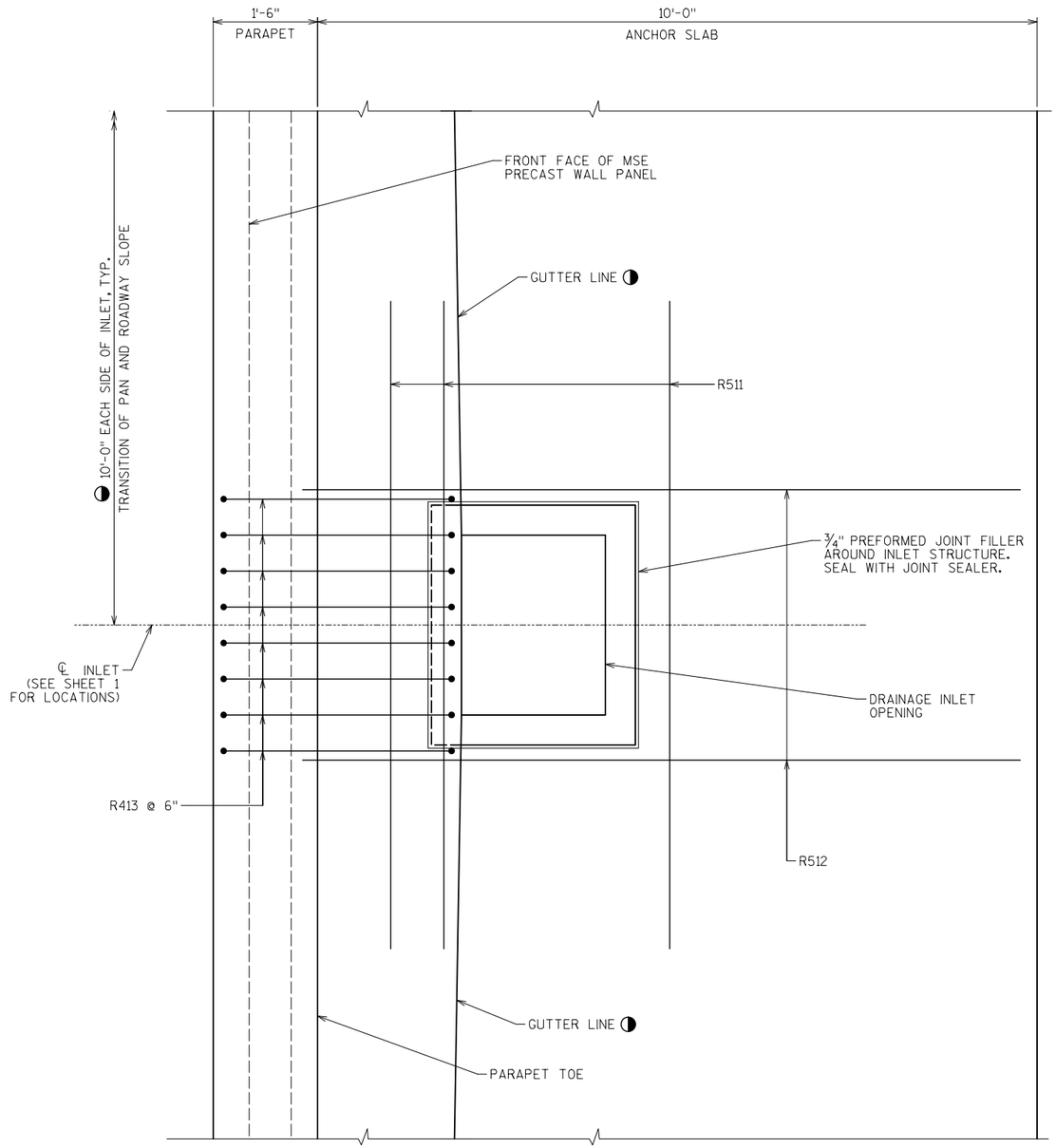
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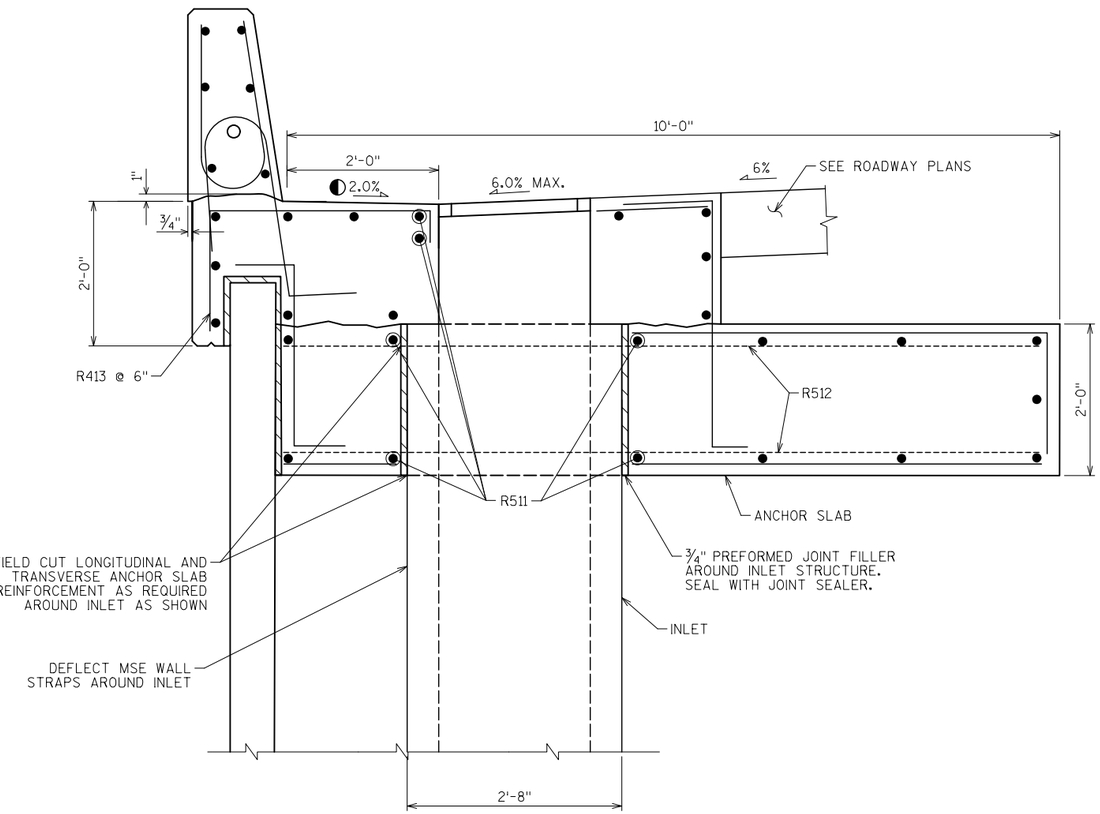
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STATE PROJECT NUMBER
1517-75-75



PARAPET AND ANCHOR SLAB AT INLET STRUCTURE



SECTION AT INLET STRUCTURE

SEE ROADWAY PLANS FOR INLET AND PIPE DETAILS

NOTES

CUT, BEND, OR DISPLACE REINFORCEMENT 2" CLEAR OF INLET STRUCTURE AS REQUIRED.

SEE SHEET 7 FOR BILL OF BARS AND BEND DIAGRAMS.

LEGEND

◐ TRANSITION PAN AND SLOPE OVER 10'-0" ON EACH SIDE OF THE INLET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY MRL | PLANS CK'D. MJA

ANCHOR SLAB AT INLET

SHEET 10 OF 12
843

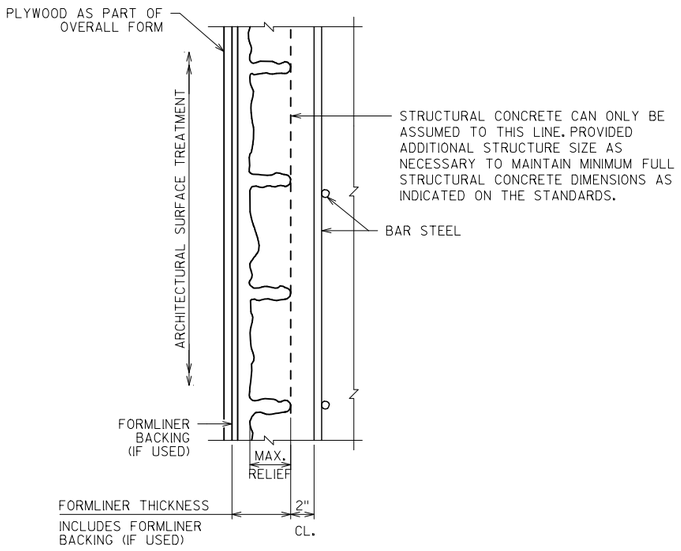
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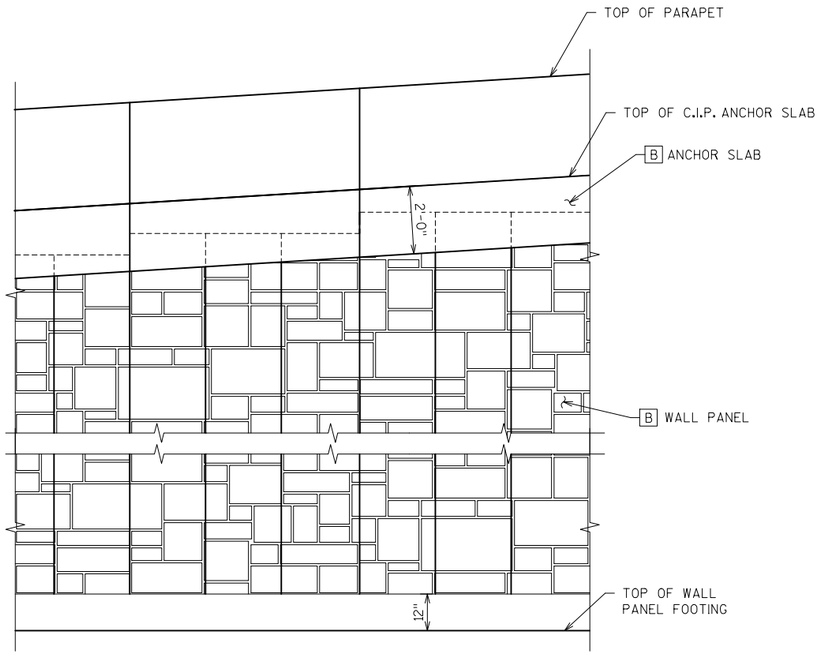
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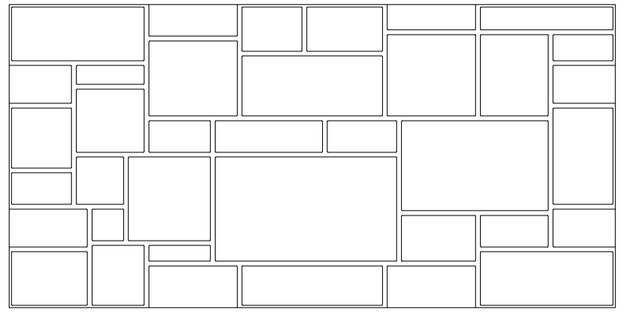
STATE PROJECT NUMBER
1517-75-75



SECTION THROUGH FORMLINER



CONCRETE FORMLINER STAINING DETAIL



ASHLAR

MAXIMUM RELIEF: 1⅝"
AVERAGE RELIEF: 1¼"
LINER THICKNESS*: 2½"
STONE SIZE: H: 3" - 17"
W: 5"-29"

* INCLUDES INTERNAL PLYWOOD BACKING

CONCRETE STAINING SCHEDULE

MARK	COLOR	FED. COLOR NO.	LOCATION
B	LATTE	33522	WALL PANELS, ANCHOR SLAB

NOTE: 1. FINISH ON COLORS IS FLAT (LUSTERLESS)

NOTES

FORMLINER COURSING ON RETAINING WALL SHALL BE LEVEL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-70-120

DRAWN BY	JDL	PLANS CK'D.	MJA

AESTHETIC DETAILS

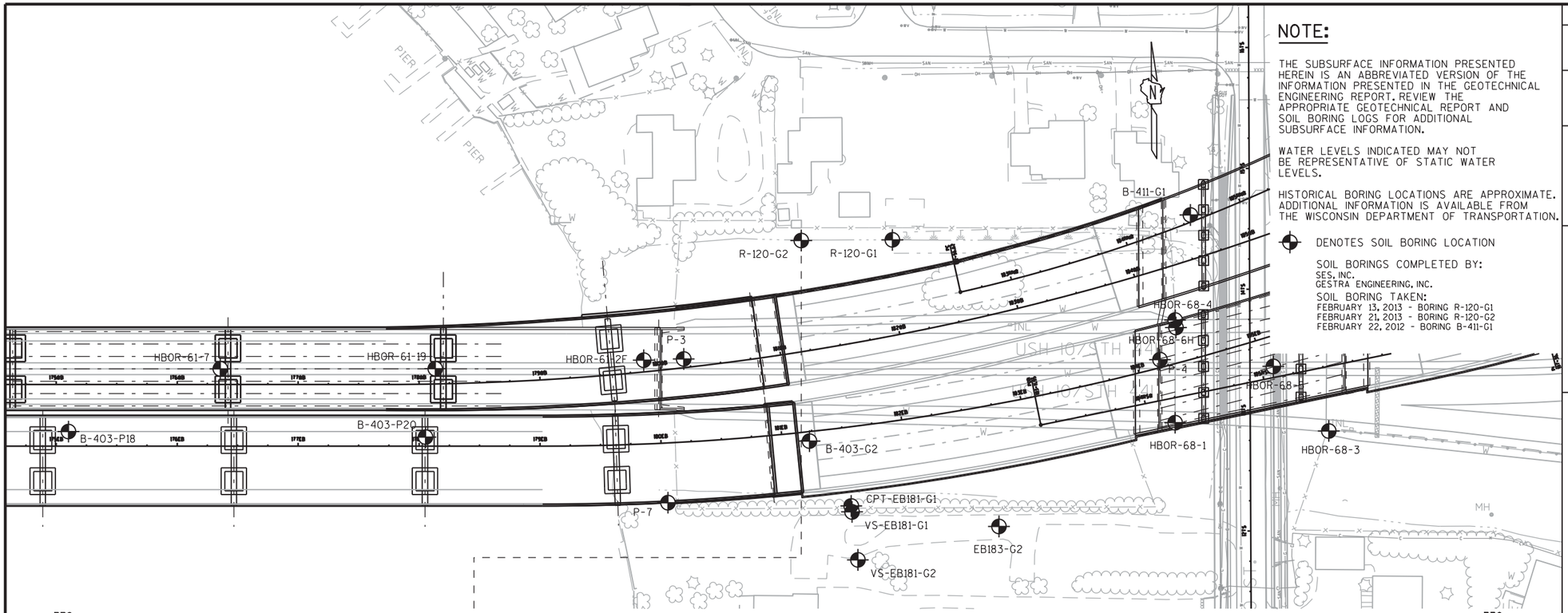
SHEET 11 OF 12
844

DATE: 5/5/2015
I.D.

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NOTE:

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.

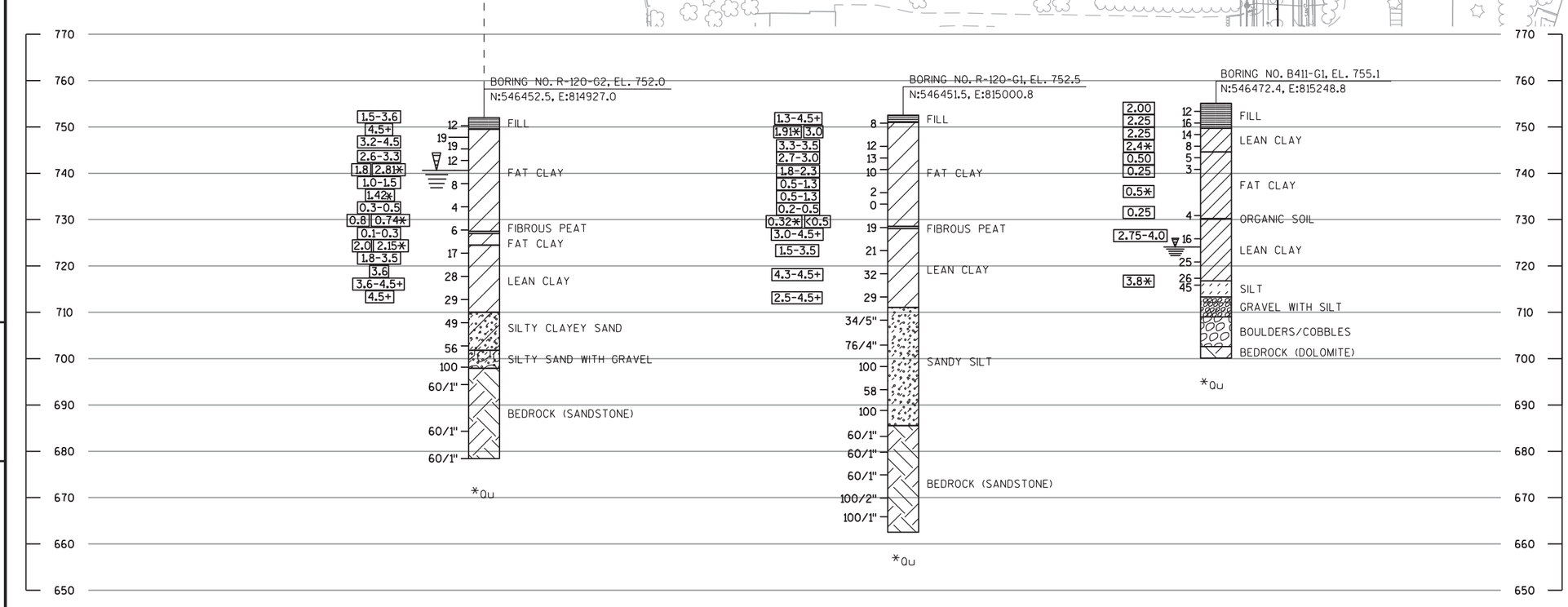
WATER LEVELS INDICATED MAY NOT BE REPRESENTATIVE OF STATIC WATER LEVELS.

HISTORICAL BORING LOCATIONS ARE APPROXIMATE. ADDITIONAL INFORMATION IS AVAILABLE FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
SES, INC.
GESTRA ENGINEERING, INC.

SOIL BORING TAKEN:
FEBRUARY 13, 2013 - BORING R-120-G1
FEBRUARY 21, 2013 - BORING R-120-G2
FEBRUARY 22, 2012 - BORING B-411-G1



STATE PROJECT NUMBER

1517-75-75

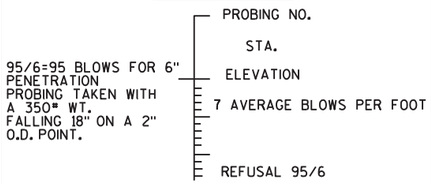
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

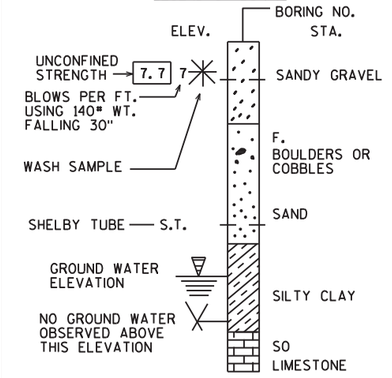
MATERIAL SYMBOLS

TOPSOIL / FILL, 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-70-120

DRAWN BY DB | PLANS CK'D. BW

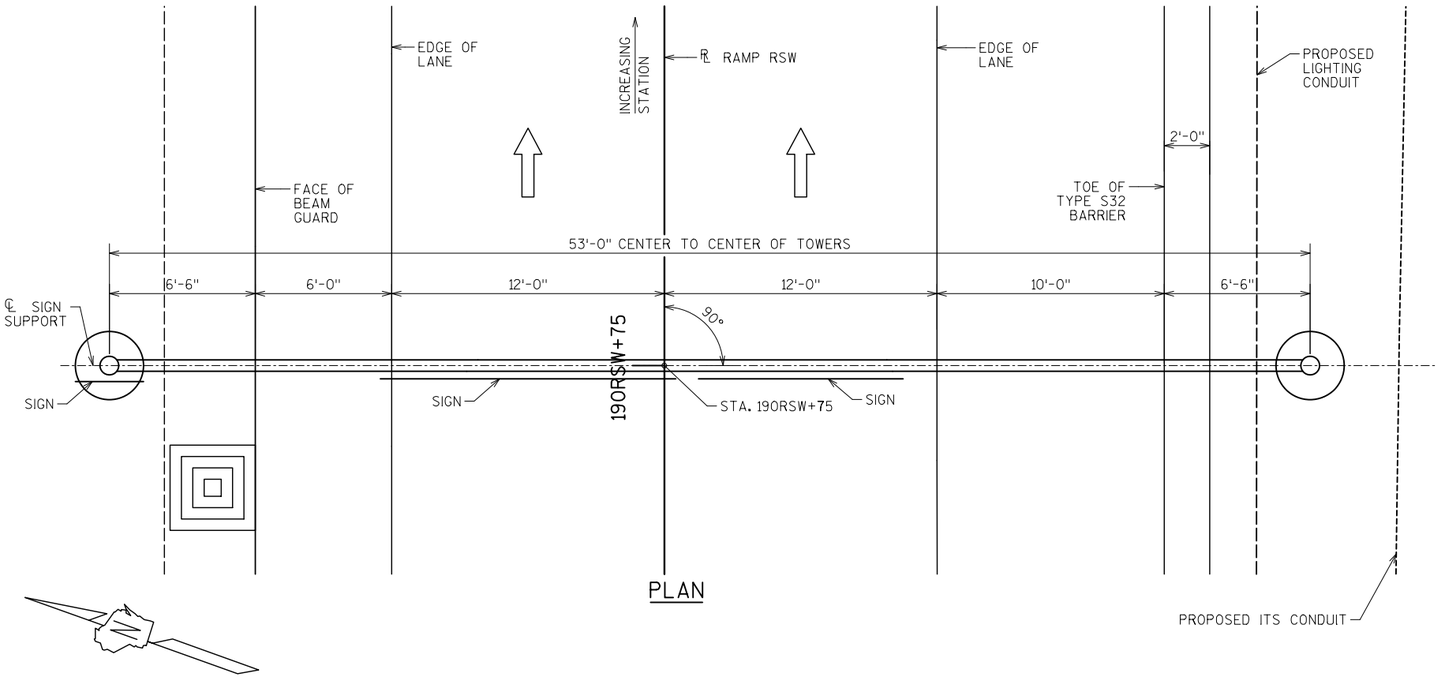
SUBSURFACE EXPLORATION

SHEET 12 OF 12

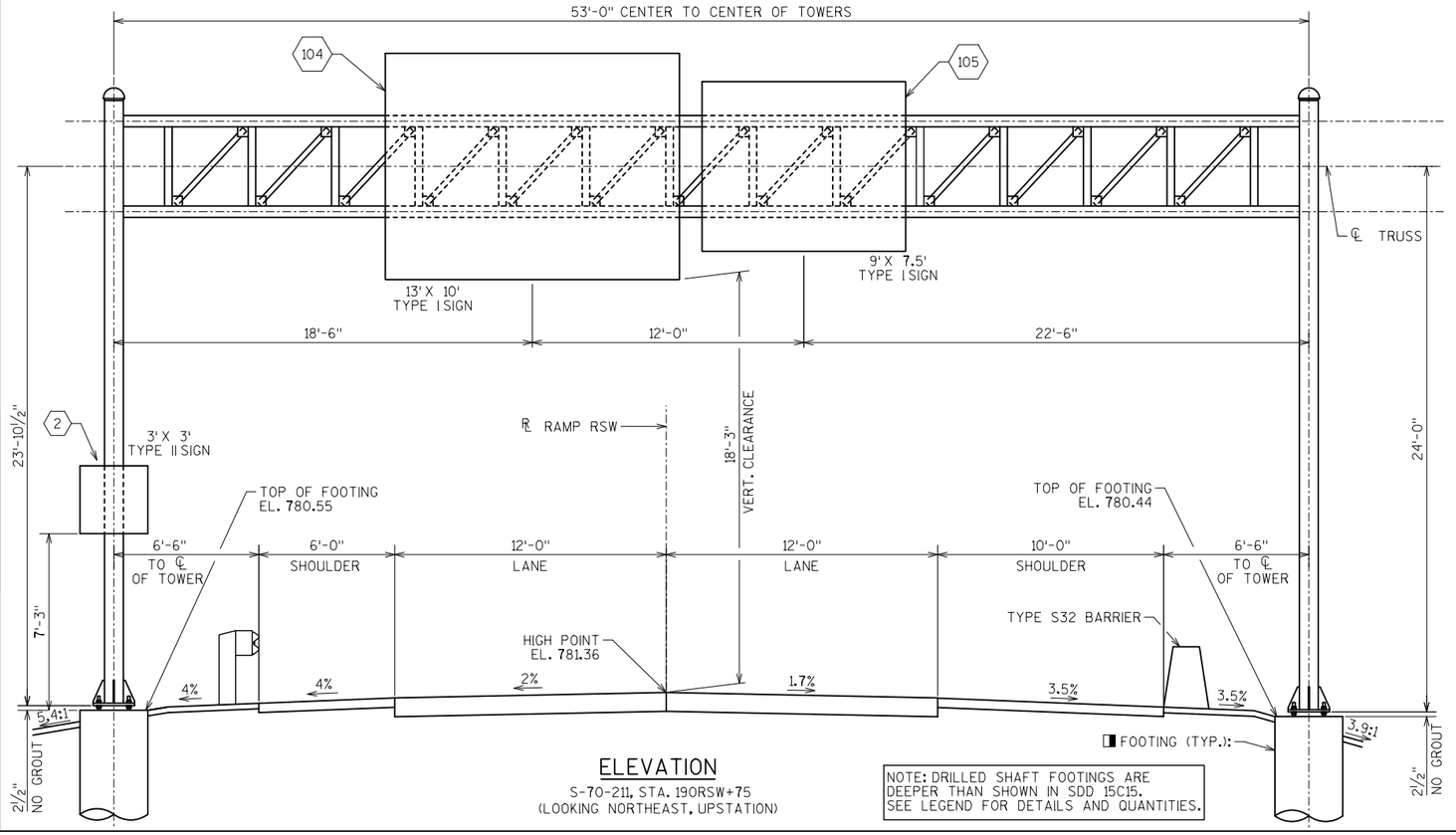
845

8

8



PLAN



ELEVATION

S-70-211, STA. 190RSW+75
(LOOKING NORTHEAST, UPSTATION)

NOTE: DRILLED SHAFT FOOTINGS ARE DEEPER THAN SHOWN IN SDD 15C15. SEE LEGEND FOR DETAILS AND QUANTITIES.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

OVERHEAD SIGN SUPPORTS SHALL BE DESIGNED AND FABRICATED USING STEEL.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

CENTER TYPE I SIGNS VERTICALLY ON TRUSS.

HANDHOLES ARE NOT REQUIRED.

DESIGN STRUCTURE BASE PLATE CONNECTION TO ACCOMODATE A MINIMUM OF SIX (6) ANCHOR BOLTS.

SIZE THE ANCHOR BOLT / TEMPLATE ASSEMBLY TO FIT WITHIN THE BAR CAGE OF THE FOOTING BASE SHOWN IN STANDARD DETAIL DRAWING 15C15 IN ADDITION TO MEETING ALL APPLICABLE DESIGN REQUIREMENTS FOR THE DESIGN OF THE UPRIGHT BASE CONNECTION.

PROVIDE IDENTIFICATION PLAQUE FOR THE OVERHEAD SIGN SUPPORT. COST INCIDENTAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT (STRUCTURE)".

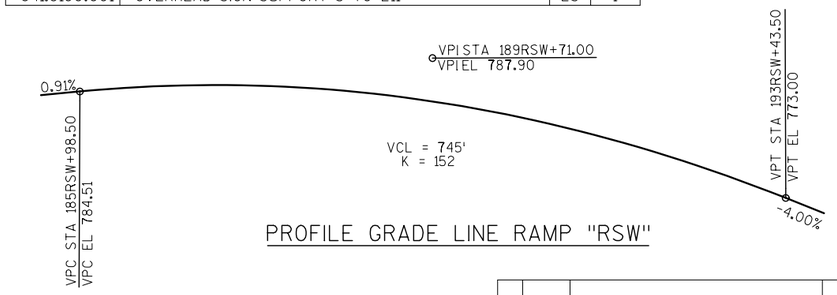
DESIGN NEW OVERHEAD SIGN SUPPORTS ACCORDING TO THE LATEST EDITION OF THE STATE OF WISCONSIN "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" AND AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS."

DESIGN OF THE SIGN SUPPORT STRUCTURE, EXCAVATION, CONCRETE, REINFORCING STEEL, STEEL MEMBERS, BACKFILLING, AND FABRICATION SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT (STRUCTURE)".

SIGNS OR BLANKS SHALL BE INSTALLED ON THE OVERHEAD SIGN SUPPORT AT THE TIME OF ERECTION. BLANKS, IF USED, SHALL BE OF THE SAME SIZE AND LOCATION AS PERMANENT SIGNS.

ESTIMATED QUANTITIES

BID ITEM #	BID ITEM	UNIT	TOTAL
641.8100.001	OVERHEAD SIGN SUPPORT S-70-211	LS	1



PROFILE GRADE LINE RAMP "RSW"

STATE PROJECT NUMBER

1517-75-75

LIST OF DRAWINGS

1. PLAN AND ELEVATION S-70-211
2. PLAN AND ELEVATION S-70-212

DESIGN DATA

DESIGN SIGN AREA = 206.5 SF

SIGN DIMENSIONS

- 2 — 3'-0" X 3'-0"
- 104 — 13'-0" X 10'-0"
- 105 — 9'-0" X 7'-6"

LEGEND

- ## — REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEET
- ◨ MODIFY SDD 15C15 TO HAVE A TOTAL SHAFT LENGTH OF 13'-9" WITH 15 HOOPS AND VERTICAL REINFORCING BARS WITH LENGTH OF 13'-4".

QUANTITES PER FOOTING FOR S-70-211 ARE:

CONCRETE: 3.6 C.Y.
H.S. REINFORCEMENT: 230 LBS.

WISCONSIN — MICHAEL J. ARNOLD — E-41717 — GREENDALE WI — PROFESSIONAL ENGINEER — 11/26/2014

NE REGION CONTACT - SCOTT EBEL (920) 492-2240
BUREAU OF STRUCTURES CONTACT - BILL DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL ARNOLD (414) 831-4179

NO.	DATE	REVISION	BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 04/22/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

OVERHEAD SIGN SUPPORTS S-70-211, S-70-212

RACINE RD (CTH P) INTERCHANGE SIGN SUPPORTS

COUNTY	TOWN/~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC.	LOAD 90 MPH 3 SEC. SPEED
AASHTO STANDARD SIGN SPEC.	

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JDL	MJA	KNW	MJA

PLAN AND ELEVATION S-70-211

SHEET 1 OF 2
846

8

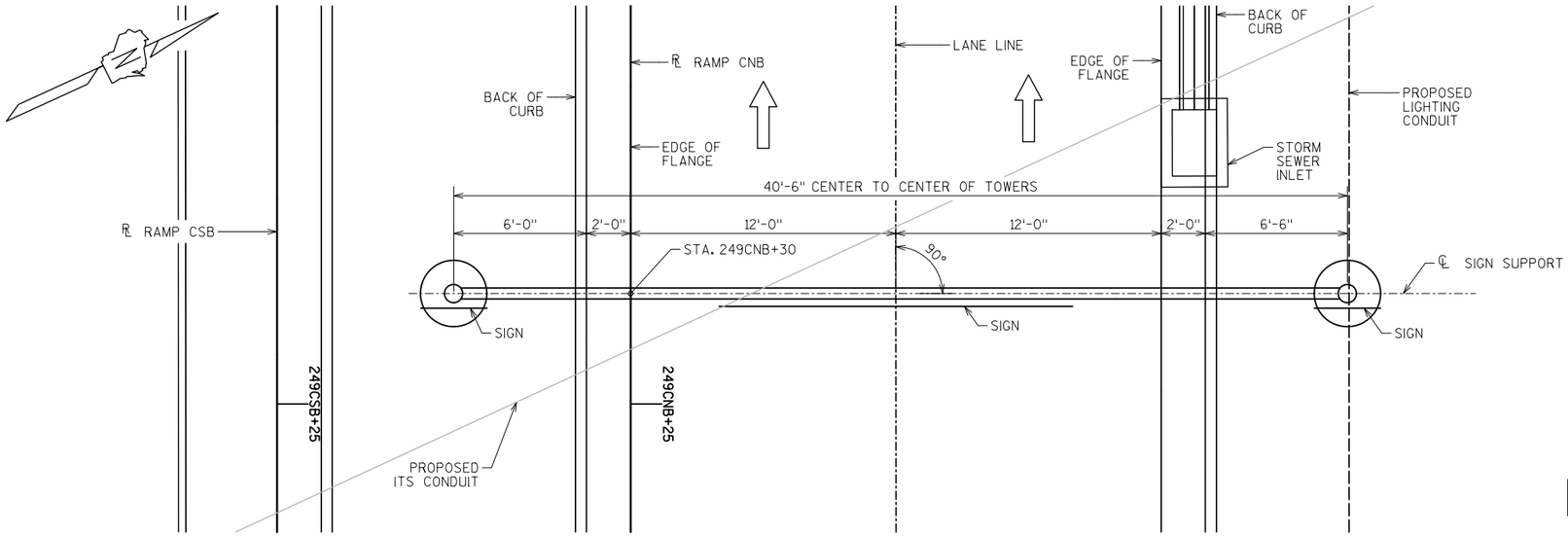
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DATE: 11/26/2014

I.D.

STATE PROJECT NUMBER
1517-75-75



PLAN

DESIGN DATA

DESIGN SIGN AREA = 135 SF

SIGN DIMENSIONS

10 — 3'-0" X 2'-6"

12 — 3'-0" X 2'-6"

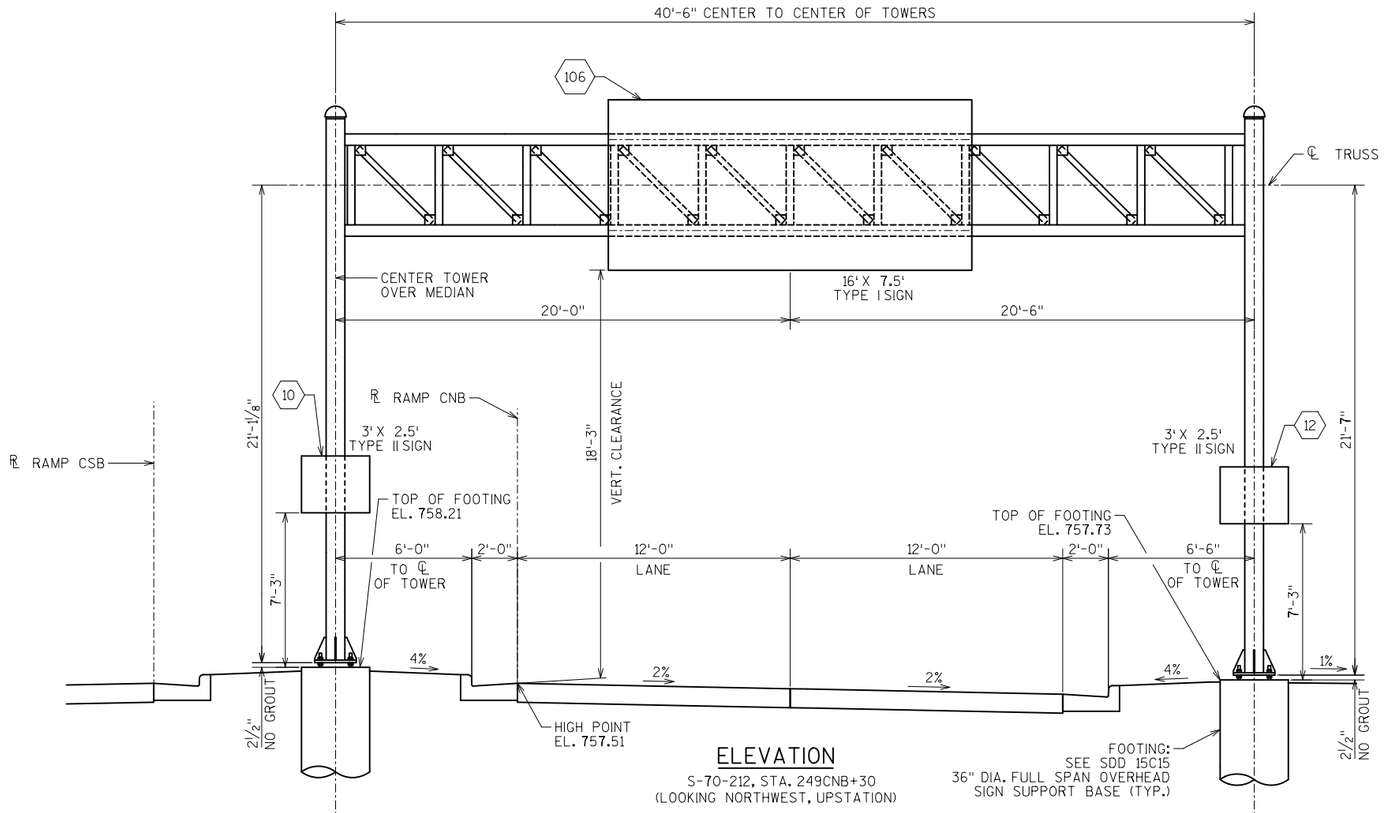
106 — 16'-0" X 7'-6"

LEGEND

— REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEET

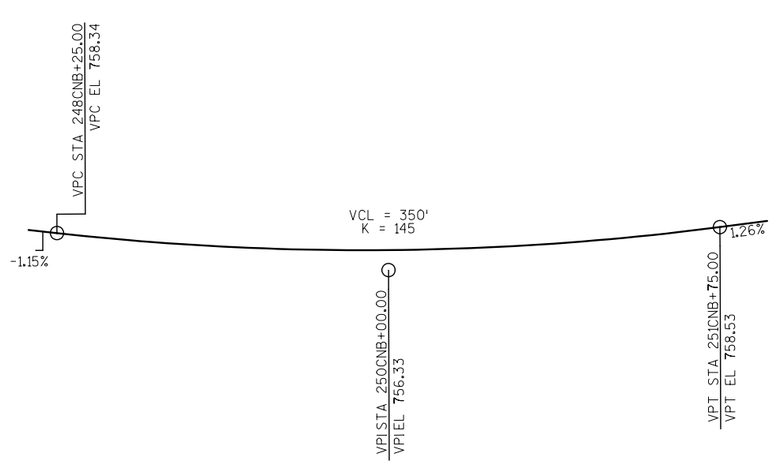
ESTIMATED QUANTITIES

BID ITEM #	BID ITEM	UNIT	TOTAL
641.8100.002	OVERHEAD SIGN SUPPORT S-70-212	LS	1



ELEVATION

S-70-212, STA. 249CNB+30
(LOOKING NORTHWEST, UPSTATION)



PROFILE GRADE LINE RAMP "CNB"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN SUPPORTS
S-70-211, S-70-212

DRAWN BY: JDL | PLANS CK'D.: MJA

PLAN AND ELEVATION
S-70-212

SHEET 2 OF 2
847

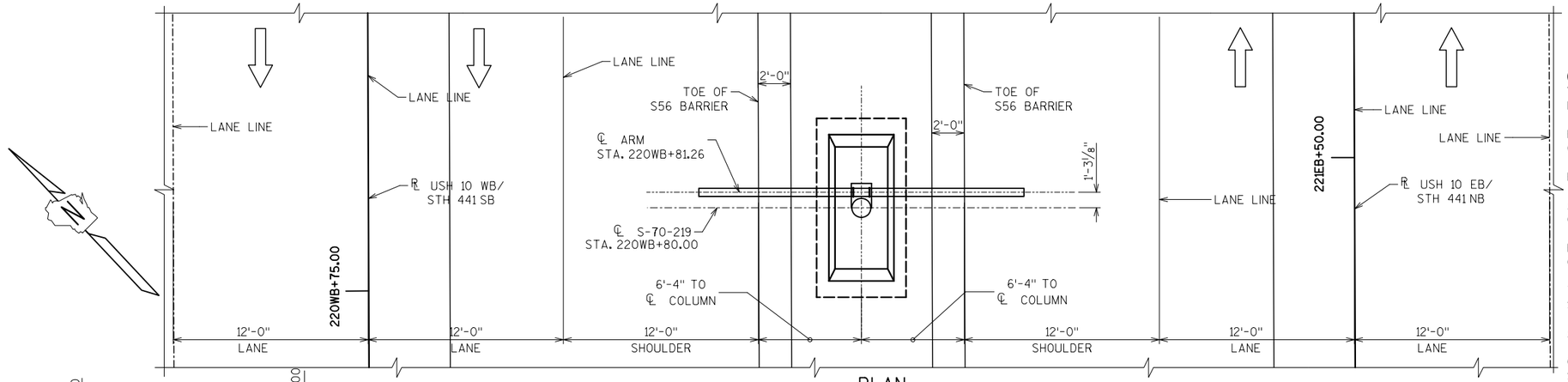
DATE: 11/26/2014
I.D.

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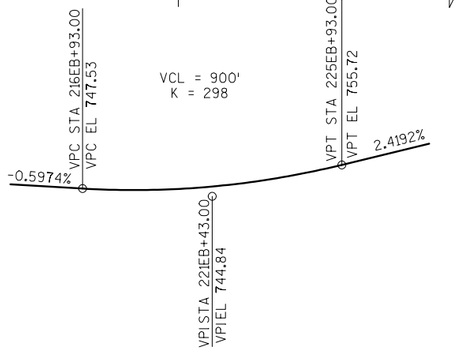
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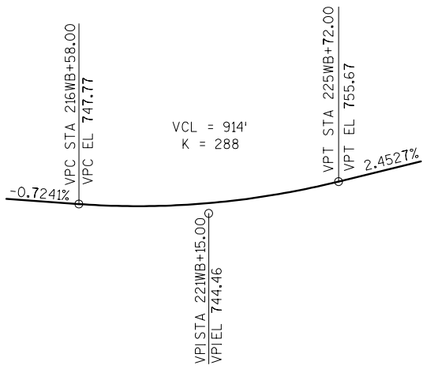
STATE PROJECT NUMBER
1517-75-75



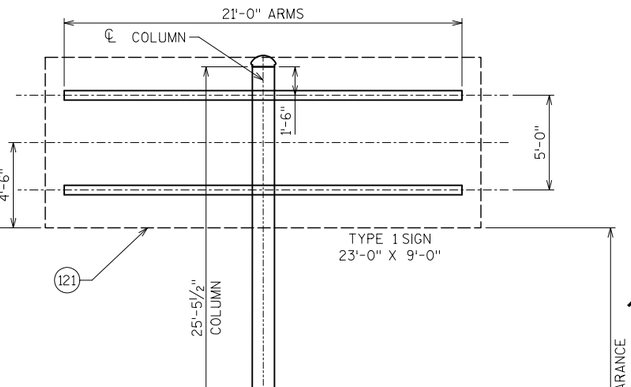
PLAN



PROFILE USH 10 EB/STH 441 NB



PROFILE USH 10 WB/STH 441 SB



ELEVATION

S-70-219, ℄ AT STA. 220WB+80.00
(LOOKING NORTHEAST, UPSTATION)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

ALL DIMENSIONS ARE IN SURVEY FEET AND SURVEY INCHES UNLESS OTHERWISE SHOWN OR NOTED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

CENTER SIGNS VERTICALLY ON CHORDS AND HORIZONTALLY SYMMETRICAL ABOUT POSTS.

HANDHOLES ARE NOT REQUIRED.

PROVIDE A ¾" CHAMFER OR 1" RADIUS ON ALL EXPOSED CONCRETE EDGES.

EXCAVATION AND BACKFILL REQUIRED TO CONSTRUCT THE CONCRETE FOOTING SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

PROVIDE AN IDENTIFICATION PLAQUE FOR THE SIGN SUPPORT IN ACCORDANCE WITH SDD "STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS." THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN (STRUCTURE)".

SIGNS OR BLANKS SHALL BE INSTALLED AT THE TIME OF ERECTION. BLANK DIMENSIONS SHALL MATCH THOSE OF THE PROPOSED SIGN AS DESIGNATED IN PLANS. SIGN BLANKS AND MOUNTING HARWARE SHALL BE INCIDENTAL TO "SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN (STRUCTURE)".

WELD TEST AS PER AWS D1.1

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
WI
PROFESSIONAL ENGINEER
5/5/2015

LEGEND

(##) REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEET.

ESTIMATED QUANTITIES

BID ITEM #	BID ITEM	UNIT	TOTAL
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	120
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	440
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	410
641.0100.800	SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN S-70-219	LS	1

DESIGN DATA

DESIGN SIGN AREA = 288 SF (24'-0" X 12'-0" TYPE 1 SIGN)
MAX. SIGN DEPTH = 12'-0" (TYPE 1 SIGN)

DEAD LOAD - WEIGHT OF SIGN AND SUPPORTING STRUCTURE. NO PROVISIONS HAVE BEEN INCLUDED FOR A CATWALK OR LIGHTING.

LIVE LOAD - NONE.

ICE LOAD - 3 PSF TO ONE FACE OF SIGN & AROUND SURFACE OF MEMBERS.

WIND PRESSURE - 90 MPH (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
4. FATIGUE	**

* MIN. VALUE OF 25 PSF FOR GROUP 3.

** SEE SECTION 11 OF AASHTO SIGN SPECIFICATIONS FOR FATIGUE LOADS AND STRESS RANGE LIMITS.

FOUNDATION DATA

SUPPORT ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 29 FEET. A MINIMUM PILE TIP ELEVATION OF 715.37 IS 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.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION S-70-219
2. GENERAL PLAN AND ELEVATION S-70-255
3. SIGN BRIDGE SINGLE POLE DETAILS
4. FOOTING TYPE 0
5. SUBSURFACE EXPLORATION
6. SUBSURFACE EXPLORATION

NE REGION CONTACT - SCOTT EBEL (920) 492-2240
BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL ARNOLD (414) 831-4179

NO.	DATE	REVISION	BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 05/06/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE S-70-219, S-70-255

WIS 441 SIGN STRUCTURES

COUNTY	TOWN ~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC.	LOAD 90 MPH 3 SEC. SPEED
AASHTO STANDARD SIGN SPEC.	

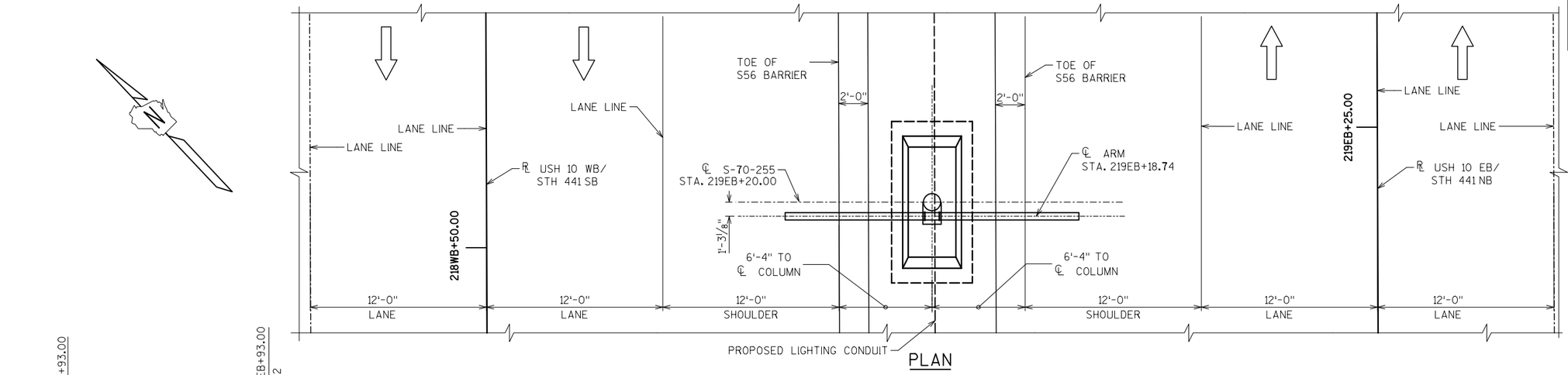
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JDL	NPP	JDL	MJA

GENERAL PLAN AND ELEVATION S-70-219

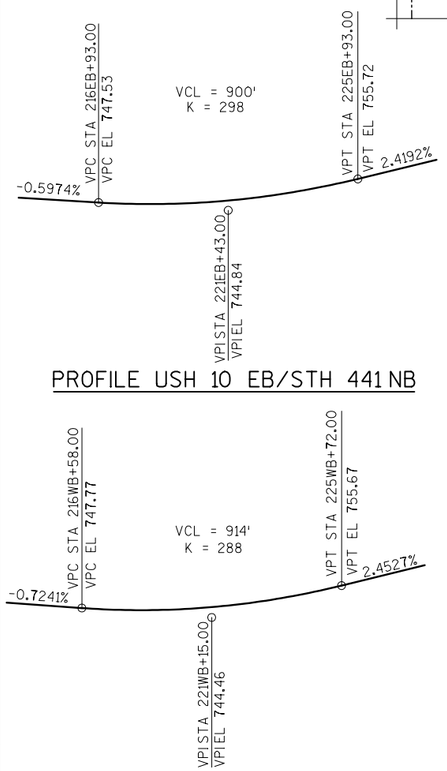
SHEET 1 OF 6
848

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DATE: 5/5/2015
I.D.

STATE PROJECT NUMBER
1517-75-75

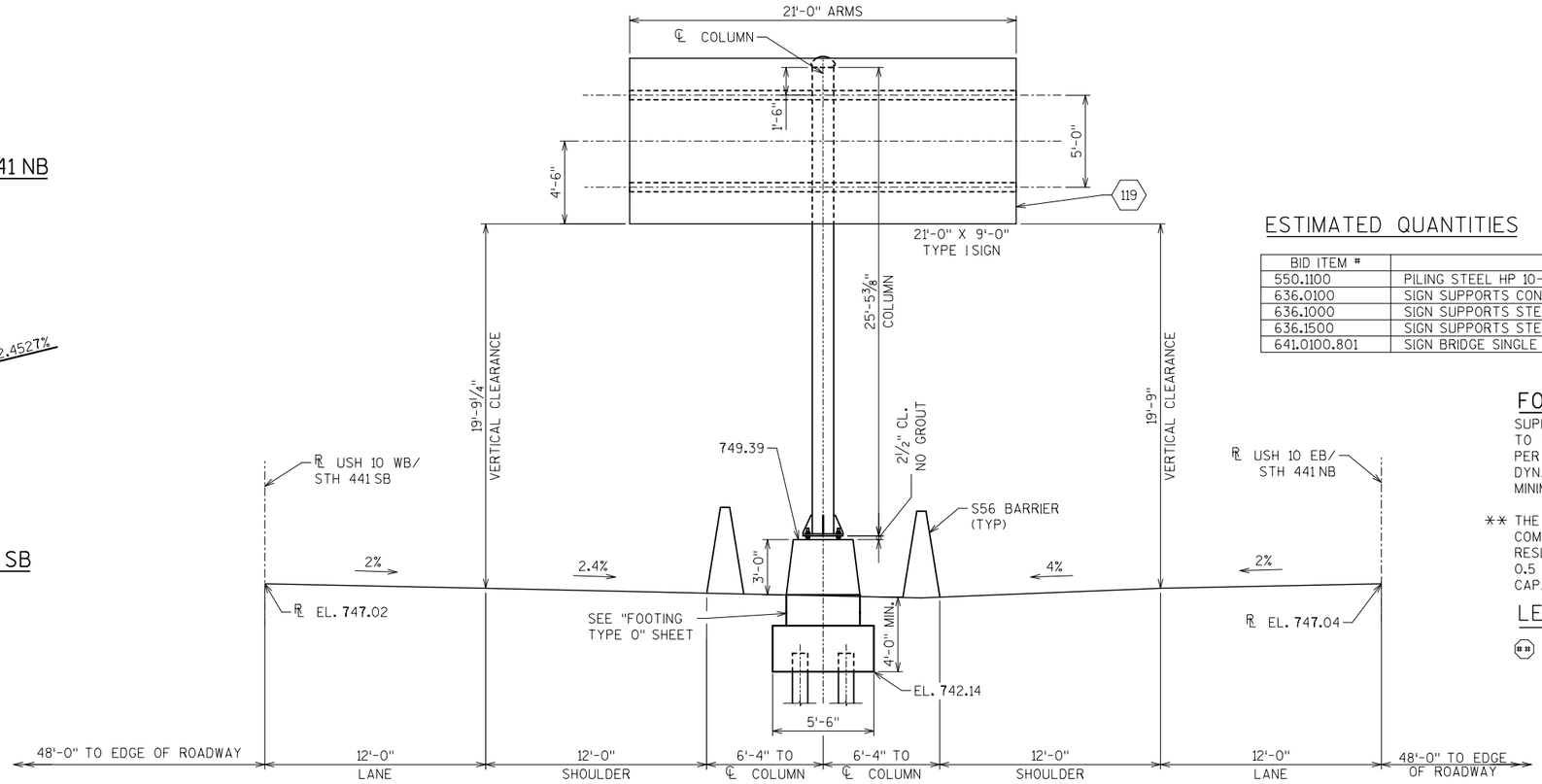


PLAN



PROFILE USH 10 EB/STH 441 NB

PROFILE USH 10 WB/STH 441 SB



ELEVATION

S-70-255, ℄ AT STA. 219EB+20.00
(LOOKING EAST, UPSTATION)

ESTIMATED QUANTITIES

BID ITEM #	BID ITEM	UNIT	TOTAL
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	125
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	12
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	440
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	410
641.0100.801	SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN S-70-255	LS	1

FOUNDATION DATA

SUPPORT ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH IS 31 FEET. A MINIMUM PILE TIP ELEVATION OF 719.00 IS 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

(##) REPRESENTS THE SIGN NO. REFER TO THE PERMANENT SIGNING SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-70-219, S-70-255

DRAWN BY	JDL	PLANS CK'D.	MJA

GENERAL PLAN AND ELEVATION S-70-255

SHEET 2 OF 6
849

DATE: 5/5/2015
I.D.

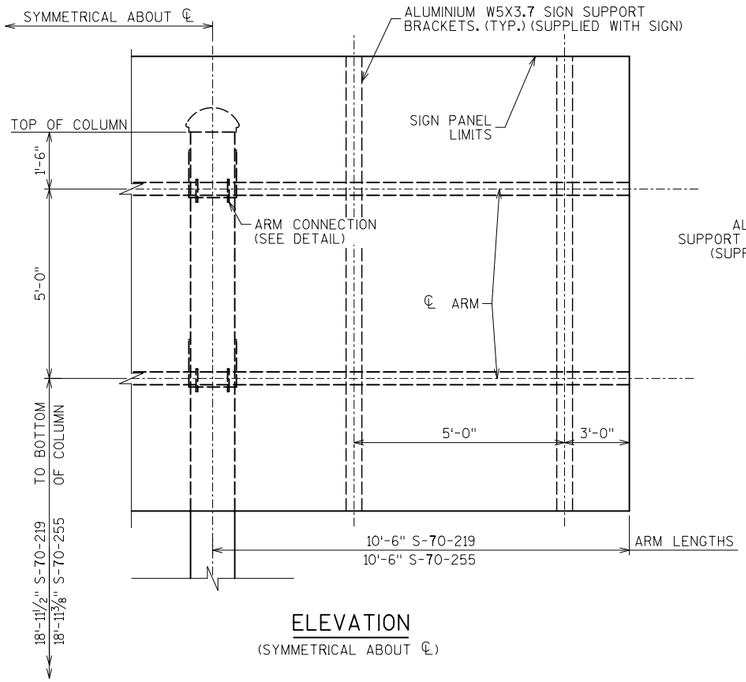
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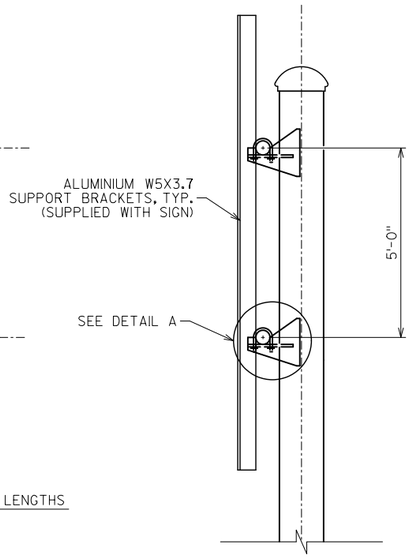
STATE PROJECT NUMBER

1517-75-75

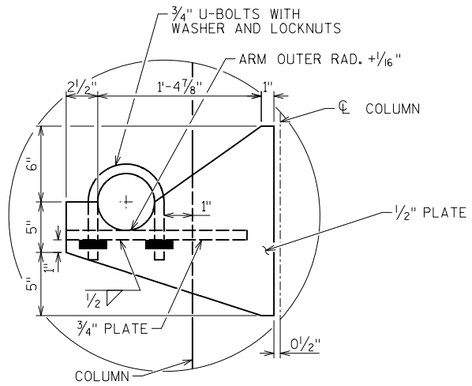


ELEVATION

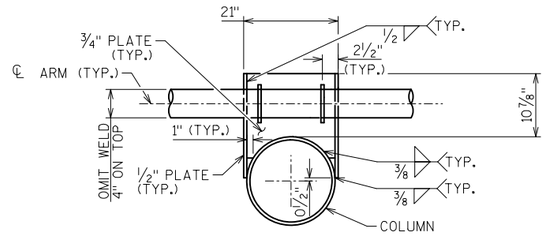
(SYMMETRICAL ABOUT ℄)



END VIEW

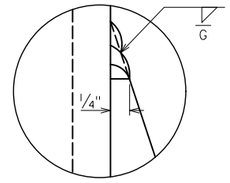


DETAIL A

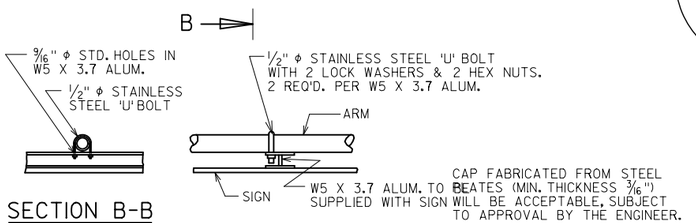


ARM CONNECTION DETAIL

(W5X3.7 BRACKETS NOT SHOWN)



DETAIL B



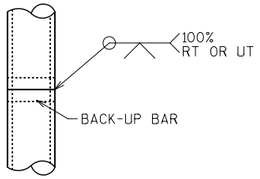
SECTION B-B

TYPICAL SIGN CONNECTION

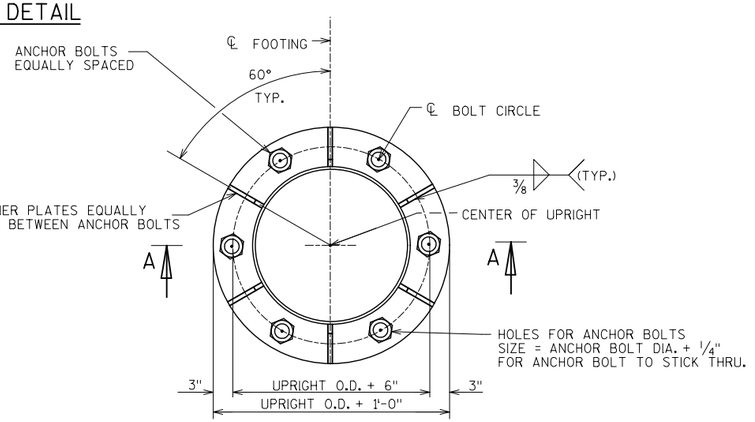
ULTIMATE DESIGN STRESSES

* ARMS & COLUMN	API-5L-X42	fy=42,000 P.S.I.
PLATES & BARS	A.S.T.M. A709 GRADE 36	fy=36,000 P.S.I.
ANCHOR BOLTS	ASTM F1554 GRADE 55	fy=55,000 P.S.I.
HIGH STRENGTH BOLTS - A325		fy=92,000 P.S.I.
STRUCTURAL MEMBERS GALVANIZED		A123
HARDWARE GALVANIZED		A153 CLASS C

* ALTERNATE MATERIAL FOR COLUMN AND ARM LESS THAN 10" DIAMETER MAY BE ASTM A500 GRADE B Fy = 42,000 PSI., GRADE C Fy = 46,000 PSI., OR ASTM A53 GRADE B Fy = 35,000 PSI.

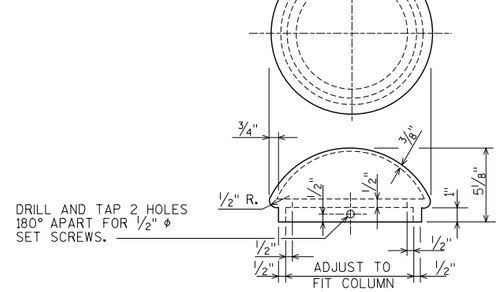


OPTIONAL COLUMN OR CHORD SPLICE DETAIL

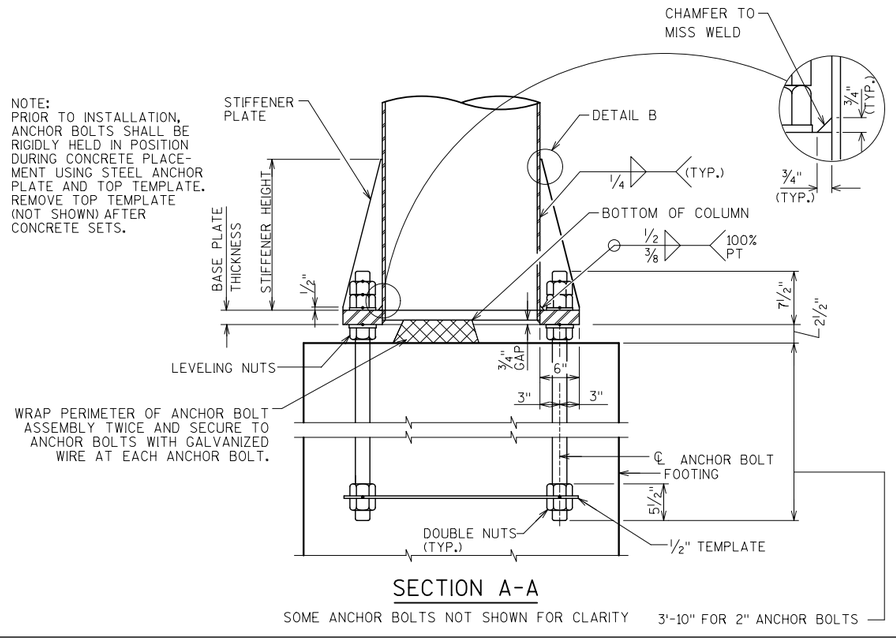


PLAN VIEW

(BASE PLATE)



CAP DETAIL



SECTION A-A

SOME ANCHOR BOLTS NOT SHOWN FOR CLARITY

BASE PLATE & MEMBER DETAILS

STRUCTURE	ARM O.D. X THK.	COLUMN O.D. X THK.	ANCHOR BOLTS	BASE PLATE THICKNESS (IN.)	STIFFENER PLATE THICKNESS (IN.)	STIFFENER PLATE HEIGHT (IN.)
ALL SINGLE POLE SIGN BRIDGES	6.625"X0.432"	20"X0.5"	6 - 2"	2.375"	¾"	12"

GENERAL NOTES

THE STRUCTURE MUST BE ASSEMBLED AFTER GALVANIZING, AND PRIOR TO SHIPMENT TO THE SITE TO ASSURE PROPER FITUP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-70-219, S-70-255

DRAWN BY JDL | PLANS CK'D. MJA

SIGN BRIDGE SINGLE POLE DETAILS

SHEET 3 OF 6

850

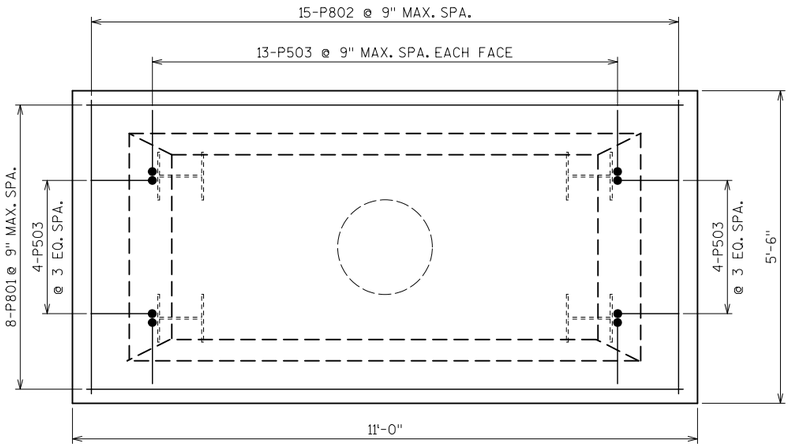
DATE: 5/5/2015
I.D.

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8

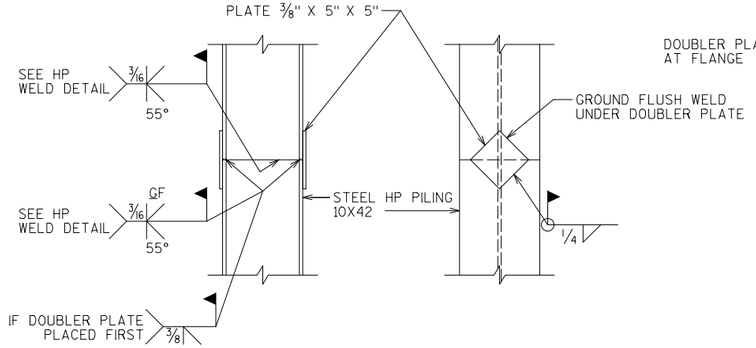
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STATE PROJECT NUMBER
1517-75-75

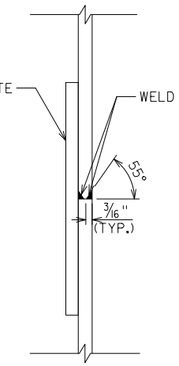


PLAN

(FOOTING BAR SHOWN STEM AND CAP BARS NOT SHOWN FOR CLARITY)

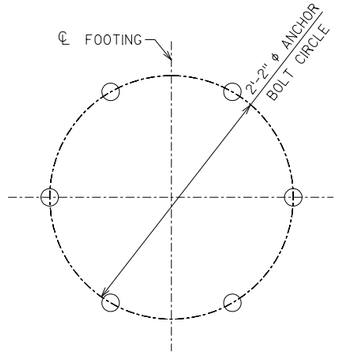


PILE SPLICE DETAIL



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR



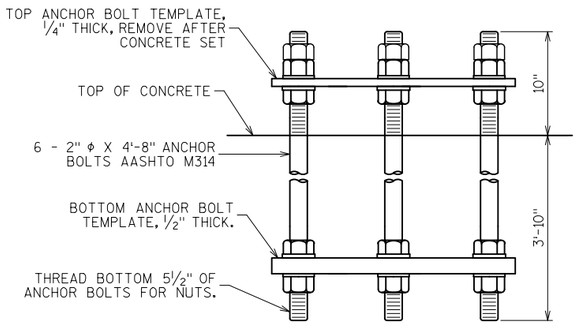
BILL OF BARS

INCLUDES BARS FOR BOTH S-70-219 AND S-70-255

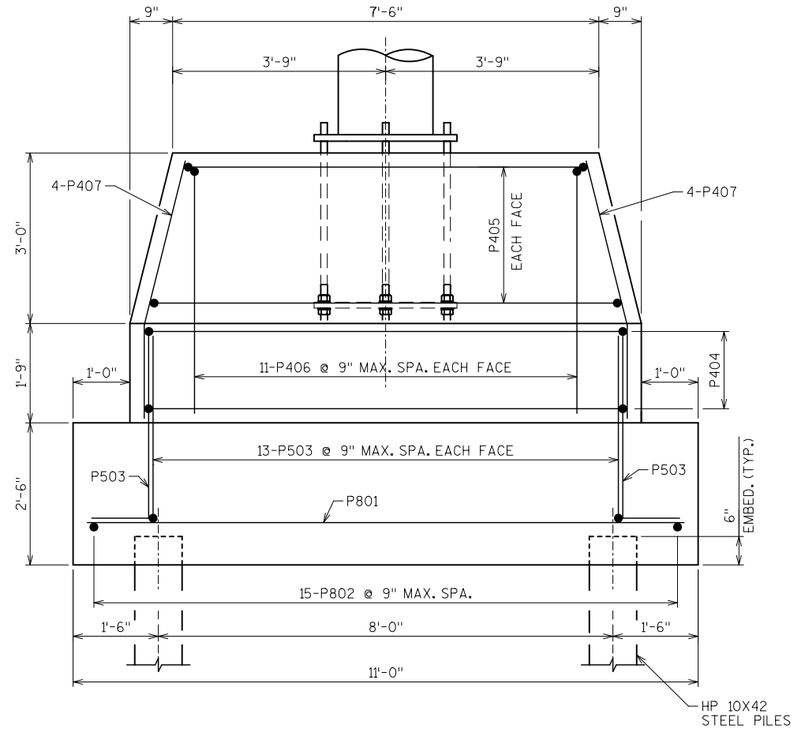
BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	COATED	LOCATION
P801	16	10'-8"				FOOTING LONGITUDINAL
P802	30	5'-2"				FOOTING TRANSVERSE
P503	68	4'-4"	X		X	FOOTING VERTICAL
P404	12	13'-6"	X		X	BASE LONGITUDINAL
P405	20	12'-7"	X	X	X	BASE LONGITUDINAL
P406	44	6'-5"	X		X	BASE VERTICAL
P407	16	4'-5"	X		X	BASE VERTICAL

TOTAL WEIGHT OF EPOXY COATED BARS = 820 LBS
TOTAL WEIGHT OF UNCOATED BARS = 870 LBS

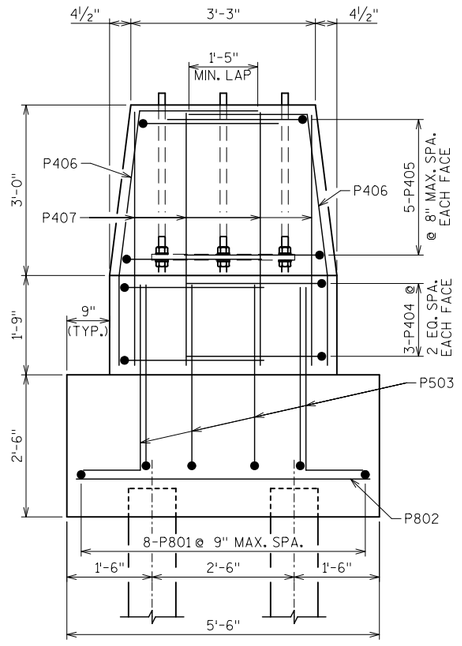
BAR SERIES TABLE		
MARK	NO REQ'D	"A" LENGTH
P405	4 SERIES OF 5	7'-0" TO 8'-6"



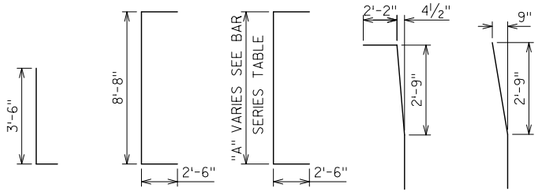
ANCHOR BOLT DETAIL



ELEVATION

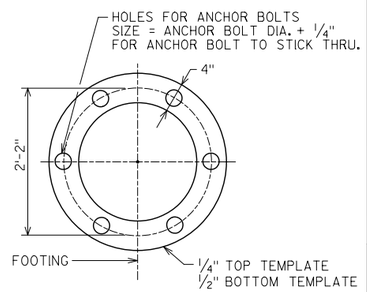


END VIEW



P503 P404 P405 P406 P407

BEND DIAGRAMS



ANCHOR PLATE/TEMPLATE PLAN

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ENTIRE CONCRETE SURFACE SHALL BE SMOOTH AND SLOPED TO DRAIN.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CL.

CONCRETE MASONRY.....f'c = 3,500 PSI

BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 PSI

FOUNDATION DATA

SUPPORT ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH FOR S-70-219 IS 29 FEET WITH A MINIMUM PILE TIP ELEVATION OF 715.37 IS REQUIRED. ESTIMATED PILE LENGTH FOR S-70-255 IS 31 FEET WITH A MINIMUM PILE TIP ELEVATION OF 719.00 IS REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-70-219, S-70-255

DRAWN BY JDL | PLANS CK'D. MJA

FOOTING TYPE 0

SHEET 4 OF 6
851

DATE: 5/5/2015
I.D.

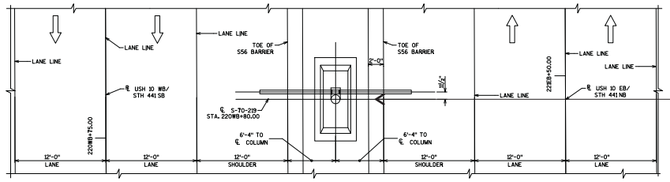
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8

8

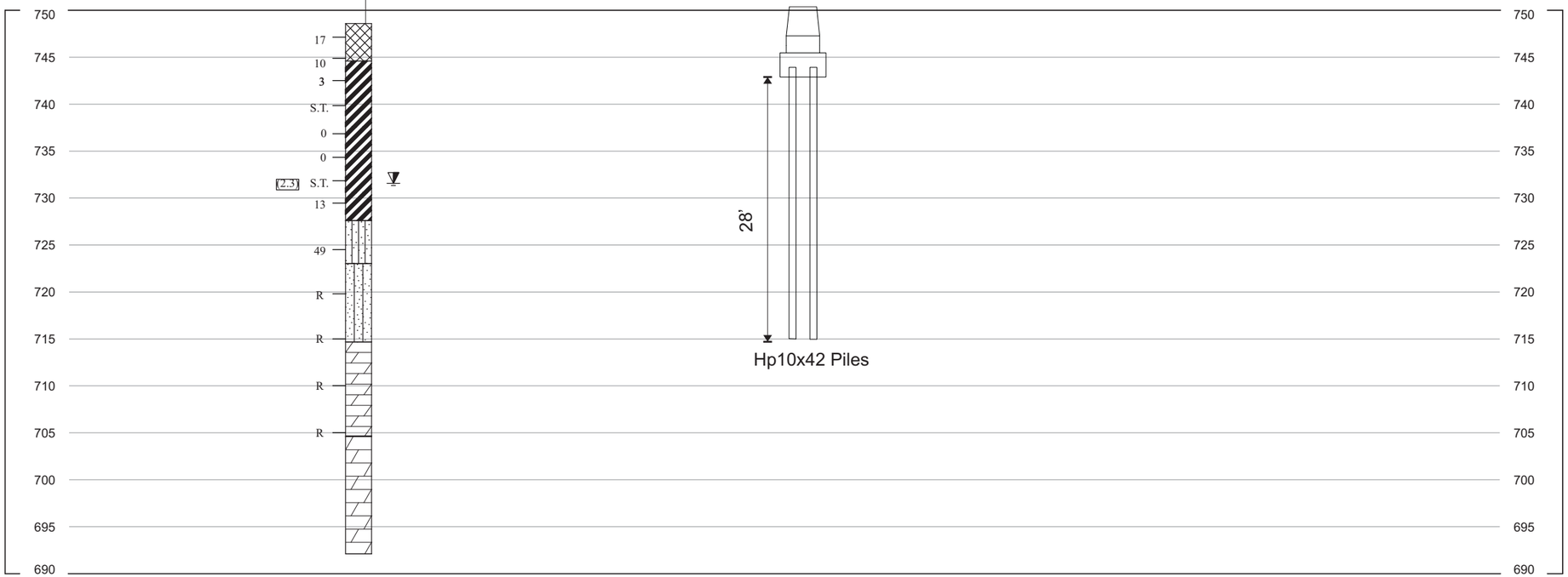
WIS 441
Winnebago, WI

R123-G2



S-70-219
STA. 220WB+80

STA. 221WB+34.37 LT
EL. 748.596, R123-G2



NOTE: WATER LEVEL OBSERVED AT COMPLETION OF DRILLING

NOTE:

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.

BORING STATIONS ARE NOT AVAILABLE AT THE TIME OF THIS REPORT

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
SOILS & ENGINEERING SERVICES, INC.

SOIL BORING TAKEN:

02.11.2013 - BORING R123-G2

STATE PROJECT NUMBER

1517-75-75

ABBREVIATIONS

F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS

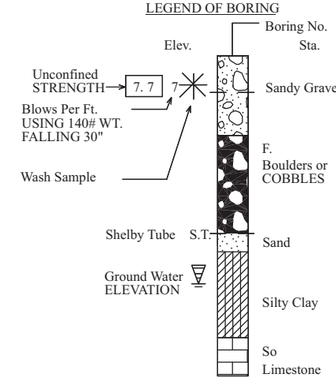
Topsoil, Silt, Sandstone
Sand, Peat, Dolomite
Gravel, Clay, Fill

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



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.

Gestra Engineering Inc.
1626 W. Fond du Lac Avenue
Milwaukee, WI 53205
Phone: 414-933-7444, Fax: 414-933-7844

STRUCTURE S-70-219

DRAWN BY NS | PLANS CK'D. SHL

SUBSURFACE EXPLORATION

SHEET 5 OF 6

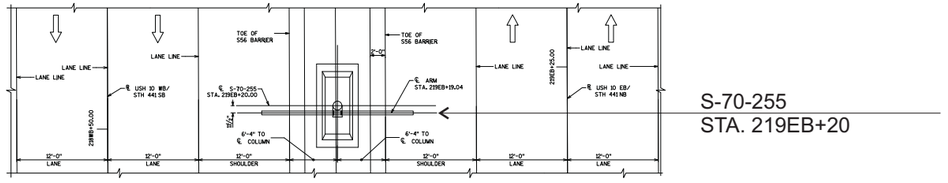
852

SCALE 1"=20'

8

8

WIS 441
Winnebago, WI



S-70-255
STA. 219EB+20

R122-G1

STA. 219 EB+02, 39' RT.
EL. 748.753, R122-G1

NOTE:

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.

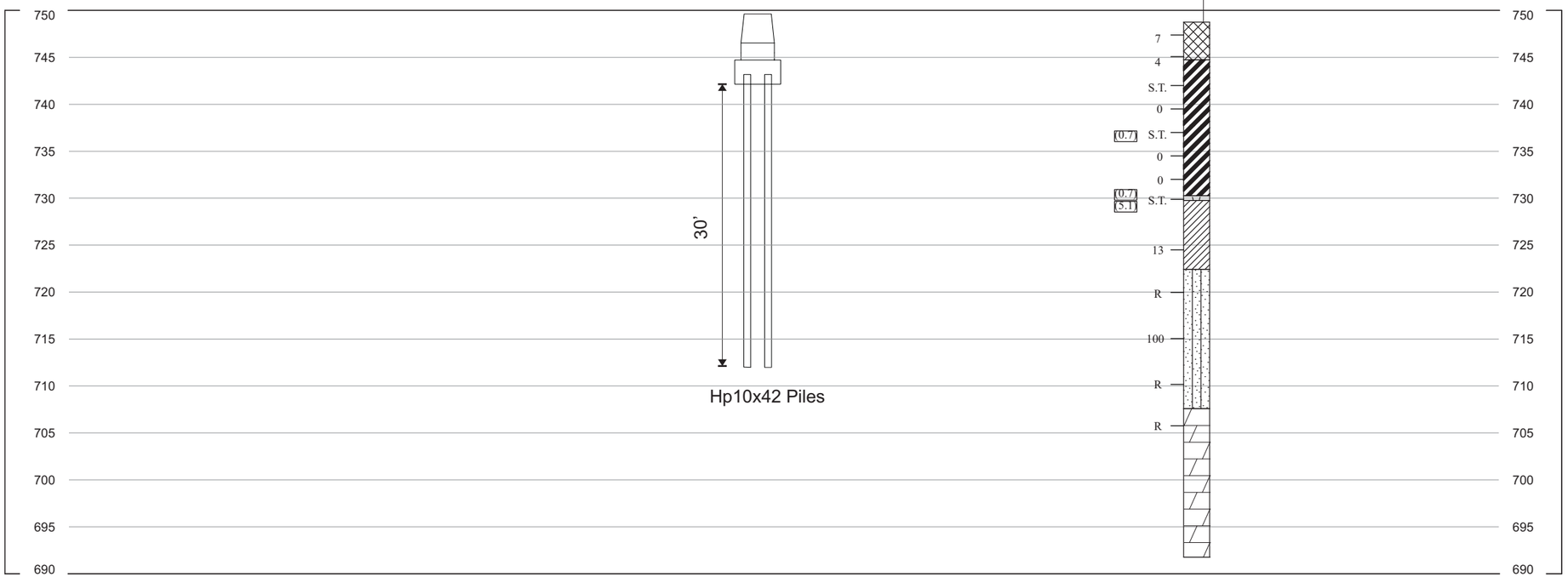
BORING STATIONS ARE NOT AVAILABLE AT THE TIME OF THIS REPORT

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
SOILS & ENGINEERING SERVICES, INC.

SOIL BORING TAKEN:

02.04.2013 - BORING R122-G1



NOTE: WATER LEVEL WAS NOT ENCOUNTERED DURING DRILLING OPERATION

STATE PROJECT NUMBER

1517-75-75

ABBREVIATIONS

F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS

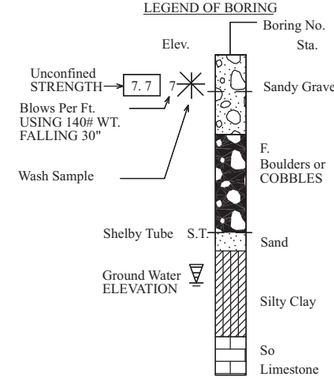
Topsoil, Silt, Dolomite
Sand, Peat, Limestone
Gravel, Clay, Fill

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



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.

Gestra Engineering Inc.
1626 W. Fond du Lac Avenue
Milwaukee, WI 53205
Phone: 414-933-7444, Fax: 414-933-7844

STRUCTURE S-70-255

DRAWN BY NS | PLANS CK'D. SHL

SUBSURFACE EXPLORATION

SHEET 6 OF 6

853

10/20/2014

SCALE 1"=20'

8

8

PROJECT ID 1517-75-75
STAGE 1A - TWA

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
3+85	AH	0.00	63.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4+00		14.87	50.60	0.00	0.00	0.00	31.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00	31.50
4+50		50.00	34.40	0.00	0.00	0.00	78.70	0.00	0.00	0.00	110.21	0.00	0.00	0.00	110.21
5+00		50.00	39.70	0.00	0.00	0.00	68.61	0.00	0.00	0.00	178.82	0.00	0.00	0.00	178.82
5+50		50.00	37.20	0.90	0.00	0.00	71.20	0.83	0.00	0.00	250.02	0.83	0.00	0.00	249.19
6+00		50.00	38.70	1.20	0.00	0.00	70.28	1.94	0.00	0.00	320.30	2.78	0.00	0.00	317.52
6+50		50.00	38.70	0.00	0.00	0.00	71.67	1.11	0.00	0.00	391.97	3.89	0.00	0.00	388.08
7+00		50.00	43.10	0.00	0.00	0.00	75.74	0.00	0.00	0.00	467.71	3.89	0.00	0.00	463.82
7+50		50.00	41.40	0.00	0.00	0.00	78.24	0.00	0.00	0.00	545.95	3.89	0.00	0.00	542.06
8+00		50.00	35.30	0.10	0.00	0.00	71.02	0.09	0.00	0.00	616.97	3.98	0.00	0.00	612.98
8+50		50.00	34.00	0.10	0.00	0.00	64.17	0.19	0.00	0.00	681.13	4.17	0.00	0.00	676.97
9+00		50.00	39.10	0.00	0.00	0.00	67.69	0.09	0.00	0.00	748.82	4.26	0.00	0.00	744.56
9+50		50.00	40.90	0.00	0.00	0.00	74.07	0.00	0.00	0.00	822.89	4.26	0.00	0.00	818.63
10+00		50.00	30.10	0.10	0.00	0.00	65.74	0.09	0.00	0.00	888.63	4.35	0.00	0.00	884.28
10+50		50.00	35.90	0.00	0.00	0.00	61.11	0.09	0.00	0.00	949.74	4.44	0.00	0.00	945.30
11+00		50.00	46.10	0.00	0.00	0.00	75.93	0.00	0.00	0.00	1025.67	4.44	0.00	0.00	1021.22
11+50		50.00	46.10	0.00	0.00	0.00	85.37	0.00	0.00	0.00	1111.04	4.44	0.00	0.00	1106.59
12+00		50.00	41.40	0.00	0.00	0.00	81.02	0.00	0.00	0.00	1192.06	4.44	0.00	0.00	1187.61
12+50		50.00	37.90	0.00	0.00	0.00	73.43	0.00	0.00	0.00	1265.48	4.44	0.00	0.00	1261.04
13+00		50.00	35.80	4.00	0.00	0.00	68.24	3.70	0.00	0.00	1333.72	8.15	0.00	0.00	1325.58
13+50		50.00	62.60	1.60	0.00	0.00	91.11	5.19	0.00	0.00	1424.84	13.33	0.00	0.00	1411.50
14+00		50.00	69.80	0.00	0.00	0.00	122.59	1.48	0.00	0.00	1547.43	14.81	0.00	0.00	1532.61
14+50		50.00	68.50	0.00	0.00	0.00	128.06	0.00	0.00	0.00	1675.48	14.81	0.00	0.00	1660.67
15+00		50.00	59.20	0.00	0.00	0.00	118.24	0.00	0.00	0.00	1793.72	14.81	0.00	0.00	1778.91
15+12		11.64	56.90	0.00	0.00	0.00	25.03	0.00	0.00	0.00	1818.75	14.81	0.00	0.00	1803.94
						Column totals	1818.75	14.81	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 1B - TWB

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
16+50	AH	0.00	23.50	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17+00		50.00	25.60	0.00	0.00	0.00	45.46	0.93	0.00	0.00	45.46	0.93	0.00	0.00	44.54
17+50		50.00	30.90	2.60	0.00	0.00	52.31	2.41	0.00	0.00	97.78	3.33	0.00	0.00	94.44
18+00		50.00	32.70	6.70	0.00	0.00	58.89	8.61	0.00	0.00	156.67	11.94	0.00	0.00	144.72
18+50		50.00	36.70	3.50	0.00	0.00	64.26	9.44	0.00	0.00	220.93	21.39	0.00	0.00	199.54
19+00		50.00	46.10	1.00	0.00	0.00	76.67	4.17	0.00	0.00	297.59	25.56	0.00	0.00	272.04
19+50		50.00	33.00	0.20	0.00	0.00	73.24	1.11	0.00	0.00	370.83	26.67	0.00	0.00	344.17
20+00		50.00	36.20	0.00	0.00	0.00	64.07	0.19	0.00	0.00	434.91	26.85	0.00	0.00	408.06
20+50		50.00	32.40	0.00	0.00	0.00	63.52	0.00	0.00	0.00	498.43	26.85	0.00	0.00	471.57
21+00		50.00	28.90	0.50	0.00	0.00	56.76	0.46	0.00	0.00	555.19	27.31	0.00	0.00	527.87
21+50	BK	50.00	15.10	0.00	0.00	0.00	40.74	0.46	0.00	0.00	595.93	27.78	0.00	0.00	568.15
						Column totals	595.93	27.78	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 1B - TWC

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
170+24	AH	0.00	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170+50		26.44	28.30	0.00	0.00	0.00	26.83	0.00	0.00	0.00	26.83	0.00	0.00	0.00	26.83
171+00		50.00	112.60	0.00	0.00	0.00	130.46	0.00	0.00	0.00	157.29	0.00	0.00	0.00	157.29
171+50		50.00	200.60	0.00	0.00	0.00	290.00	0.00	0.00	0.00	447.29	0.00	0.00	0.00	447.29
172+00		50.00	249.70	0.00	0.00	0.00	416.94	0.00	0.00	0.00	864.24	0.00	0.00	0.00	864.24
172+50		50.00	279.40	0.00	0.00	0.00	489.91	0.00	0.00	0.00	1354.15	0.00	0.00	0.00	1354.15
173+00		50.00	286.00	0.00	0.00	0.00	523.52	0.00	0.00	0.00	1877.67	0.00	0.00	0.00	1877.67
173+50		50.00	277.90	0.00	0.00	0.00	522.13	0.00	0.00	0.00	2399.79	0.00	0.00	0.00	2399.79
174+00		50.00	186.80	0.00	0.00	0.00	430.28	0.00	0.00	0.00	2830.07	0.00	0.00	0.00	2830.07
174+50		50.00	38.10	22.00	0.00	0.00	208.24	20.37	0.00	0.00	3038.31	20.37	0.00	0.00	3017.94
175+00		50.00	46.40	9.90	0.00	0.00	78.24	29.54	0.00	0.00	3116.55	49.91	0.00	0.00	3066.65
175+50		50.00	54.40	0.90	0.00	0.00	93.33	10.00	0.00	0.00	3209.89	59.91	0.00	0.00	3149.98
176+00		50.00	49.80	0.00	0.00	0.00	96.48	0.83	0.00	0.00	3306.37	60.74	0.00	0.00	3245.63
176+50		50.00	42.30	0.00	0.00	0.00	85.28	0.00	0.00	0.00	3391.65	60.74	0.00	0.00	3330.91
177+00		50.00	44.80	0.00	0.00	0.00	80.65	0.00	0.00	0.00	3472.29	60.74	0.00	0.00	3411.55
177+50		50.00	43.60	0.00	0.00	0.00	81.85	0.00	0.00	0.00	3554.15	60.74	0.00	0.00	3493.41
178+00		50.00	31.80	0.00	0.00	0.00	69.81	0.00	0.00	0.00	3623.96	60.74	0.00	0.00	3563.22
178+50		50.00	33.20	0.00	0.00	0.00	60.19	0.00	0.00	0.00	3684.15	60.74	0.00	0.00	3623.41
179+00		50.00	26.00	0.20	0.00	0.00	54.81	0.19	0.00	0.00	3738.96	60.93	0.00	0.00	3678.04
179+15	BK	14.70	24.30	2.40	0.00	0.00	13.69	0.71	0.00	0.00	3752.65	61.63	0.00	0.00	3691.02
						Column totals	3752.65	61.63	0.00	0.00					

PROJECT ID 1517-75-75

STAGE 1B - TWD

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
28+50	AH	0.00	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29+00		50.00	17.60	0.00	0.00	0.00	34.35	0.00	0.00	0.00	34.35	0.00	0.00	0.00	34.35
29+50		50.00	31.60	0.00	0.00	0.00	45.56	0.00	0.00	0.00	79.91	0.00	0.00	0.00	79.91
30+00		50.00	35.90	0.00	0.00	0.00	62.50	0.00	0.00	0.00	142.41	0.00	0.00	0.00	142.41
30+50		50.00	42.70	0.00	0.00	0.00	72.78	0.00	0.00	0.00	215.19	0.00	0.00	0.00	215.19
31+00		50.00	44.00	0.00	0.00	0.00	80.28	0.00	0.00	0.00	295.46	0.00	0.00	0.00	295.46
31+50		50.00	44.80	0.00	0.00	0.00	82.22	0.00	0.00	0.00	377.69	0.00	0.00	0.00	377.69
32+00		50.00	46.10	0.00	0.00	0.00	84.17	0.00	0.00	0.00	461.85	0.00	0.00	0.00	461.85
32+50		50.00	51.10	0.00	0.00	0.00	90.00	0.00	0.00	0.00	551.85	0.00	0.00	0.00	551.85
33+00		50.00	56.30	0.00	0.00	0.00	99.44	0.00	0.00	0.00	651.30	0.00	0.00	0.00	651.30
33+50		50.00	41.05	0.20	0.00	0.00	90.14	0.19	0.00	0.00	741.44	0.19	0.00	0.00	741.25
34+00		50.00	52.10	0.00	0.00	0.00	86.25	0.19	0.00	0.00	827.69	0.37	0.00	0.00	827.31
34+50		50.00	48.40	0.00	0.00	0.00	93.06	0.00	0.00	0.00	920.74	0.37	0.00	0.00	920.37
35+00		50.00	43.90	0.00	0.00	0.00	85.46	0.00	0.00	0.00	1006.20	0.37	0.00	0.00	1005.83
35+50		50.00	45.80	0.00	0.00	0.00	83.06	0.00	0.00	0.00	1089.26	0.37	0.00	0.00	1088.89
36+00		50.00	43.10	0.00	0.00	0.00	82.31	0.00	0.00	0.00	1171.57	0.37	0.00	0.00	1171.20
36+50		50.00	40.50	0.00	0.00	0.00	77.41	0.00	0.00	0.00	1248.98	0.37	0.00	0.00	1248.61
37+00		50.00	35.68	0.00	0.00	0.00	70.54	0.00	0.00	0.00	1319.52	0.37	0.00	0.00	1319.15
37+50		50.00	34.00	0.00	0.00	0.00	64.52	0.00	0.00	0.00	1384.04	0.37	0.00	0.00	1383.67
38+00		50.00	33.90	0.00	0.00	0.00	62.87	0.00	0.00	0.00	1446.91	0.37	0.00	0.00	1446.54
38+50		50.00	33.20	0.00	0.00	0.00	62.13	0.00	0.00	0.00	1509.04	0.37	0.00	0.00	1508.67
39+00		50.00	33.30	0.00	0.00	0.00	61.57	0.00	0.00	0.00	1570.61	0.37	0.00	0.00	1570.24
39+50		50.00	36.90	0.00	0.00	0.00	65.00	0.00	0.00	0.00	1635.61	0.37	0.00	0.00	1635.24
40+00		50.00	37.90	0.00	0.00	0.00	69.26	0.00	0.00	0.00	1704.87	0.37	0.00	0.00	1704.50
40+50		50.00	44.60	0.00	0.00	0.00	76.39	0.00	0.00	0.00	1781.26	0.37	0.00	0.00	1780.89
41+00		50.00	46.70	0.00	0.00	0.00	84.54	0.00	0.00	0.00	1865.80	0.37	0.00	0.00	1865.43
41+50		50.00	47.90	0.00	0.00	0.00	87.59	0.00	0.00	0.00	1953.39	0.37	0.00	0.00	1953.02
42+00		50.00	49.30	0.00	0.00	0.00	90.00	0.00	0.00	0.00	2043.39	0.37	0.00	0.00	2043.02
42+50		50.00	48.40	0.00	0.00	0.00	90.46	0.00	0.00	0.00	2133.85	0.37	0.00	0.00	2133.48
43+00		50.00	54.17	0.00	0.00	0.00	94.97	0.00	0.00	0.00	2228.82	0.37	0.00	0.00	2228.45
43+50		50.00	43.00	0.00	0.00	0.00	89.97	0.00	0.00	0.00	2318.80	0.37	0.00	0.00	2318.43
44+00		50.00	40.40	0.00	0.00	0.00	77.22	0.00	0.00	0.00	2396.02	0.37	0.00	0.00	2395.65
44+50		50.00	32.70	0.20	0.00	0.00	67.69	0.19	0.00	0.00	2463.70	0.56	0.00	0.00	2463.15
45+00		50.00	30.80	3.00	0.00	0.00	58.80	2.96	0.00	0.00	2522.50	3.52	0.00	0.00	2518.98
45+50		50.00	31.90	3.00	0.00	0.00	58.06	5.56	0.00	0.00	2580.56	9.07	0.00	0.00	2571.48
46+00		50.00	27.80	3.80	0.00	0.00	55.28	6.30	0.00	0.00	2635.83	15.37	0.00	0.00	2620.46
46+50		50.00	26.50	10.20	0.00	0.00	50.28	12.96	0.00	0.00	2686.11	28.33	0.00	0.00	2657.78
47+00		50.00	26.70	16.90	0.00	0.00	49.26	25.09	0.00	0.00	2735.37	53.43	0.00	0.00	2681.94
47+50		50.00	30.00	10.80	0.00	0.00	52.50	25.65	0.00	0.00	2787.87	79.07	0.00	0.00	2708.80
48+00		50.00	30.50	9.40	0.00	0.00	56.02	18.70	0.00	0.00	2843.89	97.78	0.00	0.00	2746.11
48+50		50.00	30.50	7.70	0.00	0.00	56.48	15.83	0.00	0.00	2900.37	113.61	0.00	0.00	2786.76
49+00		50.00	31.30	6.00	0.00	0.00	57.22	12.69	0.00	0.00	2957.59	126.30	0.00	0.00	2831.30
49+50		50.00	30.30	8.40	0.00	0.00	57.04	13.33	0.00	0.00	3014.63	139.63	0.00	0.00	2875.00
50+00		50.00	30.80	7.00	0.00	0.00	56.57	14.26	0.00	0.00	3071.20	153.89	0.00	0.00	2917.31
50+50		50.00	30.30	7.80	0.00	0.00	56.57	13.70	0.00	0.00	3127.78	167.59	0.00	0.00	2960.19
51+00		50.00	30.50	6.00	0.00	0.00	56.30	12.78	0.00	0.00	3184.07	180.37	0.00	0.00	3003.70
51+50		50.00	28.00	7.40	0.00	0.00	54.17	12.41	0.00	0.00	3238.24	192.78	0.00	0.00	3045.46

PROJECT ID 1517-75-75
STAGE 1B - TWD (CONTINUED)

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
52+00		50.00	25.80	9.80	0.00	0.00	49.81	15.93	0.00	0.00	3288.06	208.70	0.00	0.00	3079.35
52+50		50.00	28.20	8.90	0.00	0.00	50.00	17.31	0.00	0.00	3338.06	226.02	0.00	0.00	3112.04
53+00		50.00	28.30	6.90	0.00	0.00	52.31	14.63	0.00	0.00	3390.37	240.65	0.00	0.00	3149.72
53+50		50.00	28.10	6.10	0.00	0.00	52.22	12.04	0.00	0.00	3442.59	252.69	0.00	0.00	3189.91
54+00		50.00	25.40	4.70	0.00	0.00	49.54	10.00	0.00	0.00	3492.13	262.69	0.00	0.00	3229.44
54+50		50.00	25.50	2.70	0.00	0.00	47.13	6.85	0.00	0.00	3539.26	269.54	0.00	0.00	3269.72
55+00		50.00	23.20	0.00	0.00	0.00	45.09	2.50	0.00	0.00	3584.35	272.04	0.00	0.00	3312.31
55+47	BK	47.00	17.20	0.00	0.00	0.00	35.16	0.00	0.00	0.00	3619.51	272.04	0.00	0.00	3347.48
						Column totals	3619.51	272.04	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - WB a

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
180+25	AH	0.00	50.90	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180+50		25.00	59.30	1.30	0.00	0.00	51.02	3.70	0.00	0.00	51.02	3.70	0.00	0.00	47.31
181+00		50.00	63.30	50.30	0.00	0.00	113.52	47.78	0.00	0.00	164.54	51.48	0.00	0.00	113.06
181+06		6.00	43.30	85.40	0.00	37.70	11.84	15.08	0.00	4.19	176.38	66.56	0.00	4.19	109.82
181+50		44.00	57.20	99.50	0.00	52.00	81.89	150.66	0.00	73.09	258.27	217.22	0.00	77.28	41.05
182+00		50.00	67.50	128.10	0.00	121.80	115.46	210.74	0.00	160.93	373.73	427.96	0.00	238.21	-54.23
182+25		25.00	54.50	45.80	0.00	175.10	56.48	80.51	0.00	137.45	430.21	508.47	0.00	375.66	-78.25
182+50		25.00	-9.70	128.90	0.00	145.90	20.74	80.88	0.00	148.61	450.96	589.35	0.00	524.27	-138.39
183+00		50.00	-70.50	236.90	0.00	108.30	-74.26	338.70	0.00	235.37	376.70	928.05	0.00	759.64	-551.36
183+50		50.00	31.30	509.00	0.00	131.40	-36.30	690.65	0.00	221.94	340.40	1618.70	0.00	981.58	-1278.30
184+00		50.00	59.80	840.40	0.00	21.80	84.35	1249.44	0.00	141.85	424.75	2868.14	0.00	1123.43	-2443.39
184+11		10.60	140.00	995.50	0.00	0.00	39.22	360.38	0.00	4.28	463.97	3228.52	0.00	1127.71	-2764.55
184+16		5.11	93.40	1027.40	0.00	0.00	22.09	191.43	0.00	0.00	486.06	3419.95	0.00	1127.71	-2933.89
184+40	BK	24.29	4.20	284.30	0.00	0.00	43.90	590.02	0.00	0.00	529.96	4009.97	0.00	1127.71	-3480.01
						Column totals	529.96	4009.97	0.00	1127.71					

PROJECT ID 1517-75-75
STAGE 2A - WB_b

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
185+66	AH	0.00	0.00	218.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186+00		33.74	0.00	783.25	0.00	0.00	0.00	626.03	0.00	0.00	0.00	626.03	0.00	0.00	-626.03
186+01		1.46	0.00	715.90	0.00	0.00	0.00	40.53	0.00	0.00	0.00	666.56	0.00	0.00	-666.56
186+16		14.48	0.00	568.50	0.00	0.00	0.00	344.41	0.00	0.00	0.00	1010.97	0.00	0.00	-1010.97
186+26		9.56	0.00	232.80	0.00	0.00	0.00	141.86	0.00	0.00	0.00	1152.83	0.00	0.00	-1152.83
186+50		24.50	0.00	451.37	0.00	0.00	0.00	310.41	0.00	0.00	0.00	1463.24	0.00	0.00	-1463.24
186+95		45.43	0.00	217.67	0.00	0.00	0.00	562.86	0.00	0.00	0.00	2026.10	0.00	0.00	-2026.10
187+00		4.57	0.00	444.48	0.00	0.00	0.00	56.04	0.00	0.00	0.00	2082.14	0.00	0.00	-2082.14
187+50		50.00	0.00	469.22	0.00	0.00	0.00	846.02	0.00	0.00	0.00	2928.16	0.00	0.00	-2928.16
188+00		50.00	0.00	517.19	0.00	0.00	0.00	913.35	0.00	0.00	0.00	3841.50	0.00	0.00	-3841.50
188+27		27.00	0.00	241.20	0.00	0.00	0.00	379.20	0.00	0.00	0.00	4220.70	0.00	0.00	-4220.70
188+50		23.00	0.00	506.76	0.00	0.00	0.00	318.57	0.00	0.00	0.00	4539.27	0.00	0.00	-4539.27
189+00		50.00	0.00	460.59	0.00	0.00	0.00	895.69	0.00	0.00	0.00	5434.96	0.00	0.00	-5434.96
189+50		50.00	0.00	538.51	0.00	0.00	0.00	925.09	0.00	0.00	0.00	6360.05	0.00	0.00	-6360.05
190+00		50.00	0.00	678.94	0.00	0.00	0.00	1127.27	0.00	0.00	0.00	7487.32	0.00	0.00	-7487.32
190+50		50.00	2.30	711.97	0.00	0.00	2.13	1287.88	0.00	0.00	2.13	8775.19	0.00	0.00	-8773.06
191+00		50.00	15.70	540.68	0.00	0.00	16.67	1159.86	0.00	0.00	18.80	9935.05	0.00	0.00	-9916.25
191+50		50.00	2.90	530.81	0.00	0.00	17.22	992.12	0.00	0.00	36.02	10927.17	0.00	0.00	-10891.15
192+00		50.00	0.60	631.36	0.00	0.00	3.24	1076.08	0.00	0.00	39.26	12003.24	0.00	0.00	-11963.98
192+50		50.00	0.20	970.57	0.00	0.00	0.74	1483.26	0.00	0.00	40.00	13486.51	0.00	0.00	-13446.51
193+00		50.00	0.00	1151.27	0.00	0.00	0.19	1964.66	0.00	0.00	40.19	15451.17	0.00	0.00	-15410.98
193+50		50.00	0.00	1188.27	0.00	0.00	0.00	2166.24	0.00	0.00	40.19	17617.41	0.00	0.00	-17577.22
194+00		50.00	0.00	1446.46	0.00	0.00	0.00	2439.57	0.00	0.00	40.19	20056.98	0.00	0.00	-20016.79
194+04		4.32	0.00	1227.20	0.00	0.00	0.00	213.89	0.00	0.00	40.19	20270.87	0.00	0.00	-20230.68
194+50		45.68	0.00	1612.24	0.00	0.00	0.00	2401.96	0.00	0.00	40.19	22672.83	0.00	0.00	-22632.64
195+00		50.00	0.00	1809.44	0.00	0.00	0.00	3168.23	0.00	0.00	40.19	25841.05	0.00	0.00	-25800.87
195+22		22.47	0.00	1830.60	0.00	0.00	0.00	1514.66	0.00	0.00	40.19	27355.71	0.00	0.00	-27315.53
195+25		2.28	0.00	1783.10	0.00	0.00	0.00	152.58	0.00	0.00	40.19	27508.29	0.00	0.00	-27468.11
195+30		5.25	0.00	1822.10	0.00	0.00	0.00	350.51	0.00	0.00	40.19	27858.80	0.00	0.00	-27818.61
195+39		9.30	0.00	1933.60	0.00	0.00	0.00	646.81	0.00	0.00	40.19	28505.61	0.00	0.00	-28465.43
195+49	BK	10.00	0.00	664.90	0.00	0.00	0.00	481.20	0.00	0.00	40.19	28986.82	0.00	0.00	-28946.63
						Column totals	40.19	28986.82	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - WB_c

STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
196+97 AH	0.00	0.00	33.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197+00	3.00	0.00	871.25	0.00	0.00	0.00	50.25	0.00	0.00	0.00	50.25	0.00	0.00	-50.25
197+30	30.00	0.00	1281.10	0.00	0.00	0.00	1195.75	0.00	0.00	0.00	1246.00	0.00	0.00	-1246.00
197+39	8.91	0.00	1417.70	0.00	0.00	0.00	445.30	0.00	0.00	0.00	1691.30	0.00	0.00	-1691.30
197+43	4.25	0.00	1392.50	0.00	0.00	0.00	221.17	0.00	0.00	0.00	1912.47	0.00	0.00	-1912.47
197+50	6.84	0.00	1500.13	0.00	0.00	0.00	366.40	0.00	0.00	0.00	2278.87	0.00	0.00	-2278.87
197+51	1.15	0.00	1310.90	0.00	0.00	0.00	59.86	0.00	0.00	0.00	2338.74	0.00	0.00	-2338.74
198+00	48.85	4.40	1134.39	0.00	0.00	3.98	2212.08	0.00	0.00	3.98	4550.82	0.00	0.00	-4546.84
198+50	50.00	0.10	1114.16	0.00	0.00	4.17	2081.99	0.00	0.00	8.15	6632.81	0.00	0.00	-6624.66
199+00	50.00	0.20	1048.23	0.00	0.00	0.28	2002.21	0.00	0.00	8.42	8635.02	0.00	0.00	-8626.60
199+50	50.00	59.90	554.16	0.00	0.00	55.65	1483.69	0.00	0.00	64.07	10118.71	0.00	0.00	-10054.64
200+00	50.00	172.50	360.64	0.00	0.00	215.19	847.03	0.00	0.00	279.26	10965.75	0.00	0.00	-10686.49
200+39	38.74	151.50	282.70	0.00	0.00	232.44	461.53	0.00	0.00	511.70	11427.28	0.00	0.00	-10915.58
200+50	11.26	106.10	580.60	0.00	0.00	53.71	180.01	0.00	0.00	565.41	11607.29	0.00	0.00	-11041.88
200+65	14.88	37.50	447.60	0.00	0.00	39.57	283.33	0.00	0.00	604.98	11890.62	0.00	0.00	-11285.64
200+90	25.41	0.00	556.00	0.00	0.00	17.65	472.25	0.00	0.00	622.63	12362.87	0.00	0.00	-11740.24
201+00	9.71	0.00	810.53	0.00	0.00	0.00	245.72	0.00	0.00	622.63	12608.59	0.00	0.00	-11985.96
201+50	50.00	0.00	740.66	0.00	0.00	0.00	1436.29	0.00	0.00	622.63	14044.88	0.00	0.00	-13422.25
202+00	50.00	0.00	675.51	0.00	0.00	0.00	1311.27	0.00	0.00	622.63	15356.15	0.00	0.00	-14733.52
202+50	50.00	19.60	585.73	0.00	0.00	18.15	1167.82	0.00	0.00	640.78	16523.97	0.00	0.00	-15883.19
203+00	50.00	237.20	873.07	0.00	0.00	237.78	1350.74	0.00	0.00	878.55	17874.71	0.00	0.00	-16996.15
203+43	42.78	133.20	1032.90	0.00	0.00	293.44	1509.95	0.00	0.00	1171.99	19384.66	0.00	0.00	-18212.66
203+50	7.22	162.30	1129.30	0.00	0.00	39.51	289.09	0.00	0.00	1211.50	19673.75	0.00	0.00	-18462.25
204+00	50.00	219.30	1229.20	0.00	0.00	353.33	2183.80	0.00	0.00	1564.84	21857.55	0.00	0.00	-20292.71
204+50	50.00	295.00	1214.90	0.00	0.00	476.20	2263.06	0.00	0.00	2041.04	24120.60	0.00	0.00	-22079.56
205+00	50.00	162.90	937.00	0.00	0.00	423.98	1992.50	0.00	0.00	2465.02	26113.10	0.00	0.00	-23648.08
205+50	50.00	186.80	761.70	0.00	0.00	323.80	1572.87	0.00	0.00	2788.82	27685.97	0.00	0.00	-24897.16
206+00	50.00	200.40	677.80	0.00	0.00	358.52	1332.87	0.00	0.00	3147.34	29018.84	0.00	0.00	-25871.51
206+50	50.00	170.10	571.10	0.00	0.00	343.06	1156.39	0.00	0.00	3490.39	30175.23	0.00	0.00	-26684.84
207+00	50.00	28.50	376.30	0.00	0.00	183.89	877.22	0.00	0.00	3674.28	31052.46	0.00	0.00	-27378.17
207+50	50.00	62.20	342.70	0.00	0.00	83.98	665.74	0.00	0.00	3758.26	31718.20	0.00	0.00	-27959.93
208+00	50.00	20.10	246.70	0.00	0.00	76.20	545.74	0.00	0.00	3834.47	32263.94	0.00	0.00	-28429.47
208+50	50.00	0.00	349.20	0.00	0.00	18.61	551.76	0.00	0.00	3853.08	32815.70	0.00	0.00	-28962.62
209+00	50.00	0.00	256.80	0.00	0.00	0.00	561.11	0.00	0.00	3853.08	33376.81	0.00	0.00	-29523.73
209+50	50.00	0.00	176.40	0.00	0.00	0.00	401.11	0.00	0.00	3853.08	33777.92	0.00	0.00	-29924.84
210+00	50.00	0.30	102.00	0.00	0.00	0.28	257.78	0.00	0.00	3853.35	34035.70	0.00	0.00	-30182.34
210+50	50.00	0.00	23.00	0.00	0.00	0.28	115.74	0.00	0.00	3853.63	34151.44	0.00	0.00	-30297.80
210+84	33.82	12.00	7.90	0.00	0.00	7.52	19.35	0.00	0.00	3861.15	34170.79	0.00	0.00	-30309.64
211+00	16.18	20.20	3.50	0.00	0.00	9.65	3.42	0.00	0.00	3870.80	34174.20	0.00	0.00	-30303.41
211+50	50.00	50.10	0.00	0.00	0.00	65.09	3.24	0.00	0.00	3935.89	34177.45	0.00	0.00	-30241.56
212+00	50.00	75.10	0.00	0.00	0.00	115.93	0.00	0.00	0.00	4051.81	34177.45	0.00	0.00	-30125.63
212+50	50.00	170.90	9.90	0.00	0.00	227.78	9.17	0.00	0.00	4279.59	34186.61	0.00	0.00	-29907.02
212+69	19.49	191.90	6.80	0.00	0.00	130.94	6.03	0.00	0.00	4410.54	34192.64	0.00	0.00	-29782.10
213+00	30.51	212.30	3.20	0.00	0.00	228.37	5.65	0.00	0.00	4638.91	34198.29	0.00	0.00	-29559.38
213+50	50.00	254.10	0.20	0.00	0.00	431.85	3.15	0.00	0.00	5070.76	34201.44	0.00	0.00	-29130.68
214+00	50.00	280.71	0.00	0.00	0.00	495.19	0.19	0.00	0.00	5565.96	34201.62	0.00	0.00	-28635.67
214+50	50.00	200.89	0.00	0.00	0.00	445.93	0.00	0.00	0.00	6011.88	34201.62	0.00	0.00	-28189.74

PROJECT ID 1517-75-75

STAGE 2A - WB_c (CONTINUED)

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
215+00		50.00	175.92	7.07	0.00	0.00	348.90	6.55	0.00	0.00	6360.78	34208.17	0.00	0.00	-27847.39
215+50		50.00	174.82	7.00	0.00	0.00	324.76	13.03	0.00	0.00	6685.54	34221.20	0.00	0.00	-27535.66
216+00		50.00	222.51	7.00	0.00	0.00	367.90	12.96	0.00	0.00	7053.44	34234.16	0.00	0.00	-27180.72
216+50		50.00	221.97	6.49	0.00	0.00	411.56	12.49	0.00	0.00	7464.99	34246.65	0.00	0.00	-26781.66
217+00		50.00	164.99	4.03	0.00	0.00	358.30	9.74	0.00	0.00	7823.29	34256.39	0.00	0.00	-26433.10
217+50		50.00	180.98	6.41	0.00	0.00	320.34	9.67	0.00	0.00	8143.63	34266.06	0.00	0.00	-26122.43
218+00		50.00	179.74	9.30	0.00	0.00	334.00	14.55	0.00	0.00	8477.63	34280.60	0.00	0.00	-25802.97
218+50		50.00	179.78	10.92	0.00	0.00	332.89	18.72	0.00	0.00	8810.52	34299.33	0.00	0.00	-25488.81
218+55		4.83	178.10	11.09	0.00	0.00	32.01	1.97	0.00	0.00	8842.53	34301.30	0.00	0.00	-25458.76
219+00		45.17	195.44	12.68	0.00	0.00	312.46	19.88	0.00	0.00	9154.99	34321.18	0.00	0.00	-25166.19
219+50		50.00	217.95	21.00	0.00	0.00	382.77	31.19	0.00	0.00	9537.76	34352.36	0.00	0.00	-24814.61
220+00		50.00	200.40	26.73	0.00	0.00	387.36	44.19	0.00	0.00	9925.12	34396.56	0.00	0.00	-24471.44
220+25		25.00	268.48	28.29	0.00	0.00	217.07	25.47	0.00	0.00	10142.19	34422.03	0.00	0.00	-24279.84
220+50		25.00	226.15	36.86	0.00	0.00	229.00	30.16	0.00	0.00	10371.19	34452.19	0.00	0.00	-24081.00
220+81		30.93	222.33	37.28	0.00	0.00	256.88	42.47	0.00	0.00	10628.07	34494.66	0.00	0.00	-23866.59
221+00		19.07	223.03	35.82	0.00	0.00	157.28	25.82	0.00	0.00	10785.35	34520.47	0.00	0.00	-23735.13
221+25		25.00	219.15	37.65	0.00	0.00	204.71	34.01	0.00	0.00	10990.06	34554.49	0.00	0.00	-23564.43
221+50		25.00	208.09	34.29	0.00	0.00	197.80	33.31	0.00	0.00	11187.86	34587.79	0.00	0.00	-23399.94
222+00		50.00	179.67	5.90	0.00	0.00	359.04	37.21	0.00	0.00	11546.89	34625.01	0.00	0.00	-23078.11
222+20		19.80	187.19	13.50	0.00	0.00	134.52	7.11	0.00	0.00	11681.41	34632.12	0.00	0.00	-22950.71
222+32	BK	11.90	188.40	21.77	0.00	0.00	82.77	7.77	0.00	0.00	11764.18	34639.89	0.00	0.00	-22875.71
						Column totals	11764.18	34639.89	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - WBT

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
22+32	AH	0.00	219.60	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22+50		18.40	191.20	4.90	0.00	0.00	139.98	4.87	0.00	0.00	139.98	4.87	0.00	0.00	135.10
23+00		50.00	139.30	2.50	0.00	0.00	306.02	6.85	0.00	0.00	445.99	11.72	0.00	0.00	434.27
23+50		50.00	122.60	11.30	0.00	0.00	242.50	12.78	0.00	0.00	688.49	24.50	0.00	0.00	663.99
24+00		50.00	113.50	15.50	0.00	0.00	218.61	24.81	0.00	0.00	907.11	49.32	0.00	0.00	857.79
24+50		50.00	102.80	10.20	0.00	0.00	200.28	23.80	0.00	0.00	1107.38	73.11	0.00	0.00	1034.27
25+00		50.00	134.20	2.10	0.00	0.00	219.44	11.39	0.00	0.00	1326.83	84.50	0.00	0.00	1242.33
25+50		50.00	143.00	3.10	0.00	0.00	256.67	4.81	0.00	0.00	1583.49	89.32	0.00	0.00	1494.18
26+00		50.00	159.40	1.60	0.00	0.00	280.00	4.35	0.00	0.00	1863.49	93.67	0.00	0.00	1769.83
26+50		50.00	163.50	5.40	0.00	0.00	298.98	6.48	0.00	0.00	2162.48	100.15	0.00	0.00	2062.33
27+00		50.00	172.20	3.50	0.00	0.00	310.83	8.24	0.00	0.00	2473.31	108.39	0.00	0.00	2364.92
27+50		50.00	172.80	1.20	0.00	0.00	319.44	4.35	0.00	0.00	2792.75	112.74	0.00	0.00	2680.01
28+00		50.00	32.20	4.60	0.00	0.00	189.81	5.37	0.00	0.00	2982.57	118.11	0.00	0.00	2864.46
28+50		50.00	29.60	5.20	0.00	0.00	57.22	9.07	0.00	0.00	3039.79	127.19	0.00	0.00	2912.60
29+00		50.00	27.90	5.20	0.00	0.00	53.24	9.63	0.00	0.00	3093.03	136.82	0.00	0.00	2956.21
29+50		50.00	30.30	3.60	0.00	0.00	53.89	8.15	0.00	0.00	3146.92	144.97	0.00	0.00	3001.96
30+00		50.00	32.20	0.10	0.00	0.00	57.87	3.43	0.00	0.00	3204.79	148.39	0.00	0.00	3056.40
30+50		50.00	32.90	0.00	0.00	0.00	60.28	0.09	0.00	0.00	3265.07	148.48	0.00	0.00	3116.59
31+00		50.00	18.90	0.00	0.00	0.00	47.96	0.00	0.00	0.00	3313.03	148.48	0.00	0.00	3164.55
31+33	BK	33.00	29.20	0.10	0.00	0.00	29.39	0.06	0.00	0.00	3342.43	148.54	0.00	0.00	3193.88
						Column totals	3342.43	148.54	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - RNE

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
198+74	AH	0.00	742.99	153.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198+82		7.80	761.14	172.8	0.00	0.00	217.26	47.11	0.00	0.00	217.26	47.11	0.00	0.00	170.15
199+00		18.00	790.77	219.9	0.00	0.00	517.30	130.89	0.00	0.00	734.57	178.01	0.00	0.00	556.56
199+50		50.00	1263.48	24.48	0.00	0.00	1902.08	226.28	0.00	0.00	2636.65	404.29	0.00	0.00	2232.36
200+00		50.00	647.87	341.1	0.00	0.00	1769.77	338.50	0.00	0.00	4406.42	742.79	0.00	0.00	3663.63
200+50		50.00	118.90	506.8	0.00	0.00	709.97	785.11	0.00	0.00	5116.39	1527.90	0.00	0.00	3588.49
200+55		4.99	118.30	515.1	0.00	0.00	21.92	94.43	0.00	0.00	5138.31	1622.33	0.00	0.00	3515.98
200+90		34.97	111.00	483.9	0.00	0.00	148.49	646.93	0.00	0.00	5286.80	2269.26	0.00	0.00	3017.54
201+00		10.04	106.90	483.3	0.00	0.00	40.51	179.83	0.00	0.00	5327.32	2449.09	0.00	0.00	2878.23
201+50		50.00	97.70	502.8	0.00	0.00	189.44	913.07	0.00	0.00	5516.76	3362.16	0.00	0.00	2154.60
202+00		50.00	70.70	540.7	0.00	0.00	155.93	966.25	0.00	0.00	5672.69	4328.41	0.00	0.00	1344.28
202+50		50.00	216.50	639.2	0.00	0.00	265.93	1092.46	0.00	0.00	5938.61	5420.87	0.00	0.00	517.74
203+00		50.00	507.90	740	0.00	0.00	670.74	1276.95	0.00	0.00	6609.35	6697.83	0.00	0.00	-88.47
203+05		5.31	533.87	750.7	0.00	0.00	102.44	146.58	0.00	0.00	6711.79	6844.41	0.00	0.00	-132.62
203+50		44.69	568.06	788.9	0.00	0.00	911.95	1274.15	0.00	0.00	7623.74	8118.56	0.00	0.00	-494.82
204+00		50.00	556.90	829.3	0.00	0.00	1041.63	1498.31	0.00	0.00	8665.37	9616.88	0.00	0.00	-951.50
204+17		17.36	541.70	825.8	0.00	0.00	353.18	532.09	0.00	0.00	9018.55	10148.97	0.00	0.00	-1130.42
204+50		32.64	462.80	816.2	0.00	0.00	607.16	992.52	0.00	0.00	9625.72	11141.49	0.00	0.00	-1515.77
205+00		50.00	287.70	786.7	0.00	0.00	694.91	1484.13	0.00	0.00	10320.62	12625.62	0.00	0.00	-2304.99
205+17		17.46	211.70	768	0.00	0.00	161.47	502.66	0.00	0.00	10482.10	13128.28	0.00	0.00	-2646.18
205+46		28.27	172.10	702.1	0.00	0.00	200.93	769.61	0.00	0.00	10683.02	13897.88	0.00	0.00	-3214.86
205+50		4.27	164.80	667.6	0.00	0.00	26.64	108.31	0.00	0.00	10709.66	14006.20	0.00	0.00	-3296.53
205+83		33.04	48.10	505.3	0.00	0.00	130.26	717.64	0.00	0.00	10839.93	14723.84	0.00	0.00	-3883.91
206+00		16.96	15.60	459.1	0.00	0.00	20.01	302.87	0.00	0.00	10859.93	15026.71	0.00	0.00	-4166.78
206+03		3.20	11.20	555.2	0.00	0.00	1.59	60.10	0.00	0.00	10861.52	15086.81	0.00	0.00	-4225.29
206+50		46.80	0.00	493.5	0.00	0.00	9.71	908.87	0.00	0.00	10871.23	15995.69	0.00	0.00	-5124.46
206+69		19.45	0.00	474.8	0.00	0.00	0.00	348.77	0.00	0.00	10871.23	16344.45	0.00	0.00	-5473.23
206+93		23.60	0.00	363.9	0.00	0.00	0.00	366.54	0.00	0.00	10871.23	16711.00	0.00	0.00	-5839.77
207+00		6.95	0.00	370.4	0.00	0.00	0.00	94.51	0.00	0.00	10871.23	16805.50	0.00	0.00	-5934.28
207+50		50.00	0.00	479	0.00	0.00	0.00	786.48	0.00	0.00	10871.23	17591.99	0.00	0.00	-6720.76
208+00		50.00	0.00	373.6	0.00	0.00	0.00	789.44	0.00	0.00	10871.23	18381.43	0.00	0.00	-7510.20
208+50		50.00	0.00	192.4	0.00	0.00	0.00	524.07	0.00	0.00	10871.23	18905.50	0.00	0.00	-8034.28
209+00		50.00	103.90	90	0.00	0.00	96.20	261.48	0.00	0.00	10967.43	19166.99	0.00	0.00	-8199.55
209+50		50.00	148.30	92.9	0.00	0.00	233.52	169.35	0.00	0.00	11200.95	19336.34	0.00	0.00	-8135.39
210+00		50.00	127.90	84.3	0.00	0.00	255.74	164.07	0.00	0.00	11456.69	19500.41	0.00	0.00	-8043.72
210+50		50.00	77.00	73.9	0.00	0.00	189.72	146.48	0.00	0.00	11646.41	19646.89	0.00	0.00	-8000.48
210+51		1.00	76.40	69.7	0.00	0.00	2.84	2.66	0.00	0.00	11649.25	19649.55	0.00	0.00	-8000.30
211+00		49.00	52.40	53.9	0.00	0.00	116.87	112.16	0.00	0.00	11766.13	19761.71	0.00	0.00	-7995.58
211+50		50.00	53.90	31.8	0.00	0.00	98.43	79.35	0.00	0.00	11864.55	19841.06	0.00	0.00	-7976.51
212+00		50.00	75.50	13.4	0.00	0.00	119.81	41.85	0.00	0.00	11984.37	19882.91	0.00	0.00	-7898.54
212+33	BK	33.20	97.70	6.8	0.00	0.00	106.49	12.42	0.00	0.00	12090.85	19895.33	0.00	0.00	-7804.48
						Column totals	12090.85	19895.33	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - RNW

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
186+20	AH	0.00	0.00	163.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186+50		30.00	1.20	71.80	0.00	0.00	0.67	130.61	0.00	0.00	0.67	130.61	0.00	0.00	-129.94
186+89		38.67	1.50	81.85	0.00	0.00	1.93	110.03	0.00	0.00	2.60	240.64	0.00	0.00	-238.04
187+00		11.33	2.30	81.05	0.00	0.00	0.80	34.18	0.00	0.00	3.40	274.82	0.00	0.00	-271.42
187+25		25.10	0.80	82.57	0.00	0.00	1.44	76.05	0.00	0.00	4.84	350.87	0.00	0.00	-346.04
187+50		24.90	1.70	84.90	0.00	0.00	1.15	77.22	0.00	0.00	5.99	428.10	0.00	0.00	-422.10
188+00		50.00	6.10	79.20	0.00	0.00	7.22	151.94	0.00	0.00	13.21	580.04	0.00	0.00	-566.83
188+50		50.00	13.80	79.40	0.00	0.00	18.43	146.85	0.00	0.00	31.64	726.89	0.00	0.00	-695.25
188+75		25.10	16.50	34.50	0.00	0.00	14.08	52.94	0.00	0.00	45.72	779.83	0.00	0.00	-734.11
189+00		24.90	34.70	5.30	0.00	0.00	23.61	18.35	0.00	0.00	69.33	798.19	0.00	0.00	-728.85
189+50		50.00	28.00	30.50	0.00	0.00	58.06	33.15	0.00	0.00	127.39	831.33	0.00	0.00	-703.95
190+00		50.00	26.60	77.10	0.00	0.00	50.56	99.63	0.00	0.00	177.94	930.96	0.00	0.00	-753.02
190+50		50.00	31.30	54.70	0.00	0.00	53.61	122.04	0.00	0.00	231.55	1053.00	0.00	0.00	-821.45
191+00		50.00	58.60	28.70	0.00	0.00	83.24	77.22	0.00	0.00	314.80	1130.22	0.00	0.00	-815.43
191+50		50.00	220.23	1378.92	0.00	0.00	258.18	1303.35	0.00	0.00	572.97	2433.58	0.00	0.00	-1860.60
192+00		50.00	42.81	1271.85	0.00	0.00	243.56	2454.42	0.00	0.00	816.53	4887.99	0.00	0.00	-4071.47
192+50		50.00	65.48	1309.27	0.00	0.00	100.27	2389.93	0.00	0.00	916.80	7277.92	0.00	0.00	-6361.12
193+00		50.00	88.33	1625.93	0.00	0.00	142.42	2717.78	0.00	0.00	1059.21	9995.70	0.00	0.00	-8936.48
193+50		50.00	127.57	1563.52	0.00	0.00	199.91	2953.19	0.00	0.00	1259.12	12948.89	0.00	0.00	-11689.77
193+99		48.99	177.47	1564.57	0.00	0.00	276.74	2837.87	0.00	0.00	1535.86	15786.76	0.00	0.00	-14250.90
194+00		1.01	184.19	1545.47	0.00	0.00	6.76	58.17	0.00	0.00	1542.62	15844.93	0.00	0.00	-14302.31
194+50		50.00	418.94	1620.76	0.00	0.00	558.45	2931.69	0.00	0.00	2101.08	18776.63	0.00	0.00	-16675.55
195+00		50.00	383.97	1483.65	0.00	0.00	743.44	2874.45	0.00	0.00	2844.51	21651.08	0.00	0.00	-18806.57
195+29		28.65	351.30	1411.07	0.00	0.00	390.10	1535.81	0.00	0.00	3234.61	23186.89	0.00	0.00	-19952.28
195+39		10.60	362.30	1523.40	0.00	0.00	140.08	576.03	0.00	0.00	3374.69	23762.92	0.00	0.00	-20388.23
195+50		10.75	358.06	1459.42	0.00	0.00	143.41	593.80	0.00	0.00	3518.10	24356.72	0.00	0.00	-20838.62
196+00		50.00	332.60	1100.02	0.00	0.00	639.50	2369.85	0.00	0.00	4157.60	26726.57	0.00	0.00	-22568.97
196+35		34.67	360.04	813.01	0.00	0.00	444.70	1228.24	0.00	0.00	4602.30	27954.81	0.00	0.00	-23352.51
196+47		12.43	382.67	630.11	0.00	0.00	170.96	332.18	0.00	0.00	4773.26	28286.99	0.00	0.00	-23513.73
196+50		2.90	387.44	630.40	0.00	0.00	41.36	67.69	0.00	0.00	4814.61	28354.68	0.00	0.00	-23540.07
196+68	BK	18.29	419.14	634.79	0.00	0.00	273.19	428.52	0.00	0.00	5087.81	28783.21	0.00	0.00	-23695.40
						Column totals	5087.81	28783.21	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - CNB

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
250+50	AH	0.00	752.20	36.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
251+00		50.00	663.00	41.00	0.00	0.00	1310.37	71.48	0.00	0.00	1310.37	71.48	0.00	0.00	1238.89
251+50		50.00	0.00	507.30	0.00	0.00	613.89	507.69	0.00	0.00	1924.26	579.17	0.00	0.00	1345.09
252+00		50.00	0.00	467.04	0.00	0.00	0.00	902.17	0.00	0.00	1924.26	1481.33	0.00	0.00	442.93
252+50		50.00	0.00	352.48	0.00	0.00	0.00	758.81	0.00	0.00	1924.26	2240.15	0.00	0.00	-315.89
253+00		50.00	0.00	367.65	0.00	0.00	0.00	666.79	0.00	0.00	1924.26	2906.94	0.00	0.00	-982.68
253+08		8.47	0.00	324.59	0.00	0.00	0.00	108.58	0.00	0.00	1924.26	3015.51	0.00	0.00	-1091.26
253+17	BK	8.76	0.00	348.40	0.00	0.00	0.00	109.17	0.00	0.00	1924.26	3124.69	0.00	0.00	-1200.43
						Column totals	1924.26	3124.69	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - CSB

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
250+50	AH	0.00	733.08	20.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
251+00		50.00	633.53	60	0.00	0.00	1265.38	74.35	0.00	0.00	1265.38	74.35	0.00	0.00	1191.03
251+50		50.00	0.00	606.9	0.00	0.00	586.60	617.50	0.00	0.00	1851.98	691.85	0.00	0.00	1160.13
252+00		50.00	0.00	525.4	0.00	0.00	0.00	1048.40	0.00	0.00	1851.98	1740.25	0.00	0.00	111.73
252+50		50.00	0.00	331.6	0.00	0.00	0.00	793.53	0.00	0.00	1851.98	2533.78	0.00	0.00	-681.80
253+00		50.00	0.00	362.8	0.00	0.00	0.00	643.02	0.00	0.00	1851.98	3176.80	0.00	0.00	-1324.81
253+16	BK	15.94	0.00	286.8	0.00	0.00	0.00	169.34	0.00	0.00	1851.98	3346.13	0.00	0.00	-1494.15
						Column totals	1851.98	3346.13	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2A - RRN

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
10+00	AH	0.00	222.71	568.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10+25		25.00	399.58	476.16	0.00	0.00	288.10	483.73	0.00	0.00	288.10	483.73	0.00	0.00	-195.63
10+50		25.00	381.45	463.53	0.00	0.00	361.59	435.04	0.00	0.00	649.69	918.77	0.00	0.00	-269.09
10+75		25.00	348.04	506.09	0.00	0.00	337.73	448.90	0.00	0.00	987.41	1367.67	0.00	0.00	-380.26
11+00		25.00	254.69	587.25	0.00	0.00	279.04	506.18	0.00	0.00	1266.45	1873.85	0.00	0.00	-607.39
11+25		25.00	451.42	783.31	0.00	0.00	326.90	634.52	0.00	0.00	1593.36	2508.37	0.00	0.00	-915.01
11+50		25.00	0.00	402.52	0.00	0.00	208.99	549.00	0.00	0.00	1802.35	3057.36	0.00	0.00	-1255.01
11+75		25.00	0.00	484.54	0.00	0.00	0.00	410.68	0.00	0.00	1802.35	3468.04	0.00	0.00	-1665.69
12+00		25.00	0.00	611.11	0.00	0.00	0.00	507.25	0.00	0.00	1802.35	3975.28	0.00	0.00	-2172.94
12+25		25.00	0.00	382.43	0.00	0.00	0.00	459.97	0.00	0.00	1802.35	4435.25	0.00	0.00	-2632.91
12+50		25.00	0.00	398.35	0.00	0.00	0.00	361.47	0.00	0.00	1802.35	4796.73	0.00	0.00	-2994.38
12+75		25.00	0.00	442.05	0.00	0.00	0.00	389.07	0.00	0.00	1802.35	5185.80	0.00	0.00	-3383.45
13+00		25.00	22.12	730.70	0.00	0.00	10.24	542.94	0.00	0.00	1812.59	5728.74	0.00	0.00	-3916.15
13+25		25.00	0.00	757.64	0.00	0.00	10.24	689.05	0.00	0.00	1822.83	6417.79	0.00	0.00	-4594.96
13+50		25.00	0.00	821.87	0.00	0.00	0.00	731.25	0.00	0.00	1822.83	7149.04	0.00	0.00	-5326.21
13+75		25.00	0.00	743.33	0.00	0.00	0.00	724.63	0.00	0.00	1822.83	7873.67	0.00	0.00	-6050.84
14+00		25.00	16.16	555.46	0.00	0.00	7.48	601.29	0.00	0.00	1830.31	8474.96	0.00	0.00	-6644.65
14+11	BK	11.49	221.41	569.29	0.00	0.00	50.55	239.32	0.00	0.00	1880.86	8714.28	0.00	0.00	-6833.42
						Column totals	1880.86	8714.28	0.00	0.00					

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PROJECT ID 1517-75-75
STAGE 2A - NWE

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
208+95	AH	0.00	65.20	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209+00		5.00	54.50	0.0	0.00	0.00	11.08	0.00	0.00	0.00	11.08	0.00	0.00	0.00	11.08
209+50		50.00	81.70	0.0	0.00	0.00	126.11	0.00	0.00	0.00	137.19	0.00	0.00	0.00	137.19
210+00		50.00	86.00	0.0	0.00	0.00	155.28	0.00	0.00	0.00	292.47	0.00	0.00	0.00	292.47
210+50		50.00	77.20	0.0	0.00	0.00	151.11	0.00	0.00	0.00	443.58	0.00	0.00	0.00	443.58
211+00		50.00	45.70	0.0	0.00	0.00	113.80	0.00	0.00	0.00	557.38	0.00	0.00	0.00	557.38
211+50		50.00	55.10	0.0	0.00	0.00	93.33	0.00	0.00	0.00	650.71	0.00	0.00	0.00	650.71
212+00		50.00	54.70	0.0	0.00	0.00	101.67	0.00	0.00	0.00	752.38	0.00	0.00	0.00	752.38
212+50		50.00	46.00	0.0	0.00	0.00	93.24	0.00	0.00	0.00	845.62	0.00	0.00	0.00	845.62
213+00		50.00	38.00	0.0	0.00	0.00	77.78	0.00	0.00	0.00	923.40	0.00	0.00	0.00	923.40
213+50		50.00	35.10	0.1	0.00	0.00	67.69	0.09	0.00	0.00	991.08	0.09	0.00	0.00	990.99
214+00		50.00	23.30	0.0	0.00	0.00	54.07	0.09	0.00	0.00	1045.16	0.19	0.00	0.00	1044.97
214+50		50.00	15.10	0.0	0.00	0.00	35.56	0.00	0.00	0.00	1080.71	0.19	0.00	0.00	1080.53
215+00		50.00	3.80	0.0	0.00	0.00	17.50	0.00	0.00	0.00	1098.21	0.19	0.00	0.00	1098.03
						Column totals	1098.21	0.19	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2C - TWE

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
103+07	AH	0.00	40.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103+50		42.83	41.20	0.00	0.00	0.00	65.12	0.00	0.00	0.00	65.12	0.00	0.00	0.00	65.12
104+00		50.00	31.60	0.00	0.00	0.00	67.41	0.00	0.00	0.00	132.52	0.00	0.00	0.00	132.52
104+50		50.00	28.80	0.00	0.00	0.00	55.93	0.00	0.00	0.00	188.45	0.00	0.00	0.00	188.45
105+00		50.00	28.20	0.00	0.00	0.00	52.78	0.00	0.00	0.00	241.23	0.00	0.00	0.00	241.23
105+31	BK	30.78	25.80	0.00	0.00	0.00	30.78	0.00	0.00	0.00	272.01	0.00	0.00	0.00	272.01
						Column totals	272.01	0.00	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2C - TWH

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
7+13	AH	0.00	90.20	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7+50		36.53	94.50	0.80	0.00	0.00	124.95	0.81	0.00	0.00	124.95	0.81	0.00	0.00	124.13
8+00		50.00	79.40	2.40	0.00	0.00	161.02	2.96	0.00	0.00	285.96	3.77	0.00	0.00	282.19
8+50		50.00	59.80	1.30	0.00	0.00	128.89	3.43	0.00	0.00	414.85	7.20	0.00	0.00	407.65
9+00		50.00	43.40	0.00	0.00	0.00	95.56	1.20	0.00	0.00	510.41	8.40	0.00	0.00	502.00
9+50		50.00	59.90	0.00	0.00	0.00	95.65	0.00	0.00	0.00	606.06	8.40	0.00	0.00	597.65
10+00		50.00	47.90	0.90	0.00	0.00	99.81	0.83	0.00	0.00	705.87	9.24	0.00	0.00	696.63
10+50		50.00	37.30	4.30	0.00	0.00	78.89	4.81	0.00	0.00	784.76	14.05	0.00	0.00	770.71
11+00		50.00	37.90	2.90	0.00	0.00	69.63	6.67	0.00	0.00	854.39	20.72	0.00	0.00	833.67
11+50		50.00	35.00	0.50	0.00	0.00	67.50	3.15	0.00	0.00	921.89	23.87	0.00	0.00	898.02
12+00		50.00	33.20	0.00	0.00	0.00	63.15	0.46	0.00	0.00	985.04	24.33	0.00	0.00	960.71
12+50		50.00	31.50	0.00	0.00	0.00	59.91	0.00	0.00	0.00	1044.95	24.33	0.00	0.00	1020.62
13+00		50.00	35.00	0.00	0.00	0.00	61.57	0.00	0.00	0.00	1106.52	24.33	0.00	0.00	1082.19
13+50		50.00	35.00	0.00	0.00	0.00	64.81	0.00	0.00	0.00	1171.34	24.33	0.00	0.00	1147.00
14+00		50.00	32.00	0.30	0.00	0.00	62.04	0.28	0.00	0.00	1233.37	24.61	0.00	0.00	1208.76
14+50		50.00	31.90	1.00	0.00	0.00	59.17	1.20	0.00	0.00	1292.54	25.81	0.00	0.00	1266.73
15+00		50.00	34.30	1.10	0.00	0.00	61.30	1.94	0.00	0.00	1353.84	27.76	0.00	0.00	1326.08
15+50		50.00	33.80	1.50	0.00	0.00	63.06	2.41	0.00	0.00	1416.89	30.16	0.00	0.00	1386.73
16+00		50.00	34.50	1.50	0.00	0.00	63.24	2.78	0.00	0.00	1480.13	32.94	0.00	0.00	1447.19
16+50		50.00	34.50	1.50	0.00	0.00	63.89	2.78	0.00	0.00	1544.02	35.72	0.00	0.00	1508.30
17+00		50.00	34.20	1.60	0.00	0.00	63.61	2.87	0.00	0.00	1607.63	38.59	0.00	0.00	1569.04
17+50		50.00	33.70	1.80	0.00	0.00	62.87	3.15	0.00	0.00	1670.50	41.74	0.00	0.00	1628.76
18+00		50.00	35.10	0.00	0.00	0.00	63.70	1.67	0.00	0.00	1734.21	43.40	0.00	0.00	1690.80
18+50		50.00	33.50	0.30	0.00	0.00	63.52	0.28	0.00	0.00	1797.72	43.68	0.00	0.00	1754.04
19+00		50.00	33.90	0.00	0.00	0.00	62.41	0.28	0.00	0.00	1860.13	43.96	0.00	0.00	1816.17
19+50		50.00	32.20	0.50	0.00	0.00	61.20	0.46	0.00	0.00	1921.34	44.42	0.00	0.00	1876.91
20+00		50.00	31.20	0.90	0.00	0.00	58.70	1.30	0.00	0.00	1980.04	45.72	0.00	0.00	1934.32
20+50		50.00	31.30	0.40	0.00	0.00	57.87	1.20	0.00	0.00	2037.91	46.92	0.00	0.00	1990.99
21+00		50.00	28.50	0.60	0.00	0.00	55.37	0.93	0.00	0.00	2093.28	47.85	0.00	0.00	2045.43
21+50		50.00	25.60	1.80	0.00	0.00	50.09	2.22	0.00	0.00	2143.37	50.07	0.00	0.00	2093.30
22+00		50.00	25.10	0.50	0.00	0.00	46.94	2.13	0.00	0.00	2190.32	52.20	0.00	0.00	2138.12
22+50		50.00	22.50	0.30	0.00	0.00	44.07	0.74	0.00	0.00	2234.39	52.94	0.00	0.00	2181.45
23+00		50.00	21.00	0.20	0.00	0.00	40.28	0.46	0.00	0.00	2274.67	53.40	0.00	0.00	2221.26
23+50		50.00	17.90	0.00	0.00	0.00	36.02	0.19	0.00	0.00	2310.69	53.59	0.00	0.00	2257.10
24+00		50.00	14.70	0.00	0.00	0.00	30.19	0.00	0.00	0.00	2340.87	53.59	0.00	0.00	2287.28
24+23	BK	23.00	0.40	1.50	0.00	0.00	6.43	0.64	0.00	0.00	2347.30	54.23	0.00	0.00	2293.08
						Column totals	2347.30	54.23	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 2C - TWE

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
103+07	AH	0.00	40.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103+50		42.83	41.20	0.00	0.00	0.00	65.12	0.00	0.00	0.00	65.12	0.00	0.00	0.00	65.12
104+00		50.00	31.60	0.00	0.00	0.00	67.41	0.00	0.00	0.00	132.52	0.00	0.00	0.00	132.52
104+50		50.00	28.80	0.00	0.00	0.00	55.93	0.00	0.00	0.00	188.45	0.00	0.00	0.00	188.45
105+00		50.00	28.20	0.00	0.00	0.00	52.78	0.00	0.00	0.00	241.23	0.00	0.00	0.00	241.23
105+31	BK	30.78	25.80	0.00	0.00	0.00	30.78	0.00	0.00	0.00	272.01	0.00	0.00	0.00	272.01
						Column totals	272.01	0.00	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - EB_a

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
180+92	AH	0.00	0.00	1490.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181+00		8.29	1.80	1686.20	0.00	0.00	0.28	487.64	0.00	0.00	0.28	487.64	0.00	0.00	-487.36
181+50		50.00	2.10	2026.10	0.00	0.00	3.61	3437.31	0.00	0.00	3.89	3924.95	0.00	0.00	-3921.06
182+00		50.00	6.10	1938.20	0.00	0.00	7.59	3670.65	0.00	0.00	11.48	7595.60	0.00	0.00	-7584.12
182+50		50.00	9.30	1721.80	0.00	0.00	14.26	3388.89	0.00	0.00	25.74	10984.49	0.00	0.00	-10958.75
183+00		50.00	27.40	1500.30	0.00	0.00	33.98	2983.43	0.00	0.00	59.72	13967.91	0.00	0.00	-13908.19
183+50		50.00	16.07	1299.20	0.00	0.00	40.25	2592.13	0.00	0.00	99.97	16560.04	0.00	0.00	-16460.07
184+00		50.00	5.20	693.48	0.00	0.00	19.69	1845.07	0.00	0.00	119.67	18405.12	0.00	0.00	-18285.45
184+25	BK	24.94	0.00	26.50	0.00	0.00	2.40	332.52	0.00	0.00	122.07	18737.64	0.00	0.00	-18615.57
						Column totals	122.07	18737.64	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - EB_b

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
185+58	AH	0.00	256.50	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186+00		41.64	0.00	698.10	0.00	0.00	197.79	556.36	0.00	0.00	197.79	556.36	0.00	0.00	-358.57
186+50		50.00	0.00	515.63	0.00	0.00	0.00	1123.82	0.00	0.00	197.79	1680.18	0.00	0.00	-1482.39
187+00		50.00	0.00	500.35	0.00	0.00	0.00	940.72	0.00	0.00	197.79	2620.90	0.00	0.00	-2423.11
187+38		37.86	0.20	216.82	0.00	0.00	0.14	502.81	0.00	0.00	197.93	3123.71	0.00	0.00	-2925.78
187+50		12.14	0.50	357.89	0.00	0.00	0.16	129.20	0.00	0.00	198.09	3252.91	0.00	0.00	-3054.82
188+00		50.00	2.70	266.99	0.00	0.00	2.96	578.59	0.00	0.00	201.05	3831.50	0.00	0.00	-3630.45
188+26		25.50	4.20	66.30	0.00	0.00	3.26	157.39	0.00	0.00	204.31	3988.88	0.00	0.00	-3784.58
188+50		24.50	6.00	232.99	0.00	0.00	4.63	135.79	0.00	0.00	208.94	4124.68	0.00	0.00	-3915.74
189+00		50.00	8.60	241.04	0.00	0.00	13.52	438.92	0.00	0.00	222.46	4563.60	0.00	0.00	-4341.14
189+50		50.00	80.30	208.87	0.00	0.00	82.31	416.59	0.00	0.00	304.77	4980.18	0.00	0.00	-4675.41
190+00		50.00	14.90	245.39	0.00	0.00	88.15	420.61	0.00	0.00	392.92	5400.80	0.00	0.00	-5007.88
190+50		50.00	0.00	350.38	0.00	0.00	13.80	551.64	0.00	0.00	406.71	5952.44	0.00	0.00	-5545.72
191+00		50.00	0.00	388.29	0.00	0.00	0.00	683.95	0.00	0.00	406.71	6636.39	0.00	0.00	-6229.67
191+50		50.00	0.00	456.49	0.00	0.00	0.00	782.20	0.00	0.00	406.71	7418.59	0.00	0.00	-7011.87
191+85		34.97	0.00	390.60	0.00	0.00	0.00	548.57	0.00	0.00	406.71	7967.16	0.00	0.00	-7560.45
192+00		15.03	0.00	589.51	0.00	0.00	0.00	272.80	0.00	0.00	406.71	8239.96	0.00	0.00	-7833.24
192+09		9.49	0.00	460.30	0.00	0.00	0.00	184.49	0.00	0.00	406.71	8424.45	0.00	0.00	-8017.74
192+50		40.51	0.00	781.47	0.00	0.00	0.00	931.56	0.00	0.00	406.71	9356.01	0.00	0.00	-8949.29
193+00		50.00	0.00	1301.33	0.00	0.00	0.00	1928.52	0.00	0.00	406.71	11284.53	0.00	0.00	-10877.81
193+50		50.00	0.00	1636.39	0.00	0.00	0.00	2720.11	0.00	0.00	406.71	14004.64	0.00	0.00	-13597.92
194+00		50.00	0.00	1748.34	0.00	0.00	0.00	3134.01	0.00	0.00	406.71	17138.64	0.00	0.00	-16731.93
194+50		50.00	731.90	2533.76	0.00	0.00	677.69	3964.90	0.00	0.00	1084.40	21103.55	0.00	0.00	-20019.15
195+00		50.00	####	2585.78	0.00	0.00	1996.67	4740.31	0.00	0.00	3081.07	25843.86	0.00	0.00	-22762.79
195+50		50.00	0.00	1522.96	0.00	0.00	1318.98	3804.39	0.00	0.00	4400.05	29648.24	0.00	0.00	-25248.20
195+84	BK	33.64	0.00	72.82	0.00	0.00	0.00	994.11	0.00	0.00	4400.05	30642.35	0.00	0.00	-26242.31
						Column totals	4400.05	30642.35	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - EB_c

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
197+23	AH	0.00	1128.28	390.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197+50		27.29	711.49	2056.77	0.00	0.00	929.77	1236.82	0.00	0.00	929.77	1236.82	0.00	0.00	-307.05
198+00		50.00	438.30	2022.90	0.00	0.00	1064.62	3777.47	0.00	0.00	1994.39	5014.29	0.00	0.00	-3019.90
198+50		50.00	241.83	1608.27	0.00	0.00	629.75	3362.19	0.00	0.00	2624.14	8376.48	0.00	0.00	-5752.35
199+00		50.00	165.35	1348.83	0.00	0.00	377.02	2738.06	0.00	0.00	3001.15	11114.54	0.00	0.00	-8113.39
199+50		50.00	176.71	1196.80	0.00	0.00	316.72	2357.06	0.00	0.00	3317.88	13471.61	0.00	0.00	-10153.73
200+00		50.00	188.22	1012.49	0.00	0.00	337.90	2045.64	0.00	0.00	3655.77	15517.24	0.00	0.00	-11861.47
200+50		50.00	39.70	564.08	0.00	0.00	211.04	1459.78	0.00	0.00	3866.81	16977.02	0.00	0.00	-13110.21
201+00		50.00	113.00	694.10	0.00	0.00	141.39	1164.98	0.00	0.00	4008.20	18142.00	0.00	0.00	-14133.80
201+50		50.00	25.40	727.59	0.00	0.00	128.15	1316.38	0.00	0.00	4136.35	19458.39	0.00	0.00	-15322.04
202+00		50.00	3.20	674.16	0.00	0.00	26.48	1297.91	0.00	0.00	4162.83	20756.30	0.00	0.00	-16593.47
202+50		50.00	2.50	658.20	0.00	0.00	5.28	1233.66	0.00	0.00	4168.11	21989.96	0.00	0.00	-17821.86
203+00		50.00	0.00	596.30	0.00	0.00	2.31	1161.57	0.00	0.00	4170.42	23151.54	0.00	0.00	-18981.11
203+50		50.00	37.70	620.80	0.00	0.00	34.91	1126.94	0.00	0.00	4205.33	24278.48	0.00	0.00	-20073.15
204+00		50.00	30.80	630.60	0.00	0.00	63.43	1158.70	0.00	0.00	4268.76	25437.19	0.00	0.00	-21168.43
204+50		50.00	44.00	645.70	0.00	0.00	69.26	1181.76	0.00	0.00	4338.02	26618.94	0.00	0.00	-22280.93
205+00		50.00	62.90	624.40	0.00	0.00	98.98	1176.02	0.00	0.00	4437.00	27794.96	0.00	0.00	-23357.97
205+50		50.00	45.90	559.70	0.00	0.00	100.74	1096.39	0.00	0.00	4537.74	28891.35	0.00	0.00	-24353.61
206+00		50.00	47.50	531.90	0.00	0.00	86.48	1010.74	0.00	0.00	4624.22	29902.09	0.00	0.00	-25277.87
206+05		5.00	34.40	529.00	0.00	0.00	7.58	98.23	0.00	0.00	4631.80	30000.32	0.00	0.00	-25368.52
206+50		45.00	26.50	524.20	0.00	0.00	50.75	877.67	0.00	0.00	4682.55	30877.99	0.00	0.00	-26195.44
206+93		42.88	19.90	489.60	0.00	0.00	36.85	805.03	0.00	0.00	4719.40	31683.02	0.00	0.00	-26963.63
207+00		7.12	23.00	478.00	0.00	0.00	5.66	127.58	0.00	0.00	4725.05	31810.60	0.00	0.00	-27085.55
207+50		50.00	12.80	390.20	0.00	0.00	33.15	803.89	0.00	0.00	4758.20	32614.49	0.00	0.00	-27856.29
208+00		50.00	38.40	344.10	0.00	0.00	47.41	679.91	0.00	0.00	4805.61	33294.40	0.00	0.00	-28488.79
208+50		50.00	29.60	265.90	0.00	0.00	62.96	564.81	0.00	0.00	4868.57	33859.21	0.00	0.00	-28990.64
209+00		50.00	61.70	277.80	0.00	0.00	84.54	503.43	0.00	0.00	4953.11	34362.64	0.00	0.00	-29409.53
209+50		50.00	0.00	252.20	0.00	0.00	57.13	490.74	0.00	0.00	5010.24	34853.38	0.00	0.00	-29843.14
210+00		50.00	0.00	146.40	0.00	0.00	0.00	369.07	0.00	0.00	5010.24	35222.46	0.00	0.00	-30212.22
210+50		50.00	0.00	46.20	0.00	0.00	0.00	178.33	0.00	0.00	5010.24	35400.79	0.00	0.00	-30390.55
211+00		50.00	31.50	1.40	0.00	0.00	29.17	44.07	0.00	0.00	5039.41	35444.86	0.00	0.00	-30405.46
211+50		50.00	72.30	0.00	0.00	0.00	96.11	1.30	0.00	0.00	5135.52	35446.16	0.00	0.00	-30310.64
212+00		50.00	103.70	0.00	0.00	0.00	162.96	0.00	0.00	0.00	5298.48	35446.16	0.00	0.00	-30147.68
212+50		50.00	119.80	0.00	0.00	0.00	206.94	0.00	0.00	0.00	5505.42	35446.16	0.00	0.00	-29940.73
212+79		28.56	251.30	0.00	0.00	0.00	196.27	0.00	0.00	0.00	5701.69	35446.16	0.00	0.00	-29744.46
212+87		7.94	250.80	0.00	0.00	0.00	73.83	0.00	0.00	0.00	5775.52	35446.16	0.00	0.00	-29670.64
213+00		13.50	255.00	0.00	0.00	0.00	126.45	0.00	0.00	0.00	5901.97	35446.16	0.00	0.00	-29544.19
213+50		50.00	264.60	0.00	0.00	0.00	481.11	0.00	0.00	0.00	6383.08	35446.16	0.00	0.00	-29063.08
214+00		50.00	256.20	0.00	0.00	0.00	482.22	0.00	0.00	0.00	6865.31	35446.16	0.00	0.00	-28580.85
214+50		50.00	270.10	0.00	0.00	0.00	487.31	0.00	0.00	0.00	7352.62	35446.16	0.00	0.00	-28093.54
215+00		50.00	289.70	0.00	0.00	0.00	518.33	0.00	0.00	0.00	7870.95	35446.16	0.00	0.00	-27575.21
215+50		50.00	277.00	0.00	0.00	0.00	524.72	0.00	0.00	0.00	8395.68	35446.16	0.00	0.00	-27050.48
216+00		50.00	299.10	0.00	0.00	0.00	533.43	0.00	0.00	0.00	8929.10	35446.16	0.00	0.00	-26517.06
216+50		50.00	313.60	0.00	0.00	0.00	567.31	0.00	0.00	0.00	9496.42	35446.16	0.00	0.00	-25949.74
217+00		50.00	332.10	0.00	0.00	0.00	597.87	0.00	0.00	0.00	10094.29	35446.16	0.00	0.00	-25351.87
217+50		50.00	190.90	0.00	0.00	0.00	484.26	0.00	0.00	0.00	10578.55	35446.16	0.00	0.00	-24867.61
218+00		50.00	144.30	0.00	0.00	0.00	310.37	0.00	0.00	0.00	10888.92	35446.16	0.00	0.00	-24557.24

PROJECT ID 1517-75-75
STAGE 3A - EB_c (CONTINUED)

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
218+50		50.00	154.80	4.40	0.00	0.00	276.94	4.07	0.00	0.00	11165.86	35450.23	0.00	0.00	-24284.37
219+00		50.00	234.30	0.00	0.00	0.00	360.28	4.07	0.00	0.00	11526.14	35454.31	0.00	0.00	-23928.17
219+22		21.85	232.40	0.00	0.00	0.00	188.84	0.00	0.00	0.00	11714.98	35454.31	0.00	0.00	-23739.33
219+50		28.15	218.90	0.00	0.00	0.00	235.26	0.00	0.00	0.00	11950.24	35454.31	0.00	0.00	-23504.07
220+00		50.00	189.70	0.00	0.00	0.00	378.33	0.00	0.00	0.00	12328.57	35454.31	0.00	0.00	-23125.73
220+50		50.00	208.70	0.00	0.00	0.00	368.89	0.00	0.00	0.00	12697.46	35454.31	0.00	0.00	-22756.84
221+00		50.00	181.50	0.00	0.00	0.00	361.30	0.00	0.00	0.00	13058.76	35454.31	0.00	0.00	-22395.55
221+50		50.00	172.50	0.00	0.00	0.00	327.78	0.00	0.00	0.00	13386.54	35454.31	0.00	0.00	-22067.77
222+00		50.00	204.30	0.10	0.00	0.00	348.89	0.09	0.00	0.00	13735.43	35454.40	0.00	0.00	-21718.97
222+05		4.94	198.60	2.90	0.00	0.00	36.86	0.27	0.00	0.00	13772.28	35454.67	0.00	0.00	-21682.39
222+50		45.06	180.10	18.60	0.00	0.00	316.00	17.94	0.00	0.00	14088.29	35472.61	0.00	0.00	-21384.33
223+00	BK	50.00	139.00	21.20	0.00	0.00	295.46	36.85	0.00	0.00	14383.75	35509.47	0.00	0.00	-21125.72
						Column totals	14383.75	35509.47	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - EBT

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
23+00	AH	0.00	127.26	35.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23+50		50.00	139.05	51.46	0.00	0.00	246.58	80.18	0.00	0.00	246.58	80.18	0.00	0.00	166.41
24+00		50.00	118.41	72.62	0.00	0.00	238.39	114.89	0.00	0.00	484.97	195.06	0.00	0.00	289.91
24+50		50.00	99.93	74.50	0.00	0.00	202.17	136.22	0.00	0.00	687.14	331.29	0.00	0.00	355.85
25+00		50.00	67.94	68.77	0.00	0.00	155.44	132.66	0.00	0.00	842.57	463.94	0.00	0.00	378.63
25+50		50.00	60.01	44.94	0.00	0.00	118.47	105.29	0.00	0.00	961.05	569.23	0.00	0.00	391.81
26+00		50.00	45.37	30.72	0.00	0.00	97.57	70.06	0.00	0.00	1058.62	639.29	0.00	0.00	419.33
26+50		50.00	53.21	12.52	0.00	0.00	91.28	40.04	0.00	0.00	1149.90	679.32	0.00	0.00	470.57
27+00		50.00	81.85	3.49	0.00	0.00	125.06	14.82	0.00	0.00	1274.95	694.15	0.00	0.00	580.81
27+50		50.00	107.11	0.73	0.00	0.00	174.96	3.91	0.00	0.00	1449.92	698.06	0.00	0.00	751.86
28+00		50.00	137.15	2.68	0.00	0.00	226.17	3.16	0.00	0.00	1676.08	701.21	0.00	0.00	974.87
28+50		50.00	119.93	10.35	0.00	0.00	238.04	12.06	0.00	0.00	1914.12	713.28	0.00	0.00	1200.84
29+00		50.00	80.75	10.60	0.00	0.00	185.81	19.40	0.00	0.00	2099.94	732.68	0.00	0.00	1367.26
29+50		50.00	91.32	11.96	0.00	0.00	159.32	20.89	0.00	0.00	2259.26	753.56	0.00	0.00	1505.69
30+00		50.00	84.00	12.51	0.00	0.00	162.33	22.66	0.00	0.00	2421.59	776.22	0.00	0.00	1645.37
30+07		7.20	32.00	37.26	0.00	0.00	15.47	6.64	0.00	0.00	2437.06	782.86	0.00	0.00	1654.20
30+50		42.80	25.66	13.24	0.00	0.00	45.70	40.03	0.00	0.00	2482.76	822.88	0.00	0.00	1659.88
31+00	BK	50.00	32.01	1.84	0.00	0.00	53.40	13.96	0.00	0.00	2536.16	836.85	0.00	0.00	1699.31
						Column totals	2536.16	836.85	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - RSE

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
193+84	AH	0.00	121.70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194+00		15.68	116.50	0	0.00	0.00	69.17	0.00	0.00	0.00	69.17	0.00	0.00	0.00	69.17
194+39		39.00	7.50	29.3	0.00	0.00	89.56	21.16	0.00	0.00	158.72	21.16	0.00	0.00	137.56
194+50		11.00	0.00	113.6	0.00	0.00	1.53	29.11	0.00	0.00	160.25	50.27	0.00	0.00	109.98
195+00		50.00	91.20	63.7	0.00	0.00	84.44	164.17	0.00	0.00	244.69	214.44	0.00	0.00	30.26
195+01		1.00	103.80	27.7	0.00	0.00	3.61	1.69	0.00	0.00	248.31	216.13	0.00	0.00	32.18
195+50		49.00	1116.50	0	0.00	0.00	1107.31	25.14	0.00	0.00	1355.61	241.26	0.00	0.00	1114.35
196+00		50.00	2260.90	0	0.00	0.00	3127.22	0.00	0.00	0.00	4482.84	241.26	0.00	0.00	4241.57
196+50		50.00	2600.40	0	0.00	0.00	4501.20	0.00	0.00	0.00	8984.04	241.26	0.00	0.00	8742.78
197+00		50.00	2357.40	0	0.00	0.00	4590.56	0.00	0.00	0.00	13574.60	241.26	0.00	0.00	13333.33
197+50		50.00	2145.70	0	0.00	0.00	4169.54	0.00	0.00	0.00	17744.13	241.26	0.00	0.00	17502.87
198+00		50.00	1956.50	0	0.00	0.00	3798.33	0.00	0.00	0.00	21542.47	241.26	0.00	0.00	21301.20
198+50		50.00	1718.30	0	0.00	0.00	3402.59	0.00	0.00	0.00	24945.06	241.26	0.00	0.00	24703.79
199+00		50.00	1468.30	0	0.00	0.00	2950.56	0.00	0.00	0.00	27895.61	241.26	0.00	0.00	27654.35
199+50		50.00	1154.80	0	0.00	0.00	2428.80	0.00	0.00	0.00	30324.41	241.26	0.00	0.00	30083.15
200+00		50.00	788.00	0	0.00	0.00	1798.89	0.00	0.00	0.00	32123.30	241.26	0.00	0.00	31882.03
200+50		50.00	419.60	1.3	0.00	0.00	1118.15	1.20	0.00	0.00	33241.45	242.47	0.00	0.00	32998.98
201+00		50.00	151.60	7.4	0.00	0.00	528.89	8.06	0.00	0.00	33770.34	250.52	0.00	0.00	33519.81
201+50		50.00	33.10	99.5	0.00	0.00	171.02	98.98	0.00	0.00	33941.36	349.51	0.00	0.00	33591.85
202+00		50.00	5.90	186.6	0.00	0.00	36.11	264.91	0.00	0.00	33977.47	614.41	0.00	0.00	33363.05
202+50		50.00	15.99	213.1	0.00	0.00	20.27	370.13	0.00	0.00	33997.73	984.54	0.00	0.00	33013.19
203+00		50.00	19.34	350.6	0.00	0.00	32.71	522.00	0.00	0.00	34030.45	1506.54	0.00	0.00	32523.91
203+50		50.00	78.28	546.8	0.00	0.00	90.39	830.91	0.00	0.00	34120.84	2337.45	0.00	0.00	31783.39
204+00		50.00	135.26	748.5	0.00	0.00	197.72	1199.27	0.00	0.00	34318.56	3536.72	0.00	0.00	30781.84
204+50		50.00	127.30	869.2	0.00	0.00	243.11	1497.82	0.00	0.00	34561.67	5034.54	0.00	0.00	29527.13
205+00		50.00	17.73	283.1	0.00	0.00	134.29	1066.95	0.00	0.00	34695.96	6101.50	0.00	0.00	28594.46
205+50		50.00	4.90	258.5	0.00	0.00	20.95	501.49	0.00	0.00	34716.91	6602.99	0.00	0.00	28113.92
206+00		50.00	2.20	175.3	0.00	0.00	6.57	401.67	0.00	0.00	34723.48	7004.65	0.00	0.00	27718.83
206+50		50.00	8.90	85.5	0.00	0.00	10.28	241.48	0.00	0.00	34733.76	7246.14	0.00	0.00	27487.63
206+75		25.00	12.90	60.15	0.00	0.00	10.09	67.43	0.00	0.00	34743.86	7313.57	0.00	0.00	27430.29
207+00		25.00	12.50	41.49	0.00	0.00	11.76	47.06	0.00	0.00	34755.61	7360.62	0.00	0.00	27394.99
207+02		1.57	12.40	4.2	0.00	0.00	0.72	1.33	0.00	0.00	34756.34	7361.95	0.00	0.00	27394.39
207+08		6.77	11.30	7.2	0.00	0.00	2.97	1.43	0.00	0.00	34759.31	7363.38	0.00	0.00	27395.93
207+34		25.29	11.80	1.8	0.00	0.00	10.82	4.22	0.00	0.00	34770.13	7367.59	0.00	0.00	27402.53
207+50		16.37	12.40	8.7	0.00	0.00	7.34	3.18	0.00	0.00	34777.46	7370.78	0.00	0.00	27406.69
208+00		50.00	7.30	74	0.00	0.00	18.24	76.57	0.00	0.00	34795.71	7447.35	0.00	0.00	27348.35
208+01		1.00	7.20	28.7	0.00	0.00	0.27	1.90	0.00	0.00	34795.97	7449.25	0.00	0.00	27346.72
208+50		49.00	7.90	20.5	0.00	0.00	13.70	44.64	0.00	0.00	34809.68	7493.90	0.00	0.00	27315.78
209+00		50.00	36.58	233.3	0.00	0.00	41.19	234.98	0.00	0.00	34850.86	7728.88	0.00	0.00	27121.98
209+50		50.00	9.28	175.3	0.00	0.00	42.46	378.34	0.00	0.00	34893.32	8107.22	0.00	0.00	26786.10
209+75		25.10	2.27	142.3	0.00	0.00	5.37	147.62	0.00	0.00	34898.69	8254.84	0.00	0.00	26643.85
210+00		24.90	0.60	135.7	0.00	0.00	1.32	128.17	0.00	0.00	34900.02	8383.00	0.00	0.00	26517.01
210+50		50.00	13.30	39.7	0.00	0.00	12.87	162.41	0.00	0.00	34912.89	8545.41	0.00	0.00	26367.48
211+00		50.00	15.90	3.8	0.00	0.00	27.04	40.28	0.00	0.00	34939.92	8585.69	0.00	0.00	26354.23
211+25		25.00	32.70	3.7	0.00	0.00	22.50	3.47	0.00	0.00	34962.42	8589.16	0.00	0.00	26373.26
211+50		25.00	58.36	2.2	0.00	0.00	42.16	2.73	0.00	0.00	35004.58	8591.89	0.00	0.00	26412.69
212+00		50.00	90.40	3.6	0.00	0.00	137.74	5.37	0.00	0.00	35142.32	8597.26	0.00	0.00	26545.06

PROJECT ID 1517-75-75
STAGE 3A - RSE (CONTINUED)

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
212+40		40.38	108.00	5.1	0.00	0.00	148.36	6.51	0.00	0.00	35290.68	8603.77	0.00	0.00	26686.91
212+50		9.62	111.30	5	0.00	0.00	39.07	1.80	0.00	0.00	35329.75	8605.57	0.00	0.00	26724.18
212+78	BK	27.97	136.90	0	0.00	0.00	128.56	2.59	0.00	0.00	35458.31	8608.16	0.00	0.00	26850.15
						Column totals	35458.31	8608.16	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - RSWC

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
16+81	AH	0.00	121.50	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17+00		18.64	215.44	0.20	0.00	0.00	116.31	3.24	0.00	0.00	116.31	3.24	0.00	0.00	113.06
17+50		50.00	217.45	0.00	0.00	0.00	400.82	0.19	0.00	0.00	517.13	3.43	0.00	0.00	513.70
18+00		50.00	25.10	125.50	0.00	0.00	224.58	116.20	0.00	0.00	741.71	119.63	0.00	0.00	622.08
18+03		3.35	25.50	125.20	0.00	0.00	3.14	15.55	0.00	0.00	744.85	135.19	0.00	0.00	609.67
18+21		18.07	14.10	0.00	0.00	0.00	13.25	41.90	0.00	0.00	758.10	177.08	0.00	0.00	581.02
18+33		11.93	75.00	0.00	0.00	0.00	19.68	0.00	0.00	0.00	777.79	177.08	0.00	0.00	600.71
18+45		12.08	99.30	38.40	0.00	0.00	38.99	8.59	0.00	0.00	816.78	185.67	0.00	0.00	631.11
18+50		4.57	90.60	49.40	0.00	0.00	16.07	7.43	0.00	0.00	832.85	193.10	0.00	0.00	639.75
18+63	BK	12.57	89.50	49.00	0.00	0.00	41.92	22.91	0.00	0.00	874.78	216.01	0.00	0.00	658.77
						Column totals	874.78	216.01	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - RSW

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
185+92	AH	0.00	0.00	549.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186+00		7.70	0.80	539.64	0.00	0.00	0.11	155.36	0.00	0.00	0.11	155.36	0.00	0.00	-155.24
186+50		50.00	113.00	532.87	0.00	0.00	105.37	993.06	0.00	0.00	105.48	1148.42	0.00	0.00	-1042.94
187+00		50.00	209.02	604.27	0.00	0.00	298.17	1052.91	0.00	0.00	403.65	2201.33	0.00	0.00	-1797.68
187+43		42.61	300.83	822.37	0.00	0.00	402.31	1125.72	0.00	0.00	805.96	3327.05	0.00	0.00	-2521.09
187+50		7.39	298.59	843.77	0.00	0.00	82.03	228.01	0.00	0.00	887.99	3555.07	0.00	0.00	-2667.07
188+00		50.00	560.99	1027.55	0.00	0.00	795.91	1732.70	0.00	0.00	1683.90	5287.77	0.00	0.00	-3603.87
188+50		50.00	537.60	1061.31	0.00	0.00	1017.21	1934.13	0.00	0.00	2701.11	7221.90	0.00	0.00	-4520.79
189+00		50.00	524.01	840.82	0.00	0.00	982.97	1761.23	0.00	0.00	3684.08	8983.13	0.00	0.00	-5299.05
189+01		1.00	553.32	839.48	0.00	0.00	19.95	31.12	0.00	0.00	3704.04	9014.25	0.00	0.00	-5310.21
189+50		49.00	732.56	698.90	0.00	0.00	1166.82	1395.94	0.00	0.00	4870.85	10410.19	0.00	0.00	-5539.33
189+55		5.29	796.28	682.90	0.00	0.00	149.77	135.37	0.00	0.00	5020.62	10545.55	0.00	0.00	-5524.93
189+80		24.98	816.21	591.09	0.00	0.00	745.93	589.34	0.00	0.00	5766.55	11134.89	0.00	0.00	-5368.34
190+00		19.73	787.45	541.26	0.00	0.00	585.93	413.73	0.00	0.00	6352.48	11548.62	0.00	0.00	-5196.14
190+50		50.00	746.12	523.89	0.00	0.00	1419.97	986.25	0.00	0.00	7772.45	12534.87	0.00	0.00	-4762.42
190+75		25.00	760.15	510.84	0.00	0.00	697.35	479.04	0.00	0.00	8469.80	13013.91	0.00	0.00	-4544.11
191+00		25.00	767.27	516.06	0.00	0.00	707.14	475.42	0.00	0.00	9176.94	13489.33	0.00	0.00	-4312.39
191+07		7.00	756.19	524.23	0.00	0.00	197.49	134.85	0.00	0.00	9374.42	13624.18	0.00	0.00	-4249.76
191+27		20.27	835.76	547.30	0.00	0.00	597.57	402.22	0.00	0.00	9971.99	14026.40	0.00	0.00	-4054.41
191+50		22.73	864.53	522.36	0.00	0.00	715.70	450.25	0.00	0.00	10687.69	14476.65	0.00	0.00	-3788.96
192+00		50.00	963.74	529.93	0.00	0.00	1692.84	974.34	0.00	0.00	12380.53	15450.99	0.00	0.00	-3070.46
192+50		50.00	973.05	381.43	0.00	0.00	1793.32	843.85	0.00	0.00	14173.86	16294.84	0.00	0.00	-2120.98
192+64		14.00	984.03	383.79	0.00	0.00	507.39	198.39	0.00	0.00	14681.25	16493.23	0.00	0.00	-1811.98
193+00		36.00	1062.00	292.65	0.00	0.00	1364.02	450.96	0.00	0.00	16045.27	16944.19	0.00	0.00	-898.92
193+04		4.00	1080.58	282.17	0.00	0.00	158.71	42.58	0.00	0.00	16203.98	16986.77	0.00	0.00	-782.79
193+50		46.00	708.62	779.48	0.00	0.00	1524.13	904.37	0.00	0.00	17728.11	17891.14	0.00	0.00	-163.03
194+00		50.00	99.72	1485.98	0.00	0.00	748.46	2097.65	0.00	0.00	18476.57	19988.79	0.00	0.00	-1512.21
194+25		25.00	98.12	1434.19	0.00	0.00	91.59	1351.93	0.00	0.00	18568.17	21340.72	0.00	0.00	-2772.55
194+50		25.00	70.33	1213.93	0.00	0.00	77.99	1225.98	0.00	0.00	18646.15	22566.70	0.00	0.00	-3920.55
195+00		50.00	924.00	353.98	0.00	0.00	920.68	1451.77	0.00	0.00	19566.83	24018.47	0.00	0.00	-4451.64
195+26		25.76	1624.20	158.30	0.00	0.00	1215.59	244.38	0.00	0.00	20782.41	24262.84	0.00	0.00	-3480.43
195+50		24.24	1066.32	136.30	0.00	0.00	1207.74	132.24	0.00	0.00	21990.16	24395.09	0.00	0.00	-2404.93
196+00		50.00	142.90	300.10	0.00	0.00	1119.65	404.07	0.00	0.00	23109.81	24799.16	0.00	0.00	-1689.35
196+41		40.72	33.60	482.00	0.00	0.00	133.09	589.76	0.00	0.00	23242.90	25388.92	0.00	0.00	-2146.02
196+50		9.28	45.70	412.80	0.00	0.00	13.63	153.77	0.00	0.00	23256.53	25542.69	0.00	0.00	-2286.17
197+00		50.00	0.00	44.90	0.00	0.00	42.31	423.80	0.00	0.00	23298.84	25966.49	0.00	0.00	-2667.65
197+05		5.10	1.00	13.30	0.00	0.00	0.09	5.50	0.00	0.00	23298.94	25971.99	0.00	0.00	-2673.05
197+50		44.90	122.00	0.00	0.00	0.00	102.27	11.06	0.00	0.00	23401.21	25983.05	0.00	0.00	-2581.84
197+77	BK	27.15	76.00	0.00	0.00	0.00	99.55	0.00	0.00	0.00	23500.76	25983.05	0.00	0.00	-2482.29
						Column totals	23500.76	25983.05	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - CNB

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
243+93	AH	0.00	5.00	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
244+00		7.13	43.10	14.00	0.00	0.00	6.35	5.18	0.00	0.00	6.35	5.18	0.00	0.00	1.18
244+11		10.86	76.00	0.00	0.00	0.00	23.95	2.82	0.00	0.00	30.30	7.99	0.00	0.00	22.31
244+23		11.96	132.20	0.00	0.00	0.00	46.11	0.00	0.00	0.00	76.42	7.99	0.00	0.00	68.42
244+35		12.18	50.10	9.10	0.00	0.00	41.12	2.05	0.00	0.00	117.53	10.04	0.00	0.00	107.49
244+50		15.00	26.10	22.50	0.00	0.00	21.17	8.78	0.00	0.00	138.70	18.82	0.00	0.00	119.88
244+53		2.87	22.20	21.20	0.00	0.00	2.57	2.32	0.00	0.00	141.27	21.14	0.00	0.00	120.12
244+72		19.22	74.00	7.10	0.00	0.00	34.24	10.07	0.00	0.00	175.51	31.22	0.00	0.00	144.29
245+00		27.91	213.60	0.00	0.00	0.00	148.65	3.67	0.00	0.00	324.15	34.89	0.00	0.00	289.27
245+37		37.40	169.60	0.00	0.00	0.00	265.40	0.00	0.00	0.00	589.56	34.89	0.00	0.00	554.67
245+50		12.60	157.50	0.00	0.00	0.00	76.32	0.00	0.00	0.00	665.88	34.89	0.00	0.00	630.99
245+95		45.00	0.00	69.30	0.00	0.00	131.25	57.75	0.00	0.00	797.13	92.64	0.00	0.00	704.49
246+00		5.00	0.00	106.60	0.00	0.00	0.00	16.29	0.00	0.00	797.13	108.92	0.00	0.00	688.21
246+50		50.00	169.00	0.00	0.00	0.00	156.48	98.70	0.00	0.00	953.61	207.63	0.00	0.00	745.98
247+00		50.00	1021.50	0.00	0.00	0.00	1102.31	0.00	0.00	0.00	2055.93	207.63	0.00	0.00	1848.30
247+50		50.00	1444.30	0.00	0.00	0.00	2283.15	0.00	0.00	0.00	4339.07	207.63	0.00	0.00	4131.45
248+00		50.00	1676.70	0.00	0.00	0.00	2889.81	0.00	0.00	0.00	7228.89	207.63	0.00	0.00	7021.26
248+04		3.80	1714.30	0.00	0.00	0.00	238.63	0.00	0.00	0.00	7467.51	207.63	0.00	0.00	7259.89
248+50		46.20	2085.90	0.00	0.00	0.00	3251.28	0.00	0.00	0.00	10718.80	207.63	0.00	0.00	10511.17
249+00		50.00	1473.70	0.00	0.00	0.00	3295.93	0.00	0.00	0.00	14014.72	207.63	0.00	0.00	13807.10
249+37		36.73	227.90	143.60	0.00	0.00	1157.40	97.67	0.00	0.00	15172.13	305.30	0.00	0.00	14866.82
249+50		13.27	177.10	165.20	0.00	0.00	99.53	75.88	0.00	0.00	15271.65	381.19	0.00	0.00	14890.46
250+00		50.00	854.70	62.40	0.00	0.00	955.37	210.74	0.00	0.00	16227.02	591.93	0.00	0.00	15635.09
250+50	BK	50.00	752.20	36.20	0.00	0.00	1392.96	91.30	0.00	0.00	17619.98	683.22	0.00	0.00	16936.76
						Column totals	17619.98	683.22	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - CSB

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
243+83	AH	0.00	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
244+00		16.98	55.70	0.00	0.00	0.00	17.51	1.51	0.00	0.00	17.51	1.51	0.00	0.00	16.01
244+01		1.47	73.60	0.00	0.00	0.00	3.52	0.00	0.00	0.00	21.03	1.51	0.00	0.00	19.53
244+13		11.53	111.50	0.00	0.00	0.00	39.52	0.00	0.00	0.00	60.56	1.51	0.00	0.00	59.05
244+25		12.05	12.40	0.00	0.00	0.00	27.65	0.00	0.00	0.00	88.20	1.51	0.00	0.00	86.70
244+43		17.96	22.50	0.00	0.00	0.00	11.61	0.00	0.00	0.00	99.81	1.51	0.00	0.00	98.30
244+50		6.99	31.30	0.00	0.00	0.00	6.96	0.00	0.00	0.00	106.78	1.51	0.00	0.00	105.27
244+77		26.75	83.60	0.00	0.00	0.00	56.92	0.00	0.00	0.00	163.69	1.51	0.00	0.00	162.19
245+00		23.25	126.30	0.00	0.00	0.00	90.37	0.00	0.00	0.00	254.07	1.51	0.00	0.00	252.56
245+48		48.00	33.20	4.90	0.00	0.00	141.78	4.36	0.00	0.00	395.85	5.86	0.00	0.00	389.98
245+50		2.00	26.60	11.60	0.00	0.00	2.21	0.61	0.00	0.00	398.06	6.48	0.00	0.00	391.58
246+00		50.00	0.00	250.50	0.00	0.00	24.63	242.69	0.00	0.00	422.69	249.16	0.00	0.00	173.53
246+50		50.00	331.60	0.00	0.00	0.00	307.04	231.94	0.00	0.00	729.73	481.11	0.00	0.00	248.62
247+00		50.00	1378.60	0.00	0.00	0.00	1583.52	0.00	0.00	0.00	2313.25	481.11	0.00	0.00	1832.14
247+50		50.00	1671.00	0.00	0.00	0.00	2823.70	0.00	0.00	0.00	5136.95	481.11	0.00	0.00	4655.84
248+00		50.00	1384.20	0.00	0.00	0.00	2828.89	0.00	0.00	0.00	7965.84	481.11	0.00	0.00	7484.73
248+50		50.00	508.80	0.40	0.00	0.00	1752.78	0.37	0.00	0.00	9718.62	481.48	0.00	0.00	9237.14
249+00		50.00	11.60	412.10	0.00	0.00	481.85	381.94	0.00	0.00	10200.47	863.42	0.00	0.00	9337.05
249+50		50.00	261.58	55.30	0.00	0.00	252.94	432.78	0.00	0.00	10453.41	1296.20	0.00	0.00	9157.21
250+00		50.00	794.42	20.30	0.00	0.00	977.78	70.00	0.00	0.00	11431.19	1366.20	0.00	0.00	10064.99
250+50	BK	50.00	733.08	20.30	0.00	0.00	1414.35	37.59	0.00	0.00	12845.54	1403.79	0.00	0.00	11441.75
						Column totals	12845.54	1403.79	0.00	0.00					

PROJECT ID 1517-75-75

STAGE 3 - MEF (9 FT FILL HEIGHT SHOWN IN PLAN)

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
243EB+50	AH	0.00	65.50	696.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
244EB+00		50.00	35.73	853.46	0.00	0.00	93.73	1435.29	0.00	0.00	93.73	1435.29	0.00	0.00	-1341.56
244EB+50		50.00	100.92	1126.93	0.00	0.00	126.53	1833.70	0.00	0.00	220.26	3268.99	0.00	0.00	-3048.73
245EB+00		50.00	155.19	1342.67	0.00	0.00	237.14	2286.67	0.00	0.00	457.40	5555.65	0.00	0.00	-5098.25
245EB+50		50.00	236.43	1575.15	0.00	0.00	362.61	2701.69	0.00	0.00	820.01	8257.34	0.00	0.00	-7437.33
246EB+00		50.00	307.34	1861.48	0.00	0.00	503.49	3182.06	0.00	0.00	1323.50	11439.40	0.00	0.00	-10115.90
246EB+50		50.00	638.80	2160.69	0.00	0.00	876.06	3724.23	0.00	0.00	2199.56	15163.63	0.00	0.00	-12964.08
247EB+00		50.00	783.70	2503.15	0.00	0.00	1317.13	4318.37	0.00	0.00	3516.69	19482.00	0.00	0.00	-15965.32
247EB+50		50.00	519.26	2700.46	0.00	0.00	1206.44	4818.16	0.00	0.00	4723.13	24300.16	0.00	0.00	-19577.03
248EB+00		50.00	745.69	2964.84	0.00	0.00	1171.25	5245.65	0.00	0.00	5894.38	29545.81	0.00	0.00	-23651.43
248EB+50		50.00	439.48	2755.37	0.00	0.00	1097.38	5296.49	0.00	0.00	6991.76	34842.30	0.00	0.00	-27850.54
249EB+00		50.00	252.28	2699.34	0.00	0.00	640.52	5050.66	0.00	0.00	7632.28	39892.96	0.00	0.00	-32260.68
249EB+50		50.00	1242.19	3412.58	0.00	0.00	1383.77	5659.19	0.00	0.00	9016.05	45552.14	0.00	0.00	-36536.10
250EB+00		50.00	1319.06	3464.80	0.00	0.00	2371.53	6367.94	0.00	0.00	11387.57	51920.09	0.00	0.00	-40532.51
250EB+50		50.00	1362.36	3520.44	0.00	0.00	2482.80	6467.81	0.00	0.00	13870.37	58387.90	0.00	0.00	-44517.53
251EB+00		50.00	1175.93	3513.32	0.00	0.00	2350.27	6512.74	0.00	0.00	16220.64	64900.64	0.00	0.00	-48680.00
251EB+50		50.00	1113.10	3433.91	0.00	0.00	2119.47	6432.62	0.00	0.00	18340.11	71333.26	0.00	0.00	-52993.15
252EB+00		50.00	857.70	3345.42	0.00	0.00	1824.81	6277.16	0.00	0.00	20164.93	77610.42	0.00	0.00	-57445.49
252EB+50		50.00	786.74	3288.93	0.00	0.00	1522.63	6142.92	0.00	0.00	21687.56	83753.34	0.00	0.00	-62065.78
253EB+00		50.00	713.93	3045.24	0.00	0.00	1389.51	5864.97	0.00	0.00	23077.06	89618.31	0.00	0.00	-66541.24
253EB+50		50.00	580.41	2715.57	0.00	0.00	1198.46	5334.08	0.00	0.00	24275.53	94952.39	0.00	0.00	-70676.86
254EB+00		50.00	530.36	2414.58	0.00	0.00	1028.49	4750.14	0.00	0.00	25304.02	99702.53	0.00	0.00	-74398.51
254EB+50		50.00	600.42	2024.63	0.00	0.00	1047.02	4110.38	0.00	0.00	26351.04	103812.91	0.00	0.00	-77461.87
255EB+00		50.00	524.93	1759.83	0.00	0.00	1041.99	3504.13	0.00	0.00	27393.03	107317.04	0.00	0.00	-79924.01
255EB+50		50.00	183.87	1334.82	0.00	0.00	656.30	2865.42	0.00	0.00	28049.32	110182.46	0.00	0.00	-82133.13
256EB+00	BK	50.00	173.51	1015.55	0.00	0.00	330.91	2176.27	0.00	0.00	28380.23	112358.73	0.00	0.00	-83978.49
						Column totals	28380.23	112358.73	0.00	0.00					

PROJECT ID 1517-75-75

STAGE 3 - MEF (MAXIMUM FILL HEIGHT)

