WKE

JULY 24 2018

PROJECT ID: 1035-01-74
WITH: 1030-20-84/87, 1035-01-72/79/82

COUNTY: RACINE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
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 = 664

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1035-01-74	WISC 2018383	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

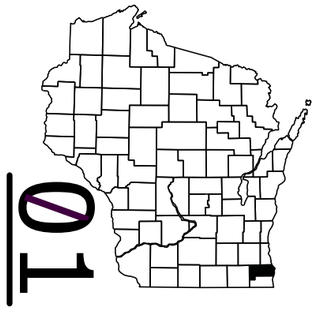
N-S FREEWAY 7 MILE RD INTERCHANGE

MAINLINE & RAMPS

IH 94

RACINE COUNTY

STATE PROJECT NUMBER
1035-01-74



DESIGN DESIGNATIONS

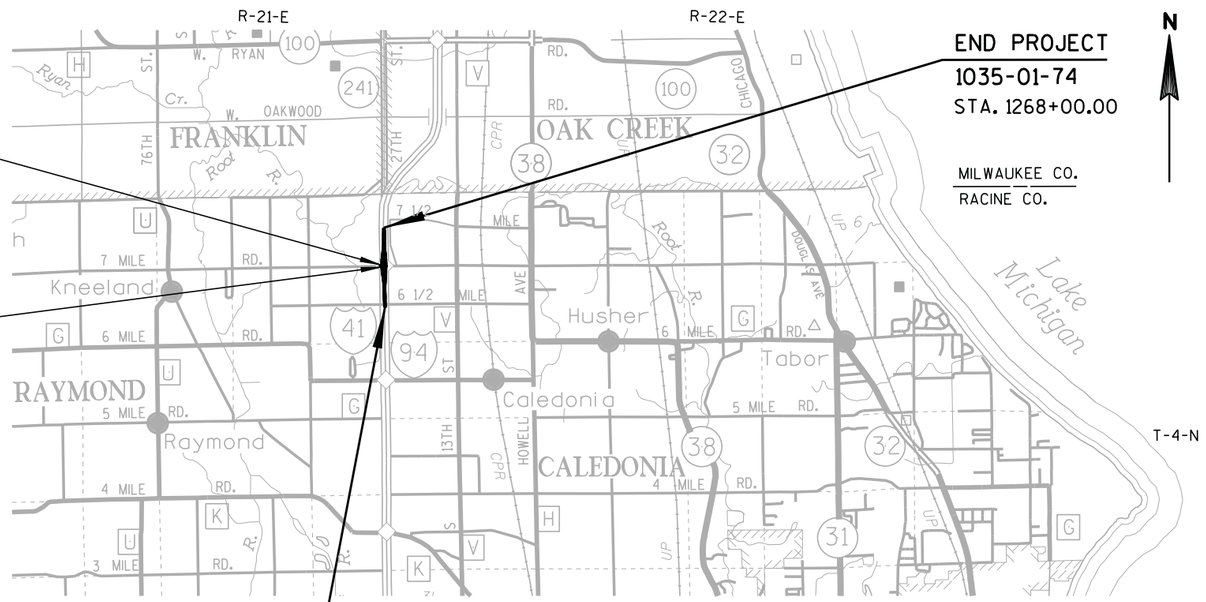
	IH 94
A.A.D.T. 2010	= 98,280
A.A.D.T. 2035	= 123,200
D.H.V.	= 10,472
D.D.	= 55NB/45SB
T.	= 14%
DESIGN SPEED	= 70 MPH
ESALS	= 36,383,200

CONVENTIONAL SYMBOLS

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

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (735.36)
- CULVERT (Profile View)

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



STRUCTURE B-51-139 (SB)
STA. 1241+81.27

STRUCTURE B-51-140 (NB)
STA. 1241+81.27

BEGIN PROJECT
1035-01-74
STA. 1213+00.00
Y=220,563.86
X=594,352.25

END PROJECT
1035-01-74
STA. 1268+00.00

MILWAUKEE CO.
RACINE CO.

TOWN OF RAYMOND

VILLAGE OF CALEDONIA

LAYOUT
SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.042 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE COUNTY, NAD 1983(97)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (91) (NAVD 88(91)).

ORIGINAL PLANS PREPARED BY
BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity

WISCONSIN
SUSAN M. COOK
E-23367
MENOMONEE FALLS, WI
PROFESSIONAL ENGINEER

6/1/18 (Date) Susan Cook (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	DAAR ENGINEERING
Designer	BLOOM COMPANIES, LLC
Project Manager	JASON DAHLGREN
District Examiner	
District Supervisor	MANAJOY NAG
C.O. Examiner	

APPROVED FOR DISTRICT OFFICE
DATE: 6/4/2018 (Signature)

E

UTILITY CONTACTS

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

AMERICAN TRANSMISSION COMPANY
CHRIS DAILEY
P.O. BOX 47
WAUKESHA, WI 53187
PHONE: (262) 506-6884
cdailey@atcllc.com

AT&T CORPORATION
c/o KEN NINE
JMC ENGINEERS & ASSOCIATES, INC.
110 NORTH MAIN STREET
CULVER, IN 46511
PHONE: (574) 842-8830
CELL: (574) 904-6336
knine@jmceainc.com

AT&T WISCONSIN
JEFF OLDENBURG
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
PHONE: (262) 896-7522
jo2376@att.com

CALEDONIA UTILITY DISTRICT
BOB LUI
6922 NICHOLSON ROAD
CALEDONIA, WI 53108
PHONE: (262) 681-3900
blui@caledoniawiutility.com

CHARTER COMMUNICATIONS
PETE KRUZELA
1320 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
PHONE: (414) 908-1339
CELL: (414) 688-5376
Pete.kruzela@charter.com
wis.engineering@charter.com

LEVEL 3 COMMUNICATIONS
BRAHIM GADDOUR
OSP ENGINEERING DEPT.
3235 INTERTECH DRIVE, SUITE 600
BROOKFIELD, WI 53045
PHONE: (414) 908-1027
CELL: (414) 704-1026
gaddour.brahim@level3.com
relo@level3.com

WE ENERGIES - ELECTRIC
SEND ALL CORRESPONDENCE TO:
NICOLE SMULLEN
333 W. EVERETT STREET - A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617
CELL: (414) 460-5617
Nicole.Smullen@we-energies.com

CONSTRUCTION FIELD CONTACT:
DAN TOOMEY
500 S. 116TH STREET
WEST ALLIS, WI 53214
OFFICE: (414) 944-5695
CELL: (414) 254-8459
dan.toomey@we-energies.com

WINDSTREAM
MARY FISHER
13935 BISHOPS DRIVE
BROOKFIELD, WI 53005
PHONE: (414) 792-7938
mary.b.fisher@windstream.com

WE ENERGIES - GAS
SEND ALL CORRESPONDENCE TO:
NICOLE SMULLEN
333 W. EVERETT STREET - A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617
CELL: (414) 460-5617
Nicole.Smullen@we-energies.com

CONSTRUCTION FIELD CONTACT:
DAN TOOMEY
500 S. 116TH STREET
WEST ALLIS, WI 53214
OFFICE: (414) 944-5695
CELL: (414) 254-8459
dan.toomey@we-energies.com

WISDOT - LIGHTING
ERIC PEREA
141 NW BARSTOW STREET
WAUKESHA, WI 53187
PHONE: (262) 574-5422
CELL: (414) 750-0935
eric.perea@dot.wi.gov

WISDOT COMMUNICATIONS
JEFFREY MADSON
433 W ST. PAUL AVENUE
SUITE 300
MILWAUKEE, WI 53203
PHONE: (414) 225-3723
jeffrey.madson@dot.wi.gov

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

OTHER AGENCIES

BLOOM COMPANIES, LLC
NICK SKIFFINGTON, PROJECT MANAGER
10501 W RESEARCH DRIVE, SUITE 100
MILWAUKEE, WI 53226
PHONE: (414) 292-4511
nskiffington@bloomcos.com

CALEDONIA, VILLAGE OF
ANTHONY BUNKELMAN
6922 NICHOLSON ROAD
CALEDONIA, WI 53108
PHONE: (262) 835-6416
abunkelman@caledoniawi.com

RACINE COUNTY DPW
NATHAN PLUNKETT
14200 WASHINGTON AVENUE
STURTEVANT, WI 53177
PHONE: (262) 886-8442
nathan.plunkett@racinecounty.com

RAYMOND, TOWN OF
LINDA TERRY, TOWN CLERK
2255 S. 76TH STREET
FRANKSVILLE, WI 53126
PHONE: (262) 835-4426

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
ROB MERRY
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262) 953-4289
CELL: (920) 912-1036
rmerry@sewrpc.org

WISCONSIN DEPARTMENT OF TRANSPORTATION
LACI KAZAN – ENVIRONMENTAL ANALYST AND REVIEW SPECIALIST
141 NW BARSTOW STREET
WAUKESHA, WI 53187-0798
CELL: (414) 322-1429
laci.kazan@dot.wi.gov

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
KRISTINA BETZOLD
DNR SERVICE CENTER
2300 N. MARTIN LUTHER KING JR.
MILWAUKEE, WI 53212
PHONE: (414) 507-4946
kristina.betzold@wisconsin.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION
GREG BERRY – UTILITY COORDINATOR
141 NW BARSTOW STREET
WAUKESHA, WI 53187-0798
CELL: (414) 750-7828
gregory.berry@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION
JASON DAHLGREN – PROJECT MANAGER
141 NW BARSTOW STREET
WAUKESHA, WI 53187-0798
CELL: (262) 521-5349
jason.dahlgren@dot.wi.gov

WISCONSIN COACH LINE, INC.
TOME DIECKLEMAN – PRESIDENT
1520 ARCADIAN AVENUE
WAUKESHA, WI 53186
PHONE: (262) 542-8861 EXT 140
Tom.dieckleman@coachusa.com

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLANS
PAVING DETAILS
FTMS PLANS
CROSS SECTION MATCHLINE
EROSION CONTROL PLANS
STORM SEWER PLANS
EXISTING SIGNING PLANS
PERMANENT SIGNING PLANS
LIGHTING PLANS
PAVEMENT MARKING PLANS
TRAFFIC CONTROL PLANS
FENCING PLANS
ALIGNMENT PLANS

GENERAL NOTES

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

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

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

ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED WITH GRANULAR MATERIAL. GRANULAR MATERIAL IS INCLUDED IN COST OF REMOVAL ITEMS.

PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.

QUANTITIES FOR EXCAVATION COMMON INCLUDE REMOVAL OF EXISTING CONCRETE PAVEMENT AND ASPHALT.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.07 GALLON PER SQUARE YARD AND SHALL BE APPLIED BETWEEN ALL LAYERS OF ASPHALTIC PAVEMENT.

ASPHALTIC SURFACE, AND ASPAHALTIC SURFACE TEMPORARY MAY BE CONSTRUCTED IN A SINGLE LAYER.

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

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

CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED FROM 0 TO 6 INCHES IN 6 FEET. SEE CONSTRUCTION DETAIL.

CONCRETE MEDIAN SLOPED NOSE SHALL BE CONSTRUCTED FOR ALL MEDIAN OPENINGS AT INTERSECTIONS WITH CURB & GUTTER.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.

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

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS AND AS LOCATED IN THE MISCELLANEOUS QUANTITIES. JOINT TIES SHALL BE INCLUDED IN THE COST OF THE CONCRETE PIPE.

FERTILIZER SHALL NOT BE USED NEAR AVAILABLE WATERWAYS OR WETLANDS.

BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS RIPRAP MEDIUM.

INLET PROTECTION REQUIRED AT ALL INLETS AS PER EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.

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

CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE REPLACED WITH 4-INCH TYPICAL DEPTH.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE SODDED AREAS AND AREAS WITHIN THE FINISHED SHOUDER POINTS, SHALL BE RESTORED WITH TOPSOIL FERTILIZER AND SEED AS DIRECTED BY THE ENGINEER.

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

LOCATIONS OF DRAINTILE ON THE PLAN ARE BASED ON AS-BUILT OR PROPERTY OWNER INTERVIEWS, DRAINTILE EXPLORATION ITEM ARE TO BE USED TO VERIFY THE EXACT LOCATION.

COORDINATE WITH THE RACINE COUNTY PLANNING AND DEVELOPEMENT DIRECTOR, JULIE ANDERSON, AT 262-886-8470 TO PERPETUATE SECTION CORNERS 10 DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS.

STRAND PREPARED THE FOLLOWING PLANS FOR THIS PROJECT:
EROSION CONTROL, PAVEMENT MARKING, STORM SEWER, AND ASSOCIATED CONSTRUCTION DETAILS AND MISCELLANEOUS QUANTITIES FOR THESE PLANS.

ALL TYPES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING GRADATIONS, TRAFFIC, BINDER AND DESIGNATIONS:

TOTAL LAYER PAVEMENT THICKNESS	BID ITEMS			
5”	2.25” UPPER	4	MT	58-28 H
	2.75” LOWER	3	MT	58-28 S
7.5”	2.0” UPPER	4	HT	58-28 H
	2.75” LOWER	3	HT	58-28 S
	2.75” LOWER	3	HT	58-28 S
1.75”	1.75”	4	MT	58-28 H

STANDARD ABBREVATIONS

AECPRC	APRON ENDWALL CULVERT PIPE REINFORCE CONCRETE
AECPRCHE	APRON ENDWALL CULVERT PIPE REINFORCE CONCRETE HORIZONTAL ELLIPTICAL
AECPSS	APRON ENDWALL CULVERT PIPE SLOPE SECTION
AEW	APRON ENDWALL
AGG	AGGREGATE
ASPH	ASPHALT
BAD	BASE AGGREGATE DENSE
B/C	BACK OF CURB
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L OR	CENTER OR CONSTUCTION LINE
CONC	CONCRETE
CP	CULVERT PIPE
CPCM	CULVERT PIPE CORRUGATED METAL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CTR	CENTER
CY	CUBIC-YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
EBS	EXCAVATION BELOW SUBGRADE
EFR	EAST FRONTAGE ROAD
EL	ELEVATION
ESTR	EXISTING SIGN TO REMAIN
FE	FIELD ENTRANCE
FS	FULL SUPERELEVATION
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MIN	MINIMUM
MIO	MIDDLE OF RADIUS
M/L	MATCH LINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT-OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASMENT
PT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
REQ’D	REQUIRED
RHF	RIGHT HAND FORWARD
RT	RIGHT
SALV	SALVAGED
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
WFR	WEST FRONTAGE ROAD

2

2

N

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00
MATCH PROJECT
I.D. 1035-01-79

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
MATCH PROJECT
I.D. 1035-01-82

6 1/2 MILE ROAD

1/4 SECTION LINE

SECTION LINE

TOWN OF RAYMOND

ROOT RIVER TRIBUTARY

ROOT RIVER

WETLAND

I.D. 1035-01-75
(PREVIOUSLY CONSTRUCTED)

WEST FRONTAGE RD

7 MILE RD

S-51-23

S-51-22

B-51-139

B-51-140

S-51-220

RAMP SW

RAMP NW

RAMP SE

RAMP NE

NE POND

SE POND

POND

EAST FRONTAGE RD

IH 94 SB

IH 94 NB

1220SW
1230SW
1240SW
1250NW
1260NW
1264NW
1220SE
1230SE
1240SE
1250NE
1260NE

1210
1220
1230
1240
1250
1260
1270

27TH ST ENTRANCE RAMP

27TH ST EXIT RAMP

STANLEY RD

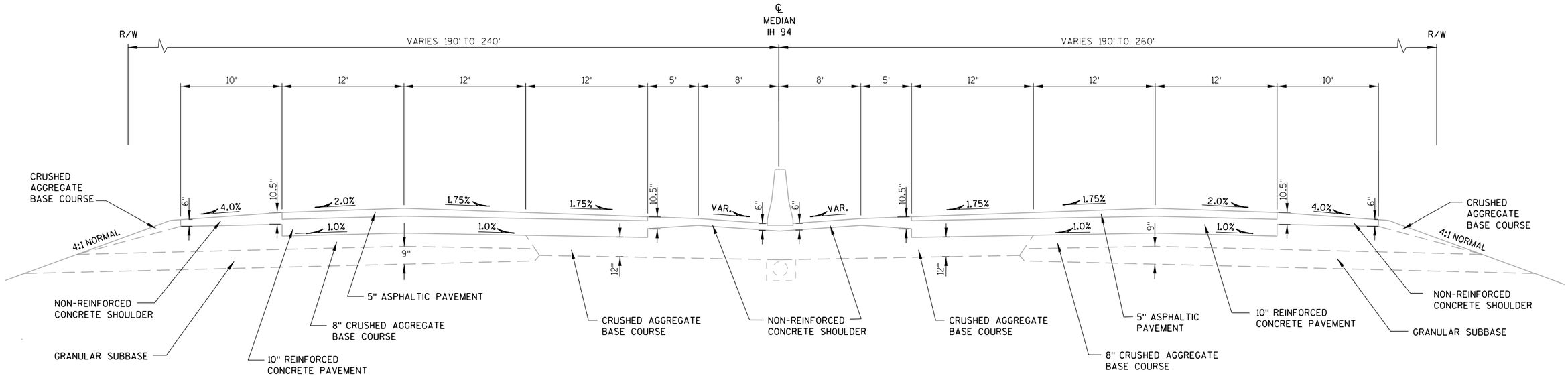
HAGEMANN RD

I.D. 1035-01-71
(PREVIOUSLY CONSTRUCTED)

VILLAGE OF CALEDONIA

7 1/2 MILE ROAD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 4	E

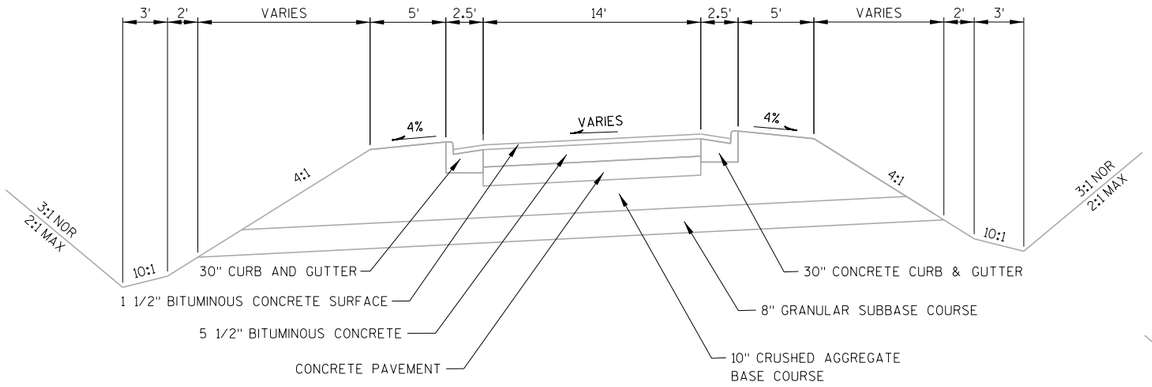


TYPICAL EXISTING SECTION

IH 94

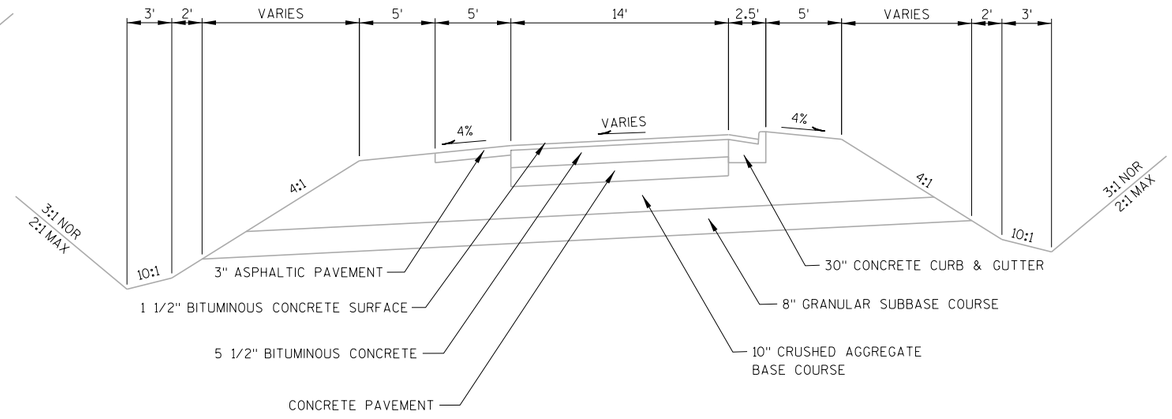
MAINLINE EXCLUDING RAMPS
STA 1213+00 TO STA 1268+00

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TYPICAL EXISTING SECTIONS	SHEET 5	E



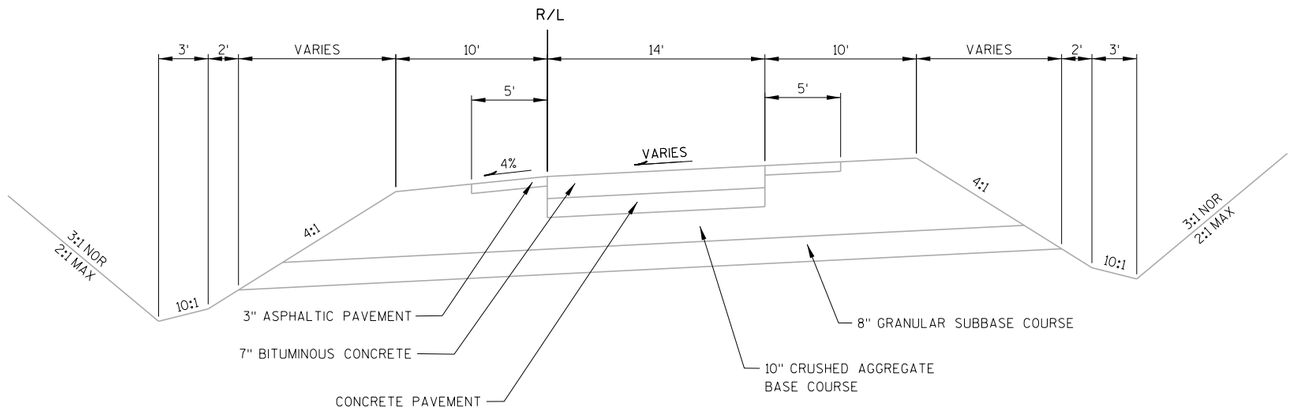
TYPICAL EXISTING SECTION RAMPS

RAMP AREAS
CURB & GUTTER BOTH SIDES
STA 1229SE+25 TO STA 1230SE+00
STA 1247NE+25 TO STA 1247NE+89
STA 1230SW+63 TO STA 1231SW+30
STA 1252NW+93 TO STA 1253NW+77



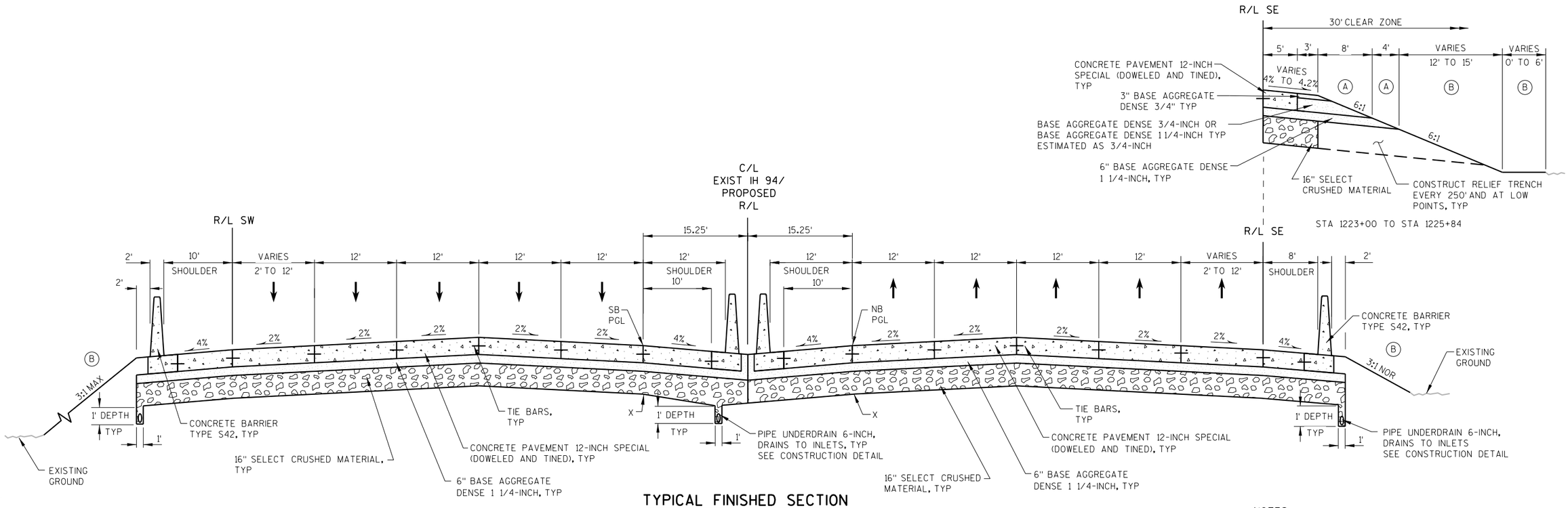
TYPICAL EXISTING SECTION RAMPS

BETWEEN MAINLINE AND RAMP AREAS
CURB & GUTTER ONE SIDE
STA 1228SE+10 TO STA 1229SE+25
STA 1230SE+00 TO STA 1230SE+72
STA 1247NE+89 TO STA 1249NE+54
STA 1228SW+88 TO STA 1230SW+63
STA 1252NW+25 TO STA 1252NW+93
STA 1253NW+77 TO STA 1254NW+66



TYPICAL EXISTING SECTION RAMPS

RAMP AREAS
WITHOUT CURB & GUTTER
STA 1225SE+68 TO STA 1228SE+10
STA 1246NE+83 TO STA 1247NE+25
STA 1231SW+26 TO STA 1231SW+62
STA 1254NW+92 TO STA 1257NW+69



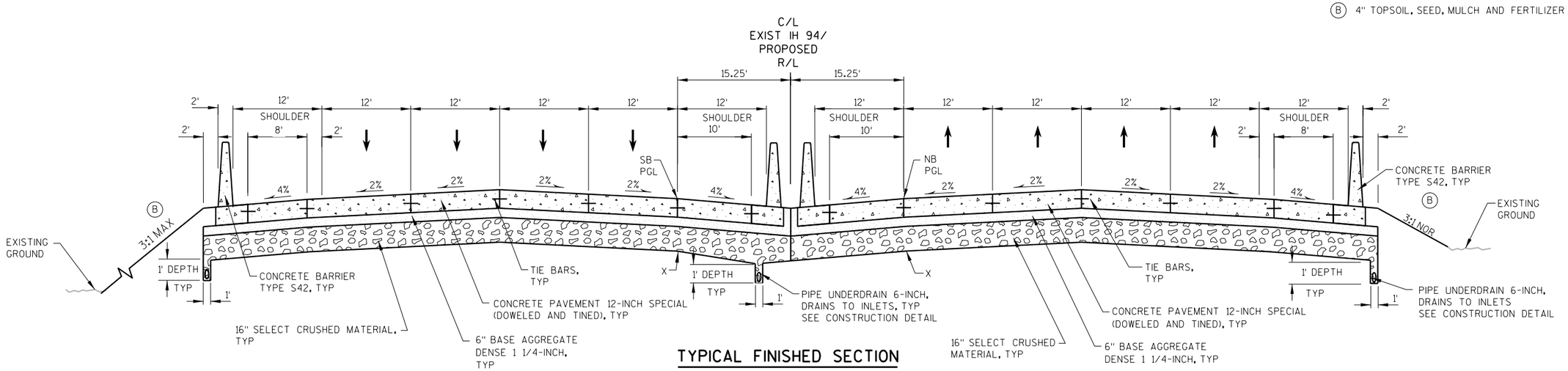
TYPICAL FINISHED SECTION

IH 94

STA 1218+83 TO STA 1225+84 NB
STA 1216+62 TO STA 1226+00 SB

NOTES

X = POINT REFERRED TO ON CROSS SECTION
(A) SEEDING AND FERTILIZER
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

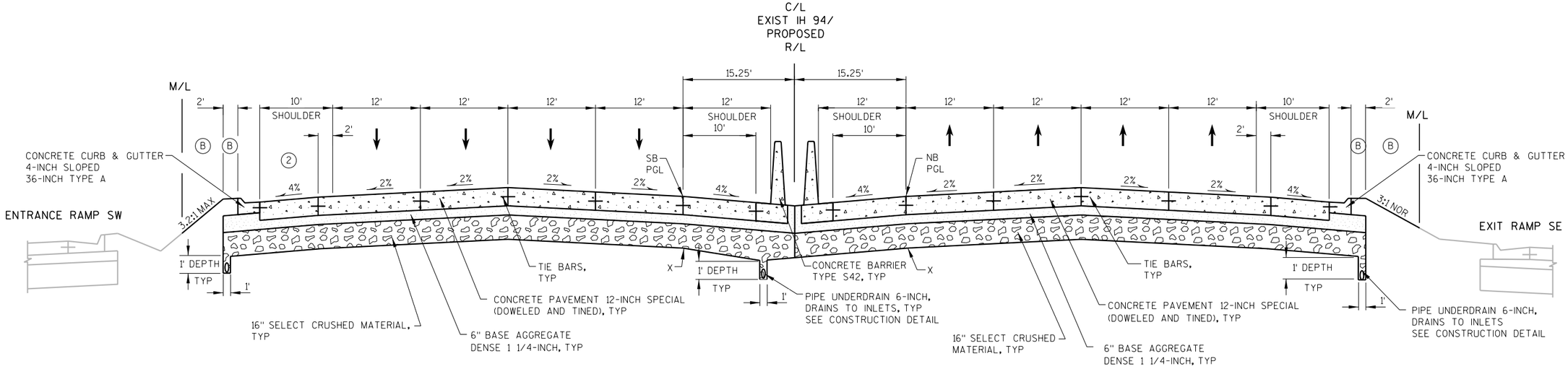


TYPICAL FINISHED SECTION

IH 94

STA 1213+00 TO STA 1218+83 NB
STA 1213+00 TO STA 1216+62 SB

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 7	E



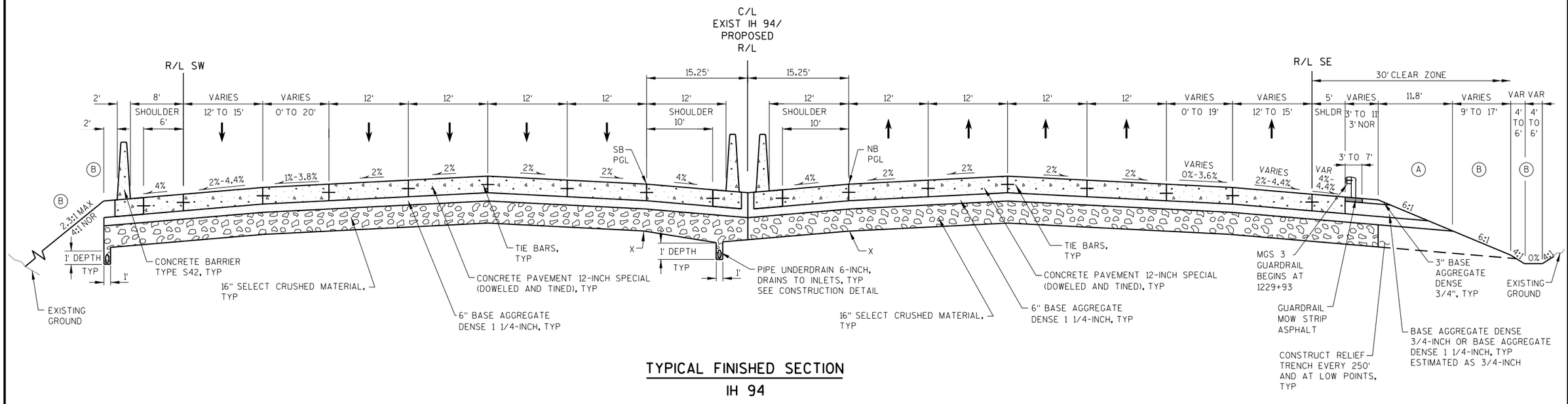
TYPICAL FINISHED SECTION

IH 94

STA 1230+37 TO STA 1234+00 NB
STA 1231+96 TO STA 1235+00 SB

NOTES

X = POINT REFERRED TO ON CROSS SECTION
(A) SEEDING AND FERTILIZER
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

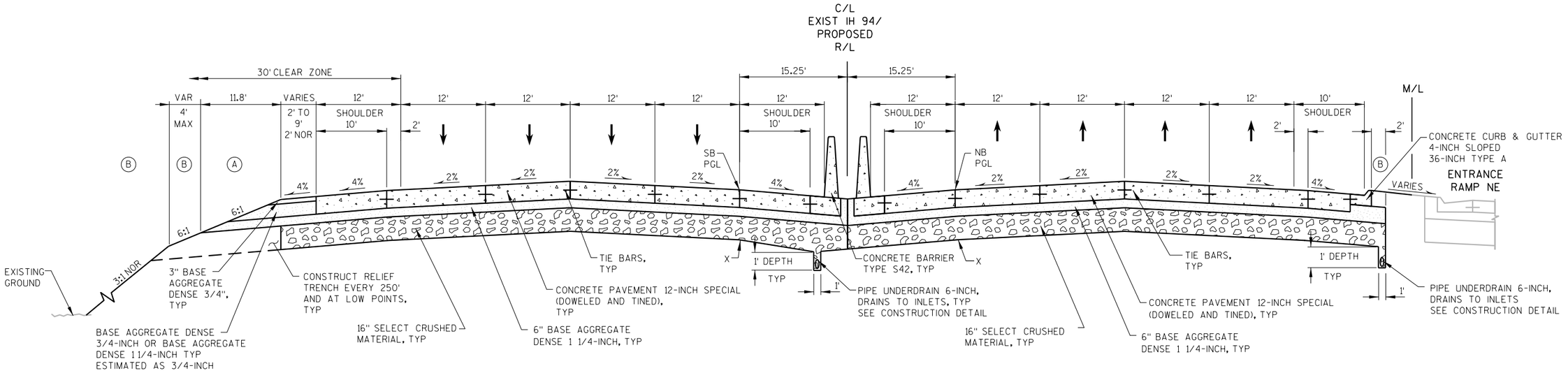


TYPICAL FINISHED SECTION

IH 94

STA 1225+84 TO STA 1230+37 NB
STA 1226+00 TO STA 1231+96 SB

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 8	E



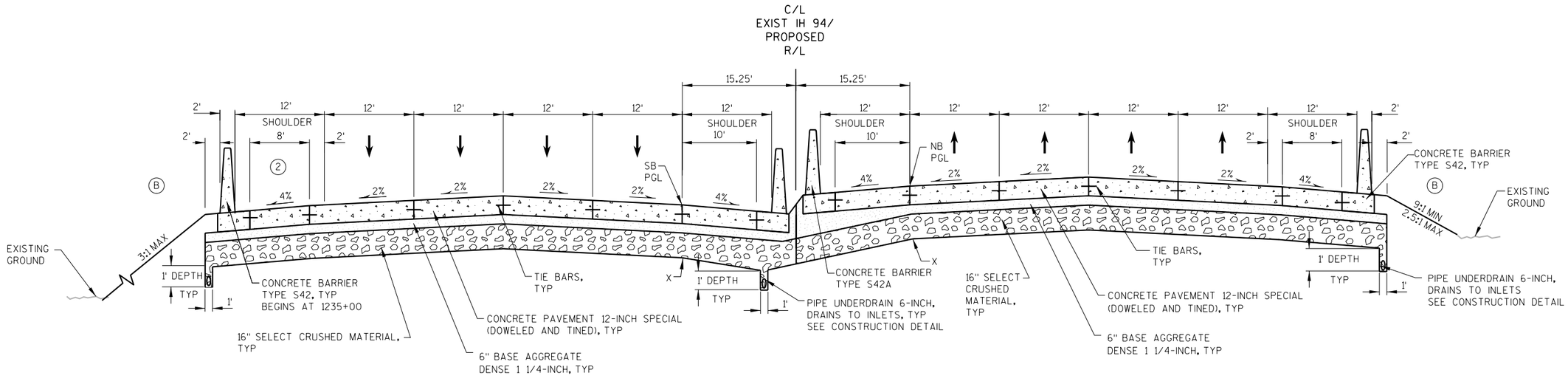
TYPICAL FINISHED SECTION

IH 94

STA 1250+00 TO STA 1252+97 NB
STA 1244+42 TO STA 1253+93 SB

NOTES

X = POINT REFERRED TO ON CROSS SECTION
(A) SEEDING AND FERTILIZER
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

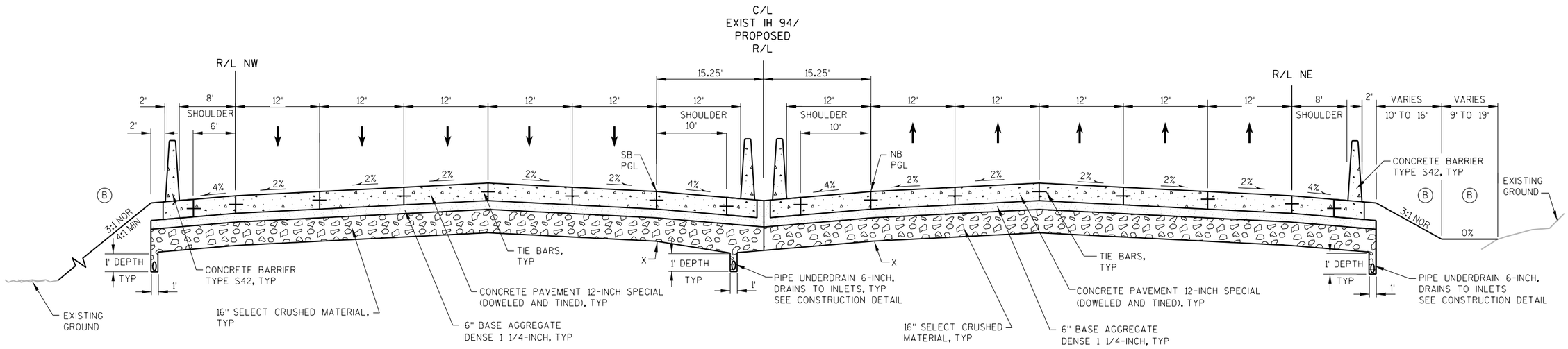


TYPICAL FINISHED SECTION

IH 94

STA 1234+00 TO STA 1240+64 NB
STA 1235+00 TO STA 1240+64 SB
STA 1242+99 TO STA 1250+00 NB
STA 1242+99 TO STA 1244+42 SB

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 9	E



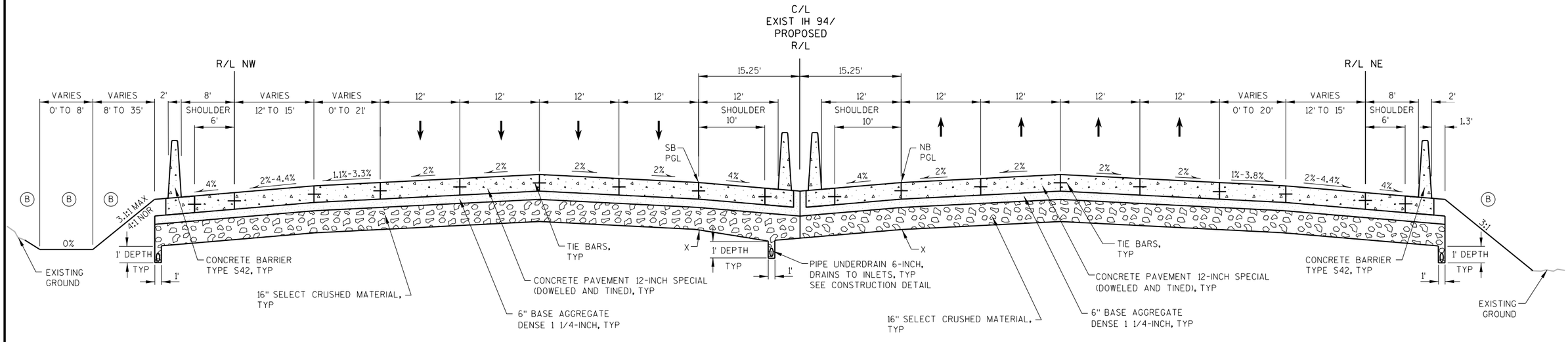
TYPICAL FINISHED SECTION

IH 94

STA 1259+14 TO STA 1265+39 NB
STA 1258+00 TO STA 1264+00 SB

NOTES

X = POINT REFERRED TO ON CROSS SECTION
(A) SEEDING AND FERTILIZER
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

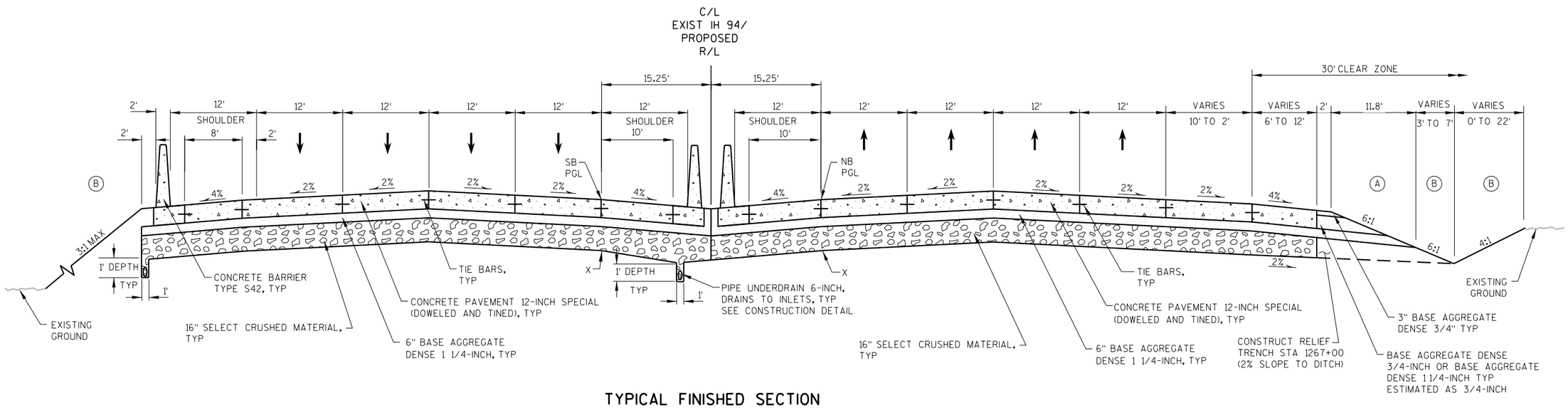


TYPICAL FINISHED SECTION

IH 94

STA 1252+97 TO STA 1259+14 NB
STA 1253+93 TO STA 1258+00 SB

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 10	E



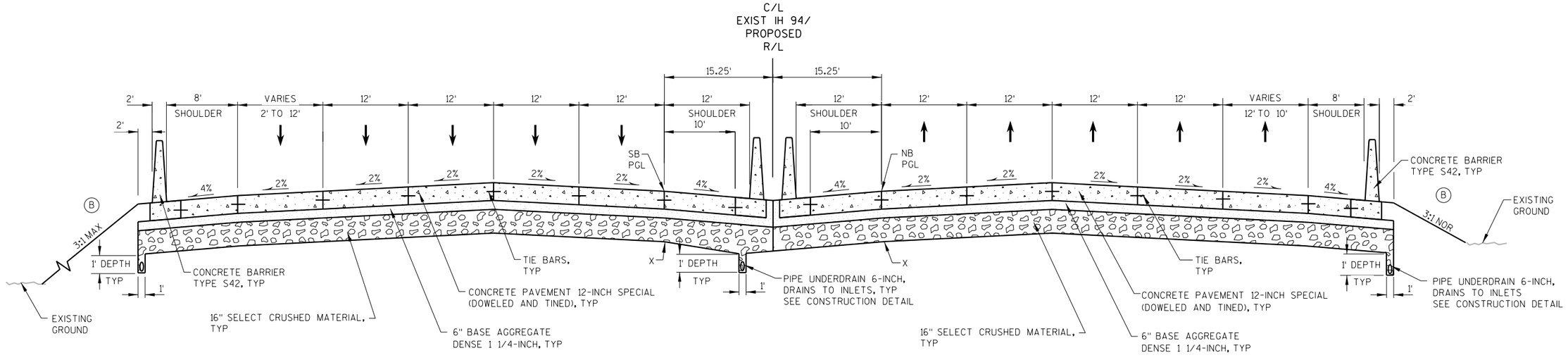
TYPICAL FINISHED SECTION

IH 94

STA 1266+00 TO STA 1268+00 NB
STA 1265+25 TO STA 1268+00 SB

NOTES

X = POINT REFERRED TO ON CROSS SECTION
(A) SEEDING AND FERTILIZER
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

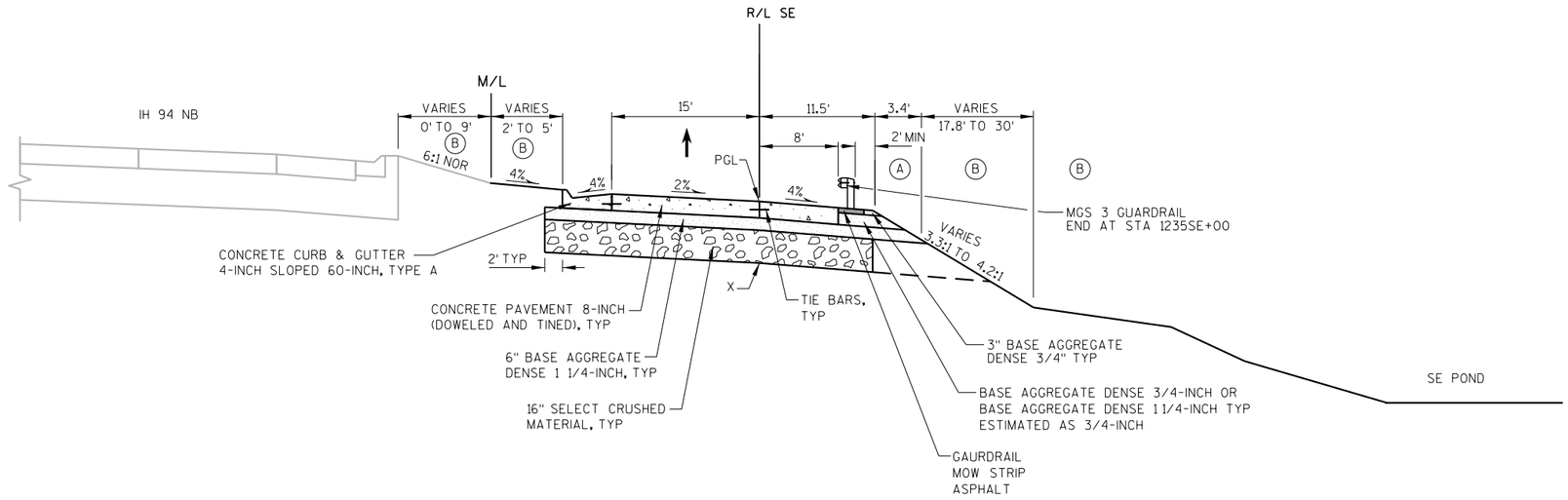


TYPICAL FINISHED SECTION

IH 94

STA 1265+39 TO STA 1266+00 NB
STA 1264+00 TO STA 1265+25 SB

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 11	E



NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

(A) SEEDING AND FERTILIZER

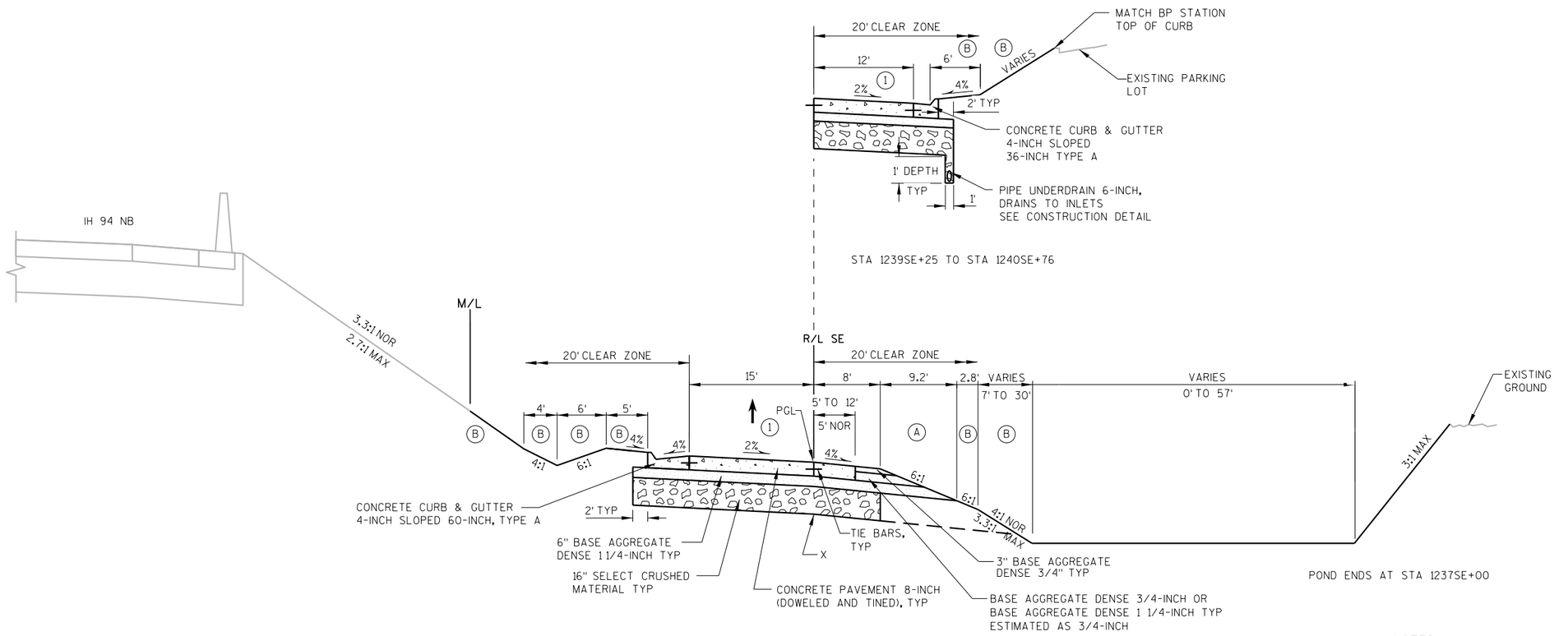
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

TYPICAL FINISHED SECTION

RAMP SE

STA 1230SE+42 TO STA 1233SE+50

2



NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

(A) SEEDING AND FERTILIZER

(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

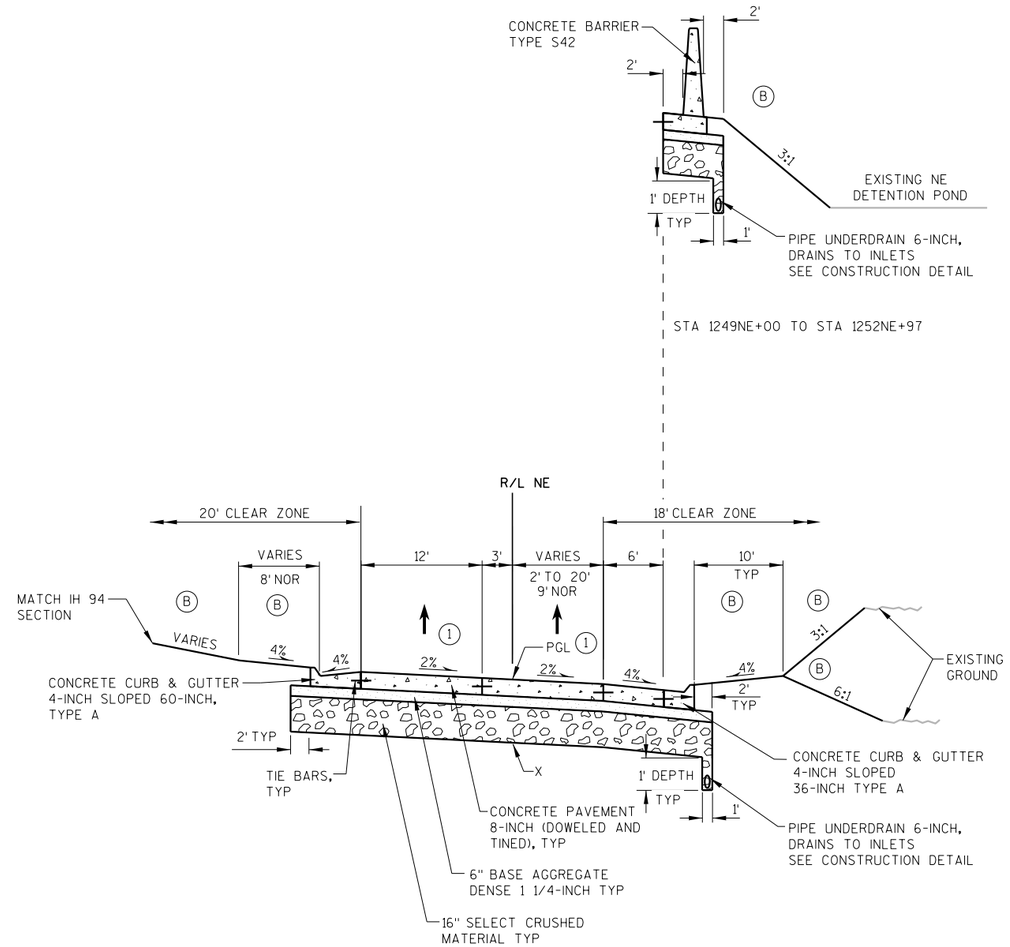
(1) RAMP SUPERELEVATION VARIES 2% TO -2%
STA 1239SE+00 TO STA 1240SE+00

TYPICAL FINISHED SECTION

RAMP SE

STA 1233SE+50 TO STA 1240SE+76

2



NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

(A) SEEDING AND FERTILIZER

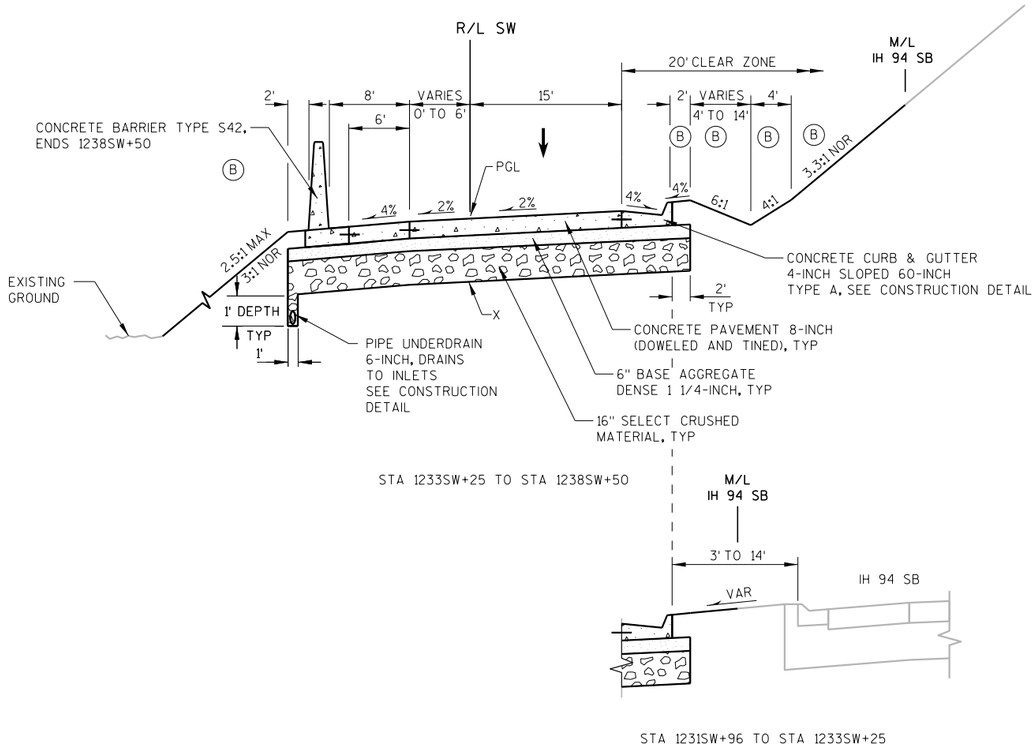
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

(1) RAMP SUPERELEVATION VARIES 2% TO -2%
STA 1243NE+00 TO STA 1244NE+00

TYPICAL FINISHED SECTION

RAMP NE

STA 1242NE+55 TO STA 1252NE+97



NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

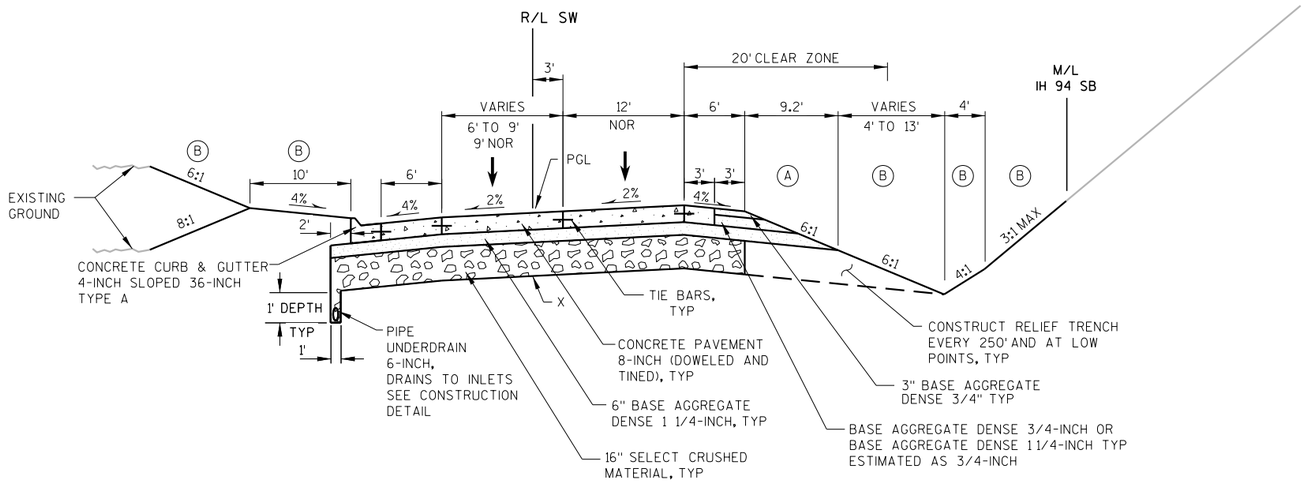
(A) SEEDING AND FERTILIZER

(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

TYPICAL FINISHED SECTION

RAMP SW

STA 1231SW+96 TO STA 1238SW+50



NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

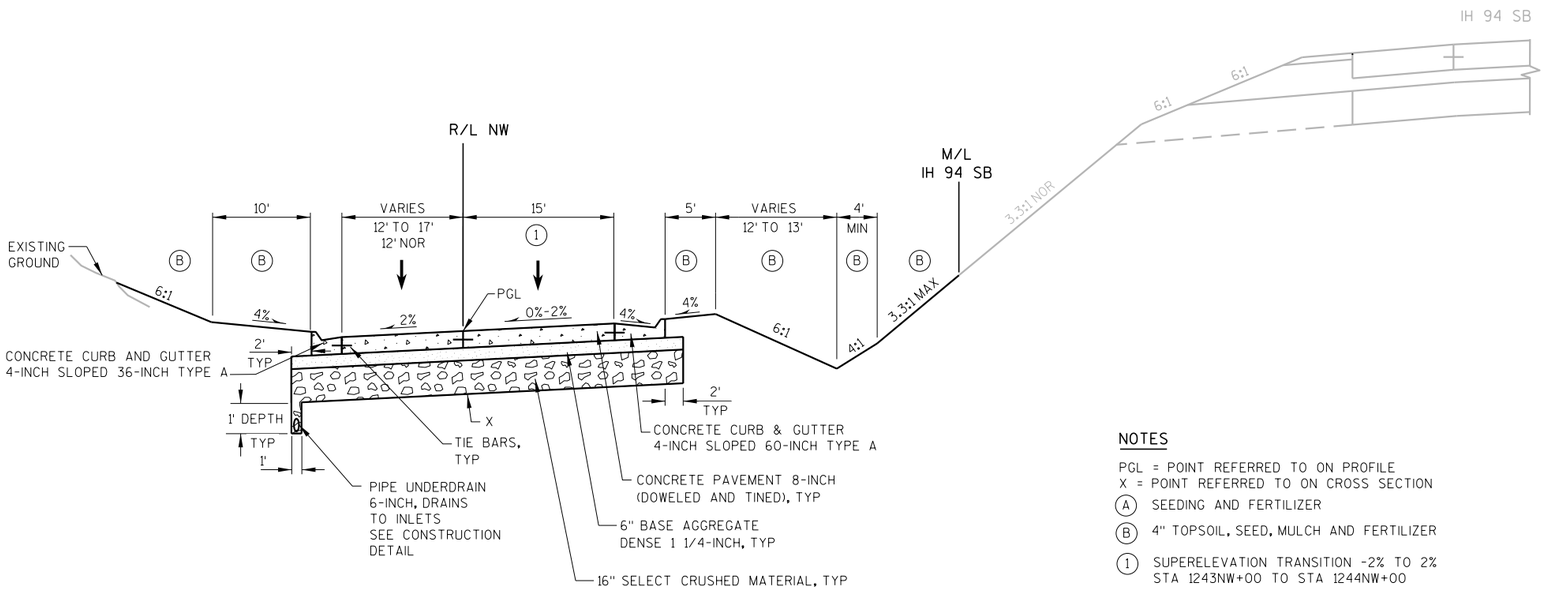
(A) SEEDING AND FERTILIZER

(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

TYPICAL FINISHED SECTION

RAMP SW

STA 1238SW+50 TO STA 1241SW+46



TYPICAL FINISHED SECTION

RAMP NW

STA 1243NW+50 TO STA 1246NW+25

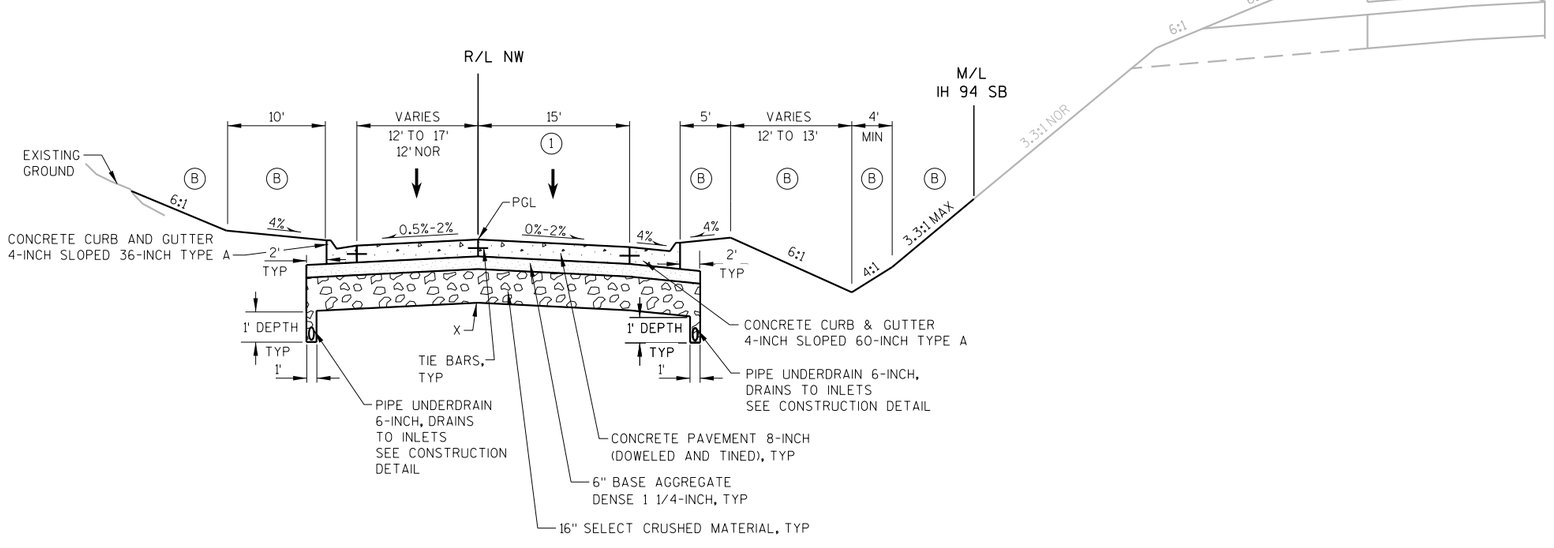
NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

(A) SEEDING AND FERTILIZER

(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER

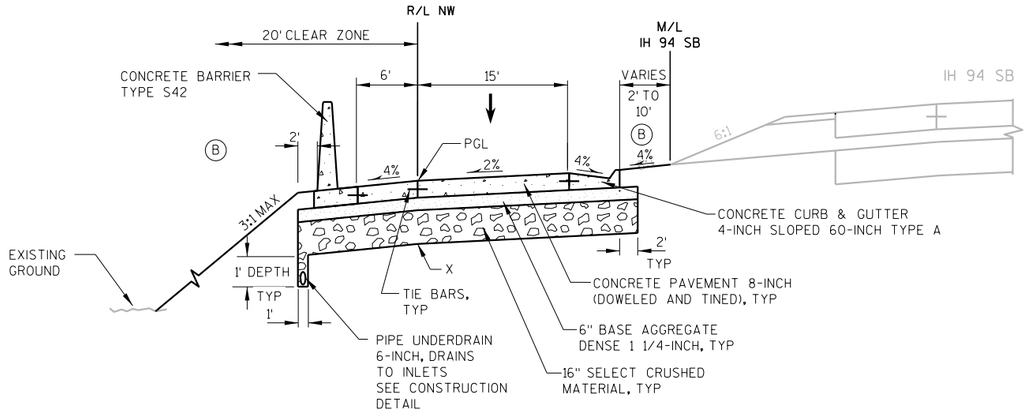
(1) SUPERELEVATION TRANSITION -2% TO 2%
STA 1243NW+00 TO STA 1244NW+00



TYPICAL FINISHED SECTION

RAMP NW

STA 1242NW+25 TO STA 1243NW+50



TYPICAL FINISHED SECTION

RAMP NW

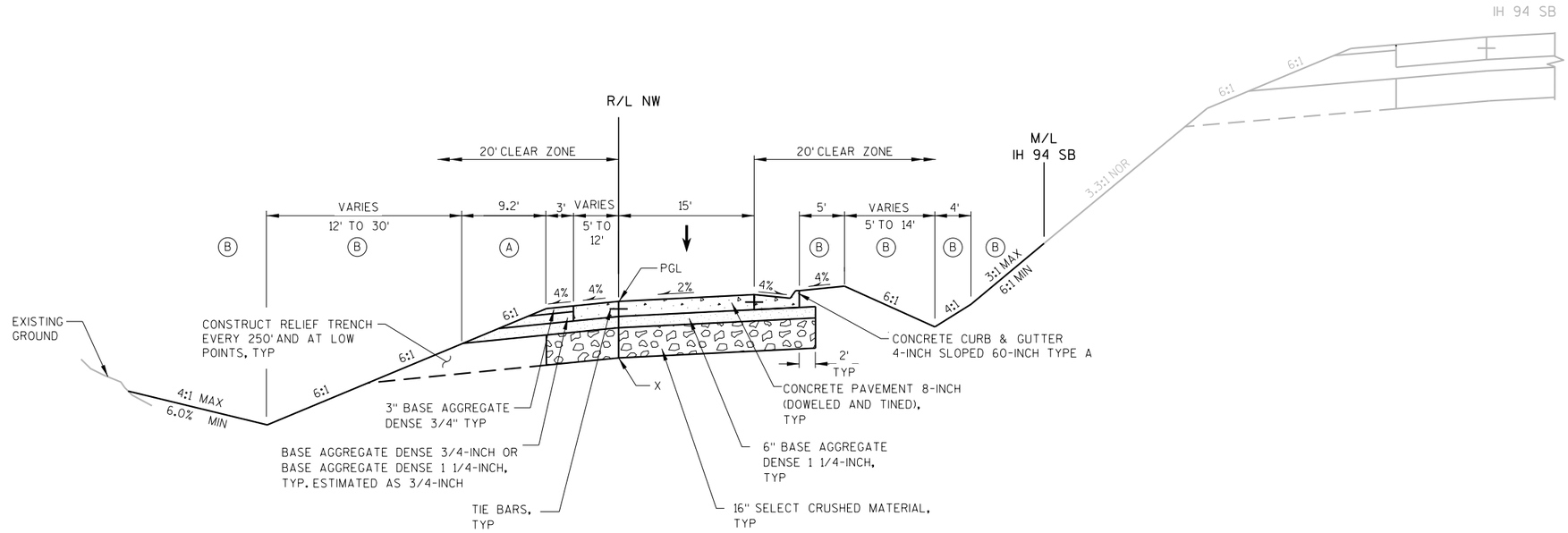
STA 1251NW+75 TO STA 1253NW+94

NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION

(A) SEEDING AND FERTILIZER

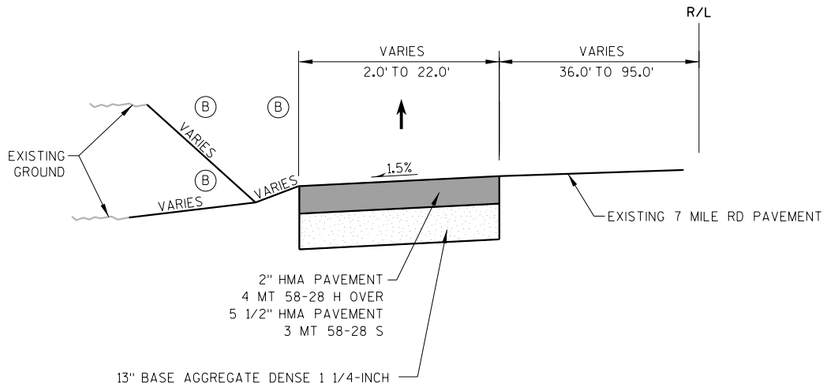
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER



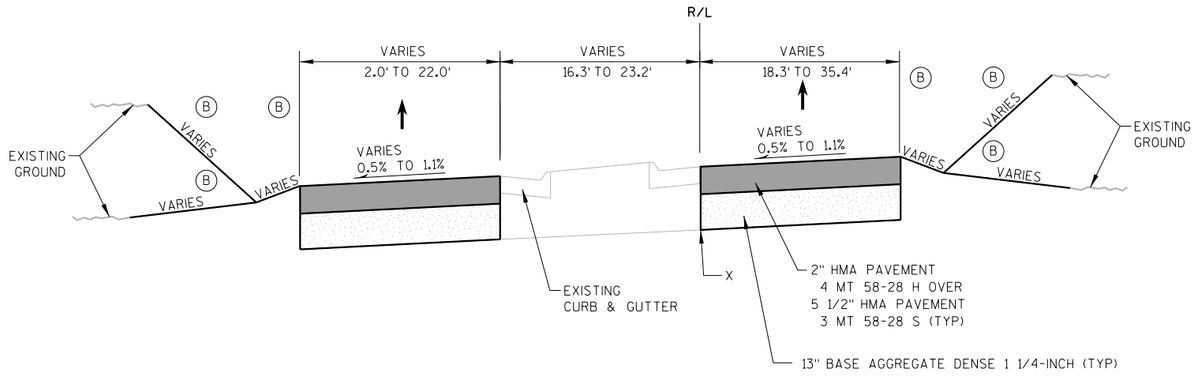
TYPICAL FINISHED SECTION

RAMP NW

STA 1246NW+25 TO STA 1251NW+75



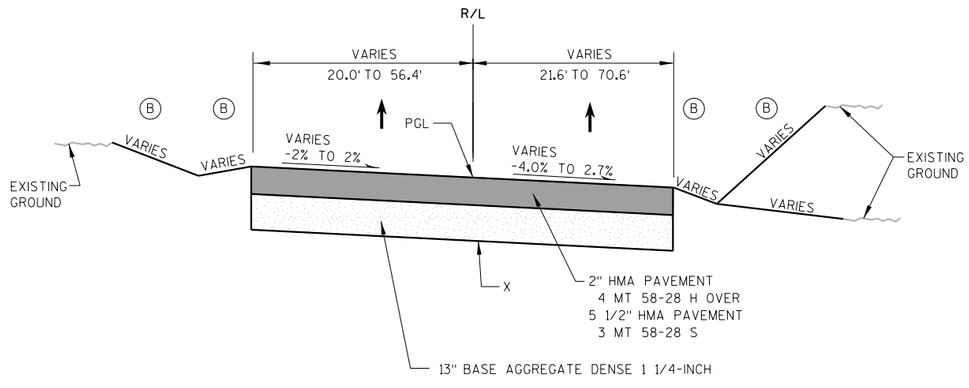
TYPICAL FINISHED SECTION
TEMPORARY RAMP - SW
STA 1241SW+27.7 TO STA 1242SW+57.3



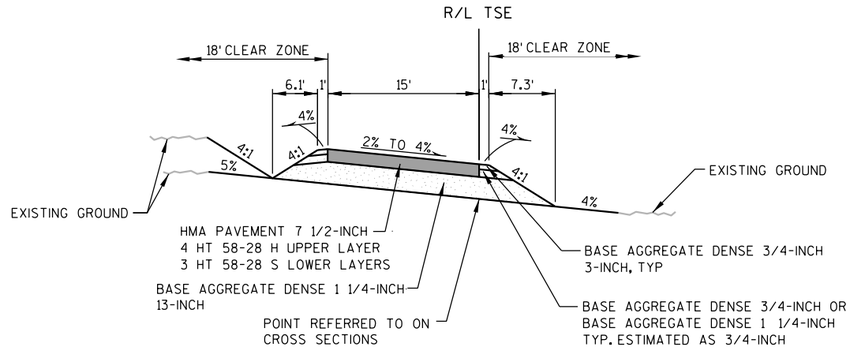
TYPICAL FINISHED SECTION
TEMPORARY RAMP - NW RAMP
STA 1241NW+77.4 TO STA 1241NW+16.4

NOTES

PGL = POINT REFERRED TO ON PROFILE
X = POINT REFERRED TO ON CROSS SECTION
(A) SEEDING AND FERTILIZER
(B) 4" TOPSOIL, SEED, MULCH AND FERTILIZER



TYPICAL FINISHED SECTION
TEMPORARY RAMPS - SE AND NE RAMPS
STA 1241NE+64.2 TO STA 1242NE+50.0
STA 1240SE+76.0 TO STA 1241NE+35.9



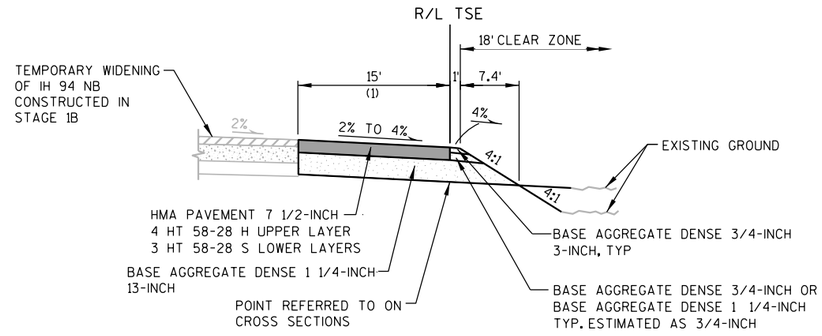
FOOTNOTE

(1) SUPERELEVATION VARIES 4% TO 2%
STA 1227TSE+85 TO STA 1228TSE+29

TYPICAL FINISHED SECTION

TEMPORARY NB EXIT RAMP SE

STA 1228TSE+00 TO STA 1229TSE+00



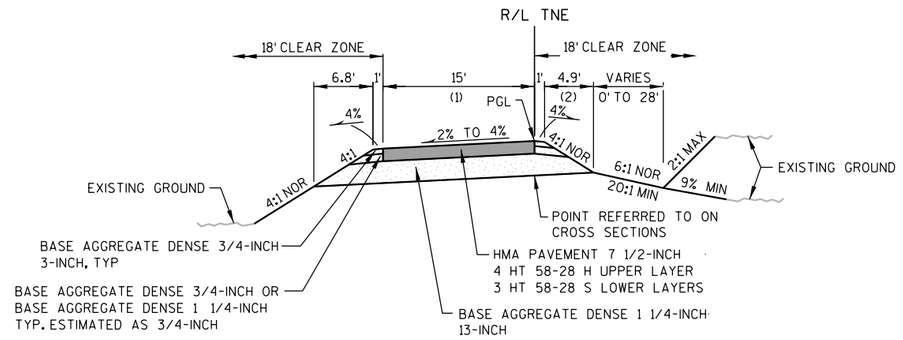
FOOTNOTE

(1) SUPERELEVATION VARIES 2% TO 4%
STA 1226TSE+21 TO STA 1226TSE+64

TYPICAL FINISHED SECTION

TEMPORARY NB EXIT RAMP SE

STA 1226TSE+00 TO STA 1228TSE+00

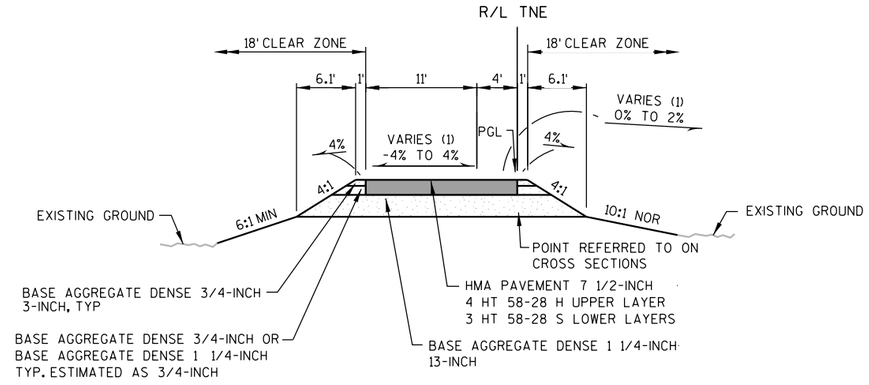


FOOTNOTE

(1) SUPERELEVATION VARIES 2% TO 4%
STA 1245TNE+22 TO STA 1245TNE+66

TYPICAL FINISHED SECTION
TEMPORARY NB ENTRANCE RAMP NE

STA 1244TNE+50 TO STA 1246TNE+61

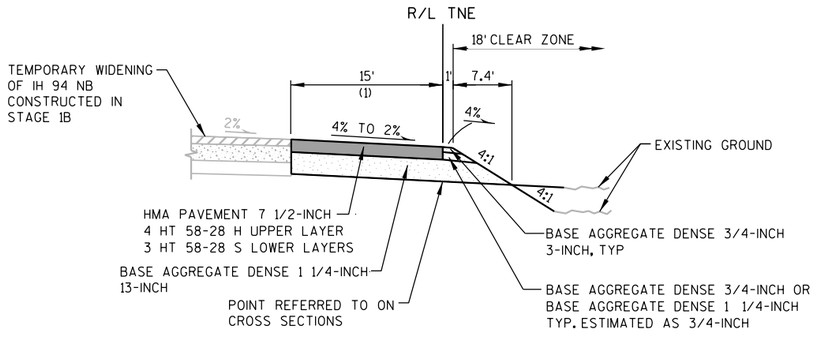


FOOTNOTES

(1) SUPERELEVATION VARIES -4% TO 4%
STA 1246TNE+61 TO STA 1247TNE+97

TYPICAL FINISHED SECTION
TEMPORARY NB ENTRANCE RAMP NE

STA 1246TNE+61 TO STA 1247TNE+97

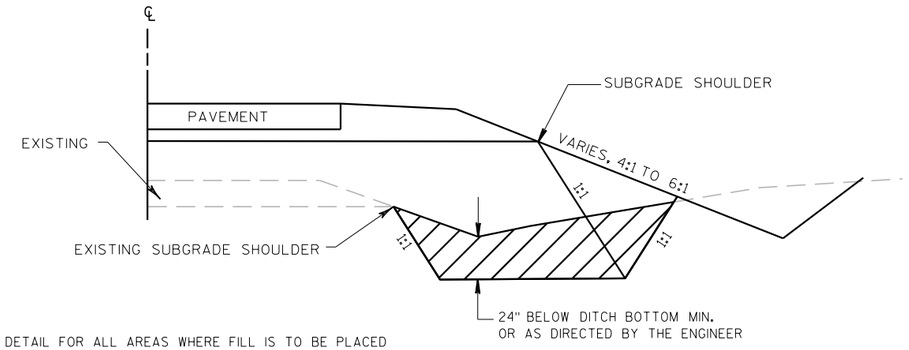


FOOTNOTE

(1) SUPERELEVATION VARIES 4% TO 2%
STA 1248TNE+59 TO STA 1249TNE+03

TYPICAL FINISHED SECTION
TEMPORARY NB ENTRANCE RAMP NE

STA 1247TNE+97 TO STA 1252TNE+00



NOTES

1) UTILIZE DETAIL FOR ALL AREAS WHERE FILL IS TO BE PLACED OVER AN EXISTING DITCH.

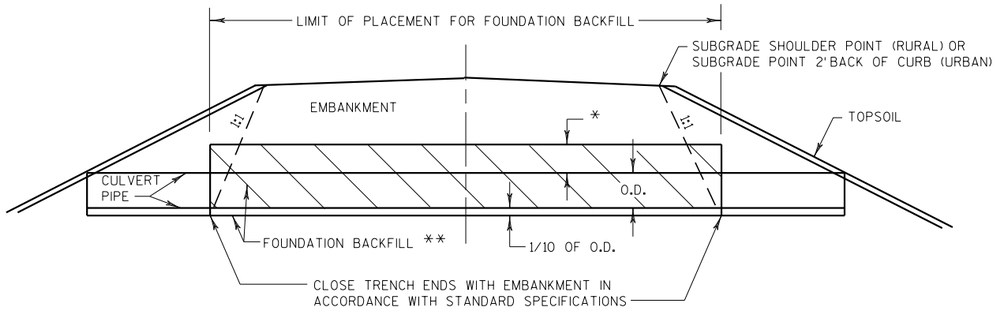
2) EXCAVATE AREA TO A MINIMUM OF 24 INCHES BELOW THE EXISTING DITCH BOTTOM OR AS DIRECTED BY THE ENGINEER.

3) EBS AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER.

4) BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

5) EXACT LOCATION AND EXTENTS OF EBS SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

EBS IN DITCHES DETAIL

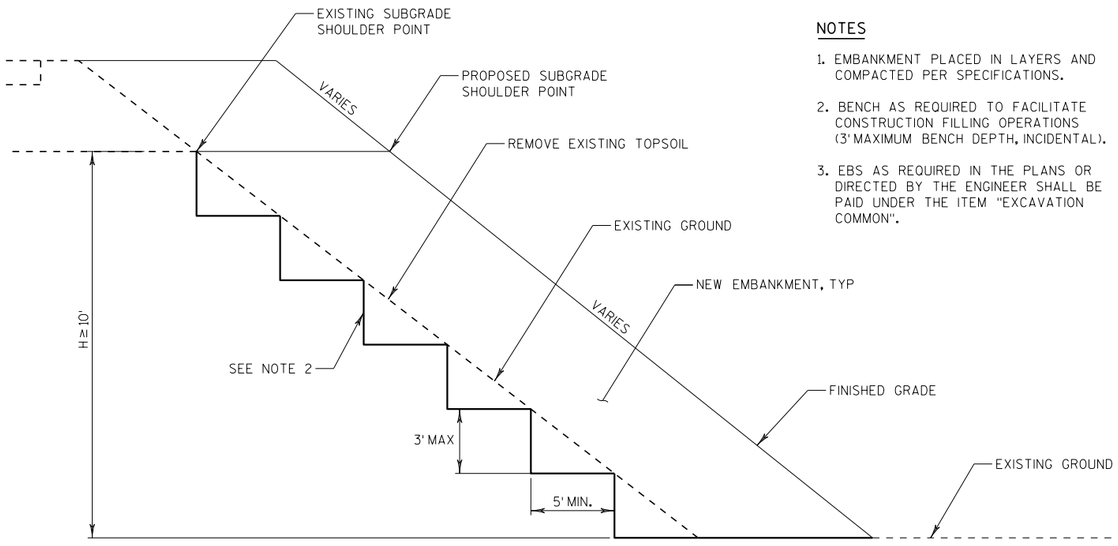


O.D. = OUTSIDE DIAMETER

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

** INCIDENTAL TO CULVERT PIPE

CULVERT BACKFILL DETAIL



NOTES

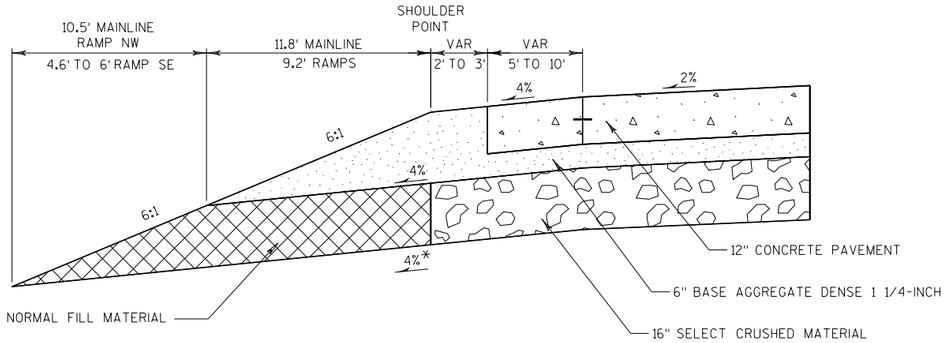
1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.

2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (3' MAXIMUM BENCH DEPTH, INCIDENTAL).

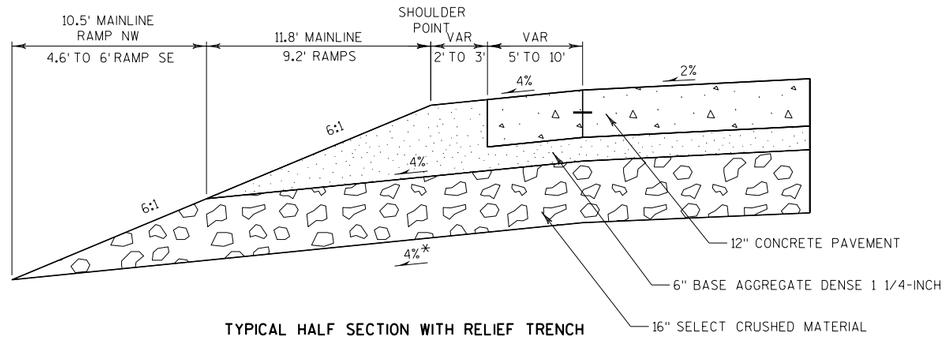
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "EXCAVATION COMMON".

STEPPED EMBANKMENT

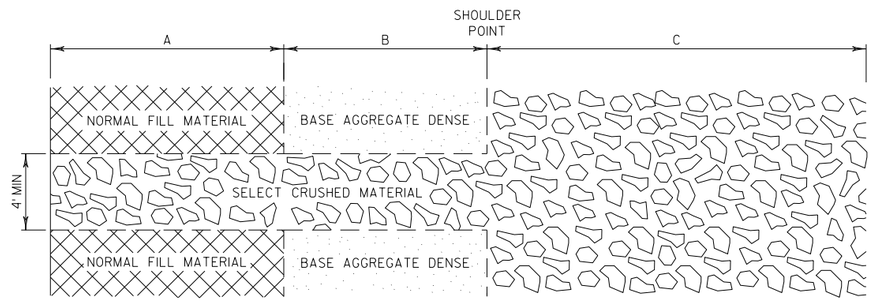
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TYPICAL HALF SECTION WITHOUT RELIEF TRENCH



TYPICAL HALF SECTION WITH RELIEF TRENCH



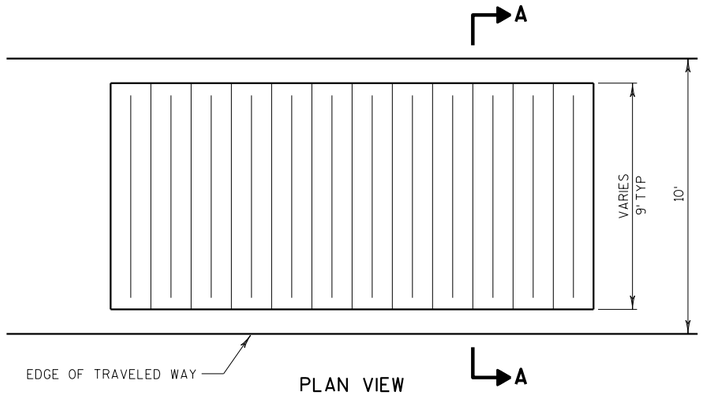
RELIEF TRENCH PLAN VIEW

* AT STA 1267+00 NB USE 2% SLOPE TO PROVIDE POSITIVE SLOPE TO DITCH

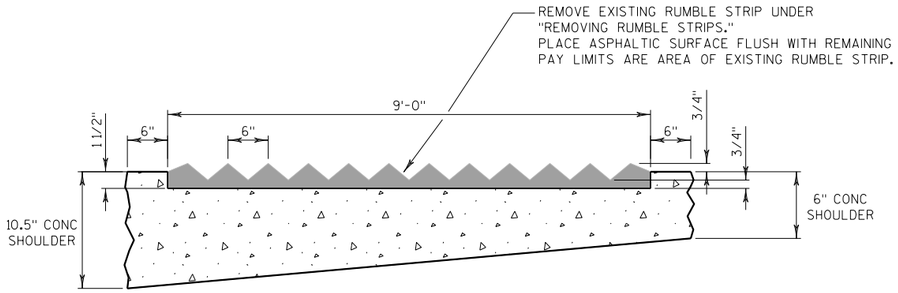
RELIEF TRENCH

CONSTRUCT RELIEF TRENCHES AT:

STAGE 4	STAGE 2
STA 1226+03 NB	STA 1247+00 SB
STA 1228+53 NB	STA 1249+50 SB
STA 1267+00 NB	STA 1252+00 SB
STA 1231SE+03	STA 1247NW+00
STA 1233SE+53	STA 1249NW+50
STA 1236SE+03	STA 1252NW+00
STA 1238SE+53	



PLAN VIEW



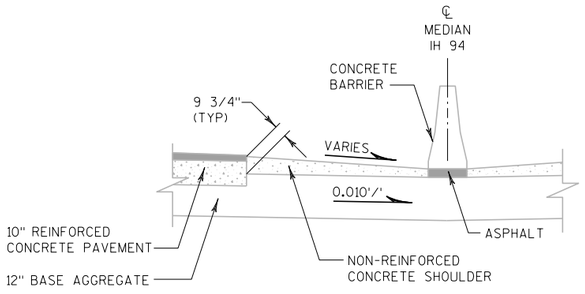
SECTION A-A

NOTES

1) RUMBLE STRIPS ARE LONGITUDINALLY SPACED 60' CENTER TO CENTER.

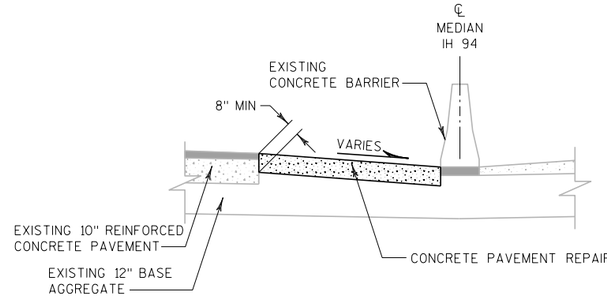
2) IF THE RUMBLE STRIP ENDS AT OR NEAR A CONCRETE JOINT, MILL OUT AN ADDITIONAL 1' OF CONCRETE PAST THE JOINT BEFORE FILLING WITH HMA.

REMOVING RUMBLE STRIPS



TYPICAL EXISTING SECTION

(DRAINAGE STRUCTURES NOT SHOWN)

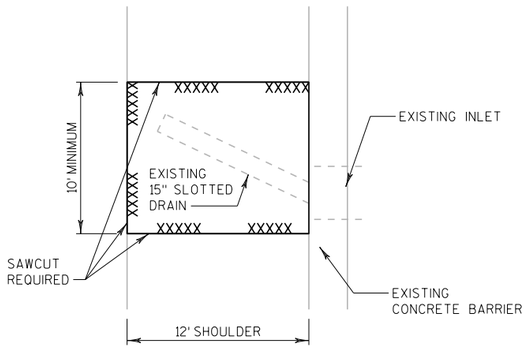


TYPICAL PROPOSED SECTION - CONCRETE OPTION

(DRAINAGE STRUCTURES NOT SHOWN)

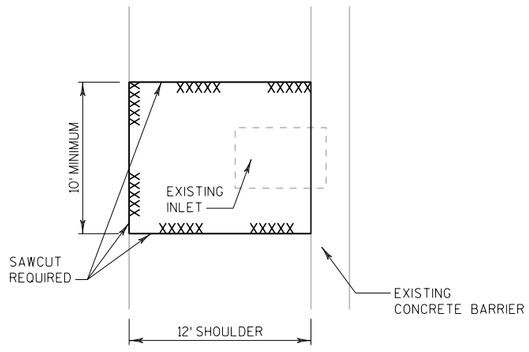
NOTES

1. SAWCUT LIMITS TO BE DETERMINED BY THE ENGINEER.
2. IF VOIDS EXIST UNDER AREAS TO BE REPAIRED, AND AT THE DIRECTION OF THE ENGINEER, BACKFILL WITH BASE AGGREGATE DENSE AND/OR BACKFILL CONTROLLED LOW STRENGTH.



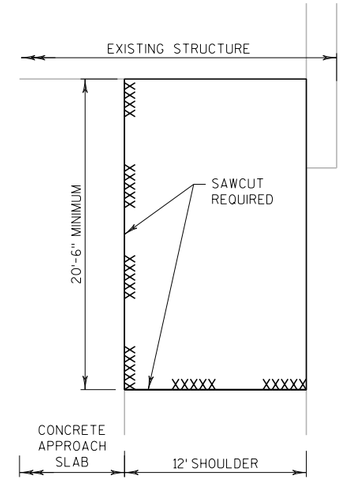
PLAN VIEW

REPAIR AT SLOTTED DRAIN



PLAN VIEW

REPAIR AT INLET

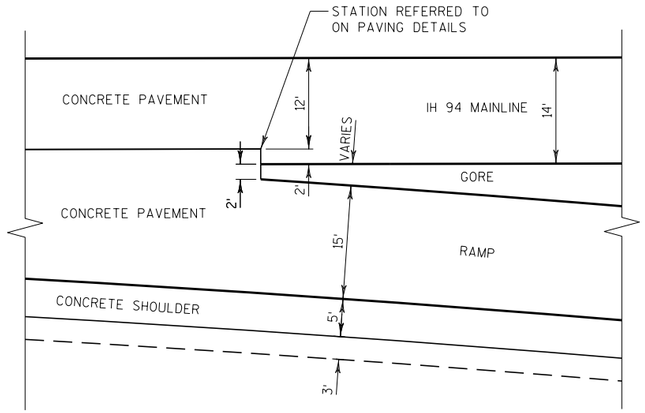


PLAN VIEW

REPAIR AT BRIDGE APPROACH SLAB

SHOULDER REPAIR

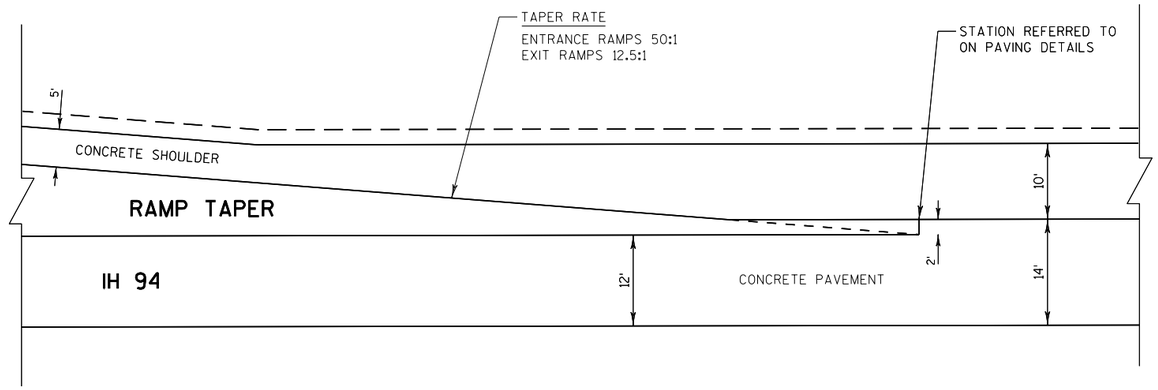
100818



TAPER END LAYOUT FOR CONCRETE PAVEMENT

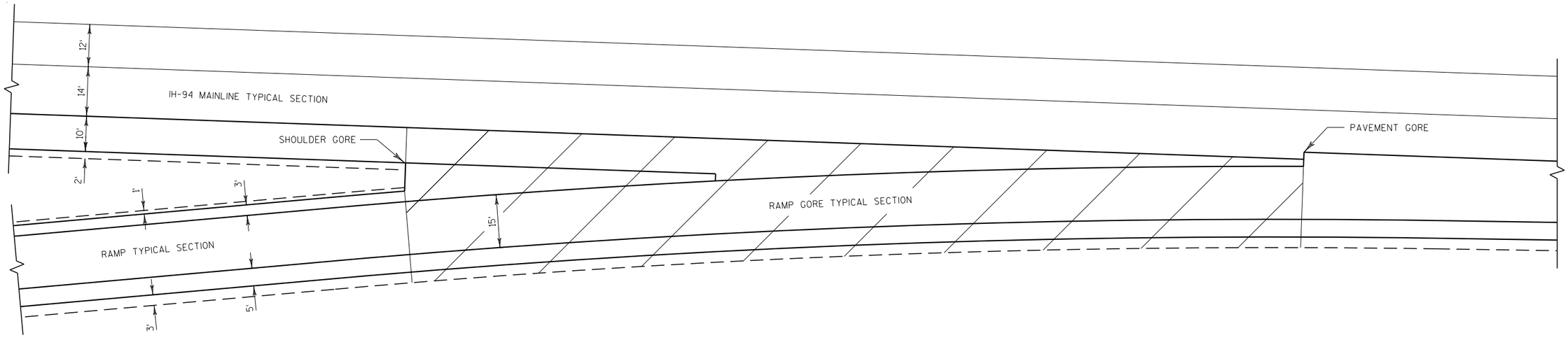
FOR ENTRANCE AND EXIT RAMP PAVEMENT NOTCH AT GORE

100915



TAPER END LAYOUT FOR CONCRETE PAVEMENT

FOR ENTRANCE AND EXIT RAMP PAVEMENT NOTCH AT TAPER POINT



RAMP TYPICAL SECTION

- CONCRETE PAVEMENT 8-INCH
- BASE AGGREGATE DENSE 1 1/4-INCH (6-INCH)
- SELECT CRUSHED MATERIAL (16-INCH)

RAMP GORE TYPICAL SECTION

- CONCRETE PAVEMENT 12-INCH SPECIAL
- BASE AGGREGATE DENSE 1 1/4-INCH 6-INC
- SELECT CRUSHED MATERIAL 16-INCH

MAINLINE TYPICAL SECTION

- CONCRETE PAVEMENT 12-INCH SPECIAL
- BASE AGGREGATE DENSE 1 1/4-INCH 6-INC
- SELECT CRUSHED MATERIAL 16-INCH

RAMP GORE DETAIL

081230

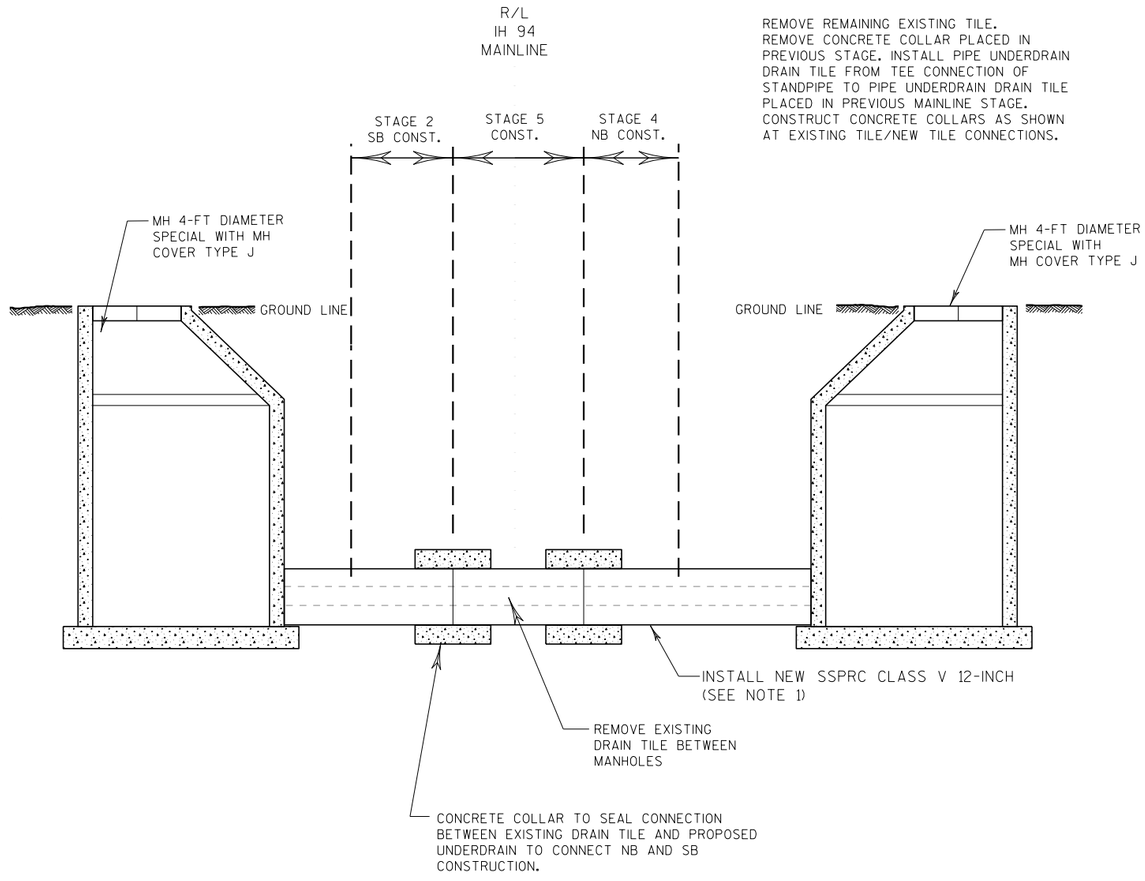
STAGING

1) MAINLINE SOUTHBOUND CONSTRUCTION:

LOCATE STANDPIPE AND REMOVE EXISTING DRAIN TILE FROM STANDPIPE TO R/L OF IH 94. INSTALL NEW PIPE UNDERDRAIN DRAIN TILE AND CONSTRUCT CONCRETE COLLARS AS SHOWN AT EXISTING TILE/NEW TILE CONNECTIONS.

2) MAINLINE NORTHBOUND CONSTRUCTION:

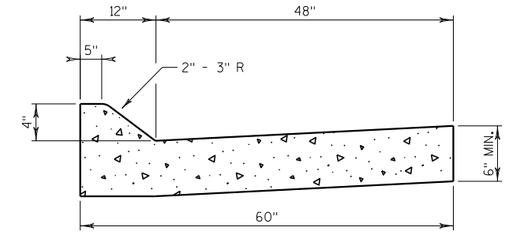
REMOVE REMAINING EXISTING TILE. REMOVE CONCRETE COLLAR PLACED IN PREVIOUS STAGE. INSTALL PIPE UNDERDRAIN DRAIN TILE FROM TEE CONNECTION OF STANDPIPE TO PIPE UNDERDRAIN DRAIN TILE PLACED IN PREVIOUS MAINLINE STAGE. CONSTRUCT CONCRETE COLLARS AS SHOWN AT EXISTING TILE/NEW TILE CONNECTIONS.



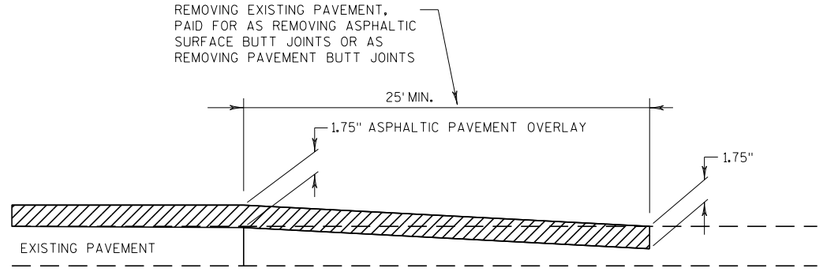
* LOCATION CAN BE ADJUSTED AS NEEDED IF APPROVED BY THE ENGINEER

PIPE UNDERDRAIN CONFIGURATION

(FOR MAINLINE CROSSINGS)

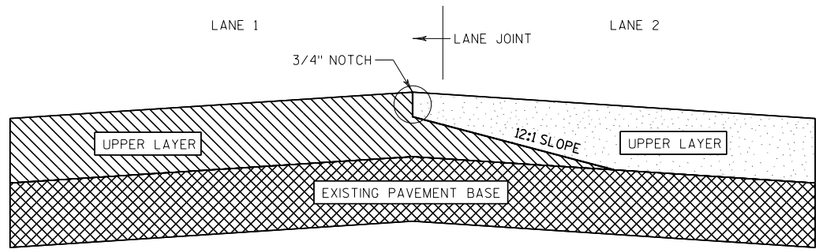


CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A

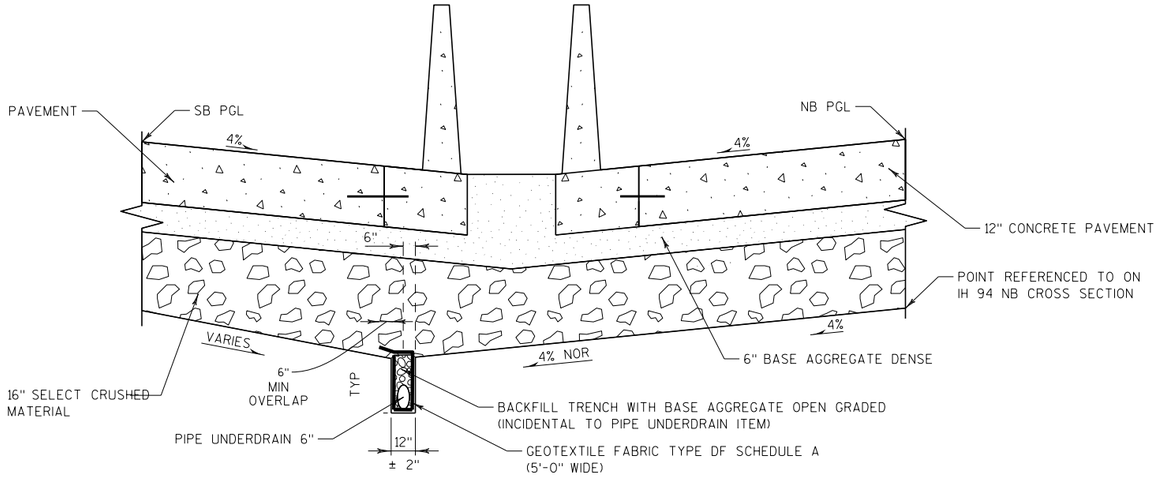


BUTT JOINT DETAIL

STA 1240+96 - STA 1241+21
STA 1242+06 - STA 1242+31

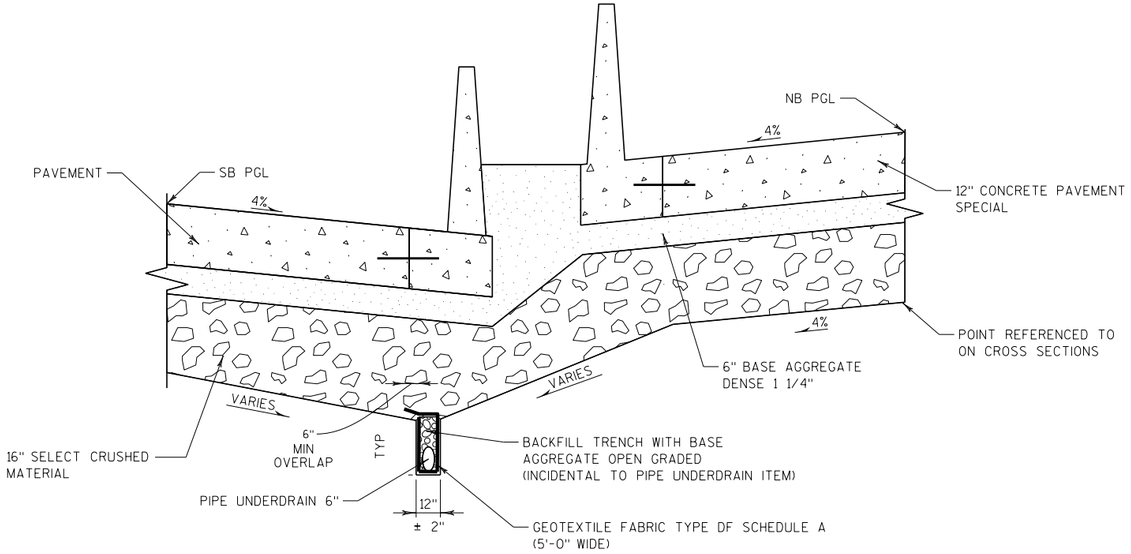


TYPICAL PAVEMENT CROSS SECTIONS OF TAPERED AND NOTCHED LONGITUDINAL JOINTS



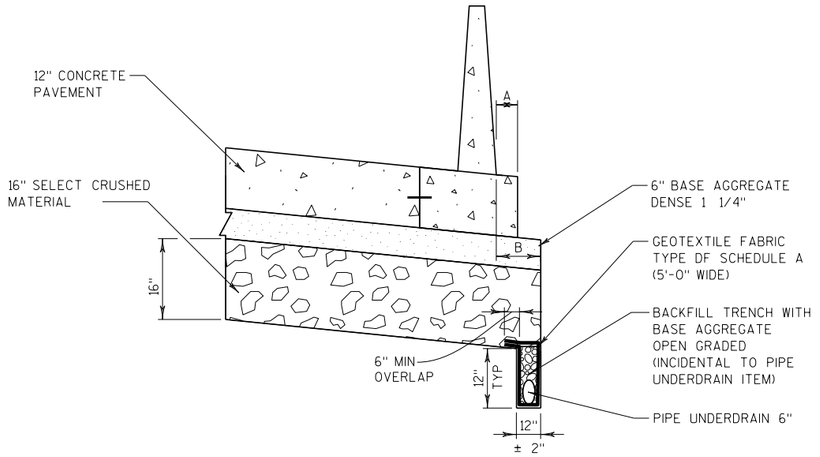
MEDIAN UNDERDRAIN TRENCH DETAIL

STA 1213+00 TO STA 1240+64 SB
STA 1242+99 TO STA 1268+00 SB



MEDIAN UNDERDRAIN TRENCH DETAIL

STA 1213+00 TO STA 1240+64 SB
STA 1242+99 TO STA 1268+00 SB



DIMENSION A	DIMENSION B	SHOULDER LOCATION
4-INCHES	2-FEET	TANGENT SECTION
4-INCHES	2-FEET	INSIDE OF A CURVE
1-FEET	3-FEET	OUTSIDE OF A CURVE

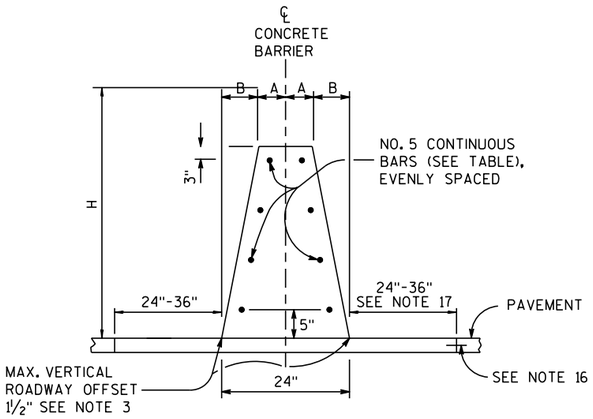
OUTSIDE SHOULDER UNDERDRAIN TRENCH DETAIL

STAGE 4

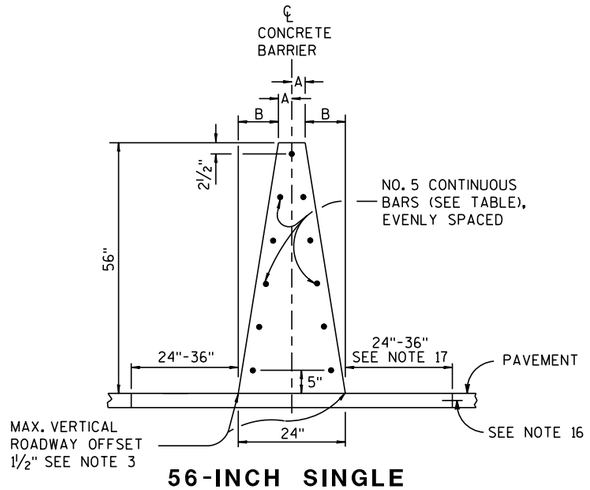
STA 1213+00 TO STA 1223+00 NB
STA 1230+42 TO STA 1240+64 NB
STA 1242+99 TO STA 1252+97 NB
STA 1252+97 TO STA 1266+00 NB
STA 1239SE+25 TO STA 1240SE+79
STA 1242NE+79 TO STA 1252NE+97

STAGE 2

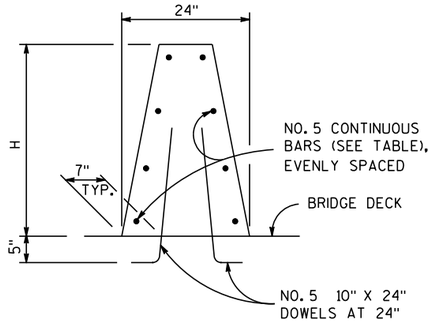
STA 1213+00 TO STA 1231+96 SB
STA 1231+96 TO STA 1240+64 SB
STA 1242+99 TO STA 1244+42 SB
STA 1253+93 TO STA 1268+00 SB
STA 1231SW+96 TO STA 1238SW+50
STA 1242NW+50 TO STA 1243NW+50
STA 1242NW+77 TO STA 1246NW+25
STA 1251NW+75 TO STA 1253NW+93



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42) SINGLE RUN



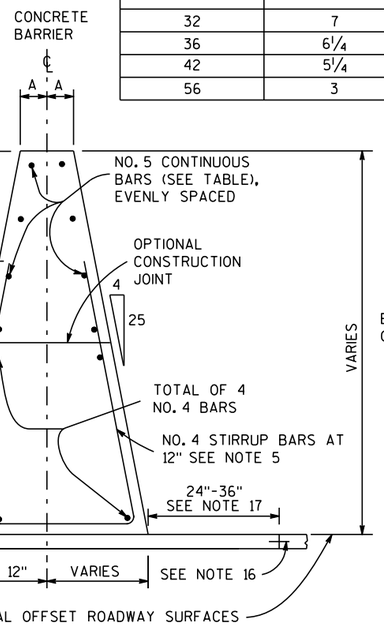
56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56) SINGLE RUN



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

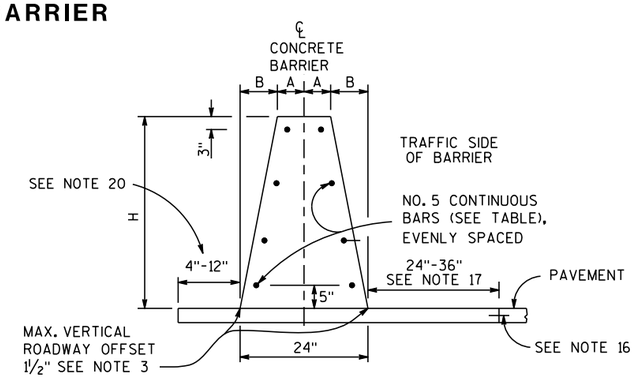
NON OUTER PARAPET APPLICATION

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

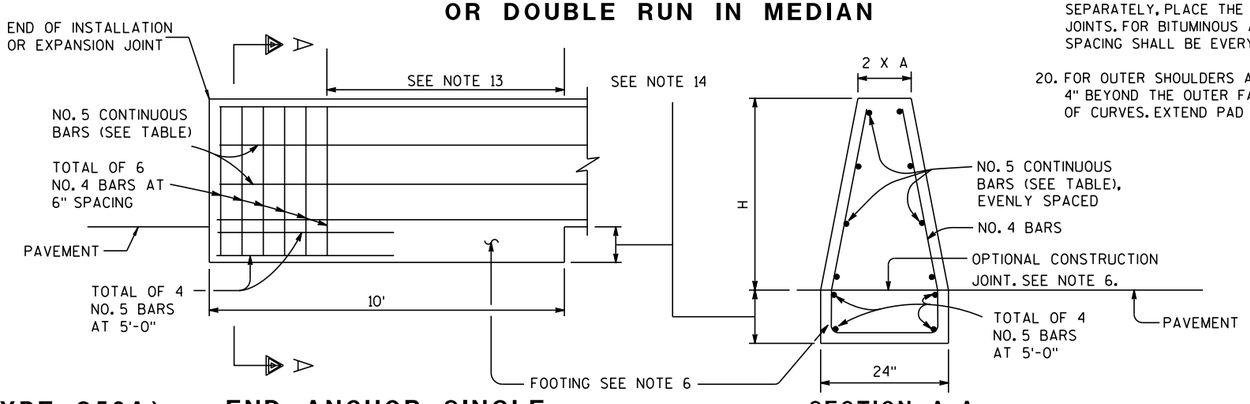


SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42) ON OUTER SHOULDER OR DOUBLE RUN IN MEDIAN

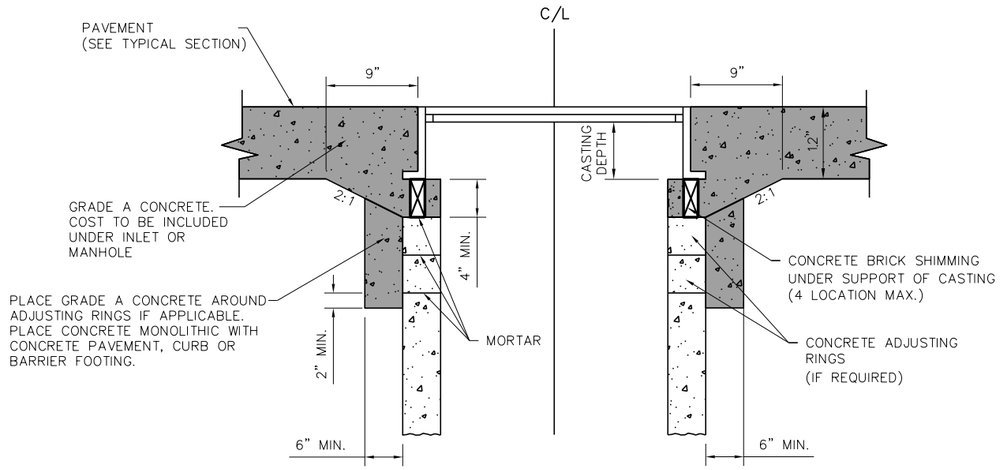


END ANCHOR SINGLE SLOPE CONCRETE BARRIER AT CONSTRUCTION JOINT

SECTION A-A

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.
16. CONSTRUCTION JOINT, SEE S.D.D. 13C1 TIE BAR TABLE. OUTER SHOULDERS AND DOUBLE RUN IN MEDIAN WILL BE TIED TO SHOULDER PANEL. SINGLE RUN MEDIAN CONCRETE BARRIER WILL BE TIED TO ONE OF THE ADJACENT SHOULDER PANELS.
17. LONGITUDINAL FOOTING JOINT SHALL BE PLACED AT AN OFFSET FROM THE WALL THAT ALIGNS WITH THE FRONT FACE OF THE DRAINAGE STRUCTURES (24" - 36"). JOINT MAY BE ELIMINATED FOR SHOULDERS LESS THAN 10' WIDE.
18. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER OR PLACED SEPARATELY. THE DEPTH OF PAD SHOULD BY EQUAL DEPTH OF THE CONCRETE SHOULDER, WITH 6" MINIMUM FOOTING.
19. CBSS SHALL HAVE REGULARLY SPACED CONTRACTION JOINTS THAT ARE 1/4" WIDE BY 1" DEEP. FOR CONCRETE SECTIONS, ADJACENT TO THE BARRIER, THE BARRIER CONTRACTION JOINTS SHALL ALIGN WITH THE JOINTS IN THE CONCRETE SECTION NOT TO EXCEED 15'. IF THE FOOTING IS CONSTRUCTED SEPARATELY, PLACE THE CONTRACTION JOINTS DIRECTLY ABOVE THE FOOTING JOINTS. FOR BITUMINOUS ADJACENT TO THE BARRIER, THE CONTRACTION JOINT SPACING SHALL BE EVERY 15'.
20. FOR OUTER SHOULDERS AND DOUBLE RUN IN MEDIAN, CONCRETE PAD SHALL EXTEND 4" BEYOND THE OUTER FACE OF THE WALL FOR TANGENT SECTIONS AND ALONG INSIDE OF CURVES. EXTEND PAD 12" ALONG OUTSIDE OF CURVES.

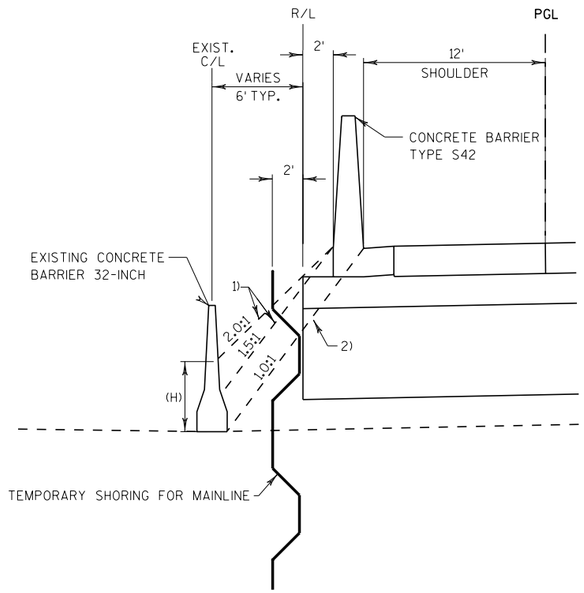


NOTE

1) PROVIDE MONOLITHIC CONCRETE SHIMMING FOR FINAL ADJUSTMENT OF DRAINAGE STRUCTURES LOCATED WITHIN THE ROADWAY CONCRETE PAVEMENT AND CONCRETE CURB & GUTTER.

MONOLITHIC CONCRETE

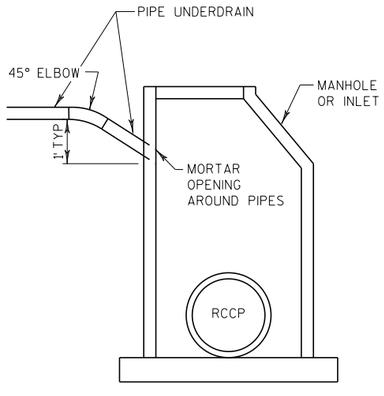
MONOLITHIC CONCRETE SHIMMING DETAIL



NOTES

1) TEMPORARY SHORING FOR MAINLINE REQUIRED WHEN SLOPES PROJECTED FROM TOP OF CONCRETE, PLACE EXCESSIVE FILL ON THE EXISTING CONCRETE BARRIER ABOVE THE FOLLOWING LIMITS:
   A. 1.5:1 SLOPE FILLS AGAINST THE EXISTING BARRIER MORE THAN 1.25 FEET, HEIGHT (H)
   B. 2:1 SLOPE FILLS AGAINST THE EXISTING BARRIER MORE THAN 1.75 FEET, HEIGHT (H)
2) IF TRAFFIC WILL BE OPERATING ON THE UPPER 12 FOOT SHOULDER DURING OTHER CONSTRUCTION STAGES, TEMPORARY SHORING FOR MAINLINE WILL BE REQUIRED IF THE 1:1 SLOPE PROJECTED DOWN FROM THE FACE OF THE UPPER CONCRETE BARRIER INTERSECTS THE LOWER EXISTING CONCRETE BARRIER.
3) LOCATION OF TEMPORARY SHORING FOR MAINLINE TO BE 2'LT OF R/L. CONTRACTOR TO VERIFY THAT THIS LOCATION DOES NOT CONFLICT WITH STORM SEWER THAT IS STILL IN USE. COORDINATE WITH ENGINEER FOR CONFLICT RESOLUTION PRIOR TO INSTALLATION IF CONFLICT IS FOUND.
4) SEE SPECIAL PROVISIONS FOR TEMPORARY SHORING DESIGN REQUIREMENTS THAT CONTRACTOR IS TO PROVIDE THE ENGINEER.
5) SEE CROSS SECTIONS FOR POTENTIAL LOCATIONS.

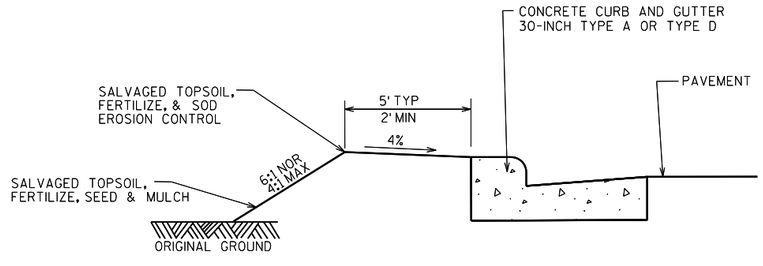
TEMPORARY SHORING FOR MAINLINE



PIPE UNDERDRAIN CONNECTION TO MANHOLES AND INLETS

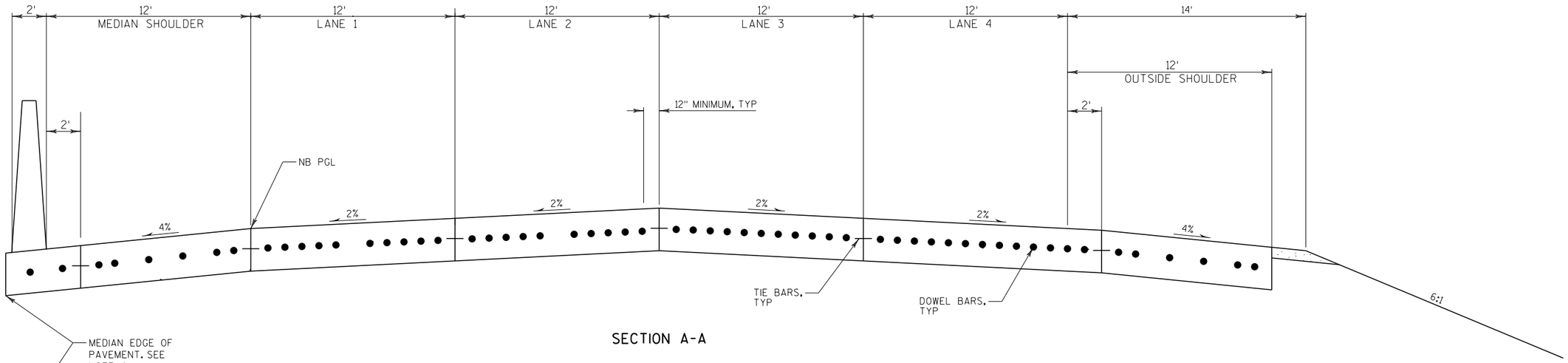
(UNDERDRAIN IN EBS AREAS)

100823

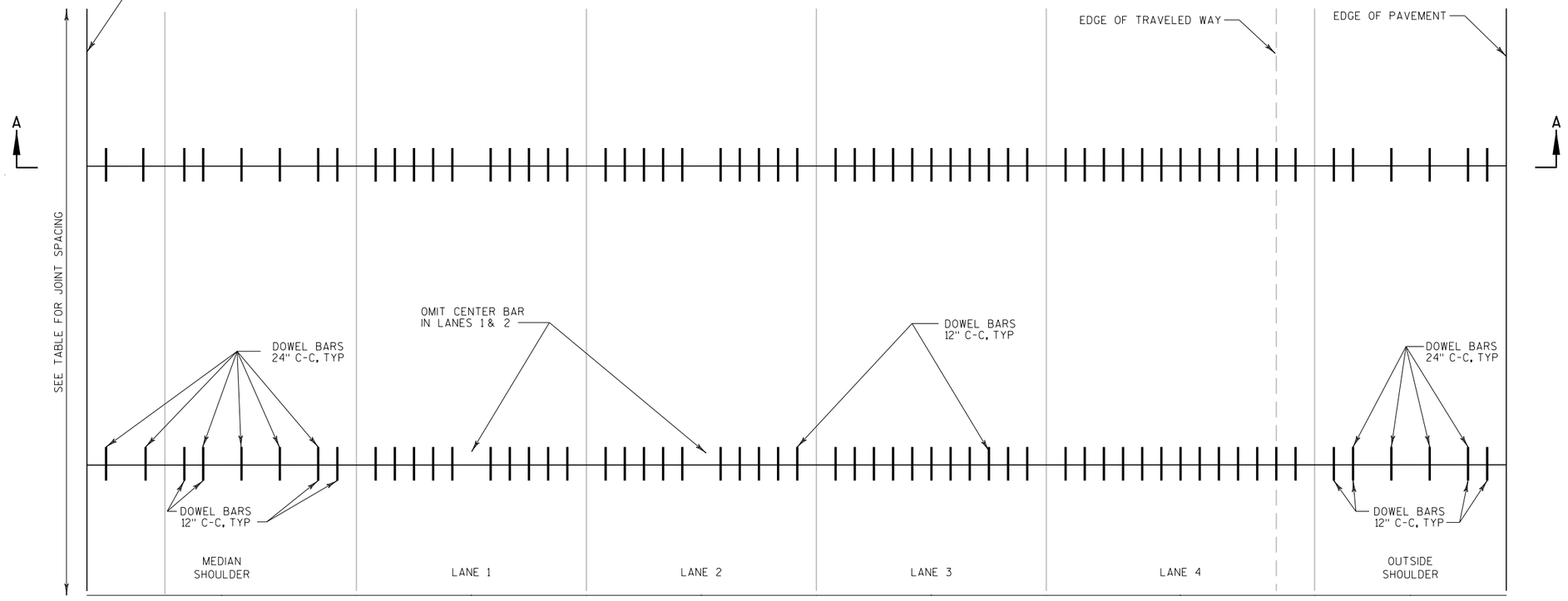


TYPICAL PARTIAL SECTION AT INTERSECTION RADII

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SECTION A-A



PLAN

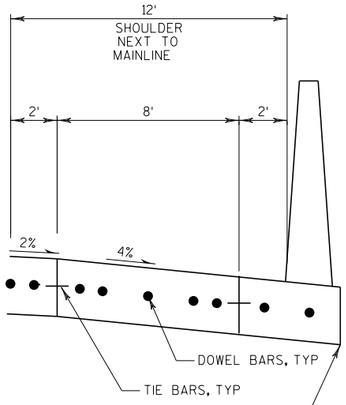
HPC PAVEMENT JOINT DETAIL

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

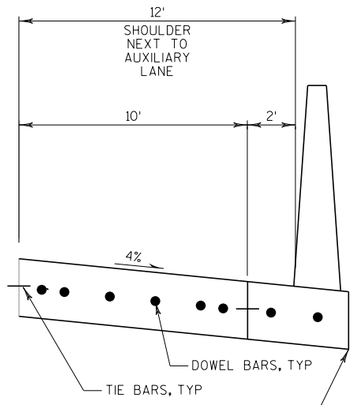
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
10" & ABOVE	1 1/2"	15'

NOTES

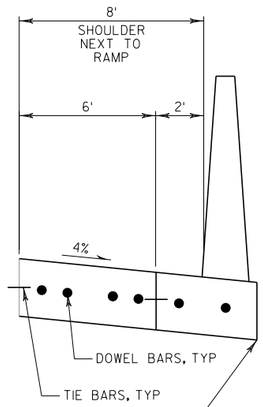
1. DETAILS NOT SHOWN SHALL CONFORM TO STANDARD DETAIL DRAWINGS.
2. LOCATE OUTERMOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS 12 INCHES FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT.
3. TREAT SAWED SURFACES OF TRANSVERSE AND LONGITUDINAL JOINTS WITH SILANE SEALANT.
4. FOR OUTER SHOULDERS AND DOUBLE RUN IN MEDIAN, CONCRETE PAD SHALL EXTEND 4" BEYONDTHE OUTER FACE OF TEH WALL FOR TANGENT SECTIONS AND ALONG INSIDE OF CURVES. EXTEND PAD 12" ALONG OUTSIDE OF CURVES.



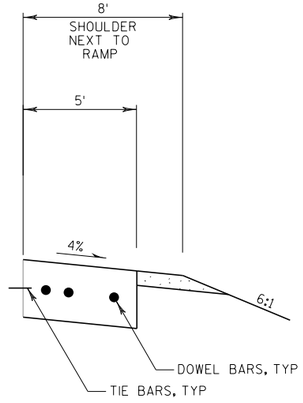
SECTION A-A



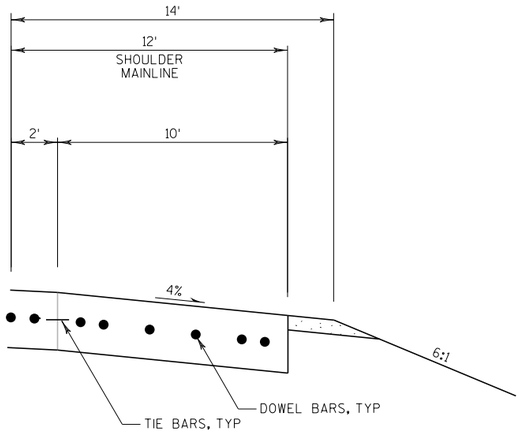
SECTION B-B



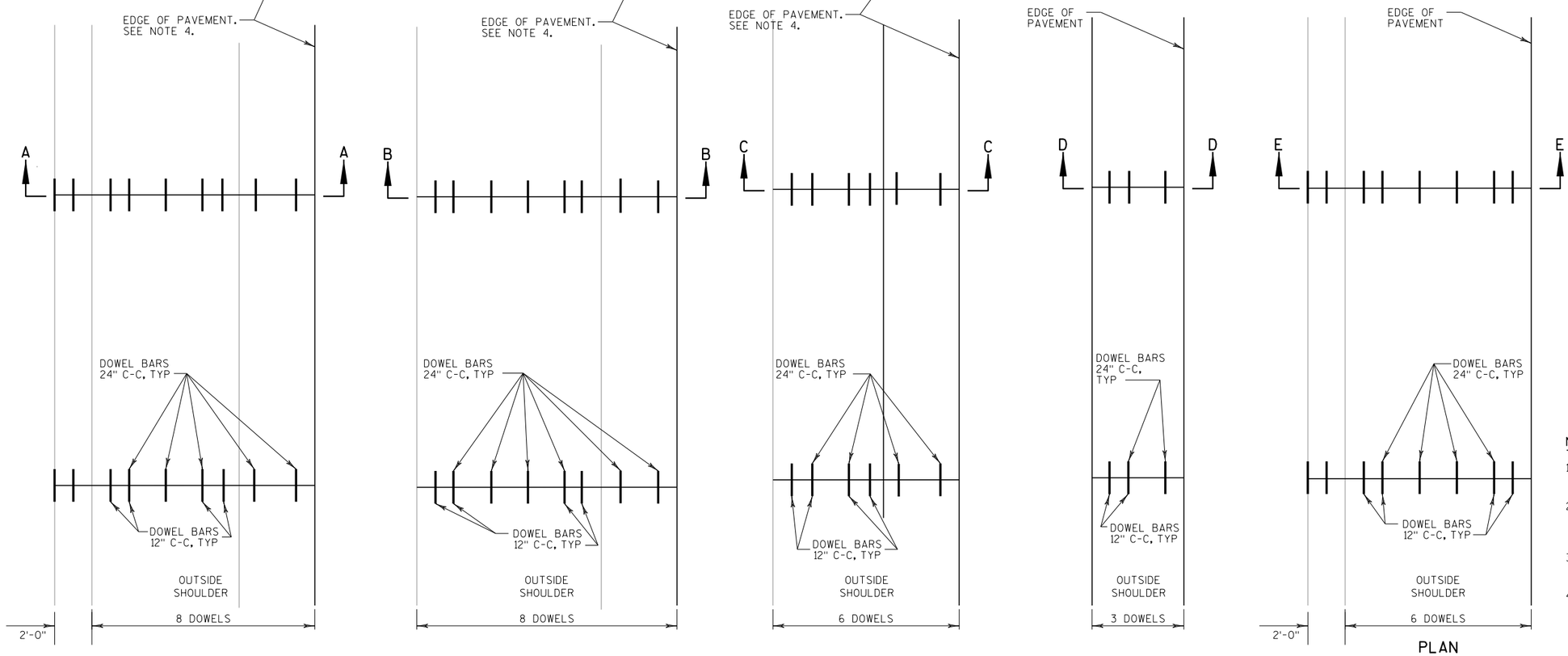
SECTION C-C



SECTION D-D



SECTION E-E



PLAN PLAN PLAN PLAN PLAN

HPC PAVEMENT JOINT DETAIL - SHOULDERS

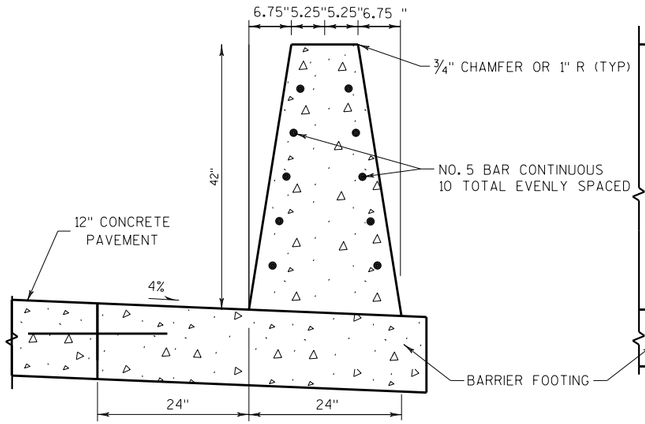
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
10" & ABOVE	1 1/2"	15'

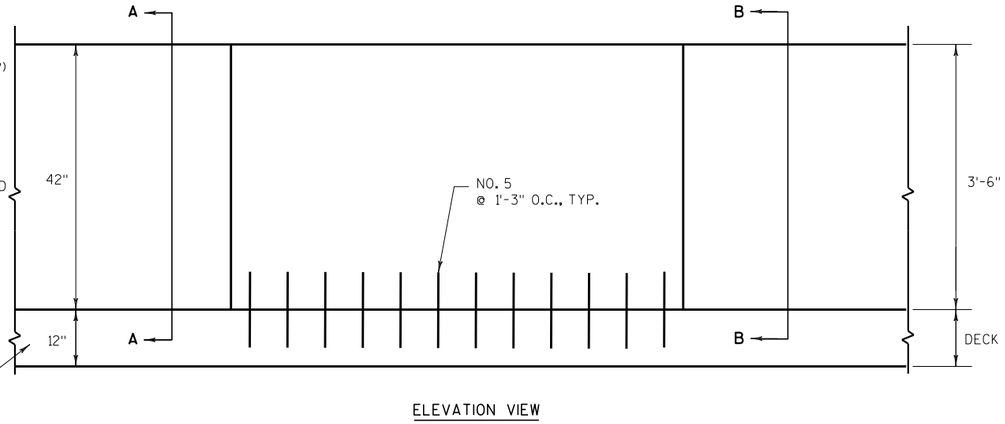
NOTES

1. DETAILS NOT SHOWN SHALL CONFORM TO STANDARD DETAIL DRAWINGS.
2. LOCATE OUTERMOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS 12 INCHES FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT.
3. TREAT SAWED SURFACES OF TRANSVERSE AND LONGITUDINAL JOINTS WITH SILANE SEALANT.
4. AT LOCATIONS OF BARRIER ALONG TANGENET ALIGNMENT, EDGE OF PAVEMENT IS 4 INCHES BEHIND BACK OF BARRIER. AT LOCATIONS OF BARRIER ALONG THE OUTSIDE OF CURVES, EDGE OF PAVEMENT IS 12" BEHIND BACK OF BARRIER. DIMENSIONS AND GRADES SHOWN IN PLANS ARE TO BACK OF BARRIER.

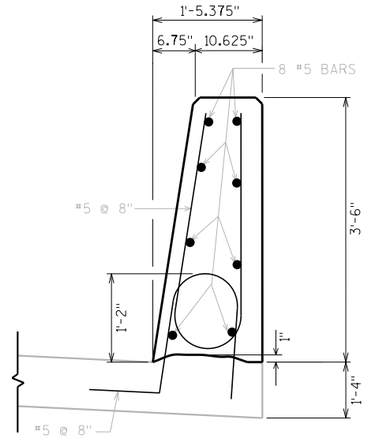
100813



SECTION A-A

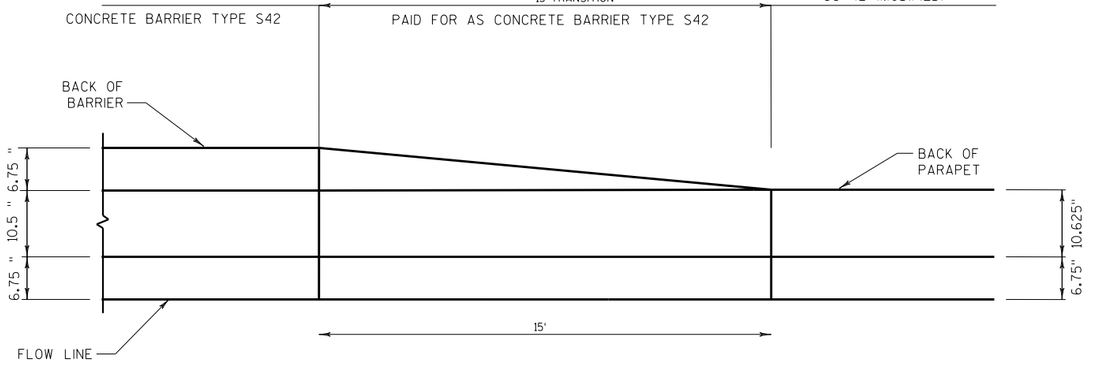


ELEVATION VIEW



STRUCTURAL APPROACH SLAB

SECTION B-B



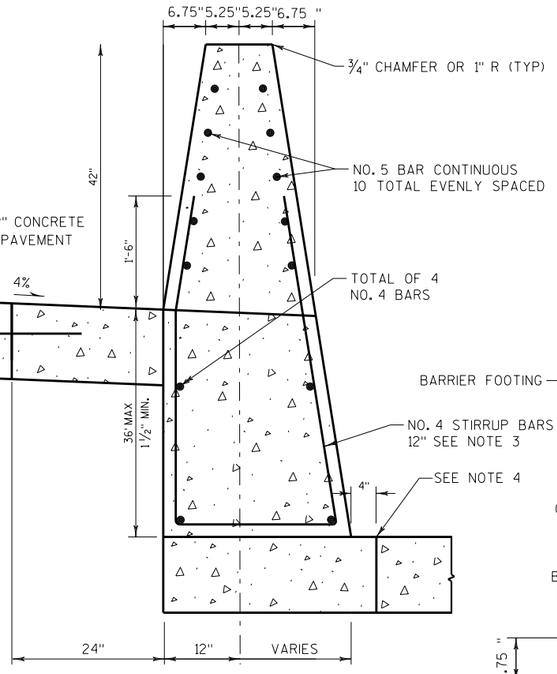
PLAN VIEW

NOTEs

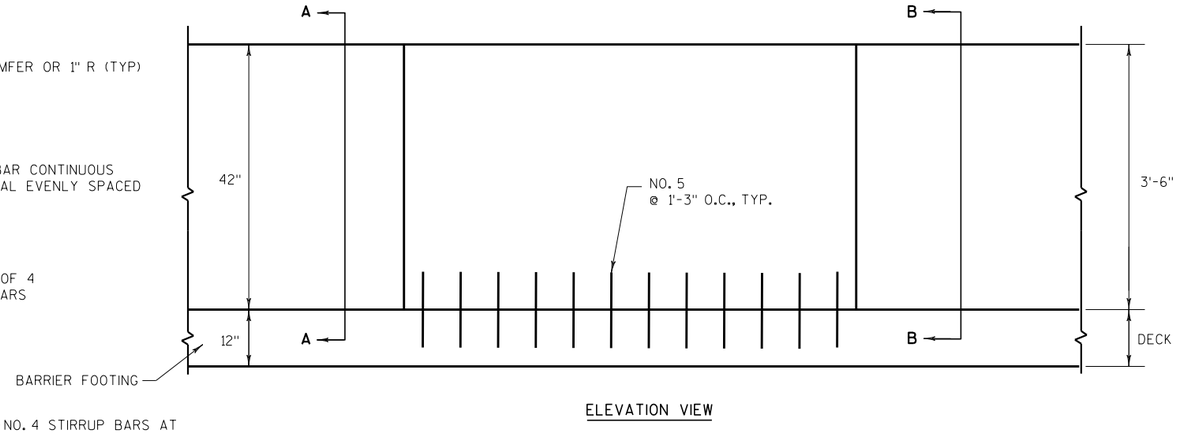
1) SEE STRUCTURE PLANS FOR REBAR DETAILS ON WING AND/OR BRIDGE DECK
2) CONCRETE BARRIER TRANSITION TO BRIDGE PARAPET PAID FOR AS CONCRETE BARRIER S42.

CONCRETE BARRIER S42 TRANSITION TO BRIDGE PARAPET DETAIL

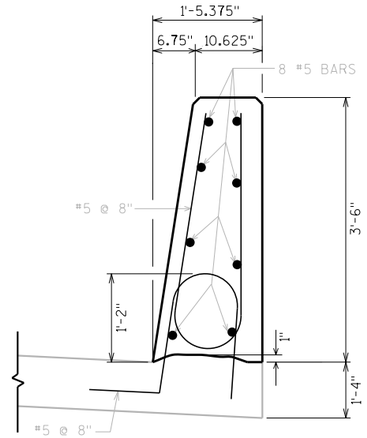
STA 1240+49, LT & RT MEDIAN, OUTSIDE BARRIER
STA 1242+99, LT & RT MEDIAN, OUTSIDE BARRIER



SECTION A-A

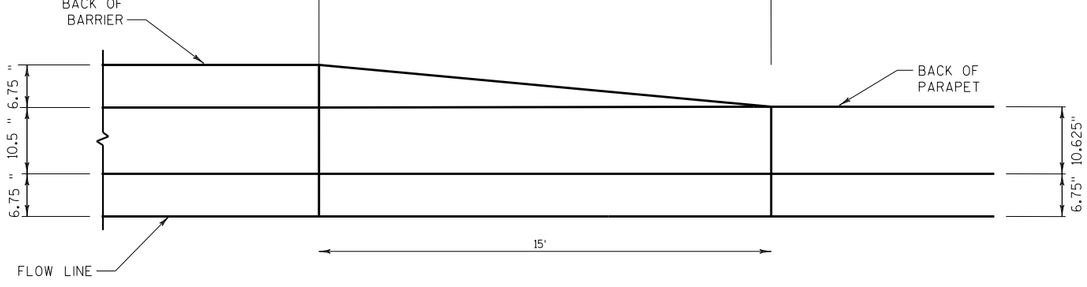


ELEVATION VIEW



STRUCTURAL APPROACH SLAB

SECTION B-B



PLAN VIEW

NOTES

1) SEE STRUCTURE PLANS FOR REBAR DETAILS ON WING AND/OR BRIDGE DECK
2) CONCRETE BARRIER TRANSITION TO BRIDGE PARAPET PAID FOR AS CONCRETE BARRIER S42A.
3) EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0"
4) CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPERATELY 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

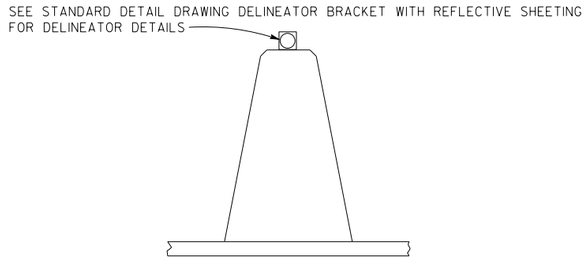
CONCRETE BARRIER S42A TRANSITION TO BRIDGE PARAPET DETAIL

STA 1240+49, LT & RT MEDIAN, OUTSIDE BARRIER
STA 1242+99, LT & RT MEDIAN, OUTSIDE BARRIER

2

DELINEATOR SPACING ON HORIZONTAL CURVES

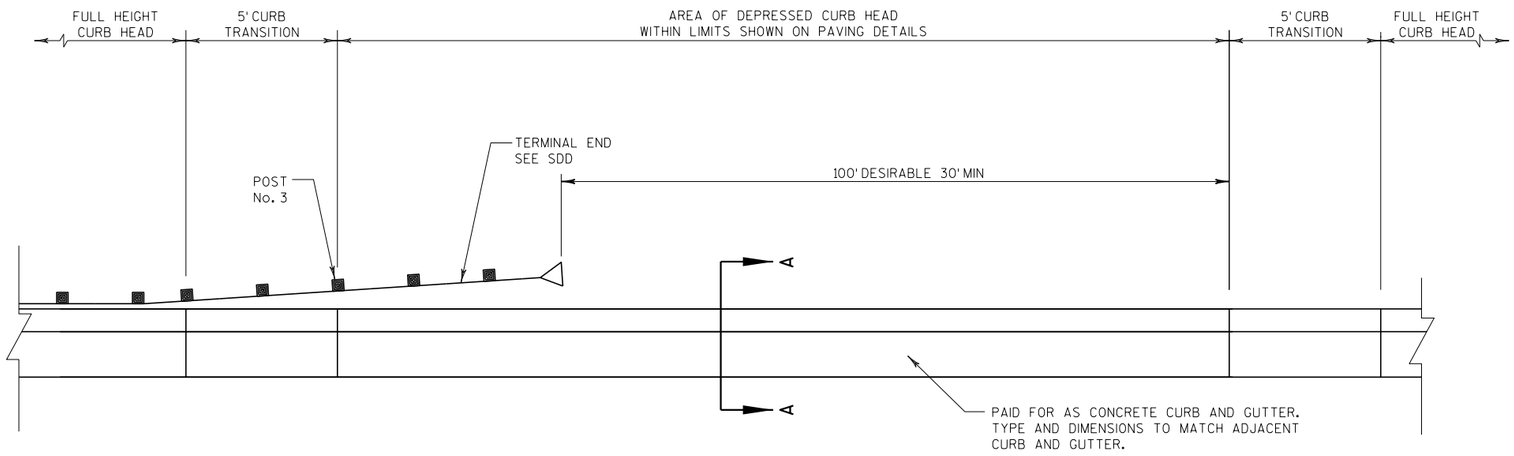
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

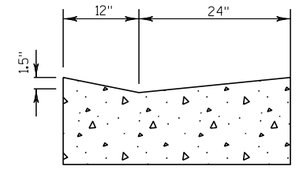


DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACED REFLECTORIZED	MIN. NO. REFLECTIORS
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	

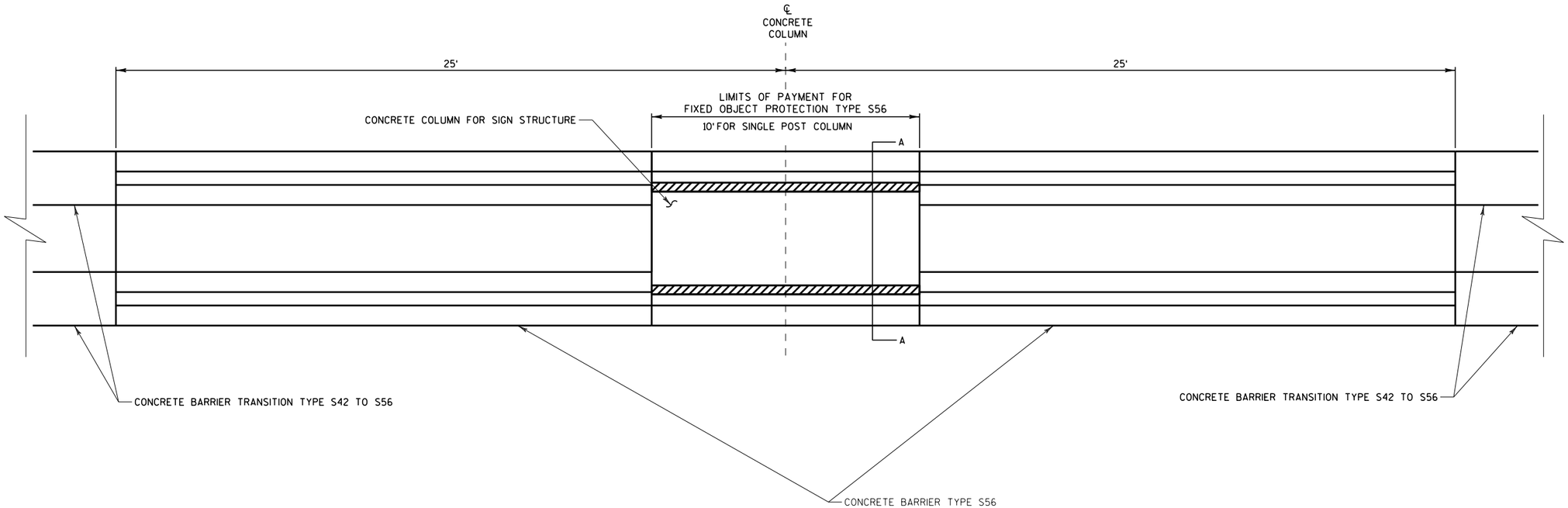
DELINEATION DETAILS





*SECTION A-A
DEPRESSED CURB

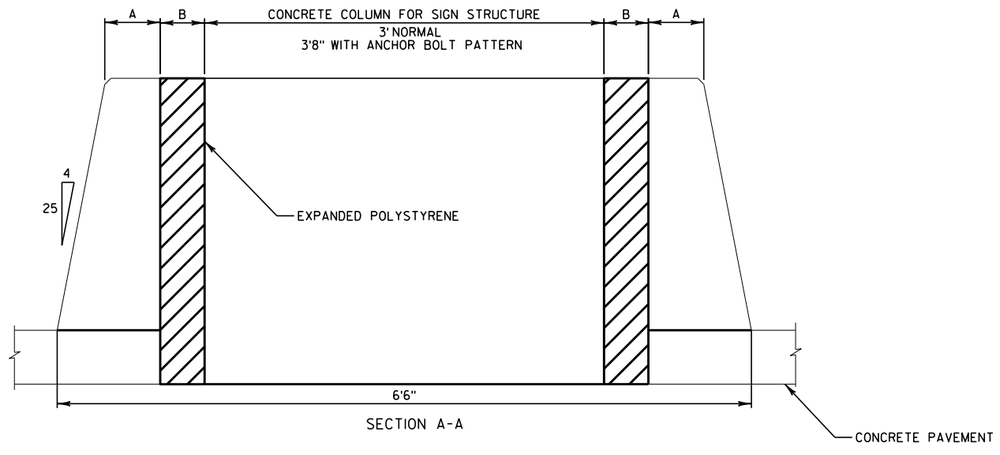
DEPRESSED CURB HEAD AT BEAM GUARD TERMINAL



NOTES

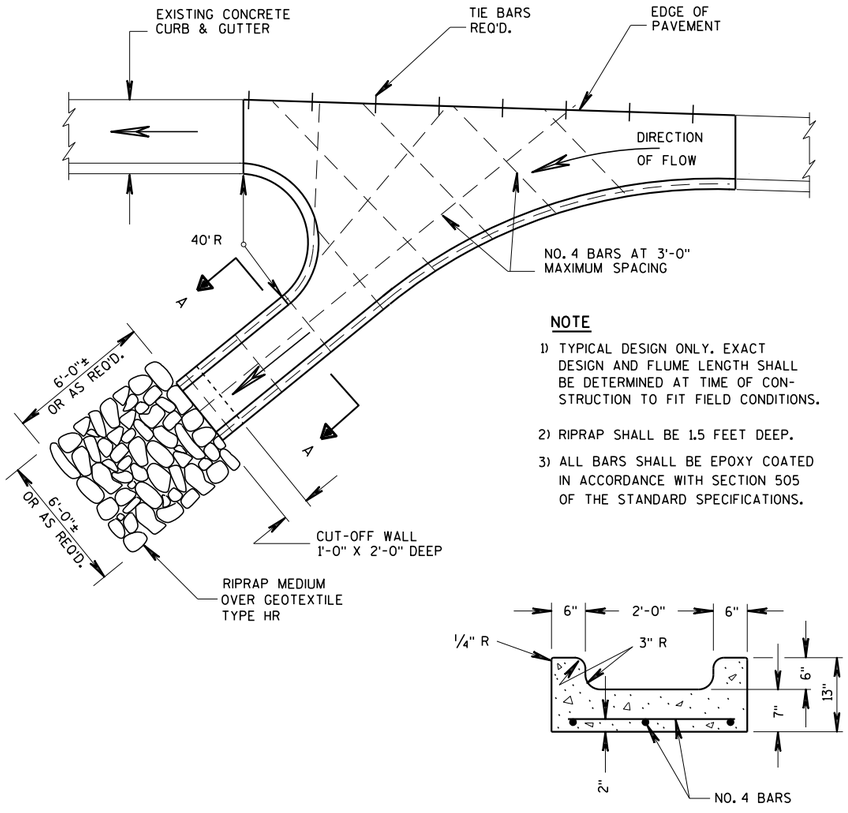
DIMENSION A = 4" FOR 3'8" WIDE COLUMN
8" FOR 3' WIDE COLUMN

DIMENSION B = 1" FOR 3'8" WIDE COLUMN
4" FOR 3' WIDE COLUMN



CONCRETE BARRIER FIXED OBJECT PROTECTION

FOR USE AT MEDIAN SIGN STRUCTURE COLUMNS
SUPPLEMENT TO S.D.D. 14B32



NOTE

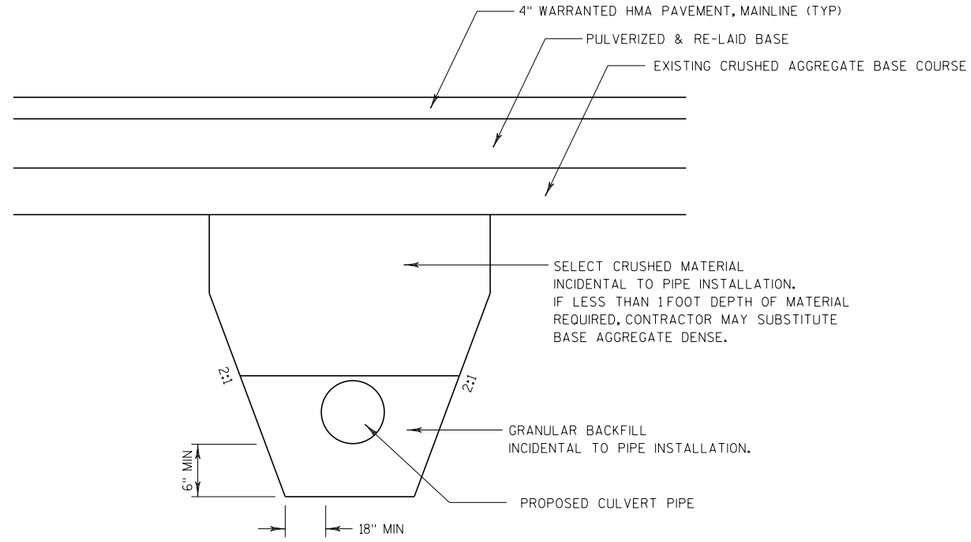
1) TYPICAL DESIGN ONLY. EXACT DESIGN AND FLUME LENGTH SHALL BE DETERMINED AT TIME OF CONSTRUCTION TO FIT FIELD CONDITIONS.

2) RIPRAP SHALL BE 1.5 FEET DEEP.

3) ALL BARS SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

SECTION A-A

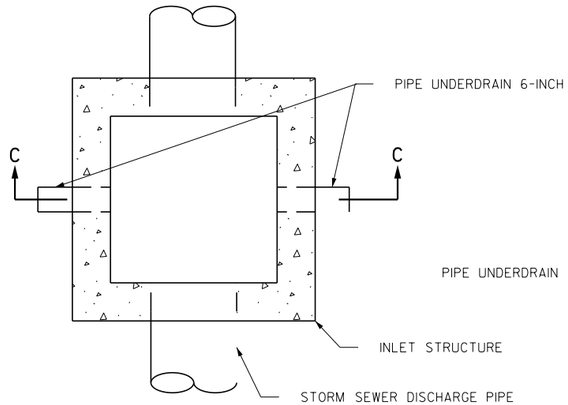
CONCRETE SURFACE DRAIN



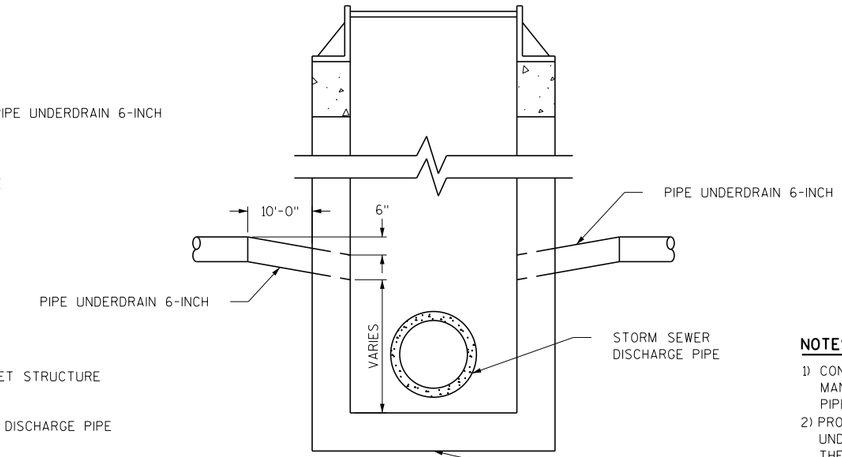
100914

INSTALLATION OF PIPES

2



PLAN VIEW

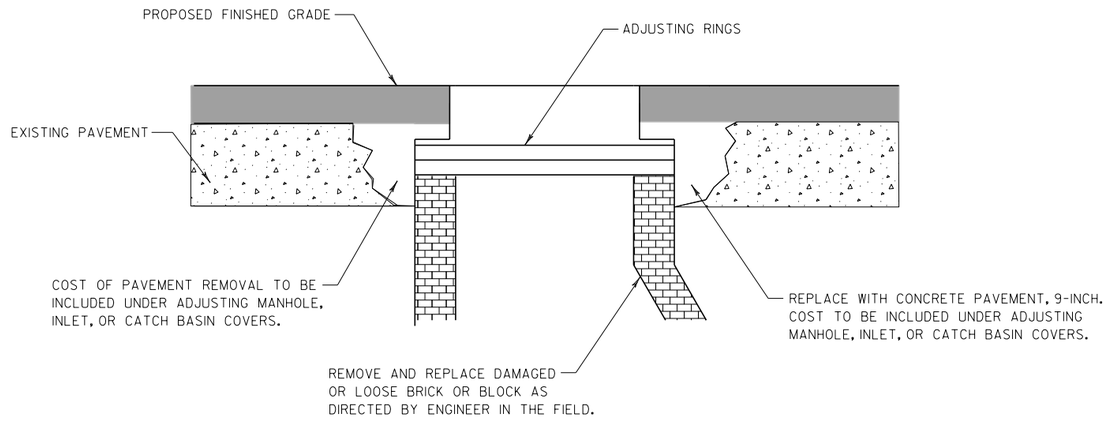


SECTION C-C

NOTES

1) CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH.
2) PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE APPROX 48" BELOW THE PROPOSED TOP OF STRUCTURE.
3) SEE STORM SEWER AND UNDERDRAIN PLANS FOR PIPE UNDERDRAIN LOCATIONS.

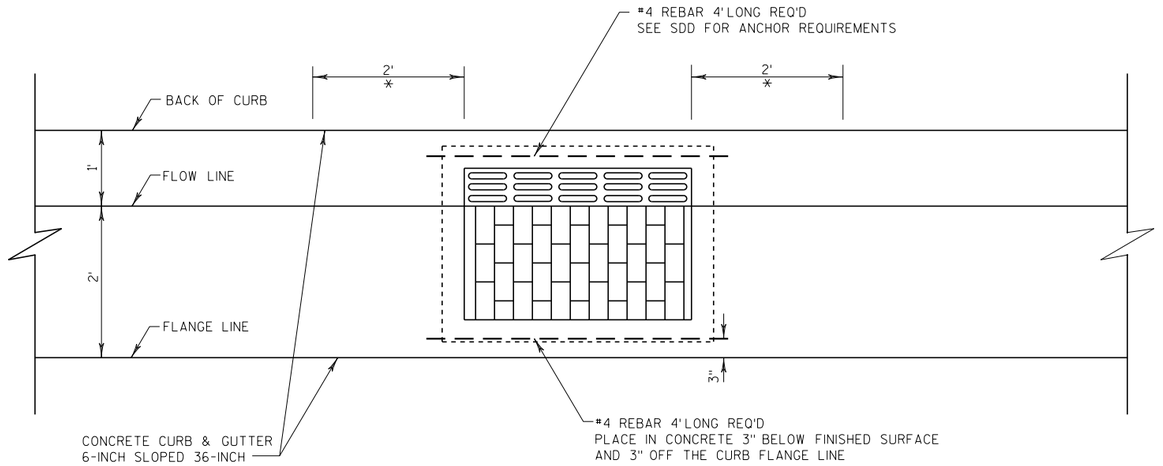
UNDERDRAIN OUTFALL AT INLET



ADJUSTING MANHOLE OR INLET COVERS

100813

2



PLAN VIEW

* TRANSITION STANDARD CURB HEAD TO MATCH THE TYPE HM INLET COVER.

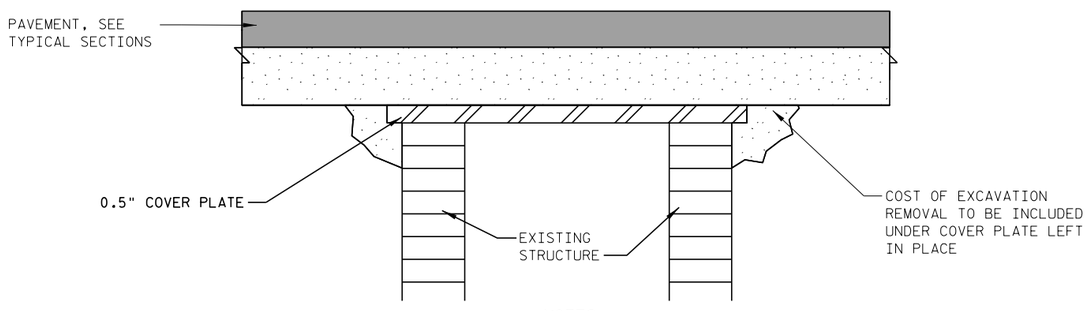
NOTES

1) SEE SDD "INLET COVERS TYPE F, HM, HM-S, S, V, HM-GJ, & HM-GJ-S" FOR ADDITIONAL INFORMATION.

2) THE TWO 2-FOOT LONG CURB TRANSITION SEGMENTS ARE PAID AS CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH.

3) THE TWO 4-FOOT LENGTHS OF #4 REBAR ARE INCIDENTAL TO THE BID ITEM "INLET COVERS TYPE HM".

INLET COVERS, TYPE HM



NOTES

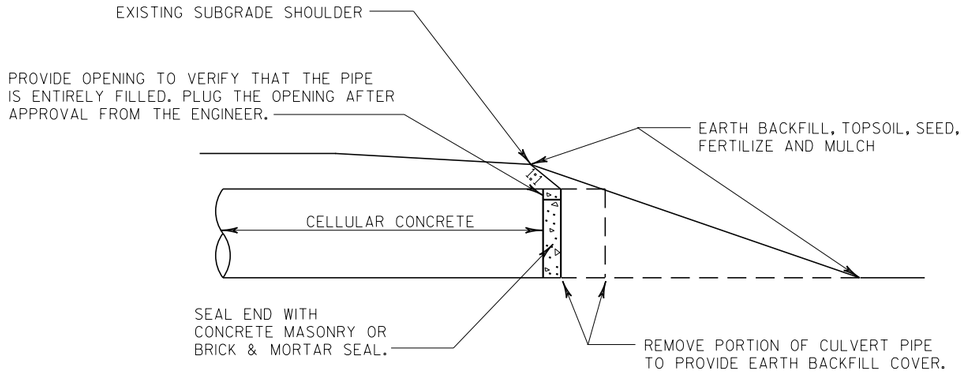
1) INSTALL COVER PLATE TO REST FLAT UPON THE EXISTING STRUCTURE. COVER PLATE SHOULD EXTEND OUTSIDE EDGE OF THE EXISTING MASONRY.

2) THE FOLLOWING ITEMS ARE INCIDENTAL TO ITEM COVER PLATE LEFT IN PLACE:

A. REMOVE INLET FRAME AND LID
B. REMOVE 2' MINIMUM CONCRETE BLOCK
C. FURNISH AND INSTALL COVER PLATE
D. BACKFILL USING BASE AGGREGATE DENSE 1 1/4 "

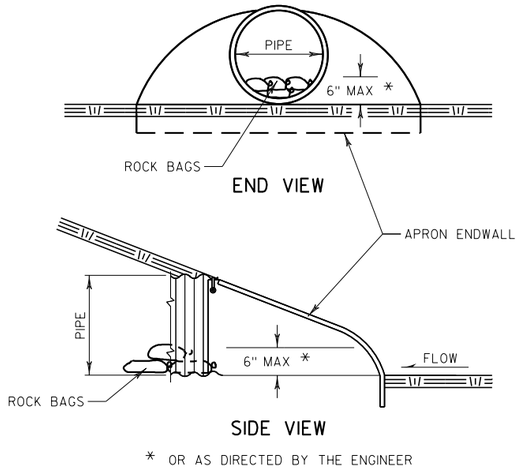
COVER PLATE LEFT IN PLACE

2



ABANDONING SEWER DETAIL

110210

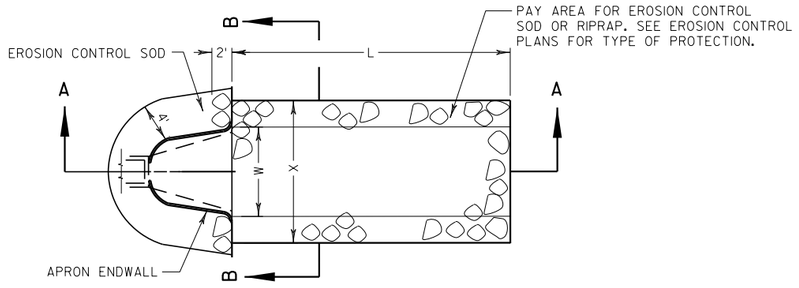


* OR AS DIRECTED BY THE ENGINEER

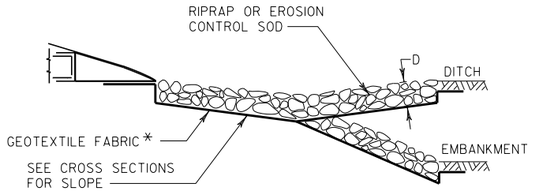
ESTIMATED BAG SIZE = 18" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
12"	1
15"	2
18"	2
24"	3
30"	5
36"	7
42"	7
48"	10
54"	10
60"	13
66"	14
72"	16
13"X17"	2
19"X30"	5
24"X38"	7
29"X45"	10
34"X53"	10
38"X60"	13
48"X76"	18

CULVERT PIPE CHECK

INSTALL AT INLET END ONLY



PLAN VIEW



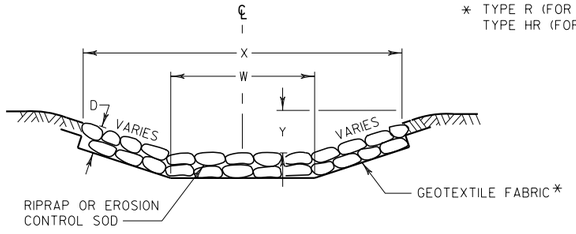
SECTION A-A

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

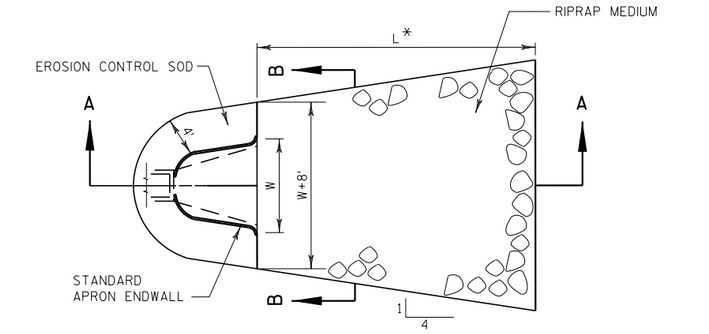


SECTION B-B

* TYPE R (FOR RIPRAP LIGHT ONLY)
TYPE HR (FOR RIPRAP HEAVY AND MEDIUM ONLY)

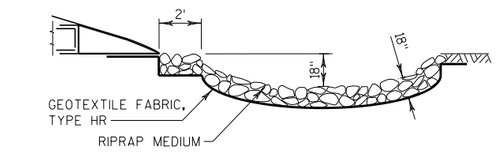
SOD, RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

SEE EROSION CONTROL PLAN FOR LOCATIONS

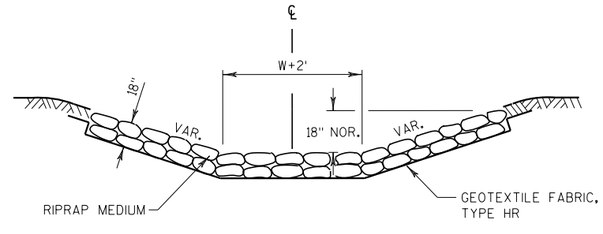


* L = 3 TIMES W OR 10' MIN
OR AS DIRECTED BY THE ENGINEER

PLAN VIEW

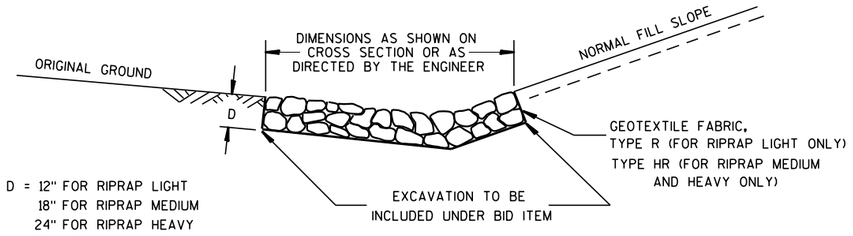


SECTION A-A

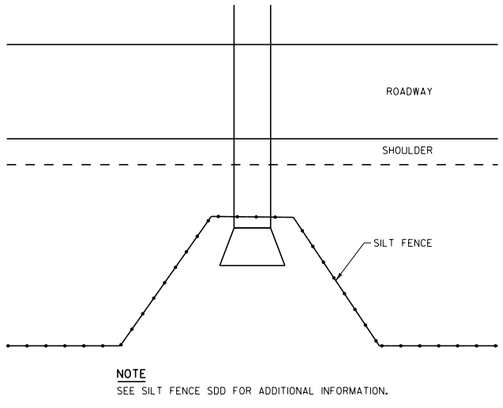


SECTION B-B

SOD, RIPRAP AND GEOTEXTILE FABRIC DETAIL AT POND OUTFALL ENDWALLS



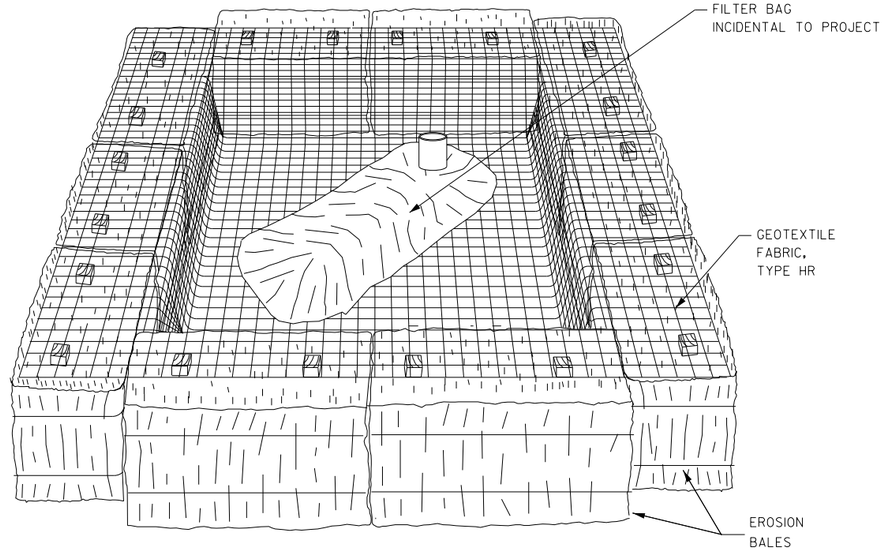
RIPRAP IN DITCHES DETAIL



NOTE
SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

100902

TYPICAL SILT FENCE DETAIL AT PIPE INLET



EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.
SOLUTION:
SV (C.F.) = 16 X 50

SV = 800 C.F.

$$\frac{800 \text{ C.F.}}{1.5 \text{ FT.}} = 533 \text{ S.F.}$$

USE A 20 FT. X 27 FT. BASIN

NOTES

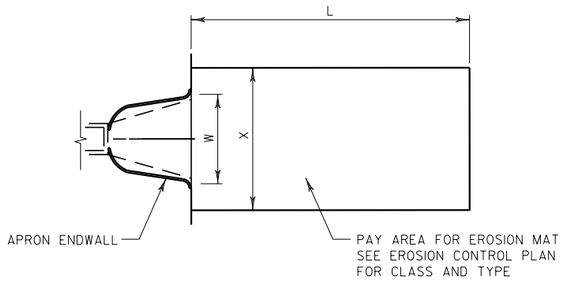
1) SEE EROSION CONTROL PLANS FOR LOCATION OF TEMPORARY SEDIMENT BASINS. ADDITONALLY, THE CONTRACTOR SHALL PUMP WATER FROM DEWATERING OPERATIONS INTO TEMPORARY SEDIMENT BASINS PRIOR TO DISCHARGING INTO ROADSIDE DITCHES.

2) BASIN SHALL BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED BY THE CONTRACTOR OFF OF THE PROJECT SITE.

3) TEMPORARY SETTLING BASIN SHALL BE PAID FOR AS EROSION BALES AND GEOTEXTILE FABRIC TYPE FF.

TEMPORARY SEDIMENT BASIN DETAIL

UNDISTRIBUTED



W = WIDTH OF APRON ENDWALL

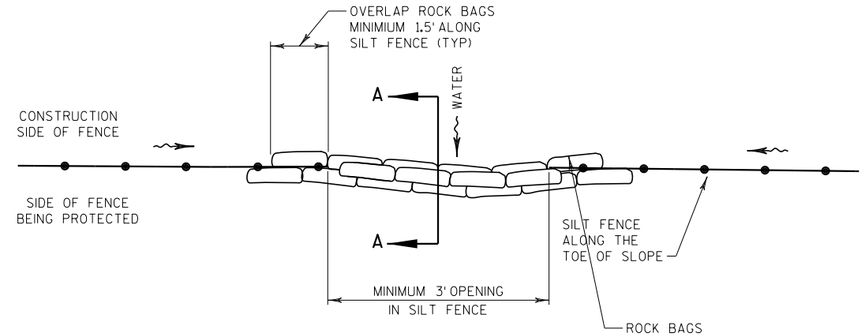
L = 3 × W (NORMAL) OR 10' (MINIMUM) OR
AS INDICATED IN THE PLANS OR
AS DIRECTED BY THE ENGINEER.

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

EROSION MAT TREATMENT AT CULVERTS

SEE EROSION CONTROL PLAN FOR LOCATIONS

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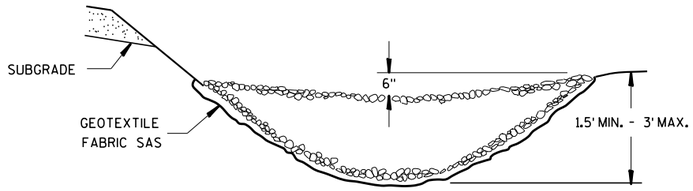


PLAN VIEW

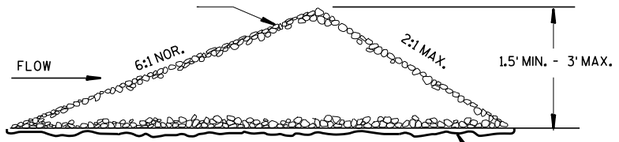


SECTION A-A

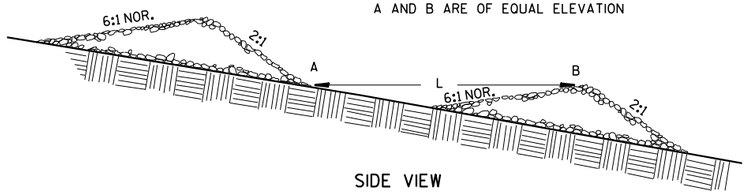
SILT FENCE DRAINAGE OUTLET, ROCK BAGS



CROSS SECTIONAL VIEW

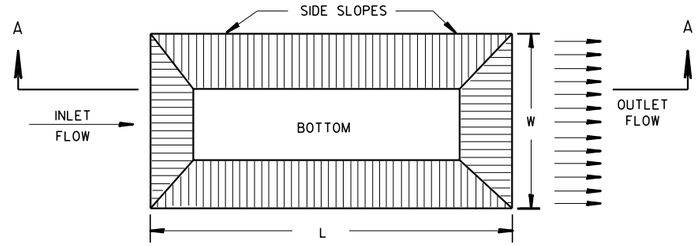


SIDE VIEW

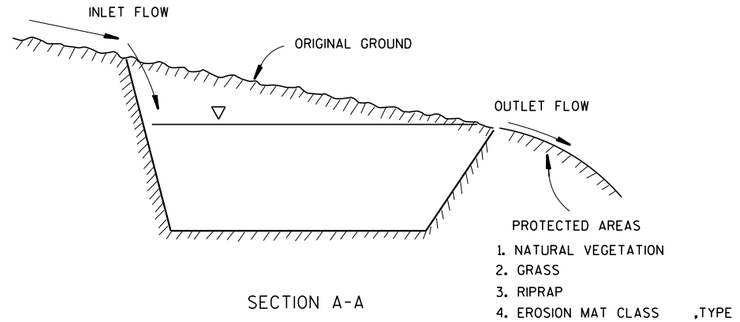


SIDE VIEW

PERMANENT STONE DITCH CHECK

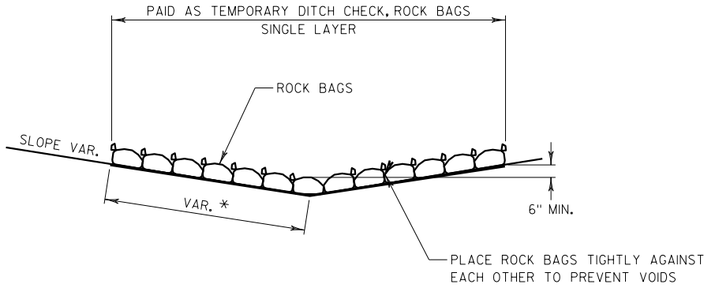


PLAN VIEW

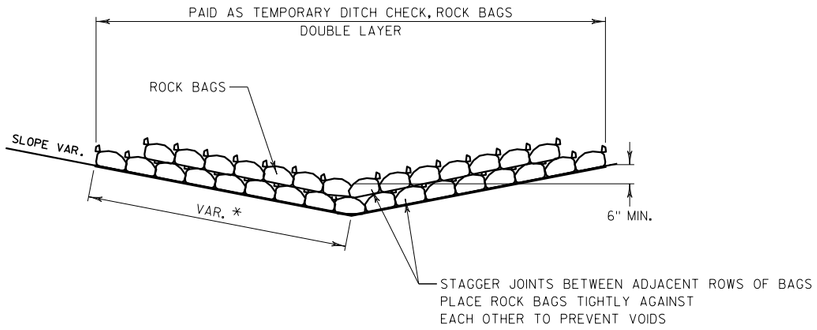


SECTION A-A

TYPICAL EXCAVATED SEDIMENT TRAP



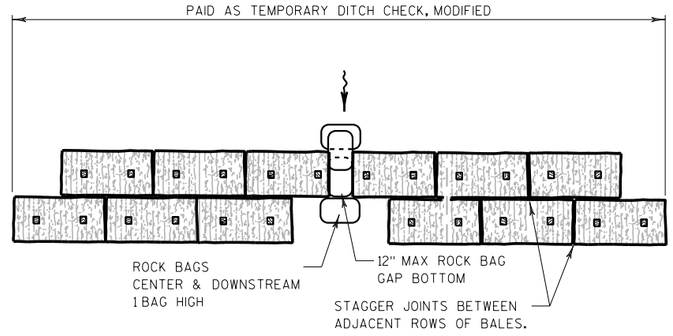
SIDE VIEW (SINGLE LAYER)



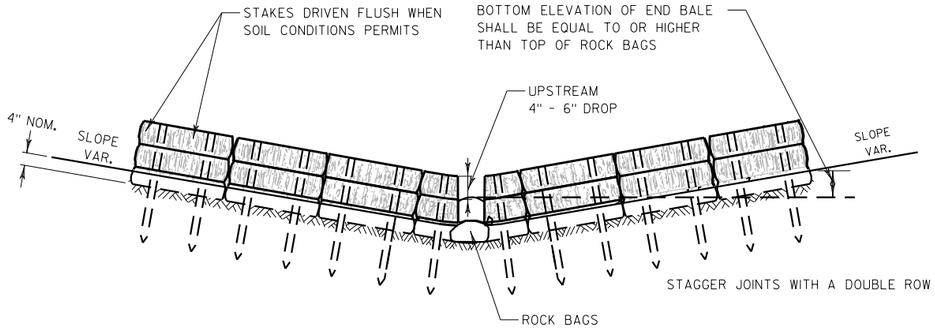
* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL.

SIDE VIEW (DOUBLE LAYER)

TEMPORARY DITCH CHECK, ROCK BAGS, SINGLE LAYER AND DOUBLE LAYER



PLAN VIEW



FRONT ELEVATION

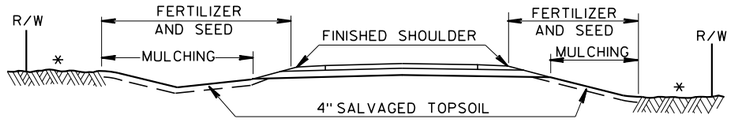
NOTE

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.

TEMPORARY DITCH CHECK, MODIFIED

TEMPORARY DITCH CHECKS

NOTE TO DESIGNER: When using these detail drawings, include the corresponding corridor specifications



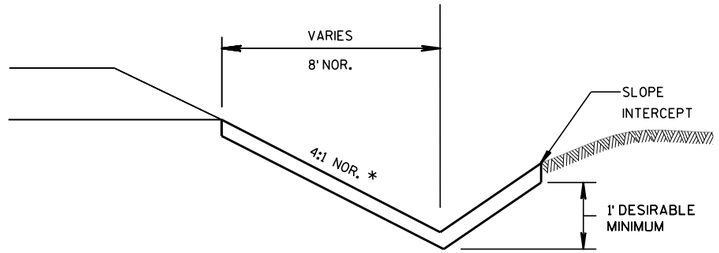
* DISTURBED AREAS TO BE FERTILIZED & SEEDED



NOTES

1) USE SEED MIXTURE #20 EXCEPT WHEN ADJACENT TO WETLANDS USE SEED MIXTURE # 80. USE FERTILIZER TYPE B.

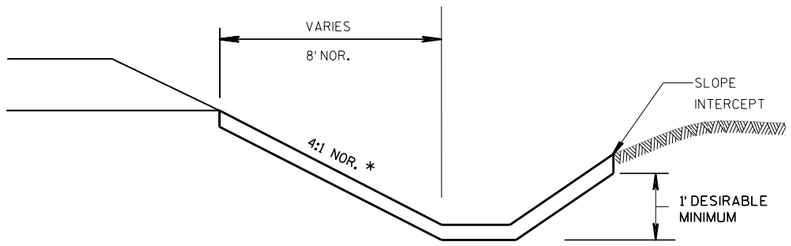
FINISHING ITEMS DETAIL



* USE EROSION MAT IF THE SLOPE IS 3:1 OR STEEPER

SOD OR EROSION MAT DETAIL

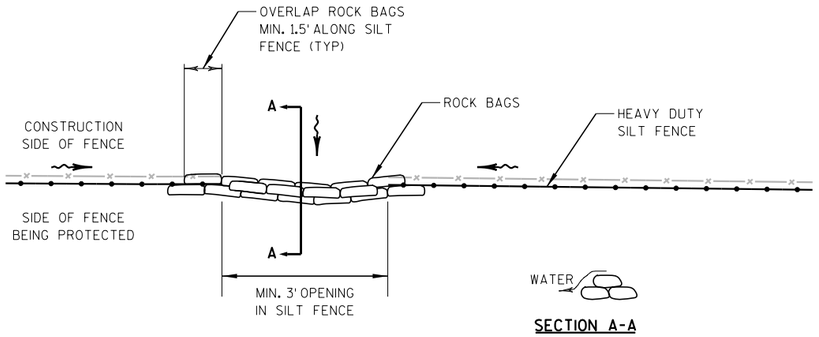
FOR V DITCH



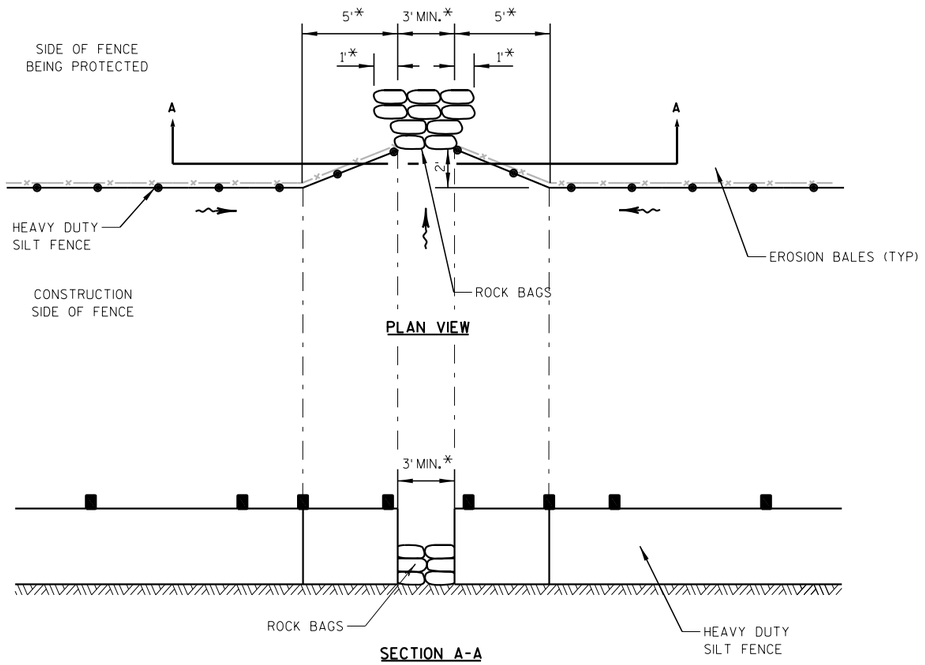
* USE EROSION MAT IF THE SLOPE IS 3:1 OR STEEPER

SOD OR EROSION MAT DETAIL

FOR TRAPEZOIDAL DITCH



SECTION A-A



PLAN VIEW

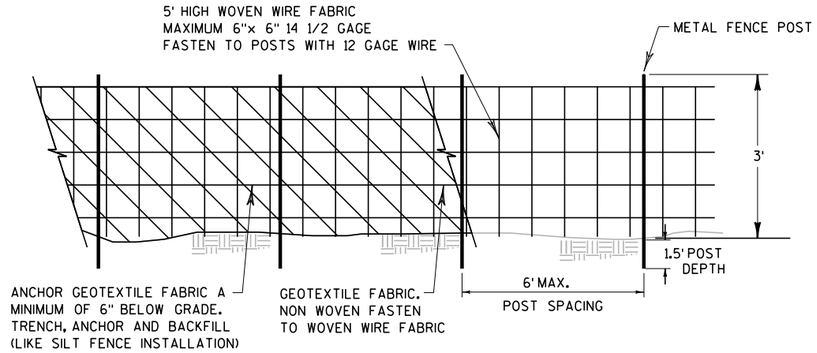
SECTION A-A

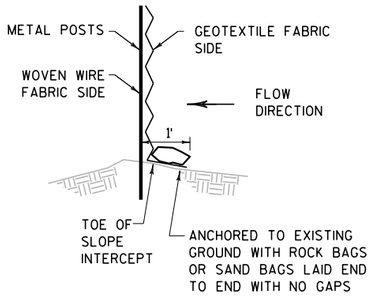
NOTE

* DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY ENGINEER

HEAVY DUTY SILT FENCE DRAINAGE OUTLET, ROCK BAGS DETAIL

(FOR USE IN ENVIRONMENTALLY SENSITIVE AREAS)



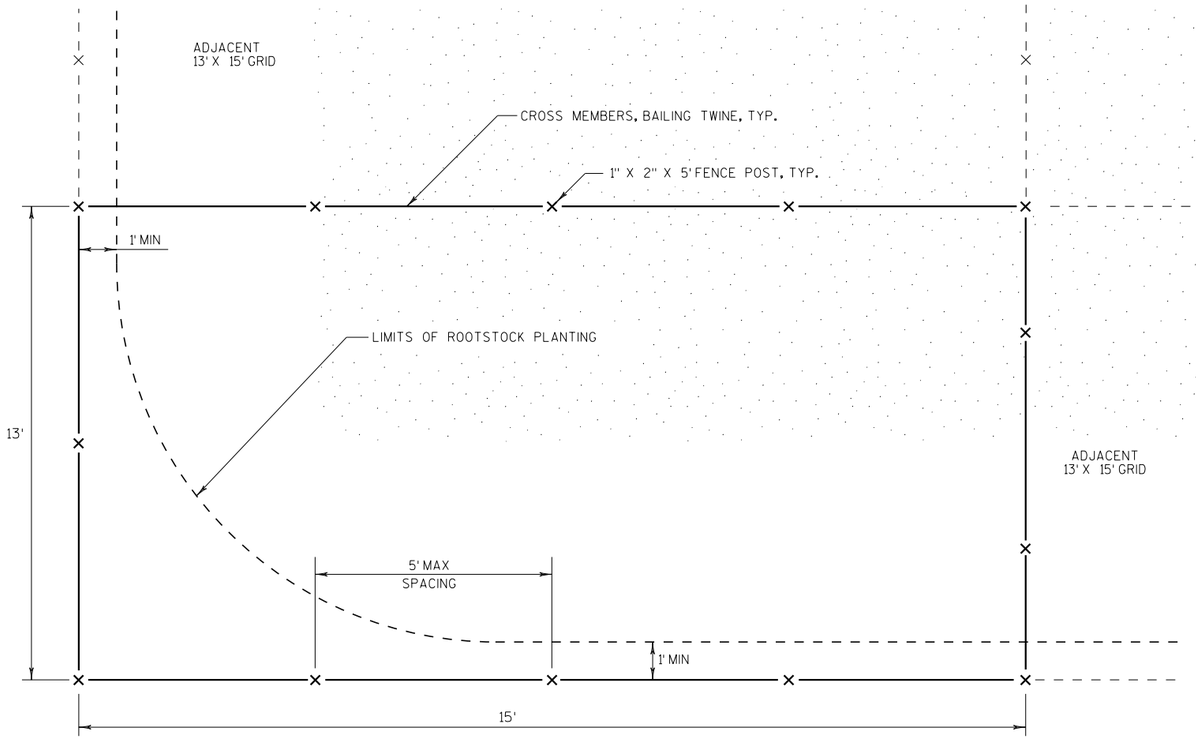


NOTE

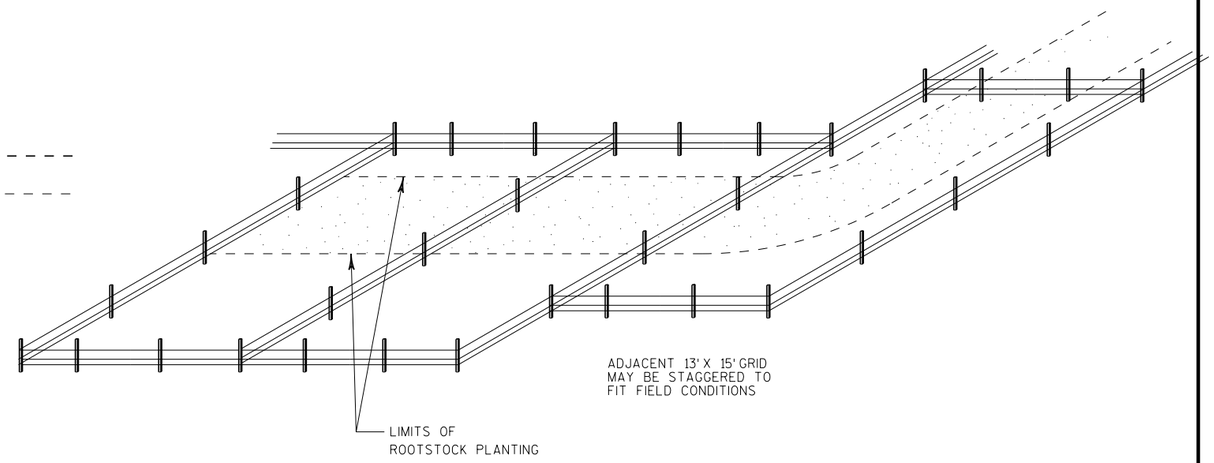
1) ANCHOR MATERIAL IS INCLUDED IN THE BID ITEM HEAVY DUTY SILT FENCE

SILT FENCE HEAVY DUTY DETAIL

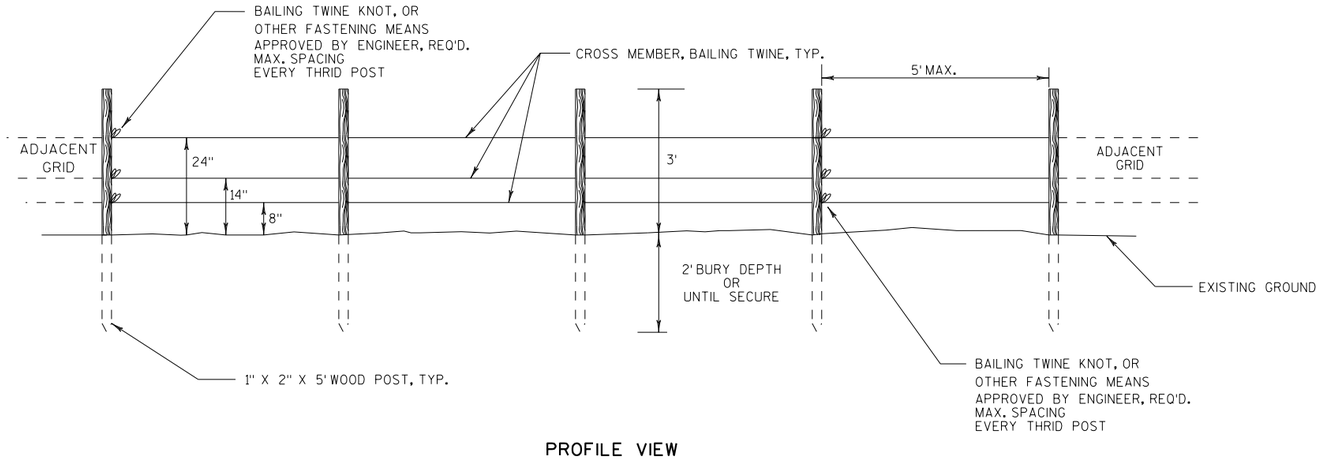
INSTALL AS SHOWN ON PLANS



PLAN VIEW



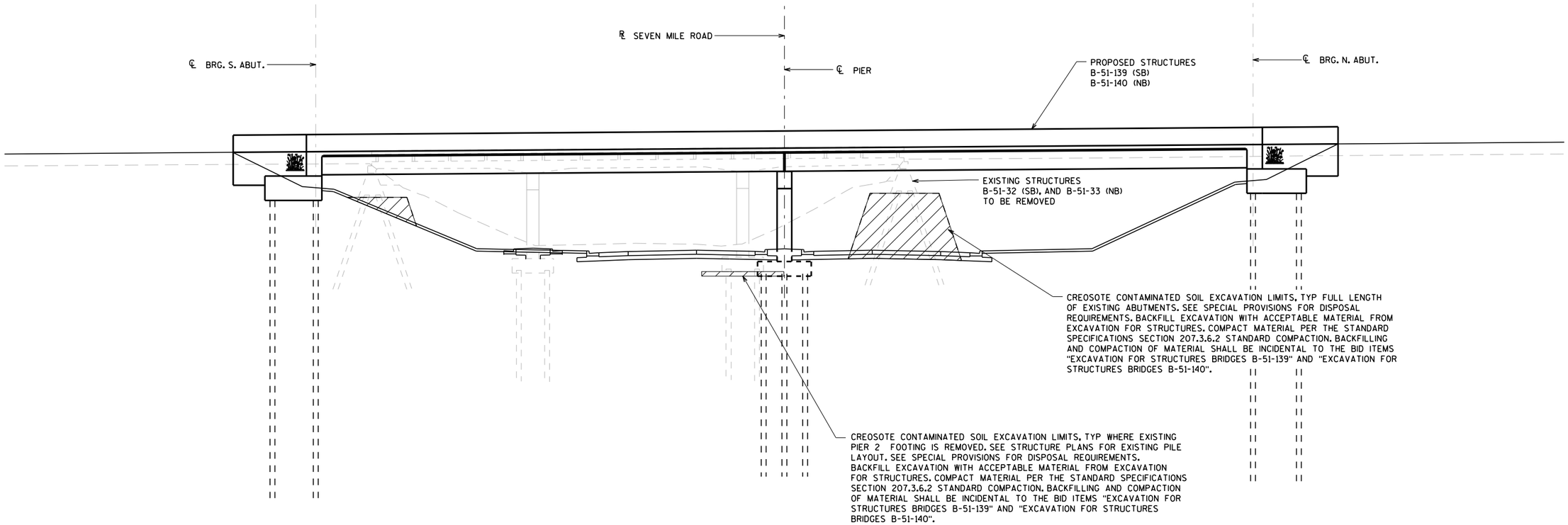
ISOMETRIC VIEW



PROFILE VIEW

ROOTSTOCK PROTECTION

2



EXCAVATION, HAULING, AND DISPOSAL OF CREOSOTE CONTAMINATED SOIL

TEMPORARY END WALL (STAGE 1B/1C)

FINAL END WALL (STAGE 4)

194 NORTHBOUND

1230SE

1232SE

194 SE RAMP

1234SE

1236SE

TOP OF SPILLWAY
ELEV. = 715.0

3:1 SLOPE

2:1 SLOPE

10:1 SLOPE

4:1 SLOPE

5:1 SLOPE

NORMAL WATER ELEV= 712.0
POND BOTTOM ELEV= 707.0

POND OUTLET STRUCTURE
(SEE SE DETENTION BASIN DETAILS SHEETS FOR DETAILS)

EIXISTING CULVERT
INLET ELEV. 711.50
DISCHARGE ELEV. 710.5

EAST FRONTAGE ROAD

ASPH

WELL

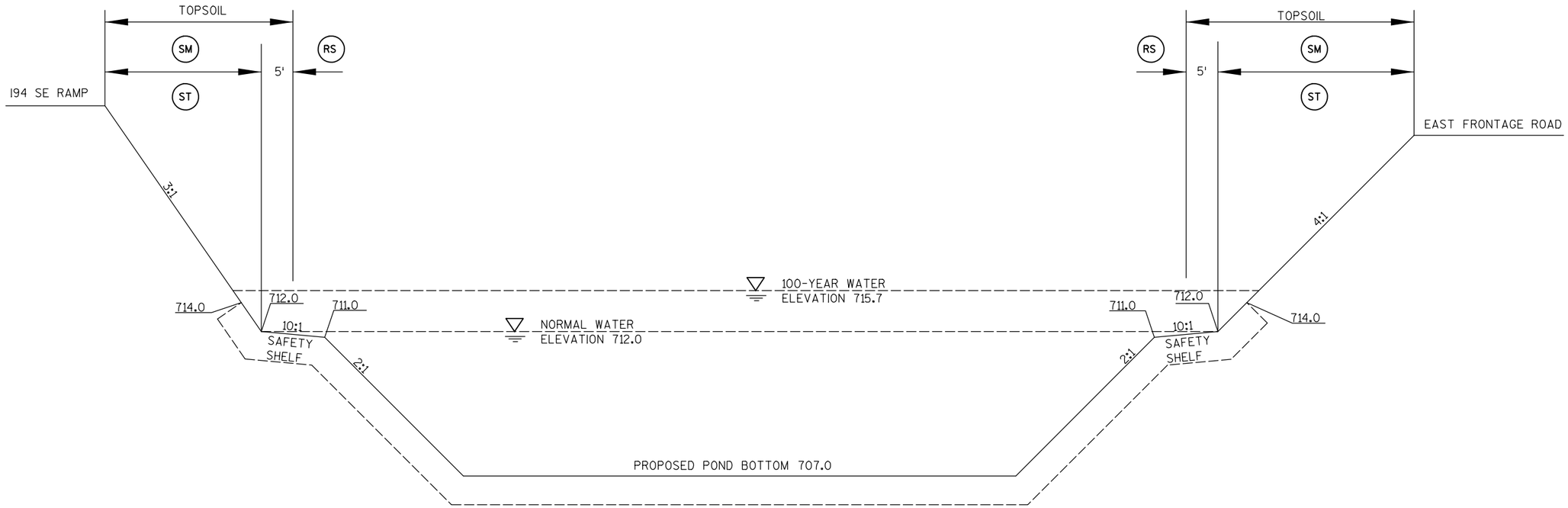
SEPC

SCALE, FEET 0 50 100

DATA FOR POND LAYOUT

POINT	Y	X	POINT	Y	X	POINT	Y	X
10	222,203.05	594,490.57	46	222,427.82	594,557.48	82	222,624.47	594,535.76
11	222,234.36	594,516.79	47	222,432.78	594,548.83	83	222,595.73	594,594.84
12	222,250.13	594,503.68	48	222,455.96	594,523.71	84	222,598.88	594,602.20
13	222,244.82	594,493.18	49	222,456.34	594,517.72	85	222,618.17	594,622.65
14	222,273.60	594,474.38	50	222,481.70	594,485.24	86	222,664.11	594,613.21
15	222,279.12	594,486.73	51	222,472.48	594,496.69	87	222,664.11	594,613.21
16	222,274.72	594,497.02	52	222,471.73	594,508.66	88	222,677.76	594,598.02
17	222,267.75	594,517.12	53	222,436.14	594,594.43	89	222,665.19	594,594.06
18	222,261.36	594,523.81	54	222,459.51	594,600.60	90	222,649.82	594,596.82
19	222,298.27	594,535.49	55	222,468.84	594,582.73	91	222,639.47	594,588.66
20	222,290.68	594,516.02	56	222,474.91	594,567.86	92	222,633.21	594,583.68
21	222,295.72	594,502.65	57	222,473.11	594,562.14	93	222,635.13	594,560.33
22	222,314.16	594,475.68	58	222,485.69	594,529.28	94	222,642.96	594,561.96
23	222,314.52	594,483.92	59	222,490.75	594,526.07	95	222,654.12	594,558.66
24	222,316.34	594,496.87	60	222,509.54	594,505.02	96	222,666.99	594,551.18
25	222,313.06	594,505.63	61	222,509.91	594,523.92	97	222,663.52	594,573.88
26	222,323.20	594,540.55	62	222,514.21	594,530.67	98	222,675.48	594,575.01
27	222,331.93	594,531.61	63	222,503.66	594,553.75	99	222,671.45	594,564.62
28	222,342.29	594,520.55	64	222,496.22	594,550.81	100	222,683.59	594,558.43
29	222,329.75	594,506.24	65	222,495.62	594,577.99	101	222,680.54	594,547.48
30	222,377.13	594,478.60	66	222,487.93	594,580.18	102	222,642.53	594,537.68
31	222,375.71	594,490.53	67	222,488.76	594,632.37	103	222,649.49	594,533.73
32	222,384.59	594,503.13	68	222,507.27	594,611.31	104	222,668.14	594,525.75
33	222,365.01	594,514.28	69	222,516.16	594,605.61	105	222,698.43	594,513.20
34	222,374.93	594,522.10	70	222,521.14	594,599.34	106	222,719.56	594,514.34
35	222,369.15	594,530.37	71	222,551.93	594,655.93	107	222,687.55	594,530.56
36	222,357.35	594,543.38	72	222,550.99	594,635.93	108	222,700.98	594,533.51
37	222,350.70	594,552.29	73	222,551.83	594,625.92	109	222,722.21	594,538.45
38	222,381.82	594,559.09	74	222,551.60	594,617.93	110	222,708.21	594,552.47
39	222,393.80	594,522.30	75	222,563.21	594,532.22	111	222,694.35	594,570.75
40	222,400.87	594,514.19	76	222,563.67	594,524.23	112	222,708.81	594,579.86
41	222,415.10	594,521.12	77	222,559.12	594,513.95	113	222,697.30	594,586.28
42	222,404.37	594,535.53	78	222,576.76	594,493.95	114	222,715.72	594,594.46
43	222,400.56	594,544.84	79	222,639.91	594,500.56	115	222,699.41	594,612.82
44	222,401.97	594,553.63	80	222,634.27	594,518.28	116	222,681.24	594,617.66
45	222,404.08	594,566.82	81	222,624.92	594,527.78			

PROJECT NO: 1035-01-74	HWY: IH 94/SEVEN MILE RD	COUNTY: RACINE	SE DETENTION BASIN DETAILS	SHEET 49	E



LEGEND

(SM) SEEDING MIXTURE NO. 10, FERTILIZER TYPE B

(ST) SEEDING TEMPORARY

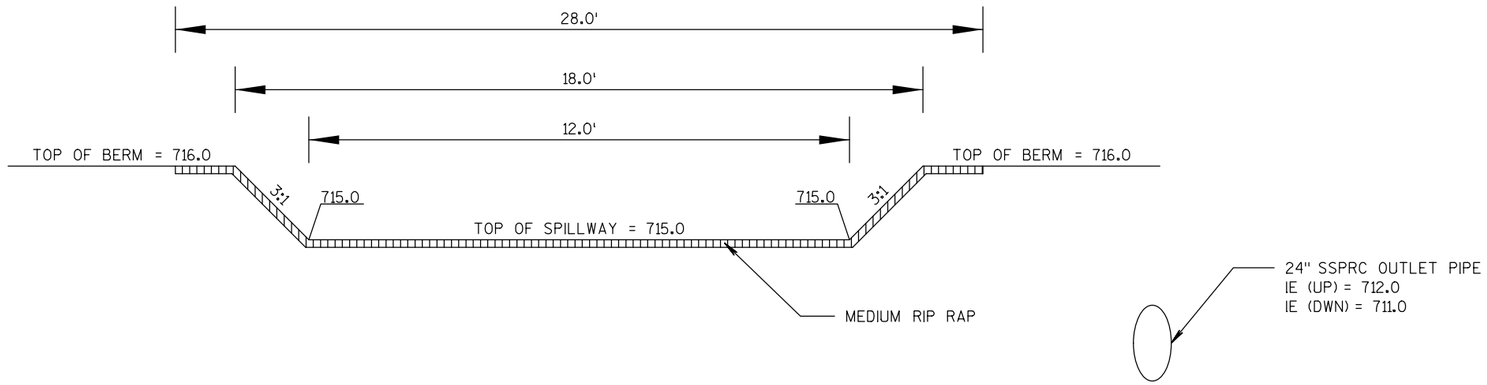
(RS) ROOTSTOCK VEGETATION

SECTION A-A FINISHED TYPICAL SECTION SE DETENTION POND

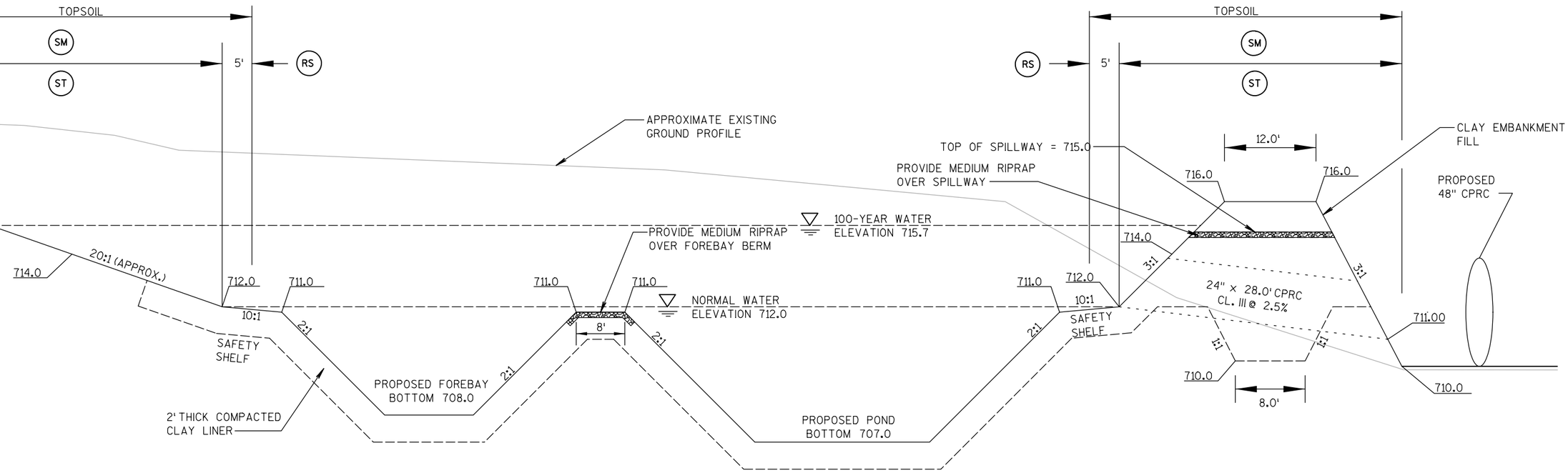
NOTES

1. SEE EROSION CONTROL SHEETS 3 FOR EROSION CONTROL DETAILS.

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE RD	COUNTY: RACINE	SE DETENTION BASIN DETAILS	SHEET 50	E



SECTION C-C BERM CROSS SECTION SE DETENTION POND



LEGEND

- (SM) SEEDING MIXTURE NO. 10, FERTILIZER TYPE B,
- (ST) SEEDING TEMPORARY
- (RS) ROOTSTOCK VEGETATION

NOTES

1. SEE EROSION CONTROL SHEETS 3 FOR EROSION CONTROL DETAILS.

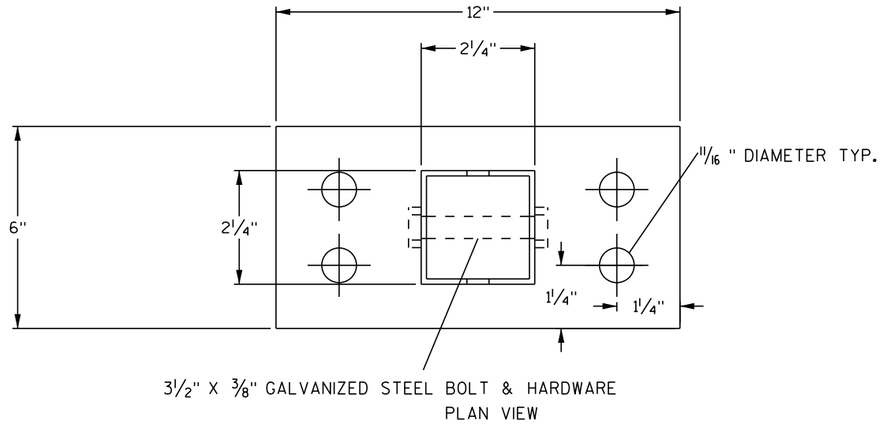
SECTION B-B FINISHED TYPICAL SECTION SE DETENTION POND

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE RD	COUNTY: RACINE	SE DETENTION BASIN DETAILS	SHEET 51	E

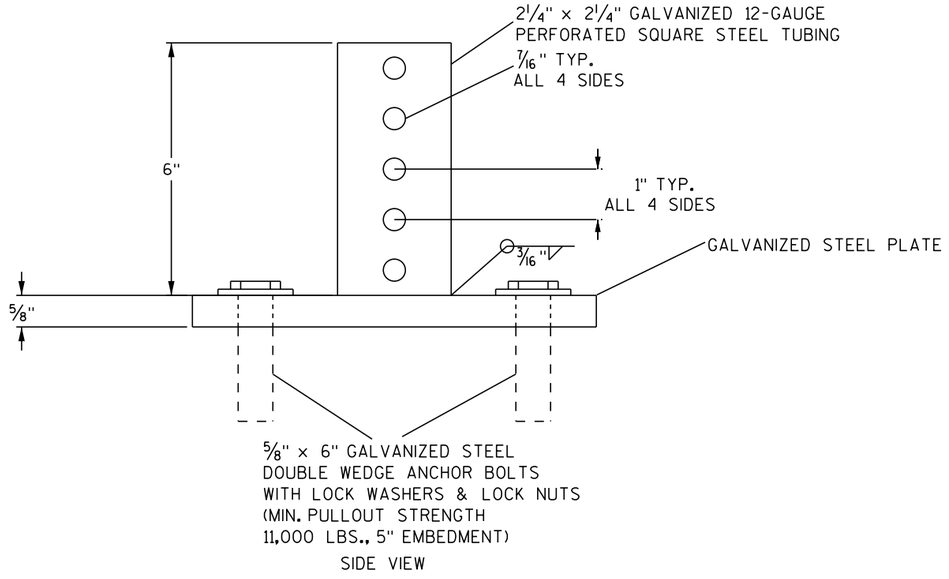
2

TYPICAL REFERENCE MARKER MOUNTING DETAILS

BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE

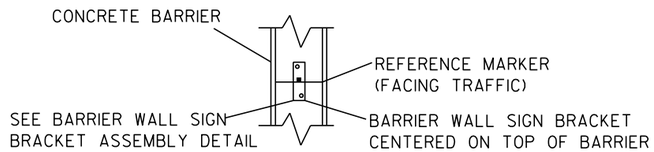


PLAN VIEW



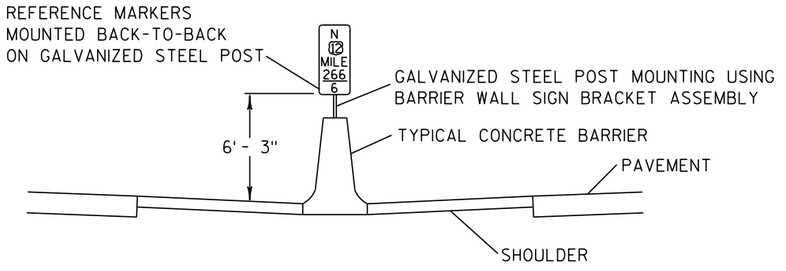
SIDE VIEW

TYPICAL REFERENCE MARKER PLACEMENT DETAILS



PLAN VIEW

MEDIAN BARRIER MOUNTING DETAIL



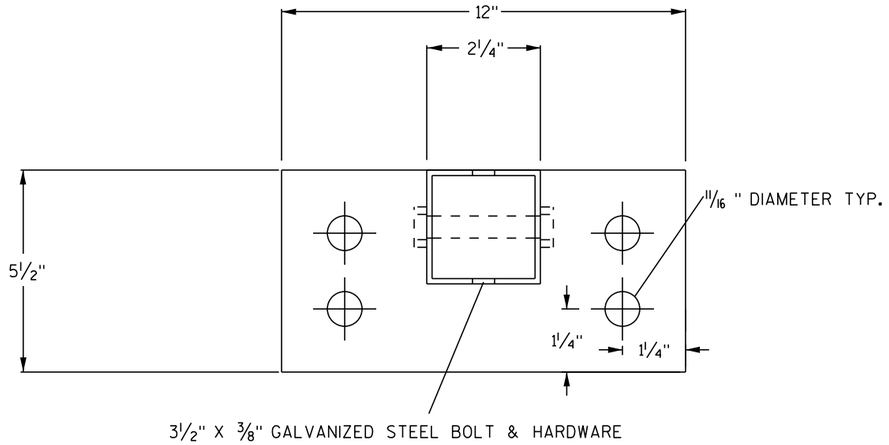
SINGLE MEDIAN BARRIER

NOTES

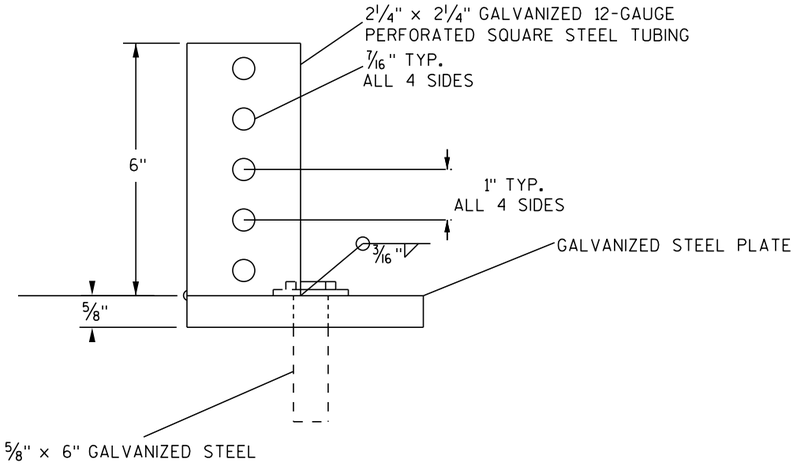
1) ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION
2) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
3) SEE SIGN PLATE A4-8 FOR BOLT REQUIREMENTS. INCIDENTAL TO SIGN.

PROJECT NO: 1035-01-74	HWY: 94/ SEVEN MILE ROAD	COUNTY: RACINE	OFFSET MILE MARKER MOUNTING DETAIL	SHEET 52	E

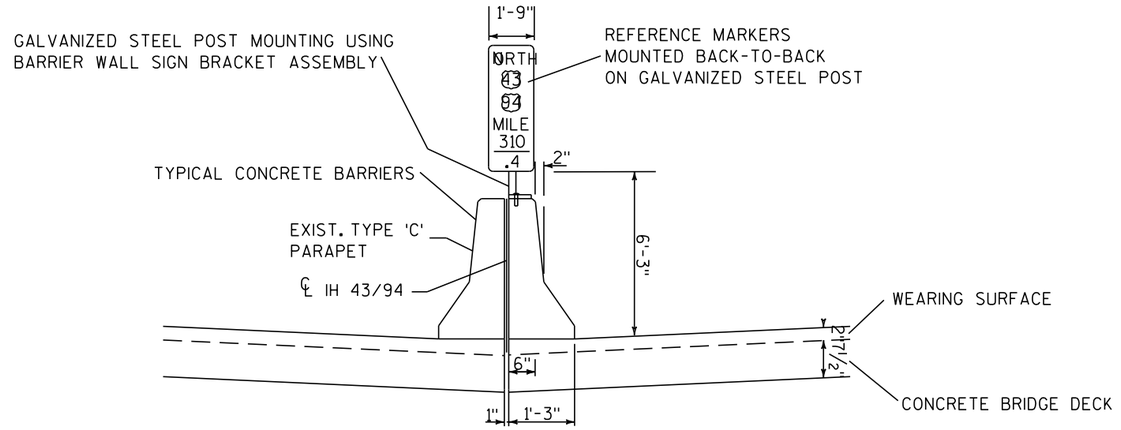
BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE



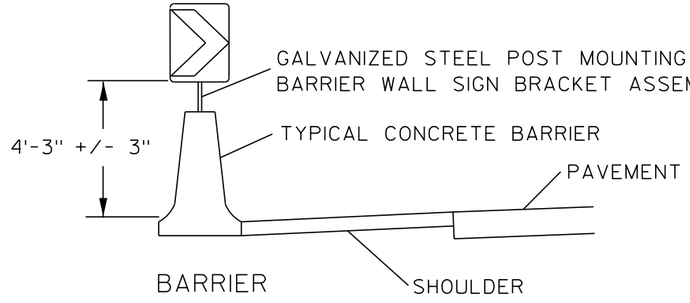
PLAN VIEW



ELEVATION VIEW

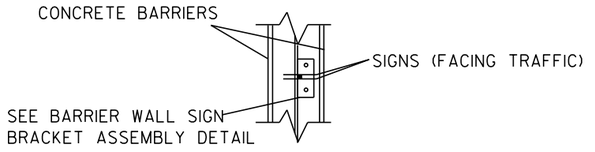


DOUBLE MEDIAN BRIDGE PARAPET



DOUBLE MEDIAN BARRIER

TYPICAL SIGN PLACEMENT DETAILS



PLAN VIEW

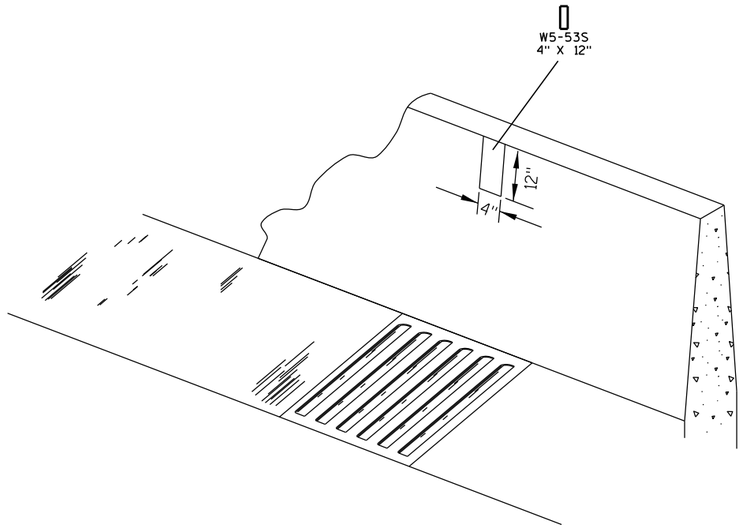
MEDIAN BRIDGE PARAPET MOUNTING DETAIL

NOTES

1) ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION
2) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
3) SEE SIGN PLATE A4-8 FOR BOLT REQUIREMENTS.

PROJECT NO: 1035-01-74	HWY: 94/ SEVEN MILE ROAD	COUNTY: RACINE	OFFSET MILE MARKER MOUNTING DETAIL	SHEET 53	E

2



STORM DRAIN INLET MARKING

USE 1/2" EXPANSION FASTENER
AND BOLT TO FASTEN SIGN

SEE A4-8 STATE PLATE
FOR BOLT TYPE

PROJECT NO: 1035-01-74	HWY: IH 94/ SEVEN MILE ROAD	COUNTY: RACINE	SIGN MOUNTING DETAIL ON BARRIER WALL	SHEET 54	E

2

REMOVAL LEGEND

- REMOVING PAVEMENT
- COMPLETED PAVEMENT WIDENING
- REMOVING CONCRETE BARRIER
- REMOVING FENCE
- REMOVING GUARDRAIL
- REMOVING INLETS
- REMOVING MANHOLES
- RM — REMOVING STORM SEWER, CULVERTS, OR UNDERDRAIN
- S1C STAGE 1C REMOVAL
- S2 STAGE 2 REMOVAL
- S4 STAGE 4 REMOVAL

N

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

6 1/2 MILE RD

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 REMOVALS

EAST FRONTAGE RD

1206 1208 1210 1212 1214 1216 1218 1220

1220SW

R/L IH 94

REMOVE DELINEATORS

MATCHLINE 1220+50

6 1/2 MILE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	REMOVAL PLANS: MAINLINE	SHEET 55	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m021101_rm.dgn PLOT DATE : 04-MAY-2018 13:37 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

N

WEST FRONTAGE RD

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

1222 1224 1226 1228 1230 1232 1234

IH 94 SB
R/L IH 94

IH 94 NB

MATCHLINE 1220+50

MATCHLINE 1234+50

REMOVE DELINEATORS

EAST FRONTAGE RD

EXIT RAMP

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	REMOVAL PLANS: MAINLINE	SHEET 56	E

2

2

WEST FRONTAGE RD

7 MILE ROAD

IH-94 SB

IH 94 NB

EXIT RAMP

ENTRANCE RAMP

R/L IH 94

REMOVE DELINEATORS

1234+50

1236

1238

1240

1242

1244

1246

1248

1248+50

1236SW

1238SW

1240SW

1242NW

1244NW

1246NW

1248NW

341

346

348

350

352

MATCHLINE 1234+50

MATCHLINE 1248+50

N

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	REMOVAL PLANS: MAINLINE	SHEET 57	E

2

N

WEST FRONTAGE RD

1250NW 1252NW 1254NW 1256NW 1258NW 1260NW 1262NW

R/L IH 94

IH 94 SB

IH 94 NB

1250 1252 1254 1256 1258 1260 1262

MATCHLINE 1248+50

MATCHLINE 1262+50

REMOVE DELINEATORS

EAST FRONTAGE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	REMOVAL PLANS: MAINLINE	SHEET 58	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m021104_rm.dgn PLOT DATE : 04-MAY-2018 13:37 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

N

WEST FRONTAGE RD

SEE PROJECT I.D. 1035-01-82 FOR
ADDITIONAL IH 94 REMOVALS

1264NW

1264NE

R/L IH 94

1264

1266

1258

1270

1272

IH 94 SB

IH 94 NB

MATCHLINE 1262+50

END PROJECT
I.D. 1035-01-74
STA 1268+00.00

REMOVE
DELINEATORS

EAST FRONTAGE RD

7 1/2 MILE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	REMOVAL PLANS: MAINLINE	SHEET 59 E

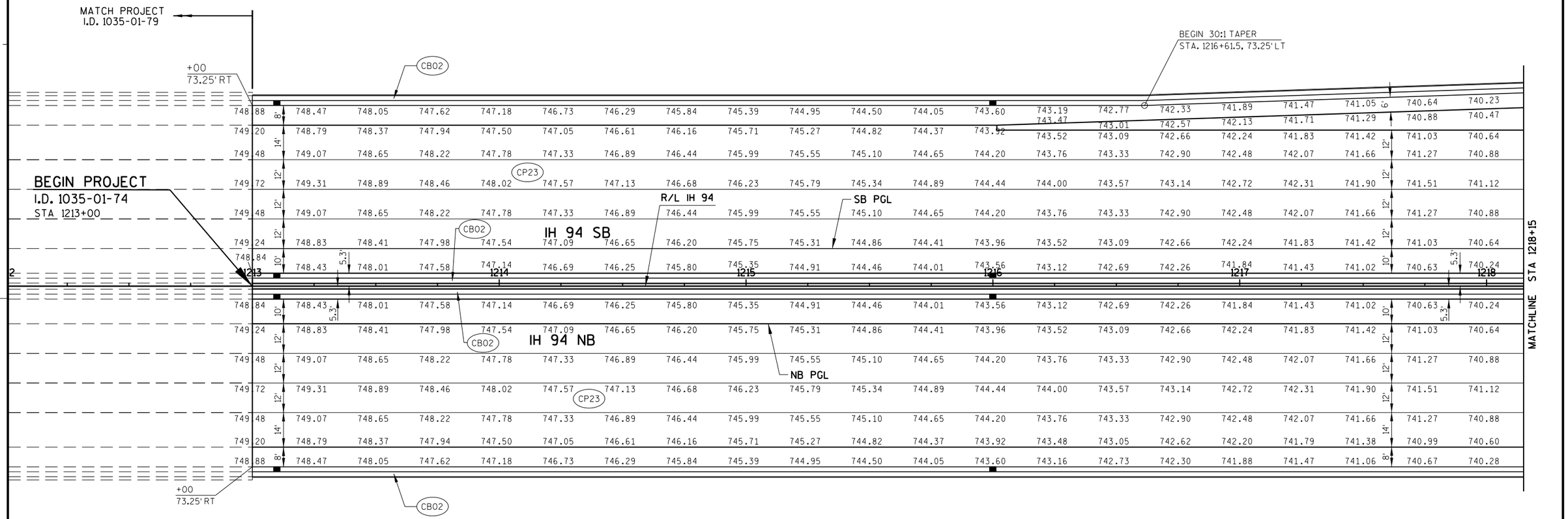
FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m021105_rm.dgn PLOT DATE : 04-MAY-2018 13:37 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

N

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.



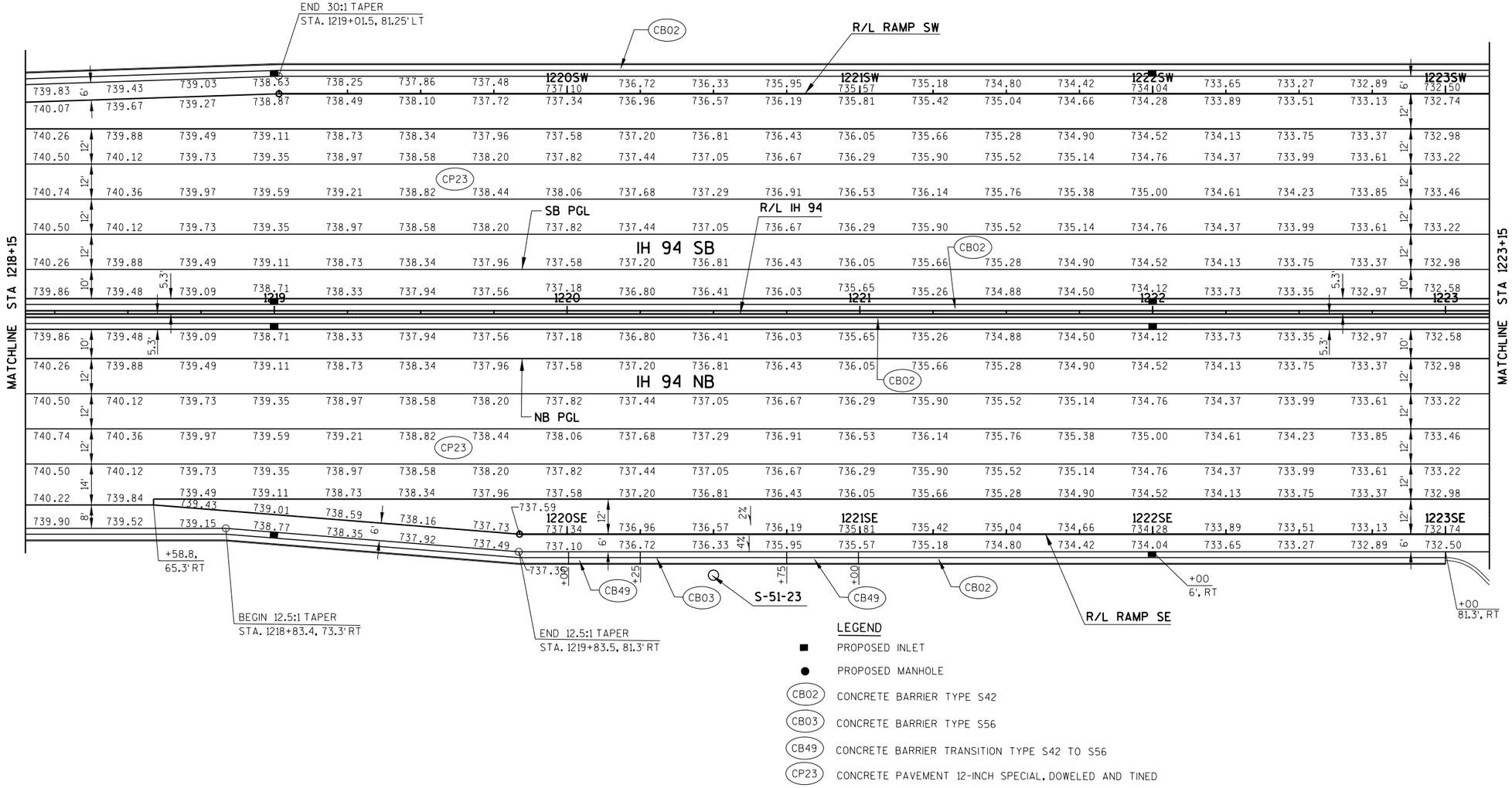
| | | |

2

N

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.



LEGEND

- ■ PROPOSED INLET
- ● PROPOSED MANHOLE
- (CB02) CONCRETE BARRIER TYPE S42
- (CB03) CONCRETE BARRIER TYPE S56
- (CB49) CONCRETE BARRIER TRANSITION TYPE S42 TO S56
- (CP23) CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED

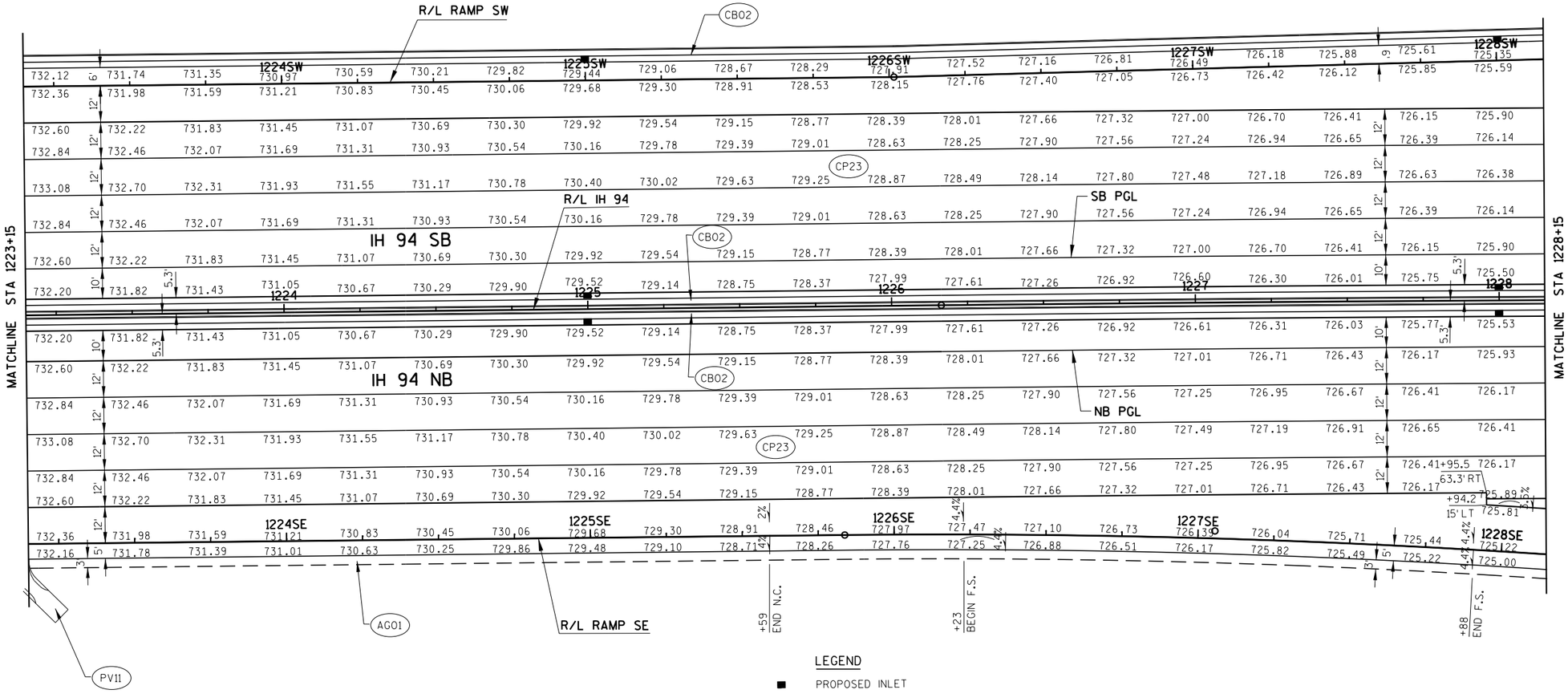
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 61	E

2

N

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.



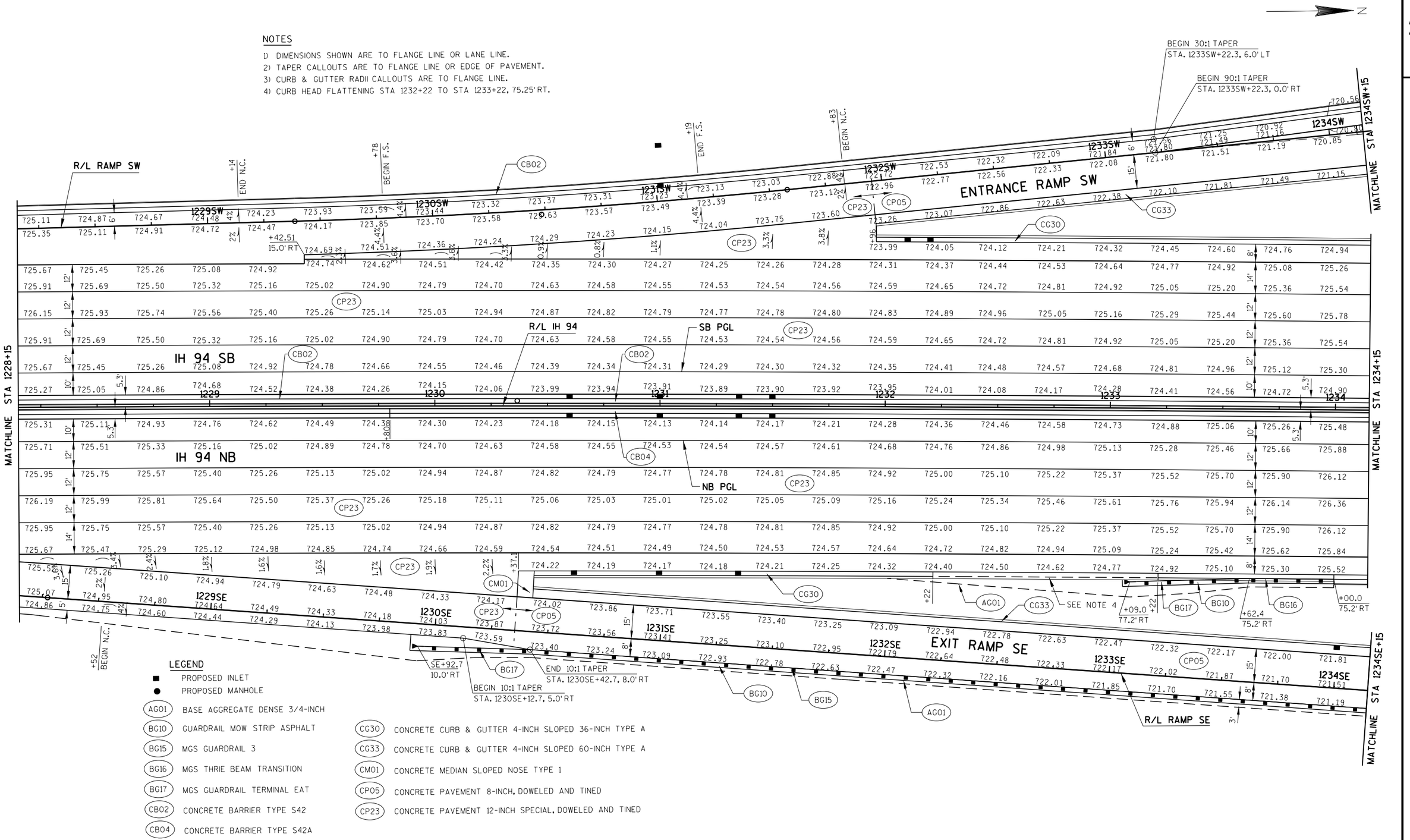
LEGEND

- ■ PROPOSED INLET
- ● PROPOSED MANHOLE
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (CB02) CONCRETE BARRIER TYPE S42
- (CP23) CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED
- (PV11) CONCRETE SURFACE DRAINS

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 62	E

NOTES

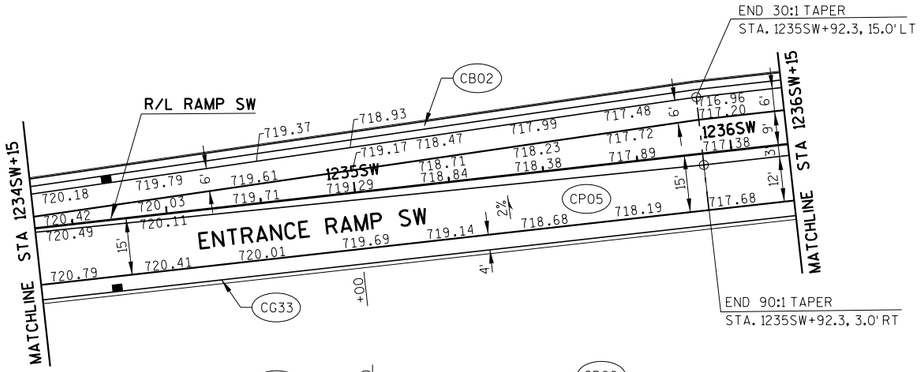
1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.
4) CURB HEAD FLATTENING STA 1232+22 TO STA 1233+22, 75.25' RT.

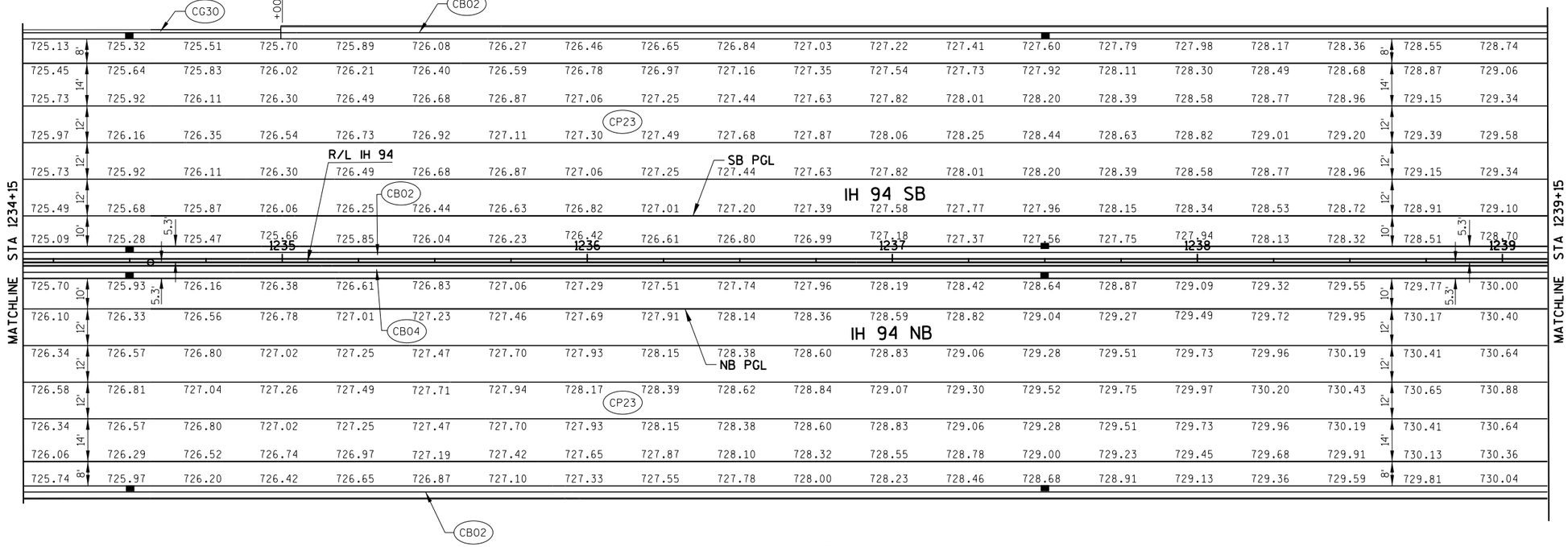


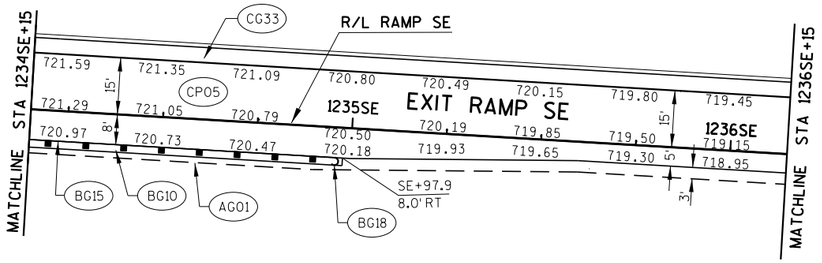
LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE

AG01	BASE AGGREGATE DENSE 3/4-INCH
BG10	GUARDRAIL MOW STRIP ASPHALT
BG15	MGS GUARDRAIL 3
BG16	MGS THRIE BEAM TRANSITION
BG17	MGS GUARDRAIL TERMINAL EAT
CB02	CONCRETE BARRIER TYPE S42
CB04	CONCRETE BARRIER TYPE S42A
CG30	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG33	CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CP05	CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
CP23	CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED







NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.

LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE

AG01	BASE AGGREGATE DENSE 3/4-INCH	CB04	CONCRETE BARRIER TYPE S42A
BG10	GUARDRAIL MOW STRIP ASPHALT	CG30	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
BG15	MGS GUARDRAIL 3	CG33	CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
BG18	MGS GUARDRAIL TERMINAL TYPE 2	CP05	CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
CB02	CONCRETE BARRIER TYPE S42	CP23	CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED

2

N

MATCHLINE STA 1239+15

CB02 +64

728.93 8' 729.12 729.31 4% 729.50 3% 729.77 2% 730.04

729.25 729.44 729.63 729.82 730.01 730.20

729.53 14' 729.72 729.91 730.10 730.29 730.48

729.77 12' CP23 729.96 730.15 730.34 730.53 PV01 730.72

729.53 12' 729.72 729.91 730.10 730.29 730.48

SB PGL

729.29 12' 729.48 729.67 729.86 IH 94 SB 730.05 CB02 730.24

728.89 10' 729.08 5.3' 729.27 4% 729.46 3% 729.75 2% 730.04

1240

BARRIER TRANSITIONS (SEE DETAIL)

1241

730.22 10' 730.45 5.3' 730.68 4% 730.90 3% 731.23 2% 731.65

730.62 12' 730.85 731.08 731.30 IH 94 NB 731.53 CB04 731.75

730.86 12' 731.09 731.32 731.54 731.77 PV01 731.99

731.10 12' 731.33 731.56 731.78 CP23 732.01 732.23

730.86 14' 731.09 731.32 731.54 731.77 731.99

730.58 14' 730.81 731.04 731.26 731.49 731.71

730.25 8' 730.49 730.72 4% 730.94 3% 731.25 2% 731.55

CB02

BARRIER TRANSITION (SEE DETAIL TYP)

347

348

1242

B-51-139

R/L 7 MILE ROAD

B-51-140

349

350

7 MILE ROAD

+99 BARRIER TRANSITION (SEE DETAIL TYP)

CB02

731.94 2% 732.05 3% 732.16 4% 732.35 732.54 732.73 732.91 10' 732.60 733.13

732.10 732.29 732.48 732.67 732.86 733.05 733.23 14' 733.40 733.56

732.38 732.57 732.76 732.95 733.14 733.33 733.51 733.68 733.84

PV01 732.62 732.81 CP23 733.00 733.19 733.38 733.57 733.75 12' 733.92 734.08

R/L IH 94

732.38 732.57 732.76 732.95 733.14 733.33 733.51 12' 733.68 733.84

732.14 732.33 CB02 732.52 732.71 732.90 733.09 733.27 12' 733.44 733.60

731.94 2% 732.03 3% 732.12 4% 732.31 732.50 732.69 732.87 10' 733.04 5.3' 733.20

1243

1244

1245

733.75 2% 733.82 3% 733.88 4% 734.03 734.16 734.28 734.38 10' 734.47 5.3' 734.54

733.95 734.12 734.28 CB04 734.43 734.56 734.68 734.78 12' 734.87 734.94

734.19 734.36 734.52 734.67 734.80 734.92 735.02 12' 735.11 735.18

PV01 NB PGL

734.43 734.60 734.76 CP23 735.91 735.04 735.16 735.26 12' 735.35 735.42

733.19 734.36 734.52 734.67 734.80 734.92 735.02 14' 735.11 735.18

733.91 734.08 734.24 734.39 734.52 734.64 734.78 14' 734.83 734.90

733.75 2% 733.84 3% 733.92 4% 734.07 734.20 734.32 734.46 8' 734.51 734.58

CB02

MATCHLINE STA 1245+15

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.

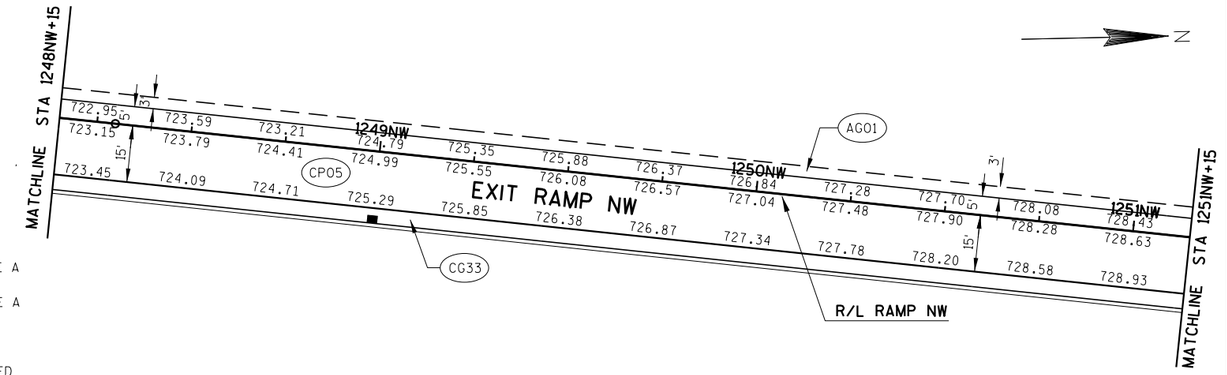
LEGEND

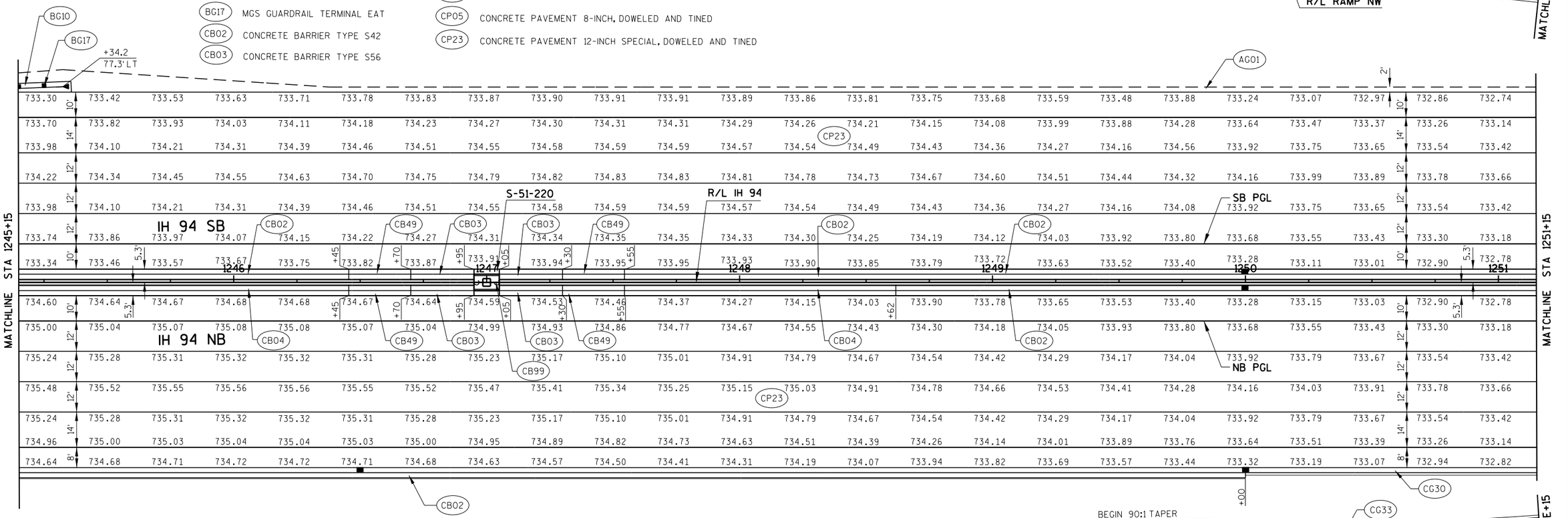
- PROPOSED INLET
- PROPOSED MANHOLE
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- BG10 GUARDRAIL MOW STRIP ASPHALT
- BG16 MGS THRIE BEAM TRANSITION
- BG17 MGS GUARDRAIL TERMINAL EAT
- CB02 CONCRETE BARRIER TYPE S42
- CB04 CONCRETE BARRIER TYPE S42A
- CP05 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- CP23 CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED
- PV01 CONCRETE PAVEMENT APPROACH SLAB

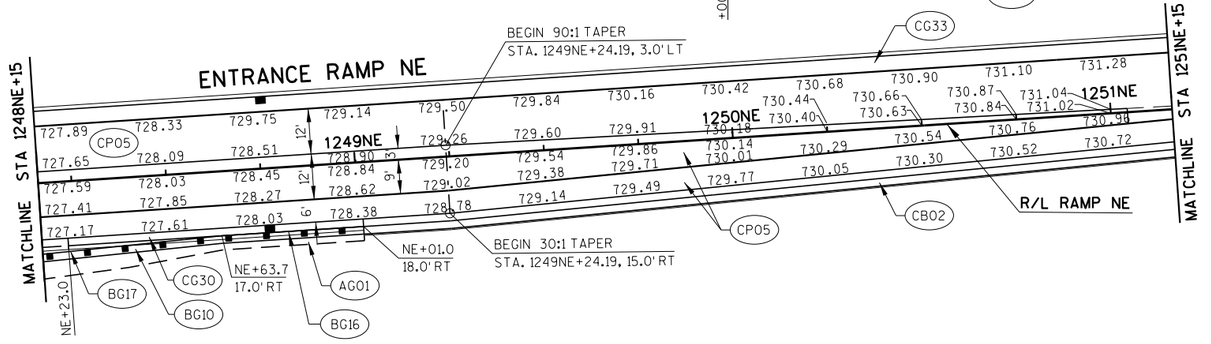
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 65	E

LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (BG10) GUARDRAIL MOW STRIP ASPHALT
- (BG15) MGS GUARDRAIL 3
- (BG16) MGS THRIE BEAM TRANSITION
- (BG17) MGS GUARDRAIL TERMINAL EAT
- (CB02) CONCRETE BARRIER TYPE S42
- (CB03) CONCRETE BARRIER TYPE S56
- (CB04) CONCRETE BARRIER TYPE S42A
- (CB49) CONCRETE BARRIER TRANSITION TYPE S42 TO S56
- (CB99) CONCRETE BARRIER FIXED OBJECT PROTECTION TYPE S56
- (CG30) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG33) CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
- (CP05) CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- (CP23) CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED



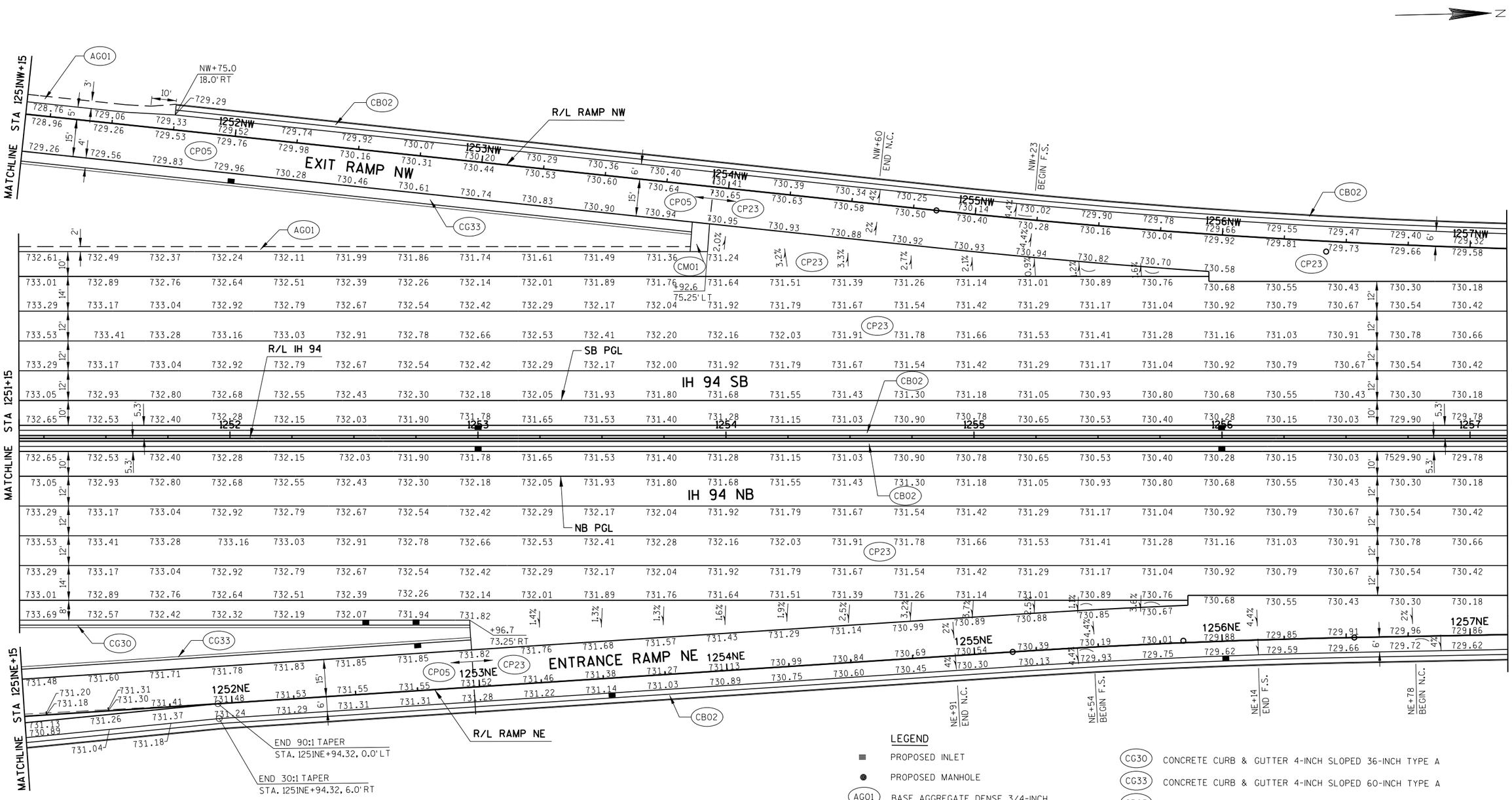




NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.
4) INSTALL BUTTERFLY SIGN STRUCTURE (S-51-220) IN STAGE 4 (STA 1247+00)

2



LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- CBO2 CONCRETE BARRIER TYPE S42
- CG30 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CG33 CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
- CPO5 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- CP23 CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED

NOTES

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2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.

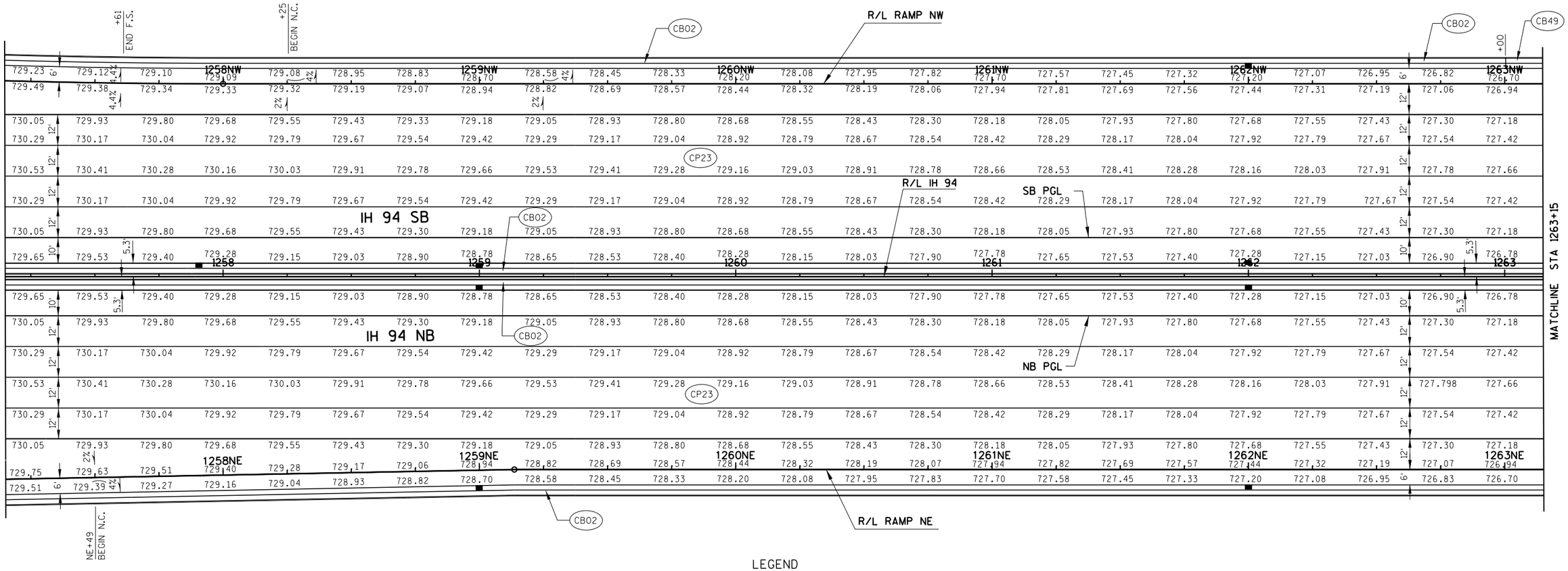
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 67	E

2

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.

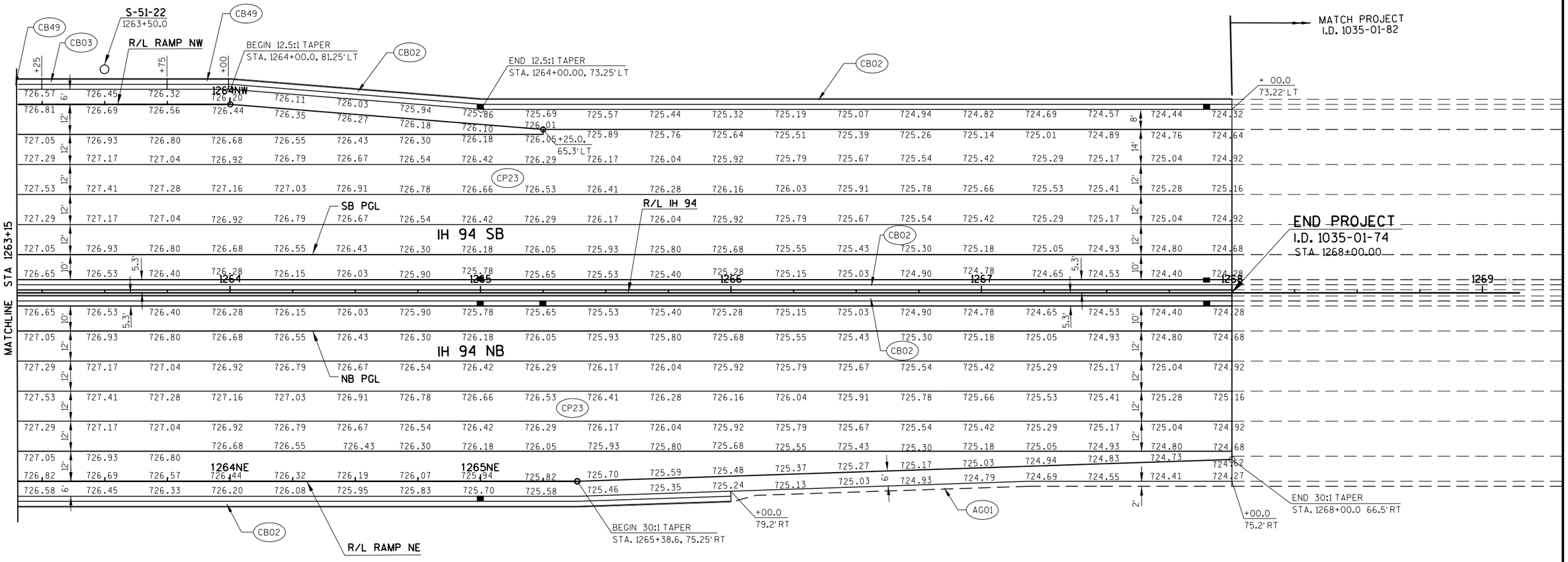
N



LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- CB02 CONCRETE BARRIER TYPE S42
- CB49 CONCRETE BARRIER TRANSITION TYPE S42 TO S56
- CP23 CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 68	E



LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- CB02 CONCRETE BARRIER TYPE S42
- CB03 CONCRETE BARRIER TYPE S56
- CB49 CONCRETE BARRIER TRANSITION TYPE S42 TO S56
- CP23 CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED

NOTES

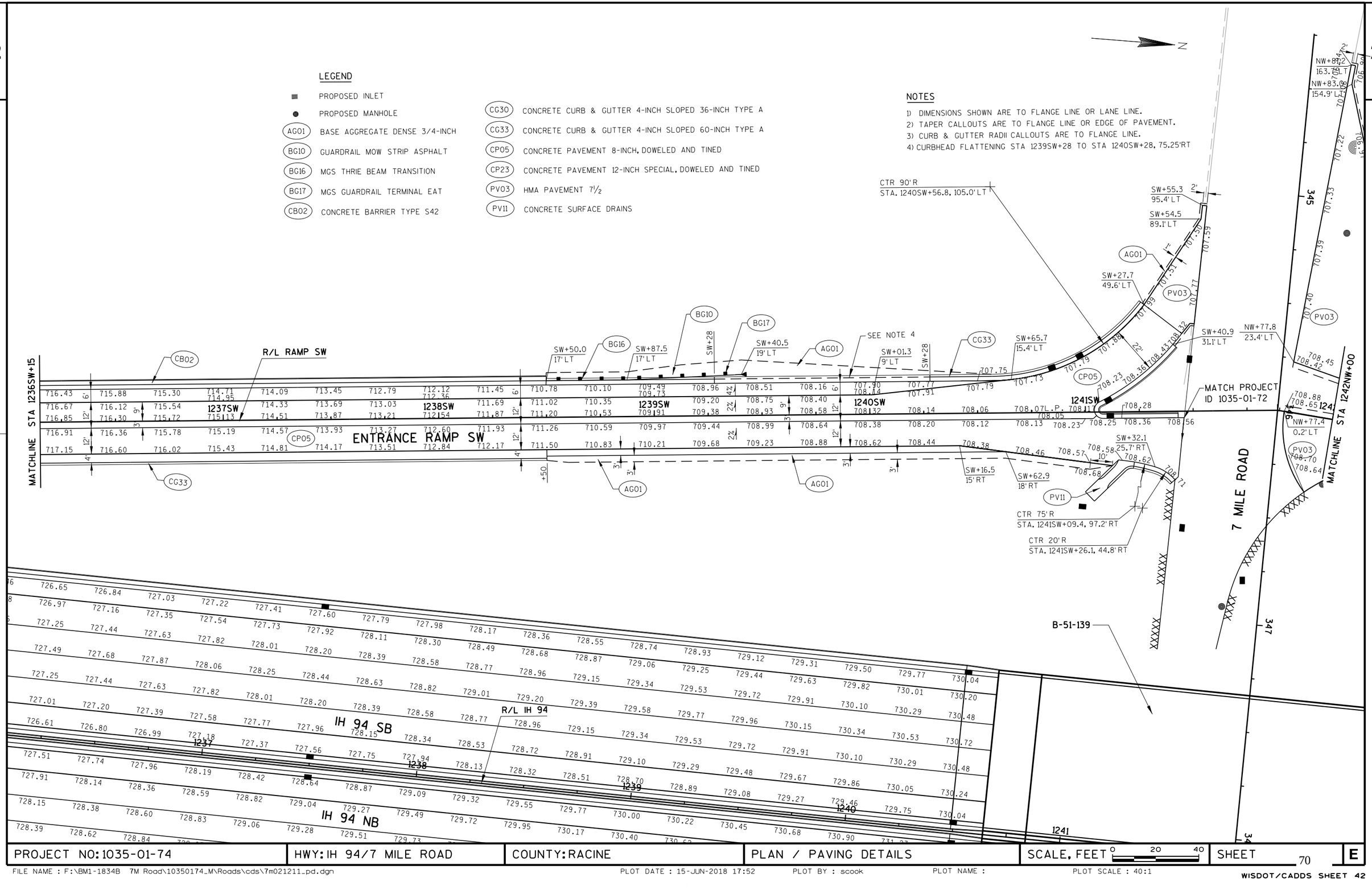
1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.

LEGEND

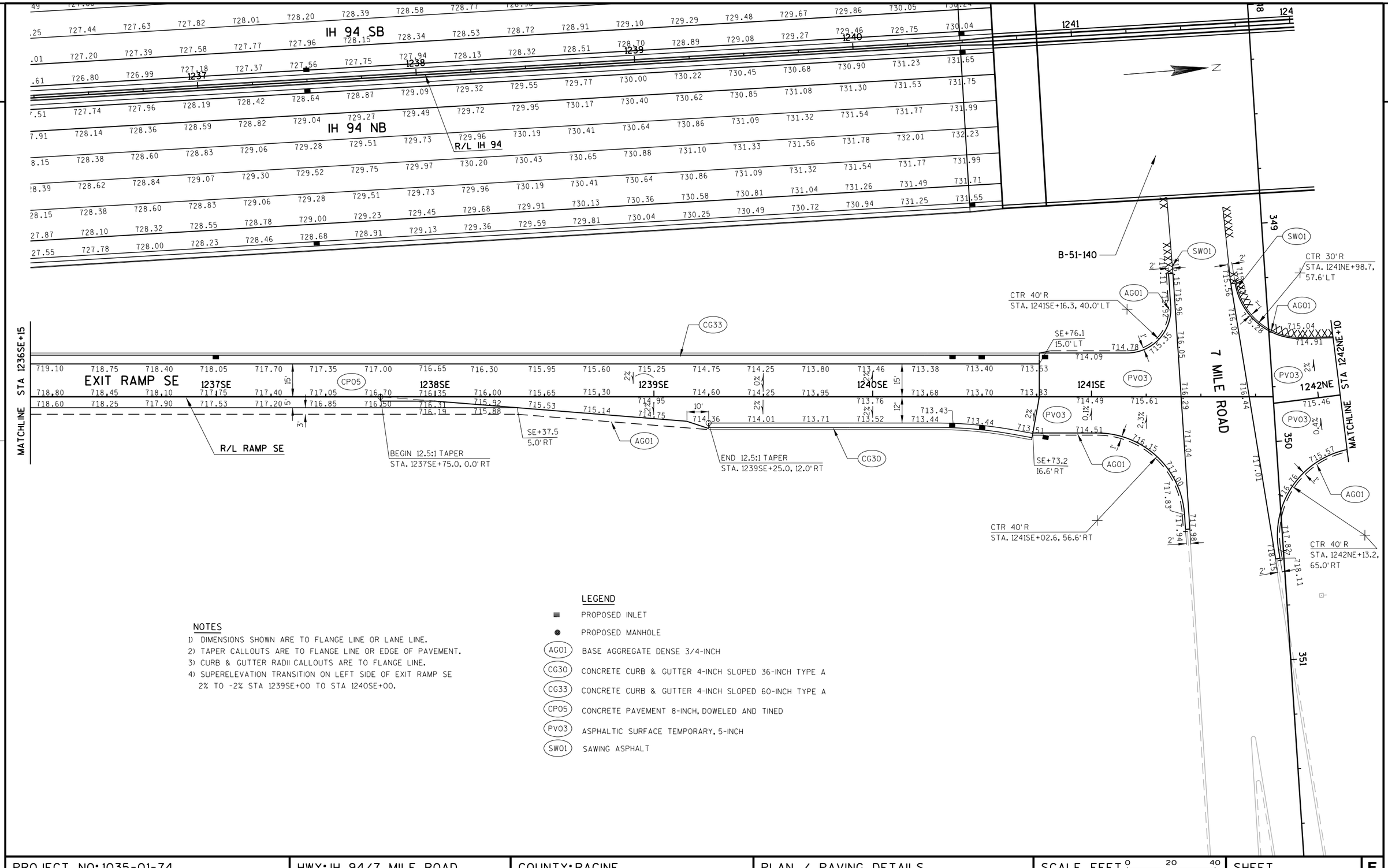
- PROPOSED INLET
- PROPOSED MANHOLE
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- BG10 GUARDRAIL MOW STRIP ASPHALT
- BG16 MGS THRIE BEAM TRANSITION
- BG17 MGS GUARDRAIL TERMINAL EAT
- CB02 CONCRETE BARRIER TYPE S42
- CG30 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CG33 CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
- CP05 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- CP23 CONCRETE PAVEMENT 12-INCH SPECIAL, DOWELED AND TINED
- PV03 HMA PAVEMENT 7½
- PV11 CONCRETE SURFACE DRAINS

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.
4) CURBHEAD FLATTENING STA 1239SW+28 TO STA 1240SW+28, 75.25'RT



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 70 E



NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.
4) SUPERELEVATION TRANSITION ON LEFT SIDE OF EXIT RAMP SE 2% TO -2% STA 1239SE+00 TO STA 1240SE+00.

LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (CG30) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG33) CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
- (CP05) CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- (PV03) ASPHALTIC SURFACE TEMPORARY, 5-INCH
- (SW01) SAWING ASPHALT

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN / PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 71	E

2

N

NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.

LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (CB02) CONCRETE BARRIER TYPE S42
- (CG30) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG33) CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CP05) CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- (PV03) HMA PAVEMENT 7½"

MATCHLINE STA 1242NW+00

MATCH PROJECT ID 1035-01-72

CTR 60'R STA. 1242NW+75.7, 82.1'LT

CTR 400'R STA. 1243NW+62.7, 412.0'LT

CTR 80'R STA. 1242NW+41.4, 94.9'RT

NW+21.4 56.7'LT

NW+65.2 23.1'LT

NW+62.7 12.0'LT

NW+18.2 18.4'RT

R/L RAMP NW

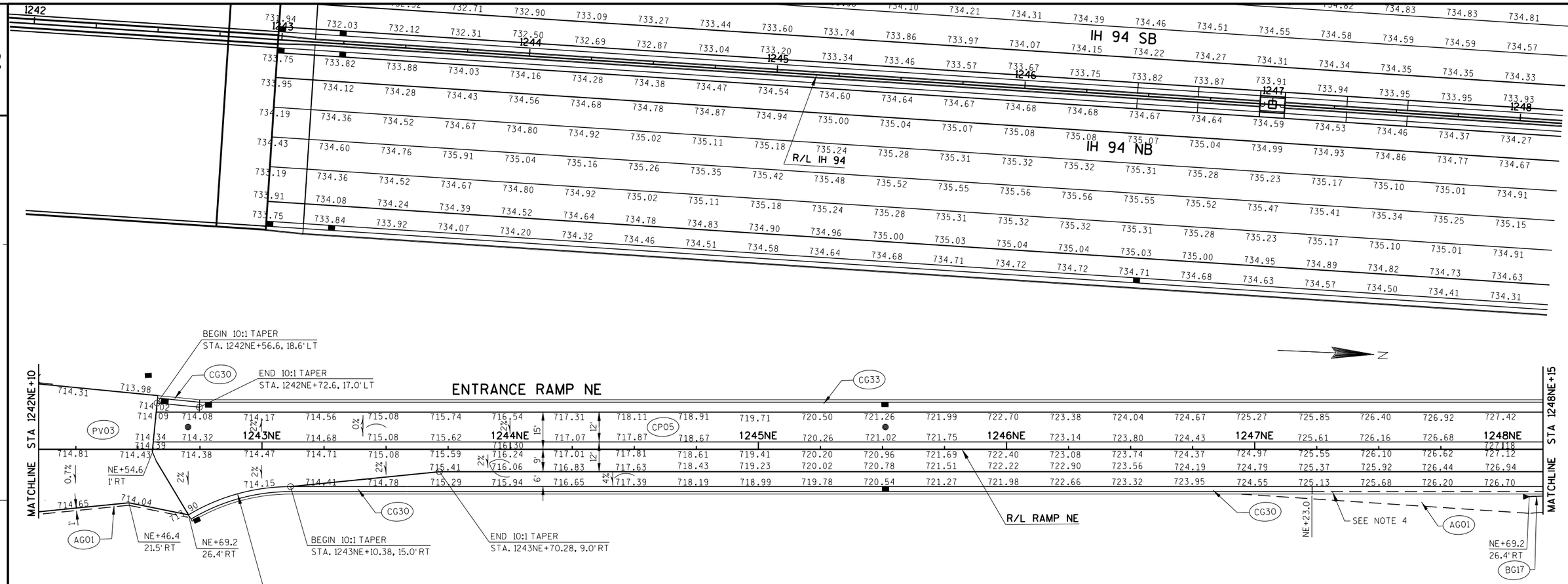
EXIT RAMP NW

BEGIN 11.25:1 TAPER STA. 1246NW+25.0, 12.0'LT

END 11.25:1 TAPER STA. 1247NW+60.0, 0.0'LT

1243NW 1244NW 1245NW 1246NW 1247NW 1248NW

| | | |



NOTES

1) DIMENSIONS SHOWN ARE TO FLANGE LINE OR LANE LINE.
2) TAPER CALLOUTS ARE TO FLANGE LINE OR EDGE OF PAVEMENT.
3) CURB & GUTTER RADII CALLOUTS ARE TO FLANGE LINE.
4) CURB HEAD FLATTENING STA 1247NE+23 TO STA 1248NE+23, 17.0'RT
4) SUPERELEVATION TRANSITION ON ENTRANCE RAMP NE 2% TO -2%
   STA 1243NE+00 TO STA 1244NE+00 (LEFT LANE ONLY).