STATION		Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) EBS (In Cross Sections)	AREA (SF) Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Incremental Vol (CY) (Unadjusted) EBS	Incremental Vol (CY) (Unadjusted) Structure Excavation	Cumulative Vol (CY) Cut	Cumulative Vol (CY) Fill	Cumulative Vol (CY) EBS	Cumulative Vol (CY) Structure Excavation	Mass Ordinate
243EB+50	AH	0.00	65.50	945.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
244EB+00		50.00	35.73	1245.51	0.00	0.00	93.73	2028.49	0.00	0.00	93.73	2028.49	0.00	0.00	-1934.76
244EB+50		50.00	100.92	1846.83	0.00	0.00	126.53	2863.28	0.00	0.00	220.26	4891.77	0.00	0.00	-4671.51
245EB+00		50.00	155.19	2305.13	0.00	0.00	237.14	3844.41	0.00	0.00	457.40	8736.18	0.00	0.00	-8278.78
245EB+50		50.00	236.43	2841.50	0.00	0.00	362.61	4765.40	0.00	0.00	820.01	13501.57	0.00	0.00	-12681.56
246EB+00		50.00	307.34	3379.77	0.00	0.00	503.49	5760.44	0.00	0.00	1323.50	19262.01	0.00	0.00	-17938.51
246EB+50		50.00	638.80	3966.46	0.00	0.00	876.06	6802.06	0.00	0.00	2199.56	26064.07	0.00	0.00	-23864.52
247EB+00		50.00	783.70	4663.06	0.00	0.00	1317.13	7990.30	0.00	0.00	3516.69	34054.37	0.00	0.00	-30537.69
247EB+50		50.00	519.26	5047.60	0.00	0.00	1206.44	8991.35	0.00	0.00	4723.13	43045.72	0.00	0.00	-38322.59
248EB+00		50.00	745.69	5536.70	0.00	0.00	1171.25	9800.28	0.00	0.00	5894.38	52846.00	0.00	0.00	-46951.62
248EB+50		50.00	439.48	5199.76	0.00	0.00	1097.38	9941.17	0.00	0.00	6991.76	62787.17	0.00	0.00	-55795.41
249EB+00		50.00	252.28	4848.21	0.00	0.00	640.52	9303.68	0.00	0.00	7632.28	72090.84	0.00	0.00	-64458.56
249EB+50		50.00	1242.19	5739.96	0.00	0.00	1383.77	9803.86	0.00	0.00	9016.05	81894.70	0.00	0.00	-72878.66
250EB+00		50.00	1319.06	5815.20	0.00	0.00	2371.53	10699.22	0.00	0.00	11387.57	92593.93	0.00	0.00	-81206.35
250EB+50		50.00	1362.36	5764.12	0.00	0.00	2482.80	10721.59	0.00	0.00	13870.37	103315.52	0.00	0.00	-89445.15
251EB+00		50.00	1175.93	5694.29	0.00	0.00	2350.27	10609.64	0.00	0.00	16220.64	113925.15	0.00	0.00	-97704.52
251EB+50		50.00	1113.10	5404.18	0.00	0.00	2119.47	10276.36	0.00	0.00	18340.11	124201.51	0.00	0.00	-105861.40
252EB+00		50.00	857.70	5082.78	0.00	0.00	1824.81	9710.15	0.00	0.00	20164.93	133911.66	0.00	0.00	-113746.73
252EB+50		50.00	786.74	5136.51	0.00	0.00	1522.63	9462.31	0.00	0.00	21687.56	143373.97	0.00	0.00	-121686.41
253EB+00		50.00	713.93	4651.36	0.00	0.00	1389.51	9062.84	0.00	0.00	23077.06	152436.81	0.00	0.00	-129359.74
253EB+50		50.00	580.41	3984.05	0.00	0.00	1198.46	7995.75	0.00	0.00	24275.53	160432.56	0.00	0.00	-136157.03
254EB+00		50.00	530.36	3624.20	0.00	0.00	1028.49	7044.67	0.00	0.00	25304.02	167477.23	0.00	0.00	-142173.21
254EB+50		50.00	600.42	3127.44	0.00	0.00	1047.02	6251.52	0.00	0.00	26351.04	173728.75	0.00	0.00	-147377.71
255EB+00		50.00	524.93	2628.12	0.00	0.00	1041.99	5329.23	0.00	0.00	27393.03	179057.98	0.00	0.00	-151664.95
255EB+50		50.00	183.87	1770.60	0.00	0.00	656.30	4072.89	0.00	0.00	28049.32	183130.86	0.00	0.00	-155081.54
256EB+00	BK	50.00	173.51	1339.90	0.00	0.00	330.91	2880.09	0.00	0.00	28380.23	186010.96	0.00	0.00	-157630.73
						Column totals	28380.23	186010.96	0.00	0.00					

******SHOWN FOR INFORMATIONAL PURPOSES ONLY******

PROJECT ID 1517-75-75
STAGE 3B - EBT

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
23+00	AH	0.00	28.78	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23+50		50.00	9.33	4.90	0.00	0.00	35.29	4.96	0.00	0.00	35.29	4.96	0.00	0.00	30.32
24+00		50.00	2.24	12.49	0.00	0.00	10.71	16.10	0.00	0.00	46.00	21.06	0.00	0.00	24.94
24+50		50.00	1.48	13.28	0.00	0.00	3.44	23.86	0.00	0.00	49.44	44.93	0.00	0.00	4.52
25+00		50.00	2.72	9.93	0.00	0.00	3.89	21.49	0.00	0.00	53.33	66.42	0.00	0.00	-13.08
25+50		50.00	22.69	0.00	0.00	0.00	23.53	9.19	0.00	0.00	76.86	75.61	0.00	0.00	1.25
26+00		50.00	28.91	2.71	0.00	0.00	47.78	2.51	0.00	0.00	124.64	78.12	0.00	0.00	46.52
26+50		50.00	55.49	0.00	0.00	0.00	78.15	2.51	0.00	0.00	202.79	80.63	0.00	0.00	122.16
27+00		50.00	76.48	0.00	0.00	0.00	122.19	0.00	0.00	0.00	324.98	80.63	0.00	0.00	244.35
27+50		50.00	88.72	0.00	0.00	0.00	152.96	0.00	0.00	0.00	477.94	80.63	0.00	0.00	397.31
28+00		50.00	96.67	0.00	0.00	0.00	171.66	0.00	0.00	0.00	649.60	80.63	0.00	0.00	568.97
28+50		50.00	99.65	0.00	0.00	0.00	181.78	0.00	0.00	0.00	831.38	80.63	0.00	0.00	750.75
29+00		50.00	78.19	0.00	0.00	0.00	164.67	0.00	0.00	0.00	996.05	80.63	0.00	0.00	915.42
29+50		50.00	75.79	0.00	0.00	0.00	142.57	0.00	0.00	0.00	1138.62	80.63	0.00	0.00	1057.99
30+00		50.00	57.12	0.00	0.00	0.00	123.06	0.00	0.00	0.00	1261.69	80.63	0.00	0.00	1181.06
30+07		7.20	0.23	0.72	0.00	0.00	7.65	0.10	0.00	0.00	1269.33	80.73	0.00	0.00	1188.61
30+50		42.80	0.00	0.00	0.00	0.00	0.18	0.57	0.00	0.00	1269.51	81.30	0.00	0.00	1188.22
31+00	BK	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1269.51	81.30	0.00	0.00	1188.22
						Column totals	1269.51	81.30	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3B - WBT

STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
22+32	AH	0.00	81.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22+50		18.40	50.77	0.00	0.00	0.00	45.04	0.00	0.00	0.00	45.04	0.00	0.00	0.00	45.04
23+00		50.00	27.94	0.83	0.00	0.00	72.88	0.77	0.00	0.00	117.92	0.77	0.00	0.00	117.15
23+50		50.00	20.24	9.61	0.00	0.00	44.61	9.67	0.00	0.00	162.53	10.44	0.00	0.00	152.09
24+00		50.00	19.83	13.81	0.00	0.00	37.10	21.69	0.00	0.00	199.63	32.12	0.00	0.00	167.51
24+50		50.00	28.76	8.77	0.00	0.00	44.99	20.91	0.00	0.00	244.62	53.03	0.00	0.00	191.59
25+00		50.00	52.75	0.00	0.00	0.00	75.47	8.12	0.00	0.00	320.09	61.15	0.00	0.00	258.94
25+50		50.00	60.83	2.45	0.00	0.00	105.17	2.27	0.00	0.00	425.26	63.42	0.00	0.00	361.84
26+00		50.00	73.90	1.54	0.00	0.00	124.75	3.69	0.00	0.00	550.01	67.11	0.00	0.00	482.90
26+50		50.00	80.89	1.94	0.00	0.00	143.32	3.22	0.00	0.00	693.33	70.33	0.00	0.00	623.00
27+00		50.00	80.14	3.35	0.00	0.00	149.10	4.90	0.00	0.00	842.43	75.23	0.00	0.00	767.20
27+50	BK	50.00	81.86	1.09	0.00	0.00	150.00	4.11	0.00	0.00	992.43	79.34	0.00	0.00	913.09
						Column totals	992.43	79.34	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3A - RRB

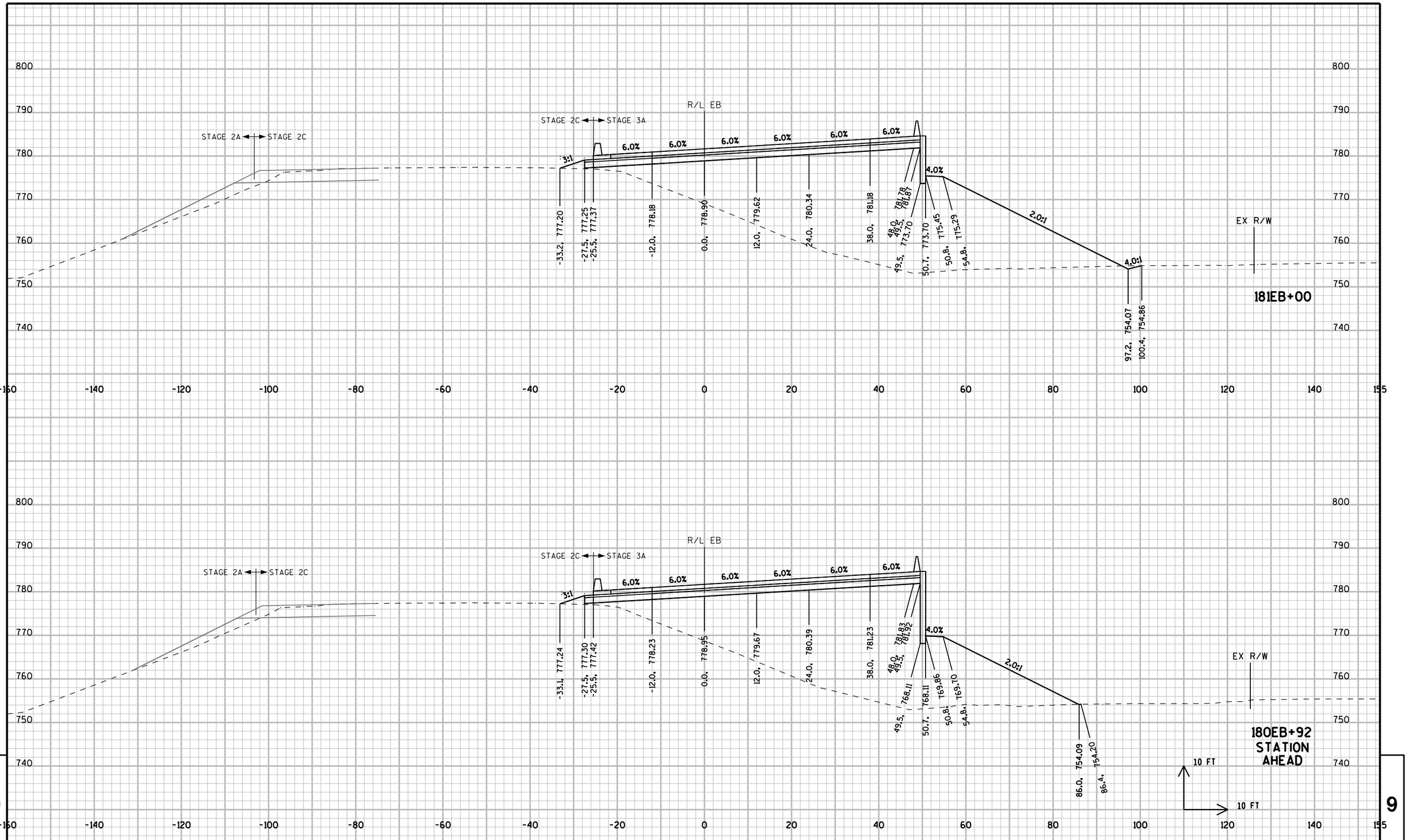
STATION		Distance	AREA (SF) Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Incremental Vol (CY) (Unadjusted) Cut	Fill	EBS	Structure Excavation	Cumulative Vol (CY) Cut	Fill	EBS	Structure Excavation	Mass Ordinate
+3	AH	0.00	0.00	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+10		7.00	0.00	19.9	0.00	0.00	0.00	5.30	0.00	0.00	0.00	5.30	0.00	0.00	-5.30
+20		10.00	1.40	23.2	0.00	0.00	0.26	7.98	0.00	0.00	0.26	13.28	0.00	0.00	-13.02
+30		10.00	0.00	15	0.00	0.00	0.26	7.07	0.00	0.00	0.52	20.36	0.00	0.00	-19.84
+40		10.00	0.00	13.6	0.00	0.00	0.00	5.30	0.00	0.00	0.52	25.65	0.00	0.00	-25.14
+44	BK	3.51	0.00	13.3	0.00	0.00	0.00	1.73	0.00	0.00	0.52	27.38	0.00	0.00	-26.86
						Column totals	0.52	27.38	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3B -TES

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
211+50	AH	0.00	3.60	2.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212+00		50.00	9.00	0.66	0.00	0.00	11.67	2.77	0.00	0.00	11.67	2.77	0.00	0.00	8.90
212+50		50.00	17.00	0.00	0.00	0.00	24.07	0.61	0.00	0.00	35.74	3.38	0.00	0.00	32.36
212+79		28.56	21.98	0.00	0.00	0.00	20.62	0.00	0.00	0.00	56.36	3.38	0.00	0.00	52.98
212+87		7.94	23.42	0.00	0.00	0.00	6.68	0.00	0.00	0.00	63.03	3.38	0.00	0.00	59.65
213+00		13.50	26.27	0.00	0.00	0.00	12.42	0.00	0.00	0.00	75.45	3.38	0.00	0.00	72.08
213+50		50.00	35.51	0.00	0.00	0.00	57.20	0.00	0.00	0.00	132.66	3.38	0.00	0.00	129.28
214+00		50.00	43.63	0.00	0.00	0.00	73.28	0.00	0.00	0.00	205.94	3.38	0.00	0.00	202.56
214+50		50.00	45.20	0.00	0.00	0.00	82.25	0.00	0.00	0.00	288.19	3.38	0.00	0.00	284.81
215+00		50.00	48.22	0.00	0.00	0.00	86.50	0.00	0.00	0.00	374.69	3.38	0.00	0.00	371.31
215+50		50.00	50.37	0.00	0.00	0.00	91.29	0.00	0.00	0.00	465.97	3.38	0.00	0.00	462.59
216+00		50.00	52.70	0.00	0.00	0.00	95.44	0.00	0.00	0.00	561.41	3.38	0.00	0.00	558.03
216+50		50.00	54.58	0.00	0.00	0.00	99.33	0.00	0.00	0.00	660.74	3.38	0.00	0.00	657.36
217+00		50.00	55.57	0.00	0.00	0.00	101.99	0.00	0.00	0.00	762.73	3.38	0.00	0.00	759.35
217+50		50.00	142.10	0.00	0.00	0.00	183.03	0.00	0.00	0.00	945.76	3.38	0.00	0.00	942.38
218+00		50.00	143.00	0.00	0.00	0.00	263.98	0.00	0.00	0.00	1209.74	3.38	0.00	0.00	1206.36
218+50		50.00	68.50	0.00	0.00	0.00	195.83	0.00	0.00	0.00	1405.58	3.38	0.00	0.00	1402.20
219+00		50.00	67.90	0.00	0.00	0.00	126.30	0.00	0.00	0.00	1531.87	3.38	0.00	0.00	1528.49
219+22		21.85	66.90	0.00	0.00	0.00	54.54	0.00	0.00	0.00	1586.42	3.38	0.00	0.00	1583.04
219+50		28.15	65.00	0.00	0.00	0.00	68.76	0.00	0.00	0.00	1655.17	3.38	0.00	0.00	1651.79
220+00		50.00	61.90	0.00	0.00	0.00	117.50	0.00	0.00	0.00	1772.67	3.38	0.00	0.00	1769.29
220+50		50.00	57.50	0.00	0.00	0.00	110.56	0.00	0.00	0.00	1883.23	3.38	0.00	0.00	1879.85
221+00		50.00	51.70	0.00	0.00	0.00	101.11	0.00	0.00	0.00	1984.34	3.38	0.00	0.00	1980.96
221+50		50.00	44.90	0.00	0.00	0.00	89.44	0.00	0.00	0.00	2073.79	3.38	0.00	0.00	2070.41
222+00		50.00	35.20	0.00	0.00	0.00	74.17	0.00	0.00	0.00	2147.95	3.38	0.00	0.00	2144.57
222+05		4.94	34.20	0.00	0.00	0.00	6.35	0.00	0.00	0.00	2154.30	3.38	0.00	0.00	2150.92
222+50		45.06	22.00	0.80	0.00	0.00	46.90	0.67	0.00	0.00	2201.20	4.05	0.00	0.00	2197.15
223+00	BK	50.00	13.60	1.80	0.00	0.00	32.96	2.41	0.00	0.00	2234.16	6.45	0.00	0.00	2227.71
						Column totals	2234.16	6.45	0.00	0.00					

PROJECT ID 1517-75-75
STAGE 3B - TWS

STATION		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	EBS (In Cross Sections)	Structure Excavation (In Cross Sections)	Cut	Fill	EBS	Structure Excavation	Cut	Fill	EBS	Structure Excavation	
210+50	AH	0.00	0.00	34.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210+84		33.82	0.00	17.40	0.00	0.00	0.00	32.55	0.00	0.00	0.00	32.55	0.00	0.00	-32.55
211+00		16.18	0.00	11.70	0.00	0.00	0.00	8.72	0.00	0.00	0.00	41.27	0.00	0.00	-41.27
211+50		50.00	4.80	2.60	0.00	0.00	4.44	13.24	0.00	0.00	4.44	54.51	0.00	0.00	-50.06
212+00		50.00	16.30	0.06	0.00	0.00	19.54	2.46	0.00	0.00	23.98	56.97	0.00	0.00	-32.99
212+50		50.00	21.10	0.00	0.00	0.00	34.63	0.06	0.00	0.00	58.61	57.03	0.00	0.00	1.58
212+69		19.49	22.40	0.00	0.00	0.00	15.70	0.00	0.00	0.00	74.31	57.03	0.00	0.00	17.28
213+00		30.51	24.65	2.90	0.00	0.00	26.58	1.64	0.00	0.00	100.89	58.67	0.00	0.00	42.23
213+50		50.00	33.56	0.30	0.00	0.00	53.90	2.96	0.00	0.00	154.79	61.63	0.00	0.00	93.16
214+00		50.00	39.18	0.00	0.00	0.00	67.35	0.28	0.00	0.00	222.14	61.91	0.00	0.00	160.24
214+50		50.00	113.50	0.00	0.00	0.00	141.37	0.00	0.00	0.00	363.52	61.91	0.00	0.00	301.61
215+00		50.00	118.50	0.00	0.00	0.00	214.81	0.00	0.00	0.00	578.33	61.91	0.00	0.00	516.42
215+50		50.00	125.70	0.00	0.00	0.00	226.11	0.00	0.00	0.00	804.44	61.91	0.00	0.00	742.53
216+00		50.00	128.20	0.00	0.00	0.00	235.09	0.00	0.00	0.00	1039.53	61.91	0.00	0.00	977.63
216+50		50.00	132.80	0.00	0.00	0.00	241.67	0.00	0.00	0.00	1281.20	61.91	0.00	0.00	1219.29
217+00		50.00	138.30	0.00	0.00	0.00	251.02	0.00	0.00	0.00	1532.22	61.91	0.00	0.00	1470.31
217+50		50.00	59.30	0.00	0.00	0.00	182.96	0.00	0.00	0.00	1715.18	61.91	0.00	0.00	1653.28
218+00		50.00	59.60	0.00	0.00	0.00	110.09	0.00	0.00	0.00	1825.27	61.91	0.00	0.00	1763.37
218+50		50.00	61.80	0.00	0.00	0.00	112.41	0.00	0.00	0.00	1937.68	61.91	0.00	0.00	1875.78
218+55		4.83	63.30	0.00	0.00	0.00	11.19	0.00	0.00	0.00	1948.87	61.91	0.00	0.00	1886.96
219+00		45.17	67.60	0.00	0.00	0.00	109.50	0.00	0.00	0.00	2058.37	61.91	0.00	0.00	1996.46
219+50		50.00	64.60	0.00	0.00	0.00	122.41	0.00	0.00	0.00	2180.77	61.91	0.00	0.00	2118.87
220+00		50.00	61.20	0.00	0.00	0.00	116.48	0.00	0.00	0.00	2297.26	61.91	0.00	0.00	2235.35
220+25		25.00	59.00	0.00	0.00	0.00	55.65	0.00	0.00	0.00	2352.90	61.91	0.00	0.00	2291.00
220+50		25.00	56.10	0.00	0.00	0.00	53.29	0.00	0.00	0.00	2406.19	61.91	0.00	0.00	2344.28
220+81		30.93	53.40	0.00	0.00	0.00	62.72	0.00	0.00	0.00	2468.91	61.91	0.00	0.00	2407.00
221+00		19.07	51.50	0.00	0.00	0.00	37.05	0.00	0.00	0.00	2505.96	61.91	0.00	0.00	2444.05
221+25		25.00	49.60	0.00	0.00	0.00	46.81	0.00	0.00	0.00	2552.76	61.91	0.00	0.00	2490.85
221+50		25.00	45.30	0.00	0.00	0.00	43.94	0.00	0.00	0.00	2596.70	61.91	0.00	0.00	2534.79
222+00		50.00	35.20	0.50	0.00	0.00	74.54	0.46	0.00	0.00	2671.23	62.37	0.00	0.00	2608.86
222+20		19.80	30.60	1.00	0.00	0.00	24.13	0.55	0.00	0.00	2695.36	62.92	0.00	0.00	2632.44
222+32	BK	11.90	0.00	0.00	0.00	0.00	6.74	0.22	0.00	0.00	2702.10	63.14	0.00	0.00	2638.96
						Column totals	2702.10	63.14	0.00	0.00					

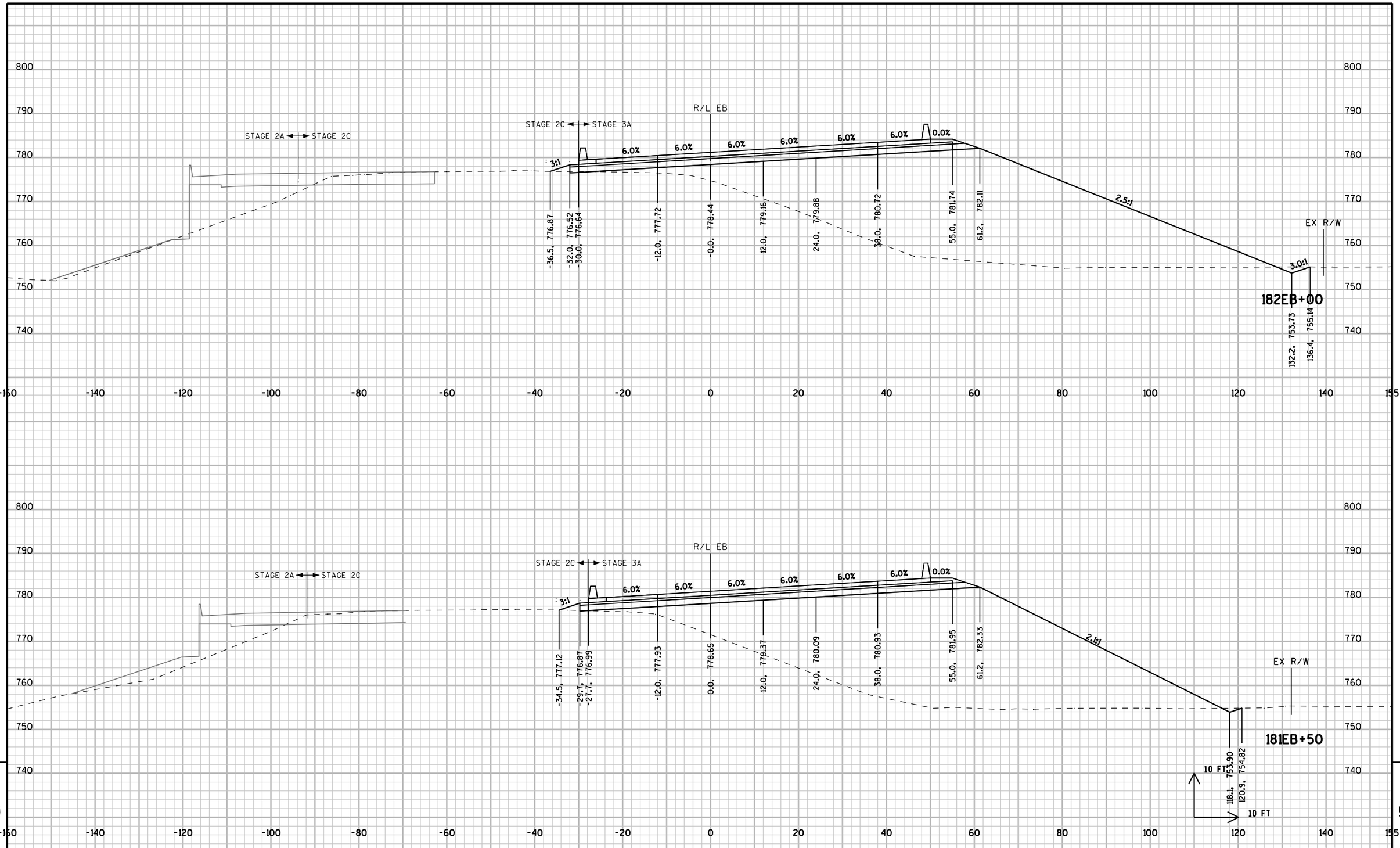


STA 180EB+92 TO 181EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

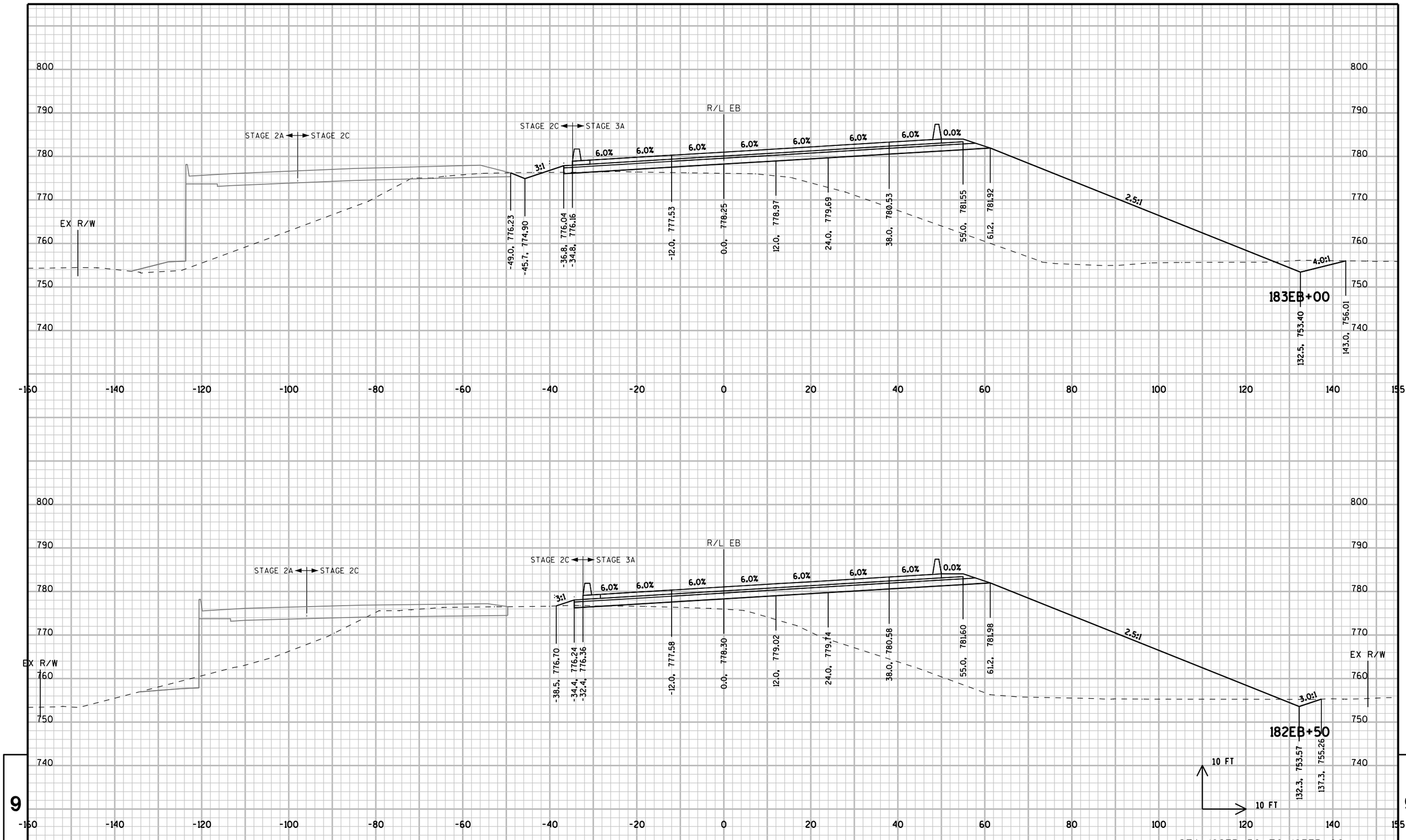
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WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 884	E

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WISDOT/CADDS SHEET 21

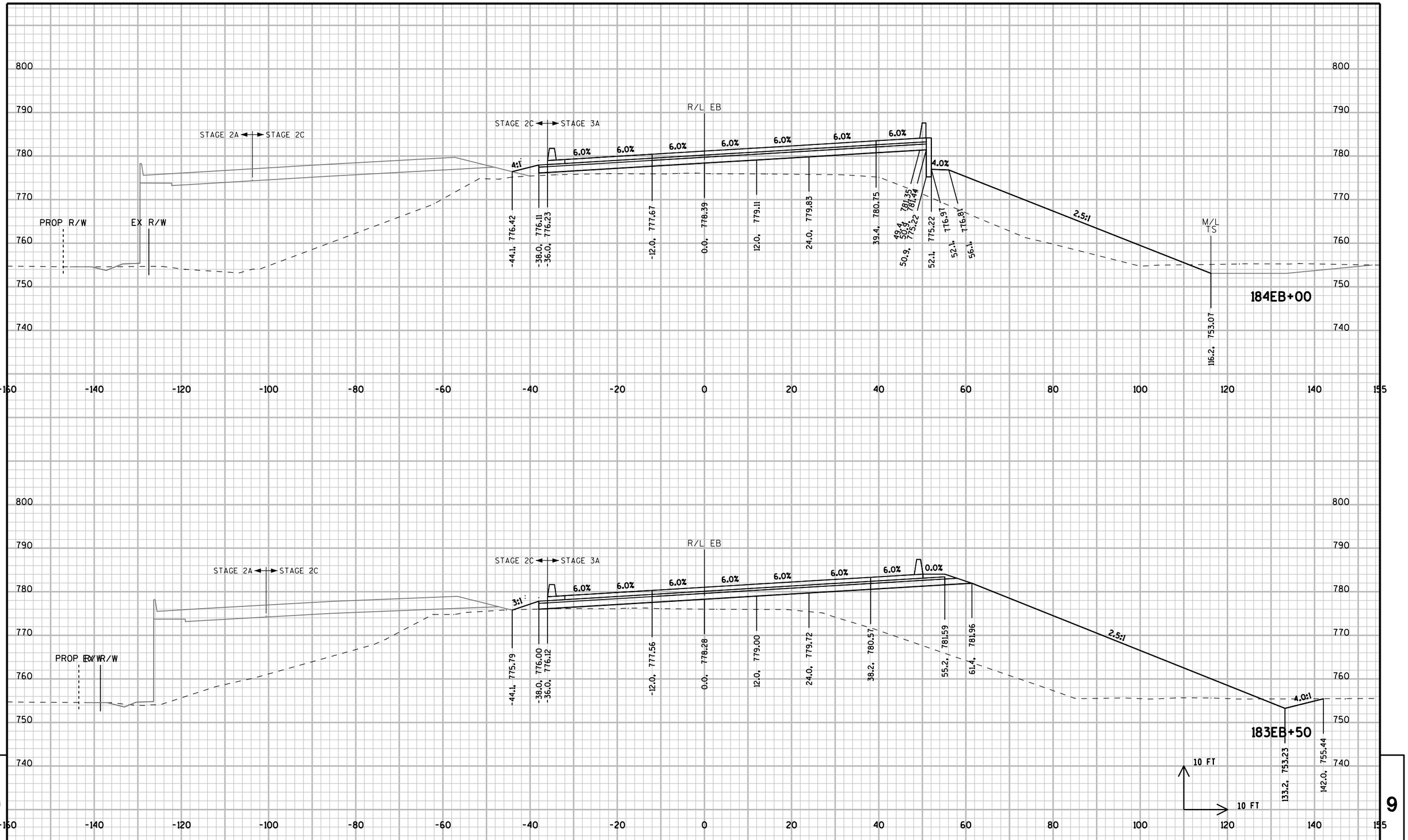


STA 182EB+50 TO 183EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 3/17/2015 1:54:14 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

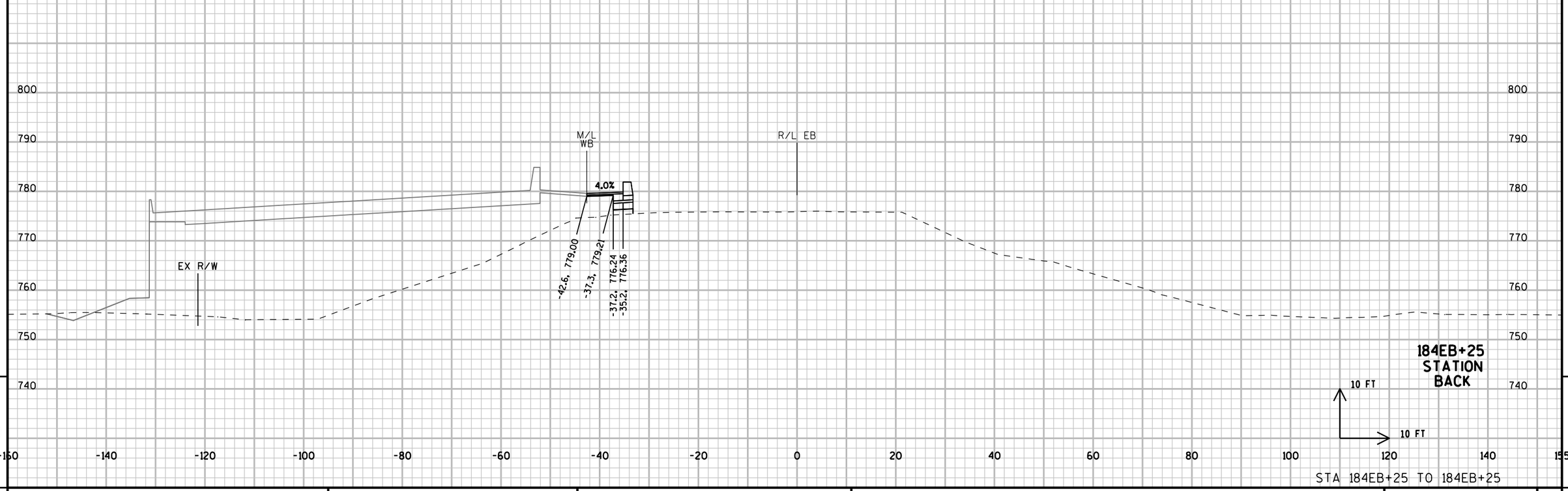
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 3/17/2015 1:54:14 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

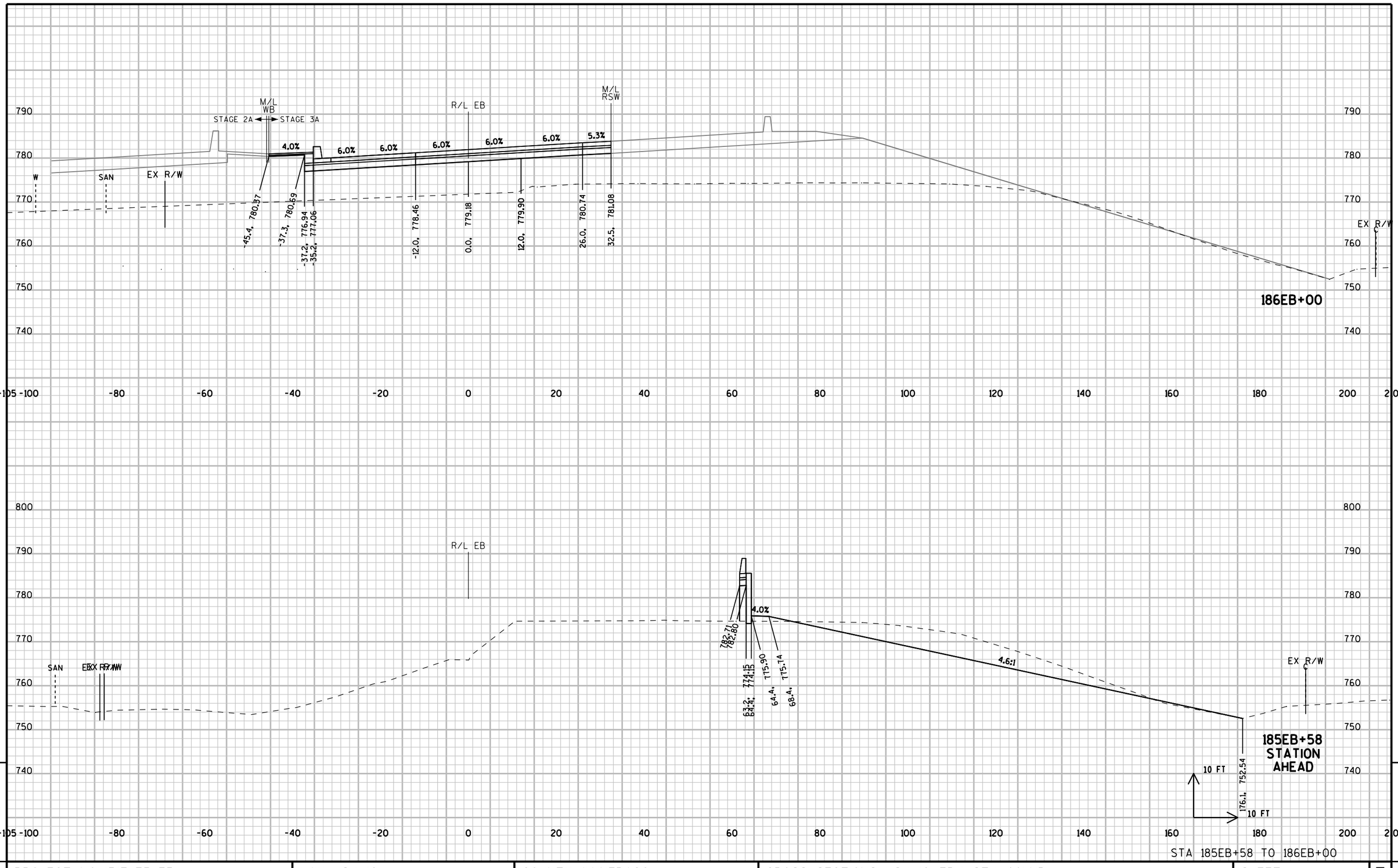
WISDOT/CADDS SHEET 21



STA 184EB+25 TO 184EB+25

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 887	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:30 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

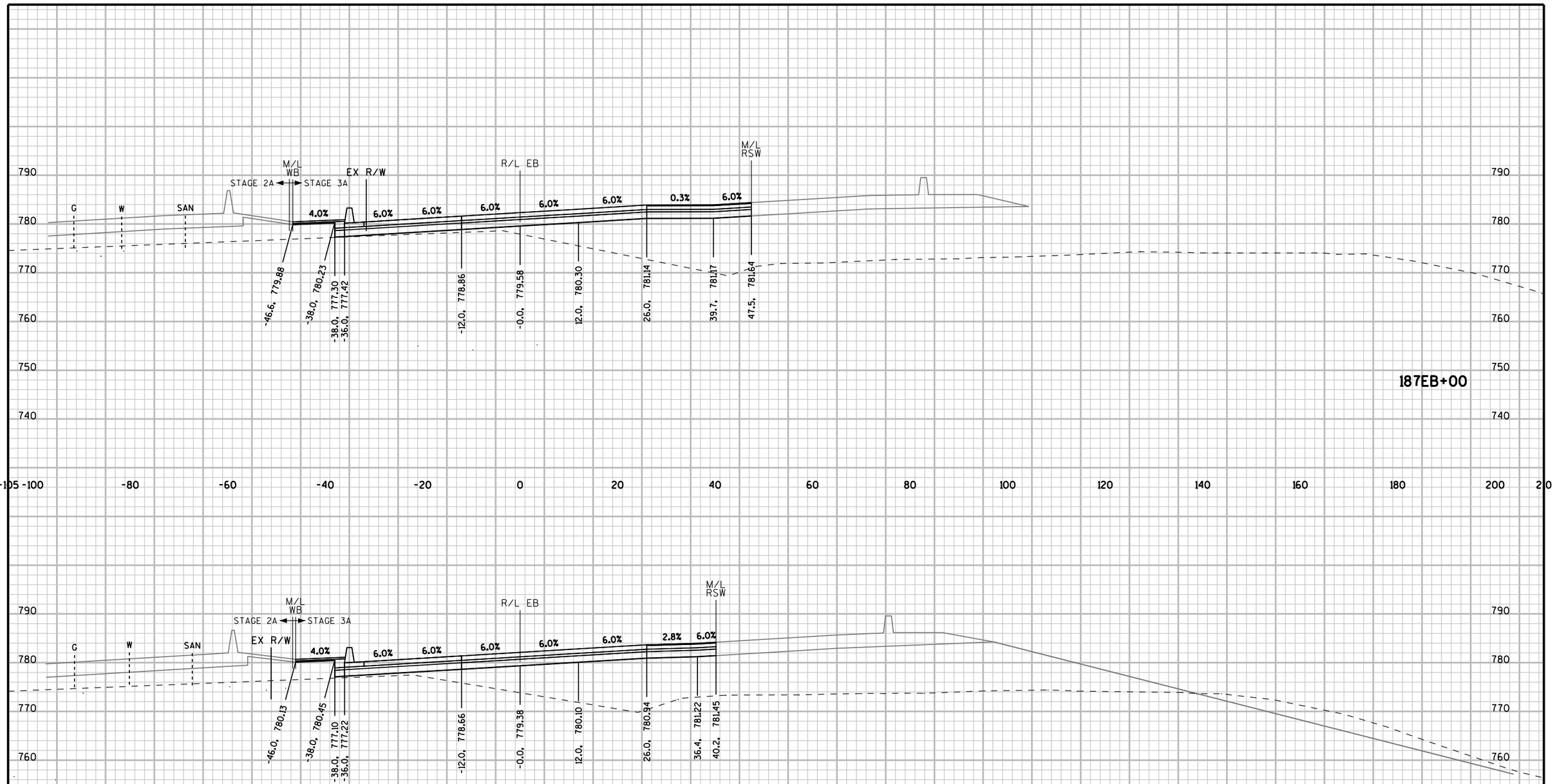


9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 888	E

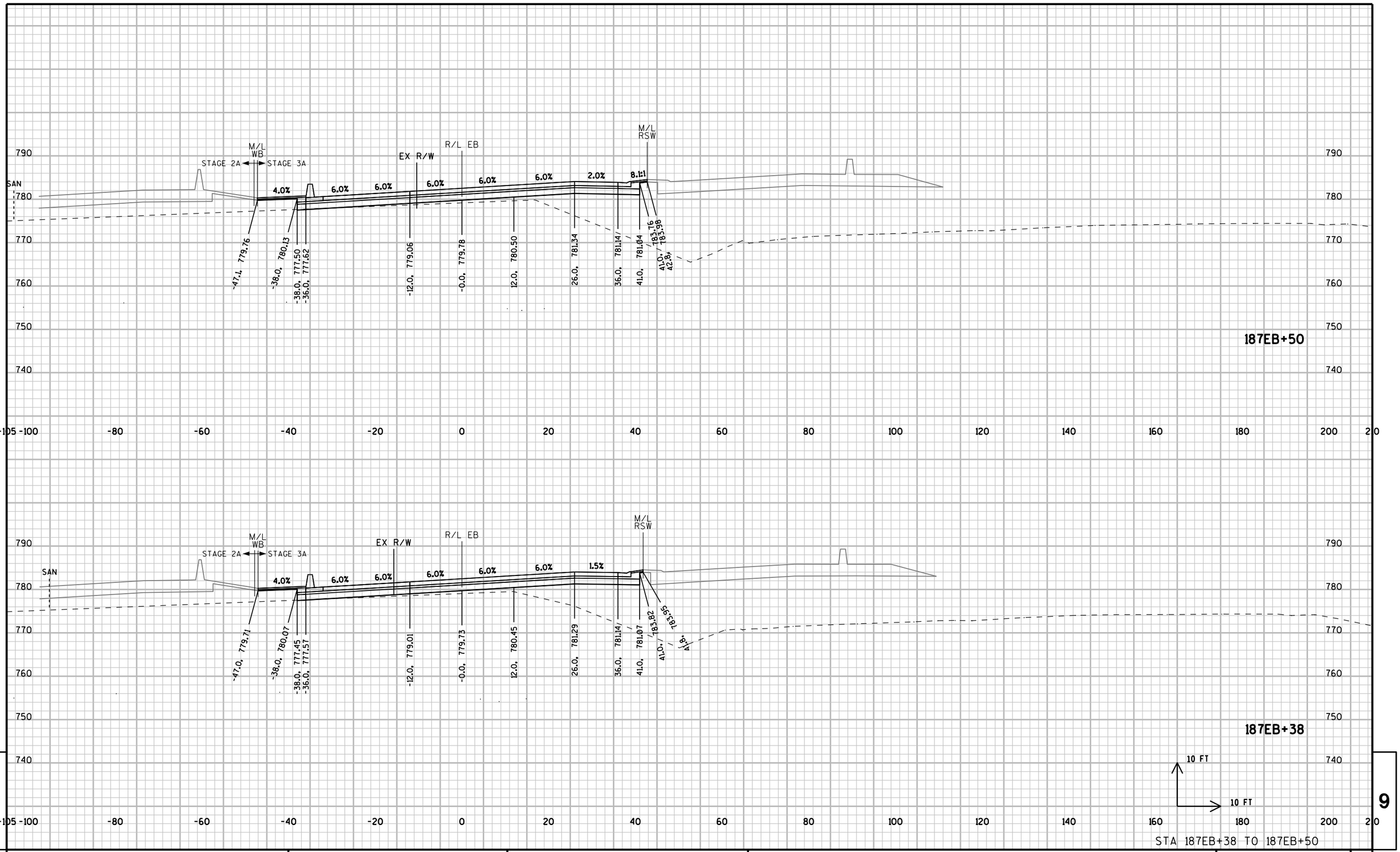
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WISDOT/CADDS SHEET 21



9 9

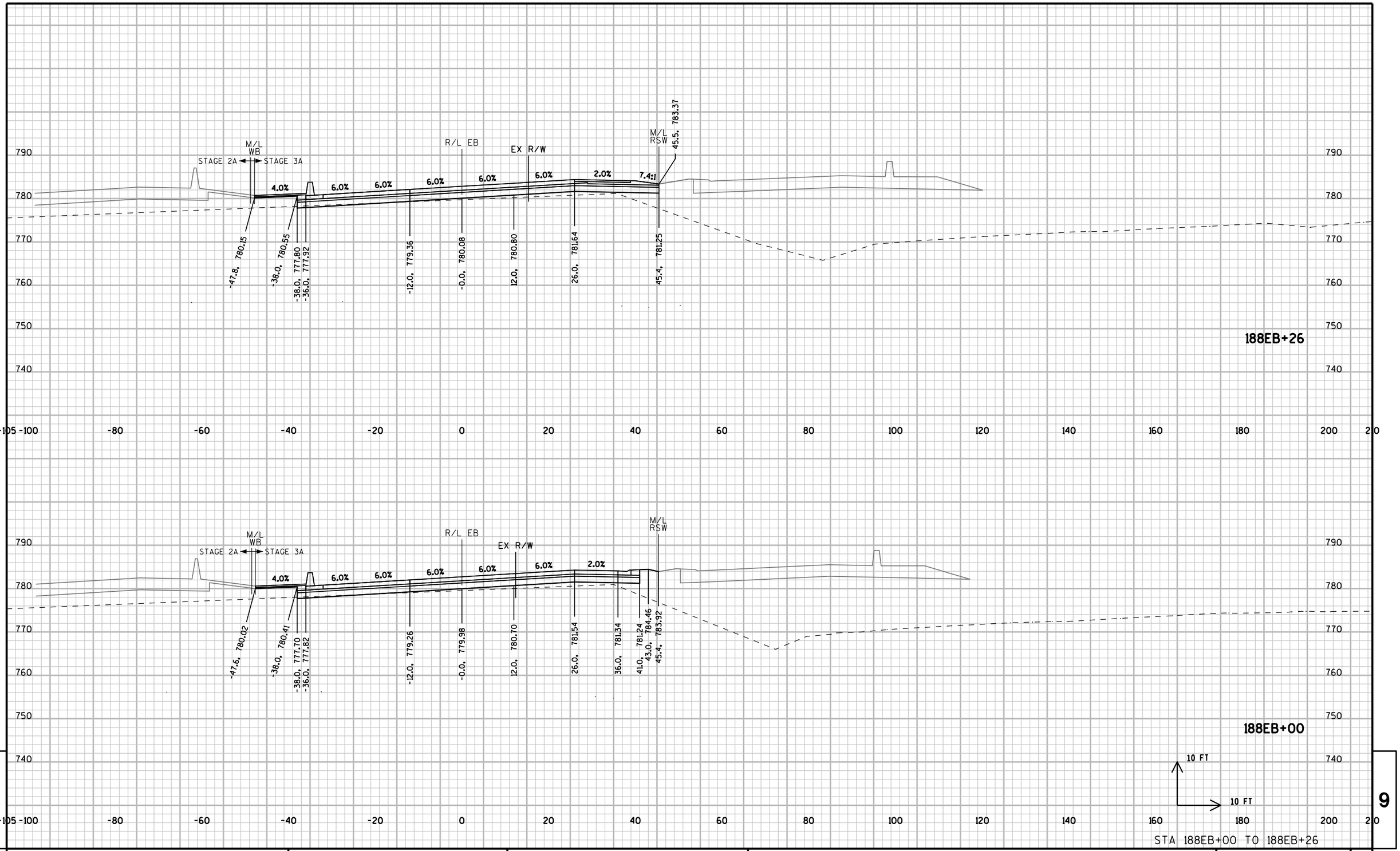
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 889	E



STA 187EB+38 TO 187EB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 890	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:31 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

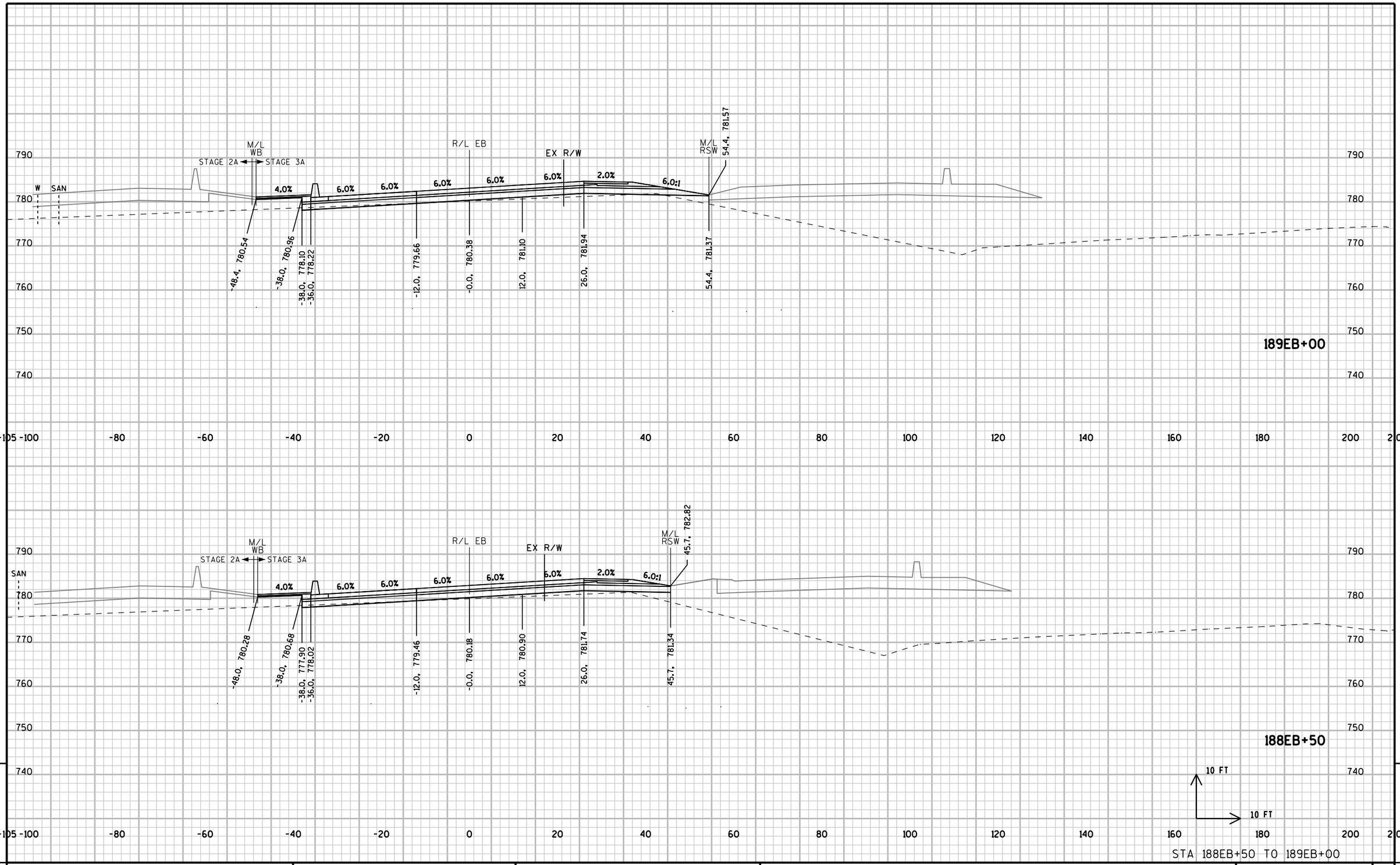


STA 188EB+00 TO 188EB+26

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 891	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:32 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

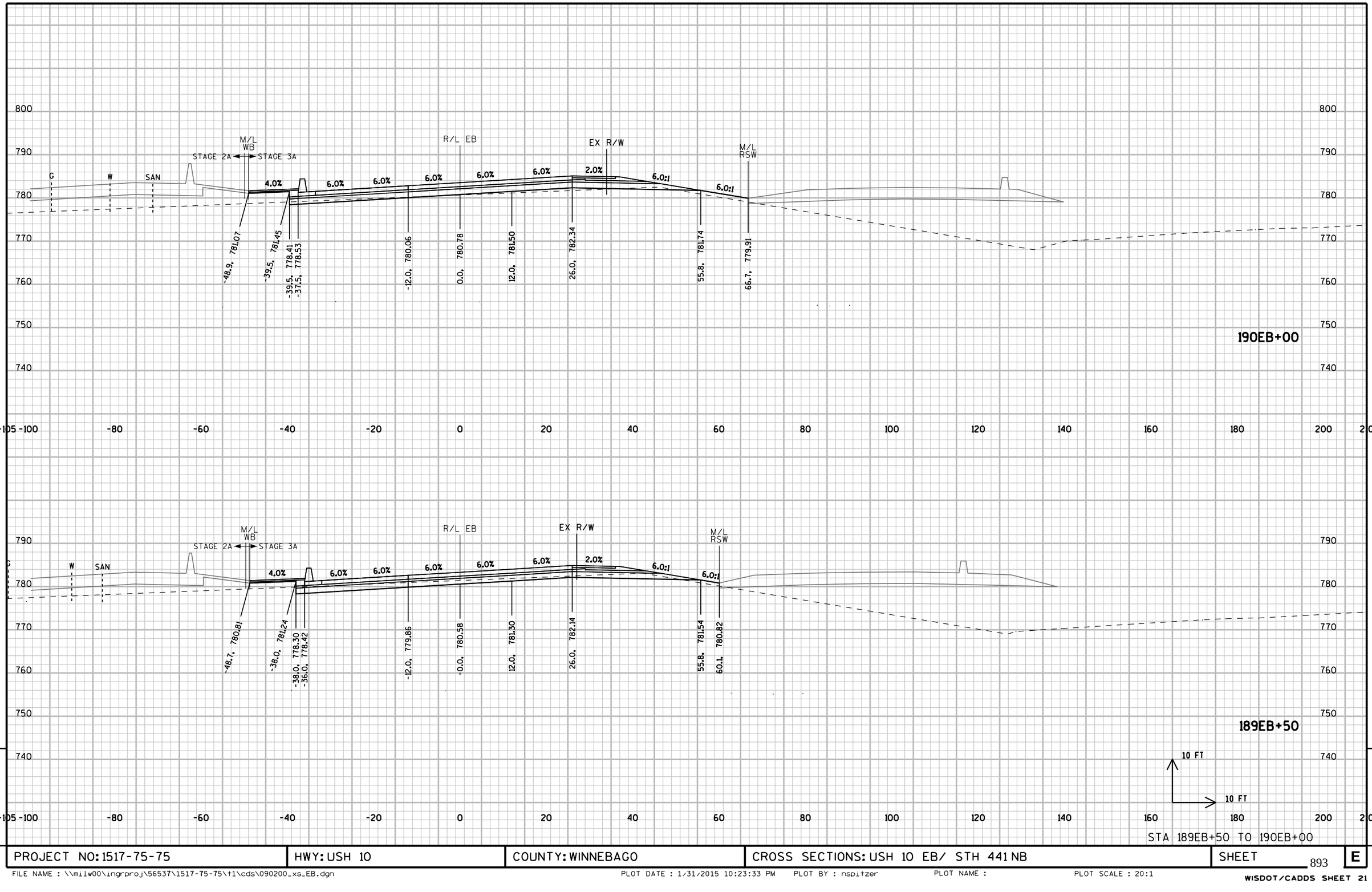
WISDOT/CADDS SHEET 21



STA 188EB+50 TO 189EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 892	E

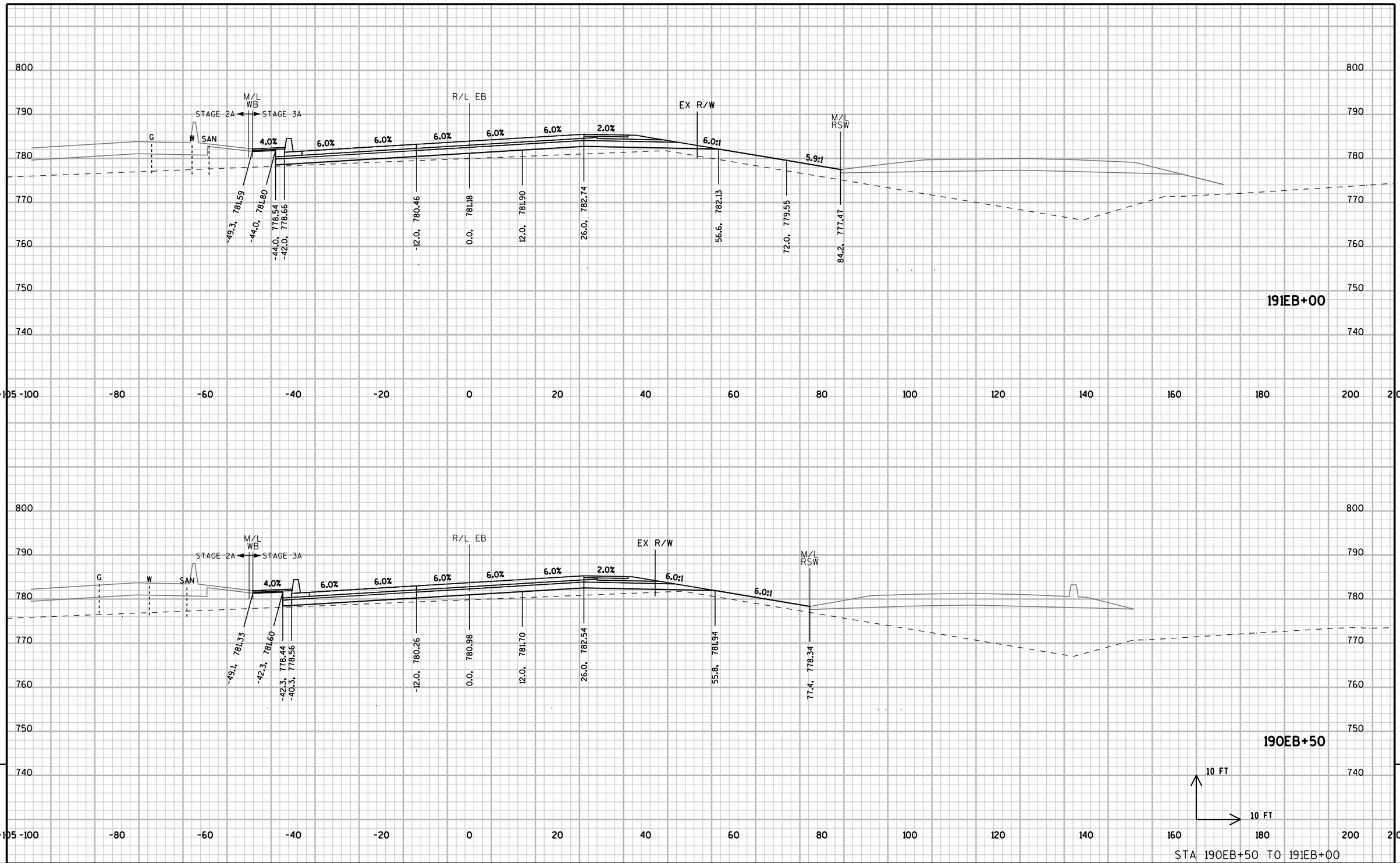
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STA 189EB+50 TO 190EB+00

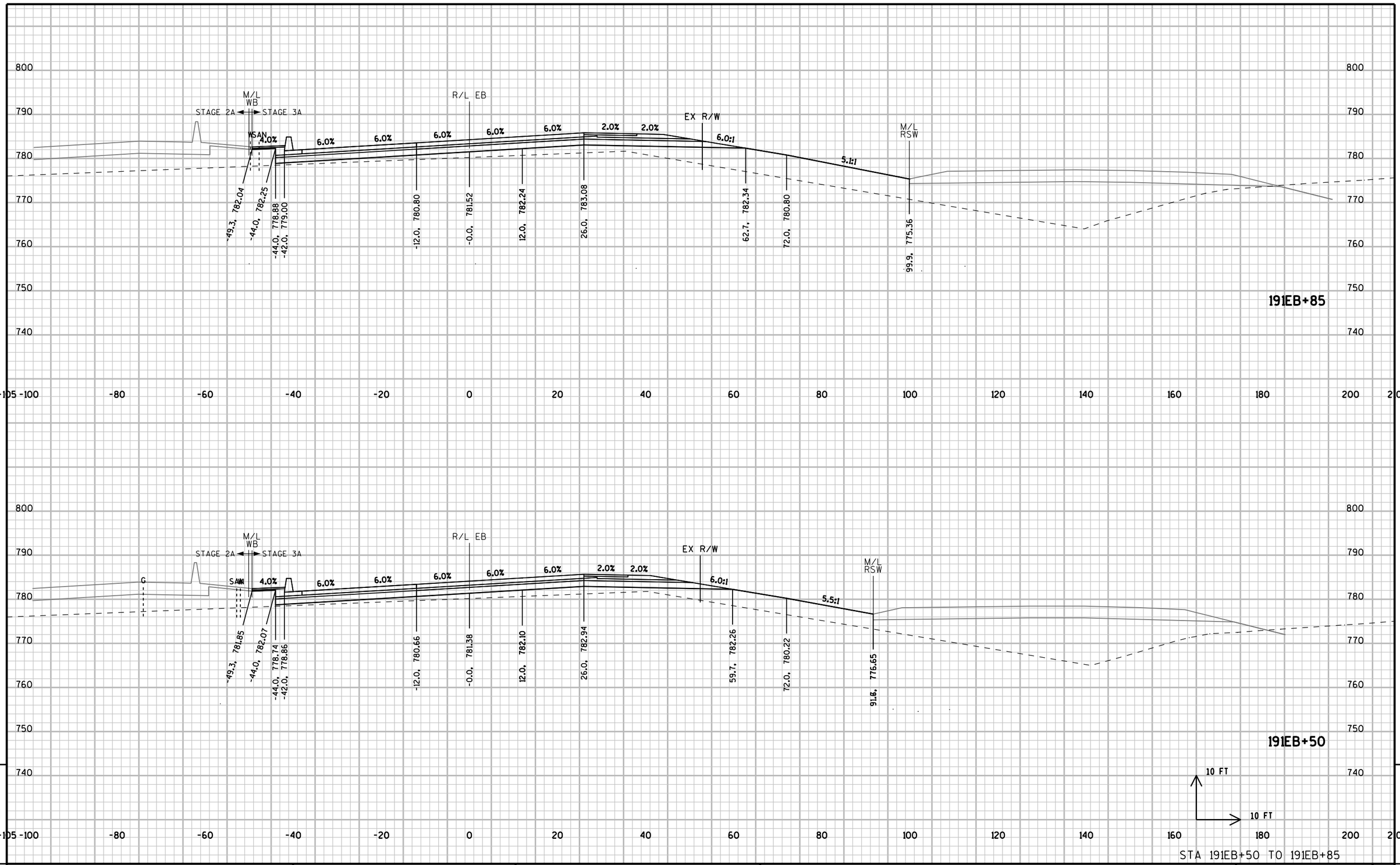
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:33 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

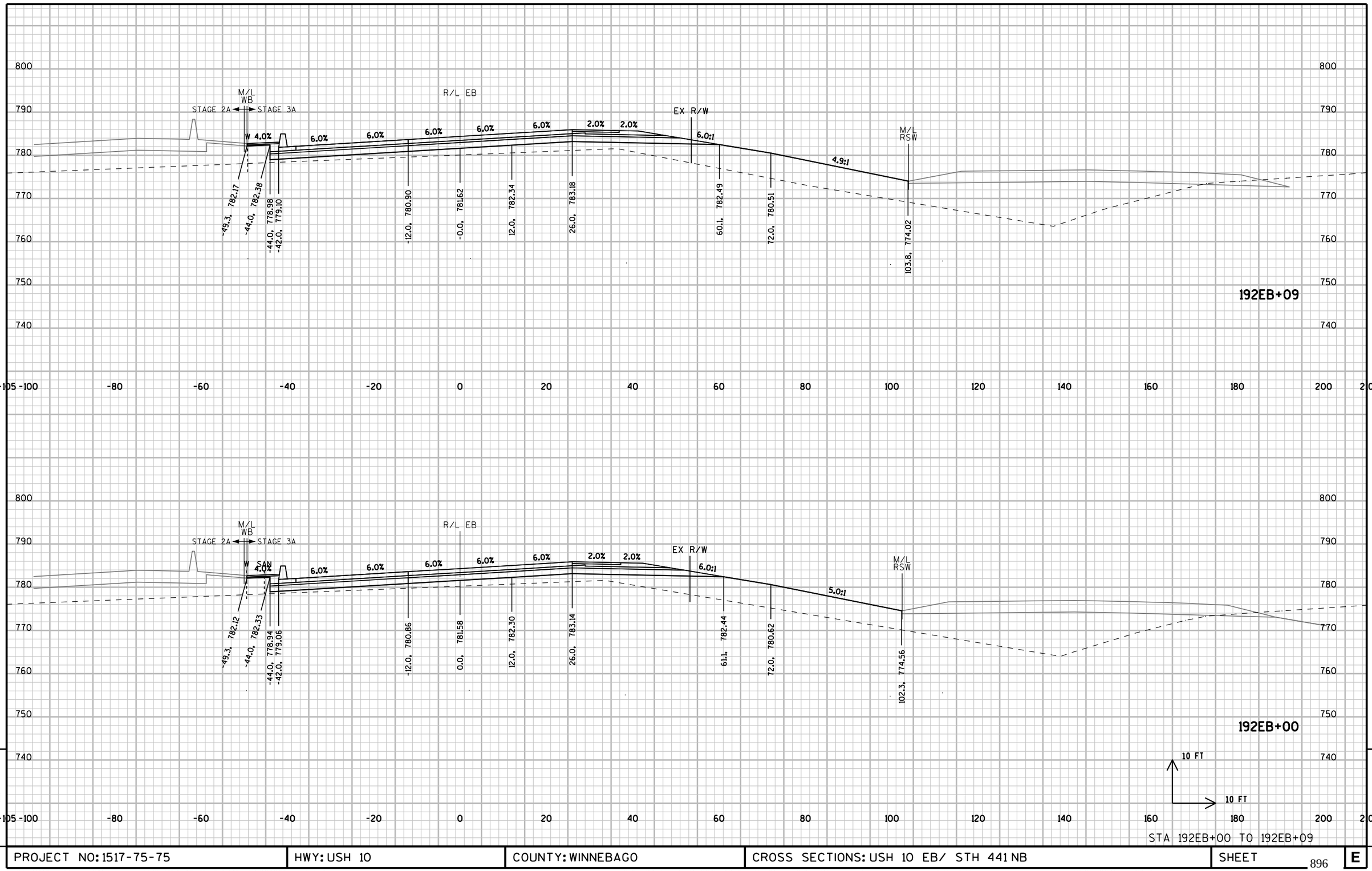


STA 190EB+50 TO 191EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 894	E

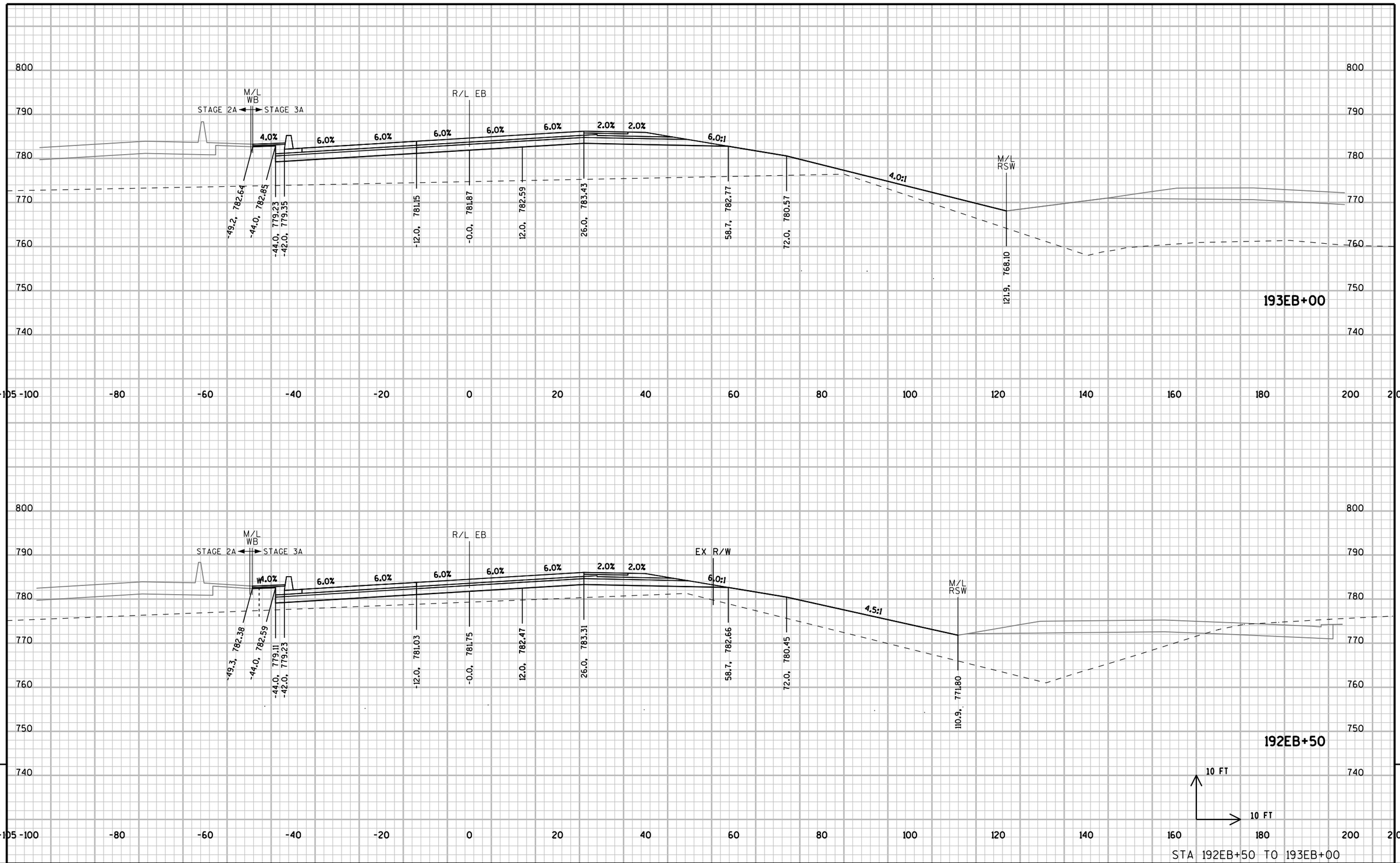


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 895	E



STA 192EB+00 TO 192EB+09

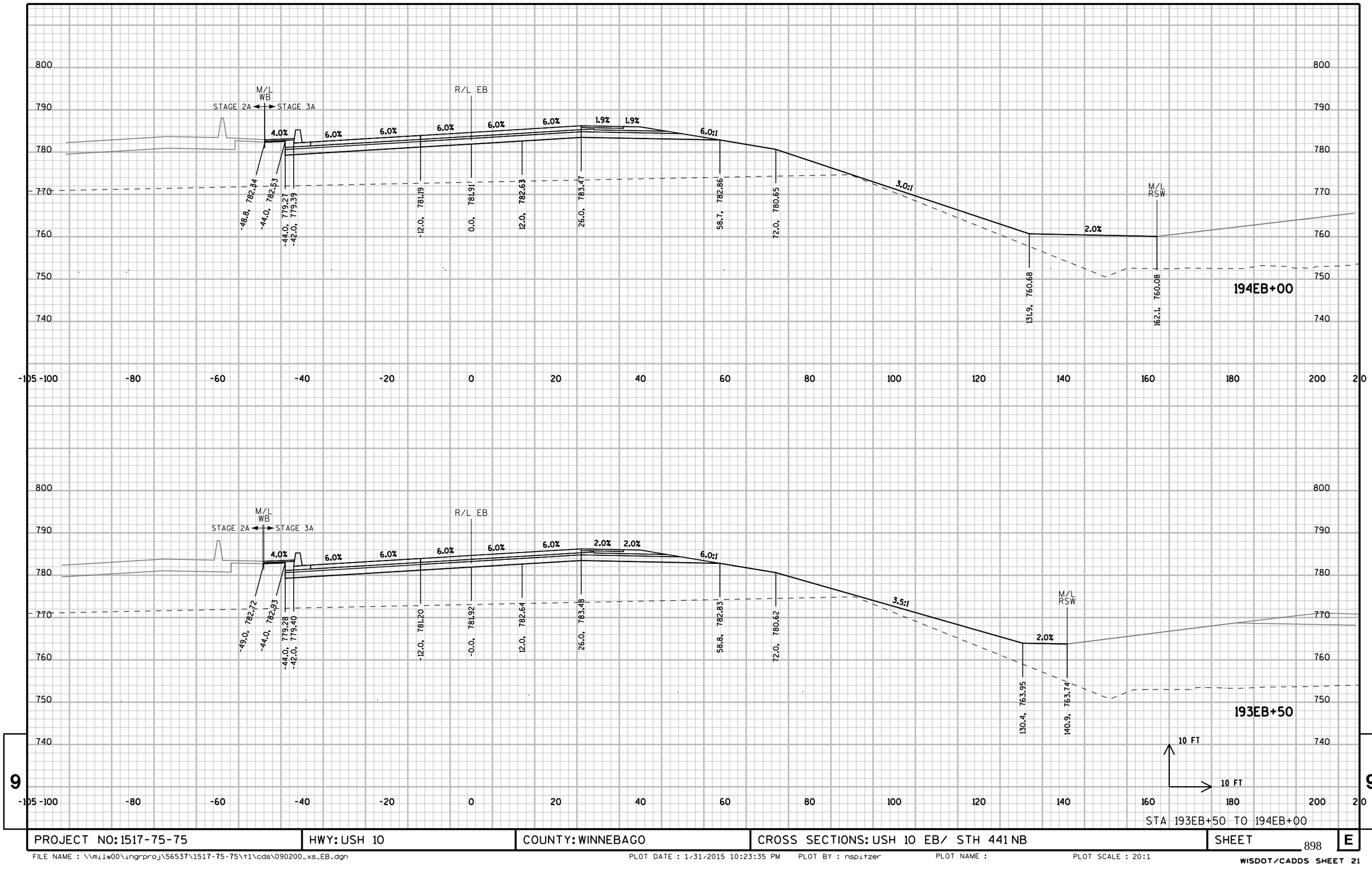
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 896	E



STA 192EB+50 TO 193EB+00

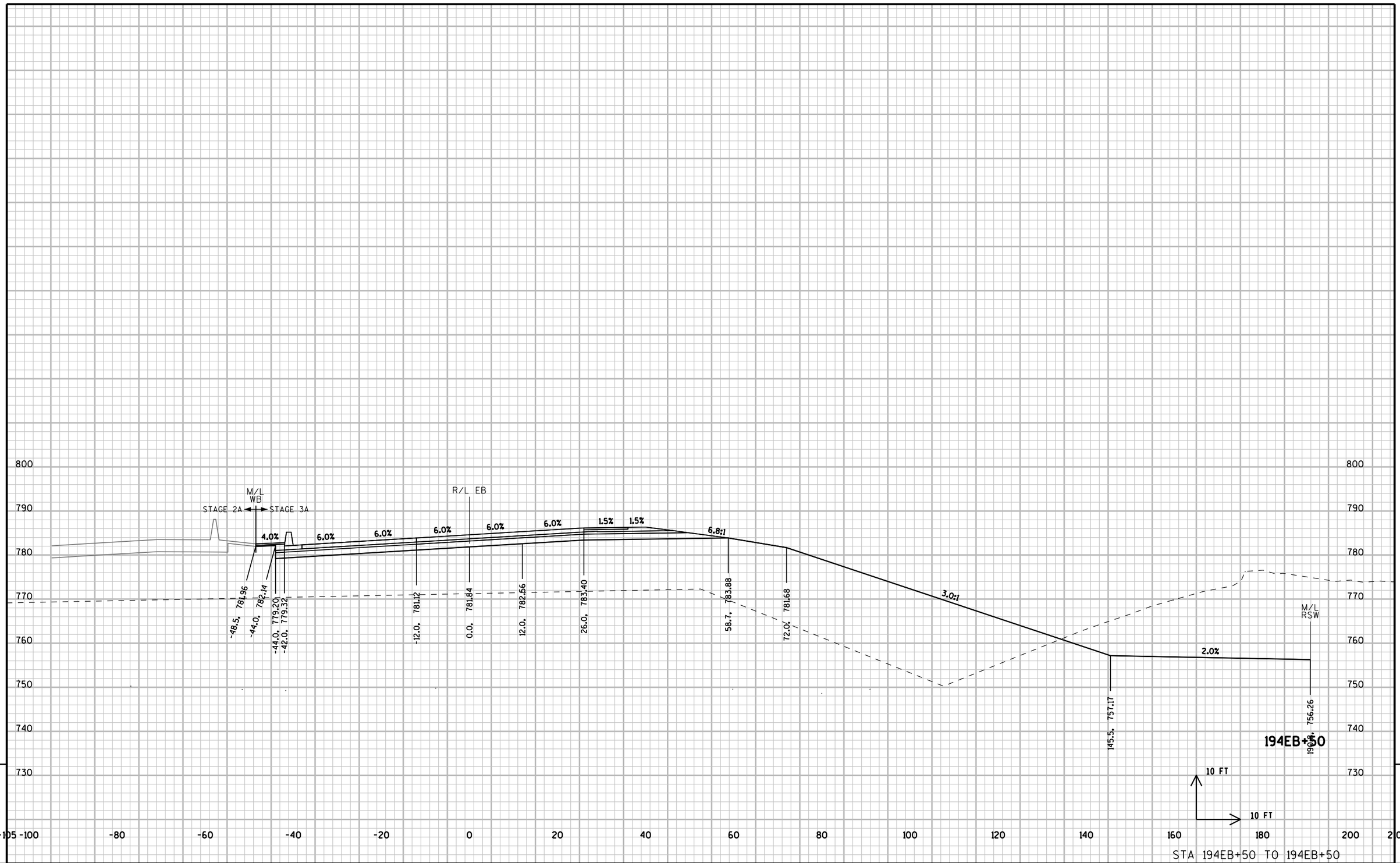
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 897	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:35 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STA 193EB+50 TO 194EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 898	E

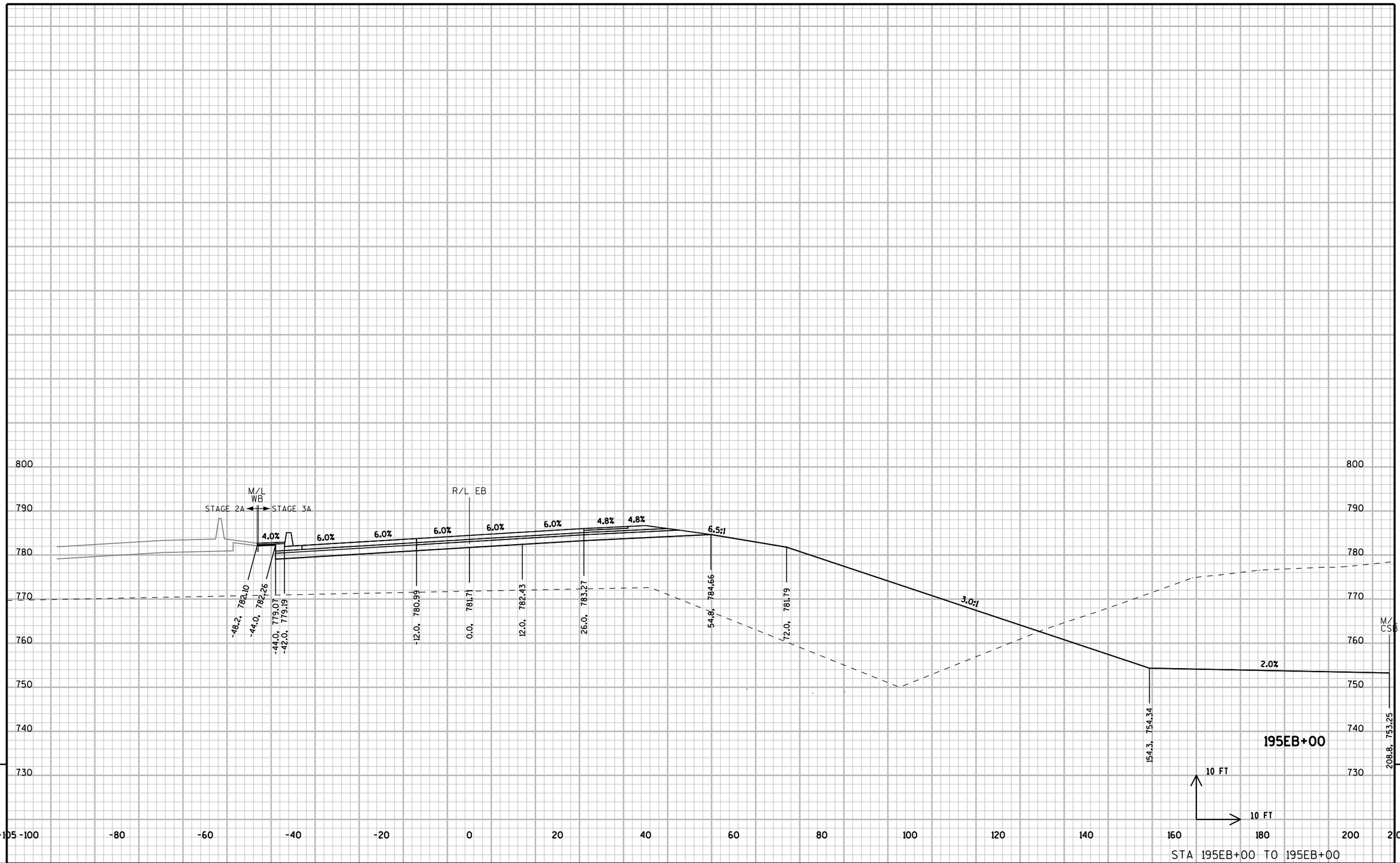


STA 194EB+50 TO 194EB+50

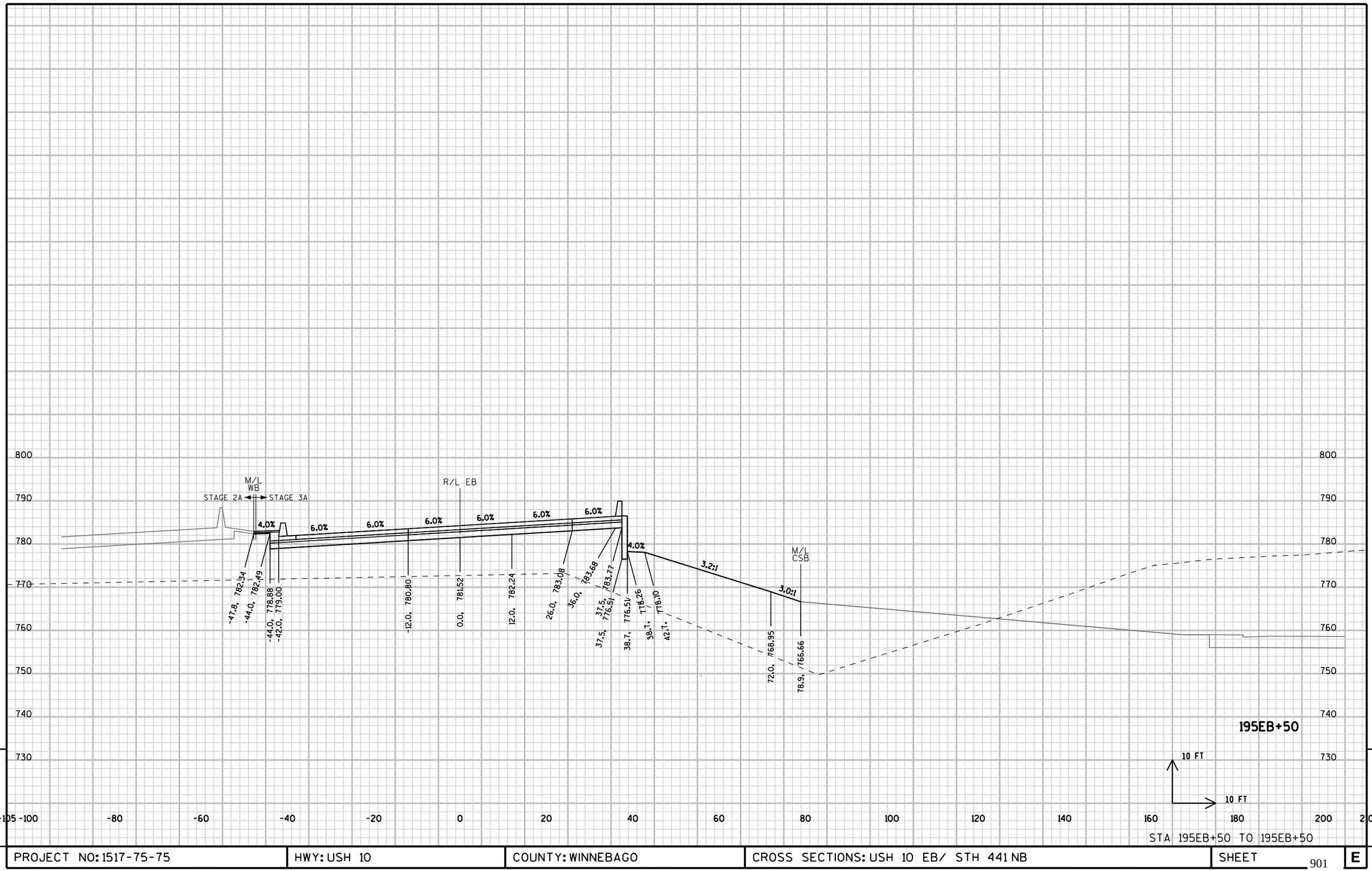
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WISDOT/CADDS SHEET 21

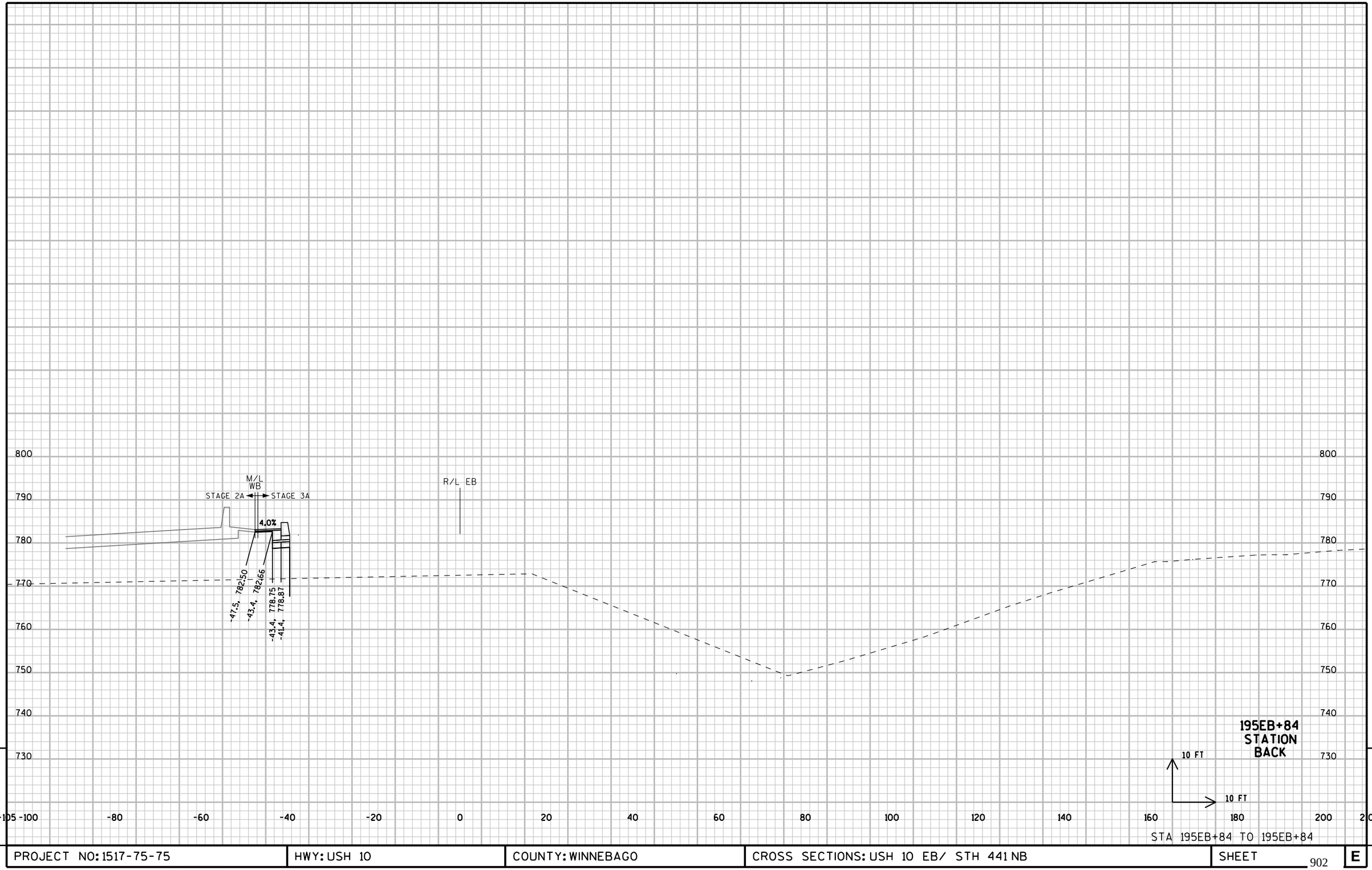


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 900	E



STA 195EB+50 TO 195EB+50

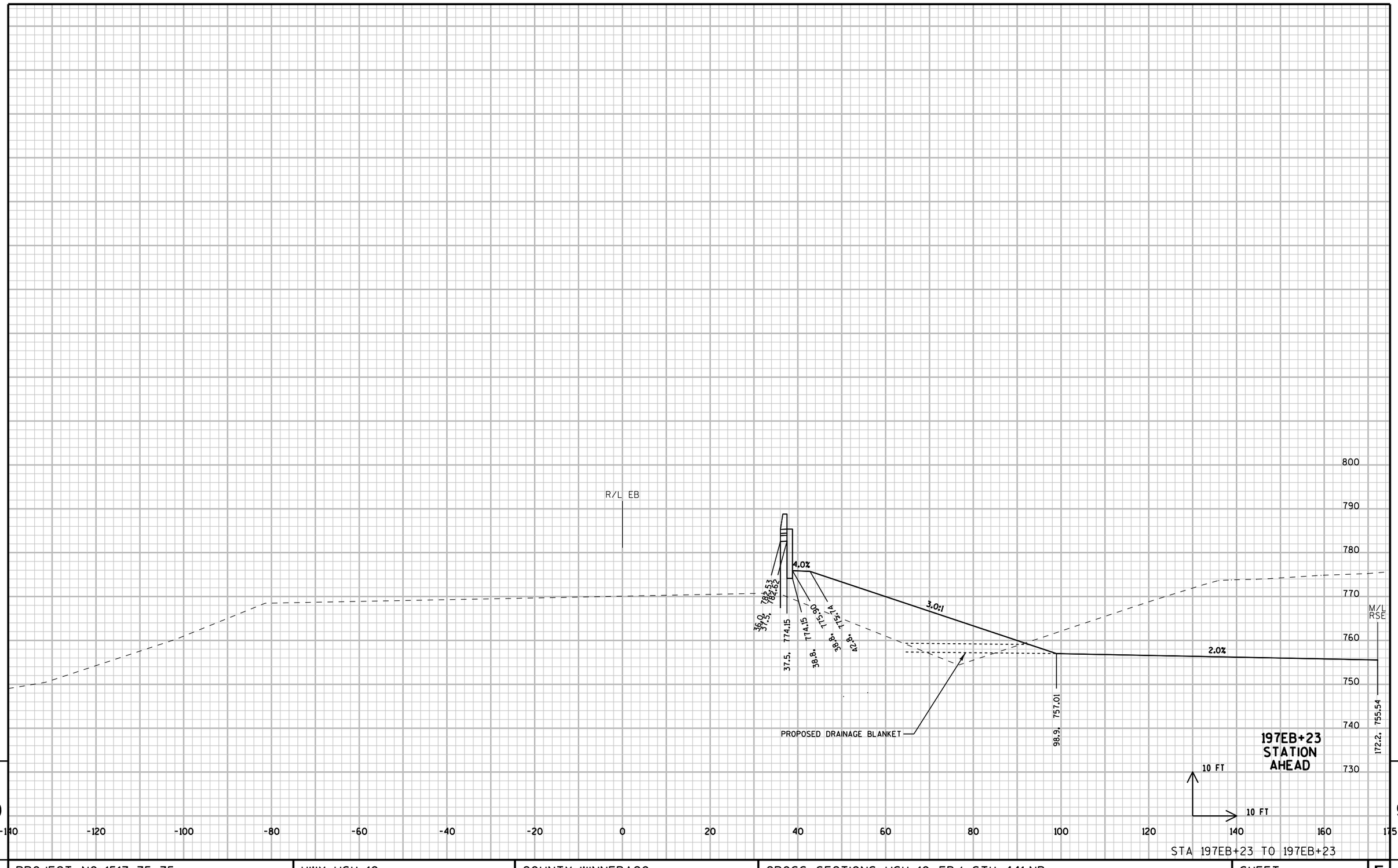
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 901	E



STA 195EB+84 TO 195EB+84

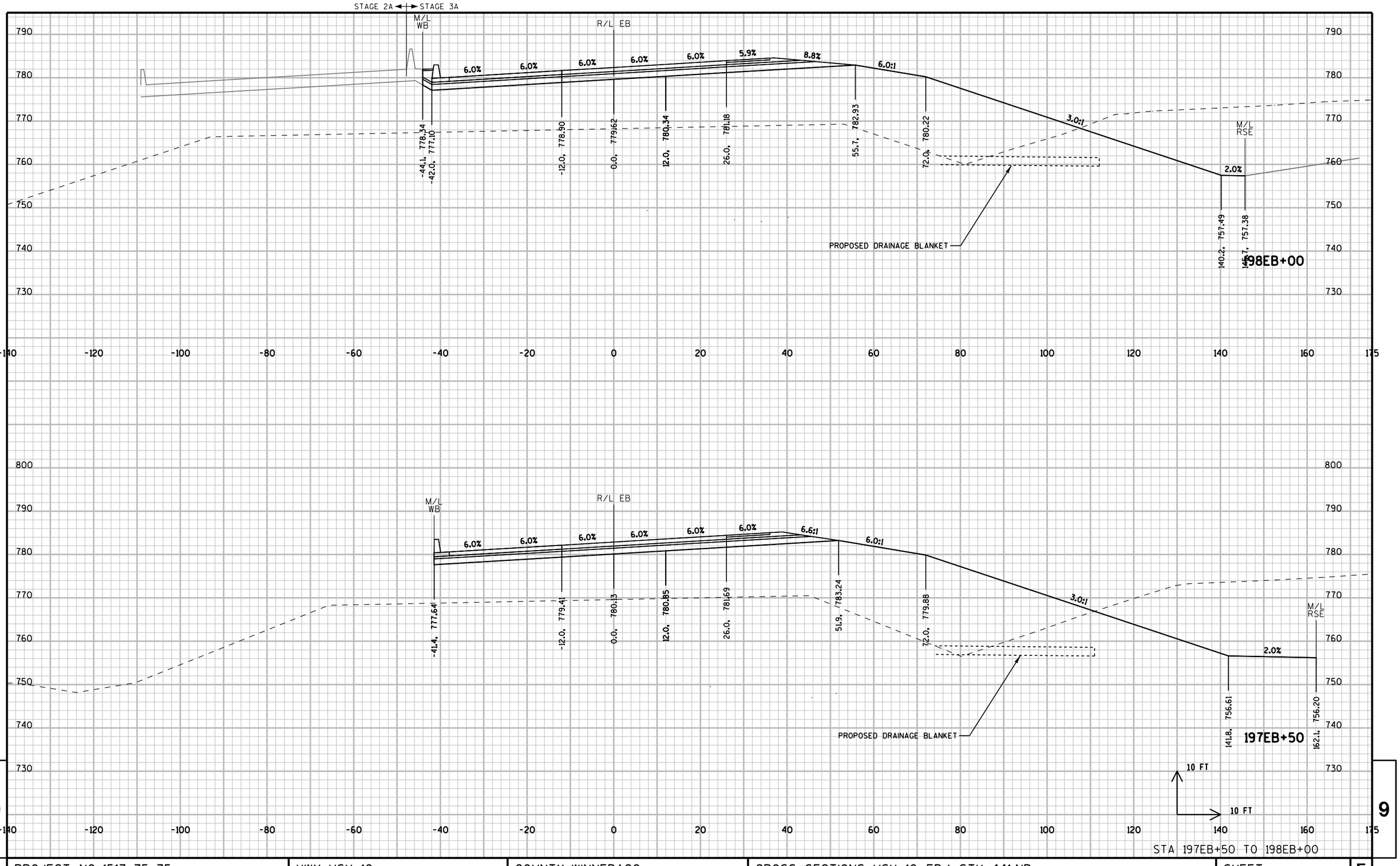
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 902	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:37 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1



STA 197EB+23 TO 197EB+23

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 903	E

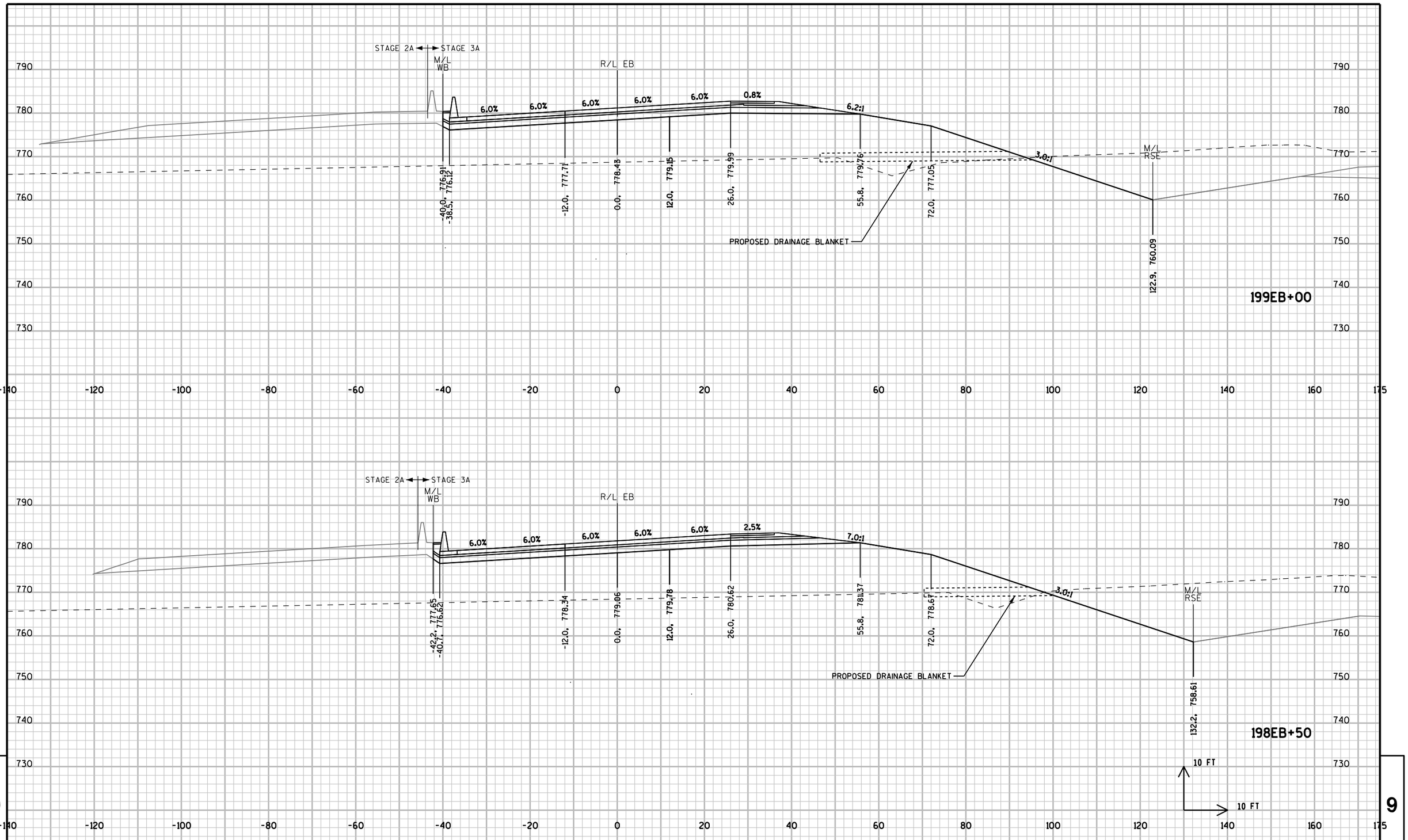


STA 197EB+50 TO 198EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 904	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 4/25/2015 4:44:02 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

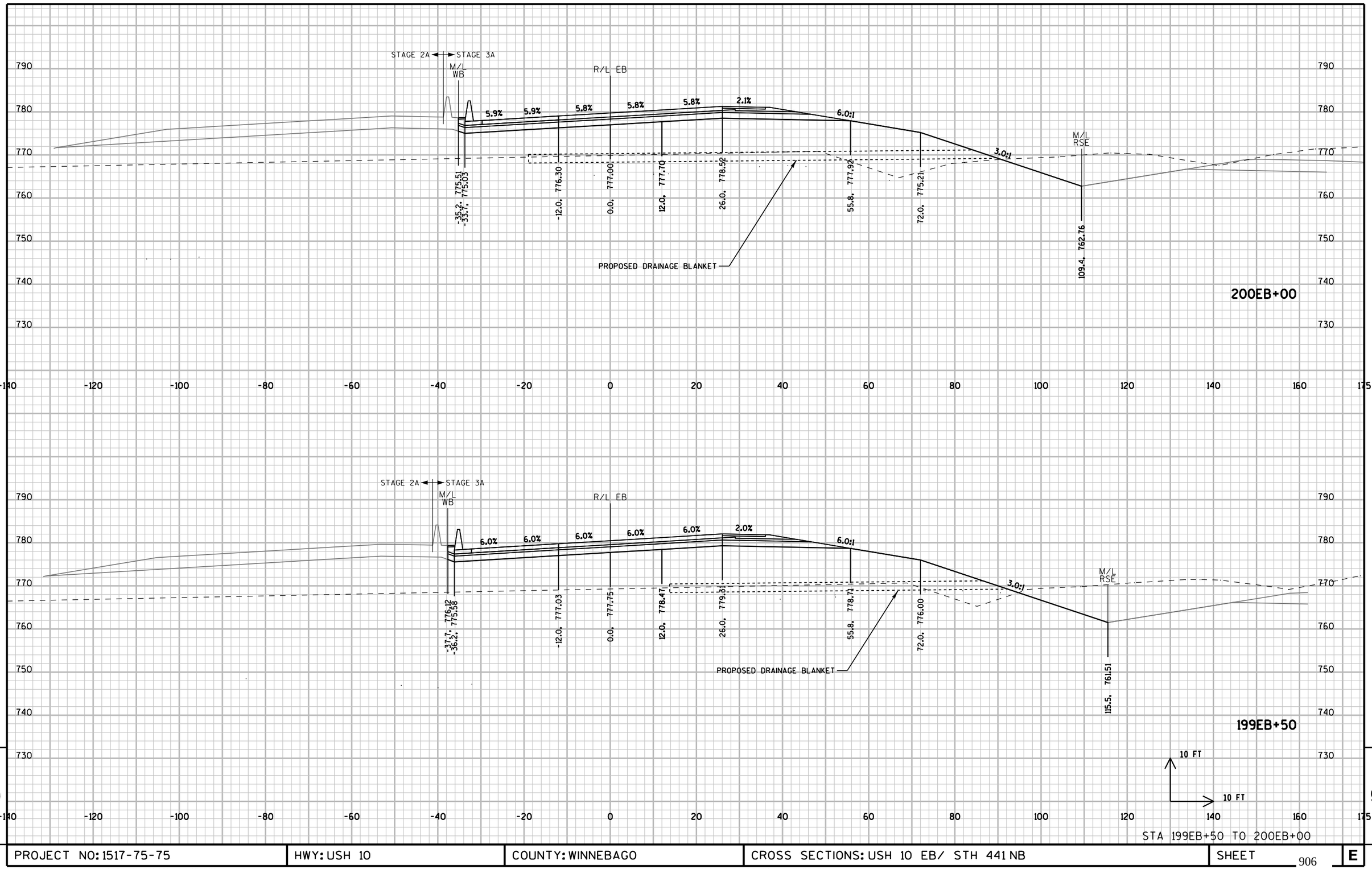


STA 198EB+50 TO 199EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 4/25/2015 4:44:02 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

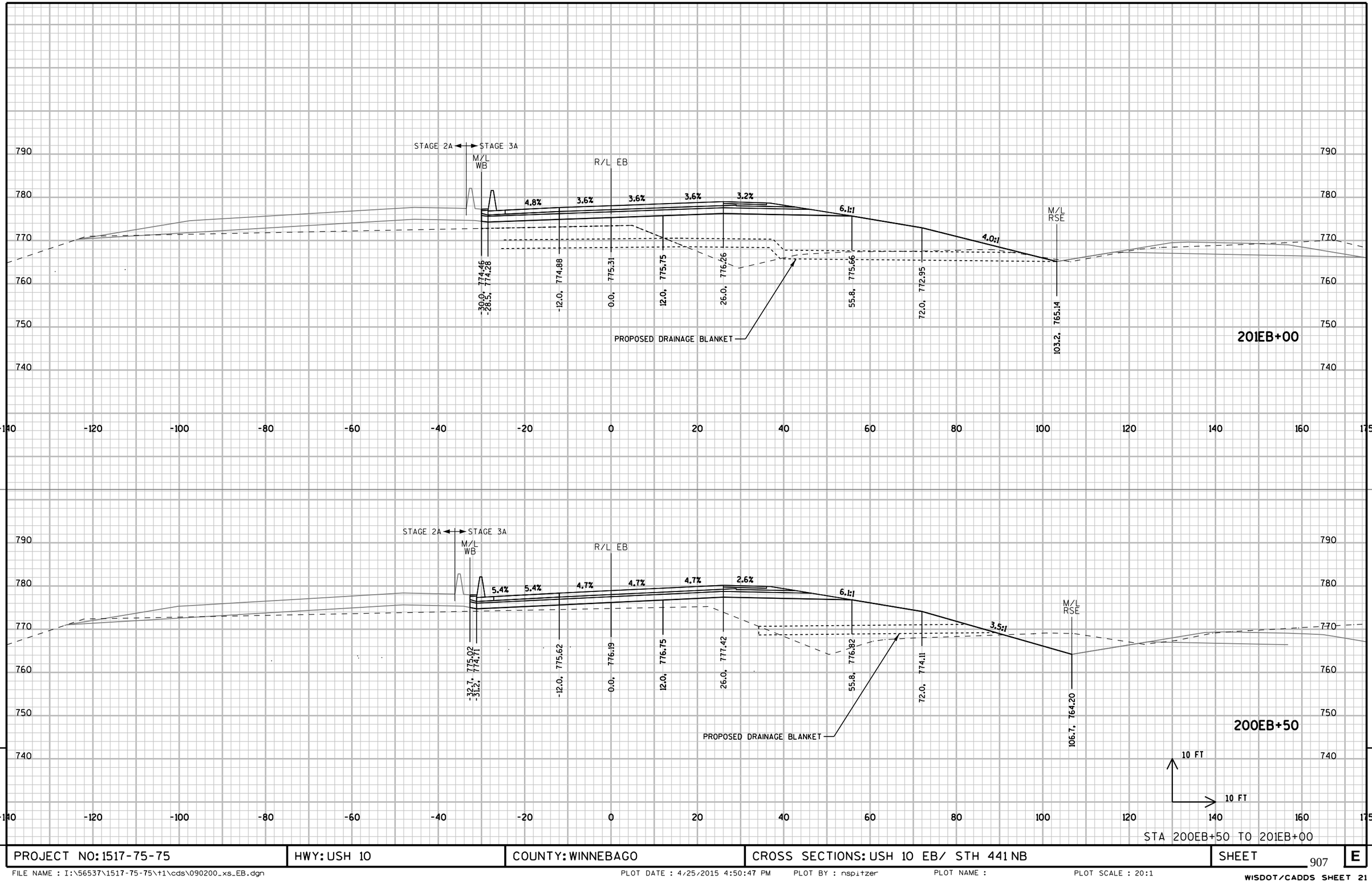


STA 199EB+50 TO 200EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 4/25/2015 4:44:03 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

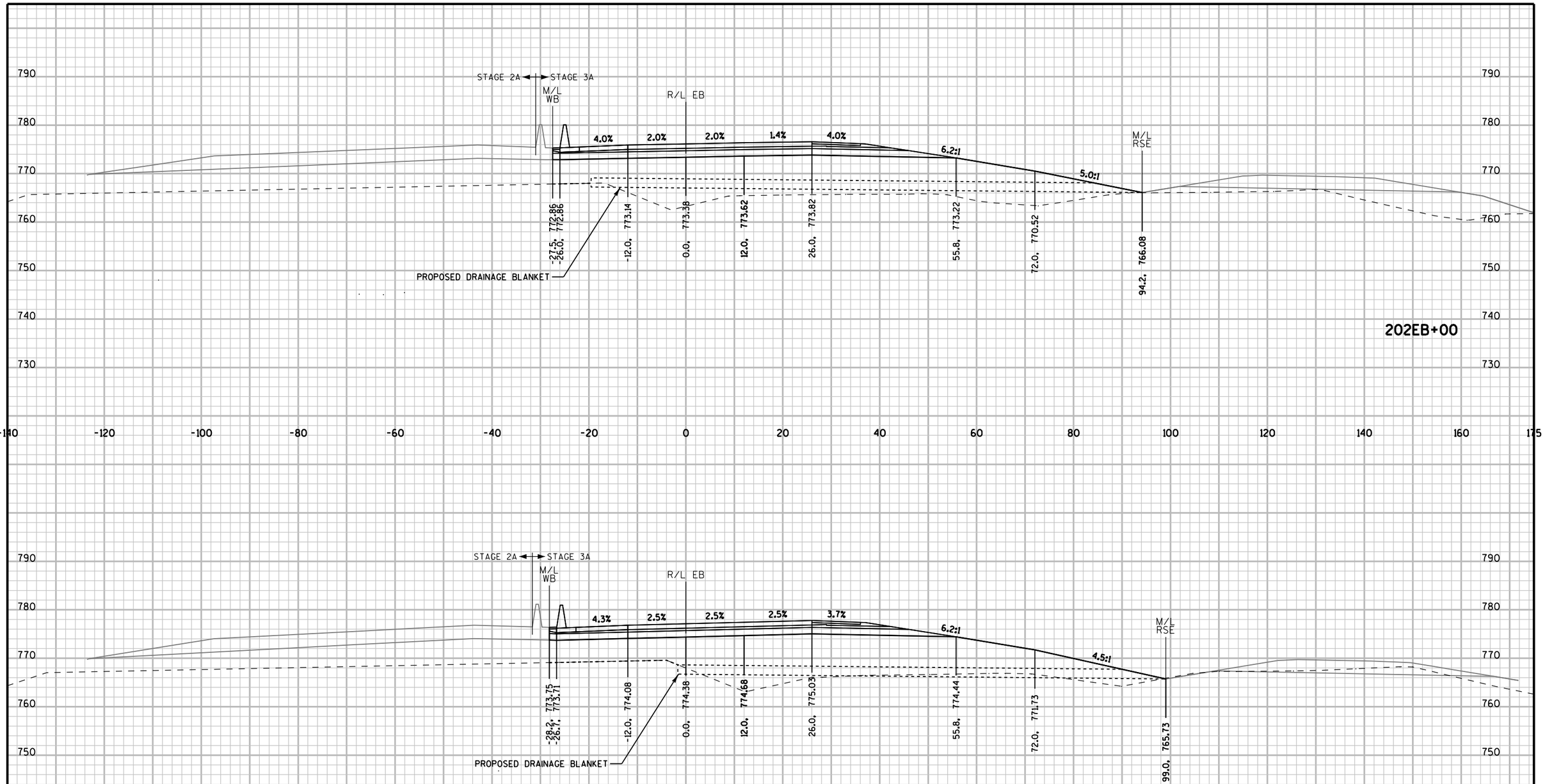
WISDOT/CADDS SHEET 21



STA 200EB+50 TO 201EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 907	E

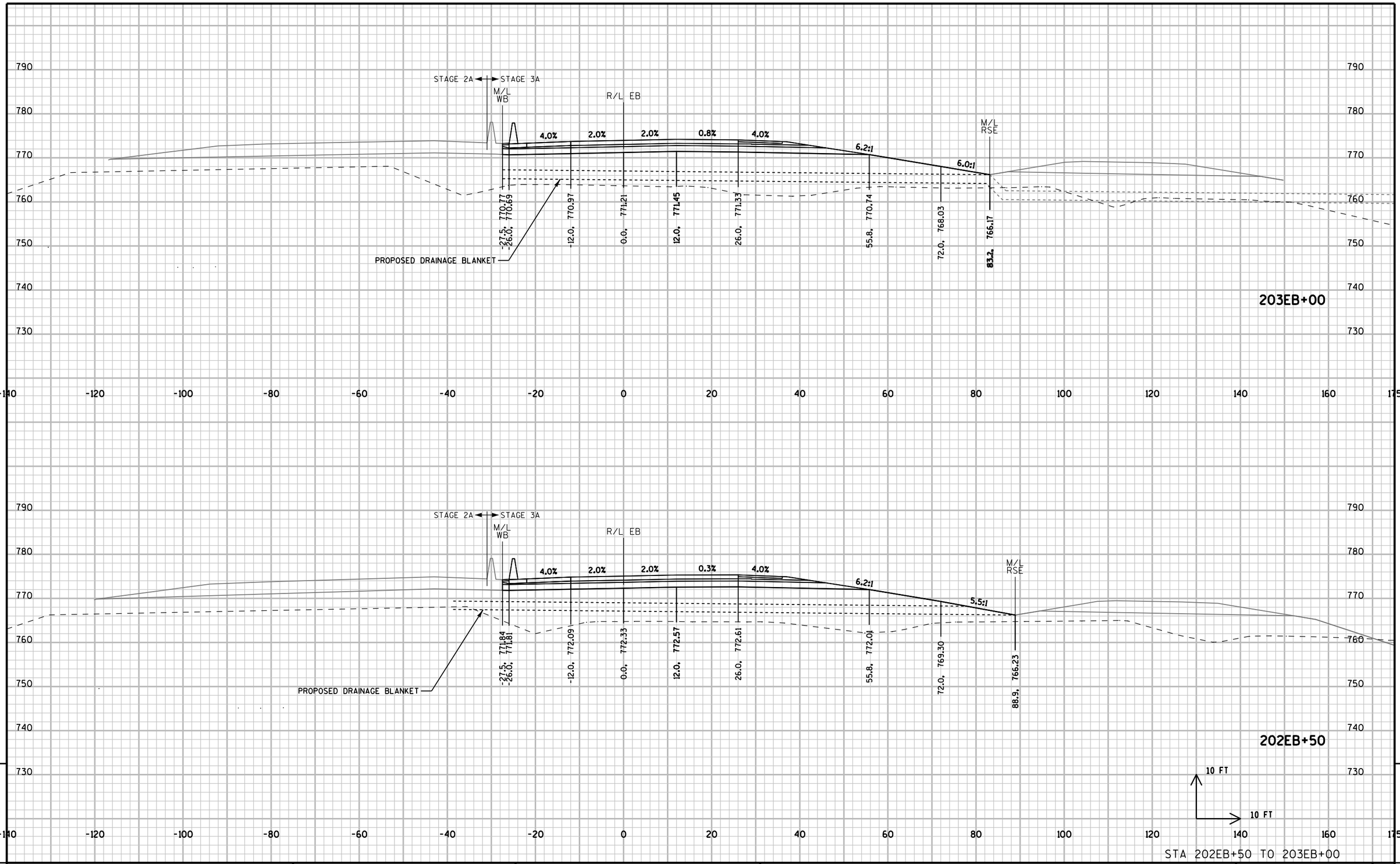
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PLOT DATE : 4/25/2015 4:50:47 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STA 201EB+50 TO 202EB+00

9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 908	E

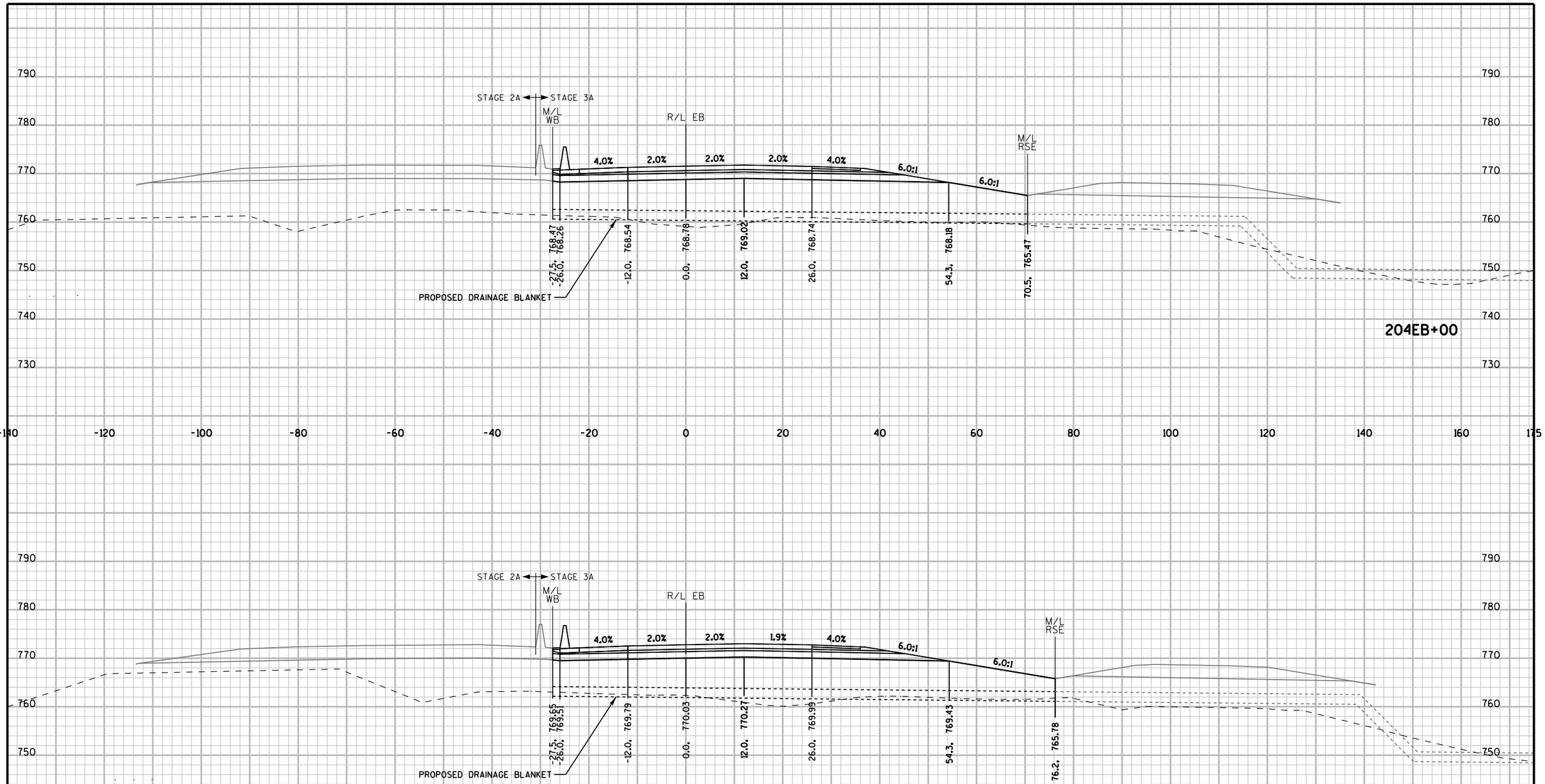


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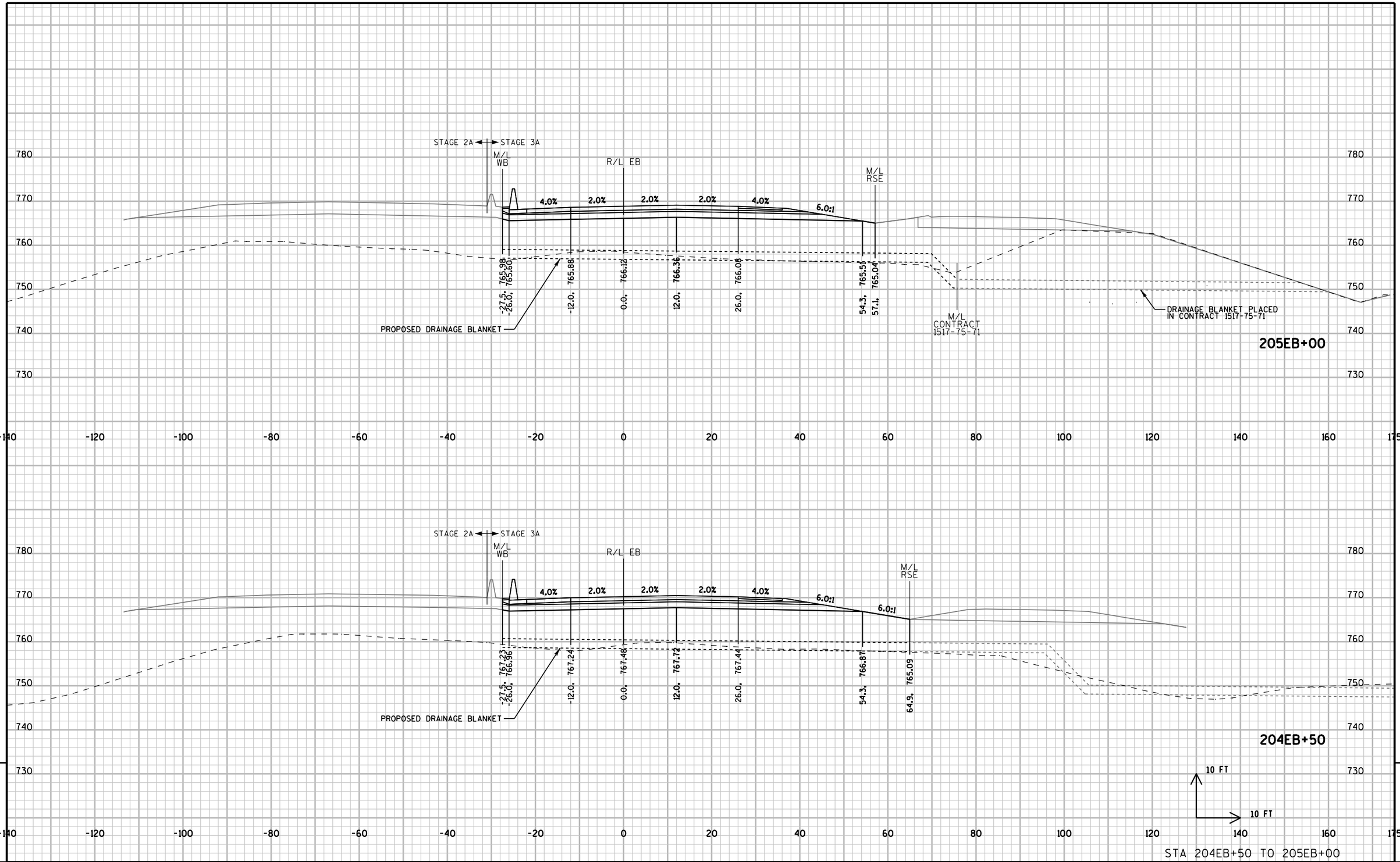
STA 202EB+50 TO 203EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 909	E



STA 203EB+50 TO 204EB+00

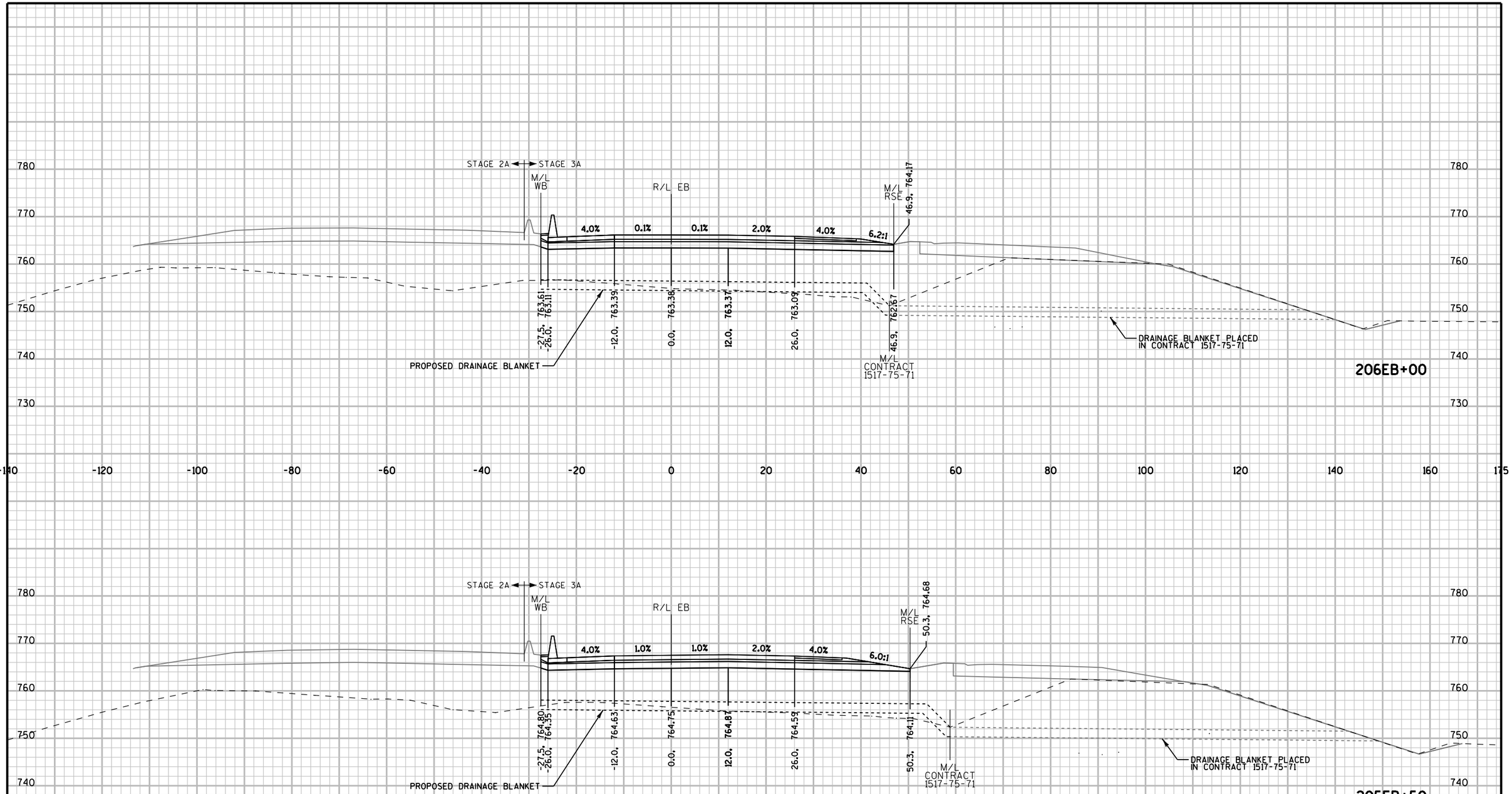
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 910	E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

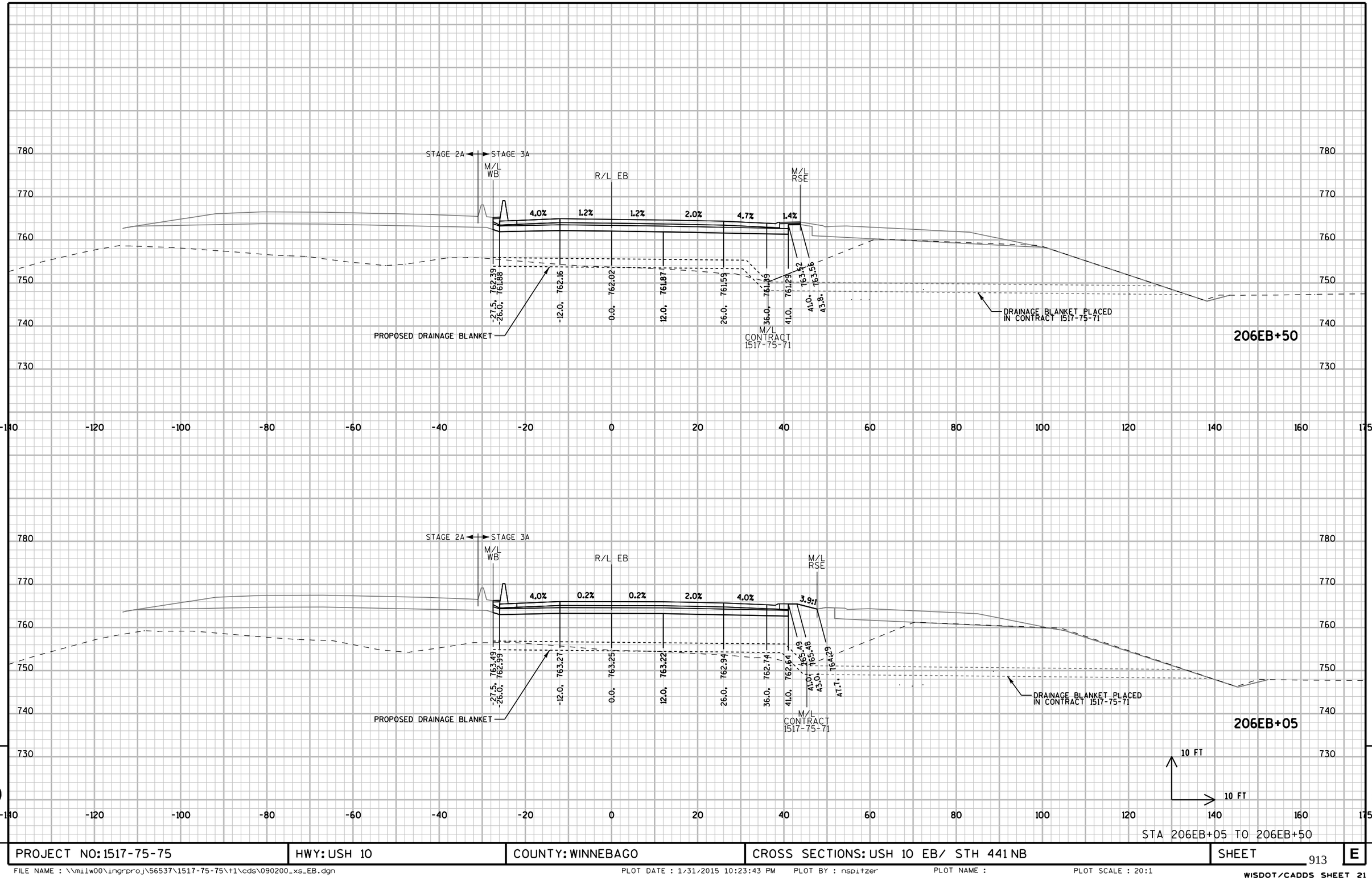
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WISDOT/CADDS SHEET 21



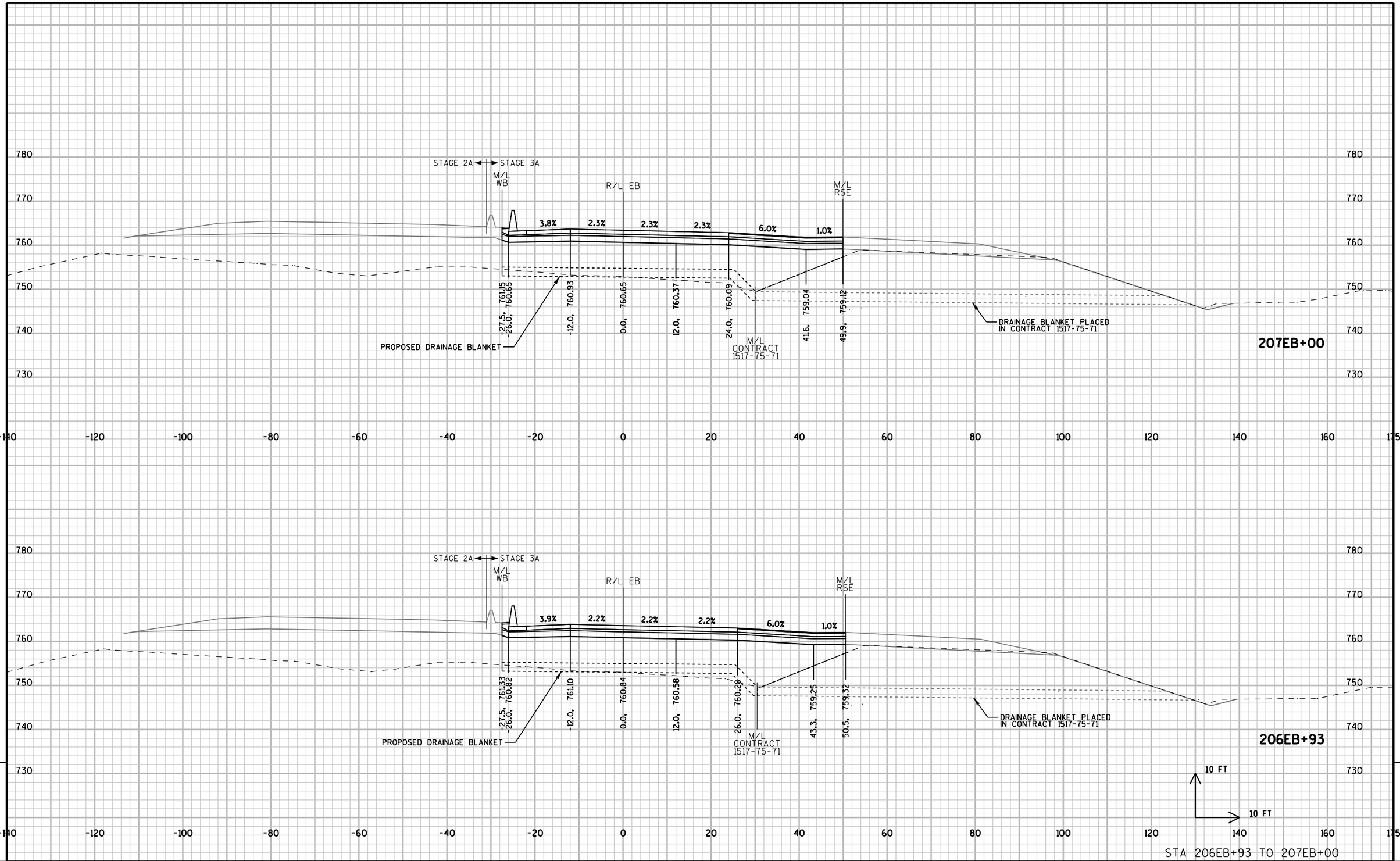
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn
PLOT DATE : 1/31/2015 10:23:42 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

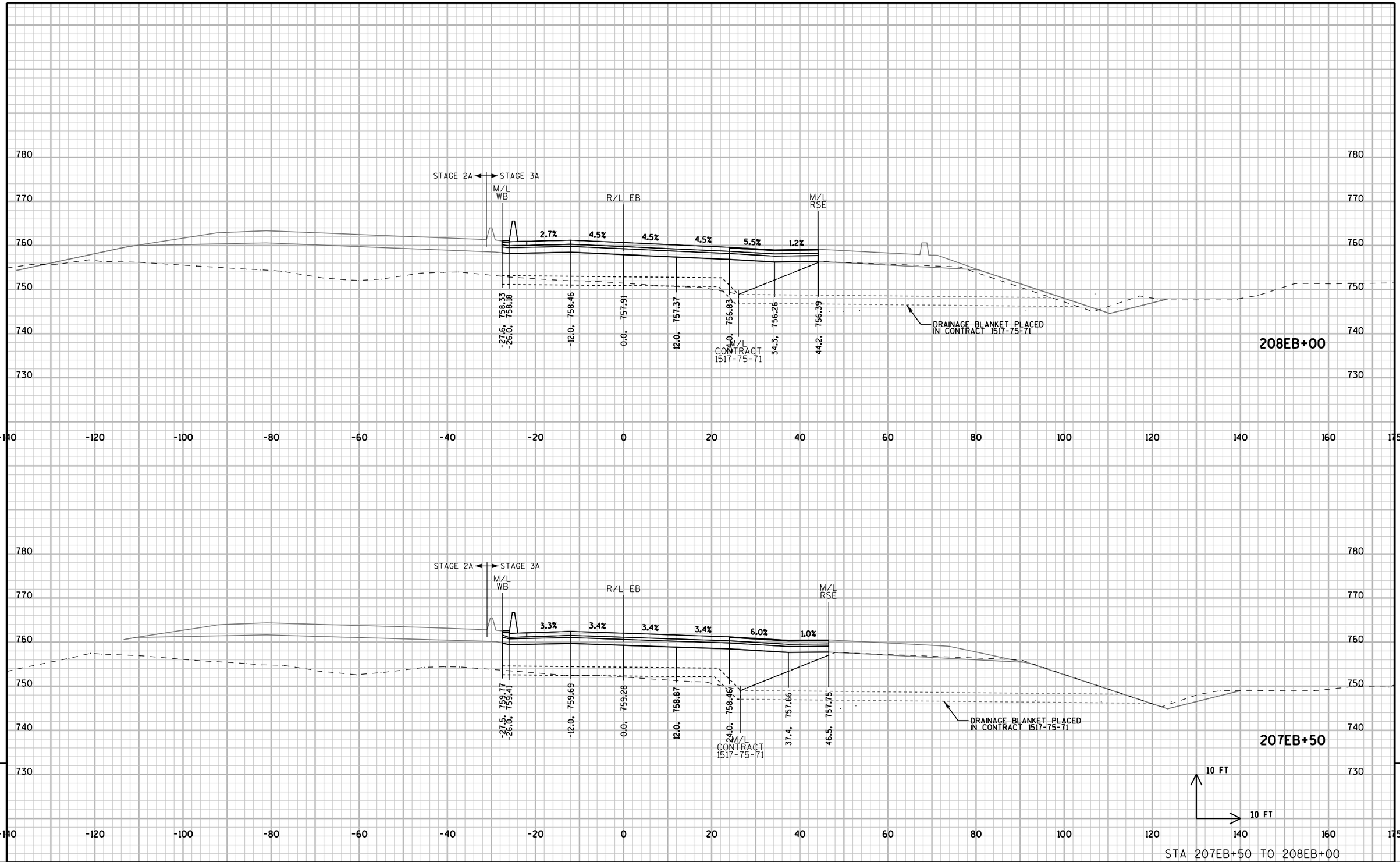
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PLOT DATE : 1/31/2015 10:23:43 PM
PLOT BY : nspitzer
PLOT NAME :
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 914	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:43 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

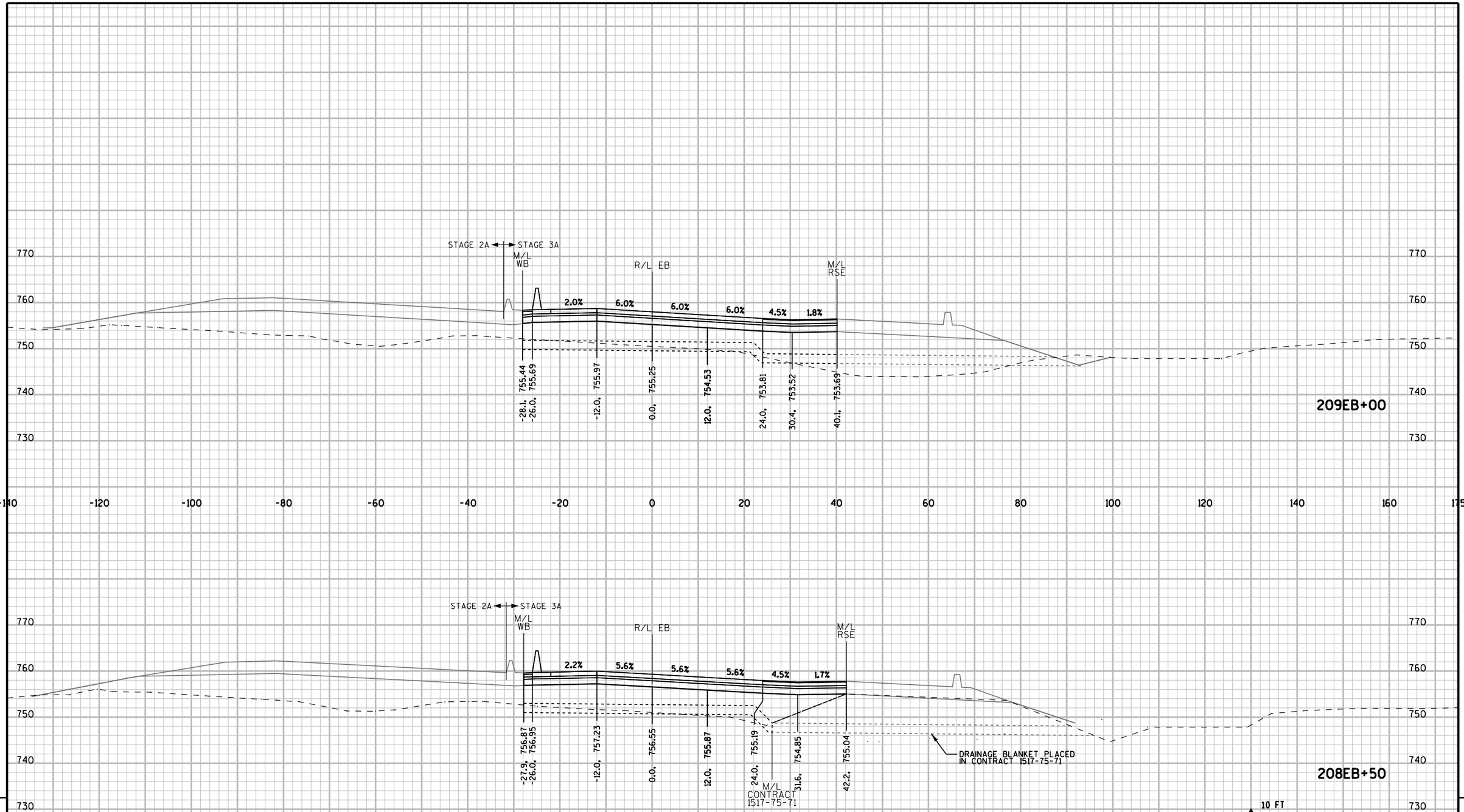
WISDOT/CADDS SHEET 21



STA 207EB+50 TO 208EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:44 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



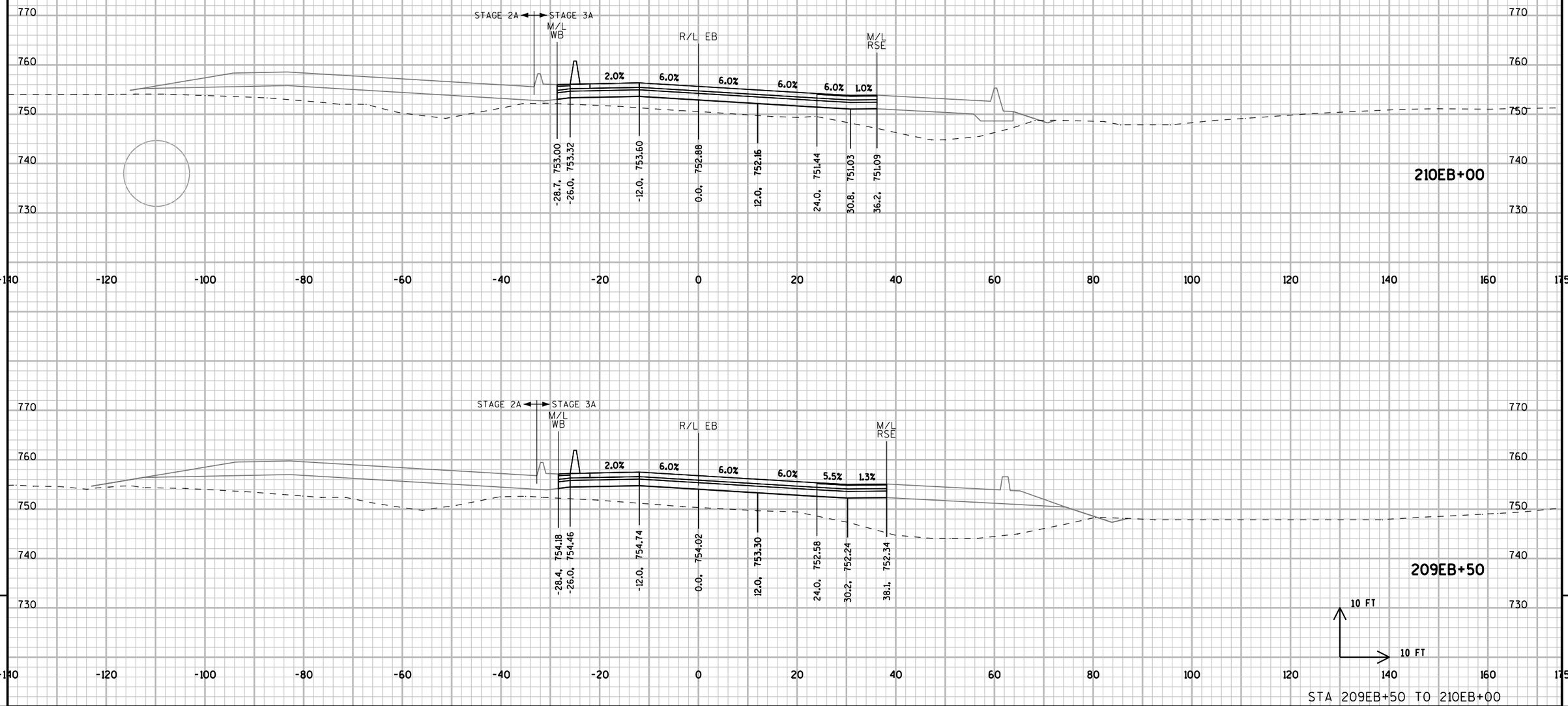
STA 208EB+50 TO 209EB+00

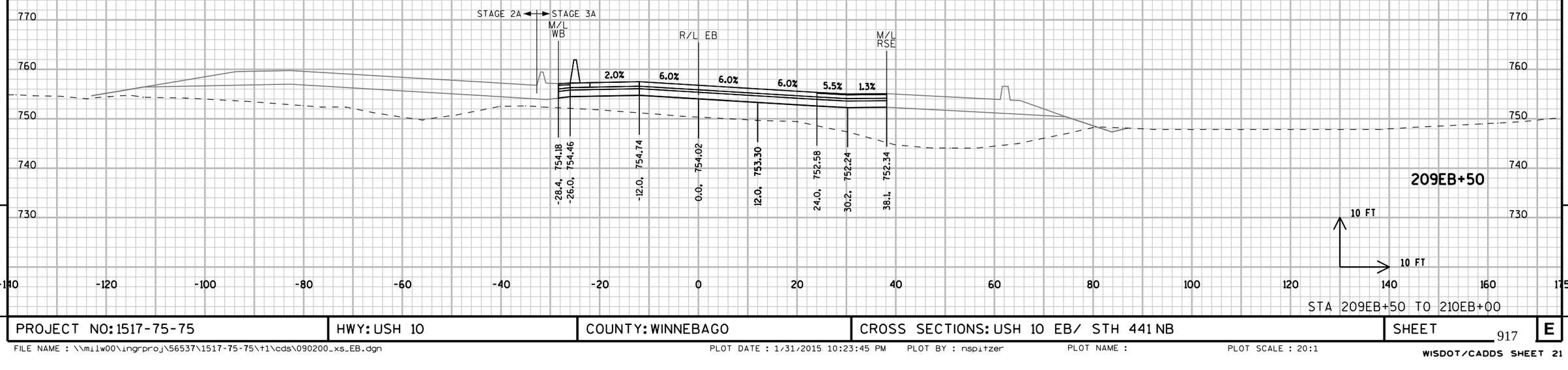
9

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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:44 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21





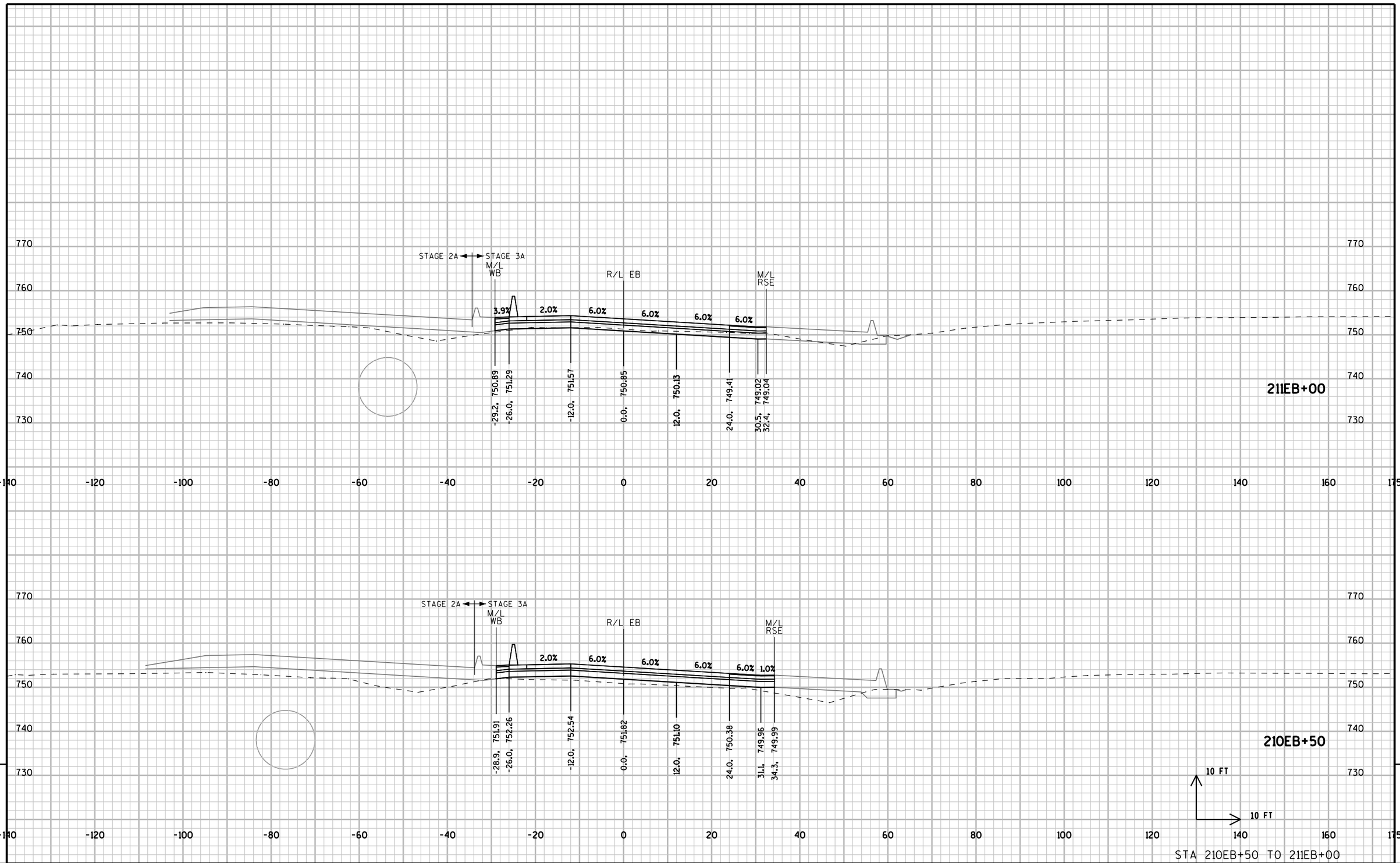
9

9

STA 209EB+50 TO 210EB+00

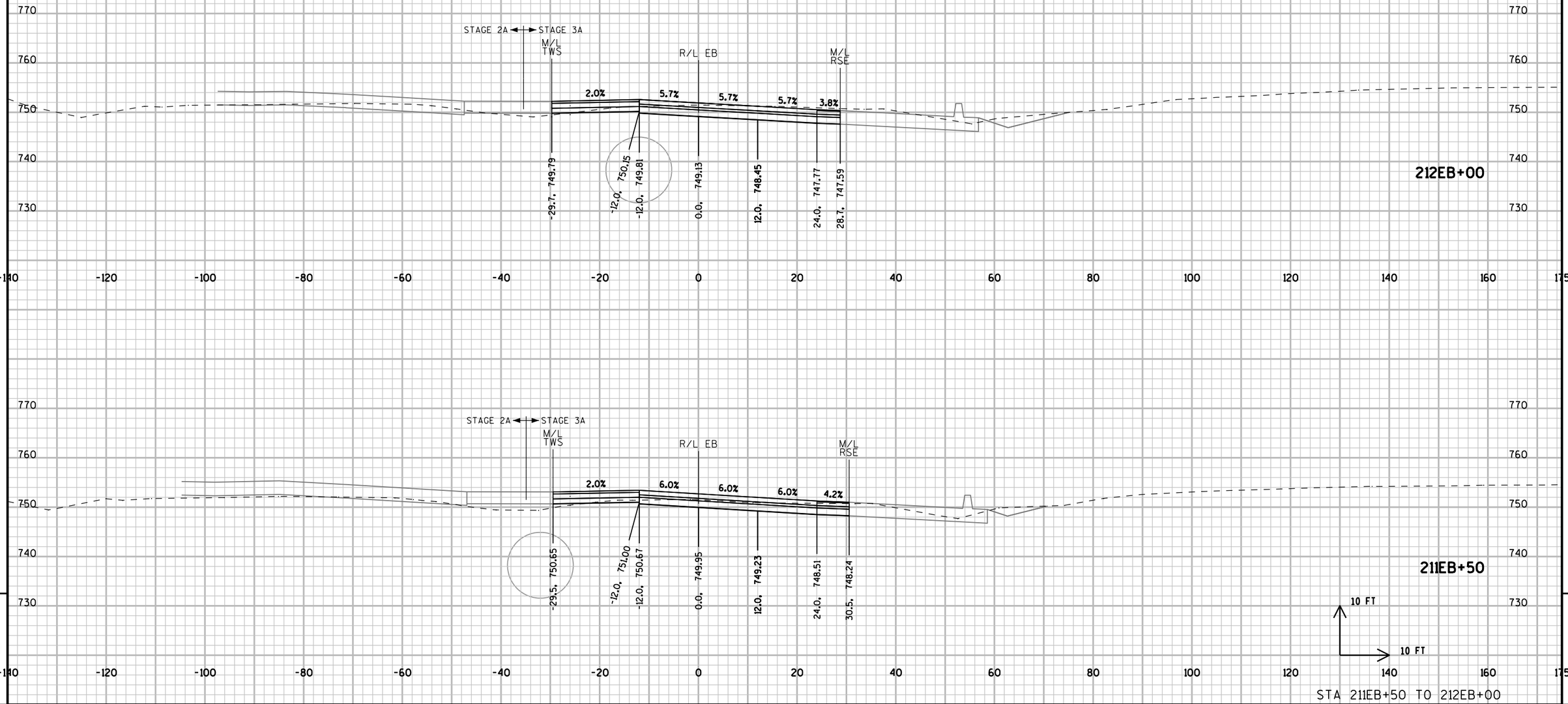
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 917	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn
PLOT DATE : 1/31/2015 10:23:45 PM
PLOT BY : nspitzer
PLOT NAME :
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STA 210EB+50 TO 211EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 918	E

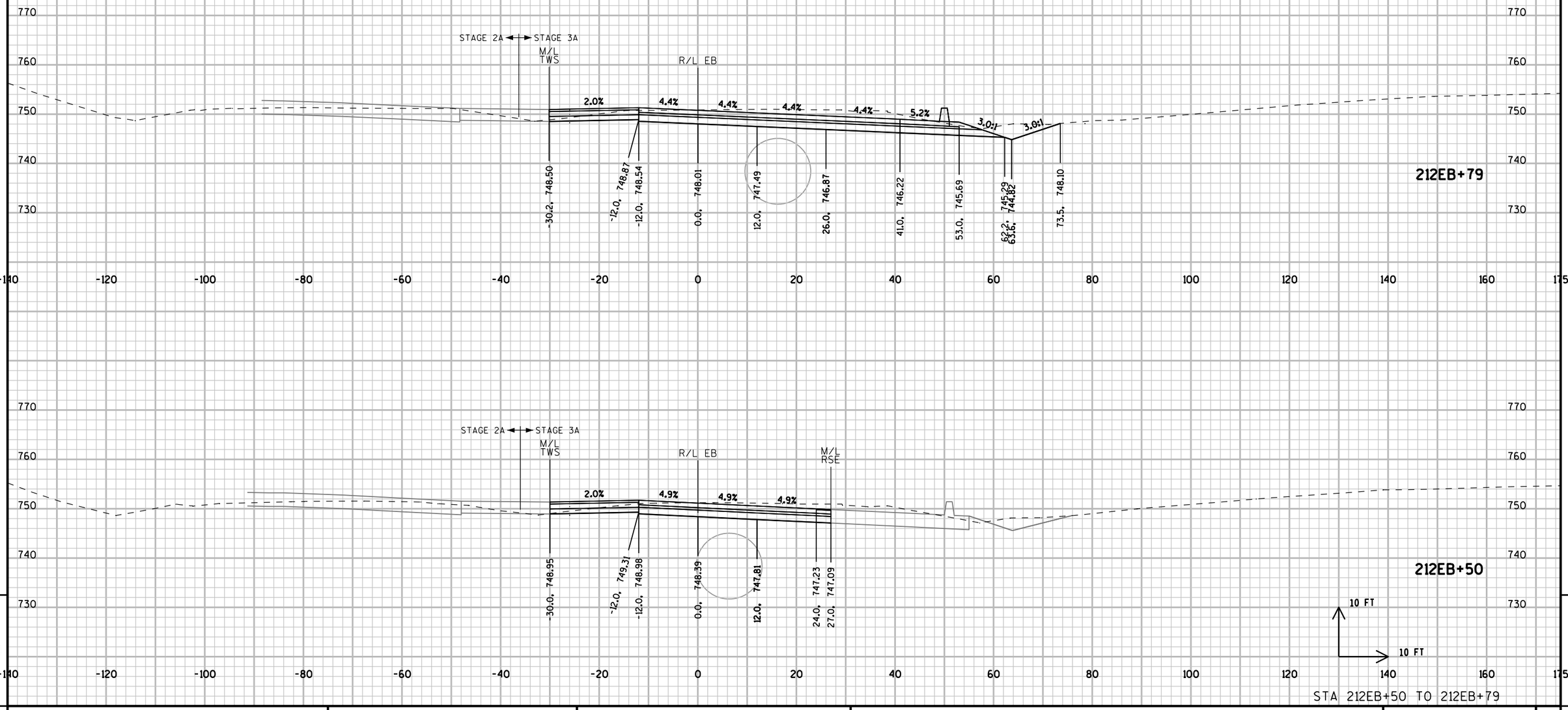


STA 211EB+50 TO 212EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 919	E

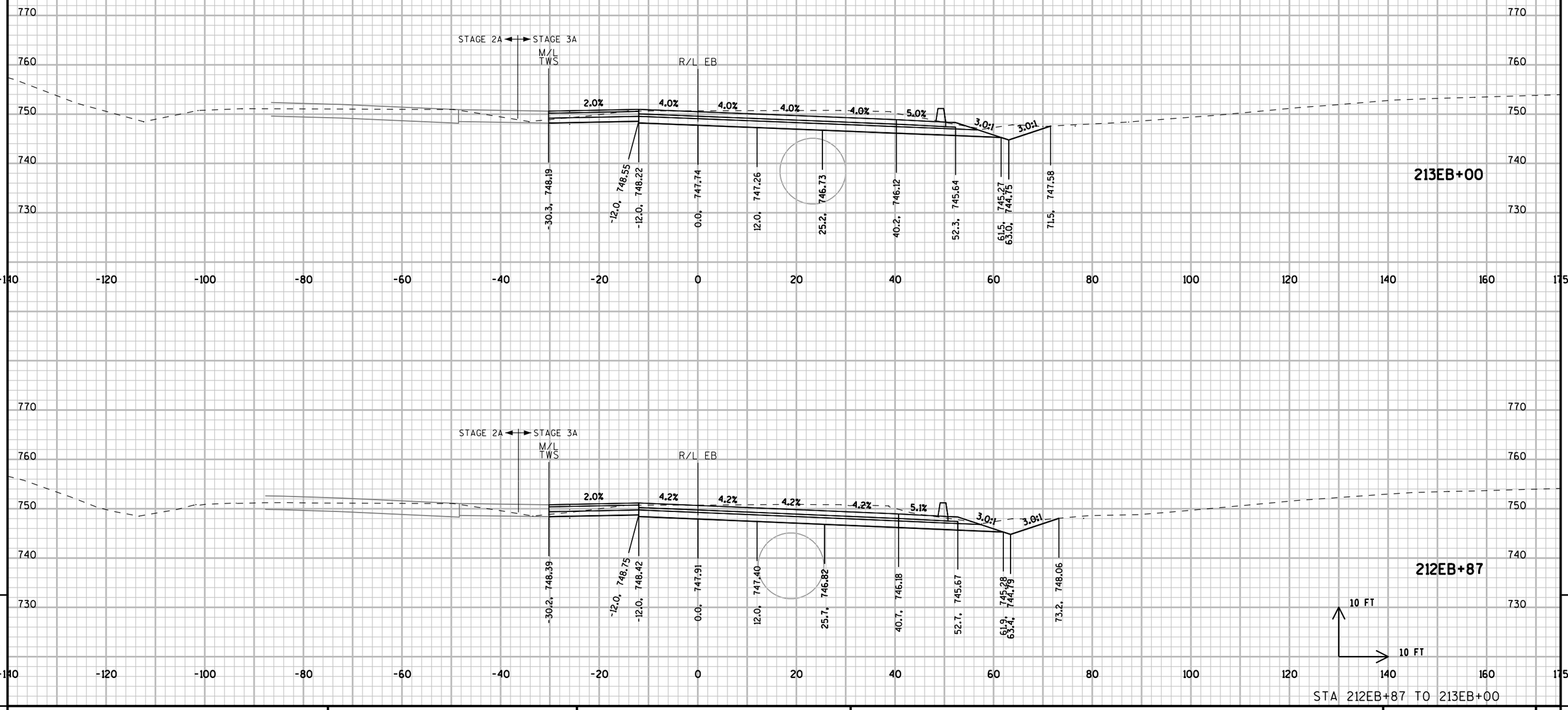
FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:46 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



STA 212EB+50 TO 212EB+79

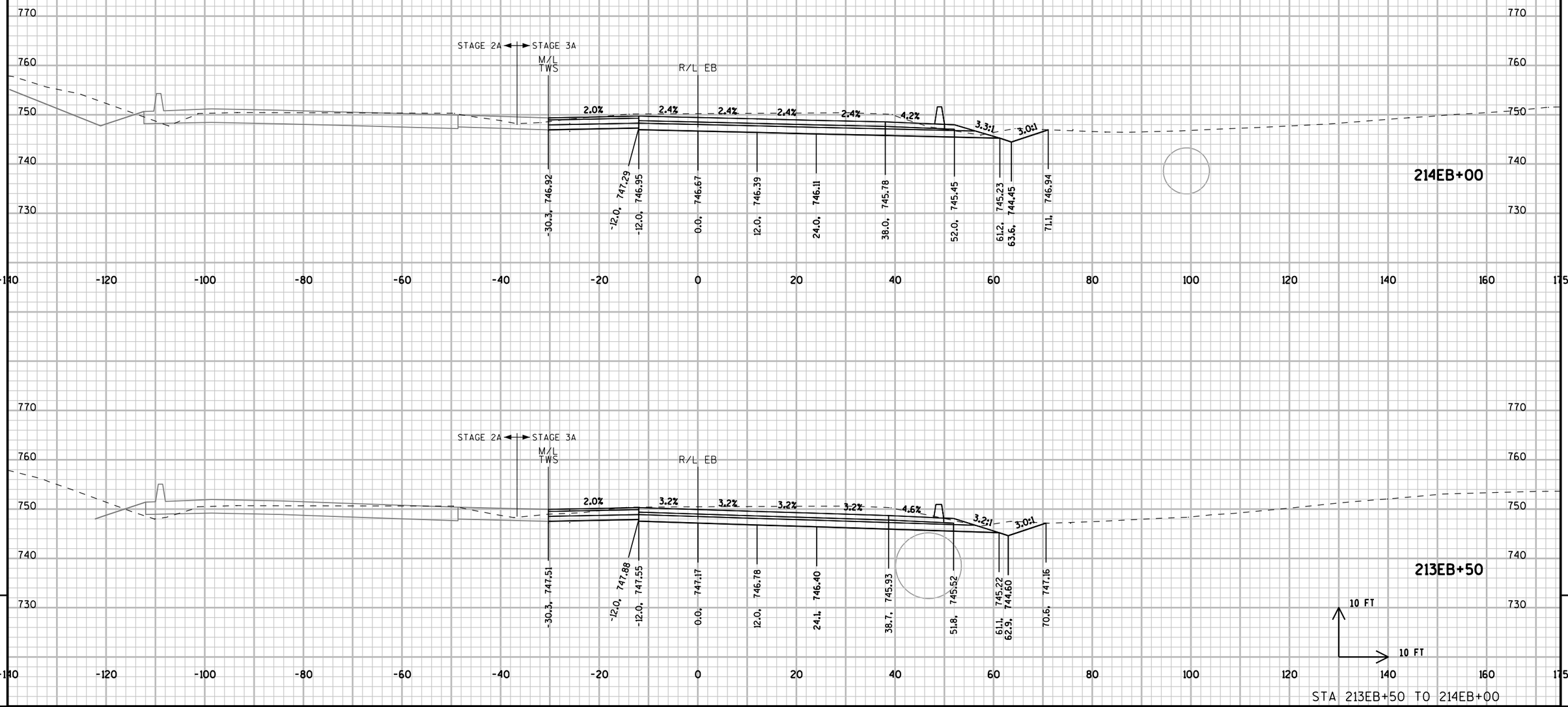
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 920	E



STA 212EB+87 TO 213EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:47 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

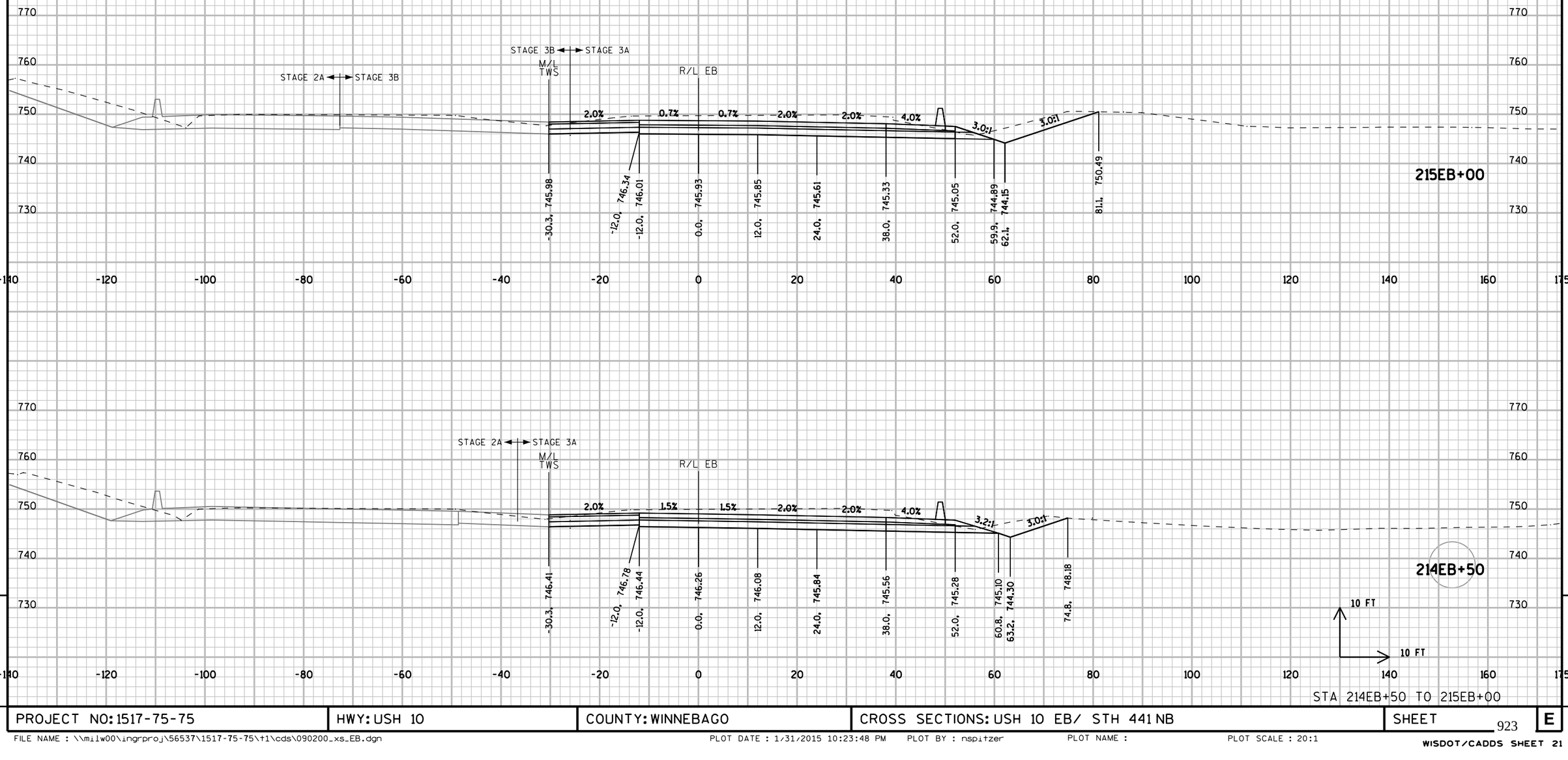


STA 213EB+50 TO 214EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:47 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

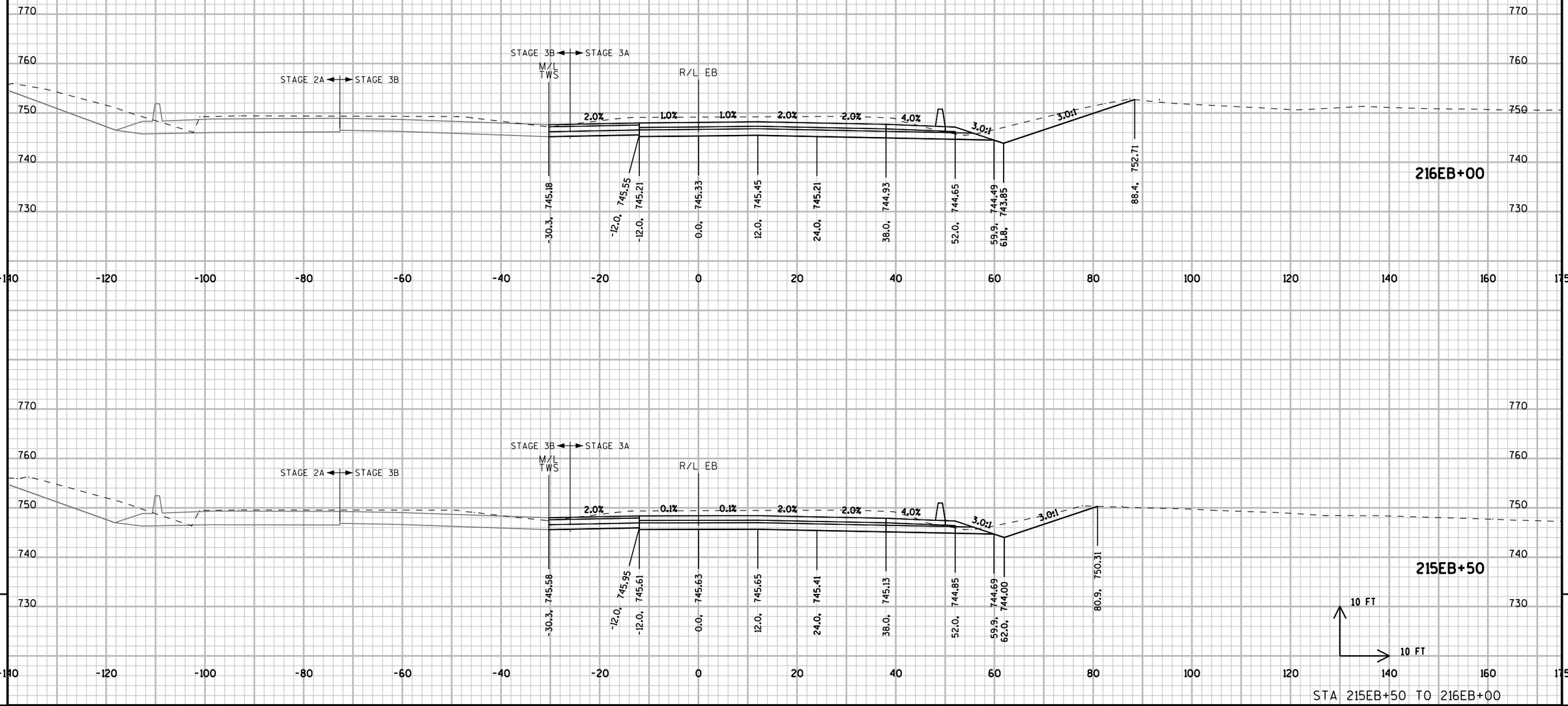


9

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STA 214EB+50 TO 215EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 923	E



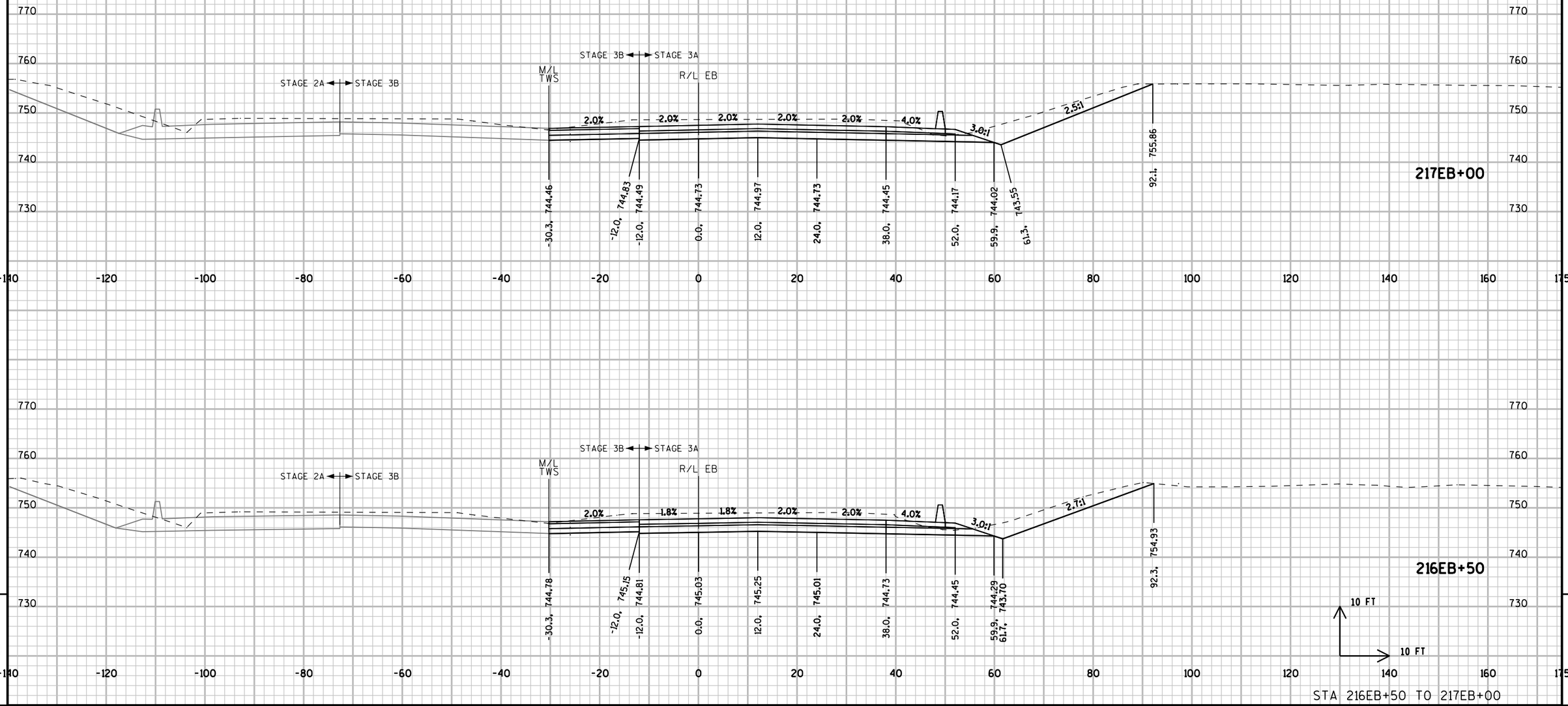
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 924	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:48 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



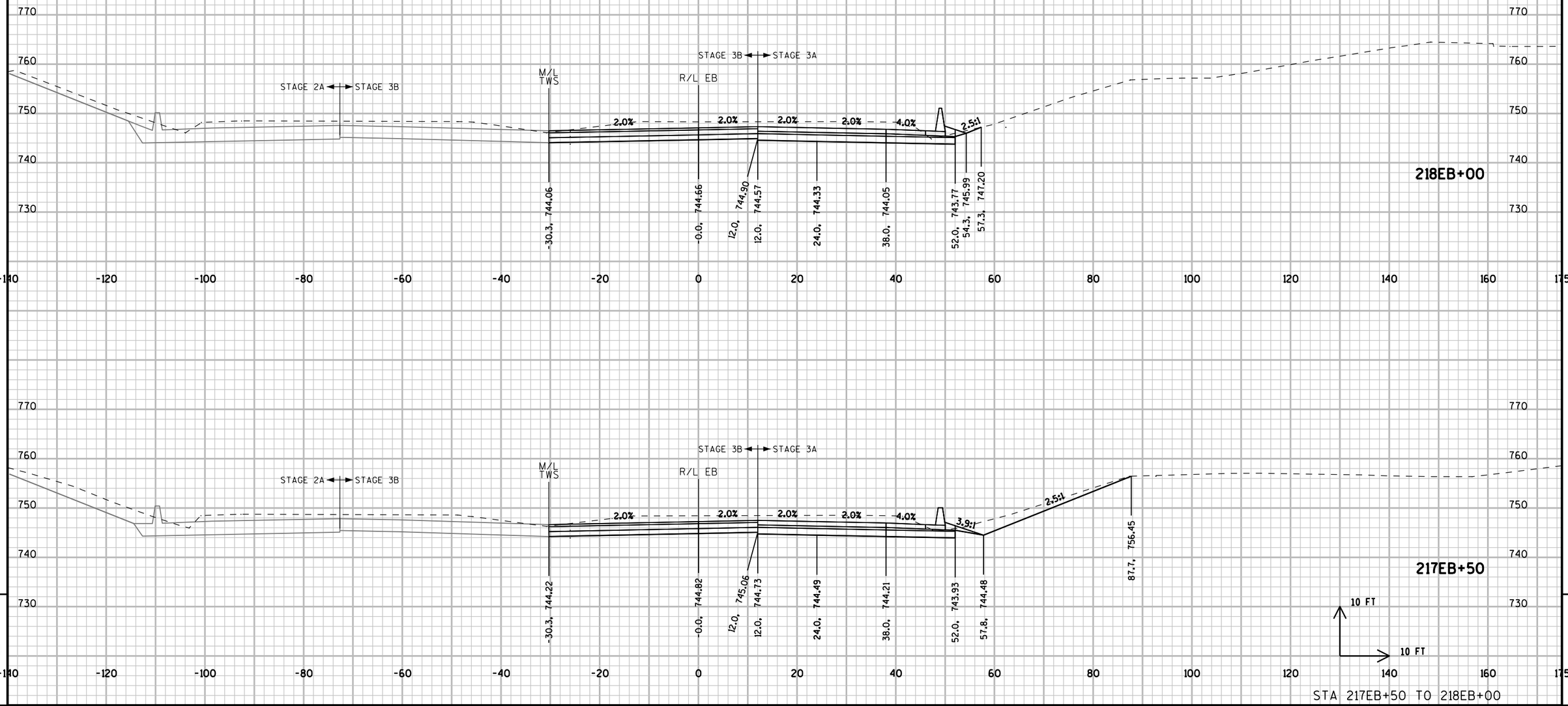
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 925	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:49 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



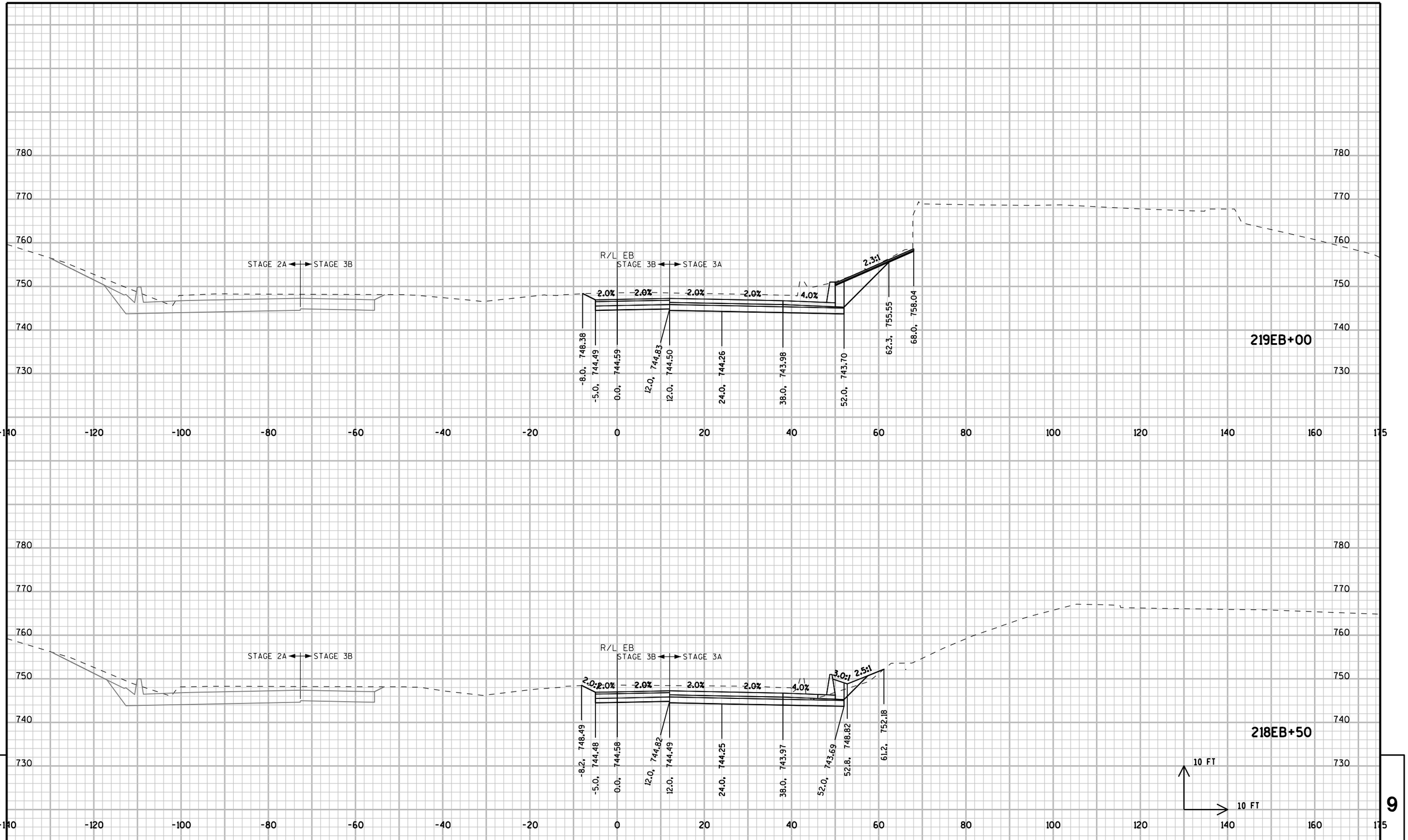
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STA 217EB+50 TO 218EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn
PLOT DATE : 1/31/2015 10:23:49 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

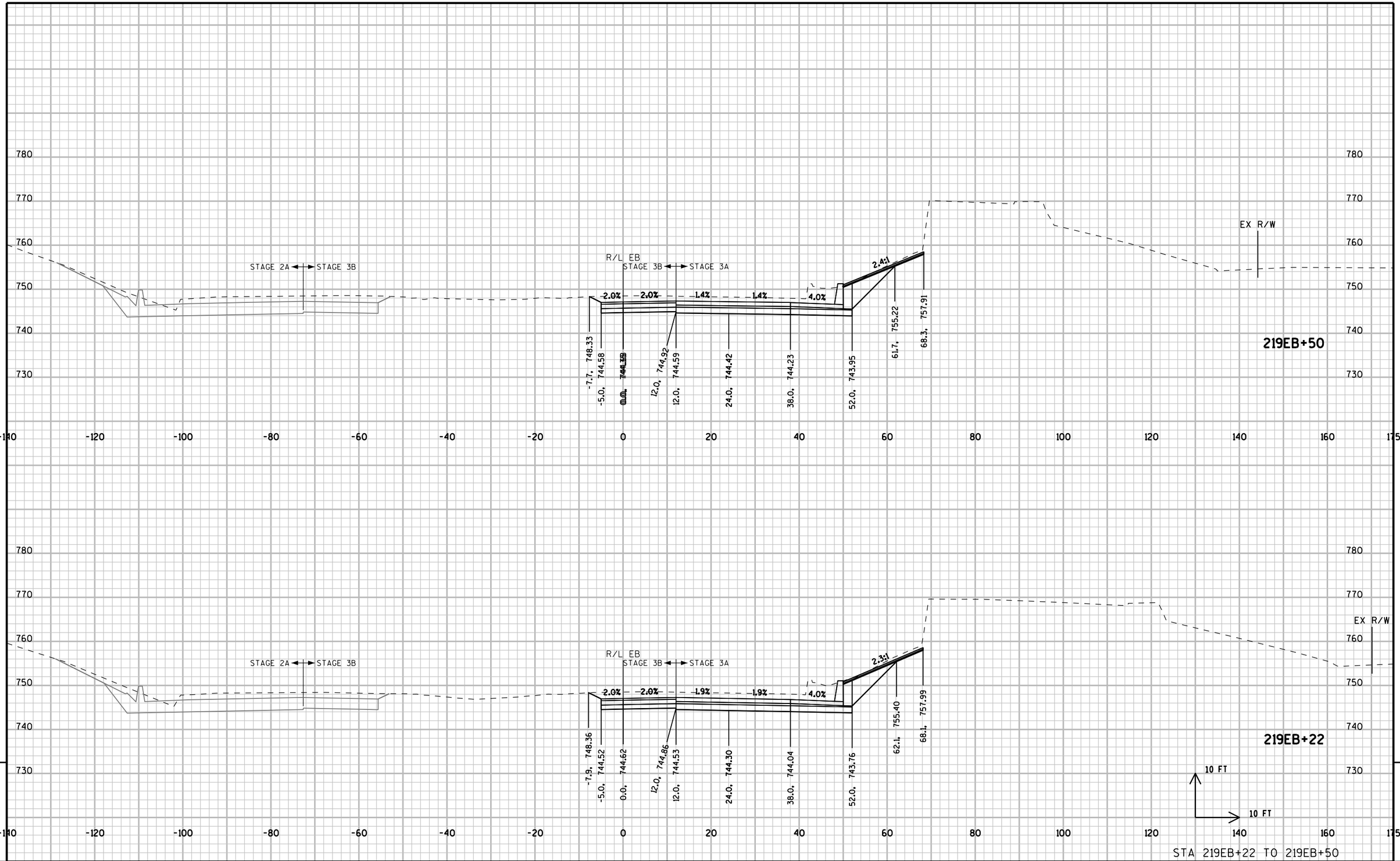


STA 218EB+50 TO 219EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 927	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:50 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

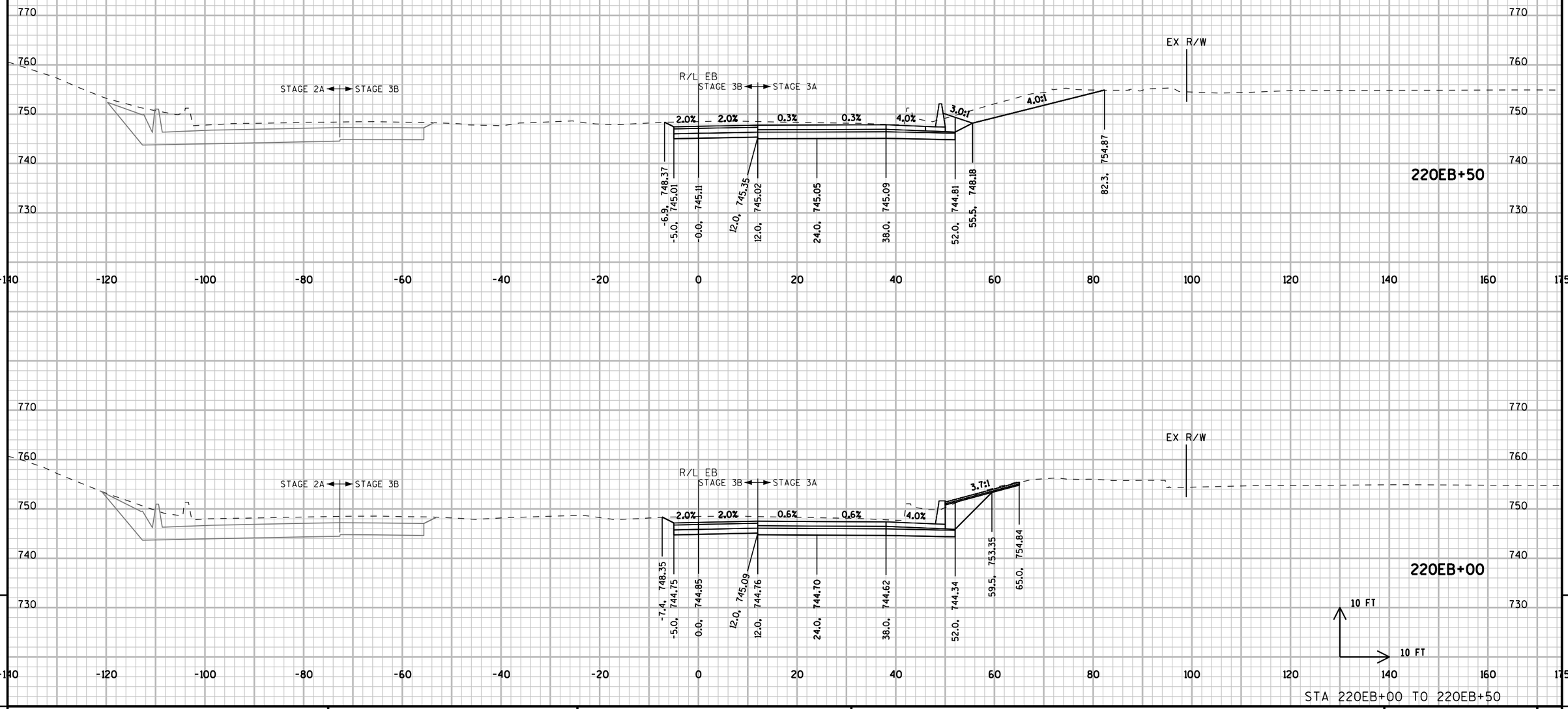


9

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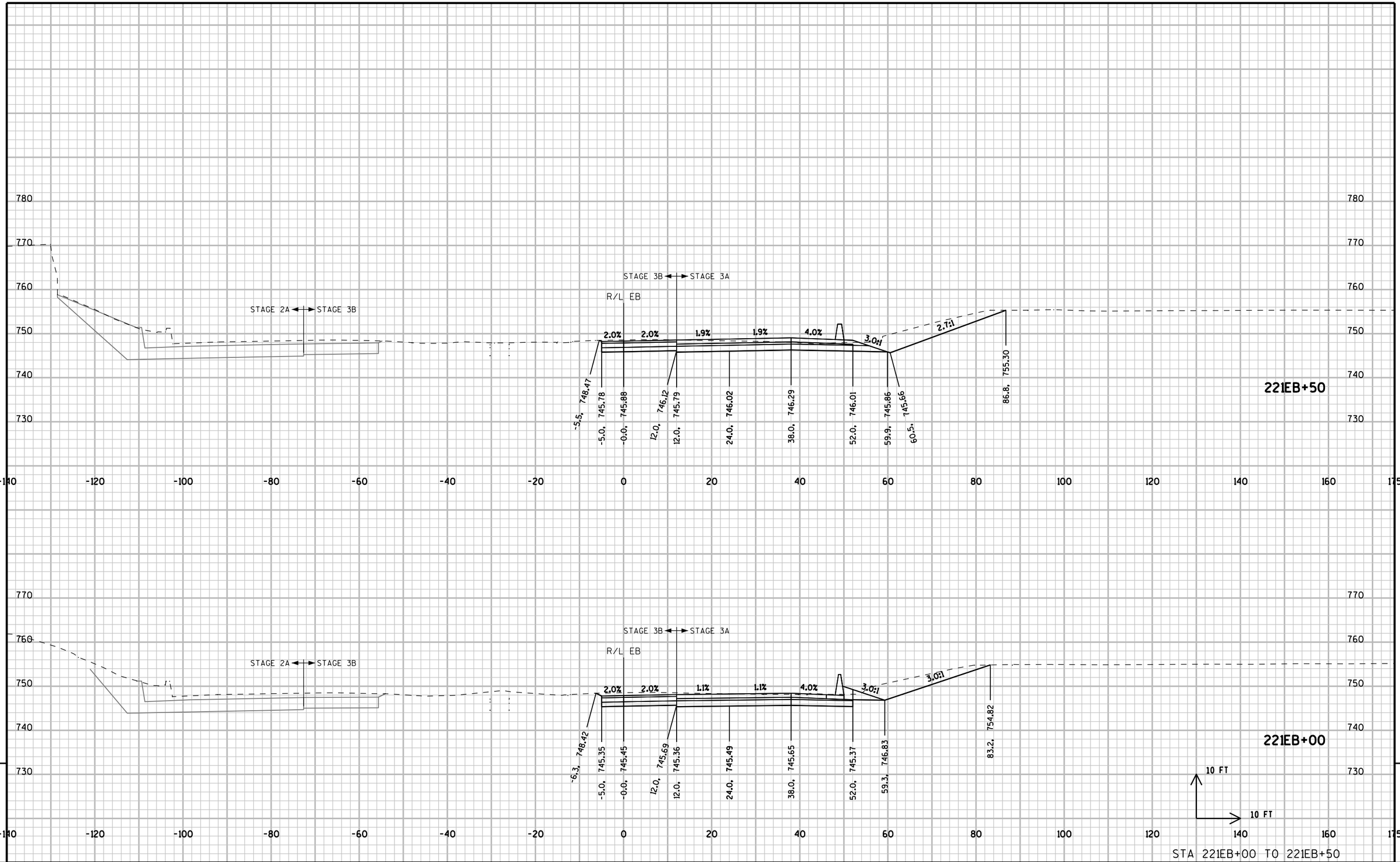
STA 219EB+22 TO 219EB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 928	E



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

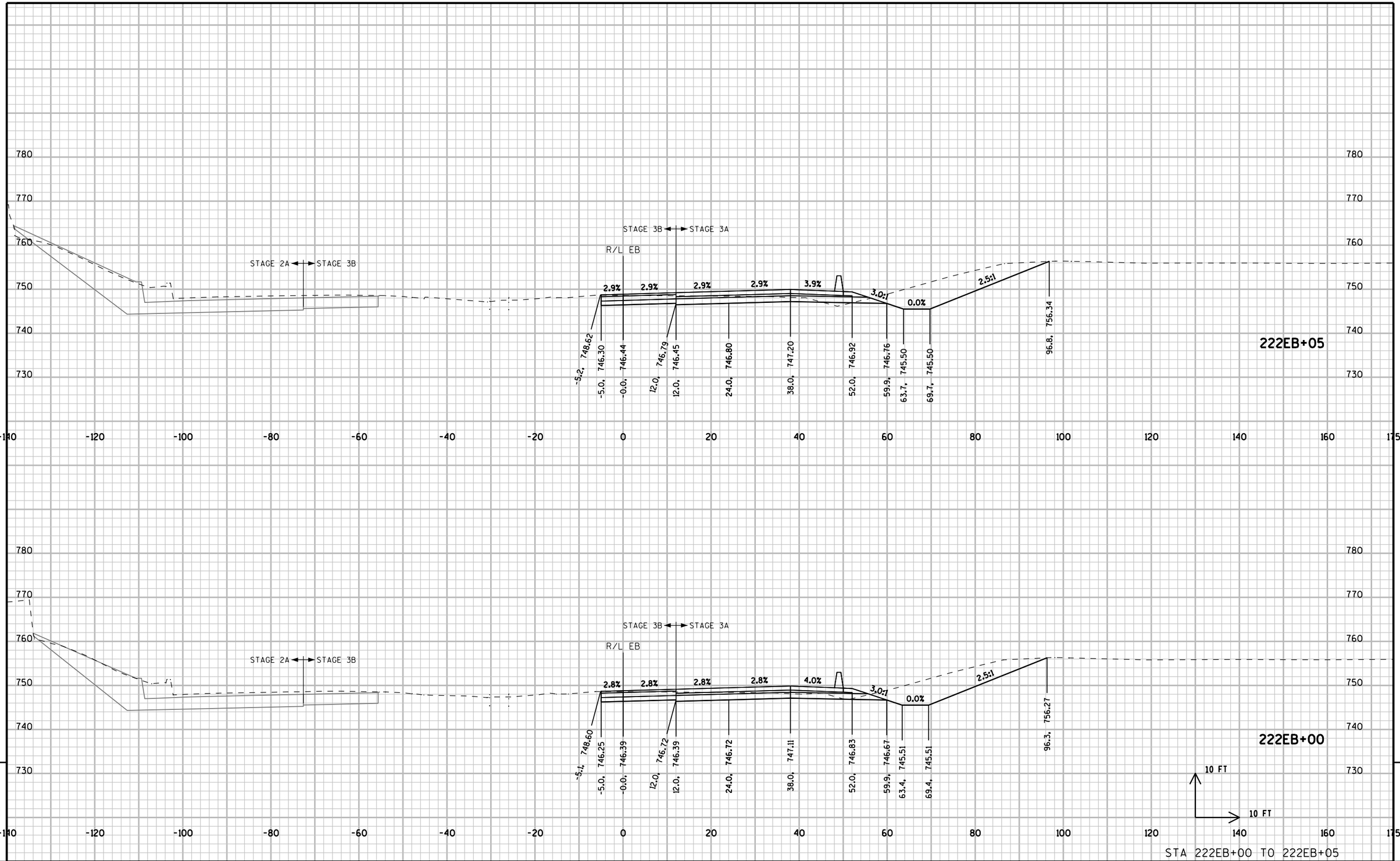
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PLOT DATE : 1/31/2015 10:23:51 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 930	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090200_xs_EB.dgn PLOT DATE : 1/31/2015 10:23:51 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

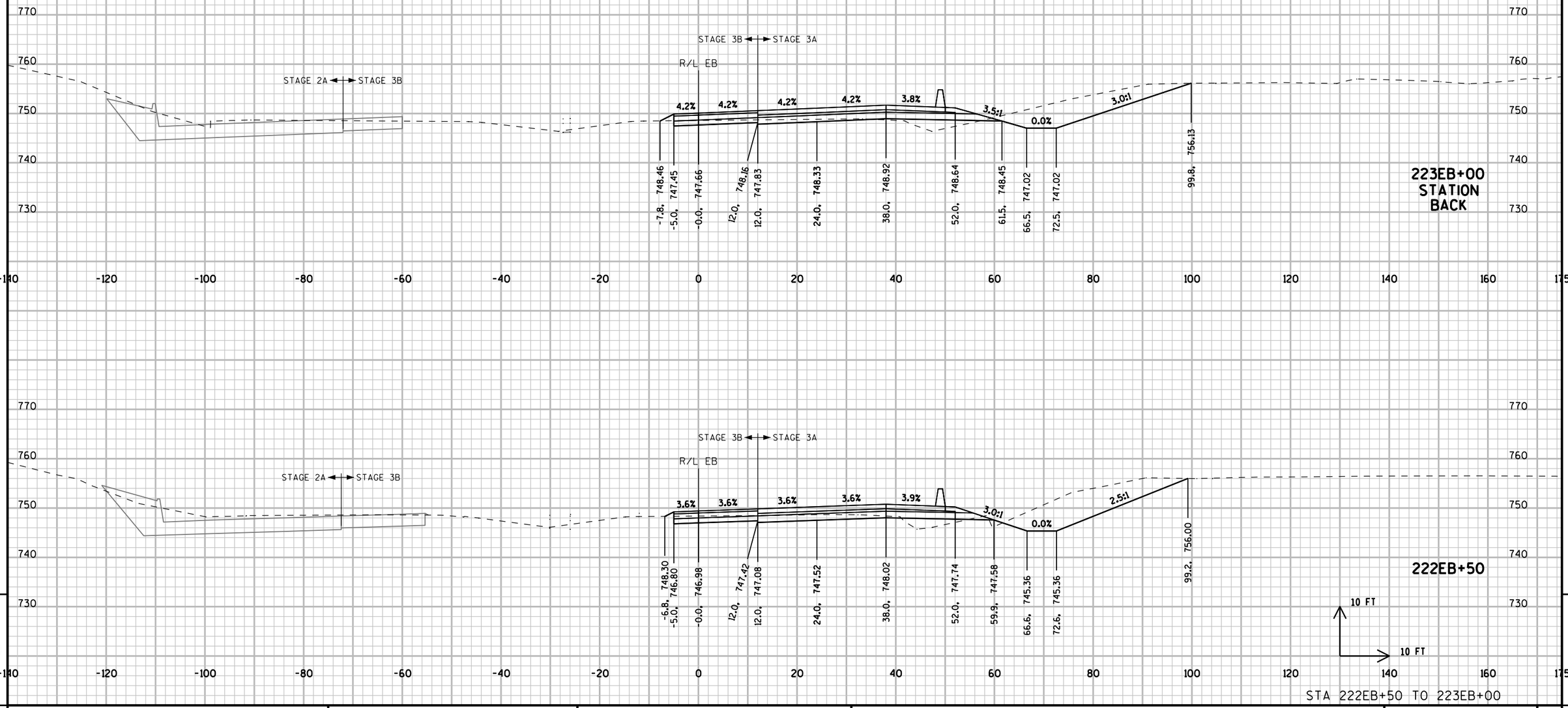
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STA 222EB+00 TO 222EB+05

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET	E

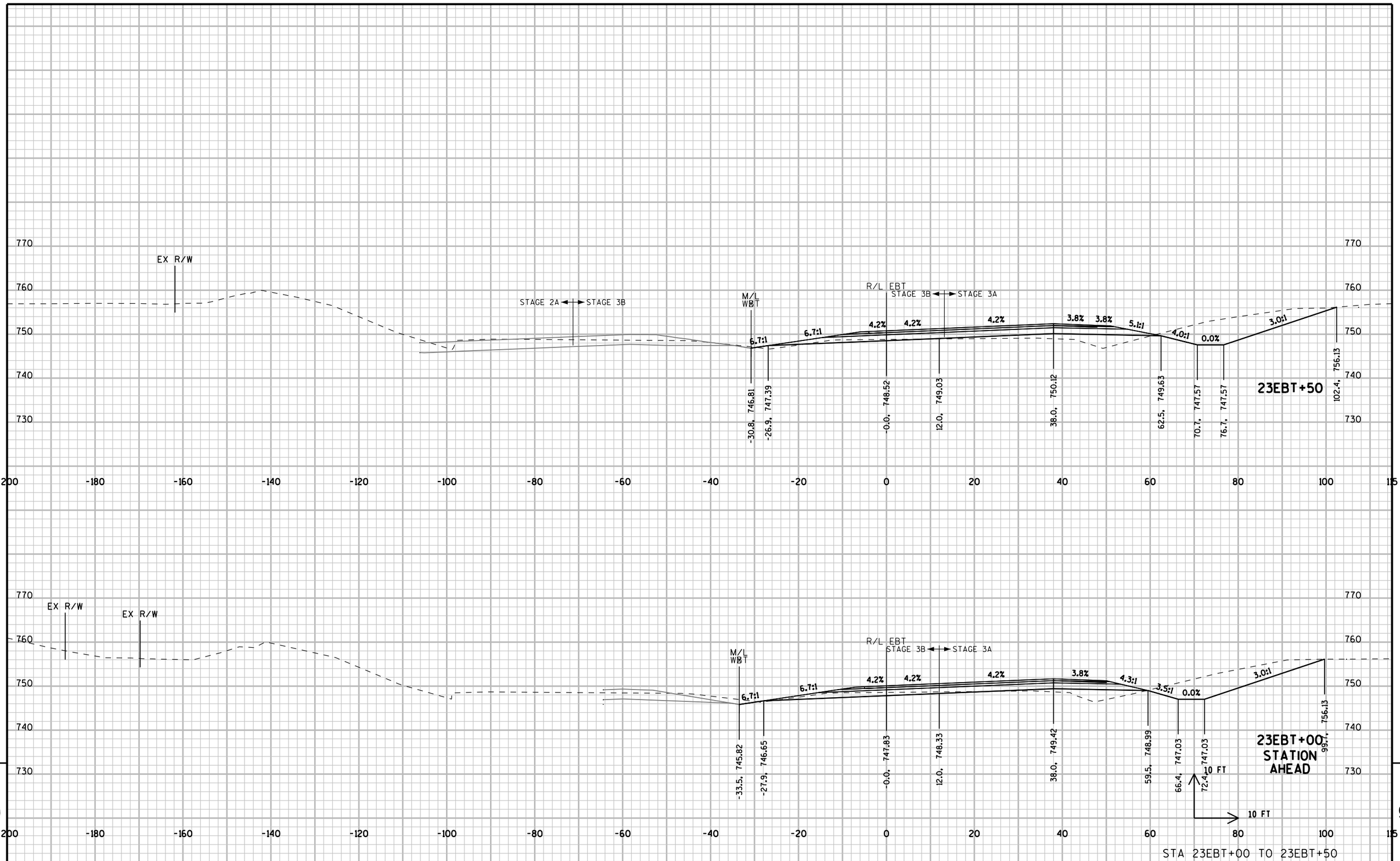
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WISDOT/CADDS SHEET 21



STA 222EB+50 TO 223EB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/ STH 441 NB	SHEET 932	E

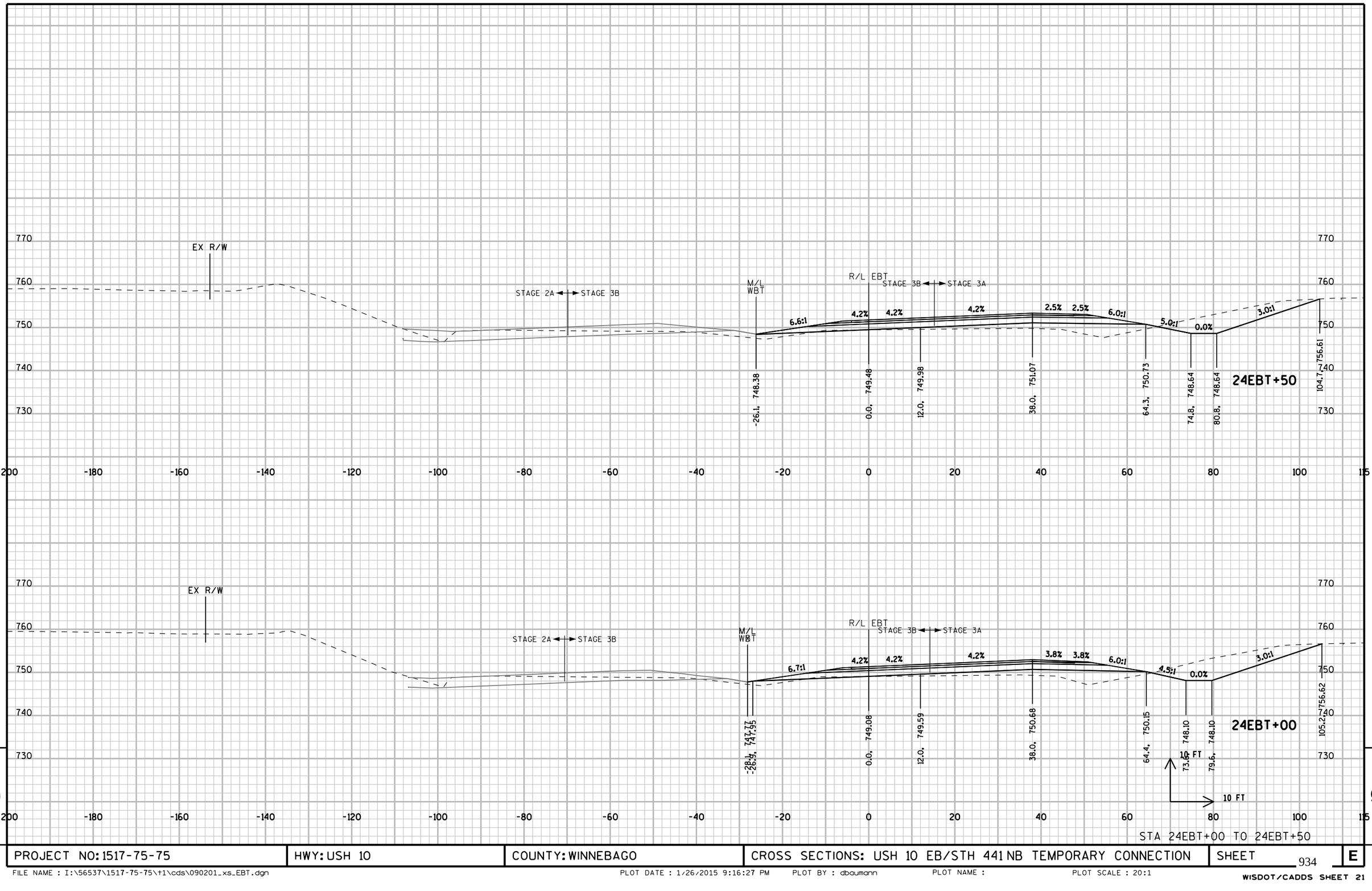


STA 23EBT+00 TO 23EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:27 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

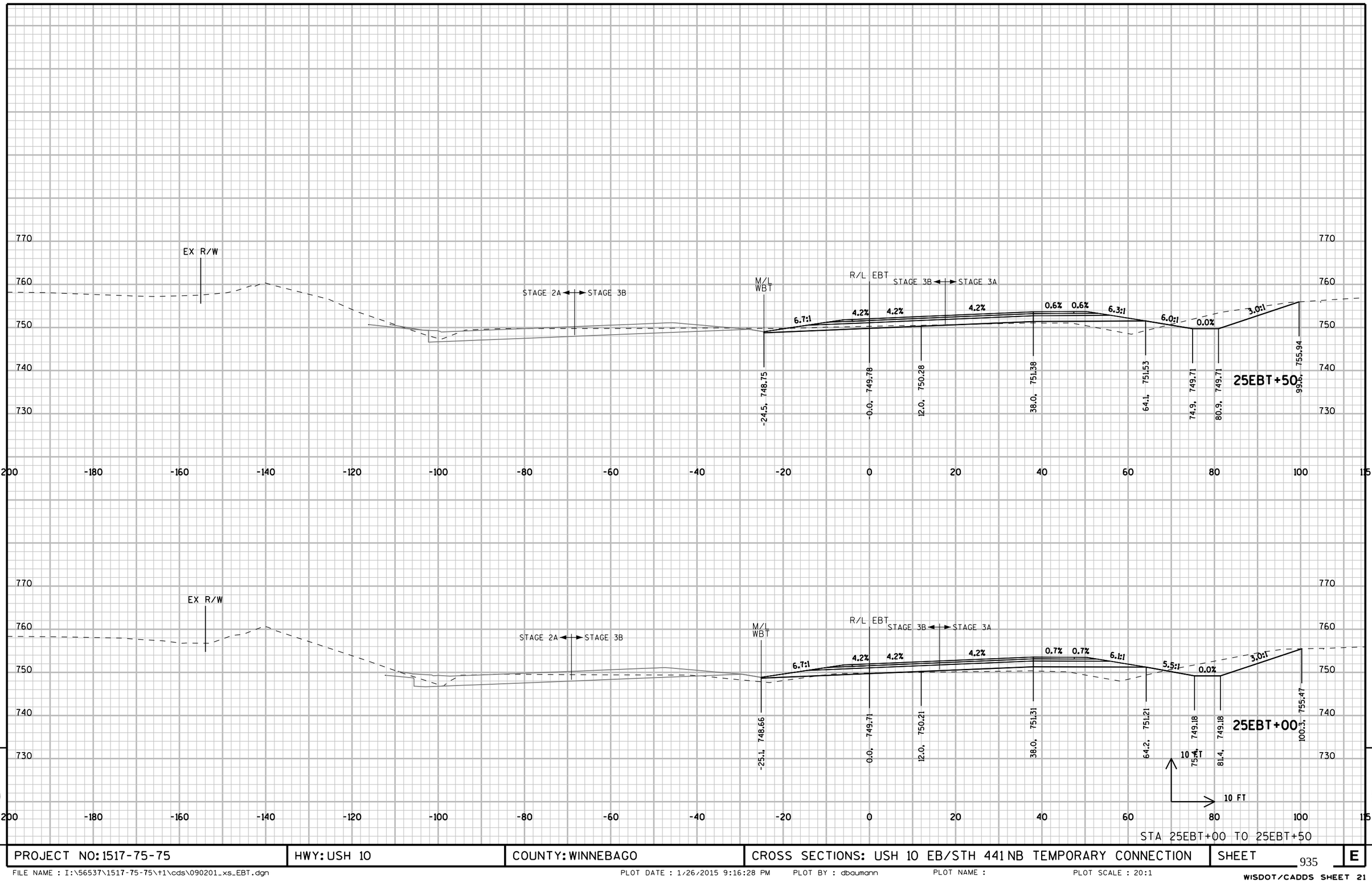
WISDOT/CADDS SHEET 21



STA 24EBT+00 TO 24EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn
PLOT DATE : 1/26/2015 9:16:27 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

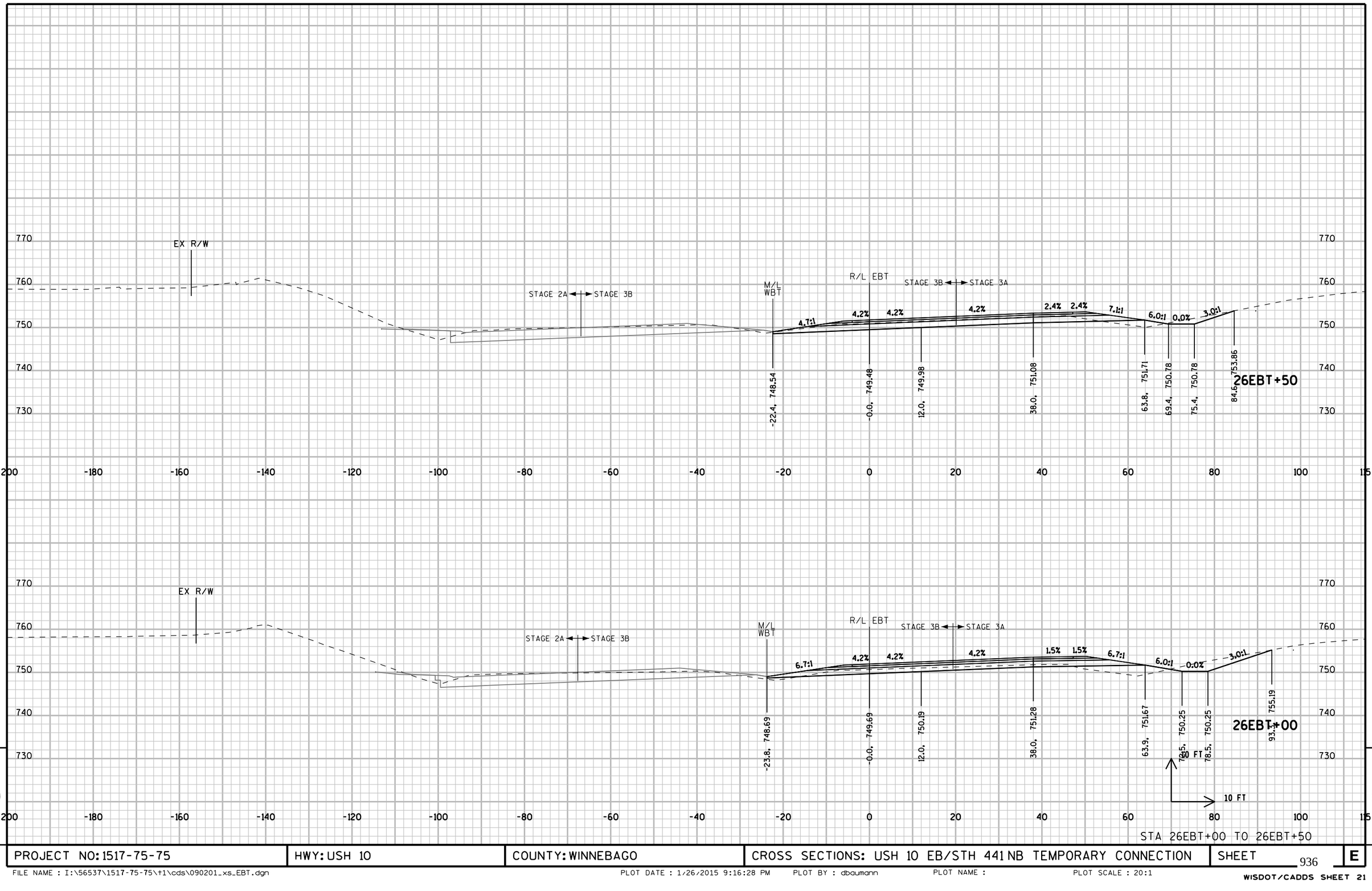


STA 25EBT+00 TO 25EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET 935	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:28 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

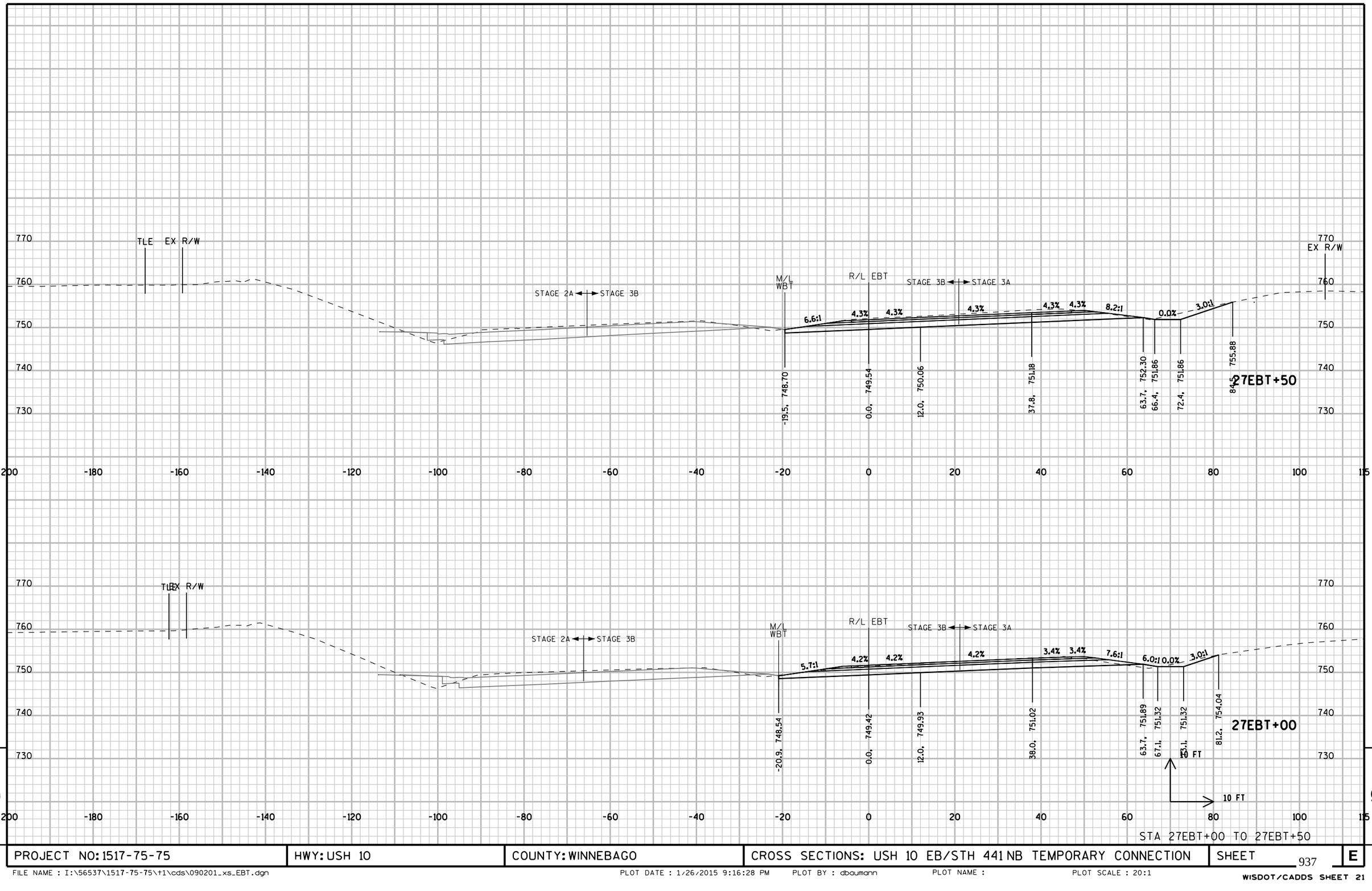


STA 26EBT+00 TO 26EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:28 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

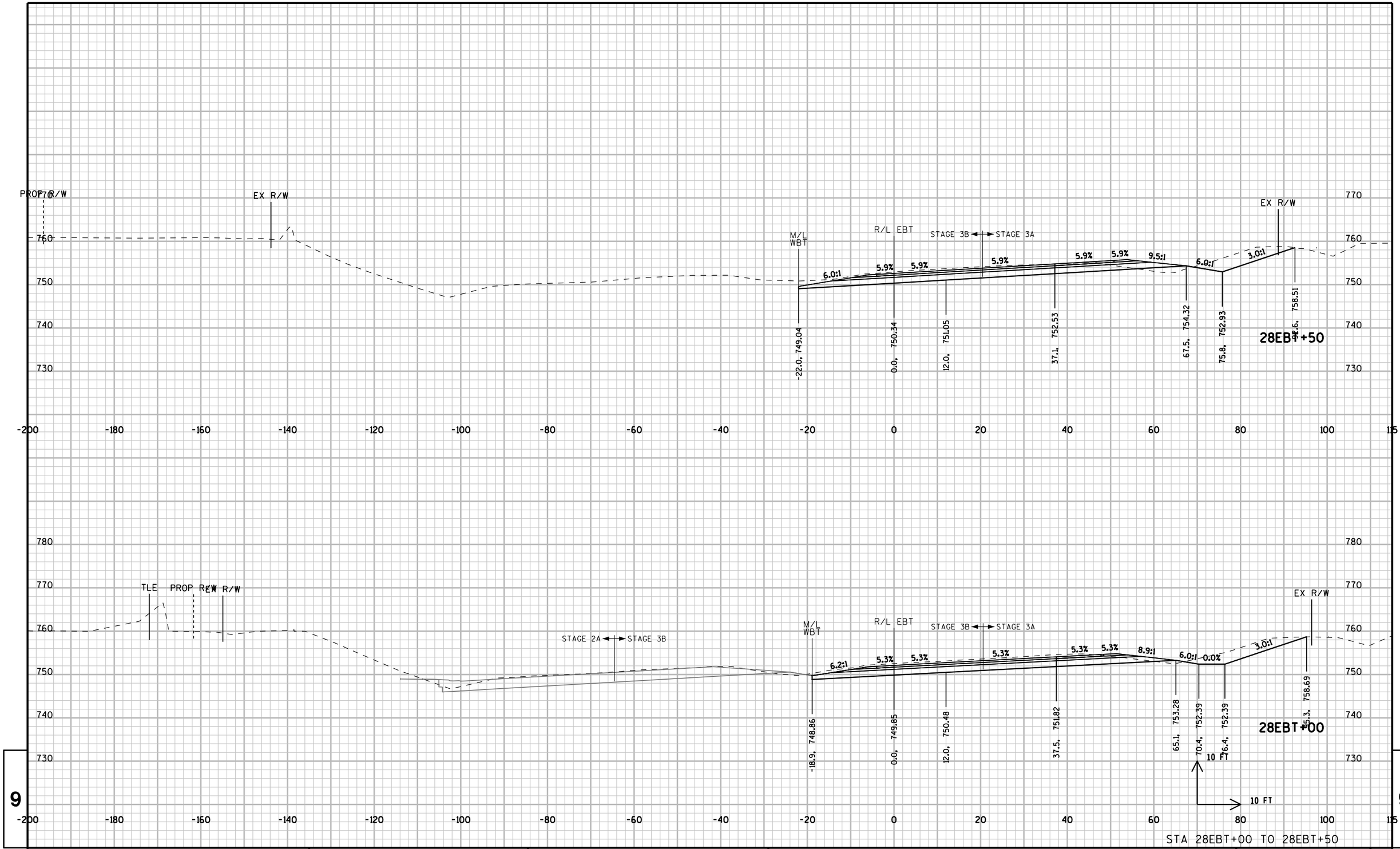
WISDOT/CADDS SHEET 21



STA 27EBT+00 TO 27EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:28 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

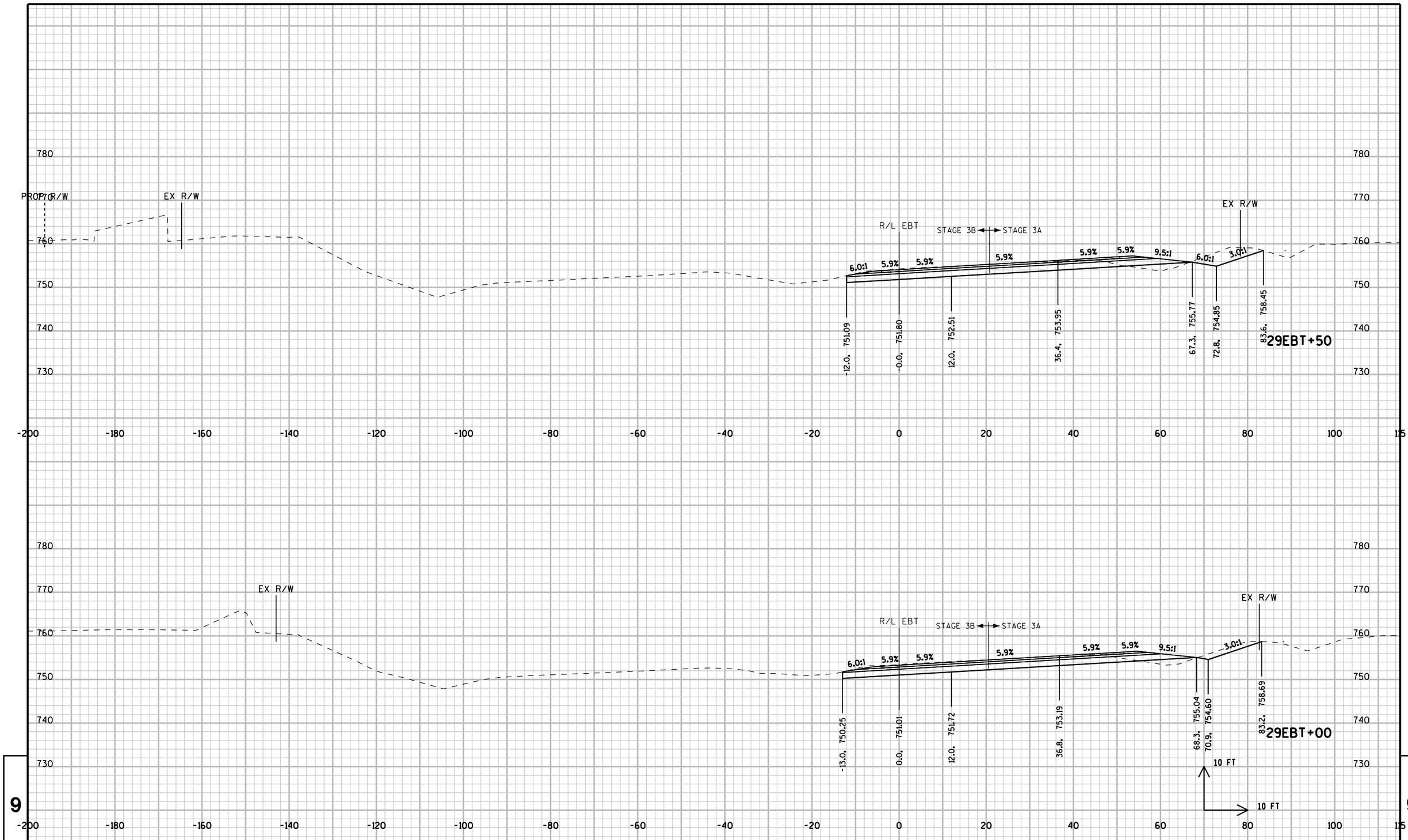


STA 28EBT+00 TO 28EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:29 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

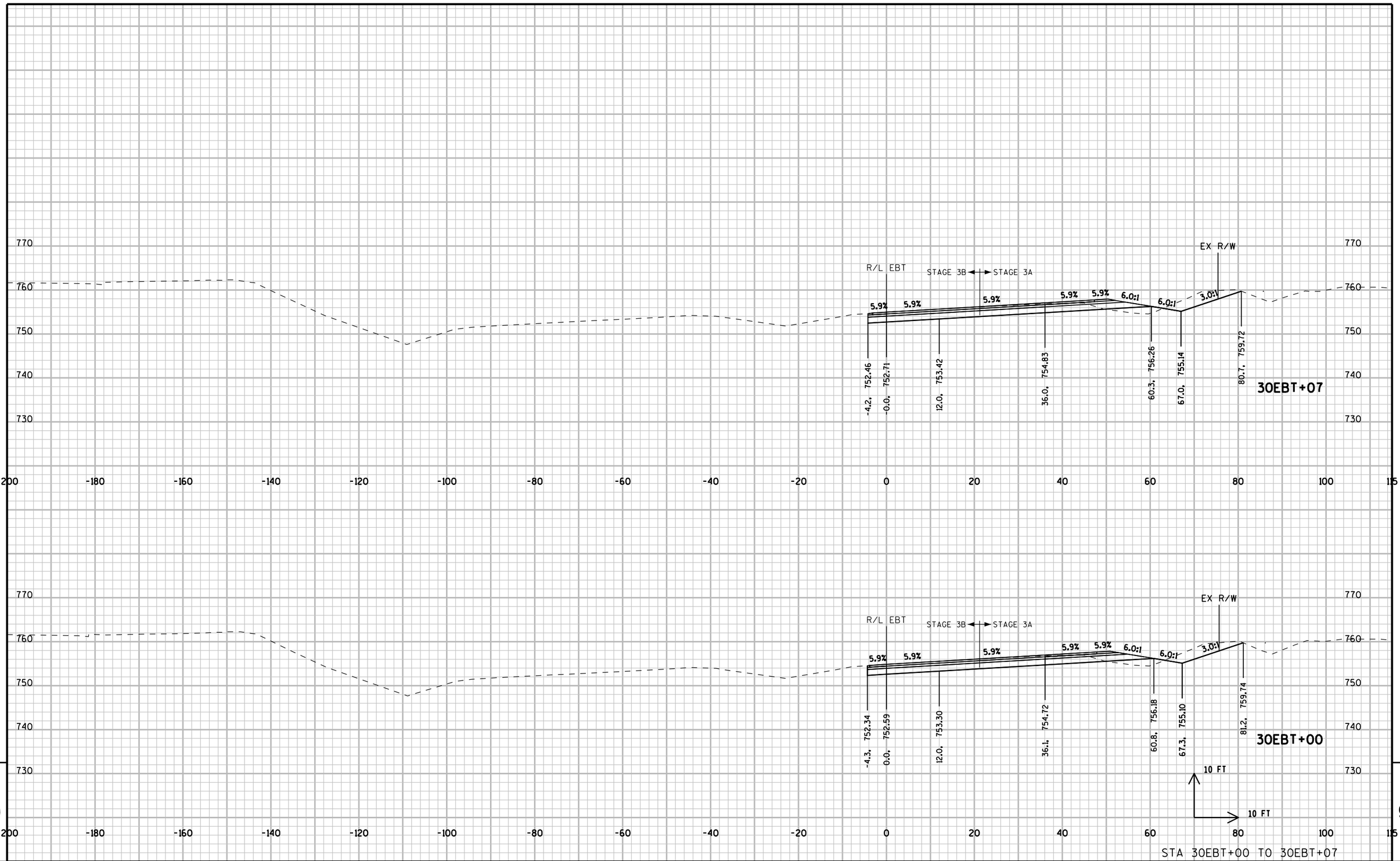
WISDOT/CADDS SHEET 21



STA 29EBT+00 TO 29EBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET	E

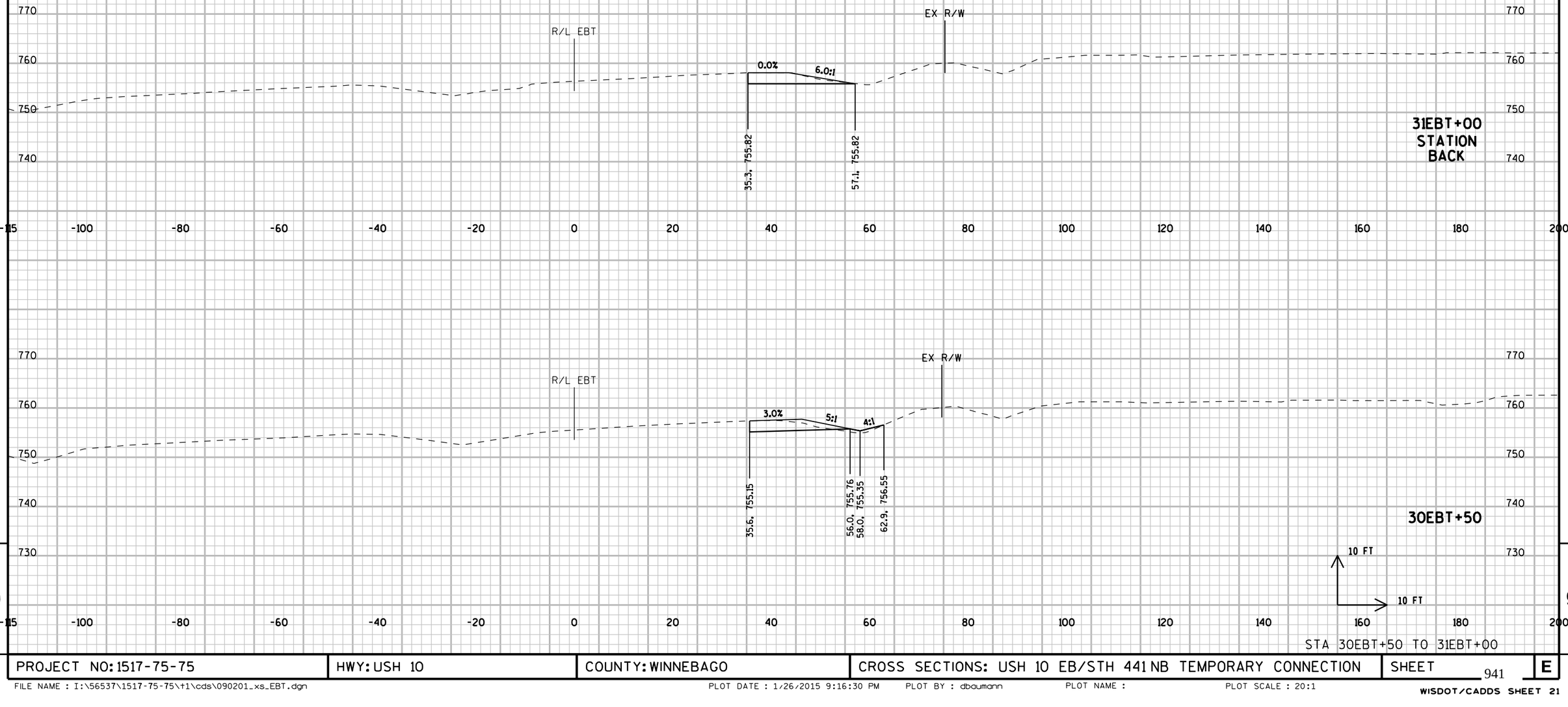
FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:29 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



STA 30EBT+00 TO 30EBT+07

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET 940	E

ALL WORK COMPLETED IN STAGE 3A

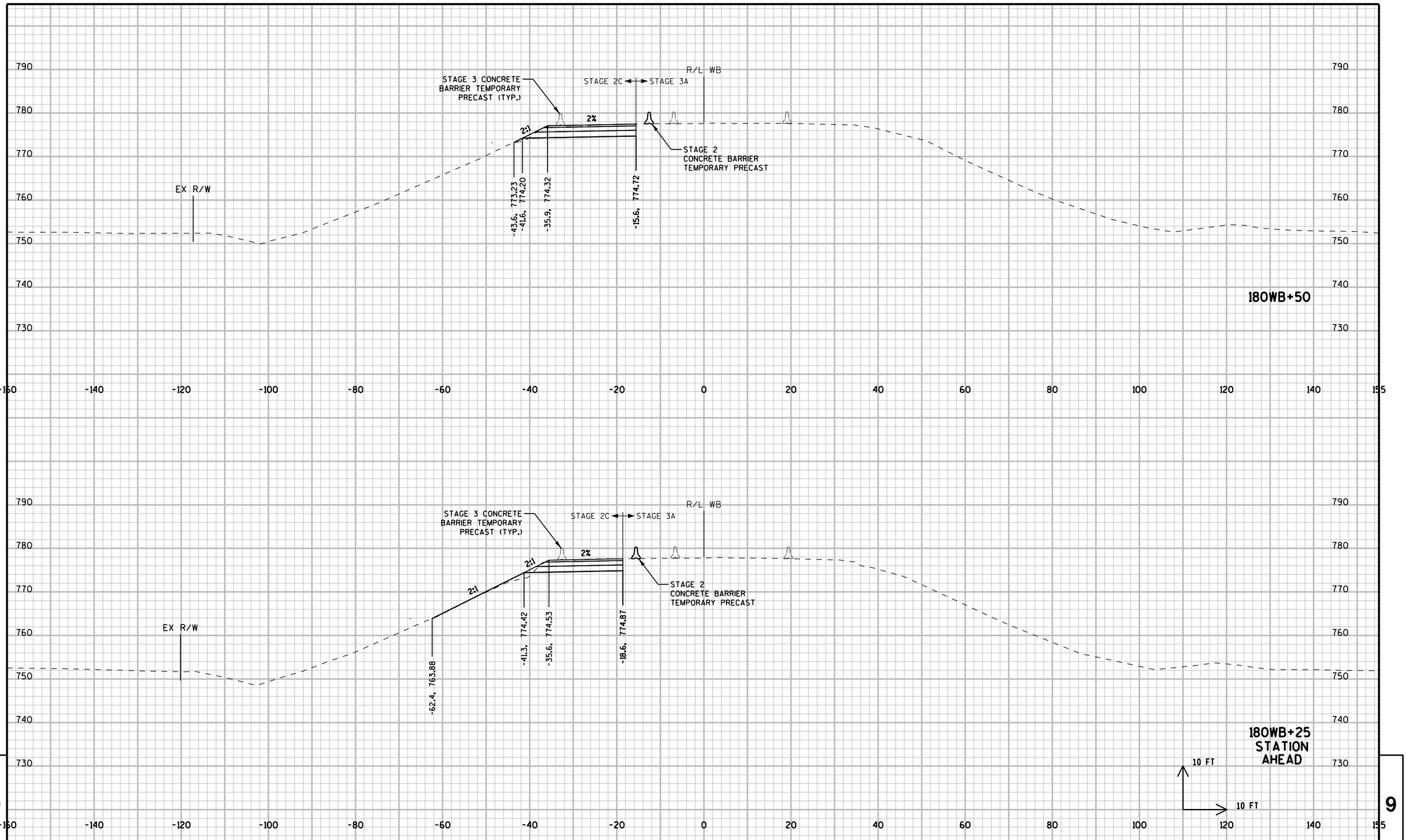


STA 30EBT+50 TO 31EBT+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 EB/STH 441 NB TEMPORARY CONNECTION	SHEET 941	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090201_xs_EBT.dgn PLOT DATE : 1/26/2015 9:16:30 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

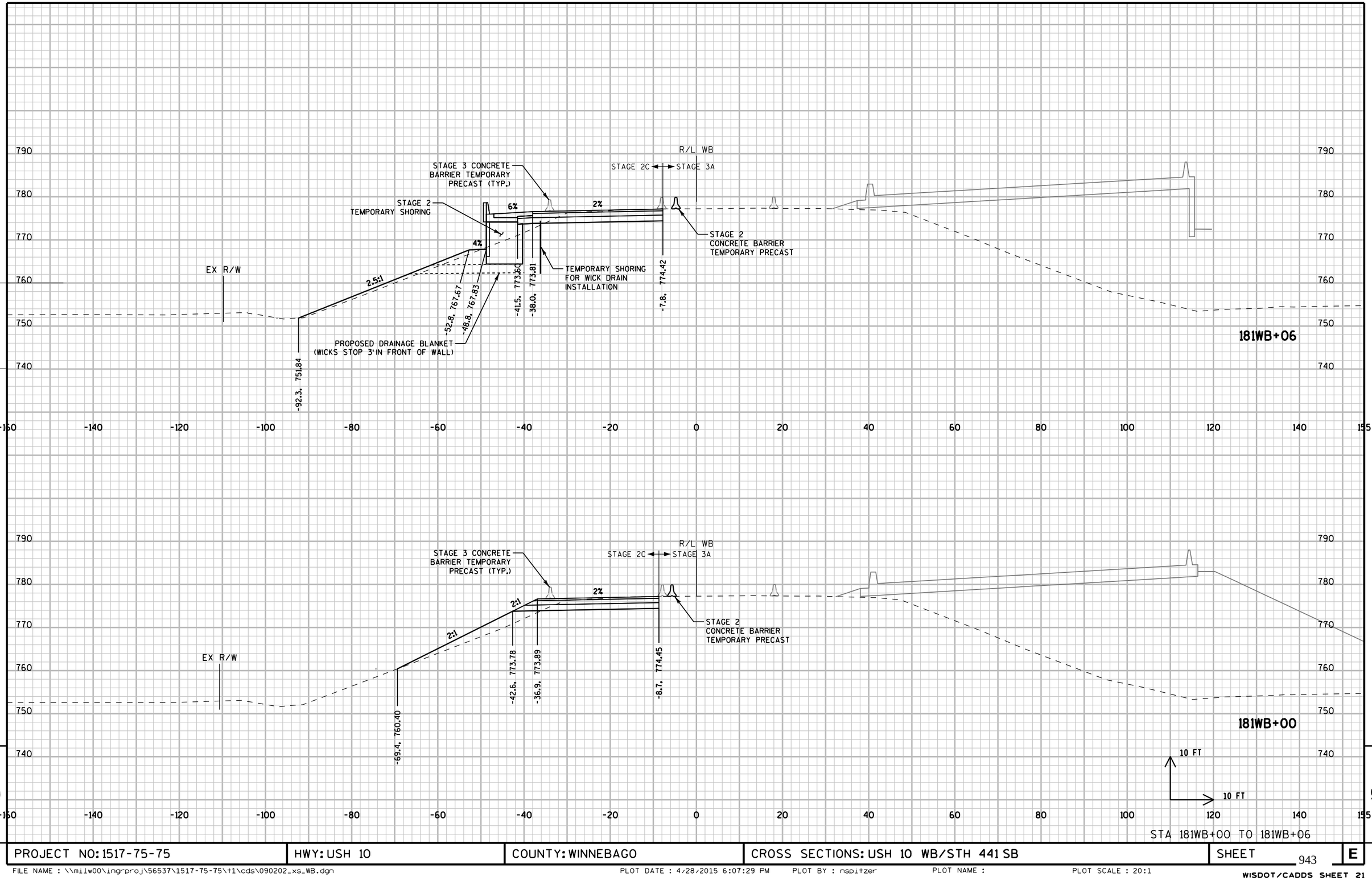


STA 180WB+25 TO 180WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 4/6/2015 2:53:48 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



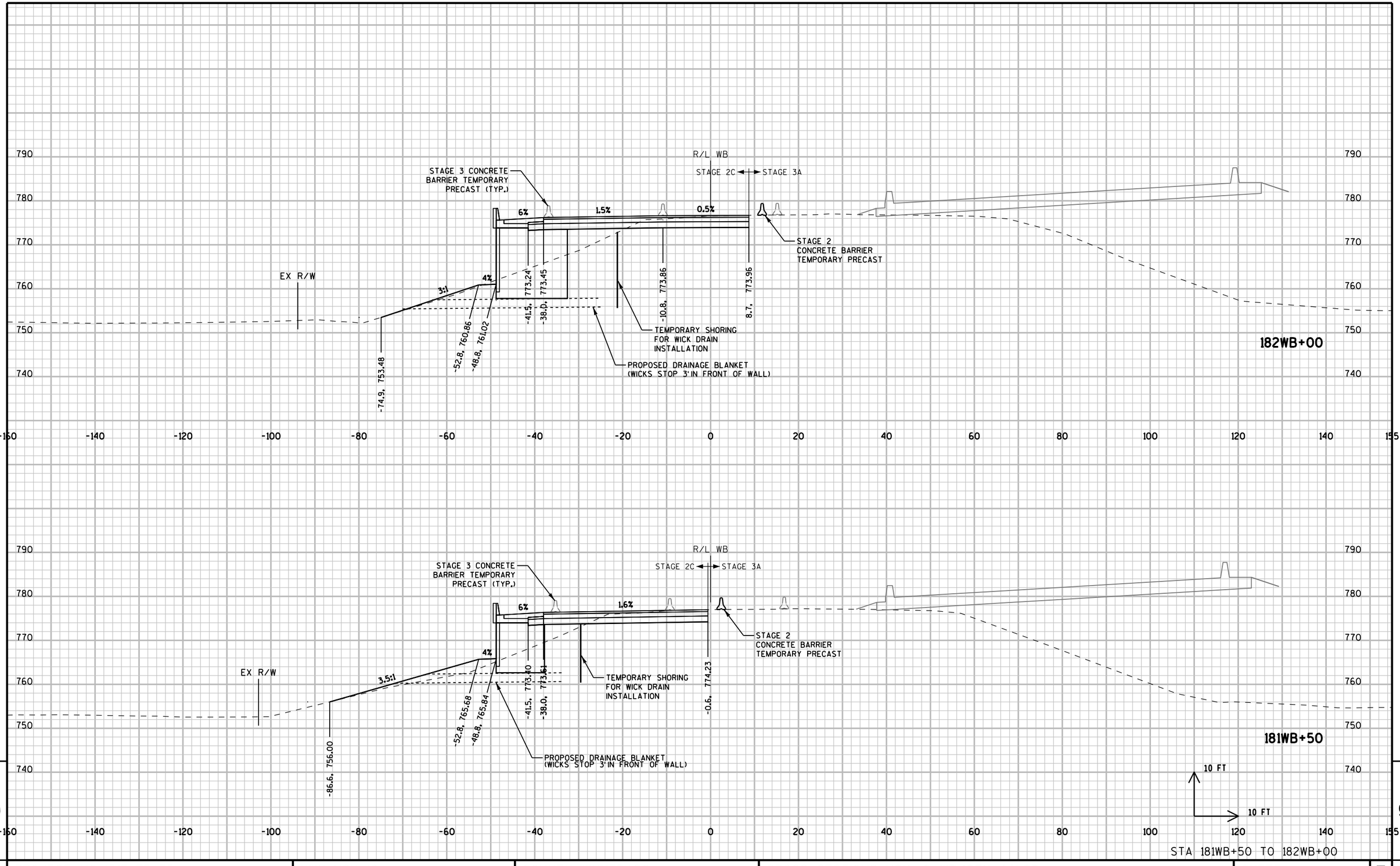
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9

STA 181WB+00 TO 181WB+06

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET E

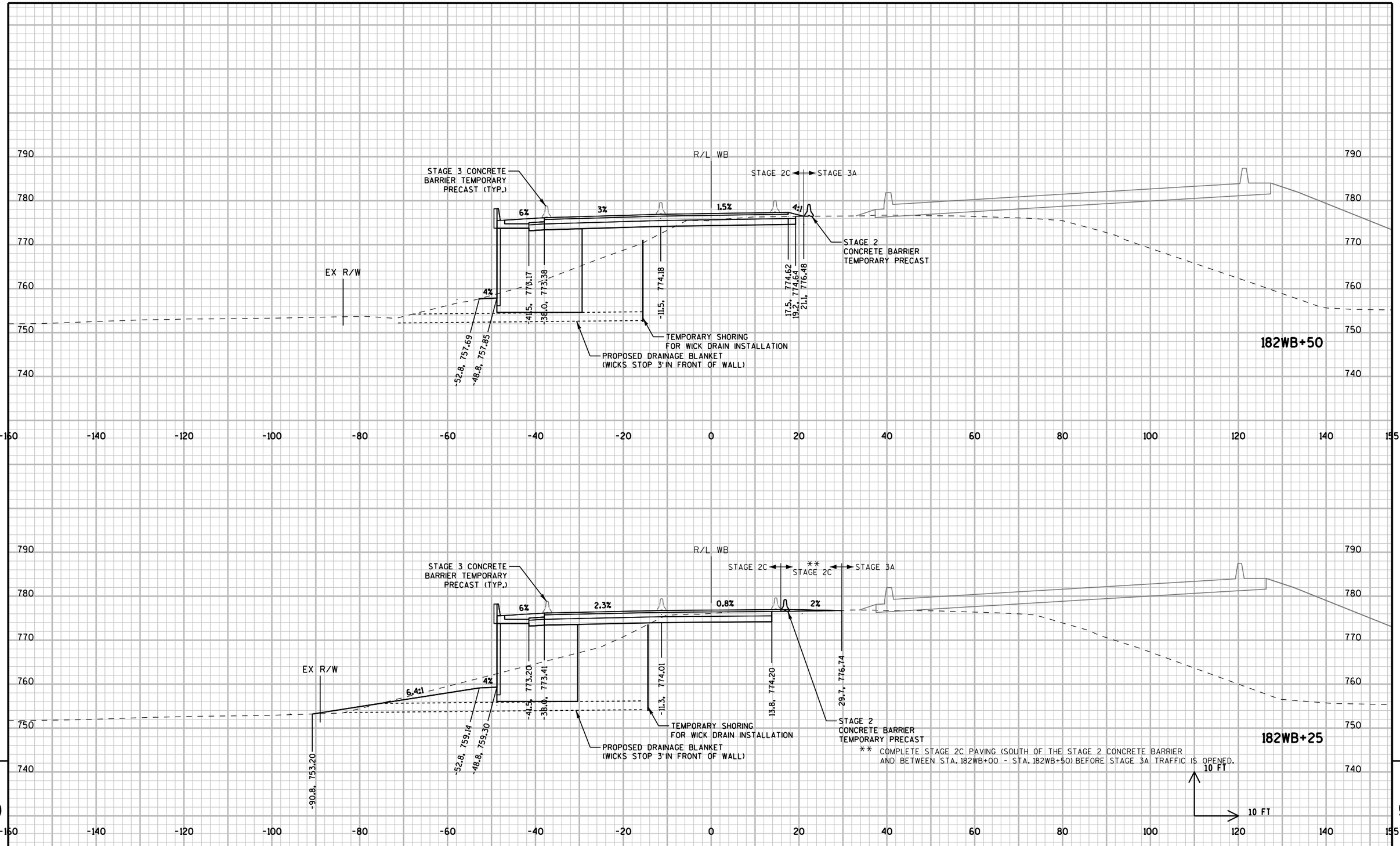
FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 4/28/2015 6:07:29 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 4/28/2015 6:07:30 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



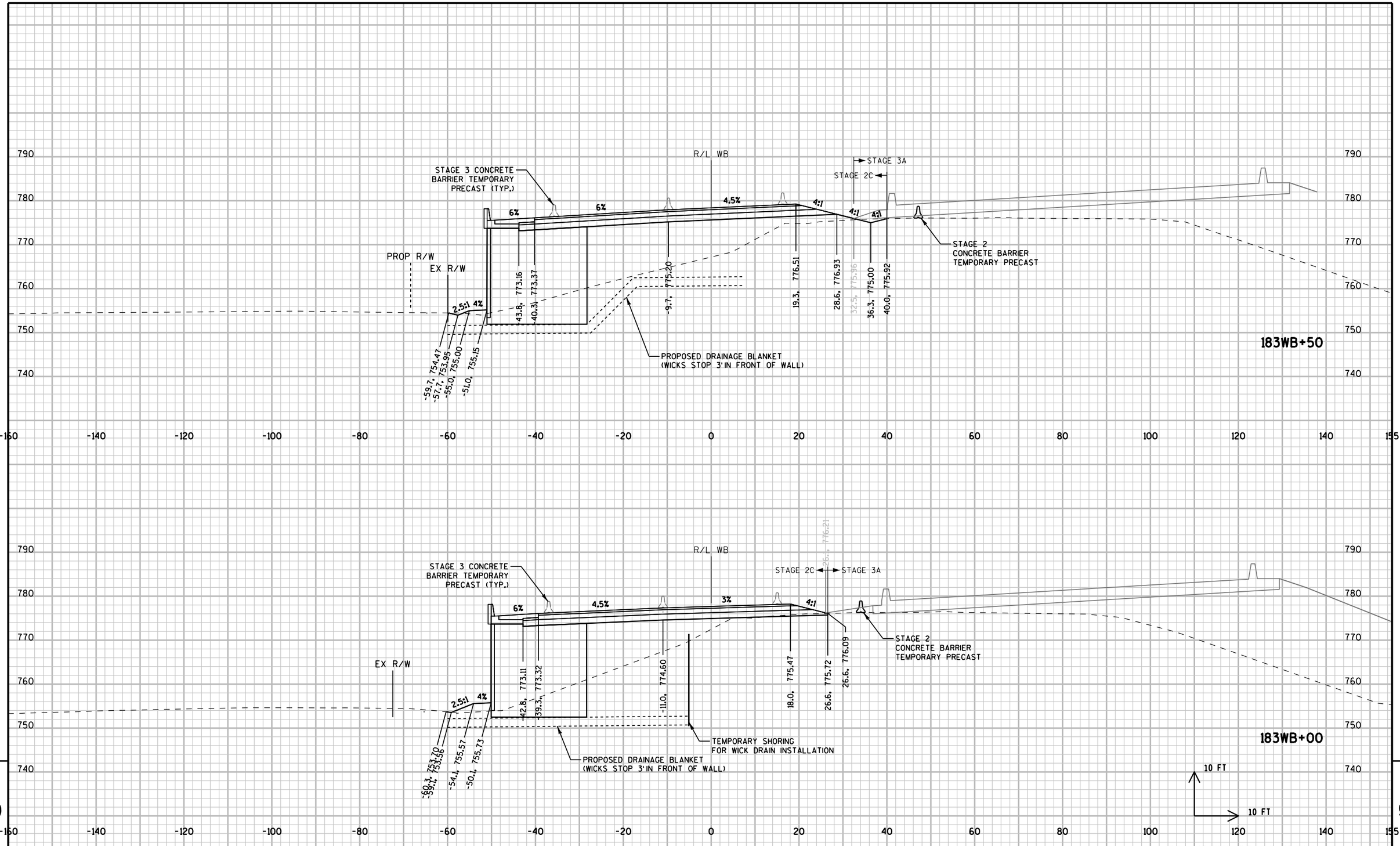
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9

STA 182WB+25 TO 182WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn
PLOT DATE : 4/28/2015 6:07:31 PM
PLOT BY : nspitzer
PLOT NAME :
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



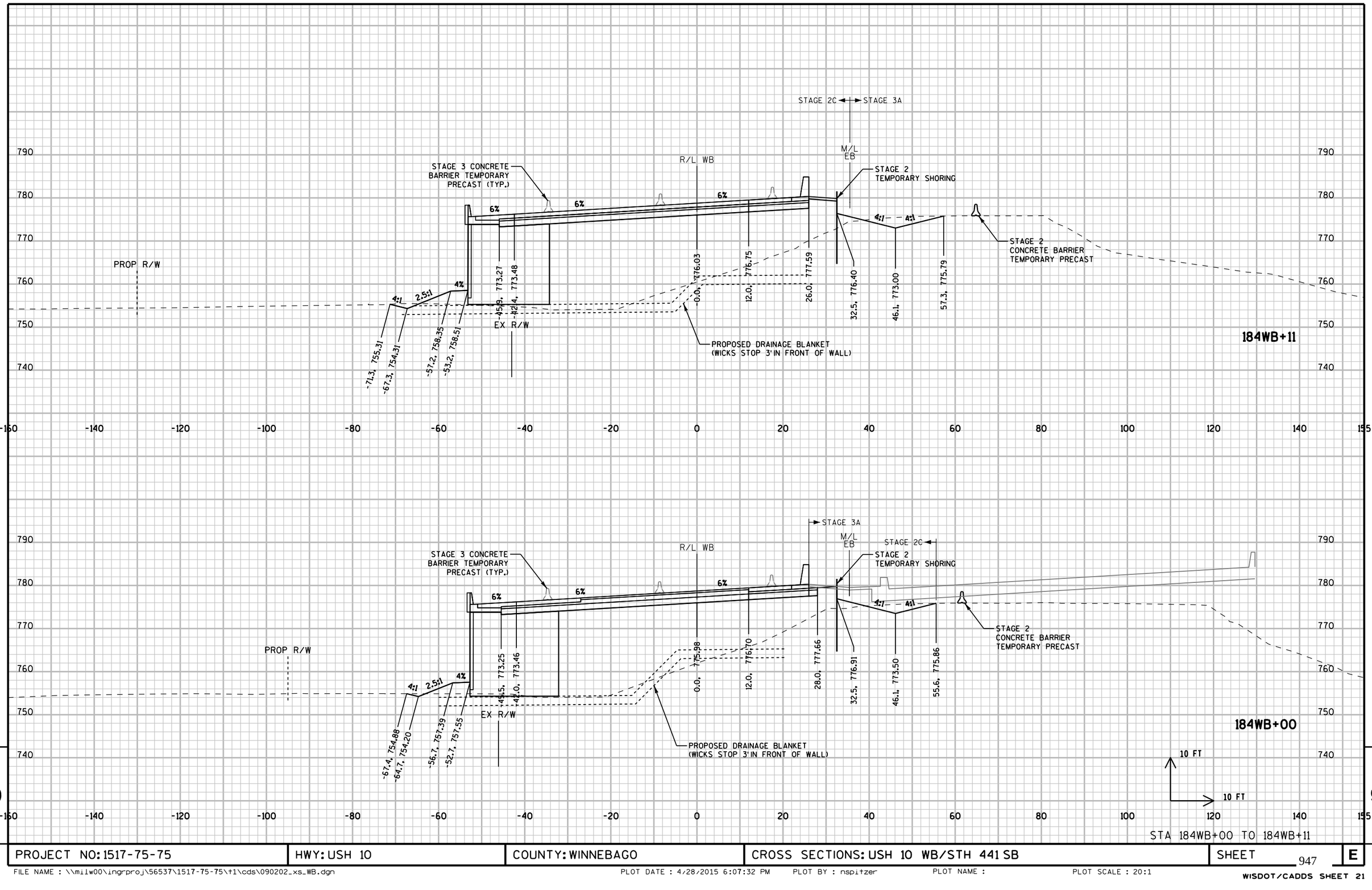
9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 4/28/2015 6:07:31 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

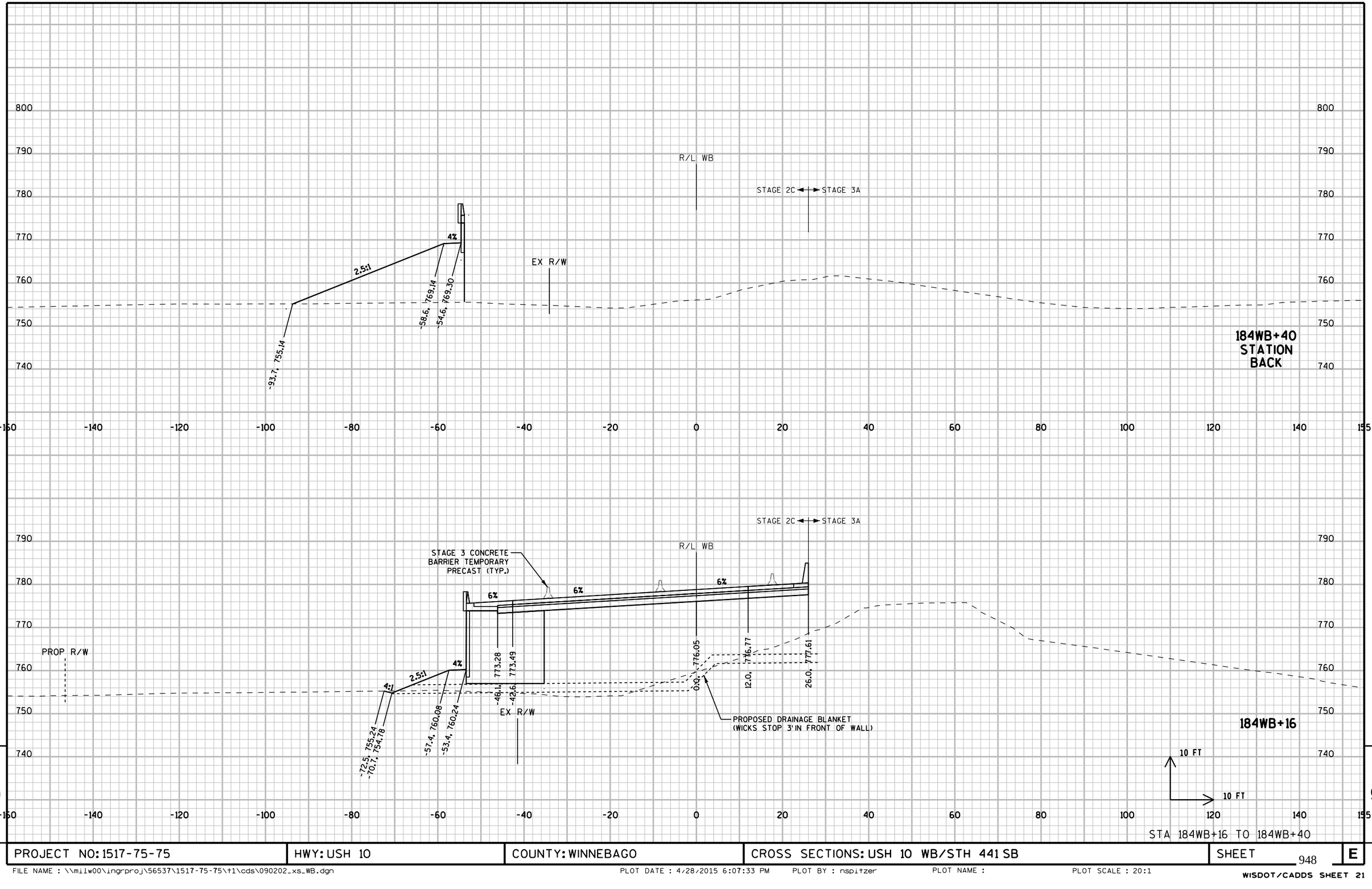
WISDOT/CADDS SHEET 21



STA 184WB+00 TO 184WB+11

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

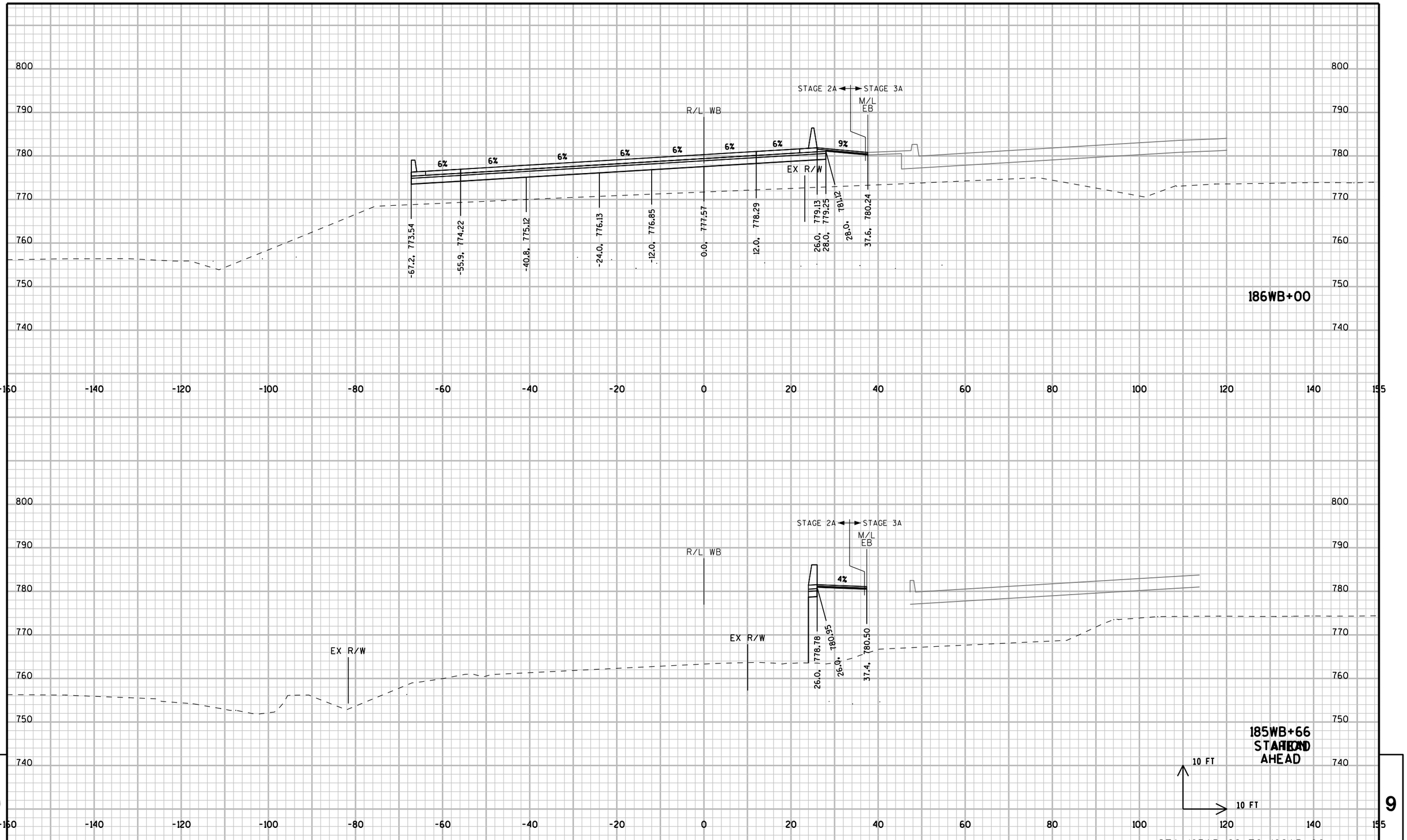
FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 4/28/2015 6:07:32 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STA 184WB+16 TO 184WB+40

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 4/28/2015 6:07:33 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

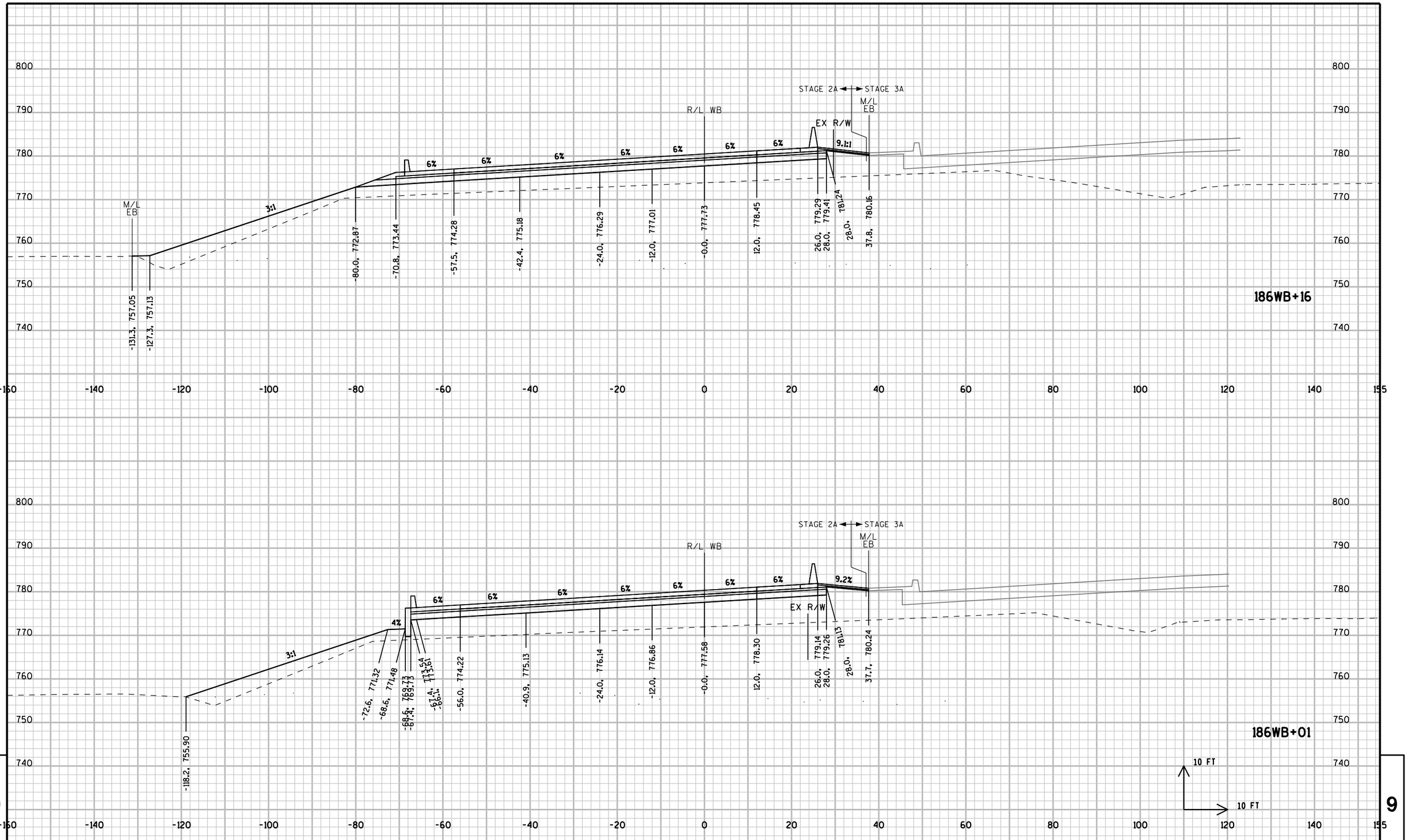


STA 185WB+66 TO 186WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:19 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

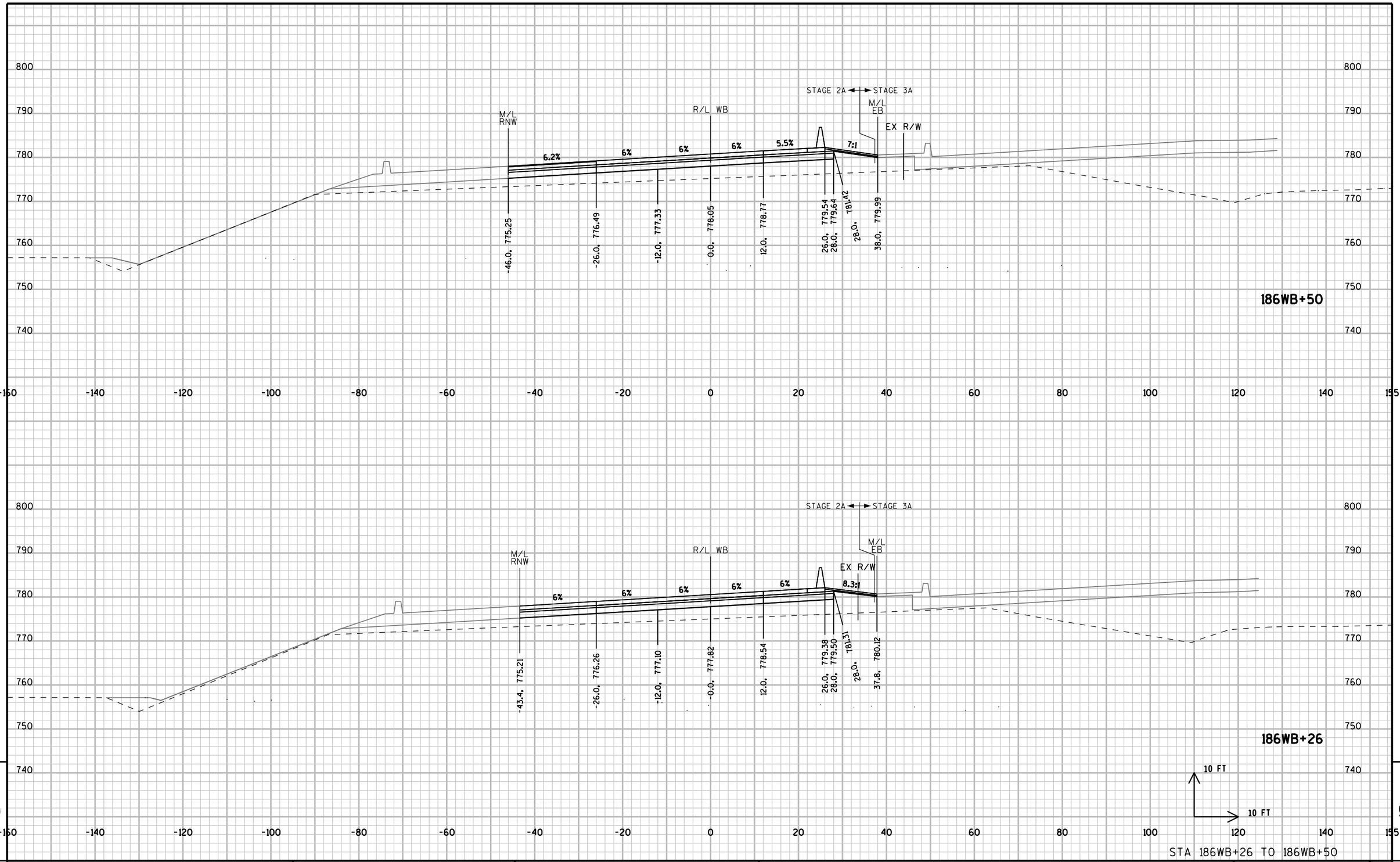
WISDOT/CADDS SHEET 21



STA 186WB+01 TO 186WB+16

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:20 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

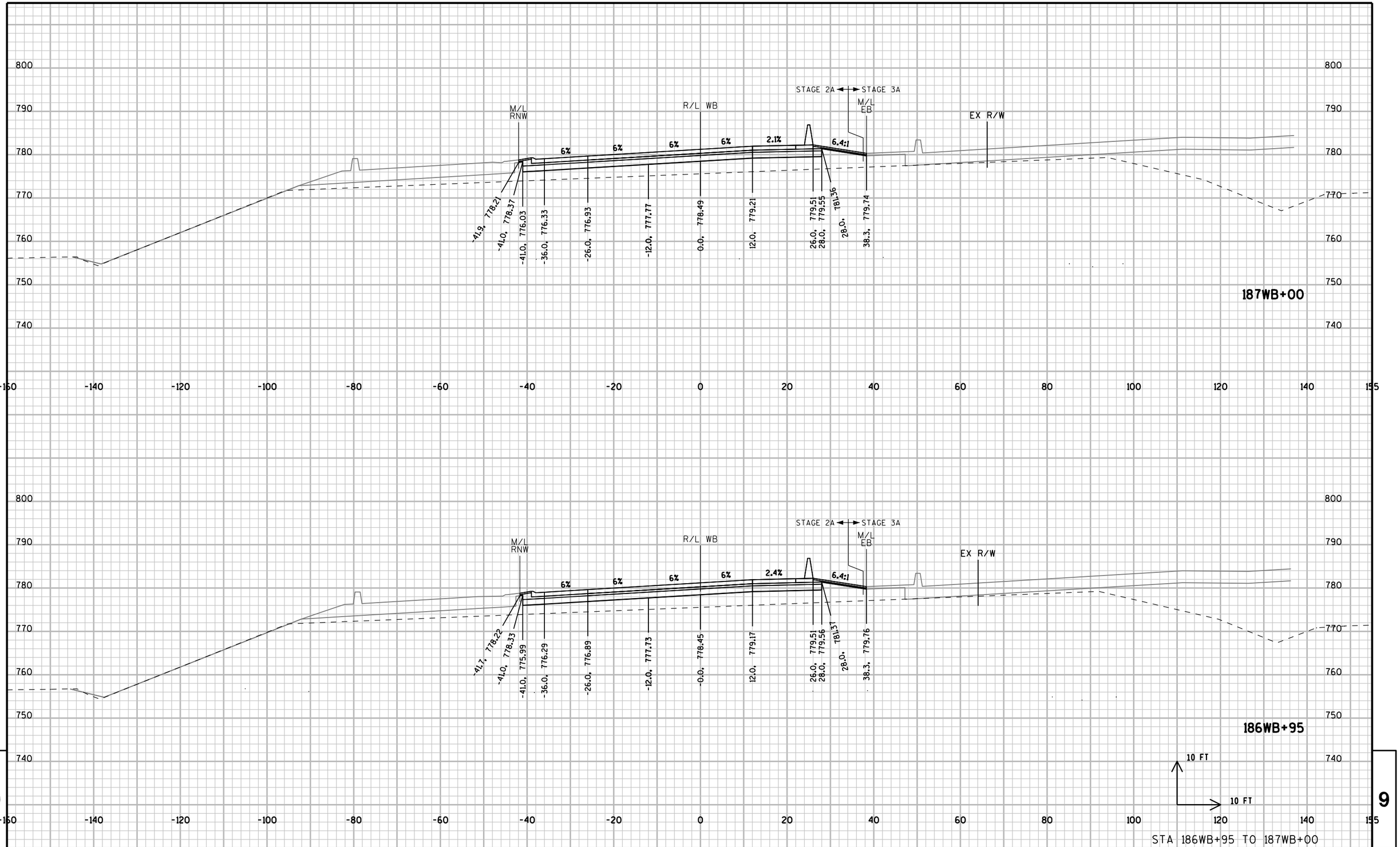


STA 186WB+26 TO 186WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 951	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:21 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

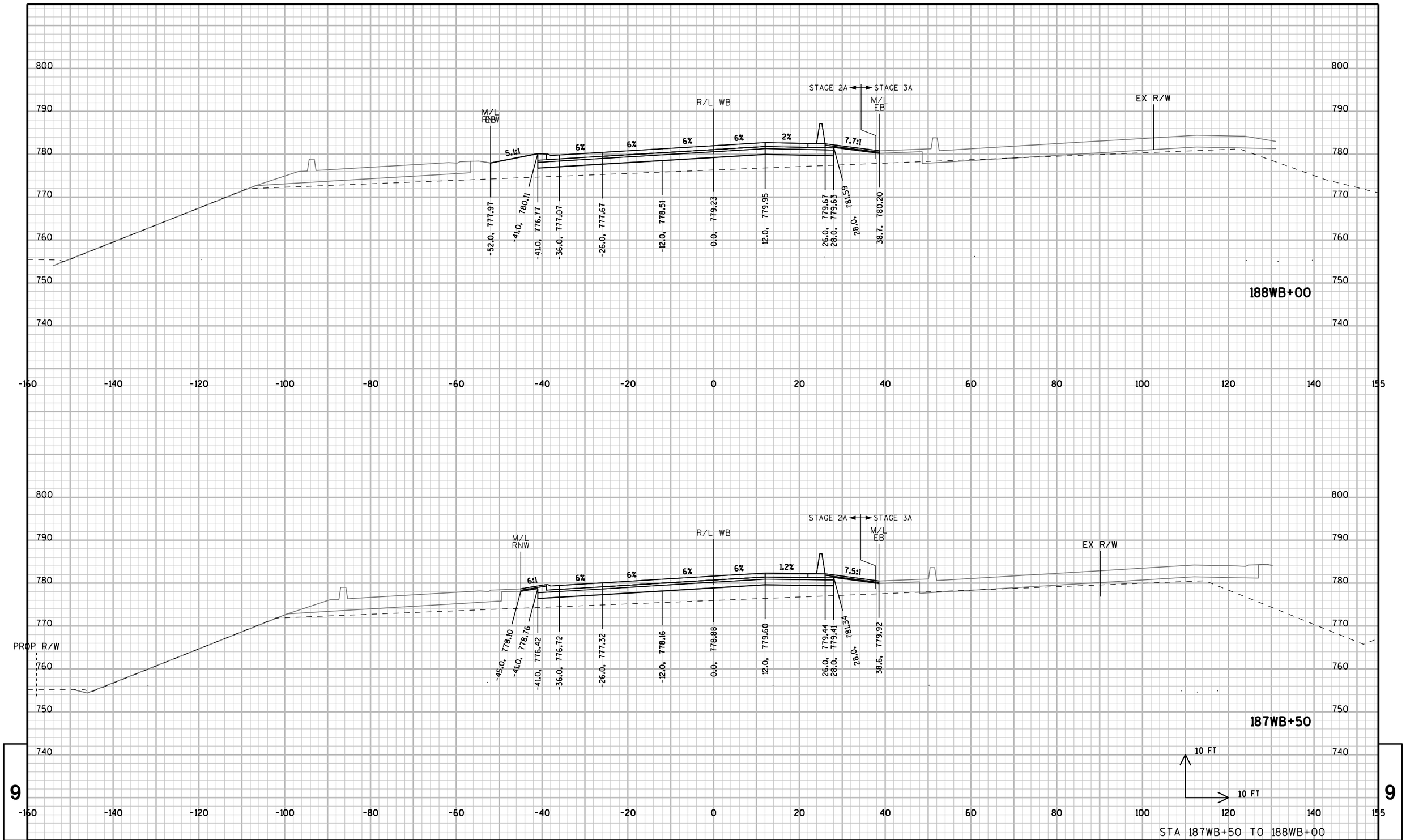
WISDOT/CADDS SHEET 21



STA 186WB+95 TO 187WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:22 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

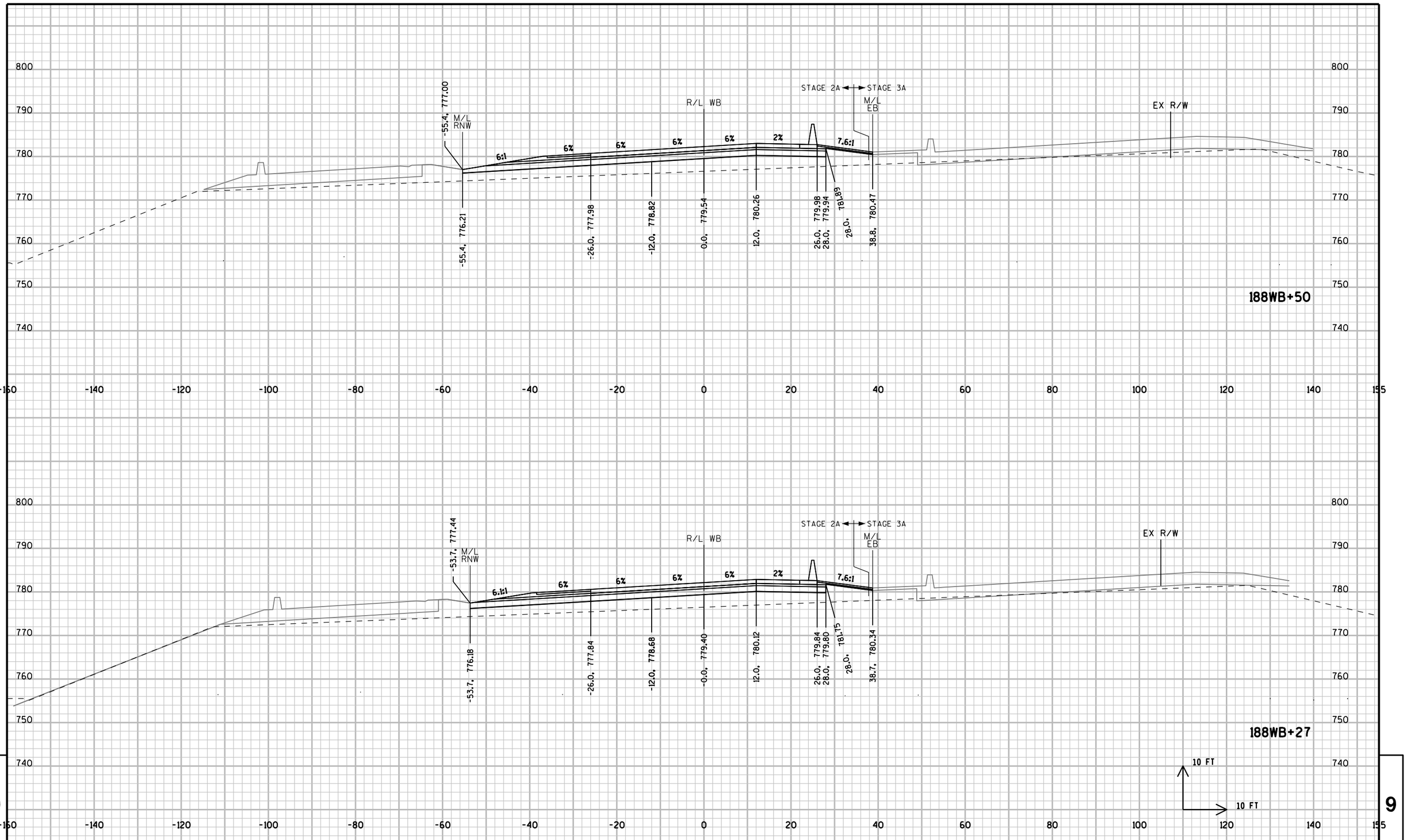


STA 187WB+50 TO 188WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 953	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:22 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



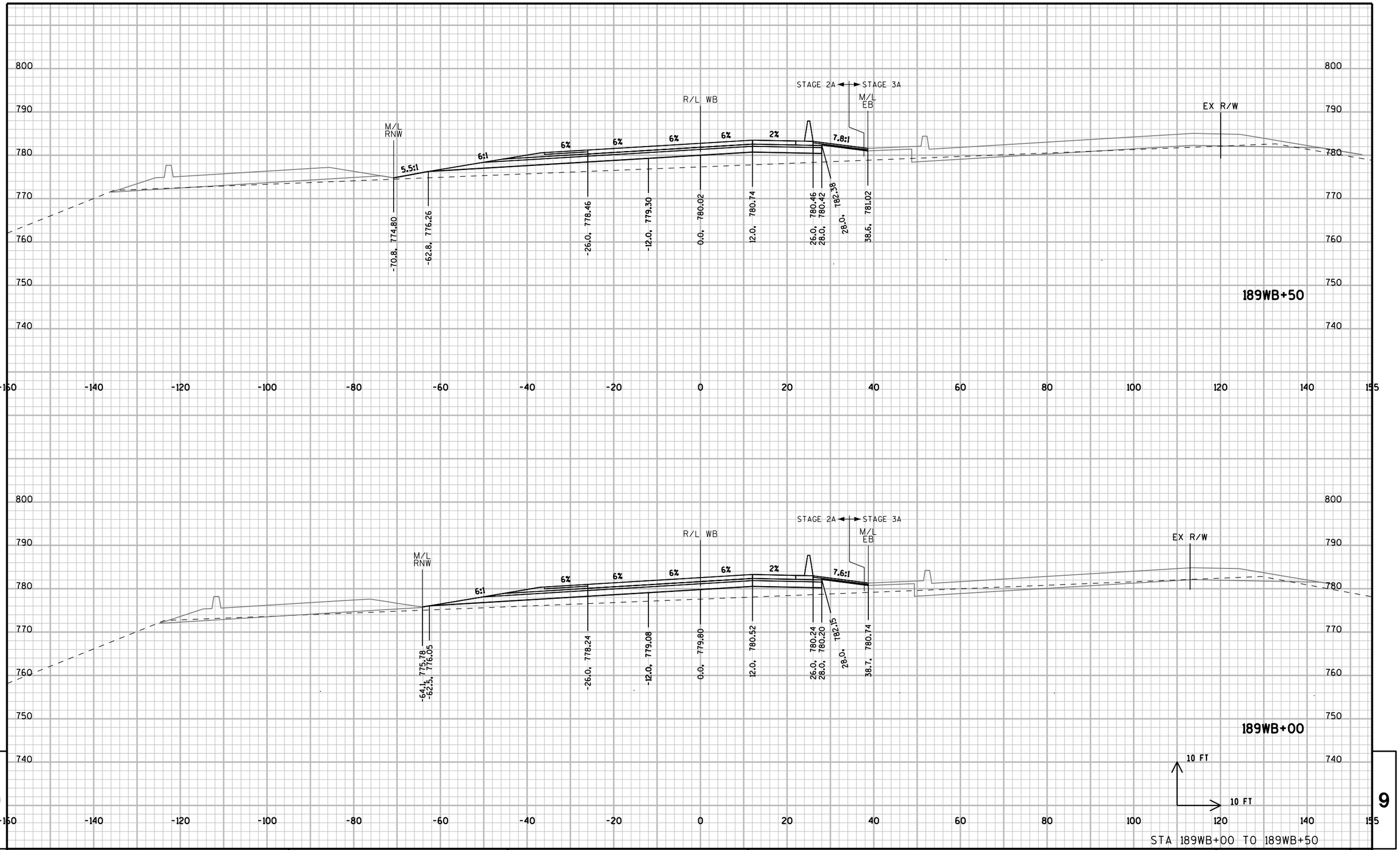
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9

STA 188WB+27 TO 188WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:23 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

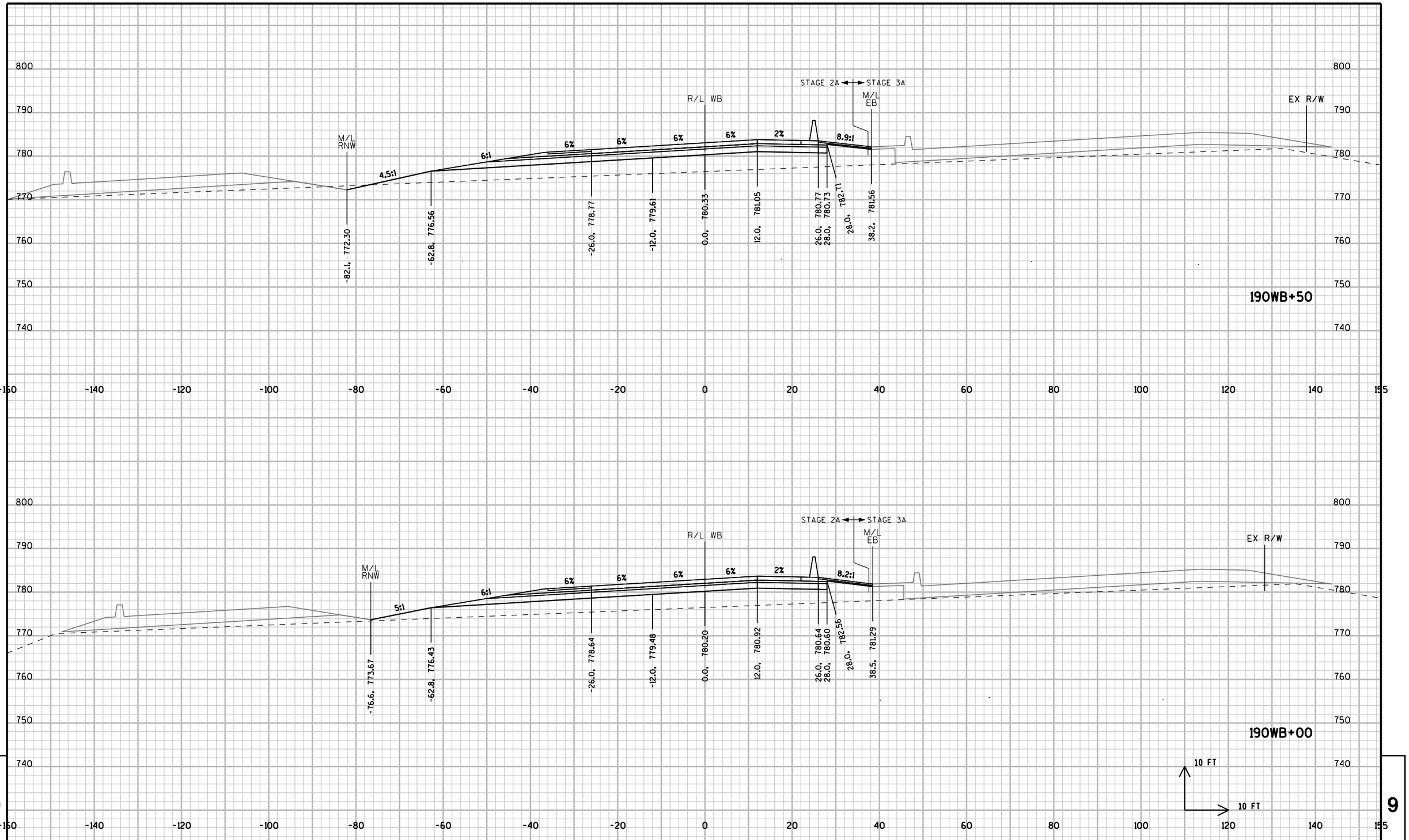


STA 189WB+00 TO 189WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 955	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:24 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

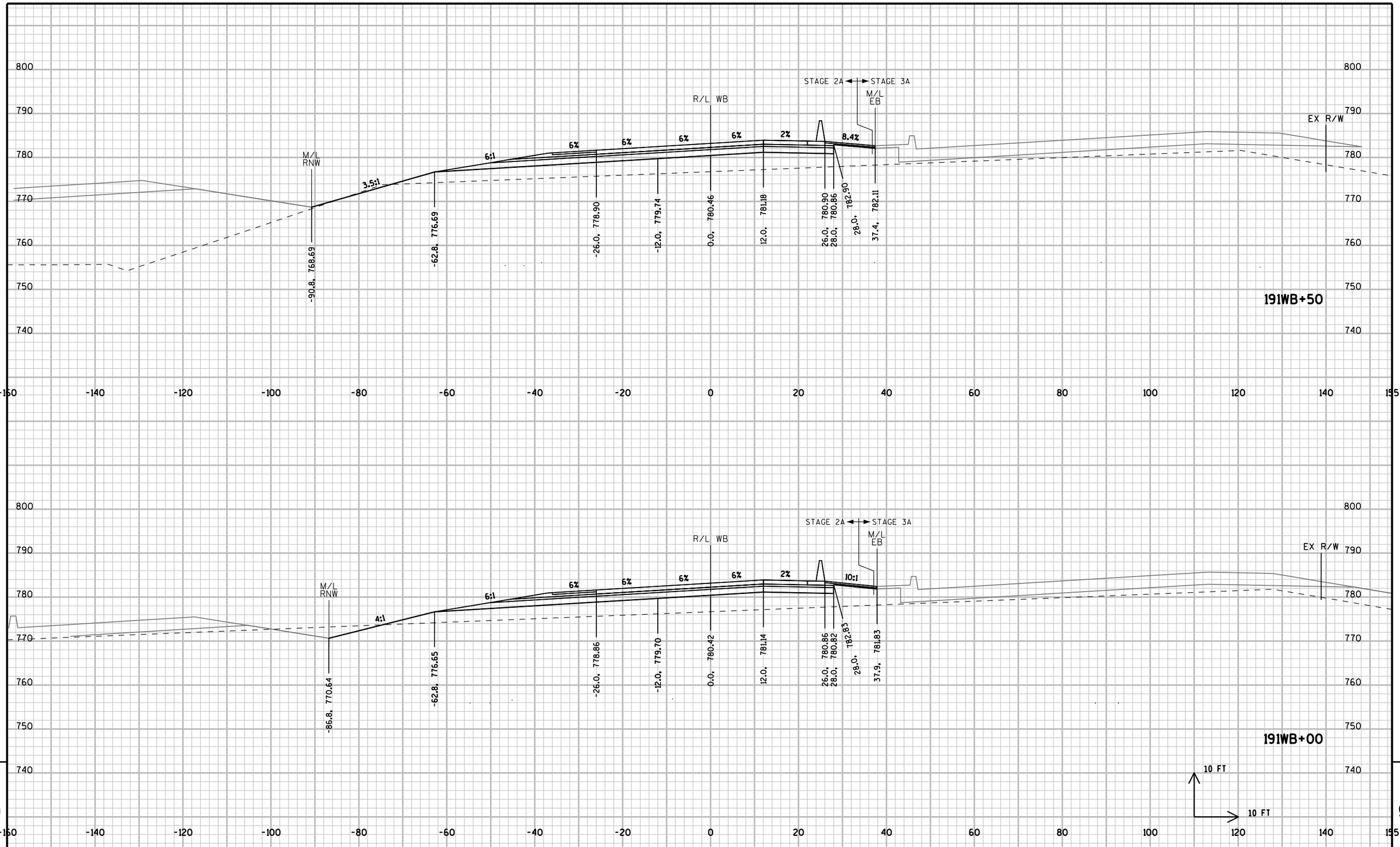


STA 190WB+00 TO 190WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 956	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:24 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

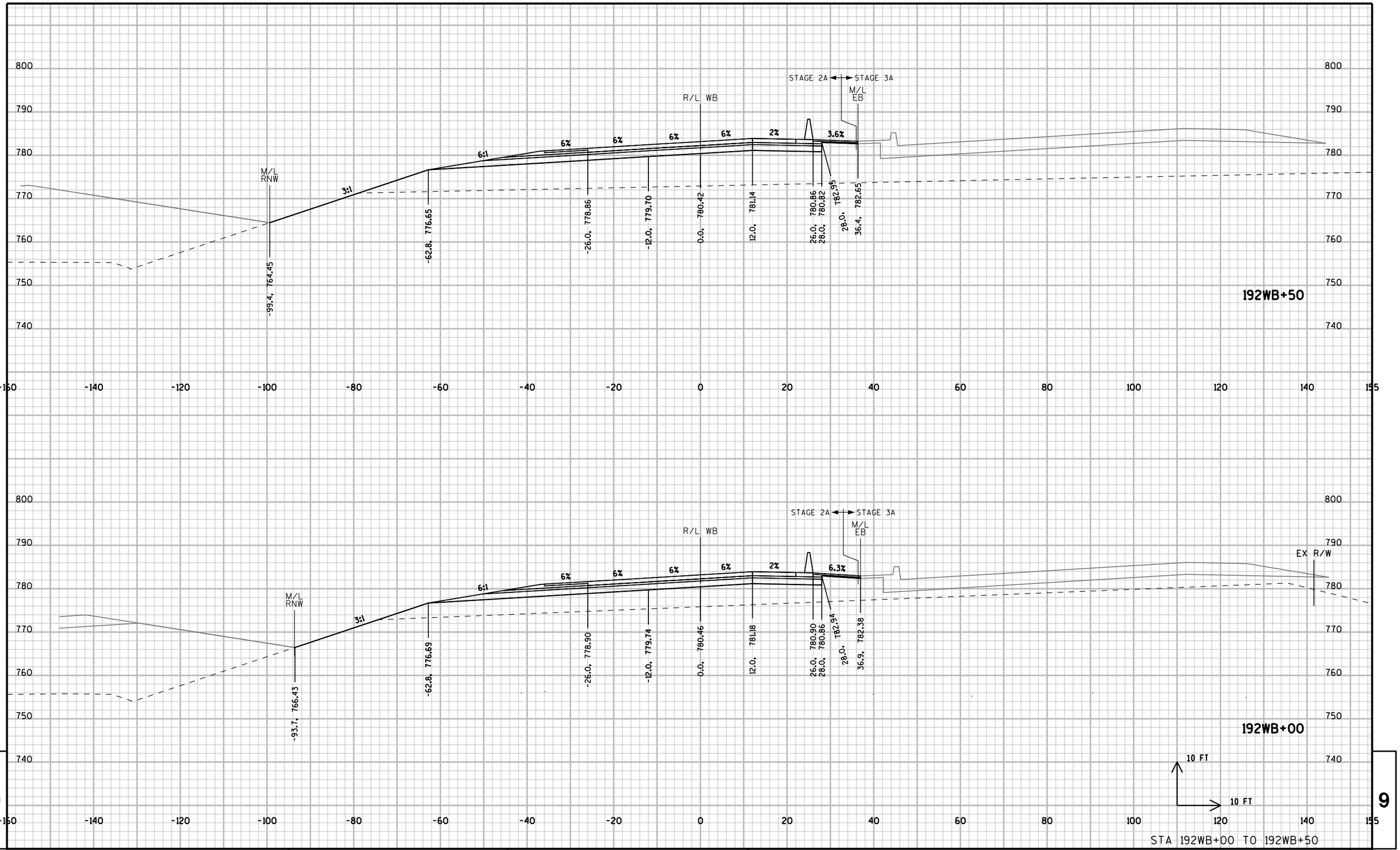


STA 191WB+00 TO 191WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 957	E

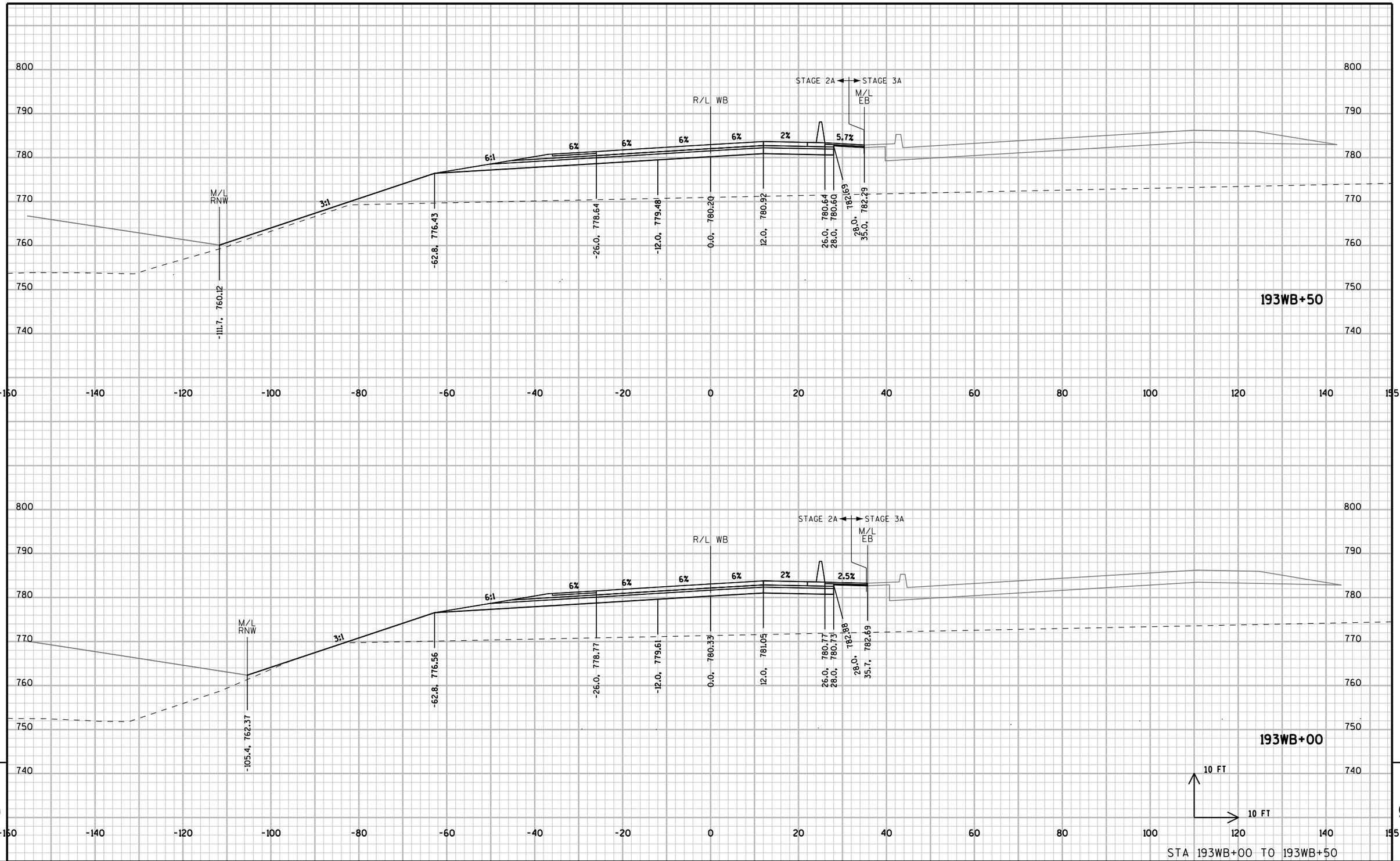
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WISDOT/CADDS SHEET 21



STA 192WB+00 TO 192WB+50

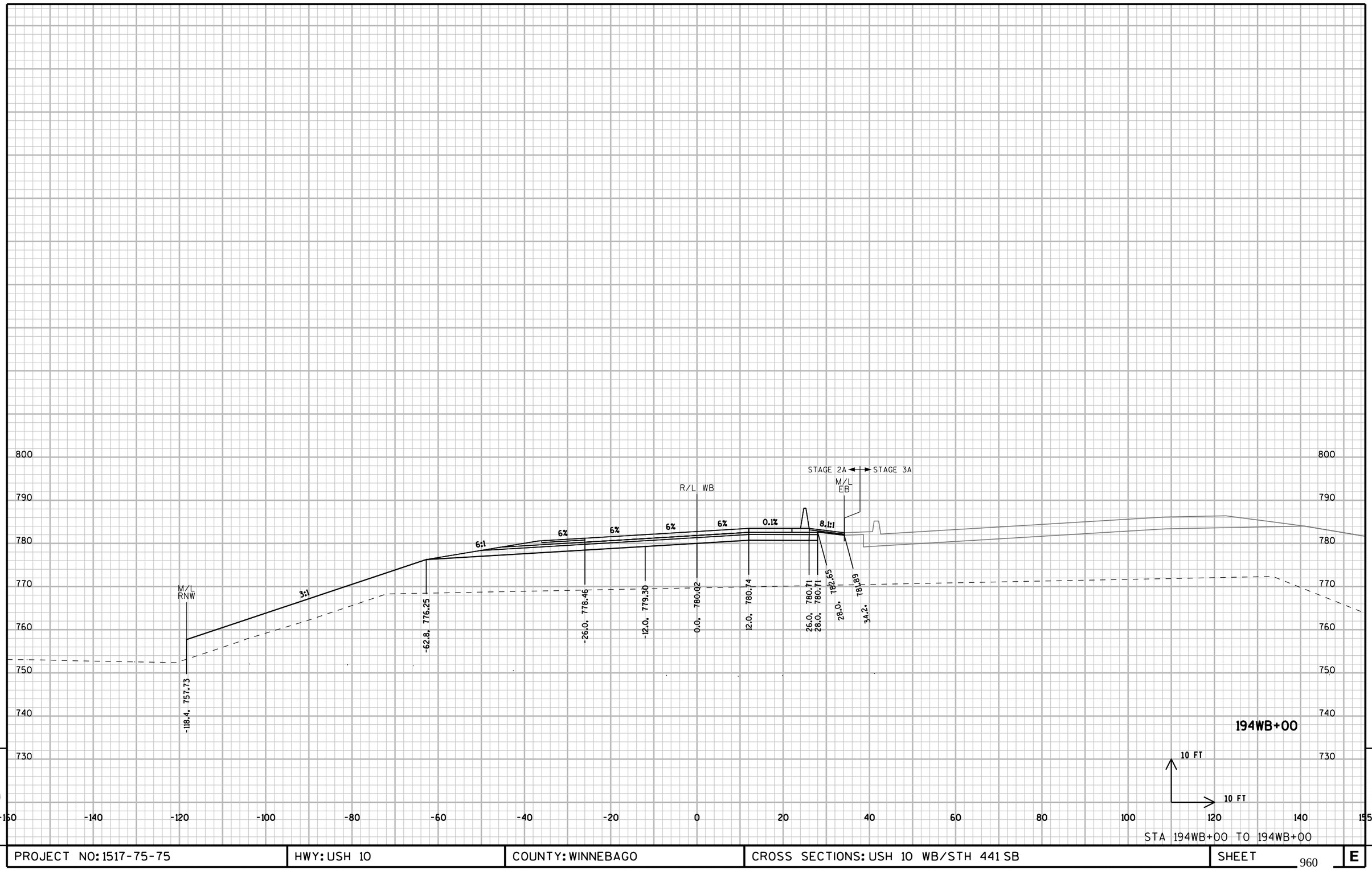
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 958	E



STA 193WB+00 TO 193WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:26 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

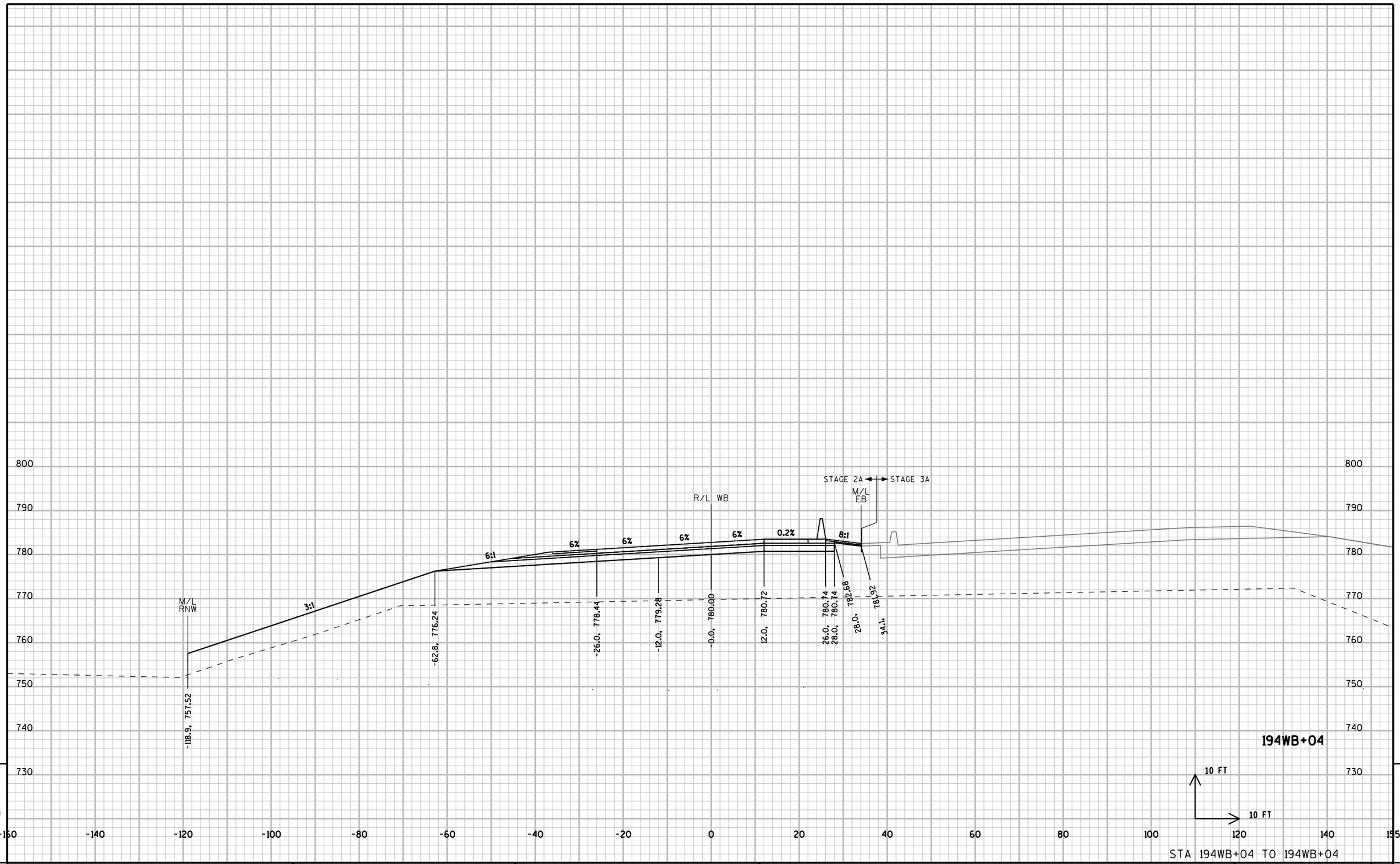


STA 194WB+00 TO 194WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 960	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:27 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

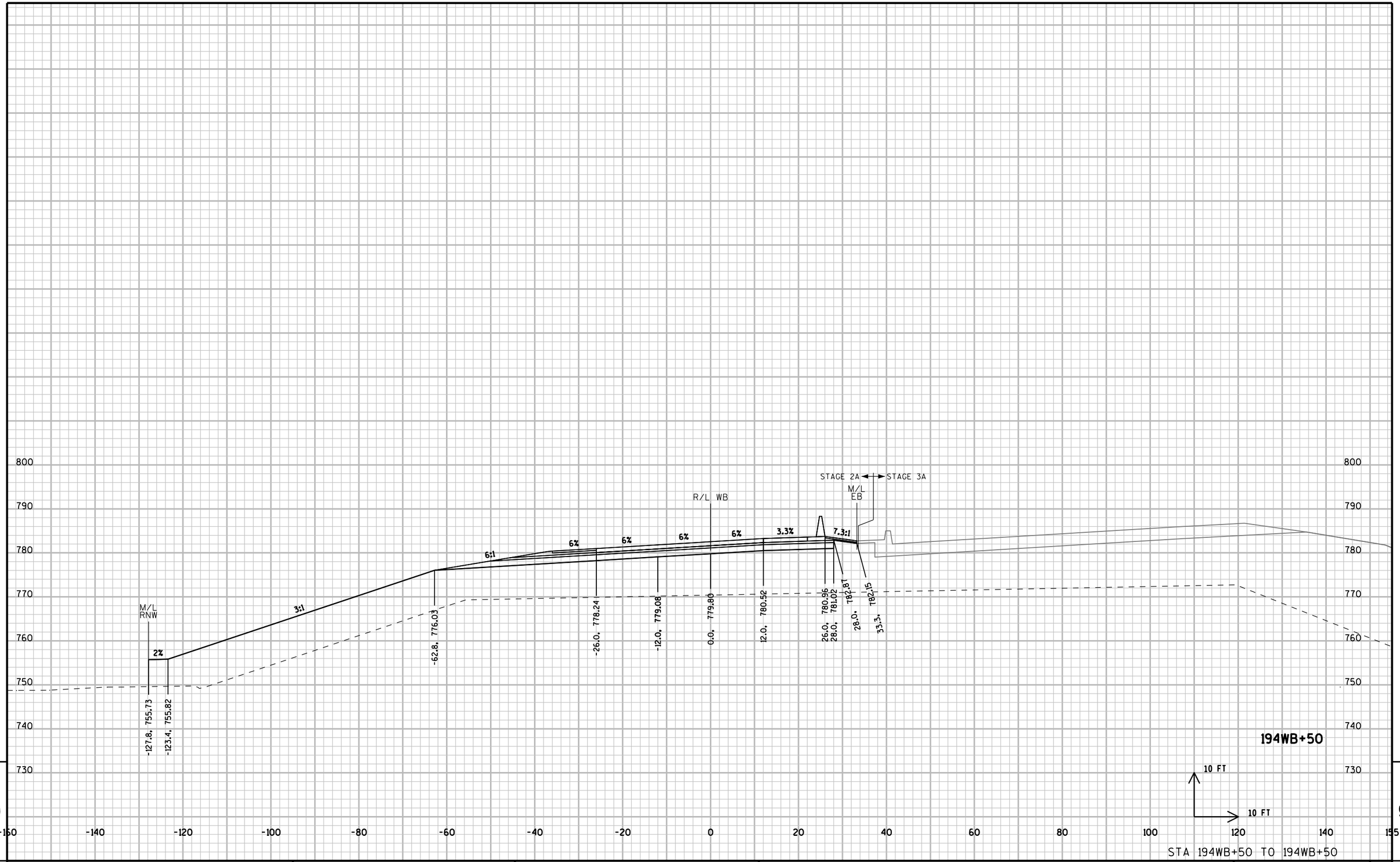
WISDOT/CADDS SHEET 21



STA 194WB+04 TO 194WB+04

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:28 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

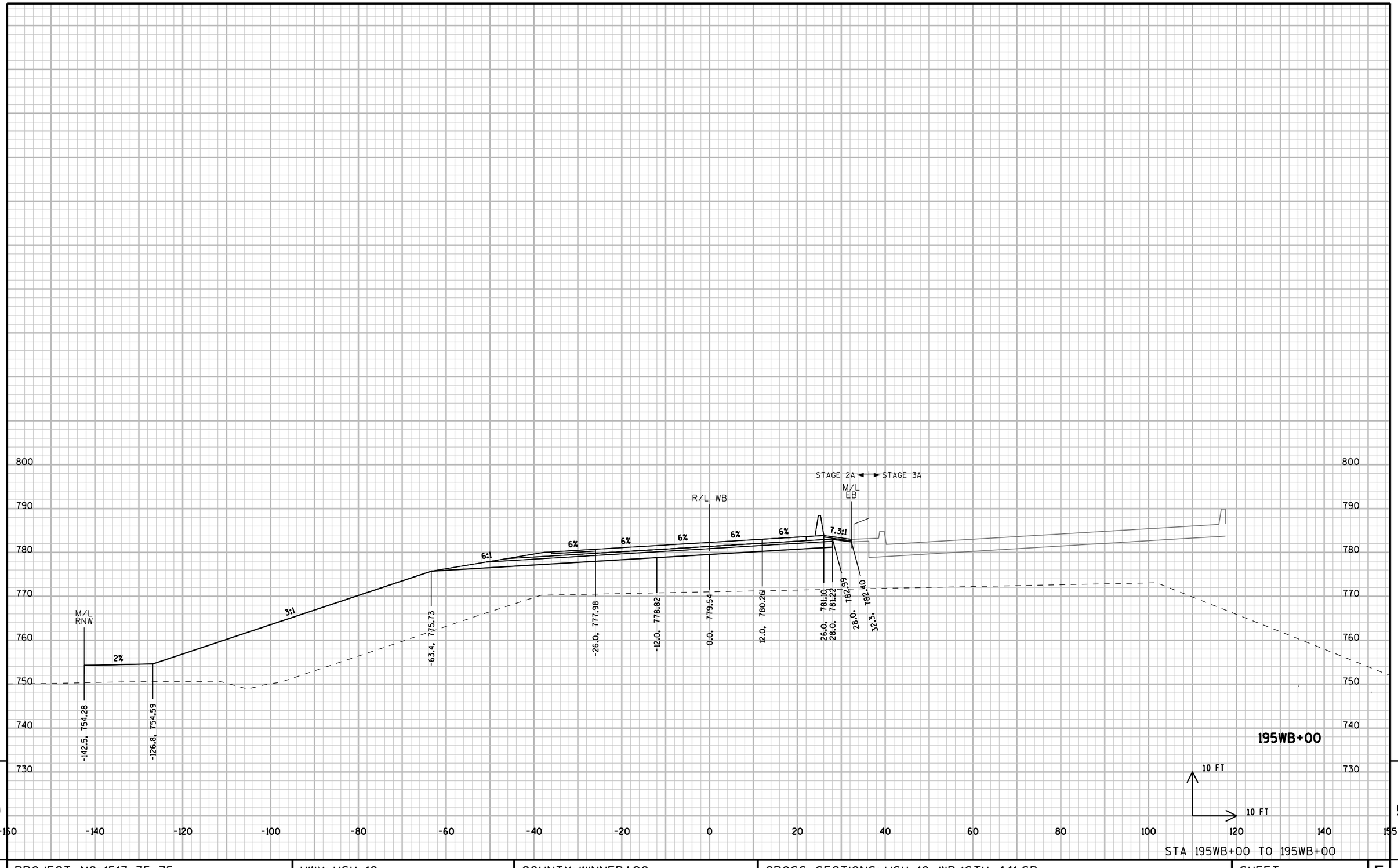


STA 194WB+50 TO 194WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:28 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

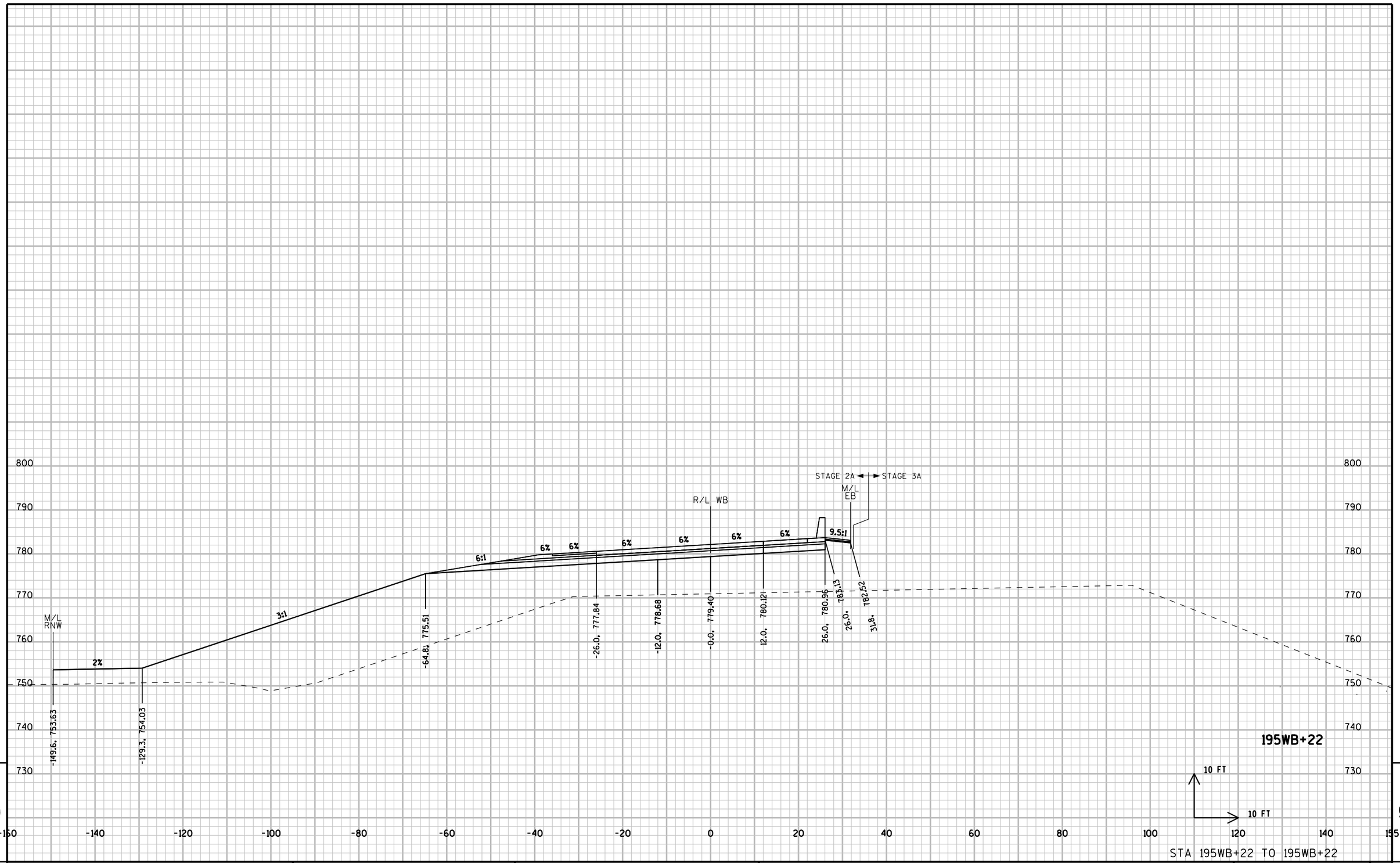
WISDOT/CADDS SHEET 21



STA 195WB+00 TO 195WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

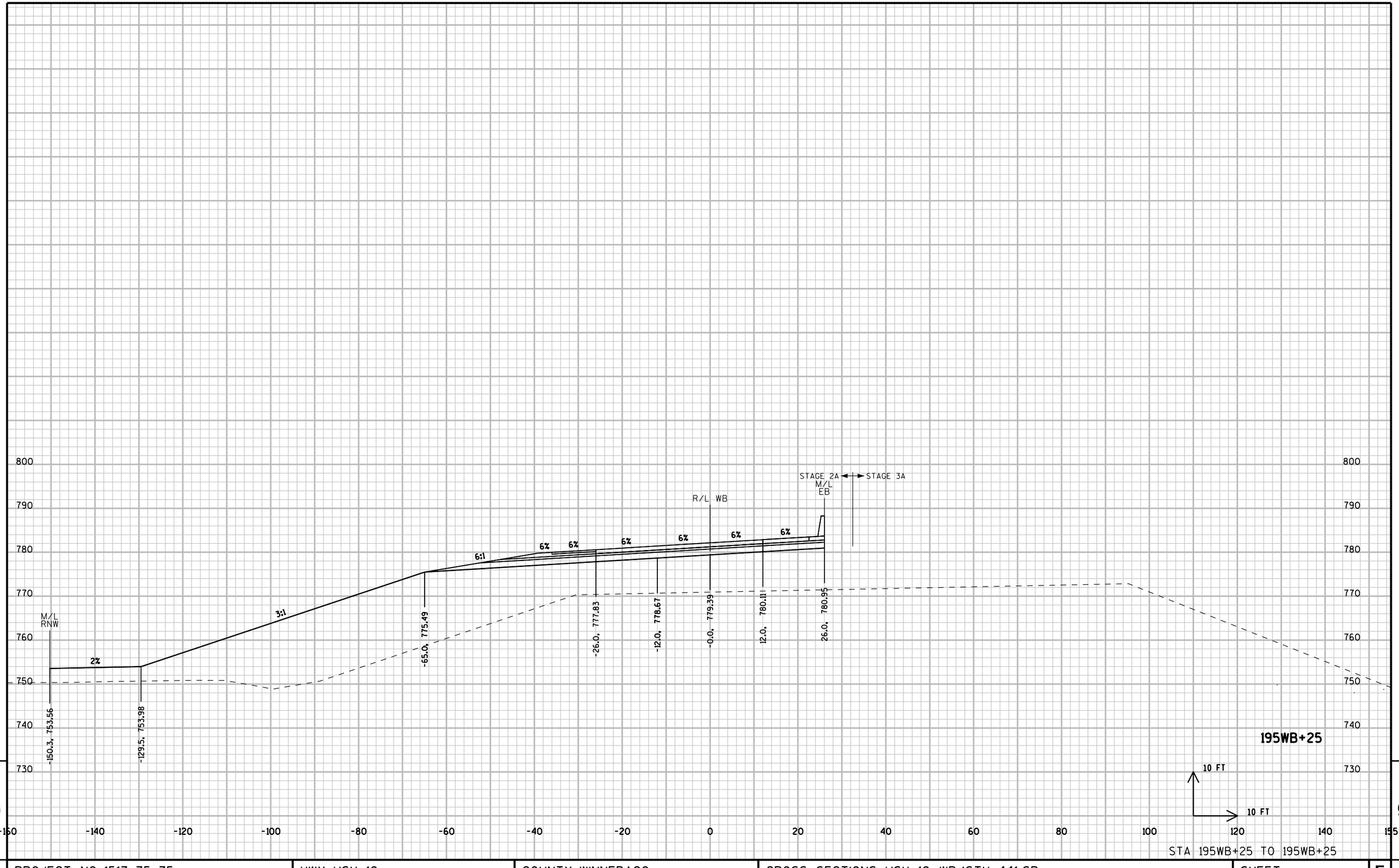
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WISDOT/CADDS SHEET 21



STA 195WB+22 TO 195WB+22

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:30 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



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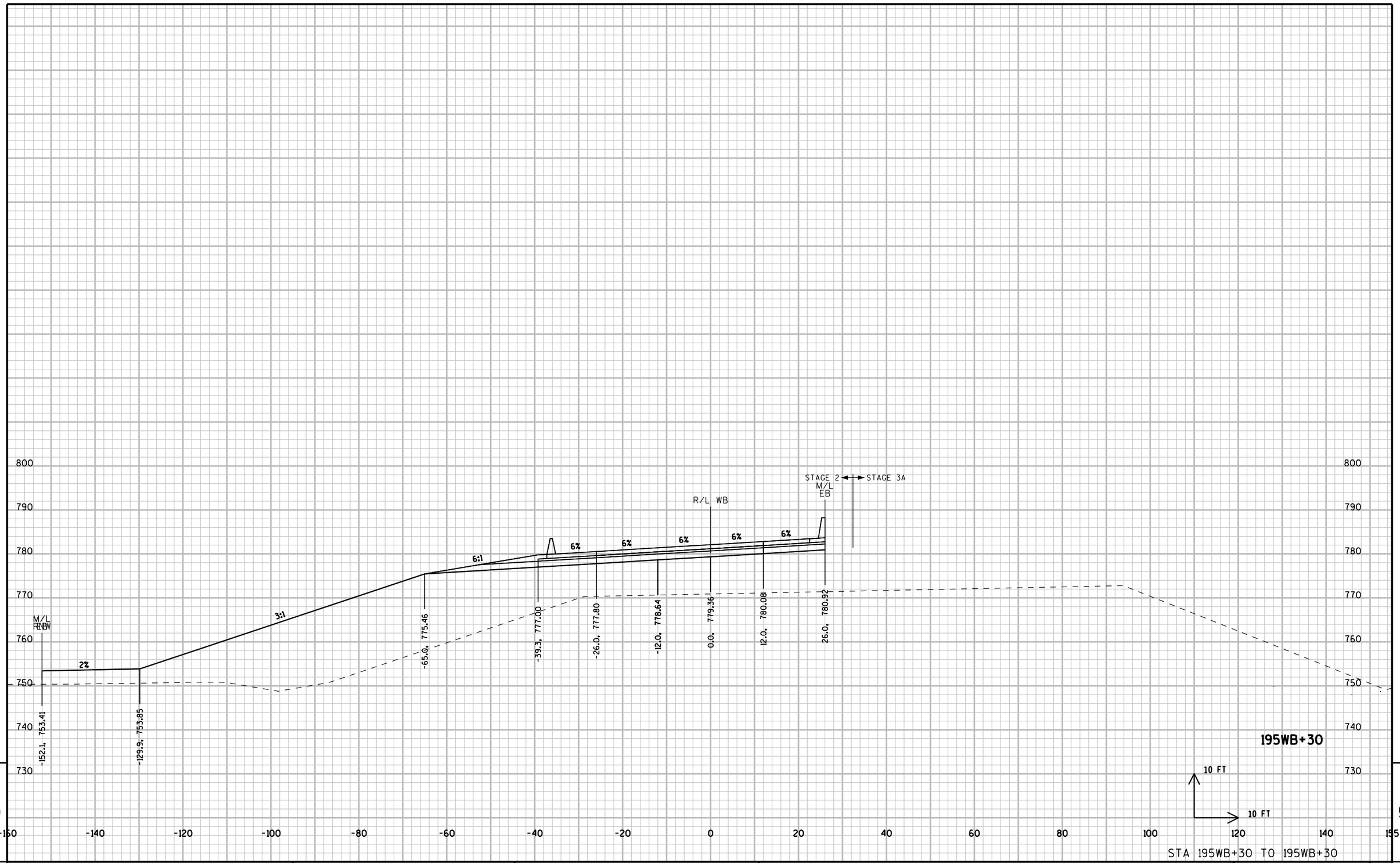
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STA 195WB+25 TO 195WB+25

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:30 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



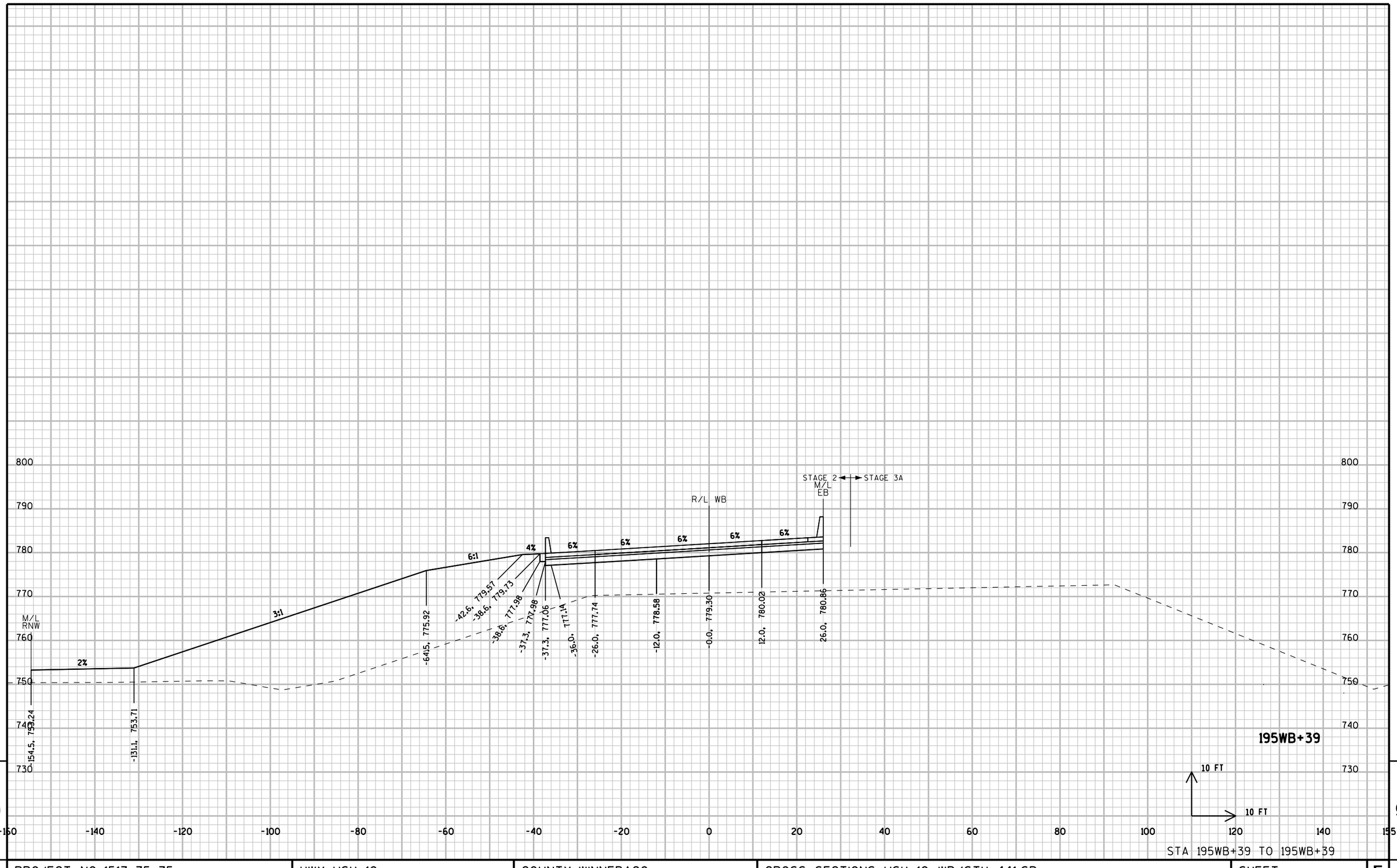
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9

STA 195WB+30 TO 195WB+30

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:31 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



9

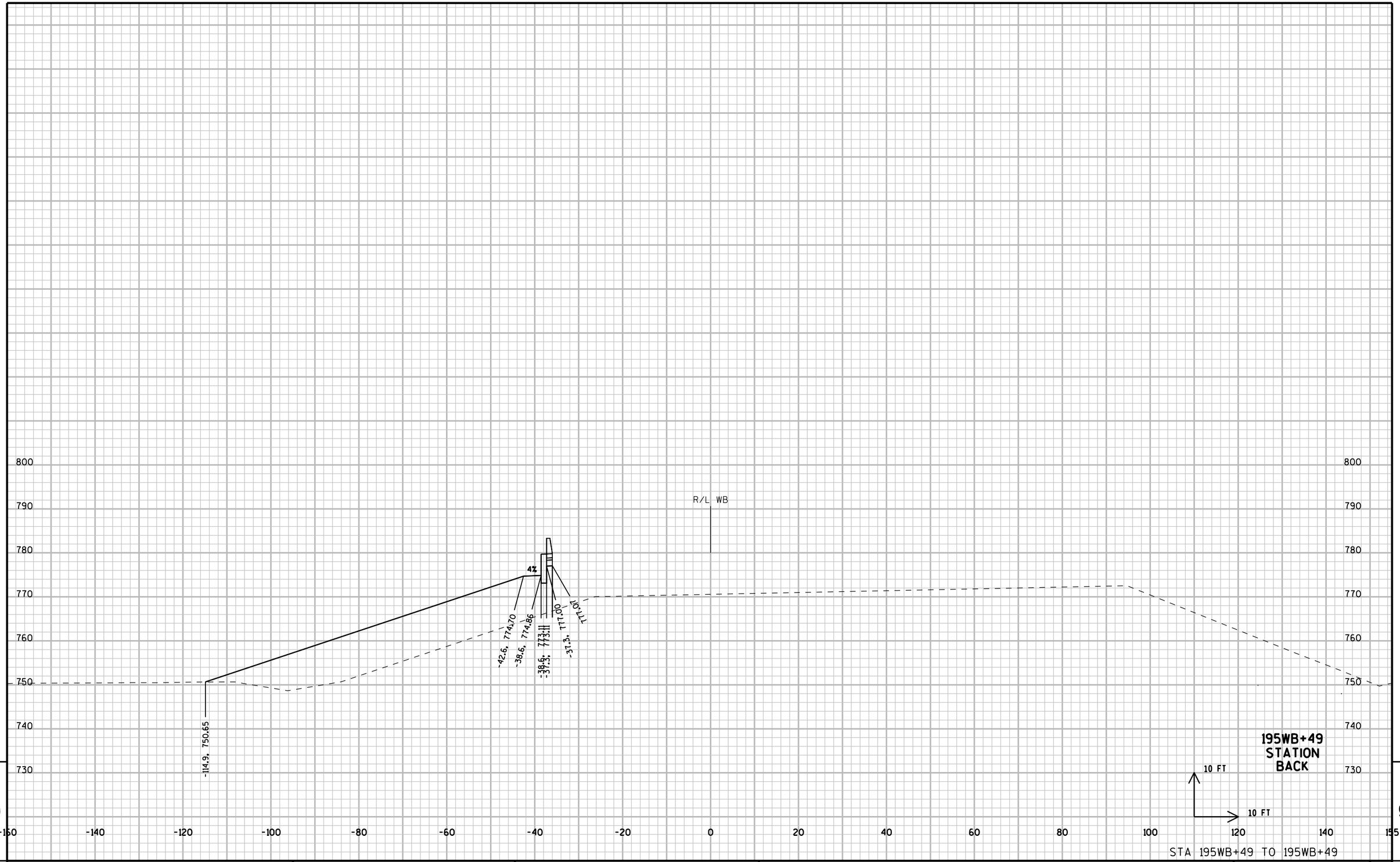
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STA 195WB+39 TO 195WB+39

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:32 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

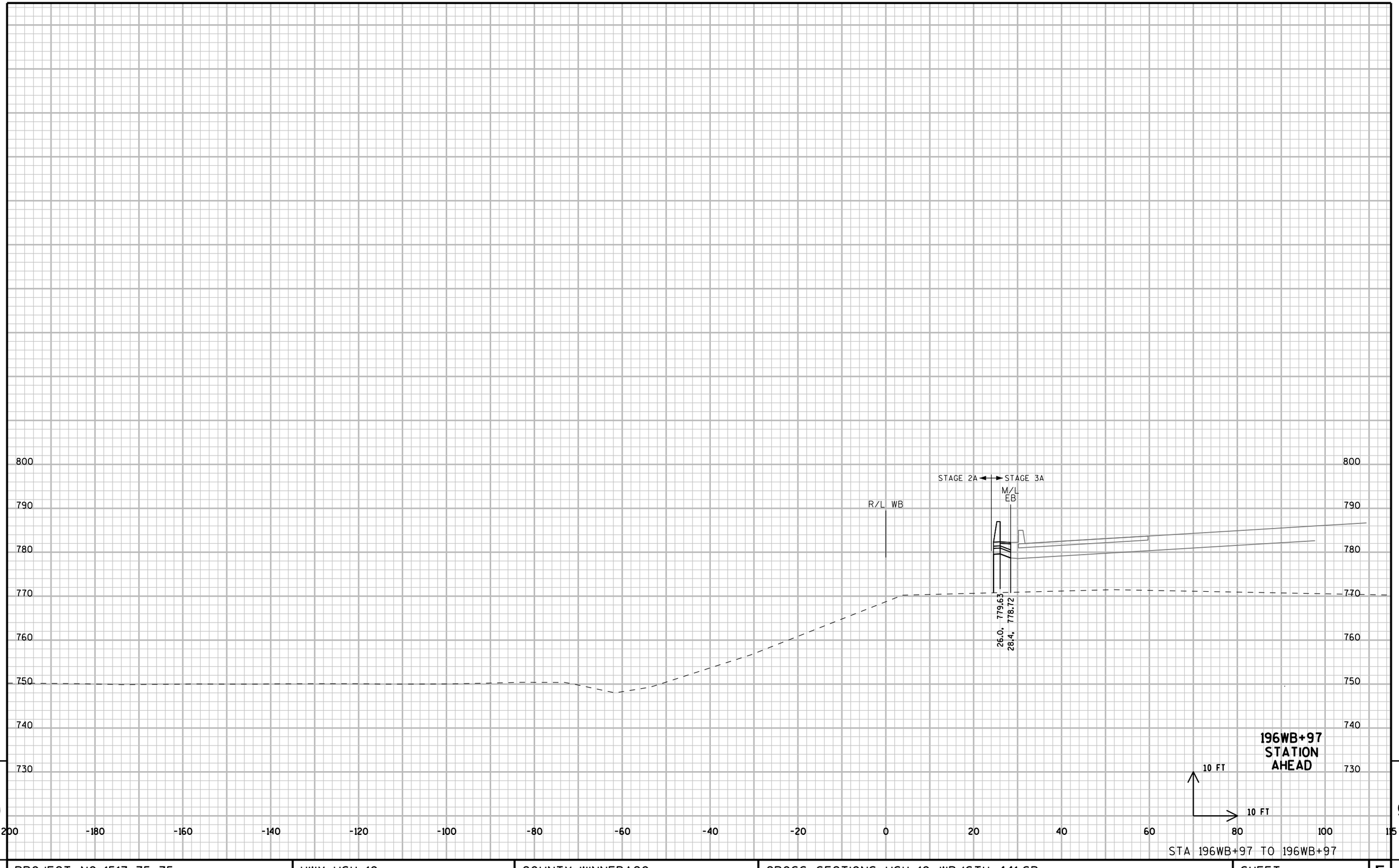
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STA 195WB+49 TO 195WB+49

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:32 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

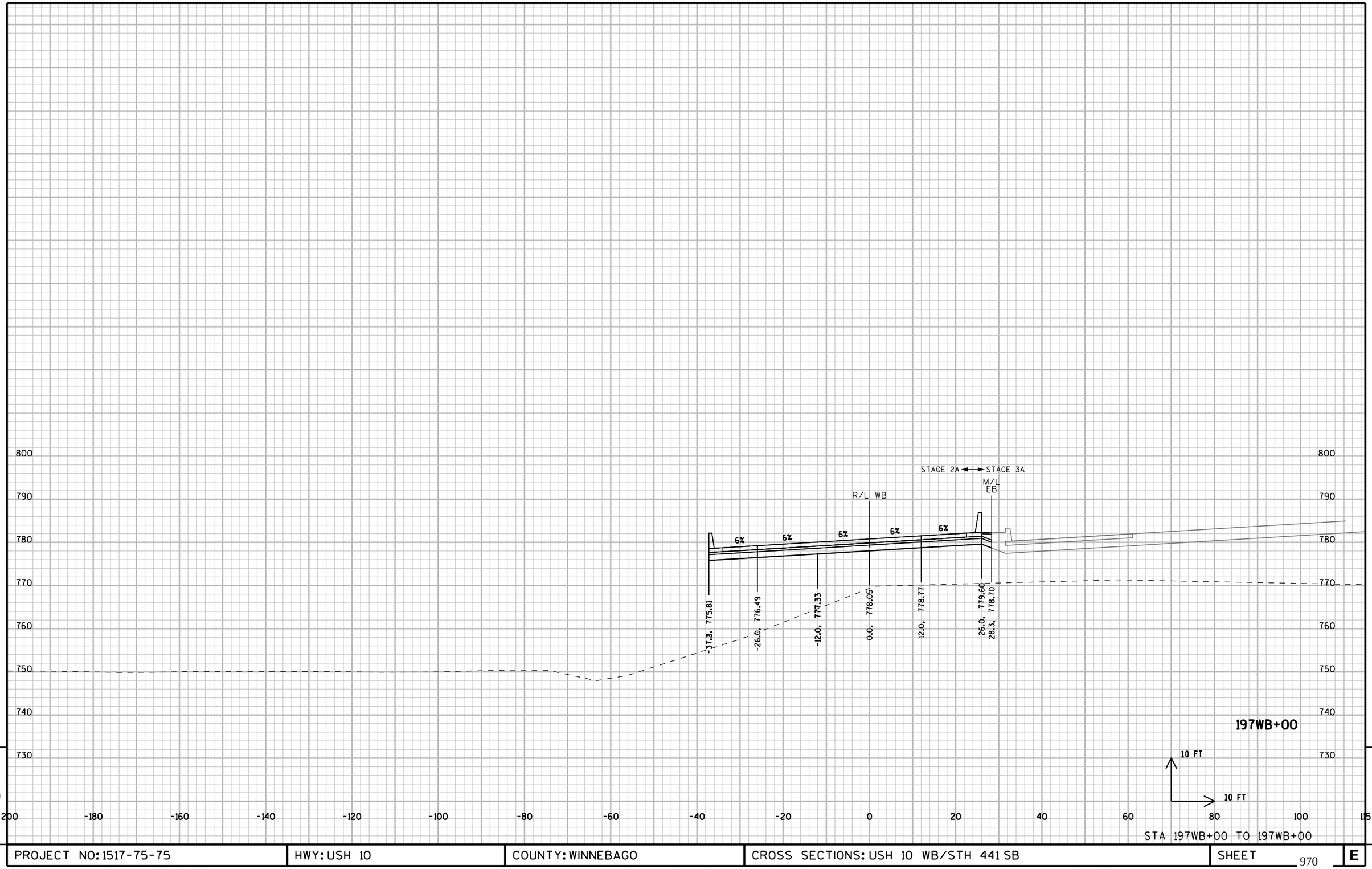
WISDOT/CADDS SHEET 21



STA 196WB+97 TO 196WB+97

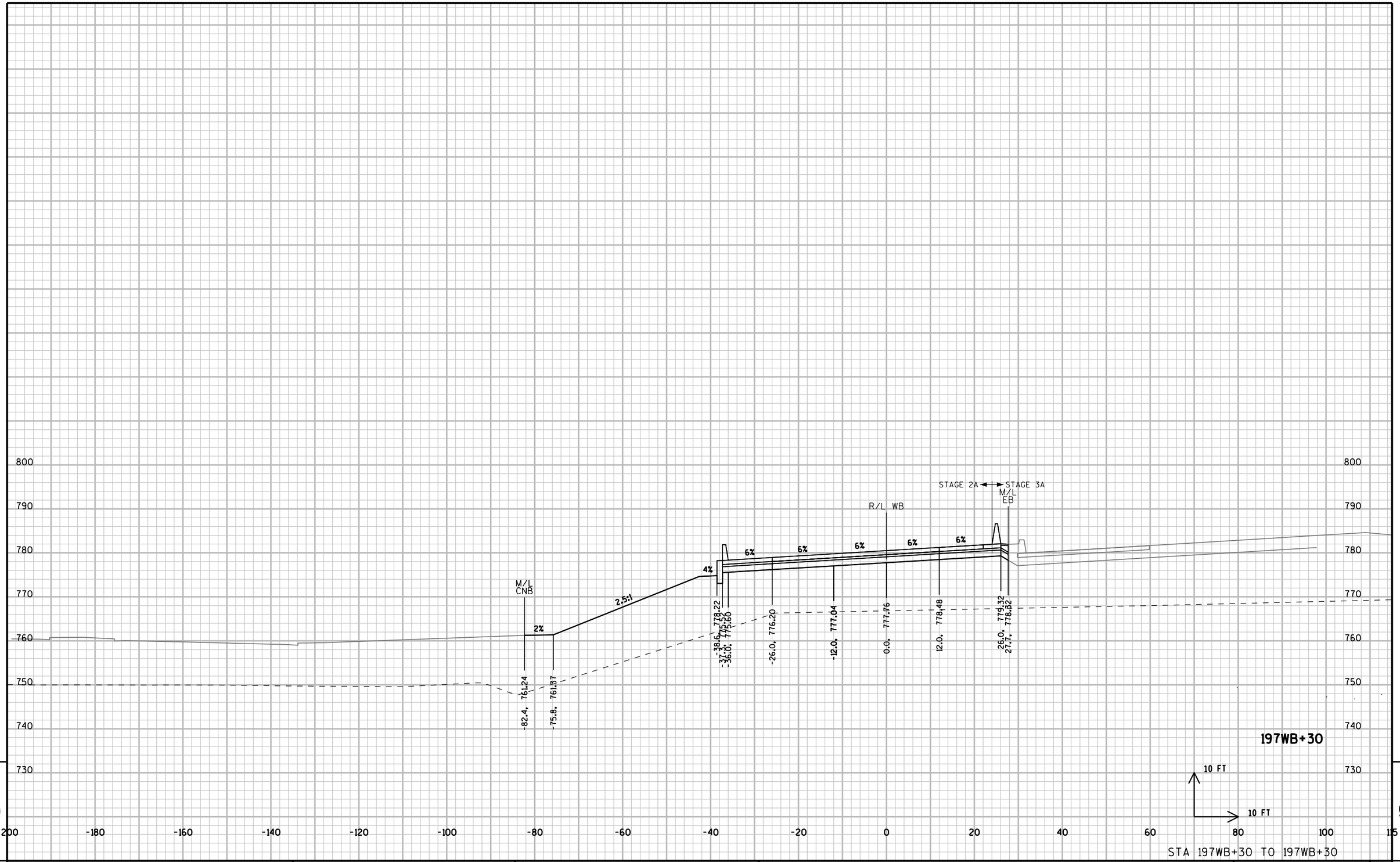
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:33 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



STA 197WB+00 TO 197WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 970	E



9

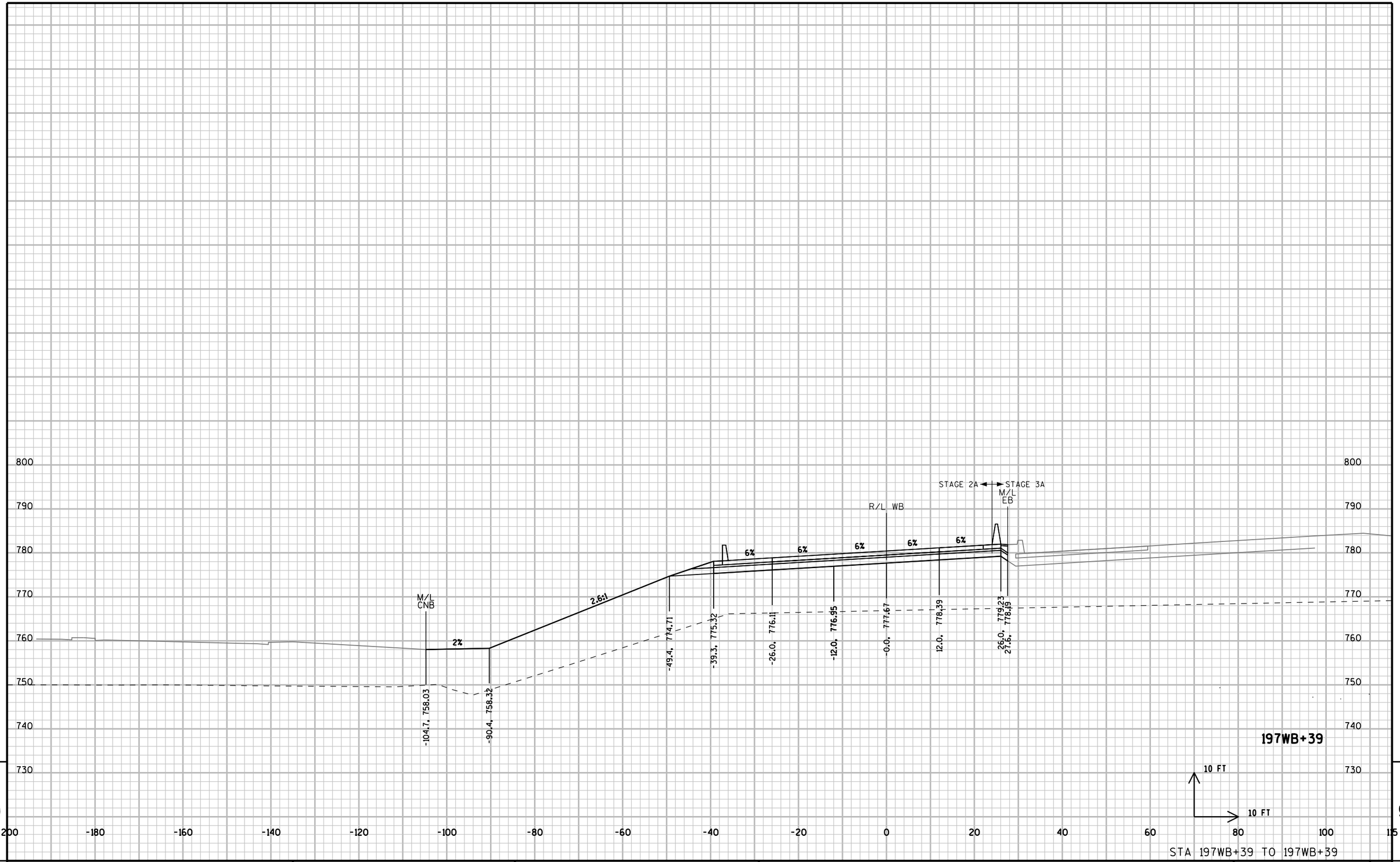
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STA 197WB+30 TO 197WB+30

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 971	E

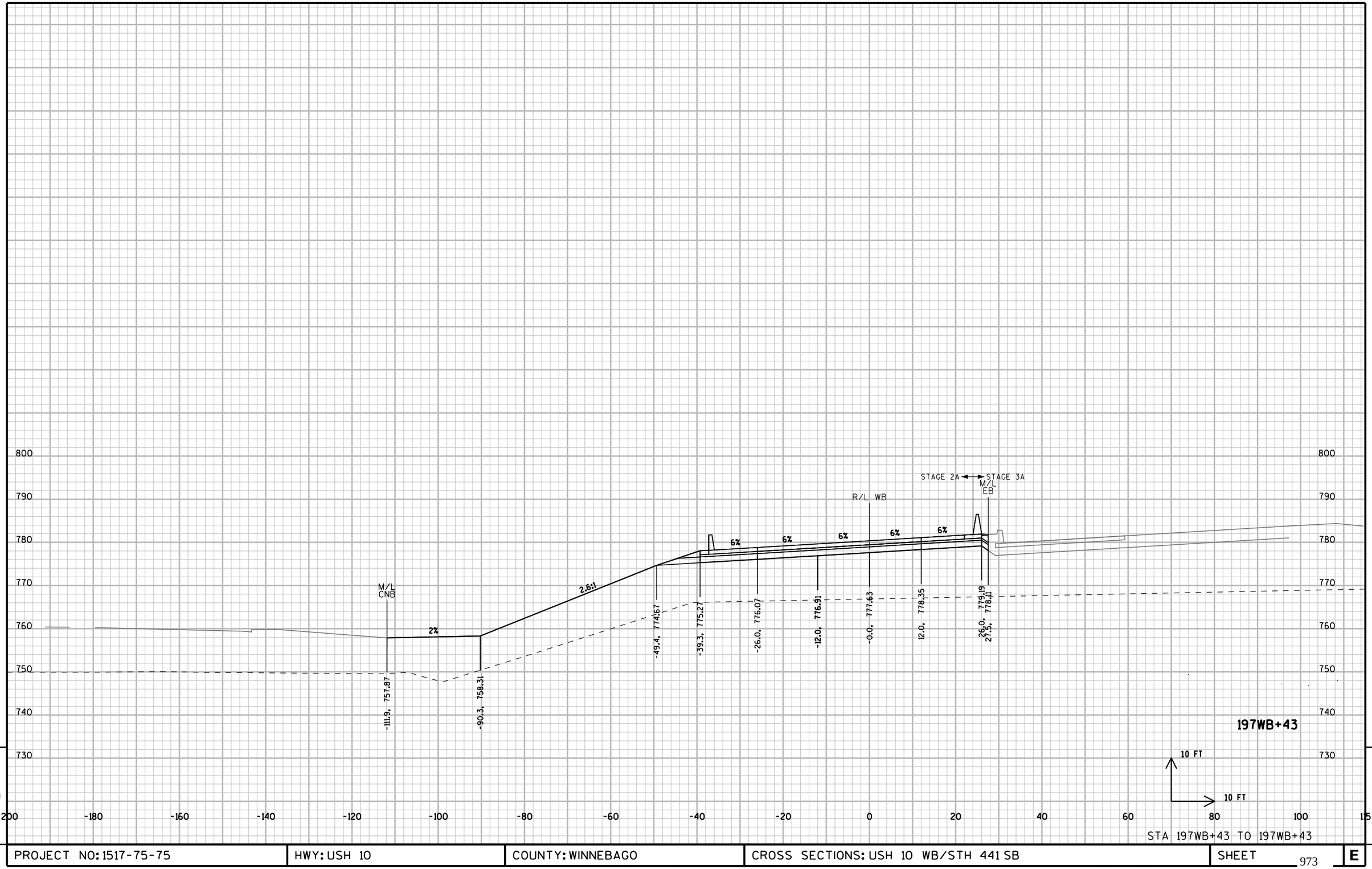
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WISDOT/CADDS SHEET 21



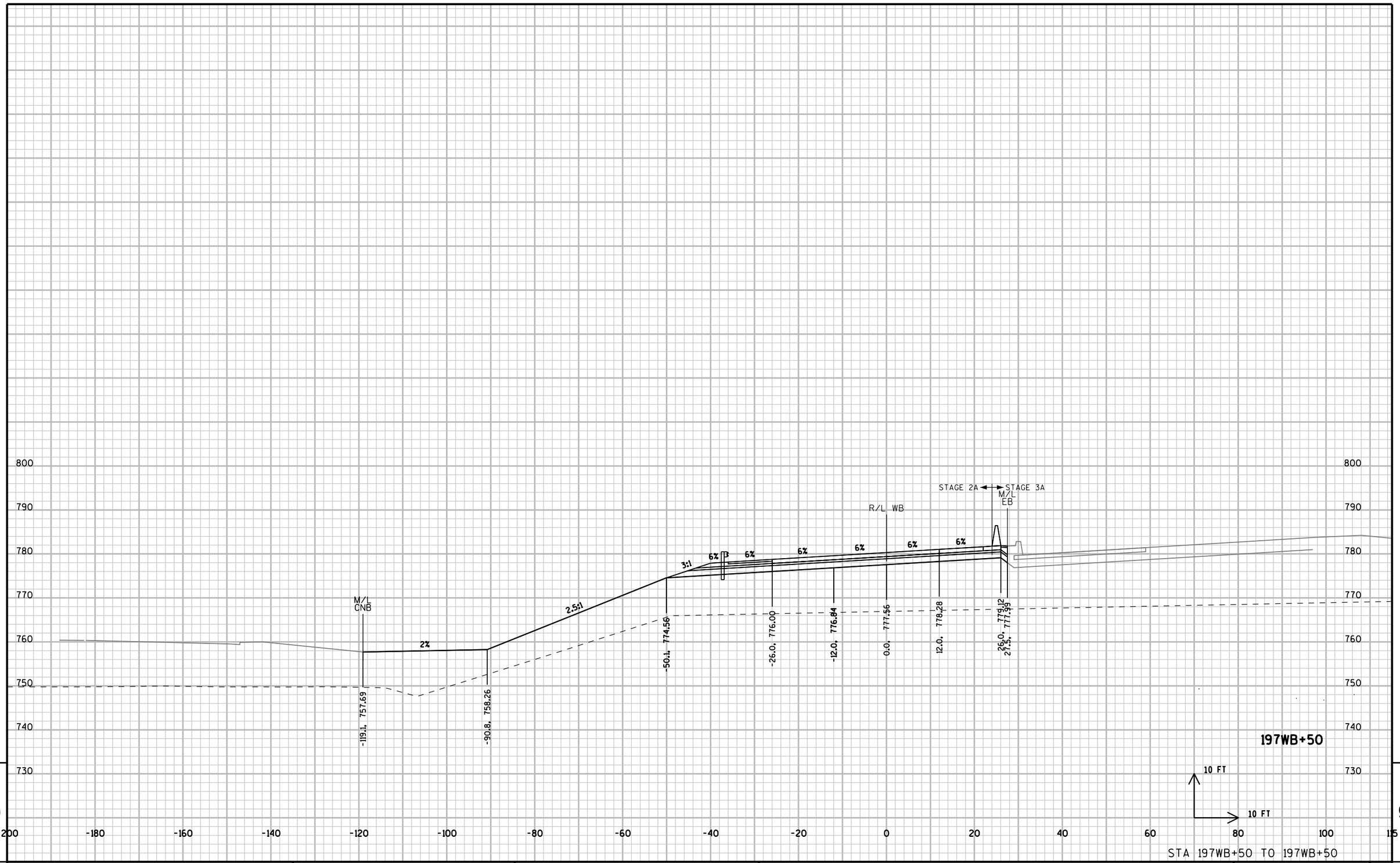
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 972	E



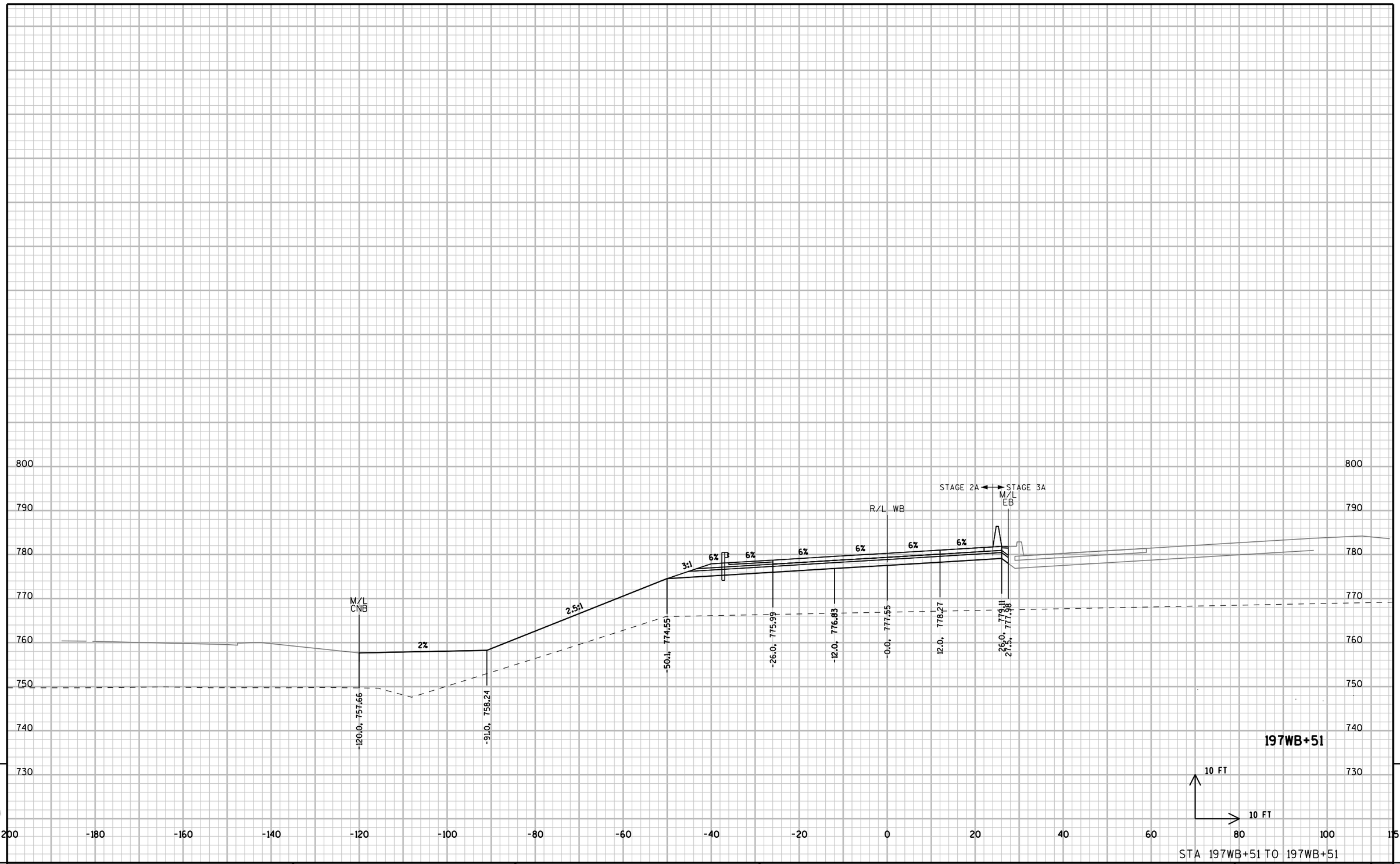
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:36 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



STA 197WB+50 TO 197WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 974	E

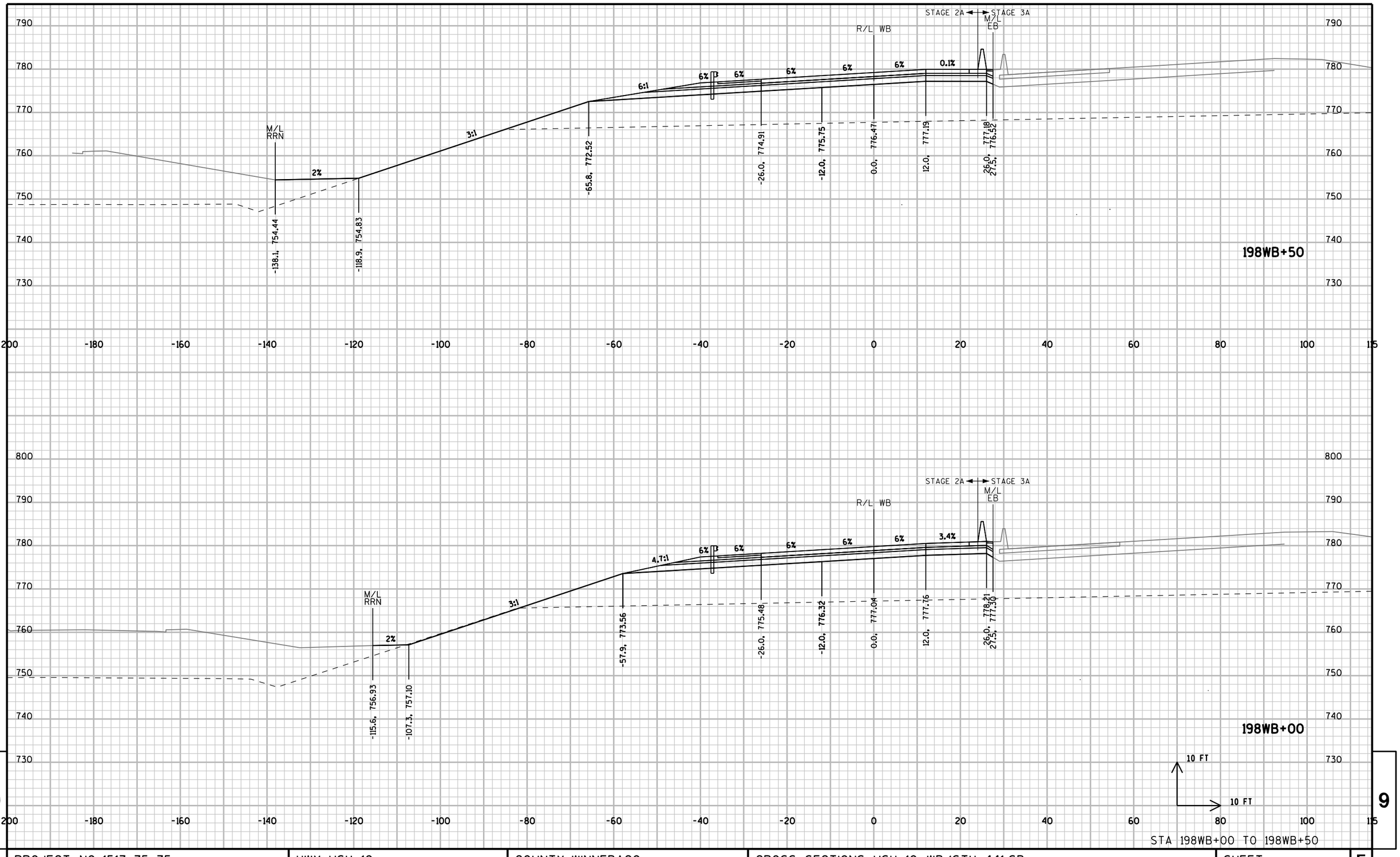


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9

STA 197WB+51 TO 197WB+51

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 975	E



9

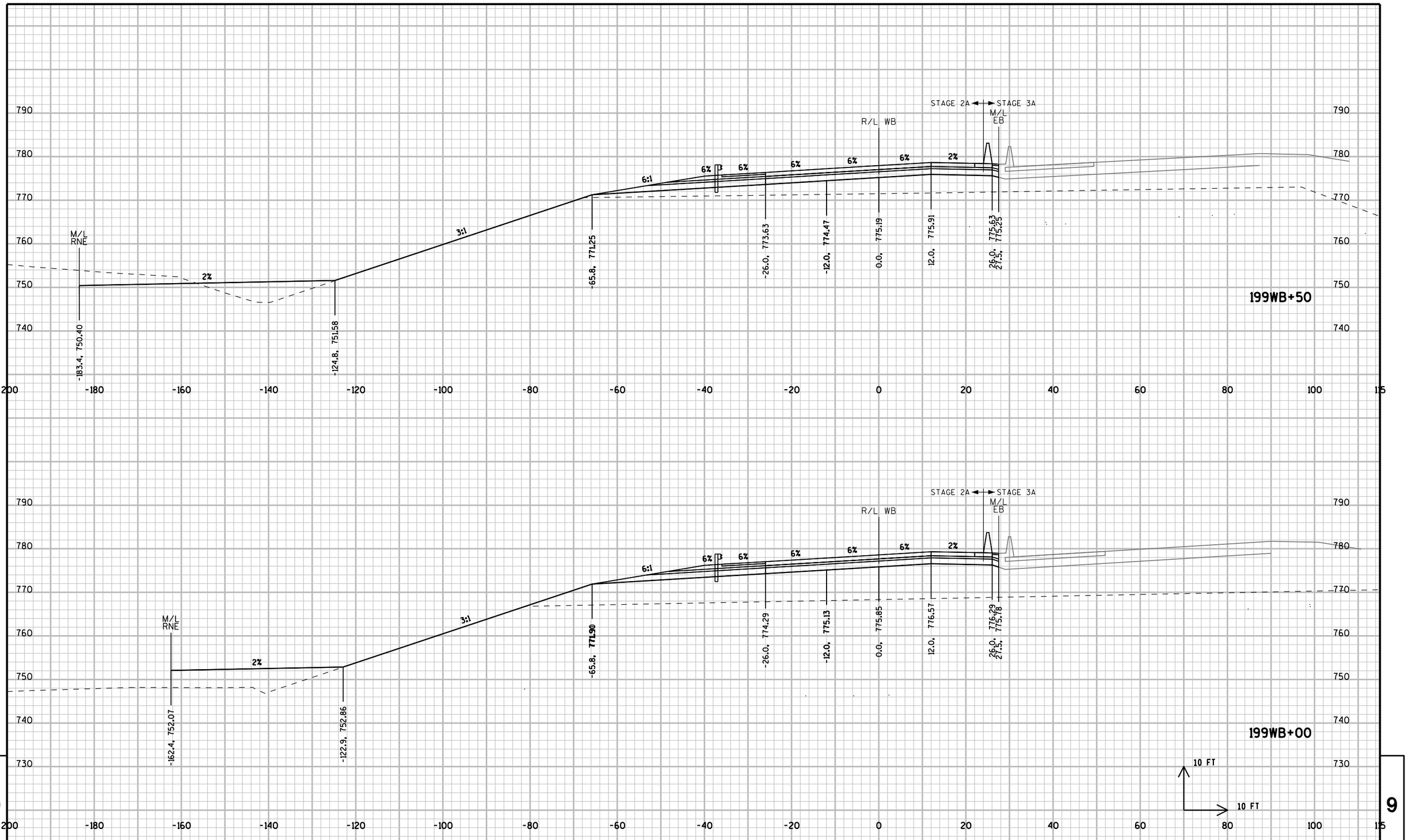
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STA 198WB+00 TO 198WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:48 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