LEGEND

- PROPOSED INLET
- PROPOSED MANHOLE
- AGO1 — BASE AGGREGATE DENSE 3/4-INCH
- CG30 — CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CG33 — CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A
- CP05 — CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- BG17 — MGS GUARDRAIL TERMINAL EAT
- PV03 — ASPHALTIC SURFACE TEMPORARY, 5-INCH

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET 73	E

LEGEND

FTMS CONVENTIONAL SYMBOLS	EXISTING	PROPOSED
POLE MOUNTED CABINET		
METER BREAKER PEDESTAL		
24X42-INCH CSCP PULL BOX		
FTMS (ITS) CONDUIT		
BREAKER DISCONNECT BOX		
COMMUNICATIONS VAULT, TYPE 1		
TYPE 5 POLE AND MICROWAVE DETECTOR		
MICROWAVE VEHICLE DETECTOR DETECTION ZONE		
CAMERA POLE BASE, POLE, AND CAMERA		
CSCP PULL BOX		
ON-RAMP CLOSURE GATE		
FLASHING YELLOW WARNING SIGN ASSEMBLY		

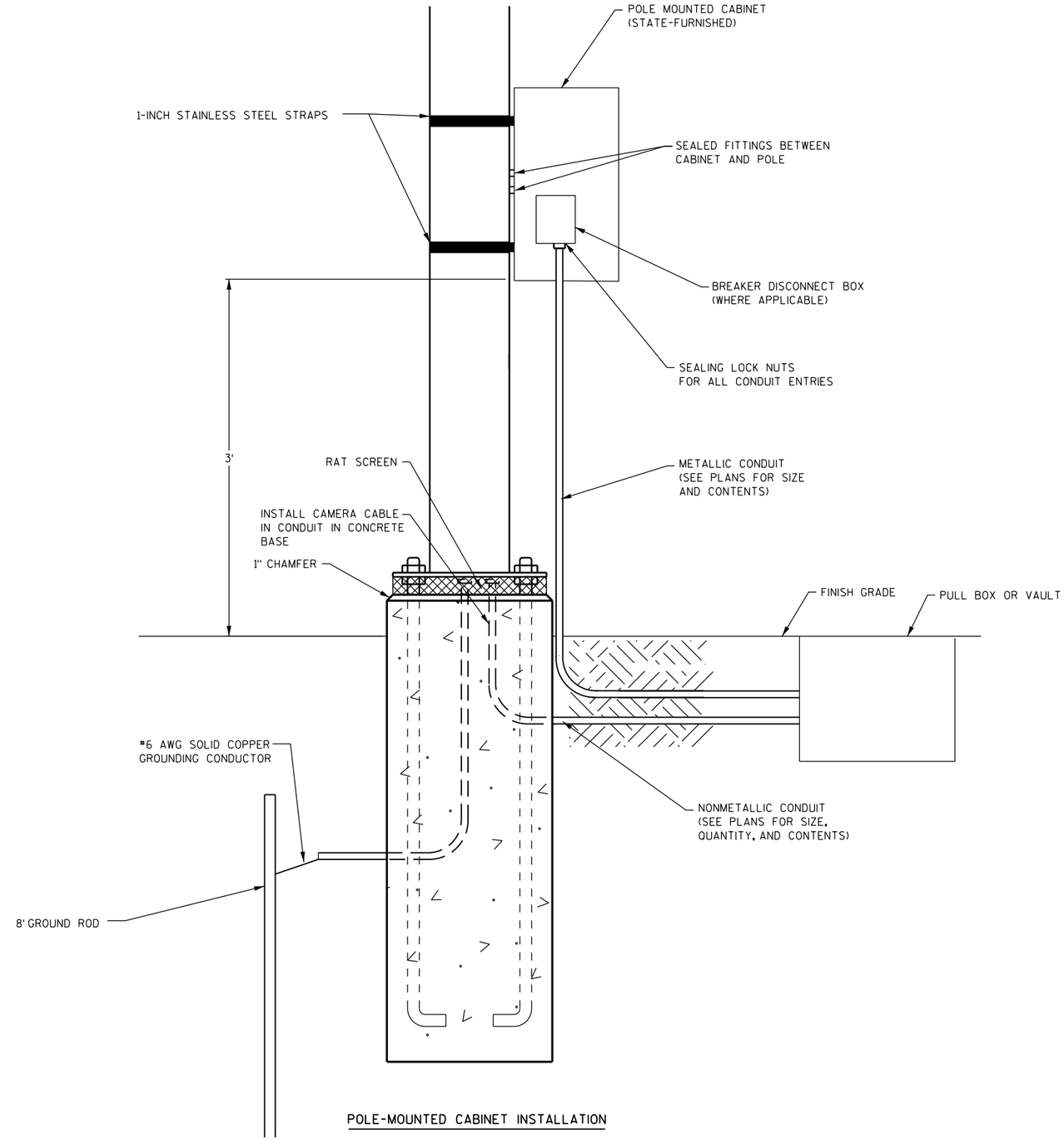
FTMS STANDARD ABBREVIATIONS

CB	CONTROLLER CABINET
CCTV	CLOSED CIRCUIT TELEVISION SITE
CV	COMMUNICATIONS VAULT
PB	PULL BOX
EX	EXISTING
SDS	SYSTEM DETECTOR STATION
FOC	FIBER OPTIC CABLE
F.O.	FIBER OPTIC
MD	MICROWAVE DETECTOR
S-F	STATE-FURNISHED
DMS	DYNAMIC MESSAGE SIGN
DP	DETECTOR POLE
RG	RAMP GATE

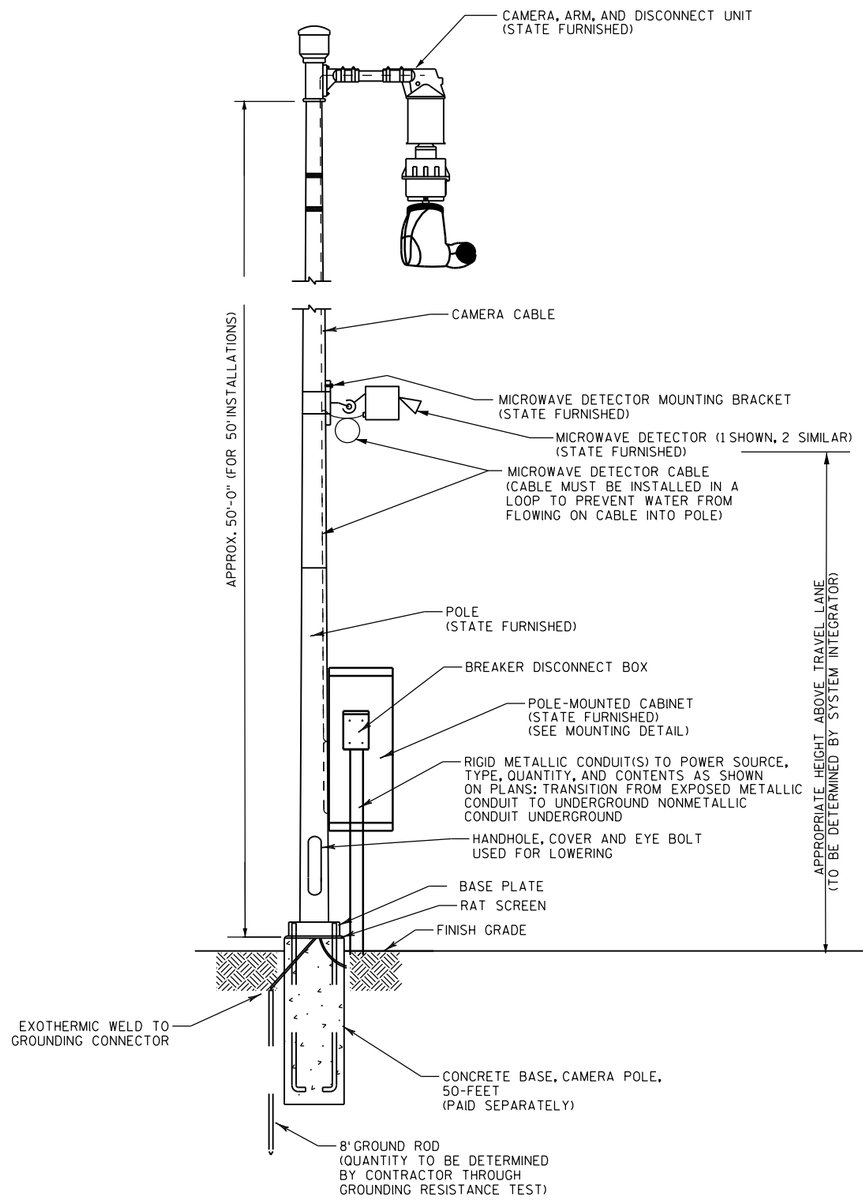
FTMS GENERAL NOTES

1. 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.
2. BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.
3. BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
4. NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
5. AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND EROSION MAT, AND SHALL BE INCLUDED IN THE COST OF INSTALLING FTMS ITEMS. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION SHALL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
7. DUE TO RAMP, LANE, SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.
8. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.
9. THE CONTRACTOR SHALL CONTACT THE WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER AT (414) 227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.
10. ALL LOOP DETECTORS ARE STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.
11. HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.
12. VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

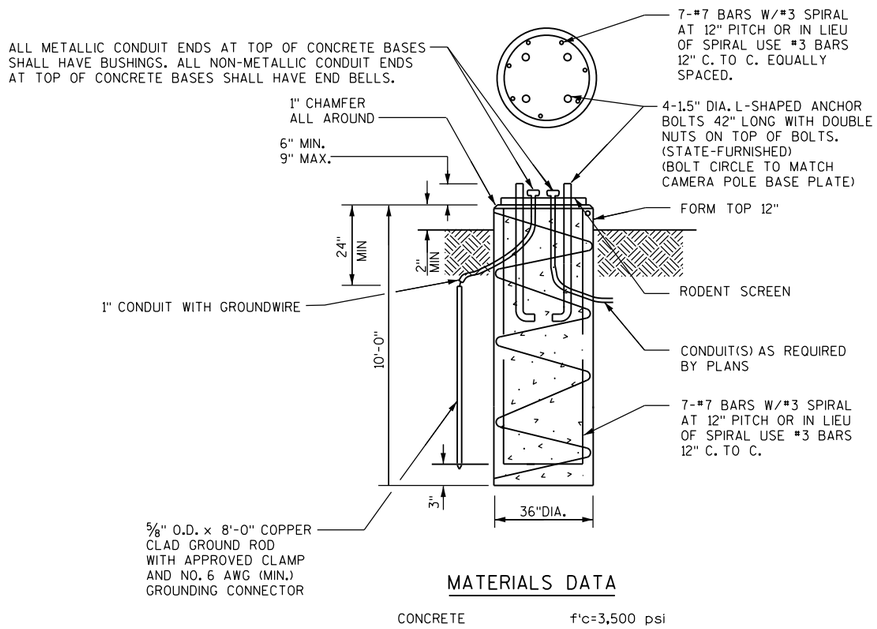
2



POLE-MOUNTED CABINET INSTALLATION



CAMERA POLE WITH CAMERA LOWERING HARDWARE

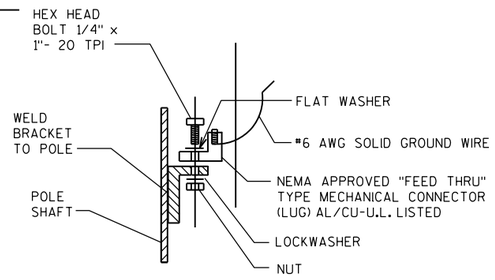


MATERIALS DATA

CONCRETE	f'c=3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

CONCRETE BASE, 50' CAMERA POLE

NOT TO SCALE



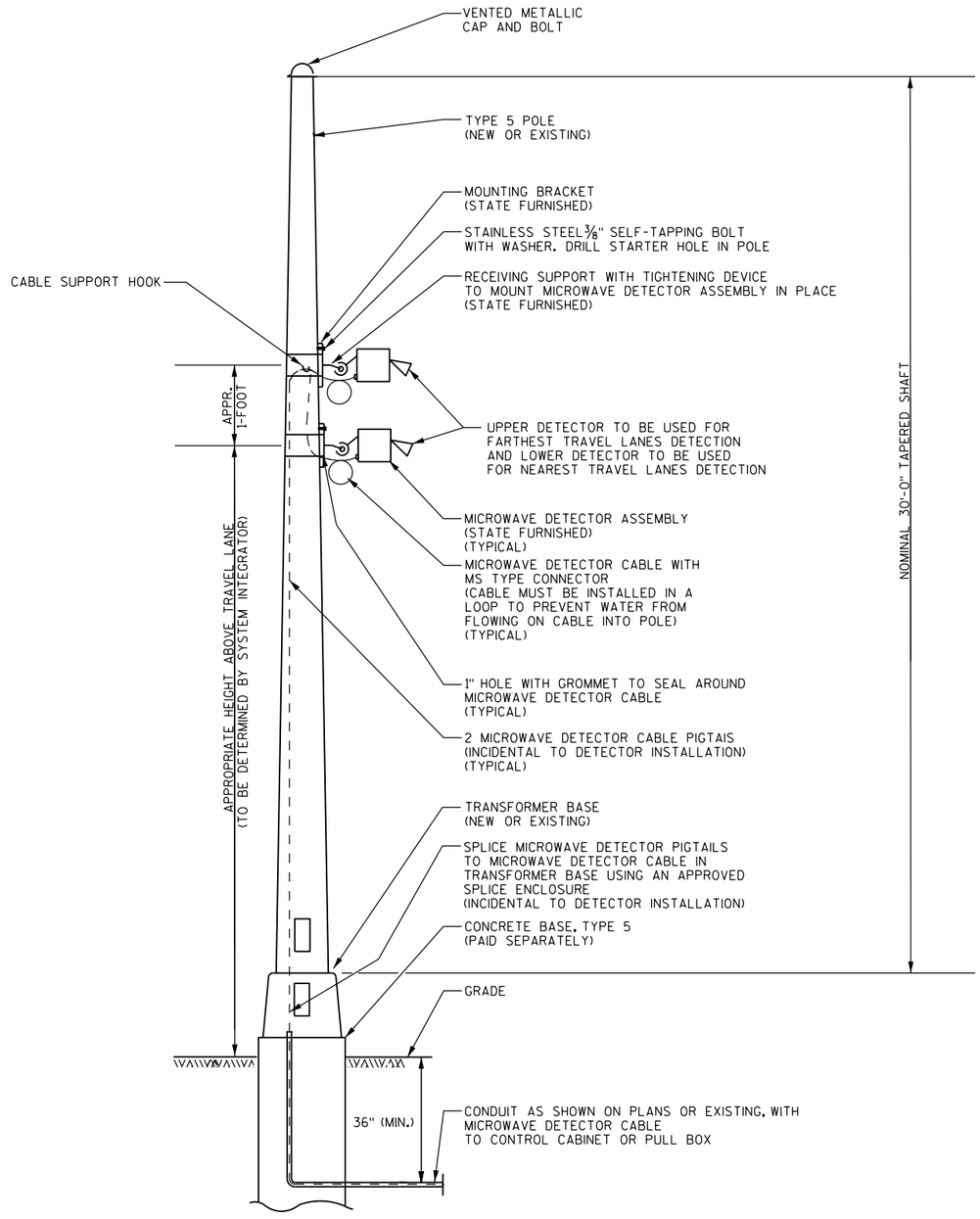
FIELD INSTALLED GROUNDING LUG

NOTES

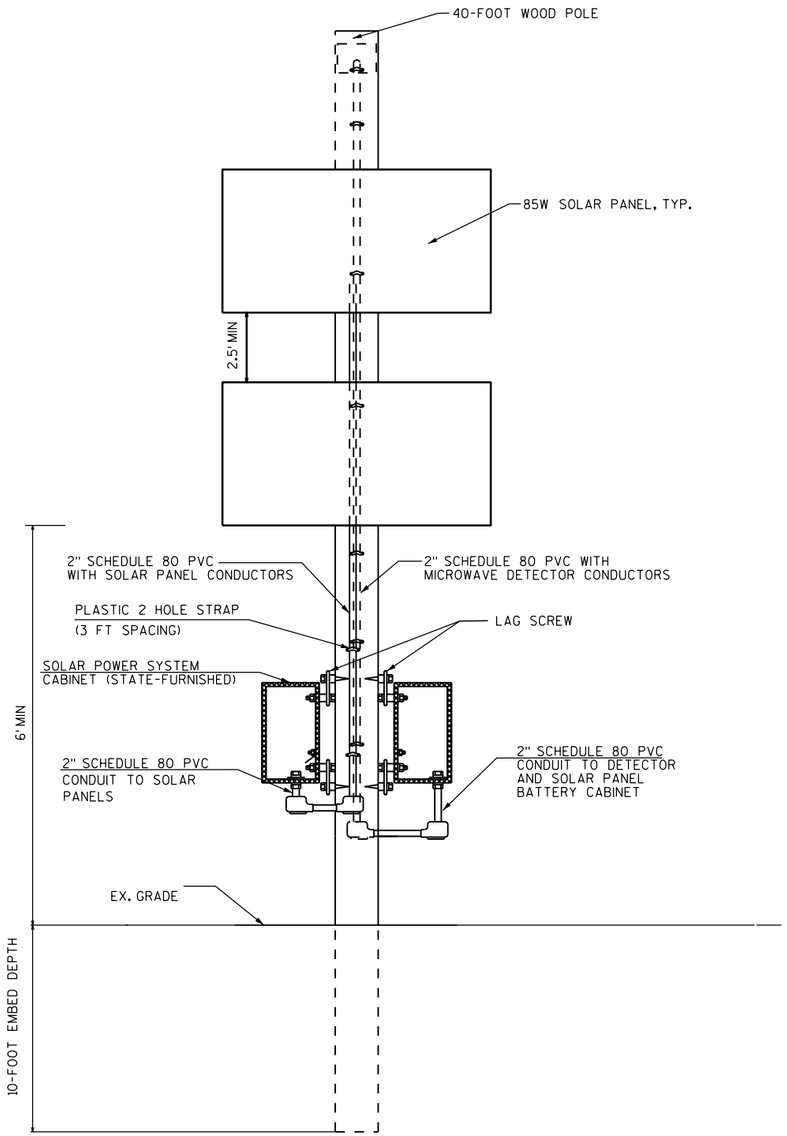
1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE STATE FURNISHED. BASE TO BE CONTRACTOR DESIGNED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN

CAMERA POLES & FOUNDATIONS

2

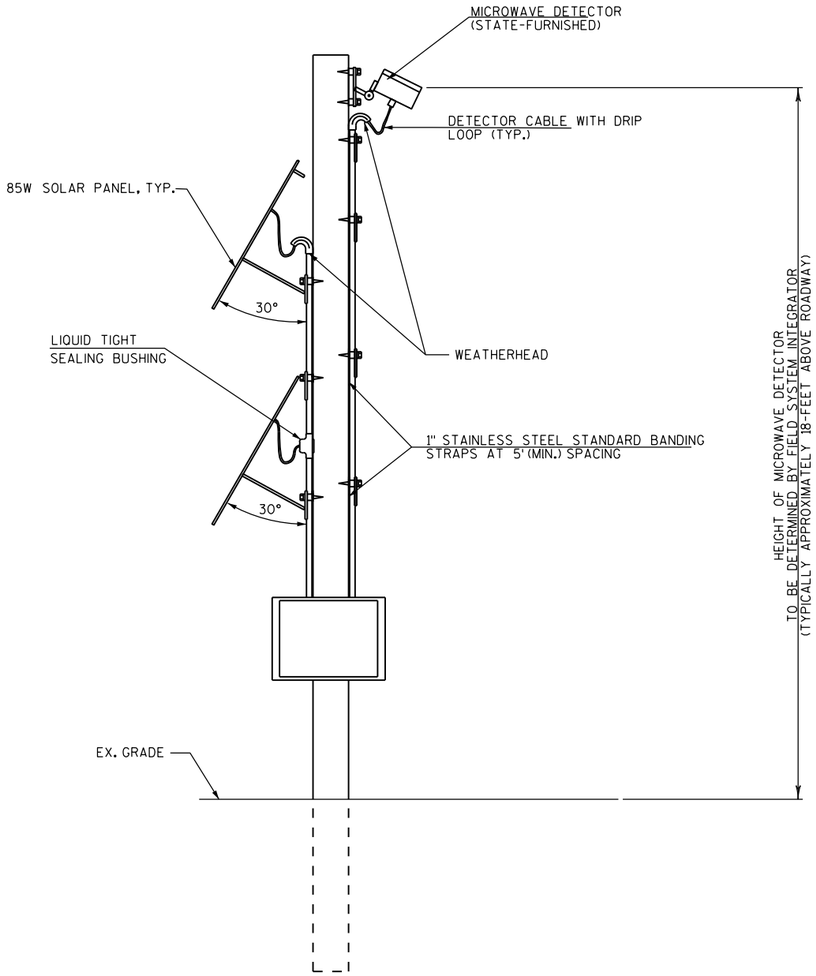


MICROWAVE DETECTOR INSTALLATION
ON TYPE 5 POLE



NOTES:

1. ALL WIRES ENTERING CONDUIT, LB'S AND SERVICE CAPS SHALL HAVE AN ESTABLISHED DRIP LOOP TO PREVENT WATER FROM ENTERING CONDUIT.
2. ANY LB OPENINGS THAT ARE NOT ATTACHED TO CONDUIT SHALL BE WEATHERPROOFED USING A SILICONE SEAL.
3. SOLAR PANELS MUST FACE DUE SOUTH.
4. COORDINATE SOLAR PANEL LOCATIONS WITH VEHICLE DETECTORS, GIVING PRIORITY TO VEHICLE DETECTORS.
5. CONTRACTOR SHALL PROVIDE REQUIRED SETTING DEPTH AND ADEQUATE POLE HEIGHT ABOVE MONITORED ROAD SURFACE TO MEET VEHICLE DETECTOR MANUFACTURER'S SPECIFICATIONS.
6. CONTRACTOR TO DETERMINE MOUNTING HEIGHT OF MICROWAVE DETECTOR ABOVE ROADWAY BEING DETECTED. NOMINAL HEIGHT IS APPROXIMATELY 18-FEET ABOVE ROADWAY.



INSTALLING TEMPORARY VEHICLE DETECTOR ASSEMBLY

2

N

REMOVE CABLE

EXPB12143

REMOVE PULLBOX

EXPB12141

WEST FRONTAGE RD.

1220SW

1222SW

1224SW

IH 41 / 94 SB

1212

1214

1216

1218

1220

1222

1224

MATCHLINE 1226+00

IH 41 / 94 NB

1220SE

1222SE

1224SE

EAST FRONTAGE RD.

PROJECT NO:1035-01-74	HWY:IH 41 / 94 / 7-MILE RD.	COUNTY:RACINE	FTMS REMOVAL PLANS	SHEET 79	E

2

2

N

WEST FRONTAGE RD.

REMOVE CABLE

REMOVE CABLE

EXPB12311

EXRG12311

1228SW

1230SW

1232SW

1234SW

1236SW

1238SW

EXPB12301

SB ON-RAMP

REMOVE PULL BOX

REMOVE ON-RAMP CLOSURE GATE

REMOVE PULL BOX

MATCHLINE 1226+00

1226

1228

1230

1232

1234

1236

1238

MATCHLINE 1239+50

IH 41 / 94 / NB

REMOVE PULLBOX

EXPB12281

1228SE

1230SE

1232SE

1234SE

1236SE

1238SE

EAST FRONTAGE RD.

NB OFF-RAMP

PROJECT NO:1035-01-74	HWY: IH 41 / 94 / 7-MILE RD.	COUNTY:RACINE	FTMS REMOVAL PLANS	SHEET 80	E

FILE NAME : \\mlww400\ingrproj\68580\IH94_N-S-Freeway_Projects\10350174\7m_ml_FM_rem_02.dgn PLOT DATE : 5/31/2018 PLOT BY : PKutz PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

EXFS12411
(1) REMOVE ADVANCE WARNING SIGN ASSEMBLY
(1) REMOVE CONCRETE BASE

REMOVE PULLBOX

REMOVE CABLE

EXPB12411

REMOVE CABLE

EXPB12421

7-MILE RD.

REMOVE CABLE

EXPB12422

EXPB12431

REMOVE CABLE

EXPB12451

REMOVE CABLE

EXPB12471

EXPB12492

REMOVE CABLE

IH 41 / 94 SB

REMOVE CABLE

REMOVE PULL BOX

EXPB12423

REMOVE PULL BOX

REMOVE ON-RAMP CLOSURE GATE

EXPB12441

EXPB12452

EXPB12481

EXRG12481

EXPB12491

NB ON-RAMP

REMOVE CABLE

EXFS12401

EXPB12401

EXPB12424

REMOVE CABLE

EXPB12425

REMOVE CABLE

EXFS12425
(1) REMOVE ADVANCE WARNING SIGN ASSEMBLY
(1) REMOVE CONCRETE BASE

REMOVE PULLBOX

SB OFF-RAMP

1240SW 1242NW 1244NW 1246NW 1248NW 1250NW 1252NW 1254NW

1240SE 1242NE 1244NE 1246NE 1248NE 1250NE 1252NE 1254NE

MATCHLINE 1239+50

PROJECT NO:1035-01-74	HWY:IH 41 / 94 / 7-MILE RD.	COUNTY:RACINE	FTMS REMOVAL PLANS	SHEET 81	E

2

N

WEST FRONTAGE RD.

1220SW 1222SW 1224SW

IH 41 / 94 SB

1212 1214 1216 1218 1220 1222 1224

MATCHLINE 1226+00

SLOPE INTERCEPT

IH 41 / 94 NB

1220SE 1222SE 1224SE

CV12130

CV12261

EAST FRONTAGE RD.

CV12130, CONDUIT, AND CABLE TO SOUTH
INSTALLED IN PROJECT ID. 1035-01-79

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

PROJECT NO: 1035-01-74	HWY: IH 41 / 94 / 7-MILE RD.	COUNTY: RACINE	FTMS PLANS	SHEET 82	E

TEMPORARY EQUIPMENT INSTALLATION NOTES:
TEMPORARY VEHICLE DETECTORS MUST BE INSTALLED AND INTEGRATED PRIOR TO DEPLOYMENT OF TRAFFIC CONTROL OR TRAFFIC PATTERN ALTERATION THAT WOULD IMPACT THE PERFORMANCE OF THE EXISTING VEHICLE DETECTION EQUIPMENT.

N

WEST FRONTAGE RD.

EAST FRONTAGE RD.

IH 41 / 94 SB

IH 41 / 94 / NB

SB ON-RAMP

NB OFF-RAMP

MATCHLINE 1226+00

MATCHLINE 1239+50

1226 1228 1230 1232 1234 1236 1238

1228SW 1230SW 1232SW 1234SW 1236SW 1238SW

1228SE 1230SE 1232SE 1234SE 1236SE 1238SE

SLOPE INTERCEPT

TEMP-DP1228
(1) TEMPORARY 40-FOOT WOOD POST
(1) TEMPORARY VEHICLE DETECTOR ASSEMBLY

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

PB12331

DP12331

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH 2 MD CABLES AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

DP12331
(1) TYPE 6 CONCRETE BASE
(1) 11-1/2-INCH TRANSFORMER BASE
(1) TYPE 6 POLE
(2) MICROWAVE DETECTORS (S-F)

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

PB12371

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH 2 MD CABLES AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH 2 MD CABLES
(1) FOR FUTURE USE

PROJECT NO:1035-01-74	HWY:IH 41 / 94 / 7-MILE RD.	COUNTY:RACINE	FTMS PLANS	SHEET 83	E

2

N

7-MILE RD.

WEST FRONTAGE RD.

SB OFF-RAMP

NB ON-RAMP

EAST FRONTAGE RD.

IH 41 / 94 SB

IH 41 / 94 SB

MATCHLINE 1239+50

MATCHLINE 1254+00

CV12431 - PB12432
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

CV12431
(2) F.O. SPLICE ENCLOSURES (S-F)
(1) WITH (26) F.O. SPLICES ON 24-COUNT FOC
(1) WITH (72) F.O. SPLICES ON 72-COUNT FOC

TEMP-CCTV-51-0062
(1) 40-FOOT TEMPORARY WOOD POLE
(1) TEMPORARY TRAFFIC CAMERA ASSEMBLY (S-F)

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (4) MD CABLES
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

EXMH12471

CCTV-51-0062
(1) 50-FOOT CAMERA POLE BASE
(1) 50-FOOT CAMERA POLE (S-F)
(1) DOME CCTV CAMERA (S-F)
(2) ETHERNET MICROWAVE DETECTORS (S-F)
(1) POLE-MOUNTED CABINET (S-F)
(1) BREAKER DISCONNECT BOX
(1) 12-COUNT F.O. TERMINATION PANEL (S-F)
(6) F.O. TERMINATIONS
(1) ETHERNET SWITCH (S-F)
(1) TERMINAL SERVER (S-F)

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

(3) 2-INCH NONMETALLIC CONDUITS
(1) WITH (3) NO. 6 AWG TRAFFIC SIGNAL WIRES
(1) WITH (4) MD CABLES
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH 2 MD CABLES AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

(3) 2-INCH HDPE DUCTS, DIRECTIONAL BORE
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTURE USE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH 2 MD CABLES AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTURE USE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH 2 MD CABLES AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTURE USE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTURE USE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTRE USE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTRE USE

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTURE USE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) MD CABLES
(1) FOR FUTURE USE

DP12541
(1) TYPE 6 CONCRETE BASE
(1) 11-1/2-INCH TRANSFORMER BASE
(1) TYPE 6 POLE
(2) MICROWAVE DETECTORS (S-F)

MB-CCTV-51-0062

SLOPE INTERCEPT

PB12401 PB12431 PB12432 PB12433 PB12461 PB12491 PB12541

CV12401 CV12431

1240SW 1242NW 1244NW 1246NW 1248NW 1250NW 1252NW

1240SE 1242NE 1244NE 1248NE 1250NE 1252NE

1240 1242 1244 1248 1250 1252

5250 5252

SIGN RACK ASPH CANOPY FILLER CAPS A/C BLDG MH INL W

TEMPORARY EQUIPMENT INSTALLATION NOTES:
TEMPORARY VEHICLE DETECTORS MUST BE INSTALLED AND INTEGRATED PRIOR TO DEPLOYMENT OF TRAFFIC CONTROL OR TRAFFIC PATTERN ALTERATION THAT WOULD IMPACT THE PERFORMANCE OF THE EXISTING VEHICLE DETECTION EQUIPMENT.

N

TEMP-DP1254
(1) TEMPORARY 40-FOOT WOOD POST
(1) TEMPORARY VEHICLE DETECTOR ASSEMBLY

WEST FRONTAGE RD.

IH 41 / 94 SB

IH 41 / 94 / NB

EAST FRONTAGE RD.

MATCHLINE 1254+00

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

CV12551

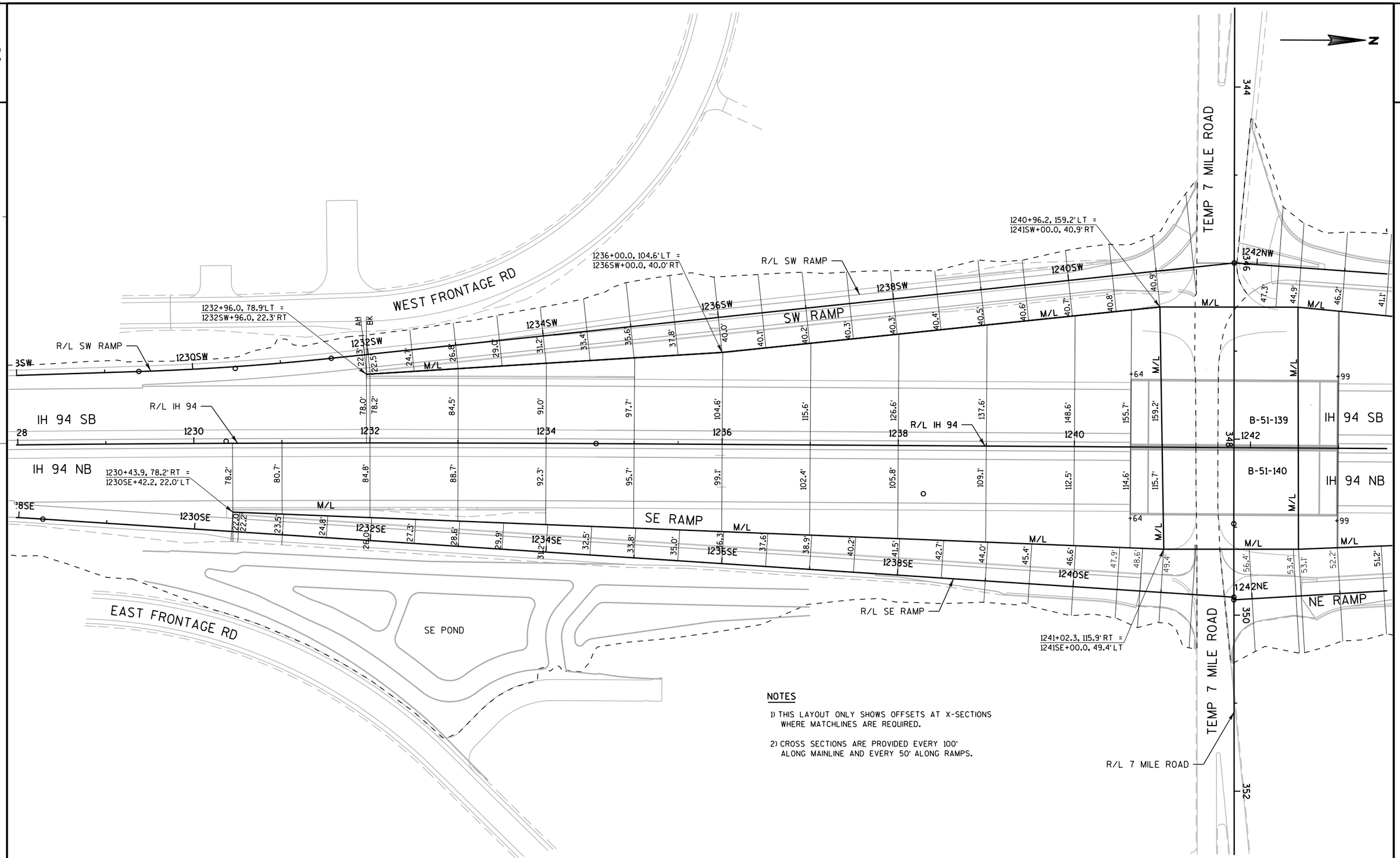
CV12681

SLOPE INTERCEPT

CONDUIT AND CABLE TO NORTH OF CV12681 TO BE INSTALLED IN PROJECT ID. 1035-01-82

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC (S-F),
(1) 24-COUNT FOC (S-F), AND
(1) NO. 12 AWG TRAFFIC SIGNAL WIRE

PROJECT NO: 1035-01-74	HWY: IH 41 / 94 / 7-MILE RD.	COUNTY: RACINE	FTMS PLANS	SHEET 85 E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTION MATCHLINE	SHEET 86	E

2

N

TEMP 7 MILE ROAD

R/L SW RAMP

SW RAMP

NW RAMP

R/L NW RAMP

WEST FRONTAGE RD

1242+53.0, 160.0' LT = 1242NW+50.0, 44.9' RT

1247+00.0, 119.3' LT = 1247NW+00.0, 54.1' RT

1253+85.0, 86.7' LT = 1253NW+86.0, 20.2' RT

1242NW 1244NW 1246NW 1248NW 1250NW 1252NW 1254NW

B-51-139

B-51-140

R/L IH 94

1242 1244 1246 1248 1250 1252 1254

SE RAMP

NE RAMP

1242NE 1244NE 1246NE 1248NE 1250NE 1252NE 1254NE

R/L NE RAMP

1249+00.0, 95.0' RT = 1249NW+00.0, 44.1' LT

1242+55.3, 115.0' RT = 1242NW+55.9, 53.1' LT

1253+85.0, 86.7' LT = 1253NW+97.8, 20.2' RT

EAST FRONTAGE RD

R/L SE RAMP

R/L 7 MILE ROAD

NOTES

1) THIS LAYOUT ONLY SHOWS OFFSETS AT X-SECTIONS WHERE MATCHLINES ARE REQUIRED.

2) CROSS SECTIONS ARE PROVIDED EVERY 100' ALONG MAINLINE AND EVERY 50' ALONG RAMPS.

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTION MATCHLINE	SHEET 87	E

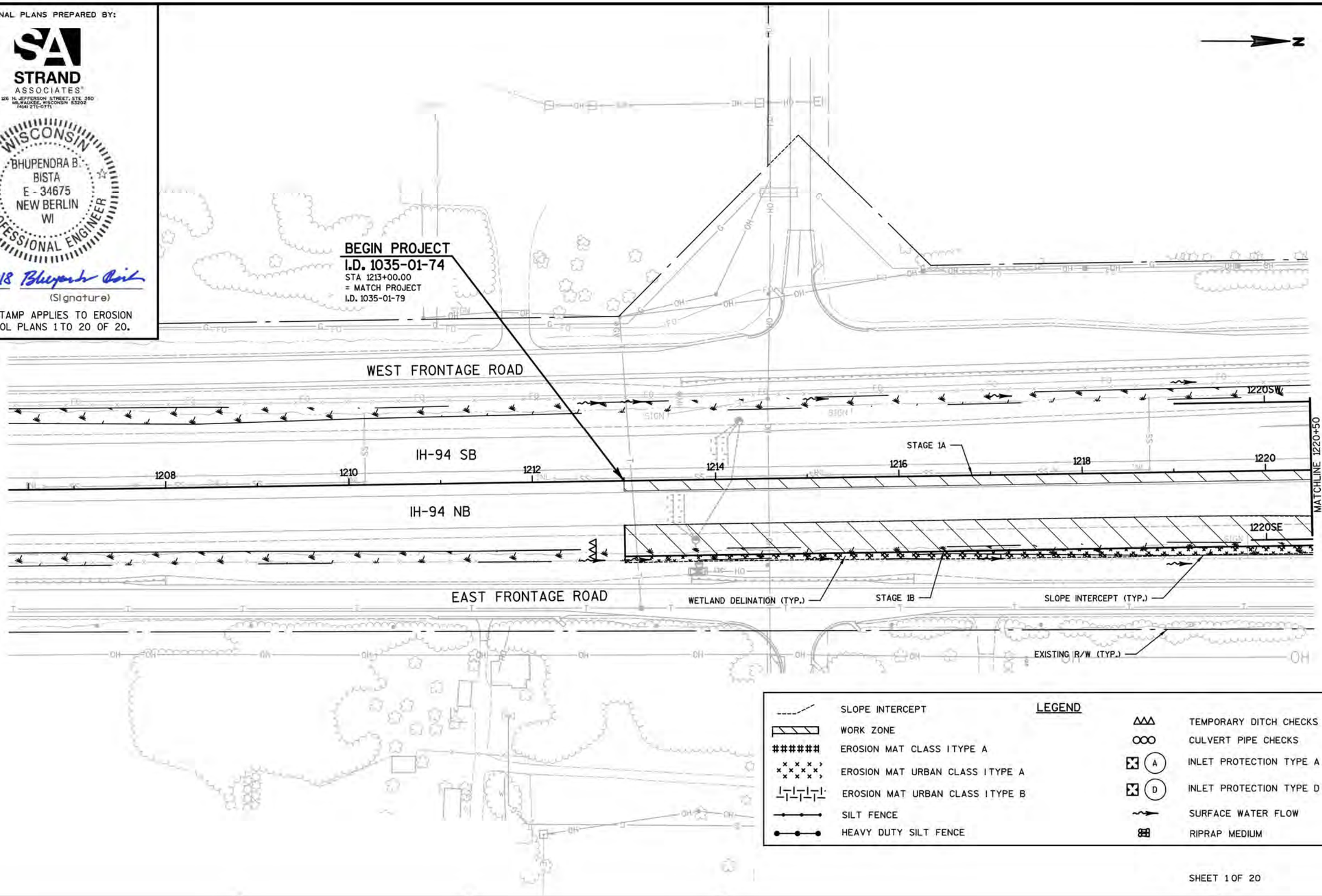
ORIGINAL PLANS PREPARED BY:

STRAND ASSOCIATES®
126 N. JEFFERSON STREET, STE. 350
MILWAUKEE, WISCONSIN 53202
(414) 271-0771

WISCONSIN
BHUPENDRA B. BISTA
E - 34675
NEW BERLIN
WI
PROFESSIONAL ENGINEER

6/4/2018 Bhupendra Bista
(Date) (Signature)

THIS STAMP APPLIES TO EROSION CONTROL PLANS 1 TO 20 OF 20.



SHEET 1 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1A/1B	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022101_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.,,,,plotscale.....$$ WISDOT/CADDS SHEET 42

2

WEST FRONTAGE ROAD

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

STAGE 1A

MATCHLINE 1220+50

1222 1224 1226 1228 1230 1232 1234

MATCHLINE 1234+50

IH-94 SB

IH-94 NB

1222SE 1224SE 1226SE 1228SE 1230SE 1232SE 1234SE

STAGE 1B

SLOPE INTERCEPT (TYP.)

WETLAND DELINATION (TYP.)

EAST FRONTAGE ROAD

PROPOSED R/W (TYP.)

LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 2 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1A/1B	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022102_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

MATCHLINE 1234+50

MATCHLINE 1248+50

IH-94 SB

IH-94 NB

STAGE 1A

STAGE 1B

1236 1238 1240 1242 1244 1246 1248

1236SW 1238SW 1240SW 1242NW 1244NW 1246NW 1248NW

1236SE 1238SE 1240SE 1242NE 1244NE 1246NE 1248NE

WETLAND DELINATION (TYP.)

EXISTING R/W (TYP.)

PROPOSED R/W (TYP.)

N

LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 3 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1A/1B	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022103_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

N

EXISTING R/W (TYP.)

WETLAND DELINATION (TYP.)

WEST FRONTAGE ROAD

1250NW 1252NW 1254NW 1256NW 1258NW 1260NW 1262NW

MATCHLINE 1248+50

1250 1252 1254 1256 IH-94 SB 1258 1260 1262

IH-94 NB

MATCHLINE 1262+50

STAGE 1A

1250NE 1252NE 1254NE 1256NE 1258NE 1260NE 1262NE

STAGE 1B

EAST FRONTAGE ROAD

SLOPE INTERCEPT (TYP.)

PROPOSED R/W (TYP.)

TLE (TYP.)

ASPH

LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 4 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1A/1B	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022104_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

N

PROPOSED R/W (TYP.)

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
= MATCH PROJECT
I.D. 1035-01-82

WEST FRONTAGE ROAD

1264NW

MATCHLINE 1262+50

STAGE 1A

1264 1266 1268 1270 1272

IH-94 SB

IH-94 NB

1264NE

STAGE 1B

EAST FRONTAGE ROAD

SLOPE INTERCEPT (TYP.)

WETLAND DELINATION (TYP.)

EXISTING R/W (TYP.)

POOL

LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 5 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1A/1B	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022105_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

N

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00
= MATCH PROJECT
I.D. 1035-01-79

EXISTING R/W (TYP.)

WETLAND DELINATION (TYP)

WEST FRONTAGE ROAD

IH-94 SB

IH-94 NB

EAST FRONTAGE ROAD

1208 1210 1212 1214 1216 1218 1220

1220SW

1220SE

MATCHLINE 1220+50

LEGEND

SLOPE INTERCEPT	TEMPORARY DITCH CHECKS
WORK ZONE	CULVERT PIPE CHECKS
EROSION MAT CLASS ITYPE A	INLET PROTECTION TYPE A
EROSION MAT URBAN CLASS ITYPE A	INLET PROTECTION TYPE D
EROSION MAT URBAN CLASS ITYPE B	SURFACE WATER FLOW
SILT FENCE	RIPRAP MEDIUM
HEAVY DUTY SILT FENCE	

SHEET 6 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1C	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022106_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

EXISTING R/W (TYP.)

WETLAND DELINATION (TYP)

WEST FRONTAGE ROAD

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

MATCHLINE 1220+50

1222 1224 1226 IH-94 SB 1228 1230 1232 1234

IH-94 NB

MATCHLINE 1234+50

1222SE 1224SE 1226SE 1228SE 1230SE 1232SE 1234SE

PLATE

EAST FRONTAGE ROAD

PROPOSED R/W (TYP.)

LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 7 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1C	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022107_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

MATCHLINE 1234+50

MATCHLINE 1248+50

IH-94 SB

IH-94 NB

1236 1238 1240 1242 1244 1246 1248

1236SW 1238SW 1240SW 1242NW 1244NW 1246NW 1248NW

1236SE 1238SE 1240SE 1242NE 1244NE 1246NE 1248NE

WETLAND DELINATION (TYP)

EXISTING R/W (TYP.)

PROPOSED R/W (TYP)

ASPH

CANOPY

FILLER CAPS

RIPRAP

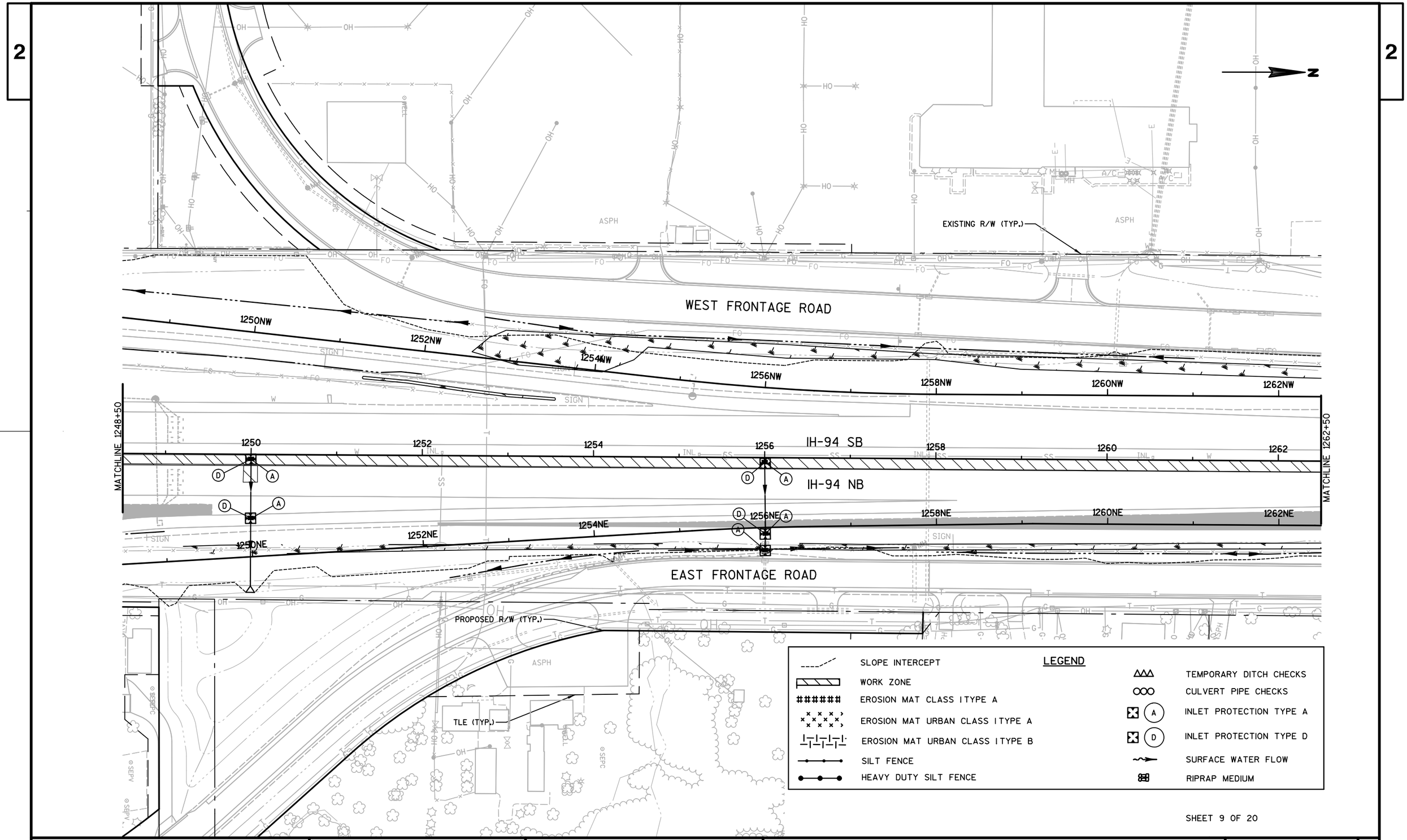
LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 8 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1C	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022108_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



SHEET 9 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1C	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022109_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

2

N

PROPOSED R/W (TYP.)

EXISTING R/W (TYP.)

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
= MATCH PROJECT
I.D. 1035-01-82

WEST FRONTAGE ROAD

1264NW

MATCHLINE 1262+50

1264 1266 1268 1270 1272

IH-94 SB

IH-94 NB

1264NE

EAST FRONTAGE ROAD

POOL

LEGEND

- SLOPE INTERCEPT
- WORK ZONE
- EROSION MAT CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS ITYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- RIPRAP MEDIUM

SHEET 10 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 1C	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022110_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00
= MATCH PROJECT
I.D. 1035-01-79

EXISTING R/W (TYP)

WEST FRONTAGE ROAD

WETLAND DELINATION (TYP.)

SLOPE INTERCEPT (TYP.)

IH-94 SB

IH-94 NB

EAST FRONTAGE ROAD

1208 1210 1212 1214 1216 1218 1220 1220SE

MATCHLINE 1220+50

LEGEND

SLOPE INTERCEPT	TEMPORARY DITCH CHECKS
EROSION MAT CLASS I TYPE A	CULVERT PIPE CHECKS
EROSION MAT URBAN CLASS I TYPE A	INLET PROTECTION TYPE A
EROSION MAT URBAN CLASS I TYPE B	INLET PROTECTION TYPE D
SILT FENCE	SURFACE WATER FLOW
HEAVY DUTY SILT FENCE	EROSION BALES
RIPRAP MEDIUM	

SHEET 11 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 2	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022201_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

EXISTING R/W (TYP)

SLOPE INTERCEPT (TYP.)

WEST FRONTAGE ROAD

WETLAND DELINATION (TYP)

STA 1233+96SW, 34'LT
BEGIN WETLAND BOUNDRY.
BEGIN HEAVY DUTY SILT FENCE

RIPRAP MEDIUM
END TREATMENT,
SEE DETAIL
5 CY

MATCHLINE 1220+50

MATCHLINE 1234+50

IH-94 SB

IH-94 NB

EAST FRONTAGE ROAD

PROPOSED R/W (TYP)

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 12 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 2	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022202_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

RIPRAP MEDIUM
END TREATMENT,
SEE DETAIL
11 CY

SILT FENCE DRAINAGE
OUTLET, ROCK BAGS
SEE DETAIL

WETLAND DELINATION (TYP)

STA 1238+48SW, 29'LT
END WETLAND BOUNDRY.
END HEAVY DUTY SILT FENCE

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

SLOPE INTERCEPT (TYP.)

IH-94 SB

IH-94 NB

MATCHLINE 1234+50

MATCHLINE 1248+50

1236SW
1238SW
1240SW
1242NW
1244NW
1246NW
1248NW

1236
1238
1240
1242
1244
1246
1248

1236SE
1238SE
1240SE
1242NE
1244NE
1246NE
1248NE

PROPOSED R/W (TYP)

ASPH
CANOPY
FILLER CAPS
A/C/A/G/C

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 13 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 2	SHEET 100	E

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 5 CY

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 5 CY

TLE (TYP)

WEST FRONTAGE ROAD

WETLAND DELINATION (TYP)

SLOPE INTERCEPT (TYP.)

MATCHLINE 1248+50

MATCHLINE 1262+50

IH-94 SB

IH-94 NB

EAST FRONTAGE ROAD

EXISTING R/W (TYP)

TLE (TYP)

PROPOSED R/W (TYP)

LEGEND

SLOPE INTERCEPT	TEMPORARY DITCH CHECKS
EROSION MAT CLASS I TYPE A	CULVERT PIPE CHECKS
EROSION MAT URBAN CLASS ITYPE A	INLET PROTECTION TYPE A
EROSION MAT URBAN CLASS I TYPE B	INLET PROTECTION TYPE D
SILT FENCE	SURFACE WATER FLOW
HEAVY DUTY SILT FENCE	EROSION BALES
RIPRAP MEDIUM	

SHEET 14 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 2	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022204_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

PROPOSED R/W (TYP)

EXISTING R/W (TYP)

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
= MATCH PROJECT
I.D. 1035-01-82

WETLAND DELINATION (TYP.)

SLOPE INTERCEPT (TYP.)

WEST FRONTAGE ROAD

MATCHLINE 1262+50

1264

1266

1268

1270

1272

IH-94 SB

IH-94 NB

1264NE

EAST FRONTAGE ROAD

POOL

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 15 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 2	SHEET 102 E

FILE NAME : S:\WIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022205_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00
= MATCH PROJECT
I.D. 1035-01-79

EXISTING R/W (TYP)

WEST FRONTAGE ROAD

IH-94 SB

IH-94 NB

EAST FRONTAGE ROAD

1208 1210 1212 1214 1216 1218 1220 1220SW 1220SE

MATCHLINE 1220+50

SLOPE INTERCEPT (TYP)

WETLAND DELINATION (TYP)

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 16 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 4	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022401_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

EXISTING R/W (TYP)

WEST FRONTAGE ROAD

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

MATCHLINE 1220+50

1222 1224 1226 IH-94 SB 1228 1230 1232 1234

IH-94 NB

MATCHLINE 1234+50

1222SE 1224SE 1226SE 1228SE 1230SE 1232SE 1234SE

SLOPE INTERCEPT (TYP)

WETLAND DELINATION (TYP)

EAST FRONTAGE ROAD

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 16 CY

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 22 CY

PROPOSED R/W (TYP)

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 5 CY

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 10 CY

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 17 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 4	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022402_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

WETLAND DELINATION (TYP)

EXISTING R/W (TYP)

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 5 CY

SLOPE INTERCEPT (TYP)

PROPOSED R/W (TYP)

MATCHLINE 1234+50

MATCHLINE 1248+50

IH-94 SB

IH-94 NB

1236 1238 1240 1242 1244 1246 1248

1236SW 1238SW 1240SW 1242NW 1244NW 1246NW 1248NW

1236SE 1238SE 1240SE 1242NE 1244NE 1246NE 1248NE

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 18 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 4	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022403_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

EXISTING R/W (TYP)

WEST FRONTAGE ROAD

1250NW 1252NW 1254NW 1256NW 1258NW 1260NW 1262NW

MATCHLINE 1248+50

1250 1252 1254 1256 IH-94 SB 1258 1260 1262

IH-94 NB

1254NE 1256NE 1258NE 1260NE 1262NE 1252NE 1250NE

MATCHLINE 1262+50

EAST FRONTAGE ROAD

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 5 CY

SILT FENCE DRAINAGE OUTLET, ROCK BAGS, SEE DETAIL

RIPRAP MEDIUM END TREATMENT, SEE DETAIL 5 CY

SLOPE INTERCEPT (TYP)

TLE (TYP)

PROPOSED R/W (TYP)

WETLAND DELINATION (TYP)

ASPH

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 19 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 4	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022404_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: INSTALL TYPE A INLET PROTECTION AFTER INLET IS INTALLED. INSTALL TYPE D INLET PROTECTION AFTER ADJACENT PAVEMENT SURFACE IS PLACED.

PROPOSED R/W (TYP)

EXISTING R/W (TYP)

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
= MATCH PROJECT
I.D. 1035-01-82

WEST FRONTAGE ROAD

IH-94 SB

IH-94 NB

EAST FRONTAGE ROAD

MATCHLINE 1262+50

1264NW

1264NE

1264

1266

1268

1270

1272

WETLAND DELINATION (TYP)

SLOPE INTERCEPT (TYP)

LEGEND

- SLOPE INTERCEPT
- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- EROSION BALES

SHEET 20 OF 20

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	EROSION CONTROL - STAGE 4	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022405_ec.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

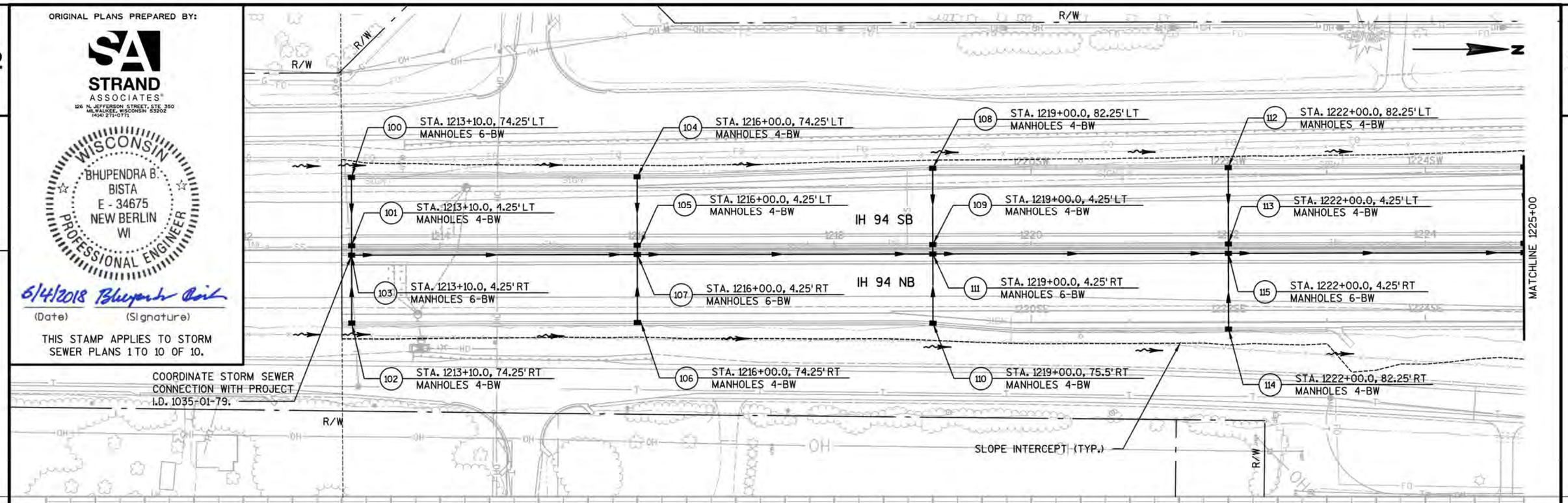
ORIGINAL PLANS PREPARED BY:

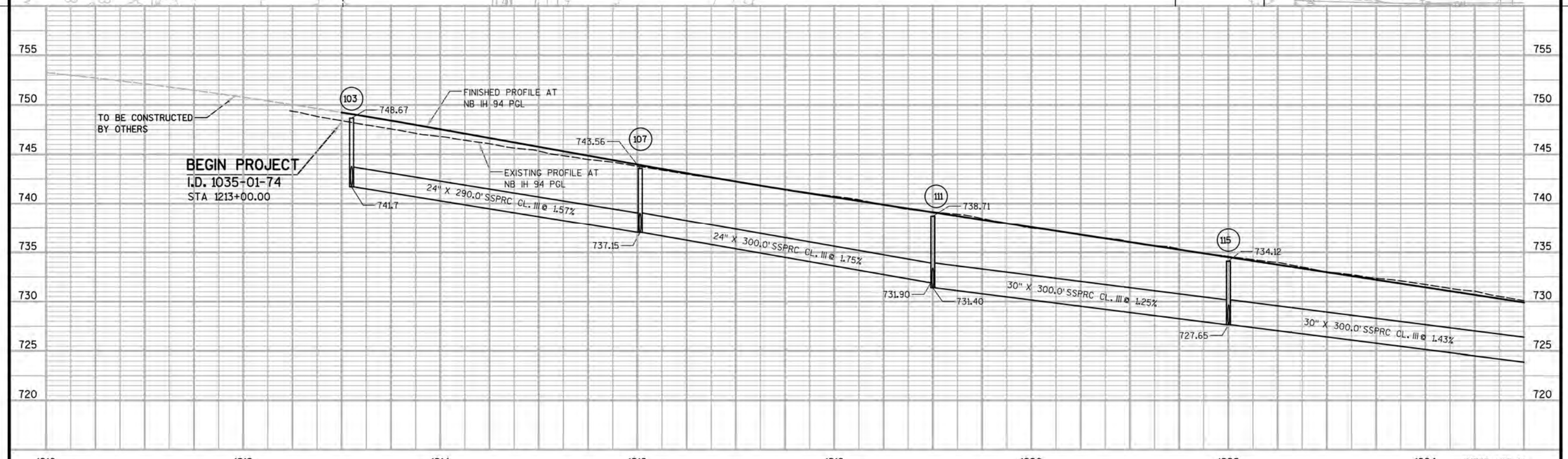
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MILWAUKEE, WISCONSIN 53202
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BHUPENDRA B. BISTA
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NEW BERLIN
WI
PROFESSIONAL ENGINEER

6/4/2018 (Date) (Signature)

THIS STAMP APPLIES TO STORM SEWER PLANS 1 TO 10 OF 10.





SHEET 1 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: IH 94	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022501_ss.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : **.****plotscale*****

WISDOT/CADDS SHEET 41a

2

R/W

MATCHLINE 1225+00

MATCHLINE 1240+00

STA. 1228+00, 86.0' LT
MANHOLES 6-BW
119

116 STA. 1225+00, 82.25' LT
MANHOLES 6-BW

WEST FRONTAGE ROAD

120 STA. 1228+00, 4.25' LT
MANHOLES 6-BW

137

136

STA. 1232+10, 74.25' LT
MANHOLES 4-BW
135

134 STA. 1232+20, 74.25' LT
INLETS 4-BW

SW RAMP

138 STA. 1234+50, 74.25' LT
MANHOLES 4-BW

142 STA. 1237+50, 74.25' LT
MANHOLES 4-BW

117 STA. 1225+00, 4.25' LT
MANHOLES 6-BW

IH 94 SB

STA. 1231+00, 4.25' LT
INLETS 4-BW
124

130 STA. 1231+35, 4.25' LT
INLETS 4-BW

STA. 1230+60, 4.25' LT
MANHOLES 4-BW
122

132 STA. 1231+50, 4.25' LT
INLETS 4-BW

139 STA. 1234+50, 4.25' LT
MANHOLES 6-BW

CONNECT TO EXISTING 48" PIPE
IN STAGE 2. PIPE COLLAR REQ'D.

143 STA. 1237+50, 4.25' LT
MANHOLES 6-BW

118 STA. 1225+00, 4.25' RT
MANHOLES 6-BW

IH 94 NB

118A

STA. 1230+60, 4.25' RT
MANHOLES 6-BW
123

STA. 1231+00, 4.25' RT
MANHOLES 7-BW
125

133 STA. 1231+50, 4.25' RT
MANHOLES 6-BW

131 STA. 1231+35, 4.25' RT
MANHOLES 6-BW

141 STA. 1234+50, 4.25' RT
MANHOLES 6-BW

140 STA. 1234+50, 74.25' RT
MANHOLES 4-BW

145 STA. 1237+50, 4.25' RT
MANHOLES 4-BW

STA. 1230+62, 74.25' RT
MANHOLES 4-BW
126

144 STA. 1237+50, 74.25' RT
MANHOLES 4-BW

STA. 1228+00, 4.25' RT
MANHOLES 6-BW
121

SE RAMP

EAST FRONTAGE ROAD

STA. 1231+00, 74.25' RT
MANHOLES 7-BW
128

STA. 1231+00, 133.4' RT
1-42" APRON ENDWALL
129

129.1

118A STA. 1226+72.66, 5.46' RT
MANHOLES 6-J-S

129.1 STA. 1231+00, 150.2' RT
1-42" APRON ENDWALL
MOVE FROM 1231+00, 125.9' RT

STA. 1231+35, 74.25' RT
MANHOLES 4-BW
127

SLOPE INTERCEPT
(TYP.)

REMOVING STORM SEWER
PIPE 42-INCH REQ'D IN STAGE 4
(FROM STR 128 TO 129)

EXISTING PROFILE AT
NB IH 94 PGL

FINISHED PROFILE AT
NB IH 94 PGL

FINISHED PROFILE AT
SB IH 94 PGL

EXISTING PROFILE AT
SB IH 94 PGL

118 729.52

118A 726.91

121 725.53

123 724.13

125 724.17

131 724.17

133 724.15

725.28 139

725.93 141

727.56 143

719.73

719.23

721.23

723.37

720.88

719.12

718.62

717.33

717.13

717.53

718.29

717.79

717.71

30" X 173.0' SSPRC CL. IV @ 1.44%

30" X 127.0' SSPRC CL. IV @ 1.39%

36" X 260.0' SSPRC CL. IV @ 0.5%

36" X 40.0' SSPRC CL. IV @ 0.5%

36" X 35.0' SSPRC CL. IV @ 0.5%

30" X 300.0' SSPRC CL. IV @ 0.31%

36" X 15.0' SSPRC CL. IV @ 0.5%

24" X 300.0' SSPRC CL. IV @ 0.5%

24" X 300.0' SSPRC CL. IV @ 0.75%

48" SSRCP, CLASS IV

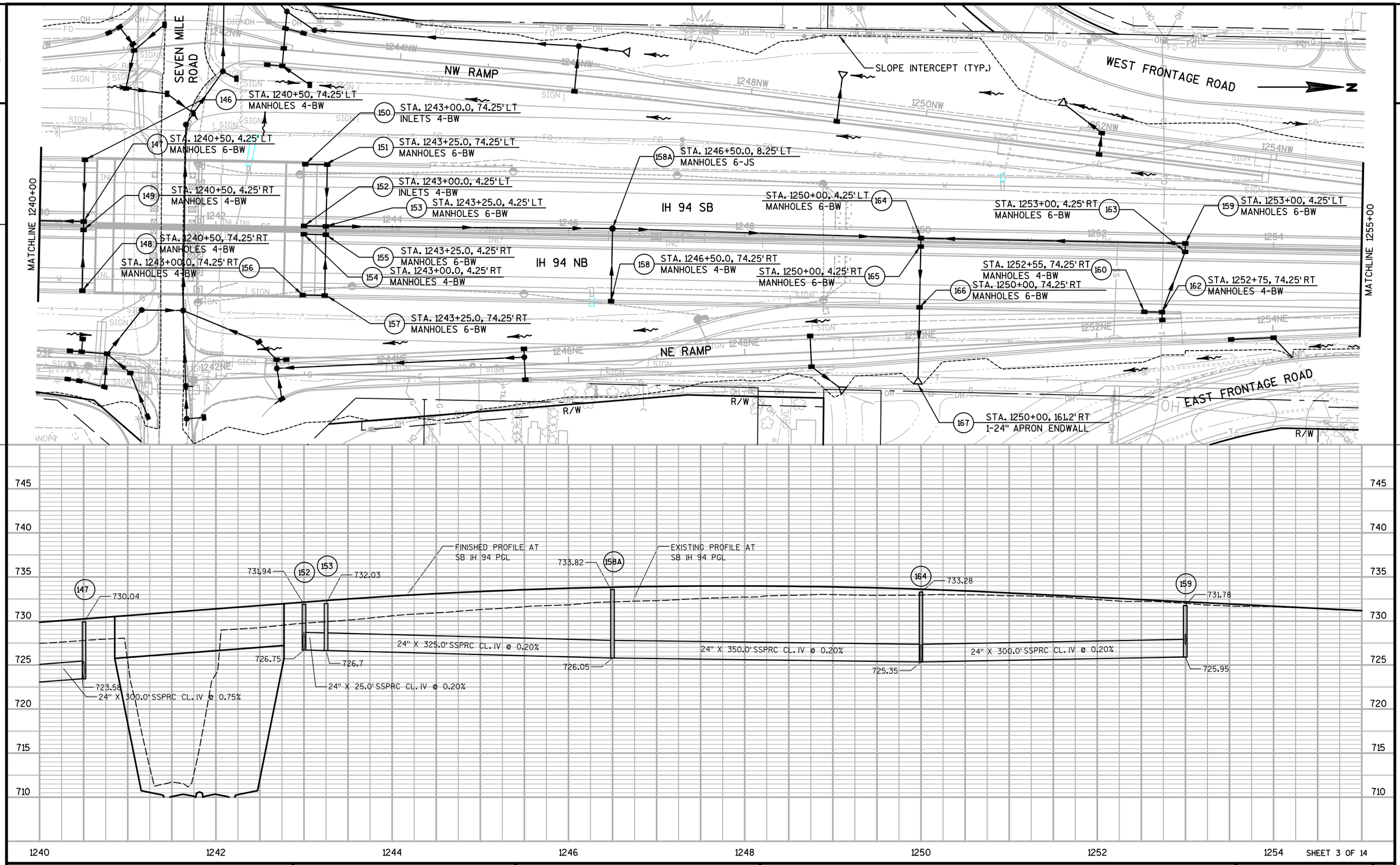
740 735 730 725 720 715 710 705

1226 1228 1230 1232 1234 1236 1238 1240

SHEET 2 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: IH 94	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022502_ss.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41a



SHEET 3 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: IH 94	SHEET 110	E

2

MATCHLINE 1255+00

STA. 1258+08, 120.8' LT
MANHOLES 7-J-S (175)

CONNECT TO EXISTING STORM SEWER. REMOVE 29x45 APRON ENDWALL

RECONNECT STORM SEWER

(177A) STA. 1260+18, 119.7' LT
INLETS MEDIAN GRATE 2 MS

REMOVING INLET AND STORM SEWER PIPE REQ'D

WEST FRONTAGE ROAD

ADJUSTING MANHOLE COVER REQ'D (RIM 718.5)

CONNECT TO EXISTING 30" SSRCP

CONNECT TO EXISTING 15" SSRCP

(192) STA. 1267+90, 74.25' LT
MANHOLES 4-BW

REMOVE END WALL AND STUB SEAL MANHOLE.

(169) STA. 1256+00, 4.25' LT
MANHOLES 4-BW

STA. 1257+90.6, 4.25' LT
MANHOLES 6-BW (174)

IH 94 SB

(177) STA. 1259+00, 4.25' LT
MANHOLES 6-BW

STA. 1262+00, 4.25' LT
MANHOLES 6-BW (181)

(180) STA. 1262+00, 82.25' LT
MANHOLES 4-BW

STA. 1265+00, 4.25' LT
MANHOLES 6-BW (190)

(191) STA. 1265+00, 74.25' LT
MANHOLES 6-BW

(188) STA. 1265+25, 4.25' LT
MANHOLES 4-BW

(186) STA. 1267+90, 4.25' LT
INLETS 4-BW

(171)

(170) STA. 1256+00, 4.25' RT
MANHOLES 4-BW

IH 94 NB

(179) STA. 1259+00, 4.25' RT
MANHOLES 4-BW

(183) STA. 1262+00, 4.25' RT
MANHOLES 4-BW

(189) STA. 1265+00, 4.25' RT
MANHOLES 6-BW

(187) STA. 1267+90, 4.25' RT
INLETS 4-BW

STA. 1257+90.6, 0.0' RT
CONNECT TO EXISTING 36" PIPE IN STAGE 2. PIPE COLLAR REQ'D. (173)

(178) STA. 1259+00, 82.5' RT
MANHOLES 4-BW

(176) STA. 1259+00, 106.0' RT
INLETS MEDIAN 2 GRATE-MS

(182) STA. 1262+00, 82.25' RT
MANHOLES 4-BW

EAST FRONTAGE ROAD

(185) STA. 1265+00, 82.25' RT
MANHOLES 4-BW

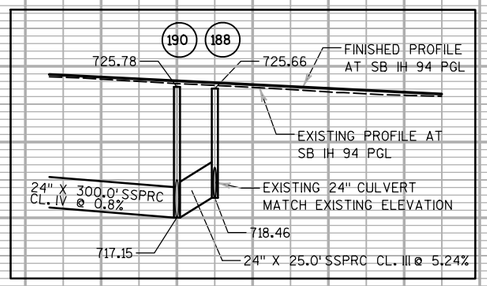
R/W

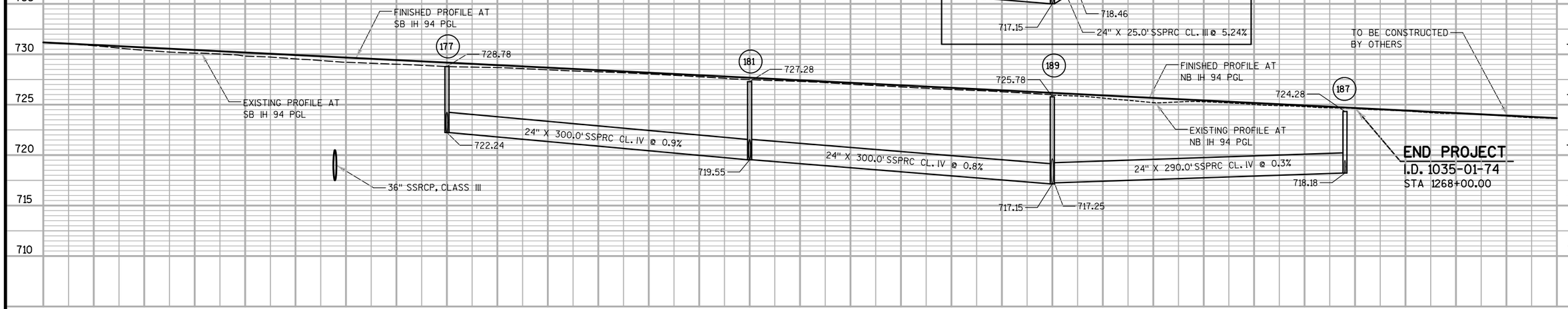
TLE

(172) STA. 1257+90.6, 98.4' RT
CONNECT TO EXISTING 36" SSPRC

SLOPE INTERCEPT (TYP.)

STA. 1265+00, 99.0' RT
INLETS MEDIAN 2 GRATE-MS (184)





PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: IH 94	SHEET

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022504_ss.dgn
PLOT DATE : 6/8/2018
PLOT BY : _username_
PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 41a

CONNECT PIPE TO DOWNSTREAM MANHOLE. MATCH PROJECT 1035-01-72.

612 STA. 1242+67 'NW', 43.5'LT
MANHOLES 6-JS

611 STA. 1242+67.0 'NW', 24.3'LT
MANHOLES 4-HM-S

609 STA. 1242+67.0 'NW', 1.5'LT
INLETS 2X3-HM-S

610 STA. 1242+88.0 'SW', 20.5'LT
INLETS 2X3-HM

612A STA. 1243+00 'NW', 25.0'LT
MANHOLES 6-JS

608A STA. 1243+00 'NW', 37.3'RT
INLETS MEDIAN 2 GRATE MS

600A STA. 1249+00 NW, 6.0'LT
INLETS 4-BW

606 STA. 1246+00 NW,33.0'LT
MANHOLES 6-J-S

605 STA. 1246+57 NW, 31.9'LT
1-24" APRON ENDWALL

STA. 1251+50 NW, 35.6'LT 601
1-24" APRON ENDWALL

603 STA. 1249+00 NW, 38.0'LT
1-24" APRON ENDWALL

604 STA. 1246+00 NW, 18.5'RT
MANHOLES 4-BW

602 STA. 1249+00 NW, 18.5'RT
MANHOLES 4-BW

608 STA. 1242+67.0 'NW', 18.5'RT
MANHOLES 4-HM-S

607 STA. 1242+50.0 'NW', 18.5'RT
INLETS 2X3-HM

STA. 1252+00 NW, 18.5'RT 600
INLETS 4-BW

SLOPE INTERCEPT (TYP.)

MATCHLINE 1253NW+00

SEVEN MILE ROAD

WEST FRONTAGE ROAD

RAMP NW

RAMP SW

IH 94 SB

IH 94 NB

R/W

TLE

BEGIN CONSTRUCTION
STA 1241NW+79.25

FINISHED PROFILE AT ℄ RAMP NW

EXISTING PROFILE AT ℄ RAMP NW

708.37
708.60
718.30
714.30
712.62
709.14
702.38
703.14

24" X 38.0' SSPRC CL. III @ 2.0%

24" X 300.0' SSPRC CL. III @ 2.0%

24" X 52.0' SSPRC CL. III @ 2.9%

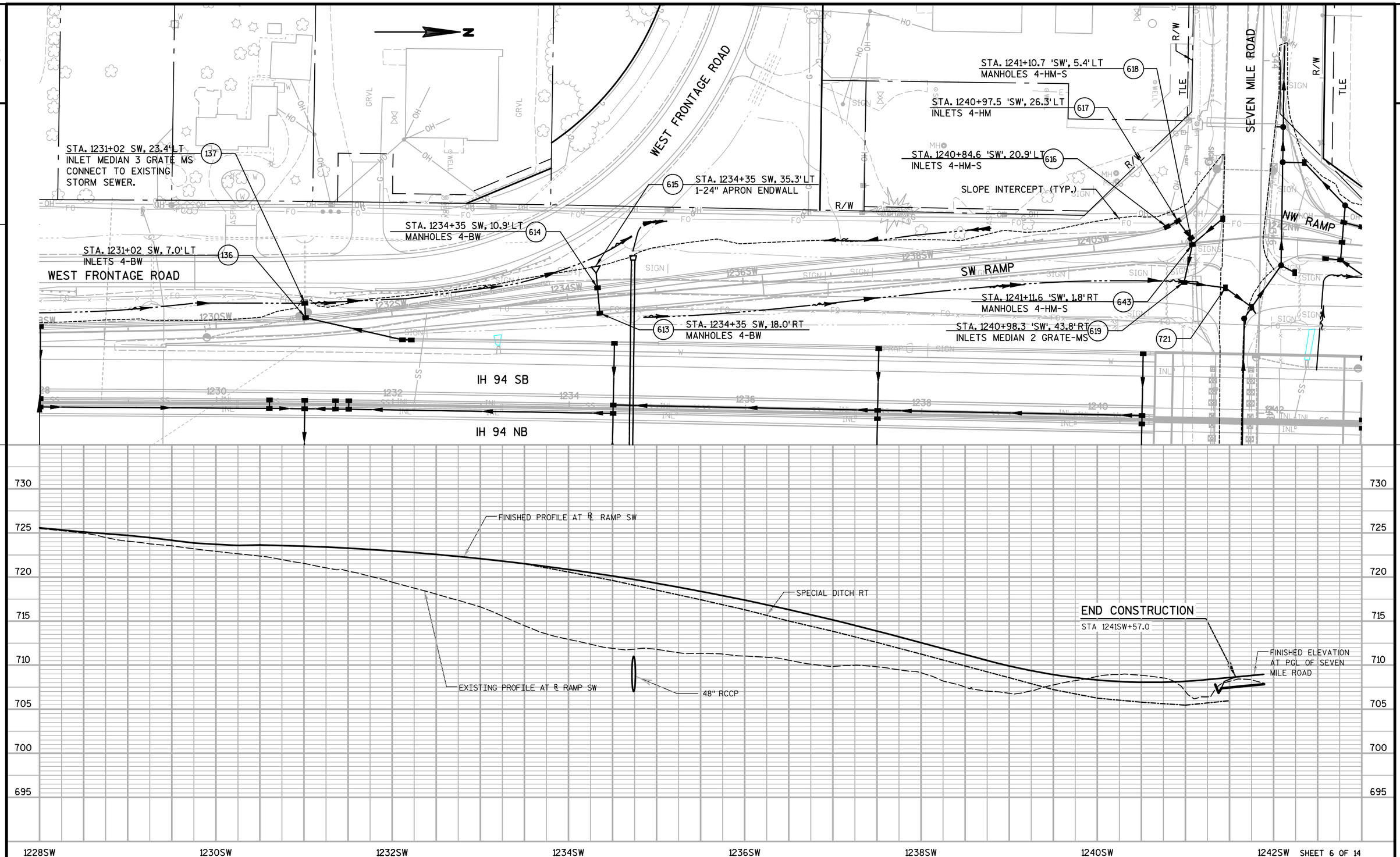
735 730 725 720 715 710 705 700

1238 1240 1242 1244 1246 1248 1250 1252

SHEET 5 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: NW RAMP	SHEET 112	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022505_ss.dgn PLOT DATE : 6/18/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: SW RAMP	SHEET 113	E

2

STA. 1234+00 SE, 18.5' LT
MANHOLES 4-BW
620

STA. 1237+00 SE, 18.5' LT
MANHOLES 4-BW
622

STA. 1240+50 SE, 33.0' LT
INLETS MEDIAN 2 GRATE MS
625

STA. 1240+36.7 SE, 18.5' LT
INLETS 4-BW
624

718

626 STA. 1240+50 SE, 18.5' LT
MANHOLES 4-BW

IH 94 SB

IH 94 NB

623 STA. 1237+00 SE, 34.8' RT
1-24" APRON ENDWALL

631 STA. 1240+79 SE, 18.5' LT
MANHOLE 7-FT DIA.,
PLACE COVER PLATE TEMPORARY

MATCHLINE 1231SE+00

SE RAMP

NE RAMP

SLOPE INTERCEPT (TYP.)

621 STA. 1234+94.1 SE, 40.5' RT
1-24" APRON ENDWALL

STA. 1240+36.7 SE, 13.6' RT
INLETS 4-BW
627

STA. 1240+50 SE, 14.6' RT
INLETS 4-BW
628

R/W

TLE

SEVEN MILE ROAD

630 STA. 1241+07 SE, 1.2' RT
MANHOLES 4-FT DIA.,
PLACE COVER PLATE TEMPORARY

629 STA. 1240+79.0 SE, 19.3' RT
MANHOLES 4-FT DIA.,
PLACE COVER PLATE TEMPORARY

N

730
725
720
715
710
705
700
695

FINISHED PROFILE AT ℄ RAMP SE

EXISTING PROFILE AT ℄ RAMP SE

48" RCCP

END CONSTRUCTION
STA 1241SE+35.85
MATCH 7 MILE EOP
TEMPORARY CONNECTION

FINAL CONNECTION TO 7 MILE RD
CONSTRUCTED BY OTHERS UNDER
ID 1035-01-72

1231 1232 1234 1236 1238 1240 1242 1244 1246

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: SE RAMP	SHEET 114	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022507_ss.dgn PLOT DATE : 6/18/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41a

IH 94 NB

IH 94 SB

SE RAMP

NE RAMP

SEVEN MILE ROAD

EAST FRONTAGE ROAD

636 STA. 1242+50.0 NE, 40.0' LT
INLETS MEDIAN 2 GRATE MS

635 STA. 1242+69.0 NE, 18.9' LT
MANHOLES 4-BW

719

637 STA. 1245+50 NE, 18.5' LT
MANHOLES 4-BW

634 STA. 1242+80.0 NE, 18.5' LT
INLETS 4-BW

640 STA. 1248+75 NE, 18.5' LT
INLETS 4-BW

641 STA. 1248+75 NE, 16.5' RT
INLETS 4-BW

639 STA. 1245+50 NE, 9.0' LT
MANHOLES 6-J-S

638 STA. 1245+50 NE, 16.5' RT
INLETS 4-BW

633 STA. 1242+69.0 NE, 9.0' LT
MANHOLES 4-J-S

632 STA. 1242+73.0 NE, 25.9' RT
INLETS 4-BW

705A STA. 1242+65.0 NE, 30.9' RT
12" X 8.0' SSPRC (STUB)
SEALING PIPES REQ'D

642 STA. 1249+11 NE, 45.5' RT
1-12" APRON ENDWALL

SLOPE INTERCEPT (TYP.)

SLOPE INTERCEPT (TYP.)

R/W

TLE

MATCHLINE 1252NE+00

BEGIN CONSTRUCTION
STA 1241NE+64.22
MATCH 7 MILE EOP
TEMPORARY CONNECTION

ULTIMATE CONNECTION
BUILT UNDER ID 1035-01-72
7 MILE ROAD PLANS

FINISHED PROFILE AT ℄ RAMP NE

EXISTING PROFILE AT ℄ RAMP NE

721.02

715.59

708.58

24" X 281.0' SSPRC CL. IV @ 2.5%

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

740 735 730 725 720 715 710 705

1242NE 1244NE 1246NE 1248NE 1250NE 1252NE

SHEET 8 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: NE RAMP	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022508_ss.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 41a

2

IH 94 SB

IH 94 NB

MATCHLINE 1252NE+00

161 STA. 1252+75 NE, 18.5'LT
MANHOLES 4-BW

RECONNECT
STORM SEWER

168.1 STA. 1254+00 NE, 7.0'RT
MANHOLES 4-BW

171 STA. 1256+00 NE, 7.0'RT
MANHOLES 6-BW

EAST FRONTAGE RAOD

SLOPE INTERCEPT (TYP.)

168 STA. 1253+52 NE, 7.0'RT
MANHOLES 4-BW

R/W

TLE

171A STA. 1255+99 NE, 26.4'RT
INLETS MEDIAN 2 GRATE MS

TLE
REMOVING INLET AND
STORM SEWER PIPE REQ'D

R/W

N

745
740
735
730
725
720
715
710

FINISHED PROFILE AT ℄ RAMP NE

END CONSTRUCTION
STA 1258NE+00.00

EXISTING PROFILE AT ℄ RAMP NE

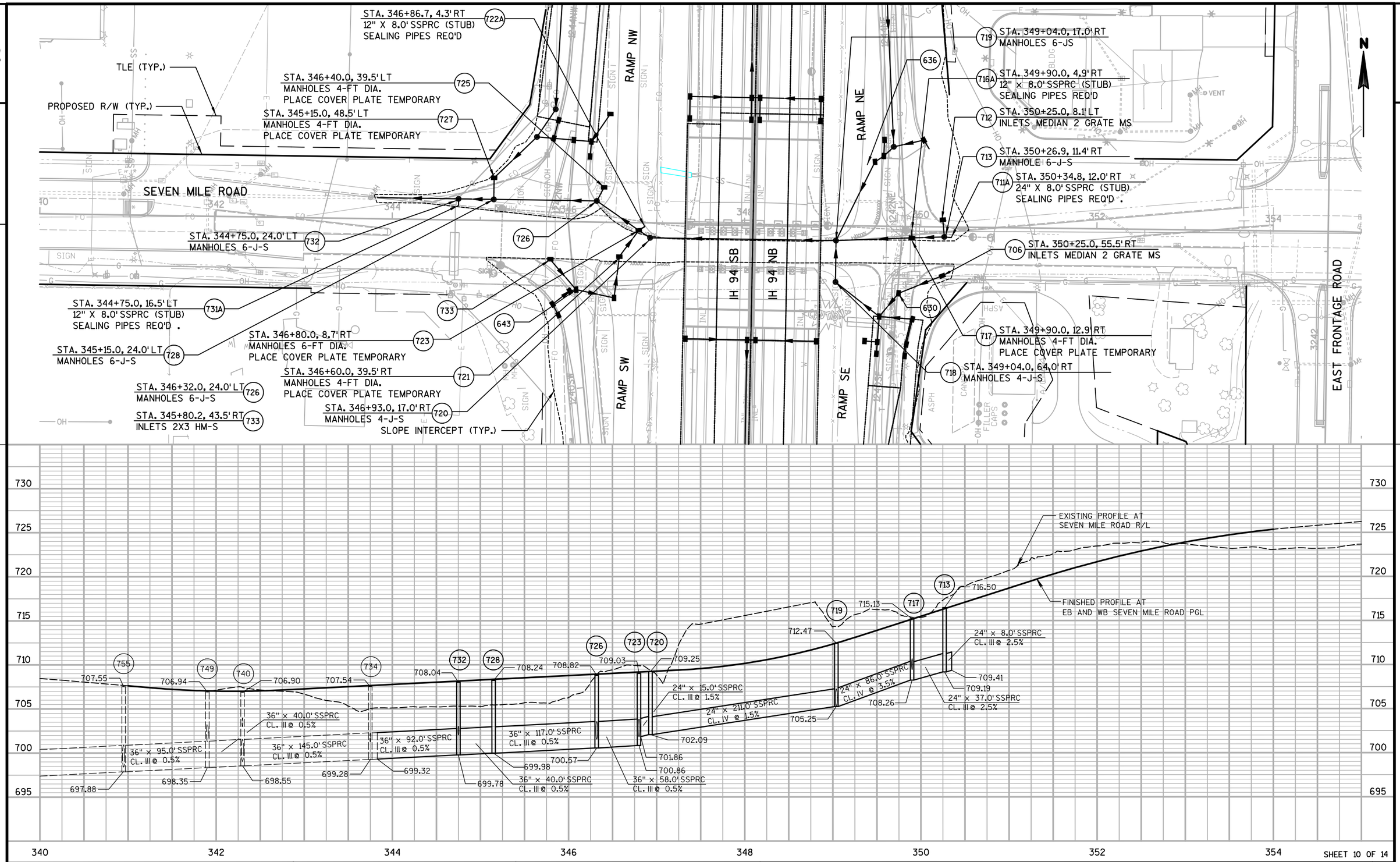
36" SSRCP, CLASS III

1252 1254 1256 1258

SHEET 9 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER : NE RAMP	SHEET	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022509_ss.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



SHEET 10 OF 14

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	STORM SEWER: SEVEN MILE ROAD	SHEET 117	E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022510_ss.dgn PLOT DATE : 6/18/2018 PLOT BY : _username_ PLOT NAME : $FILE$ PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 41a

STRUCT NUMBER	STATION	OFFSET FT		C-C (FT)	TO STRUCT	INLET TYPE	COVER	MH TYPE	COVER	RIM OR FLANGE ELEV	T.O.S. ELEV	STRUCT DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCHARGE ELEV.	LENGTH (FT)	SLOPE (%)	REMARKS
999	1210+10	73.25	LT	300	100	4-FOOT	BW	--	--	--	--		24	745.60	742.60	300	1.00%	CONSTRUCTED BY OTHERS (ID. 1035-01-79)
100	1213+10	74.25	LT	70	101	--	--	6-FOOT	BW	748.71	747.55	5.05	24	742.50	741.80	70	1.00%	
101	1213+10	4.25	LT	10	103	--	--	4-FOOT	BW	748.67	747.51	5.71	24	741.80	741.70	10	1.00%	
103	1213+10	4.25	RT	290	107	--	--	6-FOOT	BW	748.67	747.51	5.81	24	741.70	737.15	290	1.57%	SEALING PIPES REQ'D
102	1213+10	74.25	RT	69	103	--	--	4-FOOT	BW	748.71	747.55	5.16	24	742.39	741.70	69	1.00%	
104	1216+00	74.25	LT	70	105	--	--	4-FOOT	BW	743.60	742.44	4.49	24	737.95	737.25	70	1.00%	
105	1216+00	4.25	LT	10	107	--	--	4-FOOT	BW	743.56	742.40	5.15	24	737.25	737.15	10	1.00%	
106	1216+00	74.25	RT	69	107	--	--	4-FOOT	BW	743.60	742.44	4.60	24	737.84	737.15	69	1.00%	
107	1216+00	4.25	RT	300	111	--	--	6-FOOT	BW	743.56	742.40	5.25	24	737.15	731.90	300	1.75%	SEALING PIPES REQ'D
108	1219+00	82.25	LT	78	109	--	--	4-FOOT	BW	738.63	737.47	5.19	24	732.28	731.50	78	1.00%	
109	1219+00	4.25	LT	10	111	--	--	4-FOOT	BW	738.71	737.55	6.05	24	731.50	731.40	10	1.00%	
110	1219+00	75.50	RT	70	111	--	--	4-FOOT	BW	738.77	737.61	5.51	24	732.10	731.40	70	1.00%	
111	1219+00	4.25	RT	300	115	--	--	6-FOOT	BW	738.71	737.55	6.15	30	731.40	727.65	300	1.25%	SEALING PIPES REQ'D
112	1222+00	82.25	LT	78	113	--	--	4-FOOT	BW	734.04	732.88	4.35	24	728.53	727.75	78	1.00%	
113	1222+00	4.25	LT	10	115	--	--	4-FOOT	BW	734.12	732.96	5.21	24	727.75	727.65	10	1.00%	
114	1222+00	82.25	RT	77	115	--	--	4-FOOT	BW	734.04	732.88	4.46	24	728.42	727.65	77	1.00%	
115	1222+00	4.25	RT	300	118	--	--	6-FOOT	BW	734.12	732.96	5.31	30	727.65	723.37	300	1.43%	
116	1225+00	82.25	LT	78	117	--	--	6-FOOT	BW	729.44	728.28	4.47	30	723.81	723.42	78	0.50%	
117	1225+00	4.25	LT	10	118	--	--	6-FOOT	BW	729.52	728.36	4.94	30	723.42	723.37	10	0.50%	
118	1225+00	4.25	RT	173	118A	--	--	6-FOOT	BW	729.52	728.36	4.99	30	723.37	720.88	173	1.44%	SEALING PIPES REQ'D
118A	1226+73	5.50	RT	127	121	--	--	6-FOOT	J-S	726.91	725.83	4.95	30	720.88	719.12	127	1.39%	SEALING PIPES REQ'D
119	1228+00	86.00	LT	82	120	--	--	6-FOOT	BW	725.34	724.18	4.52	30	719.66	719.25	82	0.50%	
120	1228+00	4.25	LT	10	121	--	--	6-FOOT	BW	725.50	724.34	5.09	30	719.25	719.15	10	1.00%	
121	1228+00	4.25	RT	260	123	--	--	6-FOOT	BW	725.53	724.37	5.75	36	718.62	717.33	260	0.50%	SEALING PIPES REQ'D
122	1230+60	4.25	LT	10	123	--	--	4-FOOT	BW	723.97	722.81	4.84	24	717.97	717.87	10	1.00%	
123	1230+60	4.25	RT	40	125	--	--	6-FOOT	BW	724.17	723.01	5.68	36	717.33	717.13	40	0.50%	SEALING PIPES REQ'D
124	1231+00	4.25	LT	10	125	4-FOOT	BW	--	--	723.91	722.75	4.84	24	717.91	717.81	10	1.00%	
125	1231+00	4.25	RT	69	128	--	--	7-FOOT	BW	724.13	722.97	5.84	42	717.13	716.79	69	0.50%	SEALING PIPES REQ'D
126	1230+62	74.25	RT	38	128	--	--	4-FOOT	BW	724.21	723.05	4.36	24	718.69	718.31	38	1.00%	
127	1231+35	74.25	RT	35	128	--	--	4-FOOT	BW	724.19	723.03	5.54	24	717.49	717.32	35	0.50%	
128	1231+00	74.25	RT	52	129	--	--	7-FOOT	BW	724.17	723.01	8.73	42	714.28	714.00	52	0.47%	REMOVING SS PIPE REQ'D IN STAGE 4
129	1231+00	133.40	RT	--	OUTFALL	--	--	--	--	--	--	N/A	--	714.00	--	--	--	MOVE ENDWALL TO NEW LOCATION IN STAGE 4
128	1231+00	74.25	RT	69	129.1	--	--	--	--	--	--	-714	42	714.28	712.00	69	2.96%	
129.1	1231+00	150.20	RT	--	OUTFALL	--	--	--	--	--	--	N/A	--	712.00	--	--	--	OUTFALL TO SE POND
131	1231+35	4.25	RT	35	125	--	--	6-FOOT	BW	724.15	722.99	5.28	36	717.71	717.53	35	0.51%	SEALING PIPES REQ'D
130	1231+35	4.25	LT	10	131	4-FOOT	BW	--	--	723.89	722.73	4.84	24	717.89	717.79	10	1.00%	
133	1231+50	4.25	RT	15	131	--	--	6-FOOT	BW	724.17	723.01	5.22	36	717.79	717.71	15	0.53%	SEALING PIPES REQ'D
132	1231+50	4.25	LT	10	133	4-FOOT	BW	--	--	723.90	722.74	4.85	24	717.89	717.79	10	1.00%	
134	1232+20	74.25	LT	10	135	4-FOOT	BW	--	--	724.04	722.88	3.12	24	719.76	719.66	10	1.00%	
135	1232+10	74.25	LT	113	136	--	--	4-FOOT	BW	724.02	722.86	3.95	24	718.91	718.35	113	0.50%	STRUCTURE 136 SHOWN ON SW RAMP PLAN
141	1234+50	4.25	RT	300	133	--	--	6-FOOT	BW	725.93	724.77	5.54	30	719.23	718.29	300	0.31%	SEALING PIPES REQ'D
138	1234+50	74.25	LT	70	139	--	--	4-FOOT	BW	725.32	724.16	4.11	24	720.05	719.70	70	0.50%	
139	1234+50	4.25	LT	10	141	--	--	6-FOOT	BW	725.28	724.12	4.84	24	719.28	719.23	10	0.50%	
140	1234+50	74.25	RT	69	141	--	--	4-FOOT	BW	725.93	724.77	4.77	24	720.00	719.65	69	0.50%	
142	1237+50	74.25	LT	70	143	--	--	4-FOOT	BW	727.60	726.44	4.86	24	721.58	721.23	70	0.50%	SEALING PIPES REQ'D
143	1237+50	4.25	LT	300	139	--	--	6-FOOT	BW	727.56	726.40	5.17	24	721.23	719.73	300	0.50%	
144	1237+50	74.25	RT	69	145	--	--	4-FOOT	BW	728.68	727.52	5.89	24	721.63	721.28	69	0.51%	
145	1237+50	4.25	RT	10	143	--	--	4-FOOT	BW	728.64	727.48	6.20	24	721.28	721.23	10	0.50%	SEALING PIPES REQ'D
146	1240+50	74.25	LT	70	147	--	--	4-FOOT	BW	729.93	728.77	4.59	24	724.18	723.48	70	1.00%	SEALING PIPES REQ'D
147	1240+50	4.25	LT	300	143	--	--	6-FOOT	BW	730.04	728.88	5.40	24	723.48	721.23	300	0.75%	
148	1240+50	74.25	RT	69	149	--	--	4-FOOT	BW	731.44	730.28	6.01	24	724.27	723.58	69	1.00%	
149	1240+50	4.25	RT	10	147	--	--	4-FOOT	BW	731.41	730.25	6.67	24	723.58	723.48	10	1.00%	SEALING PIPES REQ'D

STRUCT NUMBER	STATION	OFFSET FT		C-C (FT)	TO STRUCT	INLET TYPE	COVER	MH TYPE	COVER	RIM OR FLANGE ELEV	T.O.S. ELEV	STRUCT DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCHARGE ELEV.	LENGTH (FT)	SLOPE (%)	REMARKS
152	1243+00	4.25	LT	25	153	4-FOOT	BW	--	--	731.94	730.78	4.03	24	726.75	726.70	25	0.20%	
150	1243+00	74.25	LT	25	151	4-FOOT	BW	--	--	731.94	730.78	3.28	24	727.50	727.37	25	0.52%	SEALING PIPES REQ'D
151	1243+25	74.25	LT	70	153	--	--	6-FOOT	BW	732.05	730.89	3.52	24	727.37	727.05	70	0.46%	
154	1243+00	4.25	RT	25	155	--	--	4-FOOT	BW	733.75	732.59	5.19	24	727.40	727.15	25	1.00%	
155	1243+25	4.25	RT	10	153	--	--	6-FOOT	BW	733.82	732.66	5.51	24	727.15	727.05	10	1.00%	SEALING PIPES REQ'D
156	1243+00	74.25	RT	25	157	--	--	4-FOOT	BW	733.75	732.59	5.02	24	727.57	727.32	25	1.00%	
157	1243+25	74.25	RT	69	155	--	--	6-FOOT	BW	733.84	732.68	5.36	24	727.32	727.15	69	0.25%	
153	1243+25	4.25	LT	325	158A	--	--	6-FOOT	BW	734.71	733.55	6.85	24	726.70	726.05	325	0.20%	
158	1246+50	74.25	RT	83	158A	--	--	4-FOOT	BW	734.08	732.92	5.92	24	727.00	726.17	83	1.00%	
158A	1246+50	8.25	LT	350	164	--	--	6-FOOT	J-S	733.82	732.74	6.69	24	726.05	725.35	350	0.20%	SEALING PIPES REQ'D
164	1250+00	4.25	LT	10	165	--	--	6-FOOT	BW	733.28	732.12	6.77	24	725.35	725.33	10	0.23%	SEALING PIPES REQ'D
165	1250+00	4.25	RT	69	166	--	--	6-FOOT	BW	733.27	732.11	6.78	24	725.33	725.17	69	0.23%	SEALING PIPES REQ'D
166	1250+00	74.25	RT	81	167	--	--	6-FOOT	BW	733.31	732.15	6.98	24	725.17	725.00	81	0.21%	
167	1250+00	161.20	RT	--	OUTFALL	--	--	--	--	--	--	N/A	--	725.00	--	--	--	OUTFALL
159	1253+00	4.25	LT	300	164	--	--	6-FOOT	BW	731.78	730.62	4.67	24	725.95	725.35	300	0.20%	SEALING PIPES REQ'D
160	1252+55	74.25	RT	20	162	--	--	4-FOOT	BW	732.04	730.88	3.86	15	727.02	726.86	20	0.79%	
162	1252+75	74.25	RT	73	163	--	--	4-FOOT	BW	731.94	730.78	4.02	24	726.76	726.57	73	0.26%	
163	1253+00	4.25	RT	10	159	--	--	6-FOOT	BW	731.78	730.62	4.05	24	726.57	726.47	10	1.00%	SEALING PIPES REQ'D
169	1256+00	4.25	LT	10	170	--	--	4-FOOT	BW	730.28	729.12	4.92	15	724.20	724.10	10	1.00%	SEALING PIPES REQ'D
170	1256+00	4.25	RT	83	171	--	--	4-FOOT	BW	730.28	729.12	5.02	24	724.10	722.16	83	2.34%	SEALING PIPES REQ'D
172	1257+91	98.39	RT	98	173	--	--	--	--	--	--	N/A	36	717.38	716.42	98	0.98%	CONNECT TO EXISTING PIPE
173	1257+91	0.00	RT	4	174	--	--	--	--	--	--	N/A	36	716.42	716.38	4	1.00%	CONNECT TO EXISTING PIPE
174	1257+91	4.25	LT	118	175	--	--	6-FOOT	BW	729.32	728.16	11.78	36	716.38	715.40	118	0.83%	
175	1258+08	120.80	LT	--	EX. PIPE	--	--	7-FOOT	J-S	720.00	718.92	3.52	--	715.40	EX. PIPE	--	--	CONNECT TO EXISTING PIPE
176	1259+00	106.00	RT	102	EX. MH	MEDIAN 2 GRATE	MS	--	--	723.10	723.10	4.70	12	718.40	717.38	102	1.00%	
177	1259+00	4.25	LT	300	181	--	--	6-FOOT	BW	728.78	727.62	5.38	24	722.24	719.55	300	0.90%	SEALING PIPES REQ'D
178	1259+00	82.50	RT	77	179	--	--	4-FOOT	BW	728.69	727.53	4.85	24	722.68	722.29	77	0.51%	
179	1259+00	4.25	RT	10	177	--	--	4-FOOT	BW	728.78	727.62	5.33	24	722.29	722.24	10	0.50%	SEALING PIPES REQ'D
177A	1260+18	119.70	LT	10	EX. INL	MEDIAN 2 GRATE	MS	--	--	715.87	715.87	4.25	15	711.62	711.52	10	1.00%	CONNECT TO EXISTING INLET
180	1262+00	82.25	LT	78	181	--	--	4-FOOT	BW	727.20	726.04	4.93	24	721.11	719.55	78	2.00%	SEALING PIPES REQ'D
181	1262+00	4.25	LT	300	190	--	--	6-FOOT	BW	727.28	726.12	6.57	24	719.55	717.15	300	0.80%	
182	1262+00	82.25	RT	77	183	--	--	4-FOOT	BW	727.20	726.04	4.85	24	721.19	719.65	77	2.00%	
183	1262+00	4.25	RT	10	181	--	--	4-FOOT	BW	727.28	726.12	6.47	24	719.65	719.55	10	1.00%	SEALING PIPES REQ'D
184	1265+00	99.00	RT	17	185	MEDIAN 2 GRATE	MS	--	--	721.50	721.50	3.31	24	718.19	718.02	17	1.00%	
185	1265+00	82.25	RT	77	189	--	--	4-FOOT	BW	725.69	724.53	6.51	24	718.02	717.25	77	1.00%	
189	1265+00	4.25	RT	10	190	--	--	6-FOOT	BW	725.78	724.62	7.37	30	717.25	717.15	10	1.00%	SEALING PIPES REQ'D
190	1265+00	4.25	LT	70	191	--	--	6-FOOT	BW	725.78	724.62	7.47	30	717.15	716.45	70	1.00%	SEALING PIPES REQ'D
191	1265+00	74.25	LT	26	EX. PIPE	--	--	6-FOOT	BW	725.86	724.70	10.43	30	714.27	713.23	26	4.00%	CONNECT TO EXISTING PIPE
188	1265+25	4.25	LT	25	190	--	--	4-FOOT	BW	725.66	724.50	6.04	24	718.46	717.15	25	5.24%	
187	1267+90	4.25	RT	290	189	4-FOOT	BW	--	--	724.28	723.12	4.94	24	718.18	717.25	290	0.32%	SEALING PIPES REQ'D
186	1267+90	4.25	LT	10	187	4-FOOT	BW	--	--	724.37	723.21	4.93	15	718.28	718.18	10	1.00%	SEALING PIPES REQ'D
192	1267+90	74.25	LT	28	EX. PIPE	--	--	4-FOOT	BW	724.33	723.17	8.30	15	714.87	714.19	28	2.43%	CONNECT TO EXISTING PIPE
600	1252+00 NW	18.50	RT	24	600A	4-FOOT	BW	--	--	729.81	728.65	3.85	24	724.80	724.68	24	0.50%	
600A	1252+00 NW	6.00	LT	50	601	4-FOOT	BW	--	--	729.52	728.36	3.68	24	724.68	724.40	50	0.50%	
601	1251+50 NW	35.60	LT	--	OUTFALL	--	--	--	--	--	--	N/A	--	724.00	--	--	--	OUTFALL
602	1249+00 NW	18.50	RT	50	603	--	--	4-FOOT	BW	725.02	723.86	4.08	24	719.78	719.50	50	0.50%	
603	1249+00 NW	38.00	LT	--	OUTFALL	--	--	--	--	--	--	N/A	--	719.50	--	--	--	OUTFALL
604	1246+00 NW	18.50	RT	52	606	--	--	4-FOOT	BW	716.46	715.30	5.12	24	710.18	709.14	52	2.00%	
605	1246+57 NW	31.90	LT	52	606	--	--	--	--	--	--	N/A	24	714.30	712.62	52	2.90%	INLET ENDWALL
606	1246+00 NW	33.00	LT	300	612A	--	--	6-FOOT	J-S	718.30	717.22	8.08	24	709.14	703.14	300	2.00%	
612A	1243+00 NW	25.00	LT	38	612	--	--	6-FOOT	J-S	708.60	707.52	4.38	24	703.14	702.38	38	2.00%	
607	1242+50 NW	18.50	RT	17	608	2x3-FT	HM	--	--	708.00	707.17	3.31	12	703.86	703.69	17	1.00%	

STRUCT NUMBER	STATION	OFFSET FT		C-C (FT)	TO STRUCT	INLET TYPE	COVER	MH TYPE	COVER	RIM OR FLANGE ELEV	T.O.S. ELEV	STRUCT DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCHARGE ELEV.	LENGTH (FT)	SLOPE (%)	REMARKS
608	1242+67 NW	18.50	RT	20	609	--	--	4-FOOT	HM-S	707.94	707.11	4.42	24	702.69	702.59	20	0.50%	SEE NOTE 7
609	1242+67 NW	1.50	LT	22	611	2x3-FT	HM-S	--	--	708.26	707.43	4.84	24	702.59	702.48	22	0.50%	
610	1242+88 NW	20.50	LT	21	611	2x3-FT	HM	--	--	707.88	707.05	3.46	12	703.59	703.48	21	0.50%	
611	1242+67 NW	24.30	LT	19	612	--	--	4-FOOT	HM-S	707.84	707.01	4.53	24	702.48	702.39	19	0.50%	SEE NOTE 7
612	1242+67 NW	43.50	LT	67	727	--	--	6-FOOT	J-S	708.37	707.29	4.91	24	702.38	701.38	67	1.49%	STR 727 SHOWN ON 7-MILE ROAD PLAN
608A	1243+00 NW	37.30	RT	38	608	MEDIAN 2 GRATE	MS	--	--	706.69	706.69	3.69	24	703.00	702.69	38	0.82%	
136	1231+02 SW	7.00	LT	16	137	4-FOOT	BW	--	--	723.24	722.08	3.77	24	718.31	718.15	16	1.00%	
137	1231+02 SW	23.40	LT	--	EX. PIPE	MEDIAN 3 GRATE	MS	--	--	720.87	718.15	2.72	24	718.15	EXISTING	--	--	CONNECT TO EXISTING PIPE
613	1234+35 SW	18.00	RT	30	614	--	--	4-FOOT	BW	721.57	720.41	4.87	24	715.54	715.24	30	1.00%	
614	1234+35 SW	10.90	LT	18	615	--	--	4-FOOT	BW	720.09	718.93	3.69	24	715.24	715.00	18	1.09%	
615	1234+35 SW	35.30	LT	--	OUTFALL	--	--	--	--	--	--	N/A	--	715.00	--	--	--	OUTFALL
616	1240+85 SW	20.90	LT	14	617	4-FOOT	HM-S	--	--	707.70	706.87	2.97	15	703.90	703.62	14	2.00%	SEE NOTE 7
617	1240+98 SW	26.30	LT	24	618	4-FOOT	HM	--	--	707.78	706.95	3.97	24	702.98	702.57	24	1.71%	SEE NOTE 7
618	1241+11 SW	5.40	LT	7	643	--	--	4-FOOT	HM-S	708.23	707.40	4.83	24	702.57	702.50	7	1.00%	SEE NOTE 7
643	1241+12 SW	1.80	RT	44	619	--	--	4-FOOT	HM-S	708.28	707.45	4.95	24	702.50	702.28	44	0.50%	SEE NOTE 7
619	1240+98 SW	43.80	RT	47	721	MEDIAN 2 GRATE	MS	--	--	705.47	702.28	3.19	24	702.28	702.05	47	0.50%	STR 721 SHOWN ON 7-MILE ROAD PLAN
620	1234+00 SE	18.50	LT	53	621	--	--	4-FOOT	BW	721.81	720.65	6.29	24	714.36	712.00	53	4.00%	
621	1233+94 SE	40.50	RT	--	OUTFALL	--	--	--	--	--	--	N/A	--	712.00	--	--	--	OUTFALL
622	1237+00 SE	18.50	LT	47	623	--	--	4-FOOT	BW	718.03	716.87	4.34	24	712.53	712.00	47	1.00%	
623	1237+00 SE	34.80	RT	--	OUTFALL	--	--	--	--	--	--	N/A	--	712.00	--	--	--	OUTFALL
624	1240+37 SE	18.50	LT	13	626	4-FOOT	BW	--	--	713.46	712.30	3.76	24	708.54	708.41	13	1.00%	
625	1240+50 SE	33.00	LT	15	626	MEDIAN 2 GRATE	MS	--	--	712.84	712.84	4.51	24	708.33	708.03	15	2.00%	
626	1240+50 SE	18.50	LT	29	631	--	--	4-FOOT	BW	713.40	712.24	4.21	24	708.03	707.45	29	2.00%	
627	1240+37 SE	13.60	RT	13	628	4-FOOT	BW	--	--	713.44	712.28	3.22	15	709.06	708.93	13	1.00%	
628	1240+50 SE	14.60	RT	29	629	4-FOOT	BW	--	--	713.44	712.28	3.35	15	708.93	708.64	29	1.00%	
629	1240+79 SE	19.30	RT	38	631	--	--	4-FOOT	CLP	713.53	713.53	5.64	24	707.89	707.51	38	1.00%	PLACE COVER PLATE TEMPORARY
631	1240+79 SE	18.50	LT	63	718	--	--	7-FOOT	CLP	713.50	713.50	6.05	24	707.45	706.19	63	2.00%	PLACE COVER PLATE TEMPORARY
630	1241+07 SE	1.20	RT	34	631	--	--	4-FOOT	CLP	714.14	714.14	6.01	24	708.13	707.45	34	2.00%	PLACE COVER PLATE TEMPORARY
705A	1242+65 NE	30.90	RT	12	632	--	--	--	--	--		N/A	12	710.10	709.98	12	1.00%	SEALING PIPES REQ'D
632	1242+75 NE	25.40	RT	35	633	4-FOOT	BW	--	--	713.95	712.79	3.29	15	709.50	709.15	35	1.00%	
633	1242+69 NE	9.00	LT	15	635	--	--	4-FOOT	J-S	714.20	713.12	4.55	24	708.57	708.27	15	2.00%	
634	1242+77 NE	19.80	LT	18	635	4-FOOT	BW	--	--	714.00	712.84	4.00	15	708.84	708.48	18	2.00%	
635	1242+59 NE	20.70	LT	12	636	--	--	4-FOOT	BW	714.02	712.86	4.81	24	708.05	707.81	12	2.00%	
636	1242+53 NE	31.10	LT	100	719	MEDIAN 2 GRATE	MS	--	--	713.75	713.75	5.95	24	707.81	705.95	100	1.86%	STR 719 SHOWN ON 7-MILE ROAD PLAN
637	1245+50 NE	18.50	LT	10	639	--	--	4-FOOT	BW	721.26	720.10	4.31	24	715.79	715.59	10	2.00%	
638	1245+50 NE	16.50	RT	25	639	4-FOOT	BW	--	--	720.54	719.38	3.71	24	715.67	715.59	25	0.32%	
639	1245+50 NE	9.00	LT	281	633	--	--	6-FOOT	J-S	721.02	719.94	4.35	24	715.59	708.57	281	2.50%	
640	1248+75 NE	18.50	LT	35	641	4-FOOT	BW	--	--	729.75	728.59	3.35	12	725.24	725.14	35	0.30%	
641	1248+75 NE	16.50	RT	40	642	4-FOOT	BW	--	--	728.03	726.87	1.73	12	725.14	725.00	40	0.35%	
642	1249+11 NE	45.50	RT	--	OUTFALL	--	--	--	--	--	--	N/A	--	725.00	--	--	--	OUTFALL
161	1252+75 NE	18.50	LT	9	162	--	--	4-FOOT	BW	731.85	730.69	3.74	15	726.95	726.86	9	1.00%	
168	1253+52 NE	7.00	RT	48	168.1	--	--	4-FOOT	BW	731.13	729.97	5.42	15	724.55	724.31	48	0.50%	
168.1	1254+00 NE	7.00	RT	29	EX. MH	--	--	4-FOOT	BW	730.89	729.73	5.56	15	724.17	723.88	29	1.00%	CONNECT TO EXISTING MANHOLE
171	1256+00 NE	7.00	RT	20	171A	--	--	6-FOOT	BW	729.67	728.51	6.44	24	722.07	721.63	20	2.20%	STR 171 SHOWN ON NE RAMP PLAN
171A	1255+99 NE	26.40	RT	--	EX. PIPE	MEDIAN 2 GRATE	MS	--	--	725.26	725.26	3.63	--	721.63	--	--	--	CONNECT TO EXISTING PIPE
706	350+25	55.50	RT	53	630	MEDIAN 2 GRATE	MS	--	--	715.93	715.93	4.58	24	711.35	709.23	53	4.00%	STR 630 SHOWN ON SE RAMP PLAN
711A	350+35	12.00	RT	8	713	--	--	--	--	--	--	N/A	24	709.41	709.19	8	2.75%	SEALING PIPES REQ'D
712	350+25	8.10	LT	20	713	MEDIAN 2 GRATE	MS	--	--	715.37	715.37	5.78	24	709.59	709.19	20	2.00%	
713	350+27	11.40	RT	37	717	--	--	6-FOOT	J-S	716.50	715.42	6.23	24	709.19	708.26	37	2.51%	
716A	349+90	4.90	RT	8	717	--	--	--	--	--	--	N/A	12	709.54	709.46	8	1.00%	SEALING PIPES REQ'D
717	349+90	12.90	RT	86	719	--	--	4-FOOT	CLP	715.13	715.13	6.87	24	708.26	705.25	86	3.50%	PLACE COVER PLATE TEMPORARY
718	349+04	64.00	RT	47	719	--	--	4-FOOT	J-S	714.00	712.92	6.73	24	706.19	705.25	47	2.00%	

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m022511_ss.dgn PLOT DATE : 6/18/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

STRUCT NUMBER	STATION	OFFSET FT		C-C (FT)	TO STRUCT	INLET TYPE	COVER	MH TYPE	COVER	RIM OR FLANGE ELEV	T.O.S. ELEV	STRUCT DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCHARGE ELEV.	LENGTH (FT)	SLOPE (%)	REMARKS
719	349+04	17.00	RT	211	720	--	--	6-FOOT	J-S	712.47	711.39	6.14	24	705.25	702.09	211	1.50%	
720	346+93	17.00	RT	15	723	--	--	4-FOOT	J-S	709.25	708.17	6.08	24	702.09	701.86	15	1.53%	
721	346+60	39.50	RT	37	723	--	--	4-FOOT	CLP	708.59	708.59	6.54	24	702.05	701.86	37	0.51%	PLACE COVER PLATE TEMPORARY
722A	346+87	4.30	RT	8	723	--	--	--	--	--	--	N/A	12	702.94	702.86	8	1.00%	SEALING PIPES REQ'D
723	346+80	8.70	RT	58	726	--	--	6-FOOT	CLP	709.03	709.03	8.17	36	700.86	700.57	58	0.50%	PLACE COVER PLATE TEMPORARY
725	346+40	39.50	LT	17	726	--	--	4-FOOT	CLP	708.66	708.66	6.75	24	701.91	701.57	17	2.00%	PLACE COVER PLATE TEMPORARY
726	346+32	24.00	LT	117	728	--	--	6-FOOT	J-S	708.82	707.74	7.17	36	700.57	699.98	117	0.50%	
727	345+15	48.50	LT	25	728	--	--	4-FOOT	CLP	707.78	707.78	6.40	24	701.38	701.01	25	1.50%	PLACE COVER PLATE TEMPORARY
728	345+15	24.00	LT	40	732	--	--	6-FOOT	J-S	708.24	707.16	7.18	36	699.98	699.78	40	0.50%	
731A	344+75	16.50	LT	8	732	--	--	--	--	--	--	N/A	12	702.18	702.02	8	2.00%	SEALING PIPES REQ'D
732	344+75	24.00	LT	92	EX. PIPE	--	--	6-FOOT	J-S	708.04	706.96	7.18	36	699.78	699.32	92	0.50%	CONNECT TO EXISTING PIPE
733	345+80	43.50	RT	45	643	2x3-FT	HM-S	--	--	708.20	707.37	3.67	15	703.70	703.25	45	1.00%	SEE NOTE 7

NOTES

1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE
2) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS.
3) PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR END OF PIPE (NOT THE APPRON END OF ENDWALLS)
4) RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE COVER FOR MANHOLES.
5) STRUCTURE DEPTH = RIM ELEV - INVERT - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 0.75 FT FOR J COVERS; 0.5 FT FOR HM AND S COVERS; 0.83 FT FOR TYPE V; 0.67 FOR TYPE B; 0 FT FOR TYPE MS COVERS
   ADJUSTMENT (RINGS) = 0.33 FT FOR B, V, J, HM AND S COVERS; 0 FT FOR TYPE MS COVERS
6) FLAT TOP SLAB WITH CENTERED OPENING REQUIRED ON ALL MANHOLES
7) FLAT TOP SLAB WITH CENTERED 24-INCH X 36-INCH RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE HM OR TYPE HM-S INLET COVERS.
8) REMOVAL OF BULKHEAD IS INCIDENTAL TO PIPE ITEMS
9) LOCATIONS AND DEPTH OF EXISTING STRUCTURES AND PIPES SHALL BE VERIFIED IN THE FIELD

LEGEND

XXE EXISTING STORM SEWER

XXA TEMPORARY PROPOSED STORM SEWER

R/W

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

IH 94 SB

IH 94 NB

SW RAMP

SE RAMP

1226SW 1228SW 1230SW 1232SW 1234SW 1236SW 1238SW

1226SE 1228SE 1230SE 1232SE 1234SE 1236SE 1238SE

1226 1228 1230 1232 1234 1236 1238

CAUTION

CONCTRUCT INLET 50A; PROVIDE TEMPORARY DRAINAGE BY RECONNECTING NB STORM SEWER STRUCTURE INTO THIS INLET.

CONCTRUCT INLET 51A; PROVIDE TEMPORARY DRAINAGE BY RECONNECTING NB STORM SEWER STRUCTURE INTO THIS INLET.

CONCTRUCT INLET 52A; PROVIDE TEMPORARY DRAINAGE BY RECONNECTING NB STORM SEWER STRUCTURE INTO THIS INLET.

50A 50E 51A 51E 52A 52E

SLOPE INTERCEPT (TYP.)

MATCHLINE 1240+00

FINISHED PROFILE AT NB IH 94 PGL

FINISHED PROFILE AT SB IH 94 PGL

PROPOSED 24" SSPRC TRUNKLINE

720.08

717.57

721.11

719.11

723.37

721.30

740 735 730 725 720 715 710 705

PROJECT NO: 1035-01-74	HWY: IH 94/SEVEN MILE ROAD	COUNTY: RACINE	TEMPORARY STORM SEWER: IH 94	SHEET 122	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m022502_ss_temp2.dgn PLOT DATE : 24-MAY-2018 16:09 PLOT BY : vlatifi PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 41a

LEGEND

(XXE) EXISTING STORM SEWER

[XXA] TEMPORARY PROPOSED STORM SEWER

CONCTRUCT INLET 53A; PROVIDE TEMPORARY DRAINAGE BY RECONNECTING NB STORM SEWER STRUCTURE INTO THIS INLET.

CONCTRUCT INLET 54A; PROVIDE TEMPORARY DRAINAGE BY RECONNECTING NB STORM SEWER STRUCTURE INTO THIS INLET.

CONSTRUCT INLET 55A; PROVIDE TEMPORARY DRAINAGE BY MAINTAINING SCUPPER OPENING ON IH 94 NB.

SLOPE INTERCEPT (TYP.)

CAUTION

1244NW 1246NW 1248NW 1250NW 1252NW 1254NW

NW RAMP

WEST FRONTAGE ROAD

MATCHLINE 1240+00

MATCHLINE 1255+00

SEVEN MILE ROAD

53A 54A 55A

IH 94 SB

IH 94 NB

1240 1242 1244 1246 1248 1250 1252 1254

1242NE 1244NE 1246NE 1248NE 1250NE 1252NE 1254NE

NE RAMP

EAST FRONTAGE ROAD

R/W

FINISHED PROFILE AT SB IH 94 PGL

EXISTING PROFILE AT SB IH 94 PGL

53E 54E

PROPOSED 24" SSPRC TRUNKLINE

725.44 726.12 726.57 725.71 725.77

MAINTAIN FLOW THROUGH SCUPPER

745 740 735 730 725 720 715 710

PROJECT NO: 1035-01-74	HWY: IH 94/SEVEN MILE ROAD	COUNTY: RACINE	TEMPORARY STORM SEWER: IH 94	SHEET 123	E

LEGEND

XXX EXISTING STORM SEWER

XXX TEMPORARY PROPOSED STORM SEWER

MATCHLINE 1255+00

CONSTRUCT INLET 56A; PROVIDE TEMPORARY DRAINAGE BY MAINTAINING SCUPPER OPENING ON IH 94 NB.

CONCTRUCT INLET 57A; PROVIDE TEMPORARY DRAINAGE BY CONNECTING TO PROPOSED SS STRUCTURE 188 AND BY MAINTAINING SCUPPER OPENING ON IH 94 NB.

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

IH 94 SB

IH 94 NB

56A

57A

1256NW 1258NW 1260NW 1262NW 1264NW

1256NE 1258NE 1260NE 1262NE 1264NE

1256 1258 1260 1262 1264 1266 1268 1270

R/W

TLE

SLOPE INTERCEPT (TYP.)

FINISHED PROFILE AT SB IH 94 PGL

EXISTING PROFILE AT SB IH 94 PGL

MAINTAIN FLOW THROUGH SCUPPER

PROPOSED 24" SSPRC TRUNKLINE

725.77

188

18" X 8.0' SSPRC CL IV @ 1.00%

720.66

720.50

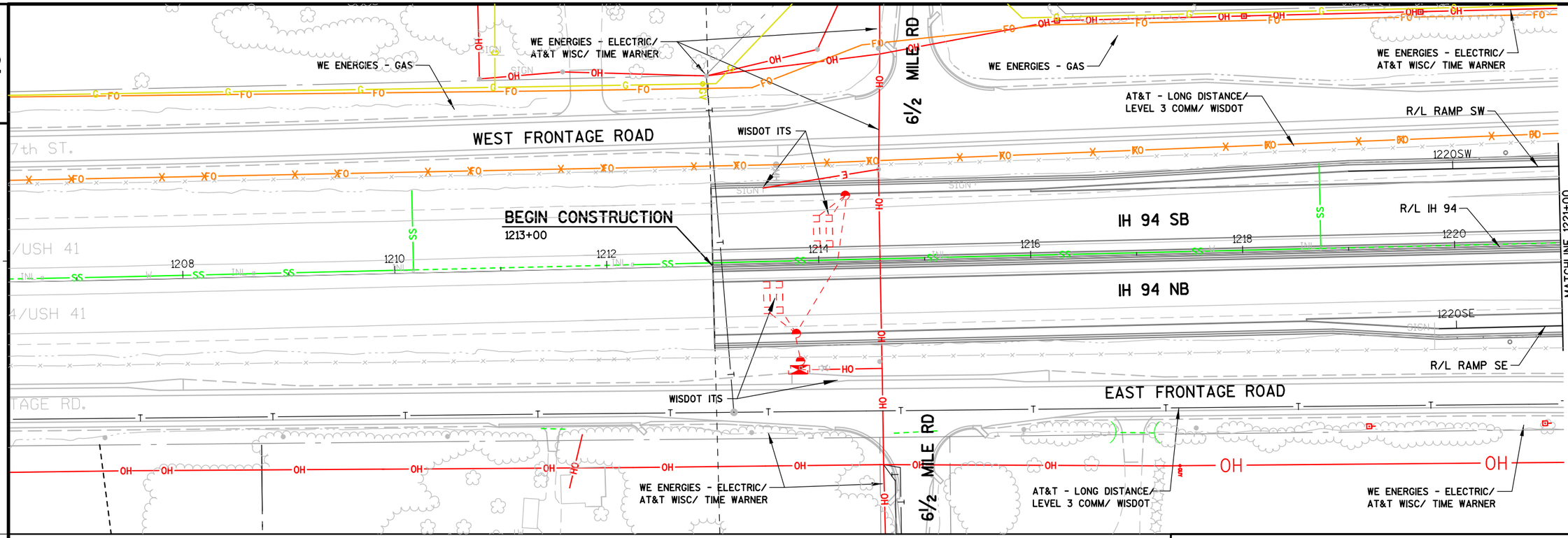
718.46

745 740 735 730 725 720 715 710

PROJECT NO: 1035-01-74	HWY: IH 94/SEVEN MILE ROAD	COUNTY: RACINE	TEMPORARY STORM SEWER: IH 94	SHEET 124	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m022504_ss_temp4.dgn PLOT DATE : 24-MAY-2018 16:09 PLOT BY : vlatifi PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 41a



UTILITY COMPANY	UTILITY LOCATION		FACILITY TYPE	TIMING	ANTICIPATED ACTION
AT&T - LONG DISTANCE	1213+00, 96' LT - 1221+00, 104' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
	1213+00, 138' RT - 1221+00, 149' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
AT&T WISCONSIN	1212+98, 179' LT - 1221+00, 204' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1213+33, 158' RT - 1221+00, 169' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
LEVEL 3 COMMUNICATIONS	1213+00, 96' LT - 1221+00, 104' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
	1213+00, 138' RT - 1221+00, 149' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
TIME WARNER CABLE	1212+98, 179' LT - 1221+00, 204' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1213+33, 158' RT - 1221+00, 169' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
WE ENERGIES - ELECTRIC	1212+98, 179' LT - 1221+00, 204' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1214+57, LT/RT	CROSSING IH 94	OVERHEAD POLE LINE	NA	REMAIN
	1213+33, 158' RT - 1221+00, 169' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
WE ENERGIES - GAS	1212+83, 148' LT - 1221+00, 204' LT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	NA	REMAIN
WISDOT TOC	1213+00, 96' LT - 1221+00, 104' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
	1213+49, 72' LT	EXISTING IH 94	FTMS INTERCHANGE SIGNAGE	NA	REMAIN
	1213+56, 31' RT & 1214+05, 30' LT	EXISTING IH 94	FTMS DETECTOR LOOP AND CONDUIT	NA	REMAIN
	1213+00, 138' RT - 1221+00, 149' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN

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THE TABLE WILL BE REVISED TO MATCH THE INFORMATION IN THE UTILITY WORKPLAN.

NOTES

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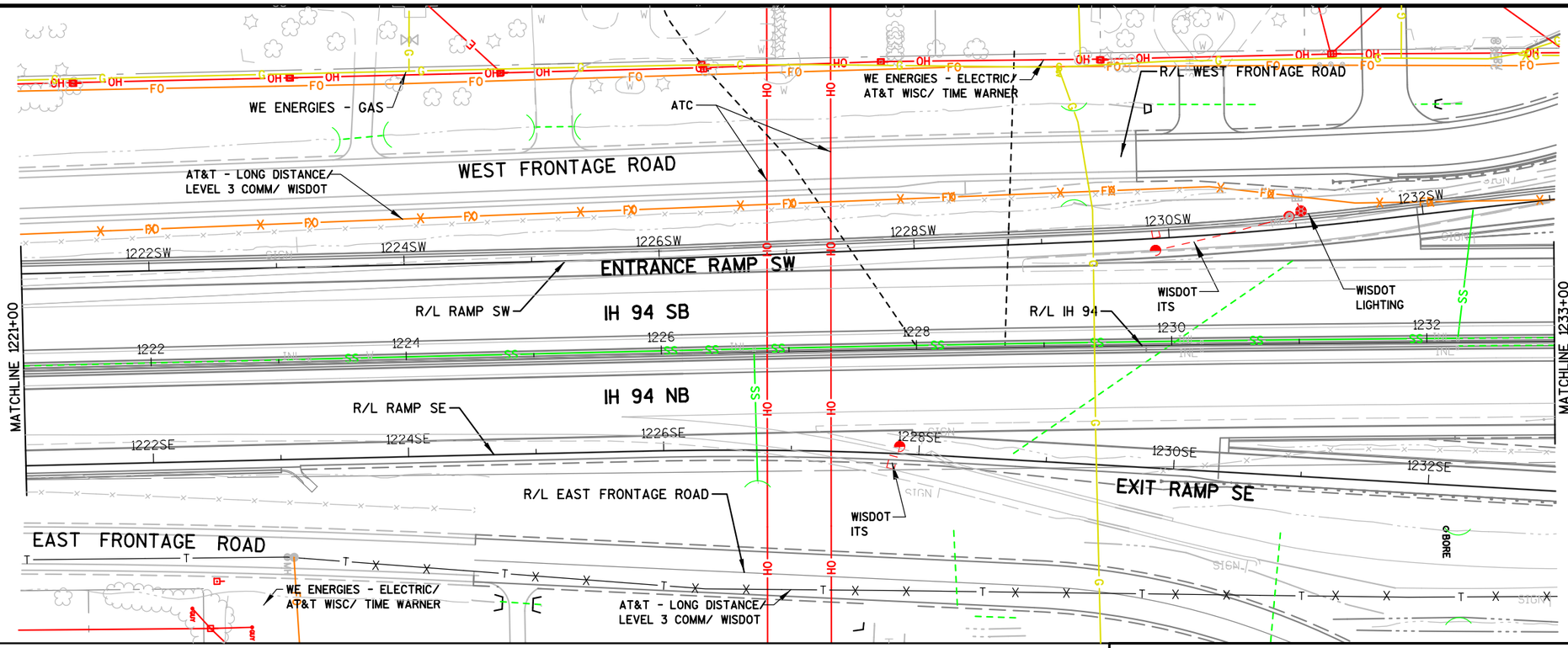
3) CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES, PER STATUTES, BY CALLING DIGGERS HOTLINE OR DIRECTLY CONTACTING THE UTILITY COMPANIES.

LEGEND

EXISTING	PROPOSED	
G	G	GAS
E	E	BURIED ELECTRIC
OH	OH	OVERHEAD UTILITIES
T	T	BURIED TELEPHONE
FO	FO	BURIED FIBER OPTIC
TV	TV	BURIED CABLE TV
W	W	WATER
- - - - -		ITS
SS		STORM SEWER
)======(		CULVERT

FOR REFERENCE ONLY

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	UTILITY OCCUPATION PLAN	SCALE, FEET 0 50 100	SHEET 125 E



UTILITY COMPANY	UTILITY LOCATION		FACILITY TYPE	TIMING	ANTICIPATED ACTION
AMERICAN TRANSMISSION COMPANY	1227+08, LT/RT	CROSSING IH 94	OVERHEAD TRANSMISSION LINE	NA	REMAIN
AT&T - LONG DISTANCE	1221+00, 104' LT - 1233+00, 120' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1221+00, 149' RT - 1233+00, 200' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
AT&T WISCONSIN	1221+00, 224' LT - 1233+00, 226' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1221+00, 149' RT - 1233+00, 258' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
LEVEL 3 COMMUNICATIONS	1221+00, 104' LT - 1233+00, 120' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1221+00, 149' RT - 1233+00, 200' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
TIME WARNER CABLE	1221+00, 224' LT - 1233+00, 226' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1221+00, 149' RT - 1233+00, 258' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
WE ENERGIES - ELECTRIC	1221+00, 224' LT - 1233+00, 226' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1221+00, 149' RT - 1233+00, 258' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
WE ENERGIES - GAS	1221+00, 204' LT - 1233+00, 223' LT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	NA	REMAIN
WISDOT TOC	1221+00, 104' LT - 1233+00, 120' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1229+90SW, 4' LT	IH 94 ENTRANCE RAMP	DETECTOR LOOP AND CONDUIT	PRIOR	RELOCATE
	1221+00, 149' RT - 1233+00, 200' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
	1227+80SE, 7' RT	IH 94 EXIT RAMP	DETECTOR LOOP AND CONDUIT	PRIOR	RELOCATE

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FOR REFERENCE ONLY

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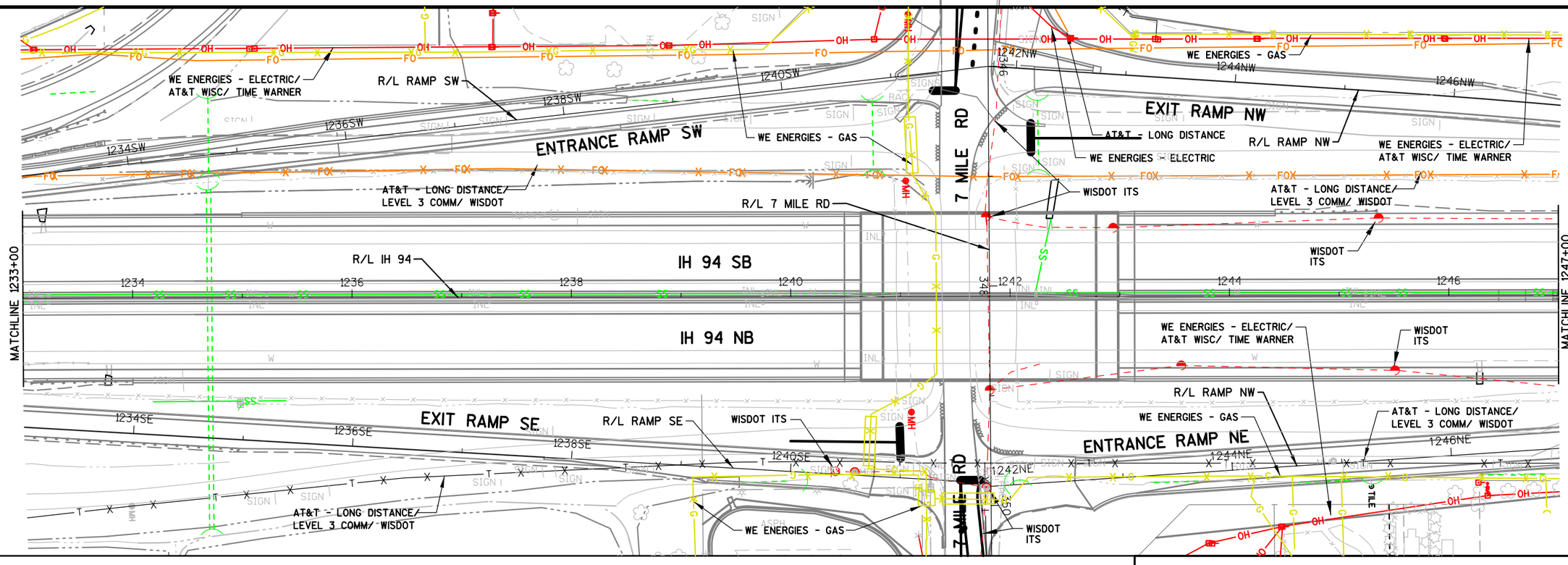
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LEGEND

EXISTING	PROPOSED	
G	G	GAS
E	E	BURIED ELECTRIC
OH	OH	OVERHEAD UTILITIES
T	T	BURIED TELEPHONE
FO	FO	BURIED FIBER OPTIC
TV	TV	BURIED CABLE TV
W	W	WATER
- - - - -		ITS
SS		STORM SEWER
)======(		CULVERT

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	UTILITY OCCUPATION PLAN	SCALE, FEET 0 50 100	SHEET 126	E



UTILITY COMPANY	UTILITY LOCATION		FACILITY TYPE	TIMING	ANTICIPATED ACTION
AT&T - LONG DISTANCE	1233+00, 120' LT - 1247+00, 111' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1233+00, 200' RT - 1247+00, 153' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
AT&T WISCONSIN	1233+00, 226' LT - 1247+00, 234' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
	1233+00, 258' RT - 1247+00, 170' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
LEVEL 3 COMMUNICATIONS	1233+00, 120' LT - 1247+00, 111' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1233+00, 200' RT - 1247+00, 153' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
TIME WARNER CABLE	1233+00, 226' LT - 1247+00, 234' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
	1233+00, 258' RT - 1247+00, 170' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
WE ENERGIES - ELECTRIC	1233+00, 226' LT - 1240+77, 235' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
	345+75, LT / RT & 350+73, LT /RT	CROSSING 7 MILE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE
	1242+55, 235' LT - 1247+00, 234' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
	1233+00, 258' RT - 1241+22, 261' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
	1241+92, 262' RT - 1247+00 170' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / REMAIN
	345+21, 14' LT - 345+75, 76' LT	CROSSING 7 MILE ROAD	UNDERGROUND ELECTRIC SERVICE & PED.	PRIOR	RELOCATE
WE ENERGIES - GAS	1233+00, 223' LT - 1239+75, 225' LT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	ADJUST / REMAIN
	344+73, 74' RT - 349+93, 59' RT	EXISTING 7 MILE ROAD	UNDERGROUND GAS LINE ABANDONED	PRIOR	ADJUST / RELOCATE
	1243+09, 239' LT - 1247+00, 237' LT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	ADJUST / REMAIN
	1239+10, 164' RT - 1241+24, 184' RT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	ADJUST / RELOCATE
	349+95, LT / RT	CROSSING 7 MILE ROAD	UNDERGROUND GAS LINE ABANDONED	PRIOR	ADJUST / RELOCATE
	1239+10, 164' RT - 1241+24, 184' RT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	ADJUST / RELOCATE
	1242+16, 165' RT - 1247+00, 167' RT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	ADJUST / RELOCATE
	1244+23, 164' RT - 1246+88, 167' RT	WEST FRONTAGE ROAD	UNDERGROUND GAS SERVICE	PRIOR	ADJUST
WISDOT TOC	1233+00, 120' LT - 1247+00, 111' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	345+25, 14' LT - 350+59, 11' RT	EXISTING 7 MILE ROAD	CONDUIT AND PULL BOXES	PRIOR	RELOCATE / REMAIN
	1233+00, 200' RT - 1247+00, 153' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE
	1241+78, 73' LT - 1247+00, 70' LT	IH 94 SB LANES	CONDUIT AND PULL BOXES	PRIOR	RELOCATE
	1241+81, 84' RT - 1247+00, 82' RT	IH 94 NB LANES	CONDUIT AND PULL BOXES	PRIOR	RELOCATE

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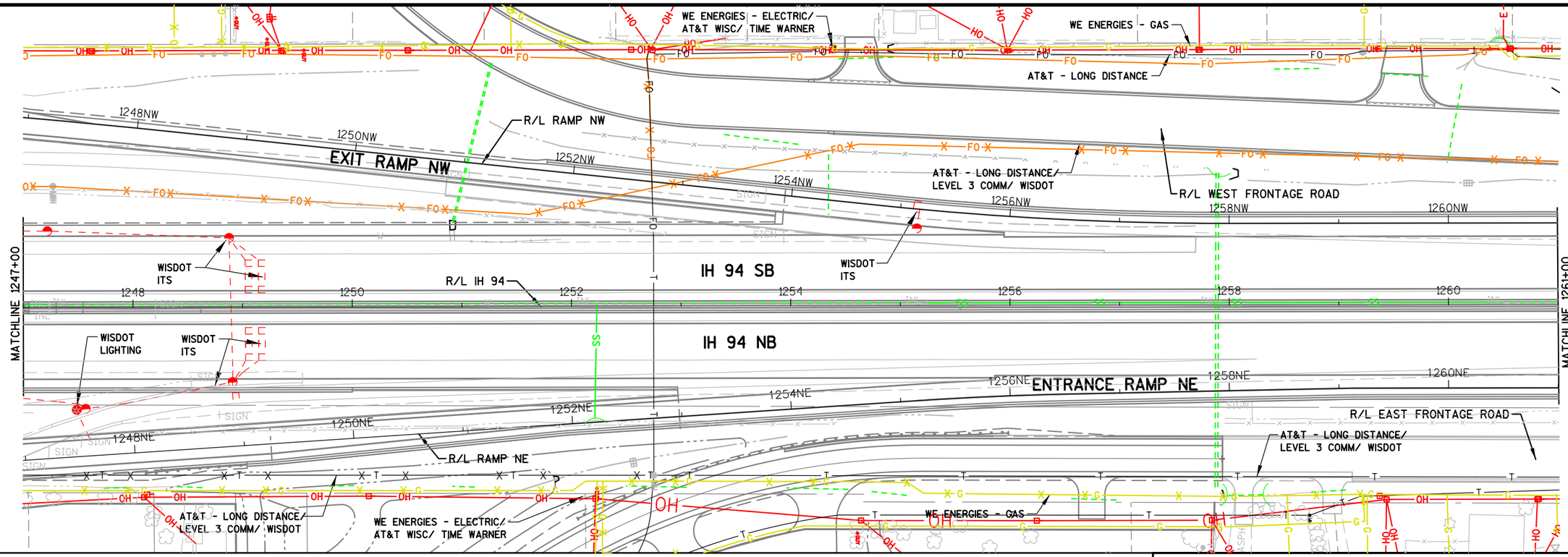
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LEGEND

EXISTING	PROPOSED	
G	G	GAS
E	E	BURIED ELECTRIC
OH	OH	OVERHEAD UTILITIES
T	T	BURIED TELEPHONE
FO	FO	BURIED FIBER OPTIC
TV	TV	BURIED CABLE TV
W	W	WATER
- - - - -		ITS
SS		STORM SEWER
)======(		CULVERT

FOR REFERENCE ONLY

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	UTILITY OCCUPATION PLAN	SCALE, FEET 0 50 100	SHEET 127	E



UTILITY COMPANY	UTILITY LOCATION		FACILITY TYPE	TIMING	ANTICIPATED ACTION
AT&T - LONG DISTANCE	1247+00, 111' LT - 1261+00, 136' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	ADJUST / REMAIN
	1247+00, 153' RT - 1261+00, 157' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE
AT&T WISCONSIN	1247+00, 234' LT - 1261+00, 233' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	ADJUST / REMAIN
	1247+00 170' RT - 1261+00, 176' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / ADJUST
LEVEL 3 COMMUNICATIONS	1247+00, 111' LT - 1261+00, 136' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	ADJUST / REMAIN
	1247+00, 153' RT - 1261+00, 157' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE
TIME WARNER CABLE	1247+00, 234' LT - 1261+00, 233' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	ADJUST / REMAIN
	1247+00 170' RT - 1261+00, 176' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / ADJUST
WE ENERGIES - ELECTRIC	1247+00, 234' LT - 1261+00, 233' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	ADJUST / REMAIN
	1247+00 170' RT - 1261+00, 176' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	PRIOR	RELOCATE / ADJUST
WISDOT LIGHTING	1247+49NE, 43' RT	IH 94 ENTRANCE RAMP	UNDERGROUND GAS LINE	PRIOR	RELOCATE
WE ENERGIES - GAS	1247+00, 237' LT - 1261+00, 229' LT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	RELOCATE / ADJUST
	1247+00 167' RT - 1261+00, 173' RT	EAST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	RELOCATE / ADJUST
WISDOT TOC	1247+00, 111' LT - 1261+00, 136' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	ADJUST / REMAIN
	1247+57NE, 43' LT- 1248+92NE, 59' LT	IH 94 ENTRANCE RAMP	FTMS DETECTOR LOOP AND CONDUIT	PRIOR	RELOCATE
	1247+00, 70' LT - 1848+88, 64' LT	IH 94 SB LANES	CONDUIT AND PULL BOXES	PRIOR	RELOCATE
	1248+89, LT /RT	CROSSING IH 94	FTMS DETECTOR LOOP AND CONDUIT	PRIOR	ADJUST
	1247+00, 70' LT - 1248+91, 68' RT	IH 94 SB LANES	CONDUIT AND PULL BOXES	PRIOR	RELOCATE
	1247+00, 153' RT - 1261+00, 157' RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE

THE INFORMATION PROVIDED IN THIS TABLE IS PROVIDED FOR REFERENCE ONLY TO ASSIST IN THE EARLY IDENTIFICATION OF POTENTIAL UTILITY CONFLICTS. IT IS THE RESPONSIBILITY OF THE UTILITY TO DETERMINE THE EXACT LOCATION OF THEIR FACILITIES AND TO IDENTIFY CONFLICTS WITH THE PROPOSED HIGHWAY IMPROVEMENT PROJECT.

THE TABLE WILL BE REVISED TO MATCH THE INFORMATION IN THE UTILITY WORKPLAN.

FOR REFERENCE ONLY

NOTES

1) ALL UTILITIES ARE UNDERGROUND UNLESS NOTED AS "OH"

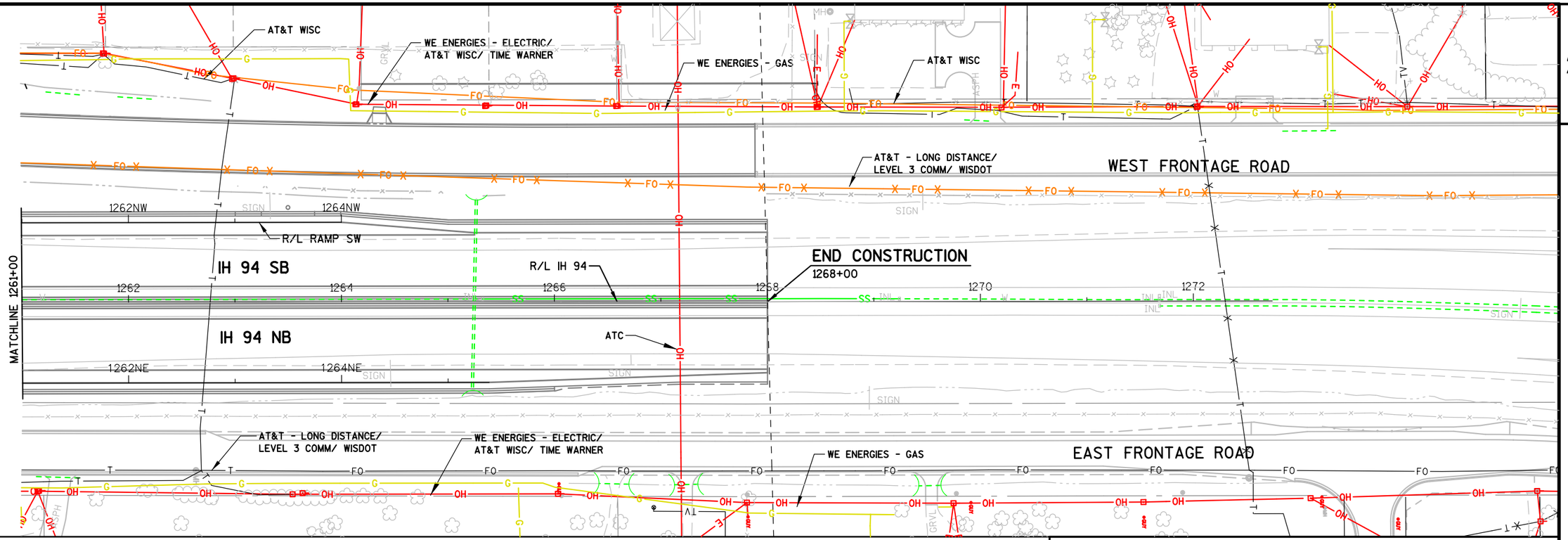
2) DETAILS SHOWN AND LISTED HEREIN ARE PROVIDED FOR INFORMATION ONLY. ACTUAL LOCATION OF EXISTING AND NEW UTILITY FACILITIES MAY VARY FROM THAT SHOWN.

3) CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES, PER STATUTES, BY CALLING DIGGERS HOTLINE OR DIRECTLY CONTACTING THE UTILITY COMPANIES.

LEGEND

EXISTING	PROPOSED	
G	G	GAS
E	E	BURIED ELECTRIC
OH	OH	OVERHEAD UTILITIES
T	T	BURIED TELEPHONE
FO	FO	BURIED FIBER OPTIC
TV	TV	BURIED CABLE TV
W	W	WATER
- - - - -		ITS
SS		STORM SEWER
)======(		CULVERT

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	UTILITY OCCUPATION PLAN	SCALE, FEET 0 50 100	SHEET 128 E



UTILITY COMPANY	UTILITY LOCATION		FACILITY TYPE	TIMING	ANTICIPATED ACTION
AMERICAN TRANSMISSION COMPANY	1267+18, LT/RT	CROSSING IH 94	OVERHEAD TRANSMISSION LINE	NA	REMAIN
AT&T - LONG DISTANCE	1261+00, 136' LT - 1268+00, 110' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1261+00, 157' RT - 1268+00, RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
AT&T WISCONSIN	1261+00, 233' LT - 1268+00, 183' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1261+00, 176' RT - 1267+81, 181' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
LEVEL 3 COMMUNICATIONS	1261+00, 136' LT - 1268+00, 110' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1261+00, 157' RT - 1268+00, RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN
TIME WARNER CABLE	1261+00, 233' LT - 1268+00, 183' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1261+00, 176' RT - 1267+81, 181' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
WE ENERGIES - ELECTRIC	1261+00, 233' LT - 1268+00, 183' LT	WEST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
	1261+00, 176' RT - 1267+81, 181' RT	EAST FRONTAGE ROAD	OVERHEAD POLE LINE	NA	REMAIN
WE ENERGIES - GAS	1261+00, 229' LT - 1268+00, 180' LT	WEST FRONTAGE ROAD	UNDERGROUND GAS LINE	PRIOR	ADJUST / REMAIN
	1261+00, 173' RT - 1268+00, RT	EAST FRONTAGE ROAD	UNDERGROUND GAS LINE	NA	REMAIN
WISDOT TOC	1261+00, 136' LT - 1268+00, 110' LT	WEST FRONTAGE ROAD	BURIED FIBER OPTIC	PRIOR	RELOCATE / REMAIN
	1261+00, 157' RT - 1268+00, RT	EAST FRONTAGE ROAD	BURIED FIBER OPTIC	NA	REMAIN

THE INFORMATION PROVIDED IN THIS TABLE IS PROVIDED FOR REFERENCE ONLY TO ASSIST IN THE EARLY IDENTIFICATION OF POTENTIAL UTILITY CONFLICTS. IT IS THE RESPONSIBILITY OF THE UTILITY TO DETERMINE THE EXACT LOCATION OF THEIR FACILITIES AND TO IDENTIFY CONFLICTS WITH THE PROPOSED HIGHWAY IMPROVEMENT PROJECT.

THE TABLE WILL BE REVISED TO MATCH THE INFORMATION IN THE UTILITY WORKPLAN.

FOR REFERENCE ONLY

NOTES

1) ALL UTILITIES ARE UNDERGROUND UNLESS NOTED AS "OH"

2) DETAILS SHOWN AND LISTED HEREIN ARE PROVIDED FOR INFORMATION ONLY. ACTUAL LOCATION OF EXISTING AND NEW UTILITY FACILITIES MAY VARY FROM THAT SHOWN.

3) CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES, PER STATUTES, BY CALLING DIGGERS HOTLINE OR DIRECTLY CONTACTING THE UTILITY COMPANIES.

LEGEND

EXISTING	PROPOSED	
G	G	GAS
E	E	BURIED ELECTRIC
OH	OH	OVERHEAD UTILITIES
T	T	BURIED TELEPHONE
FO	FO	BURIED FIBER OPTIC
TV	TV	BURIED CABLE TV
W	W	WATER
- - - - - -		ITS
SS		STORM SEWER
)======(		CULVERT

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	UTILITY OCCUPATION PLAN	SCALE, FEET 0 50 100	SHEET 129 E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

DMS TO BE INSTALLED UNDER 1035-01-79 S-51-404

1035-01-79

1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225+00

MATCHLINE

REMOVE
SOUTH 41 EAST 94 SOUTH 41
J4-1(5)

10 MB3-3 M1-1 MB3-2 M1-1 M3-3 M1-4
SOUTH 41 EAST 94 SOUTH 41
J4-3(5)

8 9 REMOVE
EAST 94 MILE 326 .5 D10-5(5)
WEST 94 MILE 326 .5 D10-5(5)

51 MOVE
WEIGHT STATION 1 3/4 MILE
TRUCK OVER 5 TONS USE RIGHT LANE WHEN OPEN
CMS OPEN/CLOSED
MOVE SEE ELECTRICAL SIGN INSTALLED UNDER 1030-25-79

22 MOVE TO STATION 1228+00
RACINE AREA TRAVEL INFO TUNE TO 1700 AM
D12-3

6 7 REMOVE
EAST 94 MILE 326 .4 D10-5A
WEST 94 MILE 326 .4 D10-5A
EAST 94 MILE 326 .4 D10-5(5)
WEST 94 MILE 326 .4 D10-5(5)

3 REMOVE
EXIT 50 M-F'N W13-2

4 REMOVE
EXIT 326 Seven Mile Rd
REMOVE TYPE I SIGN & STEEL SUPPORTS

S-51-23 SIGN BRIDGE TRUSS

5 5A
EXIT 326
TO 241
Seven Mile Rd
EXIT ONLY
INSTALL TYPE I SIGNS 17 X 10, 11 X 2.5, ON SIGN BRIDGE STATION 1220+50

1 2 REMOVE
EAST 94 MILE 326 .6 D10-5A
WEST 94 MILE 326 .6 D10-5A
EAST 94 MILE 326 .6 D10-5(5)
WEST 94 MILE 326 .6 D10-5(5)

50
Caledonia EXIT 326
TYPE I SIGN ON STEEL SUPPORTS

6½ MILE RD.

SHEET 1 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/ SEVEN MILE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

EXIT 327

22 MOVE
RACINE AREA TRAVEL INFO TUNE TO 1700 AM
D12-3
TYPE I SIGN ONTO NEW STEEL POSTS MOVE EXISTING SIGN

12 13 REMOVE
EAST 94 MILE 326 .3 D10-5(5)
WEST 94 MILE 326 .3 D10-5(5)

21 REMOVE
W4-1(5)

52 TRUCKS USE RIGHT 2 LANES MOVE
52A NEXT 2 MILES MOVE
INSTALLED UNDER 1030-25-79

19 20 REMOVE
EAST 94 MILE 326 .2 D10-5(5)
WEST 94 MILE 326 .2 D10-5(5)

17 17A
G
Caledonia
1 MILE
INSTALL TYPE I SIGN ( ) ONTO STEEL SUPPORTS

WEST FRONTAGE ROAD

RAMP SW

IH 94 SB

IH 94 NB

RAMP SE

EAST FRONTAGE ROAD

MATCHLINE 1225+00

1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238

MATCHLINE 1238+50

48 49
W5-53S(2)
MODIFIED ON BARRIER WALL AT STORM SEWER INLET

16 REMOVE
SLOWER TRAFFIC KEEP RIGHT
R4-3
SLOWER TRAFFIC KEEP RIGHT
R4-3(5)

18 EXIT 327
G
Caledonia
1 MILE
REMOVE TYPE I SIGN AND STEEL SUPPORTS

15 EXIT 325
241 NORTH
27Th Street
3/4 MILE
REMOVE EXISTING TYPE I SIGN
REMOVE EXISTING SUPPORTS

14 REMOVE
EXIT 326
E5-1a(5)

EXIT 326
E5-1a(5)
14A W5-54(2M)
14B W5-54(2M)

SHEET 2 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/ SEVEN MILE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

FILE NAME : J:\projects\d2_10350194\74\023212_PS.DGN PLOT DATE : 14-JUN-2018 07:42 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

RAMP SW

RAMP NW

RAMP SE

RAMP NE

IH 94 SB

IH 94 NB

MATCHLINE 1238+50

MATCHLINE 1253+50

1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253

S-51-220

CAMERA POLE

ASPH

GANOPY

FILLER CAPS

A/C

WELL

SEPT

REMOVE

23 24 EAST 94 MILE 326 .1 D10-5(5) WEST 94 MILE 326 .1 D10-5(5)

53 MOVE

WEIGH STATION 2 MILES

TRUCK USE 2 RIGHT LANES

INSTALLED UNDER 1030-25-79

REMOVE

33 34 WEST 94 MILE 326 .0 D10-5(5) EAST 94 MILE 326 .0 D10-5(5)

WEST 94 MILE 326 .0 D10-5(5) EAST 94 MILE 326 .0 D10-5(5)

REMOVE

29 30 EAST 94 MILE 325 .9 D10-5(5) WEST 94 MILE 325 .9 D10-5(5)

32 EXIT 326 E5-1a(5)

32A W5-54(2M)

32B W5-54(2M)

REMOVE

EXIT 326

W5-54 W5-54

REMOVE

25 26 W5-52R W5-52R(5)

INSTALL TYPE II SIGN

27 REMOVE

Oak Creek Franklin NEXT 4 EXITS

Oak Creek Franklin NEXT 4 EXITS

INSTALL TYPE I SIGN ONTO STEEL SUPPORTS REMOVE EXISTING SIGN AND SUPPORTS

28 REMOVE

24 27th St 1/2

Ryan Rd 2 3/4

Drexel Ave 5 3/4

Elm Rd 1 1/4

100 Ryan Rd 2 3/4 (NB)

Drexel Ave 4 3/4

INSTALL TYPE I SIGN 18 X 7.5 ONTO BUTTERFLY SIGN BRIDGE S-51-220

REPLACES S-51-205

31 REMOVE

W4-1

W4-1(5)

SHEET 3 OF 4

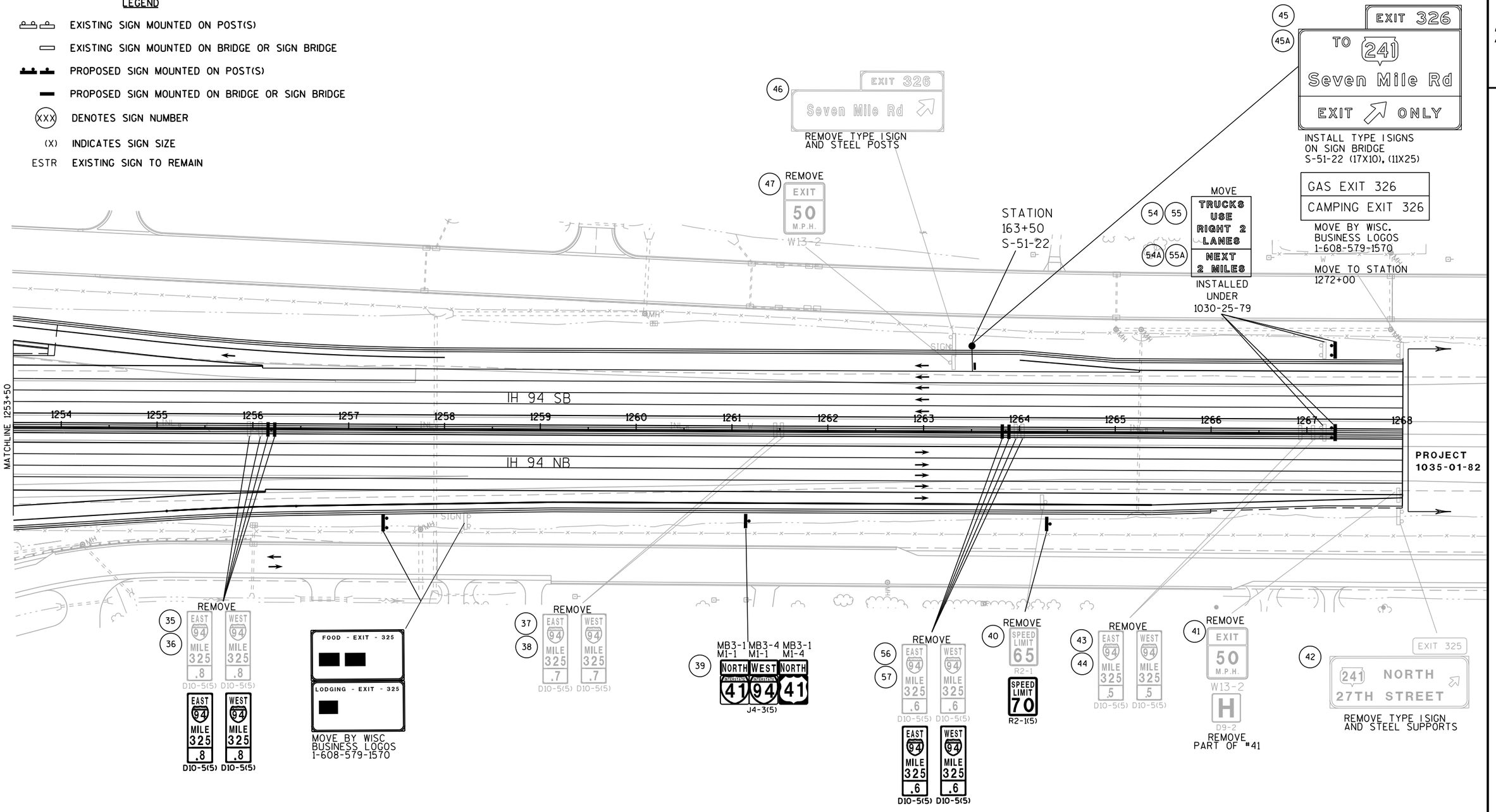
PROJECT NO: 1035-01-74	HWY: IH 94/ SEVEN MILE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

FILE NAME : J:\projects\d2_10350194\74\023213_PS.DGN PLOT DATE : 14-JUN-2018 07:42 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 4 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/ SEVEN MILE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

FILE NAME : J:\projects\d2_10350194\74\023214_PS.DGN PLOT DATE : 14-JUN-2018 07:42 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WEST FRONTAGE RD

SB ENTRANCE RAMP

7 MILE ROAD

IH 94 SB

IH 94 NB

NB EXIT RAMP

EAST FRONTAGE RD

1228SW 1230SW 1232SW 1234SW 1236SW 1238SW 1240SW 1242NW

1228SE 1230SE 1232SE 1234SE 1236SE 1238SE 1240SE 1242NE

1228 1230 1232 1234 1236 1238 1240 1242

344 346 348 350 352

1R01 REMOVE

1R02 1R03 1R04 REMOVE

1R05 SOUTH EAST INTERSTATE 41 INTERSTATE 94 REMOVE

1R06 REMOVE

1R07 NO PARKING ON RAMP EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES REMOVE

1R08 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE

1R09 ROAD WORK AHEAD REMOVE

1R10 FREEWAY ENTRANCE RAMP ONLY RAMP CLOSED REMOVE

1R11 RAMP CLOSED REMOVE

1R12 WRONG WAY REMOVE

1R13 NO PARKING ON RAMP EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES REMOVE

1R14 REMOVE

1R15 ONLY REMOVE

1R16 DO NOT ENTER REMOVE

1R17 GAS 0.1 CAMPING 2.3

INTERSTATE LOGOS-WISCONSIN, RESPONSIBLE FOR SIGN. CONTACT 608-579-1570

1R18 1R19 WRONG WAY REMOVE

1R20 NO PARKING ON RAMP EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES REMOVE

1R21 RAMP CLOSED HWY 94 WEST WHEN FLASHING FOLLOW ALT ROUTE REMOVE

1M01 SOUTH EAST INTERSTATE 41 INTERSTATE 94 MOVE

1M02 MOVE

1M03 STOP ALL WAY MOVE

1M04 SOUTH EAST INTERSTATE 41 INTERSTATE 94 CHICAGO MOVE

1M05 STOP ALL WAY MOVE

1M06 DO NOT ENTER WRONG WAY MOVE

1M07 1M08 STOP ALL WAY MOVE

1M09 ONE WAY MOVE

1M10 ONE WAY MOVE

1M11 DO NOT ENTER WRONG WAY MOVE

1M12 ALTERNATE ALTERNATE INTERSTATE 41 INTERSTATE 94 MOVE

LEGEND

EXISTING SIGN ON WOOD POST

1RXX SIGN NUMBER, REMOVED

NOTE

1) SEE MAINLINE PERMANENT SIGNING SHEETS FOR SIGNS ON IH 94

SHEET 1 OF 2

PROJECT NO: 1035-01-74	HWY: IH 94/ 7 MILE ROAD	COUNTY: RACINE	EXISTING SIGNING	SHEET 134 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m023201_es.dgn PLOT DATE : 07-JUN-2018 22:27 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

7 MILE ROAD

SB EXIT RAMP

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

NB ENTRANCE RAMP

EAST FRONTAGE RD

LEGEND

EXISTING SIGN ON WOOD POST

(2RXX) SIGN NUMBER, REMOVED

2M01 ONE WAY MOVE

2M02 ONE WAY MOVE

2M03 DO NOT ENTER WRONG WAY MOVE

2M04 2M05 STOP ALL WAY MOVE

2M06 STOP ALL WAY MOVE

2M07 NORTH WEST INTERSTATE 41 INTERSTATE 94 MILWAUKEE MOVE

2M08 STOP ALL WAY MOVE

2M09 MOVE

2M10 NORTH WEST INTERSTATE 41 INTERSTATE 94 MOVE

2R01 REMOVE

2R02 GAS 0.1 CAMPING 2.3

INTERSTATE LOGOS-WISCONSIN, RESPONSIBLE FOR SIGN. CONTACT 608-579-1570

2R03 ONLY REMOVE

2R04 NO PARKING ON RAMP EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES REMOVE

2R05 REMOVE

2R06 ONE WAY REMOVE

2R07 DO NOT ENTER WRONG WAY REMOVE

2R08 2R09 WRONG WAY REMOVE

2R10 ONE WAY REMOVE

2R11 REMOVE

2R12 RAMP CLOSED REMOVE

2R13 FREEWAY ENTRANCE RAMP ONLY REMOVE

2R14 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE

2R15 NO PARKING ON RAMP EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES REMOVE

2R16 NORTH WEST INTERSTATE 41 INTERSTATE 94 REMOVE

2R17 2R18 2R19 REMOVE

2R20 REMOVE

2R21 NO PARKING ANY TIME REMOVE

344 346 348 350 352

1242NW 1244NW 1246NW 1248NW 1250NW 1252NW 1254NW 1256NW

1242 1244 1246 1248 1250 1252 1254 1256

1242NE 1244NE 1246NE 1248NE 1250NE 1252NE 1254NE 1256NE

NOTE

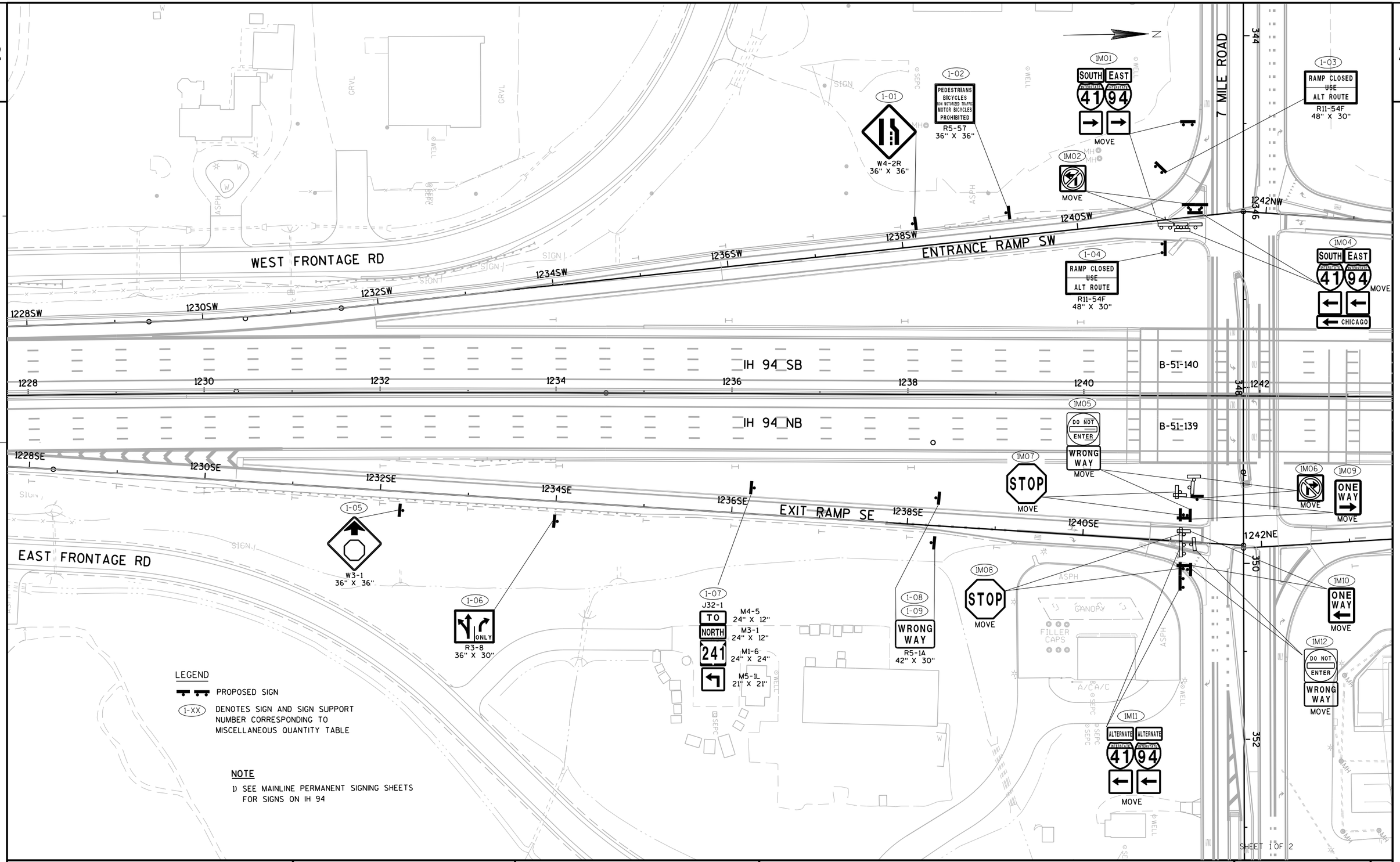
1) SEE MAINLINE PERMANENT SIGNING SHEETS FOR SIGNS ON IH 94

SHEET 2 OF 2

PROJECT NO: 1035-01-74	HWY: IH 94/ 7 MILE ROAD	COUNTY: RACINE	EXISTING SIGNING	SHEET 135	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m023202_es.dgn PLOT DATE : 07-JUN-2018 22:27 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42



LEGEND

PROPOSED SIGN

(1-XX) DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

NOTE

1) SEE MAINLINE PERMANENT SIGNING SHEETS FOR SIGNS ON IH 94

SHEET 1 OF 2

PROJECT NO: 1035-01-74	HWY: IH 94/ 7 MILE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m023212_ps.dgn PLOT DATE : 07-JUN-2018 22:27 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2M01 ONE WAY MOVE

2M02 DO NOT ENTER / WRONG WAY MOVE

2M03 STOP MOVE

2M04 ONE WAY MOVE

2M05 MOVE

2M06 STOP MOVE

2M07 NORTH WEST / 41 94 / MILWAUKEE MOVE

2M09 MOVE

2M10 NORTH WEST / 41 94 MOVE

2-01 YIELD R1-2 36" X 31"

2-02 J33-1 TO NORTH 241 M4-5 24" X 12" M3-1 24" X 12" M1-6 24" X 24" M6-1 21" X 21"

2-03 2-04 WRONG WAY R5-1A 40" X 30"

2-05 J32-1 TO NORTH 241 M4-5 24" X 12" M3-1 24" X 12" M1-6 24" X 24" M5-1R 21" X 21"

2-06 ONLY R3-8 36" X 30"

2-07 W3-1 36" X 36"

2-08 W12-1D 24" X 24" MOUNT SIGN AT 2' HEIGHT TO BOTTOM OF SIGN

2-09 2-10 RAMP CLOSED USE ALT ROUTE R11-54F 48" X 30"

2-11 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 36" X 36"

2-12 W4-2R 36" X 36"

LEGEND

PROPOSED SIGN

(2-XX) PROPOSED SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

N

EXIT RAMP NW

1244NW 1246NW 1248NW 1250NW 1252NW 1254NW 1256NW

WEST FRONTAGE RD

IH 94 SB

B-51-140

SIGN STRUCTURE S-51-220

1242 1244 1246 1248 1250 1252 1254 1256

IH 94 NB

B-51-139

ENTRANCE RAMP NE

1242NE 1244NE 1246NE 1248NE 1250NE 1252NE 1254NE 1256NE

7 MILE ROAD

EAST FRONTAGE RD

NOTE

1) SEE MAINLINE PERMANENT SIGNING SHEETS FOR SIGNS ON IH 94

SHEET 2 OF 2

PROJECT NO: 1035-01-74	HWY: IH 94/ 7 MILE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m023213_ps.dgn PLOT DATE : 07-JUN-2018 22:27 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

FREEWAY LIGHTING AND LOCAL STREET LIGHTING SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTIONS 652 TO 657 AND 659 EXCEPT:

1. DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

2. LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, UNDER THE APPROVAL OF THE ENGINEER. ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED TO ILLUSTRATE AS BUILT CONDITIONS.

3. THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

4. ALL OPEN AND UNTERMINATED CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

5. BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

6. ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

7. PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

8. CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX-TO-PULL BOX, JUNCTION BOX OR BASE-TO-BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

9. PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

10. CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS (.PDF FORMAT) FOR ALL THE WORK BEING DONE.

11. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

12. PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DRAINAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

13. THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT ARE WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

14. HAND DIGGING MAY BE REQUIRED FOR THE LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASES BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

15. UNDERGROUND WIRE & CONDUIT SHOWN ON REMOVAL PLANS FOR REMOVAL SHALL BE ABANDONED IN PLACE UNLESS DIRECTED BY THE ENGINEER. CONTRACTOR MAY CHOOSE TO REMOVE CONDUCTOR AT THEIR OWN EXPENSE.

16. EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACTOR'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.

17. ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.

18. PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINET, PULL BOXES, AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO THE ASSOCIATED CONDUIT PAY ITEM.

19. PROVIDE MINIMUM CABLE SLACK AS MENTIONED BELOW:

PULL BOXES:	10-FT
POLE BASES:	5-FT ONE WAY IN OR OUT
EMBEDDED JUNCTION BOXES:	3-FT
DISTRIBUTION CENTER/LOAD CENTER:	10-FT

STREET LIGHTING PLANS PREPARED BY:

HNTB CORPORATION
111 N CANAL STREET, SUITE 1250
CHICAGO, IL 60606

WISCONSIN PROFESSIONAL ENGINEER
MATTHEW C. DURNING
E-39943
OSWEGO, IL

06/11/2018 (DATE)

Matt Durning (SIGNATURE)

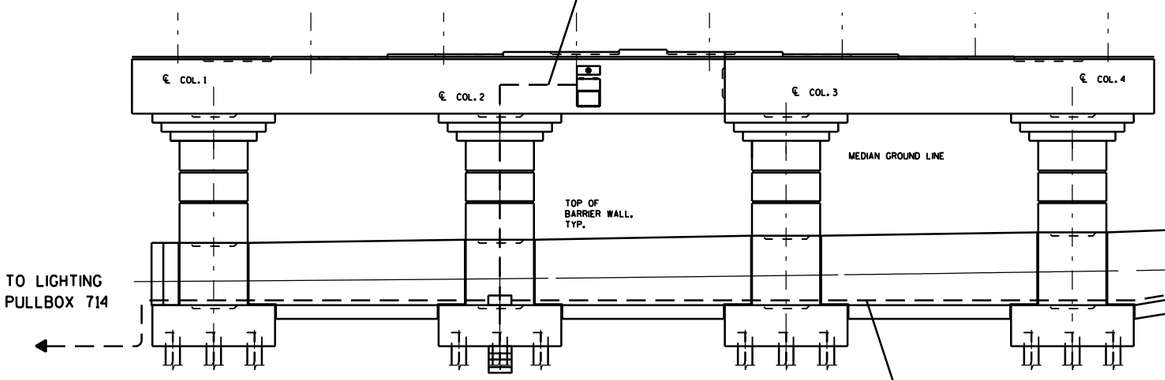
SHEET 1 TO 4

WISCONSIN PROFESSIONAL ENGINEER
MATTHEW C. DURNING
E-39943
OSWEGO, IL

2

N

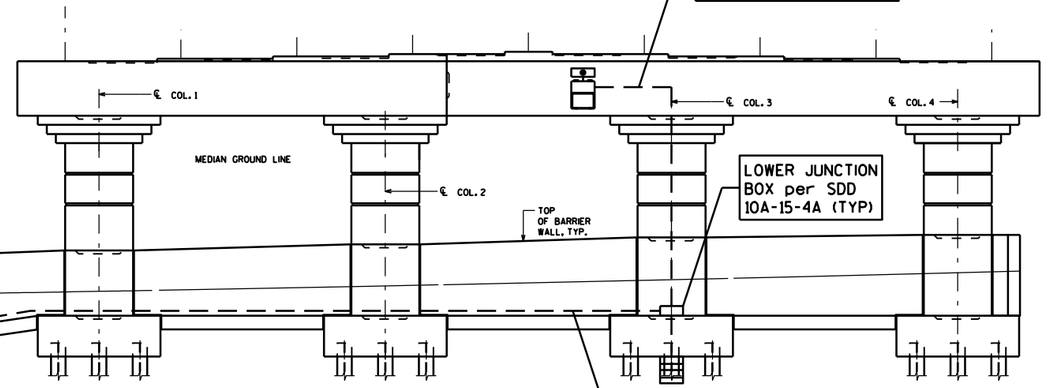
1" FIBER GLASS CONDUIT
3#8 E,F,N
1#8 GND



ELEVATION
(LOOKING NORTH)
(N.T.S.)

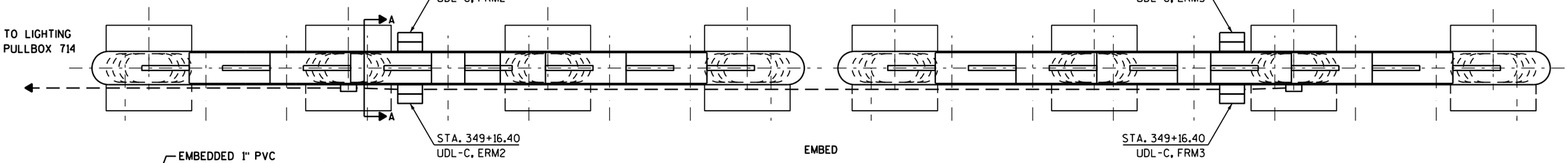
2" CONDUIT, EMBEDDED
3#8 E,F,N
1#8 GND

1" FIBER GLASS CONDUIT
3#8 E,F,N
1#8 GND



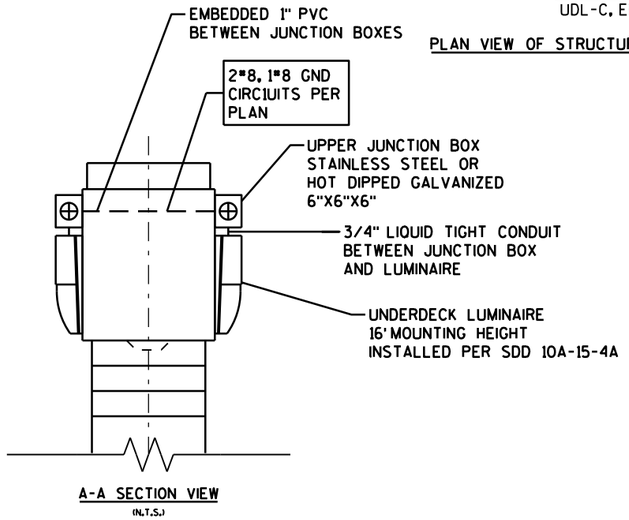
ELEVATION
(LOOKING NORTH)

2" CONDUIT, EMBEDDED
3#8 E,F,N
1#8 GND



PLAN VIEW OF STRUCTURE B-51-139

PLAN VIEW OF STRUCTURE B-51-140



A-A SECTION VIEW
(N.T.S.)

NOTES:

1. CONDUIT EMBEDDED IN BARRIER WALL, LOWER JUNCTION BOXES EMBEDDED IN BARRIER WALL, UPPER JUNCTION BOXES ATTACHED TO PIER CONDUIT, SUMPS. ALL UNDERDECK LUMINAIRES AND ALL CONDUIT AND CONDUCTORS FROM LAST PULLBOX ARE INCLUDED IN UNDERDECK LIGHTING LUMP SUM PAY ITEM.

NOT TO SCALE SHEET 2 OF 4

2

N

7 MILE ROAD

RAMP NW

RAMP NE

RAMP SW

RAMP SE

SB IH 94

NB IH 94

1245NW

1245

1245NE

1240SW

1240

1240SE

LPB701

LPB702

LPB714

NOTE 1

NOTE 2
LPB710

SEE UNDERDECK LIGHTING DETAIL SHEET

HL-51-RM

CANOPY

340

345

350

CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM OLD SOURCE.

NOTES;

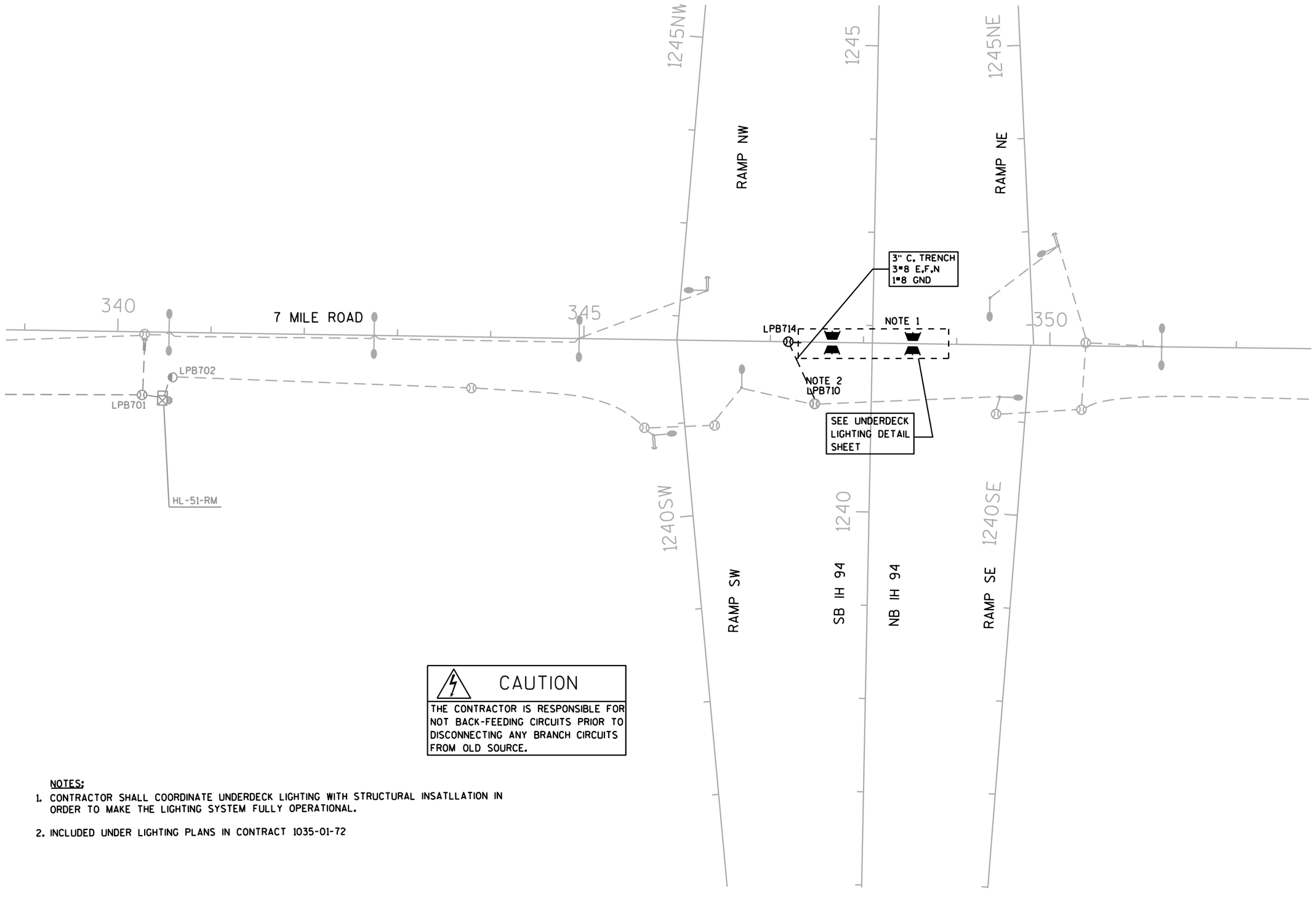
1. CONTRACTOR SHALL COORDINATE UNDERDECK LIGHTING WITH STRUCTURAL INSATLLATION IN ORDER TO MAKE THE LIGHTING SYSTEM FULLY OPERATIONAL.

2. INCLUDED UNDER LIGHTING PLANS IN CONTRACT 1035-01-72

SHEET 3 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	LIGHTING PLAN - FINAL	SHEET 140	E

2



CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM OLD SOURCE.

NOTES:

1. CONTRACTOR SHALL COORDINATE UNDERDECK LIGHTING WITH STRUCTURAL INSATLLATION IN ORDER TO MAKE THE LIGHTING SYSTEM FULLY OPERATIONAL.

2. INCLUDED UNDER LIGHTING PLANS IN CONTRACT 1035-01-72

SHEET 4 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	LIGHTING PLAN - SCHEMATIC	SHEET	E

FILE NAME : \\chiw00\Projects\50858\1035-01-74_7_Mile_UDL\cds\7r023804_lp.dgn PLOT DATE : 6/7/2018 10:55:19 AM PLOT BY : amcomber PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

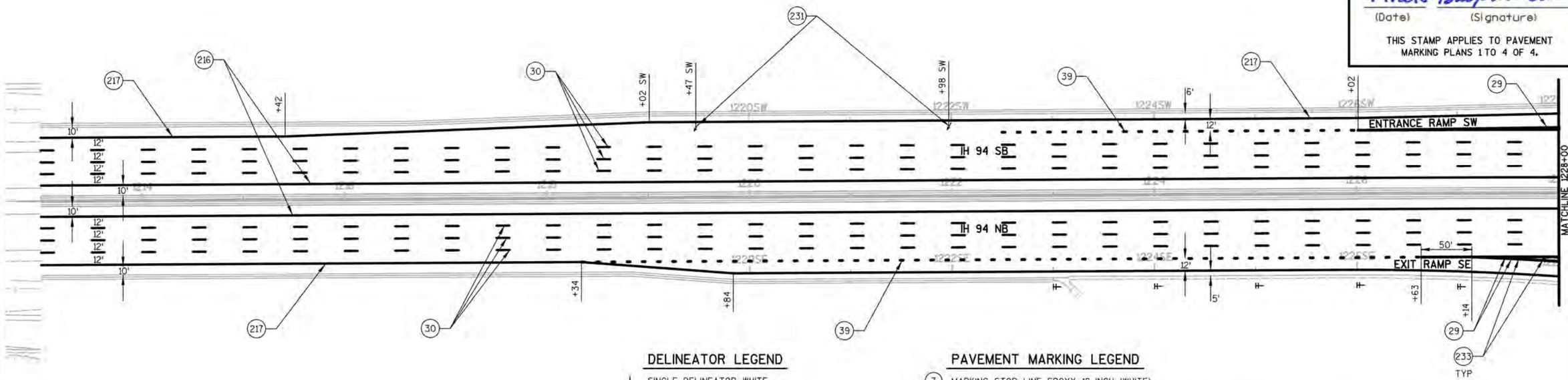
ORIGINAL PLANS PREPARED BY:

STRAND ASSOCIATES®
126 N. JEFFERSON STREET, STE 350
MILWAUKEE, WISCONSIN 53202
(414) 271-0771

WISCONSIN
BHUPENDRA B. BISTA
E - 34675
NEW BERLIN
WI
PROFESSIONAL ENGINEER

6/4/2018 Bhupendra Bista
(Date) (Signature)

THIS STAMP APPLIES TO PAVEMENT MARKING PLANS 1 TO 4 OF 4.



DELINEATOR LEGEND

- SINGLE DELINEATOR, WHITE
- DOUBLE DELINEATOR, WHITE
- SINGLE DELINEATOR ON BARRIER, WHITE

PAVEMENT MARKING LEGEND

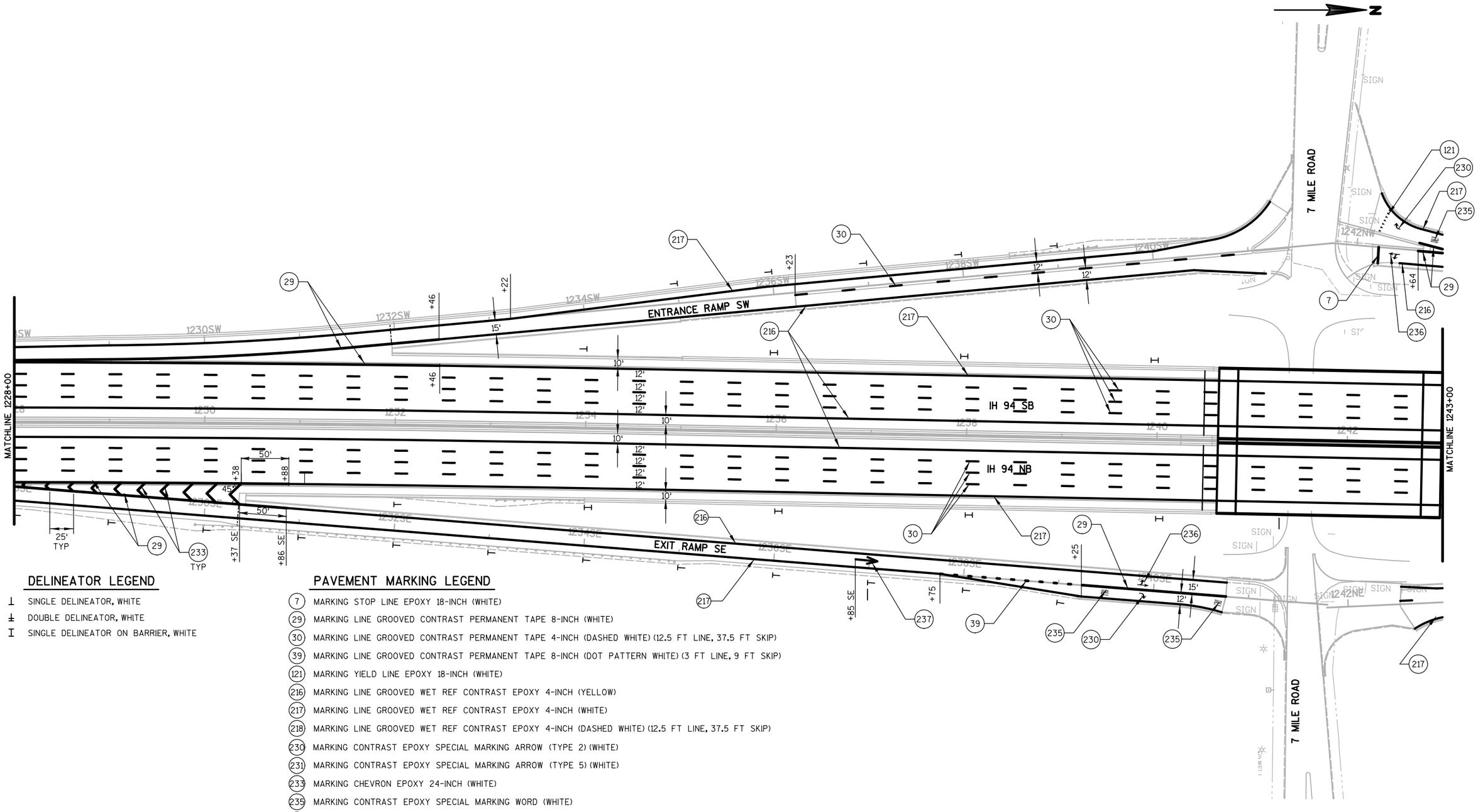
- (7) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (29) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- (30) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)
- (39) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE, 9 FT SKIP)
- (121) MARKING YIELD LINE EPOXY 18-INCH (WHITE)
- (216) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (YELLOW)
- (217) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE)
- (218) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)
- (230) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 2) (WHITE)
- (231) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 5) (WHITE)
- (233) MARKING CHEVRON EPOXY 24-INCH (WHITE)
- (235) MARKING CONTRAST EPOXY SPECIAL MARKING WORD (WHITE)
- (236) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 3) (WHITE)
- (237) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 4) (WHITE)

SHEET 1 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PAVEMENT MARKING	SHEET E

FILE NAME : S:\MIL\1000--1099\1084\001\Micros\10350174_M\Roads\cds\7m024501_pm.dgn PLOT DATE : 6/8/2018 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$,,,,plotscale,,,,,$$ WISDOT/CADDS SHEET 42

2



DELINEATOR LEGEND

- ⊥ SINGLE DELINEATOR, WHITE
- ⫫ DOUBLE DELINEATOR, WHITE
- I SINGLE DELINEATOR ON BARRIER, WHITE

PAVEMENT MARKING LEGEND

- (7) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (29) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- (30) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)
- (39) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE, 9 FT SKIP)
- (121) MARKING YIELD LINE EPOXY 18-INCH (WHITE)
- (216) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (YELLOW)
- (217) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE)
- (218) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)
- (230) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 2) (WHITE)
- (231) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 5) (WHITE)
- (233) MARKING CHEVRON EPOXY 24-INCH (WHITE)
- (235) MARKING CONTRAST EPOXY SPECIAL MARKING WORD (WHITE)
- (236) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 3) (WHITE)
- (237) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 4) (WHITE)

SHEET 2 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PAVEMENT MARKING	SHEET 143	E

DELINEATOR LEGEND

⊥ SINGLE DELINEATOR, WHITE

± DOUBLE DELINEATOR, WHITE

I SINGLE DELINEATOR ON BARRIER, WHITE

PAVEMENT MARKING LEGEND

N

(7) MARKING STOP LINE EPOXY 18-INCH (WHITE)

(29) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)

(30) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)

(39) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE, 9 FT SKIP)

(121) MARKING YIELD LINE EPOXY 18-INCH (WHITE)

(216) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (YELLOW)

(217) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE)

(218) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)

(230) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 2) (WHITE)

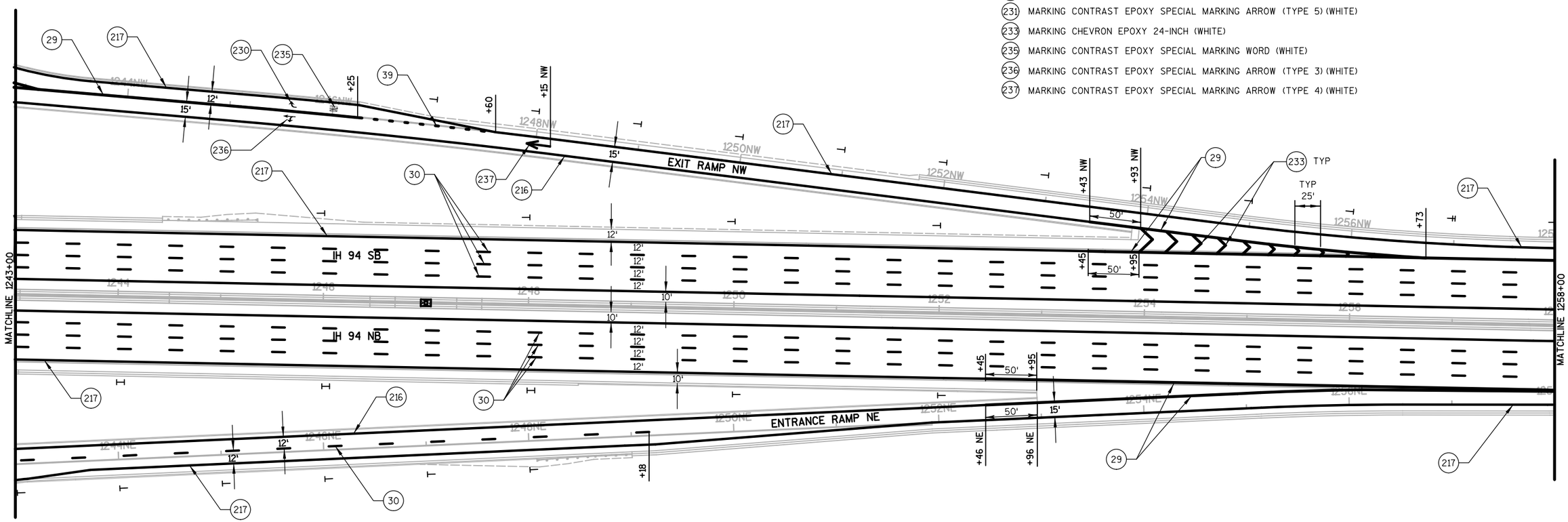
(231) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 5) (WHITE)

(233) MARKING CHEVRON EPOXY 24-INCH (WHITE)

(235) MARKING CONTRAST EPOXY SPECIAL MARKING WORD (WHITE)

(236) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 3) (WHITE)

(237) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 4) (WHITE)



SHEET 3 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PAVEMENT MARKING	SHEET 144	E

DELINEATOR LEGEND

⊥ SINGLE DELINEATOR, WHITE

± DOUBLE DELINEATOR, WHITE

I SINGLE DELINEATOR ON BARRIER, WHITE

PAVEMENT MARKING LEGEND

N

(7) MARKING STOP LINE EPOXY 18-INCH (WHITE)

(29) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)

(30) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)

(39) MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE, 9 FT SKIP)

(121) MARKING YIELD LINE EPOXY 18-INCH (WHITE)

(216) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (YELLOW)

(217) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE)

(218) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE, 37.5 FT SKIP)

(230) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 2) (WHITE)

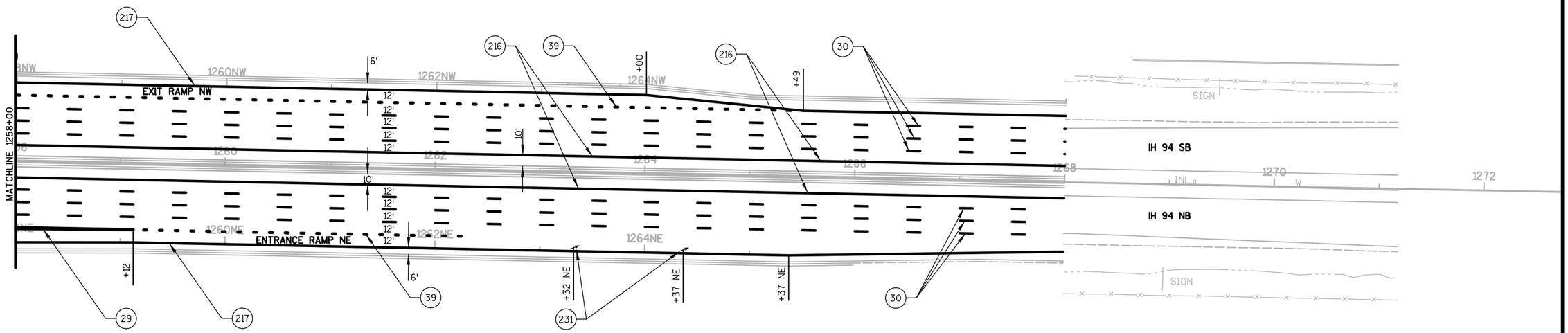
(231) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 5) (WHITE)

(233) MARKING CHEVRON EPOXY 24-INCH (WHITE)

(235) MARKING CONTRAST EPOXY SPECIAL MARKING WORD (WHITE)

(236) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 3) (WHITE)

(237) MARKING CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 4) (WHITE)



SHEET 4 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE RD	COUNTY: RACINE	PAVEMENT MARKING	SHEET 145	E

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WISDOT/CADDS SHEET 42

2

MARKING LEGEND

APPLICABLE TO ALL TRAFFIC CONTROL SHEETS IN THIS PLAN SET.

- 1 MARKING LINE EPOXY 4-INCH (YELLOW)
- 2 MARKING LINE EPOXY 4-INCH (WHITE)
- 3 MARKING LINE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- 4 MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- 5 MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- 6 MARKING LINE EPOXY 8-INCH (WHITE)
- 7 MARKING STOP LINE EPOXY 18-INCH (WHITE)
- 14 MARKING WORD EPOXY (WHITE)
- 15 MARKING ARROW EPOXY TYPE 1
- 16 MARKING ARROW EPOXY TYPE 2
- 17 MARKING ARROW EPOXY TYPE 3
- 20 MARKING CURB EPOXY (YELLOW)
- 21 MARKING ISLAND NOSE EPOXY
- 23 MARKING LINE PAINT 4-INCH (YELLOW)
- 24 MARKING LINE PAINT 4-INCH (WHITE)
- 25 MARKING LINE PAINT 8-INCH (WHITE)
- 26 MARKING LINE PAINT 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- 29 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 30 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- 32 TEMPORARY RAISED PAVEMENT MARKERS TYPE I(WHITE)
- 36 MARKING LINE EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)
- 37 MARKING LINE EPOXY 4-INCH (DOT PATTERN YELLOW) (3 FT LINE 9 FT SKIP)
- 38 PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)
- 39 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- 44 MARKING LINE PAINT 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- 45 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- 46 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 49 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- 50 TEMPORARY MARKING REMOVABLE TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- 51 TEMPORARY MARKING REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- 54 MARKING LINE PAINT 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
- 55 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE)
- 56 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 239 TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
- 240 TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
- 241 TEMPORARY MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- 242 TEMPORARY MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

1) ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48' UNLESS OTHERWISE NOTED IN THE PLANS.

2) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

3) TRAFFIC CONTROL DRUMS IN TAPERS, SHALL BE EQUIPPED WITH TRAFFIC CONTROL WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY, UNLESS OTHERWISE SHOWN, DRUMS SHALL BE SPACED AT 25-FT OC IN TAPERS AND 50-FT OC ON TANGENTS OR AS OTHERWISE SHOWN.

4) SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.

5) ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.

6) ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. COVERING WILL BE PAID FOR AS "TRAFFIC CONTROL COVERING SIGNS TYPE I" OR AS "TRAFFIC CONTROL COVERING SIGNS TYPE II".

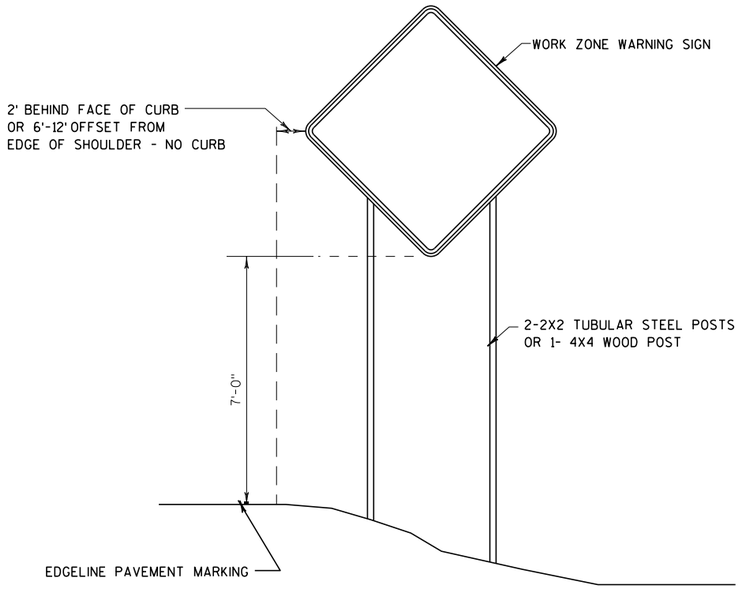
7) CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

8) BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.

9) ALL TRAFFIC CONTROL SIGNS LOCATED IN MEDIAN ARE TO BE MOUNTED ON MEDIAN BARRIER, SEE CONSTRUCTION DETAILS.

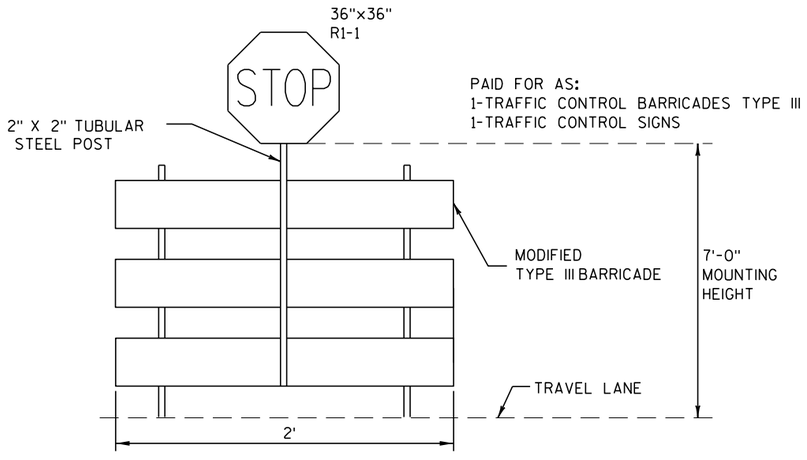
LEGEND

- TYPE III BARRICADE WITH LIGHTS TYPE A
- TYPE III BARRICADE WTH LIGHTS TYPE A AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN LIGHT TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CC CRASH CUSHION TEMPORARY
- PCMS TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC CONTROL FIXED MESSAGE SIGNS (SURFACE MOUNT)
- TRAFFIC CONTROL FIXED MESSAGE SIGNS (GROUND MOUNT)
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- TEMPORARY SHORING (SHEET PILING)
- TEMPORARY PAVING
- TBC ANCHORAGES FOR STEEL PLATE BEAM GUARD TEMPORARY
- SC CORRUGATIONS (SAWED IN) DURING STAGE 5
- GS GLARE SCREEN TEMPORARY
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- 98 SINGLE DELINEATOR
- 99 DOUBLE DELINEATOR

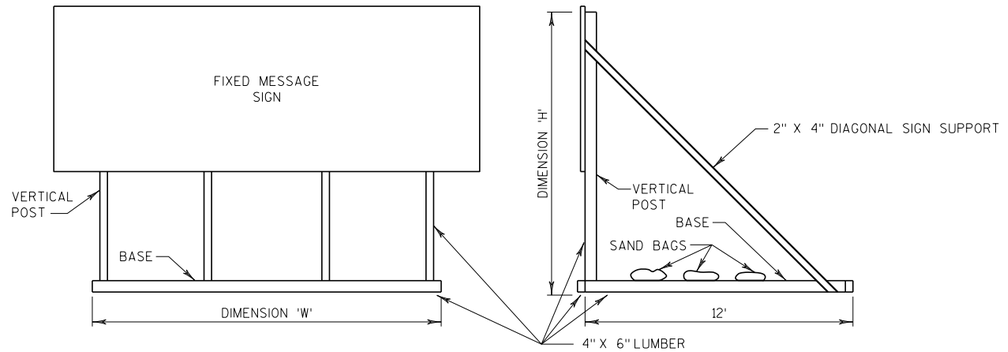


TYPICAL TEMPORARY TRAFFIC CONTROL SIGN MOUNTING ON FIXED SUPPORT

LONG TERM
7 DAYS OR MORE

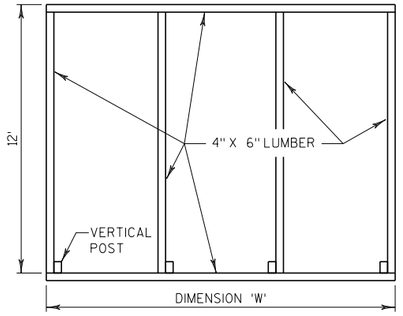


TEMPORARY STOP SIGN



FRONT VIEW

SIDE VIEW



BASE PLAN VIEW

ANTICIPATED DIMENSIONS & POSTS REQUIRED
(FOR INFORMATION ONLY, CONTRACTOR IS TO VERIFY)

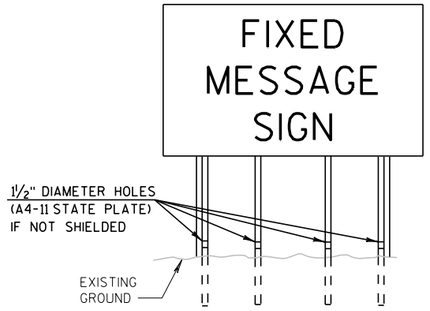
SIGN NO.	'W' (FT)	'H' (FT)	NO. OF POSTS OF HEIGHT 'H'
1712	8'	7.5'	3
1713	9'	5.5'	3
1715	11.5'	8'	3

NOTES

1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. TWO DIAGONAL SUPPORTS SHALL BE INCLUDED AND AFFIXED TO THE OUTSIDE SUPPORTS.
3. DIAGONAL SUPPORTS, VERTICAL POSTS AND BASE LUMBER ARE ALL INCLUDED IN THE "FIXED MESSAGE SIGN PORTABLE SUPPORT" ITEM.
4. PROVIDE AN ADEQUATE NUMBER OF SAND BAGS TO HOLD THE SIGN IN PLACE. SAND BAGS ARE INCLUDED IN THE "FIXED MESSAGE SIGN PORTABLE SUPPORT" ITEM.
5. SEE "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS" SIGN PLATE FOR ADDITIONAL REQUIREMENTS.

FIXED MESSAGE SIGN PORTABLE SUPPORT SPECIAL

NOTE,
THIS INSTALLATION METHOD ONLY ALLOWED
WHEN BEHIND BARRIER WALL OR GUARDRAIL
WHERE POSTS CANNONT BE INSTALLED INTO GROUND



FRONT VIEW

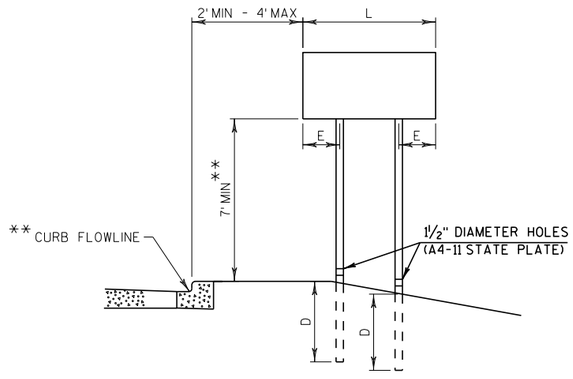
NOTES

1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. SEE TABLES BELOW FOR REQUIRED NUMBER OF POSTS.

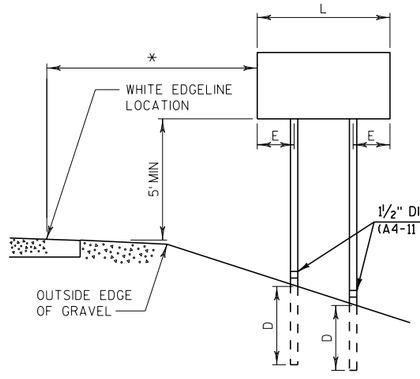
* 6' FROM EDGE OF A PAVED SHOULDER OR 12' FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) OR 2' FROM OUTSIDE EDGE OF GRAVEL, WHICHEVER IS GREATER UNLESS DIRECTED BY PROJECT ENGINEER.

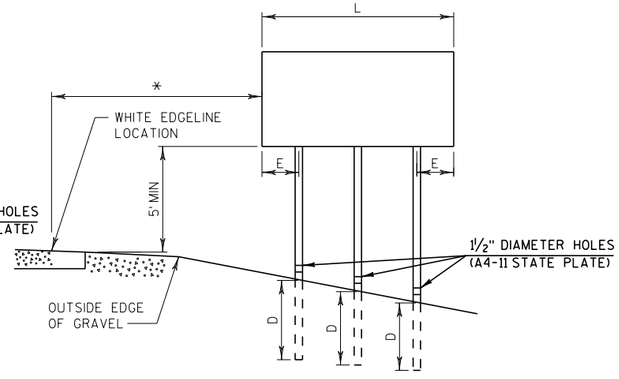
** THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5' MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

3. 4X6 WOOD POSTS SHALL HAVE TWO HOLES PER STATE PLATE A4-11



URBAN AREA





RURAL AREA

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
GREATER THAN 48" LESS THAN 60"	12"
60" TO 120"	L/5

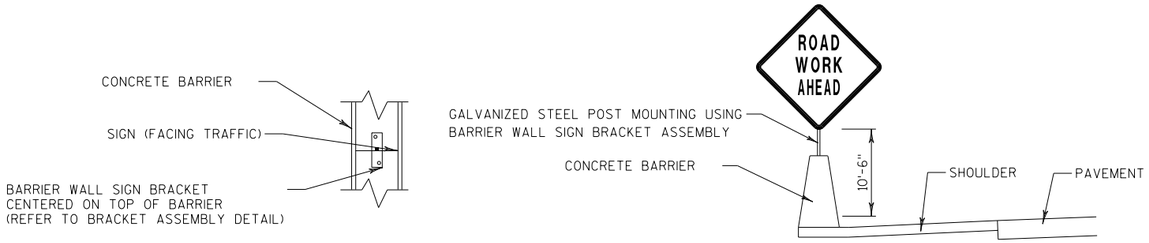
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
GREATER THAN 120" LESS THAN 168"	12"

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'

POST MOUNTING DETAIL FOR TRAFFIC CONTROL FIXED MESSAGE SIGNS



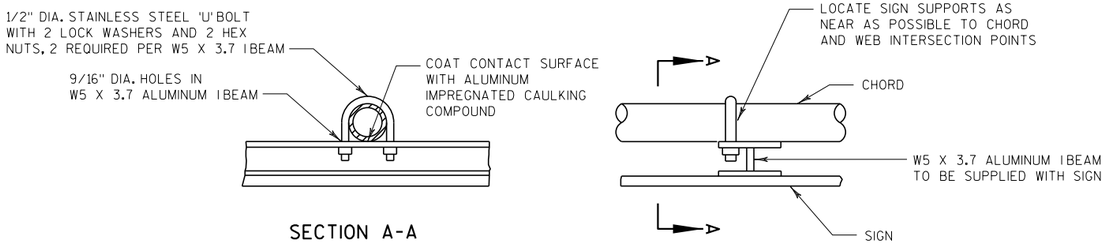
PLAN VIEW

SIDE VIEW

MEDIAN BARRIER MOUNTING DETAIL

MOUNTING DETAILS FOR SIGNS MOUNTED TO MEDIAN BARRIER

NOT TO SCALE



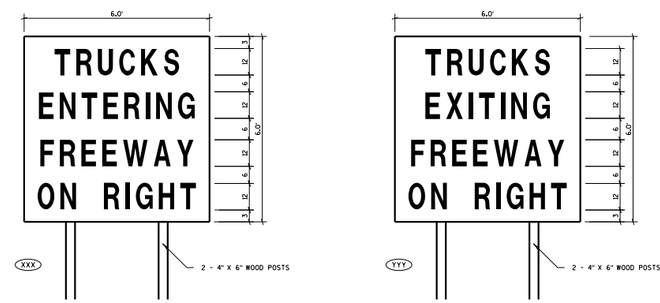
SECTION A-A

TYPICAL SIGN CONNECTION

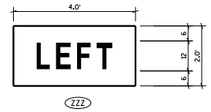
FOR USE WHEN MOUNTING SIGNS TO EXISTING SIGN BRIDGE TRUSS
INCIDENTAL TO OTHER SIGN ITEMS

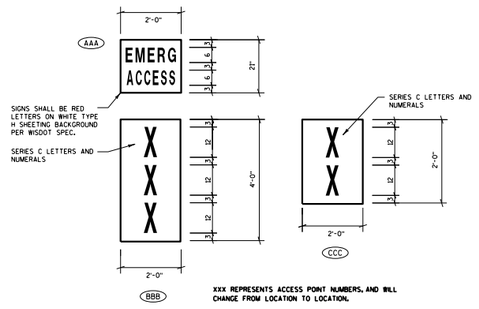
NOTE TO DESIGNER:
For mounting signs to existing overhead sign supports,
utilize sign plate A4-7.1

2



FIXED MESSAGE SIGNS





XXX REPRESENTS ACCESS POINT NUMBERS, AND WILL CHANGE FROM LOCATION TO LOCATION.

EMERGENCY ACCESS SIGNS

NOTES

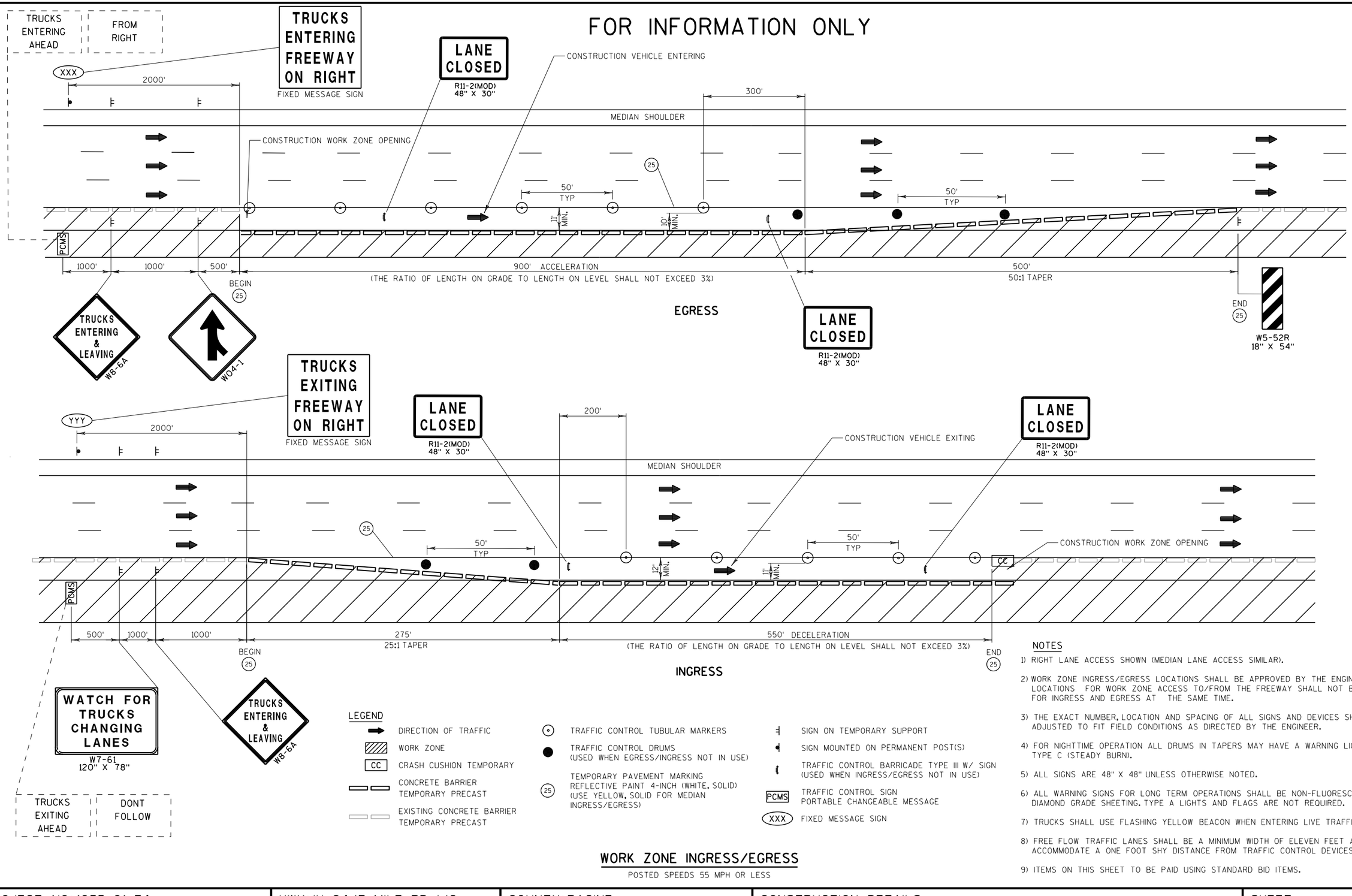
1. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE SIGNING AND MARKING SUPERVISOR SHALL VERIFY EACH SIGN LOCATION.
2. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"x6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN. STEEL POSTS (2"X2") MAY BE USED FOR SIGNS ON SURFACE 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 SIGN SUPPORTS.
3. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".
4. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE TYPE F REFLECTIVE BACKGROUND UNLESS OTHERWISE NOTED.
5. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS: 12" AND 8" CAPS SHALL BE SERIES "D", 6" CAPS SHALL BE SERIES "C" UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.
7. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 637.2.1.2..
8. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

(XXX) = FIXED MESSAGE SIGN NUMBER

111015

WORK ZONE INGRESS/EGRESS

FOR INFORMATION ONLY



LEGEND

- DIRECTION OF TRAFFIC
- WORK ZONE
- CC — CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL TUBULAR MARKERS
- TRAFFIC CONTROL DRUMS (USED WHEN EGRESS/INGRESS NOT IN USE)
- 25 — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE, SOLID) (USE YELLOW, SOLID FOR MEDIAN INGRESS/EGRESS)
- SIGN ON TEMPORARY SUPPORT
- SIGN MOUNTED ON PERMANENT POST(S)
- TRAFFIC CONTROL BARRICADE TYPE III W/ SIGN (USED WHEN INGRESS/EGRESS NOT IN USE)
- PCMS — TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- XXX — FIXED MESSAGE SIGN

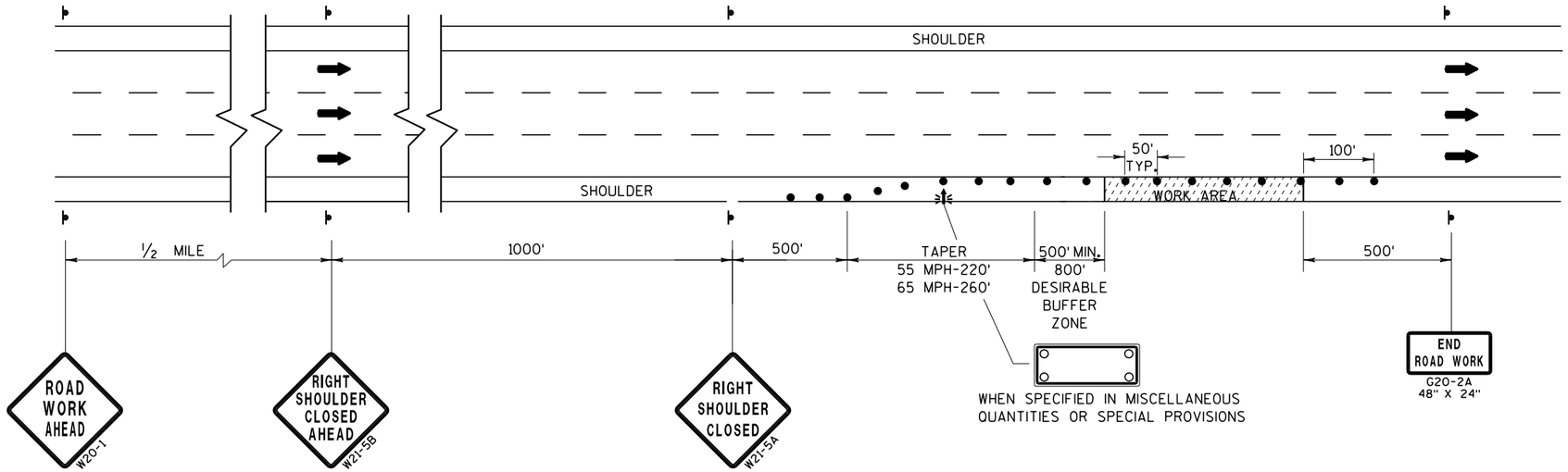
WORK ZONE INGRESS/EGRESS

POSTED SPEEDS 55 MPH OR LESS

NOTES

1) RIGHT LANE ACCESS SHOWN (MEDIAN LANE ACCESS SIMILAR).
2) WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.
3) THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
4) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS MAY HAVE A WARNING LIGHT, TYPE C (STEADY BURN).
5) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
6) ALL WARNING SIGNS FOR LONG TERM OPERATIONS SHALL BE NON-FLUORESCENT DIAMOND GRADE SHEETING. TYPE A LIGHTS AND FLAGS ARE NOT REQUIRED.
7) TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING LIVE TRAFFIC.
8) FREE FLOW TRAFFIC LANES SHALL BE A MINIMUM WIDTH OF ELEVEN FEET AND ACCOMMODATE A ONE FOOT SHY DISTANCE FROM TRAFFIC CONTROL DEVICES.
9) ITEMS ON THIS SHEET TO BE PAID USING STANDARD BID ITEMS.

100813



LEGEND

- DRUM
- SIGN ON PERMANENT SUPPORT 4 DAYS OR MORE (LONG TERM)
- SIGN ON TEMPORARY SUPPORT
- ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN, LEFT LANE CLOSURE SIMILAR.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

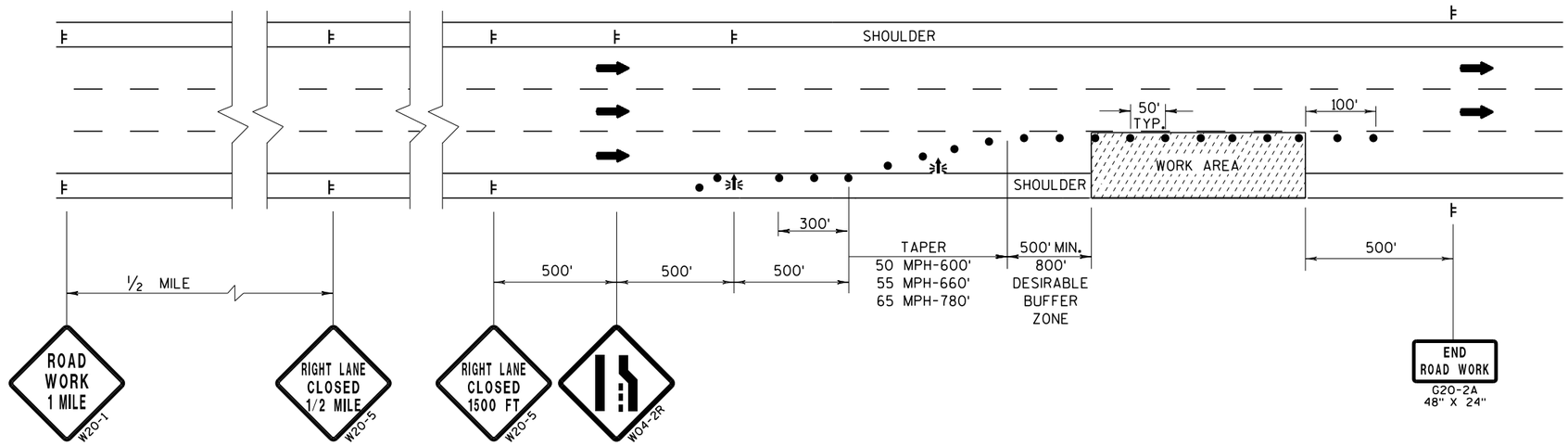
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

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.

SHOULDER CLOSURE-SPEEDS 45 MPH OR GREATER

TYPICAL ONE-LANE CLOSURE LESS THAN 7 DAYS



LEGEND

- DRUM
- SIGN ON TEMPORARY SUPPORT
- ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN, LEFT LANE CLOSURE SIMILAR.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

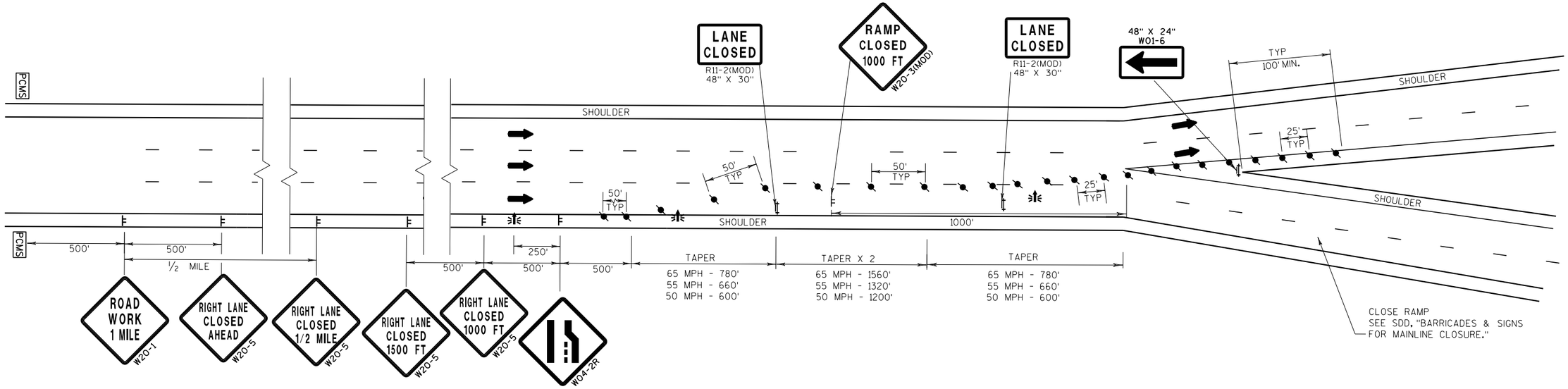
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS.

SPEEDS 45 OR GREATER



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- 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

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN)

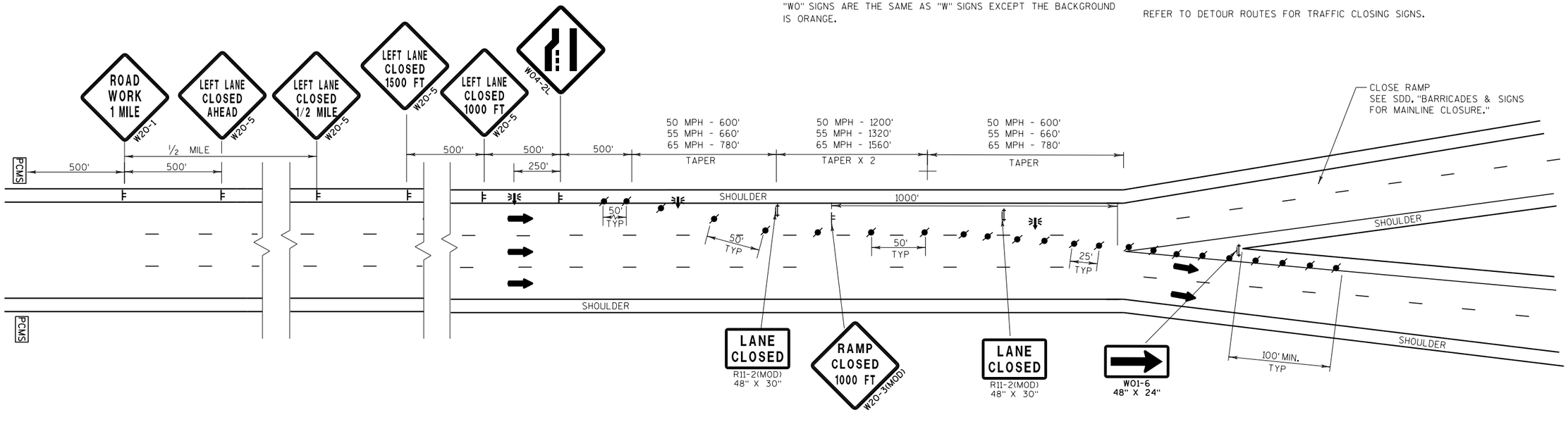
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

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.

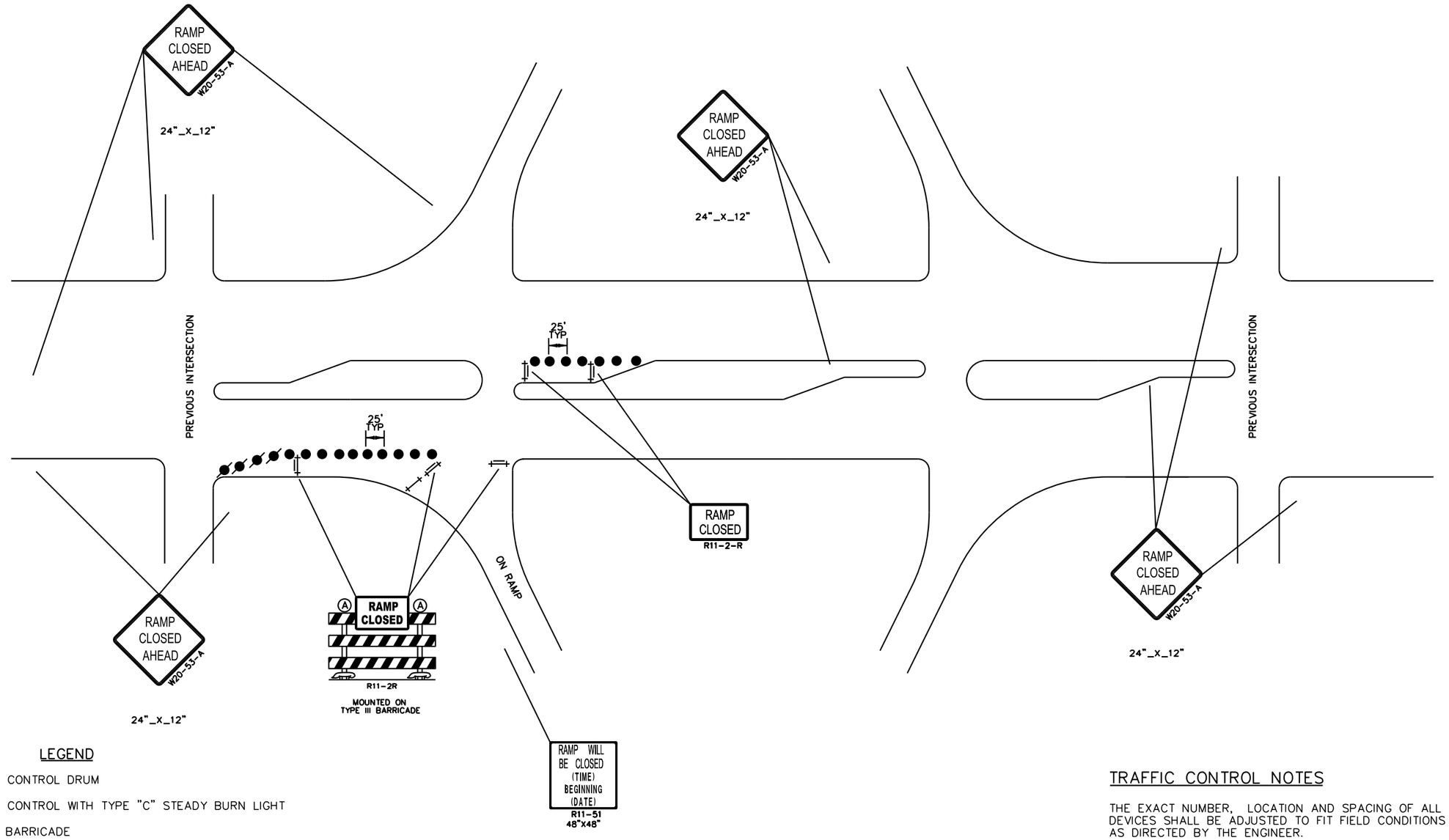
REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.



TYPICAL ONE-LANE NIGHT TIME CLOSURE

090805

2



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH 2 TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
SHORT TERM ONLY

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

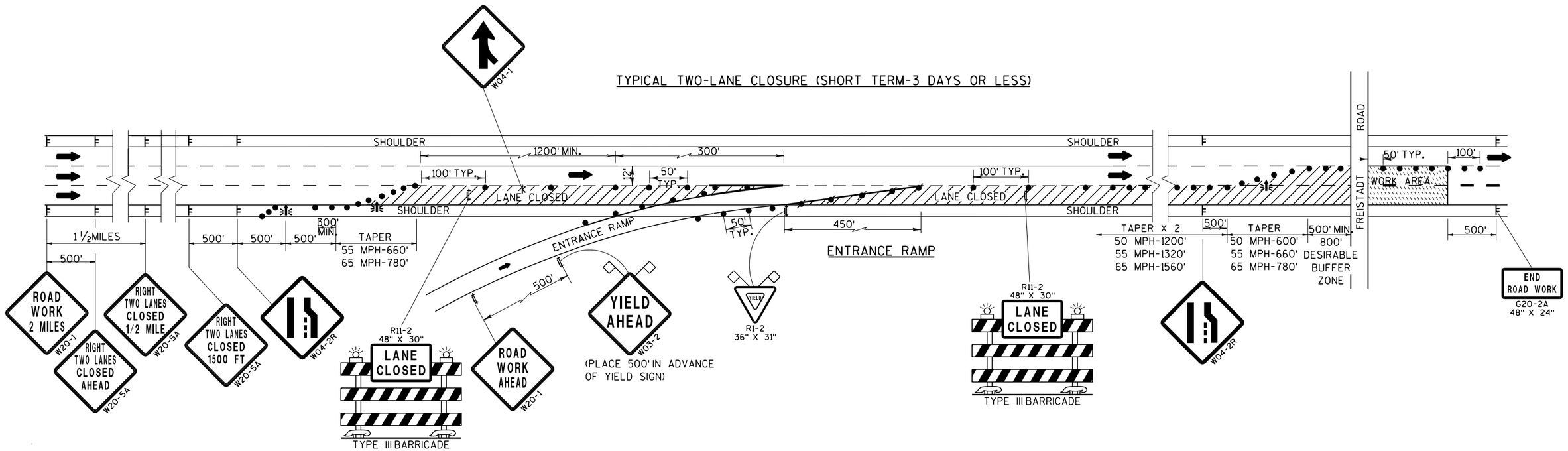
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SHORT TERM DEFINED AS 7 DAYS/NIGHTS OR LESS. FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WARNING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

2

TYPICAL TWO-LANE CLOSURE (SHORT TERM-3 DAYS OR LESS)



TRAFFIC CONTROL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED SO AS NOT TO CONFLICT WITH EXISTING SIGNS THAT WILL REMAIN IN PLACE. A MINIMUM OF 200 FEET, (500 FEET DESIRABLE), CLEARANCE SHOULD BE PROVIDED TO THE EXISTING SIGNS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL SIGNS "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

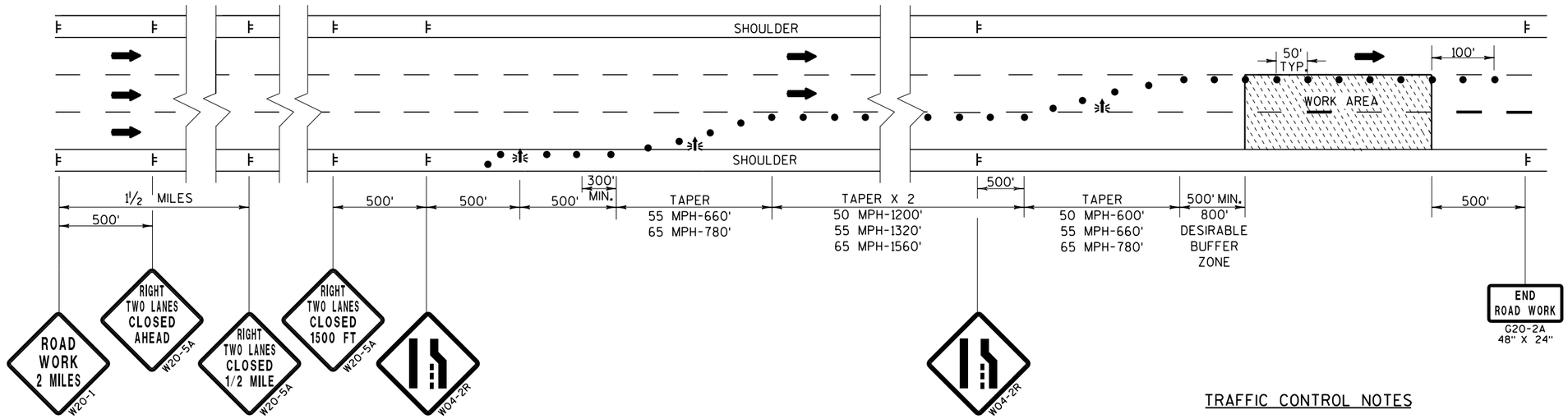
LEGEND

- SIGN ON PORTABLE SUPPORT
- DRUM
- DRUM WITH WARNING LIGHT, TYPE "C" (STEADY BURN)
- TYPE II BARRICADE WITH SIGN
- FLAGS (16"X16" MIN. ORANGE)
- DIRECTION OF TRAFFIC FLOW
- WORK AREA

LANE CLOSURE NEAR ENTRANCE RAMP

2

TYPICAL TWO-LANE CLOSURE LESS THAN 7 DAYS



LEGEND

- DRUM
- SIGN ON TEMPORARY SUPPORT
- ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN, LEFT LANE CLOSURE SIMILAR.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

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.

WHEN USING DIAMOND GRADE SHEETING.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS.

SPEEDS 45 MPH OR GREATER

2

N

TOWN OF
RAYMOND

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

6 1/2 MILE RD

REMOVE
SHOULDER
CORRUGATIONS
NB IH 94

WEST FRONTAGE RD

7 MILE RD

MEDIAN
SHOULDER
REPAIR
NB IH 94

WEST FRONTAGE RD

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

NE POND

EAST FRONTAGE RD

IH 94 SB
IH 94 NB

27TH ST
ENTRANCE RAMP
EXIT RAMP

6 1/2 MILE RD

7 1/2 MILE RD

HAGEMANN RD

STANLEY RD

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00

MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 1A

WORK ZONE = ▨

CONSTRUCTION

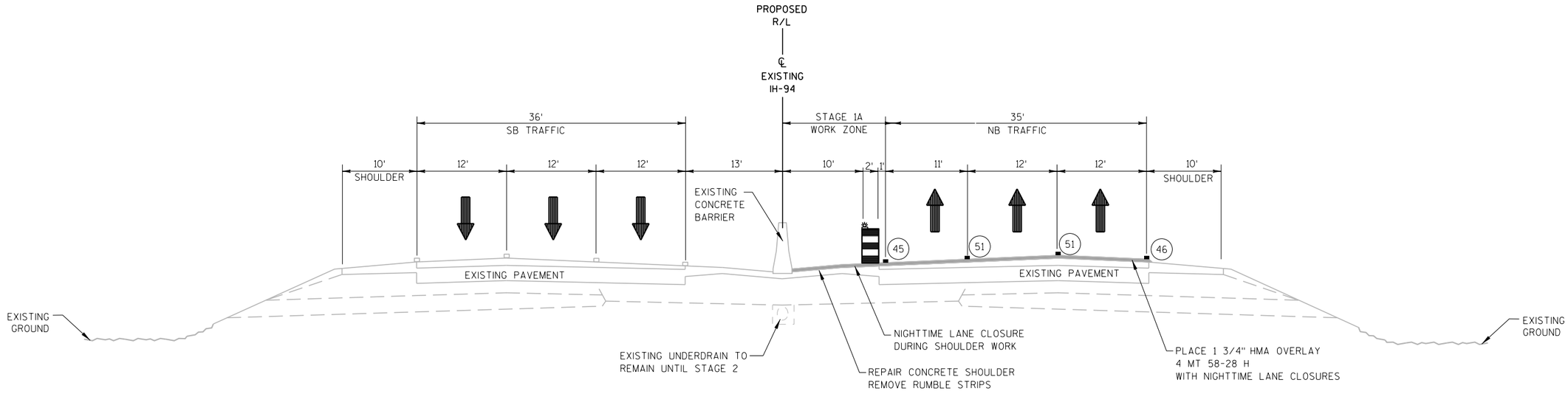
-REMOVE EXISTING RUMBLE STRIPS FROM 94 NB MEDIAN
-REPAIR 94 NB MEDIAN SHOULDER
-1 3/4" OVERLAY ENTIRE NB ROADWAY
-MILL 2" AND REPLACE OVERLAY ON B-51-33
-ADJUST NB MEDIAN INLETS

TRAFFIC

-IH 94 REMAINS OPEN - 3 THROUGH LANES
-SB TRAFFIC REMAINS ON EXISTING LANES
-NIGHTTIME LANE CLOSURES TO REMOVE MEDIAN
RUMBLE STRIPS, SHOULDER REPAIR AND OVERLAY
-ALL RAMPS ARE OPEN
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IIH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 1A	SHEET 157	E

2



MARKING LEGEND

(45) TEMPORARY MARKING REMOVABLE TAPE 4-INCH (YELLOW)

(46) TEMPORARY MARKING REMOVABLE TAPE 4-INCH (WHITE)

(51) TEMPORARY MARKING REMOVABLE TAPE 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)

STAGE 1A TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

2

N

NOTE

1) AS THE IH 94 NB OVERLAY WORK PROGRESSES, REPLACE LANE MARKINGS WITH TEMPORARY MARKING REMOVABLE TAPE 4-INCH.

EAST 94 MILE 326 0.6
D10-5 21" X 60"
WEST 94 MILE 326 0.6
D10-5 21" X 60"
REMAIN TYPE 2

LEFT SHOULDER CLOSED
W21-5AL 48" X 48"

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

6 1/2 MILE RD

WEST FRONTAGE RD

IH 94 SB

1206 1208 1210 1212 1214 1216 1218 1220

MATCHLINE 1220+50

R/L IH 94

IH 94 NB

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

CONCRETE SHOULDER REPAIRS

REMOVE RUMBLE STRIPS

EAST FRONTAGE RD

PLACE 1 3/4" HMA OVERLAY WITH NIGHTTIME LANE CLOSURES

W21-62O 48" X 30" WORK ZONE

SPEED LIMIT 60
R2-1 30" X 36"

FINES DOUBLE
W21-62R 48" X 30"

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE DURING NIGHTTIME LANE CLOSURES ONLY

6 1/2 MILE RD

EXIT 50 M.P.H.
REMAIN TYPE 1

EXIT 326
SEVEN MILE RD
REMAIN TYPE 1

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1A	SHEET 159 E

RACINE AREA
TRAVEL INFO
TUNE TO
1700 AM

REMAIN TYPE 1

SOUTH EAST SOUTH
INTERSTATE INTERSTATE INTERSTATE
41 94 41

REMAIN TYPE 2

LEFT SHOULDER CLOSED

W21-5AL
48" X 48"

ALTERNATE
M 4-1
24" X 12"

INTERSTATE
94

M1-1
24" X 24"

M 6-1
21" X 21"

N

WEST FRONTAGE RD

ENTRANCE RAMP

R/L IH 94

IH 94 SB

IH 94 NB

MATCHLINE 1220+50

MATCHLINE 1234+50

1222 1224 1226 1228 1230 1232 1234

REMOVE RUMBLE STRIPS

REPLACE LANE MARKING
AS OVERLAY PROGRESSES

CONCRETE SHOULDER REPAIRS

PLACE 1 3/4" HMA OVERLAY
WITH NIGHTTIME LANE CLOSURES

EAST FRONTAGE RD

EXIT RAMP

EAST
94
MILE
326
0.4

D10-5
21" X 60"

REMAIN TYPE 2

WEST
94
MILE
326
0.4

D10-5
21" X 60"

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

DURING NIGHTTIME
LANE CLOSURES ONLY

ALTERNATE
M 4-1
24" X 12"

INTERSTATE
94

M1-1
24" X 24"

M 6-1
21" X 21"

EXIT
326

REMAIN TYPE 1

EXIT 325

241 NORTH
27TH STREET
3/4 MILE

REMAIN TYPE 1

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1A	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m025997_s1a.dgn PLOT DATE : 15-JUN-2018 15:34 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

N

WEST FRONTAGE RD

7 MILE ROAD

EXIT 327

G
CALEDONIA
1 MILE
REMAIN TYPE 1

R/L 7 MILE RD

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

EAST 94 MILE 326 0.0
D10-5
21" X 60"
WEST 94 MILE 326 0.0
D10-5
21" X 60"
REMAIN TYPE 2

241 27th St 1/2
100 Ryan Rd 2 3/4
Drexel Ave 4 3/4
REMAIN TYPE 1

CONCRETE SHOULDER REPAIRS

IH 94 SB

IH 94 NB

B-51-32

REMOVE RUMBLE STRIPS

R/L IH 94

REPLACE LANE MARKING AS OVERLAY PROGRESSES

B-51-33

PLACE 1 3/4" HMA OVERLAY WITH NIGHTTIME LANE CLOSURES

MATCHLINE 1234+50

MATCHLINE 1248+50

1236 1238 1240 1242 1244 1246 1248

341 348 350 352

EAST 94 MILE 326 0.2
D10-5
21" X 60"
WEST 94 MILE 326 0.2
D10-5
21" X 60"
REMAIN TYPE 2

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE
DURING NIGHTTIME SHOULDER WORK ONLY

OAK CREEK
FRANKLIN
NEXT 4 EXITS
REMAIN TYPE 1

REMAIN TYPE 2

REMAIN TYPE 2

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1A	SHEET 161 E

2

N

ALTERNATE
M 4-1
24" X 12"
ALTERNATE
94
M1-1
24" X 24"
M 6-1
21" X 21"

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

REMAIN TYPE 1
EXIT 326

WEST FRONTAGE RD

EXIT RAMP

R/L IH 94

MATCHLINE 1248+50

1250 1252 1254 1256 1258 1260 1262

IH 94 SB

IH 94 NB

MATCHLINE 1262+50

REPLACE LANE MARKING AS OVERLAY PROGRESSES

CONCRETE SHOULDER REPAIRS

REMOVE RUMBLE STRIPS

PLACE 1 3/4" HMA OVERLAY WITH NIGHTTIME LANE CLOSURES

EAST FRONTAGE RD

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE
DURING NIGHTTIME SHOULDER WORK ONLY

NE POND

REMAIN TYPE 2

EAST 94 MILE 325 0.8
D10-5
21" X 60"

WEST 94 MILE 325 0.8
D10-5
21" X 60"
REMAIN TYPE 2

FOOD - EXIT - 325
LODGING - EXIT - 325
REMAIN

ASPH

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1A	SHEET 162	E

2

N

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

EXIT 50 M.P.H.
REMAIN TYPE 2

EXIT 326
SEVEN MILE RD
REMAIN TYPE 1

REMOVE RUMBLE STRIPS

SEE PROJECT I.D. 1035-01-82 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

WEST FRONTAGE RD

PLACE 1 3/4" HMA OVERLAY WITH NIGHTTIME LANE CLOSURES

R/L IH 94

MATCHLINE 1262+50

1264 1266 1268 1270 1272

IH 94 SB

IH 94 NB

CONCRETE SHOULDER REPAIRS

END PROJECT
I.D. 1035-01-74
STA 1268+00.00

REPLACE LANE MARKING AS OVERLAY PROGRESSES

EAST FRONTAGE RD

EAST 94 MILE 325 0.6
D10-5
21" X 60"
REMAIN TYPE 2

WEST 94 MILE 325 0.6
D10-5
21" X 60"

SPEED LIMIT 70
REMOVE TYPE 2

W21-62O
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE
DURING NIGHTTIME SHOULDER WORK ONLY

7 1/2 MILE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1A	SHEET 163 E

2

2

N

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

CONSTRUCT PAVEMENT WIDENING
ALONG NORTHBOUND
OUTSIDE SHOULDER

6 1/2 MILE RD

WEST FRONTAGE RD

7 MILE RD

TOWN OF
RAYMOND

REMOVE OUTER SHOULDER
RUMBLE STRIPS
AND REPAIR SHOULDER

WEST FRONTAGE RD

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

6 1/2 MILE RD

RECONSTRUCT
NB EXIT RAMP

WIDEN STRUCTURE
B-51-33

HAGEMANN RD

RECONSTRUCT
NB ENTRANCE RAMP

STANLEY RD

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

27TH ST

ENTRANCE RAMP

EXIT RAMP

7 1/2 MILE RD

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00

MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 1B

WORK ZONE =

CONSTRUCTION

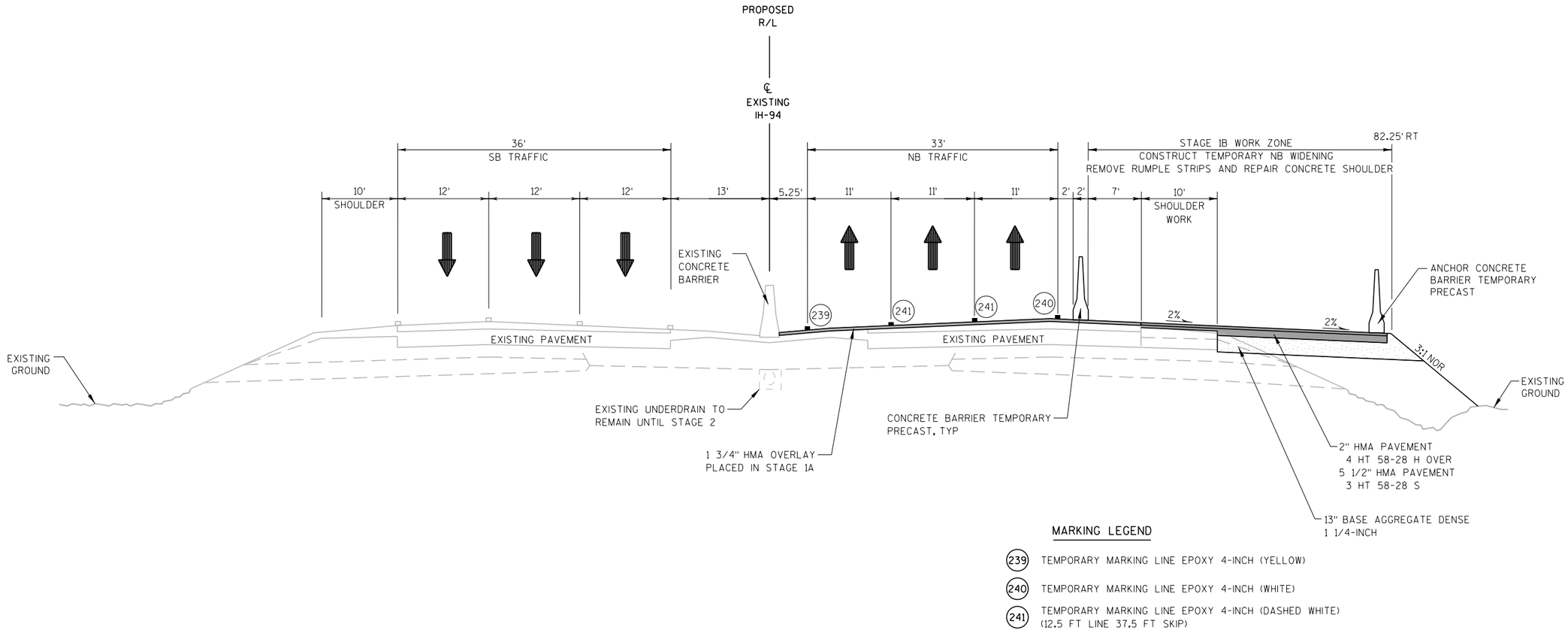
-TEMPORARY WIDENING ALONG IH 94 NB OUTSIDE SHOULDER FROM STA 1213+00 TO STA 1268+00
-WIDENING STRUCTURE B-51-33
-REMOVING EXISTING RUMBLE STRIPS AND REPAIR OUTSIDE SHOULDER ALONG IH 94 NB
-INSTALL EAST PORTION OF STORM SEWER LATERALS STA 1213+10 RT, STA 1231+00 RT AND STA 1250+00 RT
-RECONSTRUCT NB EXIT RAMP AND NB ENTRANCE RAMP

TRAFFIC

-IH 94 REMAINS OPEN 3 LANES EACH DIRECTION
-TEMPORARY NB BRIDGE WIDENING B-51-33
-ALL RAMPS ARE OPEN EXCEPT NB RAMPS CLOSED FOR FOUR WEEKS TO RECONSTRUCT
-7 MILE ROAD CLOSED THIS STAGE FOR BRIDGE WIDENING
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 1B	SHEET 164 E

2



MARKING LEGEND

(239) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)

(240) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)

(241) TEMPORARY MARKING LINE EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)

STAGE 1B TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

2

N

6 1/2 MILE RD

EAST 94 MILE 326 0.6
D10-5 21" X 60"

WEST 94 MILE 326 0.6
D10-5 21" X 60"

REMAIN FROM PREVIOUS STAGE

RIGHT SHOULDER CLOSED
W21-5AR 48" X 48"

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

EAST FRONTAGE RD

1206 1208 1210 1212 1214 1216 1218 1220

R/L IH 94

239 241 240 242

MATCHLINE 1220+50

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

CONCRETE SHOULDER REPAIR

REMOVE RUMBLE STRIPS

CONSTRUCT TEMPORARY WIDENING

INSTALL STORM SEWER LATERAL AT 1213+10

W21-620 48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1 30" X 36"

FINES DOUBLE
W21-62R 48" X 30"
REMAIN FROM PREVIOUS STAGE

6 1/2 MILE RD

INSTALL PORTABLE CHANGABLE MESSAGE BOARD PRIOR TO CLOSING EXIT RAMP. SEE PORTABLE MESSAGE SIGN DETAILS, SETUP A, FOR MESSAGES

EXIT 50 M.P.H.

MOVE TYPE 1
EXIT 326
SEVEN MILE RD

MOVE TYPE 2
2111
CLOSED

BEGINS XXX XX

INSTALL DATE AND SIGN DATE DETERMINED BY ENGINEER

SEE RAMP CLOSURE CONSTRUCTION DETAIL 2106

EXIT RAMP TO BE CLOSED FOR 30 DAYS IN STAGE 1B

DO NOT CLOSE SB EXIT AND SB ENTRANCE RAMPS AT THE SAME TIME

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1B	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026002_s1b.dgn
PLOT DATE : 15-JUN-2018 17:53
PLOT BY : scook
PLOT NAME :
PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

RACINE AREA
TRAVEL INFO
TUNE TO
1700 AM

REMAIN FROM PREVIOUS STAGE

REMAIN FROM PREVIOUS STAGE

SOUTH 41 EAST 94 SOUTH 41

REMAIN FROM PREVIOUS STAGE

ALTERNATE
M 4-1
24" X 12"
94
M1-1
24" X 24"
M 6-1
21" X 21"

RIGHT SHOULDER CLOSED
W21-5AR
48" X 48"

N

WEST FRONTAGE RD

ENTRANCE RAMP

MATCHLINE 1220+50

MATCHLINE 1234+50

R/L IH 94

IH 94 SB

IH 94 NB

1222 1224 1226 1228 1230 1232 1234

242 241 240 239

CONSTRUCT TEMPORARY WIDENING

CONCRETE SHOULDER REPAIRS

REMOVE RUMBLE STRIPS

INSTALL STORM SEWER LATERAL AT 1231+00

CONCRETE SHOULDER REPAIRS

REMOVE RUMBLE STRIPS

EAST FRONTAGE RD

EXIT RAMP

EXIT 50 M.P.H.

EAST 94 MILE 326 0.4
D10-5
21" X 60"

WEST 94 MILE 326 0.4
D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

ALTERNATE
M 4-1
24" X 12"
94
M1-1
24" X 24"
M 6-1
21" X 21"
REMAIN FROM PREVIOUS STAGE

EXIT 326

MOVE TYPE 1

RECONSTRUCT SE EXIT RAMP

EXIT 325
241 NORTH
27TH STREET
3/4 MILE

MOVE TYPE 1

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1B	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026003_s1b.dgn PLOT DATE : 15-JUN-2018 17:53 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

WEST FRONTAGE RD

7 MILE ROAD

EXIT 327

G
CALEDONIA
1 MILE

REMAIN FROM PREVIOUS STAGE

R/L 7 MILE RD

RIGHT SHOULDER CLOSED

W21-5AR
48" X 48"

EAST 94 MILE 326 0.0
D10-5
21" X 60"

WEST 94 MILE 326 0.0
D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

241 27th St 1/2
100 Ryan Rd 2 3/4
Drexel Ave 4 3/4

REMAIN FROM PREVIOUS STAGE

ENTRANCE RAMP

EXIT RAMP

PLACE TEMPORARY PAVEMENT WIDENING AND CONCRETE BARRIER TEMPORARY PRECAST

INSTALL CRASH CUSHION TEMPORARY

B-51-32

R/L IH 94

MATCHLINE 1234+50

IH 94 SB

IH 94 NB

1236 1238 1240 1242 1244 1246 1248

344 348

MATCHLINE 1248+50

CONSTRUCT TEMPORARY WIDENING

REPAIR CONCRETE SHOULDER

REMOVE RUMBLE STRIPS

EXIT RAMP

B-51-33

ENTRANCE RAMP

CONSTRUCT TEMPORARY WIDENING

REPAIR CONCRETE SHOULDER

REMOVE RUMBLE STRIPS

TEMPORARY BRIDGE WIDENING

350

OAK CREEK
FRANKLIN
NEXT 4 EXITS

MOVE TYPE 1

RECONSTRUCT NE ENTRANCE RAMP

REMAIN

REMAIN

EAST 94 MILE 326 0.2
D10-5
21" X 60"

WEST 94 MILE 326 0.2
D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

7 MILE ROAD

352

2111 CLOSED

BEGINS XXX XX

2106

SEE RAMP CLOSURE CONSTRUCTION DETAIL

INSTALL DATE AND SIGN DATE DETERMINED BY ENGINEER

EXIT RAMP TO BE CLOSED FOR 30 DAYS IN STAGE 1B

DO NOT CLOSE SB EXIT AND SB ENTRANCE RAMPS AT THE SAME TIME

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1B	SHEET 168 E

2

N

REMAIN FROM PREVIOUS STAGE

EXIT 326

ALTERNATE M 4-1 24" X 12"

94 M1-1 24" X 24"

M 6-1 21" X 21"

REMAIN FROM PREVIOUS STAGE

WEST FRONTAGE RD

MATCHLINE 1248+50

R/L IH 94

1250 1252 1254 1256 1258 1260 1262

IH 94 SB

IH 94 NB

240 241 239

MATCHLINE 1262+50

EAST FRONTAGE RD

CONSTRUCT TEMPORARY WIDENING

CONCRETE SHOULDER REPAIR

REMOVE RUMBLE STRIPS

INSTALL STORM SEWER LATERAL AT 1250+00

NE POND

MOVE TYPE 2

RIGHT SHOULDER CLOSED

W21-5AR 48" X 48"

EAST 94 MILE 325 0.8 D10-5 21" X 60"

WEST 94 MILE 325 0.8 D10-5 21" X 60"

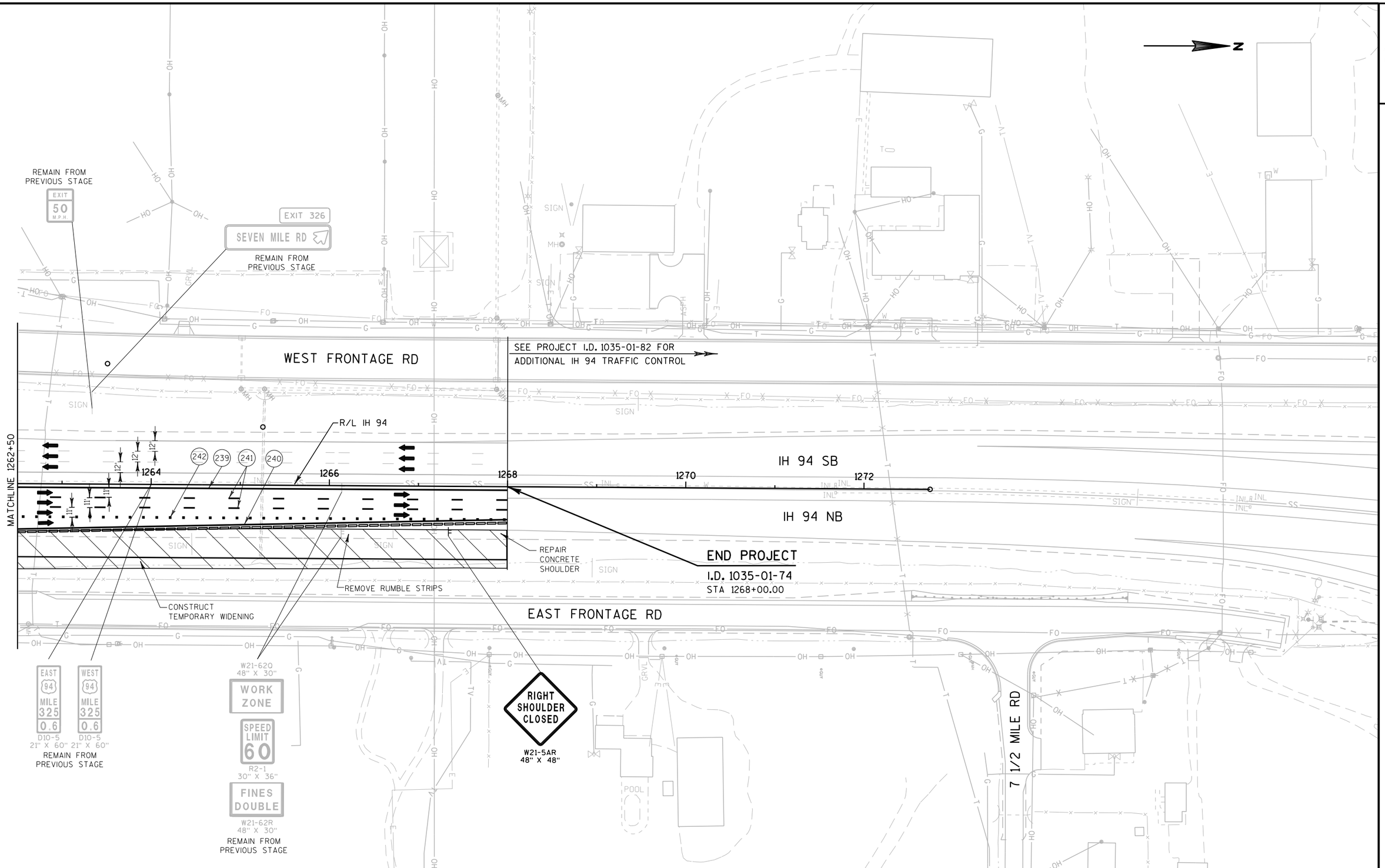
REMAIN FROM PREVIOUS STAGE

FOOD - EXIT - 325

LODGING - EXIT - 325

INTERSTATE LOGOS-WISCONSIN RESPONSIBLE FOR SIGN CONTACT 608-579-1570

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1B	SHEET 169	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1B	SHEET 170	E

2

N

TOWN OF
RAYMOND

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

6 1/2 MILE RD

STORM SEWER
TRUNKLINE
INSTALLATION

WEST FRONTAGE RD

7 MILE RD

WEST FRONTAGE RD

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

NE POND

INSTALL STORM LATERAL
STA 1250+00 RT

IH 94 SB
IH 94 NB

27TH ST
ENTRANCE RAMP
EXIT RAMP

7 1/2 MILE RD

6 1/2 MILE RD

INSTALL STORM
LATERALS STA
1213+10 RT AND
STA 1231+00 RT

EAST FRONTAGE RD

STANLEY RD

HAGEMANN RD

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00

MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 1C

WORK ZONE =

CONSTRUCTION

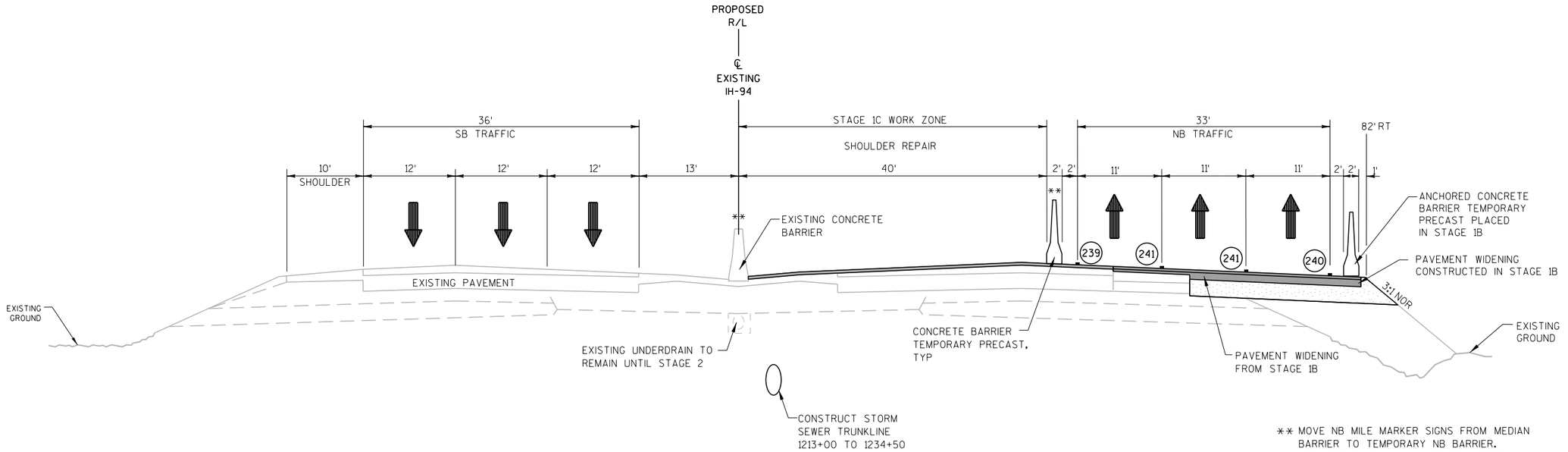
-INSTALL PORTIONS OF STORM SEWER TRUNKLINE,
STA 1213+00 TO 1234+50
-FINISH STORM SEWER LATERALS STA 1213+10 RT,
STA 1231+00 RT AND STA 1250+00 RT.

TRAFFIC

-IH 94 REMAINS OPEN
(NB TRAFFIC ON OUTSIDE LANES (NIGHTTIME
LANE CLOSURES FOR STORM LATERALS)
-ALL RAMPS ARE OPEN
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IIH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 1C	SHEET 171	E

2



** MOVE NB MILE MARKER SIGNS FROM MEDIAN BARRIER TO TEMPORARY NB BARRIER. MOVE ONLY THE EVEN 2/10 MILE SIGNS.

MARKING LEGEND

(239) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)

(240) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)

(241) TEMPORARY MARKING LINE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

STAGE 1C TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

2

N

WEST 94 MILE 326 0.6
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

6 1/2 MILE RD

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

WEST FRONTAGE RD

IH 94 SB

1206 1208 1210 1212 1214 1216 1218 1220

INSTALL STORM SEWER TRUNK LINE

R/L IH 94

STORM SEWER LATERAL, TYP

MATCHLINE 1220+50

IH 94 NB

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

239 241 240

EAST FRONTAGE RD

EAST 94 MILE 326 0.6
D10-5
21" X 60"
MOVE

FINISH CONSTRUCTING STORM LATERAL AT STA 1213+10 RT

W21-62O
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

6 1/2 MILE RD

EXIT 326
SEVEN MILE RD
REMAIN FROM PREVIOUS STAGE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1C	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026008_s1c.dgn PLOT DATE : 14-JUN-2018 17:28 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

N

RACINE AREA
TRAVEL INFO
TUNE TO
1700 AM

REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 326 0.4
D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

REMAIN FROM PREVIOUS STAGE
ALTERNATE
M 4-1
24" X 12"
INTERSTATE 94
M1-1
24" X 24"
M 6-1
21" X 21"

SOUTH EAST SOUTH
INTERSTATE 41 94 41

REMAIN FROM PREVIOUS STAGE

WEST FRONTAGE RD

ENTRANCE RAMP

R/L IH 94

IH 94 SB

IH 94 NB

MATCHLINE 1220+50

MATCHLINE 1234+50

1222 1224 1226 1228 1230 1232 1234

INSTALL STORM SEWER TRUNK LINE

STORM SEWER LATERAL

STORM SEWER LATERAL

239 241 240 242 240

FINISH CONSTRUCTING STORM LATERAL AT STA 1231+00 RT

EAST FRONTAGE RD

TEMP. EXIT RAMP

EXIT 50 M.P.H.

REMAIN FROM PREVIOUS STAGE

EAST 94 MILE 326 0.4
D10-5
21" X 60"
MOVE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ALTERNATE
M 4-1
24" X 12"
INTERSTATE 94
M1-1
24" X 24"
M 6-1
21" X 21"

REMAIN FROM PREVIOUS STAGE

EXIT 326

REMAIN FROM PREVIOUS STAGE

EXIT 325
241 NORTH
27TH STREET
3/4 MILE

REMAIN FROM PREVIOUS STAGE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1C	SHEET 174 E

2

N

WEST FRONTAGE RD

7 MILE ROAD

EXIT 327

G
CALEDONIA
1 MILE

REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 326 0.2
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

R/L 7 MILE RD

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

WEST 94 MILE 326 0.0
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

241	27th St	1/2
100	Ryan Rd	2 3/4
	Drexel Ave	4 3/4

REMAIN FROM PREVIOUS STAGE

R/L IH 94

IH 94 SB

IH 94 NB

MATCHLINE 1234+50

MATCHLINE 1248+50

1236 1238 1240 1242 1244 1246 1248

344 348 350 352

239 241 240

B-51-33

EAST 94 MILE 326 0.2
D10-5
21" X 60"
MOVE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

OAK CREEK
FRANKLIN
NEXT 4 EXITS
REMAIN FROM PREVIOUS STAGE

REMAIN

EAST 94 MILE 326 0.0
D10-5
21" X 60"
MOVE

REMAIN FROM PREVIOUS STAGE

REMAIN

240

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1C	SHEET 175 E

2

N

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

REMAIN FROM PREVIOUS STAGE
EXIT 326

WEST 94 MILE 325 0.8
D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

ALTERNATE
M 4-1
24" X 12"
INTERSTATE 94
M1-1
24" X 24"
M 6-1
21" X 21"

REMAIN FROM PREVIOUS STAGE

ASPH

WEST FRONTAGE RD

FINISH CONSTRUCTING STORM LATERAL AT STA 1250+00 RT

EXIT RAMP

R/L IH 94

MATCHLINE 1248+50

1250 1252 1254 1256 IH 94 SB 1258 1260 1262

MATCHLINE 1262+50

IH 94 NB

242 239 241 240

EAST FRONTAGE RD

NE POND

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

EAST 94 MILE 325 0.8
D10-5
21" X 60"
MOVE

FOOD - EXIT - 325
LODGING - EXIT - 325
INTERSTATE LOGOS-WISCONSIN
RESPONSIBLE FOR SIGN
CONTACT 608-579-1570

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1C	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026011_s1c.dgn PLOT DATE : 14-JUN-2018 17:28 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

N

EXIT 50 M.P.H.
REMAIN FROM PREVIOUS STAGE

EXIT 326
SEVEN MILE RD
REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 325 0.6
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

SEE PROJECT I.D. 1035-01-82 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

WEST FRONTAGE RD

R/L IH 94

MATCHLINE 1262+50

1264 1266 1268 1270 1272

IH 94 SB

IH 94 NB

END PROJECT
I.D. 1035-01-74
STA 1268+00.00

239 241 240

EAST FRONTAGE RD

EAST 94 MILE 325 0.6
D10-5
21" X 60"
MOVE

W21-62O
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"

7 1/2 MILE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1C	SHEET 177	E

2

2

N

TOWN OF
RAYMOND

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

6 1/2 MILE RD

WEST FRONTAGE RD

7 MILE RD

B-51-139

CONSTRUCT IH 94 SB
AND RAMPS SW & NW

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

WEST FRONTAGE RD

IH 94 SB
IH 94 NB

27TH ST

IH 94 SB
IH 94 NB

ENTRANCE RAMP

EXIT RAMP

NE POND

EAST FRONTAGE RD

EAST FRONTAGE RD

6 1/2 MILE RD

7 1/2 MILE RD

STANLEY RD

HAGEMANN RD

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00

MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 2

WORK ZONE =

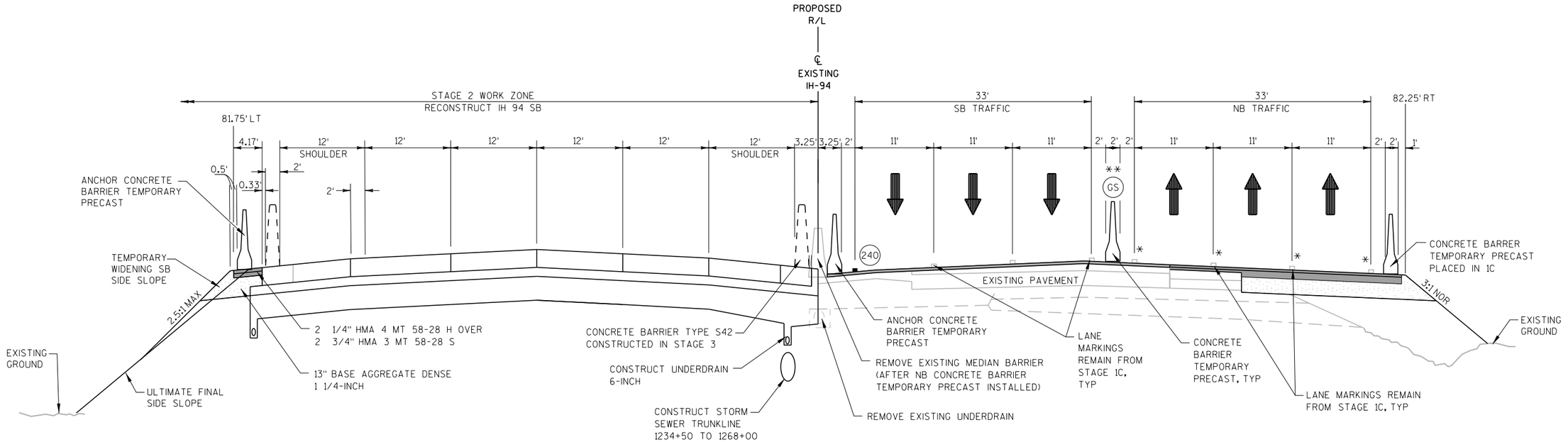
CONSTRUCTION

-REMOVE EXISTING STORM SEWER TRUNK, MEDIAN BARRIER
-REMOVE OLD STRUCTURE, B-51-32
-CONSTRUCT BRIDGE B-51-139
-CONSTRUCT IH 94 SB
-STORM SEWER TRUNKLINE STA 1234+50 - 1268+00

TRAFFIC

-ALL IH 94 NB TRAFFIC SHIFTED TO
SB LANES (CROSSOVERS CONSTRUCTED
IN OTHER SEGMENTS)
-IH 94 SB RAMPS AT 7 MILE ROAD CLOSED
SEE DETOUR PLANS FOR SB RAMPS
- 7 MILE ROAD CLOSED 10 DAYS FOR B-51-32 REMOVAL
AND 10 DAYS FOR B-51-139 FALSEWORK
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 2	SHEET 178	E



NOTE

1) SB OUTER CONCRETE CURB & GUTTER AND OUTER CONCRETE BARRIER IS STAGE 5 CONSTRUCTION

MARKING LEGEND

(239) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)

(240) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)

(241) TEMPORARY MARKING LINE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

(GS) GLARE SCREEN TEMPORARY

* LANE MARKINGS PLACED IN STAGE 1C

** MOVE SB MILE MARKER SIGNS FROM MEDIAN BARRIER TO TEMPORARY BARRIER. MOVE ONLY THE EVEN 2/10 MILE SIGNS.

NB MARKINGS WERE INSTALLED IN STAGE 1C

STAGE 2 TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

2

N

NOTES

1) DO NOT CONSTRUCT OUTER SB SHOULDER CORRUGATIONS IN STAGE 2. CORRUGATIONS TO BE SAWED IN DURING STAGE 5.

2) DO NOT CONSTRUCT OUTER SB CONCRETE BARRIER OR OUTER CONCRETE CURB & GUTTER IN STAGE 2.

3) IH 94 NB PAVEMENT MARKINGS REMAIN IN PLACE FROM STAGE 1C

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

6 1/2 MILE RD

MB3-3 M1-1 SOUTH / MB3-2 M1-1 EAST / MB3-3 M1-4 SOUTH
J4-3
INSTALL TYPE 2

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

EAST FRONTAGE RD

1206 1208 1210 1212 1214 1216 1218 1220

R/L IH 94

1220SW

MATCHLINE 1220+50

239 241 240 241

EAST 94 MILE 326 0.6
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 326 0.6
D10-5
21" X 60"
MOVE

W21-620
48" X 30"
WORK ZONE

W21-620
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"

FINES DOUBLE
W21-62R
48" X 30"
REMAIN FROM PREVIOUS STAGE

6 1/2 MILE RD

EXIT 326
SEVEN MILE RD
REMAIN FROM PREVIOUS STAGE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2	SHEET 180	E

RACINE AREA
TRAVEL INFO
TUNE TO
1700 AM

MOVE TYPE 1 TO
STATION 1228+00

ALTERNATE
M 4-1
24" X 12"

REMAIN FROM
PREVIOUS STAGE

M1-1
24" X 24"

M 6-1
21" X 21"

SOUTH 41 EAST 94 SOUTH 41

REMOVE TYPE 2

N

WEST FRONTAGE RD

R/L RAMP SW

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

R/L IH 94

1222 1224 1226 1228 1230 1232 1234

MATCHLINE 1220+50

MATCHLINE 1234+50

IH 94 SB

IH 94 NB

11' 11' 11' 11'

239 241 240 241 242 240

EAST FRONTAGE RD

TEMP. EXIT RAMP

EXIT
50
M.P.H.

REMAIN FROM
PREVIOUS STAGE

EAST 94 MILE 326 0.4
D10-5
21" X 60"
REMAIN FROM
PREVIOUS STAGE

WEST 94 MILE 326 0.4
D10-5
21" X 60"
MOVE

ALTERNATE
M 4-1
24" X 12"

M1-1
24" X 24"

M 6-1
21" X 21"
REMAIN FROM
PREVIOUS STAGE

EXIT
326

REMAIN FROM
PREVIOUS STAGE

EXIT 325
241 NORTH
27TH STREET
3/4 MILE
REMAIN FROM
PREVIOUS STAGE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026015_s2.dgn PLOT DATE : 15-JUN-2018 22:42 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

N

WEST FRONTAGE RD

7 MILE ROAD

MOVE TYPE 1 EXIT 327

G
CALEDONIA
1 MILE

FMS ON PORTABLE SUPPORTS

INSTALL TYPE 1 EXIT 327

G
CALEDONIA
1 MILE

R11-2B
48" X 30"
BRIDGE OUT
TYPE III BARRICADE

R11-2R
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

R11-2B
48" X 30"
BRIDGE OUT
TYPE III BARRICADE

GAS CAMPING
0.1 2.3

INTERSTATE LOGOS-WISCONSIN
RESPONSIBLE FOR SIGN
CONTACT 608-579-1570

R/L RAMP SW

1236SW
1238SW
1240SW

R/L RAMP NW

1242NW
1244NW
1246NW
1248NW

B-51-139

R/L IH 94

MATCHLINE 1234+50

1236
1238
1240
1242
1244
1246
1248

IH 94 SB
IH 94 NB

MATCHLINE 1248+50

B-51-33

32
240
239
241

TEMP EXIT RAMP

TEMP. ENTRANCE RAMP

EAST 94 MILE 326 0.2
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 326 0.2
D10-5
21" X 60"
MOVE

OAK CREEK
FRANKLIN
NEXT 4 EXITS
REMAIN FROM PREVIOUS STAGE

REMAIN

REMAIN FROM PREVIOUS STAGE

REMAIN

EAST 94 MILE 326 0.0
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 326 0.0
D10-5
21" X 60"
MOVE

241 27th St 1/2
100 Ryan Rd 2 3/4
Drexel Ave 4 3/4

REMAIN FROM PREVIOUS STAGE

2111
CLOSED
ADD FMS 2111 WHEN 27TH ST EXIT CLOSED

R/L 7 MILE RD

ASPH
CANOPY
FILLER CAPS
A/CLASS4
BLDG

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2	SHEET 182 E

2

N

INSTALL TYPE 1

EXIT 326

INSTALL TYPE 2

REMOVE TYPE 1

EXIT 326

REMOVE TYPE 2

REMAIN FROM PREVIOUS STAGE

ALTERNATE M 4-1 24" X 12"

INTERSTATE 94 M1-1 24" X 24"

M 6-1 21" X 21"

WEST FRONTAGE RD

EAST FRONTAGE RD

R/L RAMP NW

R/L IH 94

1250NW 1252NW 1254NW 1256NW 1258NW 1260NW 1262NW

1250 1252 1254 1256 1258 1260 1262

MATCHLINE 1248+50

MATCHLINE 1262+50

IH 94 SB

IH 94 NB

CC

242 240 239 241 240 241

NE POND

ASPH

EAST 94 MILE 325 0.8 D10-5 21" X 60" REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 325 0.8 D10-5 21" X 60" MOVE

FOOD - EXIT - 325

LODGING - EXIT - 325

INTERSTATE LOGOS-WISCONSIN RESPONSIBLE FOR SIGN CONTACT 608-579-1570

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2	SHEET 183 E

2

MOVE TYPE 2

EXIT 326

SEVEN MILE RD

CLOSED

USE HWY G

2111

2104

FMS ON PORTABLE SUPPORTS

EXIT 50 M.P.H.

REMOVE TYPE 2

W21-620
48" X 30"
WORK ZONE

SPEED LIMIT 60

R2-1
30" X 36"
FINES DOUBLE

W21-62R
48" X 30"

SIGN

MH

WEST FRONTAGE RD

SEE PROJECT I.D. 1035-01-82 FOR
ADDITIONAL IH 94 TRAFFIC CONTROL

1264NW

R/L IH 94

MATCHLINE 1262+50

1264

1266

1268

1270

1272

IH 94 SB

IH 94 NB

IH 94 SB

IH 94 NB

239

241

240

241

END PROJECT
I.D. 1035-01-74
STA 1268+00.00

EAST FRONTAGE RD

EAST 94 MILE 325 0.6
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 325 0.6
D10-5
21" X 60"
MOVE

W21-620
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"
FINES DOUBLE

W21-62R
48" X 30"
REMAIN FROM PREVIOUS STAGE

7 1/2 MILE RD

POOL

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2	SHEET 184	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026018_s2.dgn PLOT DATE : 15-JUN-2018 22:42 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

2

N

TOWN OF
RAYMOND

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

6 1/2 MILE RD

CONSTRUCT SB
MEDIAN BARRIER

WEST FRONTAGE RD

7 MILE RD

CONSTRUCT
S-51-220

WEST FRONTAGE RD

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

NE POND

EAST FRONTAGE RD

27TH ST

IH 94 SB
IH 94 NB

ENTRANCE RAMP

EXIT RAMP

6 1/2 MILE RD

7 1/2 MILE RD

STANLEY RD

HAGEMANN RD

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00
MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 3

WORK ZONE =

CONSTRUCTION

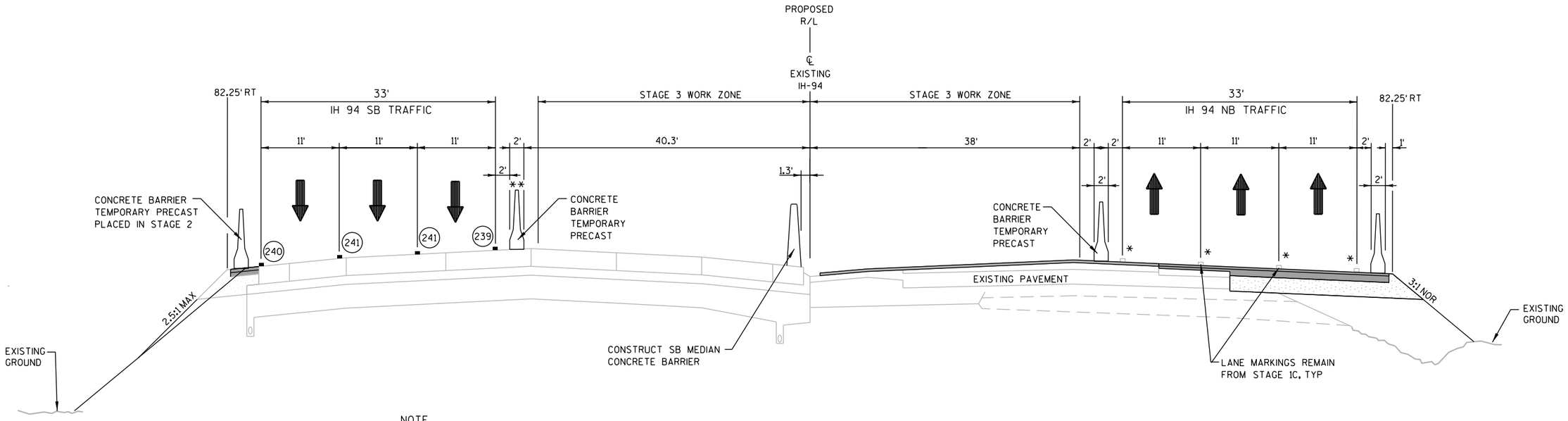
-CONSTRUCT SB MEDIAN BARRIER
-CONSTRUCT SIGN STRUCTURE S-51-220

TRAFFIC

-IH 94 SB OPEN WITH 3 LANES
-IH 94 NB OPEN WITH 3 LANES
-ALL RAMPS ARE OPEN
-7 MILE ROAD OPEN
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 3	SHEET 185	E

2



NOTE

1) PLACE SB LANE MARKINGS PRIOR TO SHIFTING TRAFFIC

MARKING LEGEND

(239) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)

(240) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)

(241) TEMPORARY MARKING LINE EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)

* LANE MARKINGS PLACED IN STAGE 1C

** MOVE SB MILE MARKER SIGNS FROM TEMPORARY BARRIER TO NEW SB TEMPORARY BARRIER.
MOVE ONLY THE EVEN 2/10 MILE SIGNS.
NB MILE MARKER SIGNS TO REMAIN

STAGE 3 TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

2

N

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

EAST FRONTAGE RD

SEE PROJECT I.D. 1035-01-79 FOR
ADDITIONAL IH 94 TRAFFIC CONTROL

6 1/2 MILE RD

WEST 94 MILE 326 0.6
D10-5
21" X 60"
MOVE

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

W21-620
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"

MB3-3 M1-1 SOUTH 41
MB3-2 M1-1 EAST 94
MB3-3 M1-4 SOUTH 41
J4-3
REMAIN FROM PREVIOUS STAGE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

1206 1208 1210 1212 1214 1216 1218 1220 1220SW

239 240 241

R/L IH 94

MATCHLINE 1220+50

EAST 94 MILE 326 0.6
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

W21-620
48" X 30"
WORK ZONE
SPEED LIMIT 60
R2-1
30" X 36"
FINES DOUBLE
W21-62R
48" X 30"
REMAIN FROM PREVIOUS STAGE

CONSTRUCT SB MEDIAN CONCRETE BARRIER

EXIT 326
SEVEN MILE RD
REMAIN FROM PREVIOUS STAGE

NOTE
1) IH 94 NB PAVEMENT MARKINGS REMAIN IN PLACE FROM STAGE 1C.

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 3	SHEET 187	E

2

N

REMAIN FROM PREVIOUS STAGE

ALTERNATE
M 4-1
24" X 12"
INTERSTATE 94
M1-1
24" X 24"
M 6-1
21" X 21"

REMAIN FROM PREVIOUS STAGE

RACINE AREA
TRAVEL INFO
TUNE TO
1700 AM

WEST 94 MILE 326 0.4
D10-5
21" X 60"
MOVE

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

WEST FRONTAGE RD

R/L RAMP SW

ENTRANCE RAMP SW

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

IH 94 SB

R/L IH 94

IH 94 NB

1222 1224 1226 1228 1230 1232 1234

MATCHLINE 1220+50

MATCHLINE 1234+50

239 241 240 242 240 241 240 240

CONSTRUCT SB MEDIAN CONCRETE BARRIER

EAST FRONTAGE RD

TEMP. EXIT RAMP

EXIT 50 M.P.H.