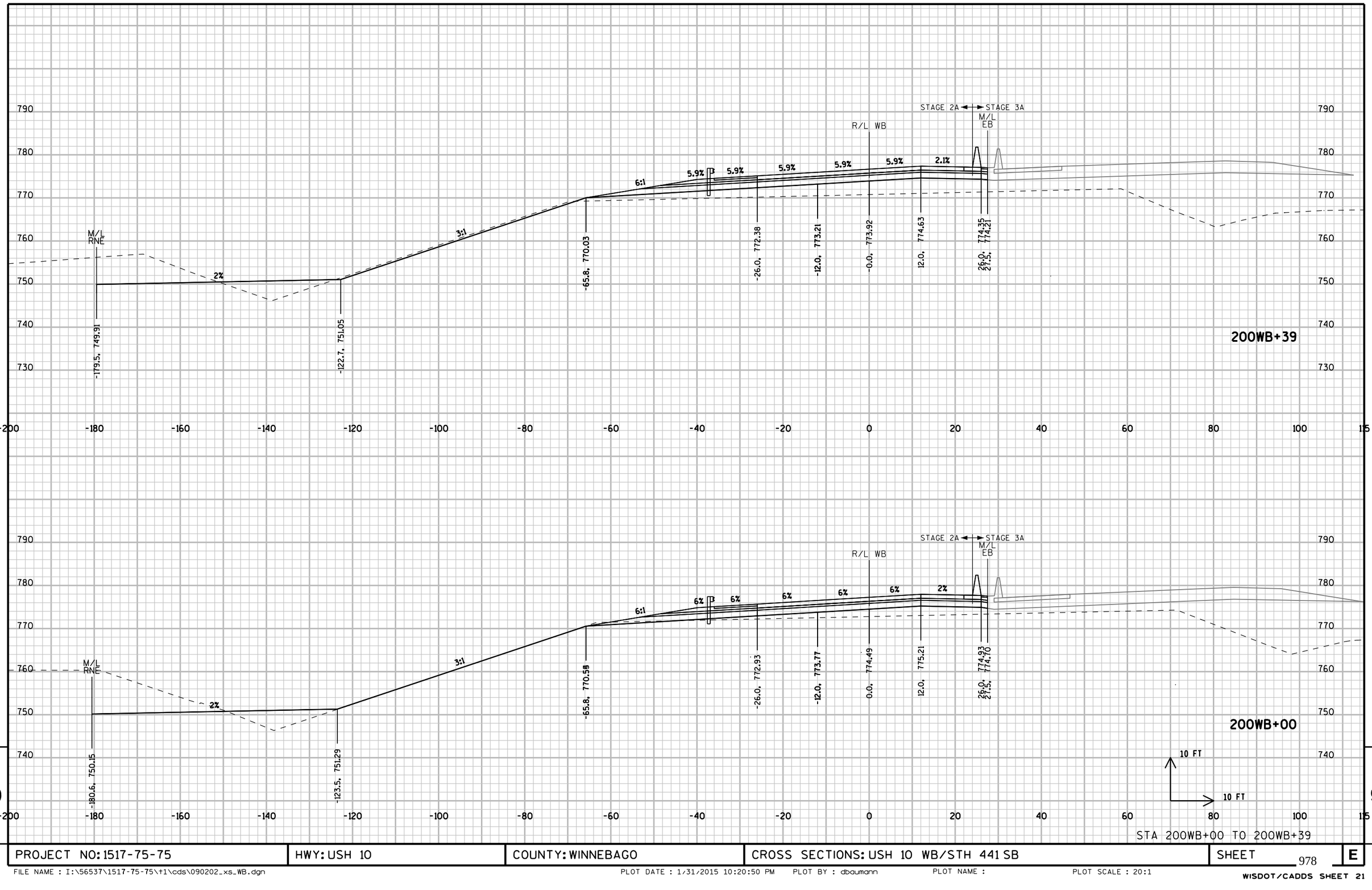
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:49 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

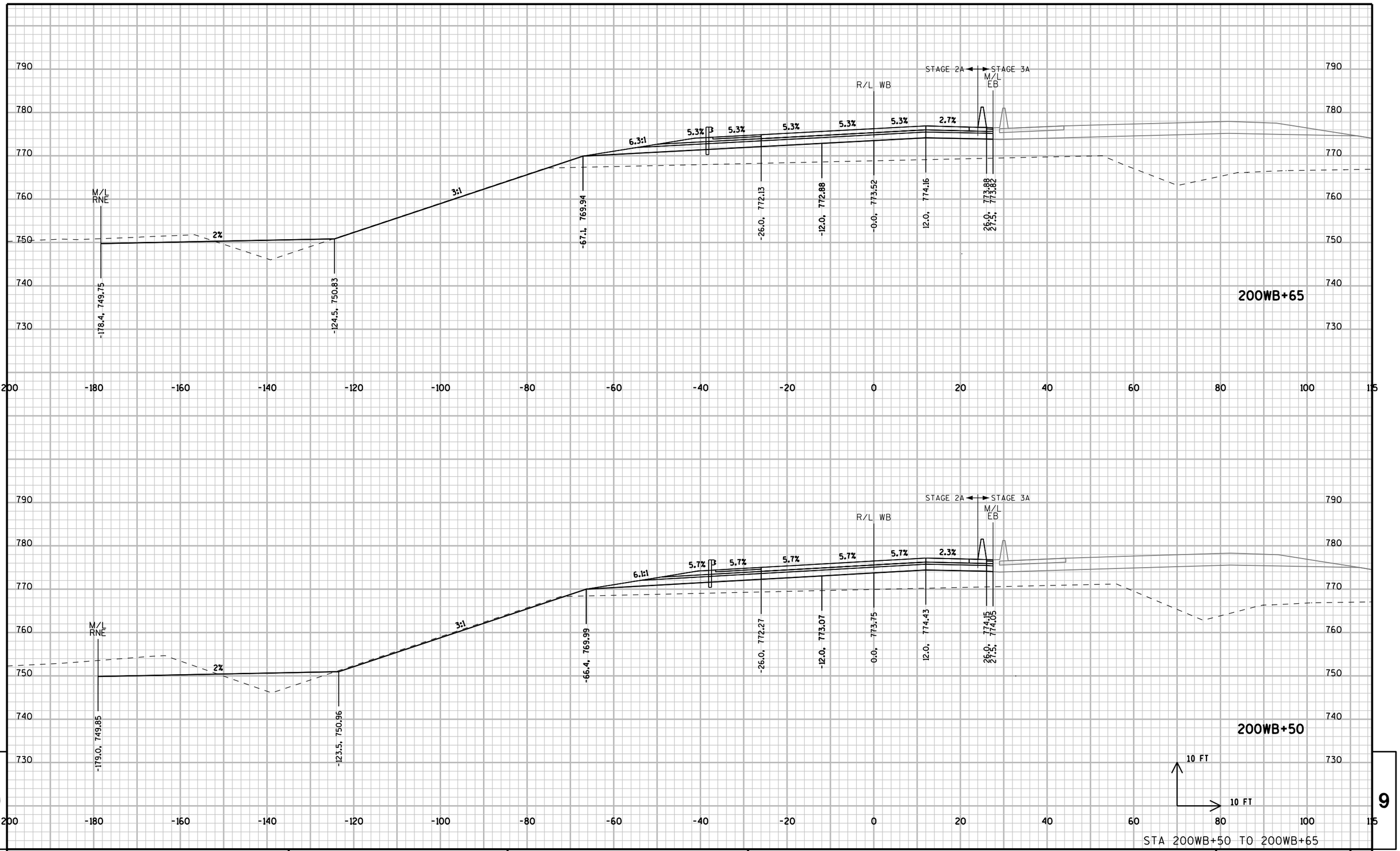
9

STA 200WB+00 TO 200WB+39

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:50 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

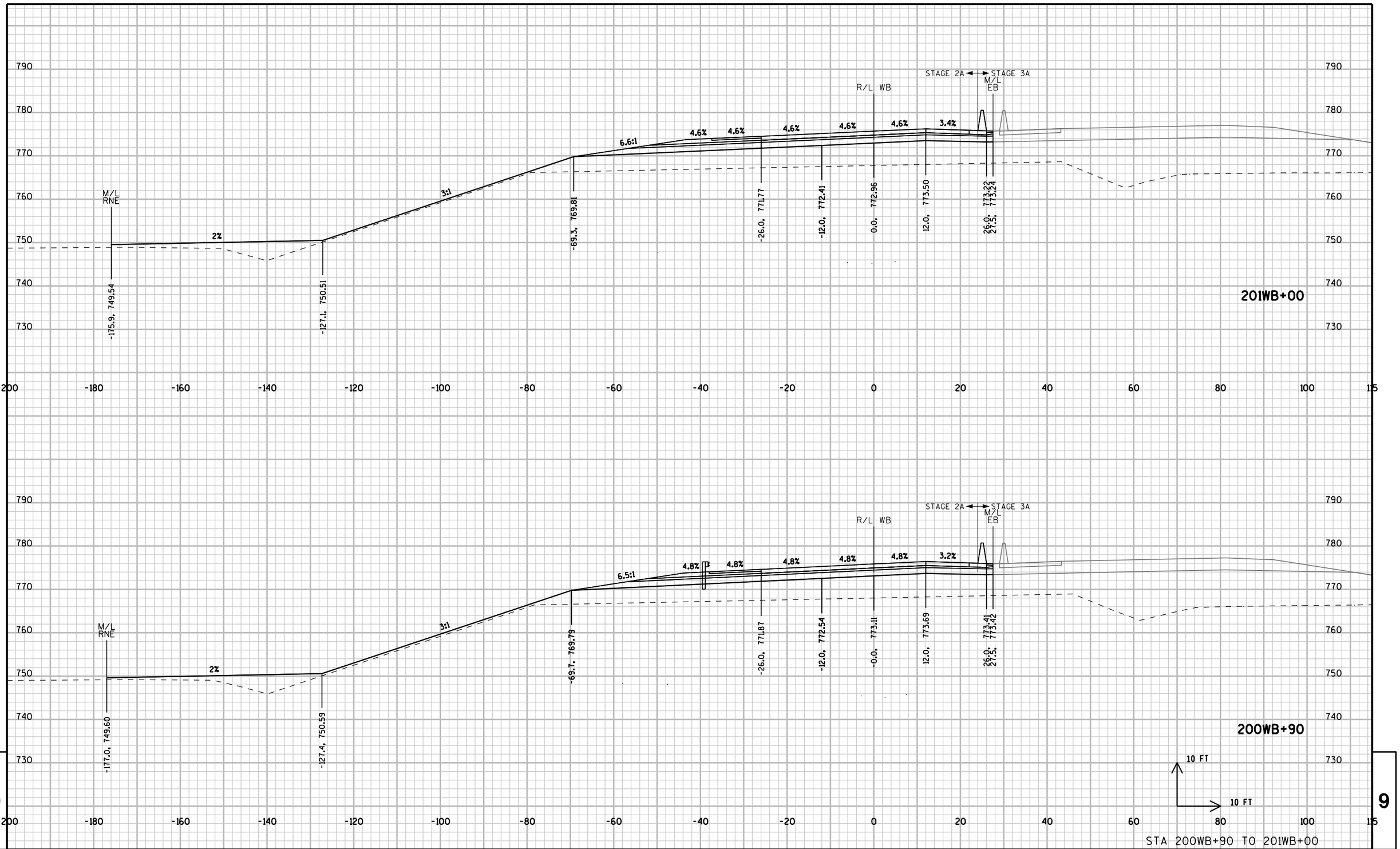


STA 200WB+50 TO 200WB+65

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:51 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

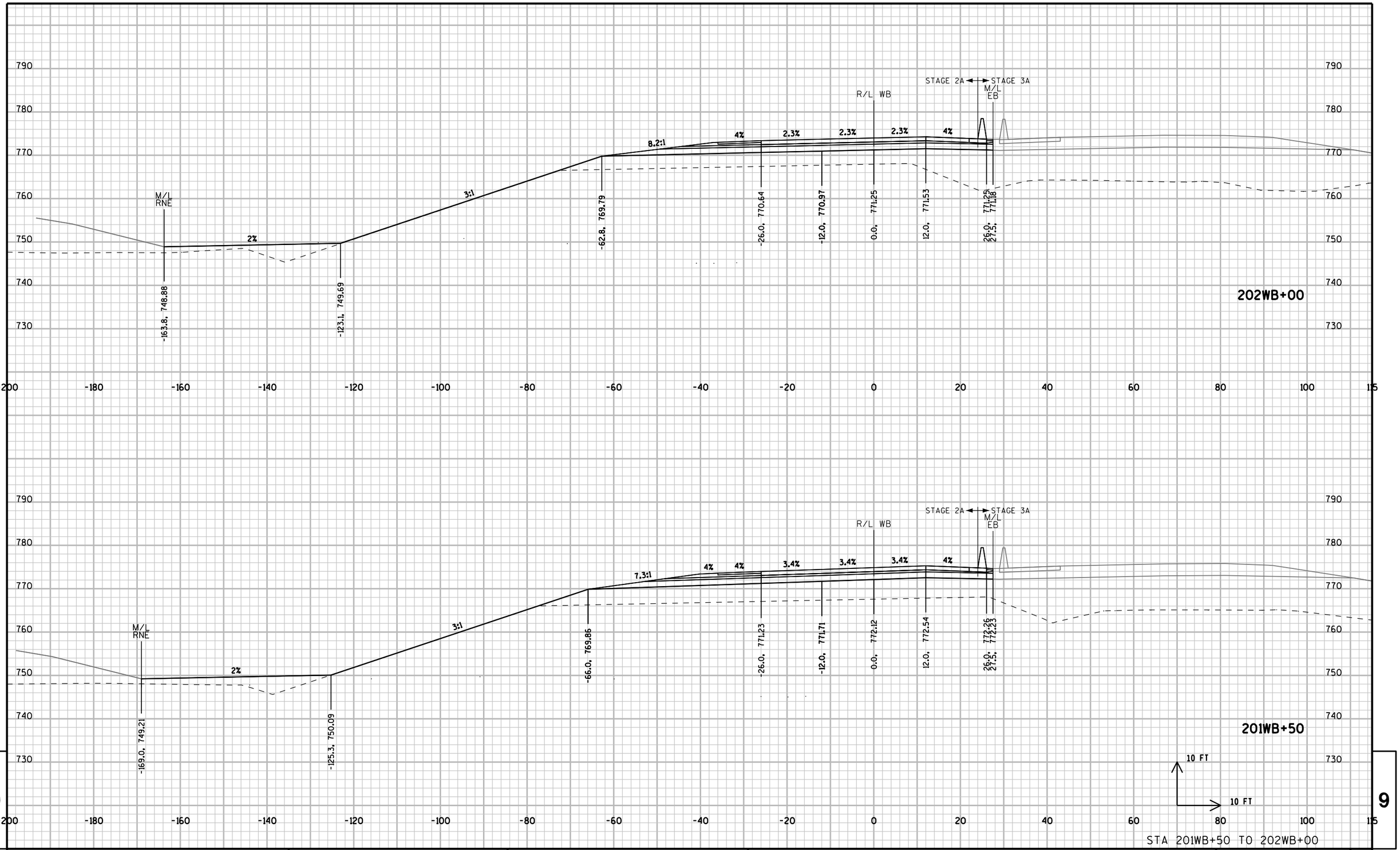
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

STA 200WB+90 TO 201WB+00

9

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:51 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

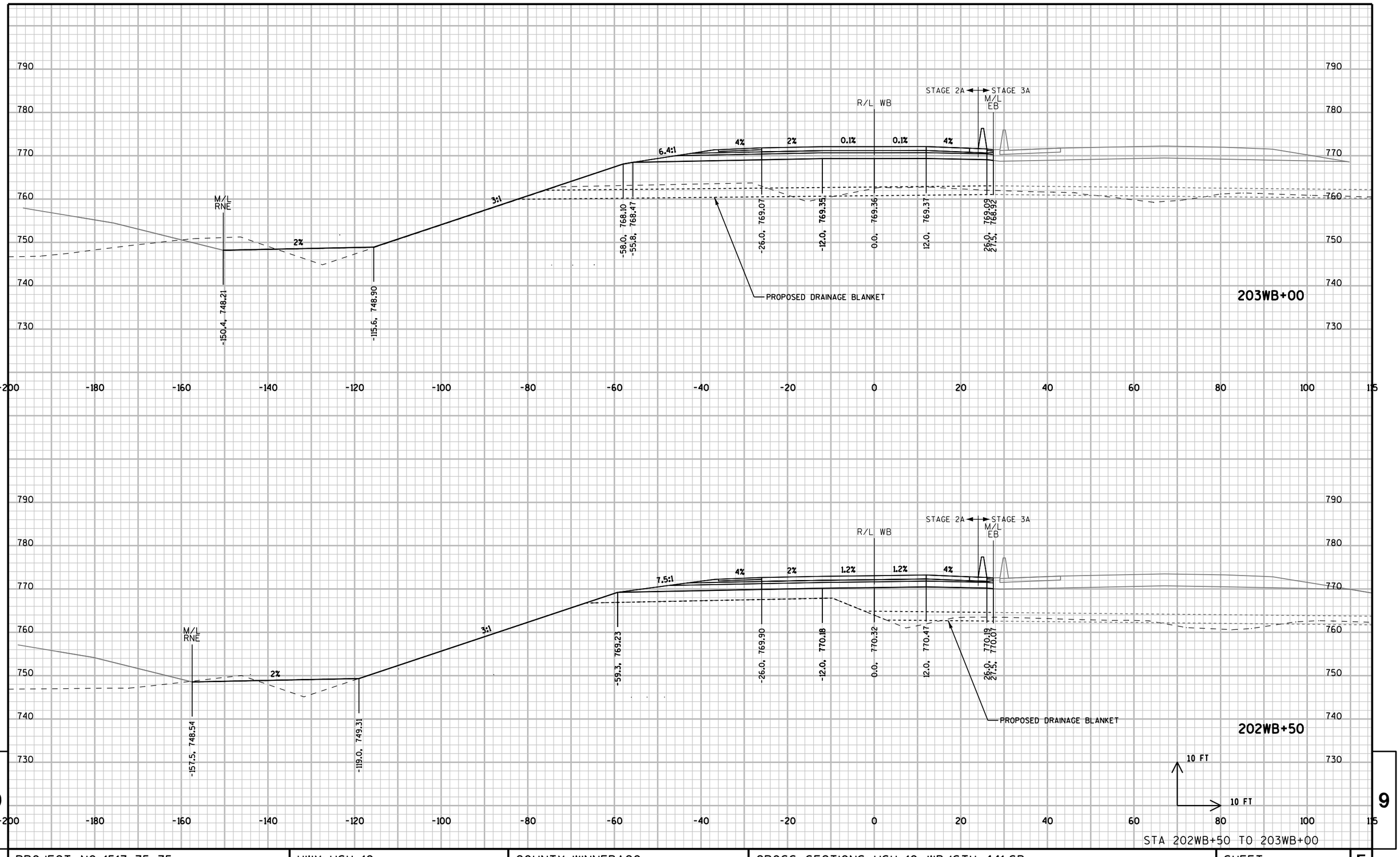
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STA 201WB+50 TO 202WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:52 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

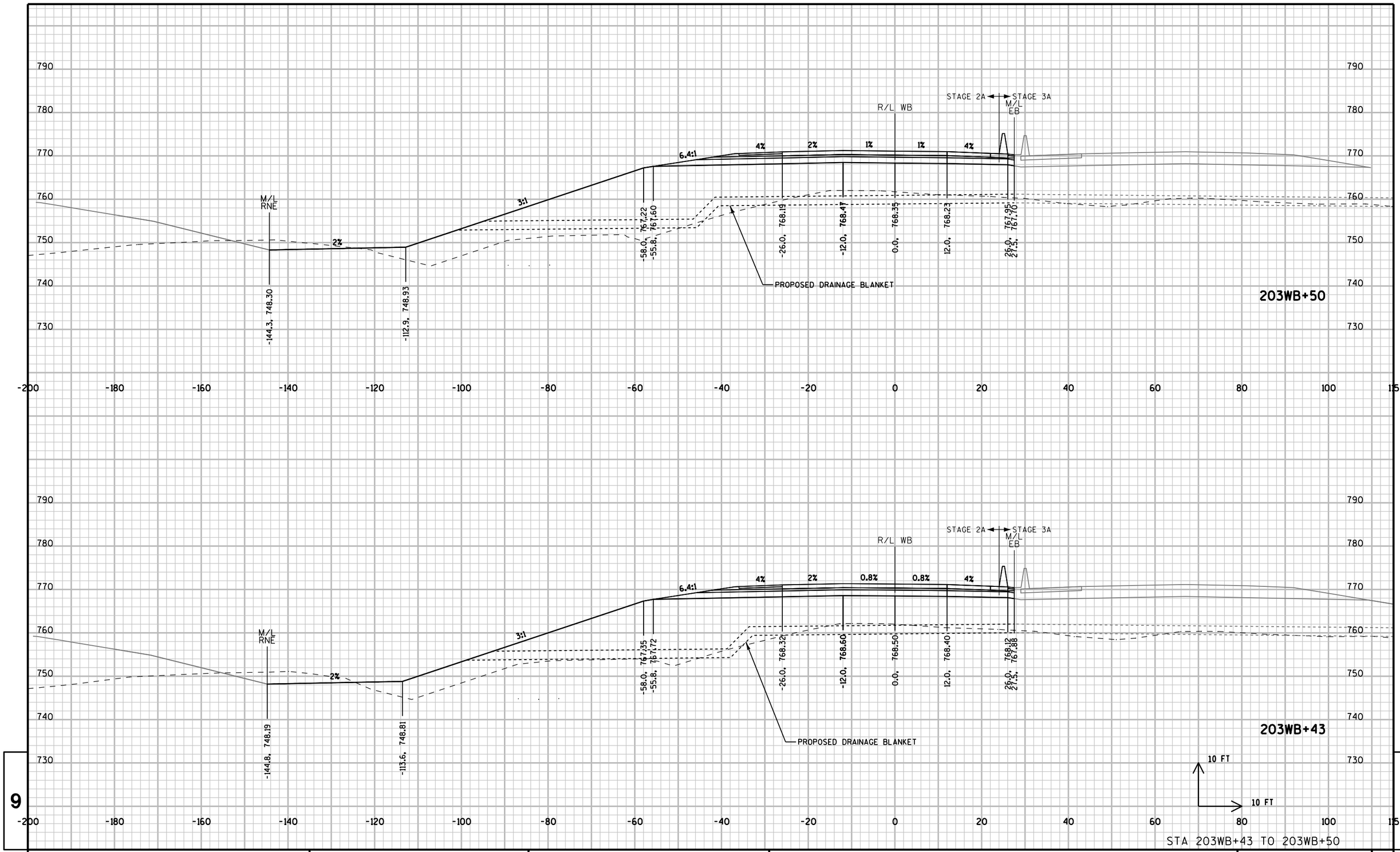
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:53 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

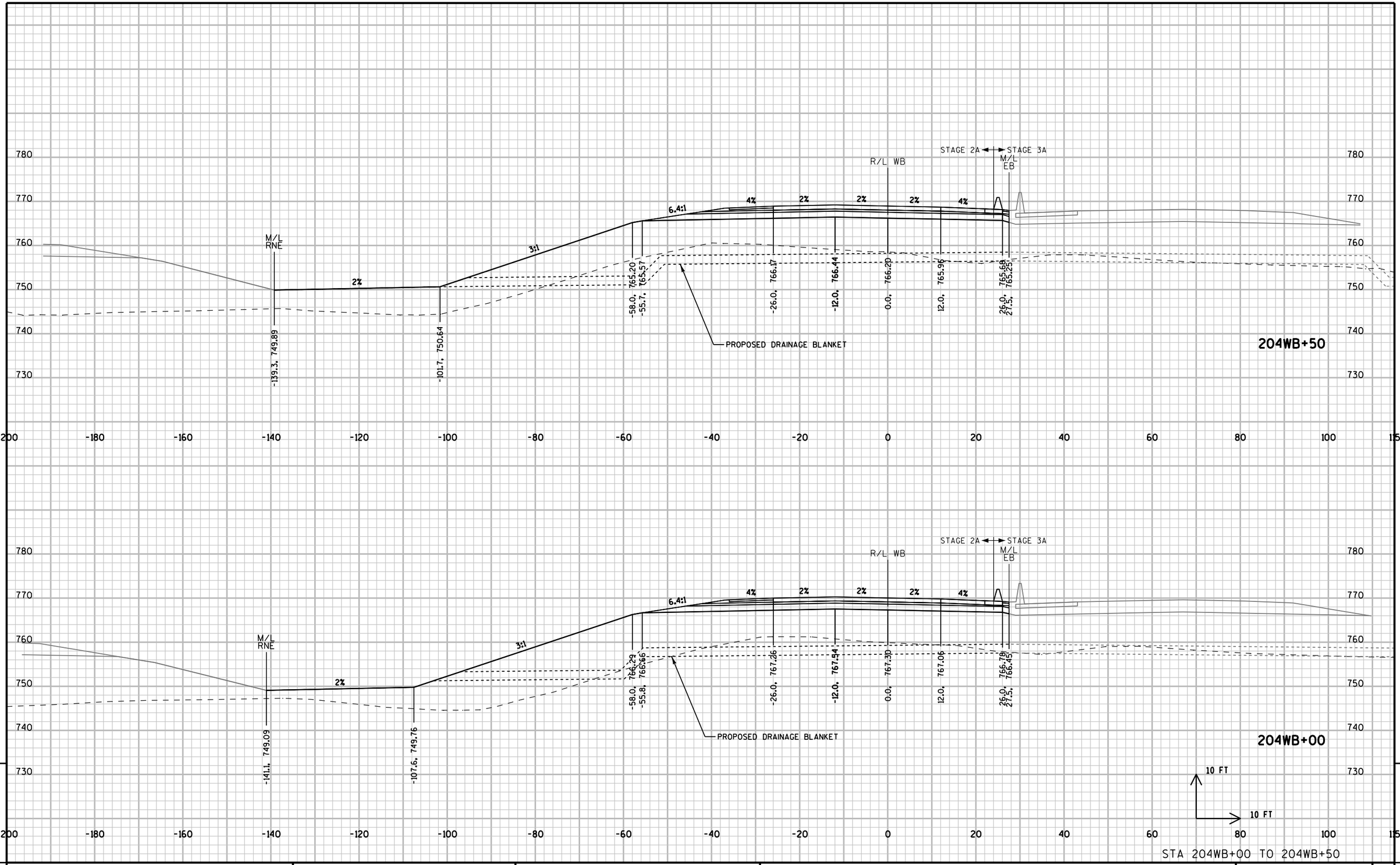
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STA 203WB+43 TO 203WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 983	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 5/4/2015 11:14:41 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

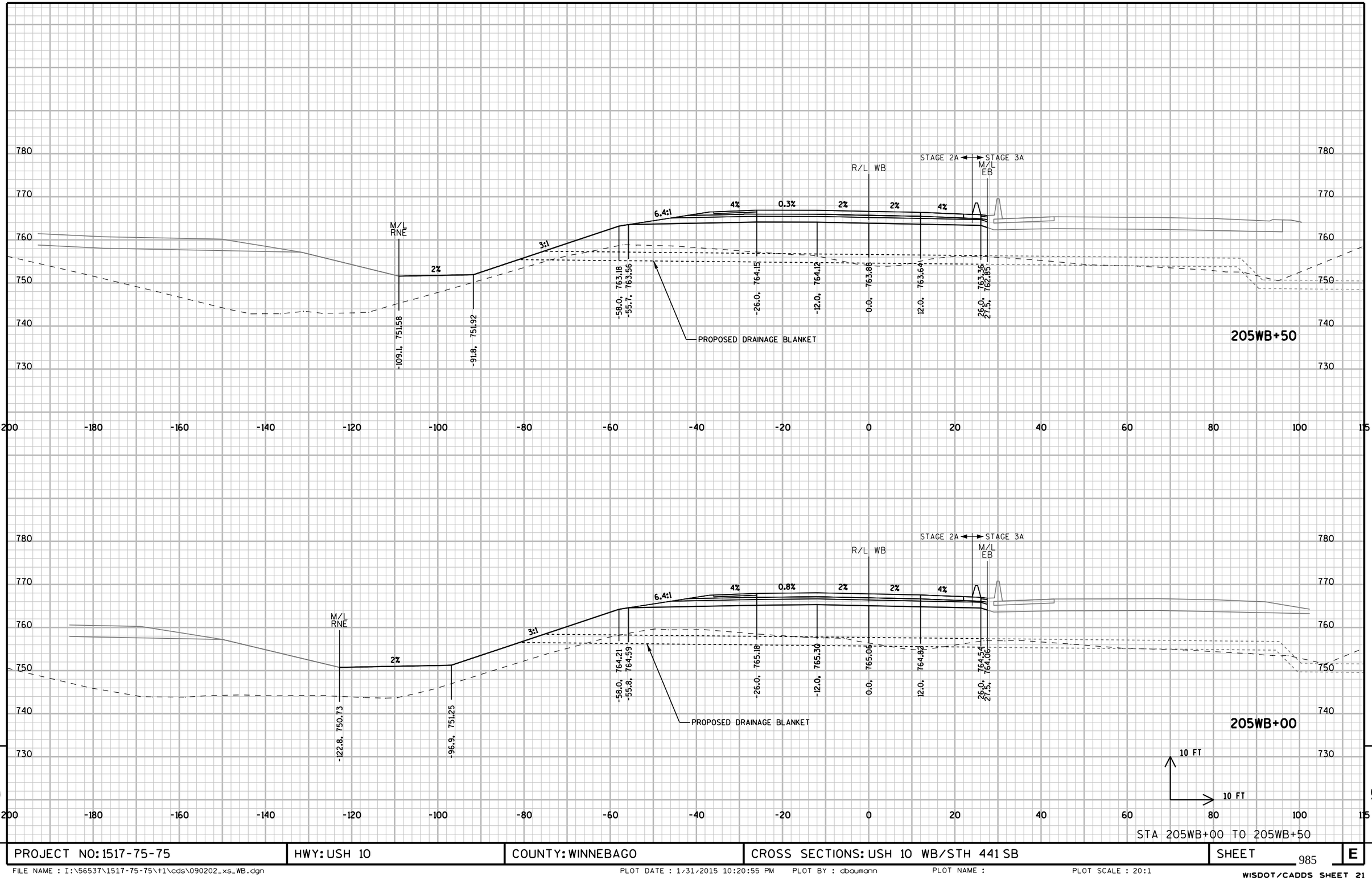
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STA 204WB+00 TO 204WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 984	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 5/4/2015 11:14:57 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

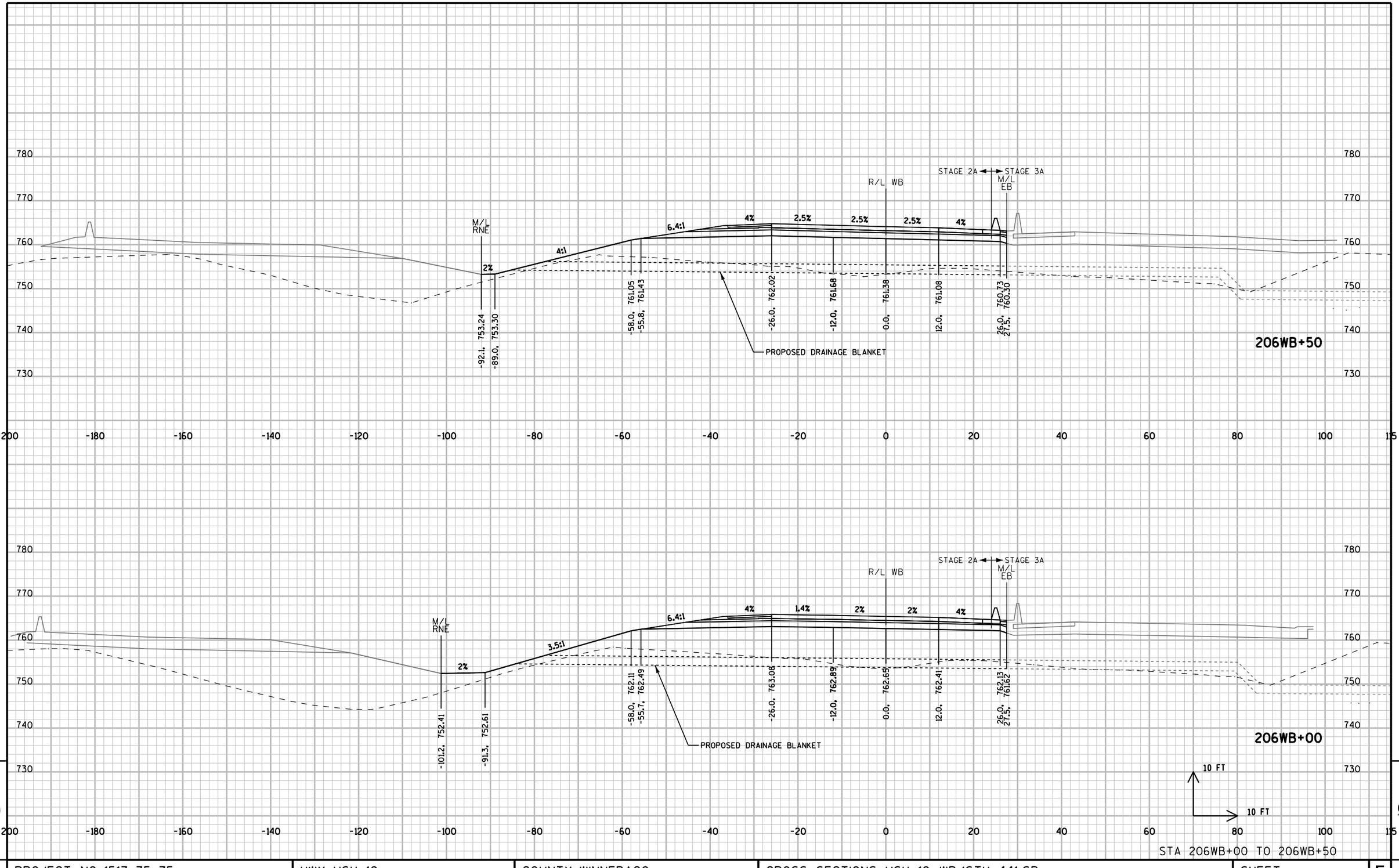
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STA 205WB+00 TO 205WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:55 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

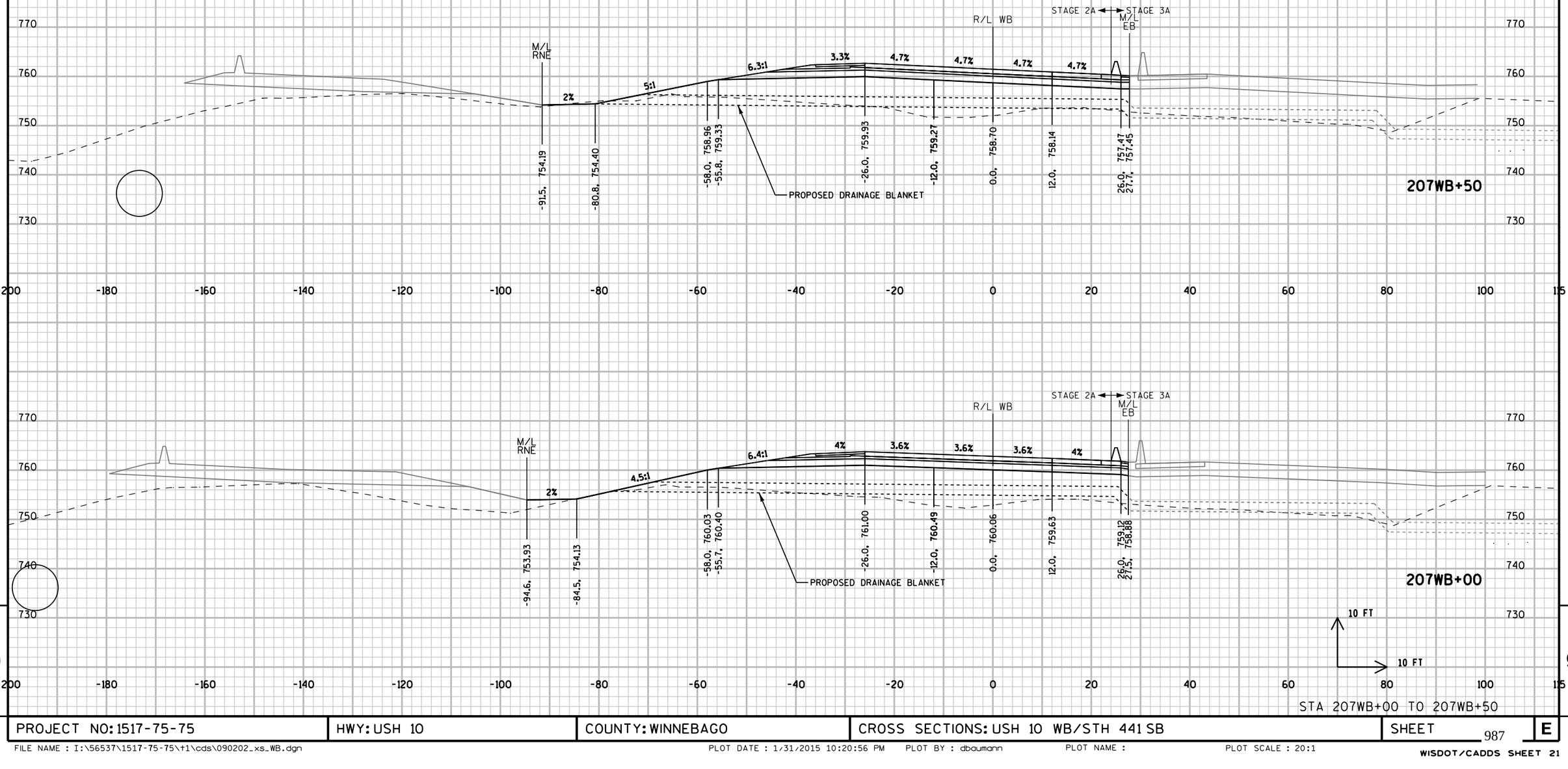
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STA 206WB+00 TO 206WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:56 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

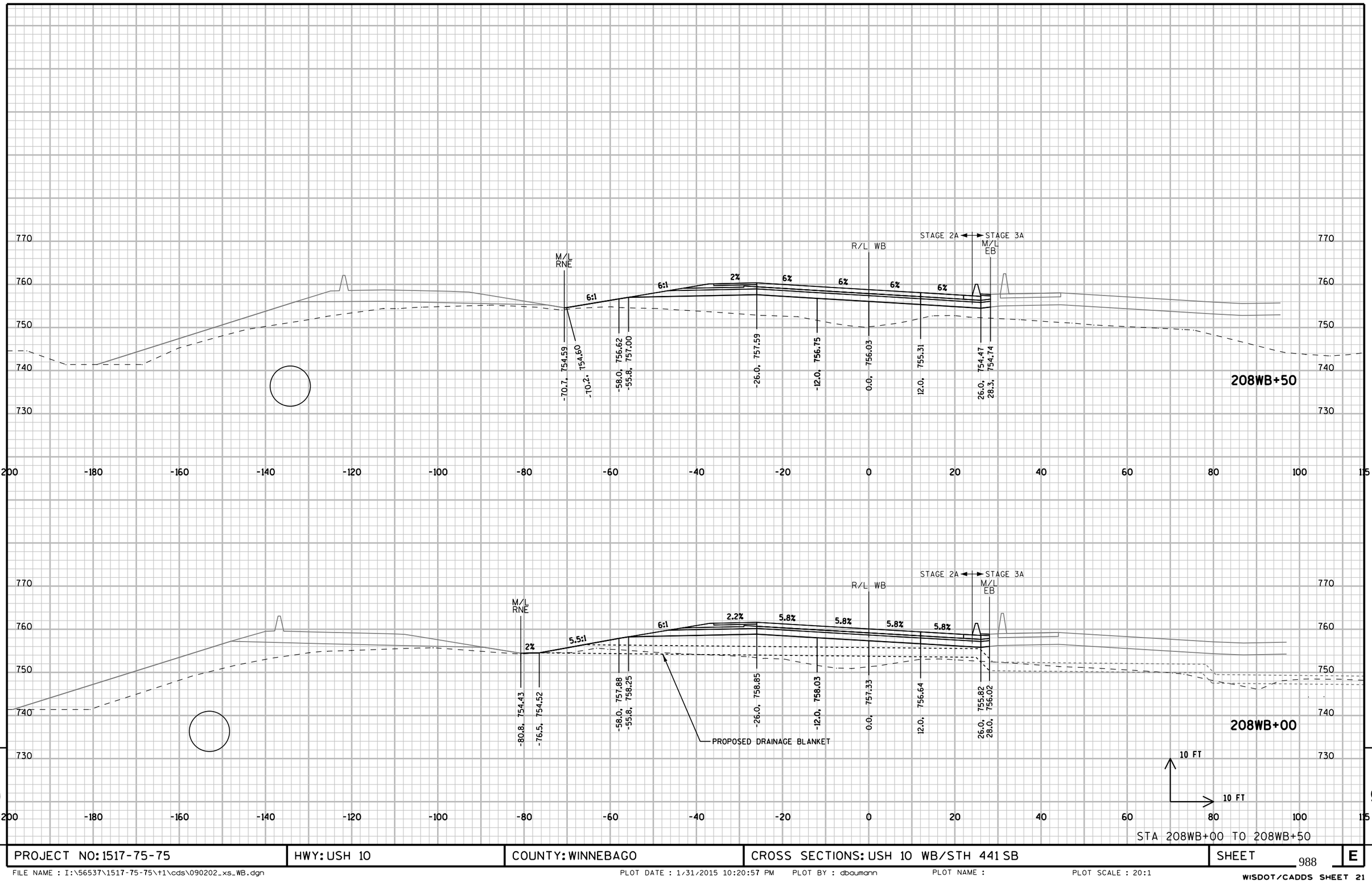


STA 207WB+00 TO 207WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:56 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

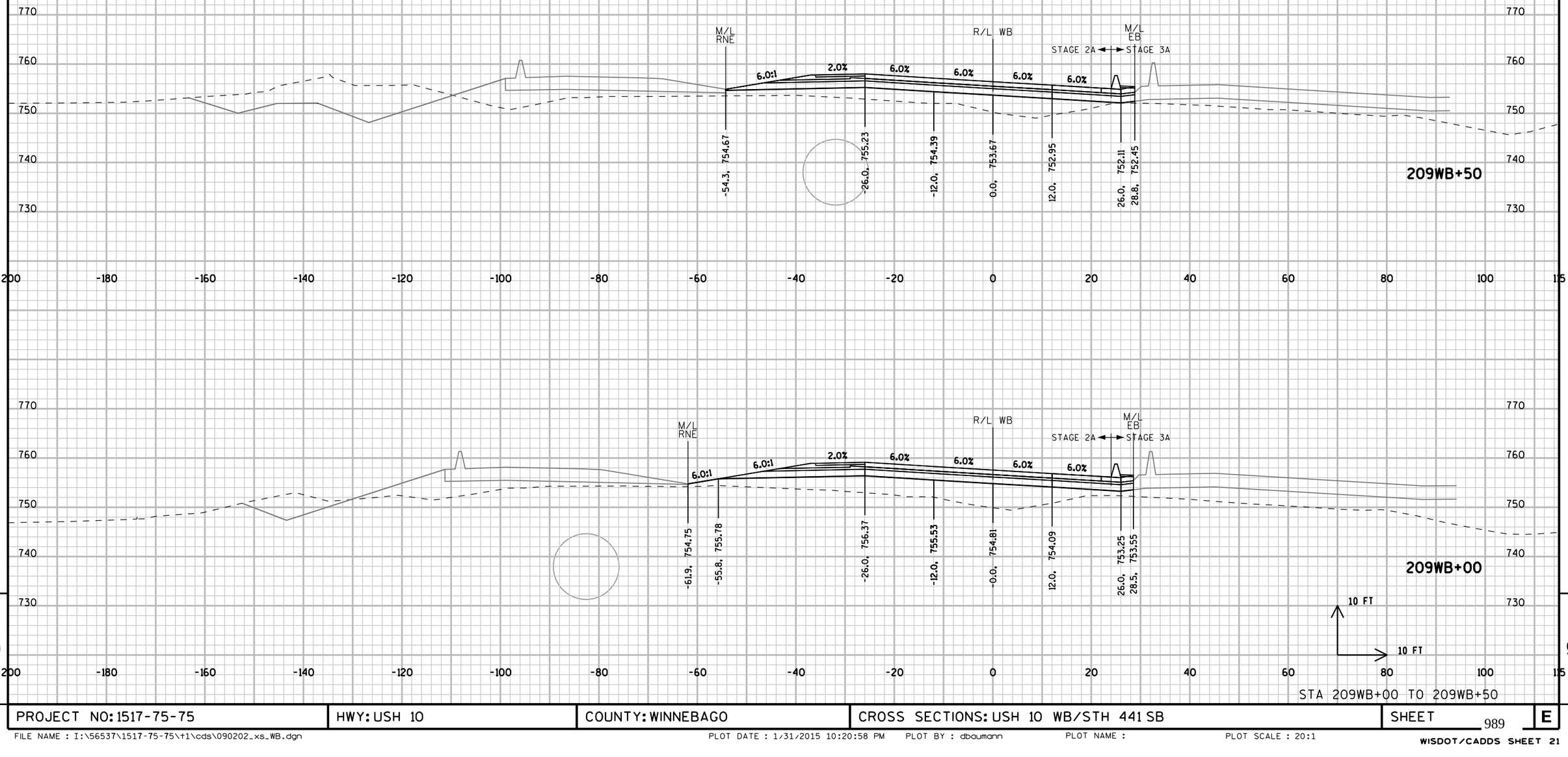


STA 208WB+00 TO 208WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:57 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

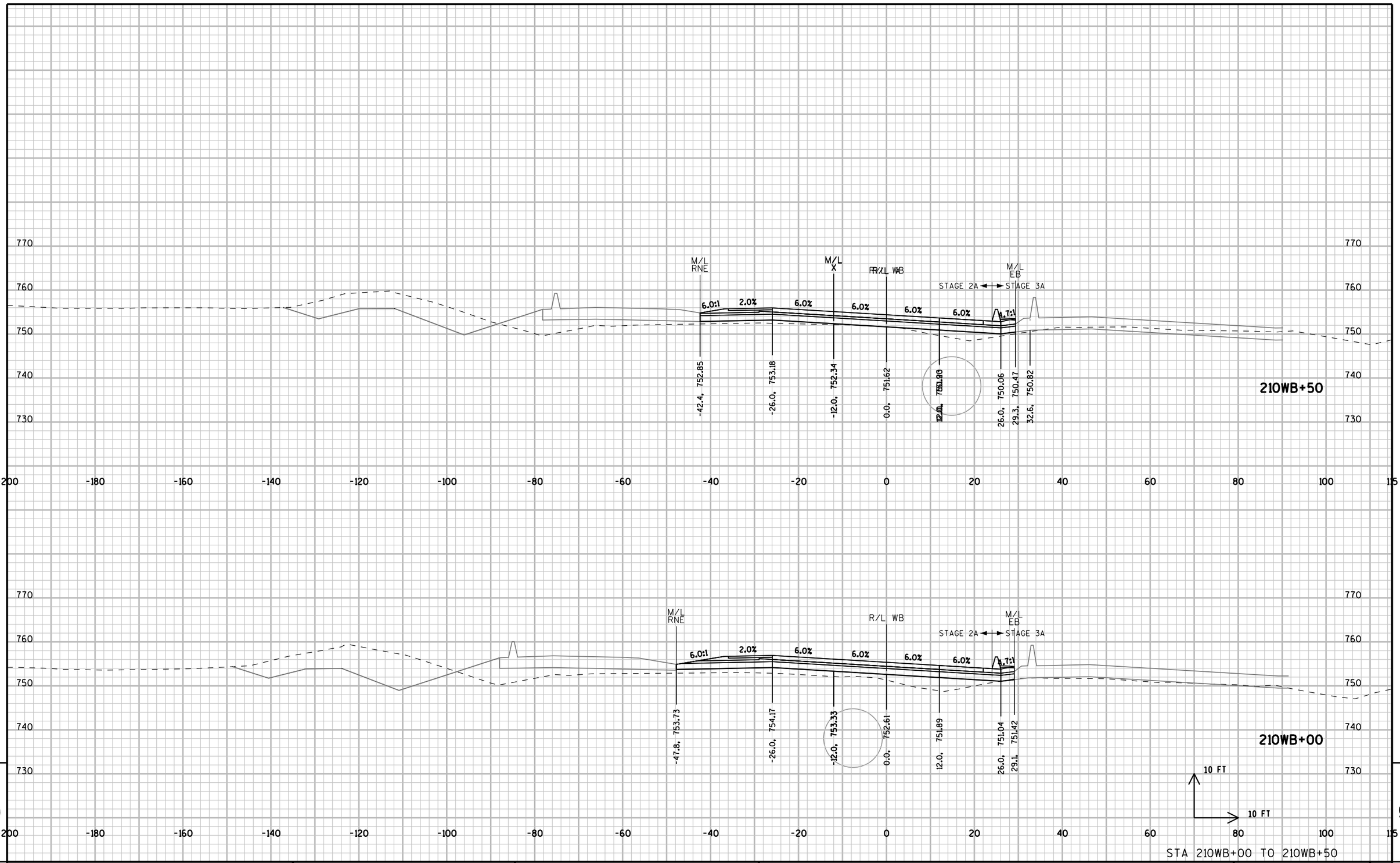
WISDOT/CADDS SHEET 21



STA 209WB+00 TO 209WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:58 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



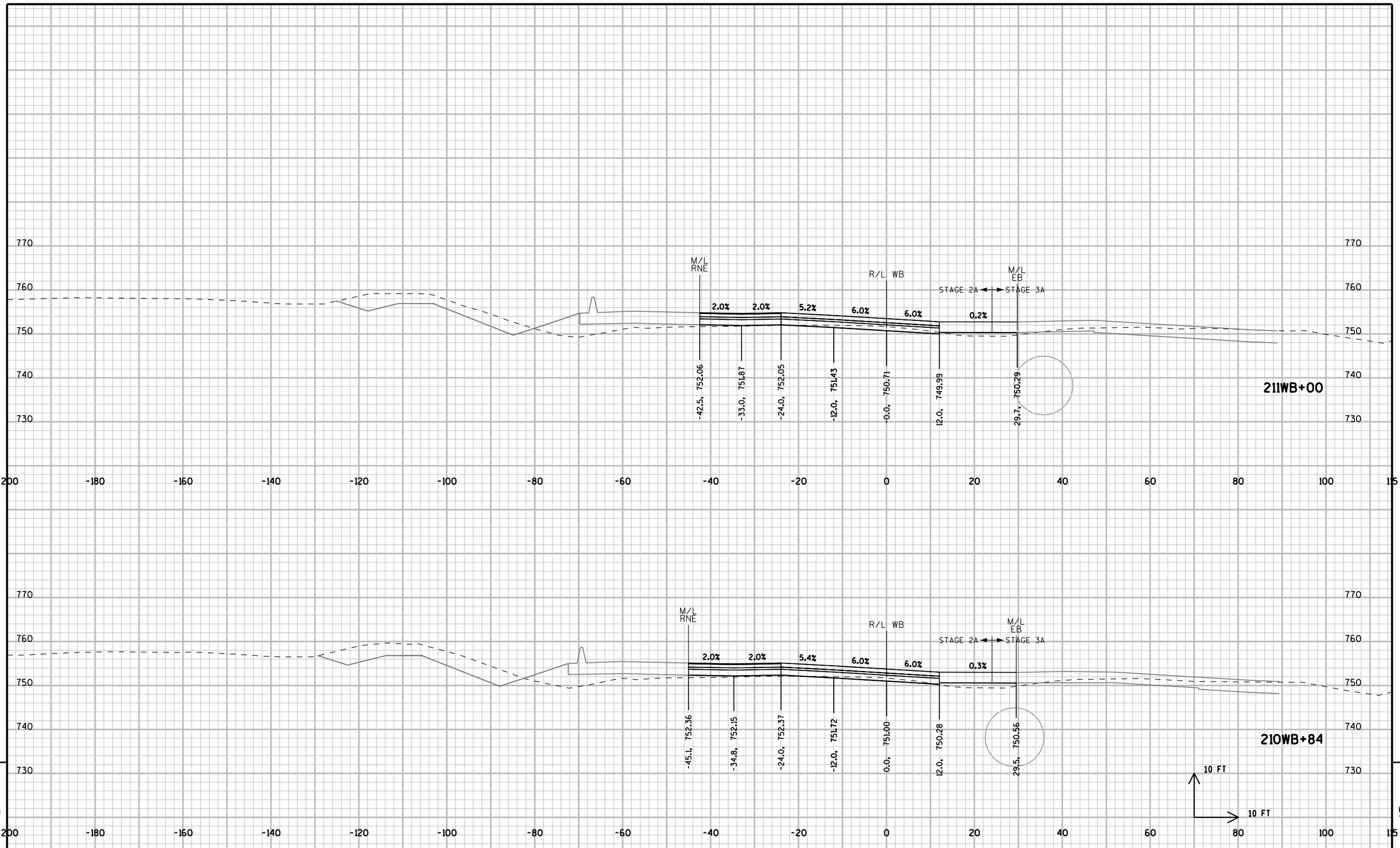
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9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:58 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

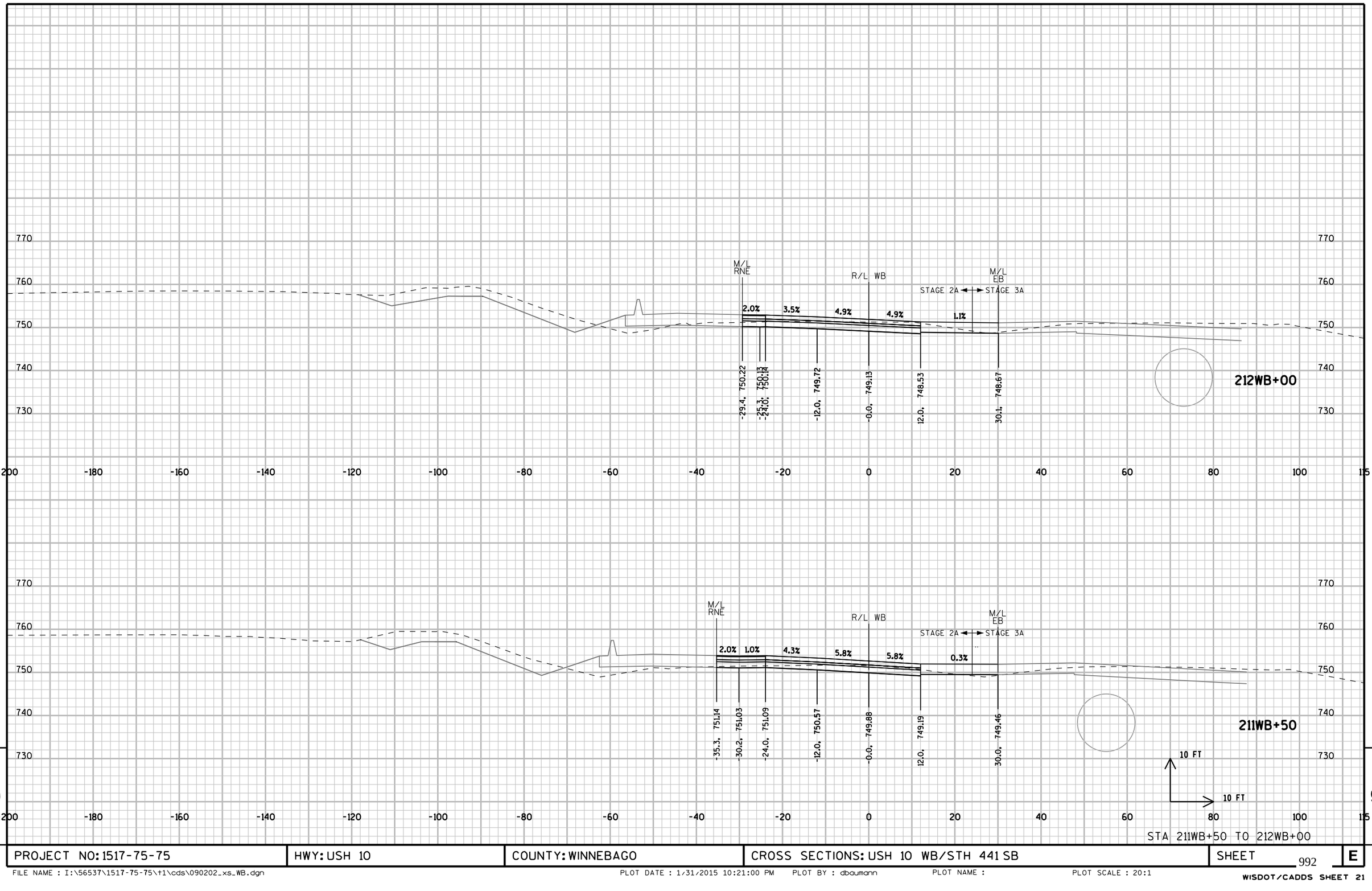
WISDOT/CADDS SHEET 21



STA 210WB+84 TO 211WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

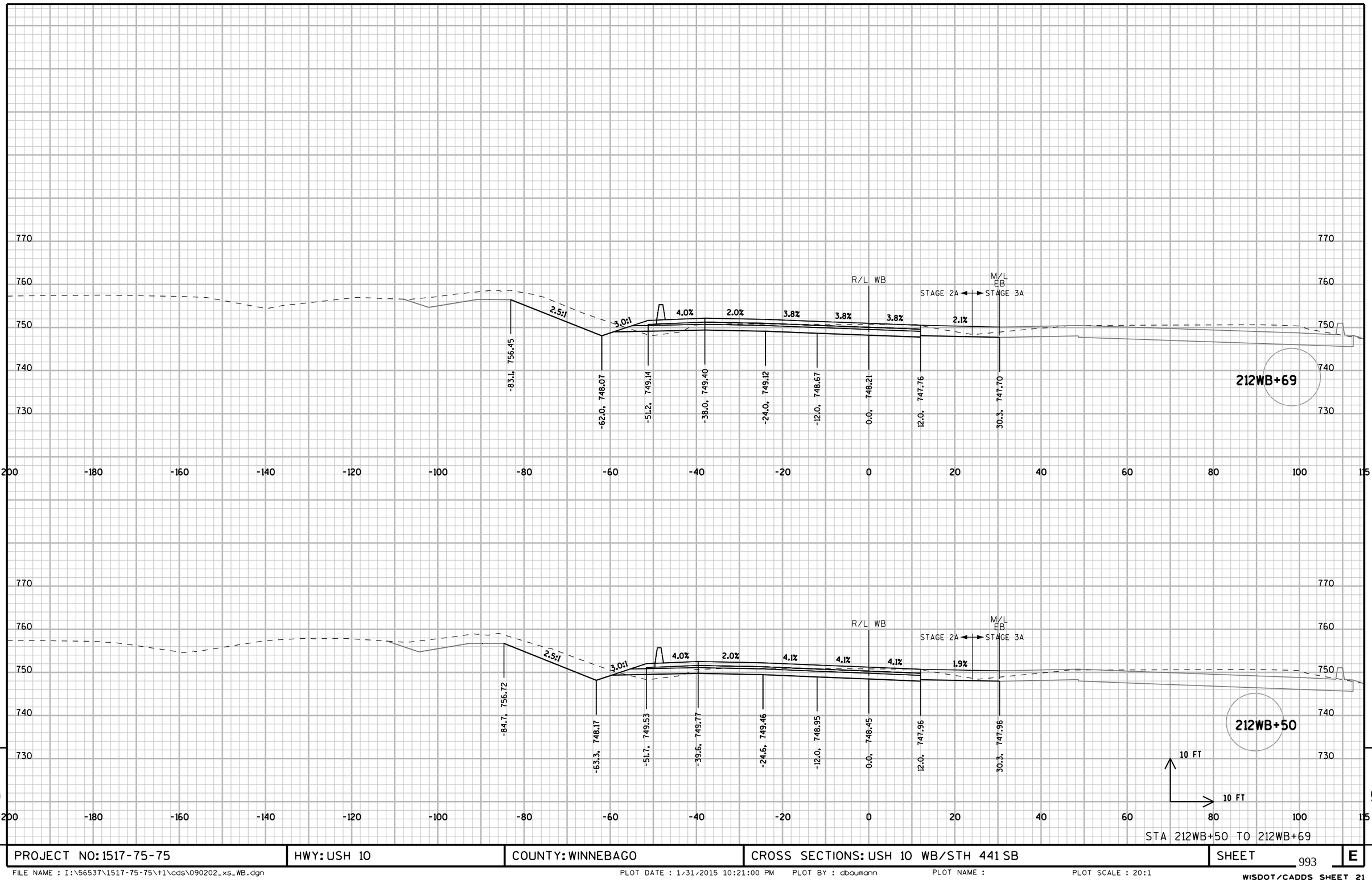
FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:20:59 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



STA 211WB+50 TO 212WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:00 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

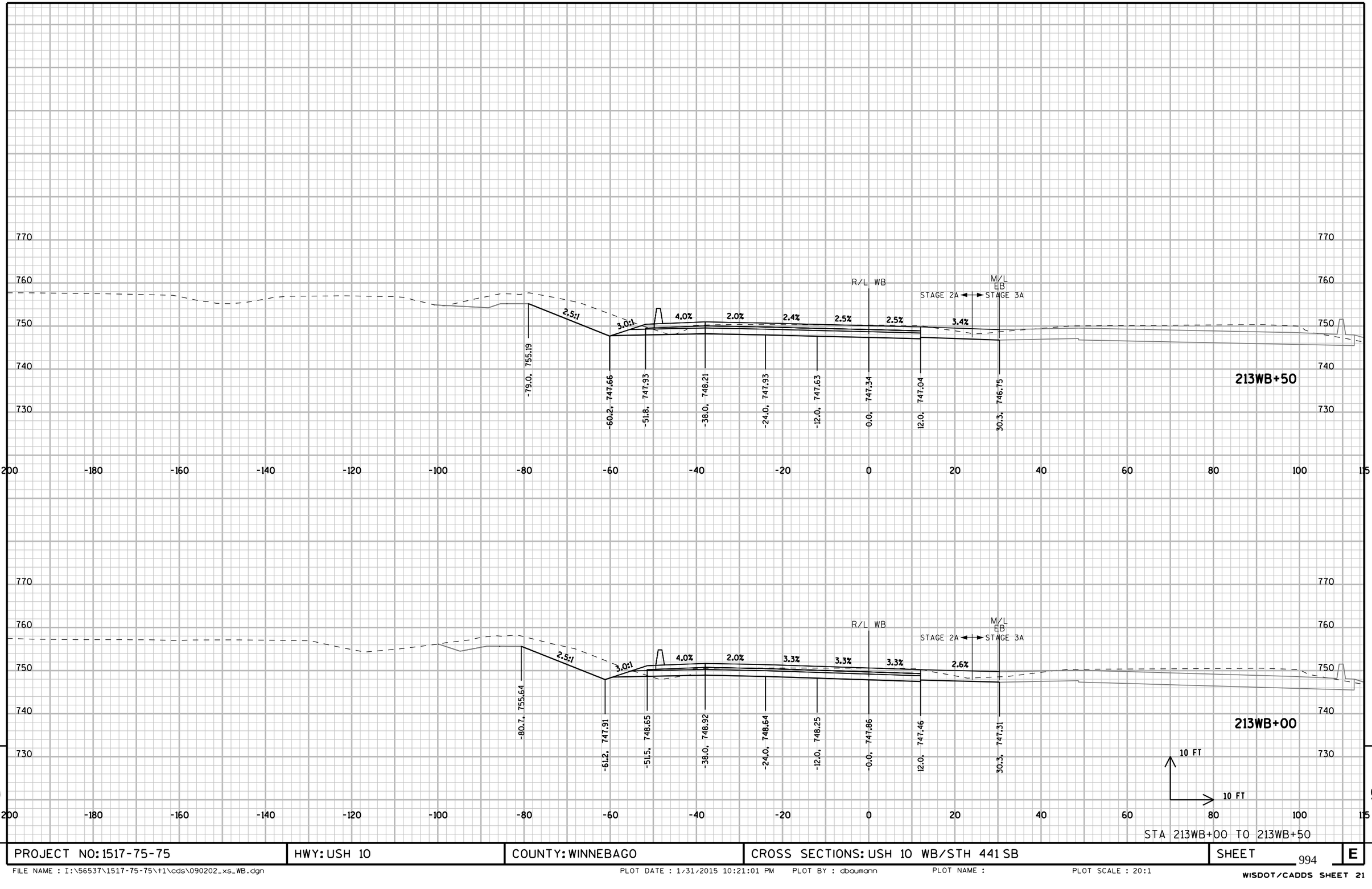


STA 212WB+50 TO 212WB+69

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:00 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

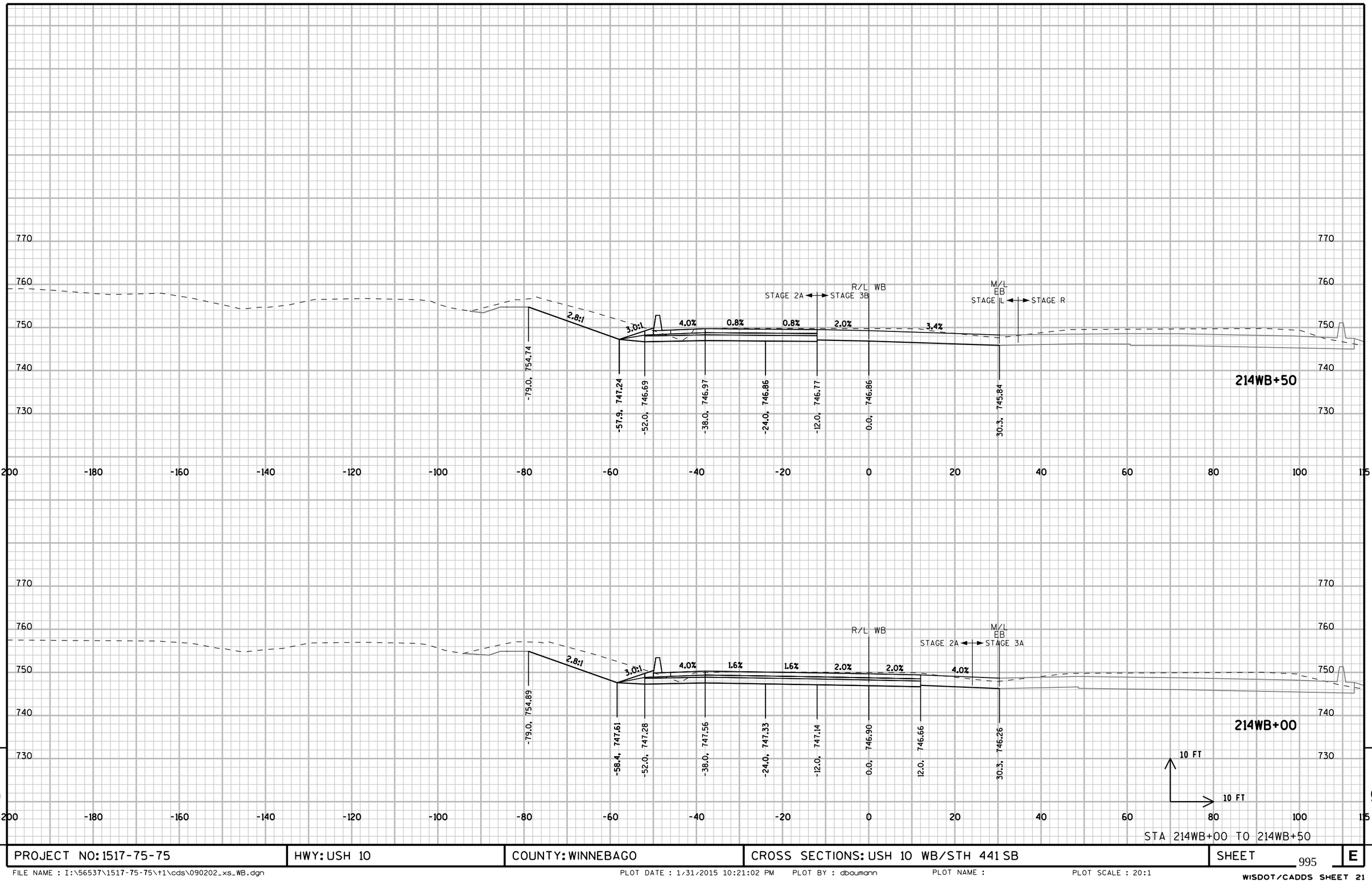


STA 213WB+00 TO 213WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:01 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

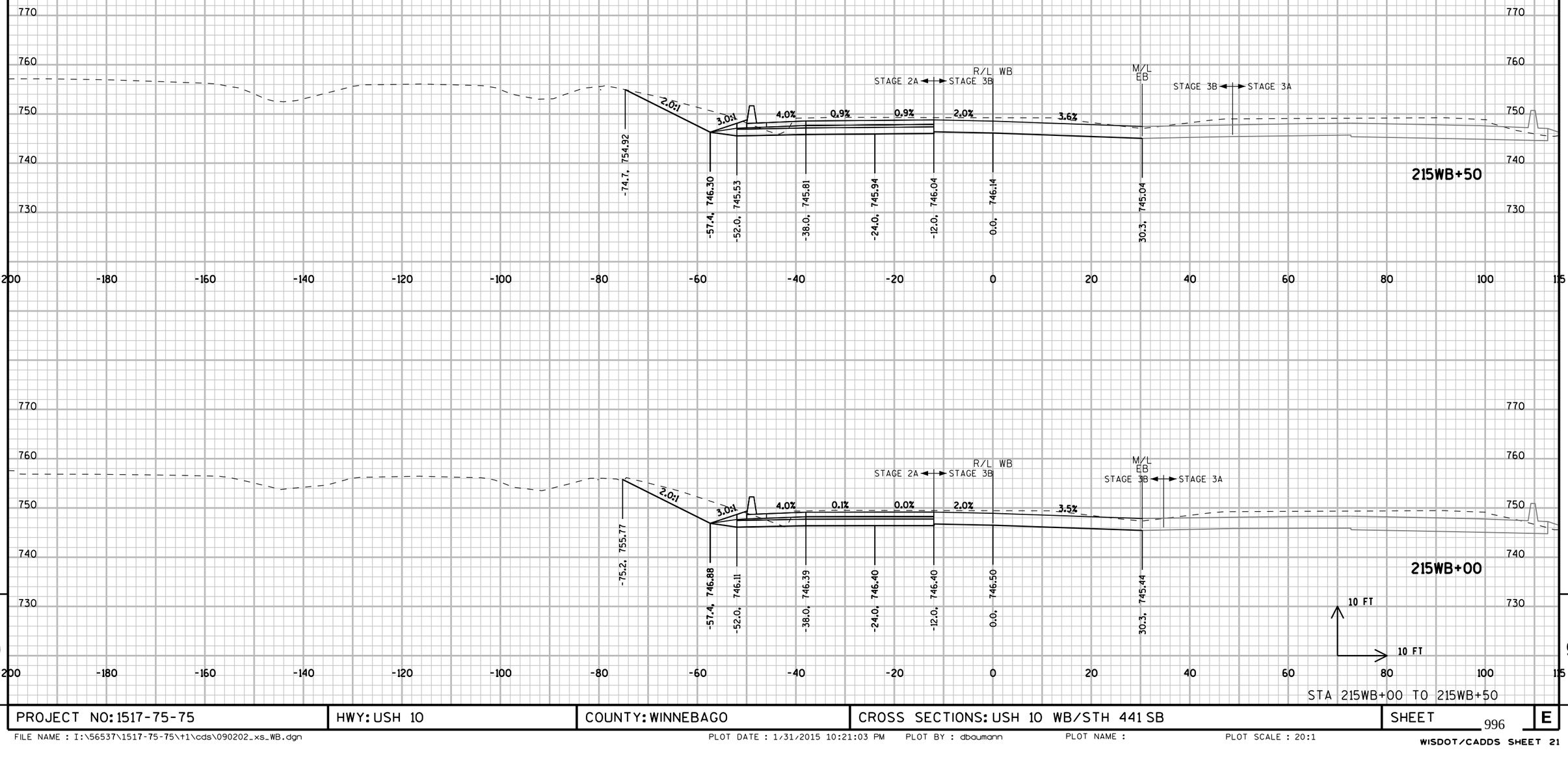
WISDOT/CADDS SHEET 21



STA 214WB+00 TO 214WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:02 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



9

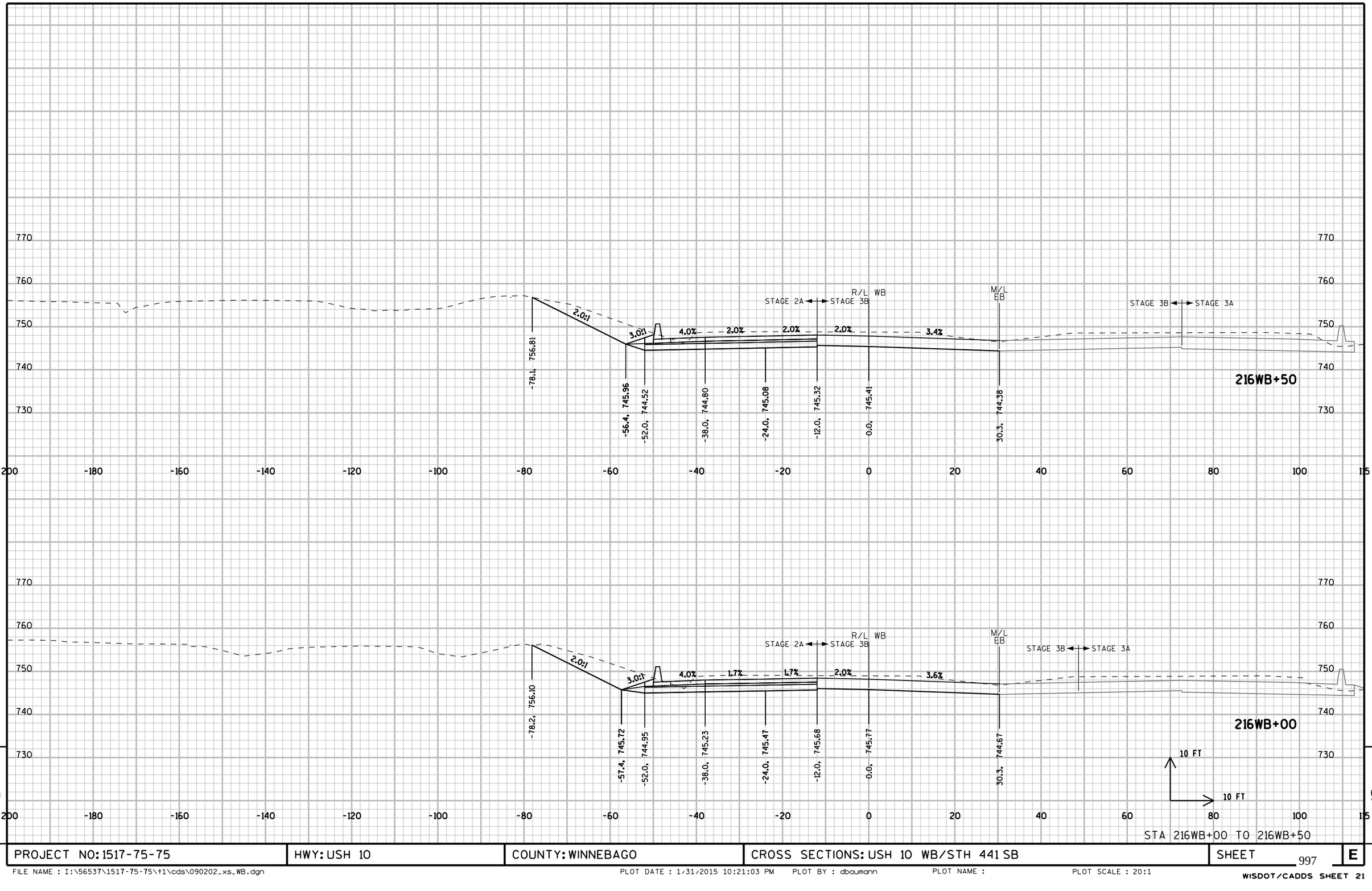
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STA 215WB+00 TO 215WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:03 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

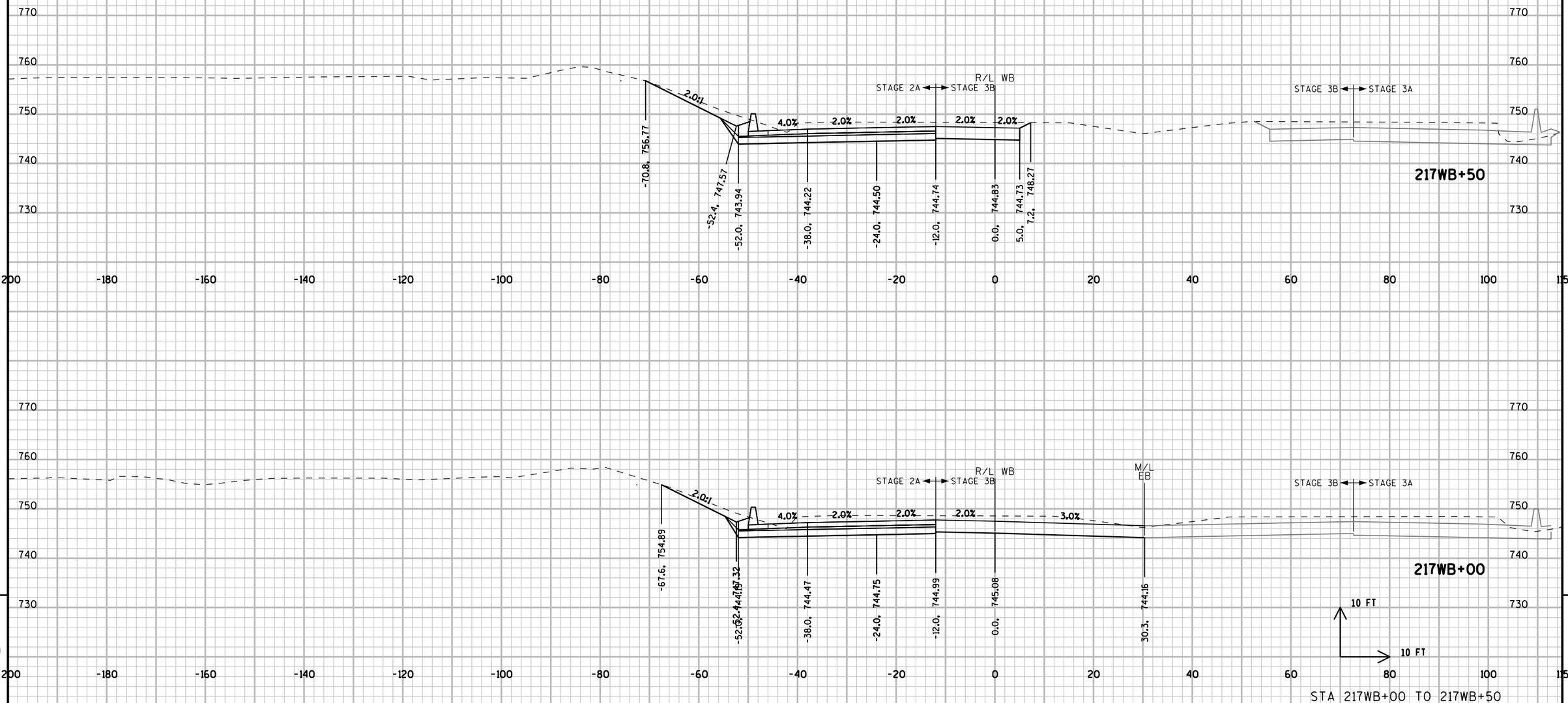


STA 216WB+00 TO 216WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 997	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:03 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

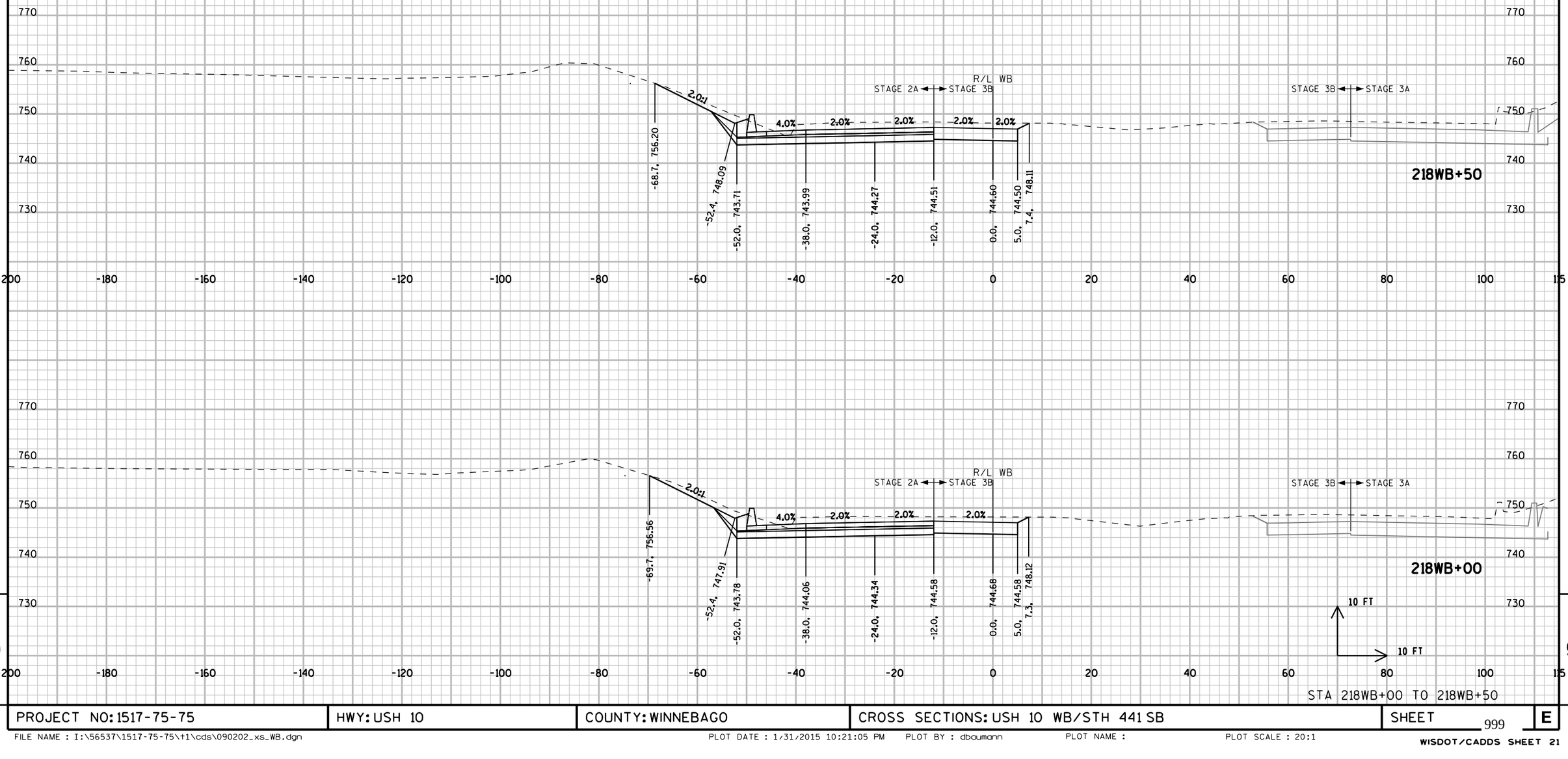


STA 217WB+00 TO 217WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:04 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

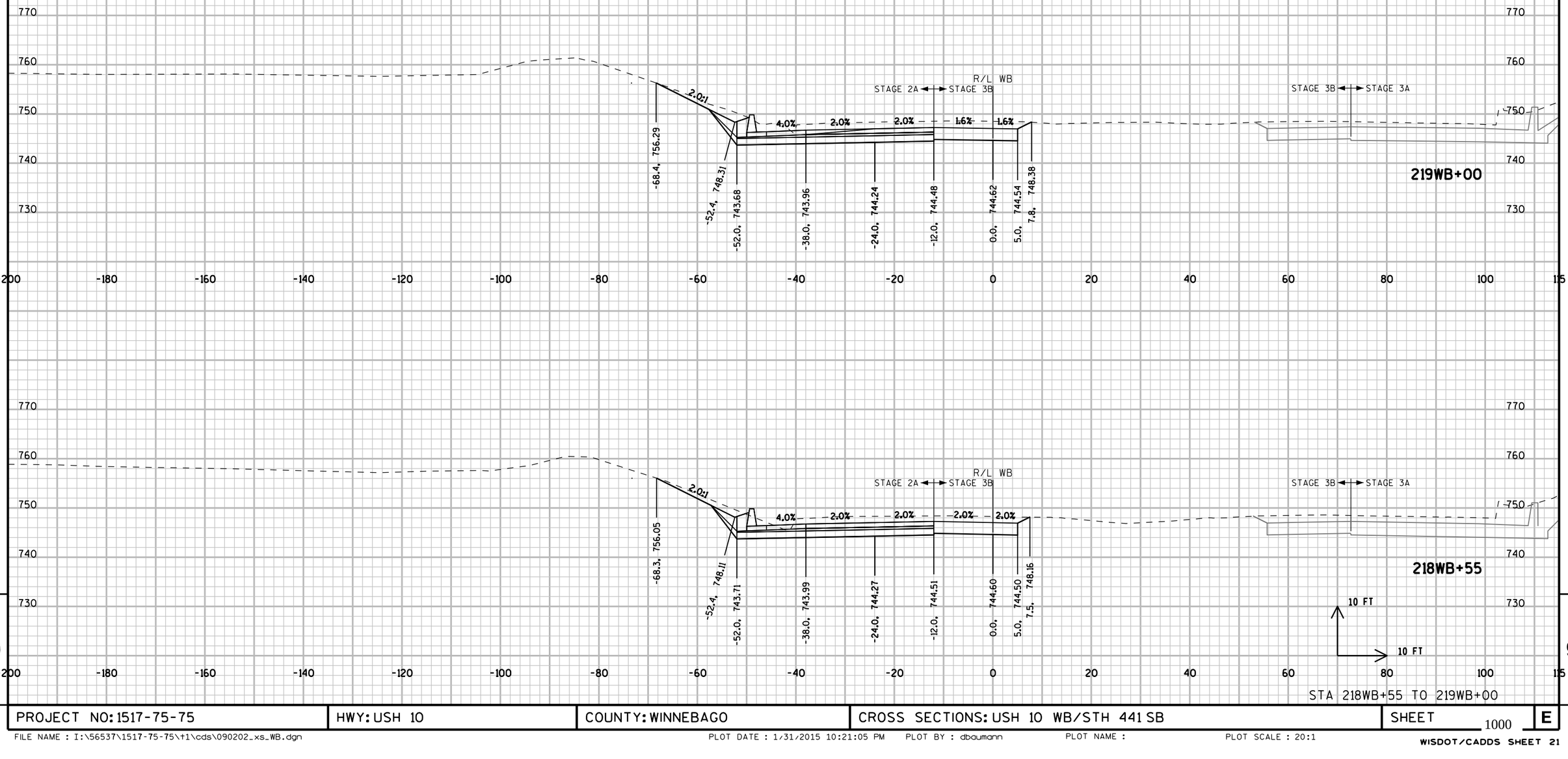


STA 218WB+00 TO 218WB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 999	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:05 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



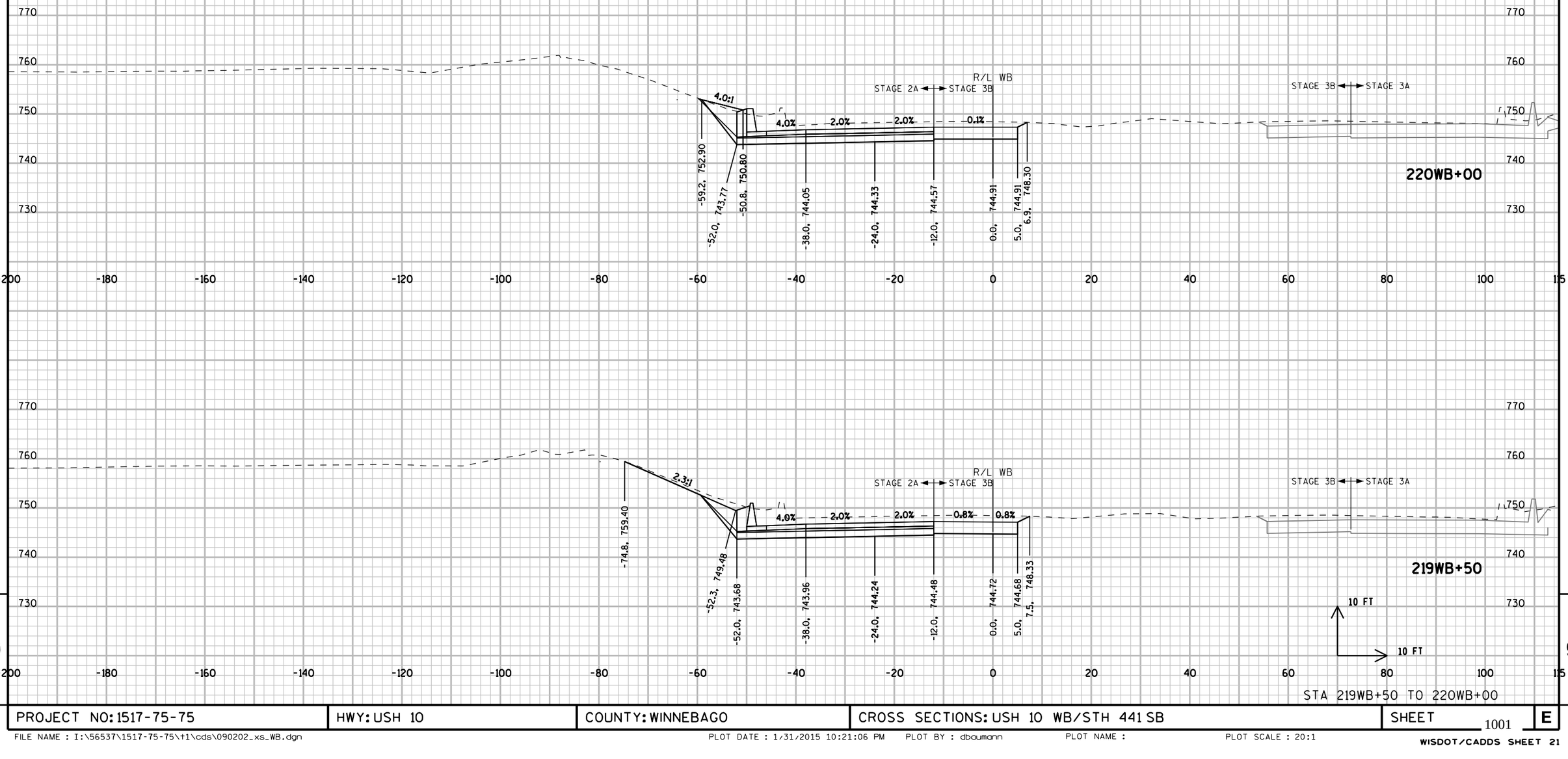
STA 218WB+55 TO 219WB+00

9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1000	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:05 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

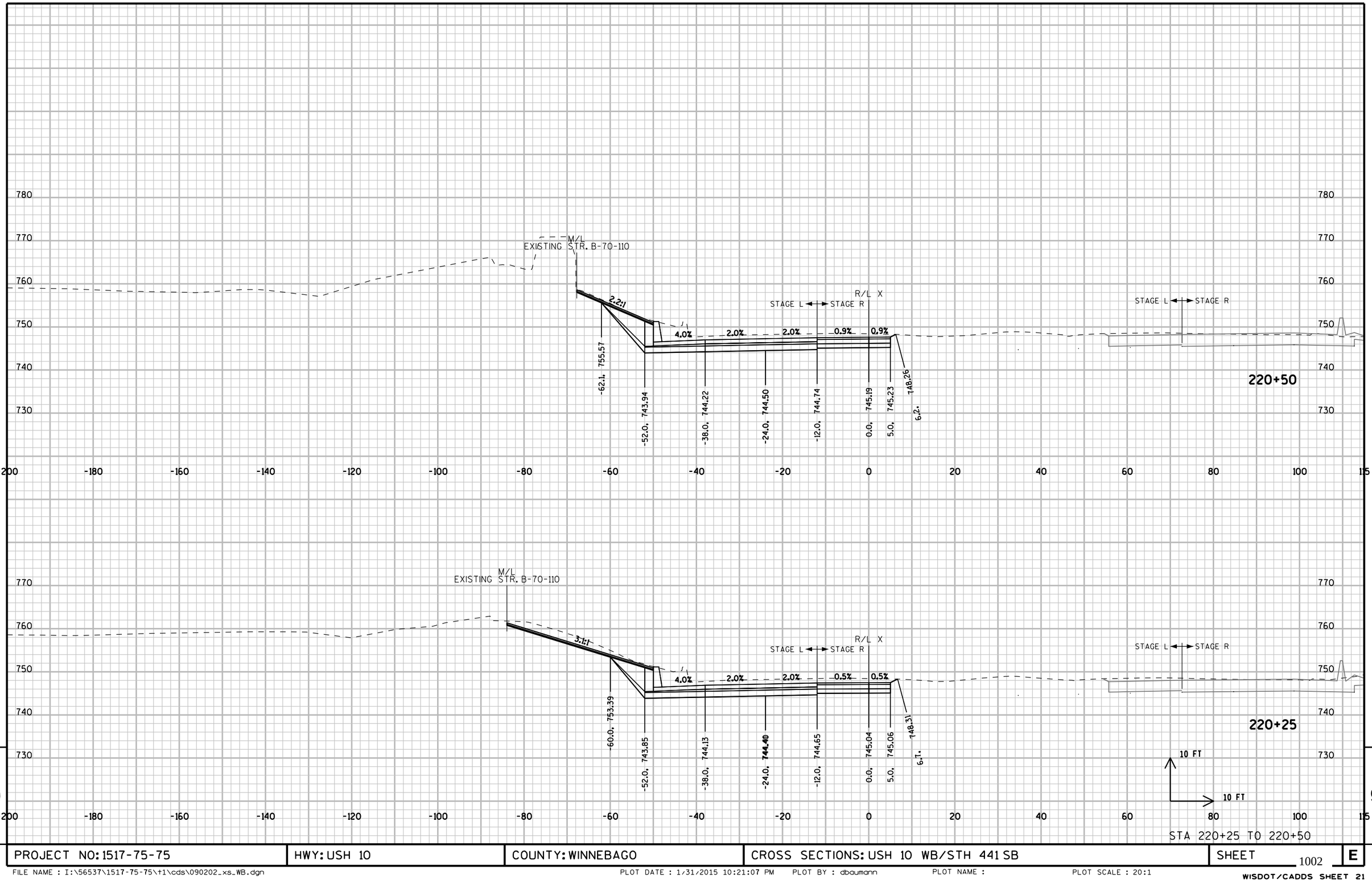


STA 219WB+50 TO 220WB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1001	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:06 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

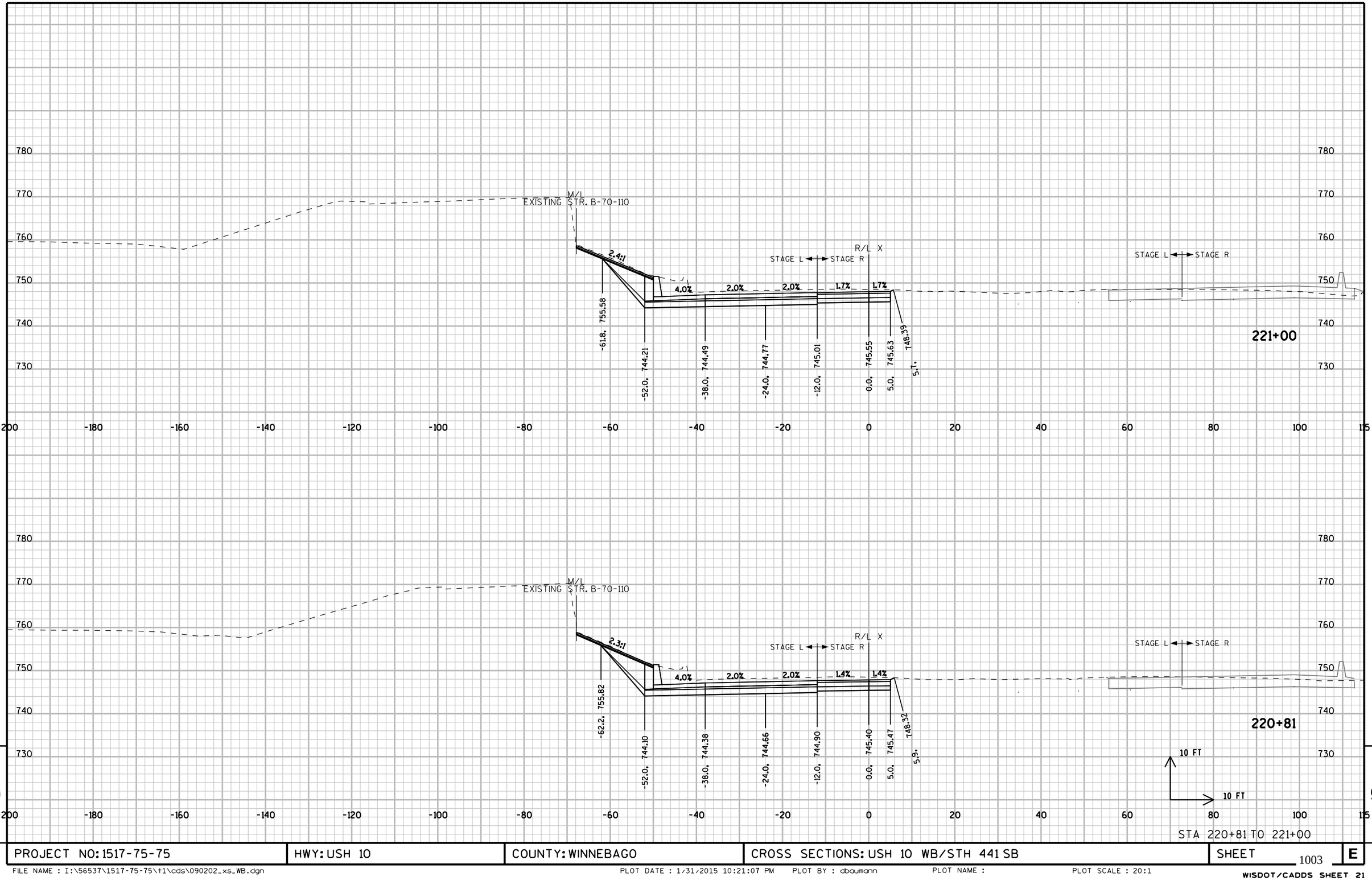
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1002	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:07 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

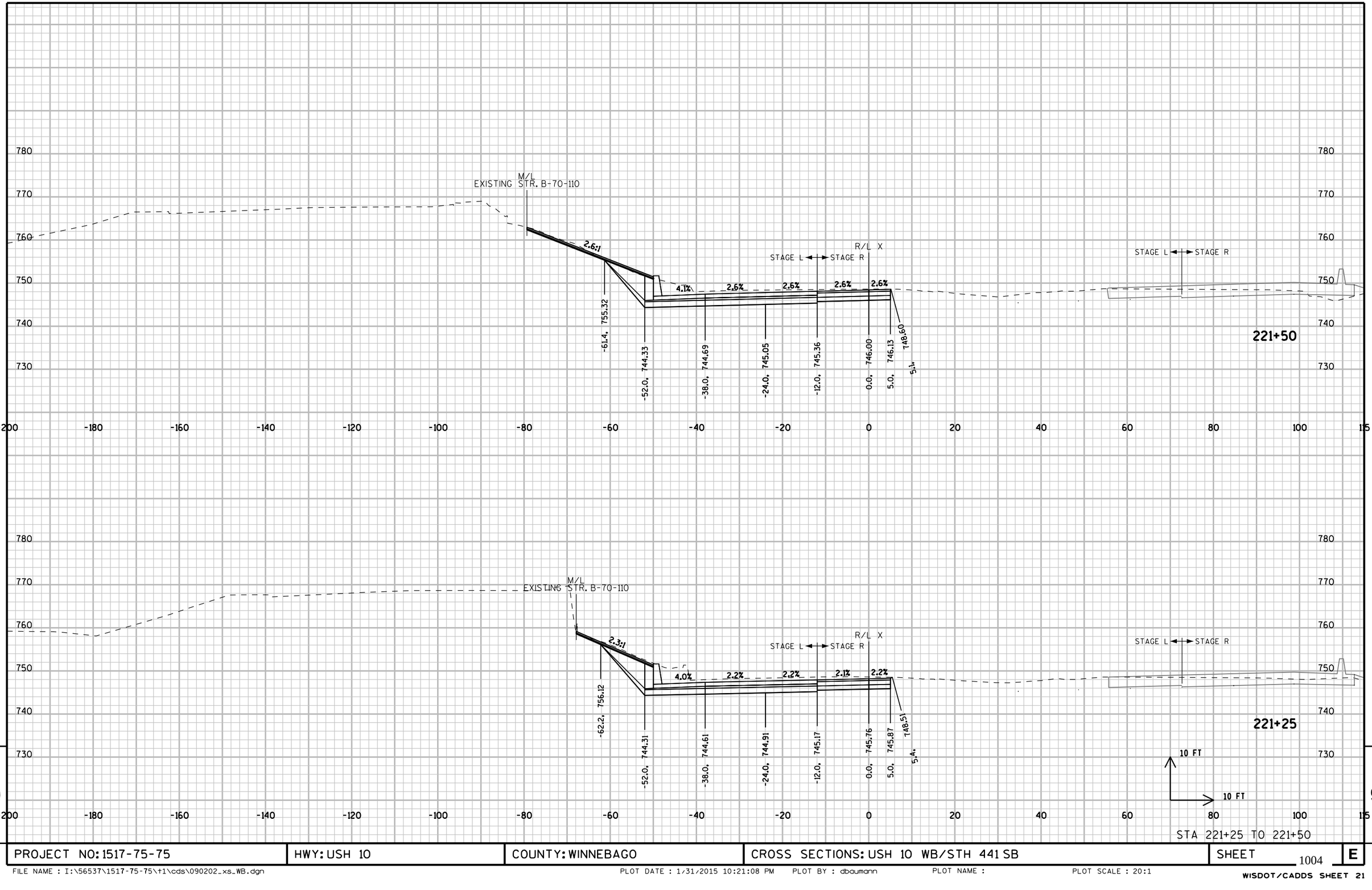


STA 220+81 TO 221+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1003	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:07 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



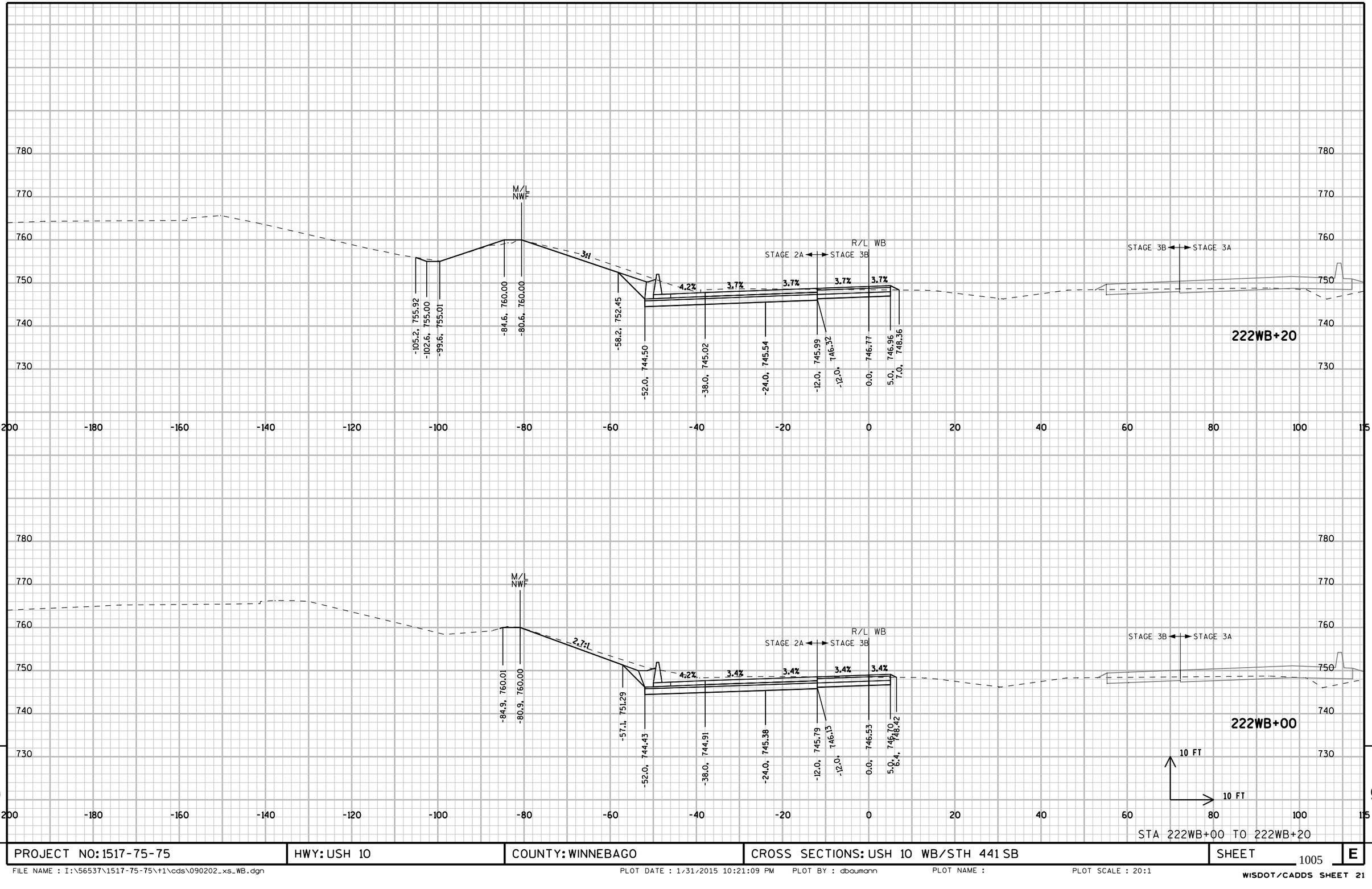
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9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1004	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:08 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

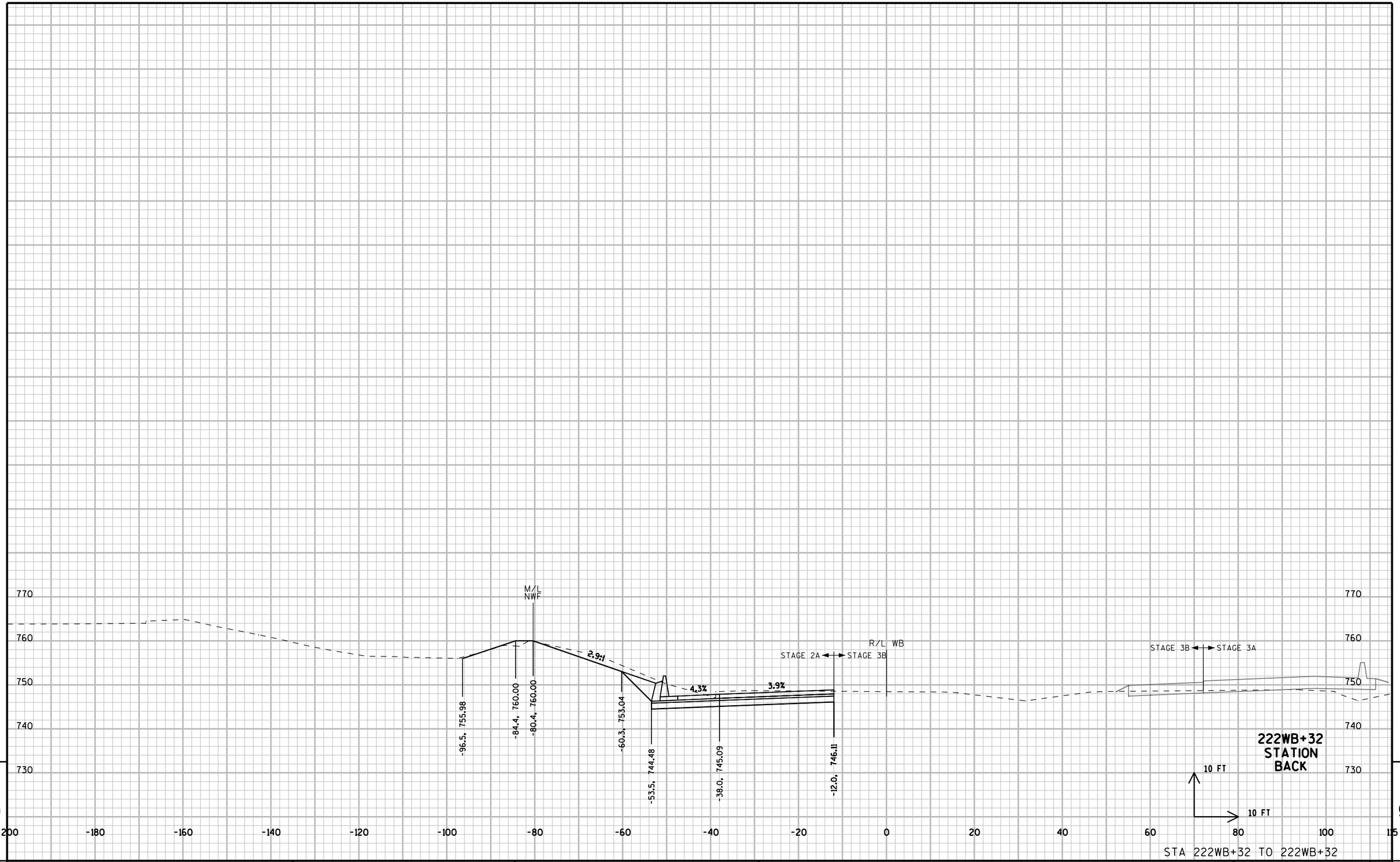
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STA 222WB+00 TO 222WB+20

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1005	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:09 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

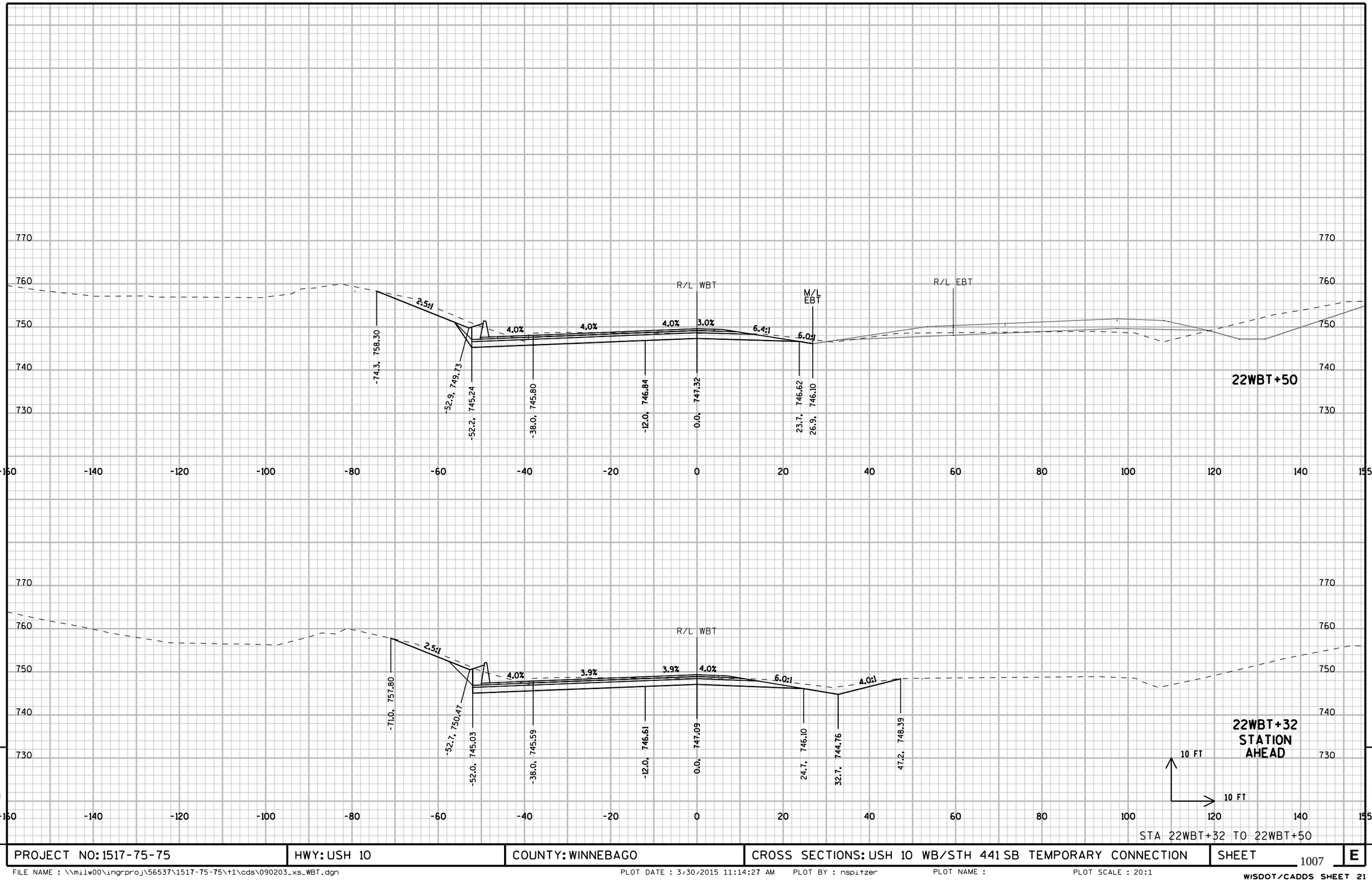


STA 222WB+32 TO 222WB+32

9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB	SHEET 1006	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090202_xs_WB.dgn PLOT DATE : 1/31/2015 10:21:10 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STA 22WBT+32 TO 22WBT+50

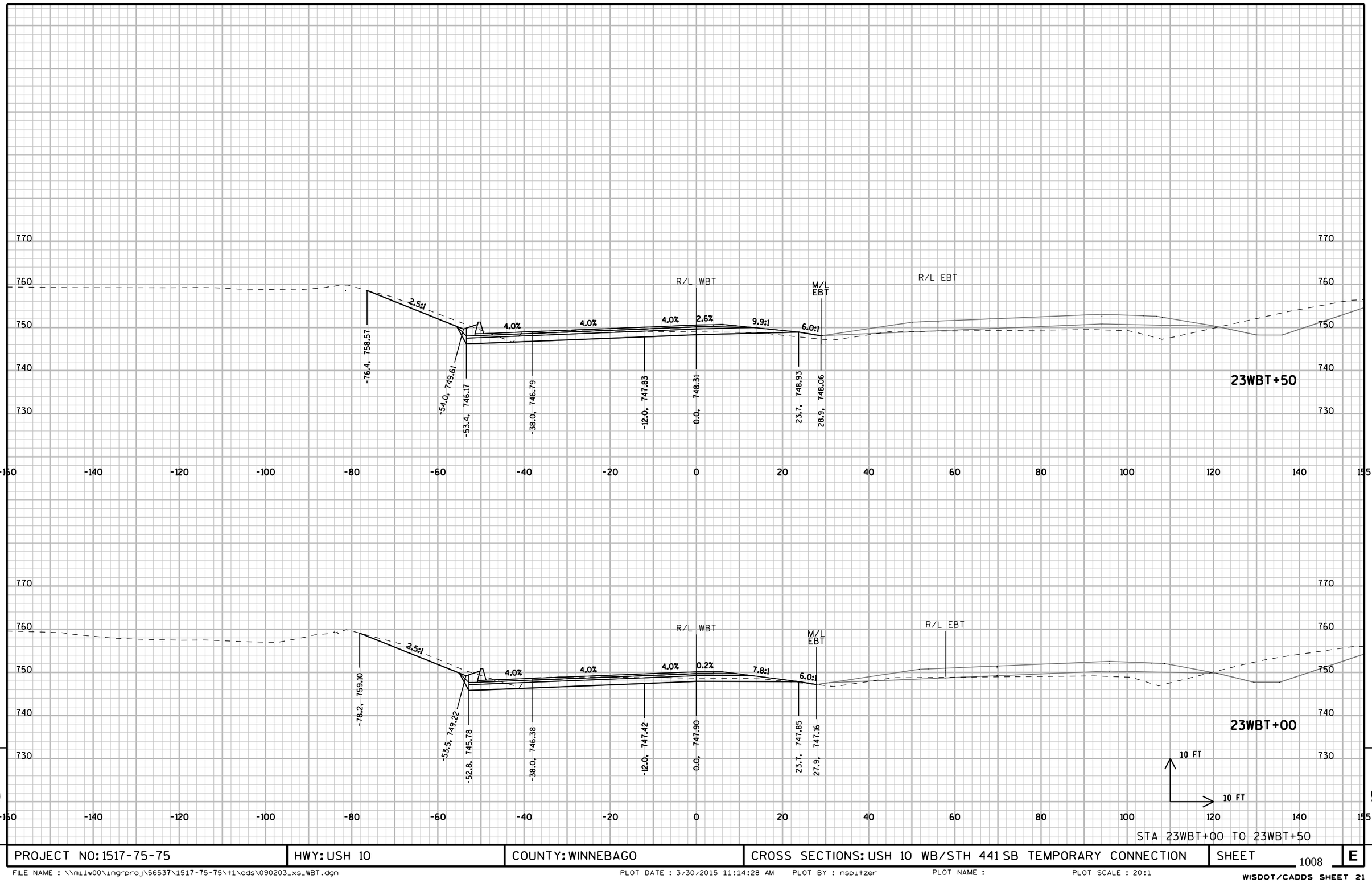
9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1007	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 3/30/2015 11:14:27 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

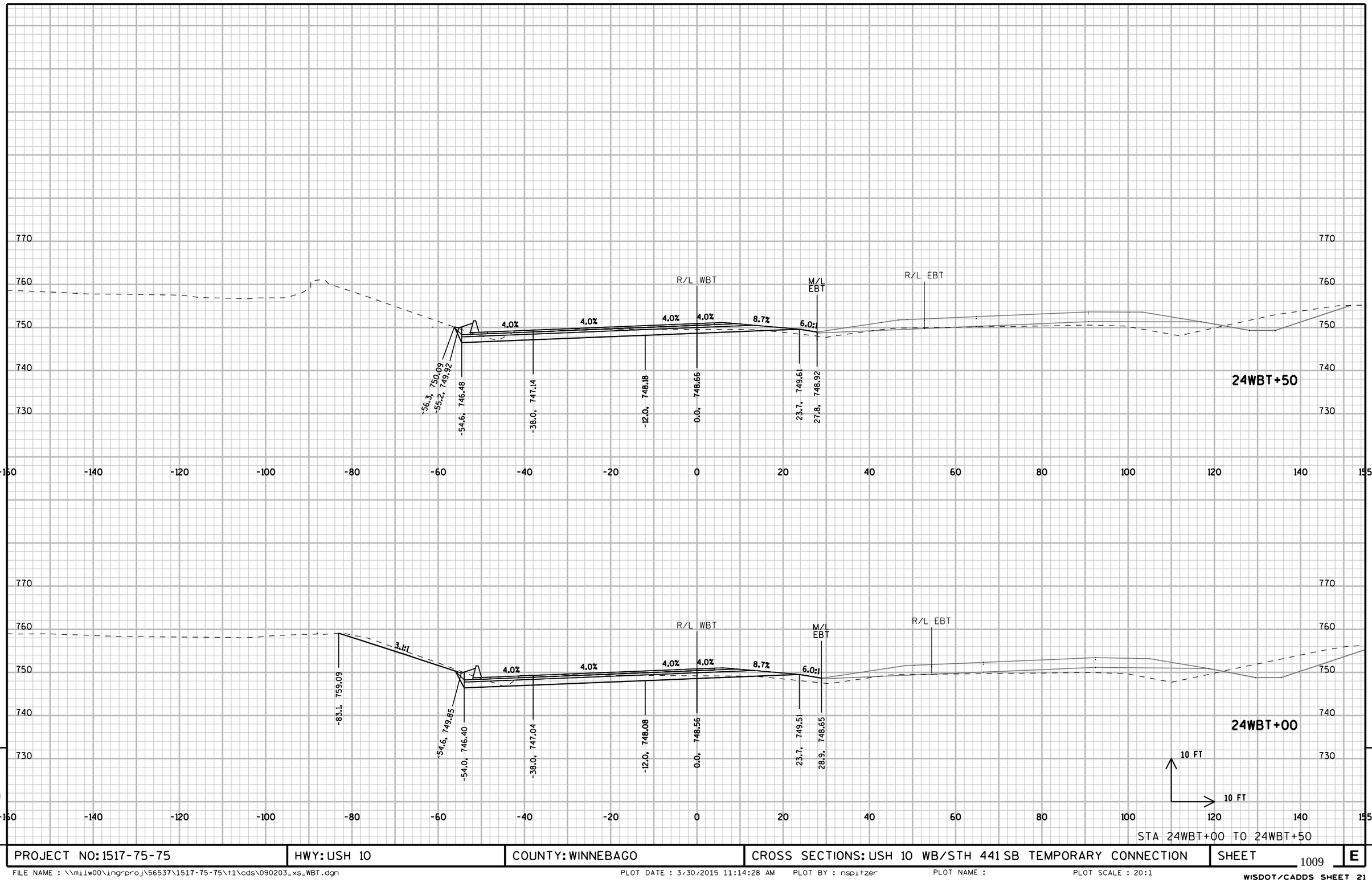


STA 23WBT+00 TO 23WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1008	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 3/30/2015 11:14:28 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

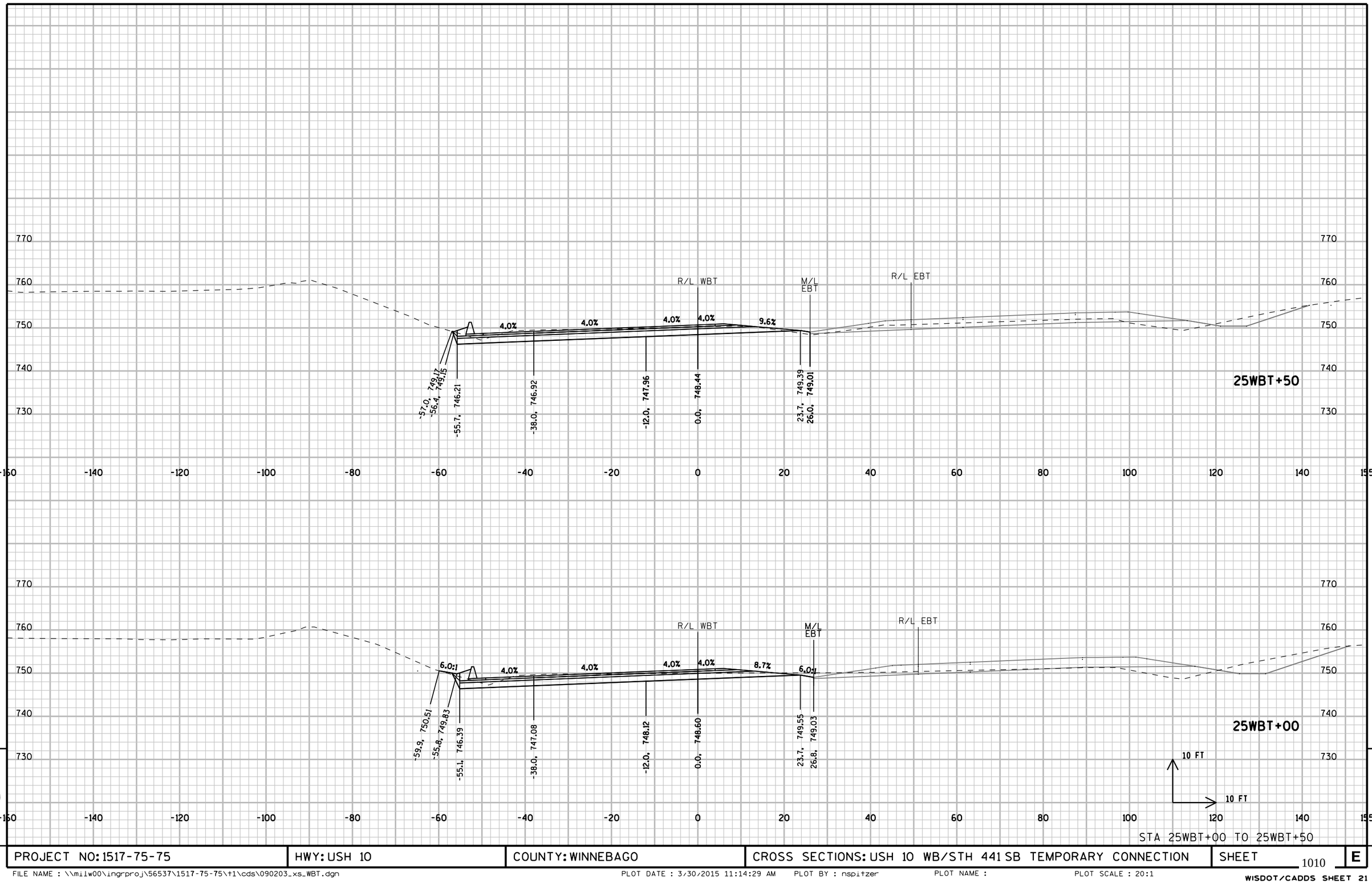


STA 24WBT+00 TO 24WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1009	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 3/30/2015 11:14:28 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

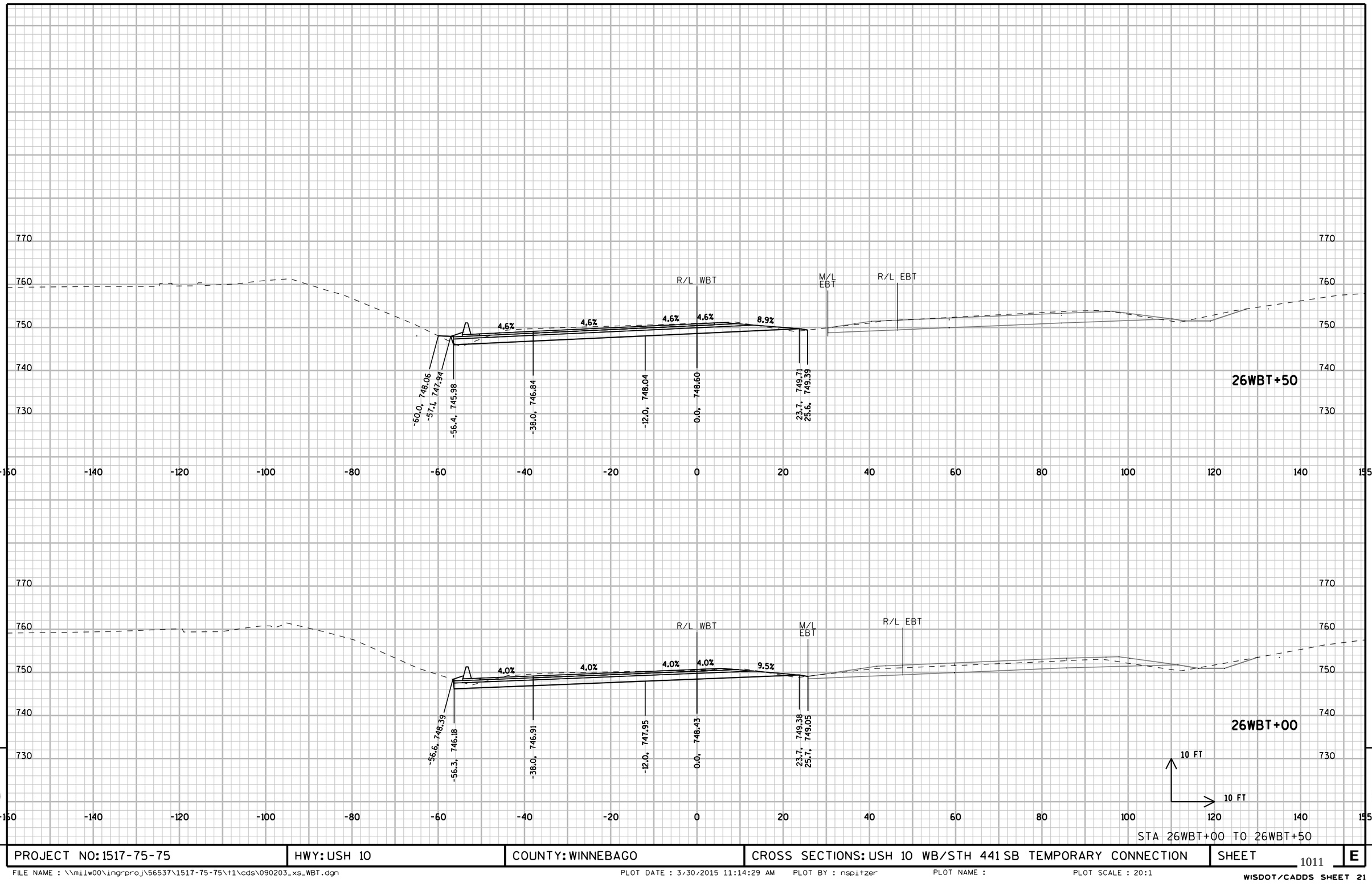


STA 25WBT+00 TO 25WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1010	E

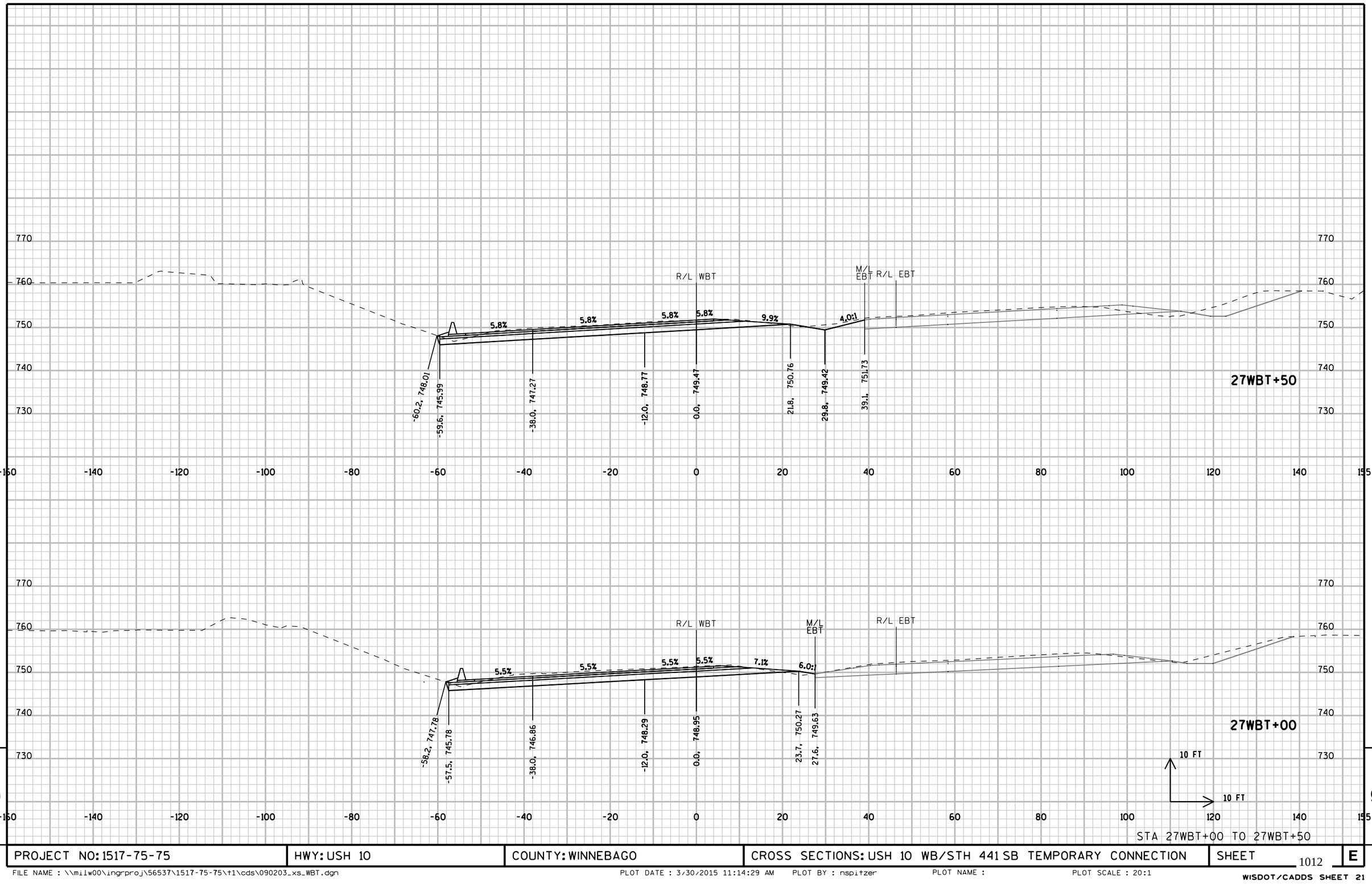
FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 3/30/2015 11:14:29 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



STA 26WBT+00 TO 26WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1011	E

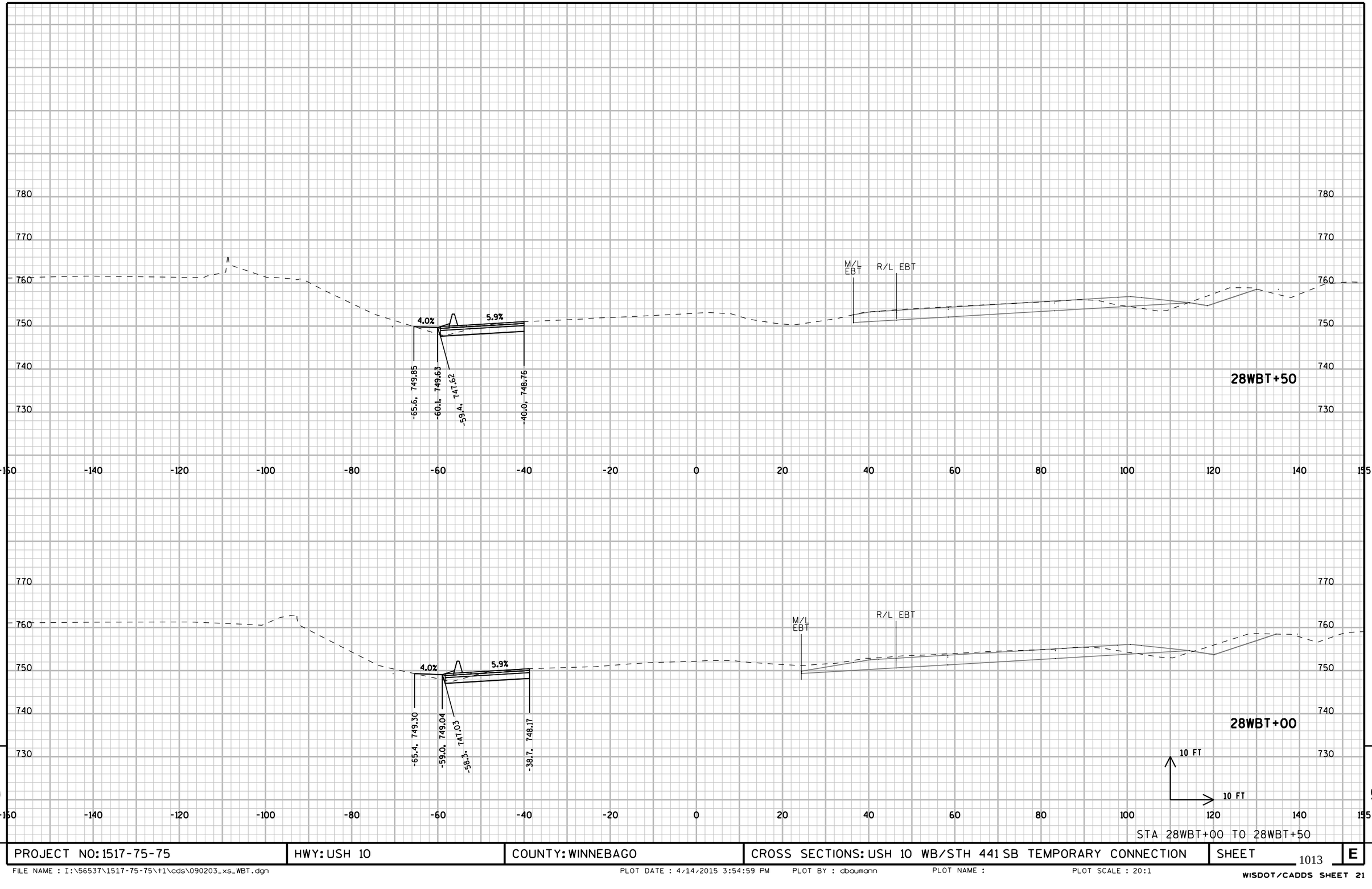


STA 27WBT+00 TO 27WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1012	E

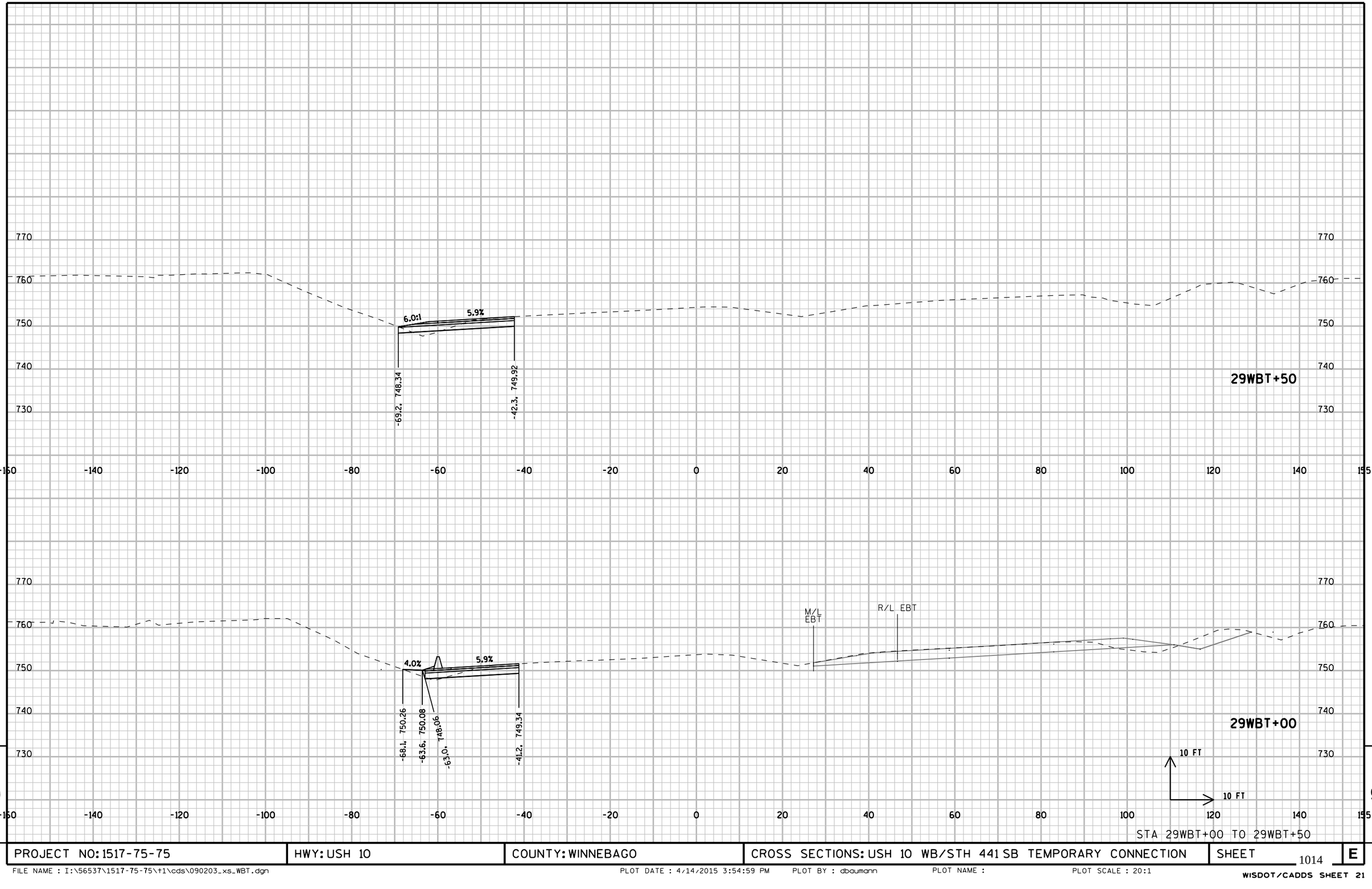
FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 3/30/2015 11:14:29 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



STA 28WBT+00 TO 28WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1013	E

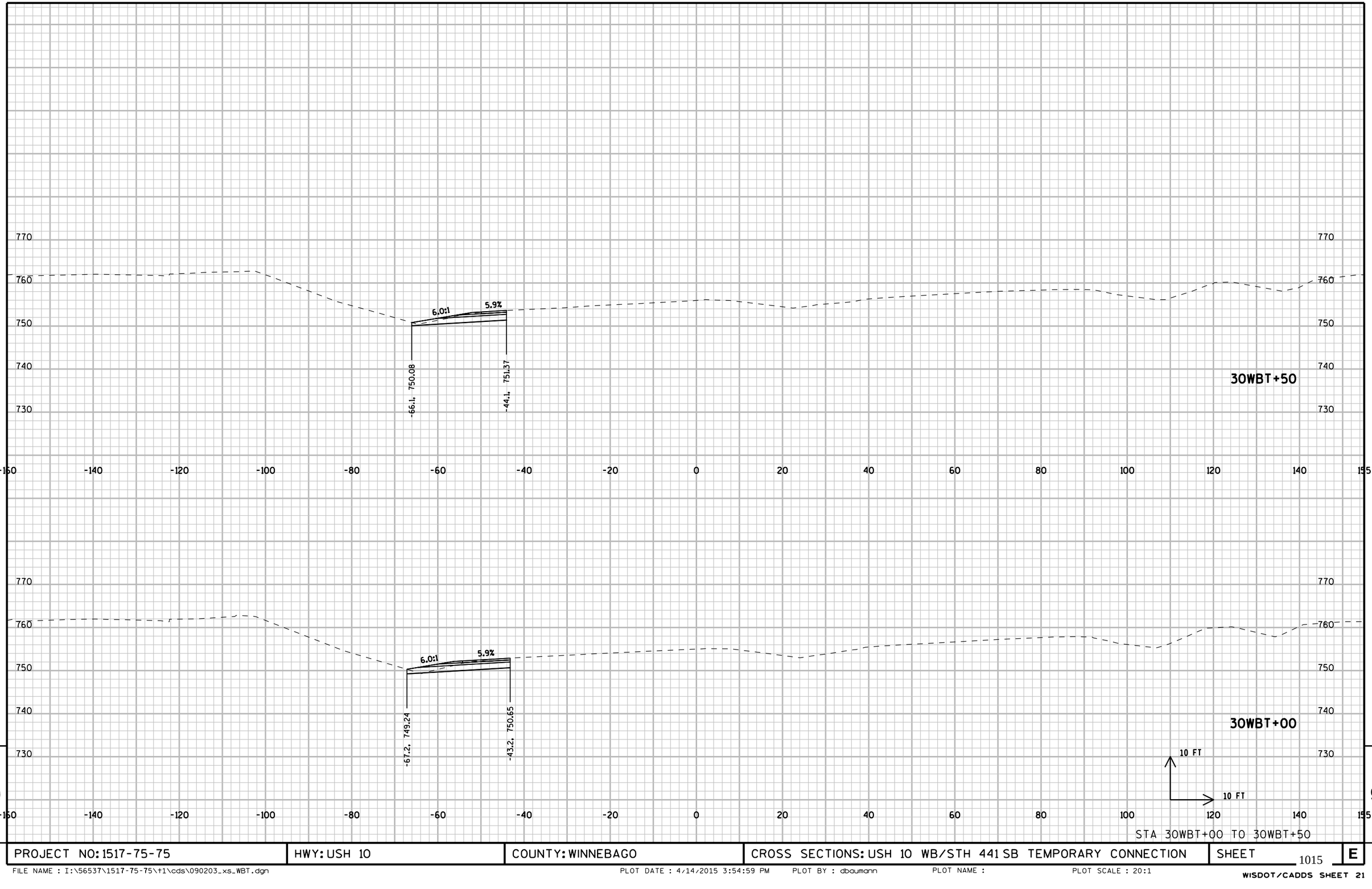


STA 29WBT+00 TO 29WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1014	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 4/14/2015 3:54:59 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

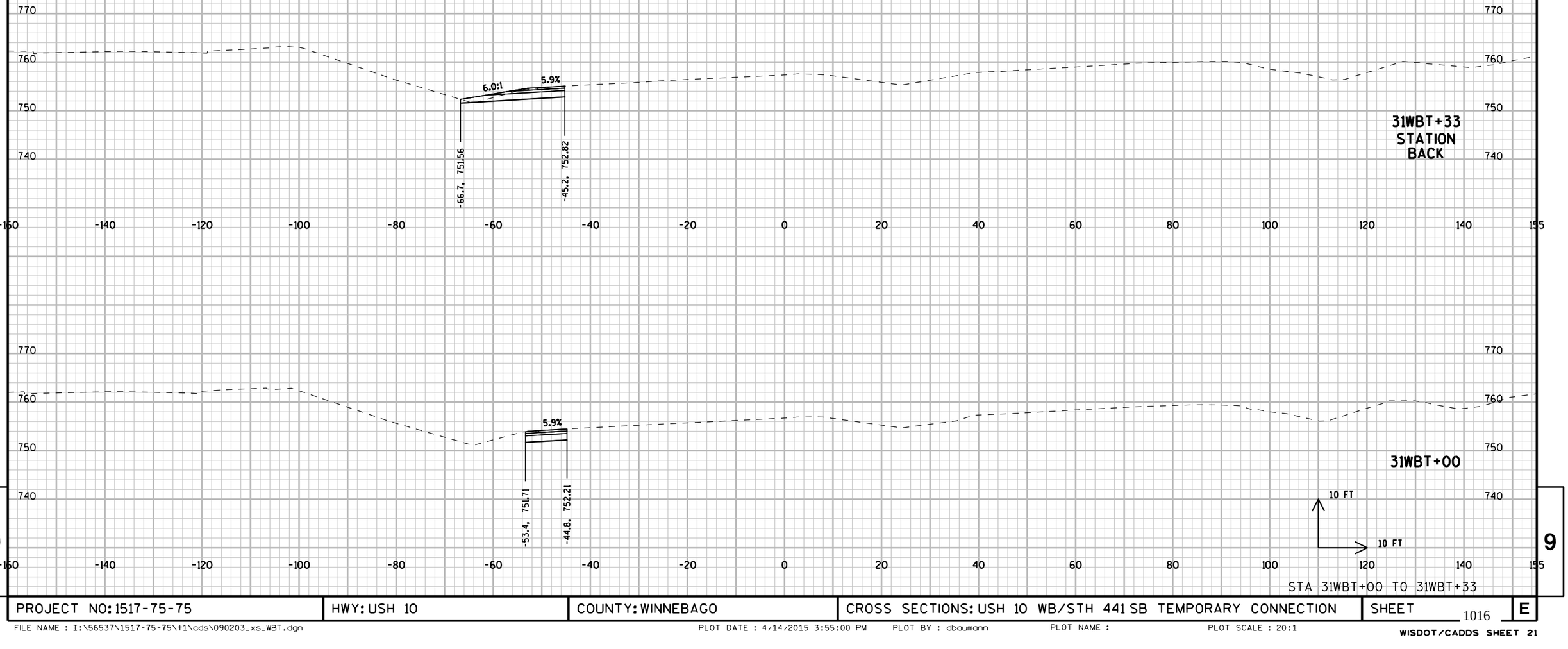


STA 30WBT+00 TO 30WBT+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1015	E

9

FILE NAME : I:\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 4/14/2015 3:54:59 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1



9

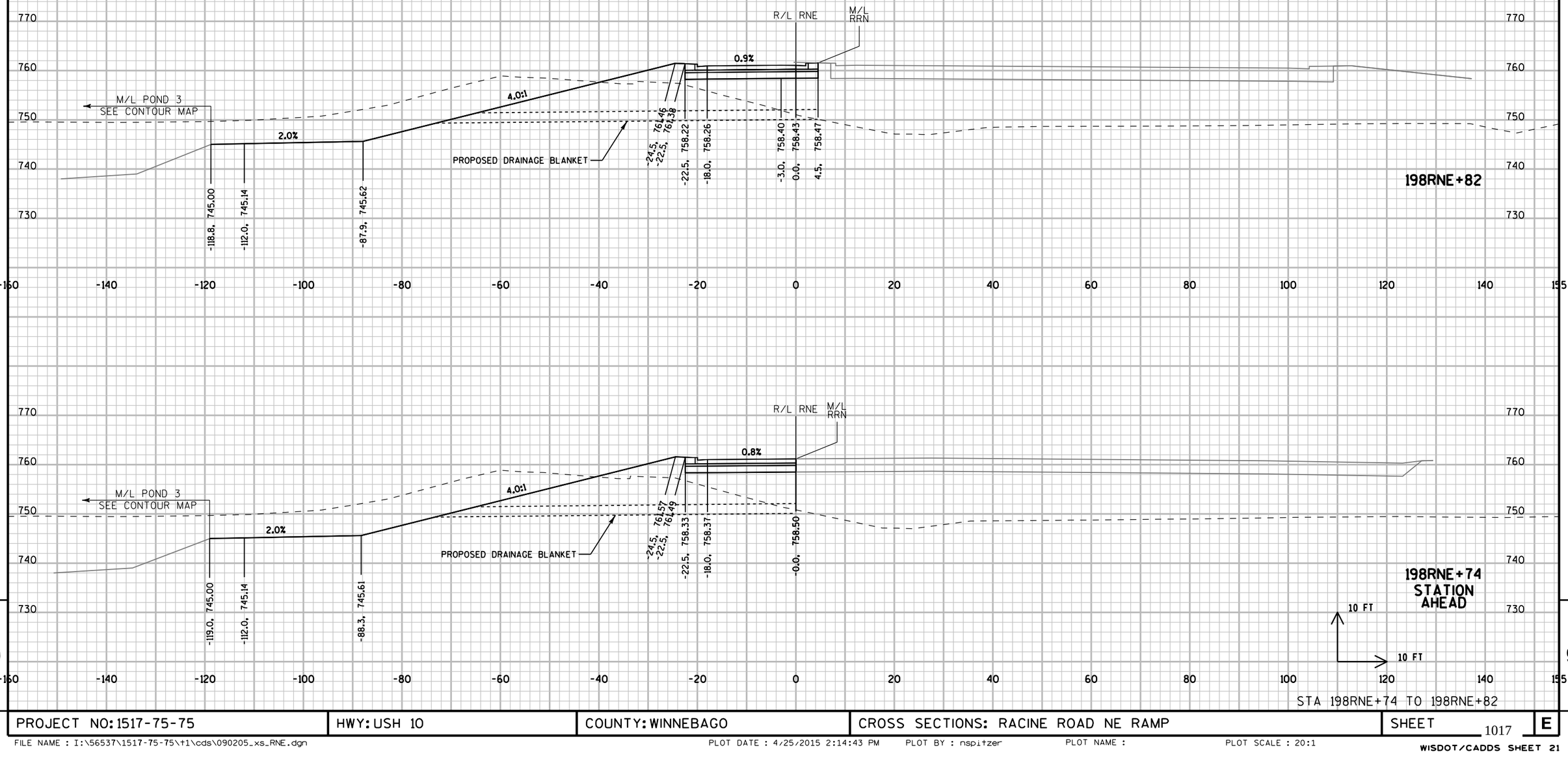
9

STA 31WBT+00 TO 31WBT+33

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: USH 10 WB/STH 441 SB TEMPORARY CONNECTION	SHEET 1016	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090203_xs_WBT.dgn PLOT DATE : 4/14/2015 3:55:00 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A

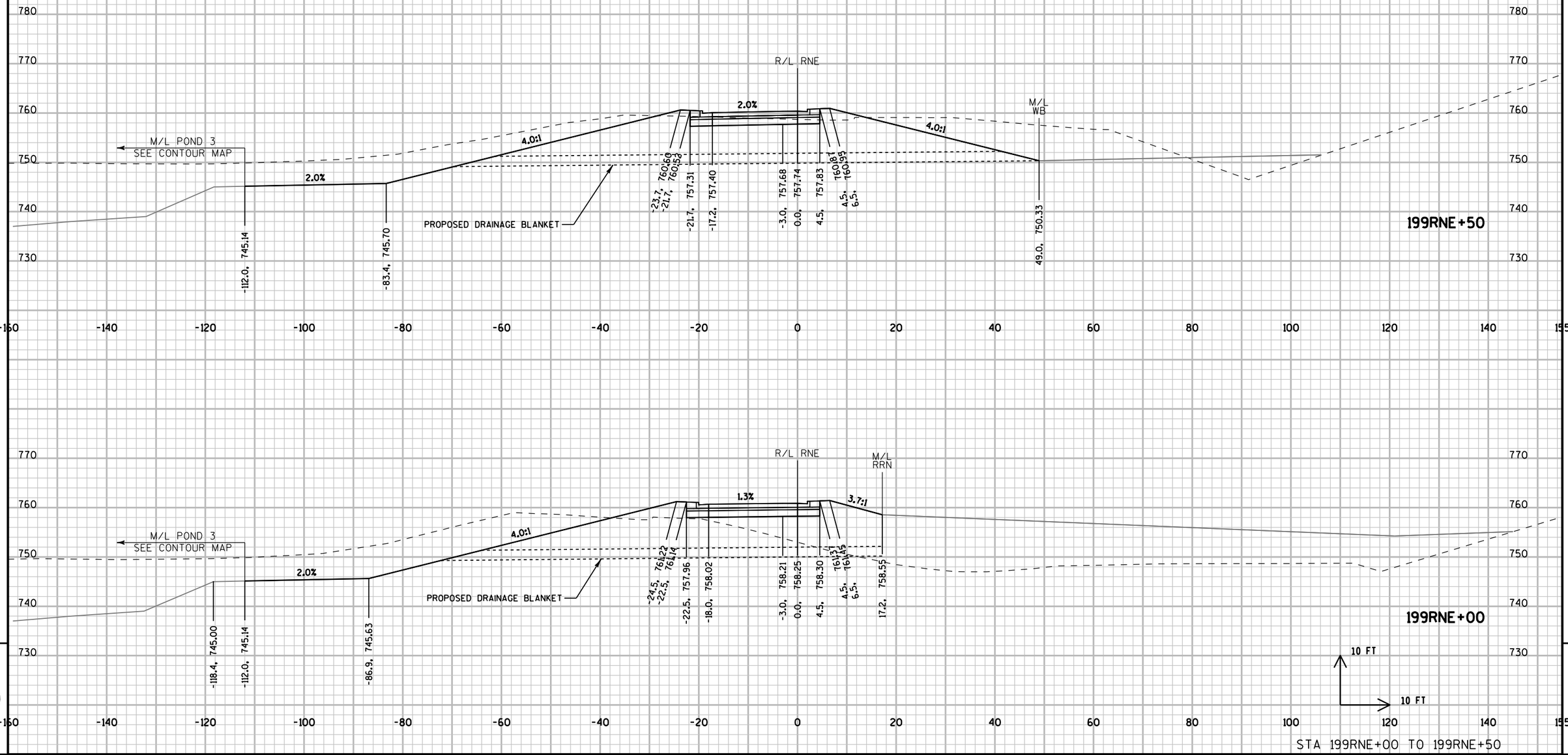


STA 198RNE+74 TO 198RNE+82

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1017	E

ALL WORK COMPLETED IN STAGE 2A



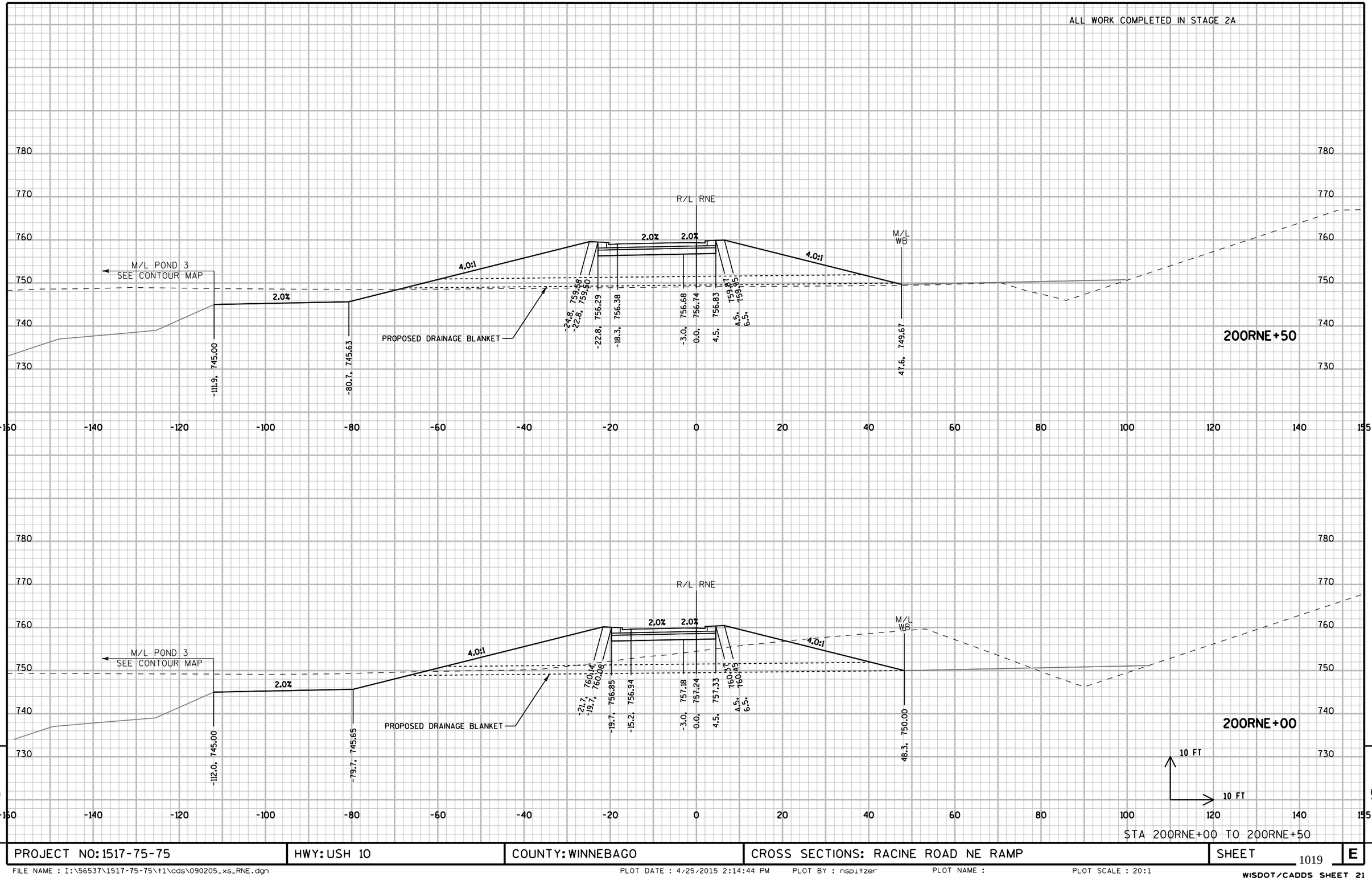
STA 199RNE+00 TO 199RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1018	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 4/25/2015 2:14:44 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



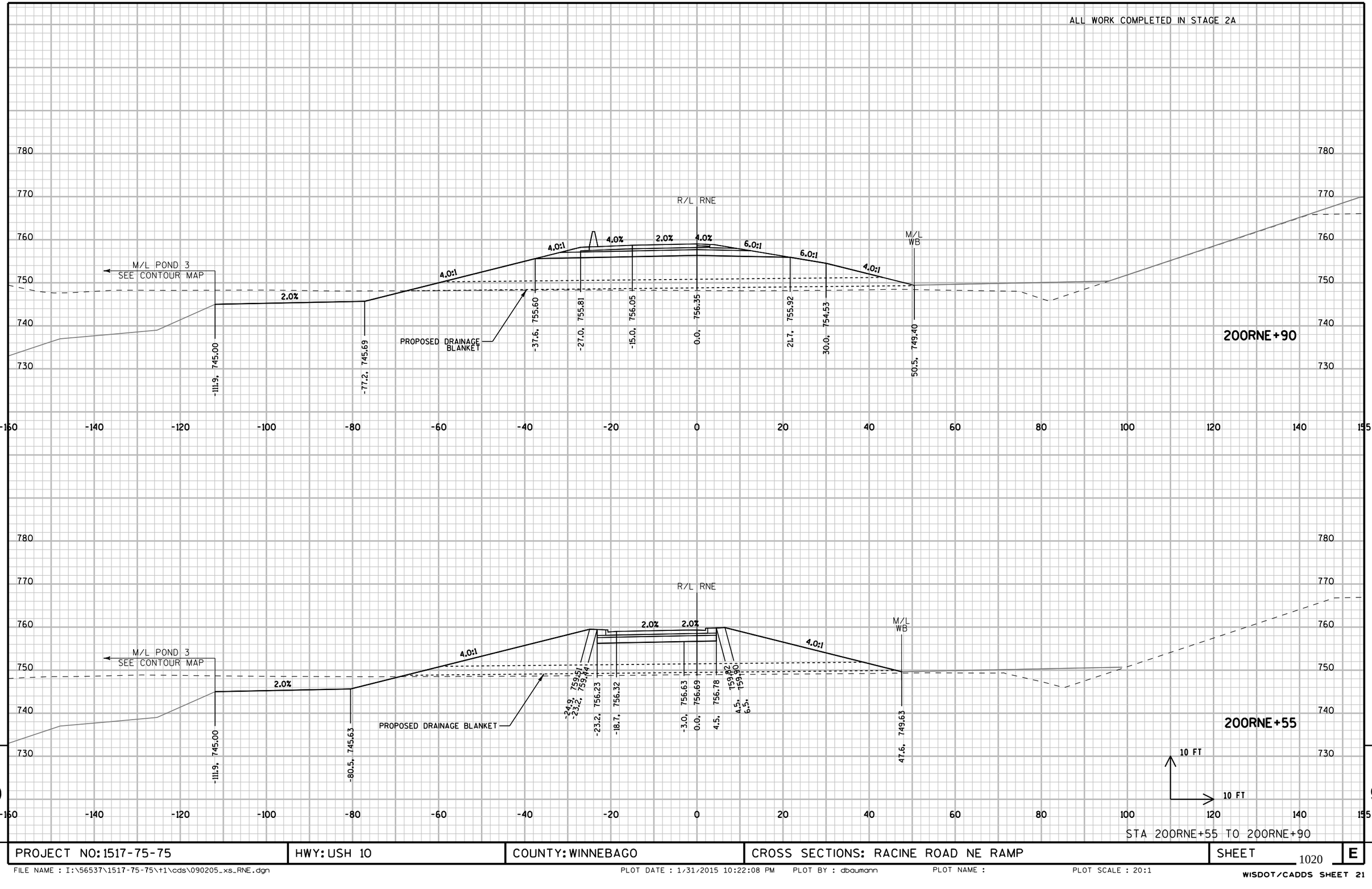
STA 200RNE+00 TO 200RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1019	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 4/25/2015 2:14:44 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



9

9

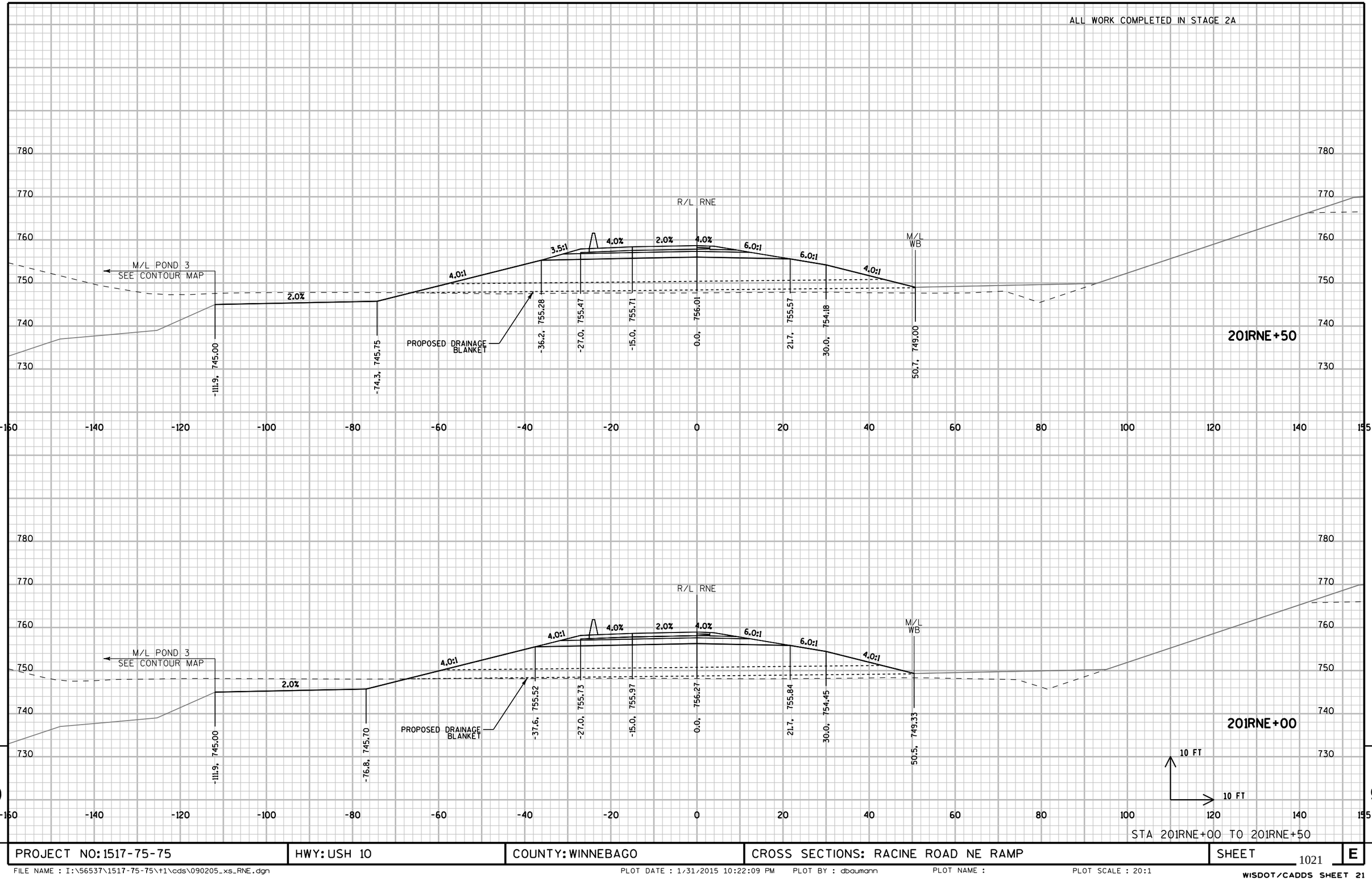
STA 200RNE+55 TO 200RNE+90

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1020	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:08 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



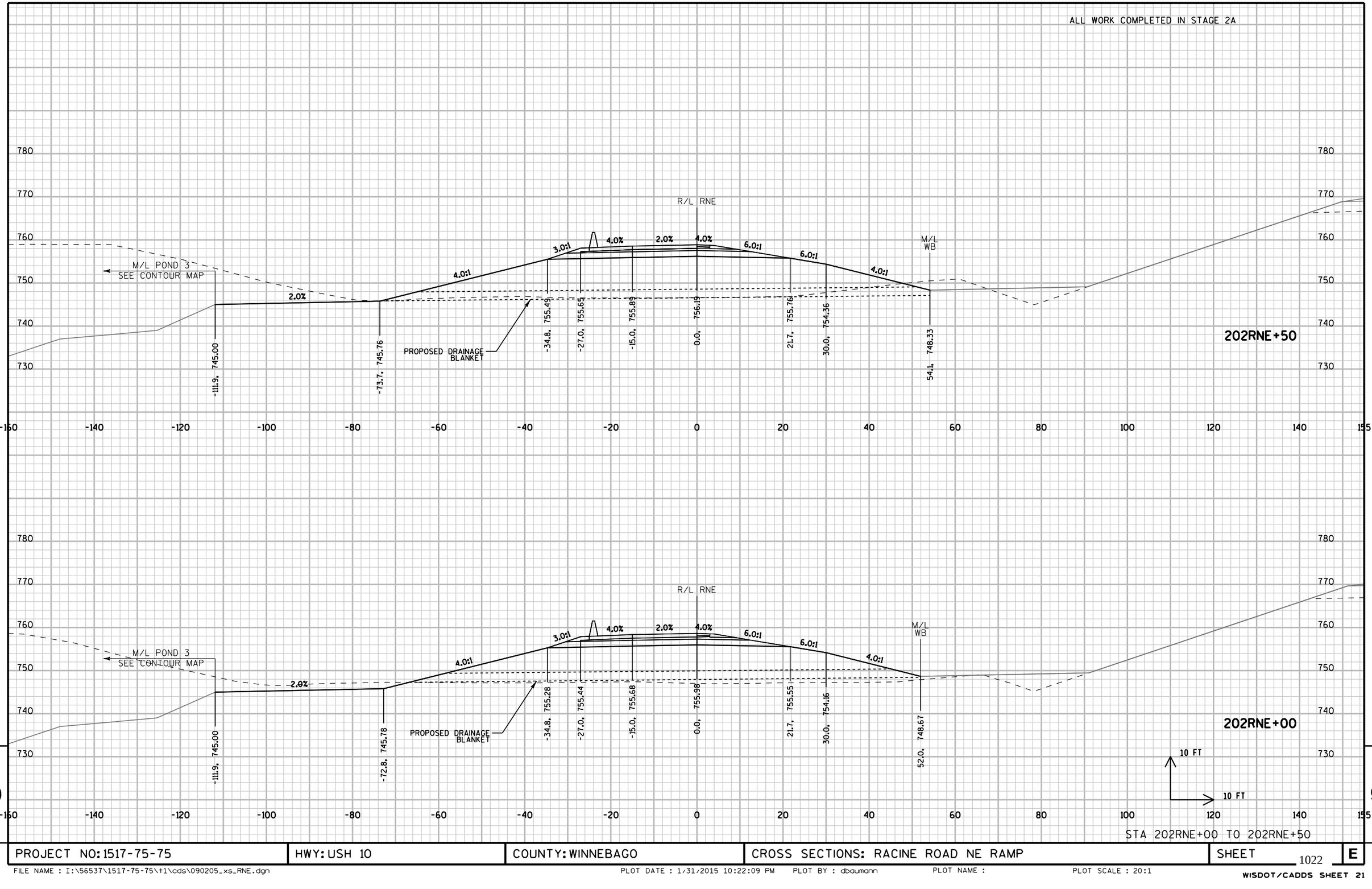
STA 201RNE+00 TO 201RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1021	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:09 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



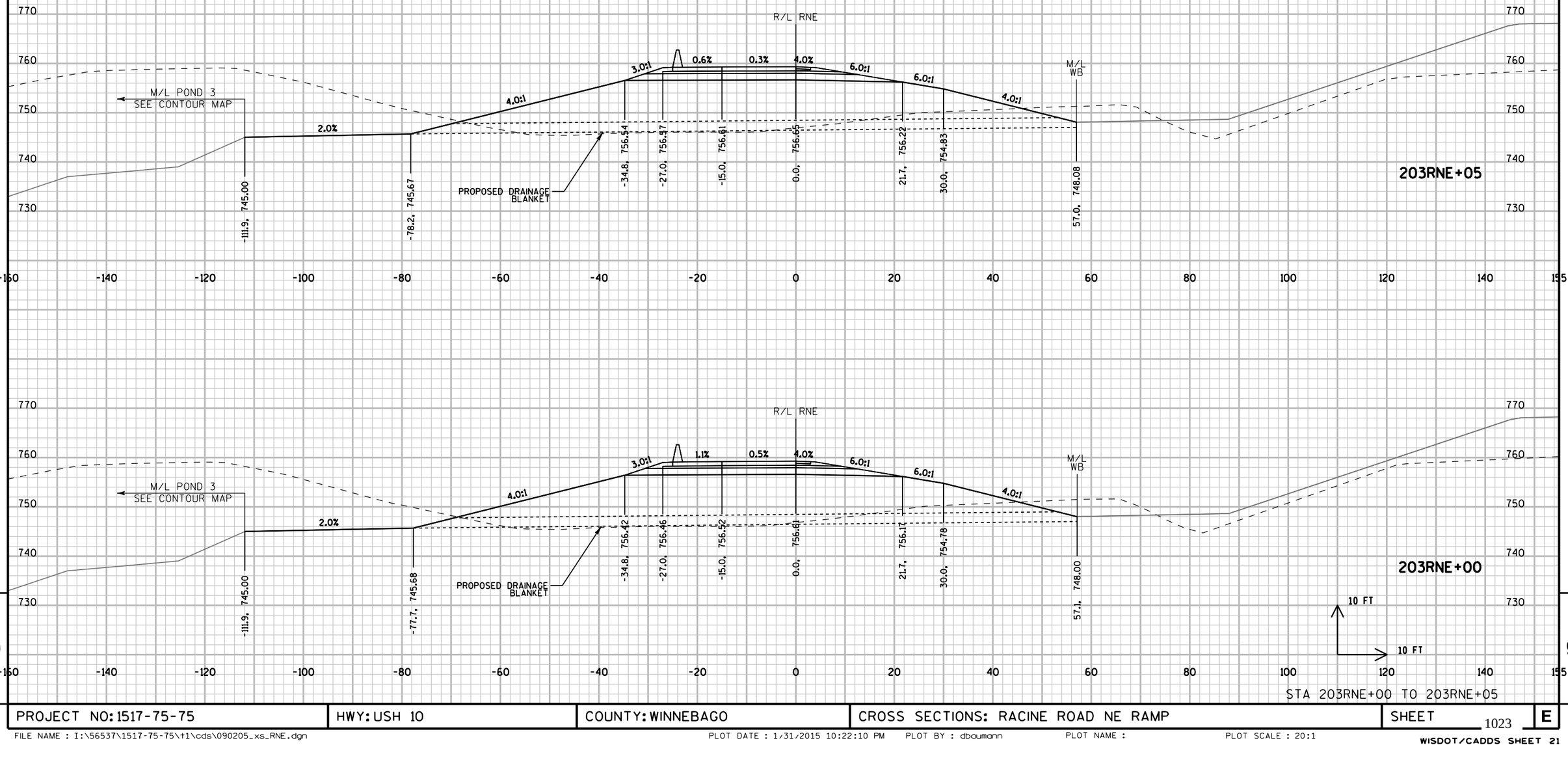
STA 202RNE+00 TO 202RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1022	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:09 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



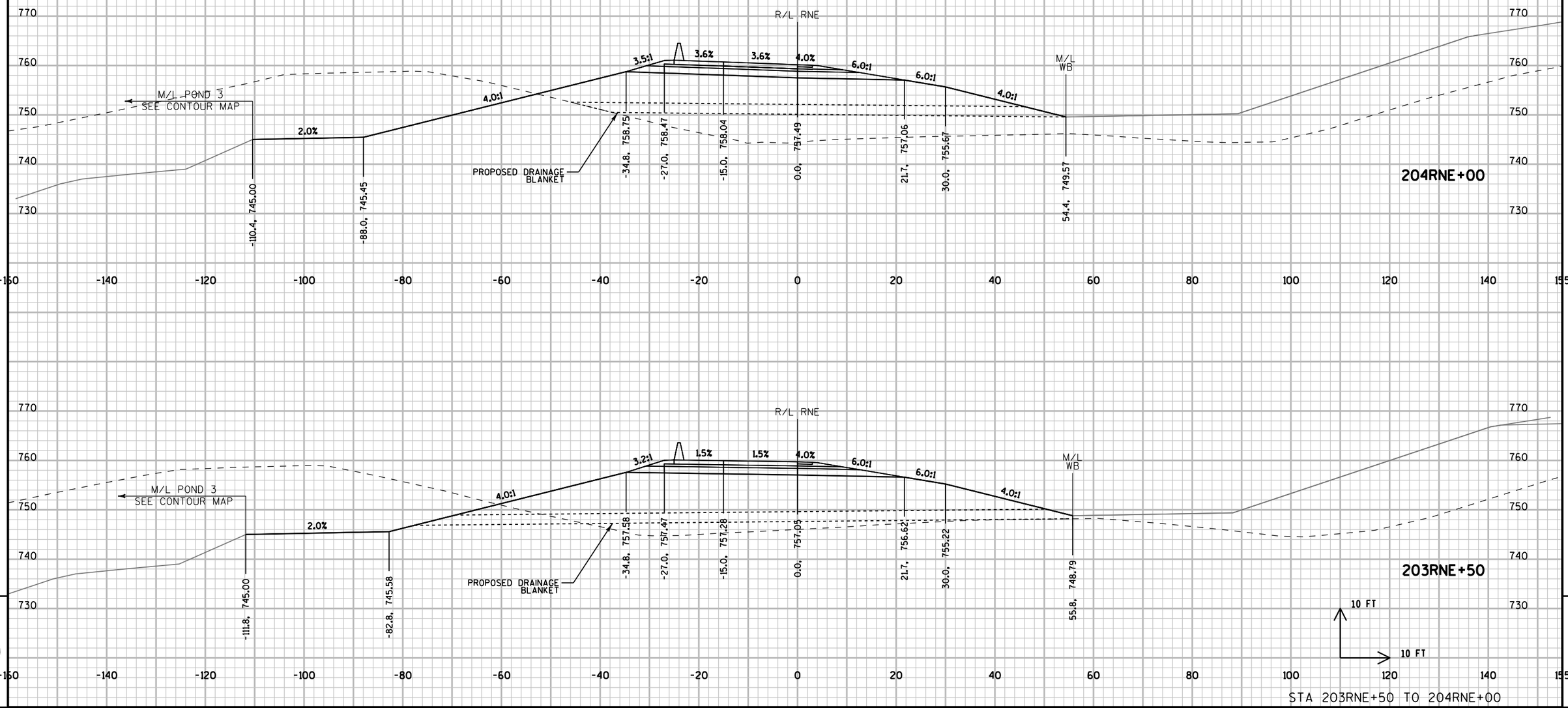
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STA 203RNE+00 TO 203RNE+05

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1023	E

ALL WORK COMPLETED IN STAGE 2A



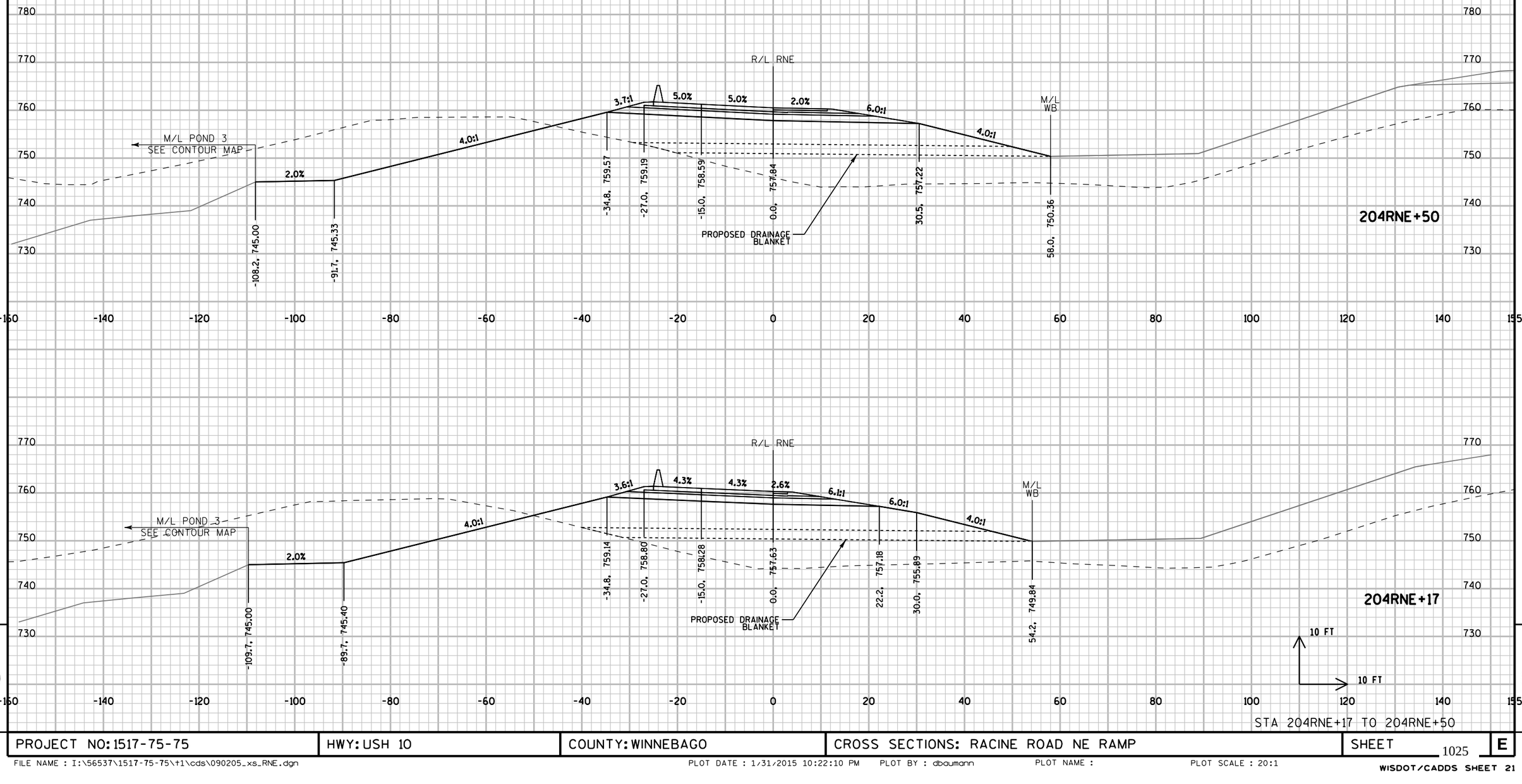
STA 203RNE+50 TO 204RNE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1024	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:10 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



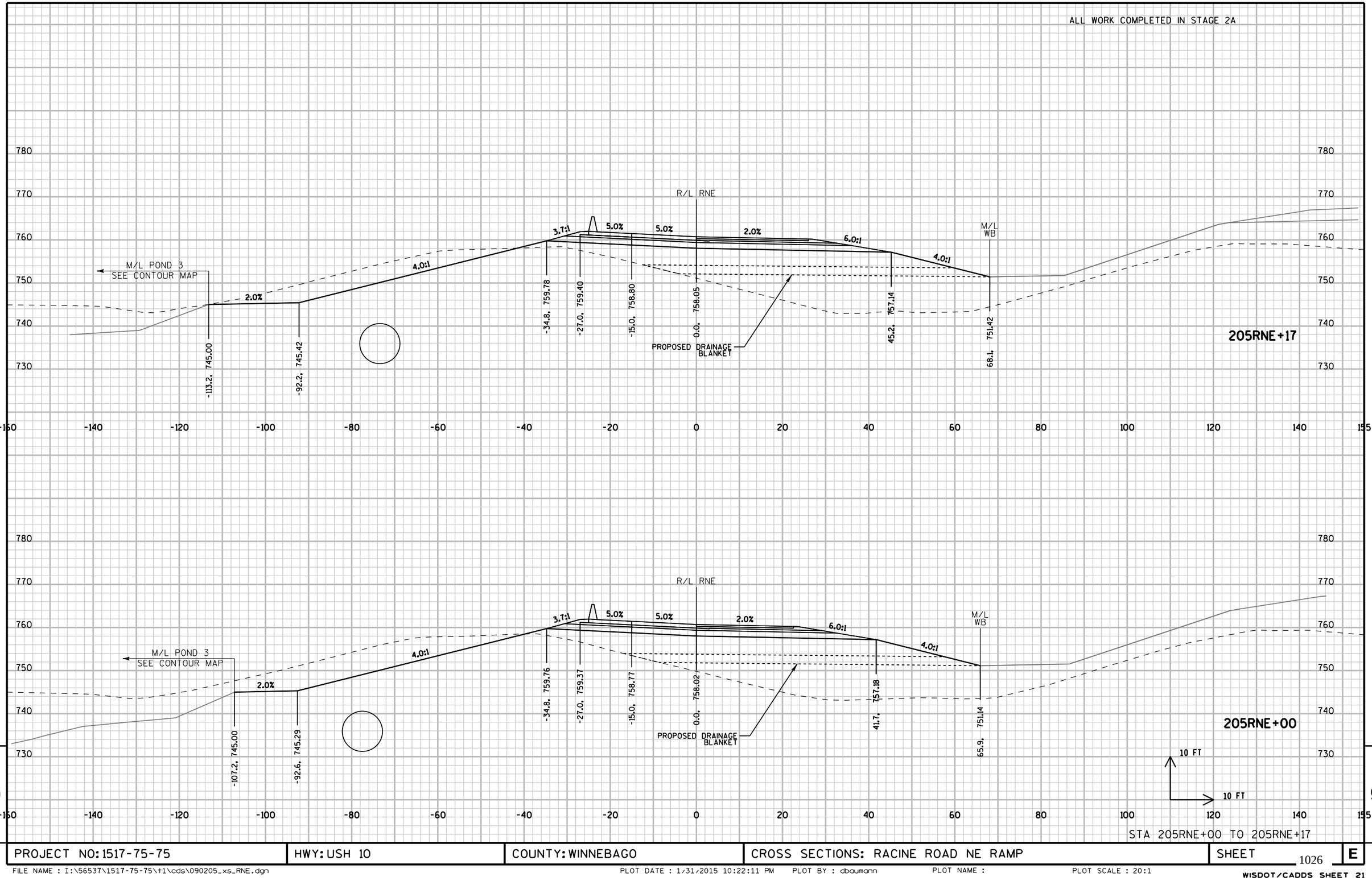
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1025	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:10 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