REMAIN FROM PREVIOUS STAGE

EAST 94 MILE 326 0.4
D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

ALTERNATE
M 4-1
24" X 12"
INTERSTATE 94
M1-1
24" X 24"
M 6-1
21" X 21"

REMAIN FROM PREVIOUS STAGE

EXIT 326

REMAIN FROM PREVIOUS STAGE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

EXIT 325
241 NORTH
27TH STREET
3/4 MILE

REMAIN FROM PREVIOUS STAGE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 3	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026021_s3.dgn PLOT DATE : 15-JUN-2018 08:36 PLOT BY : agulan PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

WEST FRONTAGE RD

EXIT 327

G
CALEDONIA
1 MILE

REMAIN FROM
PREVIOUS STAGE

7 MILE ROAD

R/L 7 MILE RD

LEFT
SHOULDER
CLOSED

W21-5AL
48" X 48"

WEST
94
MILE
326
0.2
D10-5
21" X 60"
MOVE

WEST
94
MILE
326
0.0
D10-5
21" X 60"
MOVE

R/L RAMP SW

R/L RAMP NW

ENTRANCE RAMP SW

EXIT RAMP NW

1236SW
1238SW
1240SW
1242NW
1244NW
1246NW
1248NW

Elm Rd	1 1/4
100 Ryan Rd	2 3/4
Drexel Ave	4 3/4

INSTALL TYPE 1 SIGN
ON SIGN BRIDGE
S-51-220

CONSTRUCT
SIGN STRUCTURE
S-51-220

2' SHY
1' SHY
B-51-139
B-51-33

IH 94 SB
IH 94 NB
R/L IH 94

MATCHLINE 1234+50
MATCHLINE 1248+50

CONSTRUCT SB MEDIAN
CONCRETE BARRIER

TEMP. EXIT RAMP
TEMP. ENTRANCE RAMP

EAST
94
MILE
326
0.2
D10-5
21" X 60"
REMAIN FROM
PREVIOUS STAGE

EAST
94
MILE
326
0.0
D10-5
21" X 60"
REMAIN FROM
PREVIOUS STAGE

OAK CREEK
FRANKLIN
NEXT 4 EXITS
REMAIN FROM
PREVIOUS STAGE

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

REMAIN
REMAIN FROM
PREVIOUS STAGE

REMAIN

241 27th St	1/2
100 Ryan Rd	2 3/4
Drexel Ave	4 3/4

REMOVE TYPE 1

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026022_s3.dgn PLOT DATE : 15-JUN-2018 08:36 PLOT BY : agulan PLOT NAME : PLOT SCALE : 100:1

2

2

N

REMAIN FROM PREVIOUS STAGE

EXIT 326

LEFT SHOULDER CLOSED

W21-5AL 48" X 48"

WEST 94 MILE 325 0.8

D10-5 21" X 60" MOVE

REMAIN FROM PREVIOUS STAGE

ALTERNATE M 4-1 24" X 12"

INTERSTATE 94

M1-1 24" X 24"

M 6-1 21" X 21"

R/L RAMP NW

1250NW

EXIT RAMP NW

1252NW

1254NW

1256NW

1258NW

1260NW

1262NW

WEST FRONTAGE RD

R/L IH 94

CONSTRUCT SB MEDIAN CONCRETE BARRIER

IH 94 SB

IH 94 NB

EAST FRONTAGE RD

MATCHLINE 1248+50

MATCHLINE 1262+50

1250

1252

1254

1256

1258

1260

1262

NE POND

EAST 94 MILE 325 0.8

D10-5 21" X 60"

REMAIN FROM PREVIOUS STAGE

FOOD - EXIT - 325

LODGING - EXIT - 325

INTERSTATE LOGOS-WISCONSIN RESPONSIBLE FOR SIGN CONTACT 608-579-1570

R11-2L 48" X 30"

LANE CLOSED

TYPE III BARRICADE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 3	SHEET 190 E

2

N

W21-62Q
48" X 30"
WORK ZONE
SPEED LIMIT 60
R2-1
30" X 36"
FINES DOUBLE
W21-62R
48" X 30"

LEFT SHOULDER CLOSED
W21-5AL
48" X 48"

EXIT 326
SEVEN MILE RD
MOVE TO TEMPORARY SUPPORTS

WEST 94 MILE 325 0.6
D10-5
21" X 60"
MOVE

SEE PROJECT I.D. 1035-01-82 FOR
ADDITIONAL IH 94 TRAFFIC CONTROL

WEST FRONTAGE RD

1264NW

MATCHLINE 1262+50

R/L IH 94

1264 1266 1268 1270 1272

239 240 241

IH 94 SB

IH 94 NB

END PROJECT
I.D. 1035-01-74
STA 1268+00.00

EAST FRONTAGE RD

CONSTRUCT SB MEDIAN
CONCRETE BARRIER

EAST 94 MILE 326 0.0
D10-5
21" X 60"
REMAIN FROM
PREVIOUS STAGE

W21-620
48" X 30"
WORK ZONE
SPEED LIMIT 60
R2-1
30" X 36"
FINES DOUBLE
W21-62R
48" X 30"
REMAIN FROM
PREVIOUS STAGE

7 1/2 MILE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 3	SHEET 191	E

2

2

N

TOWN OF
RAYMOND

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

6 1/2 MILE RD

CONSTRUCT
SE POND

WEST FRONTAGE RD

7 MILE RD

B-51-140

CONSTRUCT
IH 94 NB

WEST FRONTAGE RD

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

NE POND

EAST FRONTAGE RD

IH 94 SB
IH 94 NB

27TH ST

ENTRANCE RAMP

EXIT RAMP

CONSTRUCT
S-51-23

7 1/2 MILE RD

HAGEMANN RD

STANLEY RD

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00

MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 4

WORK ZONE =

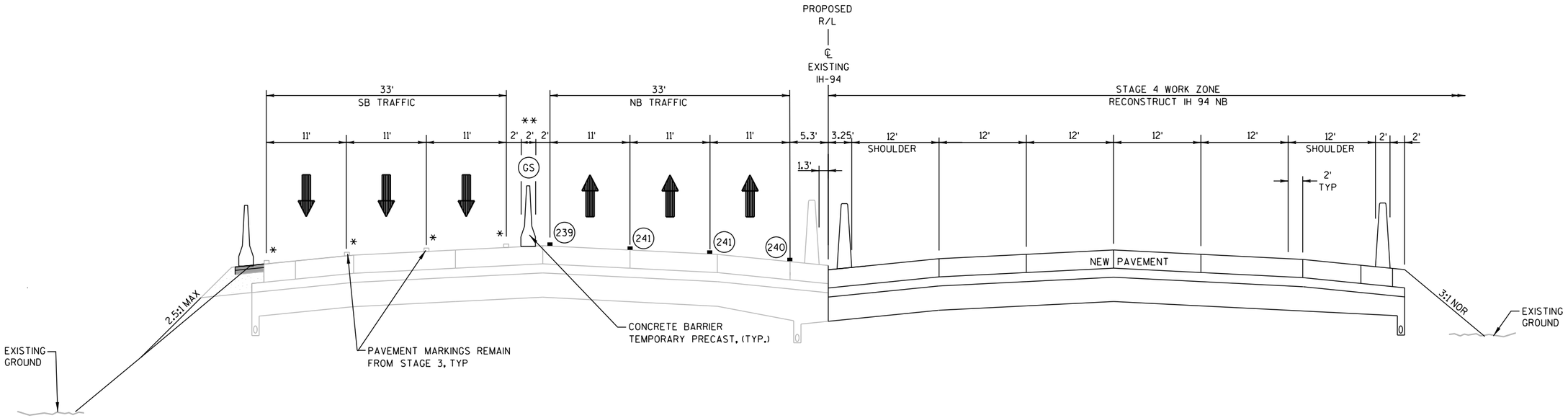
CONSTRUCTION

-CONSTRUCT IH 94 NB
-REMOVE STRUCTURE B-51-33 AND WIDENING
-CONSTRUCT BRIDGE B-51-140
-CONSTRUCT SIGN STRUCTURE S-51-23
-CONSTRUCT SE POND

TRAFFIC

-ALL IH 94 TRAFFIC SHIFTED TO
SB LANES (MEDIAN CROSSOVERS
CONSTRUCTED IN OTHER SEGMENTS)
-IH 94 NB RAMPS AT 7 MILE ROAD ARE CLOSED
-IH 94 SB RAMPS AT 7 MILE ROAD ARE OPEN
-7 MILE ROAD CLOSED 10 DAYS FOR REMOVAL
B-51-33 AND 10 DAYS FOR B-51-140 FALSEWORK
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 4	SHEET 192	E



* LANE MARKINGS PLACED IN STAGE 3

MARKING LEGEND

(239) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)

(240) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)

(241) TEMPORARY MARKING LINE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

(GS) GLARE SCREEN TEMPORARY

** MOVE NB MILE MARKER SIGNS FROM TEMPORARY BARRIER TO SB MEDIAN TEMPORARY BARRIER. MOVE ONLY THE EVEN 2/10 MILE SIGNS.

STAGE 4 TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

2

N

NOTE
1) IH 94 SB PAVEMENT MARKINGS REMAIN IN PLACE FROM STAGE 3

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

EAST FRONTAGE RD

6 1/2 MILE RD

W21-620 48" X 30" WORK ZONE

SPEED LIMIT 60 R2-1 30" X 36"

FINES DOUBLE W21-62R 48" X 30"

EAST 94 MILE 326 0.6 D10-5 21" X 60" MOVE

WEST 94 MILE 326 0.6 D10-5 21" X 60" REMAIN FROM PREVIOUS STAGE

REMAIN FROM PREVIOUS STAGE

SOUTH 41 EAST 94 Overpass SOUTH 41 Overpass REMAIN FROM PREVIOUS STAGE

1206 1208 1210 1212 1214 1216 1218 1220 239 241 240 241 1220SW 1220SE

MATCHLINE 1220+50

R/L IH 94

CONSTRUCT IH 94 NB

W21-620 48" X 30" WORK ZONE

SPEED LIMIT 60 R2-1 30" X 36"

FINES DOUBLE W21-62R 48" X 30"

6 1/2 MILE RD

INSTALL DATE AND SIGN DATE DETERMINED BY ENGINEER

MOVE TYPE 1 EXIT 326 SEVEN MILE RD

2111 CLOSED

USE RYAN RD 2107

FMS ON PORTABLE SUPPORTS

CONSTRUCT SIGN STRUCTURE S-51-23

EXIT 326
To 241
Seven Mile Road
Exit Only

INSTALL TYPE 1 SIGN ON SIGN BRIDGE S-51-23

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 4	SHEET 194 E

2

N

WEST 94 MILE 326 0.2
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

ALTERNATE M 4-1 24" X 12"
INTERSTATE 94
M1-1 24" X 24"
M 6-1 21" X 21"
REMAIN FROM PREVIOUS STAGE

RACINE AREA TRAVEL INFO
TUNE TO
1700 AM
REMAIN FROM PREVIOUS STAGE

WEST FRONTAGE RD

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW 1234SW

239 241 240 241 242

ENTRANCE RAMP SW
R/L RAMP SW

IH 94 SB
IH 94 NB
R/L IH 94

1222 1224 1226 1228 1230 1232 1234

MATCHLINE 1220+50

MATCHLINE 1234+50

1222SE 1224SE 1226SE 1228SE 1230SE 1232SE 1234SE

EAST FRONTAGE RD

R/L RAMP SE

CONSTRUCT IH 94 NB

SE POND

CONSTRUCT SE POND

EXIT 50 M.P.H.
REMOVE TYPE 2

EAST 94 MILE 326 0.2
D10-5
21" X 60"
MOVE

ALTERNATE M 4-1 24" X 12"
INTERSTATE 94
M1-1 24" X 24"
M 6-1 21" X 21"
REMAIN FROM PREVIOUS STAGE

EXIT 326
REMOVE TYPE 1

EXIT 326
INSTALL TYPE 1

EXIT 325
241 NORTH 27TH STREET 3/4 MILE
REMOVE TYPE 1

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 4	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026027_s4.dgn PLOT DATE : 15-JUN-2018 08:53 PLOT BY : agulan PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

2

N

WEST FRONTAGE RD

EXIT 327

G
CALEDONIA
1 MILE

REMAIN FROM
PREVIOUS STAGE

7 MILE ROAD

344

CONSTRUCTION OF 7 MILE ROAD
1035-01-72 BEGINS IN THIS STAGE

R/L 7 MILE RD

ASPHALTIC SURFACE
TEMPORARY REQUIRED
FOR THROUGH LANES

WEST 94 MILE 326 0.2
D10-5
21" X 60"
REMAIN FROM
PREVIOUS STAGE

WEST 94 MILE 326 0.0
D10-5
21" X 60"
REMAIN FROM
PREVIOUS STAGE

R/L RAMP SW

R/L RAMP NW

1236SW 1238SW 1240SW 1242NW 1244NW 1246NW 1248NW

ENTRANCE RAMP SW

EXIT RAMP NW

TEMPORARY SHORING
REQUIRED FOR
STORM SEWER
INSTALLATION

2' SHY

B-51-139

241 240 239 32 240 32

IH 94 SB

IH 94 NB

1236 1238 1240 1242 1244 1246 1248

MATCHLINE 1234+50

MATCHLINE 1248+50

+50

+15

R/L IH 94

B-51-140

1236SE 1238SE 1240SE 1242NE 1244NE 1246NE 1248NE

R/L RAMP SE

R/L RAMP NE

CONSTRUCT IH 94 NB,
RAMP SE AND RAMP NE

EAST 94 MILE 326 0.2
D10-5
21" X 60"
MOVE

GAS CAMPING
0.1 2.3

INTERSTATE LOGOS-WISCONSIN,
RESPONSIBLE FOR SIGN.
CONTACT 608-579-1570

INSTALL TYPE 1

OAK CREEK
FRANKLIN
NEXT 4 EXITS

EAST 94 MILE 326 0.0
D10-5
21" X 60"
MOVE

REMOVE TYPE 2

MOVE TYPE 1

OAK CREEK
FRANKLIN
NEXT 4 EXITS

FMS ON PORTABLE SUPPORTS

350

352

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 4	SHEET 196 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026028_s4.dgn PLOT DATE : 15-JUN-2018 08:53 PLOT BY : agulan PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

EXIT 326

REMAIN FROM PREVIOUS STAGE

ASPH

WEST 94 MILE 325 0.8

D10-5
21" X 60"

REMAIN FROM PREVIOUS STAGE

ALTERNATE
M 4-1
24" X 12"

INTERSTATE 94

M1-1
24" X 24"

M 6-1
21" X 21"

REMAIN FROM PREVIOUS STAGE

W1-4C

STAY IN LANE
R4-9
24" X 30"

R/L RAMP NW

1250NW

EXIT RAMP NW

1252NW

1254NW

1256NW

WEST FRONTAGE RD

R/L IH 94

1258NW

1260NW

1262NW

IH — 94 — SB

IH — 94 — NB

MATCHLINE 1248+50

MATCHLINE 1262+50

1250

1252

1254

1256

1258

1260

1262

1250NE

1252NE

1254NE

1256NE

1258NE

1260NE

1262NE

EAST FRONTAGE RD

CONSTRUCT IH 94 NB, RAMP SE AND RAMP NE

R/L RAMP SE

NE POND

W4-1
36" X 36"
INSTALL TYPE 2

EAST 94 MILE 325 0.8

D10-5
21" X 60"
MOVE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 4	SHEET 197 E

2

N

EXIT 326
SEVEN MILE RD
REMAIN FROM PREVIOUS STAGE

WEST 94 MILE 325 0.6
D10-5
21" X 60"
REMAIN FROM PREVIOUS STAGE

W21-620
48" X 30"
WORK ZONE
SPEED LIMIT 60
R2-1
30" X 36"
FINES DOUBLE
W21-62R
48" X 30"
REMAIN FROM PREVIOUS STAGE

WEST FRONTAGE RD

SEE PROJECT I.D. 1035-01-82 FOR
ADDITIONAL IH 94 TRAFFIC CONTROL

1264NW
1264
1264NE
1266
1268
1270
1272

MATCHLINE 1262+50

R/L IH 94

IH 94 SB

IH 94 NB

END PROJECT
I.D. 1035-01-74
STA 1268+00.00

CONSTRUCT IH 94 NB

EAST FRONTAGE RD

R/L RAMP SE

EAST 94 MILE 325 0.6
D10-5
21" X 60"
MOVE

W21-620
48" X 30"
WORK ZONE
SPEED LIMIT 60
R2-1
30" X 36"
FINES DOUBLE
W21-62R
48" X 30"

7 1/2 MILE RD

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 4	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026030_s4.dgn PLOT DATE : 15-JUN-2018 08:53 PLOT BY : agulan PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

N

TOWN OF
RAYMOND

SEE PROJECT I.D. 1035-01-79
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

CONSTRUCT CORRUGATIONS
IN SB OUTER SHOULDER

WEST FRONTAGE RD

7 MILE RD

REMOVE
TEMPORARY
WIDENING

WEST FRONTAGE RD

CONSTRUCT
S-51-22

END PROJECT
1035-01-74
STA 1268+00

MATCH PROJECT
1035-01-82

IH 94 SB
IH 94 NB

EAST FRONTAGE RD

SE POND

NE POND

EAST FRONTAGE RD

IH 94 SB
IH 94 NB

27TH ST

ENTRANCE RAMP

EXIT RAMP

7 1/2 MILE RD

CONSTRUCT CORRUGATIONS
IN SB MEDIAN SHOULDER

HAGEMANN RD

STANLEY RD

CONSTRUCT
SB OUTER
BARRIER

SEE PROJECT I.D. 1035-01-82
FOR ADDITIONAL MAINLINE
TRAFFIC CONTROL

BEGIN PROJECT
1035-01-74
STA 1213+00

MATCH PROJECT
1035-01-79

VILLAGE OF
CALEDONIA

STAGE 5

WORK ZONE = ▨

CONSTRUCTION

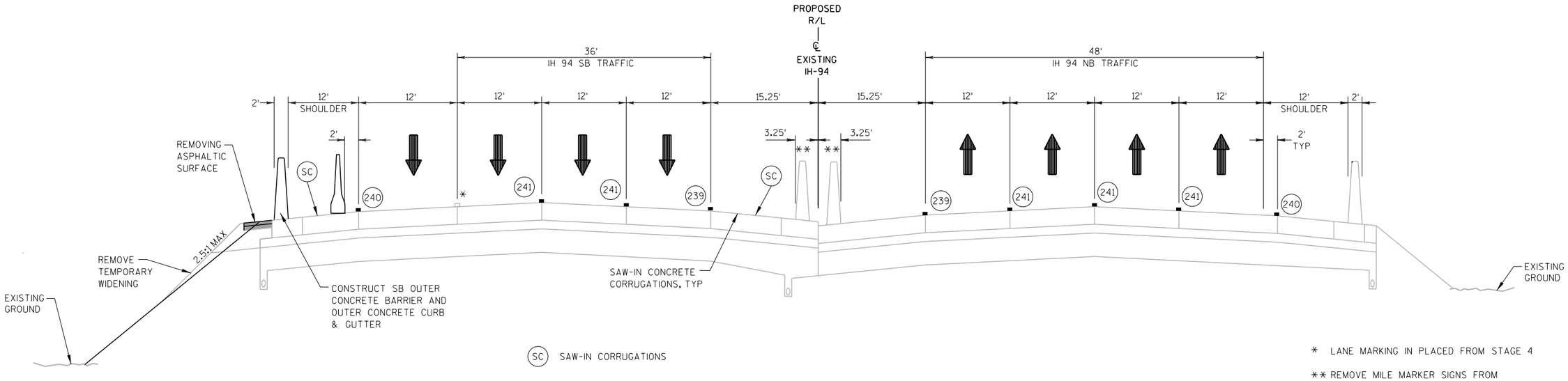
-CONSTRUCT SB OUTER CONCRETE BARRIER
-IH 94 SB CORRUGATIONS (SAWED IN)
-CONSTRUCT S-51-22
-REMOVE TEMPORARY SB WIDENING

TRAFFIC

-IH 94 REMAINS OPEN WITH 4 LANES
IN EACH DIRECTION
-SB RAMPS SHORT TERM CLOSURES FOR
SAWING CORRUGATIONS AND REMOVAL
OF TEMPORARY WIDENING
-NB RAMPS ARE OPEN
-7 MILE ROAD IS OPEN
-FRONTAGE ROADS REMAIN OPEN

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE RD	COUNTY: RACINE	TRAFFIC CONTROL: OVERVIEW - STAGE 5	SHEET 199	E

2



(SC) SAW-IN CORRUGATIONS

* LANE MARKING IN PLACED FROM STAGE 4

** REMOVE MILE MARKER SIGNS FROM TEMPORARY BARRIER, PLACE PERMANENT MILE MARKER SIGNS ON MEDIAN BARRIER

PLACE TEMPORARY LANE MARKINGS

MARKING LEGEND

(239) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)

(240) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)

(241) TEMPORARY MARKING LINE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

STAGE 5B TYPICAL SECTION

IH 94

STA 1213+00 TO STA 1268+00

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 5 TYPICAL SECTIONS	SHEET 200	E

2

N

W21-62O
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"
REMAIN FROM PREVIOUS STAGE

EAST 94 MILE 326 0.6
D10-5
21" X 60"

WEST 94 MILE 326 0.6
D10-5
21" X 60"

SEE PERMANENT SIGNING PLANS

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

6 1/2 MILE RD

SOUTH 41 EAST 94 SOUTH 41
REMAIN FROM PREVIOUS STAGE

WEST FRONTAGE RD

IH 94 SB

IH 94 NB

EAST FRONTAGE RD

REMOVE TEMPORARY WIDENING

CONSTRUCT SB OUTER CONCRETE BARRIER

1206 1208 1210 1212 1214 1216 1218 1220

1220SW

1220SE

MATCHLINE 1220+50

R/L IH 94

SC

240 241 239 241 242 240 239

S-51-23

SEE PROJECT I.D. 1035-01-79 FOR ADDITIONAL IH 94 TRAFFIC CONTROL

W21-62O
48" X 30"
WORK ZONE

SPEED LIMIT 60
R2-1
30" X 36"

FINES DOUBLE
W21-62R
48" X 30"

6 1/2 MILE RD

NOTES

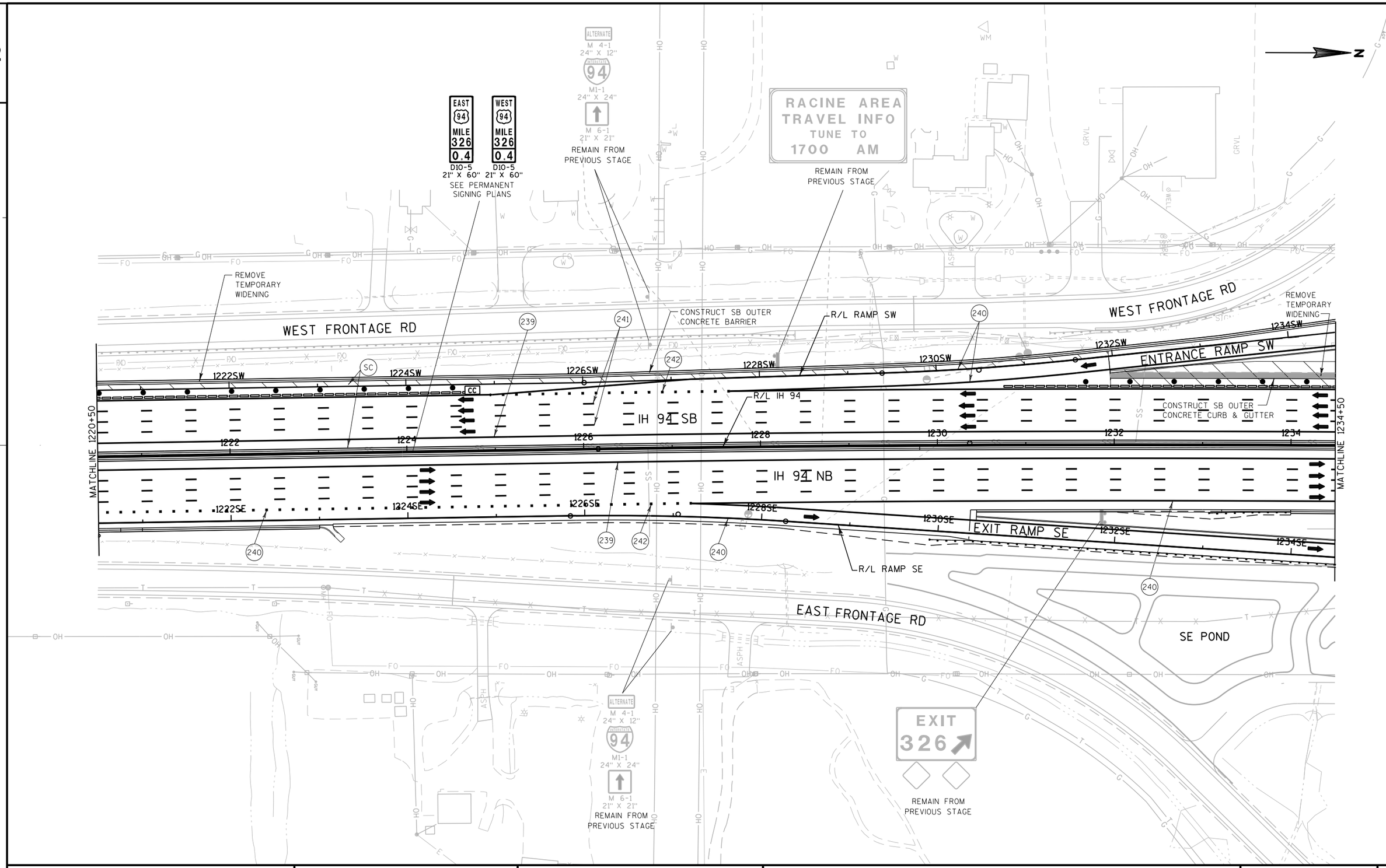
1) NB AND SB 94 MARKINGS ARE IN ULTIMATE LOCATION BUT ARE TEMPORARY MARKINGS

2) SEE PAVEMENT MARKING PLANS FOR DELINEATOR PLACEMENT

EXIT 326
To 241
Seven Mile Road
Exit Only

REMAIN FROM PREVIOUS STAGE

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 5	SHEET 201	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 5	SHEET 202 E

2

N

WEST FRONTAGE RD

EXIT 327

G
CALEDONIA
1 MILE

REMAIN FROM
PREVIOUS STAGE

7 MILE ROAD

R/L 7 MILE RD

CONSTRUCTED IN STAGE 4
UNDER 1035-01-72

EAST 94 MILE 326 0.2
D10-5 21" X 60"

WEST 94 MILE 326 0.2
D10-5 21" X 60"

SEE PERMANENT
SIGNING PLANS

EAST 94 MILE 326 0.0
D10-5 21" X 60"

WEST 94 MILE 326 0.0
D10-5 21" X 60"

SEE PERMANENT
SIGNING PLANS

R/L RAMP SW

ENTRANCE RAMP SW

1236SW
1238SW
1240SW
1242NW
1244NW
1246NW
1248NW

EXIT RAMP NW

R/L RAMP NW

REMOVE TEMPORARY
WIDENING

CONSTRUCT SB OUTER
CONCRETE BARRIER

R/L IH 94

B-51-139

S-51-220

SC 241 239 240

MATCHLINE 1234+50

IH 94 SB

IH 94 NB

1236 1238 1240 1242 1244 1246 1248

MATCHLINE 1248+50

R/L RAMP SE

B-51-140

1236SE
1238SE
1240SE

EXIT RAMP SE

1242NE
1244NE
1246NE
1248NE

ENTRANCE RAMP NE

R/L RAMP NE

OAK CREEK
FRANKLIN
NEXT 4 EXITS

Elm Rd	1 1/4
100 Ryan Rd	2 3/4
Drexel Ave	4 3/4

REMAIN FROM
PREVIOUS STAGE

REMAIN FROM
PREVIOUS STAGE

ASPH
CANOPY
FILLER CAPS
A/C LAGG
BLDG
WELL
SEPC

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 5	SHEET 203 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m026035_s5.dgn
PLOT DATE : 15-JUN-2018 22:44
PLOT BY : scook
PLOT NAME :
PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42

2

N

EXIT 326

EAST 94 MILE 325 0.8
D10-5 21" X 60"

WEST 94 MILE 325 0.8
D10-5 21" X 60"

SEE PERMANENT SIGNING PLANS

REMAIN FROM PREVIOUS STAGE

ALTERNATE M 4-1 24" X 12"

INTERSTATE 94 M1-1 24" X 24"

M 6-1 21" X 21"

REMAIN FROM PREVIOUS STAGE

REMOVE TEMPORARY WIDENING

R/L RAMP NW

WEST FRONTAGE RD

CONSTRUCT SB OUTER CONCRETE BARRIER

1250NW 1252NW 1254NW 1256NW 1258NW 1260NW 1262NW

EXIT RAMP NW

SC CC 240 242 SC 239 241 240

MATCHLINE 1248+50

R/L IH 94

1250 1252 1254 1256 1258 1260 1262

IH 94 SB

IH 94 NB

MATCHLINE 1262+50

1256NE 1258NE 1260NE 1262NE

1258NE 1252NE 1254NE

ENTRANCE RAMP NE

241 239 240 242

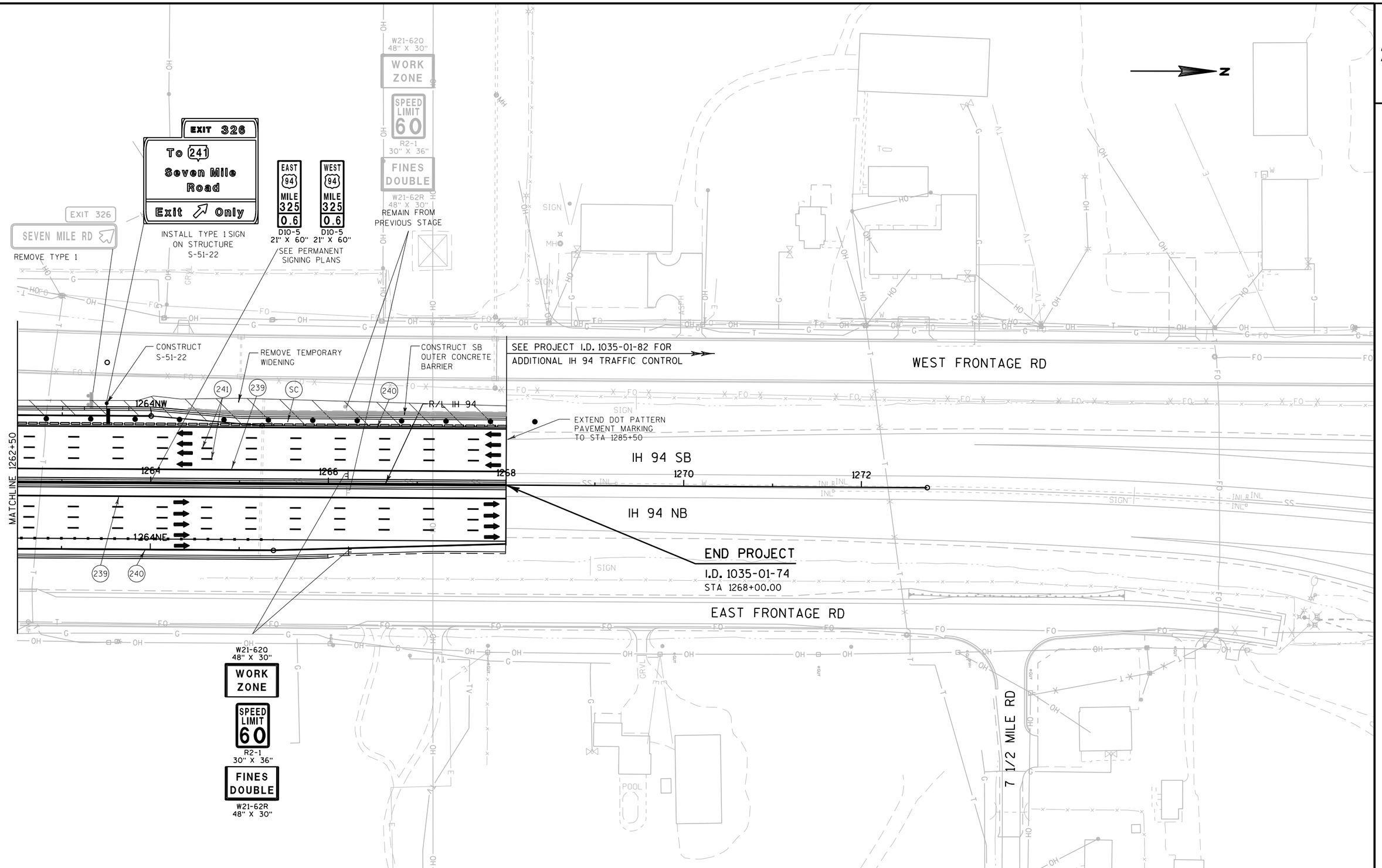
R/L RAMP NE

EAST FRONTAGE RD

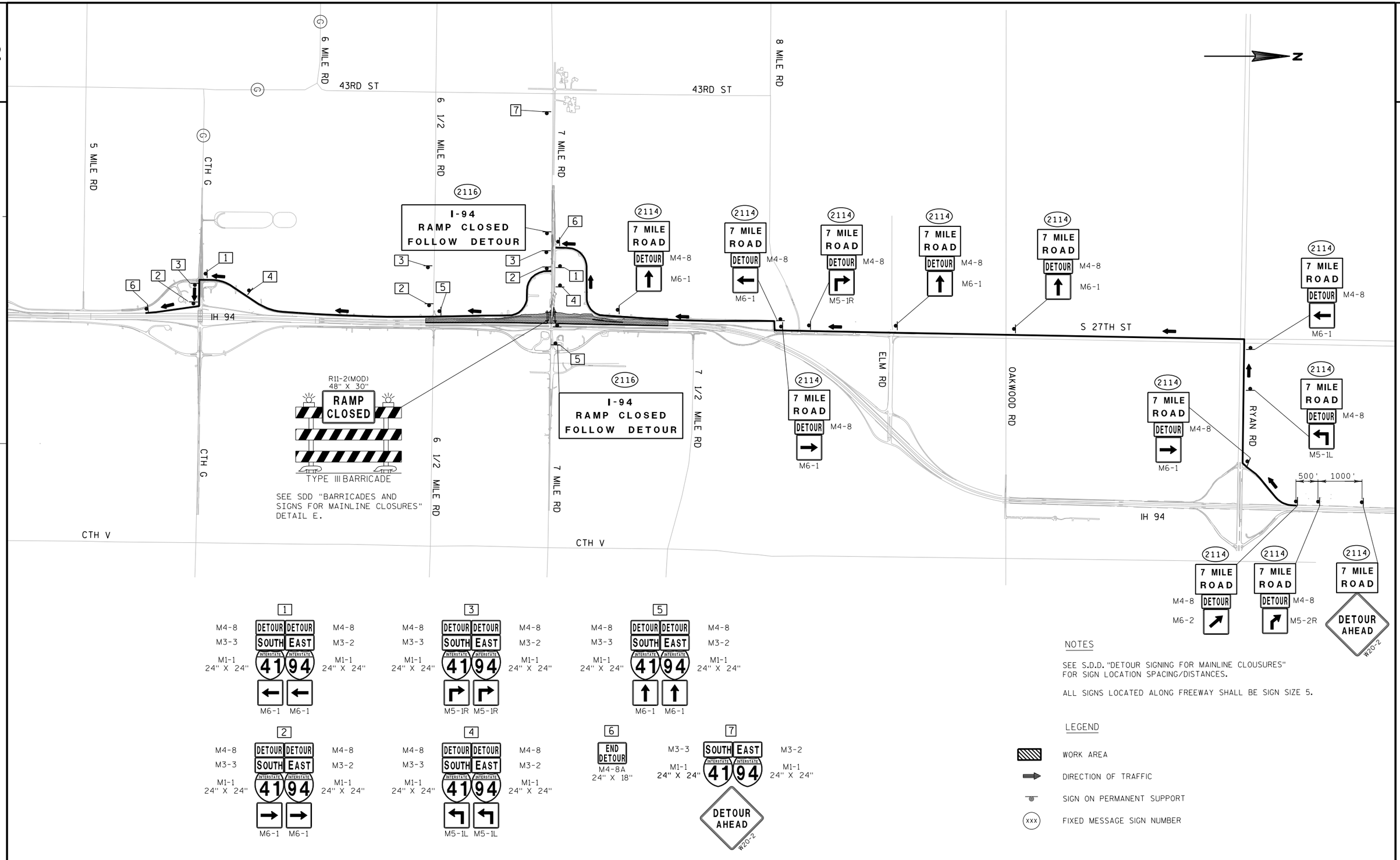
NE POND

REMAIN FROM PREVIOUS STAGE

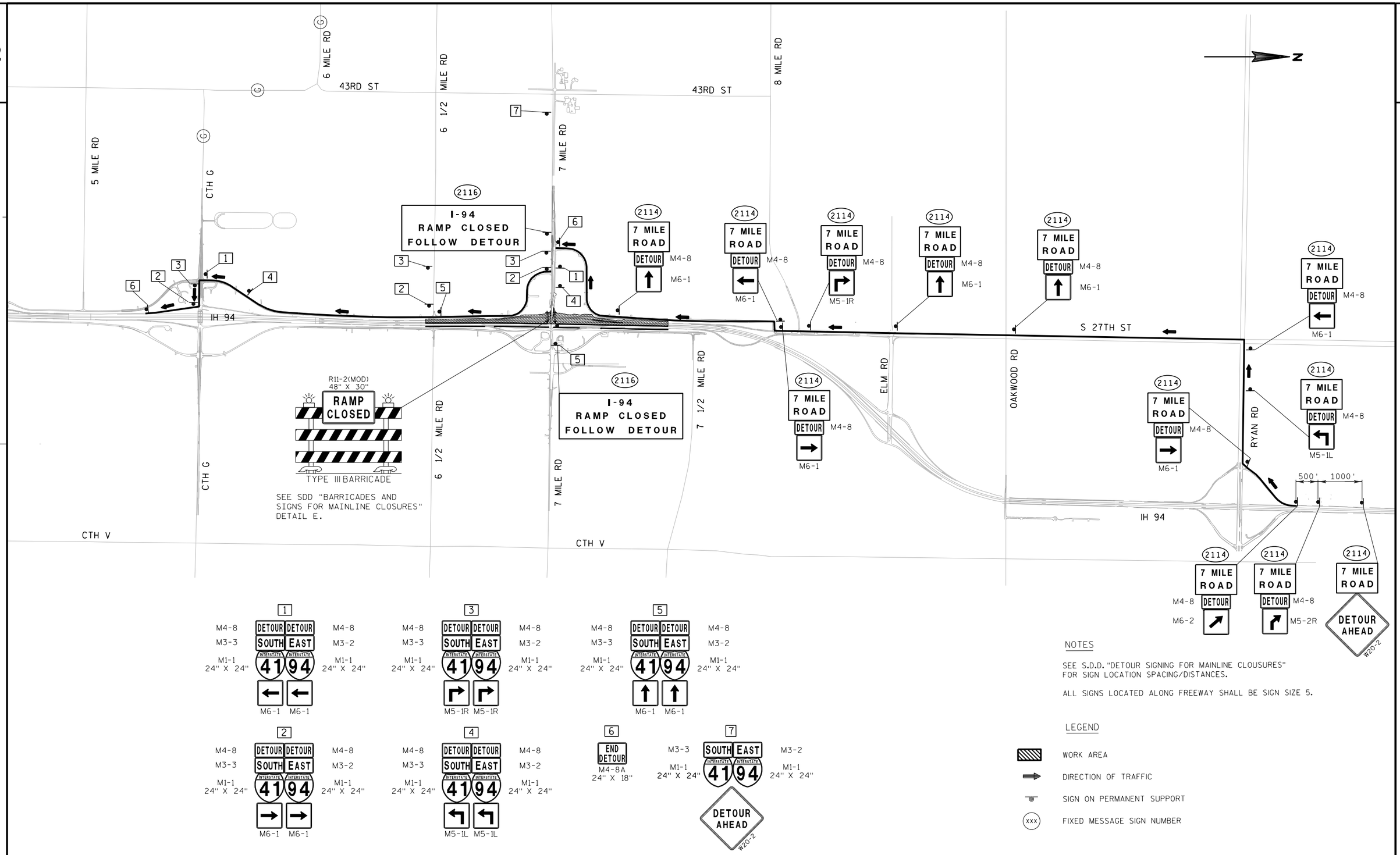
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 5	SHEET 204 E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 5	SHEET 205 E



PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL: SB DETOUR, STAGE 2	SHEET 206	E



1

M4-8 DETOUR SOUTH M3-3 M1-1 24" X 24"
DETOUR EAST M4-8 M3-2 M1-1 24" X 24"
INTERSTATE 41 INTERSTATE 94
M6-1 M6-1

2

M4-8 DETOUR SOUTH M3-3 M1-1 24" X 24"
DETOUR EAST M4-8 M3-2 M1-1 24" X 24"
INTERSTATE 41 INTERSTATE 94
M6-1 M6-1

3

M4-8 DETOUR SOUTH M3-3 M1-1 24" X 24"
DETOUR EAST M4-8 M3-2 M1-1 24" X 24"
INTERSTATE 41 INTERSTATE 94
M5-1R M5-1R

4

M4-8 DETOUR SOUTH M3-3 M1-1 24" X 24"
DETOUR EAST M4-8 M3-2 M1-1 24" X 24"
INTERSTATE 41 INTERSTATE 94
M5-1L M5-1L

5

M4-8 DETOUR SOUTH M3-3 M1-1 24" X 24"
DETOUR EAST M4-8 M3-2 M1-1 24" X 24"
INTERSTATE 41 INTERSTATE 94
M6-1 M6-1

6

END DETOUR
M4-8A
24" X 18"

7

M3-3 SOUTH EAST M3-2
M1-1 24" X 24" INTERSTATE 41 INTERSTATE 94 M1-1 24" X 24"
DETOUR AHEAD
W20-2

NOTES

SEE S.D.D. "DETOUR SIGNING FOR MAINLINE CLOUSURES" FOR SIGN LOCATION SPACING/DISTANCES.

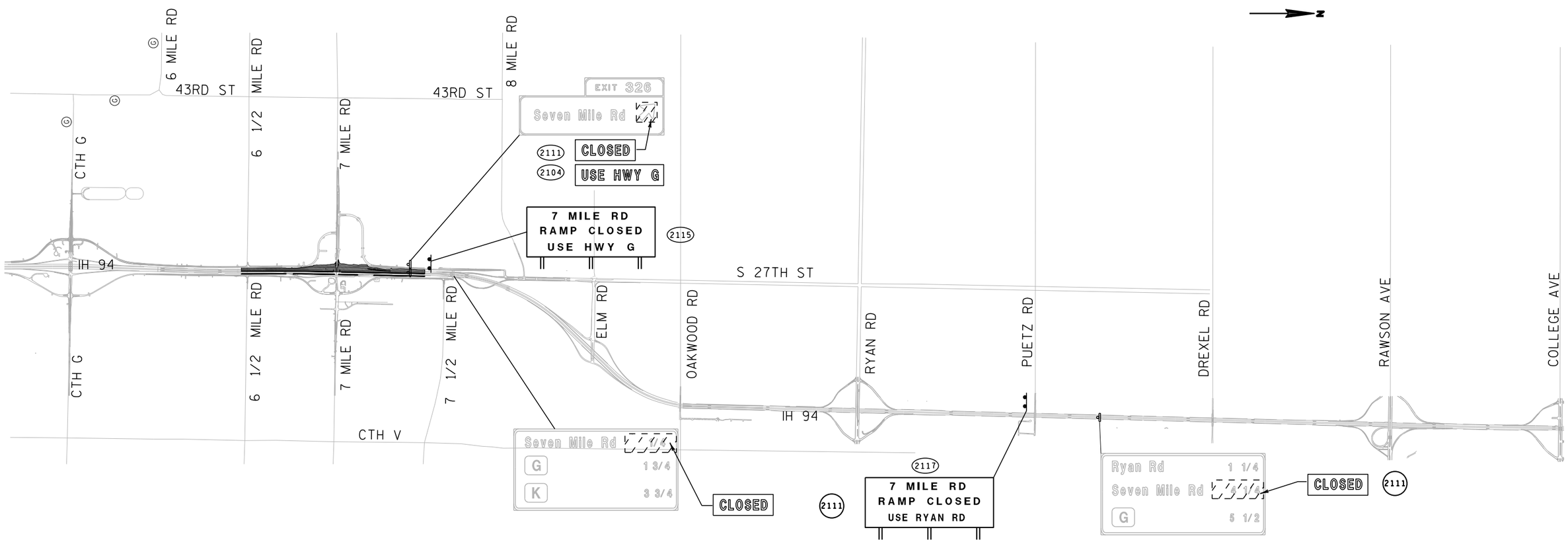
ALL SIGNS LOCATED ALONG FREEWAY SHALL BE SIGN SIZE 5.

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- (xxx) FIXED MESSAGE SIGN NUMBER

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL: SB DETOUR, STAGE 2	SHEET 207 E

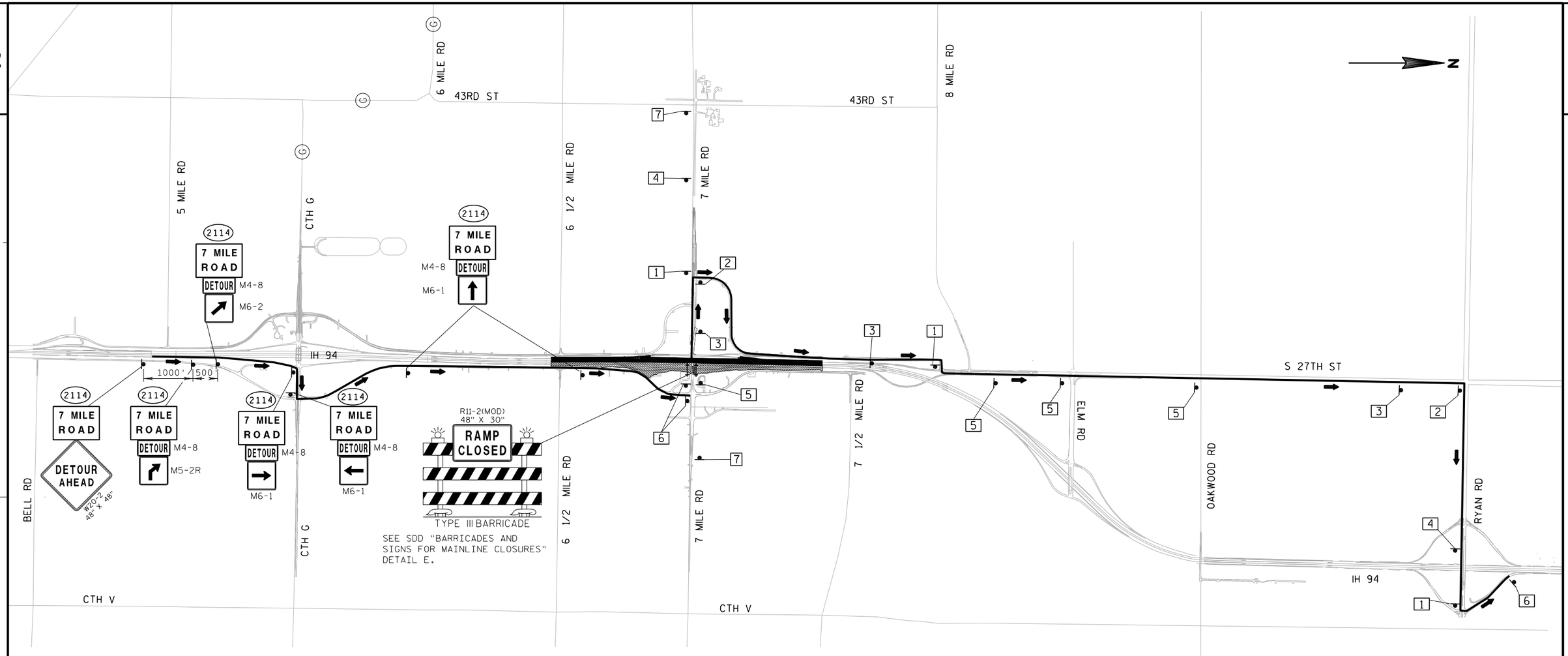
2



LEGEND

- EXISTING SIGN MOUNTED ON SUPPORT(S)
- PROPOSED SIGN MOUNTED ON SUPPORT(S)
- PROPOSED SIGN
- EAST — EXISTING SIGN
- (XXX) — SIGN NUMBER FIXED MESSAGE

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL: SB FMS COVERING, STAGE 2	SHEET 208	E



1
M4-8 DETOUR DETOUR M4-8
M3-1 NORTH WEST M3-4
M1-1 24" X 24" 41 94 M1-1 24" X 24"
M6-1 M6-1

2
M4-8 DETOUR DETOUR M4-8
M3-1 NORTH WEST M3-4
M1-1 24" X 24" 41 94 M1-1 24" X 24"
M6-1 M6-1

3
M4-8 DETOUR DETOUR M4-8
M3-1 NORTH WEST M3-4
M1-1 24" X 24" 41 94 M1-1 24" X 24"
M5-1R M5-1R

4
M4-8 DETOUR DETOUR M4-8
M3-1 NORTH WEST M3-4
M1-1 24" X 24" 41 94 M1-1 24" X 24"
M5-1L M5-1L

5
M4-8 DETOUR DETOUR M4-8
M3-1 NORTH WEST M3-4
M1-1 24" X 24" 41 94 M1-1 24" X 24"
M6-1 M6-1

6
END DETOUR
M4-8A
24" X 18"

7
M3-1 NORTH WEST M3-4
M1-1 24" X 24" 41 94 M1-1 24" X 24"
DETOUR AHEAD
W20-2
48" X 48"

NOTES

SEE S.D.D. "DETOUR SIGNING FOR MAINLINE CLOUSURES" FOR SIGN LOCATION SPACING/DISTANCES.

ALL SIGNS LOCATED ALONG FREEWAY SHALL BE SIGN SIZE 5.

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- (xxx) FIXED MESSAGE SIGN NUMBER

PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TRAFFIC CONTROL: NB DETOUR, STAGES 1B & 4	SHEET 209	E

2

N

6 1/2 MILE RD

R/W

FENCE WOVEN WIRE 4-FEET

1213+00.00
99.25' LT
MATCH I.D. 1035-01-79

1216+61.05
99.25' LT

1219+00.92
107.25' LT

WEST FRONTAGE ROAD

1225+93.95
110.58' LT

1220SW 1222SW 1224SW 1226SW

BEGIN PROJECT
I.D. 1035-01-74
1212 STA 1213+00

R/L IH 94

IH 94 SB

R/L RAMP SW

1214 1216 1218 1220 1222 1224 1226

MATCH PROJECT
I.D. 1035-01-79

FENCE WOVEN WIRE 4-FEET

IH 94 NB

R/L RAMP SE

1220SE 1222SE 1224SE 1226SE

MATCHLINE 1227+00

1213+00
100.25' RT
MATCH I.D. 1035-01-79

1218+83.36
100.25' RT

EAST FRONTAGE ROAD

1222+46.08
104.95' RT

1224+02.59
115.16' RT
MATCH EXISTING FENCE

EXISTING FENCE

6 1/2 MILE RD

NOTES

1) REMOVE EXISTING WOVEN WIRE FENCING EXCEPT AS NOTED.

2) INSTALL NEW WOVEN WIRE FENCING AFTER GRADING AND ROADWAY WORK IS COMPLETE.

SHEET 1 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	FENCING PLAN	SCALE, FEET 0 50 100	SHEET 210 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m027101_fn.dgn PLOT DATE : 10-JUN-2018 12:34 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

2

R/L SEVEN MILE ROAD

1235+91.42
367.23'LT

1236+78.49
326.56'LT

1240+96.97
338.82'LT

1235+46.51
289.60'LT

FENCE WOVEN
WIRE 4-FOOT

1236+78.98
222.00'LT

1239+80.70
222.00'LT

R/W

1234+61.15
206.70'LT

1233+55.66
147.88'LT

1232+87.13
131.18'LT

1231+91.51
119.73'LT

1228+59.78
116.29'LT

1234+65.69
97.25'LT

1228SW
1230SW
1232SW
1234SW
1236SW
1238SW
1240SW

R/L RAMP SW

122+77.56
114.90'LT

1240+68.35
115.97'LT

1240+68.35
76.69'LT

R/L IH 94

1228
1230
1232
1234
1236
1238
1240

MATCHLINE 1227+00

MATCHLINE 1242+00

1228SE
1230SE
1232SE
1234SE
1236SE
1238SE
1240SE

R/L RAMP SE

1240+68.92
76.69'RT

1240+66.92
95.58'RT

1228+52.40
145.79'RT
MATCH EXISTING
FENCE

1229+56.94
155.53'RT

1230+66.97
183.38'RT

1233+89.95
91.05'RT

1234+77.62
95.57'RT

1239+49.72
182.95'RT

1240+65.63
197.24'RT

1239+18.75
206.36'RT

1231+73.89
231.67'RT

1232+40.34
274.64'RT

1233+85.33
257.97'RT

1234+56.83
259.00'RT

1233+38.60
277.15'RT

1232+96.14
320.24'RT

FENCE WOVEN
WIRE 4-FOOT

1239+18.97
259.00'RT

R/W

ASPH

GANOPY

SHEET 2 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	FENCING PLAN	SCALE, FEET 0 50 100	SHEET 211 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m027102_fn.dgn PLOT DATE : 10-JUN-2018 12:34 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

2

N

1242+49.22
293.23' LT

1243+11.62
255.05' LT

1244+19.93
239.00' LT

FENCE WOVEN
WIRE 4-FOOT

1250+69.52
239.00' LT

1251+32.54
196.52' LT

1252+10.93
158.88' LT
MATCH EXISTING
FENCE

EXISTING FENCE

1242+94.99
102.25' LT

1242+94.99
76.70' LT

1250+99.65
102.25' LT

R/L RAMP NW

R/W

42NW
1244NW
1246NW
1248NW
1250NW
1252NW
1254NW
1256NW

MATCHLINE 1242+00

42
1244
1246
1248
1250
1252
1254
1256

MATCHLINE 1257+00

R/L IH 94

1248+65.31
92.82' RT

1242+78.31
77.01' RT

1242+78.31
92.22' RT

R/L RAMP NE

2NE
1244NE
1246NE
1248NE
1250NE
1252NE
1254NE
1256NE

1251+97.14
131.84' RT
MATCH EXISTING
FENCE

1255+17.23
110.98' RT

1256+00.00
109.00' RT

1247+38.52
177.73' RT

1248+92.38
178.27' RT
MATCH EXISTING
FENCE

1243+32.32
219.04' RT

1' OFFSET
FROM R/W

FENCE WOVEN
WIRE 4-FOOT

1242+62.49
289.35' RT

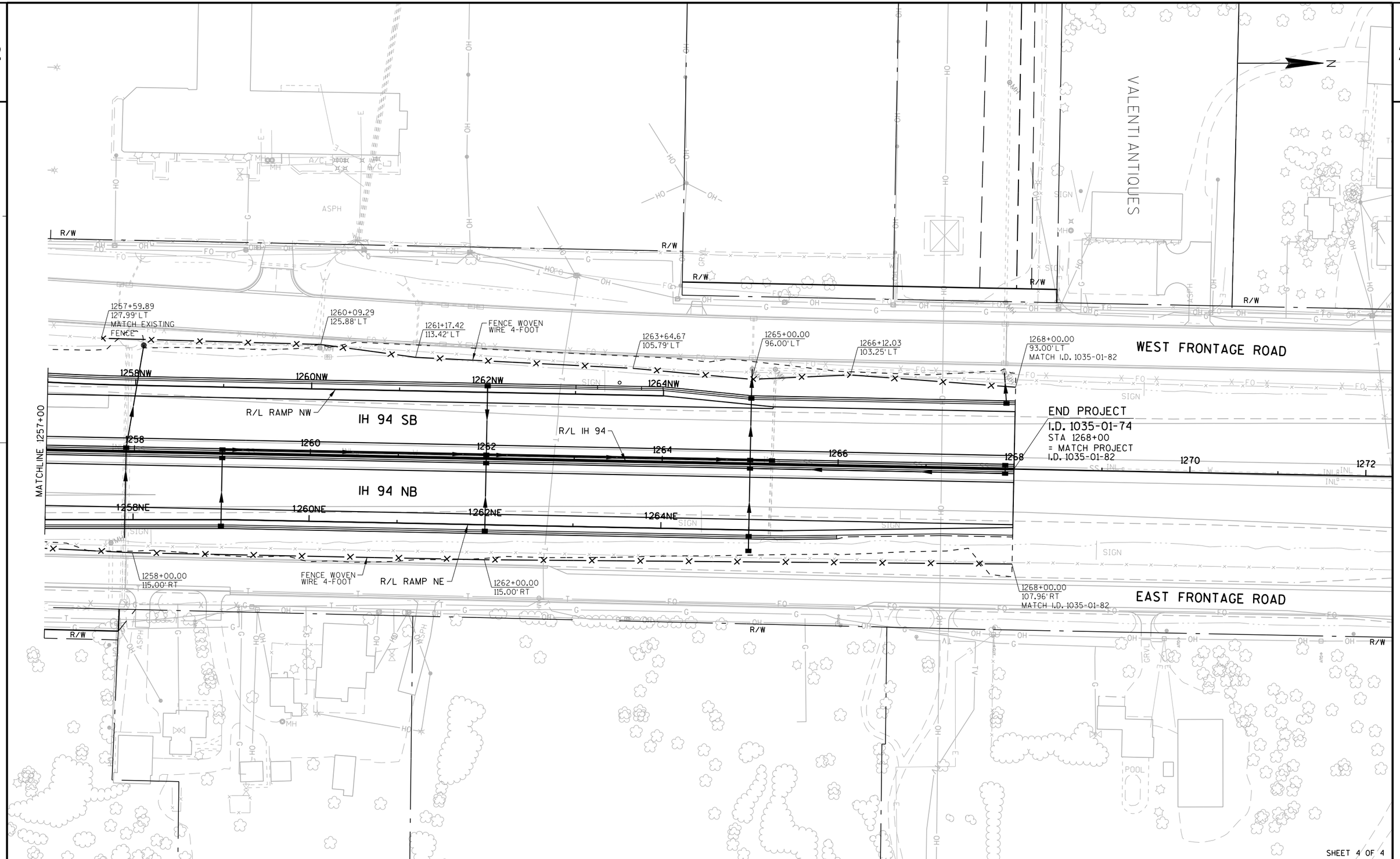
BLDG

ASPH

SHEET 3 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	FENCING PLAN	SCALE, FEET 0 50 100	SHEET 212	E

2



SHEET 4 OF 4

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	FENCING PLAN	SCALE, FEET 0 50 100	SHEET 213 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m027104_fn.dgn PLOT DATE : 10-JUN-2018 12:34 PLOT BY : scook PLOT NAME : PLOT SCALE : 100:1

T 4 N R 21 E — 12 | 12 | 12 | 12

X=591775.34
Y=220794.28

S89°05'06"E 2655.67'

1/4 LINE

BEGIN PROJECT
I.D. 1035-01-74
1213+00.00
X = 594352.25
Y = 220563.86

1215 — 1220 — 1225 — 1230 — 1235 — 1240

R/L IH 94

N0°07'15"W

1219SW+01.58 RAMP SW =
1219+01.58 IH 94, 75.25'LT
X = 594275.73
Y = 221865.28

1220SW — 1225SW — 1230SW — 1235SW — 1240SW

N0°07'15"W — N1°03'45"W — N5°14'54"W

PI 1226SW+01.58
X = 594274.25
Y = 221865.28

PC 1 — PI 1 — PT 1

PC SW1 — PI SW1 — PT SW1

CURVE SW1

R/L RAMP SW

1241SW+89.19 RAMP SW =
1241NW+74.19 RAMP NW
345+99.87 SEVEN MILE ROAD
X = 594161.61
Y = 223448.13

CURVE 1

PI = 1230+36.62
N = 222300.47
E = 594348.58
△ = 01°15'38"
D = 00°09'00"
R = 38197.19
T = 420.25
L = 840.46
E = 2.31
PC = 1226+16.37
N = 221880.23
E = 594349.47
PT = 1234+56.83
N = 222720.64
E = 594356.94

CURVE SW1

PI = 1230+48.40
N = 222312.03
E = 594265.97
△ = 04°11'09"
D = 01°54'35"
R = 3000.00
T = 109.63
L = 219.17
E = 2.00
PC = 1229+38.77
N = 222202.41
E = 594268.00
PT = 1231+57.94
N = 222421.20
E = 594255.94

T 4 N R 21 E — 1 | 1 | 12 | 12

X=591802.32
Y=223454.05

S89°07'40"E 2655.41'

SECTION LINE

340 — 345

T 4 N R 22 E — 12 | 7 | 12 | 7

X=594430.67
Y=220751.87

S89°21'50"E 2320.77'

1/4 LINE

1220SE — 1225SE — 1230SE — 1235SE — 1240SE

N0°07'15"W — N4°31'52"E

PC SE1 — PI SE1 — PT SE1

CURVE SE1

1219SE+83.75 RAMP SE =
1219+83.75 IH 94, 75.25'RT
X = 594426.06
Y = 221247.77

R/L RAMP SE

CURVE SE1

PI = 1227+05.61
N = 221969.63
E = 594424.53
△ = 04°39'07"
D = 01°54'35"
R = 3000.00
T = 121.86
L = 243.58
E = 2.47
PC = 1225+83.75
N = 222847.77
E = 594424.79
PT = 1228+27.33
N = 222091.11
E = 594434.16

SECTION LINE 2661.88' NO°34'33"E

1241SE+83.04 RAMP SE =
1241NE+78.11 RAMP NE, 3.00'LT
349+79.57 SEVEN MILE ROAD
X = 594541.26
Y = 223442.58

T 4 N R 22 E — 1 | 6 | 12 | 7

X=594457.42
Y=223413.62

S89°17'21"E 2335.80'

SECTION LINE

350 — 355

T 4 N R 22 E — 7 | 7 | 7 | 7

X=596751.29
Y=220726.11

T 4 N R 22 E — 6 | 7 | 6 | 7

X=596793.04
Y=223384.64

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	ALIGNMENT PLAN	SHEET 214 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m027201_ad.dgn PLOT DATE : 11-JUN-2018 12:42 PLOT BY : scook PLOT NAME : 7m027201_ad PLOT SCALE : 200:1

2

T 4 N R 21 E — 1 12 12 1

X=591802.32
Y=223454.05

340

S89°07'40"E 2655.41'

SECTION LINE

345

1241NW+74.19 RAMP NW =
1241SW+89.19 RAMP SW
345+99.87 SEVEN MILE ROAD
X = 594161.61
Y = 223448.13

1240SW

1245NW

N4°53'08"E

PC NW1

CURVE NW1

PI NW1

PT NW1

R/L RAMP NW

1250NW

N7°10'12"E

1255NW

PC NW2

CURVE NW2

PI NW2

PT NW2

1260NW

N1°08'23"E

1264NW+00.12 RAMP NW =
1264+00.12 IH 94, 75.25'LT
X = 594340.26
Y = 225664.84

1241+81.27 IH 94 =
348+09.64 SEVEN MILE ROAD
X = 594371.36
Y = 223444.93

1240

1245

1250

1255

1260

1265

1270

R/L IH 94

N1°08'23"E

CURVE NW1

PI = 1246+70.36
N = 223942.50
E = 594203.86
△ = 02°17'03"
D = 00°42'58"
R = 8000.00
T = 159.49
L = 318.94
E = 1.59
PC = 1245+10.87
N = 223783.59
E = 594190.28
PT = 1248+29.81
N = 224100.75
E = 594223.77

CURVE NW2

PI = 1256+42.28
N = 224906.86
E = 594325.18
△ = 06°01'48"
D = 01°54'35"
R = 3000.00
T = 158.01
L = 315.74
E = 4.16
PC = 1254+84.26
N = 224750.08
E = 594305.45
PT = 1258+00.00
N = 225064.84
E = 594328.32

SECTION LINE 2627.79' N1°20'27"E

1240SE

1245NE

1250NE

1255NE

PC NE1

CURVE NE1

PI NE1

PT NE1

N0°02'39"E

1260NE

1265NE

N1°08'23"E

N2°35'20"W

R/L RAMP NE

1241NE+79.31, RAMP NE =
349+82.57 SEVEN MILE ROAD
X = 594544.26
Y = 223442.54

1241NE+65.42, RAMP NE =
349+83.36, 13.86'RT SEVEN MILE RD
X = 594544.89
Y = 223428.67

PI 1259+13.64
X = 594481.05
Y = 225175.46

1265NE+38.64 RAMP NE =
1265+38.64 IH 94, 75.25'RT
X = 594493.48
Y = 225800.34

END PROJECT
I.D. 1035-01-74
1268+00.00
X = 594423.45
Y = 226063.15

CURVE NE1

PI = 1255+84.37
N = 224846.17
E = 594480.80
△ = 02°37'59"
D = 01°54'35"
R = 3000.00
T = 68.95
L = 137.87
E = 0.79
PC = 1255+15.42
N = 224777.29
E = 594483.91
PT = 1256+53.29
N = 2224915.12
E = 594480.85

T 4 N R 21 E — 1 16 17 1

X=594457.42
Y=223413.62

S89°17'21"E 2335.80'

SECTION LINE

350

355

T 4 N R 22 E — 6 6 7 7

X=596793.04
Y=223384.64

T 4 N R 21 E — 1 1 1 1

X=591855.70
Y=226088.40

S88°58'25"E 2663.64'

1/4 LINE

T 4 N R 21 E — 1 16 16 1

X=594518.91
Y=226040.69

S89°18'05"E 2321.49'

1/4 LINE

T 4 N R 22 E — 6 6 6 6

X=596840.22
Y=226012.38

2

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	ALIGNMENT PLAN	SHEET 215	E

2

T 4 N R 21 E — 12 | 12 | 12 | 12

X=591775.34
Y=220794.28

1/4 LINE

6 1/2 MILE RD

CP121462
CP BM NAIL IN W FACE PP NO 11-04888 SW CORNER 27TH ST AND 6 1/2 MILE RD
STA. 1214+62.00, 196.54' LT

X=594155.36
Y=220725.45

ELEV.=746.08

CP121562
F1000SPK BERNTSEN FENO WITH ALUM CAP
STA. 1215+61.82, 236.57' LT

X=594115.13
Y=220825.18

ELEV.=748.02

N

T 4 N R 21 E — 1 | 12 | 1 | 12

X=591802.32
Y=223454.05

CP BM BRIDGE DISK TOP PARAPET WALL
NW CORNER 194 BRIDGE 51-32-59 OVER 7 MILE RD
STA. 1242+06.37, 60.54' LT

X=594311.33
Y=223471.24

ELEV.=731.22

WEST FRONTAGE RD

1220SW 1225SW 1230SW 1235SW 1240SW

IH 94 SB

1215 1220 1225 1230 1235 1240

IH 94 NB

1220SE 1225SE 1230SE 1235SE 1240SE

SECTION LINE

EAST FRONTAGE RD

340 345 350 355

7 MILE RD

T 4 N R 22 E — 12 | 7 | 12 | 7

X=594430.67
Y=220751.87

CP BM BRIDGE DISK TOP PARAPET WALL
SE CORNER 194 BRIDGE 51-33-59 OVER 7 MILE RD
STA. 1240+88.13, 60.64' RT

X=594430.13
Y=223350.61

ELEV.=732.42

T 4 N R 22 E — 1 | 6 | 12 | 7

X=594457.42
Y=223413.62

SECTION LINE

1/4 LINE

T 4 N R 22 E — 7 | 7 | 7 | 7

X=596751.29
Y=220726.11

T 4 N R 22 E — 6 | 6 | 7 | 7

X=596793.04
Y=223384.64

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	SURVEY CONTROL	SHEET 216 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m027203_ad.dgn PLOT DATE : 11-JUN-2018 12:42 PLOT BY : scook PLOT NAME : 7m027203_ad PLOT SCALE : 200:1

2

T 4 N R 21 E
1 1 12 12

X=591802.32
Y=223454.05

340

345

CP BM BRIDGE DISK TOP PARAPET WALL
NW CORNER I94 BRIDGE 51-32-59 OVER 7 MILE RD
STA. 1242+06.37, 60.54' LT

X=594311.33
Y=223471.24

ELEV.=731.22

1240SW

1245NW

1250NW

1255NW

1260NW

WEST FRONTAGE RD

CP 9155
HMOD 9A155
STA. 1262+37.02, 182.83' LT

X=594229.45
Y=225503.91

ELEV.=716.71

T 4 N R 21 E
1 1 11 11

X=591855.70
Y=226088.40

1/4 LINE

1240

IH 94 SB

1245

1250

1255

1260

1265

1270

IH 94 NB

1255NE

1260NE

1265NE

SECTION LINE

1245NE

1250NE

1240SE

350

T 4 N R 22 E
1 6 12 7

X=594457.42
Y=223413.62

CP BM BRIDGE DISK TOP PARAPET WALL
SE CORNER I94 BRIDGE 51-33-59 OVER 7 MILE RD
STA. 1240+88.13, 60.64' RT

X=594430.13
Y=223350.61

ELEV.=732.42

7 MILE ROAD

EAST FRONTAGE RD

T 4 N R 21 E
1 6 1 6

X=594518.91
Y=226040.69

1/4 LINE

SECTION LINE

355

T 4 N R 22 E
6 6 7 6

X=596793.04
Y=223384.64

T 4 N R 22 E
6 6 6 6

X=596840.22
Y=226012.38

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	SURVEY CONTROL	SHEET 217	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m027204_ad.dgn PLOT DATE : 11-JUN-2018 12:42 PLOT BY : scook PLOT NAME : 7m027204_ad PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

1035-01-74

Line	Item	Item Description	Unit	Total	Qty
0014	203.0100	Removing Small Pipe Culverts	EACH	8.000	8.000
0016	203.0200	Removing Old Structure (station) 0001. 1241+81 LT	LS	1.000	1.000
0018	203.0200	Removing Old Structure (station) 0002. 1241+81 RT	LS	1.000	1.000
0050	203.0210.S	Abatement of Asbestos Containing Material (structure) 0008. B-51-32	LS	1.000	1.000
0060	204.0100	Removing Pavement **P**	SY	81,230.000	81,230.000
0066	204.0110	Removing Asphaltic Surface **P**	SY	1,350.000	1,350.000
0068	204.0115	Removing Asphaltic Surface Butt Joints	SY	400.000	400.000
0078	204.0157	Removing Concrete Barrier **P**	LF	8,230.000	8,230.000
0082	204.0170	Removing Fence **P**	LF	7,750.000	7,750.000
0084	204.0180	Removing Delineators and Markers	EACH	29.000	29.000
0086	204.0195	Removing Concrete Bases	EACH	3.000	3.000
0090	204.0220	Removing Inlets	EACH	44.000	44.000
0094	204.0245	Removing Storm Sewer (size) 0002. 12-Inch	LF	1,400.000	1,400.000
0096	204.0245	Removing Storm Sewer (size) 0004. 15-Inch	LF	2,122.000	2,122.000
0098	204.0245	Removing Storm Sewer (size) 0006. 18-Inch	LF	474.000	474.000
0102	204.0245	Removing Storm Sewer (size) 0008. 24-Inch	LF	190.000	190.000
0108	204.0245	Removing Storm Sewer (size) 0012. 36-Inch	LF	215.000	215.000
0110	204.0245	Removing Storm Sewer (size) 0014. 42-Inch	LF	52.000	52.000
0112	204.0280	Sealing Pipes	EACH	38.000	38.000
0114	204.0291.S	Abandoning Sewer	CY	60.000	60.000
0120	204.9060.S	Removing (item description) 0005. Slotted Vane Drain	EACH	6.000	6.000
0136	204.9060.S	Removing (item description) 2030. On-Ramp Closure Gate	EACH	2.000	2.000
0138	204.9060.S	Removing (item description) 2032. Advance Warning Sign Assembly	EACH	3.000	3.000
0144	204.9060.S	Removing (item description) 2050. Temporary Vehicle Detector Assembly	EACH	2.000	2.000
0146	204.9060.S	Removing (item description) 2070. Temporary Traffic Camera Assembly	EACH	1.000	1.000
0148	204.9090.S	Removing (item description) 0002. Underdrain	LF	2,170.000	2,170.000
0166	204.9105.S	Removing (item description) 0009. Old Sign Structure S-51-205	LS	1.000	1.000
0168	205.0100	Excavation Common **P**	CY	97,120.000	97,120.000
0170	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	163.000	163.000
0174	206.1000	Excavation for Structures Bridges (structure) 4139. B-51-139	LS	1.000	1.000
0176	206.1000	Excavation for Structures Bridges (structure) 4140. B-51-140	LS	1.000	1.000
0200	209.0200.S	Backfill Controlled Low Strength	CY	160.000	160.000

1035-01-74

Line	Item	Item Description	Unit	Total	Qty
0202	209.2500	Backfill Granular Grade 2	TON	200.000	200.000
0204	210.1500	Backfill Structure Type A	TON	1,366.000	1,366.000
0216	213.0100	Finishing Roadway (project) 0010. 1035-01-74	EACH	1.000	1.000
0222	305.0115	Base Aggregate Dense 3/4-Inch **P**	CY	970.000	970.000
0224	305.0125	Base Aggregate Dense 1 1/4-Inch **P**	CY	27,586.000	27,586.000
0228	312.0115	Select Crushed Material **P**	CY	54,140.000	54,140.000
0230	390.0203	Base Patching Asphaltic	SY	100.000	100.000
0234	415.0080	Concrete Pavement 8-Inch **P**	SY	12,820.000	12,820.000
0242	415.0410	Concrete Pavement Approach Slab **P**	SY	480.000	480.000
0258	415.5110.S	Concrete Pavement Joint Layout 0008. 1035-01-74	LS	1.000	1.000
0268	416.0620	Drilled Dowel Bars	EACH	64.000	64.000
0270	416.1010	Concrete Surface Drains	CY	4.000	4.000
0272	416.1110	Concrete Shoulder Rumble Strips **P**	LF	20,025.000	20,025.000
0274	416.1710	Concrete Pavement Repair	SY	450.000	450.000
0276	416.1715	Concrete Pavement Repair SHES	SY	710.000	710.000
0278	416.1720	Concrete Pavement Replacement	SY	1,380.000	1,380.000
0280	440.4410	Incentive IRI Ride	DOL	27,500.000	27,500.000
0282	450.1100.S	Asphaltic Mixture For Extreme Conditions	TON	60.000	60.000
0284	450.4000	HMA Cold Weather Paving	TON	1,210.000	1,210.000
0286	455.0605	Tack Coat	GAL	5,330.000	5,330.000
0294	460.6223	HMA Pavement 3 MT 58-28 S	TON	230.000	230.000
0298	460.6424	HMA Pavement 4 MT 58-28 H	TON	3,100.000	3,100.000
0300	460.7223	HMA Pavement 3 HT 58-28 S	TON	4,430.000	4,430.000
0302	460.7424	HMA Pavement 4 HT 58-28 H	TON	1,630.000	1,630.000
0308	465.0125	Asphaltic Surface Temporary	TON	120.000	120.000
0312	495.1000.S	Cold patch	TON	20.000	20.000
0314	501.1000.S	Ice Hot Weather Concreting	LB	13,702.000	13,702.000
0316	502.0100	Concrete Masonry Bridges **P**	CY	632.000	632.000
0318	502.3200	Protective Surface Treatment **P**	SY	3,830.000	3,830.000
0320	502.3210	Pigmented Surface Sealer	SY	462.000	462.000
0322	503.0146	Prestressed Girder Type I 45W-Inch **P**	LF	3,084.000	3,084.000
0328	505.0400	Bar Steel Reinforcement HS Structures	LB	4,700.000	4,700.000
0330	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	311,220.000	311,220.000
0332	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	5,160.000	5,160.000
0334	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	64.000	64.000
0336	506.4000	Steel Diaphragms (structure) 0001. B-51-139	EACH	28.000	28.000
0338	506.4000	Steel Diaphragms (structure) 0002. B-51-140	EACH	28.000	28.000
0354	511.1200	Temporary Shoring (structure) 4040. B-51-139	SF	2,250.000	2,250.000
0356	511.1300	Temporary Shoring (location) 0001. STA 1239+50 to STA 1244+00	SF	430.000	430.000

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Line	Item	Item Description	Unit	Total	Qty
0360	511.1300	Temporary Shoring (location) 0003. STA 346+90 to STA 349+90	SF	3,000.000	3,000.000
0364	516.0500	Rubberized Membrane Waterproofing **P**	SY	54.000	54.000
0366	517.1010.S	Concrete Staining (structure) 4001. B-51-139 **P**	SF	5,201.000	5,201.000
0368	517.1010.S	Concrete Staining (structure) 4002. B-51-140 **P**	SF	5,175.000	5,175.000
0392	517.1010.S	Concrete Staining (structure) 4204. S-51-220 **P**	SF	235.000	235.000
0432	517.1050.S	Architectural Surface Treatment (structure) 4001. B-51-139 **P**	SF	32.000	32.000
0434	517.1050.S	Architectural Surface Treatment (structure) 4002. B-51-140 **P**	SF	32.000	32.000
0438	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0448	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	28.000	28.000
0458	522.0448	Culvert Pipe Reinforced Concrete Class IV 48-Inch	LF	351.000	351.000
0460	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0466	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	9.000	9.000
0472	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	1.000	1.000
0474	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	2.000
0500	550.2126	Piling CIP Concrete 12 3/4 X 0.375-Inch	LF	13,260.000	13,260.000
0510	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A **P**	LF	2,570.000	2,570.000
0518	603.1142	Concrete Barrier Type S42 **P**	LF	17,622.000	17,622.000
0520	603.1156	Concrete Barrier Type S56 **P**	LF	200.000	200.000
0522	603.1242	Concrete Barrier Type S42A **P**	LF	1,537.000	1,537.000
0526	603.2156	Concrete Barrier Fixed Object Protection Type S56	LF	20.000	20.000
0530	603.3559	Concrete Barrier Transition Type S42 to S56	EACH	8.000	8.000
0532	603.8000	Concrete Barrier Temporary Precast Delivered	LF	25,900.000	25,900.000
0534	603.8125	Concrete Barrier Temporary Precast Installed	LF	31,300.000	31,300.000
0540	606.0200	Riprap Medium	CY	120.000	120.000
0544	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	32.000	32.000
0546	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	170.000	170.000
0550	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	2,615.000	2,615.000
0552	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	610.000	610.000
0554	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	527.000	527.000

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Line	Item	Item Description	Unit	Total	Qty
0556	608.0342	Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	LF	120.000	120.000
0558	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	215.000	215.000
0560	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	154.000	154.000
0562	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	64.000	64.000
0564	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	4,993.000	4,993.000
0566	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	876.000	876.000
0568	608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	LF	350.000	350.000
0570	608.0442	Storm Sewer Pipe Reinforced Concrete Class IV 42-Inch	LF	69.000	69.000
0572	608.0512	Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	LF	300.000	300.000
0590	611.0530	Manhole Covers Type J	EACH	10.000	10.000
0592	611.0535	Manhole Covers Type J-Special	EACH	15.000	15.000
0594	611.0610	Inlet Covers Type BW	EACH	105.000	105.000
0596	611.0627	Inlet Covers Type HM	EACH	3.000	3.000
0598	611.0636	Inlet Covers Type HM-S	EACH	7.000	7.000
0600	611.0642	Inlet Covers Type MS	EACH	41.000	41.000
0606	611.2004	Manholes 4-FT Diameter	EACH	63.000	63.000
0610	611.2006	Manholes 6-FT Diameter	EACH	46.000	46.000
0612	611.2007	Manholes 7-FT Diameter	EACH	4.000	4.000
0618	611.3004	Inlets 4-FT Diameter	EACH	21.000	21.000
0622	611.3230	Inlets 2x3-FT	EACH	4.000	4.000
0628	611.3902	Inlets Median 2 Grate	EACH	19.000	19.000
0630	611.3903	Inlets Median 3 Grate	EACH	1.000	1.000
0636	611.8120.S	Cover Plates Temporary	EACH	8.000	8.000
0638	612.0106	Pipe Underdrain 6-Inch	LF	13,050.000	13,050.000
0640	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	80.000	80.000
0644	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	400.000	400.000
0646	612.0700	Drain Tile Exploration	LF	400.000	400.000
0656	614.0396	Guardrail Mow Strip Asphalt	SY	222.000	222.000
0660	614.0905	Crash Cushions Temporary	EACH	9.000	9.000
0662	614.0920	Salvaged Rail **P**	LF	170.000	170.000
0664	614.2300	MGS Guardrail 3	LF	450.000	450.000
0666	614.2500	MGS Thrie Beam Transition	LF	156.000	156.000
0668	614.2610	MGS Guardrail Terminal EAT	EACH	5.000	5.000

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Line	Item	Item Description	Unit	Total	Qty
0670	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000
0672	616.0100	Fence Woven Wire (height) 0001. 4-FT	LF	12,500.000	12,500.000
0678	616.0700.S	Fence Safety	LF	3,200.000	3,200.000
0688	618.0100	Maintenance And Repair of Haul Roads (project) 0010. 1035-01-74	EACH	1.000	1.000
0692	619.1000	Mobilization	EACH	0.140	0.140
0694	620.0300	Concrete Median Sloped Nose **P**	SF	160.000	160.000
0696	623.0200	Dust Control Surface Treatment	SY	92,000.000	92,000.000
0698	624.0100	Water	MGAL	435.000	435.000
0700	625.0100	Topsoil	SY	21,860.000	21,860.000
0702	625.0500	Salvaged Topsoil	SY	54,640.000	54,640.000
0704	627.0200	Mulching	SY	3,800.000	3,800.000
0706	628.1104	Erosion Bales	EACH	160.000	160.000
0708	628.1504	Silt Fence	LF	530.000	530.000
0710	628.1520	Silt Fence Maintenance	LF	530.000	530.000
0712	628.1905	Mobilizations Erosion Control	EACH	40.000	40.000
0714	628.1910	Mobilizations Emergency Erosion Control	EACH	60.000	60.000
0716	628.2002	Erosion Mat Class I Type A	SY	43,700.000	43,700.000
0720	628.2006	Erosion Mat Urban Class I Type A	SY	10,200.000	10,200.000
0722	628.2008	Erosion Mat Urban Class I Type B	SY	10,800.000	10,800.000
0726	628.6505	Soil Stabilizer Type A	ACRE	2.000	2.000
0728	628.6510	Soil Stabilizer Type B	ACRE	4.000	4.000
0730	628.7005	Inlet Protection Type A	EACH	140.000	140.000
0736	628.7020	Inlet Protection Type D	EACH	205.000	205.000
0738	628.7504	Temporary Ditch Checks	LF	890.000	890.000
0740	628.7515.S	Stone or Rock Ditch Checks	CY	230.000	230.000
0742	628.7555	Culvert Pipe Checks	EACH	16.000	16.000
0744	628.7560	Tracking Pads	EACH	5.000	5.000
0746	628.7570	Rock Bags	EACH	160.000	160.000
0750	630.0200	Seeding Temporary	LB	510.000	510.000
0754	633.0100	Delineator Posts Steel	EACH	55.000	55.000
0756	633.0500	Delineator Reflectors	EACH	70.000	70.000
0758	633.1000	Delineator Brackets	EACH	15.000	15.000
0760	633.5200	Markers Culvert End	EACH	12.000	12.000
0764	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	44.000	44.000
0768	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	8.000	8.000
0772	634.0885	Posts Tubular Steel 2x2-Inch X 8.5-FT	EACH	17.000	17.000
0774	635.0200	Sign Supports Structural Steel HS	LB	4,400.000	4,400.000
0776	636.0100	Sign Supports Concrete Masonry **P**	CY	49.000	49.000
0778	636.0500	Sign Supports Steel Reinforcement **P**	LB	468.000	468.000

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Line	Item	Item Description	Unit	Total	Qty
0780	636.1000	Sign Supports Steel Reinforcement HS **P**	LB	250.000	250.000
0782	636.1500	Sign Supports Steel Coated Reinforcement HS **P**	LB	6,750.000	6,750.000
0784	637.1220	Signs Type I Reflective SH	SF	843.500	843.500
0786	637.1230	Signs Type I Reflective F	SF	39.160	39.160
0788	637.2210	Signs Type II Reflective H	SF	517.880	517.880
0794	638.2101	Moving Signs Type I	EACH	19.000	19.000
0796	638.2102	Moving Signs Type II	EACH	81.000	81.000
0798	638.2601	Removing Signs Type I	EACH	7.000	7.000
0800	638.2602	Removing Signs Type II	EACH	69.000	69.000
0802	638.3000	Removing Small Sign Supports	EACH	82.000	82.000
0804	638.3100	Removing Structural Steel Sign Supports	EACH	18.000	18.000
0808	640.1303.S	Pond Liner Clay	CY	2,100.000	2,100.000
0810	641.0100	Sign Bridge Single Pole Sign Support One Sign (structure) 0001. S-51-220	LS	1.000	1.000
0826	641.1200	Sign Bridge Cantilevered (structure) 0022. S-51-22	LS	1.000	1.000
0828	641.1200	Sign Bridge Cantilevered (structure) 0023. S-51-23	LS	1.000	1.000
0864	643.0300	Traffic Control Drums	DAY	27,000.000	27,000.000
0866	643.0420	Traffic Control Barricades Type III	DAY	10,800.000	10,800.000
0872	643.0705	Traffic Control Warning Lights Type A	DAY	21,600.000	21,600.000
0874	643.0715	Traffic Control Warning Lights Type C	DAY	27,000.000	27,000.000
0876	643.0800	Traffic Control Arrow Boards	DAY	60.000	60.000
0878	643.0900	Traffic Control Signs	DAY	84,000.000	84,000.000
0880	643.0910	Traffic Control Covering Signs Type I	EACH	10.000	10.000
0882	643.0920	Traffic Control Covering Signs Type II	EACH	10.000	10.000
0884	643.1000	Traffic Control Signs Fixed Message	SF	705.500	705.500
0886	643.1050	Traffic Control Signs PCMS	DAY	310.000	310.000
0888	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	150.000	150.000
0894	643.4100.S	Traffic Control Interim Lane Closure	EACH	40.000	40.000
0896	643.5000	Traffic Control	EACH	0.140	0.140
0900	645.0111	Geotextile Type DF Schedule A **P**	SY	7,600.000	7,600.000
0902	645.0120	Geotextile Type HR	SY	210.000	210.000
0914	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch **P**	LF	30,040.000	30,040.000
0916	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch **P**	LF	8,620.000	8,620.000
0926	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch **P**	LF	5,660.000	5,660.000
0934	646.6120	Marking Stop Line Epoxy 18-Inch	LF	20.000	20.000
0936	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	15.000	15.000
0940	646.7220	Marking Chevron Epoxy 24-Inch	LF	400.000	400.000

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Line	Item	Item Description	Unit	Total	Qty
0948	646.9000	Marking Removal Line 4-Inch	LF	42,000.000	42,000.000
0950	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	38,500.000	38,500.000
0964	646.9400	Marking Removal Plowable Raised Pavement Markers	EACH	280.000	280.000
0966	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	95,700.000	95,700.000
0968	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	27,000.000	27,000.000
0970	649.0220	Temporary Marking Line Epoxy 8-Inch	LF	5,000.000	5,000.000
0972	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	2,600.000	2,600.000
0976	649.0760	Temporary Marking Raised Pavement Marker Type I	EACH	280.000	280.000
0978	649.0820	Temporary Marking Stop Line Epoxy 18-Inch	LF	50.000	50.000
0984	652.0125	Conduit Rigid Metallic 2-Inch	LF	15.000	15.000
0986	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,710.000	3,710.000
0988	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	63.000	63.000
0996	653.0140	Pull Boxes Steel 24x42-Inch	EACH	9.000	9.000
1004	653.0905	Removing Pull Boxes	EACH	20.000	20.000
1008	654.0106	Concrete Bases Type 6	EACH	2.000	2.000
1014	654.1150	Concrete Bases Camera Pole 50-FT	EACH	1.000	1.000
1018	655.0510	Electrical Wire Traffic Signals 12 AWG	LF	7,045.000	7,045.000
1020	655.0525	Electrical Wire Traffic Signals 6 AWG	LF	300.000	300.000
1026	655.0620	Electrical Wire Lighting 8 AWG	LF	272.000	272.000
1040	656.0200	Electrical Service Meter Breaker Pedestal (location) 0006. (MB-CCTV-51-0062)	LS	1.000	1.000
1060	656.0500	Electrical Service Breaker Disconnect Box (location) 0006. (CCTV-51-0062)	LS	1.000	1.000
1066	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	1.000	1.000
1070	657.0327	Poles Type 6-Aluminum	EACH	2.000	2.000
1088	659.0600	Underdeck Lighting (location) 0001. B-51-139 & B-51-140	LS	1.000	1.000
1100	670.0100	Field System Integrator 0002. 1035-01-74	LS	1.000	1.000
1110	670.0200	ITS Documentation 0002. 1035-01-74	LS	1.000	1.000
1118	671.0132	Conduit HDPE 3-Duct 2-Inch	LF	5,240.000	5,240.000
1122	671.0232	Conduit HDPE Directional Bore 3-Duct 2-Inch	LF	240.000	240.000
1124	671.0300	Fiber Optic Cable Marker	EACH	8.000	8.000
1126	673.0105	Communication Vault Type 1	EACH	5.000	5.000
1128	673.0200	Tracer Wire Marker Posts	EACH	1.000	1.000
1130	673.0225.S	Install Pole Mounted Cabinet	EACH	1.000	1.000
1132	674.0200	Cable Microwave Detector	LF	3,770.000	3,770.000
1134	674.0300	Remove Cable	LF	2,505.000	2,505.000
1136	675.0300	Install Mounted Controller Microwave Detector Assembly	EACH	6.000	6.000
1138	677.0150	Install Camera Pole 50-FT	EACH	1.000	1.000
1140	677.0200	Install Camera Assembly	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
1146	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	210.000	210.000
1148	678.0024	Install Fiber Optic Cable Outdoor Plant 24-CT	LF	5,830.000	5,830.000
1150	678.0072	Install Fiber Optic Cable Outdoor Plant 72-CT	LF	5,830.000	5,830.000
1152	678.0300	Fiber Optic Splice	EACH	98.000	98.000
1154	678.0400	Fiber Optic Termination	EACH	6.000	6.000
1158	678.0500	Communication System Testing 0002. 1035-01-74	LS	1.000	1.000
1166	678.0600	Install Ethernet Switches	EACH	1.000	1.000
1168	690.0150	Sawing Asphalt	LF	150.000	150.000
1170	690.0250	Sawing Concrete	LF	1,500.000	1,500.000
1172	715.0710	Optimized Aggregate Gradation Incentive	DOL	111,506.000	111,506.000
1174	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,260.000	1,260.000
1176	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,520.000	2,520.000
1178	SPV.0005	Special 0001. Seedbed Preparation	ACRE	2.000	2.000
1180	SPV.0030	Special 0001. Fertilizer Type B Special	CWT	78.000	78.000
1184	SPV.0035	Special 0002. Clay Embankment Fill	CY	3,015.000	3,015.000
1186	SPV.0035	Special 0005. Backfill Slurry	CY	200.000	200.000
1188	SPV.0035	Special 0006. Roadway Embankment **P**	CY	40,979.000	40,979.000
1190	SPV.0035	Special 0007. Excavation, Hauling, and Reuse of Low-Level Contaminated Soil	CY	780.000	780.000
1192	SPV.0035	Special 0008. EBS Excavation	CY	3,910.000	3,910.000
1194	SPV.0035	Special 0009. EBS Backfill	CY	3,910.000	3,910.000
1198	SPV.0035	Special 4000. HPC Masonry Structures **P**	CY	1,194.000	1,194.000
1202	SPV.0055	Special 0002. Dispute Resolution Board	DOL	5,000.000	5,000.000
1210	SPV.0060	Special 0007. Baseline CPM Progress Schedule	EACH	0.140	0.140
1212	SPV.0060	Special 0008. Monthly CPM Progress Schedule Updates	EACH	22.000	22.000
1216	SPV.0060	Special 0016. Reconnect Storm Sewer	EACH	2.000	2.000
1218	SPV.0060	Special 0020. Fastening Sewer Access Covers	EACH	6.000	6.000
1220	SPV.0060	Special 0026. Fixed Message Sign Portable Support Special	EACH	5.000	5.000
1226	SPV.0060	Special 0032. Salvaging Existing Barricade Rack	EACH	2.000	2.000
1228	SPV.0060	Special 0034. Mobilizations Emergency Pavement Repair	EACH	3.000	3.000
1230	SPV.0060	Special 0037. Traffic Control Close-Open Freeway Entrance Ramp	EACH	30.000	30.000
1240	SPV.0060	Special 0053. Rootstock Vegetation	EACH	470.000	470.000
1244	SPV.0060	Special 0055. Temporary Sediment Traps	EACH	6.000	6.000
1246	SPV.0060	Special 0056. Sand Bags	EACH	200.000	200.000
1248	SPV.0060	Special 0060. Section Corner Monuments	EACH	2.000	2.000
1250	SPV.0060	Special 0080. Marking Contrast Epoxy Special Marking Arrow	EACH	12.000	12.000

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Line	Item	Item Description	Unit	Total	Qty
1252	SPV.0060	Special 0082. Marking Contrast Epoxy Special Marking Words	EACH	4.000	4.000
1258	SPV.0060	Special 0100. Exposing Existing Infrastructure Unpaved Area	EACH	3.000	3.000
1260	SPV.0060	Special 0101. Exposing Existing Infrastructure Paved Area	EACH	3.000	3.000
1288	SPV.0060	Special 2025. 40-Foot Temporary Wood Post	EACH	3.000	3.000
1290	SPV.0060	Special 2040. Ground Rod	EACH	3.000	3.000
1292	SPV.0060	Special 2050. Temporary Vehicle Detector Assembly	EACH	2.000	2.000
1296	SPV.0060	Special 2245. Install Temporary Traffic Camera Assembly	EACH	1.000	1.000
1298	SPV.0060	Special 2246. Relocating Temporary Traffic Camera Assembly	EACH	2.000	2.000
1300	SPV.0060	Special 2255. Relocating Temporary Vehicle Detector Assembly	EACH	2.000	2.000
1302	SPV.0060	Special 2290. Refocusing Vehicle Detector Assembly	EACH	10.000	10.000
1318	SPV.0075	Special 0022. Pavement Cleanup Project 1035-01-74	HRS	500.000	500.000
1322	SPV.0075	Special 4001. Obstructions Sign Supports Concrete Masonry	HRS	3.000	3.000
1324	SPV.0085	Special 0002. Seeding Mixture No. 30 Special	LB	3,150.000	3,150.000
1330	SPV.0090	Special 0010. Temporary Glare Screen	LF	11,000.000	11,000.000
1336	SPV.0090	Special 0050. Concrete Curb and Gutter 4-Inch Sloped 60-Inch Type A **P**	LF	3,900.000	3,900.000
1340	SPV.0090	Special 0070. Heavy Duty Silt Fence	LF	2,100.000	2,100.000
1370	SPV.0105	Special 0014. Survey Project 1035-01-74	LS	1.000	1.000
1400	SPV.0105	Special 4014. Temporary Bridge Widening B-51-33	LS	1.000	1.000
1404	SPV.0165	Special 4001. Longitudinal Grooving Bridge Deck **P**	SF	33,768.000	33,768.000
1416	SPV.0165	Special 4040. Partial Depth Precast Prestressed Concrete Deck Panels B-51-139	SF	10,391.000	10,391.000
1418	SPV.0165	Special 4050. Partial Depth Precast Prestressed Concrete Deck Panels B-51-140	SF	10,391.000	10,391.000
1420	SPV.0170	Special 0002. Removal and Disposal of Invasive Plant Species	STA	11.700	11.700
1422	SPV.0180	Special 0001. Concrete Pavement 12-Inch Special **P**	SY	94,460.000	94,460.000
1424	SPV.0180	Special 0006. Removing Rumble Strips	SY	600.000	600.000
1430	SPV.0180	Special 0010. Rootstock Protection	SY	1,320.000	1,320.000
1432	SPV.0180	Special 0012. Mulching Special	SY	7,710.000	7,710.000
1434	SPV.0180	Special 0106. Asphaltic Material Binder	SY	1,490.000	1,490.000
1436	SPV.0180	Special 4800. Slope Paving Crushed Aggregate Special	SY	2,017.000	2,017.000
1438	SPV.0195	Special 0002. HMA Transverse Joint Repair	TON	75.000	75.000
1440	SPV.0195	Special 0003. HMA Longitudinal Joint Repair	TON	250.000	250.000
1444	SPV.0195	Special 0005. Excavation, Hauling and Disposal of	TON	1,034.000	1,034.000

1035-01-74

Line	Item	Item Description	Unit	Total	Qty
		Creosote Contaminated Soil			
1446	SPV.0195	Special 0010. Soil Drying Treatment	TON	300.000	300.000
1448	SPV.0195	Special 0012. Subgrade Strengthening Treatment	TON	130.000	130.000
1450	SPV.0200	Special 0012. Manholes 4-FT Diameter Special	VF	40.000	40.000

CPM PROGRESS SCHEDULE ITEMS

CATEGORY	STAGE	LOCATION	SPV.0060.0007 BASELINE CPM PROGRESS SCHEDULE EACH	SPV.0060.0008 MONTHLY CPM PROGRESS SCHEDULE UPDATES EACH
1000	ALL	PROJECT 1035-01-74	0.14	22
	TOTALS		0.14	22

REMOVING SMALL PIPE CULVERTS

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	LENGTH	DESCRIPTION	203.0100 EACH
1000	4	IH 94 NB					
			1234+71	RT	210'	48" CPCM	1
	4	RAMP SE					
			1228SE+66	40' RT	63'	18" CPCM	1
			1232SE+20	37' RT	68'	18" CPCM	1
	4	RAMP NE					
			1242NE+05	25' LT	62'	24" CPCM	1
	2	IH 94 SB					
			1234+71	LT	98'	48" CPCM	1
	2	RAMP SW					
			1234SW+74	LT/RT	68'	48" CPCM	1
			1240SW+82	22' RT	62'	18" CPCM	1
	2	RAMP NW					
			1242NW+20	30' RT	64'	24" CPCM	1
	TOTAL						8

REMOVING ASPHALTIC SURFACE

CATEGORY	STAGE	ROADWAY	STA	TO	STA	204.0100 SY
0100	5	IH 94 SB WIDENING				
			1213+00	-	1217+84	205
			1232+00	-	1240+50	340
			1243+15	-	1253+75	645
			1264+45	-	1268+00	160
	TOTAL					1,350

REMOVING PAVEMENT

CATEGORY	STAGE	ROADWAY	STA	TO	STA	204.0100 SY
1000	1C	IH 94 NB				
		MEDIAN - S. OF 7 MILE	1213+00	-	1234+50	2,389
	SUBTOTAL STAGE 4					2,389
	4	IH 94 NB				
		MAINLINE - S. OF 7 MILE	1213+00	-	1240+97	15,995
		MAINLINE - N. OF 7 MILE	1242+06	-	1268+00	16,863
		RAMPS				
		SE RAMP	1225SE+67	-	1241SE+42	2,981
		NE RAMP	1241SE+72	-	1258NE+25	3,172
	SUBTOTAL STAGE 4					39,012
	2	IH 94 SB				
		MAINLINE - S. OF 7 MILE	1213+00	-	1240+97	18,275
		MAINLINE - N. OF 7 MILE	1242+06	-	1268+00	16,988
		RAMPS				
		SW RAMP	1219SW+95	-	1228SW+85	1,664
		SW RAMP	1236SW+96	-	1241SW+46	1,196
		NW RAMP	1241SW+61	-	1250NW+86	1,705
	SUBTOTAL STAGE 2					39,829
	TOTAL					81,230

REMOVING OLD SIGN STRUCTURE

CATEGORY	ROADWAY	STATION	204.9105.S.0009 S-51-205 LS
1000	IH 94 SB	1247+00	1
	TOTAL		1

REMOVING CONCRETE BARRIER

CATEGORY	STAGE	ROADWAY	STA	TO	STA	204.0157 LF	REMARKS
0100	4	IH 94 NB					
			1213+00	-	1240+96	2,798	MEDIAN
			1233+59	-	1240+96	739	OUTSIDE
			1242+06	-	1268+00	2,595	MEDIAN
			1242+06	-	1246+24	418	OUTSIDE
	SUBTOTAL STAGE 4					6,550	
	2	IH 94 SB					
			1233+22	-	1240+96	775	OUTSIDE
			1242+06	-	1251+09	905	OUTSIDE
	SUBTOTAL STAGE 2					1,680	
	TOTAL					8,230	

REMOVING FENCE

CATEGORY	STAGE	ROADWAY	STA	TO	STA	LOCATION	204.0170 LF
1000	4	IH 94 NB					
			1213+00	-	1224+50	RT	1,147
			1229+70	-	1240+96	RT	1,157
			1242+06	-	1247+10	RT	503
			1247+95	-	1268+00	RT	2,004
	SUBTOTAL STAGE 4						4,811
	2	IH 94 SB					
			1233+74	-	1240+96	LT	774
			1242+00	-	1252+89	LT	1,127
			1257+65	-	1268+00	LT	1,038
	SUBTOTAL STAGE 2						2,939
	TOTAL						7,750

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REMOVING DELINEATORS AND MARKERS

CATEGORY	STAGE	ROADWAY	STA	TO	STA	204.0180 EACH	COMMENTS
1000	4	IH 94 NB	1213+00	-	1268+00	14	DELINEATORS
	SUBTOTAL STAGE 4					14	
	3	IH 94 SB	1213+00	-	1268+00	15	DELINEATORS
	SUBTOTAL STAGE 2					15	
	TOTAL					29	

REMOVING SLOTTED VANE DRAIN

CATEGORY	STAGE	ROADWAY	STATION	LOCATION	204.9060.S.0005 EACH
1000	4	IH 94 NB			
			1215+10	RT - MEDIAN	1
			1218+75	RT - MEDIAN	1
			1223+15	RT - MEDIAN	1
			1255+25	RT - MEDIAN	1
			1257+90	RT - MEDIAN	1
			1260+55	RT - MEDIAN	1
	TOTAL				6

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	ROADWAY	STATION			204.0115 SY
1000	IH 94 NB				
		1240+96	-	1241+21	100
		1242+06	-	1242+31	100
	IH 94 SB				
		1240+96	-	1241+21	100
		1242+06	-	1242+31	100
	TOTAL				400

REMOVAL AND DISPOSAL OF INVASIVE PLANT SPECIES

CATEGORY	ROADWAY	STATION			OFFSET	SPV.0170.0002 STA
1000	IH 94					
		1226+27.0	-	1227+16.3	RT	0.9
		1228+15.6	-	1228+57.9	RT	0.4
		1228+48.5	-	1231+13.1	LT	2.6
		1234+75.4	-	1236+24.6	LT	1.5
		1241+74.5	-	1242+46.0	LT	0.7
		1241+74.5	-	1242+46.0	RT	0.7
		1249+58.0	-	1250+72.2	RT	1.1
		1258+49.2	-	1259+94.5	LT	1.5
		1264+72.9	-	1266+92.4	LT	2.2
	TOTAL					11.7

SALVAGED RAIL

CATEGORY	STAGE	ROADWAY	FROM STA	TO STA	LOCATION	614.0920 LF
1000	4	IH 94 NB	1232+76	1233+59	OUTSIDE SHOULDER	85
	2	IH 94 SB	1251+09	1251+91	OUTSIDE SHOULDER	85
	TOTAL					170

EXCAVATION, HAULING AND DISPOSAL OF CREOSOTE CONTAMINATED SOIL

CATEGORY	STAGE	STATION			LOCATION	OFFSET	SPV.0195.0005 TON
1000	2	1240+92	-	1241+03	B-51-32 SOUTH ABUTMENT	R/L TO 70 FT LT	153
		1241+21	-	1241+38	B-51-32 PIER 1	R/L TO 70 FT LT	106
		1241+64	-	1241+81	B-51-32 PIER 2	R/L TO 70 FT LT	106
		1242+00	-	1242+18	B-51-32 NORTH ABUTMENT	R/L TO 70 FT LT	153
	STAGE 2 SUBTOTAL						517
	4	1240+92	-	1241+03	B-51-33 SOUTH ABUTMENT	R/L TO 70 FT RT	153
		1241+21	-	1241+38	B-51-33 PIER 1	R/L TO 70 FT RT	106
		1241+64	-	1241+81	B-51-33 PIER 2	R/L TO 70 FT RT	106
		1242+00	-	1242+18	B-51-33 NORTH ABUTMENT	R/L TO 70 FT RT	153
	STAGE 4 SUBTOTAL						517
	TOTAL						1,034

REMOVING RUMBLE STRIPS

CATEGORY	STAGE	ROADWAY	STA	-	STA	SPV.0180.0006 SY
1000	1A	IH 94 SB	1213+00	-	1268+00	300
	1B	IH 94 SB	1213+00	-	1268+00	300
	TOTAL					600

REMOVING INLETS

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	* 204.0220 EACH
1000	1C	IH 94 NB	1230+24	4' RT	1
	1C		1232+24	5' RT	1
	4		1233+24	4' RT	1
	4		1235+23	4' RT	1
	4		1237+25	4' RT	1
	4		1239+75	5' RT	1
	4		1240+85	57' RT	1
	4		1242+24	6' RT	1
	4		1245+24	5' RT	1
	4		1247+24	5' RT	1
	4	SE RAMP	1230SE+51	69' RT	1
	4		1234SE+96	34' LT	1
	4		1241SE+27	7' LT	1
	4		1241SE+29	8' RT	1
	4	NE RAMP	1256NE+01	19' RT	1
	4		1257NE+75	26' RT	1
	SUBTOTAL STAGE 4				16
1000	2	IH 94 SB	1215+24	3' LT	1
	2		1218+74	3' LT	1
	2		1223+24	3' LT	1
	2		1226+73	3' LT	1
	2		1230+24	3' LT	1
	2		1232+24	3' LT	1
	2		1233+24	3' LT	1
	2		1235+23	3' LT	1
	2		1237+25	3' LT	1
	2		1239+75	4' LT	1
	2		1240+85	57' LT	1
	2		1242+24	4' LT	1
	2		1245+24	3' LT	1
	2		1247+24	4' LT	1
	2		1252+23	4' LT	1
	2		1255+24	4' LT	1
	2		1257+92	4' LT	1
	2		1260+18	112' LT	1
	2		1260+53	4' LT	1
	2		1265+33	4' LT	1
	SUBTOTAL STAGE 2				20
	TOTALS				36

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ABANDONING SEWER

CATEGORY	ROADWAY	LOCATION	204.0291.S CY	REMARKS
1000	IH 94 MAINLINE			
		UNDISTRIBUTED	60	CULVERTS UNDER IH 94
	TOTAL		60	

REMOVING STORM SEWER PIPE ITEMS

CATEGORY	STAGE	ROADWAY	STA	TO	STA	LOCATION	204.0245.0002 REMOVING STORM SEWER 12-INCH LF	204.0245.0004 REMOVING STORM SEWER 15-INCH LF	204.0245.0006 REMOVING STORM SEWER 18-INCH LF	204.0245.0008 REMOVING STORM SEWER 24-INCH LF	204.0245.0012 REMOVING STORM SEWER 36-INCH LF	204.0245.0014 REMOVING STORM SEWER 42-INCH LF	204.9090.S.0002 REMOVING UNDERDRAIN LF
1000	4	IH 94 NB	1226+73		--	RT	--	--	101	--	--	--	--
			1230+25		--	LT/RT	6	--	--	--	--	--	--
			1231+00		--	RT	--	--	--	--	--	52	
			1232+24		--	LT/RT	7	--	--	--	--	--	--
			1233+24		--	LT/RT	7	--	--	--	--	--	--
			1234+19	-	1235+39	95' RT	120	--	--	--	--	--	--
			1235+23		--	LT/RT	7	--	--	--	--	--	--
			1237+25		--	LT/RT	7	--	--	--	--	--	--
			1239+76		--	LT/RT	10	--	--	--	--	--	--
			1242+23			LT/RT	10	--	--	--	--	--	--
			1245+23		--	LT/RT	8	--	--	--	--	--	--
			1247+25		--	LT/RT	9	--	--	--	--	--	--
			1252+23		--	RT	--	--	102	--	--	--	--
			1256+00		--	RT	--	--	--	10	--	--	--
			1257+92		--	RT	--	--	--	--	93	--	--
		SE RAMP	1240SE+15	-	1241SE+27	LT/RT	--	--	113	--	--	--	--
			1241SE+27		--	RT	--	--	14	--	--	--	--
			1241SE+27	-	1241NE+91	LT	--	--	67	--	--	--	--
		NE RAMP	1256NE+01		--	RT	--	13	--	--	--	--	--
			1258NE+75		--	RT	68	--	--	--	--	--	--
		IH 94 NB	1265+25		--	RT	--	--	--	84	--	--	--
	SUBTOTAL STAGE 4						259	13	397	94	93	52	0
	2	IH 94 SB	1213+00	-	1215+24	3' LT	224	--	--	--	--	--	--
			1215+24	-	1218+74	3' LT	--	350	--	--	--	--	--
			1218+74		--	LT	--	--	77	--	--	--	--
			1218+74	-	1223+24	3' LT	--	--	--	--	--	--	429
			1223+24	-	1226+73	3' LT	--	349	--	--	--	--	--
			1226+73	-	1230+24	LT	--	--	--	--	--	--	328
			1230+24	-	1232+24	LT	--	200	--	--	--	--	--
			1232+24		--	LT	--	101	--	--	--	--	--
			1233+02	-	1232+24	LT	--	--	--	--	--	--	78
			1233+24	-	1235+23	LT	199	--	--	--	--	--	--
			1235+23	-	1237+25	LT	--	202	--	--	--	--	--
			1237+25	-	1239+75	LT	250	--	--	--	--	--	--
			1239+75	-	1240+83	LT	--	--	--	--	--	--	108
			1242+24	-	1242+37	LT	--	66	--	--	--	--	--
			1242+24	-	1245+24	LT	--	300	--	--	--	--	--
			1245+24	-	1247+24	LT	200	--	--	--	--	--	--
			1247+24	-	1252+24	LT	--	--	--	--	--	--	500
			1252+46	-	1255+24	LT	--	--	--	--	--	--	278
			1255+24	-	1257+92	LT	268	--	--	--	--	--	--
			1257+92	-	1260+54	LT	--	262	--	--	--	--	--
			1257+92		--	LT	--	--	--	--	122	--	--
			1260+18		--	LT	--	12	--	--	--	--	--
			1260+85	-	1265+33	LT	--	--	--	--	--	--	449
			1265+33	-	1268+00	LT	--	267	--	--	--	--	--
			1265+25		--	LT	--	--	--	96	--	--	--
	SUBTOTAL STAGE 2						1,141	2,109	77	96	122	0	2,170
	TOTALS						1,400	2,122	474	190	215	52	2,170

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EARTHWORK SUMMARY

CATEGORY	DIVISION	FROM/TO STATION	ROADWAY	* (1) 205.01000 EXCAVATION COMMON CY	SPV.0035.0008 EBS EXCAVATION CY	(2) SPV.0035.0009 EBS BACKFILL CY	(3) SPV.0035.0006 ROADWAY EMBANKMENT CY	(4) MASS ORDINATE +/-	CUMULATIVE WASTE CY	COMMENT
1000	1	1213+00 - 1226+90	IH 94 NB WIDENING	444	469	469	1,657	-1,213	-1,213	
	1	1227+00 - 1240+95	IH 94 NB WIDENING	516	450	450	2,090	-1,574	-2,787	
	1	1242+90 - 1268+00	IH 94 NB WIDENING	1,603	0	0	1,890	-286	-3,074	
	1	1226TSE+00 - 1229TSE+00	TEMP EXIT SE RAMP	442	0	0	3	439	-2,634	
	1	1244TNE+50 - 1252TNE+00	TEMP ENTRANCE NE RAMP	1,199	0	0	12	1,187	-1,447	
	DIVISION 1 SUBTOTAL			4,204	918	918	5,652	-1,447		
	2	1213+00 - 1268+00	IH 94 SB	29,709	1,514	1,514	14,879	14,831	13,384	
	2	1231SW+96 - 1241SW+25	SW RAMP	1,311	915	915	6,860	-5,549	7,835	
	2	1242NW+25 - 1253NW+86	NW RAMP	5,994	0	0	1,910	4,084	11,918	
	DIVISION 2 SUBTOTAL			37,014	2,429	2,429	23,649	13,365		
	3	1213+00 - 1268+00	IH 94 NB	33,129	0	0	8,414	24,715	36,633	
	3	1230SE+42 - 1241SE+35	SE RAMP	1,948	563	563	2,562	-614	36,020	
	3	1241NE+78 - 1252NE+98	NE RAMP	11,193	0	0	169	11,024	47,044	
	DIVISION 3 SUBTOTAL			46,270	563	563	11,145	35,126		
	4	1213+00 - 1217+84	IH 94 SB WIDENING REMOVAL AND RESTORATION	14	0	0	22	-8	47,036	
	4	1232+00 - 1240+50	IH 94 SB WIDENING REMOVAL AND RESTORATION	37	0	0	133	-96	46,940	
	4	1243+15 - 1253+75	IH 94 SB WIDENING REMOVAL AND RESTORATION	83	0	0	235	-153	46,787	
	4	1264+45 - 1268+00	IH 94 SB WIDENING REMOVAL AND RESTORATION	162	0	0	143	19	46,806	
	DIVISION 4 SUBTOTAL			296	0	0	534	-237		
	TOTALS			87,785	3,910	3,910	40,979	46,806		

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

(1) EXCAVATION COMMON VOLUME INCLUDES CONCRETE AND ASPHALTIC SURFACE MATERIAL.

(2) EBS EXCAVATION TO BE BACKFILLED WITH EBS BACKFILL. ALL EBS MATERIAL IS ASSUMED TO BE WASTED OFFSITE.

(3) ROADWAY EMBANKMENT = UNEXPANDED FILL

(4) THE MASS ORDINATE + OR - QUANTITY IS CALCULATED BY DIVISION. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION AND A NEGATIVE NUMBER INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION. MASS ORDINATE = EXCAVATION COMMON (1) - ROADWAY EMBANKMENT (4). THE MASS ORDINATE IS FOR INFORMATIONAL 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.

EARTHWORK TREATMENT ITEMS

CATEGORY	FROM/TO STATION	ROADWAY	SPV.0195.0010 SOIL DRYING TREATMENT TON	SPV.0195.0012 SUBGRADE STRENGTHENING TREATMENT TON
1000	1213+00 - 1268+00	IH 94 NB WIDENING	--	10
	1213+00 - 1268+00	IH 94 SB	150	50
	1231+96 - 1241+25	SW RAMP	--	20
	1213+00 - 1268+00	IH 94 NB	150	30
	1230+42 - 1241+35	SE RAMP	--	20
	TOTALS		300	130

REMOVING SOIL WASTE ITEMS

CATEGORY	LOCATION	205.0501.S EXCAVATION, HAULING AND DISPOSAL OF OF PETROLEUM CONTAMINATED SOIL TON	SPV.0035.0007 EXCAVATION, HAULING, AND REUSE OF LOW-LEVEL CONTAMINATED SOIL CY
1000	SW RAMP	163	--
	SE RAMP	--	780
	TOTALS	163	780

BASE AGGREGATE ITEMS

CATEGORY	STAGE	ROADWAY	STA	TO	STA	305.0115 BASE AGGREGATE DENSE 3/4-INCH CY	305.0125 BASE AGGREGATE DENSE 1 1/4-INCH CY	* 312.0115 SELECT CRUSHED MATERIAL CY
1000	1B	IH 94 NB WIDENING						
			1213+00	-	1228+39	--	1,480	--
			1227+19	-	1240+98	--	1,480	--
			1242+05	-	1249+55	--	770	--
			1252+18	-	1268+00	--	1,260	--
		TEMP NB EXIT RAMP SE						
			1226TSE+00	-	1229TSE+00	30	190	--
		TEMP NB ENTRANCE RAMP NE						
			1244TNE+50	-	1251TNE+00	70	450	--
		7 MILE ROAD						
			346+82	-	349+13	--	70	--
	4	IH 94 NB						
			1213+00	-	1218+83	--	880	2,303
			1218+83	-	1223+00	--	660	1,745
			1223+00	-	1225+84	70	490	1,178
			1225+84	-	1230+37	210	880	2,226
			1230+37	-	1234+00	--	550	1,425
			1234+00	-	1240+64	--	1,030	2,623
			1242+99	-	1250+00	--	1,080	2,769
			1250+00	-	1252+97	--	450	1,159
			1252+97	-	1259+14	--	1,150	3,062
			1259+14	-	1265+39	--	1,020	2,716
			1265+39	-	1266+00	--	100	261
			1266+00	-	1268+00	40	330	805
	4	SE RAMP						
			1230SE+42	-	1233SE+50	40	240	582
			1233SE+50	-	1240SE+76	80	570	1,416
	4	NE RAMP						
			1242NE+57	-	1252NE+97	--	850	2,157
1000	2	IH 94 SB						
			1213+00	-	1216+62	--	540	1,430
			1216+62	-	1226+00	--	1,520	4,053
			1226+00	-	1231+96	--	1,150	3,061
			1231+96	-	1235+00	--	450	1,193
			1235+00	-	1240+64	--	840	2,228
			1242+99	-	1244+42	--	220	565
			1244+42	-	1253+93	290	1,610	4,274
			1253+93	-	1258+00	--	760	2,020
			1258+00	-	1264+00	--	980	2,607
			1264+00	-	1265+25	--	200	519
			1265+25	-	1268+00	--	410	1,086
	2	IH 94 SB WIDENING						
			1213+00	-	1217+86	--	120	--
			1231+96	-	1240+49	--	190	--
			1243+14	-	1253+86	--	320	--
			1264+42	-	1268+00	--	90	--
	2	SW RAMP						
			1231SW+96	-	1238SW+50	--	480	1,276
			1238SW+50	-	1241SW+46	70	330	862
	2	NW RAMP						
			1242NW+25	-	1243NW+50	--	140	355
			1243NW+50	-	1246NW+25	--	220	584
			1246NW+25	-	1251NW+75	70	420	1,100
			1251NW+75	-	1253NW+94	--	140	368
		TOTALS				970	27,110	54,007

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE ITEMS

CAT.	STAGE	ROADWAY	STATIONS	415.0080 CONCRETE PAVEMENT 8-INCH SY	SPV.0180.0001 CONCRETE PAVEMENT 12-INCH SPECIAL SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	440.4410 INCENTIVE IRI RIDE DOL	601.0551 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	SPV.0090.0050 CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	715.0710 OPTIMIZED AGGREGATE GRADATION INCENTIVE DOL
1000	4	IH 94 NB									
			1213+00 - 1240+64	--	21,970	120	4,438	--	--	--	22,245
			1219+84 - 1230+36	--	2,320	--	1,844	--	--	--	2,349
			1230+37 - 1234+00	--	--	--	--	365	--	--	--
			1242+99 - 1268+00	--	19,480	120	4,039	--	--	--	19,724
			1250+00 - 1252+94	--	--	--	--	300	--	--	--
			1252+97 - 1265+39	--	3,300	--	2,132	--	--	--	3,341
		SE RAMP									
			1230SE+42 - 1240SE+76	2,640	--	--	386	--	1,035	80	3,267
			1239SE+25 - 1240SE+73	--	--	--	--	150	--	--	--
		NE RAMP									
			1242NE+55 - 1252NE+97	3,450	--	--	417	--	1,045	--	4,269
			1242NE+70 - 1249NE+00	--	--	--	--	635	--	--	--
	2	IH 94 SB									
			1213+00 - 1240+64	--	21,660	120	4,699	--	--	--	21,931
			1219+02 - 1231+95	--	3,420	--	2,459	--	--	--	3,463
			1231+96 - 1235+00	--	--	--	--	305	--	--	--
			1242+99 - 1268+00	--	19,690	120	4,289	--	--	--	19,936
			1253+93 1263+99	--	2,620	--	2,024	--	--	--	2,653
		SW RAMP									
			1231SW+95 - 1241SW+45	3,530	--	--	318	--	655	--	4,368
			1238SW+50 - 1241SW+25	--	--	--	--	290	--	--	--
			1241SW+02 - 1241SW+44	--	--	--	--	105	--	--	--
		NW RAMP									
			1242NW+13 - 1253NW+94	3,200	--	--	455	--	--	80	3,960
			1242NW+13 - 1246NW+25	--	--	--	--	420	--	--	--
			1242NW+13 - 1253NW+86	--	--	--	--	--	1,165	--	--
TOTALS				12,820	94,460	480	27,500	2,570	3,900	160	111,506

FINISHING ROADWAY

CATEGORY	STAGE		213.0100.0010 FINISHING ROADWAY EACH
1000	ALL	PROJECT 1035-01-74	1
		TOTAL	1

RELIEF TRENCH ITEM

CATEGORY	STAGE	ROADWAY	STATION	* 312.0110 SELECT CRUSHED MATERIAL CY
1000	1A	IH 94 SB		
			1232+00	2
			1237+10	2
			1242+30	2
			1251+00	2
			1254+80	4
	2	IH 94 SB		
			1224 SE+50	8
			1227 SE+00	8
			1229 SE+50	8
			1232 SE+50	8
			1234 SE+50	8
			1237 SE+00	8
			1239 SE+00	8
			1268+00	8
1000	4	IH 94 NB		
			1246 NW+75	8
			1249 NW+25	8
			1244+50	8
			1246+50	8
			1249+00	8
			1251+50	8
			1237 SW+00	8
			1238 SW+75	8
TOTAL				133

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

ASPHALTIC PAVEMENT ITEMS

CAT.	STAGE	ROADWAY	STATIONS	* 450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6424 HMA PAVEMENT 4 MT 58-28 H TON	460.7223 HMA PAVEMENT 3 HT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	SPV.0180.0106 ASPHALTIC MATERIAL BINDER SY
1000	1A	IH 94 NB OVERLAY									
			1213+00 - 1240+96	--	1,540	--	1,502	--	--	30	--
			1242+06 - 1268+00	--	1,470	--	1,412	--	--	30	--
	1B	IH 94 NB TEMP WIDENING									
			1213+00 - 1228+39	344	470	--	--	1,000	370	--	--
			1227+19 - 1240+98	349	490	--	--	1,020	370	--	--
			1242+05 - 1249+55	180	250	--	--	530	190	--	--
			1252+18 - 1268+00	278	380	--	--	810	300	--	--
		TEMP NB EXIT RAMP SE									
			1226TSE+00 - 1229TSE+00	--	80	--	--	160	60	--	--
		TEMP NB ENTRANCE RAMP NE									
			1244TNE+50 - 1251TNE+00	--	210	--	--	440	160	--	--
		7 MILE ROAD									
			346+82 - 349+13	--	--	--	--	--	--	60	--
	2	IH 94 SB TEMP WIDENING									
			1213+00 - 1217+86	--	30	40	30	--	--	--	--
			1231+96 - 1240+49	--	50	60	52	--	--	--	--
			1243+14 - 1253+86	--	90	100	84	--	--	--	--
			1264+42 - 1268+00	--	30	30	20	--	--	--	--
	2	TEMPORARY RAMP SW									
			1240SW+85 - 1241SW+54	--	20	--	--	30	10	--	--
		TEMPORARY RAMP NW									
			1241NW+70 - 1242NW+98	--	80	--	--	160	60	--	--
	4	IH 94 NB/SB									
			1213+00 - 1240+64	--	--	--	--	--	--	--	770
			1242+99 - 1268+00	--	--	--	--	--	--	--	720
		TEMPORARY RAMP SE									
			1240SE+74 - 1241SE+44	--	50	--	--	100	40	--	--
		TEMPORARY RAMP NE									
			1241SE+70 - 1242NE+70	--	90	--	--	180	70	--	--
TOTALS				1,150	5,330	230	3,100	4,430	1,630	120	1,490

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE PAVEMENT JOINT LAYOUT

CATEGORY	LOCATION	415.5110.S.0008 LS
1000	PROJECT 1035-01-74	1
	TOTAL	1

CULVERT ITEMS

CATEGORY	STAGE	INLET END STATION	INLET END OFFSET	INLET END ELEV	DISCHARGE END STATION	DISCHARGE END OFFSET	DISCHARGE END ELEV	SLOPE	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0448 CULVERT PIPE REINFORCED CONCRETE CLASS IV 48-INCH LF	* 522.1024 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1048 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	* 633.5200 MARKERS CULVERT END EACH
1000		IH 94												
	4	1234+72	186.5' RT	709.45	1234+71	0.0' RT	708.57	0.46%	--	182	--	1	1	1
	2	1234+71	0.0' RT	708.57	1234+69	169.1' LT	707.75	0.46%	--	169	--	1	--	1
	4	1233+92	227.1' RT	712.00	1234+31	221.6' RT	711.00	2.50%	28	--	2	--	--	--
		TOTALS							28	351	2	2	1	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTES

1) STATION OFFSETS SHOWN ARE TO THE CENTER OF INLET STRUCTURES OR END OF THE APRON END OF ENDWALLS (NOT THE END OF PIPE).
2) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. PIPE JOINTS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THE JOINT TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
3) GRANULAR BACKFILL IS INCIDENTAL TO THE COST OF THE PIPE.
4) PIPE LENGTH IS FROM END OF PIPE TO END OF PIPE AND DOES NOT INCLUDE LENGTH OF APRON ENDWALL.

CONCRETE SURFACE DRAINS

CATEGORY	ROADWAY	STATION	OFFSET	416.1010 CY
1000	IH 94 NB			
		1223+00	81.25' RT	2
	SW RAMP			
		1241SW+15	22.32' RT	2
	TOTAL			4

CONCRETE SHOULDER RUMBLE STRIPS

CATEGORY	ROADWAY	STATION	LOCATION	416.1110 LF
1000	IH 94 NB	1213+00 - 1240+64	INSIDE	2,765
		1213+00 - 1228+00	OUTSIDE	1,500
		1230+45 - 1240+64	OUTSIDE	1,020
		1242+99 - 1268+00	INSIDE	2,505
		1242+99 - 1252+99	OUTSIDE	1,000
		1256+00 - 1268+00	OUTSIDE	1,200
	IH 94 SB	1213+00 - 1240+64	INSIDE	2,765
		1213+00 - 1229+00	OUTSIDE	1,600
		1231+95 - 1240+64	OUTSIDE	870
		1242+99 - 1268+00	INSIDE	2,505
		1242+99 - 1253+94	OUTSIDE	1,095
		1256+00 - 1268+00	OUTSIDE	1,200
	TOTAL			20,025

TEMPORARY STORM SEWER ITEMS

CAT.	ROADWAY	STR NO	STATION	OFFSET	RIM ELEV	STR DEPTH FT	FROM STR	TO STR	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	* 611.0642 INLET COVERS TYPE MS EACH	* 611.3902 INLETS MEDIAN 2 GRATE EACH	* 204.0220 REMOVING INLETS EACH
1000	IH 94 NB/SB											
		50A	1235+22	4.25' LT	722.9	4.3	50A	50E	8	2	1	1
		51A	1237+25	4.25' LT	724.5	10.4	51A	51E	8	2	1	1
		52A	1239+74	4.25' LT	751.6	3.5	52A	52E	8	2	1	1
		53A	1245+24	6.75' LT	770.2	8.3	54A	54E	8	2	1	1
		54A	1247+24	7.33' LT	778.9	1.8	55A	55E	8	2	1	1
		55A	1252+23	4.25' LT	786.3	2.0	56A	-	8	2	1	1
		56A	1260+54	4.25' LT	793.3	2.0	57A	-	8	2	1	1
		57A	1265+33	4.25' LT	787.4	10.0	58A	188	8	2	1	1
		TOTALS							64	16	8	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE, SEE STORM SEWER
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVEATIONS PRIOR TO ORDERING MATERIALS

STORM SEWER STRUCTURE ITEMS

CATEGORY	STAGE	STRUCTURE NUMBER	STATION	OFFSET FT		611.2004 MANHOLES 4-FT DIA EACH	611.2006 MANHOLES 6-FT DIA EACH	611.2007 MANHOLES 7-FT DIA EACH	611.3004 INLETS 4-FT DIA EACH	611.3230 INLETS 2x3-FT EACH	* 611.3902 INLETS MEDIAN 2 GRATE EACH	611.3903 INLETS MEDIAN 3 GRATE EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0610 INLET COVERS TYPE BW EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	* 611.0642 INLET COVERS TYPE MS EACH	611.8120.S COVER PLATE TEMPORARY EACH	RIM OR FLANGE ELEV	STRUCTURE DEPTH FT	INVERT ELEV	REMARKS
1000		IH 94 NB																				
	1C	103	1213+10	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	748.67	5.81	741.70	
	1C	107	1216+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	743.56	5.25	737.15	
	1C	111	1219+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	738.71	6.15	731.40	
	1C	115	1222+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	734.12	5.31	727.65	
	1C	118	1225+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	729.52	4.99	723.37	
	1C	118A	1226+73	5.50	RT	--	1	--	--	--	--	--	1	--	--	--	--	--	726.91	4.95	720.88	
	1C	121	1228+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.53	5.75	718.62	
	1C	123	1230+60	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	724.17	5.68	717.33	
	1C	125	1231+00	4.25	RT	--	--	1	--	--	--	--	--	1	--	--	--	--	724.13	5.84	717.13	
	1B	128	1231+00	74.25	RT	--	--	1	--	--	--	--	--	1	--	--	--	--	724.17	8.73	714.28	
	1B	129	1231+00	133.40	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	714.00	
	1C	131	1231+35	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	724.15	5.28	717.71	
	1C	133	1231+50	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	724.17	5.22	717.79	
	1C	141	1234+50	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.93	5.54	719.23	
	1C	165	1250+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	733.27	6.78	725.33	
	1B	166	1250+00	74.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	733.31	6.98	725.17	
	1B	167	1250+00	161.20	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	725.00	
	1C	170	1256+00	4.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	730.28	5.02	724.10	
		IH 94 NB																				
	2	100	1213+10	74.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	748.71	5.05	742.50	
	2	101	1213+10	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	748.67	5.71	741.80	
	2	104	1216+00	74.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	743.60	4.49	737.95	
	2	105	1216+00	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	743.56	5.15	737.25	
	2	108	1219+00	82.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	738.63	5.19	732.28	
	2	109	1219+00	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	738.71	6.05	731.50	
	2	112	1222+00	82.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	734.04	4.35	728.53	
	2	113	1222+00	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	734.12	5.21	727.75	
	2	116	1225+00	82.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	729.44	4.47	723.81	
	2	117	1225+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	729.52	4.94	723.42	
	2	119	1228+00	86.00	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.34	4.52	719.66	
	2	120	1228+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.50	5.09	719.25	
	2	122	1230+60	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	723.97	4.84	717.97	
	2	124	1231+00	4.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	723.91	4.84	717.91	
	2	130	1231+35	4.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	723.89	4.84	717.89	
	2	132	1231+50	4.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	723.90	4.85	717.89	
	2	134	1232+20	74.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	724.04	3.12	719.76	
	2	135	1232+10	74.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	724.02	3.95	718.91	
	2	138	1234+50	74.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	725.32	4.11	720.05	
	2	139	1234+50	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.28	4.84	719.28	
	2	142	1237+50	74.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	727.60	4.86	721.58	
	2	143	1237+50	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	727.56	5.17	721.23	
	2	146	1240+50	74.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	729.93	4.59	724.18	
	2	147	1240+50	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	730.04	5.40	723.48	
	2	150	1243+00	74.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	731.94	3.28	727.50	
	2	151	1243+25	74.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	732.05	3.52	727.37	
	2	152	1243+00	4.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	731.94	4.03	726.75	
	2	153	1243+25	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	734.71	6.85	726.70	
	2	158A	1246+50	8.25	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	733.82	6.69	726.05	
	2	164	1250+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	733.28	6.77	725.35	

STORM SEWER CONTINUED ON NEXT SHEET

STORM SEWER STRUCTURE ITEMS

CATEGORY	STAGE	STRUCTURE NUMBER	STATION	OFFSET FT		611.2004 MANHOLES 4-FT DIA EACH	611.2006 MANHOLES 6-FT DIA EACH	611.2007 MANHOLES 7-FT DIA EACH	611.3004 INLETS 4-FT DIA EACH	611.3230 INLETS 2x3-FT EACH	* 611.3902 INLETS MEDIAN 2 GRATE EACH	611.3903 INLETS MEDIAN 3 GRATE EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0610 INLET COVERS TYPE BW EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	* 611.0642 INLET COVERS TYPE MS EACH	611.8120.S COVER PLATE TEMPORARY EACH	RIM OR FLANGE ELEV	STRUCTURE DEPTH FT	INVERT ELEV	REMARKS
1000	2	159	1253+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	731.78	4.67	725.95	
	2	169	1256+00	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	730.28	4.92	724.20	
	2	174	1257+91	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	729.32	11.78	716.38	
	2	175	1258+08	120.80	LT	--	--	1	--	--	--	--	1	--	--	--	--	--	720.00	3.52	715.40	
	2	177	1259+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	728.78	5.38	722.24	
	2	177A	1260+18	119.70	LT	--	--	--	--	--	1	--	--	--	--	--	2	--	715.87	4.25	711.62	
	2	180	1262+00	82.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	727.20	4.93	721.11	
	2	181	1262+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	727.28	6.57	719.55	
	2	188	1265+25	4.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	725.66	6.04	718.46	
	2	190	1265+00	4.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.78	7.47	717.15	
	2	191	1265+00	74.25	LT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.86	10.43	714.27	
	2	186	1267+90	4.25	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	724.37	4.93	718.28	
	2	192	1267+90	74.25	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	724.33	8.30	714.87	
		IH 94 SB																				
	4	102	1213+10	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	748.71	5.16	742.39	
	4	106	1216+00	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	743.60	4.60	737.84	
	4	110	1219+00	75.50	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	738.77	5.51	732.10	
	4	114	1222+00	82.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	734.04	4.46	728.42	
	4	126	1230+62	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	724.21	4.36	718.69	
	4	128	1231+00	74.25	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	714.28	EXISTING PIPE
	4	129.1	1231+00	150.20	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	712.00	EXISTING PIPE
	4	127	1231+35	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	724.19	5.54	717.49	
	4	140	1234+50	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	725.93	4.77	720.00	
	4	144	1237+50	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	728.68	5.89	721.63	
	4	145	1237+50	4.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	728.64	6.20	721.28	
	4	148	1240+50	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	731.44	6.01	724.27	
	4	149	1240+50	4.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	731.41	6.67	723.58	
	4	154	1243+00	4.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	733.75	5.19	727.40	
	4	155	1243+25	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	733.82	5.51	727.15	
	4	156	1243+00	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	733.75	5.02	727.57	
	4	157	1243+25	74.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	733.84	5.36	727.32	
	4	158	1246+50	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	734.08	5.92	727.00	
	4	160	1252+55	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	732.04	3.86	727.02	
	4	162	1252+75	74.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	731.94	4.02	726.76	
	4	163	1253+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	731.78	4.05	726.57	
	4	172	1257+91	98.39	RT	--	--	--	--	--	1	--	--	--	--	--	2	--	0.00	N/A	717.38	EXISTING PIPE
	4	173	1257+91	0.00	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	716.42	EXISTING PIPE
	4	176	1259+00	106.00	RT						1			--	--	--	2	--	723.10	4.70	718.40	
	4	178	1259+00	82.50	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	728.69	4.85	722.68	
	4	179	1259+00	4.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	728.78	5.33	722.29	
	4	182	1262+00	82.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	727.20	4.85	721.19	
	4	183	1262+00	4.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	727.28	6.47	719.65	
	4	184	1265+00	99.00	RT	--	--	--	--	--	1	--	--	--	--	--	2	--	721.50	3.31	718.19	
	4	185	1265+00	82.25	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	725.69	6.51	718.02	
	4	189	1265+00	4.25	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	725.78	7.37	717.25	
	4	187	1267+90	4.25	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	724.28	4.94	718.18	

STORM SEWER CONTINUED ON NEXT SHEET

STORM SEWER STRUCTURE ITEMS

CATEGORY	STAGE	STRUCTURE NUMBER	STATION	OFFSET FT		611.2004 MANHOLES 4-FT DIA EACH	611.2006 MANHOLES 6-FT DIA EACH	611.2007 MANHOLES 7-FT DIA EACH	611.3004 INLETS 4-FT DIA EACH	611.3230 INLETS 2x3-FT EACH	* 611.3902 INLETS MEDIAN 2 GRATE EACH	611.3903 INLETS MEDIAN 3 GRATE EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0610 INLET COVERS TYPE BW EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	* 611.0642 INLET COVERS TYPE MS EACH	611.8120.S COVER PLATE TEMPORARY EACH	RIM OR FLANGE ELEV	STRUCTURE DEPTH FT	INVERT ELEV	REMARKS
1000		RAMP NW																				
	2	600	1252+00 NW	18.50	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	729.81	3.85	724.80	
	2	600A	1252+00 NW	6.00	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	729.52	3.68	724.68	
	2	601	1251+50 NW	35.60	LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	724.00	
	2	602	1249+00 NW	18.50	RT	1	--	--	--	---	--	--	--	1	--	--	--	--	725.02	4.08	719.78	
	2	603	1249+00 NW	38.00	LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	719.50	
	2	604	1246+00 NW	18.50	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	716.46	5.12	710.18	
	2	605	1246+57 NW	31.90	LT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	714.30	
	2	606	1246+00 NW	33.00	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	718	8.08	709.14	
	2	612A	1243+00 NW	25.00	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	708.60	4.38	703.14	
	2	607	1242+50 NW	18.50	RT	--	--	--	--	1	--	--	--	--	1	--	--	--	708	3.31	703.86	
	2	608	1242+67 NW	18.50	RT	1	--	--	--	--	--	--	--	--	--	1	--	--	707.94	4.42	702.69	SEE NOTE 7
	2	609	1242+67 NW	1.50	LT	--	--	--	--	1	--	--	--	--	--	1	--	--	708.26	4.84	702.59	
	2	610	1242+88 NW	20.50	LT	--	--	--	--	1	--	--	--	--	1	--	--	--	708	3.46	703.59	
	2	611	1242+67 NW	24.30	LT	1	--	--	--	--	--	--	--	--	--	1	--	--	707.84	4.53	702.48	SEE NOTE 7
	2	612	1242+67 NW	43.50	LT	--	1	--	--	--	--	--	1	--	--	--	--		708	4.91	702.38	
	2	608A	1243+00 NW	37.30	RT	--	--	--	--	--	1	--	--	--	--	--	2	--	706.69	3.69	703.00	
		RAMP SW																				
	2	136	1231+02 SW	7.00	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	723.24	3.77	718.31	
	2	137	1231+02 SW	23.40	LT	--	--	--	--	--	--	1	--	--	--	--	3	--	720.87	2.72	718.15	
	2	613	1234+35 SW	18.00	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	721.57	4.87	715.54	
	2	614	1234+35 SW	10.90	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	720.09	3.69	715.24	
	2	615	1234+35 SW	35.30	LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	715.00	
	2	616	1240+85 SW	20.90	LT	--	--	--	1	--	--	--	--	--	--	1	--	--	707.70	2.97	703.90	SEE NOTE 7
	2	617	1240+98 SW	26.30	LT	--	--	--	1	--	--	--	--	--	1	--	--	--	707.78	3.97	702.98	SEE NOTE 7
	2	618	1241+11 SW	5.40	LT	1	--	--	--	--	--	--	--	--	--	1	--	--	708.23	4.83	702.57	SEE NOTE 7
	2	643	1241+12 SW	1.80	RT	1	--	--	--	--	--	--	--	--	--	1	--	--	708.28	4.95	702.50	SEE NOTE 7
	2	619	1240+98 SW	43.80	RT	--	--	--	--	--	1	--	--	--	--	--	2	--	705.47	3.19	702.28	
		RAMP SE																				
	4	620	1234+00 SE	18.50	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	721.81	6.29	714.36	
	4	621	1233+94 SE	40.50	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	712.00	
	4	622	1237+00 SE	18.50	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	718.03	4.34	712.53	
	4	623	1237+00 SE	34.80	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	712.00	
	4	624	1240+37 SE	18.50	LT	--	--	--	1	---	--	--	--	1	--	--	--	--	713.46	3.76	708.54	
	4	625	1240+50 SE	33.00	LT	--	--	--	--	--	1	--	--	--	--	--	2	--	712.84	4.51	708.33	
	4	626	1240+50 SE	18.50	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	713.40	4.21	708.03	
	4	627	1240+37 SE	13.60	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	713.44	3.22	709.06	
	4	628	1240+50 SE	14.60	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	713.44	3.35	708.93	
	4	629	1240+79 SE	19.30	RT	1	--	--	--	--	--	--	--	--	--	--	--	1	713.53	5.64	707.89	
	4	631	1240+79 SE	18.50	LT	--	--	1	--	--	--	--	--	--	--	--	--	1	713.50	6.05	707.45	
	4	630	1241+07 SE	1.20	RT	1	--	--	--	--	--	--	--	--	--	--	--	1	714.14	6.01	708.13	

STORM SEWER CONTINUED ON NEXT SHEET

STORM SEWER STRUCTURE ITEMS

CATEGORY	STAGE	STRUCTURE NUMBER	STATION	OFFSET FT		611.2004 MANHOLES 4-FT DIA EACH	611.2006 MANHOLES 6-FT DIA EACH	611.2007 MANHOLES 7-FT DIA EACH	611.3004 INLETS 4-FT DIA EACH	611.3230 INLETS 2x3-FT EACH	* 611.3902 INLETS MEDIAN 2 GRATE EACH	611.3903 INLETS MEDIAN 3 GRATE EACH	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0610 INLET COVERS TYPE BW EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	* 611.0642 INLET COVERS TYPE MS EACH	611.8120.S COVER PLATE TEMPORARY EACH	RIM OR FLANGE ELEV	STRUCTURE DEPTH FT	INVERT ELEV	REMARKS
1000		RAMP NE																				
	1C	171	1256+00 NE	7.00	RT	--	1	--	--	--	--	--	--	1	--	--	--	--	729.67	6.44	722.07	
	1C	171A	1255+99 NE	26.40	RT	--	--	--	--	--	1	--	--	--	--	--	2	--	725.26	3.63	721.63	
	4	705A	1242+65 NE	30.90	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	710.10	EXISTING PIPE
	4	632	1242+75 NE	25.40	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	713.95	3.29	709.50	
	4	633	1242+69 NE	9.00	LT	1	--	--	--	--	--	--	1	--	--	--	--	--	714.20	4.55	708.57	
	4	634	1242+77 NE	19.80	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	714.00	4.00	708.84	
	4	635	1242+59 NE	20.70	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	714.02	4.81	708.05	
	4	636	1242+53 NE	31.10	LT	--	--	--	--	--	1	--	--	--	--	--	2	--	713.75	5.95	707.81	
	4	637	1245+50 NE	18.50	LT	1	--	--	--	--	--	--	--	1	--	--	--	--	721.26	4.31	715.79	
	4	638	1245+50 NE	16.50	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	720.54	3.71	715.67	
	4	639	1245+50 NE	9.00	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	721.02	4.35	715.59	
	4	640	1248+75 NE	18.50	LT	--	--	--	1	--	--	--	--	1	--	--	--	--	729.75	3.35	725.24	
	4	641	1248+75 NE	16.50	RT	--	--	--	1	--	--	--	--	1	--	--	--	--	728.03	1.73	725.14	
	4	642	1249+11 NE	45.50	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	N/A	725.00	
	4	161	1252+75 NE	18.50	LT	1	--	--	--	--	--	--	--	1	--	--	--		731.85	3.74	726.95	
	4	168	1253+52 NE	7.00	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	731.13	5.42	724.55	
	4	168.1	1254+00 NE	7.00	RT	1	--	--	--	--	--	--	--	1	--	--	--	--	730.89	5.56	724.17	
1000		SEVEN MILE ROAD																				
	4AB	706	350+25	55.50	RT	--	--	--	--	--	1	--	--	--	--	--	2	--	715.93	4.58	711.35	
	4AB	711A	350+35	12.00	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	709.41	
	4AB	712	350+25	8.10	LT	--	--	--	--	--	1	--	--	--	--	--	2	--	715.37	5.78	709.59	
	4AB	713	350+27	11.40	RT	--	1	--	--	--	--	--	1	--	--	--	--	--	716.50	6.23	709.19	
	4AB	716A	349+90	4.90	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	709.54	
	4AB	717	349+90	12.90	RT	1	--	--	--	--	--	--	--	--	--	--	--	1	715.13	6.87	708.26	
	4AB	718	349+04	64.00	RT	1	--	--	--	--	--	--	1	--	--	--	--	--	714.00	6.73	706.19	
	4AB	719	349+04	17.00	RT	--	1	--	--	--	--	--	1	--	--	--	--	--	712.47	6.14	705.25	
	4C	720	346+93	17.00	RT	1	--	--	--	--	--	--	1	--	--	--	--	--	709.25	6.08	702.09	
	4C	721	346+60	39.50	RT	1	--	--	--	--	--	--	--	--	--	--	--	1	708.59	6.54	702.05	
	4C	722A	346+87	4.30	RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	702.94	
	4C	723	346+80	8.70	RT	--	1	--	--	--	--	--	--	--	--	--	--	1	709.03	8.17	700.86	
	4C	725	346+40	39.50	LT	1	--	--	--	--	--	--	--	--	--	--	--	1	708.66	6.75	701.91	
	4C	726	346+32	24.00	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	708.82	7.17	700.57	
	4C	727	345+15	48.50	LT	1	--	--	--	--	--	--	--	--	--	--	--	1	707.78	6.40	701.38	
	4C	728	345+15	24.00	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	708.24	7.18	699.98	
	4C	731A	344+75	16.50	LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	702.18	
	4C	732	344+75	24.00	LT	--	1	--	--	--	--	--	1	--	--	--	--	--	708.04	7.18	699.78	
	4C	733	345+80	43.50	RT	--	--	--	--	1	--	--	--	--	--	1	--	--	708.20	3.67	703.70	SEE NOTE 7
TOTALS						63	46	4	21	4	11	1	15	105	3	7	25	8				

NOTES

1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
2) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS.
3) PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR END OF PIPE (NOT THE APPRON END OF ENDWALLS)
4) RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE COVER FOR MANHOLES.
5) STRUCTURE DEPTH = RIM ELEV - INVERT - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 0.75 FT FOR J COVERS; 0.5 FT FOR HM AND S COVERS; 0.83 FT FOR TYPE BW; 0.67 FOR TYPE B; 0 FT FOR TYPE MS COVERS
   ADJUSTMENT (RINGS) = 0.33 FT FOR B, BW, J, HM AND S COVERS; 0 FT FOR TYPE MS COVERS
6) FLAT TOP SLAB WITH CENTERED OPENING REQUIRED ON ALL MANHOLES
7) FLAT TOP SLAB WITH CENTERED 24-INCH X 36-INCH RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE HM OR TYPE HM-S INLET COVERS.
8) REMOVAL OF BULKHEAD IS INCIDENTAL TO PIPE ITEMS
9) LOCATIONS AND DEPTH OF EXISTING STRUCTURES AND PIPES SHALL BE VERIFIED IN THE FIELD

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER PIPE ITEMS

STORM SEWER CONTINUED ON NEXT SHEET

CATEGORY	STAGE	FROM STRUCTURE NUMBER	TO STRUCTURE NUMBER	STATION	OFFSET FT		INVERT ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	608.0342 42-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS-IV 12-INCH LF	608.0415 15-INCH LF	608.0424 24-INCH LF	608.0430 30-INCH LF	608.0436 36-INCH LF	608.0442 42-INCH LF	* 522.1012 ARPON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1024 24-INCH EACH	522.1042 42-INCH EACH	204.0280 SEALING PIPES EACH
		IH 94 NB																						
1000	1C	103	107	1213+10	4.25	RT	741.70	737.15	1.57%	--	--	290	--	--	--	--	--	--	--	--	--	--	--	1
	1C	107	111	1216+00	4.25	RT	737.15	731.90	1.75%	--	--	300	--	--	--	--	--	--	--	--	--	--	--	1
	1C	111	115	1219+00	4.25	RT	731.40	727.65	1.25%	--	--	--	300	--	--	--	--	--	--	--	--	--	--	1
	1C	115	118	1222+00	4.25	RT	727.65	723.37	1.43%	--	--	--	300	--	--	--	--	--	--	--	--	--	--	1
	1C	118	118A	1225+00	4.25	RT	723.37	720.88	1.44%	--	--	--	--	--	--	--	--	--	173	--	--	--	--	1
	1C	118A	121	1226+73	5.50	RT	720.88	719.12	1.39%	--	--	--	--	--	--	--	--	--	127	--	--	--	--	1
	1C	121	123	1228+00	4.25	RT	718.62	717.33	0.50%	--	--	--	--	--	--	--	--	--	--	260	--	--	--	1
	1C	123	125	1230+60	4.25	RT	717.33	717.13	0.50%	--	--	--	--	--	--	--	--	--	--	40	--	--	--	1
	1C	125	128	1231+00	4.25	RT	717.13	716.79	0.50%	--	--	--	--	--	--	--	--	--	--	--	69	--	--	1
	1B	128	129	1231+00	74.25	RT	714.28	714.00	0.47%	--	--	--	--	--	52	--	--	--	--	--	--	--	--	--
	1B	129	OUTFALL	1231+00	133.40	RT	714.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	1C	131	125	1231+35	4.25	RT	717.71	717.53	0.51%	--	--	--	--	--	--	--	--	--	--	35	--	--	--	1
	1C	133	131	1231+50	4.25	RT	717.79	717.71	0.53%	--	--	--	--	--	--	--	--	--	--	15	--	--	--	1
	1C	141	133	1234+50	4.25	RT	719.23	718.29	0.31%	--	--	--	--	--	--	--	--	--	300	--	--	--	--	1
	1C	165	166	1250+00	4.25	RT	725.33	725.17	0.23%	--	--	69	--	--	--	--	--	--	--	--	--	--	--	1
	1B	166	167	1250+00	74.25	RT	725.17	725.00	0.20%	--	--	81	--	--	--	--	--	--	--	--	--	--	--	--
	1B	167	OUTFALL	1250+00	161.20	RT	725.00	0.00	0.00%	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	1C	170	171	1256+00	4.25	RT	724.10	722.16	2.34%	--	--	83	--	--	--	--	--	--	--	--	--	--	--	1
		IH 94 SB																						
	2	100	101	1213+10	74.25	LT	742.50	741.80	1.00%	--	--	--	--	--	--	--	--	70	--	--	--	--	--	--
	2	101	103	1213+10	4.25	LT	741.80	741.70	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	104	105	1216+00	74.25	LT	737.95	737.25	1.00%	--	--	70	--	--	--	--	--	--	--	--	--	--	--	--
	2	105	107	1216+00	4.25	LT	737.25	737.15	1.00%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--
	2	108	109	1219+00	82.25	LT	732.28	731.50	1.00%	--	--	78	--	--	--	--	--	--	--	--	--	--	--	--
	2	109	111	1219+00	4.25	LT	731.50	731.40	1.00%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--
	2	112	113	1222+00	82.25	LT	728.53	727.75	1.00%	--	--	--	--	--	--	--	--	78	--	--	--	--	--	--
	2	113	115	1222+00	4.25	LT	727.75	727.65	1.00%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--
	2	116	117	1225+00	82.25	LT	723.81	723.42	0.50%	--	--	--	--	--	--	--	--	--	78	--	--	--	--	--
	2	117	118	1225+00	4.25	LT	723.42	723.37	0.50%	--	--	--	--	--	--	--	--	--	10	--	--	--	--	--
	2	119	120	1228+00	86.00	LT	719.66	719.25	0.50%	--	--	--	--	--	--	--	--	--	82	--	--	--	--	--
	2	120	121	1228+00	4.25	LT	719.25	719.15	1.00%	--	--	--	--	--	--	--	--	--	10	--	--	--	--	--
	2	122	123	1230+60	4.25	LT	717.97	717.87	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	124	125	1231+00	4.25	LT	717.91	717.81	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	130	131	1231+35	4.25	LT	717.89	717.79	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	132	133	1231+50	4.25	LT	717.89	717.79	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	134	135	1232+20	74.25	LT	719.76	719.66	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	135	136	1232+10	74.25	LT	718.91	718.35	0.50%	--	--	--	--	--	--	--	--	113	--	--	--	--	--	--
	2	138	139	1234+50	74.25	LT	720.05	719.70	0.50%	--	--	--	--	--	--	--	--	70	--	--	--	--	--	--
	2	139	141	1234+50	4.25	LT	719.28	719.23	0.50%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	2	142	143	1237+50	74.25	LT	721.58	721.23	0.50%	--	--	--	--	--	--	--	--	70	--	--	--	--	--	1
	2	143	139	1237+50	4.25	LT	721.23	719.73	0.50%	--	--	--	--	--	--	--	--	300	--	--	--	--	--	--
	2	146	147	1240+50	74.25	LT	724.18	723.48	1.00%	--	--	--	--	--	--	--	--	70	--	--	--	--	--	1
	2	147	143	1240+50	4.25	LT	723.48	721.23	0.75%	--	--	--	--	--	--	--	--	300	--	--	--	--	--	--
	2	150	151	1243+00	74.25	LT	727.50	727.37	0.52%	--	--	--	--	--	--	--	--	25	--	--	--	--	--	--
	2	151	153	1243+25	74.25	LT	727.37	727.05	0.46%	--	--	--	--	--	--	--	--	70	--	--	--	--	--	1
	2	152	153	1243+00	4.25	LT	726.75	726.70	0.20%	--	--	--	--	--	--	--	--	25	--	--	--	--	--	--
	2	153	158A	1243+25	4.25	LT	726.70	726.05	0.20%	--	--	--	--	--	--	--	--	325	--	--	--	--	--	--
	2	158A	164	1246+50	8.25	LT	726.05	725.35	0.20%	--	--	--	--	--	--	--	--	350	--	--	--	--	--	1
	2	164	165	1250+00	4.25	LT	725.35	725.33	0.23%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	1

STORM SEWER PIPE ITEMS

CATEGORY	STAGE	FROM STRUCTURE NUMBER	TO STRUCTURE NUMBER	STATION	OFFSET FT		INVERT ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	608.0342 42-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS-IV 12-INCH LF	608.0415 15-INCH LF	608.0424 24-INCH LF	608.0430 30-INCH LF	608.0436 36-INCH LF	608.0442 42-INCH LF	* 522.1012 ARPON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1024 24-INCH EACH	522.1042 42-INCH EACH	204.0280 SEALING PIPES EACH
1000	2	159	164	1253+00	4.25	LT	725.95	725.35	0.20%	--	--	--	--	--	--	--	--	300	--	--	--	--	--	--	1
	2	169	170	1256+00	4.25	LT	724.20	724.10	1.00%	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	2	174	175	1257+91	4.25	LT	716.38	715.40	0.83%	--	--	--	--	118	--	--	--	--	--	--	--	--	--	--	--
	2	175	EX. PIPE	1258+08	120.80	LT	715.40	EX. PIPE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	176	EX. MH	1259+00	106.00	RT	718.40	717.38	1.00%	--	--	--	--	--	--	102	--	--	--	--	--	--	--	--	--
	2	177	181	1259+00	4.25	LT	722.24	719.55	0.90%	--	--	--	--	--	--	--	--	300	--	--	--	--	--	--	1
	2	177A	EX. INL	1260+18	119.70	LT	711.62	711.52	1.00%	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	180	181	1262+00	82.25	LT	721.11	719.55	2.00%	--	--	--	--	--	--	--	--	78	--	--	--	--	--	--	1
	2	181	190	1262+00	4.25	LT	719.55	717.15	0.80%	--	--	--	--	--	--	--	--	300	--	--	--	--	--	--	--
	2	188	190	1265+25	4.25	LT	718.46	717.15	5.24%	--	--	25	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	190	191	1265+00	4.25	LT	717.15	716.45	1.00%	--	--	--	--	--	--	--	--	--	70	--	--	--	--	--	1
	2	191	EX. PIPE	1265+00	74.25	LT	714.27	713.23	4.00%	--	--	--	--	--	--	--	--	--	26	--	--	--	--	--	--
	2	186	187	1267+90	4.25	LT	718.28	718.18	1.00%	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--	1
	2	192	EX. PIPE	1267+90	74.25	LT	714.87	714.19	2.43%	--	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		IH 94 NB																							
	4	102	103	1213+10	74.25	RT	742.39	741.70	1.00%	--	--	--	--	--	--	--	--	69	--	--	--	--	--	--	--
	4	106	107	1216+00	74.25	RT	737.84	737.15	1.00%	--	--	69	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	110	111	1219+00	75.50	RT	732.10	731.40	1.00%	--	--	70	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	114	115	1222+00	82.25	RT	728.42	727.65	1.00%	--	--	--	--	--	--	--	--	77	--	--	--	--	--	--	--
	4	126	128	1230+62	74.25	RT	718.69	718.31	1.00%	--	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--
	4	128	129.1	1231+00	74.30	RT	714.28	712.00	3.00%	--	--	--	--	--	68	--	--	--	--	--	--	--	--	--	--
	4	129.1	OUTFALL	1231+00	150.20	RT	712.00	0.00	0.00%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	127	128	1231+35	74.25	RT	717.49	717.32	0.50%	--	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	140	141	1234+50	74.25	RT	720.00	719.65	0.50%	--	--	--	--	--	--	--	--	69	--	--	--	--	--	--	--
	4	144	145	1237+50	74.25	RT	721.63	721.28	0.51%	--	--	69	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	145	143	1237+50	4.25	RT	721.28	721.23	0.50%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	1
	4	148	149	1240+50	74.25	RT	724.27	723.58	1.00%	--	--	69	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	149	147	1240+50	4.25	RT	723.58	723.48	1.00%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	1
	4	154	155	1243+00	4.25	RT	727.40	727.15	1.00%	--	--	--	--	--	--	--	--	25	--	--	--	--	--	--	--
	4	155	153	1243+25	4.25	RT	727.15	727.05	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	1
	4	156	157	1243+00	74.25	RT	727.57	727.32	1.00%	--	--	--	--	--	--	--	--	25	--	--	--	--	--	--	--
	4	157	155	1243+25	74.25	RT	727.32	727.15	0.25%	--	--	--	--	--	--	--	--	69	--	--	--	--	--	--	--
	4	158	158A	1246+50	74.25	RT	727.00	726.17	1.00%	--	--	83	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	160	162	1252+55	74.25	RT	727.02	726.86	0.79%	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--
	4	162	163	1252+75	74.25	RT	726.76	726.57	0.26%	--	--	--	--	--	--	--	--	73	--	--	--	--	--	--	--
	4	163	159	1253+00	4.25	RT	726.57	726.47	1.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	1
	4	172	173	1257+91	98.39	RT	717.38	716.42	0.98%	--	--	--	--	98	--	--	--	--	--	--	--	--	--	--	--
	4	173	174	1257+91	0.00	RT	716.42	716.38	1.00%	--	--	--	--	4	--	--	--	--	--	--	--		--	--	--
	4	178	179	1259+00	82.50	RT	722.68	722.29	0.50%	--	--	--	--	--	--	--	--	77	--	--	--	--	--	--	--
	4	179	177	1259+00	4.25	RT	722.29	722.24	0.50%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	1
	4	182	183	1262+00	82.25	RT	721.19	719.65	2.00%	--	--	--	--	--	--	--	--	77	--	--	--	--	--	--	--
	4	183	181	1262+00	4.25	RT	719.65	719.55	1.00%	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	1
	4	184	185	1265+00	99.00	RT	718.19	718.02	1.00%	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--
	4	185	189	1265+00	82.25	RT	718.02	717.25	1.00%	--	--	77	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	189	190	1265+00	4.25	RT	717.25	717.15	1.00%	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	1
	4	187	189	1267+90	4.25	RT	718.18	717.25	0.32%	--	--	--	--	--	--	--	--	290	--	--	--	--	--	--	1

STORM SEWER CONTINUED ON NEXT SHEET

STORM SEWER PIPE ITEMS

CATEGORY	STAGE	FROM STRUCTURE NUMBER	TO STRUCTURE NUMBER	STATION	OFFSET FT		INVERT ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	608.0342 42-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS-IV 12-INCH LF	608.0415 15-INCH LF	608.0424 24-INCH LF	608.0430 30-INCH LF	608.0436 36-INCH LF	608.0442 42-INCH LF	* 522.1012 ARPON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1024 24-INCH EACH	522.1042 42-INCH EACH	204.0280 SEALING PIPES EACH
1000		RAMP NW																						
	2	600	600A	1252+00 NW	18.50	RT	724.80	724.68	0.50%	--	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--
		600A	601				724.68	724.40	0.50%	--	--	--	--	--	--	--	--	50	--	--	--	--	--	--	--
	2	601	OUTFALL	1251+50 NW	35.60	LT	724.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	2	602	603	1249+00 NW	18.50	RT	719.78	719.50	0.50%	--	--	--	--	--	--	--	--	50	--	--	--	--	--	--	--
	2	603	OUTFALL	1249+00 NW	38.00	LT	719.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	2	604	606	1246+00 NW	18.50	RT	710.18	709.14	2.00%	--	--	52	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	605	606	1246+57 NW	31.90	LT	714.30	712.62	2.85%	--	--	52	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	2	606	612A	1246+00 NW	33.00	LT	709.14	703.14	2.00%	--	--	300	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	612A	612				703.14	702.38	2.00%	--	--	38	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	607	608	1242+50 NW	18.50	RT	703.86	703.69	1.00%	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--
	2	608	609	1242+67 NW	18.50	RT	702.69	702.59	0.50%	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--
	2	609	611	1242+67 NW	1.50	LT	702.59	702.48	0.50%	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--
	2	610	611	1242+88 NW	20.50	LT	703.59	703.48	0.50%	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--
	2	611	612	1242+67 NW	24.30	LT	702.48	702.39	0.50%	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--
	2	612	727	1242+67 NW	43.50	LT	702.38	701.38	1.49%	--	--	67	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	608A	608	1243+00 NW	37.30	RT	703.00	702.69	0.82%	--	--	38	--	--	--	--	--	--	--	--	--	--	--	--	--
1000		RAMP SW																						
	2	136	137	1231+02 SW	7.00	LT	718.31	718.15	1.00%	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--
	2	137	EX. PIPE	1231+02 SW	23.40	LT	718.15	EXISTING	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	613	614	1234+35 SW	18.00	RT	715.54	715.24	1.00%	--	--	--	--	--	--	--	--	30	--	--	--	--	--	--	--
	2	614	615	1234+35 SW	10.90	LT	715.24	715.00	1.00%	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--
	2	615	OUTFALL	1234+35 SW	35.30	LT	715.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	2	616	617	1240+85 SW	20.90	LT	703.90	703.62	2.00%	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--
	2	617	618	1240+98 SW	26.30	LT	702.98	702.57	1.71%	--	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--
	2	618	643	1241+11 SW	5.40	LT	702.57	702.50	1.00%	--	--	--	--	--	--	--	--	7	--	--	--	--	--	--	--
	2	643	619	1241+12 SW	1.80	RT	702.50	702.28	0.50%	--	--	--	--	--	--	--	--	44	--	--	--	--	--	--	--
	2	619	721	1240+98 SW	43.80	RT	702.28	702.05	0.50%	--	--	--	--	--	--	--	--	47	--	--	--	--	--	--	--
1000		RAMP SE																						
	4	620	621	1234+00 SE	18.50	LT	714.36	712.00	4.00%	--	--	53	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	621	OUTFALL	1233+94 SE	40.50	RT	712.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	4	622	623	1237+00 SE	18.50	LT	712.53	712.00	1.00%	--	--	--	--	--	--	--	--	47	--	--	--	--	--	--	--
	4	623	OUTFALL	1237+00 SE	34.80	RT	712.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	4	624	626	1240+37 SE	18.50	LT	708.54	708.41	1.00%	--	--	--	--	--	--	--	13	--	--	--	--	--	--	--	--
	4	625	626	1240+50 SE	33.00	LT	708.33	708.03	2.00%	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--
	4	626	631	1240+50 SE	18.50	LT	708.03	707.45	2.00%	--	--	--	--	--	--	--	--	29	--	--	--	--	--	--	--
	4	627	628	1240+37 SE	13.60	RT	709.06	708.93	1.00%	--	--	--	--	--	--	--	13	--	--	--	--	--	--	--	--
	4	628	629	1240+50 SE	14.60	RT	708.93	708.64	1.00%	--	--	--	--	--	--	--	29	--	--	--	--	--	--	--	--
	4	629	631	1240+79 SE	19.30	RT	707.89	707.51	1.00%	--	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--
	4	631	718	1240+79 SE	18.50	LT	707.45	706.19	2.00%	--	--	63	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	630	631	1241+07 SE	1.20	RT	708.13	707.45	2.00%	--	--	34	--	--	--	--	--	--	--	--	--	--	--	--	--

STORM SEWER CONTINUED ON NEXT SHEET

STORM SEWER PIPE ITEMS

CATEGORY	STAGE	FROM STRUCTURE NUMBER	TO STRUCTURE NUMBER	STATION	OFFSET FT		INVERT ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF	608.0342 42-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS-IV 12-INCH LF	608.0415 15-INCH LF	608.0424 24-INCH LF	608.0430 30-INCH LF	608.0436 36-INCH LF	608.0442 42-INCH LF	* 522.1012 ARPON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1024 24-INCH EACH	522.1042 42-INCH EACH	204.0280 SEALING PIPES EACH
		RAMP NE																						
	1C	171	171A	1256+00 NE	7.00	RT	722.07	721.63	2.20%	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--
	1C	171A	EX. PIPE	1255+99 NE	26.40	RT	721.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	705A	632	1242+65 NE	30.90	RT	710.10	709.98	1.00%	8	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	4	632	633	1242+75 NE	25.40	RT	709.50	709.15	1.00%	--	--	--	--	--	--	--	35	--	--	--	--	--	--	--
	4	633	635	1242+69 NE	9.00	LT	708.57	708.27	2.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	4	634	635	1242+77 NE	19.80	LT	708.84	708.48	2.00%	--	--	--	--	--	--	--	11	--	--	--	--	--	--	--
	4	635	636	1242+59 NE	20.70	LT	708.05	707.81	2.00%	--	--	28	--	--	--	--	--	--	--	--	--	--	--	--
	4	636	719	1242+53 NE	31.10	LT	707.81	705.95	1.86%	--	--	93	--	--	--	--	--	--	--	--	--	--	--	--
	4	637	639	1245+50 NE	18.50	LT	715.79	715.59	2.00%	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--
	4	638	639	1245+50 NE	16.50	RT	715.67	715.59	0.32%	--	--	--	--	--	--	--	--	25	--	--	--	--	--	--
	4	639	633	1245+50 NE	9.00	LT	715.59	708.57	2.50%	--	--	--	--	--	--	--	--	281	--	--	--	--	--	--
	4	640	641	1248+75 NE	18.50	LT	725.24	725.14	0.30%	--	--	--	--	--	--	35	--	--	--	--	--	--	--	--
	4	641	642	1248+75 NE	16.50	RT	725.14	725.00	0.30%	--	--	--	--	--	--	40	--	--	--	--	--	--	--	--
	4	642	OUTFALL	1249+11 NE	45.50	RT	725.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
	4	161	162	1252+75 NE	18.50	LT	726.95	726.86	1.00%	--	--	--	--	--	--	--	9	--	--	--	--	--	--	--
	4	168	168	1253+52 NE	7.00	RT	724.55	724.31	0.50%	--	48	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	168.1	EX. MH	1254+00 NE	7.00	RT	724.17	723.88	1.00%		29			--	--	--	--	--	--	--	--			
		7 MILE ROAD																						
	4AB	706	630	350+25	55.50	RT	711.35	709.23	4.00%	--	--	53	--	--	--	--	--	--	--	--	--	--	--	--	--
	4AB	711A	713	350+35	12.00	RT	709.41	709.19	2.75%	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	1
	4AB	712	713	350+25	8.10	LT	709.59	709.19	2.00%	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--
	4AB	713	717	350+27	11.40	RT	709.19	708.26	2.51%	--	--	37	--	--	--	--	--	--	--	--	--	--	--	--	--
	4AB	716A	717	349+90	4.90	RT	709.54	709.46	1.00%	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	4AB	717	719	349+90	12.90	RT	708.26	705.25	3.50%	--	--	--	--	--	--	--	--	86	--	--	--	--	--	--	--
	4AB	718	719	349+04	64.00	RT	706.19	705.25	2.00%	--	--	47	--	--	--	--	--	--	--	--	--	--	--	--	--
	4AB	719	720	349+04	17.00	RT	705.25	702.09	1.50%	--	--	--	--	--	--	--	--	211	--	--	--	--	--	--	--
	4C	720	723	346+93	17.00	RT	702.09	701.86	1.53%	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--
	4C	721	723	346+60	39.50	RT	702.05	701.86	0.51%	--	--	37	--	--	--	--	--	--	--	--	--	--	--	--	--
	4C	722A	723	346+87	4.30	RT	702.94	702.86	1.00%	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	4C	723	726	346+80	8.70	RT	700.86	700.57	0.50%	--	--	--	--	58	--	--	--	--	--	--	--	--	--	--	--
	4C	725	726	346+40	39.50	LT	701.91	701.57	2.00%	--	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--
	4C	726	728	346+32	24.00	LT	700.57	699.98	0.50%	--	--	--	--	117	--	--	--	--	--	--	--	--	--	--	--
	4C	727	728	345+15	48.50	LT	701.38	701.01	1.50%	--	--	25	--	--	--	--	--	--	--	--	--	--	--	--	--
	4C	728	732	345+15	24.00	LT	699.98	699.78	0.50%	--	--	--	--	40	--	--	--	--	--	--	--	--	--	--	--
	4C	731A	732	344+75	16.50	LT	702.18	702.02	2.00%	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	4C	732	EX. PIPE	344+75	24.00	LT	699.78	699.32	0.50%	--	--	--	--	92	--	--	--	--	--	--	--	--	--	--	--
	4C	733	643	345+80	43.50	RT	703.70	703.25	1.00%	--	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTALS										32	170	2,615	610	527	120	215	154	4,993	876	350	69	1	7	1	38

NOTES

1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE
2) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS.
3) PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR END OF PIPE (NOT THE APPRON END OF ENDWALLS)
4) REMOVAL OF BULKHEAD IS INCIDENTAL TO PIPE ITEMS
5) PIPE RUNS INSTALLED IN MULTIPLE STAGES SHALL BE INSTALLED IN SUCH A MANNER AS NOT TO REQUIRE PIPE COLLARS WHOLE SECTIONS OF PIPE SHALL END AND BEGIN AT EACH STAGE
6) LOCATIONS AND DEPTH OF EXISTING STRUCTURES AND PIPES SHALL BE VERIFIED IN THE FIELD

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

PIPE UNDERDRAIN ITEMS

CATEGORY	STAGE	STATION	LOCATION	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY
1000	2	1213+00 - 1222+00	NB OUTSIDE EDGE	900	10	510
		1234+00 - 1240+69	NB OUTSIDE EDGE	670	10	380
		1242+94 - 1252+96	NB OUTSIDE EDGE	1,010	10	570
		1213+00 - 1268+00	NB MEDIAN	5,500	10	3,060
	4	1213+00 - 1240+84	SB OUTSIDE EDGE	2,800	10	1,560
		1242+79 - 1244+41	SB OUTSIDE EDGE	170	10	100
		1264+00 - 1268+00	SB OUTSIDE EDGE	400	10	230
		1219SW +02 - 1235SW +00	SW RAMP, OUTSIDE EDGE	1,600	10	890
	TOTALS			13,050	80	7,300

MARKERS CULVERT END

CATEGORY	STAGE	ROADWAY	STRUCTURE NUMBER	STATION	OFFSET	* 633.5200 EACH
1000		IH 94 NB				
	1B		129.1	1231+00	133.4 RT	1
	4		129	1231+00	150.2 RT	1
	4		167	1250+00	161.2 RT	1
		NW RAMP				
	2		601	1252+00 NW	19.6 LT	1
	2		603	1249+00 NW	38 LT	1
	2		605	1246+57 NW	31.9 LT	1
		SW RAMP				
	2		615	1234+35 SW	35.3 LT	1
		SE RAMP				
	4		621	1233+94 SE	40.5 RT	1
	4		623	1237+00 SE	34.8 RT	1
		NE RAMP				
	4		642	1249+11 NE	45.5 RT	1
		TOTALS				10

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

DRAIN TILE ITEMS

CATEGORY	ROADWAY	OFFSET	SPV.0200.0012 MANHOLES 4-FT DIAMETER SPECIAL VF	611.0530 MANHOLE COVERS TYPE J EACH	608.0512 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 12-INCH LF	612.0700 DRAIN TILE EXPLORATION LF
1000	IH 94 NB	LT/RT	20	5	300	200
	IH 94 SB	LT/RT	20	5	--	200
	TOTALS		40	10	300	400

TEMPORARY SHORING ITEMS

CATEGORY	STATION	511.1300.0001 TEMPORARY SHORING STA 1239+50 TO STA 1244+00 SF	511.1300.0003 TEMPORARY SHORING STA 346+90 TO STA 349+90 SF	COMMENTS
1000	1239+50 - 1240+64	228	--	STAGE 2 MEDIAN GRADE SEPARATION
	1242+99 - 1244+00	202		STAGE 2 MEDIAN GRADE SEPARATION
	346+90 - 349+90	--	3,000	STAGE 4 STORM SEWER INSTALLATION
	TOTALS	430	3,000	

STORMWATER DETENTION POND ITEMS

CATEGORY	ROADWAY	LOCATION	OFFSET	* 205.0100 EXCAVATION COMMON CY	* 624.0100 WATER MGAL	* 625.0100 TOPSOIL SY	* SPV.0030.0001 FERTILIZER TYPE B SPECIAL CWT	* SPV.0085.0002 SEEDING MIXTURE NO. 30 SPECIAL LB	* 630.0200 SEEDING TEMPORARY LB	640.1303.S POND LINER CLAY CY	* SPV.0005.0001 SEEDBED PREPARATION ACRE	SPV.0035.0002 CLAY EMBANKMENT FILL CY	SPV.0060.0053 ROOTSTOCK VEGETATION EACH	SPV.0180.0010 ROOTSTOCK PROTECTION SY	SPV.0180.0012 MULCHING SPECIAL SY
1000	RAMP SE														
		1229+50 - 1235+00	RT	9,335	175	8,200	8.0	320	210	2,100	2	3,015	470	1,320	7,710
	TOTALS			9,335	175	8,200	8.0	320	210	2,100	2	3,015	470	1,320	7,710

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BARRIER ITEMS

CATEGORY	STAGE	ROADWAY	STA		TO STA	LOCATION	603.1142 CONCRETE BARRIER TYPE S42 LF	603.1156 CONCRETE BARRIER TYPE S56 LF	603.1242 CONCRETE BARRIER TYPE S42A LF	603.2156 CONCRETE BARRIER FIXED OBJECT PROTECTION TYPE S56 LF	603.3559 CONCRETE BARRIER TRANSITION TYPE S42 TO S56 EACH
1000	4	IH 94 NB									
			1213+00	-	1229+80	MEDIAN	1,680	--	--	--	--
			1229+80	-	1240+64	MEDIAN	--	--	1,084	--	--
			1213+00	-	1223+00	OUTSIDE	1,000	--	--	--	1
			1220+25	-	1220+75	OUTSIDE	--	50	--	--	1
			1234+00	-	1240+64	OUTSIDE	664	--	--	--	--
			1242+99	-	1246+45	MEDIAN	--	--	346	--	--
			1246+70	-	1246+95	MEDIAN	--	25	--	5	1
			1247+05	-	1247+30	MEDIAN	--	25	--	5	1
			1247+55	-	1248+62	MEDIAN	--	--	107	--	--
			1248+62	-	1268+00	MEDIAN	1,938	--	--	--	--
			1242+99	-	1250+00	OUTSIDE	701	--	--	--	--
			1252+97	-	1266+00	OUTSIDE	1,303	--	--	--	--
		RAMP NE									
			1249NE+00	-	1252NE+98	OUTSIDE	398	--	--	--	--
	SUBTOTAL STAGE 4						7,684	100	1,537	10	4
	2	IH 94 SB									
			1213+00	-	1240+64	MEDIAN	2,764	--	--	--	--
			1213+00	-	1231+96	OUTSIDE	1,896	--	--	--	--
			1235+00	-	1240+64	OUTSIDE	564	--	--	--	--
			1242+99	-	1246+45	MEDIAN	346	--	--	--	--
			1246+70	-	1246+95	MEDIAN	--	25	--	5	1
			1247+05	-	1247+30	MEDIAN	--	25	--	5	1
			1247+55	-	1268+00	MEDIAN	2,045	--	--	--	--
			1242+99	-	1244+42	OUTSIDE	143	--	--	--	--
			1253+93	-	1263+00	OUTSIDE	907	--	--	--	2
			1263+25	-	1263+50	OUTSIDE	--	50	--	--	--
			1264+00		1268+00	OUTSIDE	400	--	--	--	--
		RAMP SW									
			1231+96	-	1238+50	OUTSIDE	654	--	--	--	--
		RAMP SW									
			1251+75	-	1253+94	OUTSIDE	219	--	--	--	--
	SUBTOTAL STAGE 2						9,938	100	--	10	4
	TOTALS						17,622	200	1,537	20	8

FENCING ITEMS

CATEGORY	STAGE	ROADWAY	LOCATION			OFFSET	616.0100 FENCE WOVEN WIRE 4-FT LF	616.0700.S FENCE SAFETY LF
1000	4	IH 94 NB						
			1213+00	-	1224+03	RT	1,103	800
			1228+52	-	1240+66	RT	1,339	800
			1233+90	-	1240+67	RT	696	--
			1242+78	-	1248+65	RT	602	--
			1242+62	-	1248+92	RT	661	--
			1251+97	-	1268+00	RT	1,606	--
	2	IH 94 SB						
			1213+00	-	1240+97	LT	3,060	800
			1242+30	-	1268+00	LT	643	800
			1242+49	-	1252+11	LT	1,005	--
			1242+95	-	1250+10	LT	741	--
			1257+60	-	1268+00	LT	1,044	--
TOTALS							12,500	3,200

MOBILIZATION

CATEGORY	STAGE		619.1000 EACH
1000	ALL	PROJECT 1035-01-74	0.14
TOTAL			0.14

MAINTENANCE AND REPAIR OF HAUL ROADS 1035-01-74

CATEGORY	STAGE		618.0100.0010 EACH
1000	ALL	PROJECT 1035-01-74	1
TOTAL			1

DUST CONTROL SURFACE TREATMENT

CATEGORY	STAGE	ROADWAY	623.0200 SY
1000	2	IH 94 NB	46,000
	4	IH 94 SB	46,000
TOTAL			92,000

GUARDRAIL ITEMS

CATEGORY	STAGE	ROADWAY	STA	TO	STA	OFFSET	* 209.0200.S BACKFILL CONTROLLED LOW STRENGTH CY	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	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
1000	4	IH 94 NB	1233+09	-	1234+00	RT	2	22	--	39	1	--
		SE RAMP	1229SE+90	-	1234SE+98	RT	2	133	450	--	1	1
		NE RAMP	1248NE+28	-	1249NE+00	RT	2	22	--	39	1	--
	STAGE 4 SUBTOTAL						6	177	450	78	3	1
	2	IH 94 SB	1244+42	-	1245+36	LT	2	28	--	39	1	--
		SW RAMP	1238SW+50	-	1239SW+44	LT	2	17	--	39	1	--
	STAGE 2 SUBTOTAL						4	45	0	78	2	0
	TOTALS						10	222	450	156	5	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

WATER

CATEGORY	STAGE	ROADWAY	* 624.0100 MGAL
1000	2	IH 94 SB	115
	4	IH 94 NB	115
		UNDISTRIBUTED	30
	TOTALS		260

SECTION CORNER MONUMENTS

CATEGORY	STATION	DESCRIPTION	SPV.0060.0060 EACH
1000	IH 94		
	1214+87.62	NW COR SW 1/4 SECTION 7	1
	1267+79.45	NW COR SW 1/4 SECTION 6	1
	TOTAL		2

BACKFILL ITEMS

CATEGORY	ROADWAY	LOCATION	* 209.0200.S BACKFILL CONTROLLED LOW STRENGTH CY	209.2500 BACKFILL GRANULAR GRADE 2 TON	SPV.0035.0005 BACKFILL SLURRY CY
1000	IH 94 NB	UNDISTRIBUTED	75	100	100
	IH 94 SB	UNDISTRIBUTED	75	100	100
	TOTALS		150	200	200

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PAVEMENT REPAIR ITEMS

CATEGORY	STAGE	ROADWAY	STA	TO	STA	390.0203 BASE PATCHING ASPHALTIC SY	416.1710 CONCRETE PAVEMENT REPAIR SHES SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	450.1100.S ASPHALTIC MIXTURE FOR EXTREME CONDITIONS TON	* 450.4000 HMA COLD WEATHER PAVING TON	495.1000.S COLD PATCH TON	SPV.0060.0034 MOBILIZATIONS EMERGENCY PAVEMENT REPAIR EACH	SPV.0195.0002 HMA TRANSVERSE JOINT REPAIR TON	SPV.0195.0003 HMA LONGITUDINAL JOINT REPAIR TON
1000	1A & 1B	IH 94 LT/RT	1213+00	-	1268+00	--	450	710	1,380	--	--	--	1	--	--
	2	IH 94 RT	1213+00	-	1268+00	--	--	--	--	--	--	--	1	30	100
	4	IH 94 LT	1213+00	-	1268+00	--	--	--	--	--	--	--	1	30	100
	UNDISTRIBUTED					100	--	--	--	60	60	20	--	15	50
	TOTALS					100	450	710	1,380	60	60	20	3	75	250

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EROSION CONTROL ITEMS

CATEGORY	LOCATION	606.0200 RIPRAP MEDIUM CY	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	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7545.S STONE OR ROCK DITCH CHECKS CY	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH	645.0120 GEOTEXTILE TYPE HR SY	SPV.0060.0055 TEMPORARY SEDIMENT TRAPS EACH	SPV.0060.0056 SAND BAGS EACH	SPV.0090.0070 HEAVY DUTY SILT FENCE LF
1000	STAGE 1A/1B																				
	IH 94 NB	--	25	--	--	2	4	8,300	--	--	1	--	135	--	3	--	32	--	1	--	105
	UNDISTRIBUTED	--	3	--	--	--	--	2,075	--	--	1	--	34	--	1	1	8	--	--	50	--
	STAGE 1A/1B SUBTOTAL	0	28	0	0	2	4	10,375	0	0	2	0	169	0	4	1	40	0	1	50	105
	STAGE 1C																				
	IH 94 NB	--	--	--	--	1	2	--	--	--	14	23	--	--	--	--	--	--	--	--	--
	STAGE 1C SUBTOTAL	0	0	0	0	1	2	0	0	0	14	23	0	0	0	0	0	0	0	0	0
	STAGE 2																				
	IH 94 SB	--	30	--	--	13	19	15,980	1,319	--	41	40	180	40	--	--	--	--	1	--	538
	SW RAMP	16	18	--	--	2	3	--	--	1,759	11	8	75	30	--	--	20	48	--	--	499
	NW RAMP	10	10	--	--	2	3	--	3,749	--	11	8	90	30	3	--	--	16	--	--	--
	UNDISTRIBUTED	9	12	--	--	1	1	4,035	1,292	470	5	8	91	10	1	2	50	15	1	75	259
	STAGE 2 SUBTOTAL	35	70	0	0	18	26	20,015	6,360	2,229	68	64	436	110	4	2	70	80	2	75	1,296
	STAGE 4																				
	IH 94 NB	--	30	--	--	13	19	9,393	3,057	--	28	41	165	40	--	--	--	--	1	--	305
	SE RAMP AND POND	58	10	--	--	2	3	--	--	6,834	11	8	15	40	6	--	--	90	--	--	285
	NE RAMP	10	10	421	421	2	3	1,223	--	--	12	10	45	30	--	--	--	16	1	--	--
	UNDISTRIBUTED	17	12	109	109	1	1	2,694	783	1,738	5	9	60	10	2	2	50	24	1	75	109
	STAGE 4 SUBTOTAL	85	62	530	529	18	26	13,310	3,840	8,572	56	68	285	120	8	2	50	130	3	75	699
	STAGE 5																				
	IH 94 SB	--	--	--	--	1	2	--	--	--	--	45	--	--	--	--	--	--	--	--	--
	UNDISTRIBUTED	--	--	--	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--
	STAGE 5A SUBTOTAL	0	0	0	0	1	2	0	0	0	0	50	0	0	0	0	0	0	0	0	0
	TOTALS	120	160	530	530	40	60	43,700	10,200	10,800	140	205	890	230	16	5	160	210	6	200	2,100

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SOIL STABILIZER ITEMS

CATEGORY	ROADWAY	628.6505 SOIL STABILIZER TYPE A ACRE	628.6510 SOIL STABILIZER TYPE B ACRE
1000	IH 94 MAINLINE UNDISTRIBUTED	2	4
	TOTALS	2	4

3

RESTORATION ITEMS

CATEGORY	STAGE ROADWAY	625.0500 SALVAGED TOPSOIL SY	* 625.0100 TOPSOIL SY	627.0200 MULCHING SY	* SPV.0030.0001 FERTILIZER TYPE B SPECIAL CWT	* SPV.0085.0002 SEEDING MIXTURE NO. 30 SPECIAL LB	* 630.0200 SEEDING TEMPORARY LB
1000	STAGE 1A/1B						
	IH 94 NB	6,640	1,660	--	8.2	344	100
	UNDISTRIBUTED	1,660	415	--	2.3	86	25
	STAGE 1A/1B SUBTOTAL	8,300	2,075	0	10.5	430	125
	STAGE 2						
	IH 94 SB	13,839	3,460	--	17.1	716	50
	SW RAMP	1,670	418	329	2.1	86	10
	NW RAMP	3,926	982	1,159	4.9	203	10
	UNDISTRIBUTED	4,870	1,218	397	8.1	254	18
	STAGE 2 SUBTOTAL	24,306	6,077	1,885	32.2	1,260	88
	STAGE 4						
	IH-94 NB	9,961	2,490	--	12.3	515	50
	SE RAMP AND POND	5,938	1,485	588	7.3	307	10
	NE RAMP	1,720	430	926	2.1	89	10
	UNDISTRIBUTED	4,414	1,104	401	5.6	228	18
	STAGE 4 SUBTOTAL	22,034	5,508	1,915	27.3	1,140	88
	TOTALS	54,640	13,660	3,800	70.0	2,830	300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

SIGN REMOVAL SUMMARY

CATEGORY	SIGN #	* 638.2602 REMOVING SIGNS TYPE II EACH	* 638.3000 REMOVING SMALL SIGN SUPPORTS EACH	# OF SIGNS REMOVED FROM SAME SUPPORT	REMARKS
1000	1R01	1	1	1	TRAFFIC MERGE RIGHT
	1R02	1	1	1	DOWN ARROW LEFT
	1R03	1	1	1	DOWN ARROW LEFT
	1R04	1	1	1	DOWN ARROW LEFT
	1R05	1	2	6	SOUTH
		--	--	--	IH 41
		--	--	--	DIRECTIONAL ARROW
		--	--	--	EAST
		--	--	--	IH 94
		--	--	--	DIRECTIONAL ARROW
	1R06	1	1	1	ROAD CURVES AHEAD
	1R07	1	1	1	NO PARKING ON RAMP
	1R08	1	1	1	PEDS, ETC PROHIBITED
	1R09	1	2	1	ROAD WORK AHEAD
	1R10	1	2	2	FREEWAY RAMP ENT ONLY
		--	--	--	RAMP CLOSED
	1R11	1	1	1	RAMP CLOSED
	1R12	1	1	1	WRONG WAY
	1R13	1	1	1	NO PARKING ON RAMP
	1R14	1	1	1	STOP AHEAD

CATEGORY	SIGN #	* 638.2602 REMOVING SIGNS TYPE II EACH	* 638.3000 REMOVING SMALL SIGN SUPPORTS EACH	# OF SIGNS REMOVED FROM SAME SUPPORT	REMARKS
1000	1R15	1	1	1	LEFT AHEAD RIGHT ONLY
	1R16	1	1	1	DO NOT ENTER
	1R17	1	2	1	GAS/CAMPING
	1R18	1	1	1	WRONG WAY
	1R19	1	1	1	WRONG WAY
	1R20	1	1	1	NO PARKING ON RAMP
	1R21	1	2	1	RAMP CLOSED WHEN FLASHING
	2R01	1	1	1	KEEP RIGHT/LEFT
	2R02	1	2	1	GAS/CAMPING
	2R03	1	1	1	LEFT AHEAD RIGHT ONLY
	2R04	1	1	1	NO PARKING ON RAMP
	2R05	1	2	1	STOP AHEAD
	2R06	1	--	1	ONE WAY
	2R07	1	1	2	DO NOT ENTER
		--	--	--	WRONG WAY
	2R08	1	1	1	WRONG WAY
	2R09	1	1	1	WRONG WAY
	2R10	1	1	1	ONE WAY
	2R11	1	1	1	ROAD CURVES AHEAD
	2R12	1	1	1	RAMP CLOSED

CATEGORY	SIGN #	* 638.2602 REMOVING SIGNS TYPE II EACH	* 638.3000 REMOVING SMALL SIGN SUPPORTS EACH	# OF SIGNS REMOVED FROM SAME SUPPORT	REMARKS
1000	2R13	1	1	1	FREEWAY RAMP ENT ONLY
	2R14	1	1	1	PEDS, ETC PROHIBITED
	2R15	1	1	1	NO PARKING ON RAMP
	2R16	1	2	6	NORTH
		--	--	--	IH 41
		--	--	--	DIRECTIONAL ARROW
		--	--	--	WEST
		--	--	--	IH 94
		--	--	--	DIRECTIONAL ARROW
	2R17	1	1	1	DOWN ARROW LEFT
	2R18	1	1	1	DOWN ARROW LEFT
	2R19	1	1	1	DOWN ARROW LEFT
	2R20	1	1	1	TRAFFIC MERGE RIGHT
	2R21	1	1	1	NO PARKING ANY TIME
	TOTALS	36	49		

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PERMANENT SIGNING SUMMARY

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	SIGN DIM	* 634.0618 POSTS WOOD 4X6-INCH X 18 FEET EACH	* 637.0210 SIGNS TYPE II REFLECTIVE H SF	* 638.2102 MOVING SIGNS TYPE II EACH	# OF SIGNS ON SAME POST	REMARKS
1000	1-01	W4-2R	(2)	36X36	1	9.00	--	--	LANE REDUCTION RIGHT
	1-02	R5-57	(2)	36X36	1	9.00	--	--	PEDS, ETC PROHIBITED
	1-03	R11-54F	(2)	48X30	2	10.00		--	RAMP CLOSED USE ALT ROUTE
	1-04	R11-54F	(2)	48X30	2	10.00		--	RAMP CLOSED USE ALT ROUTE
	1M01	--	(2)	--	--	--	1	6	SOUTH
		--	--	--	--	--	--	--	IH 41
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	EAST
		--	--	--	--	--	--	--	IH 94
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
	1M02	--	(2)	--	--	--	1	1	NO LEFT TURN
		--	--	--	--	--	--	--	ALL-WAY
	1M04	--	(2)	--	--	--	1	7	SOUTH
		--	--	--	--	--	--	--	IH 41
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	EAST
		--	--	--	--	--	--	--	IH 94
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	CHICAGO
	1-05	W3-1	(2)	36X36	1	9.00	--	--	STOP AHEAD
	1-06	R3-8	(2)	36X30	1	7.50	--	--	LEFT AHEAD RIGHT ONLY
	1-07	J32-1	(2)	24X69	1	11.50	--	4	TRAILBLAZER ASSEMBLY
		M4-5	(2)	24X12	--	--	--	--	TO
		M3-1	(2)	24X12	--	--	--	--	NORTH
		M1-6	(2)	24X24	--	--	--	--	STH 241
		M5-1L	(2)	21X21	--	--	--	--	ADVANCE ARROW LEFT TURN
	1-08	R5-1A	(2)	42X30	1	8.75	--	--	WRONG WAY
	1-09	R5-1A	(2)	42X30	1	8.75	--	--	WRONG WAY
	1M05	--	--	--	--	--	1	2	DO NOT ENTER
		--	--	--	--	--	--	--	WRONG WAY
	1M06	--	--	--	--	--	1	3	STOP
		--	--	--	--	--	--	--	ALL-WAY
		--	--	--	--	--	--	--	NO RIGHT TURN
	1M07	--	--	--	--	--	1	2	STOP
	1M08	--	--	--	--	--	1	2	STOP
	1M09	--	--	--	--	--	--	1	ONE WAY
	1M10	--	--	--	--	--	--	1	ONE WAY
	1M11	--	--	--	--	--	1	6	ALTERNATE
		--	--	--	--	--	--	--	IH 41
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	ALTERNATE
		--	--	--	--	--	--	--	IH 94
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
	1M12	--	--	--	--	--	1	2	DO NOT ENTER
		--	--	--	--	--	--	--	WRONG WAY
	2M01	--	--	--	--	--	--	1	ONE WAY
	2M02	--	--	--	--	--	1	2	DO NOT ENTER
		--	--	--	--	--	--	--	WRONG WAY
	2M03	--	--	--	--	--	1	2	STOP
	2M04	--	--	--	--	--	--	1	ONE WAY
	2M05	--	--	--	--	--	--	--	NO LEFT TURN
	2M06	--	--	--	--	--	1	2	STOP
	2-01	R1-2	(2)	36X31	1	3.88	--	--	YIELD
	2-02	J33-1	(2)	24X69	1	11.50	--	4	TRAILBLAZER ASSEMBLY
		M4-5	(2)	24X12	--	--	--	--	TO
		M3-1	(2)	24X12	--	--	--	--	NORTH
		M1-6	(2)	24X24	--	--	--	--	STH 241
		M6-1	(2)	21X21	--	--	--	--	ARROW RIGHT
	2-03	R5-1A	(2)	42X30	1	8.75	--	--	WRONG WAY
	2-04	R5-1A	(2)	42X30	1	8.75	--	--	WRONG WAY
	2-05	J32-1	(2)	24X69	1	11.50	--	4	TRAILBLAZER ASSEMBLY
		M4-5	(2)	24X12	--	--	--	--	TO
		M3-1	(2)	24X12	--	--	--	--	NORTH
		M1-6	(2)	24X24	--	--	--	--	STH 241
		M5-1R	(2)	21X21	--	--	--	--	ADVANCE ARROW RIGHT TURN
	2-06	R3-8	(2)	36X30	1	7.50	--	--	LEFT AHEAD RIGHT ONLY
	2-07	W3-1	(2)	36X36	1	9.00	--	--	STOP AHEAD
	2-08	W12-1D	(2)	24X24	1	4.00	--	1	DOUBLE DOWN ARROWS
	2M07	--	--	--	--	--	1	7	NORTH
		--	--	--	--	--	--	--	IH 41
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	WEST
		--	--	--	--	--	--	--	IH 94
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	MILWAUKEE
	2M09	--	--	--	--	--	1	1	NO LEFT TURN
	2M10	--	--	--	--	--	1	6	NORTH
		--	--	--	--	--	--	--	IH 41
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
		--	--	--	--	--	--	--	WEST
		--	--	--	--	--	--	--	IH 94
		--	--	--	--	--	--	--	DIRECTIONAL ARROW
	2-09	R11-54F	(2)	48X30	2	10.00	--	--	RAMP CLOSED USE ALT ROUTE
	2-10	R11-54F	(2)	48X30	2	10.00	--	--	RAMP CLOSED USE ALT ROUTE
	2-11	R5-57	(2)	36X36	1	9.00	--	--	PEDS, ETC PROHIBITED
	2-12	W4-2R	(2)	36X36	1	9.00	--	--	LANE REDUCTION RIGHT
TOTALS					25	186.38	15		

3

TRAFFIC CONTROL SIGNS FIXED MESSAGE

CATEGORY	STAGE	LOCATION	FMS SIGN NO.	* 634.0885 POST TUBULAR STEEL 2X2-INCH X 8.5-FT EACH	638.2101 MOVING SIGNS TYPE I EACH	* 638.2102 MOVING SIGNS TYPE II EACH	* 643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	SPV.0060.0026 FIXED MESSAGE SIGN PORTABLE SUPPORT SPECIAL EACH	COMMENT
1000	1B	1219+80	--	--	2	1	--	--	MOVE "EXIT 50 MPH" TO 1221+00
		1219+80	2111	--	--	--	7.50	--	MOUNT ON EXISTING EXIT SIGN
		1219+80	2106	--	--	--	15.00	--	MOUNT ON EXISTING EXIT SIGN
		1228+65	--	--	1	--	--	--	--
		1234+49	--	--	1	--	--	--	--
		1242+15	2111	--	--	--	7.50	--	--
		1242+15	2106	--	--	--	15.00	--	--
		1242+35	--	--	1	--	--	--	--
		124,850	--	--	--	1	--	--	MOVE "MERGE" TO 1247+35
	IC	1213+00-1268+00	--	6	--	6	--	--	--
	2	1213+00-1268+00	--	--	--	6	--	--	--
		1220+95	--	--	--	1	--	--	--
		1223+25	--	--	1	--	--	--	--
		1238+00	2105	--	1	--	48.00	1	MOUNT ON PORTABLE SUPPORT
		1238+00	2103	--	1	--	10.50	--	MOUNT ON PORTABLE SUPPORT
		1248+25	2111	--	--	--	7.50	--	COVER 3/4 MILE WHEN 27TH ST RAMP IS CLOSED
		1254+00	--	--	1	--	--	--	MOVE "EXIT 326" TO 1253+50
		1263+10	--	--	2	--	--	1	--
		1263+10	2111	--	--	--	7.50	--	MOUNT ON EXISTING EXIT SIGN
		1263+10	2104	--	--	--	12.75	--	MOUNT ON EXISTING EXIT SIGN
	3	1213+00-1268+00	--	6	--	6	--	--	--
		1238+25	2105	--	--	--	48.00	--	--
		1238+25	2103	--	--	--	10.50	--	--
	4	1213+00-1268+00	--	--	--	6	--	--	--
		1219+75	--	--	2	--	--	--	--
		1219+75	2111	--	--	--	7.50	1	MOUNT ON EXISTING EXIT SIGN
		1219+75	2107	--	--	--	13.50	--	MOUNT ON EXISTING EXIT SIGN
		1234+49	2118	--	1	--	48.00	1	MOUNT ON PORTABLE SUPPORT
		1234+49	2112	--	1	--	10.50	--	MOUNT ON PORTABLE SUPPORT
		1242+35	--	--	1	--	--	1	MOUNT ON PORTABLE SUPPORT
TOTALS				12	16	27	269.25	5	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	646.9400 MARKING REMOVAL PLOWABLE RAISED PAVEMENT MARKERS EACH	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH WHITE LF	649.0120 DASHED WHITE LF	649.0120 DOT PATTERN LF	649.0120 YELLOW LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	649.0150 DASHED WHITE LF	649.0150 DOT PATTERN LF	649.0150 YELLOW LF	649.0220 TEMPORARY MARKING LINE EPOXY 8-INCH WHITE LF	649.0220 DOT PATTERN LF	649.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH WHITE LF	649.0760 TEMPORARY MARKING RAISED PAVEMENT MARKER TYPE 1 EACH	649.0820 TEMPORARY MARKING STOP LINE EPOXY 18-INCH WHITE LF
1000	STAGE 1A	--	--	--	--	--	5,500	2,750	--	5,500	--	--	800	--	--
	STAGE 1B	--	--	2,750	--	--	5,665	--	315	6,980	--	--	1,600	--	--
	STAGE 1C	--	5,650	2,750	125	5,700	--	--	--	--	500	--	--	--	--
	STAGE 2	35	6,850	--	--	5,500	--	--	--	--	--	--	--	35	20
	STAGE 3	100	8,870	2,020	110	5,830	--	--	--	--	400	--	--	100	--
	STAGE 4	135	6,840	2,750	--	5,500	--	--	--	--	--	--	--	135	30
	STAGE 5	--	11,800	8,250	--	13,500	--	--	--	--	3,520	520	--	--	--
	UNDISTRIBUTED	10	390	100	25	390	125	25	15	125	45	15	200	10	--
	TOTALS	280	95,700				27,000				5,000		2,600	280	50

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	STAGE DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 DAYS	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 DAYS	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 DAYS	643.0715 TYPE C EACH	643.0715 DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	643.0800 DAYS	* 643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 DAYS	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 DAYS	643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS EACH	643.1051 DAYS	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH	SPV.0060.0037 TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP EACH	* 638.2102 MOVING SIGNS TYPE II EACH
1000	STAGE 1A	20	110	2,200	6	120	12	240	110	2,200	--	--	40	800	1	14	1	14	--	10	--
	ONE LANE CLOSURE	7	42	294	4	28	8	56	42	294	1	7	10	70	2	14	--	--	7	--	--
	TWO LANE CLOSURE	7	76	532	4	28	8	56	76	532	2	14	12	84	2	14	--	--	14	--	--
	STAGE 1B	50	80	4,000	--	--	--	--	80	4,000	--	--	35	1,750	1	14	1	14	--	--	--
	NB RAMP CLOSURES	30	70	2,100	20	600	40	1,200	70	2,100	2	14	30	900	2	60	--	--	--	4	
	STAGE 1C	26	--	--	10	260	20	520	--	--	--	--	40	1,040	1	14	1	14	--	--	6
	STAGE 2	224	--	--	30	6,720	60	13,440	--	--	--	--	45	10,080	4	56	2	28	--	4	6
	STAGE 3	35	--	--	8	280	16	560	--	--	--	--	70	2,450	--	--	--	--	--	--	6
	STAGE 4	133	--	--	--	--	--	--	--	--	--	--	45	5,985	4	56	2	28	--	4	6
	STAGE 5	159	90	14,310	--	--	--	--	90	14,310	--	--	55	8,745	--	--	--	--	14	--	--
	UNDISTRIBUTED			3,564		964		1,928		3,564		25		3,096		68		52	5	8	9
	TOTALS			27,000		9,000		18,000		27,000		60		35,000		310		150	40	30	33

TRAFFIC CONTROL

CATEGORY	PROJECT	643.5000 EACH
1000	1035-01-74	0.14
	TOTAL	0.14

TRAFFIC CONTROL COVERING SIGN ITEMS

CATEGORY	STAGE	* STAGE DURATION DAYS	643.0910 COVERING SIGNS TYPE I # SIGNS	# CYCLES	EACH	643.0920 COVERING SIGNS TYPE II # SIGNS	# CYCLES	EACH
1000	1A	20	--	--	--	--	--	--
	1B	50	3	1	3	--	--	--
	1C	26	--	--	--	--	--	--
	2	224	2	1	2	--	--	--
	3	35	--	--	--	--	--	--
	4	133	3	1	3	--	--	--
	5	159	--	--	--	--	--	--
	UNDISTRIBUTED		2	1	2	10	1	10
	TOTALS				10			10

* FOR INFORMATION ONLY

TRAFFIC CONTROL DETOUR ITEMS

CATEGORY	STAGE	STAGE DURATION DAYS	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	DAYS	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	DAYS	* 643.0900 TRAFFIC CONTROL SIGNS EACH	DAYS
1000	STAGE 1B	30	4	120	4	240	138	4,140
	STAGE 2	224	4	896	4	1,792	114	25,536
	STAGE 4	133	4	532	4	1,064	138	18,354
	UNDISTRIBUTED			252		504		970
	TOTALS			1,800		3,600		49,000

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PAVEMENT MARKING ITEMS

CATEGORY	ROADWAY	STATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATORS REFLECTORS WHITE EACH	633.1000 DELINEATOR BRACKETS WHITE EACH	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH YELLOW LF	WHITE LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH WHITE LF	DASHED WHITE 12.5-FOOT LINE 37.5-FOOT SKIP LF	* 646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH WHITE LF	DOT PATTERN WHITE 3-FOOT LINE 9-FOOT SKIP LF	SPV 0060.0080 MARKING CONTRAST EPOXY SPECIAL MARKING ARROW TYPE 2 WHITE EACH	TYPE 3 WHITE EACH	TYPE 4 WHITE EACH	TYPE 5 WHITE EACH	SPV 0060.0082 MARKING CONTRAST EPOXY SPECIAL MARKING WORDS EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.6220 MARKING YIELD LINE EPOXY 18-INCH EACH	646.7220 MARKING CHEVRON EPOXY 24-INCH LF
1000	IH 94 SB	1213+00 - 1268+00	5	8	3	5,500	4,400	4,125	--	1,087	276	--	--	--	--	--	--	--	--	--
	IH 94 NB	1213+00 - 1268+00	3	10	7	5,500	4,340	4,125	--	1,092	285	--	--	--	--	--	--	--	--	--
	RAMP SE	1227+13 - 1241+43	17	22	--	995	1,485	--	--	527	39	1	1	1	--	2	--	--	--	200
	RAMP SW	1226+02 - 1241+51	5	5	--	875	1,540	--	125	645	--	--	--	--	2	--	--	--	--	--
	RAMP NE	1241+78 - 1259+12	6	6	--	991	1,655	--	175	667	--	--	--	--	2	--	--	--	--	177
	RAMP NW	1241+74 - 1256+74	12	14	--	1,100	1,595	--	--	930	34	2	2	1	--	2	18	15	--	--
	UNDISTRIBUTED		7	5	5	29	35	50	20	62	16	--	--	--	--	--	2	--	23	
	TOTALS		55	70	15	14,990	15,050	8,300	320	5,010	650	3	3	2	4	4	20	15	400	
						30,040		8,620		5,660		12								

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE BARRIER TEMPORARY ITEMS

CATEGORY	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	SPV.0090.0010 TEMPORARY GLARE SCREEN LF
1000	STAGE 1A	--	--	--	--
	STAGE 1B	5,150	5,150	3	--
	STAGE 1C	5,350	6,750	2	--
	STAGE 2	9,650	9,650	--	5,500
	STAGE 3	5,500	5,500	2	--
	STAGE 4	--	--	--	5,500
	STAGE 5	250	4,250	2	--
	TOTALS	25,900	31,300	9	11,000

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SALVAGING EXISTING BARRICADE RACK

CATEGORY	STAGE	ROADWAY	STA	LOCATION	SPV.0060.0032 EACH
1000	4	7 MILE AND NE RAMP	1242+50	RT	1
	2	SW RAMP	1232+00	LT	1
	TOTAL				2

FASTENING SEWER ACCESS COVERS

CATEGORY	ROADWAY	SPV.0060.0020 EACH
1000	PROJECT ID 1035-01-74	6
	TOTAL	6

SAW CUTTING ITEMS

CATEGORY	ROADWAY	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
1000	IH 94 NB	LT / RT	--	1,500
	IH 94 NB ENTANCE RAMP	LT	50	--
	7 MILE ROAD	LT / RT	100	--
	TOTALS		150	1,500

PAVEMENT CLEANUP PROJECT 1035-01-74

CATEGORY	LOCATION	SPV.0075.0022 HOUR
1000	PROJECT 1035-01-74	500
	TOTAL	500

SURVEY PROJECT 1035-01-74

CATEGORY	LOCATION	SPV.0105.0014 LS
1000	PROJECT 1035-01-74	1
	TOTAL	1

DISPUTE RESOLUTION BOARD

CATEGORY	LOCATION	SPV.0055.0002 DOL
1000	PROJECT	5,000
	TOTAL	5,000

REMOVING PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION			646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF
1000	STAGE 1A	1213+00	-	1268+00	--	--
	STAGE 1B	1213+00	-	1268+00	8,250	--
	STAGE 2	1213+00	-	1268+00	--	350
	STAGE 3	1213+00	-	1268+00	19,325	--
	STAGE 4	1213+00	-	1268+00	13,750	--
	STAGE 5	1213+00	-	1268+00	--	37,600
	UNDISTRIBUTED	1213+00	-	1268+00	675	550
	TOTALS				42,000	38,500

3

RECONNECT STORM SEWER

CATEGORY	STAGE	ROADWAY	FROM STR.	TO STR.	STATION	OFFSET	* SPV.0060.0016 EACH
1000	2	IH 94 NB					
			177A	EX. MH	1260+08	121.9 LT	1
	4	NE RAMP					
			168.1	EX. MH	1254+19 NE	29.5 RT	1
		TOTAL					2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EXPOSING EXISTING INFRASTRUCTURE

CATEGORY	ROADWAY	SPV.0060.0100 EXPOSING EXISTING INFRASTRUCTURE UNPAVED AREA EACH	SPV.0060.0101 EXPOSING EXISTING INFRASTRUCTURE PAVED AREA EACH
1000	PROJECT	3	3
	TOTAL	3	3

TRAFFIC CONTROL DETOUR ITEMS

CATEGORY	STAGE	LOCATON	FMS SIGN NO.	* 643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	COMMENT
1000	STAGE 2	1263+34	2111	7.50	CLOSED
		1263+34	2104	12.75	USE HWY G
		7 1/2 MILE RD	2115	45.00	7 MILE RD RAMP CLOSED USE HWY G
		7 1/2 MILE RD	2111	7.50	CLOSED
		PUETZ RD	2117	45.00	7 MILE RD RAMP CLOSED USE HWY G
		PUETZ RD	2111	7.50	CLOSED
		7 MILE RD, W OF IH 94	2116	49.50	I-94 RAMP CLOSED FOLLOW DETOUR
		7 MILE RD, E OF IH 94	2116	49.50	I-94 RAMP CLOSED FOLLOW DETOUR
		W FRONTAGE RD, N OF 7 MILE RD	2114	5.00	7 MILE RD
		27TH ST	2114	5.00	7 MILE RD
		27TH ST	2114	5.00	7 MILE RD
		27TH ST	2114	5.00	7 MILE RD
		27TH ST	2114	5.00	7 MILE RD
		27TH ST	2114	5.00	7 MILE RD
		RYAN RD	2114	5.00	7 MILE RD
		RYAN RD	2114	5.00	7 MILE RD
		RYAN RD	2114	5.00	7 MILE RD
		RYAN RD	2114	5.00	7 MILE RD
		IH 94, N OF RYAN RD	2114	5.00	7 MILE RD
		IH 94, N OF RYAN RD	2114	5.00	7 MILE RD
		IH 94, N OF RYAN RD	2114	5.00	7 MILE RD
	STAGE 4	2 MILE RD	2111	7.50	CLOSED
		4 MILE RD	2115	49.50	7 MILE RD RAMP CLOSED USE HWY G
		BELL RD	2111	7.50	CLOSED
		CTH G	2111	7.50	CLOSED
		6 1/2 MILE RD	2117	45.00	7 MILE RD RAMP CLOSED USE RYAN RD
		IH 94, S OF CTH G	2114	5.00	7 MILE RD
		IH 94, S OF CTH G	2114	5.00	7 MILE RD
		IH 94, S OF CTH G	2114	5.00	7 MILE RD
		IH 94, S OF CTH G	2114	5.00	7 MILE RD
		CTH G AT E FRONTAGE RD	2114	5.00	7 MILE RD
		E FRONTAGE RD, N OF CTH G	2114	5.00	7 MILE RD
		6 1/2 MILE RD	2114	5.00	7 MILE RD
	TOTALS			436.25	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TYPE I&II PERMANENT SIGNING -

I94 @ SEVEN MILE RD 1035-01-74

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.1230 SIGNS TYPE I REFLECTIVE F	638.2602 REMOVING SIGNS TYPE II [EA]	638.2102 MOVING SIGNS TYPE II EA	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4" X 6" X 22' EA	634.0885 POSTS TUBULAR STEEL 2 X 2 INCH X 8.5 FT [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	638.2101 MOVING SIGNS TYPE I I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
1	D10-5	E(94 SHIELD)	21 x 60	8.750		1		1	--		1	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/6	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
2	D10-5	W(94 SHIELD)	-- x --	--		1		--	--		--	1	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/6	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
3	W13-2	EXIT 50 MPH	-- x --	--		1		1	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
4	E1-1A	SEVEN MILE RD [A]	-- x --	--		--		--	--		--	--	--	x	0.00	1	2	--	--	--	--	--	--	--	--	--	--
5	E1-1A	[K] RACINE [A] EXIT ONLY	-- x --	--		--		--	--		--	--	INSTALL ON S-51-23 I BEAMS INCIDENTAL	17 x 10.5	178.50	--	--	--	--	--	--	--	--	--	--	--	--
5A	E1-5P	EXIT 326	-- x --	--		--		--	--		--	--	--	10 x 2.5	25.00	--	--	--	--	--	--	--	--	--	--	--	--
6	D10-5	E(94 SHIELD)	21 x 60	8.750		1		1	--		1	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/4	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
7	D10-5	W(94 SHIELD)	21 x 60	8.750		1		--	--		--	6	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/4	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
8	D10-5(5)	E(94 SHIELD)	x			1		1	--			--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/5	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
9	D10-5(5)	W(94 SHIELD)	x			1		--	--		--		--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/5	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
10	J4-3(5)	--	108 x 54	40.500		--		--	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
	MB3-3	--	36 x 18	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
	M1-1	IH 41	36 x 36	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
	MB3-2	--	36 x 18	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
	M1-1	IH 94	36 x 36	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
	M3-3		36 X 18	--																							
	M1-4	USH 41	36 X 36	--																							
11	I56-50	VETERANS MEM. HWY	96 x 48	32.000		1		2	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12	D10-5(5)	E(94 SHIELD)	x			1		1	--			--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/3	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
13	D10-5(5)	W(94 SHIELD)	x			1		--	--		--		--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/3	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
14	E5-1A(5)	EXIT	90 x 60	37.500		1		2	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326 [A]	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
14A	W5-54(2M)		18 X 18		2.250							14															
14B	W5-54(2M)		18 X 18		2.250							14															
15	E1-1A	[24] NORTH 27 TH STREET 3/4 MILE	-- x --	--		--		--	--		--	--	--	x	0.00	1	2	--	--	--	--	--	--	--	--	--	--
16	R4-3(5)	--	48 x 60	20.000		1		1	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
17	E1-1A	[G] CALEDONIA 1 MILE	-- x --	--		--		--	--		--	--	--	15 x 10	150.00	--	--	--	B	1.6	98	1000	--	--	17.5 TO 30 FEET	
17A	E1-5P	EXIT 327	-- x --	--		--		--	--		--	#17	--	10 x 2.5	25.00	--	--	--	--	--	--	--	--	--	--	--
18	E1-1	[G] CALEDONIA 1 MILE	-- x --	--		--		--	--		--	--	--	x	0.00	1	2	--	--	--	--	--	--	--	--	--	--
19	D10-5	E(94 SHIELD)	21 x 60	8.750		1		1	--		1	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/2	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
20	D10-5	W(94 SHIELD)	21 x 60	8.750		1		--	--		--	19	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/2	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
21	W4-1(5)	--	48 x 48		16.000	1		1	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
22	E1-1	RACINE AREA TRAVEL INFO TUNE TO 1700 AM	-- x --	--		--		--	--		--	--	--	x			2	1	A	1.2	68	600	--	--	17.5 TO 30 FEET	
23	D10-5(5)	E(94 SHIELD)				1		1	--			--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/1	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
24	D10-5(5)	W(94 SHIELD)	x			1		--	--		--		--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		326/1	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
25	W5-52R(3)	--	18 x 54		6.750	--		--	1		--	--	4' MOUNTING HEIGHT	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
26	W5-52R(3)	--	18 x 54		6.750	--		--	1		--	--	4' MOUNTING HEIGHT	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
27	E3-1	OAK CREEK FRANKLIN NEXT 4 EXITS	-- x --	--		--		--	--		--	--	--	11 x 6.5	71.50	1	2	--	A	1.2	68	600	--	--	17.5 TO 30 FEET	--
28	E8-1	ELM RD 1 1/4 [100] RYAN RD 2 3/4 DREXEL AVE 4 3/4	-- x --	--		--		--	--		--	--	INSTALL ON S-51-220 I BEAMS INCIDENTAL	18 x 7.5	135.00	1	--	--					--	--		
29	D10-5(5)	E(94 SHIELD)				1		1	--			--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		325/9	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
30	D10-5(5)	W(94 SHIELD)	x			1		--	--		--		--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		325/9	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--	--

TYPE I&II PERMANENT SIGNING -

I94 @ SEVEN MILE RD 1035-01-74

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.1230 SIGNS TYPE I REFLECTIVE F	638.2602 REMOVING SIGNS TYPE II (EA)	638.2102 MOVING SIGNS TYPE II EA	638.3000 REM SMALL SIGN SUP (EA)	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4" X 6" X 22' EA	634.0885 POSTS TUBULAR STEEL 2 X 2 INCH X 8.5 FT [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	638.2101 MOVING SIGNS TYPE I I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
31	W4-1(5)	--	48 x 48	16.000		1		1	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
32	E5-1A(5)	EXIT	90 x 60	37.500		1		2	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		326 [A]	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
32A	W5-54(2M)		18 X 18		2.250							32														
32B	W5-54(2M)		18 X 18		2.250							32														
33	D10-5	E(94 SHIELD)	21 x 60	8.750		1		1	--		1	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		326/0	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
34	D10-5	W(94 SHIELD)	21 x 60	8.750		1		--	--		--	33	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		326/0	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
35	D10-5	E(94 SHIELD)	21 x 60	8.750		1		1	1		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		325/8	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
36	D10-5	W(94 SHIELD)	21 x 60	8.750		1		--	--		--	35	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		325/8	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
37	D10-5(5)	E(94 SHIELD)				1		1	--			--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		325/7	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
38	D10-5(5)	W(94 SHIELD)				1		--	--		--		--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		325/7	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
39	J4-3(5)	--	108 x 54	40.500		--		--	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
	MB3-1		36 x 18	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
	M1-1	IH 41	36 x 36	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
	MB3-4	--	36 X 18	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
	M1-1	IH 94	36 x 36	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
	M3-1		36 X 18	--																						
	M1-4	USH 41	36 X 36	--																						
40	R2-1(5)	SPEED LIMIT 70	48 x 60	20.000		1		1	2		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
41	W13-2	EXIT 50 MPH	-- x --	--		1		1	--		--	--	REMOVE "H" PLAQUE. PART OF SIGN # 41	x	0.00	--	--	--	--	--	--	--	--	--	--	--
42	E4-1A	[24] NORTH 27 TH STREET [A]	-- x --	--		--		--	--		--	--	--	x	0.00	1	2	--	--	--	--	--	--	--	--	--
43	D10-5	E(94 SHIELD)	-- x --	--		1		1	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		325/5	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
44	D10-5	W(94 SHIELD)	-- x --	--		1		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
		325/5	-- x --	--		--		--	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
45	E6-1	TO 241 SEVEN MILE RD EXIT ONLY	-- x --	--		--		--	--		--	--	INSTALL ON S-51-220 I BEAMS INCIDENTAL	17 x 10.5	178.50	--	--	--	--	--	--	--	--	--	--	--
45A	E1-5P	EXIT 326	-- x --	--		--		--	--		--	--	--	10 x 2.5	25.00	--	--	--	--	--	--	--	--	--	--	--
46	E6-1	SEVEN MILE RD [A]	-- x --	--		--		--	--		--	--	--	x	0.00	1	2	--	--	--	--	--	--	--	--	--
47	W13-2	EXIT 50 MPH	-- x --	--		1		1	--		--	--	--	x	0.00	--	--	--	--	--	--	--	--	--	--	--
48	W5-53S(2)		4 X 12		0.330								MOUNTING TO WALL INCIDENTAL													
49	W5-53S(2)		4 X 12		0.330								MOUNTING TO WALL INCIDENTAL													
50	NONE	CALEDONIA EXIT 326												11 X 5	55.00				A	1.2	68	600			17.5	
51	NONE	WEIGH STATION 1 3/4 MILE, TRUCKS OVER 5 TONS USE RIGHT LANE WHEN OPEN											SEE ELECTRICAL PLAN FOR MOVING CMS AND ELECTRICAL CONNECTION. EXISTING SIGN IS 15 X 10 NOT INCLUDING CMS				2	1	B	1.6	98	1000			17.5	
52	NONE	TRUCKS USE 2 RIGHT LANES					1	2		2																
52A	NONE	NEXT 2 MILES					1					52														
53	NONE	WEIGH STATION 2 MILES , TRUCKS USE RIGHT 2 LANES											EXISTING SIGN IS 15 X 8.5				2	1	A	1.2	68	600			17.5	
54	NONE	TRUCKS USE 2 RIGHT LANES					1	2		2																
54A	NONE	NEXT 3 MILES					1					54														
55	NONE	TRUCKS USE 2 RIGHT LANES					1	2		2																
55A	NONE	NEXT 3 MILES					1	2		2			MOUNT AGAINST BARRIER WALL. BRACKET INCIDENTAL													
56	D10-5	E(94 SHIELD) 325/6	21 X 60	8.750		1		1			1															
57	D10-5	W (94 SHIELD) 325/6	21 X 60	8.750		1						56														
	TOTALS			331.500	39.160	33	6	33	19	8	5				843.500	7	18	3	--	8.000	468	4400	--	--	--	--

3

3

FREEWAY LIGHTING – WIRES AND CONDUIT

		CATEGORY	1100	1100
SYSTEM	FROM	TO	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
			LF	LF
HL-51-RM	LPB710	LPB714	63	272
		TOTAL	63	272

FREEWAY LIGHTING – PULL BOXES

			CATEGORY	1100
SYSTEM	DESCRIPTION	STATION	OFFSET	653.0140 PULL BOXES STEEL 24X42-INCH
				EACH
HL-51-RM	LPB714	347+19	0RT	1
			TOTAL	1

FREEWAY LIGHTING –DISTRIBUTION CENTER AND LUMP SUM

CATEGORY	1100
DESCRIPTION	659.0600 UNDERDECK LIGHTING B-51-139 & B-51-140
	LS
CONTRACT 1035-01-74	1
TOTAL	1

3

FTMS REMOVALS

CATEGORY 1300

ROADWAY	LOCATION	LINEAR DISTANCE	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH	674.0300 REMOVE CABLE LF	204.9060.S.2030 REMOVING ON-RAMP CLOSURE GATE EACH	204.9060.S.2032 REMOVING ADVANCE WARNING SIGN ASSEMBLY EACH
IH 41 / 94	EXPB12141	--	--	1	--	--	--
	EXPB12141 - EXPB12143	130	--	--	130	--	--
	EXPB12143	--	--	1	--	--	--
	EXPB12281	--	--	1	--	--	--
	EXPB12301	--	--	1	--	--	--
	EXPB12301 - EXPB12311	130	--	--	130	--	--
	EXPB12311	--	--	1	--	--	--
	EXPB12311 - EXRG12311	10	--	--	10	--	--
	EXRG12311	--	--	--	--	1	--
	EXFS12425	--	1	--	--	--	1
	EXFS12425 - EXPB12425	15	--	--	15	--	--
	EXPB12425	--	--	1	--	--	--
	EXPB12425 - EXPB12424	80	--	--	80	--	--
	EXPB12424	--	--	1	--	--	--
	EXPB12424 - EXPB12423	90	--	--	80	--	--
	EXPB12423	--	--	1	--	--	--
	EXPB12423 - EXPB12401	50	--	--	50	--	--
	EXPB12401	--	--	1	--	--	--
	EXPB12401 - EXFS12401	15	--	--	15	--	--
	EXFS12401	--	1	--	--	--	1
	EXPB12423 - EXPB12441	175	--	--	175	--	--
	EXPB12441	--	--	1	--	--	--
	EXPB12441 - EXPB12452	190	--	--	190	--	--
	EXPB12452	--	--	1	--	--	--
	EXPB12452 - EXPB12481	200	--	--	200	--	--
	EXPB12481	--	--	1	--	--	--
	EXPB12481 - EXRG12481	15	--	--	15	--	--
	EXRG12481	--	--	--	--	1	--
	EXPB12481 - EXPB12491	135	--	--	135	--	--
	EXPB12491	--	--	1	--	--	--
	EXPB12491 - EXPB12492	130	--	--	130	--	--
	EXPB12492	--	--	1	--	--	--
	EXPB12492 - EXPB12471	160	--	--	160	--	--
	EXPB12471	--	--	1	--	--	--
	EXPB12471 - EXPB12451	180	--	--	180	--	--
	EXPB12451	--	--	1	--	--	--
	EXPB12451 - EXPB12431	240	--	--	240	--	--
	EXPB12431	--	--	1	--	--	--
	EXPB12431 - EXPB12422	120	--	--	120	--	--
	EXPB12422	--	--	1	--	--	--
	EXPB12422 - EXPB12421	215	--	--	215	--	--
	EXPB12421	--	--	1	--	--	--
	EXPB12421 - EXPB12411	60	--	--	60	--	--
	EXPB12411	--	--	1	--	--	--
	EXPB12411 - EXFS12411	15	--	--	15	--	--
	EXFS12411	--	1	--	--	--	1
	EXPB12422 - EXPB12423	160	--	--	160	--	--
TOTALS			3	20	2505	2	3

FTMS ELECTRICAL ITEMS

CATEGORY 1300

ROADWAY	ITEM ID	656.0200.0006 ELECTRICAL SERVICE METER BREAKER PEDESTAL (MB-CCTV-51-0062) LS	656.0500.0006 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (CCTV-51-0062) LS
IH 41 / 94	MB-CCTV-51-0062	1	--
	CCTV-51-0062	--	1
TOTALS		1	1

FTMS LUMP SUM ITEMS

CATEGORY 1300

ROADWAY	LOCATION	670.0100.0002 FIELD SYSTEM INTEGRATOR (1035-01-74) LS	670.0200.0002 ITS DOCUMENTATION (1035-01-74) LS	678.0500.0002 COMMUNICATION SYSTEM TESTING (1035-01-74) LS
IH 41 / 94	IH 41 / 94	1	--	--
	IH 41 / 94	--	1	--
	IH 41 / 94	--	--	1
TOTALS		1	1	1

FTMS EACH ITEMS

CATEGORY 1300

ROADWAY	ITEM ID	653.0140 PULL BOXES STEEL 24X42-INCH EACH	654.1150 CONCRETE BASES CAMERA POLE 50-FT EACH	654.0106 CONCRETE BASES TYPE 6 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0327 POLES TYPE 6-ALUMINUM EACH	673.0105 COMMUNICATION VAULT TYPE 1 ITEM EACH	673.0225.S INSTALL POLE MOUNTED CABINET EACH	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EACH	677.0150 INSTALL CAMERA POLE 50-FT EACH	677.0200 INSTALL CAMERA ASSEMBLY EACH	678.0300 FIBER OPTIC SPLICE EACH	678.0400 FIBER OPTIC TERMINATION EACH	678.0600 INSTALL ETHERNET SWITCHES EACH	SPV.0060.2040 GROUND ROD EACH
IH 41 / 94															
	CV12261	--	--	--	--	--	1	--	--	--	--	--	--	--	--
	DP12331	--	--	1	1	1	--	--	2	--	--	--	--	--	1
	PB12331	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	PB12371	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	PB12401	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	CV12401	--	--	--	--	--	1	--	--	--	--	--	--	--	--
	CV12431	--	--	--	--	--	1	--	--	--	--	98	--	--	--
	PB12432	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	PB12433	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	PB12431	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	CCTV-51-0062	--	1	--	--	--	--	1	2	1	1	--	6	1	1
	PB12491	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	PB12541	1	--	--	--	--	--	--	--	--	--	--	--	--	--
	DP12541	--	--	1	--	1	--	--	2	--	--	--	--	--	1
	CV12551	--	--	--	--	--	1	--	--	--	--	--	--	--	--
	CV12681	--	--	--	--	--	1	--	--	--	--	--	--	--	--
TOTALS		8	1	2	1	2	5	1	6	1	1	98	6	1	3

FTMS TEMPORARY ITEMS

CATEGORY 1300

ROADWAY	ITEM ID	204.9060.S.2050 REMOVING TEMPORARY VEHICLE DETECTOR ASSEMBLY EACH	SPV.0060.2025 40-FOOT TEMPORARY WOOD POST EACH	SPV.0060.2050 TEMPORARY VEHICLE DETECTOR ASSEMBLY EACH	204.9060.S.2070 REMOVING TEMPORARY TRAFFIC CAMERA ASSEMBLY EACH	SPV.0060.2245 INSTALL TEMPORARY TRAFFIC CAMERA ASSEMBLY EACH	SPV.0060.2246 RELOCATING TEMPORARY TRAFFIC CAMERA ASSEMBLY EACH	SPV.0060.2255 RELOCATING TEMPORARY VEHICLE DETECTOR ASSEMBLY EACH	SPV.0060.2290 REFOCUSING VEHICLE DETECTOR ASSEMBLY EACH
IH 41 / 94	TEMP-DP1228	1	1	1	--	--	--	1	5
	TEMP-CCTV-51-0062	--	1	--	1	1	2	--	--
	TEMP-DP1254	1	1	1	--	--	--	1	5
TOTALS		2	3	2	1	1	2	2	10

3

FTMS LINEAR FOOT ITEMS

CATEGORY 1300

ROADWAY	ITEM ID	LINEAR DISTANCE	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0510 ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG LF	655.0525 ELECTRICAL WIRE TRAFFIC SIGNALS 6 AWG LF	671.0132 CONDUIT HDPE 3-DUCT 2-INCH LF	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH LF	671.0300 FIBER OPTIC CABLE MARKER EA	673.0200 TRACER WIRE MARKER POSTS EA	674.0200 CABLE MICROWAVE DETECTOR LF	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	678.0024 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 24-CT LF	678.0072 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT LF
IH 41 / 94	CV12130	--	--	--	--	--	--	--	--	--	--	--	50	50
	CV12130 - CV12261	1275	--	--	1275	--	1275	--	2	--			1275	1275
	CV12261	--	--	--	--	--	--	--	--	--	--	--	50	50
	CV12261 - CV12401	1490	--	--	1490	--	1490	--	2	--	--	--	1490	1490
	CV12401	--	--	--	--	--	--	--	--	--	--	--	50	50
	DP12331 - PB12331	15	--	30	15	--	--	--	--	--	30	--	--	--
	PB12331 - PB12371	365	--	730	365	--	--	--	--	--	730	--	--	--
	PB12371 - PB12401	370	--	740	370	--	--	--	--	--	740	--	--	--
	CV12401 - CV12431	240	--	--	--	--	--	240	--	--	--	--	240	240
	CV12431	--	--	--	--	--	--	--	--	1	--	100	100	100
	CV12431 - PB12432	15	--	30	15	--	--	--	--	--	--	15	--	--
	PB12432 - PB12433	40	--	120	40	120	--	--	--	--	160	40	--	--
	PB12433 - PB12431	40	--	120	40	120	--	--	--	--	160	40	--	--
	MB-CCTV-51-0062 - PB12432	20	--	20	--	60	--	--	--	--	--	--	--	--
	PB12431 - CCTV-51-0062	15	15	30	15	--	--	--	--	--	60	15	--	--
	PB12432 - PB12461	310	--	620	310	--	--	--	--	--	620	--	--	--
	CV12431 - CV12551	1235	--	--	1235	--	1235	--	2	--	--	--	1235	1235
	CV12551	--	--	--	--	--	--	--	--	--	--	--	50	50
	PB12461 - PB12491	310	--	620	310	--	--	--	--	--	620	--	--	--
	PB12491 - PB12541	310	--	620	310	--	--	--	--	--	620	--	--	--
	PB12541 - DP12541	15	--	30	15	--	--	--	--	--	30	--	--	--
	CV12551 - CV12681	1240	--	--	1240	--	1240	--	2	--	--	--	1240	1240
	CV12681		--	--	--	--	--	--	--	--	--	--	50	50
TOTALS			15	3710	7045	300	5240	240	8	1	3770	210	5830	5830

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.01

THAT PART OF PARCELS 2, 3, & OUTLOT 1 OF CSM NO. 2603 AND THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 12, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED	OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.						
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
1	RANDOLPH B. & MARY DOLENSEK	FEE, AR, TLE	0.045	--	0.045	0.123	--
2	KIMMEL TRUST & MARY E. KIMMEL	FEE, AR	2.412	--	2.412	--	--
3	THE MARVEL E. KRON SURVIVORS TRUST, ET AL	AR, TLE	--	--	--	0.170	--
4	DASADA PROPERTY MANAGEMENT, LLC	AR, TLE	--	--	--	0.029	--
5	JEROME M. HRIBAR	FEE, AR, TLE	0.063	--	0.063	0.514	--
101	WE ENERGIES - GAS	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	DJ 2277	1935	VARIES
I-94 / USH 41	DJ 2460	1938	VARIES
I-94 / USH 41	I101-1(3)	1956	VARIES
7 MILE ROAD	I101-1(3)	1956	50'
7 MILE ROAD	CERTIFIED SURVEY MAP 2603	2004	33'
6 1/2 MILE ROAD	--	--	66' BY SS 82.31(2)

CURVE 1
RL I-94
P.I. = 1230+36.62
Y = 222300.47
X = 594348.58
Δ = 01°15'38"
D = 00°09'00"
R = 38197.19'
T = 420.25'
L = 840.46'

CURVE 2
FRONTAGE RD. SW
P.I. = 2236+06.67
Y = 222870.92
X = 594203.53
Δ = 89°10'02"
D = 13°38'31"
R = 420.00'
T = 413.94'
L = 653.63'

(101) PARCEL 2
V. 1116 P. 518 DOC. 894314

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.		
LAND CONTRACT	LC	LONG CHORD	LCH
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
REBAR	RBR	TANGENT	TAN

SCALE, FEET
0 100 200

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

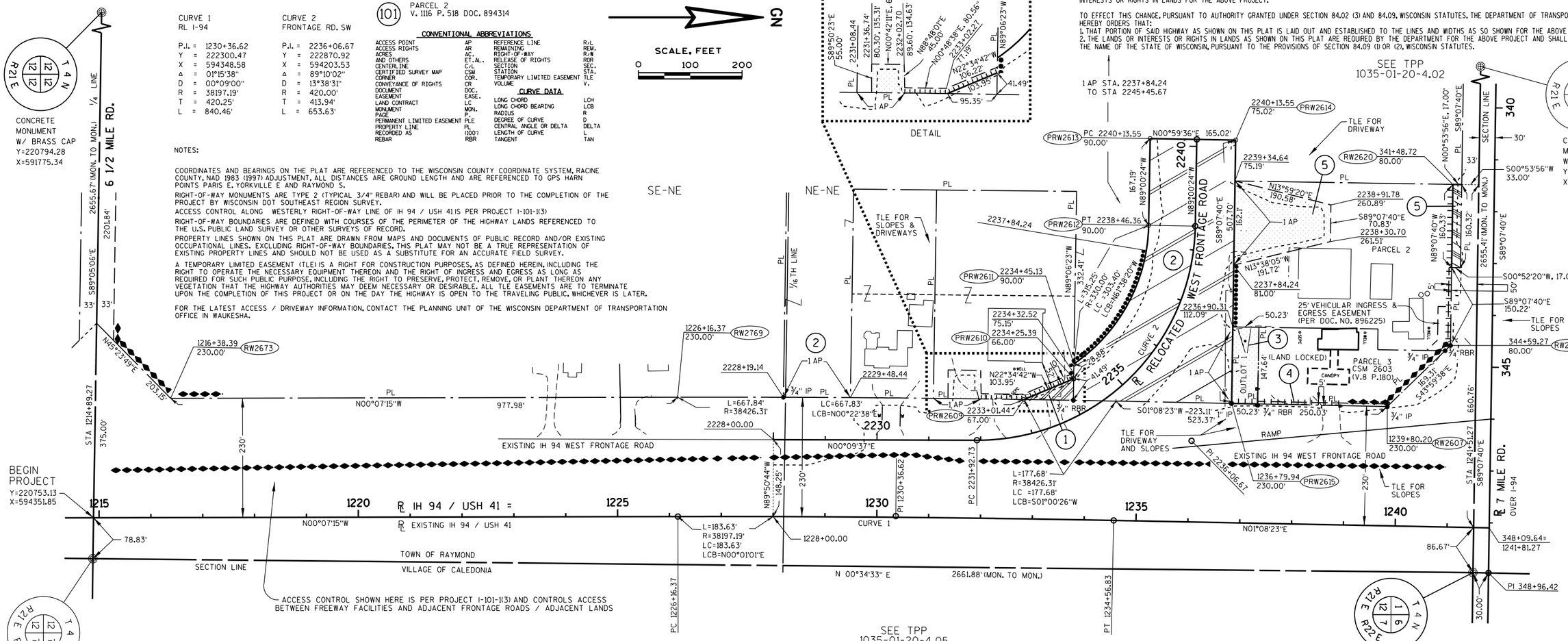
ACCESS CONTROL ALONG WESTERLY RIGHT-OF-WAY LINE OF IH 94 / USH 41 IS PER PROJECT I-101-1(3)

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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 TLE EASEMENTS ARE TO TERMINATE UPON THE COMPLETION OF THIS PROJECT OR ON THE DAY THE HIGHWAY IS OPEN TO THE TRAVELING PUBLIC, WHICHEVER IS LATER.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.



CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LR ⌀1" UNLESS NOTED	PROPOSED R/W LINE	
R/W MONUMENT	○ ⊕SET	EXISTING H.E. LINE	
R/W STANDARD	△ ⊿SET	PROPERTY LINE	
SIGN	|SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT	⊕	SLOPE INTERCEPTS	
FEE (HATCH VARIES)		CORPORATE LIMITS	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
R/W BOUNDARY POINT	RW20	NO ACCESS (BY STATUTORY AUTHORITY)	
PARCEL NUMBER	102	SECTION LINE	
SIGN NUMBER (OFF PREMISE)	21-3	QUARTER LINE	
BUILDING		SIXTEENTH LINE	
		EXISTING CENTERLINE	
		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER		W
GAS		G
TELEPHONE		T
OVERHEAD TRANSMISSION LINES		OH
ELECTRIC		E
CABLE TELEVISION		TV
FIBER OPTIC		FO
SANITARY SEWER		SAN
STORM SEWER		SS
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

LOCATION MAP
NTS
SHEET LOCATION

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin WISCONSIN LAND SURVEYOR

Milwaukee Transportation Partners LLC

I, KEVIN W. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 03/09/2010 (SIGNATURE)
KEVIN W. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.
DATE 3-11-2010 (SIGNATURE)
(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.01
AMENDMENT NO:

DOCUMENT # 2245536
RACINE COUNTY REGISTER OF DEEDS
March 24, 2010 11:14 AM
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1
Vol 1 pg 103

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040401_rp.dgn PLOT DATE : 09-MAR-2010 08:39 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1
CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.01

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.02

THAT PART OF PARCEL 1 OF CSM NO. 2603 AND THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 AND THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 12, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

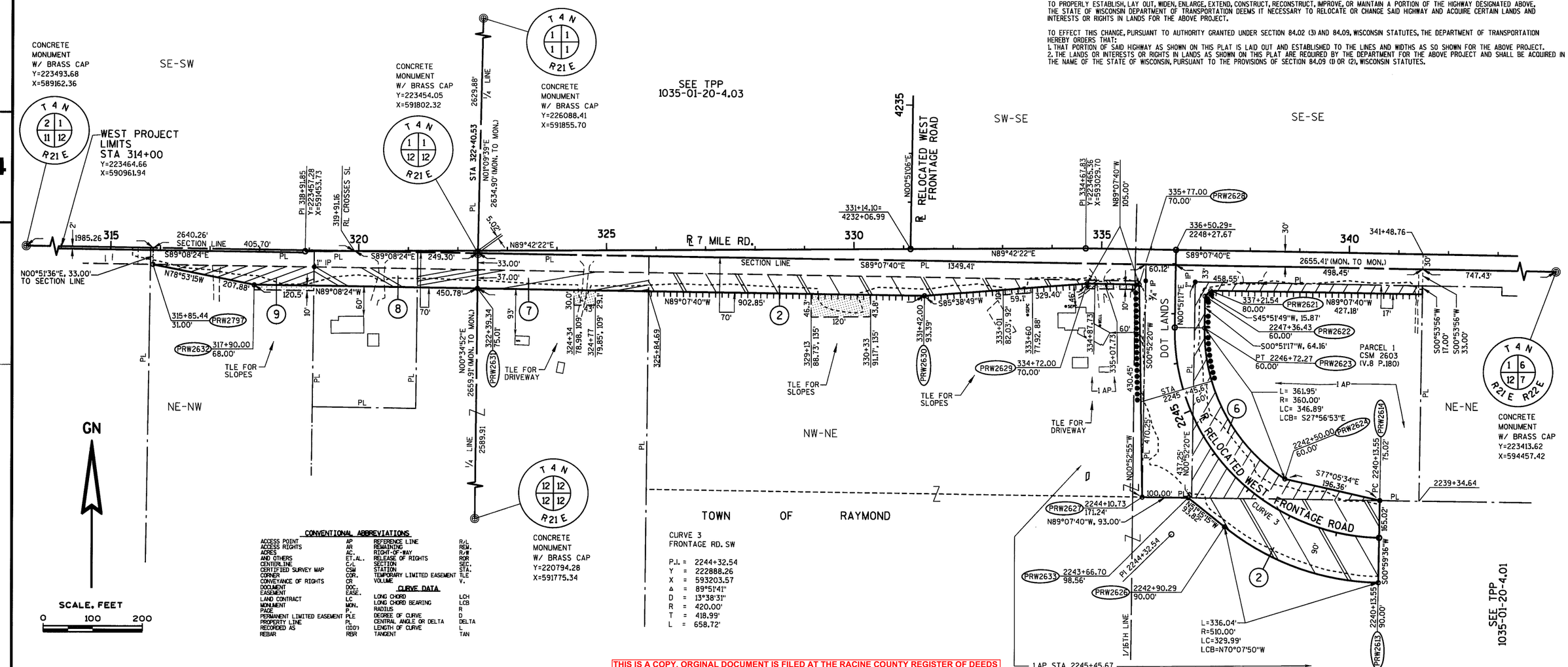
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
2	KIMMEL TRUST & MARY E. KIMMEL	FEE, AR, TLE	1.710	0.761	2.471	0.162	--
6	7 MILE FAIR, INC.	FEE, AR	0.966	--	0.966	--	--
7	JEFFERY A. & KATHLEEN ROZANSKE	FEE, TLE	0.397	0.354	0.751	0.029	--
8	LE ROY A. & COLETTE M. BARTH	FEE	0.177	0.158	0.335	--	--
9	GAIL T. OSGOOD, VENDER AND JEFFREY A. ROZANSKE, VENDEE	FEE, TLE	0.189	0.250	0.439	0.028	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
WEST FRONTAGE ROAD	1032-13-20	1999	100'
7 MILE ROAD	CERTIFIED SURVEY MAP 2603	2004	33'
7 MILE ROAD	--	--	66' BY SS 82.31(2)

LOT#	PARCEL#
2	012-04-21-12-002-000
2	012-04-21-12-005-000
6	012-04-21-12-001-010
7	012-04-21-12-009-000
8	012-04-21-12-010-000
9	012-04-21-12-012-000



CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	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
REBAR	RBR		

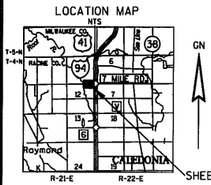
CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LS (1" UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	○ (SET)	EXISTING H.E. LINE	
R/W STANDARD	△ (SET)	PROPERTY LINE	
SIGN	|SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
FEE (HATCH VARIES)		CORPORATE LIMITS	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
R/W BOUNDARY POINT	RWBP0	NO ACCESS (BY STATUTORY AUTHORITY)	
PARCEL NUMBER	102	SECTION LINE	
SIGN NUMBER (OFF PREMISES)	21-Y	QUARTER LINE	
BUILDING		SIXTEENTH LINE	
		EXISTING CENTERLINE	
		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

LOCATION MAP



NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES, EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

THIS IS A COPY, ORGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

WISCONSIN LAND SURVEYOR
KEVIN M. CORNELL
S-2150
Milwaukee, Wisconsin

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 06/17/2010 (SIGNATURE) _____
KEVIN M. CORNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 6-28-2010 (SIGNATURE) _____
(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.02
AMENDMENT NO:

Vol 1 Pg 119

DOCUMENT # 2255668
RACINE COUNTY REGISTER OF DEEDS
July 19, 2010 8:56 AM
James A Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040402_rp.dgn PLOT DATE : 28-JUN-2010 07:46 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.02 AMENDMENT NO: 1

AMENDS PARCEL 7 OF TPP 1035-01-20-4.02, RECORDED AS DOCUMENT 2255668

THAT PART OF PARCEL 1 OF CSM NO. 2603 AND THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 AND THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 12, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

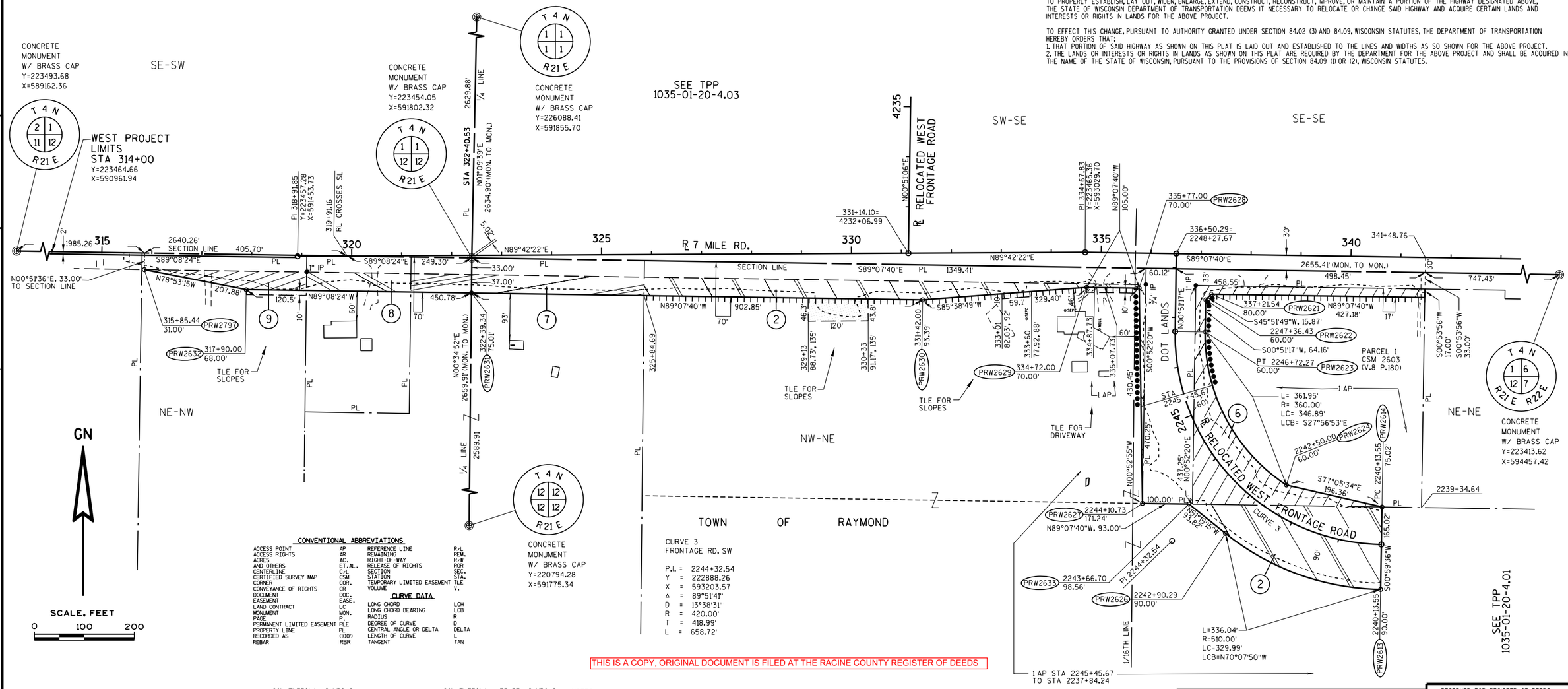
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
2	KIMMEL TRUST & MARY E. KIMMEL	FEE, AR, TLE	1.710	0.761	2.471	0.162	--
6	7 MILE FAIR, INC.	FEE, AR	0.966	--	0.966	--	--
7	JEFFERY A. & KATHLEEN ROZANSKE	FEE	0.397	0.354	0.751	--	--
8	LE ROY A. & COLETTE M. BARTH	FEE	0.177	0.158	0.335	--	--
9	GAIL T. OSGOOD, VENDER AND JEFFREY A. ROZANSKE, VENDEE	FEE, TLE	0.189	0.250	0.439	0.028	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
WEST FRONTAGE ROAD	1032-13-20	1999	100'
7 MILE ROAD	CERTIFIED SURVEY MAP 2603	2004	33'
7 MILE ROAD	--	--	66' BY SS 82.31(2)



THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(000')	TANGENT	TAN
REBAR	RBR		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (UNLESS NOTED)
R/W MONUMENT (●SET)
R/W STANDARD (▲SET)
SIGN
SECTION CORNER MONUMENT
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT (RWB20)
PARCEL NUMBER (102)
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 PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

LOCATION MAP
NTS
SHEET LOCATION

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

WISCONSIN KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin LAND SURVEYOR

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 08/23/2010 (SIGNATURE) _____
KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 8-26-2010 (SIGNATURE) _____
(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.02
AMENDMENT NO: 1

Vol 1 Pg 126
DOCUMENT # 2262147
RACINE COUNTY REGISTER OF DEEDS
September 22, 2010 10:19 AM
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amounts: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040402_rp_amend_1.dgn PLOT DATE : 25-AUG-2010 13:38 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.02-A1

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.03

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED — OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
6	7 MILE FAIR, INC.	FEE, PLE, AR, TLE	3.944	1.257	5.201	1.315	0.330
10	MICHAEL J. & TAMMY L. WARGOLET	FEE, TLE	0.00	0.076	0.076	0.016	--
11	JACOB R. & MONICA S. DINAUER	FEE, TLE	0.00	0.076	0.076	0.016	--
12	MICHAEL S. & STEPHANIE M. HOOD, & CHARLES L. NILES	FEE, TLE	0.021	0.133	0.154	0.037	--
13	GARY A. & JOSEFINE FALKOWSKI	FEE	0.178	0.229	0.407	--	--
14	NEW WISCONSIN SERVICES, LP	FEE, TLE	1.264	--	1.264	0.479	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES - GAS	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
7 MILE ROAD	--	--	66' BY SS 82.13(2)

(100) PARCEL 6
V. 1972 P. 317 DOC. 1288233
V. 1972 P. 320 DOC. 1288234
DOC. 1923812

PARCEL 14
V. 1660 P. 583 DOC. 1114769
V. 2116 P. 726 DOC. 1361403
DOC. 1927291
DOC. 1923812

(101) PARCEL 6
NO EASEMENT OF RECORD

T 4 N R 21 E

CONCRETE MONUMENT
W/ BRASS CAP
Y=226088.41
X=591855.70

GN

SCALE, FEET
0 100 200

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(000')		
REBAR	RBR		

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

SE-SW

CONCRETE MONUMENT
W/ BRASS CAP
Y=223493.68
X=589162.36

T 4 N R 21 E

TEMPORARY EASEMENT FOR DRIVEWAY ACCESS (PER DOC. NO. 1747470 V-3085, P204-205)

TLE FOR SLOPES & DRIVEWAYS

TLE FOR SLOPES

SECTION LINE 1962.30'

WEST PROJECT LIMITS
STA 314+00
Y=223464.66
X=590961.94

NE-NW

S89°08'24"E 2640.26' (MON. TO MON.)

TOWN OF RAYMOND

CONCRETE MONUMENT
W/ BRASS CAP
Y=223454.05
X=591802.32

T 4 N R 21 E

1/4 LINE

2634.90' (MON. TO MON.)

S0°09'39"W 2563.39'

PI 318+91.85
Y=223457.28
X=591453.73

319+91.16 RL CROSSES SL

STA 322+40.53

SEE TPP 1035-01-20-4.01

NW-NE

CURVE 4
FRONTAGE RD. NW

P.I. = 4239+34.94
Y = 224191.42
X = 592686.79
Δ = 88°50'36"
D = 13°38'31"
R = 420.00'
T = 411.61'
L = 651.26'

DETAIL: (NOT TO SCALE)

4240 — 19.18' — 6.82' — PL — S89°41'43"W 319.83' — 4245 — N89°05'03"W 379.00' — 4244+94.42 26.00' PRW2647 — PRW2649 — 1/16 TH LINE

L=580.02'
R=460.00'
LC=542.36'
LCB=N53°34'21"E

4238+61.76 67.00'
PI 4239+34.94
4238+89.45 104.02'
4239+29.69 67.00'
4239+61.36

RELOCATED WEST FRONTAGE ROAD — CURVE 4 — 4240

TLE FOR SLOPES

1 AP

PRW2643 4236+45.00 40.00'
N17°26'59"E 137.11'
PLE2700 4235+46.26 53.01'
4235+41.81 67'
N73°42'53"E, 87.58'
PLE2808 4235+23.33 136.00'
PRW2642 PC 4235+23.33 60.00'
N00°51'06"E, 165.33'
PLE FOR DRAINAGE
N09°17'37"E, 95.36'
PLE2699 4234+29.00 150.00'
N28°06'47"W, 106.30'
PRW2641 4233+58.00 60.00'
44.36'
PLE2698 4233+36.00 98.52'
PRW2640 329+00.00' 66.57'
500.10'
328+20 68.2'
329+45 136'
329+64 101.44'
TLE FOR SLOPES

L=496.80'
R=394.00'
LC=464.54'
LCB=S53°34'21"W

4236+45.00 26.00' PRW2649
4235+81.93 53.00'
RAYMOND
TLE FOR SLOPES
SE-SE
STA 4234+88.99
S02°59'12"E 352.51'
331+81.64 75.84' RW2650
S89°07'40"E
719.84'
S00°52'20"W 67.00'
339+00.00
340
S89°07'40"E
R 7 MILE RD.
996.18'

3 AP STA 4239+67.96 TO STA 4265+98.51

SEE TPP 1035-01-20-4.04

TLE FOR SLOPES

4241+74.59 40.00' PRW2645
PC 4248+73.33 40.00'
N89°41'43"E 698.74'
S00°18'17"E 74.07'
4248+73.33 S0°07'54.08"E
S89°41'43"W 319.83'
N89°05'03"W 379.00'
4244+94.42 26.00' PRW2647
PT 4241+74.59 26.00' PRW2648

2 AP STA. 4234+88.99 TO STA 4250+13.21

CONCRETE MONUMENT
W/ BRASS CAP
Y=223413.62
X=594457.42

T 4 N R 21 E R 22 E

SECTION LINE 1962.30'

S89°08'24"E 2640.26' (MON. TO MON.)

N89°08'24"W 249.30'

N89°07'40"W 2655.41' (MON. TO MON.) SECTION LINE

N61°07'20"E, 178.94'

1409.54'

S89°07'40"E

249.70'

336+50.29= 2248+27.67

PI 334+67.83
Y=223465.36
X=593029.70

NE-NE

N00°51'17"E

N00°52'20"E 33.00' TO R/W

LOT# PARCEL#

LOT#	PARCEL#
6	012-04-21-01-054-000
6	012-04-21-01-054-010
10	012-04-21-01-060-000
11	012-04-21-01-061-000
12	012-04-21-01-055-000
13	012-04-21-01-062-000
14	012-04-21-01-039-000

LOCATION MAP
NTS
SHEET LOCATION
R-21-E R-22-E
CALEDONIA
Raymond
7 MILE RD.

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LOT (UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	●(SET)	EXISTING H.E. LINE	
R/W STANDARD	△(SET)	PROPERTY LINE	
SIGN	SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
FEE (HATCH VARIES)		CORPORATE LIMITS	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
R/W BOUNDARY POINT	RWB20	NO ACCESS (BY STATUTORY AUTHORITY)	
PARCEL NUMBER	102	SECTION LINE	
SIGN NUMBER (OFF PREMISES)	21	QUARTER LINE	
BUILDING		SIXTEENTH LINE	
		EXISTING CENTERLINE	
		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPRESSABLE	COMPRESSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

THIS IS A COPY, ORGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E. YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

WISCONSIN LAND SURVEYOR — KEVIN M. CORNNELL — S-2150 — Milwaukee, Wisconsin

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 06/17/2010 (SIGNATURE)
KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 6-28-2010 (SIGNATURE)
(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.03
AMENDMENT NO:

Vol 1 Pg 120

DOCUMENT # 2255669
RACINE COUNTY REGISTER OF DEEDS
July 19, 2010 9:13 AM

JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040403_rp.dgn PLOT DATE : 28-JUN-2010 07:47 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.03

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.04

THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
6	7 MILE FAIR, INC.	FEE, AR, TLE	0.863	0.310	1.173	0.267	--
14	NEW WISCONSIN SERVICES, LP	FEE, AR, TLE	0.783	--	0.783	0.434	--
15	PAUL FERGUSON	FEE, AR	0.083	--	0.083	--	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES - GAS	ROR	--	--	--	--	--
102	AT&T WISCONSIN	ROR	--	--	--	--	--
105	AMERICAN TRANSMISSION COMPANY	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	DJ 2277	1935	VARIES
I-94 / USH 41	DJ 2460	1938	VARIES
I-94 / USH 41	I 101-1(3)	1956	VARIES
7 MILE ROAD	I 101-1(3)	1956	50'
7 MILE ROAD	--	--	66' BY SS 82.13(2)

SEE TPP 1035-01-20-4.03

SEE TPP 1035-01-20-4.01

SEE TPP 1035-01-20-4.07

100 PARCEL 6
V. 1972 P. 317 DOC. 1288233
V. 1972 P. 320 DOC. 1288234
V. 3042 P. 226 DOC. 1732037
DOC. 1923812

PARCEL 14
V. 620 P. 571 DOC. 671756
V. 1506 P. 134 DOC. 1051974
V. 1660 P. 583 DOC. 1114769
V. 2116 P. 726 DOC. 1361403

101 PARCEL 6
NO EASEMENT OF RECORD

102 PARCEL 6
V. 1972 P. 317 DOC. 1288233
V. 1972 P. 320 DOC. 1288234

105 PARCEL 14
V. 620 P. 571-573 DOC. 671756
V. 1506 P. 134-135 DOC. 1051974
V. 621 P. 43-44 DOC. 672039

CURVE 5 FRONTAGE RD. NW
P.I. = 4252+65.36
Y = 224199.41
X = 594189.16
Δ = 86°03'20"
D = 13°38'31"
R = 420.00'
T = 392.04'
L = 630.82'

CURVE 6 FRONTAGE RD. NW
P.I. = 4265+31.68
Y = 225616.11
X = 594279.28
Δ = 02°30'00"
D = 00°28'39"
R = 12000.00'
T = 261.84'
L = 523.60'

CONCRETE MONUMENT W/ BRASS CAP Y=223454.05 X=591802.32

CONCRETE MONUMENT W/ BRASS CAP Y=223413.62 X=594457.42

PI 348+96.42 Y=223443.61 X=594458.13

CONCRETE MONUMENT W/ BRASS CAP Y=226088.41 X=591855.70

END PROJECT STA 1269+00 Y=226163.13 X=594425.44

CONCRETE MONUMENT W/ BRASS CAP Y=229622.69 X=591916.91

TOWN OF RAYMOND

VILLAGE OF CALEDONIA

SECTION LINE

R 7 MILE RD.

R IH 94 / USH 41 = EXISTING IH 94 / USH 41

RELOCATED WEST FRONTAGE ROAD

RAMP

TLE FOR DRIVEWAY & SLOPES

TLE FOR SLOPES

1 AP

2 AP STA 4250+13.21 TO STA 4234+86.99

3 AP STA 4265+98.51 TO STA 4239+67.96

ACCESS CONTROL SHOWN HERE IS PER PROJECT I-101-1(3) AND CONTROLS ACCESS BETWEEN FREEWAY FACILITIES AND ADJACENT FRONTAGE ROADS / ADJACENT LANDS

SE-SE

NE-SE

SE-NE

N00°52'20"E 33.00' TO RW

N00°52'20"E 339+00.00 67.00'

S89°07'40"E 609.97'

N89°07'40"W 2655.41' (MON. TO MON.)

S00°52'20"W, 50.00'

N89°07'40"W, 150.68'

S46°00'22"W, 155.92'

N00°18'17"W 74.07'

N89°05'03"W 158.29'

S00°54'57"W, 40.81'

L= 462.46'
R= 380.00'
LC= 434.45'
LCB= N54°49'50"E

L= 244.44'
R= 446.00'
LC= 241.40'
LCB= S53°05'31"W

N01°08'23"E 658.23'

N01°08'23"E 1199.46'

N03°38'23"E

N01°20'27"E 2627.79' (MON. TO MON.)

N88°58'25"W 15.00'

S01°08'23"W 426.00'

N01°08'23"E 360.00'

N01°08'23"E EXISTING WEST FRONTAGE ROAD 4270+26.29 54.75'

4269+60.40

S88°58'25"E, 15.00'

S88°58'25"E 1267+79.26 = STA 1269+00 = 1/4 LINE

LOT#	PARCEL#
6	012-04-21-01-054-000
6	012-04-21-01-054-010
14	012-04-21-01-042-000

SCALE, FEET
0 100 200

GN

RAYMOND

LOCATION MAP NTS

SHEET LOCATION

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	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
REBAR	RBR		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (UNLESS NOTED)
R/W MONUMENT (SET)
R/W STANDARD (SET)
SIGN
SECTION CORNER MONUMENT
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
SIGN NUMBER (OFF PROJECT)
BUILDING
HOLDING TANK

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

THIS IS A COPY, ORGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BYWISCONSIN DOT SOUTHEAST REGION SURVEY.
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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.

ACCESS CONTROL ALONG WESTERLY RIGHT-OF-WAY LINE OF IH 94 / USH 41 IS PER PROJECT I-101-1(3)

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

WISCONSIN LAND SURVEYOR KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 06/17/2010 (SIGNATURE)

KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 6-28-2010 (SIGNATURE)

(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.04
AMENDMENT NO:

Vol 1 Pg 121

DOCUMENT # 2255670
RACINE COUNTY REGISTER OF DEEDS
July 19, 2010 9:17 AM

James A. Ladwig

JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040404_rp.dgn PLOT DATE : 28-JUN-2010 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.04

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.04 AMENDMENT NO: 1

AMENDS PARCEL 14 AND ADDS PARCEL 44 OF TPP 1035-01-20-4.04, RECORDED AS DOCUMENT 2255670

THAT PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
6	7 MILE FAIR, INC.	FEE, AR, TLE	0.863	0.310	1.173	0.267	--
14	NEW WISCONSIN SERVICES, LP	FEE, AR, PLE, TLE	0.783	--	0.783	1.063	0.381
15	PAUL FERGUSON	FEE, AR	0.083	--	0.083	--	--
44	RACINE COUNTY	TLE	--	--	--	0.015	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES - GAS	ROR	--	--	--	--	--
102	AT&T WISCONSIN	ROR	--	--	--	--	--
105	AMERICAN TRANSMISSION COMPANY	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	DJ 2277	1935	VARIES
I-94 / USH 41	DJ 2460	1938	VARIES
I-94 / USH 41	I 101-1(3)	1956	VARIES
7 MILE ROAD	I 101-1(3)	1956	50'
7 MILE ROAD	--	--	66' BY SS 82.13(2)

(101) PARCEL 6
NO EASEMENT OF RECORD

(102) PARCEL 6
V. 1972 P. 317 DOC. 1288233
V. 1972 P. 320 DOC. 1288234

(105) PARCEL 14
V. 620 P. 571-573 DOC. 671756
V. 1506 P. 134-135 DOC. 1051974
V. 621 P. 43-44 DOC. 672039

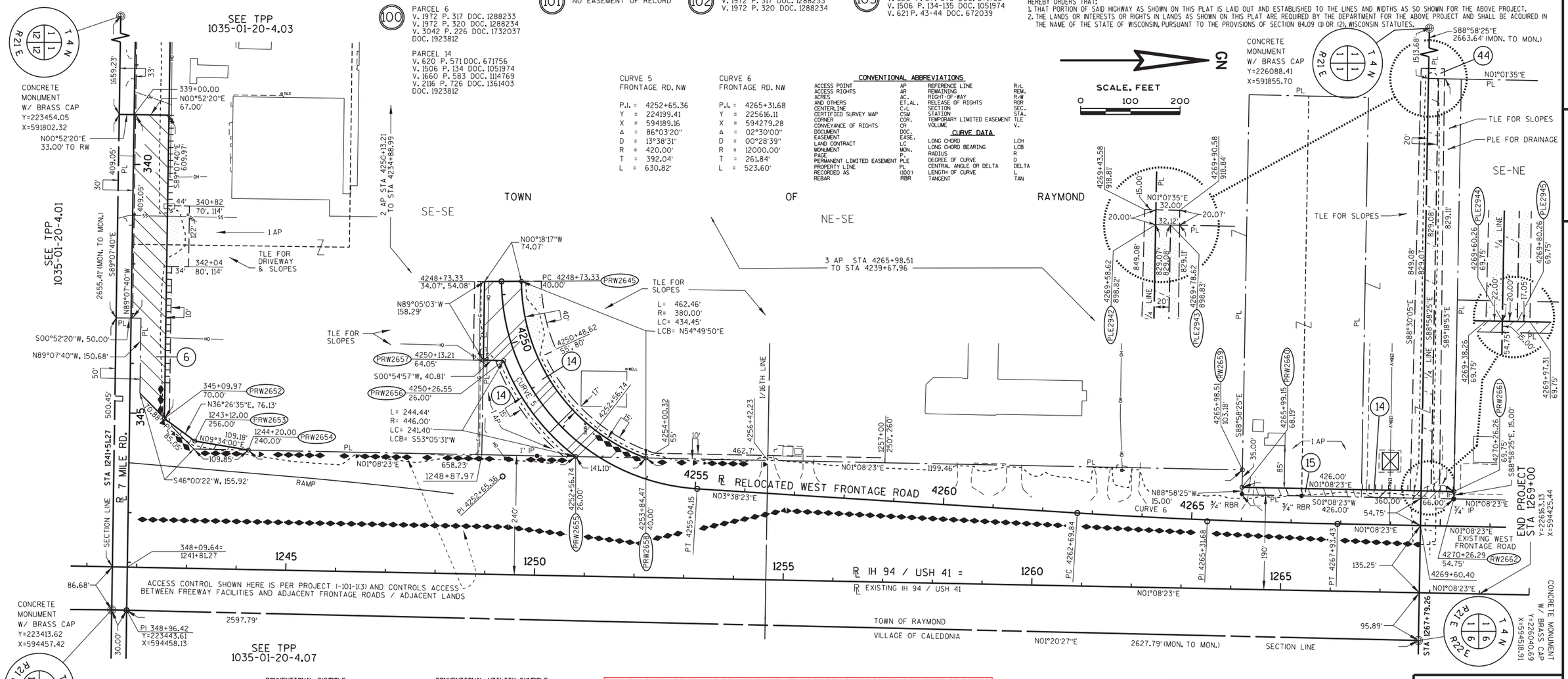
(100) PARCEL 6
V. 1972 P. 317 DOC. 1288233
V. 1972 P. 320 DOC. 1288234
V. 3042 P. 226 DOC. 1732037
DOC. 1923812

PARCEL 14
V. 620 P. 571 DOC. 671756
V. 1506 P. 134 DOC. 1051974
V. 1660 P. 583 DOC. 1114769
V. 2116 P. 726 DOC. 1361403
DOC. 1923812

CURVE 5 FRONTAGE RD. NW		CURVE 6 FRONTAGE RD. NW	
P.I. =	4252+65.36	P.I. =	4265+31.68
Y =	224199.41	Y =	225616.11
X =	594189.16	X =	594279.28
Δ =	86°03'20"	Δ =	02°30'00"
D =	13°38'31"	D =	00°28'39"
R =	420.00'	R =	12000.00'
T =	392.04'	T =	261.84'
L =	630.82'	L =	523.60'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET. AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.	**CURVE DATA**	
LAND CONTRACT	LC	LONG CHORD	LCH
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
REBAR	RBR	TANGENT	TAN



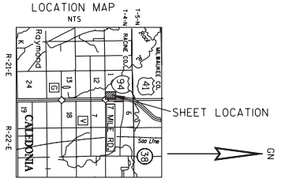
CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LD ¾" UNLESS NOTED	PROPOSED R/W LINE	
R/W MONUMENT	○ ⊕(SET)	EXISTING H.E. LINE	
R/W STANDARD	△ ▲(SET)	PROPERTY LINE	
SIGN	| SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT	⊕	SLOPE INTERCEPTS	
FEE (HATCH VARIES)		CORPORATE LIMITS	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
R/W BOUNDARY POINT	RWB20	NO ACCESS (BY STATUTORY AUTHORITY)	
PARCEL NUMBER	102	SECTION LINE	
SIGN NUMBER (OFF PREMISE)	21-1	QUARTER LINE	
BUILDING		SIXTEENTH LINE	
HOLDING TANK	①	EXISTING CENTERLINE	
		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE	⌀	⌀
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌧	⌧
ELECTRIC TOWER	⊠	

LOCATION MAP
NTS



THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

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A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE THE 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.

ACCESS CONTROL ALONG WESTERLY RIGHT-OF-WAY LINE OF IH 94 / USH 41 IS PER PROJECT I-101-1(3)

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

WISCONSIN
KEVIN M. CORNNELL
S-2150
Milwaukee, Wisconsin
LAND SURVEYOR

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 10/12/2010 (SIGNATURE)

KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 10/13/2010 (SIGNATURE) Robert L. Duffeck

(PRINTED NAME) Robert L. Duffeck

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.04
AMENDMENT NO: 1

DOCUMENT # 2266351
RACINE COUNTY REGISTER OF DEEDS
October 28, 2010 11:12 AM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

Vol 1

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.05

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 4 NORTH, RANGE 22 EAST, IN THE VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
16	GILBERTO J. HERNANDEZ	AR, TLE	--	--	--	0.012	--
17	JAMES B. WAGNER, AND THE RICHARD A. CUCCIO AND LOETTA R. CUCCIO JOINT REVOCABLE LIVING TRUST	FEE, PLE, AR, TLE	3.220	--	3.220	0.442	0.153
18	JJL, LLC	FEE, AR, TLE	0.114	0.217	0.331	0.540	--
19	STEVEN P. & DIANE M. PRZYBYSZEWSKI	FEE, AR, TLE	0.113	0.076	0.189	0.048	--
20	DAVID A. GUNTLY	FEE	0.611	0.091	0.702	--	--
21	SHARON DESCHLER & LAURIE BERTZYK	FEE, AR,TLE	0.221	0.167	0.388	0.053	--
39	(REMOVED FROM PLAT)	--	--	--	--	--	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES -GAS	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	DJ 2277	1935	VARIES
I-94 / USH 41	DJ 2460	1938	VARIES
I-94 / USH 41	I101-1(3)	1956	VARIES
6 1/2 MILE ROAD	V1 P27	1844	66'
7 MILE ROAD	V2 P27	1852	66' BY STATUTE

(100) PARCEL 18
NO EASEMENT OF RECORD
PARCEL 20
NO EASEMENT OF RECORD
PARCEL 21
NO EASEMENT OF RECORD

(101) PARCEL 18
V. 1875 P. 218 DOC. 1235254

CURVE 1 — RL I-94
P.I. = 1230+36.62
Y = 222300.47
X = 594348.58
Δ = 01°15'38"
D = 00°09'00"
R = 38197.19'
T = 420.25'
L = 840.46'

CURVE 7 — FRONTAGE RD. SE
P.I. = 3231+16.84
Y = 222379.27
X = 594552.43
Δ = 41°24'35"
D = 09°32'57"
R = 600.00'
T = 226.78'
L = 433.64'

CURVE 8 — FRONTAGE RD. SE
P.I. = 3237+48.25
Y = 222837.54
X = 595015.26
Δ = 44°25'53"
D = 09°32'57"
R = 600.00'
T = 245.05'
L = 465.29'

GN

SCALE, FEET
0 100 200

BEGIN PROJECT
Y=220753.13
X=594351.85

CONCRETE MONUMENT W/ BRASS CAP
Y=220794.28
X=591775.34

CONCRETE MONUMENT W/ BRASS CAP
Y=220751.87
X=594430.67

SEE TPP 1035-01-20-4.01

STA 1214+89.27
S89°05'06"E
78.83'
87.00'
¾" RBR
¼ LINE
6 1/2 MILE ROAD
S89°21'50"E
33'
33'

1220 ℄ IH 94 / USH 41 = ℄ EXISTING IH 94 / USH 41
N00°07'15"W
1225
1230
PC 1226+16.37
PI 1230+36.62
N89°50'44"W
L= 277.67'
R= 37936.31'
LC= 277.67'
LCB= N00°35'25"E
L= 179.73'
R= 37936.31'
LC= 179.73'
LCB= N00°56'08"E
L= 45.33'
R= 37936.31'
LC= 45.33'
LCB= N01°06'20"E
PT 1234+56.83
1235
1240
CURVE 1
NO1°08'23"E
PRW2691 1239+50.00 184.00'
PRW2690 350+07.00 117.00'
STA 1241+51.27
S89°07'40"E
℄ 7 MILE RD. OVER I-94
348+09.64= 1241+81.27
CONCRETE MONUMENT W/ BRASS CAP
Y=223413.62
X=594457.42
NO1°20'27"E
PI 348+96.42
Y=223443.61
X=594458.13
30.00'
87.00'
350
S41°08'14"W, 70.94'
350+53.00
63.00'
PRW2689
SEE DETAIL "A"
30.00'
TLE FOR SLOPES & DRIVES

ACCESS CONTROL SHOWN HERE IS PER PROJECT I-101-1(3) AND CONTROLS ACCESS BETWEEN FREEWAY FACILITIES AND ADJACENT FRONTAGE ROADS / ADJACENT LANDS

SECTION LINE N00°34'33"E 2661.88'
TOWN OF RAYMOND
862.96'
VILLAGE OF CALEDONIA
EXISTING EAST FRONTAGE ROAD S89°25'27"E, 61.28'
87'
1" IP
¾" RBR
PL
3225
3223+50.00
N03°52'26"E
3226+23.34
90.59'
RW2909
N00°07'15"W 380.77'
16
2" IP
3227+57.49
81.46'
10'
3224+73 101.09' 117"
3225+05 98.85' 115"
3227+58.03
91.45'
3228+41.85
1222+34.18
260.00'
RW2908
TLE FOR DRIVEWAY
1 AP
3225+50.07
PC 3228+50.07
PI 3231+16.84
3229+24.00
70.19'
3229+24.00
80.05'
3229+62.67
65.00'
PRW2617
PRW2618
3232+25.17
45.00'
TLE FOR DRIVE & SLOPES
PLE FOR DRAINAGE
PLE2695
PLE2694
1234+11.19
260.00'
1234+56.83
260.00'
1234+48.86
325.78'
1235+45
260' 323'
TLE FOR DRIVE & SLOPES
RAMP
260'
N89°17'21"W, 31.03'
TO S/L 233.00' N00°34'33"E
S08°10'49"W 116.38'
18
86.67'
1" IP
PL
PRW2692 1239+19.57 207.00'
PRW2682 1239+19.97 260.00'
¾" RBR
CANOPY
HO
3240+58.59
N82°01'02"W 131.36'
179.7'
45.33'
N39°29'02"E
CURVE 7
N45°17'00"E
1209.19'
S82°01'02"E 164.36'
3234+78.89
62.79'
3235+63.00
68.00'
PRW2679
PRW2680
PLE2696
17
1 AP STA 3232+25.17 TO STA 3240+58.59
69.91'
N68°04'46"W
S89°17'21"E
204.08'
NO0°16'47"E 34.66'
1" IP
PL
1" IP
PL
1" IP
PL

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.05 AMENDMENT NO:1

AMENDS PARCEL 17 OF TPP 1035-01-20-4.05, RECORDED AS DOCUMENT 2245537

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 4 NORTH, RANGE 22 EAST, IN THE VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE COUNTY

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17	JAMES B. WAGNER, AND THE RICHARD A. CUCCIO AND LOETTA R. CUCCIO JOINT REVOCABLE LIVING TRUST	FEE, PLE, AR, TLE	3.220	--	3.220	0.442	0.153
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21	SHARON DESCHLER & LAURIE BERTZYK	FEE, AR,TLE	0.221	0.167	0.388	0.053	--
39	(REMOVED FROM PLAT)	--	--	--	--	--	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES -GAS	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
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P.I. = 3231+16.84
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X = 594552.43
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GN

SCALE, FEET
0 100 200

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CONCRETE MONUMENT W/ BRASS CAP Y=220751.87 X=594430.67

CONCRETE MONUMENT W/ BRASS CAP Y=223413.62 X=594457.42

CONCRETE MONUMENT W/ BRASS CAP Y=220726.11 X=596751.29

CONCRETE MONUMENT W/ BRASS CAP Y=223384.64 X=596793.04

SEE TPP 1035-01-20-4.06

SEE TPP 1035-01-20-4.07

SEE DETAIL "A"

DETAIL "A" NTS

ACCESS CONTROL SHOWN HERE IS PER PROJECT I-101-1(3) AND CONTROLS ACCESS BETWEEN FREEWAY FACILITIES AND ADJACENT FRONTAGE ROADS / ADJACENT LANDS

RELOCATED EAST FRONTAGE ROAD

6 1/2 MILE ROAD

7 MILE RD. OVER I-94

SECTION LINE N00°34'33"E 2661.88'

TOWN OF RAYMOND

VILLAGE OF CALEDONIA

EXISTING EAST FRONTAGE ROAD S89°25'27"E, 61.28'

N89°50'44"W

N00°07'15"W

N01°08'23"E

N01°20'27"E

S41°08'14"W, 70.94'

N89°17'21"W, 31.03'

S89°17'21"E

S89°07'40"E

S89°21'50"W

N03°52'26"E 3226+23.34 90.59'

N39°29'02"E

N45°17'00"E

S82°01'02"E 164.36'

N29°24'38"E 205.89'

S28°39'10"W 222.87'

S13°05'14"W, 230.89'

S00°16'47"W, 27.00'

S00°16'47"W, 33.00'

S46°29'51"W, 10.30'

S00°51'07"W

N00°51'07"E

N00°16'47"E 34.66'

N00°16'47"E 267.00'

S69°15'05"E 34.51'

S24°14'00"E

N68°04'46"W

S08°08'49"W 116.38'

N00°34'33"E 233.00'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
LAND CONTRACT	LC	LONG CHORD	LCH
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
REBAR	RBR	TANGENT	TAN

CURVE DATA

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	● (IT UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	○ (#SET)	EXISTING H.E. LINE	
R/W STANDARD	△ (ΔSET)	PROPERTY LINE	
SIGN	SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
FEE (HATCH VARIES)		CORPORATE LIMITS	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
R/W BOUNDARY POINT	RWB20	NO ACCESS (BY STATUTORY AUTHORITY)	
PARCEL NUMBER	102	SECTION LINE	
SIGN NUMBER (OFF PREMISE)	21-)	QUARTER LINE	
BUILDING		SIXTEENTH LINE	
HOLDING TANK	①	EXISTING CENTERLINE	
		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

100 PARCEL 18 NO EASEMENT OF RECORD
PARCEL 20 NO EASEMENT OF RECORD
PARCEL 21 NO EASEMENT OF RECORD

101 PARCEL 18 V. 1875 P. 218 DOC. 1235254

15' UTILITY INGRESS/EGRESS EASEMENT (PER DOC. NO. 1781695)

1/16 TH LINE

SW-NW

NW-NW

LOCATION MAP NTS

SHEET LOCATION

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

NOTES:
COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.
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RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE THE 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 WOULD NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE THE 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 TLE EASEMENTS ARE TO TERMINATE UPON THE COMPLETION OF THIS PROJECT OR ON THE DAY THE TRAVELING PUBLIC, WHICHEVER IS LATER.
ACCESS CONTROL ALONG EASTERLY RIGHT-OF-WAY LINE OF IH 94 / USH 41 IS PER PROJECT I-101-1(3)
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

WISCONSIN KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin LAND SURVEYOR

Milwaukee Transportation Partners LLC

I, KEVIN W. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 01/31/2011 (SIGNATURE)

KEVIN W. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 2-8-2011 (SIGNATURE)

(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.05
AMENDMENT NO: 1

DOCUMENT # 2277669
RACINE COUNTY REGISTER OF DEEDS
February 23, 2011 9:44 AM
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1
Vol 1 Pg 162

268

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040405_rp_amend_1.dgn PLOT DATE : 01-FEB-2011 15:32 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.05 A1

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.06

THAT PART OF LOTS C, D, E, H, F, & G OF M.J. ZALEWSKI & CO'S SUB. NO. 6 IN THE SE 1/4 AND THE SW 1/4 OF THE SW 1/4 OF SECTION 6 AND THAT PART OF THE SE 1/4 OF THE SW 1/4 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 6, AND THE NW 1/4 OF THE NW 1/4 AND THE NE 1/4 OF THE NW 1/4 AND THE NW 1/4 OF THE NE 1/4 OF SECTION 7, ALL IN TOWNSHIP 4 NORTH, RANGE 22 EAST, IN THE VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OFWISCONSIN 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
17	JAMES B. WAGNER, AND THE RICHARD A. CUCCIO AND LOETTA R. CUCCIO JOINT REVOCABLE LIVING TRUST	FEE, AR, TLE	0.117	0.143	0.260	0.075	--
22	JEROME S. & GLORIA E. LUENEBURG	FEE, TLE	0.069	0.069	0.138	0.060	--
23	DENISE C. MICHEL	FEE, TLE	0.073	0.076	0.149	0.019	--
24	MICHAEL B. & KATHLEEN S. KUNEY	FEE, TLE	0.088	0.090	0.178	0.022	--
25	PAUL P. & DIANE M. SPANIER	FEE, TLE	0.242	0.368	0.610	0.066	--
26	STEVEN L. & MARIA G. SCHULNER	FEE, TLE	0.290	0.379	0.669	0.011	--
27	RANDAL S. & SHELLY M. KLIMOWICZ	FEE, TLE	--	0.076	0.076	0.025	--
28	MARK J. & DIANE C. EHLEITER	FEE, TLE	--	0.076	0.076	0.008	--
29	MICHAEL R. KUNEY	FEE	--	0.076	0.076	--	--
30	LARRY E. BEHRENDT & EDWIN G. BEHRENDT	FEE, TLE	--	0.258	0.258	0.032	--
31	JEFFREY M. & CHRISTINE KELTNER	FEE, TLE	0.070	0.266	0.336	0.026	--
32	ERIC L. HAMMERER	FEE, TLE	0.234	0.268	0.502	0.076	--
33	CHARLES K. & CORA ANN DEFOOR	FEE, AR, TLE	2.445	--	2.445	0.226	--
34	RALPH W. & TRUDELLE MALICKI	FEE, AR, TLE	0.442	--	0.442	0.105	--
41	CHARLES K. & CORA ANN DEFOOR	FEE, TLE	8 SF	--	8 SF	0.068	--
43	CHARLES K. & CORA ANN DEFOOR	FEE	0.102	--	0.102	--	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES - GAS	ROR	--	--	--	--	--
102	AT&T WISCONSIN	ROR	--	--	--	--	--

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
7 MILE ROAD	V.2, P.27	1852	66' BY SS 82.31(2)
7 MILE ROAD	M.J. ZALEWSKI & CO'S SUB. NO. 6	1927	33'
STANLEY ROAD	M.J. ZALEWSKI & CO'S SUB. NO. 6	1927	60'
HAGEMANN ROAD	V. 762 P. 102 DOC. 744438, V. 762 P. 103 DOC. 744439	1962	66'

(100) PARCEL 17 - NO EASEMENT OF RECORD
PARCEL 22 - NO EASEMENT OF RECORD
PARCEL 23 - NO EASEMENT OF RECORD

(101) PARCEL 25 - NO EASEMENT OF RECORD

(102) PARCEL 25 - NO EASEMENT

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	OR	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(REC')	TANGENT	TAN
REBAR	RBR		

CURVE A
L=118.89'
R=350.00'
LC=118.32'
LCB=N08°23'27"W

CURVE 9
STANLEY RD
P.I. = 17+31.44
Y = 223687.40
X = 595499.88
Δ = 33°17'36"
D = 19°05'55"
R = 300'
T = 89.70'
L = 174.32'

CURVE 10
STANLEY RD
P.I. = 20+64.85
Y = 223974.64
X = 595320.79
Δ = 33°17'03"
D = 19°05'55"
R = 300'
T = 89.67'
L = 174.28'

SEE SHEET 1035-01-20-4.07 FOR DETAIL

SEE TPP 1035-01-20-4.07

SEE TPP 1035-01-20-4.05

LOT#	PARCEL#
22	104-04-22-07-055-000
23	104-04-22-07-056-000
24	104-04-22-07-051-000
25	104-04-22-07-049-000
26	104-04-22-07-050-000
27	104-04-22-07-019-000
28	104-04-22-07-024-000
29	104-04-22-07-025-000
30	104-04-22-06-056-000
31	104-04-22-06-052-000
32	104-04-22-06-050-000
33	104-04-22-06-072-000
33	104-04-22-06-071-000
34	104-04-22-06-070-000
41	104-04-22-06-066-000
43	104-04-22-06-063-000

CONCRETE MONUMENT W/ BRASS CAP Y=223413.62 X=594457.42

CONCRETE MONUMENT W/ BRASS CAP Y=223351.50 X=599444.64

CONCRETE MONUMENT W/ BRASS CAP Y=226012.39 X=596840.22

CONCRETE MONUMENT W/ BRASS CAP Y=223384.64 X=596793.04

CONCRETE MONUMENT W/ BRASS CAP Y=220726.11 X=596751.29

EAST PROJECT LIMITS STA 376+00 Y=223376.05 X=597160.65

PI 348+96.42 Y=223436.37 X=594458.13

PI 354+80.04 Y=223436.37 X=595041.70

PI 372+32.31 Y=223380.64 X=596792.98

PI 368+40.41 Y=223360.50 X=596401.17

IH 94 / USH 41

7 MILE RD.

STANLEY RD

HAGEMANN ROAD

EAST FRONTAGE RD

R RELOCATED

VILLAGE OF CALEDONIA

M.J. ZALEWSKI & CO'S SUB. NO. 6

LOT B, LOT C, LOT D, LOT E, LOT F, LOT G, LOT H, LOT I

1/16 TH LINE

1/4 LINE

SW-SW, SE-SW, NW-NW, NE-NW, SW-SE, NW-NE

TLE FOR SLOPES & DRIVES

TLE FOR SLOPES

TLE FOR DRIVEWAY

TLE FOR SLOPES & DRIVE

RUINS

GN

SCALE, FEET
0 100 200

THIS IS A COPY, ORGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (UNLESS NOTED)
R/W MONUMENT (SET)
R/W STANDARD (SET)
SIGN
SECTION CORNER MONUMENT
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
SIGN NUMBER (OFF PREMISE)
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER — W
GAS — G
TELEPHONE — T
OVERHEAD TRANSMISSION LINES — OH
ELECTRIC — E
CABLE TELEVISION — TV
FIBER OPTIC — FO
SANITARY SEWER — SAN
STORM SEWER — SS
POWER POLE
TELEPHONE POLE
TELEPHONE PEDESTAL
ELECTRIC TOWER

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

LOCATION MAP NTS

SHEET LOCATION

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 06/17/2010 (SIGNATURE) _____
KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 7-12-2010 (SIGNATURE) _____
(PRINTED NAME) Craig Andersen

WISCONSIN KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin LAND SURVEYOR

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.06
AMENDMENT NO:

Vol 1 Pg 122

DOCUMENT # 2255671
RACINE COUNTY REGISTER OF DEEDS
July 19, 2010 9:18 AM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040406_rp.dgn PLOT DATE : 07-JUL-2010 14:52 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.06

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.06 AMENDMENT NO: 1

AMENDS PARCELS 22, 23, 24, 25 & 32 OF TPP 1035-01-20-4.06 RECORDED AS DOCUMENT 2255671.

THAT PART OF LOTS C, D, E, H, F, & G OF M.J. ZALEWSKI & CO'S SUB. NO. 6 IN THE SE 1/4 AND THE SW 1/4 OF THE SW 1/4 OF SECTION 6 AND THAT PART OF THE SE 1/4 OF THE SW 1/4 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 6, AND THE NW 1/4 OF THE NW 1/4 AND THE NE 1/4 OF THE NW 1/4 AND THE NW 1/4 OF THE NE 1/4 OF SECTION 7, ALL IN TOWNSHIP 4 NORTH, RANGE 22 EAST, IN THE VILLAGE OF CALEDONIA, RACINE COUNTY WISCONSIN.

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OFWISCONSIN 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 PROJECT.

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SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
17	JAMES B. WAGNER, AND THE RICHARD A. CUCCIO AND LOETTA R. CUCCIO JOINT REVOCABLE LIVING TRUST	FEE, AR, TLE	0.117	0.143	0.260	0.075	--
22	JEROME S. & GLORIA E. LUENEBURG	FEE, TLE	0.041	0.069	0.110	0.037	--
23	DENISE C. MICHEL	FEE, TLE	0.039	0.076	0.115	0.040	--
24	MICHAEL B. & KATHLEEN S. KUNEY	FEE,TLE	0.047	0.090	0.137	0.054	--
25	PAUL P. & DIANE M. SPANIER	FEE, TLE	0.242	0.368	0.610	0.078	--
26	STEVEN L. & MARIA G. SCHULNER	FEE, TLE	0.290	0.379	0.669	0.011	--
27	RANDAL S. & SHELLY M. KLIMOWICZ	FEE, TLE	--	0.076	0.076	0.025	--
28	MARK J. & DIANE C. EHLEITER	FEE, TLE	--	0.076	0.076	0.008	--
29	MICHAEL R. KUNEY	FEE	--	0.076	0.076	--	--
30	LARRY E. BEHRENDT & EDWIN G. BEHRENDT	FEE, TLE	--	0.258	0.258	0.032	--
31	JEFFREY M. & CHRISTINE KELTNER	FEE,TLE	0.070	0.266	0.336	0.026	--
32	ERIC L. HAMMERER	FEE, TLE	0.234	0.268	0.502	0.068	--
33	CHARLES K. & CORA ANN DEFOOR	FEE, AR, TLE	2.445	--	2.445	0.226	--
34	RALPH W. & TRUDELLE MALICKI	FEE, AR, TLE	0.442	--	0.442	0.105	--
41	CHARLES K. & CORA ANN DEFOOR	FEE, TLE	8 SF	--	8 SF	0.068	--
43	CHARLES K. & CORA ANN DEFOOR	FEE	0.102	--	0.102	--	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--
101	WE ENERGIES - GAS	ROR	--	--	--	--	--
102	AT&T WISCONSIN	ROR	--	--	--	--	--

(100) PARCEL 17 - NO EASEMENT OF RECORD
PARCEL 22 - NO EASEMENT OF RECORD
PARCEL 23 - NO EASEMENT OF RECORD

(101) PARCEL 25 - NO EASEMENT OF RECORD

(102) PARCEL 25 - NO EASEMENT

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
7 MILE ROAD	V.2, P.27	1852	66' BY SS 82.31(2)
7 MILE ROAD	M.J. ZALEWSKI & CO'S SUB. NO. 6	1927	33'
STANLEY ROAD	M.J. ZALEWSKI & CO'S SUB. NO. 6	1927	60'
HAGEMANN ROAD	V. 762 P. 102 DOC. 744438, V. 762 P. 103 DOC. 744439	1962	66'
UN-NAMED ROAD	DOC. 722156	1961	33'
UN-NAMED ROAD	DOC. 722158	1961	33'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L		
ACCESS RIGHTS	AR	REMAINING	REM.	CURVE A	
ACRES	AC.	RIGHT-OF-WAY	R/W	L=118.90'	
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR	R=350.00'	
CENTERLINE	C/L	SECTION	SEC.	LC=118.32'	
CERTIFIED SURVEY MAP	CSM	STATION	STA.	LCB=N08°23'27"W	
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE		
CONVEYANCE OF RIGHTS	CR	VOLUME	V.		
DOCUMENT	DOC.	CURVE DATA			
EASEMENT	EASE.	LONG CHORD	LCH		
LAND CONTRACT	LC	LONG CHORD BEARING	LCB		
MONUMENT	MON.	RADIUS	R		
PAGE	P.	DEGREE OF CURVE	D		
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA		
PROPERTY LINE	PL	LENGTH OF CURVE	L		
RECORDED AS	(DOC)	TANGENT	TAN		
REBAR	RBR				

CURVE 9
STANLEY RD
P.I. = 17+31.44
Y = 223687.40
X = 595499.88
Δ = 33°17'36"
D = 19°05'55"
R = 300'
T = 89.70'
L = 174.32'

CURVE 10
STANLEY RD
P.I. = 20+64.85
Y = 223974.64
X = 595320.79
Δ = 33°17'03"
D = 19°05'55"
R = 300'
T = 89.67'
L = 174.28'

SEE TPP 1035-01-20-4.07

SEE SHEET 1035-01-20-4.07 FOR DETAIL

SEE TPP 1035-01-20-4.05

SEE DETAIL

DETAIL

LINE	BEARING	DISTANCE
A	N 1°21'00" E	83.11'
B	S 89°17'21" E	69.88'
C	S 0°42'39" W	28.00'
D	S 89°17'21" E	12.00'
E	S 89°17'21" E	41.40'
F	N 0°42'39" E	30.00'
G	S 89°17'21" E	58.94'
H	S 89°17'21" E	34.22'
I	S 0°42'39" W	20.50'
J	S 89°17'21" E	85.05'
K	S 89°17'21" E	10.12'
L	N 0°42'39" E	10.50'

LOCATION MAP
NTS

SHEET LOCATION

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)
R/W MONUMENT (●SET)
R/W STANDARD (▲SET)
SIGN
SECTION CORNER MONUMENT
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT (R#820)
PARCEL NUMBER (102)
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 PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, 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 THE 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.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

SCALE, FEET
0 100 200

CONCRETE MONUMENT W/ BRASS CAP Y=223413.62 X=594457.42

CONCRETE MONUMENT W/ BRASS CAP Y=223384.64 X=596793.04

CONCRETE MONUMENT W/ BRASS CAP Y=223351.50 X=599444.64

CONCRETE MONUMENT W/ BRASS CAP Y=226012.39 X=596840.22

CONCRETE MONUMENT W/ BRASS CAP Y=220726.11 X=596751.29

EAST PROJECT LIMITS STA 376+00 Y=223376.05 X=597160.65

THIS IS A COPY. ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 08/23/2010 (SIGNATURE)

KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 8-26-2010 (SIGNATURE)

(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.06
AMENDMENT NO:1

Vol 1 Pg 127

DOCUMENT # 2262148
RACINE COUNTY REGISTER OF DEEDS
September 22, 2010 10:19 AM

JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040406_rp_amend_1.dgn PLOT DATE : 25-AUG-2010 13:43 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 100:1

CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.06 A1

TRANSPORTATION PROJECT PLAT NO: 1035-01-20 - 4.07

THAT PART OF LOTS A, B, C, D, & E, OF M.J. ZALEWSKI & CO'S SUB. NO. 6 THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 22 EAST, IN THE VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN

RELOCATION ORDER IH 94 @ 7 MILE ROAD RACINE 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 PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, 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 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 SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
35	SAIRAM REAL ESTATE 7 MILE, LLC.	FEE, AR, TLE	1.227	--	1.227	0.030	--
36	CHARLES G. & SANDRA J. HUSSEY	FEE, AR, TLE	0.175	--	0.175	0.105	--
37	KENNETH C. SCHAEFER	FEE, AR, TLE	1.552	--	1.552	0.283	--
38	RONALD L. & YVONNE I. GIGSTEAD	FEE, AR, TLE	0.183	--	0.183	0.019	--
40	THE SIRO A. SHIRIKIAN AND VERA S. SHIRIKIAN REVOCABLE TRUST	TLE	--	--	--	0.005	--
41	CHARLES K. & CORA ANN DEFOOR	FEE, AR, TLE	0.332	--	0.332	0.077	--
42	CHARLES K. & CORA ANN DEFOOR	FEE, AR, TLE	0.497	--	0.497	0.003	--
43	CHARLES K. & CORA ANN DEFOOR	FEE, AR	0.749	--	0.749	--	--
100	WE ENERGIES - DISTRIBUTION	ROR	--	--	--	--	--

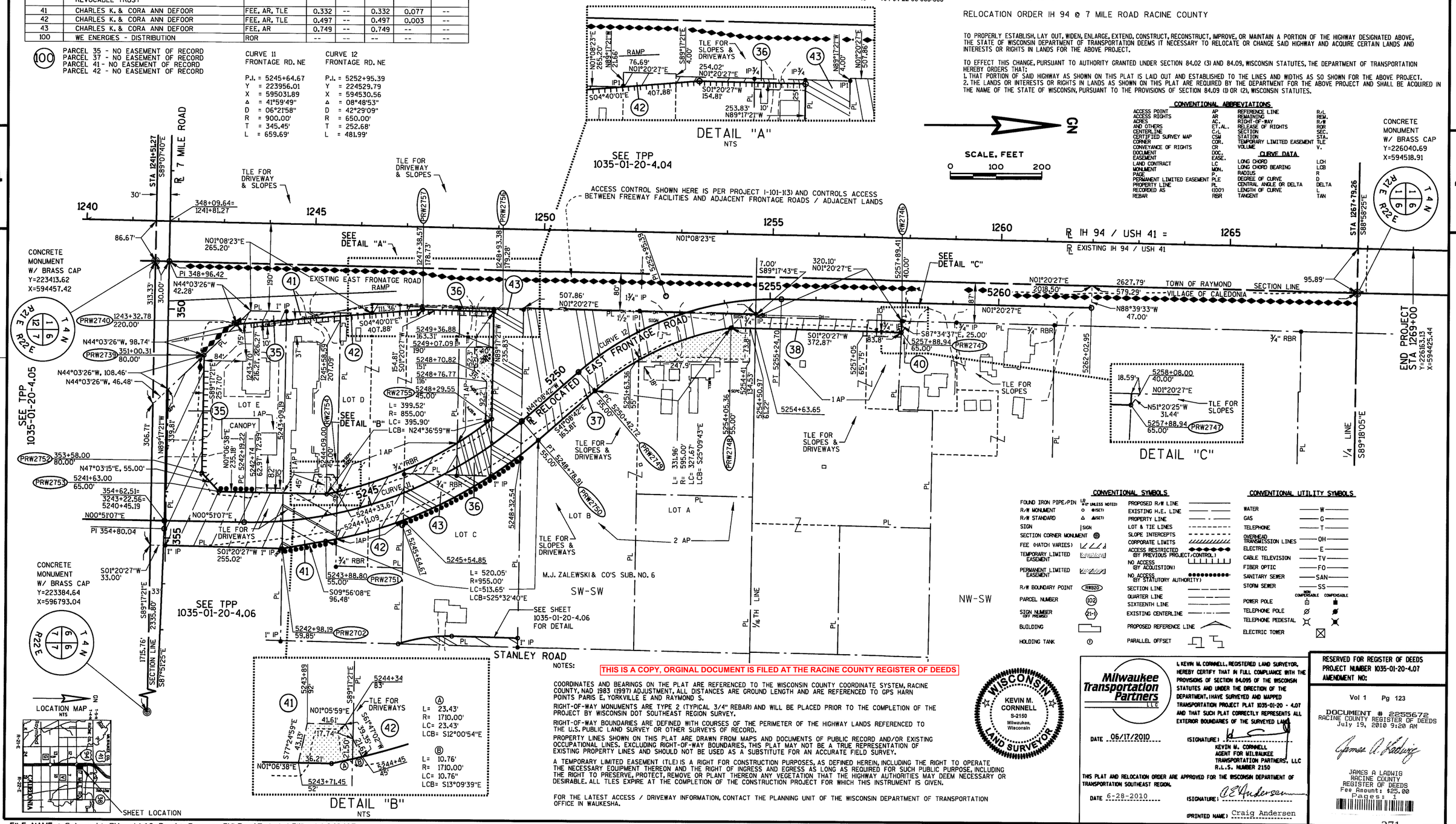
(100) PARCEL 35 - NO EASEMENT OF RECORD
PARCEL 37 - NO EASEMENT OF RECORD
PARCEL 41 - NO EASEMENT OF RECORD
PARCEL 42 - NO EASEMENT OF RECORD

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	DJ 2277	1935	VARIES
I-94 / USH 41	DJ 2460	1938	VARIES
I-94 / USH 41	I101-1(3)	1956	VARIES
I-94 / USH 41	V. 442 P. 508 DOC. 507294	1946	VARIES
7 MILE ROAD	V.2, P.27	1852	66' BY SS 82.31(2)
7 MILE ROAD	M.J. ZALEWSKI & CO. SUB. NO. 6	1927	33'

LOT#	PARCEL#
35	104-04-22-06-069-000
36	104-04-22-06-065-000
37	104-04-22-06-062-000
37	104-04-22-06-061-000
38	104-04-22-06-047-000
38	104-04-22-06-046-000
40	104-04-22-06-043-000
41	104-04-22-06-066-000
42	104-04-22-06-064-000
43	104-04-22-06-063-000

CURVE 11
FRONTAGE RD. NE
P.I. = 5245+64.67
Y = 223956.01
X = 595031.89
Δ = 41°59'49"
D = 06°21'58"
R = 900.00'
T = 345.45'
L = 659.69'

CURVE 12
FRONTAGE RD. NE
P.I. = 5252+95.39
Y = 224529.79
X = 594530.56
Δ = 08°48'53"
D = 42°29'09"
R = 650.00'
T = 252.68'
L = 481.99'



CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	CR	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(000')	TANGENT	TAN
REBAR	RBR		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (LR 3/4" UNLESS NOTED)
R/W MONUMENT (●SET)
R/W STANDARD (▲SET)
SIGN
SECTION CORNER MONUMENT
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT (RW820)
PARCEL NUMBER (102)
SIGN NUMBER (OFF PROJECT) (21-Y)
BUILDING
HOLDING TANK (T)

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPLIABLE	COMPLIABLE
POWER POLE	□	■
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌑	⌑
ELECTRIC TOWER	⊠	

NOTES:

THIS IS A COPY, ORGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 1983 (1997) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH AND ARE REFERENCED TO GPS HARN POINTS PARIS E, YORKVILLE E AND RAYMOND S.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

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FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

WISCONSIN KEVIN M. CORNNELL S-2150 Milwaukee, Wisconsin LAND SURVEYOR

Milwaukee Transportation Partners LLC

I, KEVIN M. CORNNELL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1035-01-20 - 4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 06/17/2010 (SIGNATURE)
KEVIN M. CORNNELL
AGENT FOR MILWAUKEE TRANSPORTATION PARTNERS, LLC
R.L.S. NUMBER 2150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 6-28-2010 (SIGNATURE)
(PRINTED NAME) Craig Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1035-01-20-4.07
AMENDMENT NO:

Vol 1 Pg 123
DOCUMENT # 2255672
RACINE COUNTY REGISTER OF DEEDS
July 19, 2010 9:20 AM
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : S:\prelimPMwork\19.PrelimDesign_7M\RealEstate\RW\cds\040407_rp.dgn
PLOT DATE : 28-JUN-2010 07:54
PLOT BY : MSCBXD
PLOT NAME :
PLOT SCALE : 100:1
CONST. 1035-01-70 7 MILE RD. R/W 1035-01-20 4.07

STARE-N-MAIBUSCH

R/W

WEST FRONTAGE RD

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

MATCH PROJECT
I.D. 1035-01-79

IH 94 SB

IH 94 NB

R/L IH 94

1210 1212 1214 1216 1218 1220 1222 1224

1220SW 1222SW 1224SW

1220SE 1222SE 1224SE

MATCHLINE 1225+00

S-51-23

SLOPE INTERCEPT, TYP

EAST FRONTAGE RD

R/W

SCHROEDER

HORNAK

HERNANDEZ

N

5

5

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

WATERS REVOCABLE TRUST

760 755 750 745 740 735 730 725

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

VPI STA 1213+00.00
VPI EL 749.24

VPT STA 1214+00.00
VPT EL 747.54

VPC STA 1216+00.00
VPC EL 743.96

VPI STA 1217+00.00
VPI EL 742.17

VPT STA 1218+00.00
VPT EL 740.64

TO BE CONSTRUCTED BY OTHERS

VCL = 2000'
K = 555

-1.79%

FINISHED PROFILE AT NB IH 94 PGL

VCL = 200'
K = 778

EXISTING PROFILE AT NB IH 94 PGL

-1.53%

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

1210	1212	1214	1216	1218	1220	1222	1224
751.04	753.26	752.98	752.70	752.41	752.10	751.78	751.45
750.75	750.59	750.42	750.17	749.99	749.63	749.25	748.91
750.76	750.40	750.02	749.64	749.24	748.83	748.41	747.98
748.46	748.12	747.73	747.43	747.07	746.70	746.31	745.92
747.54	747.09	746.65	746.20	745.75	745.31	744.86	744.41
745.48	745.15	744.70	744.34	743.92	743.61	743.25	742.88
743.96	743.52	743.09	742.66	742.24	741.83	741.42	741.03
742.53	742.17	741.75	741.35	741.02	740.72	740.38	740.02
740.64	740.26	739.88	739.49	739.11	738.73	738.34	737.96
739.57	739.08	738.58	738.31	737.99	737.65	737.28	736.90
737.58	737.20	736.81	736.43	736.05	735.66	735.28	734.90
736.52	736.10	735.75	735.37	734.92	734.51	734.19	733.84
734.52	734.13	733.75	733.37	732.98	732.60	732.22	731.83
733.45	733.05	732.65	732.31	731.86	731.50	731.19	730.89
731.45	731.07	730.69	730.30	729.92			
730.54	730.11	729.67	729.37				

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 NB	SHEET 272	E

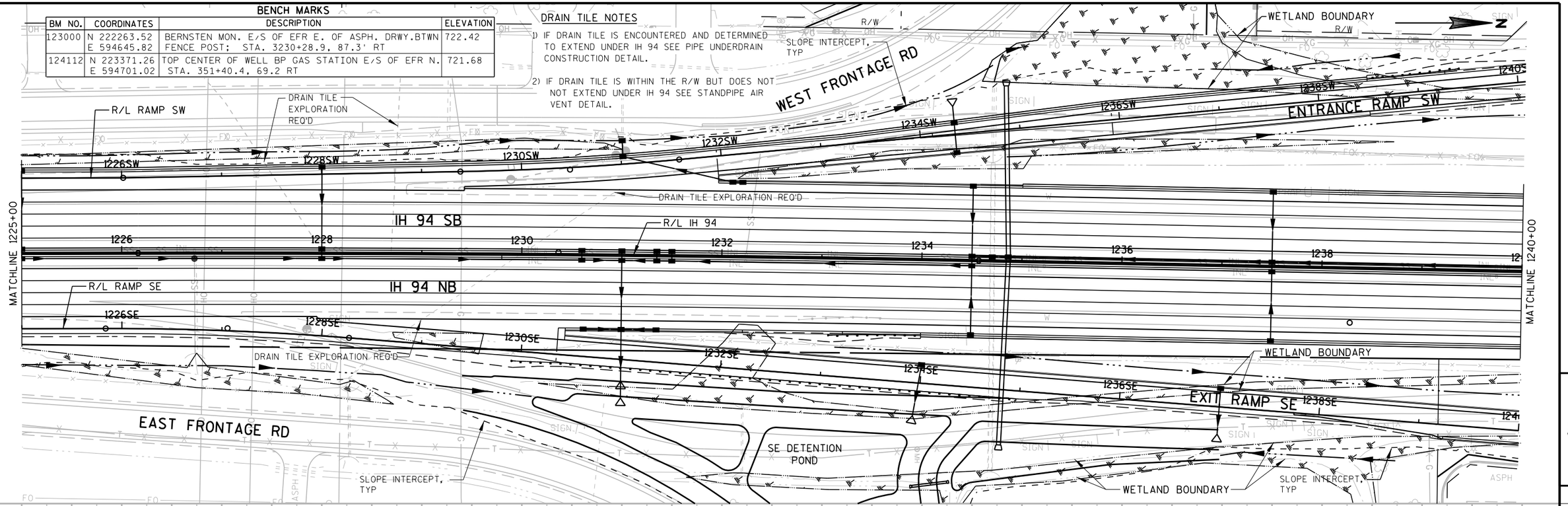
BENCH MARKS

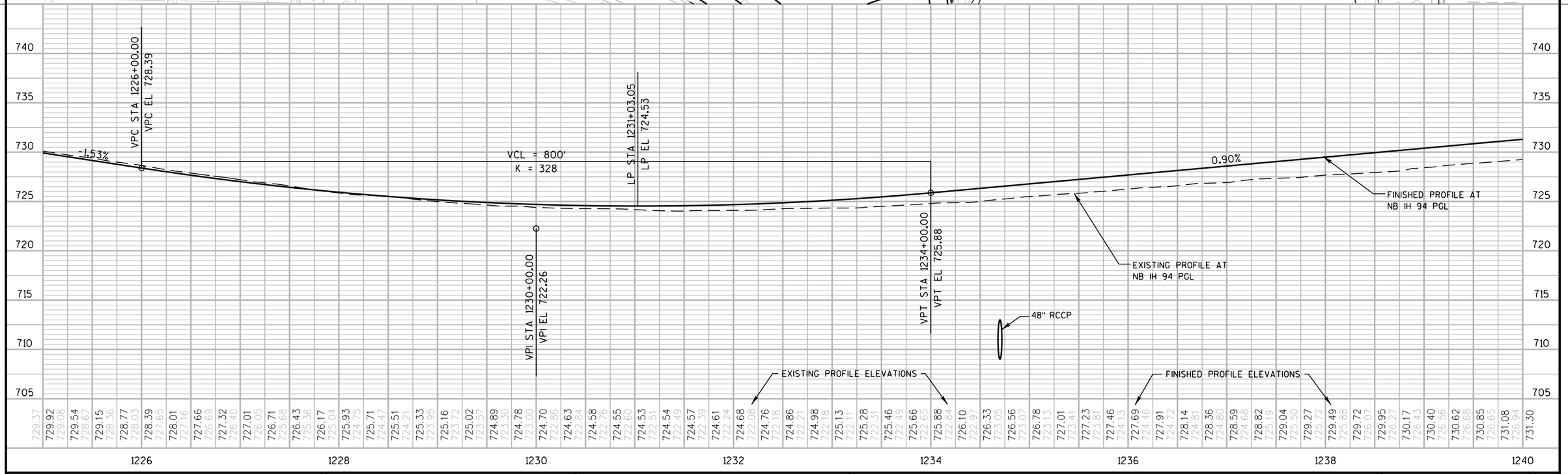
BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY.BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

DRAIN TILE NOTES

1) IF DRAIN TILE IS ENCOUNTERED AND DETERMINED TO EXTEND UNDER IH 94 SEE PIPE UNDERDRAIN CONSTRUCTION DETAIL.

2) IF DRAIN TILE IS WITHIN THE R/W BUT DOES NOT NOT EXTEND UNDER IH 94 SEE STANDPIPE AIR VENT DETAIL.

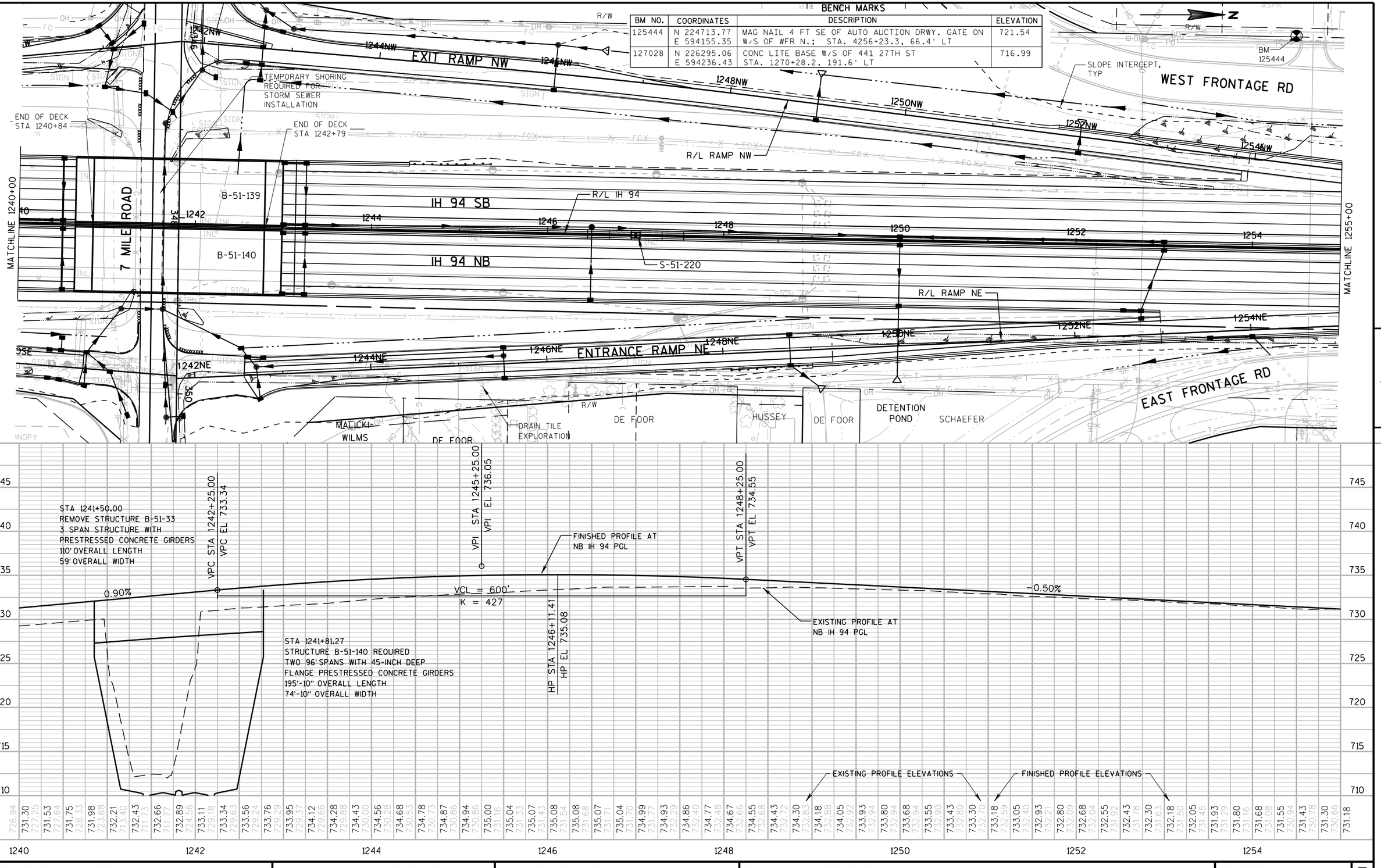




PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 NB	SHEET 273	E

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 NB	SHEET 274 E

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99

WEST FRONTAGE RD

EAST FRONTAGE RD

R/W

WISCONSIN SERVICES CORP

WISCONSIN SERVICES CORP

R/W

VALENTI ANTIQUES

BM 127028

SLOPE INTERCEPT, TYP

S-51-22

R/L RAMP NW

R/L IH 94

R/L RAMP NE

MATCHLINE 1255+00

1256NW 1258NW 1260NW 1262NW 1264NW

1256 1258 1260 1262 1264 1266 1268 1270

1256NE 1258NE 1260NE 1262NE 1264NE

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
MATCH PROJECT
I.D. 1035-01-82

IH 94 SB

IH 94 NB

GIGSTEAD R/W

GIGSTEAD

SHIRIKIN TRUST

SHIRIKIN TRUST

R/W

RACINE CO

KELEPOURIS

5

5

745 740 735 730 725 720 715 710

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
MATCH PROJECT
I.D. 1035-01-82

-0.50%

FINISHED PROFILE AT NB IH 94 PCL

EXISTING PROFILE AT NB IH 94 PCL

36" RCCP

TO BE CONSTRUCTED BY OTHERS

VPC STA 1270+00.00
VPC EL 723.68

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

| | | |

STARE-N-MAIBUSCH

R/W

WEST FRONTAGE RD

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

MATCH PROJECT
I.D. 1035-01-79

IH 94 SB

IH 94 NB

R/L IH 94

1210 1212 1214 1216 1218 1220 1222 1224

1220SW 1222SW 1224SW

1220SE 1222SE 1224SE

MATCHLINE 1225+00

S-51-23

SLOPE INTERCEPT, TYP

EAST FRONTAGE RD

SCHROEDER

HORNAK

HERNANDEZ

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

WATERS REVOCABLE TRUST

BEGIN PROJECT
I.D. 1035-01-74
STA 1213+00.00

MATCH PROJECT
I.D. 1035-01-79

TO BE CONSTRUCTED BY OTHERS

VCL = 2000'
K = 555

VPI STA 1214+00.00
VPI EL 749.24

VPT STA 1214+00.00
VPT EL 747.54

-1.79%

FINISHED PROFILE AT SB IH 94 PGL

VPC STA 1216+00.00
VPC EL 743.96

VCL = 200'
K = 778

VPI STA 1217+00.00
VPI EL 742.17

VPT STA 1218+00.00
VPT EL 740.64

EXISTING PROFILE AT SB IH 94 PGL

-1.53%

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

760 755 750 745 740 735 730 725

1210	1212	1214	1216	1218	1220	1222	1224	1225
751.04	753.26	752.98	752.70	752.41	752.10	751.78	751.45	751.11
750.75	750.59	750.42	750.17	749.99	749.63	749.25	748.91	748.46
750.40	750.02	749.64	749.24	748.83	748.41	747.98	747.54	747.09
748.12	747.73	747.43	747.07	746.70	746.31	745.92	745.48	745.15
746.65	746.20	745.75	745.31	744.86	744.41	743.96	743.52	743.09
744.70	744.34	743.92	743.61	743.25	742.88	742.53	742.17	741.75
742.66	742.24	741.83	741.42	741.03	740.64	740.26	739.88	739.49
741.35	741.02	740.72	740.38	740.02	739.57	739.08	738.58	738.31
739.11	738.73	738.34	737.96	737.58	737.20	736.81	736.43	736.05
737.99	737.65	737.28	736.90	736.52	736.10	735.75	735.37	734.92
735.66	735.28	734.90	734.52	734.13	733.75	733.37	732.98	732.60
734.51	734.19	733.84	733.45	733.05	732.65	732.31	731.86	731.50
732.22	731.83	731.45	731.07	730.69	730.30	729.92		
731.19	730.89	730.54	730.11	729.67	729.37			

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 SB	SHEET 276 E

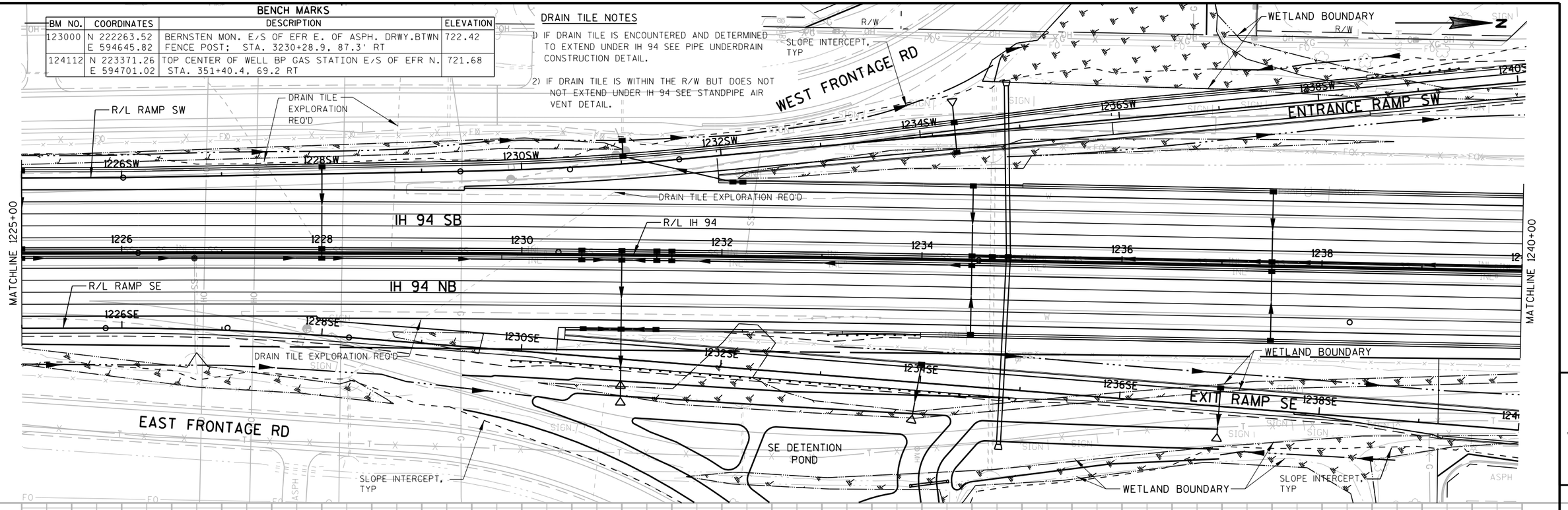
BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY.BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

DRAIN TILE NOTES

1) IF DRAIN TILE IS ENCOUNTERED AND DETERMINED TO EXTEND UNDER IH 94 SEE PIPE UNDERDRAIN CONSTRUCTION DETAIL.

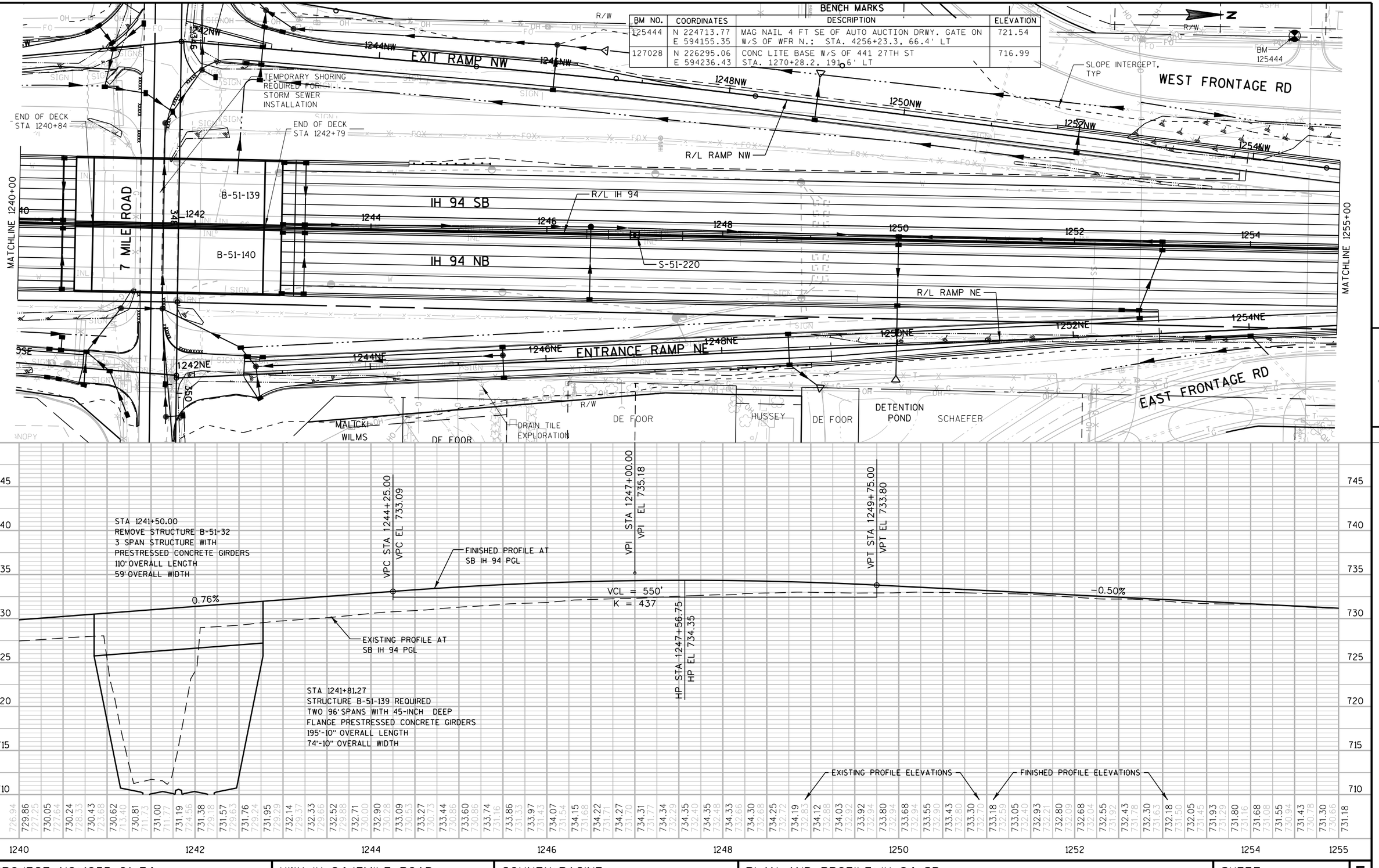
2) IF DRAIN TILE IS WITHIN THE R/W BUT DOES NOT NOT EXTEND UNDER IH 94 SEE STANDPIPE AIR VENT DETAIL.



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 SB	SHEET 277 E

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99



PROJECT NO: 1035-01-74	HWY: IH 94/7MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 SB	SHEET 278	E

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99

WEST FRONTAGE RD

EAST FRONTAGE RD

R/W

WISCONSIN SERVICES CORP

WISCONSIN SERVICES CORP

R/W

VALENTI ANTIQUES

BM 127028

SLOPE INTERCEPT, TYP

S-51-22

R/L RAMP NW

R/L IH 94

R/L RAMP NE

MATCHLINE 1255+00

1256NW 1258NW 1260NW 1262NW 1264NW

1256 1258 1260 1262 1264 1266 1268 1270

1256NE 1258NE 1260NE 1262NE 1264NE

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
MATCH PROJECT
I.D. 1035-01-82

IH 94 SB

IH 94 NB

GIGSTEAD R/W

GIGSTEAD

SHIRIKIN TRUST

SHIRIKIN TRUST

R/W

RACINE CO

KELEPOURIS

5

5

745 740 735 730 725 720 715 710

END PROJECT
I.D. 1035-01-74
STA 1268+00.00
= MATCH PROJECT
I.D. 1035-01-82

FINISHED PROFILE AT SB IH 94 PGL

-0.50%

EXISTING PROFILE AT SB IH 94 PGL

TO BE CONSTRUCTED BY OTHERS

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

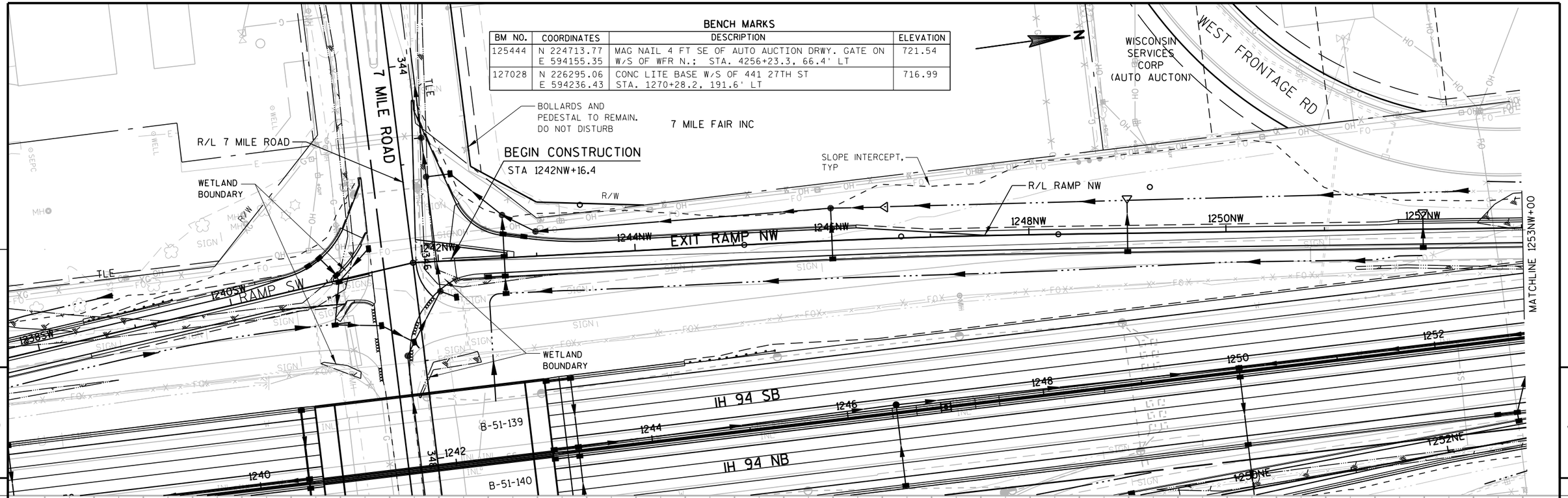
730.66 731.18 730.42 731.05 730.37 730.93 730.31 730.80 730.19 730.68 730.06 730.55 729.96 730.43 729.81 730.30 729.68 730.18 729.56 730.05 729.37 729.93 729.12 729.80 728.95 729.68 728.93 729.55 728.84 729.43 728.64 729.30 728.56 729.18 728.49 729.05 728.41 728.93 728.29 728.80 728.22 728.68 728.07 728.55 727.95 728.43 727.85 728.30 727.75 728.18 727.61 728.05 727.52 727.93 727.44 727.80 727.29 727.68 727.19 727.55 727.05 727.43 726.94 727.30 726.83 727.18 726.72 727.05 726.56 726.93 726.38 726.80 726.68 726.68 726.05 726.55 725.78 726.43 725.67 726.30 725.55 726.18 725.44 726.05 725.27 725.93 725.24 725.80 725.09 725.68 724.95 725.55 724.84 725.43 724.75 725.30 724.66 725.18 724.54 725.05 724.35 724.93 724.19 724.80 724.09 724.68 724.01 724.55 723.90 724.43 723.75 724.30 723.60 724.18 723.36 724.05 723.37 723.93 723.28 723.80 723.18 723.68

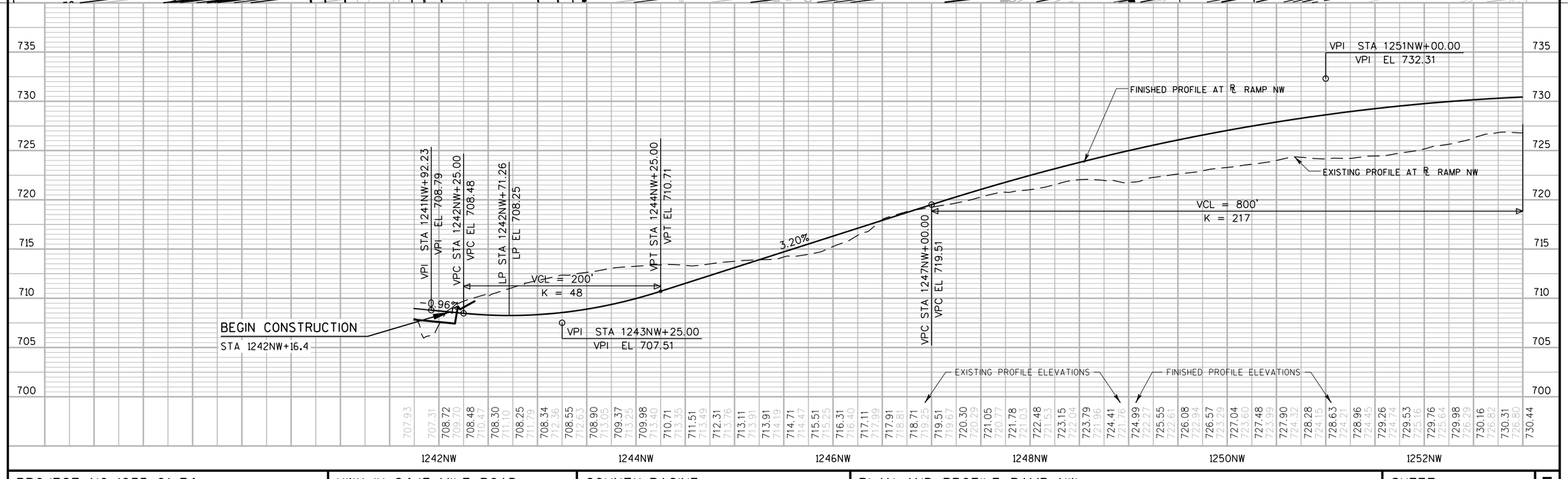
1255 1256 1258 1260 1262 1264 1266 1268 1270

PROJECT NO: 1035-01-74	HWY: IH 94/7MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: IH 94 SB	SHEET 279	E

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99





PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: RAMP NW	SHEET 280	E

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99

WISCONSIN SERVICES CORP

BM 125444

WEST FRONTAGE RD

EAST FRONTAGE RD

MATCHLINE 1253NW+00

EXIT RAMP NW

R/L RAMP NW

R/L RAMP NE

END CONSTRUCTION
STA 1264NW+00.0

SLOPE INTERCEPT, TYP

IH 94 SB

IH 94 NB

1254NW 1256NW 1258NW 1260NW 1262NW 1264NW

1254 1256 1258 1260 1262 1264 1266 1268

1254NE 1256NE 1258NE 1260NE 1262NE 1264NE

HP STA 1253NW+95.94
HP EL 730.65

VPT STA 1255NW+00.00
VPT EL 730.40

VPI STA 1256NW+00.00 VPI EL 729.92
VPI STA 1256NW+25.00 VPI EL 729.81
VPI STA 1256NW+50.00 VPI EL 729.73
VPI STA 1256NW+75.00 VPI EL 729.66
VPI STA 1257NW+00.00 VPI EL 729.58
VPI STA 1257NW+25.00 VPI EL 729.49
VPI STA 1257NW+50.00 VPI EL 729.38
VPI STA 1257NW+75.00 VPI EL 729.34
VPI STA 1258NW+00.00 VPI EL 729.33
VPI STA 1258NW+25.00 VPI EL 729.32

VPI STA 1264NW+00.00
VPI EL 726.44

-0.48% -0.45% -0.28% -0.39% -0.17% -0.06% -0.50%
-0.30% -0.32% -0.41% -0.04%

VCL = 800'
K = 217

EXISTING PROFILE AT ℄ RAMP NW

FINISHED PROFILE AT ℄ RAMP NW & IH 94

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

1253NW	1254NW	1256NW	1258NW	1260NW	1262NW	1264NW
EXISTING	730.44	730.04	729.73	729.07	728.82	728.69	728.44	728.32	728.19	728.06	727.94	727.81	727.69	727.56	727.44	727.31	727.19	727.06	726.94	726.81	726.69	726.56	726.44
FINISHED	730.53	730.16	729.92	729.81	729.66	729.58	729.49	729.38	729.34	729.33	729.32	729.19	729.07	728.94	728.82	728.69	728.57	728.44	728.32	728.19	728.06	727.94	727.81	727.69	727.56	727.44	727.31	727.19	727.06	726.94	726.81	726.69	726.56	726.44

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: RAMP NW	SHEET 281 E

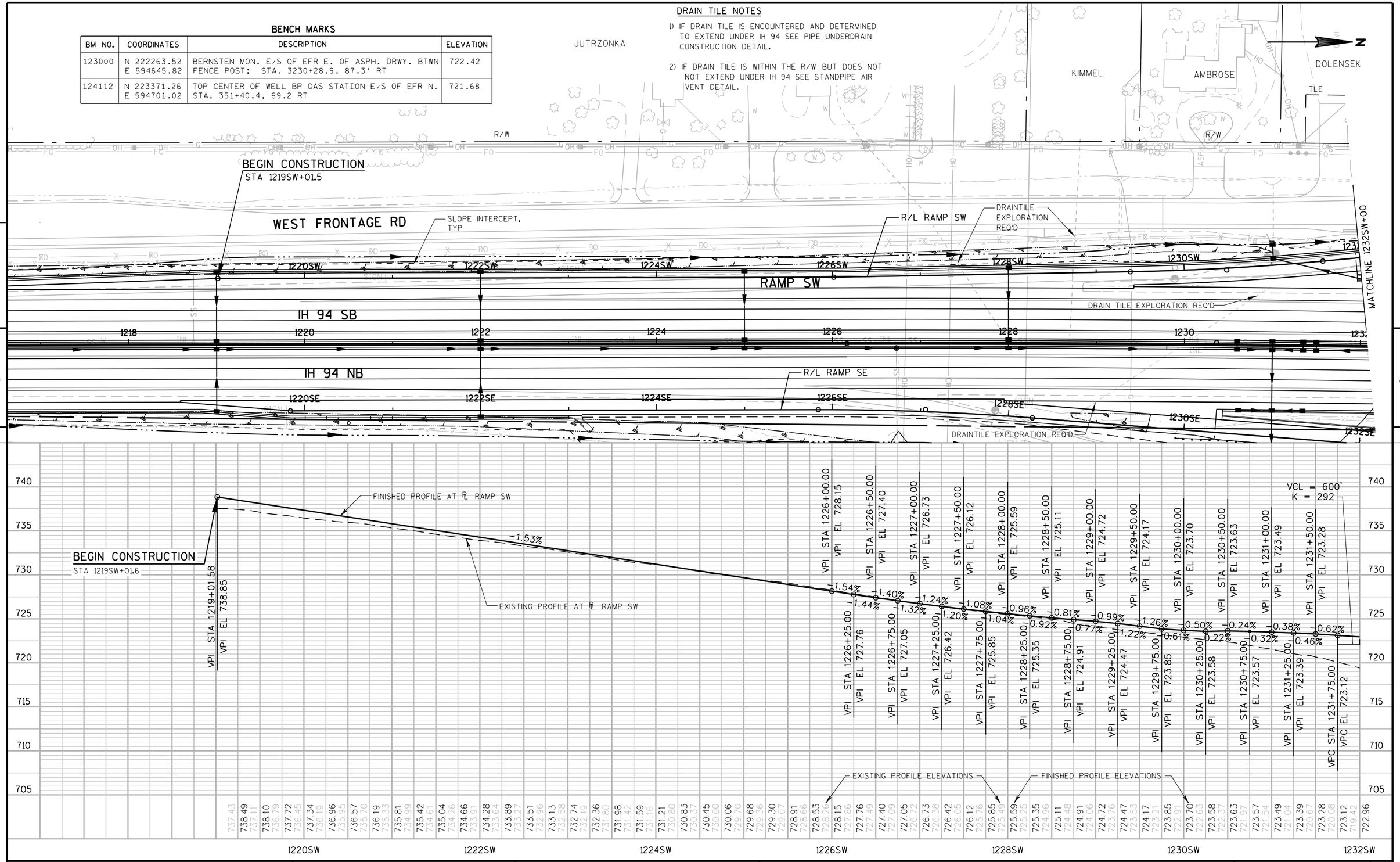
BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

DRAIN TILE NOTES

1) IF DRAIN TILE IS ENCOUNTERED AND DETERMINED TO EXTEND UNDER IH 94 SEE PIPE UNDERDRAIN CONSTRUCTION DETAIL.

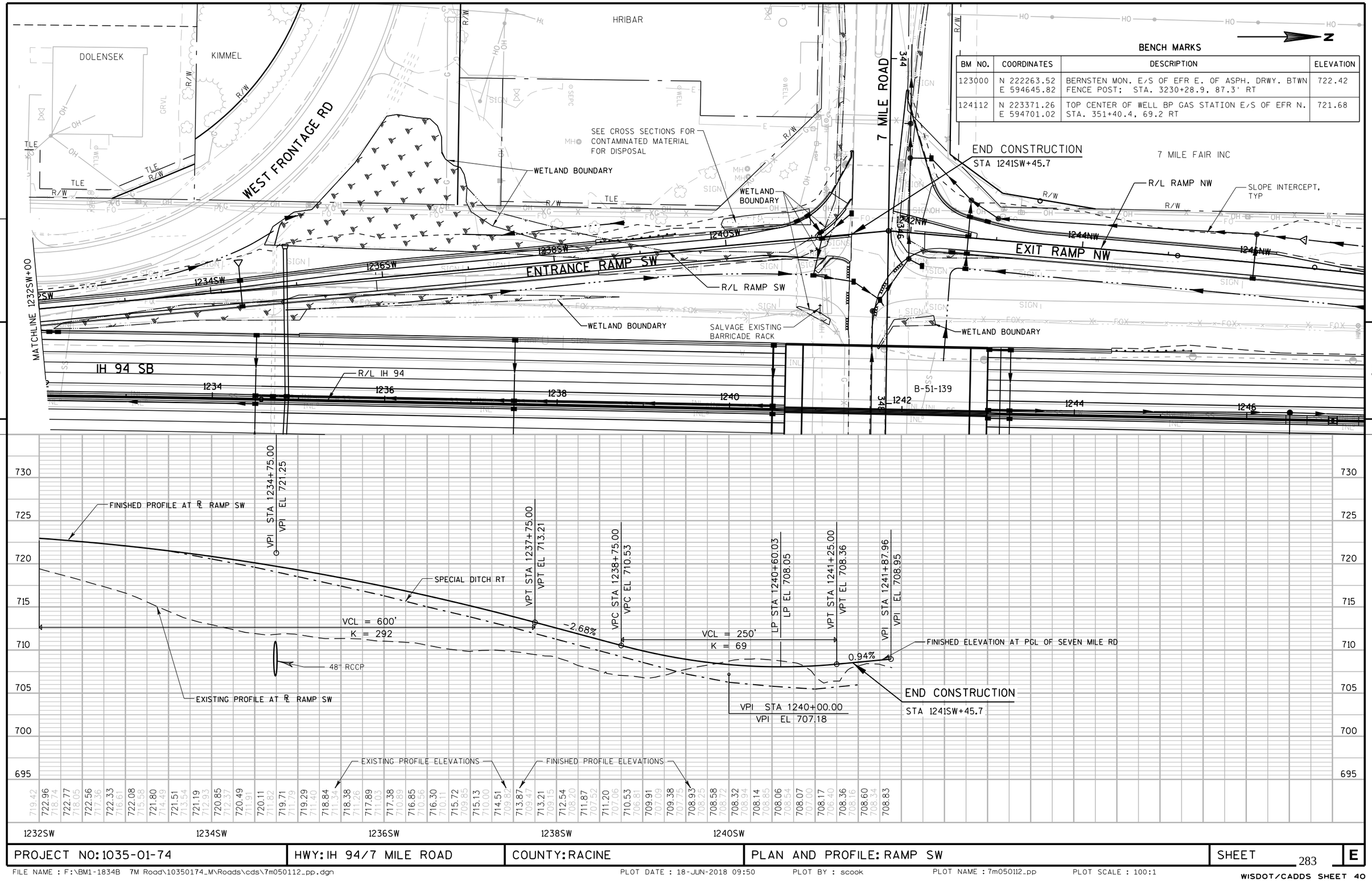
2) IF DRAIN TILE IS WITHIN THE R/W BUT DOES NOT NOT EXTEND UNDER IH 94 SEE STANDPIPE AIR VENT DETAIL.



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: RAMP SW	SHEET 282	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m050111_pp.dgn PLOT DATE : 18-JUN-2018 09:50 PLOT BY : scook PLOT NAME : 7m050111_pp PLOT SCALE : 100:1

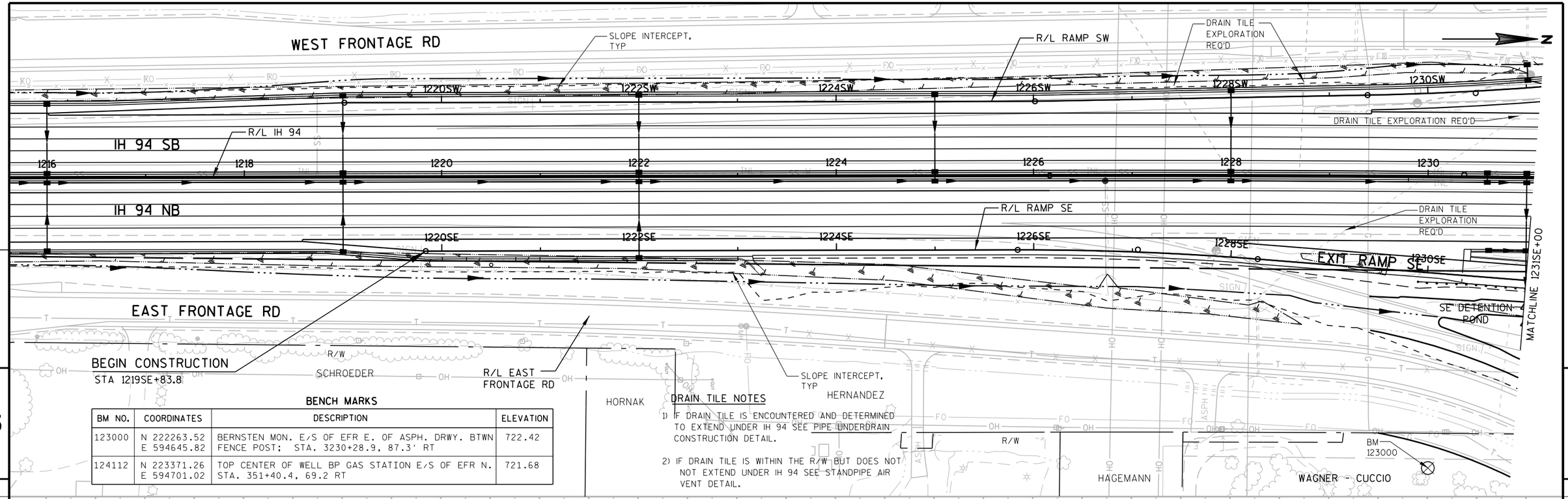
WISDOT/CADDS SHEET 40



BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

| | | |



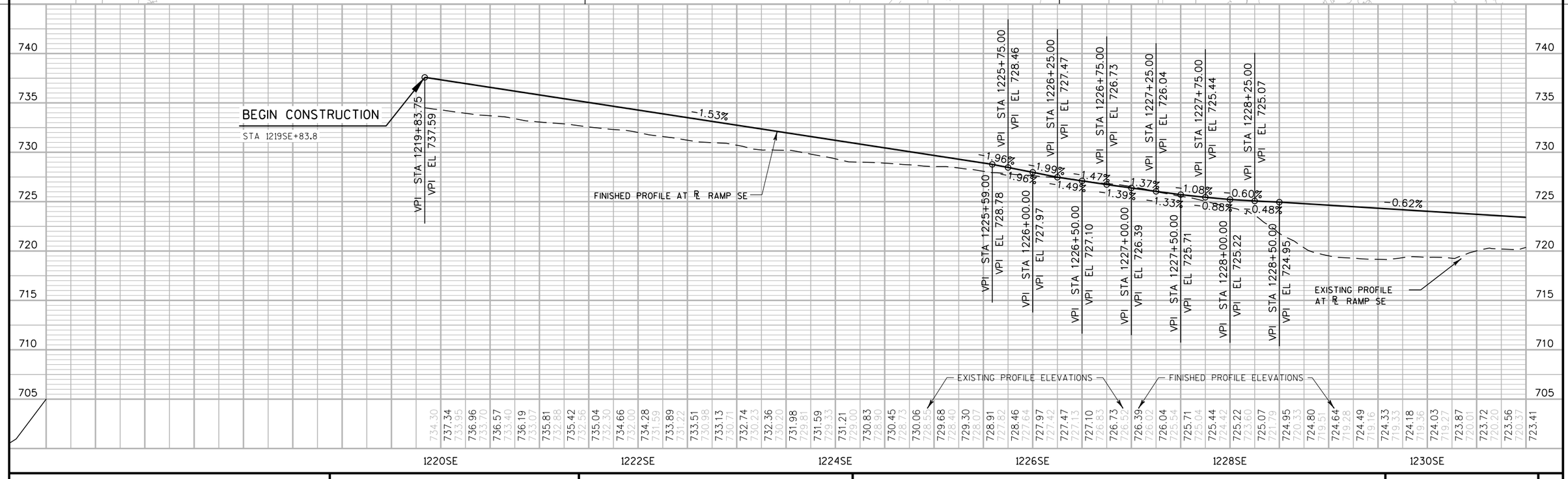
BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

DRAIN TILE NOTES

1) IF DRAIN TILE IS ENCOUNTERED AND DETERMINED TO EXTEND UNDER IH 94 SEE PIPE UNDERDRAIN CONSTRUCTION DETAIL.

2) IF DRAIN TILE IS WITHIN THE R/W BUT DOES NOT NOT EXTEND UNDER IH 94 SEE STANDPIPE AIR VENT DETAIL.



PROJECT NO: 1035-01-74	HWY: IH 94/7MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: RAMP SE	SHEET 284 E

IH 94 SB

IH 94 NB

R/L IH 94

R/L RAMP SE

EXIT RAMP SE

R/L RAMP NE

1232 1234 1236 1238 1240 1242 1244 1246

1232SE 1234SE 1236SE 1238SE 1240SE

1242NE 1244NE 1246NE

MATCHLINE 1231SE+00

SE DETENTION POND

WETLAND BOUNDARY

SLOPE INTERCEPT, TYP

EAST FRONTAGE RD

WAGNER - CUCCIO

CONTAMINATED MATERIAL FOR REUSE. SEE CROSS SECTIONS

FILLER CAPS

JJL LLC

BM 124112

7 MILE ROAD

B-51-139

B-51-140

END CONSTRUCTION
STA 1241SE+35.9

MALICKI-WILMS

BLDG

DE FOOR

DRAIN TILE EXPLORATION REQ'D

TLE

R/W

ASPH

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

730 725 720 715 710 705 700 695

FINISHED PROFILE AT ℄ RAMP SE

EXISTING PROFILE AT ℄ RAMP SE

-0.62%

-1.40%

VPC STA 1233+50.00
VPC EL 721.87

VPI STA 1234+50.00
VPI EL 721.25

VCL = 200'
K = 255

VPT STA 1235+50.00
VPT EL 719.85

48" RCCP

VPC STA 1239+50.00
VPC EL 714.25

VPI STA 1240+25.00
VPI EL 713.20

VCL = 150'
K = 59

LP STA 1240+32.38
LP EL 713.67

VPC STA 1240SE+76.00
VPC EL 713.84

VPI STA 1240+95.96
VPI EL 714.19

VCL = 40'
K = 13

VPT STA 1241+00.00
VPT EL 714.06

VPI STA 1241+15.91
VPT EL 715.17

VPI STA 1241+38.87
VPI EL 716.29

VPI STA 1241+50.97
VPI EL 714.65

VPI STA 1241+65.00
VPI EL 714.82

1.89%

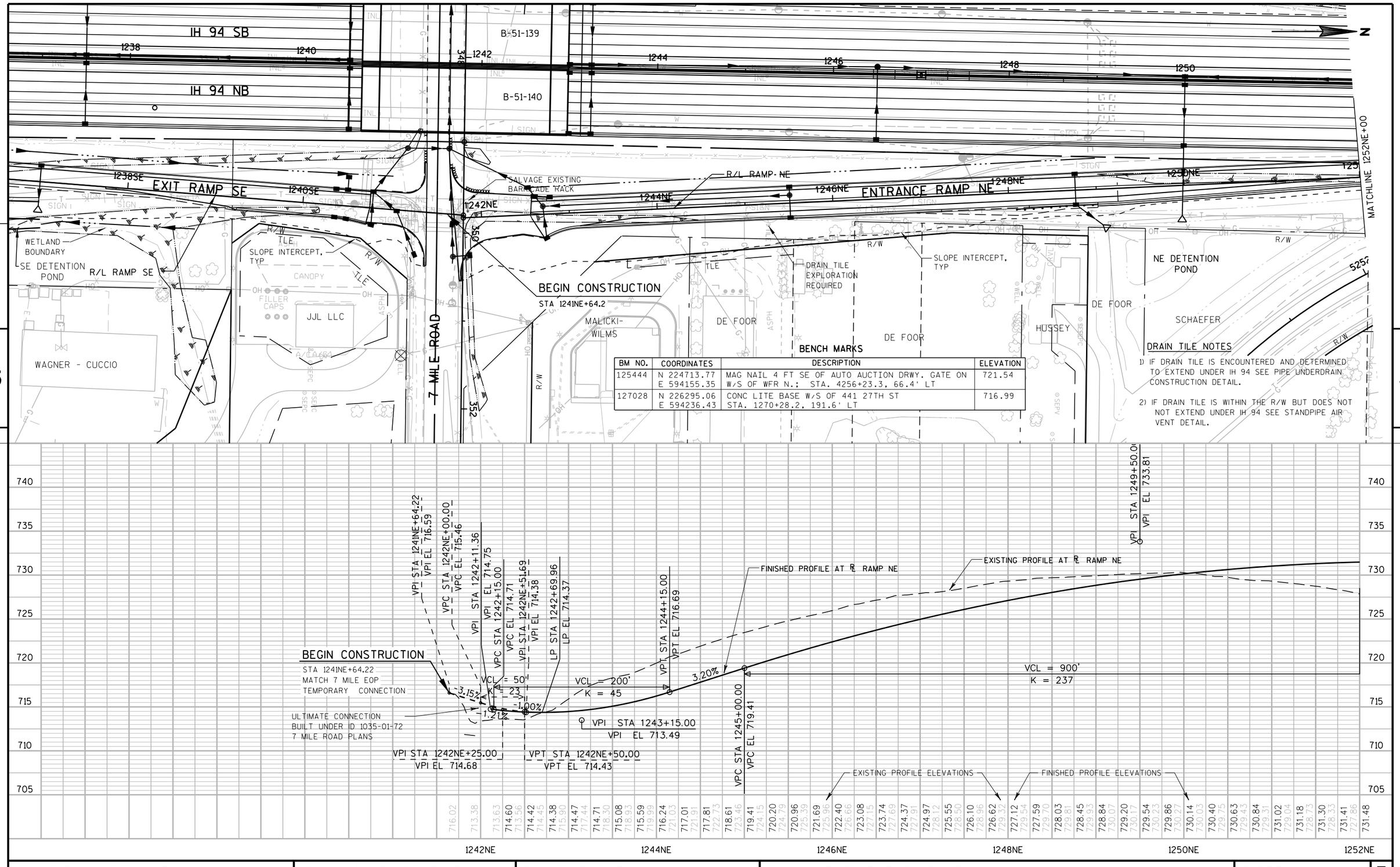
1.21%

1.15%

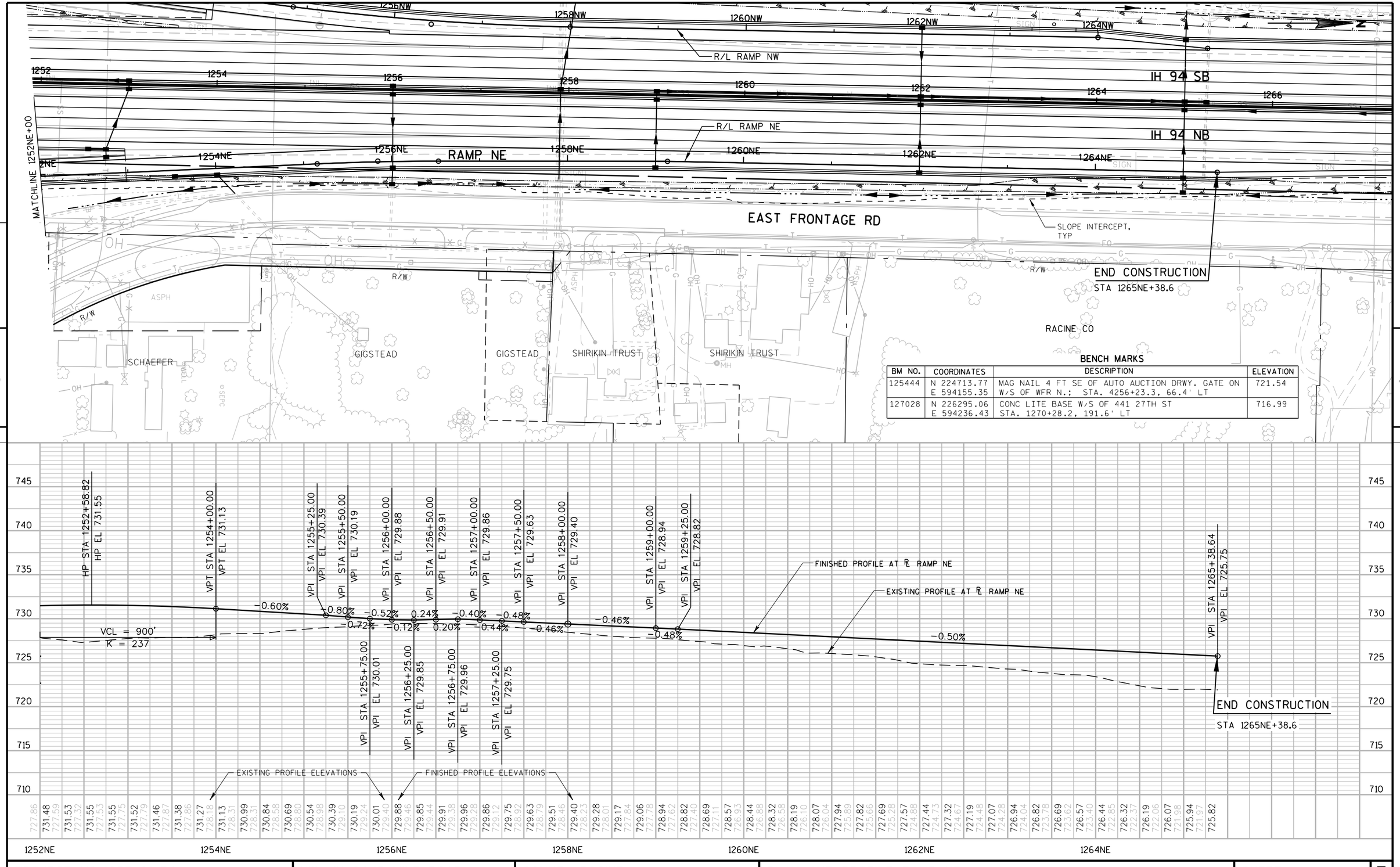
END CONSTRUCTION
STA 1241SE+38.8
MATCH 7 MILE EOP
TEMPORARY CONNECTION

FINAL CONNECTION TO 7 MILE RD CONSTRUCTED UNDER ID 1035-01-72

| EXISTING PROFILE ELEVATIONS | | |



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: RAMP NE	SHEET 286 E



BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54
127028	N 226295.06 E 594236.43	CONC LITE BASE W/S OF 441 27TH ST STA. 1270+28.2, 191.6' LT	716.99

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: RAMP NE	SHEET 287 E

WEST FRONTAGE RD

R/W

1222SW 1224SW 1226SW 1228SW 1230SW 1232SW

R/L RAMP SW

IH 94 SB

IH 94 NB

R/L IH 94

1222 1224 1226 1228 1230 1232 1234 1236

BEGIN CONSTRUCTION
STA 1226TSE+00.0

POB 1224TSE+00.03

N0°08'44"W

EDGE OF NB TEMPORARY WIDENING CONSTRUCTED IN STAGE 1B

CURVE TSE1

PI 1227TSE+24.88

R/L RAMP TSE

CURVE TSE2

END CONSTRUCTION
STA 1229TSE+00.0

1226TSE

1228TSE

1230TSE

N15°37'49"E

POE 1230TSE+43.74

WETLAND BOUNDARY, TYP

TEMP. EXIT RAMP SE

PC 1226TSE+00.00

PCC 1226TSE+35.49

PT 1228TSE+13.85

SLOPE INTERCEPT, TYP

EAST FRONTAGE RD

BM 123000

WAGNER - CUCCIO

HAGEMANN

R/W

BENCH MARK

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
123000	N 222263.52 E 594645.82	BERNSTEN MON. E/S OF EFR E. OF ASPH. DRWY. BTWN. FENCE POST; STA. 3230+28.9, 87.3' RT	722.42
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68

CURVE TSE1

PI = 1226+17.74
N = 221881.75
E = 594428.96
△ = 00°03'12"
D = 00°09'01"
R = 38117.69
T = 17.74
L = 35.49
E = 0.00
PC = 1226+00.00
N = 221864.01
E = 594429.01
PT = 1226+35.49
N = 221899.50
E = 594428.94

CURVE TSE2

PI = 1227+25.24
N = 221989.24
E = 594428.79
△ = 15°43'21"
D = 08°48'53"
R = 650.00
T = 89.75
L = 178.37
E = 6.17
PC = 1226+35.49
N = 221899.50
E = 594428.94
PT = 1228+13.85
N = 222075.67
E = 594452.97

FINISHED PROFILE AT NB TEMPORARY WIDENING

FINISHED PROFILE AT ℄ TEMPORARY SE RAMP

VPI STA 1226TSE+00.00
VPI EL 728.00

VPI STA 1227TSE+25.00
VPI EL 726.25

VPT STA 1228TSE+25.00
VPT EL 723.20

VPI STA 1229TSE+00.00
VPI EL 720.92

1.40%

3.05%

VCL = 200'
K = 121

VPC STA 1226TSE+25.00
VPC EL 727.65

BEGIN CONSTRUCTION
STA 1226TSE+00.0

END CONSTRUCTION
STA 1229TSE+00.0

EXISTING PROFILE AT ℄ TEMPORARY SE RAMP

FINISHED PROFILE ELEVATIONS

EXISTING PROFILE ELEVATIONS

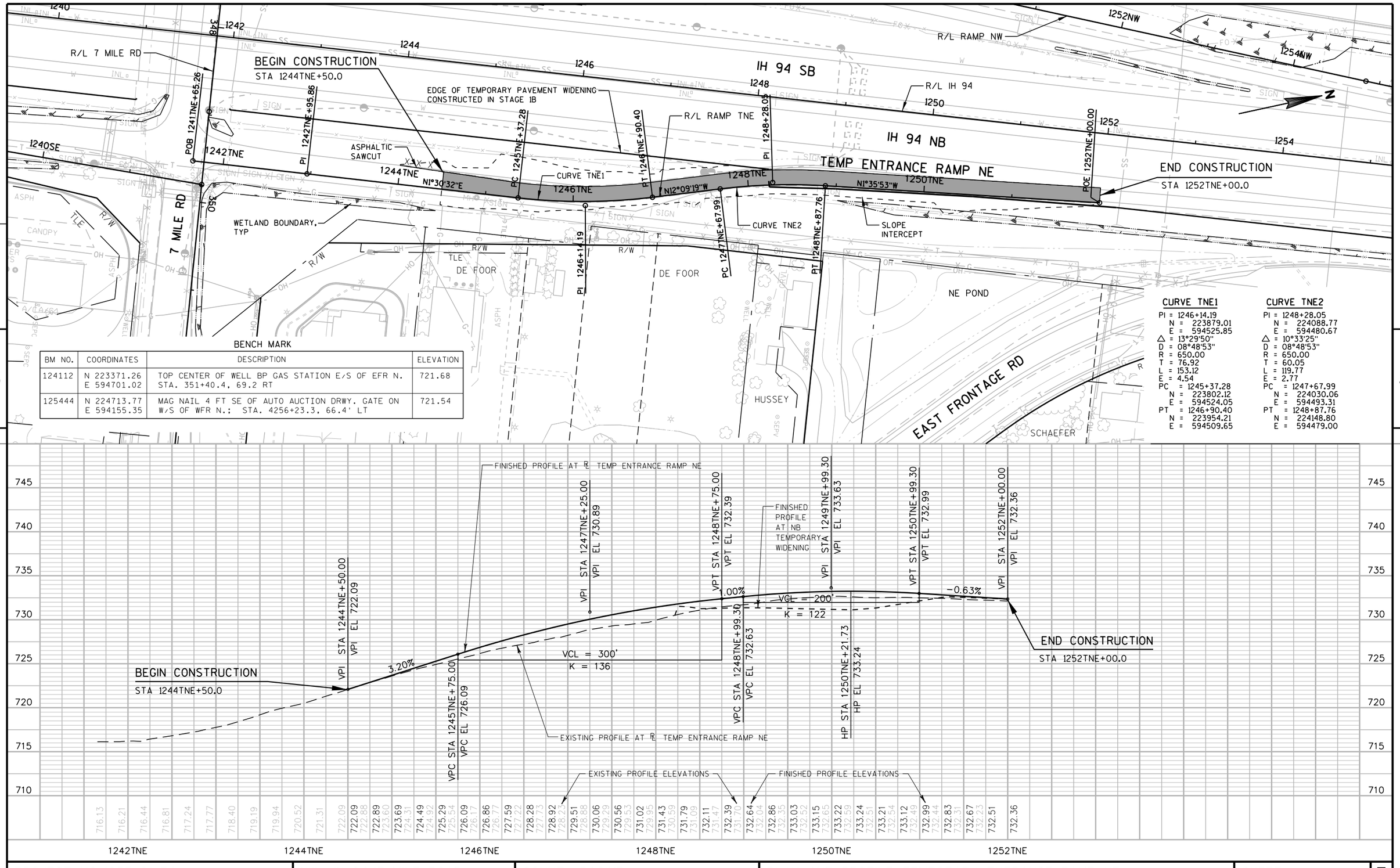
1224TSE	1226TSE	1228TSE	1230TSE
727.92	728.00	725.26	720.92
727.70	727.22	724.41	720.23
727.71	727.65	724.62	719.72
727.61	726.94	723.66	719.23
727.39	727.27	723.94	718.80
727.23	726.52	722.99	718.31
727.10	726.85	723.20	
727.10	726.23	722.27	
	726.37	722.44	
	725.64	721.60	
	725.84	721.68	
	725.09	720.92	

745 740 735 730 725 720 715 710

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: TEMPORARY EXIT RAMP SE	SHEET 288	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m050117_pp.dgn PLOT DATE : 18-JUN-2018 09:50 PLOT BY : scook PLOT NAME : 7m050117_pp PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40



BENCH MARK

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N. STA. 351+40.4, 69.2 RT	721.68
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT	721.54

CURVE TNE1
PI = 1246+14.19
N = 223879.01
E = 594525.85
△ = 13°29'50"
D = 08°48'53"
R = 650.00
T = 76.92
L = 153.12
E = 4.54
PC = 1245+37.28
N = 223802.12
E = 594524.05
PT = 1246+90.40
N = 223954.21
E = 594509.65

CURVE TNE2
PI = 1248+28.05
N = 224088.77
E = 594480.67
△ = 10°33'25"
D = 08°48'53"
R = 650.00
T = 60.05
L = 119.77
E = 2.77
PC = 1247+67.99
N = 224030.06
E = 594493.31
PT = 1248+87.76
N = 224148.80
E = 594479.00

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	PLAN AND PROFILE: TEMPORARY ENTRANCE RAMP NE	SHEET 289 E

Standard Detail Drawing List

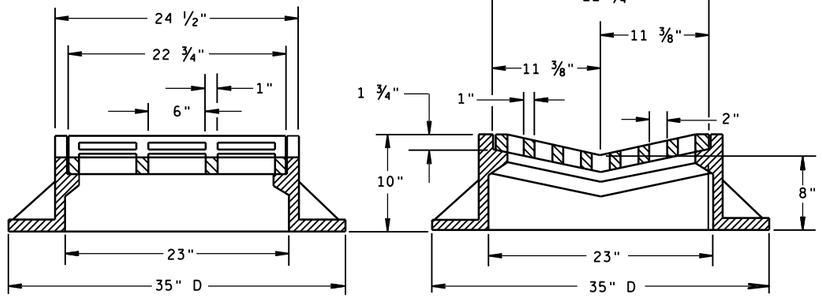
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08C09-02	INLETS MEDIAN 3 AND 4 GRATE
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
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
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09H09-02	COMMUNICATION VAULT TYPE 1
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
13A03-06	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B28-03	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE
14B32-05A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-05B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-05C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-05D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-05E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-01G	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B33-01H	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B39-01E	42-INCH SSCB TO 56-INCH SSCB HEIGHT TRANSITION
14B42-05A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

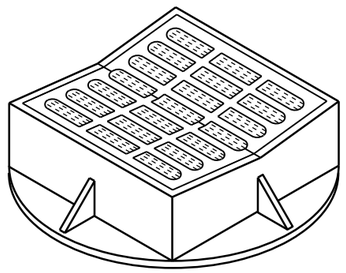
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Standard Detail Drawing List

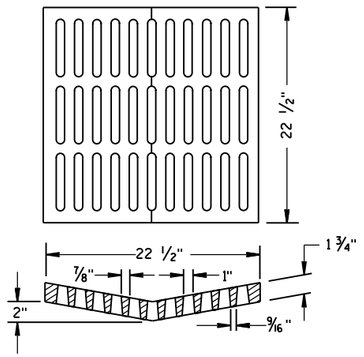
14B42-05C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-03A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	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
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-04	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C20-02	YIELD MARKING
15C31-03A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-03C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D03-04	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D13-02	TEMPORARY EMERGENCY PULLOUTS
15D15-04A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-04B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-04C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-04D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-04E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

6



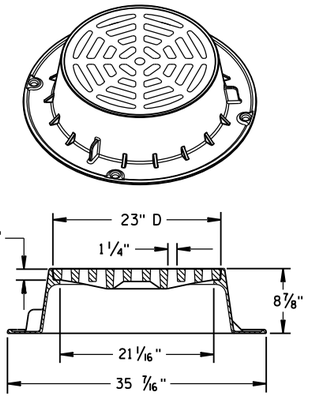


TYPE "B"



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"

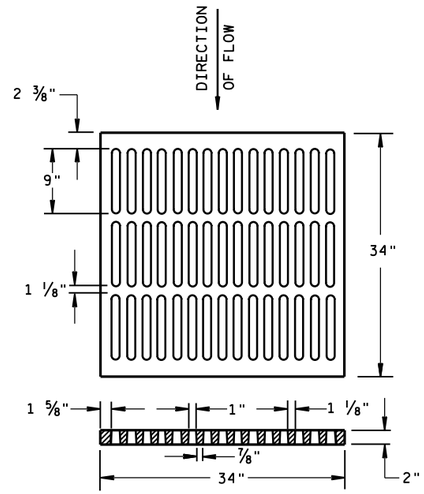
NOTE: EITHER CASTING IS ACCEPTABLE

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.

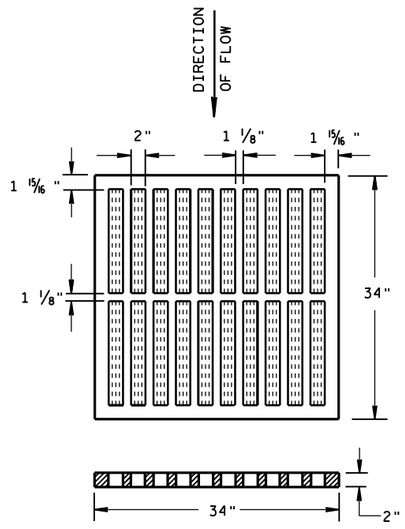
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



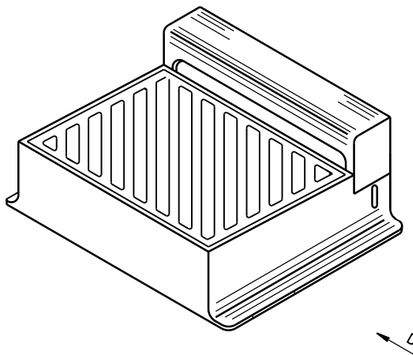
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

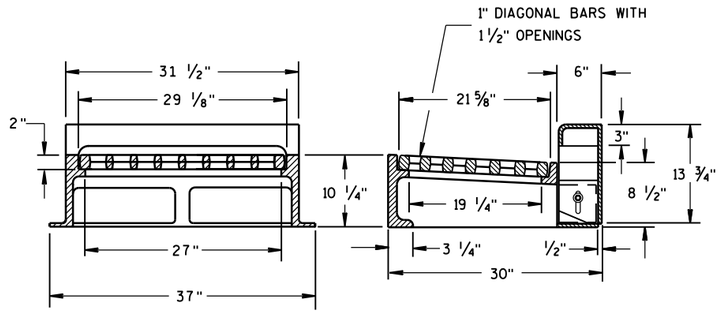


TYPE "MS"

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"

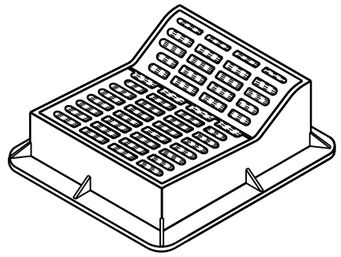
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

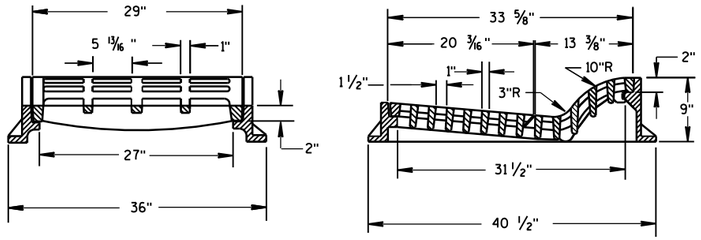
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

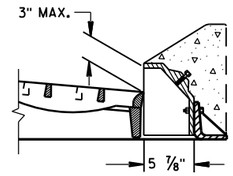
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

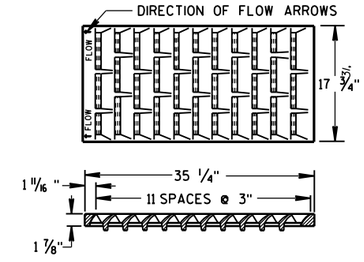
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

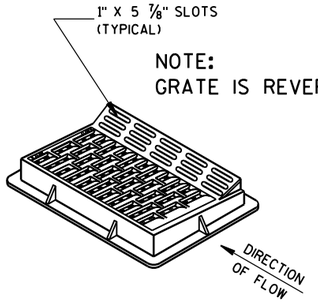
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

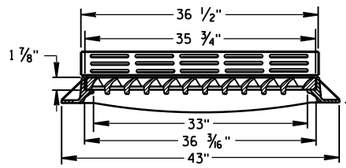
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

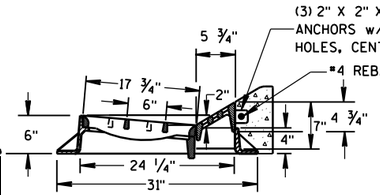
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





NOTE:
GRATE IS REVERSIBLE.

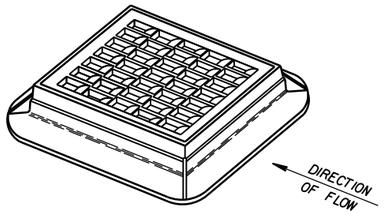


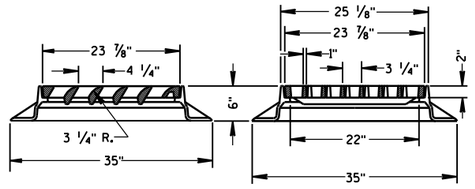


TYPE "HM"

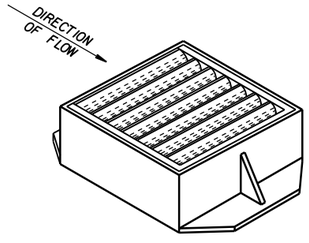
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

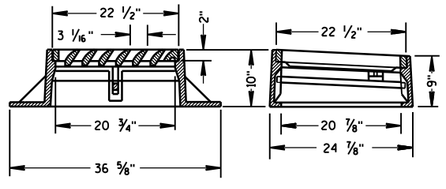
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



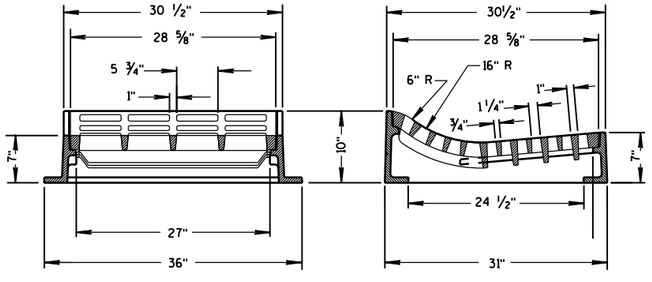


TYPE "S"



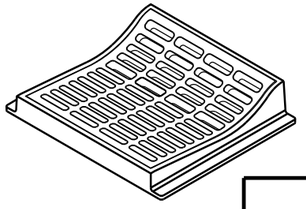


TYPE "V"



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

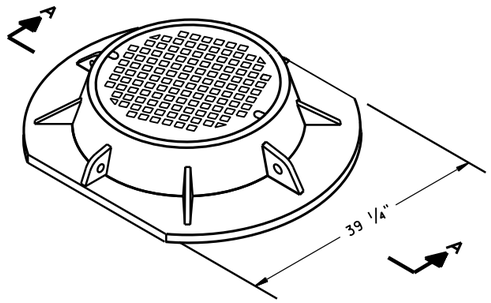
APPROVED
11/27/2013
DATE

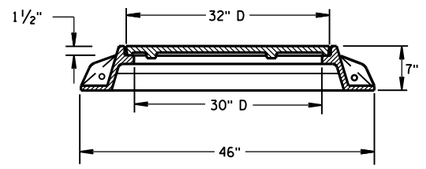
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

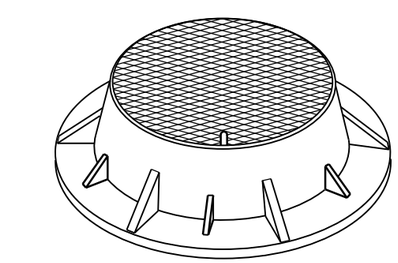
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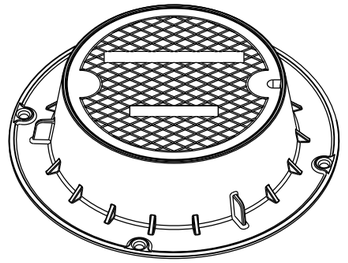
S.D.D. 8 A 5-19c

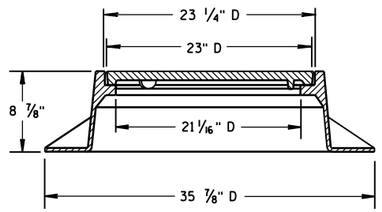


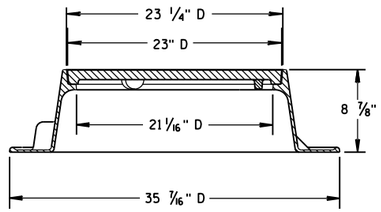


SECTION A-A
TYPE "K"









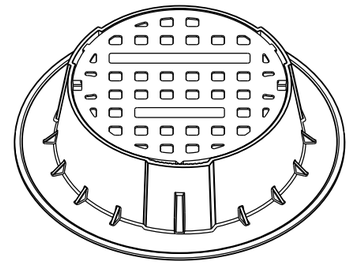
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

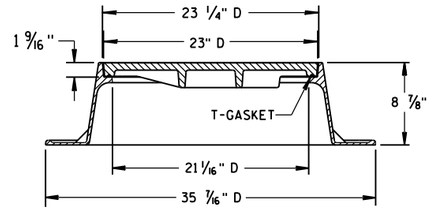
GENERAL NOTES

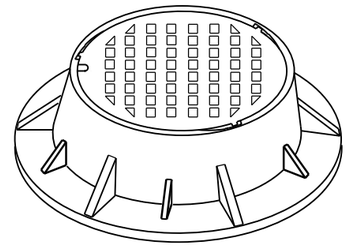
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

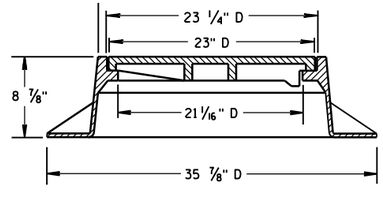
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

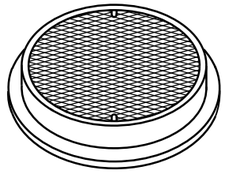


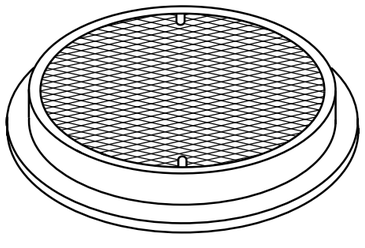


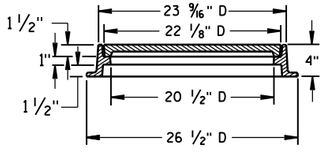




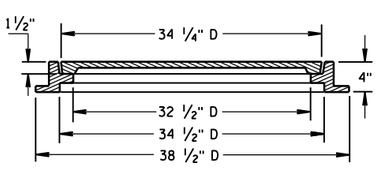
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



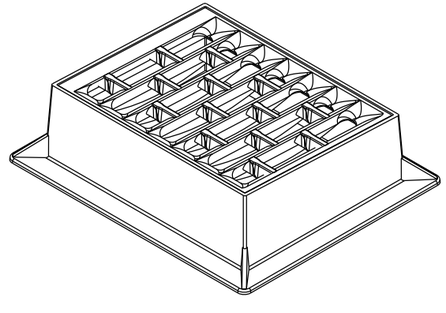


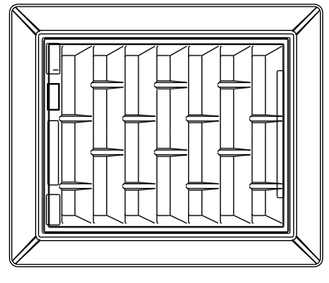


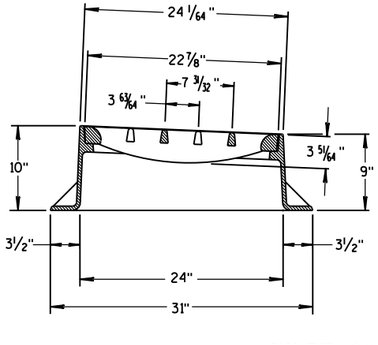
TYPE "L"

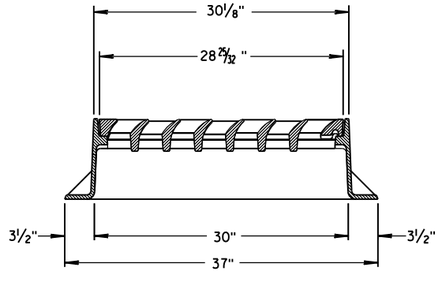


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

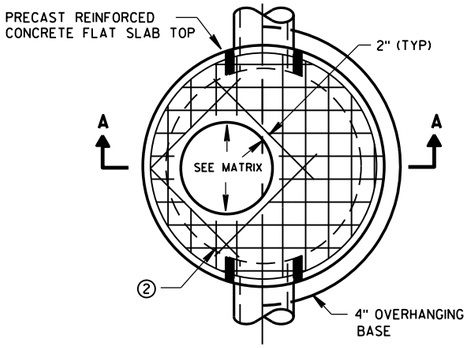
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

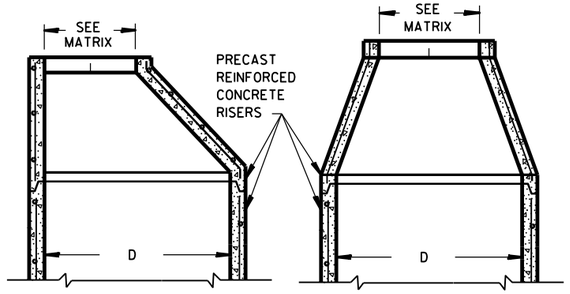
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

S.D.D. 8 A 5-19d

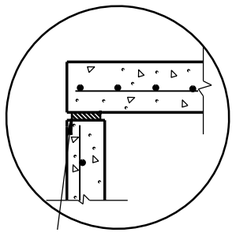


PLAN VIEW CIRCULAR OPENING

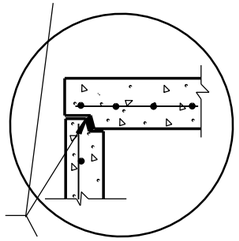


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

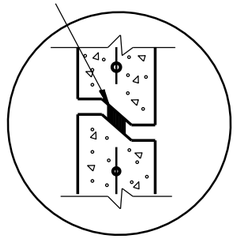


TOP WITH PLAIN END JOINT



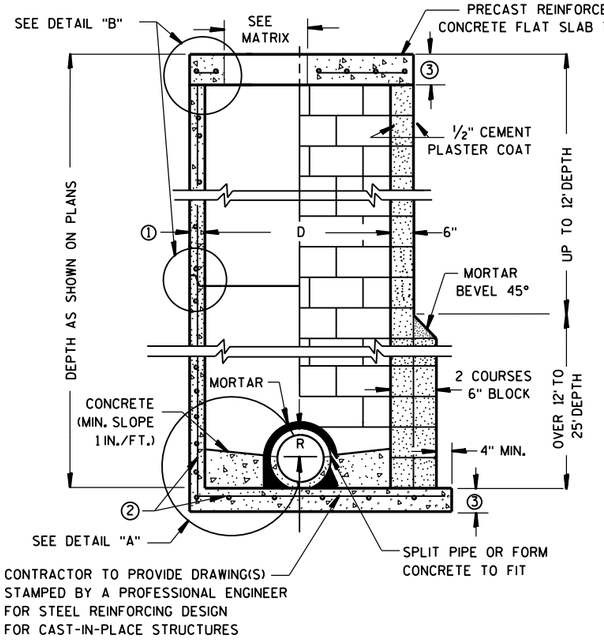
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



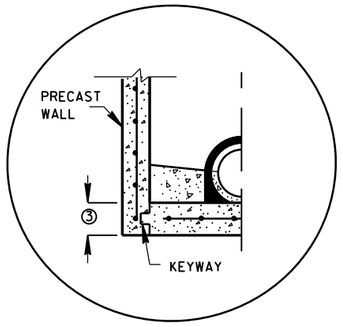
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

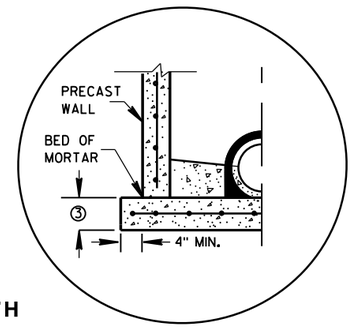


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

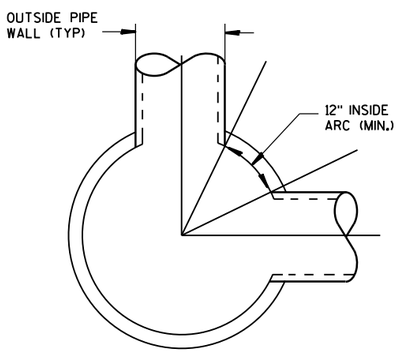


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 FOUNDATION 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.

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

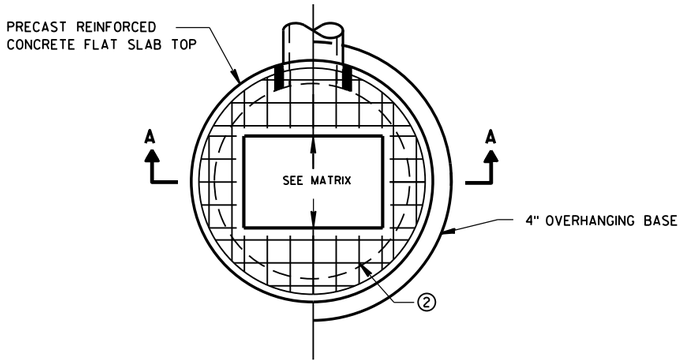
APPROVED

Sept., 2016
DATE

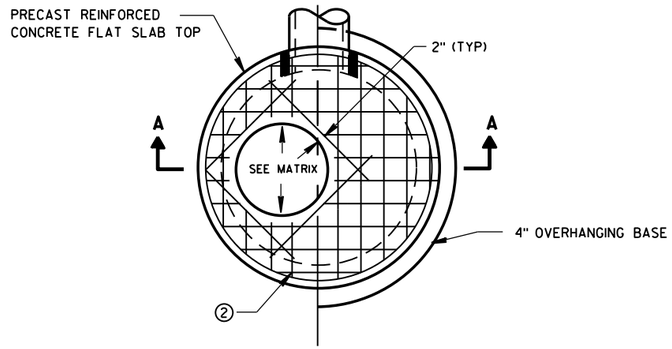
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

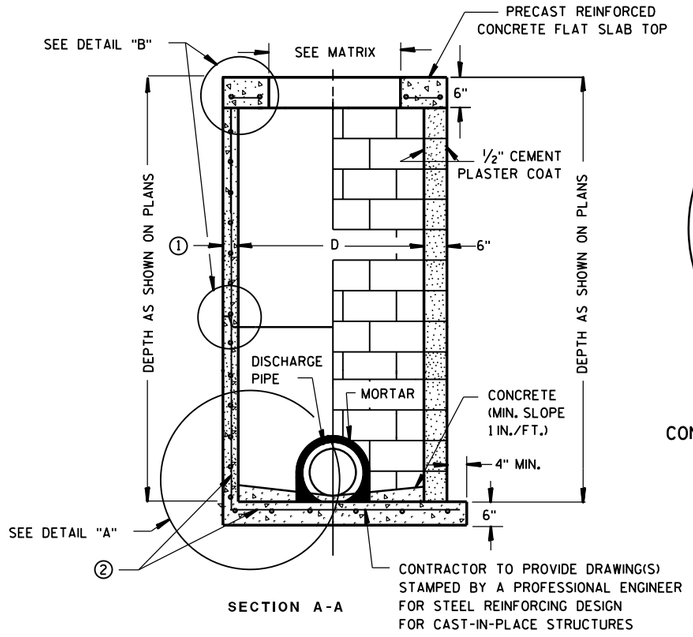
6
S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

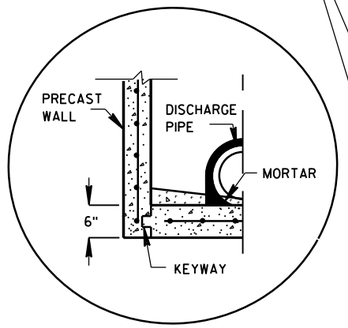


SECTION A-A

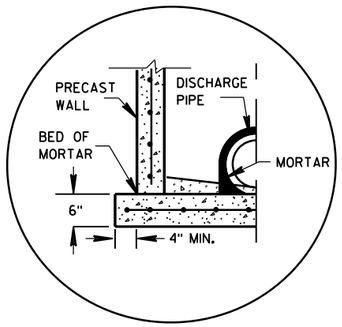
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

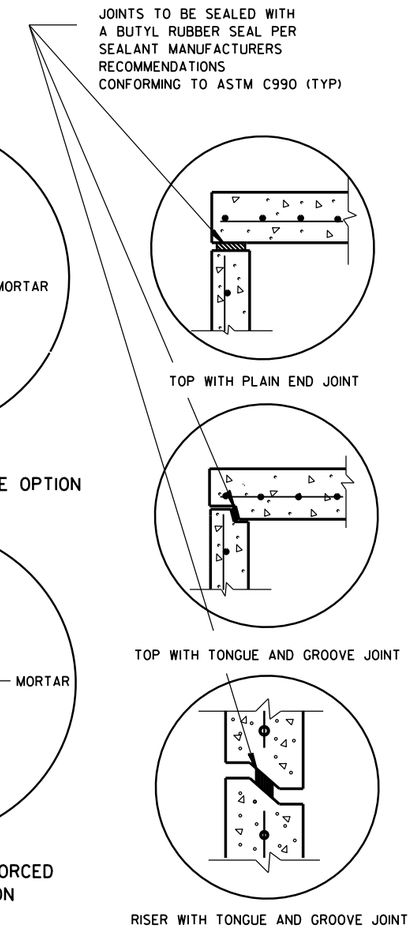


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 FOUNDATION 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.

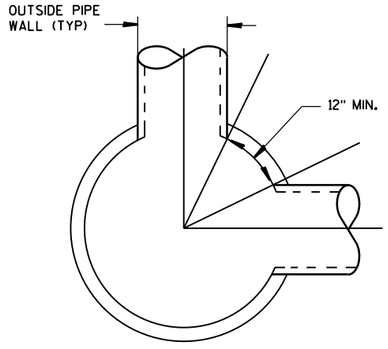
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

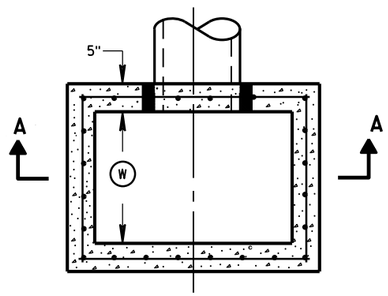
APPROVED
Sept., 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS | ENT UNIT SUPERVI
FHWA

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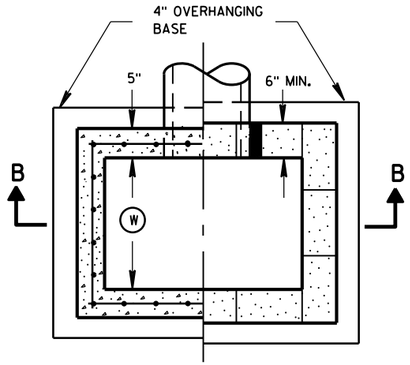
S.D.D. 8 C 6-2

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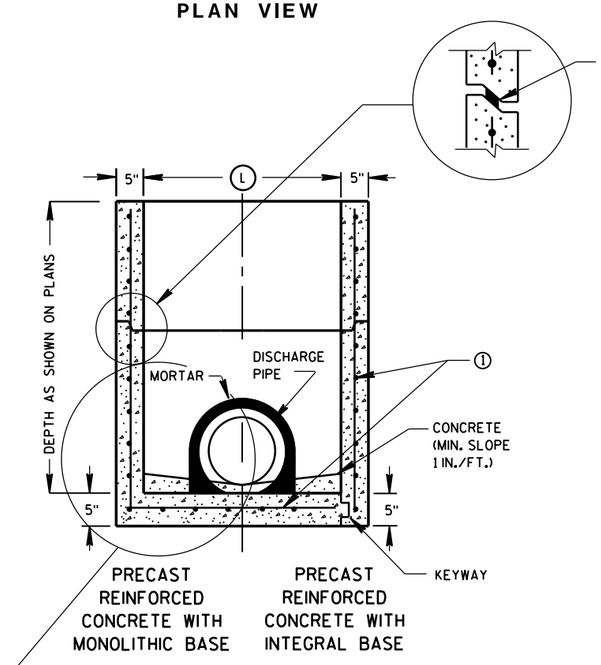
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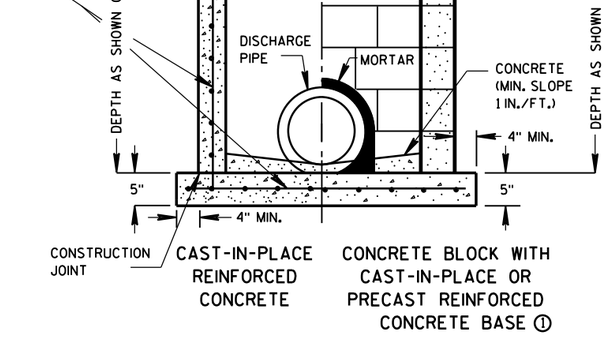
PLAN VIEW



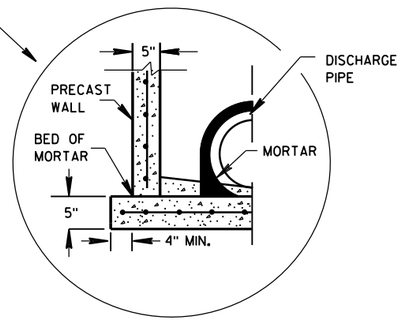
PLAN VIEW



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 FOUNDATION 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.

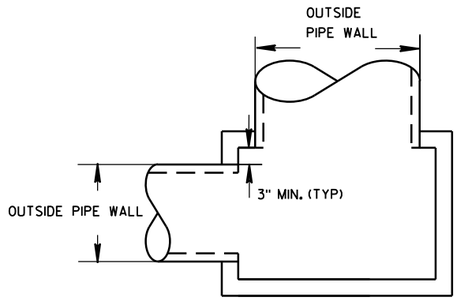
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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

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Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

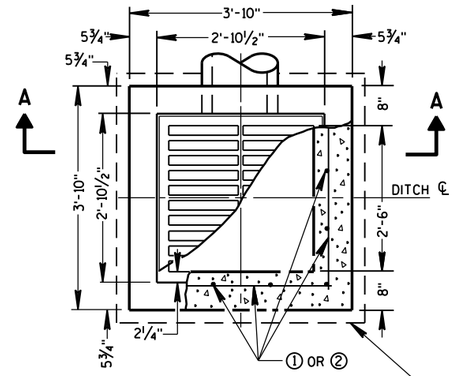
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

6

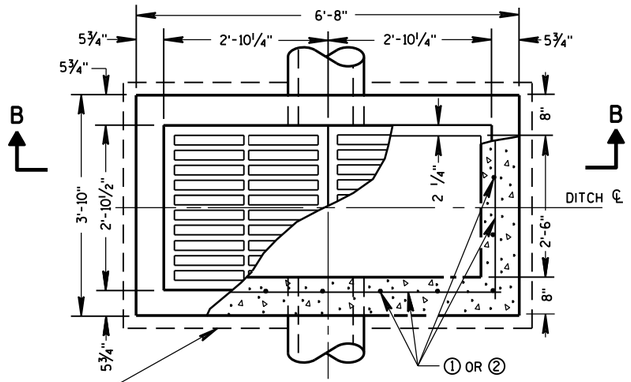
S.D.D. 8 C 7-2

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S.D.D. 8 C 7-2

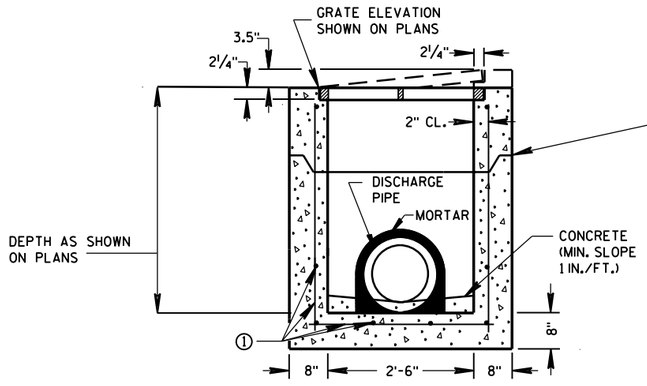


PLAN VIEW

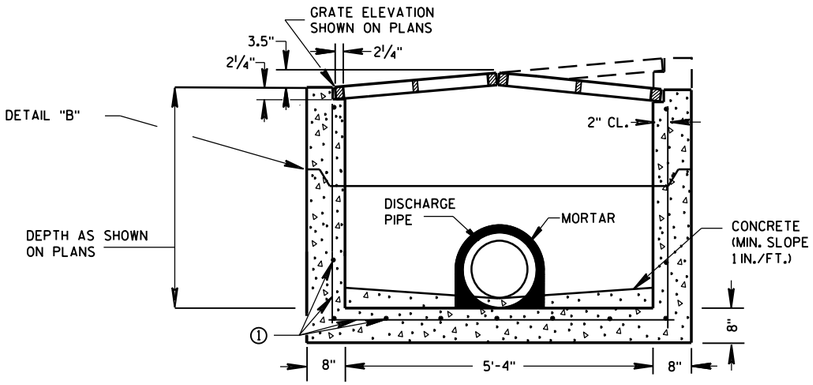


PLAN VIEW

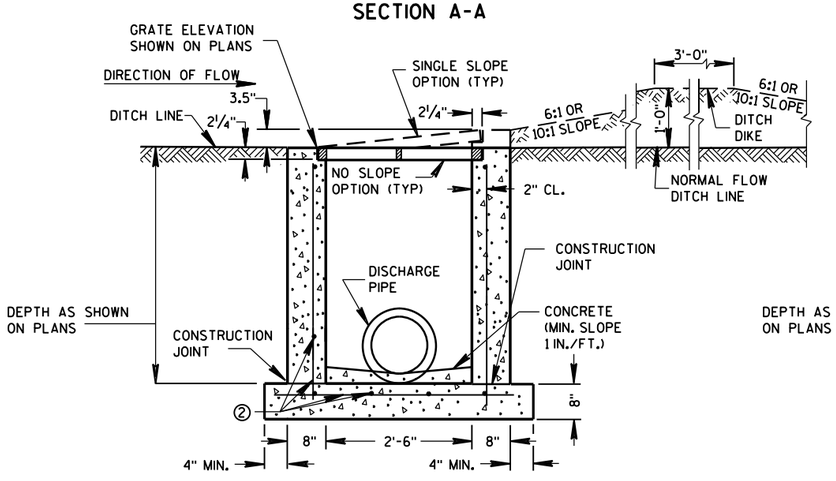
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



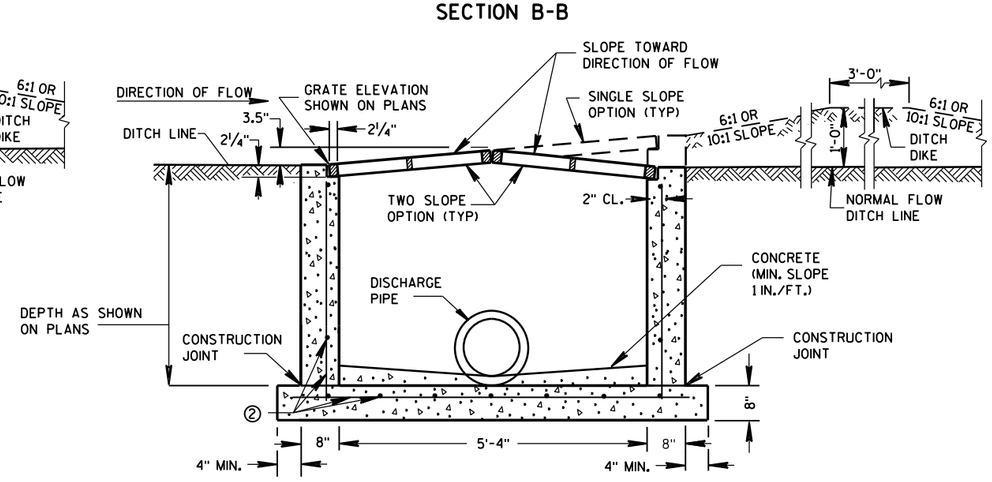
PRECAST REINFORCED CONCRETE SECTION A-A



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

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 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.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION 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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

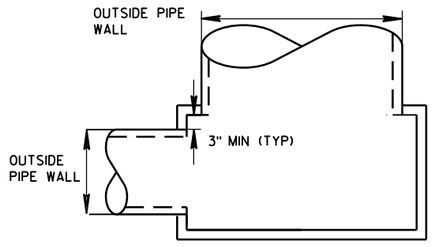
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

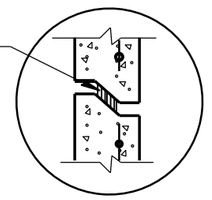
PIPE MATRIX

	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)



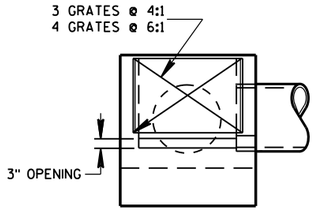
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

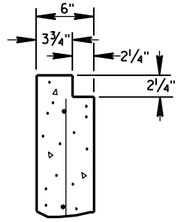
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

6
S.D.D. 8 C 8-2



SECTION B-B



SECTION C-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 INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

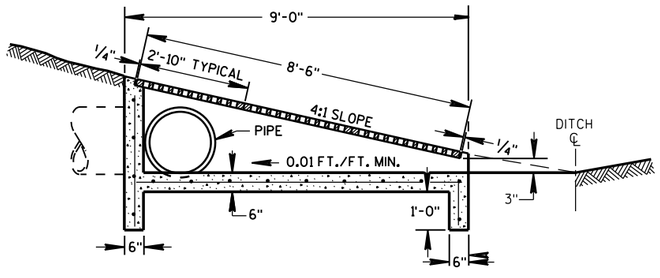
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 3G-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.

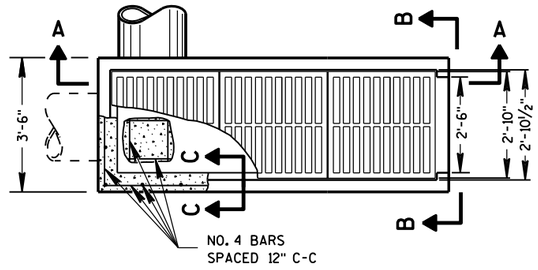
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

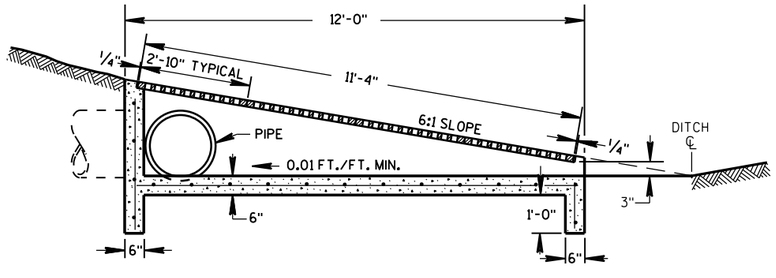


SECTION A-A

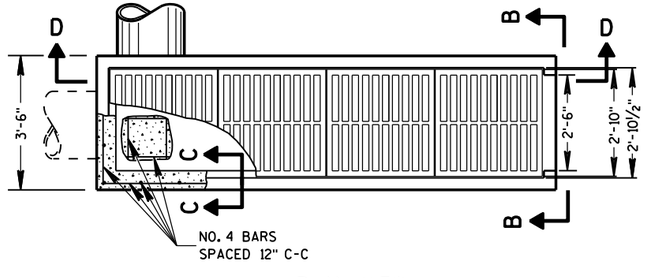


PLAN VIEW

INLETS MEDIAN 3 GRATE



SECTION D-D



PLAN VIEW

INLETS MEDIAN 4 GRATE

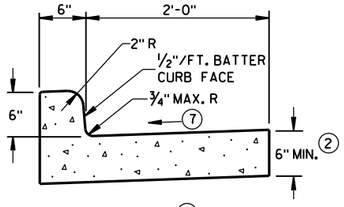
INLETS MEDIAN 3 AND 4 GRATE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2016 DATE FHWA	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER UNIT SUPERVISOR

6

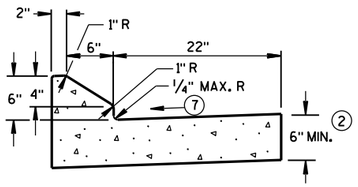
S.D.D. 8 C 9-2

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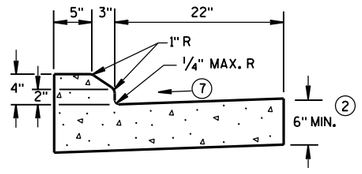
S.D.D. 8 C 9-2



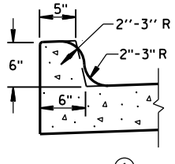
TYPES A (1) & D



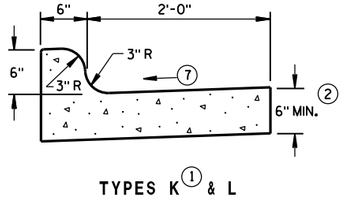
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

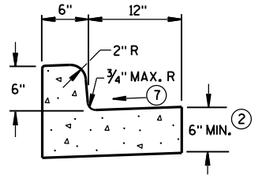


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



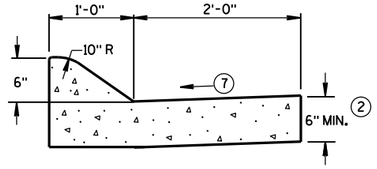
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

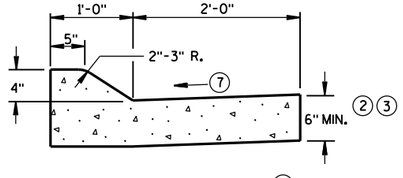


TYPES A (1) & D

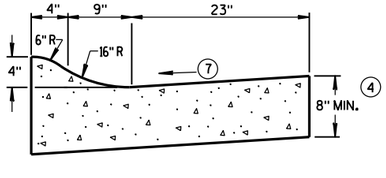
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

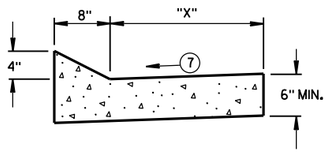


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

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.

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, R AND TBTT.

(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) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) 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.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

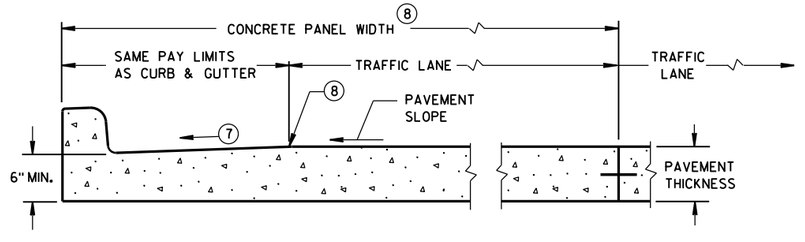
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

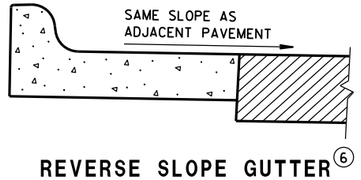
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



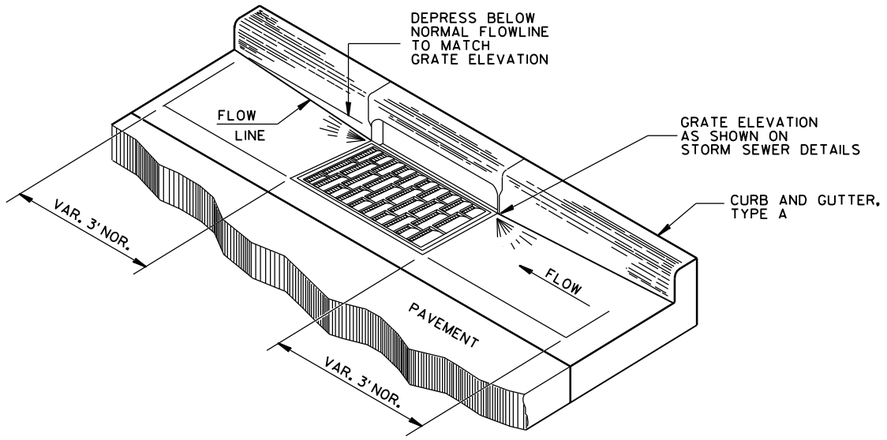
REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

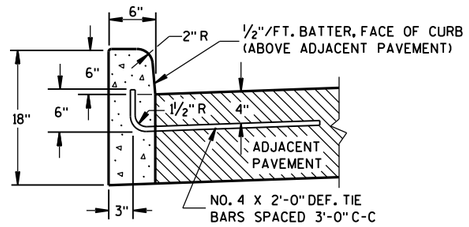
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

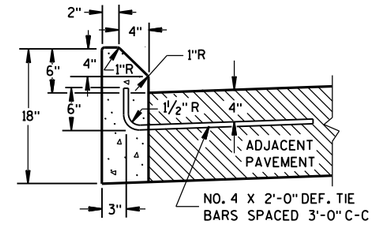
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(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.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

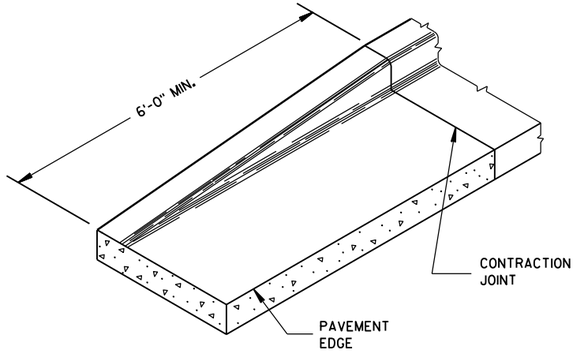


TYPES A(1) & D

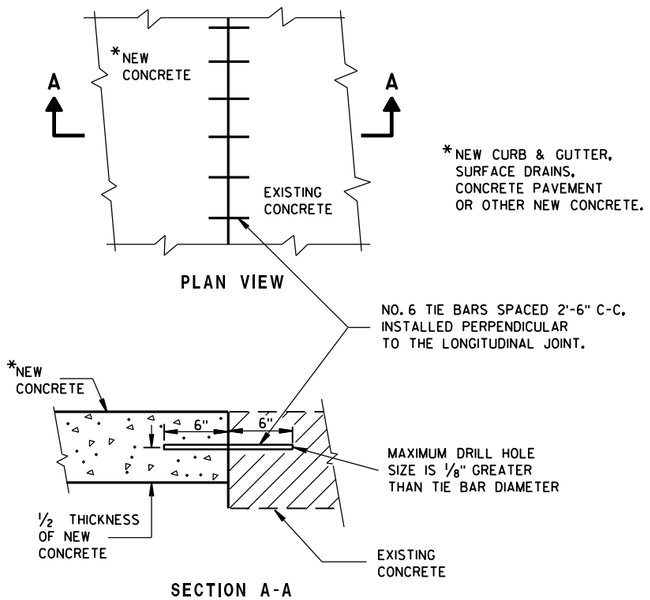


TYPES G(1) & J

CONCRETE CURB



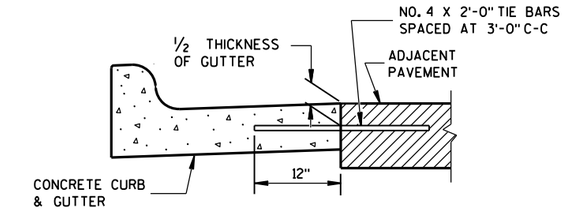
END SECTION CURB & GUTTER



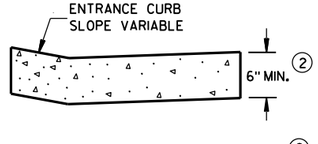
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

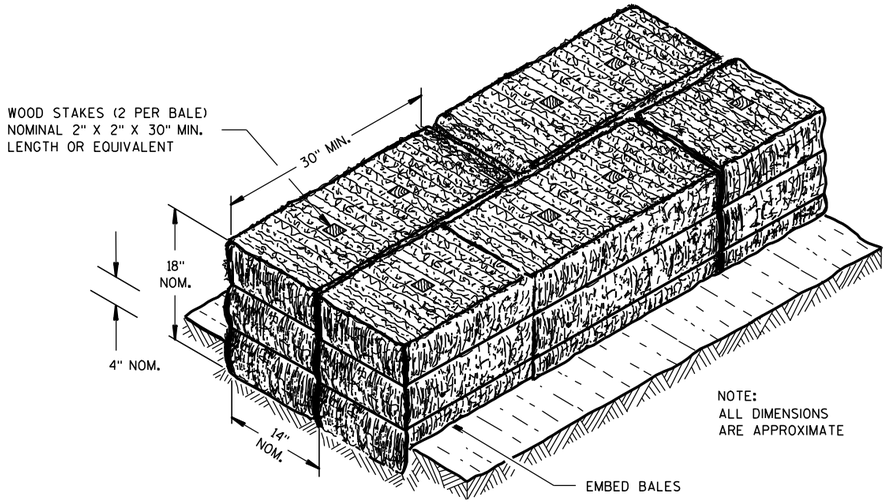
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

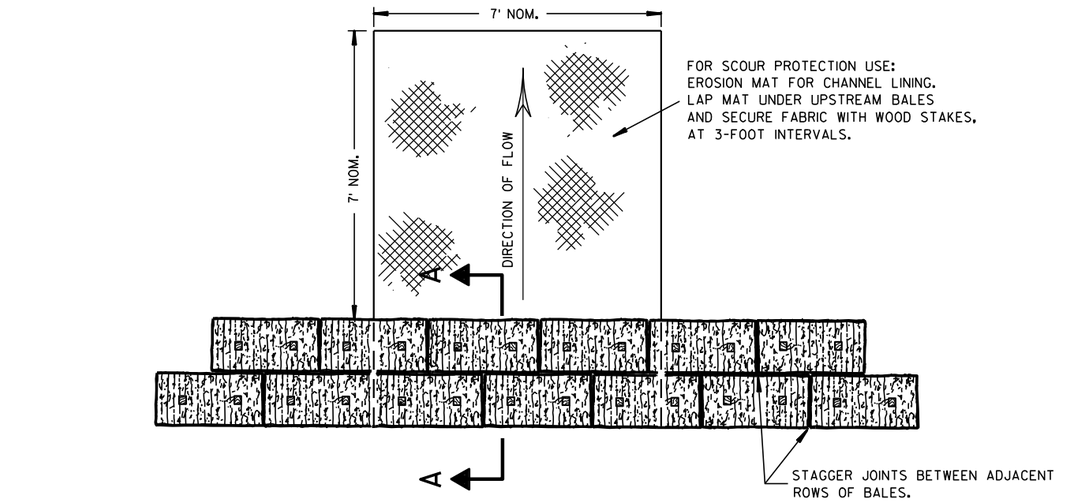
APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
301 — ENT
FHWA

6

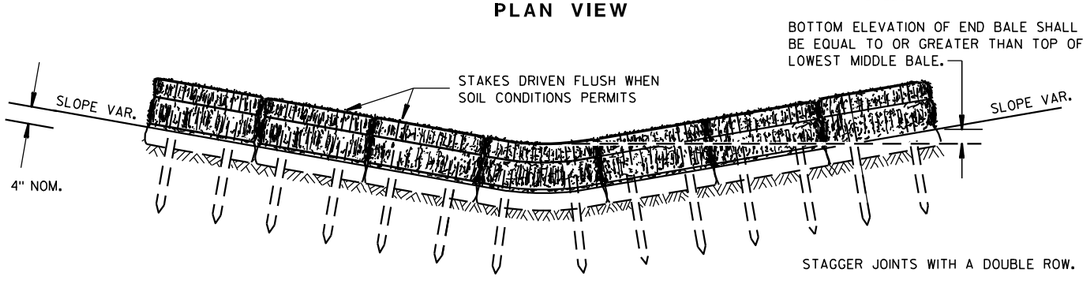
S.D.D. 8 D 1-20b



SECTION A-A



PLAN VIEW



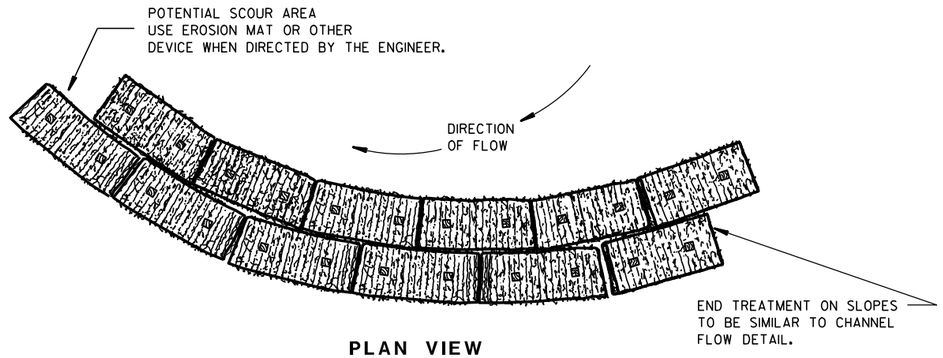
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

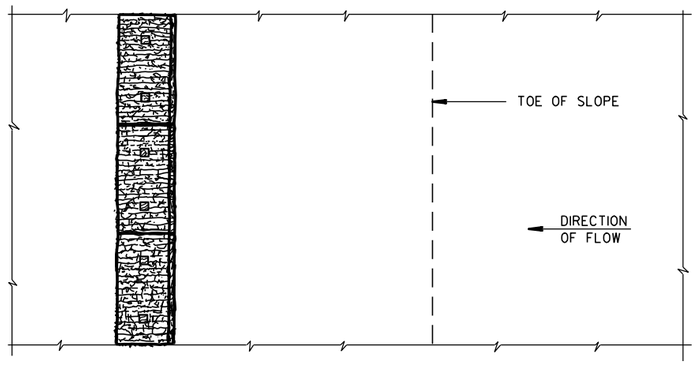
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

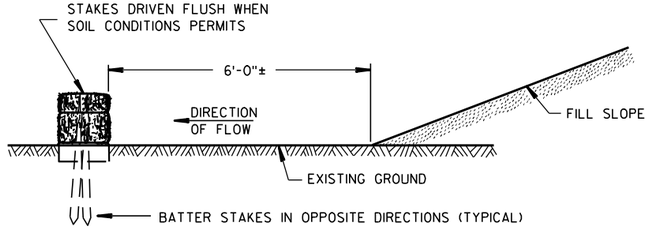


PLAN VIEW

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

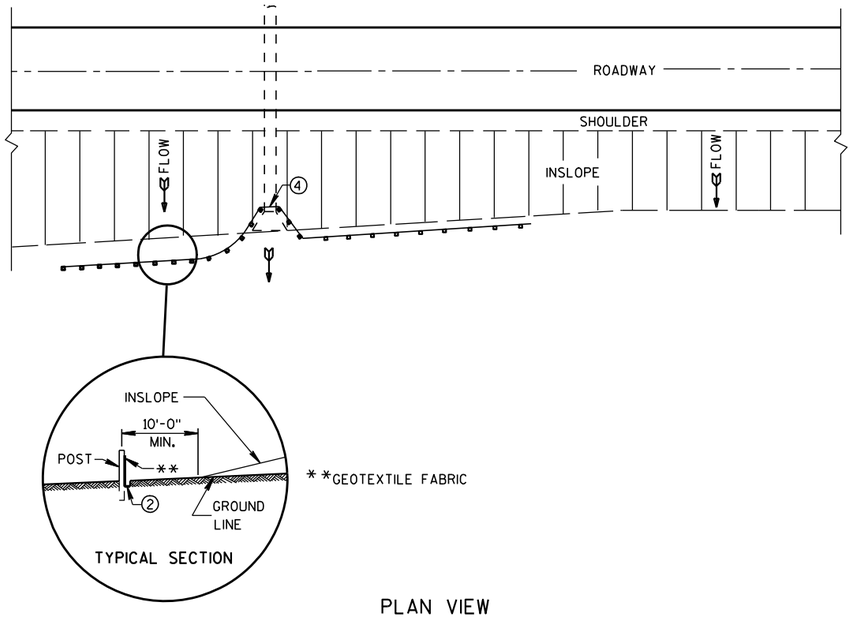
APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

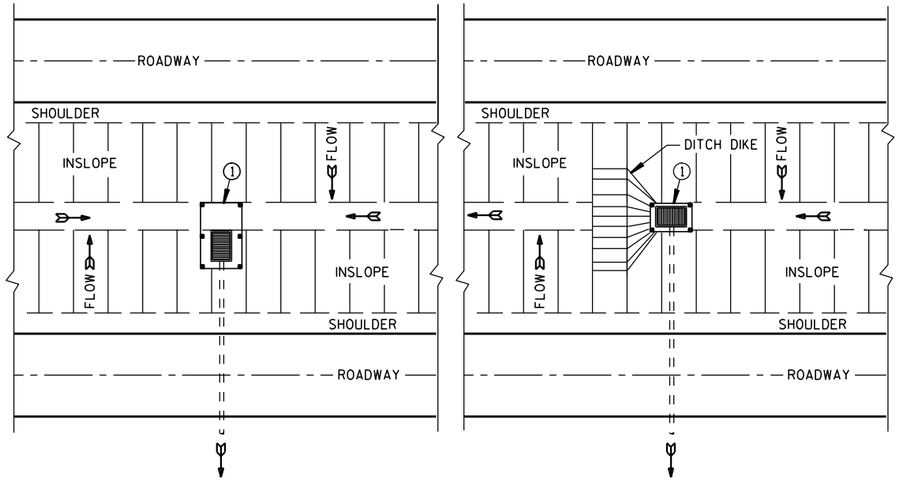
FHWA

6
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.

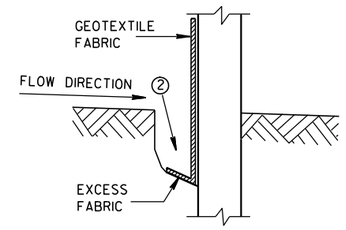
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

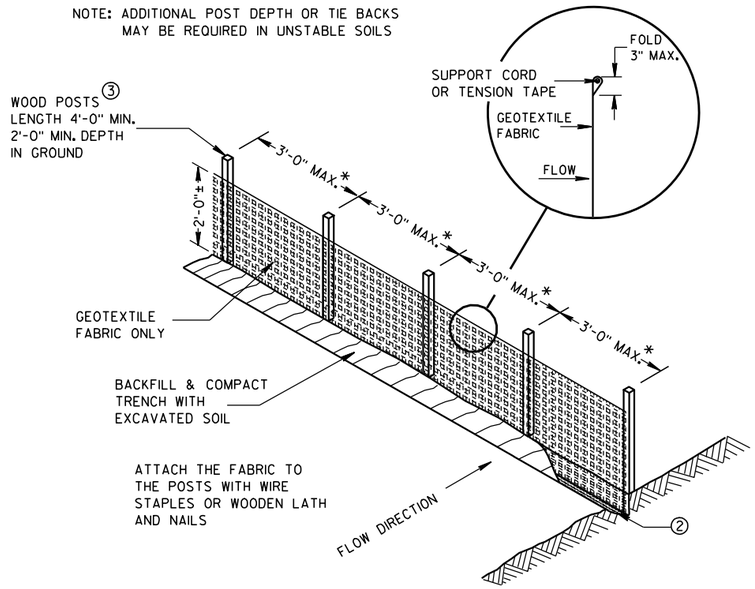
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

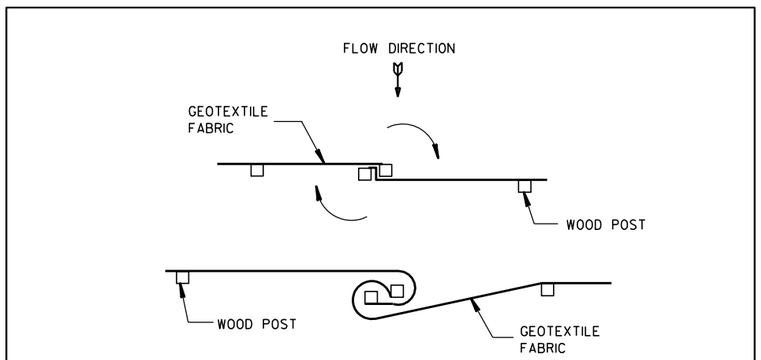
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



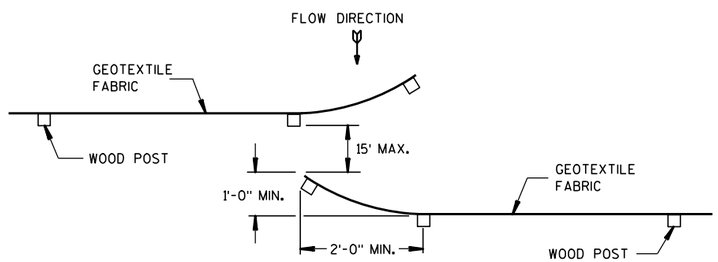
TRENCH DETAIL



SILT FENCE

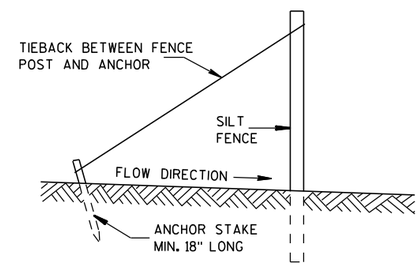


TWIST METHOD



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

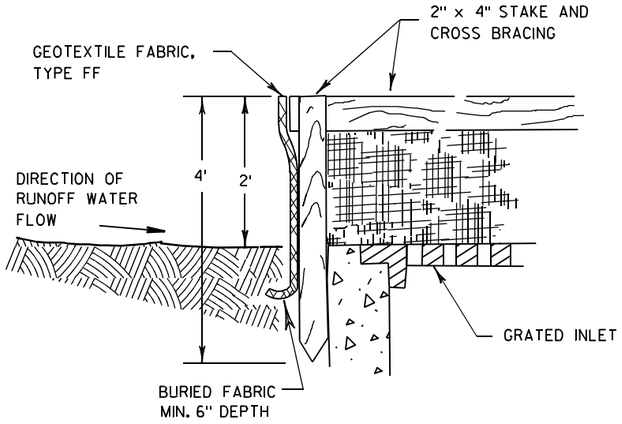
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

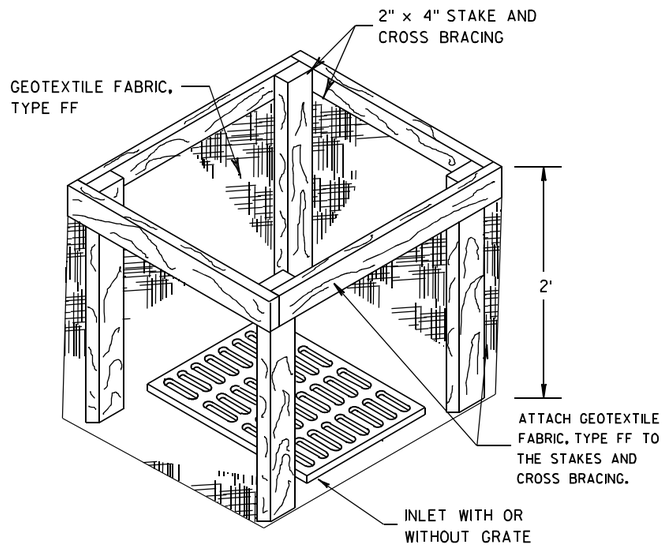
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S.D.D. 8 E 9-6

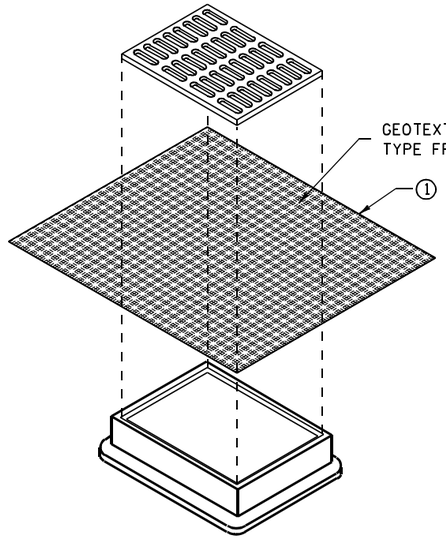
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S.D.D. 8 E 9-6



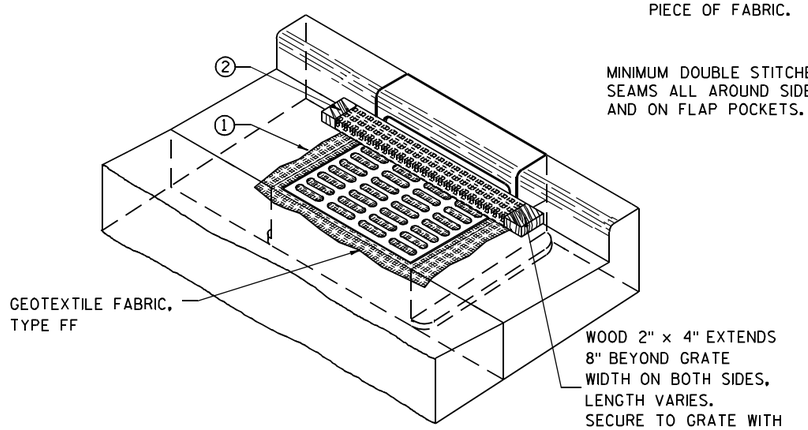


INLET PROTECTION, TYPE A

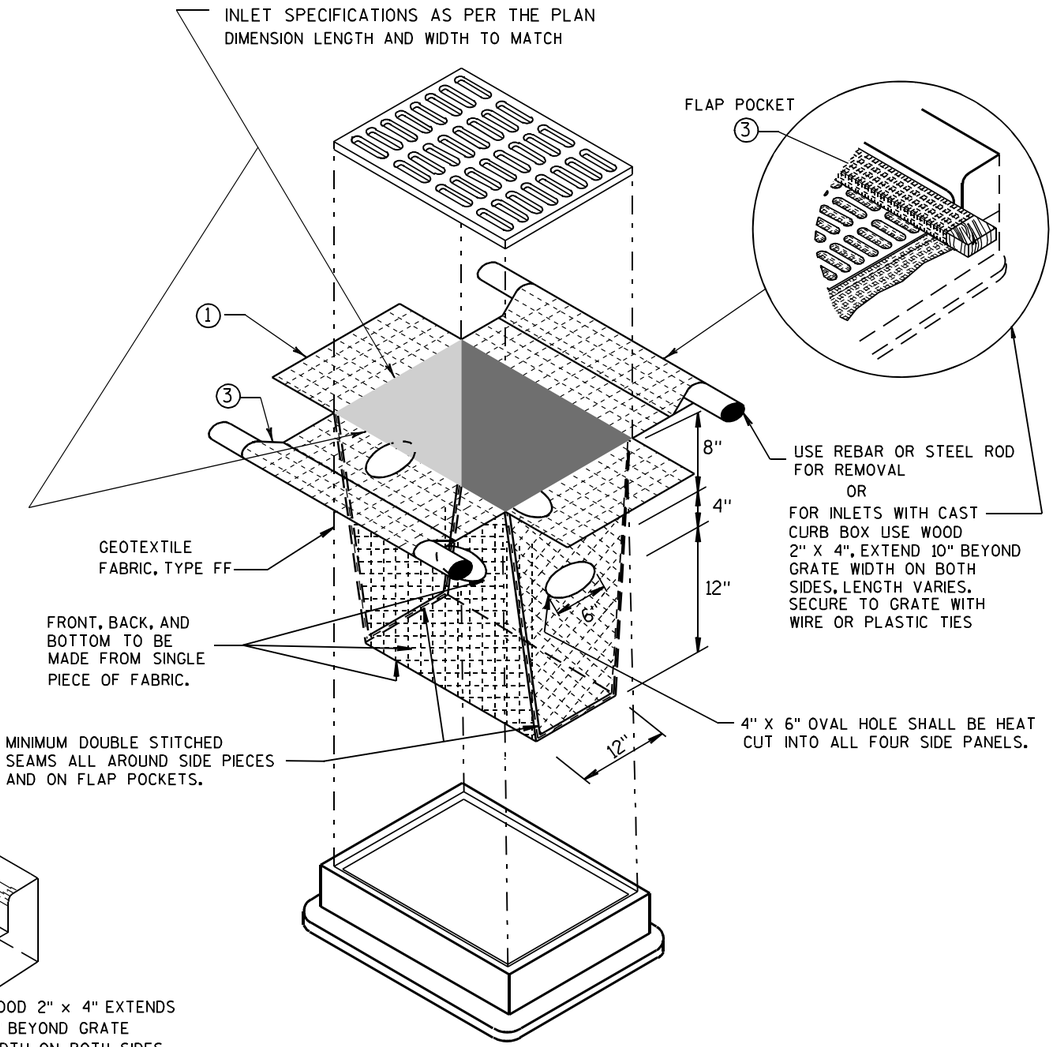


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

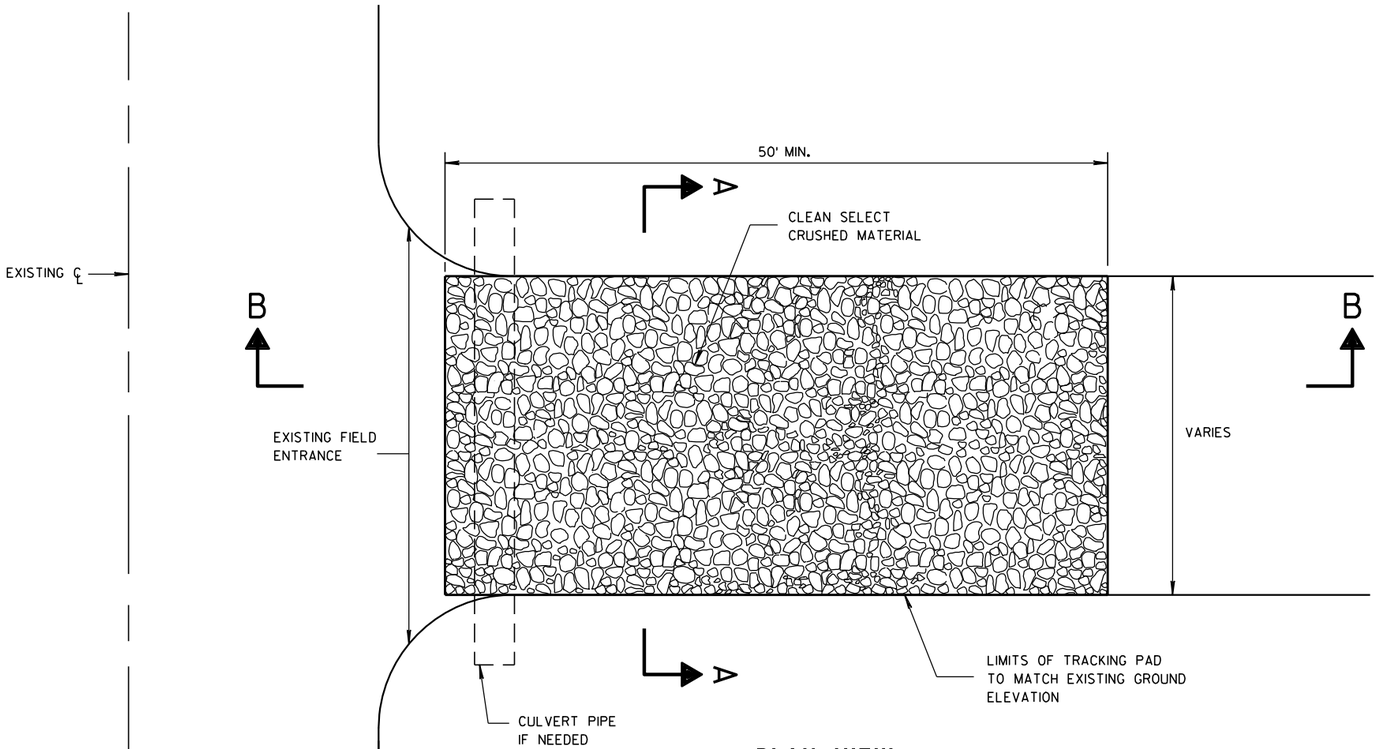
FHWA

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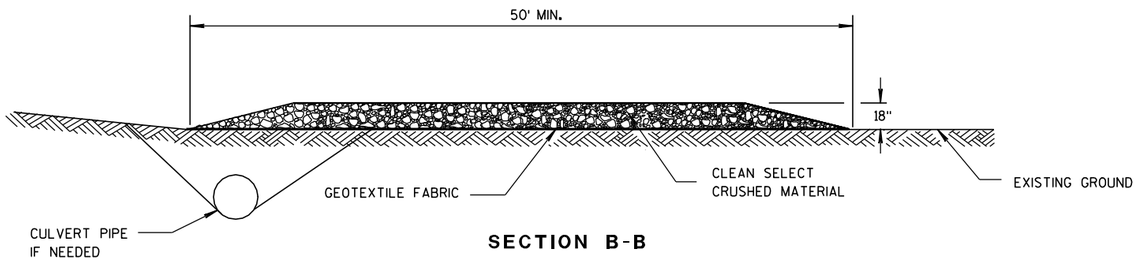
S.D.D. 8 E 10-2

6

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.

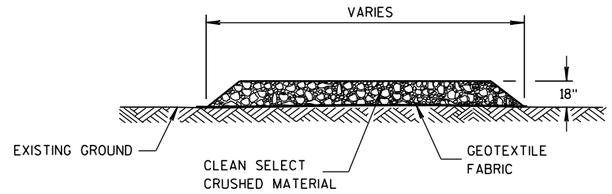
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

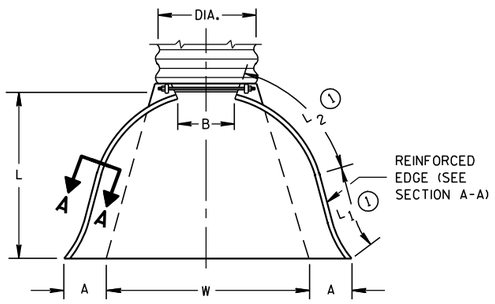
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

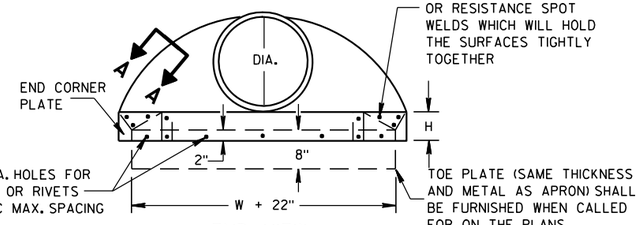
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

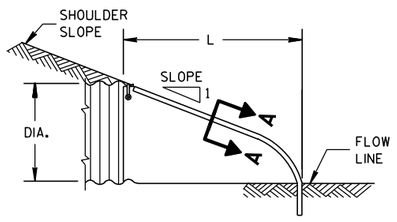
* MINIMUM
** MAXIMUM



PLAN VIEW

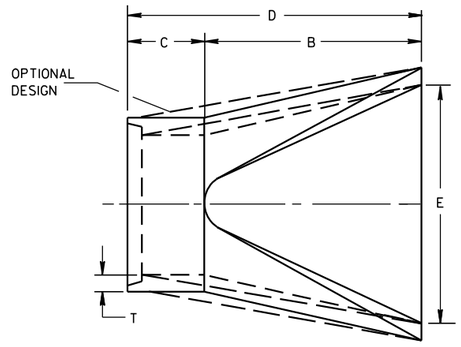


END VIEW

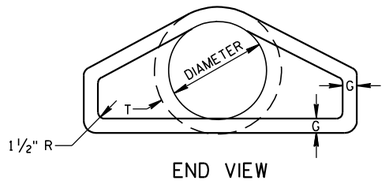


SIDE ELEVATION

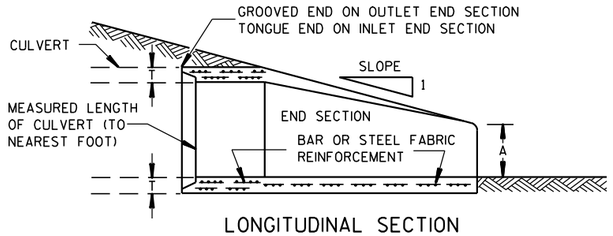
METAL ENDWALLS



PLAN

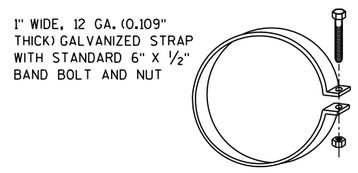


END VIEW



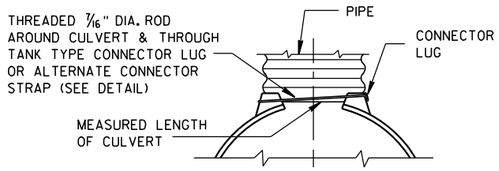
LONGITUDINAL SECTION

CONCRETE ENDWALLS

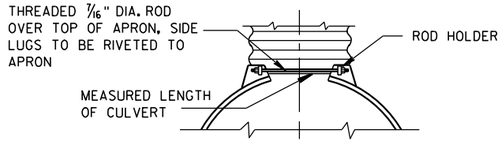


ALTERNATE FOR TYPE 1 CONNECTION

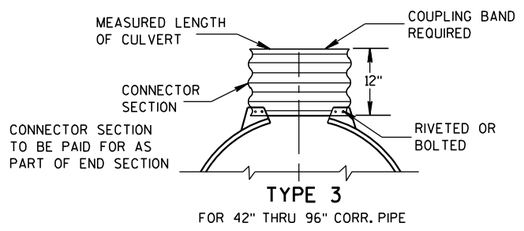
END SECTION CONNECTOR STRAP



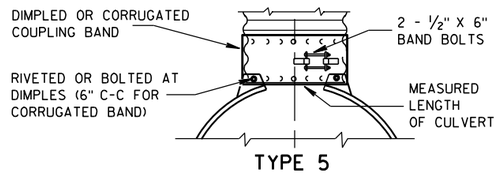
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

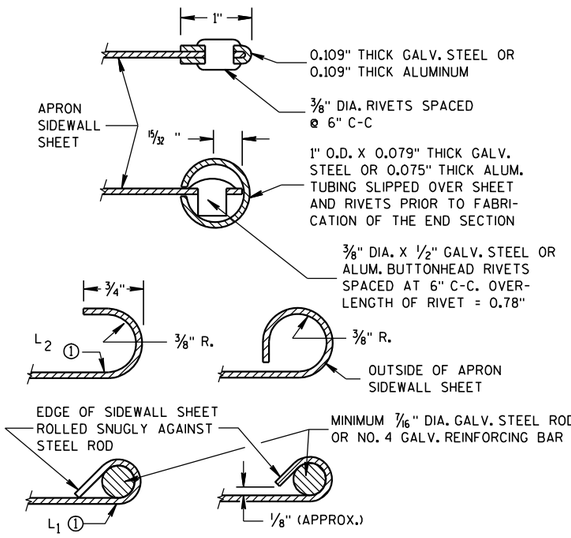
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

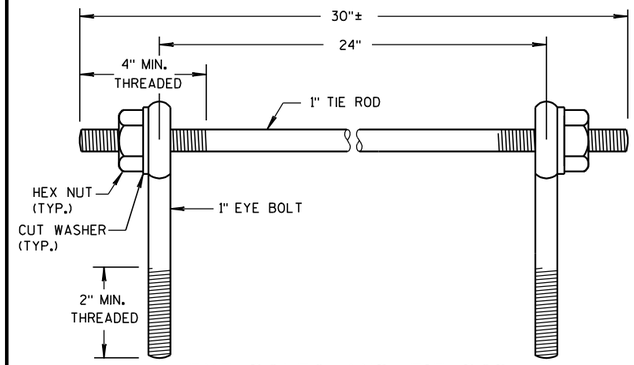
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

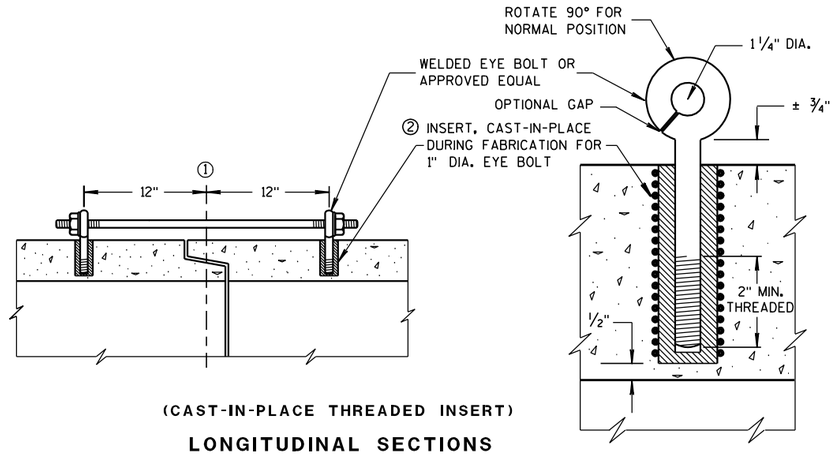
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
306
FHWA

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.

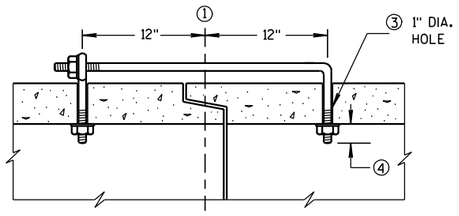
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

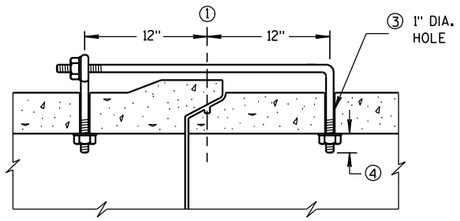
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

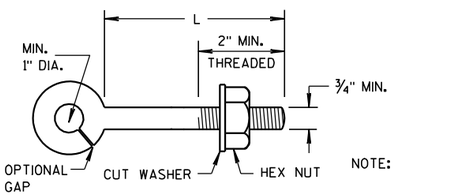


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

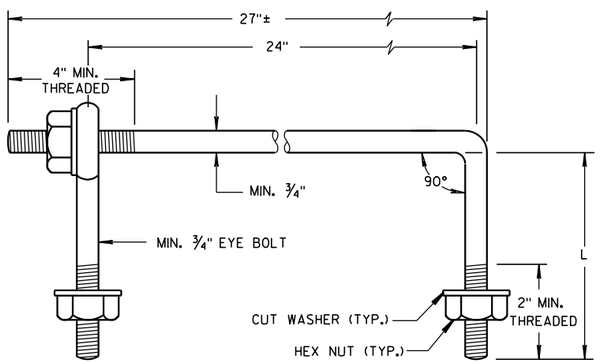
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

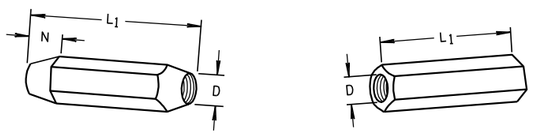
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

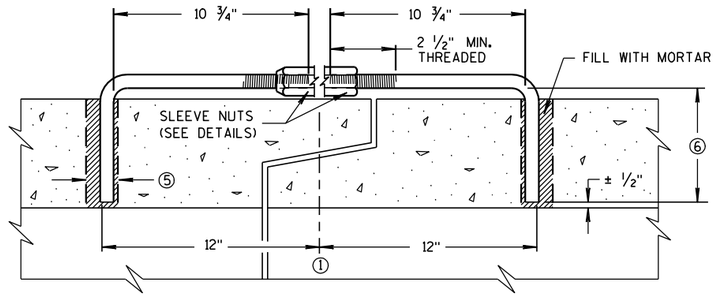
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

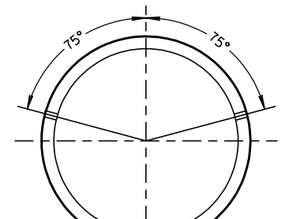
SLEEVE NUTS



LONGITUDINAL SECTION

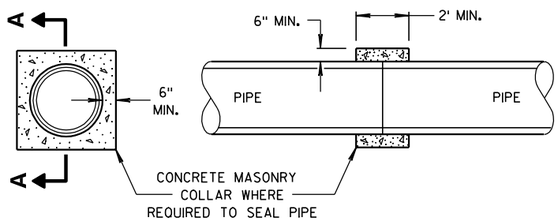
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

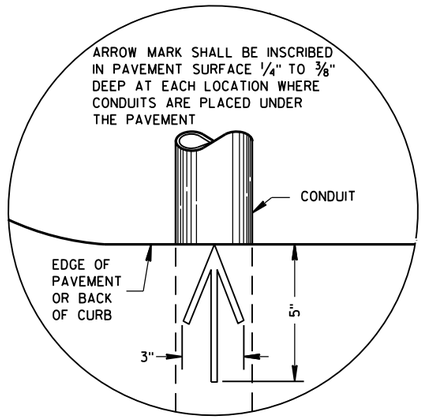
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
307
FHWA

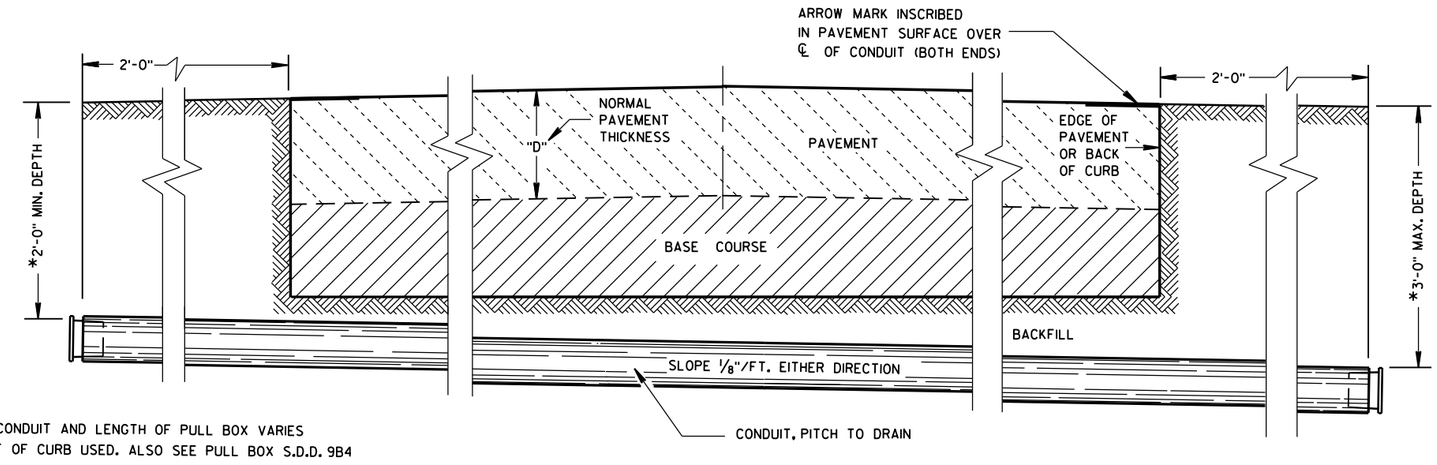
6

S.D.D. 8 F 4-7



PLAN VIEW

ARROW MARK



*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

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.).

TRACER 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.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 308
FHWA

6

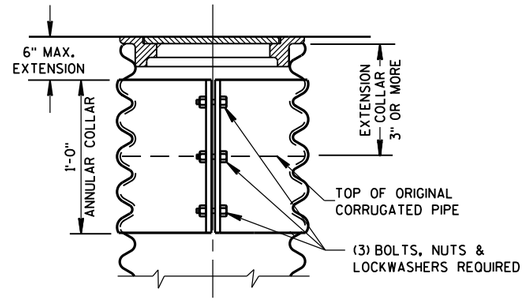
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

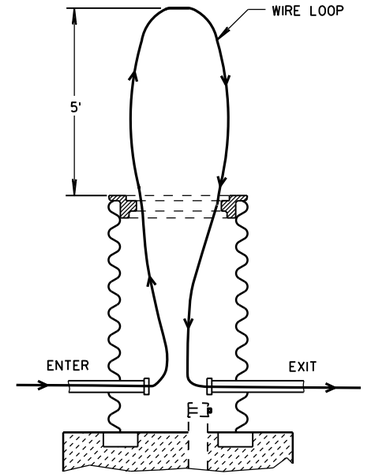
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

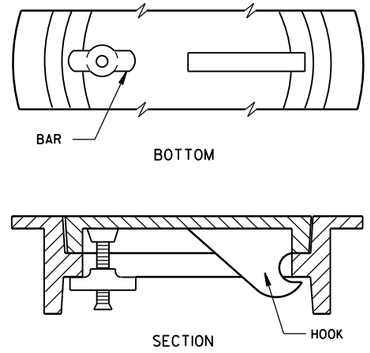
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

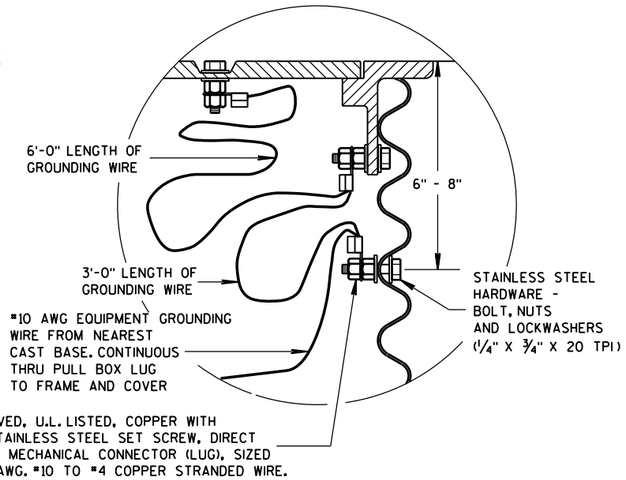


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

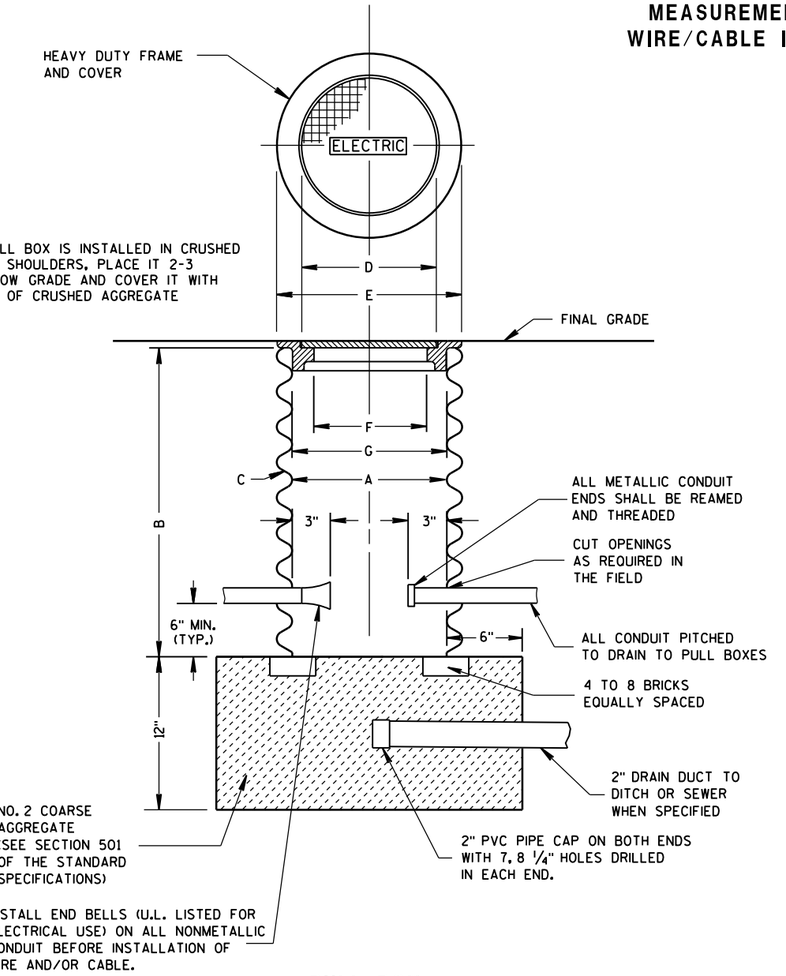


ALTERNATE COVER (LOCKING)

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.

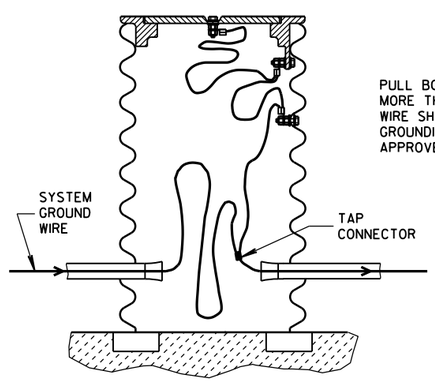
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

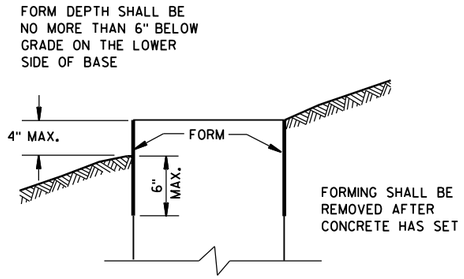
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-11



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.

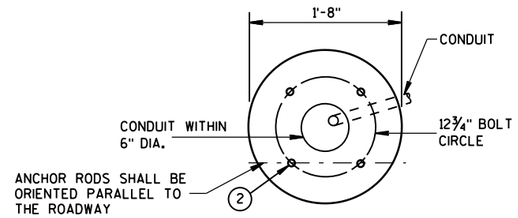
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

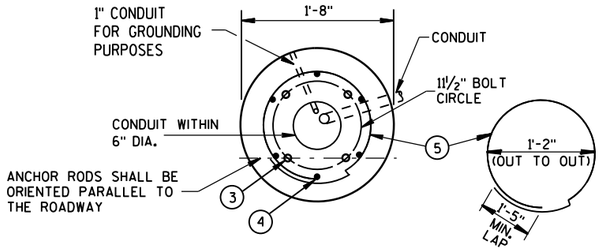
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

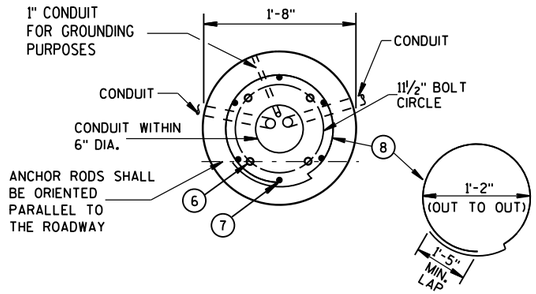
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

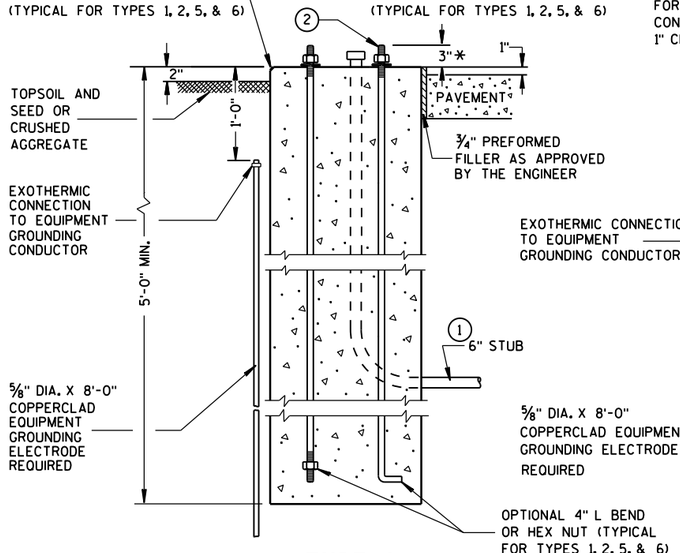




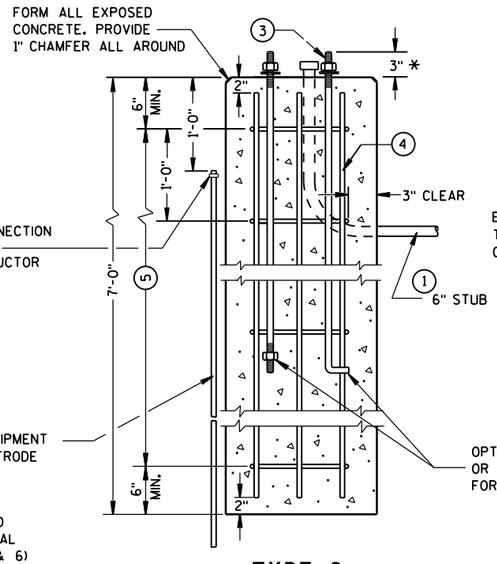


HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

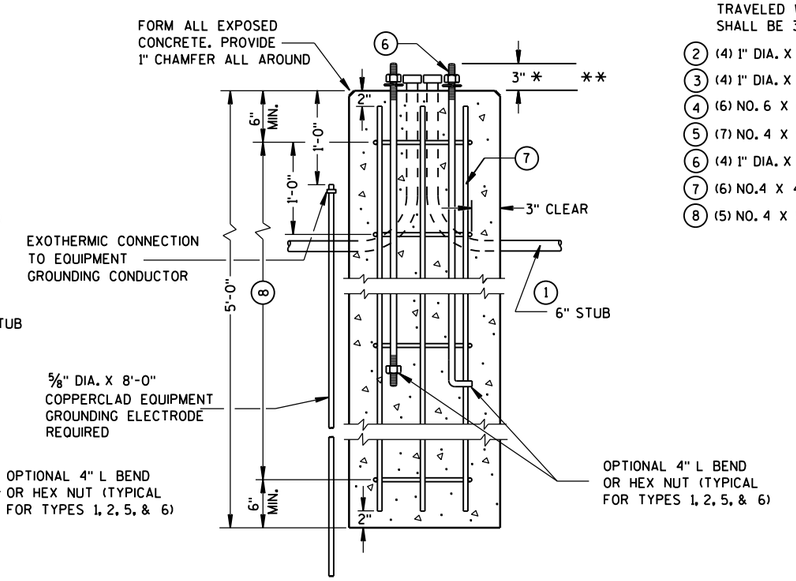
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



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
FHWA

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S.D.D. 9 C 2-7

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.

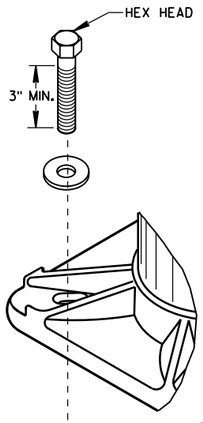
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

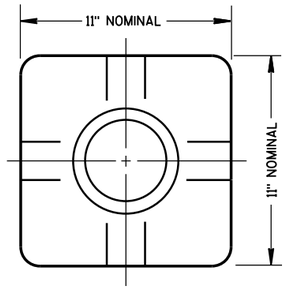
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

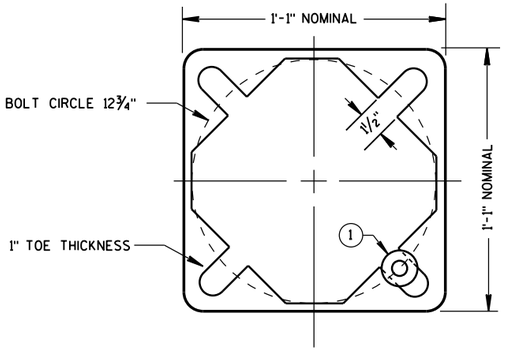
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

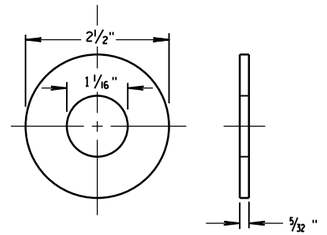




TOP VIEW
(PEDESTAL BASE)

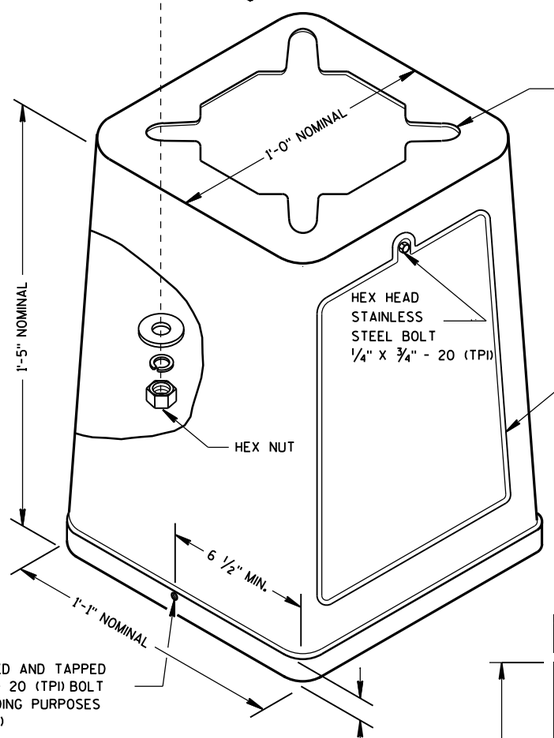


BOTTOM VIEW
(PEDESTAL BASE)

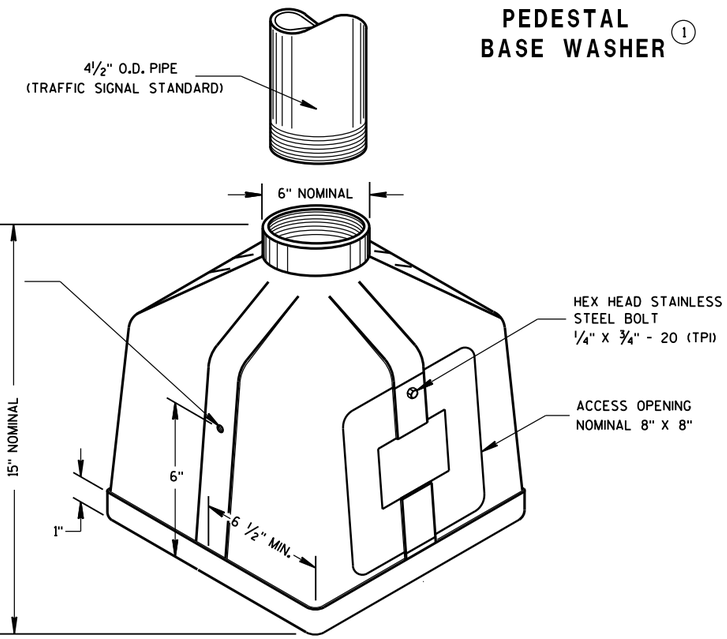


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

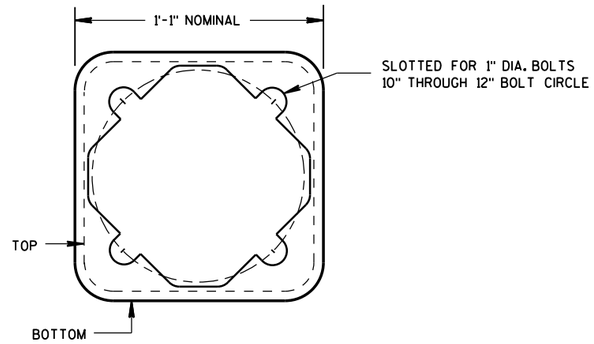


ISOMETRIC VIEW

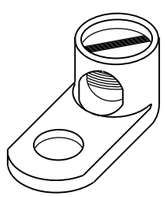


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

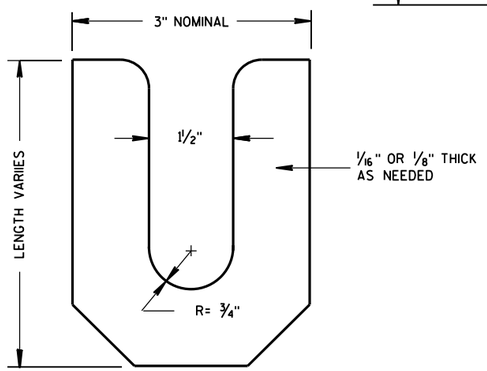


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

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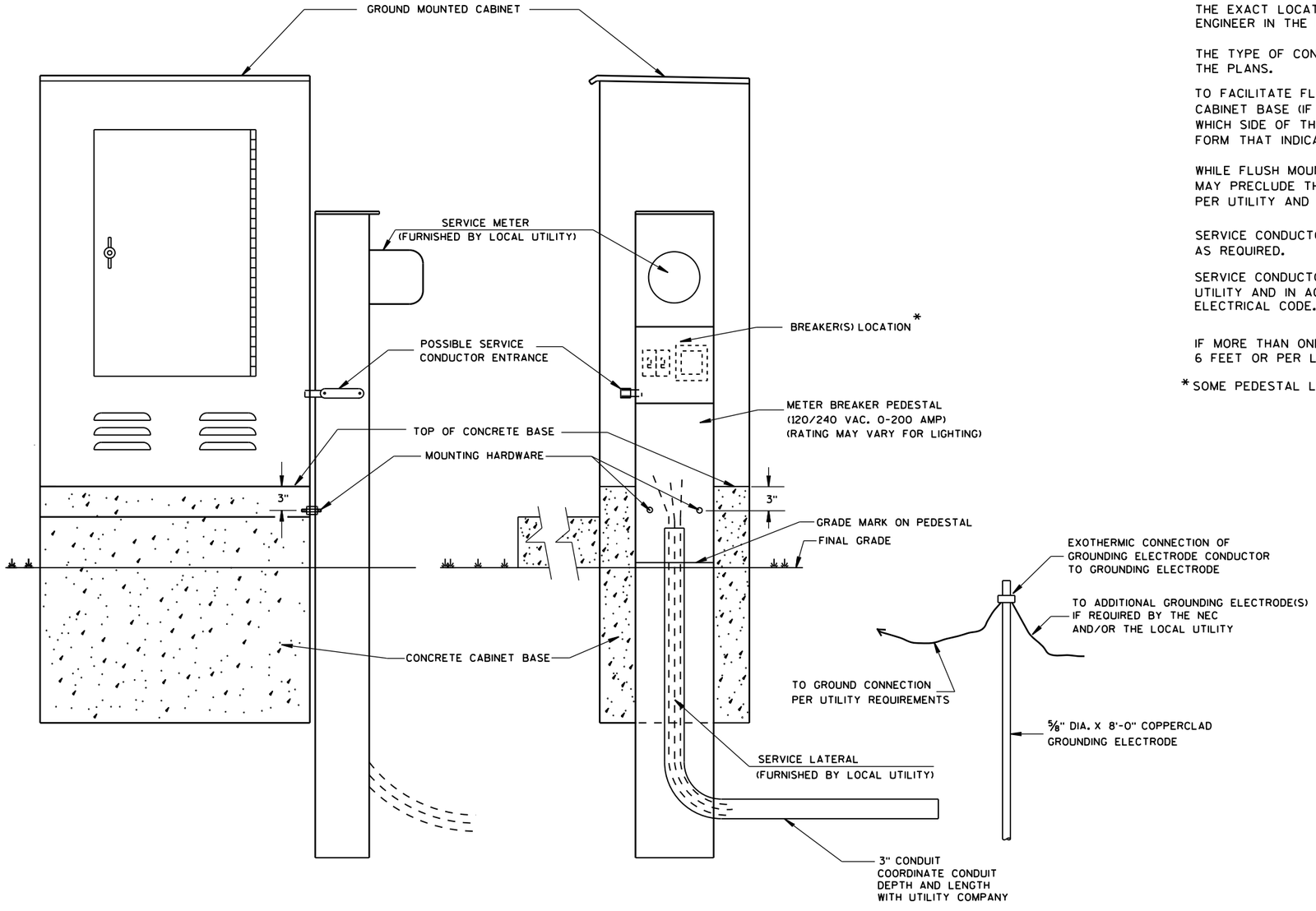
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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TYPICAL CABINET SERVICE INSTALLATION

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, NIPPLES AND/OR CONDULETS AS REQUIRED.

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 LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

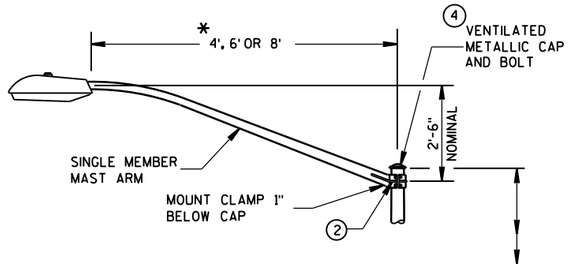
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

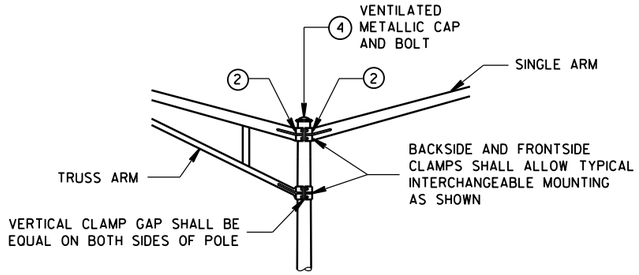
APPROVED
Sept. 2014
DATE

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STATE ELECTRICAL

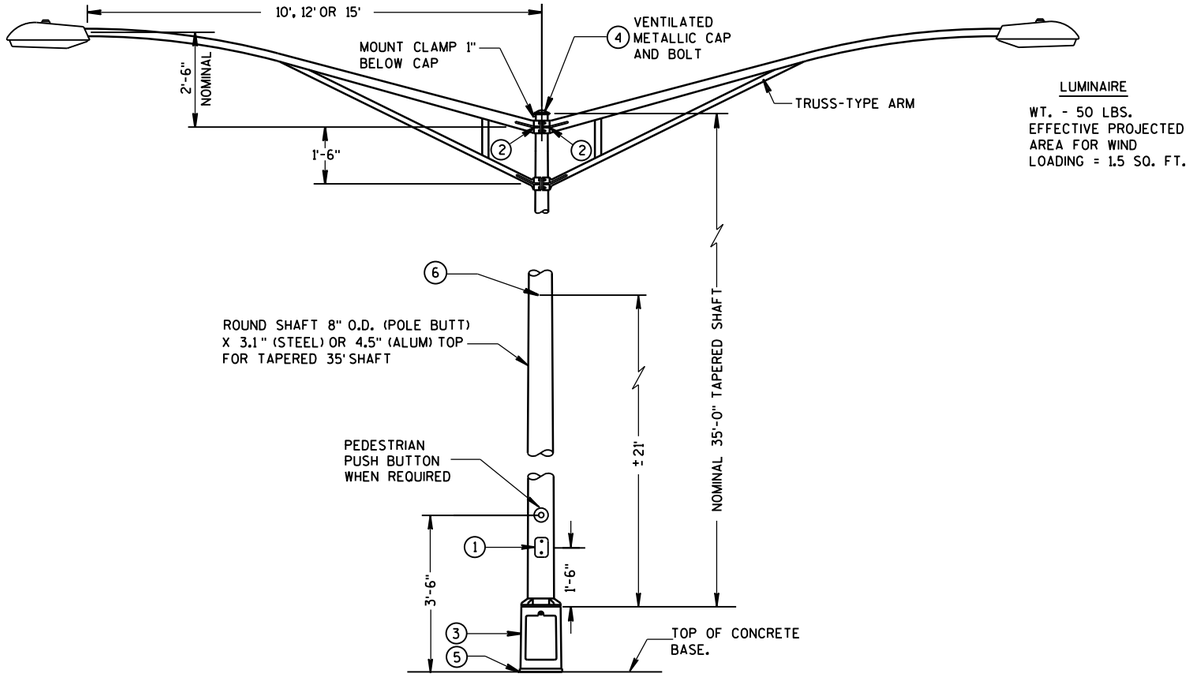
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* RISE FOR 4' ARM SHALL BE 2'-0".





INTERCHANGEABLE MOUNTING DETAIL



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE EITHER GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES, SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 6 ALUMINUM POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 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 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 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.

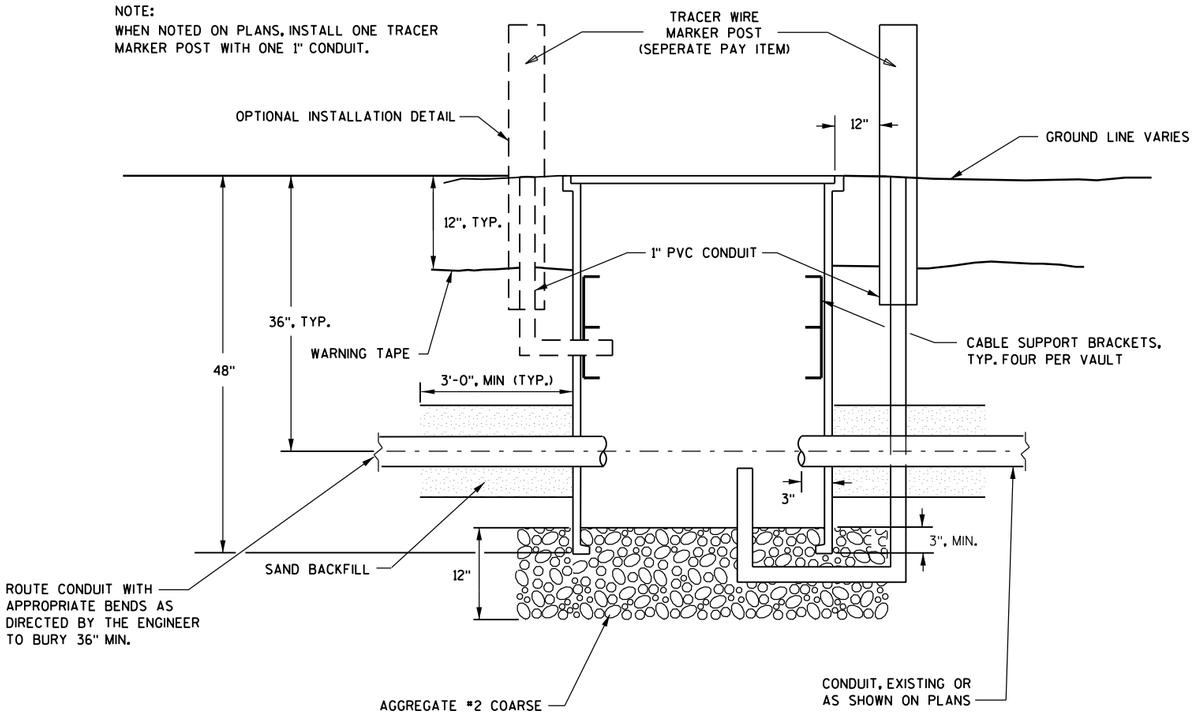
(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

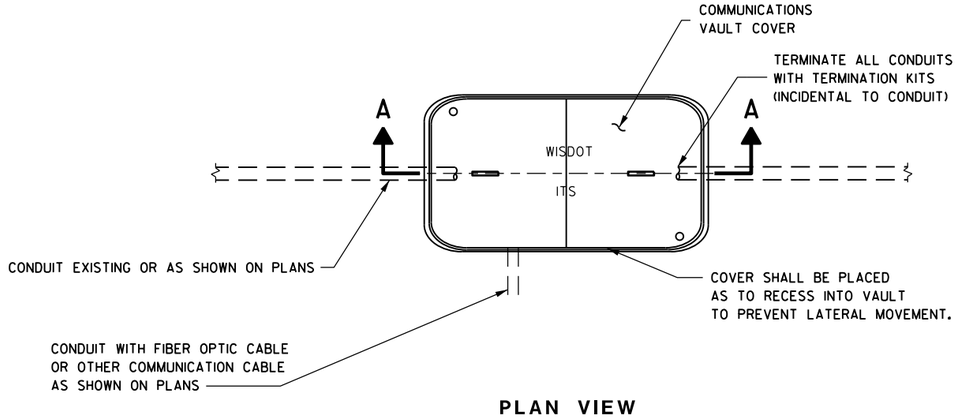
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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SECTION A-A



PLAN VIEW

COMMUNICATIONS VAULT TYPE 1

GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

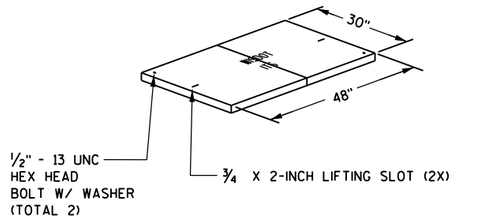
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

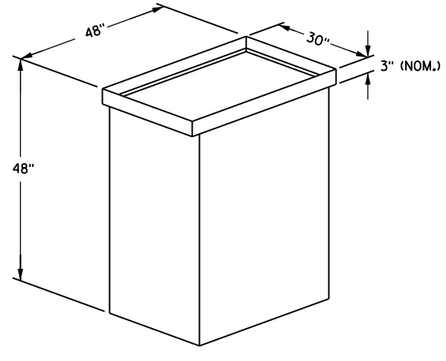
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.





ISOMETRIC VIEW

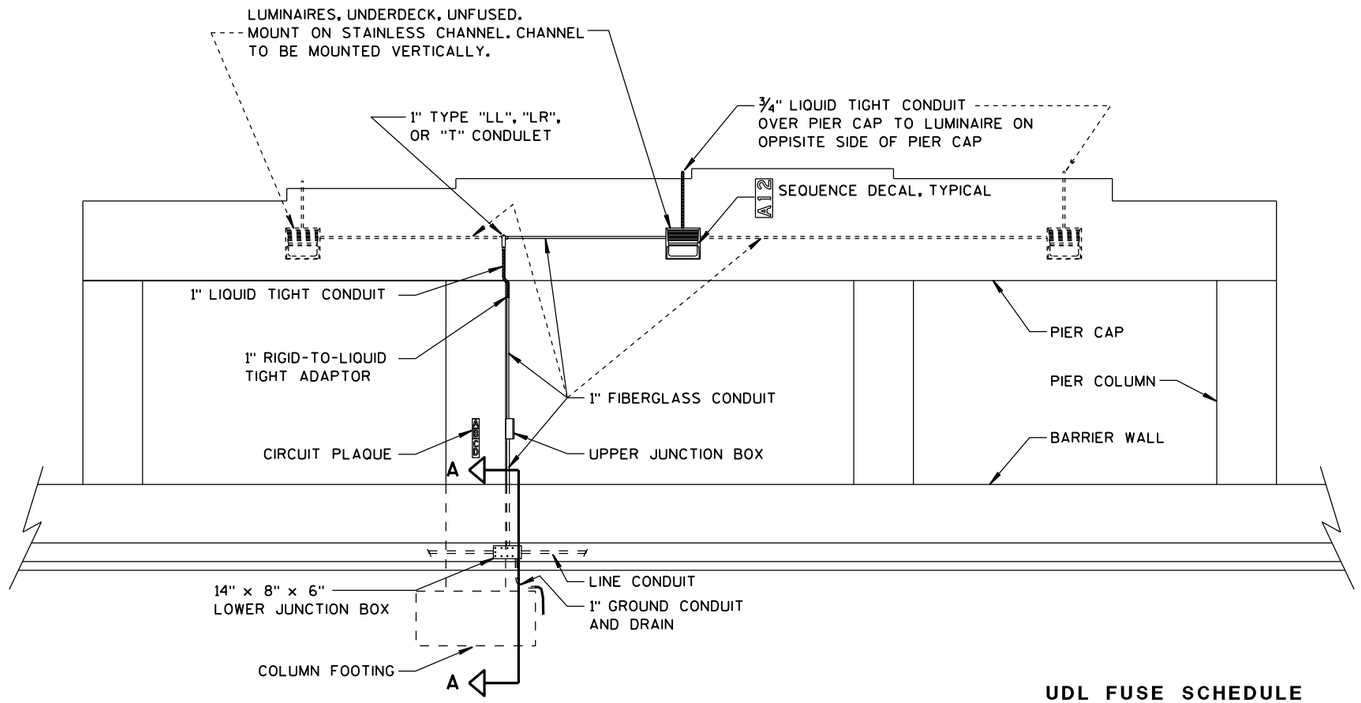
COMMUNICATION VAULT
TYPE 1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

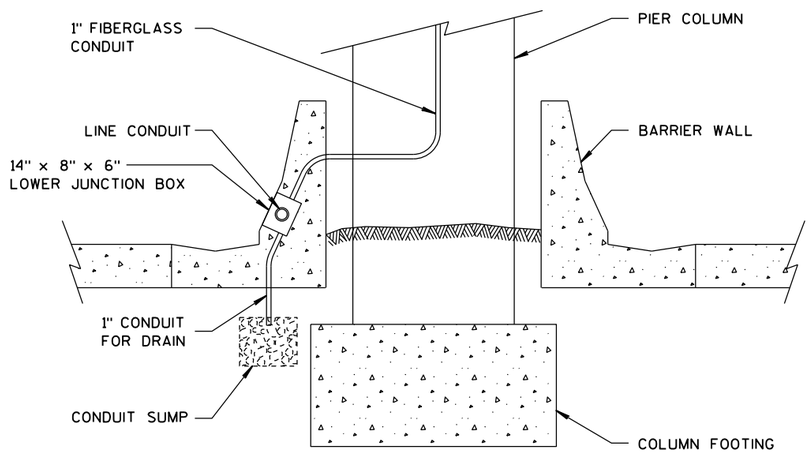
APPROVED
May, 2017
DATE
/S/Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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S.D.D. 9 H 9-2



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.

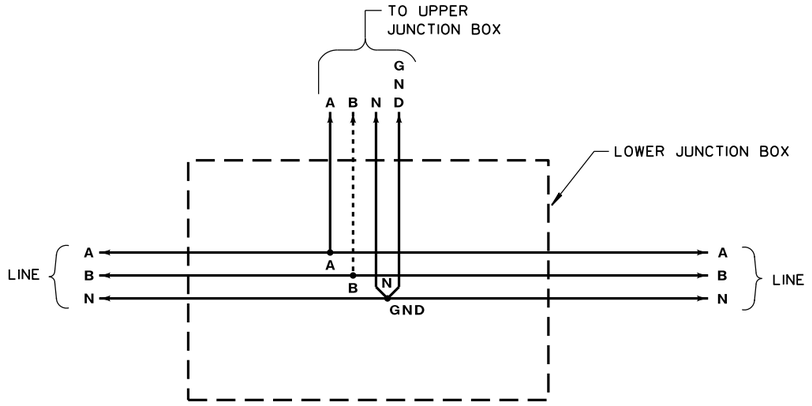
MEDIAN CONFIGURATIONS VARY; NOT ALL CASES CAN BE SHOWN IN THIS DETAIL.

WIRING FOR THE FIRST LUMINAIRE PAIR IS SHOWN IN SOLID LINES. WIRING FOR ADDITIONAL LUMINAIRE PAIRS, WHERE REQUIRED, IS SHOWN IN DOTTED LINES.

LEGEND

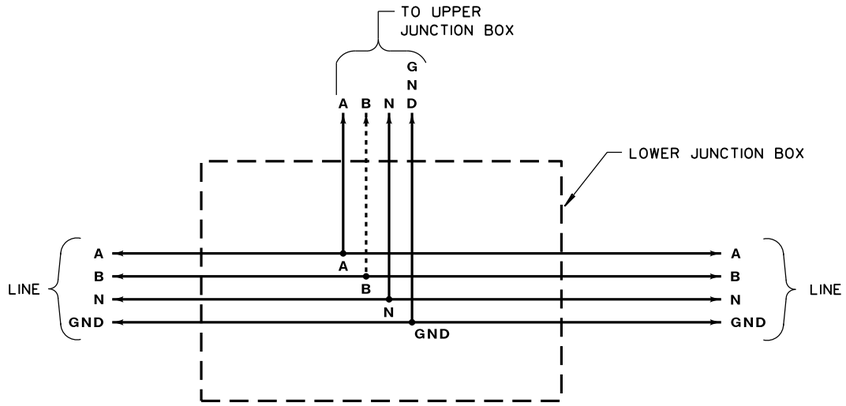
A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	UNFUSED LUMINAIRE
	SINGLE POLE (1P) FUSE ASSEMBLY
	TERMINAL
	SPLICE
	CONDUCTOR

ELECTRICAL DETAILS
UNDERDECK LIGHTING



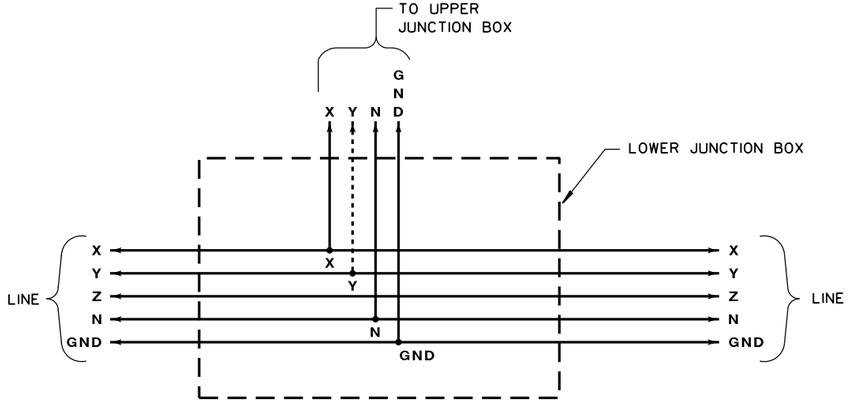
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC OR 3 WIRE OR 480VAC 2 WIRE



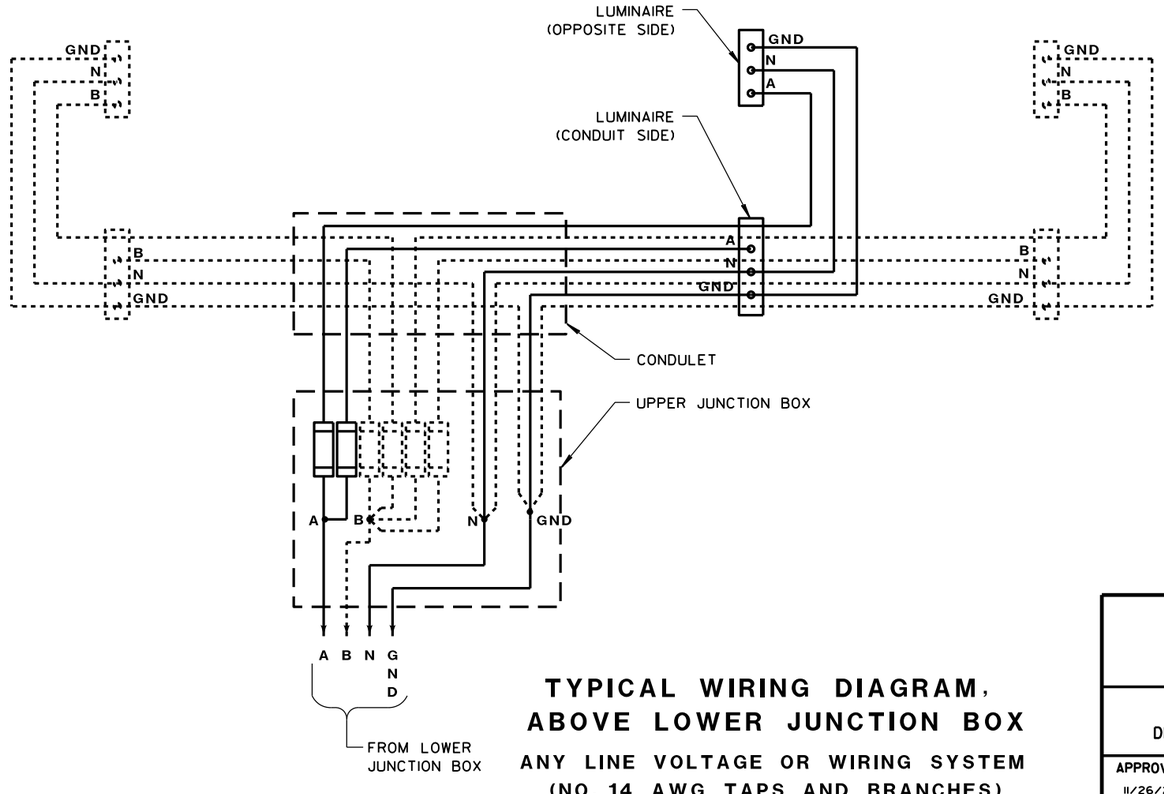
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

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)

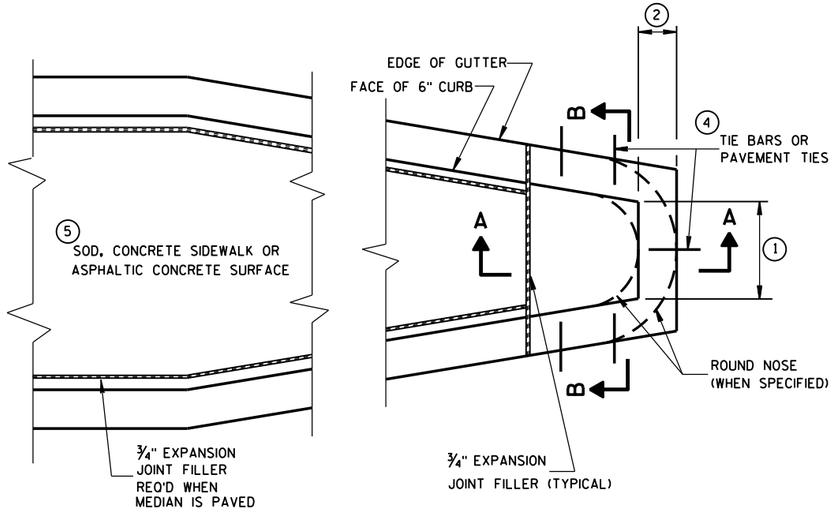
ELECTRICAL DETAILS
UNDERDECK LIGHTING

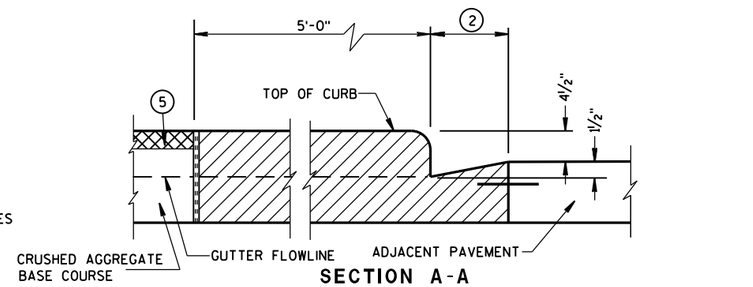
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

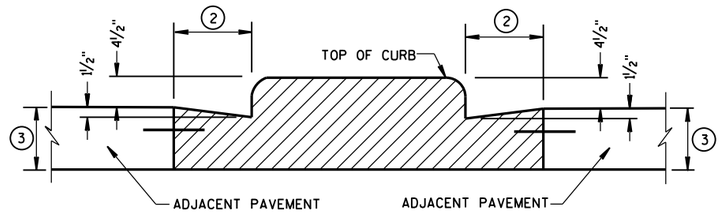
APPROVED
11/26/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

S.D.D. 10 A 15-4b







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.

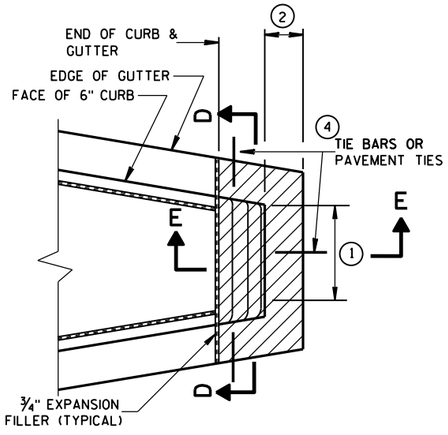
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

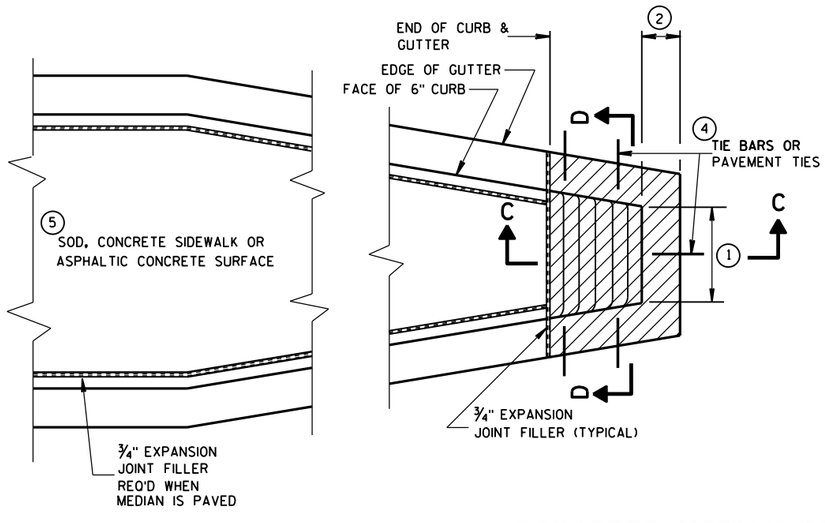
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

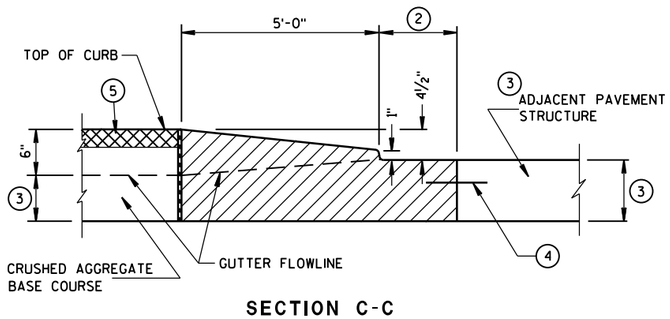
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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.

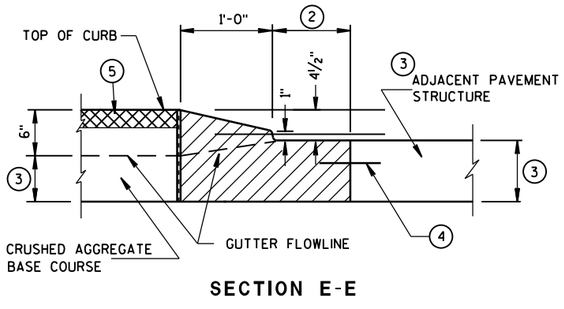
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



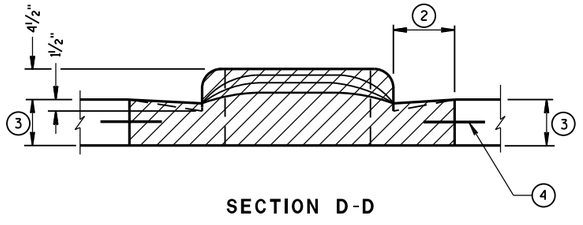




CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

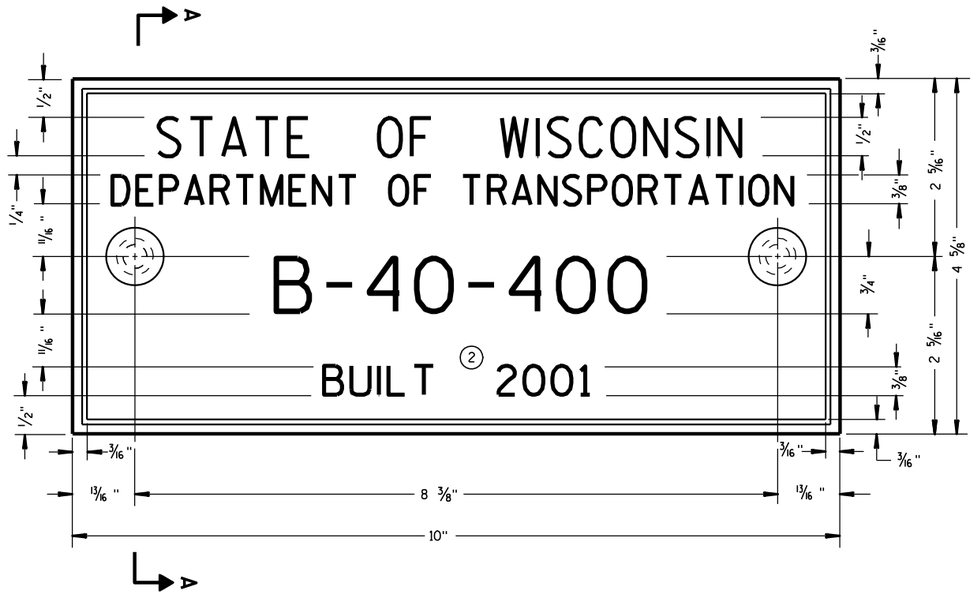
APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

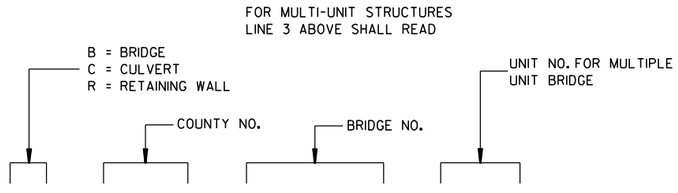
S.D.D. 11 B 2-2

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S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

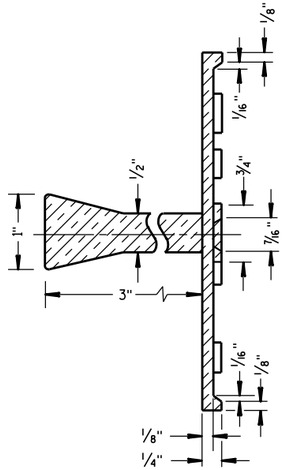
GENERAL NOTES

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.

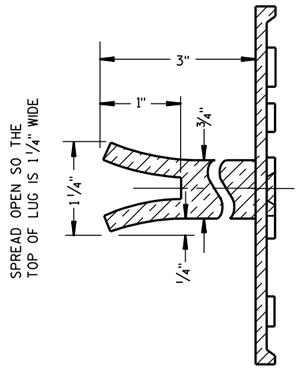
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

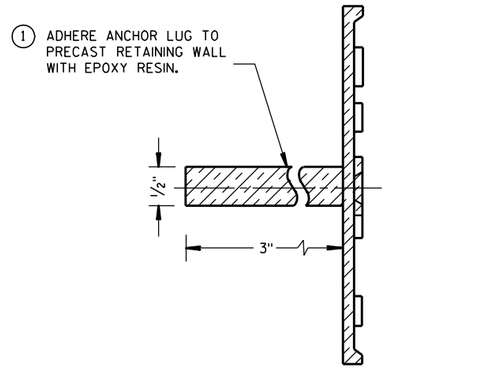
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

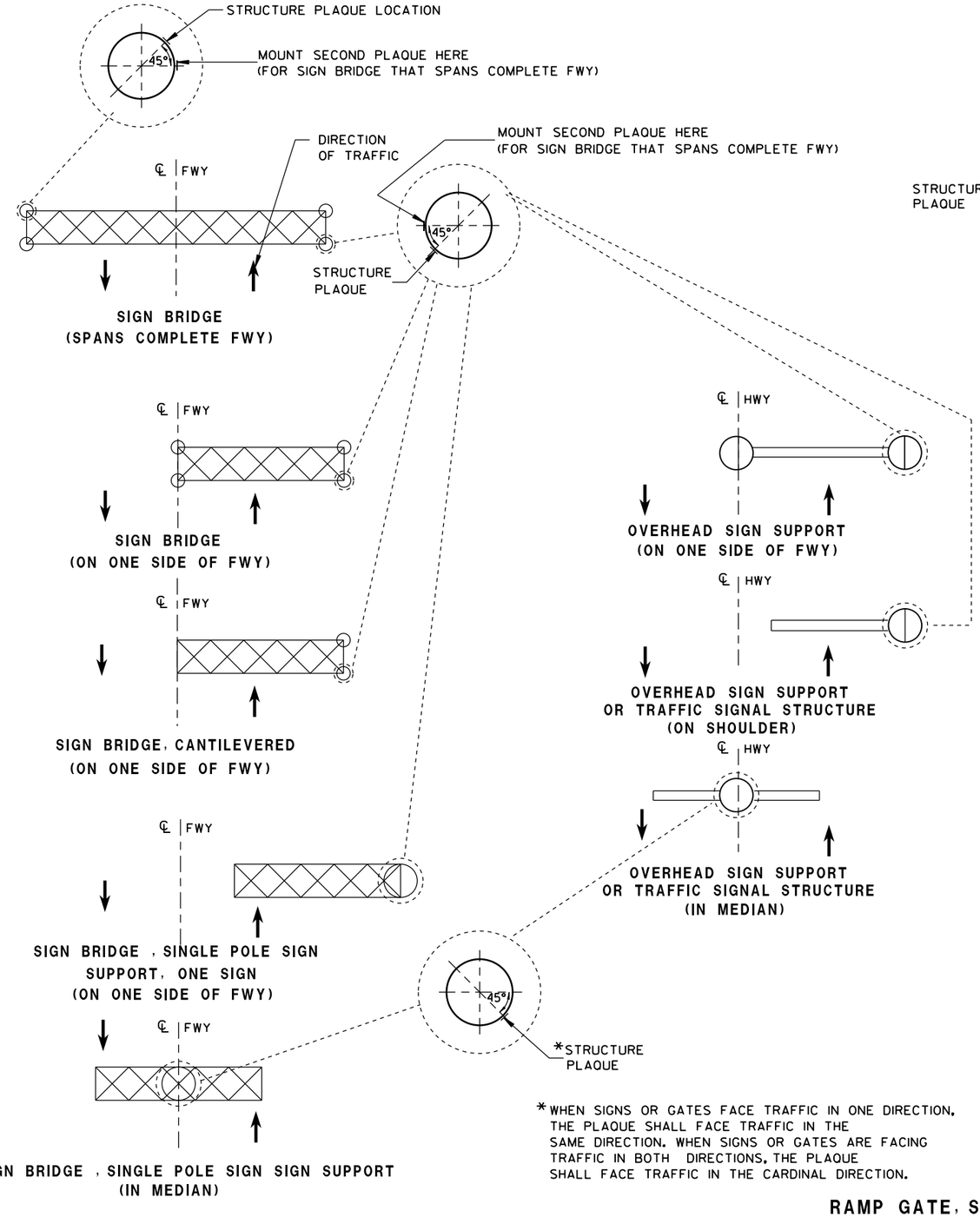
APPROVED

3/26/10 DATE — /S/ Scot Beck — CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

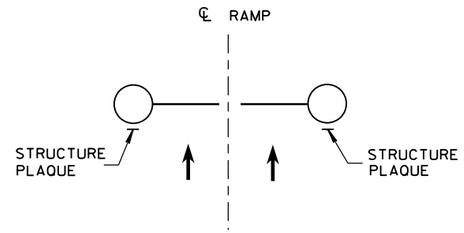
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S.D.D. 12 A 3-10

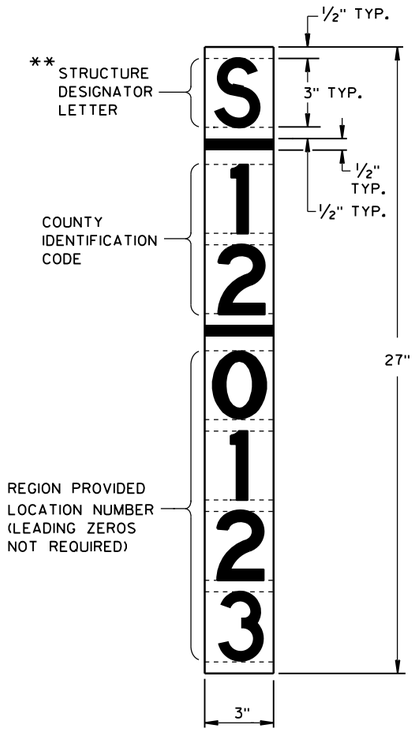


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* 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.

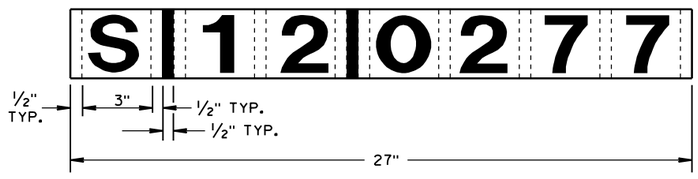
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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

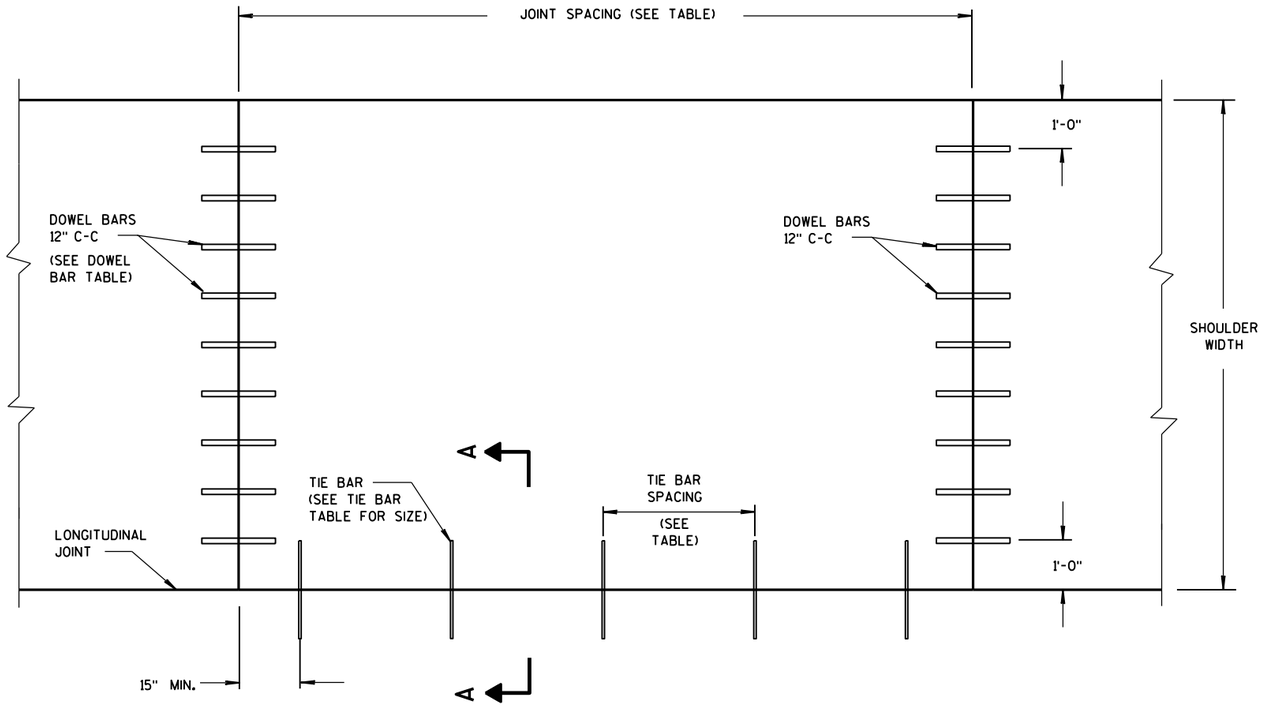
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

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S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

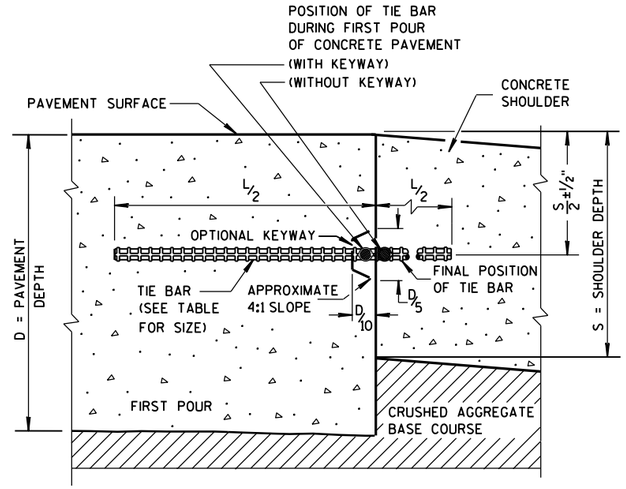
GENERAL NOTES

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

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

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

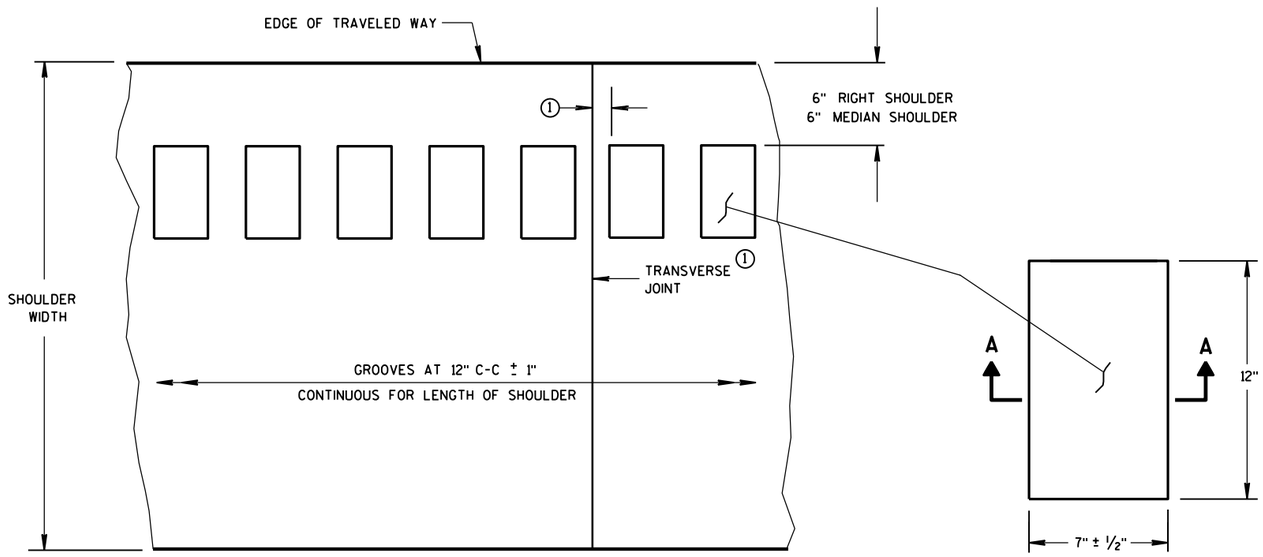
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERINTENDENT
FHWA

6

S.D.D. 13 A 3-6

6

S.D.D. 13 A 3-6



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

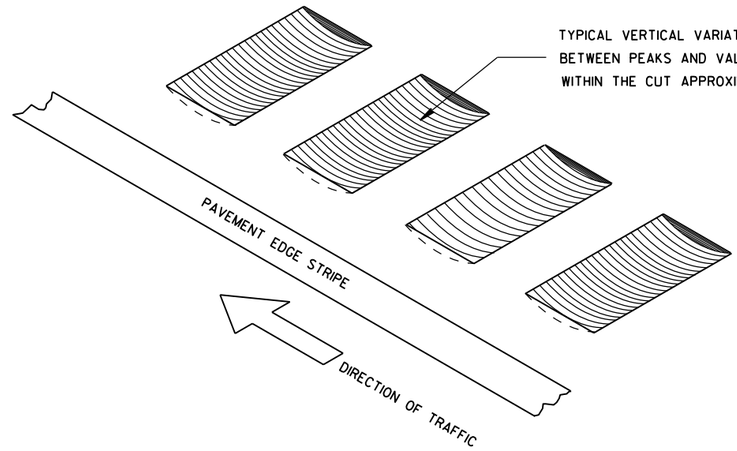
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

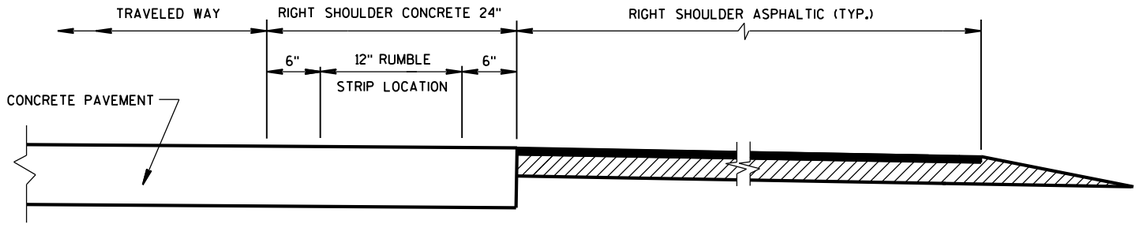
RUMBLE STRIPS ON EXPRESSWAYS

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.

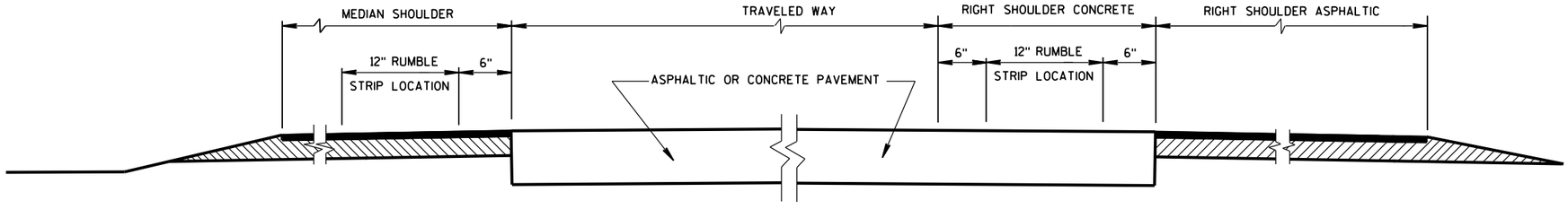
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



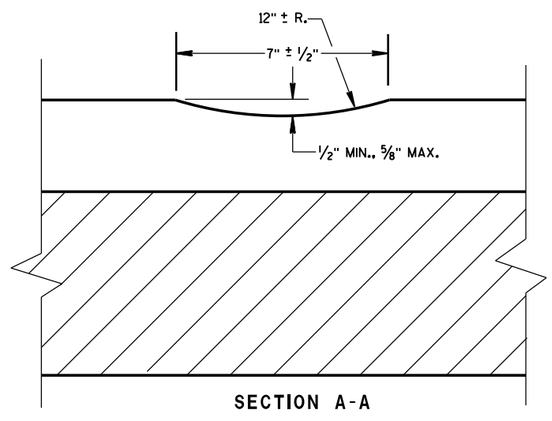
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

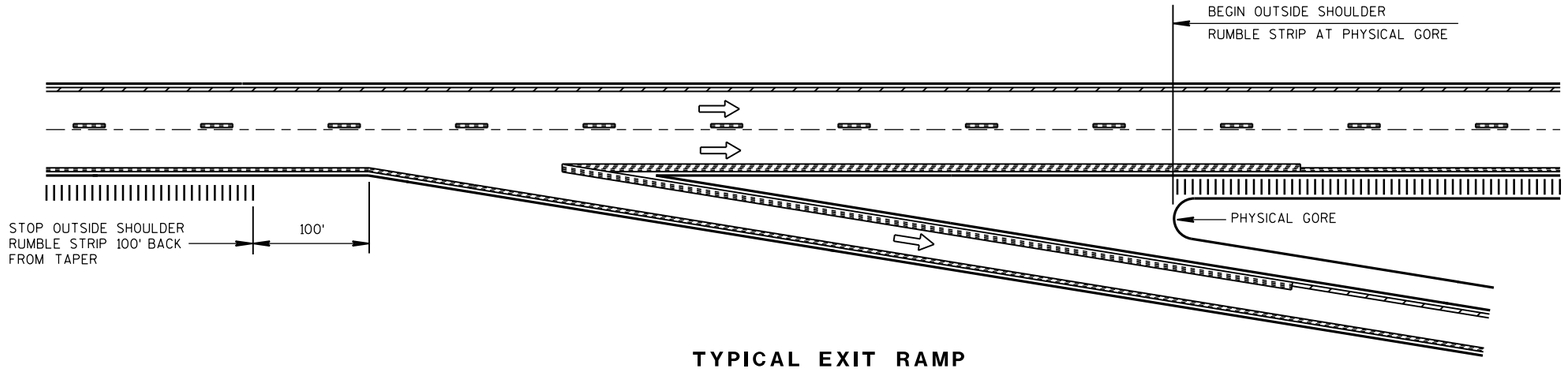
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



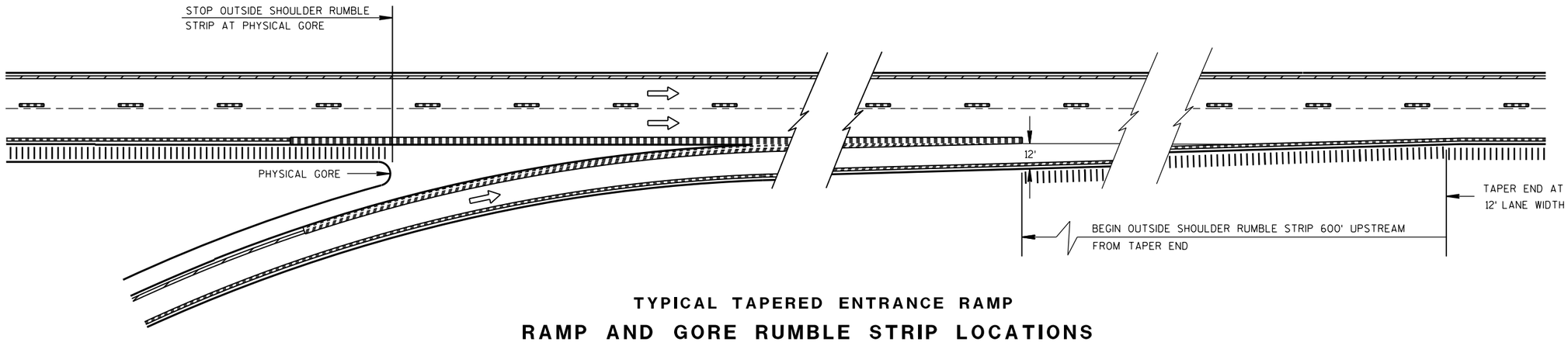
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

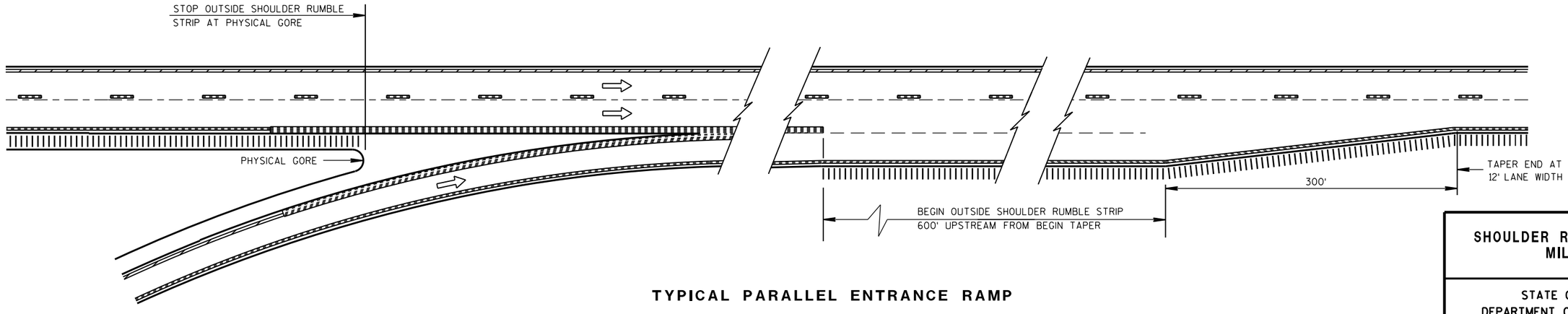
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

322

FHWA

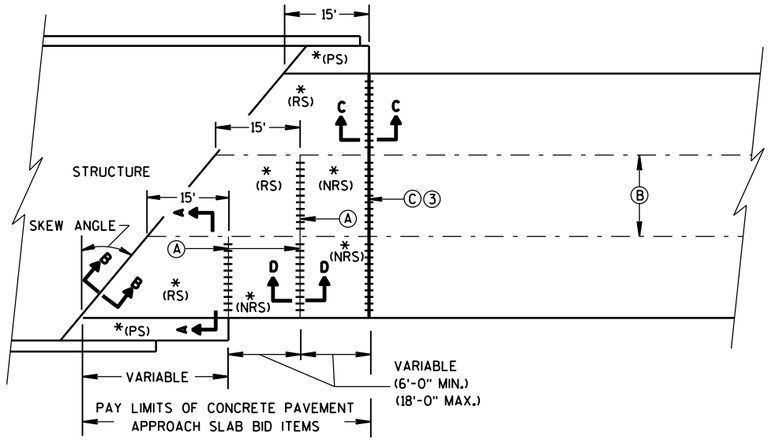
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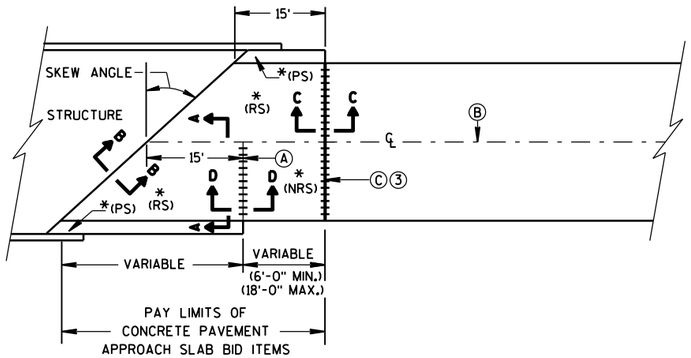
S.D.D. 13 A 5-5b

6

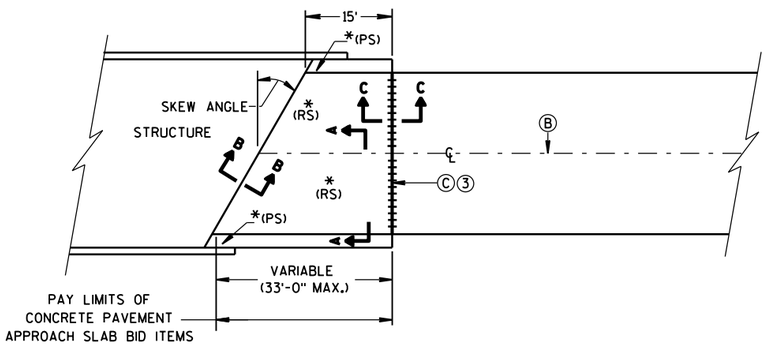
S.D.D. 13 A 5-5b



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



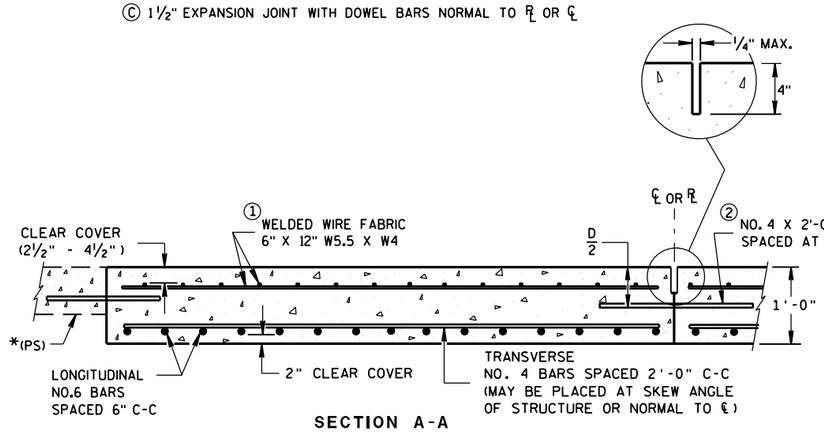
SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

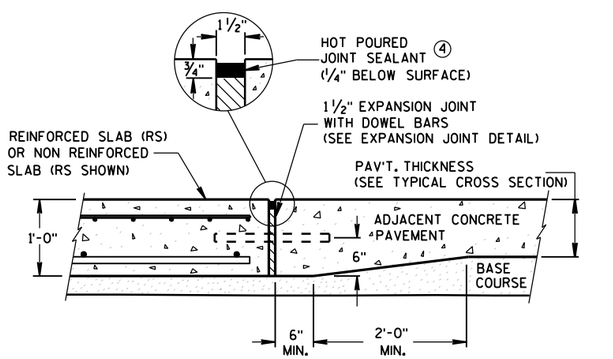
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

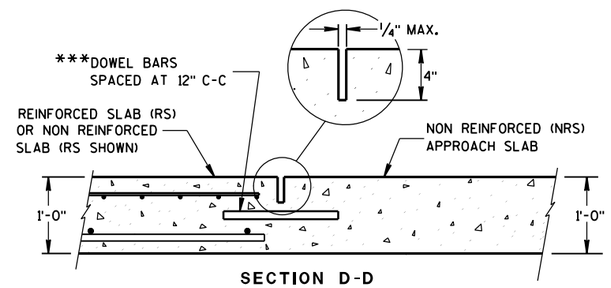
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



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.

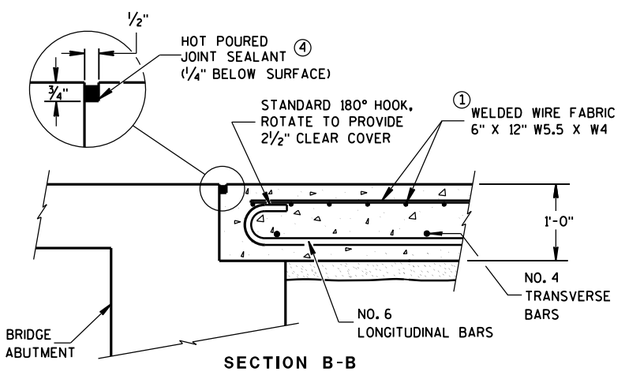
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

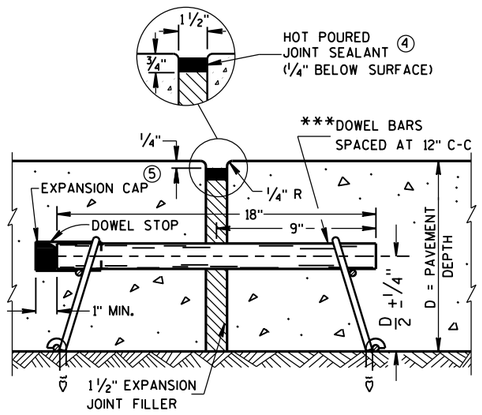
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

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



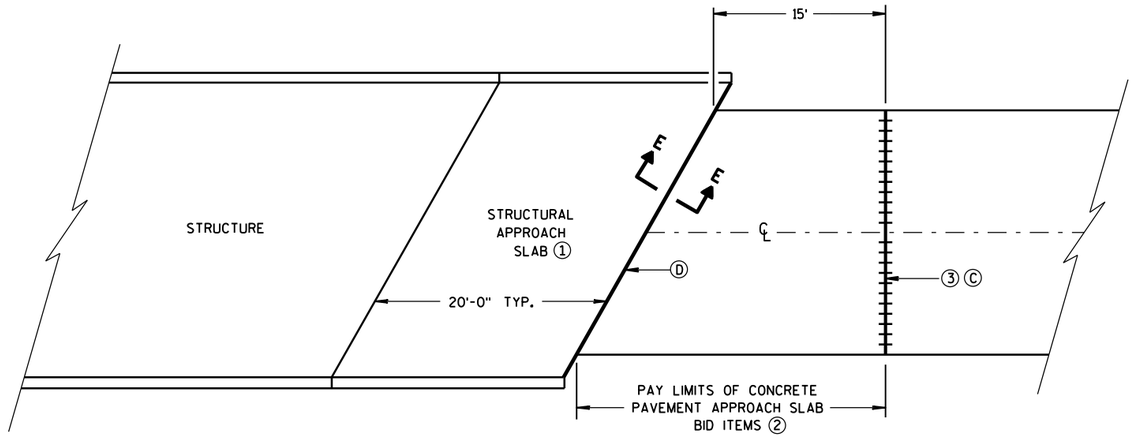
EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

6
S.D.D. 13 B 2-8a



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

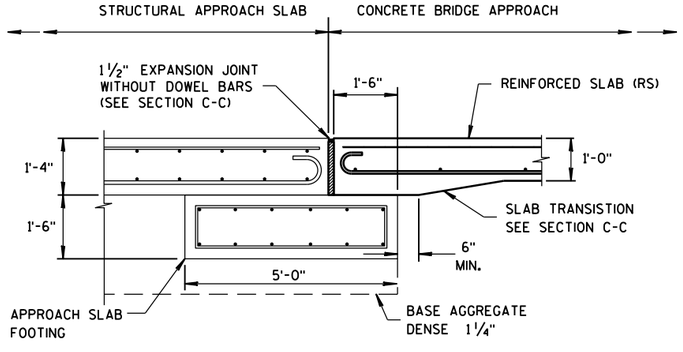
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

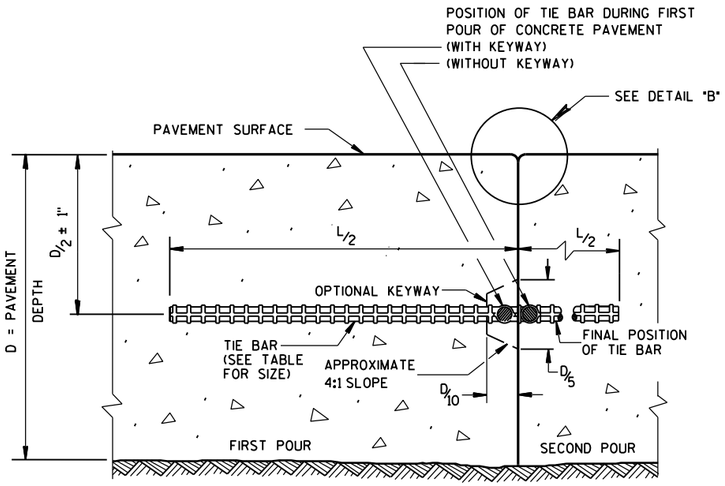
STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

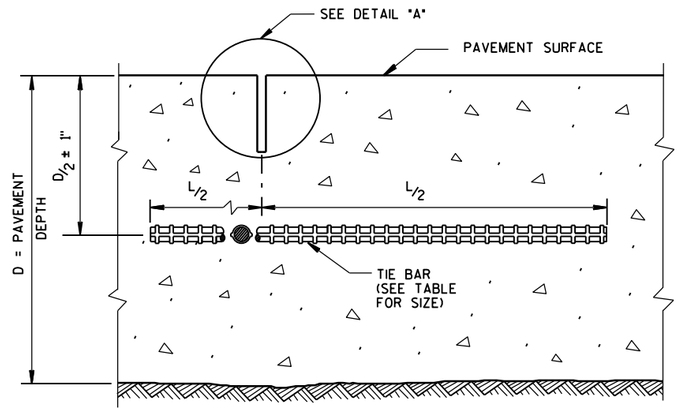
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June, 2015 — DATE
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FHWA

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S.D.D. 13 B 2-8b



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.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

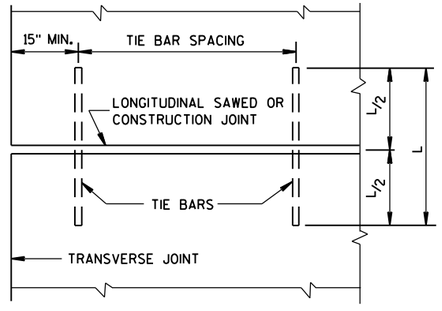
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
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S.D.D. 13 C 1-18

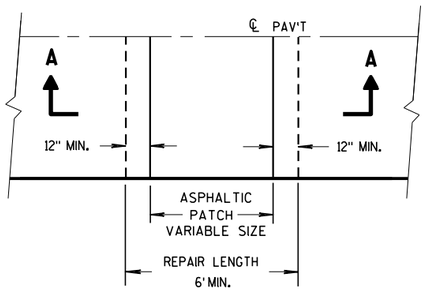
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

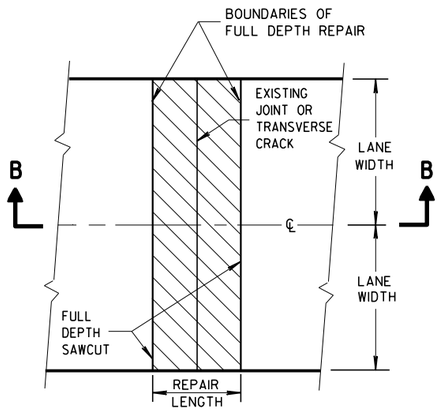
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

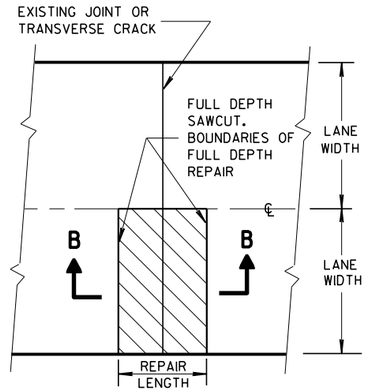
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

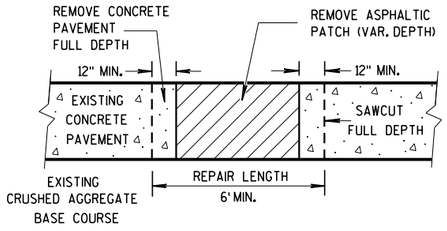


PLAN VIEW
(DOUBLE LANE REPAIR)



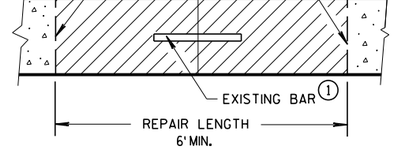
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

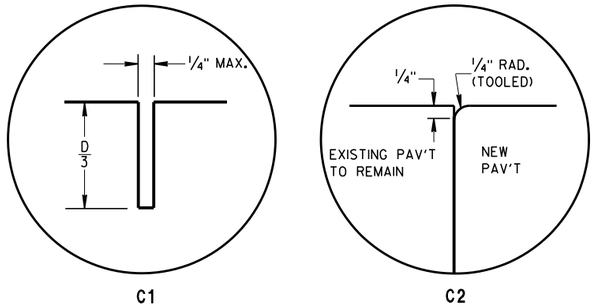
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 9-15a

6

S.D.D. 13 C 9-15a



C1 C2

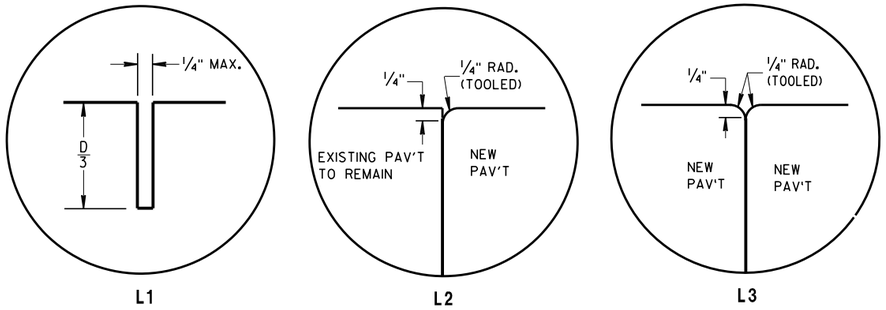
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

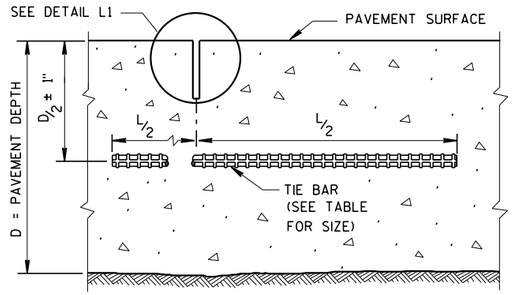
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

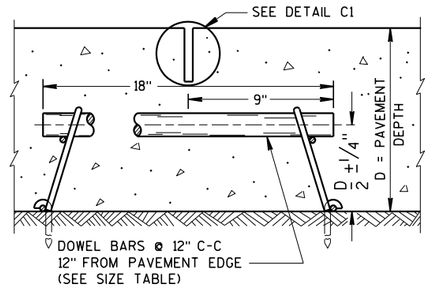
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

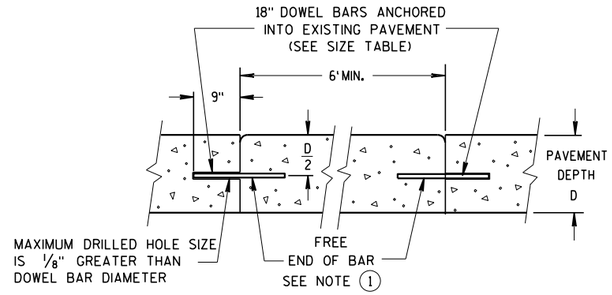
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

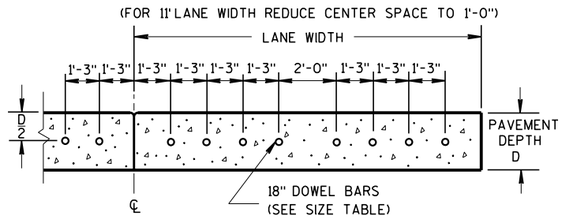


SECTION F-F

CONTRACTION JOINT



SECTION D-D

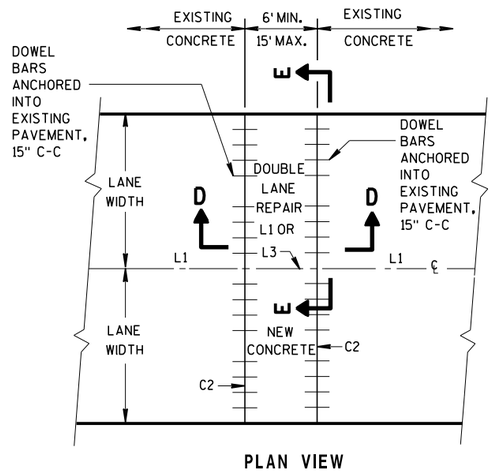


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

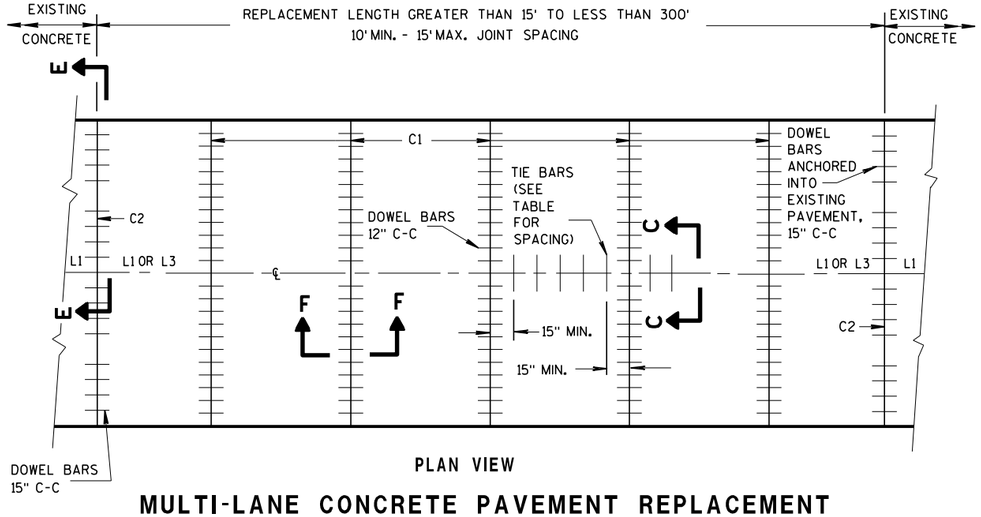
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR

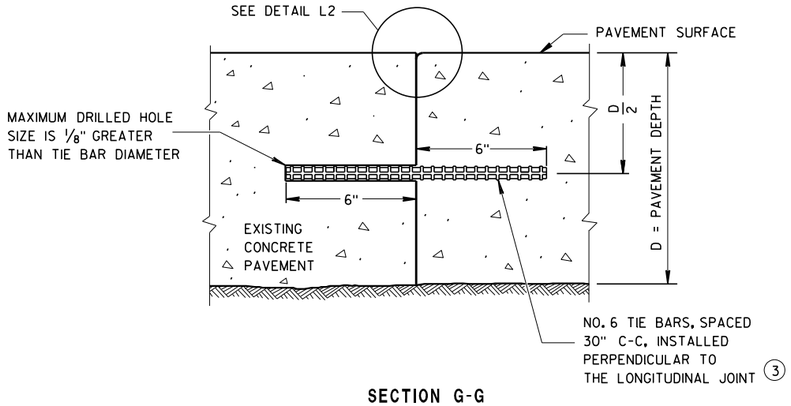


PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

6
S.D.D. 13 C 9-15b



SECTION G-G

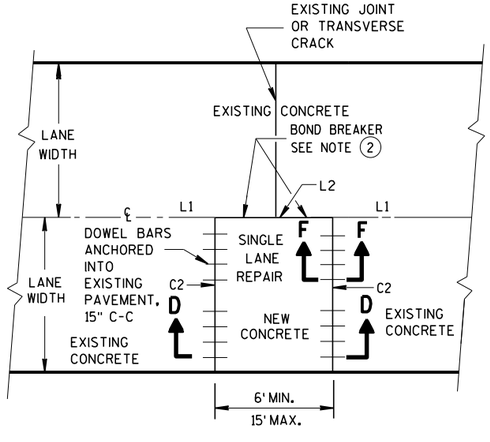
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

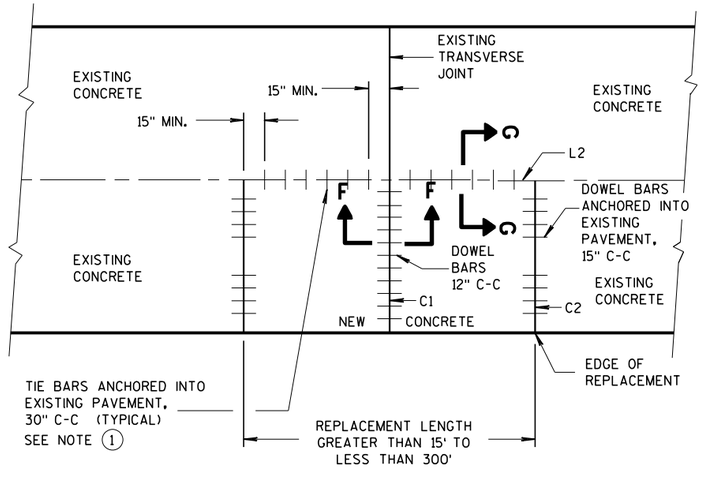
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

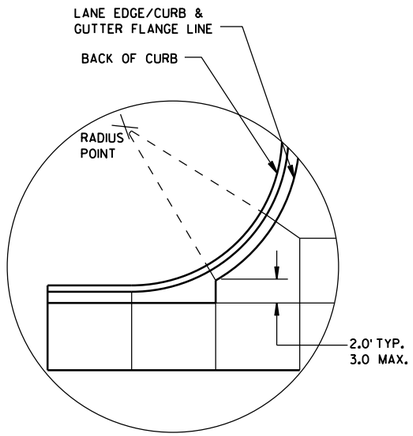
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

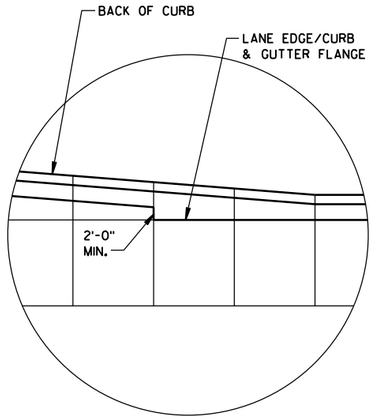
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

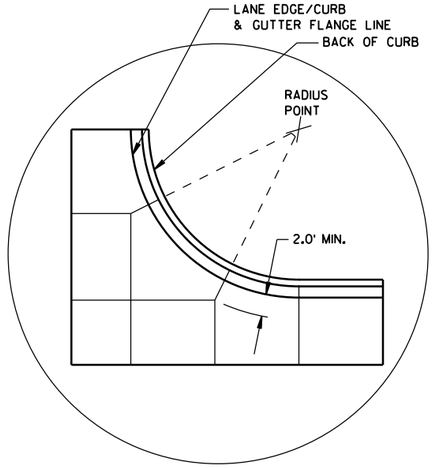
6
S.D.D. 13 C 9-15c



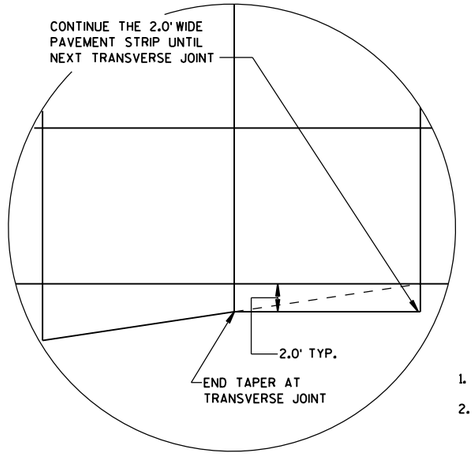
DETAIL "A"



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.

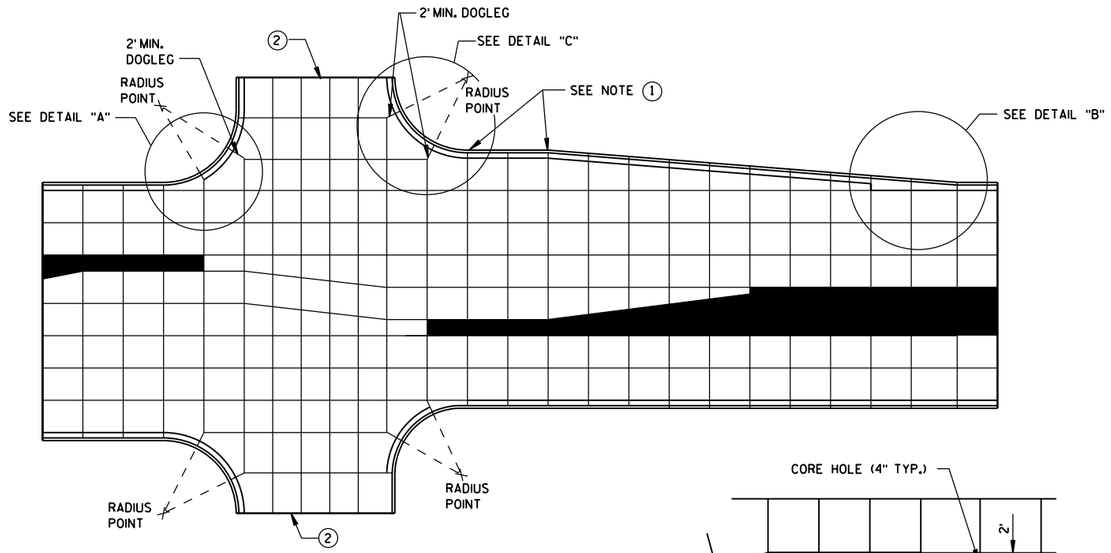
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

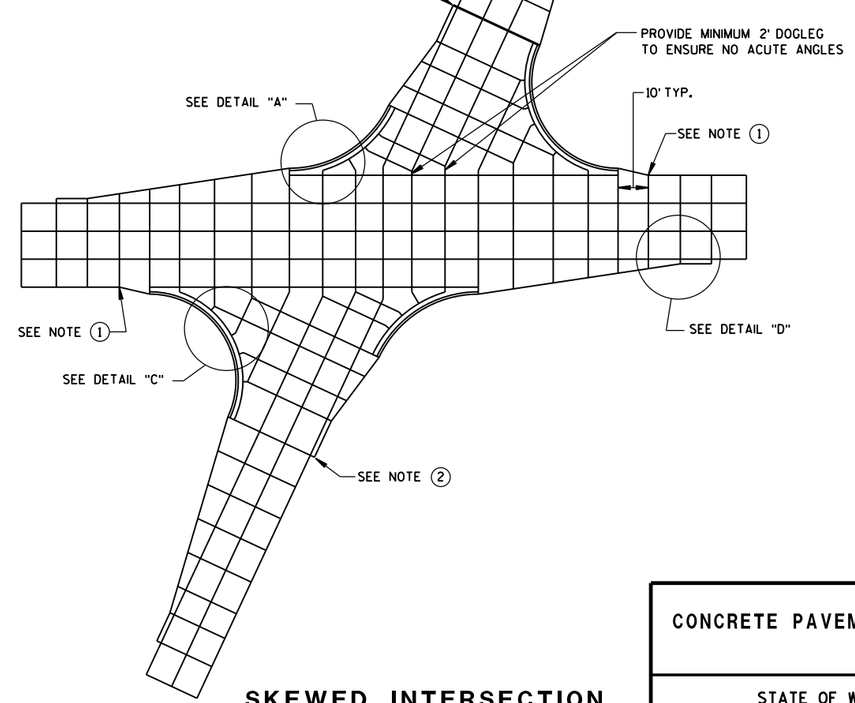
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



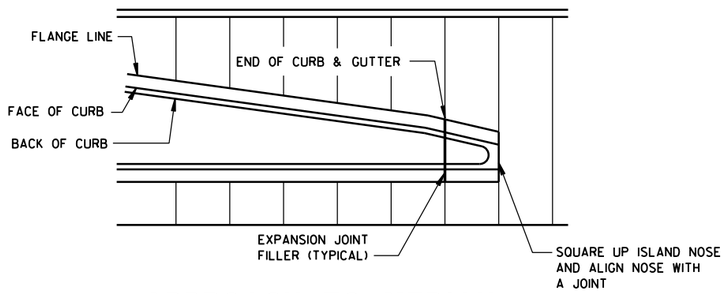
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

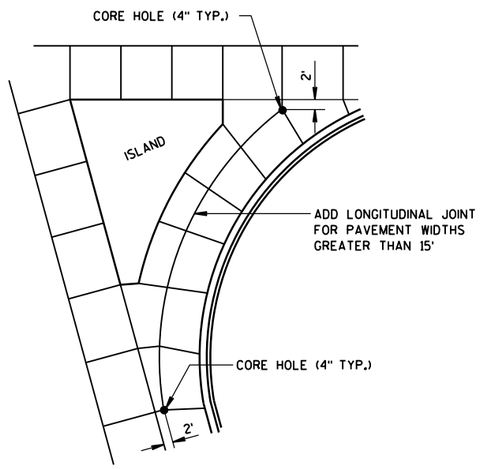
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

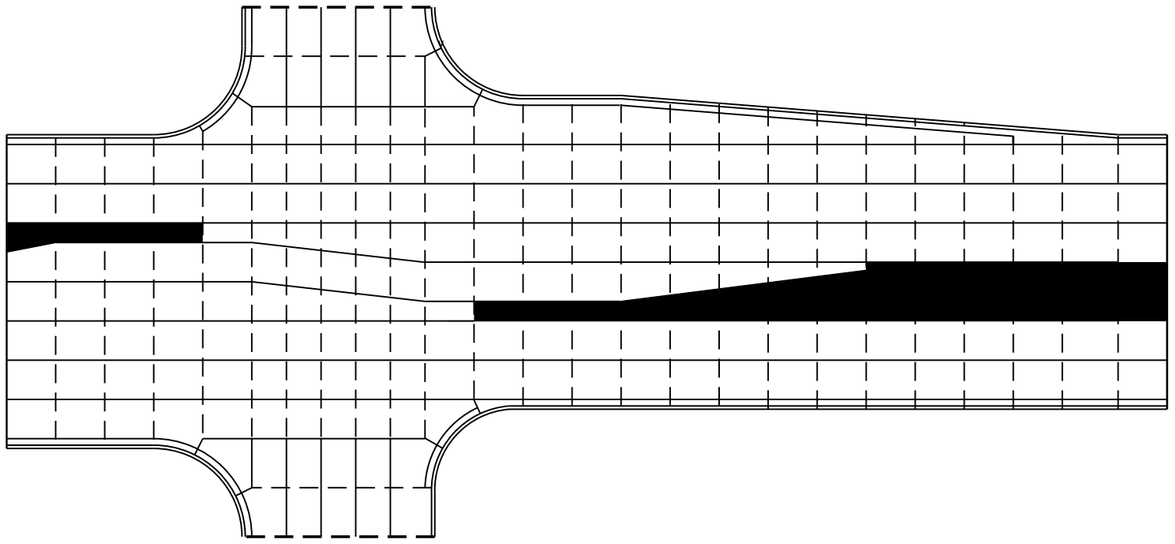
S.D.D. 13 C 18-5a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

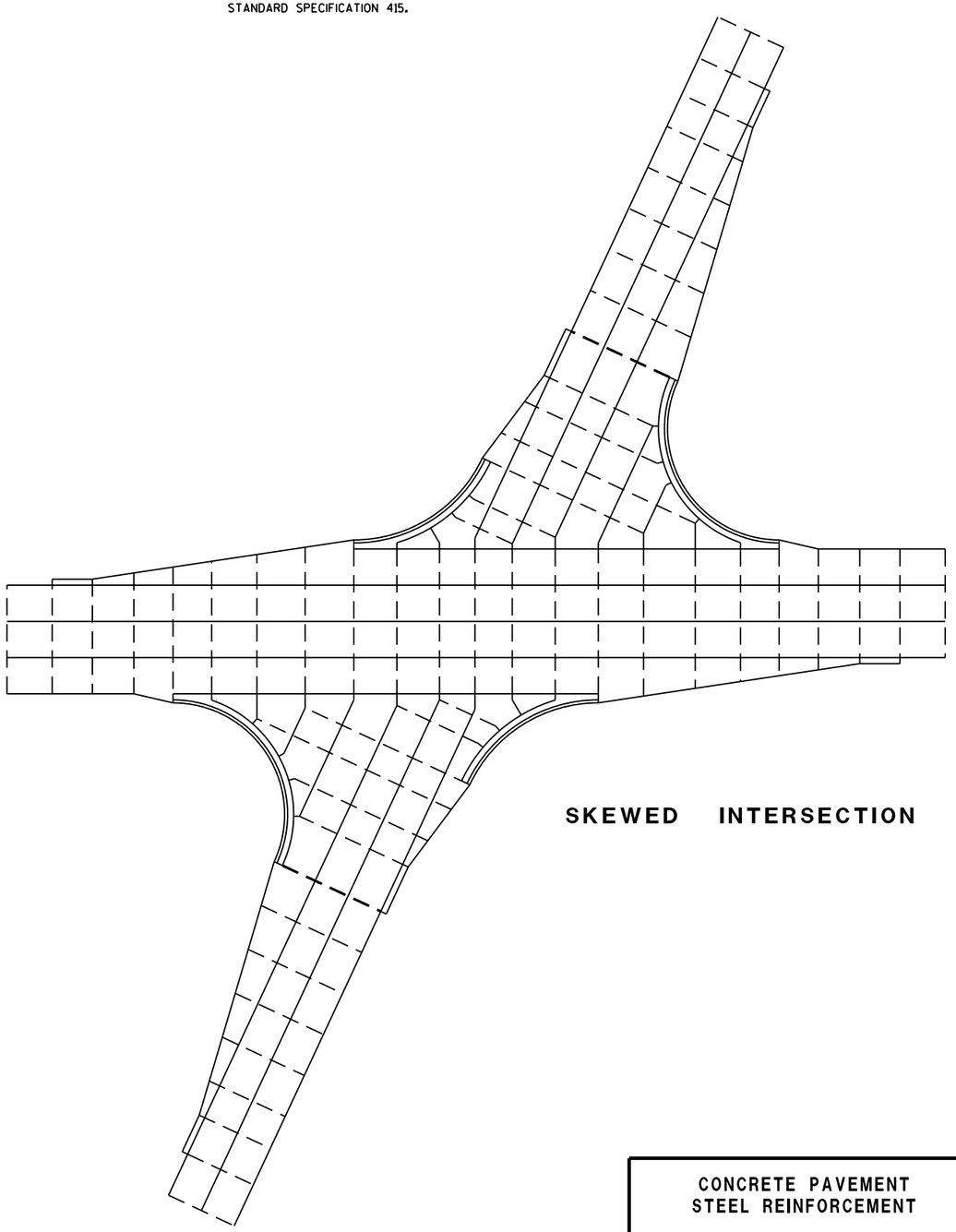
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

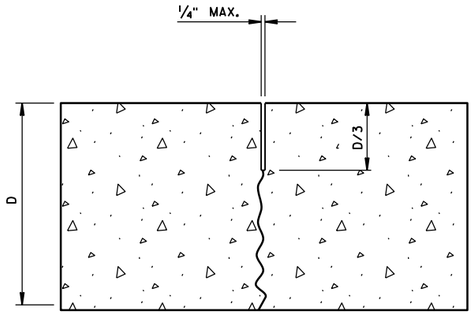
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

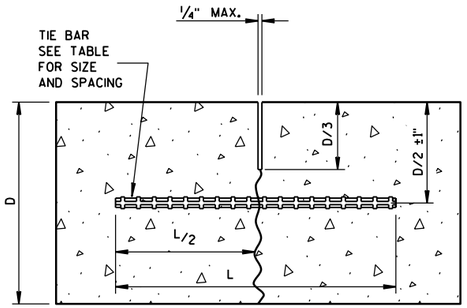
S.D.D. 13 C 18-5b

6

S.D.D. 13 C 18-5b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

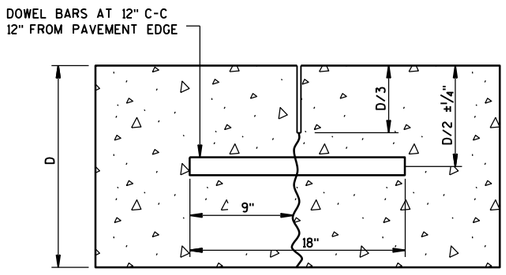
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

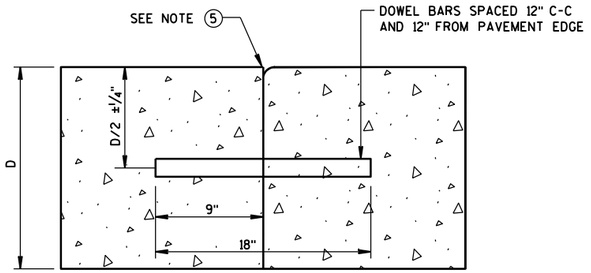
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



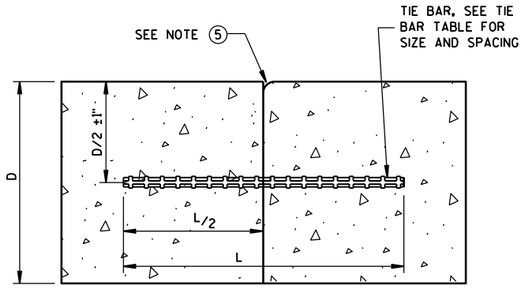
DOWELED-TRANSVERSE

CONTRACTION JOINTS

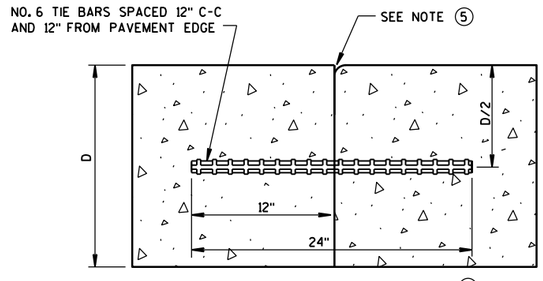
SEE NOTE (2)



DOWELED TRANSVERSE (3)

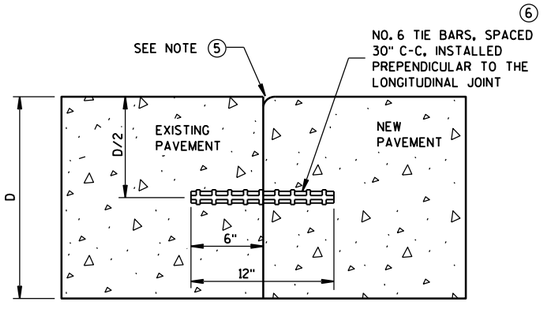


TIED LONGITUDINAL



TIED TRANSVERSE (3)

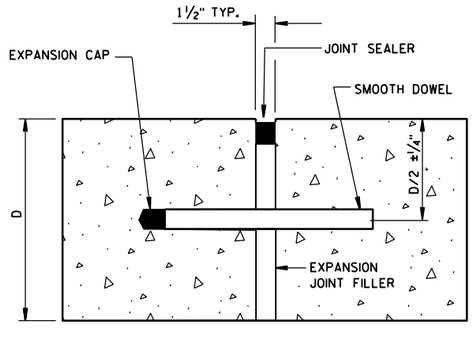
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

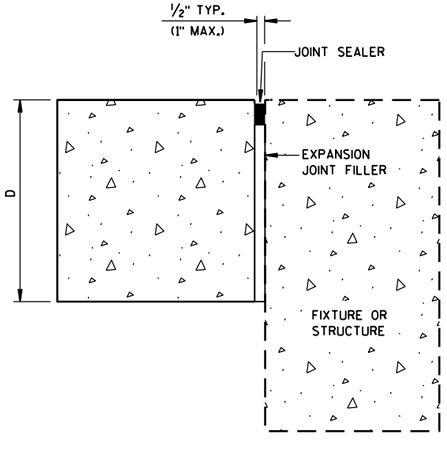
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

6

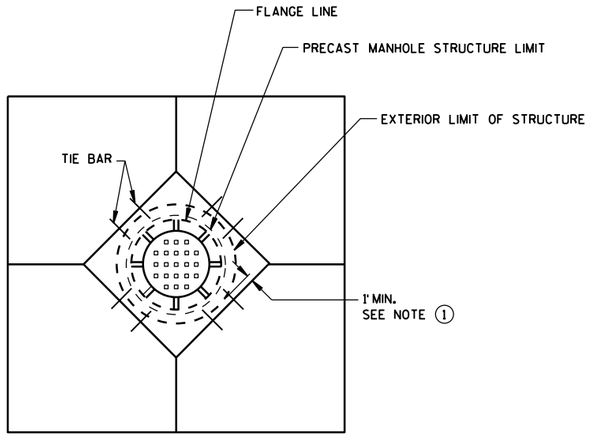
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S.D.D. 13 C 18-5c

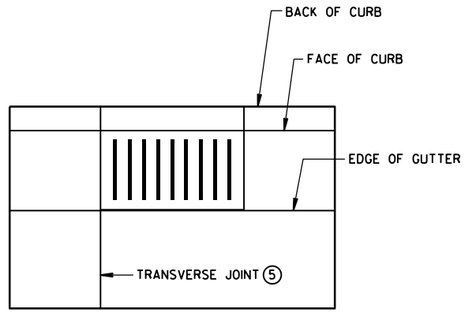
S.D.D. 13 C 18-5c

CONCRETE PAVEMENT
JOINT TYPES

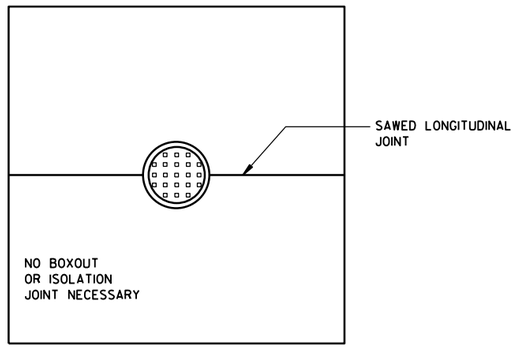
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



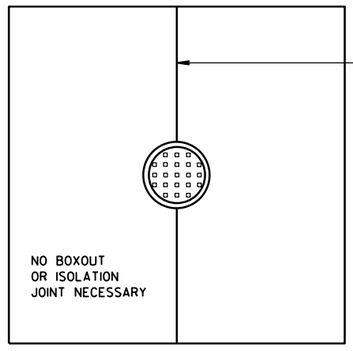
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



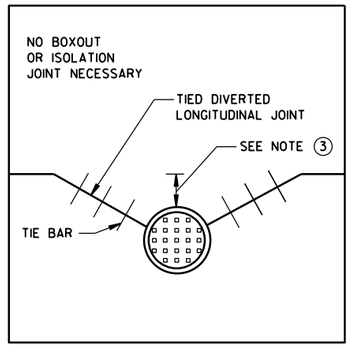
INLET WITH TRANSVERSE JOINT



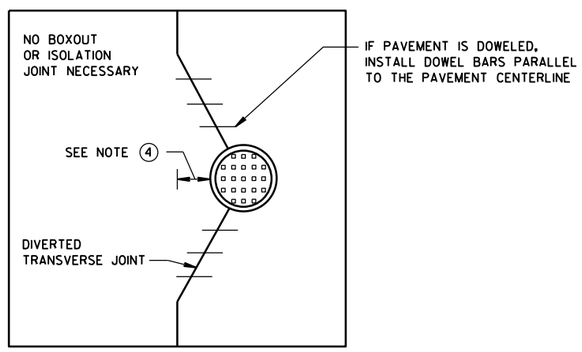
MANHOLE WITH LONGITUDINAL JOINT



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.

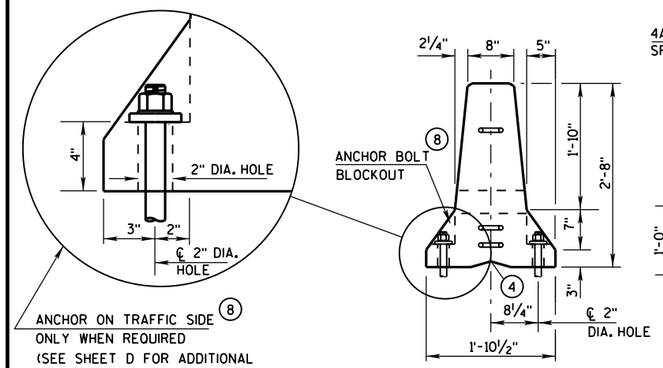
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

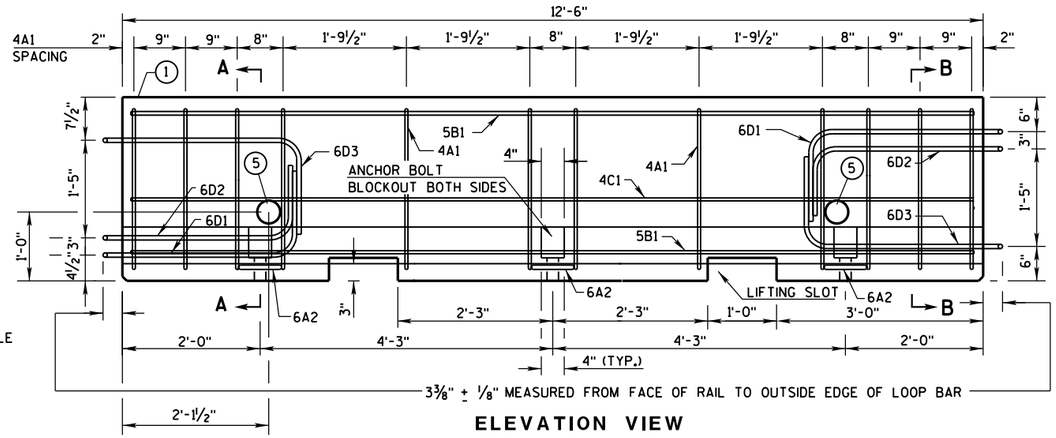
APPROVED
December, 2016 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPER
FHWA

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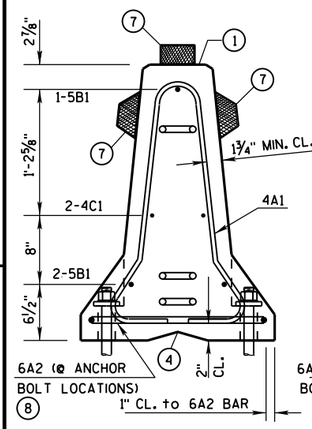
S.D.D. 13 C 18-5d



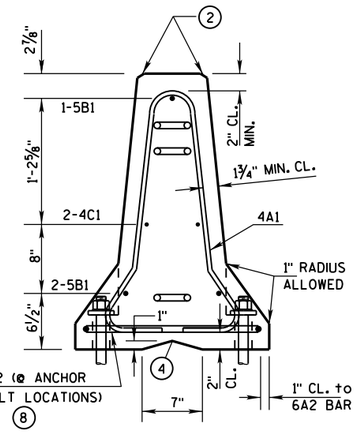
END VIEW



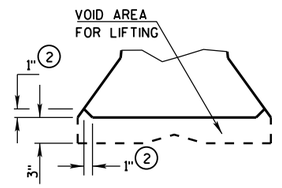
ELEVATION VIEW



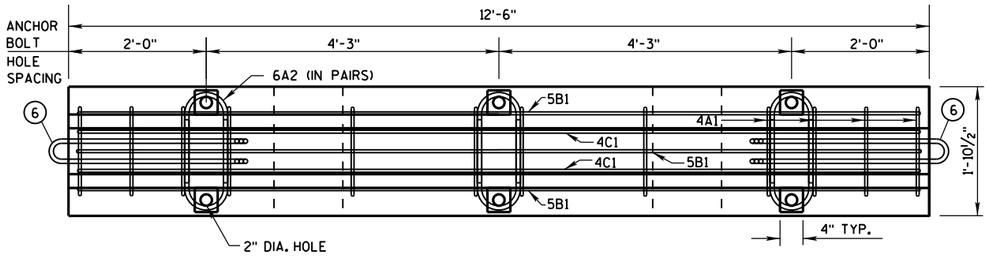
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

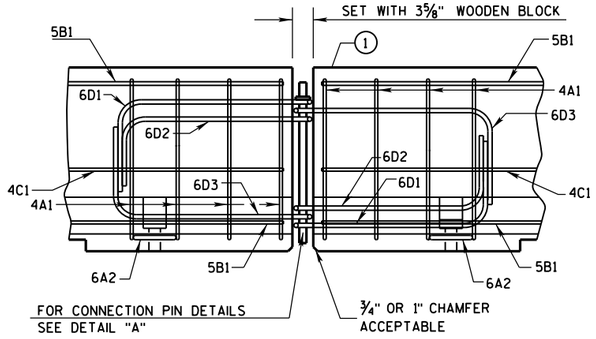


DETAIL "B"
LIFTING SLOT DETAIL

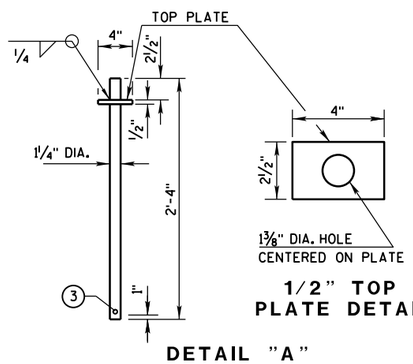


PLAN VIEW

DETAILS OF BARRIER SECTION

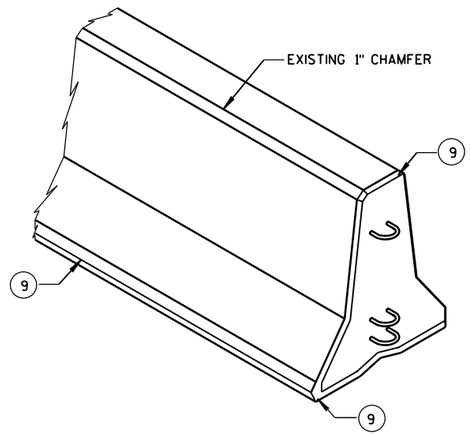


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

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 ADHESIVE 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 HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

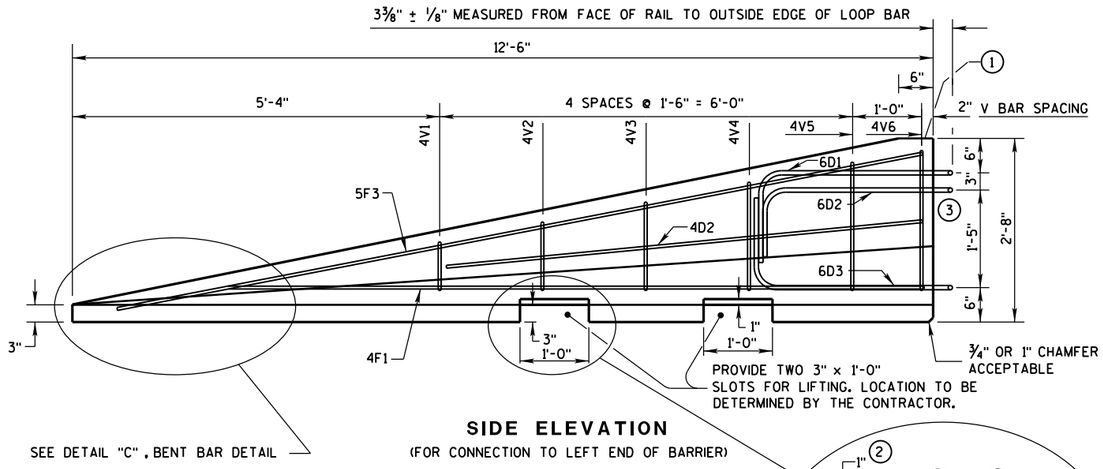
f'c = 4,000 psi

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

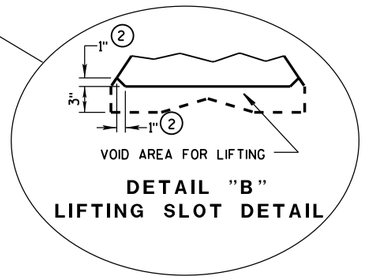
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

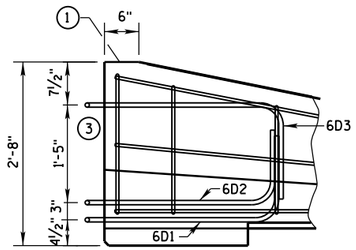
S.D.D. 14 B 7-15a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



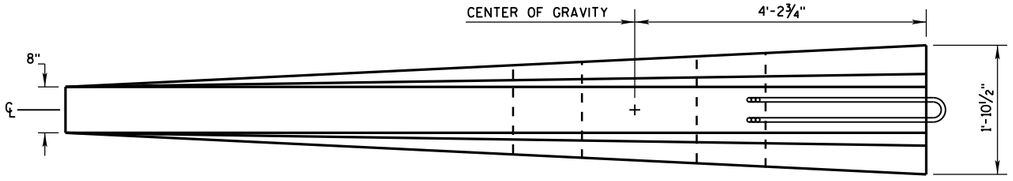
DETAIL "B"
LIFTING SLOT DETAIL



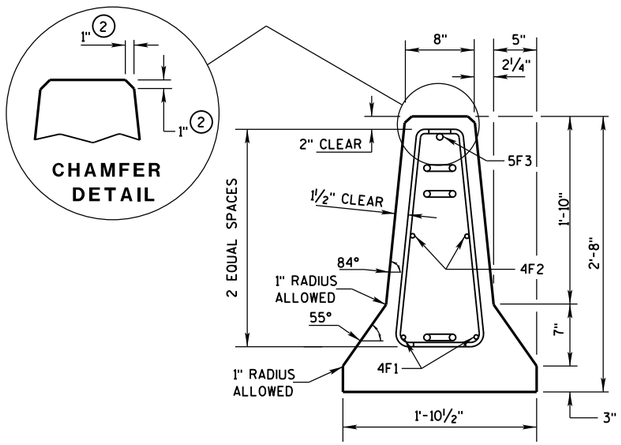
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

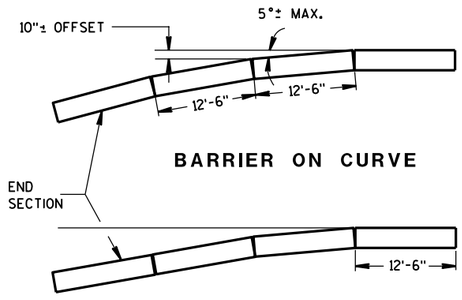
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



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

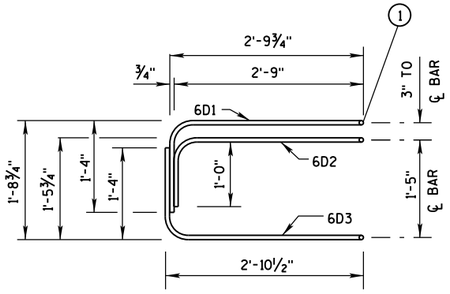
6

S.D.D. 14 B 7-15b

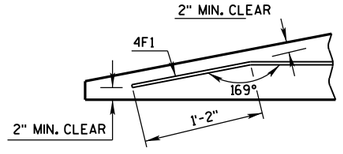
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

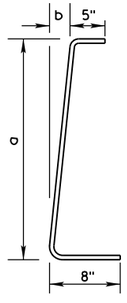
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

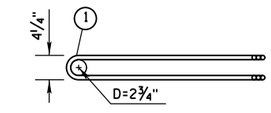
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

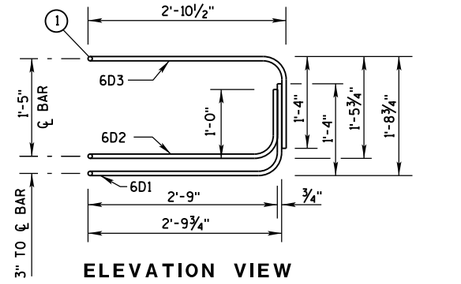
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

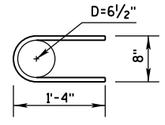
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



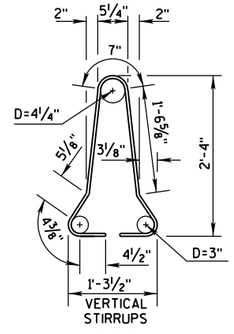
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

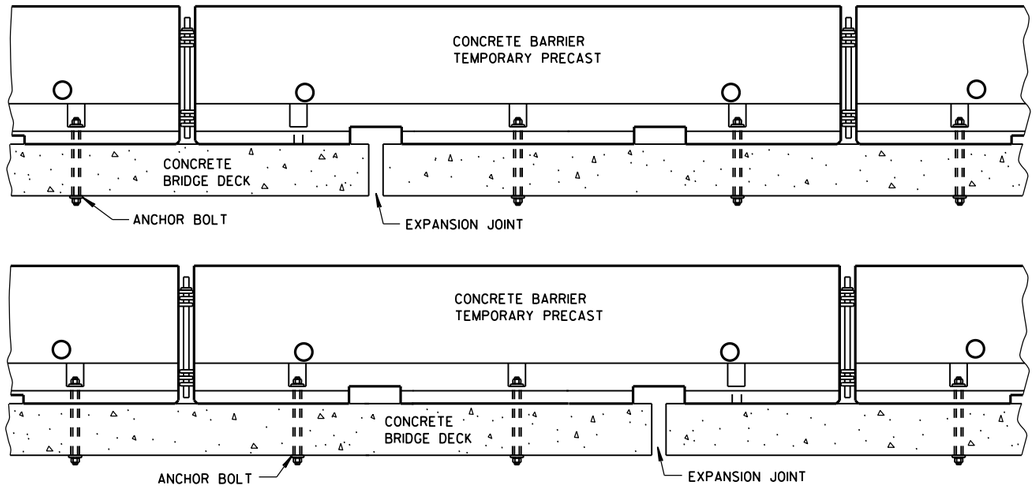
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 7-15c



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.)