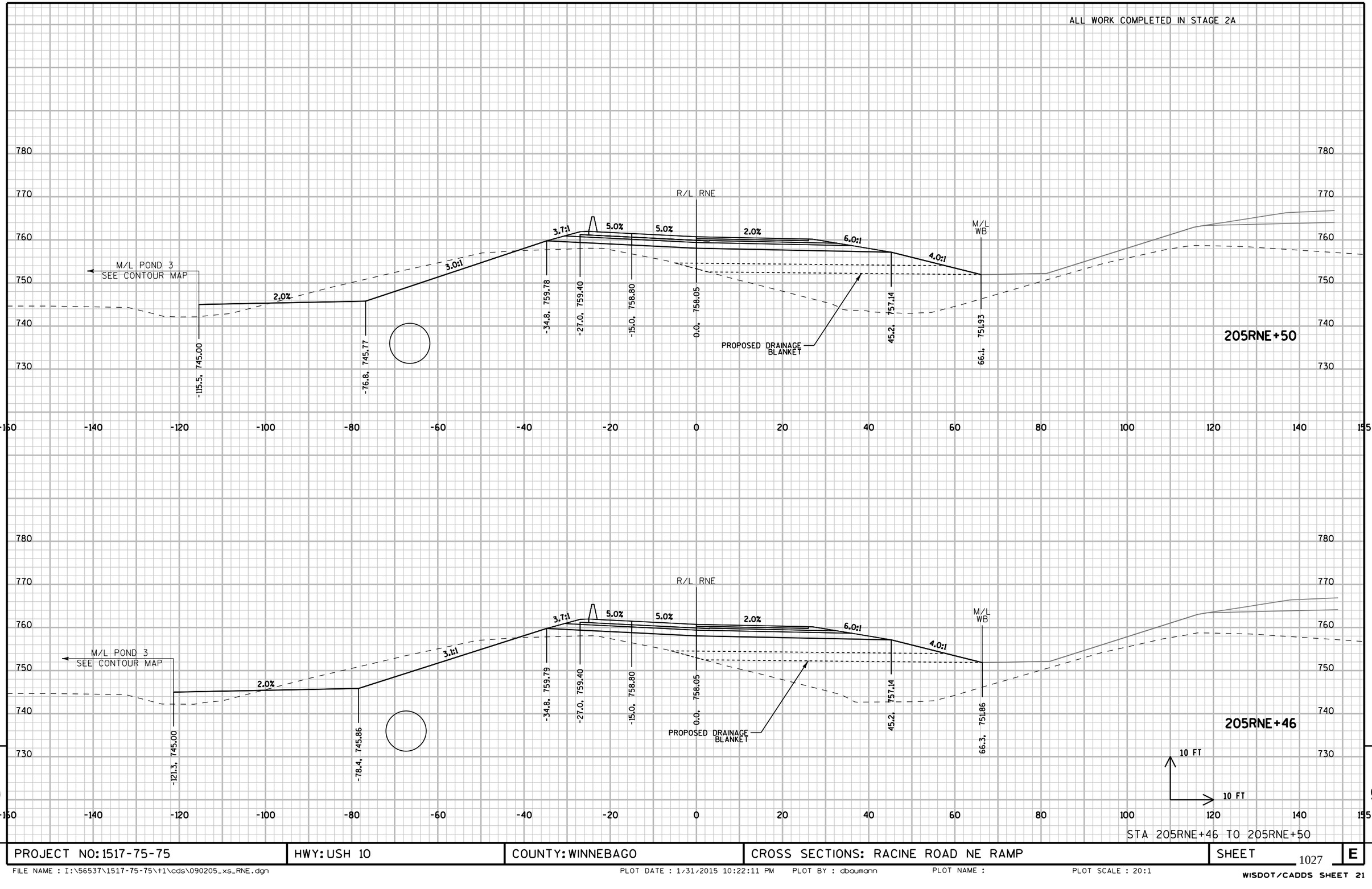
STA 205RNE+00 TO 205RNE+17

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1026	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:11 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 205RNE+46 TO 205RNE+50

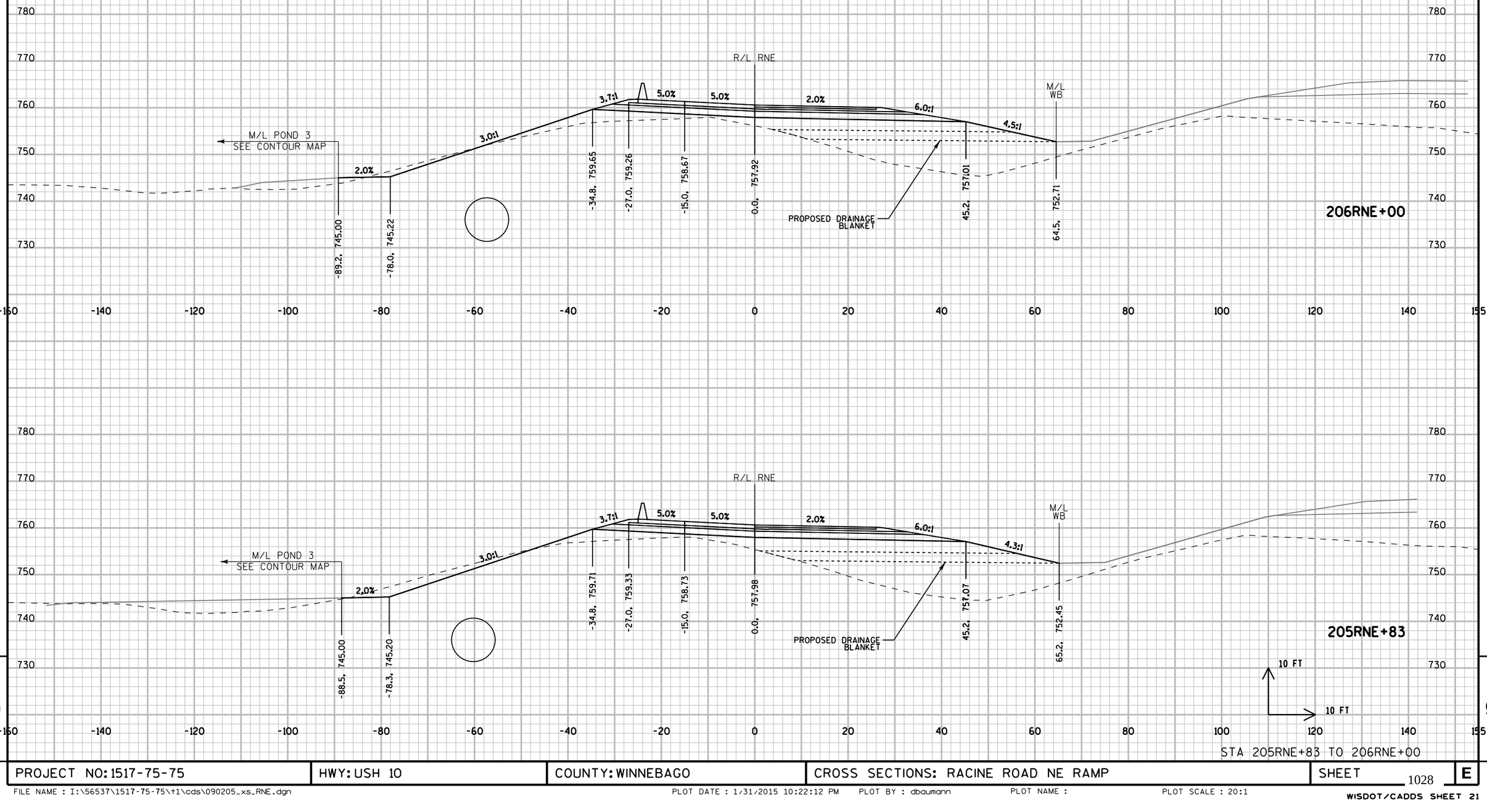
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1027	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:11 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

9 9

ALL WORK COMPLETED IN STAGE 2A



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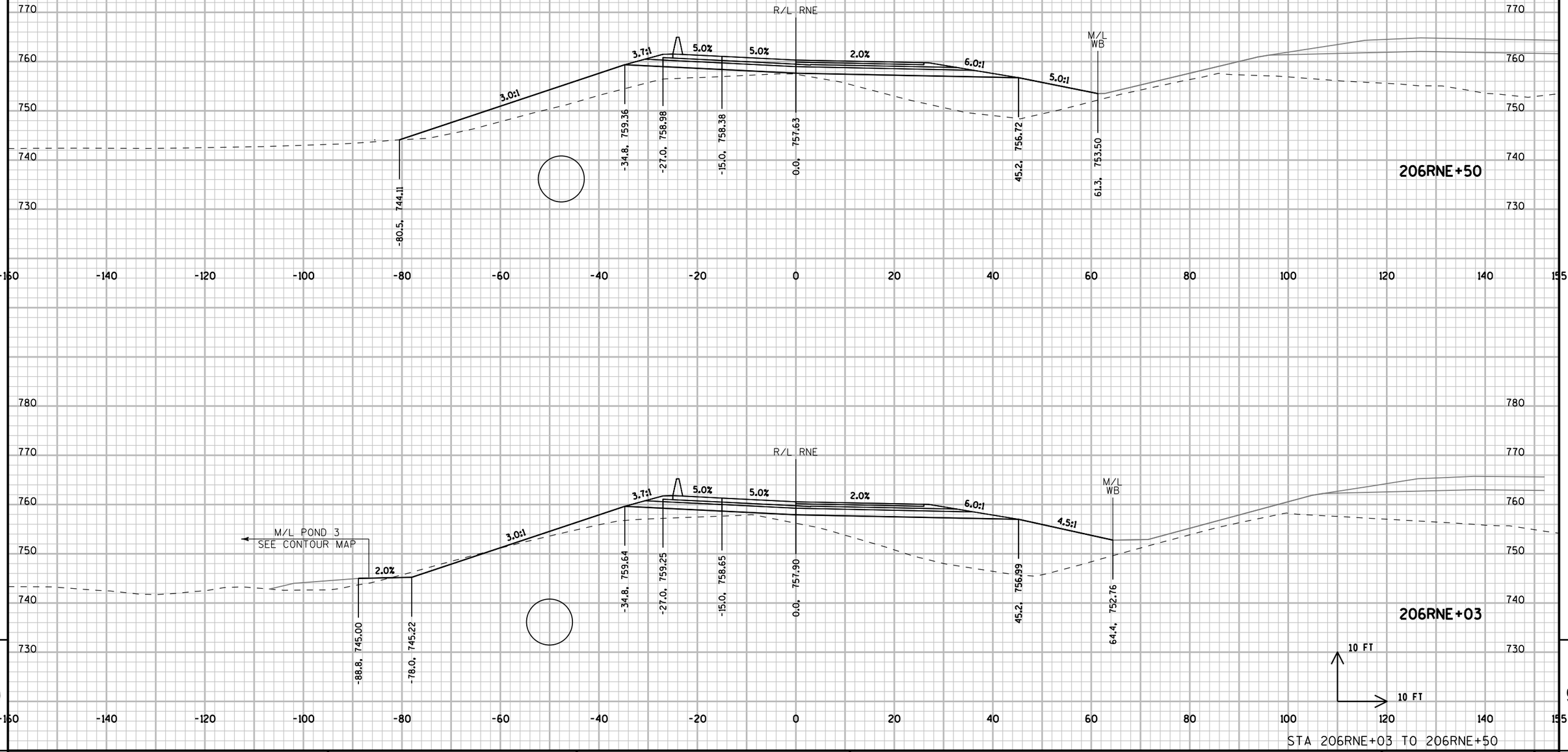
STA 205RNE+83 TO 206RNE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1028	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:12 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A

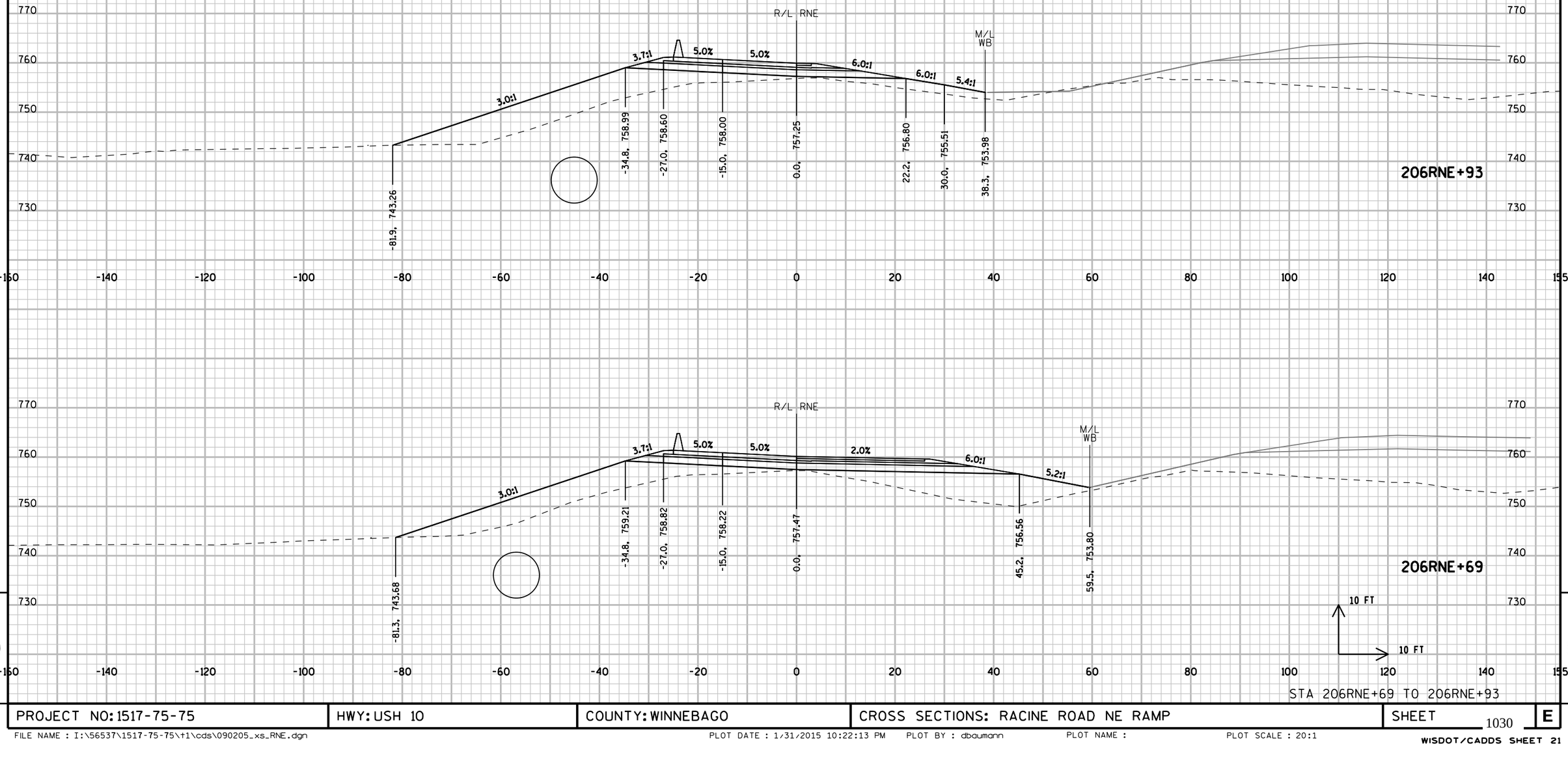


PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1029	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:12 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 206RNE+69 TO 206RNE+93

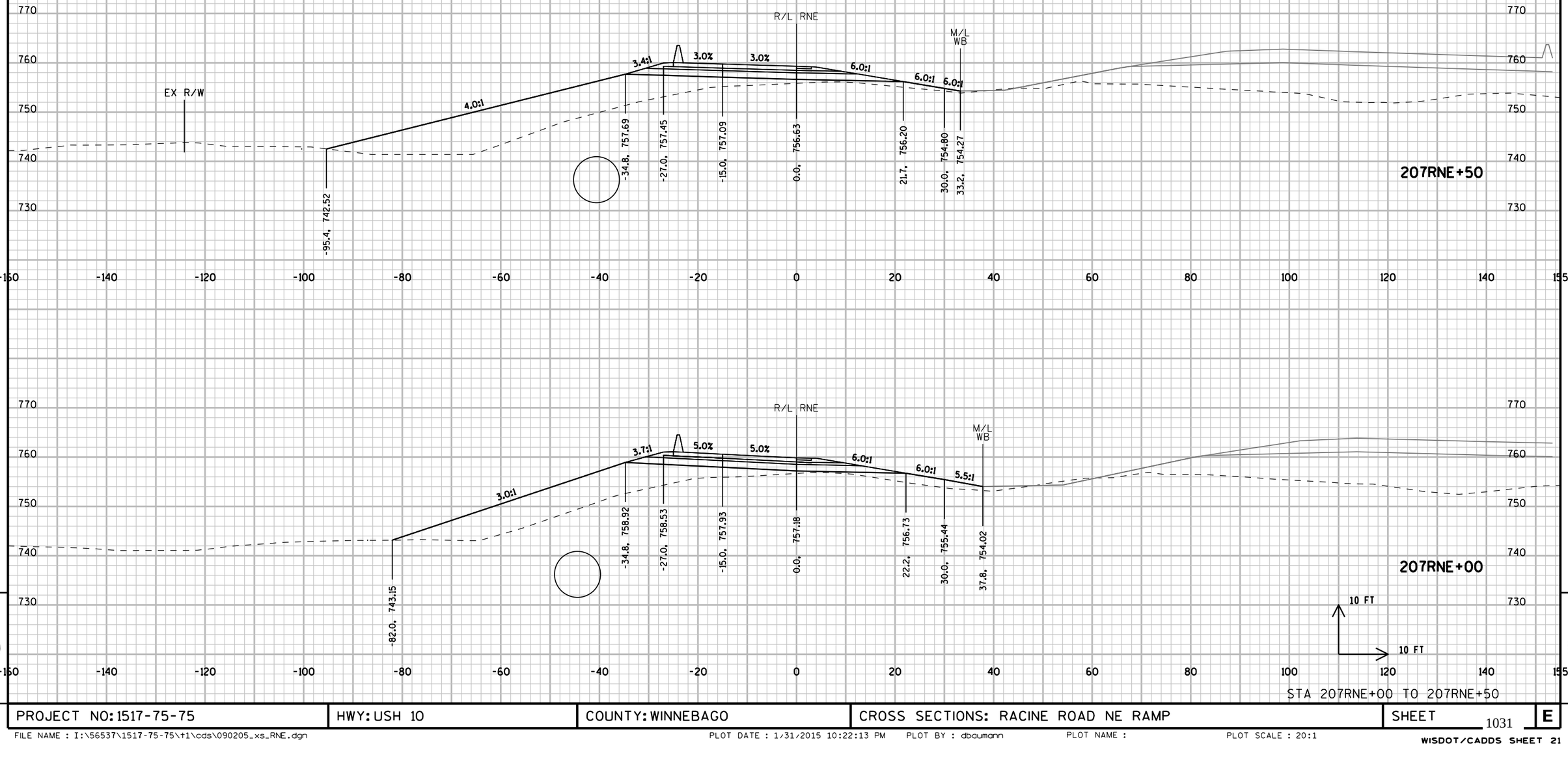
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1030	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:13 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

9 9

ALL WORK COMPLETED IN STAGE 2A



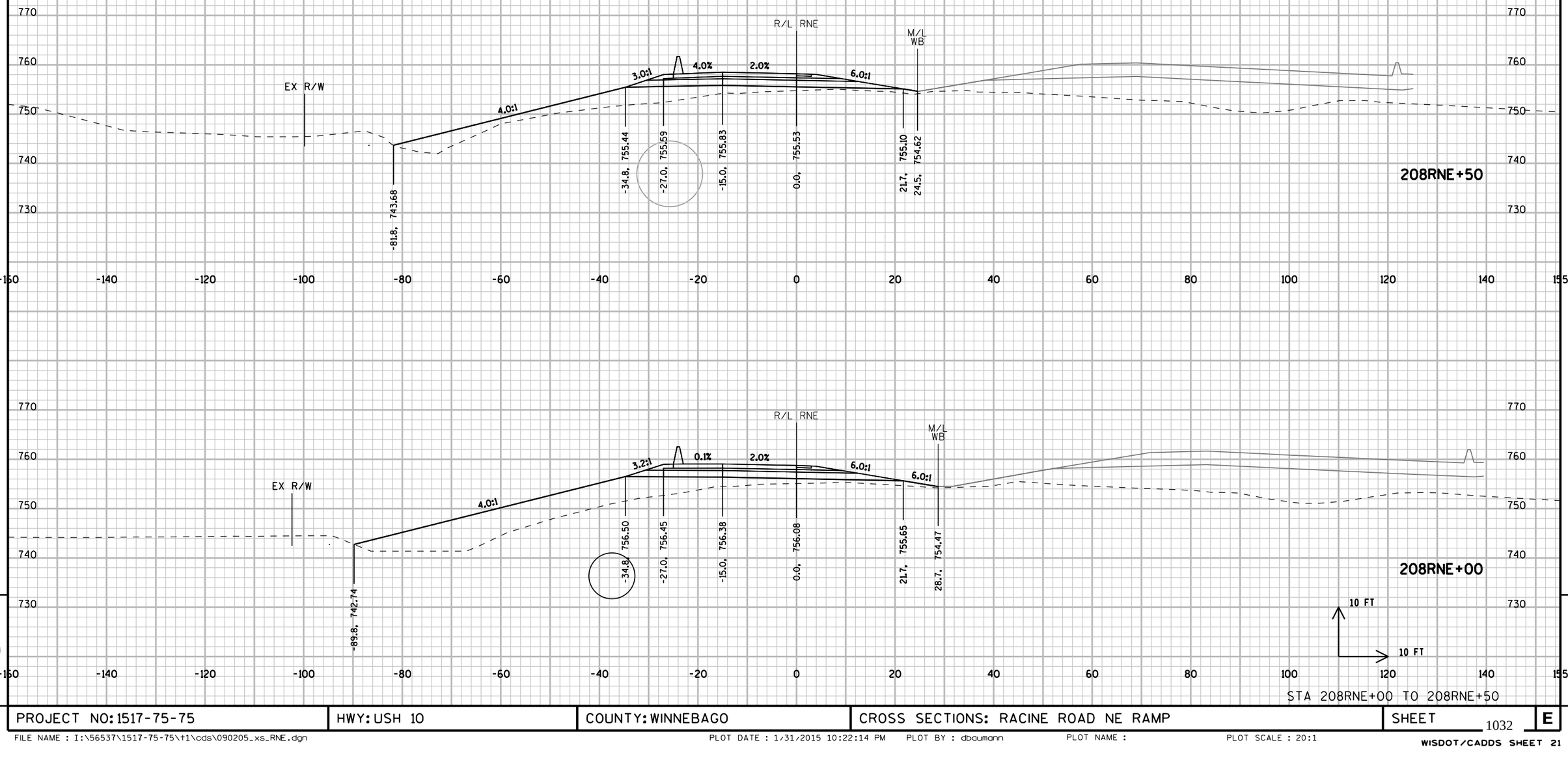
STA 207RNE+00 TO 207RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1031	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:13 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



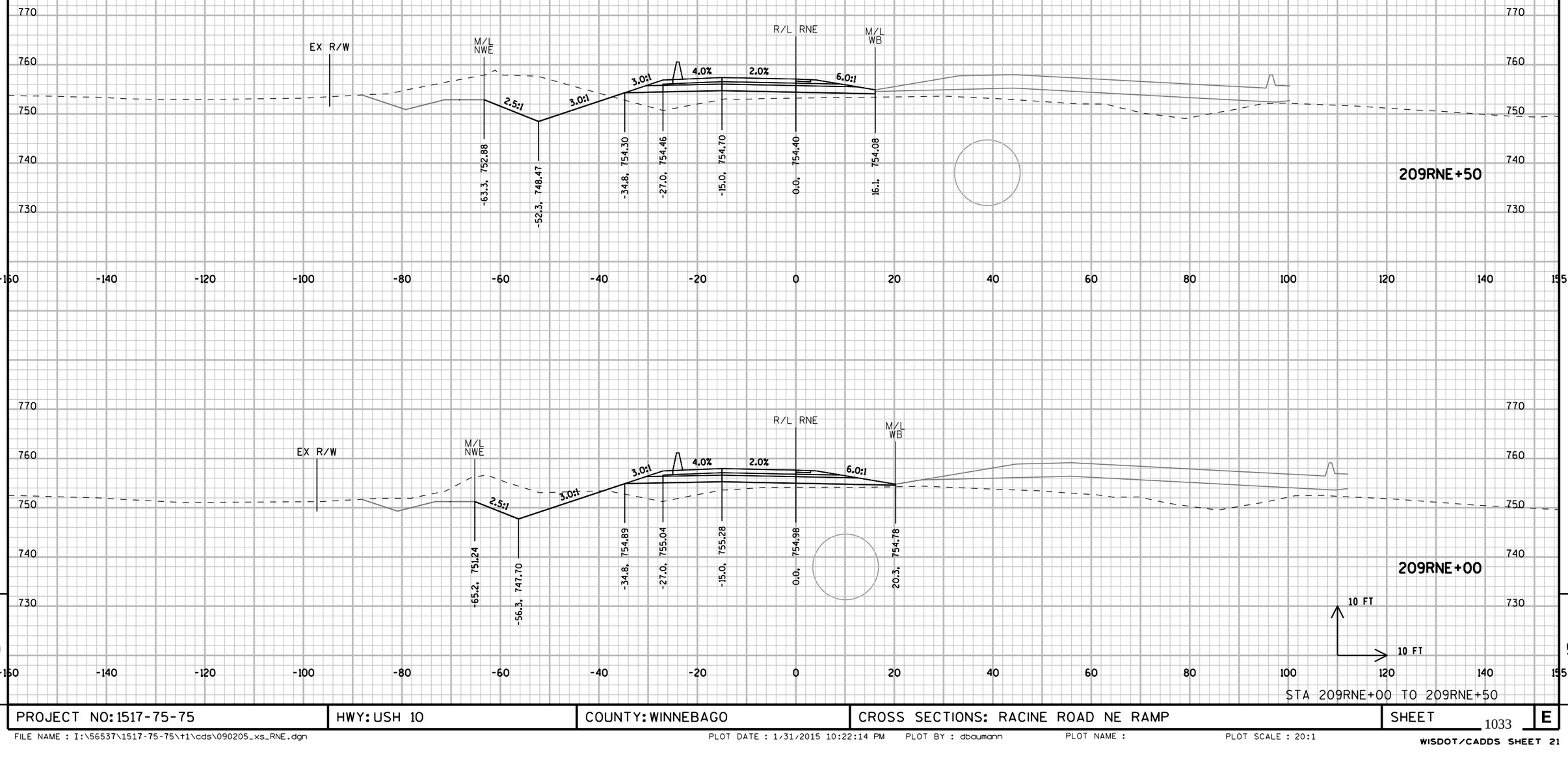
STA 208RNE+00 TO 208RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1032	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



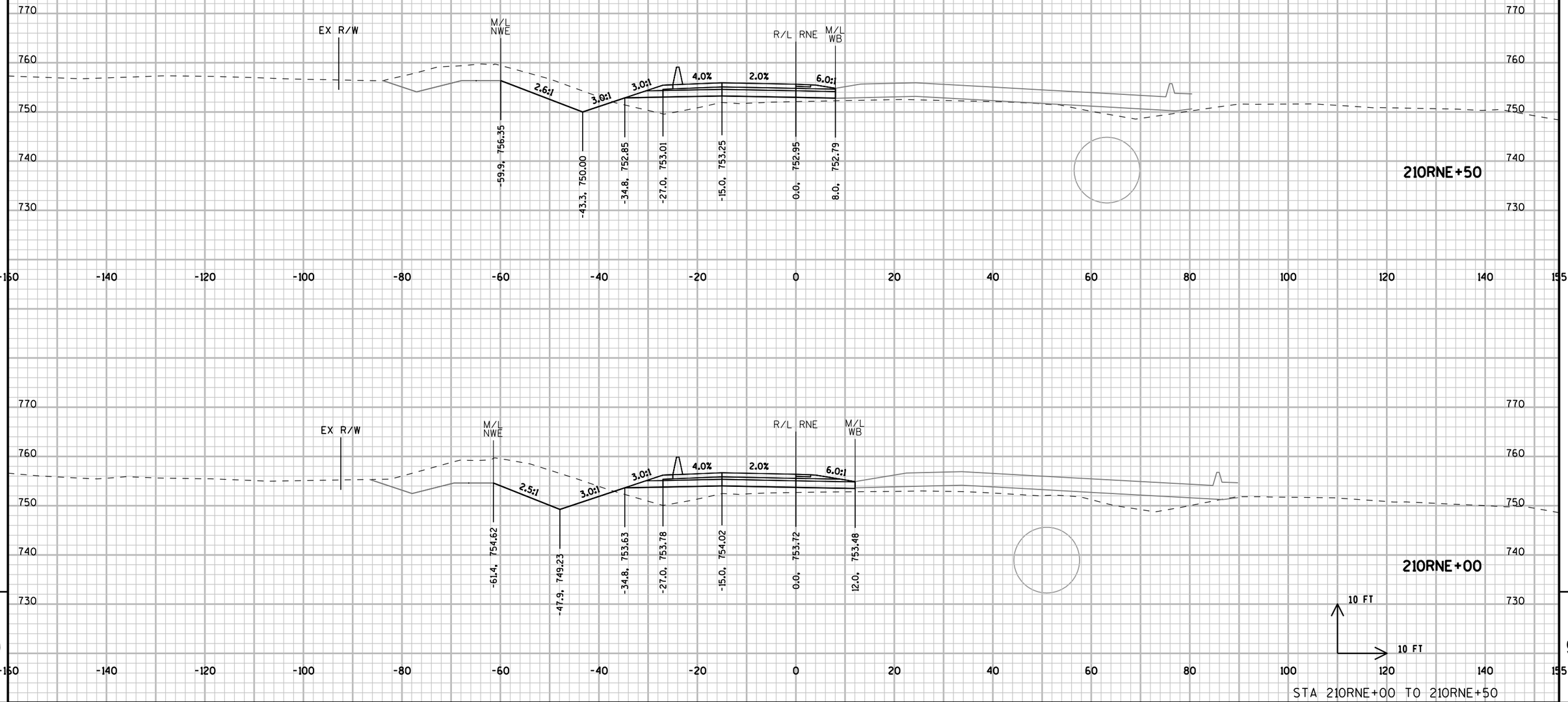
STA 209RNE+00 TO 209RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1033	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



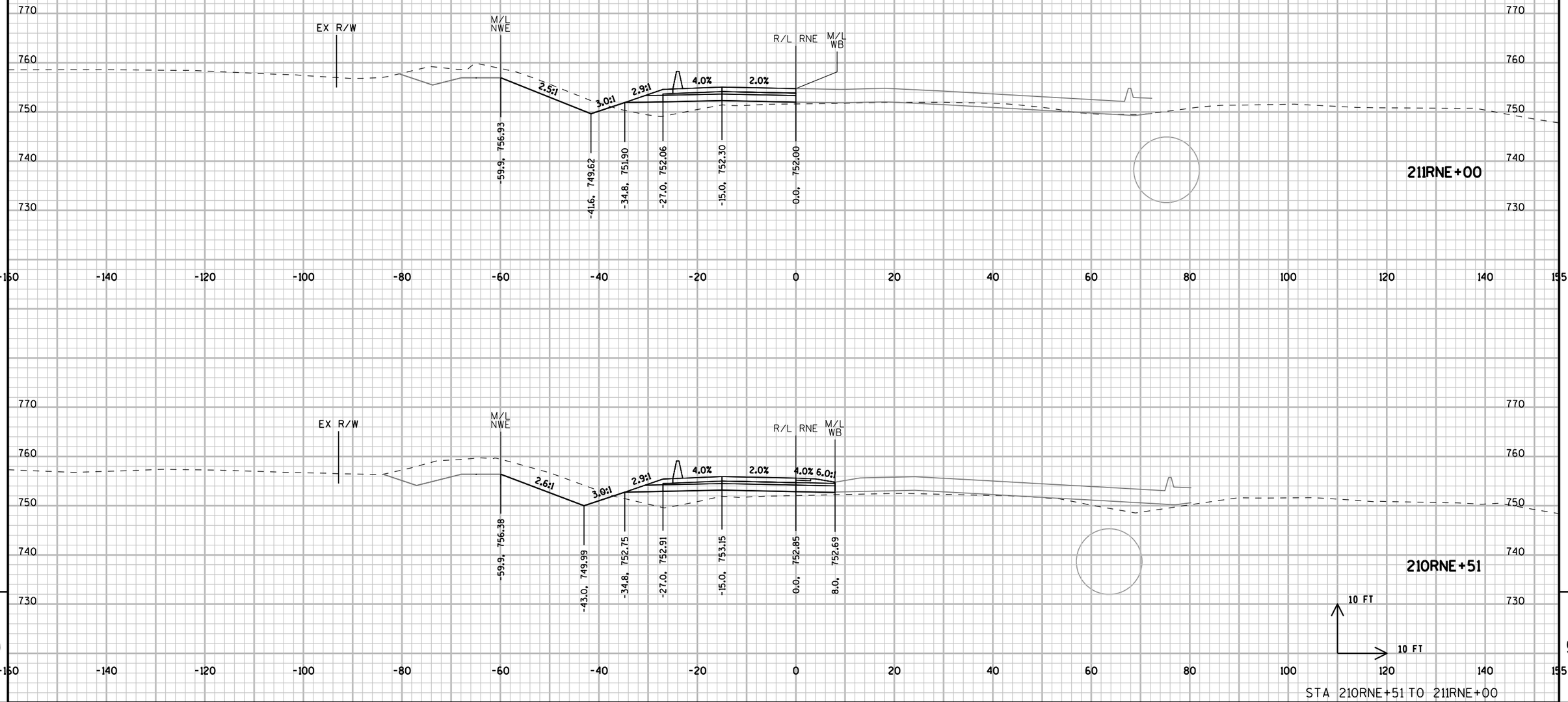
STA 210RNE+00 TO 210RNE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1034	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:15 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



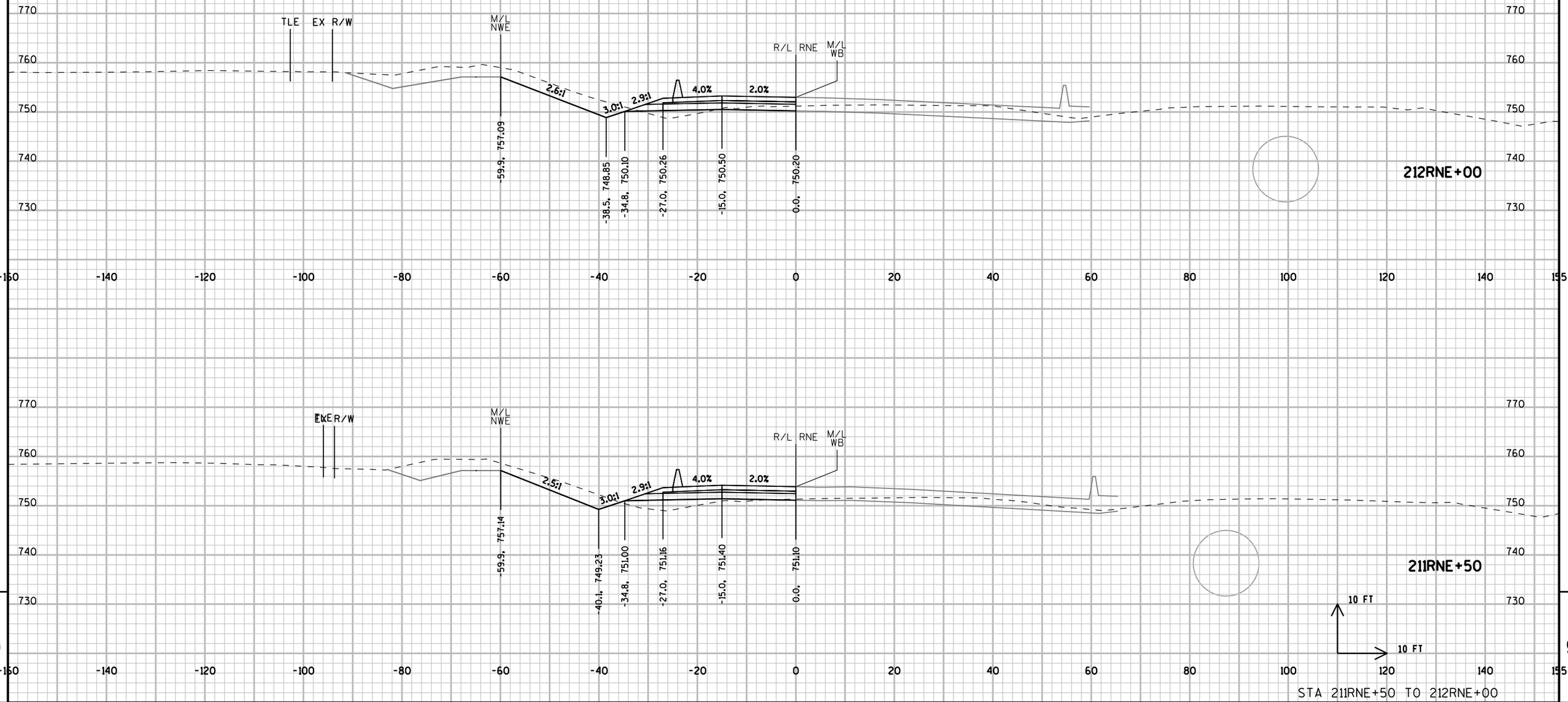
STA 210RNE+51 TO 211RNE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1035	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:15 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 211RNE+50 TO 212RNE+00

9

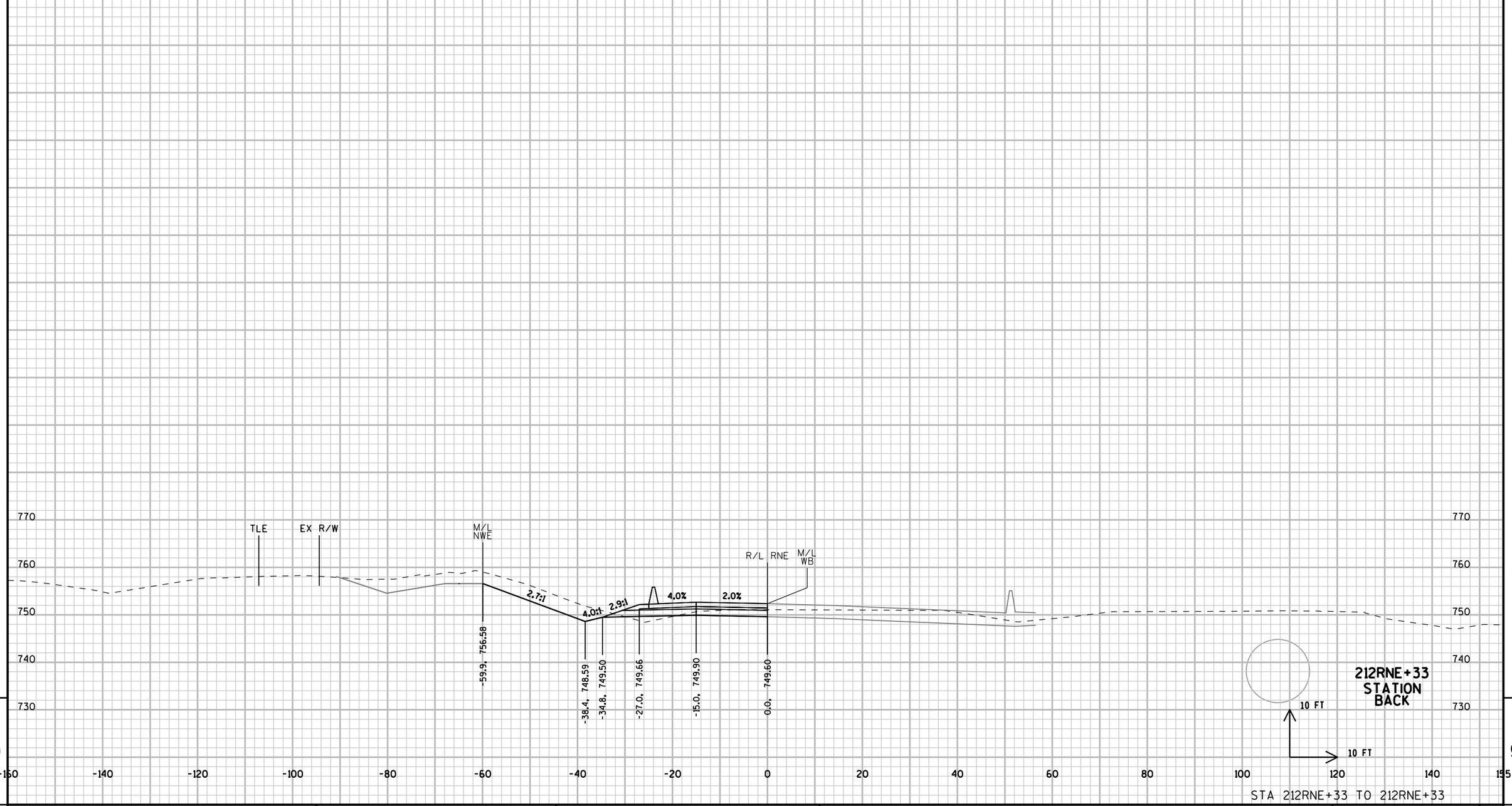
9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1036	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:15 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



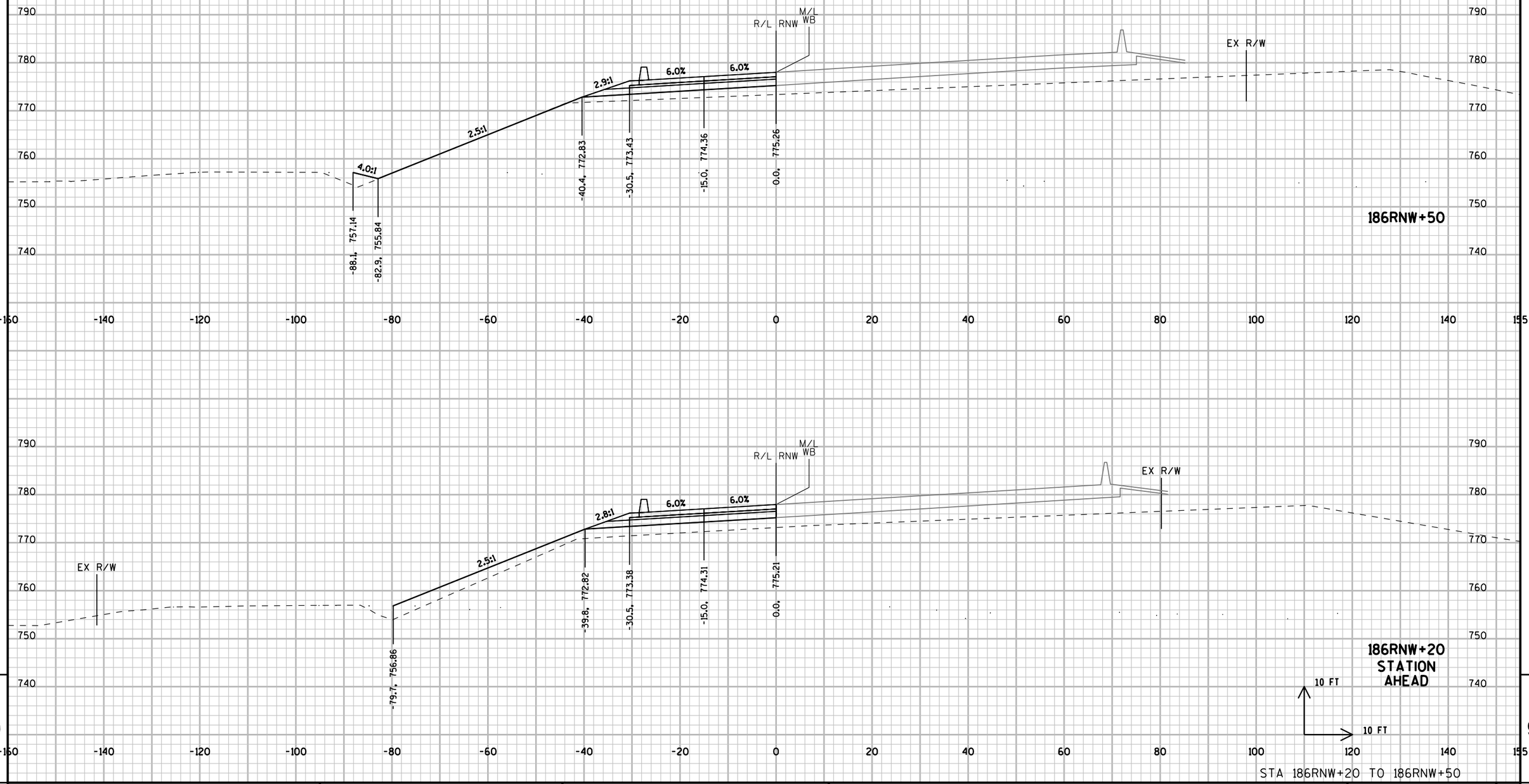
STA 212RNE+33 TO 212RNE+33

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD NE RAMP	SHEET 1037	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090205_xs_RNE.dgn PLOT DATE : 1/31/2015 10:22:16 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



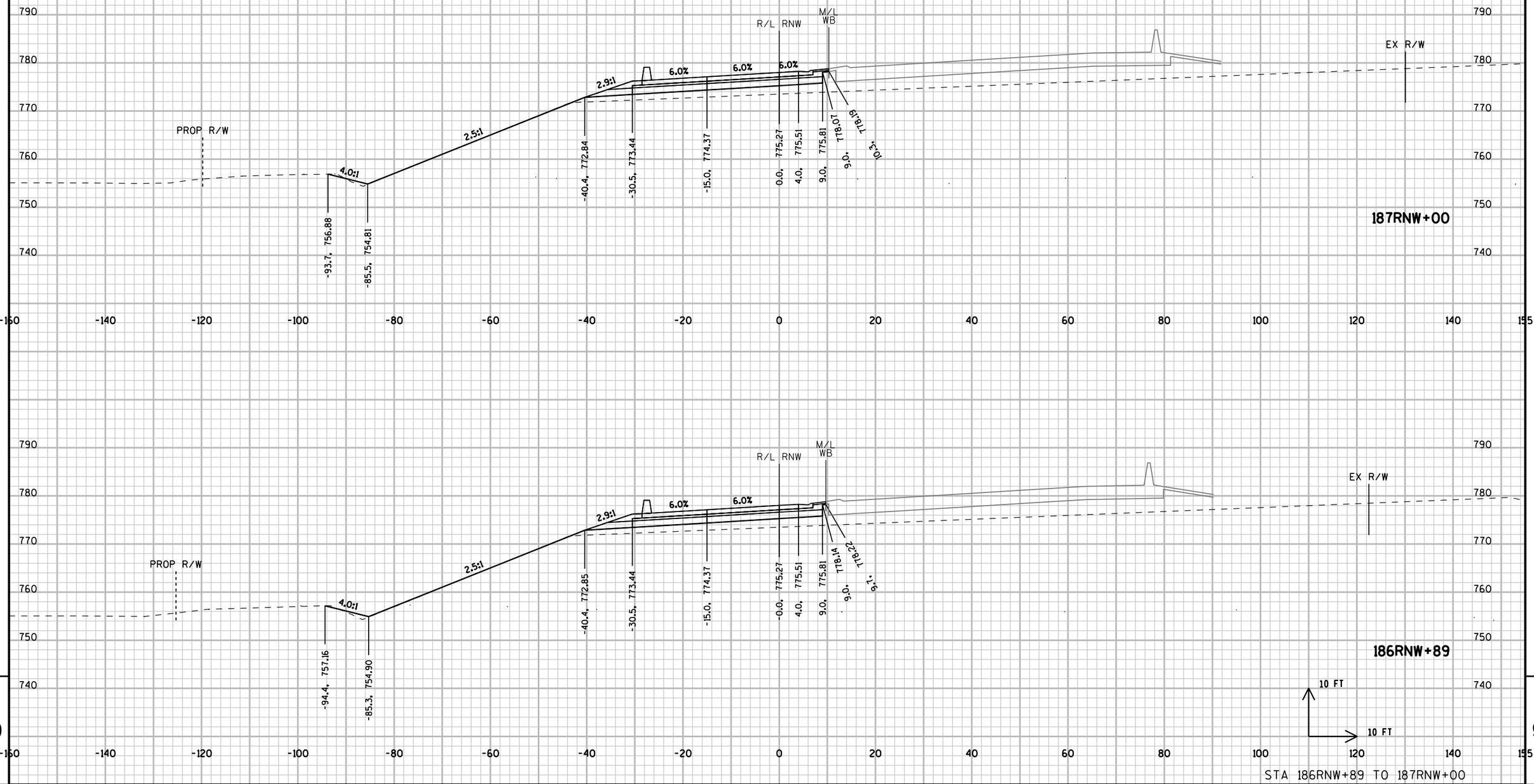
STA 186RNW+20 TO 186RNW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1038	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:33 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

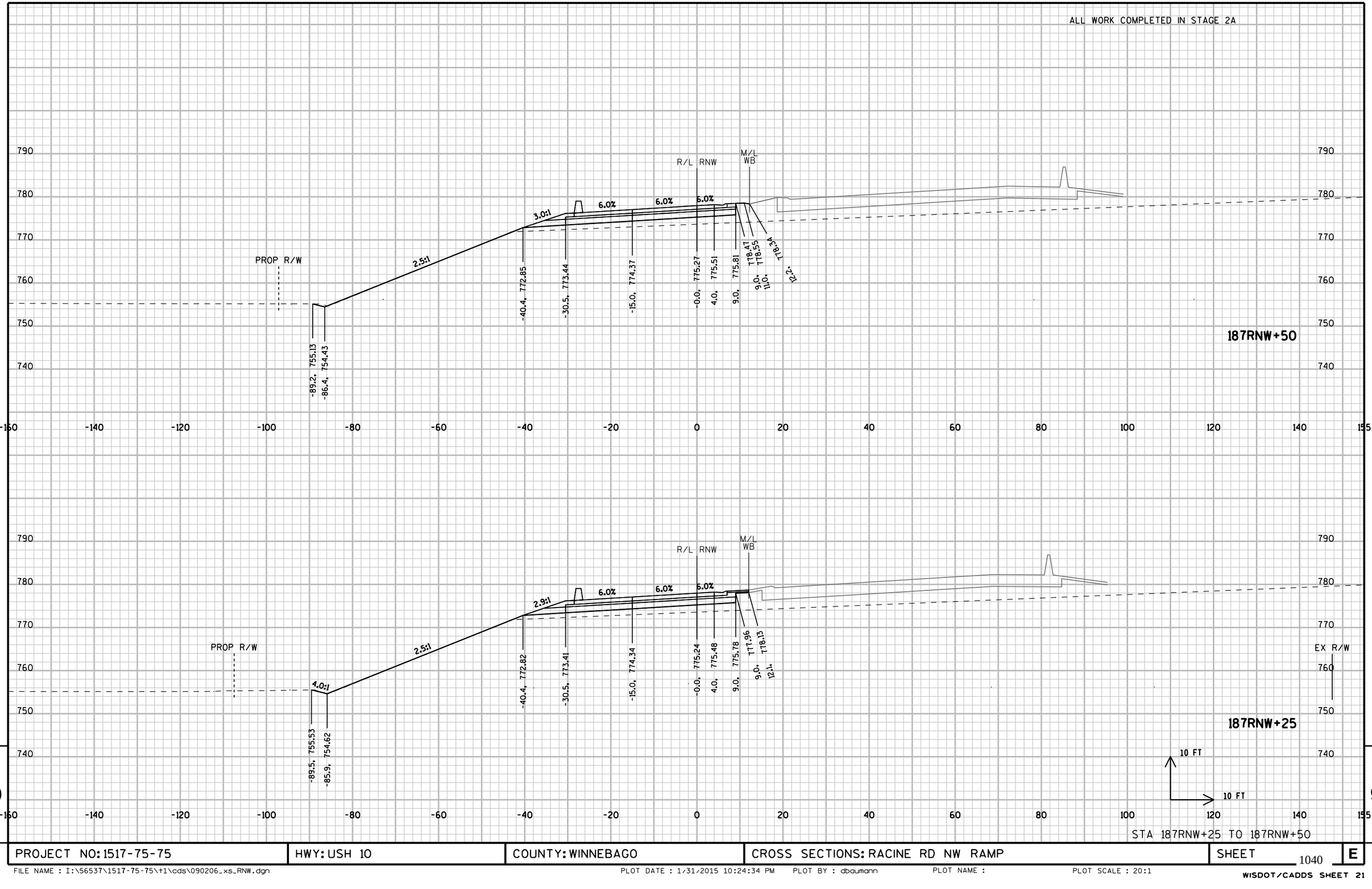
ALL WORK COMPLETED IN STAGE 2A



STA 186RNW+89 TO 187RNW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1039	E

ALL WORK COMPLETED IN STAGE 2A



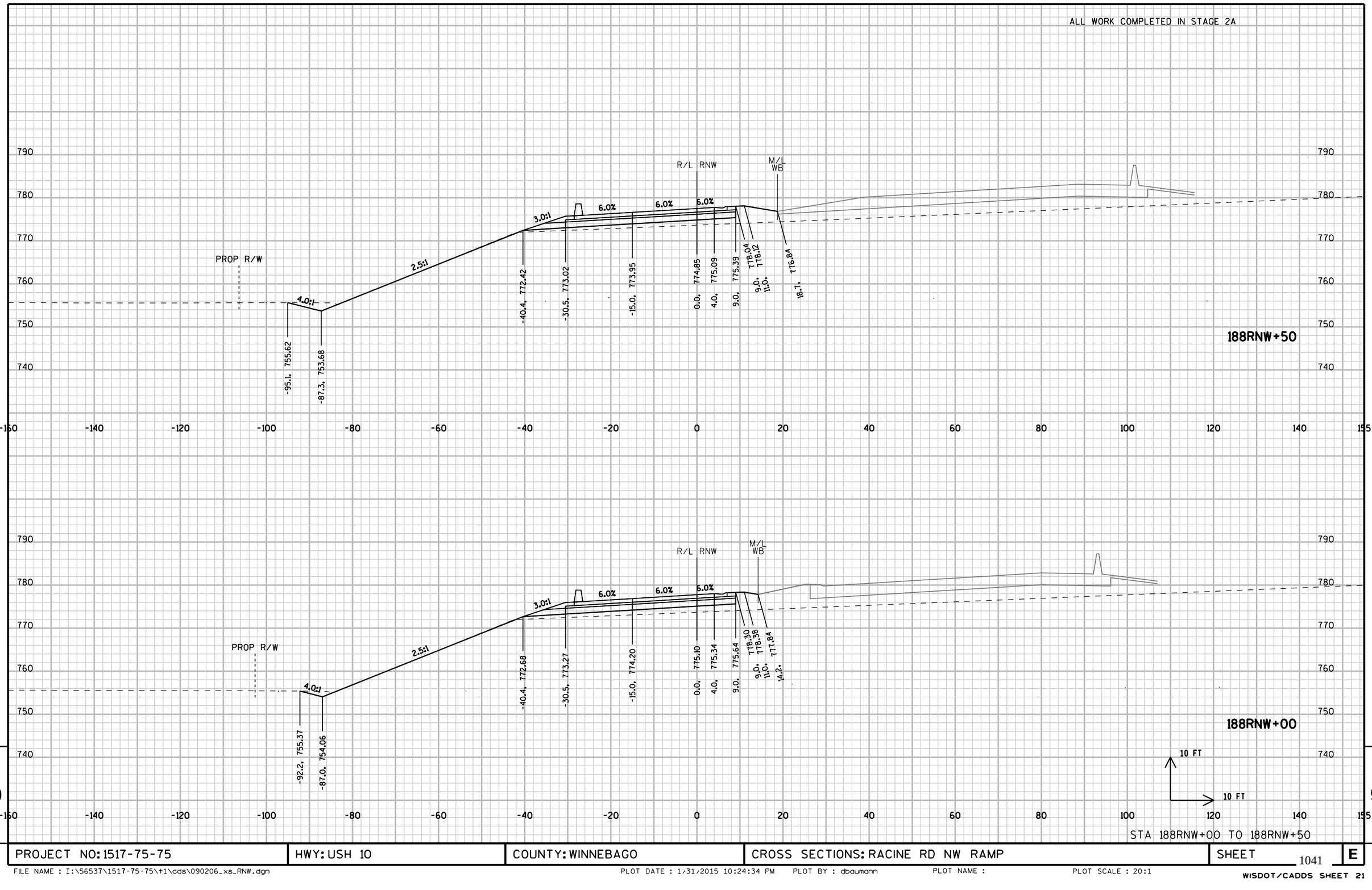
STA 187RNW+25 TO 187RNW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1040	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:34 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



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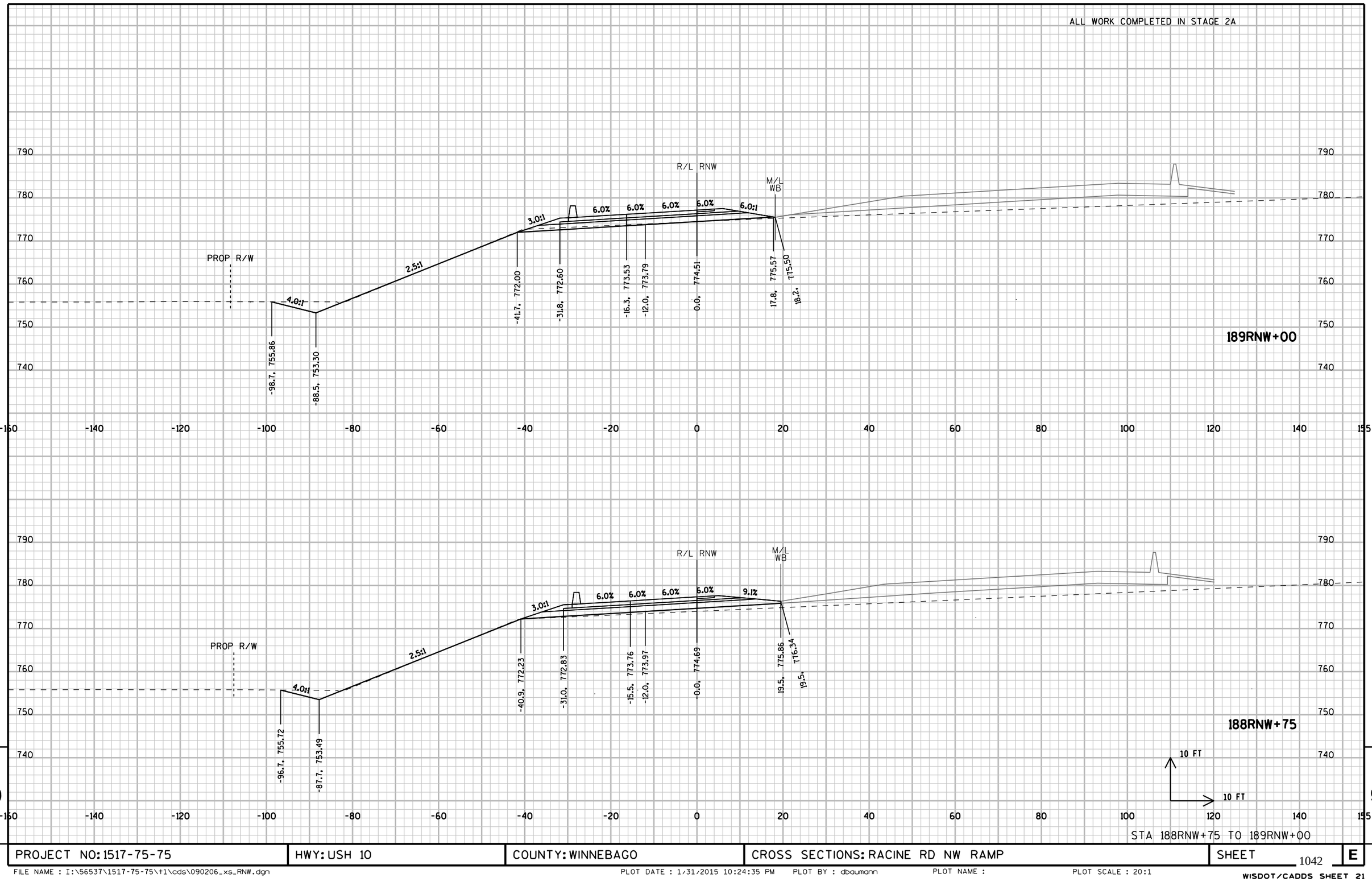
STA 188RNW+00 TO 188RNW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1041	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:34 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



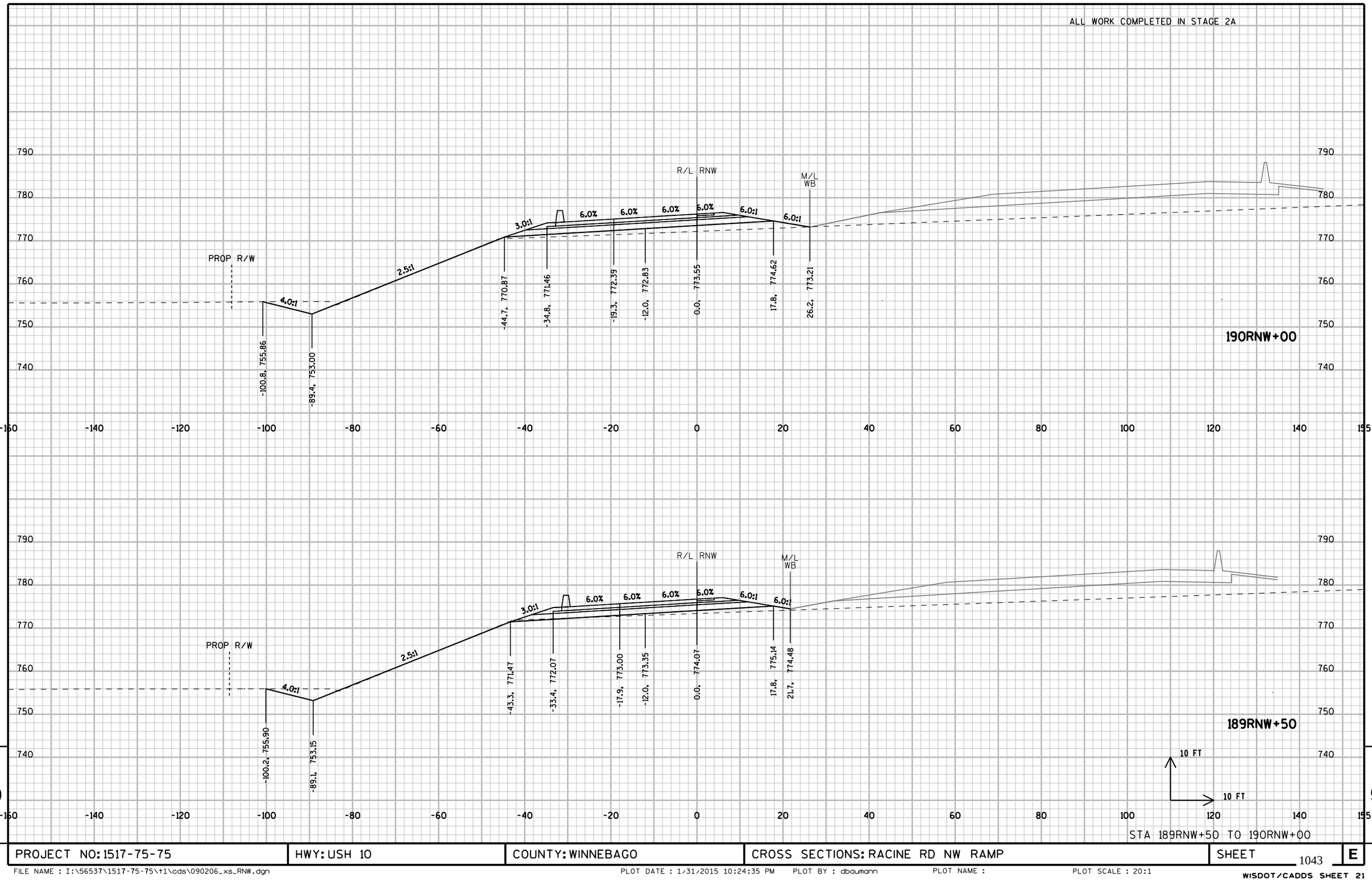
STA 188RNW+75 TO 189RNW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1042	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:35 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



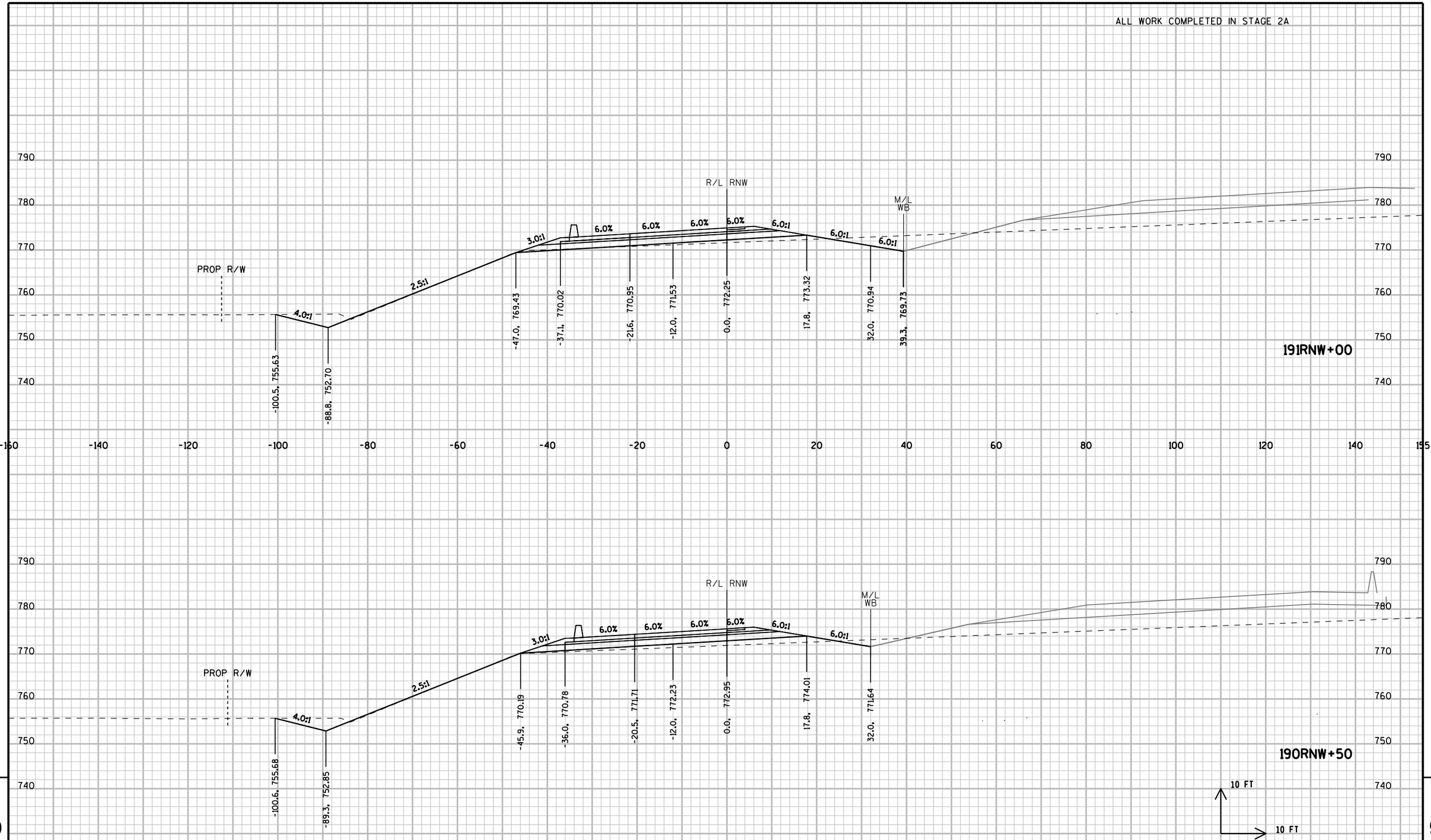
STA 189RNW+50 TO 190RNW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1043	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:35 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



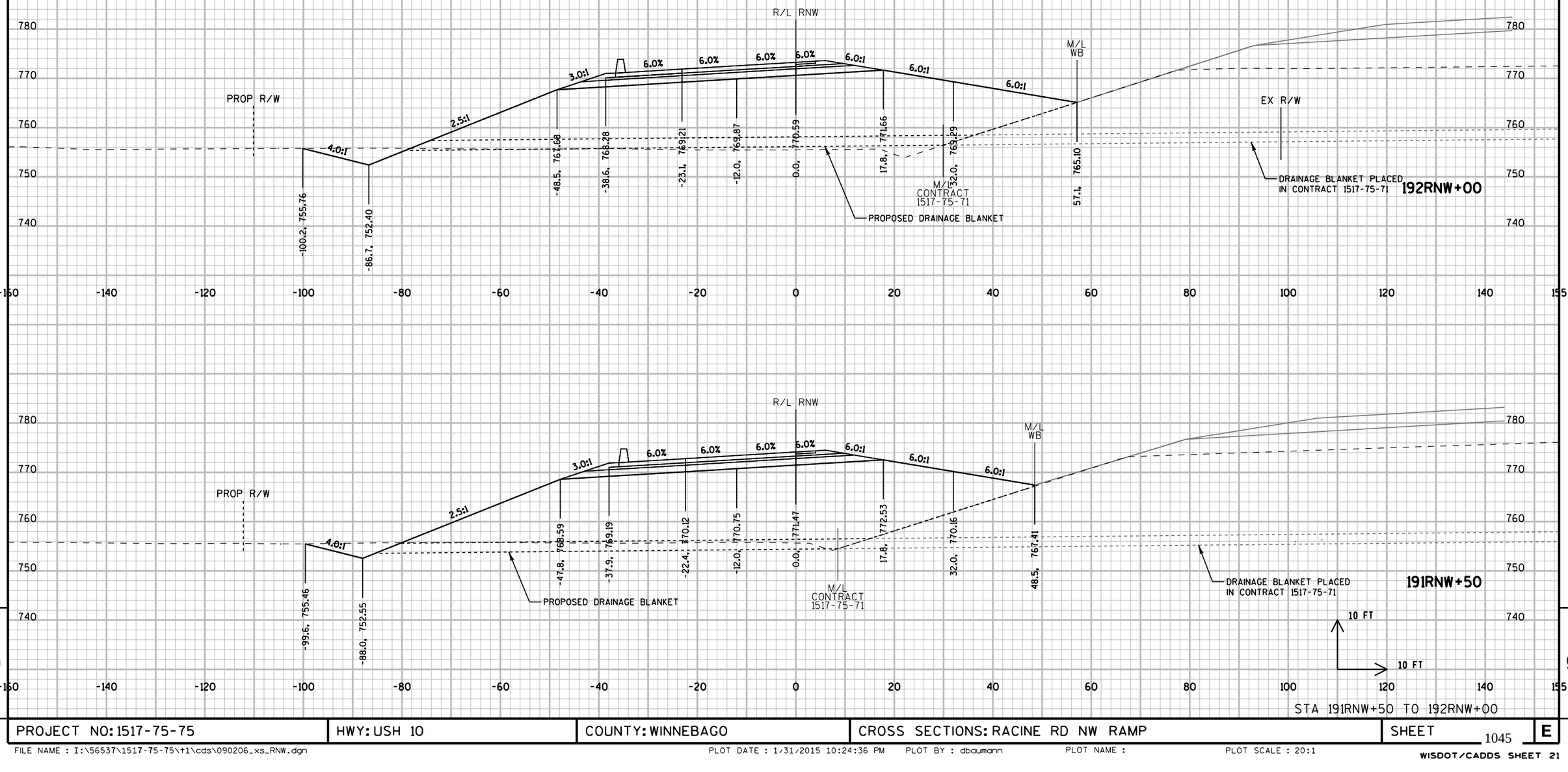
STA 190RNW+50 TO 191RNW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1044	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:36 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

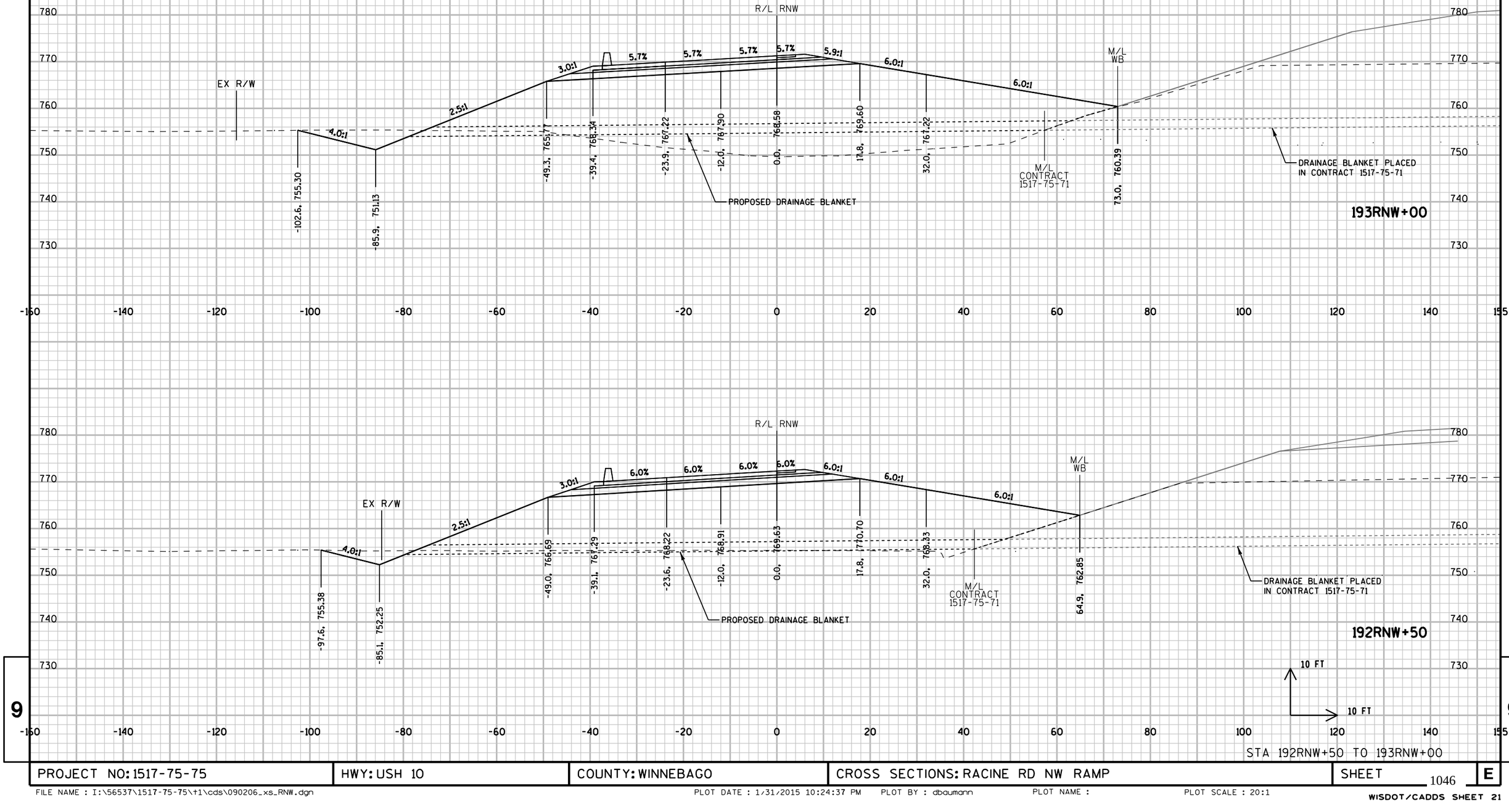
ALL WORK COMPLETED IN STAGE 2A



STA 191RNW+50 TO 192RNW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1045	E

ALL WORK COMPLETED IN STAGE 2A



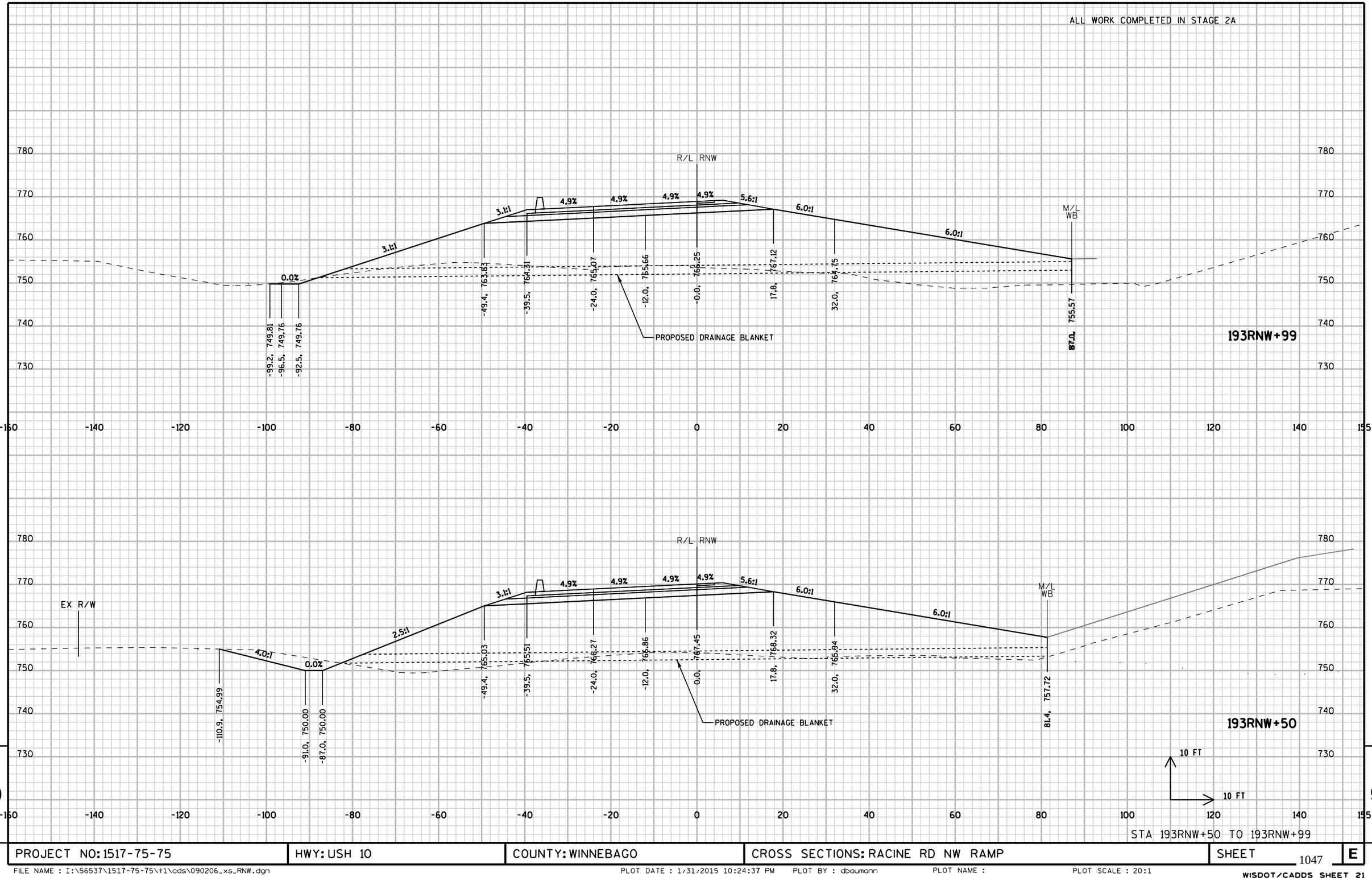
STA 192RNW+50 TO 193RNW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1046	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:37 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



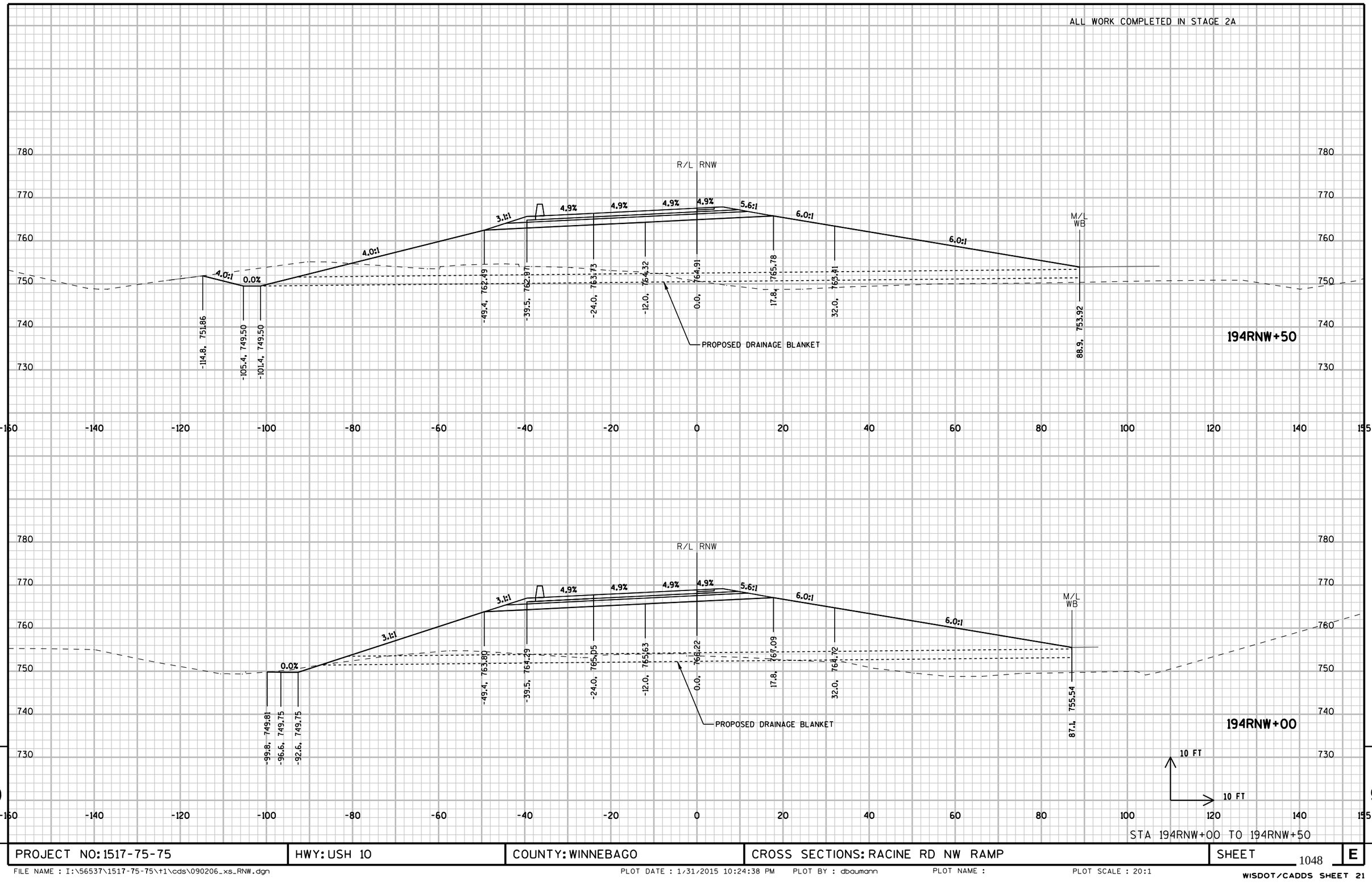
STA 193RNW+50 TO 193RNW+99

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1047	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:37 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



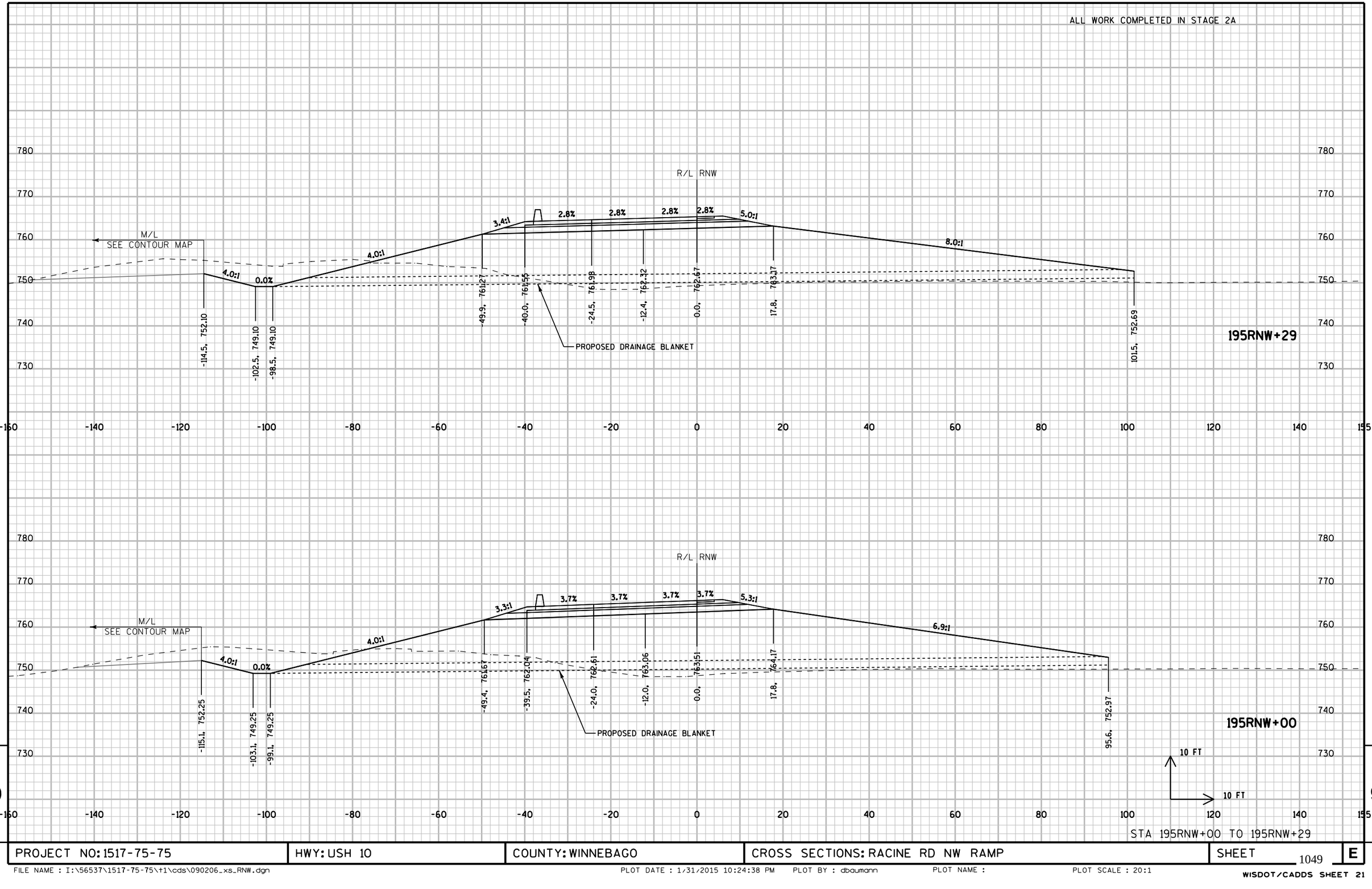
STA 194RNW+00 TO 194RNW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1048	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:38 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



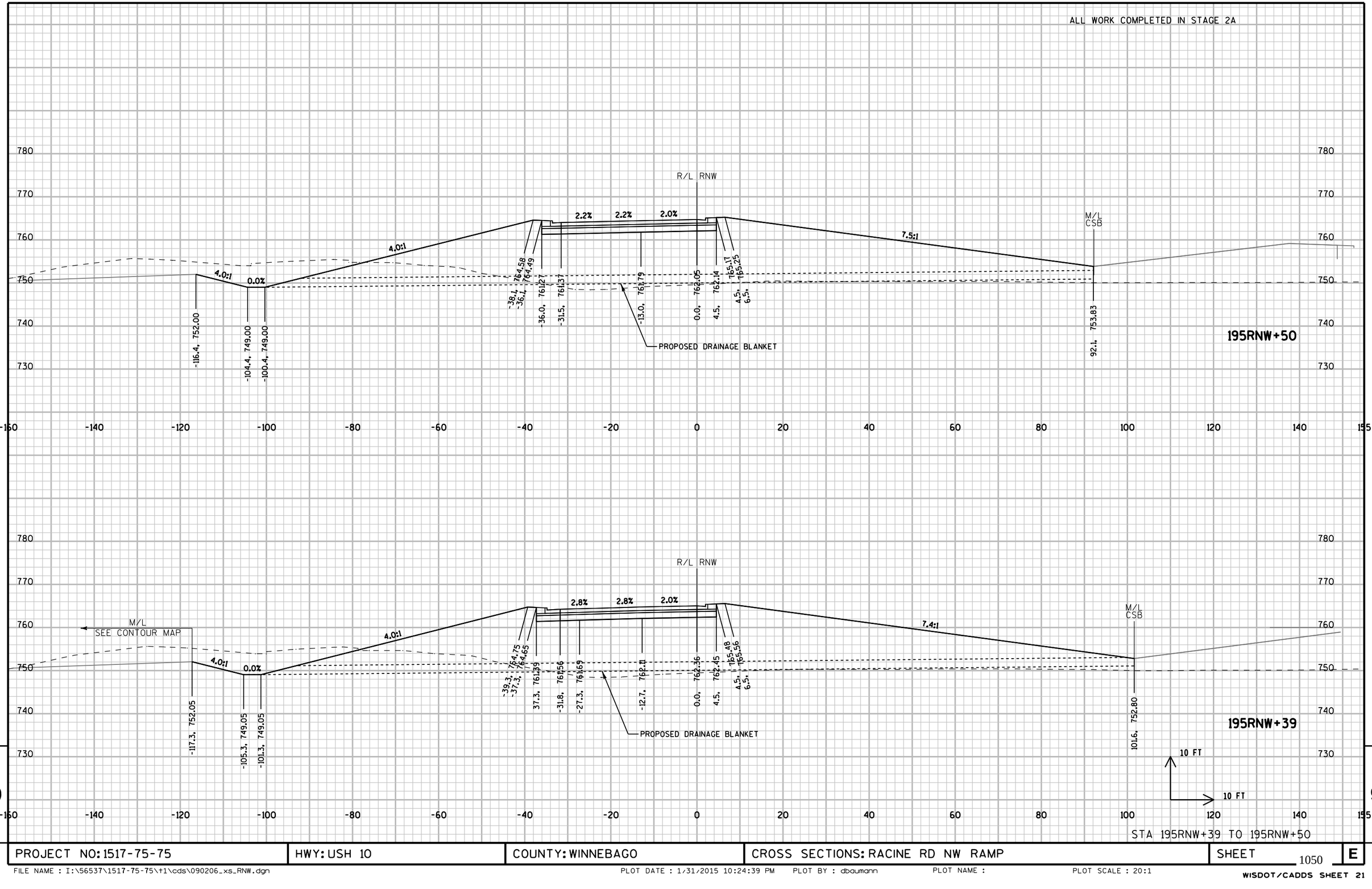
STA 195RNW+00 TO 195RNW+29

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1049	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:38 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



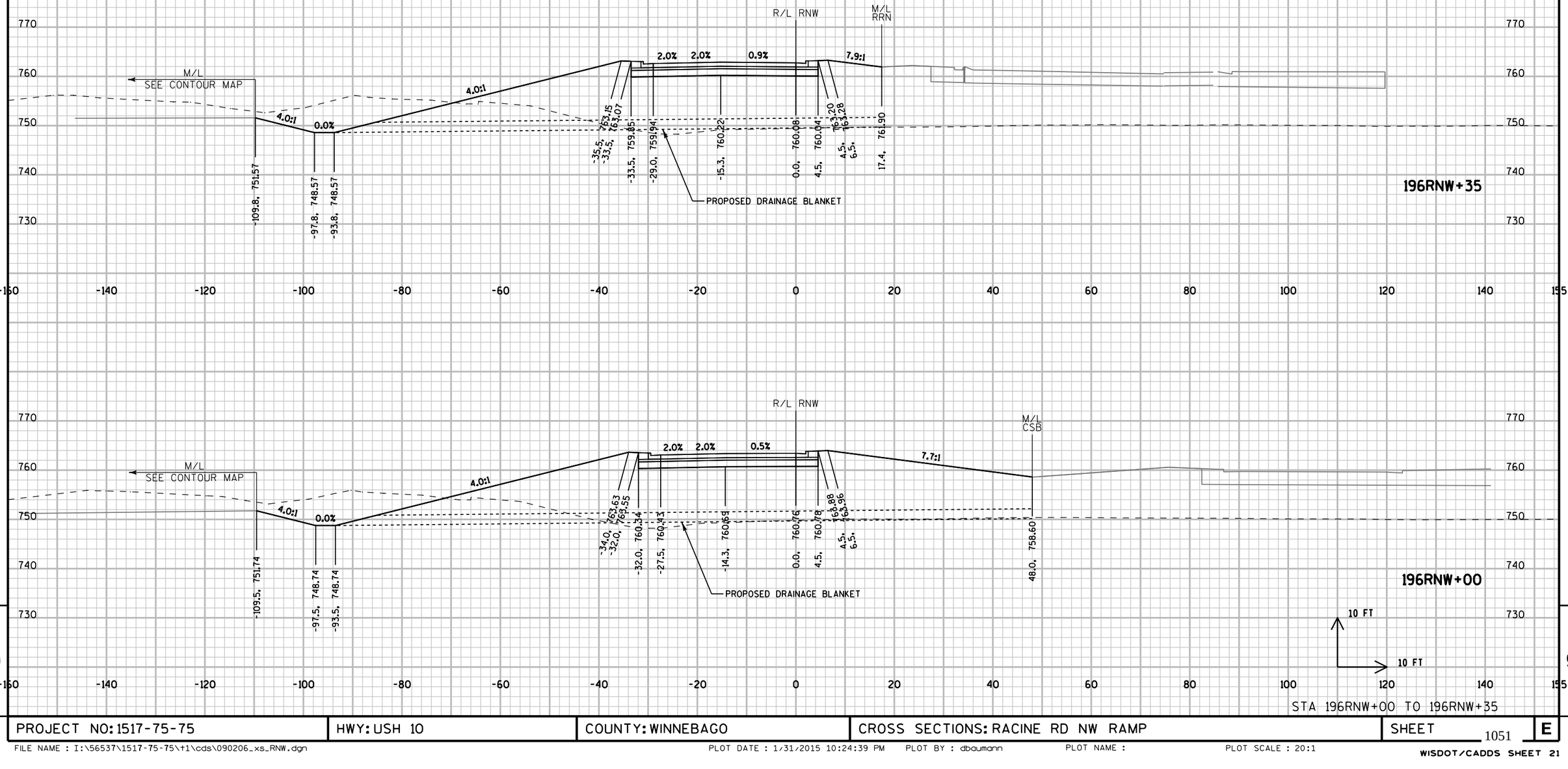
STA 195RNW+39 TO 195RNW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1050	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:39 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



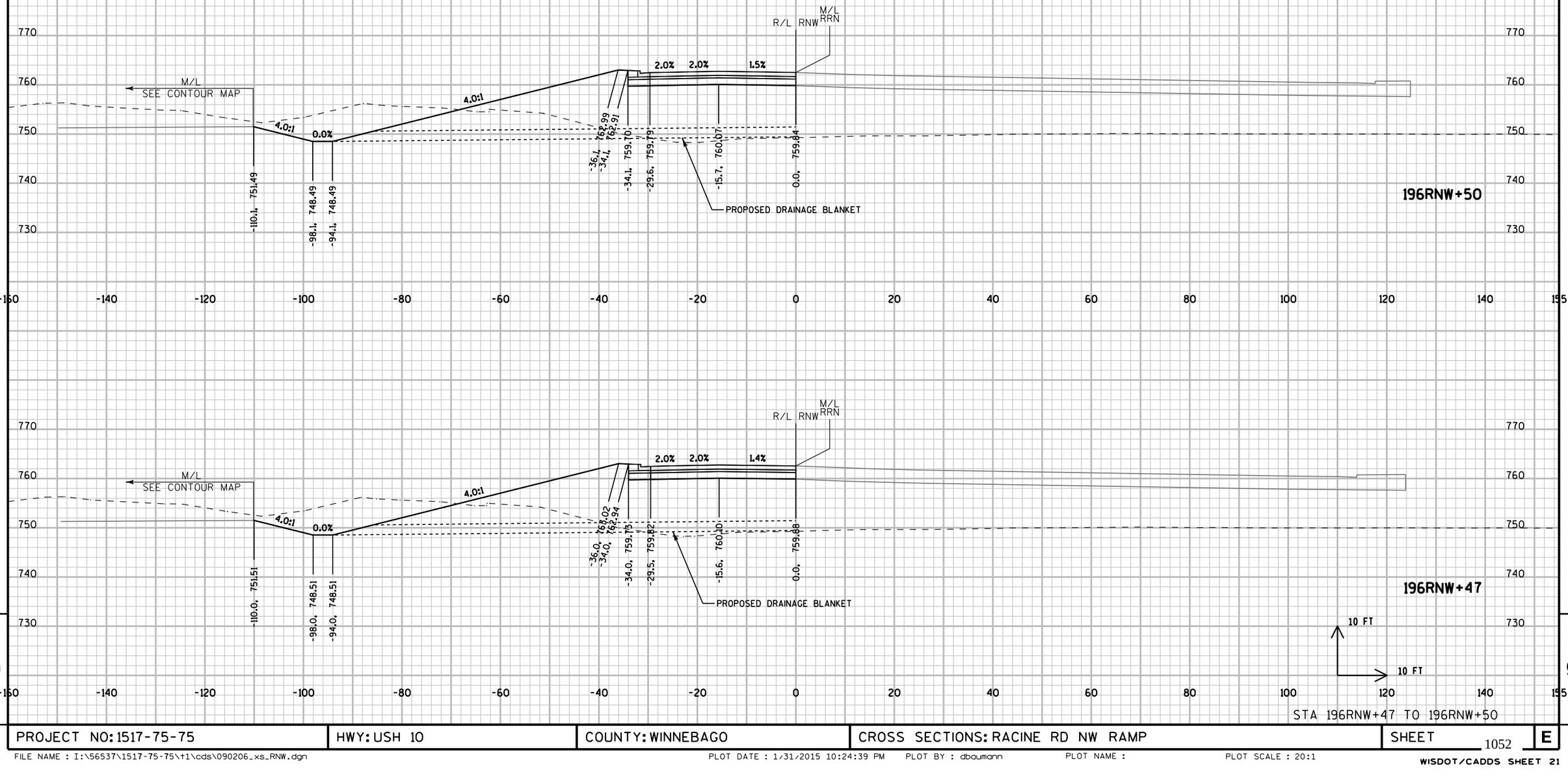
STA 196RNW+00 TO 196RNW+35

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1051	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:39 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



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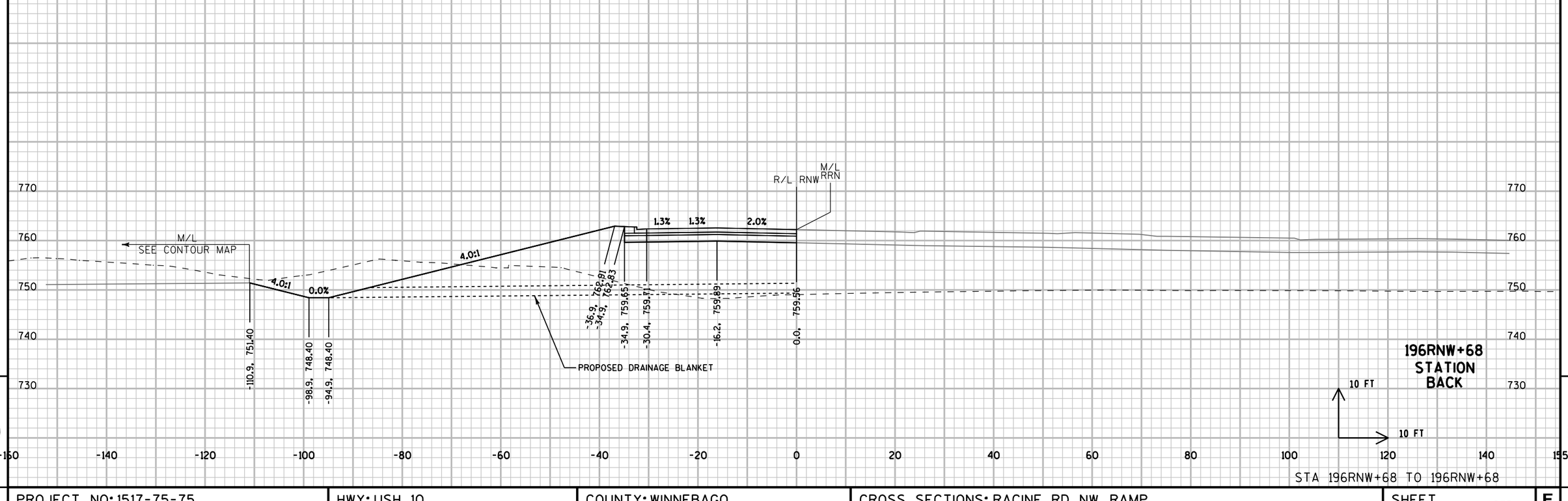
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1052	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090206_xs_RNW.dgn PLOT DATE : 1/31/2015 10:24:39 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

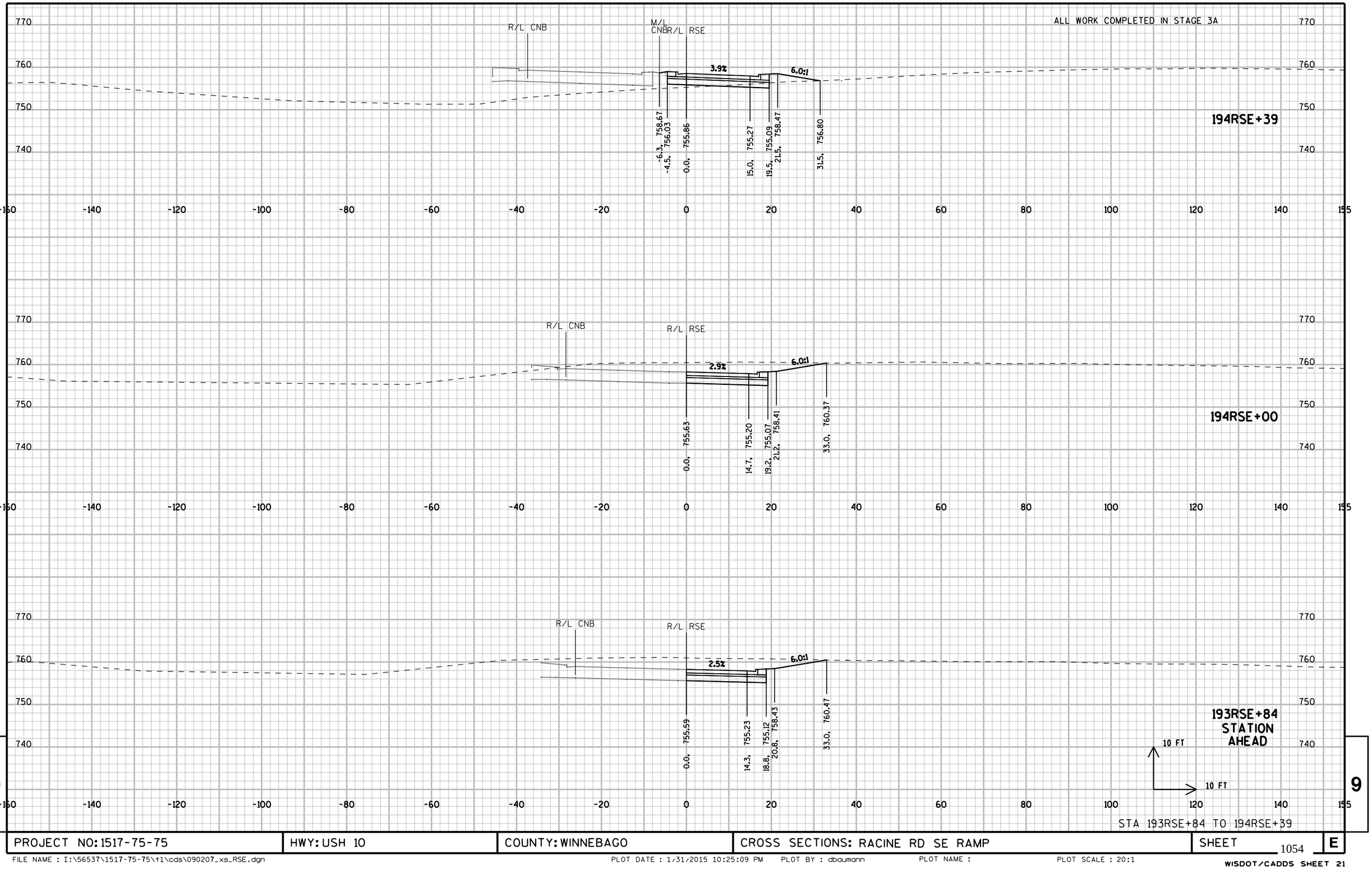
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 196RNW+68 TO 196RNW+68

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD NW RAMP	SHEET 1053	E



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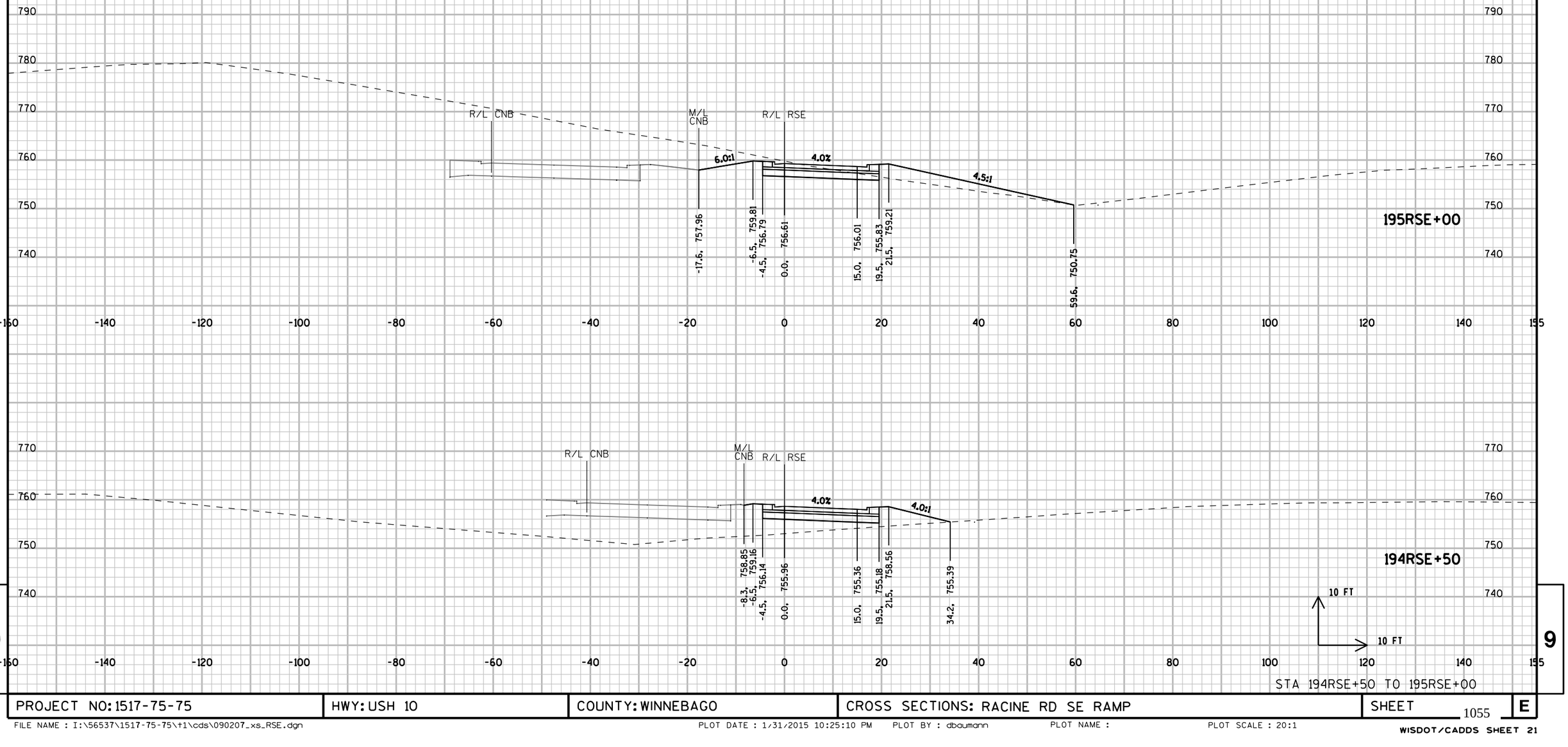
STA 193RSE+84 TO 194RSE+39

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1054	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:09 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A

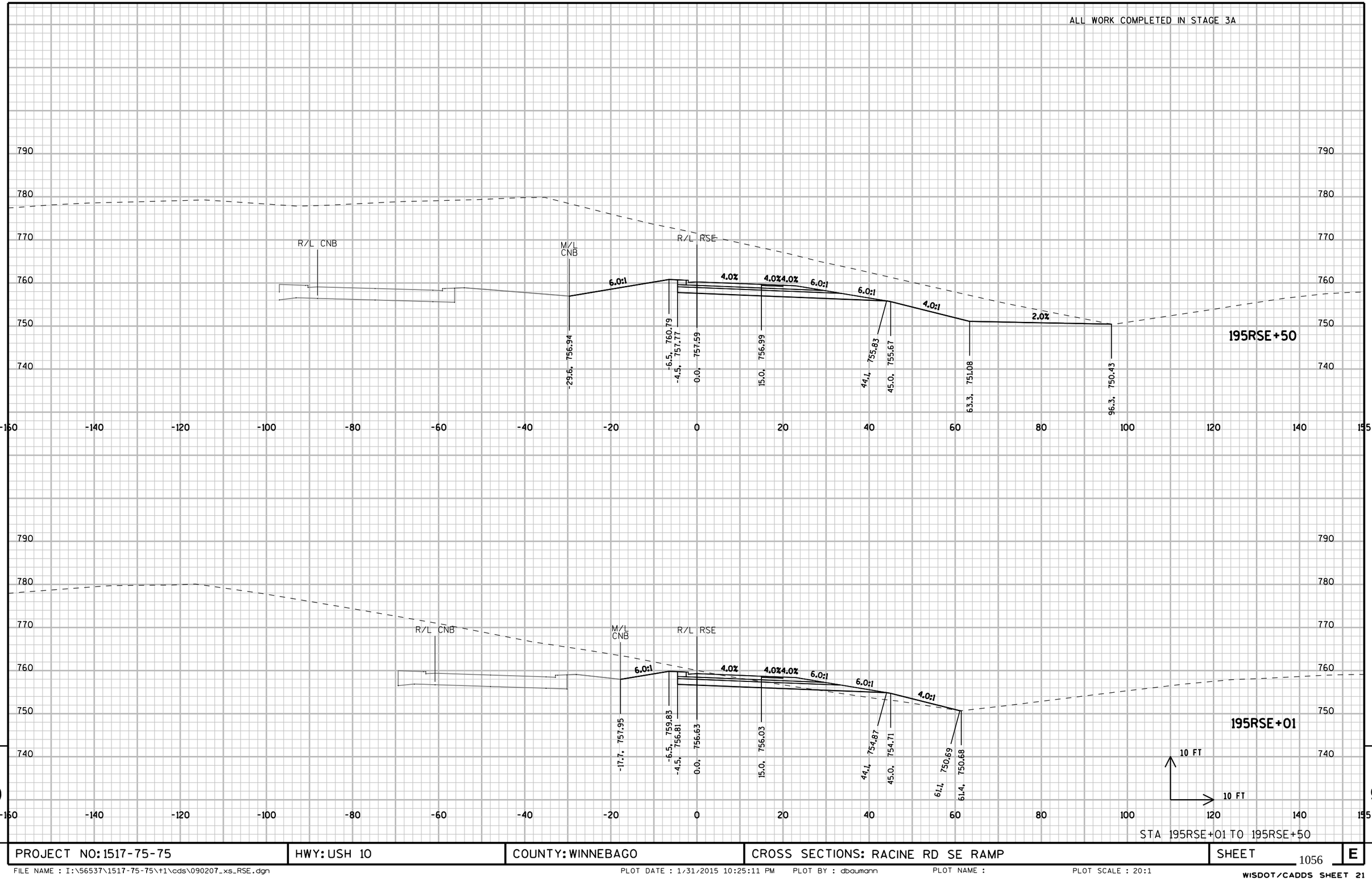


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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1055	E

STA 194RSE+50 TO 195RSE+00

ALL WORK COMPLETED IN STAGE 3A



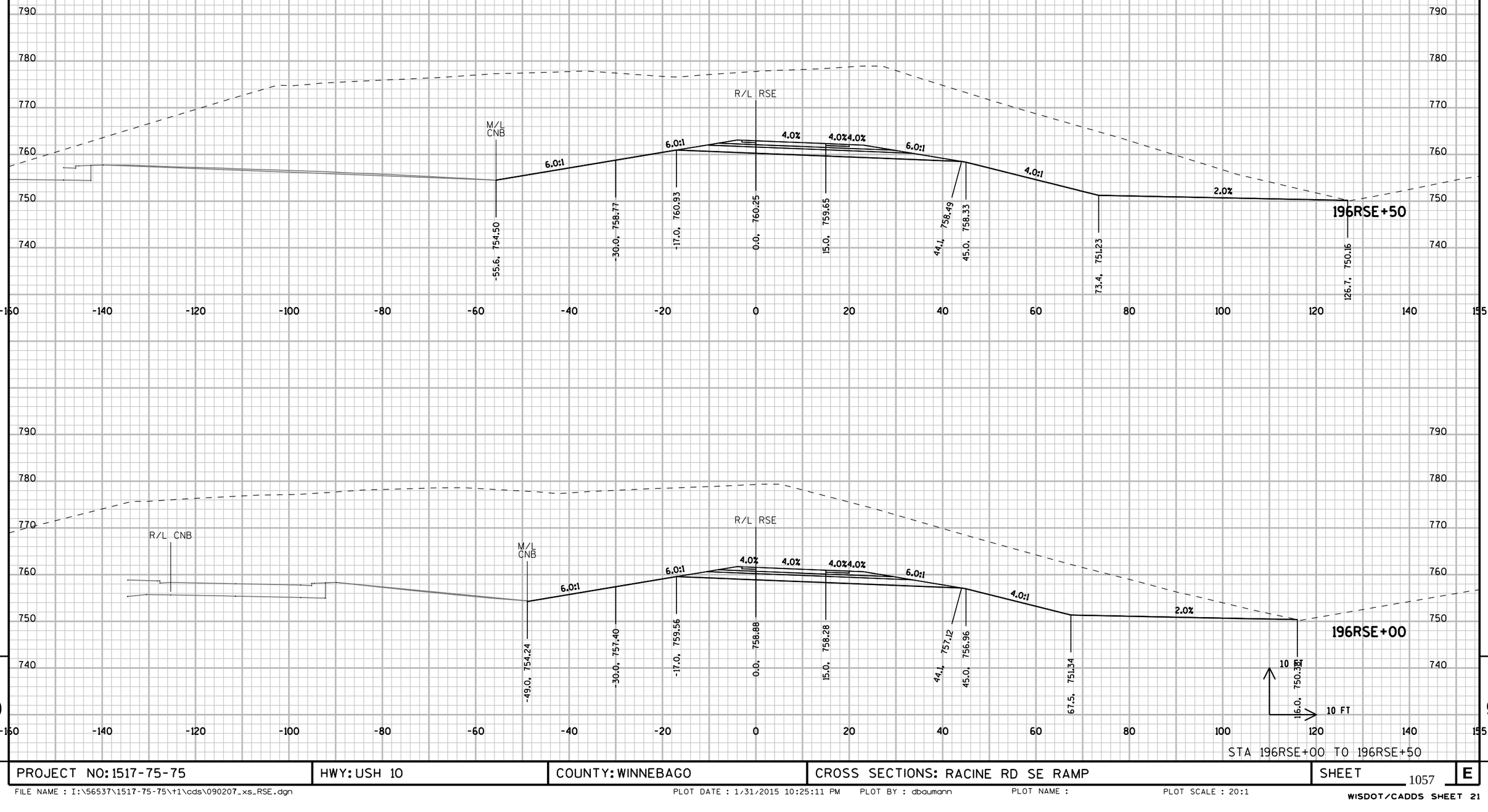
STA 195RSE+01 TO 195RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1056	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:11 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 196RSE+00 TO 196RSE+50

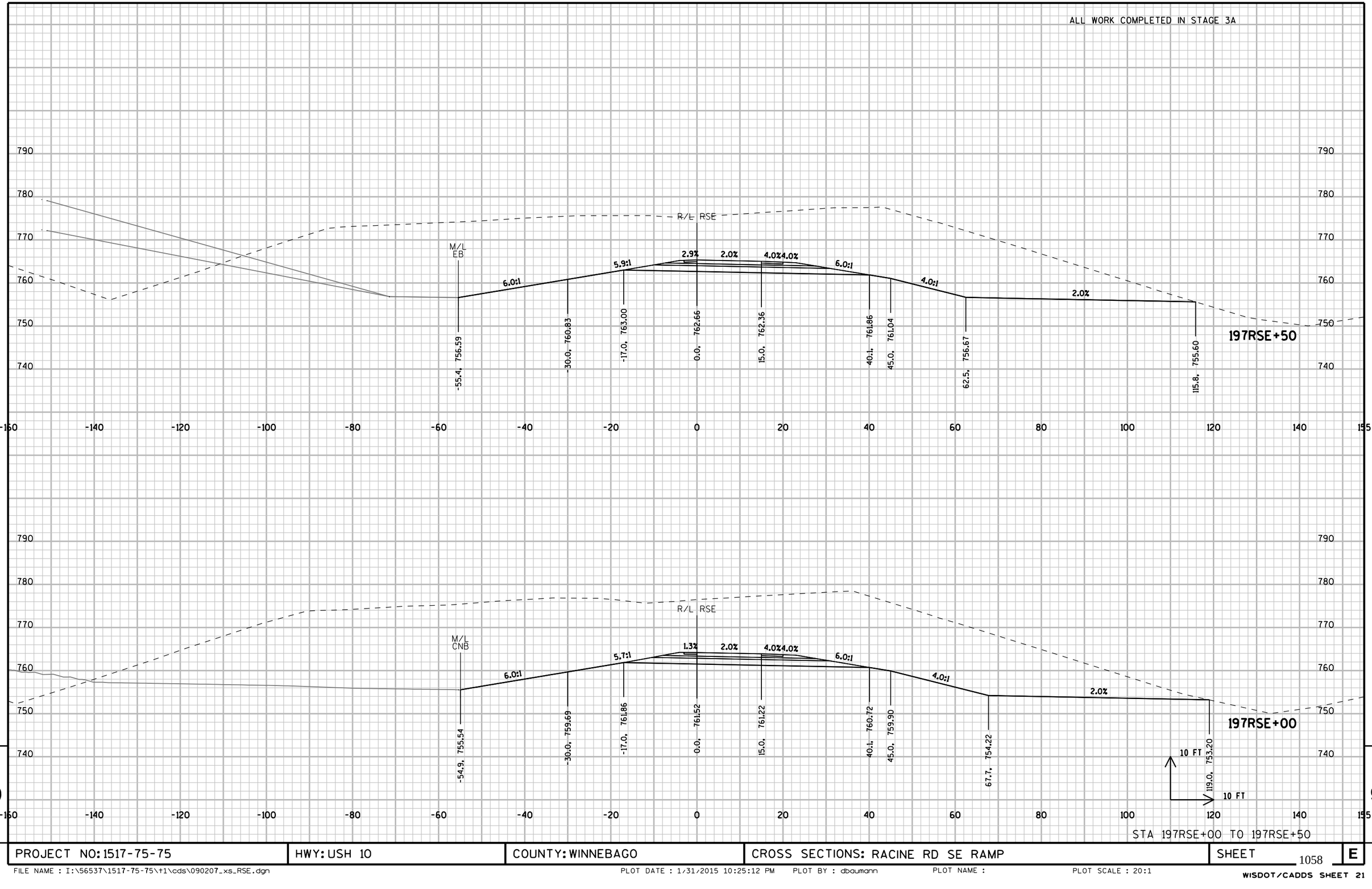
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1057	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:11 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

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ALL WORK COMPLETED IN STAGE 3A



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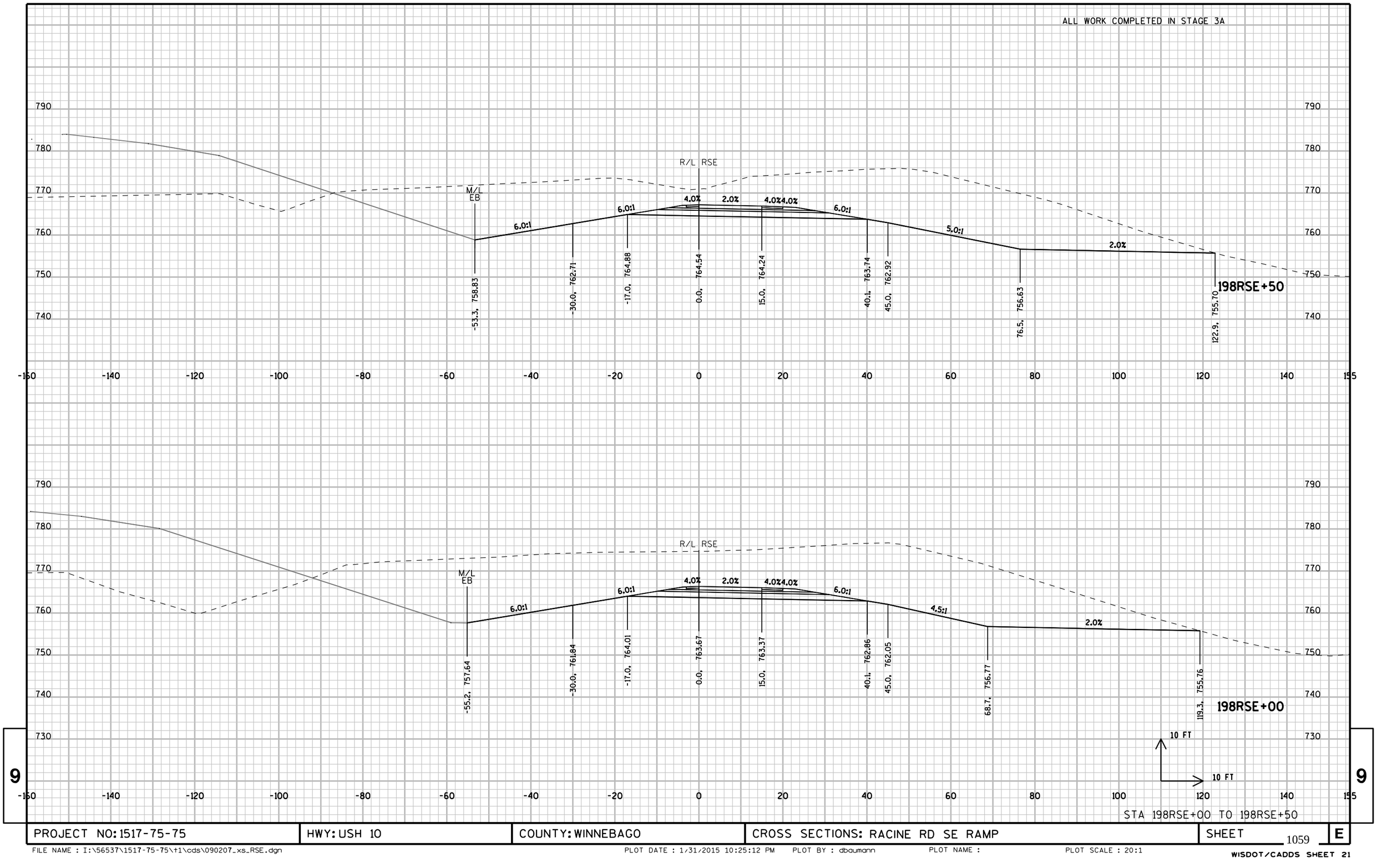
STA 197RSE+00 TO 197RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1058	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:12 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



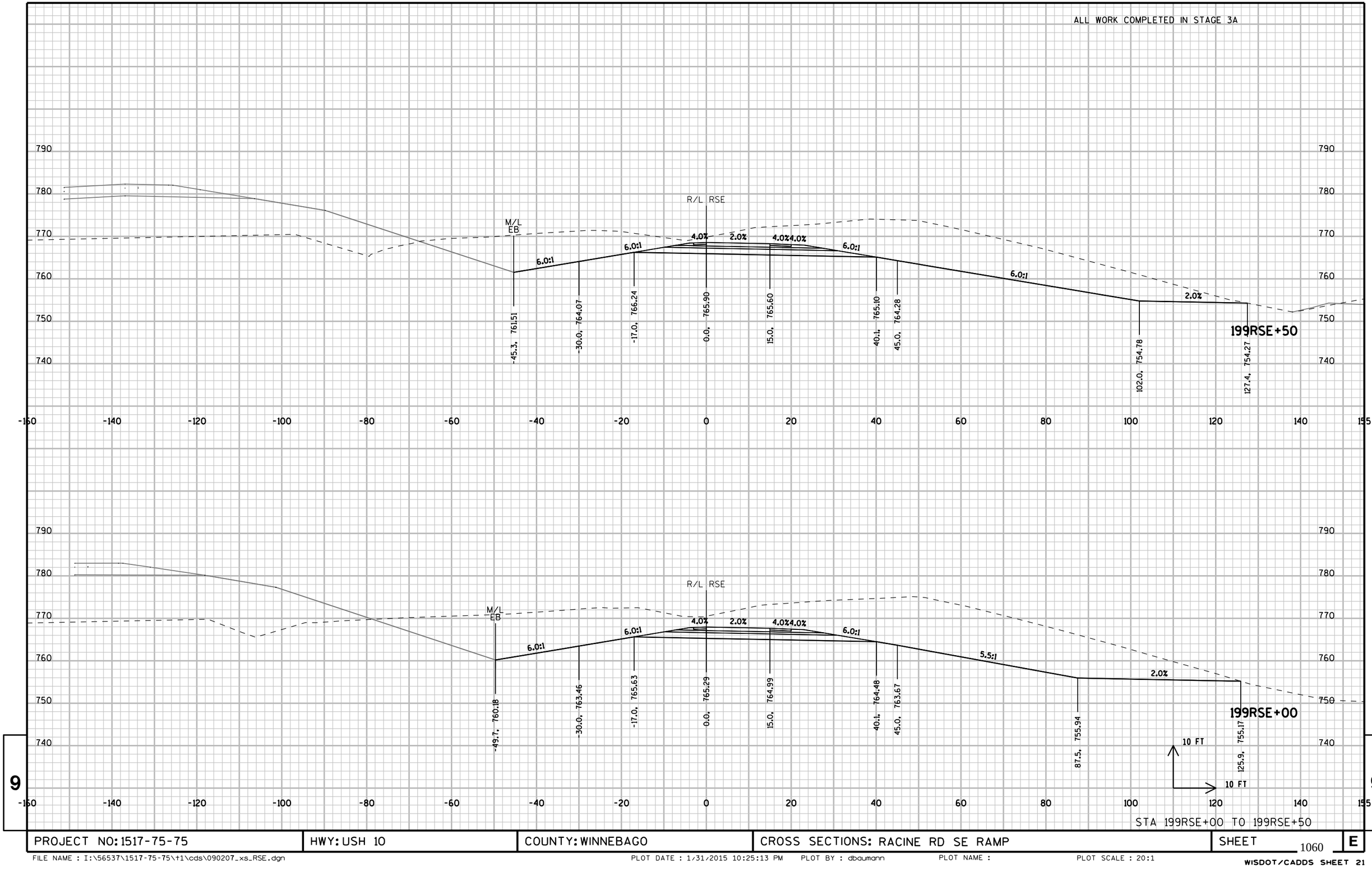
STA 198RSE+00 TO 198RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1059	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:12 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 199RSE+00 TO 199RSE+50

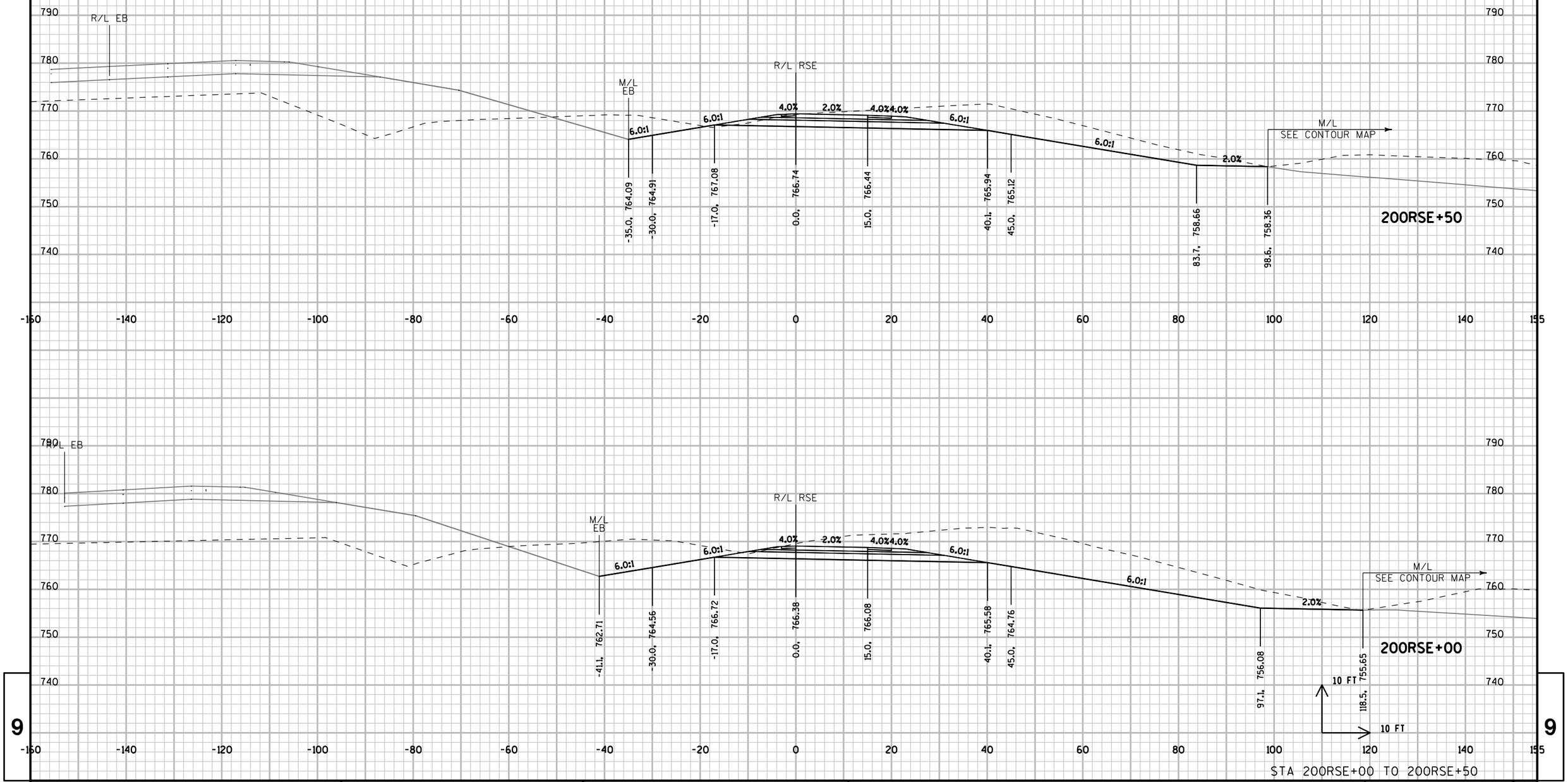
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1060	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:13 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

9 9

ALL WORK COMPLETED IN STAGE 3A



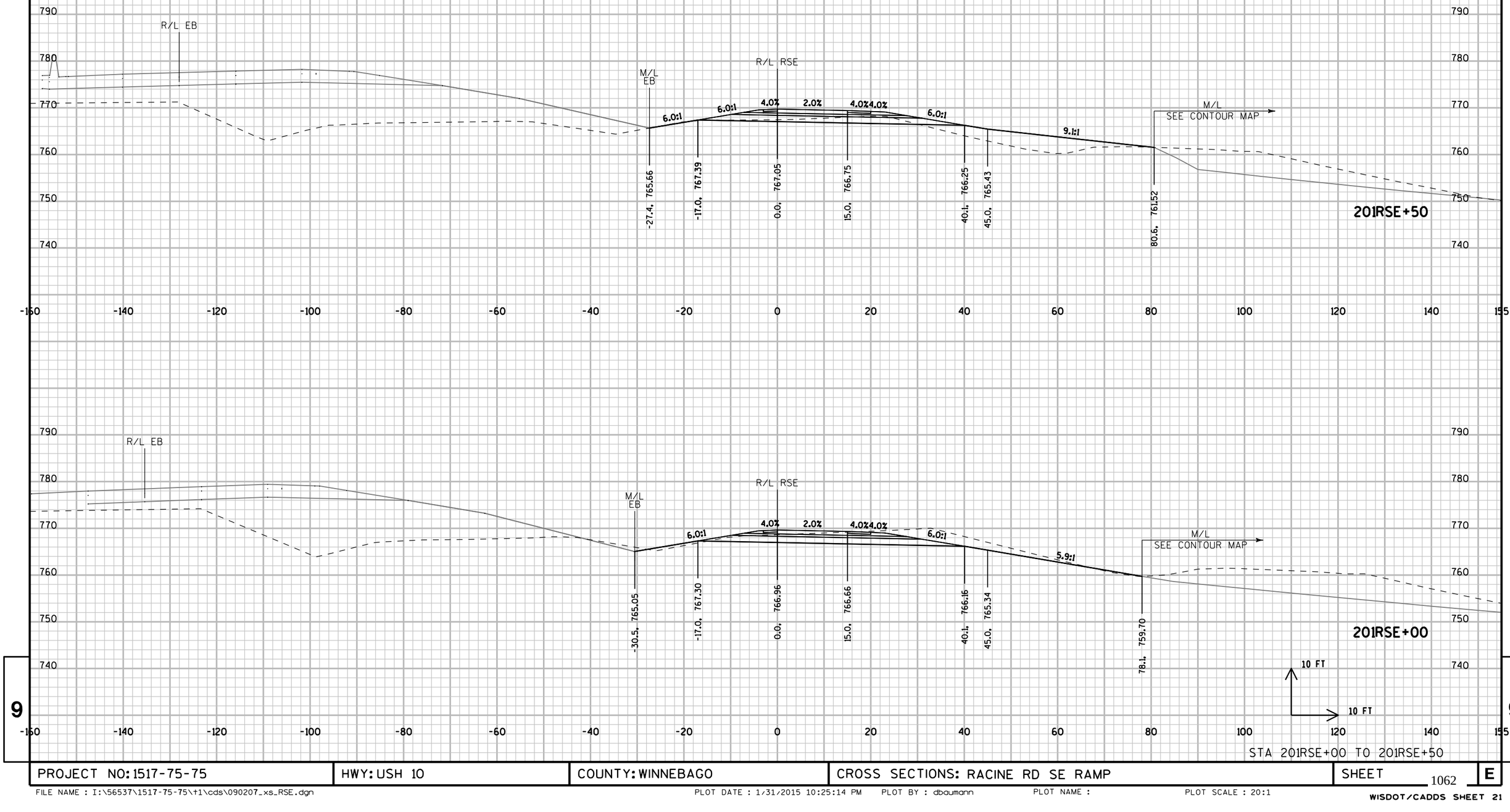
STA 200RSE+00 TO 200RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1061	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:13 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



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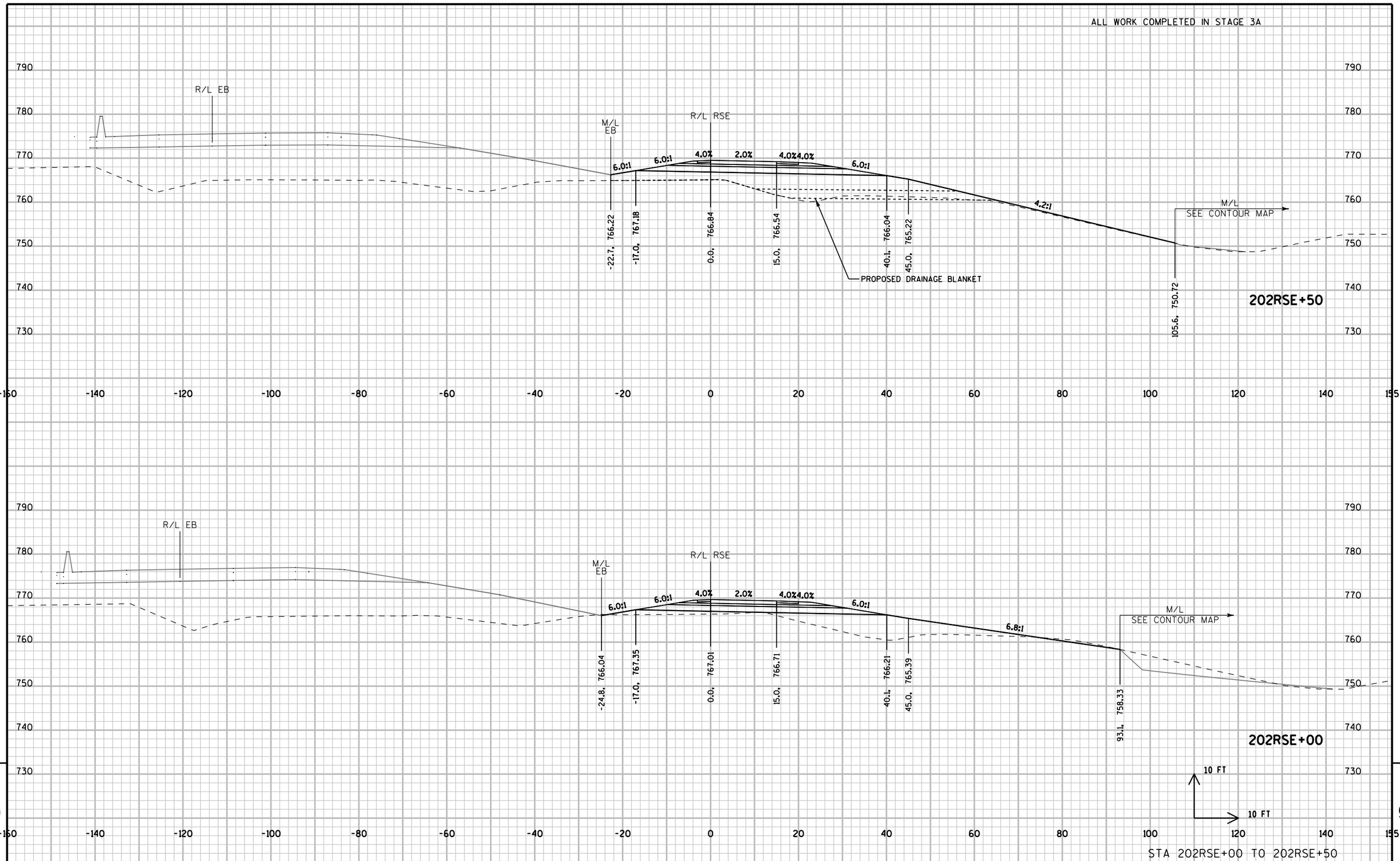
STA 201RSE+00 TO 201RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1062	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



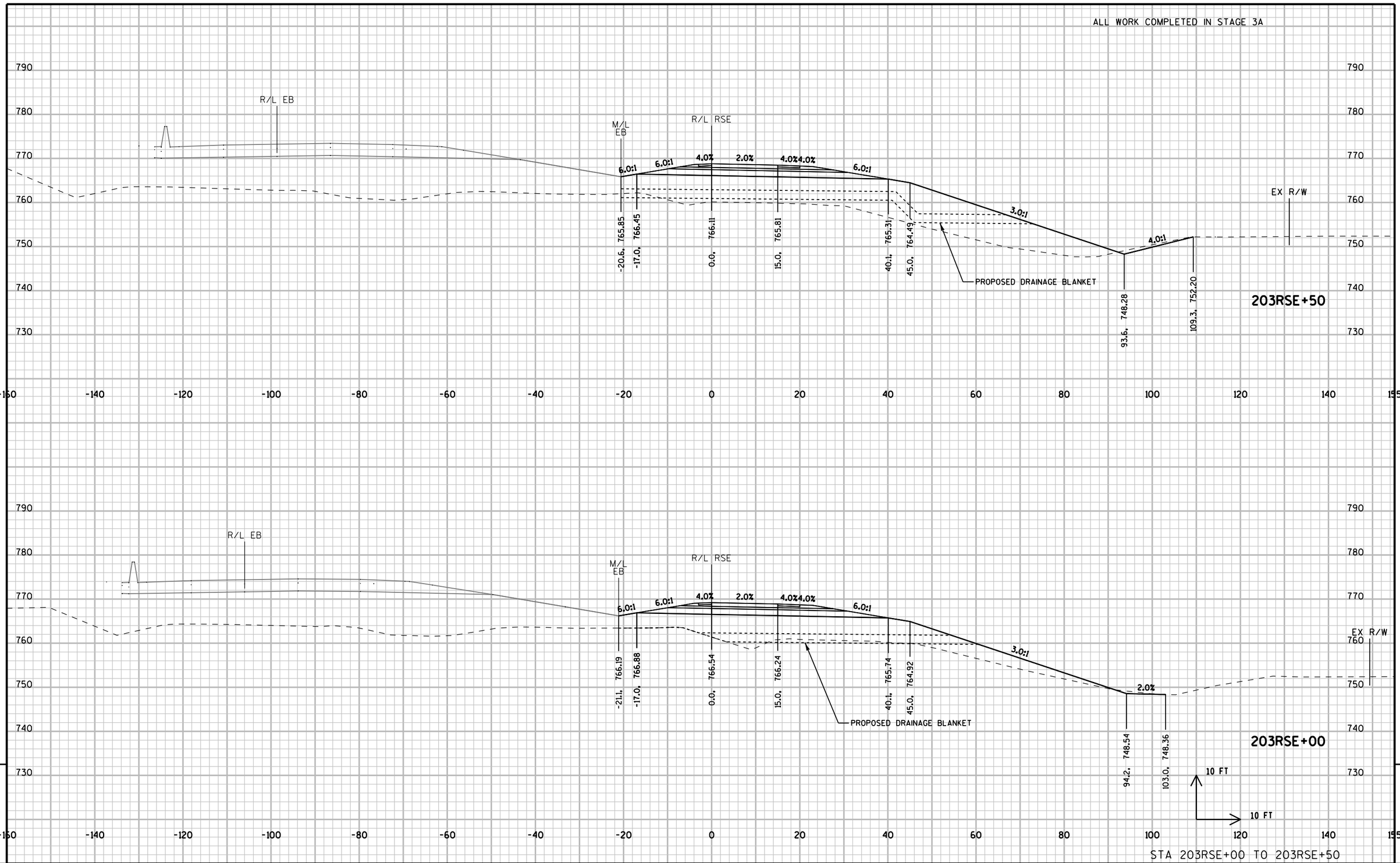
STA 202RSE+00 TO 202RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1063	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

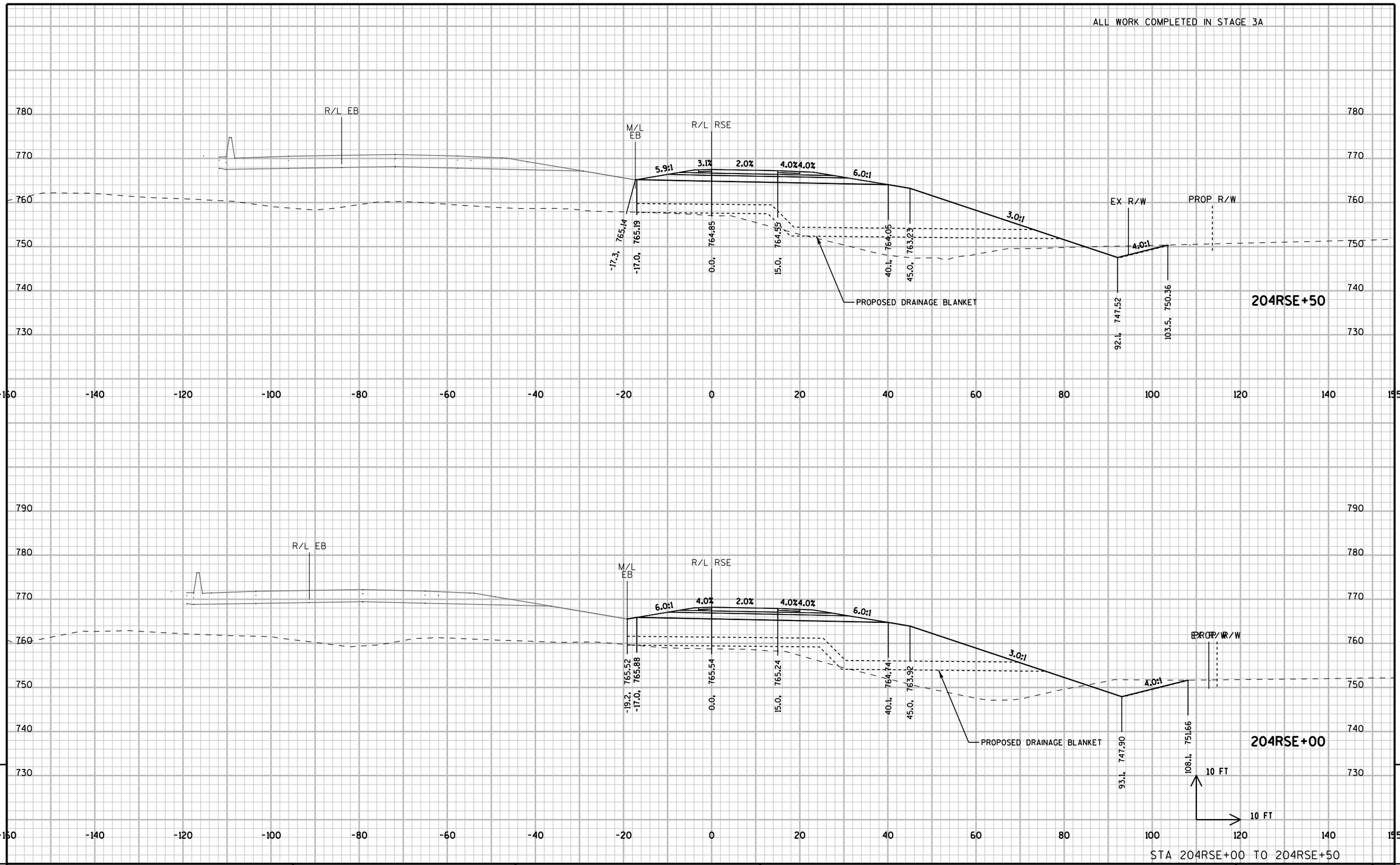
ALL WORK COMPLETED IN STAGE 3A



STA 203RSE+00 TO 203RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1064	E

ALL WORK COMPLETED IN STAGE 3A



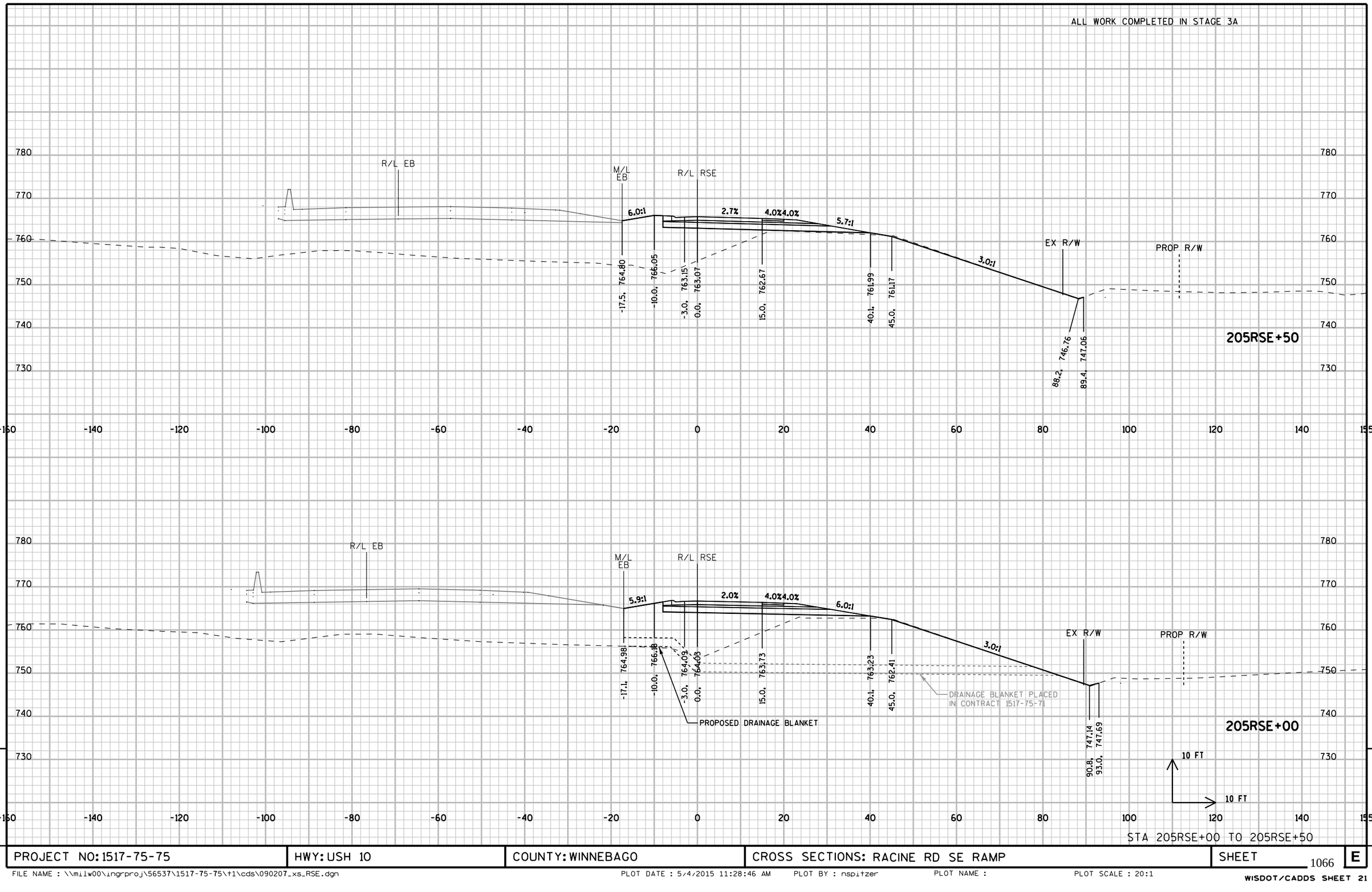
STA 204RSE+00 TO 204RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1065	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 5/4/2015 11:28:35 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



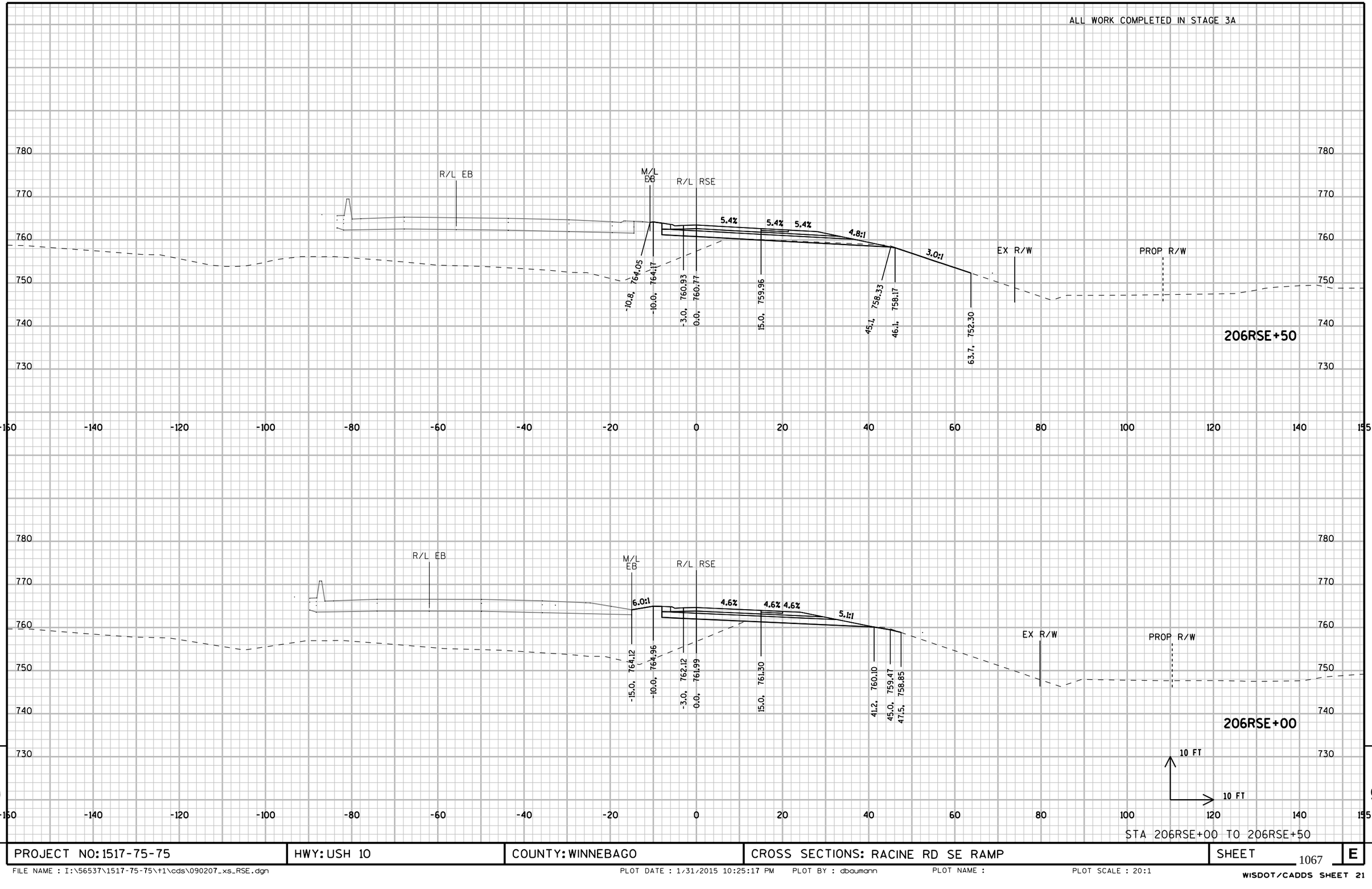
STA 205RSE+00 TO 205RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1066	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 5/4/2015 11:28:46 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



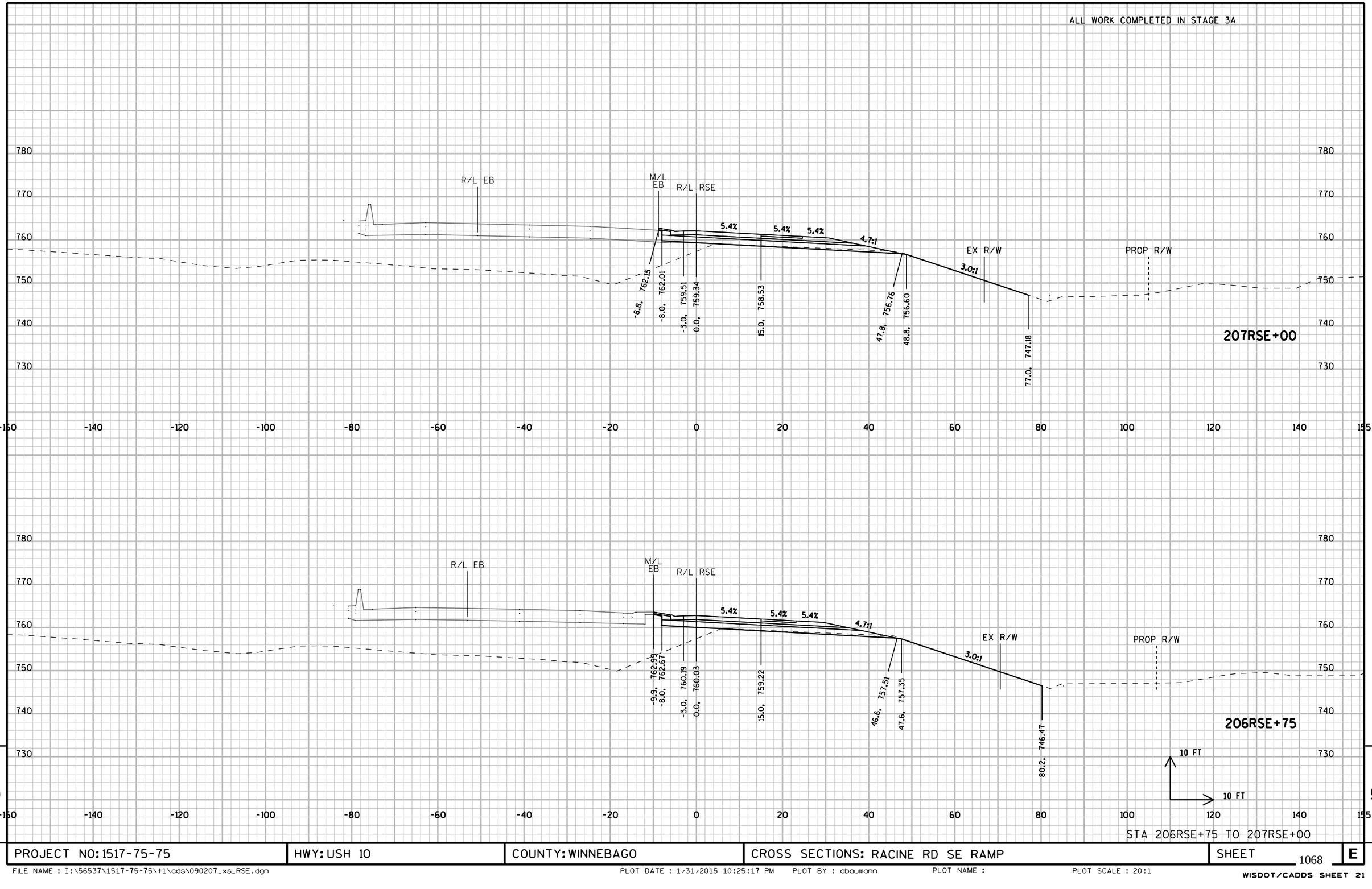
STA 206RSE+00 TO 206RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1067	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:17 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



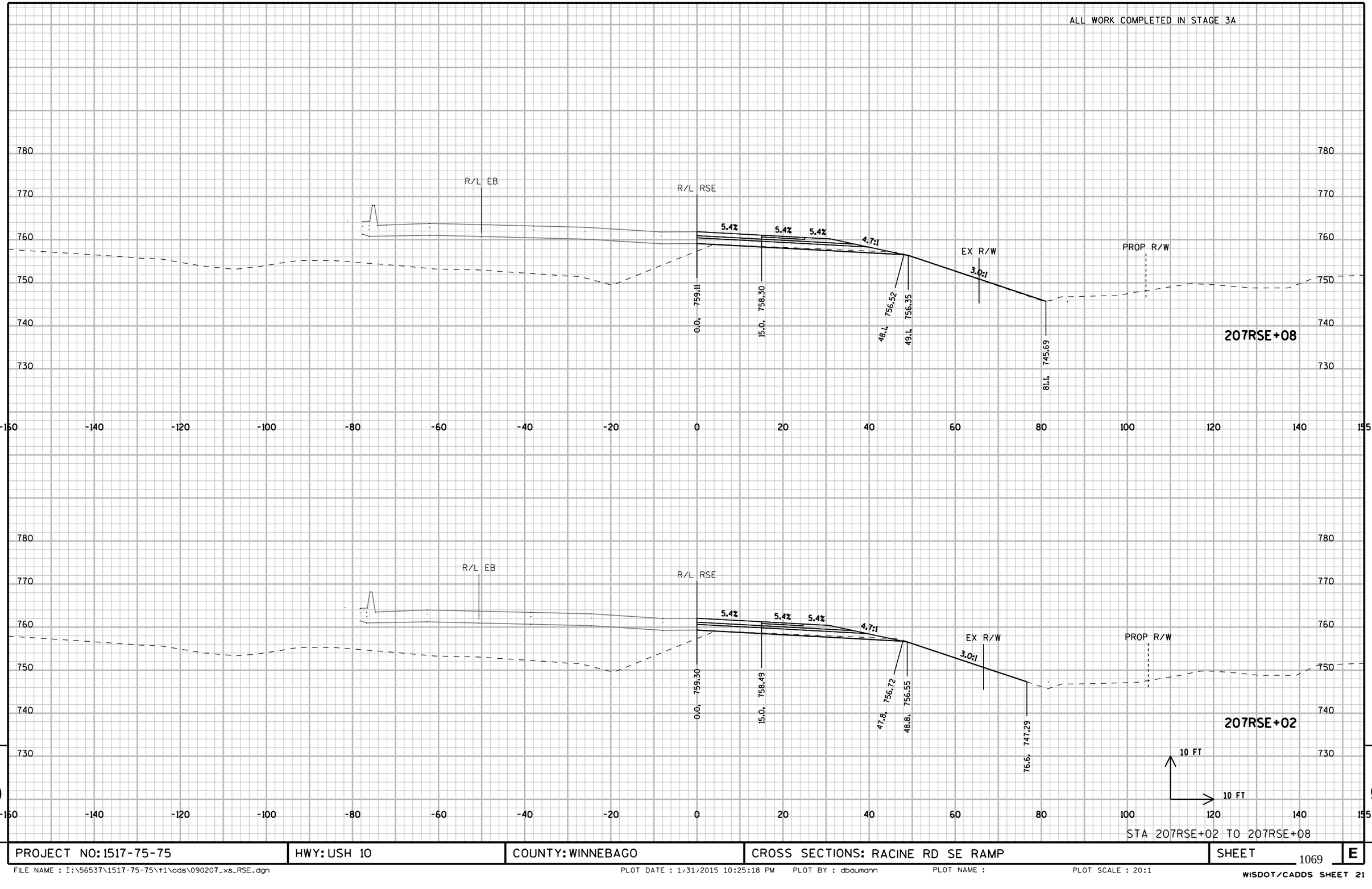
STA 206RSE+75 TO 207RSE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1068	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:17 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



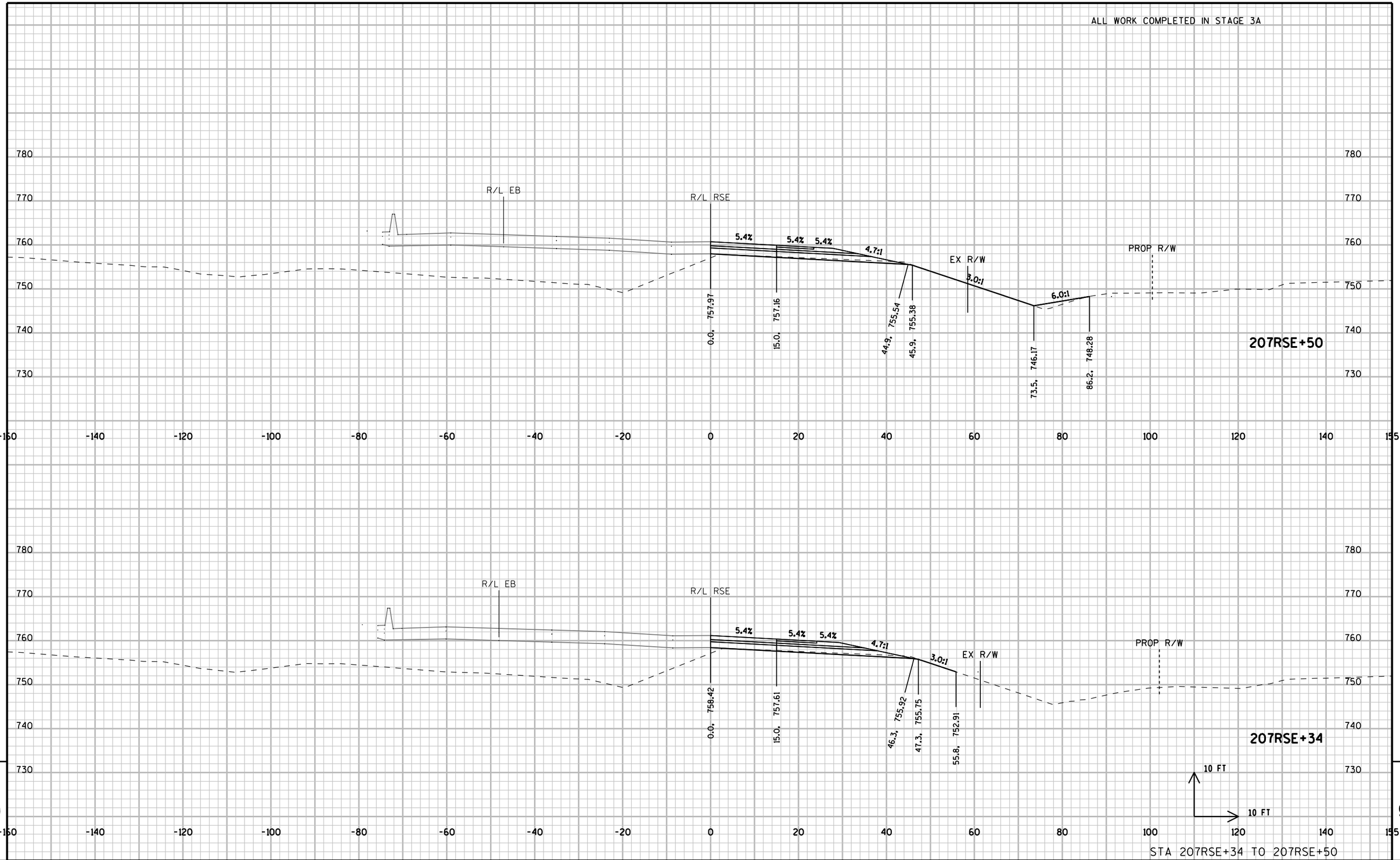
STA 207RSE+02 TO 207RSE+08

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1069	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:18 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 207RSE+34 TO 207RSE+50

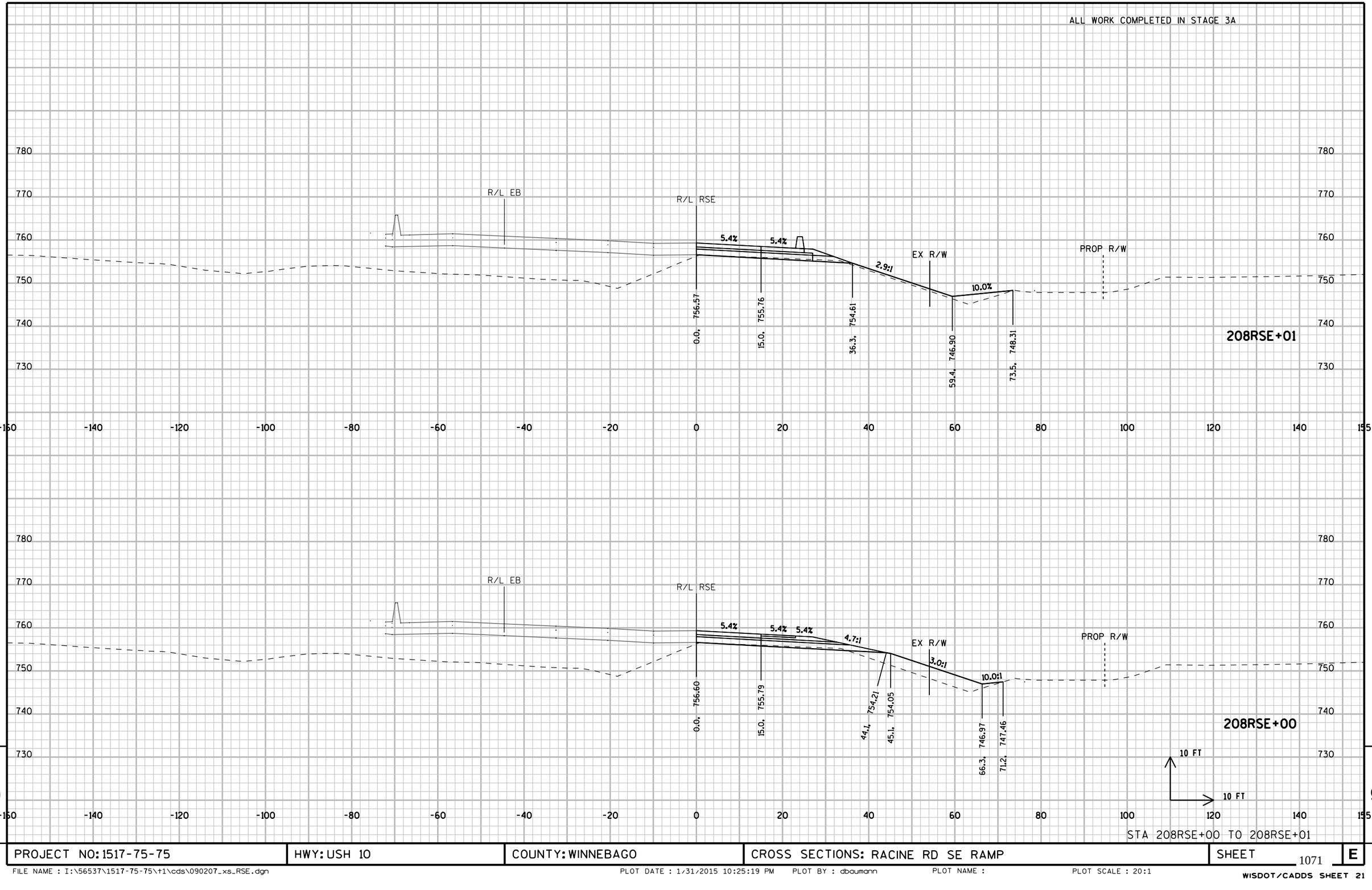
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1070	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:18 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

9 9

ALL WORK COMPLETED IN STAGE 3A



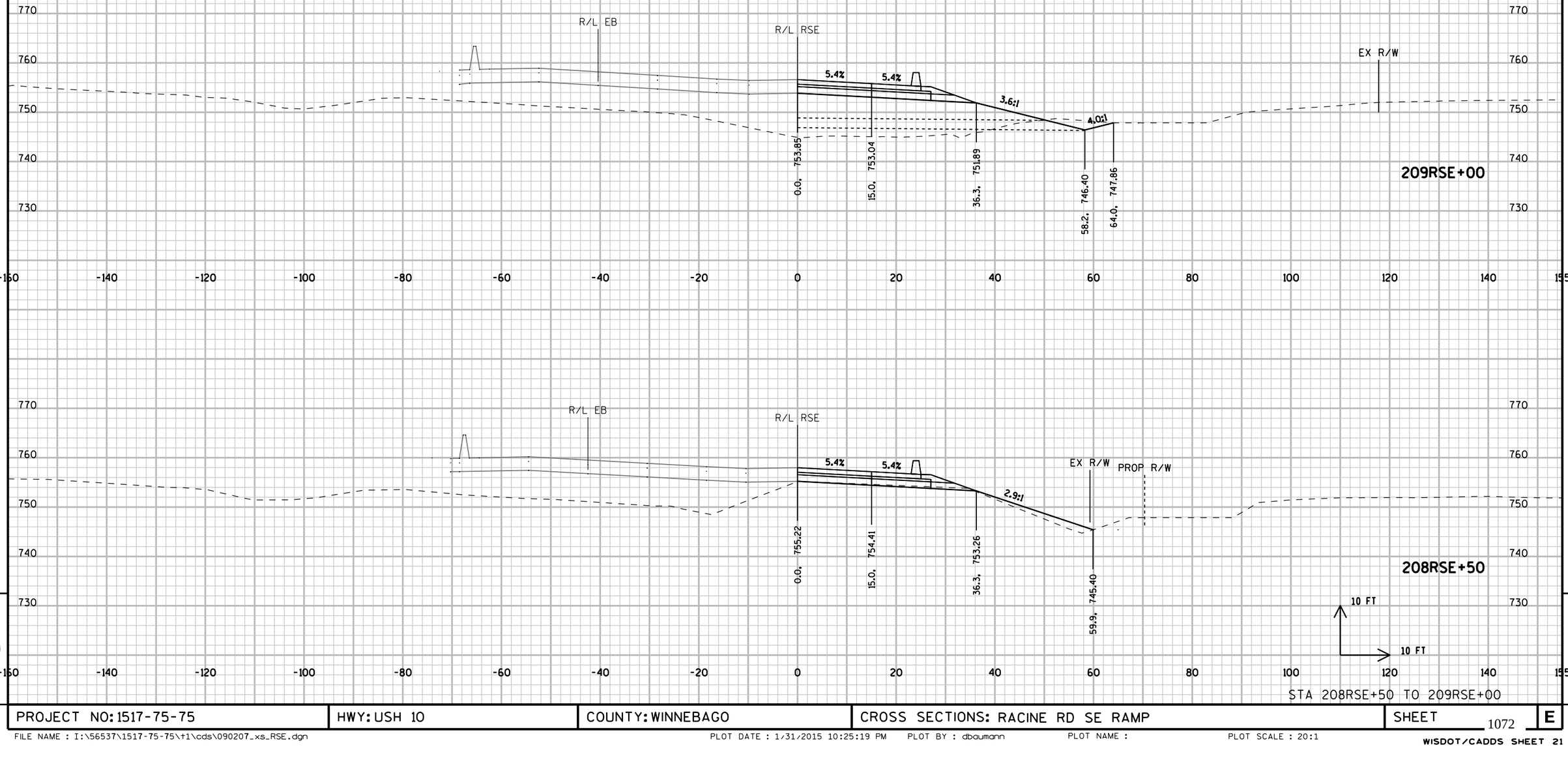
STA 208RSE+00 TO 208RSE+01

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1071	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:19 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



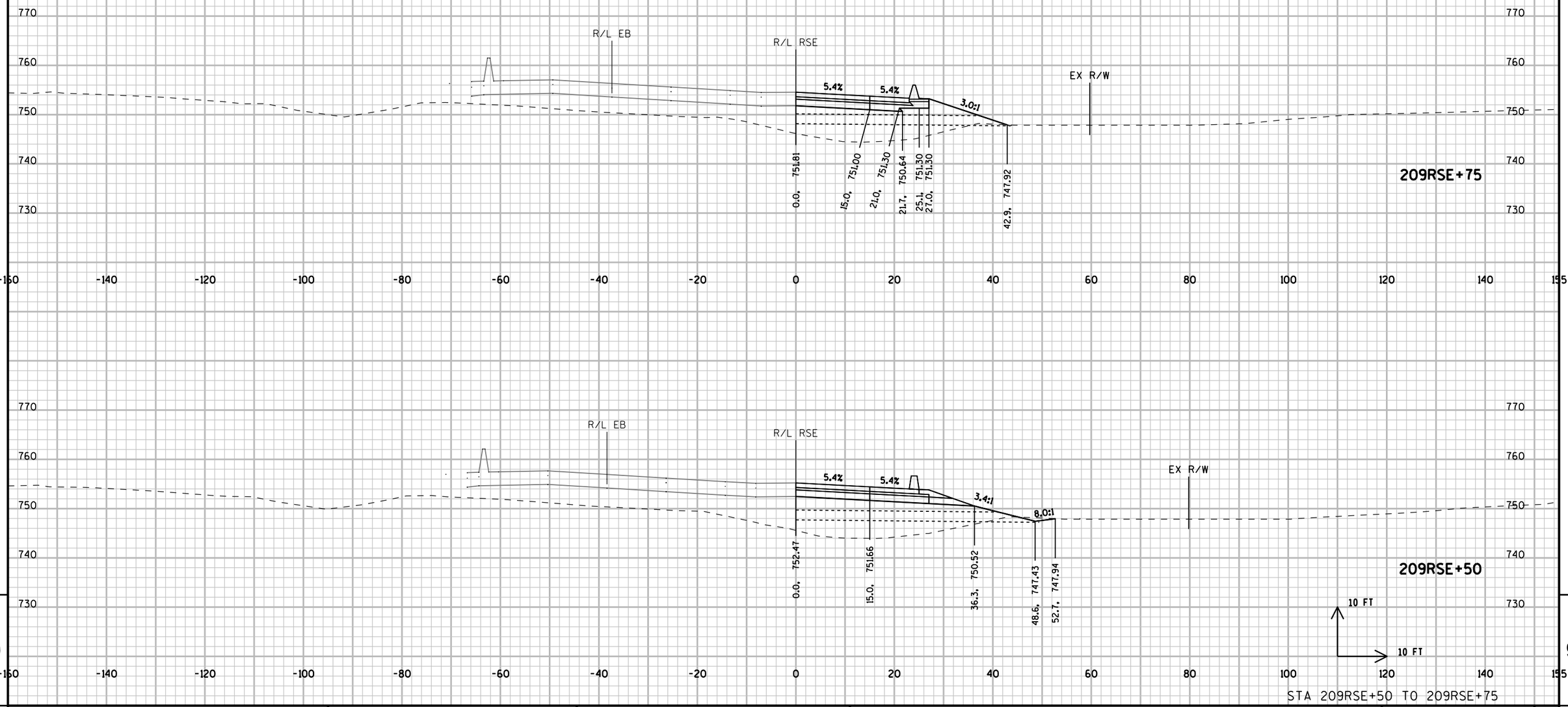
STA 208RSE+50 TO 209RSE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1072	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:19 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 209RSE+50 TO 209RSE+75

9

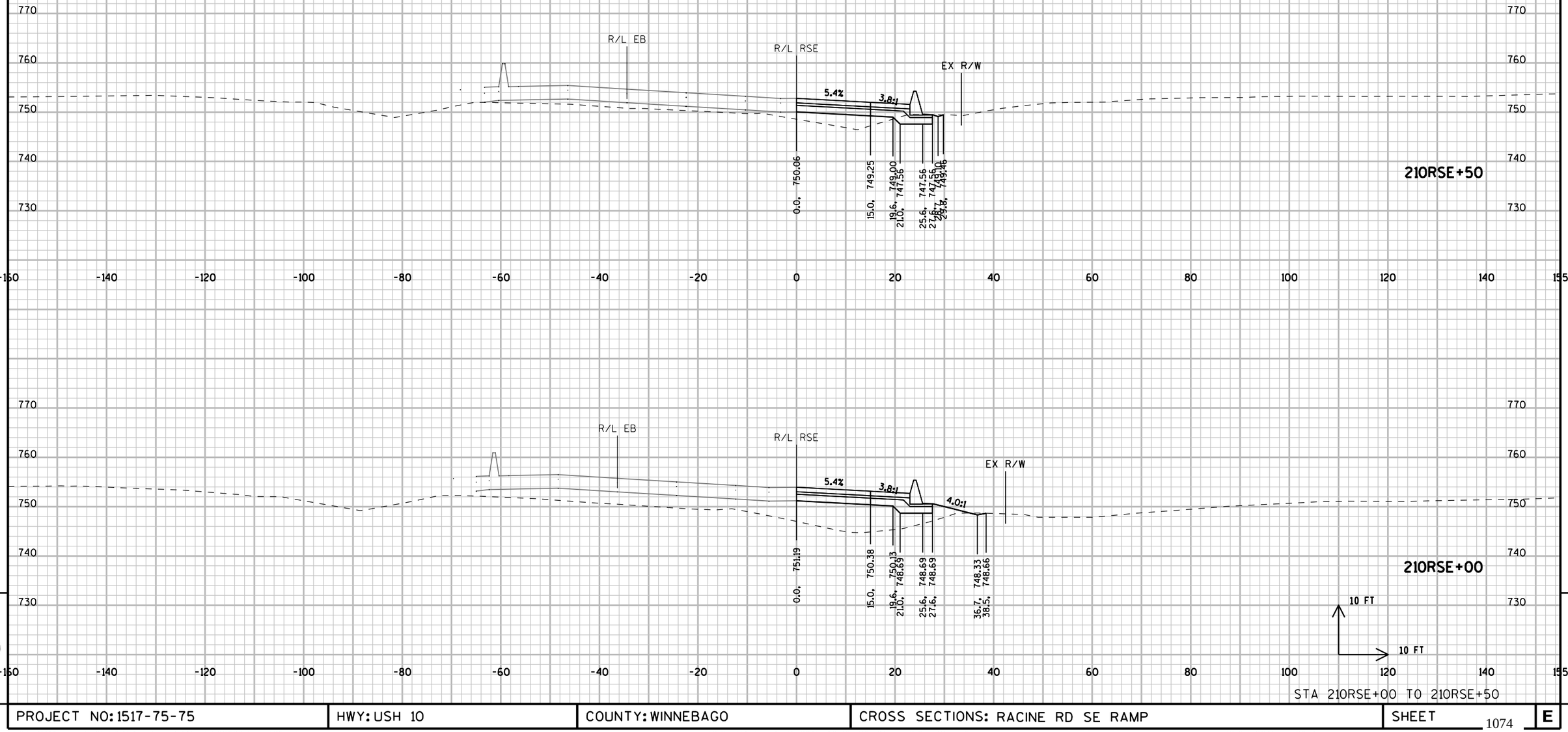
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1073	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:20 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



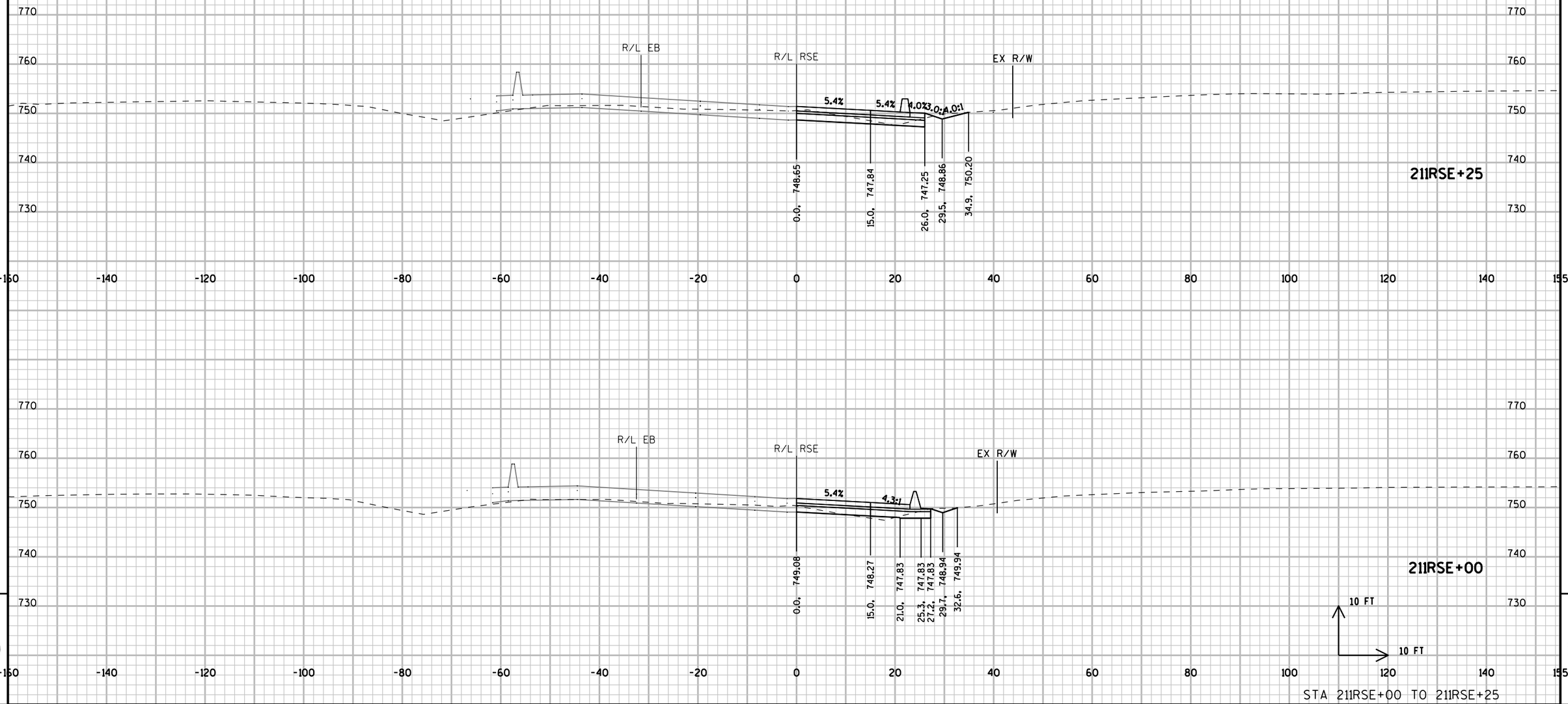
STA 210RSE+00 TO 210RSE+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1074	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:20 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



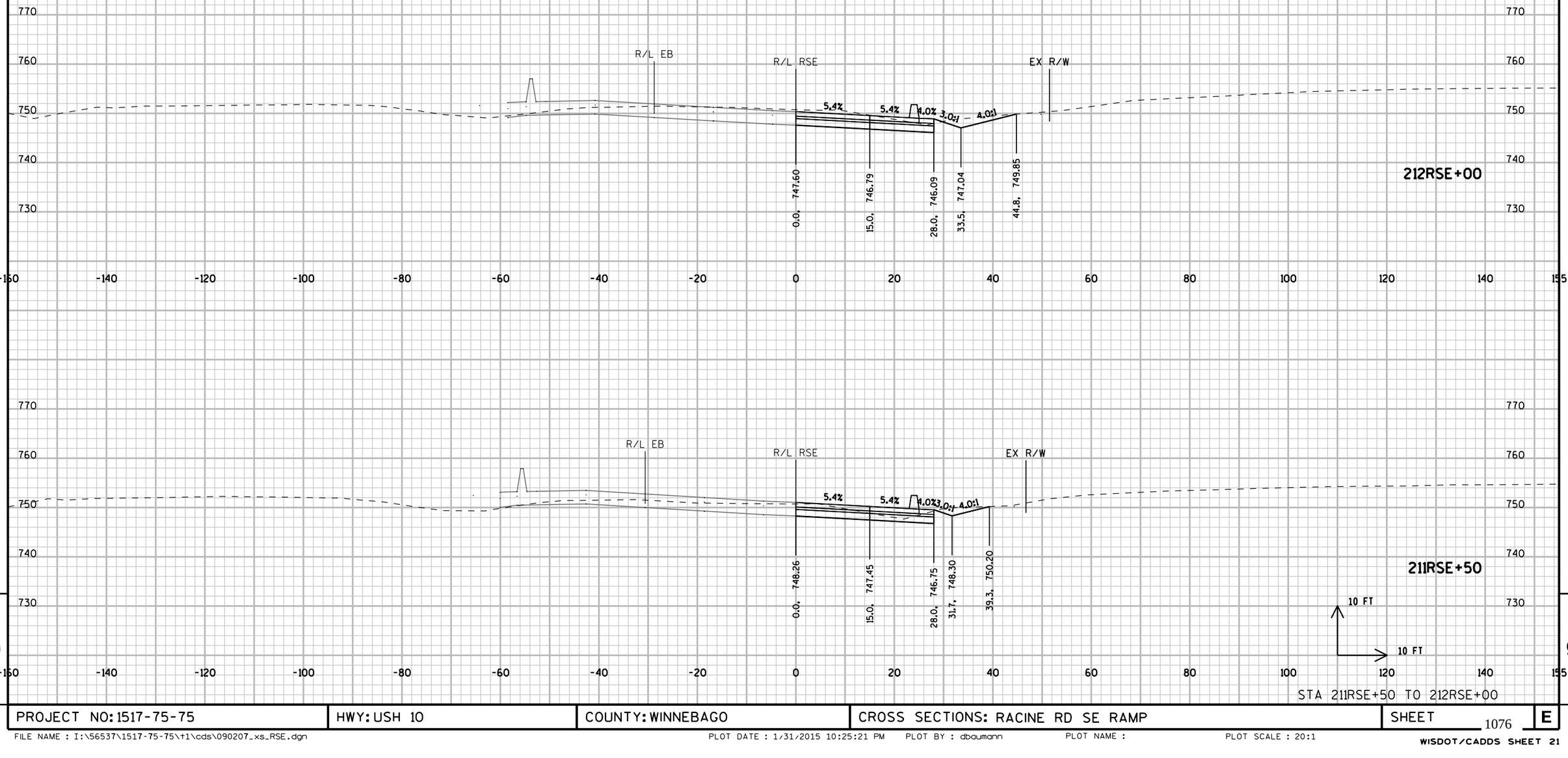
STA 211RSE+00 TO 211RSE+25

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1075	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:21 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