GENERAL NOTES

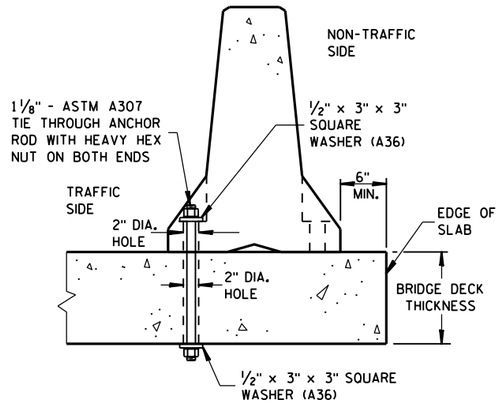
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

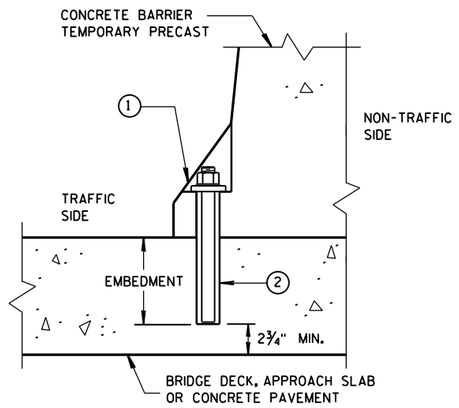
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



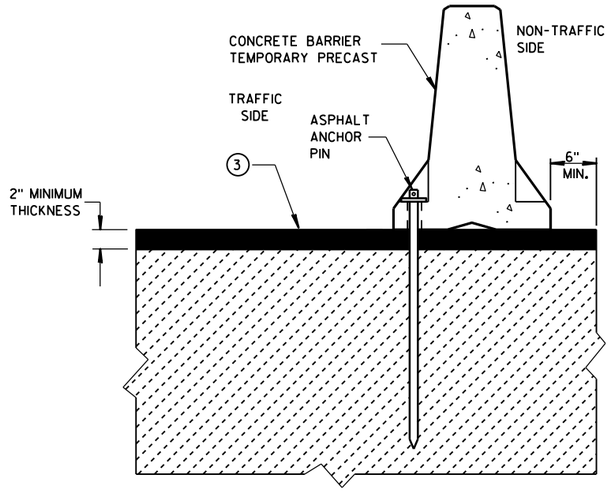
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

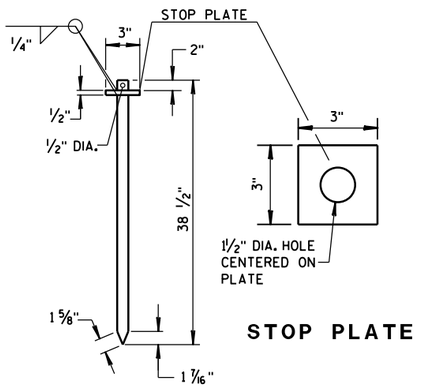


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



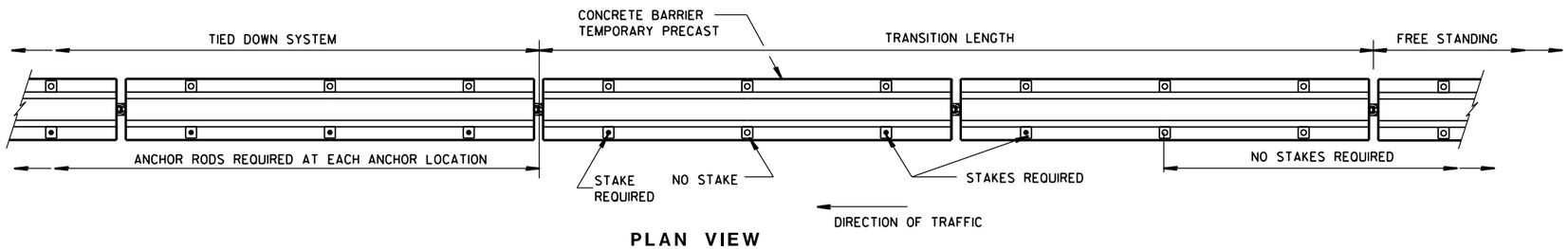
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

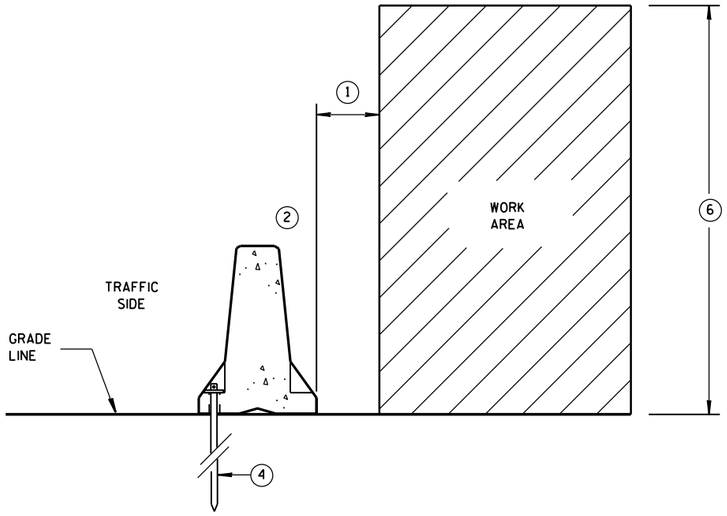
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

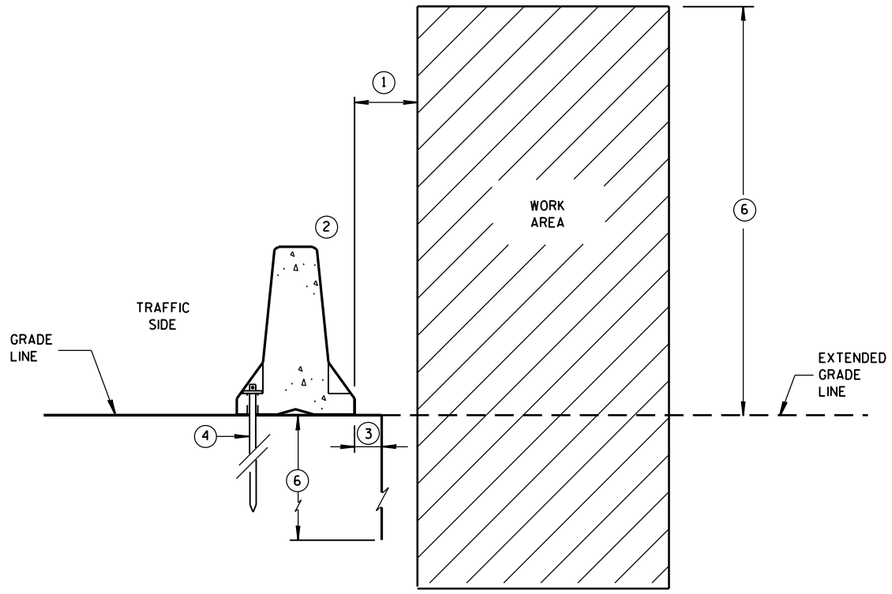
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

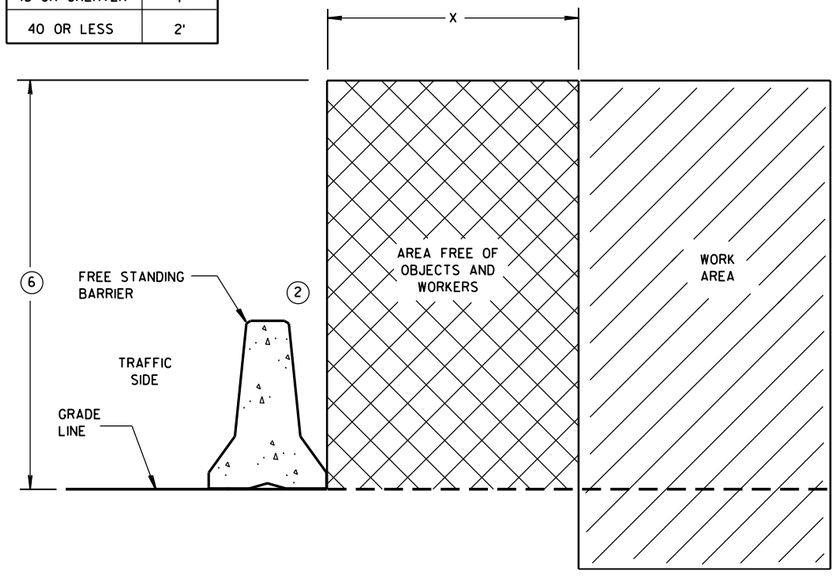


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

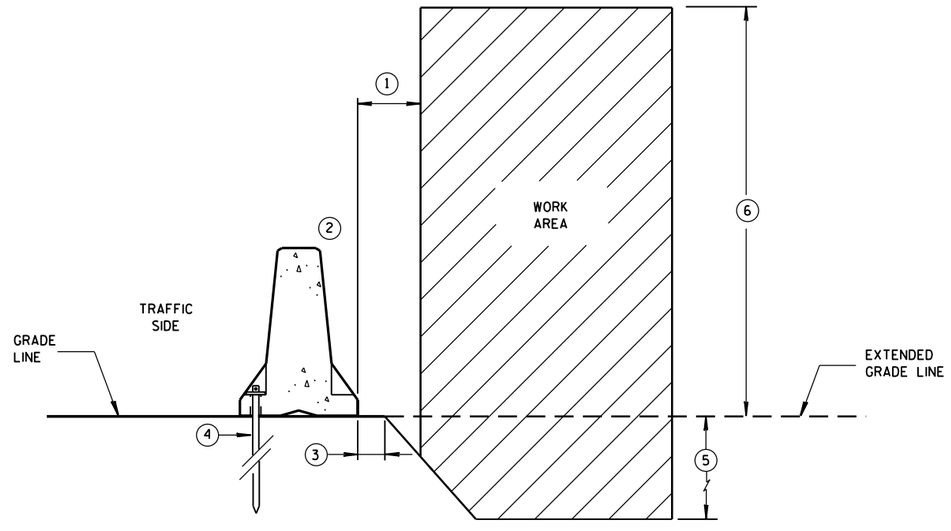
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



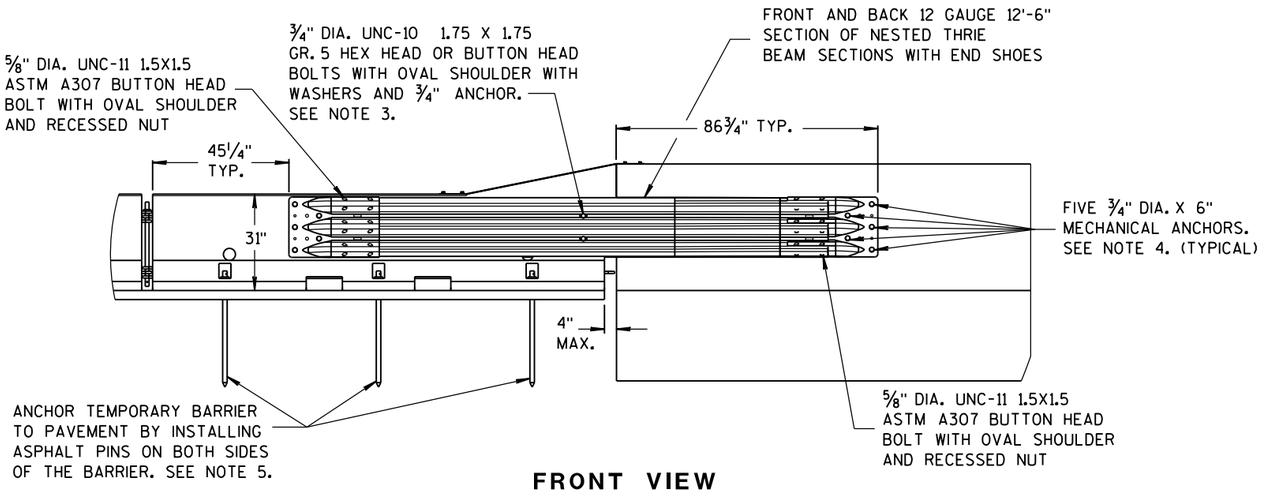
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

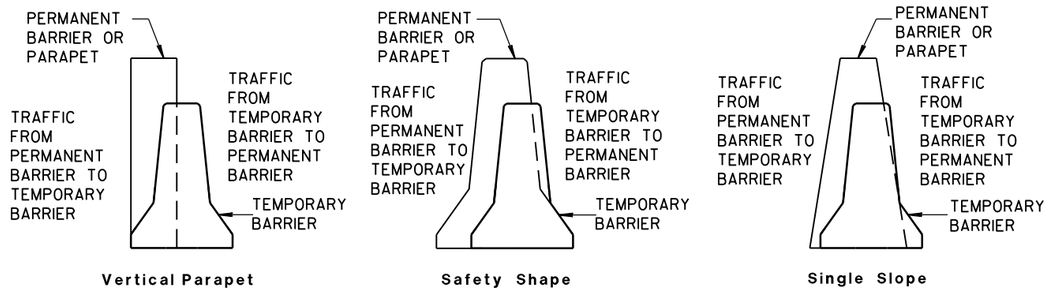
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-15e



FRONT VIEW

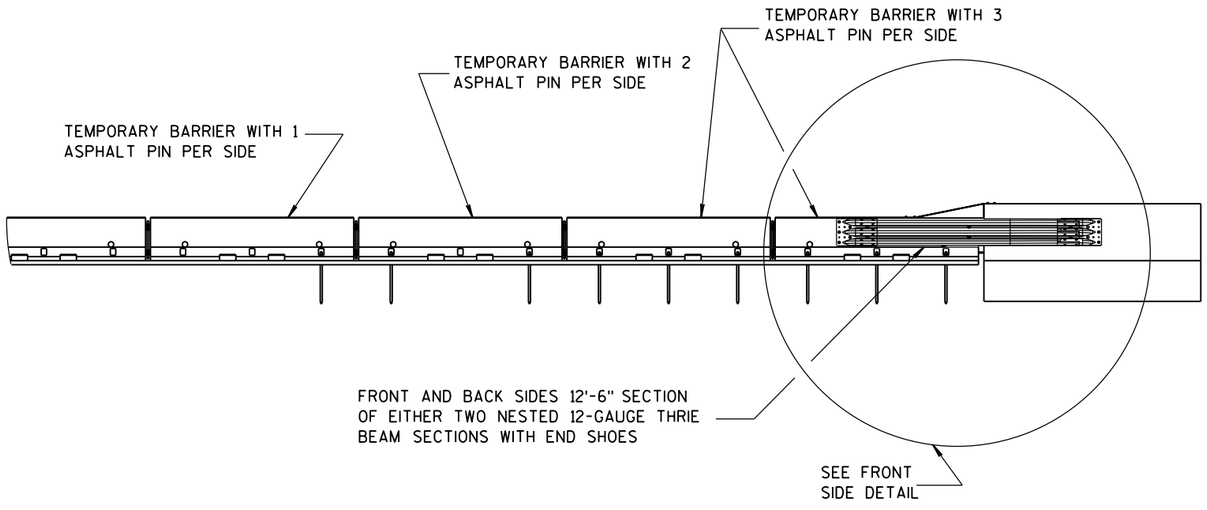


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

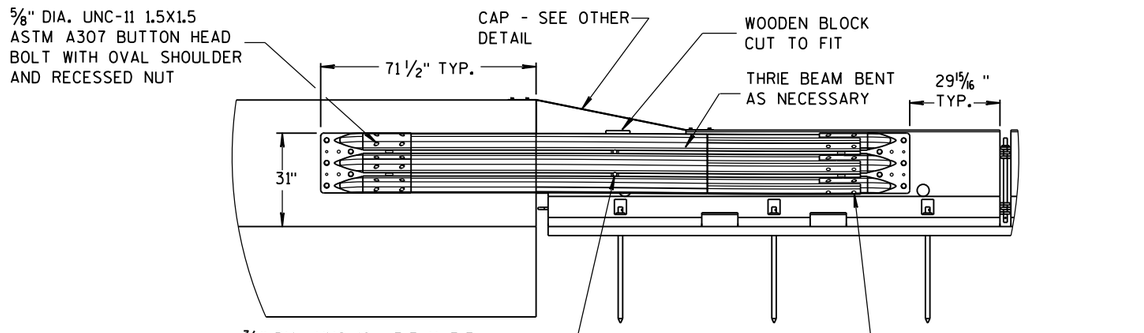
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

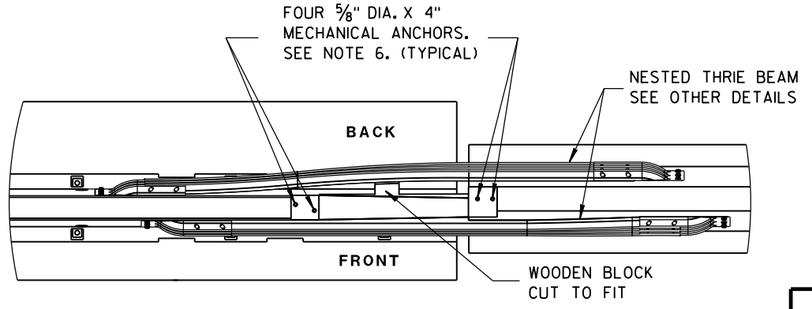
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE 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 ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



FRONT VIEW



BACK VIEW



PLAN VIEW

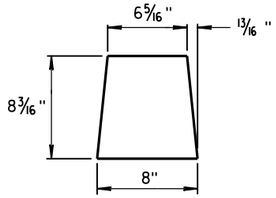
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

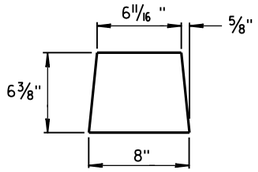
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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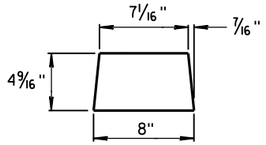
S.D.D. 14 B 7-15f



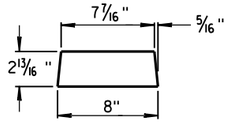
GUSSET 1



GUSSET 2

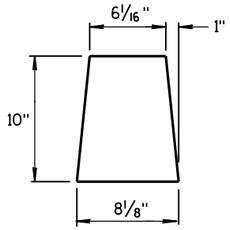


GUSSET 3

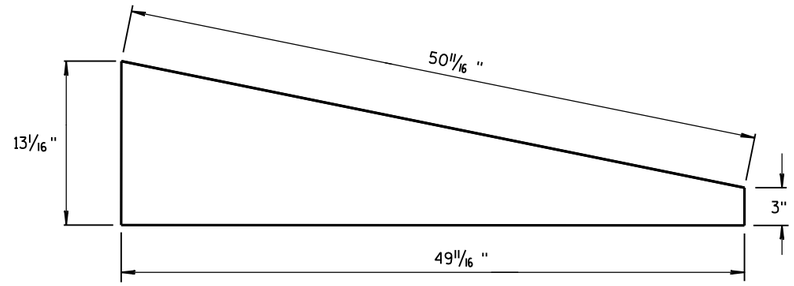


GUSSET 4

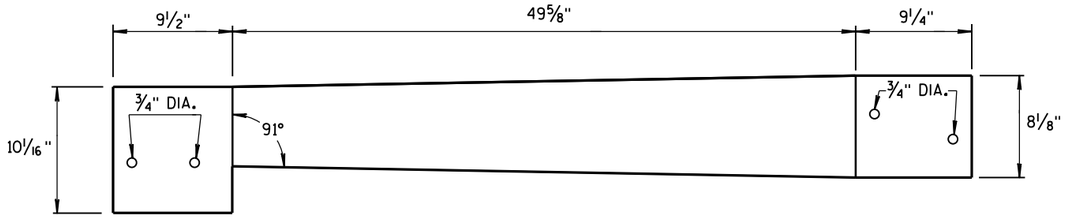
GUSSETS

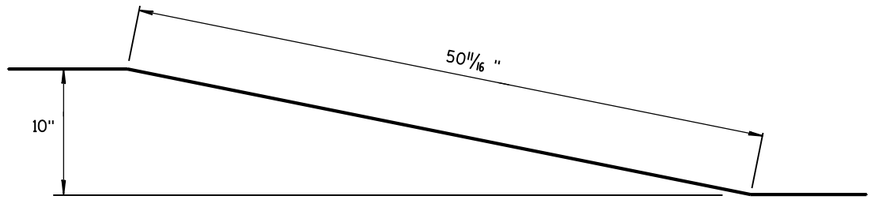


END PLATE



SIDE PLATE

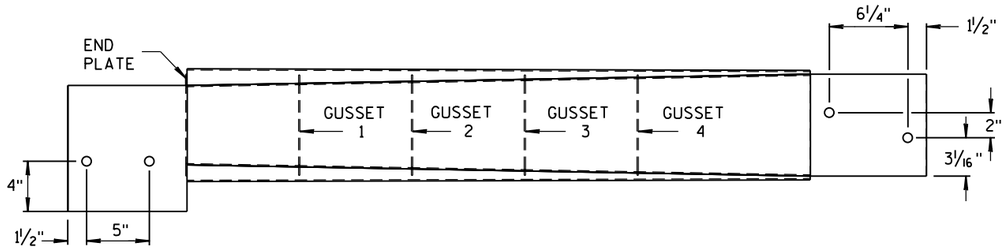


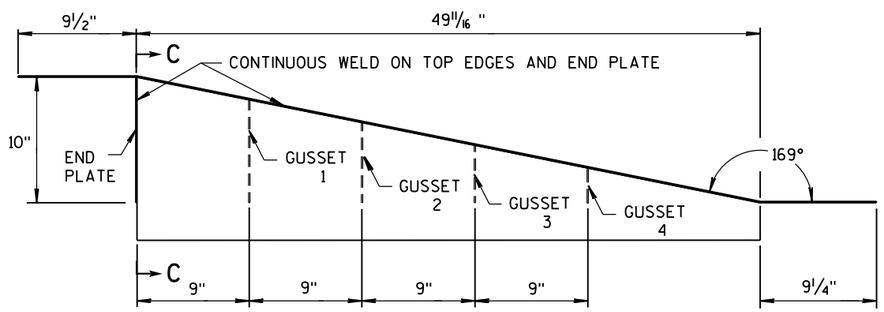


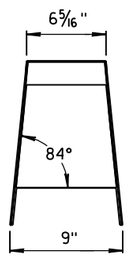
TOP PLATE

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

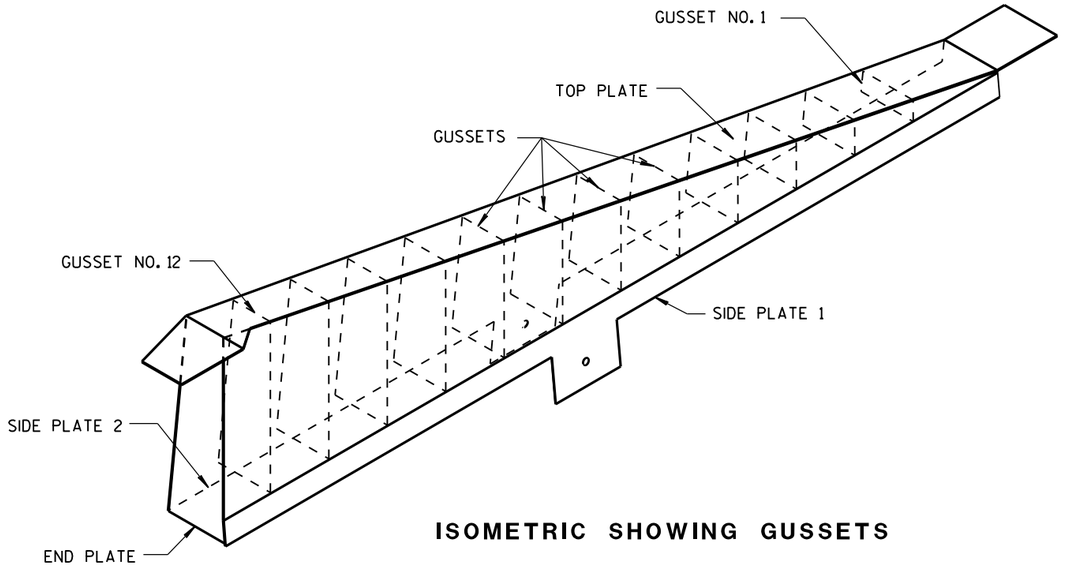
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

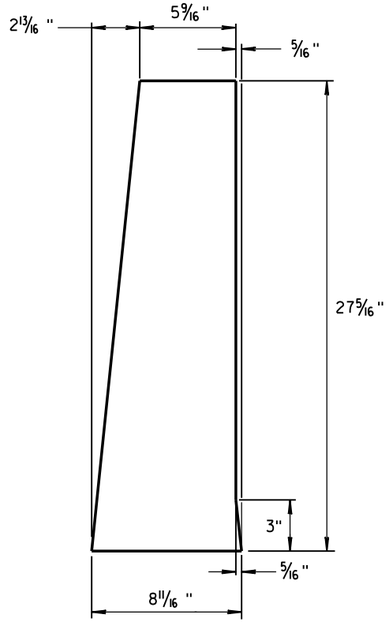
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15g

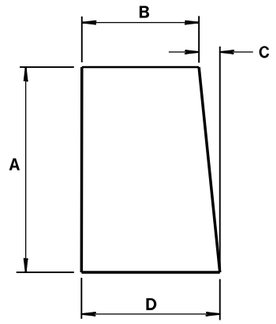


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



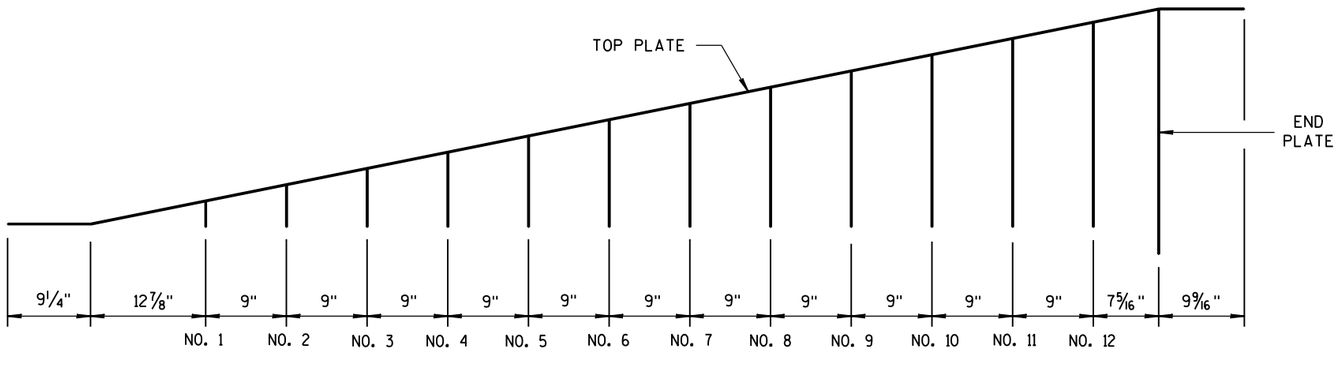
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



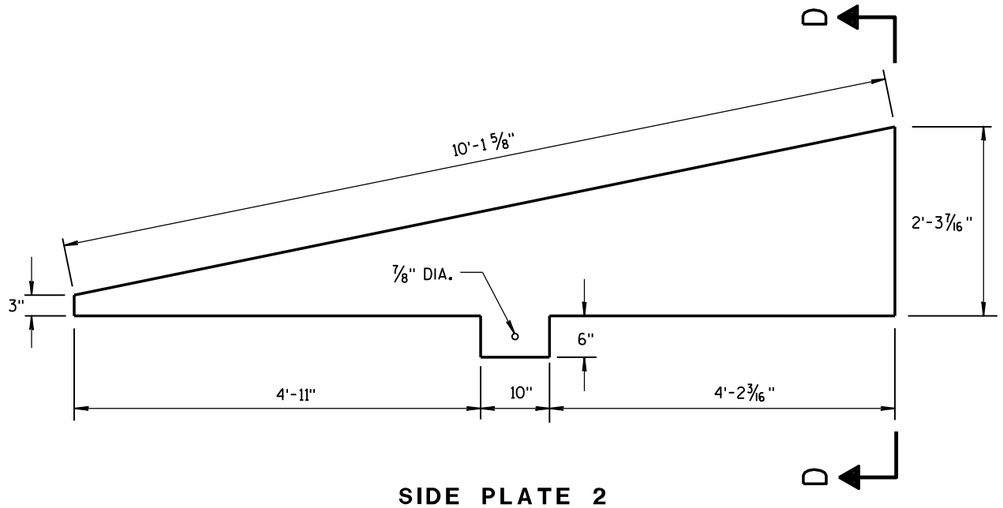
GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

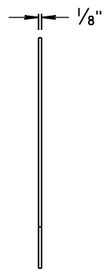
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

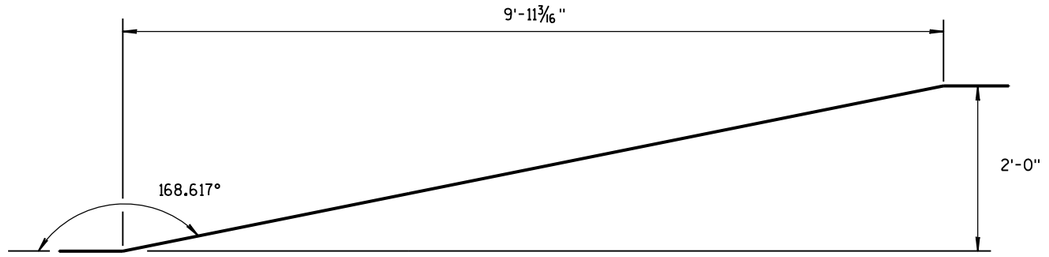
6
S.D.D. 14 B 7-15h



SIDE PLATE 2

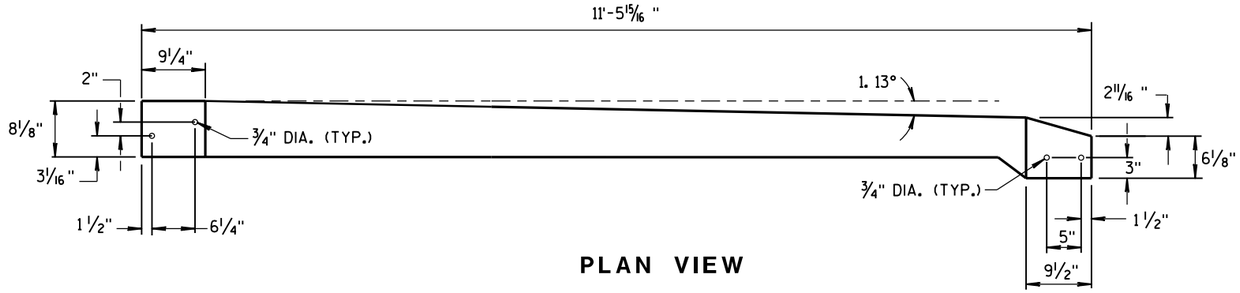


END VIEW



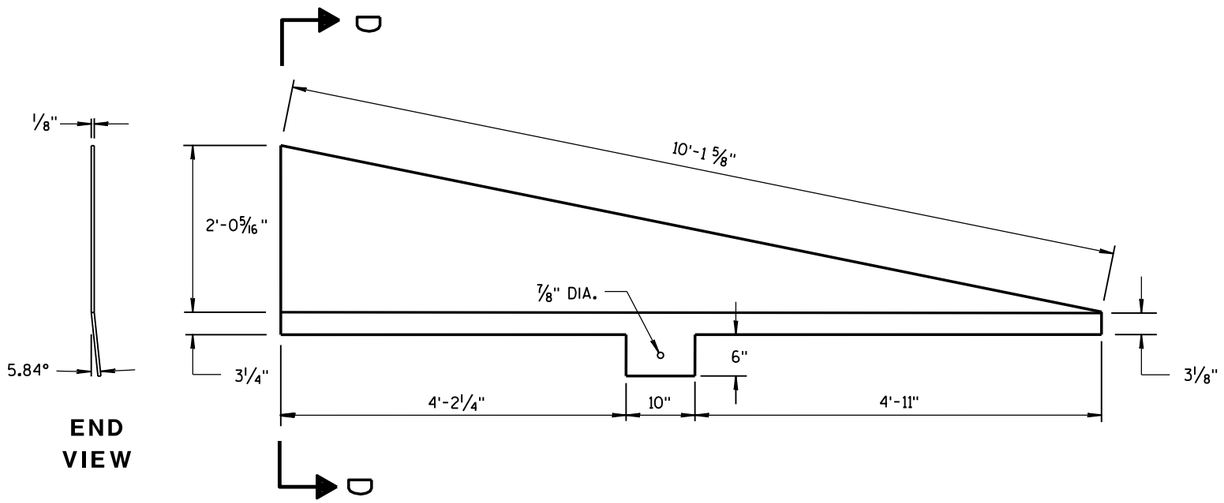
SIDE VIEW

TOP PLATE



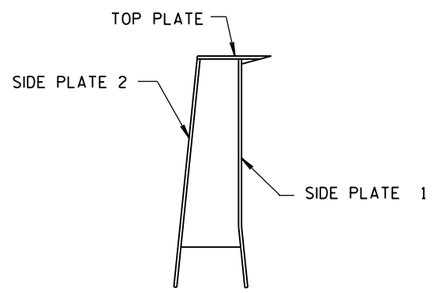
PLAN VIEW

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 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

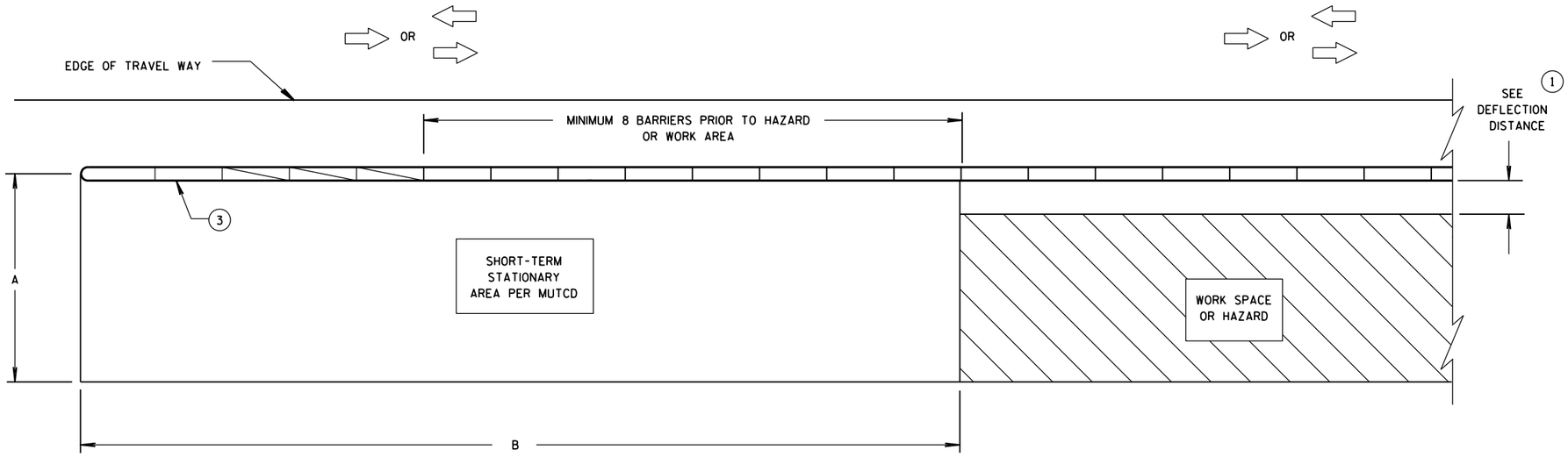
341

S.D.D. 14 B 7-15i

6

S.D.D. 14 B 7-15i

6



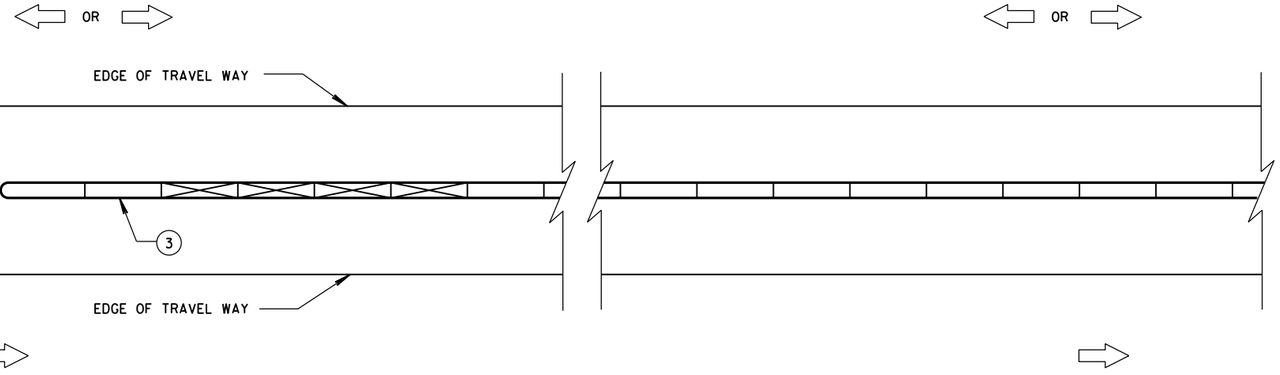
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

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.

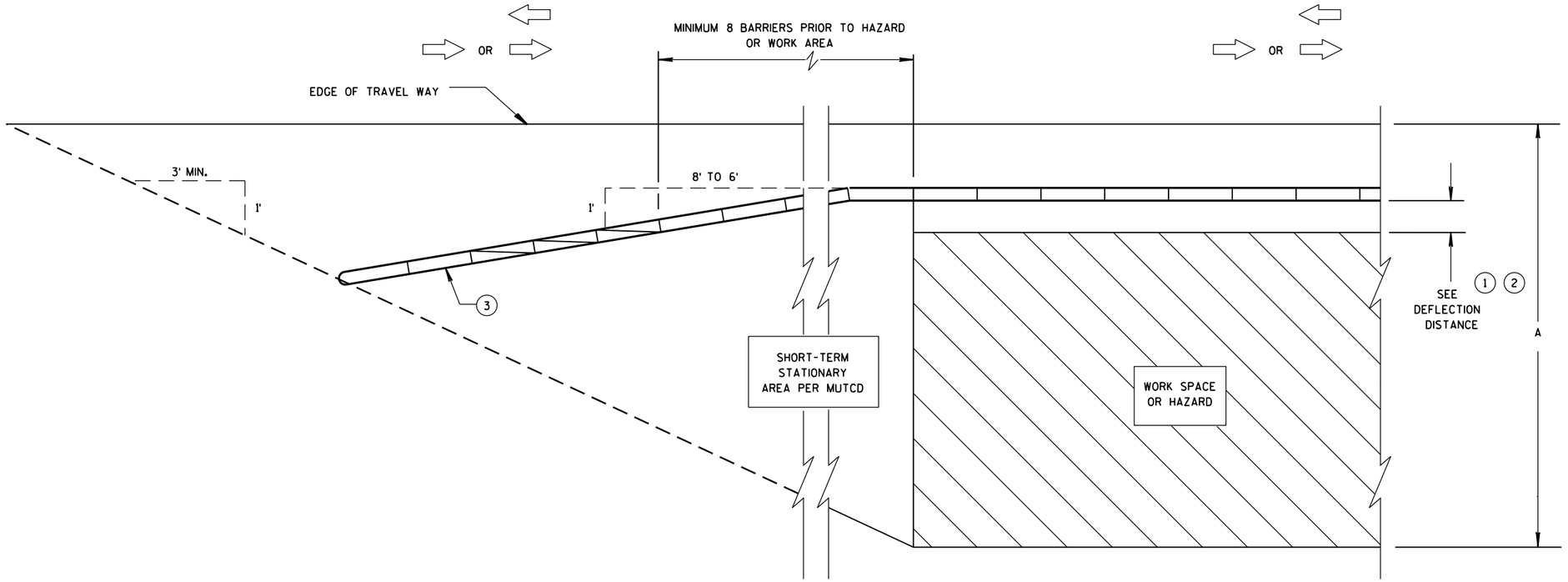
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

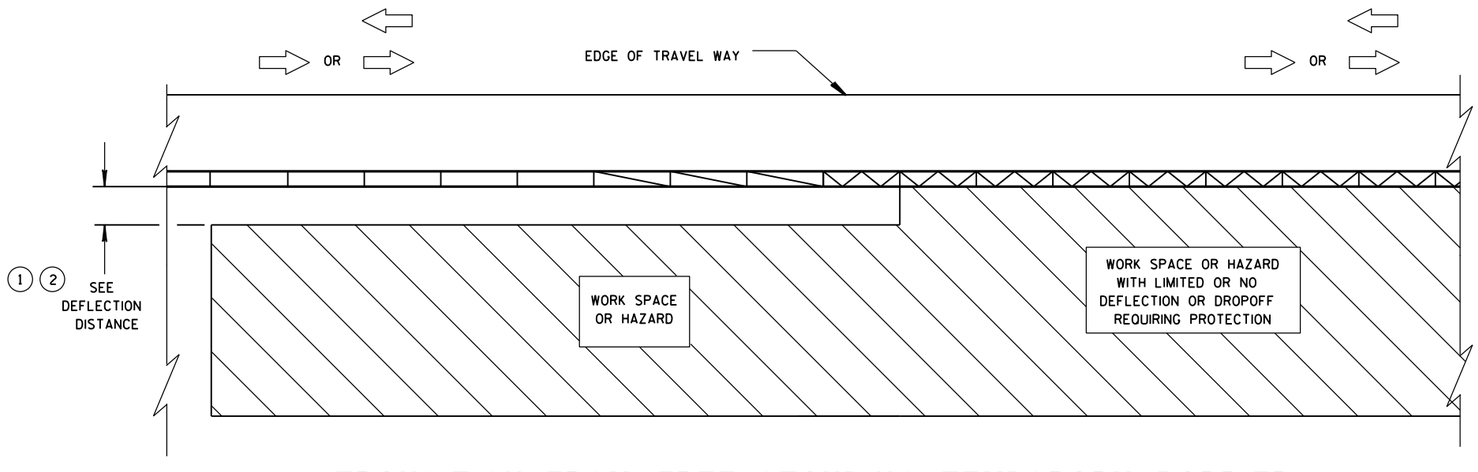
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2a
S.D.D. 14 B 8-2a



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

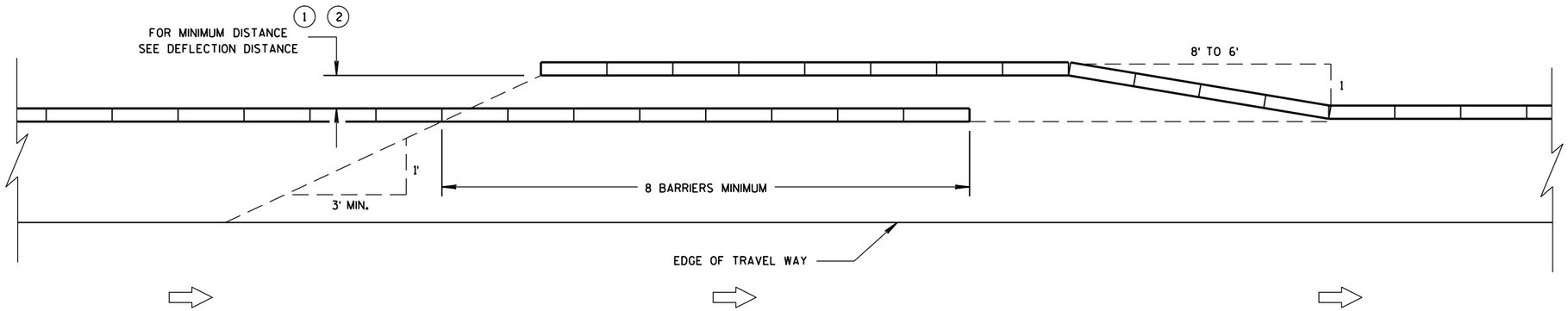
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

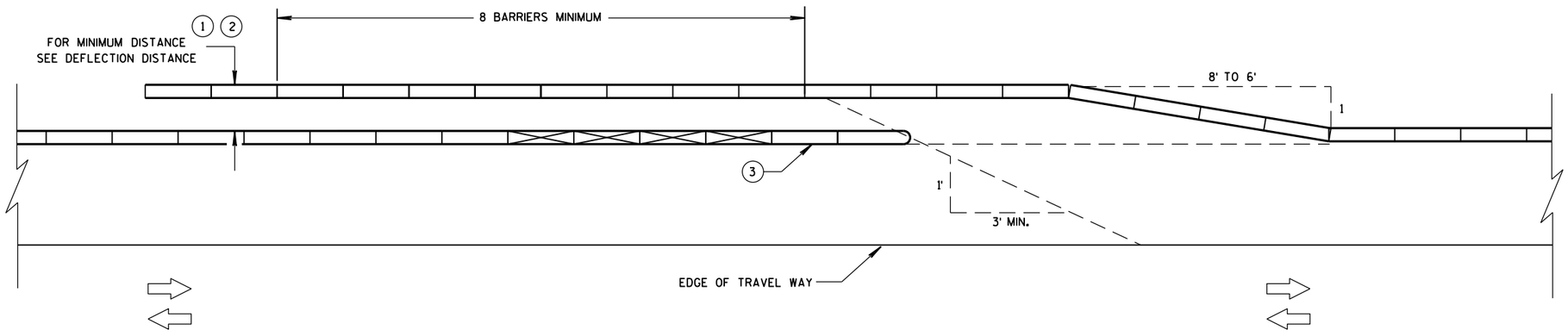
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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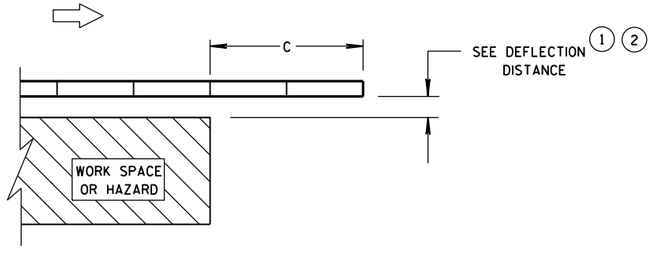
S.D.D. 14 B 8-2b



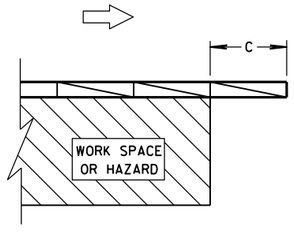
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

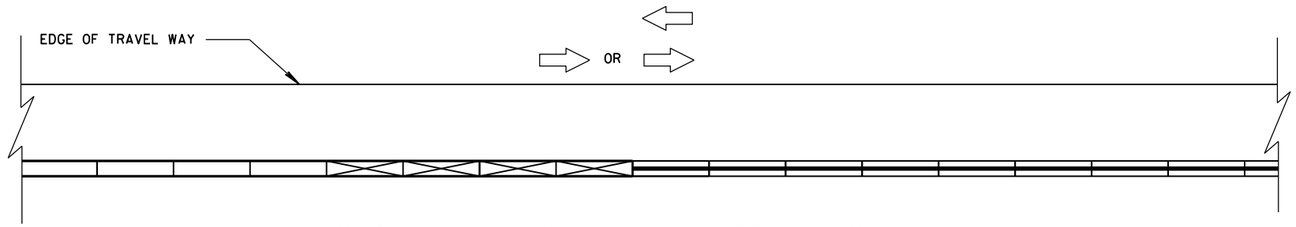
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

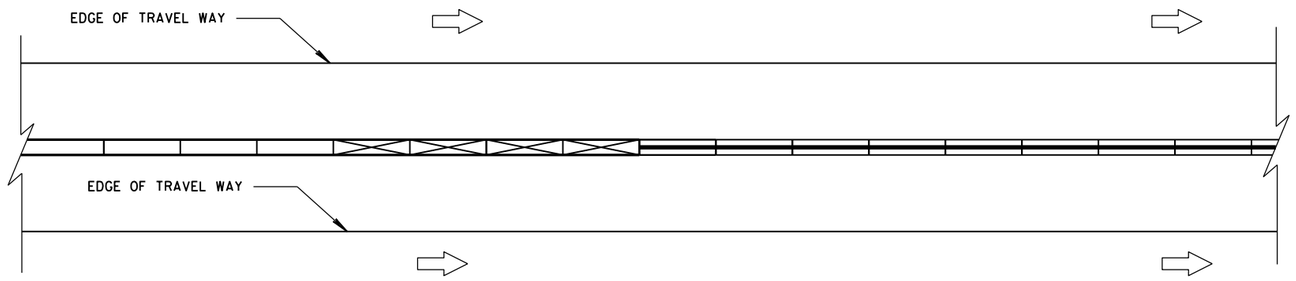
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



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

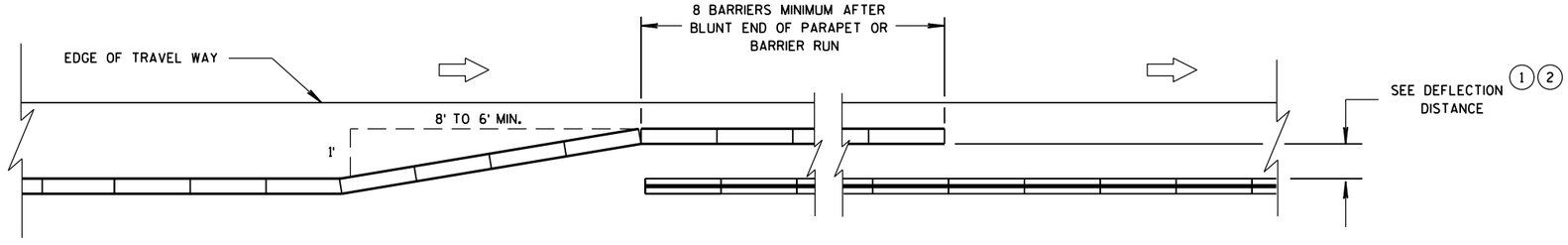
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

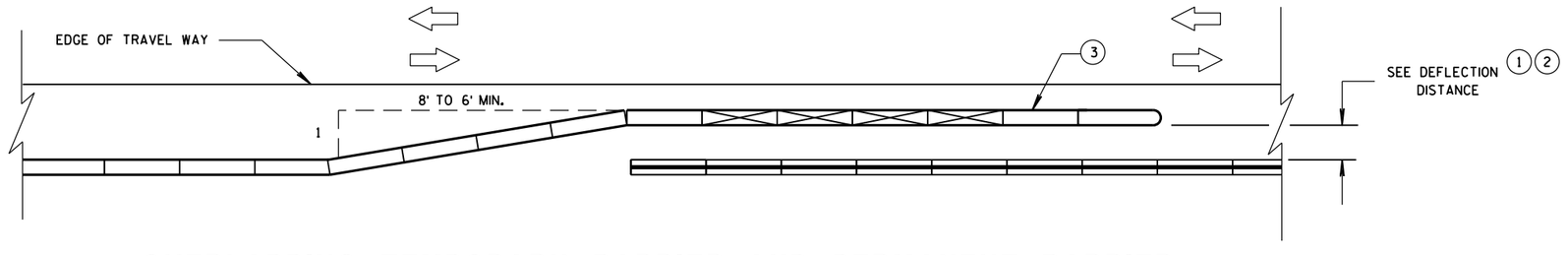
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

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 TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

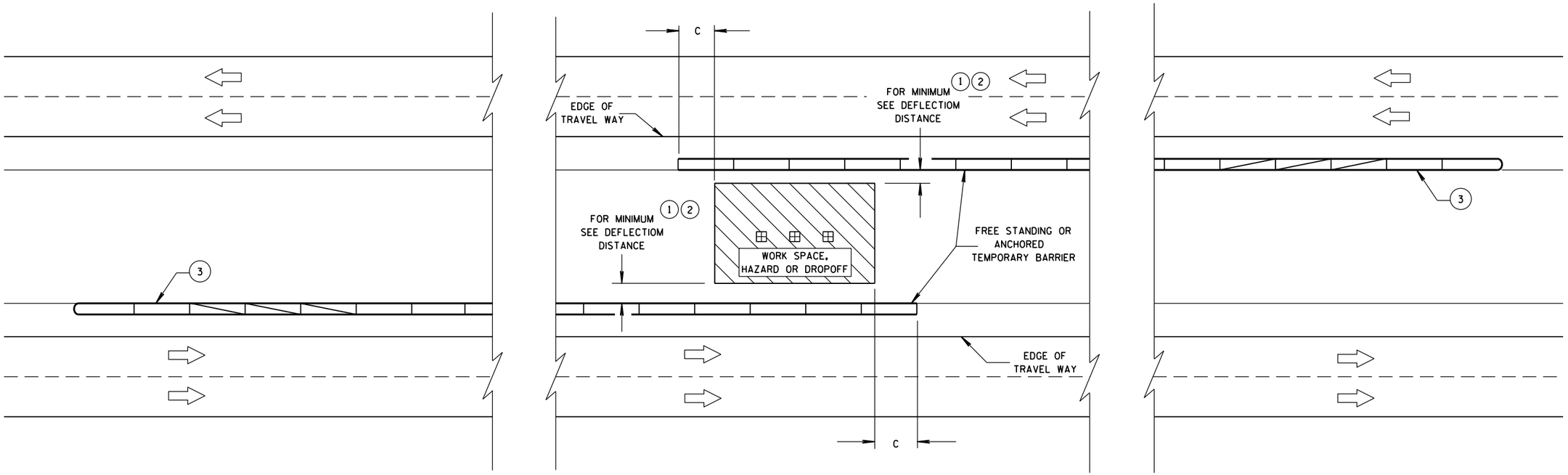
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



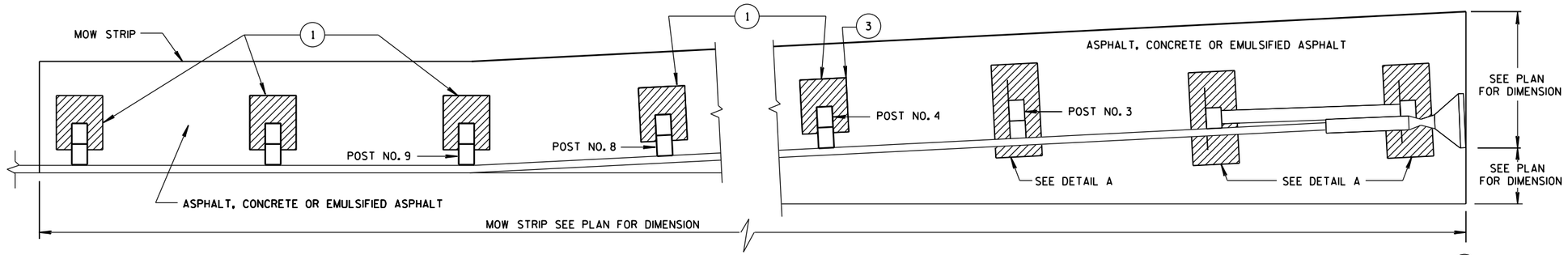
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

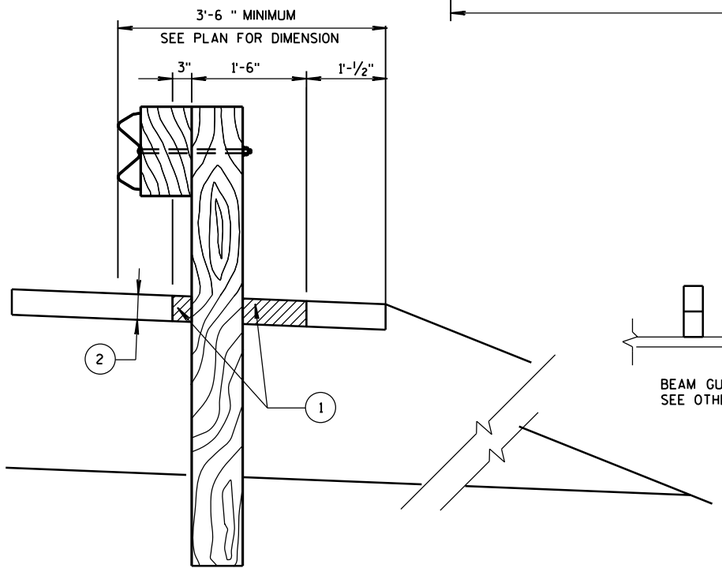
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S.D.D. 14 B 8-2e

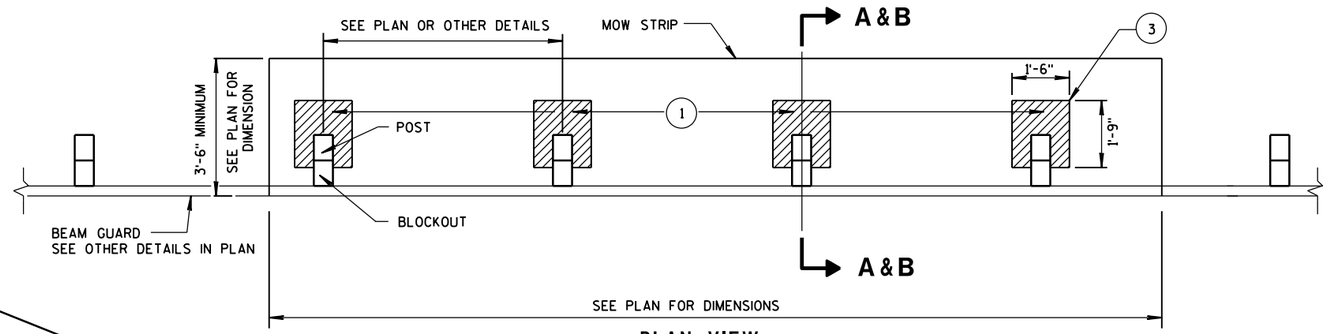


PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

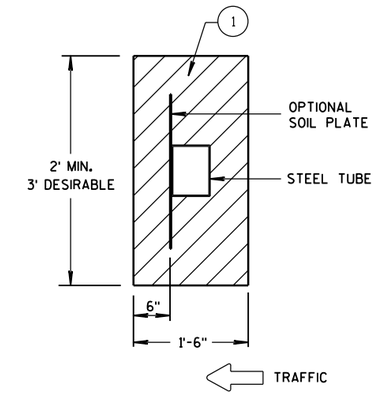


SECTION A-A

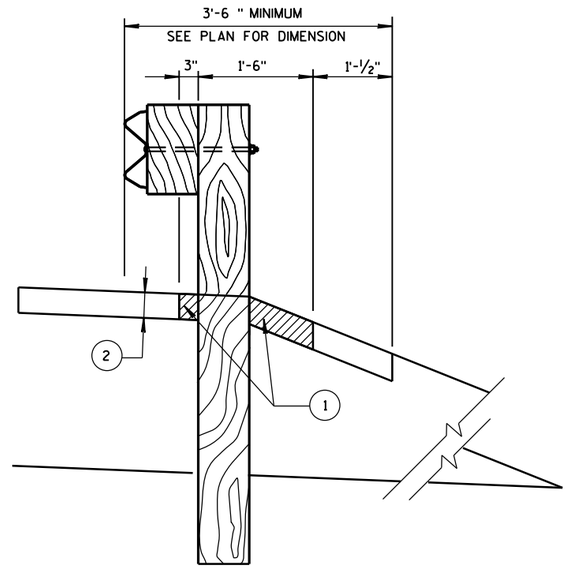


PLAN VIEW

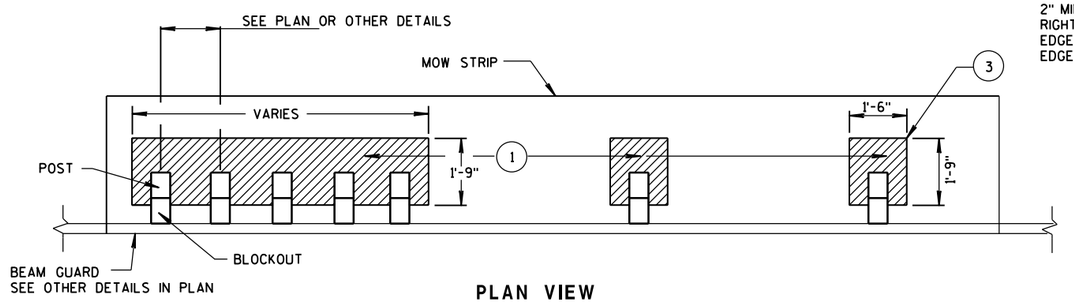
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



DETAIL A

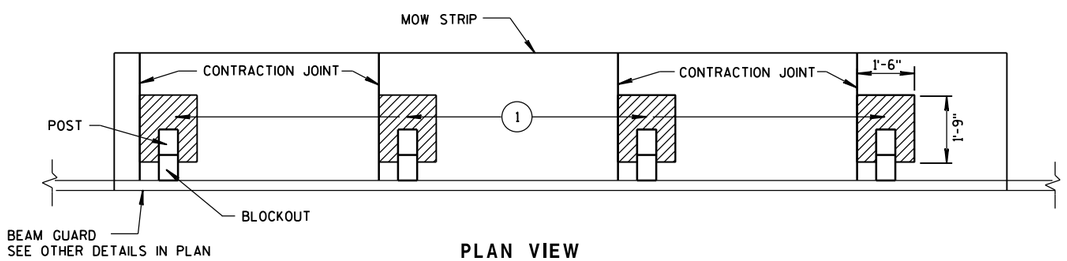


SECTION B-B



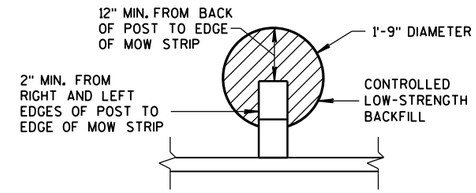
PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP



ALTERNATIVE HMA
MOW STRIP DESIGN

(1) CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.

(2) DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS

(3) FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

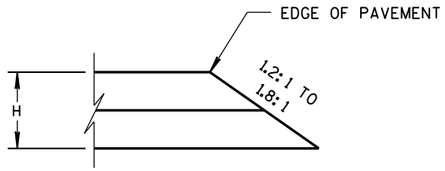
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S.D.D. 14 B 28-3

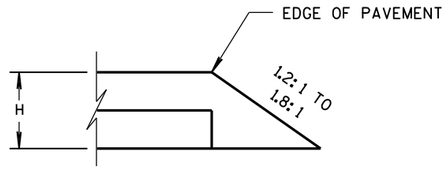
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S.D.D. 14 B 28-3



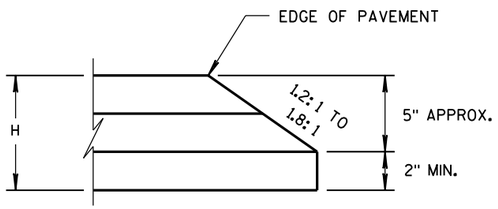
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



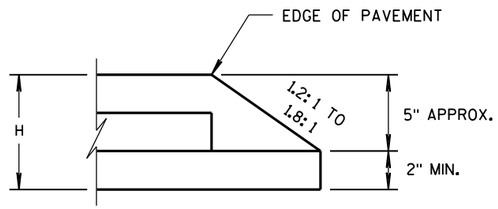
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

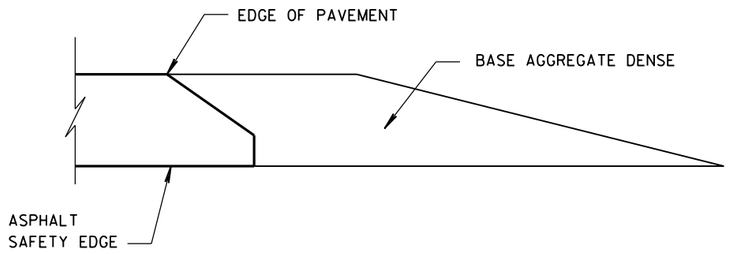
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

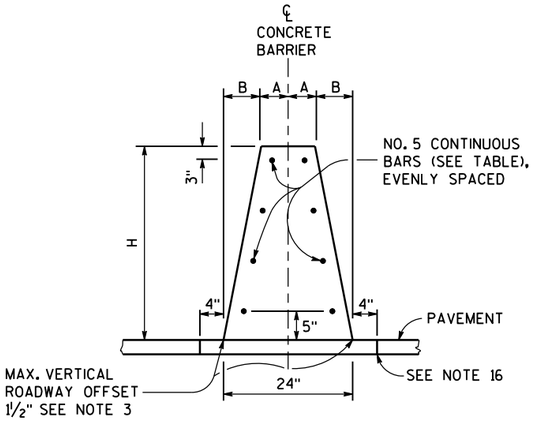
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

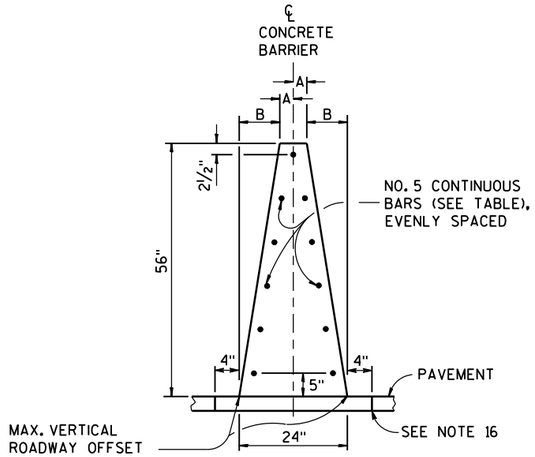
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

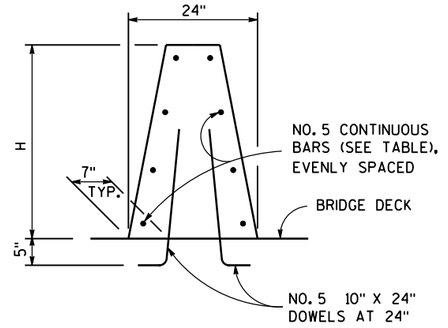
FHWA



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



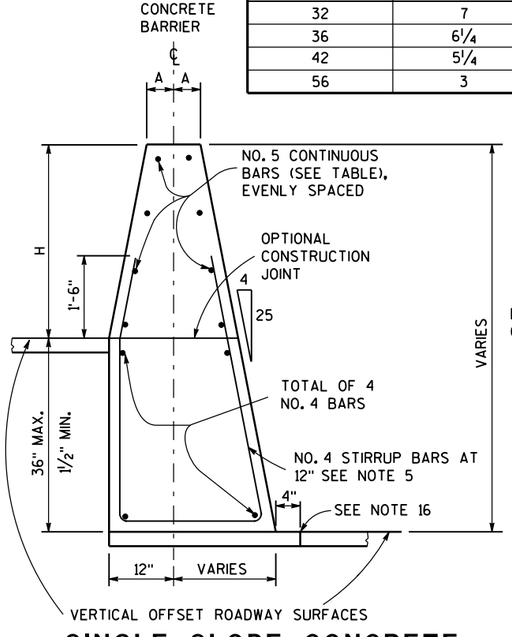
56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

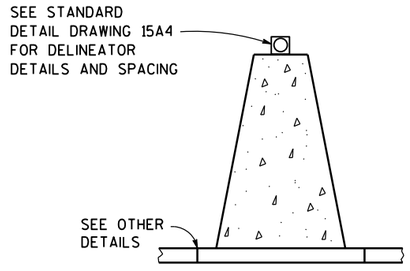
NON OUTER PARAPET APPLICATION

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

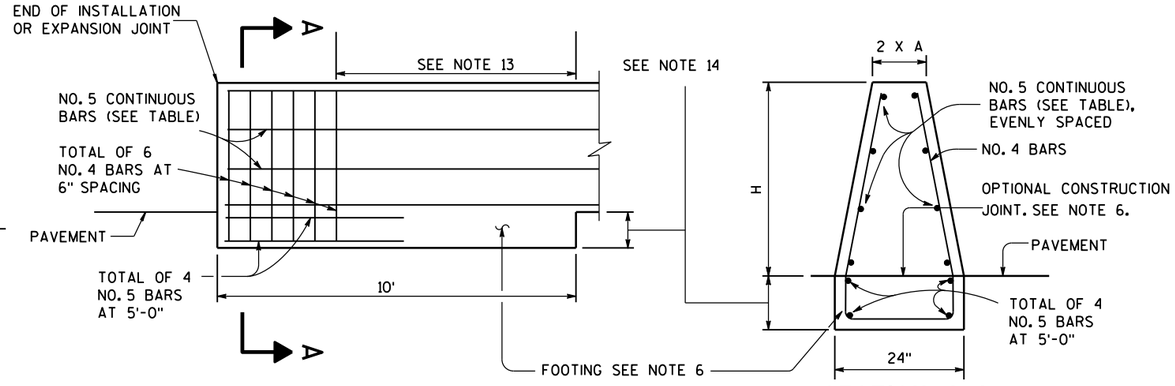


SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



DELINEATION



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT

SECTION A-A

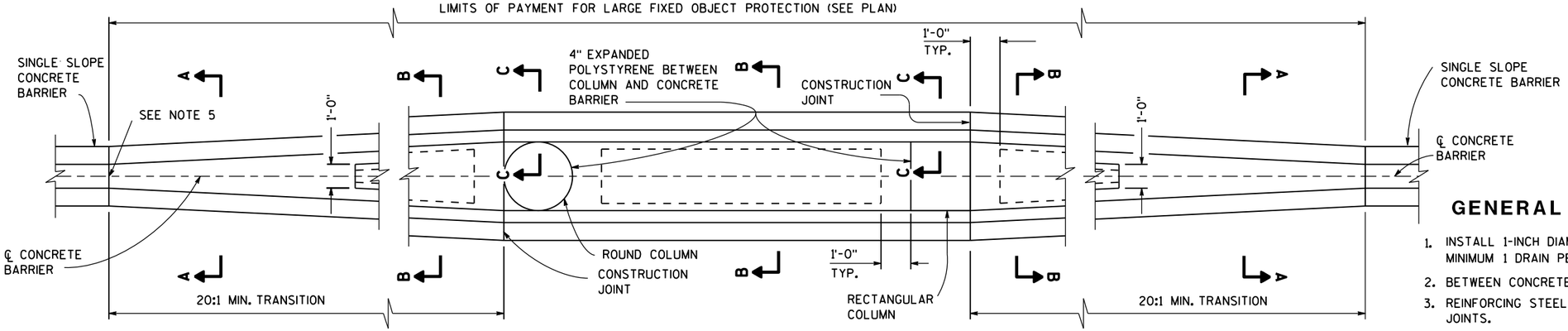
GENERAL NOTES

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.

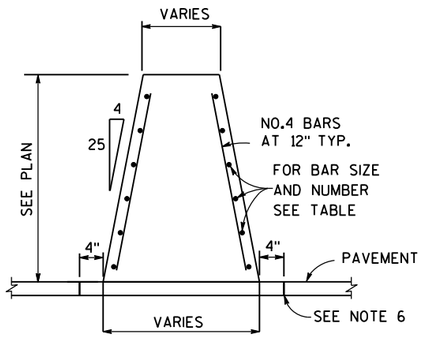
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
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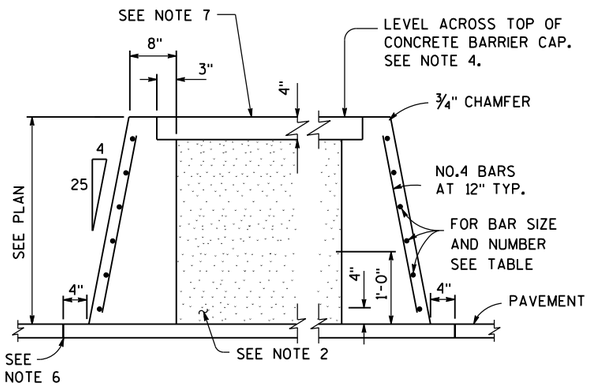
6
S.D.D. 14 B 32-5a



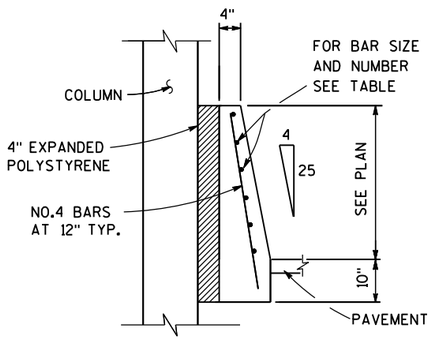
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



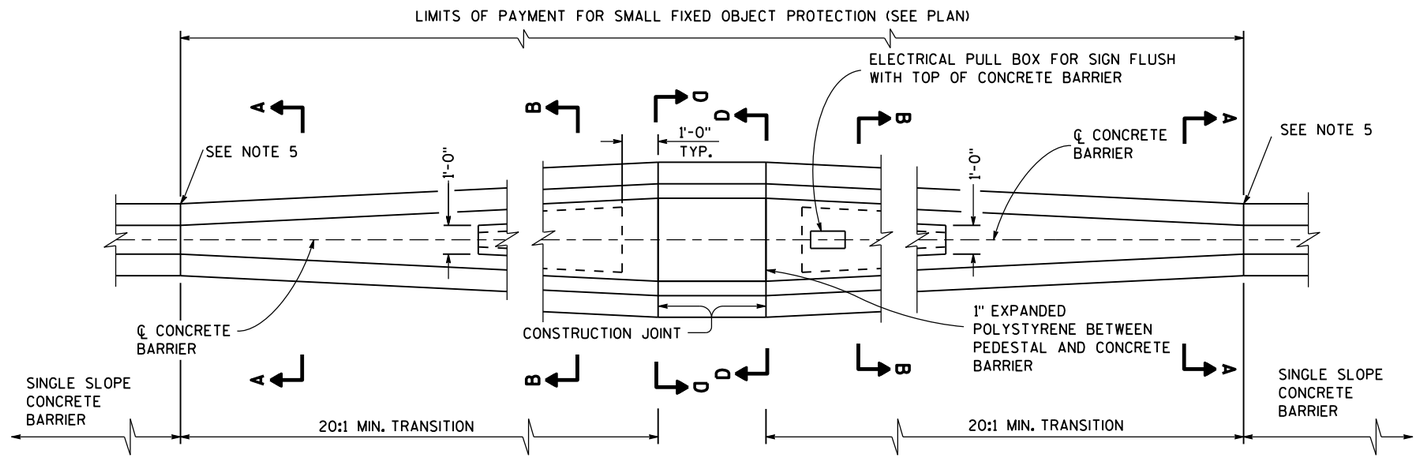
SECTION A-A



SECTION B-B



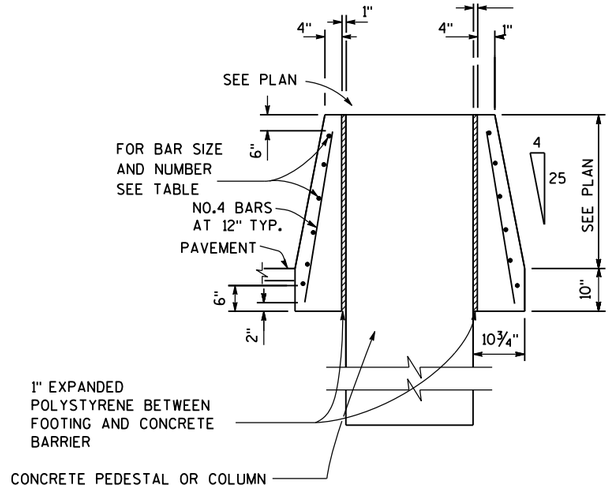
SECTION C-C



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 FOUNDATION BACKFILL.
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

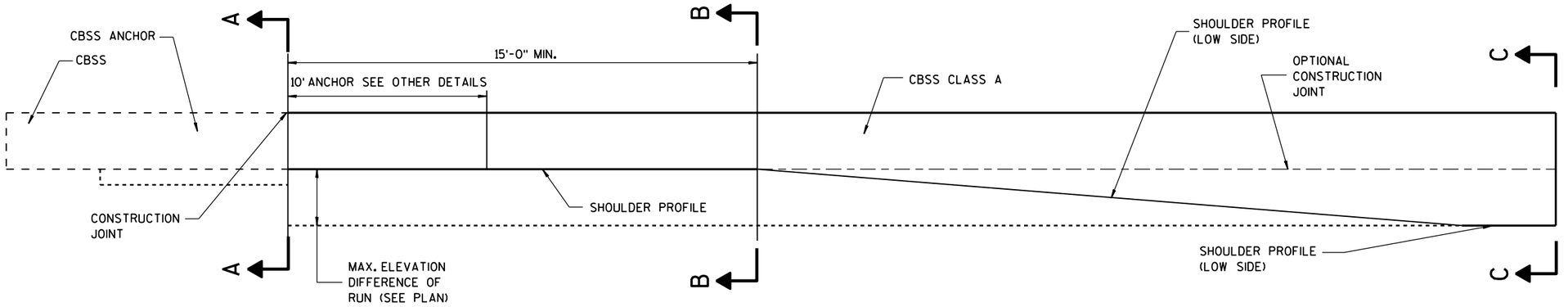
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

CONCRETE BARRIER SINGLE SLOPE (CBSS)

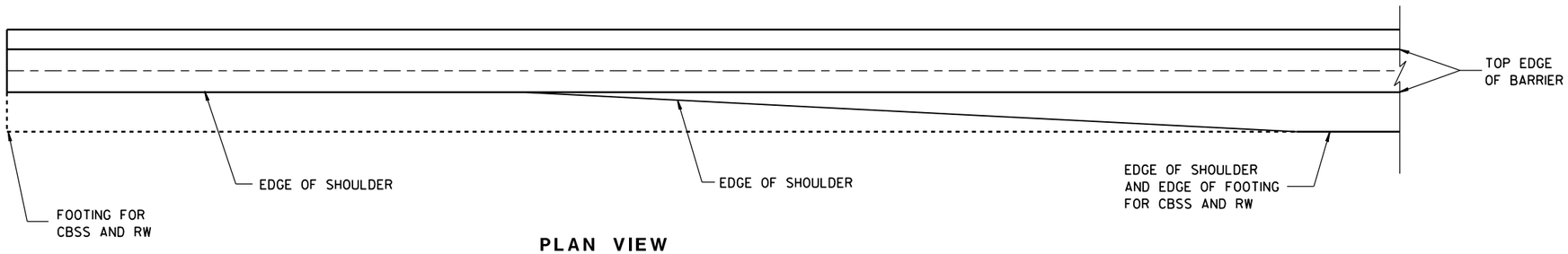
STATE OF WISCONSIN
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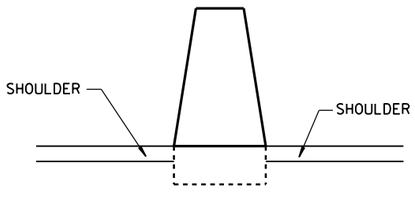
S.D.D. 14 B 32-5b



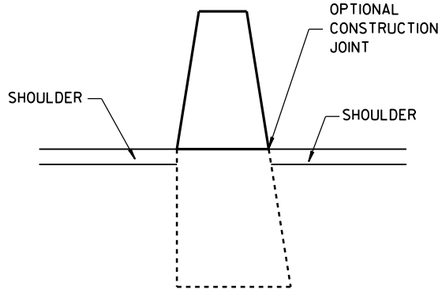
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



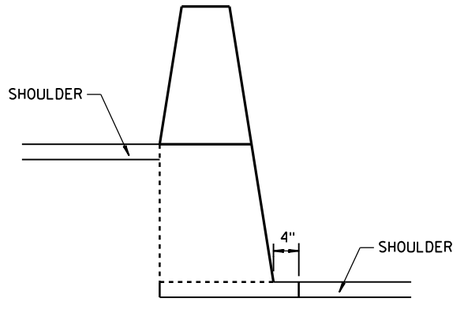
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



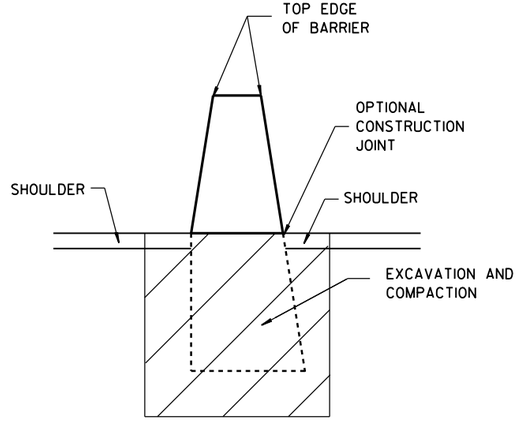
SECTION A-A



SECTION B-B



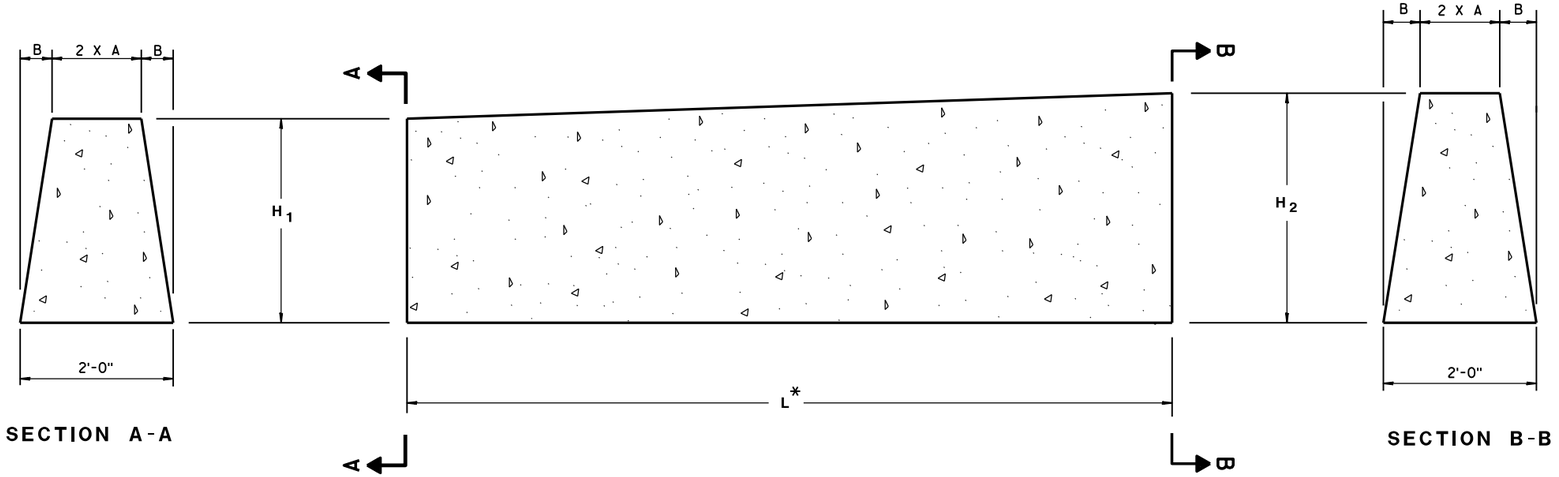
SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 32-5c



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

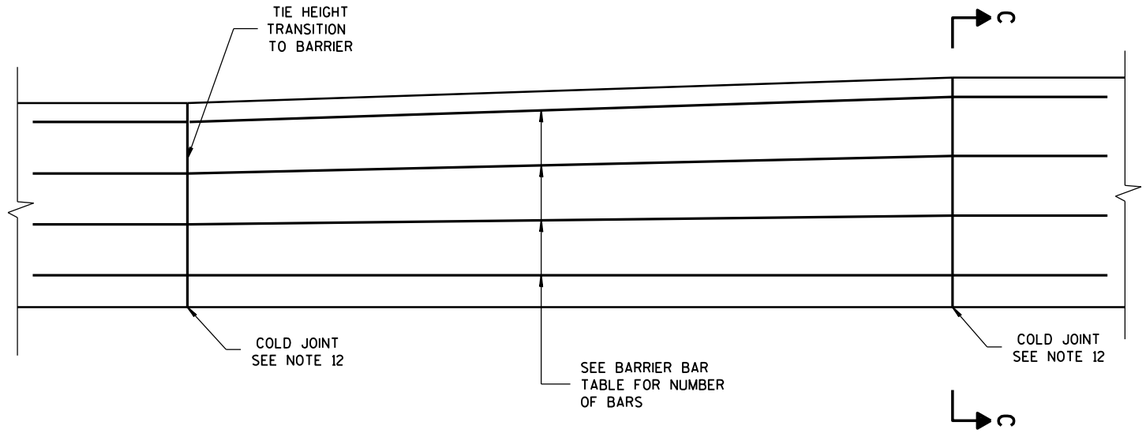
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

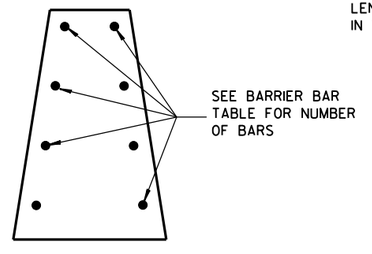
BARRIER BARS

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 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI NT

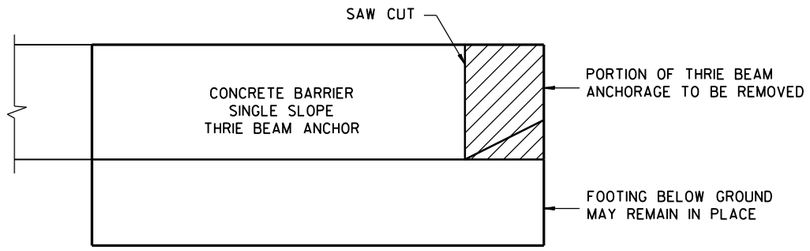
FHWA

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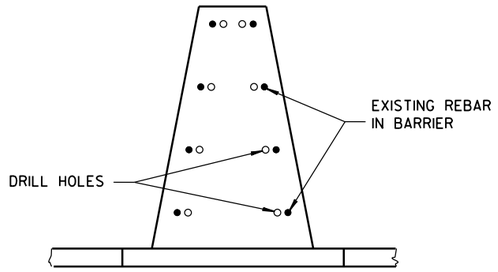
S.D.D. 14 B 32-5d

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S.D.D. 14 B 32-5d



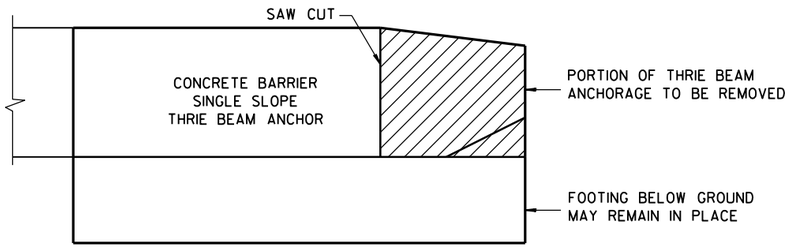
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



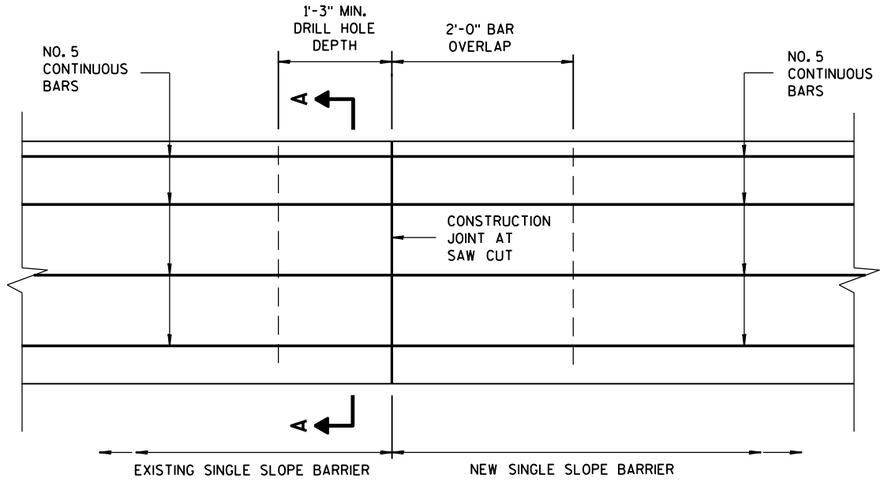
SECTION A-A

GENERAL NOTES

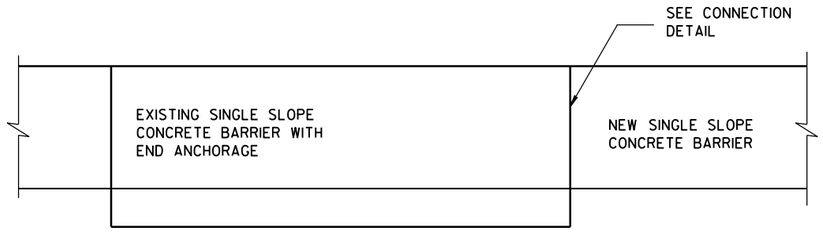
1. THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF REBAR IN BARRIER (SEE OTHER DETAILS).
2. MINIMUM DEPTH OF DRILL HOLES IS 1'-3".
3. DRILL HOLES TO BE A MINIMUM OF 4 INCHES FROM THE EDGE OF CONCRETE.
4. INSTALL EPOXY COATED NO. 5 BARS IN DRILL HOLES.
5. END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.
6. REMOVE THRIE BEAM ANCHORAGE AS SHOWN.



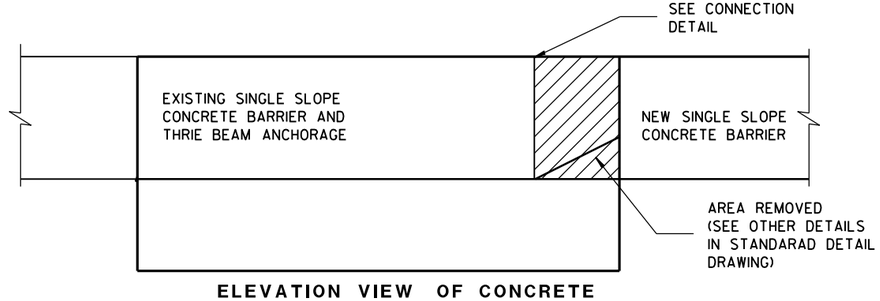
REMOVAL AREA OF CONCRETE THRIE BEAM
ANCHORAGE WITH HEIGHT GREATER THAN 32"



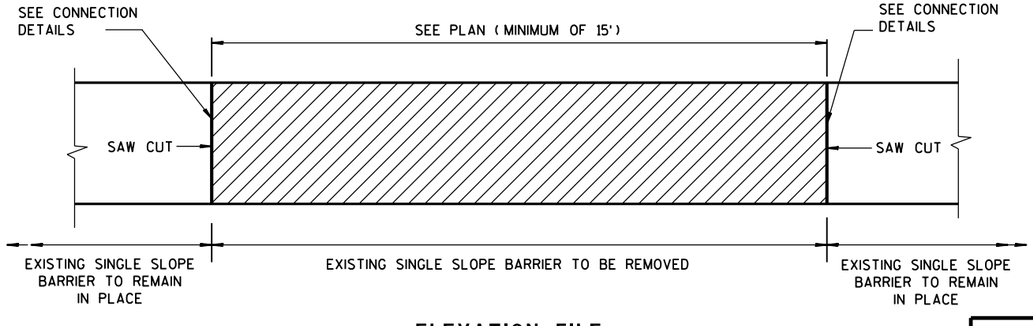
CONNECTION OF EXISTING SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR END ANCHORAGE



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR THRIE BEAM TERMINAL



ELEVATION FILE
BARRIER REMOVAL AND REPLACEMENT

CONCRETE BARRIER
SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D[illegible] UNIT SUPERVI[illegible]
FHWA

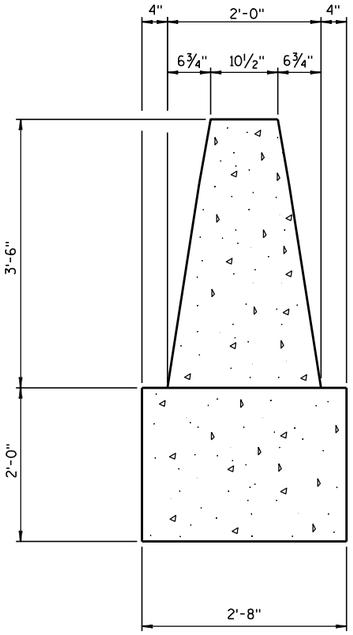
RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

6

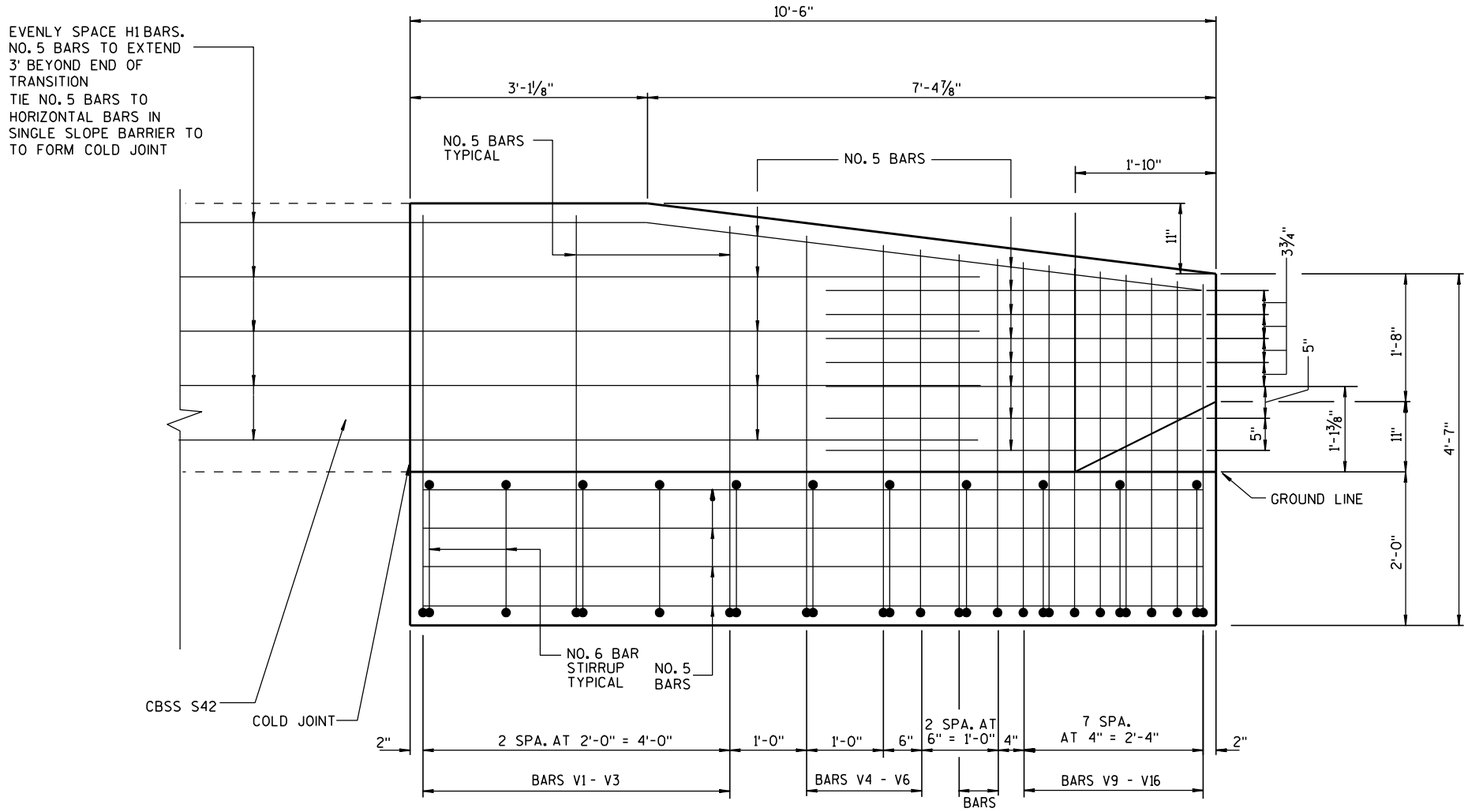
S.D.D. 14 B 32-5e

6

S.D.D. 14 B 32-5e

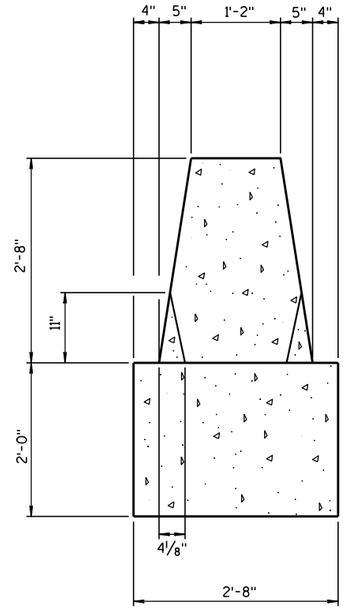


SECTION A-A

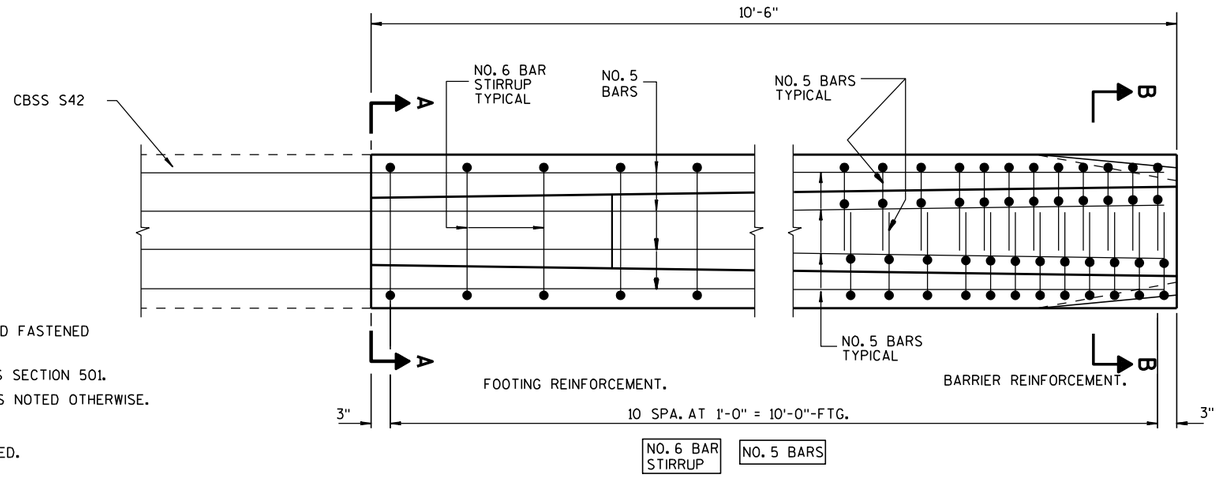


SEE SECTIONS ① THRU ⑯

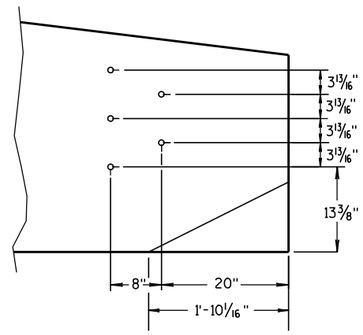
ELEVATION VIEW



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 ¾" 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 42" THRIE BEAM ANCHOR

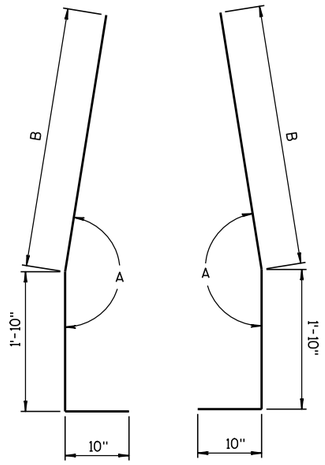
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 33-1g

BAR CHART
SECTIONS V1 - V11

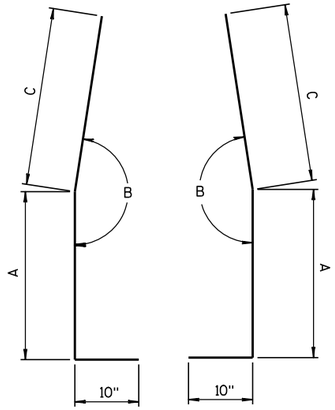
BAR	A	B
V1	170°-50'	3'-4½"
V2	171°-20'	3'-4½"
V3	171°-30'	3'-2½"
V4	171°-25'	3'-1½"
V5	171°-15'	3'-0"
V6	171°-15'	2'-11"
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



BAR BENDING DETAIL
FOR BARS V1 - V11

BAR CHART
SECTIONS V12 - V13

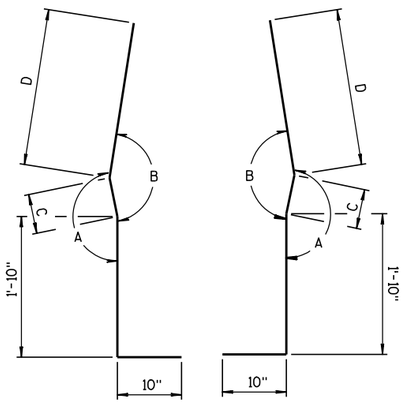
BAR	A	B	C
V12	2'-2"	171°-15'	2'-3½"
V13	2'-7"	171°-05'	1'-10"



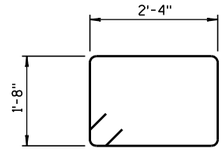
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

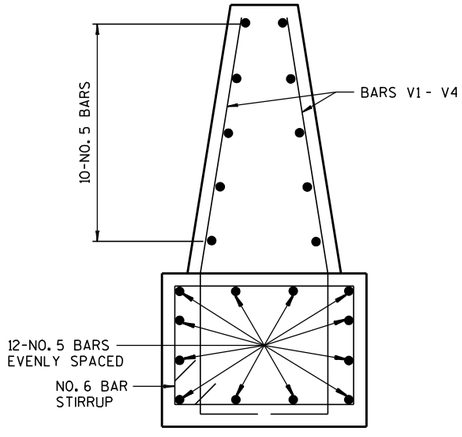
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



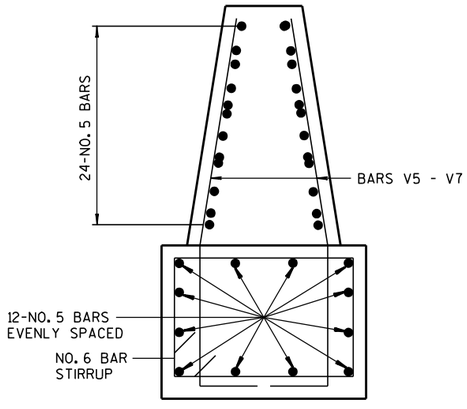
BAR BENDING DETAIL
FOR BARS V14 - V16



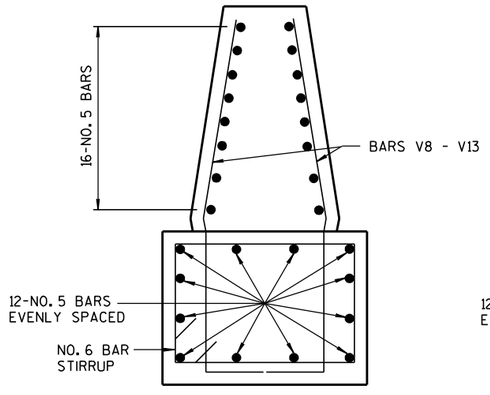
STIRRUP BAR
BENDING DETAIL



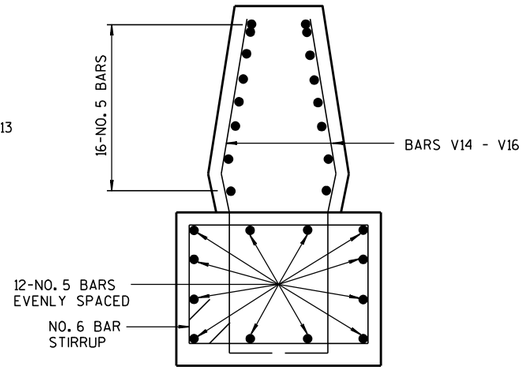
BAR DETAIL
SECTIONS V1 - V4



BAR DETAIL
SECTIONS V5 - V7



BAR DETAIL
SECTIONS V8 - V13

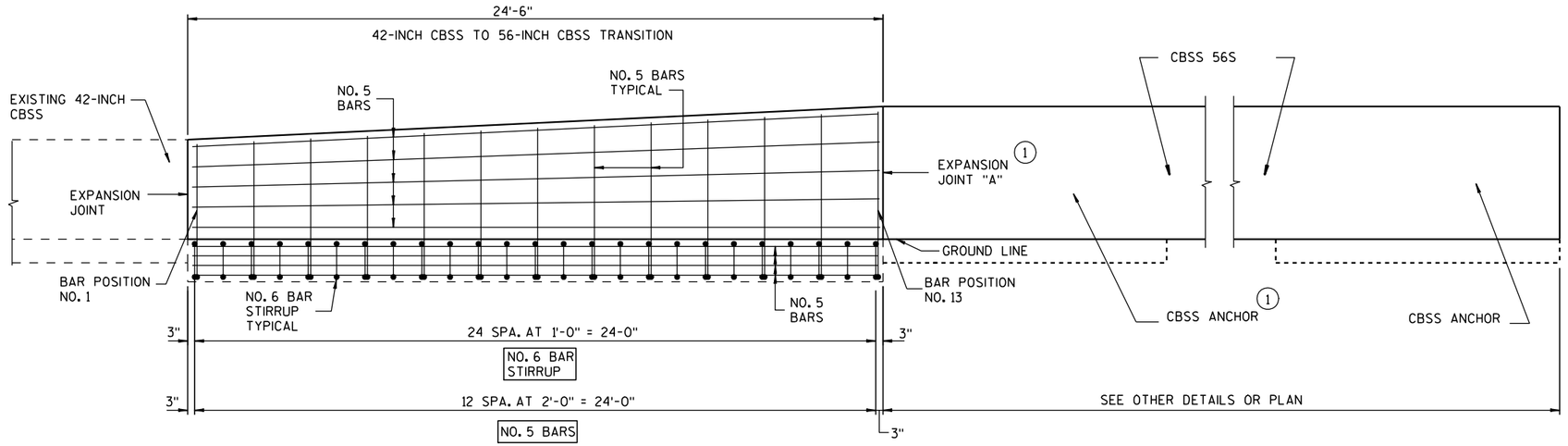


BAR DETAIL
SECTIONS V14 - V16

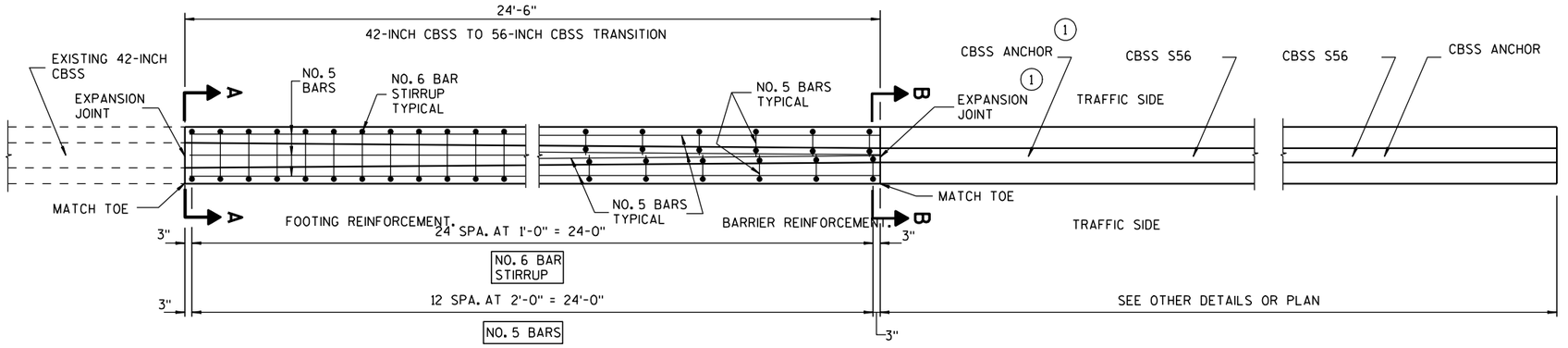
CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

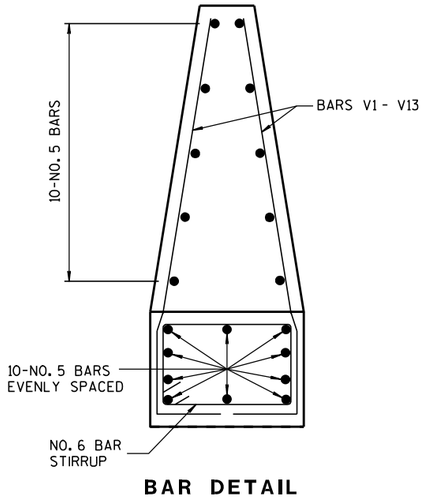
APPROVED
6-3-2010 DATE
/S/ Jerry H. Z---
ROADWAY STANDARDS ENGINEER
FHWA



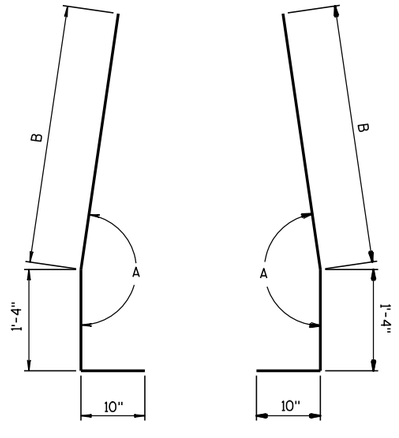
ELEVATION VIEW



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.

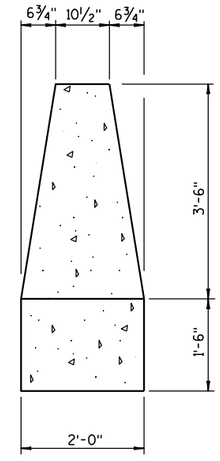
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

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

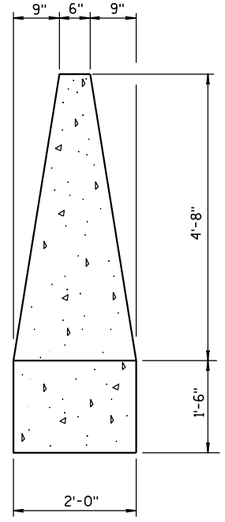
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

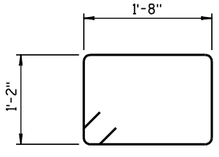
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



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. [illegible]
ROADWAY STANDARDS ENGINEER
356
ENT
FHWA

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S.D.D. 14 B 39-1e

6

S.D.D. 14 B 39-1e

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

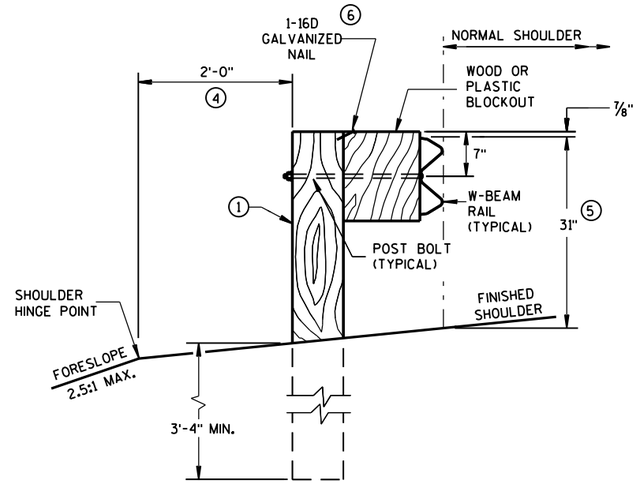
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

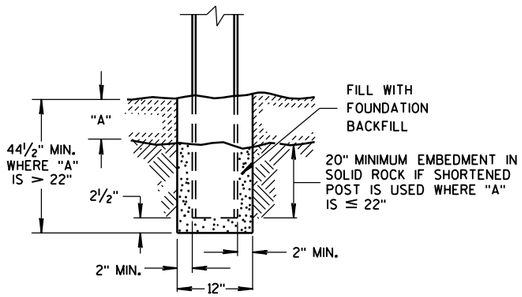
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



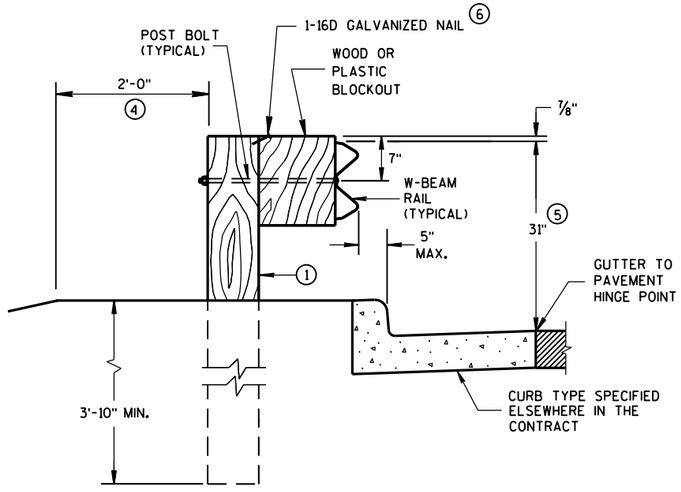
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



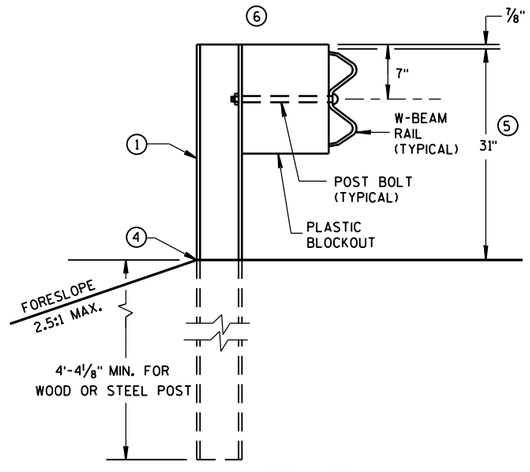
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



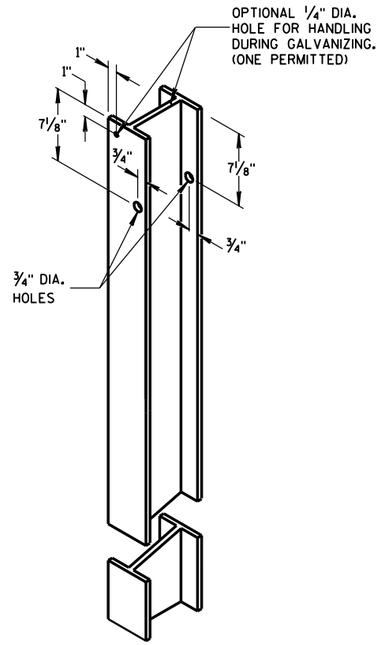
END VIEW

LOCATED ALONG A CURBED ROADWAY

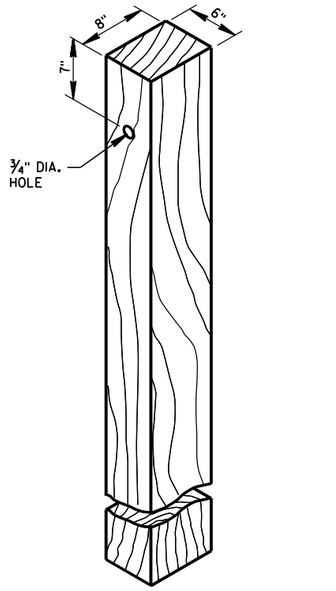


END VIEW

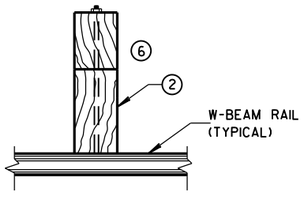
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



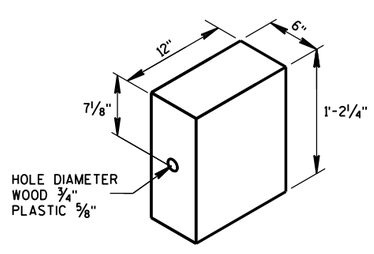
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



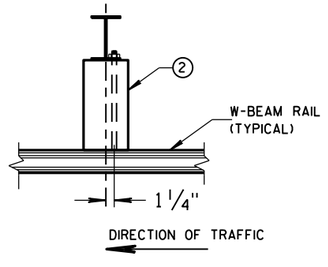
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)



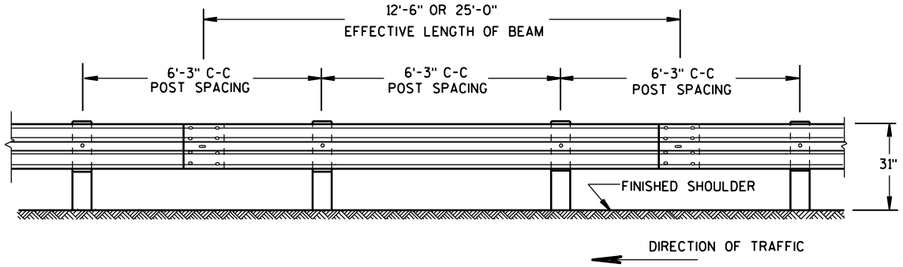
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

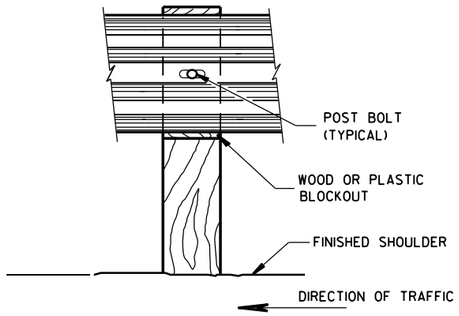
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S.D.D. 14 B 42-5a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

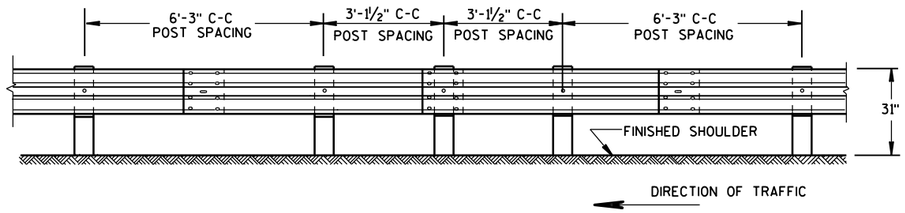
GENERAL NOTES

(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.

(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

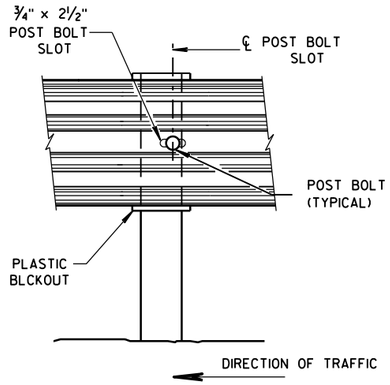
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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.

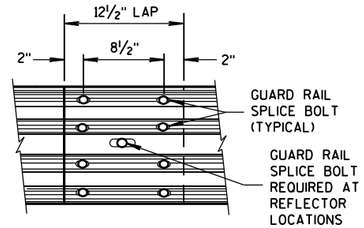


FRONT VIEW

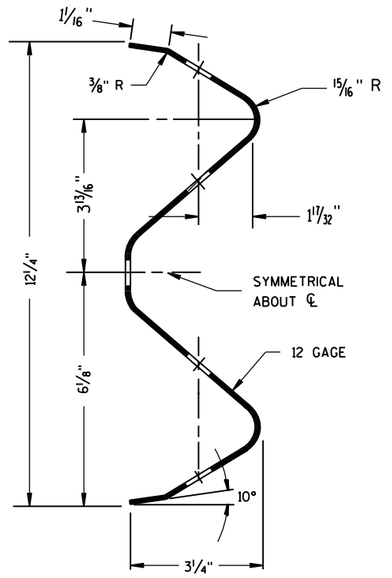
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



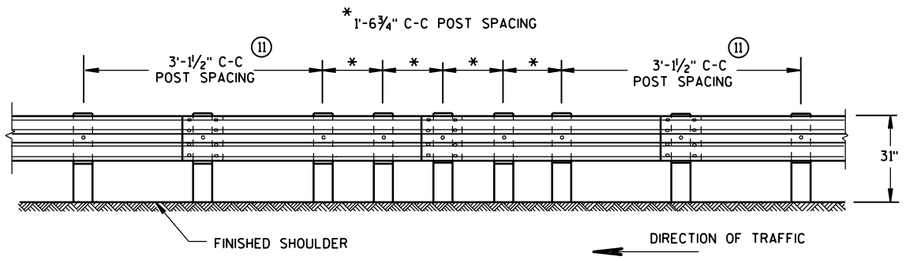
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

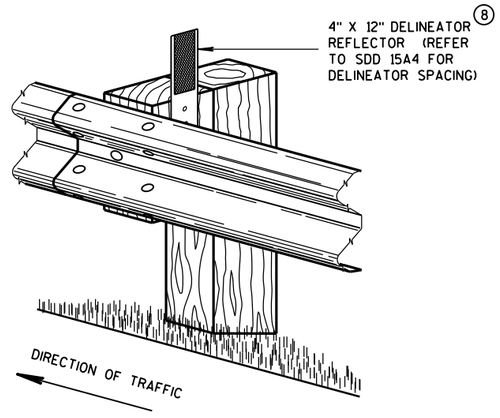


SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)



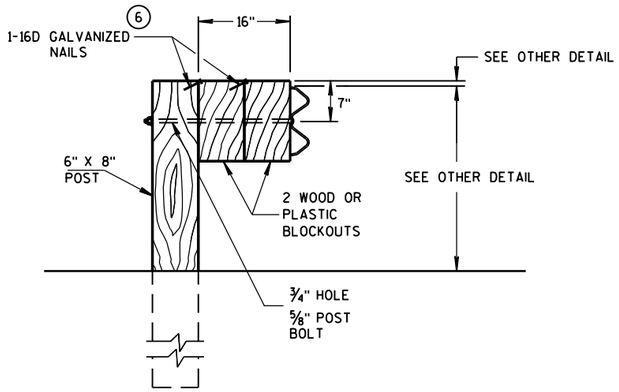
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

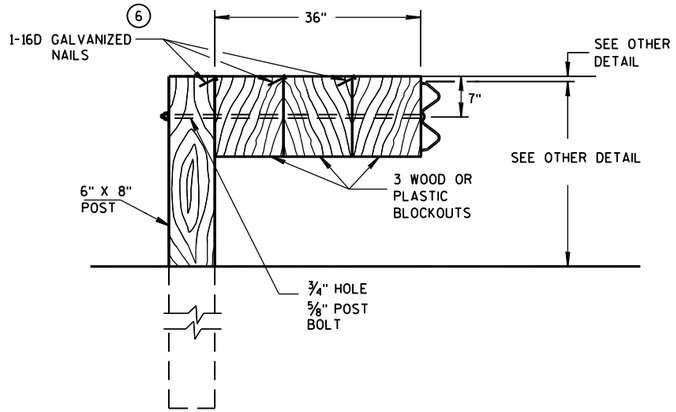
6

S.D.D. 14 B 42-5b



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.

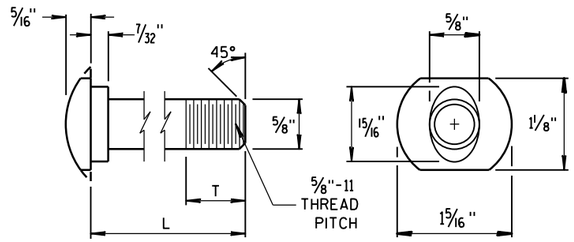


DETAIL FOR 36" BLOCKOUT DEPTH

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.

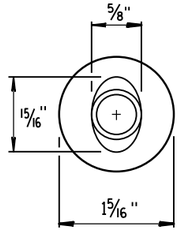
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

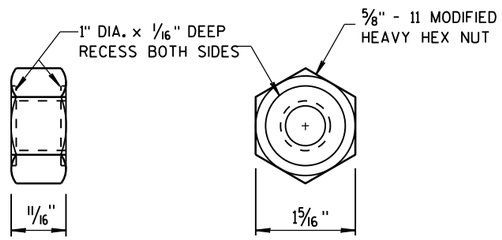


POST BOLT TABLE

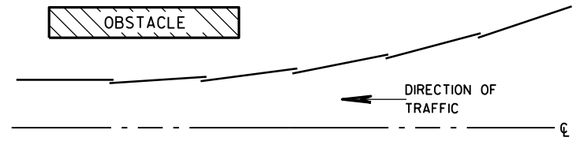
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

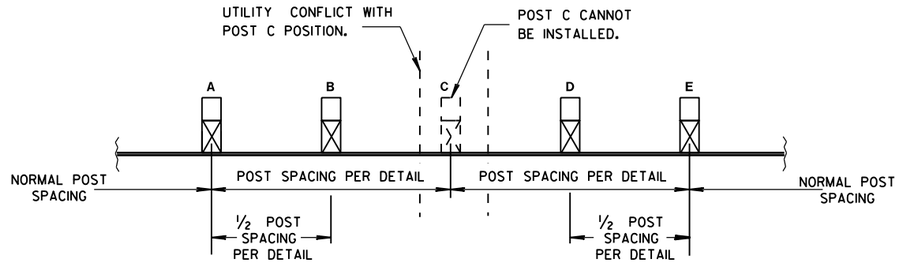


POST BOLT, SPLICE BOLT AND RECESS NUT

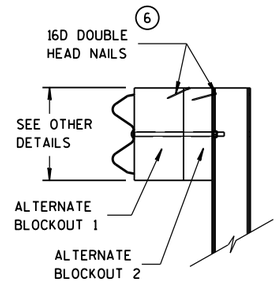


PLAN VIEW

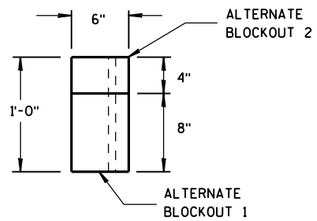
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

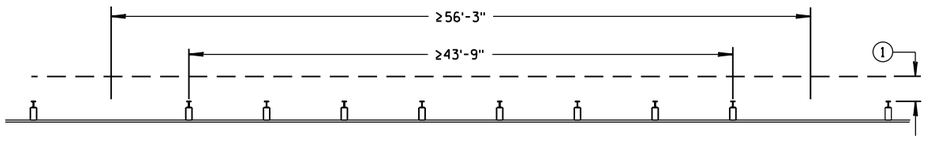
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

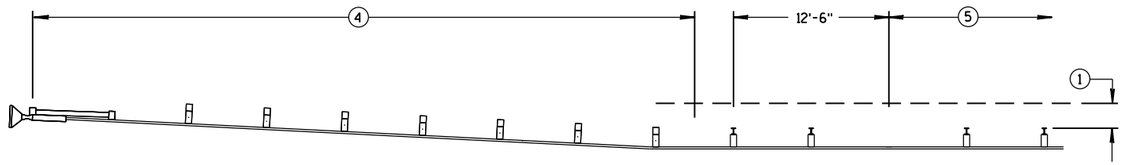
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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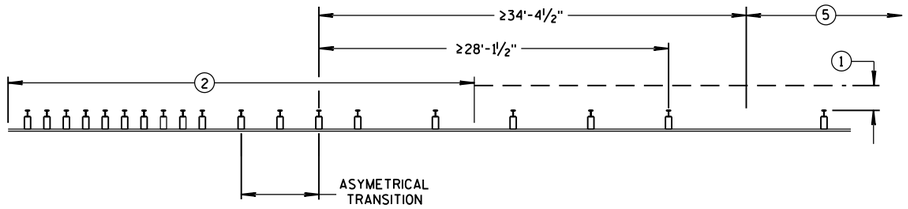
S.D.D. 14 B 42-5c



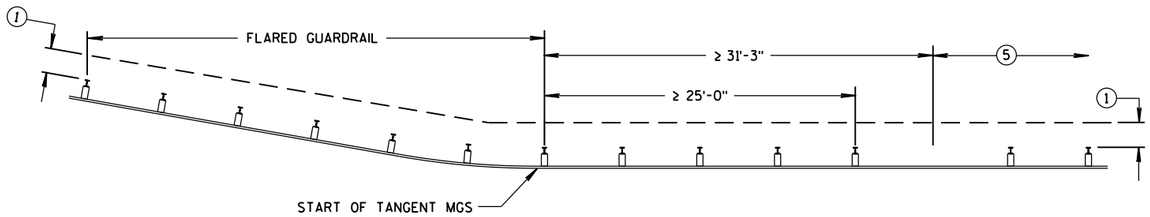
MISSING POST IN NORMAL BEAM GUARD RUN



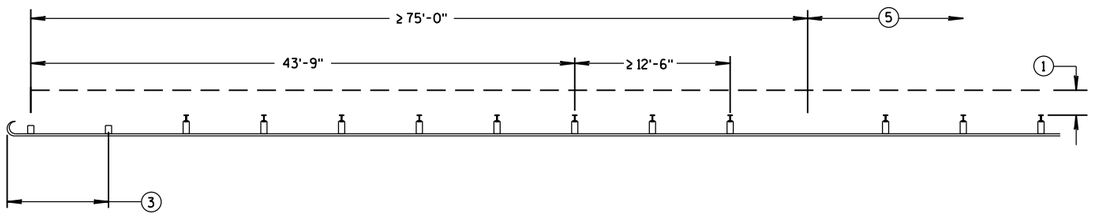
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



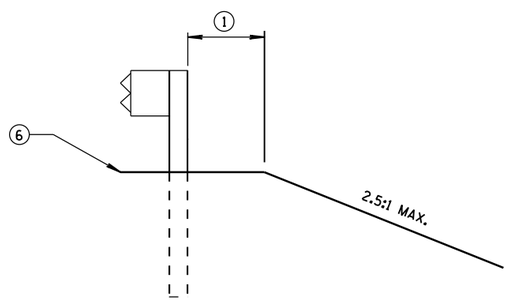
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

6

S.D.D. 14 B 42-5d

6

S.D.D. 14 B 42-5d

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.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

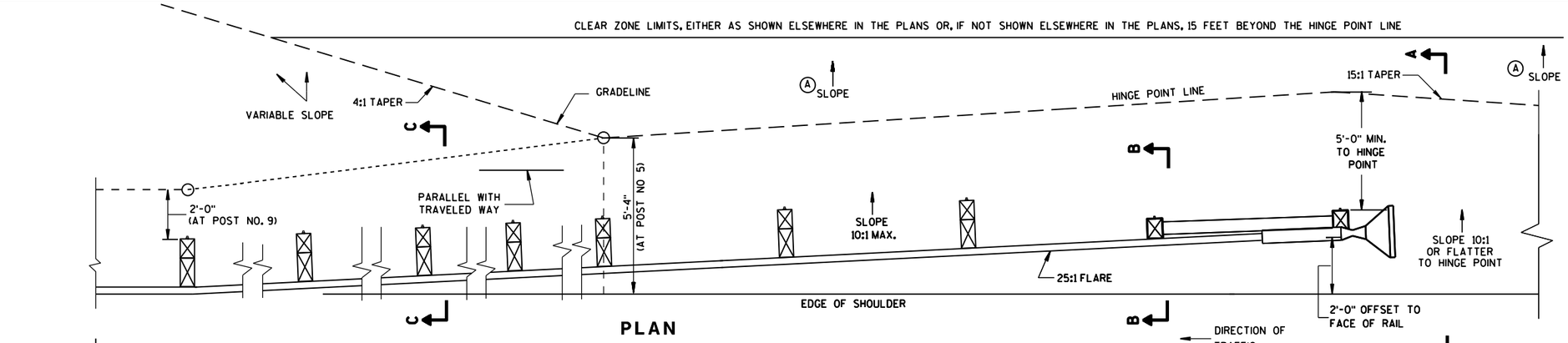
SEE SDD 14B42 FOR MORE INFORMATION.

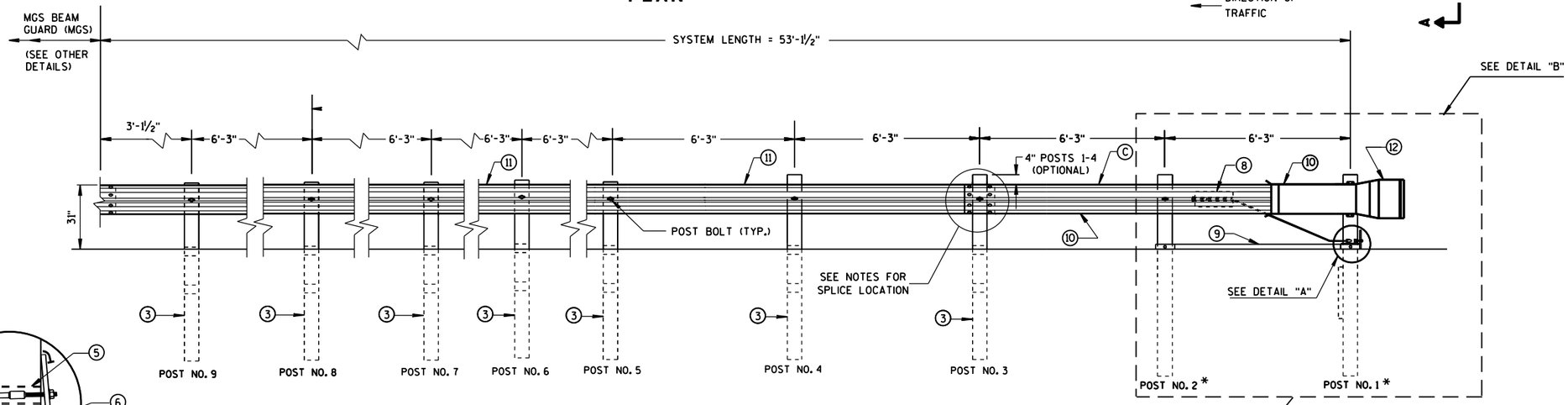
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

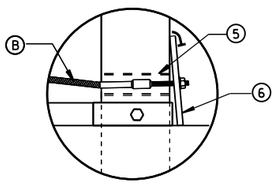
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

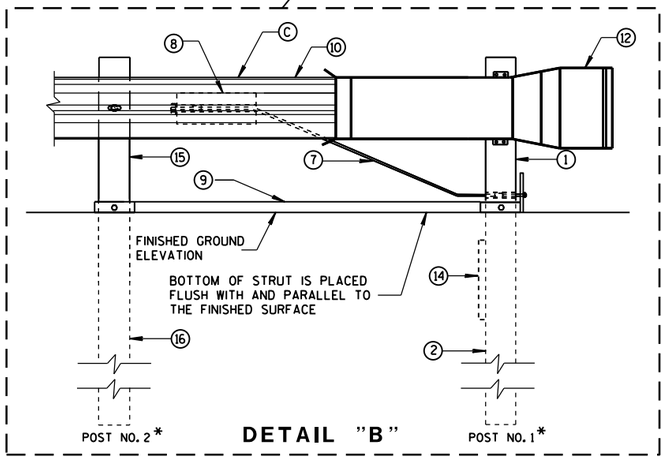
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

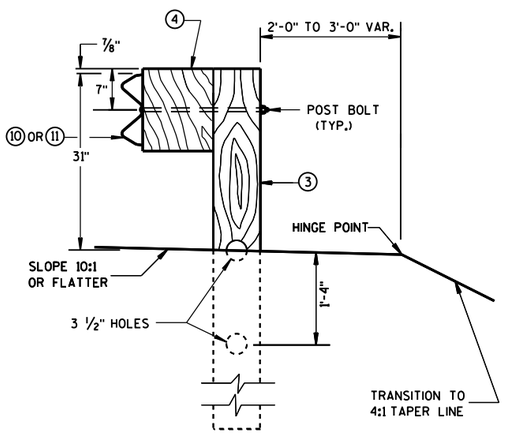
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

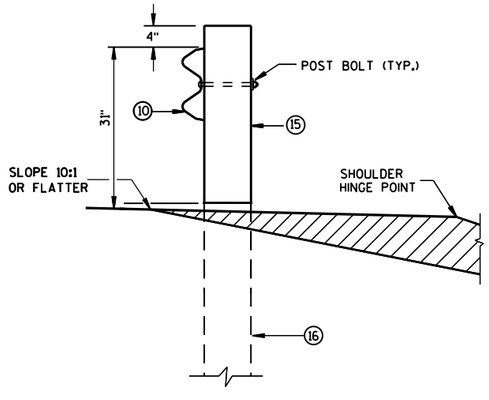


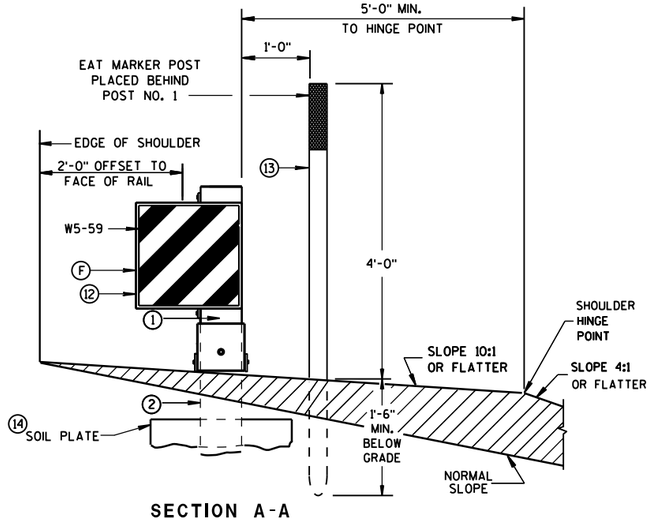












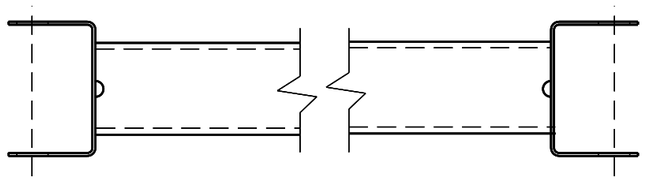
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPO	361

6

S.D.D. 14 B 44-3a

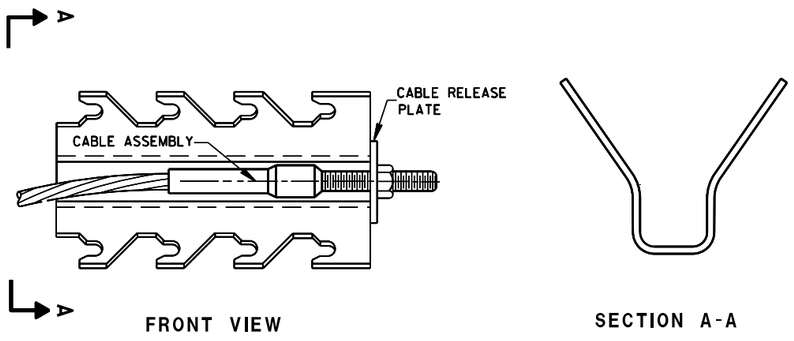
6

S.D.D. 14 B 44-3a



(9) (H)

GENERIC GROUND STRUT



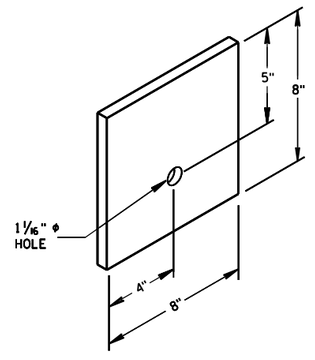
FRONT VIEW

SECTION A-A

GENERIC ANCHOR CABLE BOX (8) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(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)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

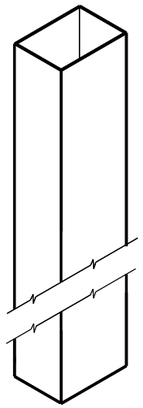
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

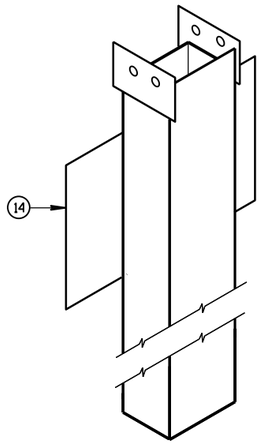
S.D.D. 14 B 44-3b

6

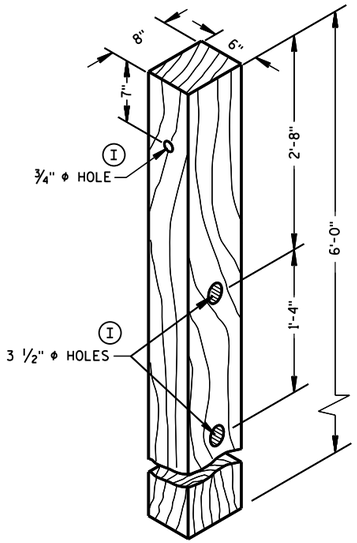
S.D.D. 14 B 44-3b



UPPER POST NO. 1 (1)

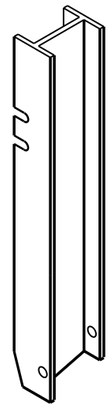


LOWER POST NO. 1 (2)

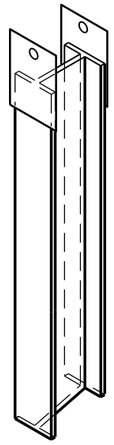


POSTS NUMBER 3-9

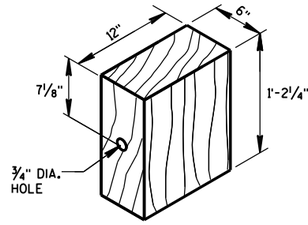
WOOD CRT POST (3)



UPPER POST NO. 2 (15)

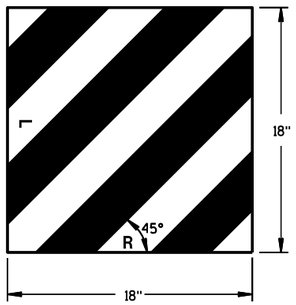


LOWER POST NO. 2 (16)



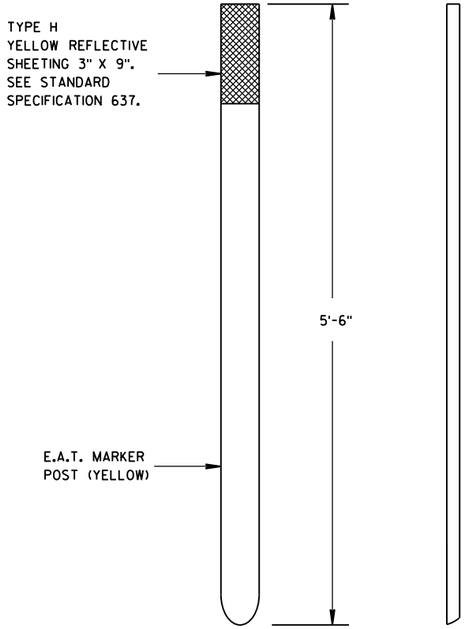
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



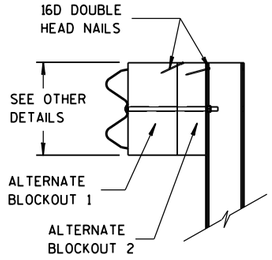
W5-59

REFLECTIVE SHEETING DETAIL (H)

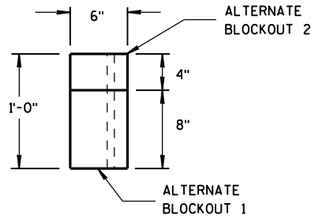


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERVISOR

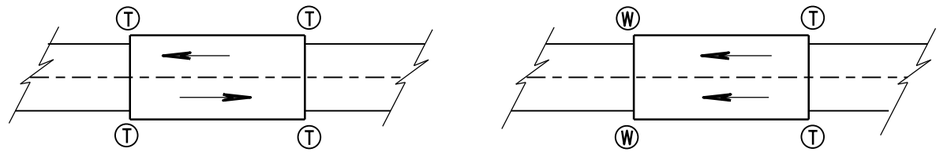
FHWA

6

S.D.D. 14 B 44-3c

6

S.D.D. 14 B 44-3c



TWO WAY TRAFFIC **ONE WAY TRAFFIC**

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

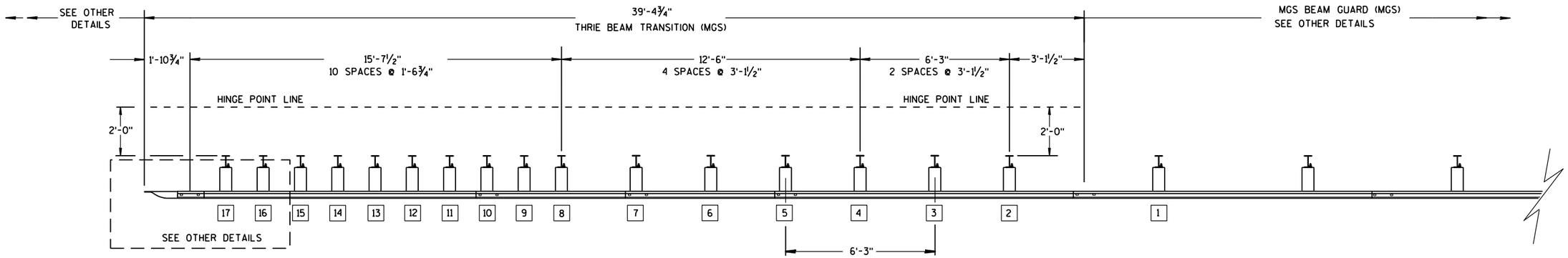
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

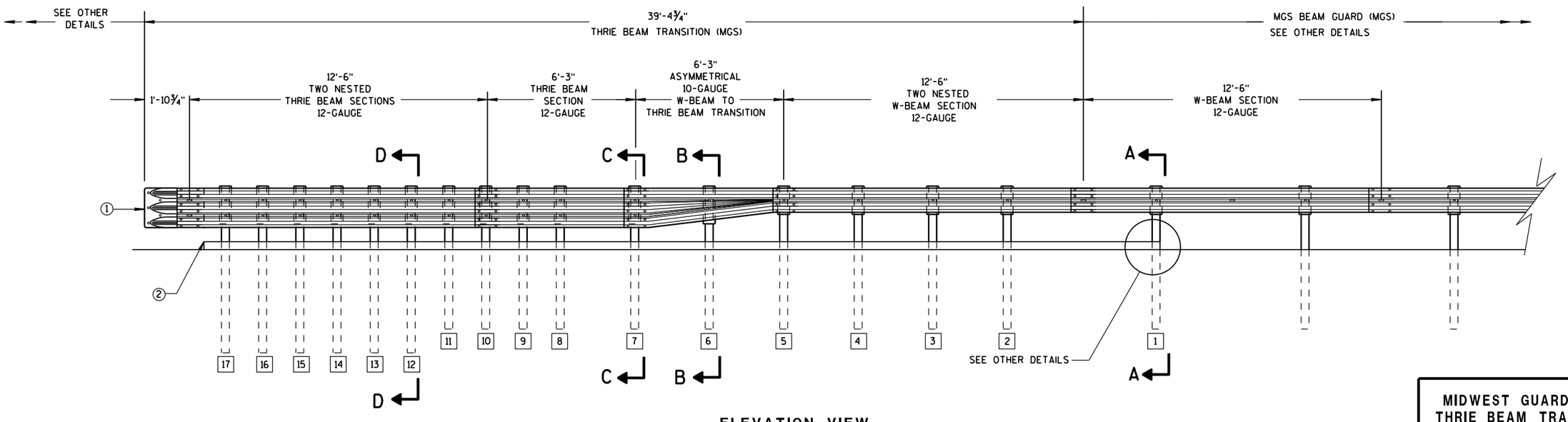
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-4a

6

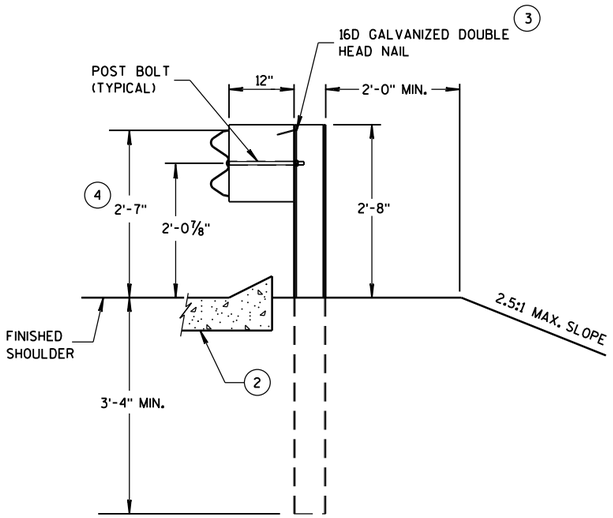
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

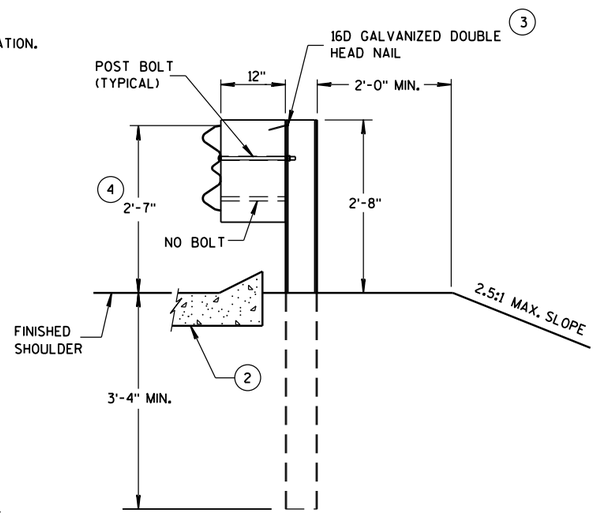
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



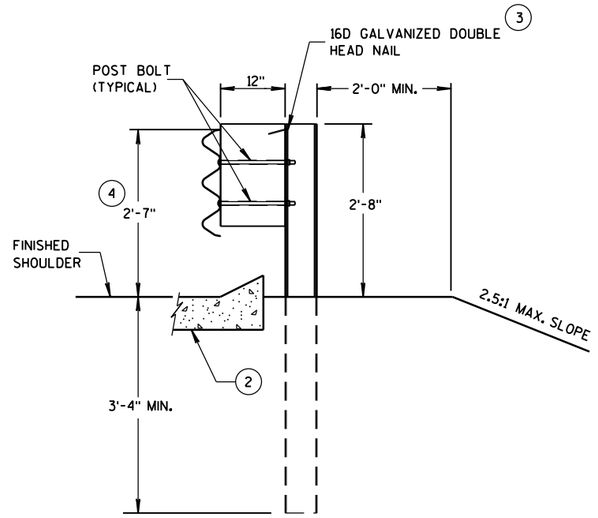
SECTION A-A

POSTS 1-5



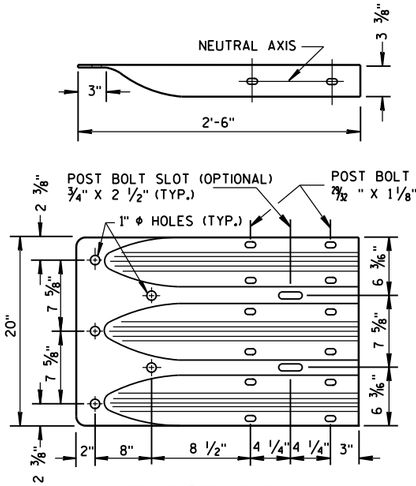
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

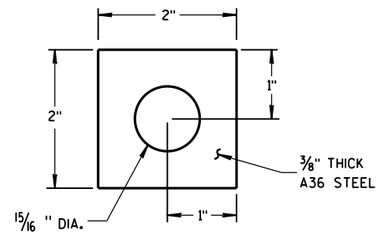
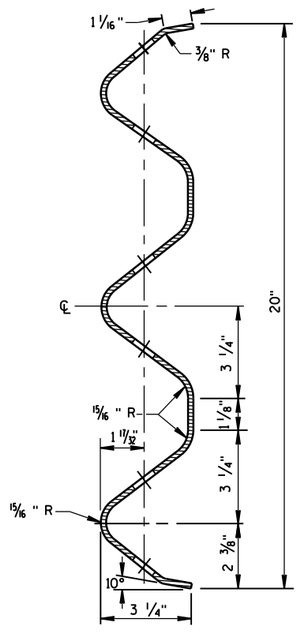
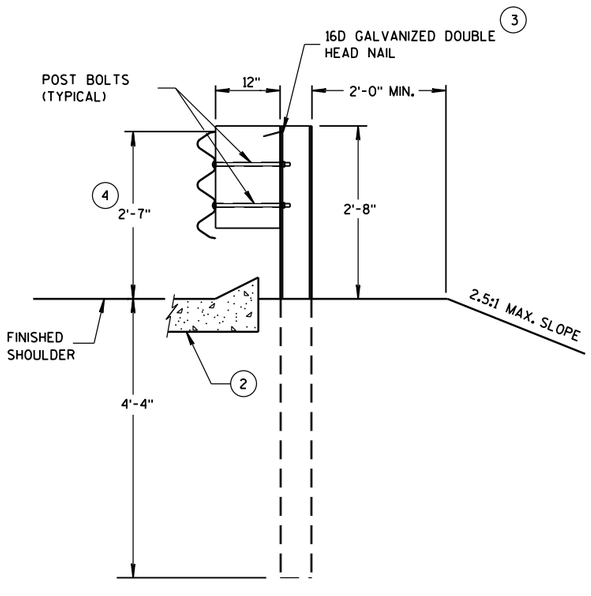


PLATE WASHER DETAIL

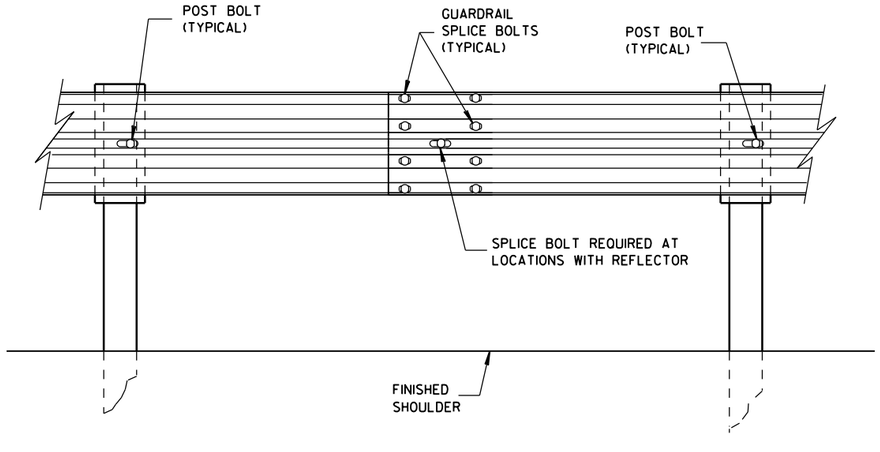


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



SPLICE DETAIL

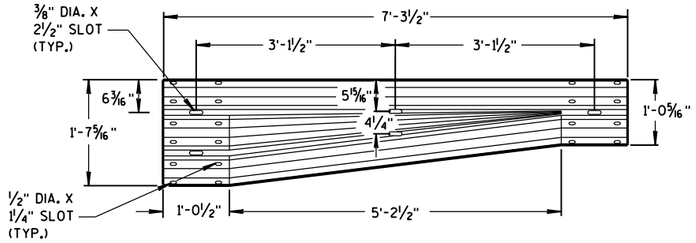
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

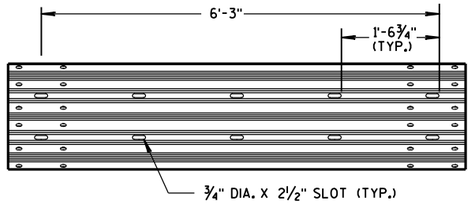
6

S.D.D. 14 B 45-4b

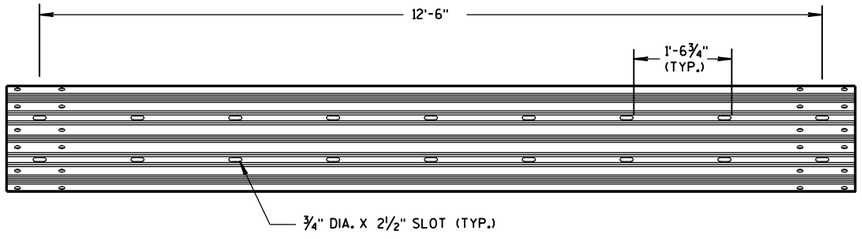
S.D.D. 14 B 45-4b



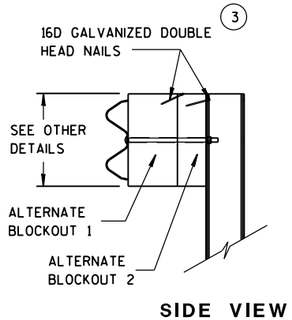
W-BEAM TO THRIE BEAM TRANSITION SECTION



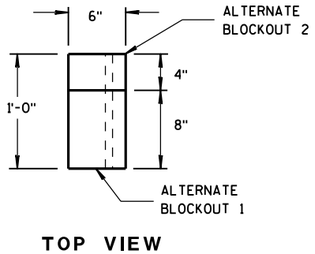
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

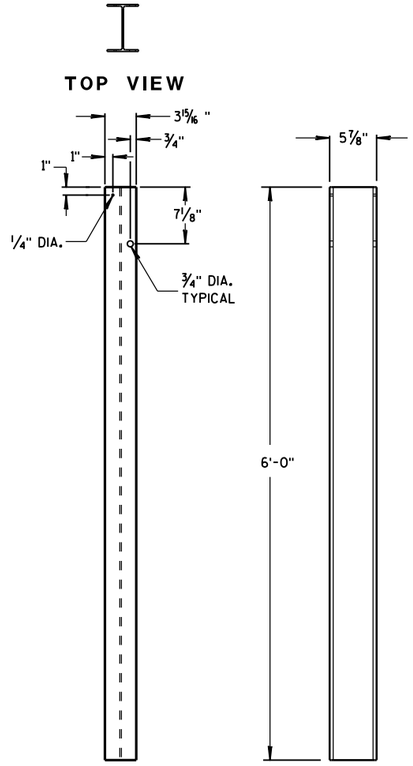


SIDE VIEW

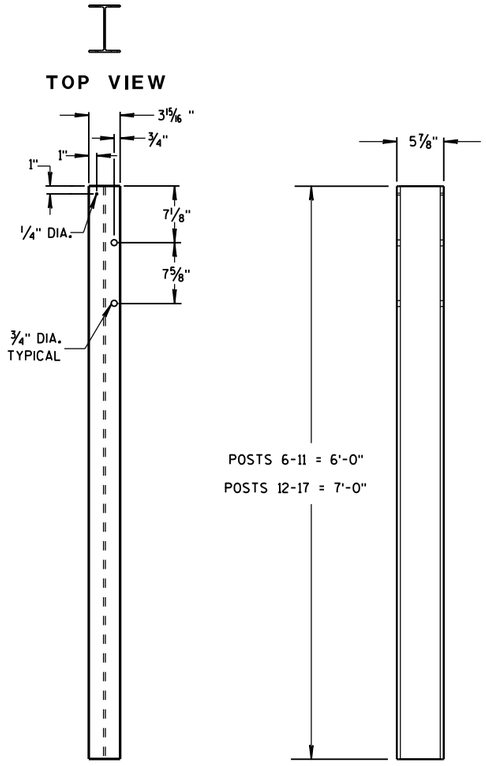


TOP VIEW

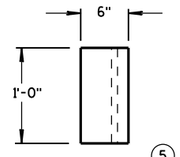
ALTERNATE WOOD BLOCKOUT DETAIL



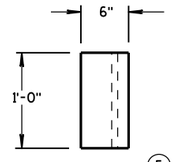
STEEL POSTS 1-5



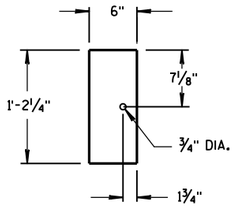
STEEL POSTS 6-17



TOP VIEW (5)

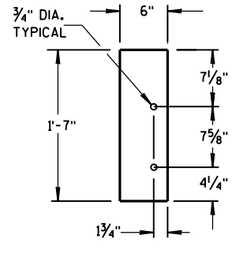


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS 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.

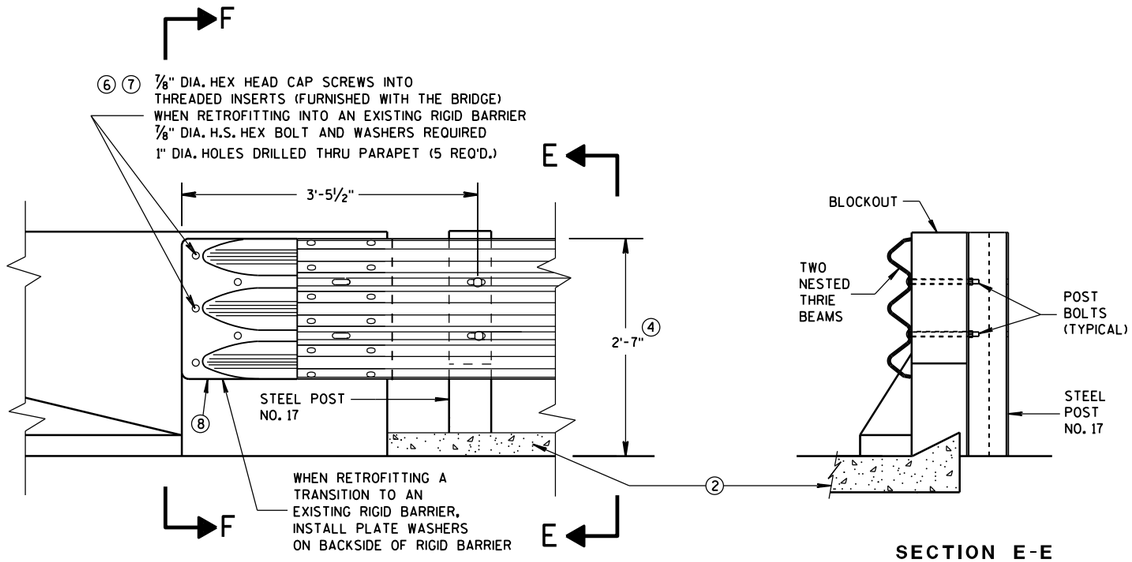
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-4c
S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

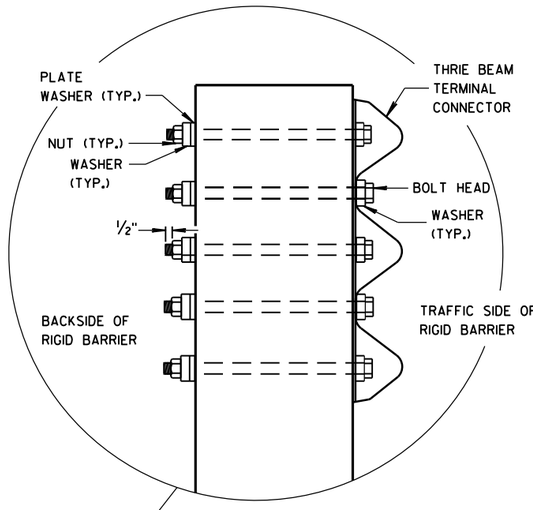
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

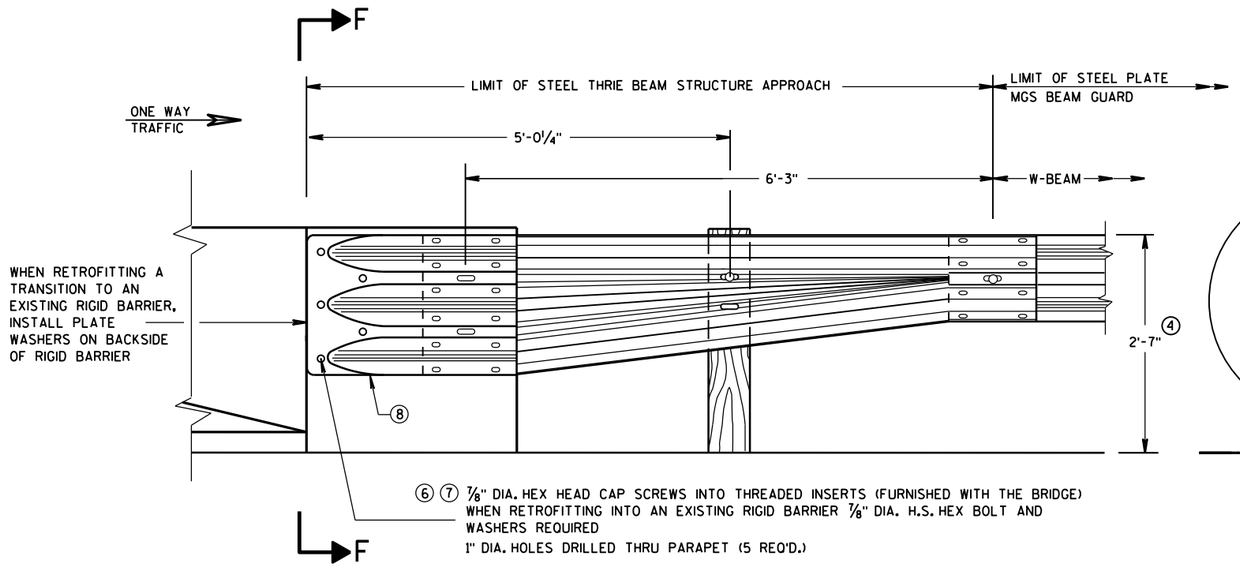
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

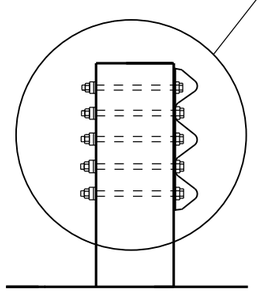
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⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

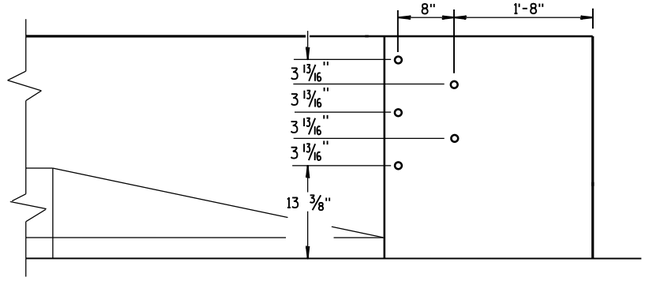




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 45-4d

6

S.D.D. 14 B 45-4d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

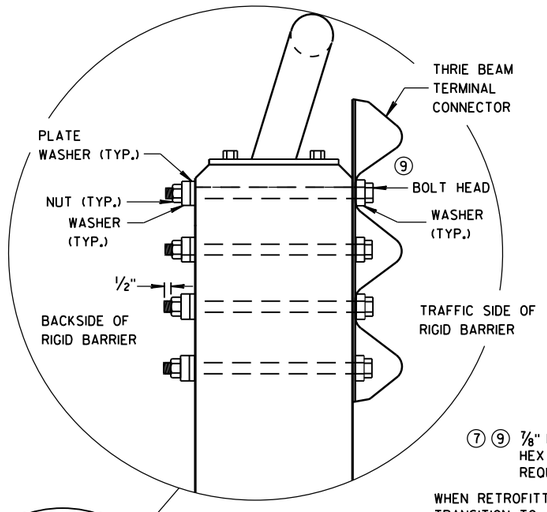
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

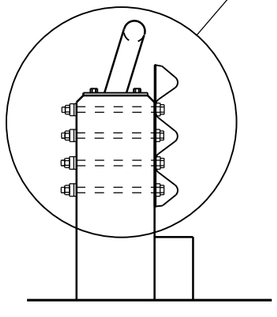
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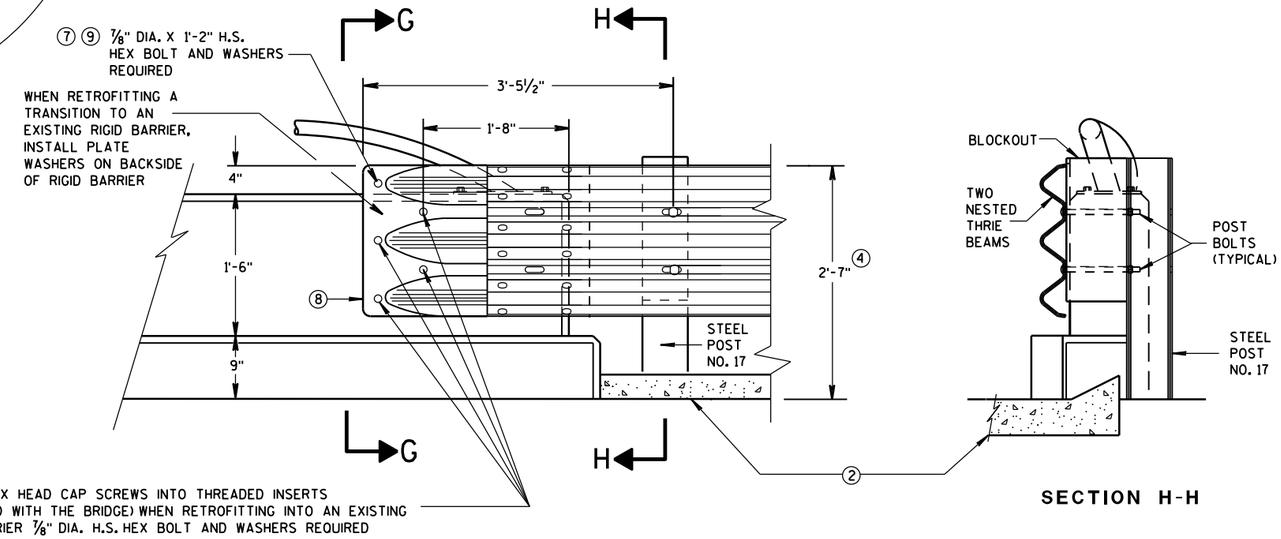
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(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





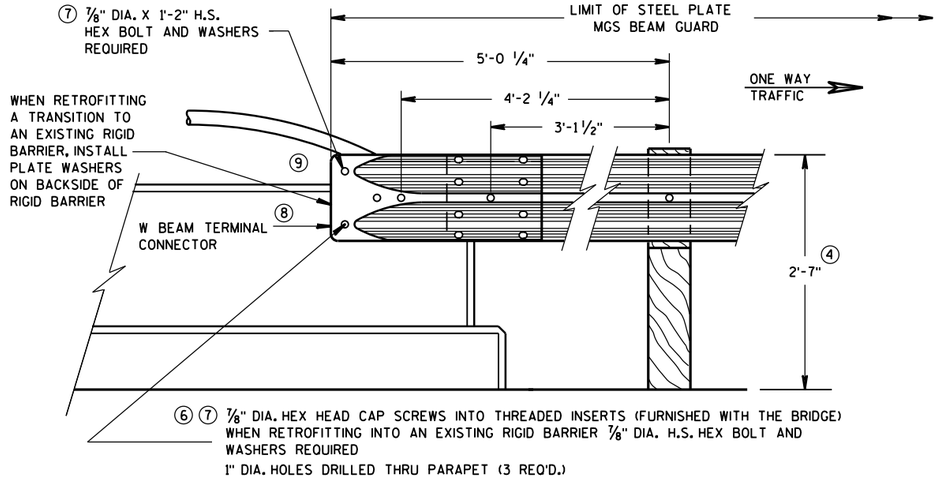
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

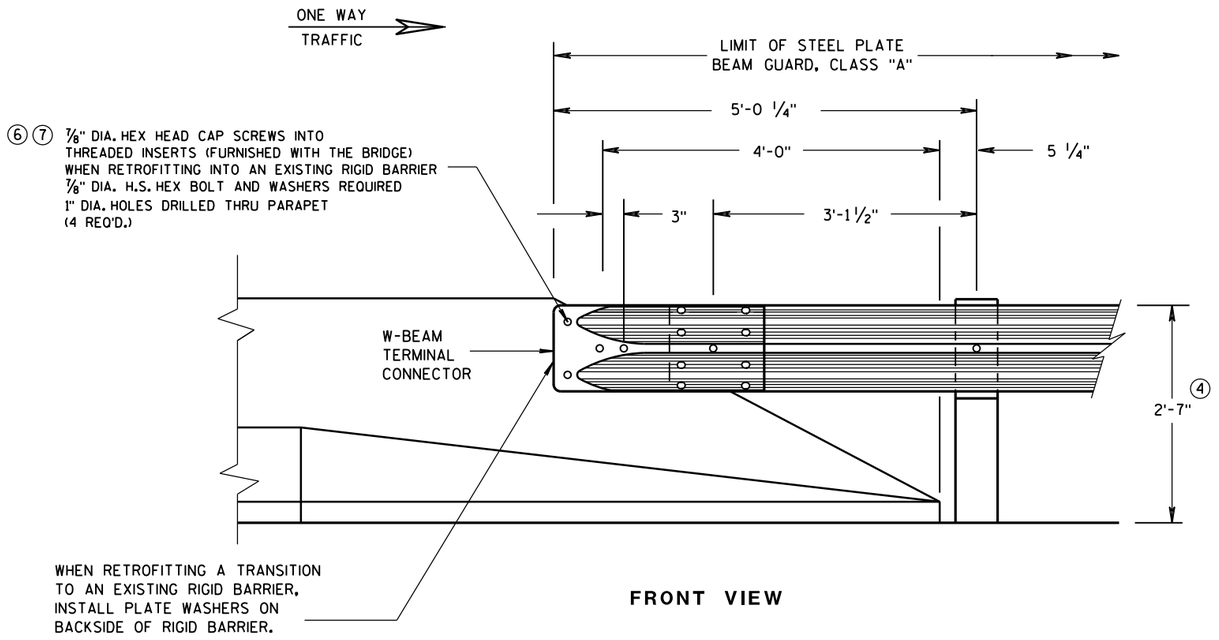


FRONT VIEW

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		
June, 2015	/S/ Jerry H. Zogg	
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER	NT
FHWA		



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

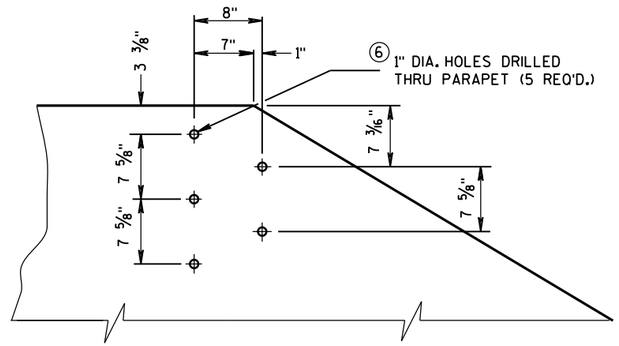
GENERAL NOTES

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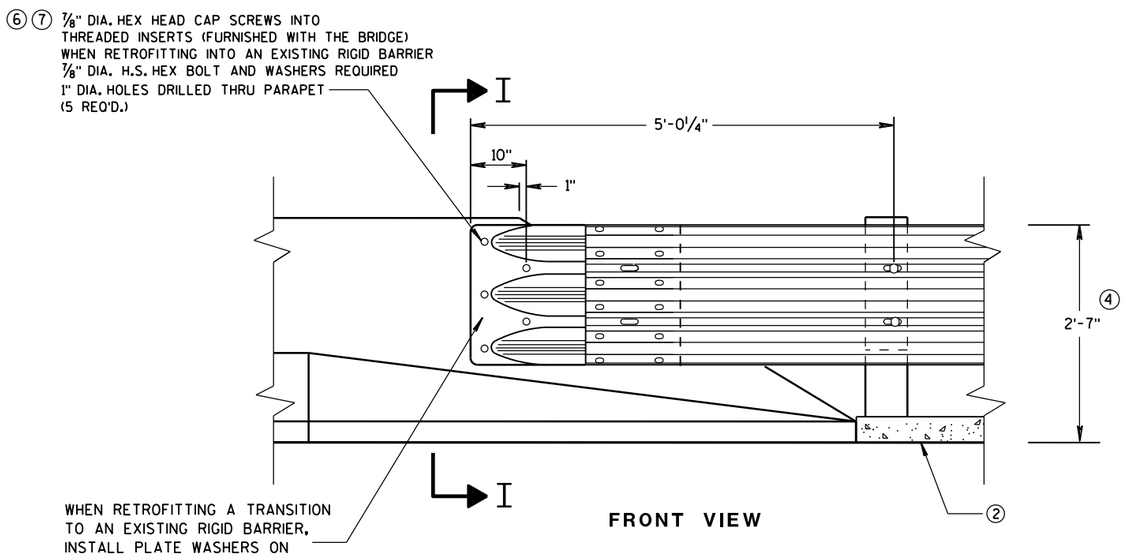
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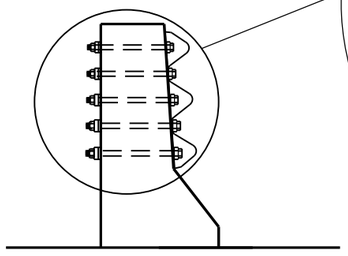
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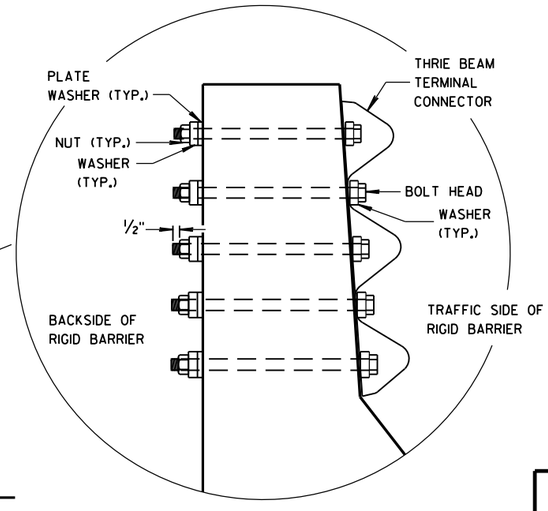
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



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

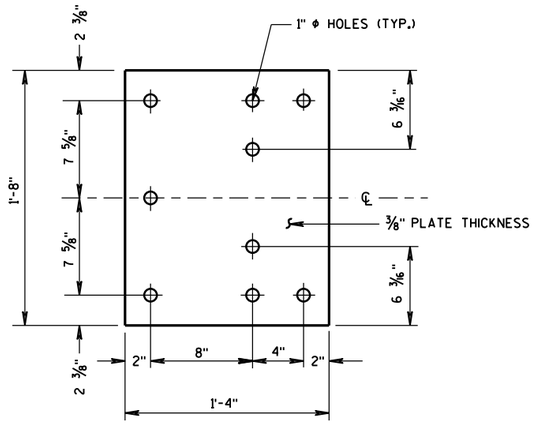
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FHWA

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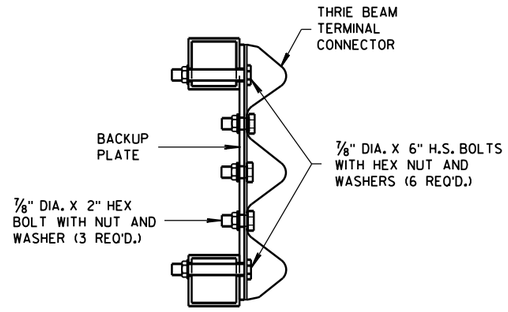
S.D.D. 14 B 45-4f

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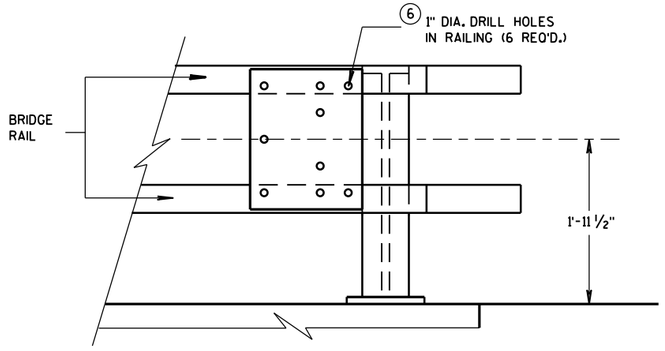
S.D.D. 14 B 45-4f



BACK-UP PLATE DETAIL



SECTION J-J

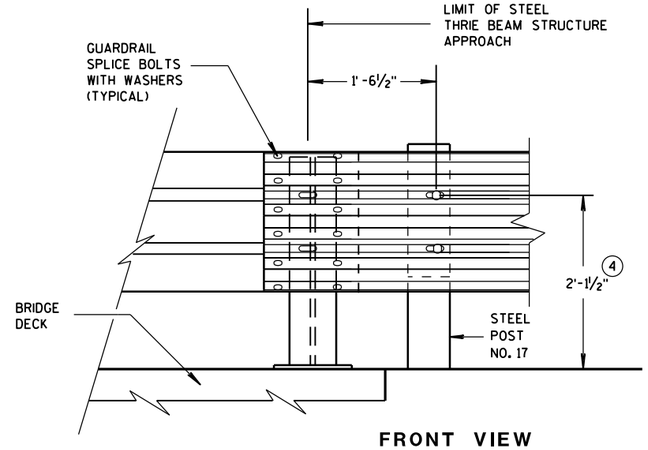


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

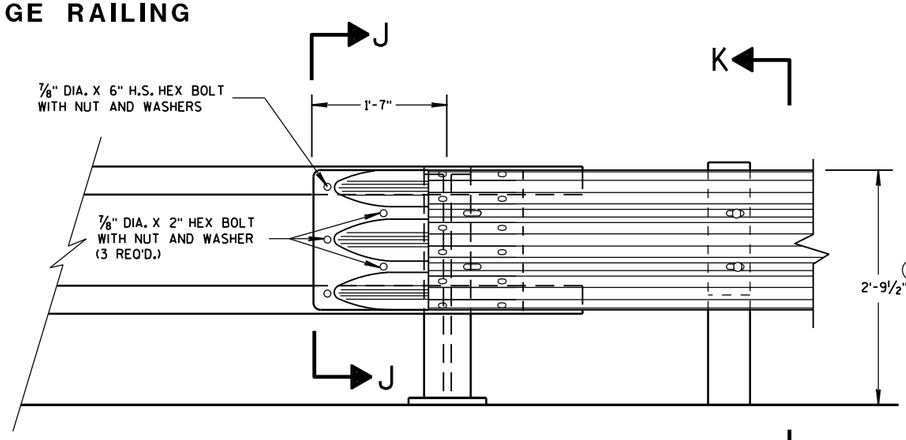
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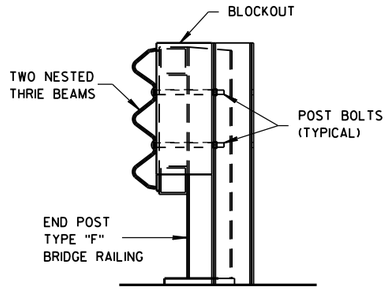


FRONT VIEW

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
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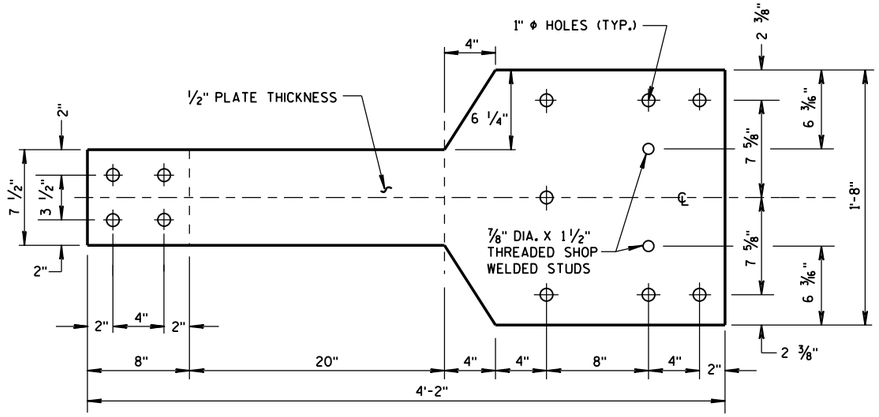
S.D.D. 14 B 45-4g

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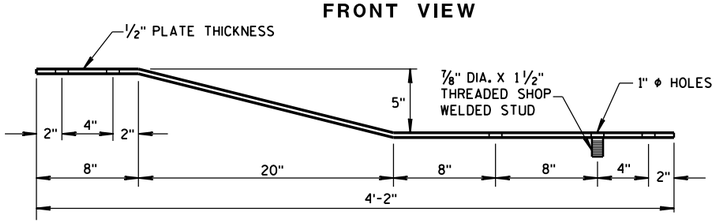
S.D.D. 14 B 45-4g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

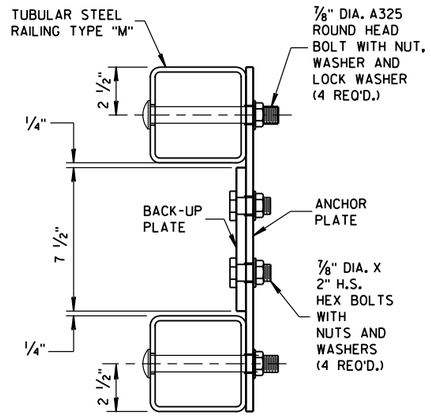


FRONT VIEW

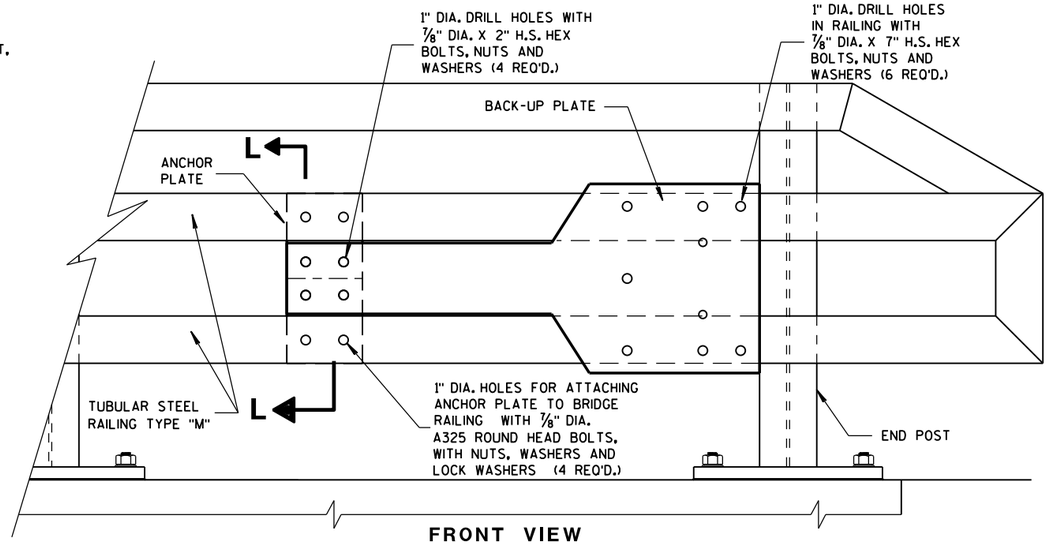


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

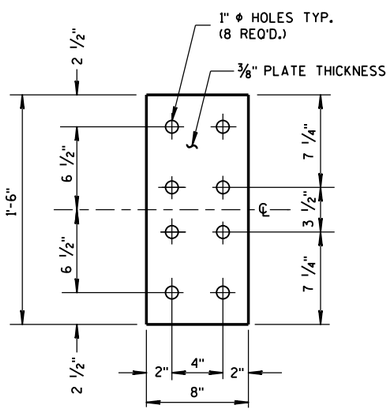


SECTION L-L



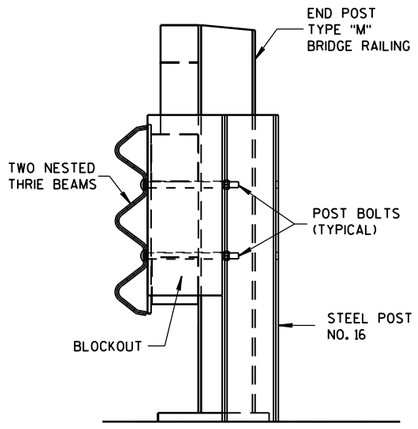
FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

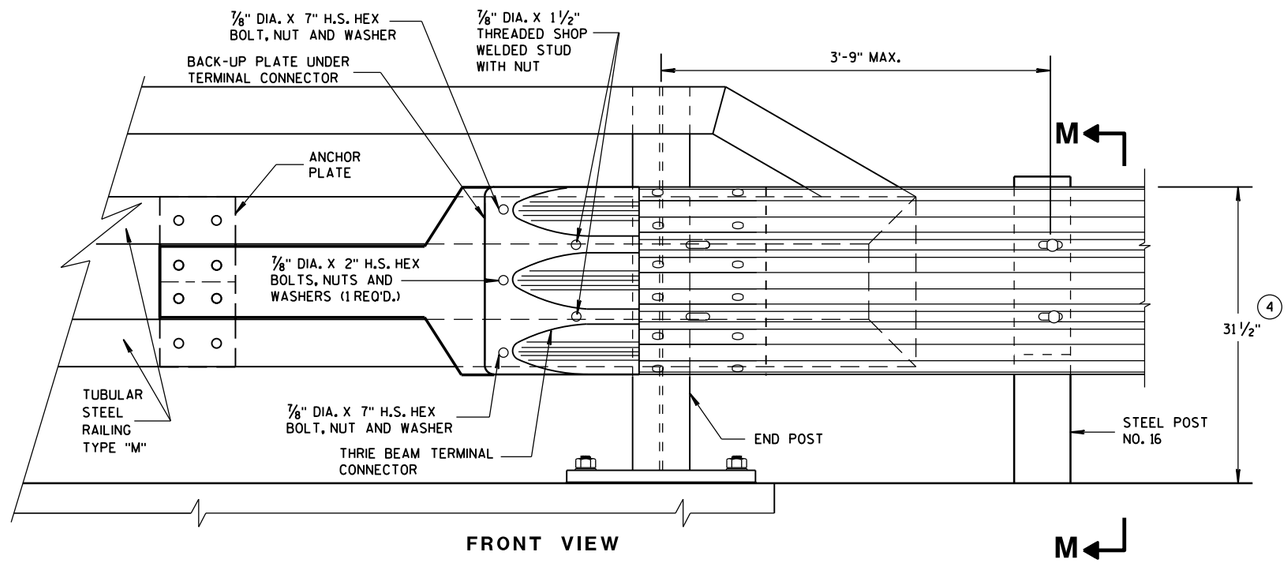


FRONT VIEW

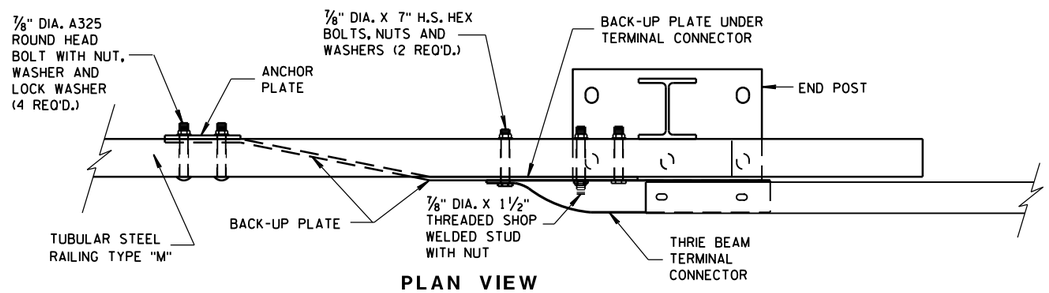
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-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

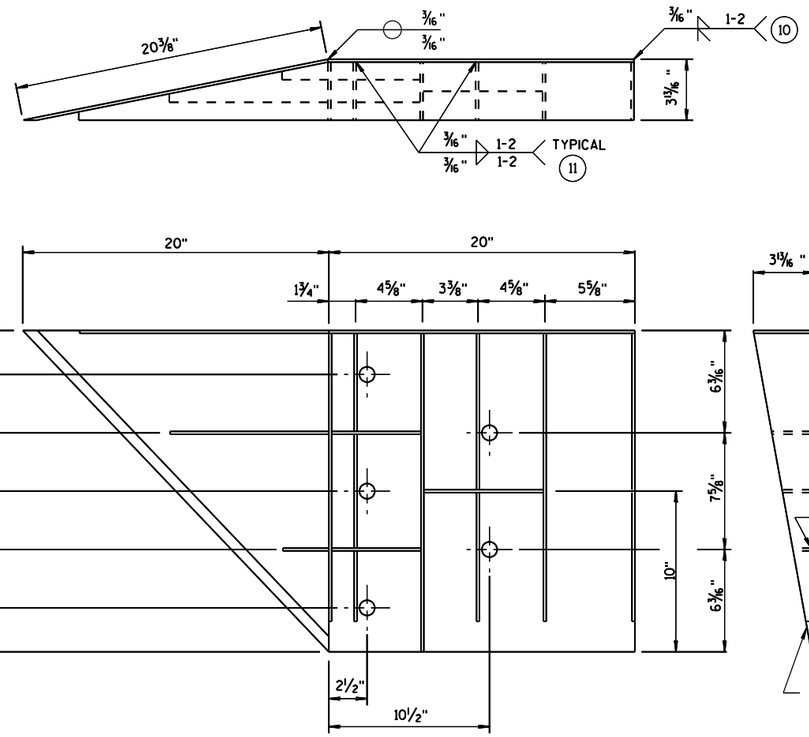
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FHWA

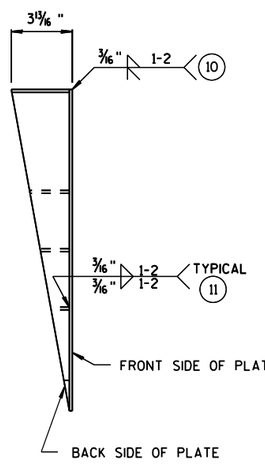
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S.D.D. 14 B 45-4h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

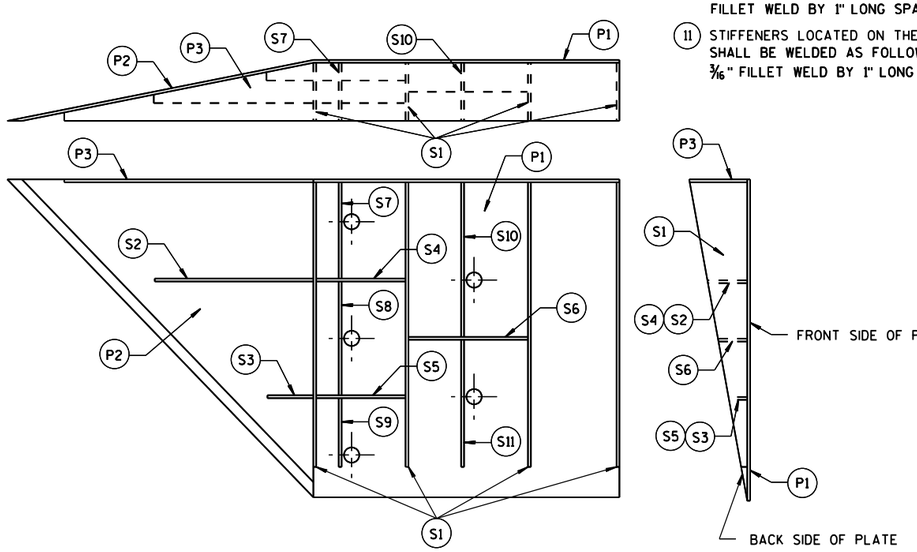


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE ⅜" THICK.

ALL STIFFENERS ARE ¼" 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.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND ⅜" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
⅜" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	⅜"
P2	1		20" x 20" x 28⁹⁄₁₆"	⅜"
P3	1		39" x 3⅝" x 20" x 19⁵⁄₁₆"	⅜"
S1	4		18⁷⁄₁₆" x 3⅜" x 18¾"	¼"
S2	1		10¼" x 2⁷⁄₁₆" x 10⅜" x ½"	¼"
S3	1		3" x 1¹⁄₁₆" x 3⅛" x ½"	¼"
S4	1		6⅛" x 2⁷⁄₁₆"	¼"
S5	1		6⅛" x 1¹⁄₁₆"	¼"
S6	1		7¾" x 1¾"	¼"
S7	1		2⁹⁄₁₆" x 6" x 3⅝" x 5⅞"	¼"
S8	1		1⁵⁄₃₂" x 7½" x 2½" x 7⅜"	¼"
S9	1		6¹⁄₁₆" x 6³⁄₁₆" x 1³⁄₃₂"	¼"
S10	1		1⅛" x 9⅞" x 3⅝" x 9¹¹⁄₁₆"	¼"
S11	1		8½" x 8¾" x 1¹³⁄₁₆"	¼"

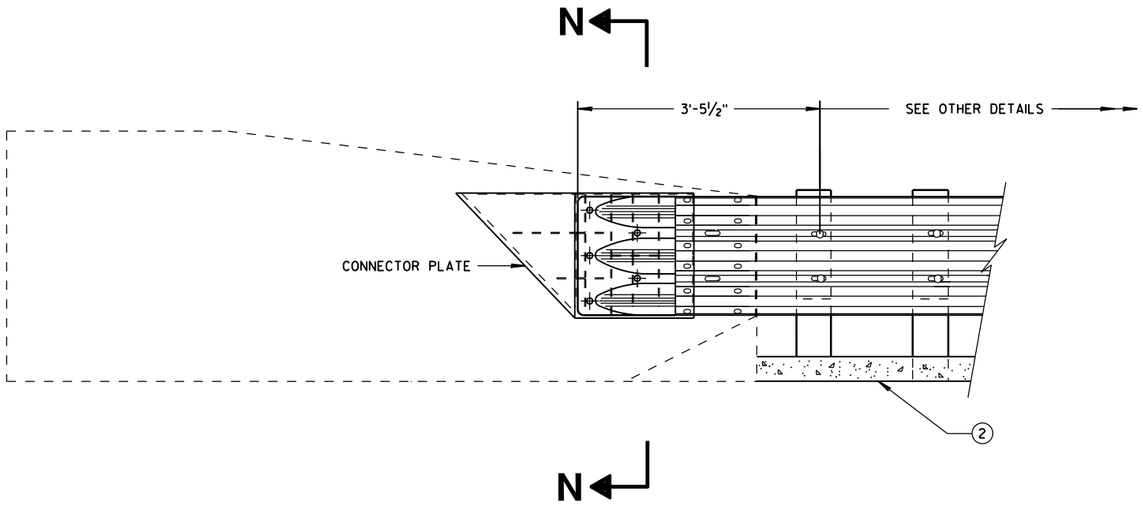
SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

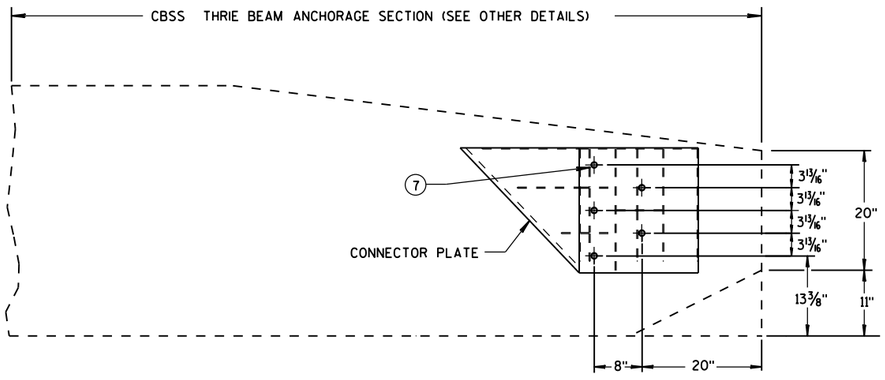
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



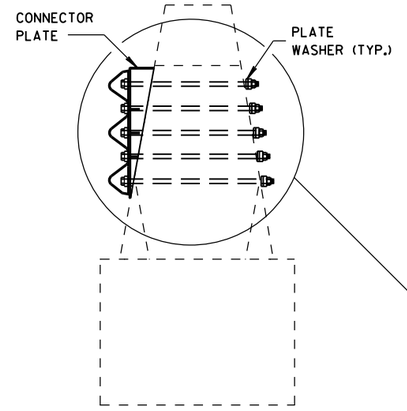
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

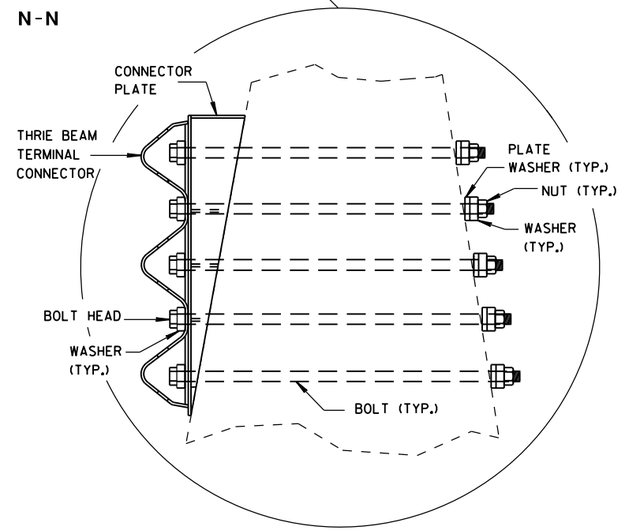
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) 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.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

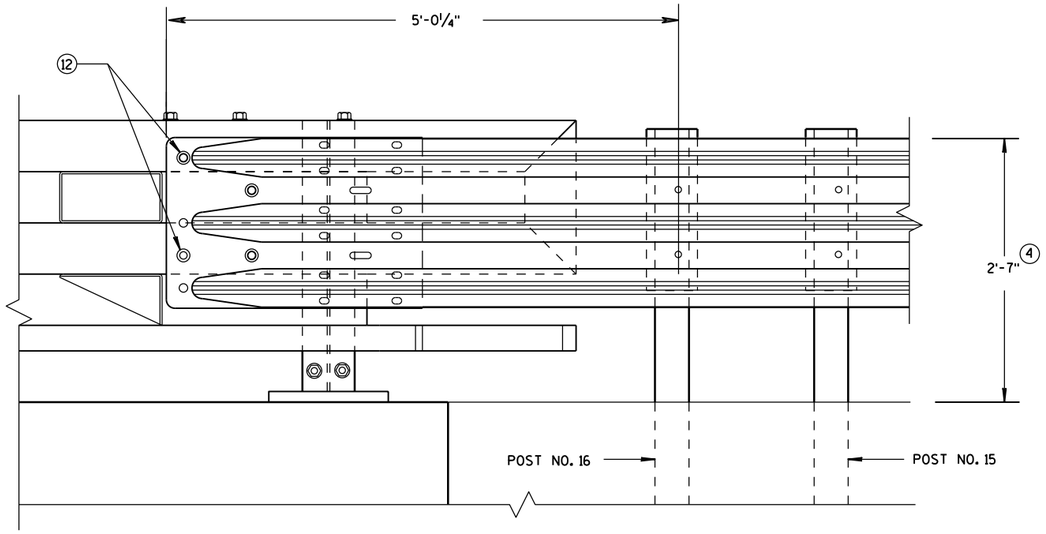
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS DEVELOPMENT ENGINEER
NT
FHWA

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S.D.D. 14 B 45-4j

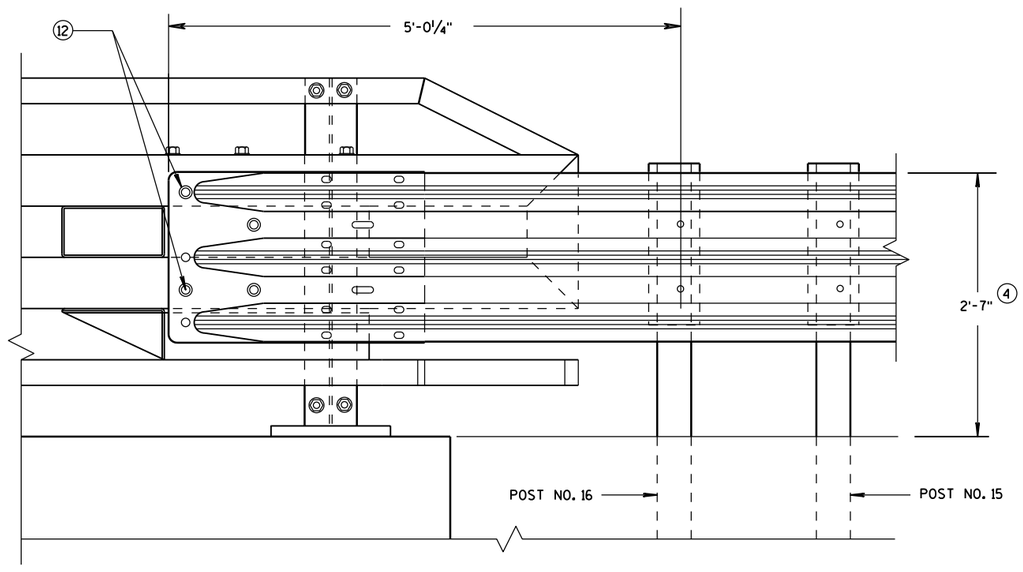
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S.D.D. 14 B 45-4j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D 374 NT
ENGINEER

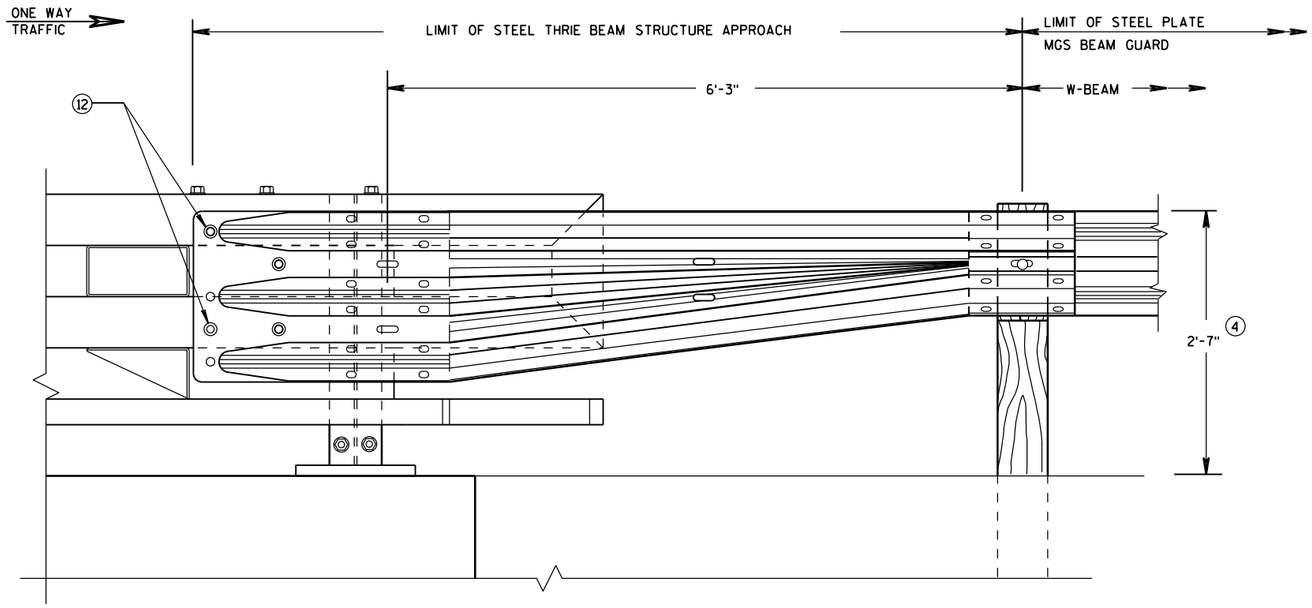
FHWA

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S.D.D. 14 B 45-4k

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S.D.D. 14 B 45-4k



FRONT VIEW

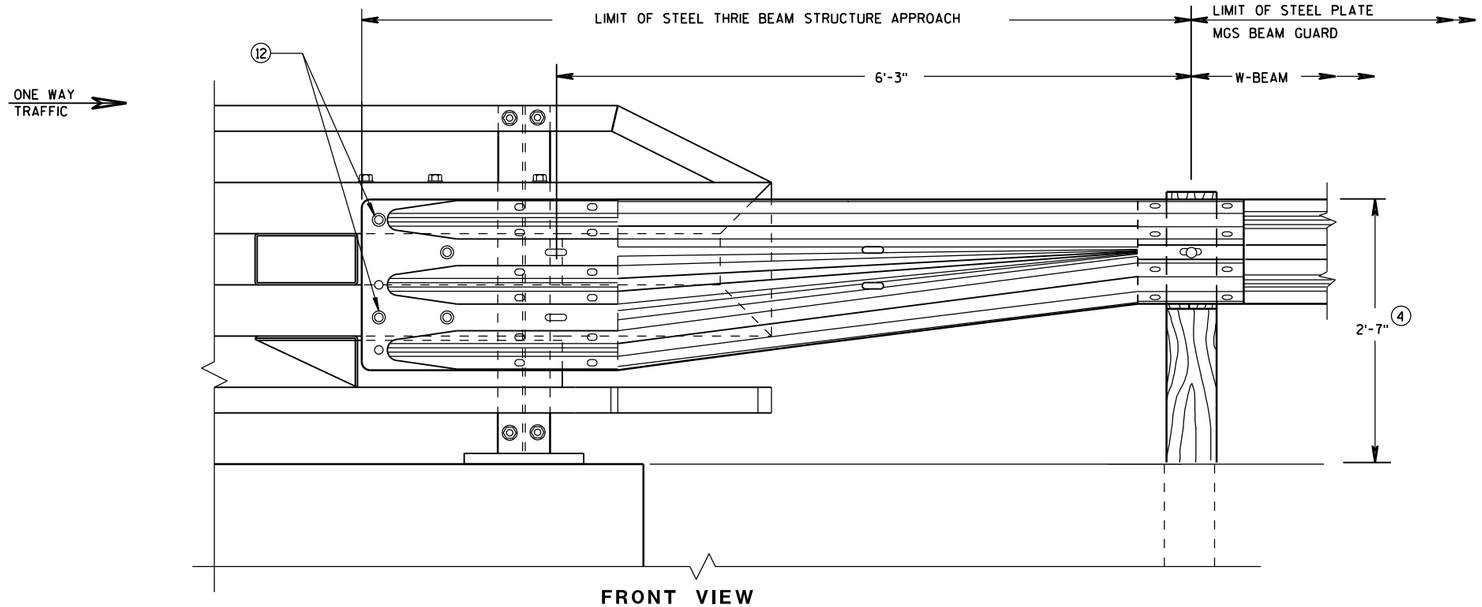
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

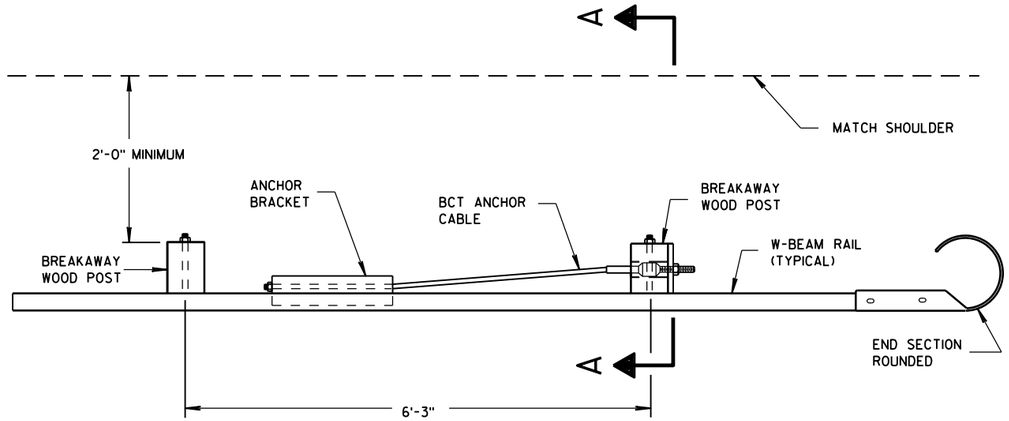
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
D 375 NT
FHWA

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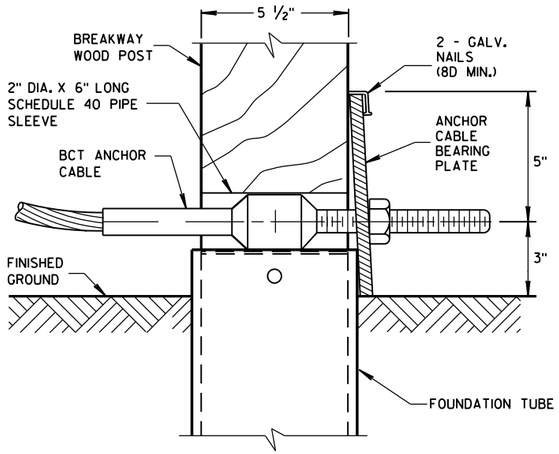
S.D.D. 14 B 45-4L

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S.D.D. 14 B 45-4L



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

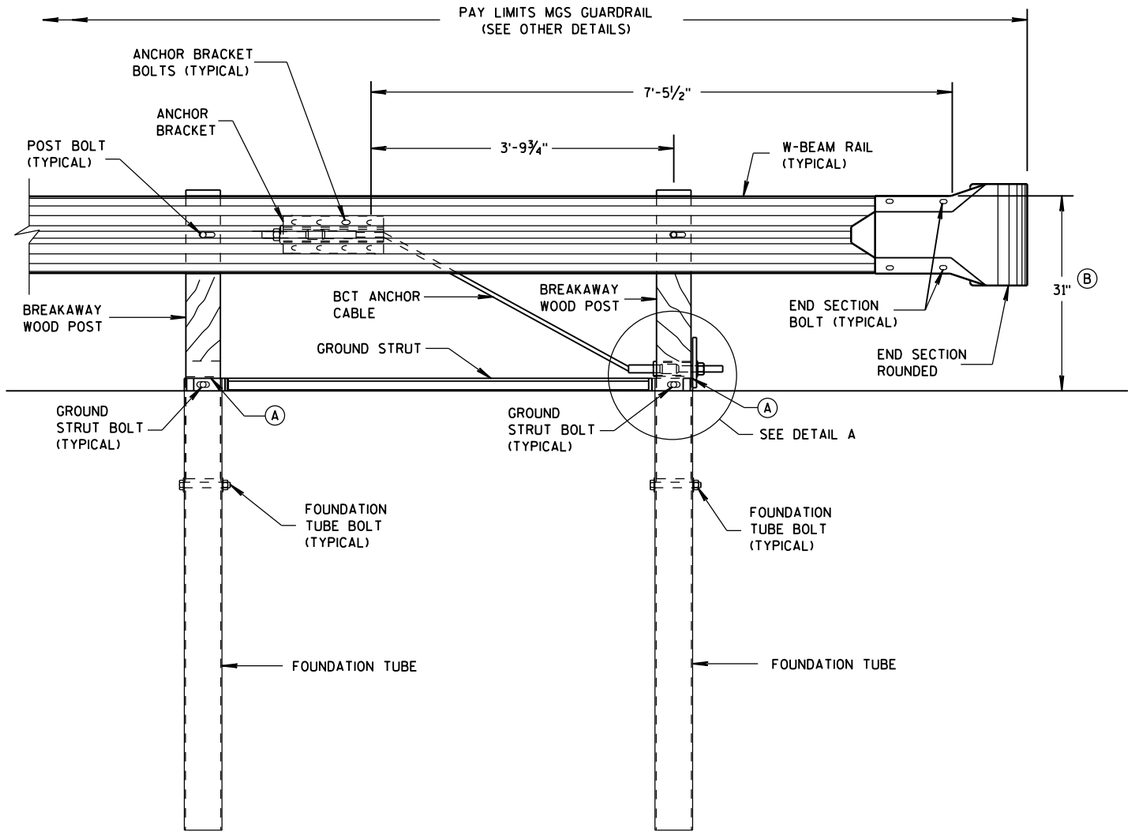
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

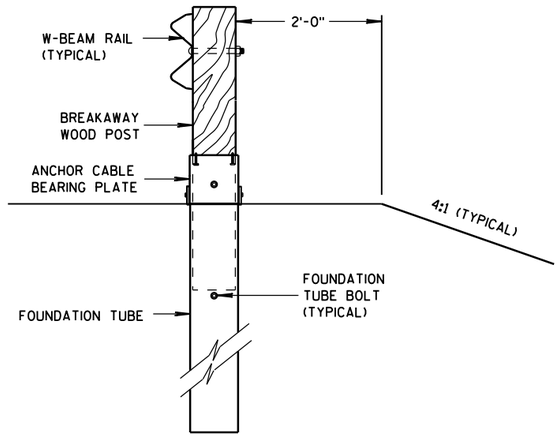
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

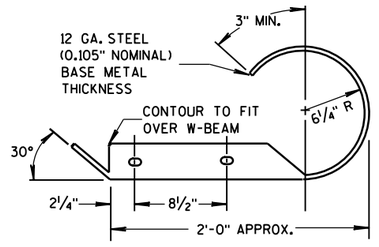


FRONT VIEW

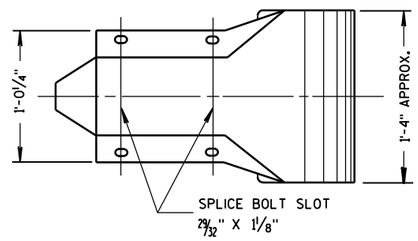
END RAIL DETAIL



SECTION A-A



PLAN VIEW



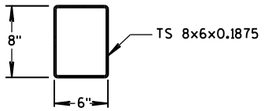
FRONT VIEW

W BEAM END SECTION ROUNDED

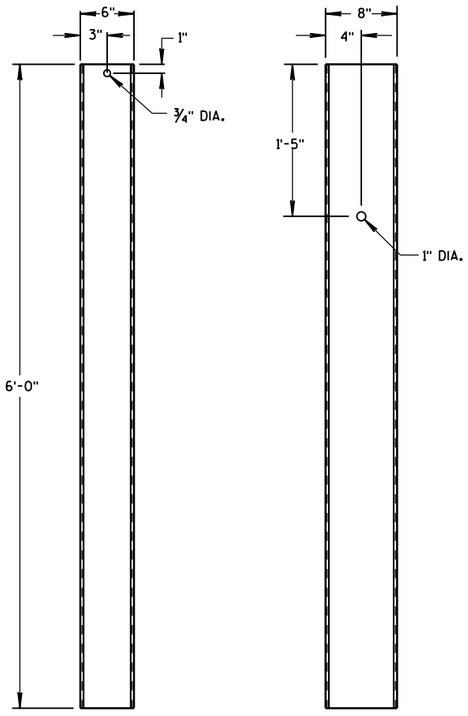
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 14 B 47-2a

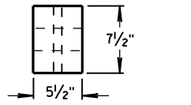


PLAN VIEW

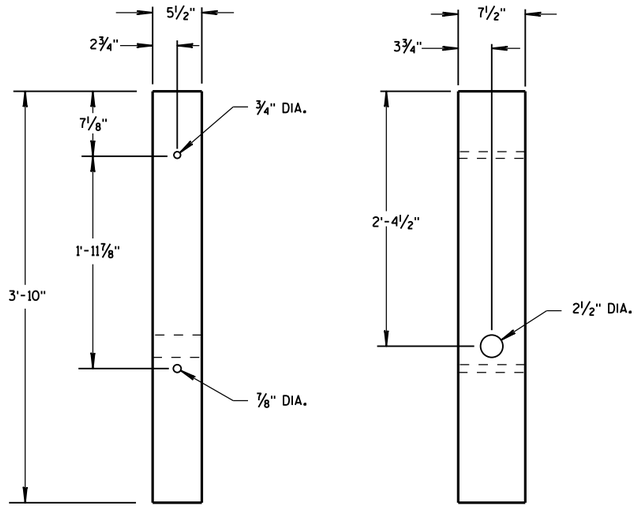


FRONT VIEW SIDE VIEW

FOUNDATION TUBE



PLAN VIEW



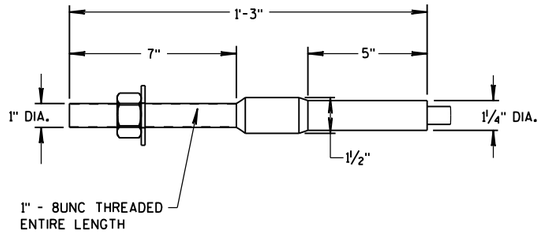
FRONT VIEW SIDE VIEW

BREAKAWAY WOOD POST

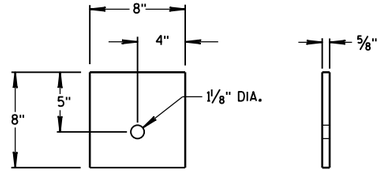
GENERAL NOTES

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



SIDE VIEW FRONT VIEW

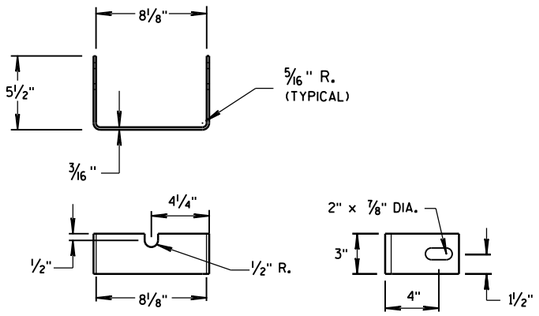
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

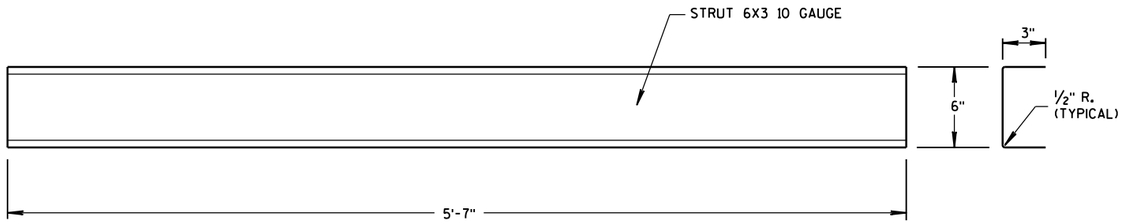
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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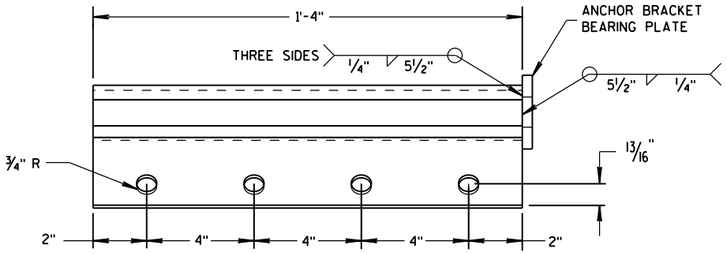
S.D.D. 14 B 47-2b

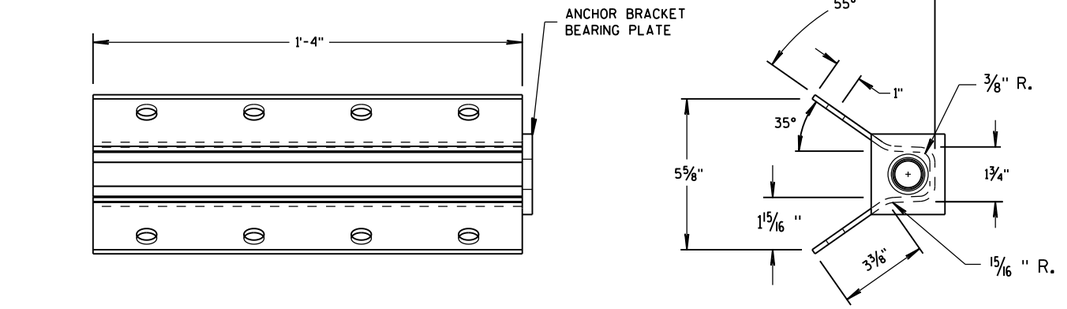


YOKE DETAIL

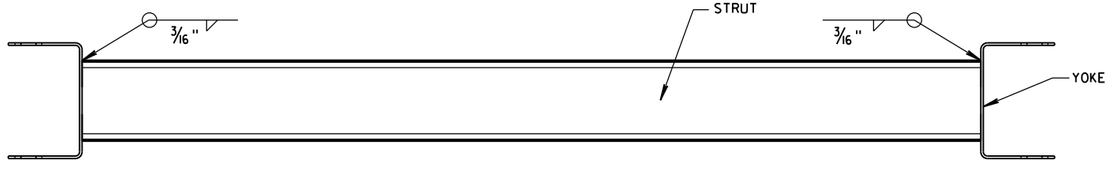


STRUT DETAIL

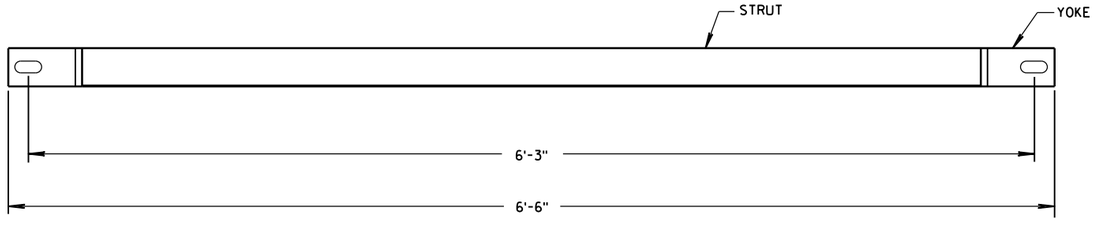




ANCHOR BRACKET

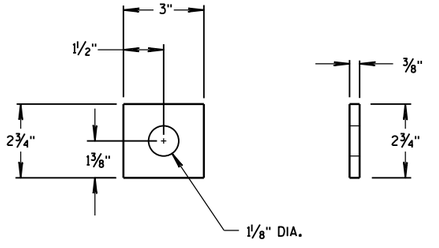


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

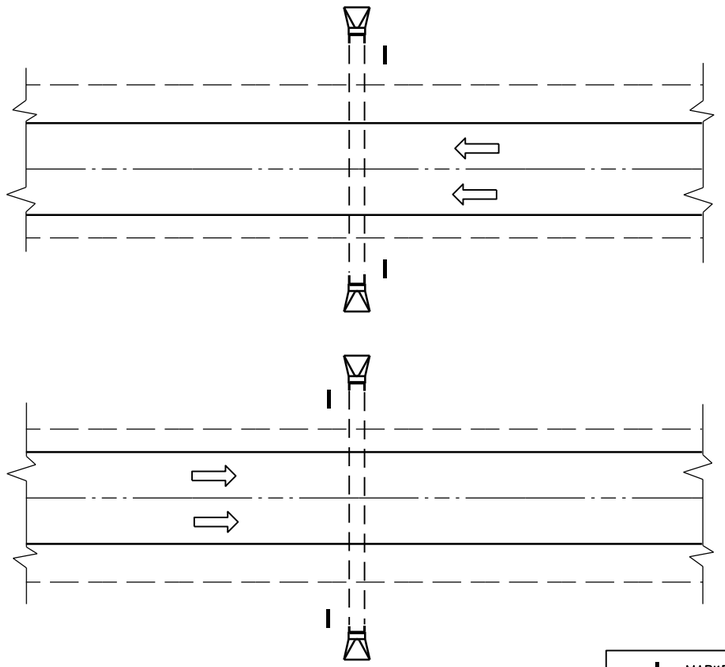
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

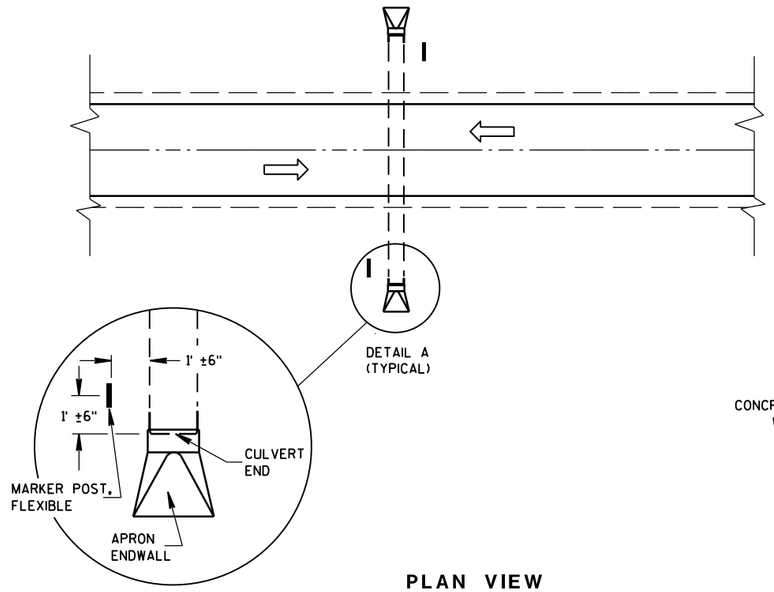
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S.D.D. 14 B 47-2c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

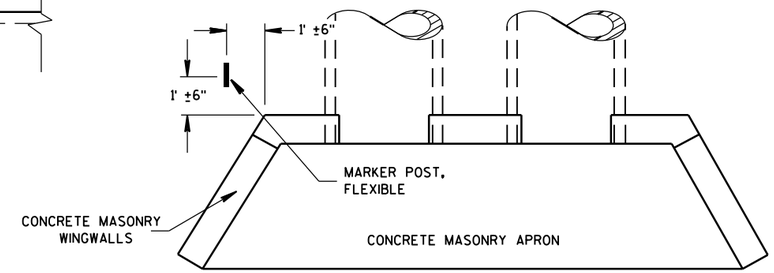
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

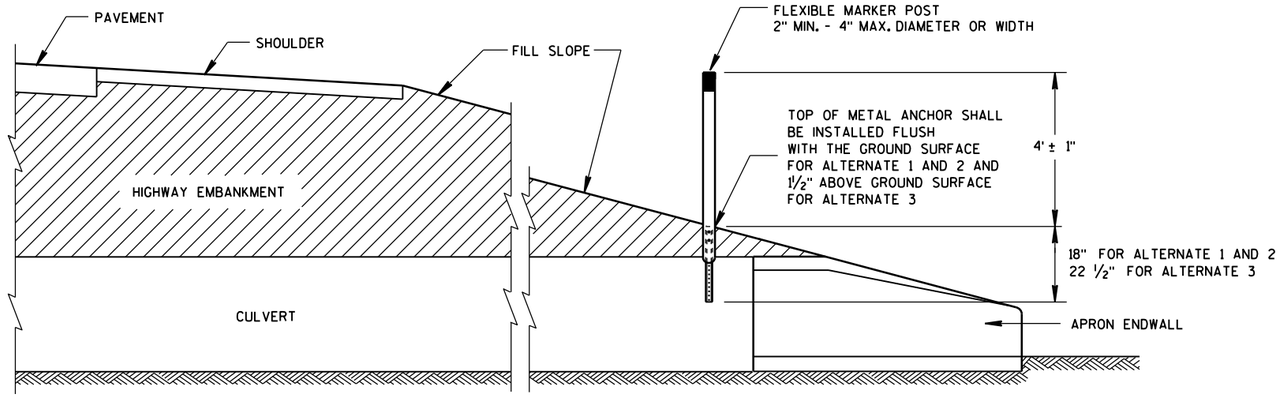
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

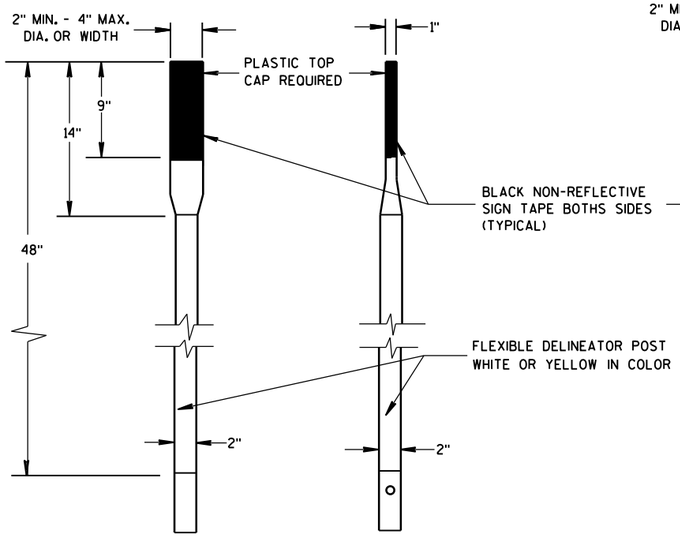
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

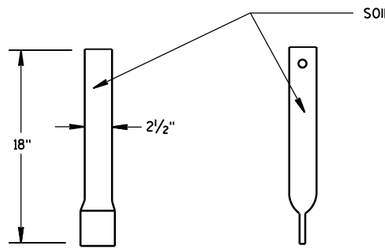
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S.D.D. 15 A 3-2a

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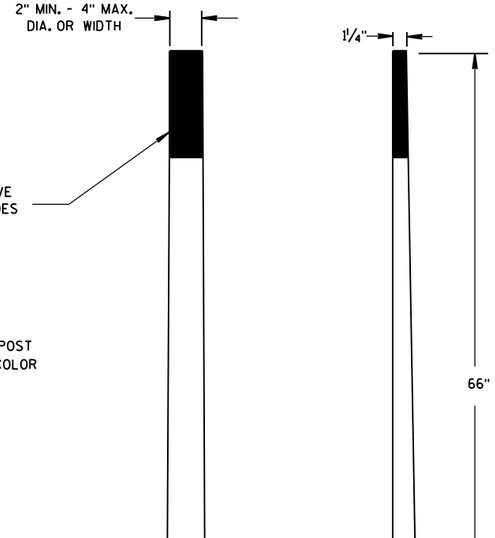
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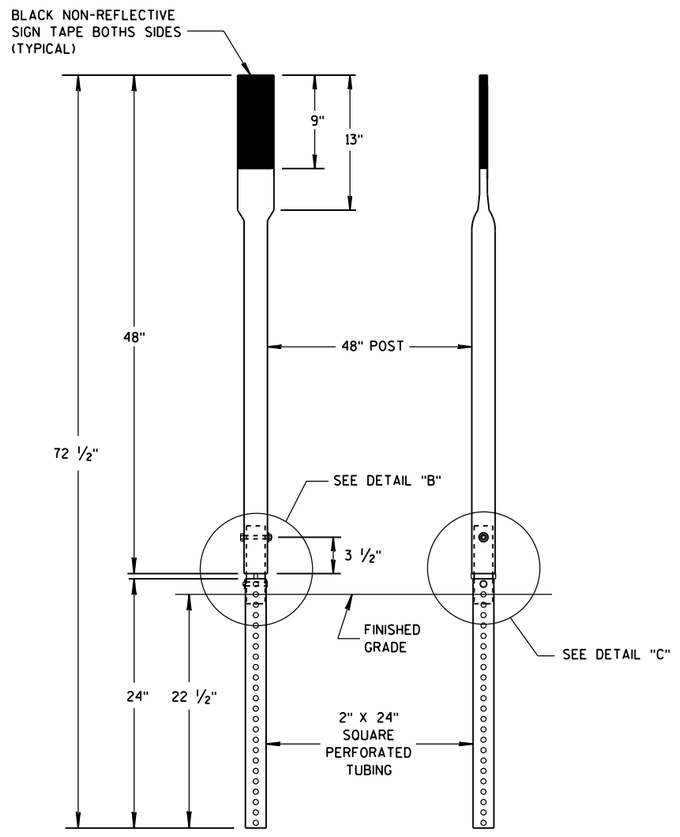
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

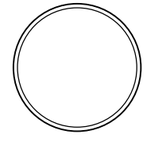
ALTERNATE 2



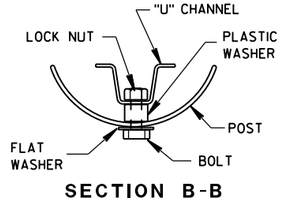
FRONT VIEW SIDE VIEW

ALTERNATE 3

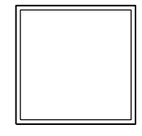
FLEXIBLE MARKER POSTS



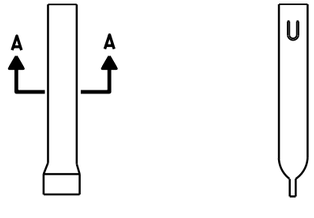
SECTION A-A



SECTION B-B

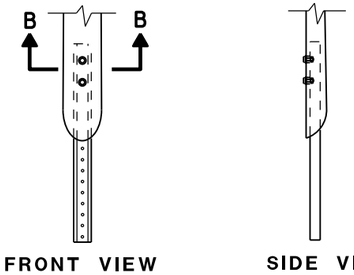


SECTION C-C



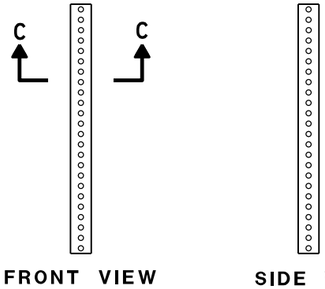
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

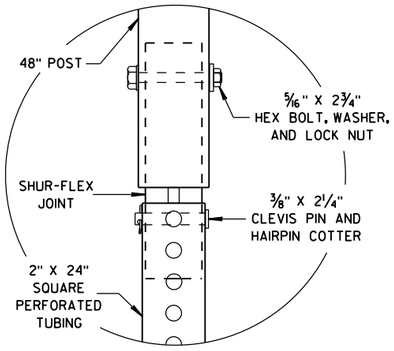
ALTERNATE 2



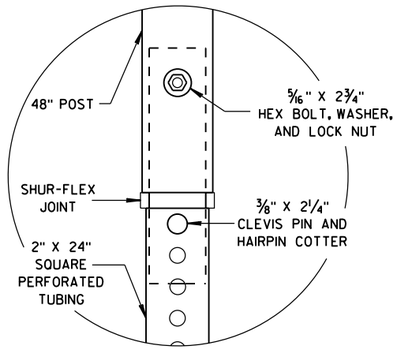
FRONT VIEW SIDE VIEW

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

6

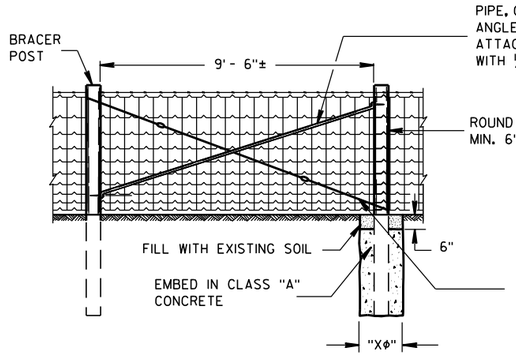
S.D.D. 15 A 3-2b

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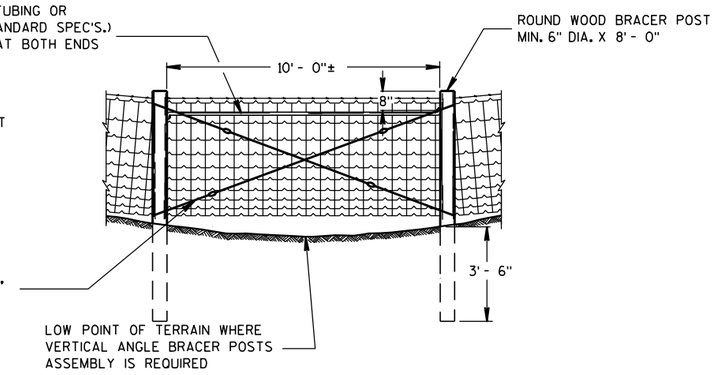
S.D.D. 15 A 3-2b

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

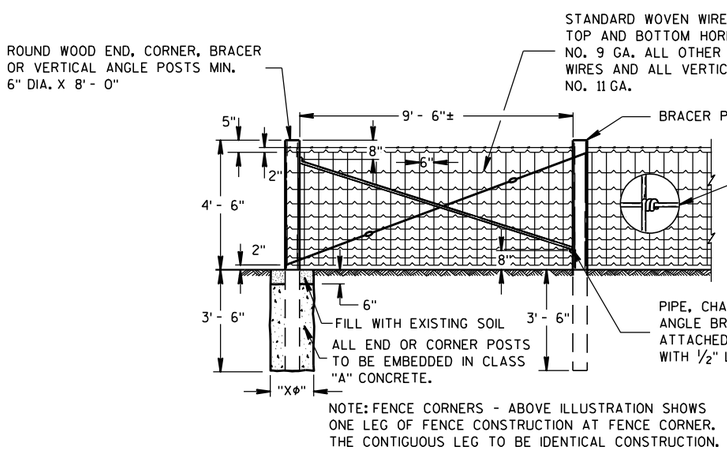
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

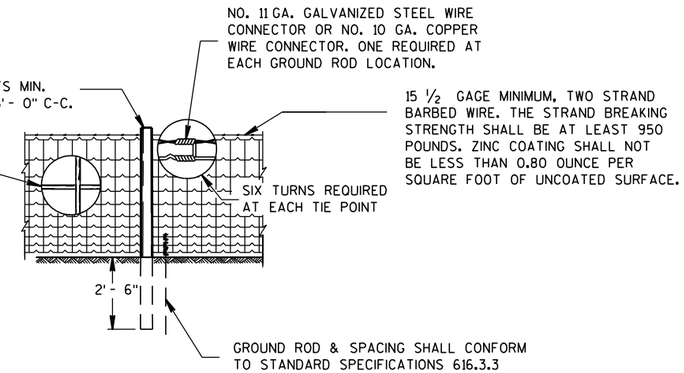
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



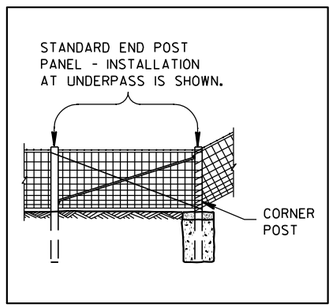
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

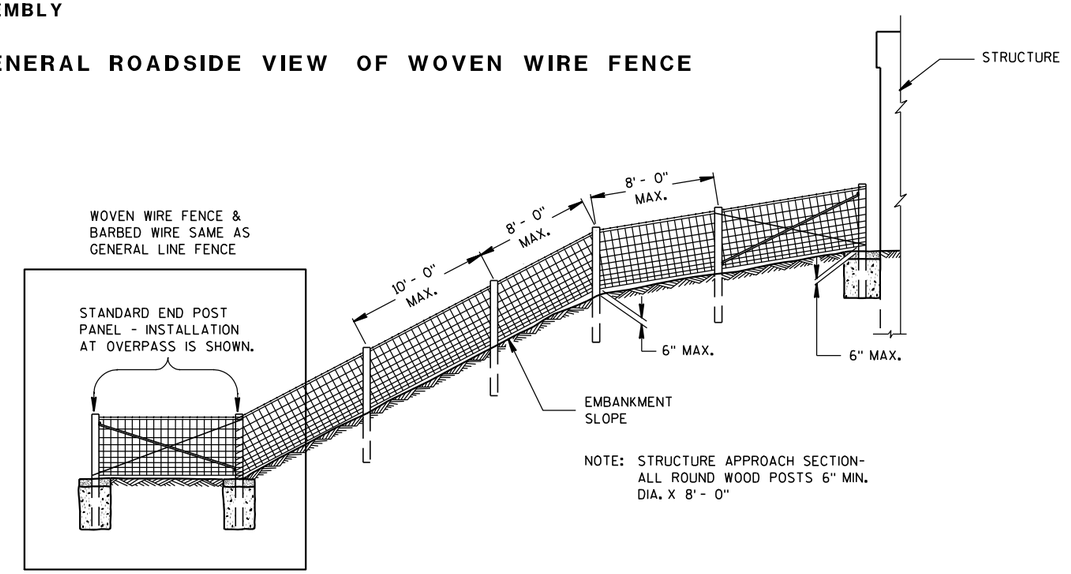


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

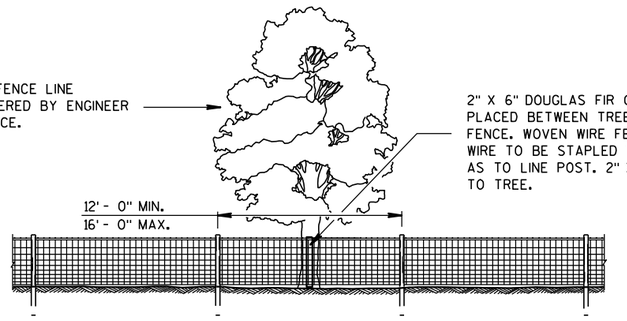
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

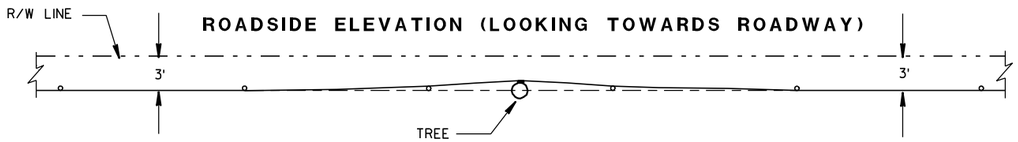
S.D.D. 15 B 1-8a

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.

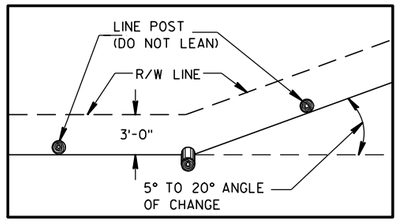


ROADSIDE ELEVATION (LOOKING TOWARDS ROADWAY)

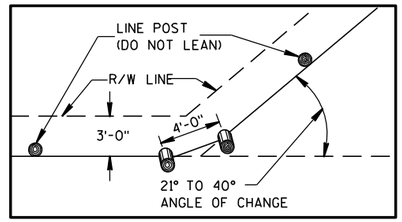


PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



PLAN VIEW
SINGLE POST CORNER

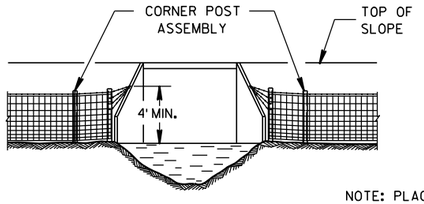


PLAN VIEW
DOUBLE POST CORNER

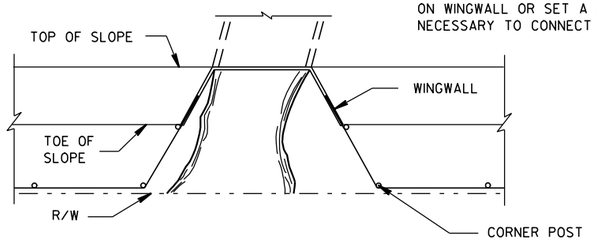
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

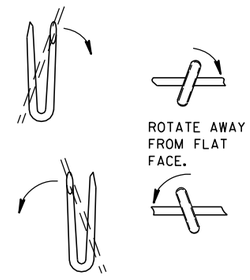
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



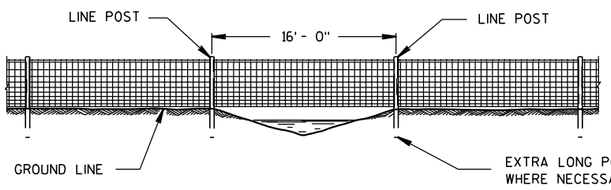
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



FENCE INSTALLATION TO WINGWALLS

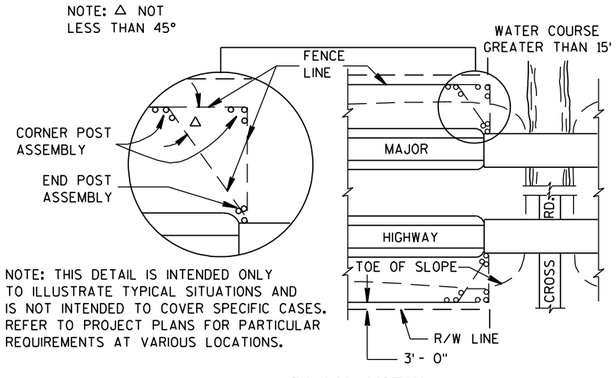


LINE POST



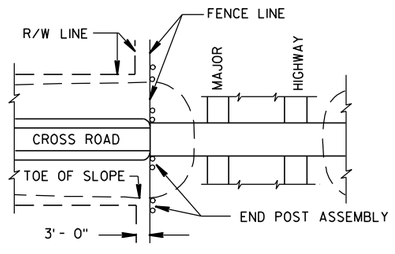
FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

NOTE: △ NOT LESS THAN 45°



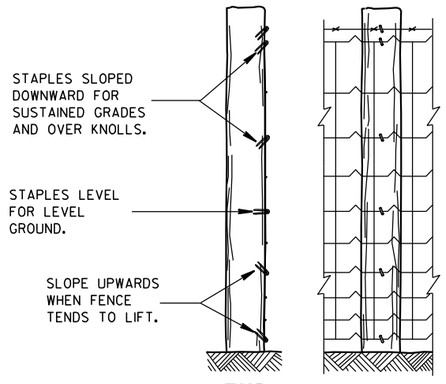
NOTE: THIS DETAIL IS INTENDED ONLY TO ILLUSTRATE TYPICAL SITUATIONS AND IS NOT INTENDED TO COVER SPECIFIC CASES. REFER TO PROJECT PLANS FOR PARTICULAR REQUIREMENTS AT VARIOUS LOCATIONS.

PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION — FARM SIDE ELEVATION

FENCE MOUNTING DETAIL

FENCE LOCATION AT STRUCTURES

FENCE WOVEN WIRE

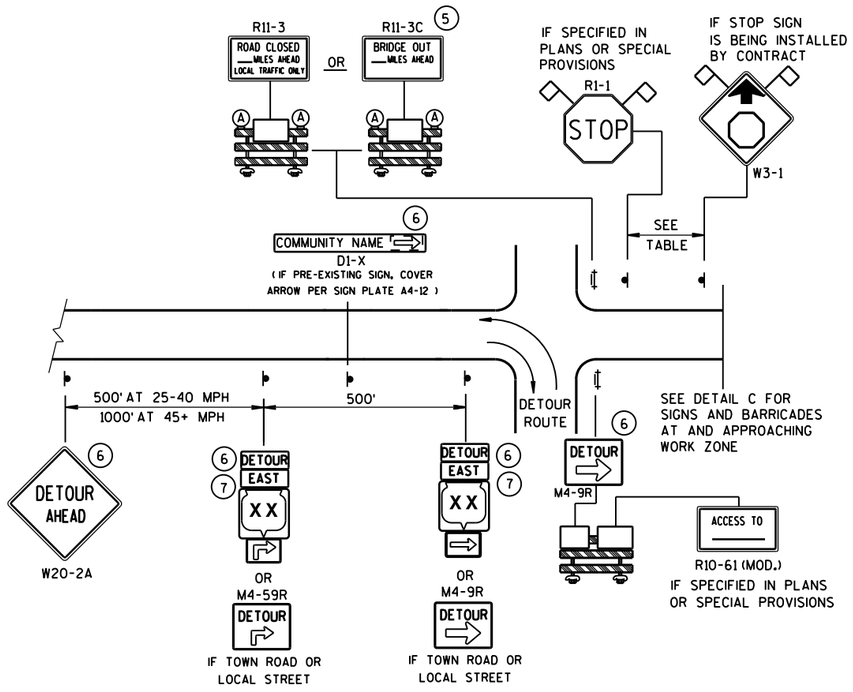
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008
DATE
/S/ Jerry H. Zo--
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

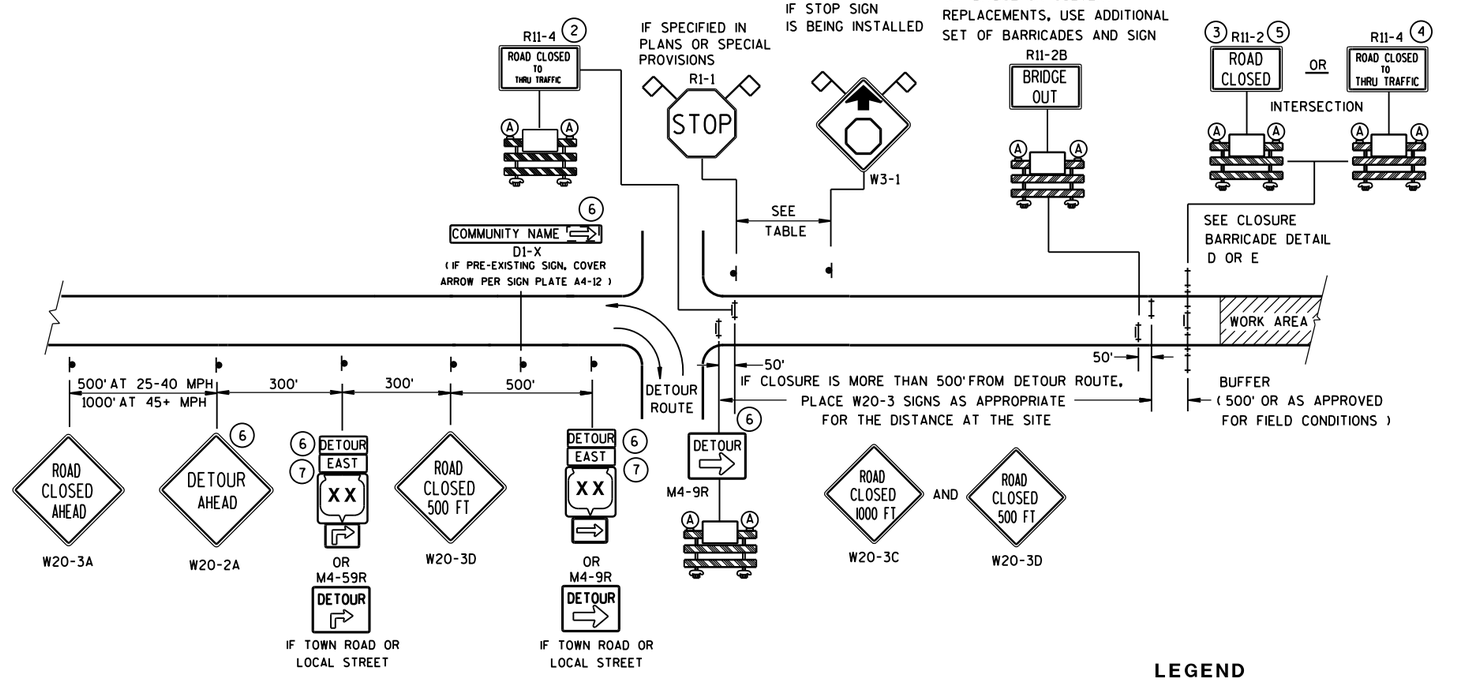
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S.D.D. 15 B 1-8b



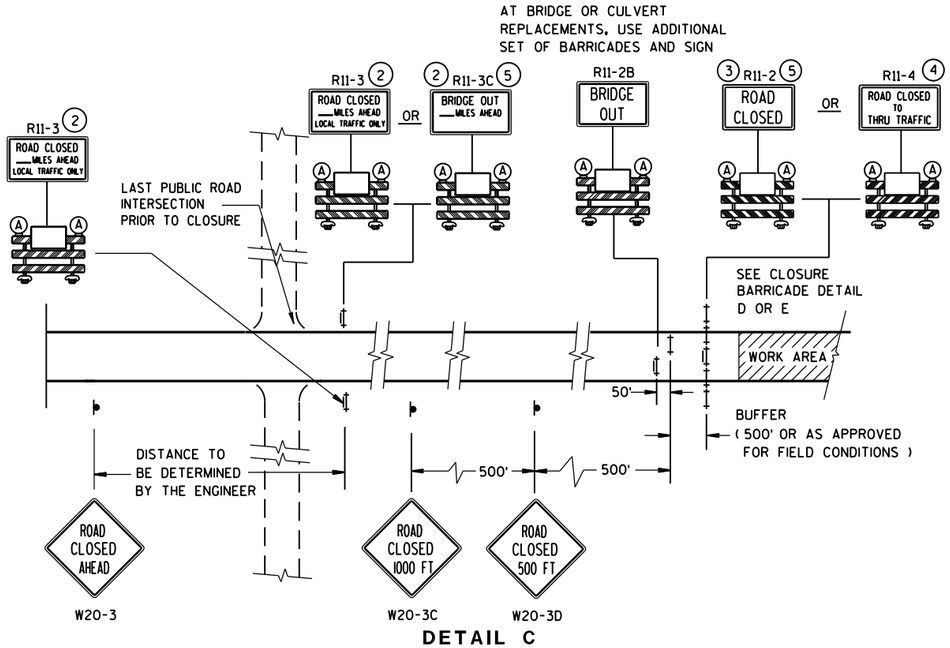
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)

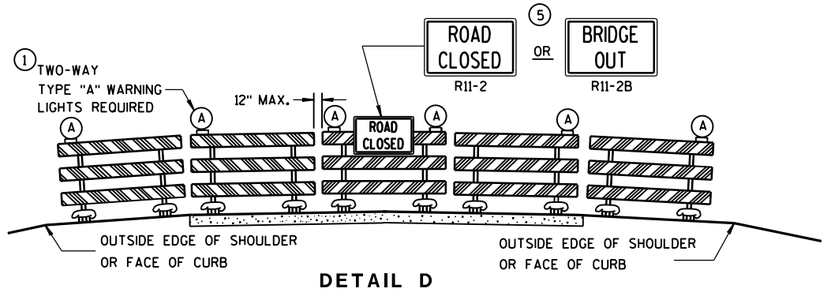
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

S.D.D. 15 C 2-6a

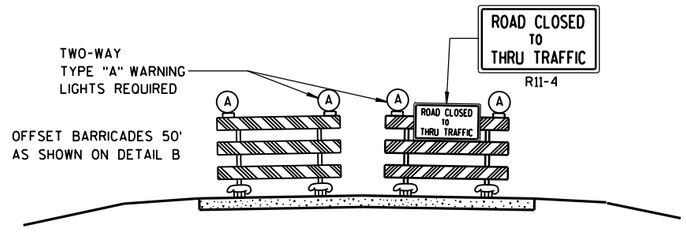
S.D.D. 15 C 2-6a



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

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC
FHWA

6

S.D.D. 15 C 2-6b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

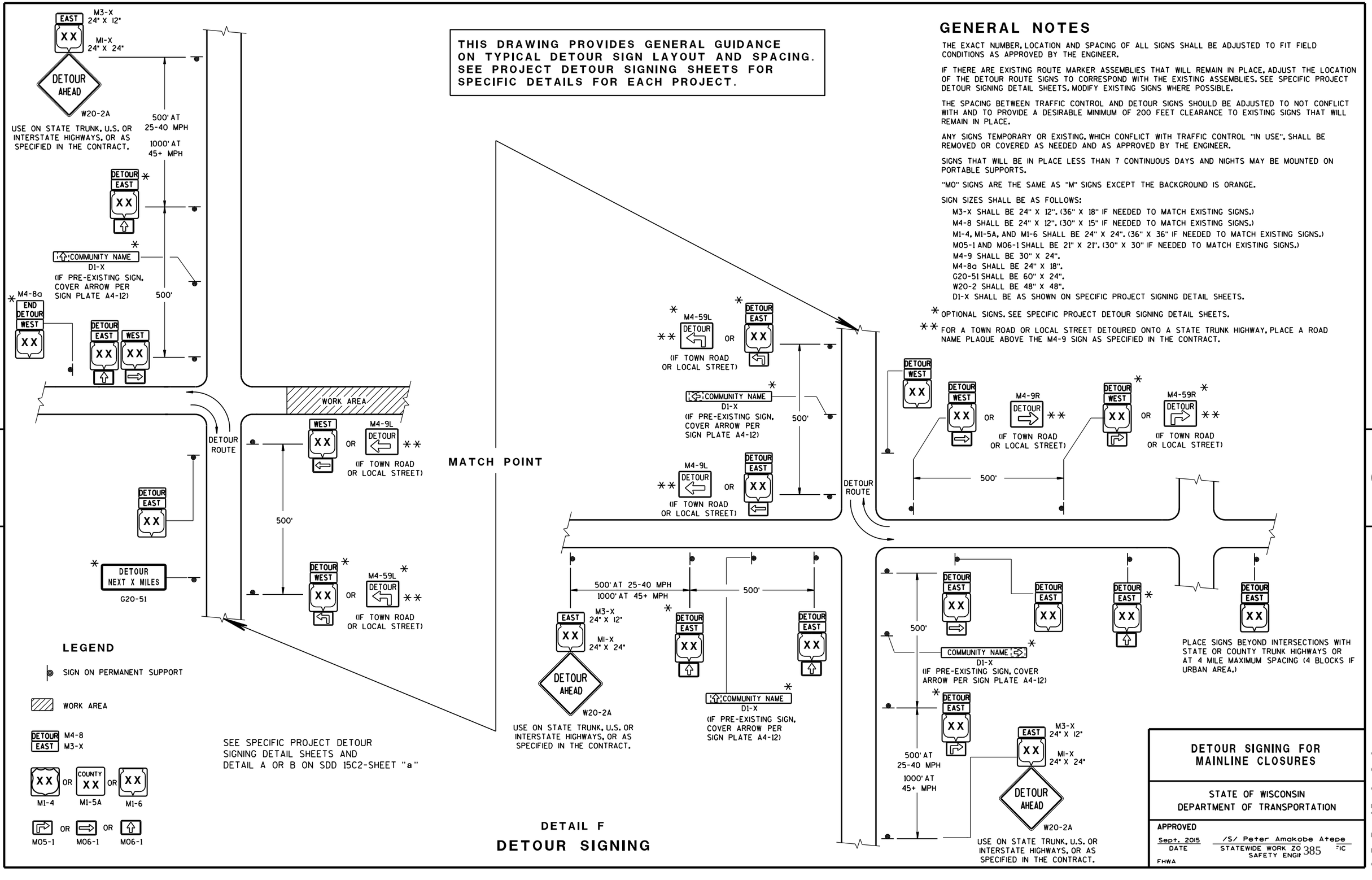
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

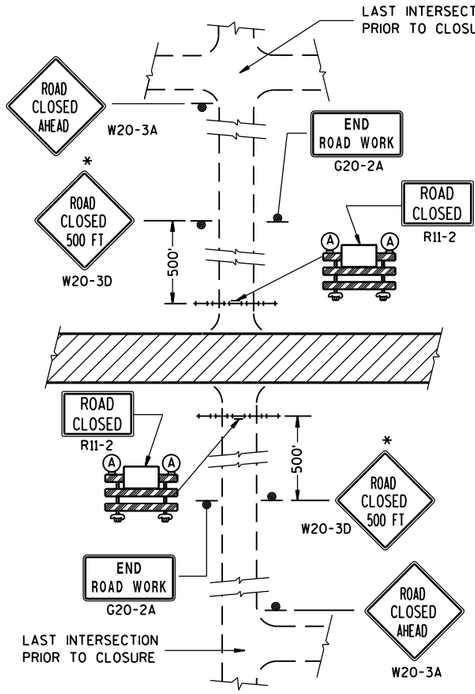
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI...

FHWA

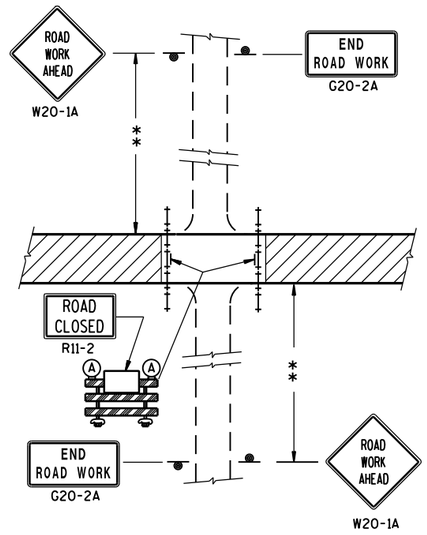
S.D.D. 15 C 2-6c

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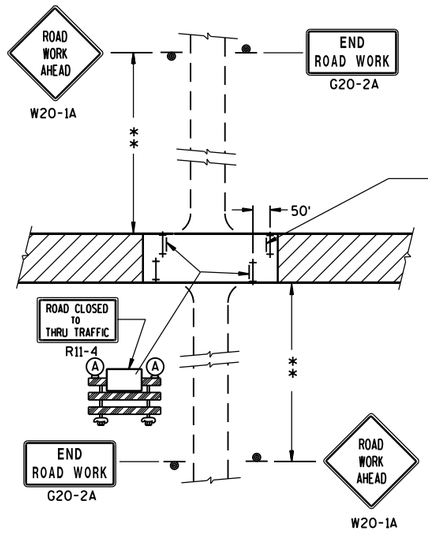
DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).

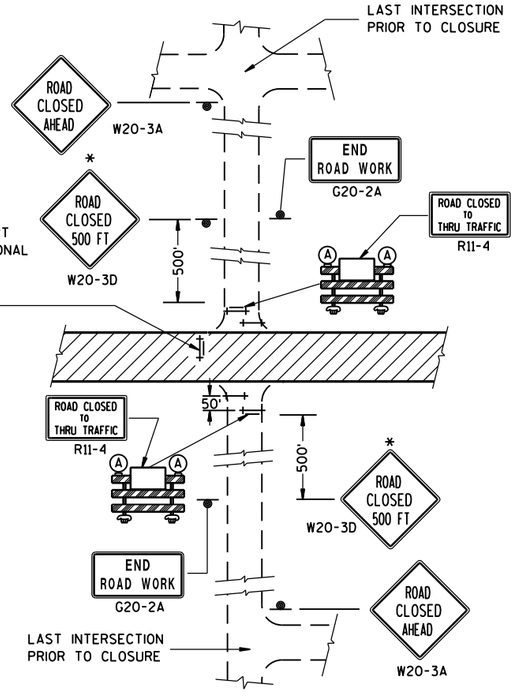


FOR BRIDGE OR CULVERT REPLACEMENT, USE ADDITIONAL SIGN ON BARRICADE

BRIDGE OUT
XX MILES AHEAD
R11-3C

DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

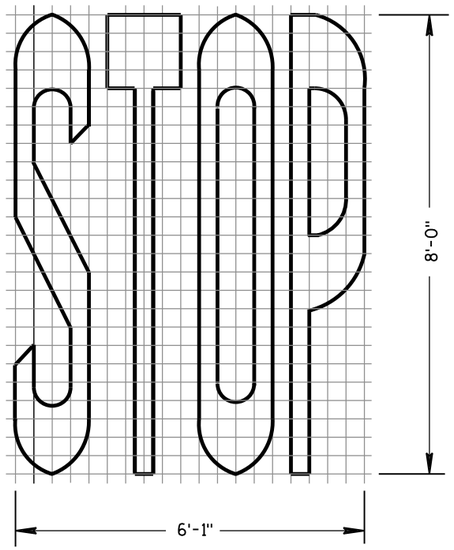
APPROVED
Sept. 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

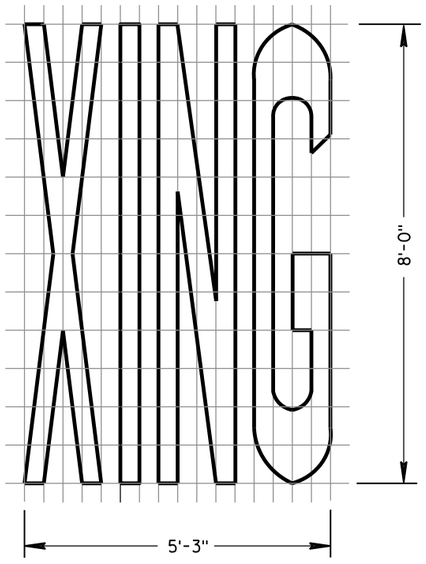
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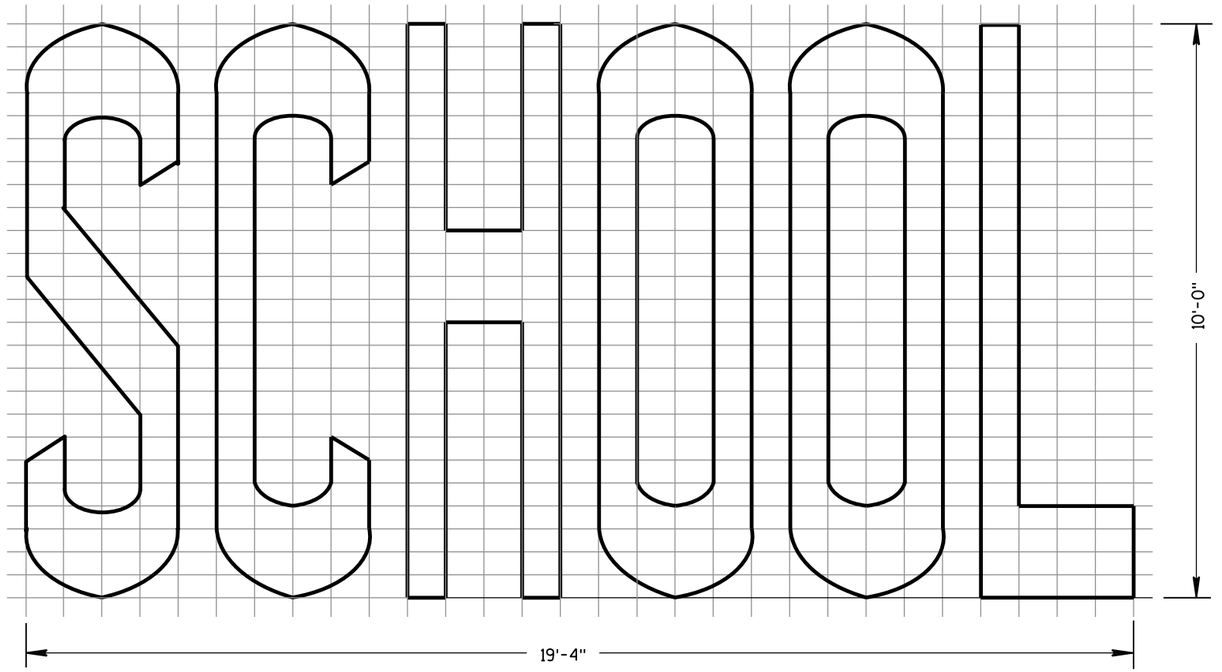
S.D.D. 15 C 3-4

GENERAL NOTES

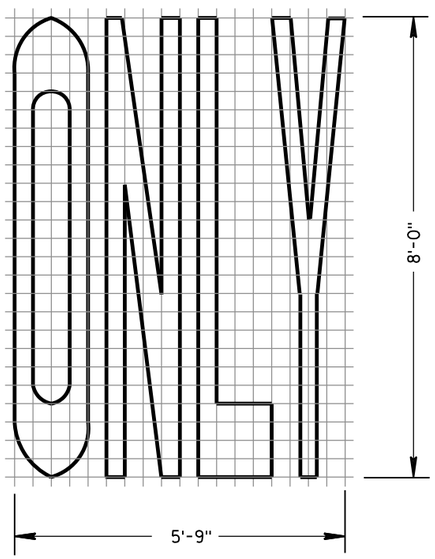
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

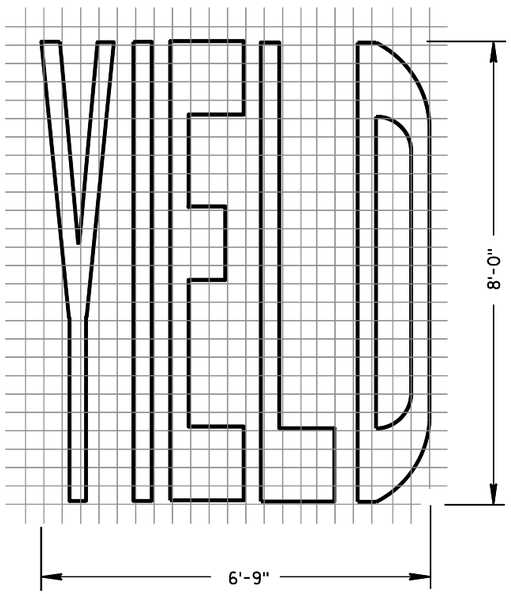


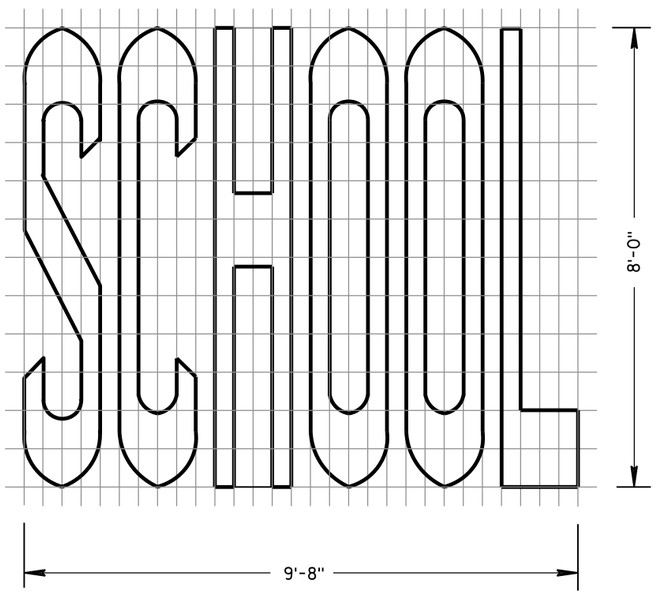




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

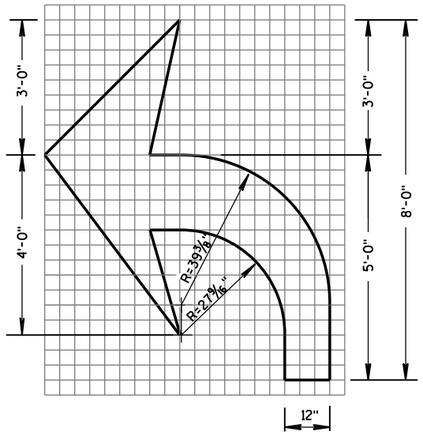
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

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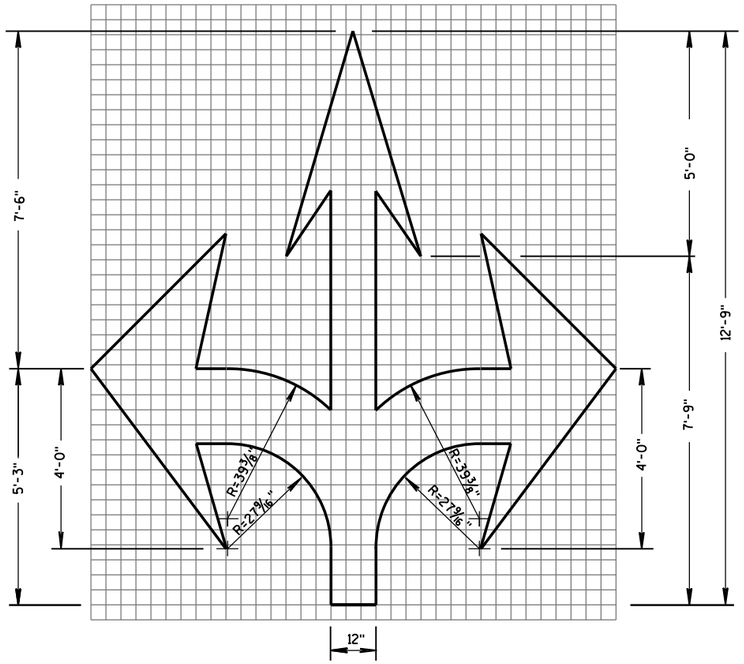
S.D.D. 15 C 7-14b

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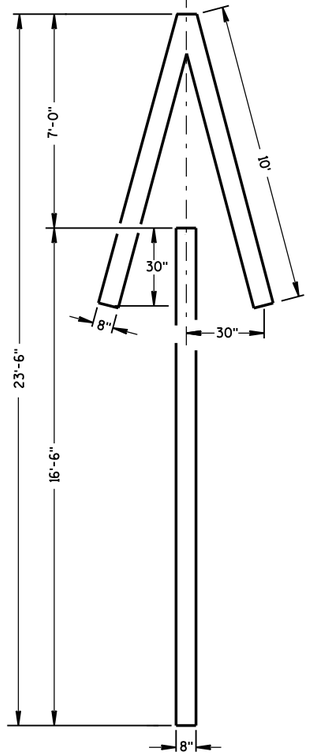
S.D.D. 15 C 7-14b



TYPE 2



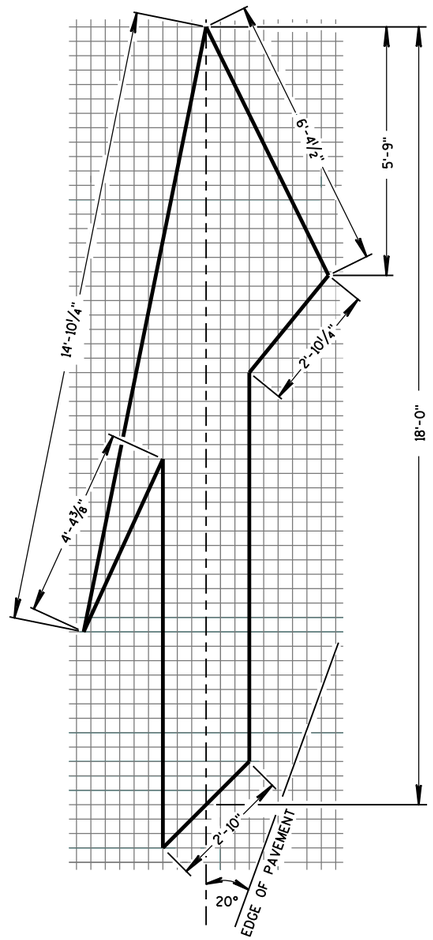
TYPE 6



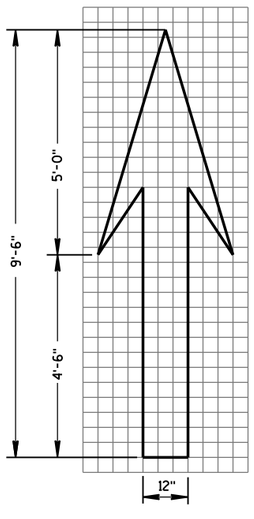
TYPE 4

GENERAL NOTES

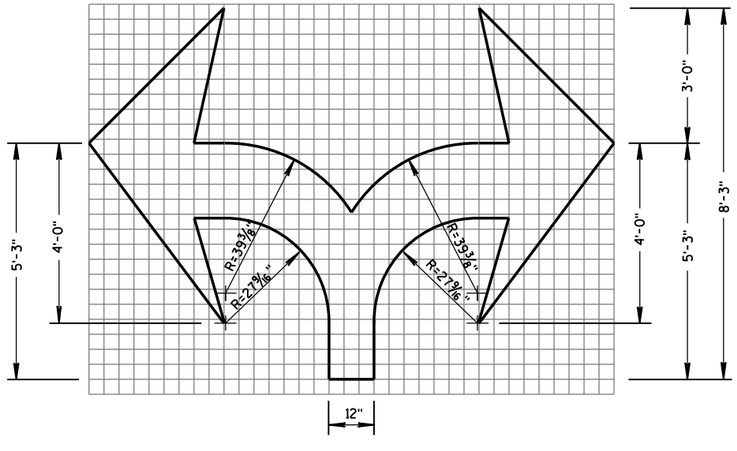
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



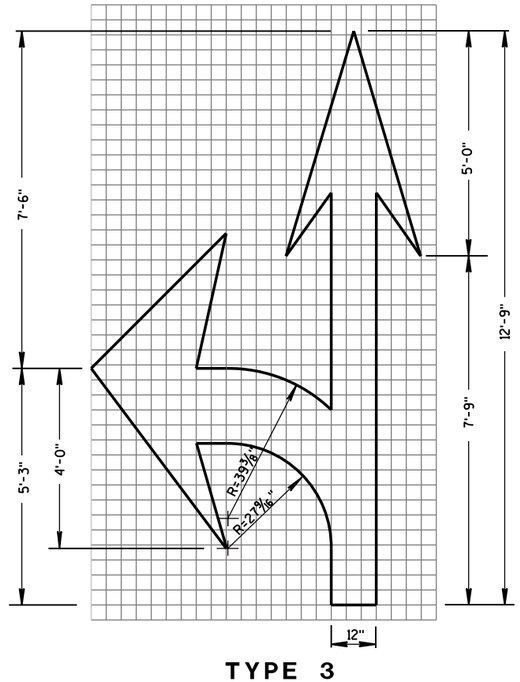
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

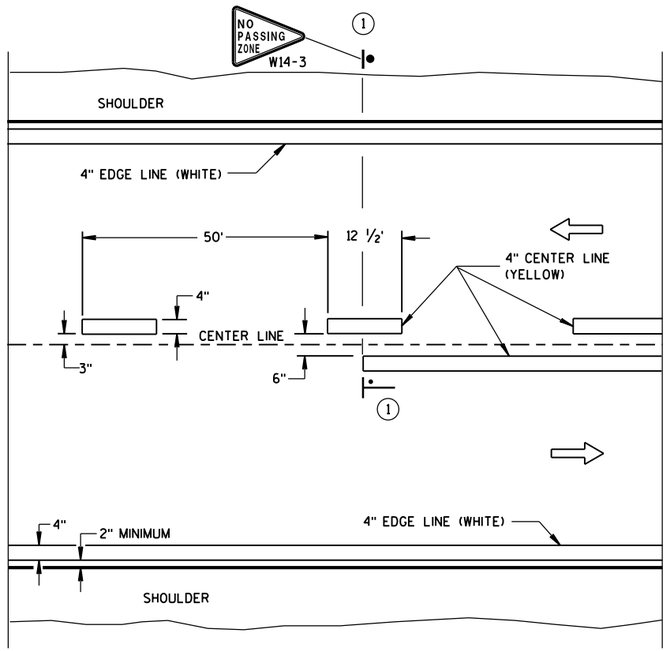
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

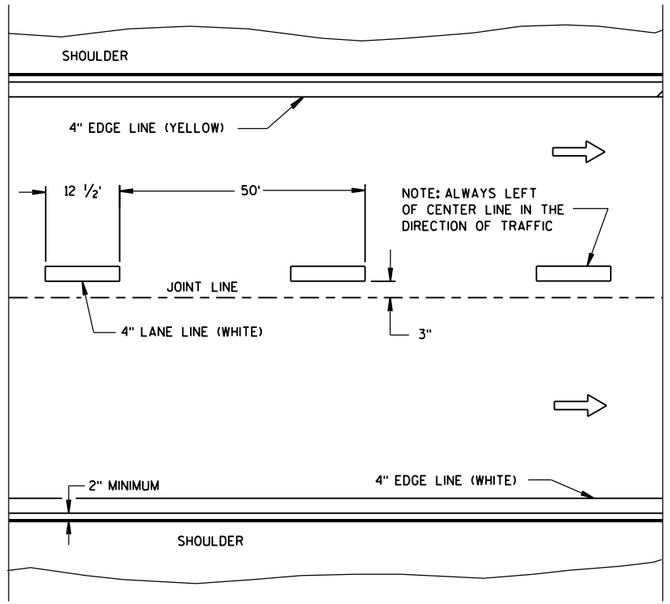
S.D.D. 15 C 7-14c

6

S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

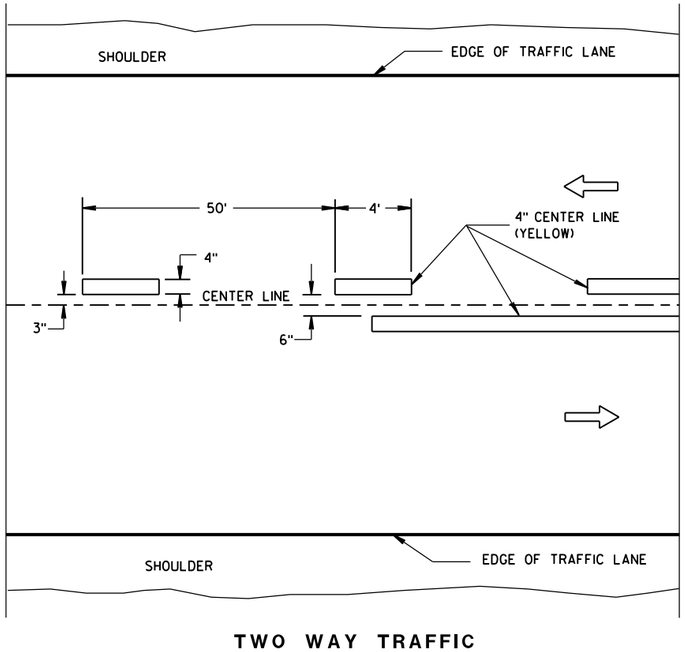
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

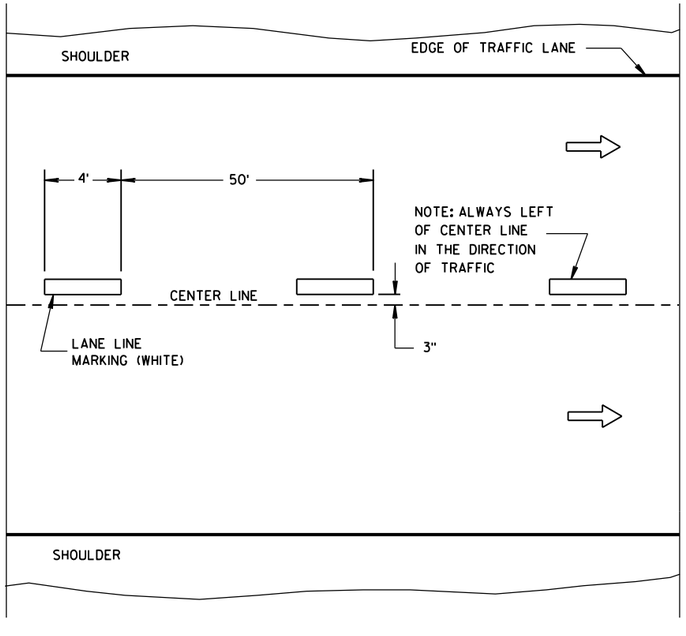
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



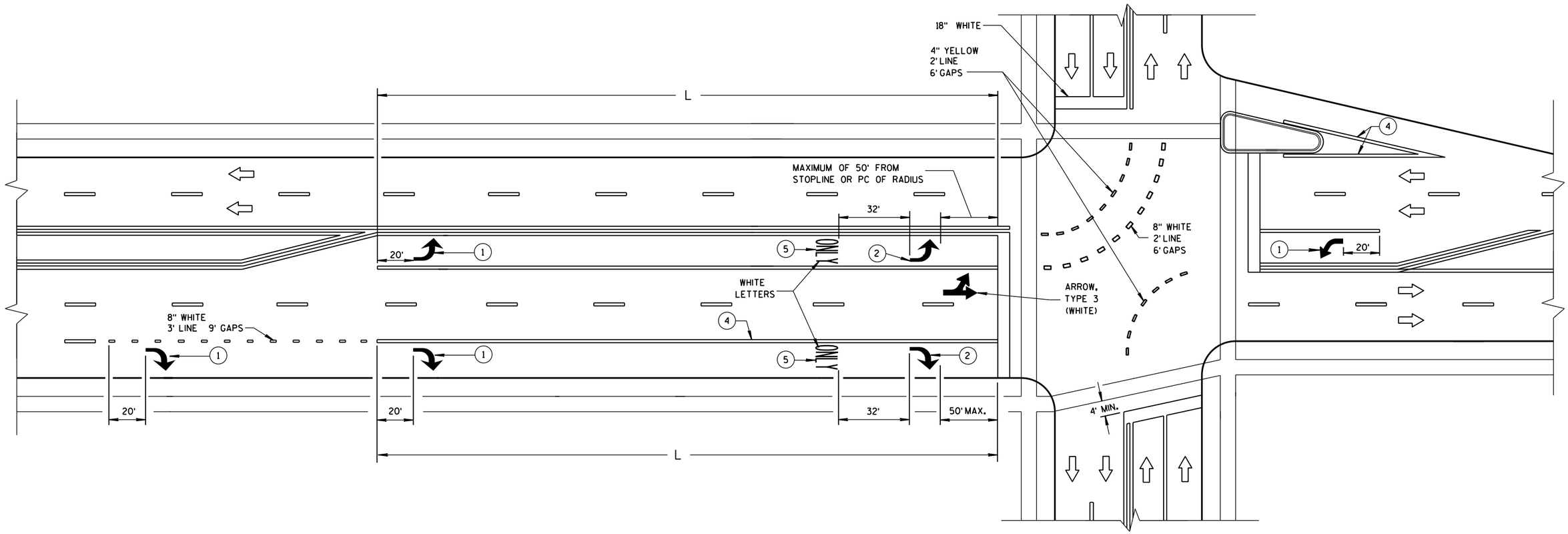
ONE WAY TRAFFIC

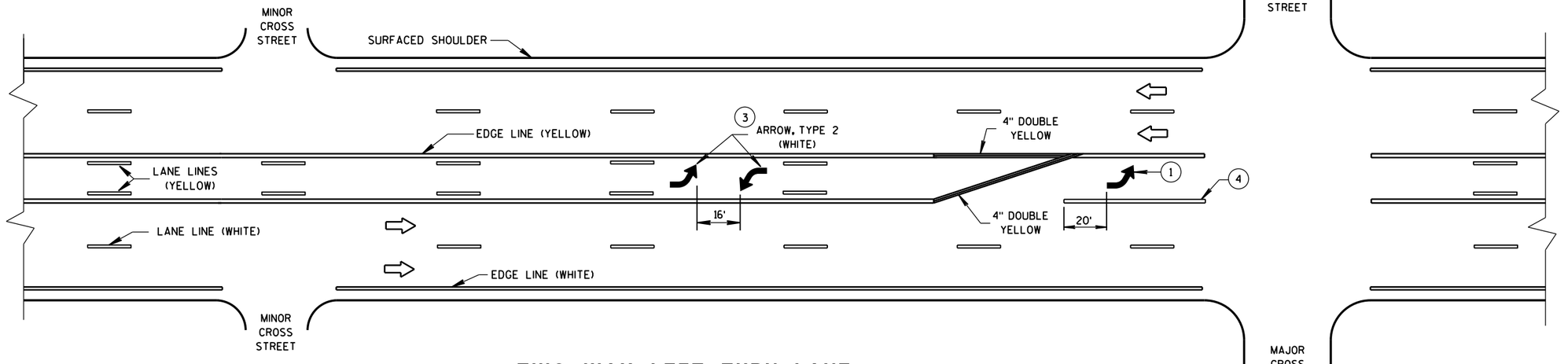
TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAR ENGINEER
FHWA	

6

S.D.D. 15 C 8-18a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

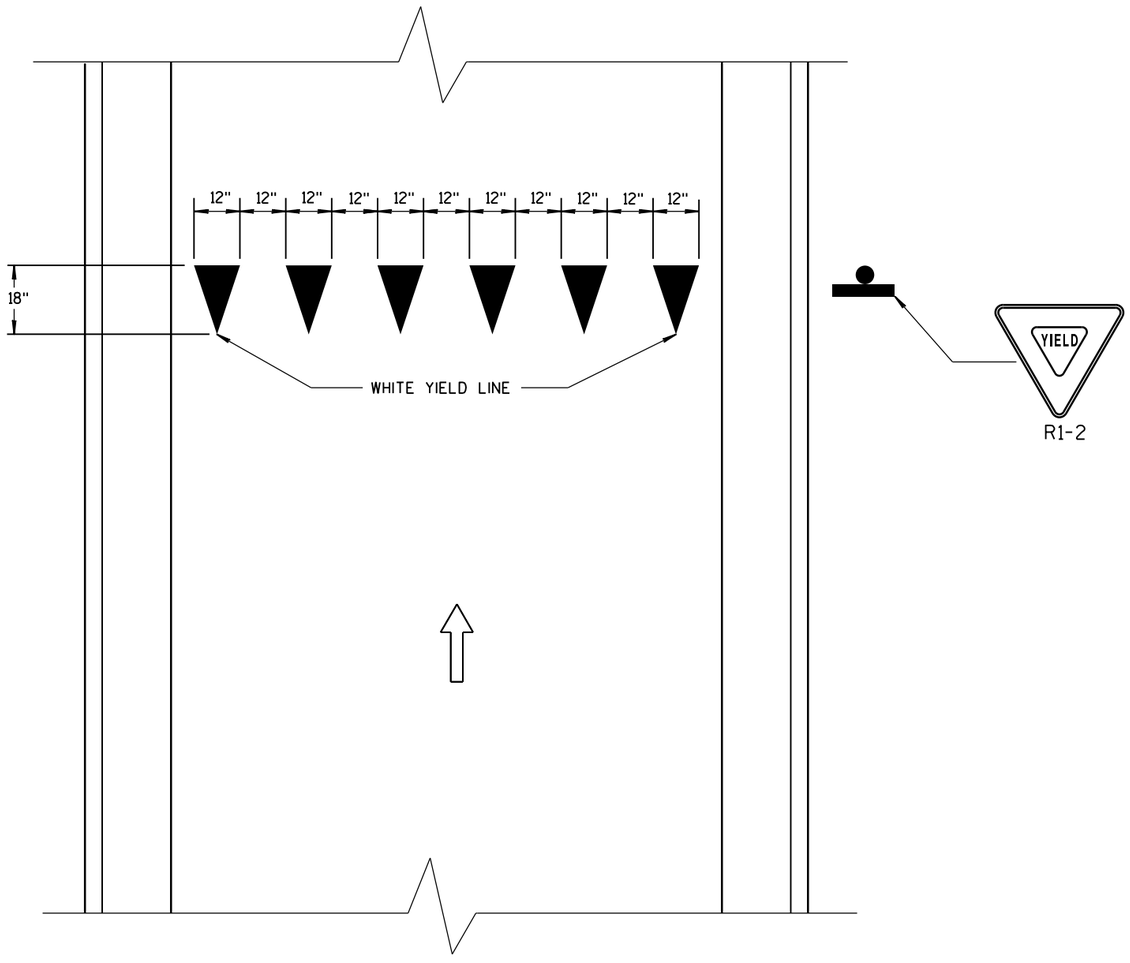
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-18b



R1-2

DIRECTION OF TRAVEL

YIELD LINE

6

6

S.D.D. 15 C 20-2

S.D.D. 15 C 20-2

YIELD MARKINGS

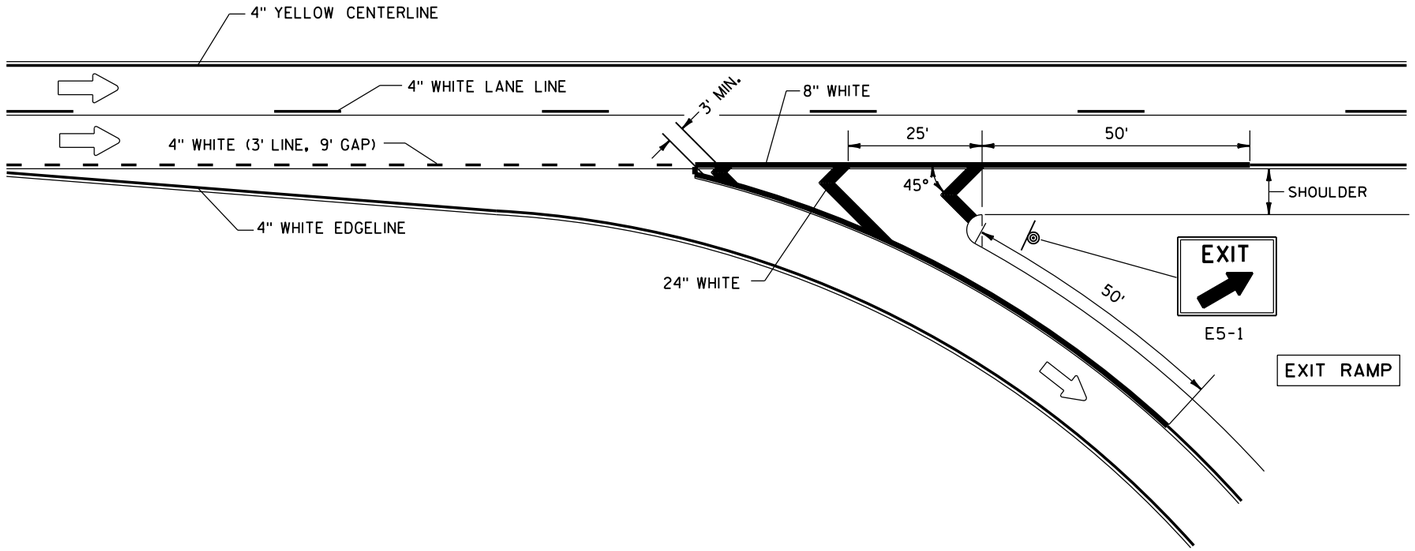
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARI 391 IEER

FHWA



PAVEMENT MARKING FOR EXIT RAMP

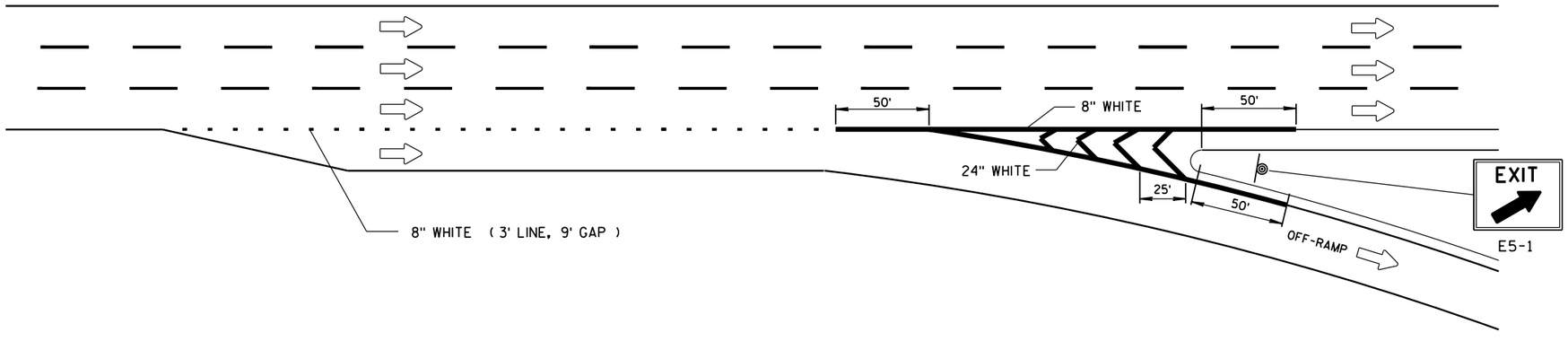
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

6

S.D.D. 15 C 31-3a

PAVEMENT MARKING (RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

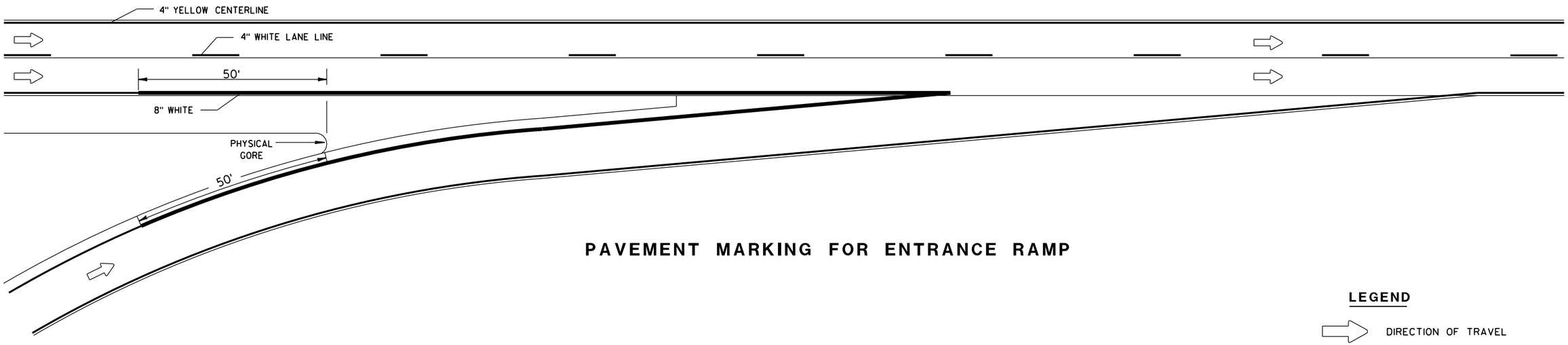
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S.D.D. 15 C 31-3a

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

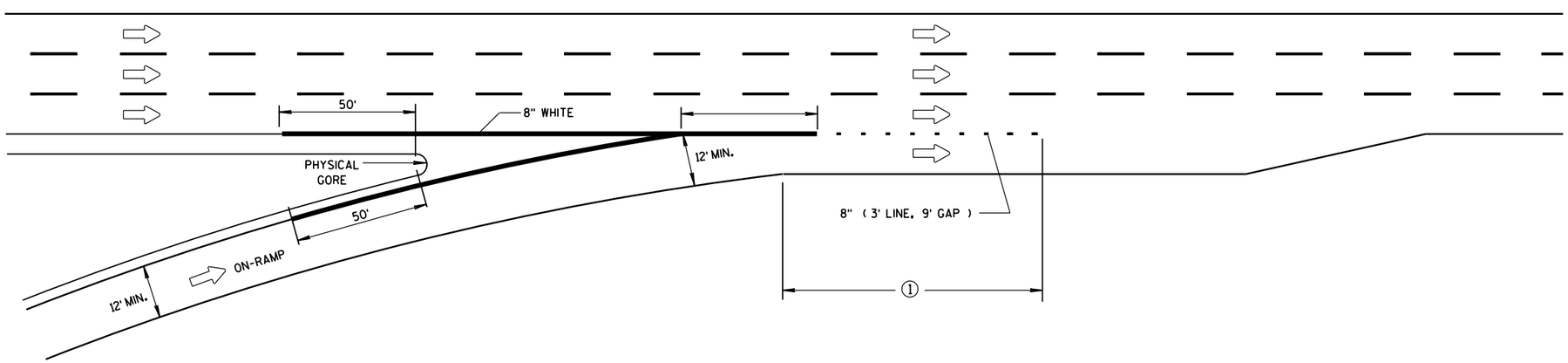
① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.



PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

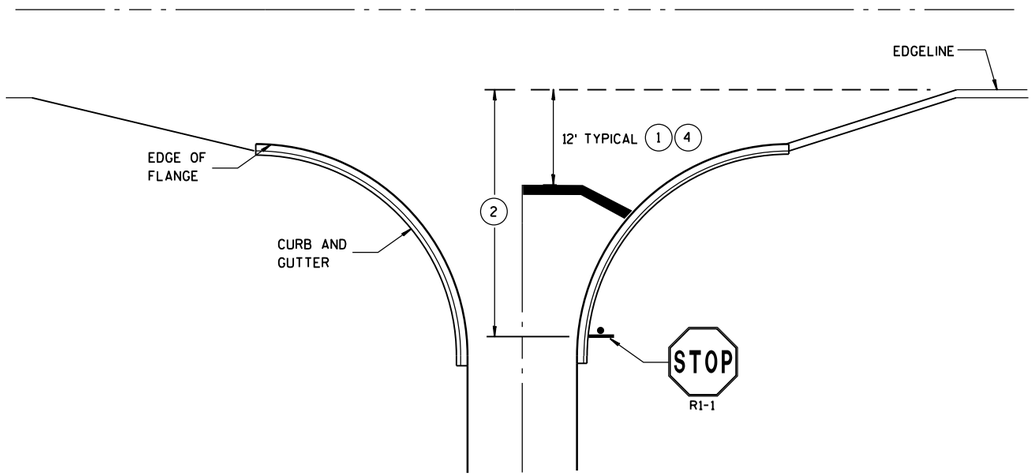
FHWA

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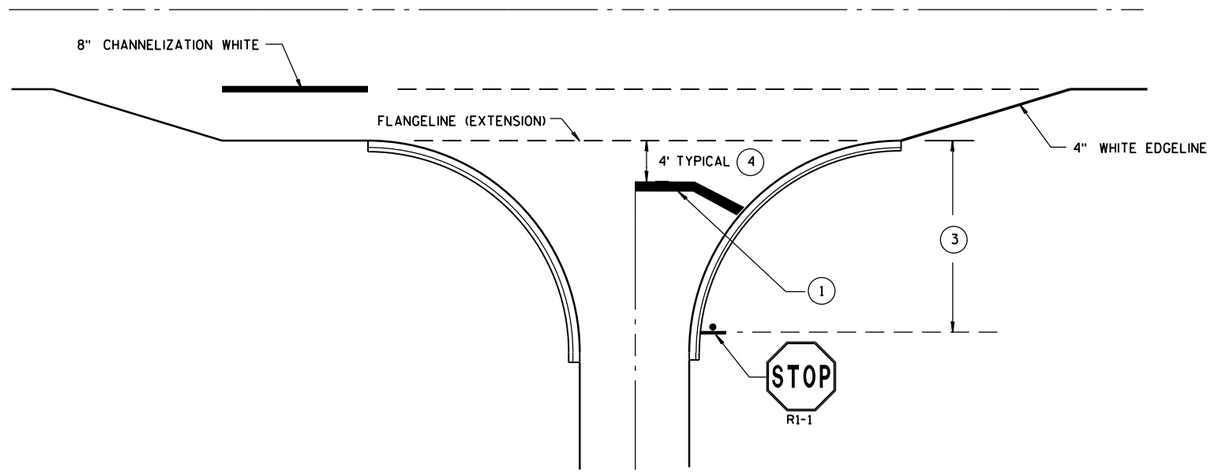
S.D.D. 15 C 31-3c

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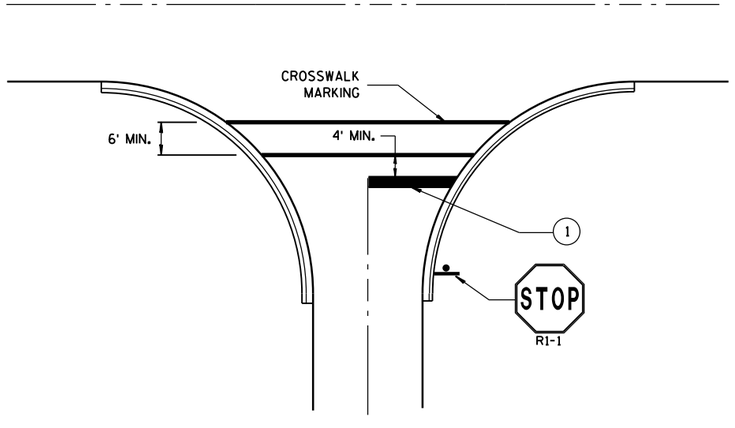
S.D.D. 15 C 31-3c



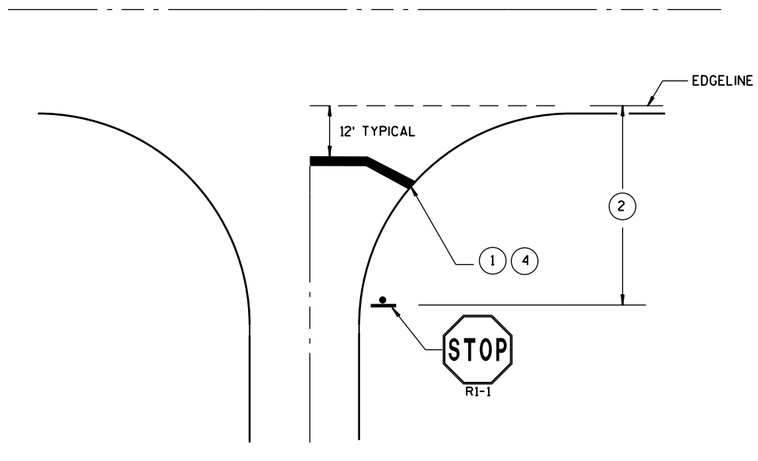
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR 394 NEER

FHWA

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S.D.D. 15 C 33-3

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



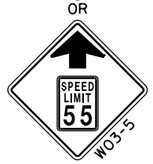


W057-52
48"x36"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



OR



LOCATED 2600 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



OR



R2-1
48"x60"
(BLACK AND WHITE)

LOCATED 500 FEET BEYOND W20-5G SIGN.

IF THE REGULATORY SPEED HAS BEEN REDUCED, 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 RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"x48" 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 OR AS APPROVED BY THE ENGINEER.

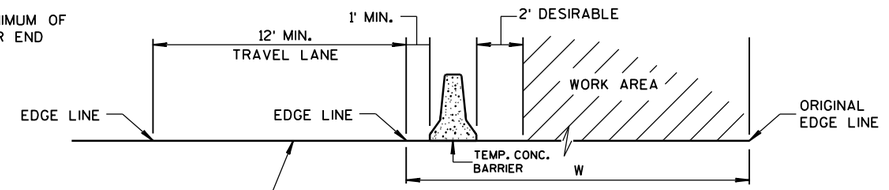
(1) CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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.

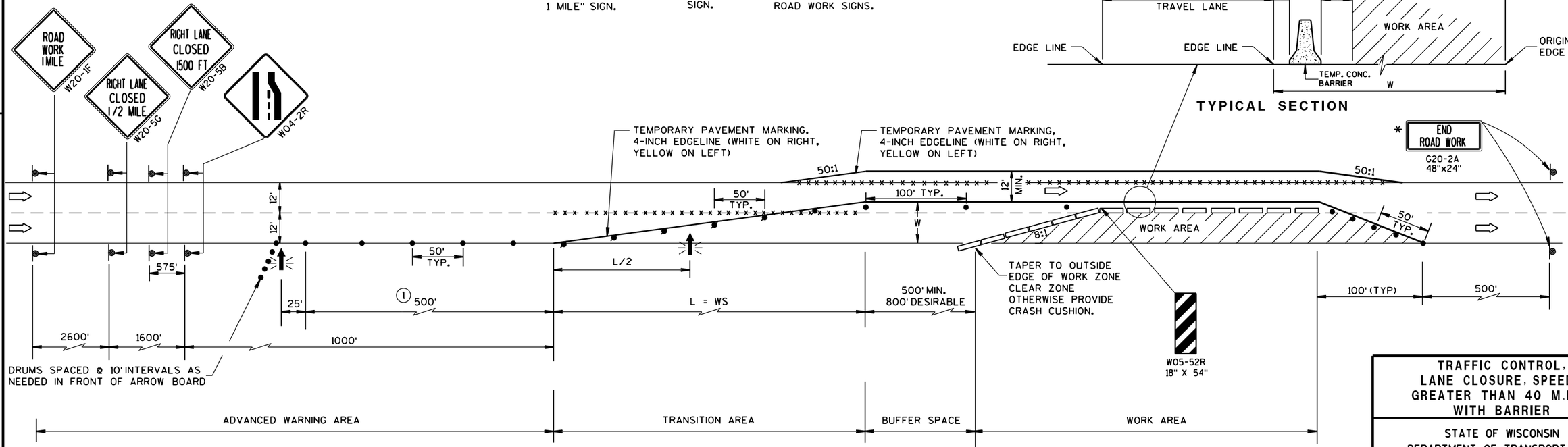
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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 OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 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.



TYPICAL SECTION



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZOI SAFETY ENGIN
FHWA

6

S.D.D. 15 D 3-4

6

S.D.D. 15 D 3-4

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"x48" 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.

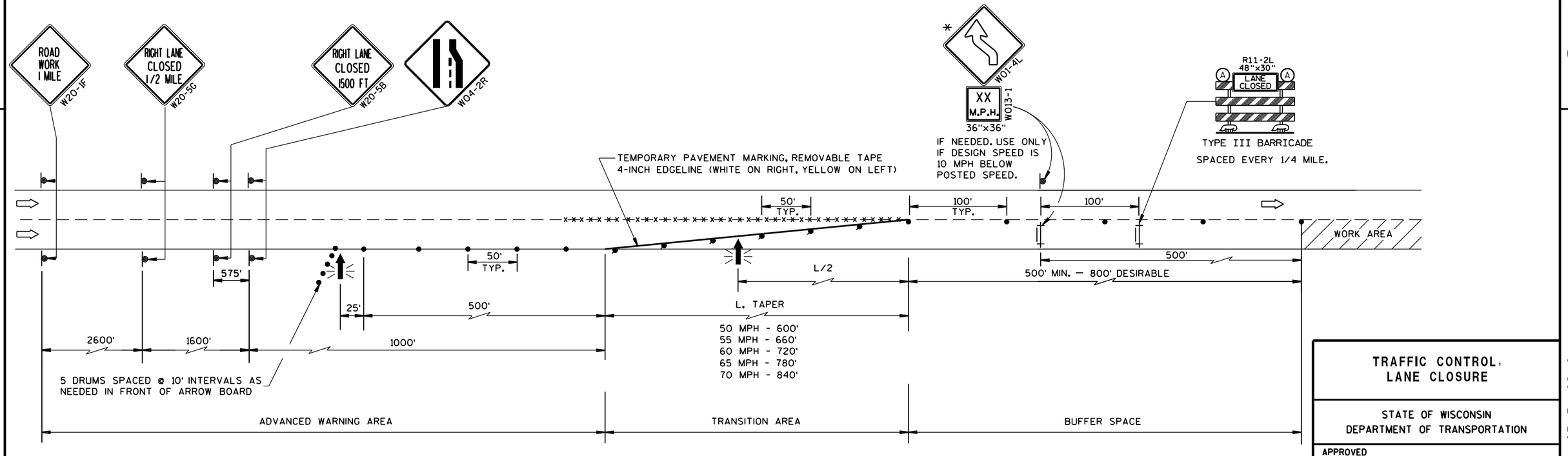
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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 (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6

S.D.D. 15 D 12-6a

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.

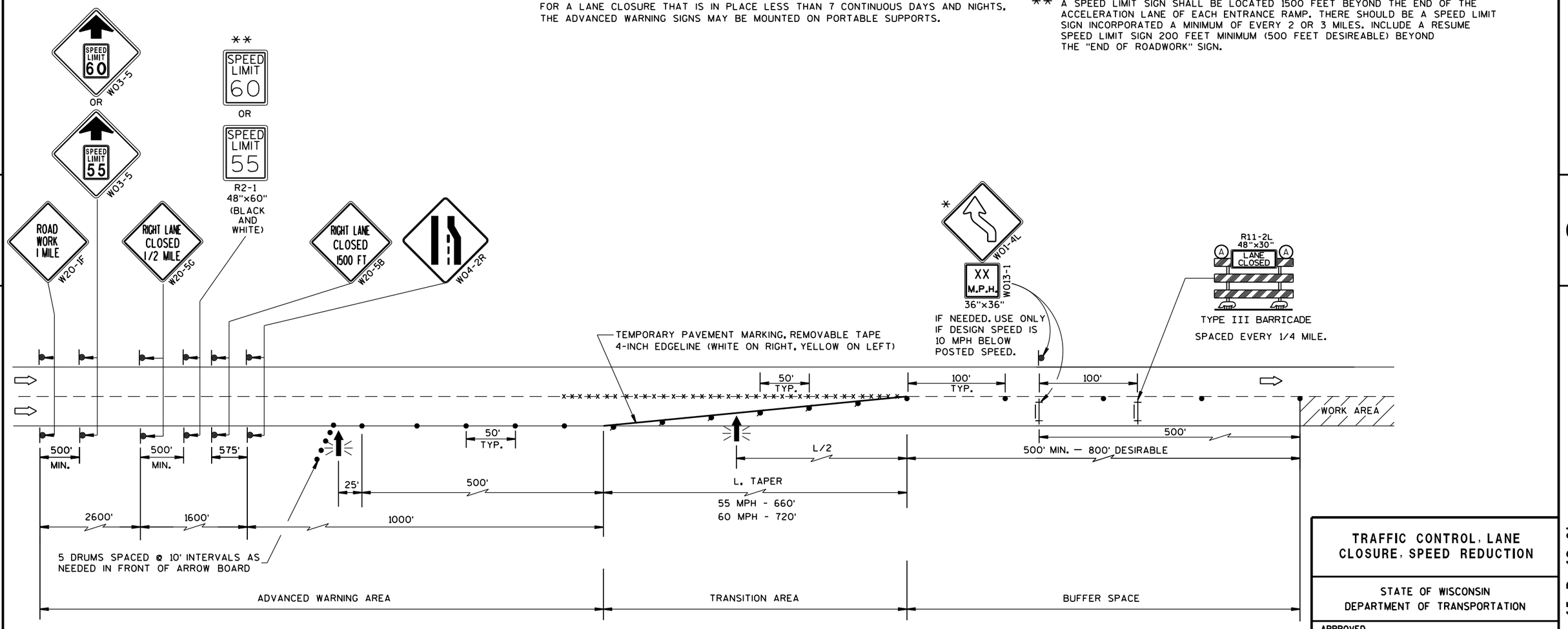
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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* 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 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

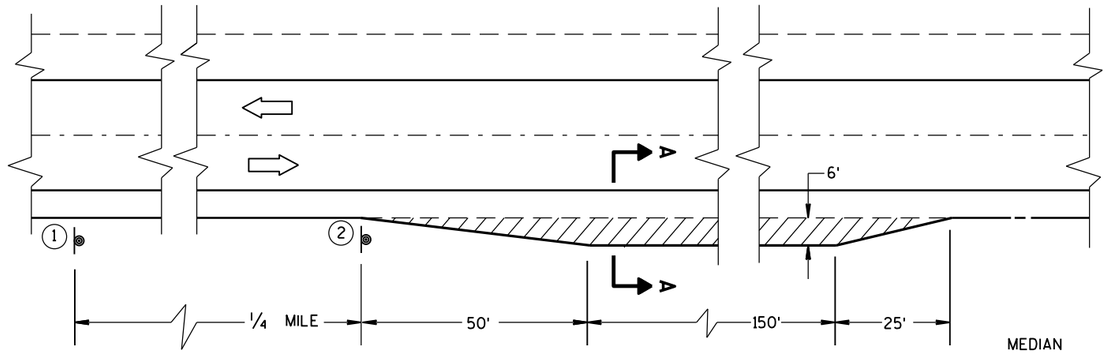
APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGIN IC
FHWA

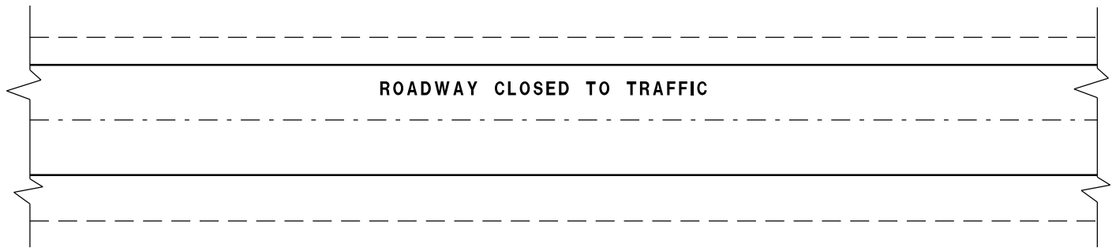
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S.D.D. 15 D 12-6b

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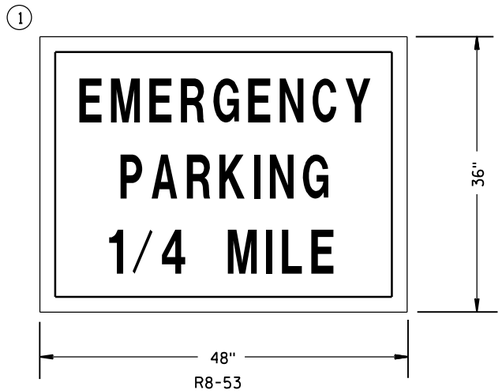
S.D.D. 15 D 12-6b





PLAN VIEW

TEMPORARY EMERGENCY PULLOUTS FOR DIVIDED HIGHWAYS



SIGNS TO BE BLACK LETTERS ON WHITE REFLECTIVE BACKGROUND

SIGNS FOR TEMPORARY EMERGENCY PULLOUTS

GENERAL NOTES

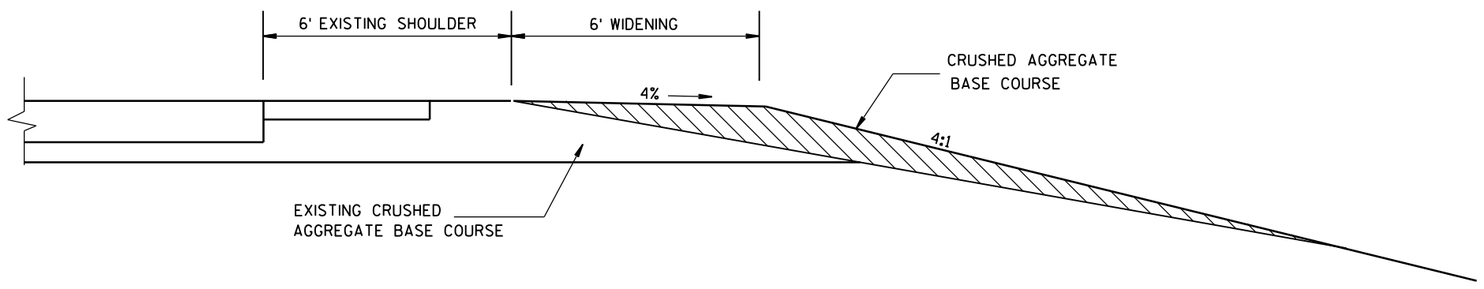
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

TEMPORARY EMERGENCY PULLOUTS AND SIGNS SHALL BE REMOVED AND THE ROADWAY RESTORED TO ITS ORIGINAL CROSS SECTION AND CONDITION PRIOR TO REOPENING THE ROADWAY TO ONE WAY TRAFFIC.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



SECTION A-A

TEMPORARY EMERGENCY PULLOUTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEE 398 SIGN
FHWA	

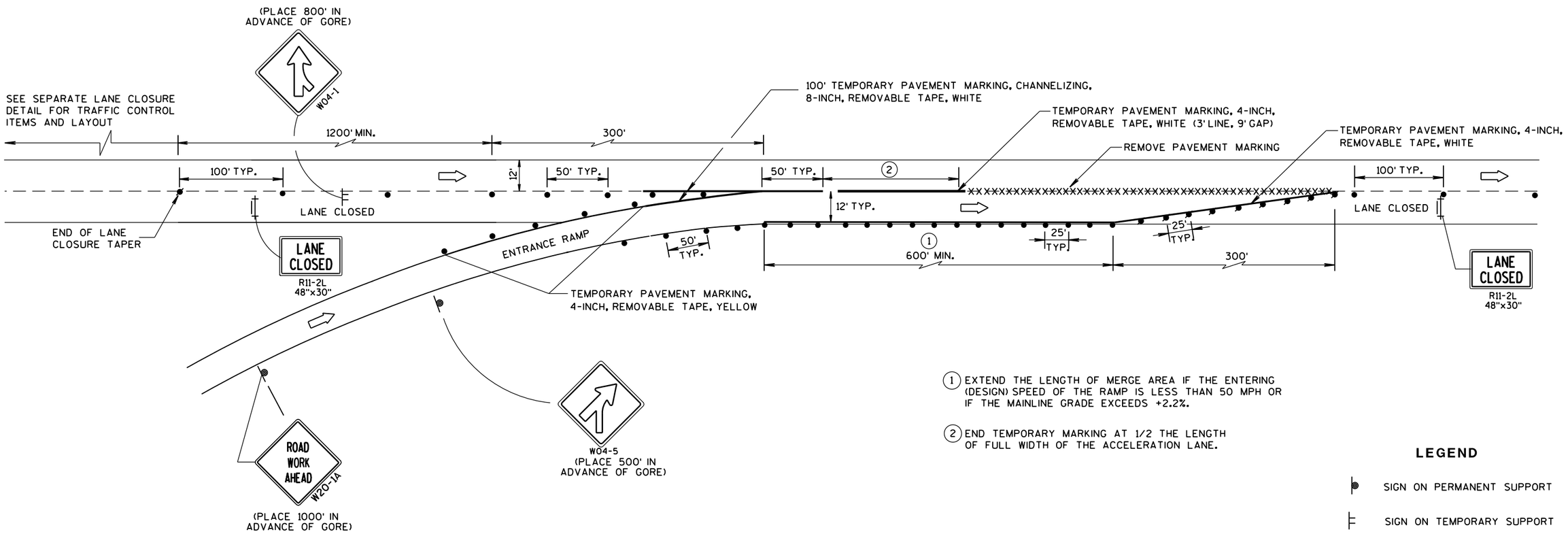
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S.D.D. 15 D 13-2

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S.D.D. 15 D 13-2

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



1. EXTEND THE LENGTH OF MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS +2.2%.

2. END TEMPORARY MARKING AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

PARALLEL ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

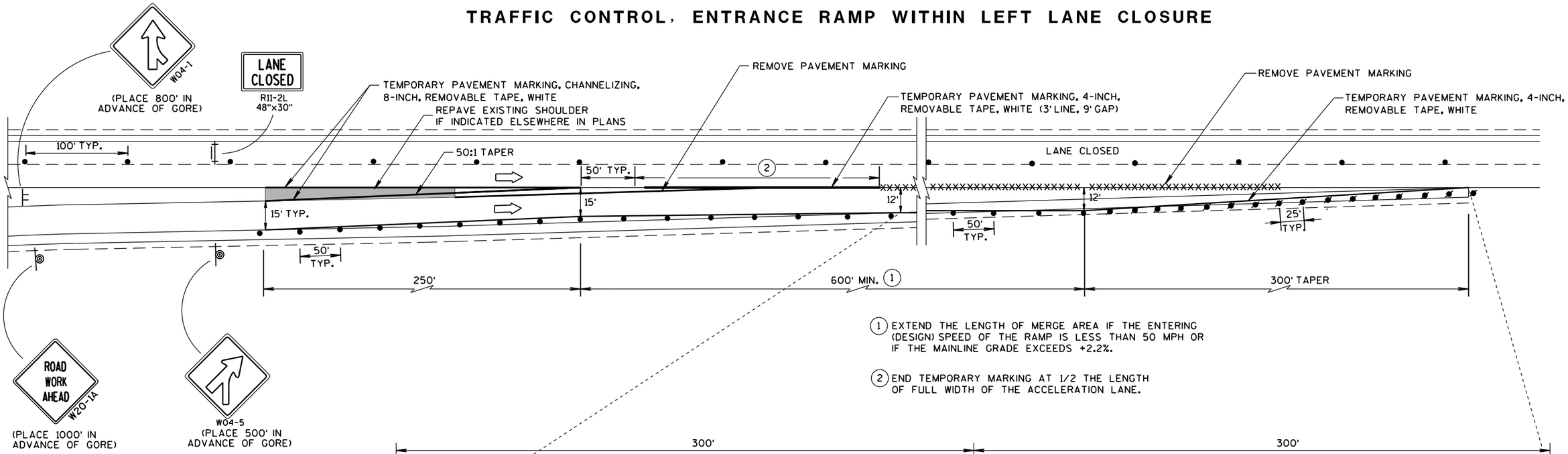
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENG
FHWA

6

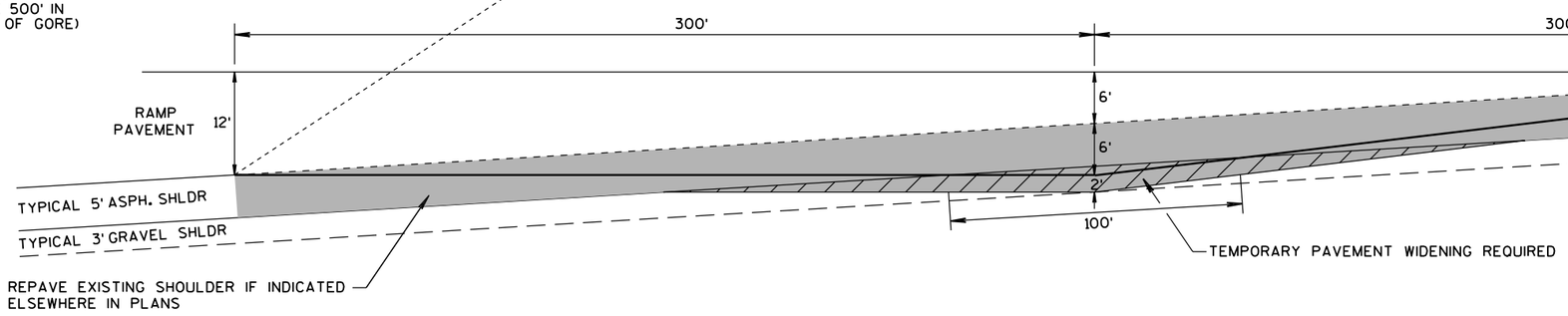
S.D.D. 15 D 15-4a

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



(1) EXTEND THE LENGTH OF MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS +2.2%.

(2) END TEMPORARY MARKING AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY. ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

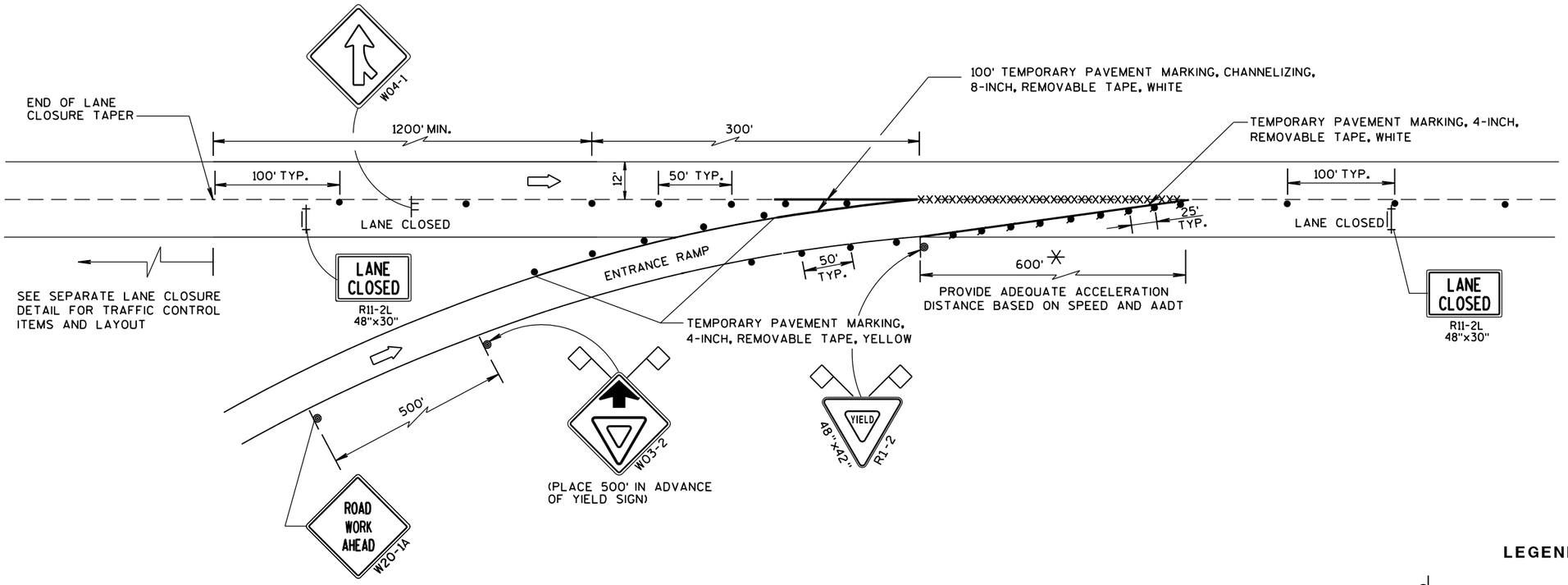
TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

6

S.D.D. 15 D 15-4b



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

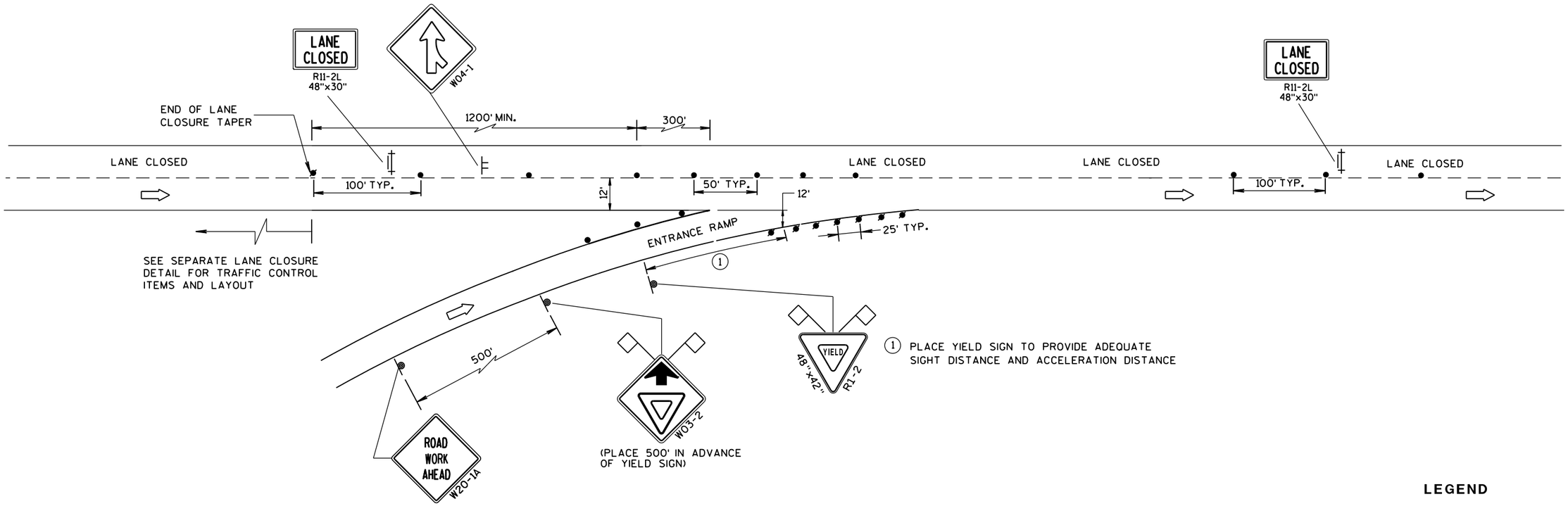
TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

6

S.D.D. 15 D 15-4c



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

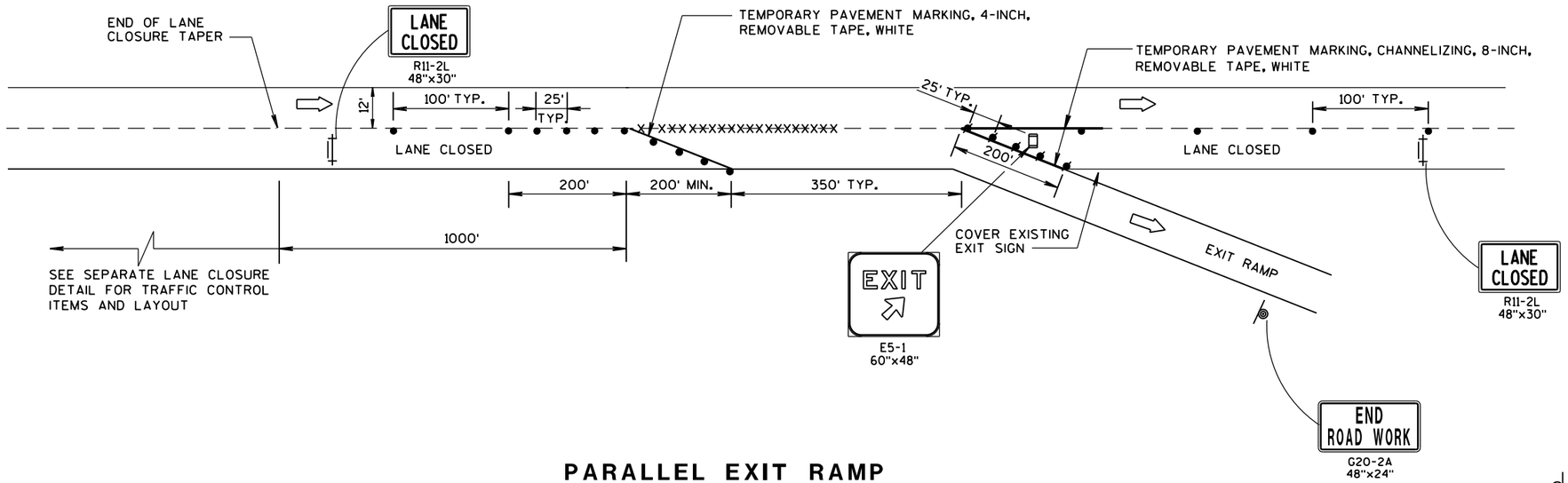
LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA



PARALLEL EXIT RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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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.

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SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

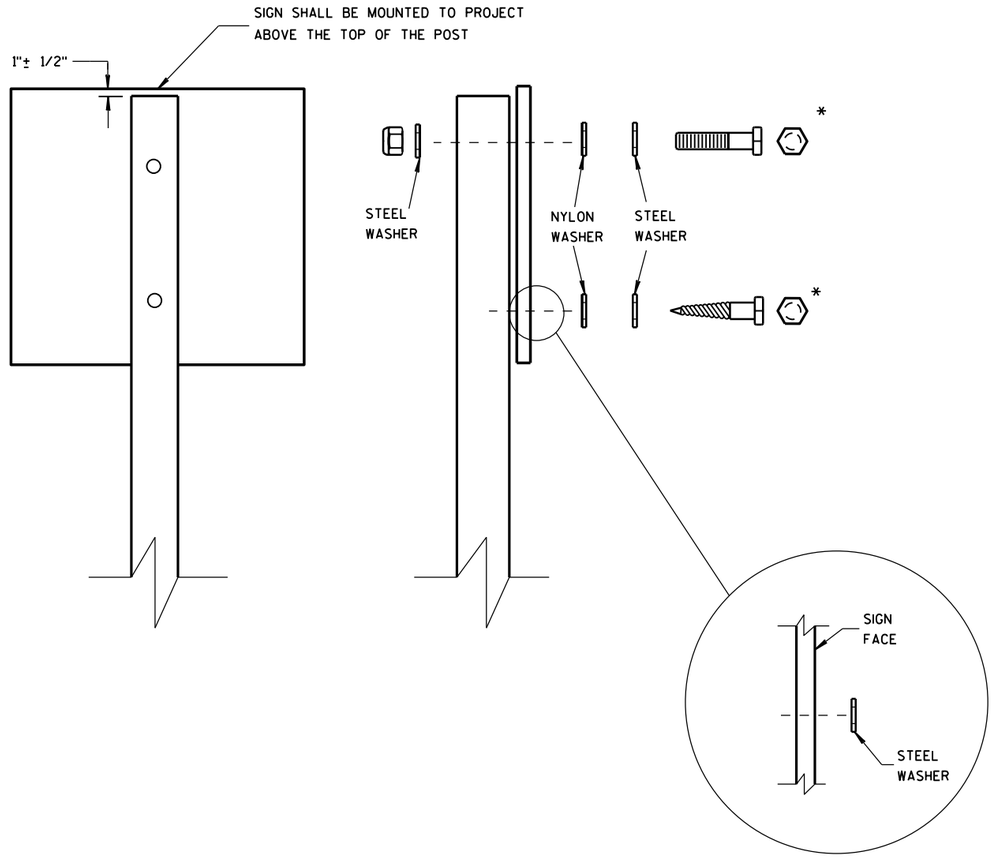
TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

6

S.D.D. 15 D 15-4e



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

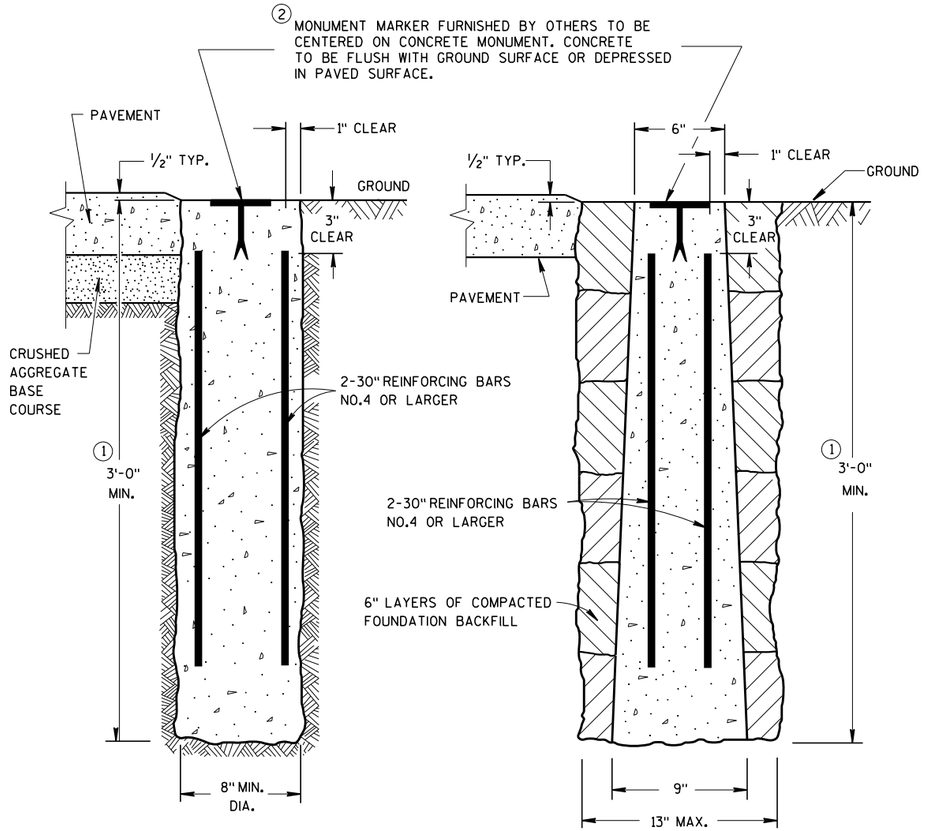
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

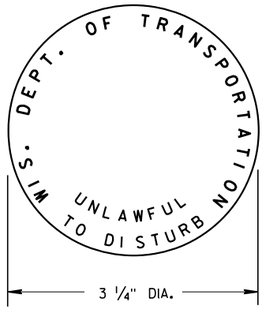


CAST-IN-PLACE

PRECAST

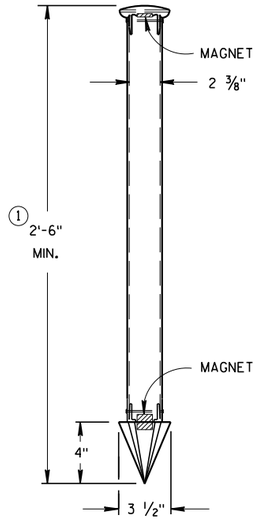
CONCRETE MONUMENTS

TYPE A



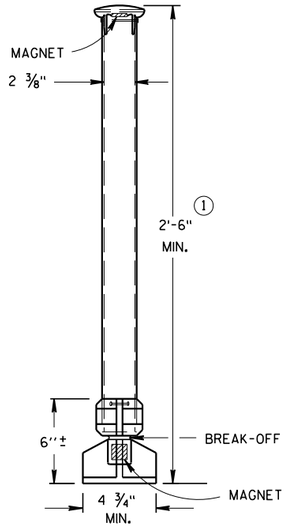
② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C", & "D"



TYPE C

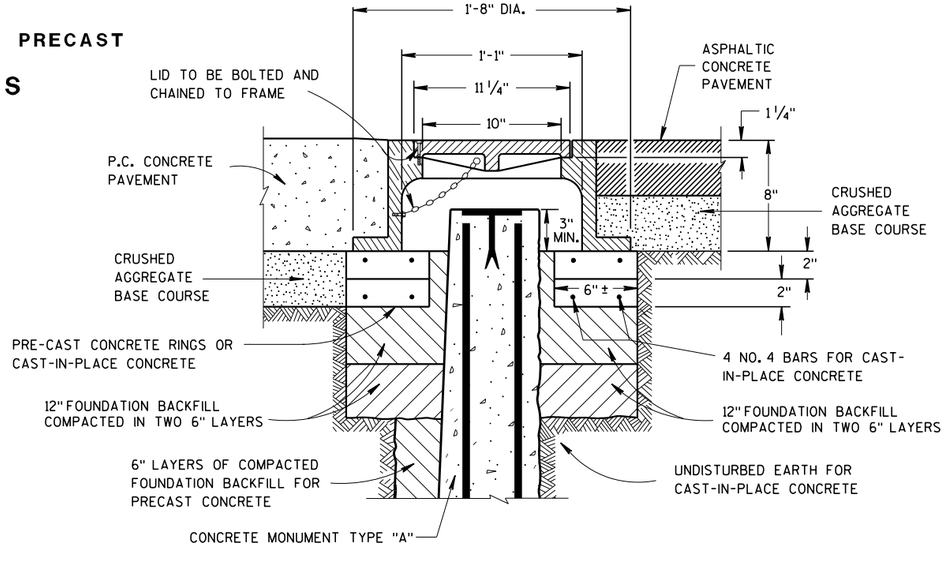
DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

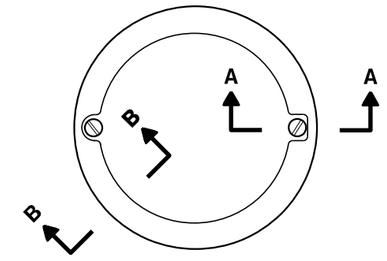
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

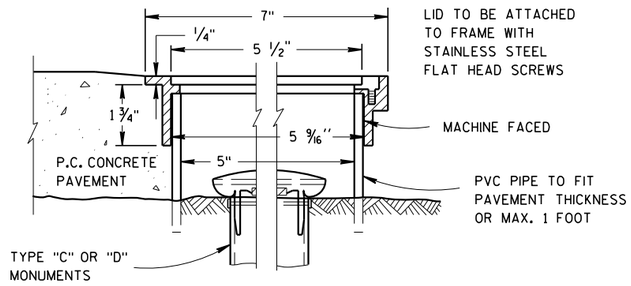
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

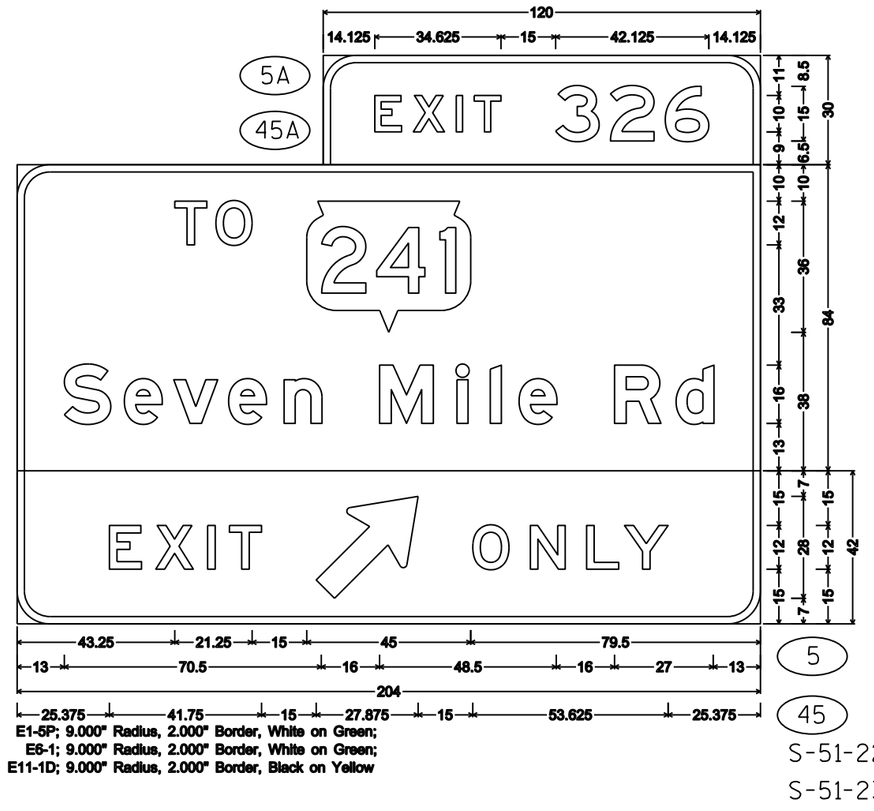
LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. [illegible] — CHIEF SURVEYING AND M[illegible]NEER
FHWA

6

S.D.D. 16 A 1-7



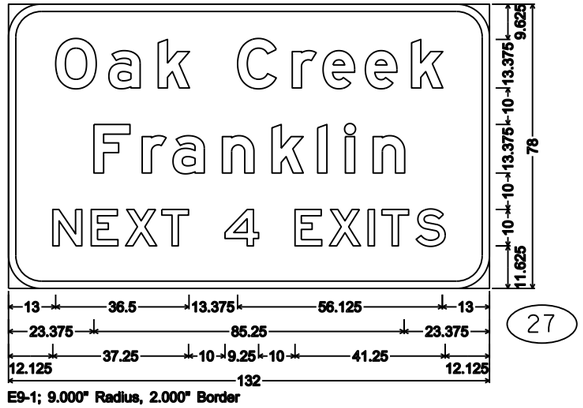
E1-5P; 9.000" Radius, 2.000" Border, White on Green;
E6-1; 9.000" Radius, 2.000" Border, White on Green;
E11-1D; 9.000" Radius, 2.000" Border, Black on Yellow

S-51-22

S-51-23

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E or as noted
4. Exit Only Panel and Plaque is on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



E9-1; 9.000" Radius, 2.000" Border

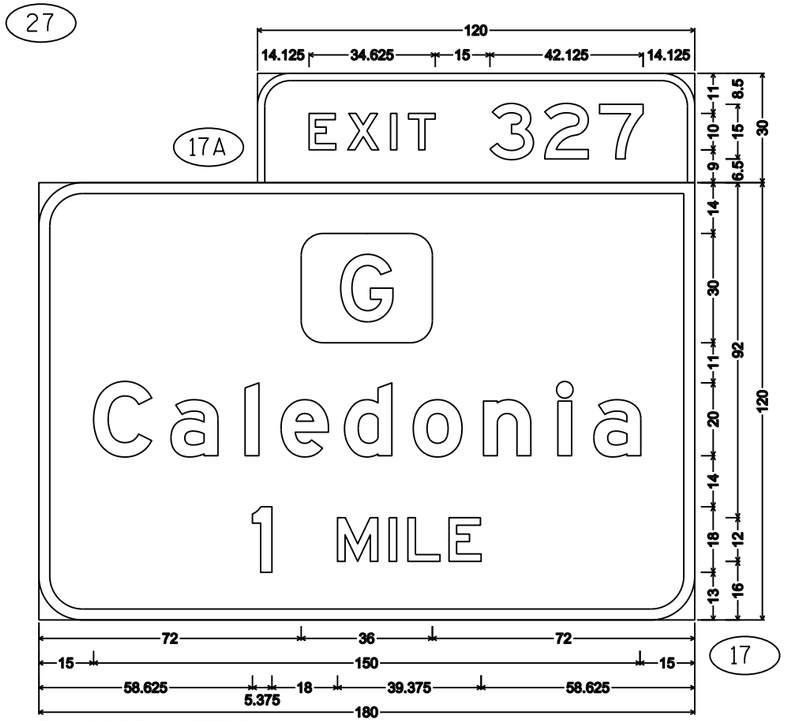


E3-1; 6.000" Radius, 2.000" Border



E8-1; 9.000" Radius, 2.000" Border

S-51-220



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

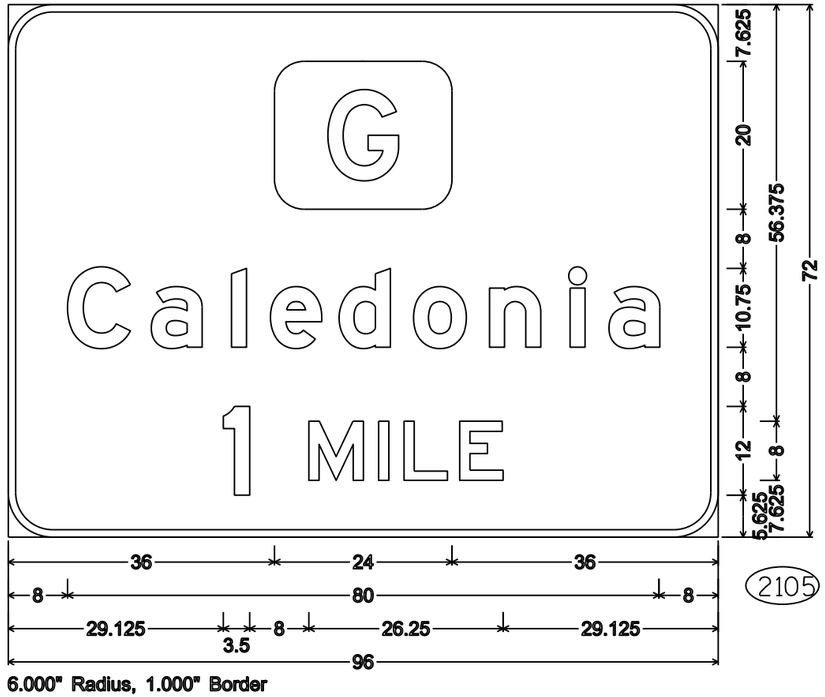
7

7

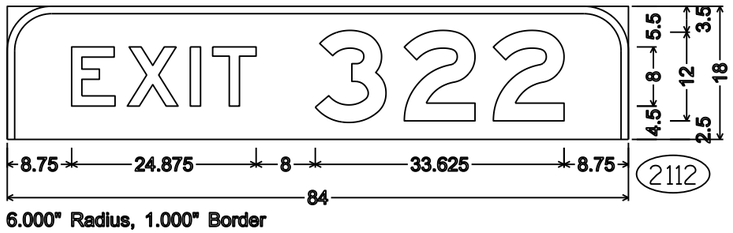
PROJECT NO: 1035-01-74	HWY: IH 94	COUNTY: RACINE	PERMANENT SIGNING	SHEET NO: 406	E

NOTES

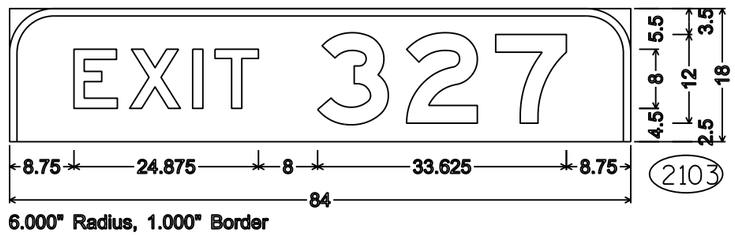
1. Fixed Message Type II Signs - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



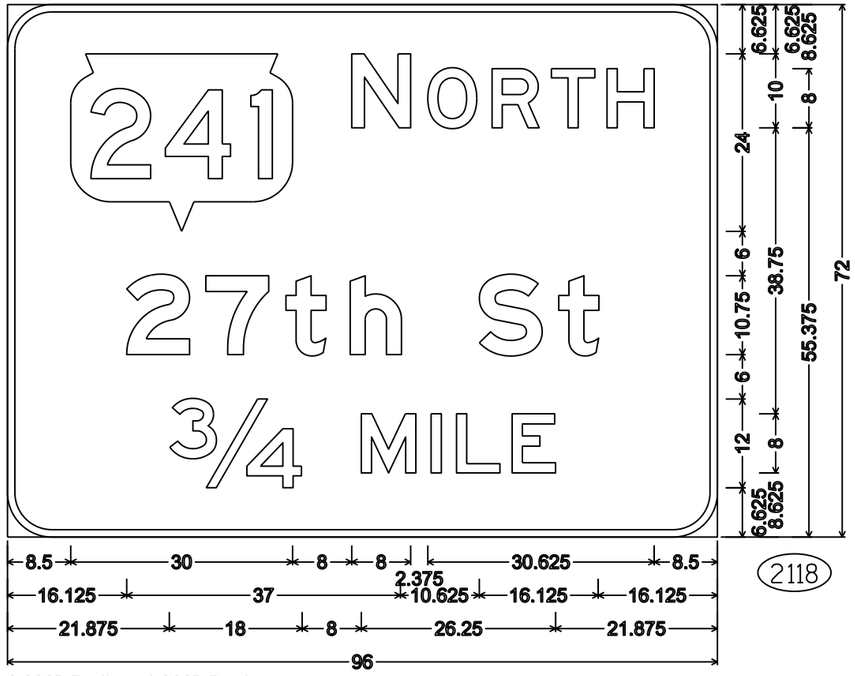
6.000" Radius, 1.000" Border



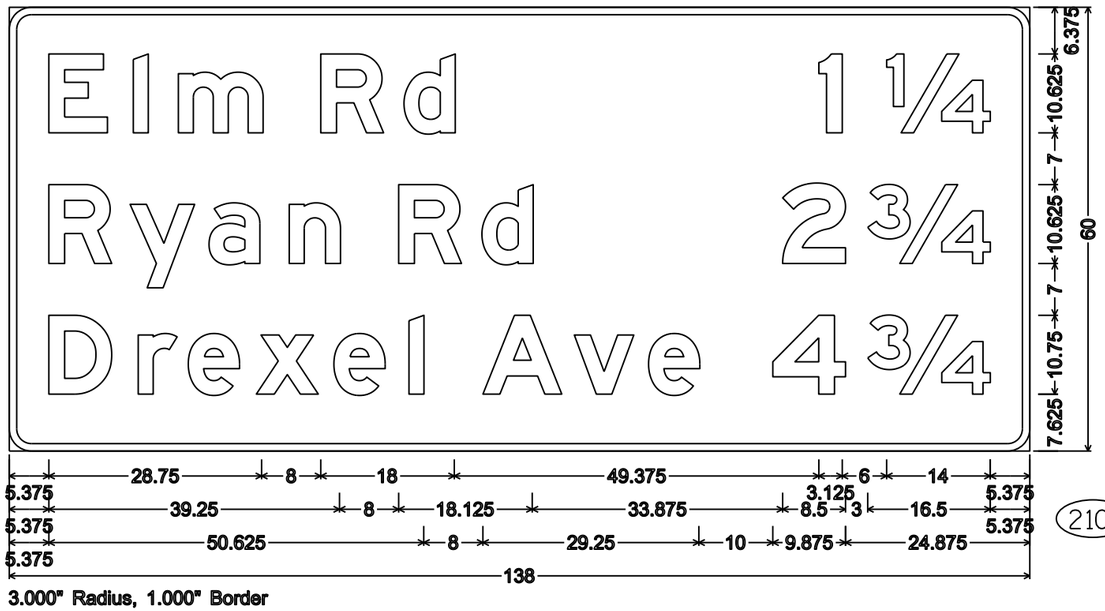
6.000" Radius, 1.000" Border



6.000" Radius, 1.000" Border



6.000" Radius, 1.000" Border

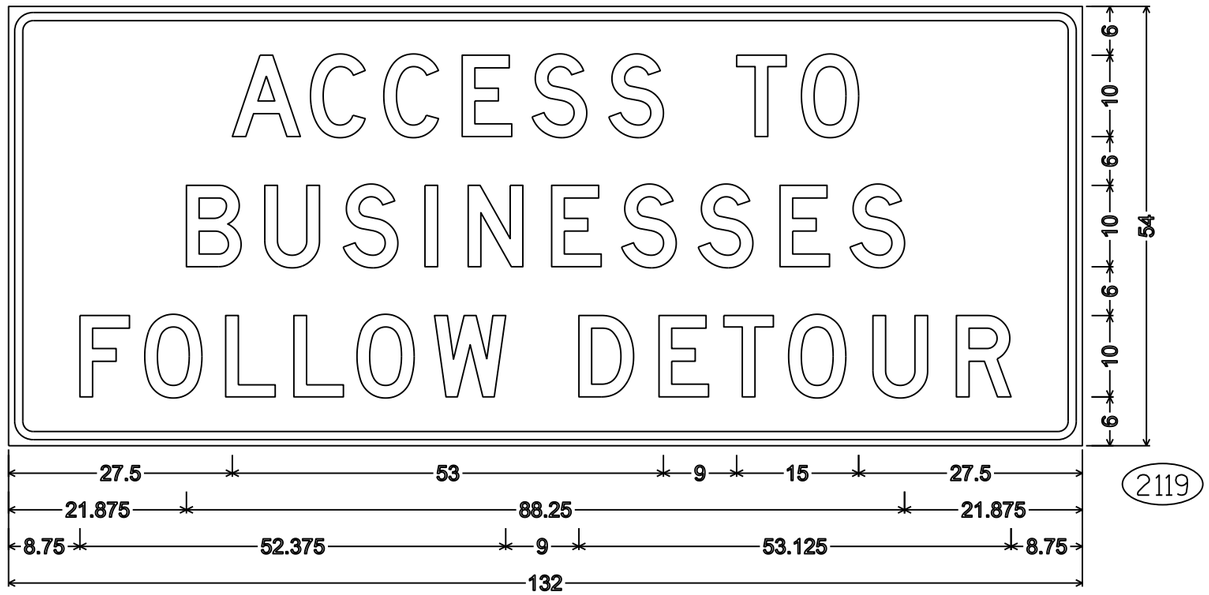


3.000" Radius, 1.000" Border

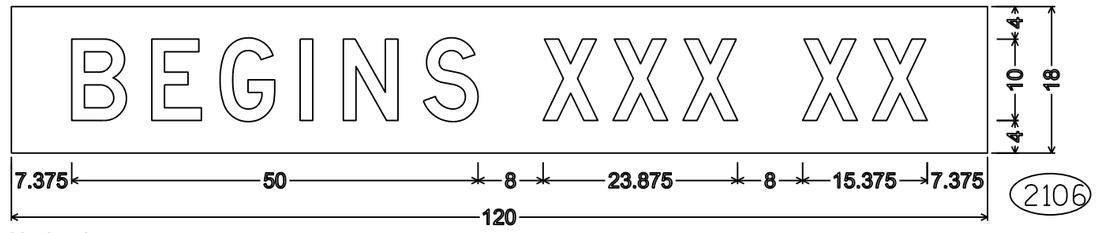
PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TEMPORARY SIGNING	SHEET NO: 407	E

NOTES

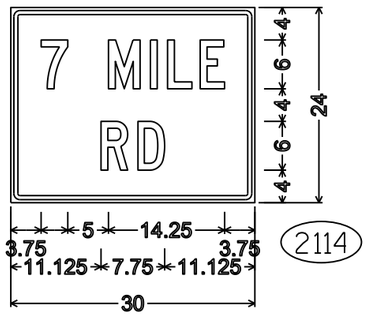
1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D except as noted



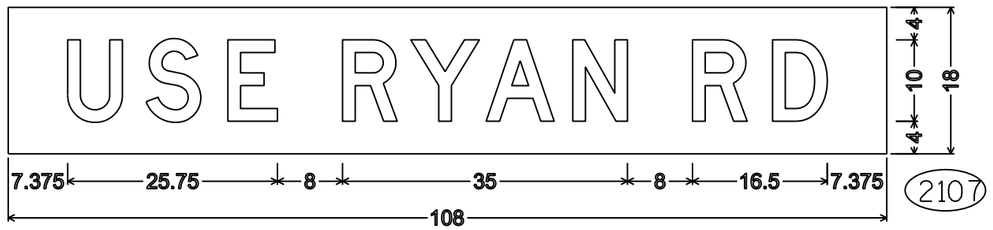
3.000" Radius, 1.000" Border, 0.750" Indent



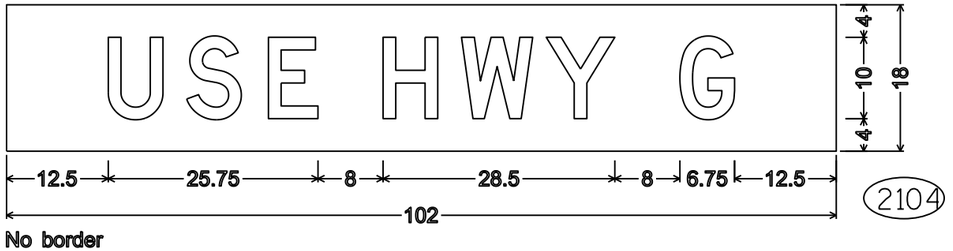
No border



1.125" Radius, 0.500" Border, 0.375" Indent,
"7" C; "MILE" C; "RD" C



No border,

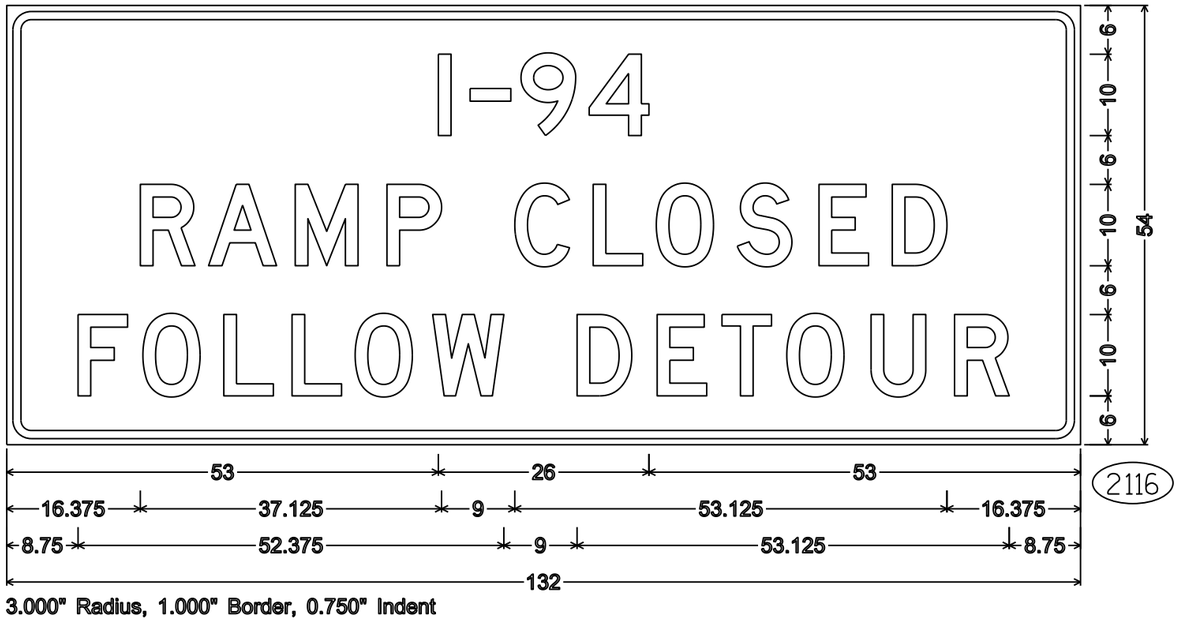


No border

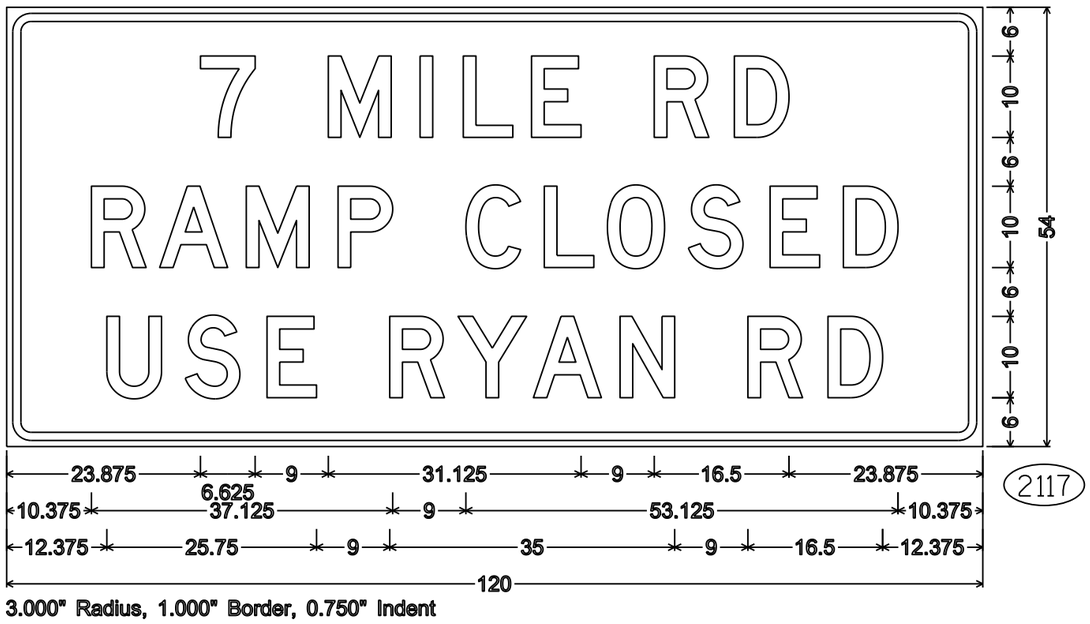
PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TEMPORARY SIGNING	SHEET NO: 408	E

NOTES

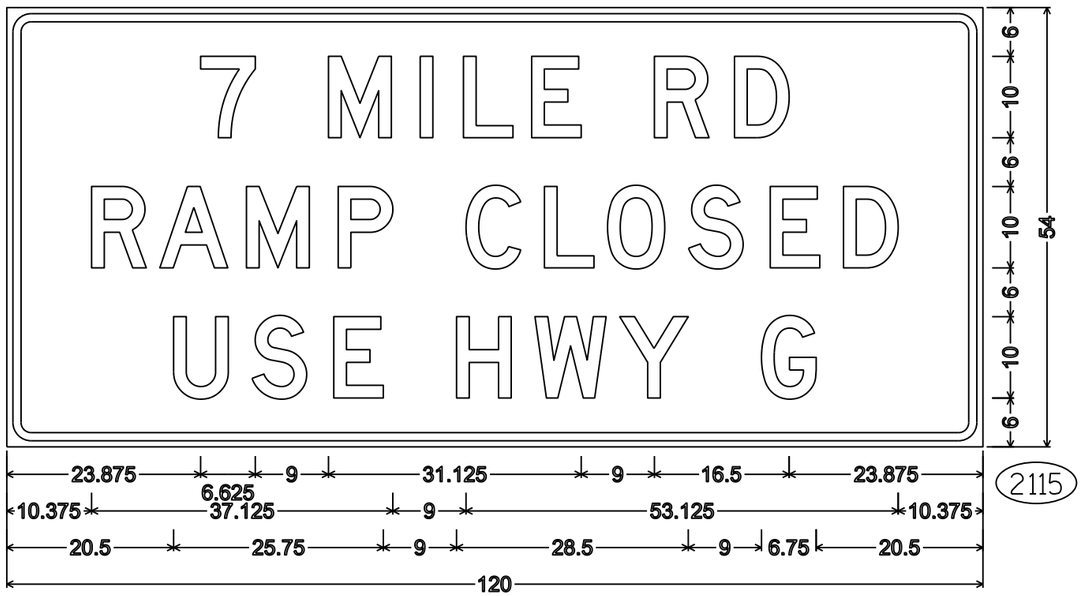
1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



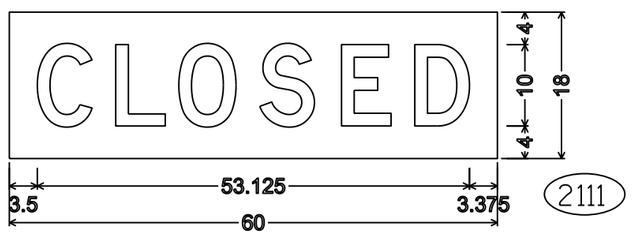
3.000" Radius, 1.000" Border, 0.750" Indent



3.000" Radius, 1.000" Border, 0.750" Indent



3.000" Radius, 1.000" Border, 0.750" Indent



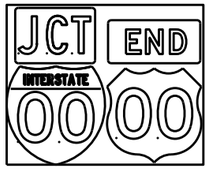
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PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	TEMPORARY SIGNING	SHEET NO: 409	E

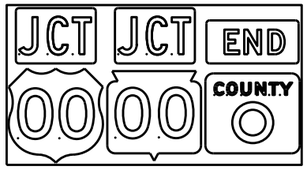
TYPICAL ASSEMBLIES



J1-1



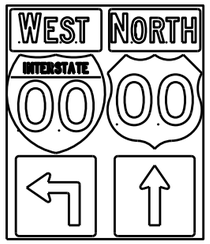
J1-2



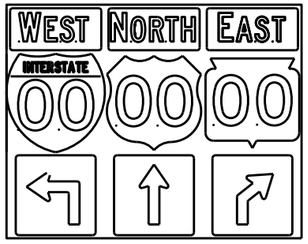
J1-3



J2-1



J2-2

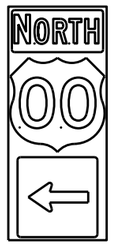


J2-3

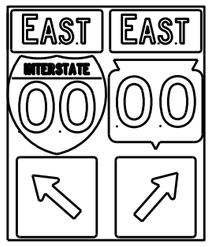


JV

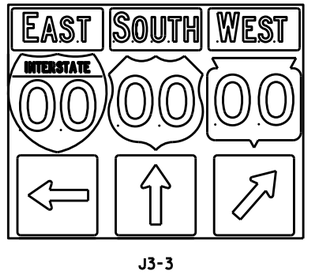
(Typical Vertical J-Assembly
See Note 10 and 11)



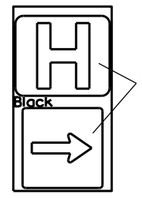
J3-1



J3-2



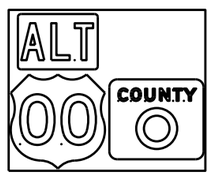
J3-3



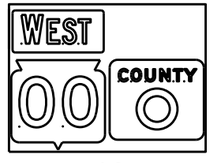
JH-1



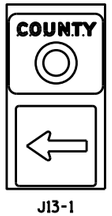
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

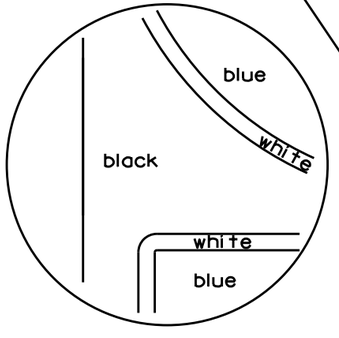


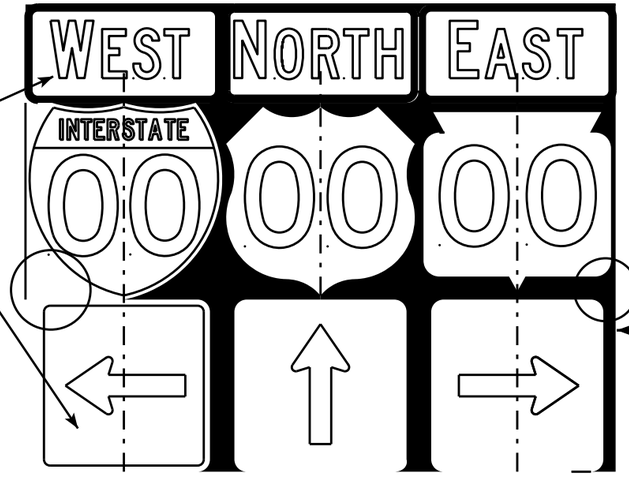
J23-1

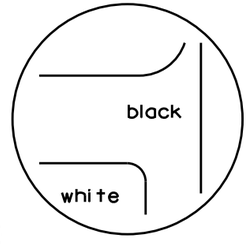


J22-1

[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

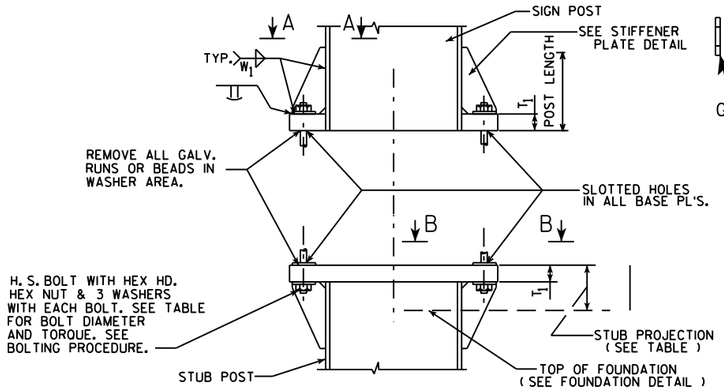
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

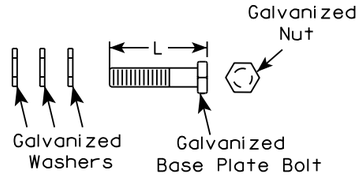
DATE 2/06/14 PL... A2-1S.8

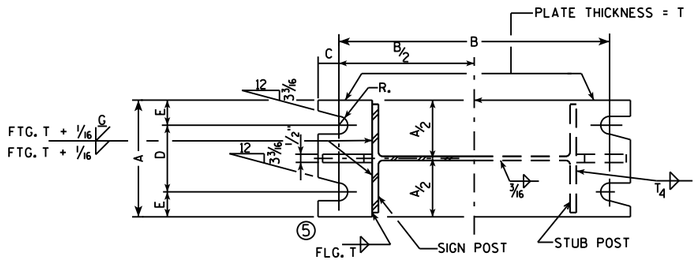
PROJECT NO: SHEET NO: E

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





DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

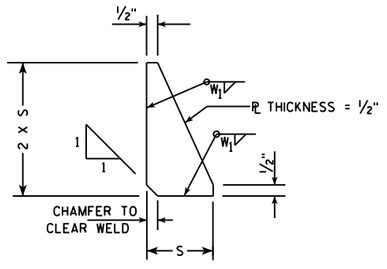
GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & 1/2 WIND[4]	140

[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.

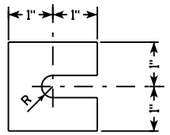
GENERAL NOTES

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, GALVANIZED IN ACCORDANCE WITH ASTM A123.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
FURNISH STEEL BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH SECTION 635 OF THE STANDARD SPECIFICATIONS.



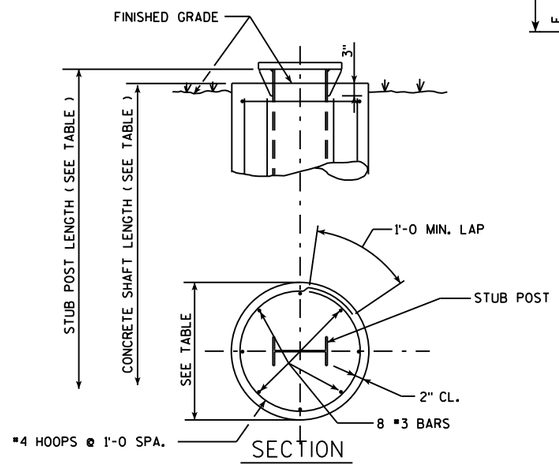
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

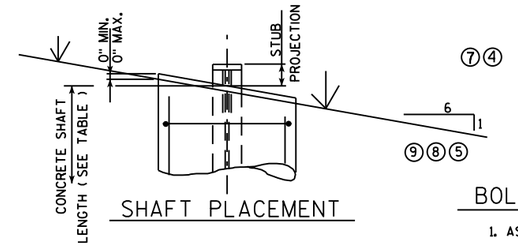


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

SHIM DETAIL



SECTION



⑦④ ⑨⑧⑤ SHAFT PLACEMENT

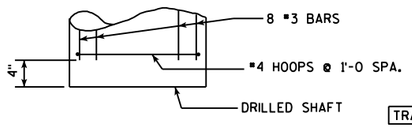
BOLTING PROCEDURE - BASE CONNECTION

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.

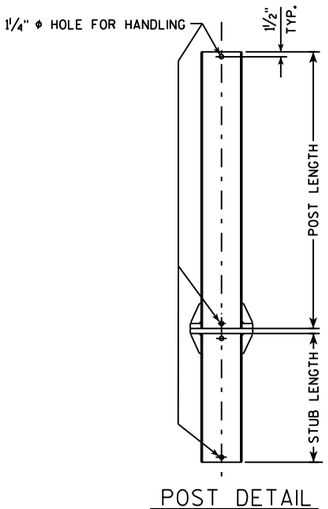
NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

⑦ 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
E	1.0	62

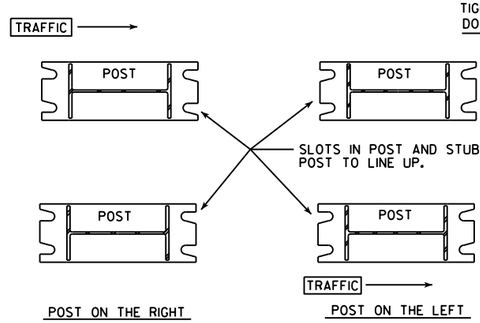
⑦ REINF. TYPE	#3	#4
A	8 @ 4'-5	5 @ 6'-3
B	8 @ 6'-5	7 @ 6'-3
C	8 @ 6'-11	7 @ 6'-3
D	8 @ 7'-5	8 @ 6'-3
E	8 @ 7'-11	9 @ 6'-3



FOUNDATION DETAIL



POST DETAIL



POST SLOT ORIENTATION ⑦

L	X	TYPE	POST SIZE	WEIGHT PER FT	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 3/4	④	A	W10"X12.0	12.0 LBS	3/4" ø @ 75"-FT.	5 1/4"	1'-0 3/8"	7/8"	3 1/2"	7/8"	1"	3/16"	5/16"	13/32"	2 1/8"	3'-6	3"	2'-0 ø	5'-0	76.0" ④
4 3/4	④	B	W12"X16.0	16.0 LBS	7/8" ø @ 85"-FT.	5 1/2"	1'-4 1/4"	1"	3 1/2"	1"	1 1/4"	1/4"	5/16"	15/32"	3"	5'-6	3"	2'-0 ø	7'-0	146.5" ④
5		C	W12"X19.0	19.0 LBS	7/8" ø @ 85"-FT.	5 1/2"	1'-4 1/4"	1"	3 1/2"	1"	1 1/2"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 ø	7'-6	182.1"
5		D	W12"X22.0	22.0 LBS	7/8" ø @ 85"-FT.	5 1/2"	1'-4 1/4"	1"	3 1/2"	1"	1 1/2"	3/8"	5/16"	15/32"	3"	6'-6	3"	2'-0 ø	8'-0	210.5"
5	③	E	W12"X26.0	26.0 LBS	1" ø @ 90"-FT.	7"	1'-4 1/4"	1 1/4"	4"	1 1/2"	1 1/2"	3/8"	5/16"	17/32"	3"	7'-0	3"	2'-0 ø	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 8/22/17 PLATE NO. A3-1.17

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 & 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

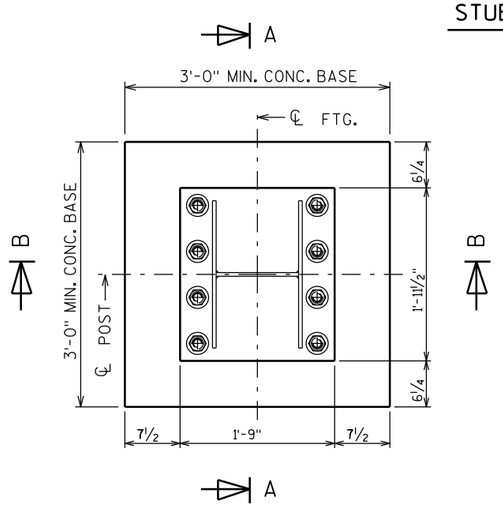
SHEET

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 411 | E

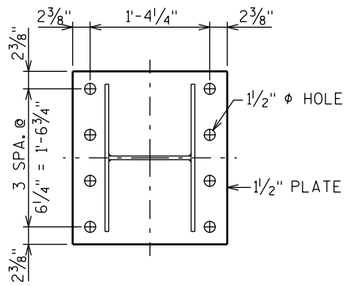
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WISDOT/CADDS SHEET 42

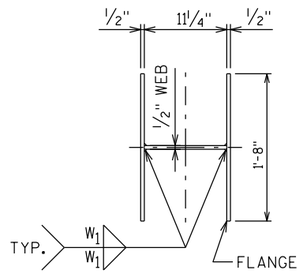
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



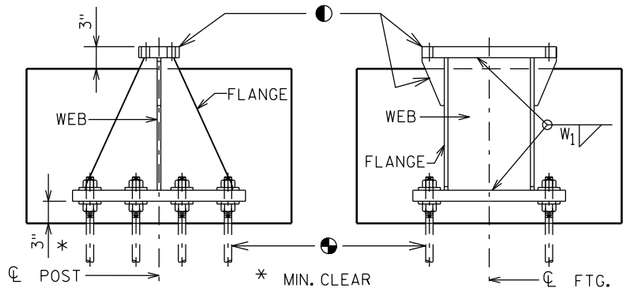
BASE PLATE



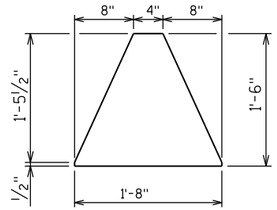
STUB

◐ 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



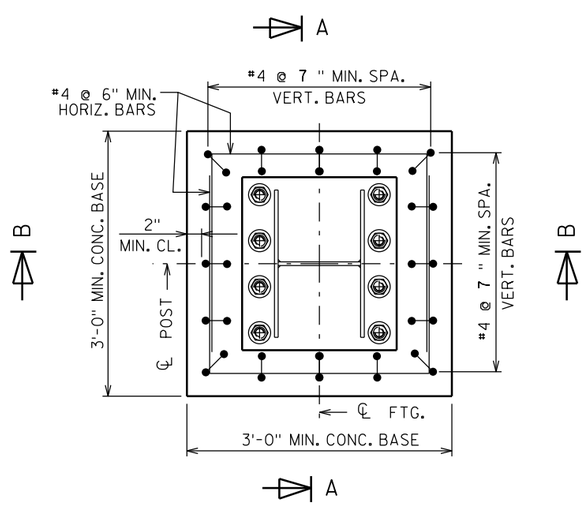
FLANGE

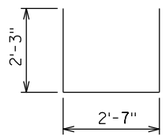
GENERAL NOTES

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

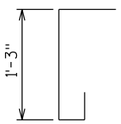
CONCRETE BASE SECTION





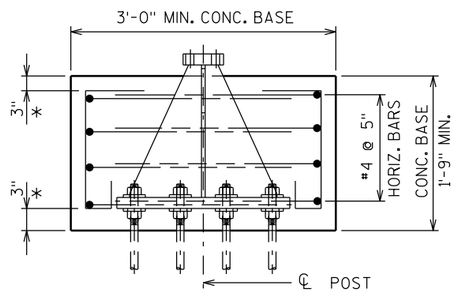
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



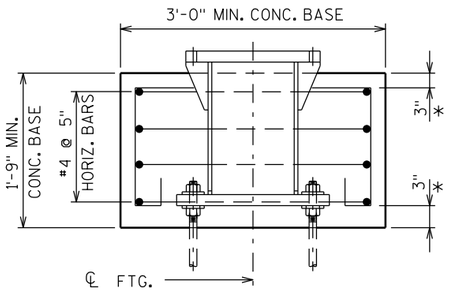
VERTICAL BARS

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

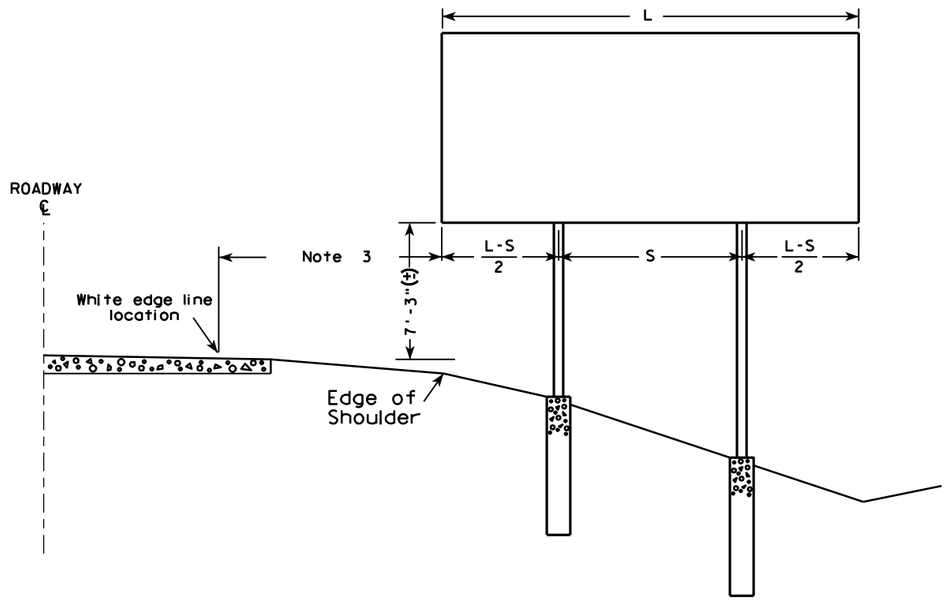
APPROVED Matthew R Rauch
for State Traffic Engineer

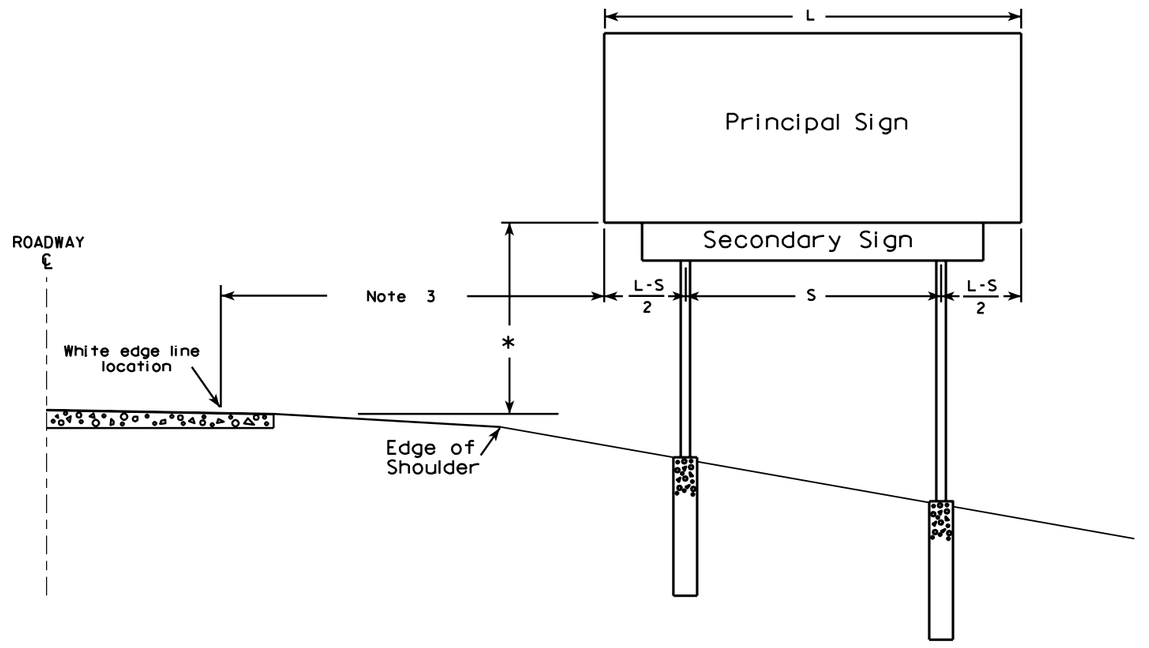
DATE 2/06/2014 PLATE A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 10-MAR-2014 15:16 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.556674:1.000000

WISDOT/CADDS SHEET 42





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

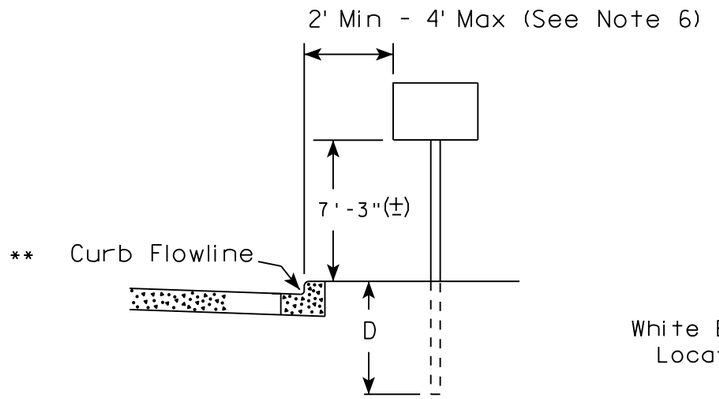
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

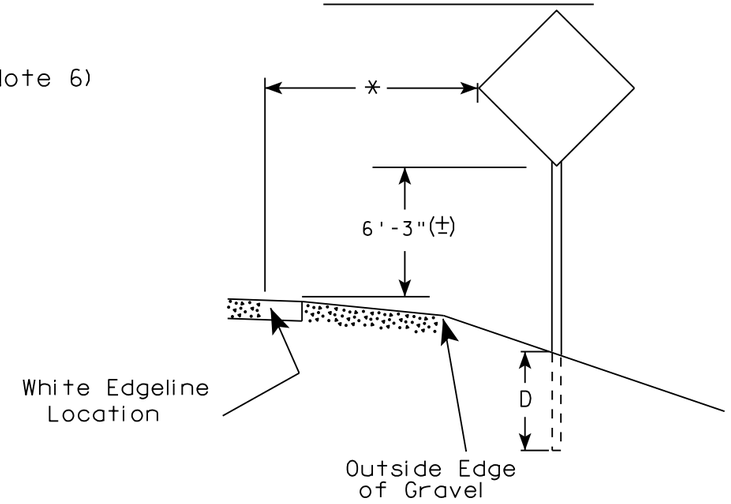
DATE 4/02/08 PLATE NO. A4-1.9

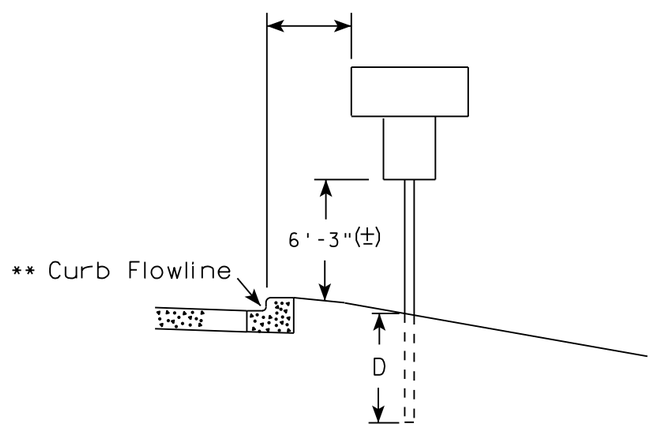
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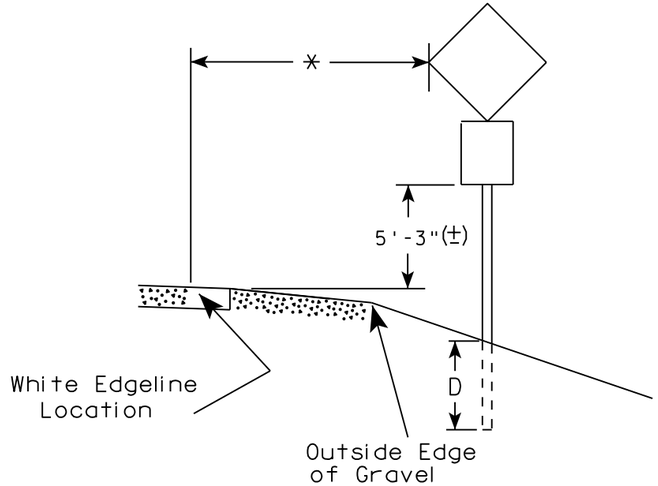
URBAN AREA



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 or 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. J-Assemblies are considered to be one sign for mounting height.
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

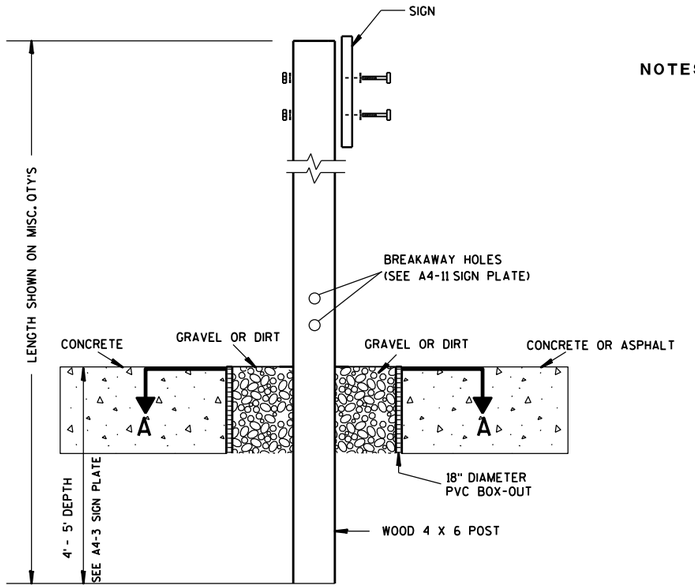
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7 7

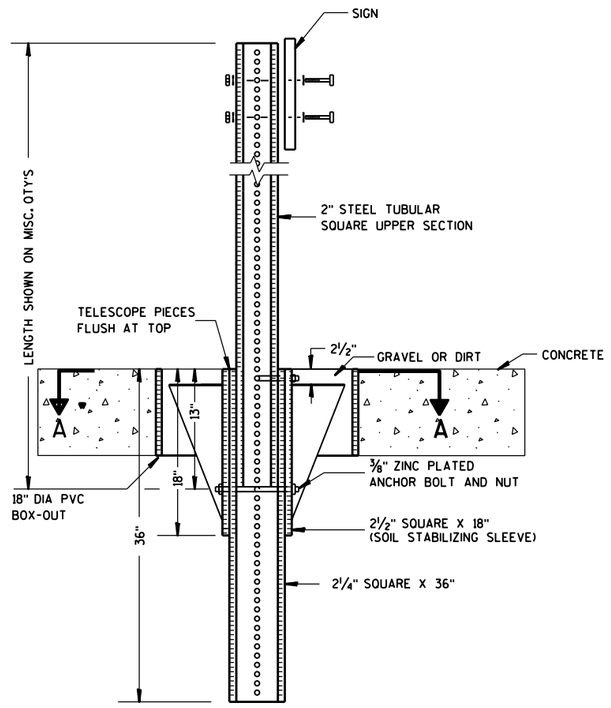
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 414	E



ELEVATION VIEW

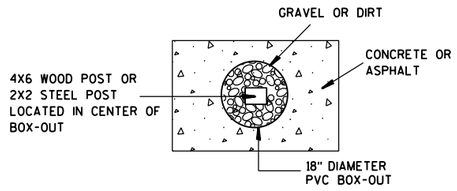
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

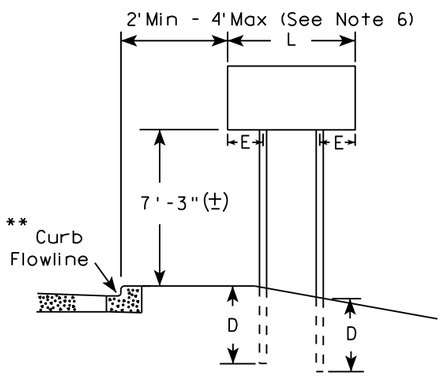
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

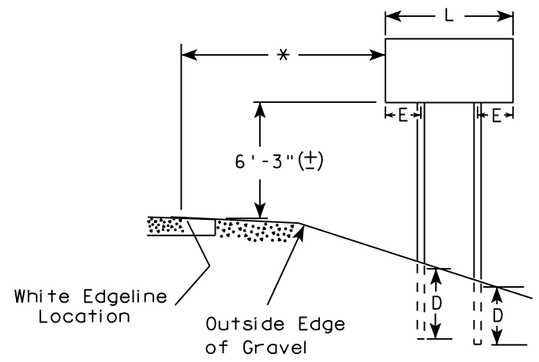
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

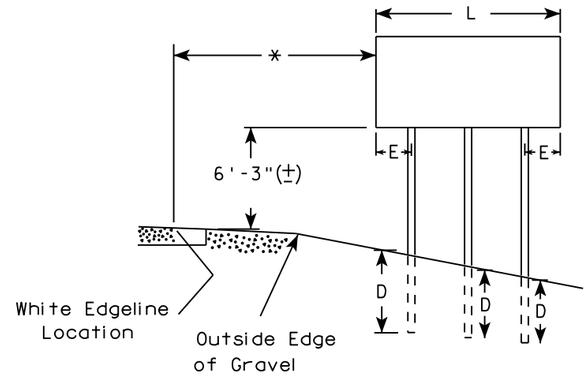
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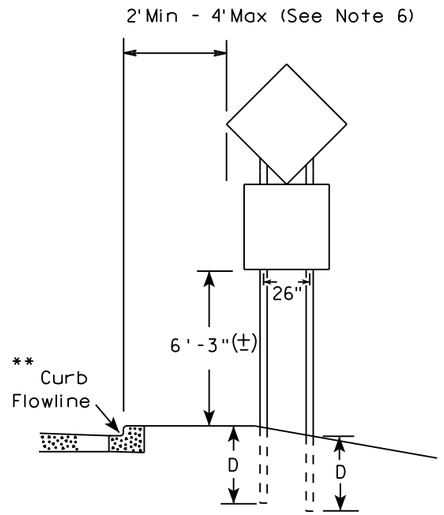
URBAN AREA



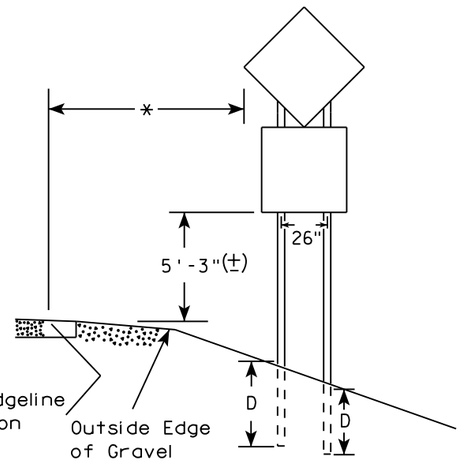
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
*** Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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. J-Assemblies are considered to be one sign for mounting height.
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 and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

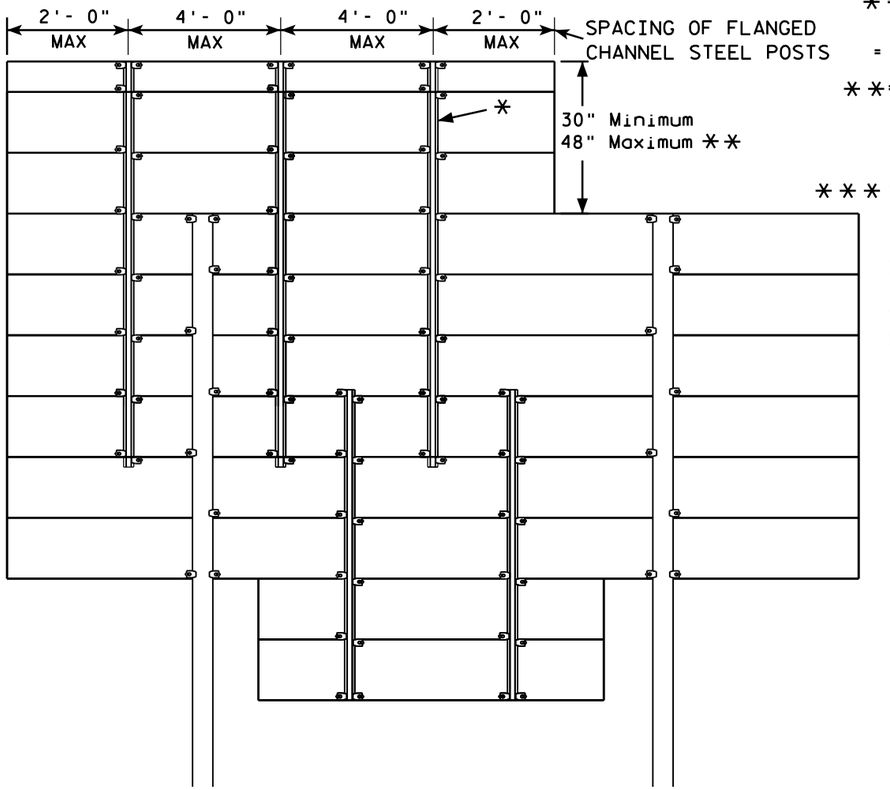
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

GROUND MOUNTED SIGN

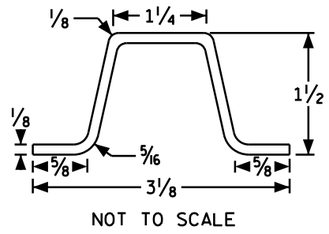


* =2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

** =FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

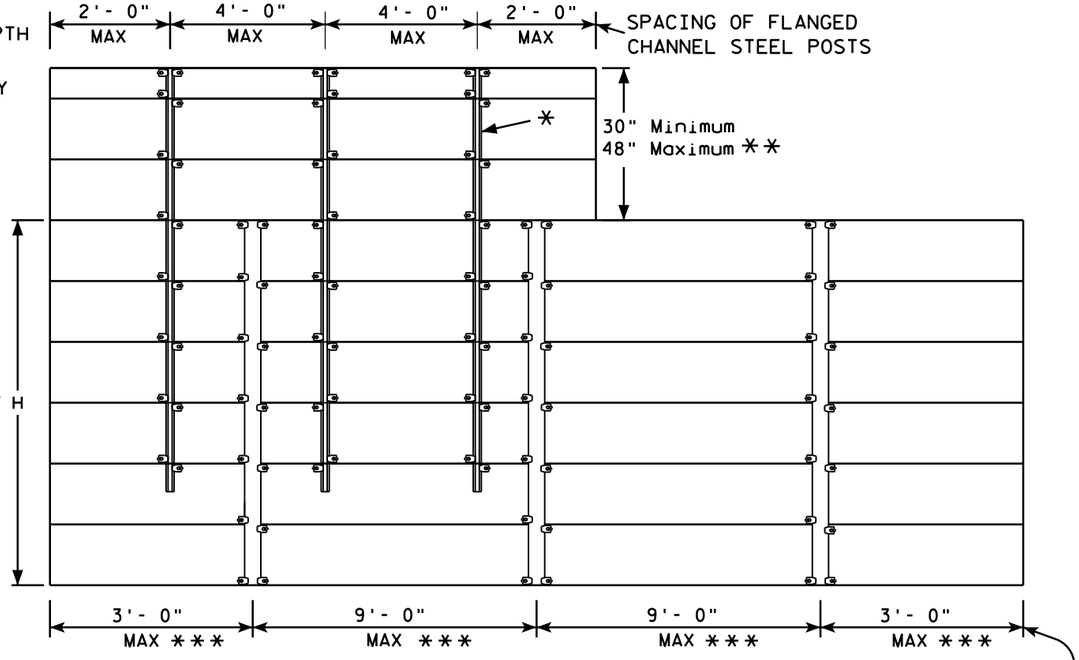
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

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.

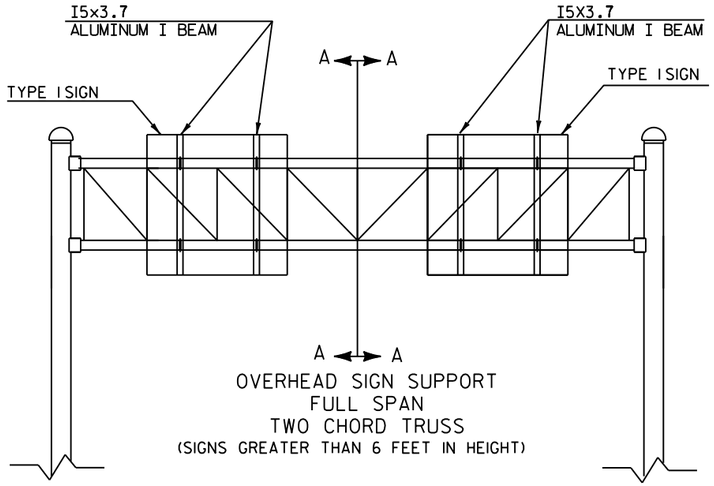
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

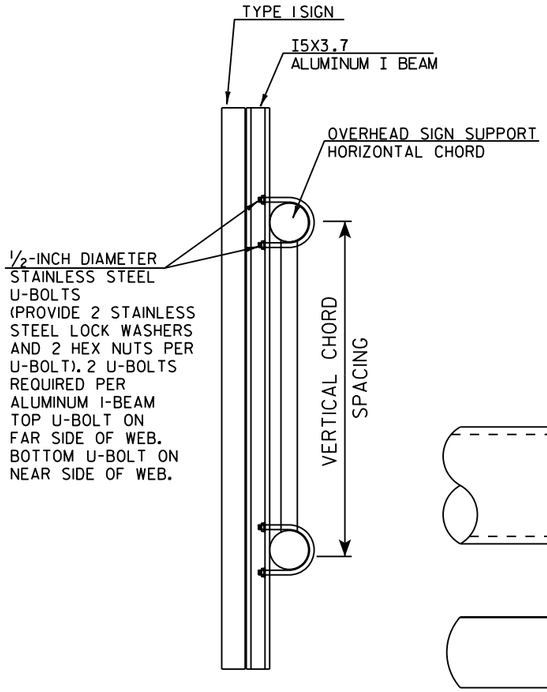
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 417 A4-6.12

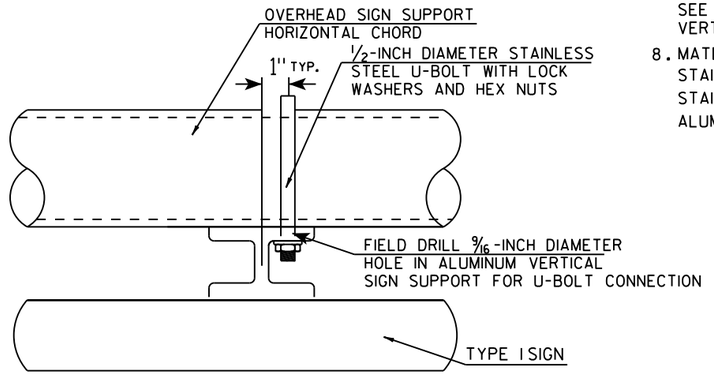
PROJECT NO: | SHEET NO: E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



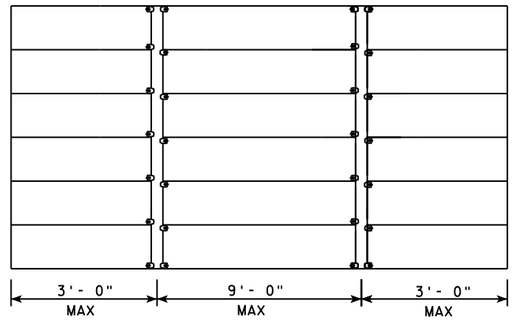
CUT SECTION A-A



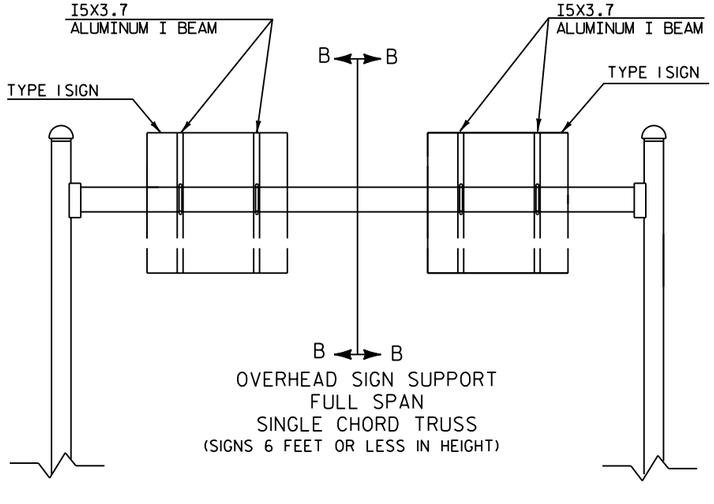
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

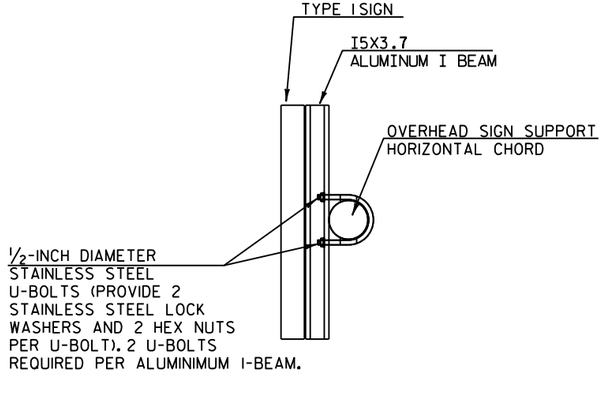
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE 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.



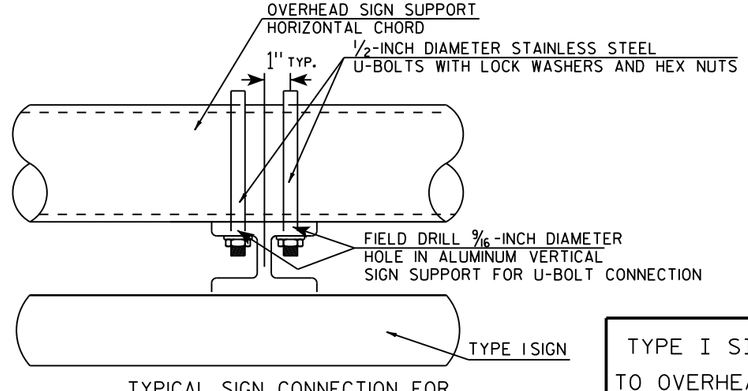
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



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

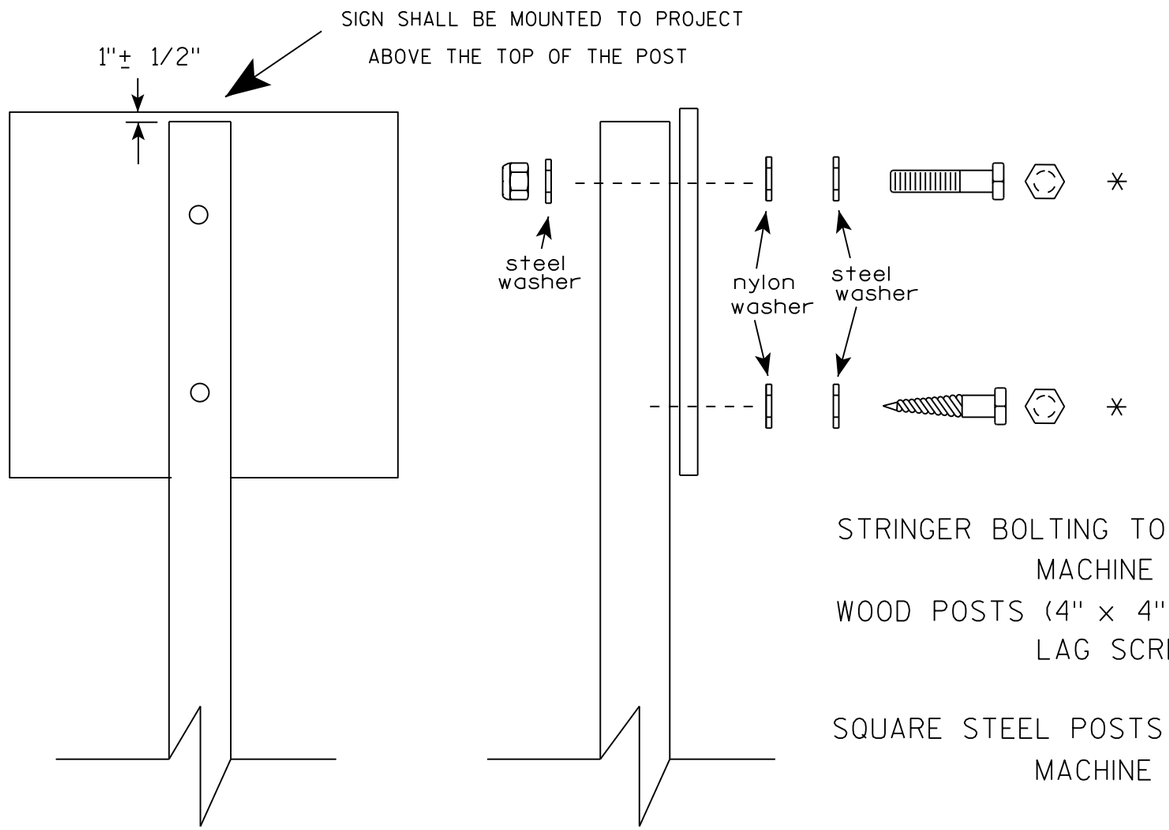
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/15 PLATE NO. A4-7.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A47.DGN PLOT DATE : 01-DEC-2015 17:42 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 38.916838:1.000000



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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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

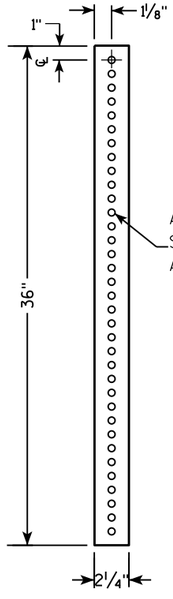
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

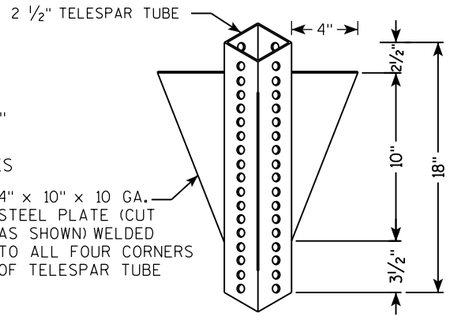
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TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

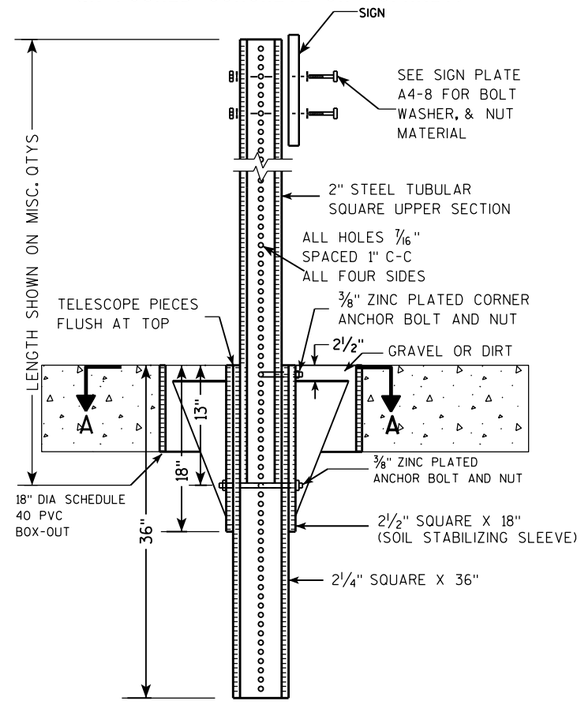
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



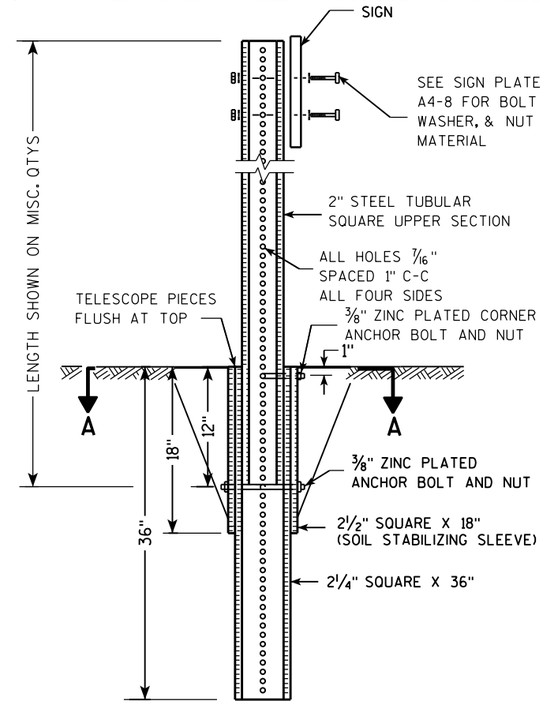
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

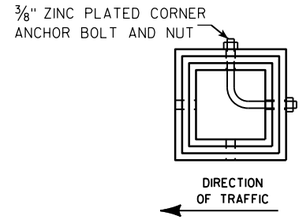


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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 420 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

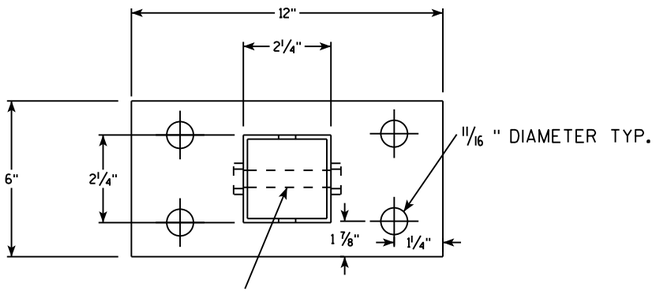
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42

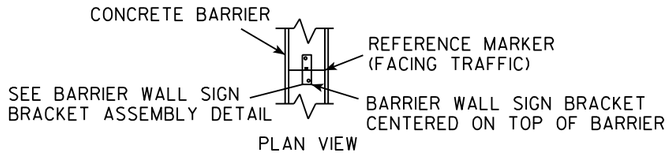
TYPICAL BARRIER WALL SIGN PLACEMENT DETAILS

TYPICAL REFERENCE MARKER MOUNTING DETAILS

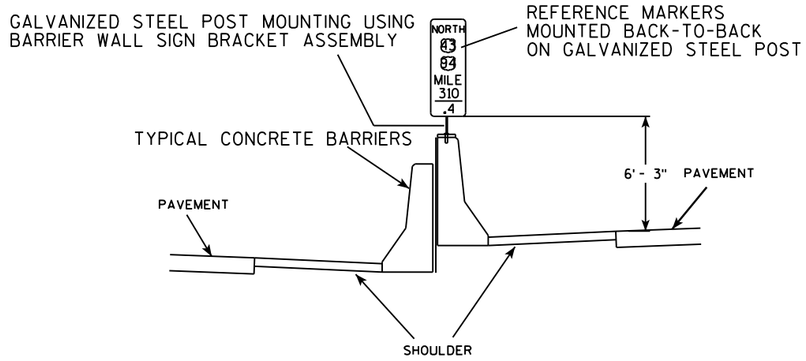
BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE



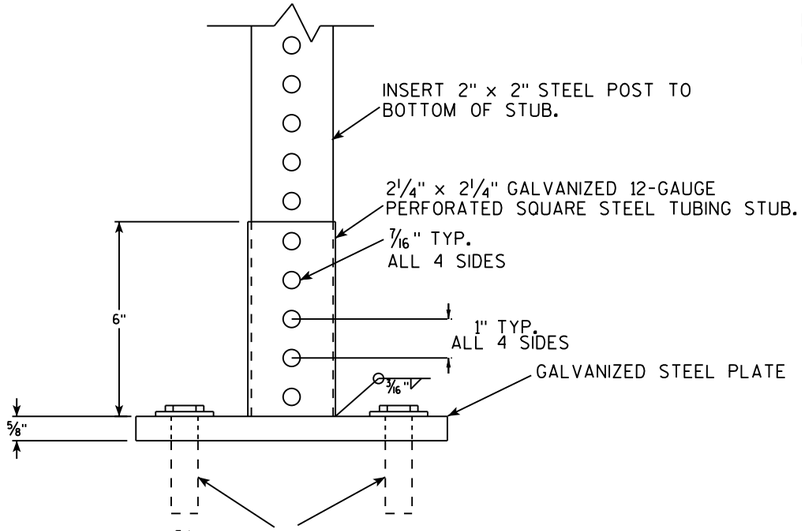
3½" X ⅜" GALVANIZED STEEL BOLT & HARDWARE
PLAN VIEW



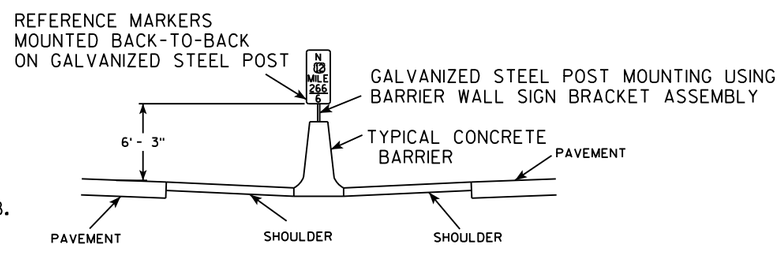
MEDIAN BARRIER MOUNTING DETAIL



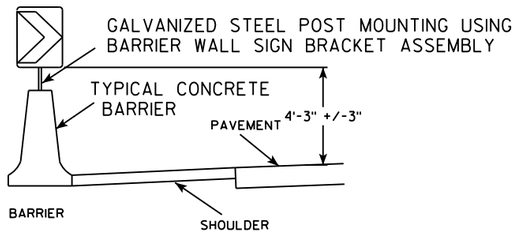
TYPICAL ENHANCED REFERENCE
MARKER PLACEMENT ON DOUBLE MEDIAN BARRIER



SIDE VIEW



TYPICAL ENHANCED REFERENCE
MARKER PLACEMENT ON SINGLE MEDIAN BARRIER



TYPICAL CHEVRON MARKER PLACEMENT

NOTES

1) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
2) SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS.

SIGN MOUNTING ON BARRIER WALL

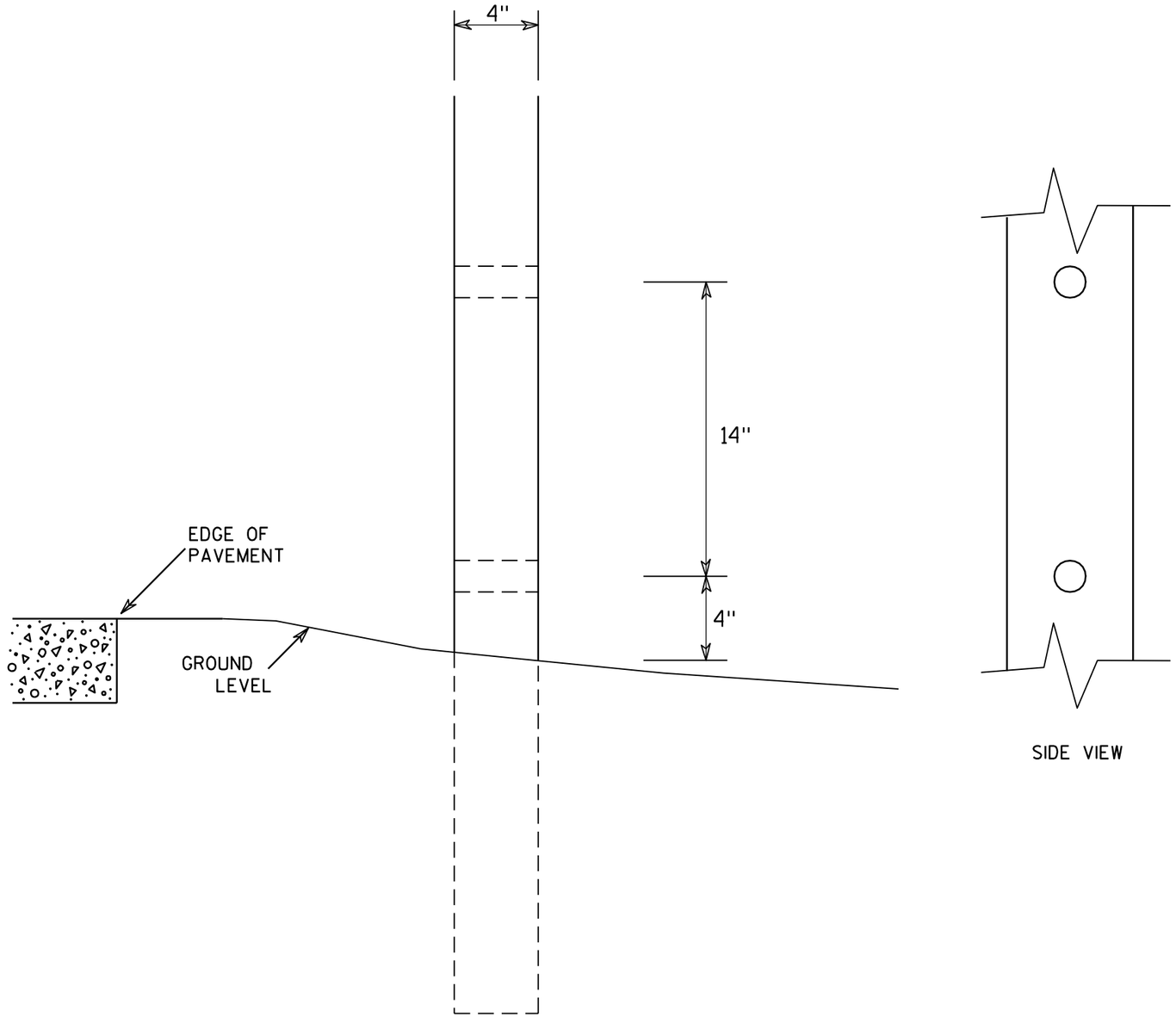
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/15 PLATE A4-10.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A410.DGN PLOT DATE : 16-MAR-2015 14:27 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 14.593816:1.000000
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.

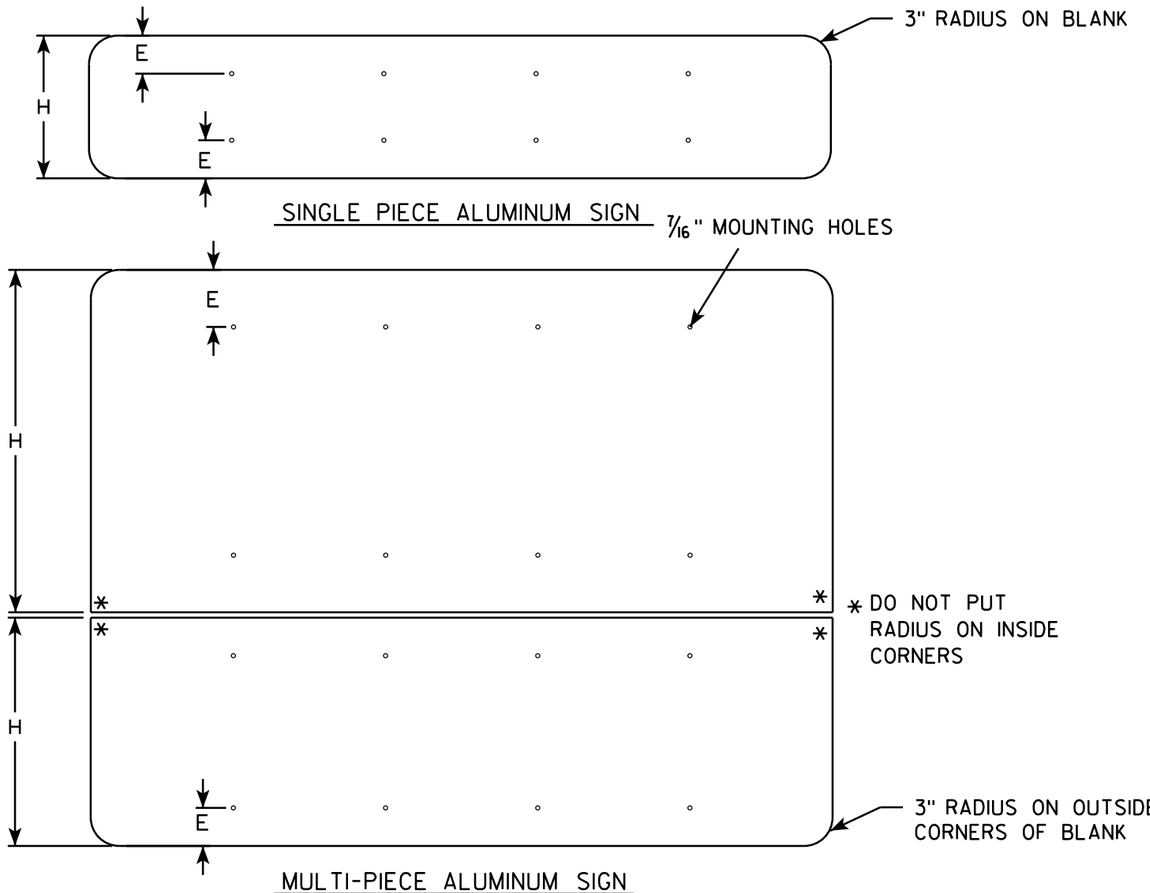
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

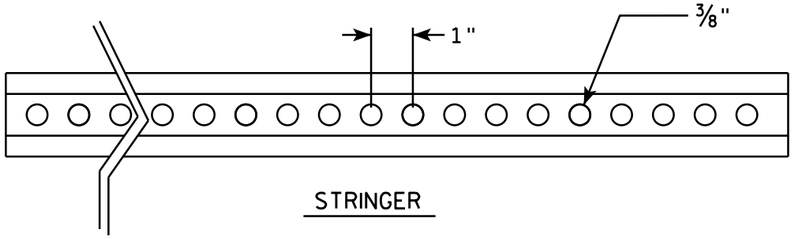
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 422	E



GENERAL NOTES

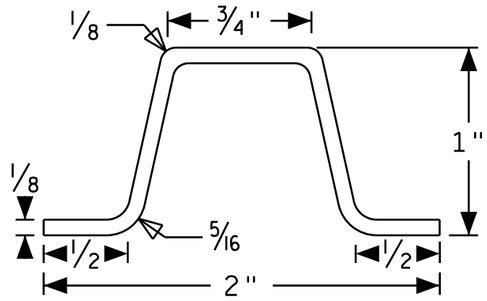
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

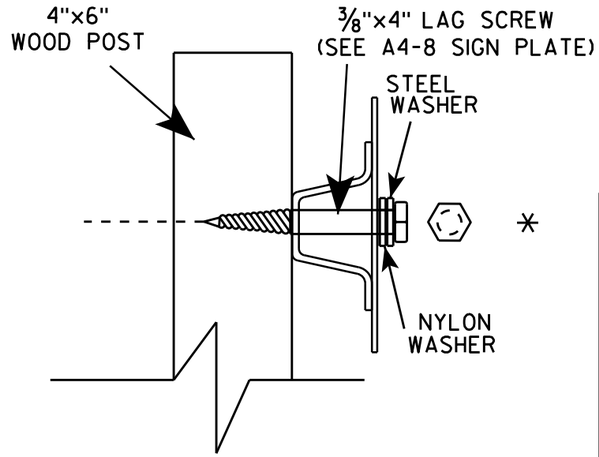


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

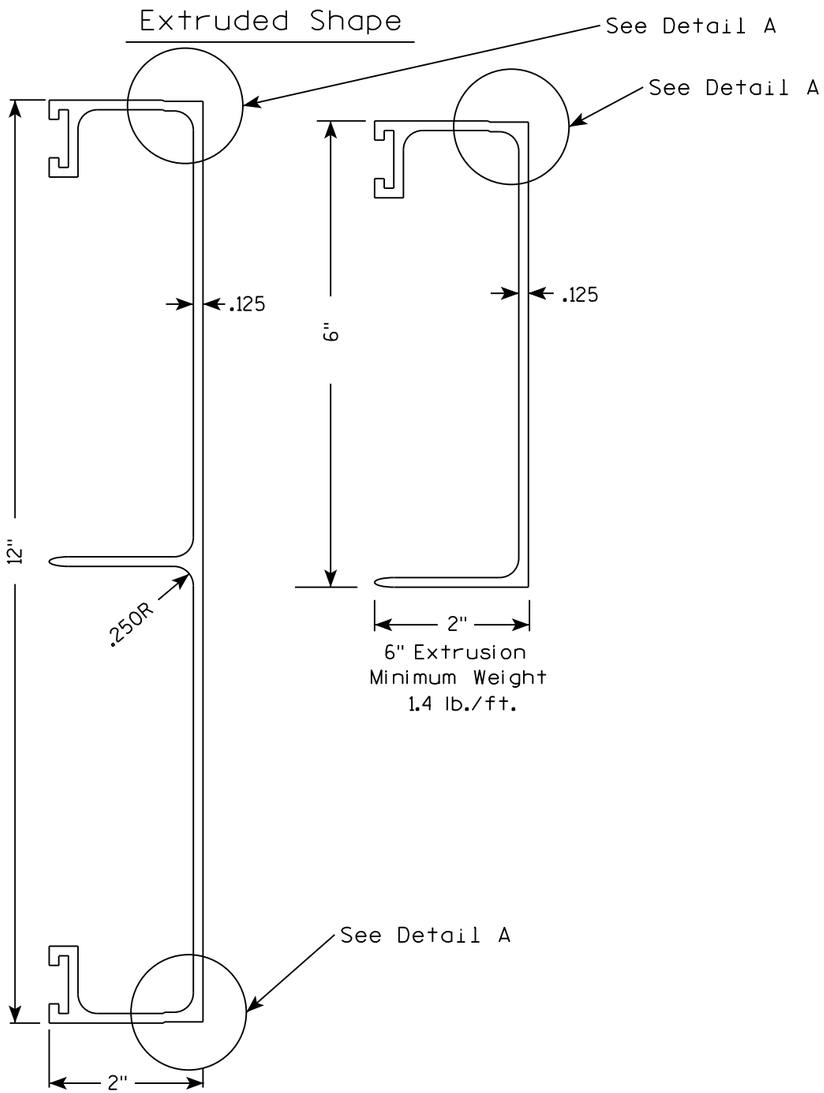
for State Traffic Engineer

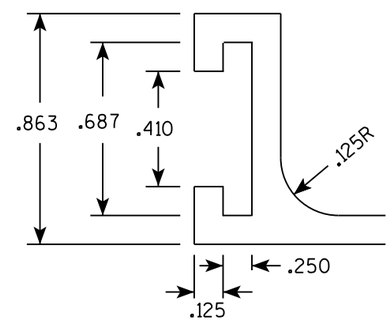
DATE 4/26/16 PLATE NO A4-18.1

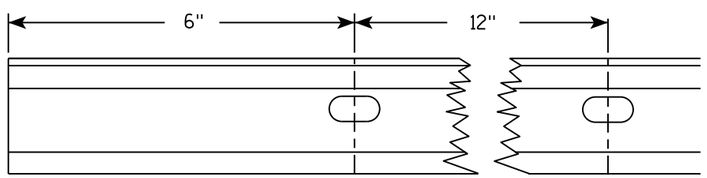
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

Extruded Shape







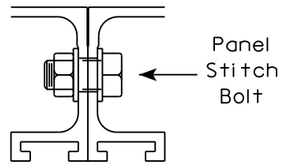
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

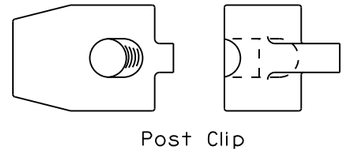
The hardware includes:

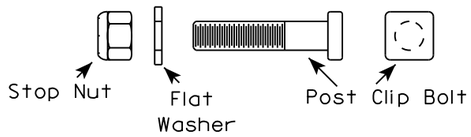
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

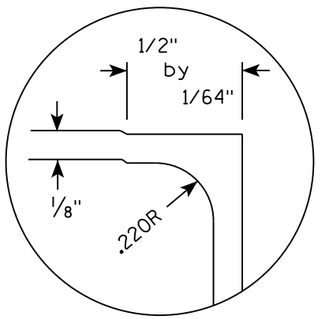
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





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.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

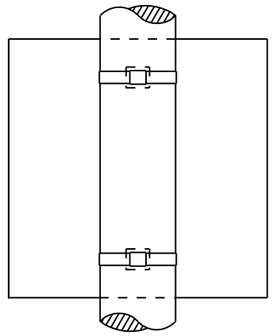
APPROVED Matthew R Rauch
for State Traffic Engineer

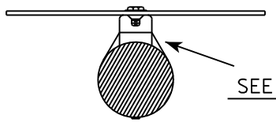
DATE 11/30/16 PLATE NO. A5-2.10

PROJECT NO:				SHEET NO: 424	E

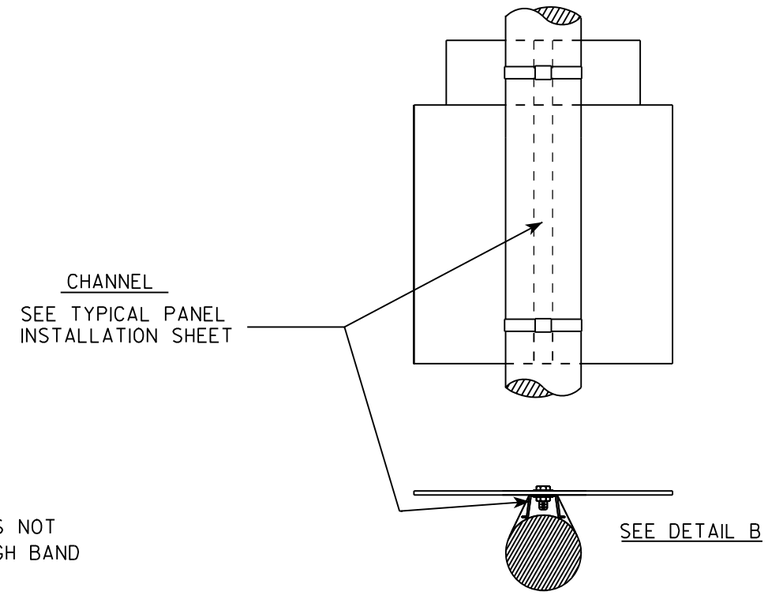
BANDING

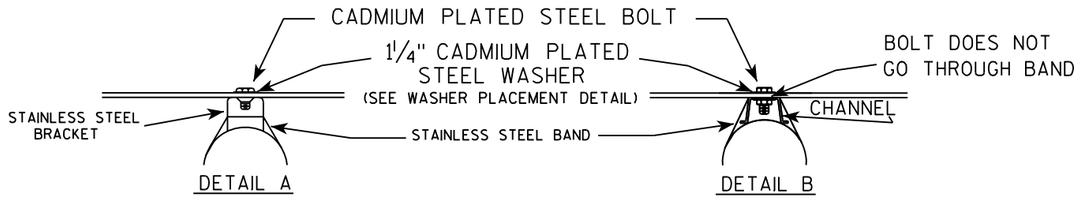
SINGLE SIGN



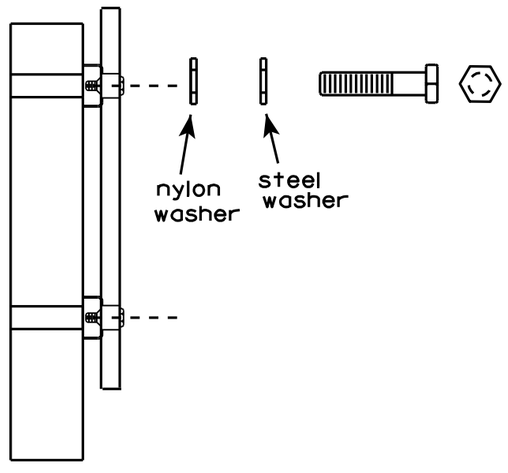


"J" ASSEMBLY





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 3/4" in width and 0.025" thickness.

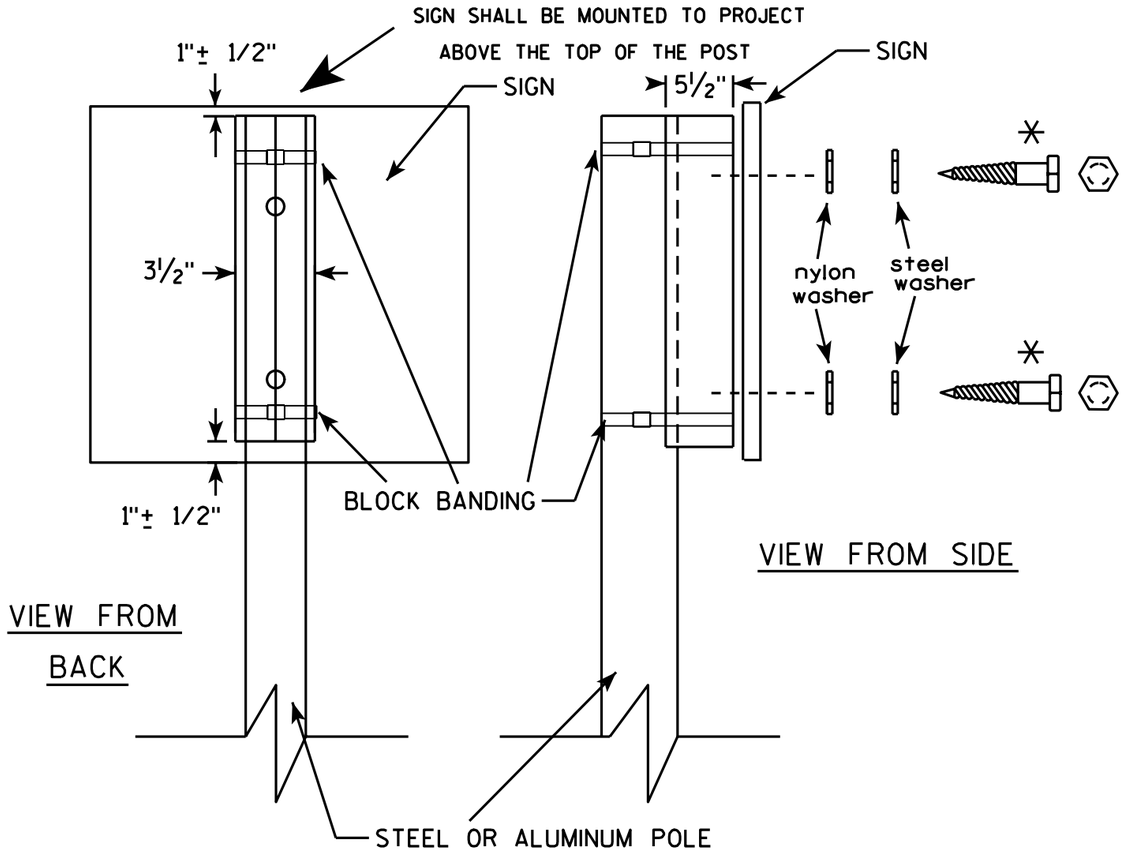
STANDARD SIGN
SIGN BANDING DETAILS

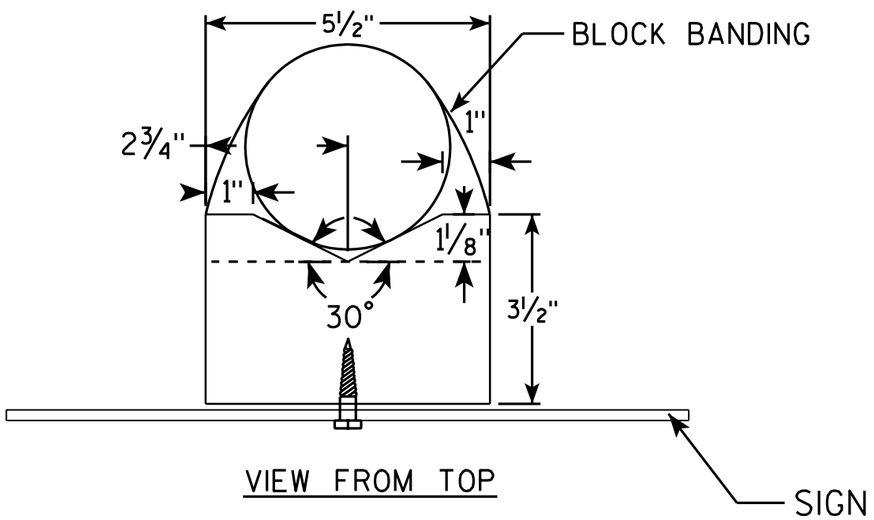
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 425	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

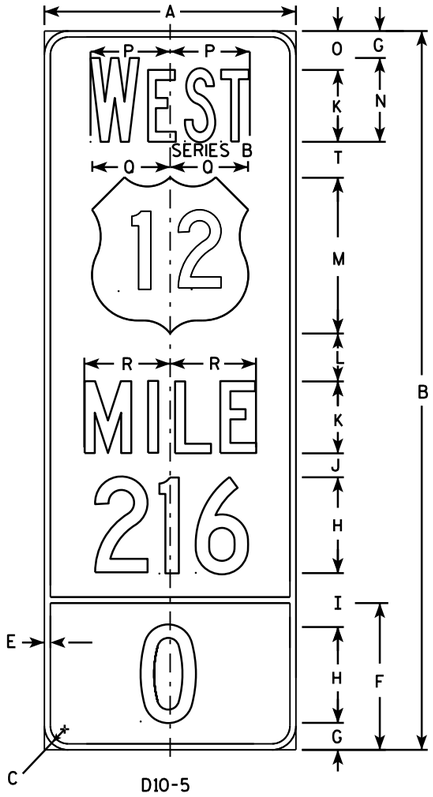
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

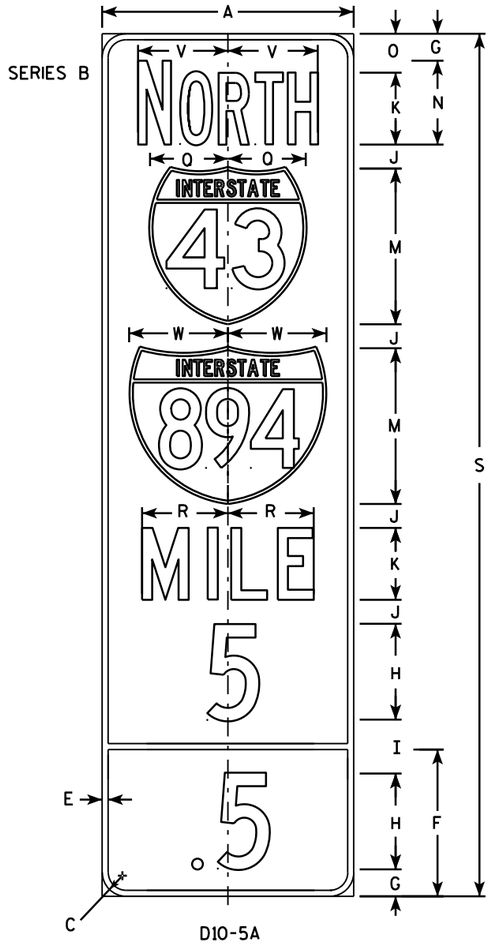
SHEET NO: 426 E

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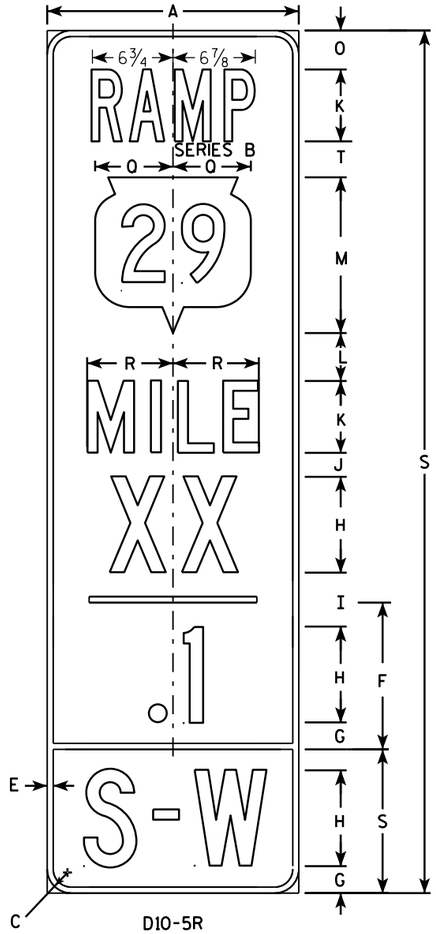
WISDOT/CADDS SHEET 42



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

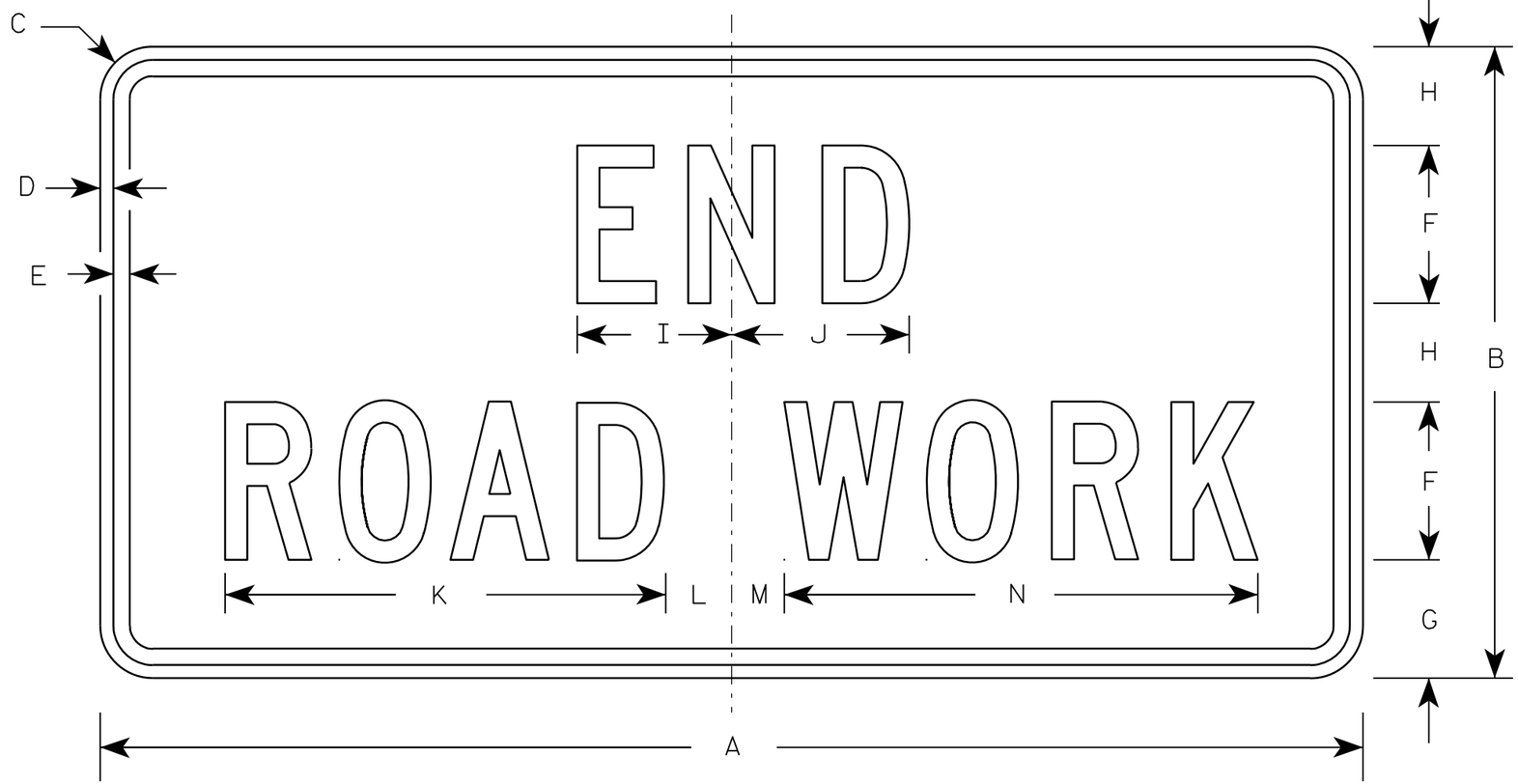
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/26/14 PL 427 D10-5.2

PROJECT NO:

SHEET NO: 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

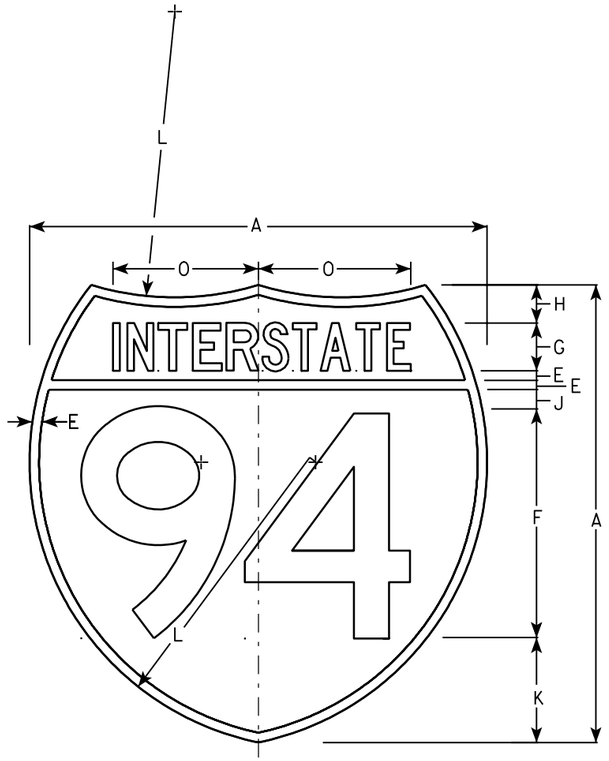
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

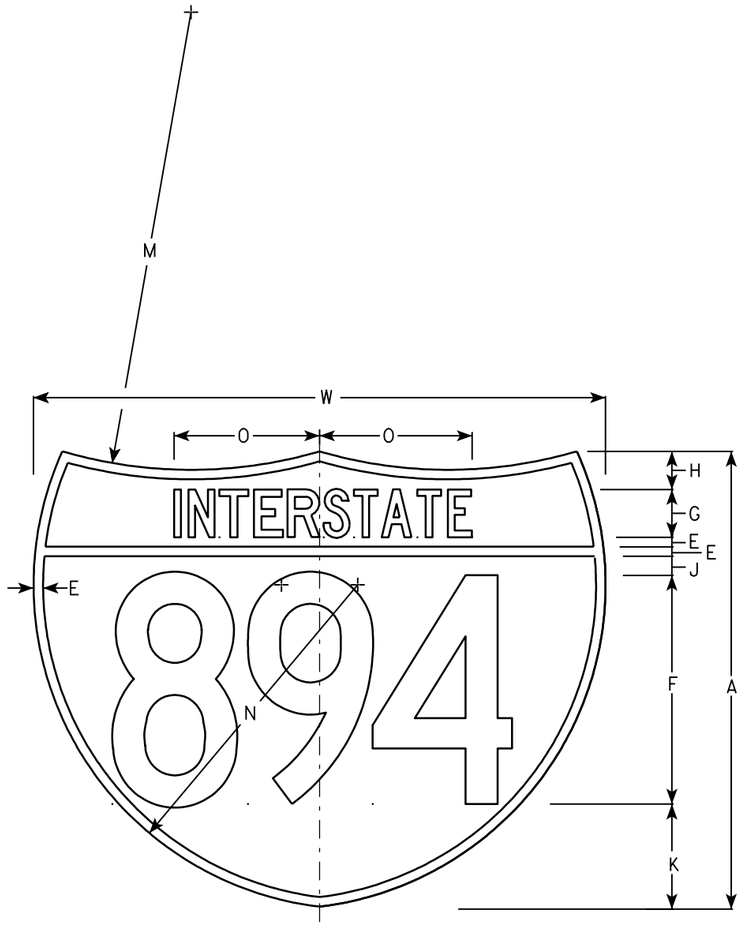
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 428	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

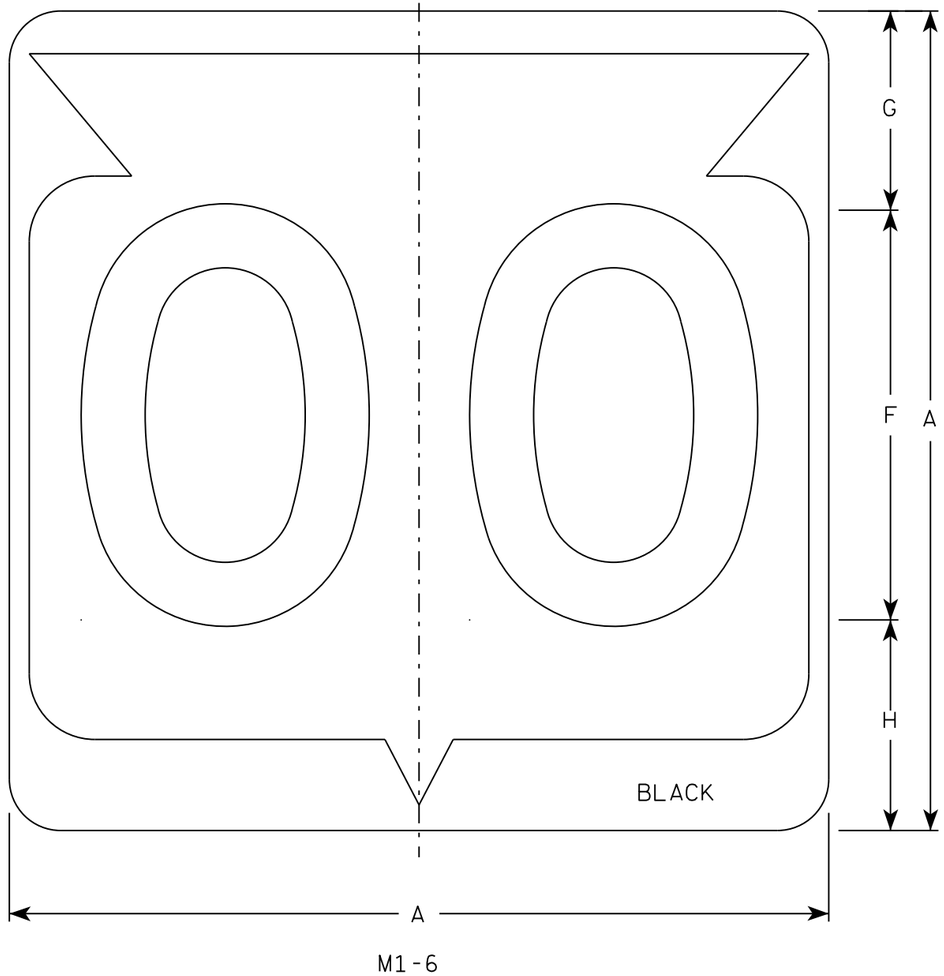
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

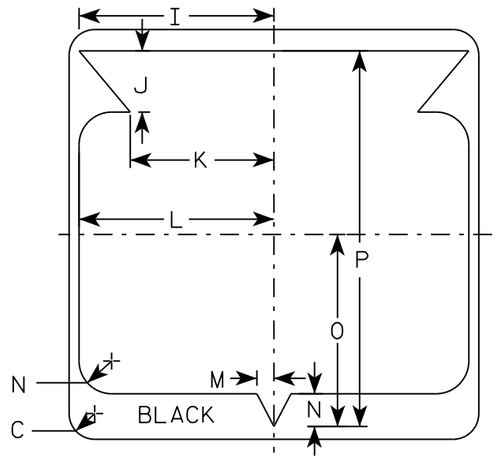
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 429	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs 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																											
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
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
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
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

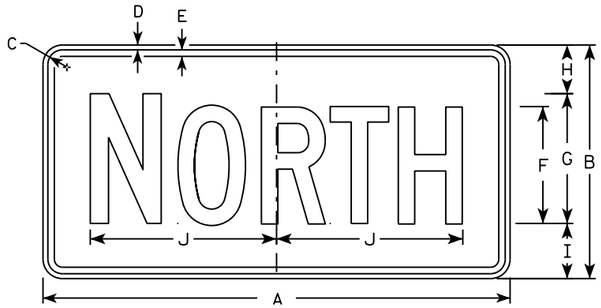
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

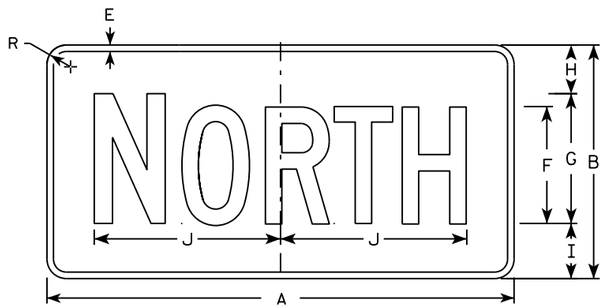
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 430 E



M3-1
MM3-1
MP3-1



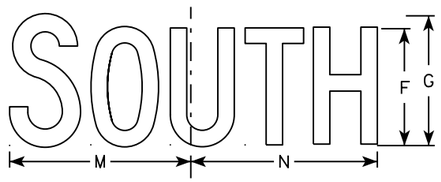
MB3-1
MK3-1
MN3-1



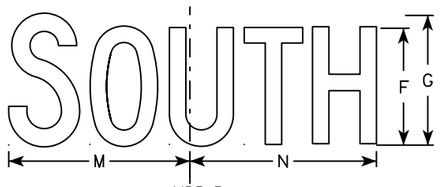
M3-2
MM3-2
MP3-2



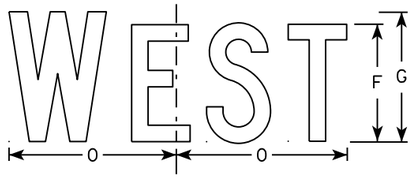
MB3-2
MK3-2
MN3-2



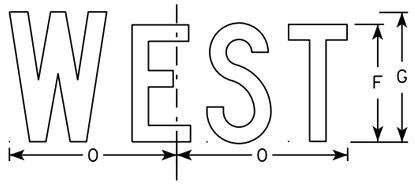
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

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
   MP3-1 thru MP3-4 Background - White
   Message - Blue
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

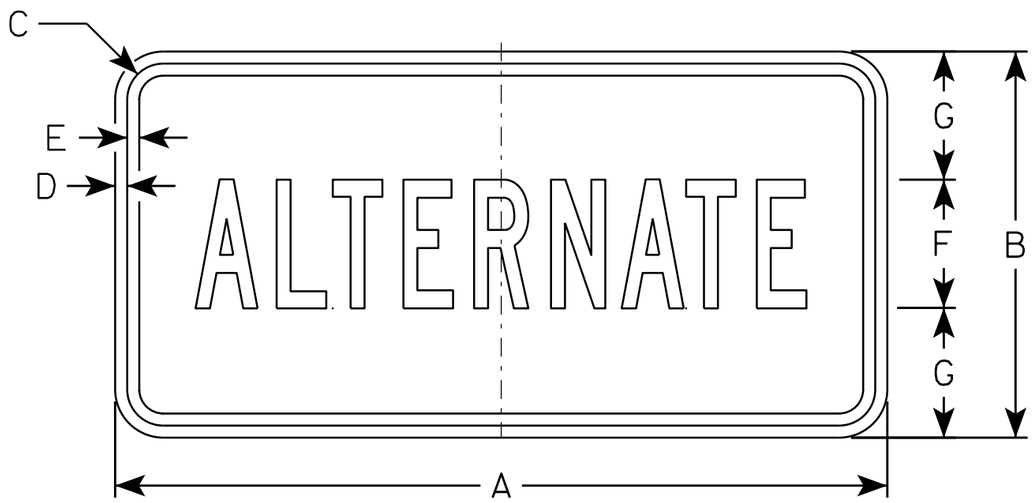
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

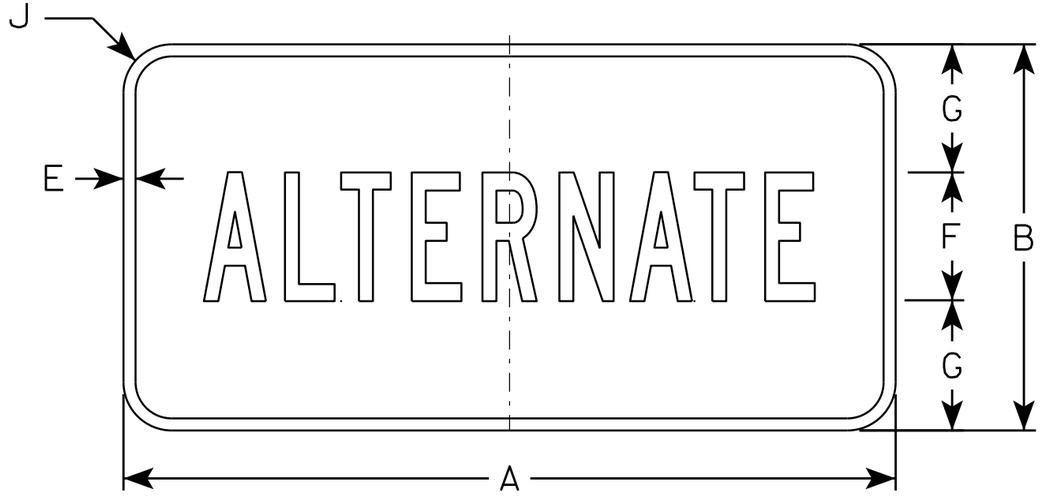
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-1
M04-1



MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   M04-1 Background - Orange - Type F
   Message - Black

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	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

STANDARD SIGN
M4-1

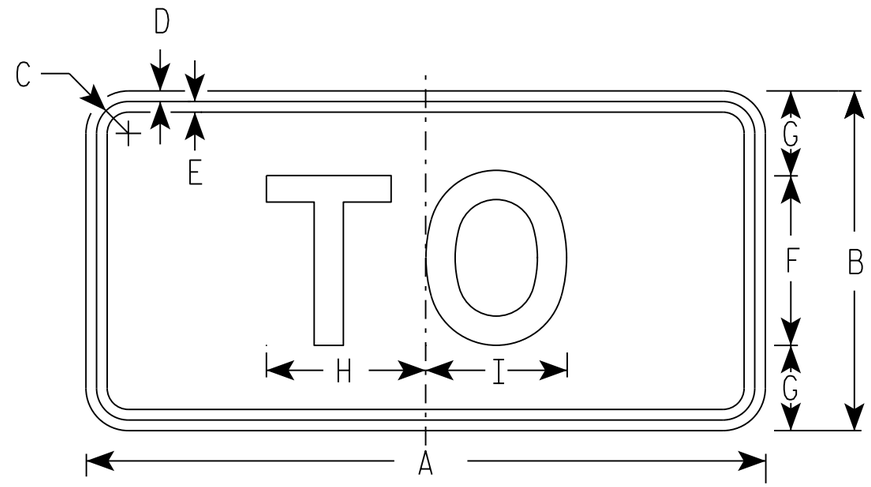
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

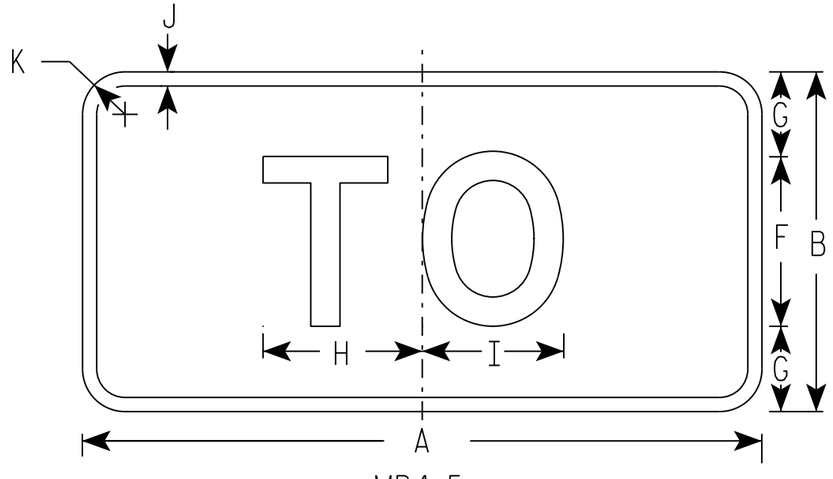
DATE 6/30/14 PLATE 14-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M41.DGN PLOT DATE : 30-JUN-2014 15:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.708937:1.000000 WISDOT/CADDS SHEET 42



M4-5
MM4-5
MP4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

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	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

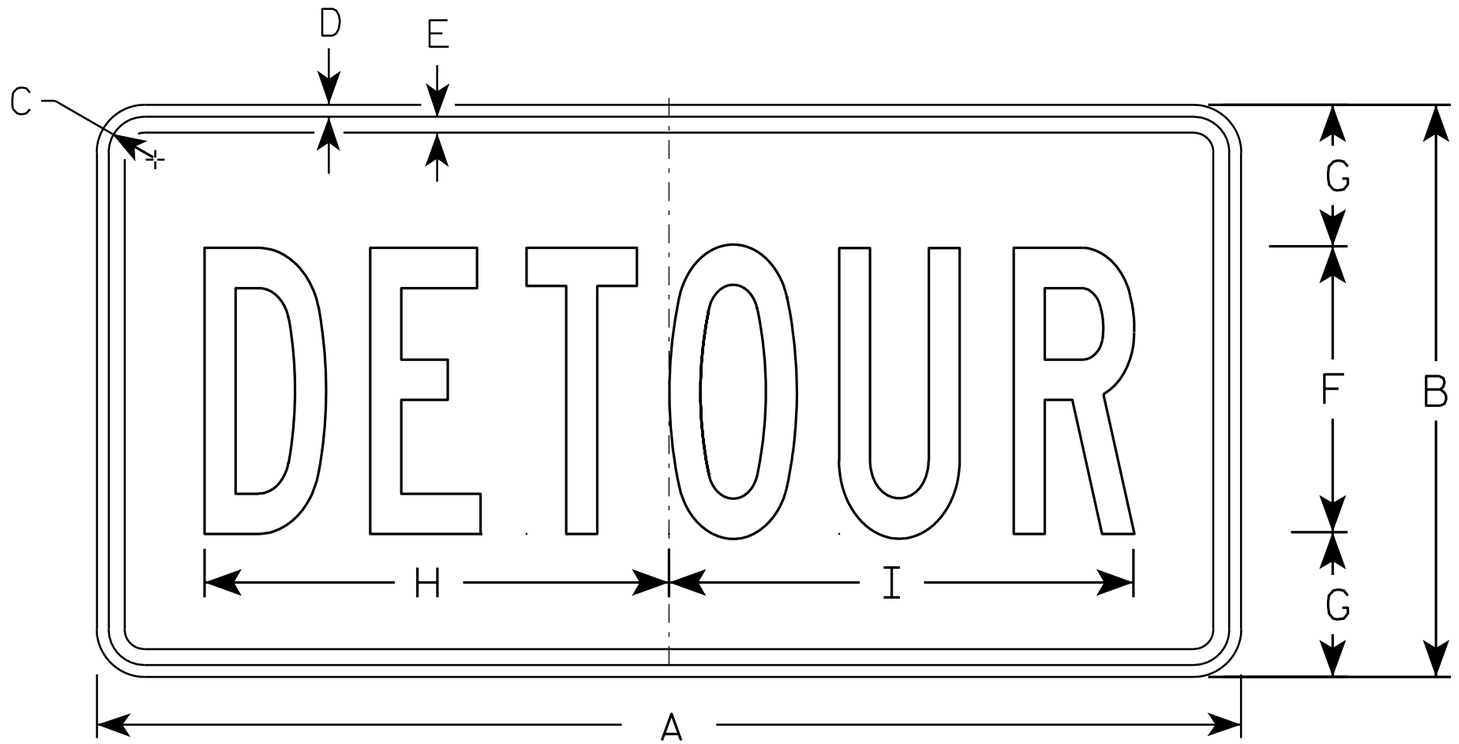
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 433 M4-5.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



M4-8

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 - 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																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

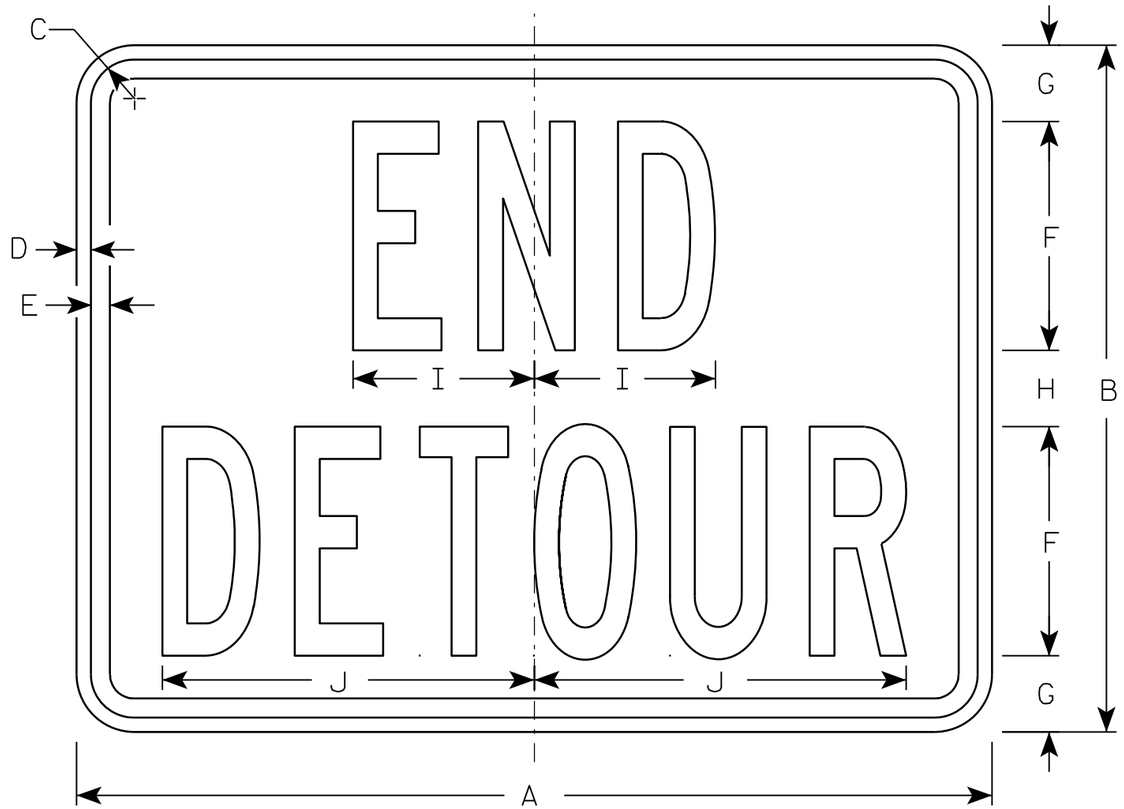
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 434	E



M4-8A

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 - 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																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

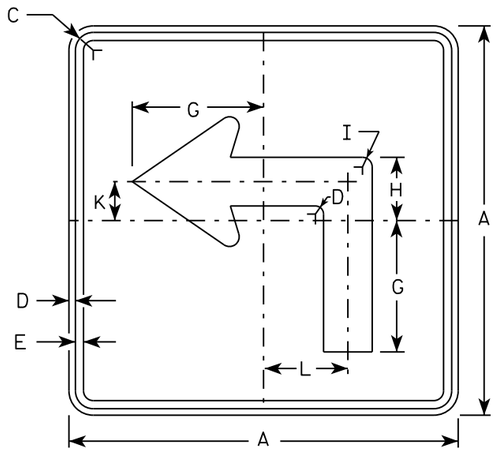
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

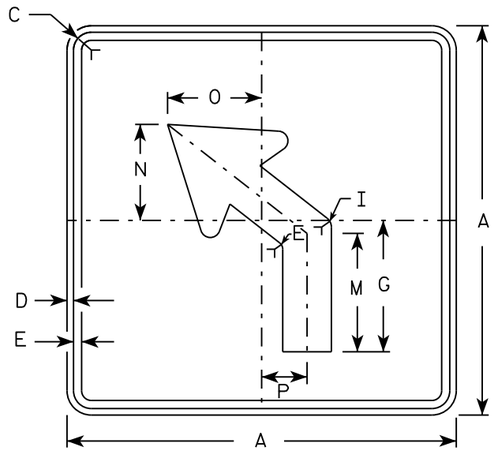
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

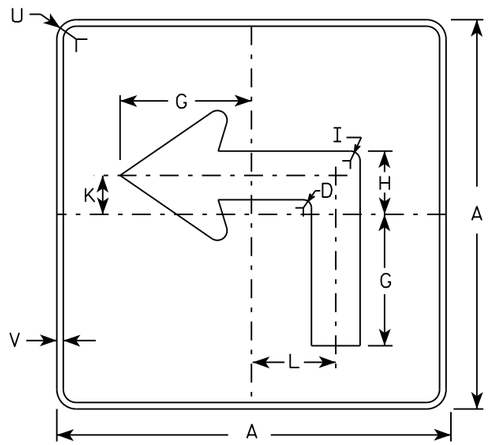
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 435	E



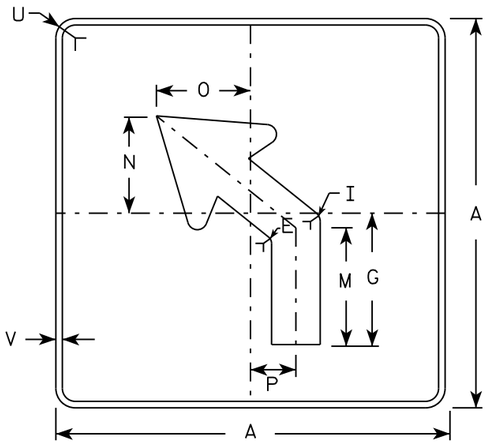
M5-1L
MM5-1L
MO5-1L
MP5-1L



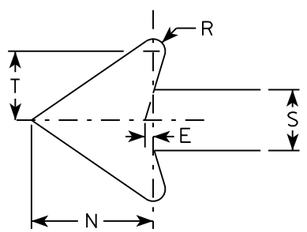
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective 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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

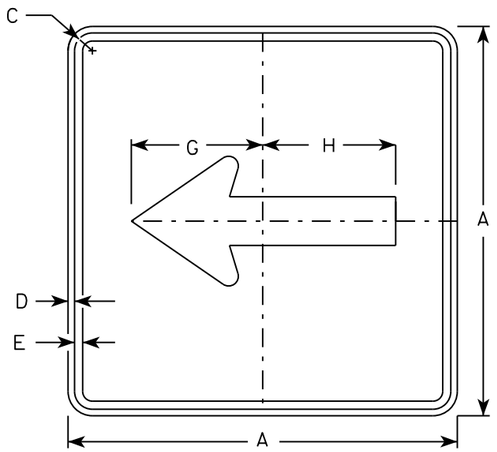
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

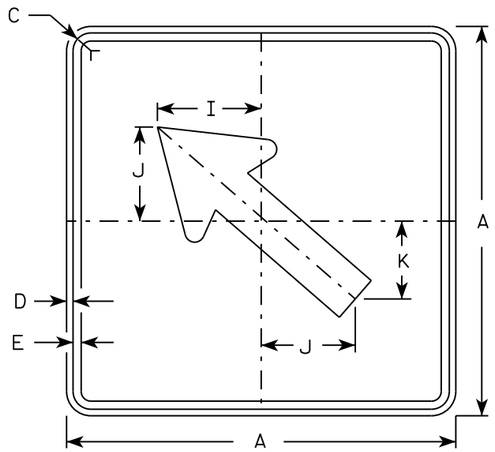
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



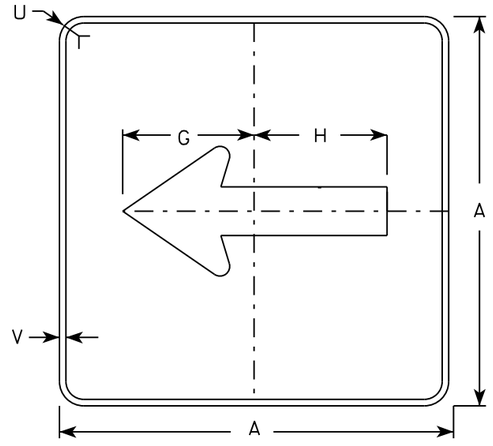
M6-1
MM6-1
MO6-1
MP6-1



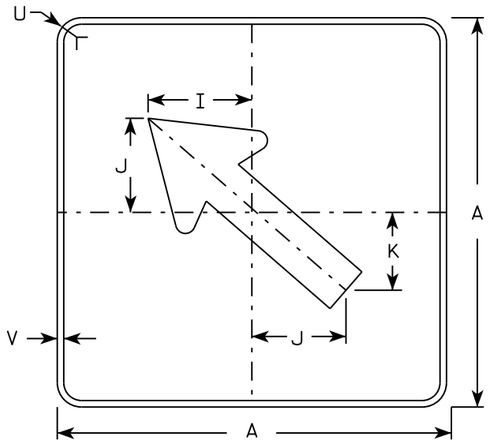
M6-2
MM6-2
MO6-2
MP6-2

NOTES

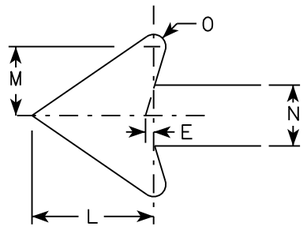
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   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
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

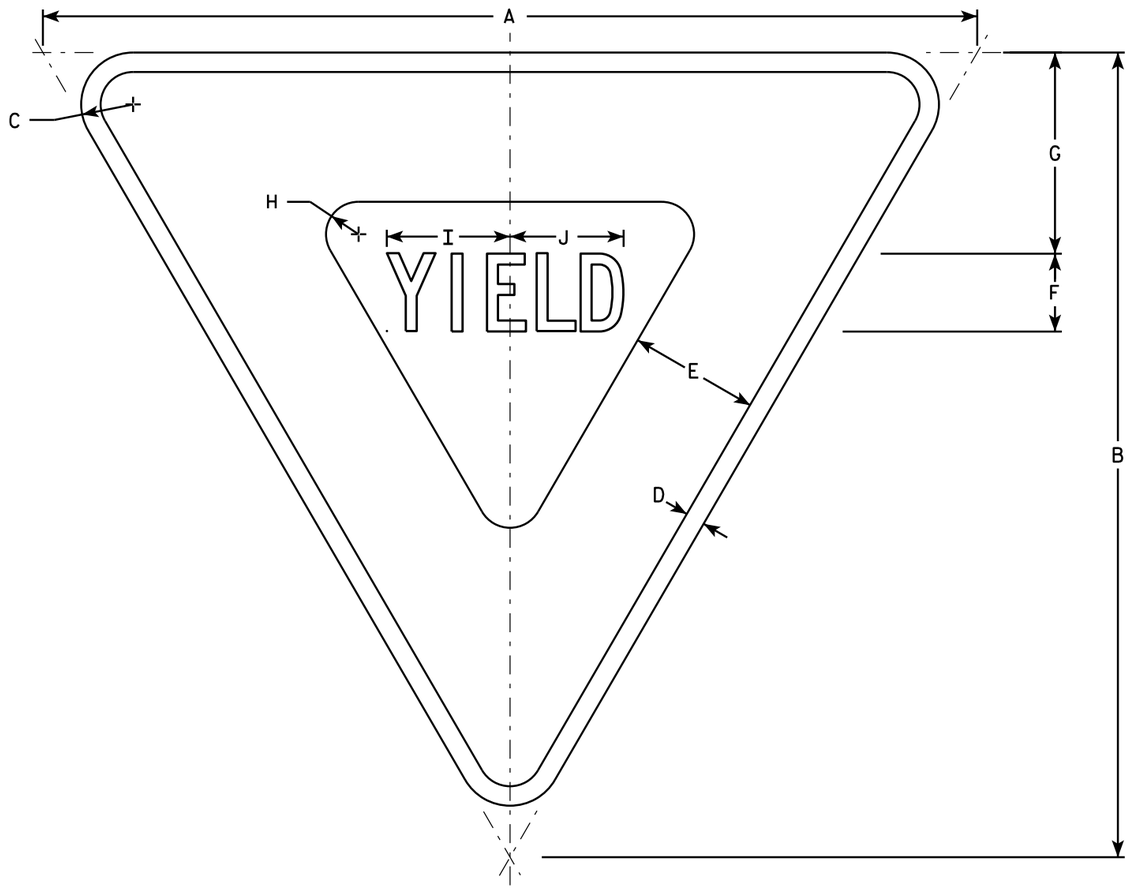
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 437 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

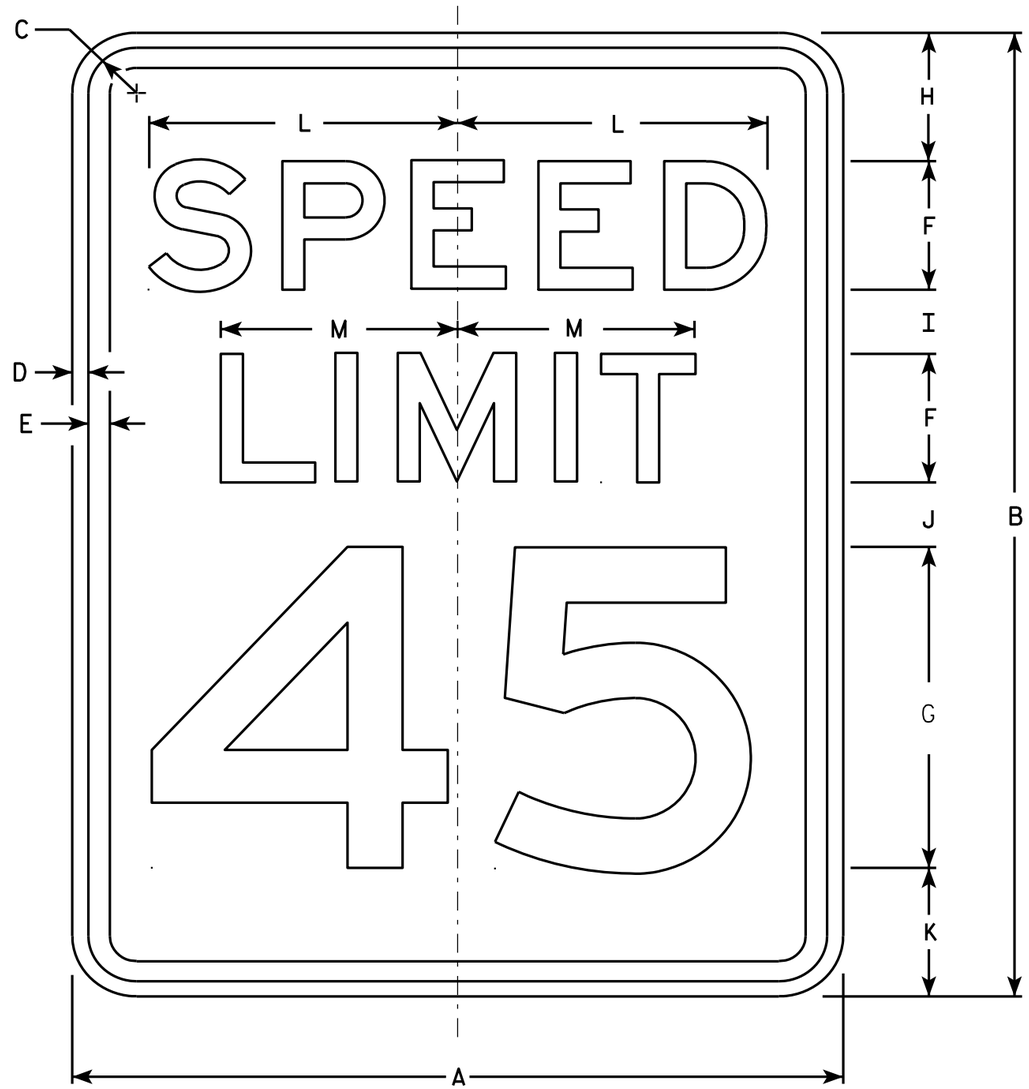
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



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

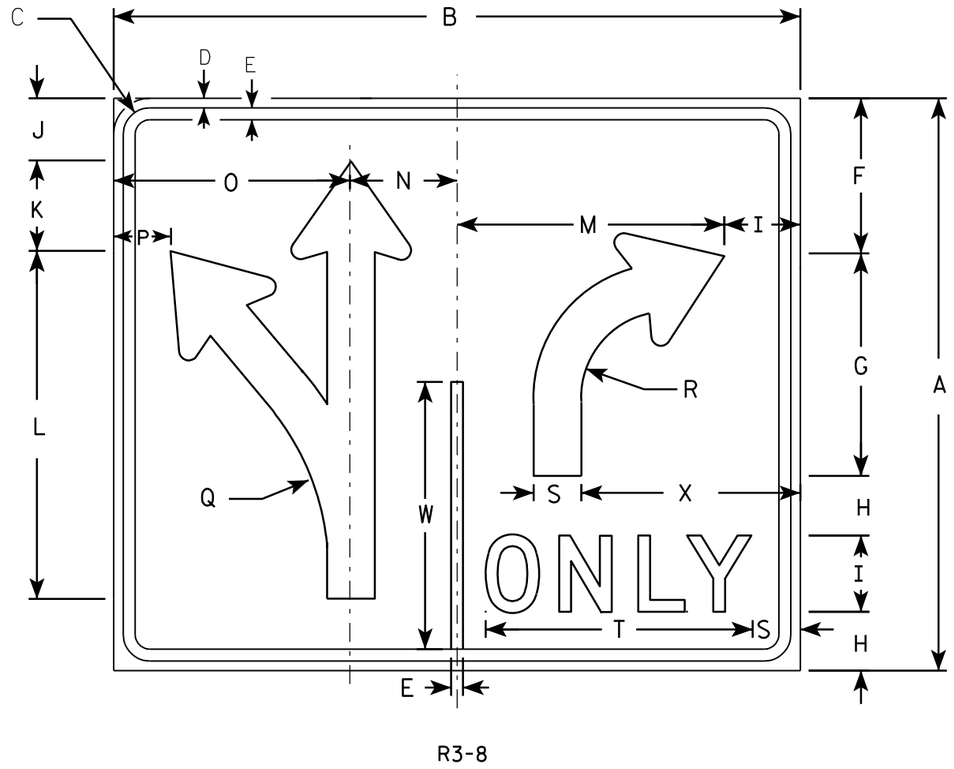
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

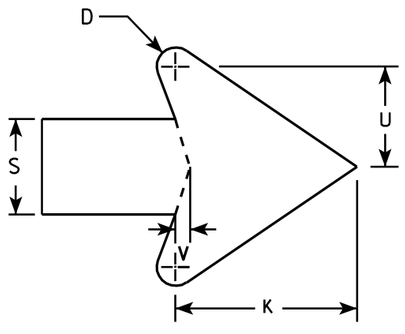
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 439 | E



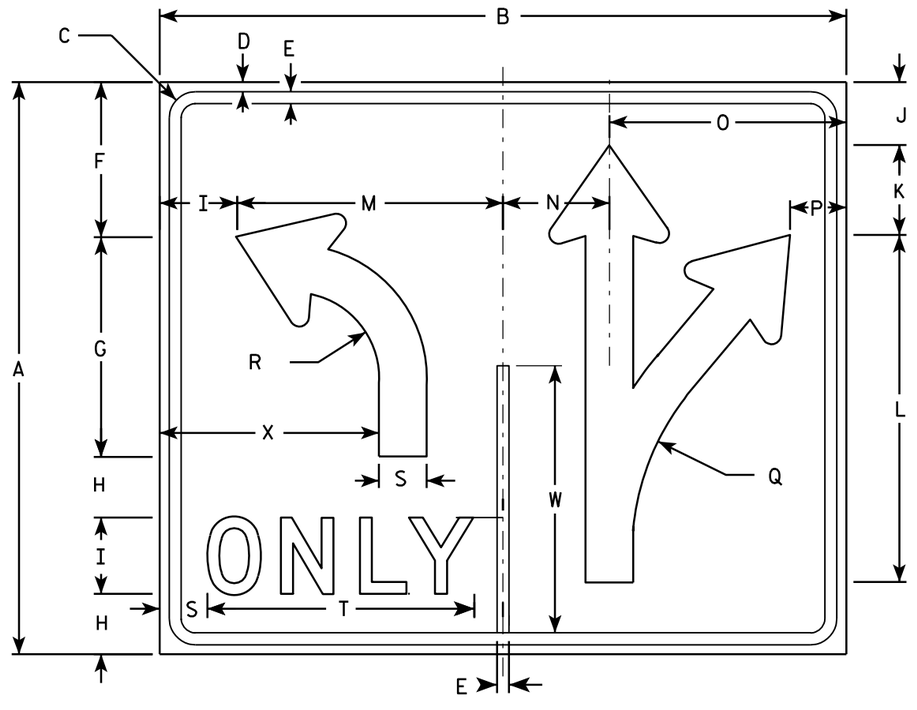
R3-8



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - 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.



R3-8A

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	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

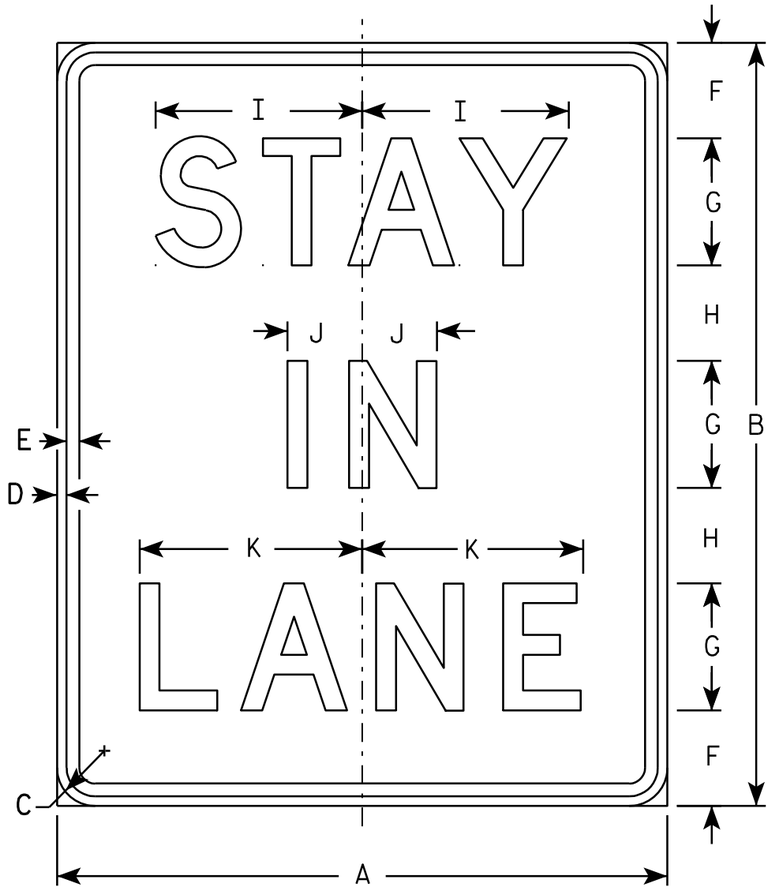
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 440	E



R4-9

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	3/8	3	4	3	6 1/2	2 3/8	7																3.0
2S	24	30	1 1/8	3/8	1/2	3 5/8	5	3 7/8	8 1/8	3	8 3/4																5.0
2M	24	30	1 1/8	3/8	1/2	3 5/8	5	3 7/8	8 1/8	3	8 3/4																5.0
3	36	48	1 3/8	1/2	5/8	8 1/4	7	5 1/4	11 3/8	4 1/8	12 1/4																12.0
4	36	48	1 3/8	1/2	5/8	8 1/4	7	5 1/4	11 3/8	4 1/8	12 1/4																12.0
5	48	60	2 1/4	3/4	1	7 1/2	10	7 1/2	16 1/4	5 7/8	17 1/2																20.0

STANDARD SIGN
R4-9

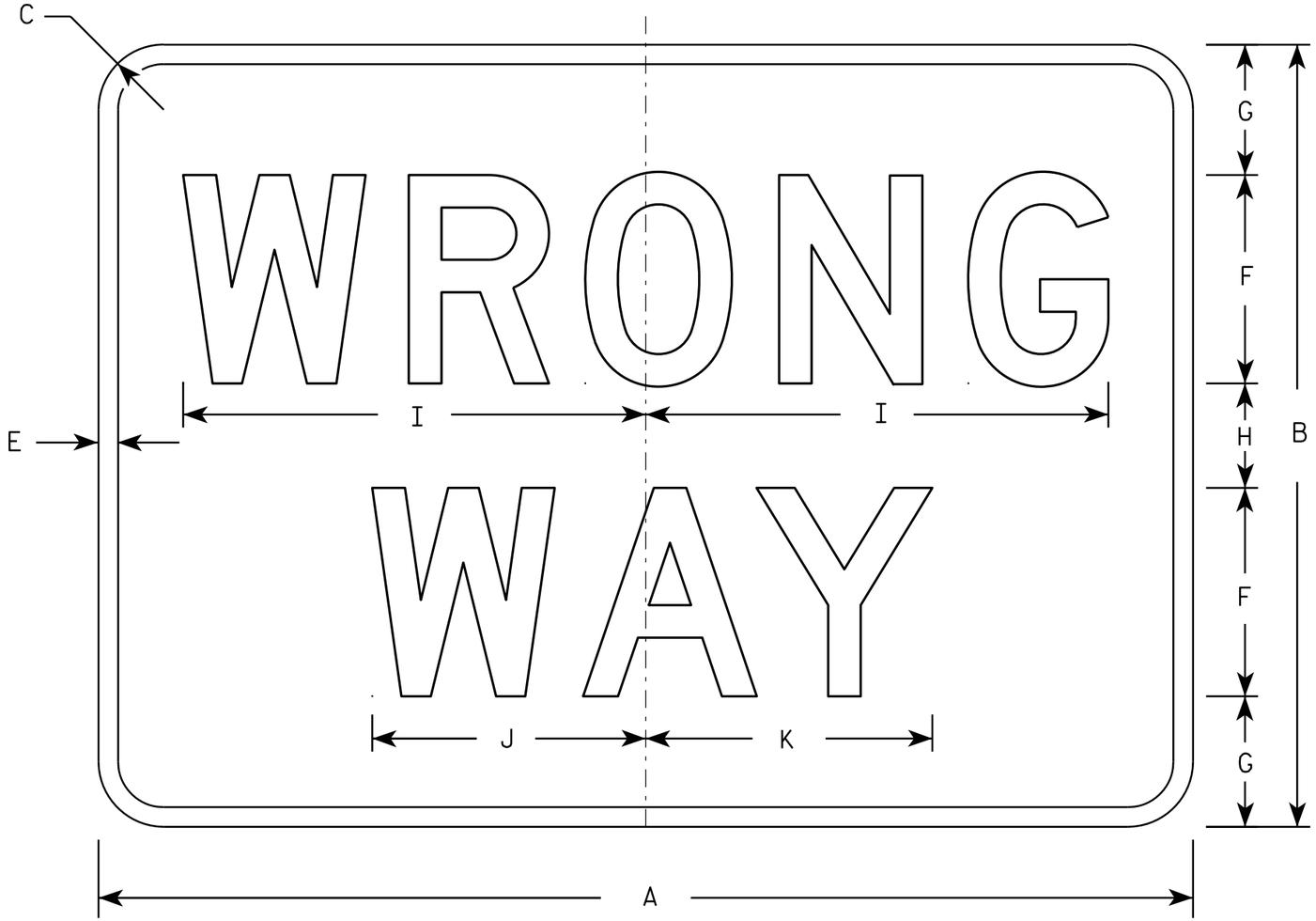
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-9.2

PROJECT NO:

SHEET NO: 441 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: 442	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

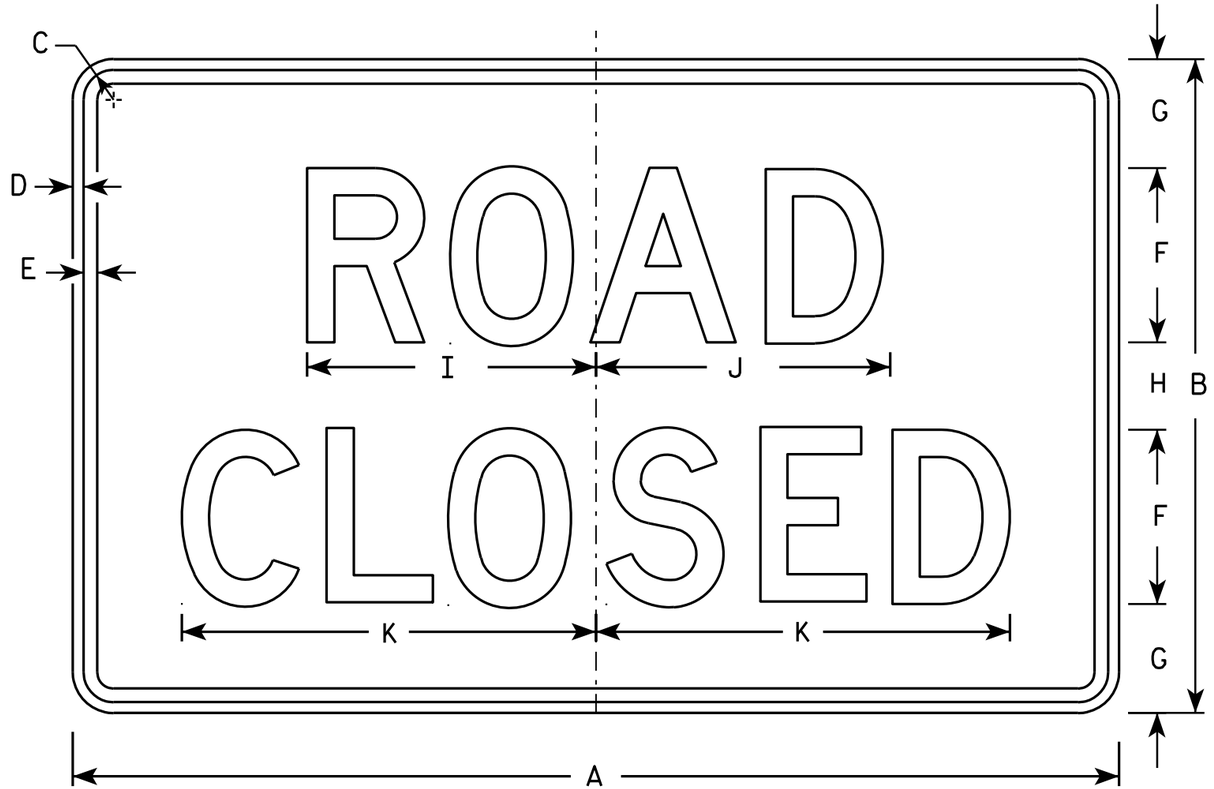
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

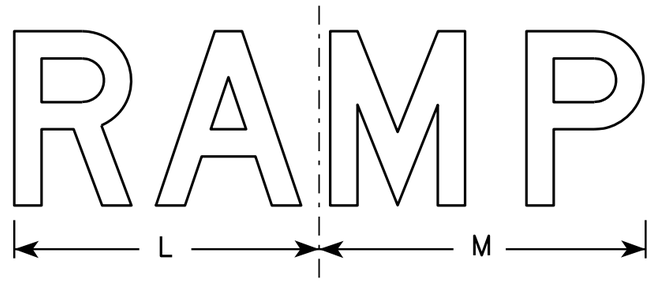
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 443 | E



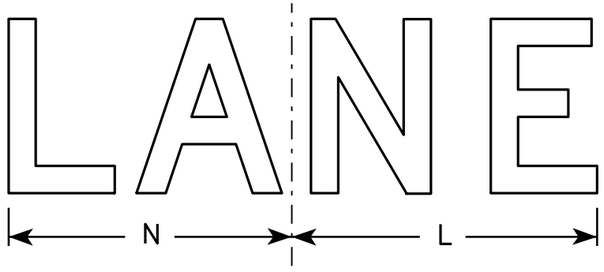
R11-2

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

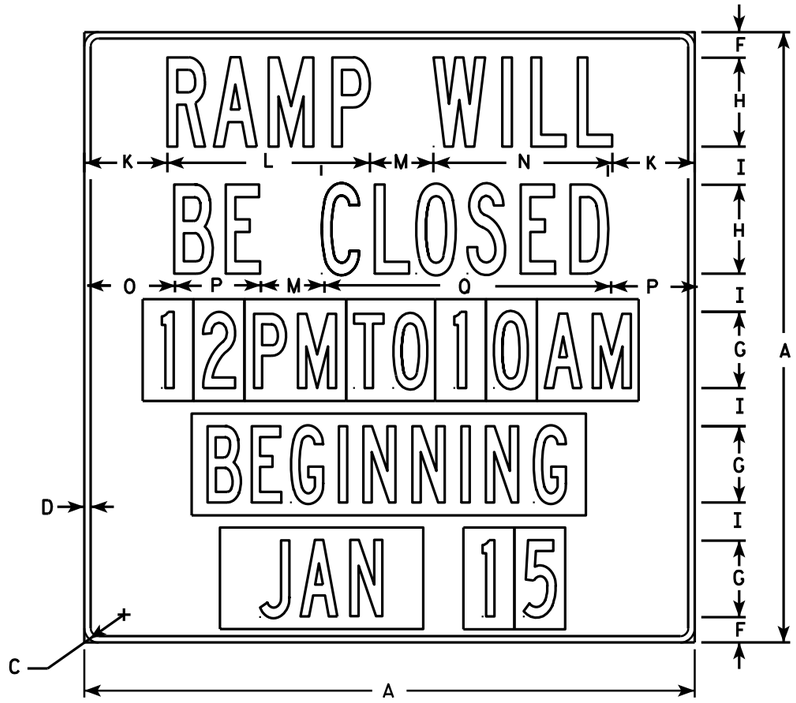
STANDARD SIGN
R11-2

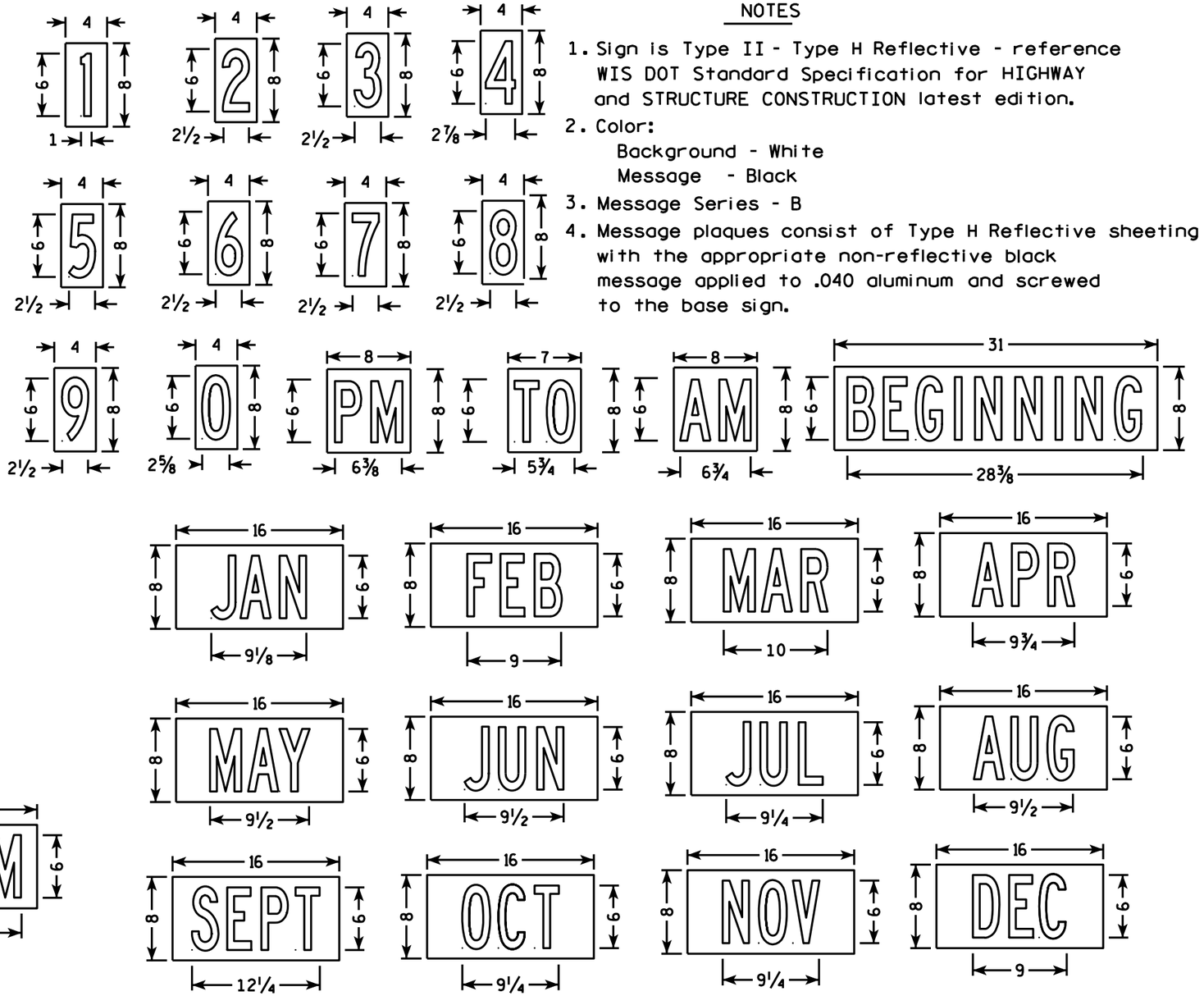
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E





NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

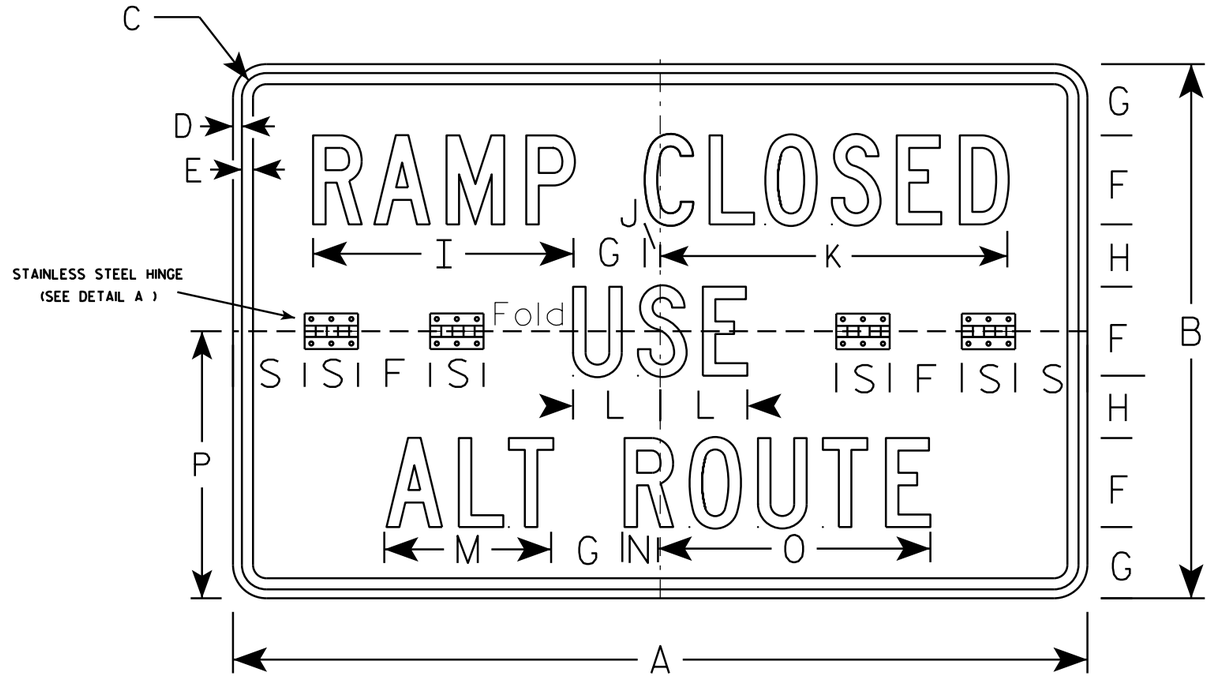
STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

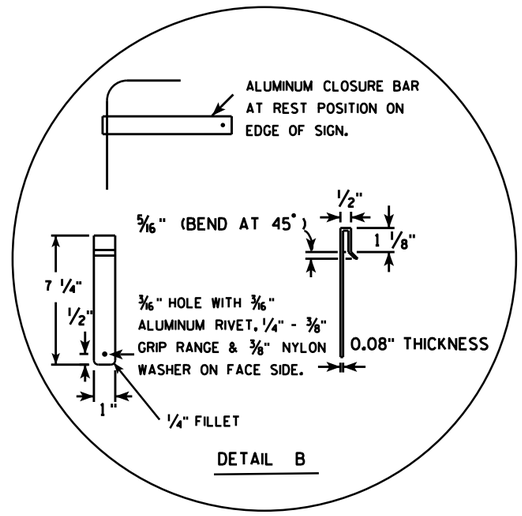
DATE 4/1/11 PLATE NO. R11-51.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 445	E



R11-54F

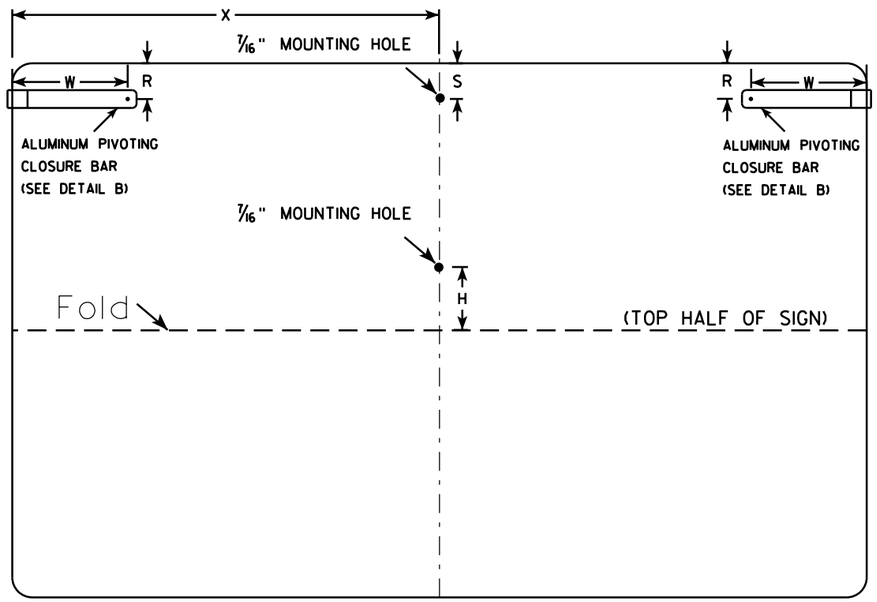
DETAIL A



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

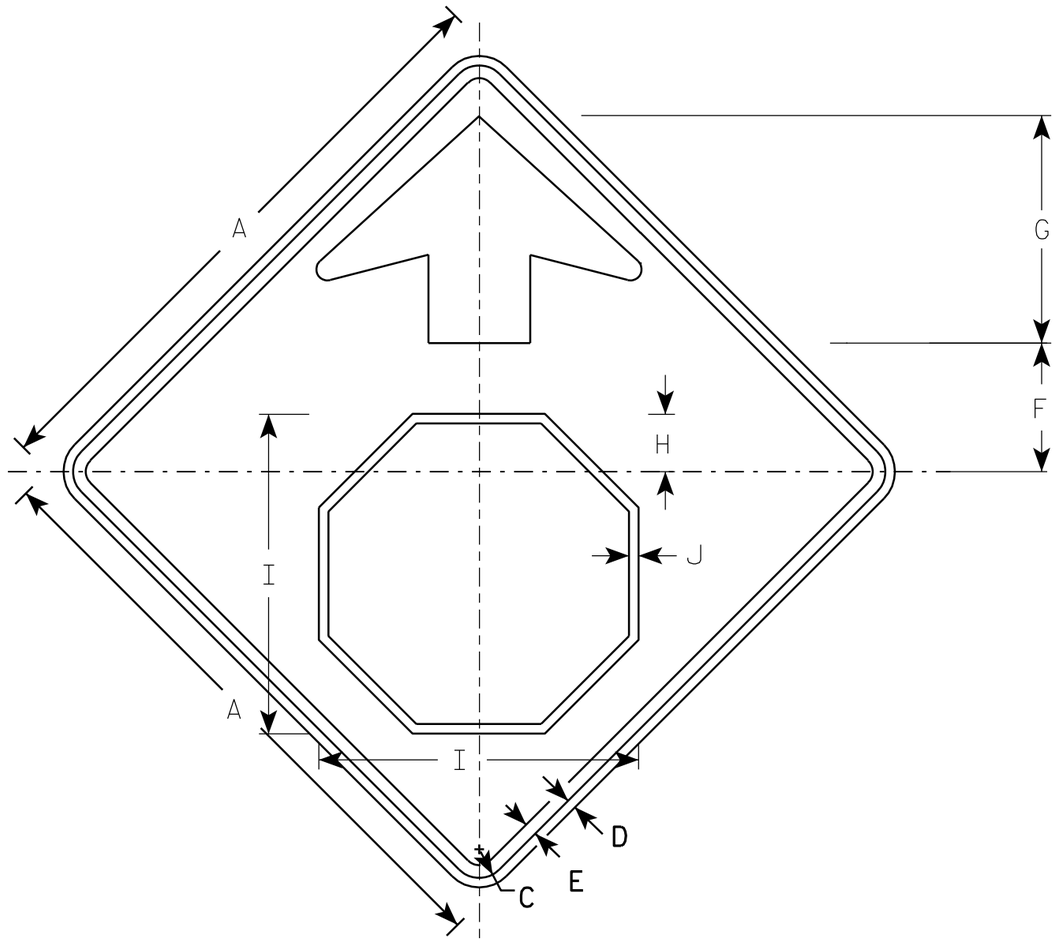
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

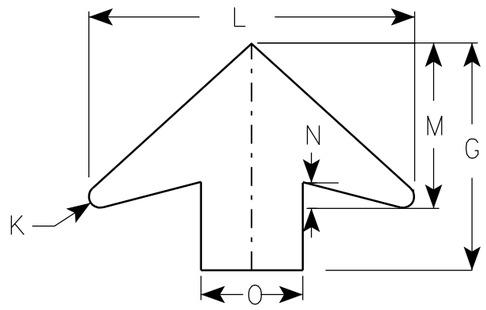
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42



W3-1

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
   Stop 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	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

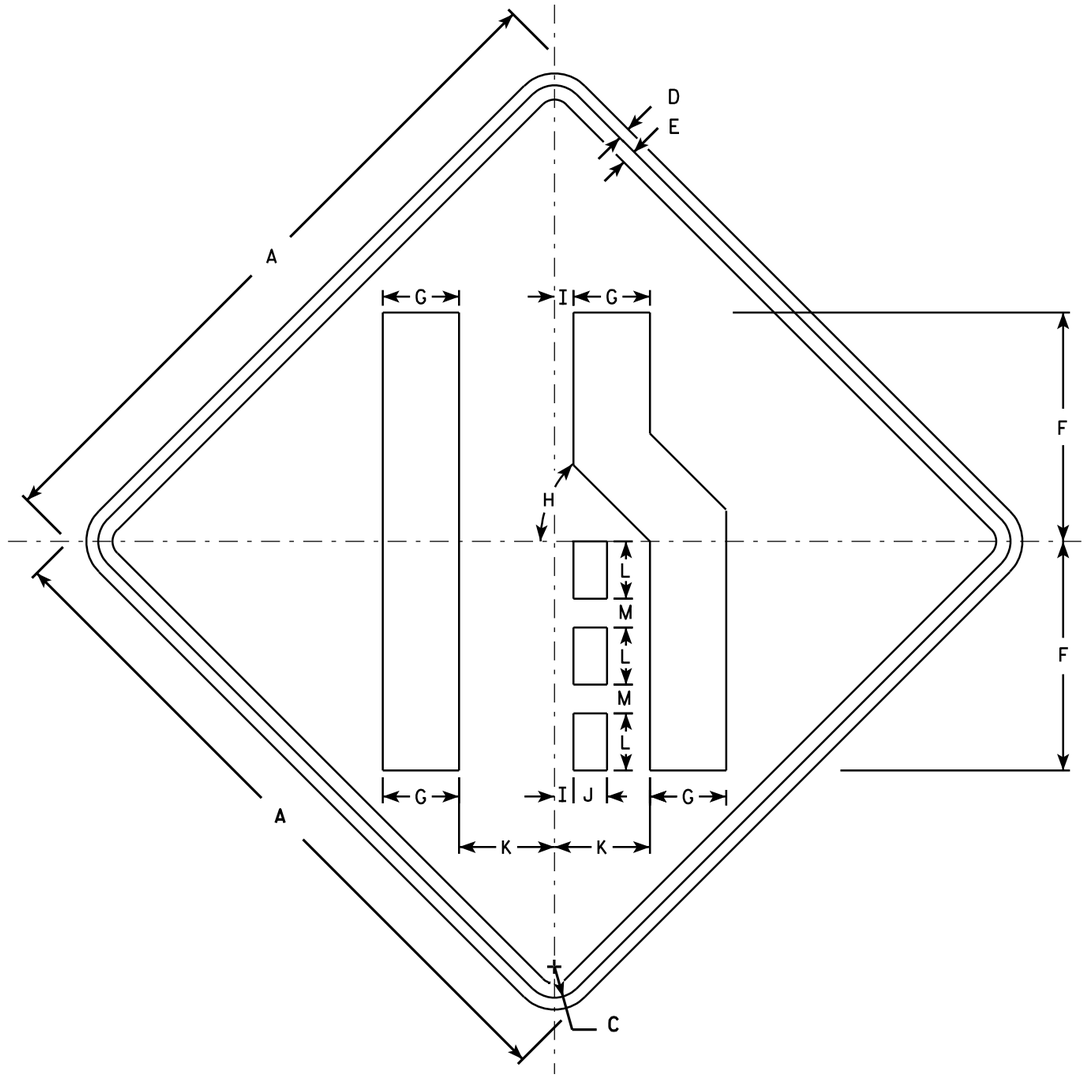
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 447 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

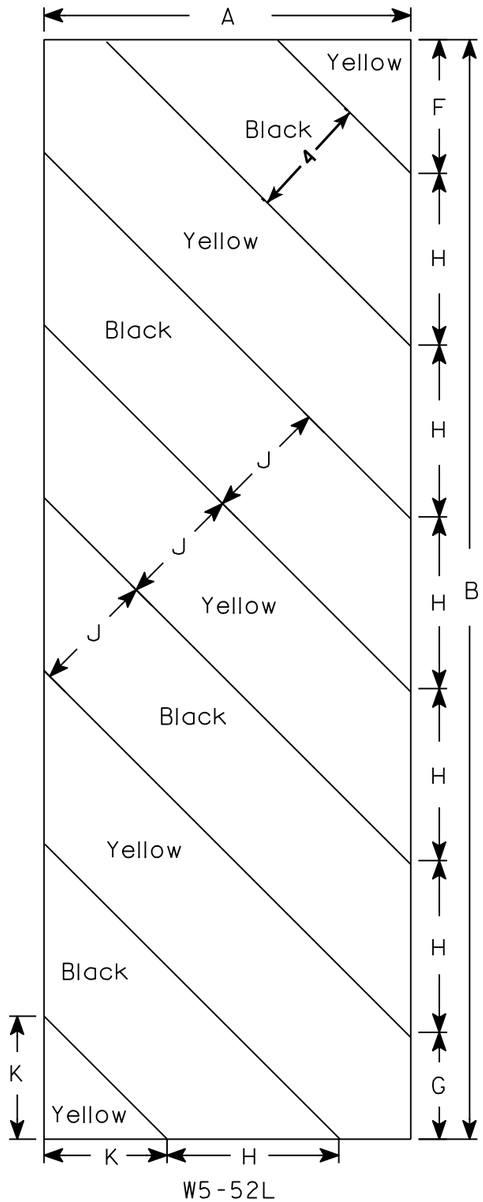
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

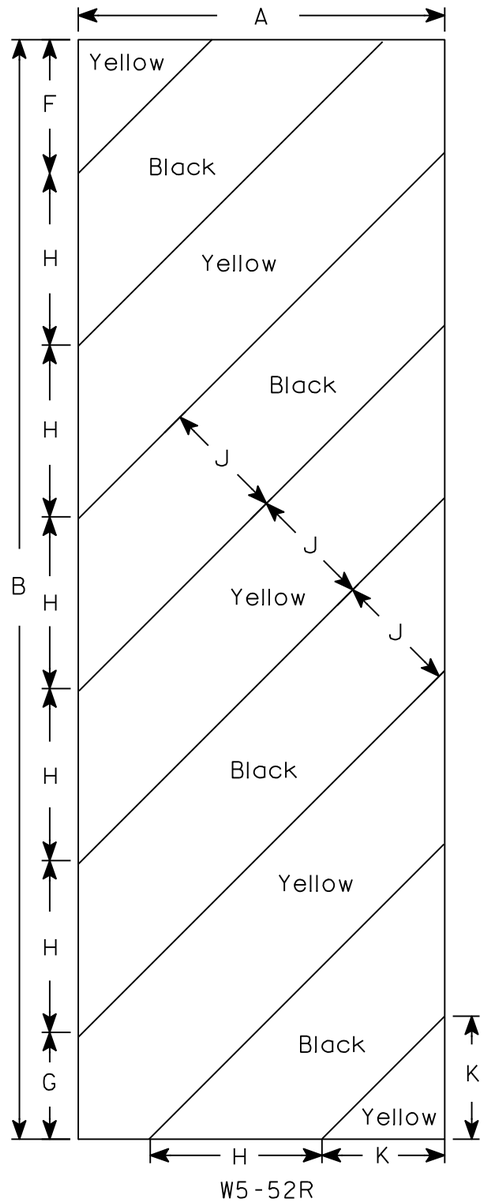
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 448 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. 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

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

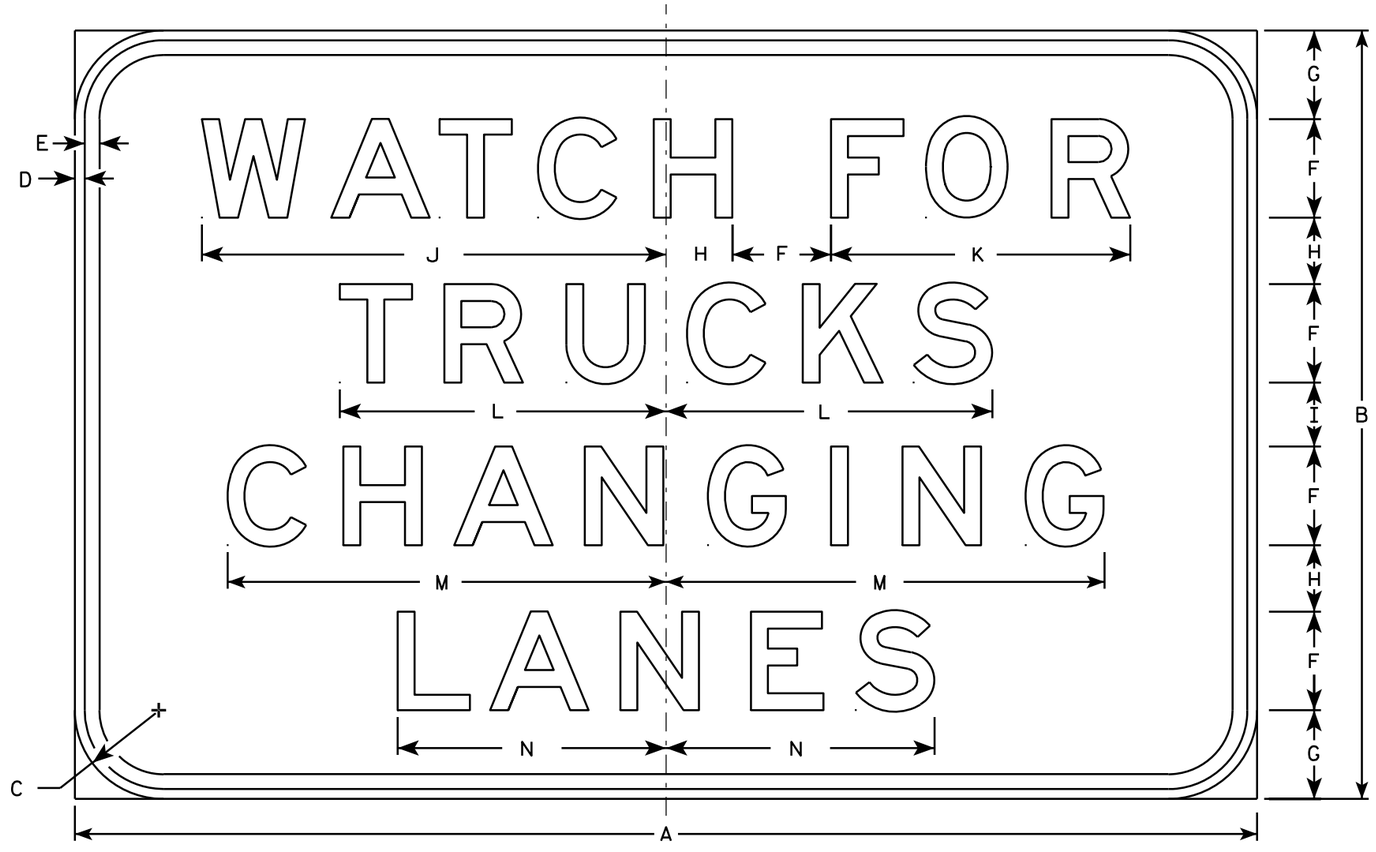
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 449 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W552.DGN PLOT DATE : 29-MAY-2012 13:03 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.961899:1.000000



W7-61

NOTES

1. Sign is Type I- Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black Non-Reflective
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																											
2S																											
2M																											
3																											
4																											
5	120	78	9	1	1 1/2	10	9	6 3/4	6 1/2	47 1/8	30 3/8	33 1/8	44 1/2	27 1/4													65.0

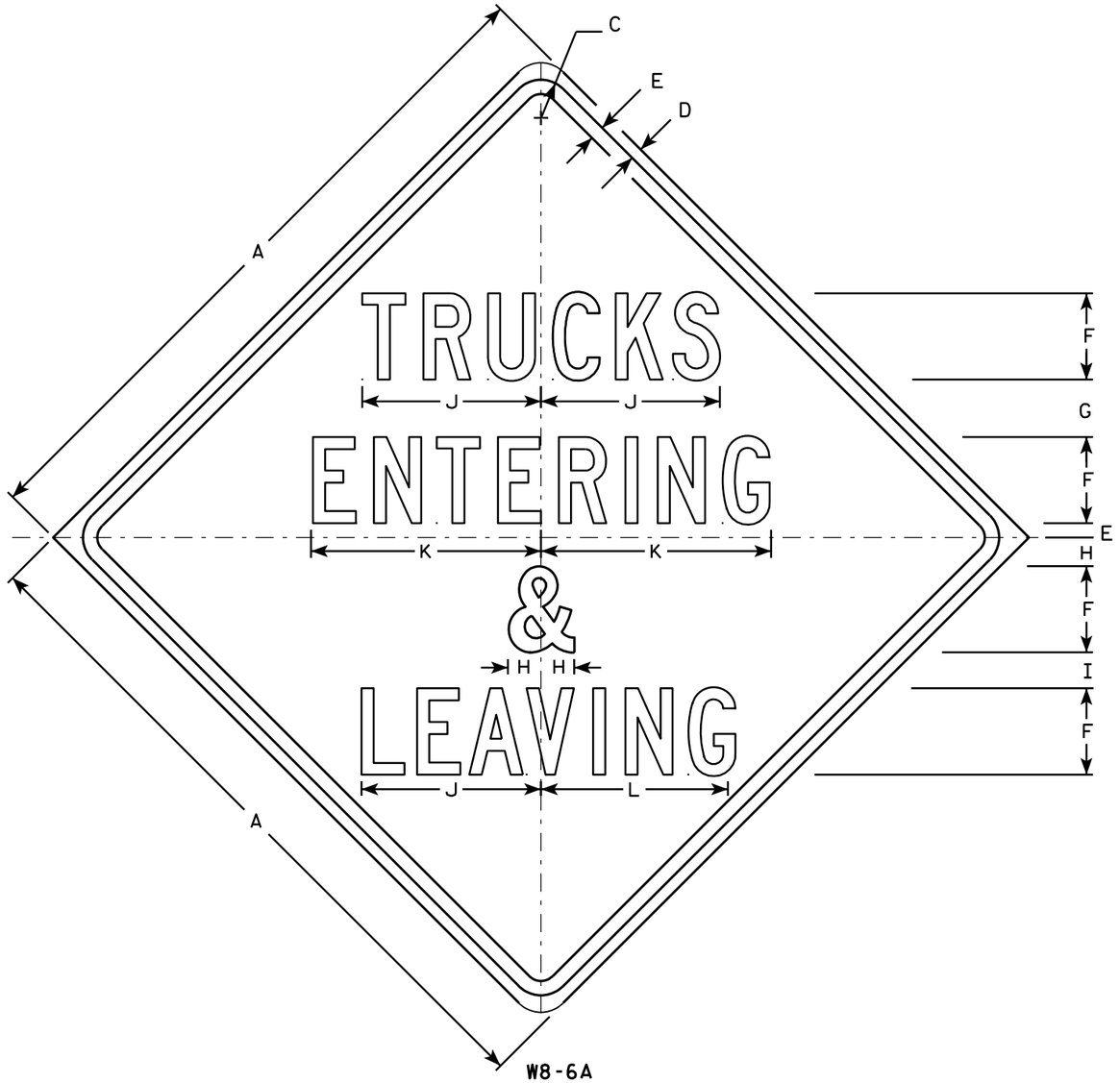
STANDARD SIGN
W7-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/14/13 PLATE NO. W7-61.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 450	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

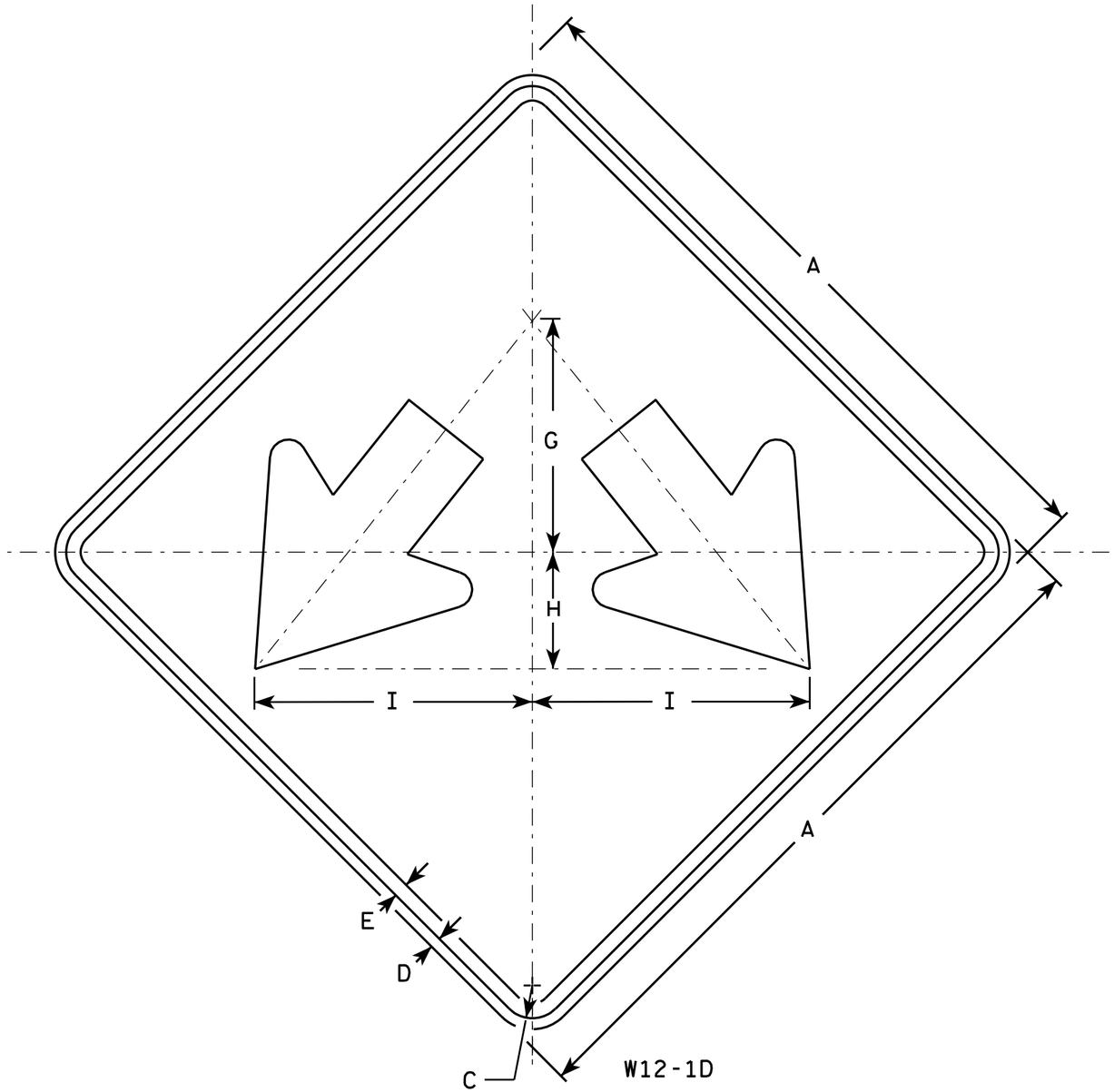
STANDARD SIGN
W8-6A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

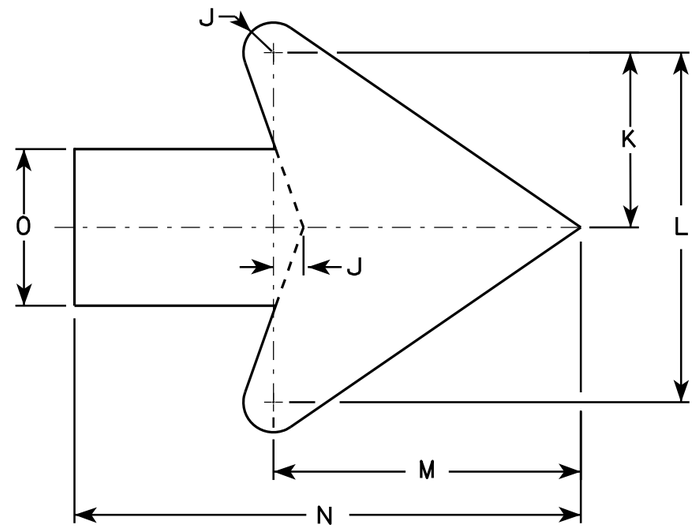
DATE 3/23/11 PLATE NO. W8-6A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 451	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

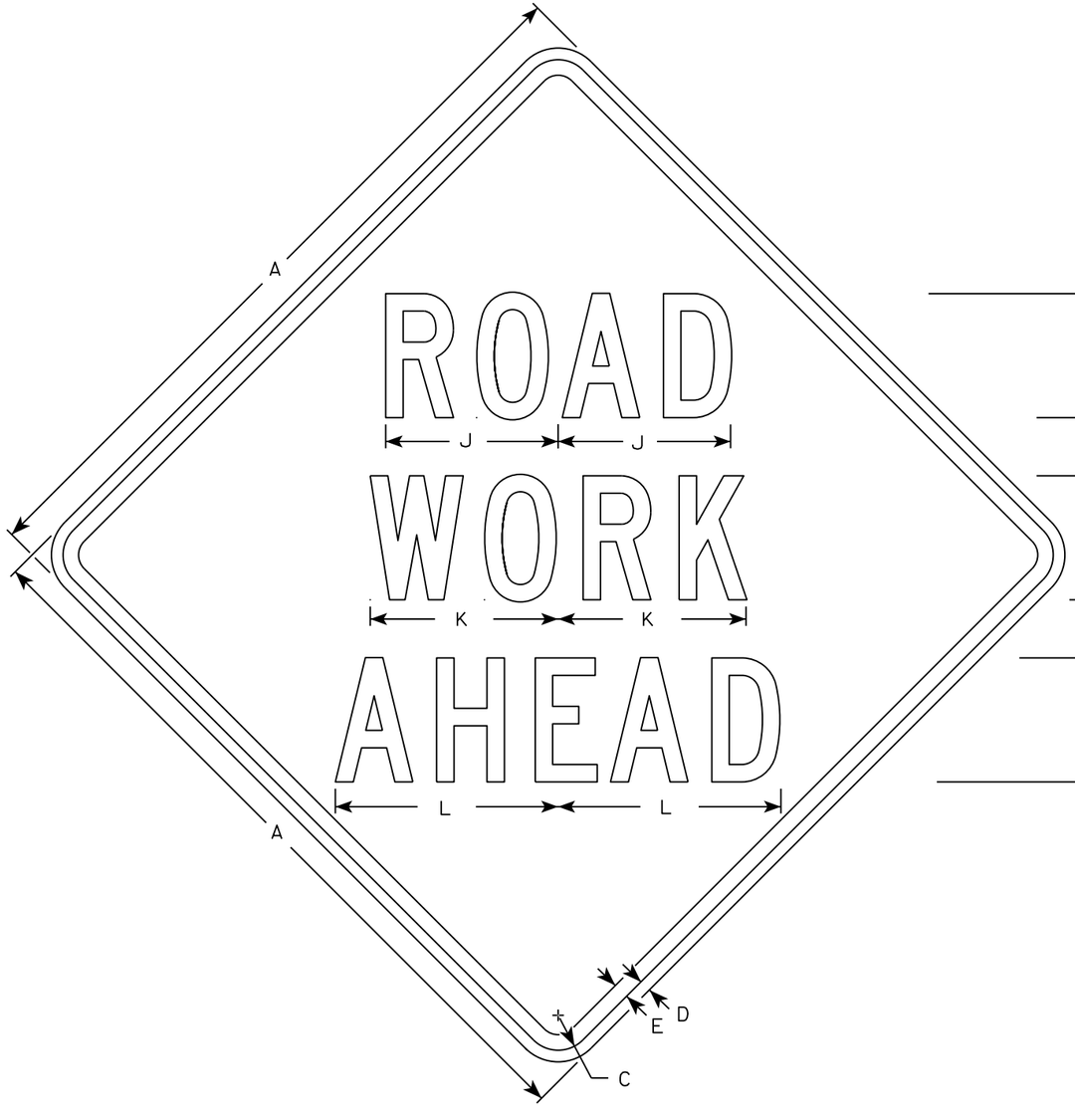
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 452	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W121D.DGN PLOT DATE : 13-MAR-2013 13:26 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.713802:1.000000

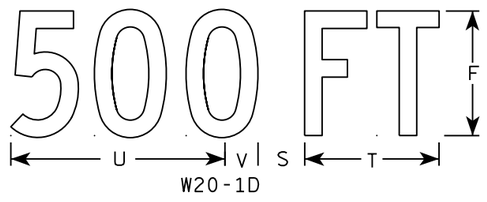
WISDOT/CADDS SHEET 42

7

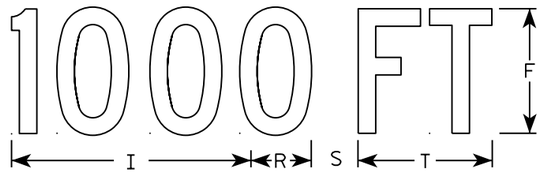
7



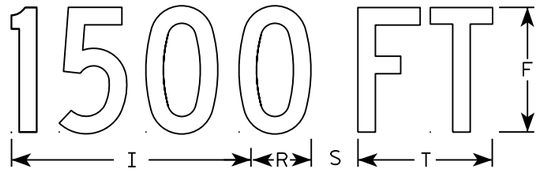
W20-1A



W20-1D



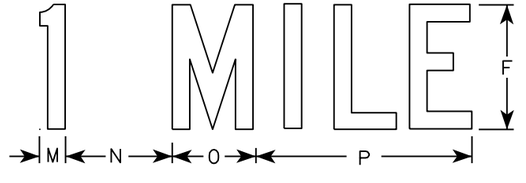
W20-1C



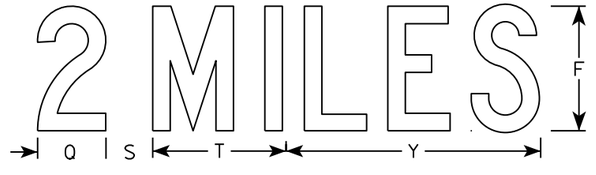
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
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	2 1/4	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	4 3/8	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	4 3/8	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	4 3/8	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	4 3/8	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	4 3/8	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

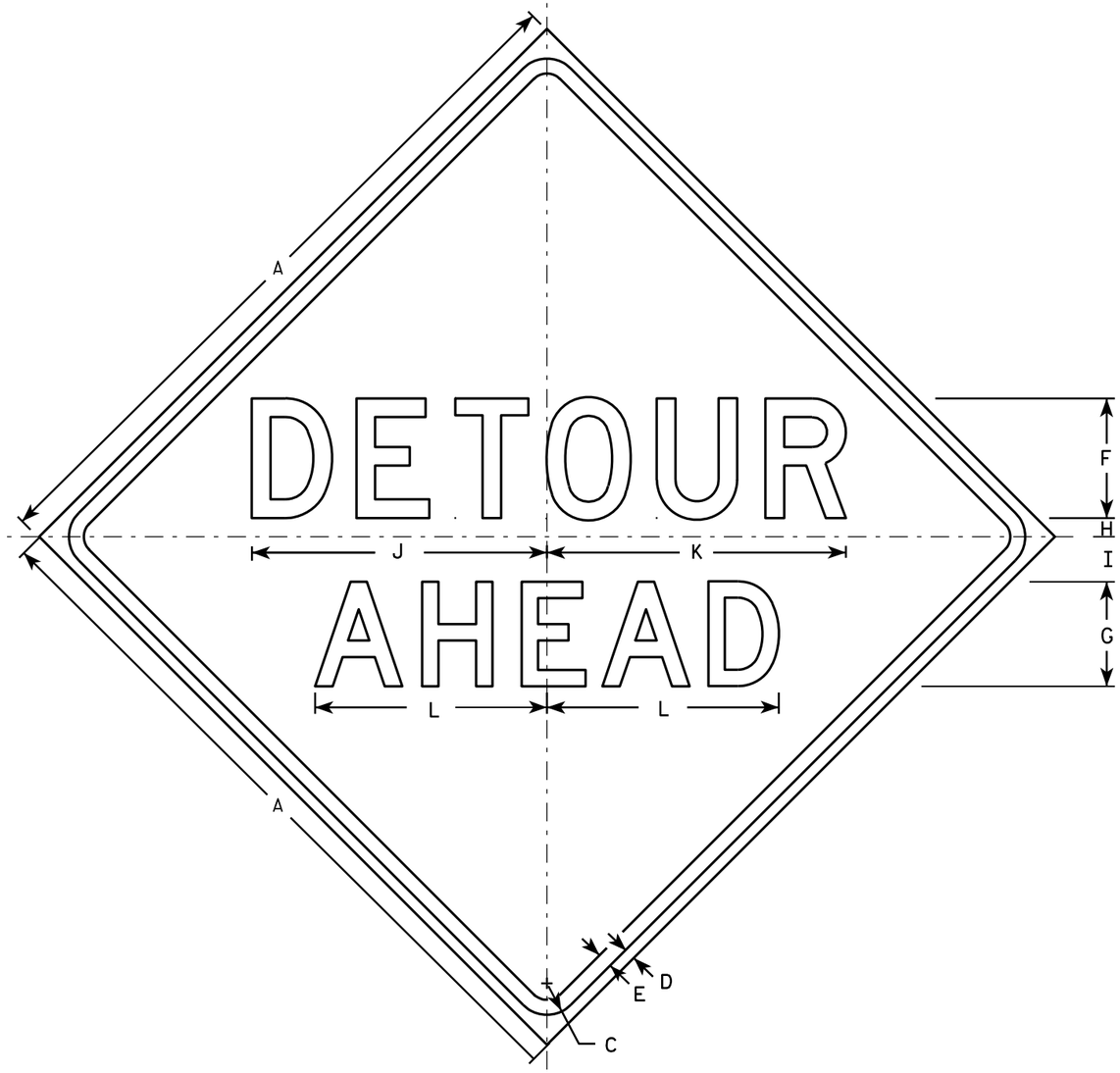
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

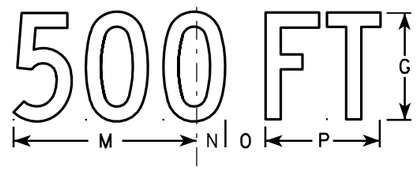
PROJECT NO:

SHEET NO: E

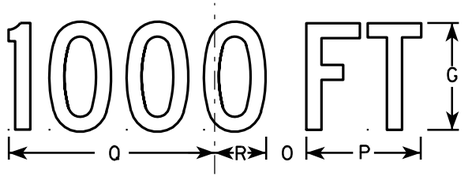
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



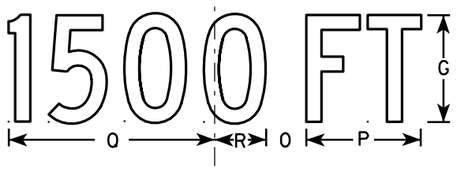
W20-2A



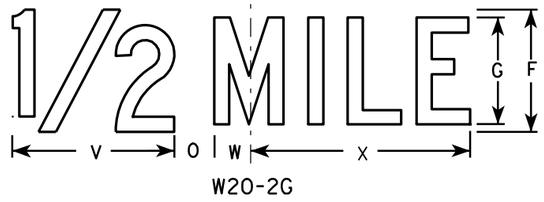
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

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. Line 1 is Series D.
   Line 2 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	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

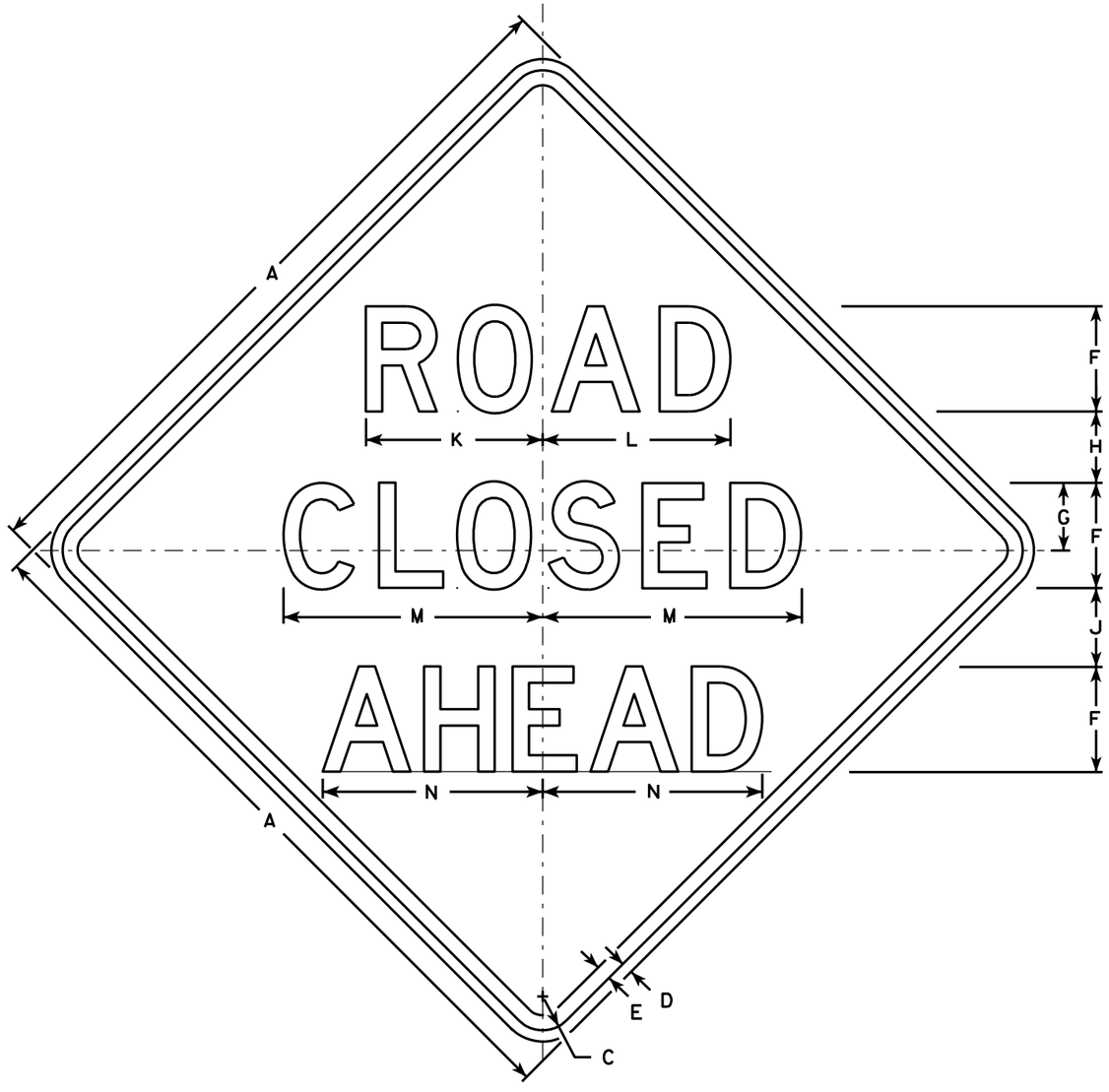
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

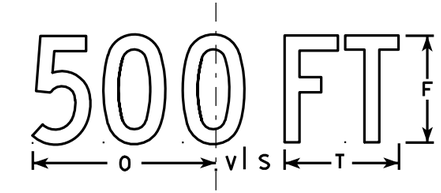
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

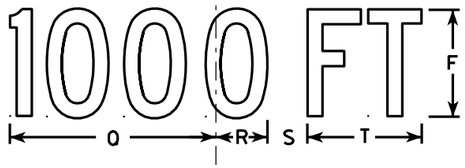
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 454 | E



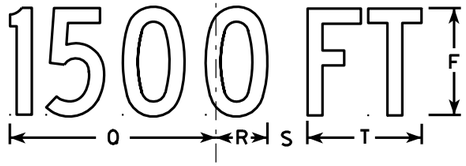
W20-3A



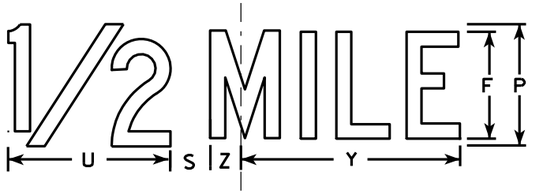
W20-3D



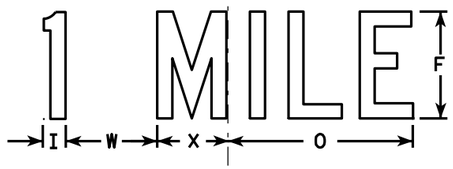
W20-3C



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.

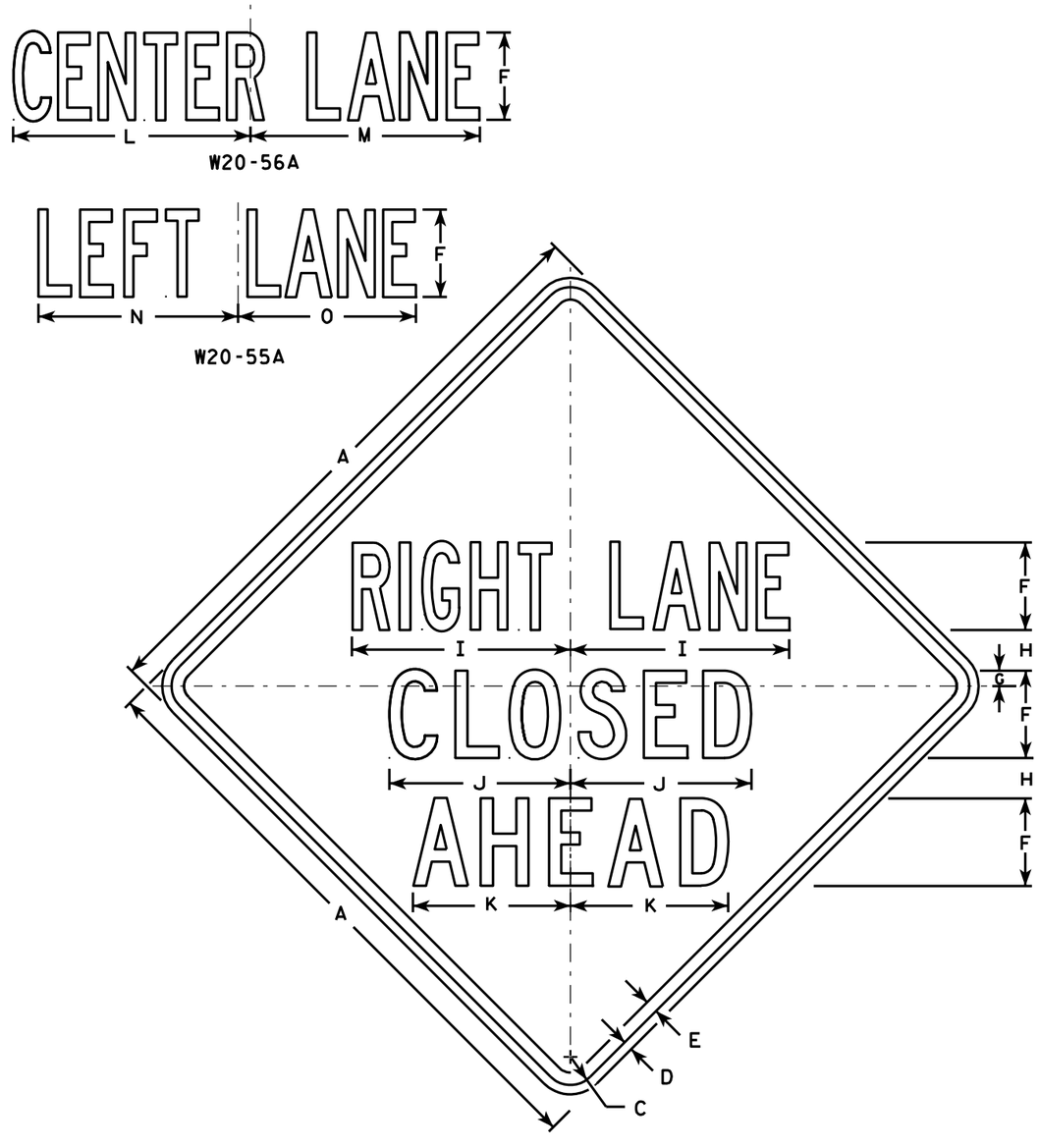
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	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

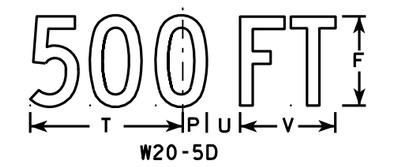
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

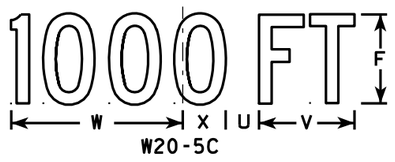
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 455 | E



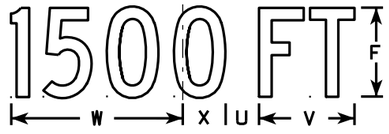
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

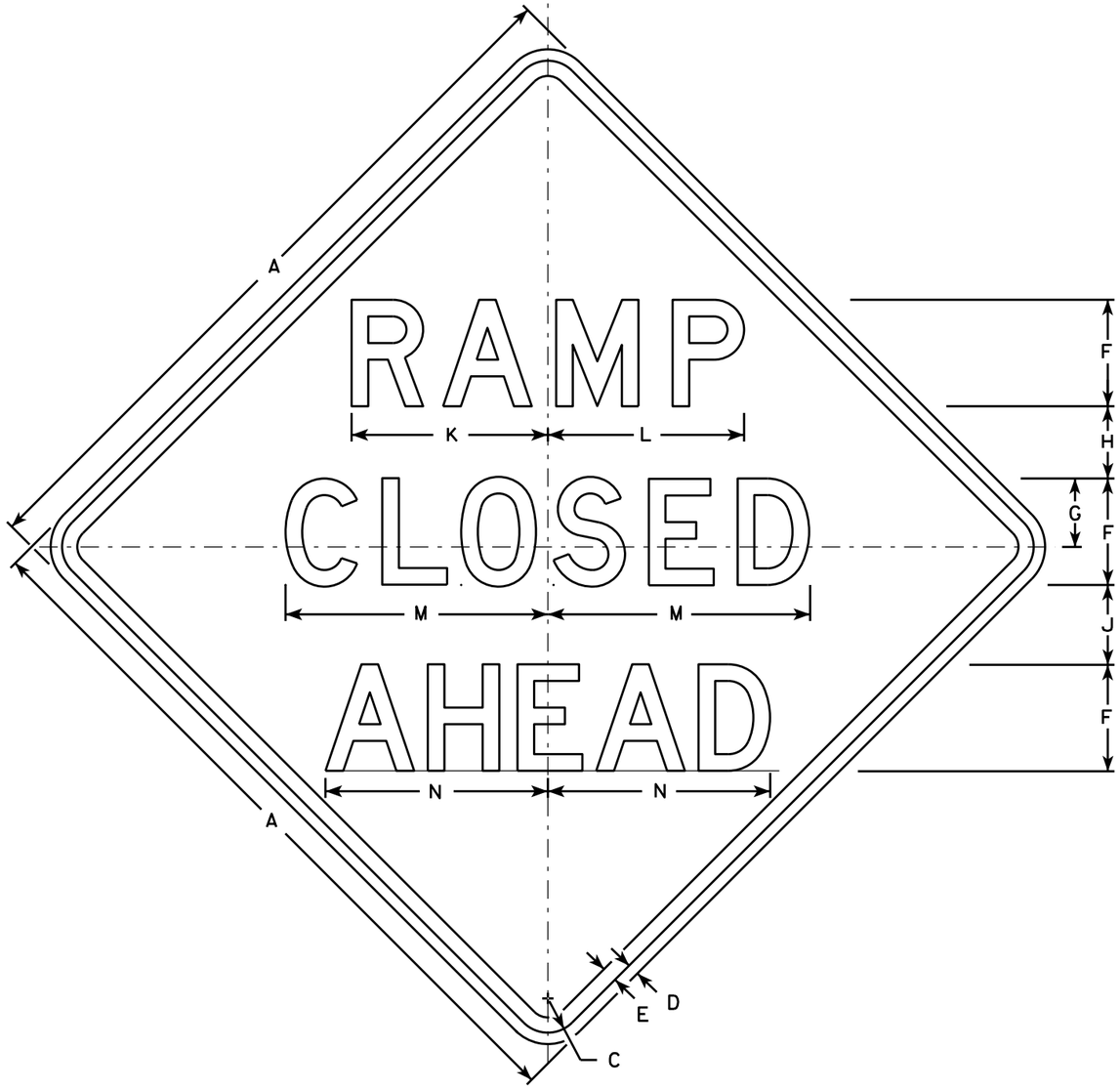
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

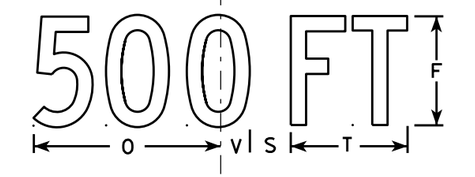
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 456	E

7

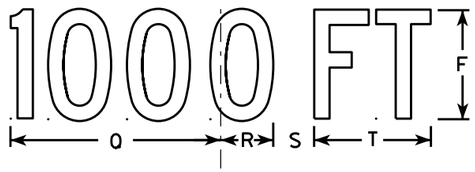
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



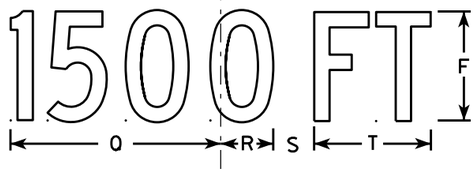
W20-53A



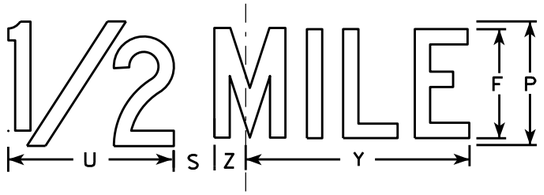
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

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	9 1/4	9 1/4	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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
W20-53A,B,C,D,F,G

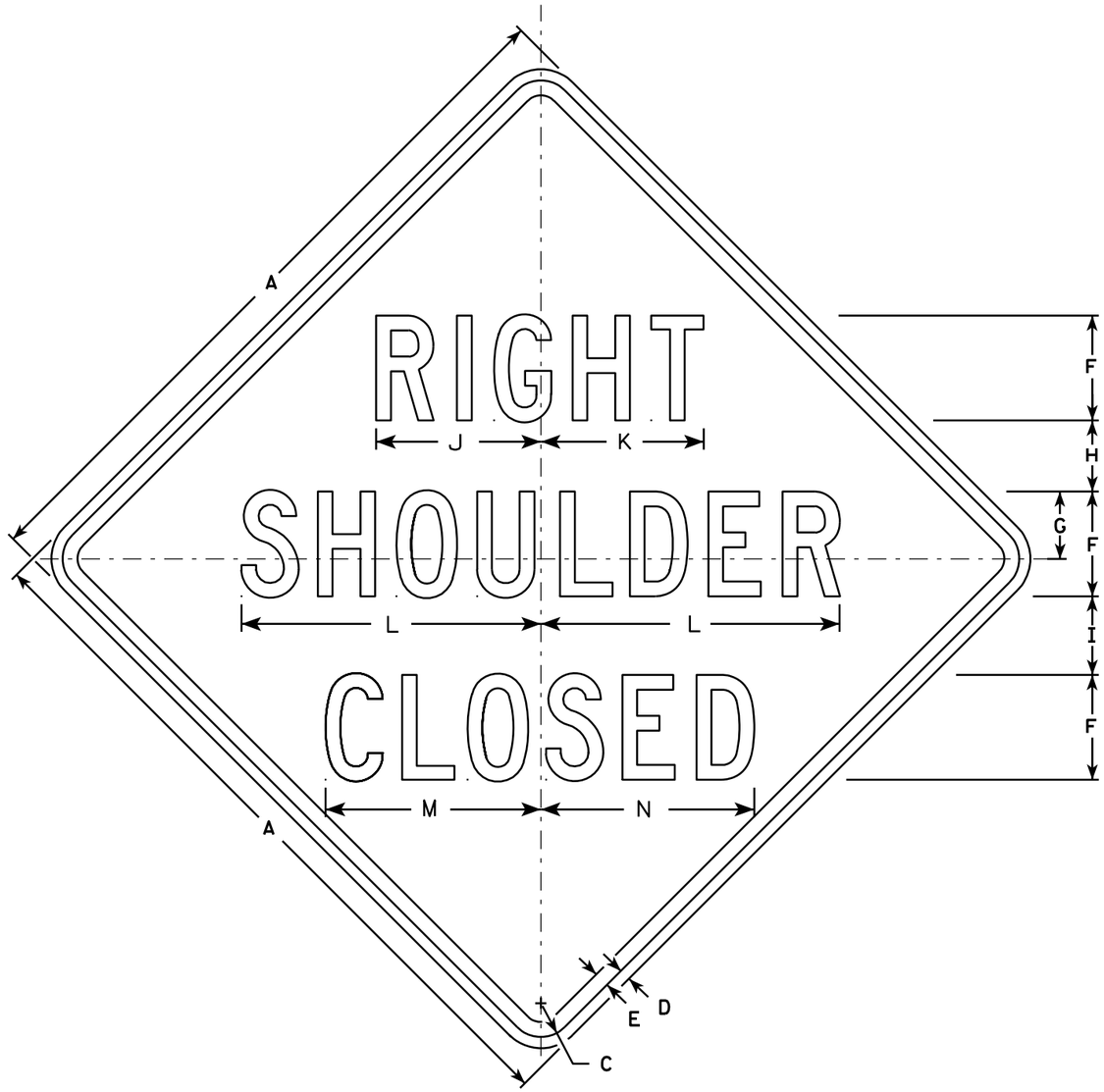
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

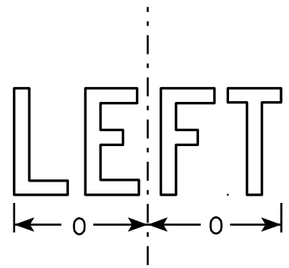
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



W21-5A

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.