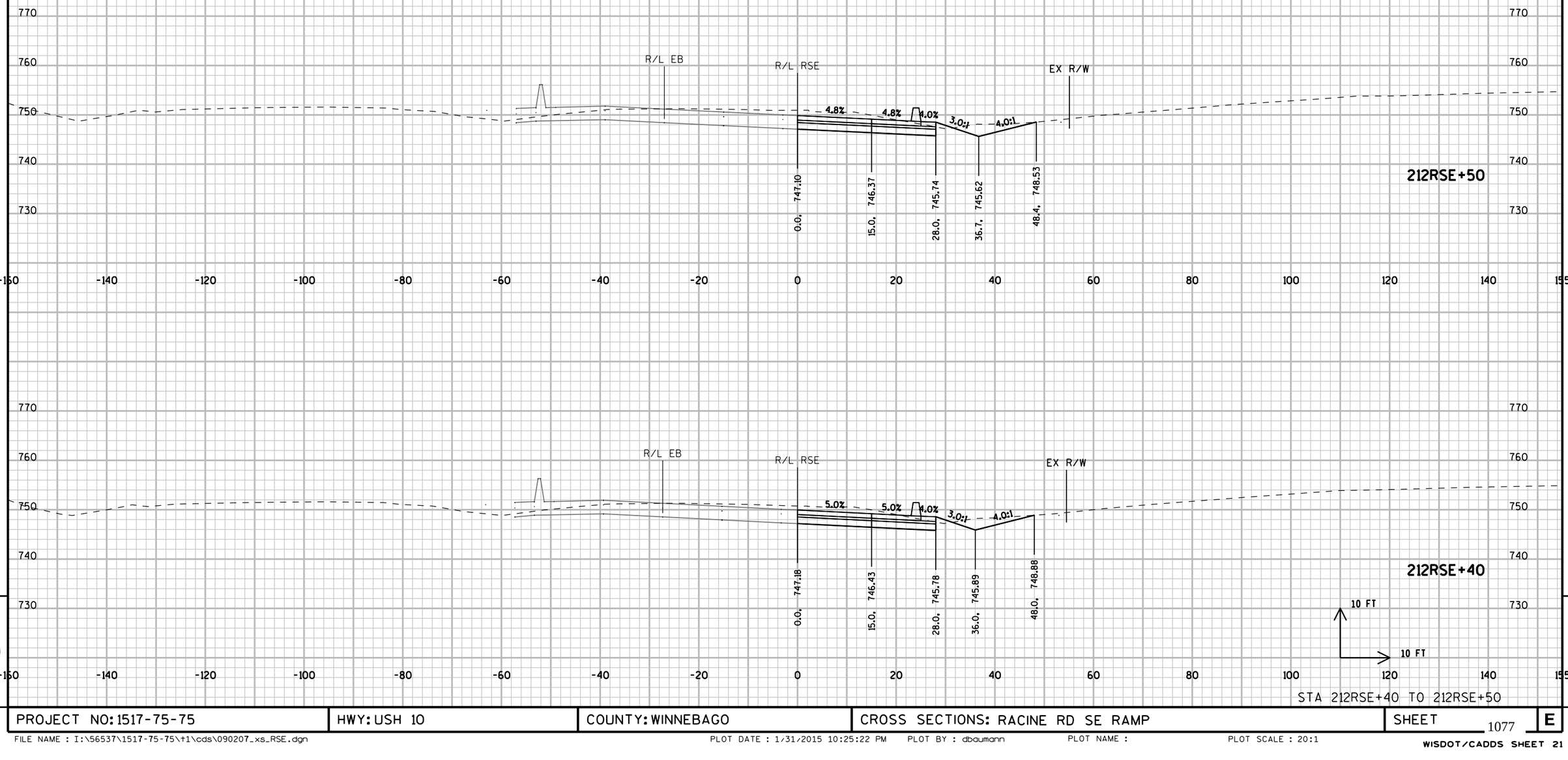
STA 211RSE+50 TO 212RSE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1076	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:21 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 212RSE+40 TO 212RSE+50

9

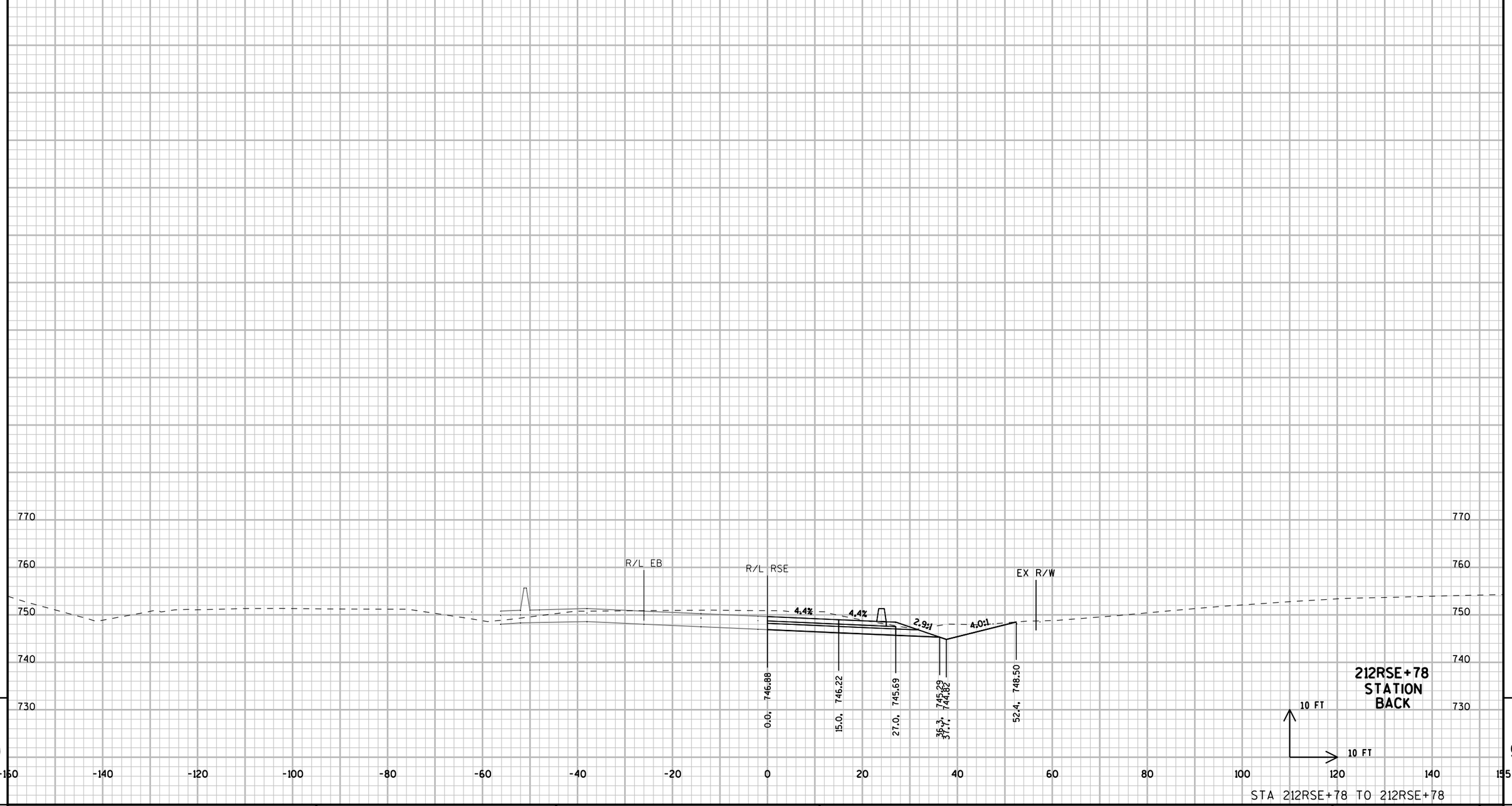
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1077	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:22 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



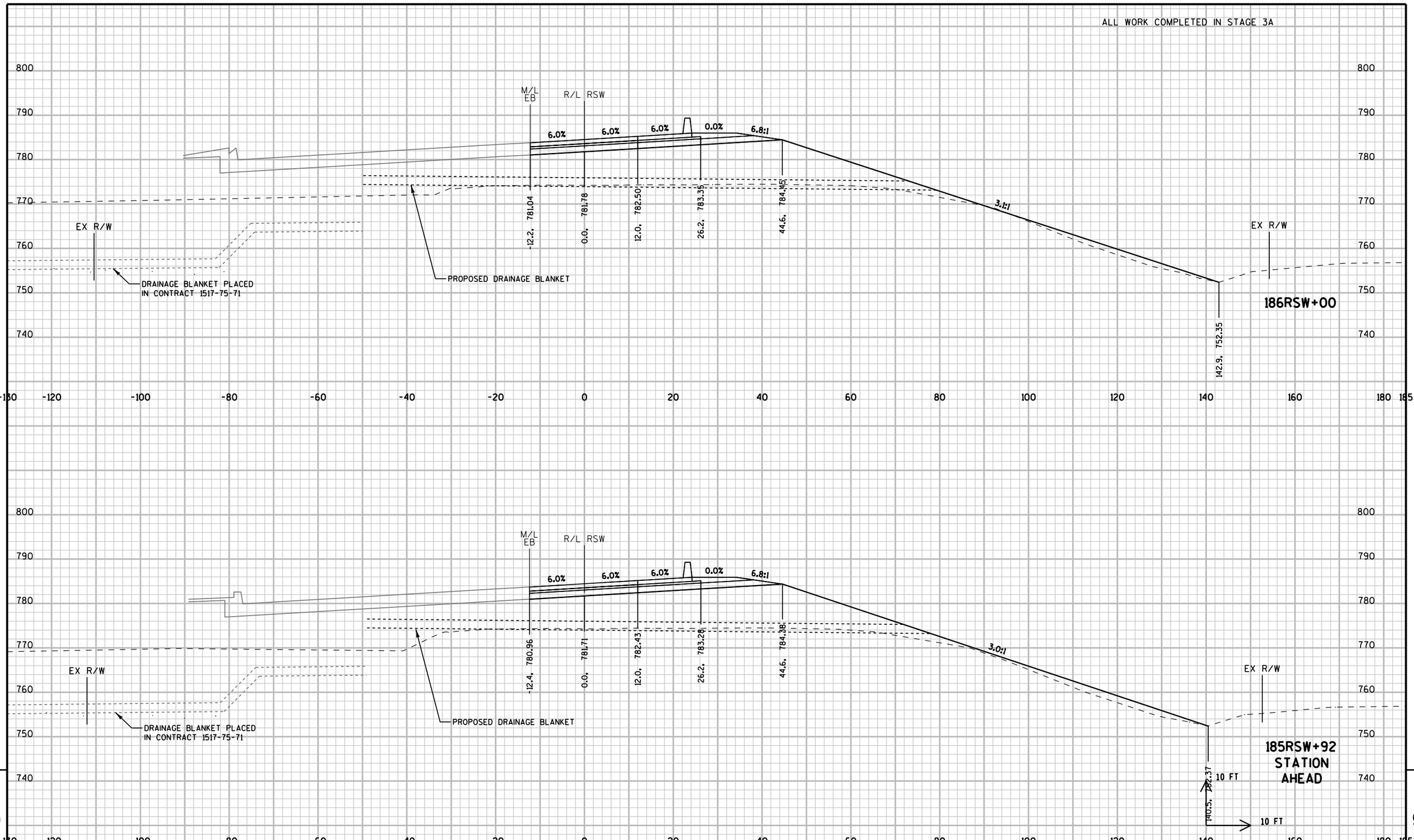
STA 212RSE+78 TO 212RSE+78

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SE RAMP	SHEET 1078	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090207_xs_RSE.dgn PLOT DATE : 1/31/2015 10:25:23 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



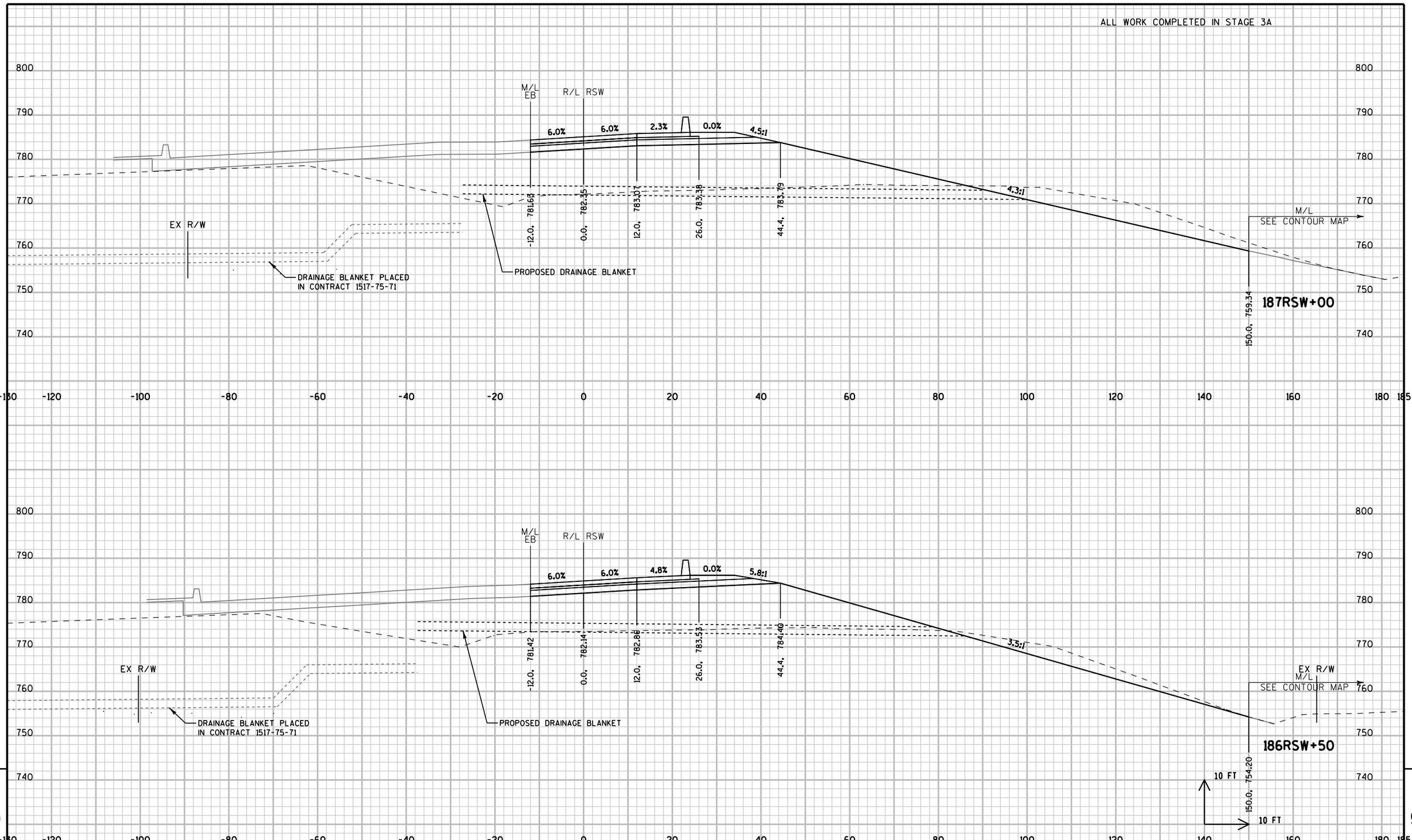
STA 185RSW+92 TO 186RSW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1079	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:32 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



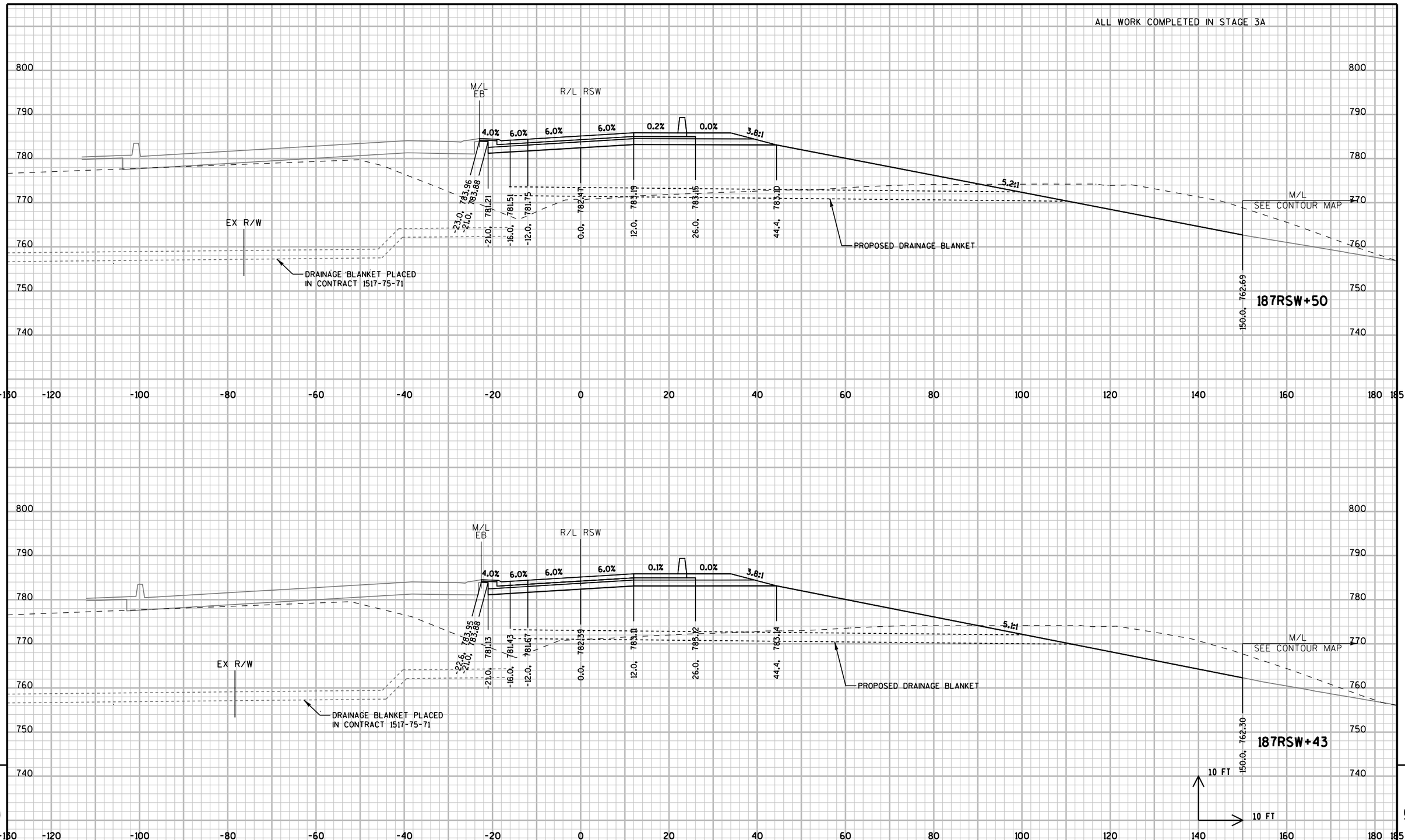
STA 186RSW+50 TO 187RSW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1080	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:33 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



9

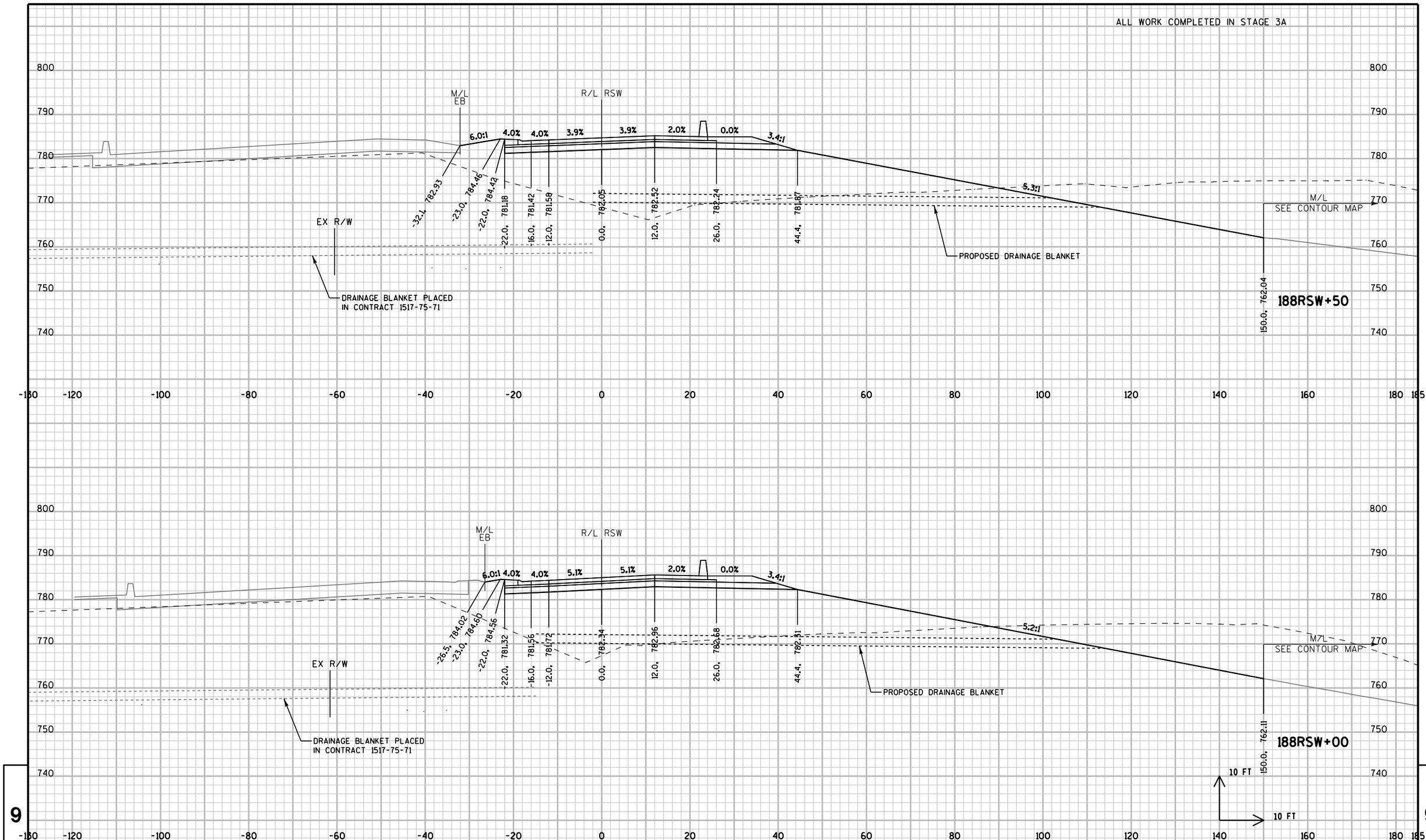
9

STA 187RSW+43 TO 187RSW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1081	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:33 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

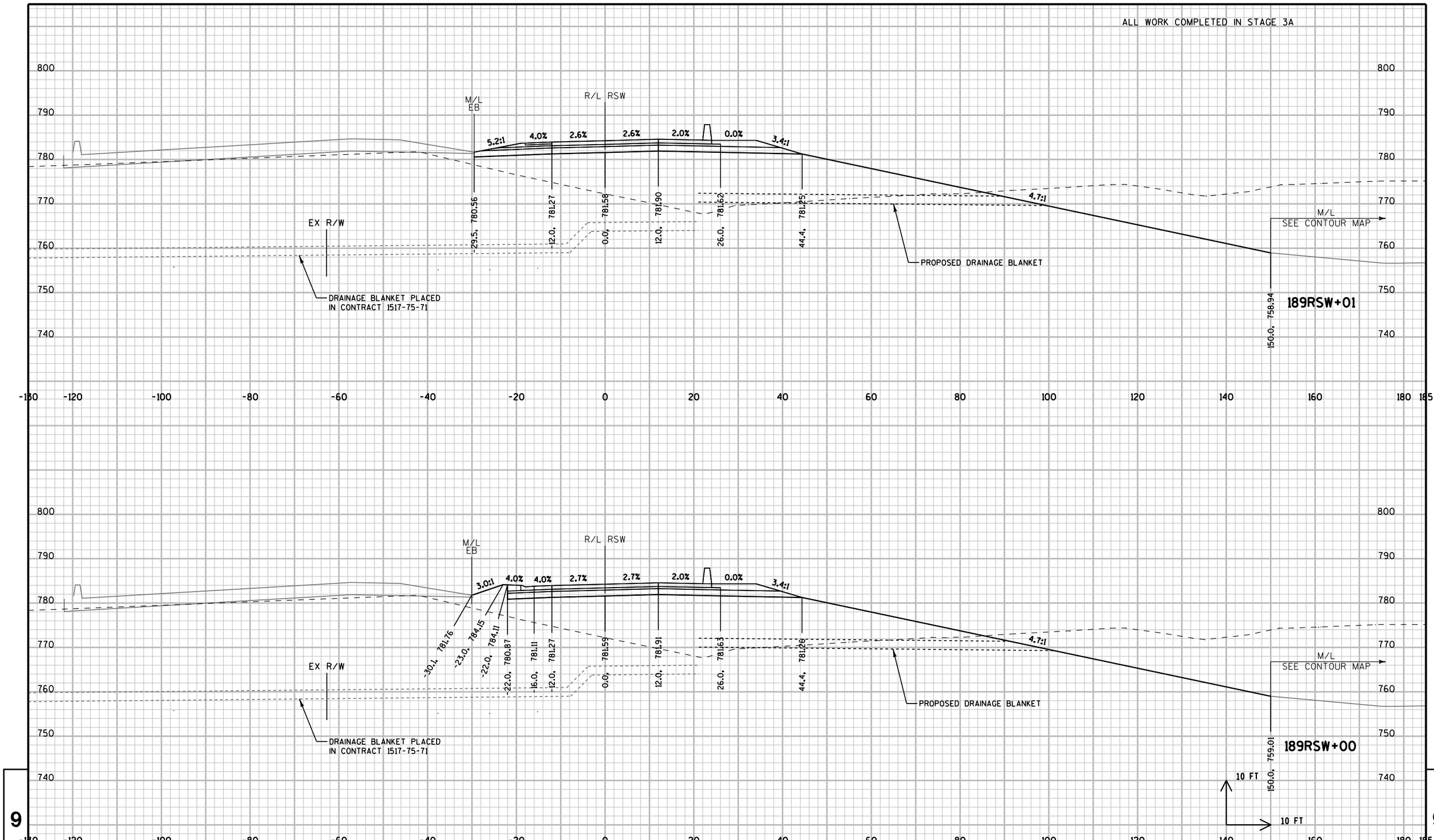
ALL WORK COMPLETED IN STAGE 3A



STA 188RSW+00 TO 188RSW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1082	E

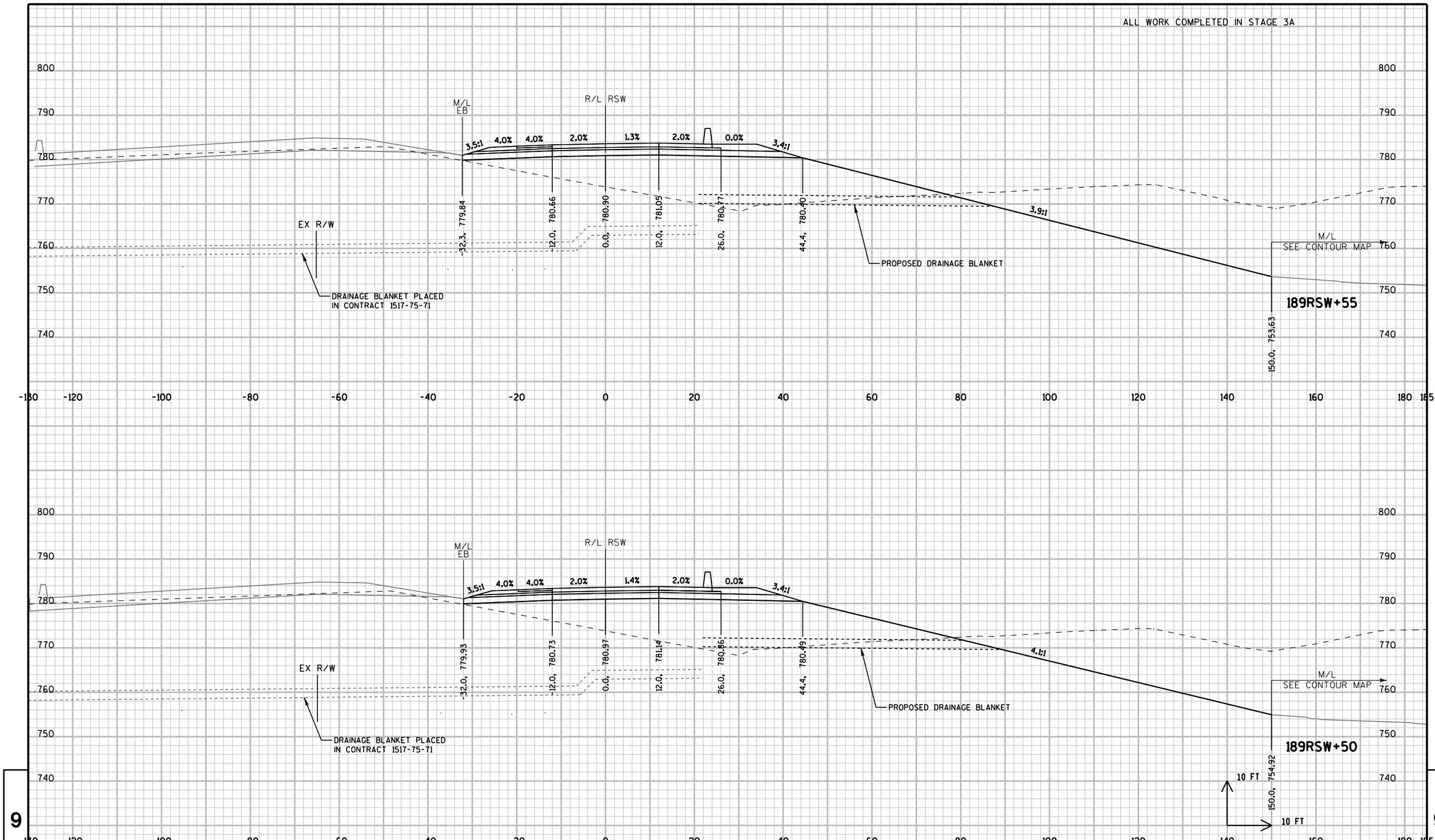
ALL WORK COMPLETED IN STAGE 3A



STA 189RSW+00 TO 189RSW+01

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1083	E

ALL WORK COMPLETED IN STAGE 3A



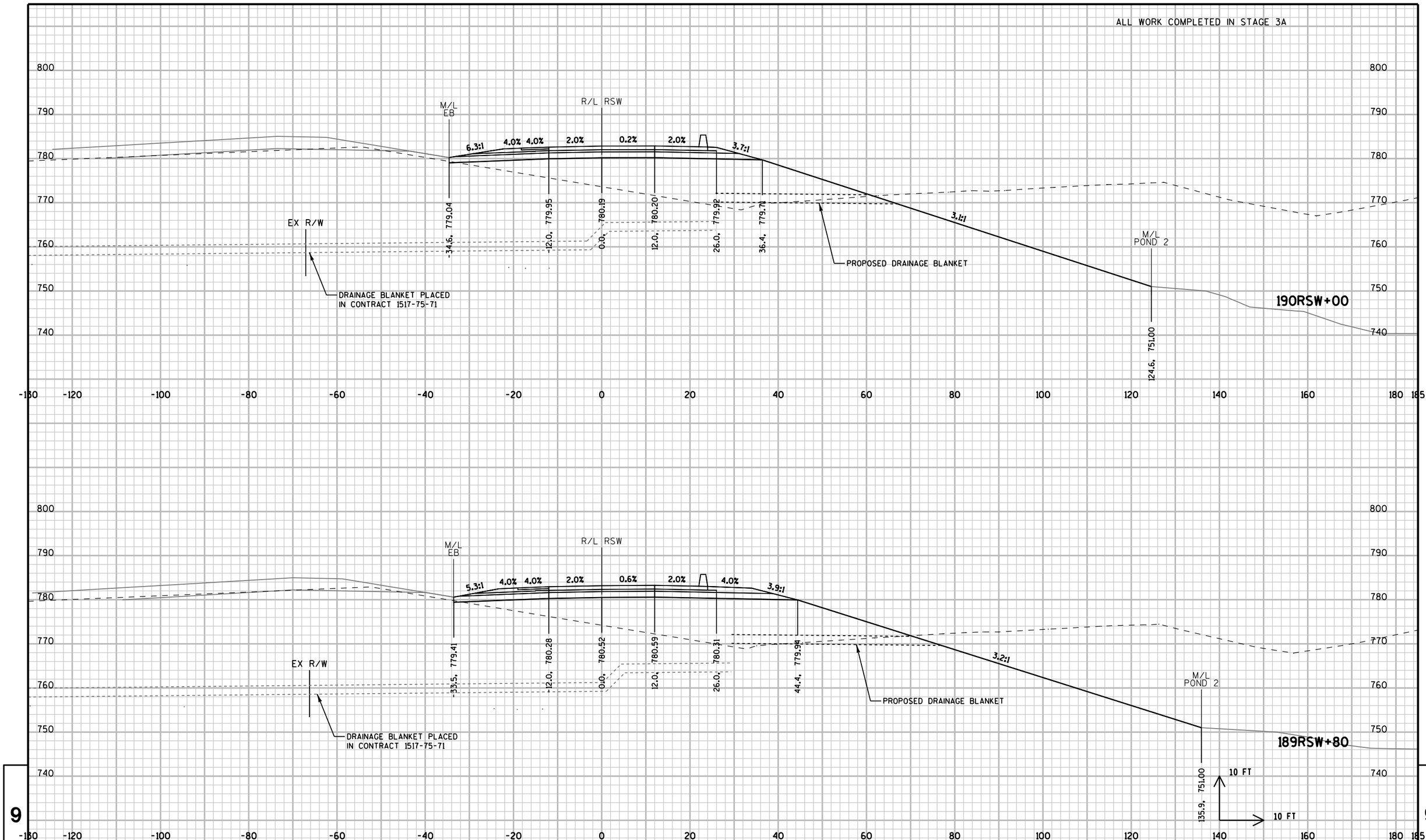
STA 189RSW+50 TO 189RSW+55

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1084	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:35 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

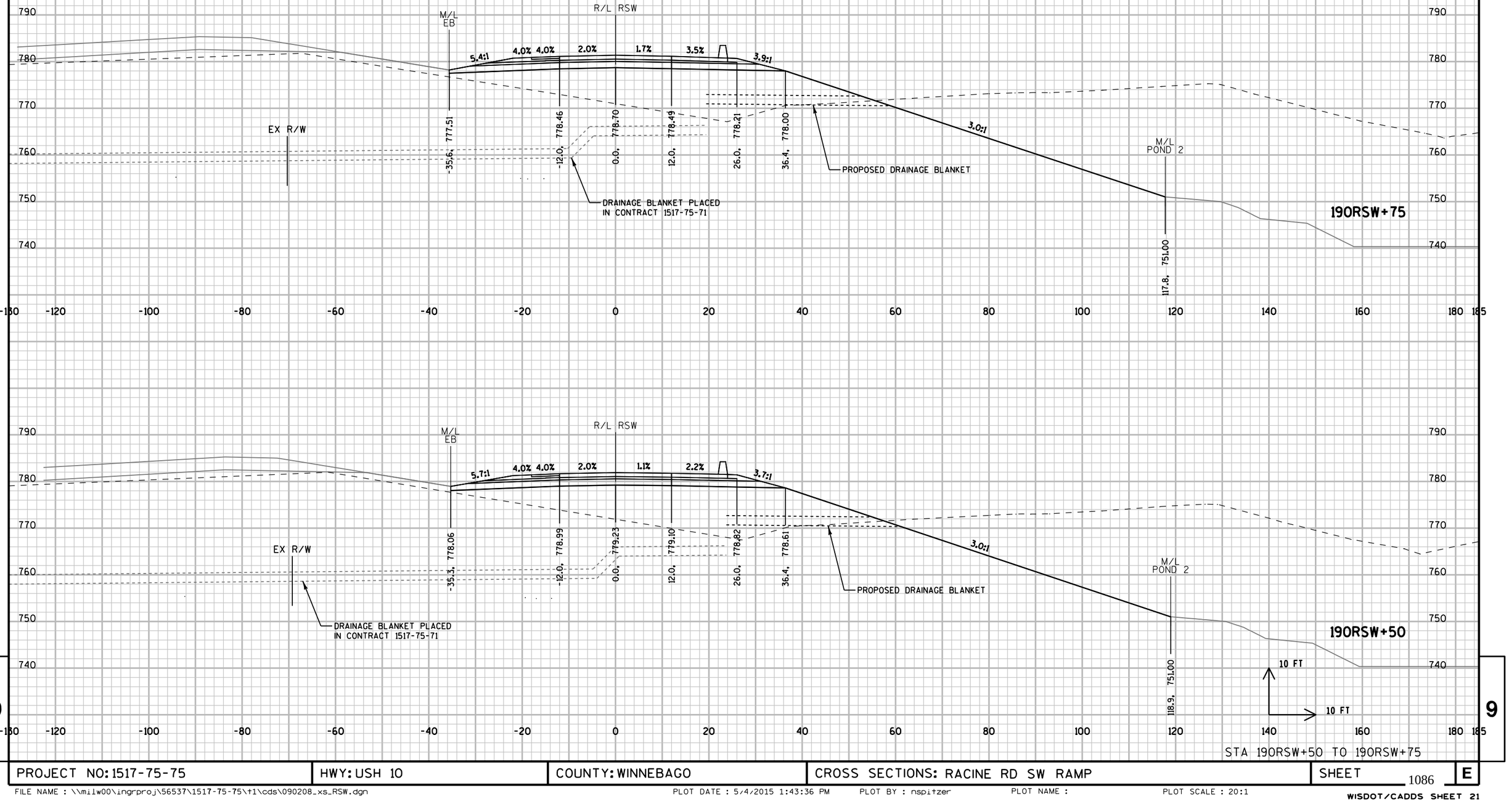
ALL WORK COMPLETED IN STAGE 3A



STA 189RSW+80 TO 190RSW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1085	E

ALL WORK COMPLETED IN STAGE 3A



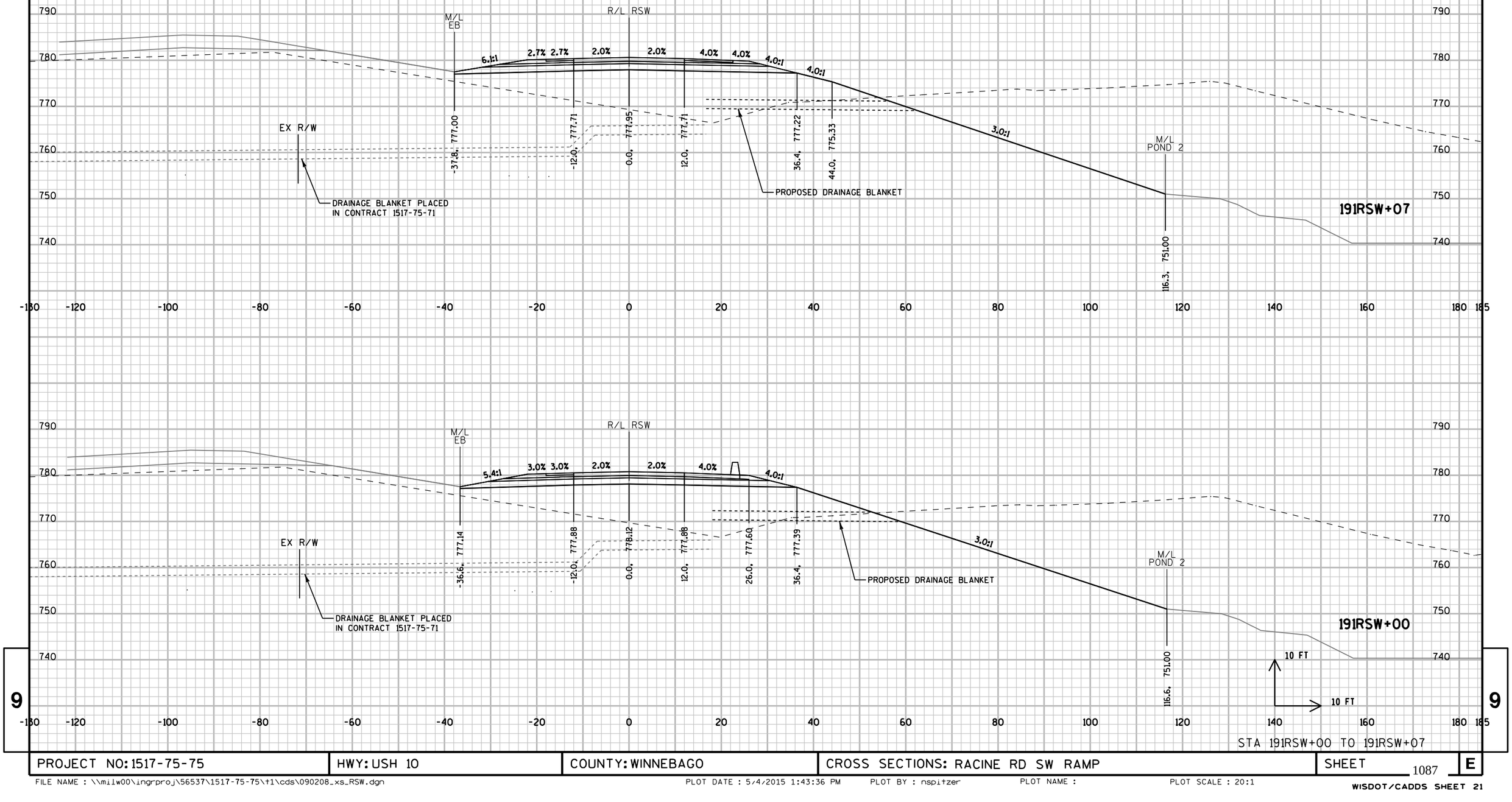
STA 190RSW+50 TO 190RSW+75

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1086	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:36 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



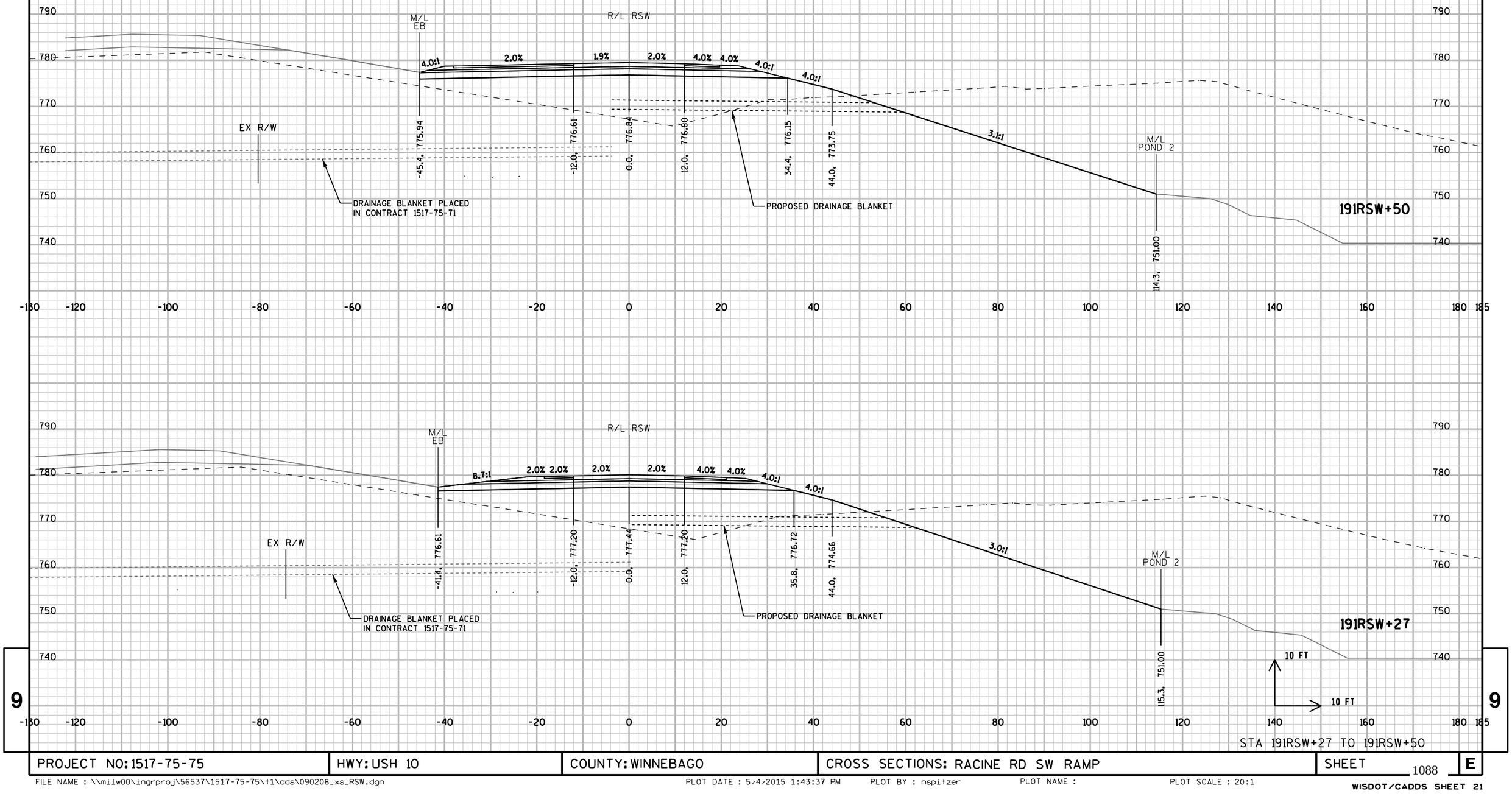
STA 191RSW+00 TO 191RSW+07

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1087	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:36 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



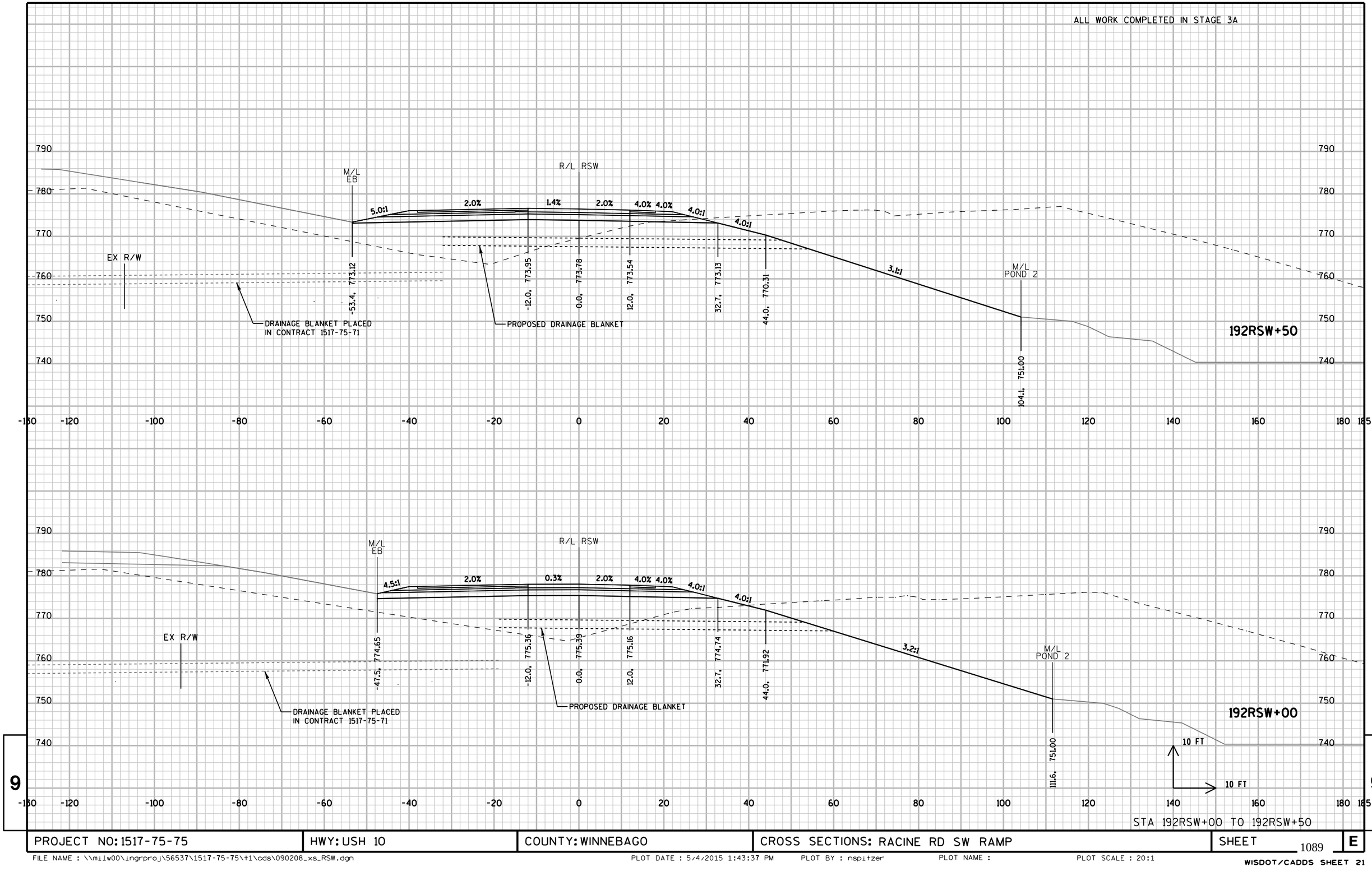
STA 191RSW+27 TO 191RSW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1088	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:37 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



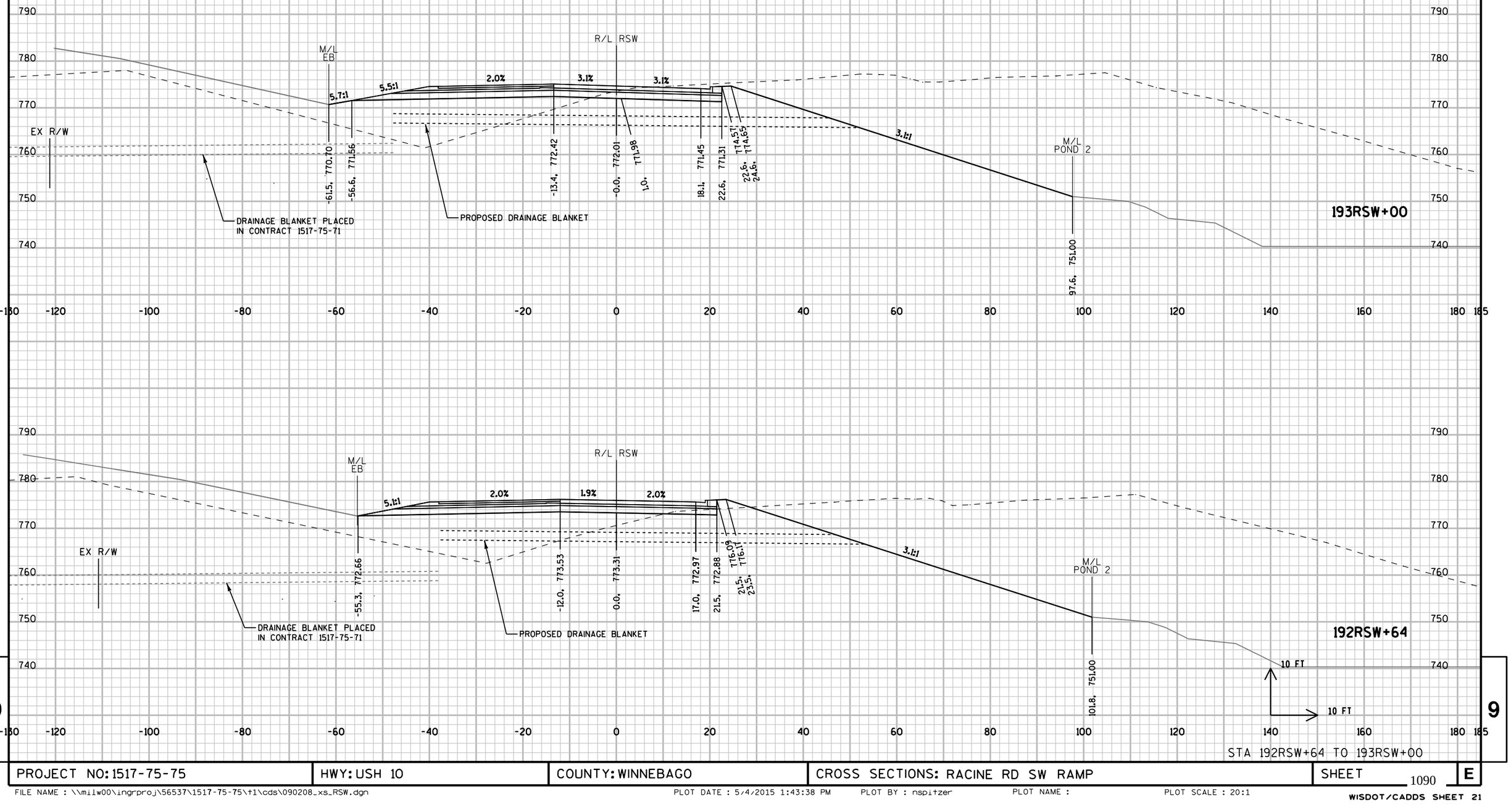
STA 192RSW+00 TO 192RSW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1089	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:37 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



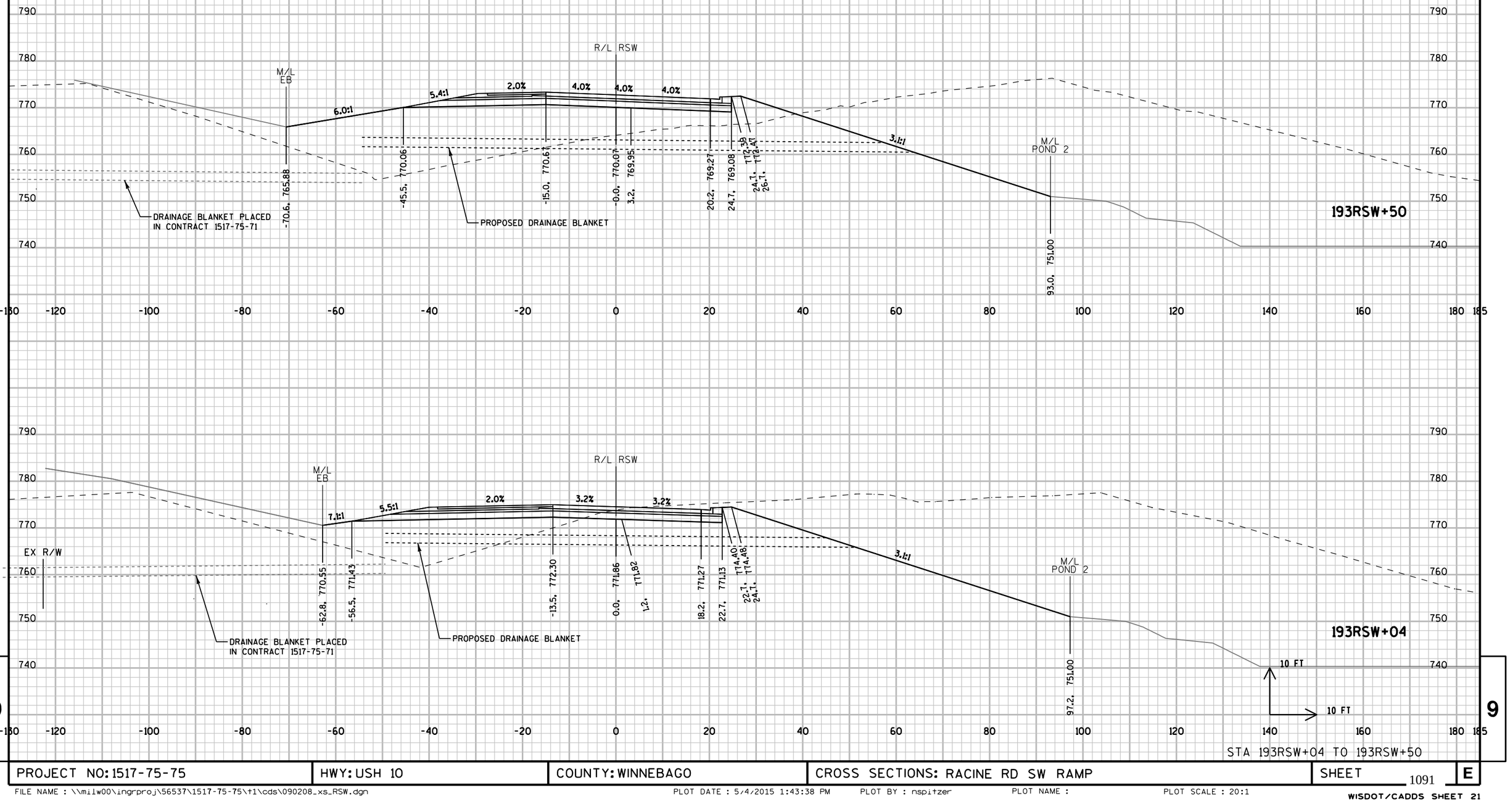
STA 192RSW+64 TO 193RSW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1090	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:38 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 193RSW+04 TO 193RSW+50

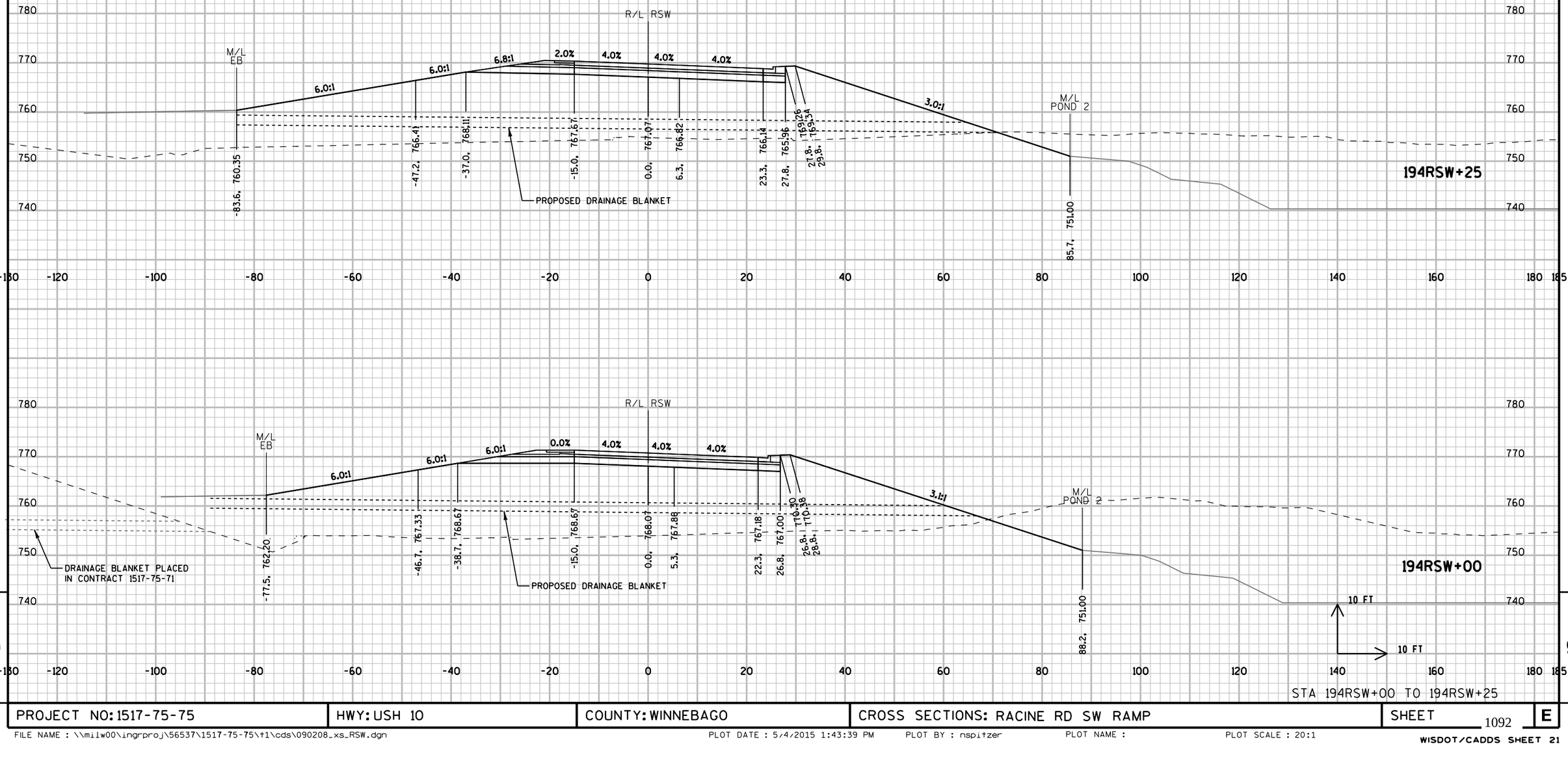
9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1091	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:38 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



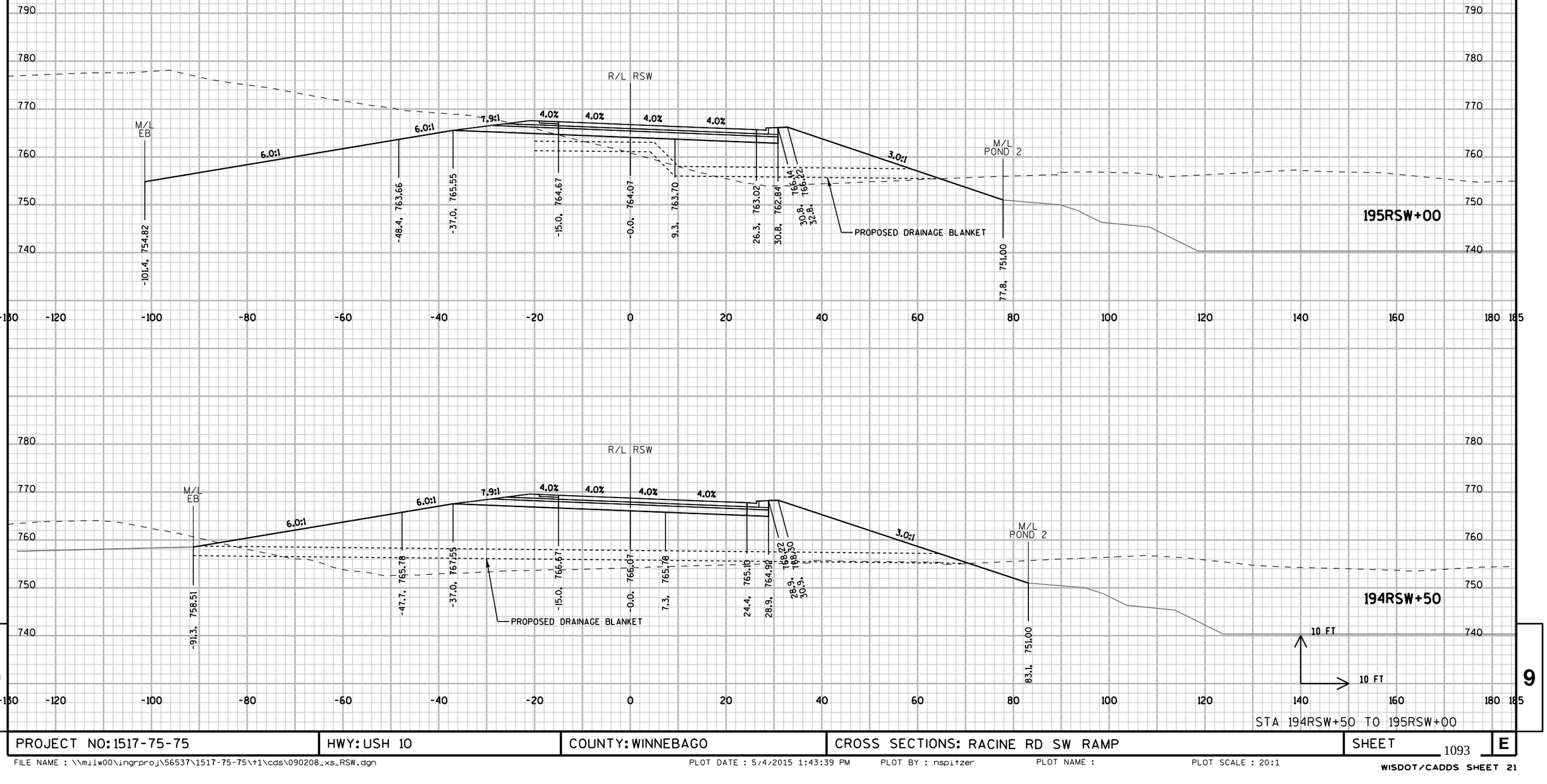
STA 194RSW+00 TO 194RSW+25

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1092	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:39 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



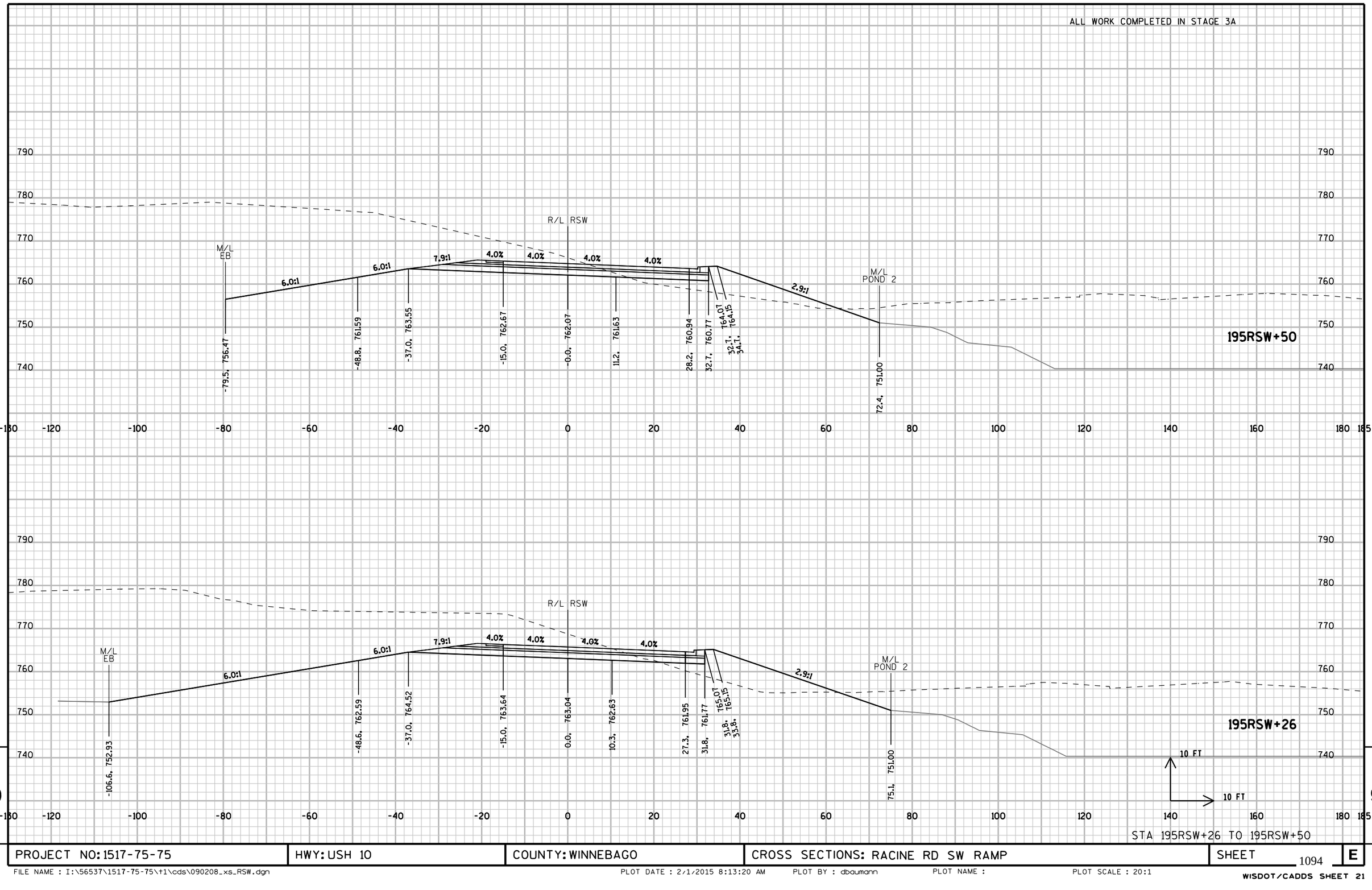
STA 194RSW+50 TO 195RSW+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 5/4/2015 1:43:39 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



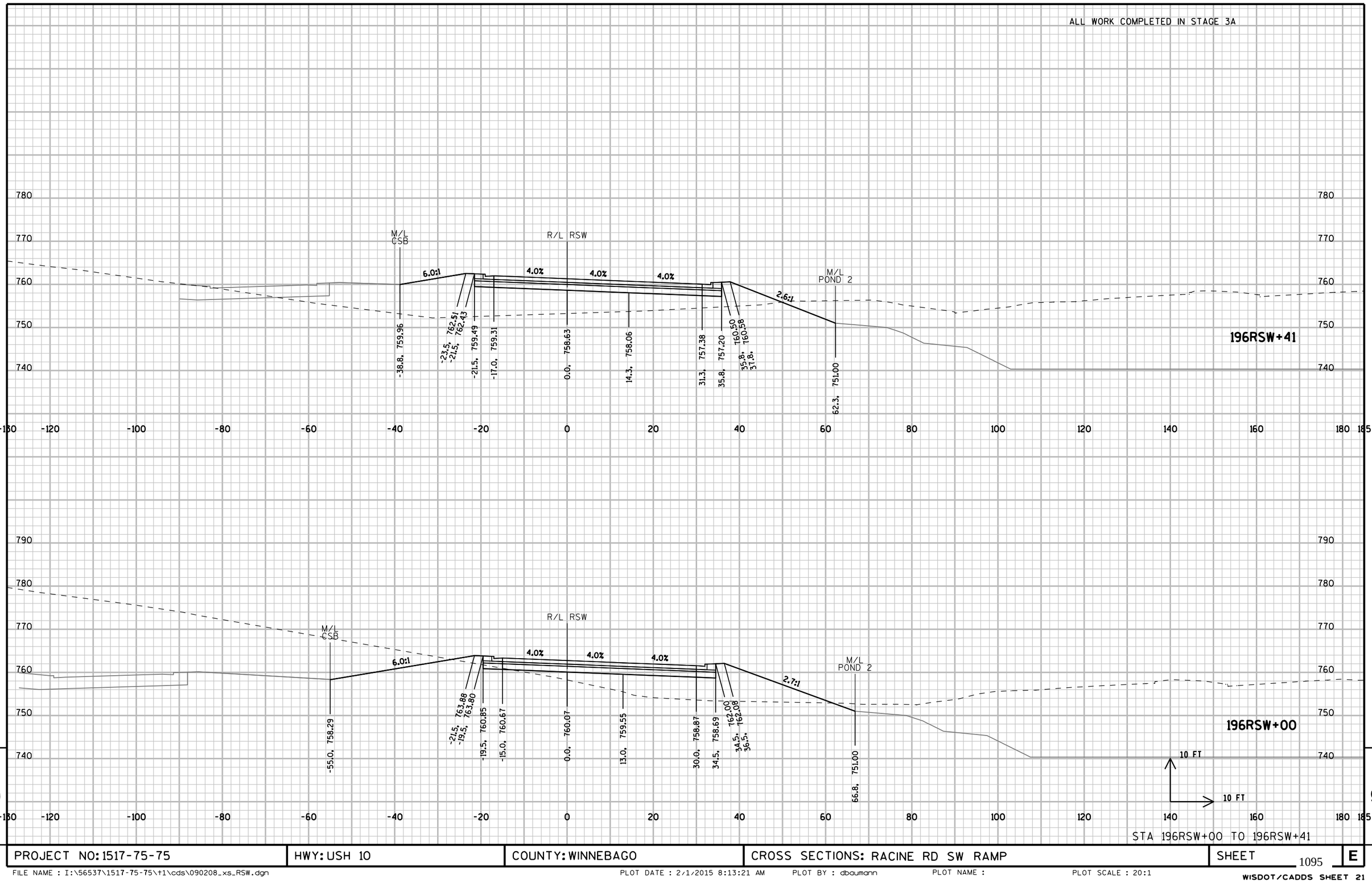
STA 195RSW+26 TO 195RSW+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1094	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 2/1/2015 8:13:20 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



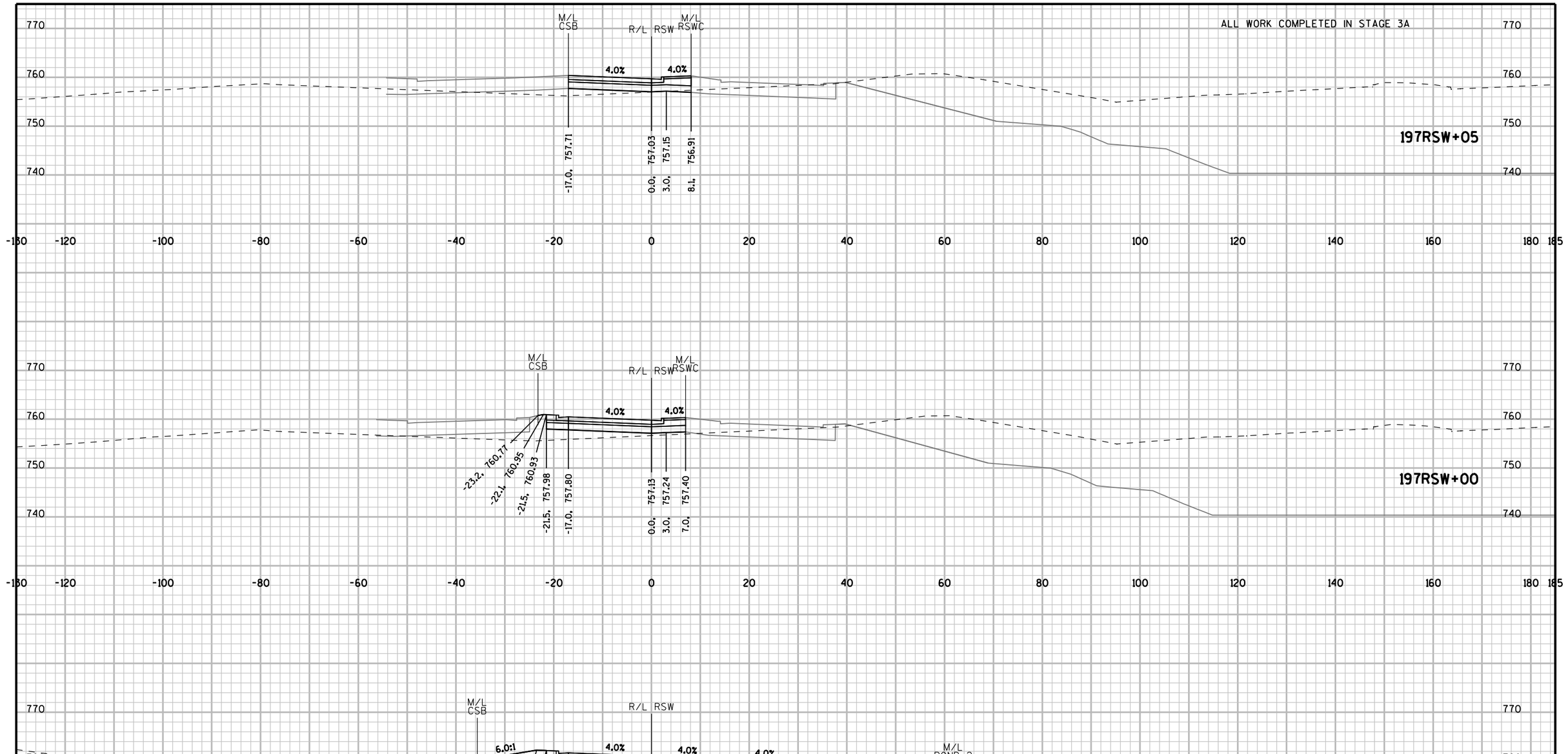
STA 196RSW+00 TO 196RSW+41

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1095	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 2/1/2015 8:13:21 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



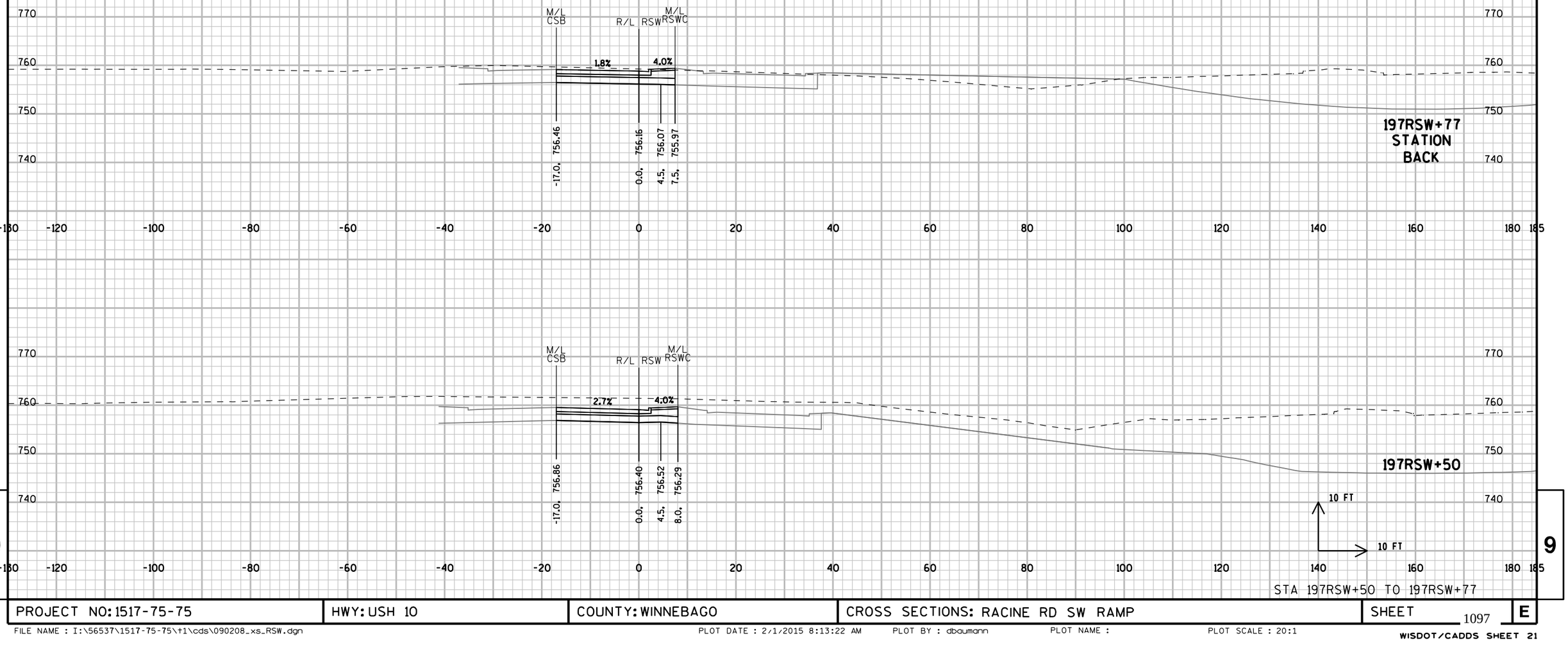
STA 196RSW+50 TO 197RSW+05

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1096	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 2/1/2015 8:13:21 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 197RSW+50 TO 197RSW+77

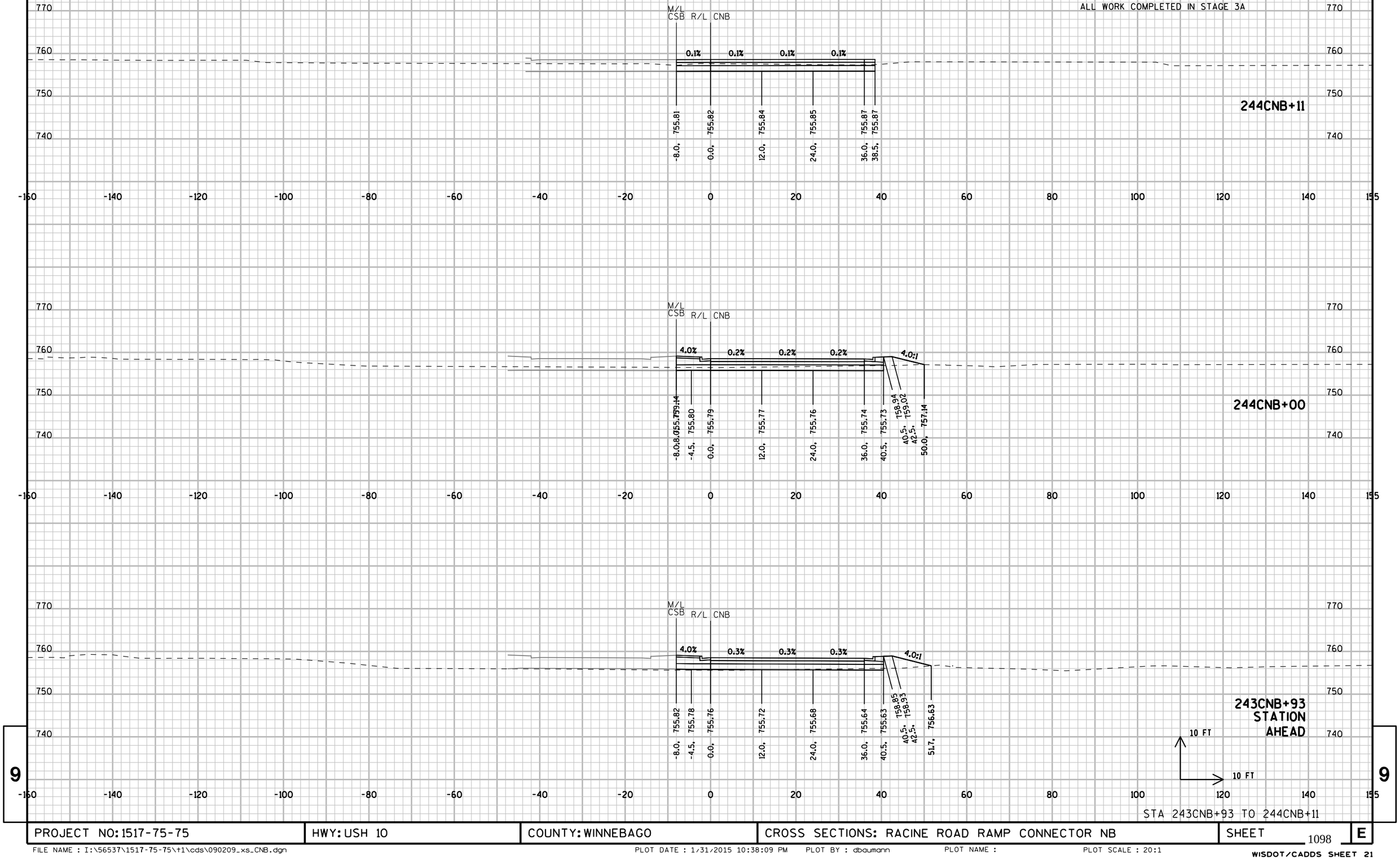
9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE RD SW RAMP	SHEET 1097	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090208_xs_RSW.dgn PLOT DATE : 2/1/2015 8:13:22 AM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 243CNB+93 TO 244CNB+11

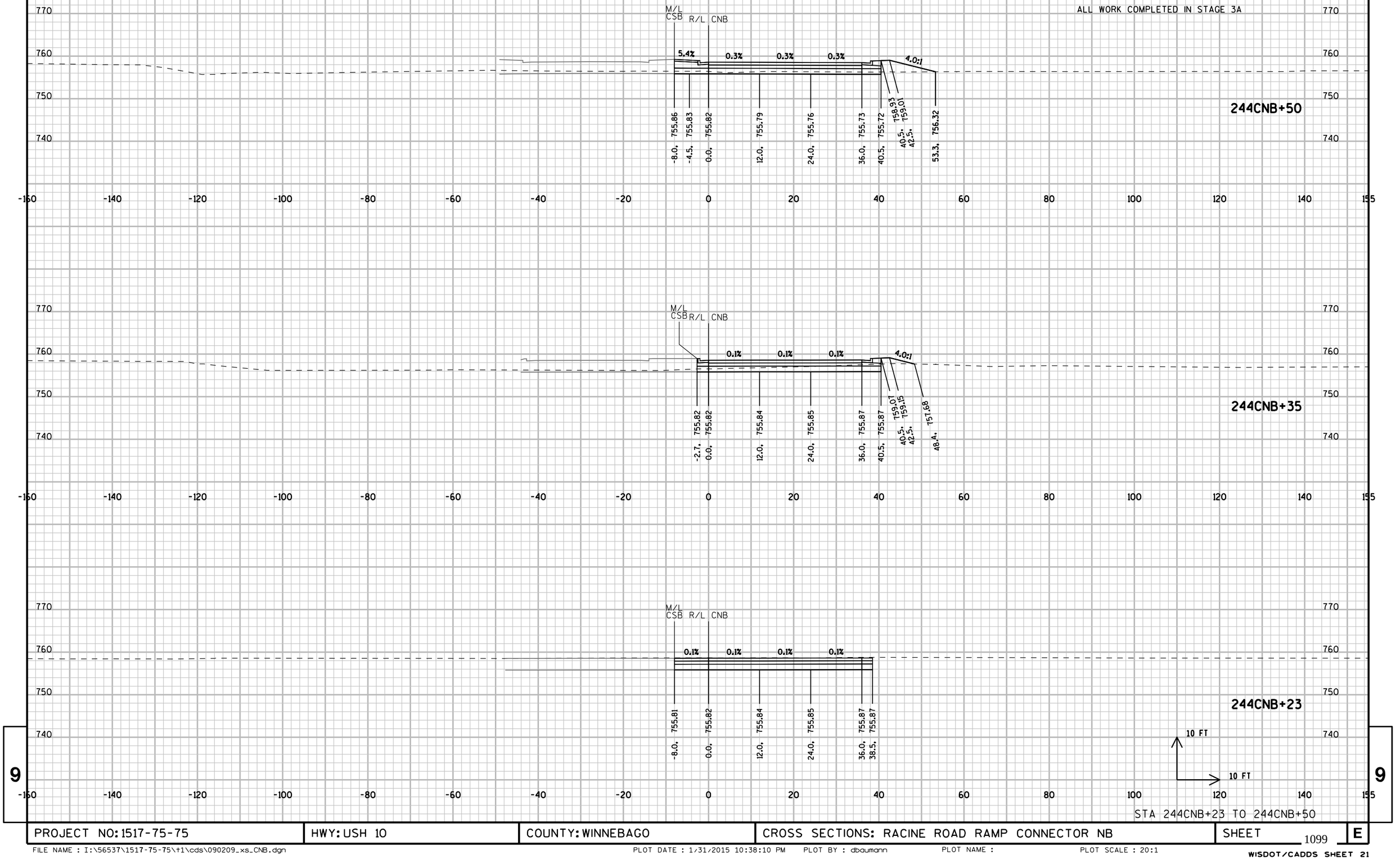
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1098	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 1/31/2015 10:38:09 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



STA 244CNB+23 TO 244CNB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1099	E

ALL WORK COMPLETED IN STAGE 3A

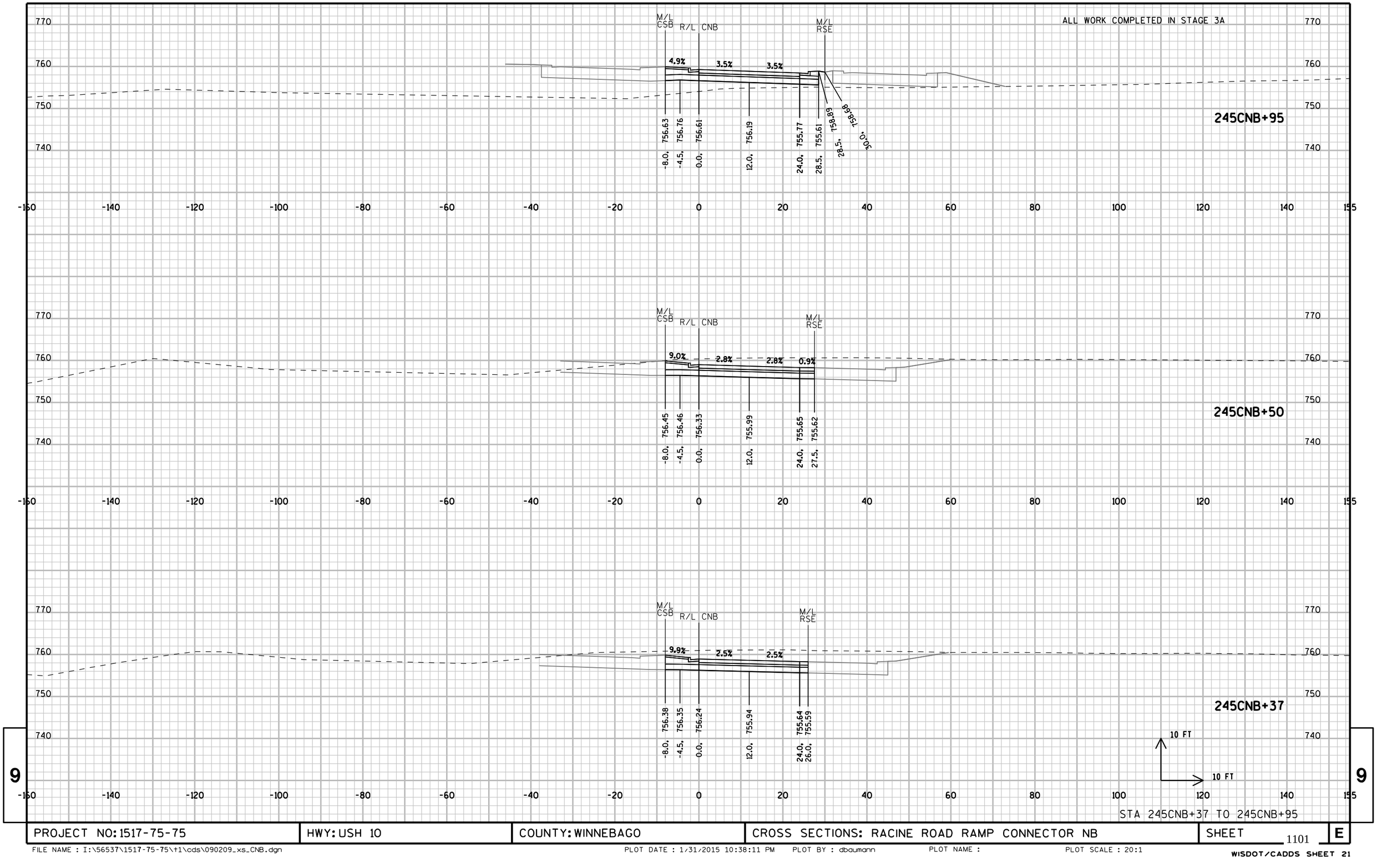
9

9

STA 244CNB+53 TO 245CNB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1100	E

ALL WORK COMPLETED IN STAGE 3A

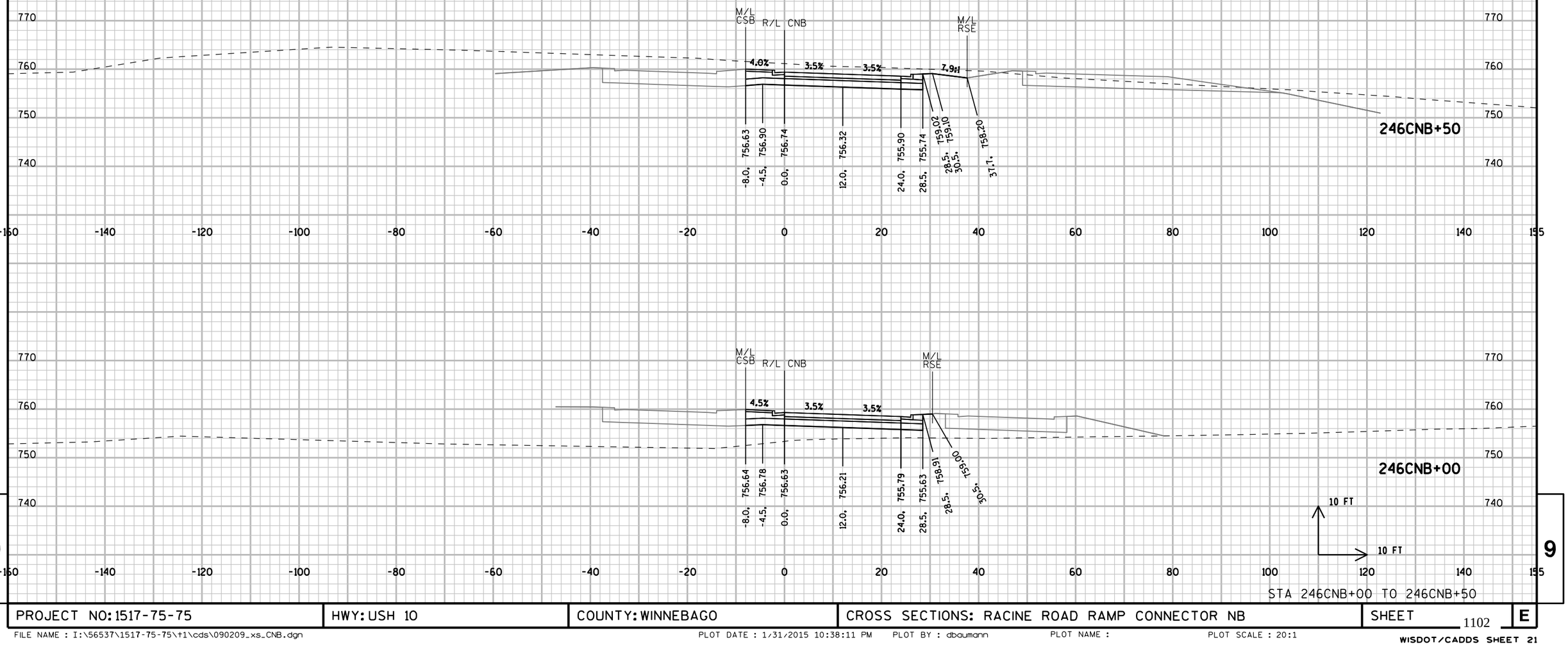


STA 245CNB+37 TO 245CNB+95

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1101	E

9 9

ALL WORK COMPLETED IN STAGE 3A



STA 246CNB+00 TO 246CNB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1102	E

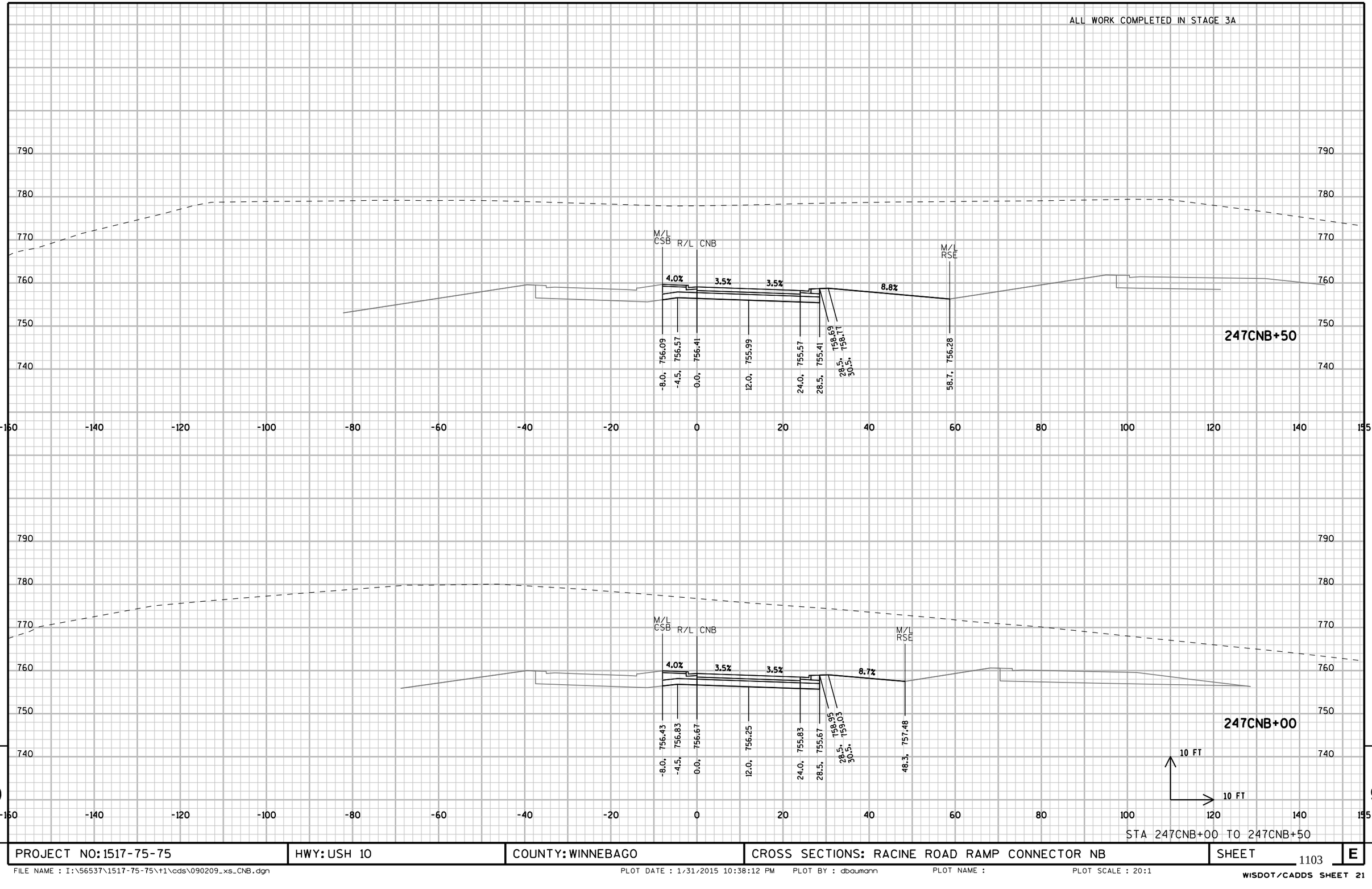
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FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 1/31/2015 10:38:11 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



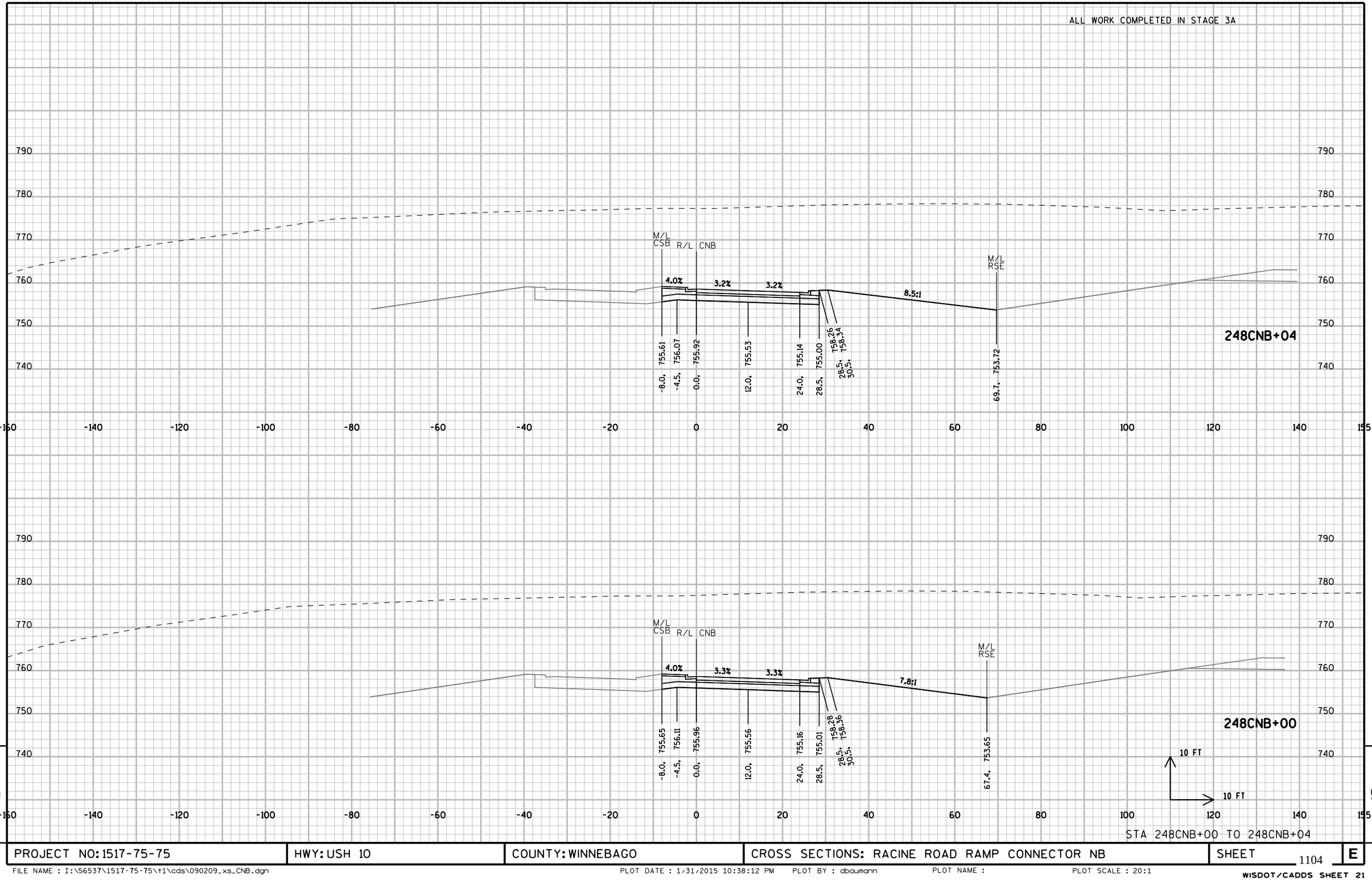
STA 247CNB+00 TO 247CNB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1103	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 1/31/2015 10:38:12 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A

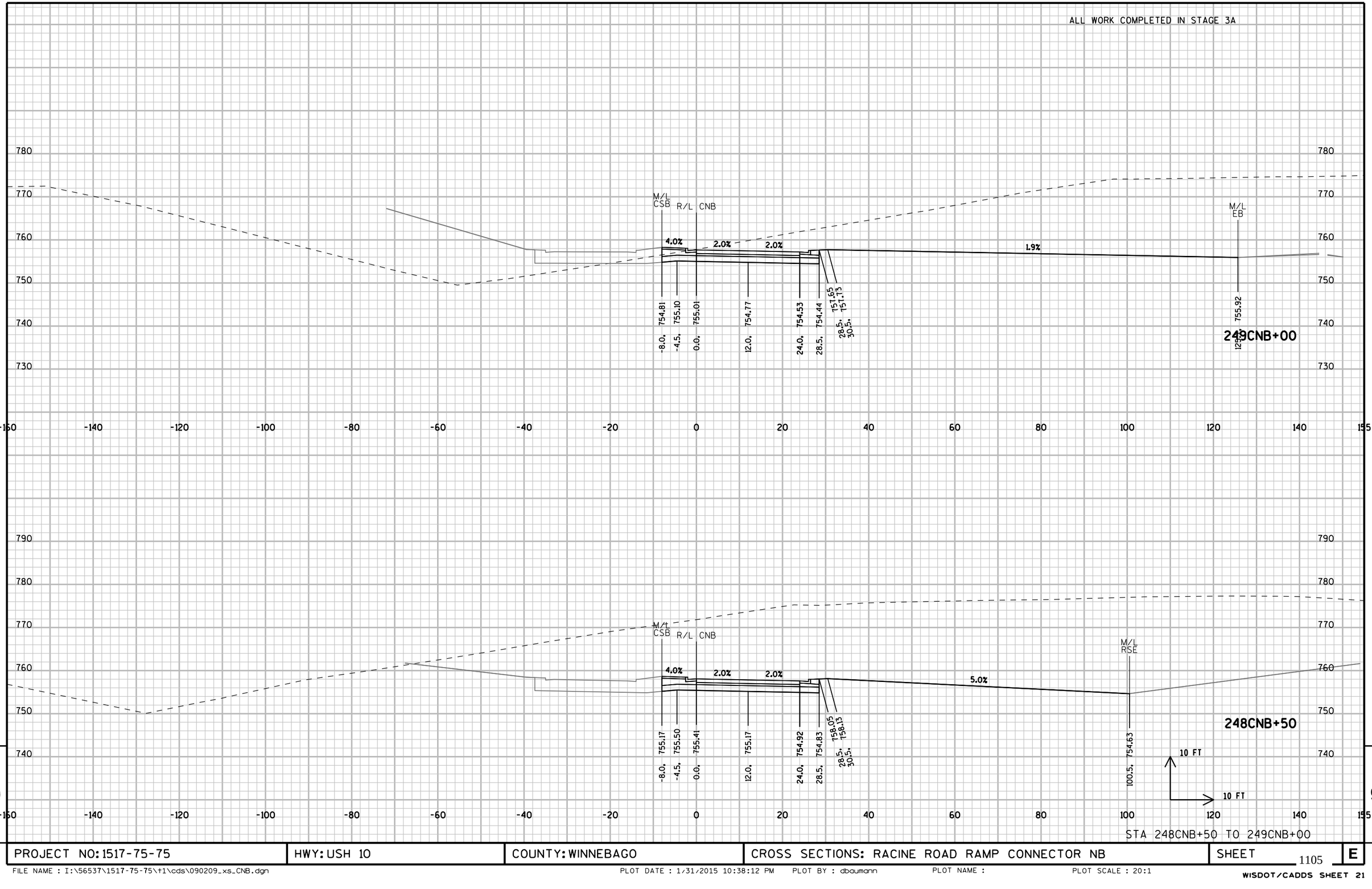


STA 248CNB+00 TO 248CNB+04

9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1104	E

ALL WORK COMPLETED IN STAGE 3A



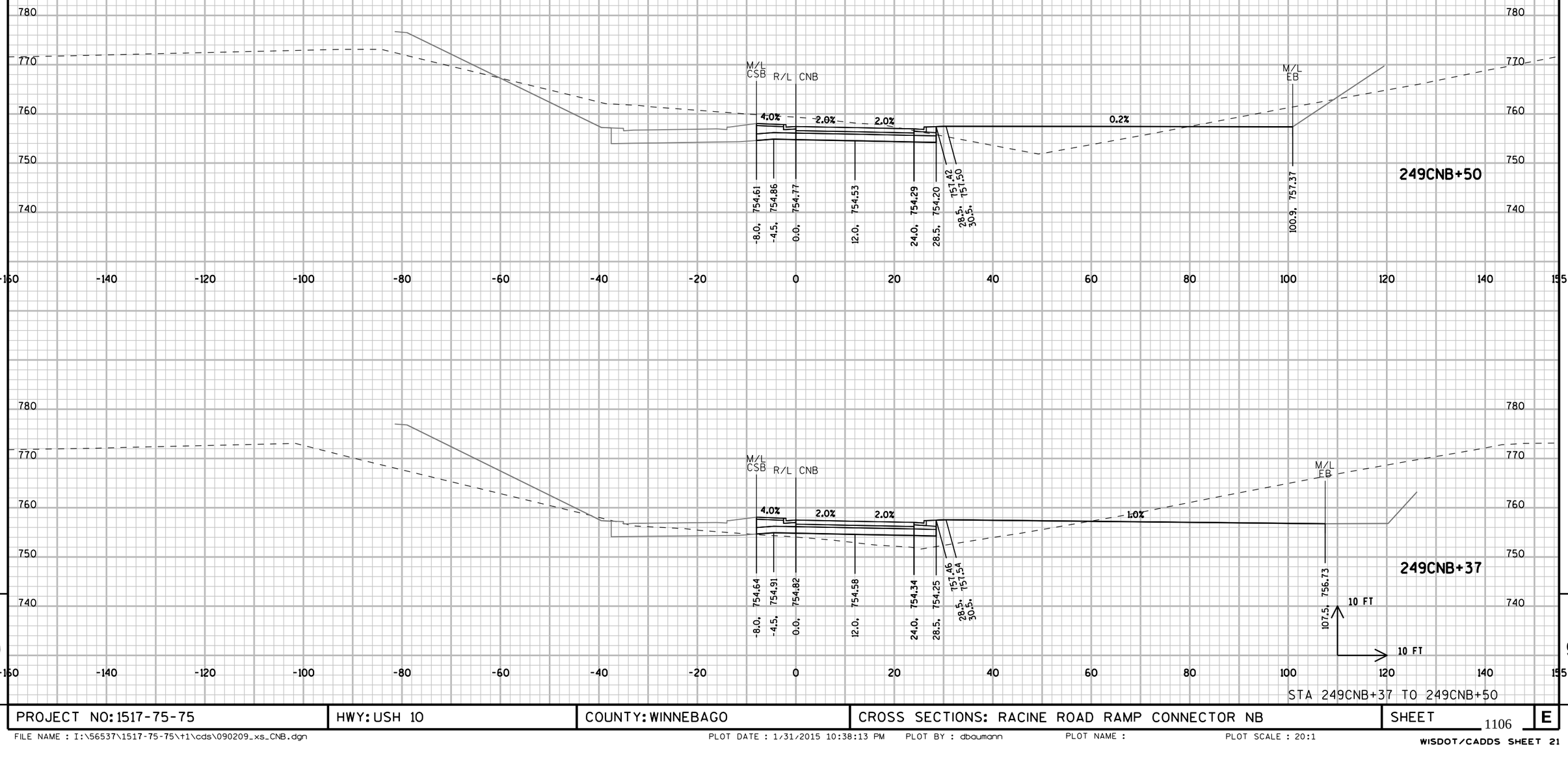
STA 248CNB+50 TO 249CNB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1105	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 1/31/2015 10:38:12 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



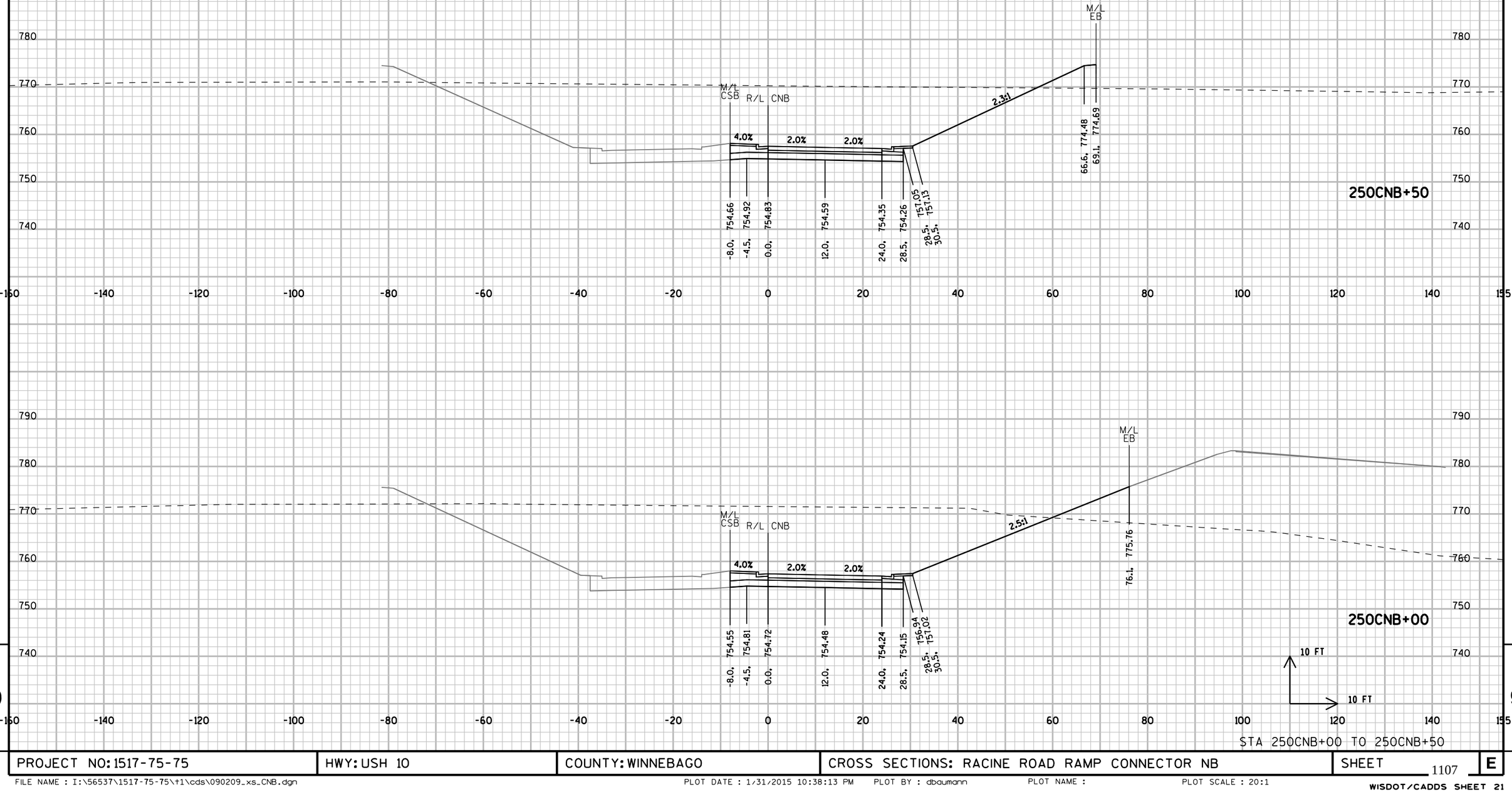
STA 249CNB+37 TO 249CNB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1106	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 1/31/2015 10:38:13 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



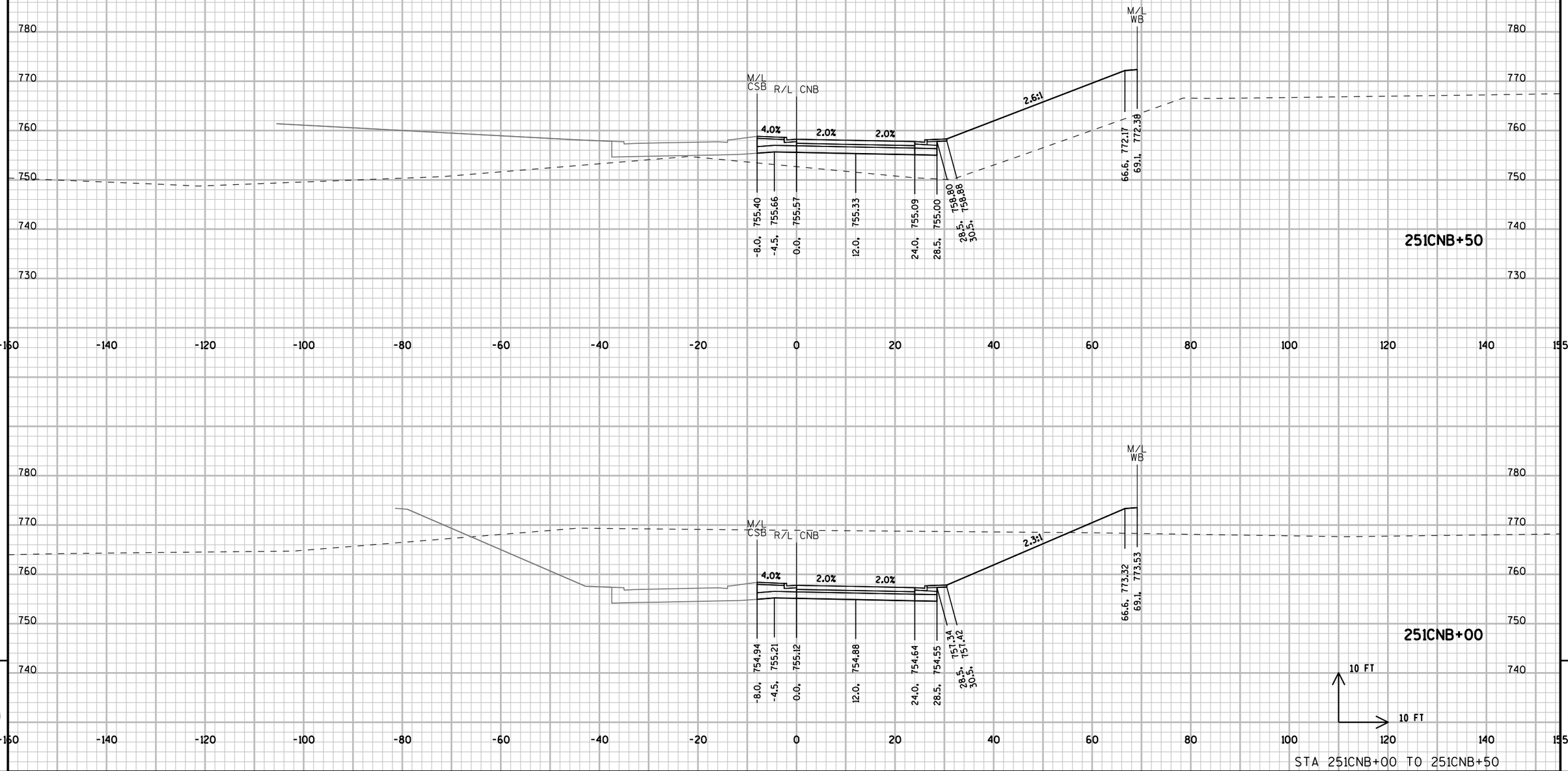
STA 250CNB+00 TO 250CNB+50

9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1107	E

ALL WORK COMPLETED IN STAGE 2A



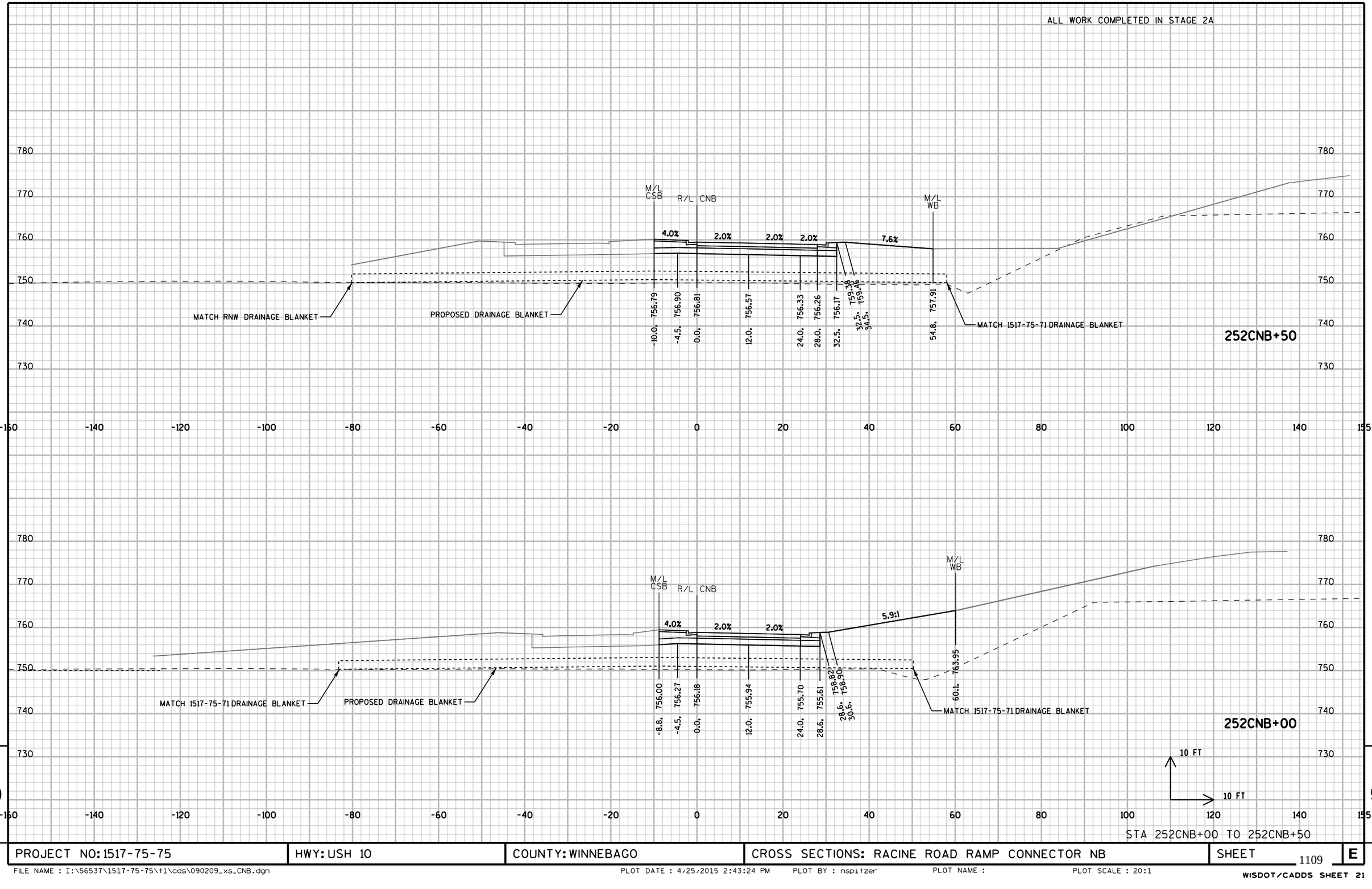
STA 251CNB+00 TO 251CNB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1108	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 1/31/2015 10:38:14 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



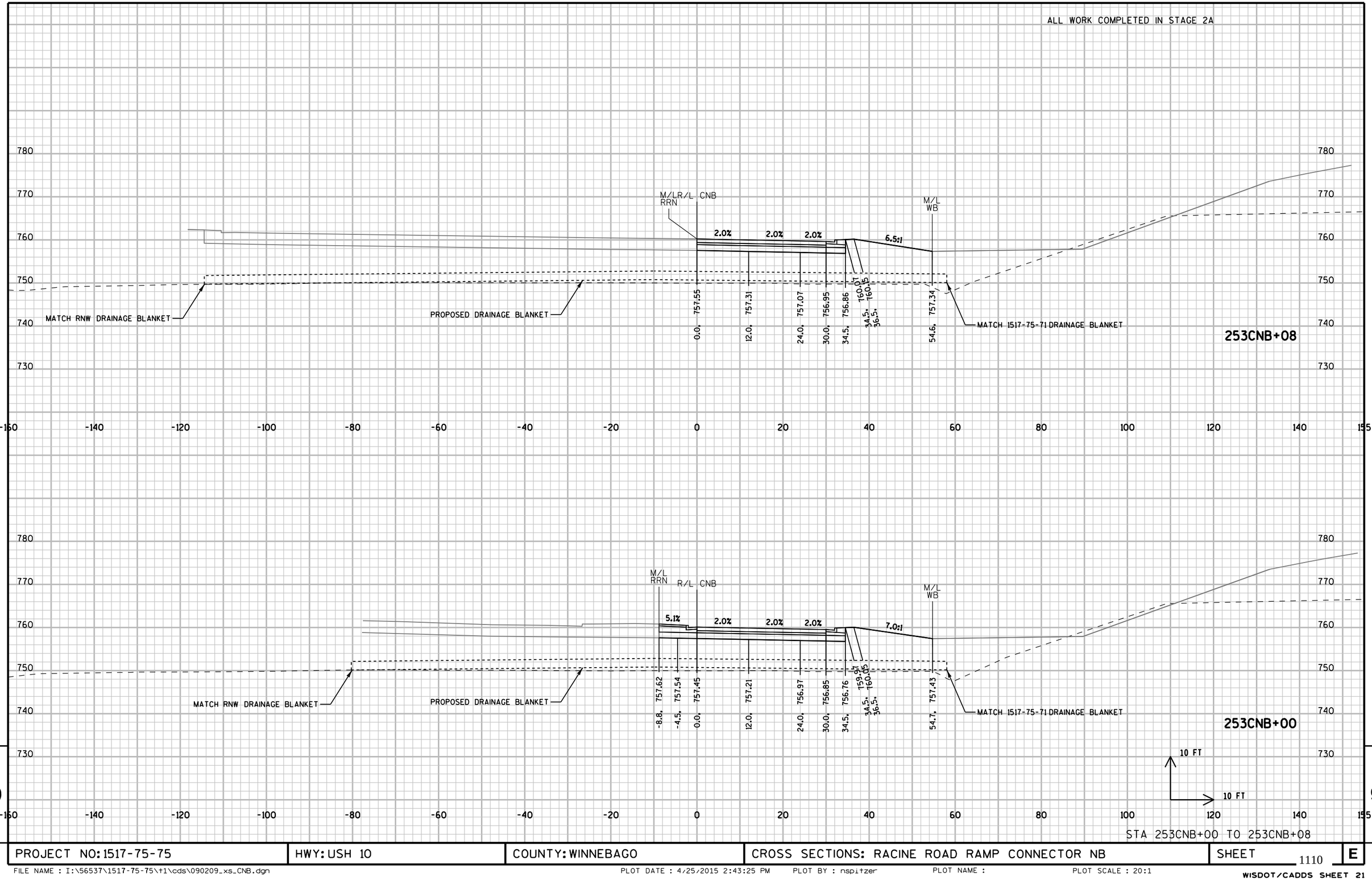
STA 252CNB+00 TO 252CNB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1109	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 4/25/2015 2:43:24 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 253CNB+00 TO 253CNB+08

9

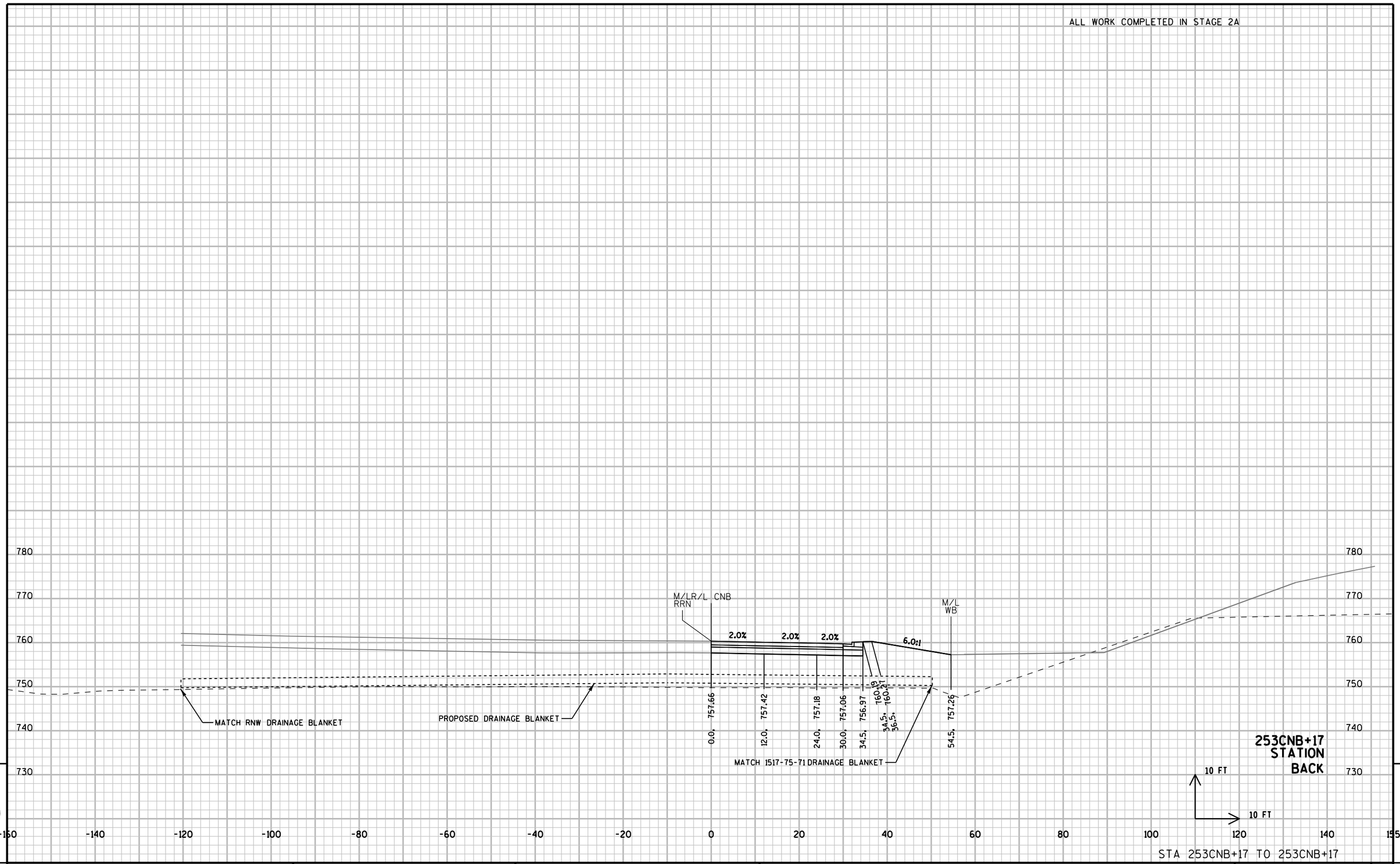
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1110	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090209_xs_CNB.dgn PLOT DATE : 4/25/2015 2:43:25 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A

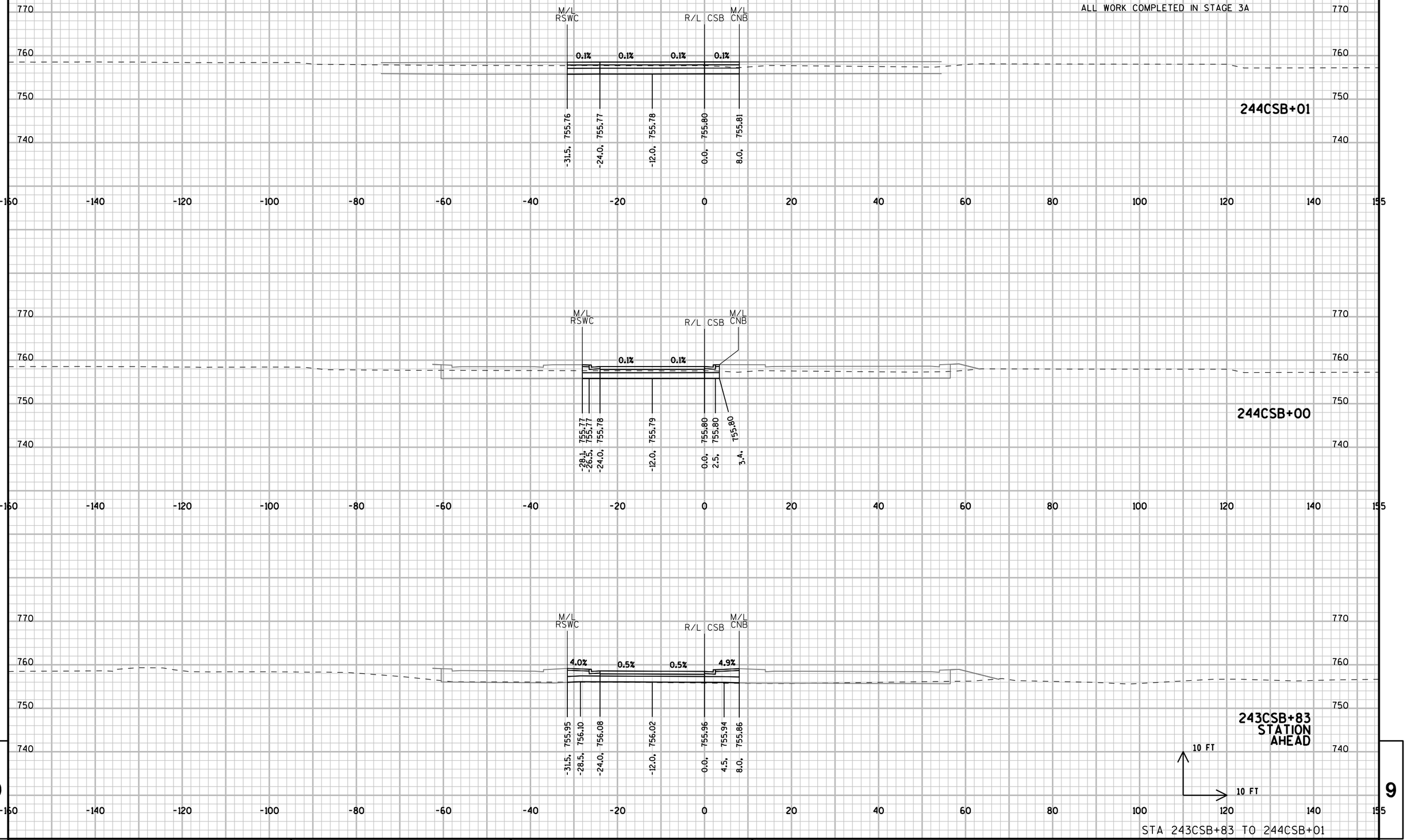


STA 253CNB+17 TO 253CNB+17

9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR NB	SHEET 1111	E

ALL WORK COMPLETED IN STAGE 3A



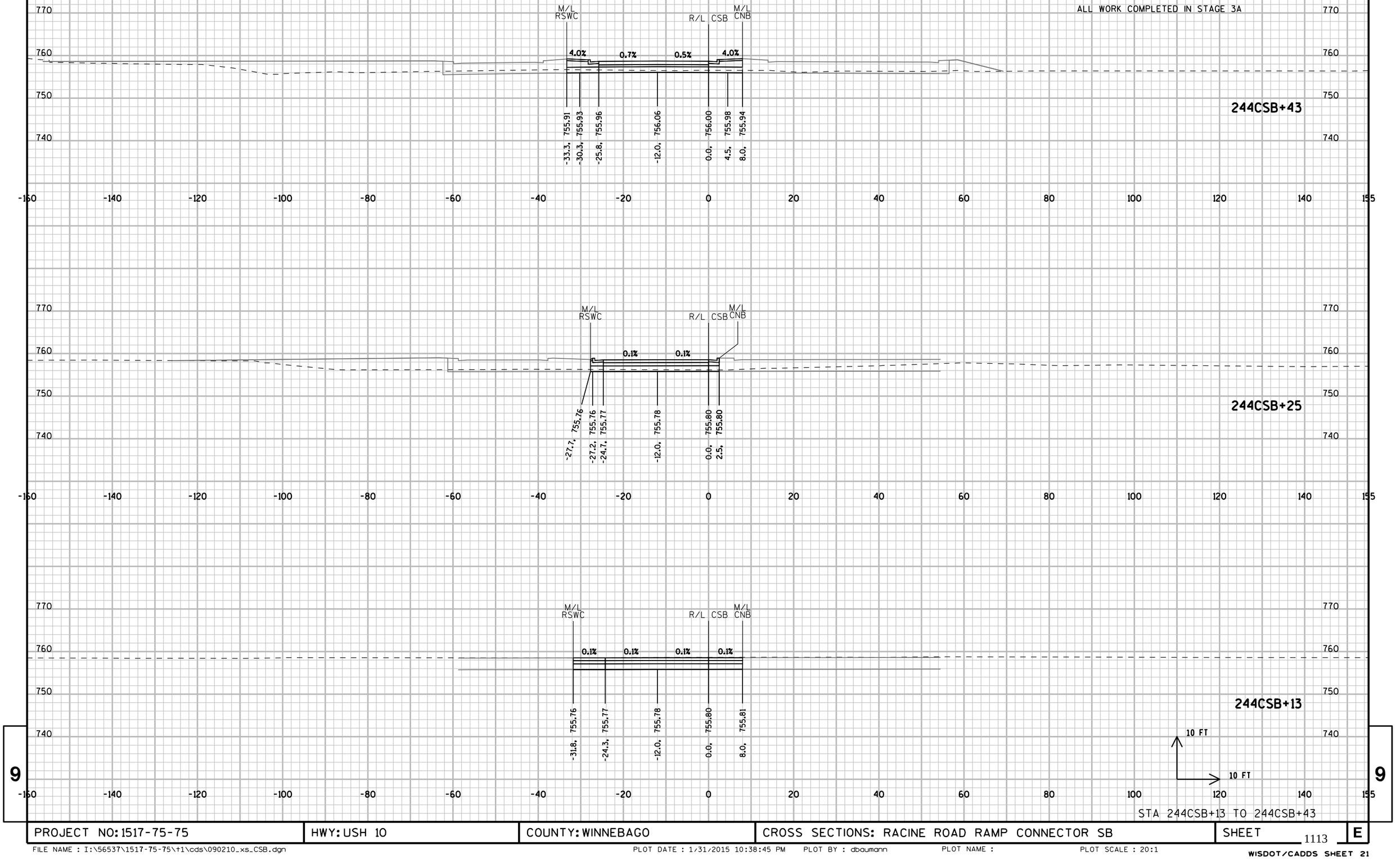
STA 243CSB+83 TO 244CSB+01

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1112	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 1/31/2015 10:38:45 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A

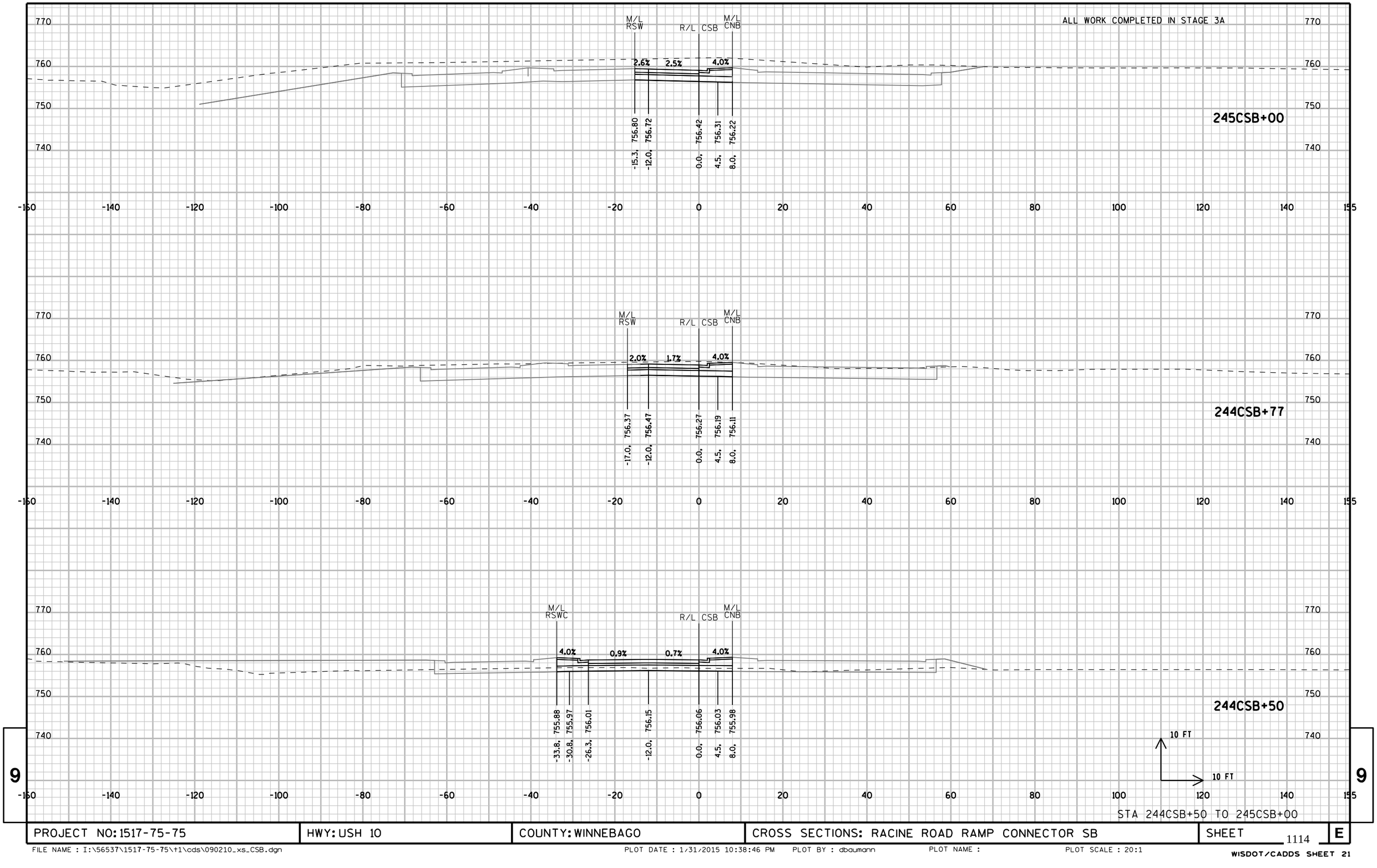


STA 244CSB+13 TO 244CSB+43

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1113	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 1/31/2015 10:38:45 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



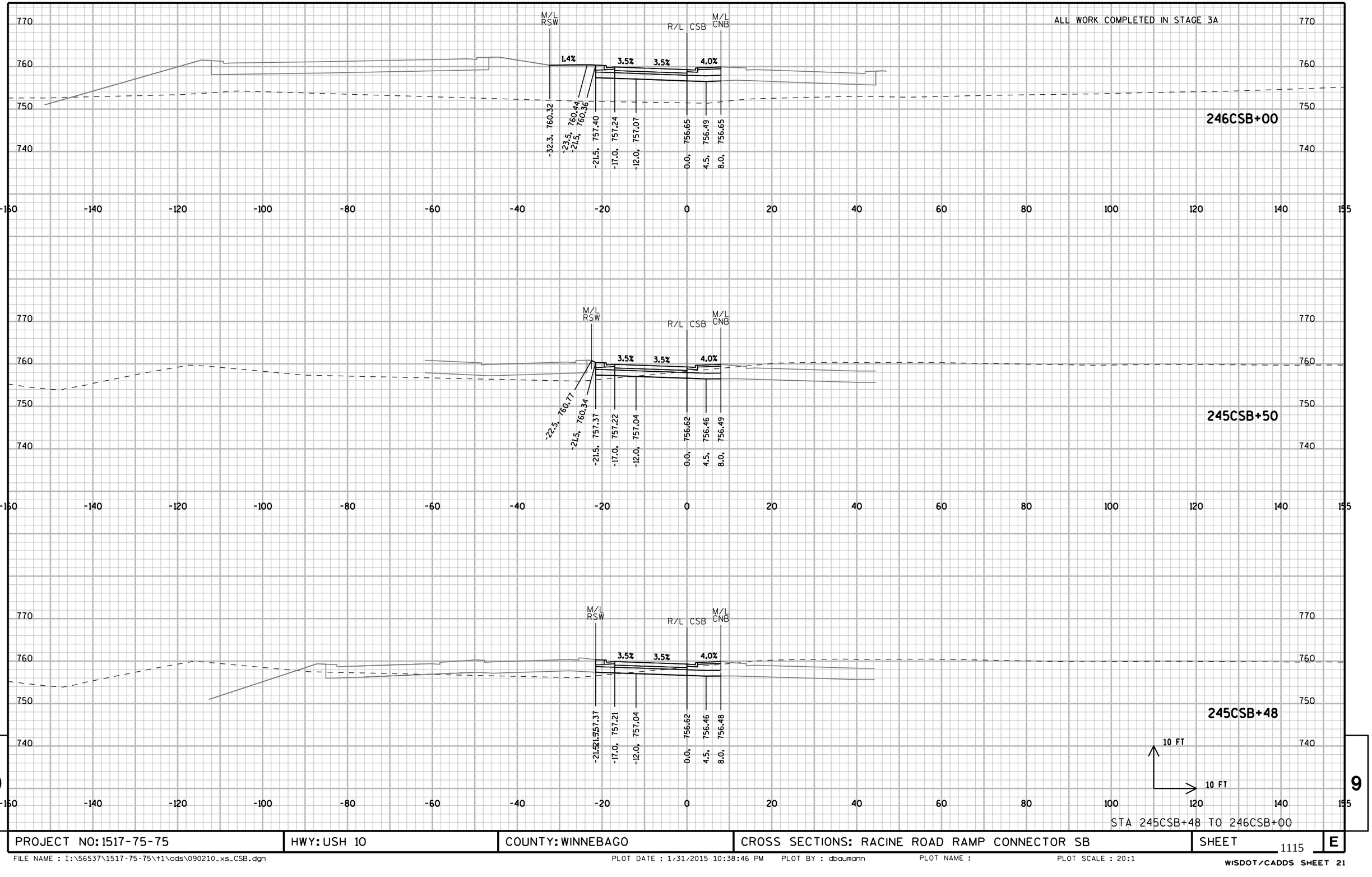
STA 244CSB+50 TO 245CSB+00

9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1114	E

ALL WORK COMPLETED IN STAGE 3A



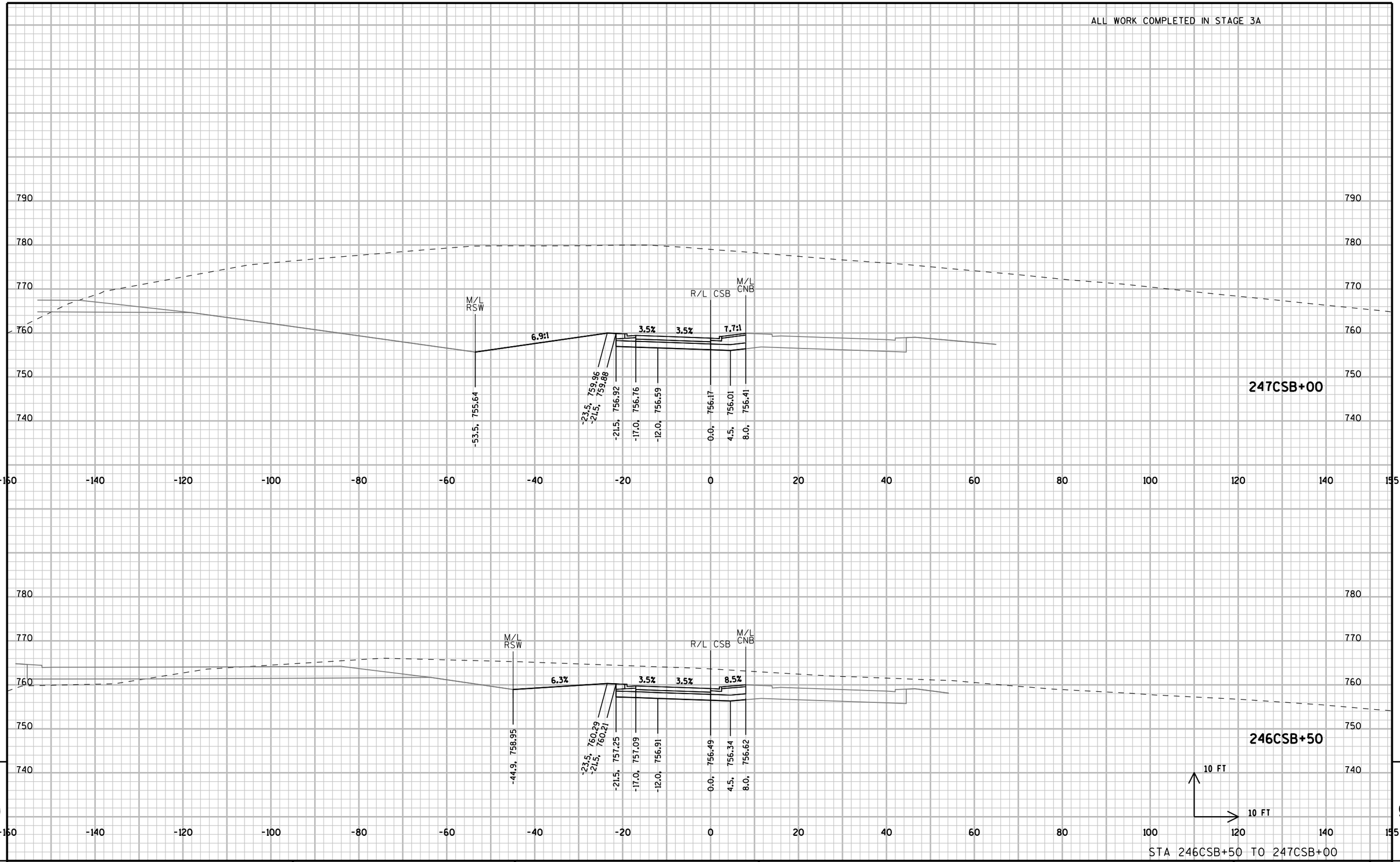
STA 245CSB+48 TO 246CSB+00

9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1115 E

ALL WORK COMPLETED IN STAGE 3A



STA 246CSB+50 TO 247CSB+00

9

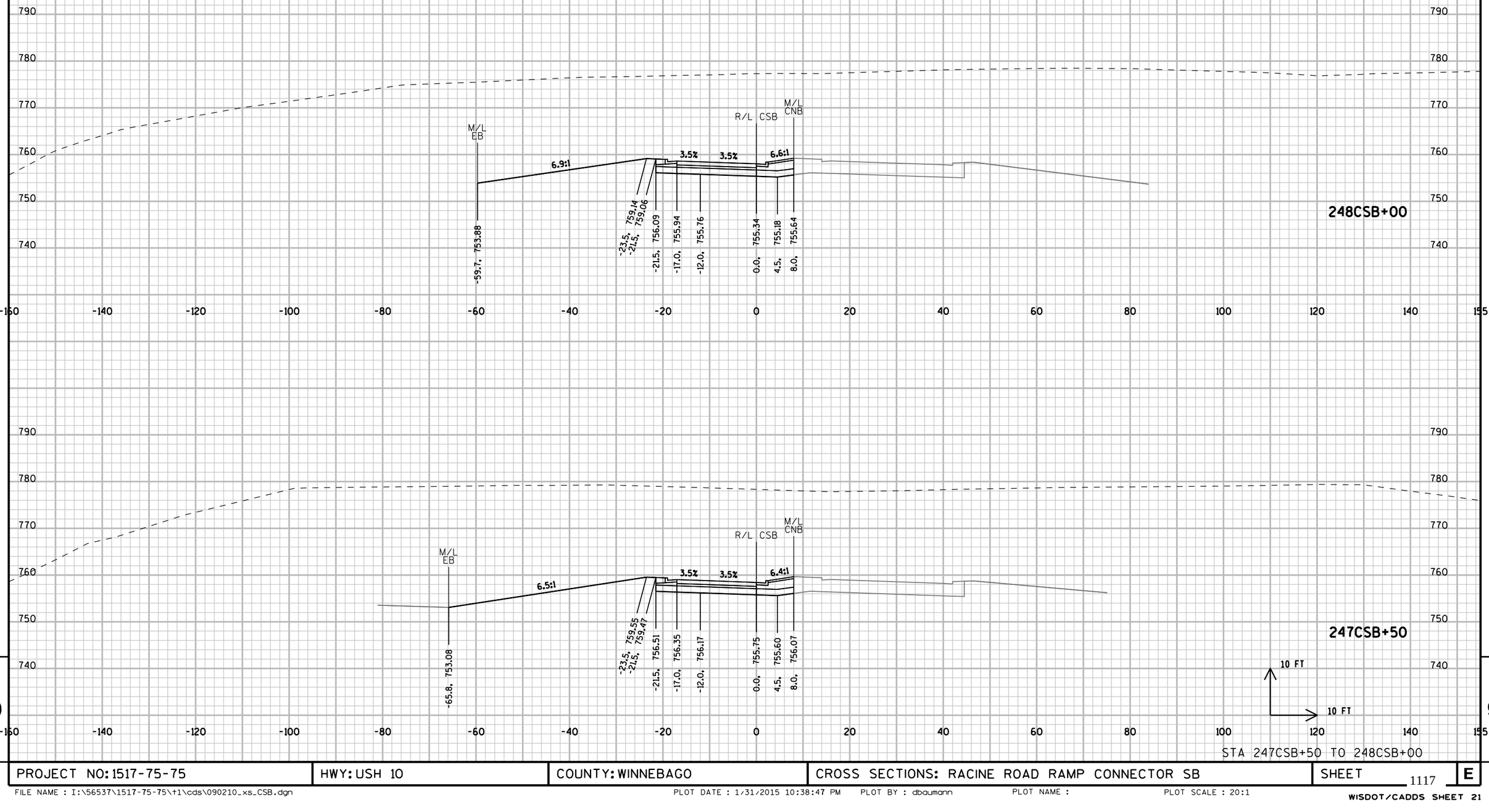
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1116	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 1/31/2015 10:38:47 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



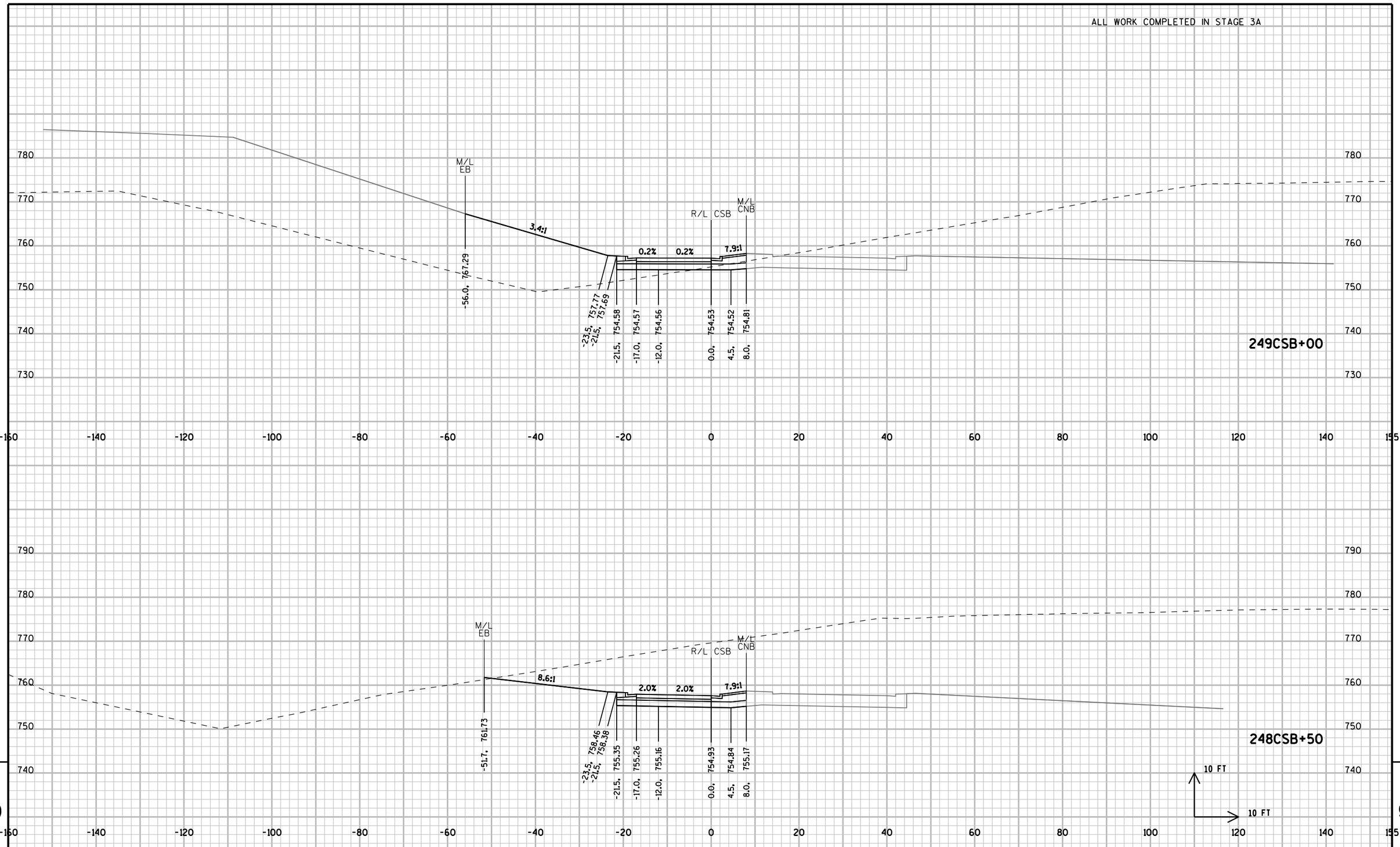
STA 247CSB+50 TO 248CSB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1117	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 1/31/2015 10:38:47 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A



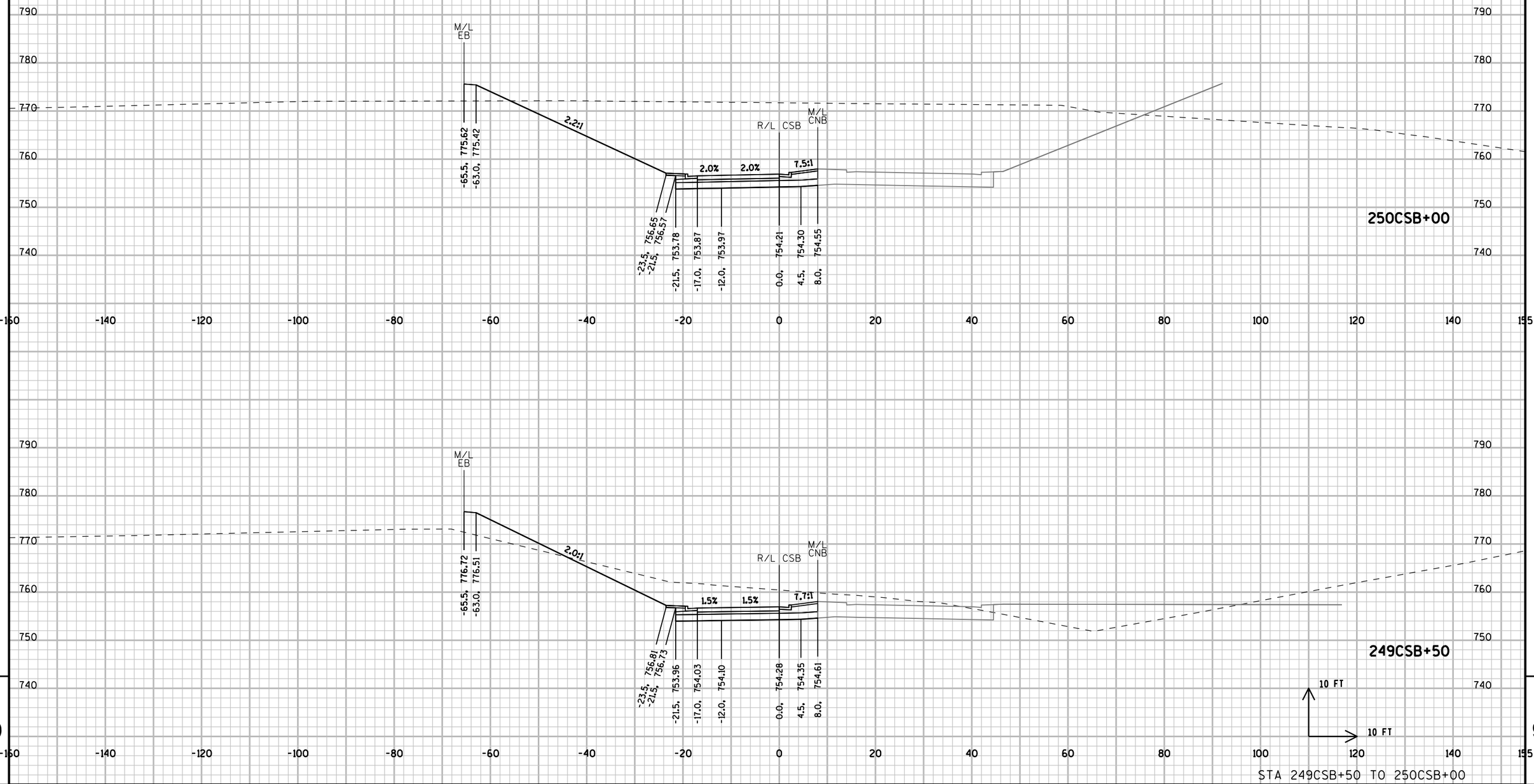
STA 248CSB+50 TO 249CSB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1118	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 1/31/2015 10:38:48 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A

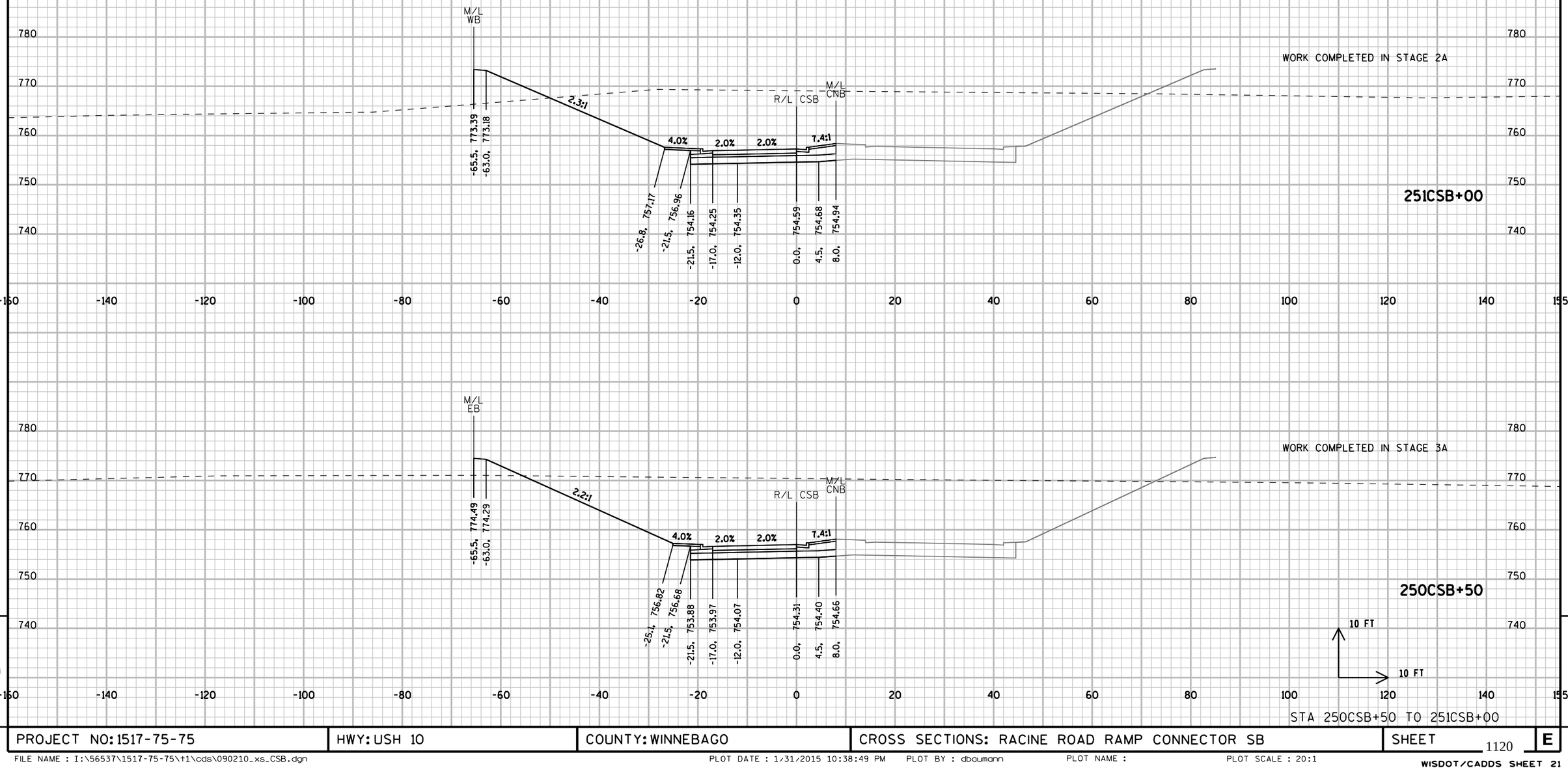


STA 249CSB+50 TO 250CSB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1119	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 1/31/2015 10:38:48 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



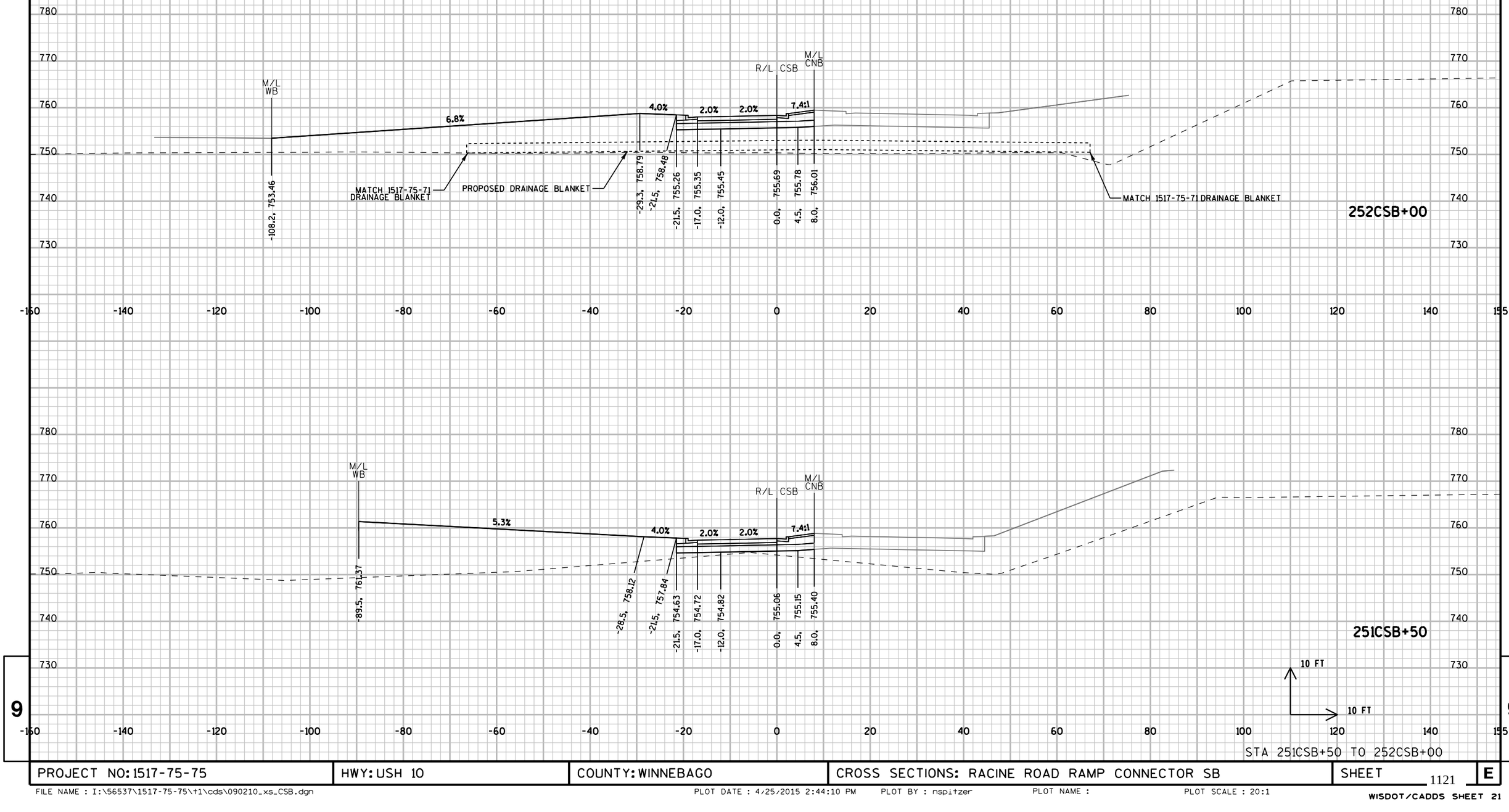
9

9

STA 250CSB+50 TO 251CSB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1120	E

ALL WORK COMPLETED IN STAGE 2A



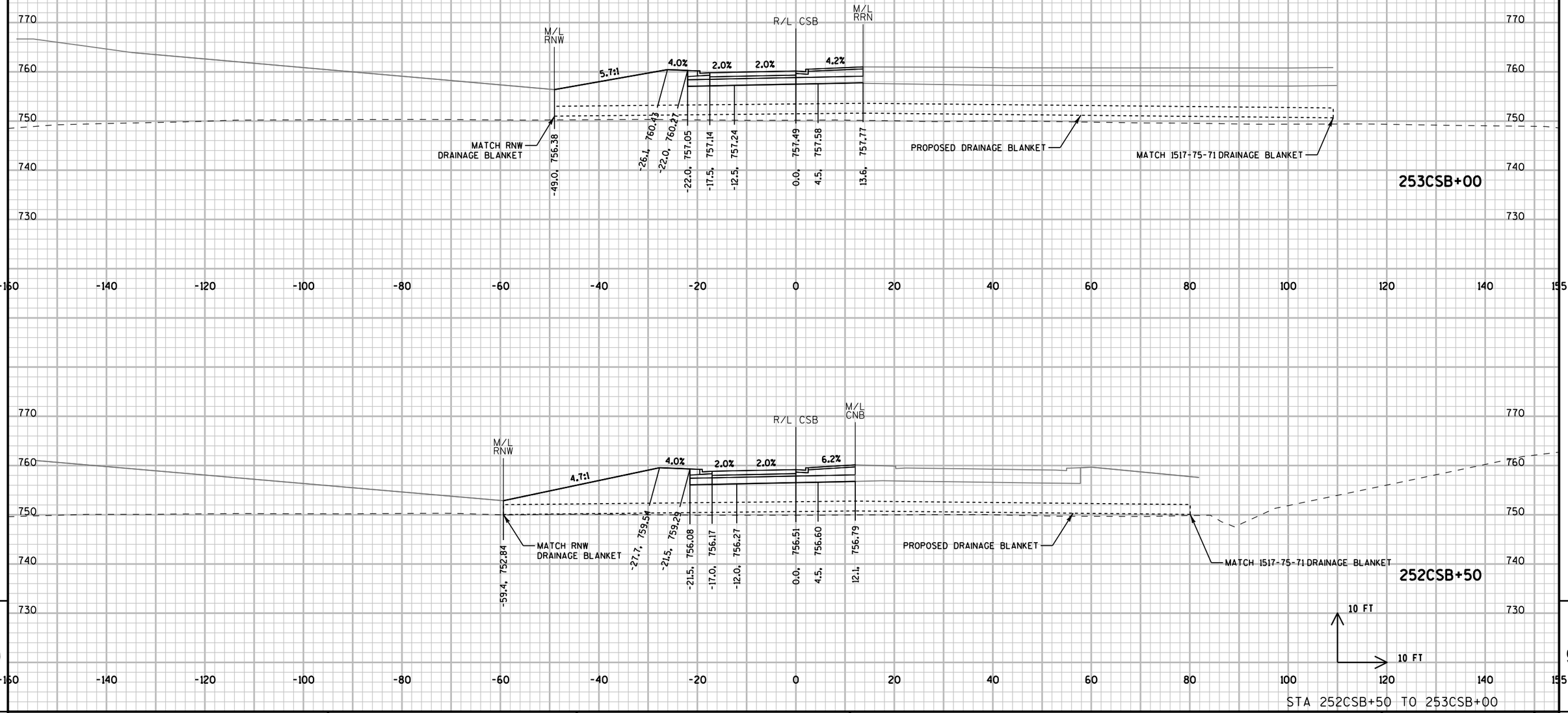
STA 251CSB+50 TO 252CSB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1121	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 4/25/2015 2:44:10 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



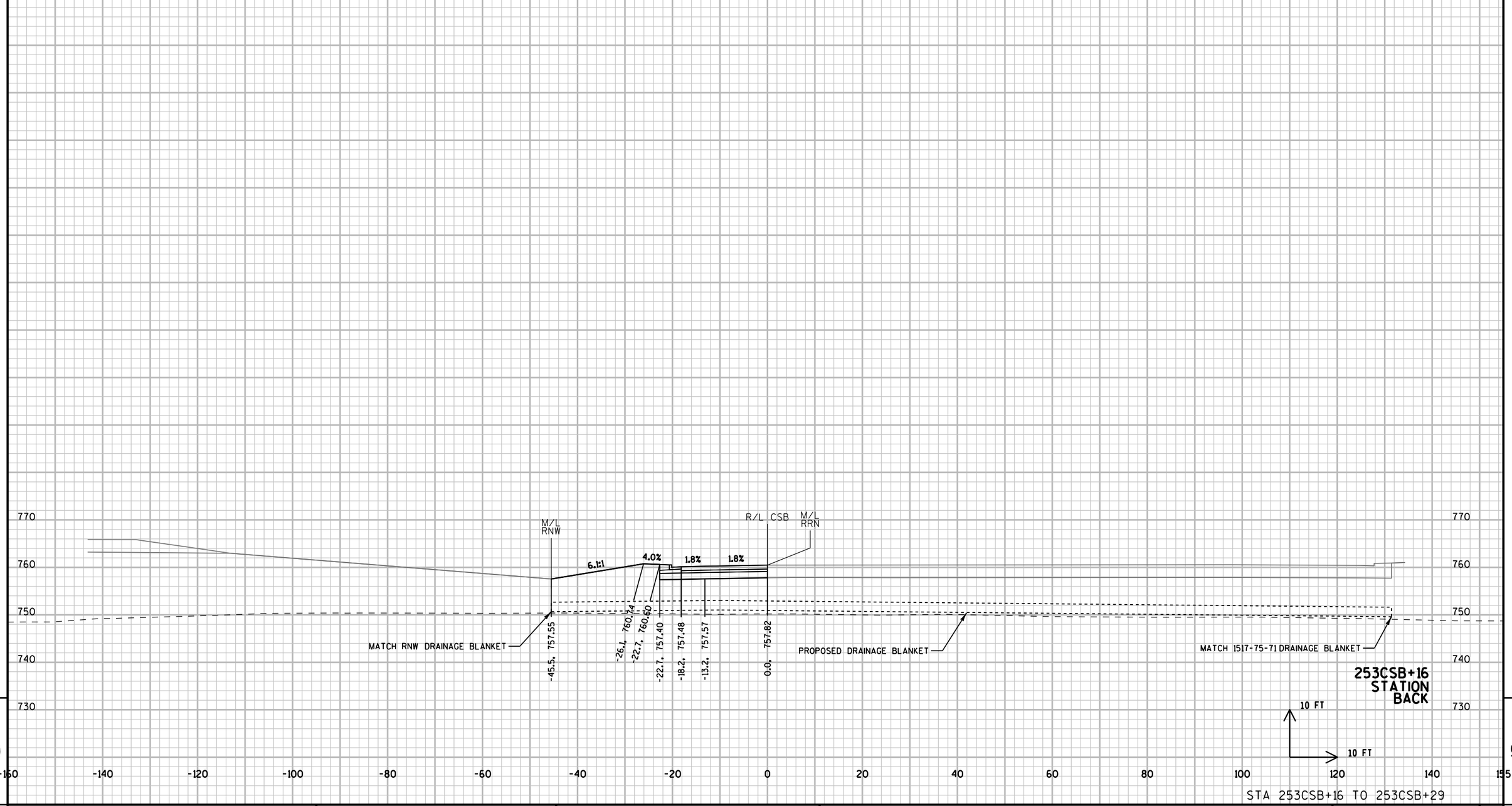
STA 252CSB+50 TO 253CSB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1122	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 4/25/2015 2:44:11 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 253CSB+16 TO 253CSB+29

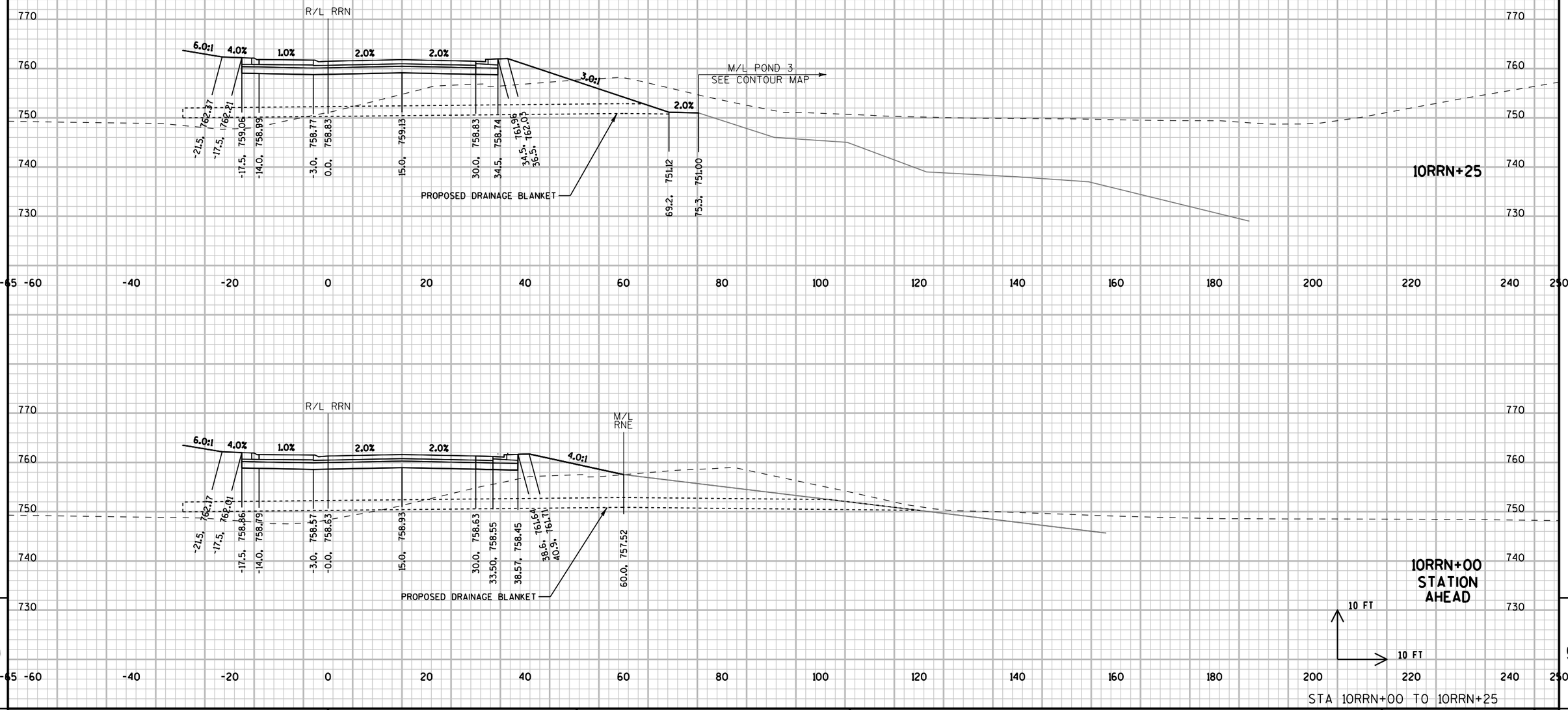
9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD RAMP CONNECTOR SB	SHEET 1123	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090210_xs_CSB.dgn PLOT DATE : 4/25/2015 2:44:11 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

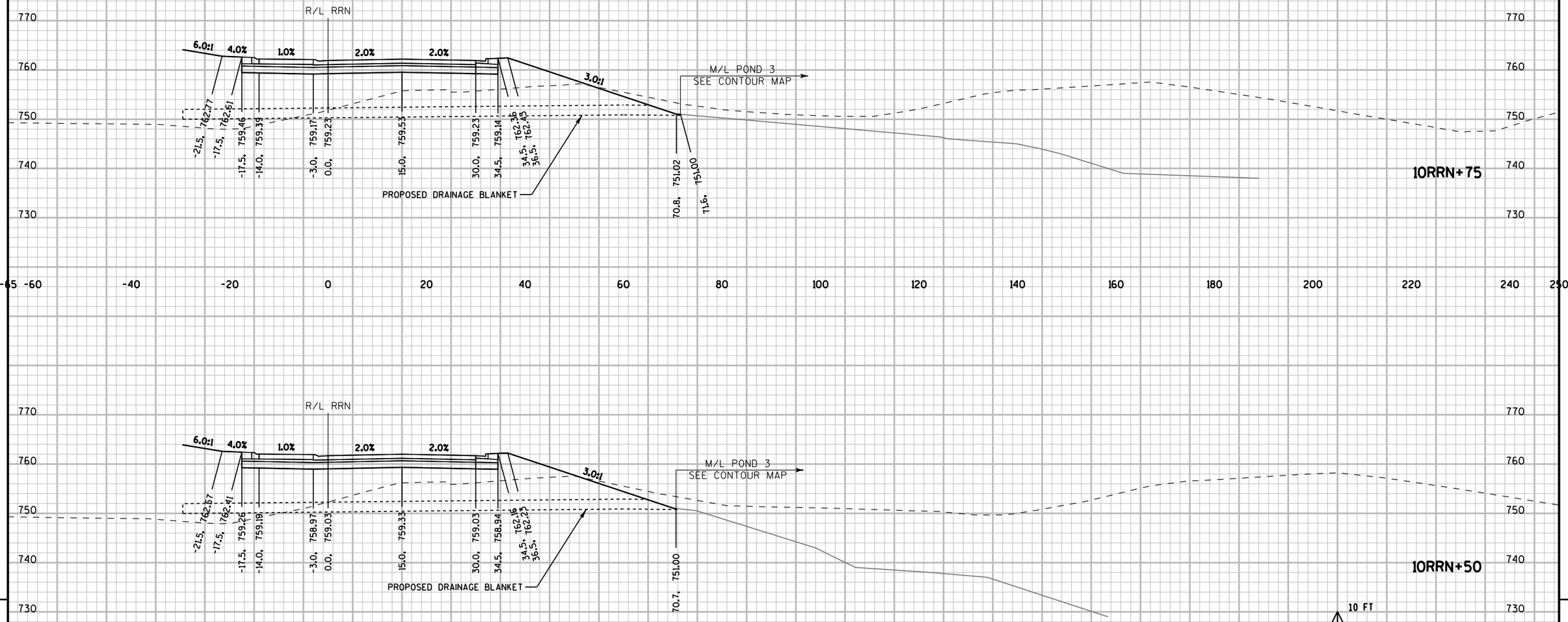
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1124	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:29 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

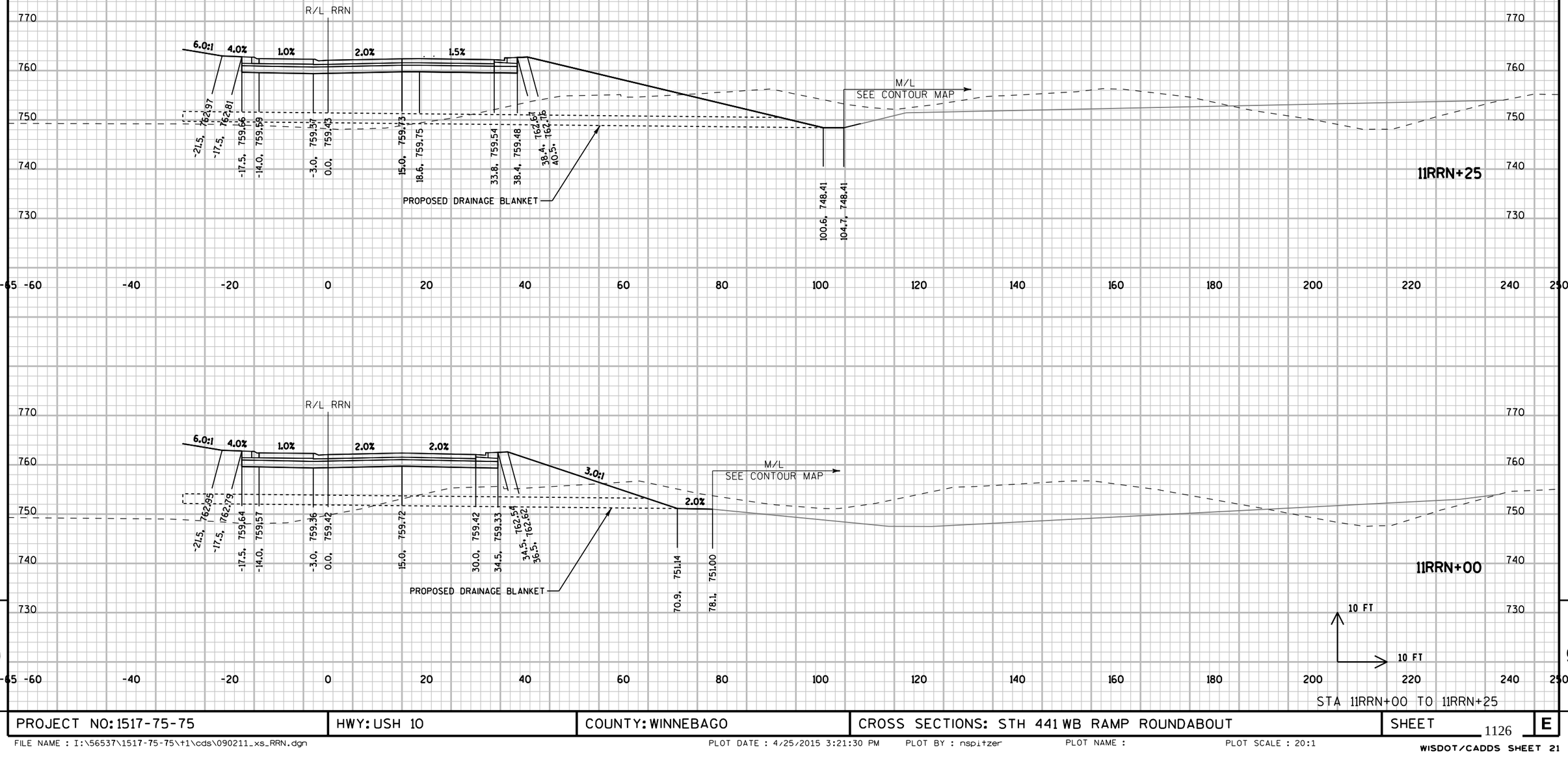
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1125	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:30 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



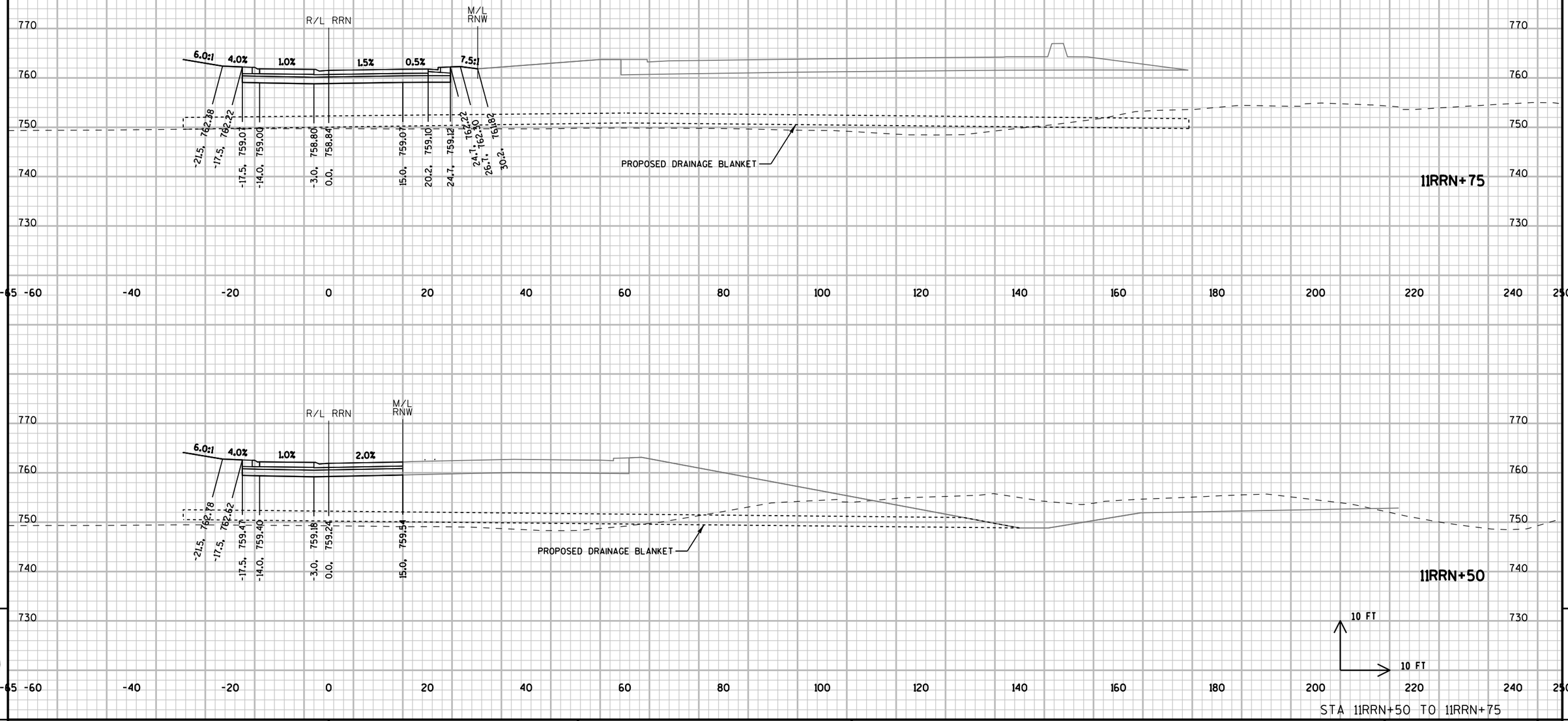
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STA 11RRN+00 TO 11RRN+25