W21-5AL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	4	7 7/8	7 3/4	14 1/4	10 1/4	10 1/8	6 1/4												9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0

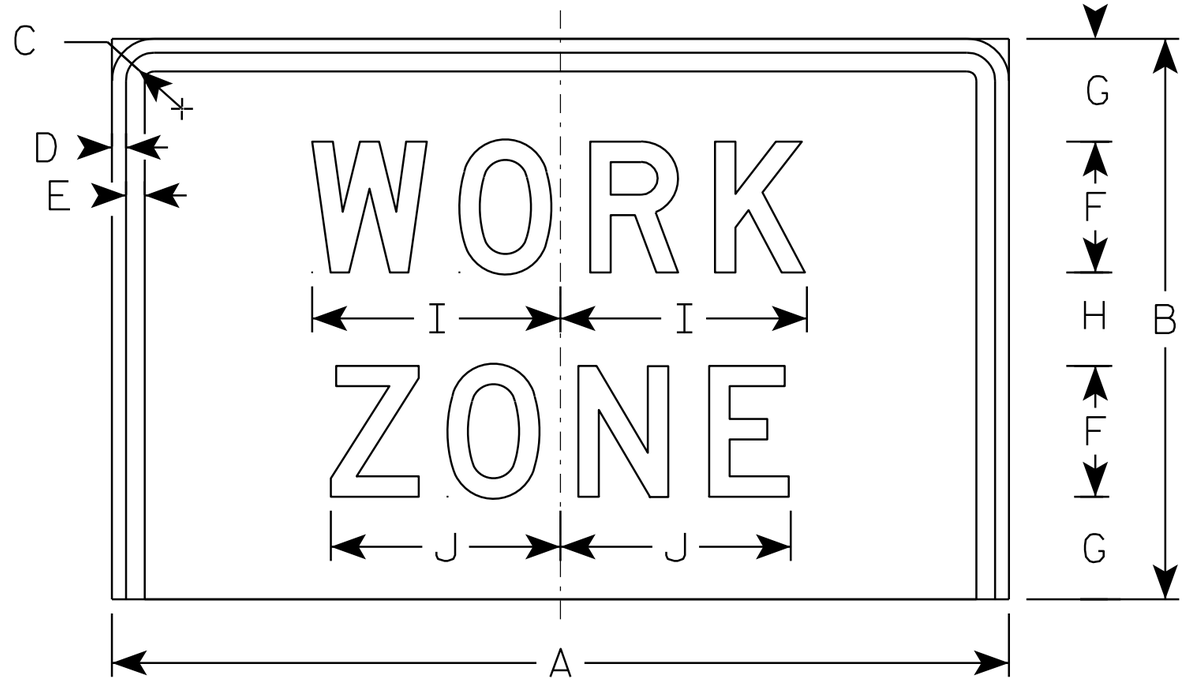
STANDARD SIGN
W21-5A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5A.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 458	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																											

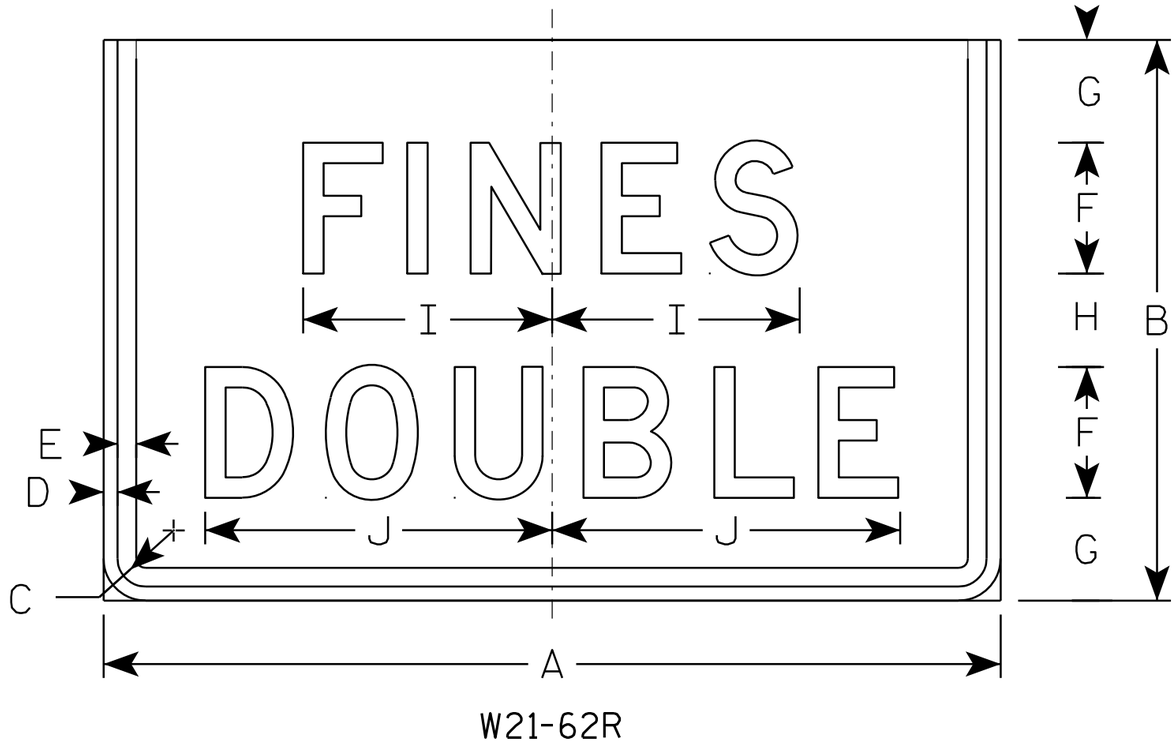
STANDARD SIGN
W21-620

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: 459	E



W21-62R

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
W21-62R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-62R.2

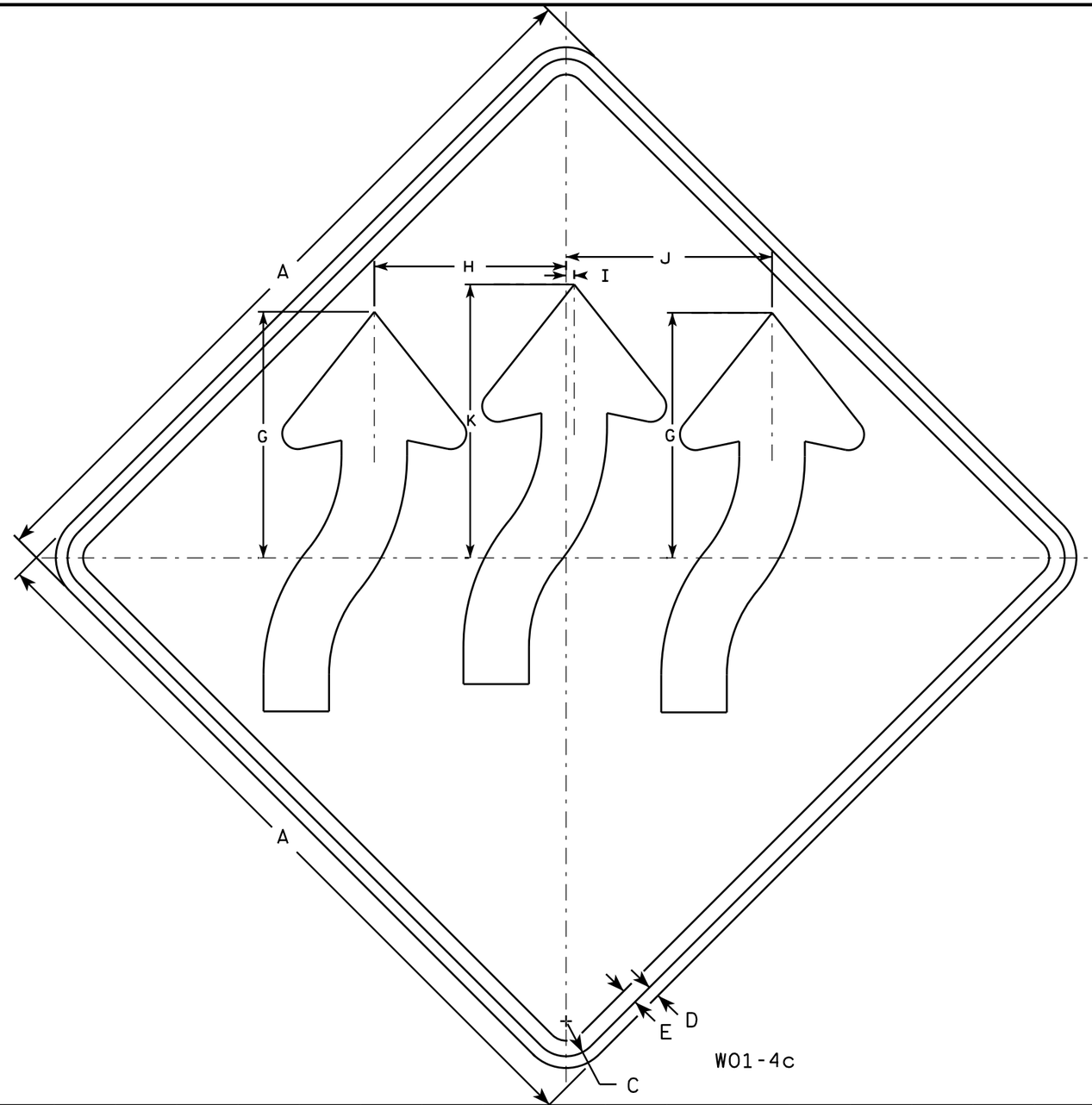
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 460	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W2162R.DGN PLOT DATE : 21-MAR-2011 10:51 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.108332:1.000000

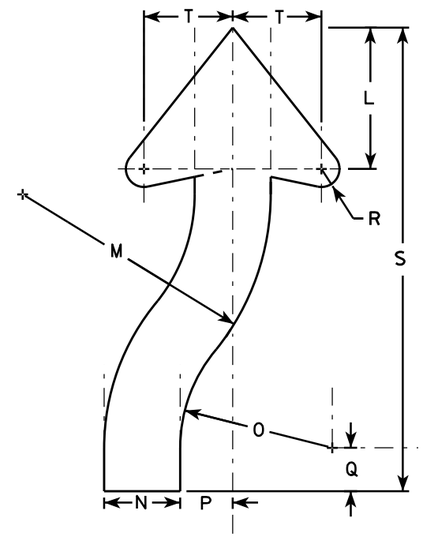
WISDOT/CADDS SHEET 42

7

7



W01-4c



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		11 3/4	9 1/4	3/8	9 7/8	13 1/8	5 7/8	10 1/4	3 1/8	6 1/4	2 1/4	1 7/8	3/4	19 1/4	3 3/4							9.0
2S	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
2M	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
3	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
4	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
5	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0

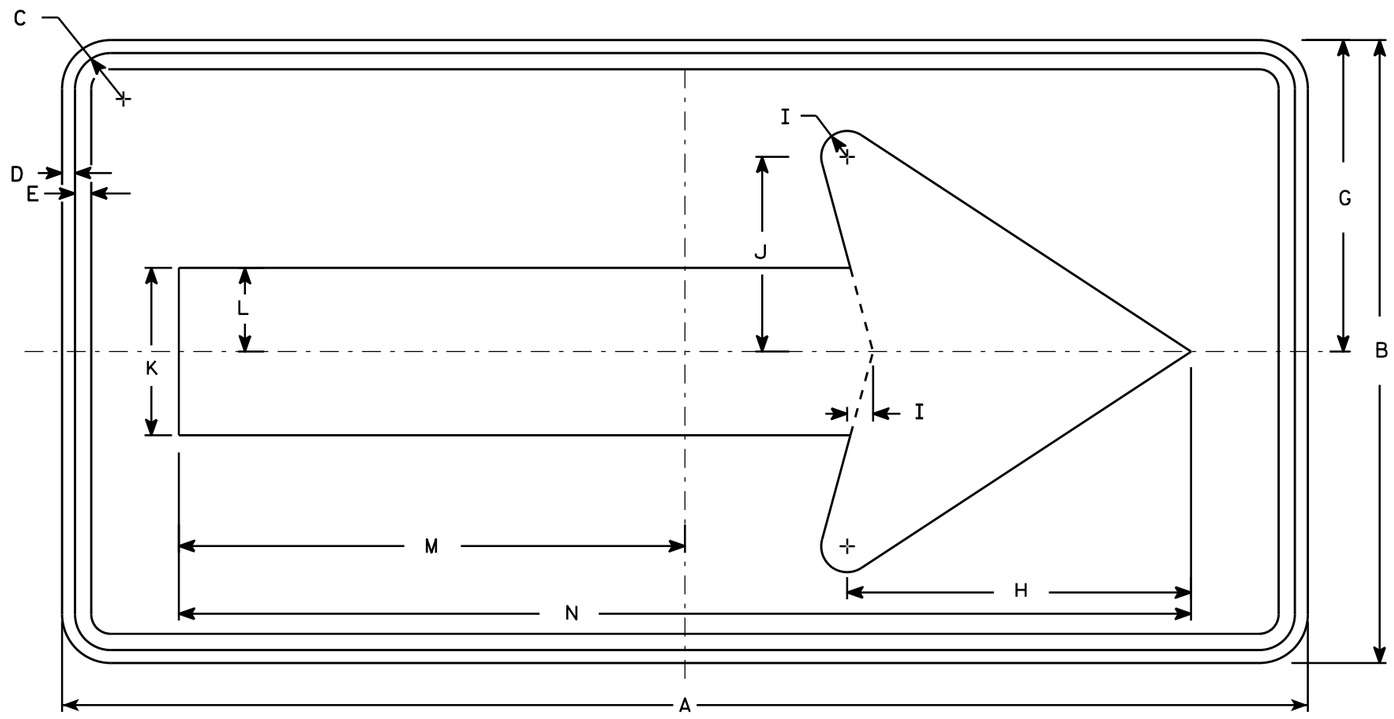
STANDARD SIGN
W01-4c

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 461 W01-4c.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

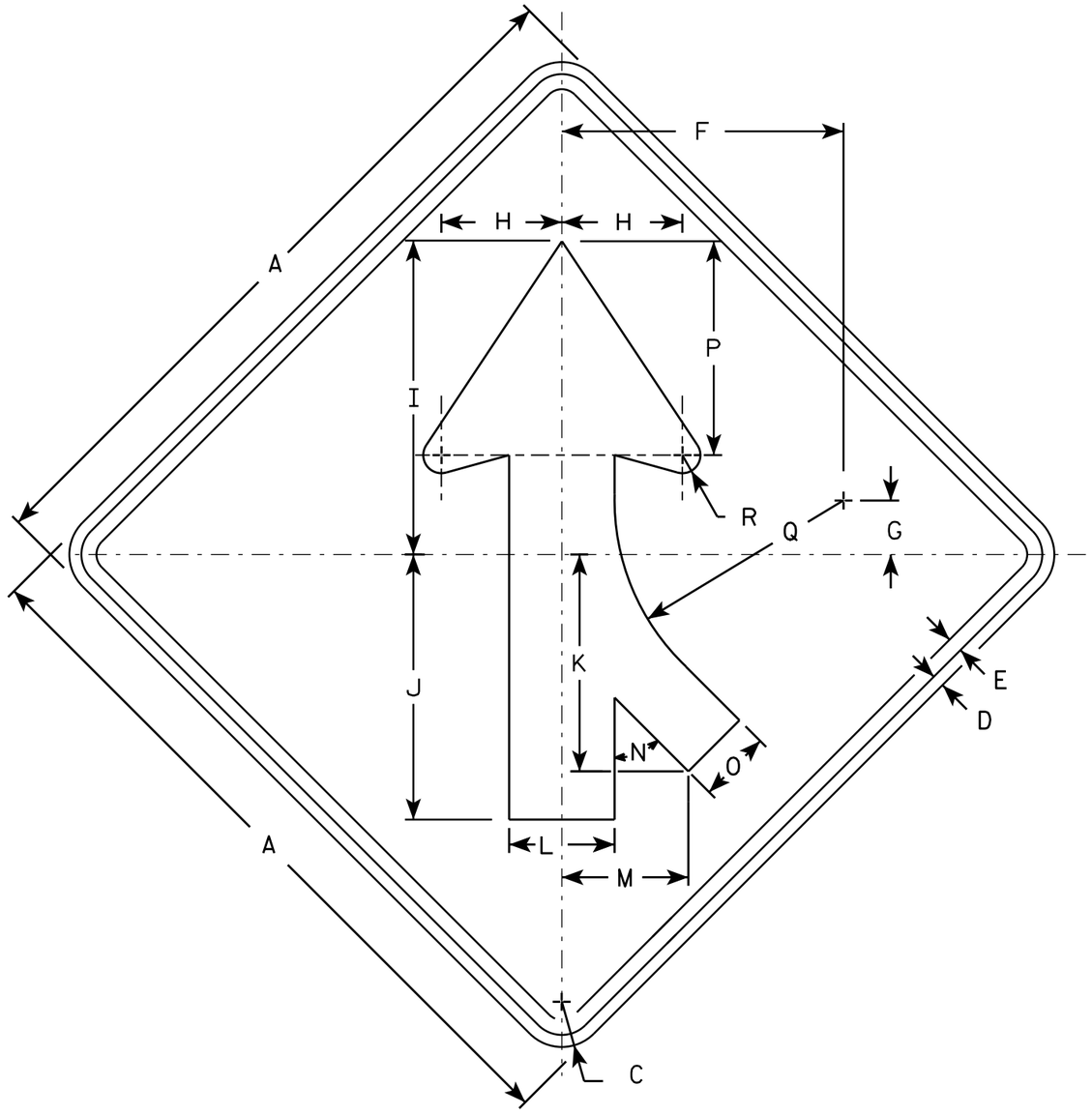
WISCONSIN DEPT OF TRANSPORTATION

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

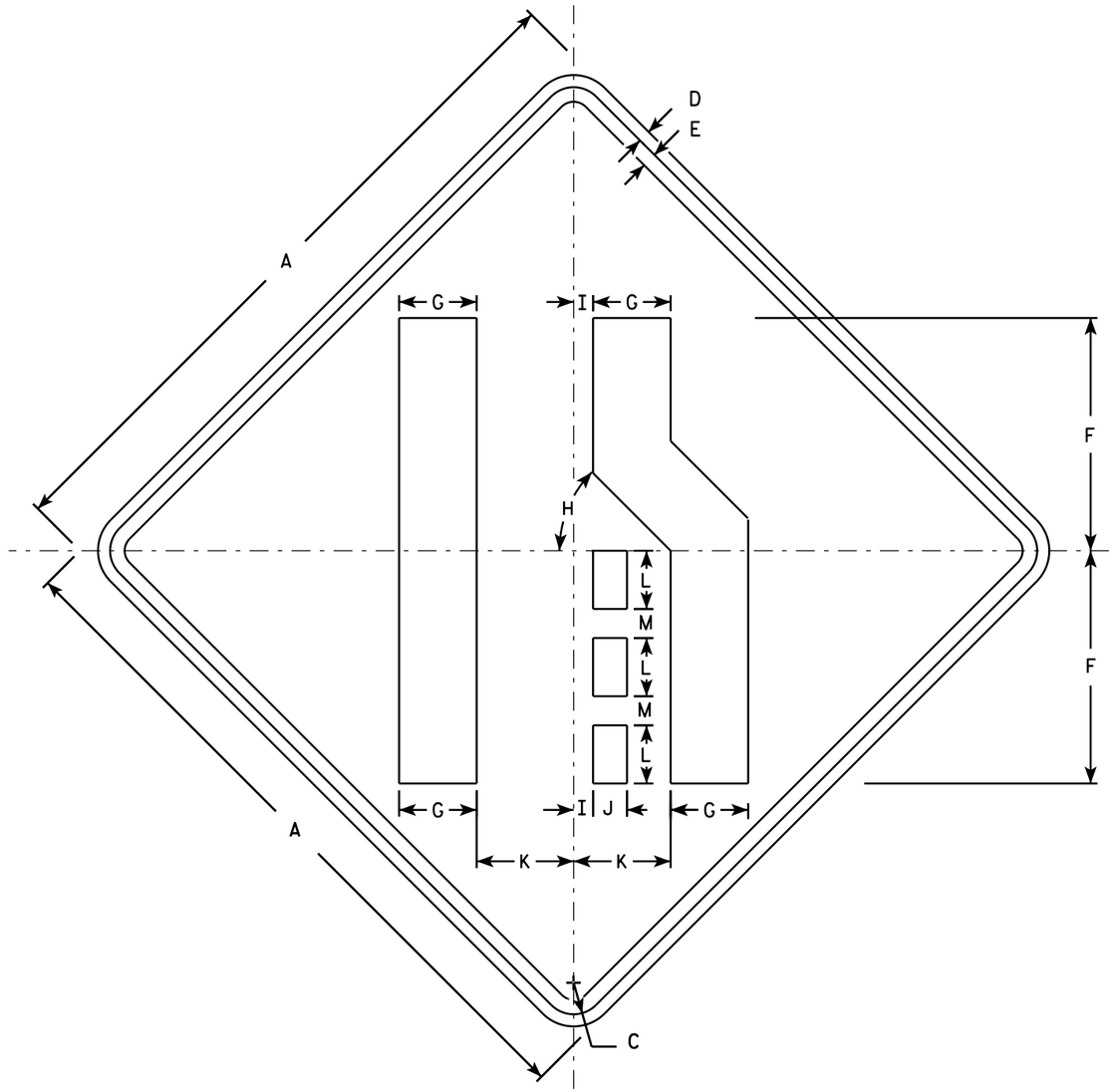
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W04-1.1

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W041.DGN PLOT DATE : 20-NOV-2013 11:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



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

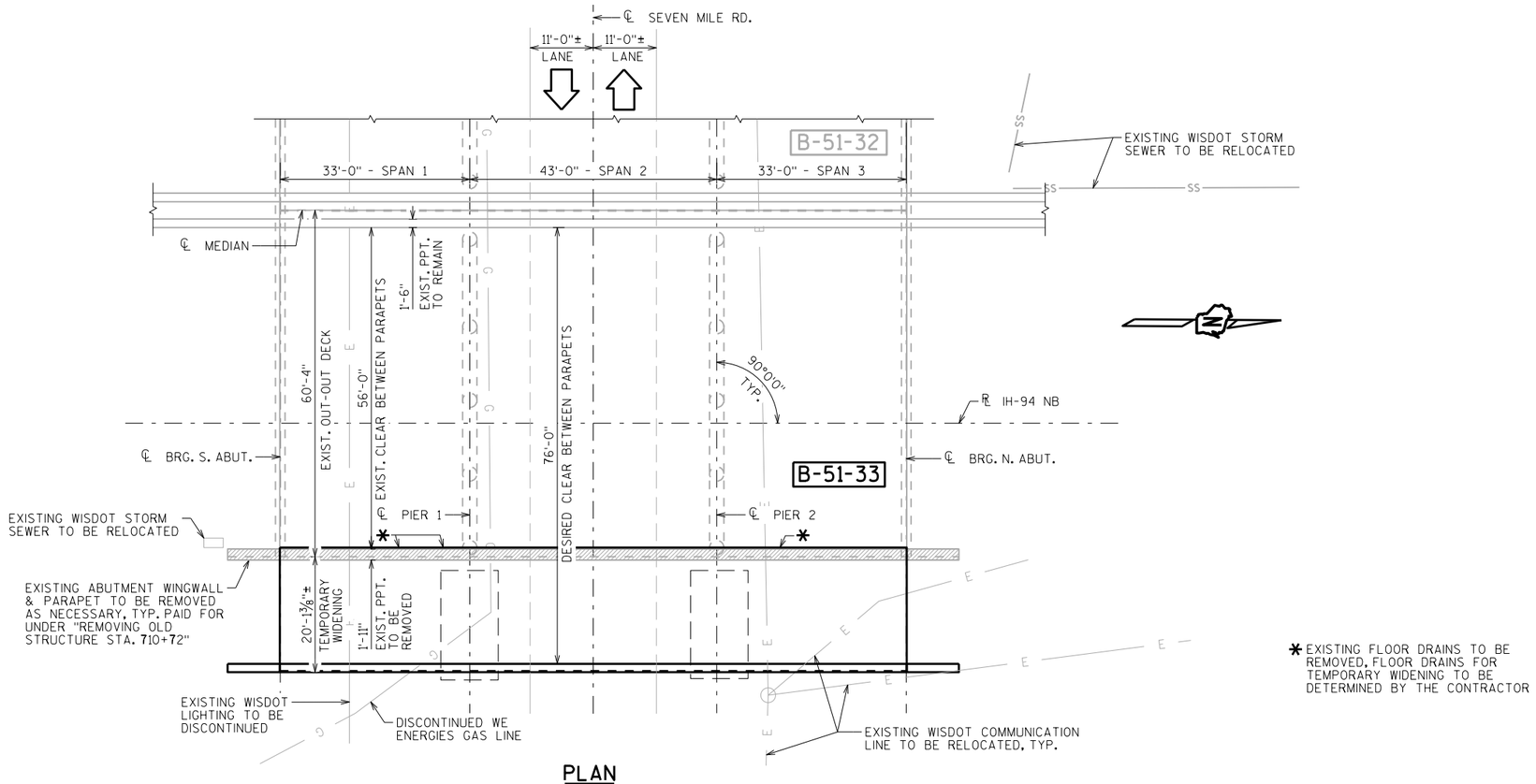
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 464 W04-2.1

PROJECT NO: | SHEET NO: E

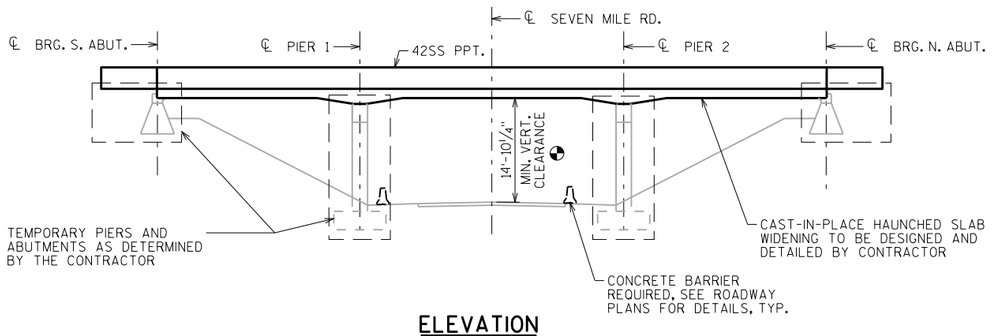
STATE PROJECT NUMBER

1035-01-74



PLAN

EXISTING 3 SPAN HAUNCHED SLAB TEMPORARY WIDENING



ELEVATION

NORMAL TO SEVEN MILE RD.
LOOKING WEST

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY ——— f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

TRAFFIC VOLUME

IH 94
ADT = 98,280 (2010)
ADT = 123,200 (2035)
R.D.S. = 70 M.P.H.

SEVEN MILE RD.
ADT = 4,930 (2010)
ADT = 6,735 (2035)
R.D.S. = 40 M.P.H.

STRUCTURE DESIGN CONTACTS:

EMILY KUEHNE	(608) 266-5089
AARON BONK	(608) 261-0261

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
203.0200.0009	REMOVING OLD STRUCTURE STA. 1241+75	LS	1
SPV.0105.4014	TEMPORARY BRIDGE WIDENING B-51-33	LS	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING STRUCTURE PLANS.

MINIMUM VERTICAL CLEARANCE = (INSPECTION REPORT MEASUREMENT) - (CROSS SLOPE) X (ANTICIPATED WIDENING WIDTH)

LIST OF DRAWINGS

1. TEMPORARY WIDENING
2. WIDENING DETAILS

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 6/14/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-51-33

IH-94 NB OVER SEVEN MILE RD.

COUNTY	VILLAGE
RACINE	CALEDONIA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
EMK	MJK	EMK	MJK

TEMPORARY WIDENING

SHEET 1 OF 2

465

I.D. 1030-20-00C DATE: JUNE 2018

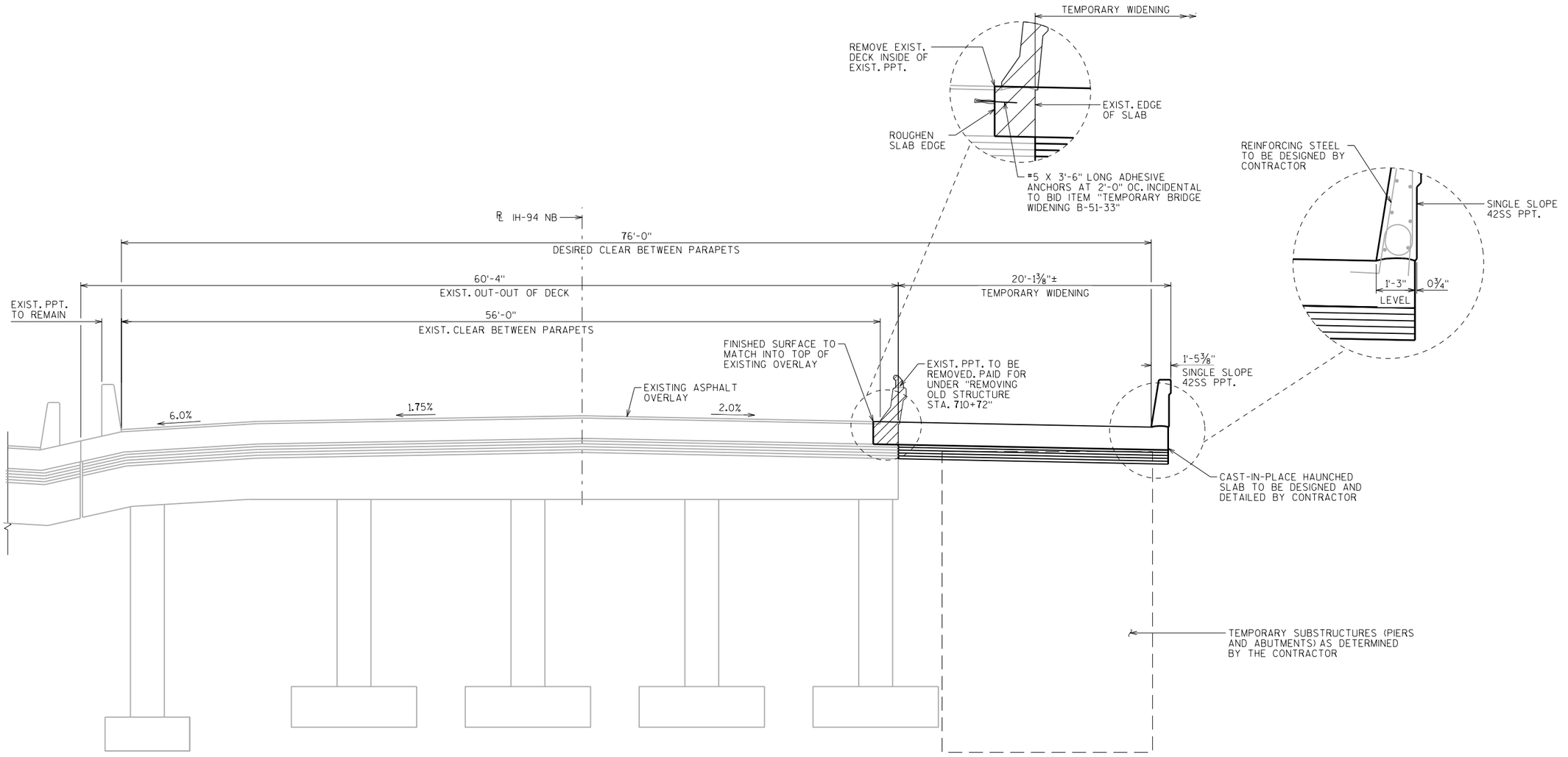
SCALE = 12.00

8

8

STATE PROJECT NUMBER

1035-01-74



CROSS SECTION THRU ROADWAY

NORMAL TO ℄ IH-94 NB
AT PIER LOOKING NORTH

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-51-33

DRAWN BY EMK | PLANS CK'D. MJK

WIDENING DETAILS

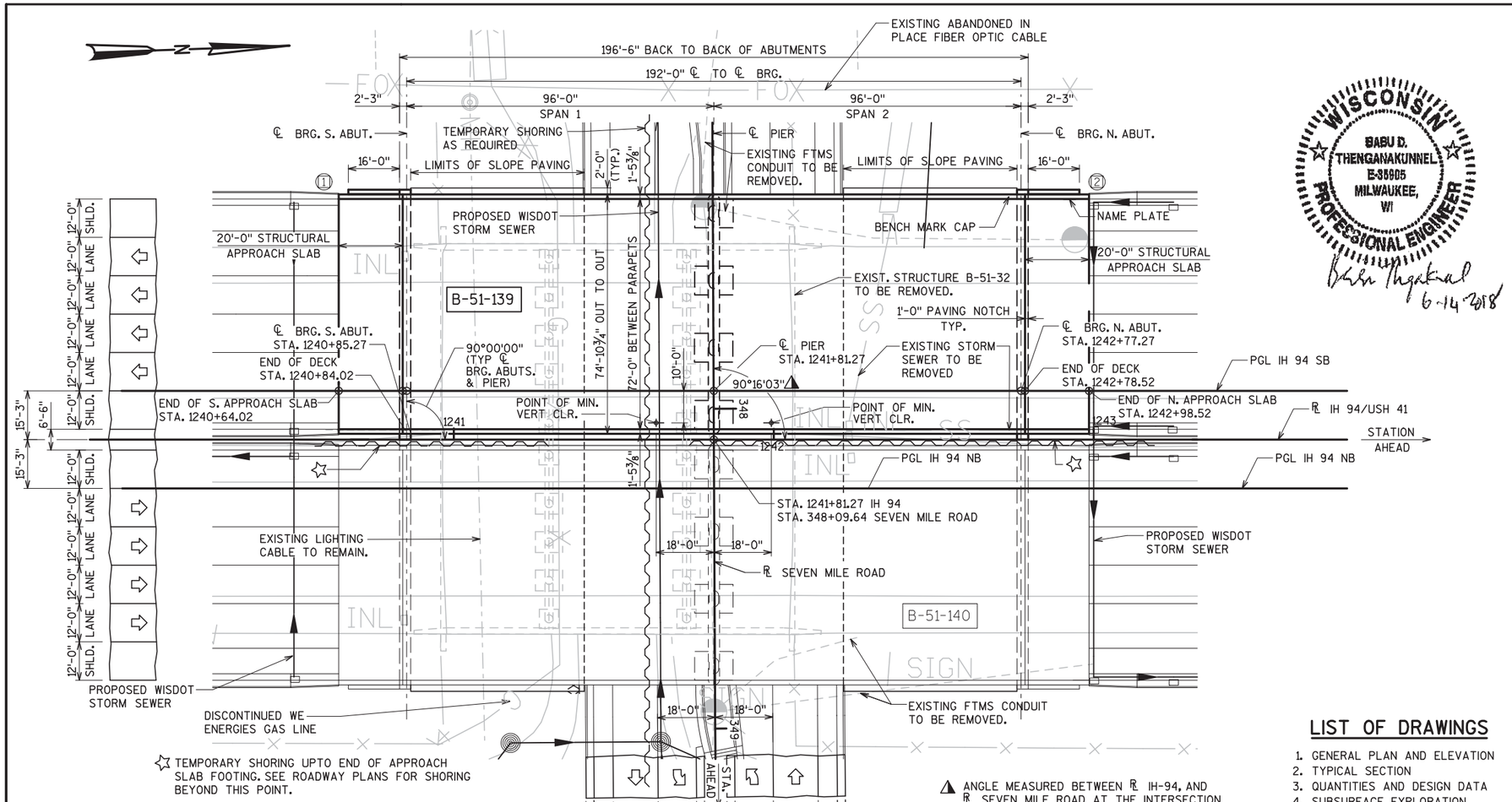
SHEET 2

466

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STATE PROJECT NUMBER

1035-01-74

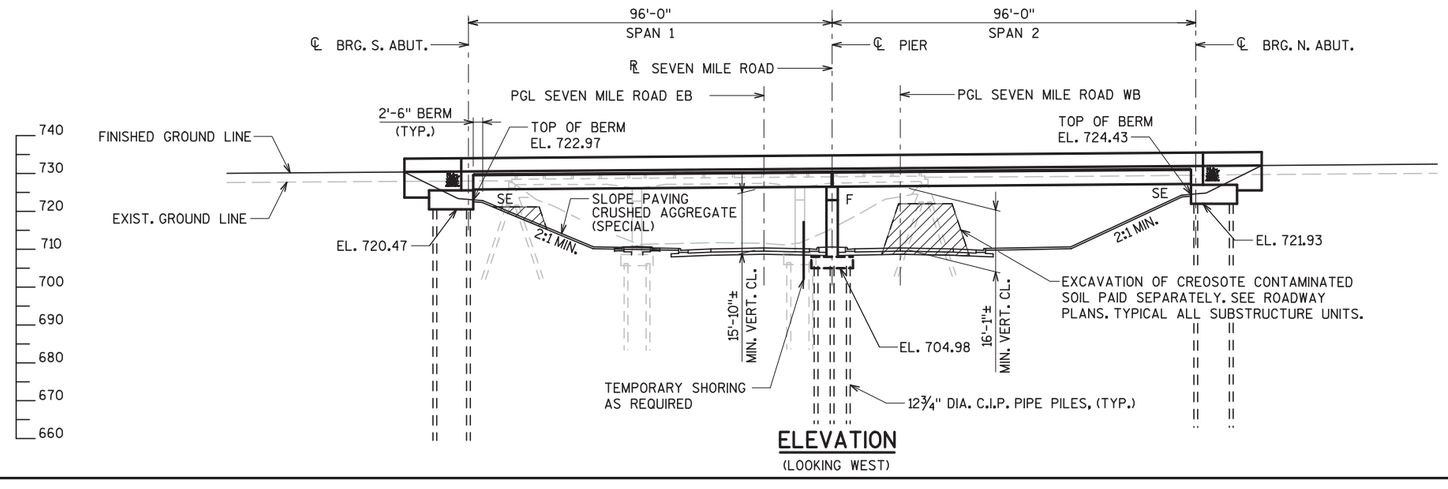


PLAN

(2 SPAN 45W" PRESTRESSED GIRDERS)

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N.; STA. 351+40.4, 69.2' RT.	721.68
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT.	721.54



ELEVATION

(LOOKING WEST)

DESIGN DATA

LIVE LOAD

DESIGN RATING: HL-93
INVENTORY RATING FACTOR: RF= 1.17
OPERATING RATING FACTOR RF= 1.53
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV) = 240 (kips)

STRUCTURE IS DESIGNED FOR A 20 PSF ADDITIONAL LOADS FOR FUTURE WEARING SURFACE.

MATERIAL PROPERTIES

CONCRETE MASONRY
SLAB,PARAPET, APPROACH SLAB (HPC)..... f'c = 4,000 psi
ALL OTHER ..... f'c = 4,000 psi

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 .....fy = 60,000 psi
EPOXY COATED ALL EXCEPT FOOTINGS.

BAR STEEL REINFORCEMENT HS STAINLESS STEEL...fy=60,000 psi

45W-INCH PRESTRESSED GIRDERS,
CONCRETE MASONRY .....f'c = 8,000 psi
STRANDS = 0.6 INCH DIA. WITH AN ULTIMATE
TENSILE STRENGTH OF 270,000 psi

FOUNDATION DATA

ABUTMENTS AND PIER TO BE SUPPORTED ON
12¾X 0.375 INCH C.I.P. PIPE PILES
DRIVEN TO A REQUIRED DRIVING RESISTANCE OF
200 TONS ** PER PILE AS DETERMINED BY THE
MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 90'-0" LONG PILES AT SOUTH ABUTMENT.
ESTIMATED 95'-0" LONG PILES AT PIER.
ESTIMATED 85'-0" LONG PILES AT NORTH ABUTMENT.

** 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 DATA

SEVEN MILE ROAD
A.D.T. = 4930 (2010)
A.D.T. = 6,735 (2035)
R.D.S. = 40 M.P.H.

IH 94
A.D.T. = 98,280 (2010)
A.D.T. = 123,200 (2035)
R.D.S. = 70 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. TYPICAL SECTION
3. QUANTITIES AND DESIGN DATA
4. SUBSURFACE EXPLORATION
5. SOUTH ABUTMENT
6. SOUTH ABUTMENT DETAILS
7. SOUTH ABUTMENT WINGWALL DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT DETAILS
10. NORTH ABUTMENT WINGWALL DETAILS
11. PIER GEOMETRY
12. PIER REINFORCING DETAILS (1 OF 2)
13. PIER REINFORCING DETAILS (2 OF 2)
14. PIER BARRIER WALL DETAILS
15. PRECAST PIER (OPTIONAL)
16. 45W" PRESTRESSED GIRDER DETAILS
17. INTERMEDIATE STEEL DIAPHRAGM
18. PRECAST DECK PANEL LAYOUT
19. PRECAST DECK PANEL DETAILS
20. SUPERSTRUCTURE
21. SUPERSTRUCTURE DETAILS
22. SUPERSTRUCTURE BILL OF BARS
23. SOUTH STRUCTURAL APPROACH SLAB
24. NORTH STRUCTURAL APPROACH SLAB
25. PARAPET 42SS (MODIFIED)
26. AESTHETIC DETAILS
27. SLOPE PAVING
28. ALTERNATE CONSTRUCTION JOINT
29. TEMPORARY SHORING LAYOUT

STRUCTURE DESIGN CONTACTS

BUREAU OF STRUCTURE CONTACT
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4507

WISCONSIN
BABU D. THENGANAKUNNEL
E-35605
MILWAUKEE, WI
PROFESSIONAL ENGINEER
6-14-2018

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher — CHIEF STRUCTURES DESIGN ENGINEER — 6/15/18 DATE

STRUCTURE B-51-139

IH-94 EB/USH 41 SB OVER
SEVEN MILE ROAD

COUNTY	TOWN
RACINE	RAYMOND

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
DMC	BDT	TAL	BDT

GENERAL PLAN AND ELEVATION

SHEET 1 OF 29
467

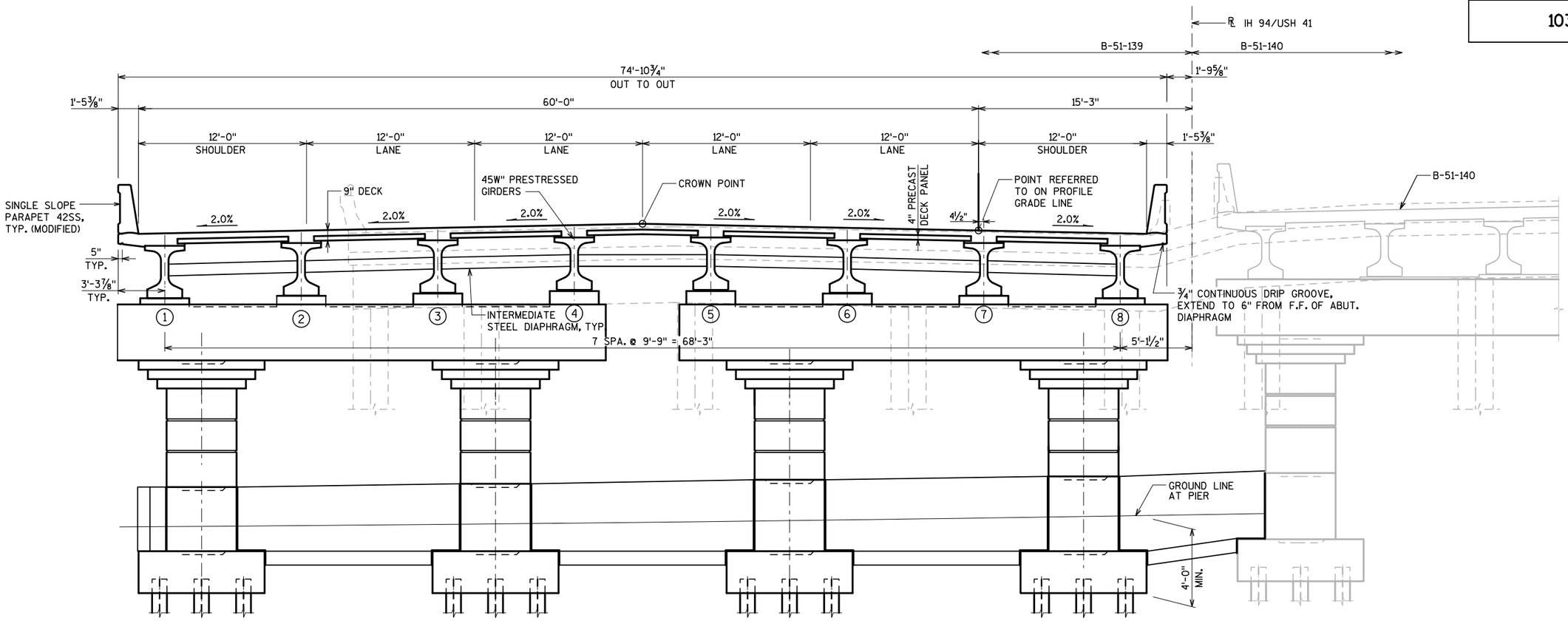
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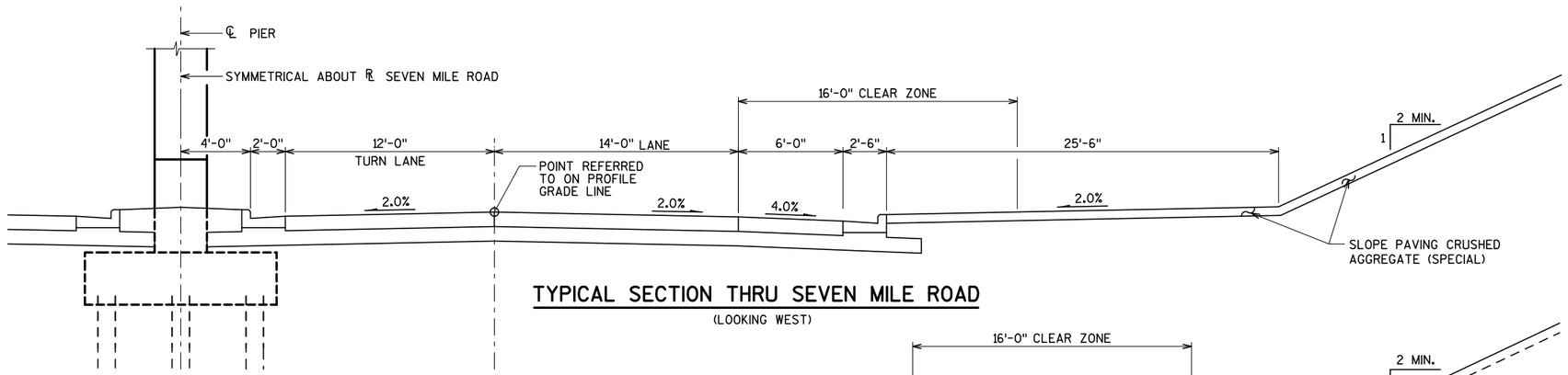
STATE PROJECT NUMBER

1035-01-74



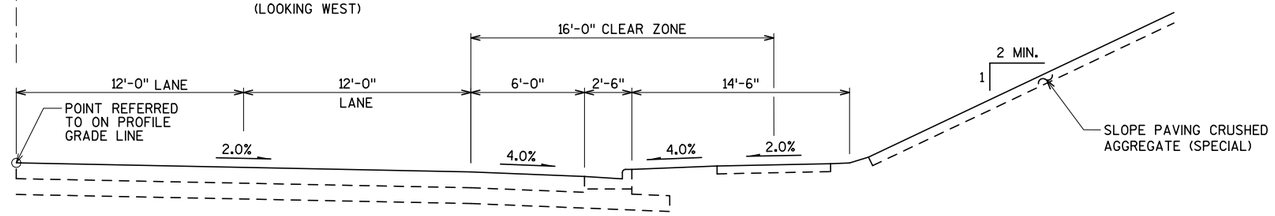
TYPICAL SECTION THRU IH 94

45W" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)



TYPICAL SECTION THRU SEVEN MILE ROAD

(LOOKING WEST)



FUTURE TYPICAL SECTION THRU SEVEN MILE ROAD

(LOOKING WEST)

LEGEND

(X) GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

TYPICAL SECTION

SHEET 2 OF 29

468

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TOTAL ESTIMATED QUANTITIES

	BID ITEM NO.	BID ITEMS	UNIT	SOUTH APPROACH SLAB	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	NORTH APPROACH SLAB	SUPER-STRUCTURE	TOTAL
	203.0200.0001	REMOVING OLD STRUCTURE STATION 1241+81 L†	LS	-	-	-	-	-	-	1
	203.0210.S.0008	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-51-32	LS	-	-	-	-	-	-	1
	206.1000.4139	EXCAVATION FOR STRUCTURES BRIDGES B-51-139	LS	-	-	-	-	-	-	1
	210.1500	BACKFILL STRUCTURE TYPE A	TON	-	253	201	263	-	-	717
	305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	CY	119	-	-	-	119	-	238
	416.0620	DRILLED DOWEL BARS	EACH	-	-	36	-	-	-	36
	501.1000.S	ICE HOT WEATHER CONCRETING	LB	754	480	1118	480	755	3308	6,895
	502.0100	CONCRETE MASONRY BRIDGES	CY	21	64	149	64	21	-	319
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	160	-	-	-	160	1595	1,915
	502.3210	PIGMENTED SURFACE SEALER	SY	20	-	-	-	20	191	231
	503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	-	-	-	-	-	1,542	1,542
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-	-	2,350	-	-	-	2,350
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	15,720	6,650	23,530	6,650	15,720	87,470	155,740
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1290	-	-	-	1,290	-	2,580
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	8	16	8	-	-	32
	506.4000.0001	STEEL DIAPHRAGMS STRUCTURE B-51-139	EACH	-	-	-	-	-	28	28
	511.1200.4040	TEMPORARY SHORING B-51-139	SF	134	500	410	1,071	135	-	2,250
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-	14	-	14	-	-	28
	517.1010.S.4001	CONCRETE STAINING STRUCTURE B-51-139	SF	150	67	2,272	70	150	2,492	5,201
	517.1050.S.4001	ARCHITECTURAL SURFACE TREATMENT STRUCTURE B-51-139	SF	-	16	-	16	-	-	32
	550.2126	PILING CIP CONCRETE 12¾X 0.375-INCH	LF	-	1,260	4,180	1,190	-	-	6,630
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-	100	-	100	-	-	200
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	-	75	-	75	-	-	150
	SPV.0035.4000	HPC MASONRY STRUCTURES	CY	80	-	-	-	80	441	600
	SPV.0165.4001	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,440	-	-	-	1,440	14,004	16,884
	SPV.0165.4040	PARTIAL DEPTH PRECAST PRESTRESSED CONCRETE DECK PANELS B-51-139	SF	-	-	-	-	-	10391	10,391
	SPV.0180.4800	SLOPE PAVING CRUSHED AGGREGATE SPECIAL	SY	-	496	-	501	-	-	997
		NON-BID ITEMS								
		PREFORMED JOINT FILLER	SIZE	-	-	-	-	-	-	½" & ¾"
		NAME PLATE								
*		PRECAST PIER COLUMNS								
*		PRECAST PIER CAPS								
*		GROUTED BAR COUPLERS								
*		PRECAST BEARING BLOCKS								

ALL ITEMS ARE CATEGORY 2160.

* PRECAST PIER NON-BID ITEMS (PRECAST PIER COLUMNS, PRECAST PIER CAPS, PRECAST BEARING BLOCKS, AND GROUTED BAR COUPLERS) ARE FOR INFORMATION PURPOSES ONLY. IF THE CONTRACTOR ELECTS TO UTILIZE PRECAST PIER COLUMNS, PRECAST PIER CAPS, OR BOTH, THE NON-BID ITEM SPECIAL PROVISIONS WITHIN THE CONTRACT SHALL GOVERN THE WORK. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR CAST-IN-PLACE PIER.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED. THE TOP LAYER OF BAR STEEL REINFORCEMENT IN THE DECK SHALL BE PLACED WITH 2½" OF CLEAR COVER.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NGVD DATUM.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON THIS SHEET.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

ALL REINFORCING BARS ARE ENGLISH AND THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. ALL DIMENSIONS IN THE BAR BENDS ARE OUT TO OUT.

THE MINIMUM CONCRETE HAUNCH SHALL BE 2" FOR DESIGN CALCULATIONS AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE HAUNCH DEPTH OF 2½" WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID

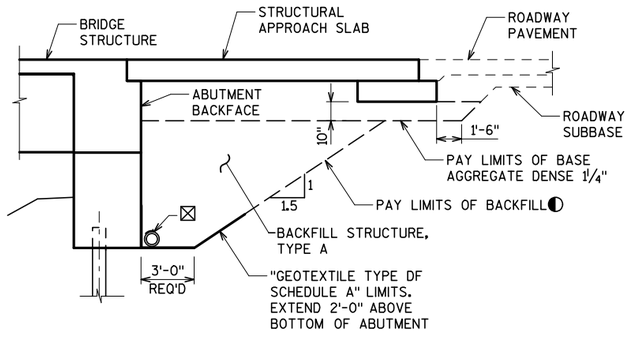
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK & APPROACH SLAB SURFACES AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGM.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

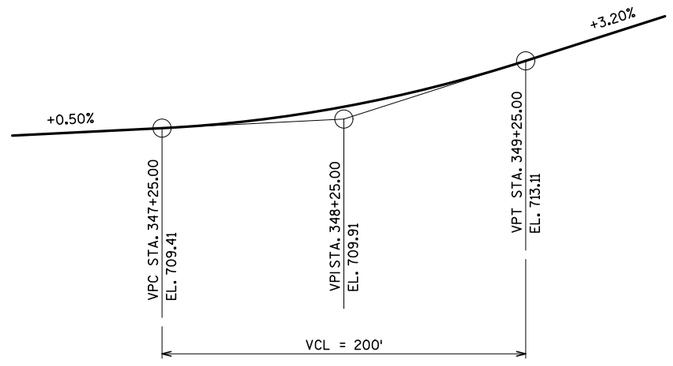
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL PREFORMED JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1*8" BELOW SURFACE OF CONCRETE)..

EXISTING STRUCTURE B-51-32 IS A 3-SPAN CONTINUOS HAUNCHED SLAB BRIDGE. WITH AN OVERALL LENGTH OF 110'-6", AND AN OVERALL WIDTH OF 60'-11", AND SHALL COMPLETELY BE REMOVED.

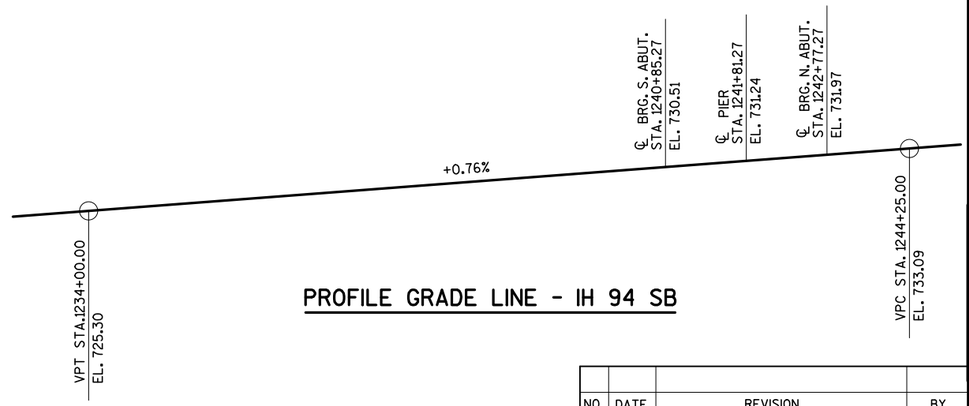
FOR STRUCTURE B-51-140, SEE SEPARATE SET OF PLANS.



STRUCTURAL BACKFILL LIMITS



PROFILE GRADE LINE - SEVEN MILE ROAD EB & WB



PROFILE GRADE LINE - IH 94 SB

LEGEND

◐ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

☒ PIPE UNDERDRAIN WRAPPED (6- INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

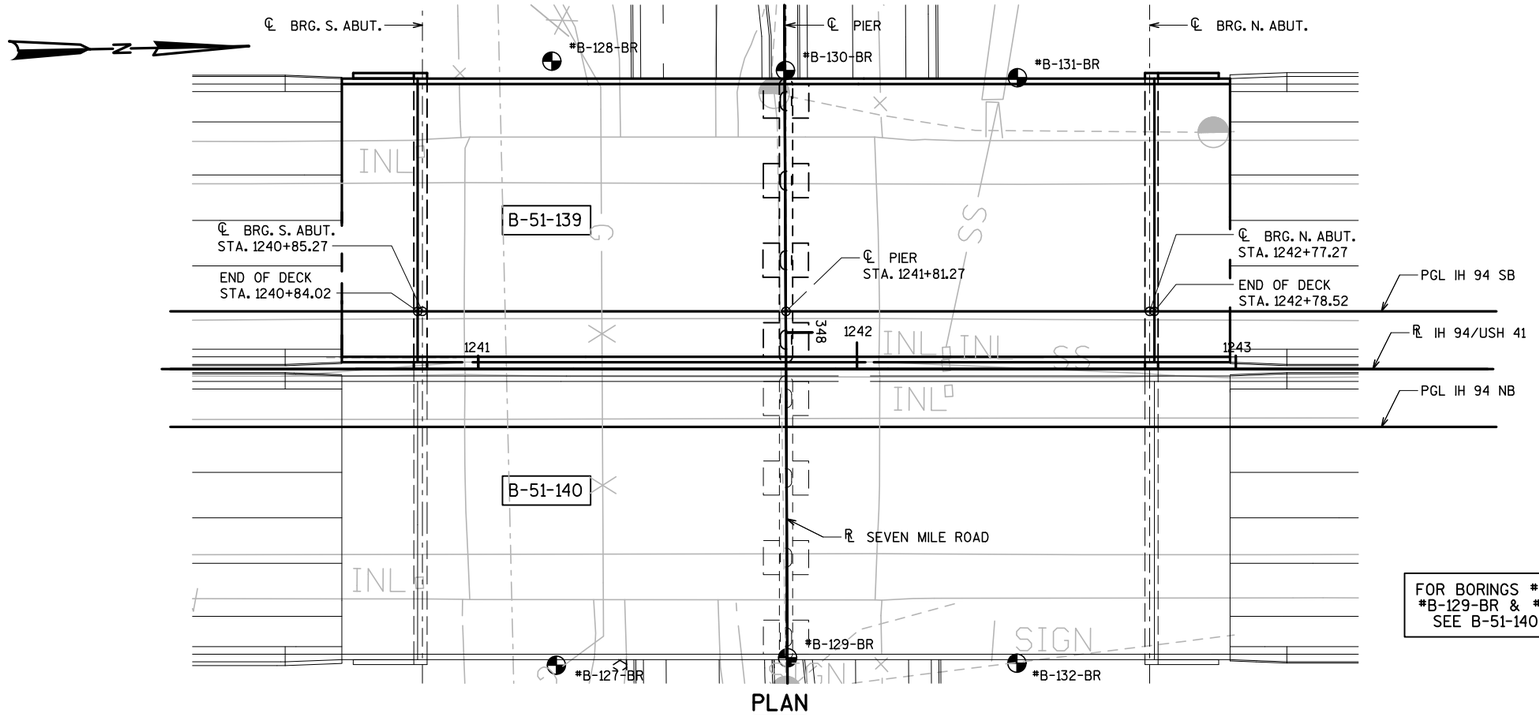
DRAWN BY TAL | PLANS CK'D. DMC

QUANTITIES AND DESIGN DATA

SHEET 3 OF 29
469

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8



PLAN

FOR BORINGS *B-127-BR, *B-129-BR & *B-132-BR SEE B-51-140 PLANS

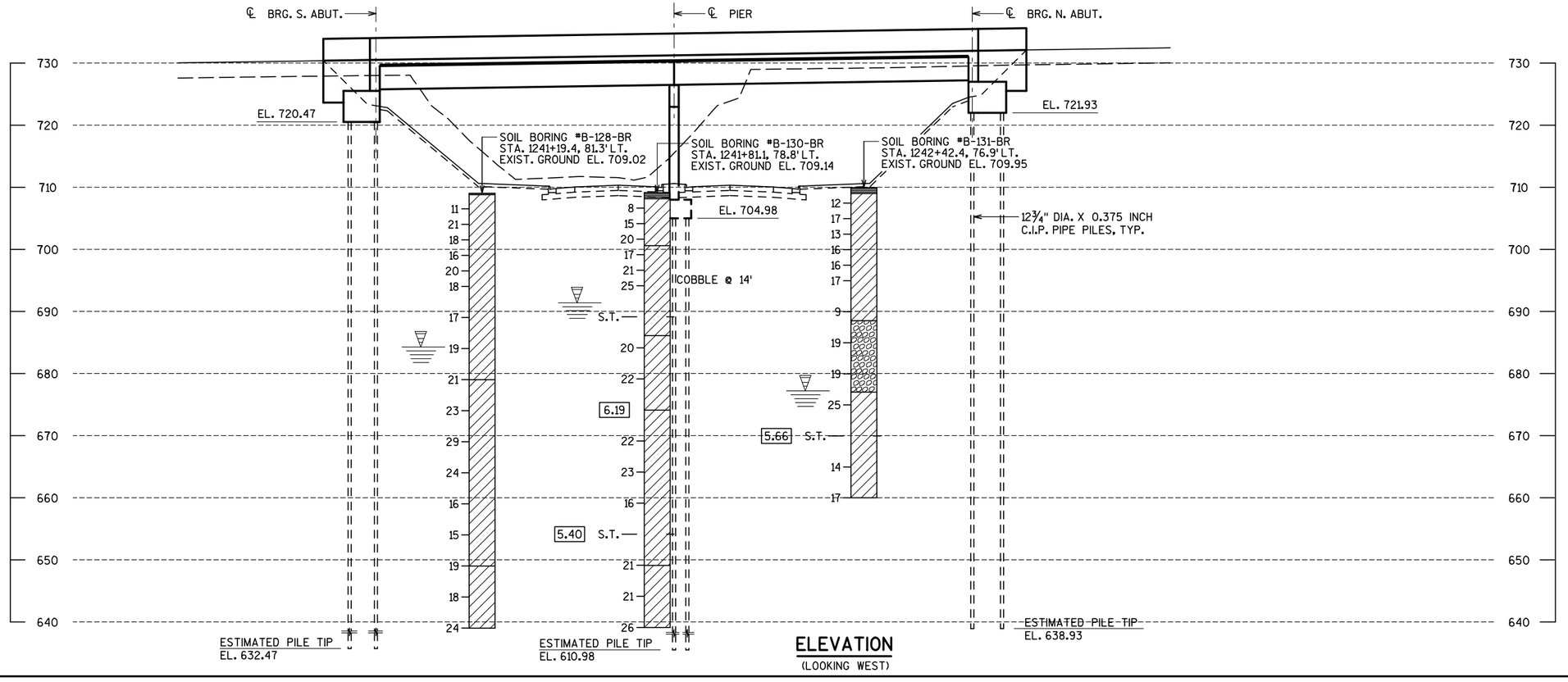
NOTES

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
11/13/2006 *B-131-BR
11/16/2006 *B-130-BR
11/20/2006 *B-128-BR



ELEVATION
(LOOKING WEST)

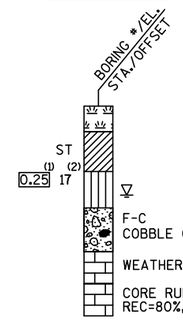
STATE PROJECT NUMBER

1035-01-74

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

STRUCTURE B-51-139

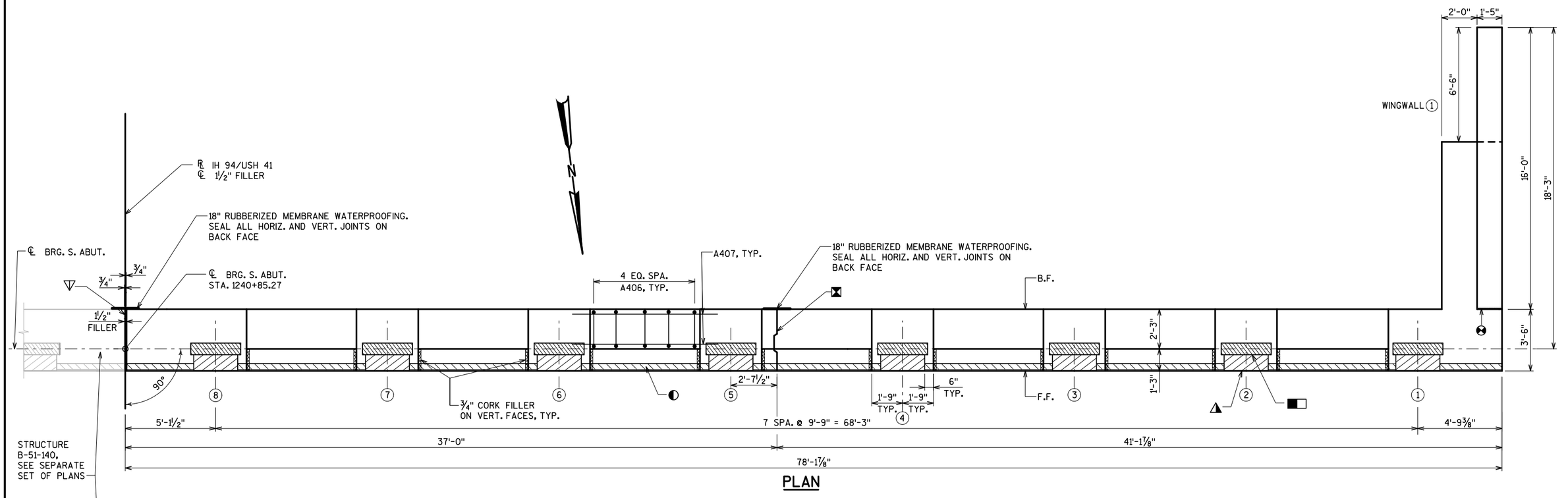
DRAWN BY TAL | PLANS CK'D. BDT

SUBSURFACE EXPLORATION

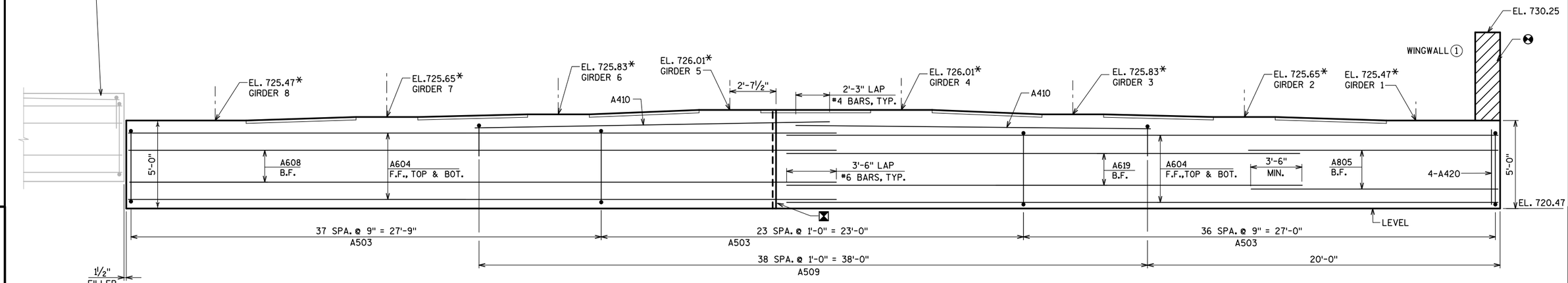
SHEET 4 OF 29
470

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DATE: 5/3/2018 12:17:49 PM Plotted by: tlegeor PEN TABLE: V8_STRUCTURAL_REV.TBL

STATE PROJECT NUMBER
1035-01-74



PLAN



ELEVATION

(LOOKING SOUTH)
(PILES NOT SHOWN)

*- ELEVATIONS ARE AT INTERSECTION OF ℄ OF GIRDER AND ℄ BRG.

LEGEND

- ½" FILLER-TO EXTEND FROM BRIDGE SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING LENGTH.
- 4" × ¾" FILLER, LENGTH OF ABUTMENT
- ¾" FILLER
- ½" × 8" × 2'-10" NON-LAMINATED ELASTOMERIC BRG. PAD.
- VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"X8". SEE SHEET 28 FOR ALT. CONSTRUCTION JOINT
- 1½" FILLER. EXTEND FROM BOTTOM OF ABUTMENT TO TOP OF DECK/ DIAPHRAGM.
- (X) GIRDER NUMBER

F.F. - FRONT FACE, B.F. - BACK FACE, E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

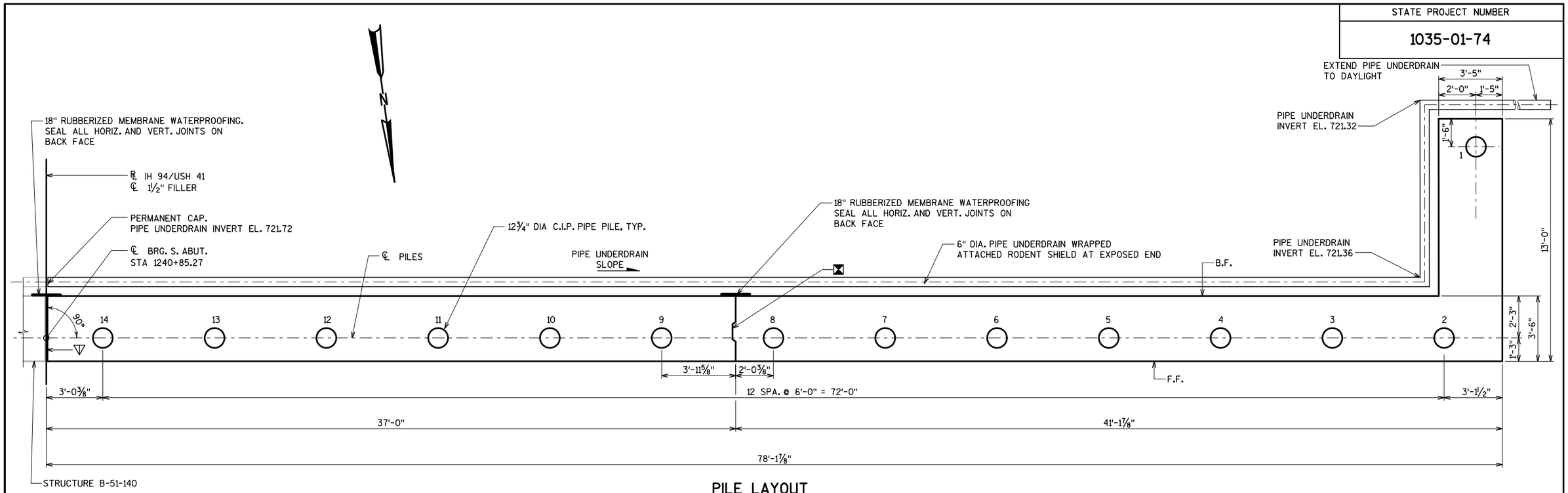
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SOUTH ABUTMENT

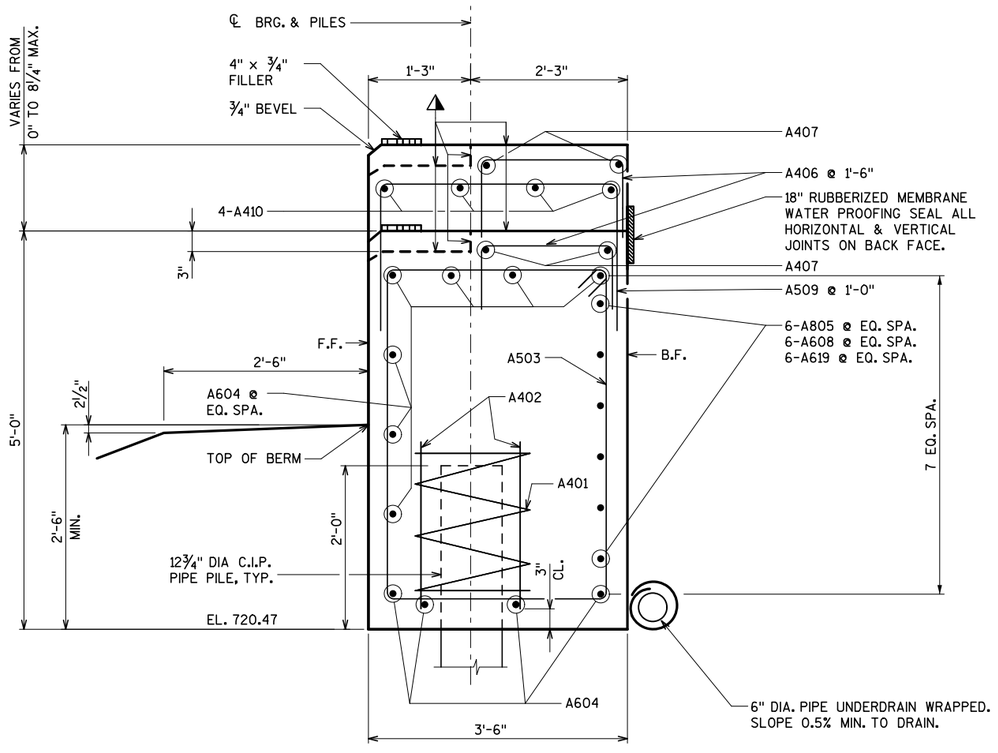
SHEET 5 OF 29
471

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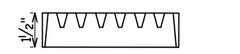
STATE PROJECT NUMBER
1035-01-74



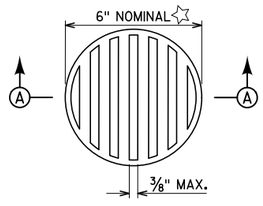
PILE LAYOUT



SECTION THRU BODY



SECTION A-A



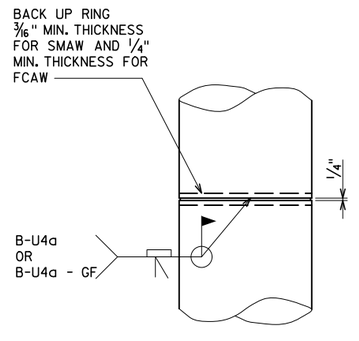
RODENT SHIELD

☆ DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SHEILD SO SLOTS ARE VERTICAL.

COST OF RODENT SHEILD, PIPE COUPLING, AND SCREWS TO BE INCLUDED IN 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.



C.I.P. PILE WELD DETAIL

PILE SPLICE DETAILS

FOUNDATION DATA

ABUTMENT TO BE SUPPORTED ON 12¾X 0.375 INCH C.I.P PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. ESTIMATED PILE LENGTH = 90 FEET.

LEGEND

◭ 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"

⧓ VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"x8"

▽ 1½" FILLER, EXTEND FROM BOTTOM OF ABUTMENT TO TOP OF DECK,DIAPHRAGM

F.F. - FRONT FACE, B.F. - BACK FACE, E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

SOUTH ABUTMENT DETAILS

SHEET 6 OF 29
472

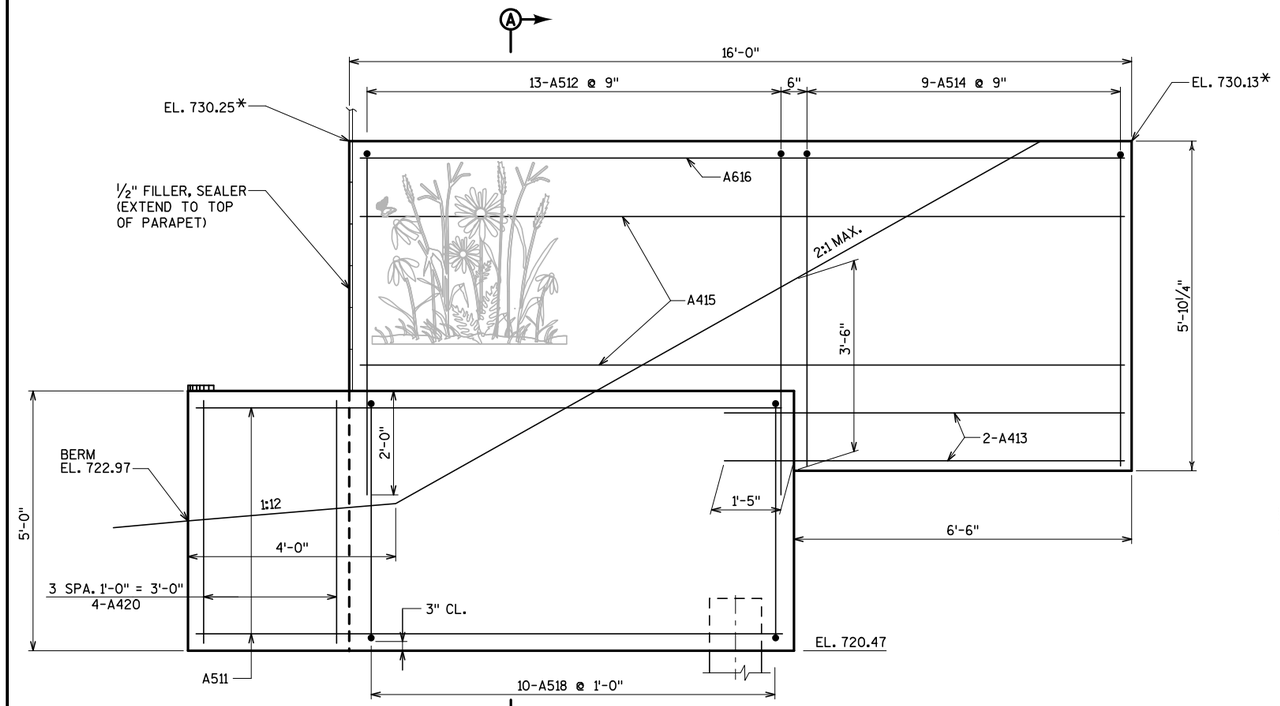
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8

8

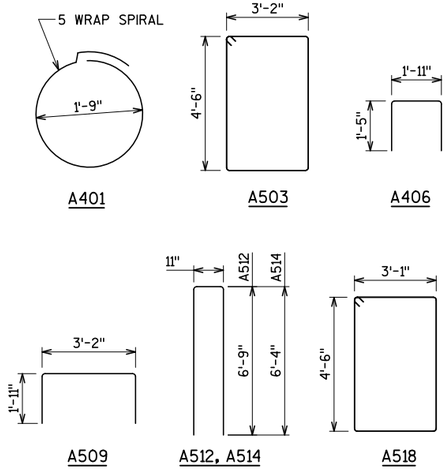
STATE PROJECT NUMBER

1035-01-74



WINGWALL 1 ELEVATION

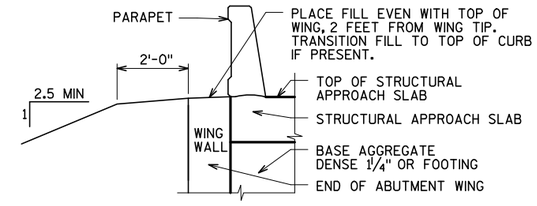
(FRONT FACE)



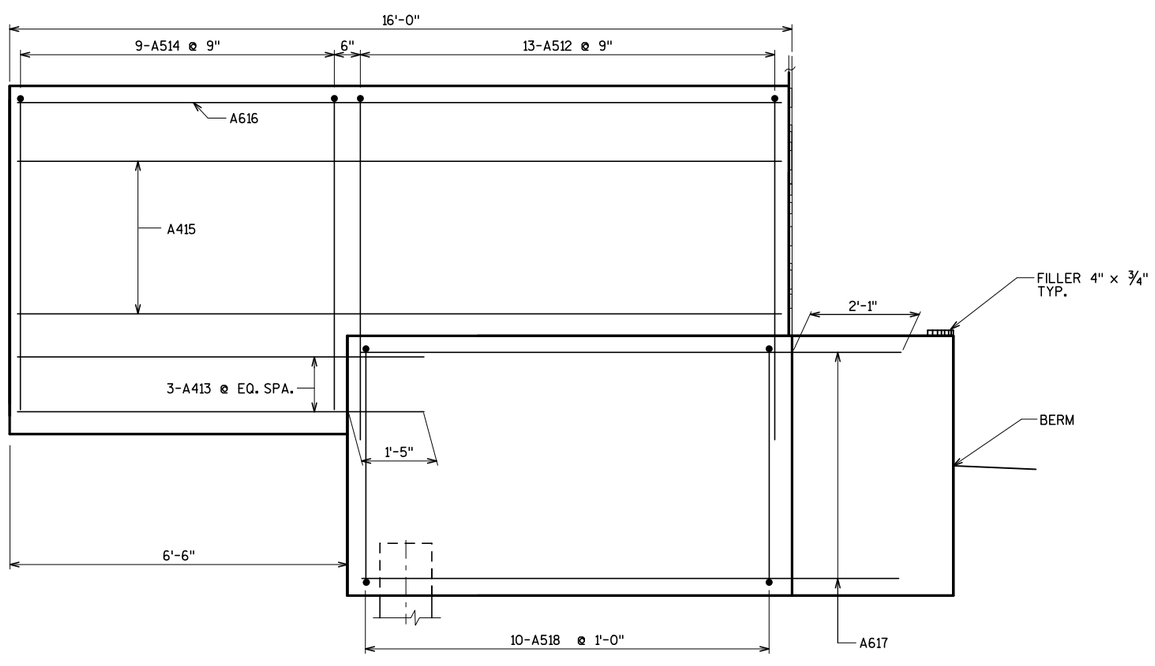
BENDING DIAGRAMS

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A401	X	13	28'-0"	X	-	BODY PILES
A402	X	26	2'-3"	-	-	BODY PILES
A503	X	97	16'-0"	X	-	BODY STIRRUPS
A604	X	22	40'-8"	-	-	BODY HORIZ.
A805	X	6	16'-0"	-	-	BODY HORIZ.
A406	X	35	4'-5"	X	-	BODY VERT. BETW. SEATS
A407	X	14	8'-3"	-	-	BODY TOP HORIZ. BETW. SEATS
A608	X	6	40'-8"	-	-	BODY TOP HORIZ.
A509	X	39	6'-9"	X	-	BODY TOP VERT.
A410	X	8	20'-2"	-	-	BODY TOP HORIZ.
A511	X	6	12'-8"	-	-	WING F.F. HORIZ.
A512	X	13	14'-4"	X	-	WING VERT.
A413	X	5	7'-9"	-	-	WING F.F. & B.F. HORIZ.
A514	X	9	11'-8"	X	-	WING VERT.
A415	X	11	15'-8"	-	-	WING HORIZ.
A616	X	2	15'-8"	-	-	WING TOP HORIZ.
A617	X	10	11'-5"	-	-	WING B.F. & TOP, HORIZ.
A518	X	10	15'-10"	X	-	WING STIRRUP
A619	X	6	28'-2"	-	-	BODY HORIZ.
A420	X	4	4'-8"	-	-	F.F. WING- ABUTMENT ENDS

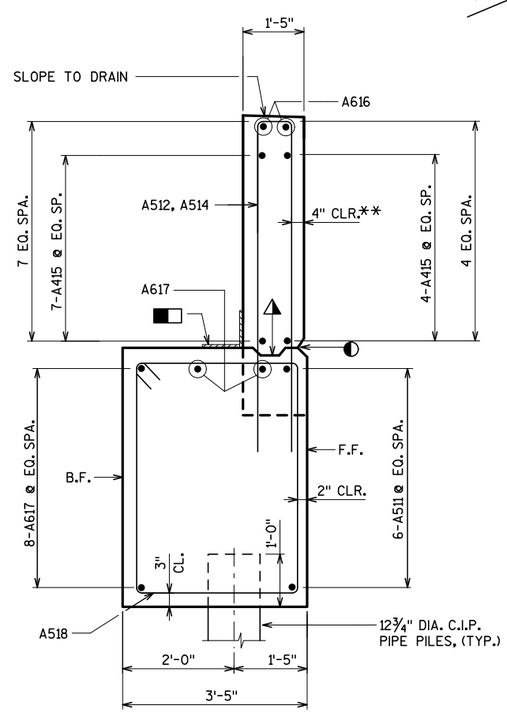


TYPICAL FILL SECTION AT WING TIPS



WINGWALL 1 ELEVATION

(BACK FACE)



SECTION A-A

LEGEND

- ◭ OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ◐ ¾" "V" GROOVE
- ** INCLUDES ALLOWANCE FOR FORMLINER
- ▀ 18" RUBBERIZED MEMBRANE WATERPROOFING, SEAL ALL HORIZONTAL AND VERTICAL SURFACES ON BACKFACE.

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

*- ELEVATIONS ARE AT INSIDE FACE OF WING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

SOUTH ABUTMENT WINGWALL DETAILS

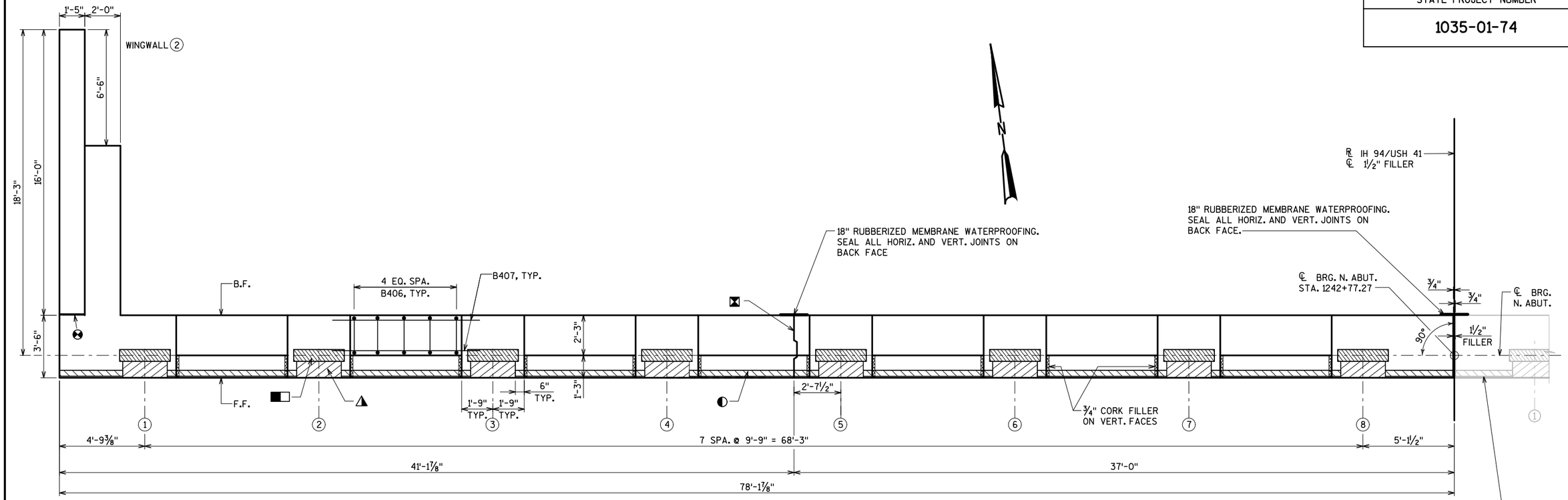
SHEET 7 OF 29
473

8

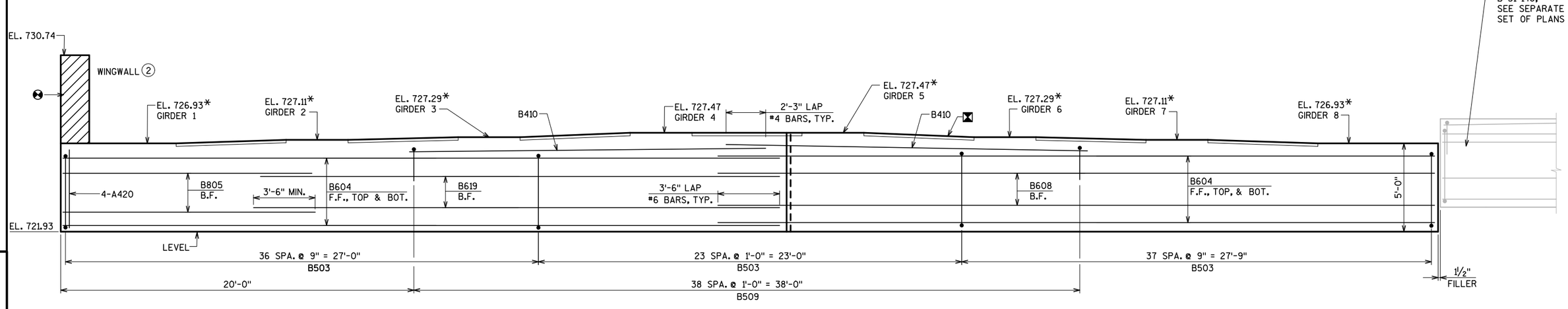
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STATE PROJECT NUMBER
1035-01-74



PLAN



ELEVATION

(LOOKING NORTH)
PILES NOT SHOWN

* - ELEVATIONS ARE AT INTERSECTION OF ℄ OF GIRDER AND ℄ BRG.

LEGEND

- ½" FILLER-TO EXTEND FROM BRIDGE SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING'S LENGTH.
- 4" × ¾" FILLER
- ¾" FILLER
- ½" × 8" × 2'-10" NON-LAMINATED ELASTOMERIC BRG. PAD.
- VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"X8"
- (X) GIRDER NUMBER

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

NORTH ABUTMENT

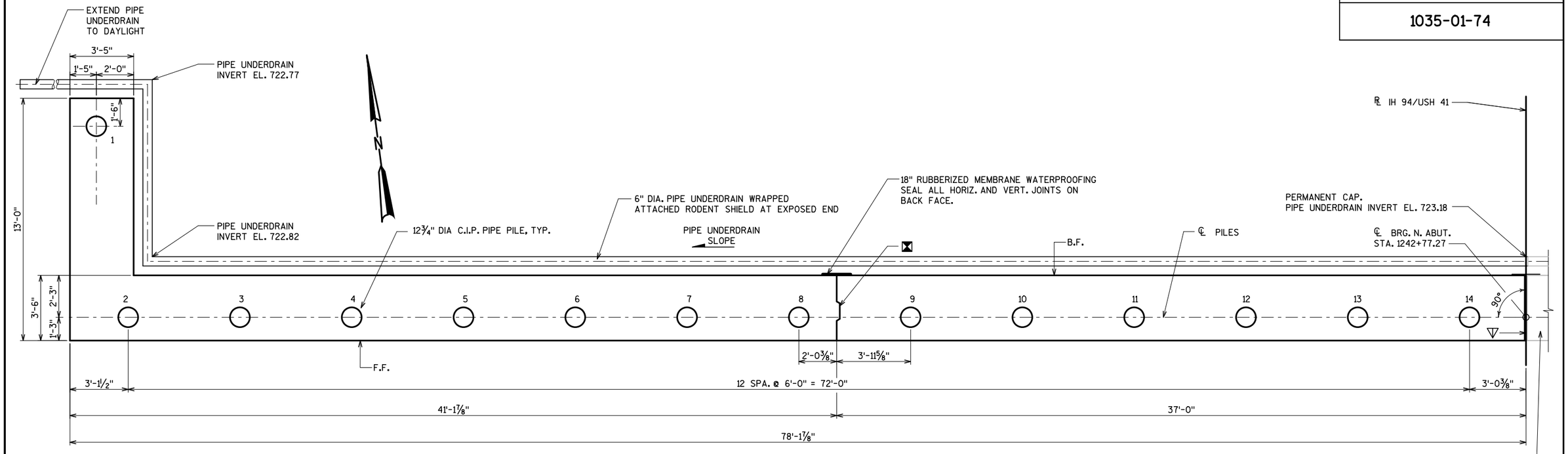
SHEET 8 OF 29
474

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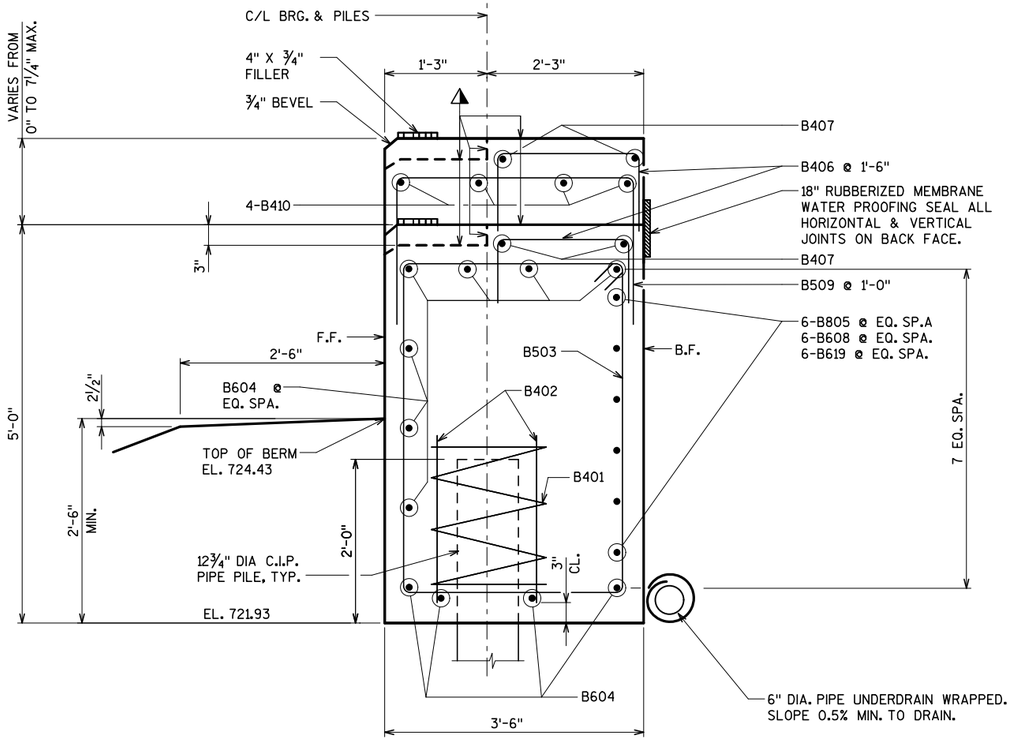
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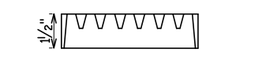
STATE PROJECT NUMBER
1035-01-74



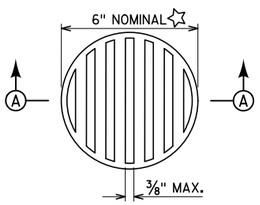
PILE LAYOUT



SECTION THRU BODY



SECTION A-A



RODENT SHIELD

FOUNDATION DATA

ABUTMENT TO BE SUPPORTED ON 12¾X 0.375 INCH C.I.P. PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. ESTIMATED PILE LENGTH = 85 FEET.

☆ DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SHEILD SO SLOTS ARE VERTICAL.

COST OF RODENT SHEILD, PIPE COUPLING, AND SCREWS TO BE INCLUDED IN 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.

LEGEND

▲ 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"

⧓ VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"×8"

▽ 1½" FILLER, EXTEND FROM BOTTOM OF ABUTMENT TO TOP OF DECK,DIAPHRAGM

F.F. - FRONT FACE, B.F. - BACK FACE, E.F. - EACH FACE

NOTE

SEE SHEET 6 FOR STEEL 12¾" DIA C.I.P. CONCRETE PILE SPLICE DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

NORTH ABUTMENT DETAILS

SHEET 9 OF 29

475

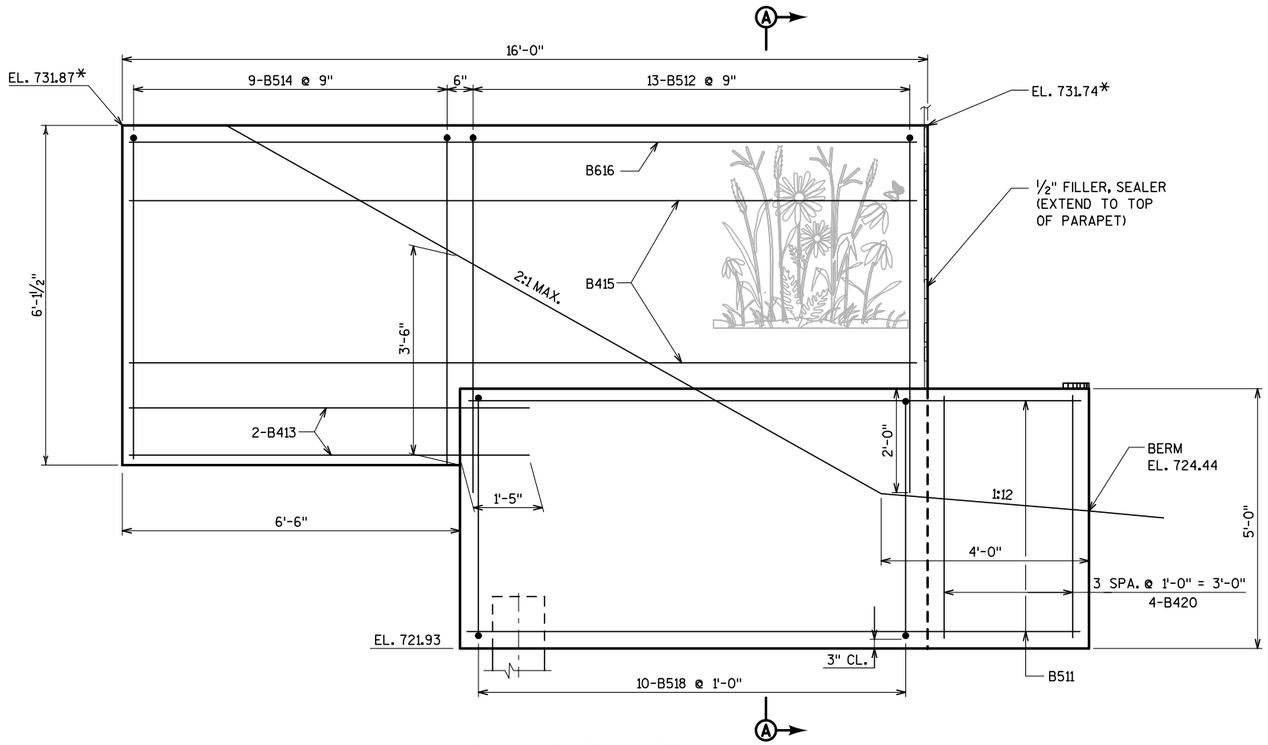
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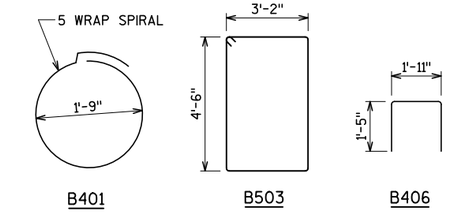
STATE PROJECT NUMBER

1035-01-74



WINGWALL 2 ELEVATION

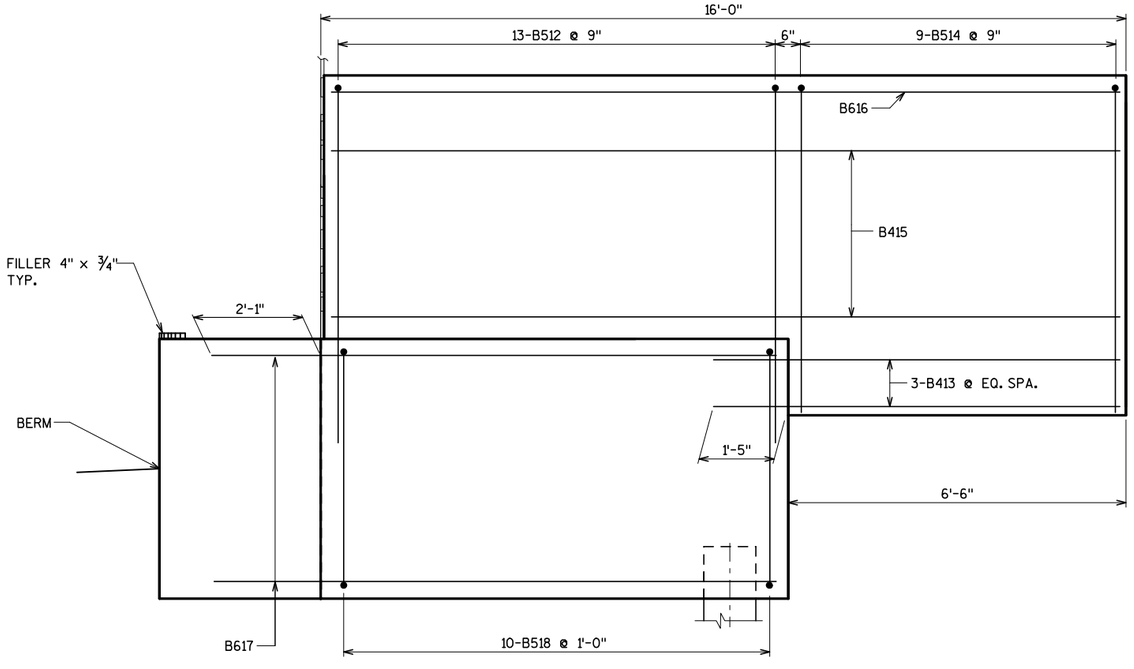
(FRONT FACE)



BENDING DIAGRAMS

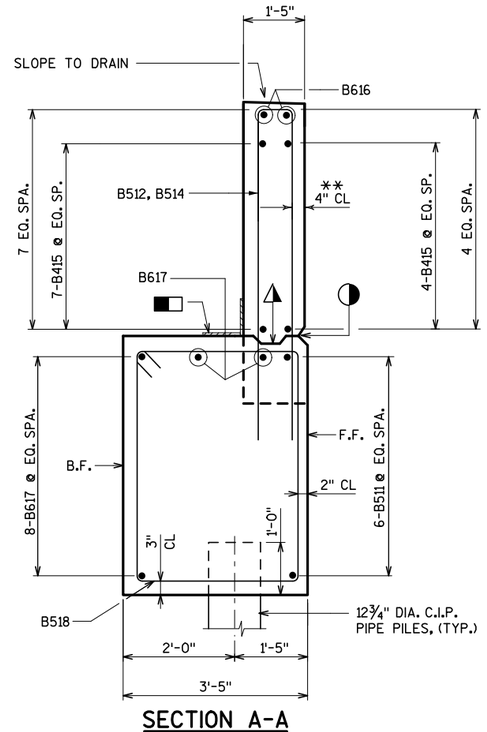
BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B401	X	13	28'-0"	X	-	BODY PILES
B402	X	26	2'-3"	-	-	BODY PILES
B503	X	97	16'-0"	X	-	BODY STIRRUPS
B604	X	22	40'-8"	-	-	BODY HORIZ.
B805	X	6	16'-0"	-	-	BODY HORIZ.
B406	X	35	4'-5"	X	-	BODY VERT. BETW. SEATS
B407	X	14	8'-3"	-	-	BODY TOP HORIZ.
B608	X	6	40'-8"	-	-	BODY TOP HORIZ.
B509	X	39	6'-9"	X	-	BODY TOP VERT.
B410	X	8	20'-2"	-	-	BODY TOP HORIZ.
B511	X	6	12'-8"	-	-	WING F.F. HORIZ.
B512	X	13	14'-4"	X	-	WING VERT.
B413	X	5	7'-9"	-	-	WING F.F. & B.F. HORIZ.
B514	X	9	11'-8"	X	-	WING VERT.
B415	X	11	15'-8"	-	-	WING HORIZ.
B616	X	2	15'-8"	-	-	WING TOP HORIZ.
B617	X	10	11'-5"	-	-	WING B.F. & TOP, HORIZ.
B518	X	10	15'-10"	X	-	WING STIRRUP
B619	X	6	28'-2"	-	-	BODY HORIZ.
B420	X	4	4'-8"	-	-	F.F. WING- ABUTMENT ENDS



WINGWALL 2 ELEVATION

(BACK FACE)



SECTION A-A

LEGEND

- OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ¾" "V" GROOVE
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- ** INCLUDES ALLOWANCE FOR FORMLINER.

  F.F. - FRONT FACE
  B.F. - BACK FACE
  E.F. - EACH FACE
- *- ELEVATIONS ARE AT INSIDE FACE OF PARAPET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

NORTH ABUTMENT WINGWALL DETAILS

SHEET 10 OF 29

476

8

8

FILE NAME: F:\BMI-1834B 7M Roads\1035074.Mas\Structures\Current Plans\48-51-139\10_139_N_Abut_wing_dt.dgn
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STATE PROJECT NUMBER

1035-01-74

℄ IH 94/USH 41

5'-1½"

75'-0" (MEASURED ALONG ℄ PIER)

1'-9" 1'-9" STRUCTURE B-51-140

UNDERDECK LIGHT FIXTURES AND CONDUITS SEE LIGHTING PLANS

GIRDER 1 EL. 726.26*
GIRDER 2 EL. 726.46*
GIRDER 3 EL. 726.67*
GIRDER 4 EL. 726.87*
GIRDER 5 EL. 726.87*
GIRDER 6 EL. 726.67*
GIRDER 7 EL. 726.46*
GIRDER 8 EL. 726.26*

5¼" 4'-0"

3 STEPS @ 8" =2'-0"

3 STEPS @ 8" = 2'-0"

2'-3" TYP.

5'-3" 2'-0" 2'-0"

3'-6" 5'-0" 16'-0" 5'-0" 16'-0" 5'-0" 16'-0" 5'-0" 3'-6"

℄ COL. 1 ℄ COL. 2 ℄ COL. 3 ℄ COL. 4

2'-0" 10½"

EL. 712.58 EL. 712.81 EL. 713.10 EL. 713.34 EL. 713.73

TOP OF BARRIER WALL, TYP.

FINISHED GROUND LINE

4'-7¼" 5'-4⅜" 4'-9½"

¾" PJF, TYP.

1'-6" 6'-0" 1'-6"

9'-0" TYP.

EL. 704.98

7'-9"

BARRIER WALL CONC. & REINF. BETWEEN PIERS INCLUDED IN B-51-139 QUANTITIES

ELEVATION

(LOOKING NORTH)
ALL DIMENSIONS ARE MEASURED ALONG ℄ PIER

℄ OF PIER

3'-6"
VARIES 1½" 3'-3" 1½"
5'-0½" MAX. 4'-0"
1'-9" 1'-9"
EL. 721.82
2'-0" 3 STEPS @ 8"
3" 3"
4'-6" 3'-0" 4'-6"
13'-7⅜" TYP. 5½" 2'-1" 5½"
BARRIER WALL
3'-0" TYP. 6" TYP.
EL. 704.98
12'-0" TYP.

END VIEW

GIRDER SPACING ALONG ℄ PIER

7 SPA. @ 9'-9" = 68'-3" 5'-1½"

9'-0" 12'-0" 9'-0" 12'-0" 9'-0" 12'-0" 9'-0" 3'-3"

℄ COL. 1 ℄ COL. 2 ℄ COL. 3 ℄ COL. 4 3'-4½"

TYP. ℄ PIER

3'-6" 1'-9" 1'-9"

5'-1½" 6'-3" 3'-6" 6'-3" 3'-6" 6'-3" 3'-6" 3'-6" 6'-3" 3'-6" 6'-3" 3'-6" 6'-3" 5'-1½"

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

EXISTING PILE, TYP.

6'-0" 21'-0" 21'-0" 21'-0" 6'-0"
34'-10½" 5'-3" 34'-10½"
75'-0" ALONG ℄ PIER 1'-9"

PLAN

(BARRIER WALL NOT SHOWN FOR CLARITY)

℄ PIER & ℄ BEARING
STRUCTURE B-51-140
90°
N
℄ PIER
STA. 1241+81.27 IH 94
STA. 348+09.64 SEVEN MILE ROAD

LEGEND

- ALL UNDERDECK ITEMS PAID UNDER ROADWAY BID ITEMS.
- 3'-6" x 1'-2" x 3" CONSTR. JOINT FORMED BY BEVELED KEYWAY, TYP. TOP AND BOTTOM OF ALL COLUMNS
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- 12¾" C.I.P. PIPE PILES. SEE SHEET 6 FOR PILE SPLICE DETAILS.
- (X) GIRDER NUMBER

PJF - PREFORMED JOINT FILLER

NOTES

FOR REINFORCEMENT DETAILS, FOOTING PLAN, BILL OF BARS AND BENDING DIAGRAMS SEE SHEETS 12-14.

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

FOR CONCRETE STAINING DETAILS, SEE SHEET "AESTHETIC DETAILS".

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE PIER IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURE DESIGN SECTION. THE PRECAST CONCRETE PIER SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 7 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND SPECIAL PROVISIONS RELATED TO PRECAST ELEMENTS WITH THE EXCEPTION OF METHOD OF PAYMENT. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.

¾" 1½"

SECTION E-E

1" ¼" 1¾"

SECTION F-F

PIER CAP
PIER COLUMN
8" 8" 8"
¾" DEEP x 1½" FILLET

SECTION G-G

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY DMC | PLANS CK'D. DMC

PIER GEOMETRY

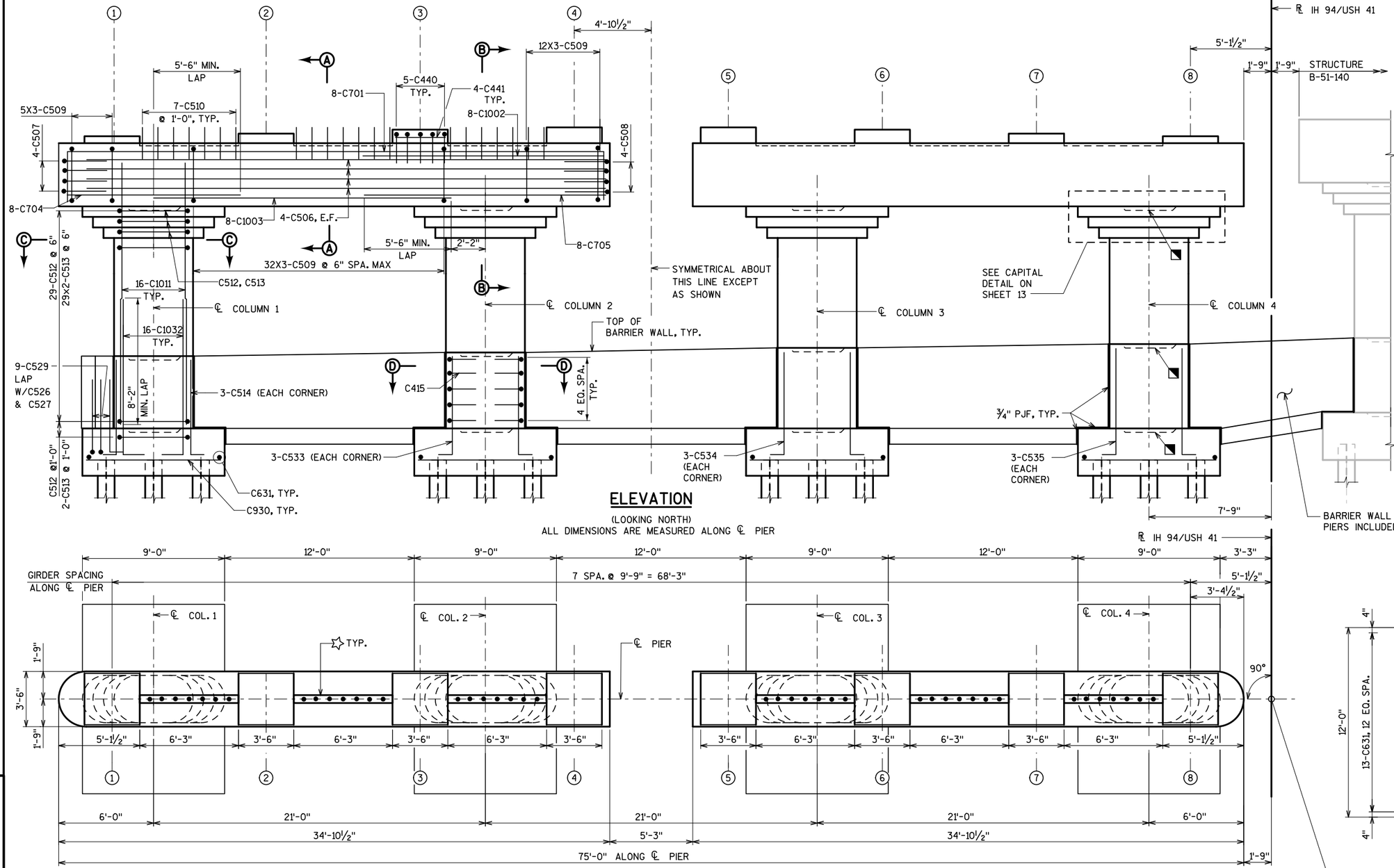
SHEET 11 OF 29
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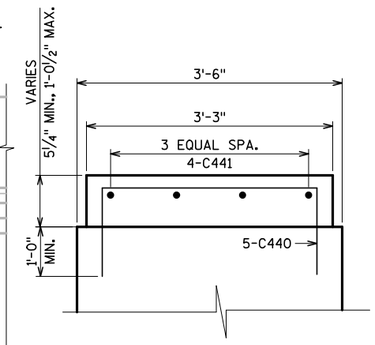
STATE PROJECT NUMBER

1035-01-74



ELEVATION

(LOOKING NORTH)
ALL DIMENSIONS ARE MEASURED ALONG ℄ PIER



TYPICAL BEARING BLOCK DETAILS

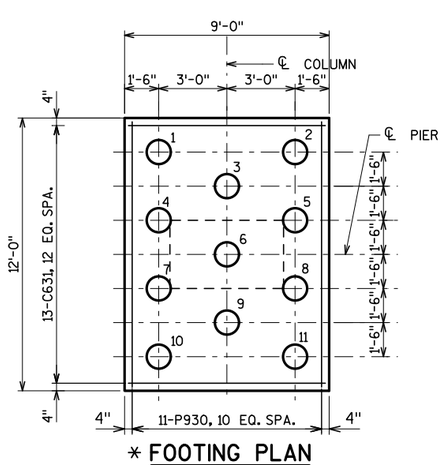
PIER CAP REINFORCEMENT NOT SHOWN FOR CLARITY.

FOUNDATION DATA

PIER TO BE SUPPORTED ON 12¾X 0.375 INCH C.I.P. PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. ESTIMATED PILE LENGTH = 95 FEET.

PLAN

(BARRIER WALL NOT SHOWN)



* FOOTING PLAN

(TYP. ALL COLUMNS)

LEGEND

- 3'-6" x 1'-2" x 3" CONSTR. JOINT FORMED BY BEVELED KEYWAY, TYP. TOP AND BOTTOM OF ALL COLUMNS
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- (X) GIRDER NUMBER
- PJF- PREFORMED JOINT FILLER
- *- PROPOSED PILING MAY BE ADJUSTED UP TO 3" EACH WAY TO AVOID CONFLICTS WITH EXISTING PILES. IF GREATER ADJUSTMENT IS REQUIRED, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING.

℄ PIER
STA. 1241+81.27 I.H. 94
STA. 348+09.64 SEVEN MILE ROAD

NOTES

FOR SECTION DETAILS, SEE SHEET 13.

FOR BARRIER WALL DETAILS, SEE SHEET 14.

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

PIER REINFORCING DETAILS (1 OF 2)

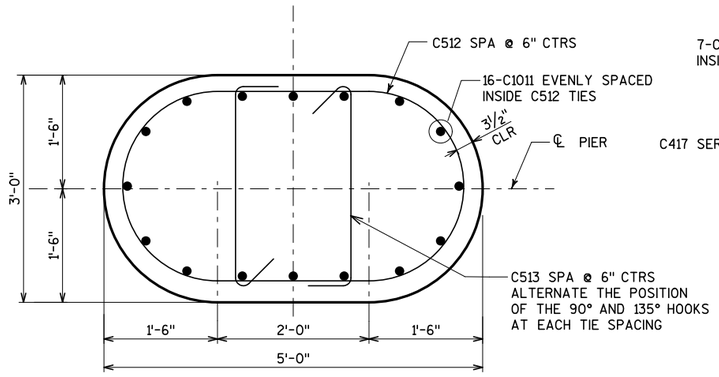
SHEET 12 OF 29
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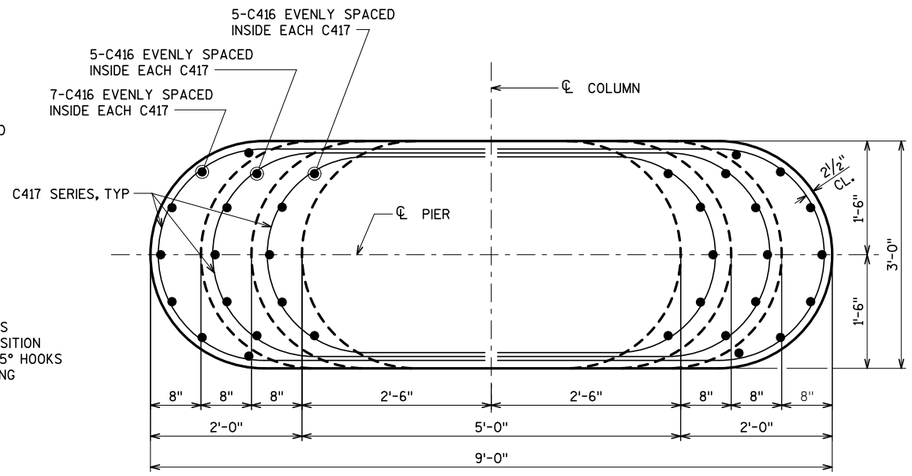
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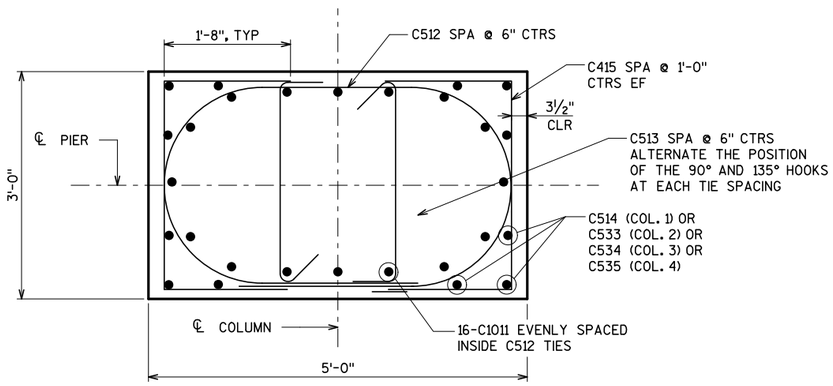
SECTION C-C

TYPICAL COLUMN SECTION ABOVE TOP OF BARRIER WALL



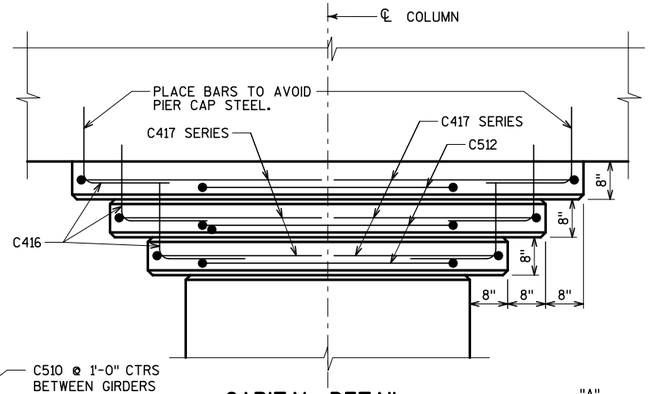
SECTION THRU TOP OF COLUMN

COLUMN DETAILS AT CAPITALS
COLUMN STEEL NOT SHOWN FOR CLARITY

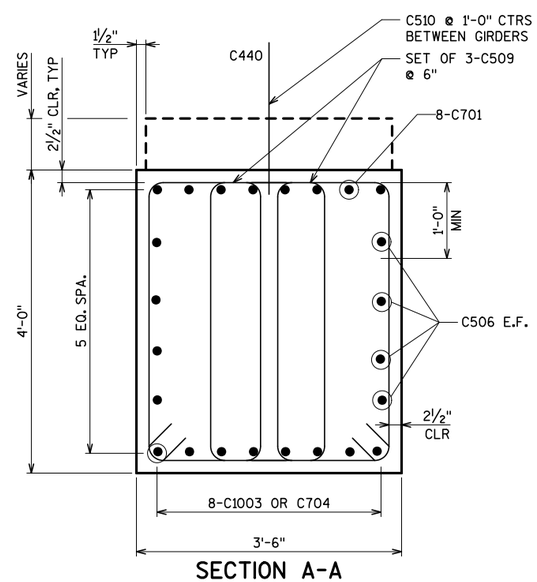


SECTION D-D

TYPICAL COLUMN SECTION
BELOW TOP OF BARRIER WALL

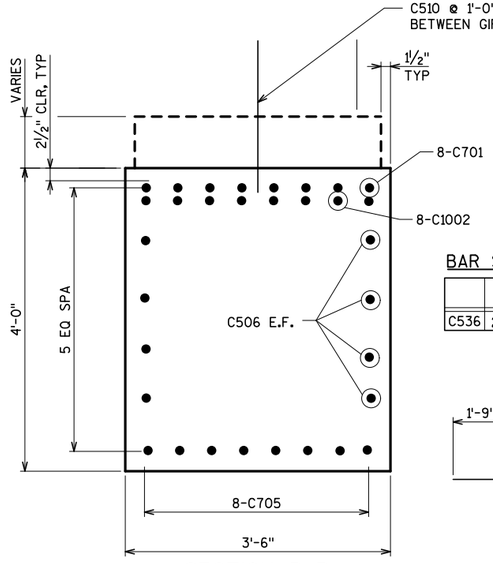


CAPITAL DETAIL



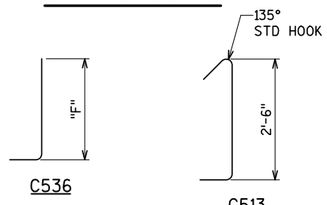
SECTION A-A

BEARING BLOCK BARS NOT SHOWN FOR CLARITY



SECTION B-B

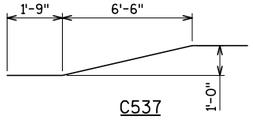
PIER CAP SECTION ABOVE COLUMNS PANEL 3



BAR SERIES TABLE

	NO. REQ'D	"F"	LENGTH
C536	2 SERIES OF 7	3'-10" TO 4'-10"	4'-7" TO 5'-7"

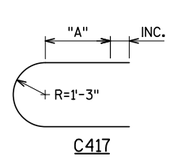
BUNDLE AND TAG EACH SERIES SEPARATELY

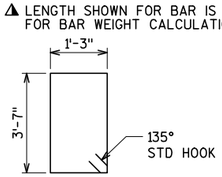


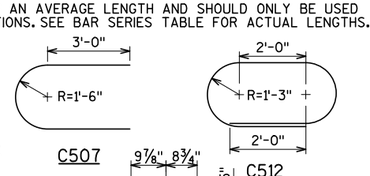
"C"
"B"

MARK	"B"	"C"
C508	1'-9"	2'-11"
C415	1'-8"	2'-7"
C518	3'-11"	2'-7"
C527	4'-0"	2'-7"
C528	4'-0"	6"
C440	1'-10"	2'-11"

BENDING DIAGRAMS





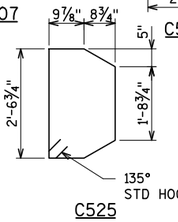


BAR SERIES TABLE

	NO. REQ'D	"A"	INC.	LENGTH
C417	8 SERIES OF 3	1'-8" TO 3'-0"	8"	7'-3" TO 9'-11"

BUNDLE AND TAG EACH SERIES SEPARATELY

C509



"D"
"E"

MARK	"D"	"E"
C701	3'-6"	20'-0"
C1002	3'-6"	15'-5"
C514	10"	6'-2"
C416	1'-4"	1'-8"
C519	10"	4'-7"
C526	10"	4-0"
C529	10"	5'-4"
C1032	1'-7"	10'-6"
C533	10"	6'-5"
C534	10"	6'-8"
C535	10"	6'-11"
C539	10"	3'-11"

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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
C701	X	32	23'-4"	X	-	PIER CAP-HORIZ., TOP
C1002	X	16	18'-9"	X	-	PIER CAP-HORIZ., TOP
C1003	X	16	18'-10"	-	-	PIER CAP-HORIZ., BOTTOM
C704	X	16	11'-4"	-	-	PIER CAP-HORIZ., BOTTOM
C705	X	16	15'-5"	-	-	PIER CAP-HORIZ., BOTTOM
C506	X	16	33'-2"	-	-	PIER CAP-HORIZ., EACH FACE
C507	X	8	10'-9"	X	-	PIER CAP-HORIZ., U BARS
C508	X	8	6'-2"	X	-	PIER CAP-HORIZ., U BARS
C509	X	294	10'-4"	X	-	PIER CAP-STIRRUPS
C510	X	42	2'-0"	-	-	PIER DIAPHRAGM DOWELS
C1011	X	64	17'-4"	-	-	COLUMN-VERT.
C512	X	116	13'-11"	X	-	COLUMN-HORIZ. TIE
C513	X	232	3'-1"	X	-	COLUMN-HORIZ. TIE
C514	X	12	6'-11"	X	-	PIER COL NO. 1. VERT.
C415	X	40	5'-9"	X	-	PIER COL. BOT.
C416	X	136	2'-11"	X	-	PIER COL CAPITAL
C417	X	24	8'-7"	X	X	PIER COL CAPITAL
C518	X	62	10'-2"	X	-	BARRIER WALL VERT.
C519	X	78	5'-4"	X	-	BARRIER WALL VERT.
C520	X	36	15'-6"	-	-	BARRIER WALL HORIZ..
C521	X	12	10'-0"	-	-	BARRIER WALL HORIZ..
C522	X	21	11'-8"	-	-	BARRIER WALL FOOTING
C523	X	7	6'-2"	-	-	BARRIER WALL FOOTING
C524	X	46	5'-6"	-	-	BARRIER WALL HORIZ..
C525	X	5	8'-4"	X	-	BARRIER WALL HORIZ..
C526	X	7	4'-9"	X	-	BARRIER WALL VERT.
C527	X	1	10'-4"	X	-	BARRIER WALL VERT.
C528	X	5	8'-3"	X	-	BARRIER WALL VERT.
C529	X	9	6'-1"	X	-	BARRIER WALL-OUTSIDE COL. FTG.
C930	-	44	11'-4"	-	-	PIER COL. FTG.
C631	-	52	8'-4"	-	-	PIER COL. FTG.
C1032	X	64	12'-0"	X	-	PIER COL. FTG. DOWELS
C533	X	12	7'-1"	X	-	PIER COL NO. 2 VERT.
C534	X	12	7'-4"	X	-	PIER COL NO.3 VERT.
C535	X	12	7'-7"	X	-	PIER COL NO. 4 VERT.
C536	X	14	5'-1"	X	X	BARRIER WALL VERT.
C537	X	2	10'-0"	X	-	BARRIER WALL HORIZ..
C539	X	28	4'-8"	X	-	BARRIER WALL VERT.
C440	X	40	6'-5"	X	-	BEARING BLOCK U BAR
C441	X	32	3'-2"	-	-	BEARING BLOCK
C842	X	36	1'-6"	-	-	BARRIER WALL DRILLED DOWELS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

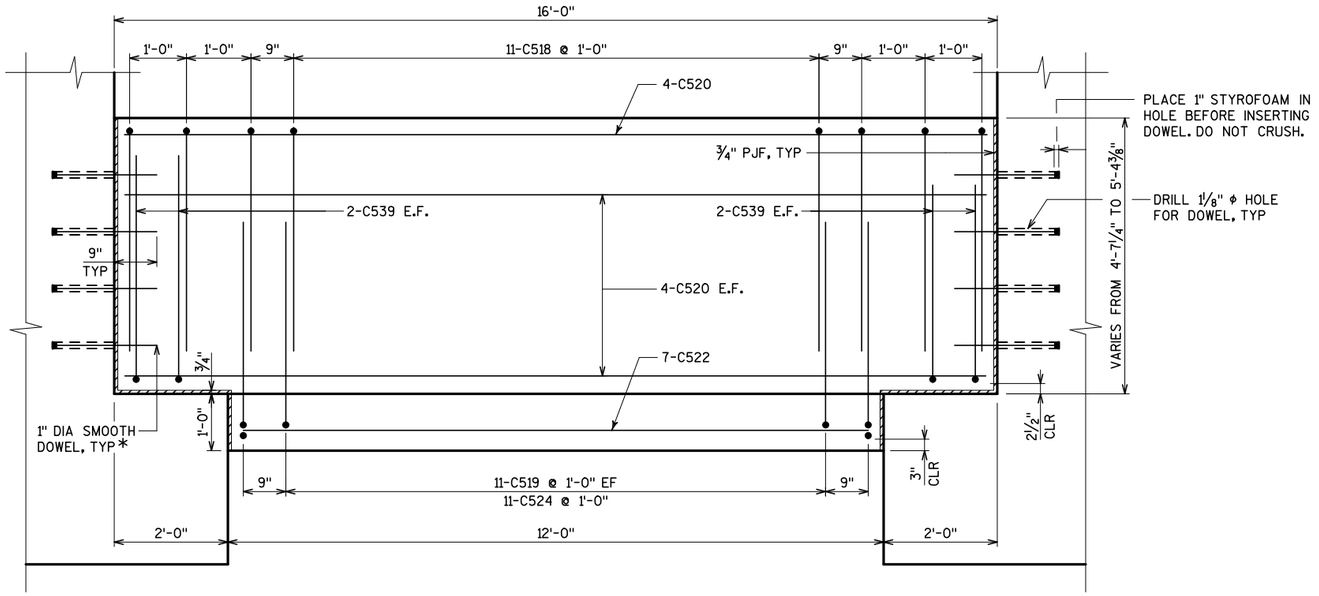
DRAWN BY HG | PLANS CK'D. DMC

PIER REINFORCING DETAILS (2 OF 2)

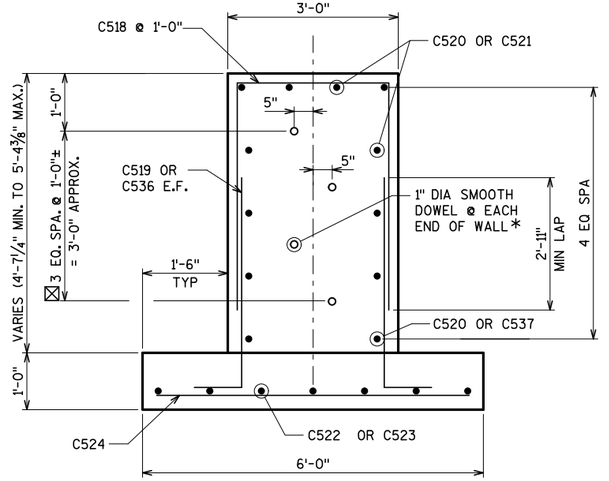
SHEET 13 OF 29
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DATE: 5/3/2018 1:24:00 PM Plotted by: Hegar PEN TABLE: v8_Structural_rev.tbl



ELEVATION OF TYPICAL BARRIER WALL



TYPICAL SECTION OF BARRIER WALL

LEGEND

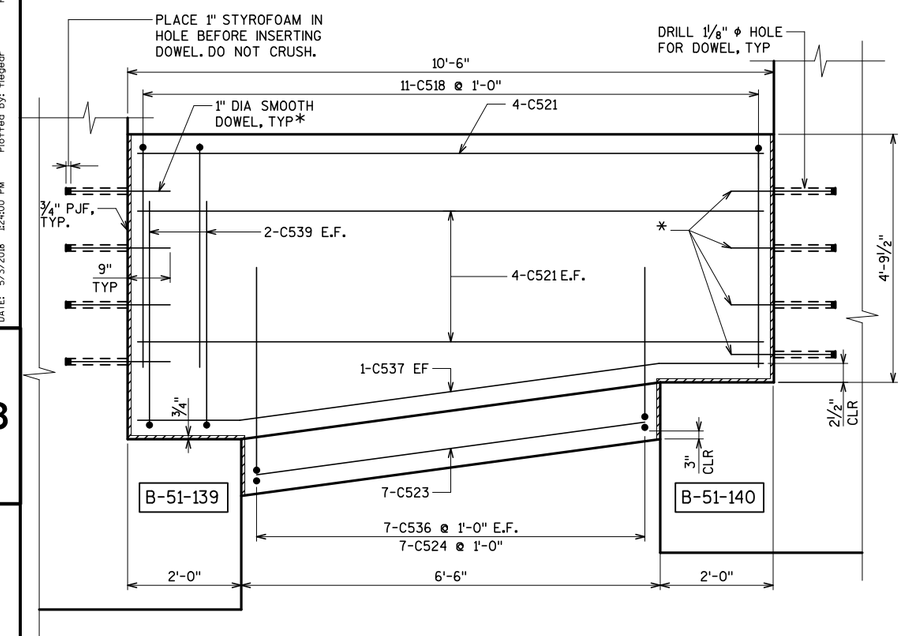
* DOWELS PAID UNDER BID ITEM "DRILLED DOWEL BARS".

PJF - PREFORMED JOINT FILLER

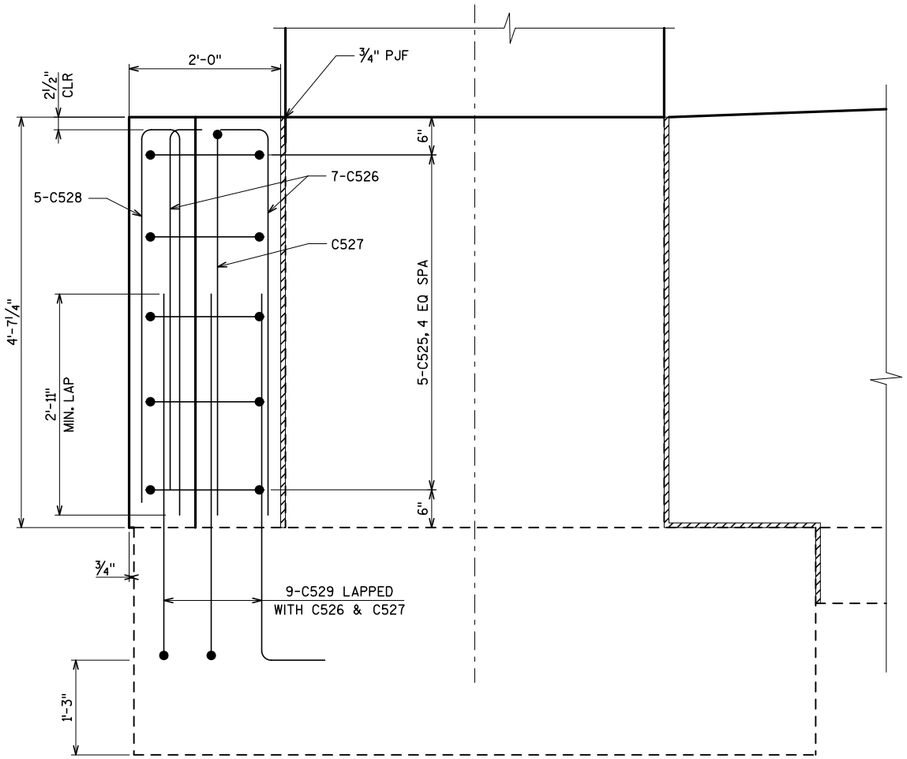
☒ STAGGER RODS TO MISS COLUMN VERTICAL BARS AND TIES. MARK LOCATION BEFORE POURING CONCRETE.

NOTE

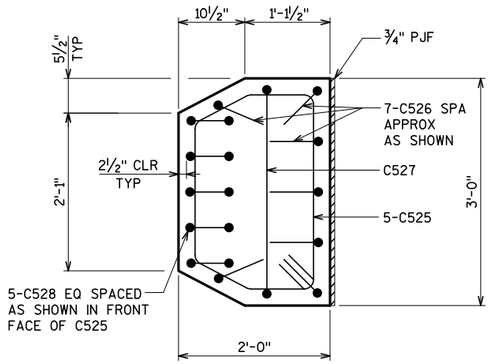
PIER BARRIER WALL IS REQUIRED FOR CAST IN PLACE AND PRECAST PIER OPTIONS.



ELEVATION OF BARRIER WALL B/W BRIDGE B-51-139 & B-51-140



ELEVATION OF BARRIER WALL AT END OF PIER



PLAN OF BARRIER WALL AT END OF PIER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

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PIER BARRIER WALL DETAILS

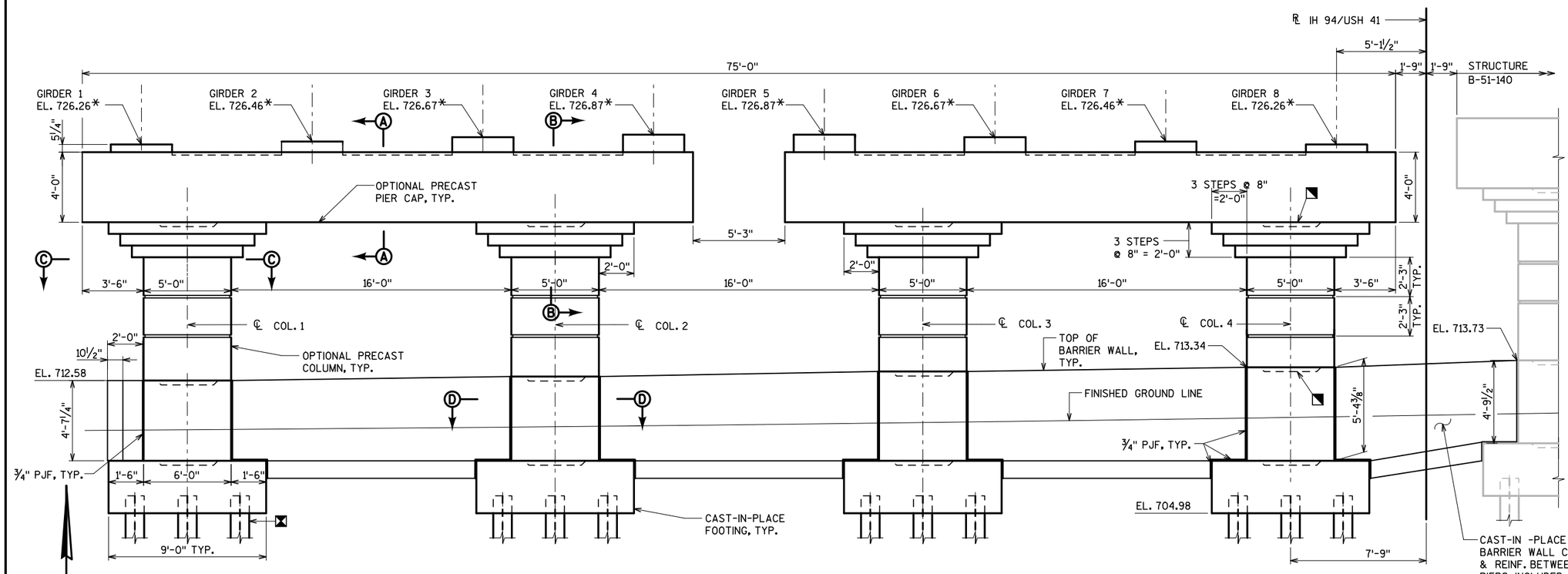
SHEET 14 OF 29
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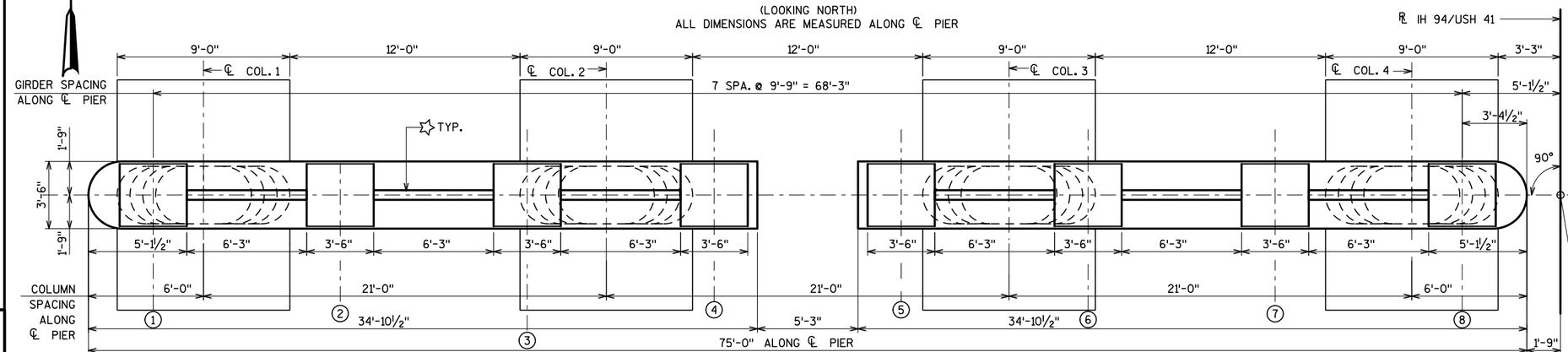
STATE PROJECT NUMBER

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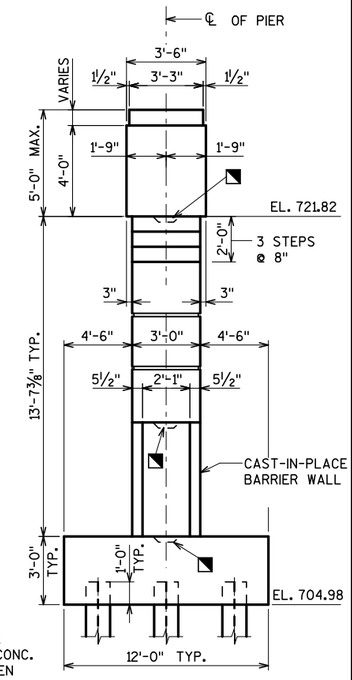
ELEVATION

(LOOKING NORTH)
ALL DIMENSIONS ARE MEASURED ALONG ℄ PIER



PLAN

(BARRIER WALL NOT SHOWN FOR CLARITY)



END VIEW

LEGEND

- 3'-6" x 1'-2" x 3" CONSTR. JOINT FORMED BY BEVELED KEYWAY, TYP. TOP AND BOTTOM OF ALL COLUMNS
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- 12¾" C.I.P. PIPE PILES. SEE SHEET 6 FOR PILE SPLICE DETAILS.
- (X) GIRDER NUMBER

PJF - PREFORMED JOINT FILLER

NOTES

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE PIER (PRECAST COLUMN, PRECAST PIER CAP AND PRECAST BEARING BLOCKS) IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE PIER SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 7 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND SPECIAL PROVISIONS RELATED TO PRECAST ELEMENTS WITH THE EXCEPTION OF METHOD OF PAYMENT. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.

PROVIDE A SUITABLE LIFTING DEVICE FOR THE PRECAST CAP, COLUMN AND BEARING BLOCK UNITS.

MANUFACTURER TO DETERMINE THE PRECAST COLUMN LENGTHS ASSUMING ½" STEEL SHIMS AT THE BOTTOM OF THE COLUMN.

GROUTED COUPLER SLEEVE MAY BE OVERSIZED TO ALLOW FOR ADDITIONAL LATERAL TOLERANCE IN THE FIELD. STANDARD WISDOT PRACTICE IS TO OVERSIZE COUPLER SLEEVE BY 1 BAR SIZE. ADJUST SHEAR STIRRUPS AS NECESSARY TO ACCOUNT FOR LARGER DIAMETER COUPLER SLEEVE.

ALL PRECAST ELEMENTS AND DIAPHRAGM ITEMS PAID PER C.I.P. BID ITEMS. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR THE PRECAST PIER OPTION.

THE CONTRACTOR MAY USE PRECAST SEGMENTS AT THIER DISCRETION (E.G. PRECAST CAP ONLY) WITH APPROVAL BY THE BUREAU OF STRUCTURES.

ALLOWABLE PRECAST ELEMENTS INCLUDE PIER COLUMNS, PIER CAP, AND BEARING BLOCKS.

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE INTERSECTION OF ℄ GIRDER AND ℄ PIER.

REFER TO SHEET "PIER REINFORCING DETAILS (2 OF 2)" FOR SECTION A-A, B-B, C-C AND SECTION D-D DETAILS.

REFER TO SHEET "PIER BARRIER WALL DETAILS" FOR BARRIER WALL DETAILS.

REFER TO SHEETS 11 THRU 14 FOR DETAILS OF CAST IN PLACE ELEMENTS.

FOR REINFORCEMENT DETAILS, FOOTING PLAN, BILL OF BARS AND BENDING DIAGRAMS SEE SHEETS 12-14.

FOR CONCRETE STAINING DETAILS, SEE SHEET 26.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

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PRECAST PIER (OPTIONAL)

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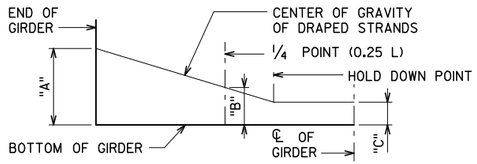
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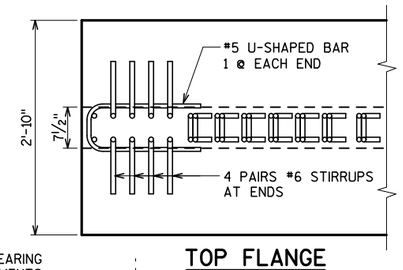
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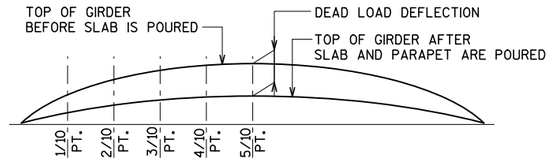
1035-01-74



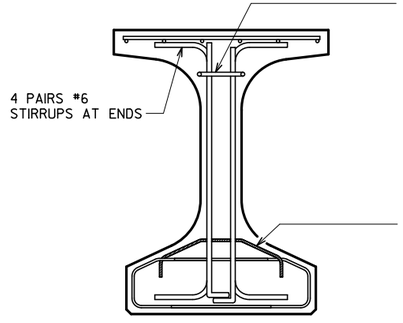
DRAPED STRAND PROFILE



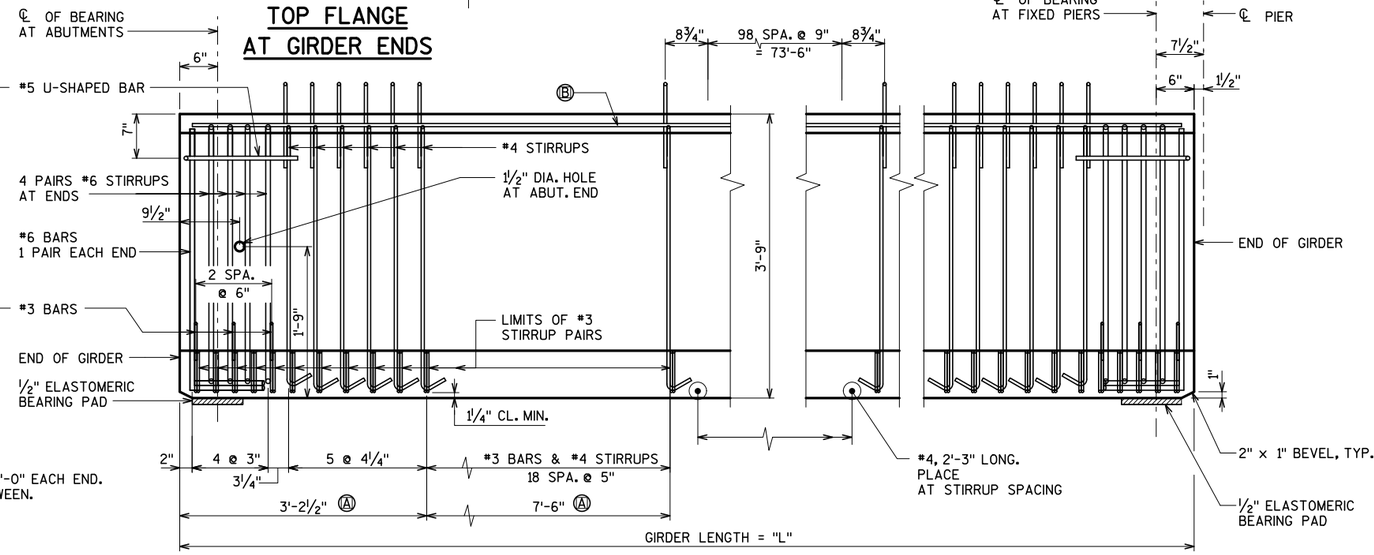
TOP FLANGE AT GIRDER ENDS



DEAD LOAD DEFLECTION DIAGRAM

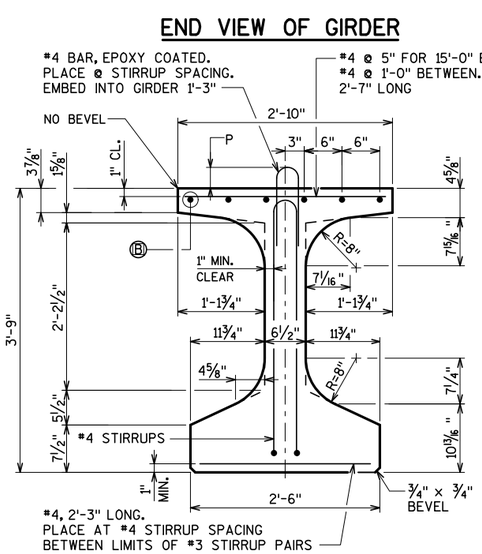


END VIEW OF GIRDER



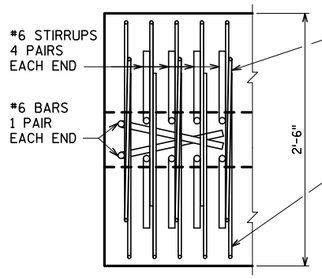
SIDE VIEW OF GIRDER

Ⓐ DETAIL TYP. AT EACH END
Ⓑ 6 - # 4 BARS, FULL LENGTH, LAP 1'-11"

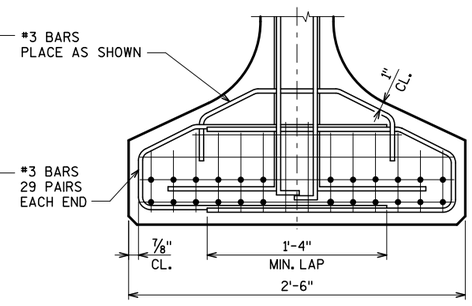


TYPICAL SECTION THRU GIRDER IN SPAN

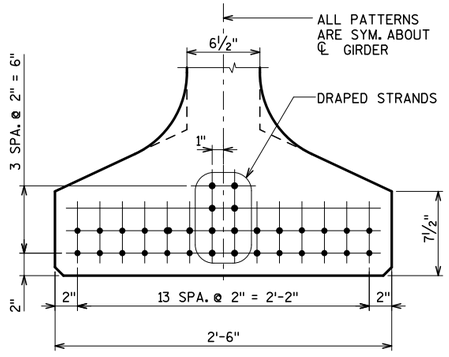
(STRANDS NOT SHOWN)



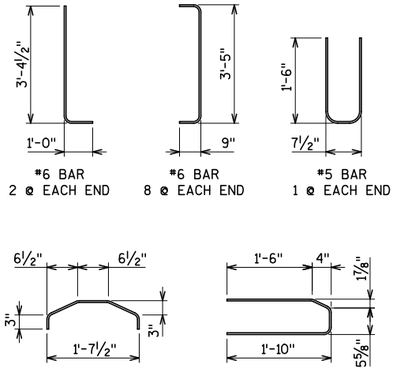
BOTTOM FLANGE AT GIRDER ENDS



TYPICAL STRAND PATTERN END VIEW



TYPICAL STRAND PATTERN MIDSPAN



BENDING DIAGRAMS

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCTRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.SEE SECTION 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRNADS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRAND SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER END, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMIMG TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED ATLEAST 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.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) 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 TENSILE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS, SEE "INTERMEDIATE STEEL DIAPHRAGM" SHEET.

SEE SHEET "AESTHETIC DETAILS" FOR CONCRETE STAINING LIMITS.

GIRDER DATA

SPAN	GIRDER NUMBER	GIRDER LENGTH "L"		DEAD LOAD DEFLECTIONS (IN)											CONC. STRGTH. f'c (p.s.i.)	GIRDER DATA "P"			DIA. OF STRAND	DRAPED PATTERN					INITIAL PULL, KIPS
				SOUTH END 0/10	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	NORTH END 10/10		SOUTH 1/3 OF GIRDER	MID 1/3 OF GIRDER	NORTH 1/3 OF GIRDER		TOTAL NO. OF STRANDS	**f'c (p.s.i.)	(IN) "A"	(IN) "B" MAX.	(IN) "B" MIN.	(IN) "C"	
1	ALL	96'-4½"	DECK PANELS AND GROUT	0	0.26	0.49	0.67	0.78	0.83	0.79	0.67	0.49	0.26	0	8,000	10"	9"	9"	0.6"	32	6,400	39	16.5	13.5	5	1406
			C.I.P. DECK	0	0.37	0.70	0.97	1.14	1.20	1.14	0.98	0.71	0.38	0												
			TOTAL DEFLECTION	0	0.63	1.19	1.64	1.92	2.02	1.93	1.65	1.21	0.64	0												
2	ALL	96'-4½"	DECK PANELS AND GROUT	0	0.26	0.49	0.67	0.78	0.83	0.79	0.67	0.49	0.26	0	8,000	9"	9"	10"	0.6"	32	6,400	39	16.5	13.5	5	1406
			C.I.P. DECK	0	0.37	0.70	0.97	1.14	1.20	1.14	0.98	0.71	0.38	0												
			TOTAL DEFLECTION	0	0.63	1.19	1.64	1.92	2.02	1.93	1.65	1.21	0.64	0												

** MINIMUM CYLINDER STRENGTH OF CONCRETE AT TIME OF TRANSFER OF PRESTRESS FORCE

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STRUCTURE B-51-139

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45W" PRESTRESSED GIRDER DETAILS

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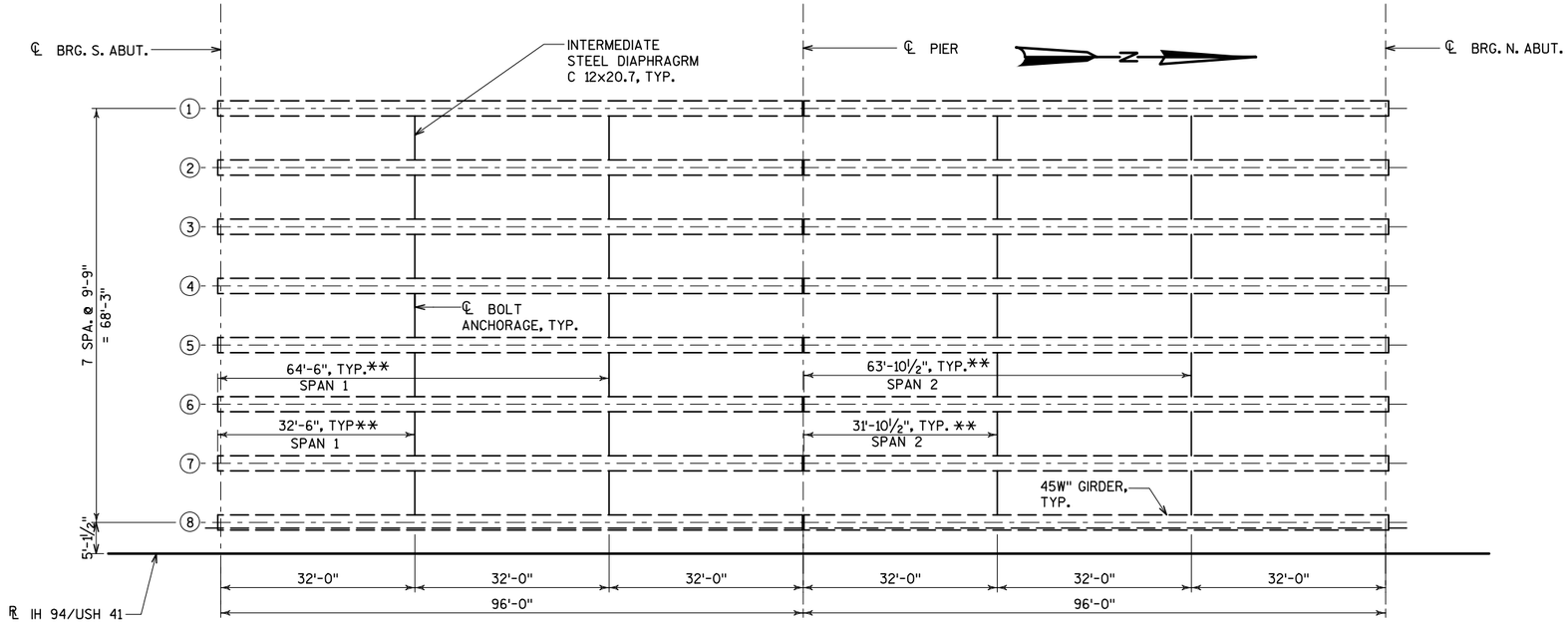
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PEN TABLE: v8_Structural_rev.tbl

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1035-01-74



PLAN

(SHOWING DIAPHRAGM SPACING)

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGM", B-51-139, EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIALS INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

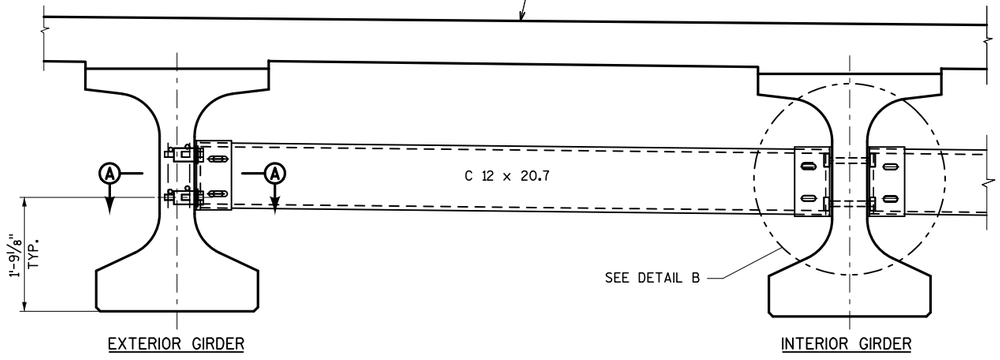
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

* DIM = 2½" FOR ALTERNATE PLATE DIAPHRAGM.

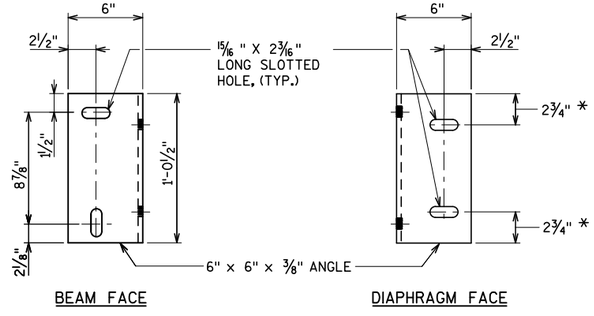
B.F. - BACK FACE

(X) GIRDER NUMBER

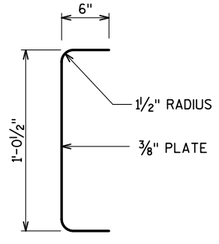
** DIMENSION IS MEASURED FROM THE SOUTH END OF GIRDER.



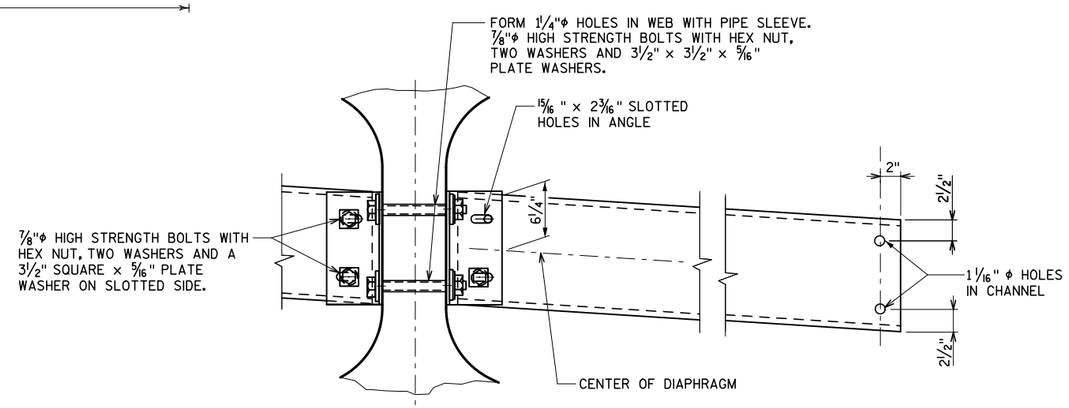
PART TRANSVERSE SECTION AT DIAPHRAGM



DIAPHRAGM SUPPORT

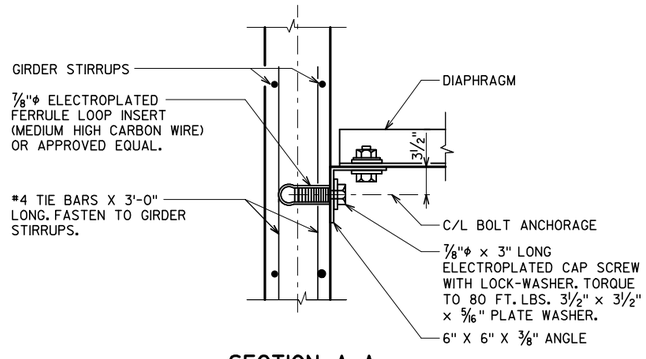


SECTION THRU ALTERNATE DIAPHRAGM



DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)



SECTION A-A

(FOR EXTERIOR ATTACHMENT)

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STRUCTURE B-51-139

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INTERMEDIATE STEEL DIAPHRAGM

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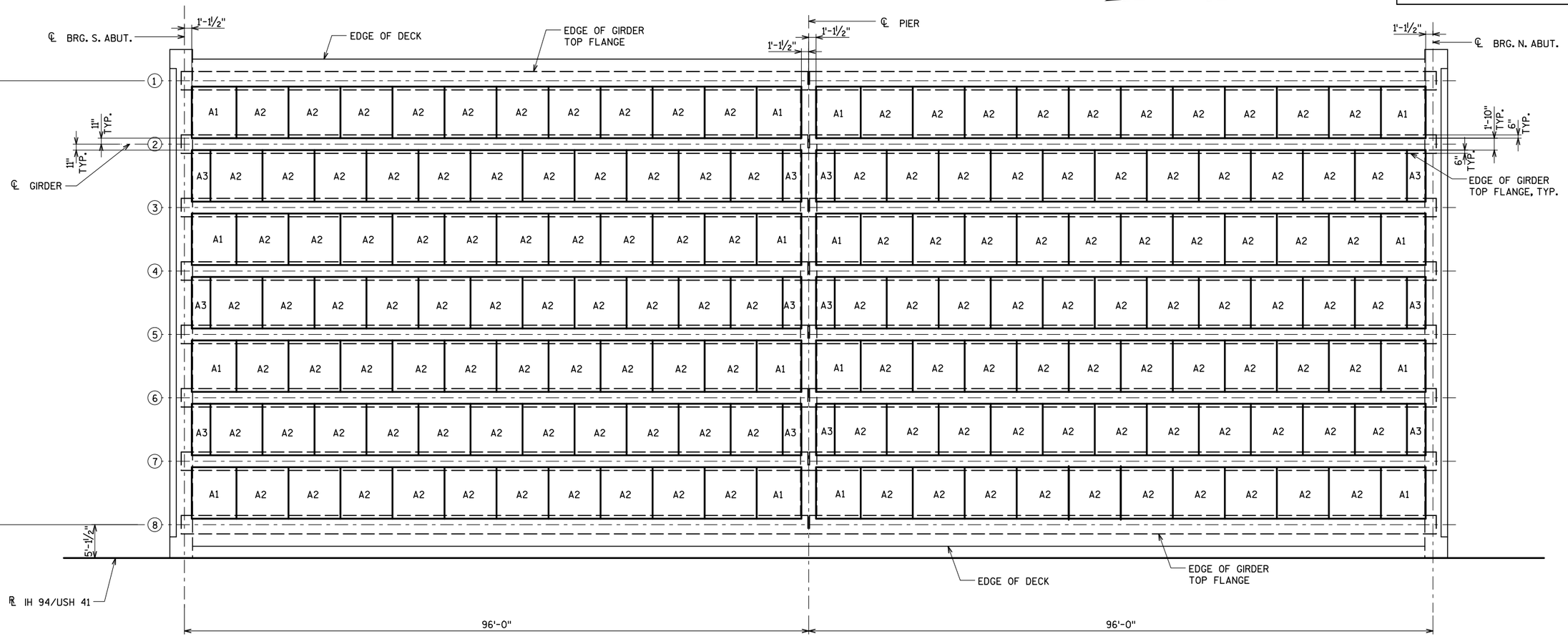
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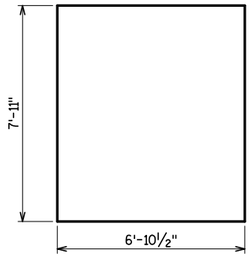


PLAN

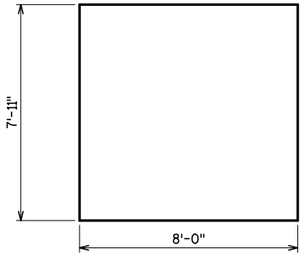
(SHOWING PRECAST DECK PANEL LAYOUT)

NOTE

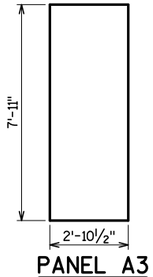
ALL PANEL ENDS AT DIAPHRAGMS SHALL EXTEND A MINIMUM OF 1½" INTO CAST-IN-PLACE DIAPHRAGM.



PANEL A1



PANEL A2



PANEL A3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

PRECAST DECK PANEL LAYOUT

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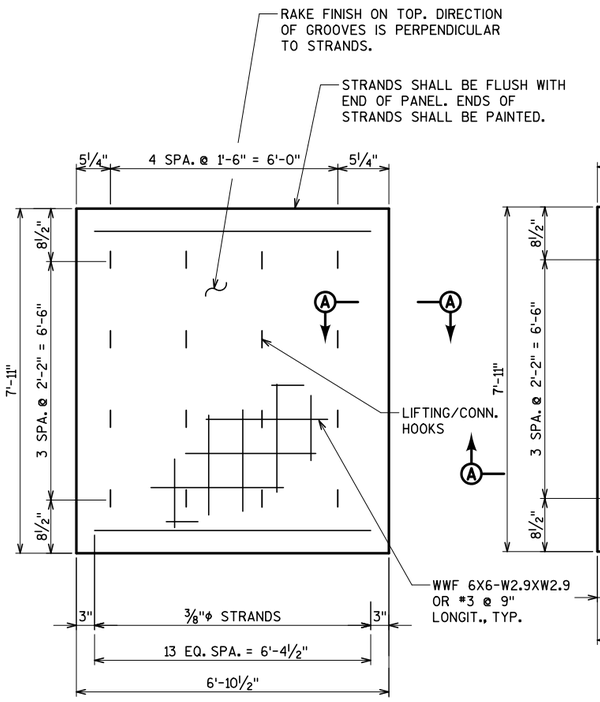
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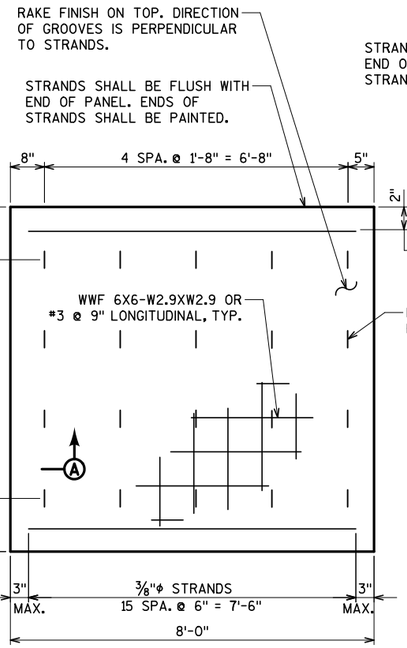
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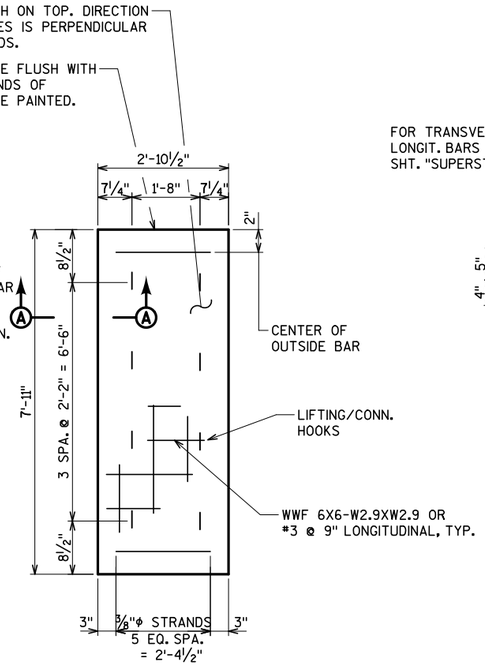


DECK PANEL A1

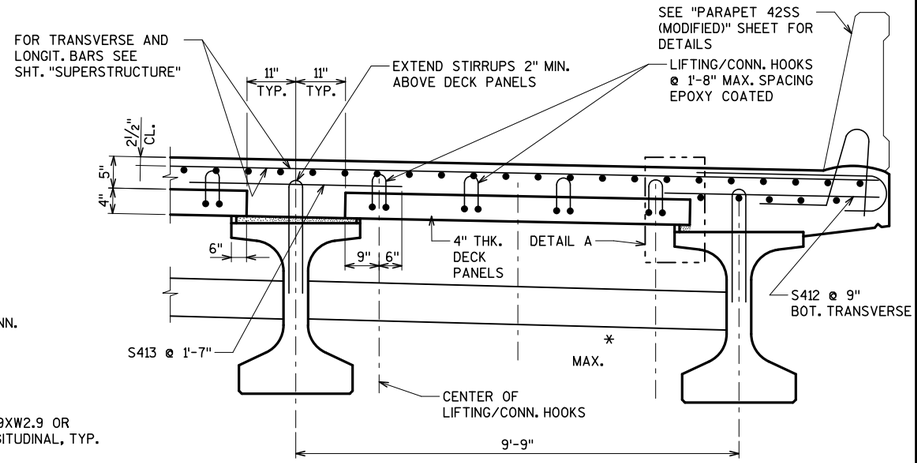


DECK PANEL A2

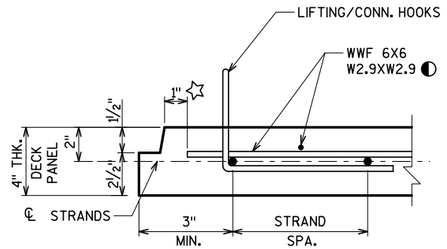
*3'-0" MAX. SPACING BETWEEN ADJACENT ROWS



DECK PANEL A3

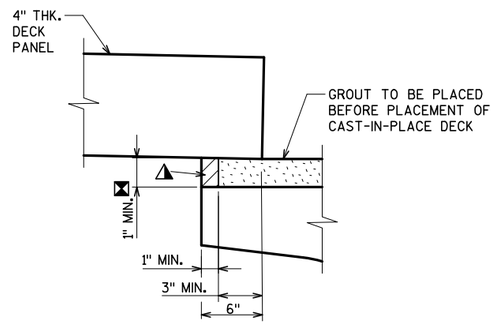


TRANSVERSE SECTION THRU SLAB ON GIRDERS WITH DECK PANELS

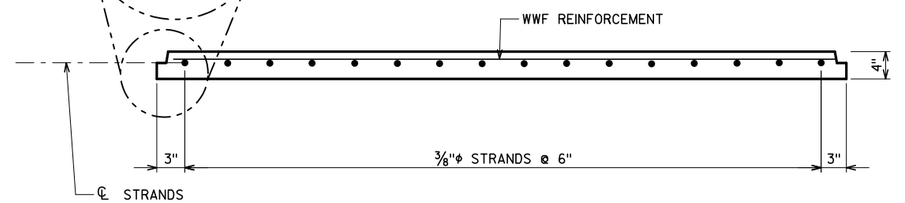


PART SECTION A-A

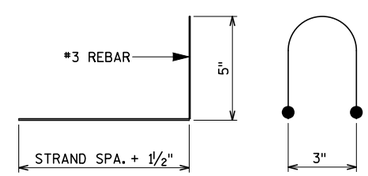
◐ BARS IN WWF WHICH ARE PARALLEL TO THE STRANDS MUST BE A MINIMUM OF 1" CLEAR FROM THE STRANDS.



DETAIL A



TYPICAL SECTION THRU PRECAST CONCRETE DECK PANELS



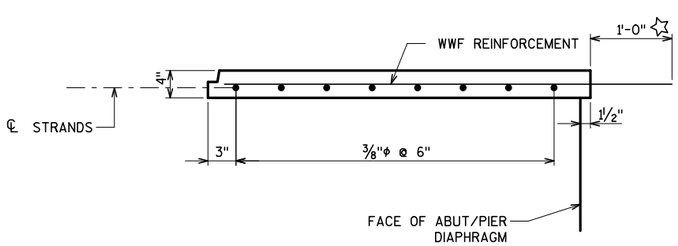
LIFTING/CONN. HOOK DETAIL

LEGEND

◭ HIGH-DENSITY EXPANDED POLYSTYRENE ADHERED TO TOP OF GIRDER FLUSH WITH EDGE OF FLANGE.

☆ LONGITUDINAL REINFORCING AT PANELS ALONG SUBSTRUCTURE TO EXTEND 1'-0" BEYOND TRANSVERSE END OF PANELS INTO SUBSTRUCTURE DIAPHRAGMS.

⊠ EQUAL TO HAUNCH HEIGHT SHOWN ON SHEET 22.



SECTION THRU PRECAST CONCRETE DECK PANELS AT ABUTMENT/PIER DIAPHRAGMS

DESIGN DATA

ULTIMATE TENSILE STRENGTH OF PRESTRESSING STRANDS IN DECK PANELS (LOW RELAXATION).....fs = 270,000 psi

INITIAL PRESTRESSD FORCE/ STRAND = 17.12 KIPS

CONCRETE FOR DECK PANELS
f'c = 6,000 PSI
f'ci = 4,400 PSI

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

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PRECAST DECK PANEL DETAILS

SHEET 19 OF 29

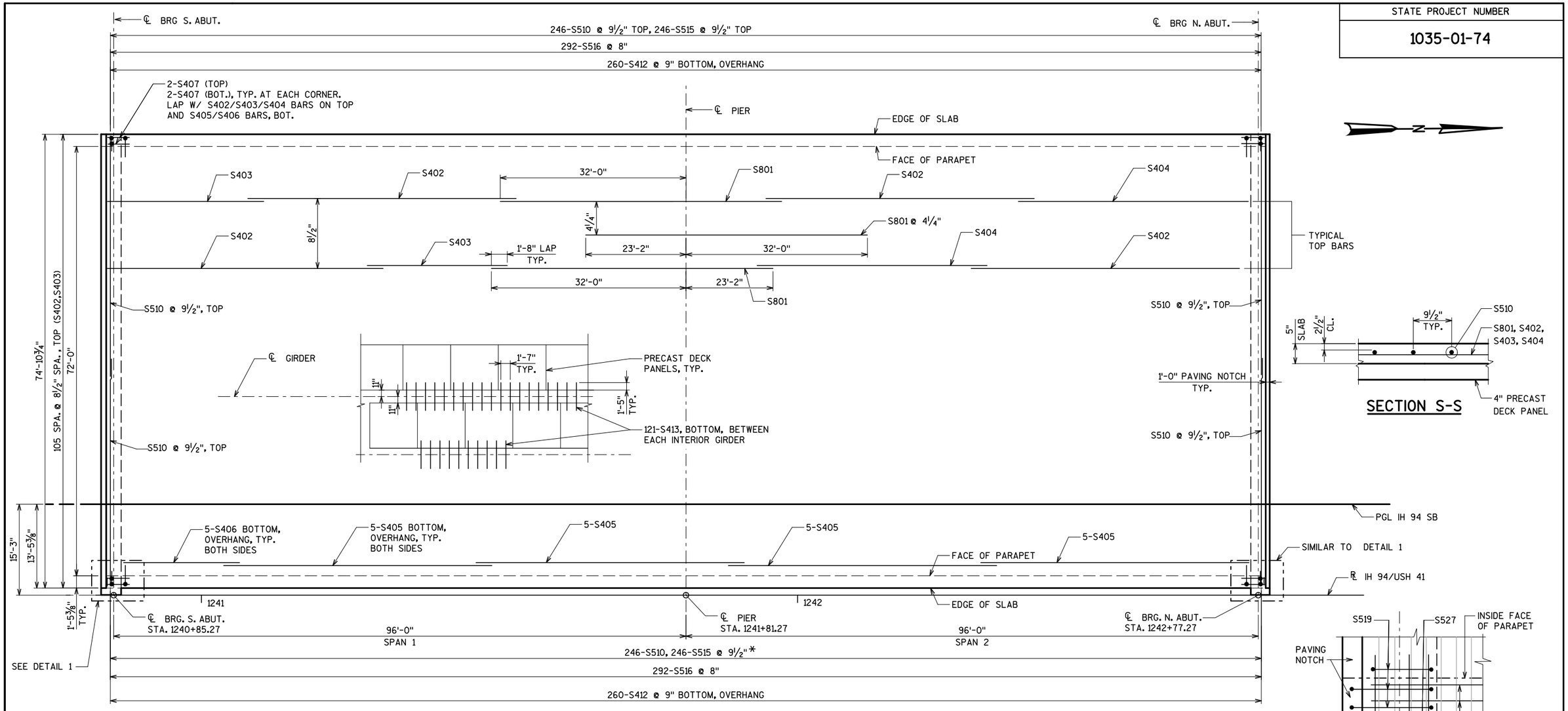
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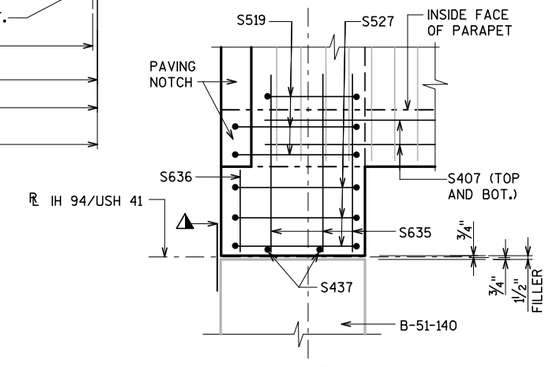
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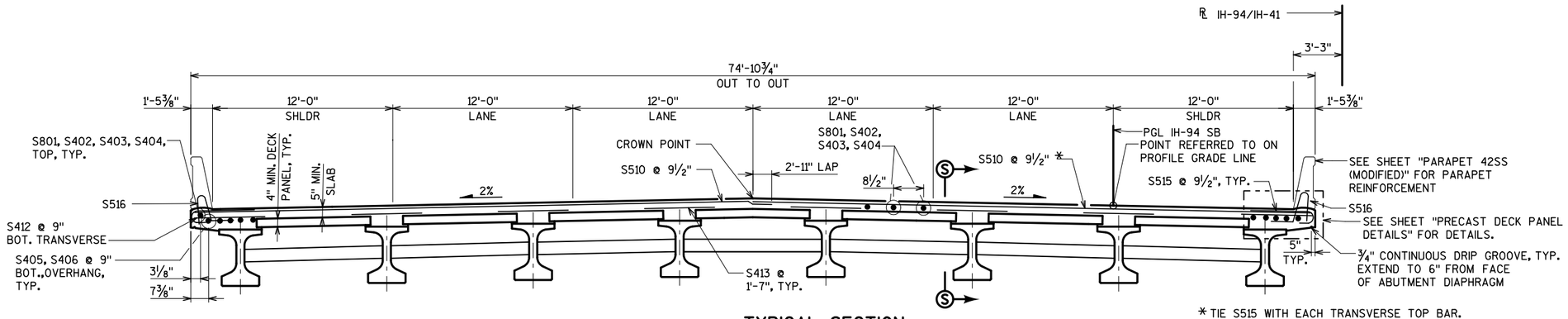
STATE PROJECT NUMBER
1035-01-74



PLAN



DETAIL 1



TYPICAL SECTION
(LOOKING NORTH)

* TIE S515 WITH EACH TRANSVERSE TOP BAR.

⚠ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. AND VERT. JOINTS ON BACK FACE

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY WJ | PLANS CK'D. AVK

SUPERSTRUCTURE

SHEET 20 OF 29
486

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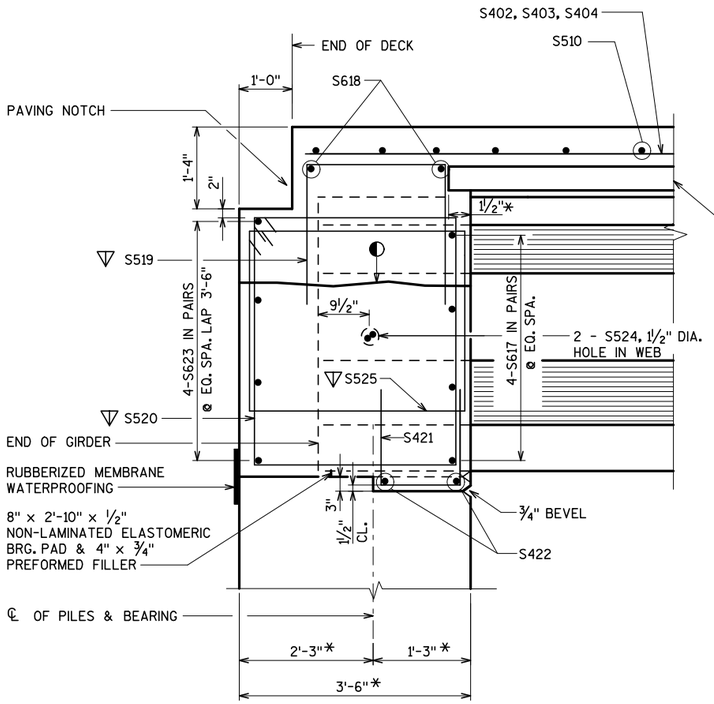
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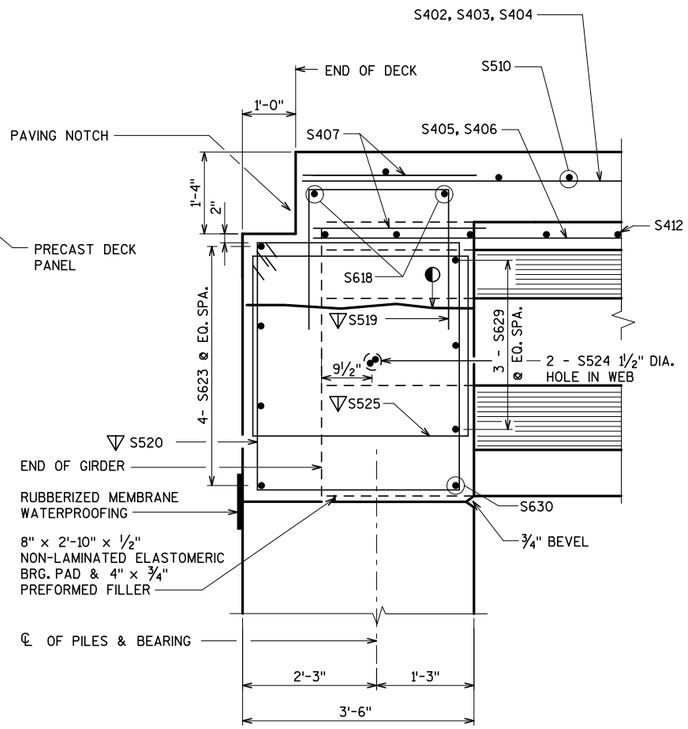
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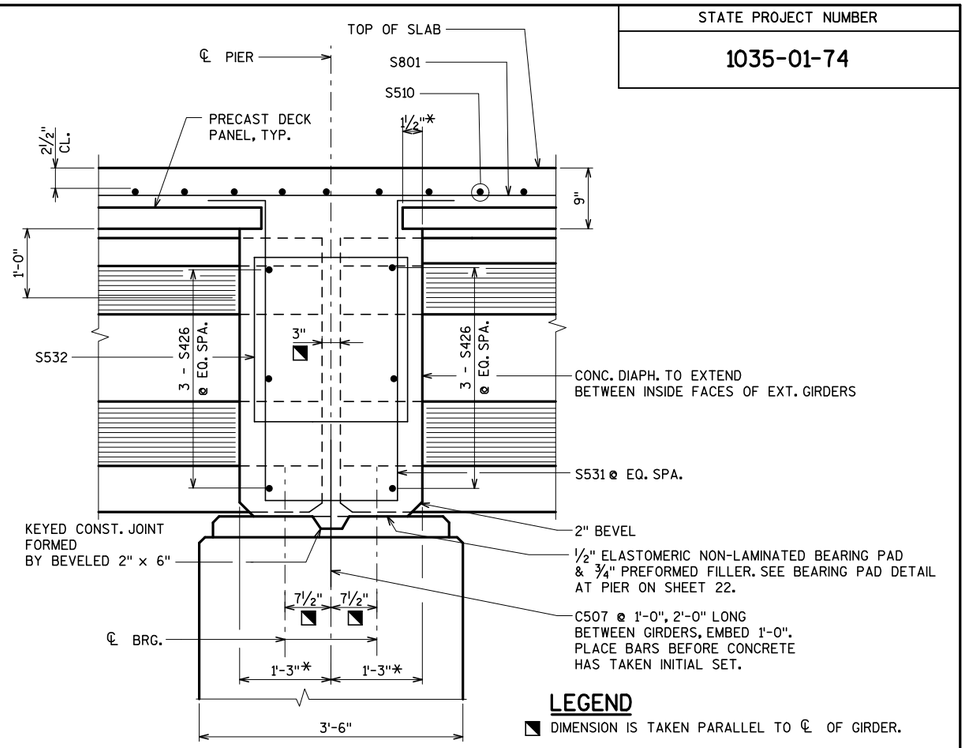
1035-01-74



DIAPHRAGM AT ABUTMENT (BETWEEN GIRDERS)



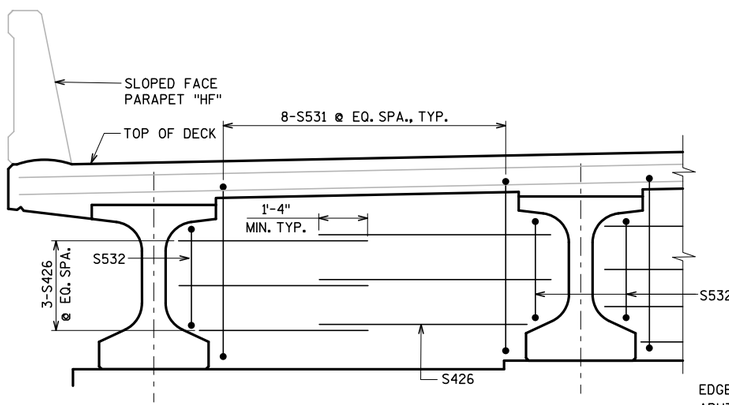
DIAPHRAGM AT ABUTMENT (UNDER PARAPET)



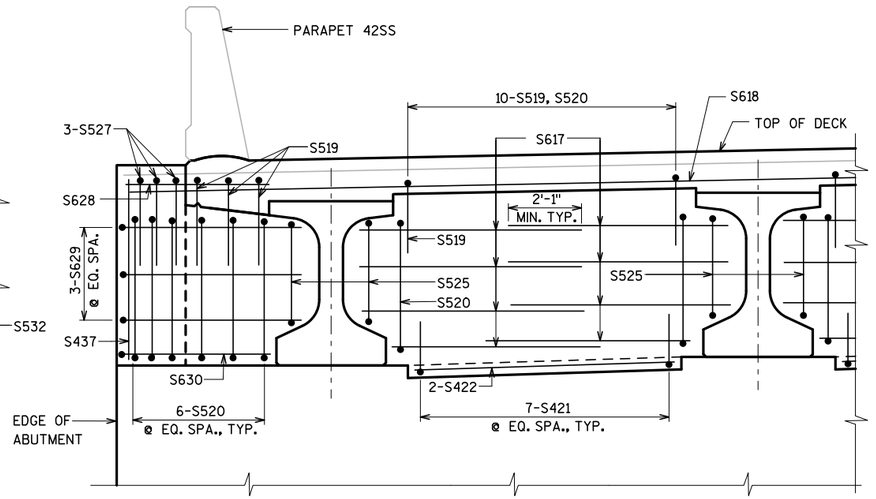
DIAPHRAGM AT PIER

LEGEND

- ◥ DIMENSION IS TAKEN PARALLEL TO ℄ OF GIRDER.
- * DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.
- ◐ OPTIONAL CONST. JT. 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF DIAPHRAGM POUR.
- ▽ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.

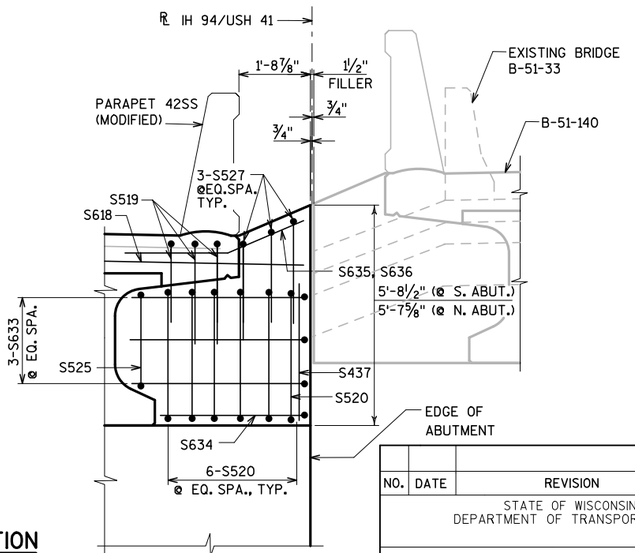


PART TRANSVERSE SECTION AT PIER DIAPHRAGM



PART TRANSVERSE SECTION AT ABUTMENT DIAPHRAGM

(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT OPPOSITE)



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY HG | PLANS CK'D. DMC

SUPERSTRUCTURE DETAILS

SHEET 21 OF 29

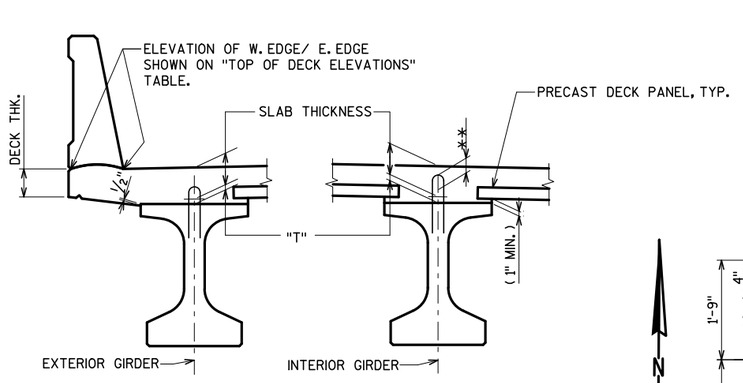
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TOP OF DECK ELEVATIONS - SPAN 1

POINT	℄ BRG. S. ABUT	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	PIER
W.EDGE	730.27	730.34	730.41	730.49	730.56	730.63	730.71	730.78	730.85	730.92	731.00
G1	730.31	730.38	730.45	730.52	730.60	730.67	730.74	730.82	730.89	730.96	731.04
G2	730.50	730.57	730.65	730.72	730.79	730.87	730.94	731.01	731.08	731.16	731.23
G3	730.70	730.77	730.84	730.91	730.99	731.06	731.13	731.21	731.28	731.35	731.43
G4	730.89	730.96	731.04	731.11	731.18	731.26	731.33	731.40	731.47	731.55	731.62
CROWN	730.99	731.06	731.13	731.21	731.28	731.35	731.43	731.50	731.57	731.64	731.72
G5	730.89	730.96	731.04	731.11	731.18	731.26	731.33	731.40	731.47	731.55	731.62
G6	730.70	730.77	730.84	730.91	730.99	731.06	731.13	731.21	731.28	731.35	731.43
PGL	730.51	730.58	730.65	730.73	730.80	730.87	730.95	731.02	731.09	731.16	731.24
G7	730.50	730.57	730.65	730.72	730.79	730.87	730.94	731.01	731.08	731.16	731.23
G8	730.31	730.38	730.45	730.52	730.60	730.67	730.74	730.82	730.89	730.96	731.04
E.EDGE	730.27	730.34	730.41	730.49	730.56	730.63	730.71	730.78	730.85	730.92	731.00

TOP OF DECK ELEVATIONS - SPAN 2

POINT	PIER	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. N. ABUT
W.EDGE	731.00	731.07	731.14	731.22	731.29	731.36	731.44	731.51	731.58	731.65	731.73
G1	731.04	731.11	731.18	731.25	731.33	731.40	731.47	731.55	731.62	731.69	731.76
G2	731.23	731.30	731.38	731.45	731.52	731.59	731.67	731.74	731.81	731.89	731.96
G3	731.43	731.50	731.57	731.64	731.72	731.79	731.86	731.94	732.01	732.08	732.15
G4	731.62	731.69	731.77	731.84	731.91	731.98	732.06	732.13	732.20	732.28	732.35
CROWN	731.72	731.79	731.86	731.94	732.01	732.08	732.16	732.23	732.30	732.37	732.45
G5	731.62	731.69	731.77	731.84	731.91	731.98	732.06	732.13	732.20	732.28	732.35
G6	731.43	731.50	731.57	731.64	731.72	731.79	731.86	731.94	732.01	732.08	732.15
PGL	731.24	731.31	731.38	731.46	731.53	731.60	731.68	731.75	731.82	731.89	731.97
G7	731.23	731.30	731.38	731.45	731.52	731.59	731.67	731.74	731.81	731.89	731.96
G8	731.04	731.11	731.18	731.25	731.33	731.40	731.47	731.55	731.62	731.69	731.76
E.EDGE	731.00	731.07	731.14	731.22	731.29	731.36	731.44	731.51	731.58	731.65	731.73



SLAB HAUNCH DETAIL

IF 1" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

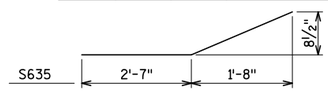
** IF 2" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED ABOVE THE TOP OF DECK PANELS.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

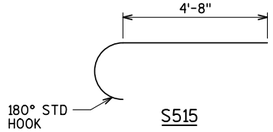
TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS (CAST IN PLACE DECK + PRECAST DECK PANELS)
= HAUNCH HEIGHT 'T'

BAR MARK	A	B
S519	2'-2"	2'-0"
S421	11"	1'-3"
S527	3'-1"	3'-8
S629	3'-1"	3'-10"
S630	3'-1"	3'-0"
S633	3'-1"	4'-2"
S634	3'-1"	3'-6"

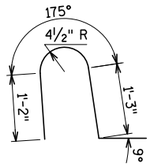
BAR MARK	C	D
S520	3'-1"	3'-1"
S525	3'-1"	2'-2"
S532	2'-1"	2'-2"



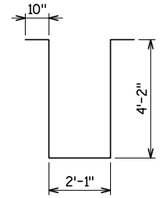
S635



S515

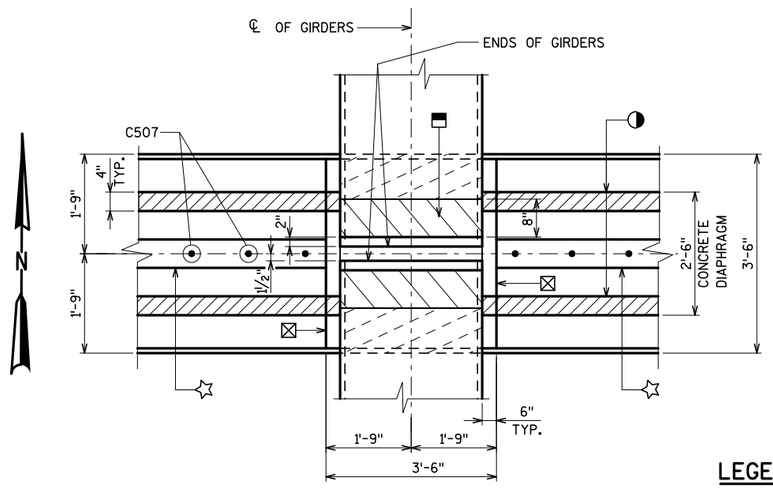


S516



S531

BENDING DIAGRAMS



BEARING PAD DETAIL AT PIER

LEGEND

- ½" × 8" × 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD
- ¾" PREFORMED FILLER
- 2" × 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- BEAM SEAT EDGE

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S801	X	211	55'-2"	-		SLAB LONGITUDINAL TOP, OVER PIER
S402	X	212	45'-0"	-		SLAB LONGITUDINAL TOP
S403	X	106	23'-5"	-		SLAB LONGITUDINAL TOP, SPAN 1
S404	X	106	32'-3"	-		SLAB LONGITUDINAL TOP, SPAN 2
S405	X	40	45'-0"	-		SLAB LONGITUDINAL BOTTOM
S406	X	10	20'-10"	-		SLAB LONGITUDINAL BOTTOM, ENDS
S407	X	16	2'-4"	-		SLAB LONGITUDINAL, ENDS
S510	X	492	38'-7"	-		SLAB TRANSVERSE TOP
S412	X	520	5'-6"	-		SLAB TRANSVERSE BOTTOM
S413	X	726	4'-8"	-		SLAB TRANSVERSE BOTTOM
S515	X	492	5'-3"	X		SLAB OVERHANG
S516	X	584	4'-5"	X		PARAPET VERTICAL
S617	X	112	5'-6"	-		DIAPHRAGM @ ABUT'S, HORIZ.
S618	X	8	40'-8"	-		SLAB TRANSVERSE @ ABUT'DIAPH
S519	X	152	5'-11"	X		DIAPHRAGM @ ABUT'S, VERTICAL, TOP
S520	X	164	13'-0"	X		DIAPHRAGM @ ABUT'S, STIRRUPS
S421	X	98	3'-3"	X		DIAPHRAGM @ ABUT'S, VERTICAL, BOTTOM
S422	X	28	6'-0"	-		DIAPHRAGM @ ABUT'S, HORIZ., BOTTOM
S623	X	16	40'-8"	-		DIAPHRAGM @ ABUT'S, HORIZ., B.F.
S524	X	32	6'-0"	-		DIAPHRAGM @ ABUT'S, HORIZ., GIRDER HOLES
S525	X	32	11'-2"	X		DIAPHRAGM @ ABUT'S, STIRRUPS
S426	X	84	5'-2"	-		DIAPHRAGM @ PIER, HORIZ..
S527	X	12	10'-2"	X		DIAPHRAGM @ ABUT'S, VERTICAL, ENDS
S628	X	2	1'-1"	-		DIAPHRAGM TRANSVERSE TOP, ENDS @ WEST
S629	X	6	10'-5"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR, WEST
S630	X	2	8'-9"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR,WEST
S531	X	56	11'-7"	X		DIAPHRAGM @ PIER, VERT.
S532	X	14	9'-0"	X		DIAPHRAGM @ PIER,STIRRUPS VERT.
S633	X	6	11'-1"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR, EAST
S634	X	2	9'-9"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR, EAST
S635	X	6	4'-5"	X		DIAPHRAGM @ ABUT'S, HORIZ.
S636	X	2	1'-11"	-		DIAPHRAGM @ ABUT'S, HORIZ.
S437	X	8	4'-5"	-		DIAPHRAGM @ ABUT'S, END, VERT.

STATE PROJECT NUMBER

1035-01-74

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY HG | PLANS CK'D. DMC

SUPERSTRUCTURE BILL OF BARS

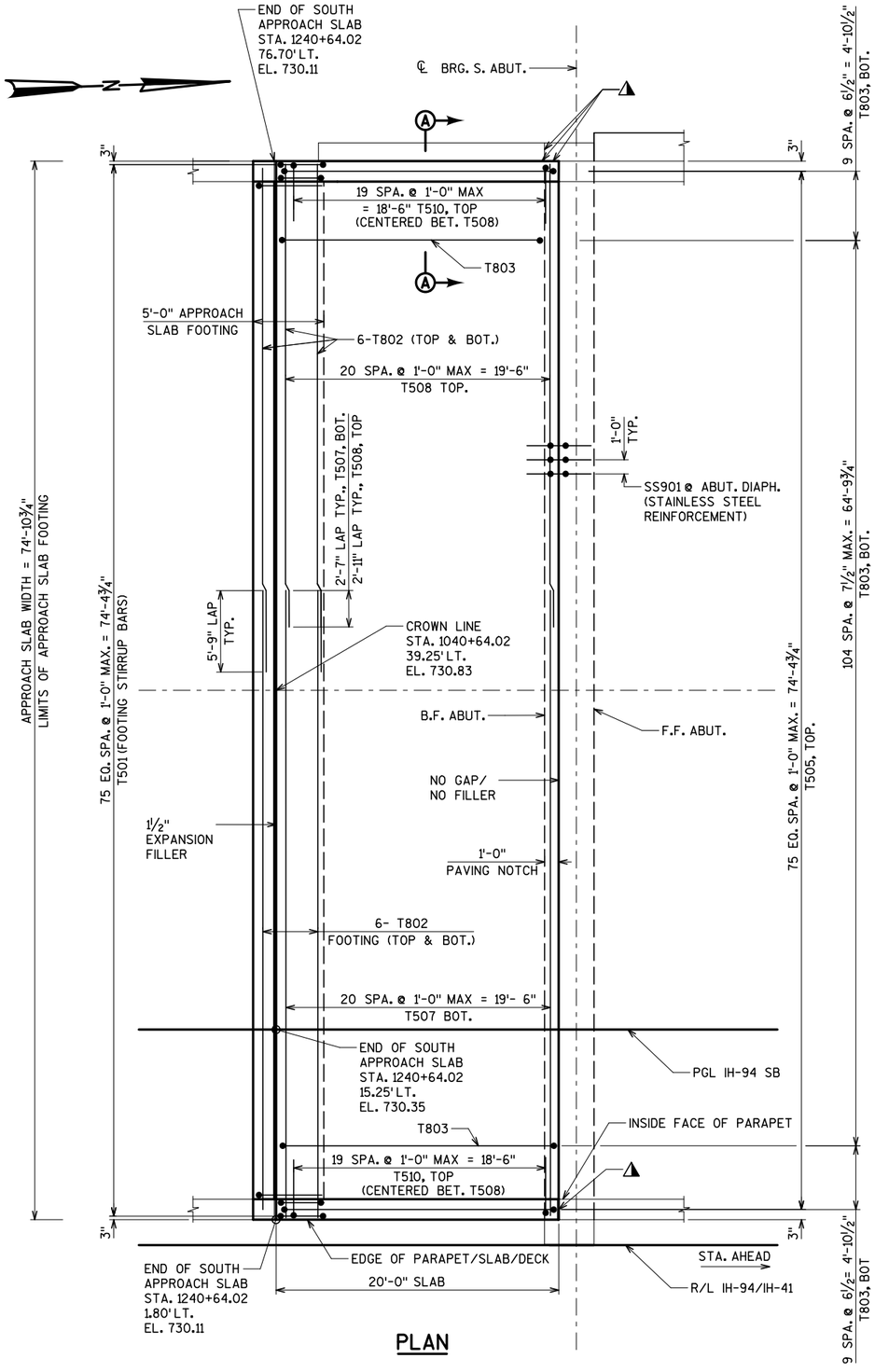
SHEET 22 OF 29

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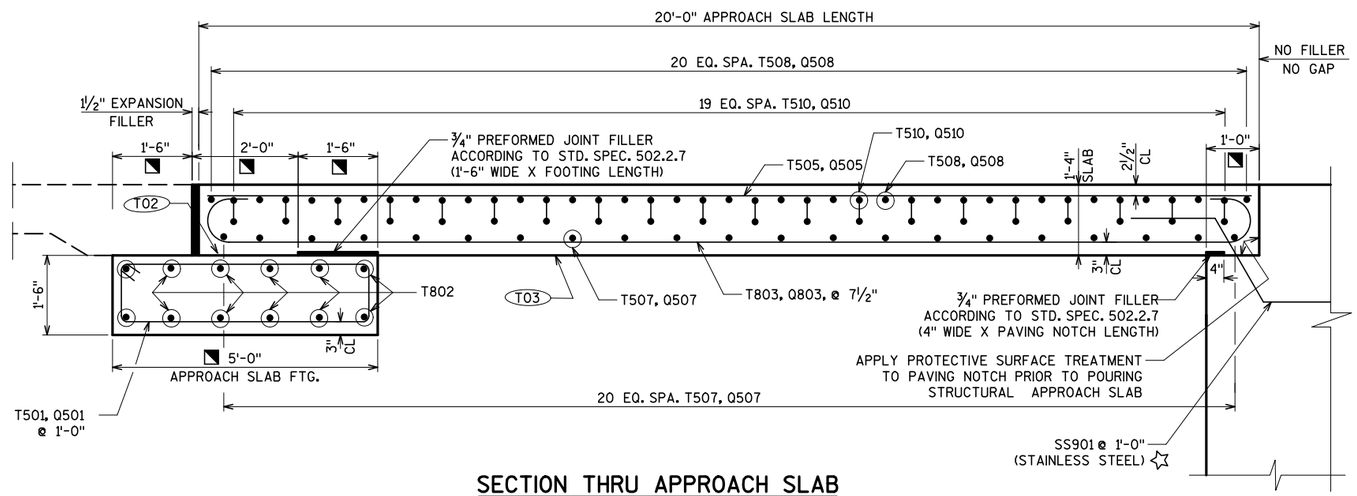
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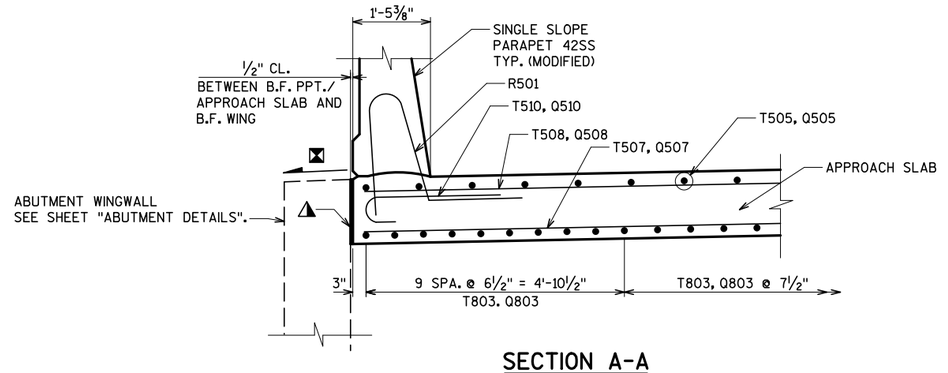


PLAN



SECTION THRU APPROACH SLAB

(TYPICAL NORTH AND SOUTH APPROACH SLAB)



SECTION A-A

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.)
- ◥ MEASURED NORMAL TO ABUTMENT
- ☆ THE BID ITEM FOR SS901 SHALL BE STANDARD SPECIAL PROVISION "BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES".
- (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.
- ◪ SLOPE TO DRAIN

SEE "NORTH STRUCTURAL APPROACH SLAB" FOR BILL OF BARS.

DESIGN DATA

CONCRETE STRENGTH, fc:	4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60, fy:	60,000 P.S.I.
ALLOWABLE SOIL BEARING PRESSURE:	2,000 P.S.F.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

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SOUTH STRUCTURAL APPROACH SLAB

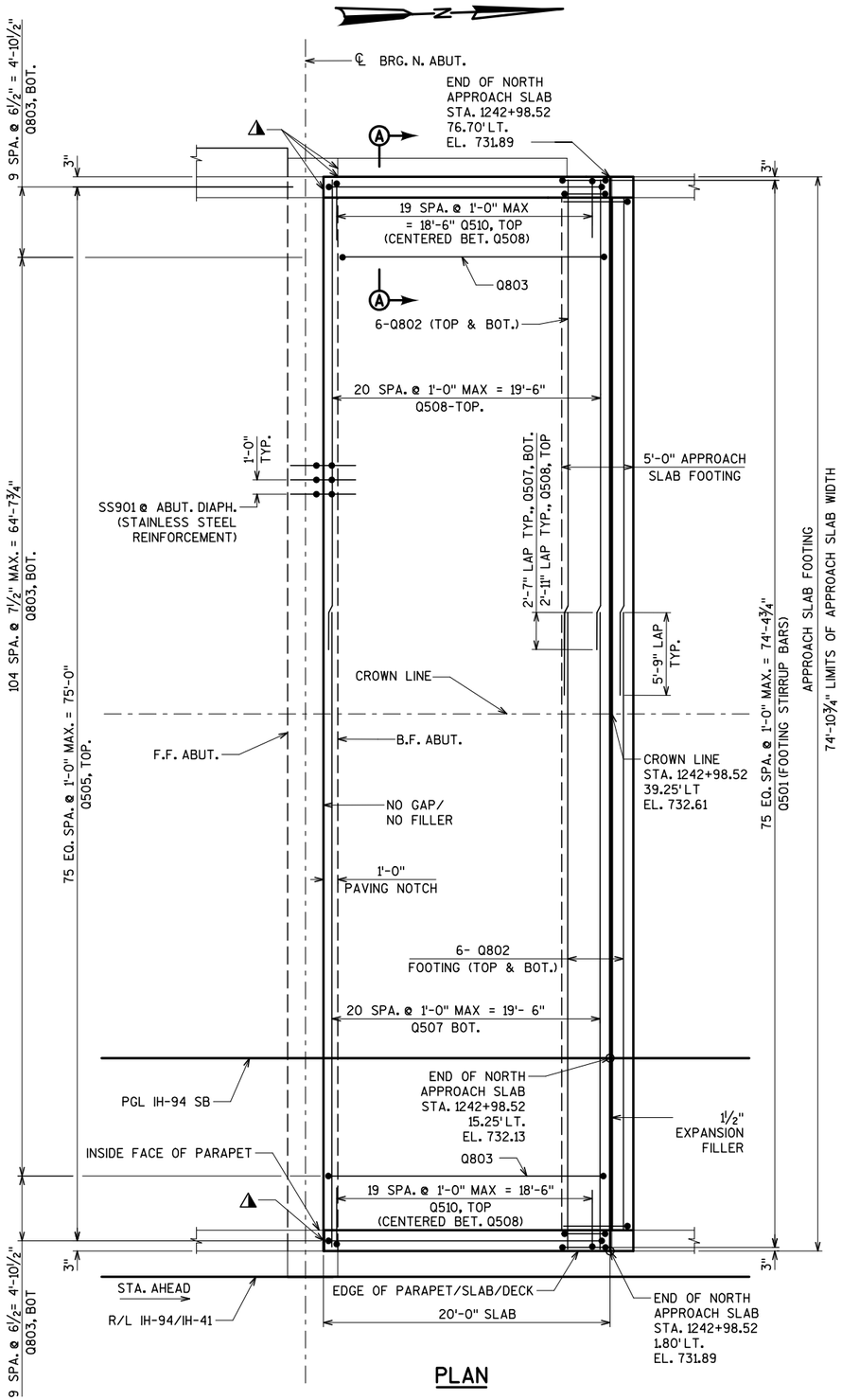
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PLAN

BILL OF BARS

SOUTH APPROACH SLAB

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	76	12'-2"	X	-	APPROACH SLAB FOOTING STIRRUP
T802	X	24	40'-2"	-	-	APPROACH SLAB FOOTING - TRANS.
T803	X	123	21'-6"	X	-	APPROACH SLAB LONG. BOT.
T505	X	76	19'-8"	-	-	APPROACH SLAB LONG. TOP.
T507	X	42	38'-7"	-	-	APPROACH SLAB TRANS. BOT.
T508	X	42	38'-9"	-	-	APPROACH SLAB TRANS. TOP
T510	X	40	4'-1"	X	-	APPROACH SLAB TRANS. TOP - WING

NORTH APPROACH SLAB

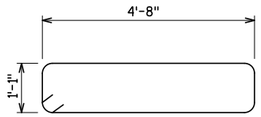
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
Q501	X	76	12'-2"	X	-	APPROACH SLAB FOOTING STIRRUP
Q802	X	24	40'-2"	-	-	APPROACH SLAB FOOTING - TRANS.
Q803	X	123	21'-6"	X	-	APPROACH SLAB LONG. BOT.
Q505	X	76	19'-8"	-	-	APPROACH SLAB LONG. TOP.
Q507	X	42	38'-7"	-	-	APPROACH SLAB TRANS. BOT.
Q508	X	42	38'-9"	-	-	APPROACH SLAB TRANS. TOP
Q510	X	40	4'-1"	X	-	APPROACH SLAB TRANS. TOP - WING

STAINLESS STEEL BILL OF BARS

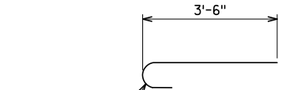
(FOR SOUTH AND NORTH APPR. SLABS)

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
SS901		152	5'-0"	X		APPROACH SLAB, AT PAV. NOTCH

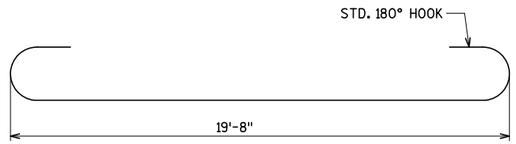
BENDING DIAGRAMS



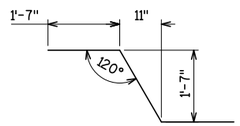
T501, Q501



T510, Q510



T803, Q803



SS901

SEE SHEET " SOUTH STRUCTURAL APPROACH SLAB" FOR SECTION A-A AND LEGEND.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

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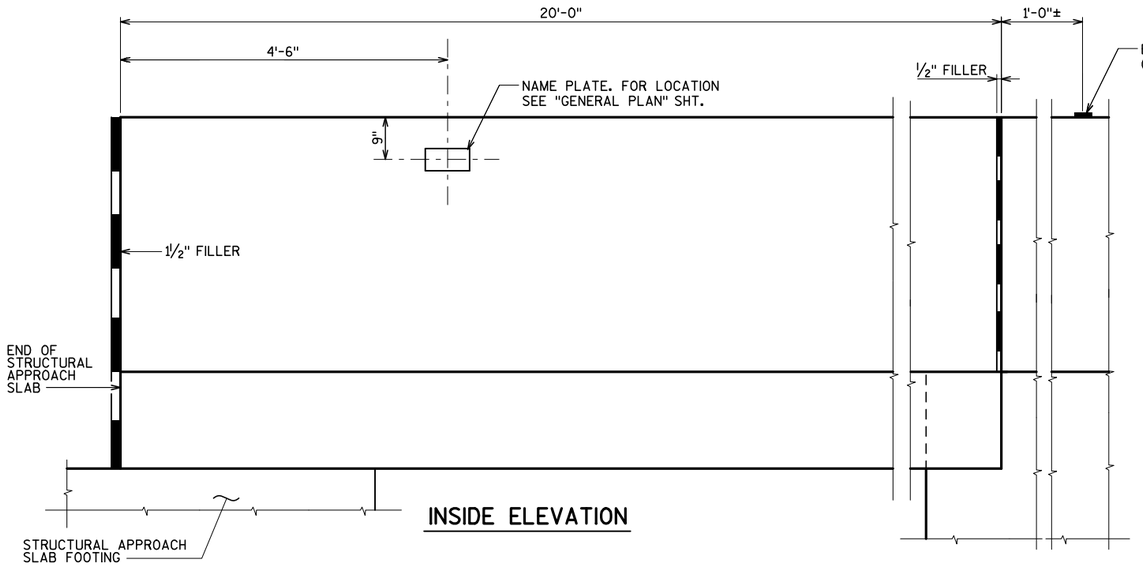
NORTH STRUCTURAL APPROACH SLAB

SHEET 24 OF 29
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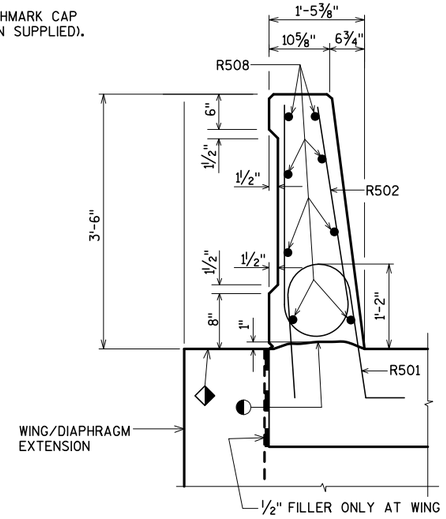
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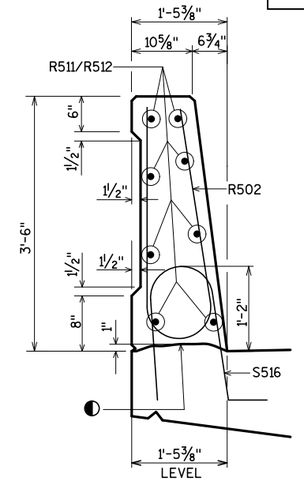
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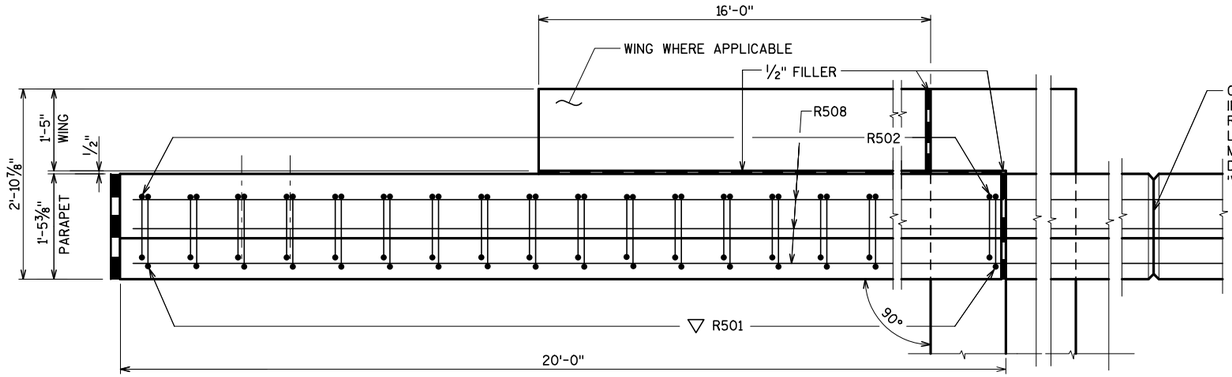
INSIDE ELEVATION



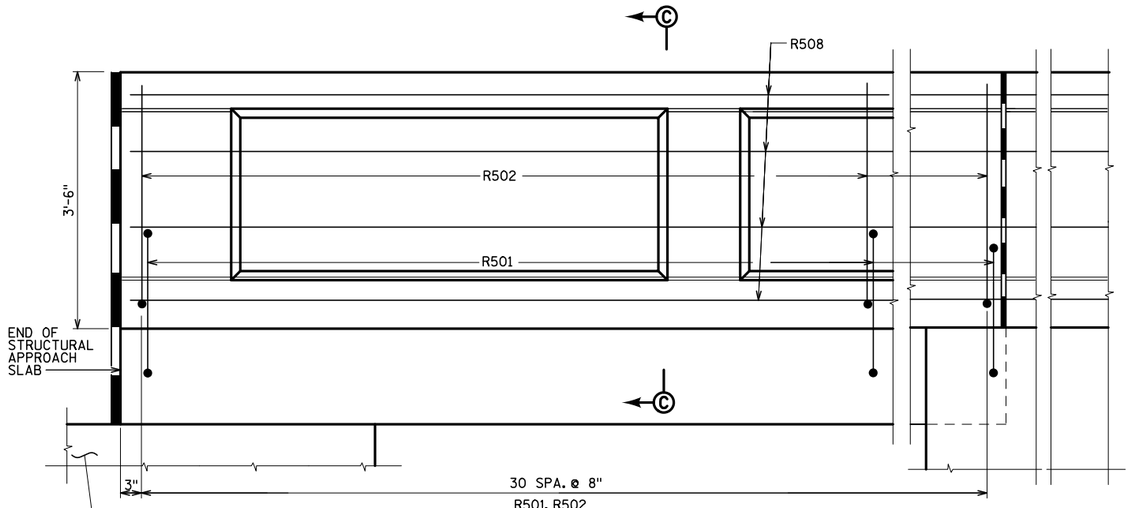
SECTION C-C



SECTION THRU PARAPET ON BRIDGE



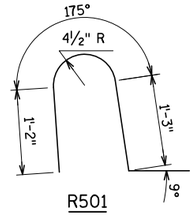
PLAN



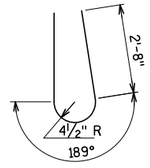
OUTSIDE ELEVATION
(WING NOT SHOWN FOR CLARITY)

BILL OF BARS

BAR MARK	COAT	NO. REQUIRED					LENGTH	BENT	BAR SERIES	LOCATION
		SUPERSTR.	S. APPR. SLAB		N. ARRP. SLAB					
			E	W	E	W				
R501	X	-	31	31	31	31	4'-5"	X	-	PARAPET VERT.
R502	X	584	31	31	31	31	6'-8"	X	-	PARAPET VERT.
R508	X	-	8	8	8	8	19'-6"	-	-	PARAPET HORIZ.
R511	X	64	-	-	-	-	45'-0"	-	-	PARAPET HORIZ.
R512	X	16	-	-	-	-	25'-10"	-	-	PARAPET HORIZ.



R501



R502

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ 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-51-139

DRAWN BY TAL | PLANS CK'D. DMC

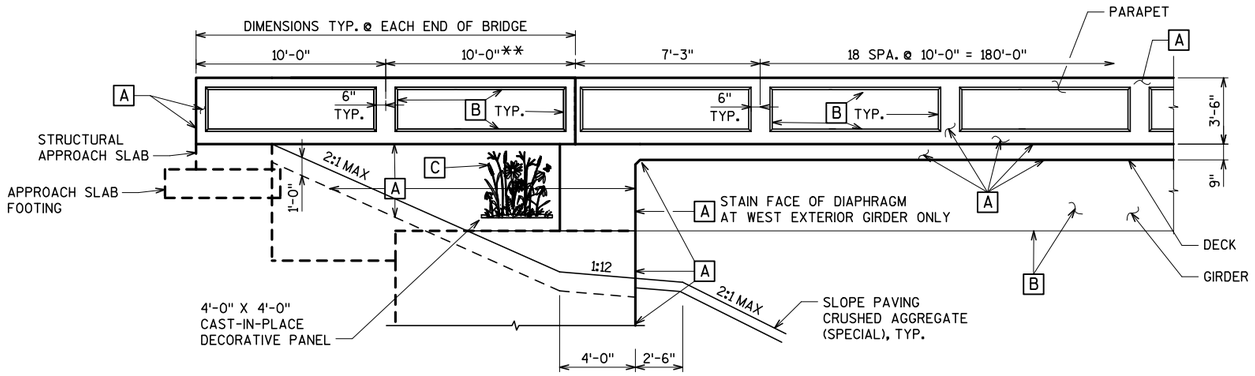
PARAPET 42SS (MODIFIED)

SHEET 25 OF 29

8

8

STATE PROJECT NUMBER
1035-01-74

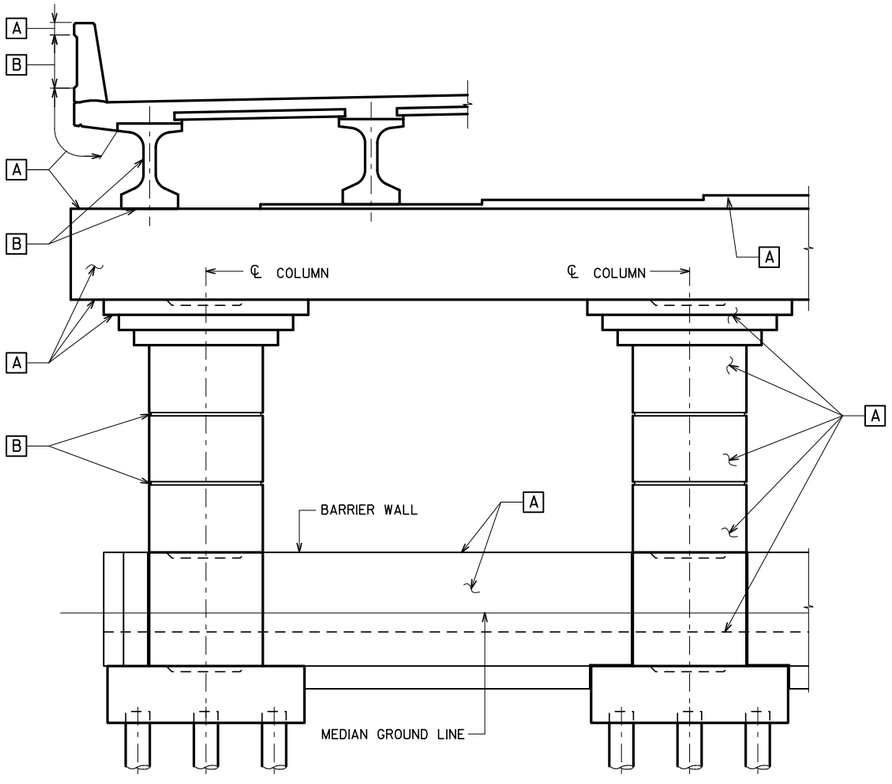


ELEVATION OF ABUTMENT & PARAPET

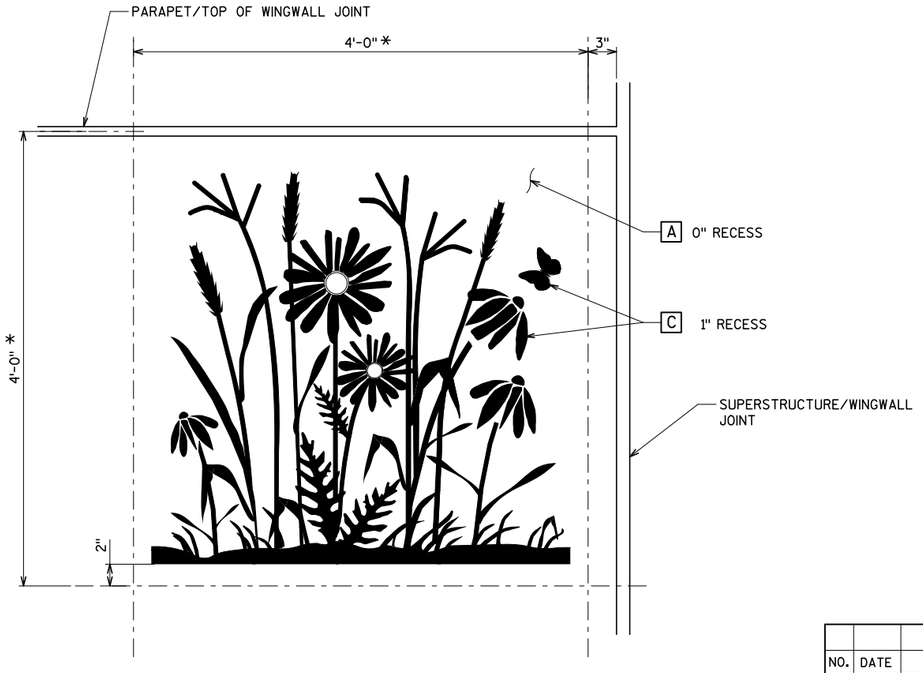
** INCLUDES 1/2" FILLER THICKNESS

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR WHOLE WHEAT - SW 6121, FN122 FEDERAL COLOR NO. 33564	PIER	PIER CAP, COLUMNS & BARRIER WALL , EXCEPT AS NOTED FOR ACCENT COLORS TO 1'-0" BELOW FINAL GRADE
		SLOPED FACE PARAPET	TOP & EXTERIOR SIDE, EXCEPT AS NOTED FOR ACCENT COLORS
		DECK	FASCIA & EXPOSED UNDERSIDE TO EXTERIOR GIRDER FLANGE
		ABUTMENTS	EXTERIOR WING WALLS TO 1'-0" BELOW FINAL GRADE, FRONT FACE FROM UNDERSIDE OF DECK TO 1'-0" BELOW FINAL GRADE INCLUDING BETWEEN ALL GIRDERS
B	ACCENT COLOR #1 BAGUETTE - SW 6123, FN124 FEDERAL COLOR NO. 33448	COLUMNS	HORIZONTAL RUSTICATIONS
		SLOPED FACE PARAPET	RECESSED PANELS ON EXTERIOR SIDES
		GIRDERS	EXTERIOR FACE AND UNDERSIDE OF EXTERIOR GIRDERS
C	ACCENT COLOR #2 CRATT PAPER - SW 6125, FN 126 FEDERAL COLOR NO. 20170	DECORATIVE PANEL	RECESSED AREAS



ELEVATION OF PIER



C.I.P. DECORATIVE PANEL

"PRAIRIE PATTERN"

* PAYMENT LIMITS FOR BID ITEM "ARCHITECTURAL SURFACE TREATMENT".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

AESTHETIC DETAILS

SHEET 26 OF 29

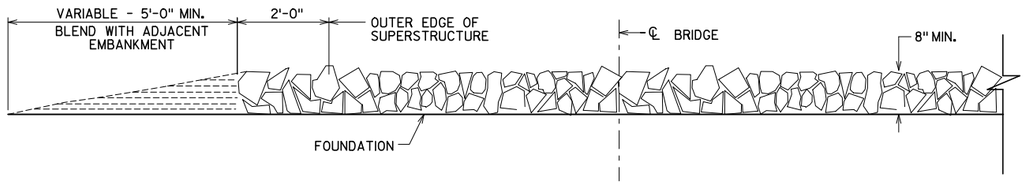
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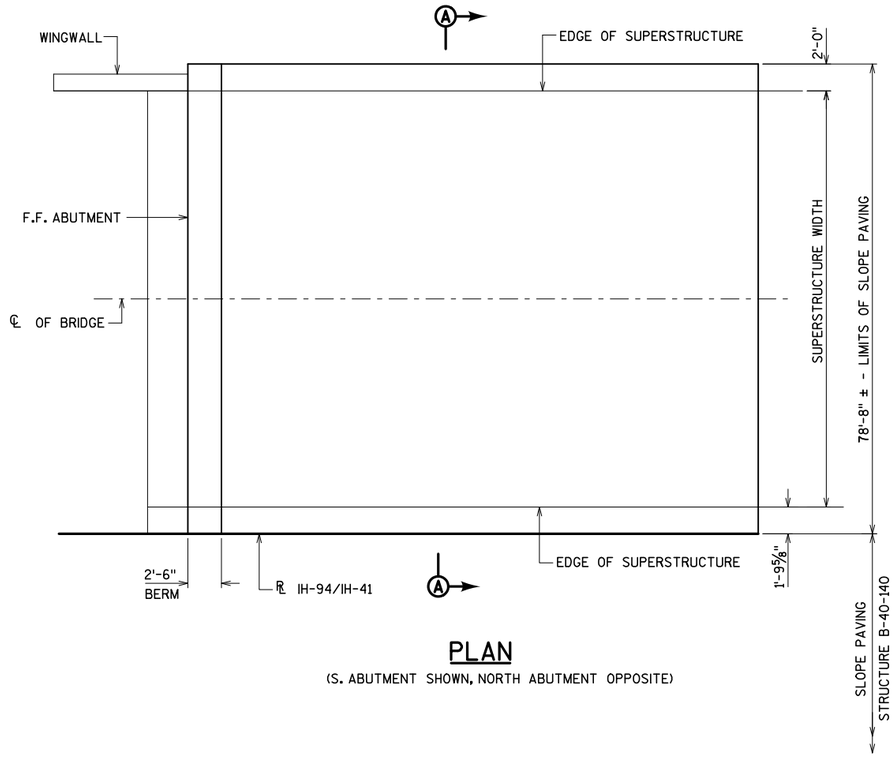
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STATE PROJECT NUMBER
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SECTION A-A

STANDARD CROSS SECTION



PLAN

(S. ABUTMENT SHOWN, NORTH ABUTMENT OPPOSITE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF SPECIAL PROVISIONS "SLOPE PAVING CRUSHED AGGREGATE SPECIAL".

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

COORDINATE PLACEMENT OF SLOPE PAVING WITH EXCAVATION FOR ABUTMENT OF STRUCTURE B-51-140.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY TAL | PLANS CK'D. DMC

SLOPE PAVING

SHEET 27 OF 29

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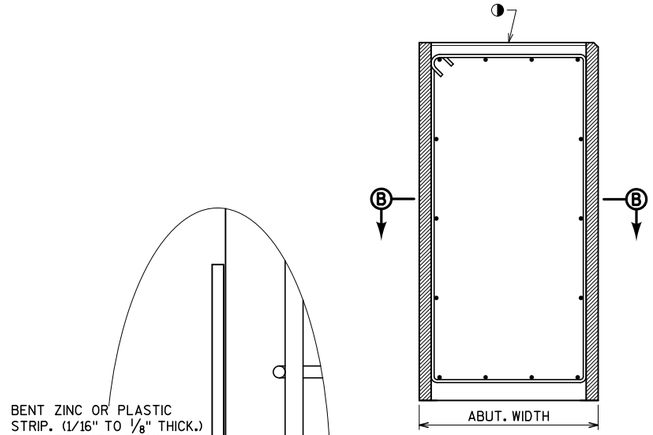
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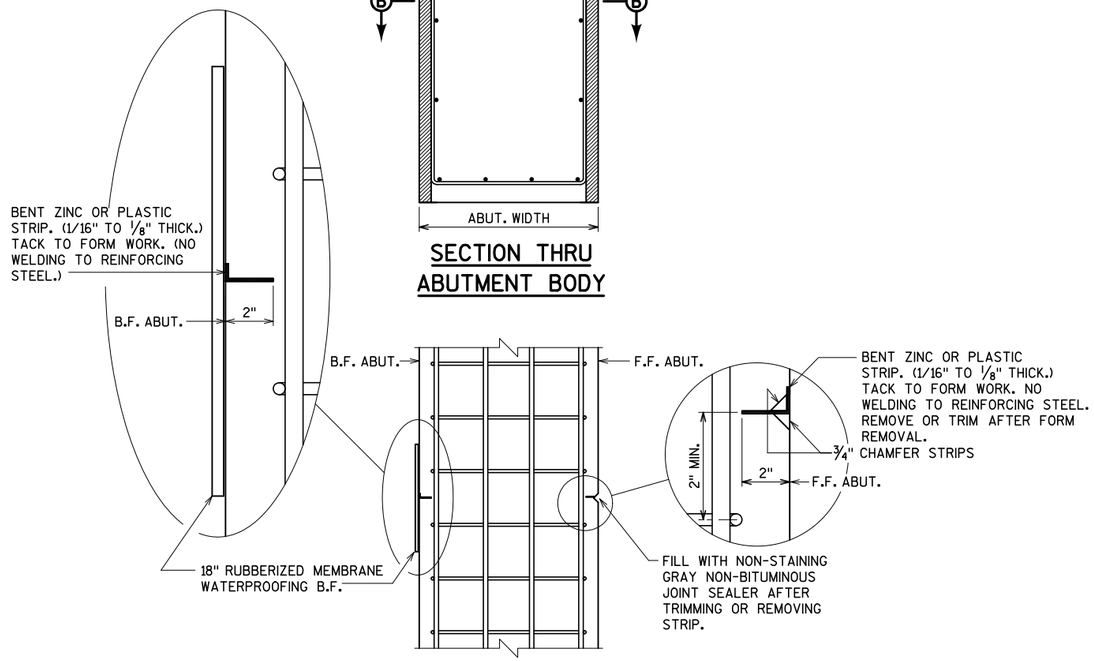
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STATE PROJECT NUMBER

1035-01-74



SECTION THRU ABUTMENT BODY



SECTION B-B

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.

SAWCUTTING JOINT IS NOT ALLOWED.

◑ 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-51-139

DRAWN BY TAL | PLANS CK'D. DMC

ALTERNATE CONSTRUCTION JOINT

SHEET 28 OF 29

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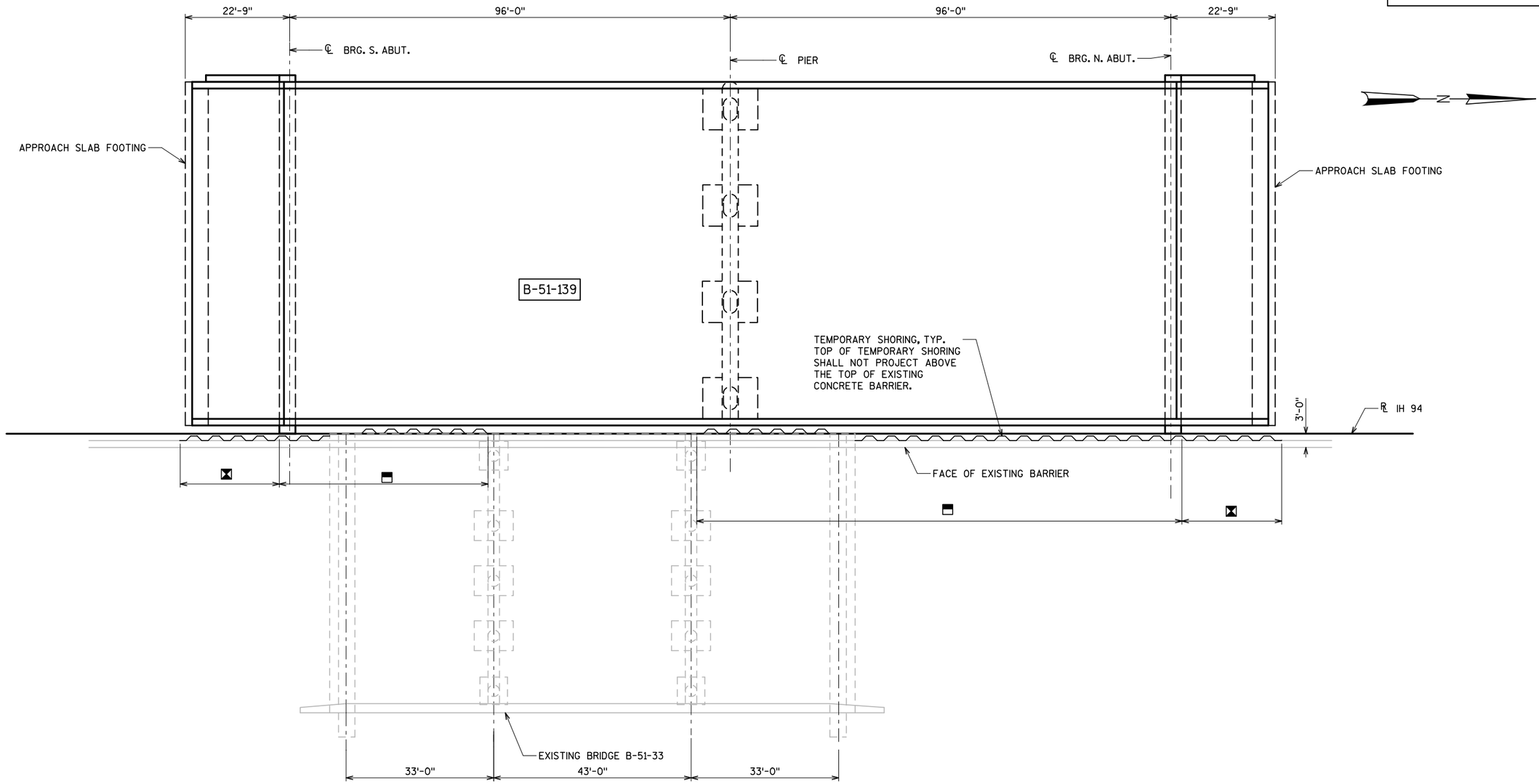
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STATE PROJECT NUMBER

1035-01-74



TEMPORARY SHORING LAYOUT

LEGEND

- ⊠ TEMPORARY SHORING TO REMAIN UNTIL STRUCTURAL APPROACH SLAB OF BRIDGE B-51-140 IS POURED.
- ⬒ TEMPORARY SHORING TO REMAIN UNTIL EXCAVATION FOR STRUCTURE B-51-140 IS COMPLETED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-139

DRAWN BY	TAL	PLANS CK'D.	DMC

TEMPORARY SHORING LAYOUT

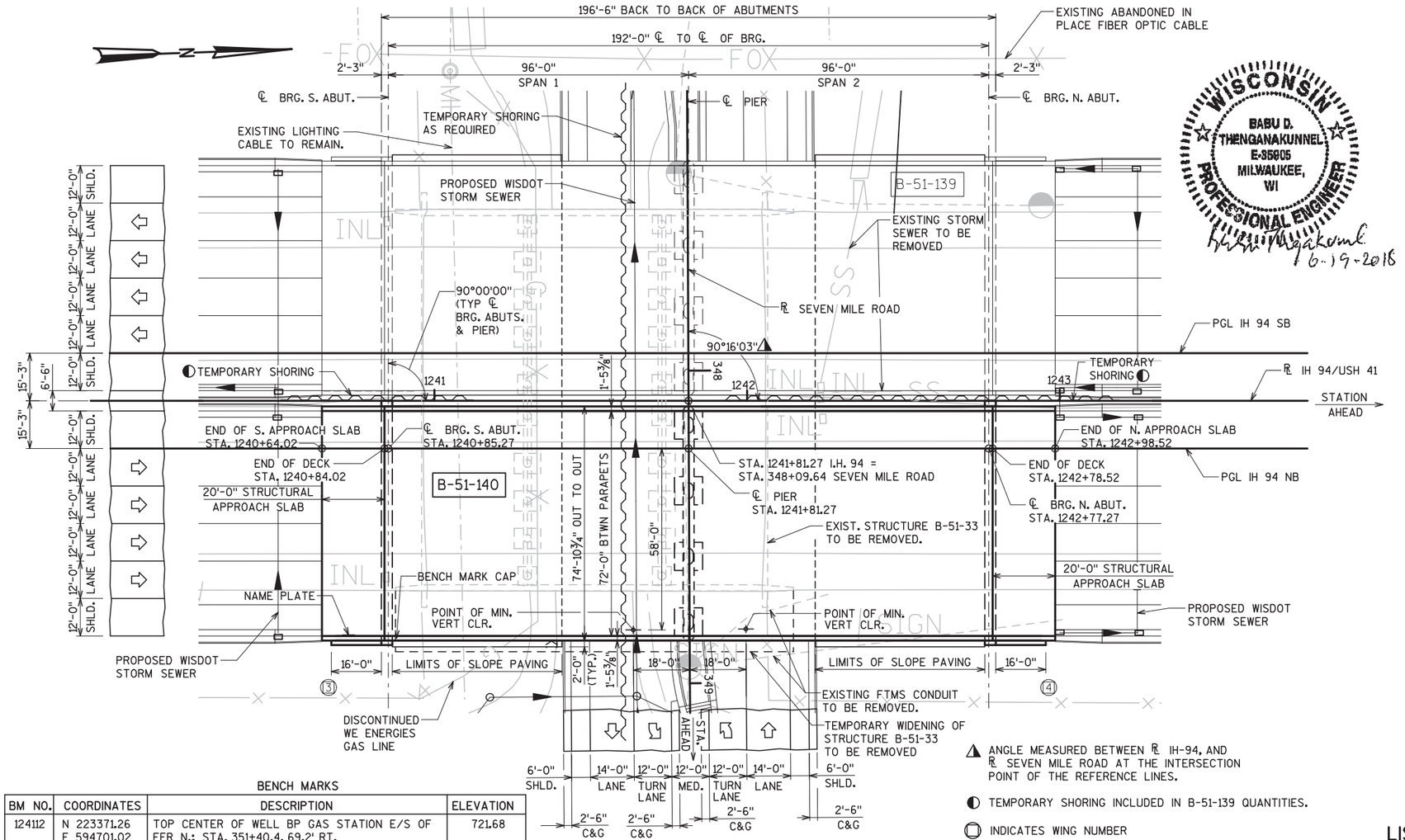
SHEET 29 OF 29

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Plotted by: tlegeor



BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEVATION
124112	N 223371.26 E 594701.02	TOP CENTER OF WELL BP GAS STATION E/S OF EFR N.; STA. 351+40.4, 69.2' RT.	721.68
125444	N 224713.77 E 594155.35	MAG NAIL 4 FT SE OF AUTO AUCTION DRWY. GATE ON W/S OF WFR N.; STA. 4256+23.3, 66.4' LT.	721.54

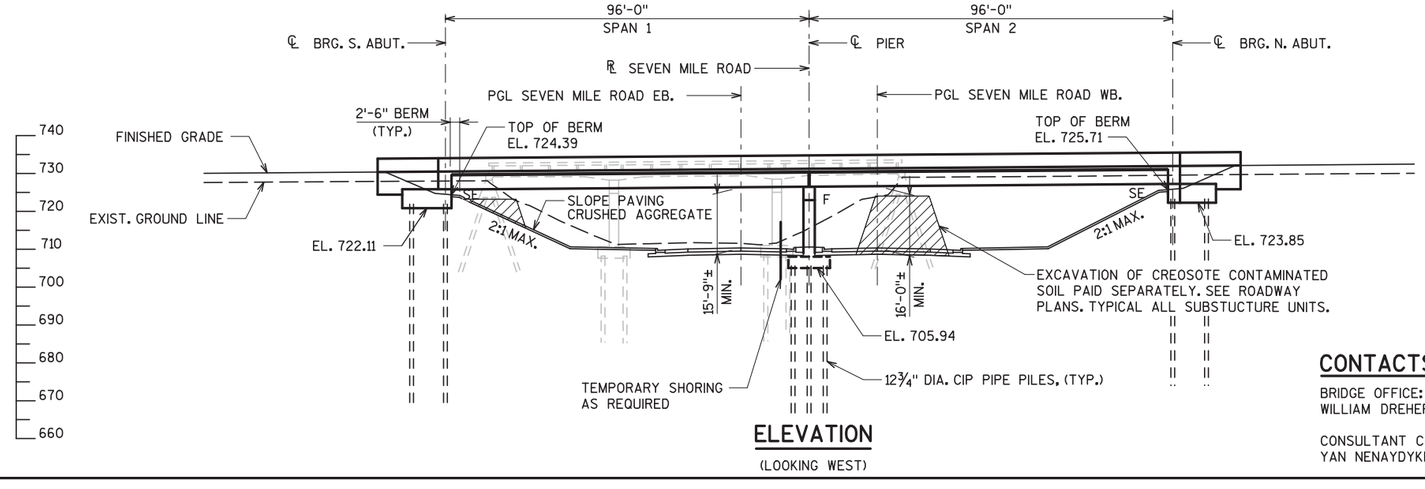
PLAN

(2 SPAN 45W" PRESTRESSED GIRDERS)

△ ANGLE MEASURED BETWEEN ℄ IH-94, AND ℄ SEVEN MILE ROAD AT THE INTERSECTION POINT OF THE REFERENCE LINES.

◐ TEMPORARY SHORING INCLUDED IN B-51-139 QUANTITIES.

⬚ INDICATES WING NUMBER



ELEVATION

(LOOKING WEST)

CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:
YAN NENAYDYKH (414) 292-4507

DESIGN DATA

LIVE LOAD

DESIGN RATING: HL-93
INVENTORY RATING FACTOR: RF= 1.17
OPERATING RATING FACTOR RF= 1.53
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV) = 240 (kips)

STRUCTURE IS DESIGNED FOR A 20 PSF ADDITIONAL LOADS FOR FUTURE WEARING SURFACE.

MATERIAL PROPERTIES

CONCRETE MASONRY
SLAB,PARAPET, APPROACH SLAB (HPC)..... f'c = 4,000 psi
ALL OTHER ..... f'c = 4,000 psi

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 .....fy = 60,000 psi
EPOXY COATED ALL EXCEPT FOOTINGS.

BAR STEEL REINFORCEMENT HS STAINLESS STEEL...fy=60,000 psi

45W-INCH PRESTRESSED GIRDERS,
CONCRETE MASONRY .....f'c = 8,000 psi
STRANDS = 0.6 INCH DIA. WITH AN ULTIMATE TENSILE STRENGTH OF 270,000 psi

FOUNDATION DATA

ABUTMENTS AND PIER TO BE SUPPORTED ON
12¾X 0.375 INCH C.I.P. PIPE PILES
DRIVEN TO A REQUIRED DRIVING RESISTANCE OF
200 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 90'-0" LONG PILES AT SOUTH ABUTMENT.
ESTIMATED 95'-0" LONG PILES AT PIER.
ESTIMATED 85'-0" LONG PILES AT NORTH ABUTMENT.

** 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 DATA

SEVEN MILE ROAD	I.H. 94
A.D.T. = 4930 (2010)	A.D.T. = 98,280 (2010)
A.D.T. = 6,735 (2035)	A.D.T. = 123,200 (2035)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

NOTE

EXISTING BRIDGE B-51-33 WILL BE WIDENED DURING STAGE 1 AND SHALL BE REMOVED DURING STAGE 4. SEE PLANS UNDER PROJECT ID 1030-11-74 FOR INFORMATION ON TEMPORARY WIDENING.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. TYPICAL SECTION
3. QUANTITIES AND DESIGN DATA
4. SUBSURFACE EXPLORATION
5. SOUTH ABUTMENT
6. SOUTH ABUTMENT DETAILS
7. SOUTH ABUTMENT WINGWALL DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT DETAILS
10. NORTH ABUTMENT WINGWALL DETAILS
11. PIER GEOMETRY
12. PIER REINFORCING DETAILS (1 OF 2)
13. PIER REINFORCING DETAILS (2 OF 2)
14. PIER BARRIER WALL DETAILS
15. PRECAST PIER (OPTIONAL)
16. 45W" PRESTRESSED GIRDER DETAILS
17. INTERMEDIATE STEEL DIAPHRAGM
18. PRECAST DECK PANEL LAYOUT
19. PRECAST DECK PANEL DETAILS
20. SUPERSTRUCTURE
21. SUPERSTRUCTURE DETAILS
22. SUPERSTRUCTURE BILL OF BARS
23. SOUTH APPROACH STRUCTURAL SLAB
24. NORTH APPROACH STRUCTURAL SLAB
25. PARAPET 42SS (MODIFIED)
26. AESTHETIC DETAILS
27. SLOPE PAVING
28. ALTERNATE CONSTRUCTION JOINT

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER
6-19-2018

STATE PROJECT NUMBER
1035-01-74

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher 6/19/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-51-140

IH-94 WB/USH 41 NB OVER SEVEN MILE ROAD

COUNTY	RACINE	TOWN	RAYMOND

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DMC	DESIGN CK'D.	BDT	DRAWN BY	TAL	PLANS CK'D.	BDT

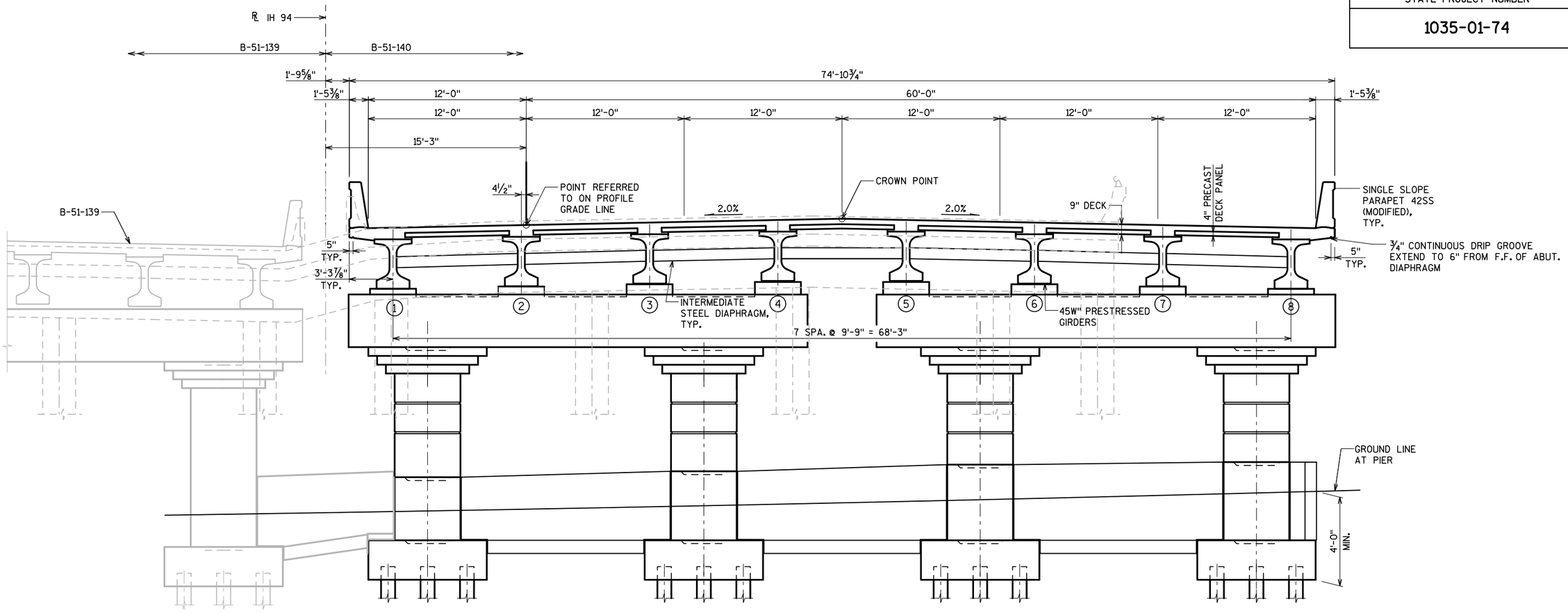
GENERAL PLAN AND ELEVATION

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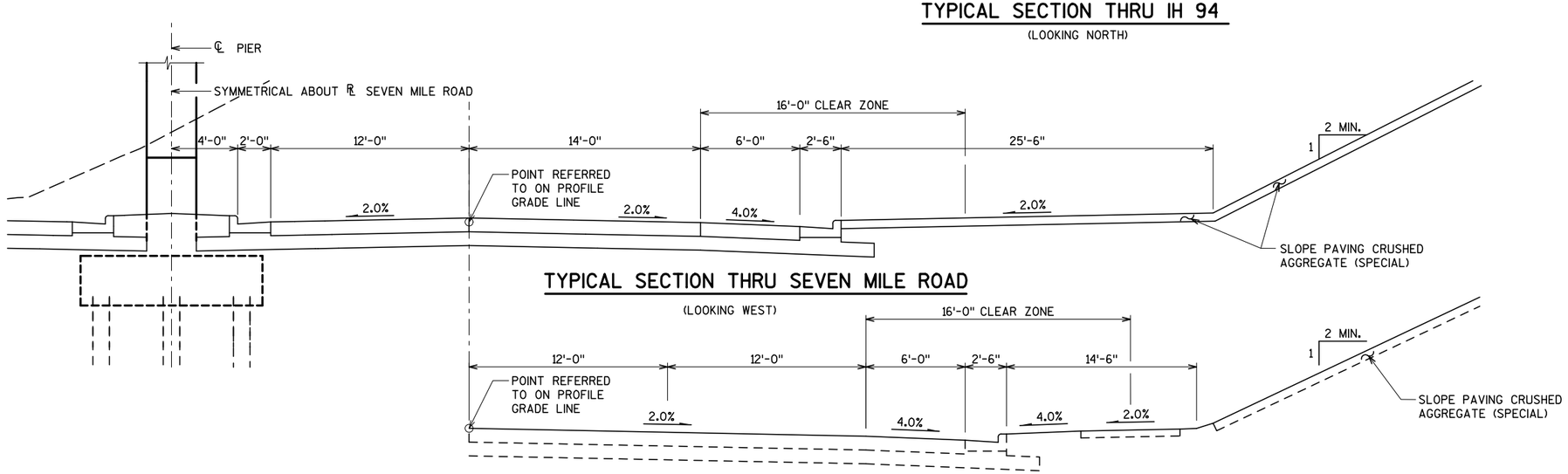
STATE PROJECT NUMBER

1035-01-74



TYPICAL SECTION THRU IH 94

(LOOKING NORTH)



TYPICAL SECTION THRU SEVEN MILE ROAD

(LOOKING WEST)

FUTURE TYPICAL SECTION THRU SEVEN MILE ROAD

(LOOKING WEST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

TYPICAL SECTION

SHEET 2 OF 28

497

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STATE PROJECT NUMBER

1035-01-74

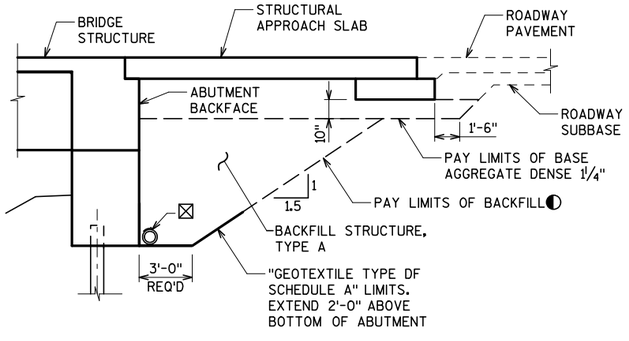
TOTAL ESTIMATED QUANTITIES

	BID ITEM NO.	BID ITEMS	UNIT	SOUTH APPROACH SLAB	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	NORTH APPROACH SLAB	SUPER-STRUCTURE	TOTAL
☆	203.0200.0002	REMOVING OLD STRUCTURE STATION 1241+81 RT	LS	-	-	-	-	-	-	1
	206.1000.4140	EXCAVATION FOR STRUCTURES BRIDGES B-51-140	LS	-	-	-	-	-	-	1
	210.1500	BACKFILL STRUCTURE TYPE A	TON	-	256	157	236	-	-	649
	305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	CY	119	-	-	-	119	-	238
	416.0620	DRILLED DOWEL BARS	EACH	-	-	28	-	-	-	28
	501.1000.S	ICE HOT WEATHER CONCRETING	LB	755	473	1088	473	755	3263	6,807
	502.0100	CONCRETE MASONRY BRIDGES	CY	21	63	145	63	21	-	313
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	160	-	-	-	160	1595	1,915
	502.3210	PIGMENTED SURFACE SEALER	SY	20	-	-	-	20	191	231
	503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	-	-	-	-	-	1,542	1,542
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-	-	2,350	-	-	-	2,350
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	15,720	6,650	23,270	6,650	15,720	87,470	155,480
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1290	-	-	-	1,290	-	2,580
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	8	16	8	-	-	32
	506.4000.0002	STEEL DIAPHRAGMS STRUCTURE B-51-140	EACH	-	-	-	-	-	28	28
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-	13	-	13	-	-	26
	517.1010.S.4002	CONCRETE STAINING STRUCTURE B-51-140	SF	150	76	2,256	79	150	2,464	5,175
	517.1050.S.4002	ARCHITECTURAL SURFACE TREATMENT STRUCTURE B-51-140	SF	-	16	-	16	-	-	32
	550.2126	PILING CIP CONCRETE 12¾X 0.375-INCH	LF	-	1,260	4,180	1,190	-	-	6,630
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-	100	-	100	-	-	200
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	-	75	-	75	-	-	150
	SPV.0035.4000	HPC MASONRY STRUCTURES	CY	80	-	-	-	80	435	594
	SPV.0165.4001	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,440	-	-	-	1,440	14,004	16,884
	SPV.0165.4050	PARTIAL DEPTH PRECAST PRESTRESSED CONCRETE DECK PANELS B-51-140	SF	-	-	-	-	-	10391	10,391
	SPV.0180.4800	SLOPE PAVING CRUSHED AGGREGATE SPECIAL	SY	-	506	-	514	-	-	1,020
		NON-BID ITEMS								
		PREFORMED JOINT FILLER	SIZE	-	-	-	-	-	-	½" & ¾"
		NAME PLATE								
*		PRECAST PIER COLUMNS								
*		PRECAST PIER CAPS								
*		GROUTED BAR COUPLERS								
*		PRECAST BEARING BLOCKS								

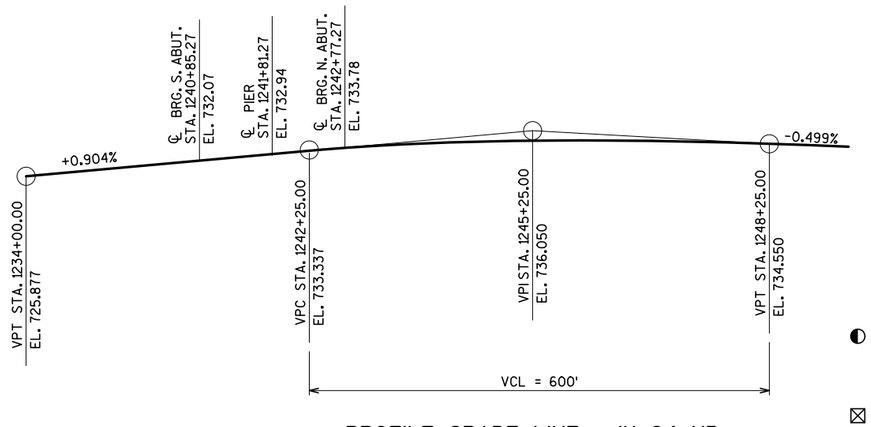
ALL ITEMS ARE CATEGORY 2170

* PRECAST PIER NON-BID ITEMS (PRECAST PIER COLUMNS, PRECAST PIER CAPS, PRECAST BEARING BLOCKS AND GROUTED BAR COUPLERS) ARE FOR INFORMATION PURPOSES ONLY. IF THE CONTRACTOR ELECTS TO UTILIZE PRECAST PIER COLUMNS, PRECAST PIER CAPS, OR BOTH, THE NON-BID ITEM SPECIAL PROVISIONS WITHIN THE CONTRACT SHALL GOVERN THE WORK. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR CAST-IN-PLACE PIER.

☆ THIS ITEM INCLUDES REMOVAL OF THE EXISTING STRUCTURE B-51-33 AND THE TEMPORARY BRIDGE WIDENING. SEE SEPARATE PLANS FOR TEMPORARY BRIDGE WIDENING.



STRUCTURAL BACKFILL LIMITS



PROFILE GRADE LINE - IH 94 NB

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED. THE TOP LAYER OF BAR STEEL REINFORCEMENT IN THE DECK SHALL BE PLACED WITH 2½" OF CLEAR COVER.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NGVD DATUM.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON THIS SHEET.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

ALL REINFORCING BARS ARE ENGLISH AND THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE.

THE MINIMUM CONCRETE HAUNCH SHALL BE 2" FOR DESIGN CALCULATIONS AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE HAUNCH DEPTH OF 2½" WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

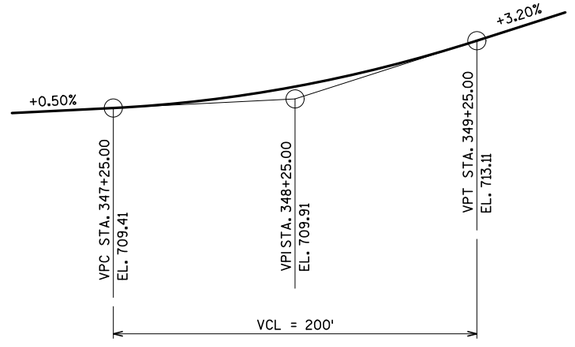
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK & APPROACH SLAB SURFACES AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGM.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL PREFORMED JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1"@8" BELOW SURFACE OF CONCRETE).

EXISTING STRUCTURE B-51-33, A 3-SPAN CONTINUOS HAUNCHED SLAB BRIDGE WITH AN OVERALL LENGTH OF 110'-6", AND AN OVERALL WIDTH OF 60'-11", AND THE TEMPORARY WIDENING SHALL COMPLETELY BE REMOVED UNDER THE BID ITEM " REMOVING OLD STRUCTURE STATION 1241+81 RT".

FOR STRUCTURE B-51-139, SEE SEPARATE SET OF PLANS.



PROFILE GRADE LINE - SEVEN MILE ROAD EB & WB

LEGEND

◐ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

☒ PIPE UNDERDRAIN WRAPPED (6- INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

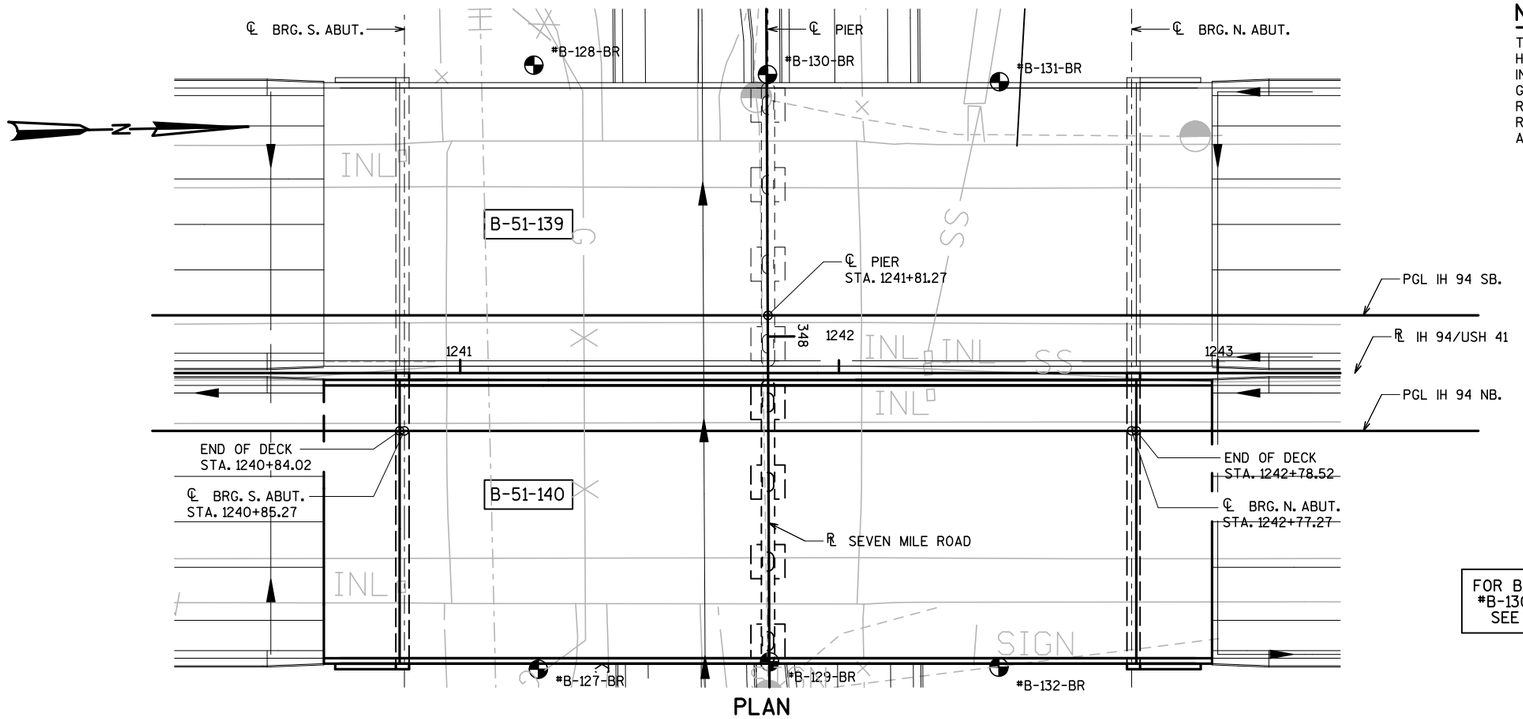
QUANTITIES AND DESIGN DATA

SHEET 3 OF 28

498

8

8



PLAN

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.

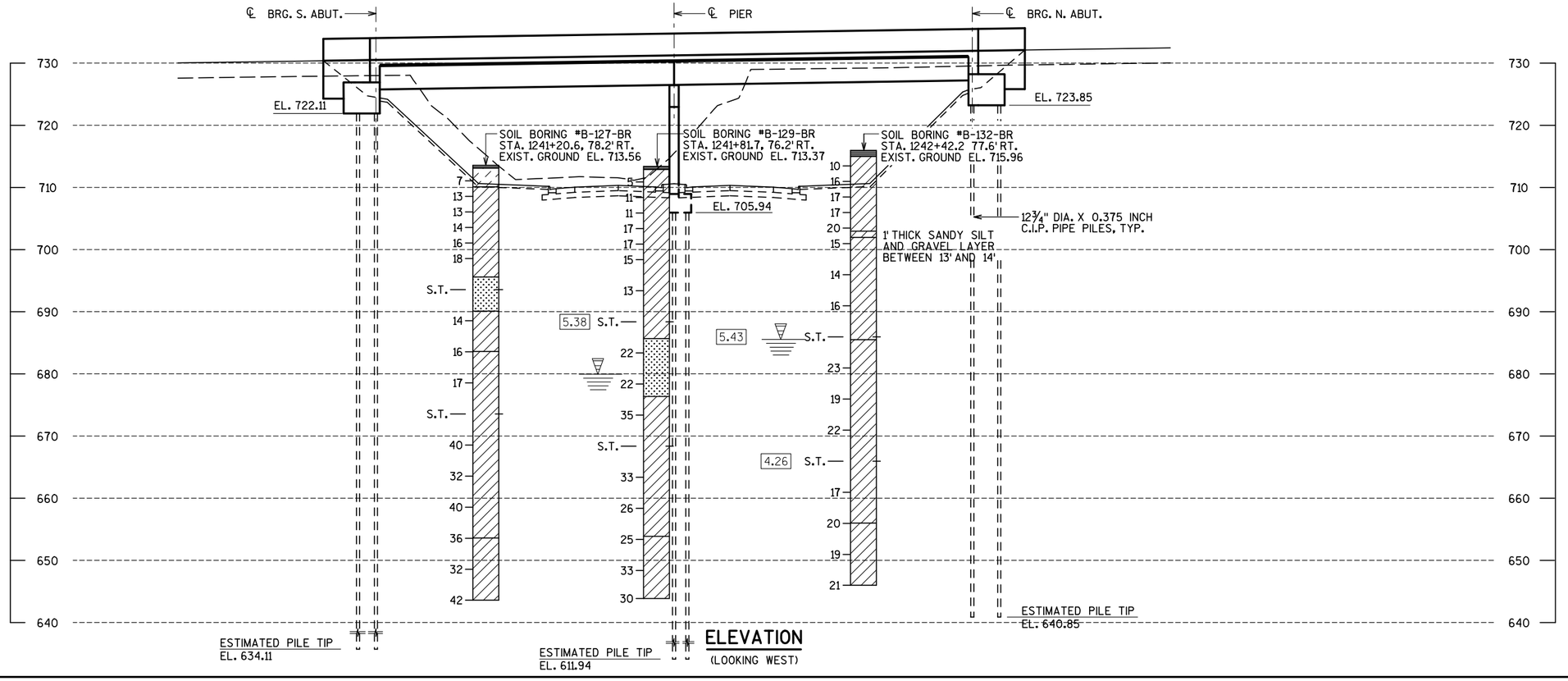
DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:

11/11/2006	*B-132-BR
11/16/2006	*B-129-BR
11/17/2006	*B-127-BR

FOR BORINGS *B-128-BR, *B-130-BR & *B-131-BR SEE B-51-139 PLANS



ELEVATION
(LOOKING WEST)

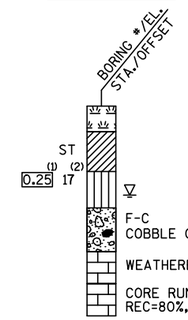
STATE PROJECT NUMBER

1035-01-74

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

STRUCTURE B-51-140

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SUBSURFACE EXPLORATION

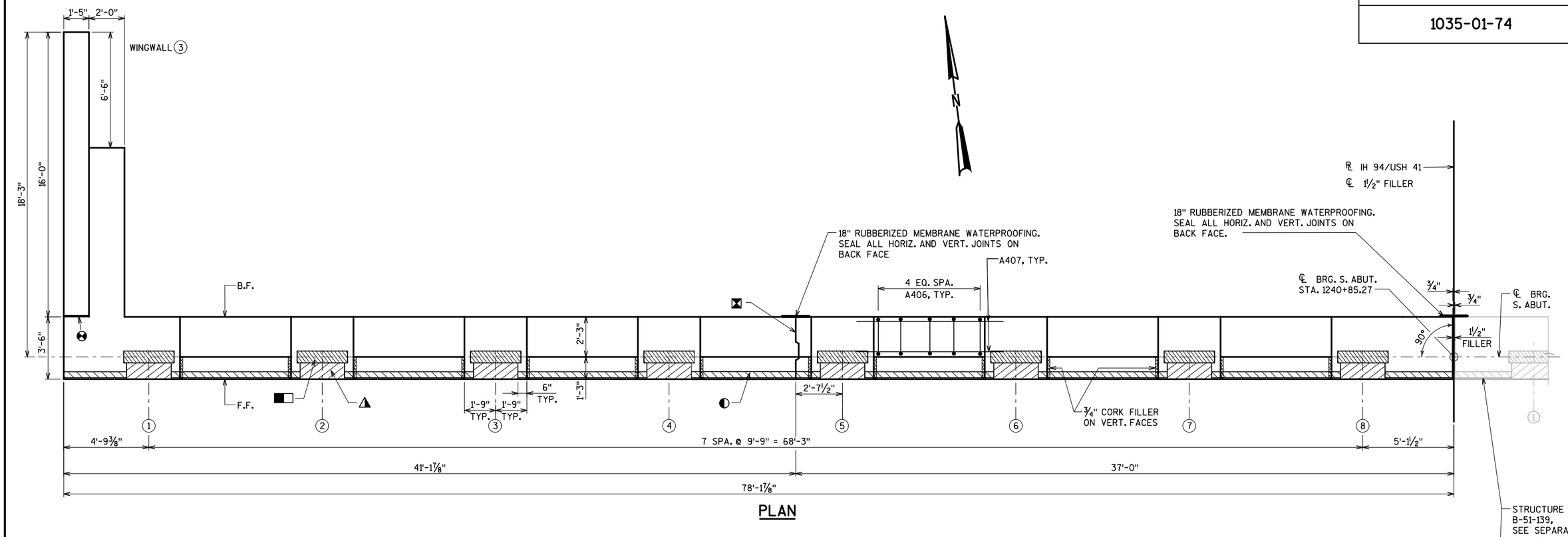
SHEET 4 OF 28
499

8

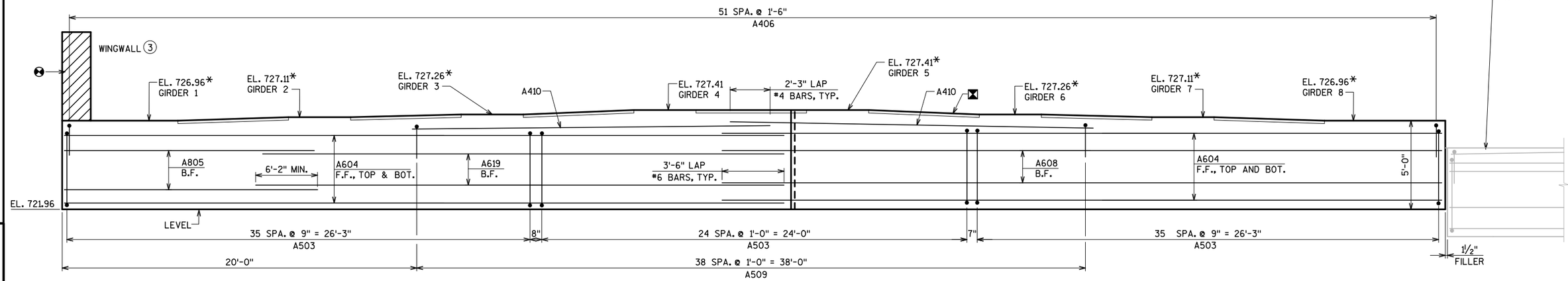
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STATE PROJECT NUMBER
1035-01-74



PLAN



ELEVATION

(LOOKING NORTH)
PILES NOT SHOWN

* - ELEVATIONS ARE AT INTERSECTION OF ℄ OF GIRDER AND ℄ BRG.

LEGEND

- ½" FILLER-TO EXTEND FROM BRIDGE SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING'S LENGTH.
- 4" × ¾" FILLER
- ¾" FILLER
- ½" × 8" × 2'-10" NON-LAMINATED ELASTOMERIC BRG. PAD.
- VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"X8" .SEE SHEET 28 FOR ALTERNATE CONSTRUCTION JOINT.
- (X) GIRDER NUMBER

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

SOUTH ABUTMENT

SHEET 5 OF 28

500

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8

STATE PROJECT NUMBER
1035-01-74

EXTEND PIPE UNDERDRAIN TO DAYLIGHT

3'-5"

1'-5" 2'-0"

PIPE UNDERDRAIN INVERT EL. 721.32

1'-6"

1

PIPE UNDERDRAIN INVERT EL. 721.36

13'-0"

N

12¾" DIA C.I.P. PIPE PILE, TYP.

6" DIA. PIPE UNDERDRAIN WRAPPED ATTACHED RODENT SHIELD AT EXPOSED END

18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. AND VERT. JOINTS ON BACK FACE.

PIPE UNDERDRAIN SLOPE

℄ PILES

PERMANENT CAP. PIPE UNDERDRAIN INVERT EL. 721.72

℄ BRG. S. ABUT. STA. 1240+85.27

℄ IH-94/USH 41
℄ 1½" FILLER

B.F.

F.F.

3'-6"

2'-3"

1'-3"

2 3 4 5 6 7 8 9 10 11 12 13 14

90°

2'-0⅜" 3'-11⅝"

3'-1½" 12 SPA. @ 6'-0" = 72'-0" 3'-0⅜"

41'-1⅞" 37'-0"

78'-1⅞"

STRUCTURE B-51-139

PILE LAYOUT

C/L BRG. & PILES

VARIES FROM 0" TO 7¾" MAX.

4" X ¾" FILLER

¾" BEVEL

1'-3" 2'-3"

A407

A406 @ 1'-6"

18" RUBBERIZED MEMBRANE WATER PROOFING SEAL ALL HORIZONTAL & VERTICAL JOINTS ON BACK FACE.

4-A410

3"

A407

A509 @ 1'-0"

6-A805 @ EQ. SP.A
6-A616 @ EQ. SPA.
6-A619 @ EQ. SPA.

F.F.

2'-6"

A503

B.F.

2½"

A604 @ EQ. SPA.

A402

5'-0"

TOP OF BERM

A401

2'-6" MIN.

12¾" DIA C.I.P. PIPE PILE, TYP.

2'-0"

3" CL.

7 EQ. SPA.

EL. 721.96

A604

3'-6"

6" DIA. PIPE UNDERDRAIN WRAPPED. SLOPE 0.5% MIN. TO DRAIN.

SECTION THRU BODY

1½"

SECTION A-A

6" NOMINAL ☆

A A

⅜" MAX.

RODENT SHIELD

☆ DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SHEILD SO SLOTS ARE VERTICAL.

COST OF RODENT SHEILD, PIPE COUPLING, AND SCREWS TO BE INCLUDED IN 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.

BACK UP RING ⅜" MIN. THICKNESS FOR SMAW AND ¼" MIN. THICKNESS FOR FCAW

¼"

B-U4a OR B-U4a - GF

PILE SPLICE DETAILS

⅜"

BACK UP RING

45°

¼"

B-U4a OR B-U4a - GF

C.I.P. PILE WELD DETAIL

FOUNDATION DATA

ABUTMENT TO BE SUPPORTED ON 12¾X 0.375 INCH C.I.P. PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. ESTIMATED PILE LENGTH = 90 FEET.

LEGEND

△ 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"

⊠ VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"x8".

▽ 1½" FILLER, EXTEND FROM BOTTOM OF ABUTMENT TO TOP OF DECK,DIAPHRAGM

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

SOUTH ABUTMENT DETAILS

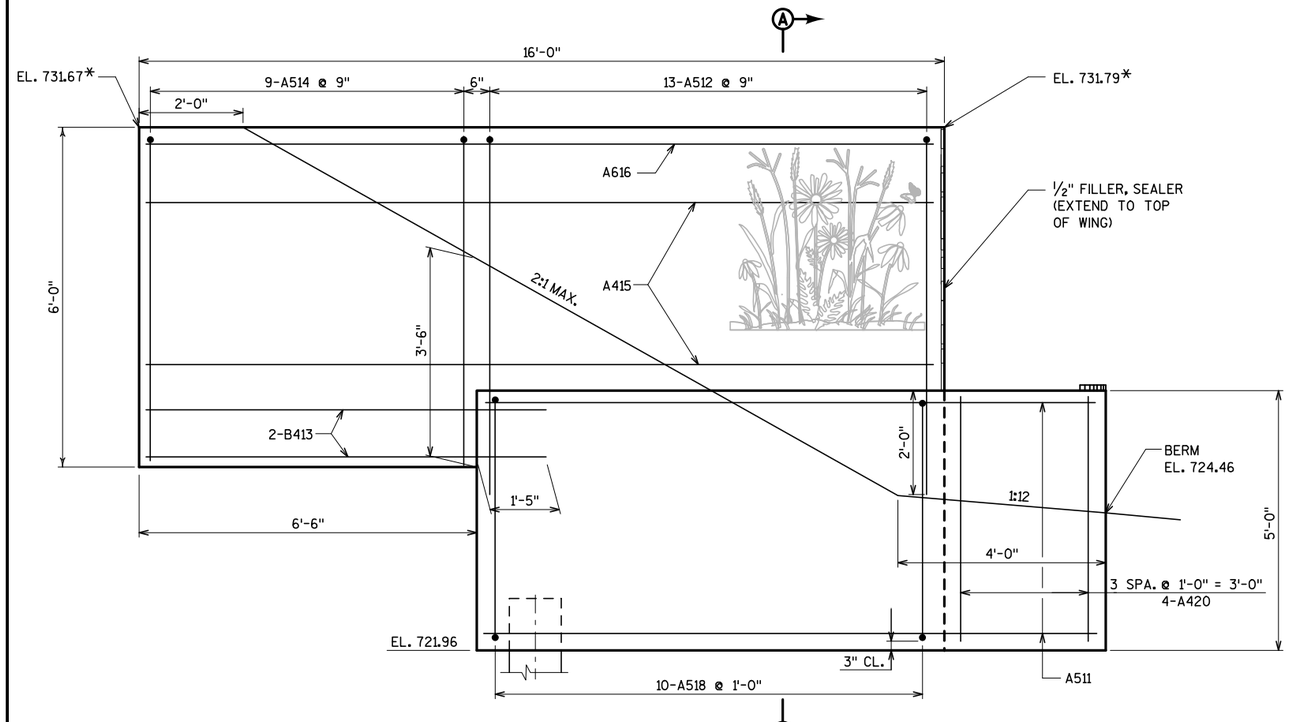
SHEET 6 OF 28
501

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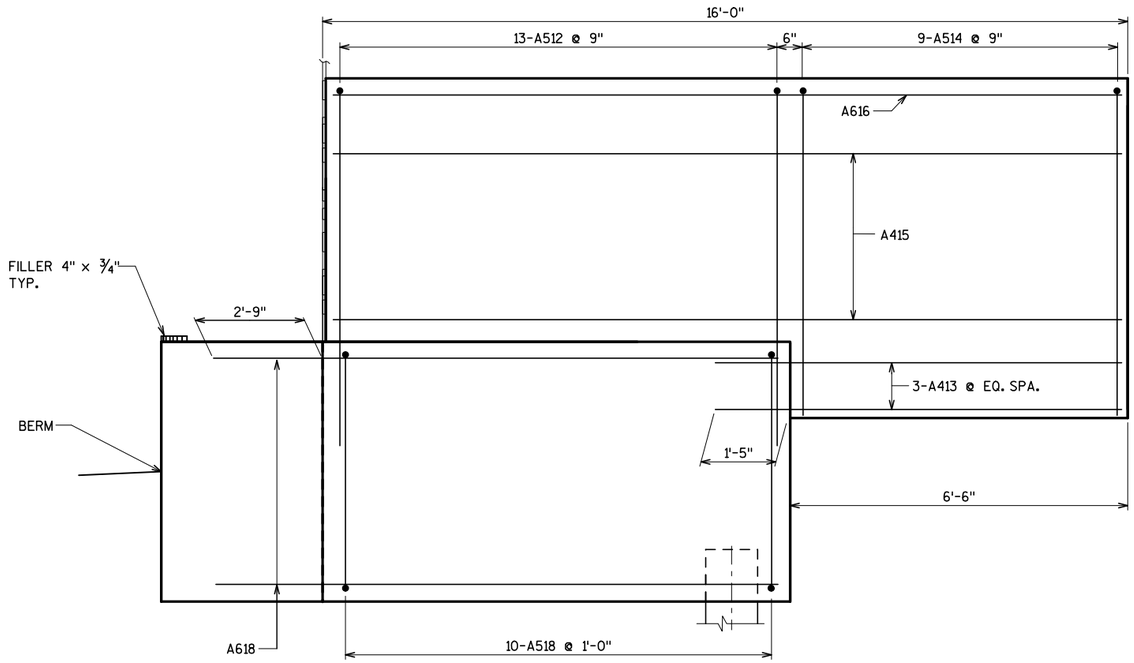
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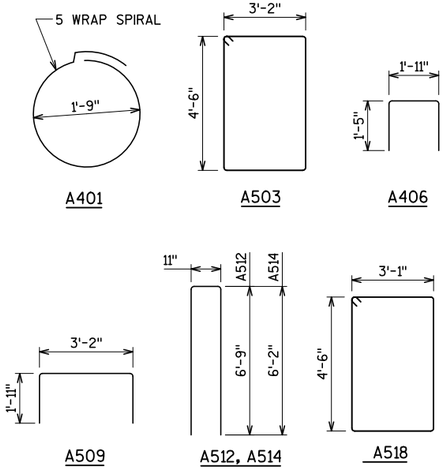
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WINGWALL 3 ELEVATION
(FRONT FACE)



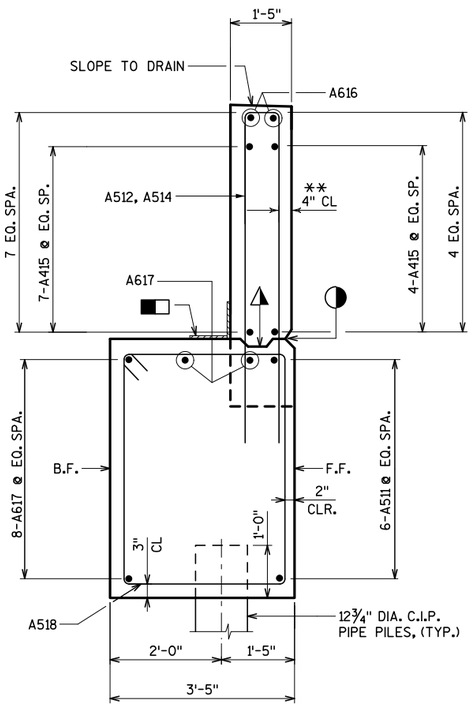
WINGWALL 3 ELEVATION
(BACK FACE)



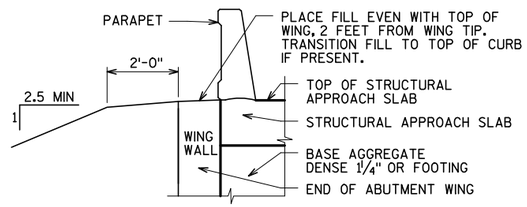
BENDING DIAGRAMS

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A401	X	13	28'-0"	X		BODY PILES
A402	X	26	2'-3"			BODY PILES
A503	X	97	16'-0"	X		BODY STIRRUPS
A604	X	22	40'-0"			BODY HORIZ.
A805	X	6	16'-0"			BODY HORIZ.
A406	X	35	4'-5"	X		BODY VERT.
A407	X	14	8'-3"			BODY TOP HORIZ.
A608	X	6	42'-5"			BODY TOP HORIZ.
A509	X	39	6'-2"	X		BODY TOP VERT.
A410	X	8	20'-2"			BODY TOP HORIZ.
A511	X	6	11'-2"			WING F.F. HORIZ.
A512	X	19	14'-4"	X		WING VERT.
A413	X	5	7'-7"			WING F.F. & B.F. HORIZ.
A514	X	9	13'-6"	X		WING VERT.
A415	X	11	14'-8"			WING HORIZ.
A616	X	2	14'-8"			WING TOP HORIZ.
A617	X	10	11'-5"			WING B.F. HORIZ.
A518	X	10	15'-10"	X		WING STIRRUPS
A619	X	6	28'-2"			BODY HORIZ.
A420	X	4	4'-8"			FRONT FACE WING - ABUTMENT ENDS



SECTION A-A



TYPICAL FILL SECTION AT WING TIPS

LEGEND

- ◭ OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ◑ ¾" "V" GROOVE
- ** INCLUDES ALLOWANCE FOR FORMLINER
- ▬◧ 18" RUBBERIZED MEMBRANE WATERPROOFING, SEAL ALL HORIZONTAL AND VERTICAL SURFACES ON BACKFACE.

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

*- ELEVATIONS ARE AT INSIDE FACE OF PARAPET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

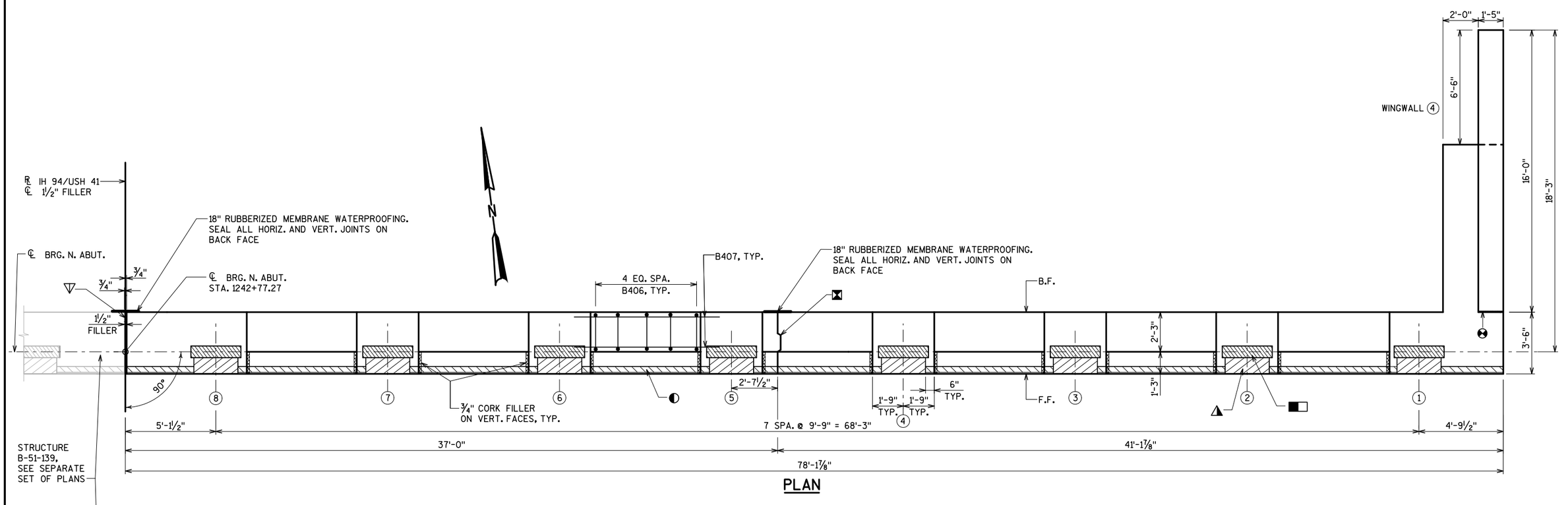
SOUTH ABUTMENT WINGWALL DETAILS

SHEET 7 OF 28
502

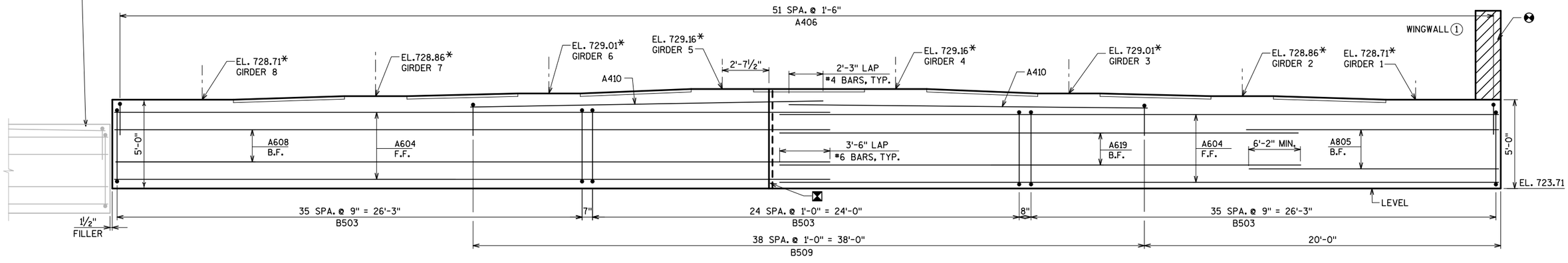
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8

STATE PROJECT NUMBER
1035-01-74



PLAN



ELEVATION

(LOOKING NORTH)
(PILES NOT SHOWN)

*- ELEVATIONS ARE AT INTERSECTION OF ℄ OF GIRDER AND ℄ BRG.