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1126	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:30 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

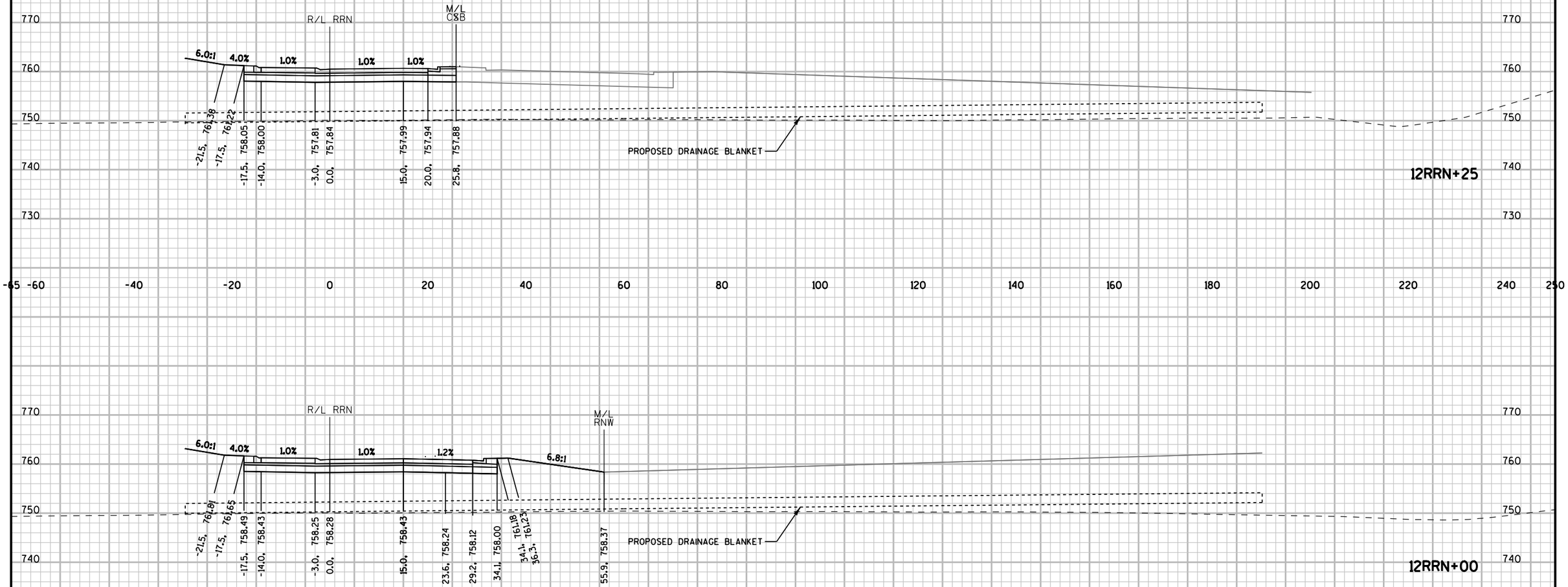


STA 11RRN+50 TO 11RRN+75

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1127	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:31 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



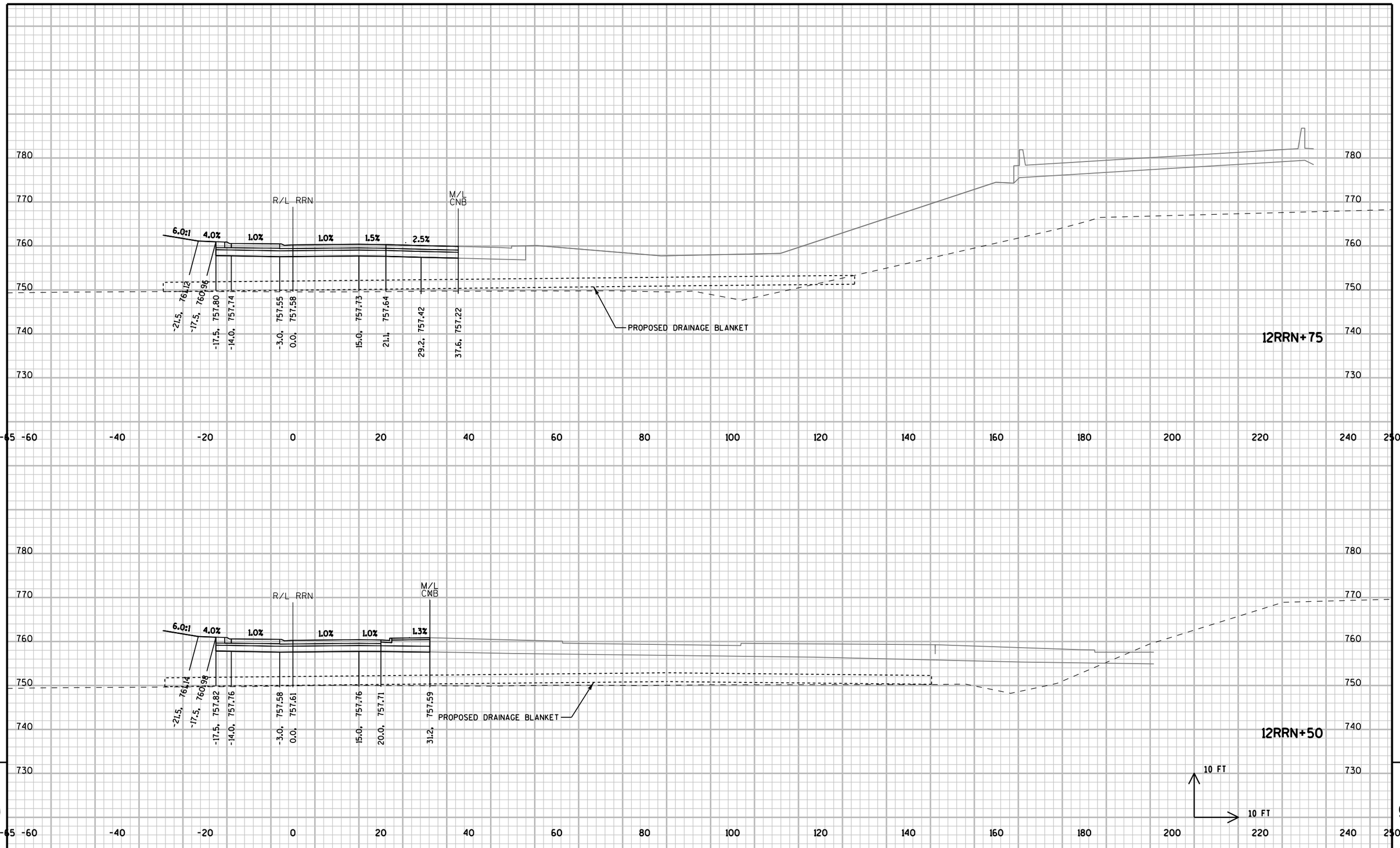
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1128	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:31 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

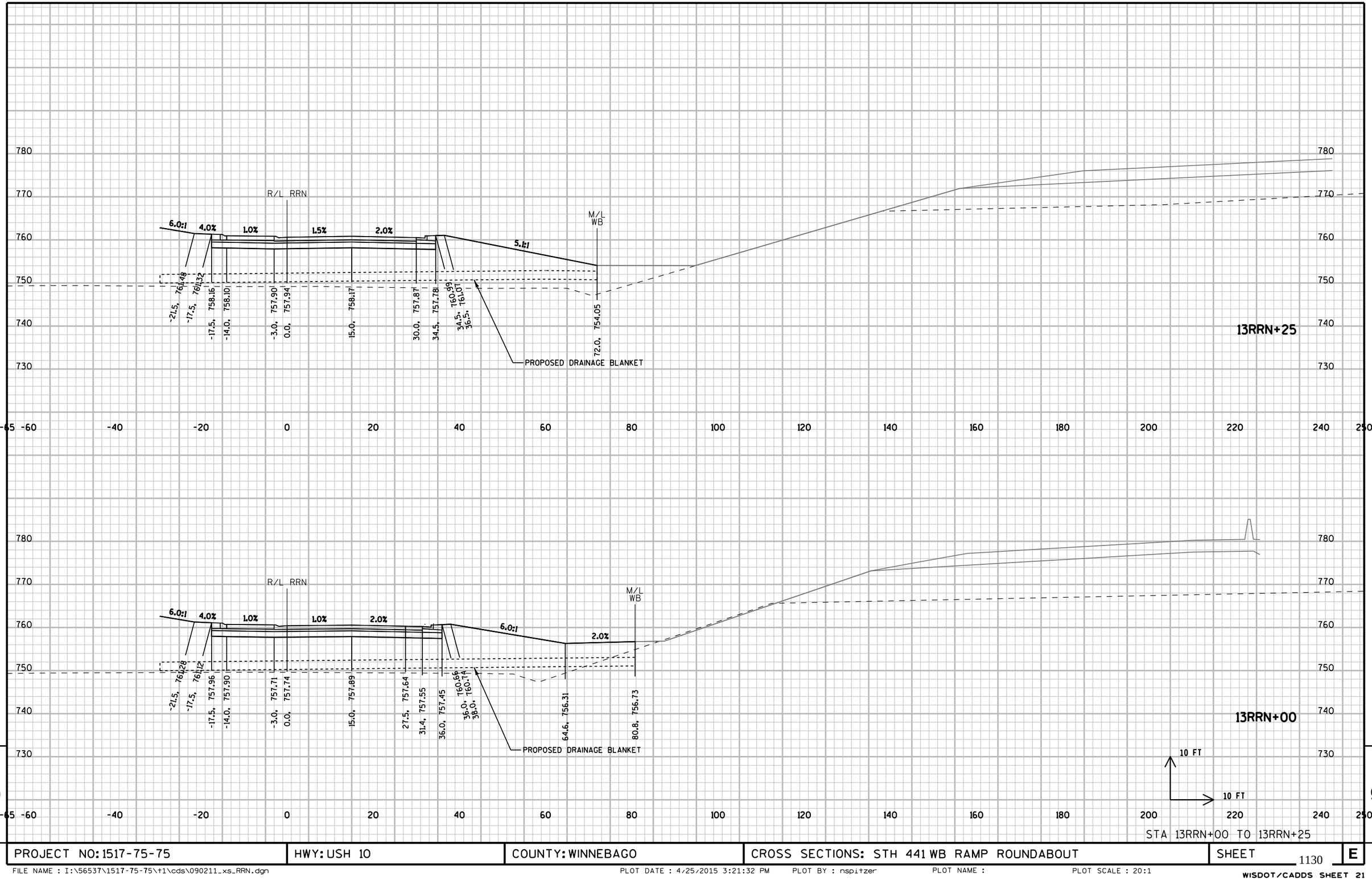
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STA 12RRN+50 TO 12RRN+75

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1129	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:32 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

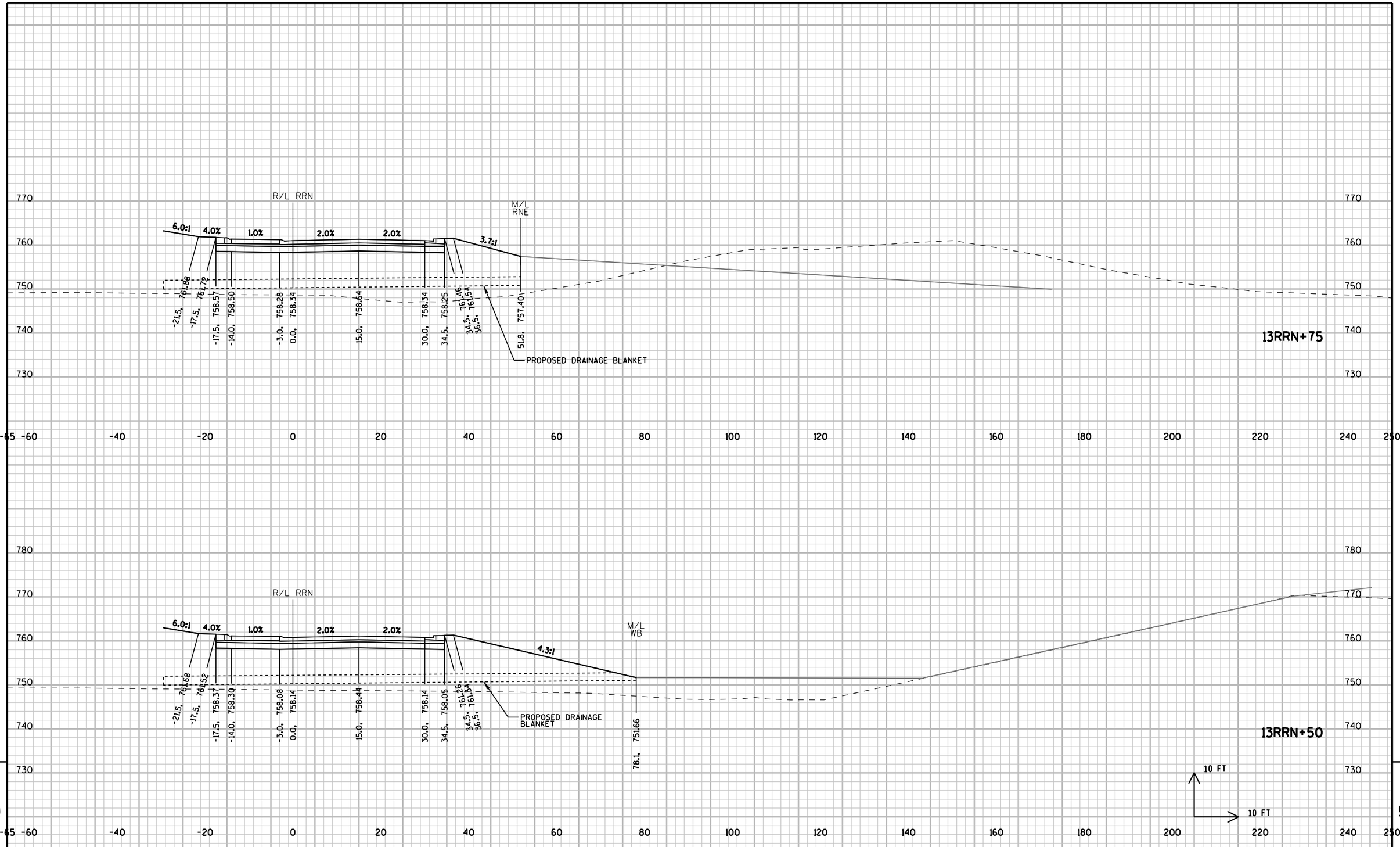


STA 13RRN+00 TO 13RRN+25

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1130	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:32 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

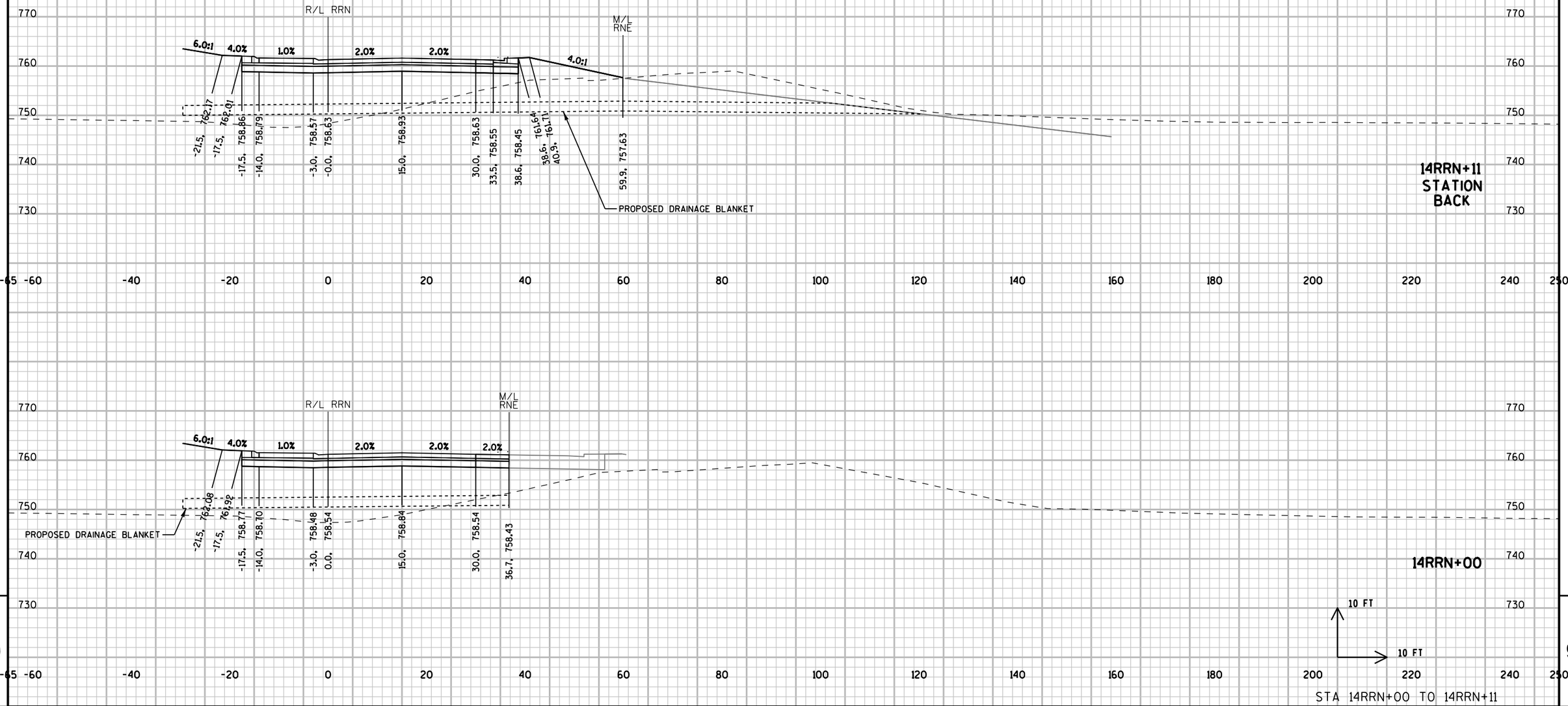
WISDOT/CADDS SHEET 21



PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1131	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:32 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

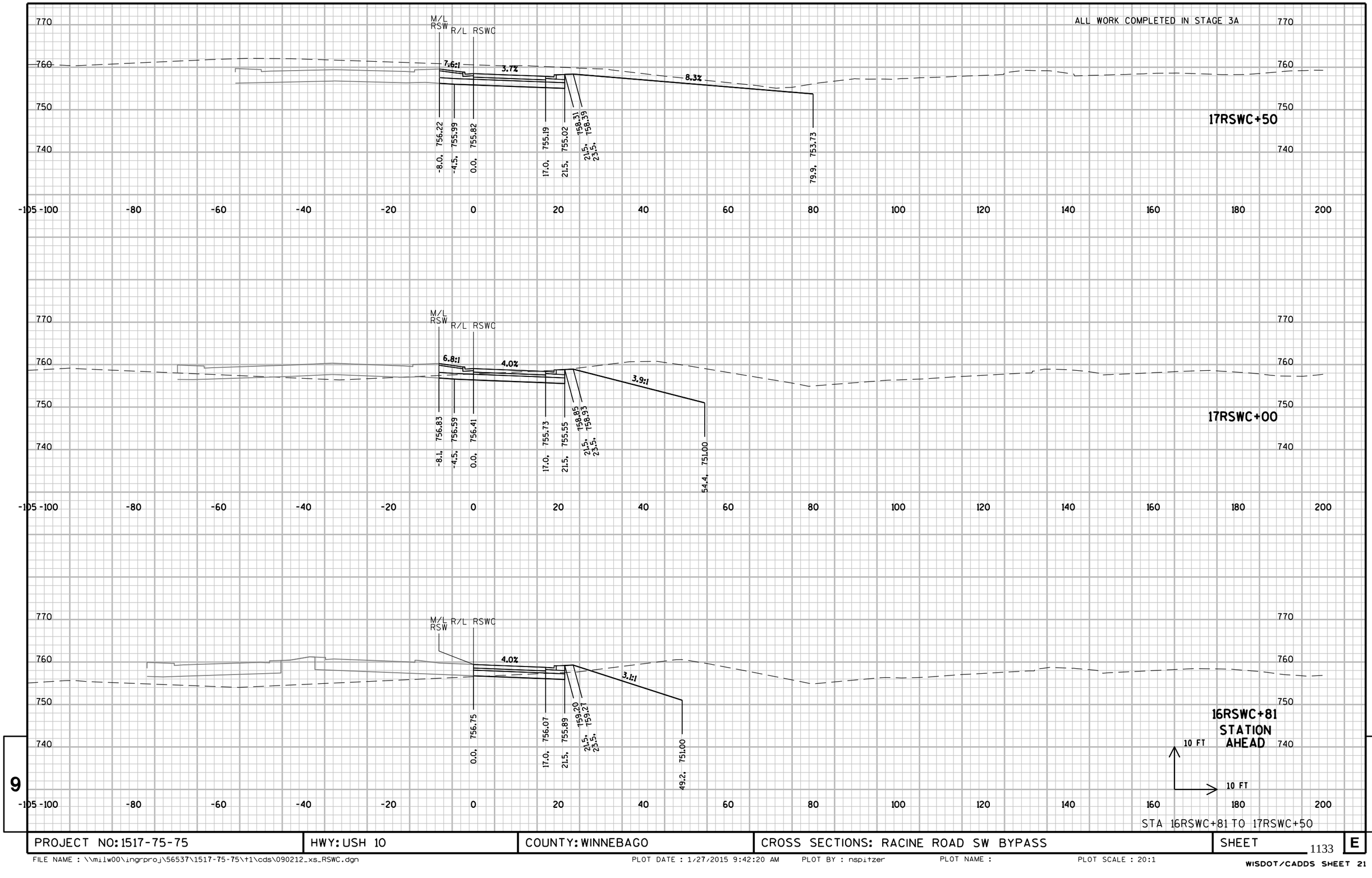
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 441 WB RAMP ROUNDABOUT	SHEET 1132	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090211_xs_RRN.dgn PLOT DATE : 4/25/2015 3:21:33 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A

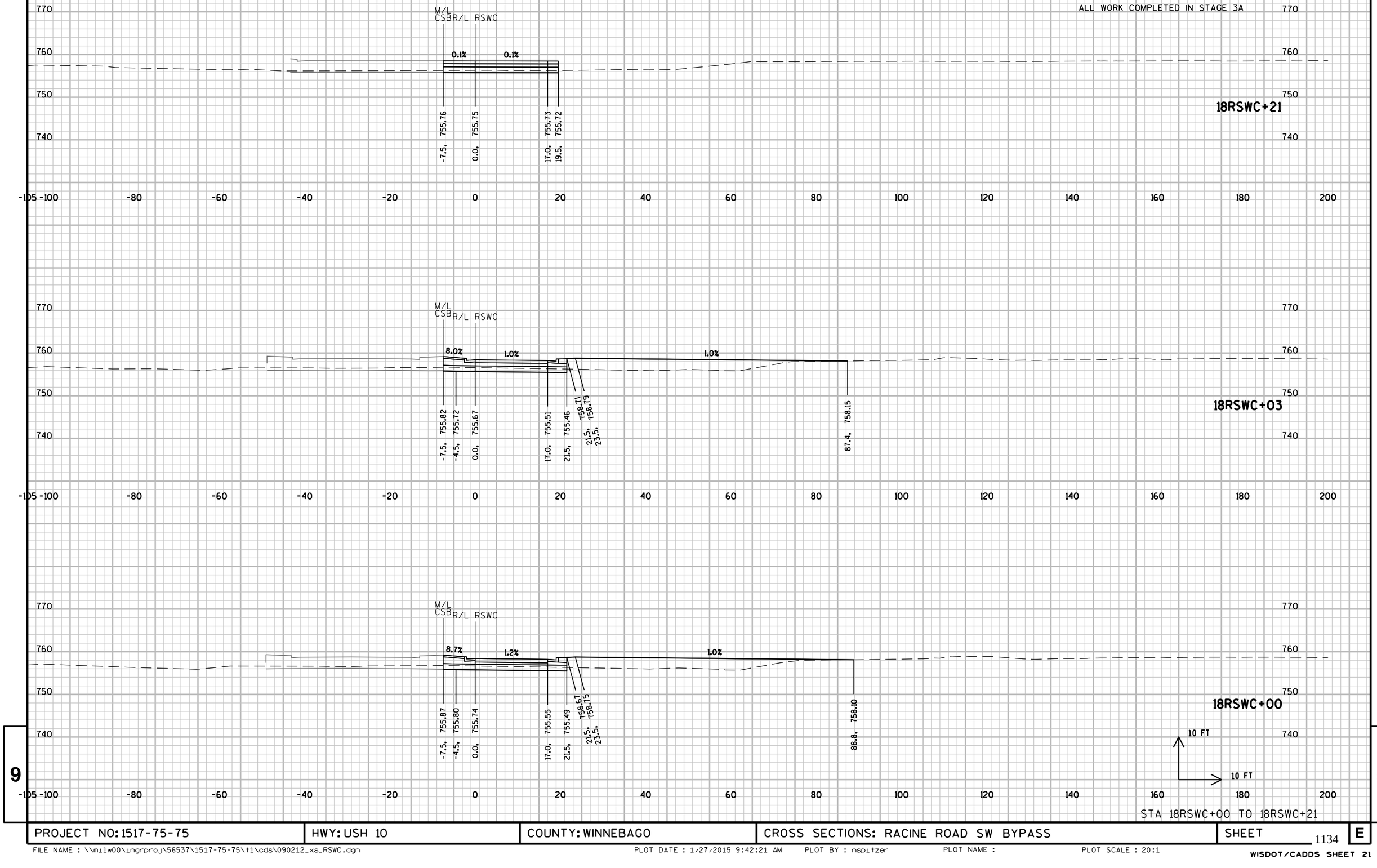


STA 16RSWC+81 TO 17RSWC+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD SW BYPASS	SHEET	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090212_xs_RSWC.dgn
PLOT DATE : 1/27/2015 9:42:20 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 3A

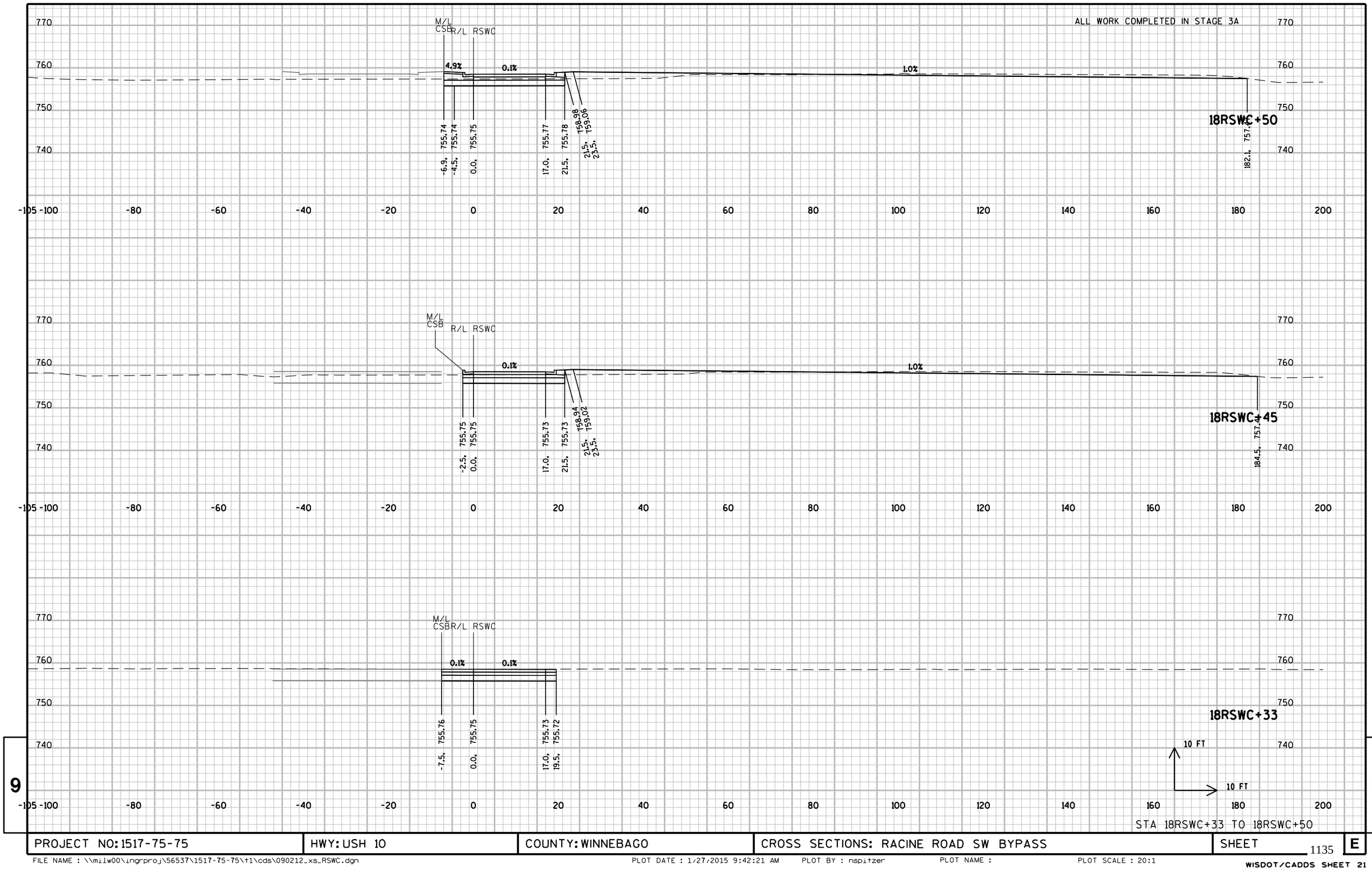


STA 18RSWC+00 TO 18RSWC+21

9 9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD SW BYPASS	SHEET 1134	E

ALL WORK COMPLETED IN STAGE 3A



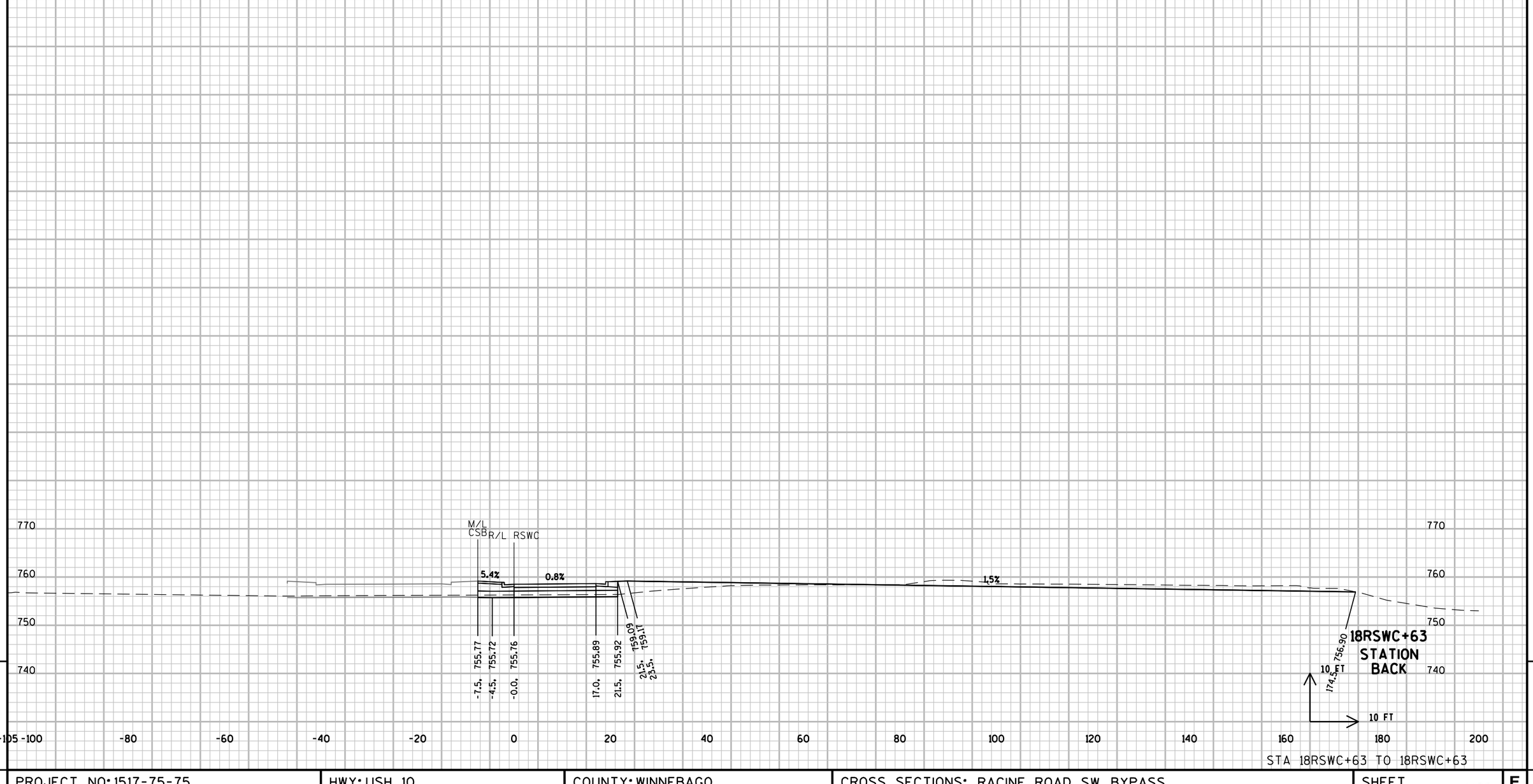
STA 18RSWC+33 TO 18RSWC+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD SW BYPASS	SHEET 1135	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090212_xs_RSWC.dgn PLOT DATE : 1/27/2015 9:42:21 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

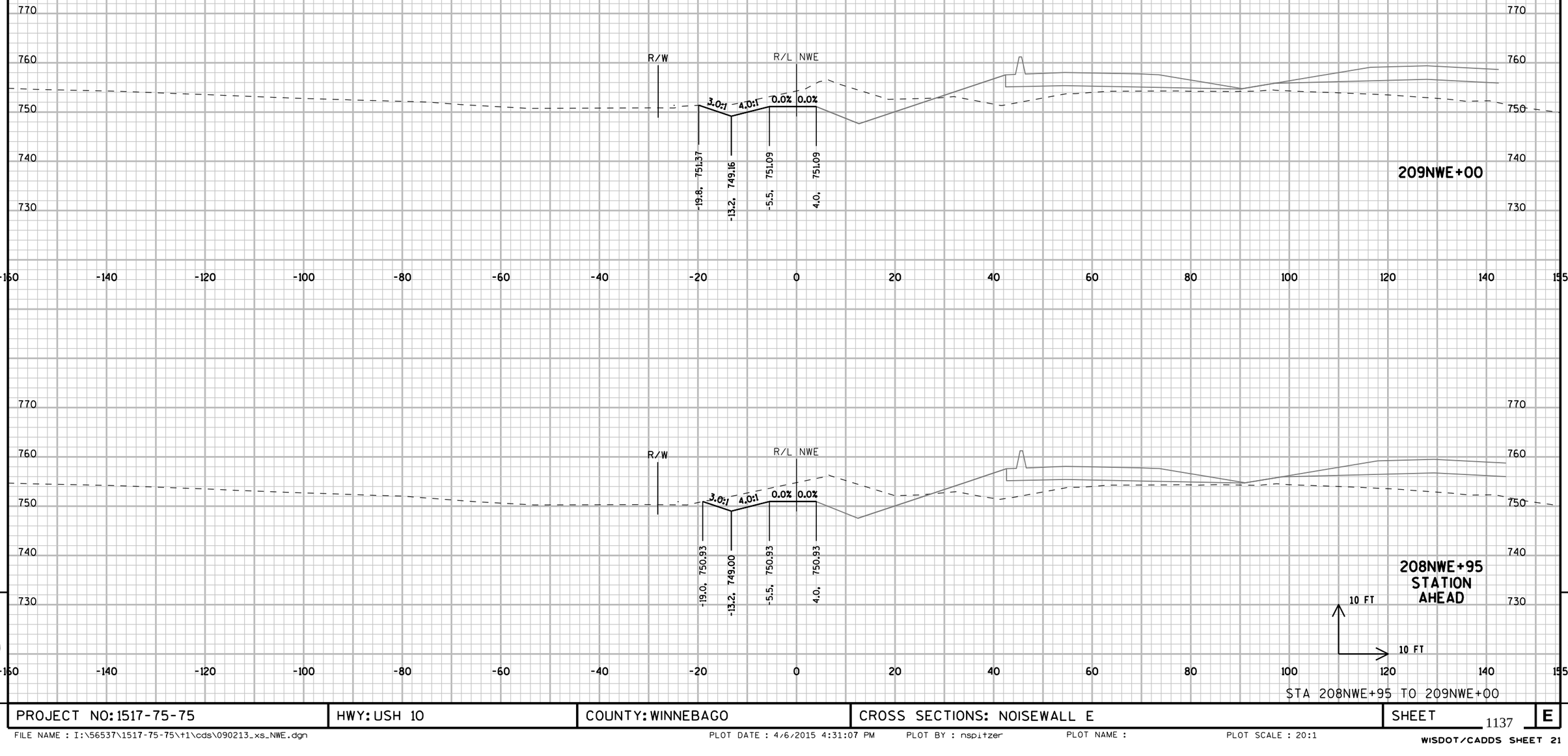
ALL WORK COMPLETED IN STAGE 3A



STA 18RSWC+63 TO 18RSWC+63

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RACINE ROAD SW BYPASS	SHEET 1136	E

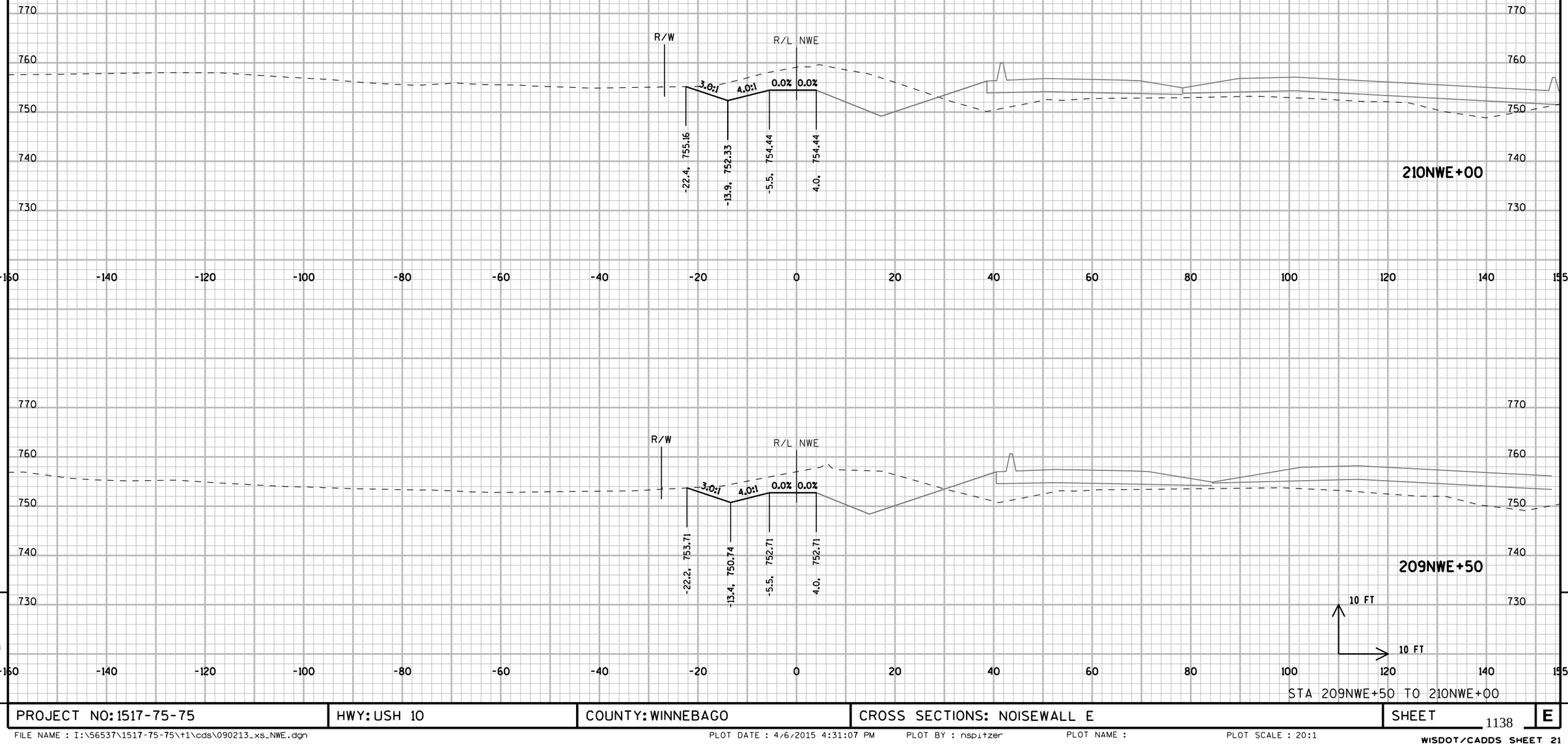
ALL WORK COMPLETED IN STAGE 2A



STA 208NWE+95 TO 209NWE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1137	E

ALL WORK COMPLETED IN STAGE 2A



STA 209NWE+50 TO 210NWE+00

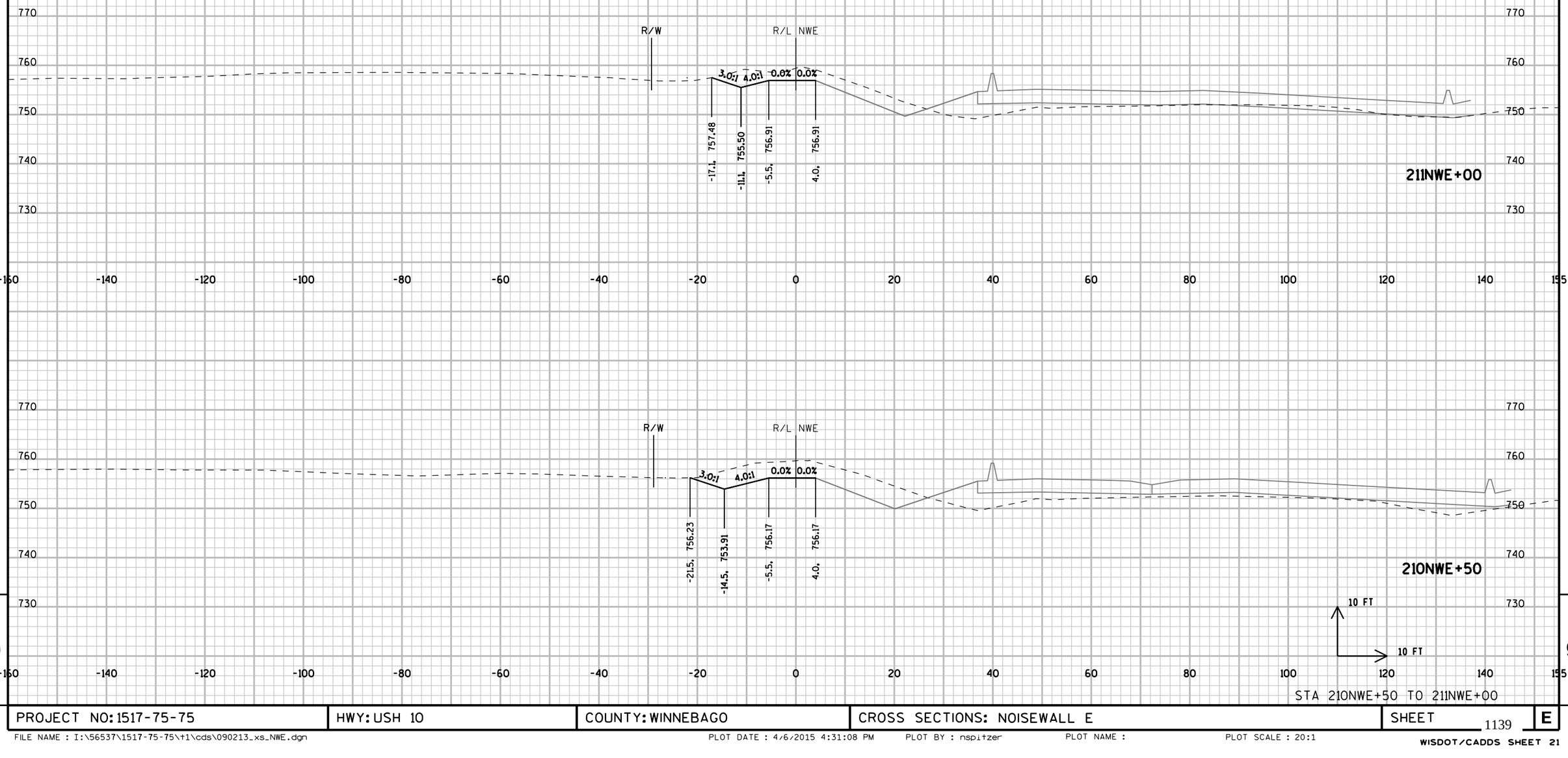
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1138	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090213_xs_NWE.dgn PLOT DATE : 4/6/2015 4:31:07 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A

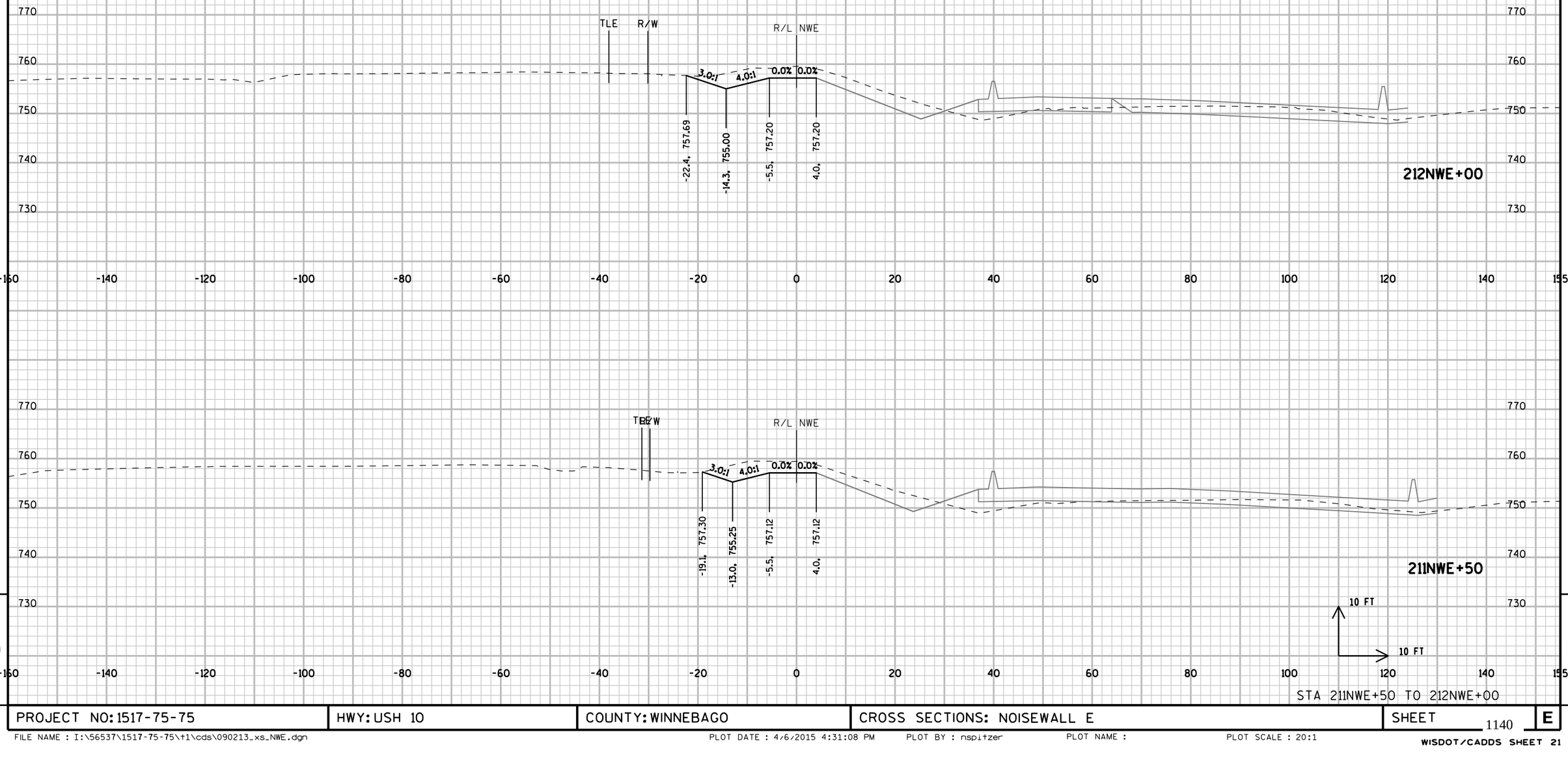


STA 210NWE+50 TO 211NWE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1139	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090213_xs_NWE.dgn PLOT DATE : 4/6/2015 4:31:08 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

ALL WORK COMPLETED IN STAGE 2A



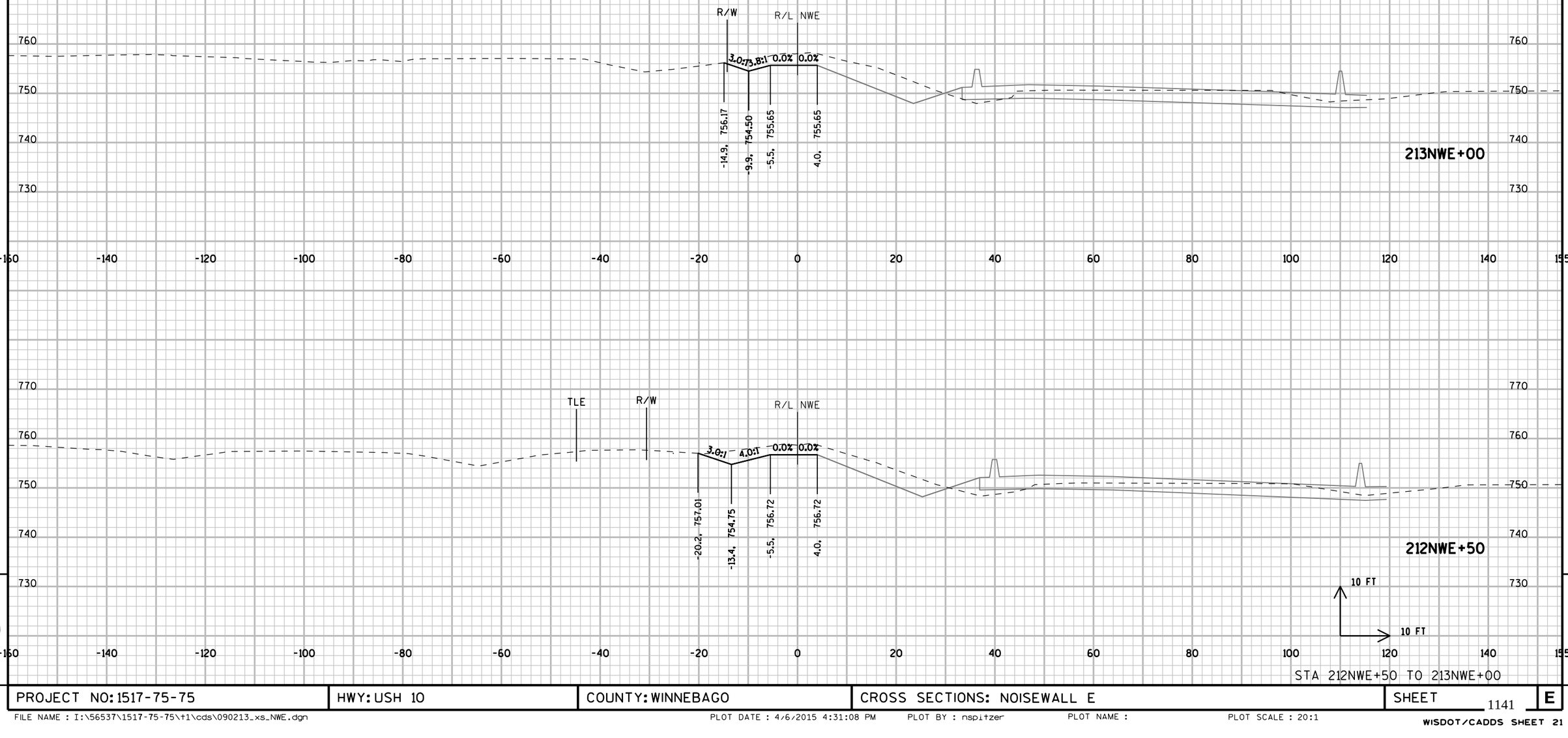
STA 211NWE+50 TO 212NWE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1140	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090213_xs_NWE.dgn PLOT DATE : 4/6/2015 4:31:08 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



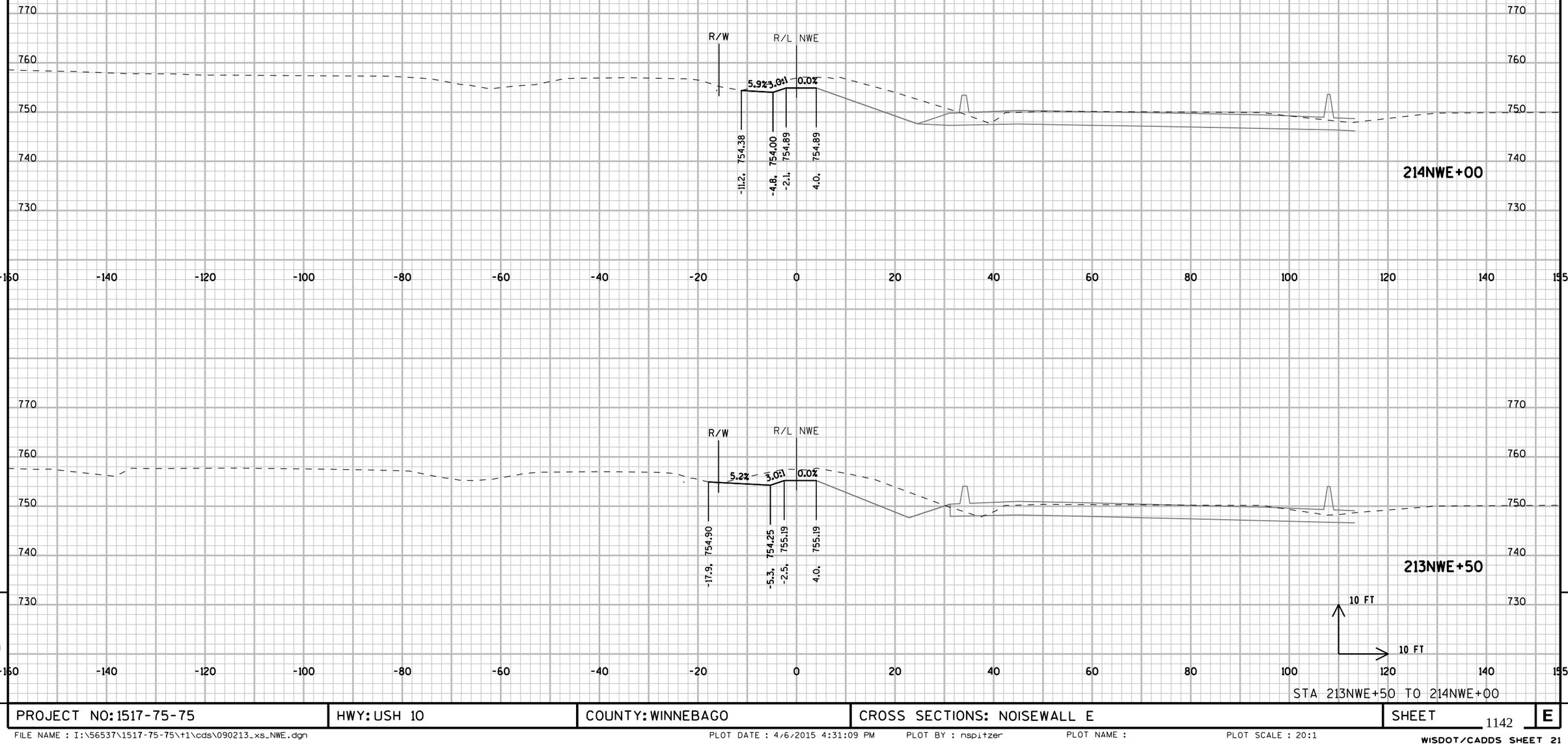
STA 212NWE+50 TO 213NWE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1141	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090213_xs_NWE.dgn PLOT DATE : 4/6/2015 4:31:08 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



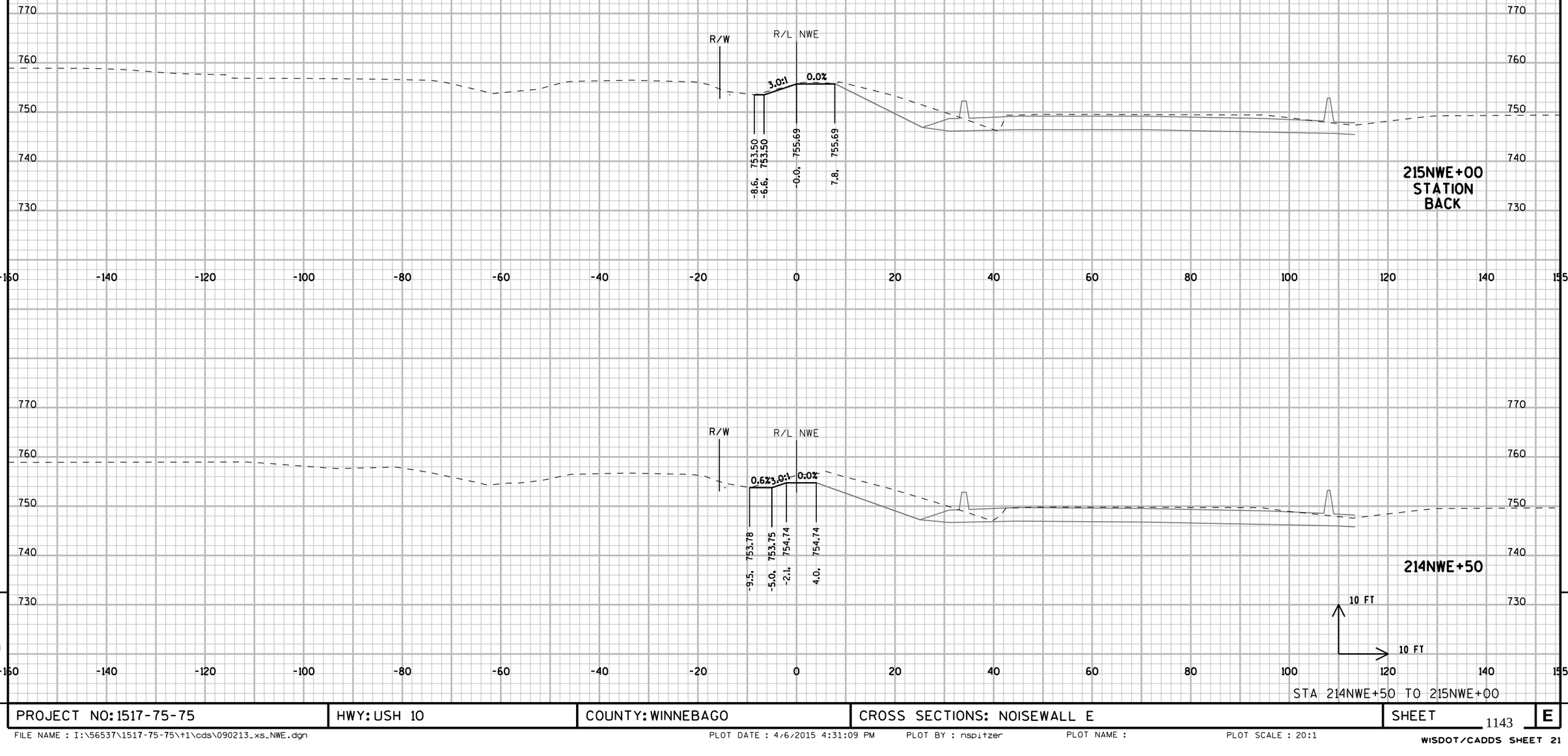
STA 213NWE+50 TO 214NWE+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1142	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090213_xs_NWE.dgn PLOT DATE : 4/6/2015 4:31:09 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2A



STA 214NWE+50 TO 215NWE+00

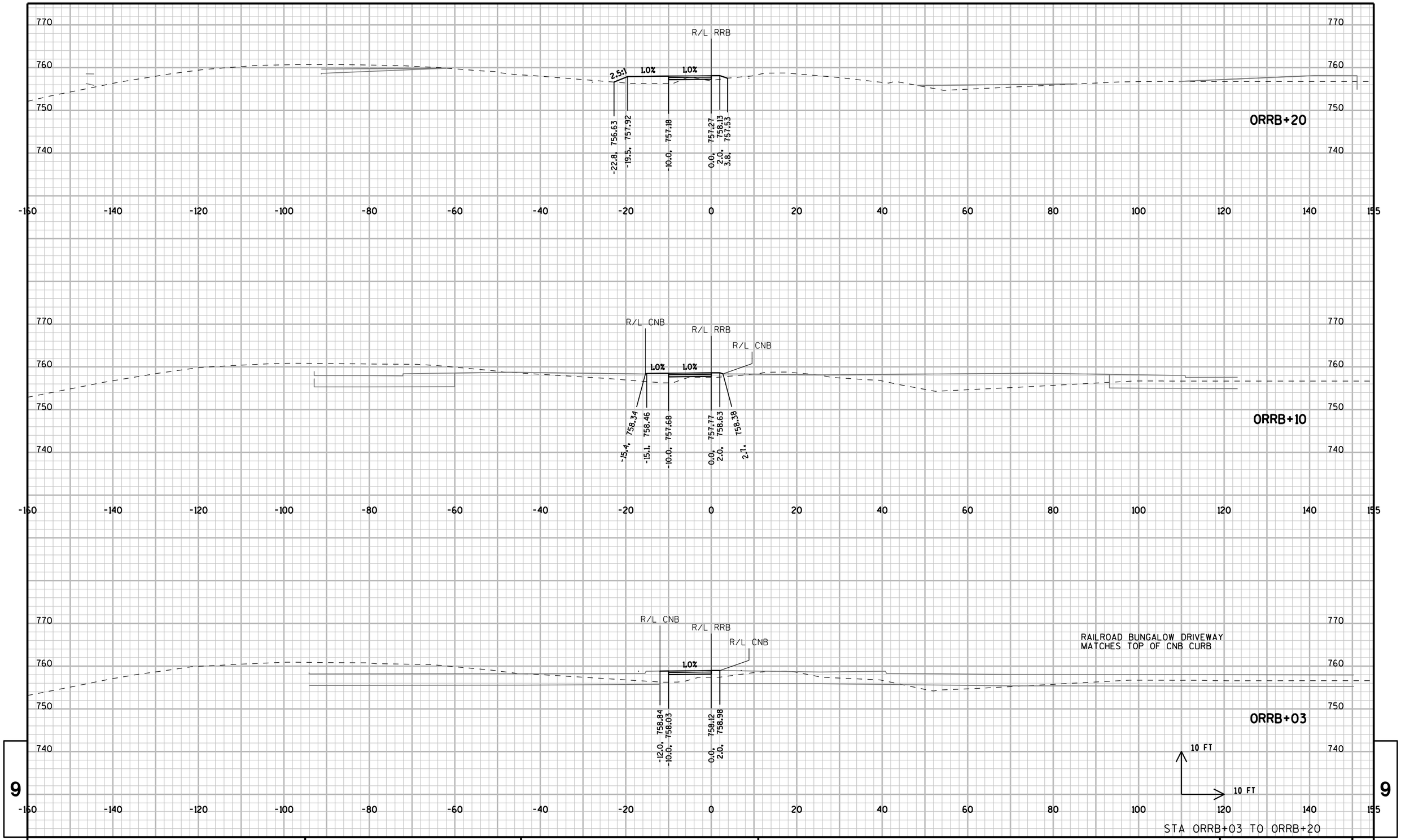
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: NOISEWALL E	SHEET 1143	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090213_xs_NWE.dgn PLOT DATE : 4/6/2015 4:31:09 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



STA 0RRB+03 TO 0RRB+20

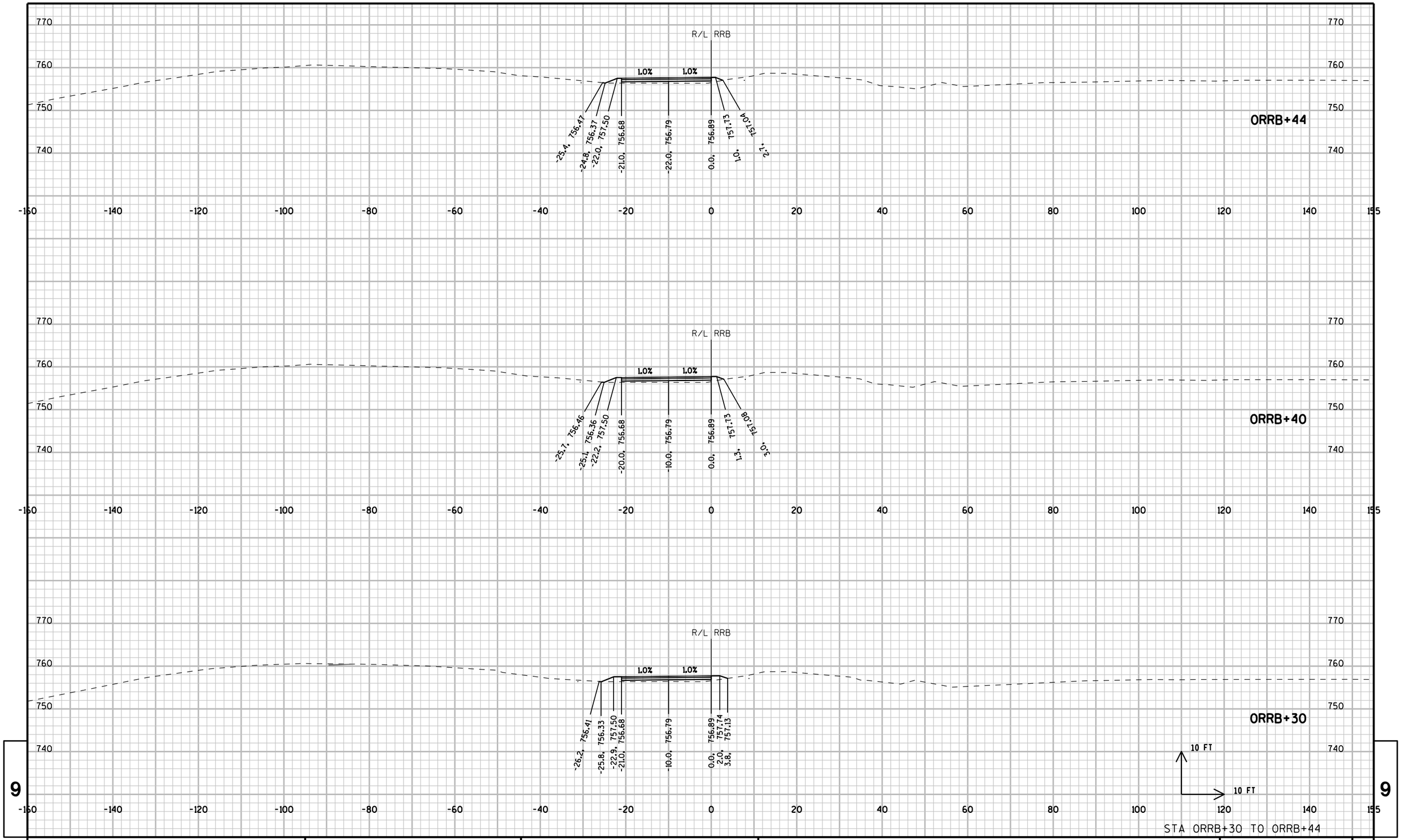
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RAILROAD BUNGALOW	SHEET 1144	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090214_xs_RRB.dgn PLOT DATE : 1/27/2015 9:11:05 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



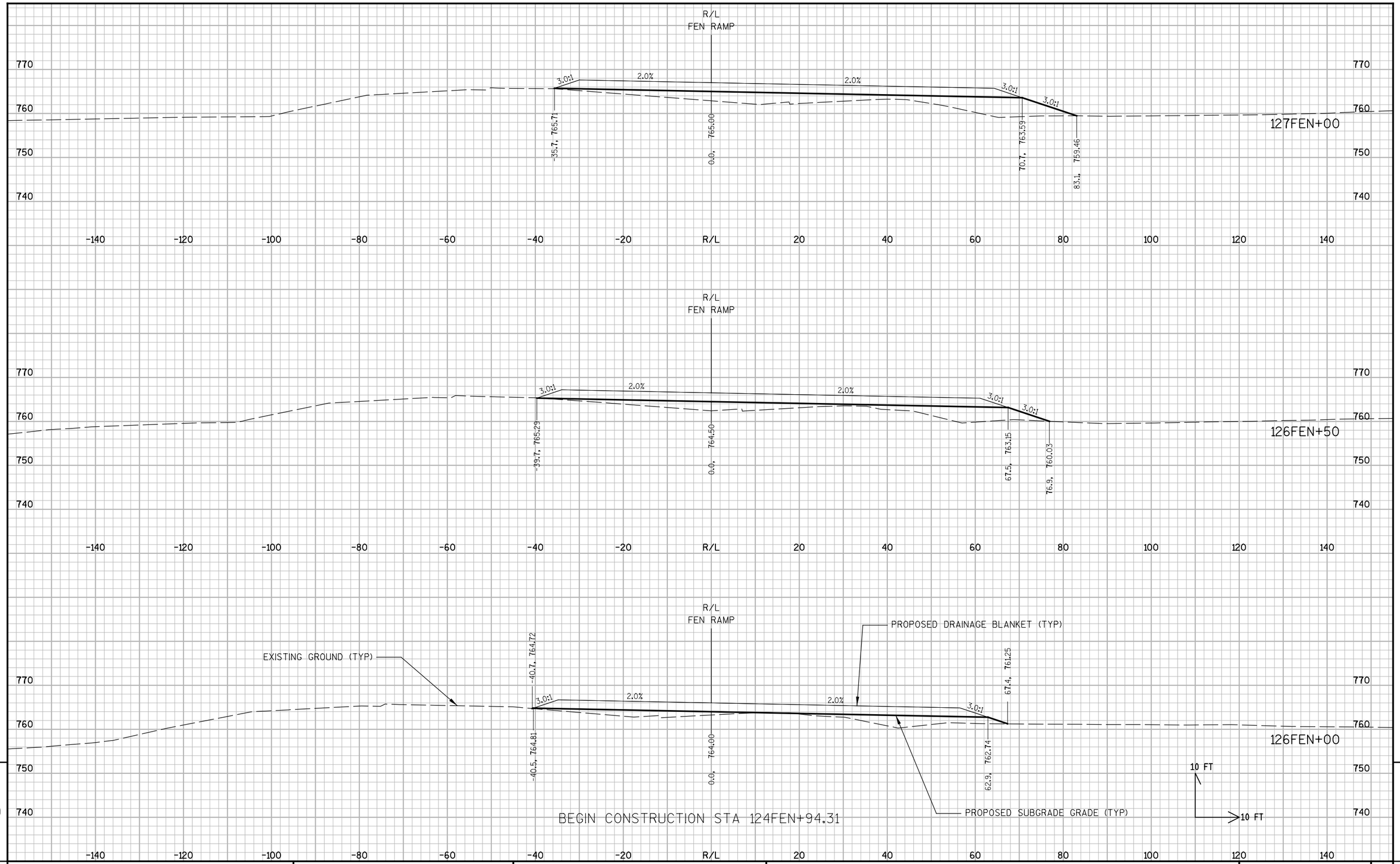
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9

STA ORRB+30 TO ORRB+44

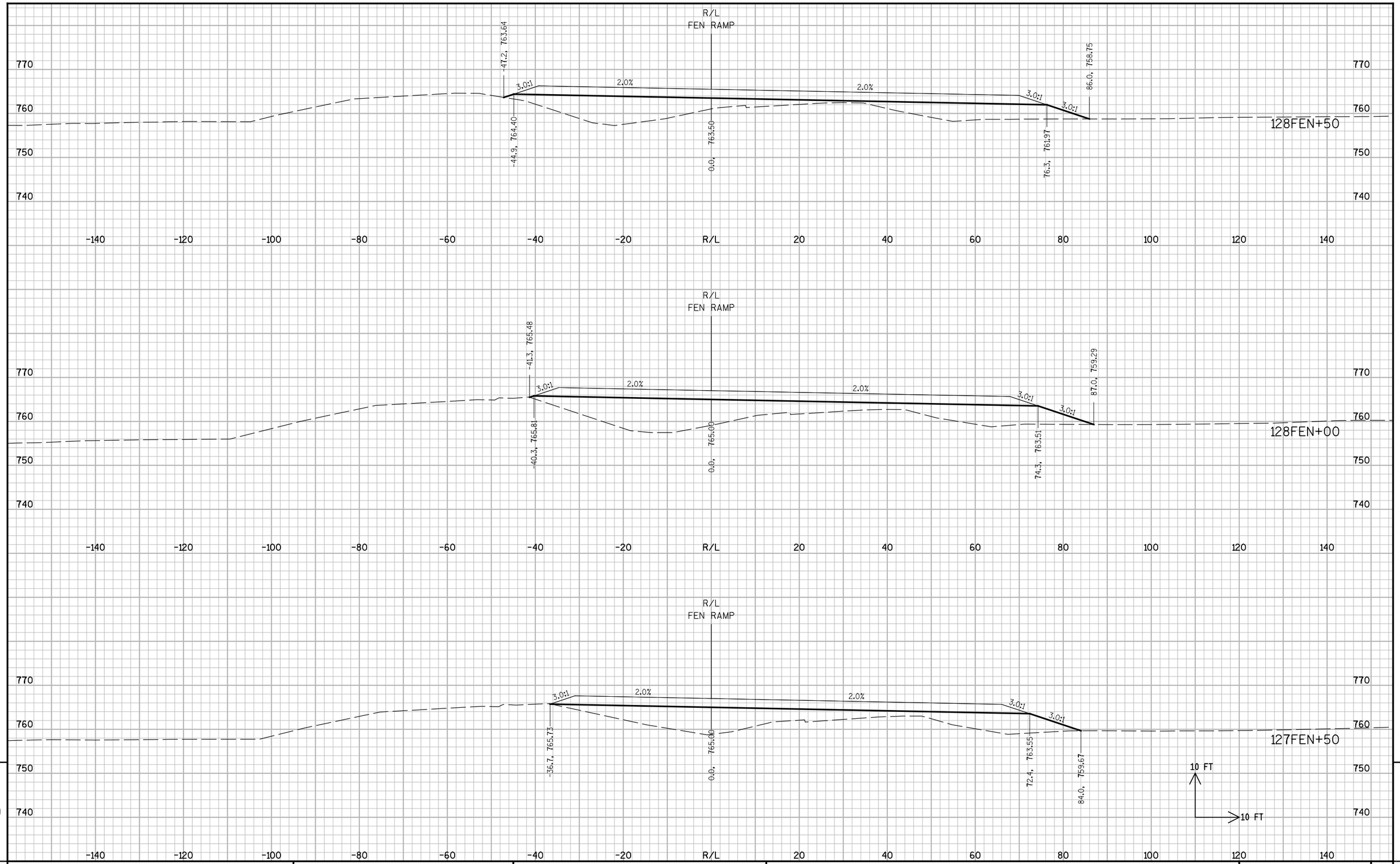
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: RAILROAD BUNGALOW	SHEET 1145	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090214_xs_RRB.dgn
PLOT DATE : 1/27/2015 9:11:06 AM
PLOT BY : nspitzer
PLOT NAME :
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STATE PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: FEN RAMP - PREFABRICATED VERTICAL DRAINS	SHEET NO: . 1146	E

FILE NAME : S:\DOT\DOT_NE\120012-Tri County Freeway\HNTB_URS projects\15177575\Kapur Files\090201_FEN-PREFAB VERTICAL DRAINS_XS.dgn PLOT DATE : 1/29/2015 PLOT BY : DCaverson PLOT NAME : PLOT SCALE : -

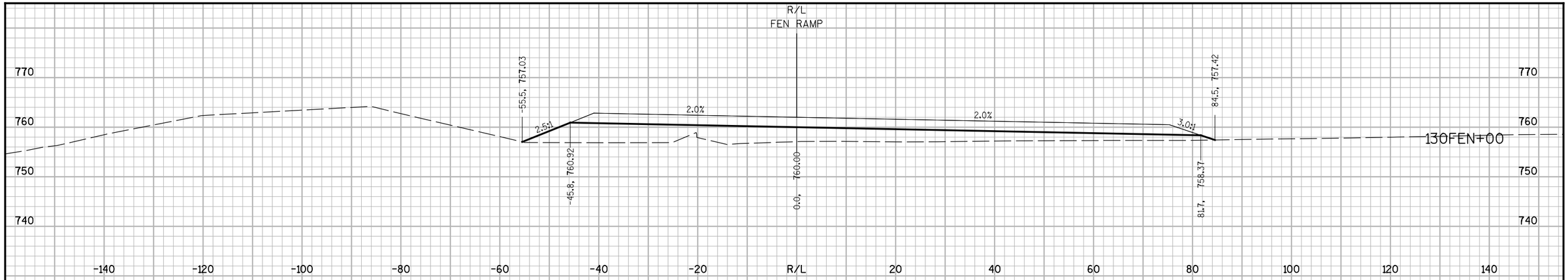


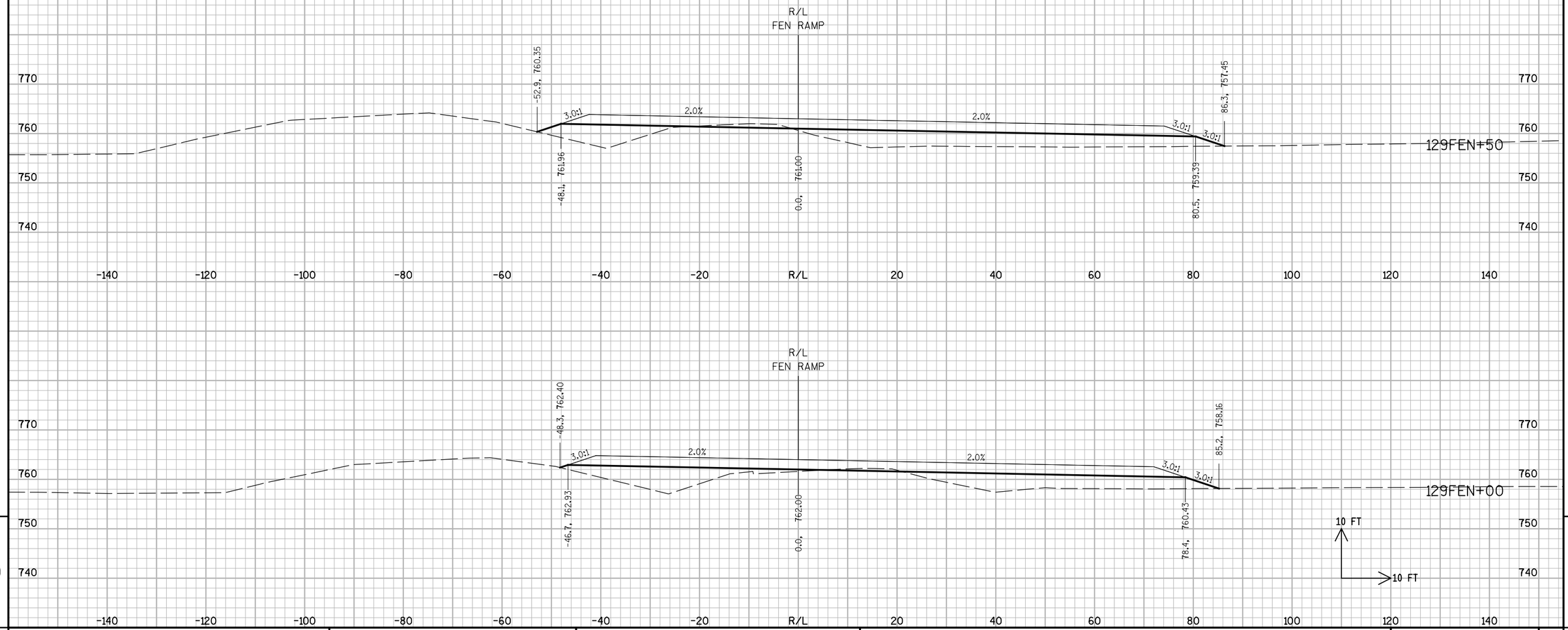
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STATE PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: FEN RAMP - PREFABRICATED VERTICAL DRAINS	SHEET NO: . 1147	E

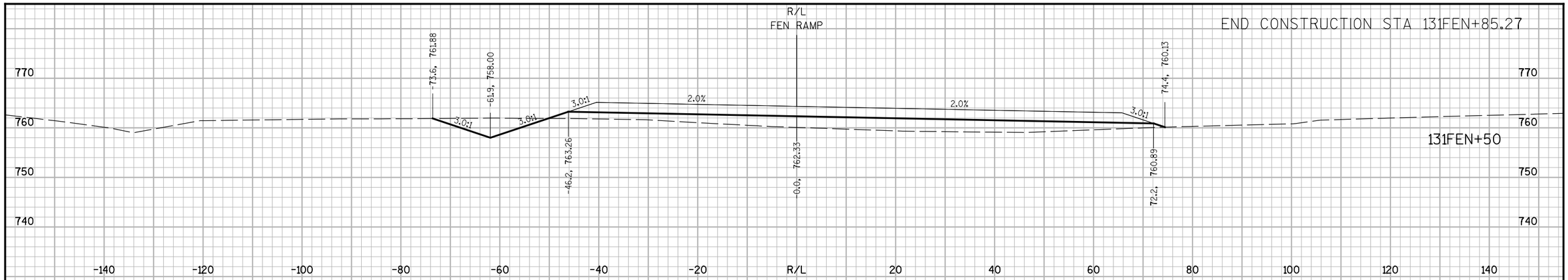
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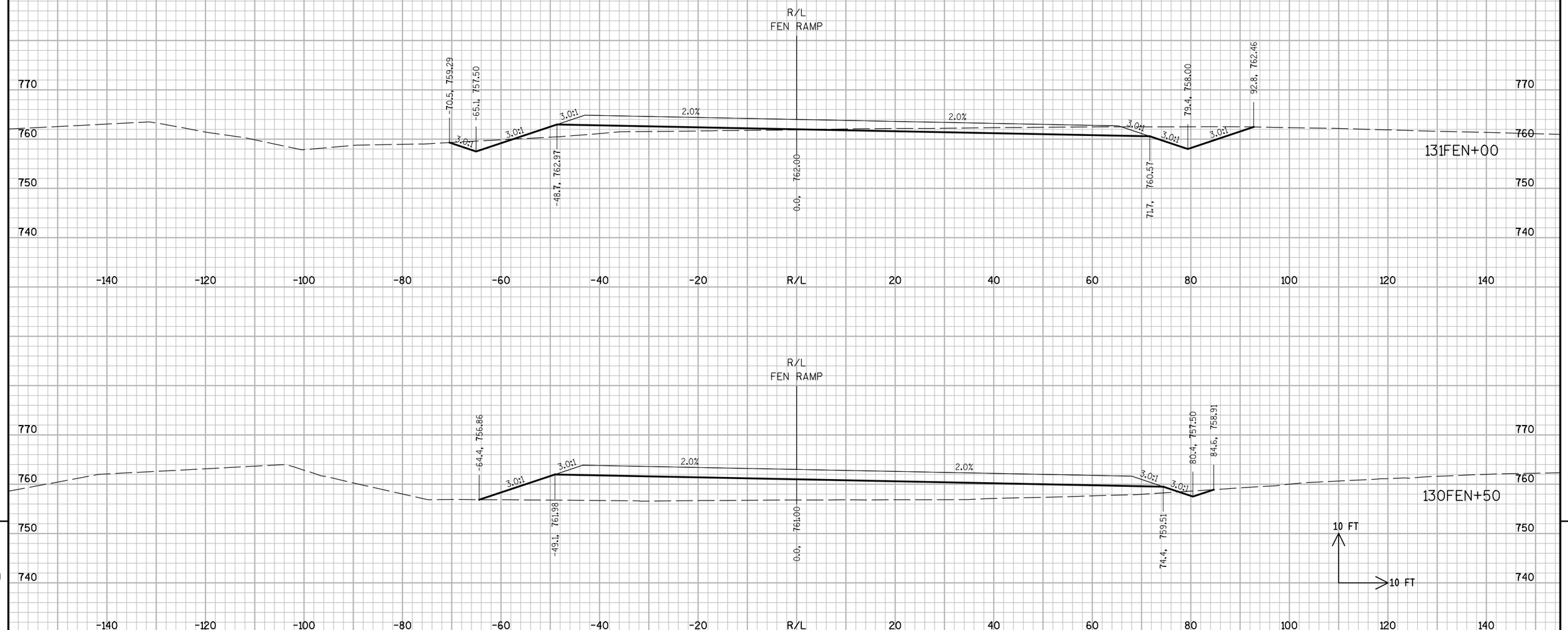




STATE PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: FEN RAMP - PREFABRICATED VERTICAL DRAINS	SHEET NO: . 1148	E

FILE NAME : S:\DOT\DOT_NE\120012-Tri County Freeway\HNTB_URS projects\15177575\Kapur Files\090201_FEN-PREFAB VERTICAL DRAINS_XS.dgn PLOT DATE : 1/29/2015 PLOT BY : DCaverson PLOT NAME : PLOT SCALE : -

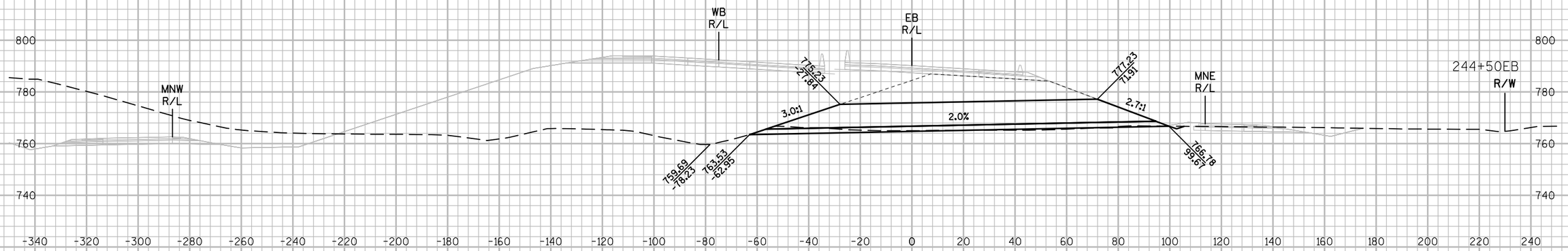




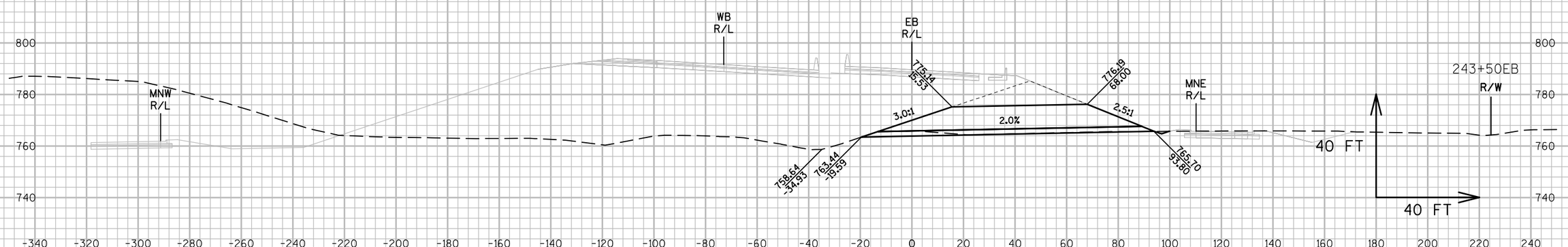
STATE PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: FEN RAMP - PREFABRICATED VERTICAL DRAINS	SHEET NO: . 1149	E

FILE NAME : S:\DOT\DOT_NE\120012-Tri County Freeway\HNTB_URS projects\15177575\Kapur Files\090201_FEN-PREFAB VERTICAL DRAINS_XS.dgn PLOT DATE : 1/29/2015 PLOT BY : DCaverson PLOT NAME : PLOT SCALE : -

PROVIDED BY NE REGION







9

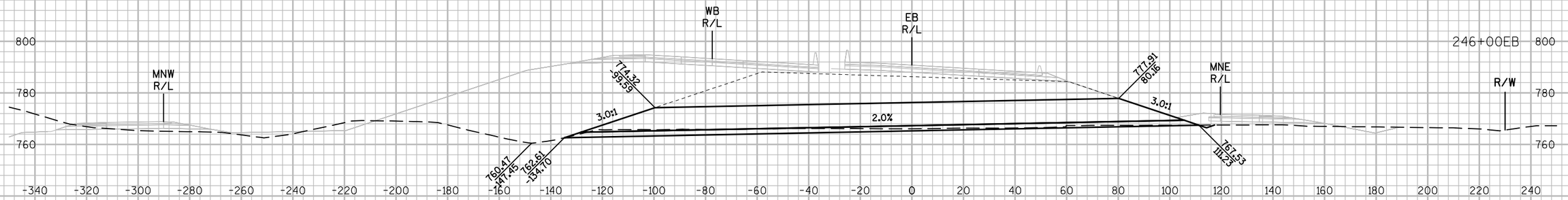
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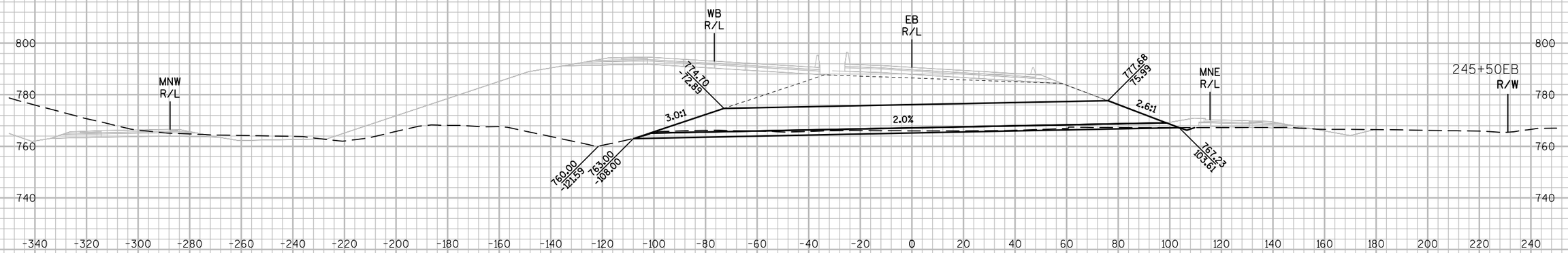
PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	CROSS SECTIONS: MIDWAY ROAD EARLY FILL	SHEET 1150	E

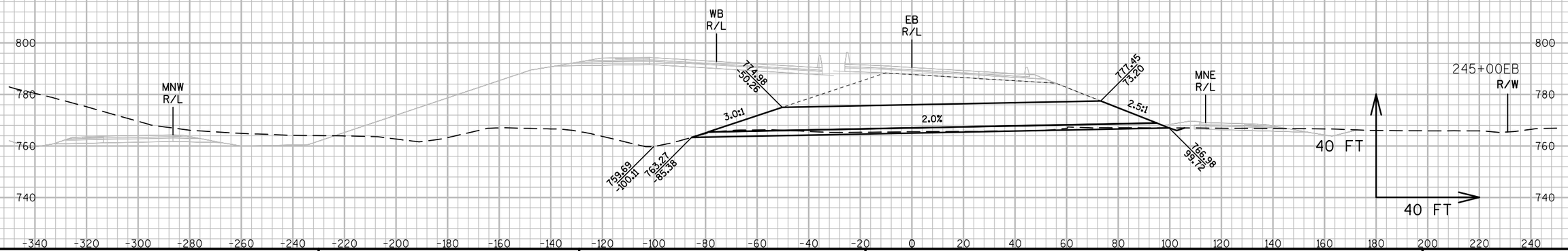
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LAYOUT NAME - MEF_1

PLOT DATE : 5/4/2015 8:31 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

PROVIDED BY NE REGION





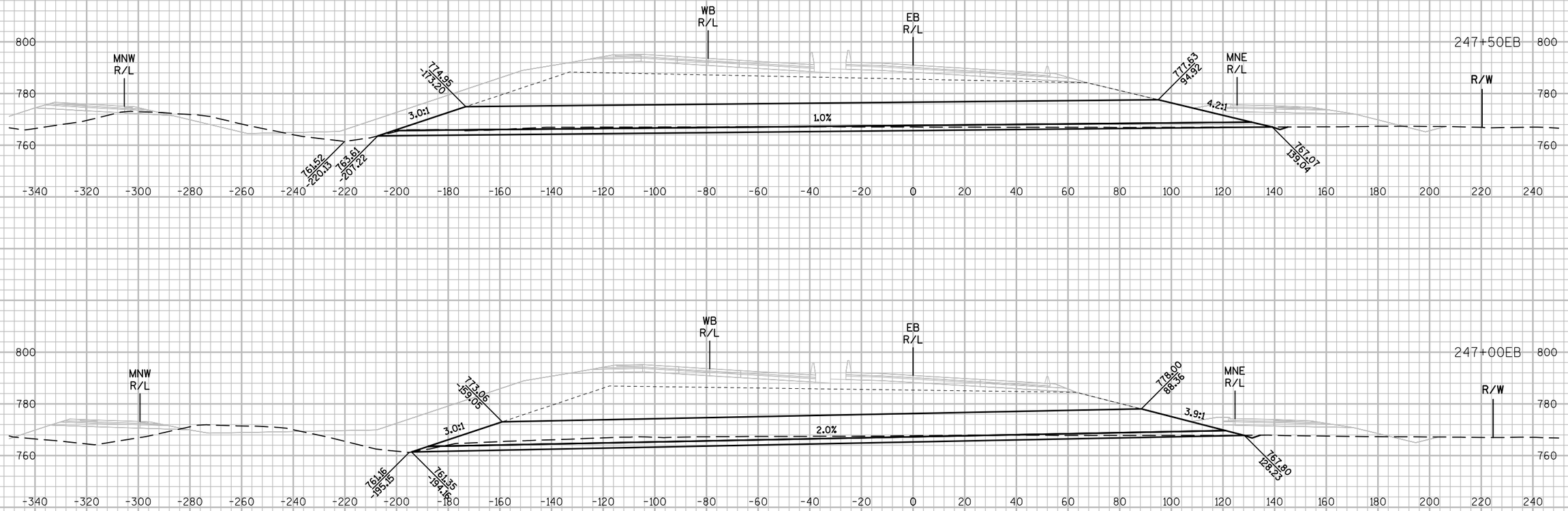


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PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	CROSS SECTIONS: MIDWAY ROAD EARLY FILL	SHEET 1151	E

FILE NAME : S:\PDS\C3D\WIS441\151775 72_77\DESIGN\CORRIDORS\MIDWAY EARLY FILL\MIDWAY EARLY FILL.DWG
LAYOUT NAME - MEF_2
PLOT DATE : 5/4/2015 8:31 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 49

PROVIDED BY NE REGION



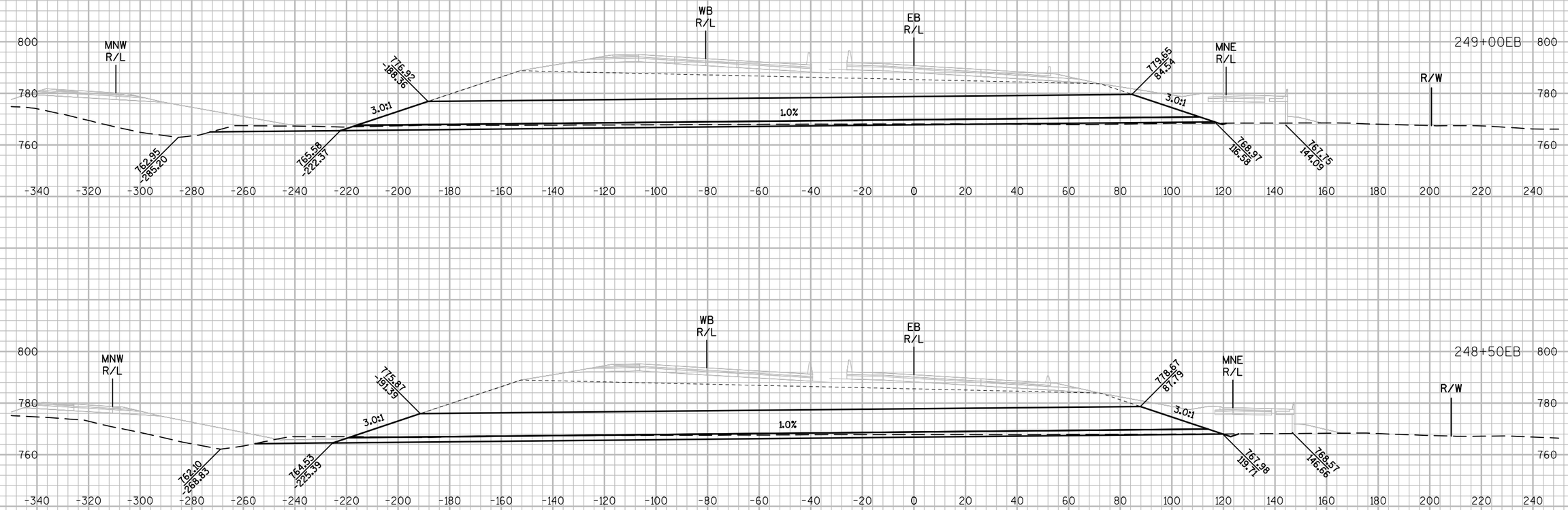
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FILE NAME : S:\PDS\C3D\WIS441\15177572_77\DESIGN\CORRIDORS\MIDWAY EARLY FILL\MIDWAY EARLY FILL.DWG
LAYOUT NAME - MEF_3

PLOT DATE : 5/4/2015 8:31 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 49

PROVIDED BY NE REGION



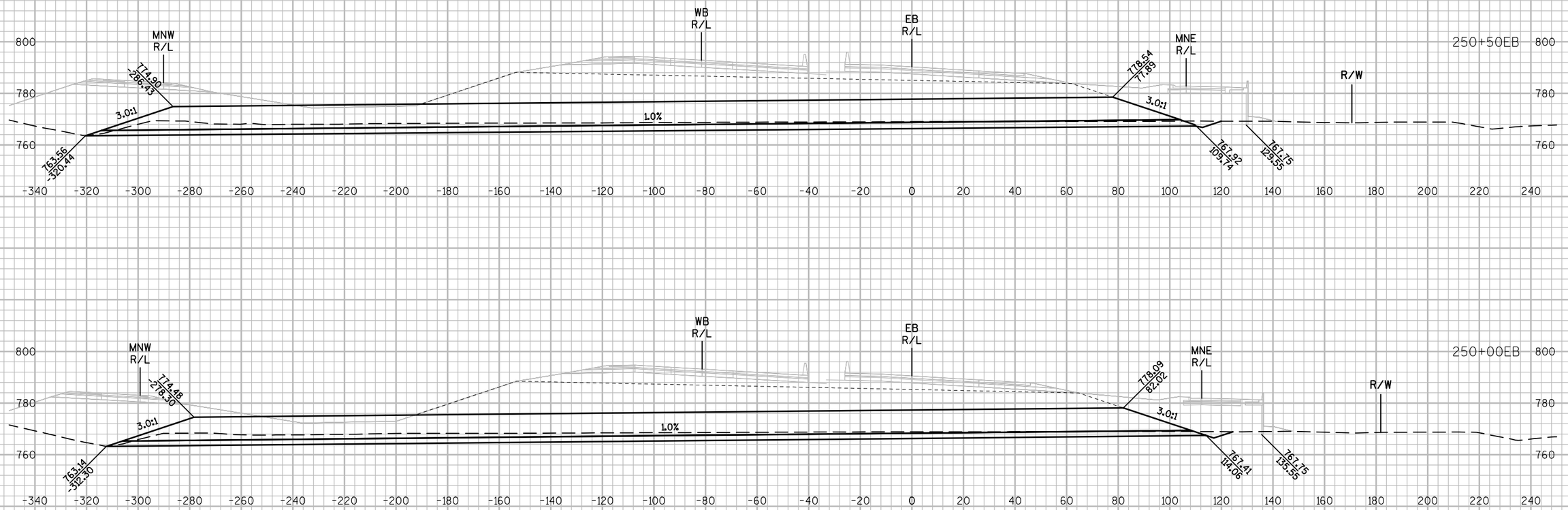
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FILE NAME : S:\PDS\C3D\WIS441\15177572_77\DESIGN\CORRIDORS\MIDWAY EARLY FILL\MIDWAY EARLY FILL.DWG
LAYOUT NAME - MEF_4

PLOT DATE : 5/4/2015 8:31 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

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PROVIDED BY NE REGION



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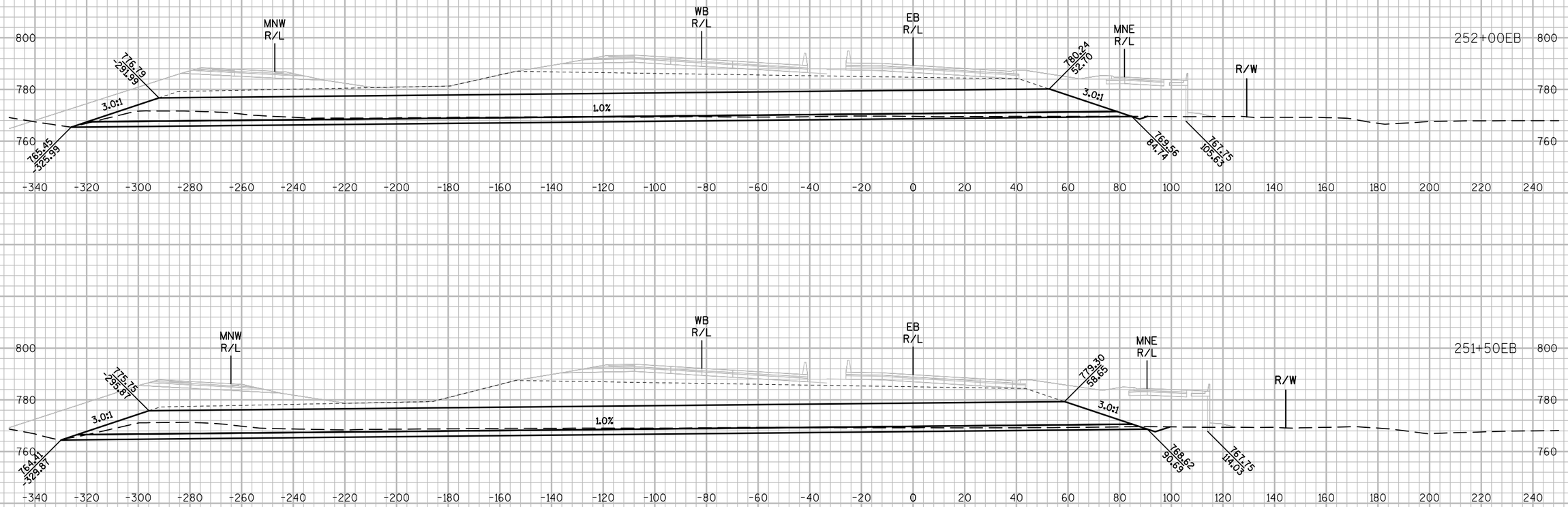
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PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	CROSS SECTIONS: MIDWAY ROAD EARLY FILL	SHEET 1154	E

FILE NAME : S:\PDS\C3D\WIS441\15177572_77\DESIGN\CORRIDORS\MIDWAY EARLY FILL\MIDWAY EARLY FILL.DWG
LAYOUT NAME - MEF_5

PLOT DATE : 5/4/2015 8:31 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

PROVIDED BY NE REGION



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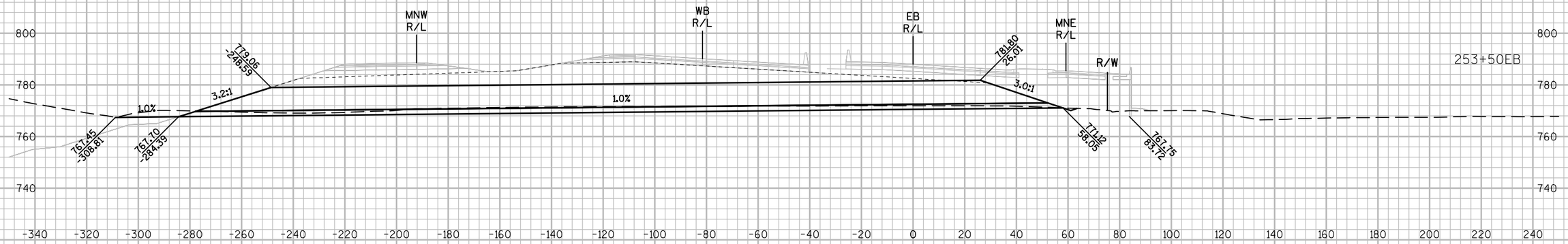
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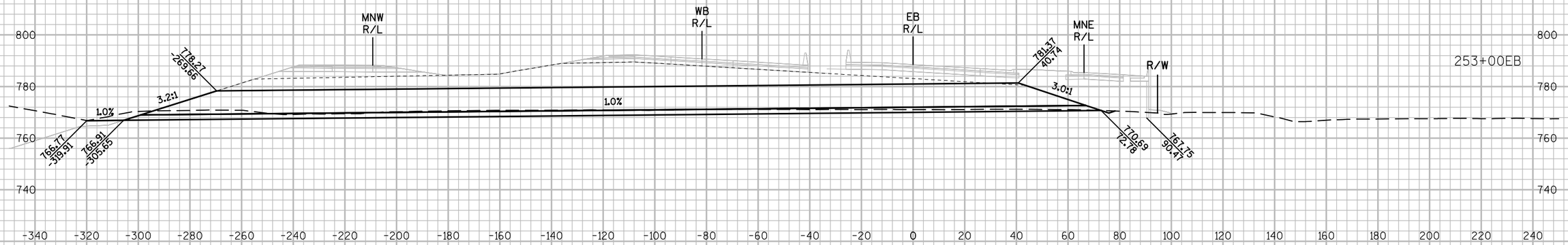
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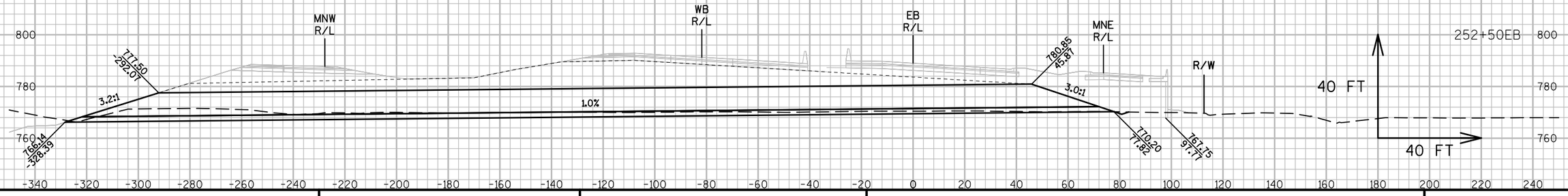
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LAYOUT NAME - MEF_6

PLOT DATE : 5/4/2015 8:31 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

PROVIDED BY NE REGION







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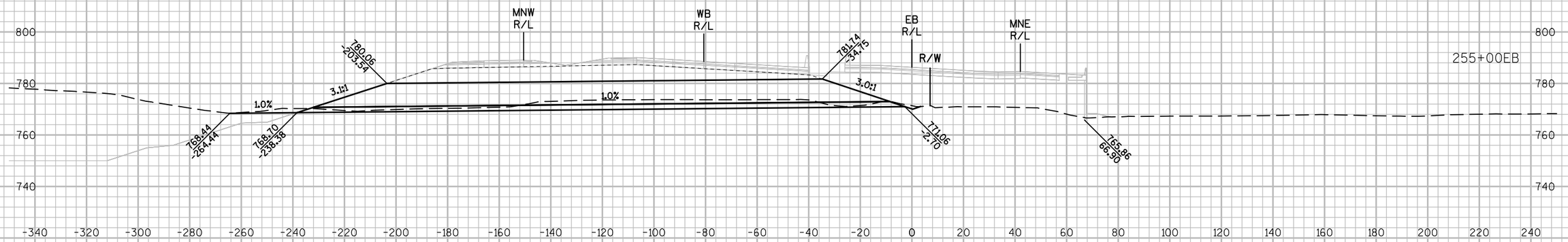
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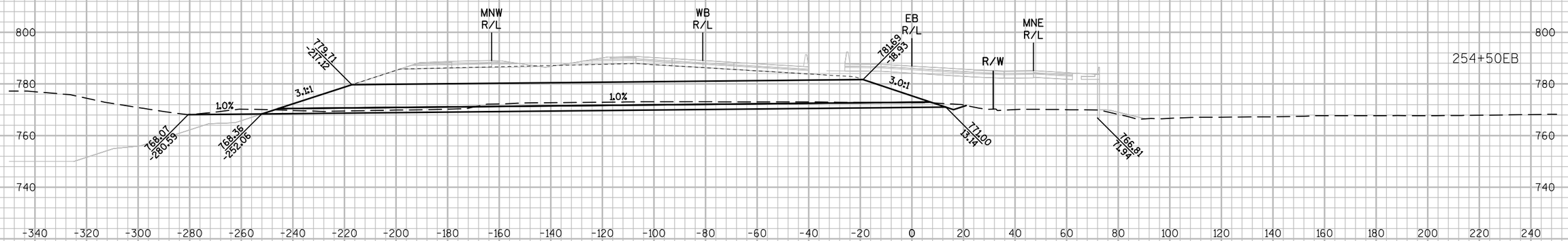
PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	CROSS SECTIONS: MIDWAY ROAD EARLY FILL	SHEET 1156	E

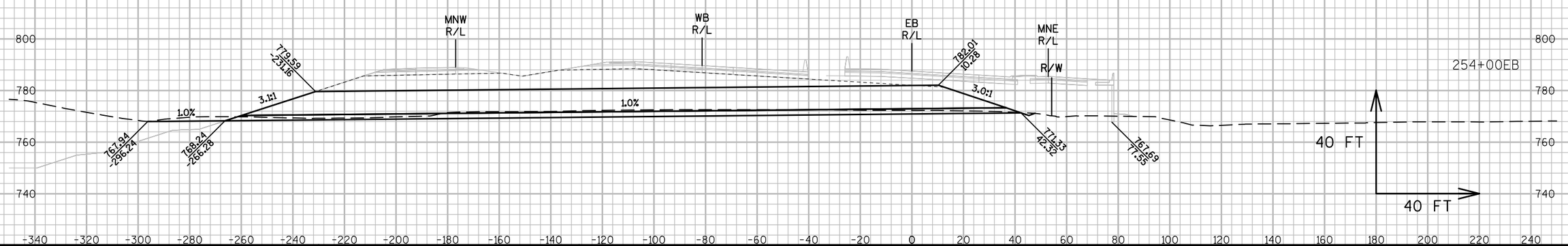
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LAYOUT NAME - MEF_7

PLOT DATE : 5/4/2015 8:32 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

PROVIDED BY NE REGION







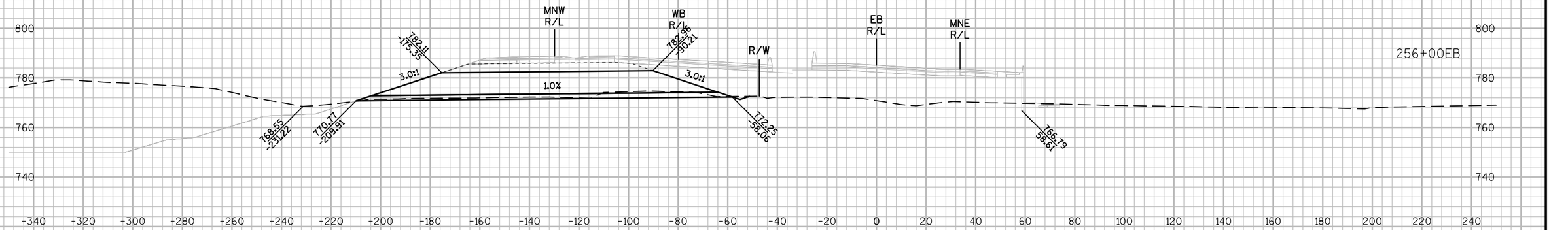
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PROJECT NO: 1517-75-75	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	CROSS SECTIONS: MIDWAY ROAD EARLY FILL	SHEET 1157	E

FILE NAME : S:\PDS\C3D\WIS441\15177572_77\DESIGN\CORRIDORS\MIDWAY EARLY FILL\MIDWAY EARLY FILL.DWG
LAYOUT NAME - MEF_8
PLOT DATE : 5/4/2015 8:32 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

PROVIDED BY NE REGION



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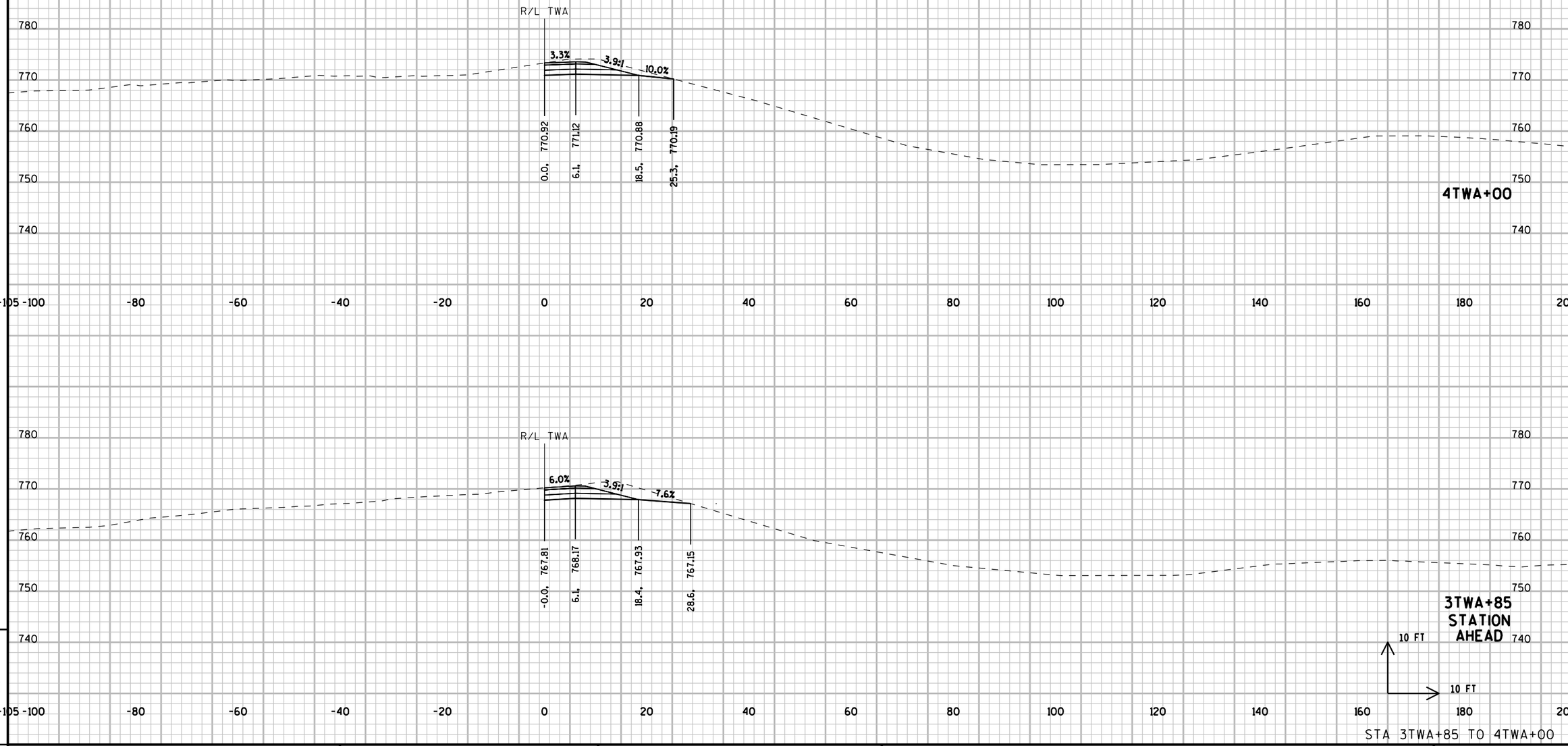
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FILE NAME : S:\PDS\C3D\WIS441\15177572_77\DESIGN\CORRIDORS\MIDWAY EARLY FILL\MIDWAY EARLY FILL.DWG
LAYOUT NAME - MEF_9

PLOT DATE : 5/4/2015 8:32 AM PLOT BY : XIONG, NOU SOUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT

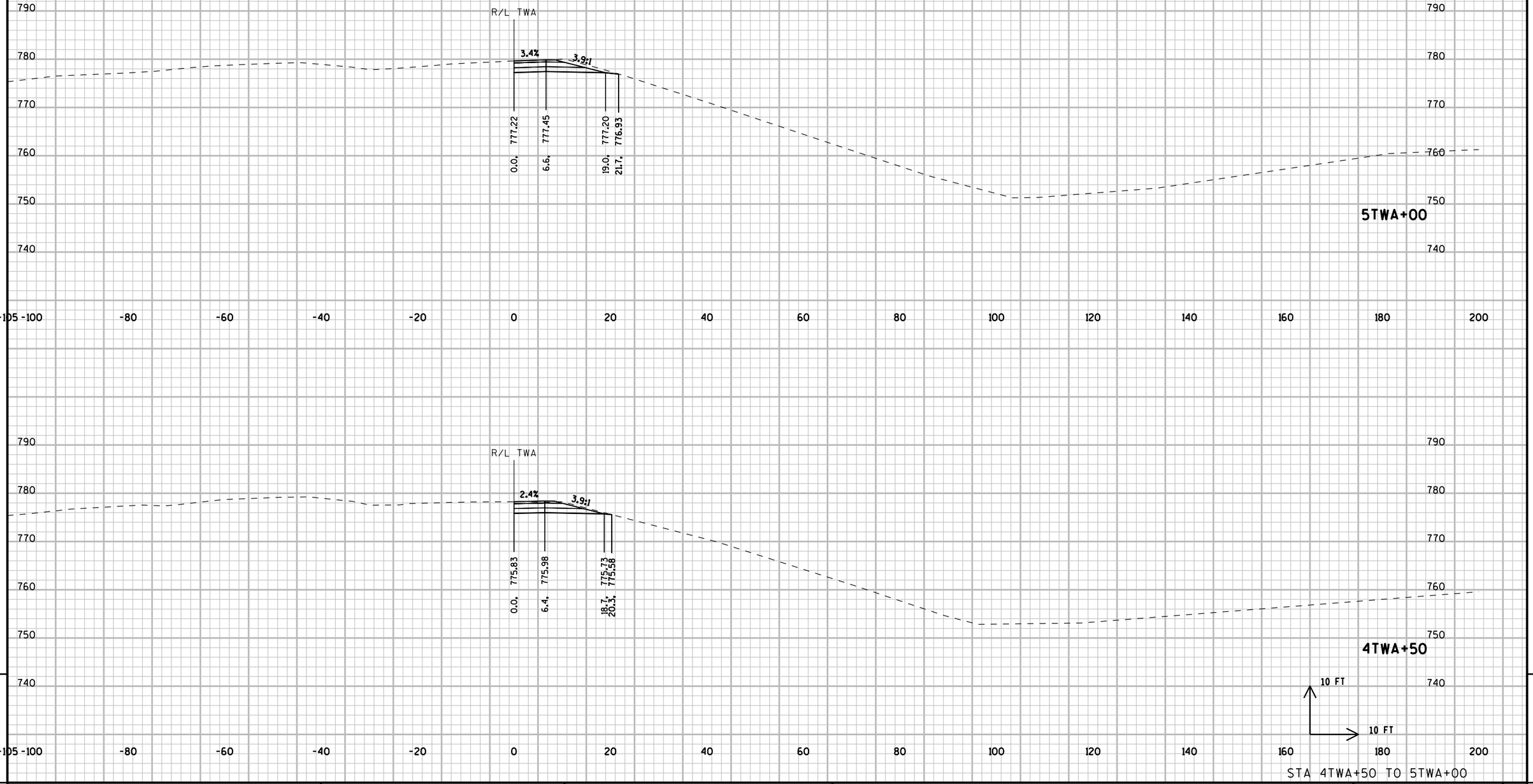


STA 3TWA+85 TO 4TWA+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1159	E

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 4TWA+50 TO 5TWA+00

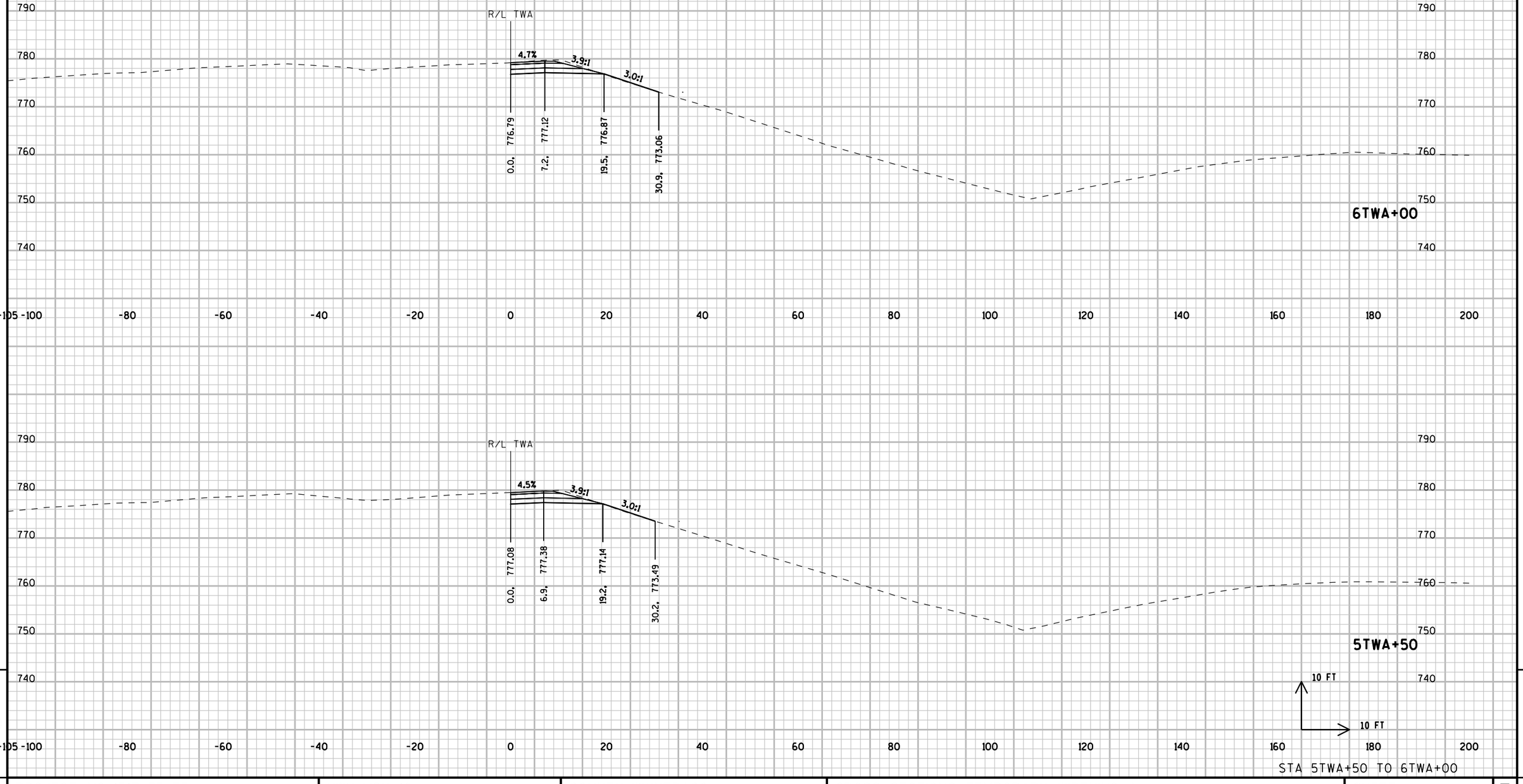
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1160	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:20 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 5TWA+50 TO 6TWA+00

9

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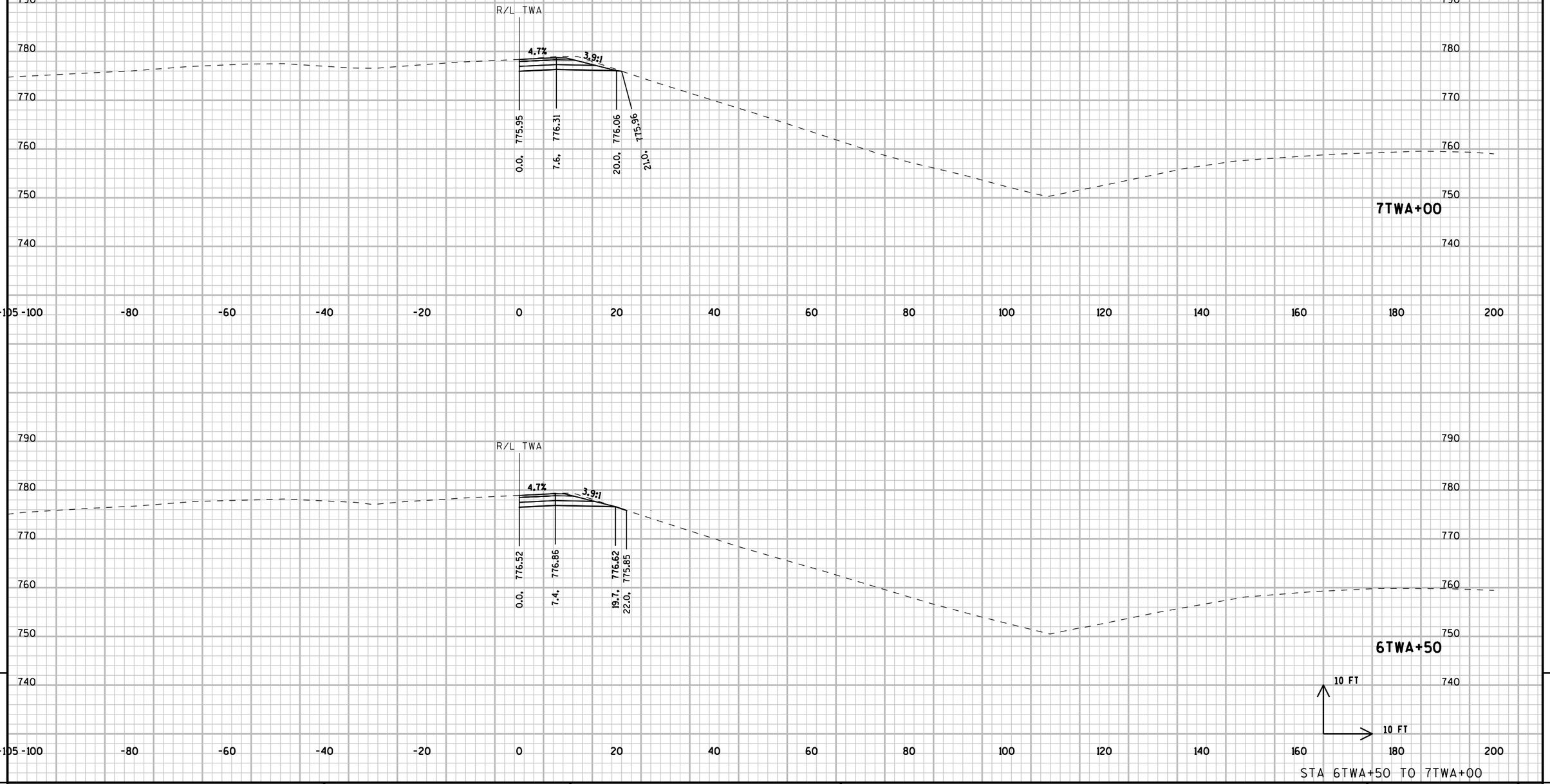
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1161	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:21 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 6TWA+50 TO 7TWA+00

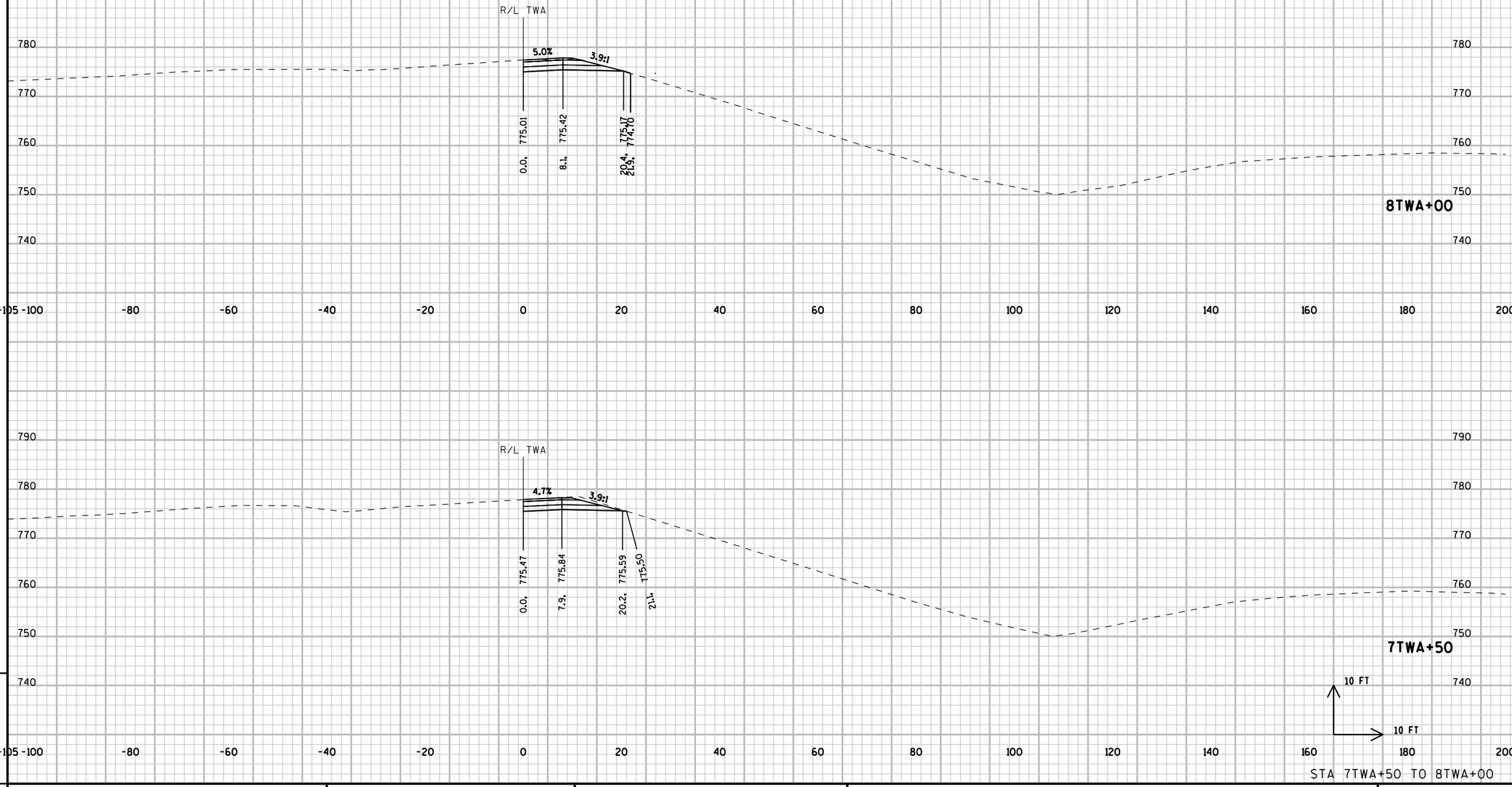
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1162	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:21 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 7TWA+50 TO 8TWA+00

9

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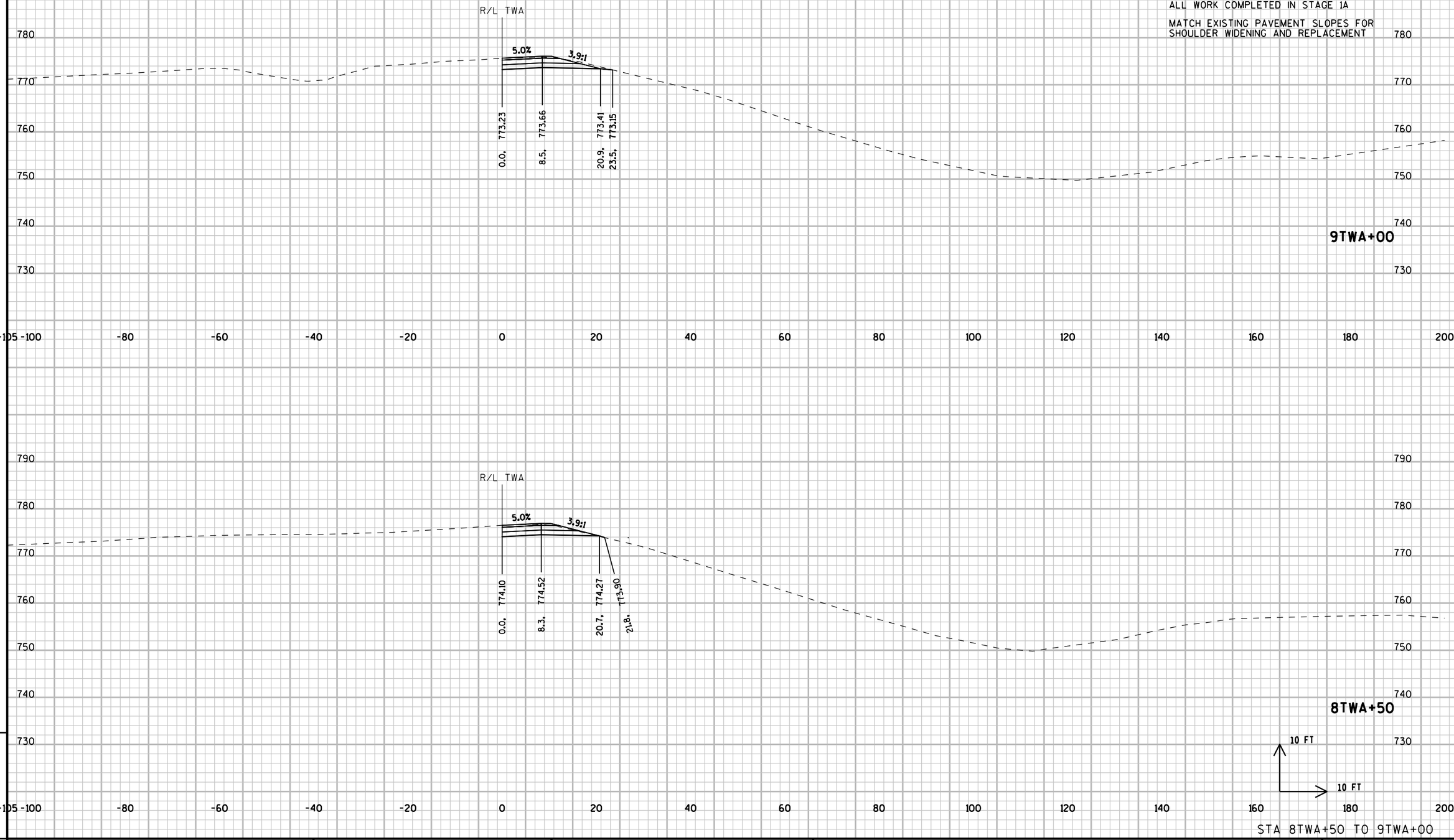
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:22 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 8TWA+50 TO 9TWA+00

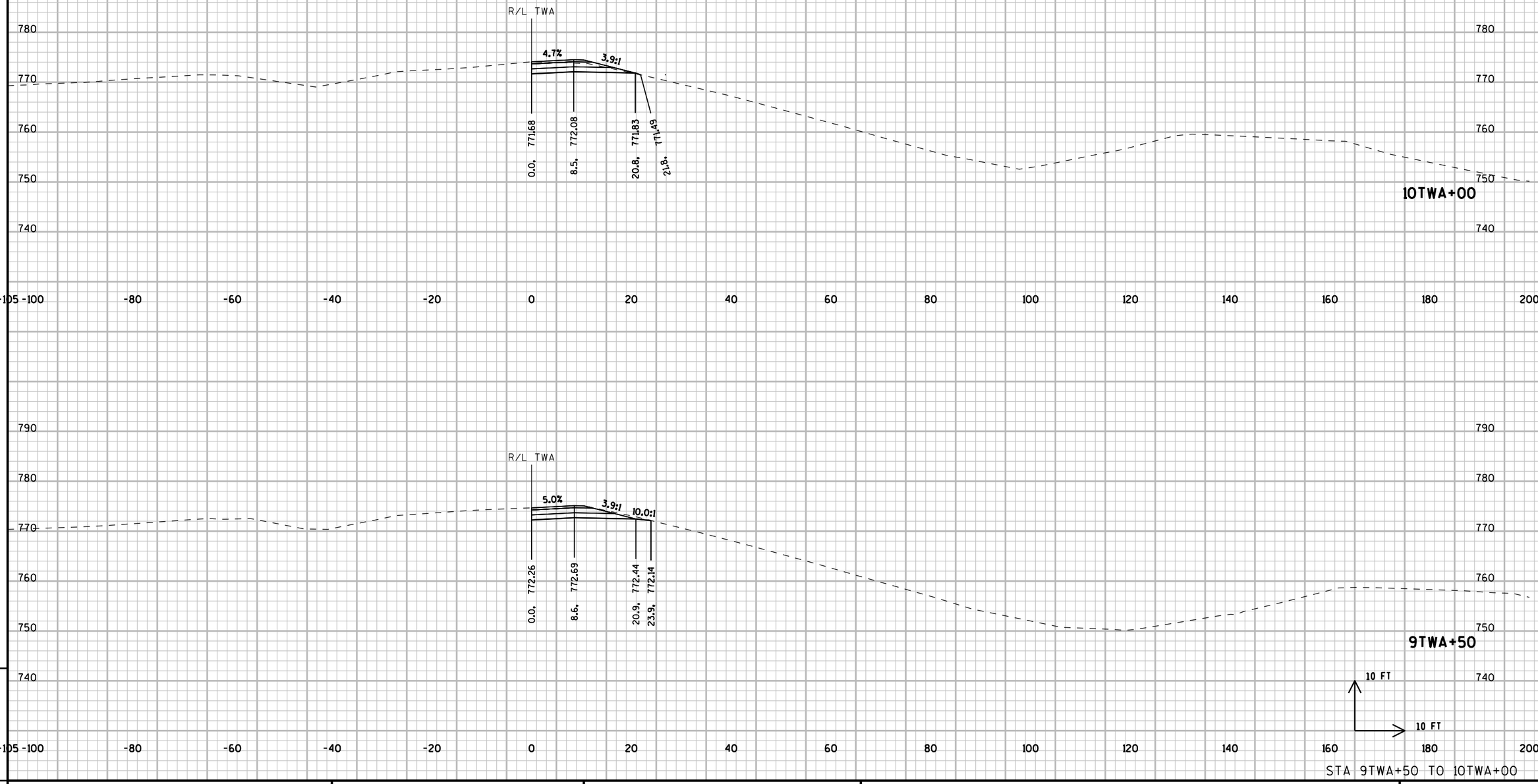
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1164	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:22 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 9TWA+50 TO 10TWA+00

9 9

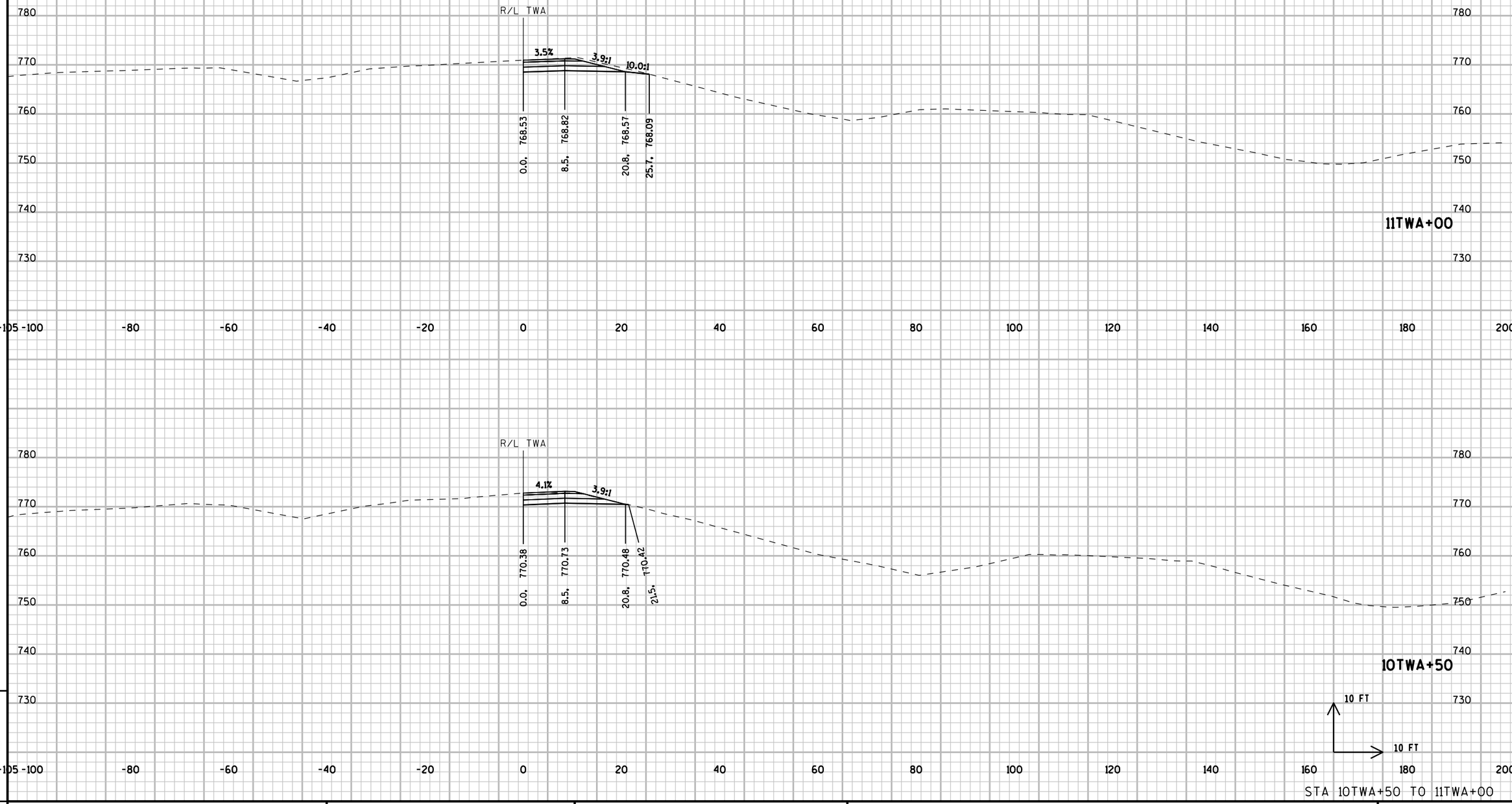
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1165	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:22 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 10TWA+50 TO 11TWA+00

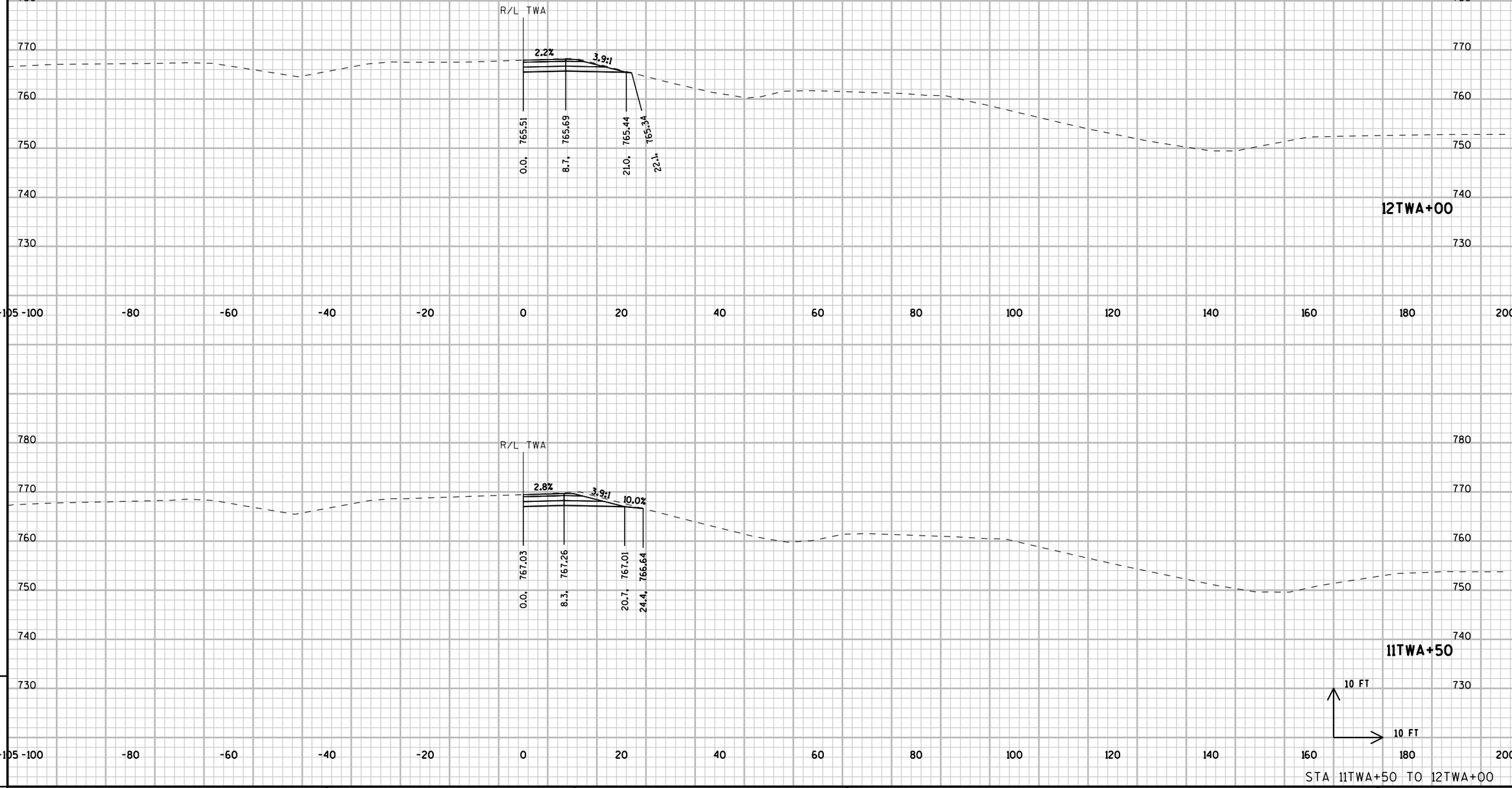
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:23 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 11TWA+50 TO 12TWA+00

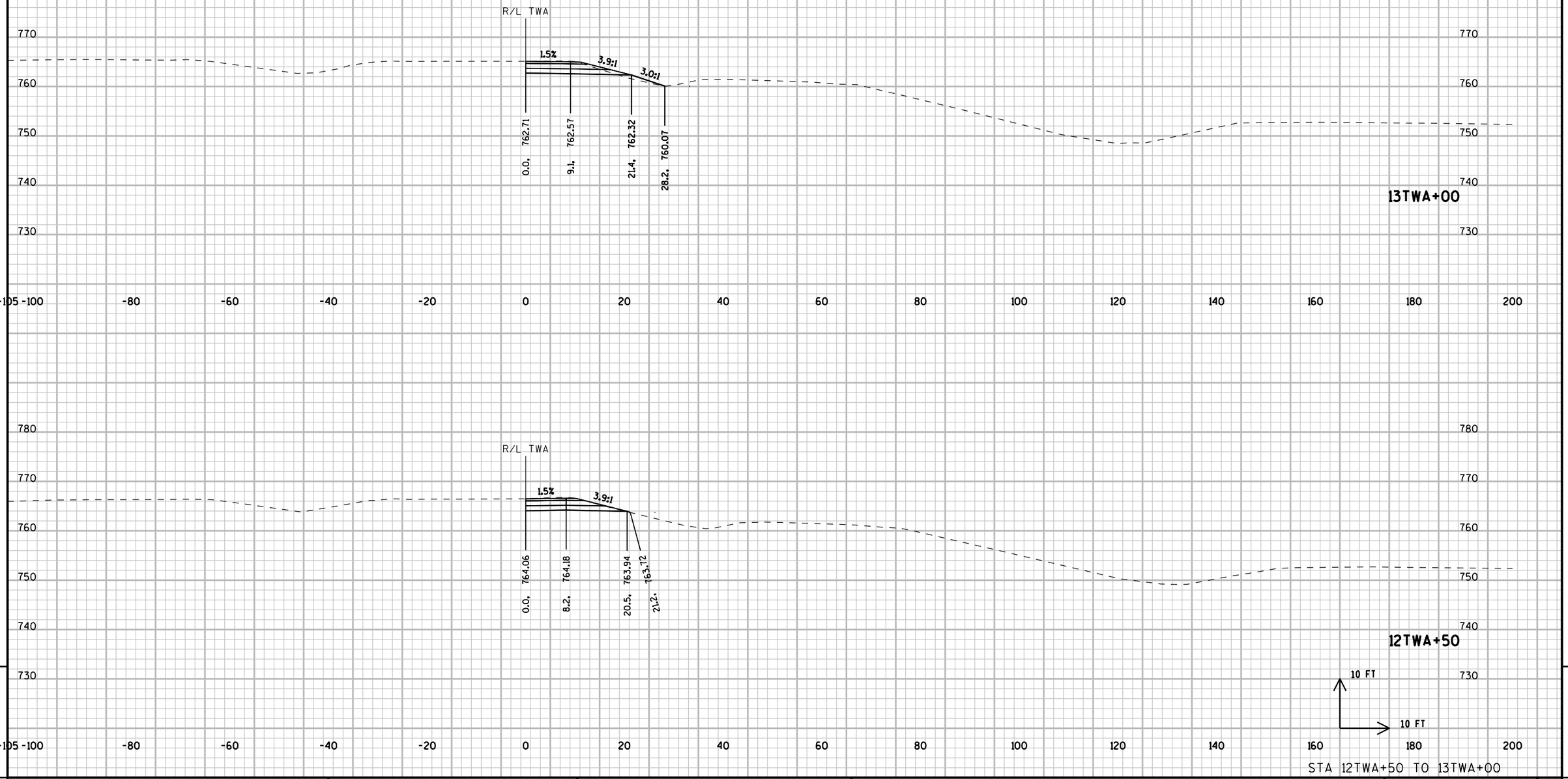
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING A	SHEET 1167	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:23 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 12TWA+50 TO 13TWA+00

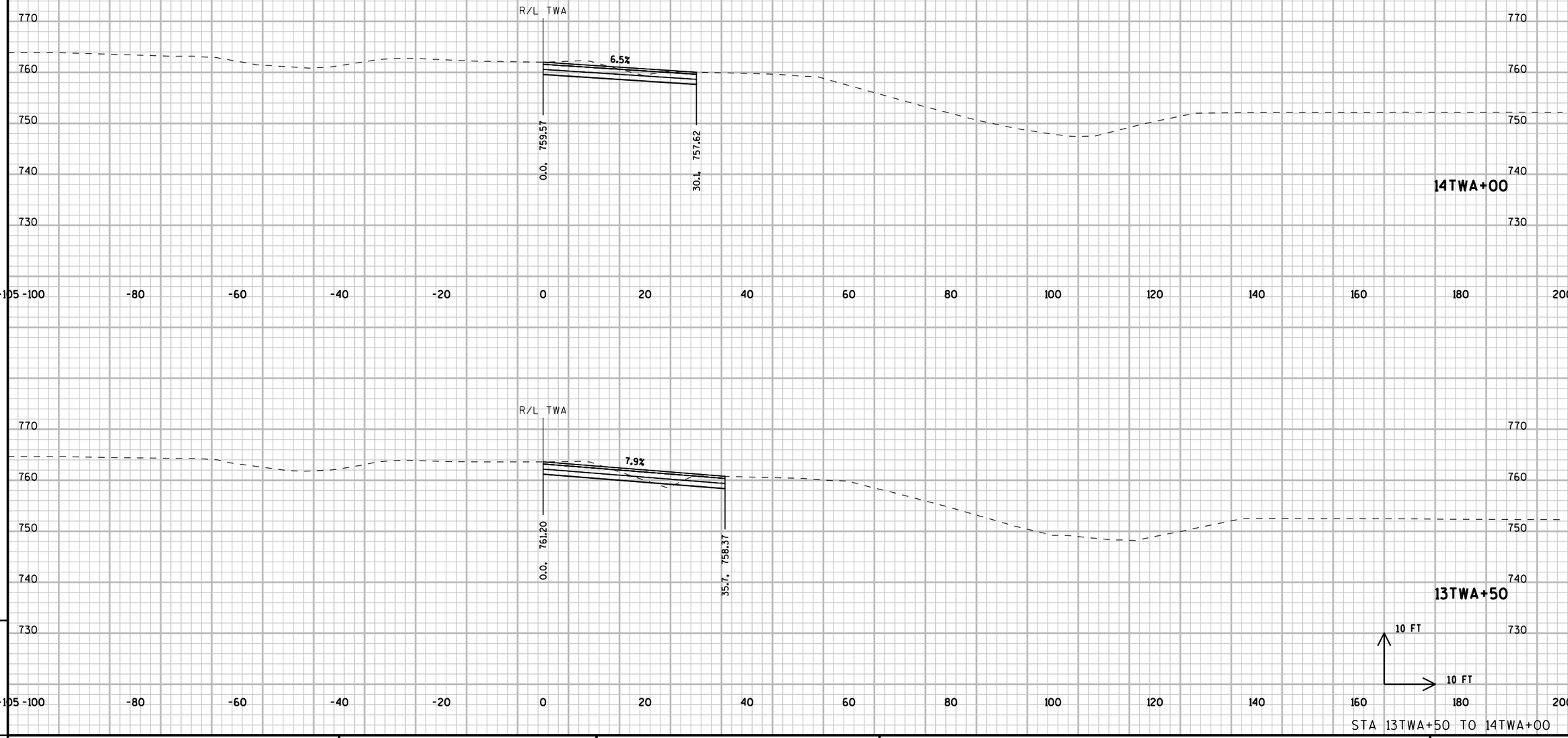
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:24 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 13TWA+50 TO 14TWA+00

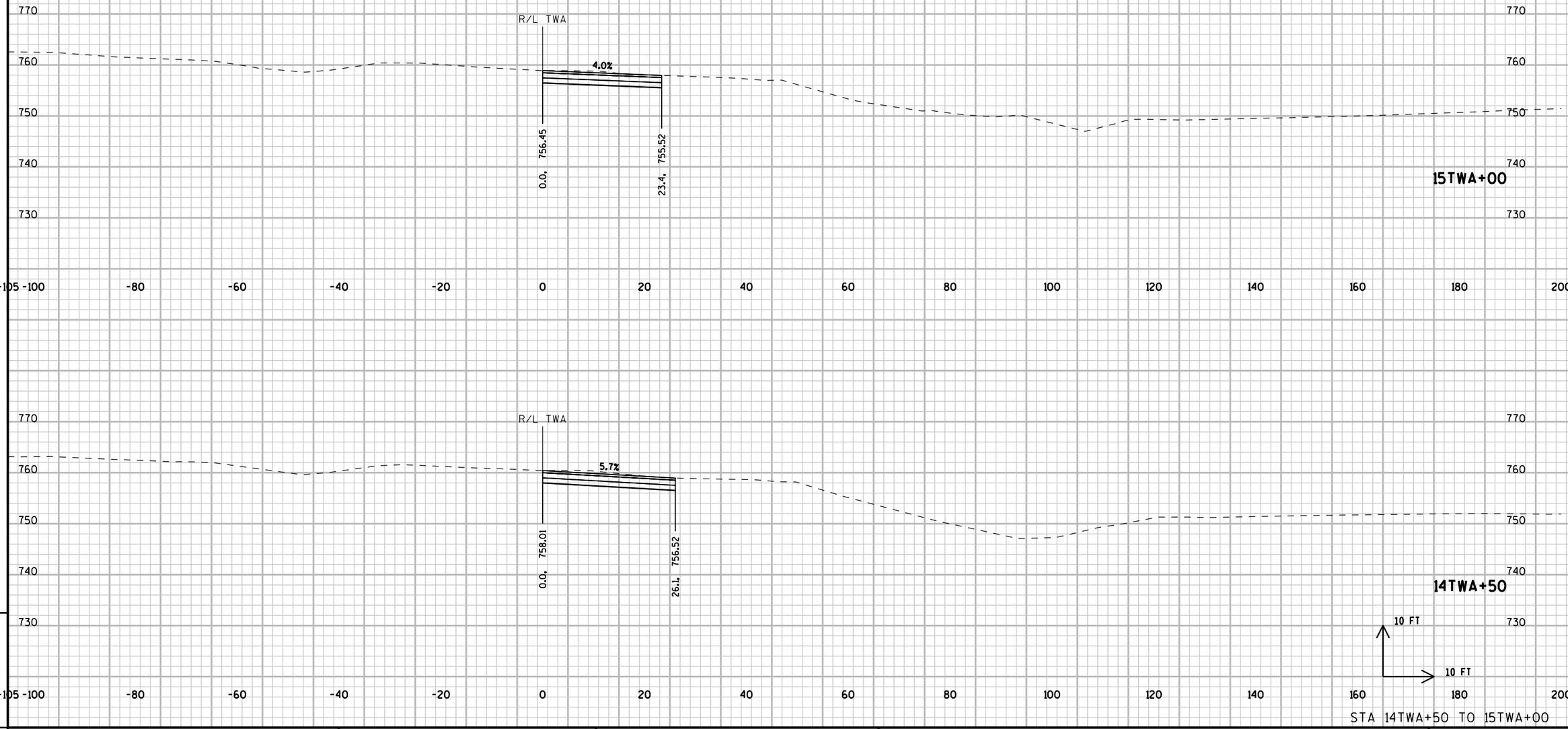
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:24 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



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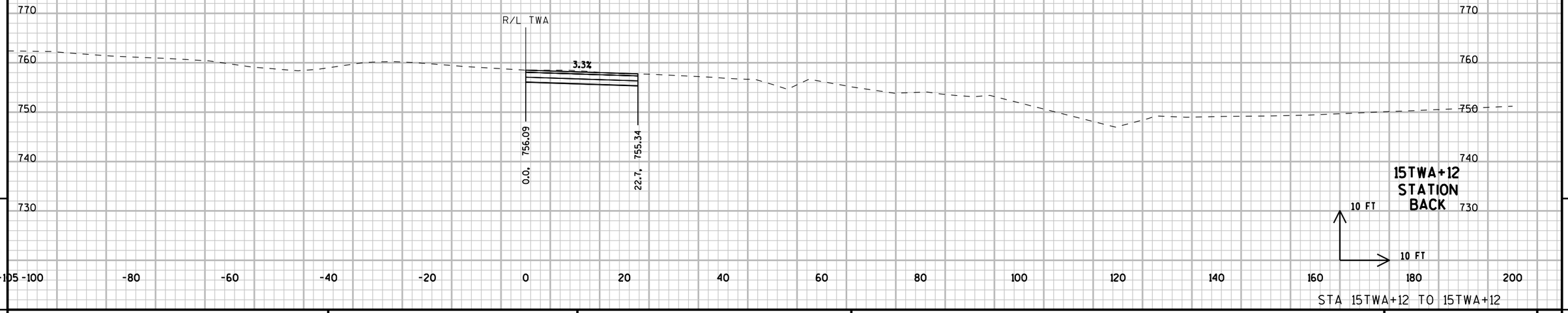
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1A

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



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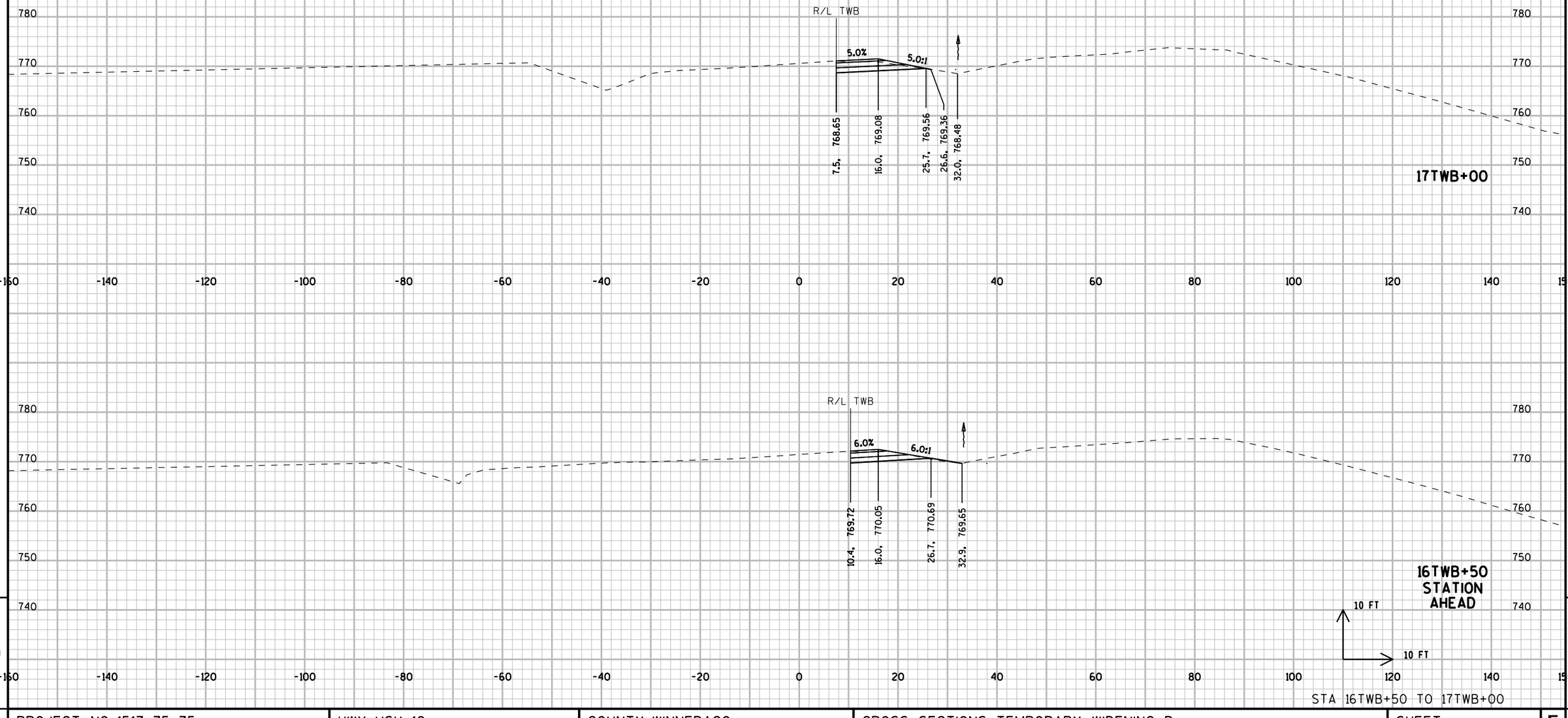
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090220_xs_TWA.dgn PLOT DATE : 1/27/2015 9:47:25 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 16TWB+50 TO 17TWB+00

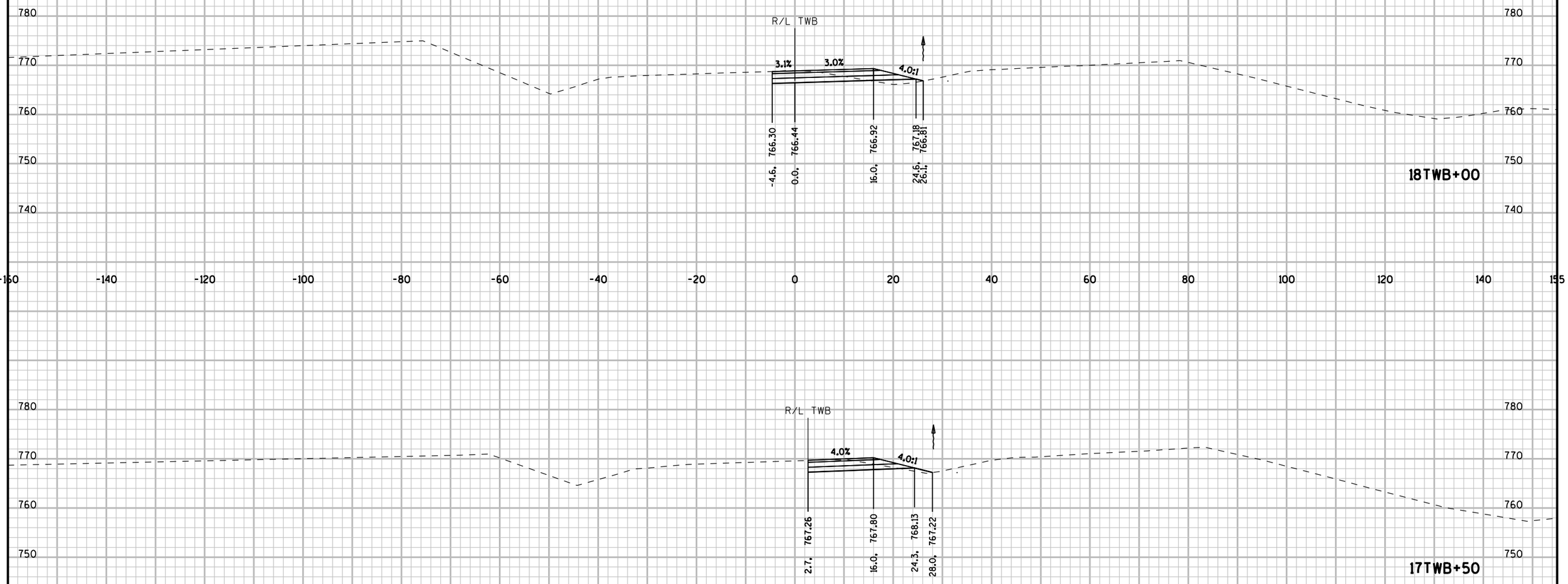
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1172	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090221_xs_TWB.dgn PLOT DATE : 1/26/2015 9:19:23 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 17TWB+50 TO 18TWB+00

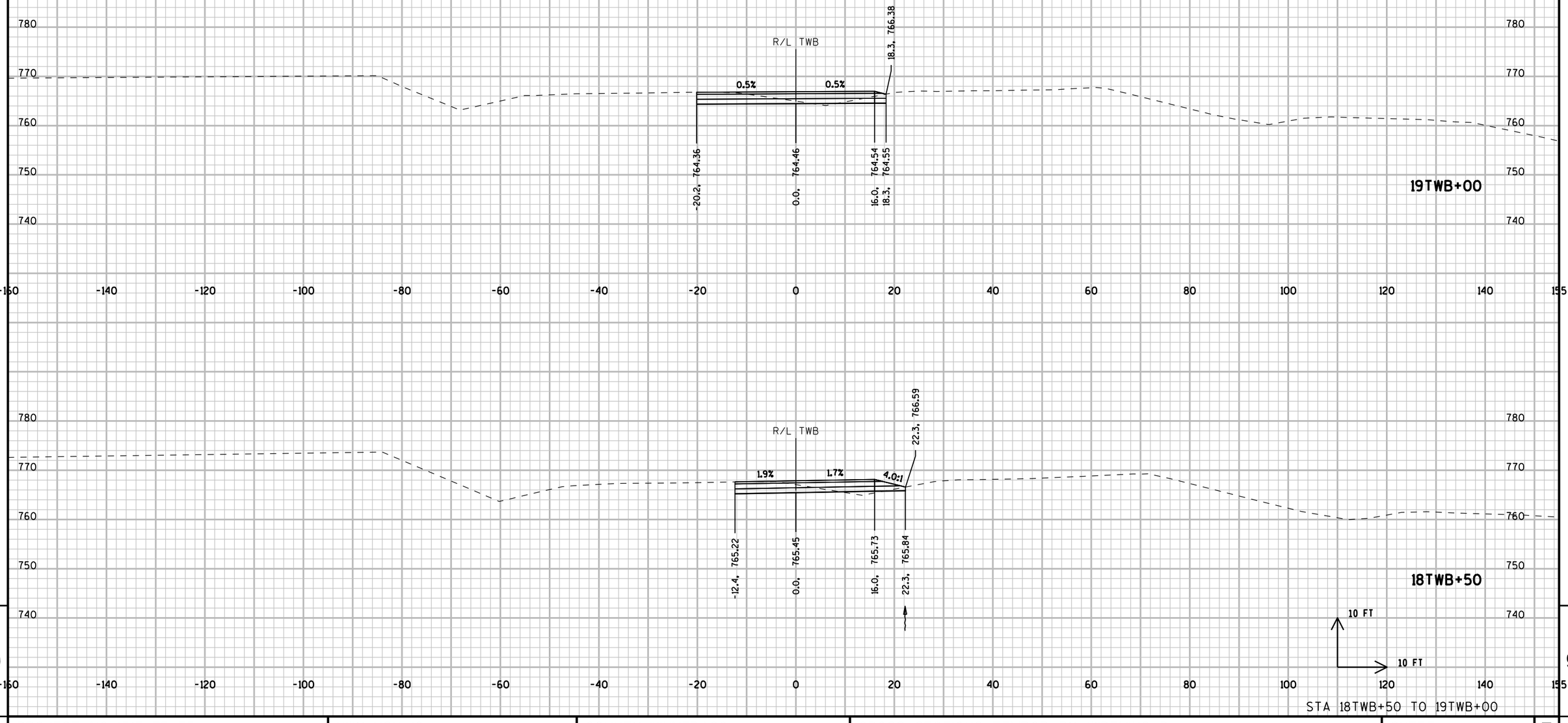
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1173	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090221_xs_TWB.dgn PLOT DATE : 1/26/2015 9:19:23 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 18TWB+50 TO 19TWB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1174	E

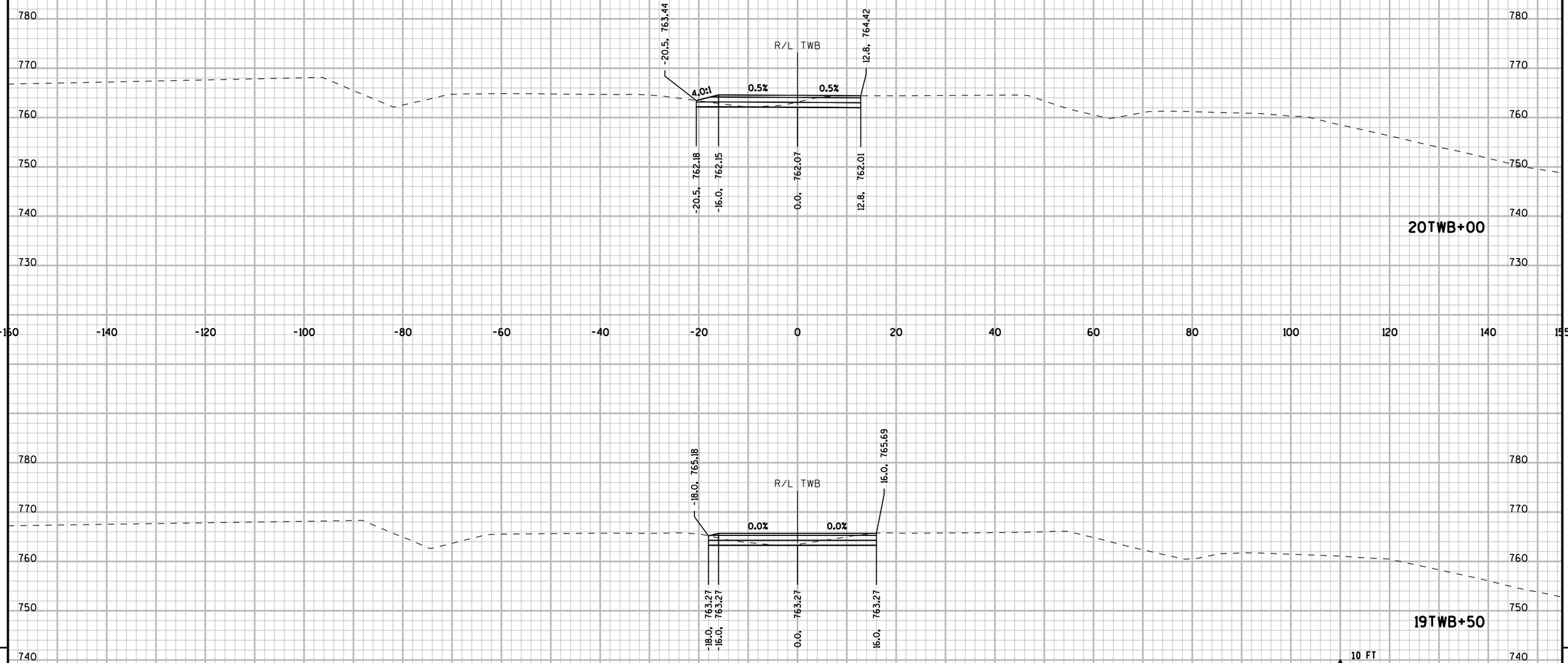
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FILE NAME : I:\56537\1517-75-75\t1\cds\090221_xs_TWB.dgn PLOT DATE : 1/26/2015 9:19:23 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 19TWB+50 TO 20TWB+00

9

9

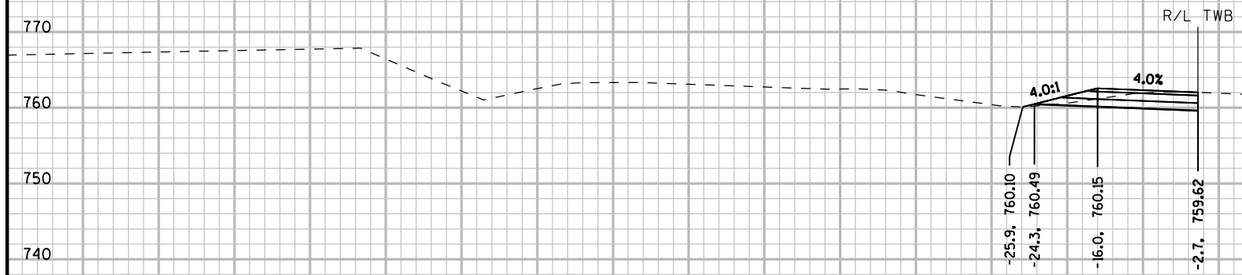
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1175	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090221_xs_TWB.dgn PLOT DATE : 1/26/2015 9:19:24 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

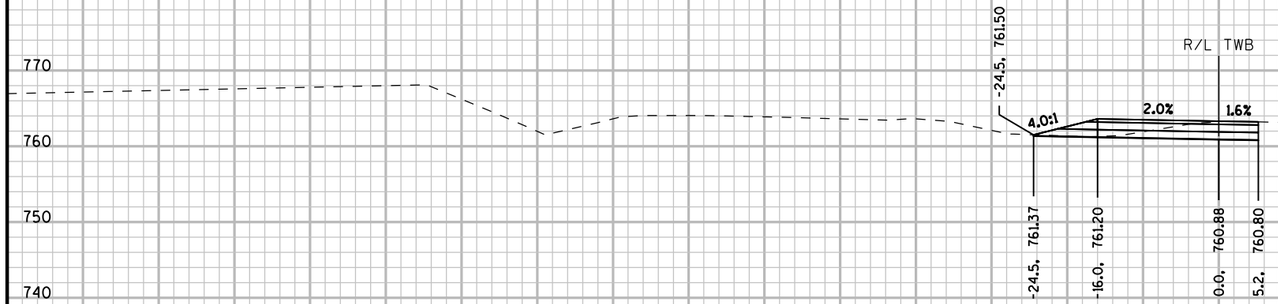
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

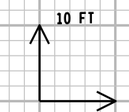
MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



21TWB+00



20TWB+50



STA 20TWB+50 TO 21TWB+00

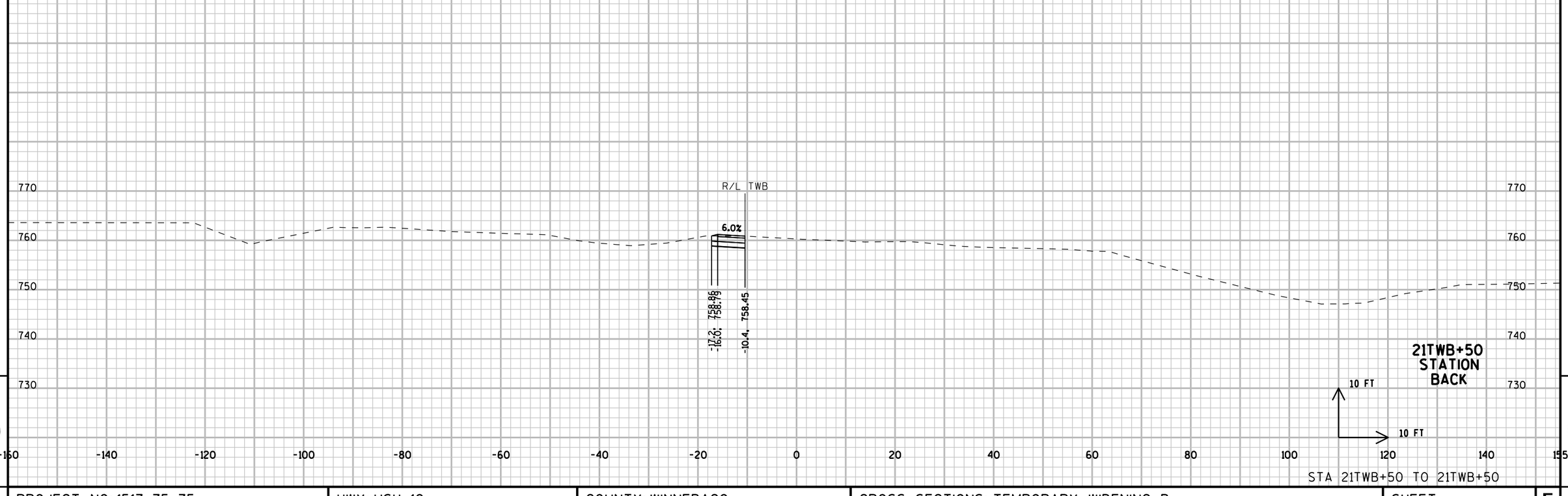
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1176	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090221_xs_TWB.dgn PLOT DATE : 1/26/2015 9:19:24 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 21TWB+50 TO 21TWB+50

9

9

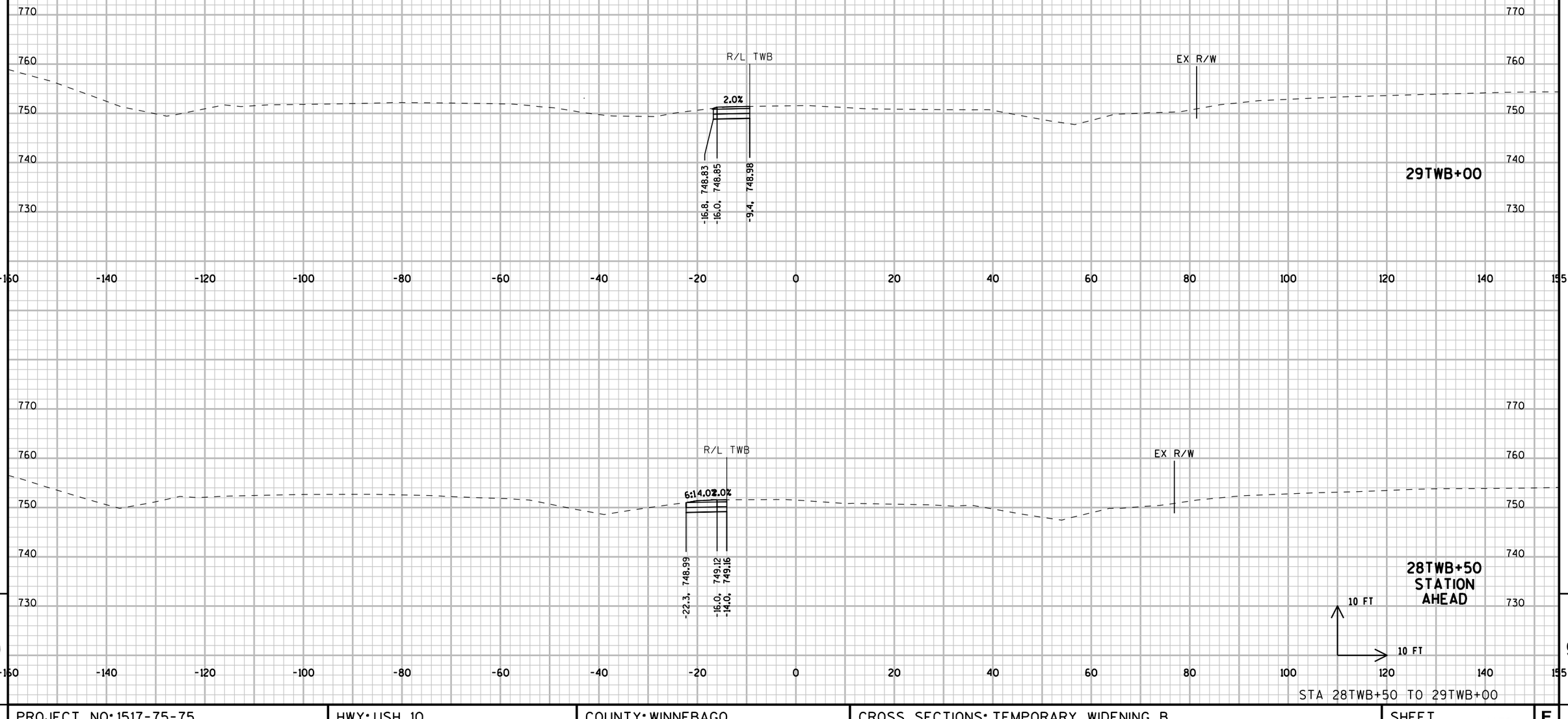
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1177	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090221_xs_TWB.dgn PLOT DATE : 1/26/2015 9:19:24 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



9

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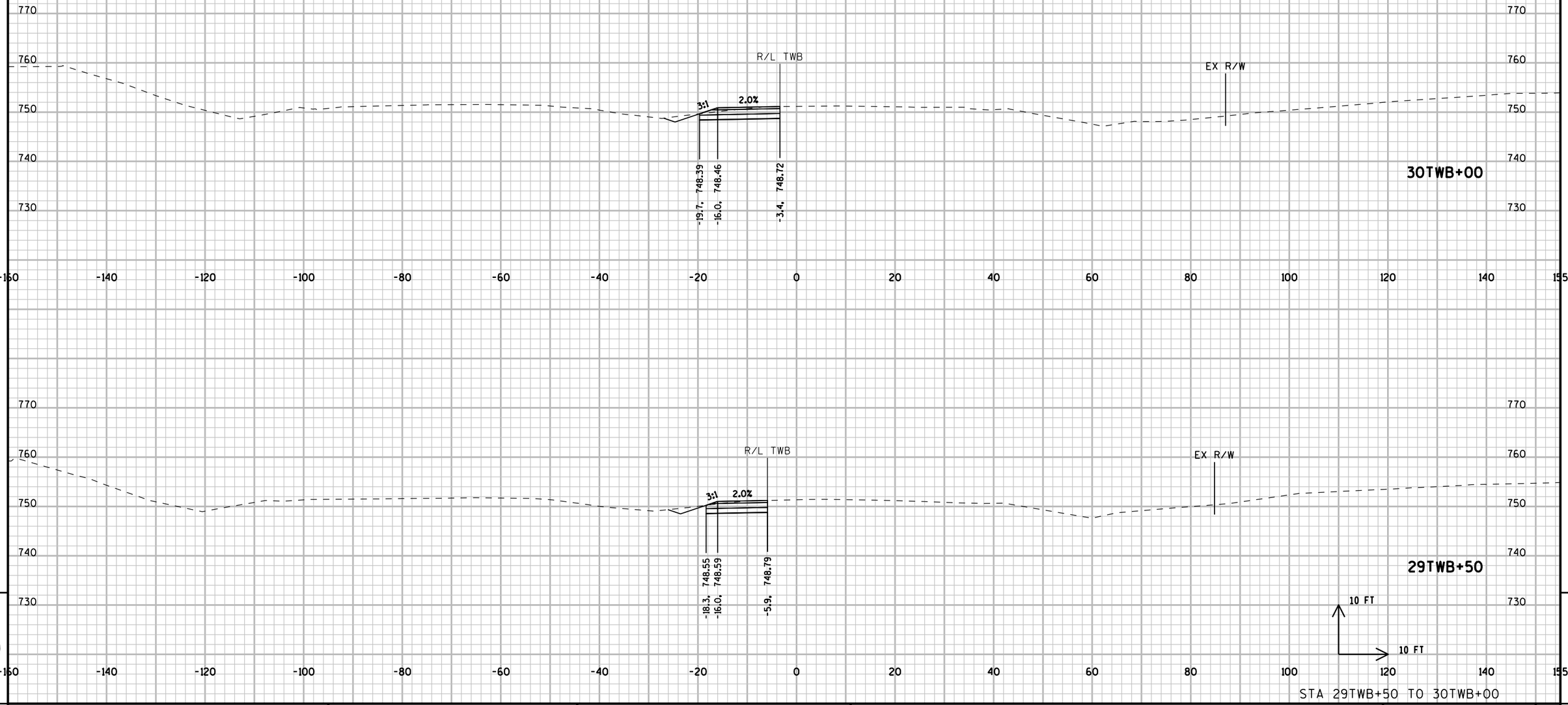
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FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:27 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 29TWB+50 TO 30TWB+00

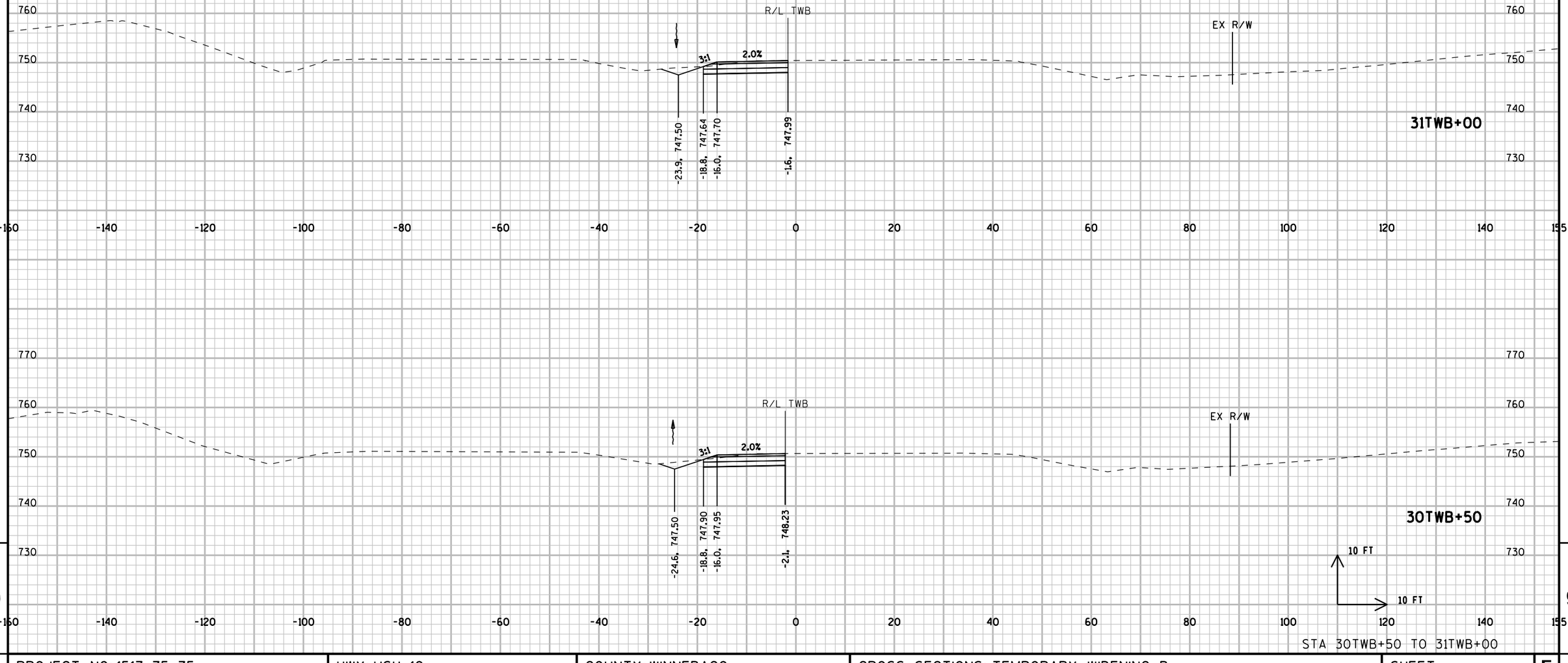
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1179	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:27 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 30TWB+50 TO 31TWB+00

9

9

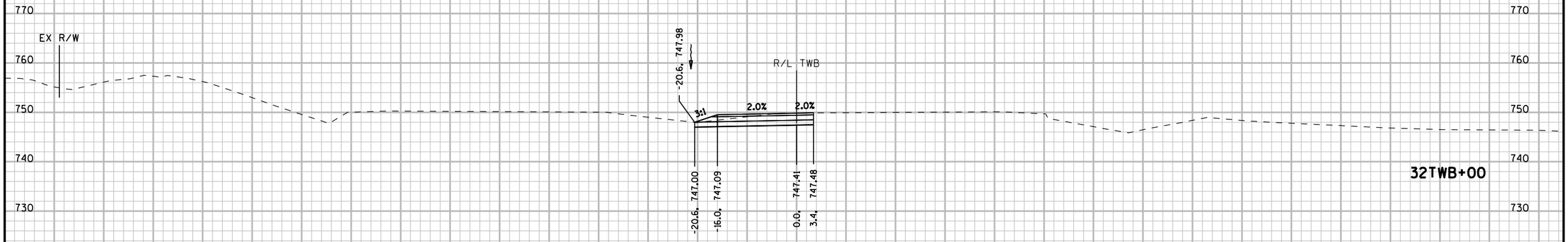
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1180	E

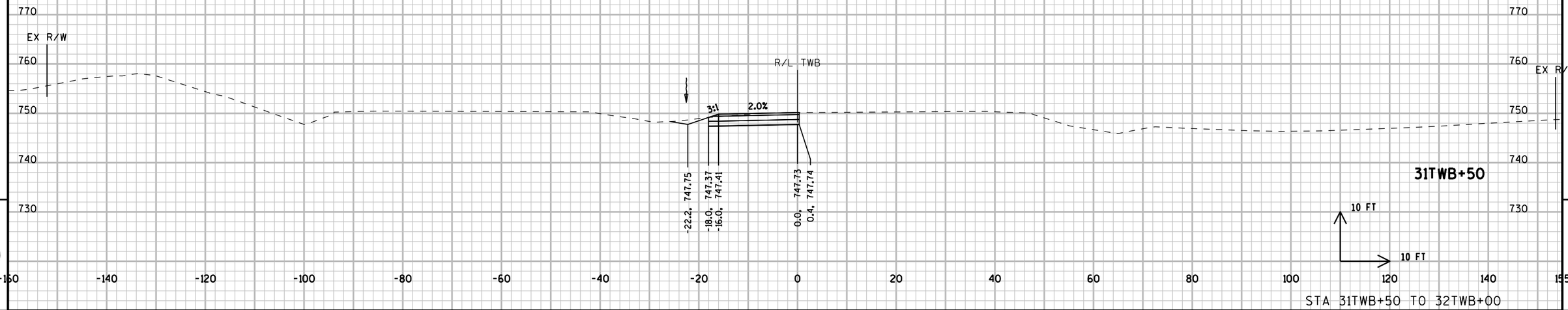
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT





STA 31TWB+50 TO 32TWB+00

9

9

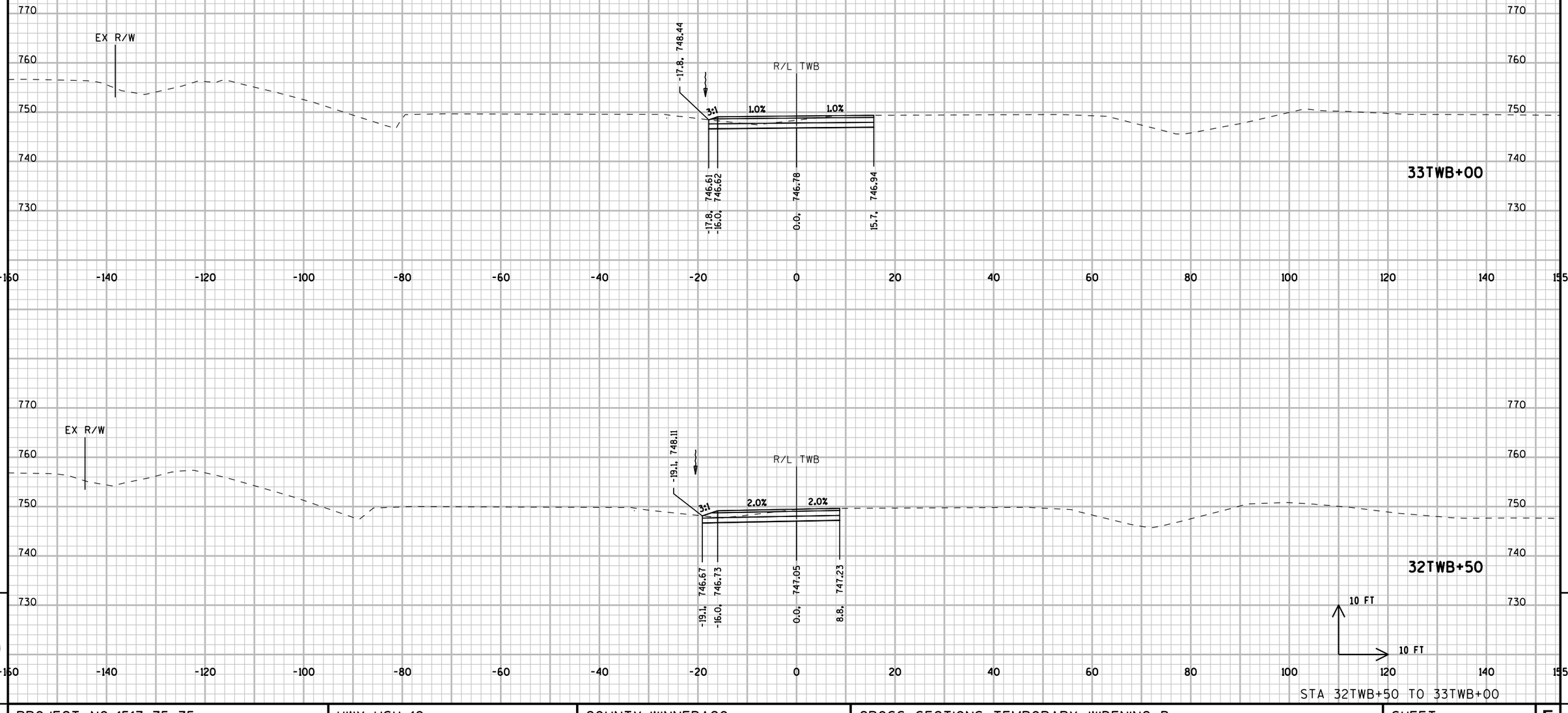
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1181	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:28 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



9

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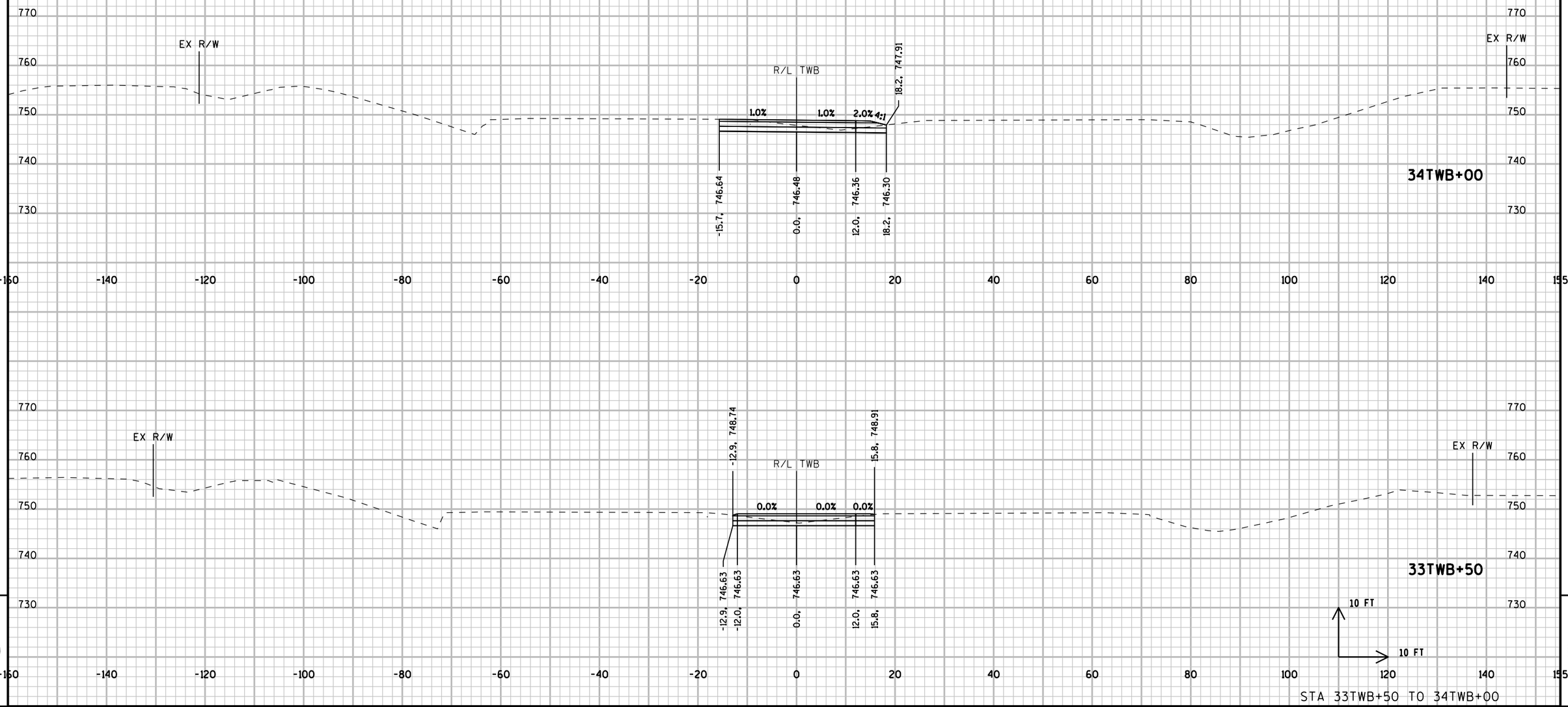
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1182	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:29 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 33TWB+50 TO 34TWB+00

9

9

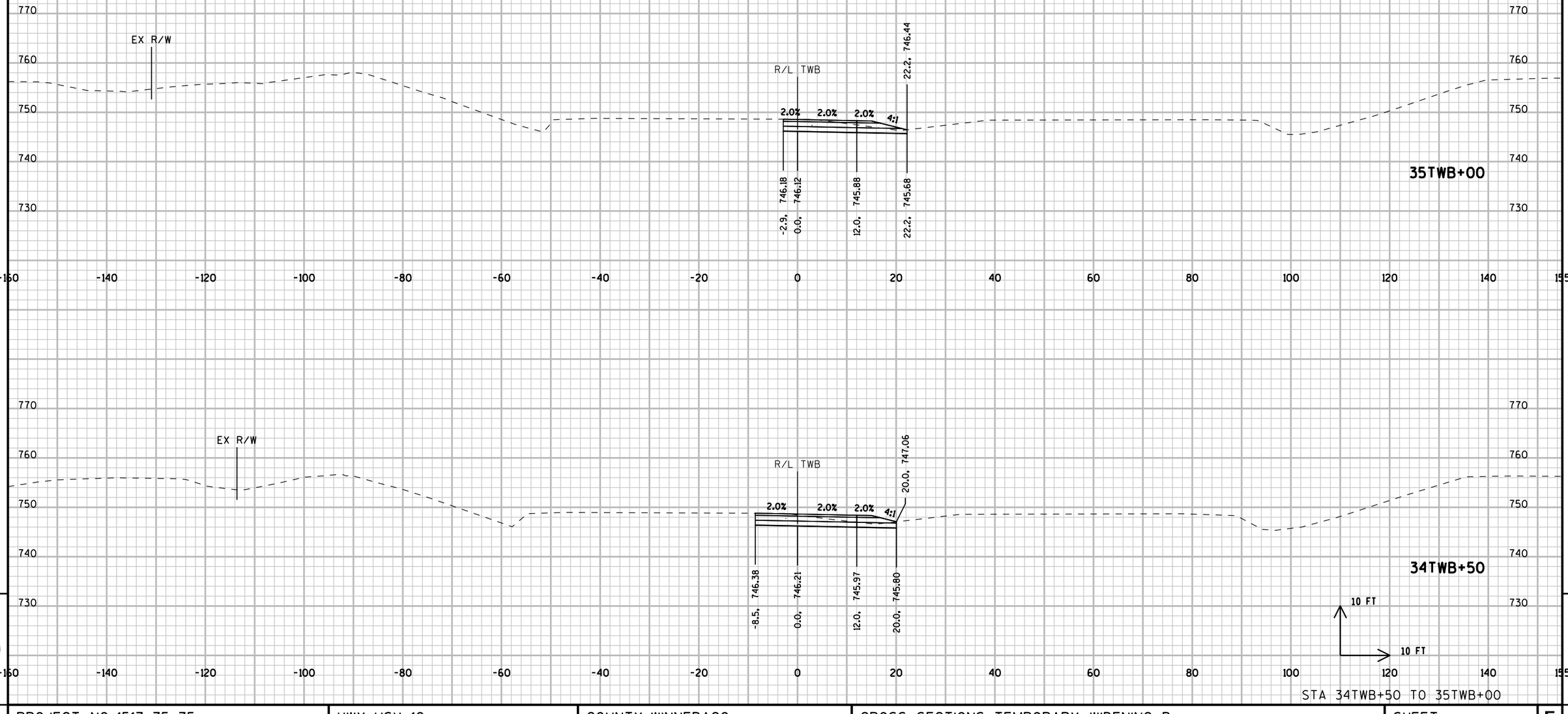
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1183	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:29 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 34TWB+50 TO 35TWB+00

9

9

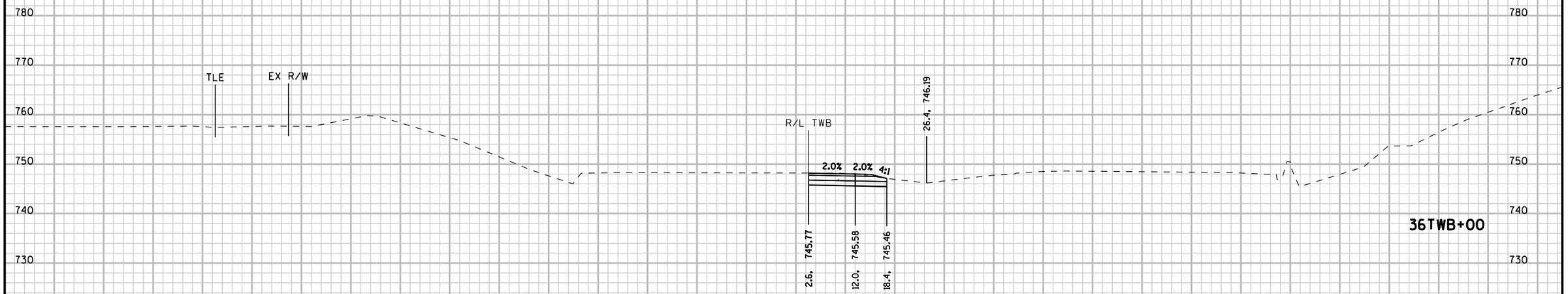
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1184	E

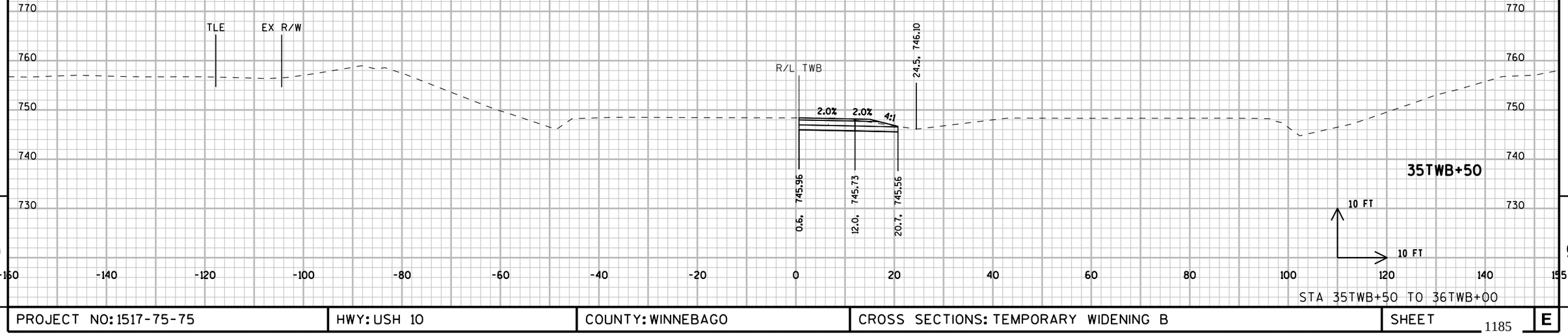
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT





STA 35TWB+50 TO 36TWB+00

9

9

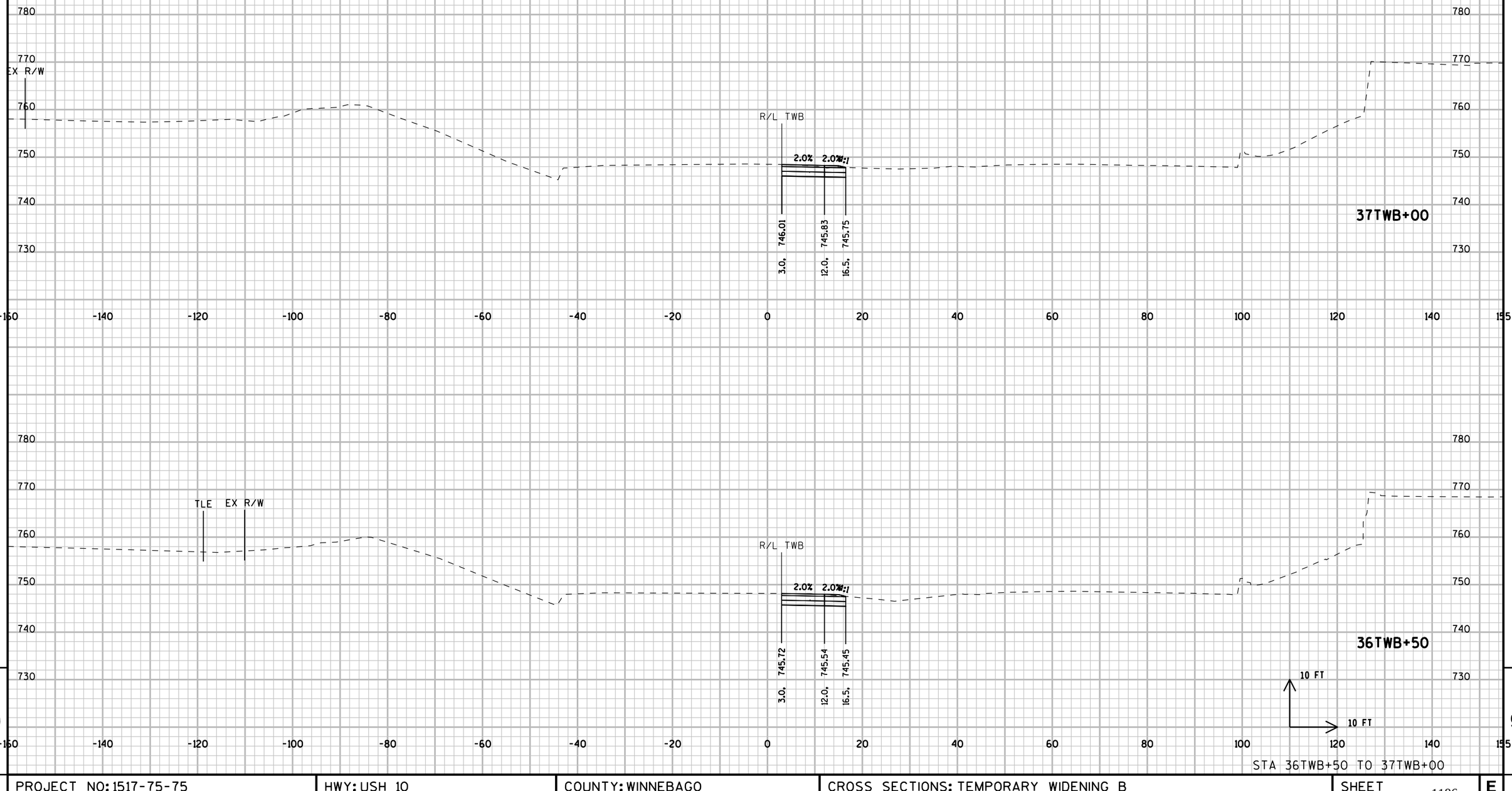
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1185	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:30 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 36TWB+50 TO 37TWB+00

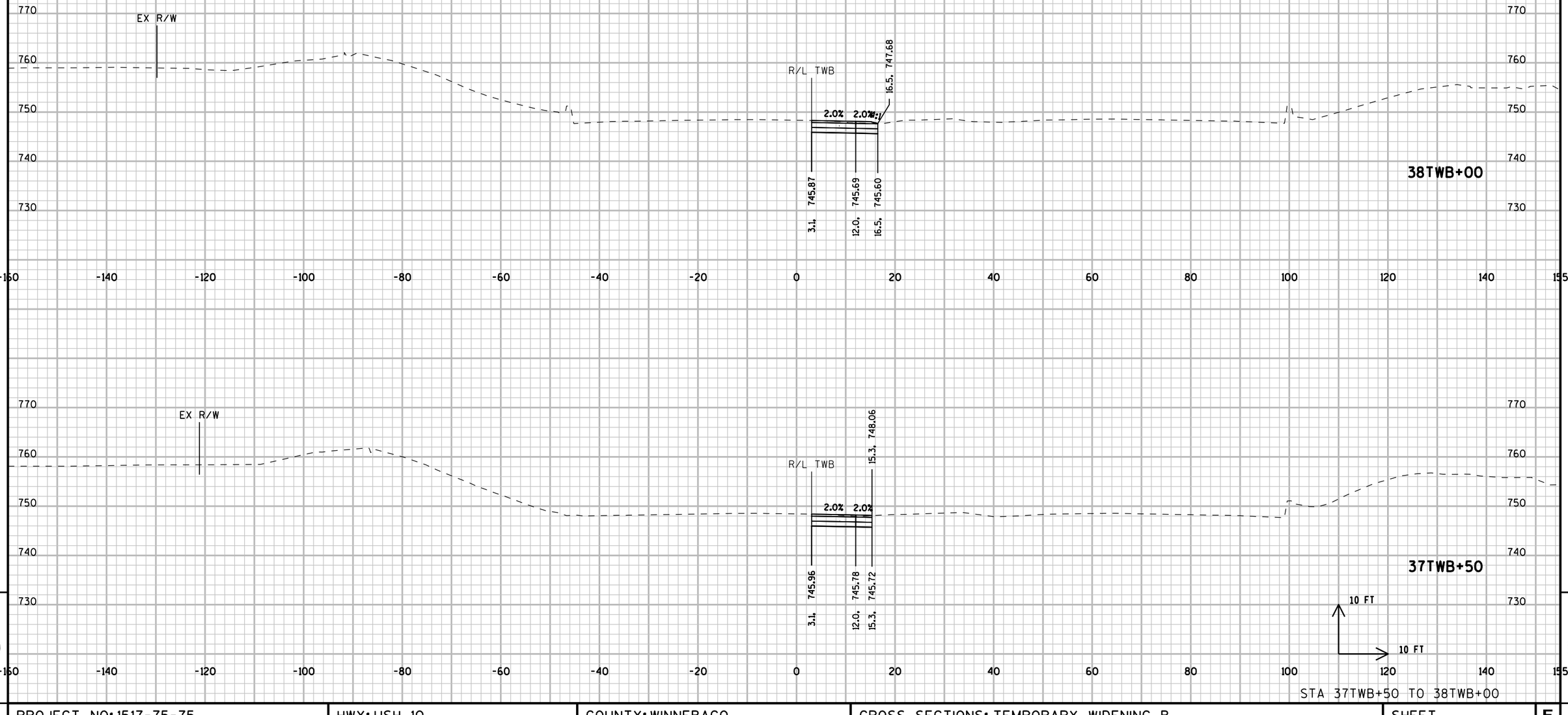
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1186	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:30 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 37TWB+50 TO 38TWB+00

9

9

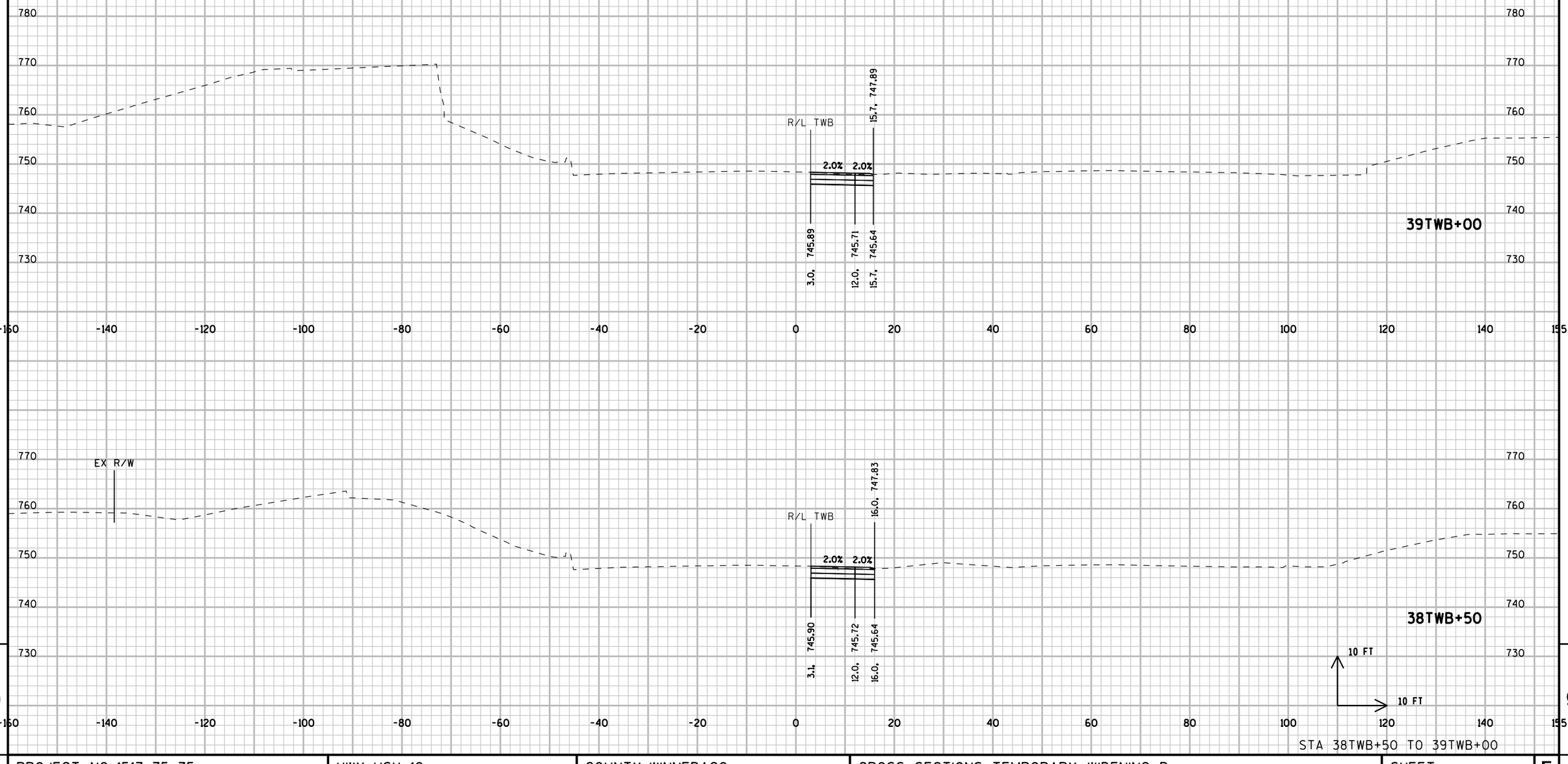
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1187	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:31 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 38TWB+50 TO 39TWB+00

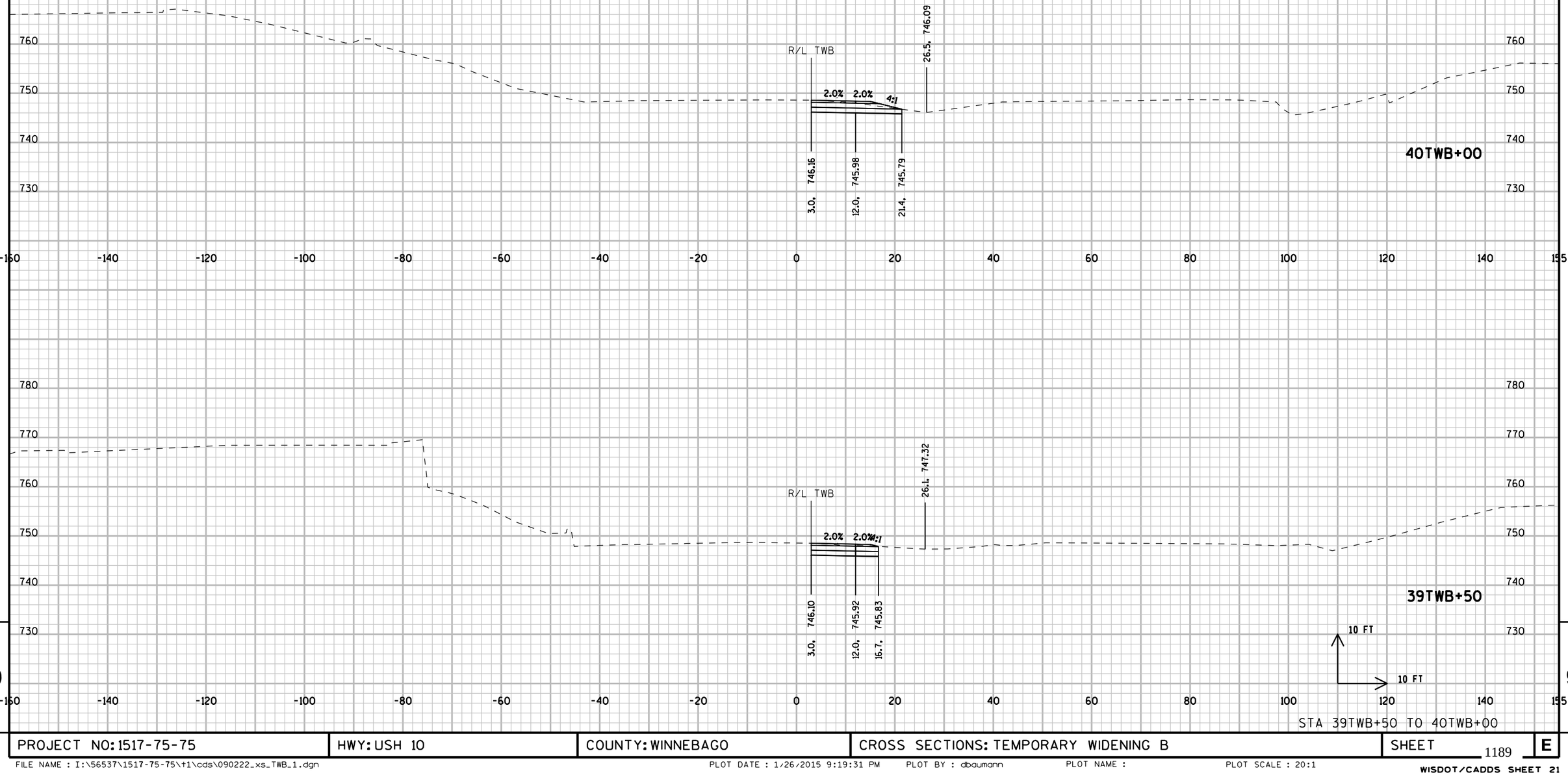
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1188	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:31 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 39TWB+50 TO 40TWB+00

9

9

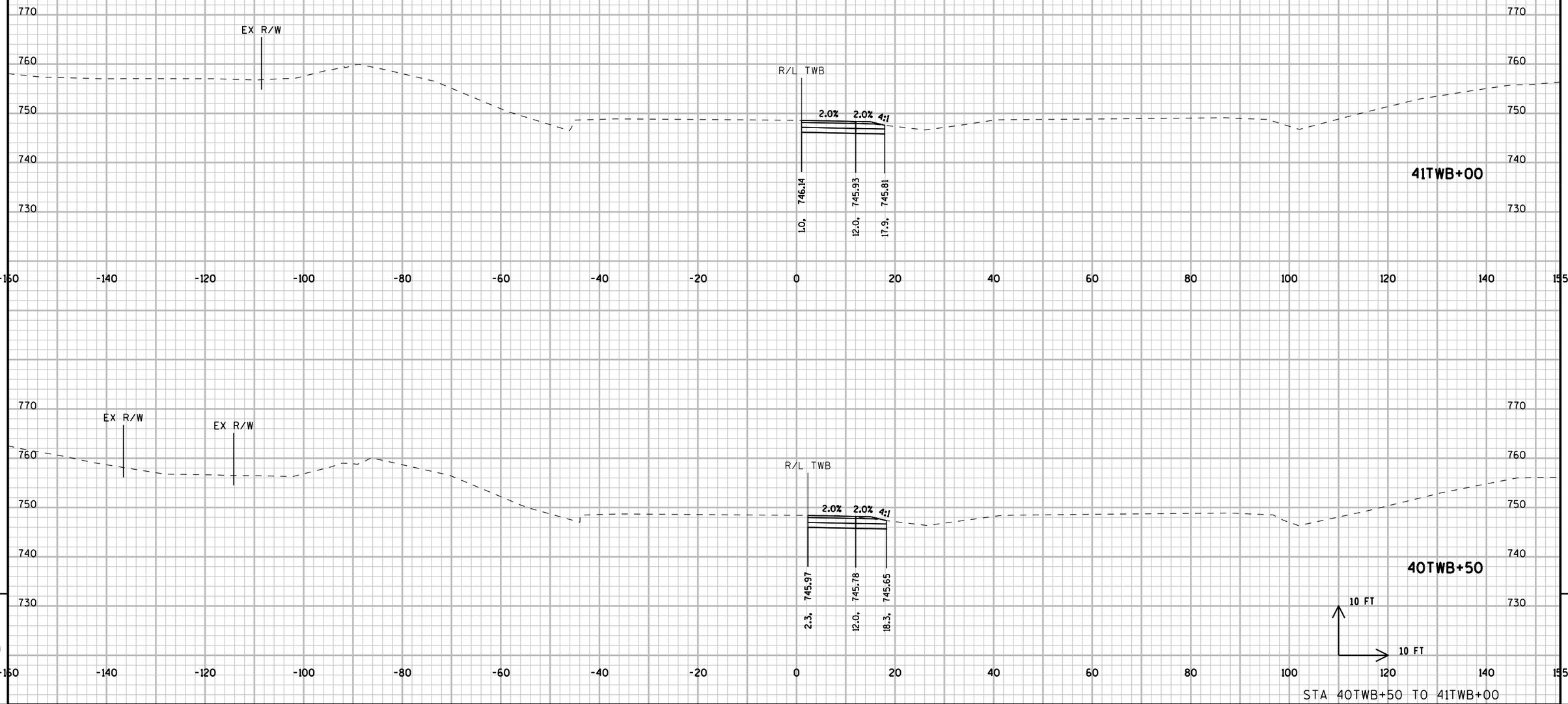
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1189	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:31 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 40TWB+50 TO 41TWB+00

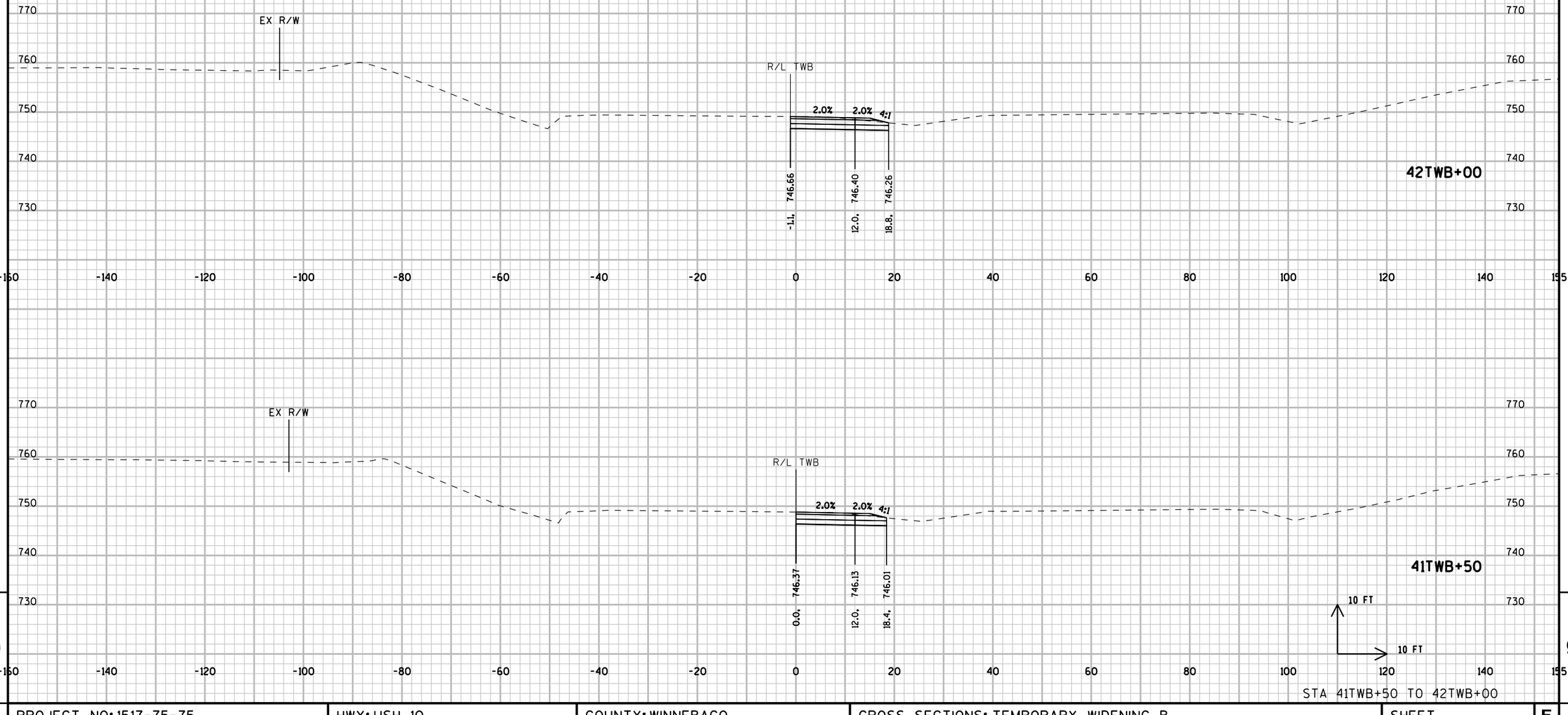
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1190	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:32 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 41TWB+50 TO 42TWB+00

9

9

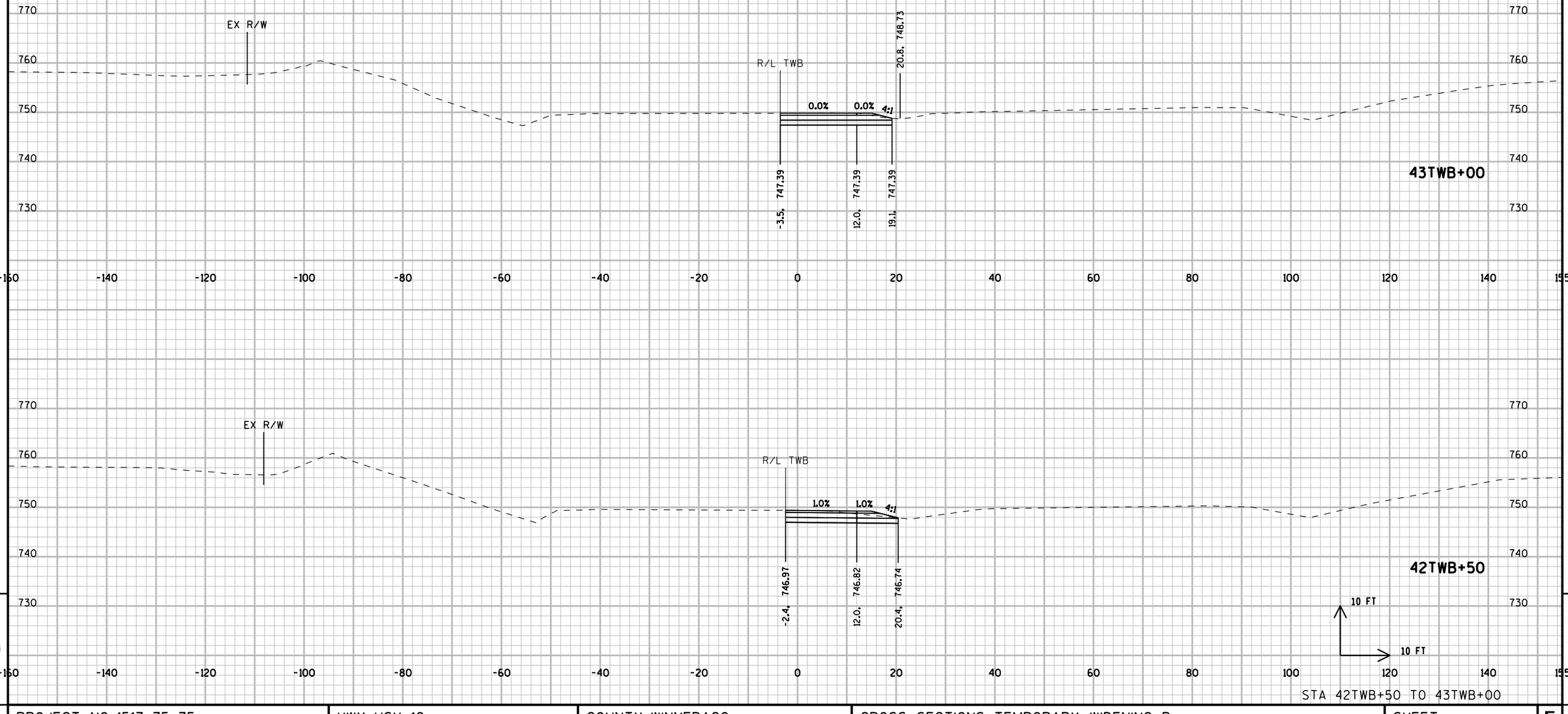
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1191	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:32 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT

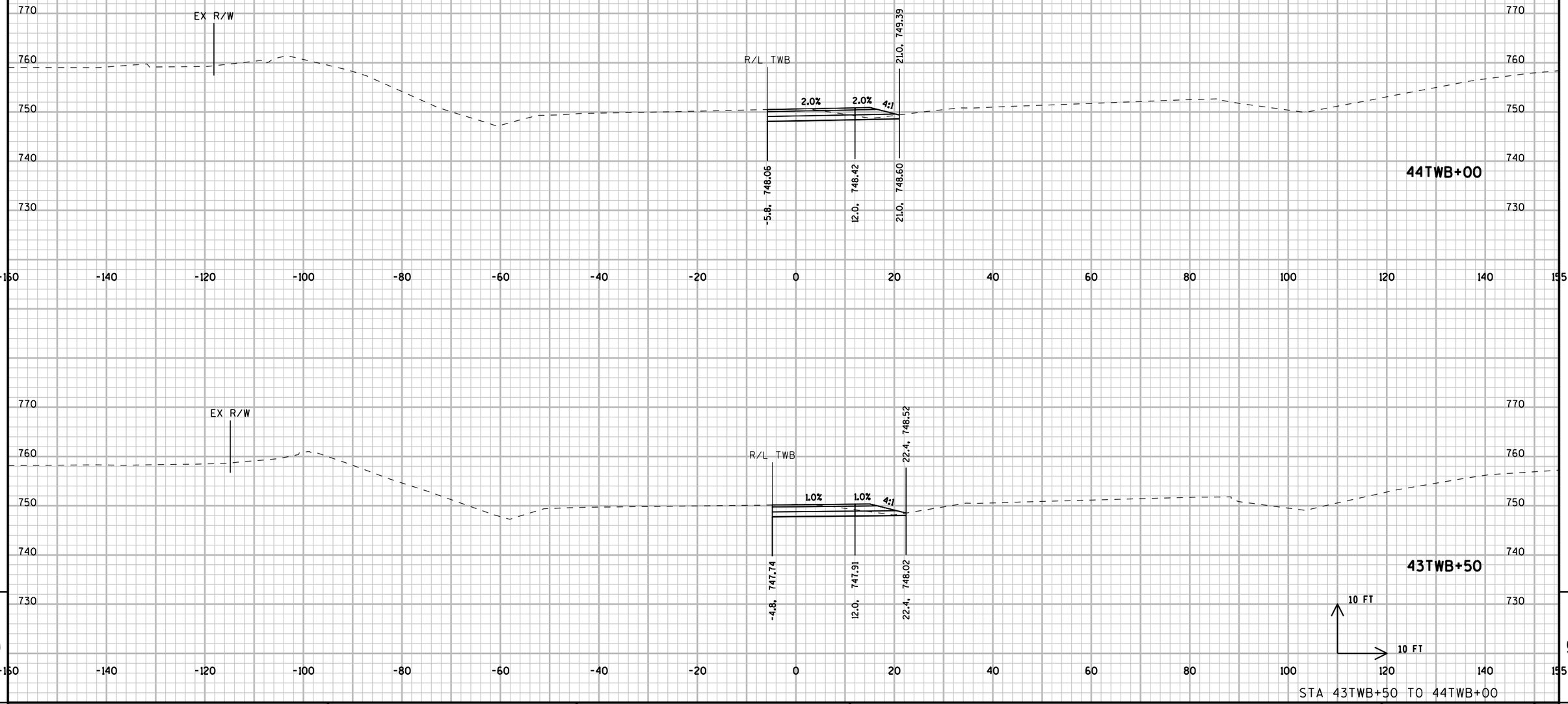


STA 42TWB+50 TO 43TWB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1192	E

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 43TWB+50 TO 44TWB+00

9

9

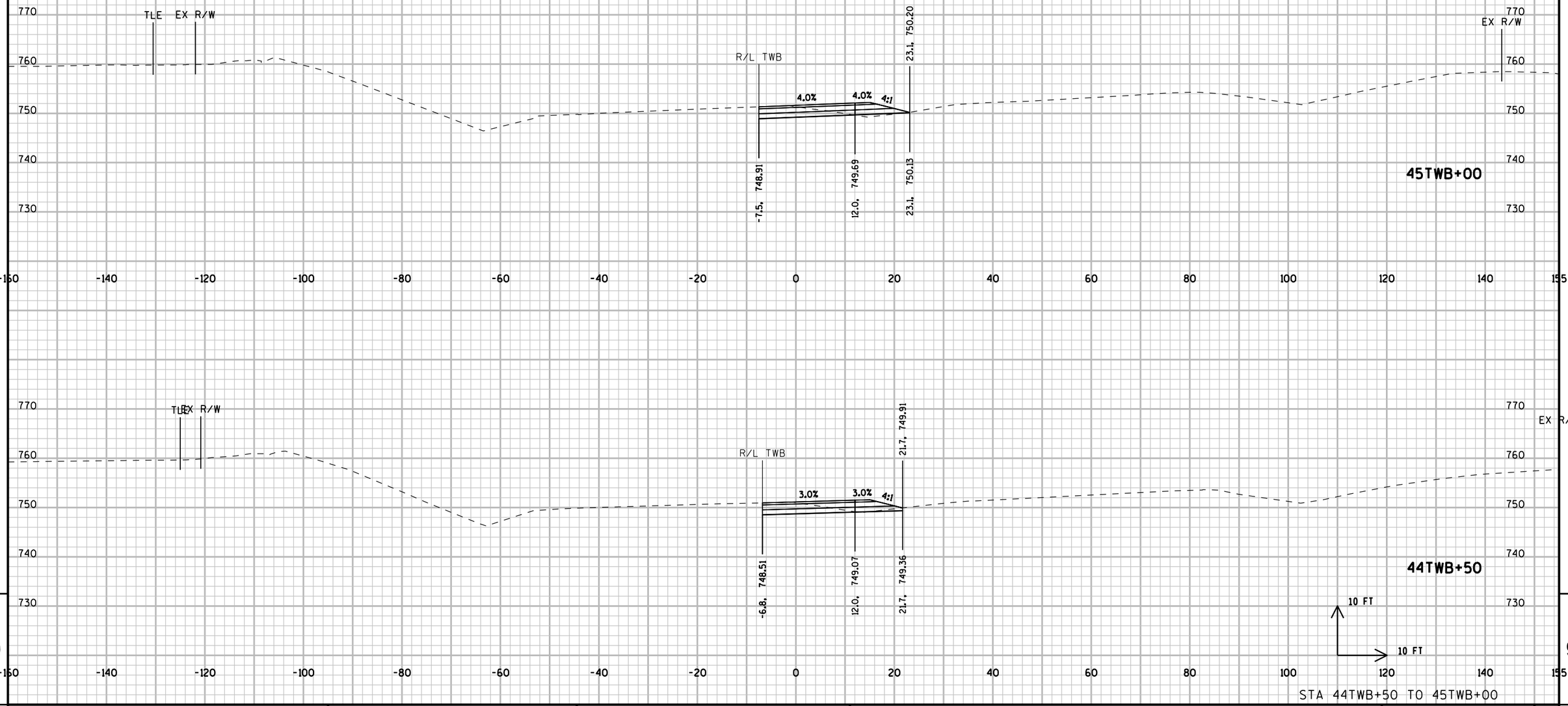
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1193	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:33 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT

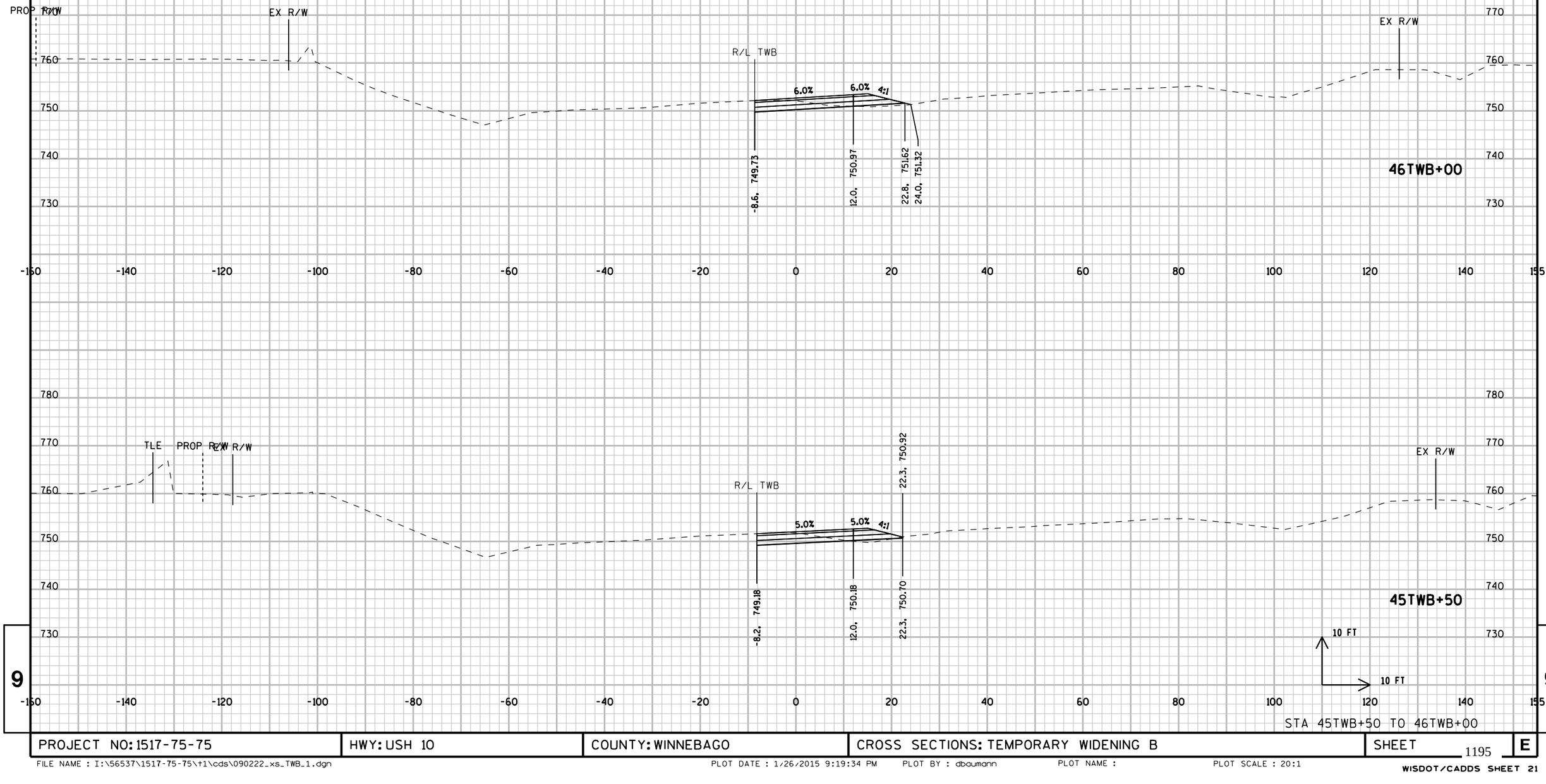


STA 44TWB+50 TO 45TWB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1194	E

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 45TWB+50 TO 46TWB+00

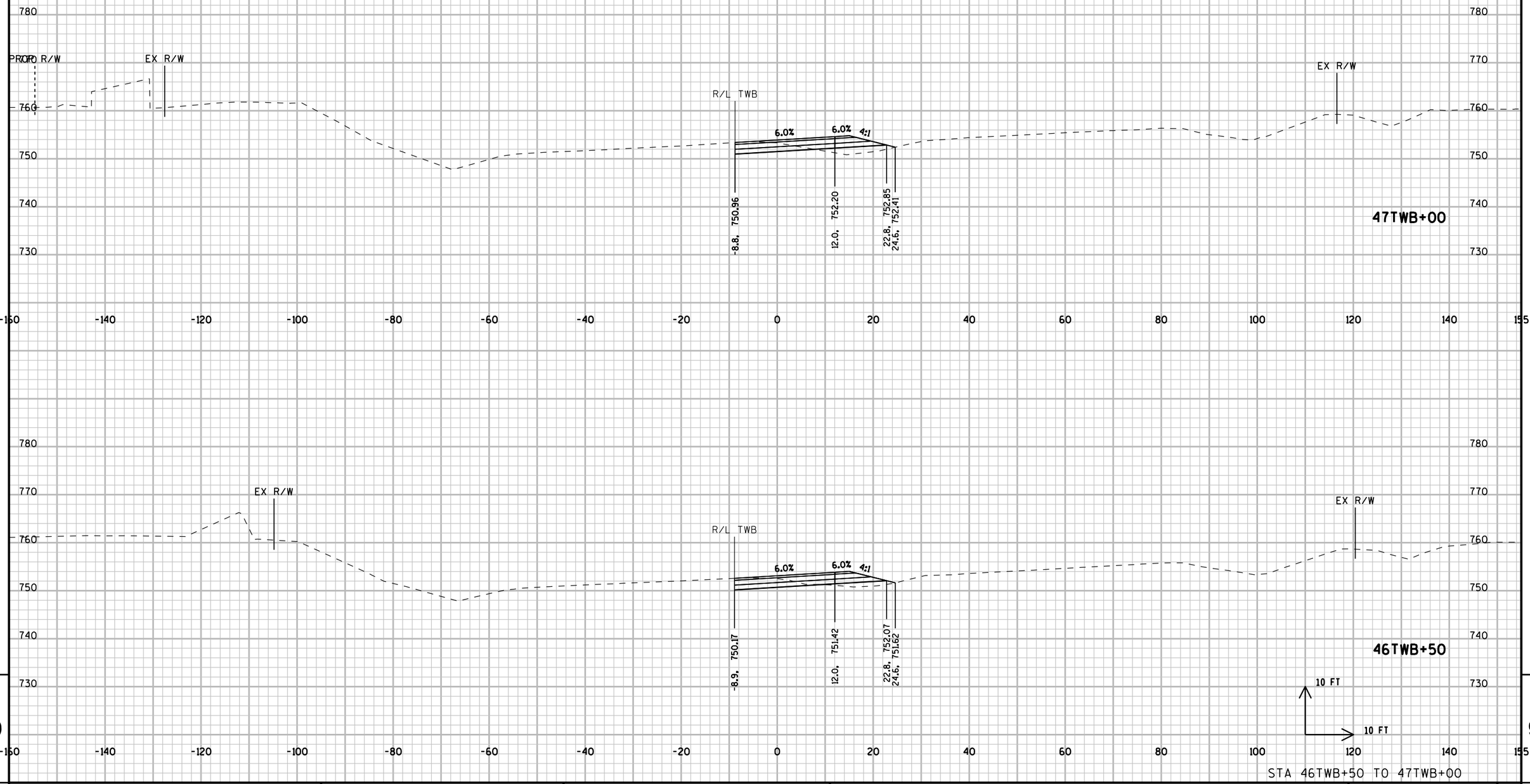
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1195	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:34 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT

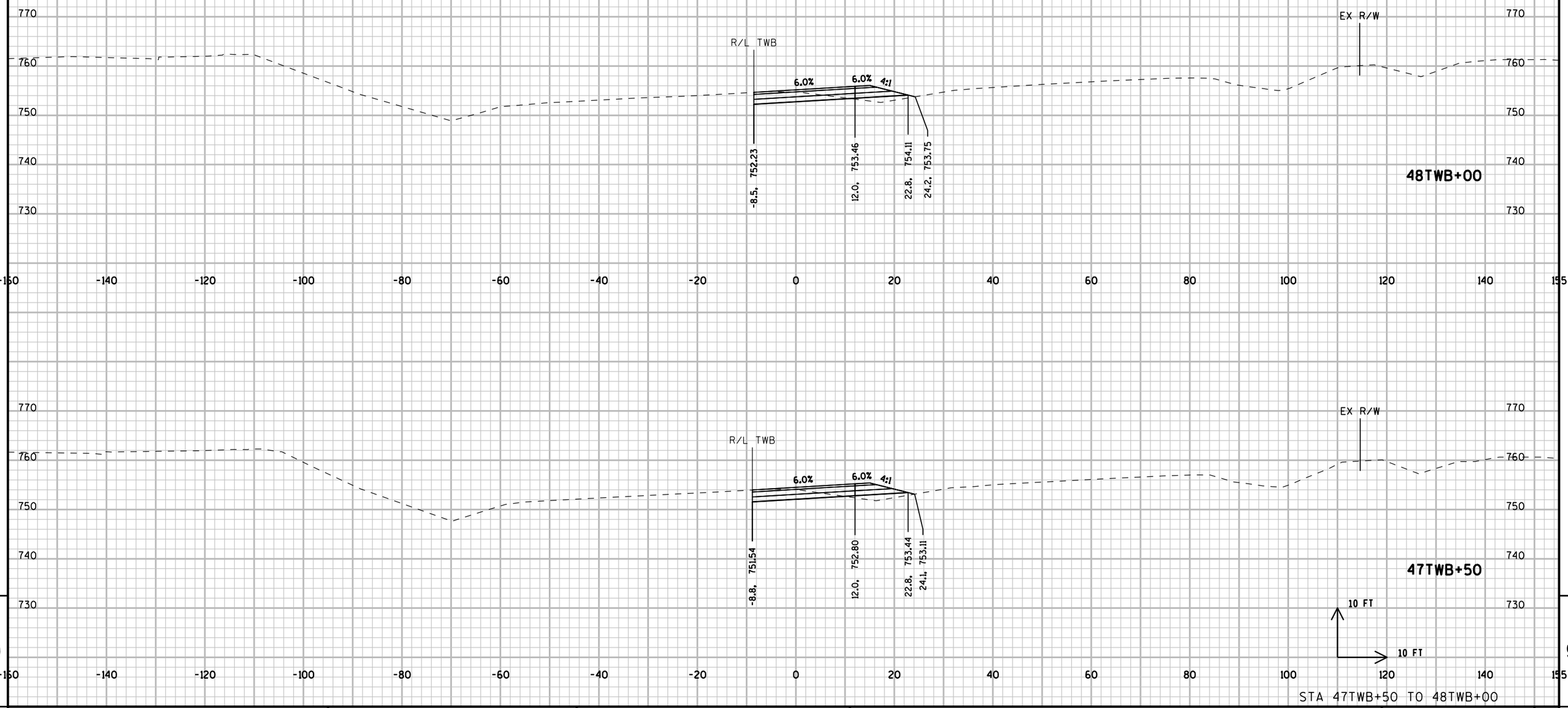


STA 46TWB+50 TO 47TWB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1196	E

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 47TWB+50 TO 48TWB+00

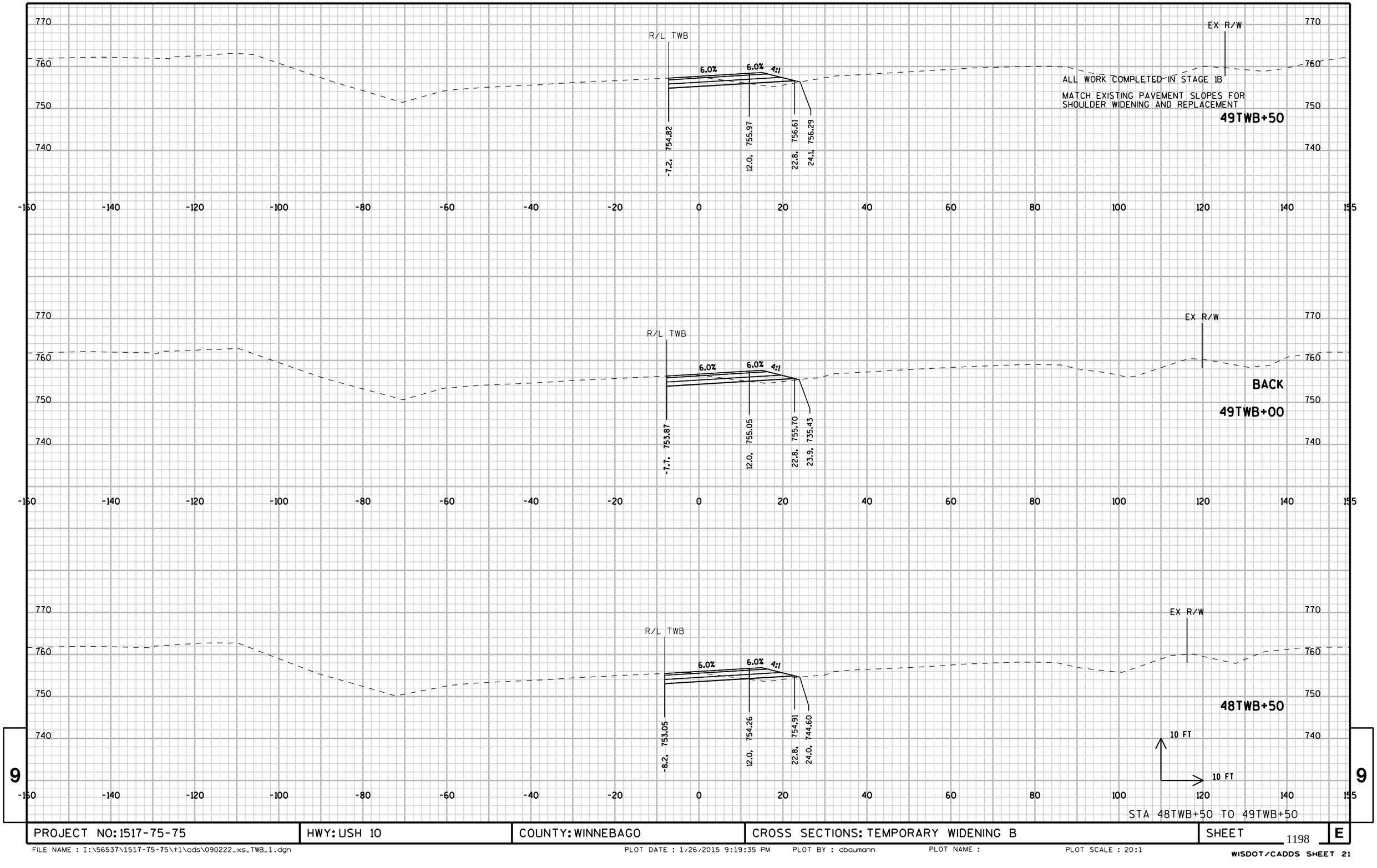
9

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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1197	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:35 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

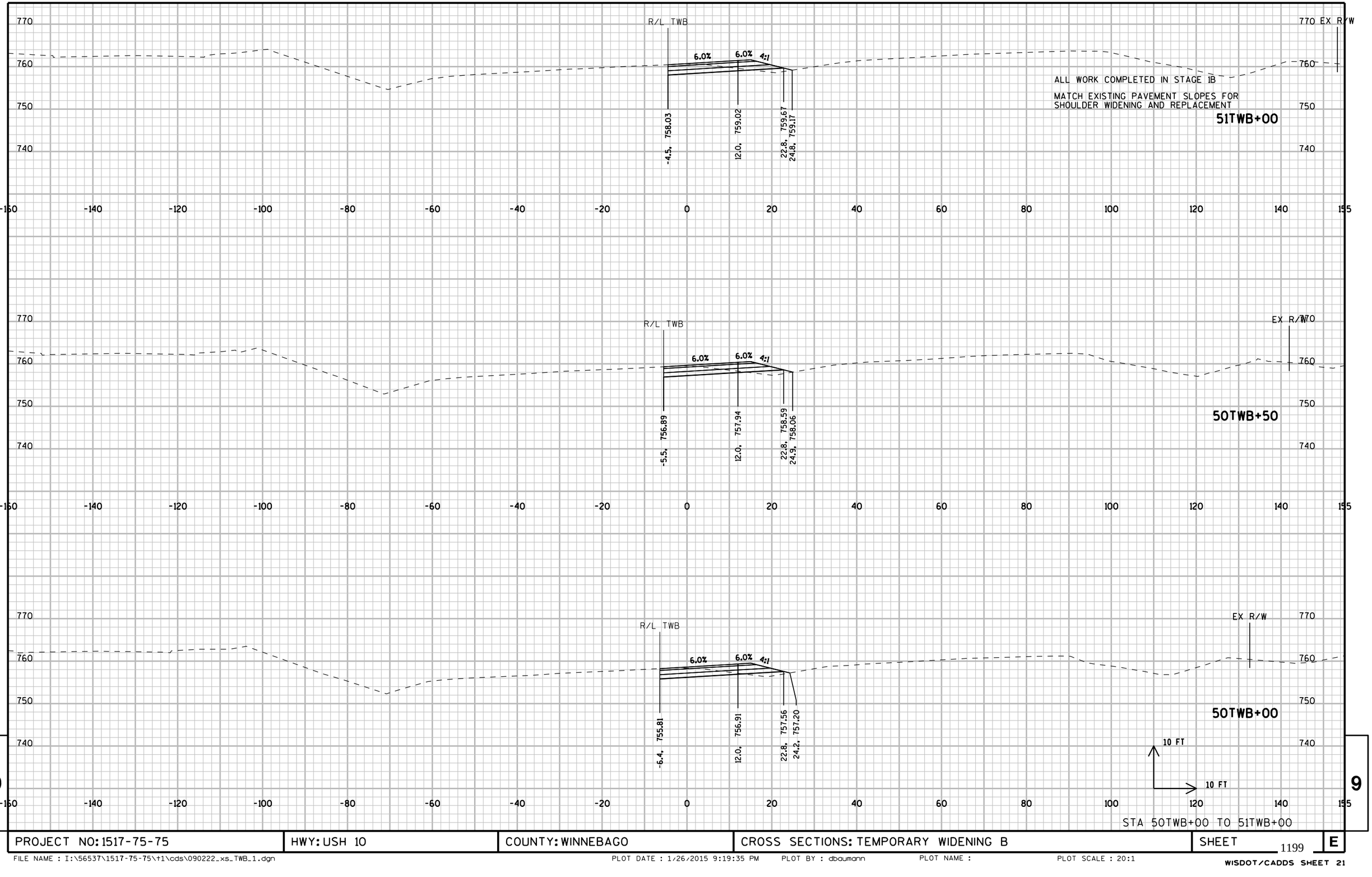
WISDOT/CADDS SHEET 21



STA 48TWB+50 TO 49TWB+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn
PLOT DATE : 1/26/2015 9:19:35 PM
PLOT BY : dbaumann
PLOT NAME :
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



STA 50TWB+00 TO 51TWB+00

9

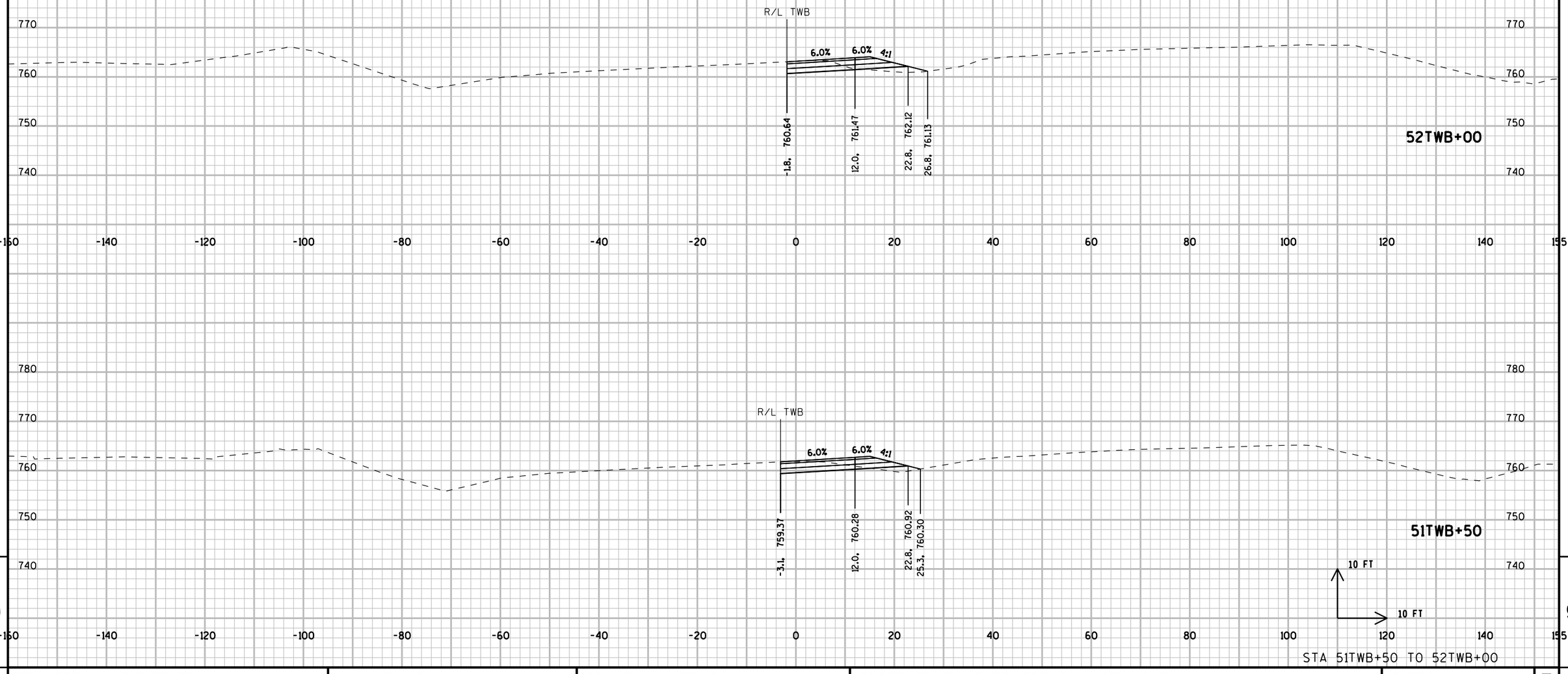
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:35 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 51TWB+50 TO 52TWB+00

9

9

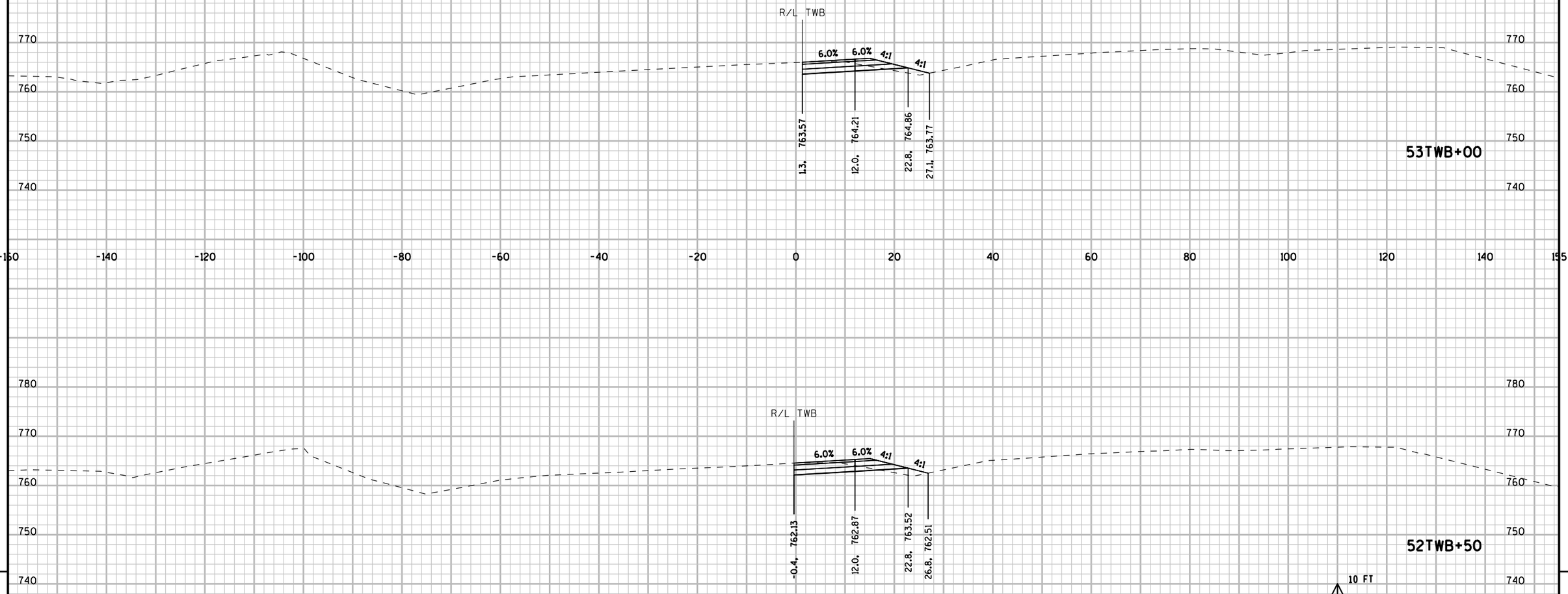
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1200	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:36 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

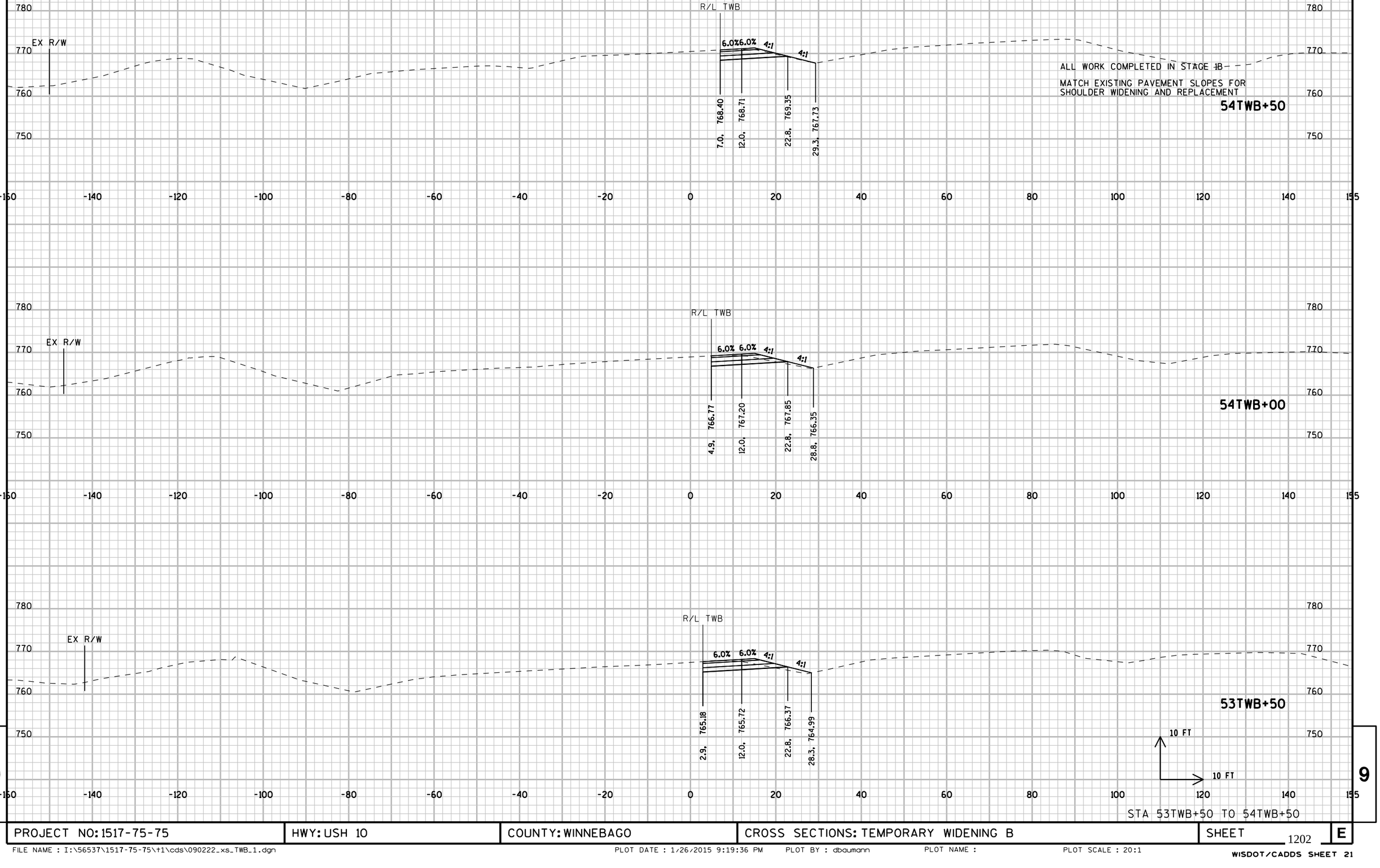
ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 52TWB+50 TO 53TWB+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1201	E



STA 53TWB+50 TO 54TWB+50

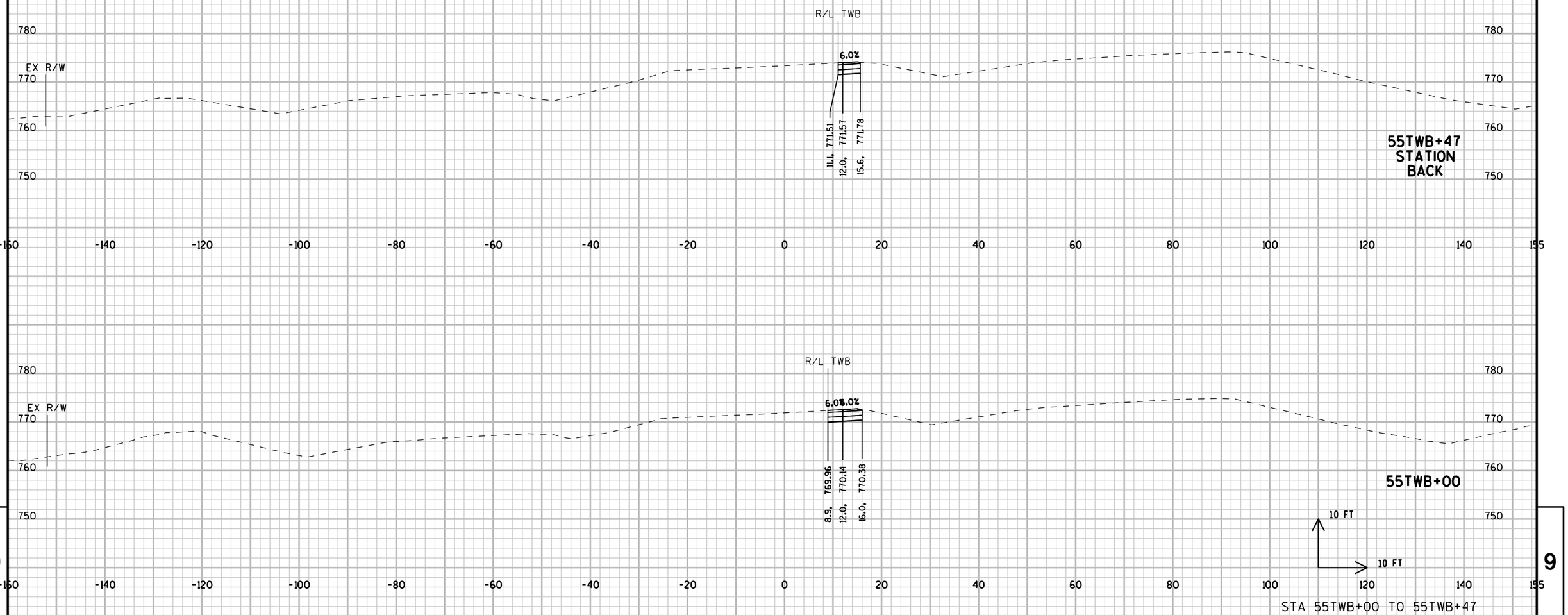
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1202	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:36 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 55TWB+00 TO 55TWB+47

9

9

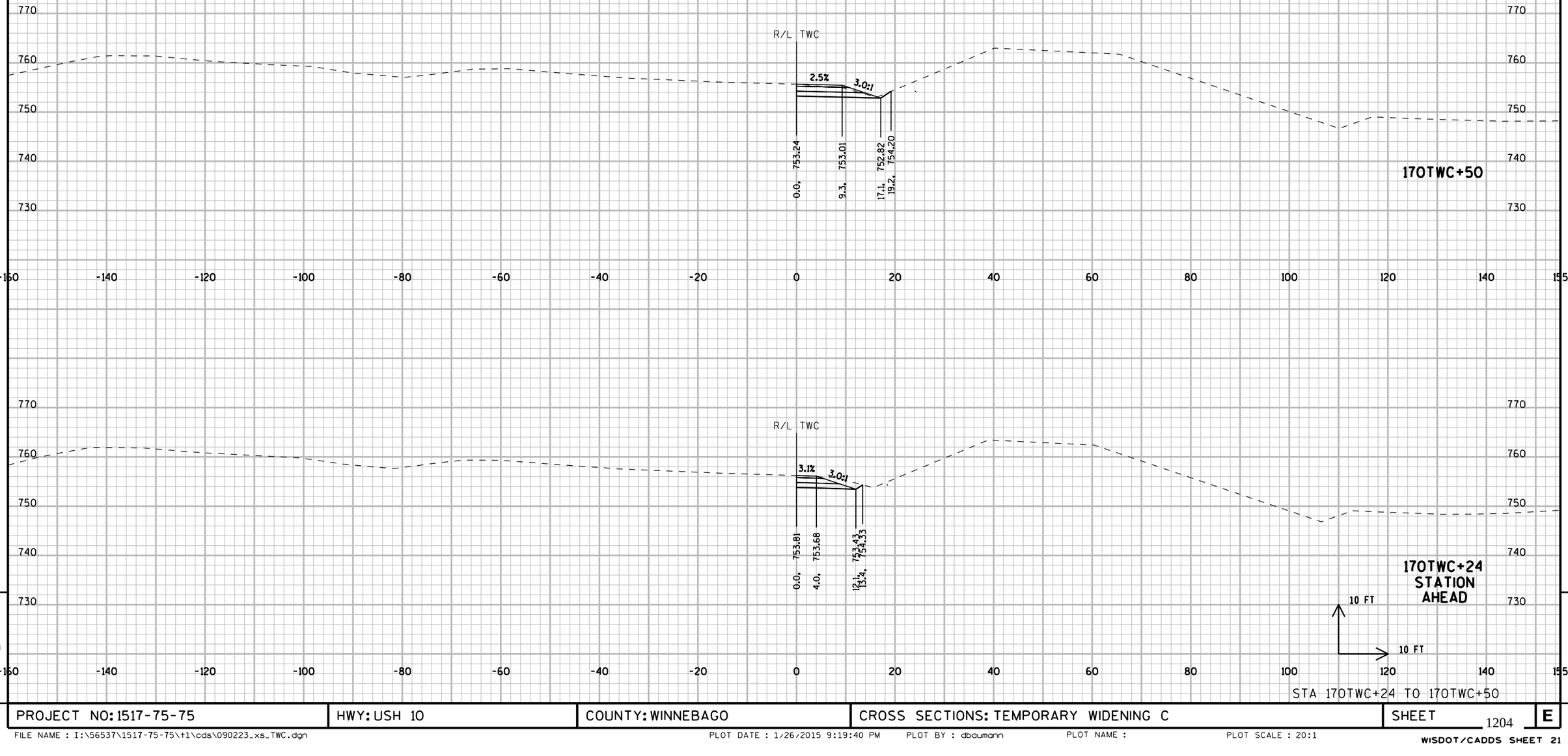
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING B	SHEET 1203	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090222_xs_TWB_1.dgn PLOT DATE : 1/26/2015 9:19:37 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING



STA 170TWC+24 TO 170TWC+50

9

9

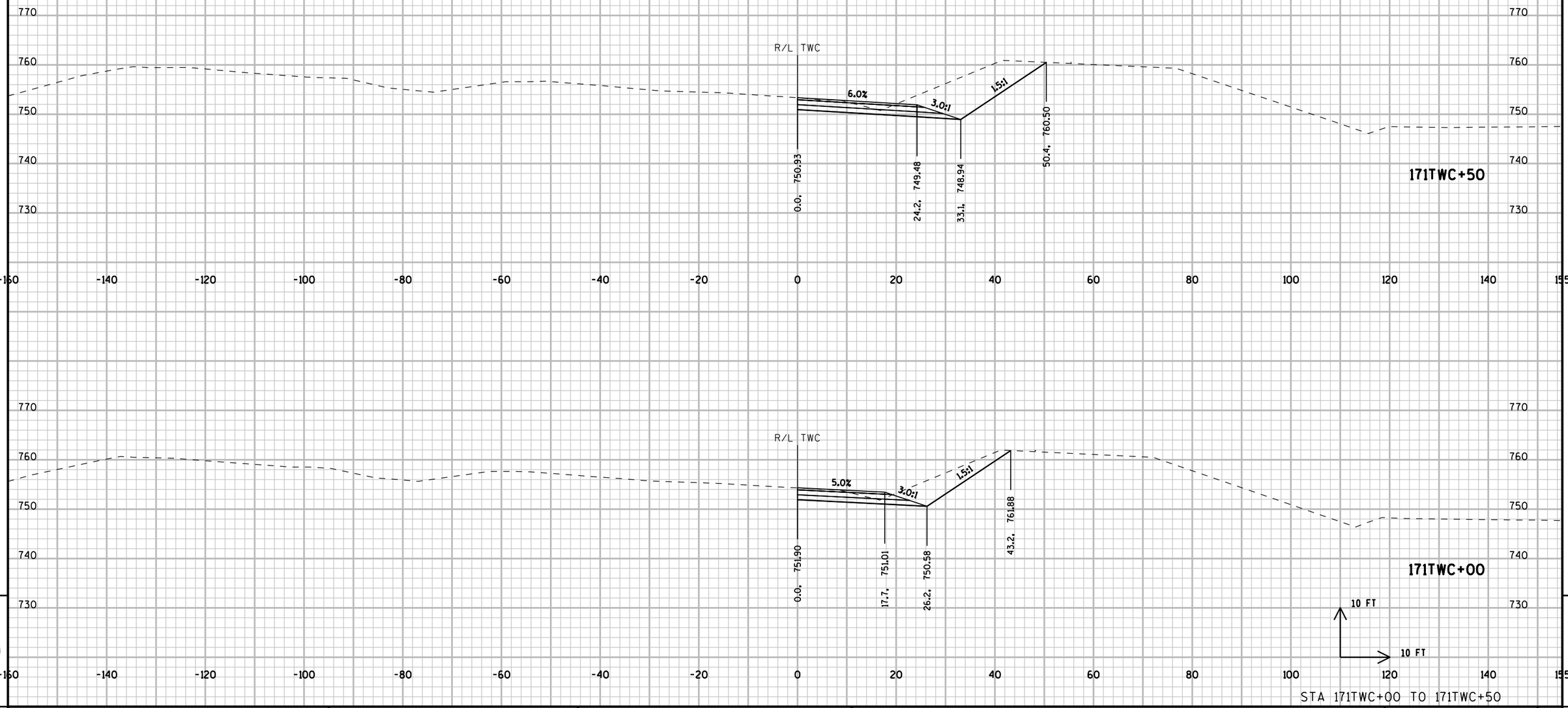
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1204	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn PLOT DATE : 1/26/2015 9:19:40 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING



STA 171TWC+00 TO 171TWC+50

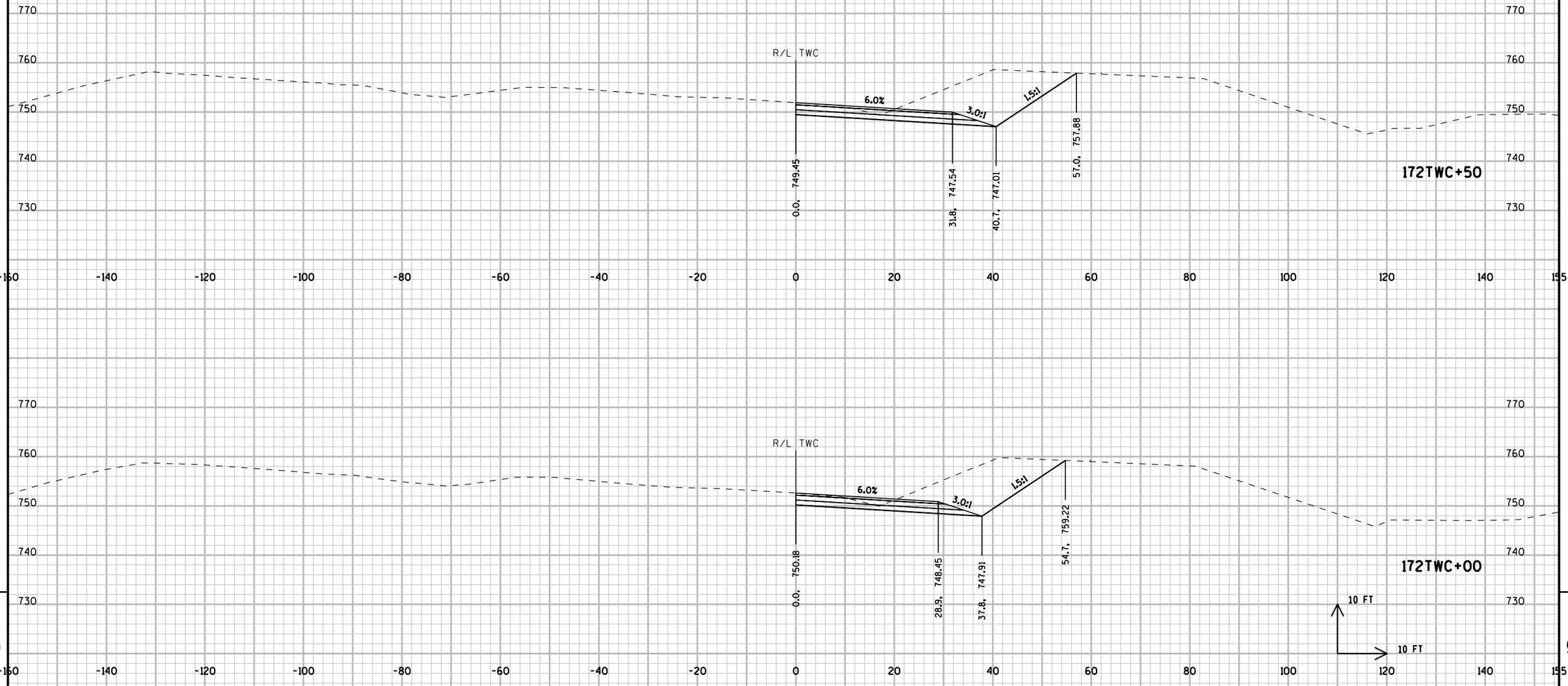
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1205	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn PLOT DATE : 1/26/2015 9:19:40 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING

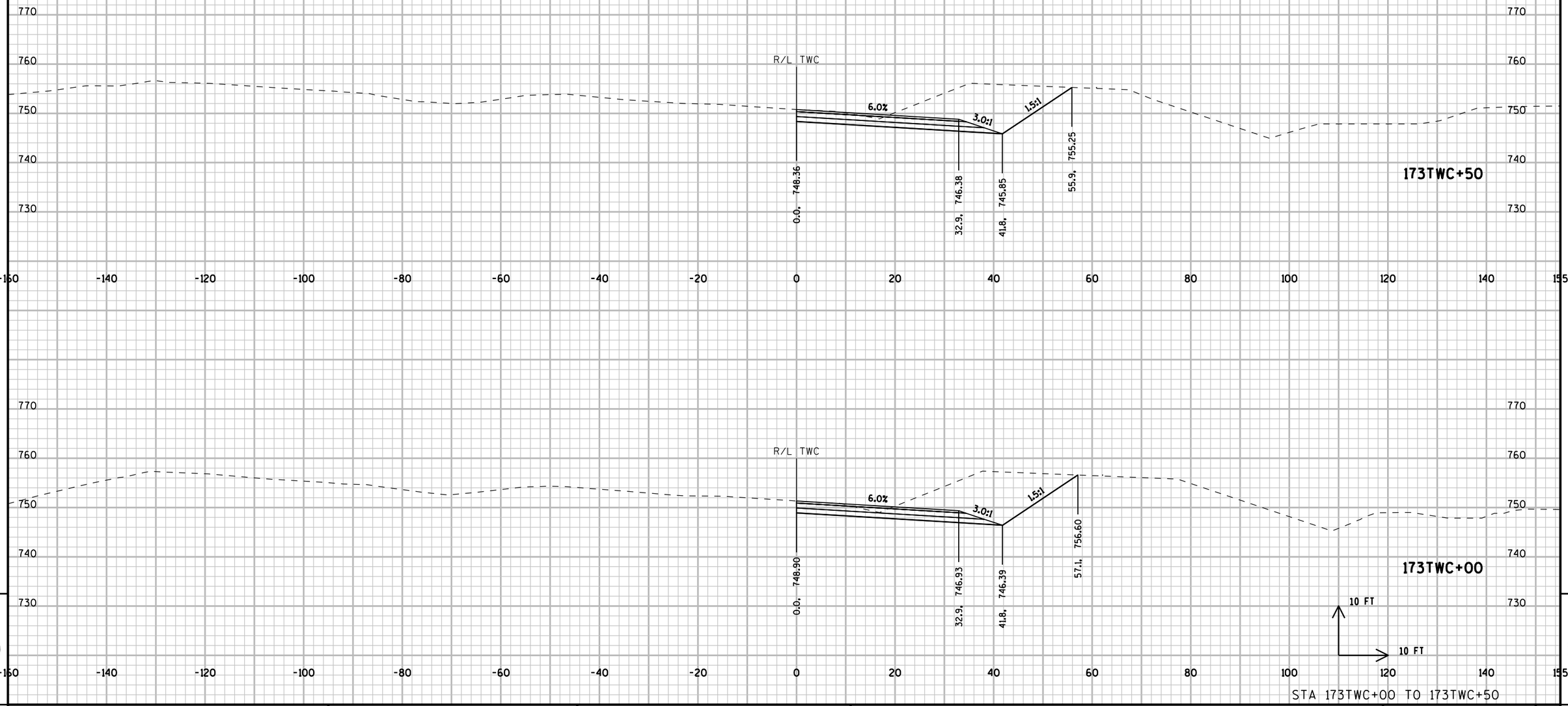


STA 172TWC+00 TO 172TWC+50

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1206 E

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING



STA 173TWC+00 TO 173TWC+50

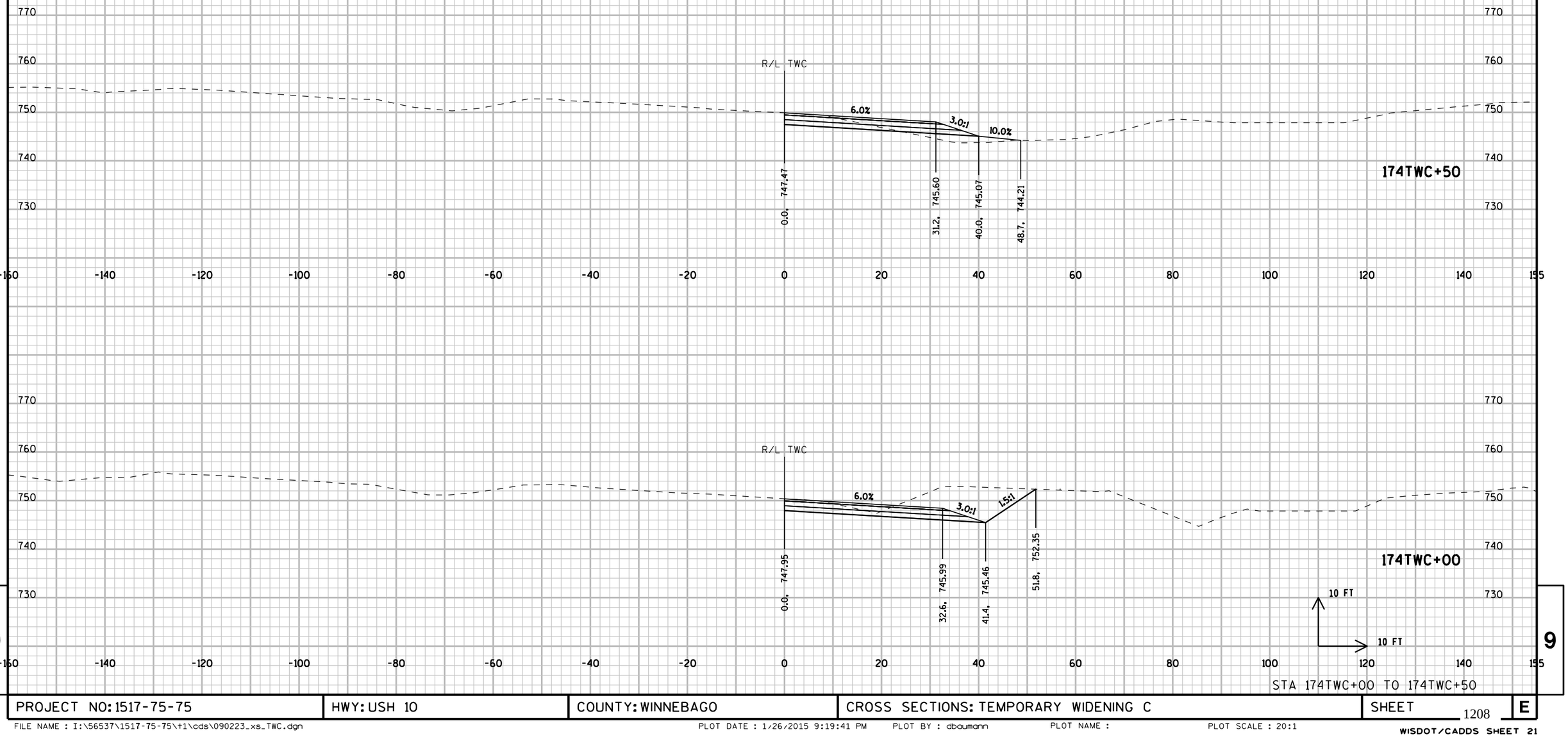
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1207	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn PLOT DATE : 1/26/2015 9:19:41 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING

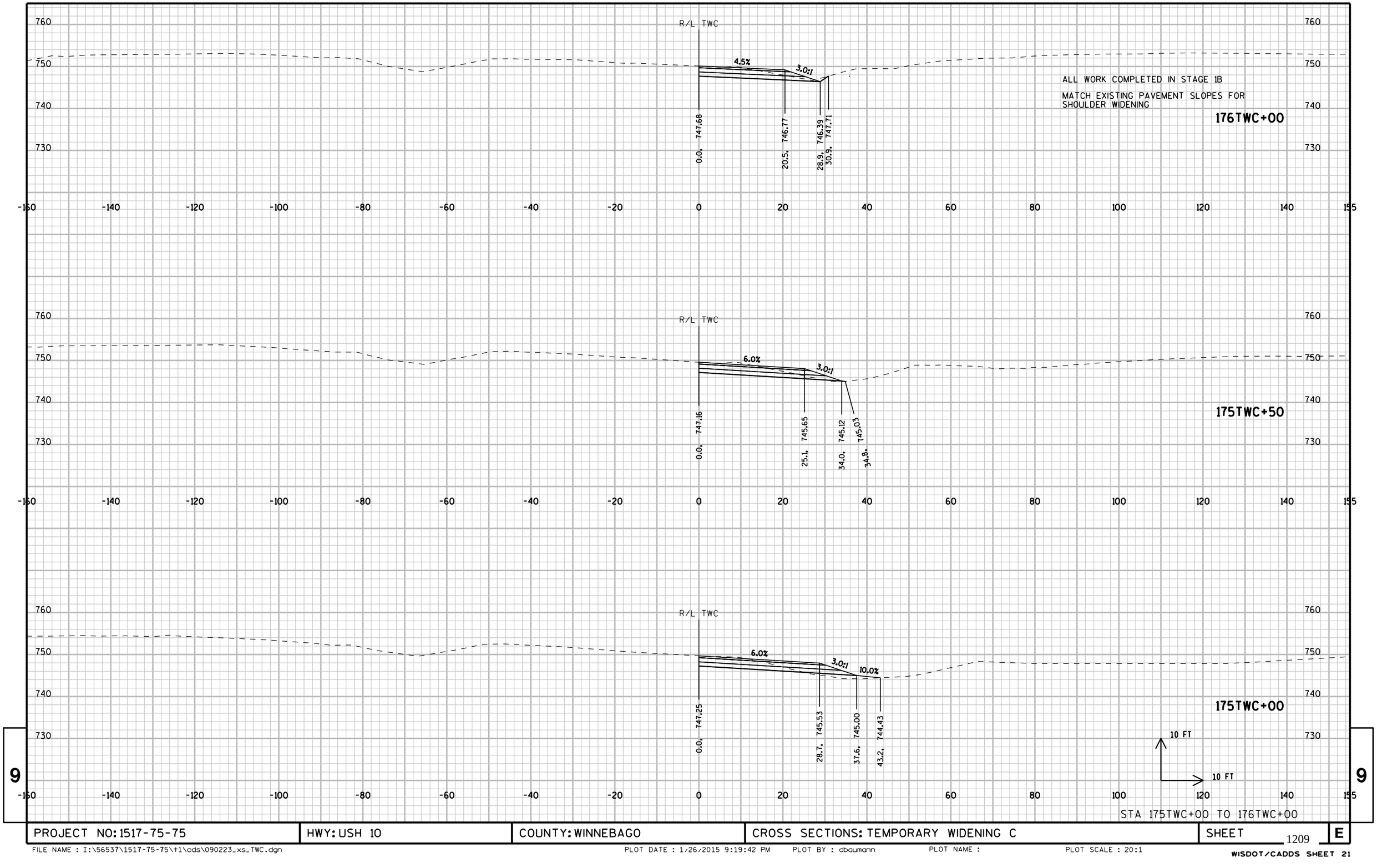


STA 174TWC+00 TO 174TWC+50

9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1208	E



9

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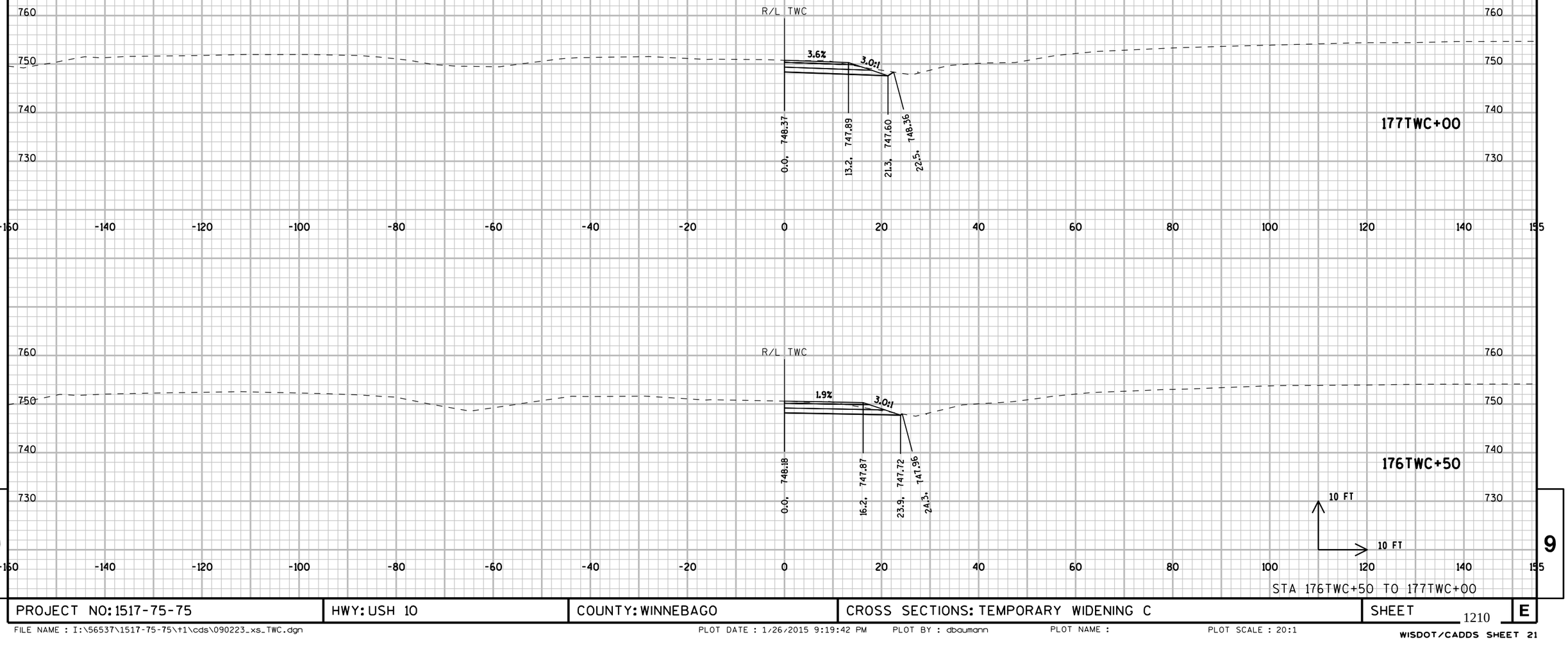
STA 175TWC+00 TO 176TWC+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn
PLOT DATE : 1/26/2015 9:19:42 PM
PLOT BY : dbaumann
PLOT NAME :
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING



STA 176TWC+50 TO 177TWC+00

9

9

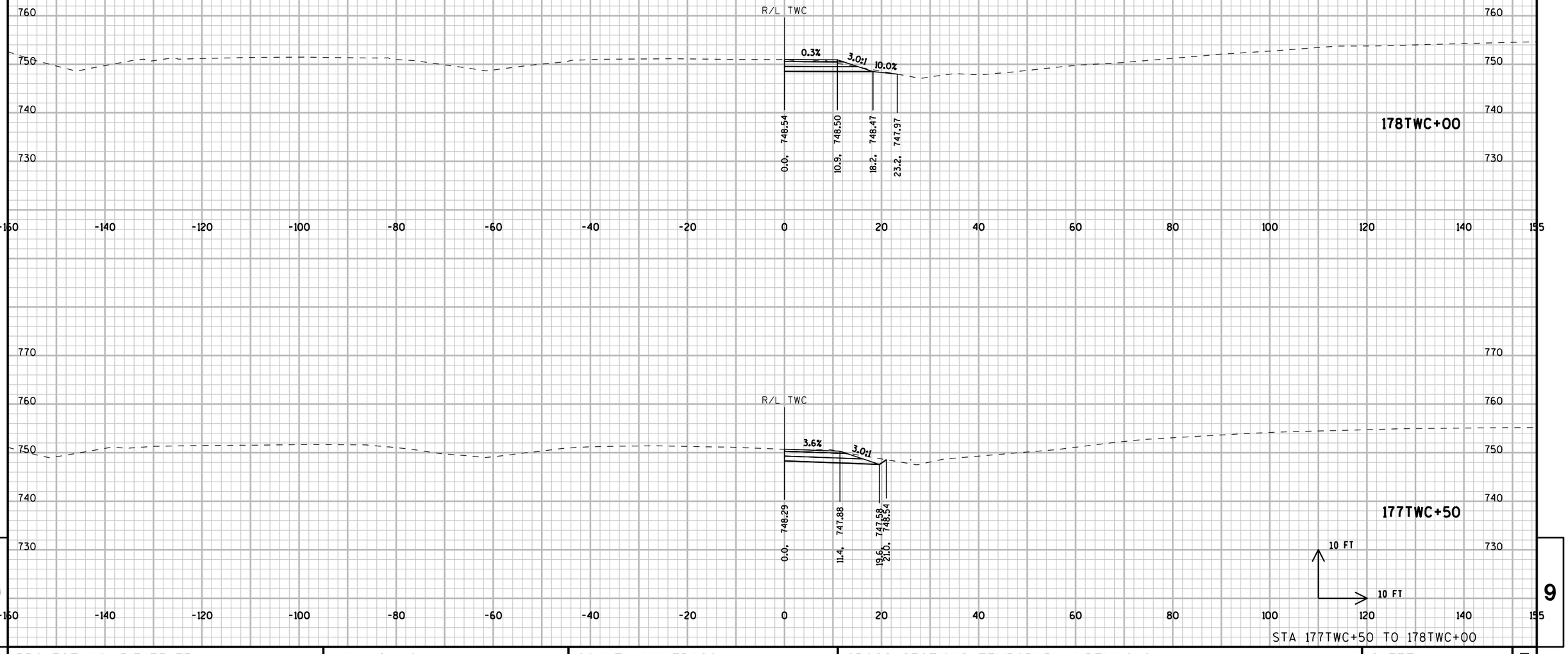
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1210	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn PLOT DATE : 1/26/2015 9:19:42 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING



STA 177TWC+50 TO 178TWC+00

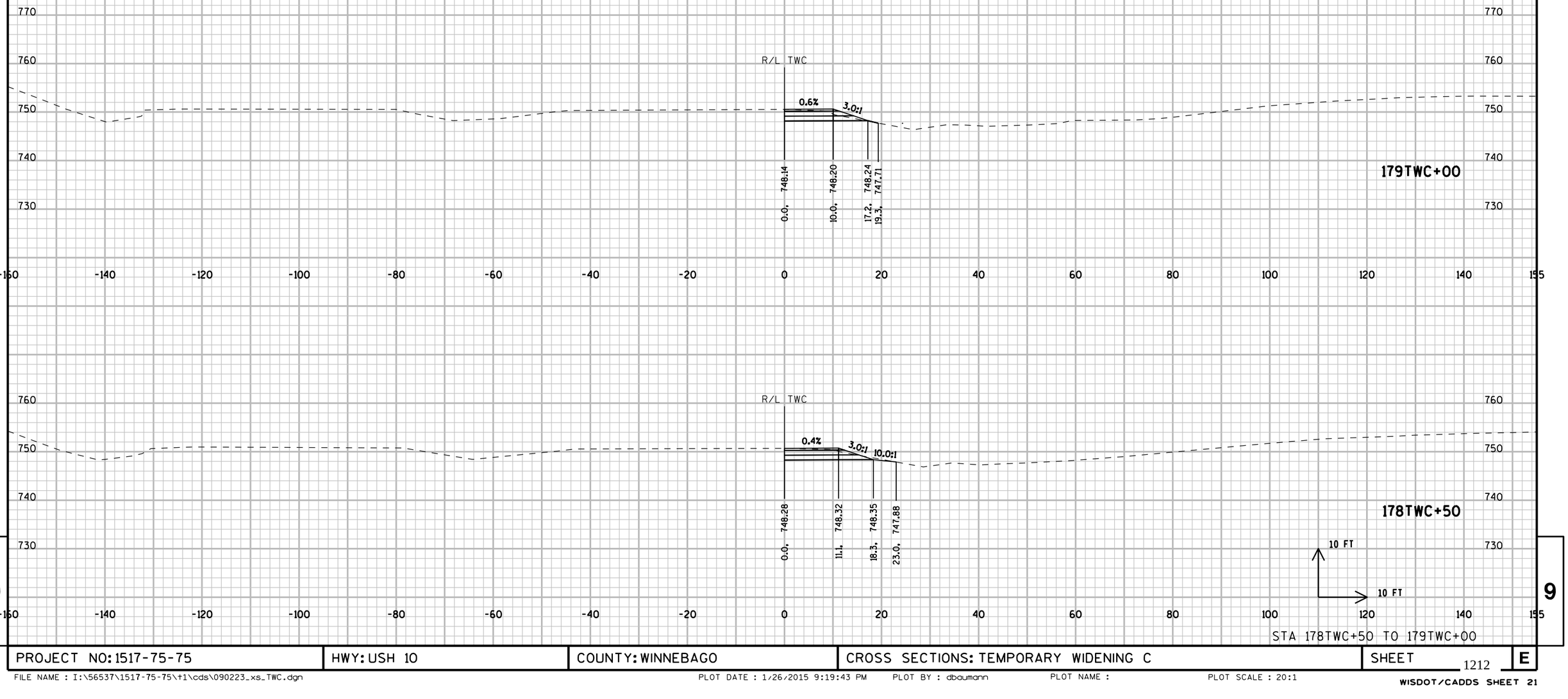
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1211	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn PLOT DATE : 1/26/2015 9:19:43 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING

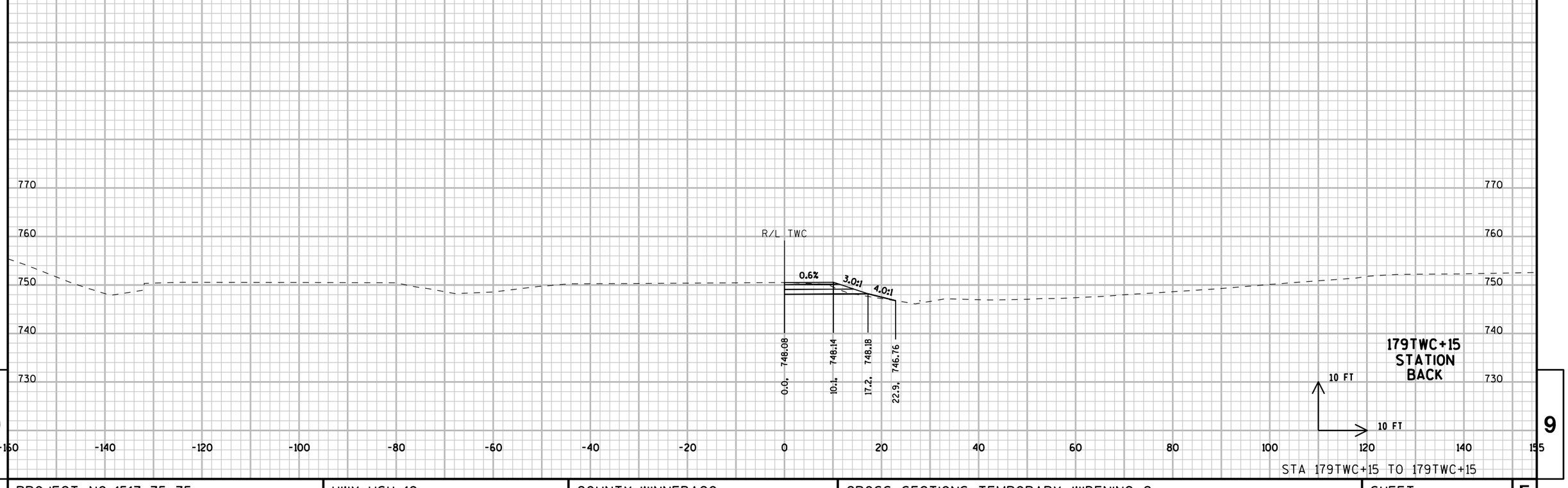


STA 178TWC+50 TO 179TWC+00

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1212	E

ALL WORK COMPLETED IN STAGE 1B

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING



STA 179TWC+15 TO 179TWC+15

9

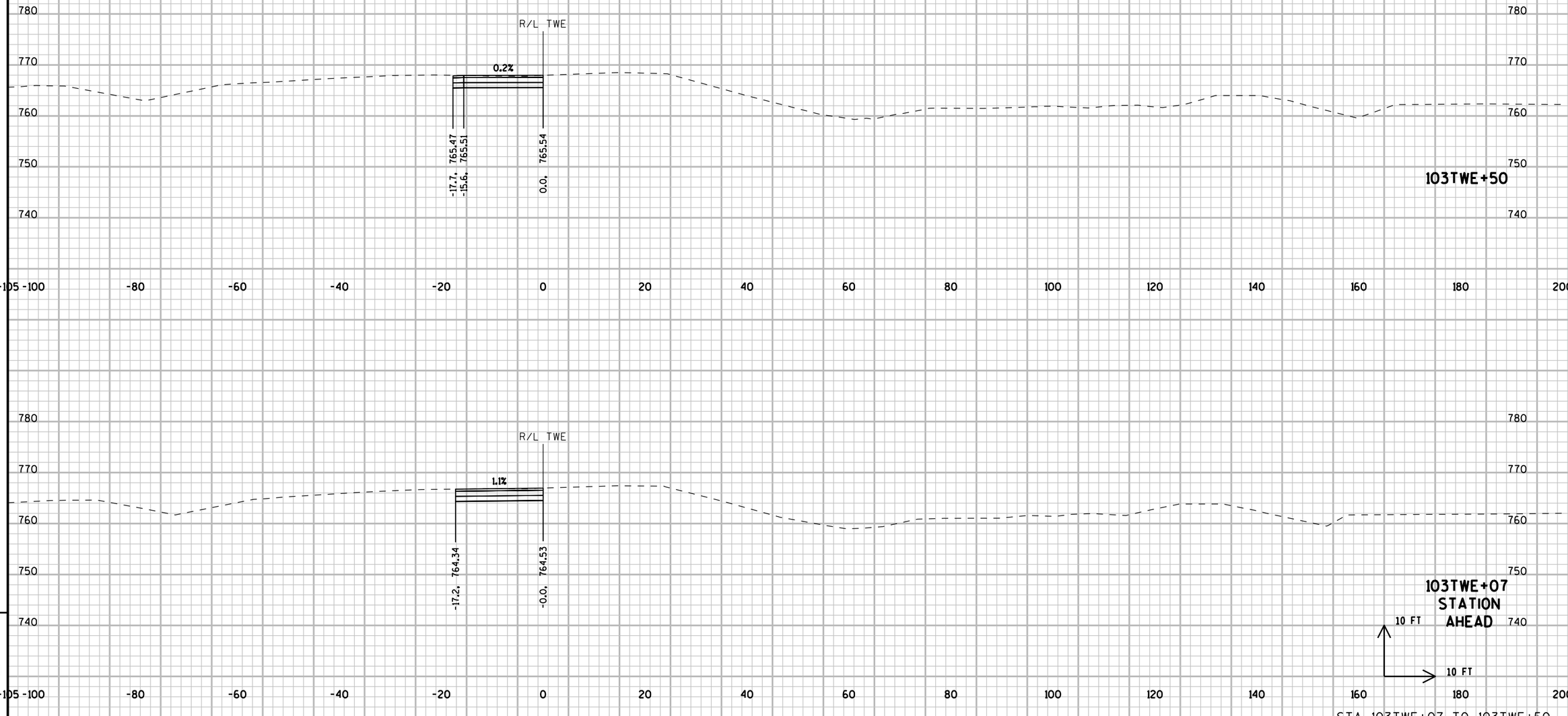
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PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING C	SHEET 1213	E

FILE NAME : I:\56537\1517-75-75\t1\cds\090223_xs_TWC.dgn PLOT DATE : 1/26/2015 9:19:53 PM PLOT BY : dbaumann PLOT NAME : PLOT SCALE : 20:1

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 103TWE+07 TO 103TWE+50

9

9

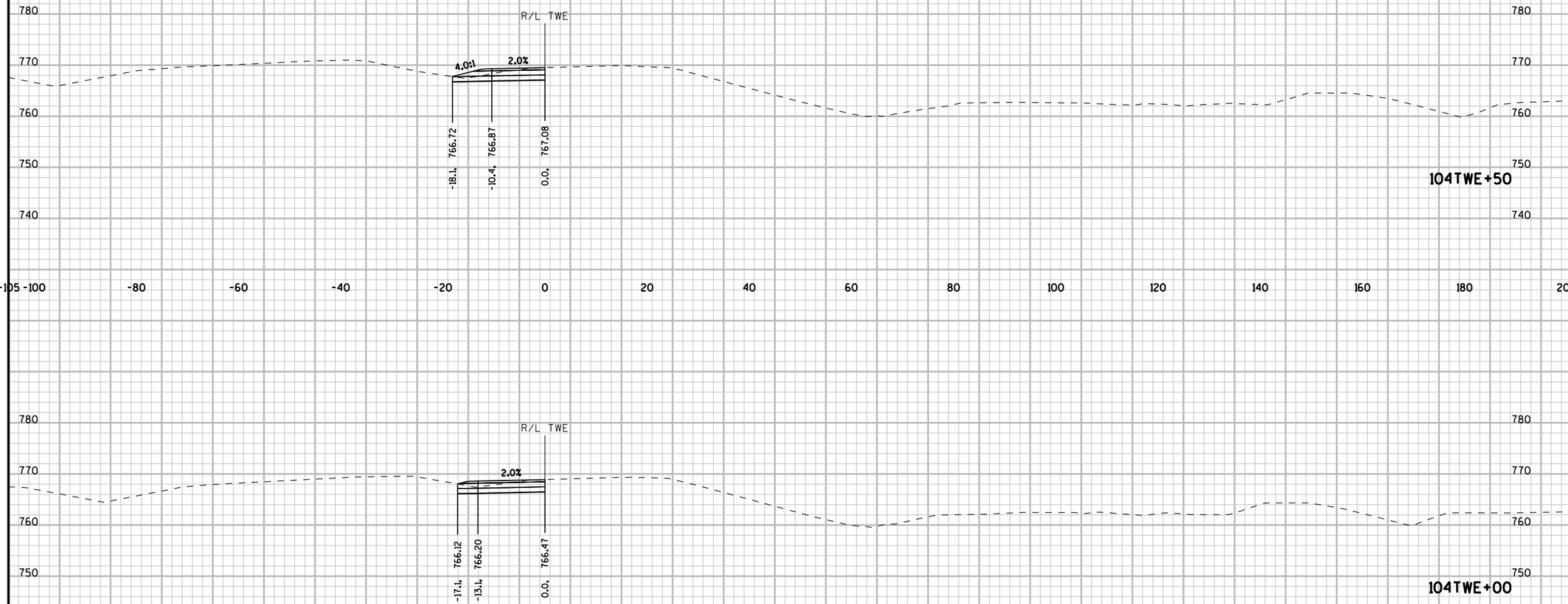
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING E	SHEET 1214	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090224_xs_TWE.dgn PLOT DATE : 1/27/2015 9:48:58 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



9

9

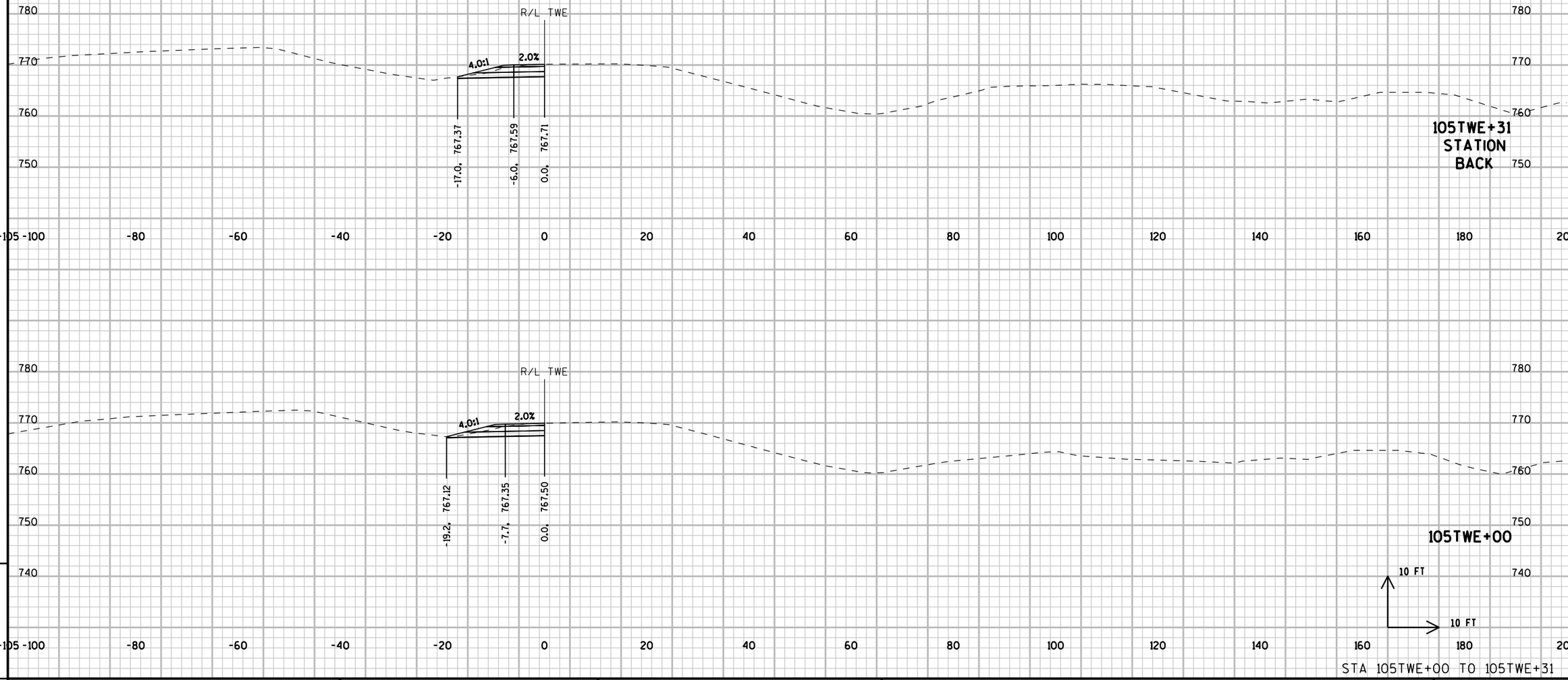
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING E	SHEET 1215	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090224_xs_TWE.dgn PLOT DATE : 1/27/2015 9:48:59 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



9

9

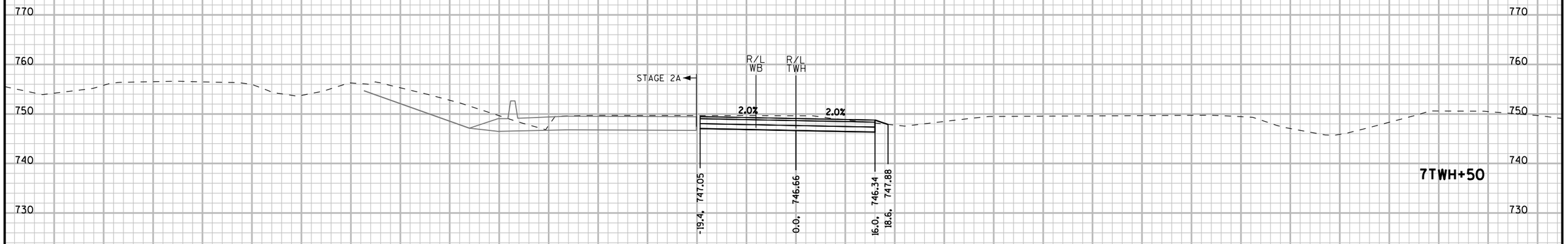
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090224_xs_TWE.dgn PLOT DATE : 1/27/2015 9:48:58 AM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

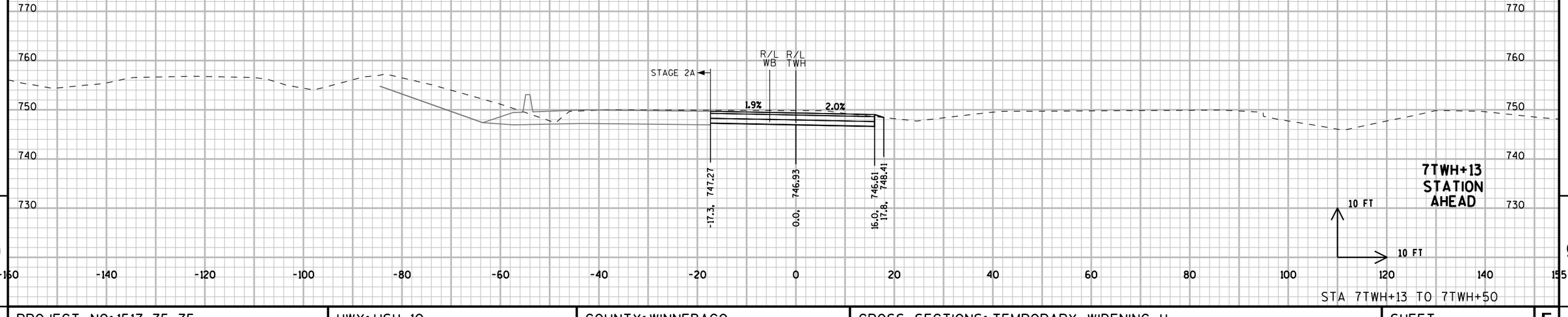
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



7TWH+50



7TWH+13
STATION
AHEAD

STA 7TWH+13 TO 7TWH+50

9

9

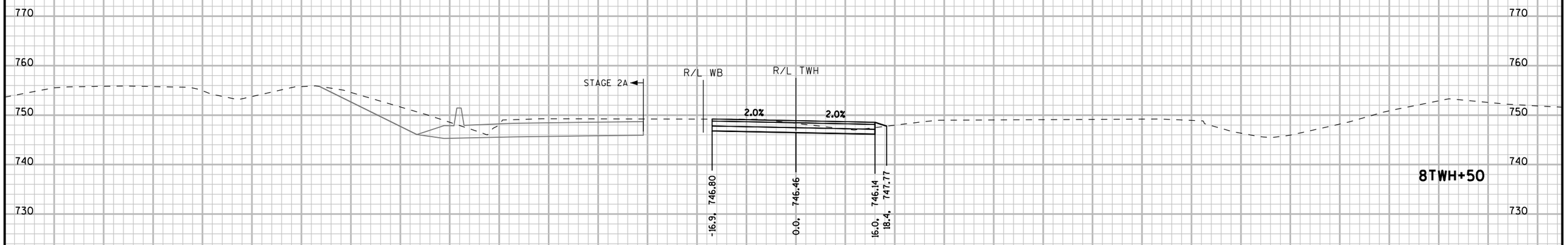
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING H	SHEET 1217	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:51 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

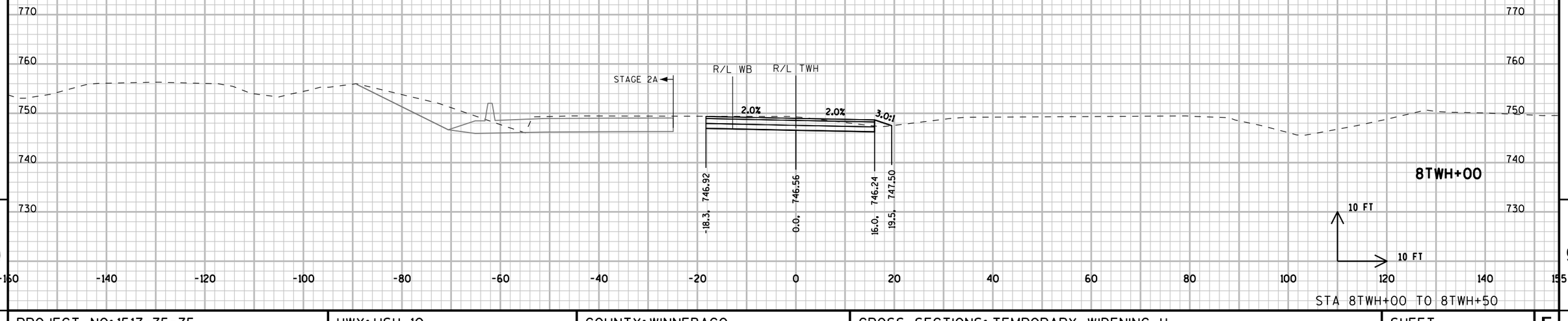
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



8TWH+50



8TWH+00

STA 8TWH+00 TO 8TWH+50

9

9

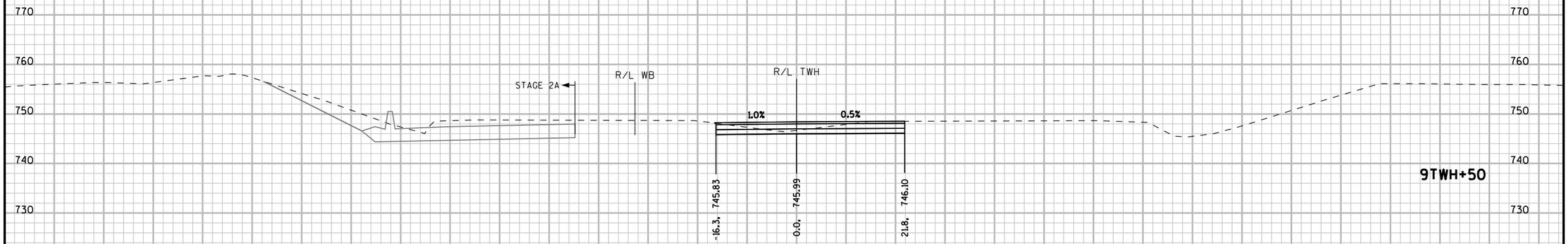
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING H	SHEET 1218	E

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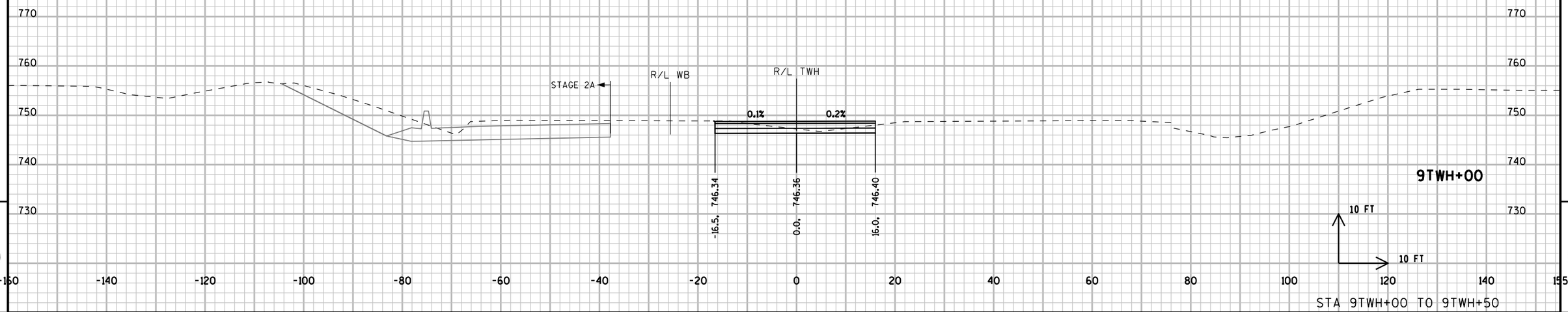
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



9TWH+50



9TWH+00

STA 9TWH+00 TO 9TWH+50

9

9

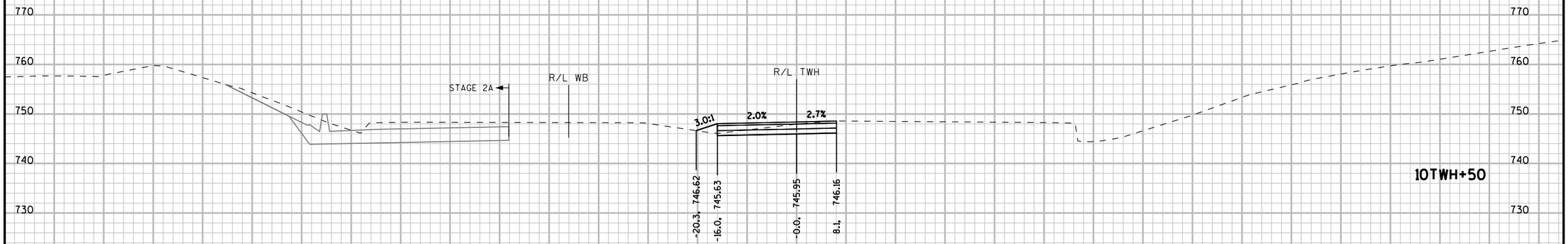
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:52 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

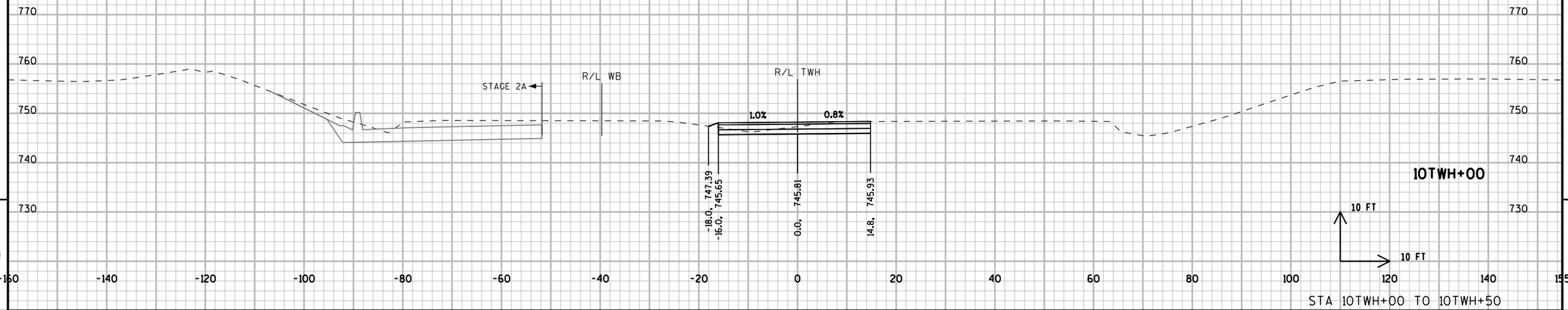
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



10TWH+50



10TWH+00

10 FT

10 FT

STA 10TWH+00 TO 10TWH+50

9

9

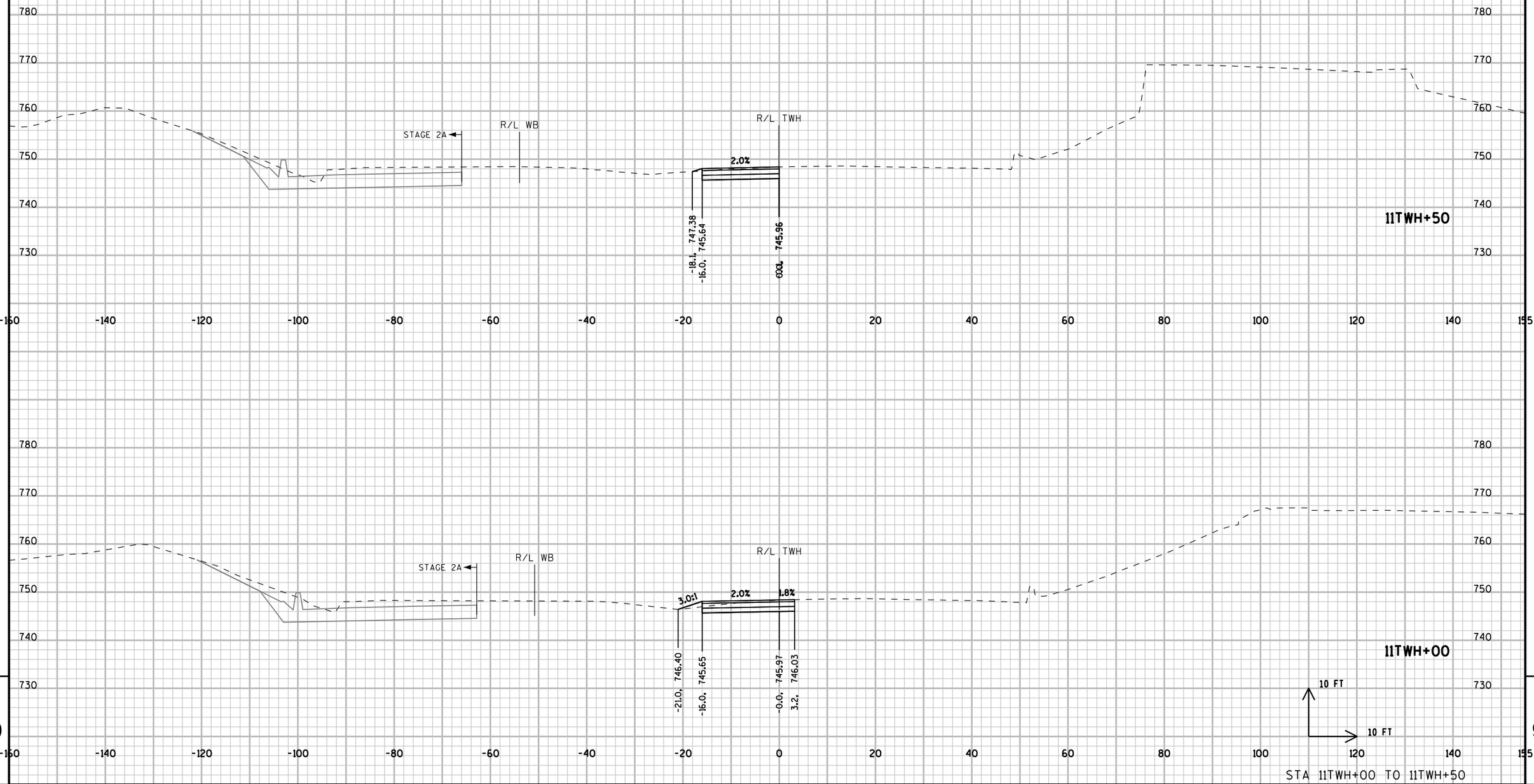
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING H	SHEET 1220	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:52 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 11TWH+00 TO 11TWH+50

9

9

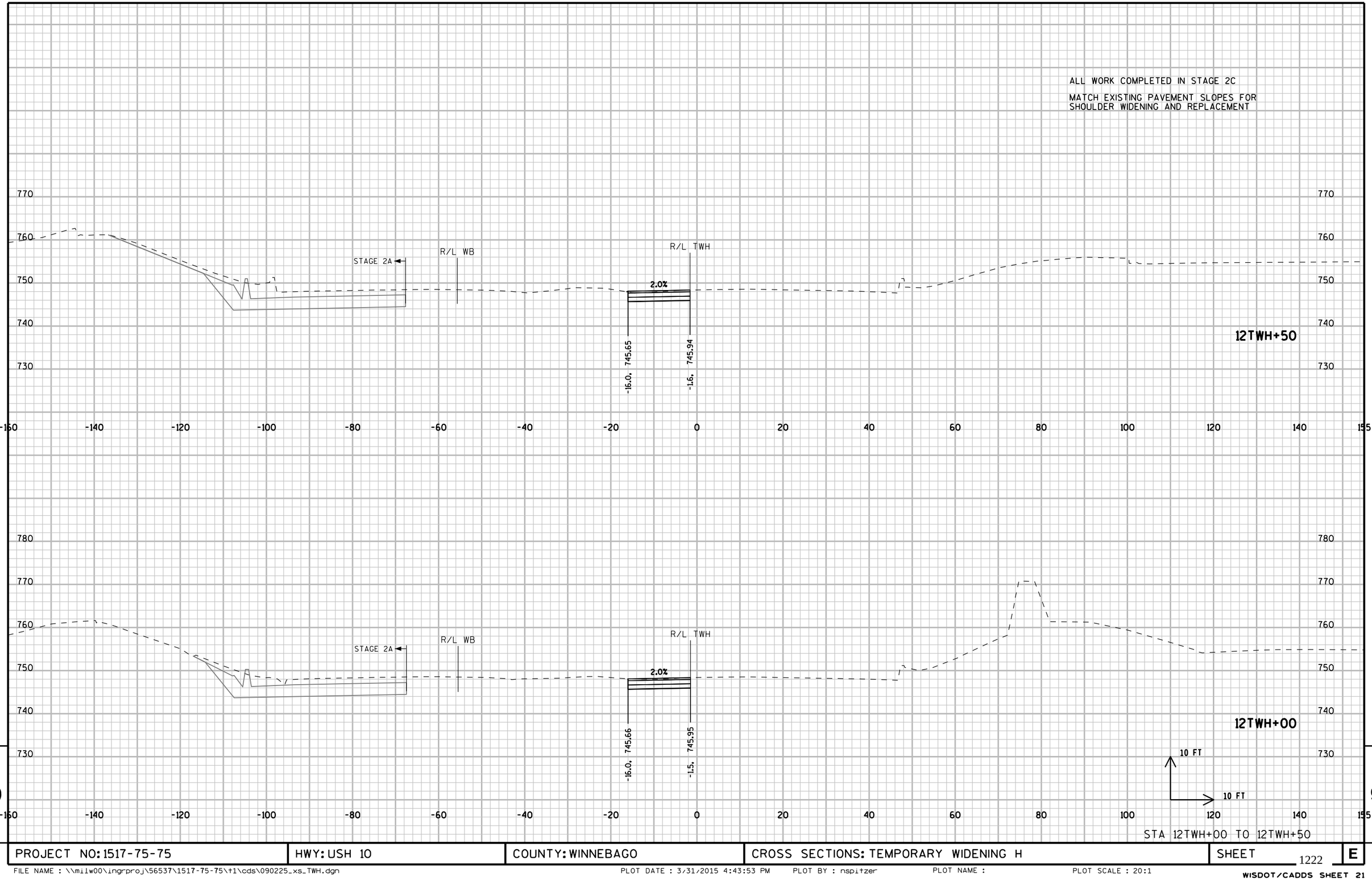
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:52 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 12TWH+00 TO 12TWH+50

9

9

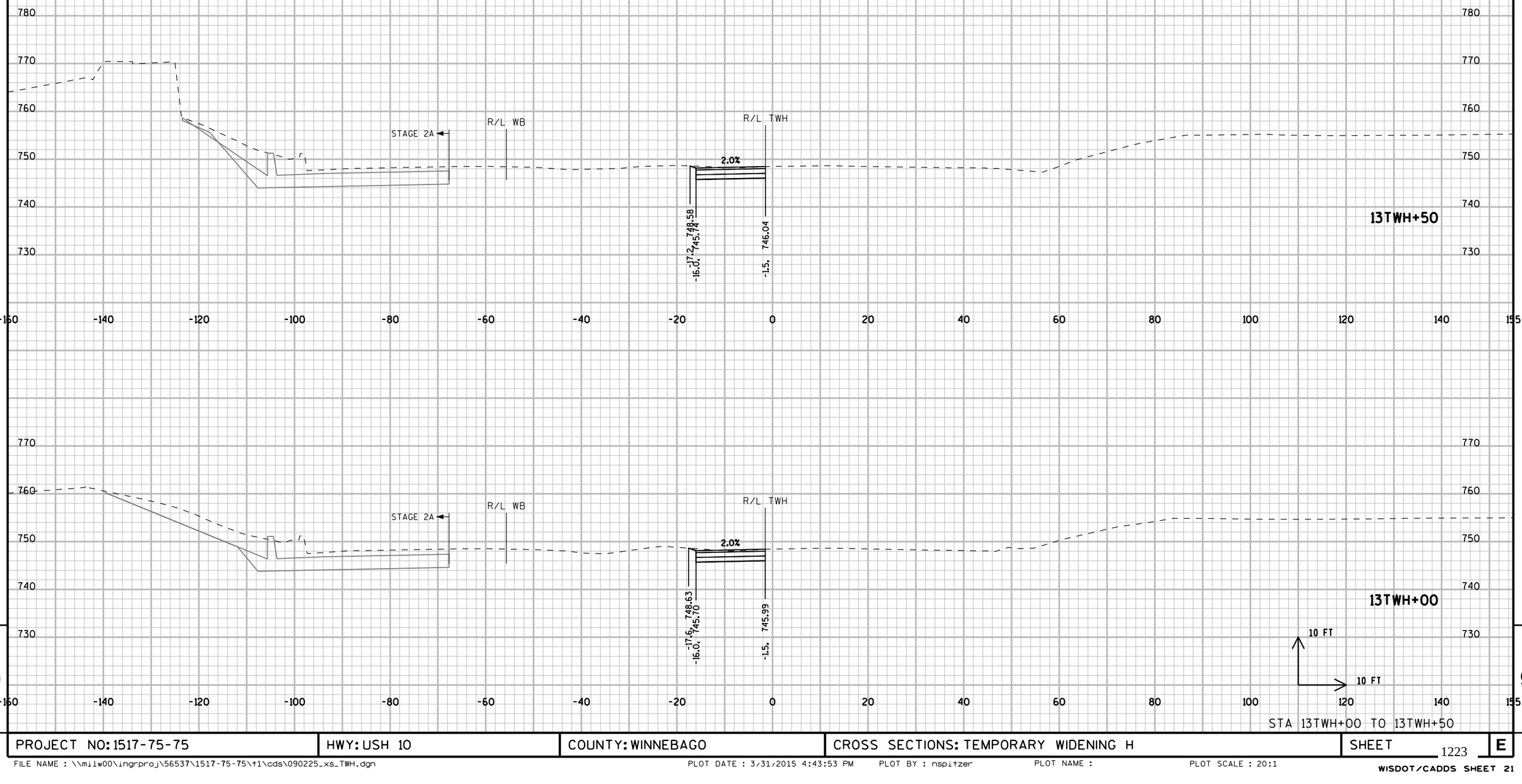
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:53 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 13TWH+00 TO 13TWH+50

9

9

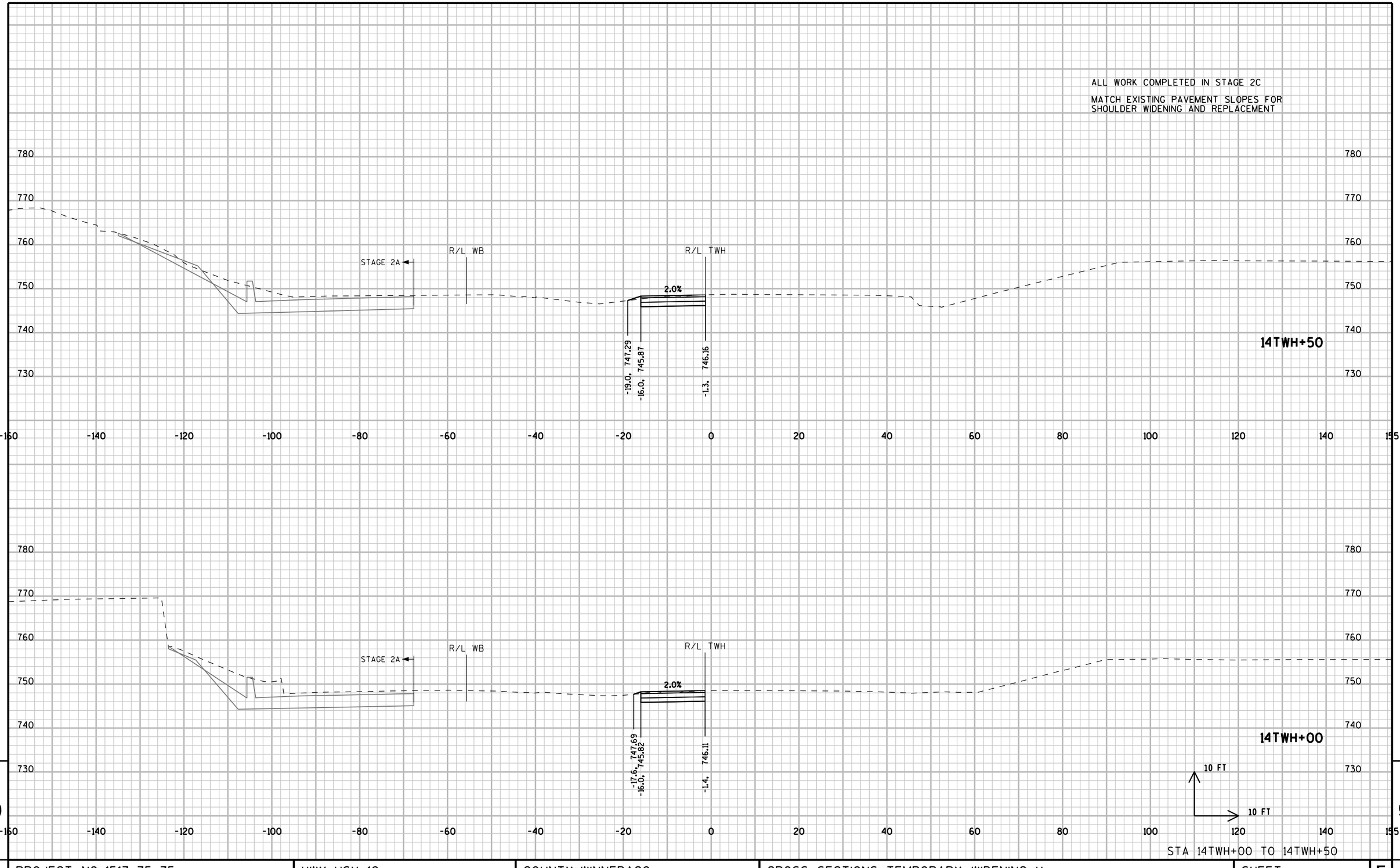
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:53 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 14TWH+00 TO 14TWH+50

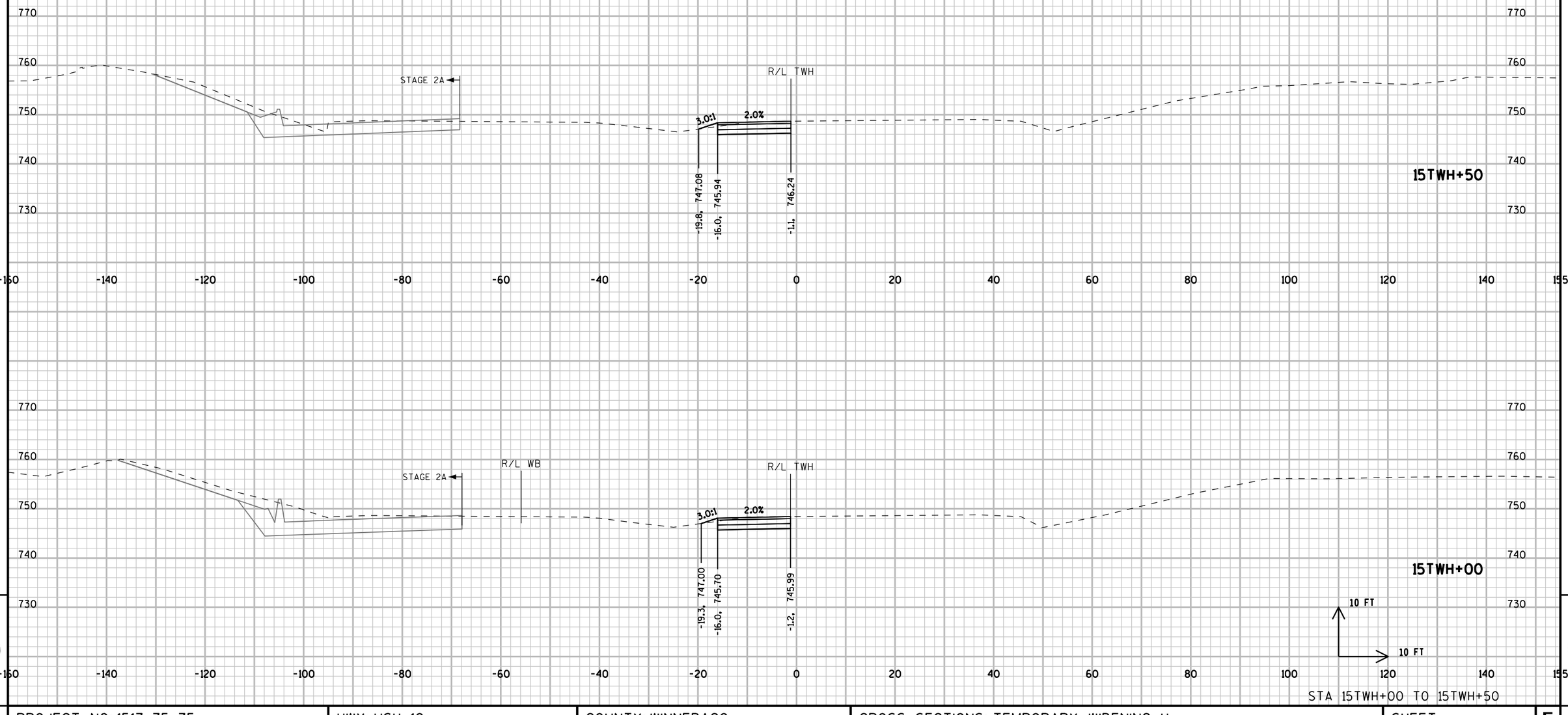
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9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING H	SHEET 1224	E

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 15TWH+00 TO 15TWH+50

9

9

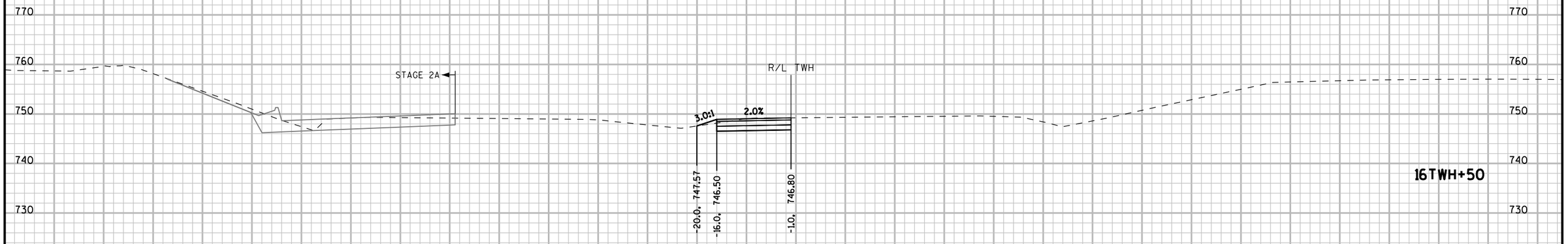
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:54 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

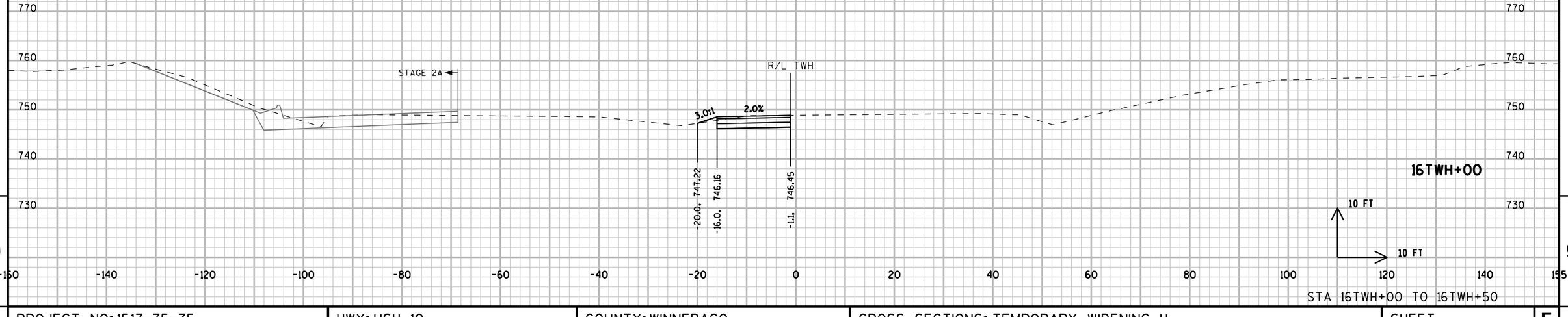
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



16TWH+50



16TWH+00

STA 16TWH+00 TO 16TWH+50

9

9

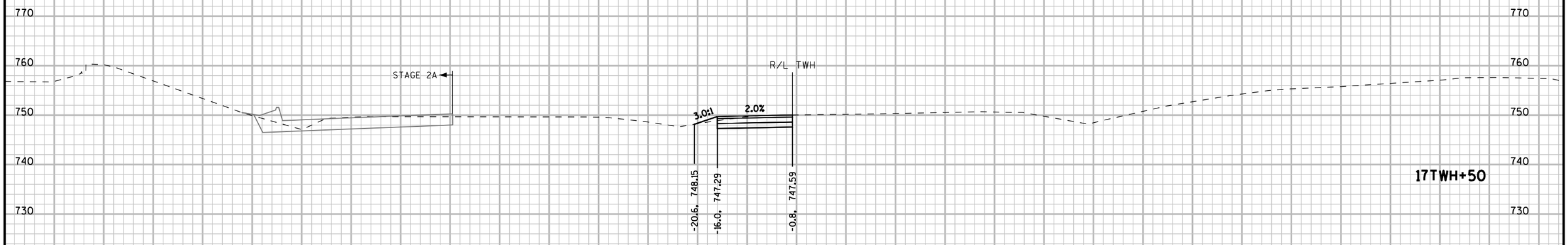
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:54 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

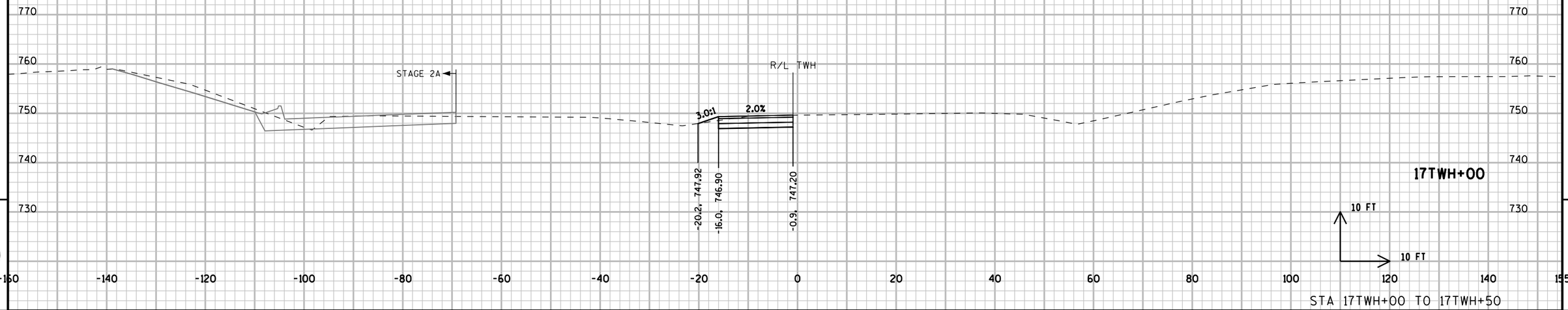
WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



17TWH+50



17TWH+00

STA 17TWH+00 TO 17TWH+50

9

9

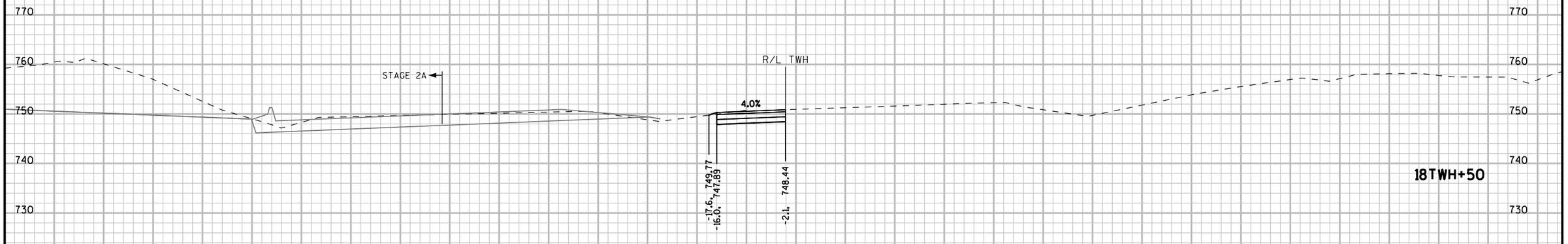
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 18TWH+00 TO 18TWH+50

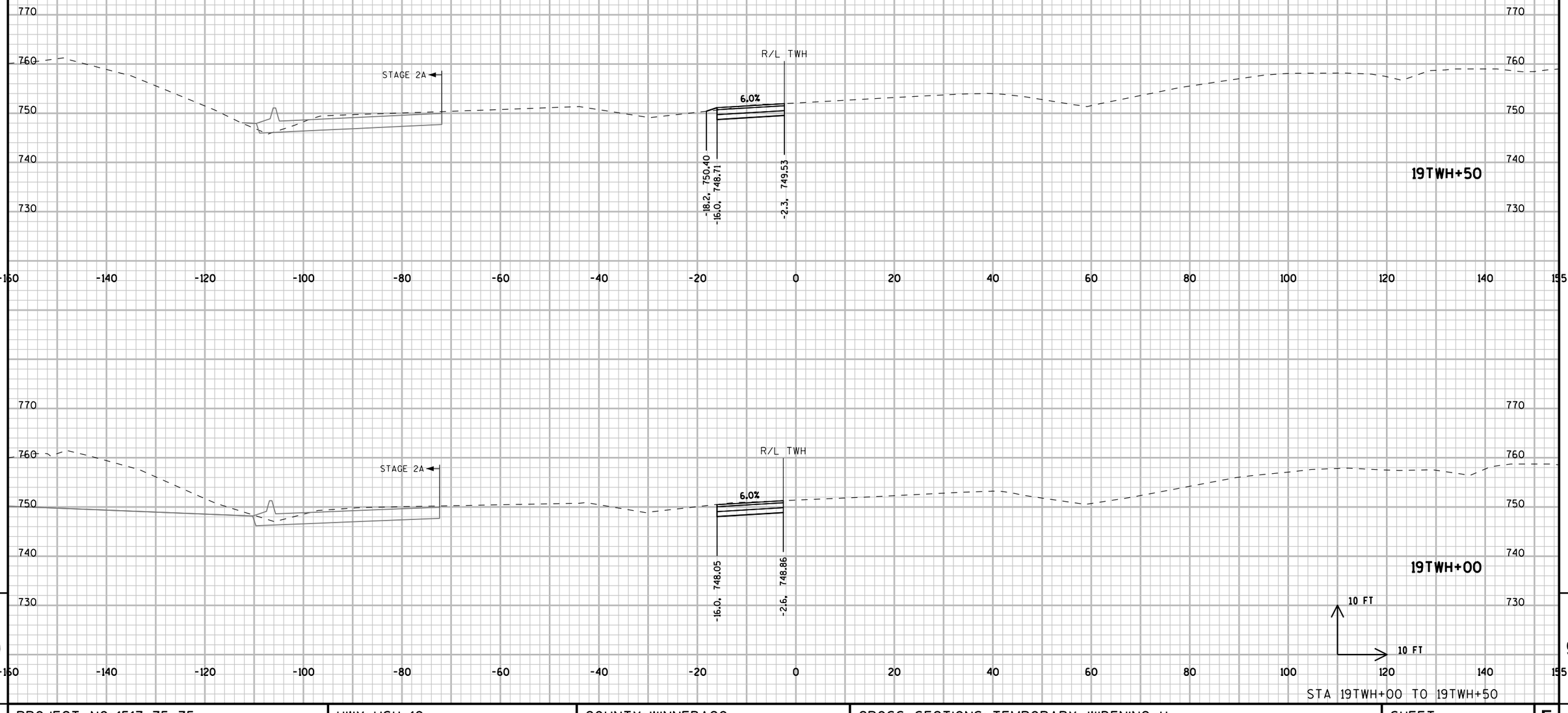
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:55 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 19TWH+00 TO 19TWH+50

9

9

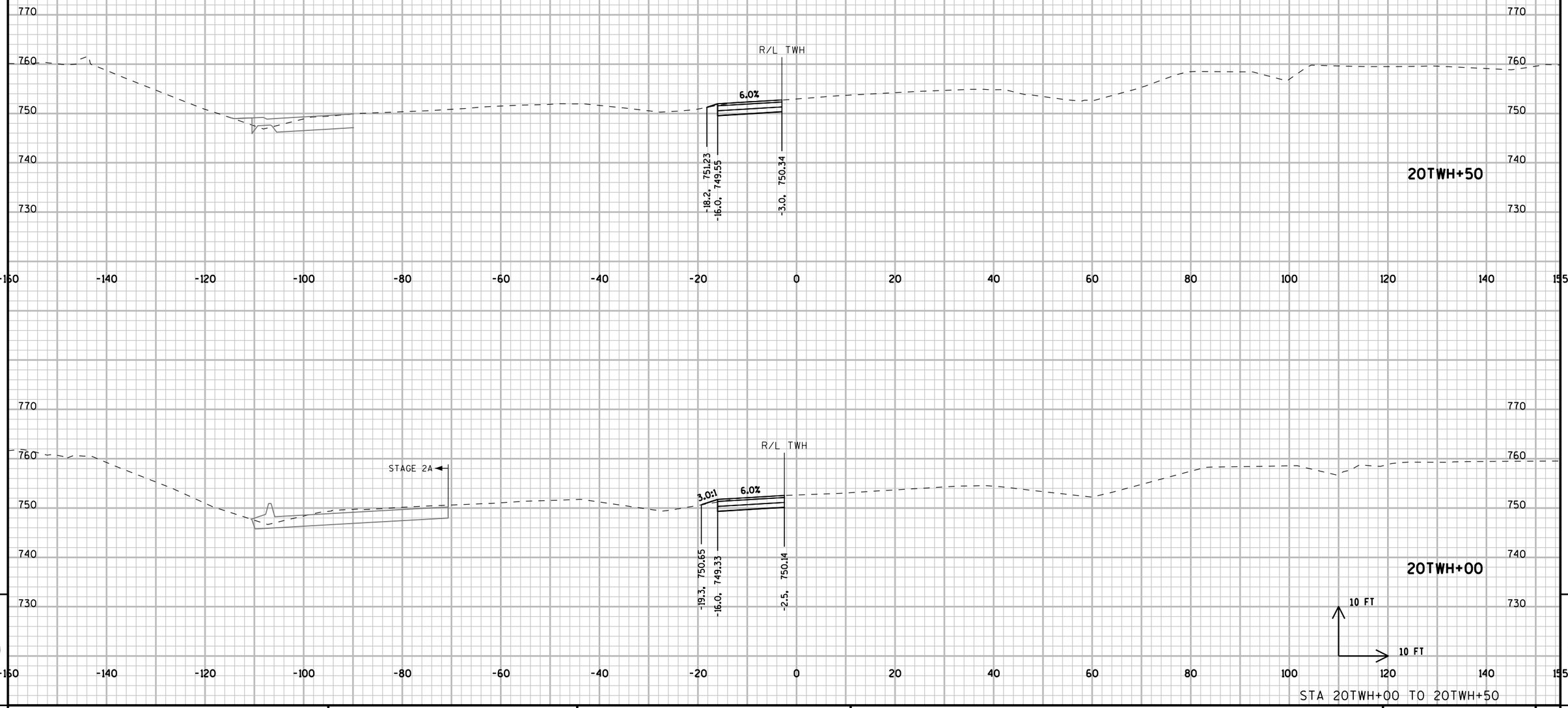
PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING H	SHEET 1229	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:56 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 20TWH+00 TO 20TWH+50

9

9

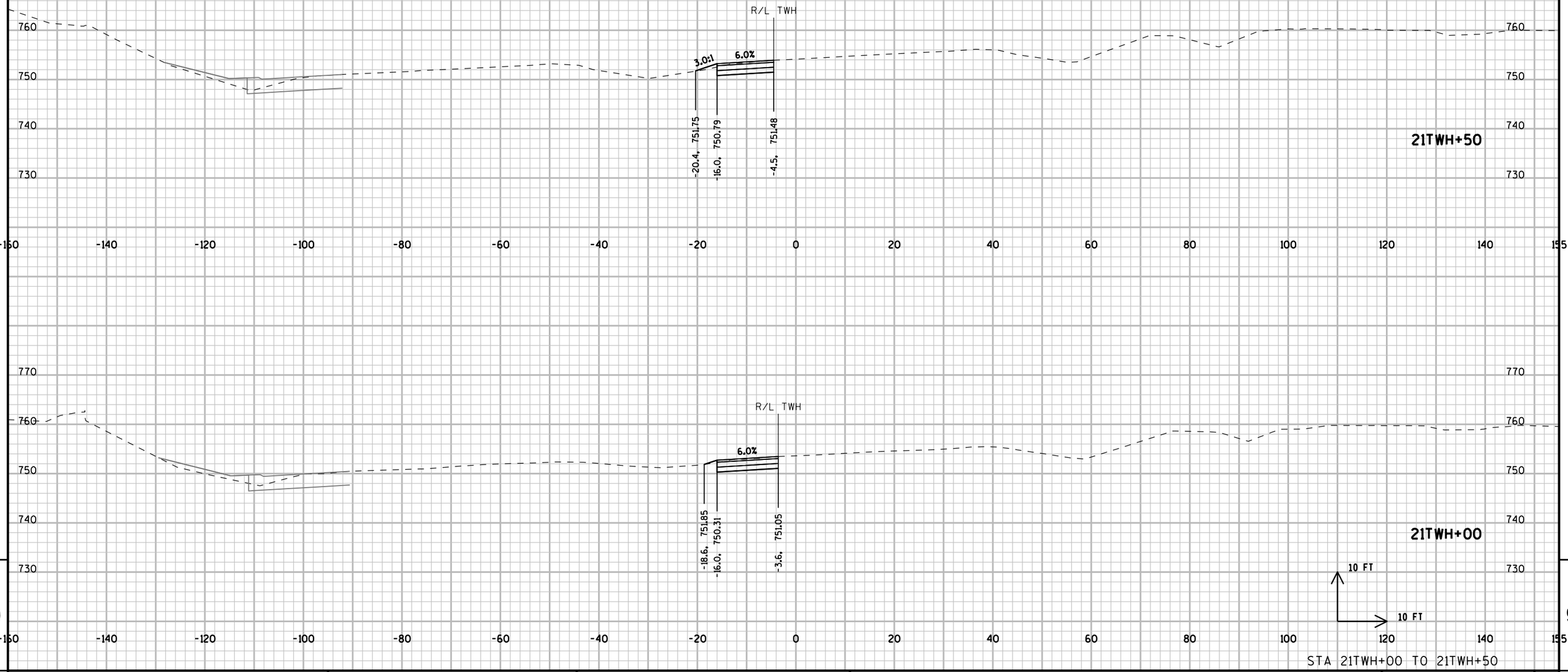
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 21TWH+00 TO 21TWH+50

9

9

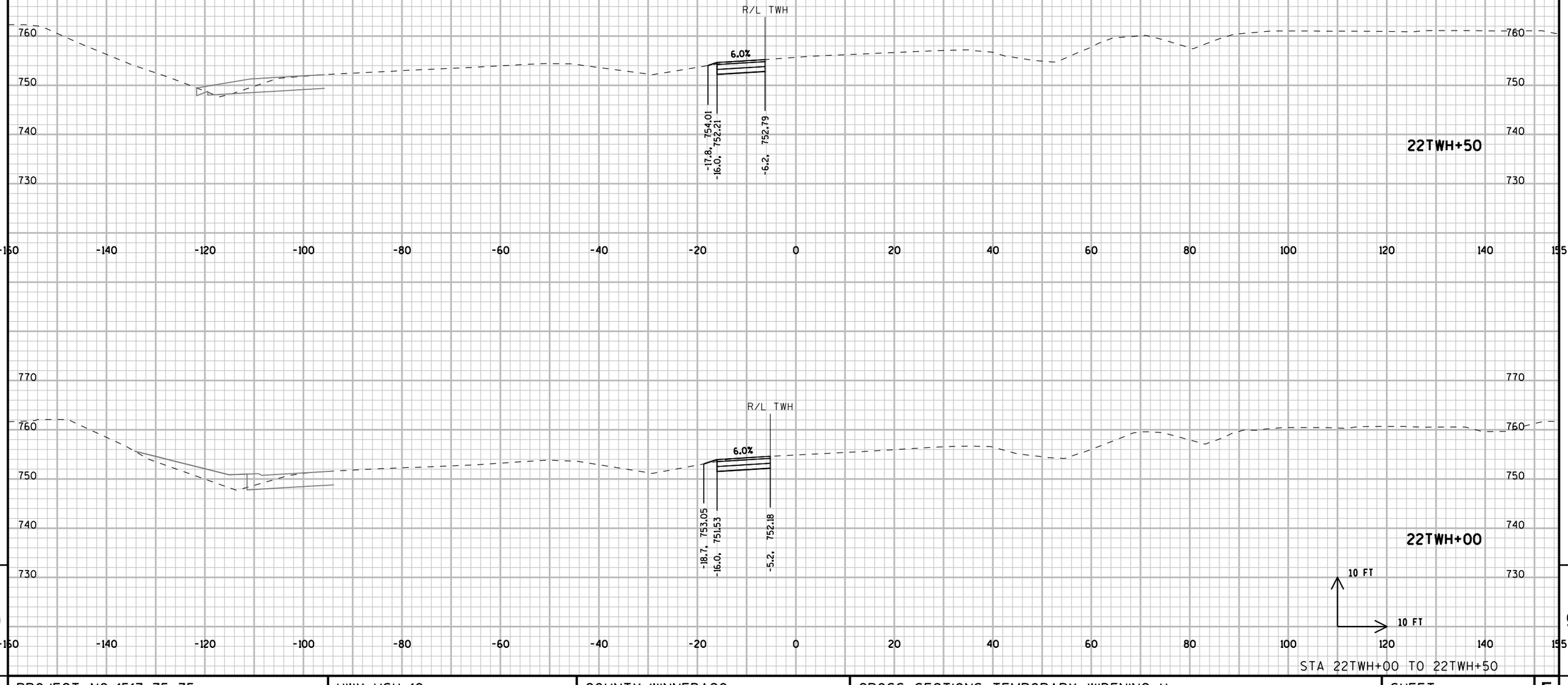
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 22TWH+00 TO 22TWH+50

9

9

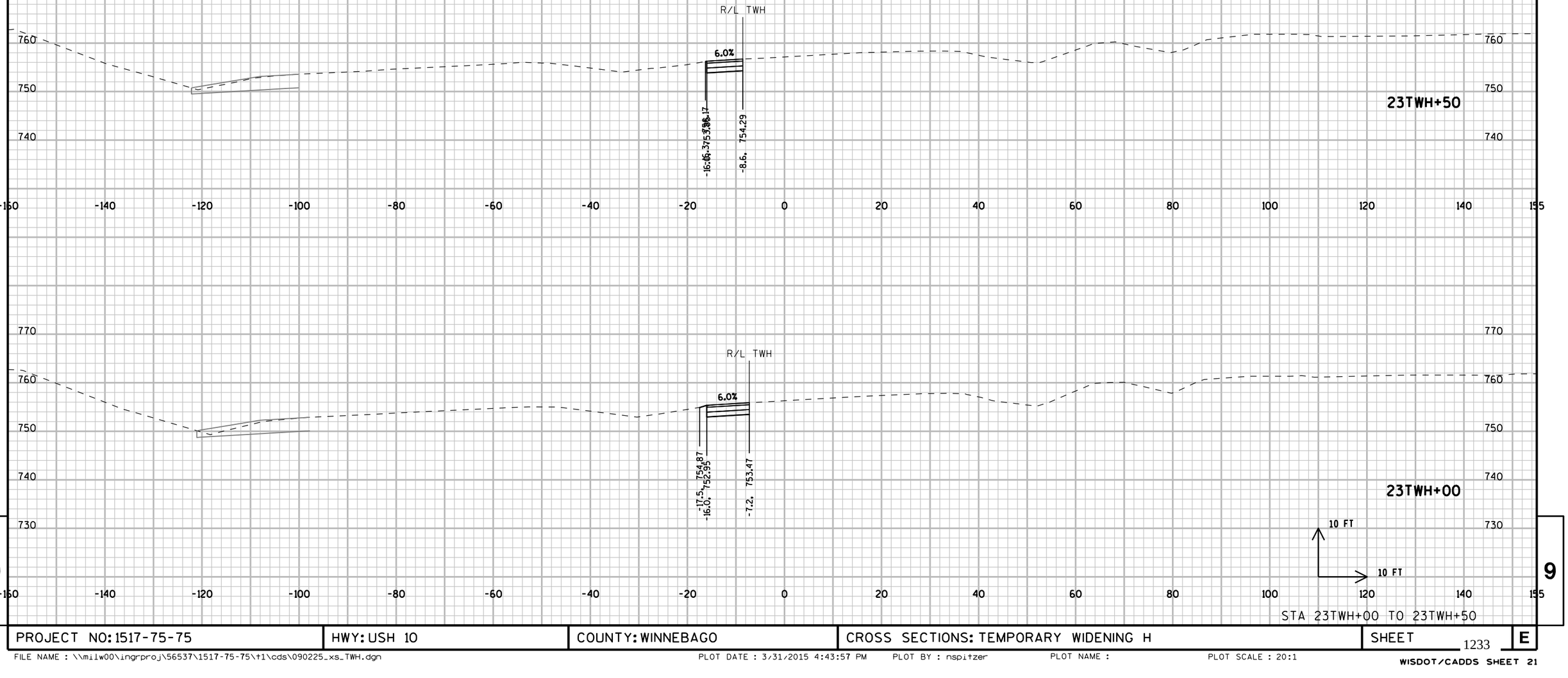
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WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 23TWH+00 TO 23TWH+50

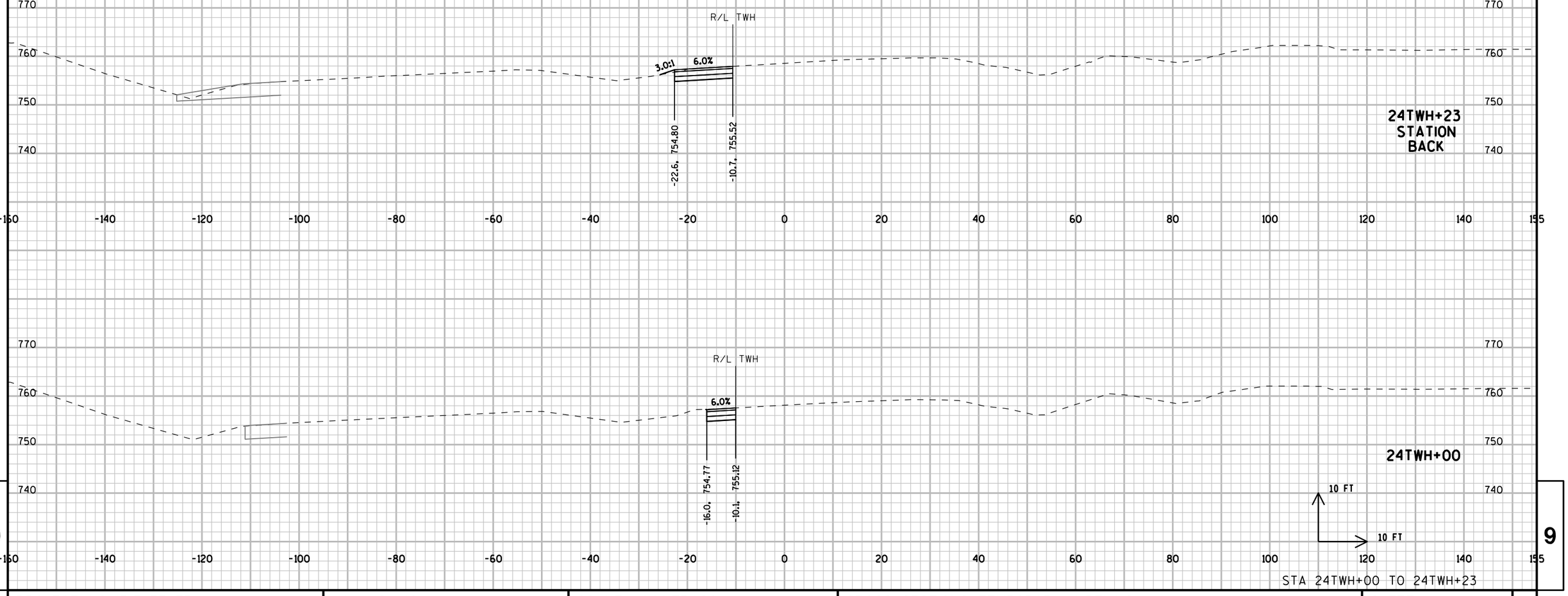
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FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:57 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

ALL WORK COMPLETED IN STAGE 2C

MATCH EXISTING PAVEMENT SLOPES FOR SHOULDER WIDENING AND REPLACEMENT



STA 24TWH+00 TO 24TWH+23

9

9

PROJECT NO: 1517-75-75	HWY: USH 10	COUNTY: WINNEBAGO	CROSS SECTIONS: TEMPORARY WIDENING H	SHEET 1234	E

FILE NAME : \\milw00\ingrproj\56537\1517-75-75\t1\cds\090225_xs_TWH.dgn PLOT DATE : 3/31/2015 4:43:58 PM PLOT BY : nspitzer PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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