LEGEND

- ½" FILLER-TO EXTEND FROM BRIDGE SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING LENGTH.
- 4" × ¾" FILLER, LENGTH OF ABUTMENT
- ¾" FILLER
- ½" × 8" × 2'-10" NON-LAMINATED ELASTOMERIC BRG. PAD.
- VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"X8". SEE SHEET 28 FOR ALT. CONSTRUCTION JOINT
- 1½" FILLER. EXTEND FROM BOTTOM OF ABUTMENT TO TOP OF DECK/ DIAPHRAGM.
- (X) GIRDER NUMBER

  F.F. - FRONT FACE, B.F. - BACK FACE, E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

NORTH ABUTMENT

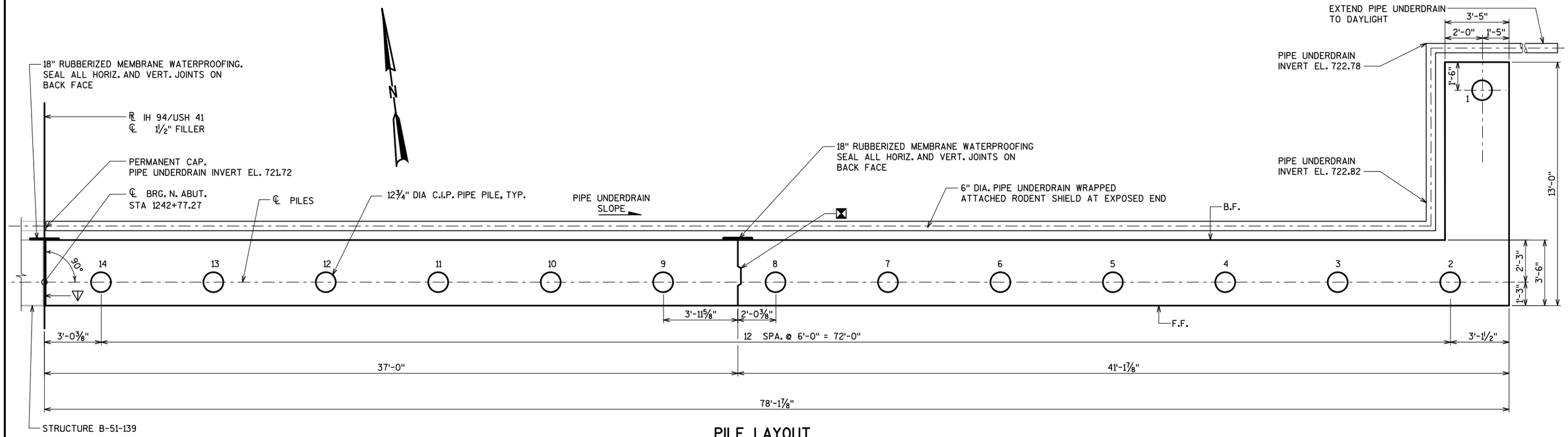
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503

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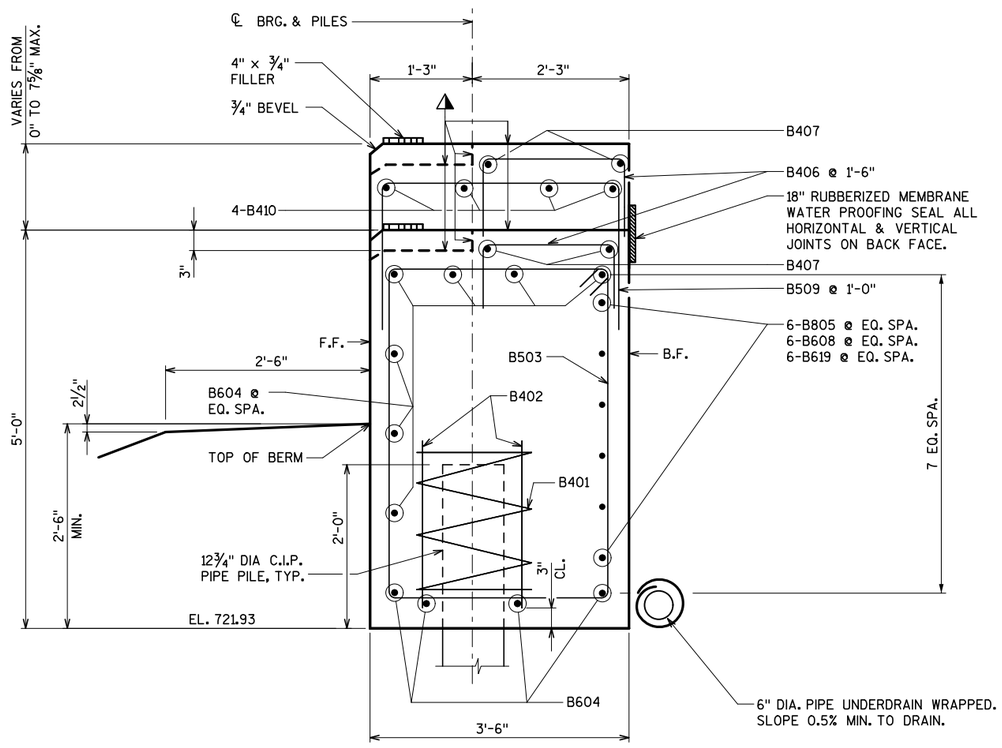
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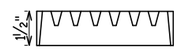
STATE PROJECT NUMBER
1035-01-74



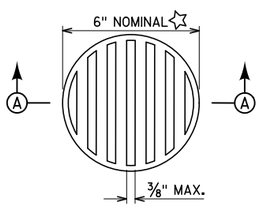
PILE LAYOUT



SECTION THRU BODY



SECTION A-A



RODENT SHIELD

FOUNDATION DATA

ABUTMENT TO BE SUPPORTED ON 12¾X 0.375 INCH C.I.P. PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. ESTIMATED PILE LENGTH = 85 FEET.

☆ DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SHEILD SO SLOTS ARE VERTICAL.

COST OF RODENT SHEILD, PIPE COUPLING, AND SCREWS TO BE INCLUDED IN 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.

LEGEND

◭ 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"

⧓ VERT. CONST. JOINT KEYWAY FORMED BY BEVELED 2"x8"

▽ 1½" FILLER, EXTEND FROM BOTTOM OF ABUTMENT TO TOP OF DECK, DIAPHRAGM

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

NOTE

SEE SHEET 6 FOR STEEL 12¾X 0.375 INCH C.I.P. PILE SPLICE DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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NORTH ABUTMENT DETAILS

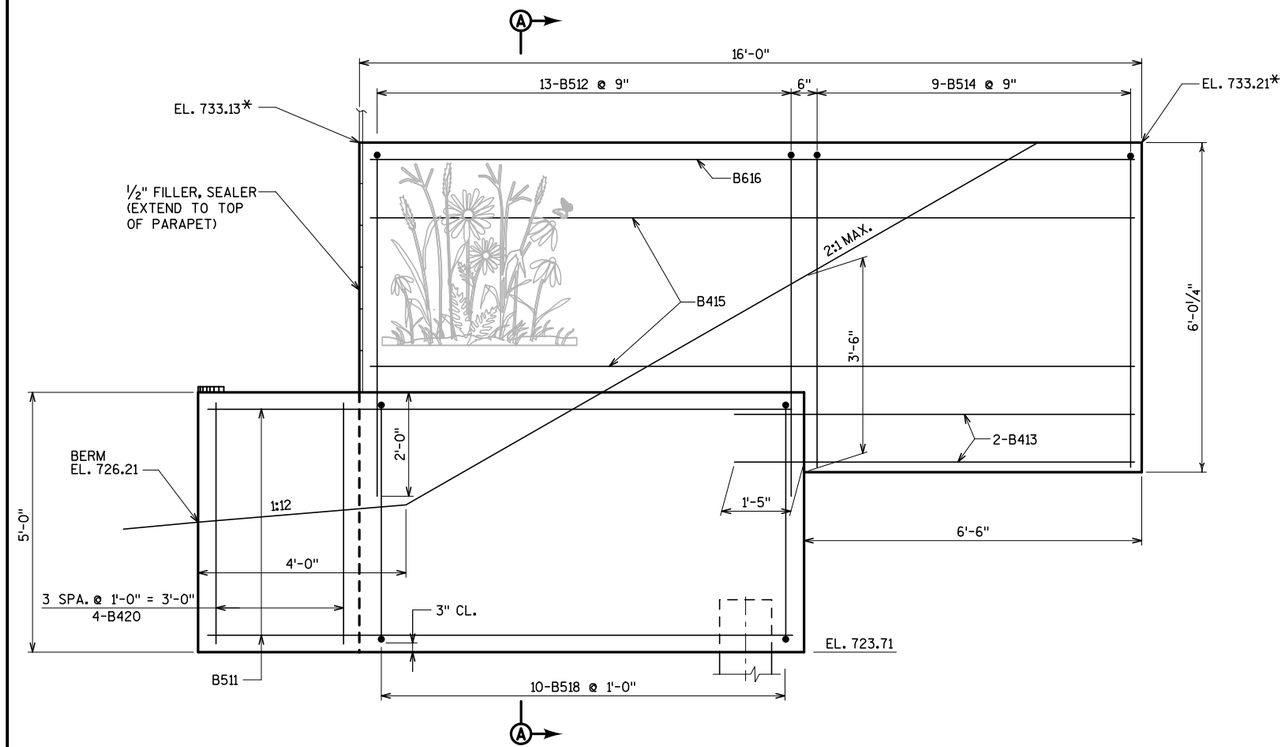
SHEET 9 OF 28
504

8

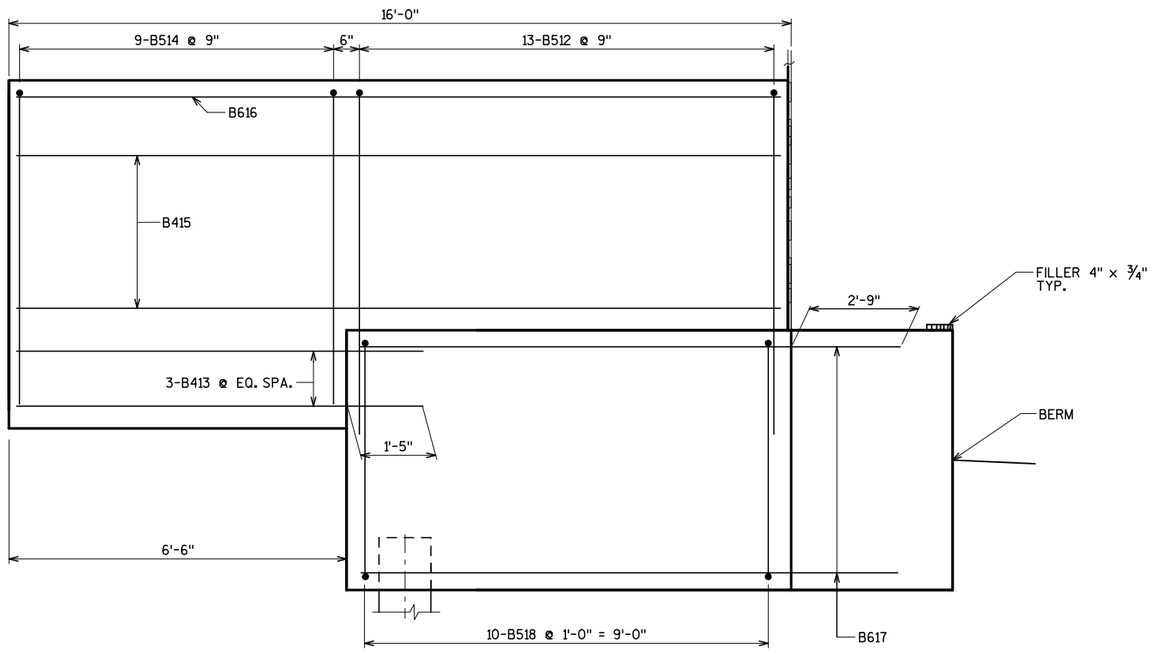
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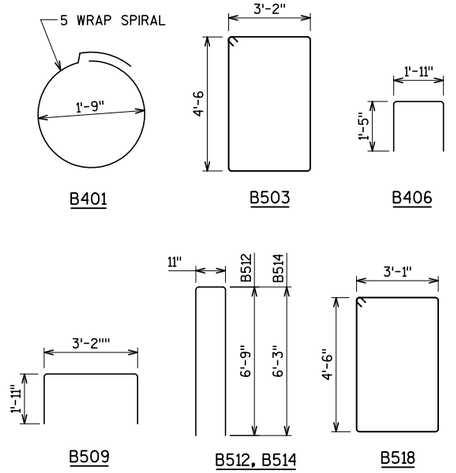
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WINGWALL 1 ELEVATION
(FRONT FACE)



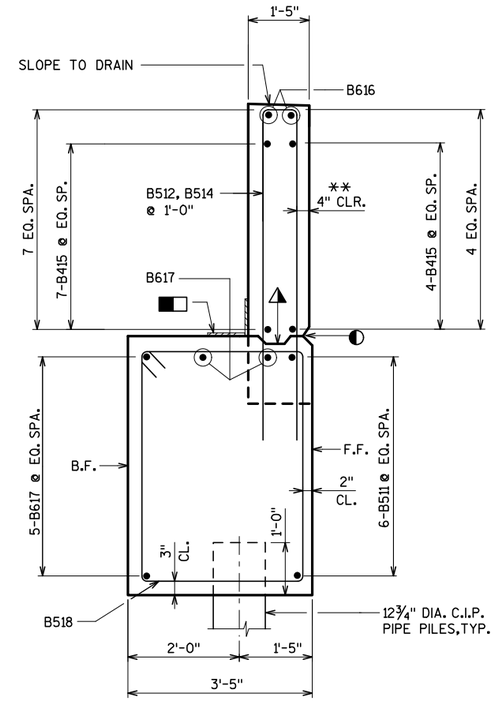
WINGWALL 1 ELEVATION
(BACK FACE)



BENDING DIAGRAMS

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B401	X	13	28'-0"	X		BODY PILES
B402	X	26	2'-3"			BODY PILES
B503	X	97	15'-2"	X		BODY STIRRUPS
B604	X	22	40'-0"			BODY HORIZ.
B805	X	6	16'-0"			BODY HORIZ.
B406	X	52	3'-11"	X		BODY VERT.
B407	X	4	42'-2"			BODY TOP HORIZ.
B608	X	6	42'-5"			BODY TOP HORIZ.
B509	X	39	6'-2"	X		BODY TOP VERT.
B410	X	8	20'-2"			BODY TOP HORIZ.
B511	X	6	11'-8"			WING F.F. HORIZ.
B512	X	19	14'-6"	X		WING VERT.
B413	X	5	7'-7"			WING F.F. & B.F. HORIZ.
B514	X	9	13'-2"	X		WING VERT.
B415	X	11	15'-2"			WING HORIZ.
B616	X	2	15'-2"			WING TOP HORIZ.
B617	X	10	11'-2"			WING B.F. HORIZ.
B518	X	10	15'-4"	X		WING STIRRUPS
B619	X	6	27'-9"			BODY HORIZ.
B420	X	4	4'-8"			FRONT FACE WING - ABUTMENT ENDS



SECTION A-A

LEGEND

- ◭ OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ◐ ¾" "V" GROOVE
- ▬ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- ** INCLUDES ALLOWANCE FOR FORMLINER.

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

*- ELEVATIONS ARE AT INSIDE FACE OF PARAPET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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NORTH ABUTMENT WINGWALL DETAILS

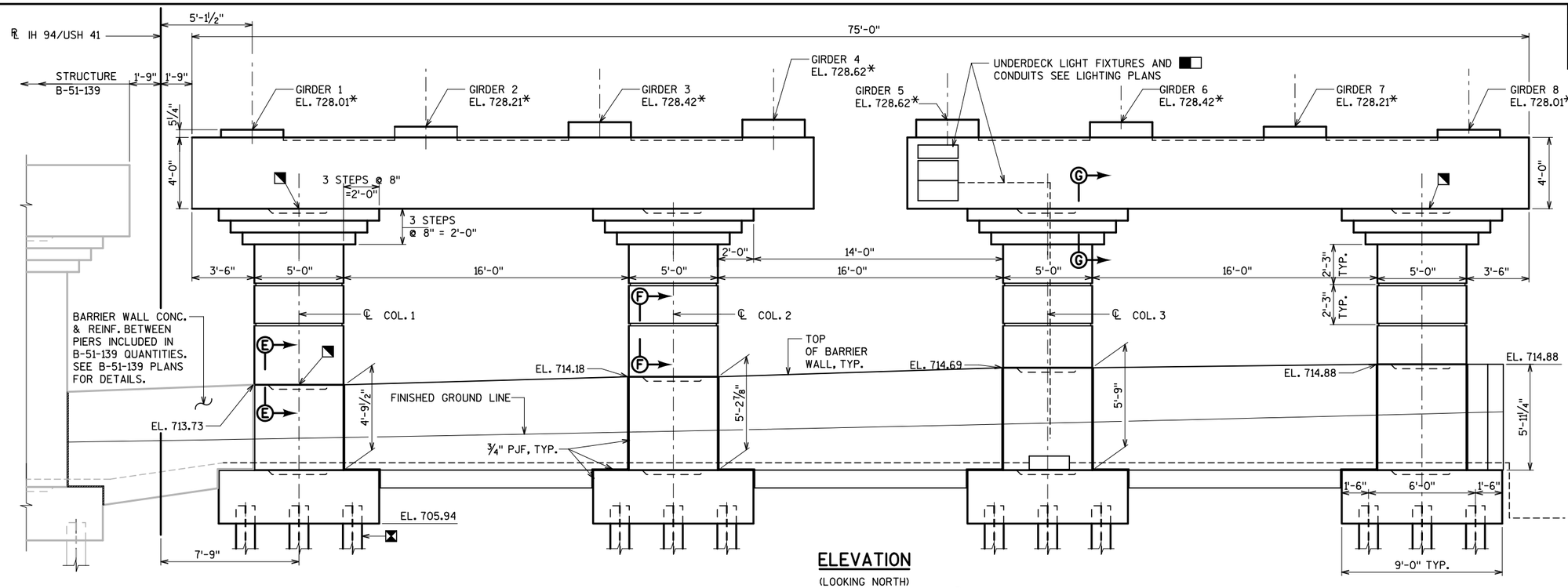
SHEET 10 OF 28
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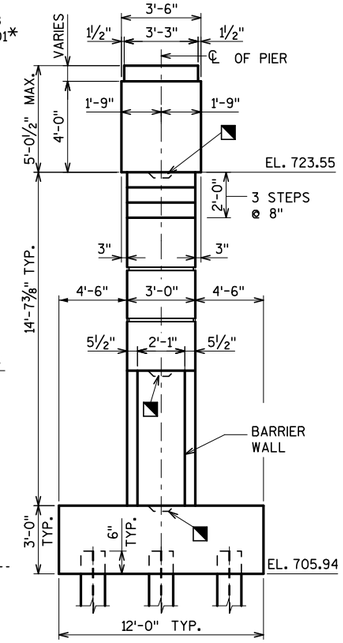
STATE PROJECT NUMBER

1035-01-74

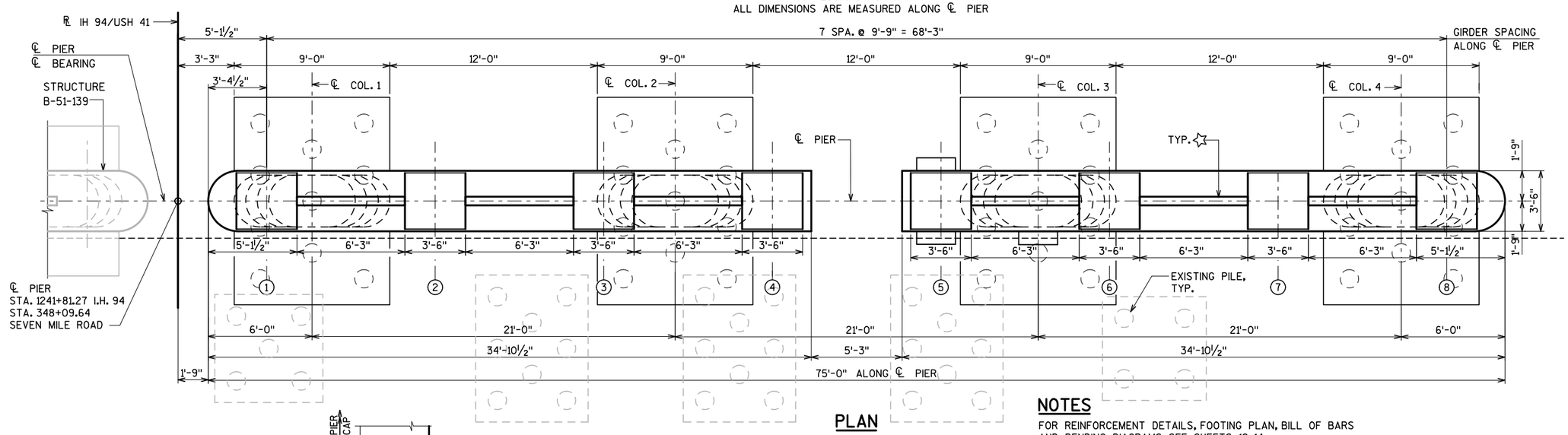


ELEVATION

(LOOKING NORTH)
ALL DIMENSIONS ARE MEASURED ALONG ℄ PIER

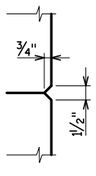


END VIEW

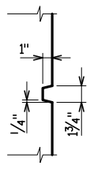


PLAN

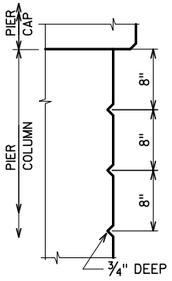
(BARRIER WALL NOT SHOWN FOR CLARITY)



SECTION E-E



SECTION F-F



SECTION G-G

LEGEND

- ALL UNDERDECK ITEMS PAID UNDER ROADWAY BID ITEMS.
- 3'-6" x 1'-2" x 3" CONSTR. JOINT FORMED BY BEVELED KEYWAY, TYP. TOP AND BOTTOM OF ALL COLUMNS
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- 12¾" C.I.P. PIPE PILES. SEE SHEET 6 FOR PILE SPLICE DETAILS.
- (X) GIRDER NUMBER

PJF - PREFORMED JOINT FILLER

NOTES

FOR REINFORCEMENT DETAILS, FOOTING PLAN, BILL OF BARS AND BENDING DIAGRAMS SEE SHEETS 12-14.

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

FOR CONCRETE STAINING DETAILS, SEE SHEET "AESTHETIC DETAILS".

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE PIER IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURE DESIGN SECTION. THE PRECAST CONCRETE PIER SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 7 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND SPECIAL PROVISIONS RELATED TO PRECAST ELEMENTS WITH THE EXCEPTION OF METHOD OF PAYMENT. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY HG | PLANS CK'D. BDT

PIER GEOMETRY

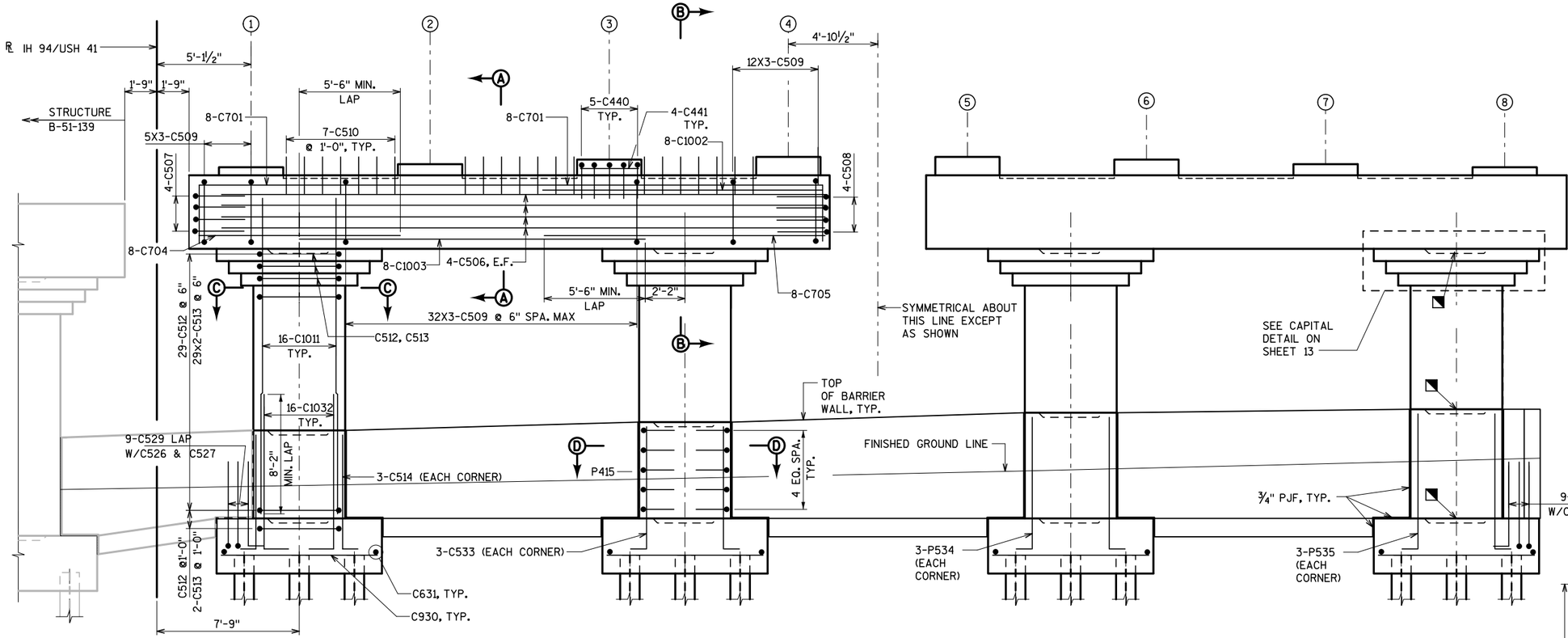
SHEET 11 OF 28

506

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STATE PROJECT NUMBER

1035-01-74



TYPICAL BEARING BLOCK DETAILS

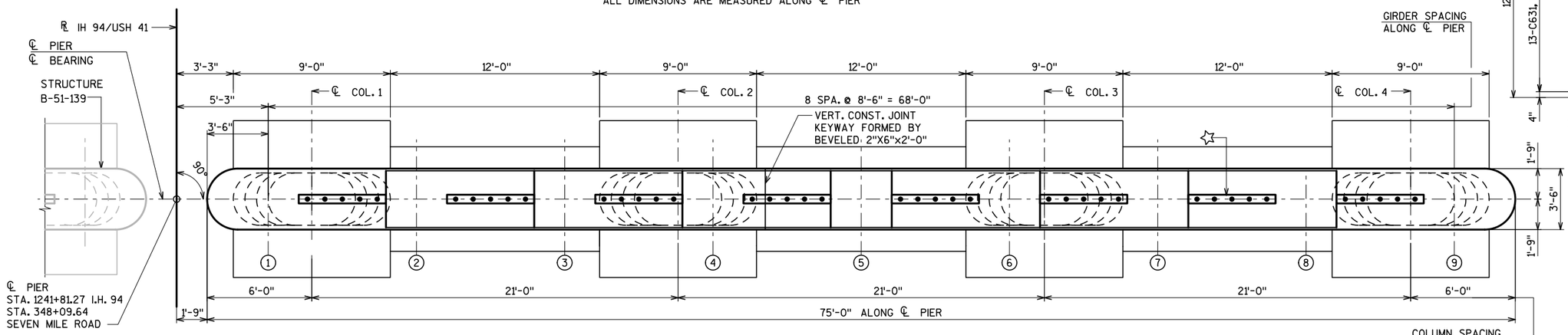
PIER CAP REINFORCEMENT NOT SHOWN FOR CLARITY.

FOUNDATION DATA

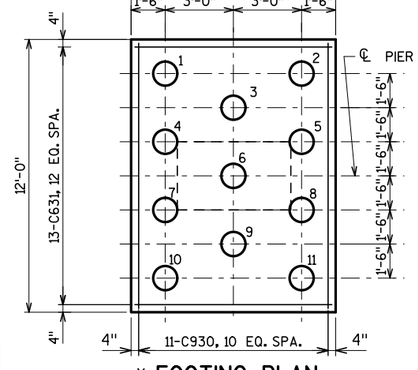
PIER TO BE SUPPORTED ON 12¾X 0.375 INCH C.I.P. PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. ESTIMATED PILE LENGTH = 95 FEET.

ELEVATION

(LOOKING NORTH)
ALL DIMENSIONS ARE MEASURED ALONG ℄ PIER



PLAN



* FOOTING PLAN

(TYP. ALL COLUMNS)

LEGEND

- 3'-6" x 1'-2" x 3" CONSTR. JOINT FORMED BY BEVELED KEYWAY, TYP. TOP AND BOTTOM OF ALL COLUMNS
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- (X) GIRDER NUMBER

PJF- PREFORMED JOINT FILLER

*- PROPOSED PILING MAY BE ADJUSTED UP TO 3" EACH WAY TO AVOID CONFLICTS WITH EXISTING PILES. IF GREATER ADJUSTMENT IS REQUIRED, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING.

NOTES

FOR SECTION DETAILS, SEE SHEET 13.

FOR BARRIER WALL DETAILS, SEE SHEET 14.

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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PIER REINFORCING DETAILS (1 OF 2)

SHEET 12 OF 28

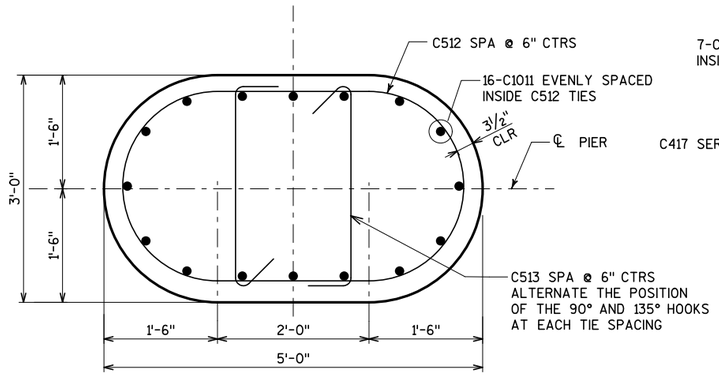
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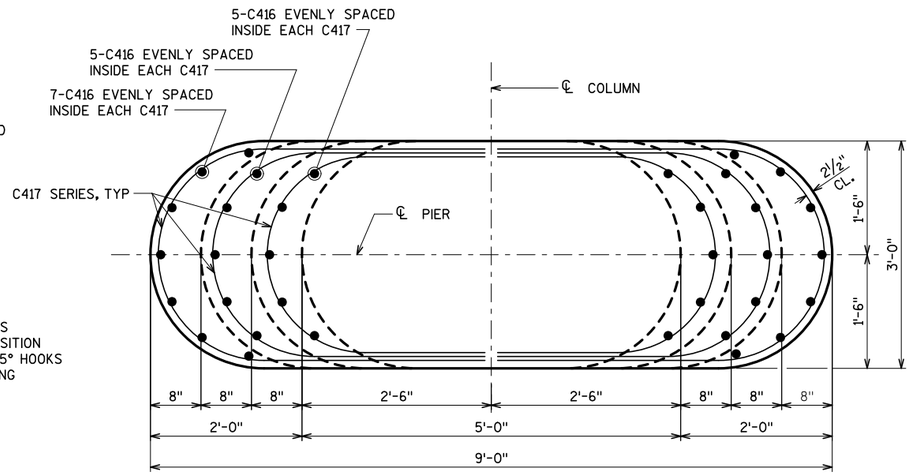
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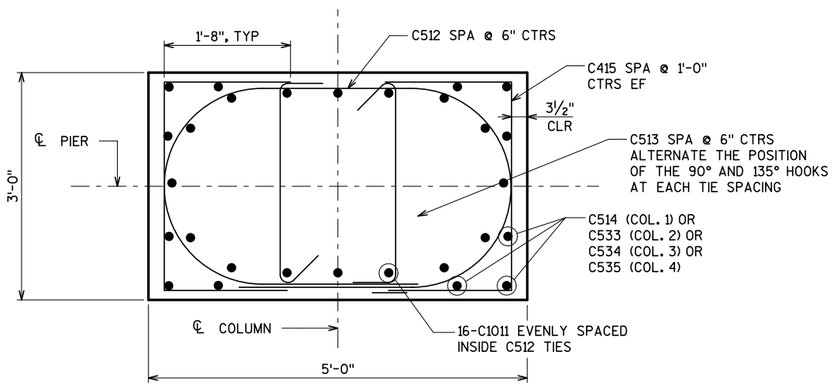
SECTION C-C

TYPICAL COLUMN SECTION ABOVE TOP OF BARRIER WALL



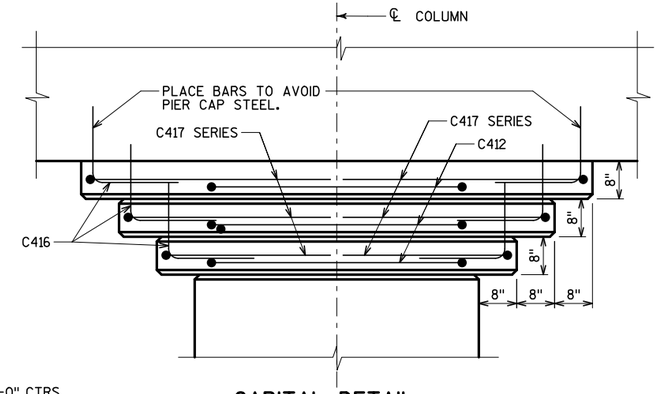
SECTION THRU TOP OF COLUMN

COLUMN DETAILS AT CAPITALS
COLUMN STEEL NOT SHOWN FOR CLARITY

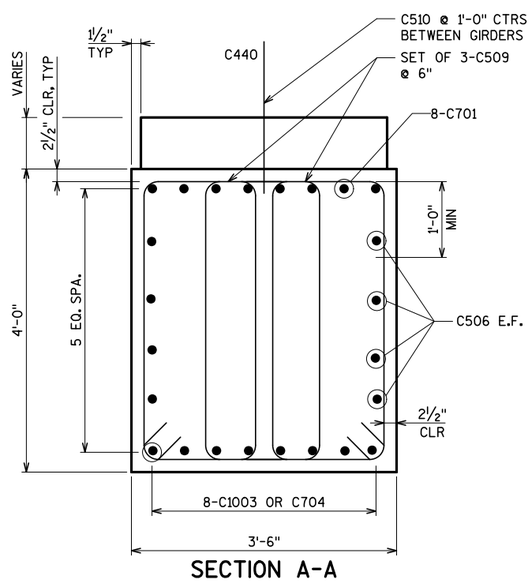


SECTION D-D

TYPICAL COLUMN SECTION BELOW TOP OF BARRIER WALL

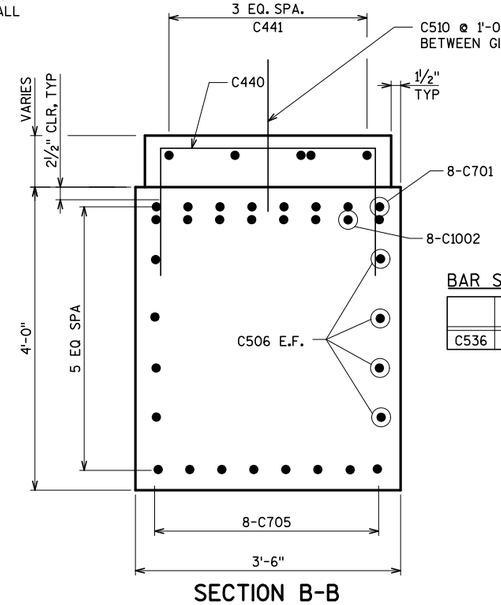


CAPITAL DETAIL



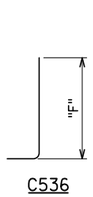
SECTION A-A

BEARING BLOCK BARS NOT SHOWN FOR CLARITY



SECTION B-B

PIER CAP SECTION ABOVE COLUMNS PANEL 3

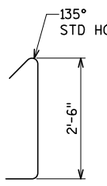


C536

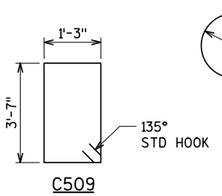
BAR SERIES TABLE

	NO. REQ'D	"F"	LENGTH
C536	2 SERIES OF 7	3'-10" TO 4'-10"	4'-7" TO 5'-7"

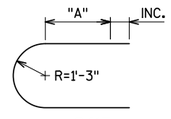
BUNDLE AND TAG EACH SERIES SEPARATELY



C513



C509

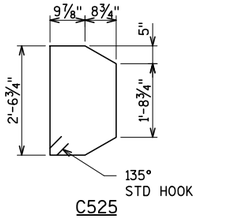


C417

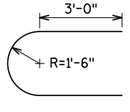
BAR SERIES TABLE

	NO. REQ'D	"A"	INC.	LENGTH
C417	8 SERIES OF 3	1'-8" TO 3'-0"	8"	7'-3" TO 9'-11"

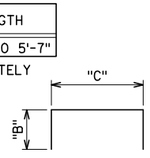
BUNDLE AND TAG EACH SERIES SEPARATELY



C525

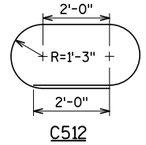


C507

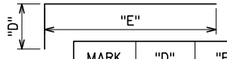


BENDING DIAGRAMS

MARK	"B"	"C"
C508	1'-9"	2'-11"
C415	1'-8"	2'-7"
C518	4'-5"	2'-7"
C527	5'-7"	2'-7"
C528	5'-7"	6"
C440	1'-10"	2'-11"



C512



MARK	"D"	"E"
C701	3'-6"	20'-0"
C1002	3'-6"	15'-5"
C514	10"	6'-4"
C416	1'-4"	1'-8"
C519	10"	4'-9"
C526	10"	5'-7"
C529	10"	5'-4"
C1032	1'-7"	10'-6"
C533	10"	6'-10"
C534	10"	7'-6"
C535	10"	7'-6"

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
C701	X	32	23'-4"	X	-	PIER CAP-HORIZ., TOP
C1002	X	16	18'-9"	X	-	PIER CAP-HORIZ., TOP
C1003	X	16	18'-10"	-	-	PIER CAP-HORIZ., BOTTOM
C704	X	16	11'-4"	-	-	PIER CAP-HORIZ., BOTTOM
C705	X	16	15'-5"	-	-	PIER CAP-HORIZ., BOTTOM
C506	X	16	33'-2"	-	-	PIER CAP-HORIZ., EACH FACE
C507	X	8	10'-9"	X	-	PIER CAP-HORIZ., U BARS
C508	X	8	6'-2"	X	-	PIER CAP-HORIZ., U BARS
C509	X	294	10'-4"	X	-	PIER CAP-STIRRUPS
C510	X	42	2'-0"	-	-	PIER DIAPHRAGM DOWELS
C1011	X	64	17'-9"	-	-	COLUMN-VERT.
C512	X	120	13'-11"	X	-	COLUMN-HORIZ. TIE
C513	X	240	3'-1"	X	-	COLUMN-HORIZ. TIE
C514	X	12	7'-1"	X	-	PIER COL NO. 1 VERT.
C415	X	40	5'-9"	X	-	PIER COL. BOT.
C416	X	136	2'-11"	X	-	PIER COL CAPITAL
C417	X	24	8'-7"	X	X	PIER COL CAPITAL
C518	X	51	11'-2"	X	-	BARRIER WALL VERT.
C519	X	78	5'-6"	X	-	BARRIER WALL VERT.
C520	X	36	15'-6"	-	-	BARRIER WALL HORIZ..
C522	X	21	11'-8"	-	-	BARRIER WALL FOOTING
C524	X	39	5'-6"	-	-	BARRIER WALL HORIZ..
C525	X	6	8'-4"	X	-	BARRIER WALL HORIZ..
C526	X	7	6'-4"	X	-	BARRIER WALL VERT.
C527	X	1	13'-6"	X	-	BARRIER WALL VERT.
C528	X	5	11'-5"	X	-	BARRIER WALL VERT.
C529	X	9	6'-1"	X	-	BARRIER WALL-OUTSIDE COL. FTG.
C930	-	44	11'-4"	-	-	PIER COL. FTG.
C631	-	52	8'-4"	-	-	PIER COL. FTG.
C1032	X	64	12'-0"	X	-	PIER COL. FTG. DOWELS
C533	X	12	7'-6"	X	-	PIER COL NO. 2. VERT.
C534	X	12	8'-0"	X	-	PIER COL NO. 3. VERT.
C535	X	12	8'-2"	X	-	PIER COL NO 4. VERT.
C440	X	40	6'-5"	X	-	BEARING BLOCK U BAR
C441	X	32	3'-2"	-	-	BEARING BLOCK
C842	X	28	1'-6"	-	-	BARRIER WALL-DRILLED DOWELS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE PROJECT NUMBER

1035-01-74

STRUCTURE B-51-140

DRAWN BY HG | PLANS CK'D. BDT

PIER REINFORCING DETAILS (2 OF 2)

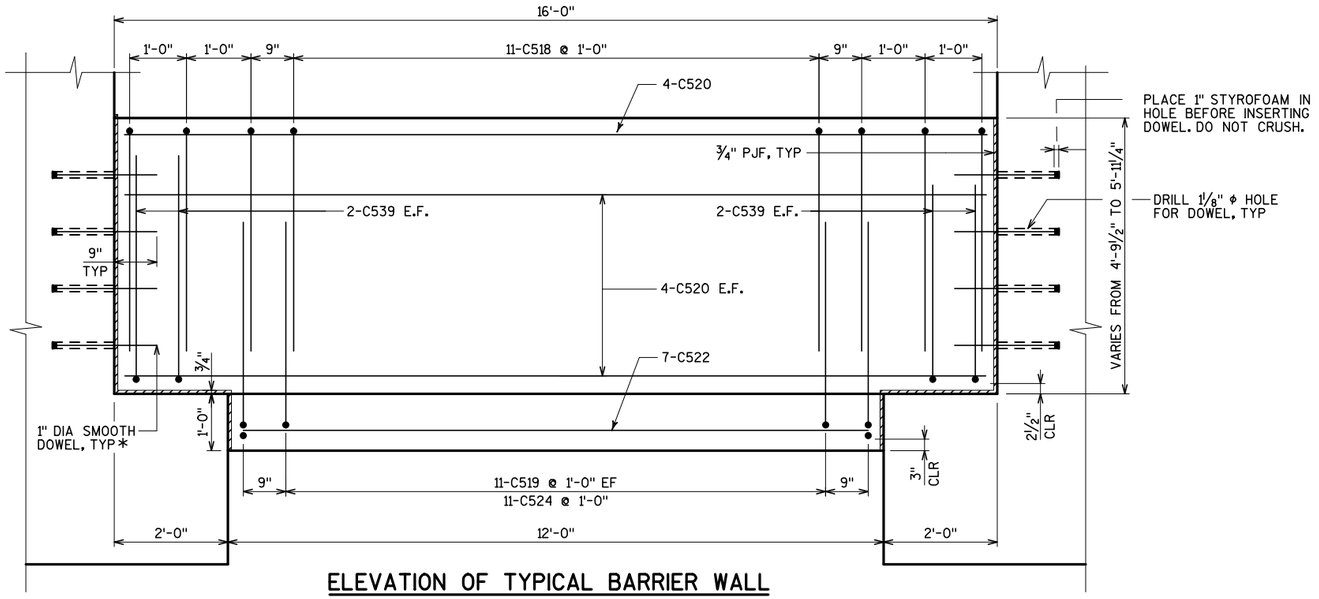
SHEET 13 OF 28

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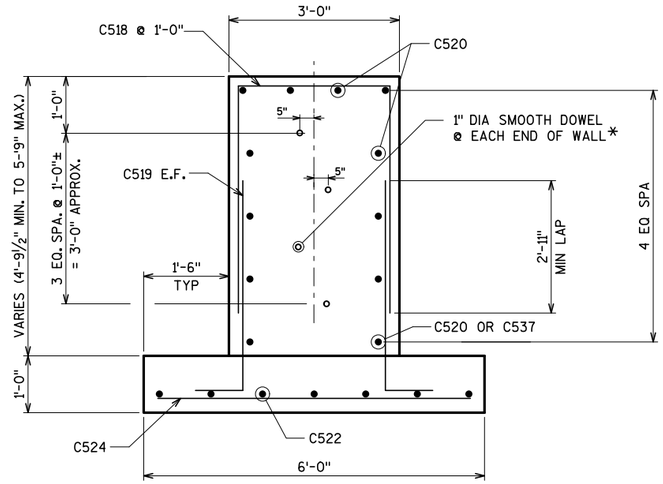
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STATE PROJECT NUMBER

1035-01-74



ELEVATION OF TYPICAL BARRIER WALL



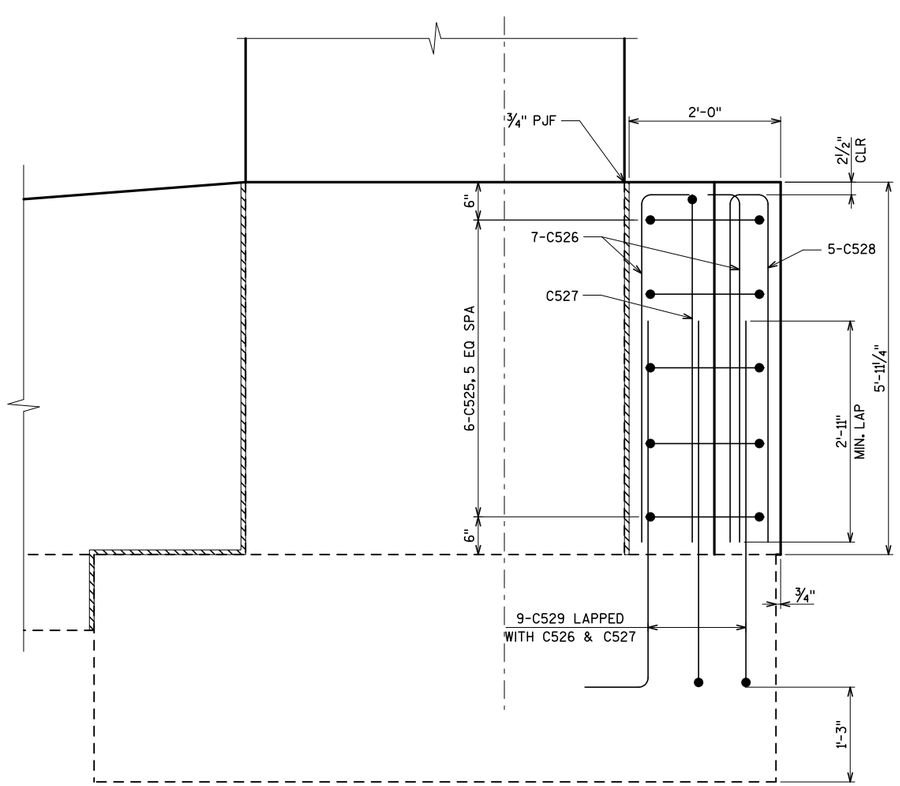
TYPICAL SECTION OF BARRIER WALL

LEGEND

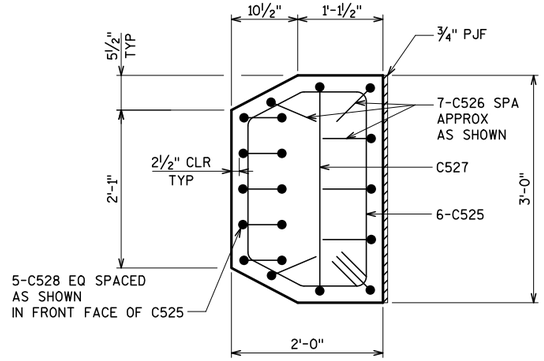
* - DOWELS PAID UNDER BID ITEM "DRILLED DOWEL BARS".

NOTE

PIER BARRIER WALL IS REQUIRED FOR CAST IN PLACE AND PRECAST PIER OPTIONS.



ELEVATION OF BARRIER WALL AT END OF PIER



PLAN OF BARRIER WALL AT END OF PIER

NOTE

SEE B-51-139 PLANS FOR BARRIER WALL BETWEEN B-51-139 AND B-51-140

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY WJ | PLANS CK'D. BDT

PIER BARRIER WALL DETAILS

SHEET 14 OF 28

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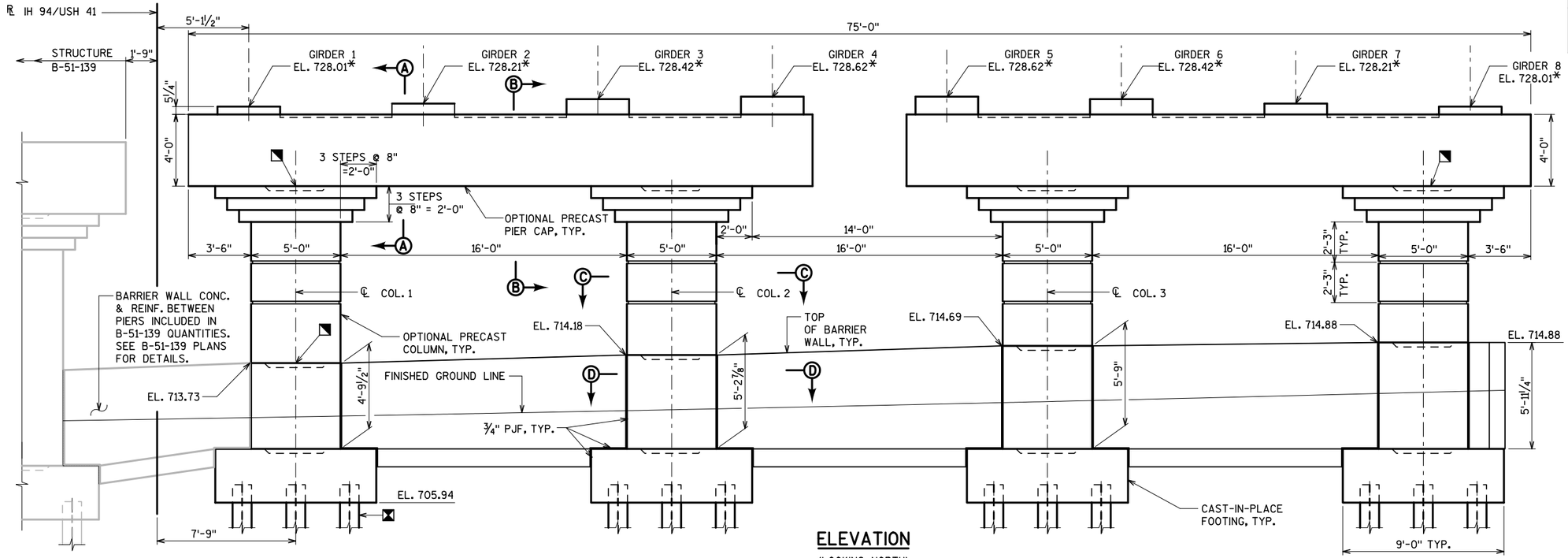
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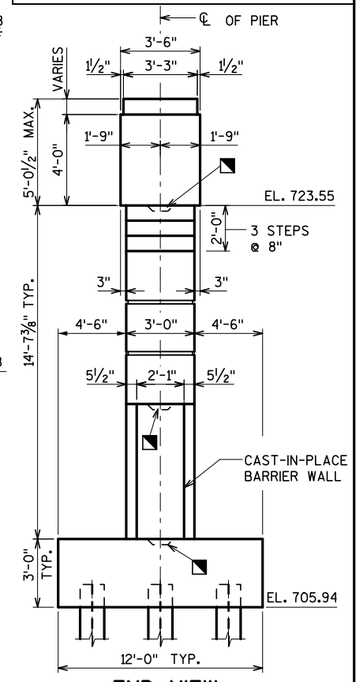
STATE PROJECT NUMBER

1035-01-74

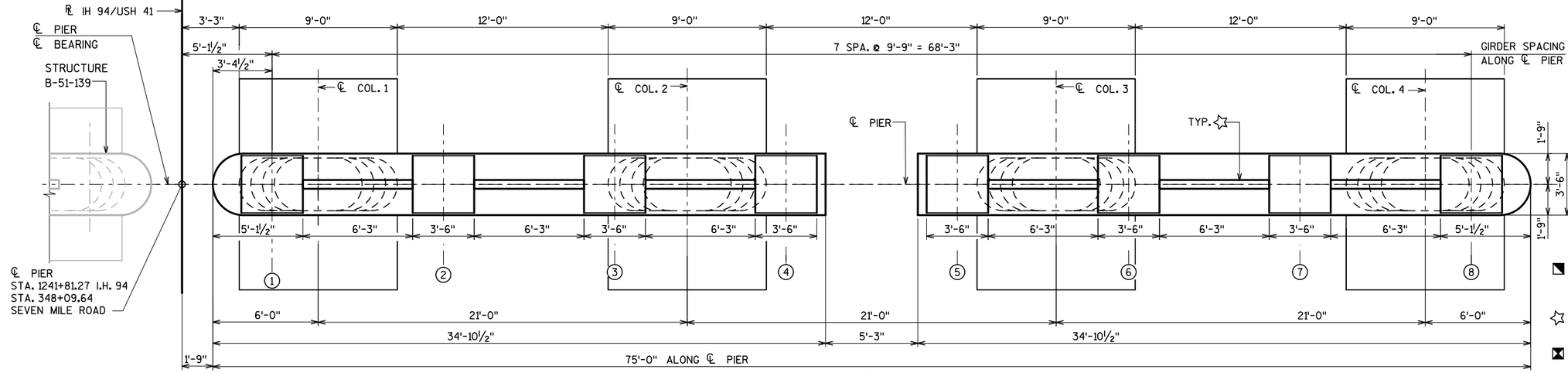


ELEVATION

(LOOKING NORTH)
ALL DIMENSIONS ARE MEASURED ALONG ℄ PIER



END VIEW



PLAN

(BARRIER WALL NOT SHOWN FOR CLARITY)

N

LEGEND

- 3'-6" x 1'-2" x 3" CONSTR. JOINT FORMED BY BEVELED KEYWAY, TYP. TOP AND BOTTOM OF ALL COLUMNS
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- 12¾" C.I.P. PIPE PILES. SEE SHEET 6 FOR PILE SPLICE DETAILS.
- (X) GIRDER NUMBER

PJF - PREFORMED JOINT FILLER

NOTES

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE PIER (PRECAST COLUMN, PRECAST PIER CAP AND PRECAST BEARING BLOCKS) IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE PIER SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 7 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND SPECIAL PROVISIONS RELATED TO PRECAST ELEMENTS WITH THE EXCEPTION OF METHOD OF PAYMENT. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.
PROVIDE A SUITABLE LIFTING DEVICE FOR THE PRECAST CAP, COLUMN AND BEARING BLOCK UNITS.

MANUFACTURER TO DETERMINE THE PRECAST COLUMN LENGTHS ASSUMING ½" STEEL SHIMS AT THE BOTTOM OF THE COLUMN.

GROUTED COUPLER SLEEVE MAY BE OVERSIZED TO ALLOW FOR ADDITIONAL LATERAL TOLERANCE IN THE FIELD. STANDARD WISDOT PRACTICE IS TO OVERSIZE COUPLER SLEEVE BY 1 BAR SIZE. ADJUST SHEAR STIRRUPS AS NECESSARY TO ACCOUNT FOR LARGER DIAMETER COUPLER SLEEVE.

ALL PRECAST ELEMENTS AND DIAPHRAGM ITEMS PAID PER C.I.P. BID ITEMS. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR THE PRECAST PIER OPTION.

THE CONTRACTOR MAY USE PRECAST SEGMENTS AT THIER DISCRETION (E.G. PRECAST CAP ONLY) WITH APPROVAL BY THE BUREAU OF STRUCTURES.

ALLOWABLE PRECAST ELEMENTS INCLUDE PIER CAP, PIER COLUMNS AND BEARING BLOCKS.

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE INTERSECTION OF ℄ GIRDER AND ℄ PIER.

REFER TO SHEET "PIER REINFORCING DETAILS (2 OF 2)" FOR SECTION A-A, B-B, C-C AND SECTION D-D DETAILS

REFER TO SHEET "PIER BARRIER WALL DETAILS" FOR BARRIER WALL DETAILS.

REFER TO SHEETS 11 THRU 14 FOR DETAILS OF CAST IN PLACE ELEMENTS.

FOR REINFORCEMENT DETAILS, FOOTING PLAN, BILL OF BARS AND BENDING DIAGRAMS SEE SHEETS 12-14.

FOR CONCRETE STAINING DETAILS, SEE SHEET 26.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY HG | PLANS CK'D. BDT

PRECAST PIER (OPTIONAL)

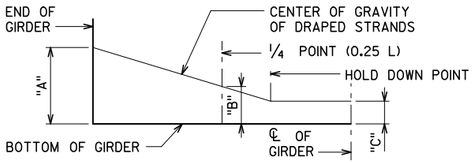
SHEET 15 OF 28

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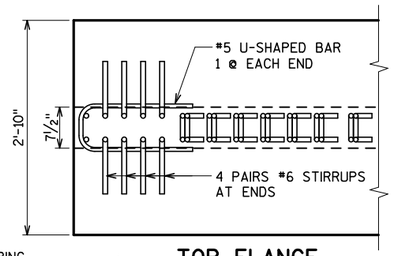
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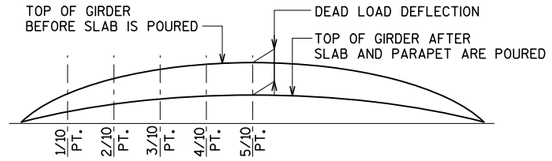
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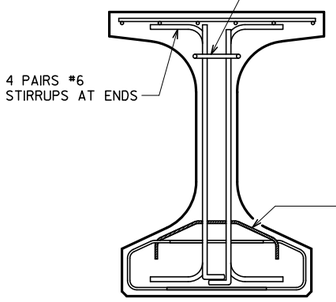
DRAPED STRAND PROFILE



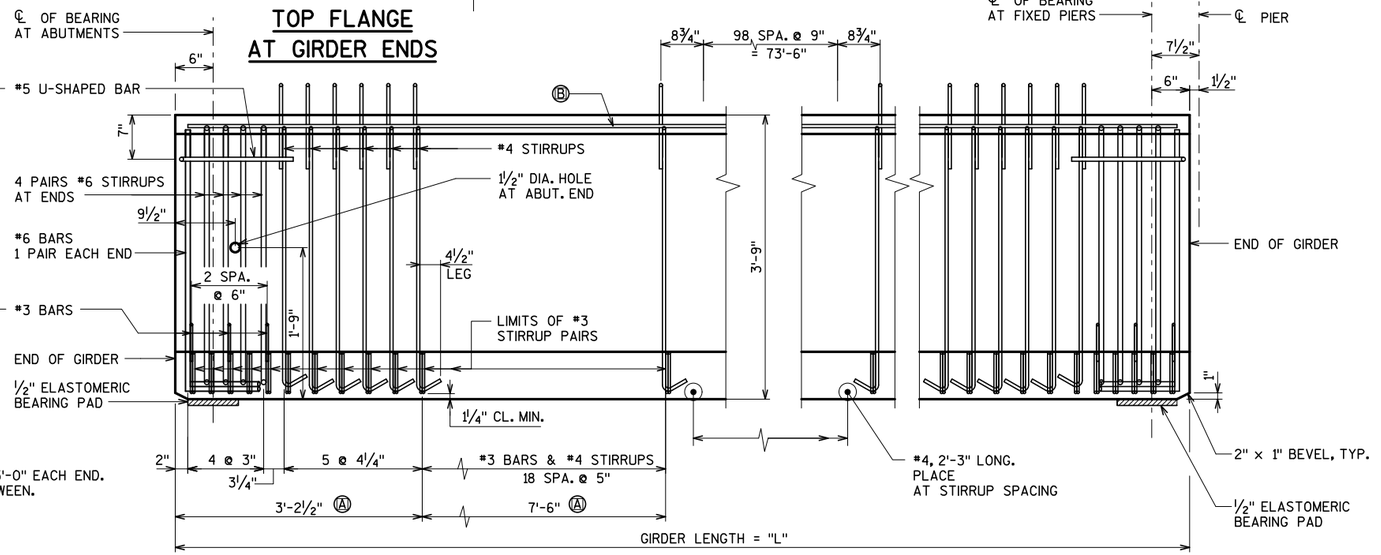
TOP FLANGE AT GIRDER ENDS



DEAD LOAD DEFLECTION DIAGRAM

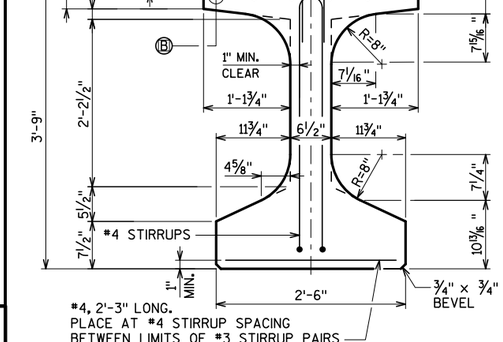


END VIEW OF GIRDER



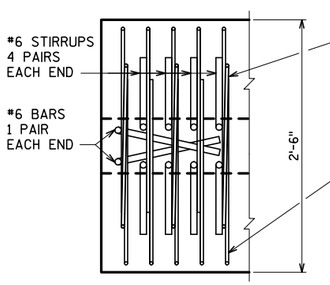
SIDE VIEW OF GIRDER

Ⓐ DETAIL TYP. AT EACH END
Ⓑ 6 - # 4 BARS, FULL LENGTH, LAP 1'-11"

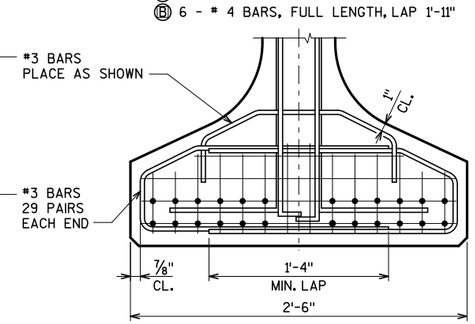


TYPICAL SECTION THRU GIRDER IN SPAN

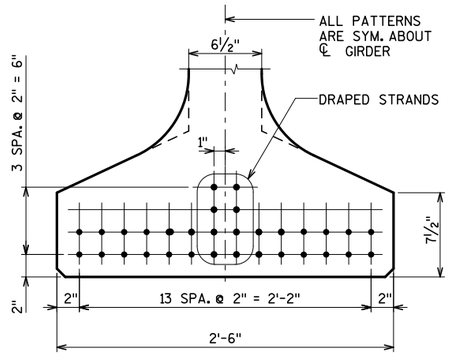
(STRANDS NOT SHOWN)



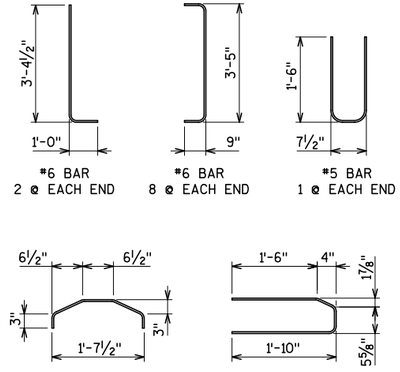
BOTTOM FLANGE AT GIRDER ENDS



TYPICAL STRAND PATTERN END VIEW



TYPICAL STRAND PATTERN MIDSPAN



GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCTRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.SEE SECTION 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRNADS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRAND SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER END, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMIMG TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED ATLEAST 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.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) 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 TENSILE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS, SEE "INTERMEDIATE STEEL DIAPHRAGM" SHEET.

SEE SHEET " AESTHETIC DETAILS" FOR CONCRETE STAINING DETAILS.

GIRDER DATA

SPAN	GIRDER NUMBER	GIRDER LENGTH "L"	DEAD LOAD DEFLECTIONS (IN)											CONC. STRGTH. f'c (p.s.i.)	GIRDER DATA "P"			DIA. OF STRAND	DRAPED PATTERN						INITIAL PULL, KIPS
				SOUTH END 0/10	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	NORTH END 10/10		SOUTH 1/3 OF GIRDER	MID 1/3 OF GIRDER	NORTH 1/3 OF GIRDER		TOTAL NO. OF STRANDS	**f'c (p.s.i.)	(IN) "A"	(IN) "B" MAX.	(IN) "B" MIN.	(IN) "C"	
1	ALL	96'-4½"	DECK PANELS AND GROUT	0	0.26	0.49	0.67	0.78	0.83	0.79	0.67	0.49	0.26	0	8,000	12"	10"	9"	0.6"	32	6,400	39	16.5	13.5	5	1406
			C.I.P. DECK	0	0.37	0.70	0.97	1.14	1.20	1.14	0.98	0.71	0.38	0												
			TOTAL DEFLECTION	0	0.63	1.19	1.64	1.92	2.02	1.93	1.65	1.21	0.64	0												
2	ALL	96'-4½"	DECK PANELS AND GROUT	0	0.26	0.49	0.67	0.78	0.83	0.79	0.67	0.49	0.26	0	8,000	9"	10"	12"	0.6"	32	6,400	39	16.5	13.5	5	1406
			C.I.P. DECK	0	0.37	0.70	0.97	1.14	1.20	1.14	0.98	0.71	0.38	0												
			TOTAL DEFLECTION	0	0.63	1.19	1.64	1.92	2.02	1.93	1.65	1.21	0.64	0												

** MINIMUM CYLINDER STRENGTH OF CONCRETE AT TIME OF TRANSFER OF PRESTRESS FORCE

BENDING DIAGRAMS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

45W" PRESTRESSED GIRDER DETAILS

SHEET 16 OF 28

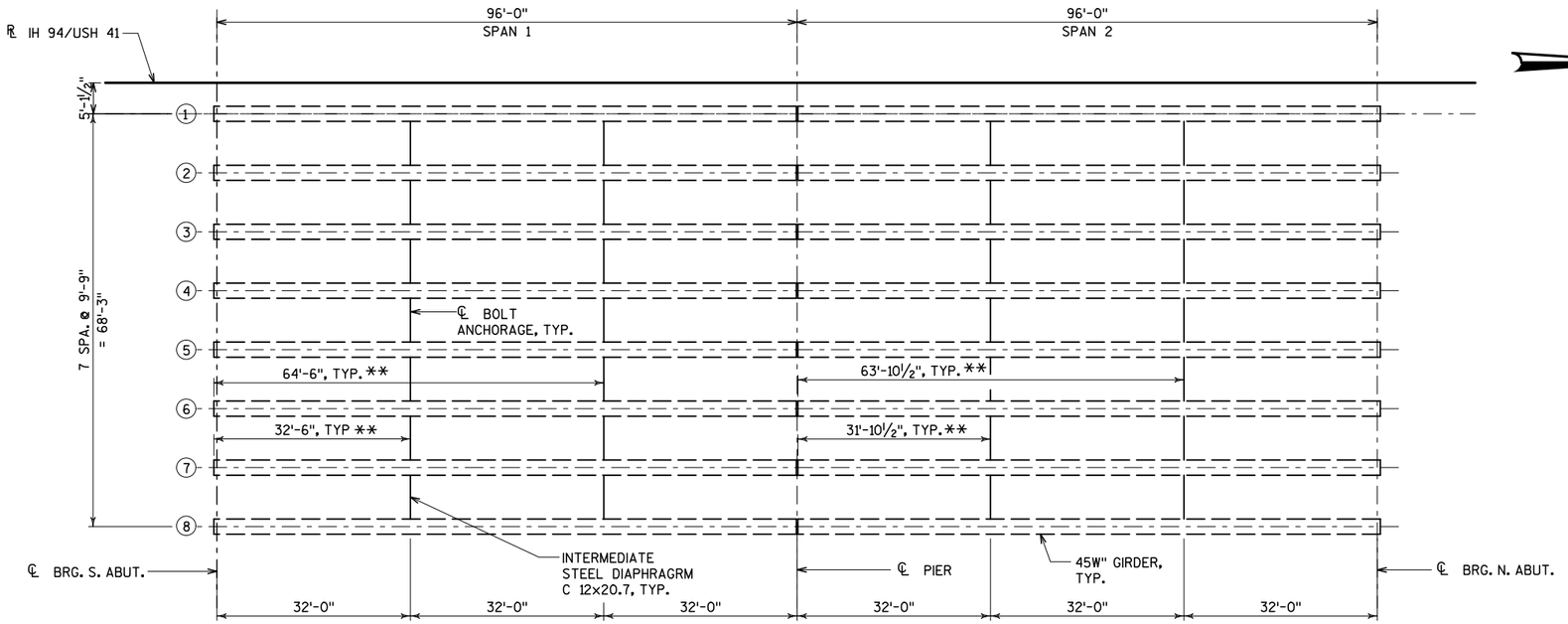
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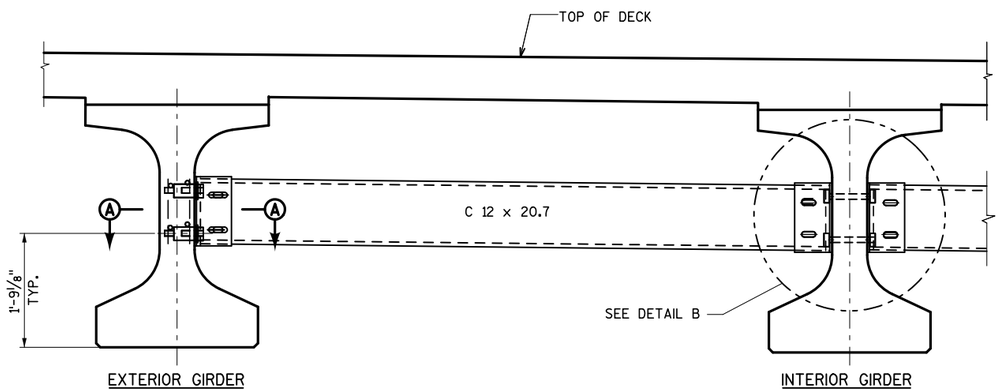
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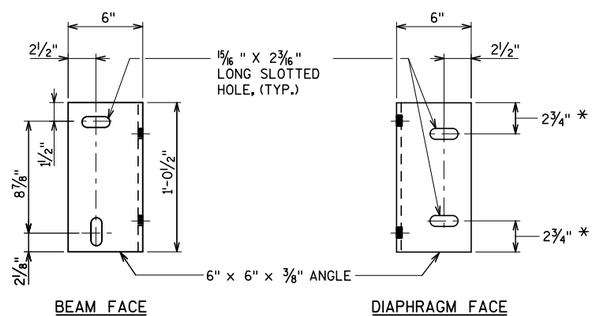
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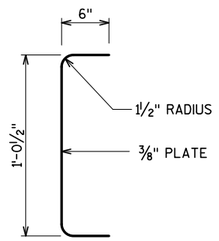
PLAN
(SHOWING DIAPHRAGM SPACING)



PART TRANSVERSE SECTION AT DIAPHRAGM



DIAPHRAGM SUPPORT



SECTION THRU ALTERNATE DIAPHRAGM

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGM", B-51-140, EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIALS INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

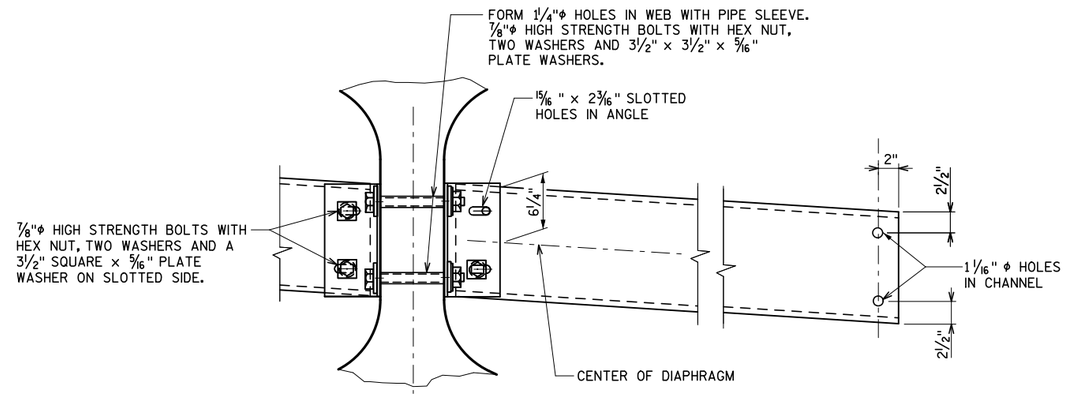
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS¼TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

* DIM = 2½" FOR ALTERNATE PLATE DIAPHRAGM.

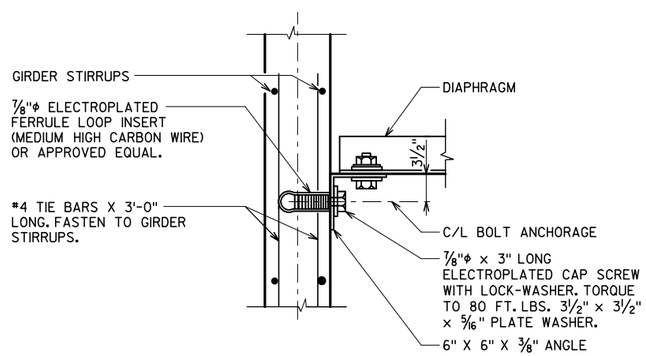
B.F. - BACK FACE

(X) GIRDER NUMBER

** DIMENSION IS MEASURED FROM THE SOUTH END OF GIRDER.



DETAIL B
(FOR CONTINUOUS LINE OF DIAPHRAGMS)



SECTION A-A
(FOR EXTERIOR ATTACHMENT)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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INTERMEDIATE STEEL DIAPHRAGM

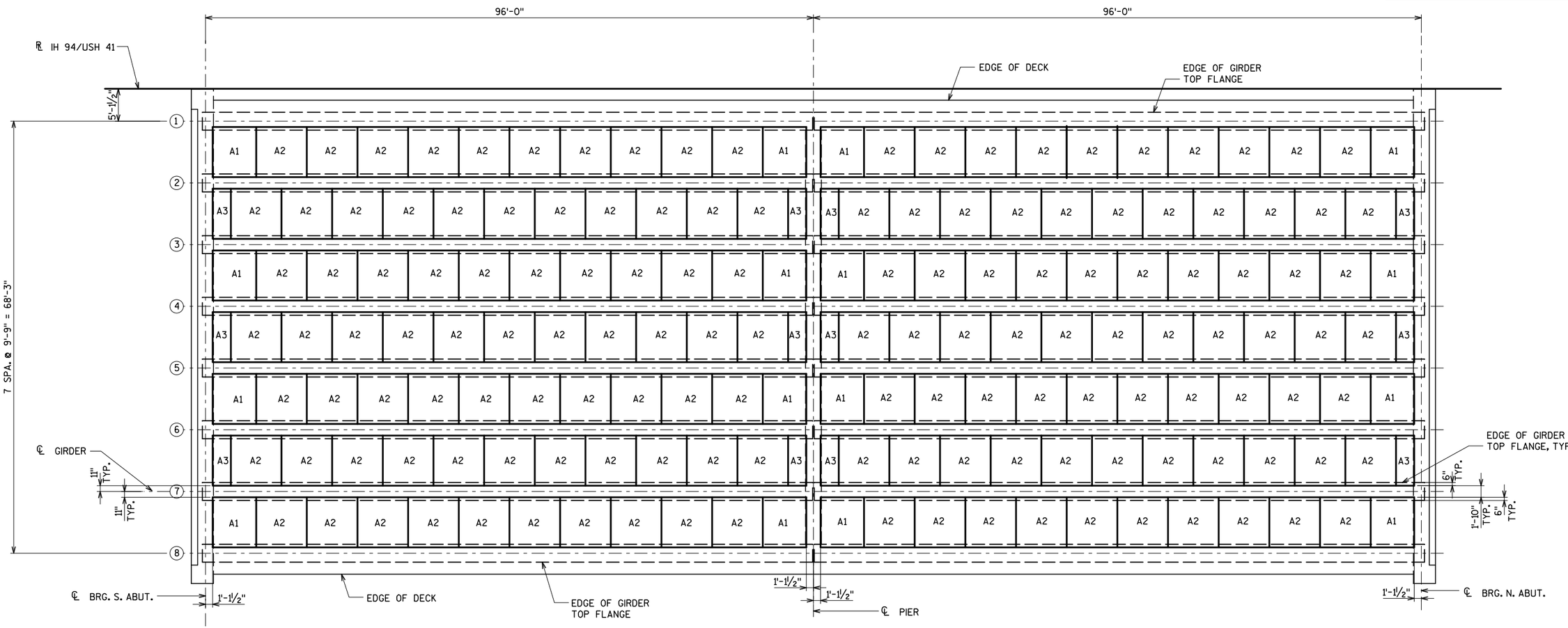
SHEET 17 OF 28
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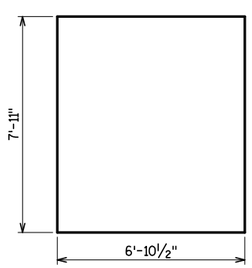
STATE PROJECT NUMBER
1035-01-74



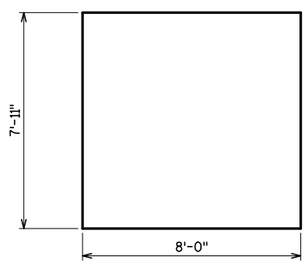
PLAN
(SHOWING PRECAST DECK PANEL LAYOUT)

NOTE

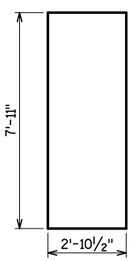
ALL PANEL ENDS AT DIAPHRAGMS SHALL EXTEND A MINIMUM OF 1½" INTO CAST-IN-PLACE DIAPHRAGM.



PANEL A1



PANEL A2



PANEL A3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

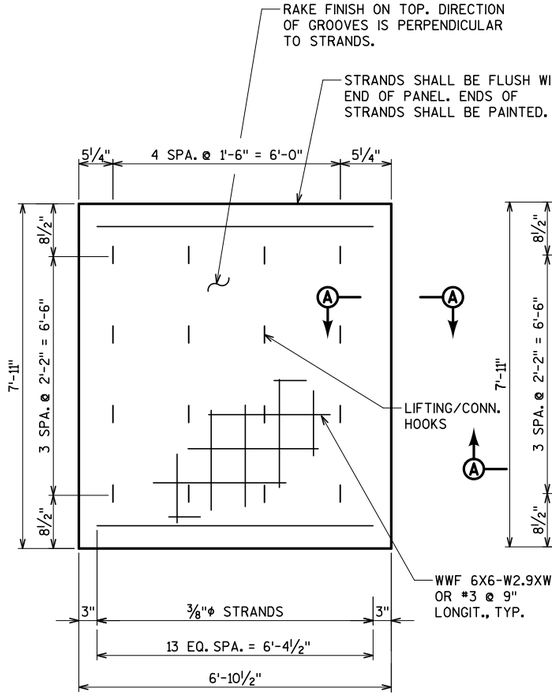
STRUCTURE B-51-140

DRAWN BY TAL | PLANS CK'D. BDT

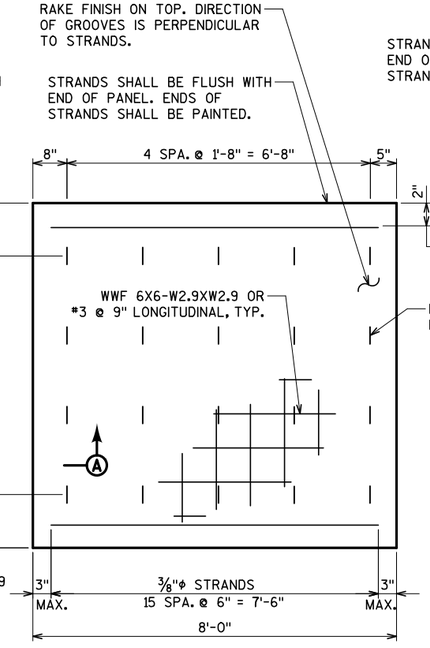
PRECAST DECK PANEL LAYOUT

SHEET 18 OF 28

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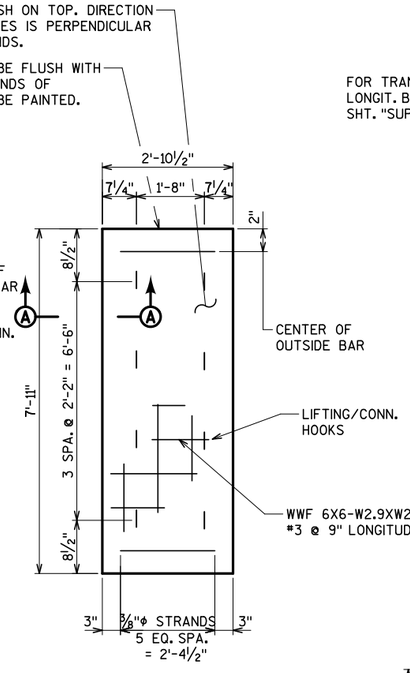


DECK PANEL A1

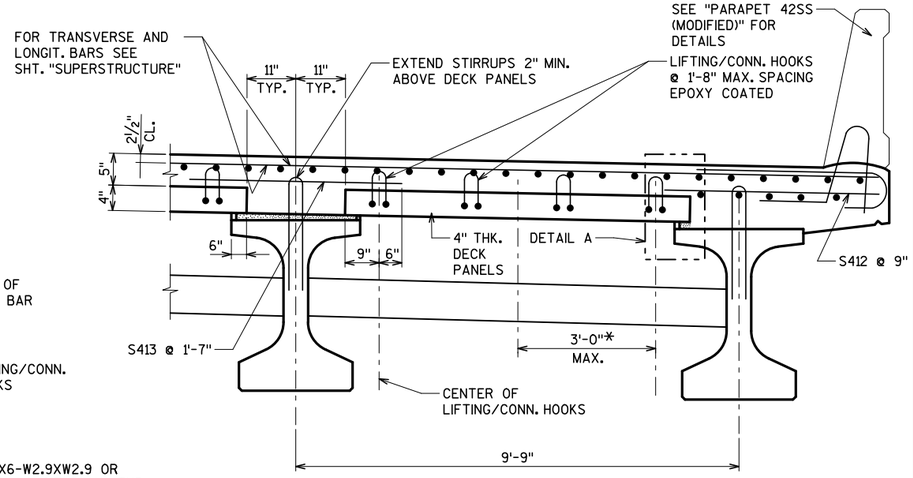


DECK PANEL A2

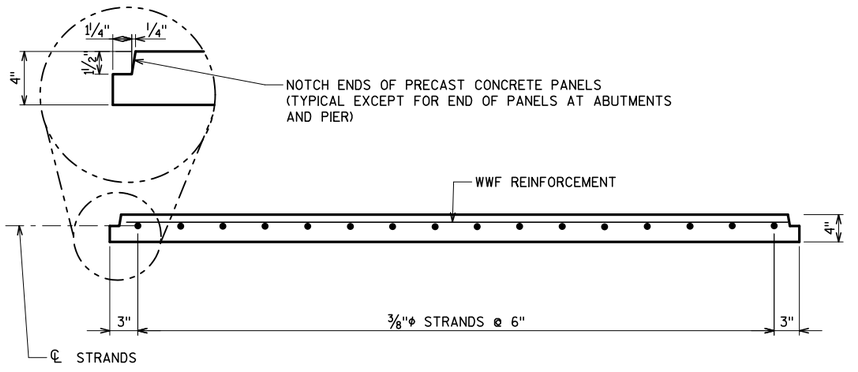
*3'-0" MAX. SPACING BETWEEN ADJACENT ROWS



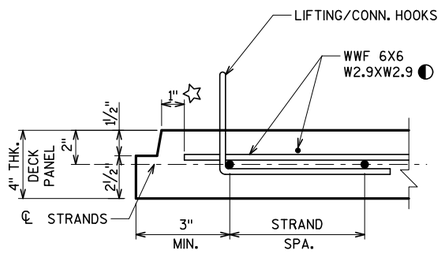
DECK PANEL A3



TRANSVERSE SECTION THRU SLAB ON GIRDERS WITH DECK PANELS

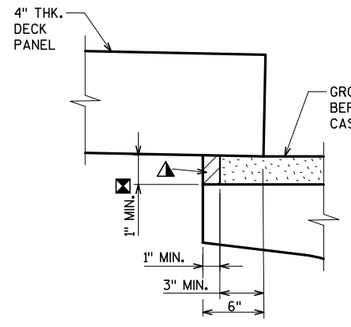


TYPICAL SECTION THRU PRECAST CONCRETE DECK PANELS

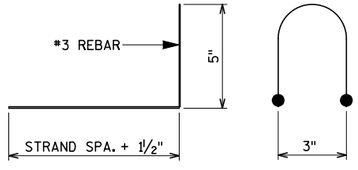


PART SECTION A-A

◐ BARS IN WWF WHICH ARE PARALLEL TO THE STRANDS MUST BE A MINIMUM OF 1" CLEAR FROM THE STRANDS.



DETAIL A



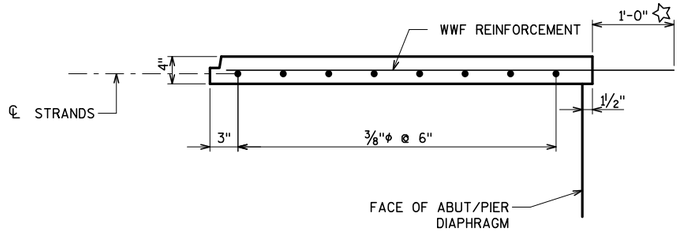
LIFTING/CONN. HOOK DETAIL

LEGEND

◭ HIGH-DENSITY EXPANDED POLYSTYRENE ADHERED TO TOP OF GIRDER FLUSH WITH EDGE OF FLANGE.

☆ LONGITUDINAL REINFORCING AT PANELS ALONG SUBSTRUCTURE TO EXTEND 1'-0" BEYOND TRANSVERSE END OF PANELS INTO SUBSTRUCTURE DIAPHRAGMS.

⊠ EQUAL TO HAUNCH HEIGHT SHOWN ON SHEET 22.



SECTION THRU PRECAST CONCRETE DECK PANELS AT ABUTMENT/PIER DIAPHRAGMS

DESIGN DATA

ULTIMATE TENSILE STRENGTH OF PRESTRESSING STRANDS IN DECK PANELS (LOW RELAXATION).....fs = 270,000 psi

INITIAL PRESTRESSD FORCE/ STRAND = 17.12 KIPS

CONCRETE FOR DECK PANELS
f'c = 6,000 PSI
f'ci = 4,400 PSI

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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PRECAST DECK PANEL DETAILS

SHEET 19 OF 28
514

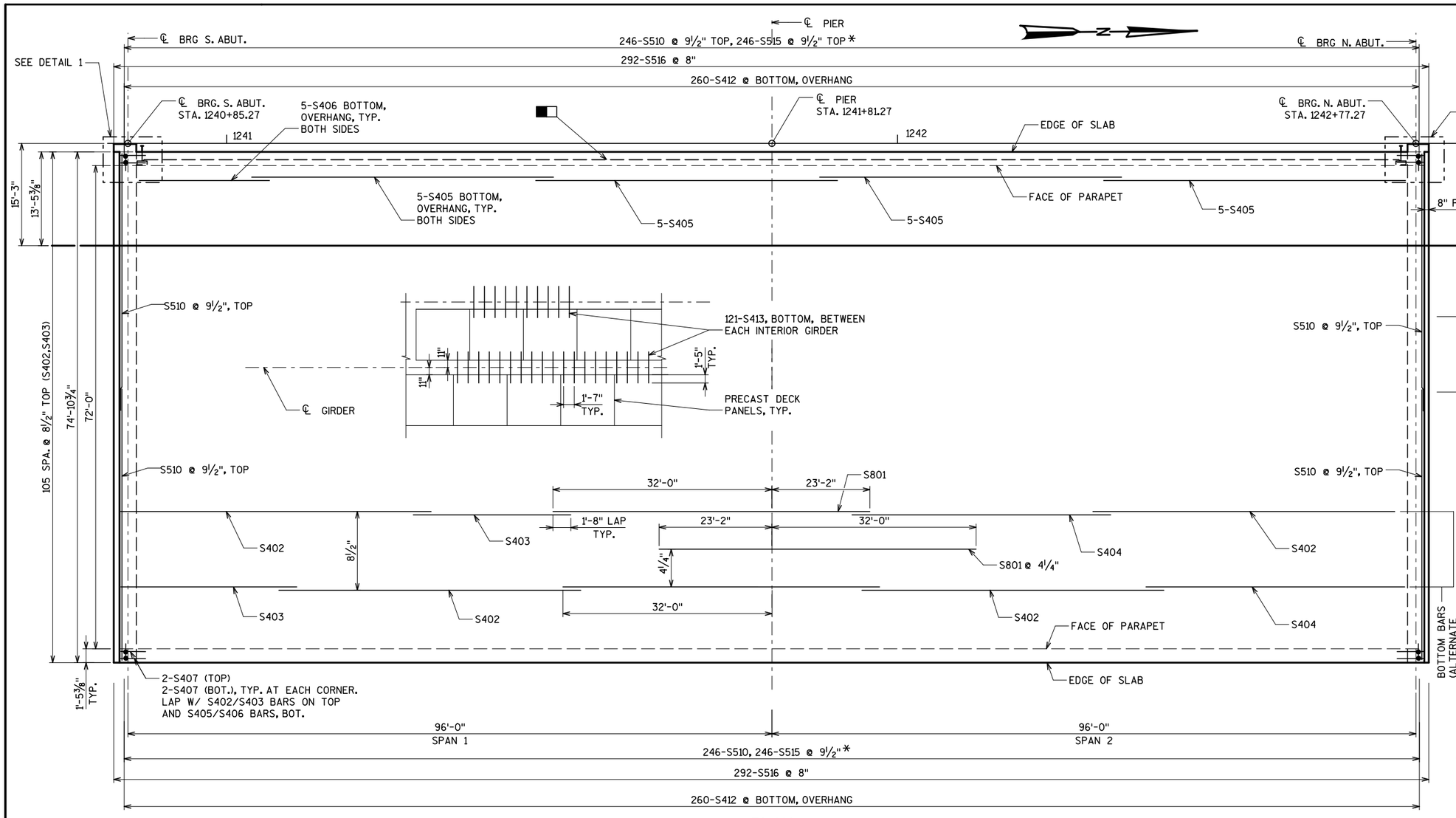
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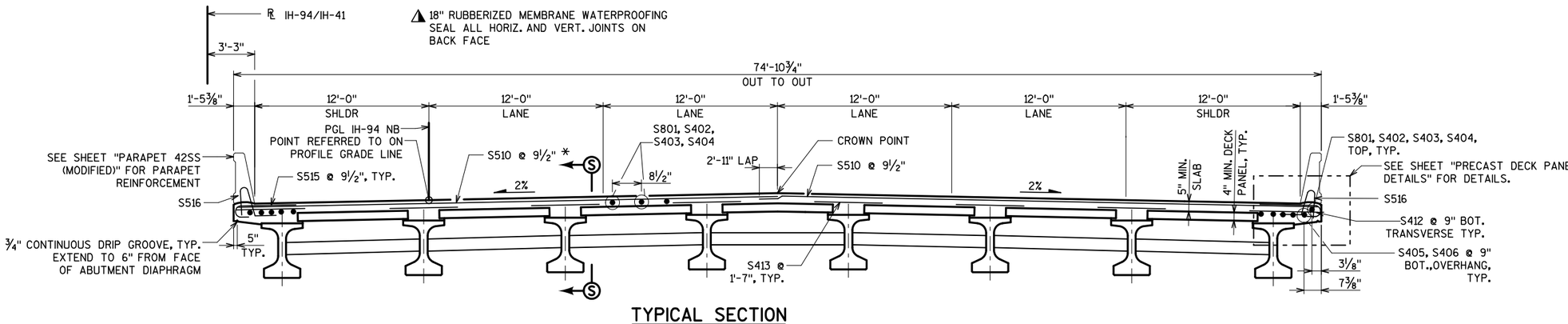
STATE PROJECT NUMBER

1035-01-74



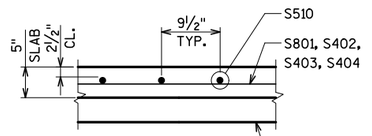
PLAN

* TIE S515 WITH EACH TRANSVERSE TOP BAR.

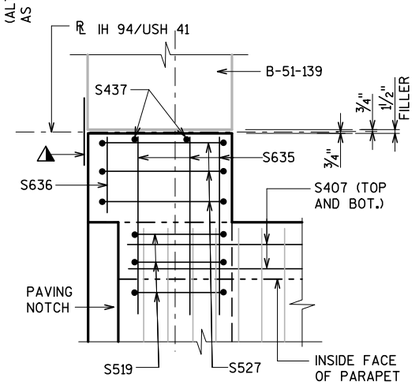


TYPICAL SECTION

(LOOKING NORTH)



SECTION S-S



DETAIL 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY HG | PLANS CK'D. AVK

SUPERSTRUCTURE

SHEET 20 OF 28

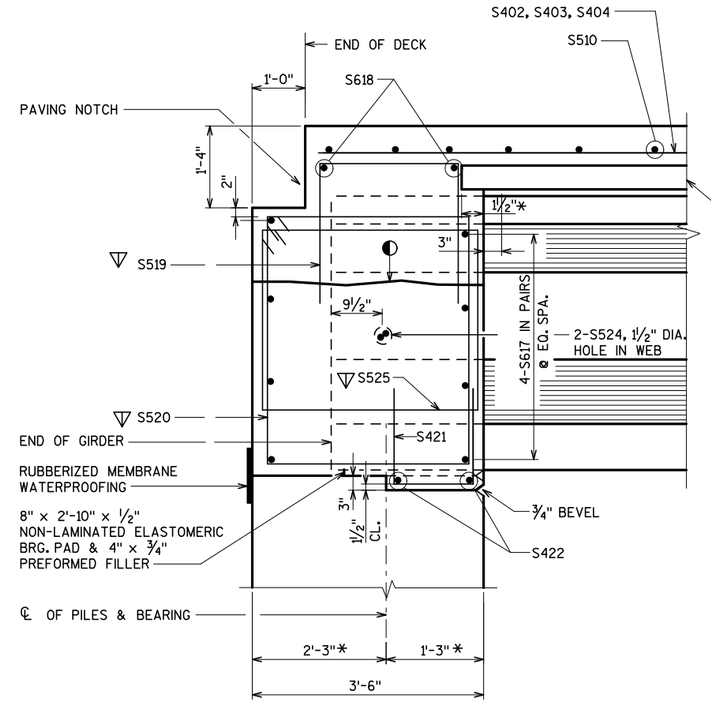
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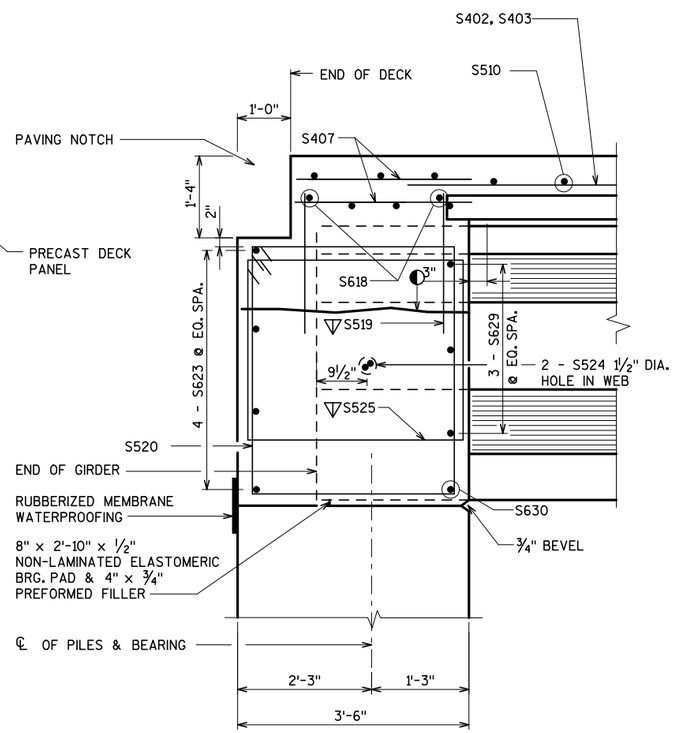
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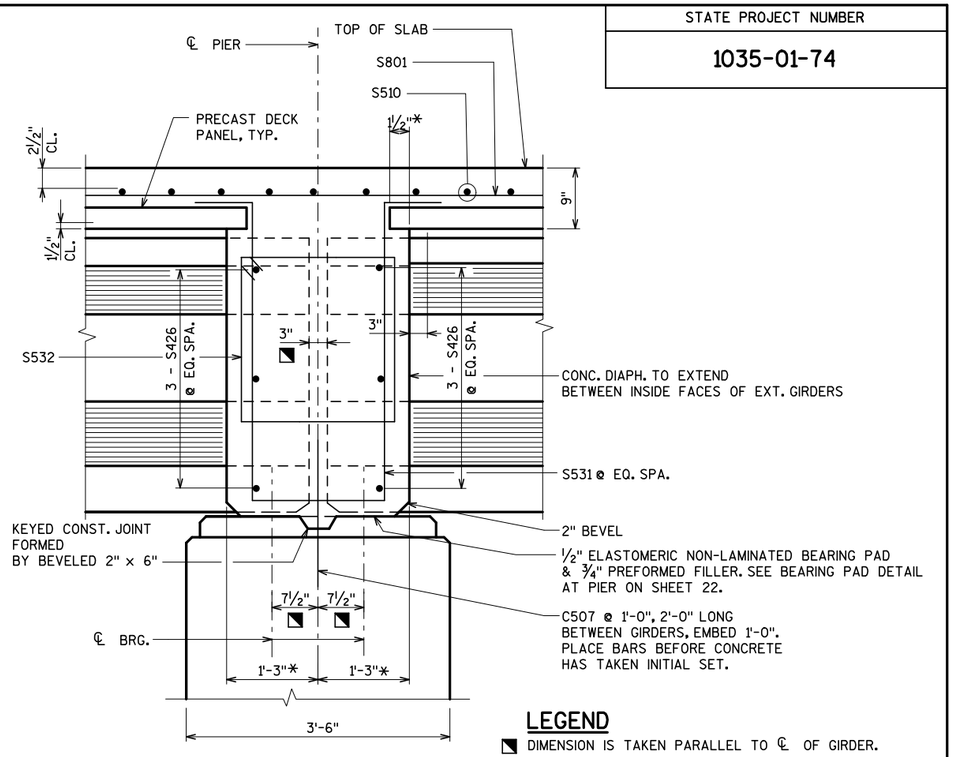
STATE PROJECT NUMBER
1035-01-74



DIAPHRAGM AT ABUTMENT (BETWEEN GIRDERS)



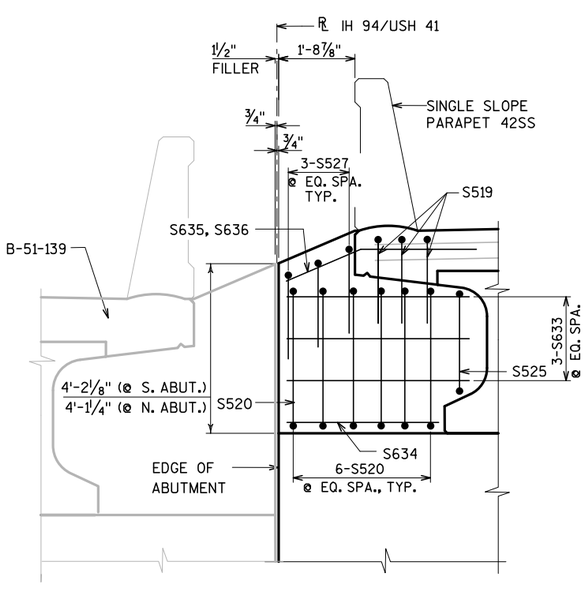
DIAPHRAGM AT ABUTMENT (UNDER PARAPET)



DIAPHRAGM AT PIER

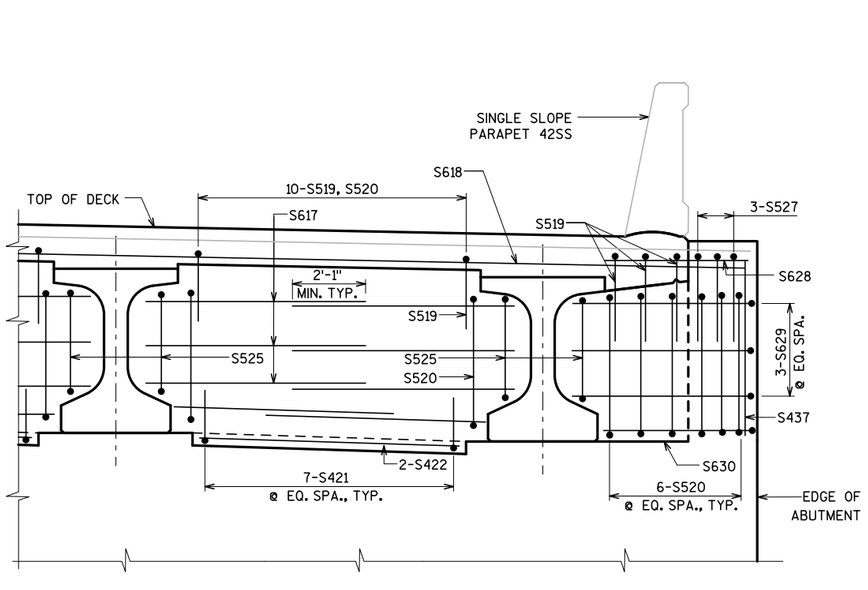
LEGEND

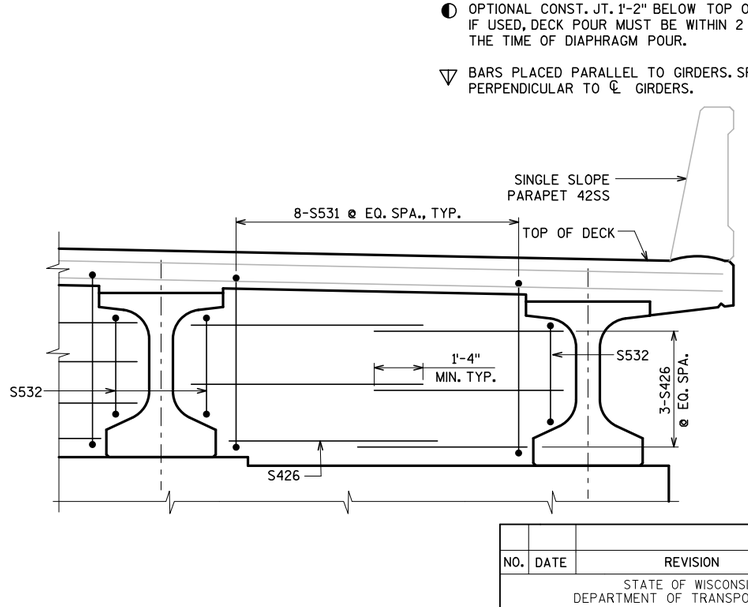
- ◥ DIMENSION IS TAKEN PARALLEL TO ℄ OF GIRDER.
- * DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.
- ◐ OPTIONAL CONST. JT. 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF DIAPHRAGM POUR.
- ▽ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.



PART TRANSVERSE SECTION AT ABUTMENT DIAPHRAGM

(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT OPPOSITE)





PART TRANSVERSE SECTION AT PIER DIAPHRAGM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY HG | PLANS CK'D. BDT

SUPERSTRUCTURE DETAILS

SHEET 21 OF 28

8

STATE PROJECT NUMBER
1035-01-74

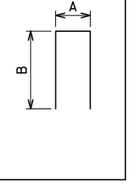
TOP OF DECK ELEVATIONS - SPAN 1

POINT	℄ BRG. S. ABUT	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	PIER
W.EDGE	731.83	731.92	732.01	732.10	732.18	732.27	732.36	732.44	732.53	732.62	732.70
G1	731.87	731.96	732.05	732.13	732.22	732.31	732.39	732.48	732.57	732.65	732.74
G2	732.07	732.15	732.24	732.33	732.41	732.50	732.59	732.67	732.76	732.85	732.94
PGL	732.07	732.16	732.25	732.34	732.42	732.51	732.60	732.68	732.77	732.86	732.94
G3	732.26	732.35	732.44	732.52	732.61	732.70	732.78	732.87	732.96	733.04	733.13
G4	732.46	732.54	732.63	732.72	732.80	732.89	732.98	733.06	733.15	733.24	733.33
CROWN	732.55	732.64	732.73	732.82	732.90	732.99	733.08	733.16	733.25	733.34	733.42
G5	732.46	732.54	732.63	732.72	732.80	732.89	732.98	733.06	733.15	733.24	733.33
G6	732.26	732.35	732.44	732.52	732.61	732.70	732.78	732.87	732.96	733.04	733.13
G7	732.07	732.15	732.24	732.33	732.41	732.50	732.59	732.67	732.76	732.85	732.94
G8	731.87	731.96	732.05	732.13	732.22	732.31	732.39	732.48	732.57	732.65	732.74
E.EDGE	731.83	731.92	732.01	732.10	732.18	732.27	732.36	732.44	732.53	732.62	732.70

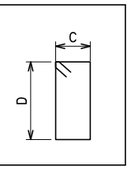
TOP OF DECK ELEVATIONS - SPAN 2

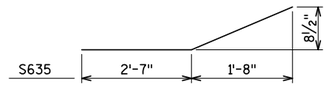
POINT	PIER	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. N. ABUT
W.EDGE	732.70	732.79	732.88	732.96	733.05	733.14	733.22	733.30	733.38	733.46	733.54
G1	732.74	732.83	732.91	733.00	733.09	733.18	733.26	733.34	733.42	733.50	733.58
G2	732.94	733.02	733.11	733.20	733.28	733.37	733.46	733.54	733.62	733.70	733.77
PGL	732.94	733.03	733.12	733.20	733.29	733.38	733.46	733.54	733.62	733.70	733.78
G3	733.13	733.22	733.30	733.39	733.48	733.57	733.65	733.73	733.81	733.89	733.97
G4	733.33	733.41	733.50	733.59	733.67	733.76	733.85	733.93	734.01	734.09	734.16
CROWN	733.42	733.51	733.60	733.68	733.77	733.86	733.94	734.02	734.10	734.18	734.26
G5	733.33	733.41	733.50	733.59	733.67	733.76	733.85	733.93	734.01	734.09	734.16
G6	733.13	733.22	733.30	733.39	733.48	733.57	733.65	733.73	733.81	733.89	733.97
G7	732.94	733.02	733.11	733.20	733.28	733.37	733.46	733.54	733.62	733.70	733.77
G8	732.74	732.83	732.91	733.00	733.09	733.18	733.26	733.34	733.42	733.50	733.58
E.EDGE	732.70	732.79	732.88	732.96	733.05	733.14	733.22	733.30	733.38	733.46	733.54

BAR MARK	A	B
S519	2'-2"	2'-0"
S421	11"	1'-3"
S527	3'-1"	3'-8
S629	3'-1"	3'-10"
S630	3'-1"	3'-0"
S633	3'-1"	4'-2"
S634	3'-1"	3'-6"

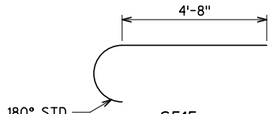


BAR MARK	C	D
S520	3'-1"	3'-1"
S525	3'-1"	2'-2"
S532	2'-1"	2'-2"

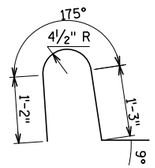




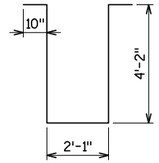
S635



S515



S516

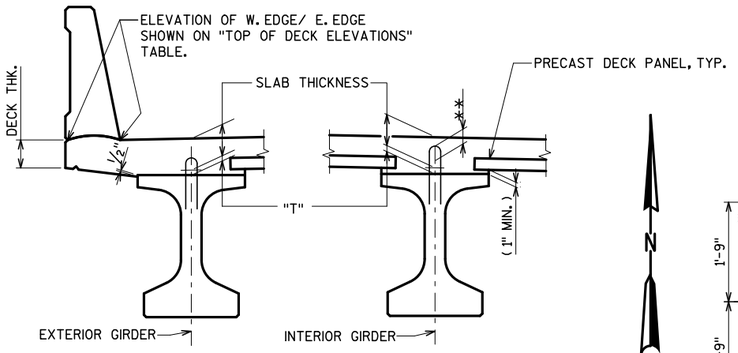


S531

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S801	X	211	55'-2"	-		SLAB LONGITUDINAL TOP, OVER PIER
S402	X	212	45'-0"	-		SLAB LONGITUDINAL TOP
S403	X	106	23'-5"	-		SLAB LONGITUDINAL TOP, SPAN 1
S404	X	106	32'-3"	-		SLAB LONGITUDINAL TOP, SPAN 2
S405	X	40	45'-0"	-		SLAB LONGITUDINAL BOTTOM
S406	X	10	20'-10"	-		SLAB LONGITUDINAL BOTTOM, ENDS
S407	X	16	2'-4"	-		SLAB LONGITUDINAL, ENDS
S510	X	492	38'-7"	-		SLAB TRANSVERSE TOP
S412	X	520	5'-6"	-		SLAB TRANSVERSE BOTTOM
S413	X	726	4'-8"	-		SLAB BETWEEN DECK PANELS
S515	X	492	5'-3"	X		SLAB OVERHANG
S516	X	584	4'-5"	X		PARAPET VERTICAL
S617	X	112	5'-6"	-		DIAPHRAGM @ ABUT'S, HORIZ.
S618	X	8	40'-8"	-		SLAB TRANSVERSE @ ABUT'DIAPH
S519	X	152	5'-11"	X		DIAPHRAGM @ ABUT'S, VERTICAL, TOP
S520	X	164	13'-0"	X		DIAPHRAGM @ ABUT'S, STIRRUPS
S421	X	98	3'-3"	X		DIAPHRAGM @ ABUT'S, VERTICAL, BOTTOM
S422	X	28	6'-0"	-		DIAPHRAGM @ ABUT'S, HORIZ., BOTTOM
S623	X	16	41'-5"	-		DIAPHRAGM @ ABUT'S, HORIZ., B.F.
S524	X	32	6'-0"	-		DIAPHRAGM @ ABUT'S, HORIZ., GIRDER HOLES
S525	X	32	11'-2"	X		DIAPHRAGM @ ABUT'S, STIRRUPS
S426	X	84	5'-2"	-		DIAPHRAGM @ PIER, HORIZ..
S527	X	12	10'-2"	X		DIAPHRAGM @ ABUT'S, VERTICAL, ENDS
S628	X	2	1'-1"	-		DIAPHRAGM TRANSVERSE TOP, ENDS @ WEST
S629	X	6	10'-5"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR, WEST
S630	X	2	8'-9"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR,WEST
S531	X	56	11'-7"	X		DIAPHRAGM @ PIER, VERT.
S532	X	14	9'-0"	X		DIAPHRAGM @ PIER,STIRRUPS VERT.
S633	X	6	11'-1"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR, EAST
S634	X	2	9'-9"	X		DIAPHRAGM @ ABUT END, HORIZ, U BAR, EAST
S635	X	6	4'-5"	X		DIAPHRAGM @ ABUT'S, HORIZ.
S636	X	2	1'-5"	-		DIAPHRAGM @ ABUT'S, HORIZ.
S437	X	8	4'-5"	-		DIAPHRAGM @ ABUT'S, END, VERT.

BENDING DIAGRAMS



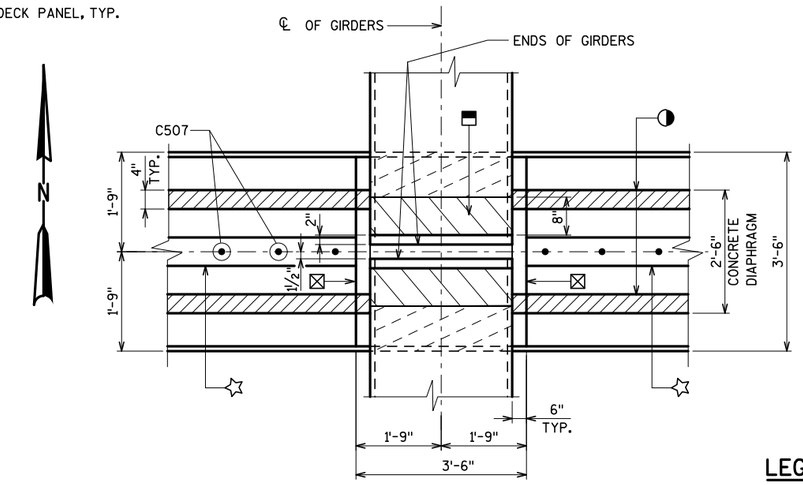
SLAB HAUNCH DETAIL

IF 1" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 2" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED ABOVE THE TOP OF DECK PANELS.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS (CAST IN PLACE DECK + PRECAST DECK PANELS)
= HAUNCH HEIGHT 'T'



BEARING PAD DETAIL AT PIER

LEGEND

- ½" x 8" x 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD
- ¾" PREFORMED FILLER
- 2" x 6" BEVELED KEYED CONSTRUCTION JOINT BETWEEN GIRDERS
- BEAM SEAT EDGE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

DRAWN BY HG | PLANS CK'D. BDT

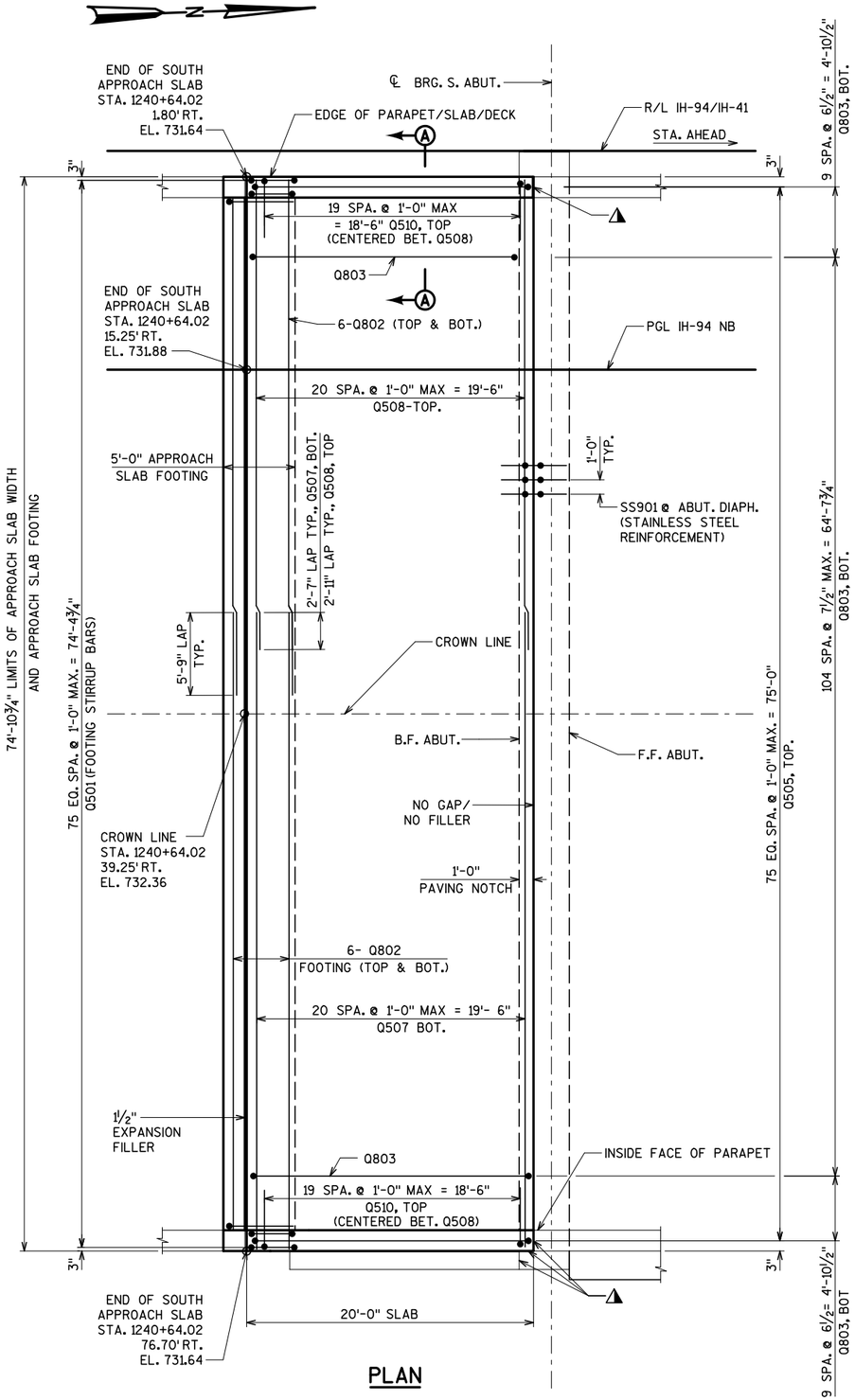
SUPERSTRUCTURE BILL OF BARS

SHEET 22 OF 28
517

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PEN TABLE: v8_Structural_rev.tbl

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DATE: 5/3/2018 4:32:15 PM Plotted by: tlegeor PEN TABLE: V8_STRUCTURAL_REV.TBL



PLAN

BILL OF BARS

SOUTH APPROACH SLAB

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	76	12'-2"	X	-	APPROACH SLAB FOOTING STIRRUP
T802	X	24	40'-2"	-	-	APPROACH SLAB FOOTING - TRANS.
T803	X	123	21'-6"	X	-	APPROACH SLAB LONG. BOT.
T505	X	76	19'-8"	-	-	APPROACH SLAB LONG. TOP.
T507	X	42	38'-7"	-	-	APPROACH SLAB TRANS. BOT.
T508	X	42	38'-9"	-	-	APPROACH SLAB TRANS. TOP
T510	X	40	4'-1"	X	-	APPROACH SLAB TRANS. TOP - WING

NORTH APPROACH SLAB

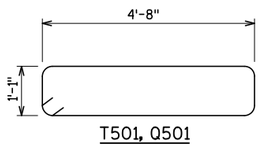
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
Q501	X	76	12'-2"	X	-	APPROACH SLAB FOOTING STIRRUP
Q802	X	24	40'-2"	-	-	APPROACH SLAB FOOTING - TRANS.
Q803	X	123	21'-6"	X	-	APPROACH SLAB LONG. BOT.
Q505	X	76	19'-8"	-	-	APPROACH SLAB LONG. TOP.
Q507	X	42	38'-7"	-	-	APPROACH SLAB TRANS. BOT.
Q508	X	42	38'-9"	-	-	APPROACH SLAB TRANS. TOP
Q510	X	40	4'-1"	X	-	APPROACH SLAB TRANS. TOP - WING

STAINLESS STEEL BILL OF BARS

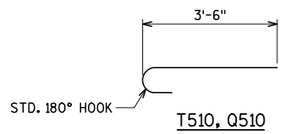
(FOR SOUTH AND NORTH APPR. SLABS)

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
SS901		152	5'-0"	X		APPROACH SLAB, AT PAV. NOTCH

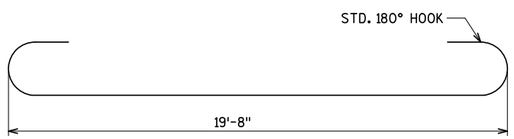
BENDING DIAGRAMS



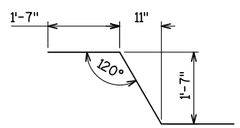
T501, Q501



T510, Q510



T803, Q803



SS901

SEE SHEET " SOUTH STRUCTURAL APPROACH SLAB" FOR SECTION A-A AND LEGEND.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

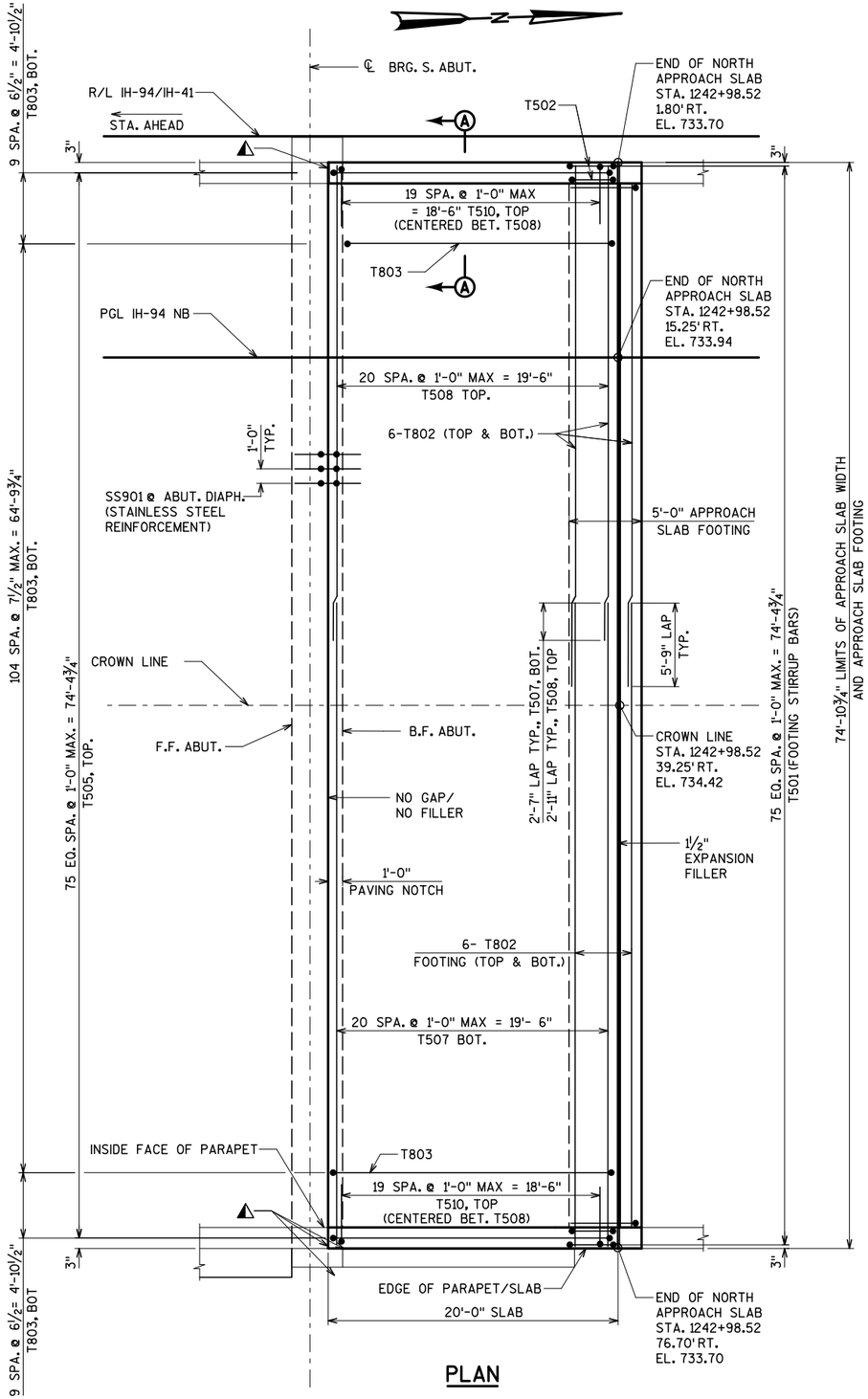
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SOUTH STRUCTURAL APPROACH SLAB

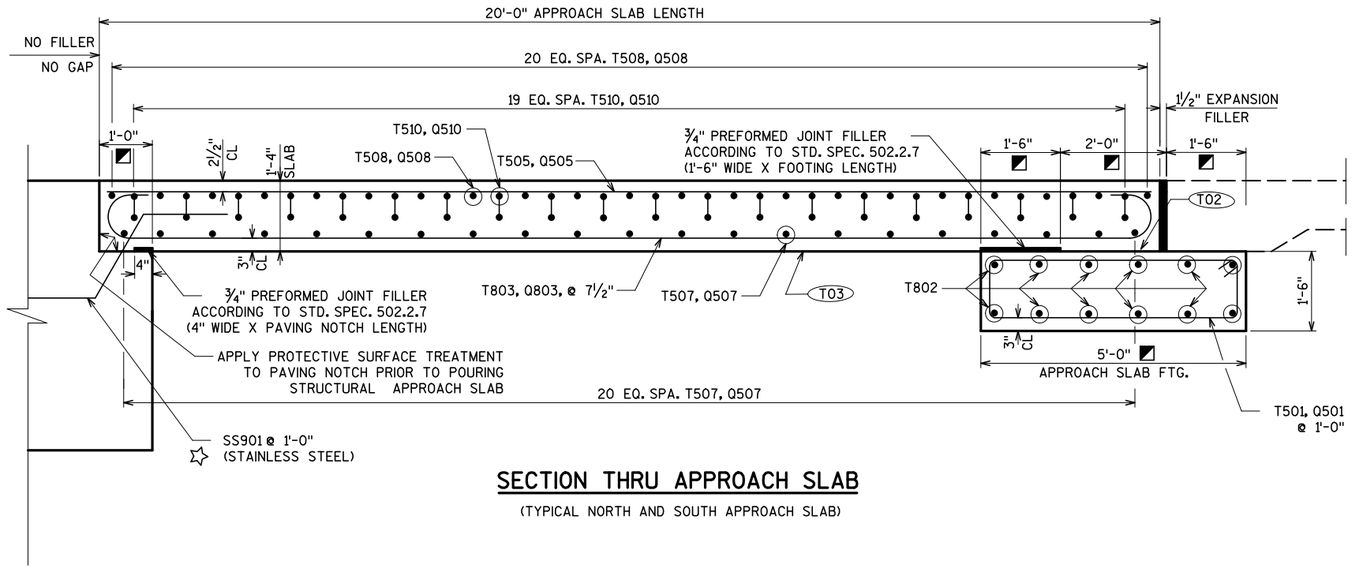
SHEET 23 OF 28
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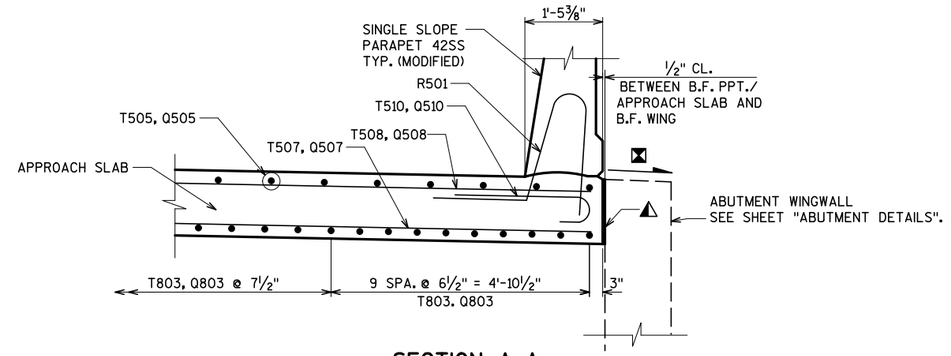


PLAN



SECTION THRU APPROACH SLAB

(TYPICAL NORTH AND SOUTH APPROACH SLAB)



SECTION A-A

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.)
- ◥ MEASURED NORMAL TO ABUTMENT
- ☆ THE BID ITEM FOR SS901 SHALL BE STANDARD SPECIAL PROVISION "BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES".
- (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.
- ⊠ SLOPE TO DRAIN

SEE "NORTH STRUCTURAL APPROACH SLAB" FOR BILL OF BARS.

DESIGN DATA

CONCRETE STRENGTH, fc:	4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60, fy:	60,000 P.S.I.
ALLOWABLE SOIL BEARING PRESSURE:	2,000 P.S.F.

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STATE OF WISCONSIN
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STRUCTURE B-51-140

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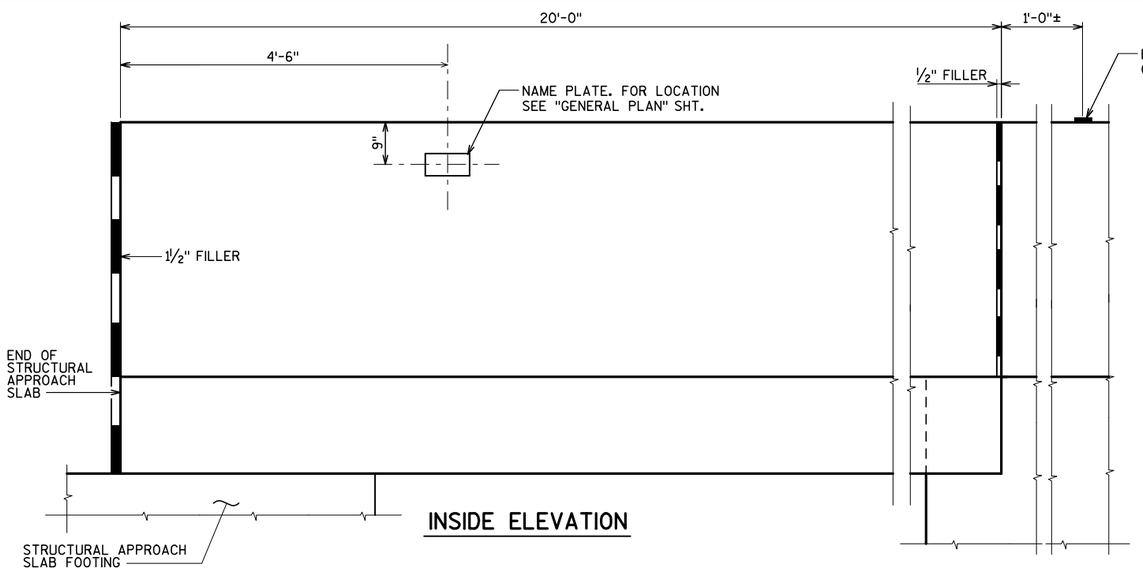
NORTH STRUCTURAL APPROACH SLAB

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519

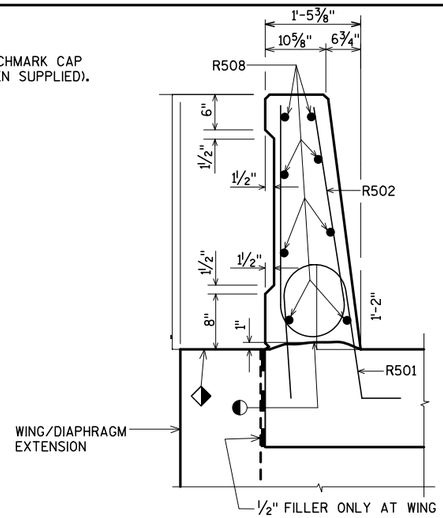
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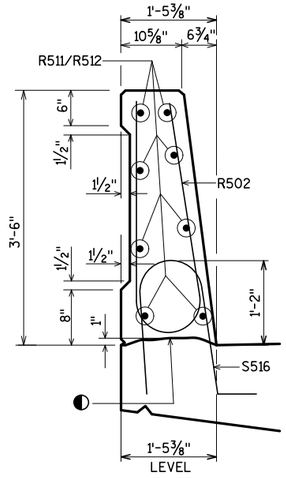
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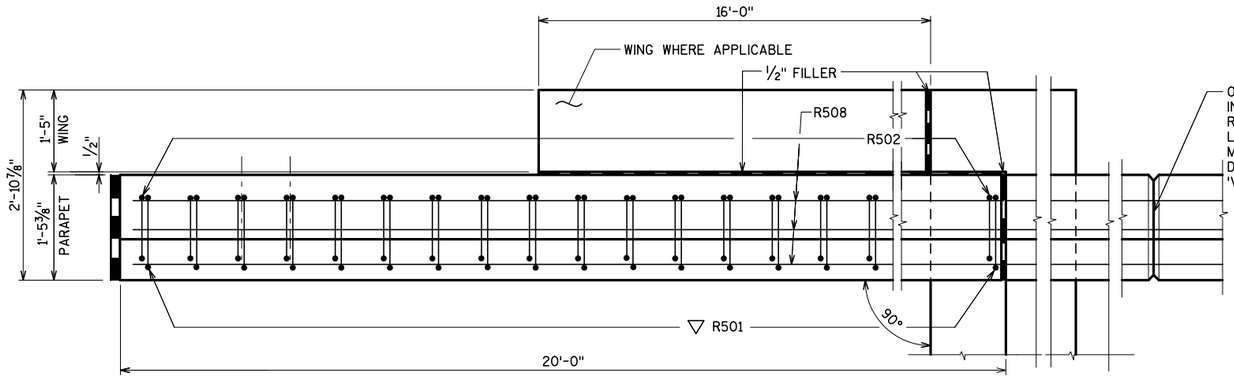
INSIDE ELEVATION



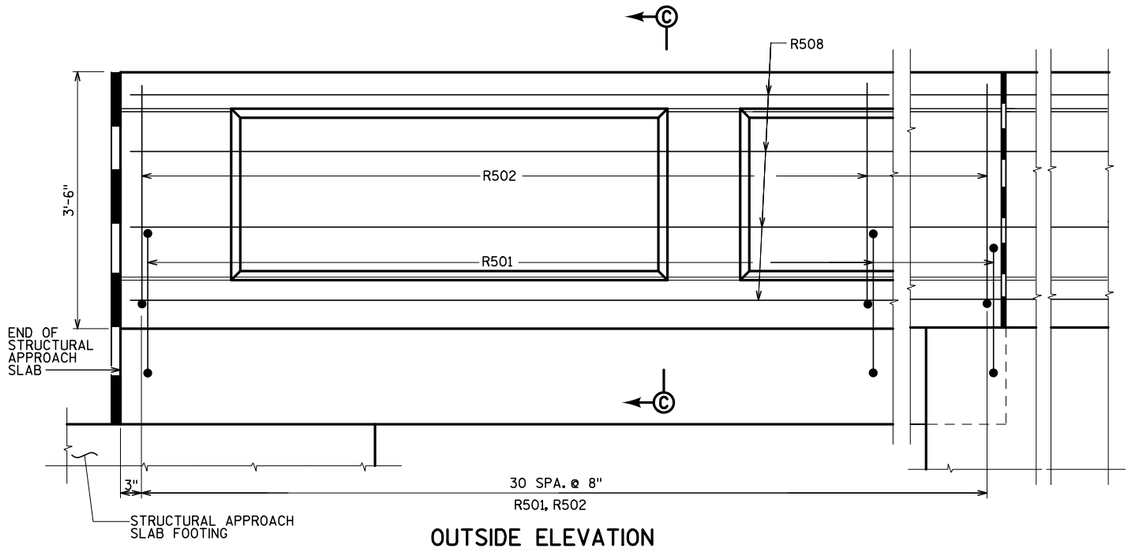
SECTION C-C



SECTION THRU PARAPET ON BRIDGE



PLAN

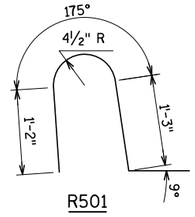


OUTSIDE ELEVATION

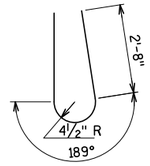
(WING NOT SHOWN FOR CLARITY)

BILL OF BARS

BAR MARK	COAT	NO. REQUIRED					LENGTH	BENT	BAR SERIES	LOCATION
		SUPERSTR.	S. APPR. SLAB		N. ARRP. SLAB					
			E	W	E	W				
R501	X	-	31	31	31	31	4'-5"	X	-	PARAPET VERT.
R502	X	584	31	31	31	31	6'-8"	X	-	PARAPET VERT.
R508	X	-	8	8	8	8	19'-6"	-	-	PARAPET HORIZ.
R511	X	64	-	-	-	-	45'-0"	-	-	PARAPET HORIZ.
R512	X	16	-	-	-	-	25'-10"	-	-	PARAPET HORIZ.



R501



R502

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ 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-51-140

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PARAPET 42SS (MODIFIED)

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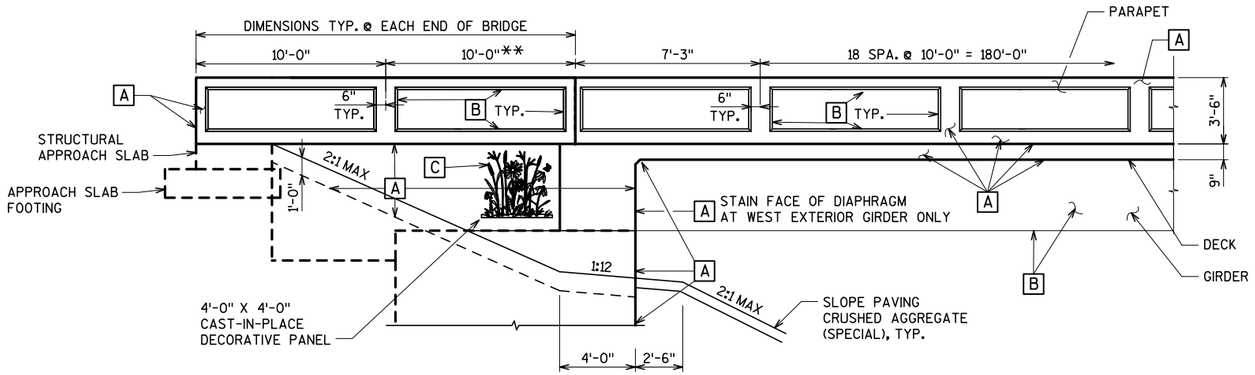
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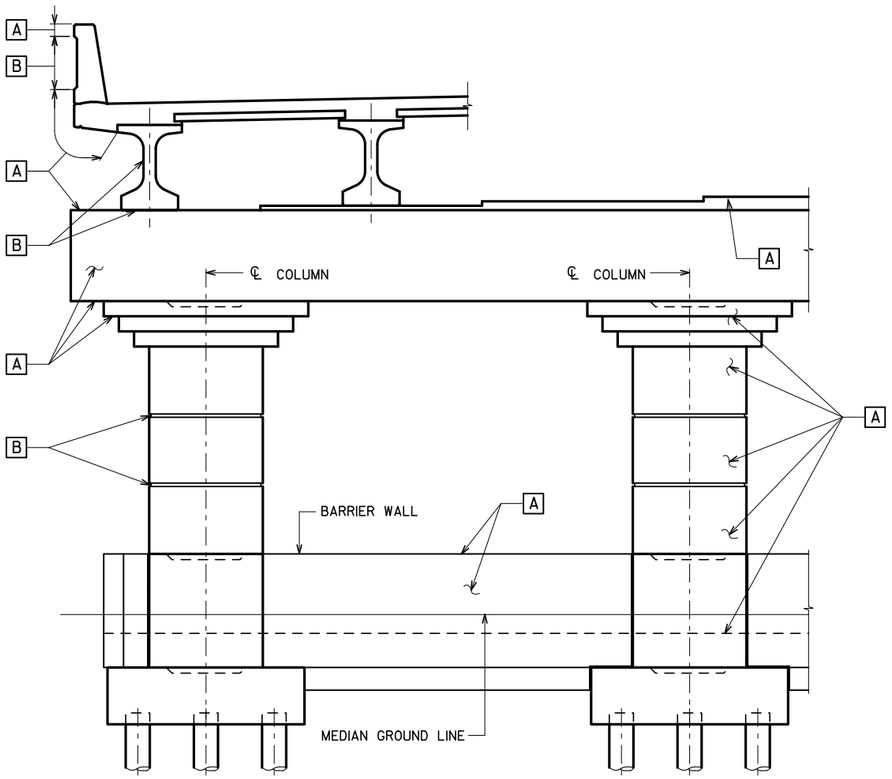


ELEVATION OF ABUTMENT & PARAPET

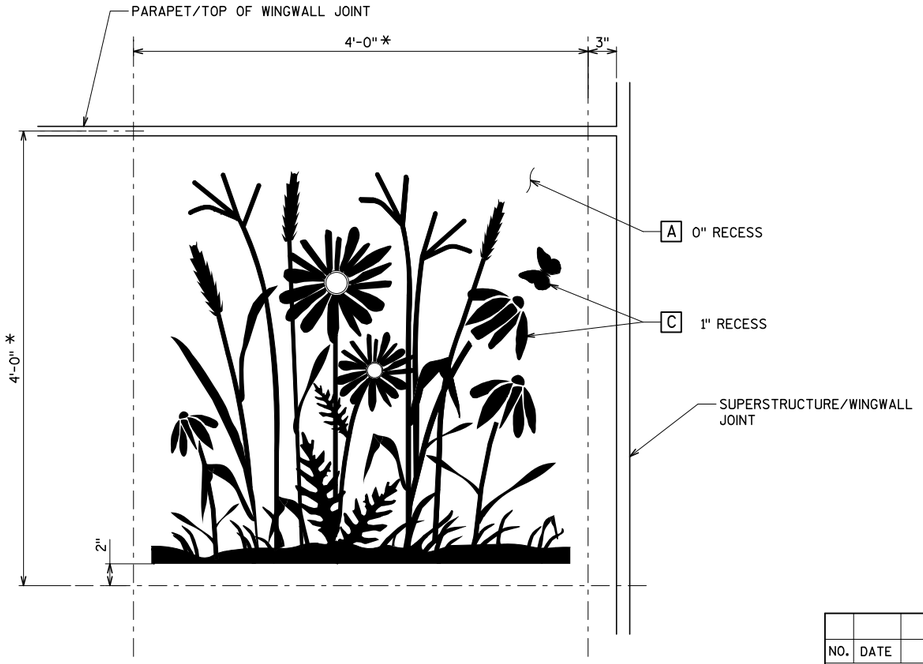
** INCLUDES ½" FILLER THICKNESS

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR WHOLE WHEAT - SW 6121, FN122 FEDERAL COLOR NO. 33564	PIER	PIER CAP, COLUMNS & BARRIER WALL , EXCEPT AS NOTED FOR ACCENT COLORS TO 1'-0" BELOW FINAL GRADE
		SLOPED FACE PARAPET	TOP & EXTERIOR SIDE, EXCEPT AS NOTED FOR ACCENT COLORS
		DECK	FASCIA & EXPOSED UNDERSIDE TO EXTERIOR GIRDER FLANGE
		ABUTMENTS	EXTERIOR WING WALLS TO 1'-0" BELOW FINAL GRADE, FRONT FACE FROM UNDERSIDE OF DECK TO 1'-0" BELOW FINAL GRADE INCLUDING BETWEEN ALL GIRDERS
B	ACCENT COLOR #1 BAGUETTE - SW 6123, FN124 FEDERAL COLOR NO. 33448	COLUMNS	HORIZONTAL RUSTICATIONS
		SLOPED FACE PARAPET	RECESSED PANELS ON EXTERIOR SIDES
		GIRDERS	EXTERIOR FACE AND UNDERSIDE OF EXTERIOR GIRDERS
C	ACCENT COLOR #2 CRATT PAPER - SW 6125, FN 126 FEDERAL COLOR NO. 20170	DECORATIVE PANEL	RECESSED AREAS



ELEVATION OF PIER



C.I.P. DECORATIVE PANEL

"PRAIRIE PATTERN"

* PAYMENT LIMITS FOR BID ITEM "ARCHITECTURAL SURFACE TREATMENT".

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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AESTHETIC DETAILS

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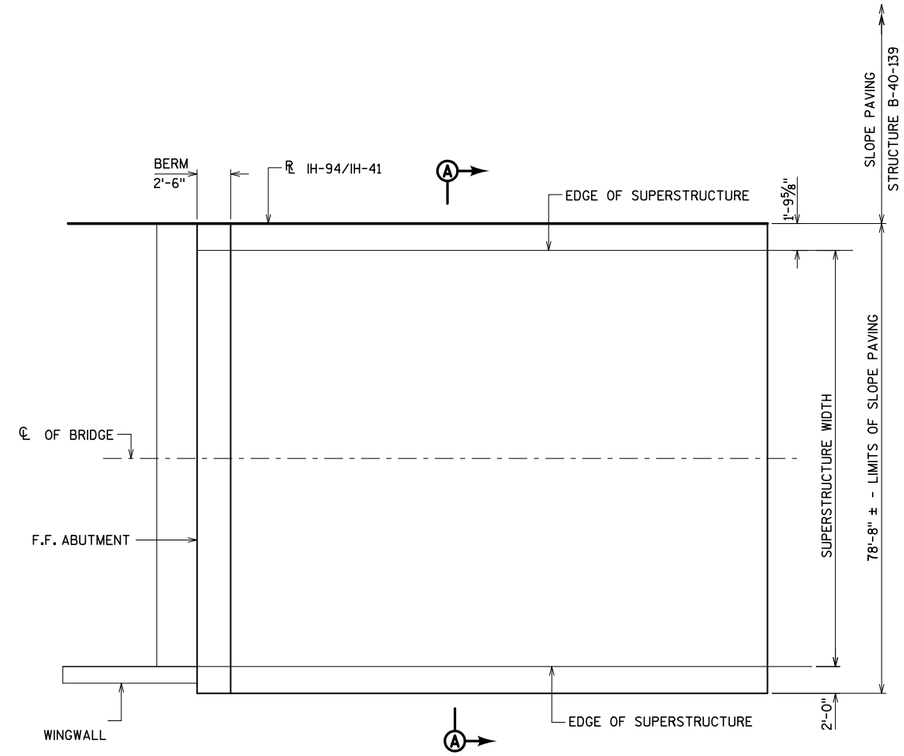
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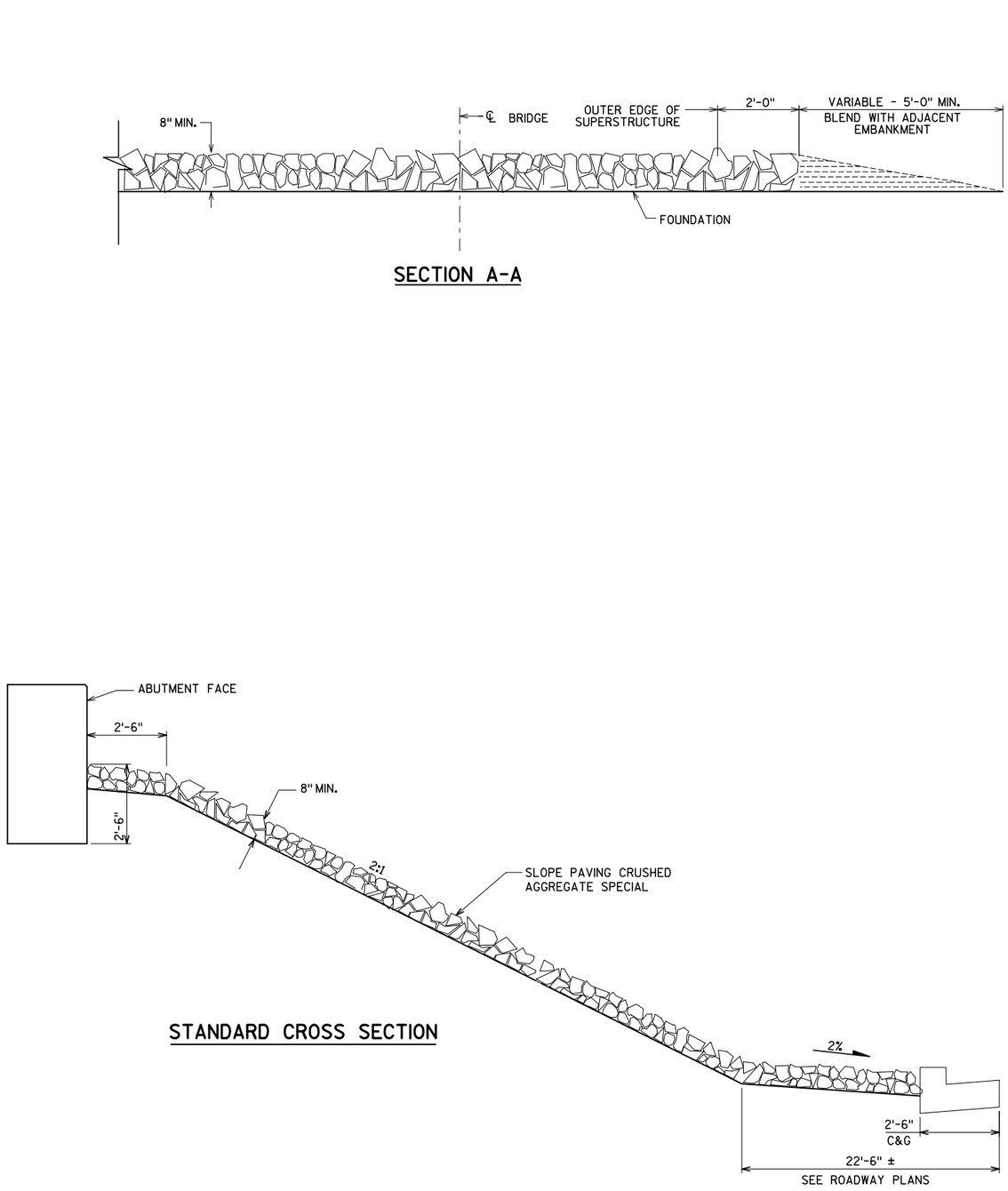
STATE PROJECT NUMBER
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SECTION A-A



(S. ABUTMENT SHOWN, NORTH ABUTMENT OPPOSITE)

PLAN



STANDARD CROSS SECTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF SPECIAL PROVISIONS "SLOPE PAVING CRUSHED AGGREGATE SPECIAL"..

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-51-140

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SLOPE PAVING

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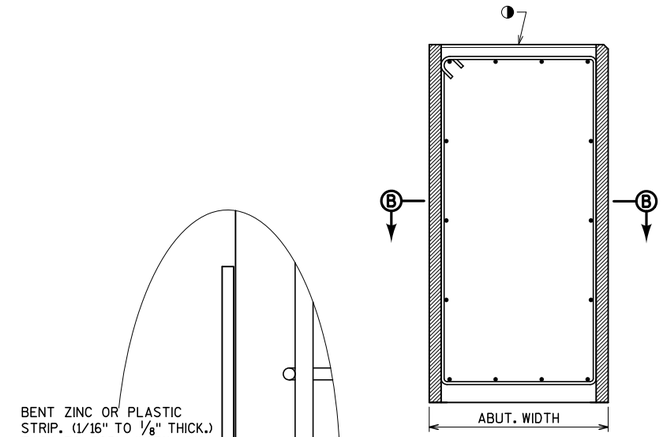
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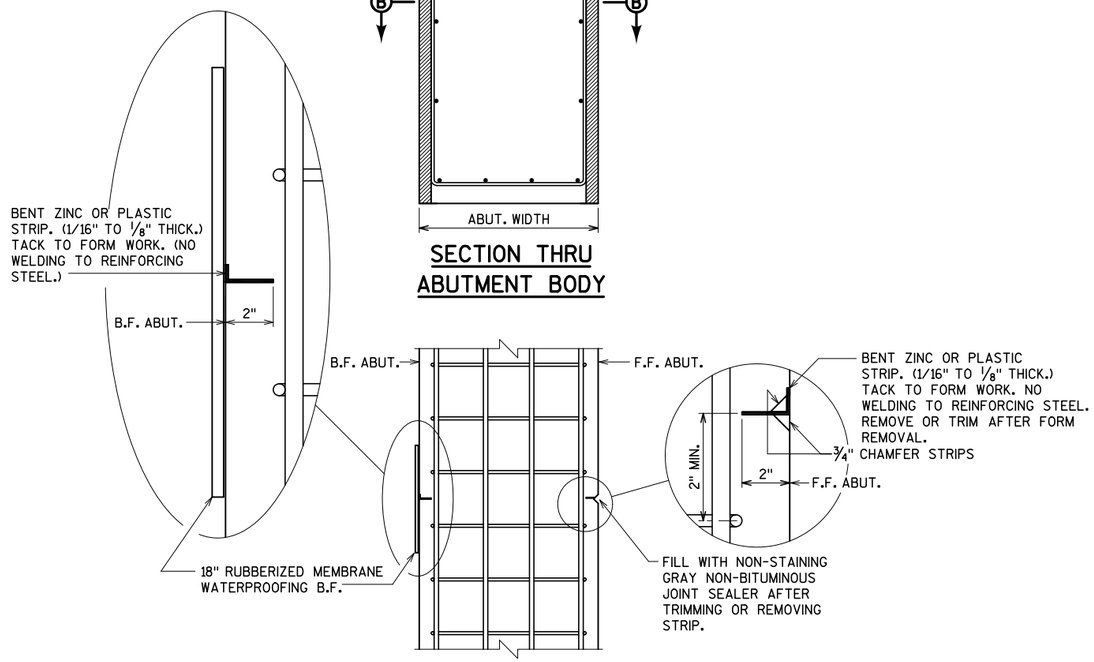
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STATE PROJECT NUMBER
1035-01-74



SECTION THRU
ABUTMENT BODY



SECTION B-B

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.

SAWCUTTING JOINT IS NOT ALLOWED.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-140

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ALTERNATE CONSTRUCTION JOINT

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1 2 3 6

DESIGN DATA

	STRUCT. S-51-22	STRUCT. S-51-23
DESIGN SIGN AREA	264	264
MAX. SIGN DEPTH	12'	12'

DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 6th EDITION.

DEAD LOAD - WT. OF SIGN AND SUPPORTING STRUCTURE.

ICE LOAD - 3 PSF TO ONE FACE OF SIGN & AROUND SURFACE OF MEMBERS

WIND VELOCITY - 90 MPH (3-SEC. 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
I. DEAD	100
II. DEAD + WIND	133
III. DEAD + ICE + ½ WIND	133

NOTE: WIND LOAD FOR GROUP III LOADING SHALL NOT BE LESS THAN 25 PSF.

BENCHMARK INFORMATION

SEE ROADWAY PLANS FOR BENCHMARK INFORMATION.

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	STRUCT. S-51-22	STRUCT. S-51-23
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	8	8
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	990	990
641.1200.0022	SIGN BRIDGE CANTILEVERED S-51-22	LS	1	
641.1200.0023	SIGN BRIDGE CANTILEVERED S-51-23	LS		1
SPV.0075.4001	OBSTRUCTIONS SIGN SUPPORTS CONCRETE MASONRY	HRS	1	1
	CATEGORY NO.		6680	6700

MATERIAL PROPERTIES

CONCRETE MASONRY ---------- f'c = 3,500 psi

HIGH STRENGTH STEEL ---------- fy = 60,000 psi
REINFORCEMENT, GRADE 60

STRUCTURAL ANGLES ---------- fy = 36,000 psi
PLATE AND BARS - ASTM A709 GRADE 36

CHORDS & COLUMN (INCLUDING ---------- fy = 42,000 psi**
HANDHOLE)- API SPEC 5L GRADE 42

HIGH STRENGTH BOLTS A325 ---------- fy = 92,000 psi

ANCHOR BOLTS - ASTM F1554 ---------- fy = 55,000 psi

STRUCTURAL MEMBERS GALVANIZED ---------- ASTM A123

HARDWARE GALVANIZED ---------- ASTM A153 CLASS C

** SEE WISDOT BRIDGE MANUAL SECTION 39.3 FOR ACCEPTABLE ALTERNATE MATERIAL. STEEL WITH YIELD STRENGTH BELOW 42,000 PSI REQUIRES A COMPLETE ANALYSIS OF THE STRUCTURE.

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE = 2T/SF.

SIGN STRUCTURE FOUNDATION IS TO BE SUPPORTED ON SOILS MEETING THE MINIMUM DESIGN PARAMETERS SHOWN ON THE FOUNDATION DATA. THE SOUTHEAST REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS TO CONFIRM THE SOIL DESIGN PARAMETERS PRIOR TO CONSTRUCTION OF THE SIGN STRUCTURE FOUNDATION.

LIST OF DRAWINGS

1. DESIGN DATA & GENERAL NOTES
2. S-51-22 LAYOUT
3. S-51-23 LAYOUT
4. CANTILEVER TRUSS FOOTING
5. GALVANIZED STEEL CANTILEVER SIGN TRUSS
6. GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS
7. HANDHOLE DETAILS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. ALL DIMENSIONS IN THE BAR BENDS ARE OUT TO OUT.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

ALTERNATE DESIGNS ARE NOT ALLOWED.

ALL STRUCTURAL STEEL MEMBERS, PLATES, ANCHOR BOLTS, H.S. BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

PLACE REINFORCEMENT TO MISS ANCHOR ROD ASSEMBLY. LENGTH OF PROJECTION OF ANCHOR ROD ABOVE CONCRETE SHALL BE AS SHOWN ON THE PLANS AND TO PLUMB. SECURE ANCHOR ROD ASSEMBLY IN POSITION DURING PLACEMENT OF CONCRETE. DO NOT WELD ANCHOR RODS, NUTS, OR WASHERS.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.

PROVIDE AN IDENTIFICATION PLAQUE FOR SIGN BRIDGE CANTILEVER SUPPORT, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE CANTILEVERED (STRUCTURE)". LOCATE THE IDENTIFICATION PLAQUE ON THE ROADWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE IDENTIFICATION PLAQUE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

SIGNS SHALL BE INSTALLED ON I5x3.7 (ALUMINUM) I-BEAM SUPPLIED WITH SIGN.

SIGNS OR BLANKS SHALL BE INSTALLED ON THE TRUSS AT THE TIME OF ERECTION. BLANKS, IF USED, SHALL BE THE SAME SIZE AND LOCATION AS PERMANENT SIGNS. SIGN SHALL BE AS DESIGNATED ON THE PLANS. SIGN BLANKS AND MOUNTING HARDWARE SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE CANTILEVERED (STRUCTURE)".

SEE SIGN PLATE No. A4-6 OF THE SIGN PLATE MANUAL FOR INSTRUCTION ON CENTERING SIGN VERTICALLY ON TRUSS.

EXACT LOCATION OF SIGN BRIDGE SHALL BE DETERMINED BY THE REGION TRAFFIC ENGINEER.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA. A325 BOLTS, GALAVANIZED ASTM A153, CLASS C, AND INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

STEEL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF ASTM F1554, GRADE 55, WITH ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.

WELD TEST AS PER AWS D1.1

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN IN "CAMBER DIAGRAM". DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF LEVELING NUTS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON SHOP DRAWINGS. ENGINEER TO SEND SHOP DRAWINGS TO BUREAU OF STRUCTURES AND TOM HEYDEL, SE REGION TRAFFIC, FOR REVIEW.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE SUPPORT BASES. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. TEMPORARY CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM" SIGN SUPPORTS CONCRETE MASONRY".

IF GROUND WATER IS ENCOUNTERED IN THE CONSTRUCTION OF THE FOUNDATIONS USE TREMIE CONCRETE. SEE SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

ALL NON-METALLIC CONDUIT SHOWN ON SIGN STRUCTURE PLANS IS INCIDENTAL THE BID ITEM " SIGN SUPPORTS CONCRETE MASONRY".

WISCONSIN BABU D. THENGANAKUNNEL E-35905 MILWAUKEE, WI PROFESSIONAL ENGINEER
6.4.2018

STRUCTURE DESIGN CONTACTS

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher 6/4/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
1035-01-74

STRUCTURES S-51-22, 23

IH 94 AT 7 MILE ROAD

COUNTY	TOWN
RACINE	RAYMOND/CALEDONIA

DESIGN SPEC.
AASHTO STD. SPEC. FOR STRUCTURAL SUPPORTS, 6TH ED

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
DMC	BDT	TAL	YNN

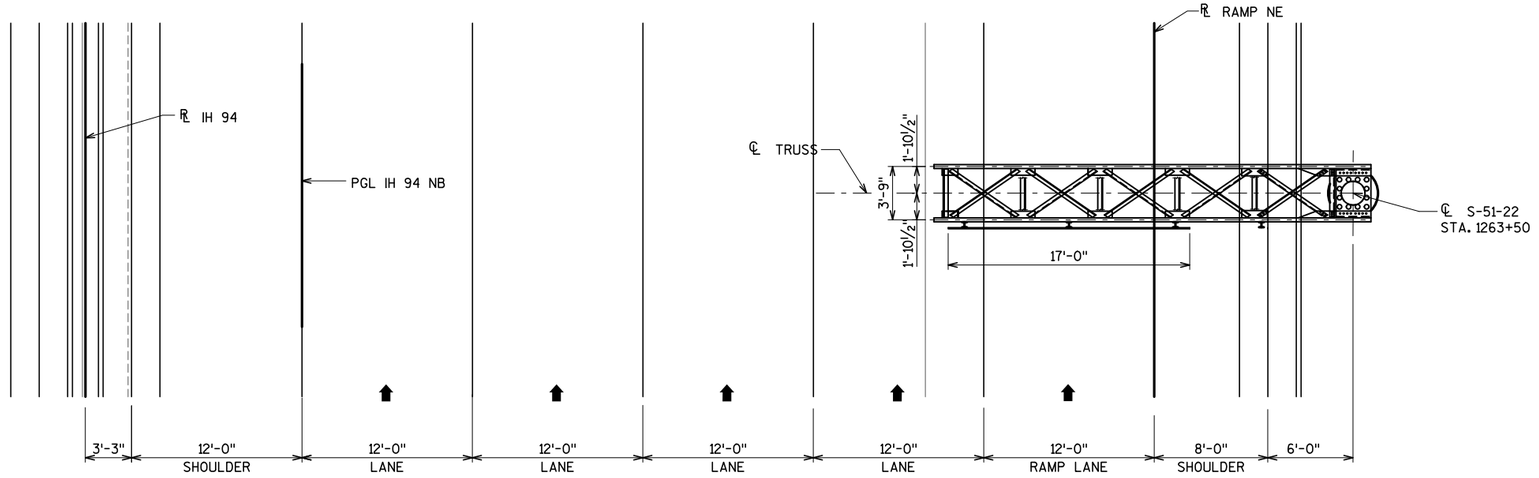
DESIGN DATA & GENERAL NOTES

SHEET 1 OF 7
524

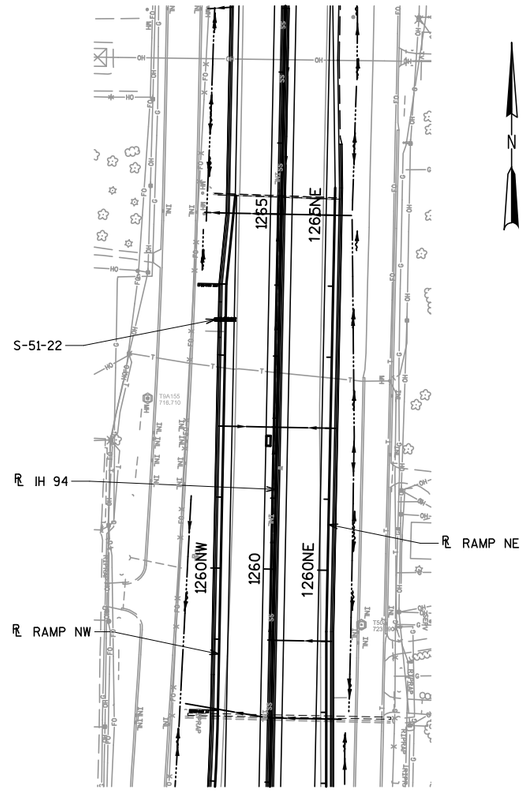
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STATE PROJECT NUMBER

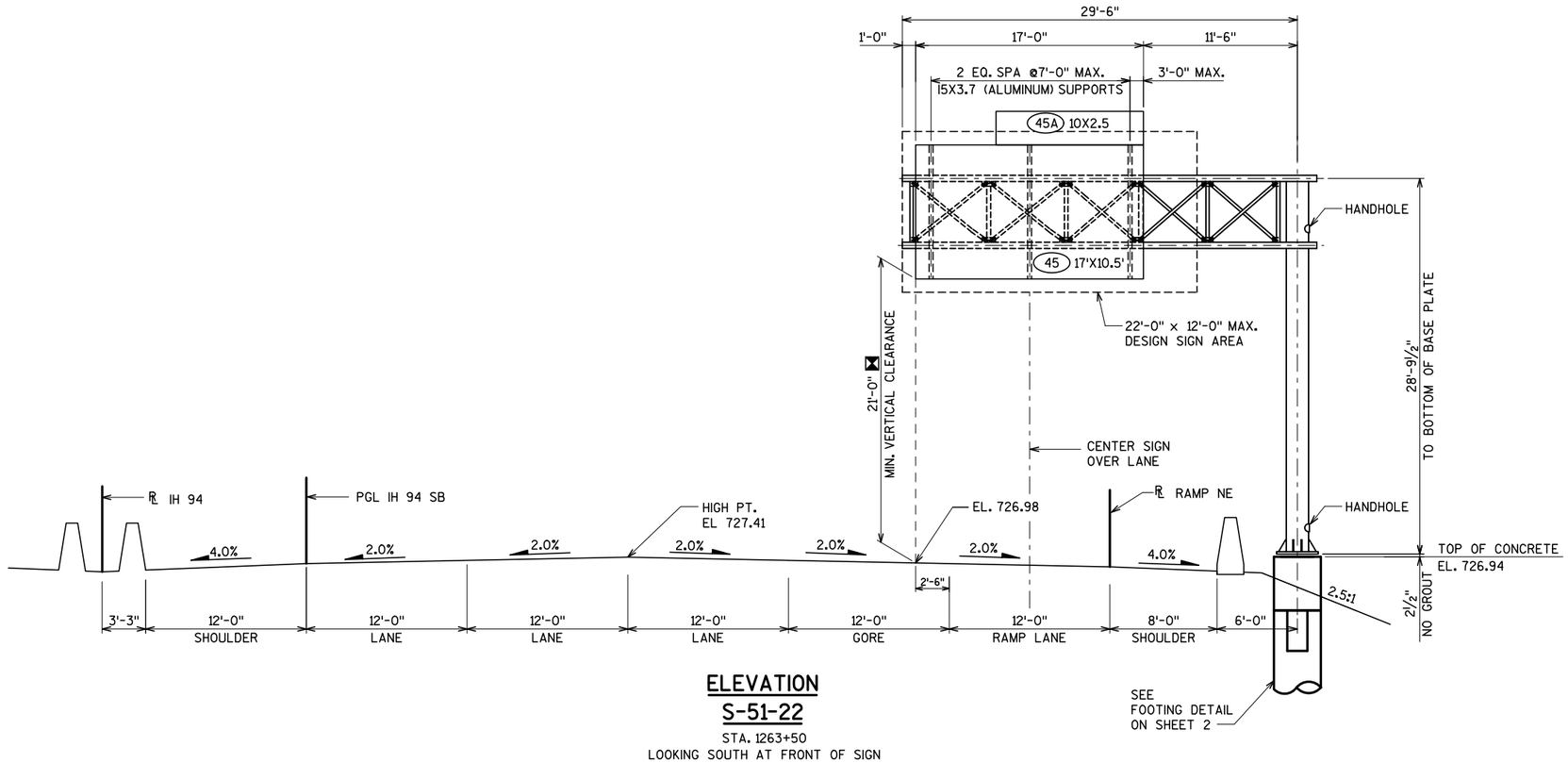
1035-01-74



PLAN



LOCATION MAP



ELEVATION
S-51-22
STA. 1263+50
LOOKING SOUTH AT FRONT OF SIGN

LEGEND

⊠ ACCOUNTS FOR FUTURE SIGN AND CATWALK

(X) SIGN NUMBER. SEE SIGNING PLANS

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-51-22, 23

DRAWN BY TAL | PLANS CK'D. YNN

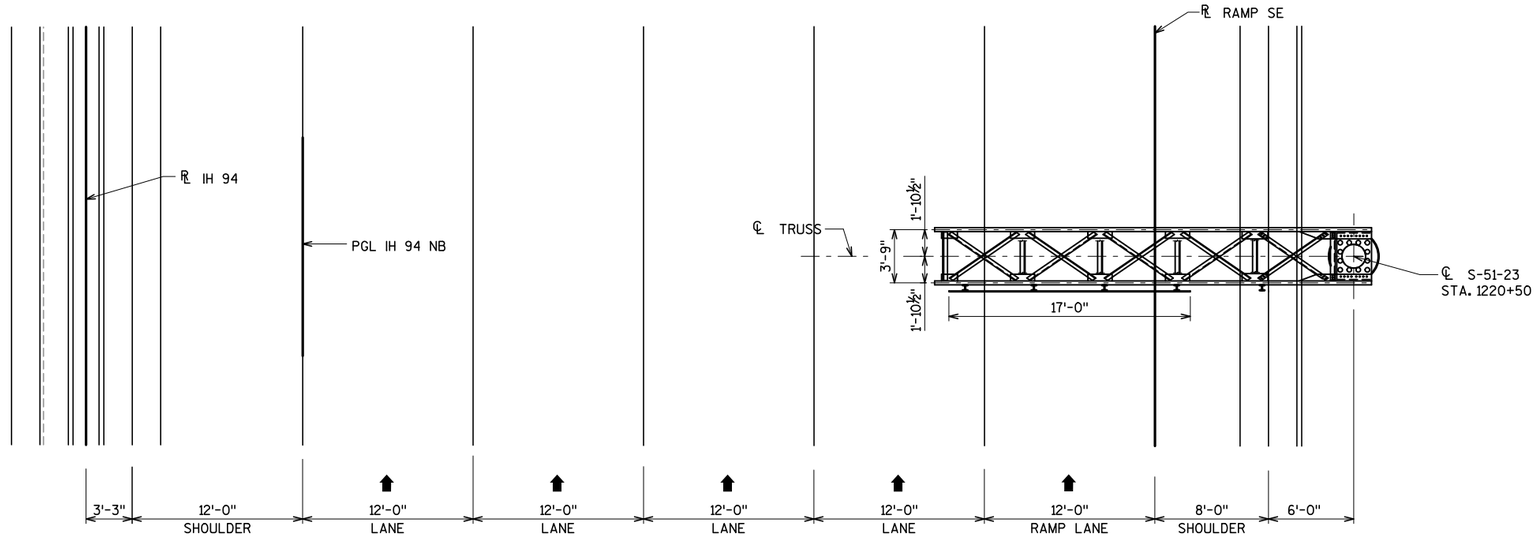
S-51-22 LAYOUT

SHEET 2 OF 7

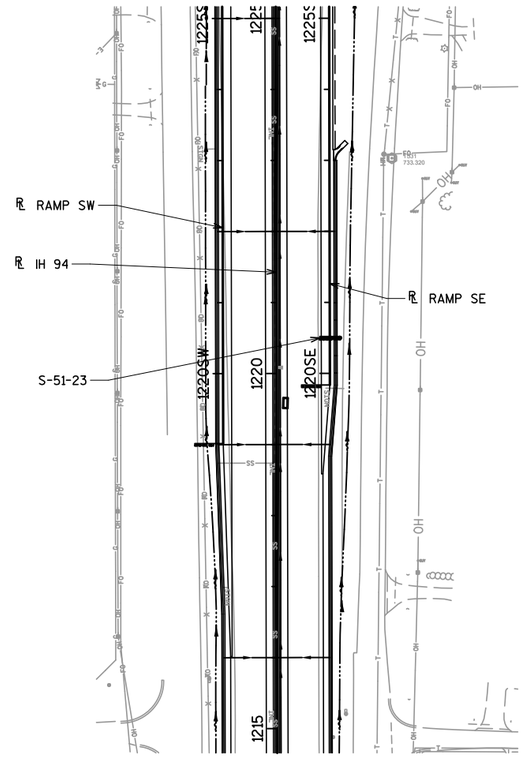
525

FILE NAME: F:\BMI-1834B 7M Road\10350174_M\Structures\sign bridges\DESIGN TABLE\YNN_S51RU22_REV.TBL DATE: 6/4/2018 8:55:21 AM Plotted by: bthengan

STATE PROJECT NUMBER
1035-01-74



PLAN



LOCATION MAP

ELEVATION
S-51-23
STA. 1220+50
LOOKING NORTH AT FRONT OF SIGN

LEGEND

- ⧓ ACCOUNTS FOR FUTURE SIGN AND CATWALK
- (X) SIGN NUMBER. SEE SIGNING PLANS

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-51-22, 23

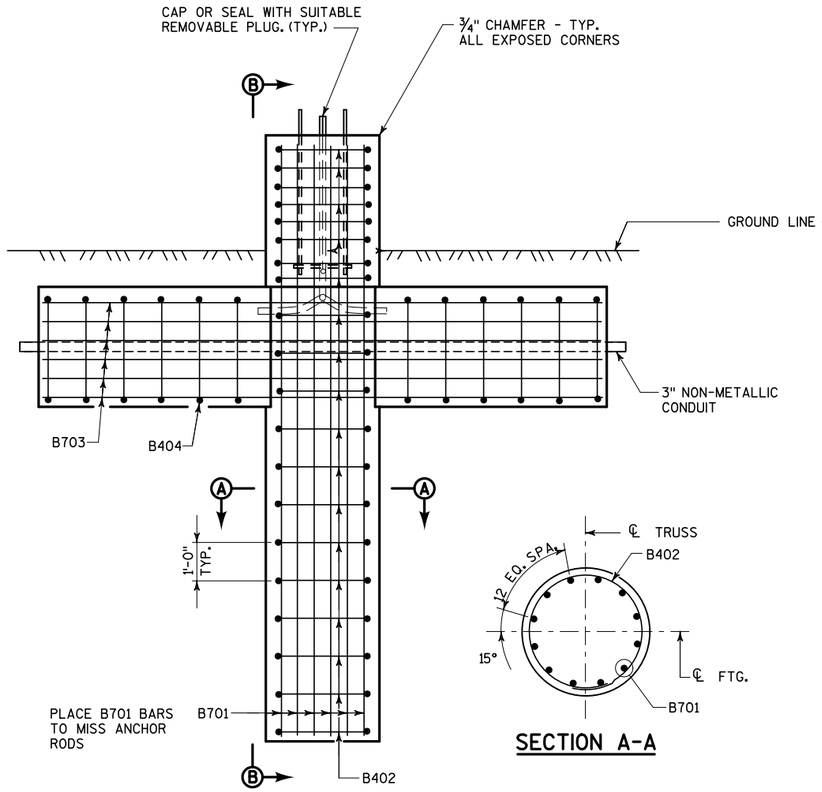
DRAWN BY TAL | PLANS CK'D. YNN

S-51-23 LAYOUT

SHEET 3 OF 7
526

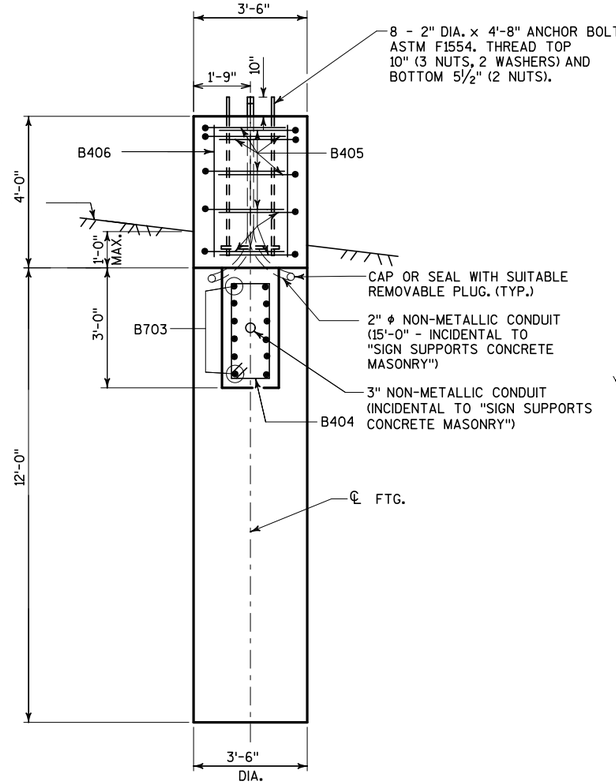
STATE PROJECT NUMBER

1035-01-74



ELEVATION

SECTION A-A

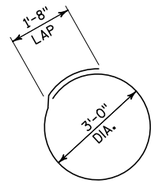


SECTION B-B

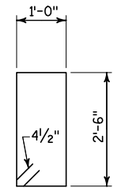
(SHOWING WING AND CAP STEEL ONLY)

BILL OF BARS

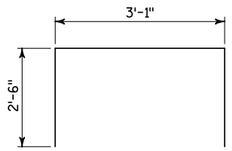
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
B701	X	12	15'-6"				FOOTING - COLUMN/TOP
B402	X	16	11'-2"	X			FOOTING - COLUMN/TOP
B703	X	12	15'-0"				FOOTING - WINGS
B404	X	12	7'-6"	X			FOOTING - WINGS
B405	X	10	7'-11"	X			FOOTING - TOP
B406	X	4	3'-6"				FOOTING - TOP - COLUMNS



B402



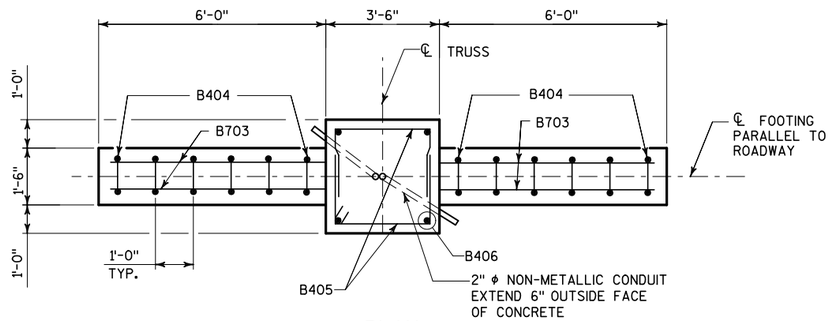
B404 (STIRRUP)



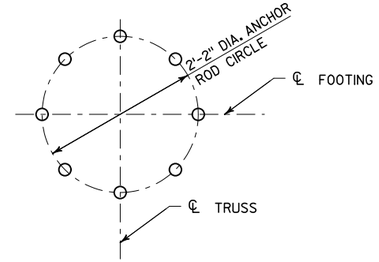
B405

BENDING DIAGRAM

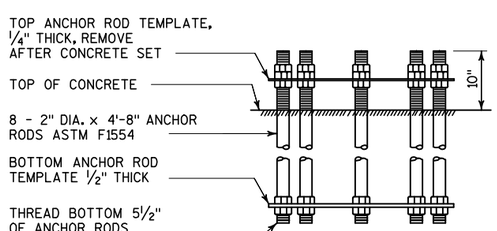
NOTE



PLAN



TOP VIEW OF TOP & BOTTOM TEMPLATES



ANCHOR BOLT DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-51-22, 23

DRAWN BY TAL | PLANS CK'D. BDT

CANTILEVER TRUSS FOOTING

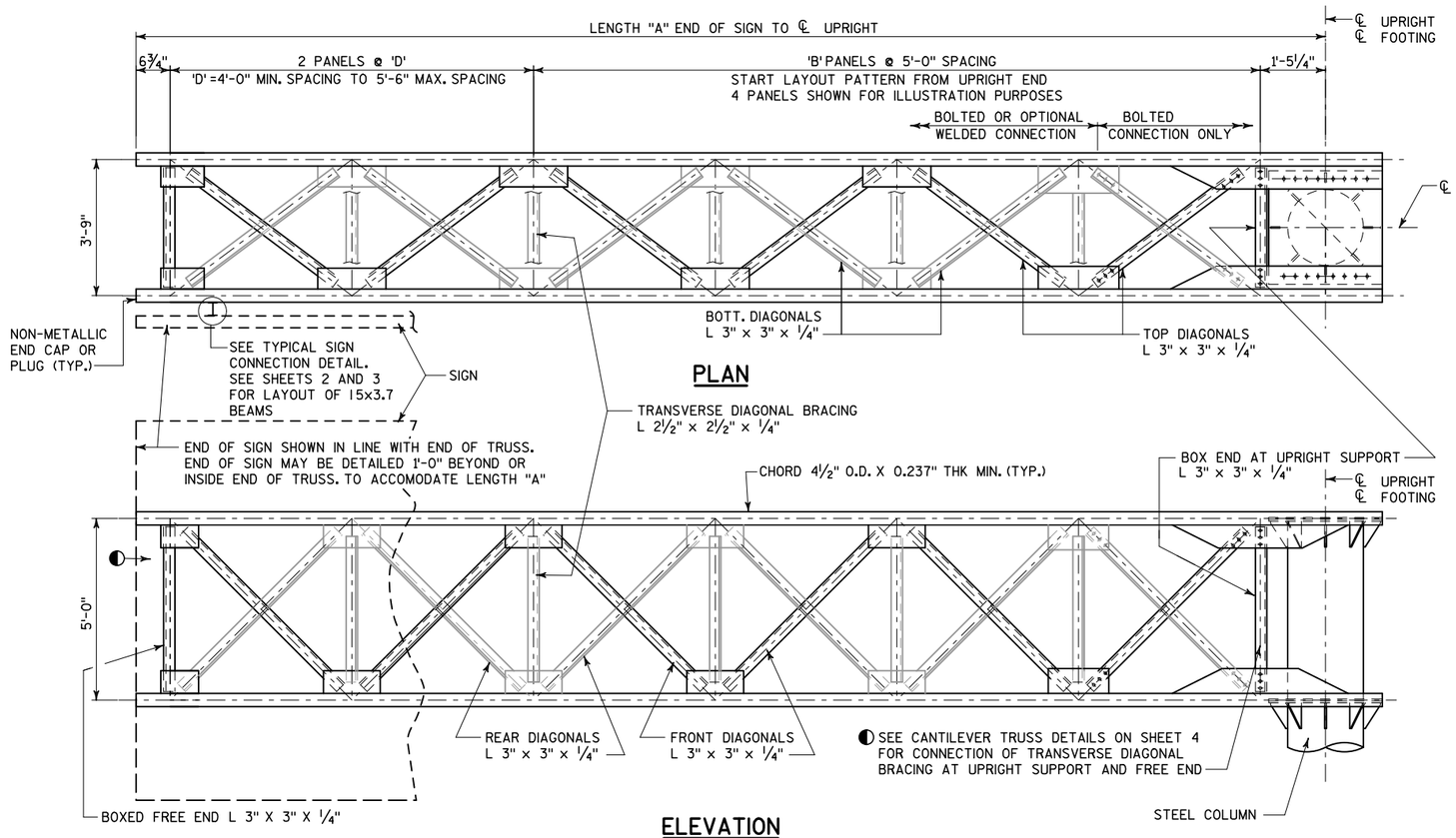
SHEET 4 OF 7

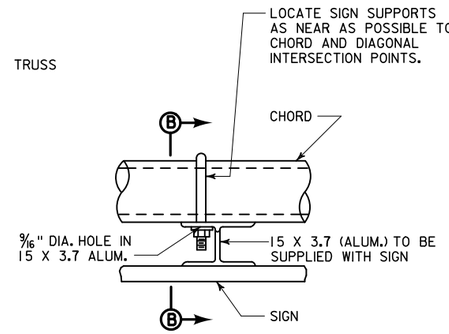
527

8

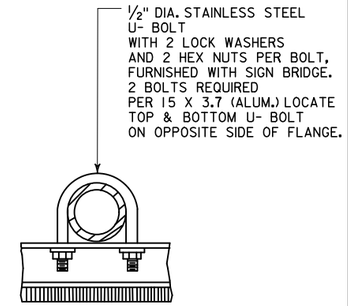
FILE NAME: DGN$SPEC$$$

STATE PROJECT NUMBER
1035-01-74





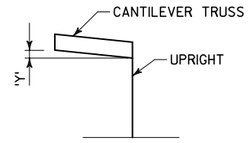
TYPICAL SIGN CONNECTION



SECTION B-B

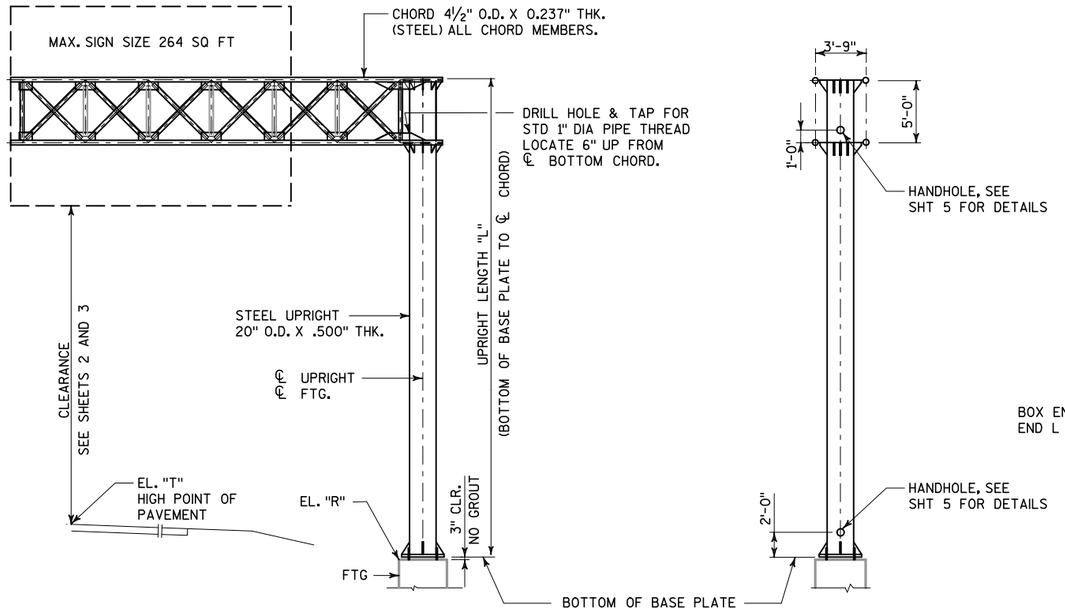
GENERAL NOTES

- ◓ WELDED CONNECTIONS MAY BE USED IF UNIT CAN BE GALVANIZED IN ONE PIECE.
- ◐ ELEVATIONS SHOWN ON "SIGN BRIDGE LAYOUT" SHEET.



CAMBER DIAGRAM

(SEE TABLE)

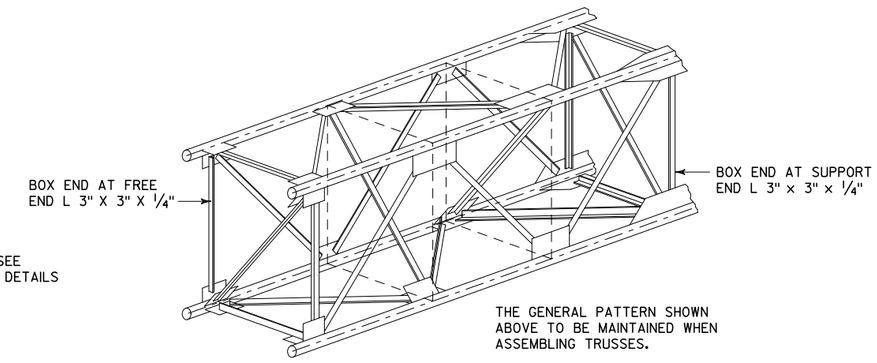


ELEVATION

END VIEW

TABLE

STRUCTURE	EL."R"	EL."T"	"A"	"L"	"B"	"D"	"Y"
S-51-22	726.94	726.98	26'-0"	28'-0½"	3	5'-0"	2¼"
S-51-23	737.48	736.86	26'-0"	27'-4½"	3	5'-0"	2¼"



THE GENERAL PATTERN SHOWN ABOVE TO BE MAINTAINED WHEN ASSEMBLING TRUSSES.

TYPICAL TRUSS SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-51-22, 23

DRAWN BY TAL | PLANS CK'D. BDT

GALVANIZED STEEL CANTILEVER SIGN TRUSS

SHEET 5 OF 7

528

8

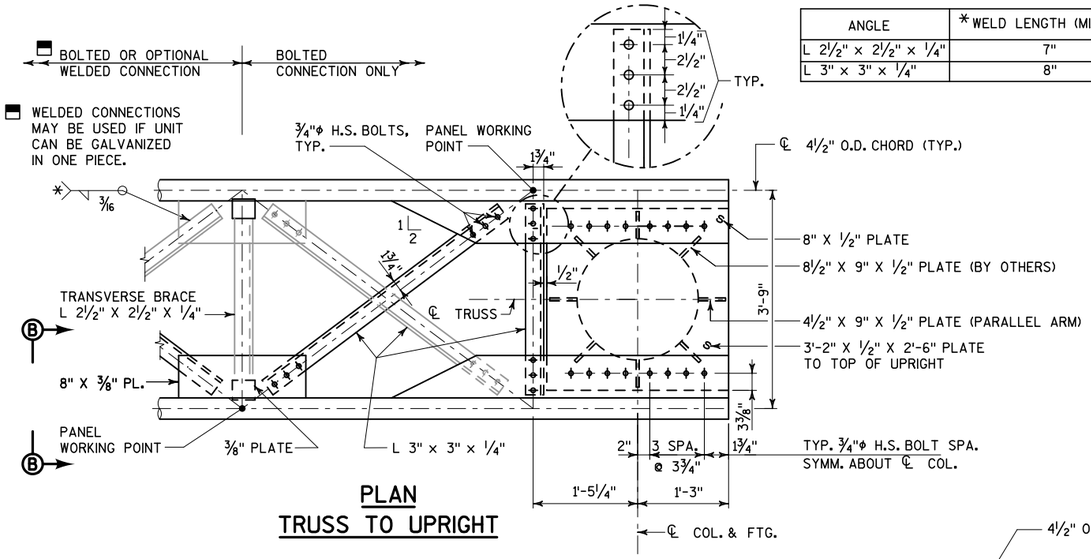
STATE PROJECT NUMBER

1035-01-74

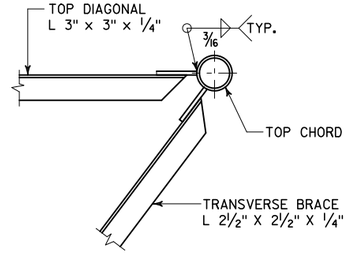
BOLTED OR OPTIONAL WELDED CONNECTION — BOLTED CONNECTION ONLY

WELDED CONNECTIONS MAY BE USED IF UNIT CAN BE GALVANIZED IN ONE PIECE.

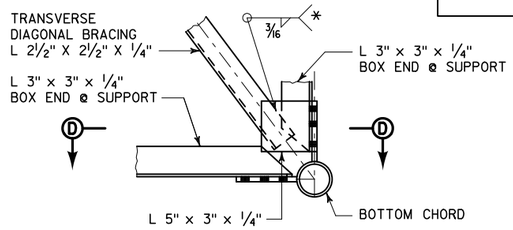
ANGLE	* WELD LENGTH (MIN.)
L 2½" x 2½" x ¼"	7"
L 3" x 3" x ¼"	8"



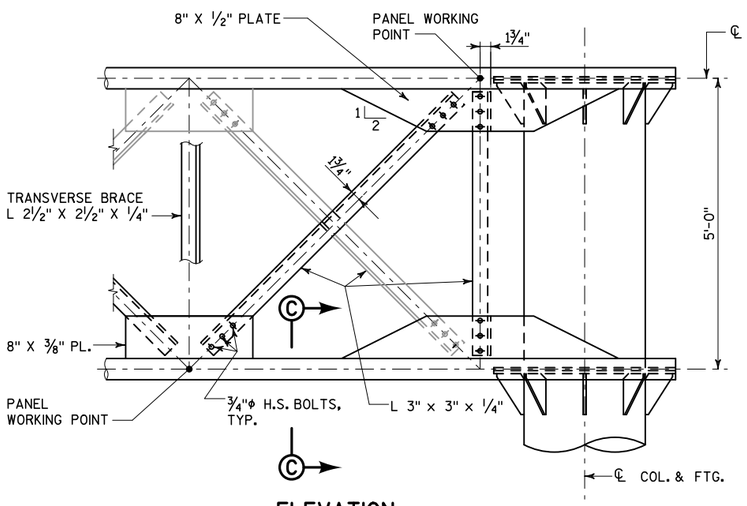
PLAN
TRUSS TO UPRIGHT



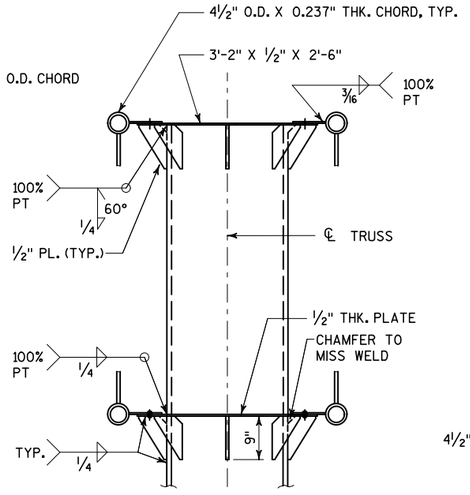
SECTION B-B



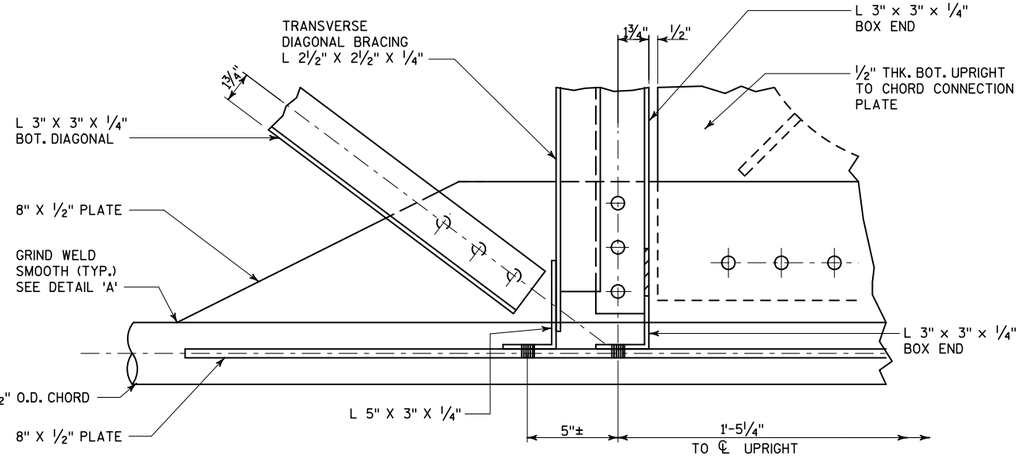
SECTION C-C



ELEVATION
TRUSS TO UPRIGHT

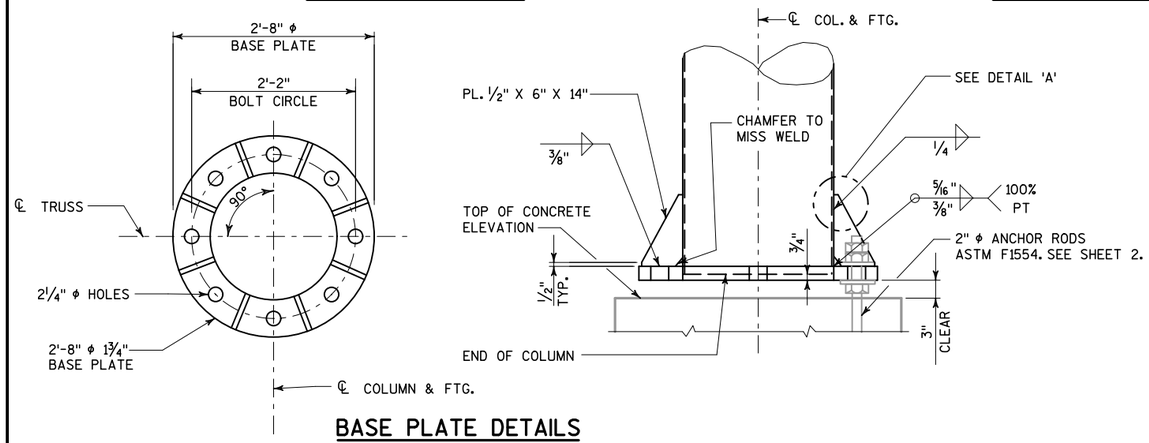


END VIEW
TRUSS TO UPRIGHT

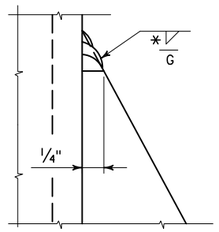


SECTION D-D

(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)

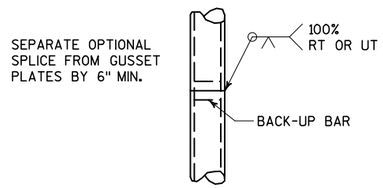


BASE PLATE DETAILS



DETAIL 'A'

* SIZE AS NEEDED



OPTIONAL
COLUMN OR CHORD
SPLICE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-51-22, 23

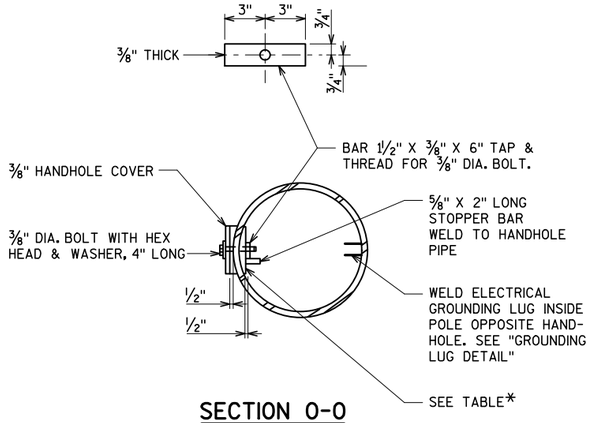
DRAWN BY TAL — PLANS CK'D. YNN

GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS

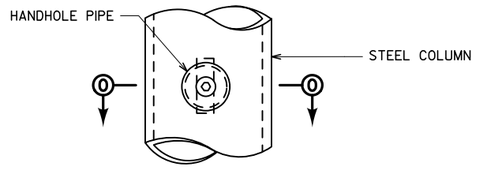
SHEET 6 OF 7

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8



SECTION O-O



HANDHOLE DETAILS

HANDHOLE NOTES

HANDHOLES SHALL BE LOCATED IN THE COLUMN AS DETAILED ON SHT 5.

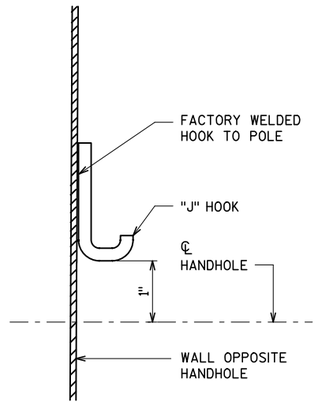
THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS.

CONDUIT (AS REQUIRED) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL DETAIL PLAN SHEETS.

UNLESS NOTED OTHERWISE, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

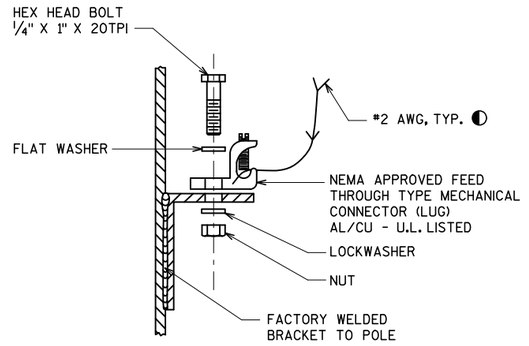
*

UPRIGHT DIAM. SIZE O.D. X THK.	HANDHOLE PIPE O.D. X MIN. THK.
UP TO AND INCLD. 16" X .375"	5.562" X .500"
GREATER THAN 16" X .375" TO AND INCLDING 24" X .562"	6.625" X .562"



TYPICAL "J" HOOK LOCATION

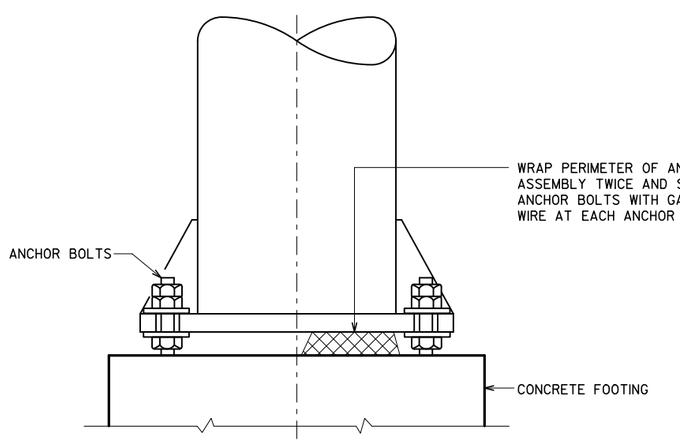
THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

◐ SEE SDD 10A1-3 FOR SIGN BRIDGE STRUCTURE GROUNDING DETAILS. GROUNDING ELECTRODES AND #2 AWG ARE INCIDENTAL TO THE PAY ITEM "SIGN SUPPORTS CONCRETE MASONRY"



RODENT SCREEN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURES S-51-22, 23

DRAWN BY TAL | PLANS CK'D. YNN

HANDHOLE DETAILS

SHEET 7 OF 7
530

8

FILE NAME: F:\BMI-1834B 7M Road\10350174_M\Structures\sign bridges\RENOTABLE1.TBL RENOTABLE2.TBL RENOTABLE3.TBL RENOTABLE4.TBL RENOTABLE5.TBL RENOTABLE6.TBL RENOTABLE7.TBL RENOTABLE8.TBL RENOTABLE9.TBL RENOTABLE10.TBL RENOTABLE11.TBL RENOTABLE12.TBL RENOTABLE13.TBL RENOTABLE14.TBL RENOTABLE15.TBL RENOTABLE16.TBL RENOTABLE17.TBL RENOTABLE18.TBL RENOTABLE19.TBL RENOTABLE20.TBL RENOTABLE21.TBL RENOTABLE22.TBL RENOTABLE23.TBL RENOTABLE24.TBL RENOTABLE25.TBL RENOTABLE26.TBL RENOTABLE27.TBL RENOTABLE28.TBL RENOTABLE29.TBL RENOTABLE30.TBL RENOTABLE31.TBL RENOTABLE32.TBL RENOTABLE33.TBL RENOTABLE34.TBL RENOTABLE35.TBL RENOTABLE36.TBL RENOTABLE37.TBL RENOTABLE38.TBL RENOTABLE39.TBL RENOTABLE40.TBL RENOTABLE41.TBL

STATE PROJECT NUMBER

1035-01-74

DESIGN DATA

BUTTERFLY SIGN	DESIGN SIGN AREA	MAX. SIGN DEPTH
S-51-220	176 SF	8 FT

DESIGNED ACCORDING TO A.A.S.H.T.O "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" 6th EDITION

DEAD LOAD - WT. OF SIGN, SUPPORTING STRUCTURE, FUTURE CATWALK, FUTURE LIGHTS AND RAILINGS.

ICE LOAD - 3 PSF TO ONE FACE OF SIGN & AROUND SURFACE OF MEMBERS.

WIND VELOCITY = 90 MPH (3-SEC. 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
I.	DEAD	100
II.	DEAD + WIND	133
III.	DEAD + ICE + ½ WIND	133

NOTE: WIND LOAD FOR GROUP III LOADING SHALL NOT BE LESS THAN 25 PSF

MATERIAL PROPERTIES

CONCRETE MASONRY .....f'c = 3,500 psi

HIGH STRENGTH STEEL
REINFORCEMENT, GRADE 60 .....fy = 60,000 psi

STRUCTURAL ANGLES
PLATE AND BARS - ASTM A709 GRADE 36 .....fy = 36,000 psi

CHORDS & COLUMN (INCLUDING
HANDHOLE) - API SPEC 5L GRADE 42 .....fy = 42,000 psi ☆

HIGH STRENGTH BOLTS - A325 .....fy = 92,000 psi

ANCHOR BOLTS - ASTM F1554 .....fy = 55,000 psi

STRUCTURAL MEMBERS GALVANIZED .....ASTM A123

HARDWARE GALVANIZED .....ASTM A153 CLASS C

☆ ALTERNATIVE MATERIAL FOR COLUMN AND CHORD LESS THAN 10" DIAMETER MAY BE ASTM A500 GRADE B fy = 42,000 psi, OR GRADE C fy = 46,000 psi.

FOUNDATION DATA

THE FOLLOWING ASSUMPTIONS WERE USED FOR THE DESIGN OF THE FOUNDATION SYSTEM:

ALLOWABLE SKIN FRICTION = 400 PSF

ALLOWABLE END RESISTANCE = 7200 PSF

SOIL COHESION = 2,000 PSF

SOIL FRICTION ANGLE = 0°

SIGN STRUCTURE FOUNDATIONS TO BE SUPPORTED ON DRILLED SHAFTS WITH AN ALLOWABLE BEARING RESISTANCE OF 7,200 PSF, THE SE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS TO CONFIRM THE ALLOWABLE BEARING RESISTANCE PRIOR TO CONSTRUCTION OF THE DRILLED SHAFTS.

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. ALL DIMENSIONS IN THE BAR BENDS ARE OUT TO OUT.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

ALTERNATE DESIGNS ARE NOT ALLOWED.

ALL STRUCTURAL STEEL MEMBERS, PLATES, ANCHOR BOLTS, H.S. BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

PLACE REINFORCEMENT TO MISS ANCHOR ROD ASSEMBLY. LENGTH OF PROJECTION OF ANCHOR ROD ABOVE CONCRETE SHALL BE AS SHOWN ON THE PLANS AND TO PLUMB. SECURE ANCHOR ROD ASSEMBLY IN POSITION DURING PLACEMENT OF CONCRETE. DO NOT WELD ANCHOR RODS, NUTS, OR WASHERS.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

PROVIDE A NAME PLATE FOR SIGN STRUCTURE COLUMN, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN (STRUCTURE)". FABRICATE AND INSTALL THE NAME PLATE IN ACCORDANCE WITH S.D.D. 12 A 3-10.

SIGNS SHALL BE INSTALLED ON 15x3.7 (ALUMINUM) I-BEAM SUPPLIED WITH SIGN.

SIGNS OR BLANKS SHALL BE INSTALLED ON THE TRUSS AT THE TIME OF ERECTION. BLANKS, IF USED, SHALL BE THE SAME SIZE AND LOCATION AS PERMANENT SIGNS. SIGN SHALL BE AS DESIGNATED ON THE PLANS. SIGN BLANKS AND MOUNTING HARDWARE SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN S-51-220".

SEE SIGN PLATE NO. A4-6 OF THE SIGN PLATE MANUAL FOR INSTRUCTION ON CENTERING SIGN VERTICALLY ON TRUSS.

EXACT LOCATION OF SIGN BRIDGE SHALL BE DETERMINED BY THE REGION TRAFFIC ENGINEER.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA. A325 BOLTS, GALAVANIZED ASTM A153, CLASS C, AND INSTALLED WITH DTI WASHERS.

STEEL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF ASTM F1554, GRADE 55, WITH ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.

WELD TEST AS PER AWS D1.1

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON SHOP DRAWINGS. ENGINEER TO SEND SHOP DRAWINGS TO BUREAU OF STRUCTURES AND TOM HEYDEL, SE REGION TRAFFIC, FOR REVIEW.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE SUPPORT BASES. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. TEMPORARY CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM" SIGN SUPPORTS CONCRETE MASONRY".

ALL NON-METALLIC CONDUIT SHOWN ON SIGN STRUCTURE PLANS IS INCIDENTAL THE BID ITEM " CONCRETE MASONRY SIGN SUPPORTS".

LIST OF DRAWINGS

1. GENERAL NOTES & DESIGN DATA
2. S-51-220 LAYOUT AND QUANTITIES
3. BUTTERFLY DETAILS
4. HANDHOLE DETAILS
5. CONCRETE FOOTING
6. CONCRETE COLUMN AESTHETIC DETAILS

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER
5-23-18

STRUCTURE DESIGN CONTACTS

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher 5/24/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-51-220

IH-94 AT 7 MILE ROAD

COUNTY	TOWN
RACINE	RAYMOND/CALEDONIA

DESIGN SPEC.
AASHTO STD. SPEC. FOR STRUCTURAL SUPPORTS, 6TH ED

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
DMC	BDT	TAL	YNN

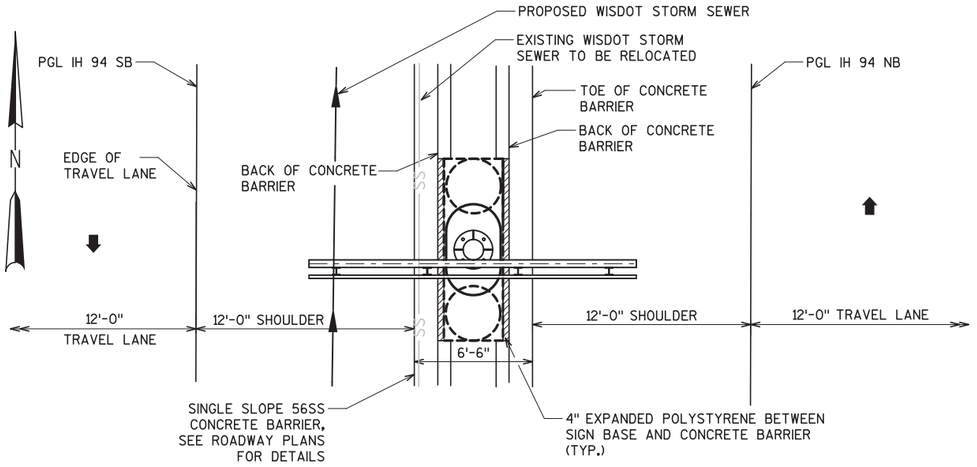
GENERAL NOTES & DESIGN DATA

SHEET 1 OF 6

531

8

STATE PROJECT NUMBER
1035-01-74

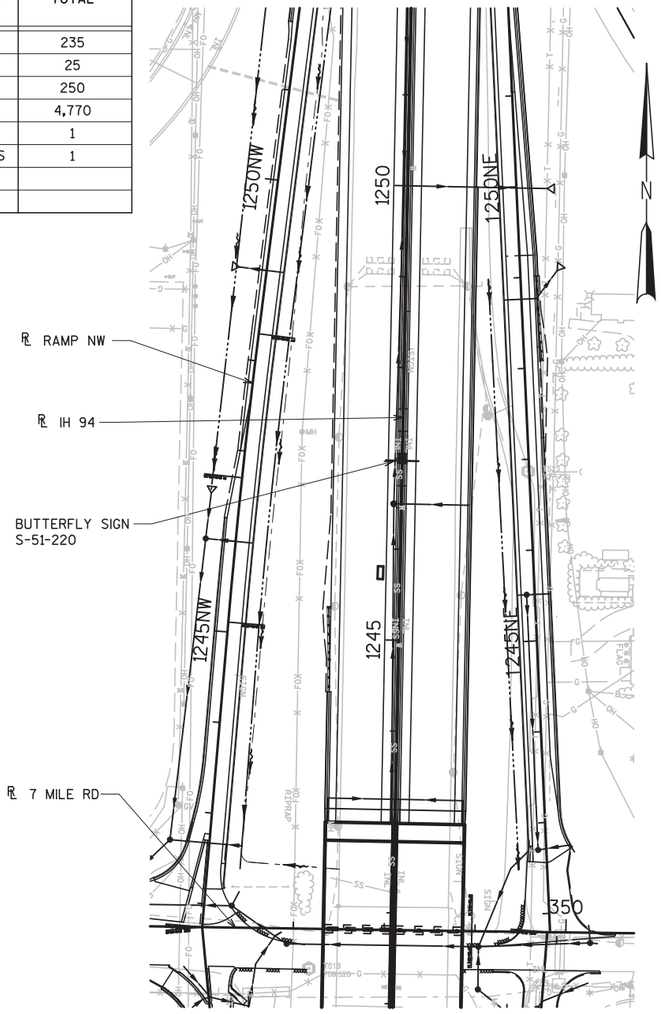


PLAN

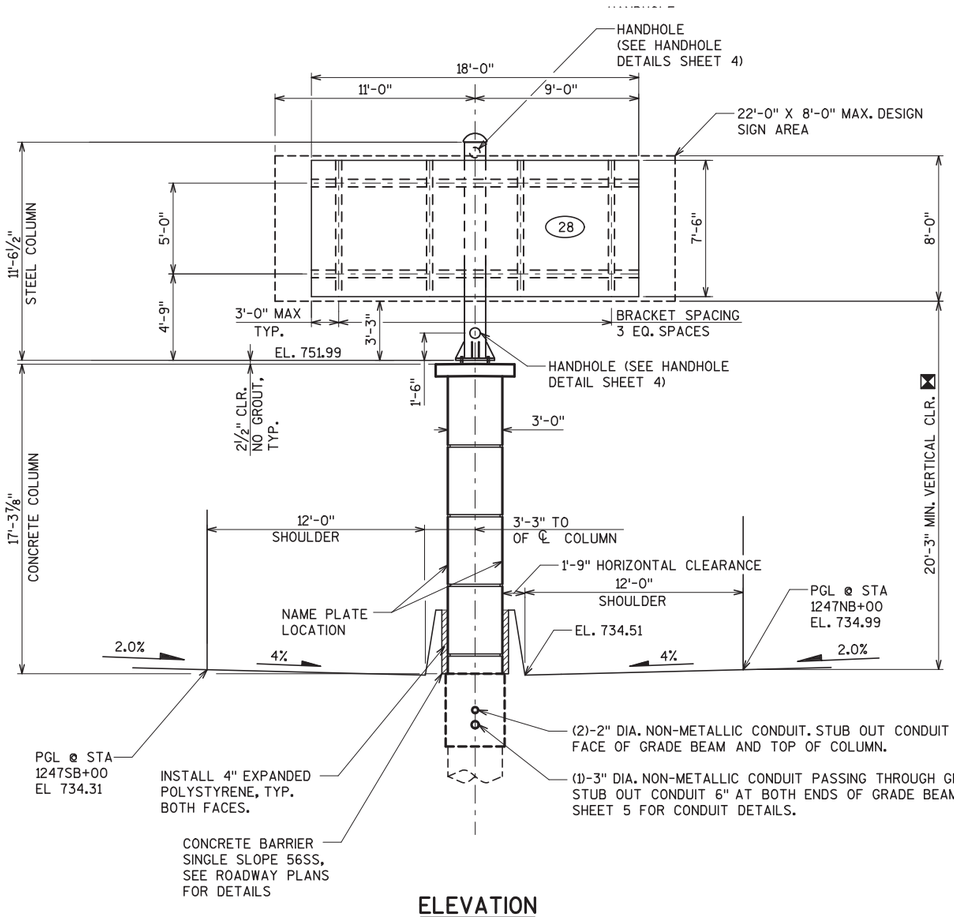
S-51-220 TOTAL ESTIMATE OF QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	TOTAL
517.1010.S.4204	CONCRETE STAINING S-51-220	SF	235
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	25
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	250
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENTS HS	LB	4,770
641.0100.0220	SIGN BRIDGE SINGLE POLE SIGN SUPPORT ONE SIGN S-51-220	LS	1
SPV.0075.4001	OBSTRUCTIONS SIGN SUPPORTS CONCRETE MASONRY	HRS	1

ALL ITEMS ARE CATEGORY 6690.



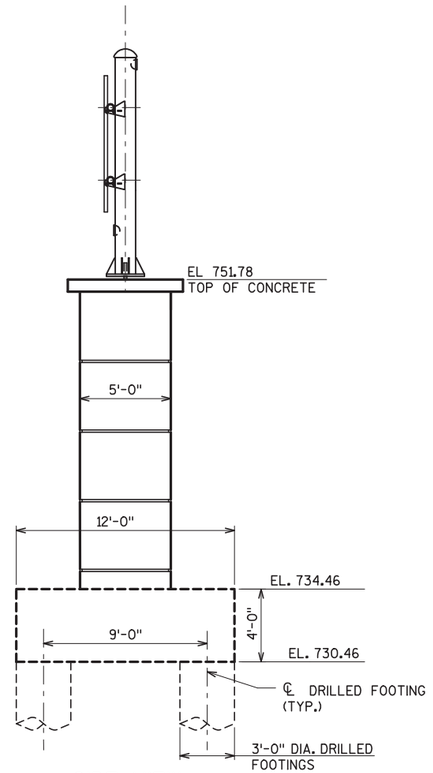
LOCATION MAP



ELEVATION

S-51-220, STA. 1247+00
(LOOKING NORTH
AT FRONT OF SIGN)

☒ INCLUDE 2'-0" PROVISION FOR FUTURE CATWALK



SIDE VIEW

(LOOKING EAST)

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-51-220

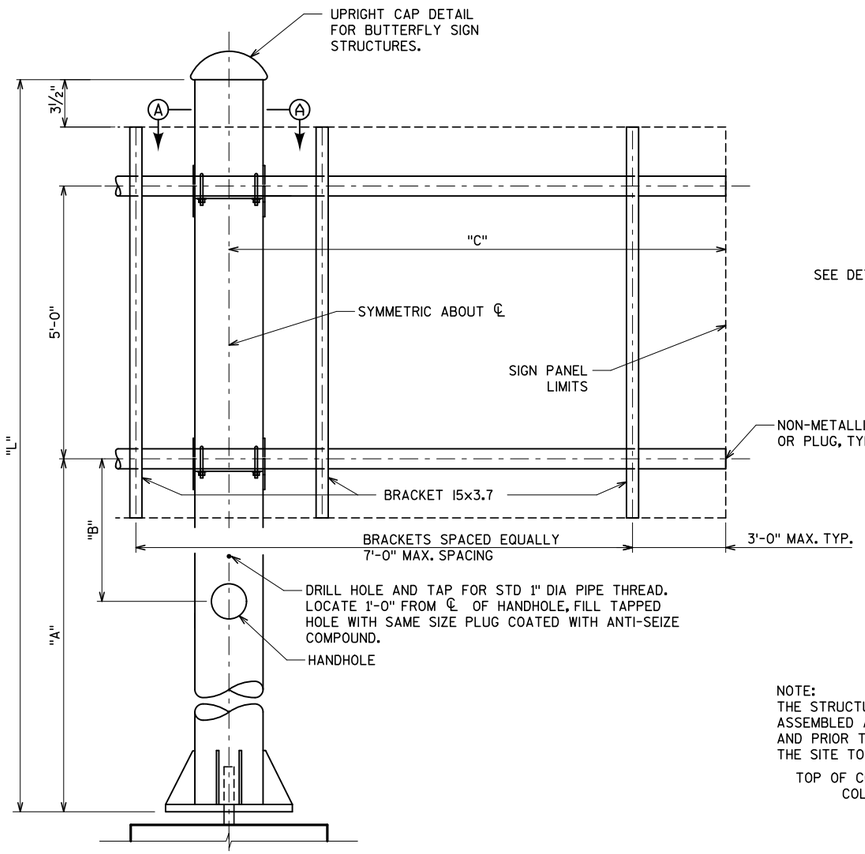
DRAWN BY TAL | PLANS CK'D. YNN

S-51-220 LAYOUT AND QUANTITIES

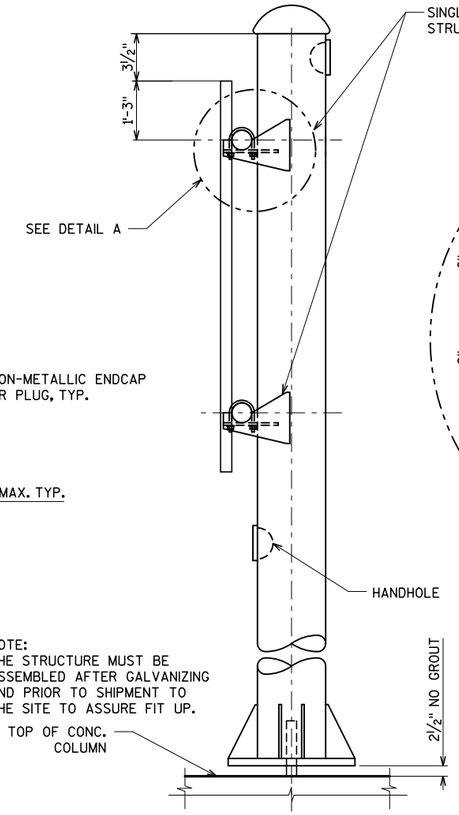
SHEET 2 OF 6
532

STATE PROJECT NUMBER

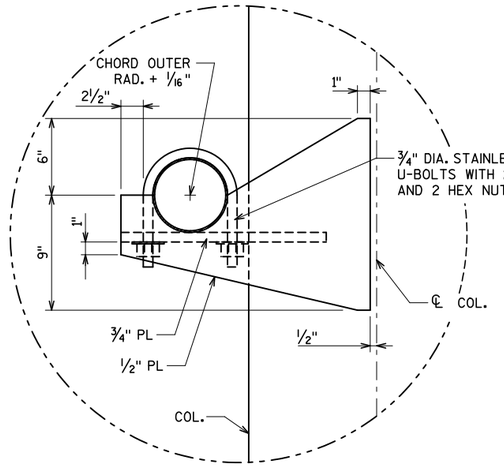
1035-01-74



ELEVATION

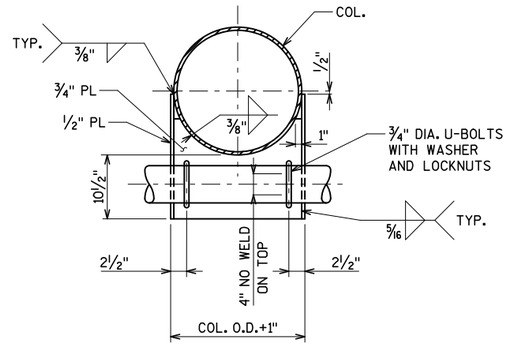


END VIEW

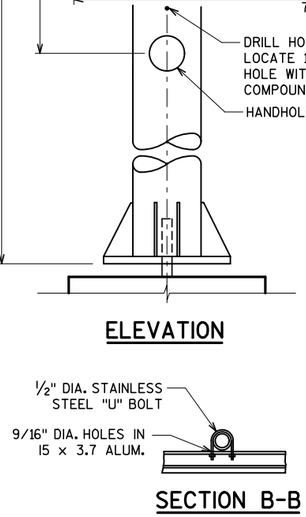


DETAIL A

(BRACKET NOT SHOWN)



SECTION A-A

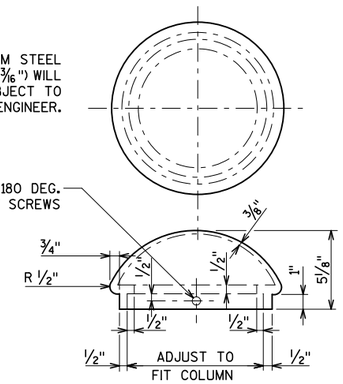


SECTION B-B

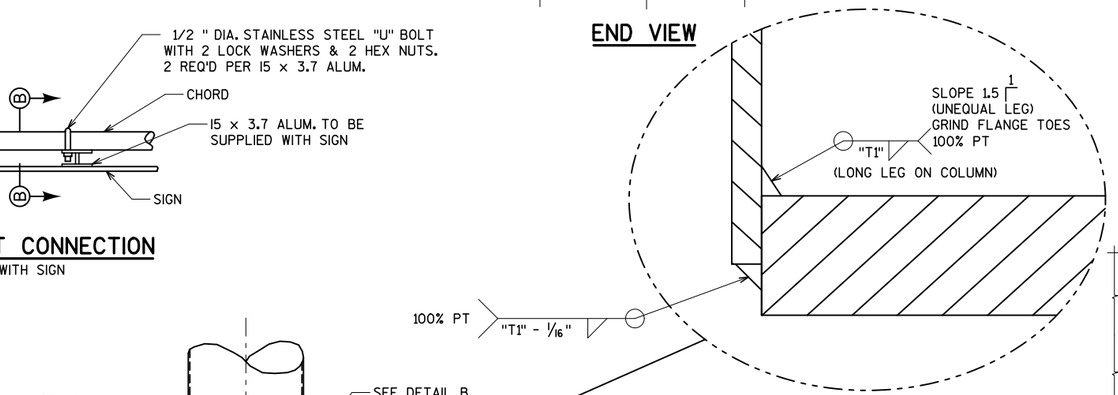
TYPICAL SIGN AND BRACKET CONNECTION

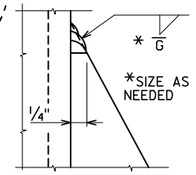
SIGN: 15x3.7 ALUM. TO BE SUPPLIED WITH SIGN

NOTE: CAP FABRICATED FROM STEEL PLATES (MIN. THICKNESS 3/16") WILL BE ACCEPTABLE, SUBJECT TO APPROVAL BY THE ENGINEER.

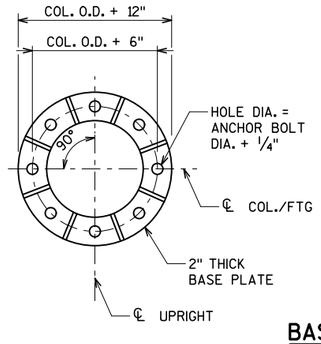


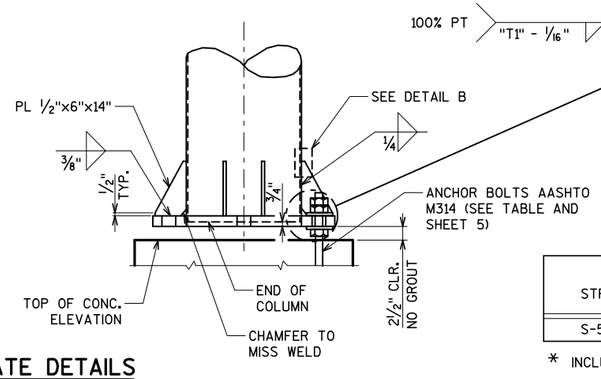
TOWER CAP DETAIL





DETAIL B





BASE PLATE DETAILS

STRUCTURE	CHORDS O.D. X THK.	COLUMN O.D. X THK. "T1"	"L"	"A"	"B"	"C"	ANCHOR BOLTS*
S-51-220	5.563"X 0.375"	14"X0.375"	11'-6½"	4'-9"	3'-3"	9'-0"	8-1½" DIA x 3'-10" LONG

* INCLUDES 9" BOLT STANDOFF FROM TOP OF CONCRETE

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STRUCTURE S-51-220

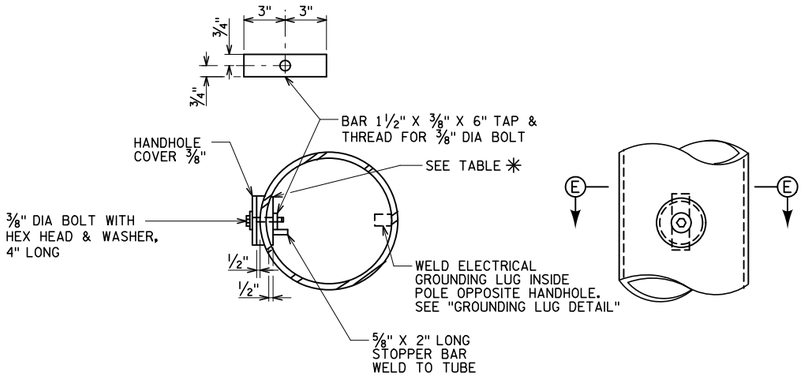
DRAWN BY TAL | PLANS CK'D. YNN

BUTTERFLY DETAILS

SHEET 3 OF 6

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8



SECTION E-E

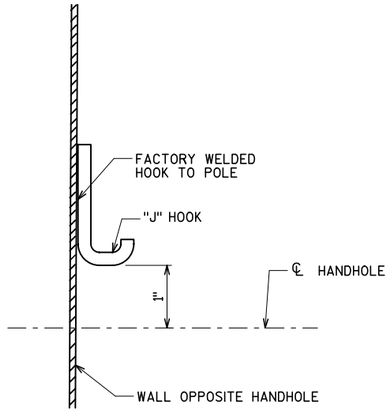
HANDHOLE DETAILS

HANDHOLE NOTES

HANDHOLES SHALL BE LOCATED IN THE STEEL COLUMNS AS DETAILED ON SHEET 3. UNLESS NOTED OTHERWISE. ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

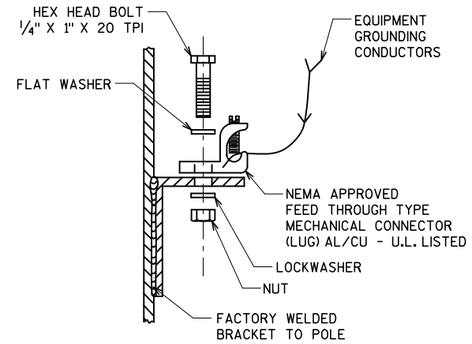
✳

UPRIGHT DIAM. SIZE	HANDHOLE PIPE O.D. X MIN. THK.
UP TO AND INCLD. 16" X .375"	5.562" X .500"
GREATER THAN 16" X .375" TO AND INCLD. 24" X .562"	6.625" X .562"



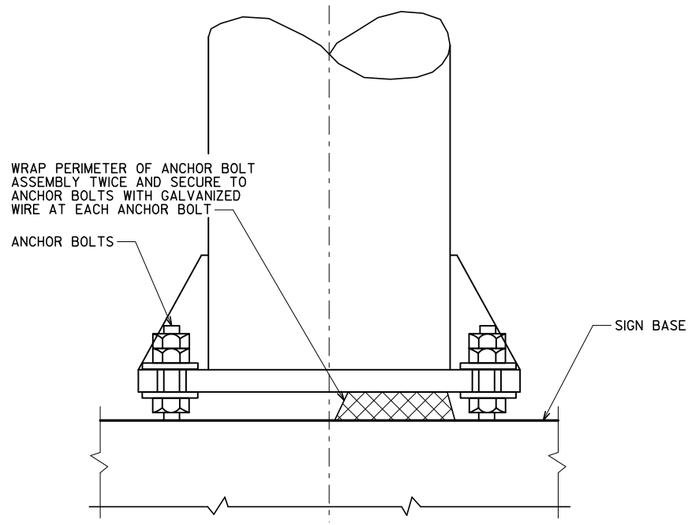
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



RODENT SCREEN

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-51-220

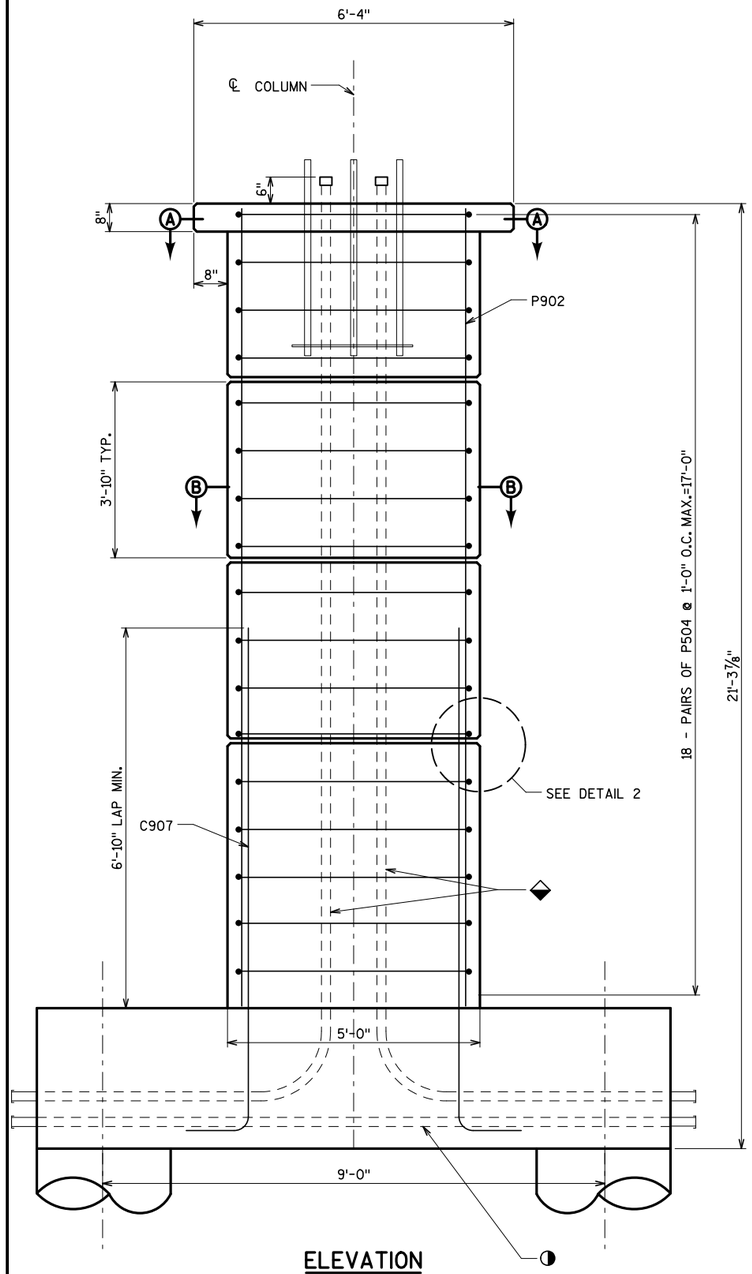
DRAWN BY TAL | PLANS CK'D. YNN

HANDHOLE DETAILS

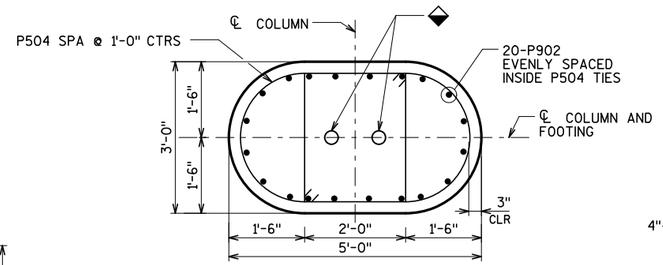
SHEET 4 OF 6
534

8

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ELEVATION

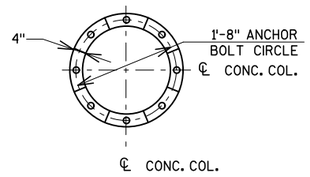


SECTION B-B

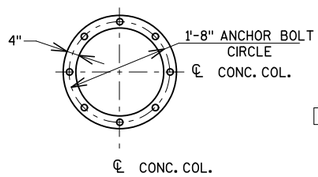
TYPICAL COLUMN SECTION

CONCRETE STAINING SCHEDULE

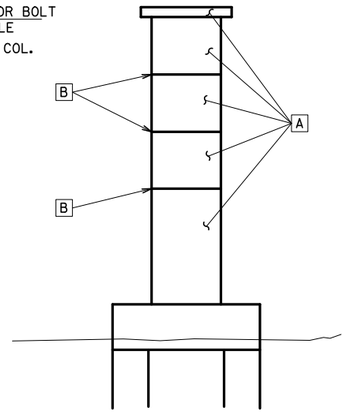
MARK	COLOR	LOCATION	NOTES	STAIN COLOR
A	BASE COLOR	PIER	COLUMNS EXCEPT AS NOTED FOR ACCENT COLORS FROM TOP OF COLUMN TO TOP OF FOOTING	FEDERAL # 33564
B	ACCENT COLOR #1	RUSTICATIONS	RUSTICATIONS	FEDERAL # 33448



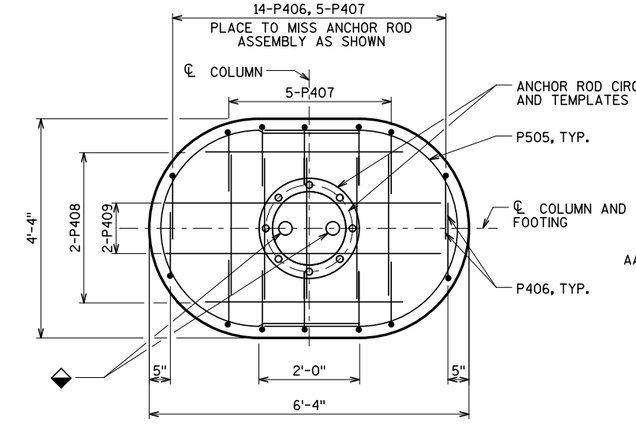
TOP VIEW OF BOTTOM TEMPLATE



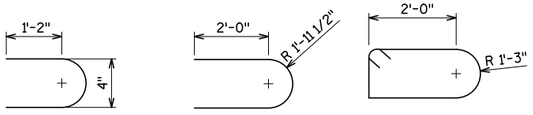
TOP VIEW OF TOP TEMPLATE



AESTHETIC DETAIL



SECTION A-A



P406 P505 P504

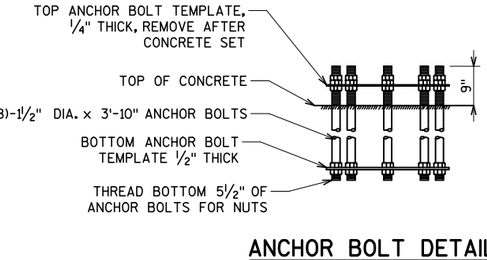
BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
P902	X	20	17'-0"			COLUM VERTICAL
P504	X	36	11'-2"	X		COLUMN STIRRUP
P505	X	2	10'-2"	X		COLUMN CAP
P406	X	14	2'-10"	X		COLUMN CAP
P407	X	5	3'-7"			COLUMN CAP
P408	X	2	3'-9"			COLUMN CAP
P409	X	2	5'-6"			COLUMN CAP

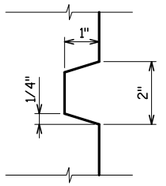
LEGEND

◆ (2)-2" DIA. NON-METALLIC CONDUIT. STUB OUT CONDUIT 6" AT FACE OF GRADE BEAM AND TOP OF COLUMN, CAP OR SEAL WITH SUITABLE REMOVABLE PLUG. CONDUITS INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

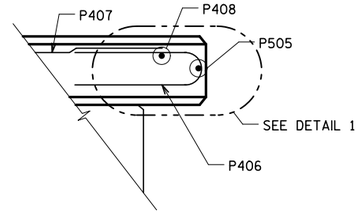
◑ (1)-3" DIA. NON-METALLIC CONDUIT PASSING THROUGH GRADE BEAM. STUB OUT CONDUIT 6" AT BOTH ENDS OF GRADE BEAM, CAP OR SEAL WITH SUITABLE REMOVABLE PLUG. CONDUITS INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

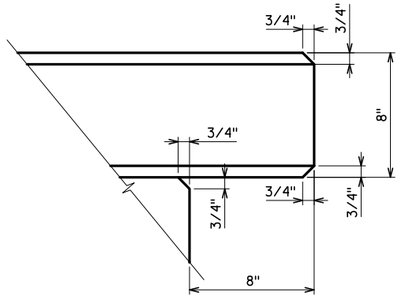


ANCHOR BOLT DETAILS



DETAIL 2





DETAIL 1

SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-51-220

DRAWN BY HKG | PLANS CK'D.

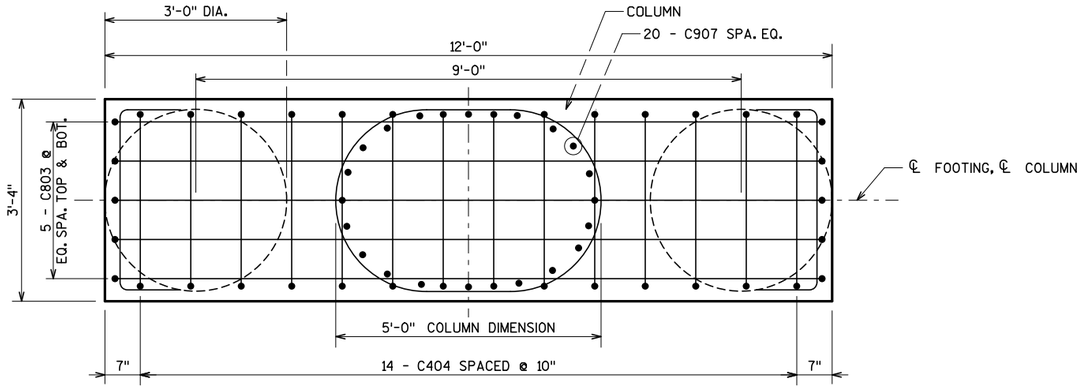
COLUMN AND AESTHETIC DETAILS

SHEET 5 OF 6

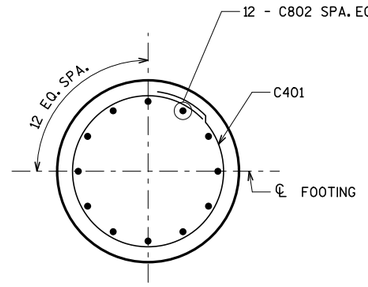
535

8

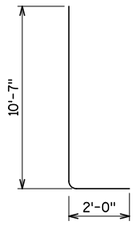
STATE PROJECT NUMBER
1035-01-74



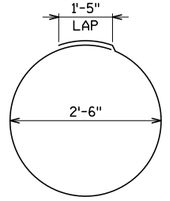
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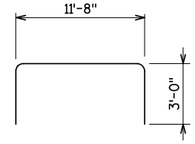
SECTION A-A



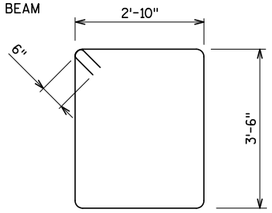
C907



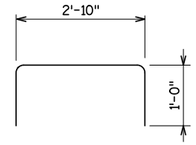
C401



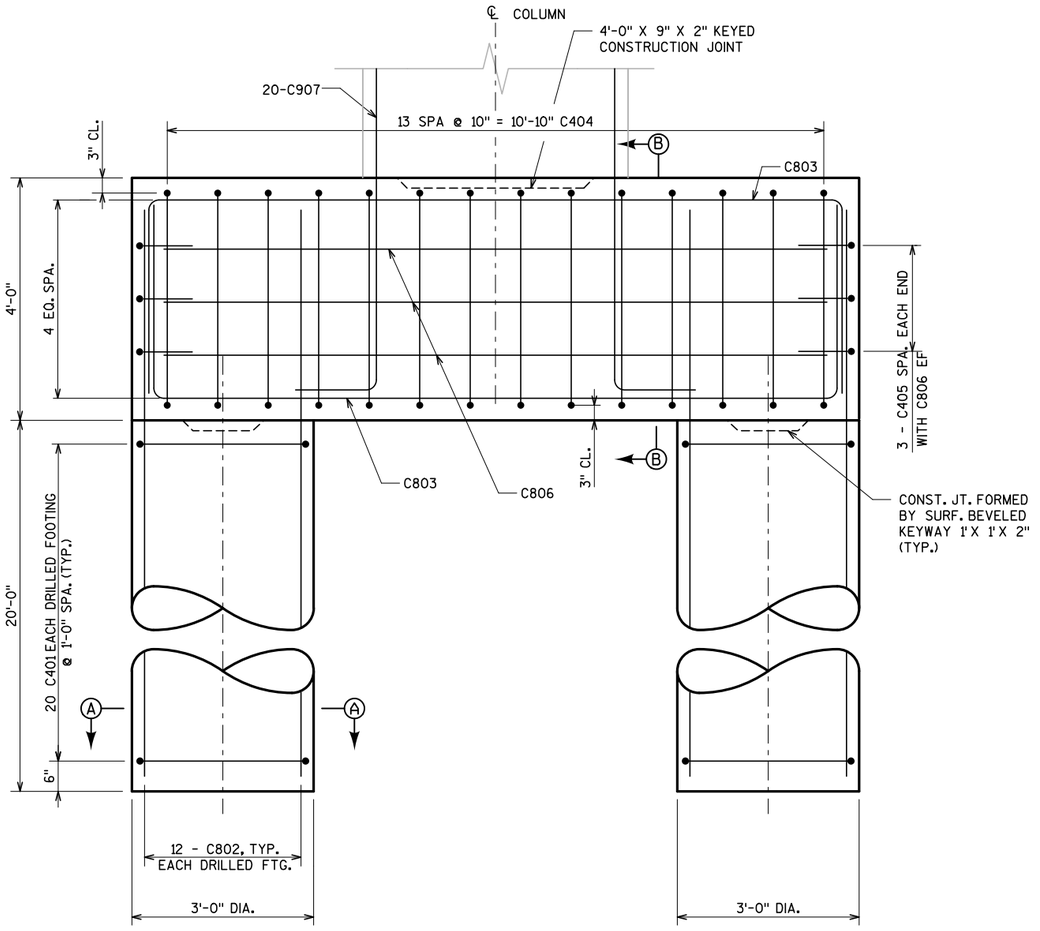
C803



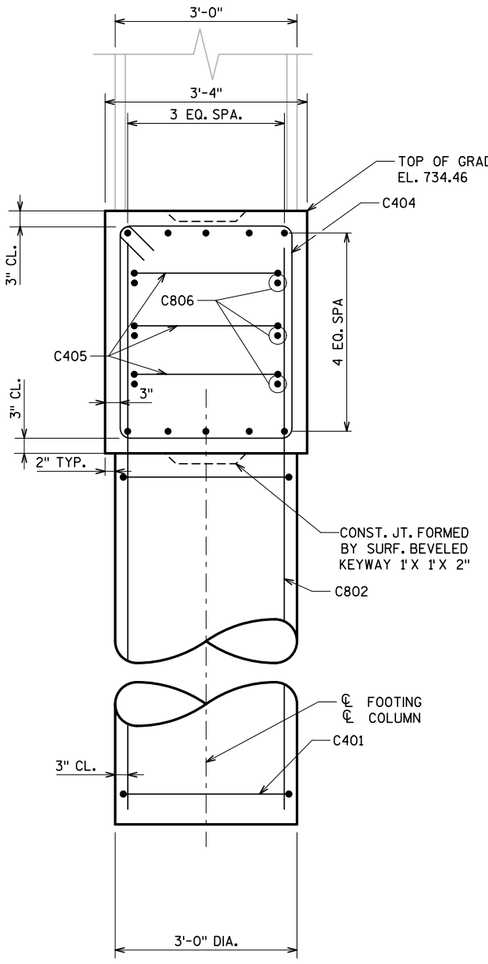
C404



C405



ELEVATION



SECTION B-B

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
C401		40	9'-3"	X		DRILLED FOOTINGS - HOOPS
C802	X	24	23'-3"			DRILLED FOOTINGS - VERTICAL
C803	X	10	17'-3"	X		FOOTING - LONGITUDINAL
C404	X	14	13'-2"	X		FOOTING - TIES
C405	X	6	4'-8"	X		FOOTING - TIES
C806	X	6	11'-8"			FOOTING - LONGITUDINAL
C907	X	20	12'-4"	X		FOOTING DOWEL

NOTE

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR IN DRILLED FOOTINGS AND GRADE BEAM.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-51-220

DRAWN BY TAL | PLANS CK'D. YNN

CONCRETE FOOTING

SHEET 6 OF 6

536

		IH 94 NB WIDENING - DIVISION 1									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1213+00	0.00	5	18	53	0	0	0	0	0	0	0
1213+50	50.00	5	18	49	9	33	94	9	33	94	-85
1214+00	50.00	6	19	41	10	34	83	19	68	178	-158
1214+50	50.00	5	19	40	10	35	75	30	103	253	-223
1215+00	50.00	5	19	43	9	35	77	39	138	330	-291
1215+50	50.00	5	19	48	9	35	84	48	173	414	-366
1216+00	50.00	4	18	54	8	34	94	56	207	508	-452
1216+50	50.00	4	18	55	7	33	101	64	241	609	-545
1217+00	50.00	5	19	56	8	34	103	72	275	712	-640
1217+50	50.00	4	19	52	8	35	100	81	310	812	-731
1218+00	50.00	5	19	54	8	35	98	89	345	910	-821
1218+50	50.00	6	19	54	10	35	100	99	381	1,010	-911
1219+00	50.00	6	19	47	11	35	94	110	416	1,104	-994
1219+50	50.00	7	19	35	12	35	76	122	451	1,180	-1,057
1220+00	50.00	8	0	30	14	18	60	136	469	1,240	-1,104
1220+50	50.00	9	0	24	16	0	50	152	469	1,290	-1,138
1221+00	50.00	11	0	20	19	0	41	170	469	1,331	-1,160
1221+50	50.00	11	0	17	20	0	34	191	469	1,365	-1,174
1222+00	50.00	13	0	17	22	0	31	213	469	1,396	-1,183
1222+50	50.00	12	0	19	23	0	33	236	469	1,430	-1,194
1223+00	50.00	11	0	21	21	0	37	257	469	1,467	-1,209
1223+50	50.00	11	0	19	20	0	37	278	469	1,504	-1,226
1224+00	50.00	10	0	24	19	0	40	297	469	1,544	-1,246
1224+50	50.00	10	0	23	19	0	44	316	469	1,587	-1,271
1225+00	50.00	11	0	13	19	0	33	335	469	1,620	-1,285
1225+50	50.00	6	0	13	16	0	24	351	469	1,644	-1,294
1226+00	50.00	21	0	1	25	0	13	376	469	1,657	-1,281
1226+50	50.00	21	0	0	39	0	0	415	469	1,657	-1,243
1226+90	40.00	19	0	0	30	0	0	444	469	1,657	-1,213
SUBTOTAL								444	469	1,657	

		IH 94 NB WIDENING - DIVISION 1									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1227+00	0.00	16	0	3	0	0	0	0	0	0	0
1227+50	50.00	41	0	1	53	0	4	53	0	4	49
1228+00	50.00	17	19	4	54	18	5	106	18	8	98
1228+50	50.00	4	19	47	19	35	47	126	53	56	70
1229+00	50.00	3	22	73	6	38	111	132	91	167	-34
1229+50	50.00	4	22	65	6	41	128	139	131	294	-156
1230+00	50.00	4	18	55	7	37	111	146	169	406	-259
1230+50	50.00	7	18	11	10	33	61	156	202	467	-310
1231+00	50.00	10	0	2	16	17	12	172	219	479	-306
1231+50	50.00	7	0	4	16	0	6	188	219	484	-296
1232+00	50.00	5	0	8	11	0	11	199	219	495	-296
1232+50	50.00	7	0	2	11	0	9	210	219	505	-294
1233+00	50.00	19	0	1	24	0	3	234	219	507	-273
1233+50	50.00	36	0	1	51	0	2	285	219	509	-224
1234+00	50.00	7	0	3	40	0	4	325	219	513	-188
1234+50	50.00	2	0	7	8	0	9	333	219	522	-189
1235+00	50.00	12	0	1	13	0	7	346	219	530	-183
1235+50	50.00	15	0	1	25	0	2	371	219	531	-160
1236+00	50.00	8	20	1	21	19	2	393	237	533	-141
1236+50	50.00	6	20	3	13	37	4	406	274	537	-131
1237+00	50.00	11	0	3	16	19	6	421	293	543	-121
1237+50	50.00	8	0	14	18	0	16	439	293	558	-119
1238+00	50.00	8	0	54	15	0	63	454	293	621	-168
1238+50	50.00	5	0	82	12	0	126	466	293	747	-281
1239+00	50.00	7	21	97	11	19	166	477	312	913	-436
1239+50	50.00	7	21	129	13	39	209	490	351	1,122	-632
1240+00	50.00	4	21	123	10	39	233	500	390	1,356	-856
1240+50	50.00	5	23	222	8	41	319	508	431	1,675	-1,167
1240+95	45.00	4	0	276	8	19	415	516	450	2,090	-1,574
SUBTOTAL								516	450	2,090	

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PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	EARTHWORK DATA	SHEET NO: 537	E

		IH 94 NB WIDENING - DIVISION 1									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1242+08	0.00	1	0	251	0	0	0	0	0	0	0
1242+50	42.00	15	0	32	12	0	220	12	0	220	-208
1243+00	50.00	12	0	2	25	0	31	37	0	252	-214
1243+50	50.00	6	0	2	17	0	4	54	0	255	-201
1244+00	50.00	5	0	1	10	0	3	64	0	258	-194
1244+50	50.00	11	0	1	15	0	2	79	0	260	-181
1245+00	50.00	18	0	0	27	0	1	106	0	261	-155
1245+50	50.00	15	0	1	31	0	1	137	0	262	-125
1246+00	50.00	6	0	2	19	0	3	156	0	265	-109
1246+50	50.00	11	0	3	16	0	5	172	0	269	-97
1247+00	50.00	7	0	15	17	0	17	188	0	286	-97
1247+50	50.00	5	0	25	11	0	37	199	0	323	-123
1248+00	50.00	5	0	23	9	0	44	209	0	367	-159
1248+50	50.00	9	0	5	13	0	26	222	0	393	-172
1249+00	50.00	25	0	0	31	0	5	253	0	398	-145
1249+50	50.00	38	0	1	58	0	1	312	0	399	-87
1250+00	50.00	67	0	0	97	0	1	409	0	400	9
1250+50	50.00	62	0	0	119	0	0	528	0	400	128
1251+00	50.00	62	0	0	115	0	0	643	0	400	243
1251+50	50.00	59	0	0	112	0	0	755	0	400	355
1252+00	50.00	61	0	0	111	0	0	866	0	400	466
1252+50	50.00	13	0	1	69	0	1	935	0	401	534
1253+00	50.00	10	0	3	21	0	4	956	0	404	552
1253+50	50.00	8	0	4	17	0	6	973	0	411	562
1254+00	50.00	7	0	5	14	0	8	987	0	419	567
1254+50	50.00	8	0	2	14	0	6	1,000	0	426	575
1255+00	50.00	8	0	1	15	0	3	1,015	0	428	587
1255+50	50.00	9	0	4	16	0	5	1,031	0	433	598
1256+00	50.00	12	0	3	19	0	6	1,050	0	440	611
1256+50	50.00	13	0	6	23	0	8	1,074	0	448	626

		IH 94 NB WIDENING - DIVISION 1									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1257+00	50.00	14	0	7	25	0	12	1,099	0	460	639
1257+50	50.00	15	0	9	27	0	15	1,125	0	475	651
1258+00	50.00	12	0	13	25	0	20	1,150	0	495	655
1258+50	50.00	22	0	19	31	0	30	1,182	0	525	657
1259+00	50.00	22	0	17	41	0	33	1,223	0	558	665
1259+50	50.00	20	0	19	39	0	33	1,262	0	591	670
1260+00	50.00	20	0	25	37	0	41	1,299	0	632	666
1260+50	50.00	17	0	27	34	0	48	1,333	0	680	653
1261+00	50.00	16	0	34	31	0	56	1,363	0	737	627
1261+50	50.00	16	0	37	30	0	66	1,393	0	803	590
1262+00	50.00	12	0	44	26	0	75	1,419	0	878	541
1262+50	50.00	12	0	43	22	0	81	1,441	0	958	483
1263+00	50.00	11	0	45	21	0	81	1,462	0	1,040	423
1263+50	50.00	10	0	46	19	0	84	1,482	0	1,124	358
1264+00	50.00	10	0	45	19	0	84	1,500	0	1,208	292
1264+50	50.00	8	0	52	17	0	90	1,517	0	1,298	219
1265+00	50.00	7	0	56	14	0	100	1,531	0	1,398	133
1265+50	50.00	7	0	53	13	0	101	1,544	0	1,499	45
1266+00	50.00	6	0	49	12	0	94	1,556	0	1,593	-37
1266+50	50.00	6	0	42	11	0	84	1,567	0	1,678	-110
1267+00	50.00	7	0	38	12	0	74	1,579	0	1,752	-172
1267+50	50.00	6	0	38	12	0	70	1,591	0	1,822	-231
1268+00	50.00	7	0	35	12	0	68	1,603	0	1,890	-286
SUBTOTAL								1,603	0	1,890	-286
IH 94 NB WIDENING					**2,563**	**918**	**5,637**	**2,563**	**918**	**5,637**	**-3,074**

		TEMP EXIT SE RAMP - DIVISION 1									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
TEMP EXIT SE RAMP											
1226SW+00	0.00	23	0	3	0	0	0	0	0	0	0
1226SW+50	50.00	29	0	0	48	0	3	48	0	3	45
1227SW+00	50.00	38	0	0	62	0	0	110	0	3	107
1227SW+50	50.00	41	0	0	73	0	0	183	0	3	180
1228SW+00	50.00	36	0	0	71	0	0	253	0	3	251
1228SW+50	50.00	52	0	0	81	0	0	334	0	3	331
1229SW+00	50.00	65	0	0	108	0	0	442	0	3	439
TEMP EXIT SE RAMP					**442**	**0**	**3**	**442**	**0**	**3**	**439**

		TEMP ENTRANCE NE RAMP - DIVISION 1									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
TEMP ENTRANCE NE RAMP											
1244TNE+50	0.00	82	0	0	0	0	0	0	0	0	0
1245TNE+00	50.00	94	0	0	163	0	0	163	0	0	163
1245TNE+50	50.00	88	0	0	168	0	0	331	0	0	331
1246TNE+00	50.00	94	0	0	168	0	0	500	0	0	500
1246TNE+50	50.00	60	0	0	143	0	0	642	0	0	642
1247TNE+00	50.00	23	0	0	76	0	0	718	0	0	718
1247TNE+50	50.00	23	0	0	42	0	0	760	0	0	760
1248TNE+00	50.00	13	0	7	33	0	6	793	0	6	787
1248TNE+50	50.00	16	0	0	27	0	6	820	0	12	808
1249TNE+00	50.00	23	0	0	36	0	0	857	0	12	845
1249TNE+50	50.00	28	0	0	47	0	0	904	0	12	892
1250TNE+00	50.00	28	0	0	51	0	0	955	0	12	943
1250TNE+50	50.00	27	0	0	51	0	0	1,006	0	12	994
1251TNE+00	50.00	32	0	0	54	0	0	1,060	0	12	1,048
1251TNE+50	50.00	37	0	0	64	0	0	1,124	0	12	1,112
1252TNE+00	50.00	44	0	0	75	0	0	1,199	0	12	1,187
TEMP ENTRANCE NE RAMP					**1,199**	**0**	**12**	**1,199**	**0**	**12**	**1,187**

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		IH 94 SB - DIVISION 2									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1213+00, BA, AH	0.00	90	21	49	0	0	0	0	0	0	0
1214+00	100.00	111	21	31	372	78	148	372	78	148	224
1215+00	100.00	137	22	25	459	80	104	831	157	252	580
1216+00	100.00	165	21	16	559	80	76	1,391	237	328	1,063
1217+00	100.00	179	21	13	637	78	54	2,028	315	381	1,646
1218+00	100.00	198	22	8	698	80	39	2,726	394	420	2,306
1219+00	100.00	196	27	11	730	91	35	3,456	485	456	3,000
1220+00	100.00	204	23	7	741	93	33	4,196	578	489	3,707
1221+00	100.00	215	23	8	776	85	28	4,972	663	517	4,456
1222+00	100.00	223	25	9	811	89	31	5,783	752	548	5,235
1223+00	100.00	232	21	9	843	85	33	6,626	837	581	6,044
1224+00	100.00	240	24	7	874	83	30	7,500	920	611	6,889
1225+00	100.00	243	29	6	894	98	24	8,394	1,019	635	7,759
1226+00	100.00	252	27	3	917	104	17	9,311	1,122	652	8,659
1227+00	100.00	245	20	1	920	87	7	10,231	1,209	659	9,572
1228+00	100.00	232	24	0	883	81	2	11,115	1,291	661	10,454
1229+00	100.00	197	0	4	794	44	7	11,909	1,335	669	11,241
1230+00	100.00	169	0	5	678	0	17	12,587	1,335	685	11,902
1231+00	100.00	121	38	6	537	70	20	13,124	1,406	706	12,419
1231+95, BK	95.00	91	0	11	373	67	30	13,497	1,472	735	12,762
1232+00	5.00	80	0	16	16	0	3	13,513	1,472	738	12,775
1233+00	100.00	53	0	82	246	0	181	13,759	1,472	919	12,840
1234+00	100.00	26	0	154	146	0	437	13,905	1,472	1,356	12,549
1235+00	100.00	12	0	200	70	0	656	13,976	1,472	2,012	11,964
1236+00	100.00	18	0	74	56	0	507	14,031	1,472	2,519	11,512
1237+00	100.00	18	0	103	67	0	328	14,098	1,472	2,847	11,251
1238+00	100.00	21	0	152	72	0	472	14,170	1,472	3,319	10,851
1239+00	100.00	22	0	258	80	0	759	14,250	1,472	4,079	10,171
1240+00	100.00	19	0	354	76	0	1,133	14,326	1,472	5,212	9,114
1240+64	64.00	24	24	573	51	28	1,099	14,377	1,501	6,311	8,066
1240+94, EA, BK	30.00	0	0	0	13	13	318	14,390	1,514	6,629	7,761
B-51-139											
1242+69, EA, AH	0.00	0	0	0	0	0	0	14,390	1,514	6,629	7,761
1242+99	30.00	56	0	254	31	0	141	14,421	1,514	6,770	7,651
1243+00	1.00	55	0	250	2	0	9	14,423	1,514	6,779	7,644
1244+00	100.00	25	0	235	148	0	898	14,571	1,514	7,678	6,894
1245+00	100.00	24	0	224	91	0	850	14,662	1,514	8,528	6,135
1246+00	100.00	37	0	109	113	0	617	14,775	1,514	9,144	5,631
1247+00	100.00	52	0	53	165	0	300	14,940	1,514	9,444	5,496
1248+00	100.00	94	0	16	270	0	128	15,210	1,514	9,572	5,638
1249+00	100.00	123	0	19	402	0	65	15,612	1,514	9,637	5,975
1250+00	100.00	151	0	24	507	0	80	16,120	1,514	9,717	6,403
1251+00	100.00	179	0	39	611	0	117	16,731	1,514	9,833	6,898
1252+00	100.00	191	0	38	685	0	143	17,416	1,514	9,976	7,440
1253+00	100.00	184	0	17	694	0	102	18,110	1,514	10,078	8,033
1253+85	85.00	221	0	20	638	0	58	18,748	1,514	10,136	8,612
1254+00	15.00	227	0	47	124	0	19	18,872	1,514	10,154	8,718
1255+00	100.00	240	0	23	865	0	130	19,737	1,514	10,284	9,453
1256+00	100.00	252	0	27	911	0	93	20,648	1,514	10,377	10,272
1257+00	100.00	236	0	59	904	0	159	21,552	1,514	10,536	11,016
1258+00	100.00	227	0	61	857	0	222	22,409	1,514	10,758	11,651

		IH 94 SB - DIVISION 2 - CONTINUED									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	Cut	EBS	Fill	Cut	EBS	Fill	MASS ORDINATE
1259+00	100.00	204	0	125	798	0	344	23,207	1,514	11,103	12,105
1260+00	100.00	206	0	146	759	0	502	23,967	1,514	11,604	12,362
1261+00	100.00	201	0	142	754	0	533	24,720	1,514	12,138	12,583
1262+00	100.00	203	0	133	748	0	509	25,469	1,514	12,647	12,822
1263+00	100.00	201	0	128	748	0	483	26,217	1,514	13,130	13,086
1264+00	100.00	195	0	111	733	0	443	26,950	1,514	13,573	13,377
1265+00	100.00	183	0	76	700	0	346	27,650	1,514	13,919	13,731
1266+00	100.00	179	0	121	670	0	365	28,320	1,514	14,284	14,036
1267+00	100.00	188	0	80	680	0	372	29,000	1,514	14,656	14,344
1268+00	100.00	195	0	40	709	0	222	29,709	1,514	14,879	14,831
IH 94 SB					**29,709**	**1,514**	**14,879**	**29,709**	**1,514**	**14,879**	**14,831**

		SW RAMP - DIVISION 2									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
SW ENTRANCE RAMP											
1231SW+96	0.00	0	20	63	0	0	0	0	0	0	0
1232SW+00	4.00	0	19	67	0	3	10	0	3	10	-10
1232SW+50	50.00	0	18	127	0	34	180	0	37	189	-189
1233SW+00	50.00	0	19	208	0	33	310	0	70	499	-499
1233SW+50	50.00	0	18	300	0	33	470	0	103	970	-970
1234SW+00	50.00	0	17	378	0	32	628	0	135	1,598	-1,598
1234SW+50	50.00	0	18	451	0	32	768	0	168	2,365	-2,365
1235SW+00	50.00	0	19	420	0	34	806	0	202	3,172	-3,172
1235SW+50	50.00	0	19	406	0	35	765	0	237	3,936	-3,936
1236SW+00	50.00	0	19	356	0	34	706	0	271	4,642	-4,642
1236SW+50	50.00	0	20	317	0	36	623	0	307	5,265	-5,265
1237SW+00	50.00	0	41	278	0	56	551	0	363	5,816	-5,816
1237SW+50	50.00	0	64	205	0	97	447	0	460	6,263	-6,263
1238SW+00	50.00	0	65	130	0	119	310	0	580	6,574	-6,574
1238SW+50	50.00	8	59	59	7	115	175	7	695	6,749	-6,741
1239SW+00	50.00	45	19	22	49	72	75	56	767	6,824	-6,767
1239SW+50	50.00	116	14	0	149	31	20	206	797	6,844	-6,638
1240SW+00	50.00	165	10	0	260	22	0	466	820	6,844	-6,378
1240SW+50	50.00	165	9	0	306	18	0	771	837	6,844	-6,073
1241SW+00	50.00	95	39	0	241	44	0	1,012	882	6,844	-5,832
1241SW+46	46.00	256	0	19	299	33	16	1,311	915	6,860	-5,549
SW RAMP					**1,311**	**915**	**6,860**	**1,311**	**915**	**6,860**	**-5,549**

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PROJECT NO: 1035-01-74 | HWY: IH 94 / 7 MILE ROAD | COUNTY: RACINE | EARTHWORK DATA | SHEET NO: 541 | E

FILE NAME : F:\BM1-1834B\10350174\roads\cds\7m090101_ew.ppt PLOT DATE : 6/18/2018 09:11 PLOT BY : scook PLOT NAME : 7m090101_ew PLOT SCALE : 1.000000:1.000000

STATION	DISTANCE	SW RAMP - DIVISION 2 AREA CONTAMINATED MATERIAL SF	INCREMENTAL VOLUME CONTAMINATED MATERIAL CY	CUMULATIVE VOLUME CONTAMINATED MATERIAL CY	(- WASTE) MASS ORDINATE CY
SW RAMP					
1239SW+50	50.00	0	0	0	0
1240SW+00	50.00	8	8	8	8
1240SW+50	50.00	9	16	24	24
1241SW+00	50.00	73	77	100	100
1241SW+46	46.00	0	62	163	163
SW RAMP			**163**	**163**	**163**

STATION	DISTANCE	NW RAMP - DIVISION 2 AREA (SF) CUT	EBS	FILL	INCREMENTAL VOLUME (CY) CUT	EBS	FILL	CUMULATIVE VOLUME (CY) CUT	EBS	FILL	(- WASTE) MASS ORDINATE
NW EXIT RAMP											
1242NW+25	0.00	339	0	22	0	0	0	0	0	0	0
1242NW+50	25.00	290	0	10	291	0	15	291	0	15	276
1243NW+00	50.00	345	0	1	588	0	10	879	0	25	854
1243NW+50	50.00	344	0	0	638	0	1	1,517	0	26	1,491
1244NW+00	50.00	318	0	0	613	0	0	2,130	0	26	2,104
1244NW+50	50.00	260	0	0	535	0	0	2,665	0	26	2,639
1245NW+00	50.00	204	0	0	430	0	0	3,095	0	26	3,069
1245NW+50	50.00	184	0	1	359	0	1	3,454	0	27	3,427
1246NW+00	50.00	160	0	4	319	0	5	3,773	0	31	3,741
1246NW+50	50.00	218	0	9	350	0	12	4,123	0	44	4,079
1247NW+00	50.00	155	0	11	345	0	19	4,468	0	62	4,406
1247NW+50	50.00	103	0	9	239	0	19	4,707	0	81	4,626
1248NW+00	50.00	112	0	14	199	0	21	4,906	0	102	4,804
1248NW+50	50.00	83	0	30	181	0	41	5,087	0	143	4,944
1249NW+00	50.00	91	0	66	161	0	89	5,248	0	231	5,016
1249NW+50	50.00	111	0	89	187	0	144	5,435	0	375	5,060
1250NW+00	50.00	117	0	101	211	0	176	5,646	0	551	5,095
1250NW+50	50.00	93	0	107	194	0	193	5,840	0	744	5,097
1251NW+00	50.00	8	0	123	94	0	213	5,934	0	956	4,977
1251NW+50	50.00	2	0	125	9	0	230	5,943	0	1,186	4,757
1252NW+00	50.00	2	0	101	4	0	209	5,947	0	1,395	4,551
1252NW+50	50.00	4	0	63	6	0	152	5,952	0	1,547	4,405
1253NW+00	50.00	7	0	67	10	0	120	5,963	0	1,668	4,295
1253NW+50	50.00	10	0	81	16	0	137	5,978	0	1,805	4,174
1253NW+85	35.00	14	0	82	16	0	106	5,994	0	1,910	4,084
NW RAMP					**5,994**	**0**	**1,910**	**5,994**	**0**	**1,910**	**4,084**

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PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	EARTHWORK DATA	SHEET NO: 542	E

		IH 94 NB - DIVISION 3									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1213+00, BA, AH	0.00	120	0	63	0	0	0	0	0	0	0
1214+00	100.00	126	0	51	456	0	211	456	0	211	244
1215+00	100.00	139	0	44	491	0	176	946	0	387	559
1216+00	100.00	156	0	49	546	0	172	1,493	0	559	933
1217+00	100.00	171	0	48	606	0	180	2,098	0	739	1,359
1218+00	100.00	180	0	43	650	0	169	2,748	0	907	1,841
1219+00	100.00	180	0	38	667	0	150	3,415	0	1,057	2,357
1220+00	100.00	189	0	23	683	0	113	4,098	0	1,170	2,928
1221+00	100.00	191	0	14	704	0	69	4,802	0	1,239	3,563
1222+00	100.00	198	0	16	720	0	56	5,522	0	1,294	4,228
1223+00	100.00	206	0	24	748	0	74	6,270	0	1,369	4,902
1224+00	100.00	229	0	28	806	0	96	7,076	0	1,465	5,611
1225+00	100.00	223	0	28	837	0	104	7,913	0	1,569	6,344
1226+00	100.00	240	0	8	857	0	67	8,770	0	1,635	7,135
1227+00	100.00	269	0	0	943	0	15	9,713	0	1,650	8,063
1228+00	100.00	252	0	0	965	0	0	10,678	0	1,650	9,028
1229+00	100.00	216	0	81	867	0	150	11,544	0	1,800	9,744
1230+00	100.00	158	0	148	693	0	424	12,237	0	2,224	10,013
1230+44, BK	44.00	156	0	50	256	0	161	12,493	0	2,385	10,107
1231+00	56.00	155	0	7	323	0	59	12,815	0	2,445	10,371
1232+00	100.00	137	0	19	541	0	48	13,356	0	2,493	10,863
1233+00	100.00	135	0	18	504	0	69	13,860	0	2,561	11,299
1234+00	100.00	104	0	14	443	0	59	14,302	0	2,620	11,682
1235+00	100.00	85	0	15	350	0	54	14,652	0	2,674	11,978
1236+00	100.00	89	0	16	322	0	57	14,975	0	2,732	12,243
1237+00	100.00	73	0	21	300	0	69	15,275	0	2,800	12,475
1238+00	100.00	67	0	87	259	0	200	15,534	0	3,000	12,534
1239+00	100.00	52	0	154	220	0	446	15,754	0	3,446	12,308
1240+00	100.00	43	0	226	176	0	704	15,930	0	4,150	11,780
1240+64	64.00	40	0	360	98	0	695	16,029	0	4,845	11,184
1240+94, EA, BK	30.00	0	0	0	22	0	200	16,051	0	5,045	11,006
B-51-140											
1242+69, EA, AH	0.00	0	0	0	0	0	0	16,051	0	5,045	11,006
1242+99	30.00	14	0	99	8	0	55	16,059	0	5,100	10,959
1243+00	1.00	14	0	98	1	0	4	16,059	0	5,103	10,956
1244+00	100.00	47	0	42	113	0	259	16,172	0	5,363	10,810
1245+00	100.00	75	0	20	226	0	115	16,398	0	5,477	10,921
1246+00	100.00	76	0	25	280	0	83	16,678	0	5,561	11,117
1247+00	100.00	86	0	32	300	0	106	16,978	0	5,666	11,311
1248+00	100.00	123	0	31	387	0	117	17,365	0	5,783	11,582
1249+00	100.00	184	0	3	569	0	63	17,933	0	5,846	12,087
1250+00	100.00	211	0	0	731	0	6	18,665	0	5,851	12,813
1251+00	100.00	228	0	0	813	0	0	19,478	0	5,851	13,626
1252+00	100.00	228	0	1	844	0	2	20,322	0	5,853	14,469
1253+00	100.00	252	0	21	889	0	41	21,211	0	5,894	15,317
1254+00	100.00	246	0	23	922	0	81	22,133	0	5,975	16,158
1255+00	100.00	246	0	25	911	0	89	23,044	0	6,064	16,980
1256+00	100.00	252	0	30	922	0	102	23,967	0	6,166	17,800
1257+00	100.00	240	0	40	911	0	130	24,878	0	6,296	18,582
1258+00	100.00	225	0	71	861	0	206	25,739	0	6,501	19,237

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		IH 94 NB - DIVISION 3 - CONTINUED									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	Cut	EBS	Fill	Cut	EBS	Fill	Cut	EBS	Fill	MASS ORDINATE
1259+00	100.00	207	0	47	800	0	219	26,539	0	6,720	19,819
1260+00	100.00	212	0	50	776	0	180	27,315	0	6,900	20,415
1261+00	100.00	212	0	65	785	0	213	28,100	0	7,113	20,987
1262+00	100.00	204	0	60	770	0	231	28,870	0	7,344	21,526
1263+00	100.00	197	0	60	743	0	222	29,613	0	7,566	22,047
1264+00	100.00	194	0	52	724	0	207	30,337	0	7,774	22,563
1265+00	100.00	181	0	57	694	0	202	31,031	0	7,975	23,056
1266+00	100.00	182	0	44	672	0	187	31,704	0	8,163	23,541
1267+00	100.00	189	0	33	687	0	143	32,391	0	8,305	24,086
1268+00	100.00	210	0	26	739	0	109	33,129	0	8,414	24,715
IH 94 NB					**33,129**	**0**	**8,414**	**33,129**	**0**	**8,414**	**24,715**

		SE RAMP - DIVISON 3									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
SE EXIT RAMP											
1230SE+42	0.00	0	17	65	0	0	0	0	0	0	0
1230SE+50	7.78	0	17	132	0	5	28	0	5	28	-28
1231SE+00	50.00	3	17	119	3	31	232	3	36	261	-258
1231SE+50	50.00	2	17	122	5	31	223	7	68	484	-477
1232SE+00	50.00	4	17	127	6	31	231	13	99	714	-702
1232SE+50	50.00	20	19	105	22	33	215	35	133	929	-894
1233SE+00	50.00	41	18	76	56	34	168	92	167	1,097	-1,005
1233SE+50	50.00	44	18	59	79	33	125	170	200	1,222	-1,052
1234SE+00	50.00	33	18	54	71	33	105	242	234	1,327	-1,085
1234SE+50	50.00	31	15	89	59	31	132	301	264	1,459	-1,158
1235SE+00	50.00	41	18	84	67	31	160	368	295	1,619	-1,252
1235SE+50	50.00	18	19	73	55	34	145	422	329	1,764	-1,342
1236SE+00	50.00	6	19	60	22	35	123	444	364	1,888	-1,443
1236SE+50	50.00	10	19	51	15	35	103	459	399	1,990	-1,531
1237SE+00	50.00	7	21	34	16	37	79	475	436	2,069	-1,594
1237SE+50	50.00	26	0	54	31	19	81	506	456	2,151	-1,645
1238SE+00	50.00	47	14	49	68	13	95	573	469	2,246	-1,673
1238SE+50	50.00	69	24	78	108	35	118	681	504	2,364	-1,683
1239SE+00	50.00	80	20	36	138	41	106	819	545	2,469	-1,650
1239SE+50	50.00	95	0	17	162	19	49	981	563	2,518	-1,537
1240SE+00	50.00	121	0	7	200	0	22	1,181	563	2,540	-1,360
1240SE+50	50.00	180	0	8	279	0	14	1,459	563	2,554	-1,095
1241SE+00	50.00	155	0	0	310	0	7	1,770	563	2,562	-792
1241SE+36	35.85	114	0	0	179	0	0	1,948	563	2,562	-614
SE RAMP					**1,948**	**563**	**2,562**	**1,948**	**563**	**2,562**	**-614**

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PROJECT NO: 1035-01-74 | HWY: IH 94 / 7 MILE ROAD | COUNTY: RACINE | EARTHWORK DATA | SHEET NO: 544 | E

STATION	DISTANCE	SE RAMP - DIVISION 3 AREA CONTAMINATED MATERIAL SF	INCREMENTAL VOLUME CONTAMINATED MATERIAL CY	CUMULATIVE VOLUME CONTAMINATED MATERIAL CY	(- WASTE) MASS ORDINATE CY
SE RAMP					
1239SE+25	0.00	0	0	0	0
1239SE+50	25.00	83	38	38	38
1240SE+00	50.00	102	171	209	209
1240SE+50	50.00	150	233	442	442
1241SE+00	50.00	143	271	714	714
1241SE+25	25.00	0	66	780	780
SE RAMP			780	780	780

STATION	DISTANCE	SE RAMP - DIVISION 3 AREA DISPOSED ON-SITE CONTAM. MATERIAL SF	INCREMENTAL VOLUME DISPOSED ON-SITE CONTAM. MATERIAL CY	CUMULATIVE VOLUME DISPOSED ON-SITE CONTAM. MATERIAL CY	(- WASTE) MASS ORDINATE CY
SE RAMP					
1239SE+25	25.00	0	0	0	0
1239SE+50	25.00	128	59	59	59
1240SE+00	50.00	146	254	313	313
1240SE+50	50.00	238	356	669	669
1240SE+75	25.40	0	112	780	780
SE RAMP			780	780	780

STATION	DISTANCE	NE RAMP - DIVISION 3 AREA (SF) CUT	EBS	FILL	INCREMENTAL VOLUME (CY) CUT	EBS	FILL	CUMULATIVE VOLUME (CY) CUT	EBS	FILL	(- WASTE) Mass Ordinate
NE RAMP											
1241NE+78	0.00	115	0	23	0	0	0	0	0	0	0
1242NE+00	21.89	244	0	3	146	0	11	146	0	11	135
1242NE+50	50.00	643	0	0	821	0	3	967	0	13	954
1243NE+00	50.00	462	0	0	1,023	0	0	1,990	0	13	1,977
1243NE+50	50.00	471	0	0	864	0	0	2,854	0	13	2,841
1244NE+00	50.00	477	0	0	878	0	0	3,732	0	13	3,718
1244NE+50	50.00	519	0	0	922	0	0	4,654	0	13	4,641
1245NE+00	50.00	453	0	0	900	0	0	5,554	0	13	5,541
1245NE+50	50.00	404	0	0	794	0	0	6,347	0	13	6,334
1246NE+00	50.00	378	0	0	724	0	0	7,071	0	13	7,058
1246NE+50	50.00	355	0	0	679	0	0	7,750	0	13	7,737
1247NE+00	50.00	293	0	0	600	0	0	8,350	0	13	8,337
1247NE+50	50.00	258	0	0	510	0	0	8,860	0	13	8,847
1248NE+00	50.00	216	0	0	439	0	0	9,299	0	13	9,286
1248NE+50	50.00	218	0	0	402	0	0	9,701	0	13	9,688
1249NE+00	50.00	194	0	0	381	0	0	10,083	0	13	10,069
1249NE+50	50.00	145	0	0	314	0	0	10,396	0	13	10,383
1250NE+00	50.00	123	0	0	248	0	0	10,645	0	13	10,631
1250NE+50	50.00	82	0	0	190	0	0	10,834	0	13	10,821
1251NE+00	50.00	53	0	2	125	0	2	10,959	0	15	10,944
1251NE+50	50.00	34	0	28	81	0	28	11,040	0	43	10,997
1252NE+00	50.00	27	0	19	56	0	44	11,096	0	86	11,010
1252NE+50	50.00	27	0	20	50	0	36	11,146	0	123	11,024
1252NE+98	48.00	25	0	32	46	0	46	11,193	0	169	11,024
NE RAMP					11,193	0	169	11,193	0	169	11,024

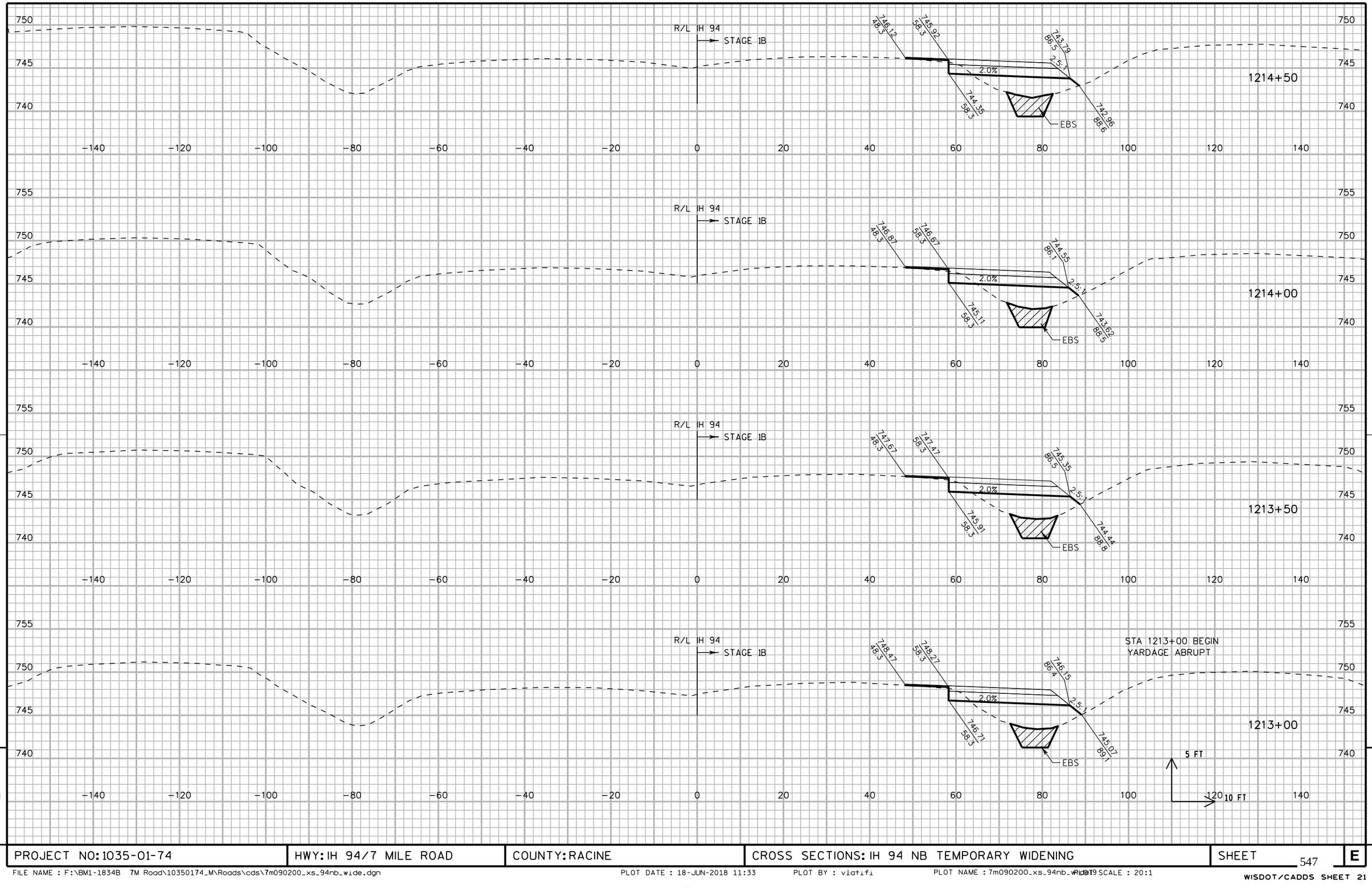
		IH 94 SB WIDENING REMOVAL AND RESTORATION - DIVISION 4									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1213+00	0.00	1	0	1	0	0	0	0	0	0	0
1213+50	50.00	1	0	1	2	0	2	2	0	2	0
1214+00	50.00	1	0	2	2	0	3	4	0	4	-1
1214+50	50.00	1	0	2	1	0	3	5	0	8	-2
1215+00	50.00	1	0	1	2	0	3	7	0	10	-3
1215+50	50.00	1	0	1	2	0	2	9	0	12	-4
1216+00	50.00	1	0	1	2	0	2	10	0	15	-4
1216+50	50.00	1	0	1	2	0	2	12	0	17	-4
1217+00	50.00	0	0	1	1	0	2	14	0	19	-5
1217+50	50.00	0	0	1	0	0	2	14	0	21	-7
1217+84	34.00	0	0	1	0	0	1	14	0	22	-8
SUBTOTAL								14	0	22	
1232+00	0.00	3	0	1	0	0	0	0	0	0	0
1232+50	50.00	3	0	1	5	0	3	5	0	3	2
1233+00	50.00	0	0	3	3	0	4	8	0	6	1
1233+50	50.00	0	0	3	1	0	5	8	0	12	-4
1234+00	50.00	1	0	1	1	0	4	9	0	15	-6
1234+50	50.00	1	0	1	2	0	2	11	0	18	-7
1235+00	50.00	3	0	1	4	0	2	15	0	20	-5
1235+50	50.00	3	0	1	5	0	2	20	0	22	-2
1236+00	50.00	2	0	1	4	0	2	24	0	24	1
1236+50	50.00	2	0	1	4	0	2	28	0	25	3
1237+00	50.00	1	0	1	3	0	2	31	0	27	4
1237+50	50.00	1	0	1	2	0	2	33	0	29	4
1238+00	50.00	1	0	0	2	0	1	35	0	30	5
1238+50	50.00	1	0	0	2	0	1	36	0	31	6
1239+00	50.00	0	0	25	1	0	24	37	0	54	-17
1239+50	50.00	0	0	25	0	0	46	37	0	100	-63
1240+00	50.00	0	0	4	0	0	26	37	0	127	-90
1240+50	50.00	0	0	4	0	0	6	37	0	133	-96
SUBTOTAL								37	0	133	

		IH 94 SB WIDENING REMOVAL AND RESTORATION - DIVISION 4									
		AREA (SF)			INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			(- WASTE)
STATION	DISTANCE	CUT	EBS	FILL	CUT	EBS	FILL	CUT	EBS	FILL	MASS ORDINATE
1243+15	0.00	0	0	2	0	0	0	0	0	0	0
1243+50	35.00	0	0	2	0	0	2	0	0	2	-2
1244+00	50.00	0	0	2	0	0	4	0	0	6	-6
1244+50	50.00	0	0	2	0	0	4	0	0	10	-10
1245+00	50.00	0	0	13	0	0	13	0	0	23	-23
1245+50	50.00	0	0	13	0	0	23	0	0	46	-46
1246+00	50.00	12	0	4	11	0	15	11	0	61	-50
1246+50	50.00	12	0	4	23	0	7	34	0	68	-34
1247+00	50.00	0	0	13	12	0	15	46	0	83	-37
1247+50	50.00	0	0	13	0	0	24	46	0	107	-61
1248+00	50.00	0	0	8	0	0	19	47	0	127	-80
1248+50	50.00	0	0	8	1	0	15	47	0	142	-94
1249+00	50.00	1	0	6	1	0	13	48	0	155	-107
1249+50	50.00	1	0	6	1	0	11	49	0	166	-117
1250+00	50.00	4	0	3	4	0	8	53	0	174	-122
1250+50	50.00	4	0	3	7	0	5	59	0	179	-120
1251+00	50.00	2	0	3	5	0	5	64	0	184	-120
1251+50	50.00	2	0	3	4	0	5	68	0	189	-121
1252+00	50.00	4	0	2	5	0	5	73	0	194	-121
1252+50	50.00	4	0	2	6	0	4	79	0	198	-118
1253+00	50.00	0	0	10	3	0	11	83	0	209	-126
1253+50	50.00	0	0	10	0	0	18	83	0	226	-144
1253+75	25.00	0	0	10	0	0	9	83	0	235	-153
SUBTOTAL								83	0	235	
1264+45	0.00	1	0	19	0	0	0	0	0	0	0
1264+50	5.00	1	0	19	0	0	4	0	0	4	-3
1265+00	50.00	1	0	19	2	0	36	3	0	39	-37
1265+50	50.00	1	0	19	2	0	36	5	0	75	-70
1266+00	50.00	22	0	7	22	0	24	27	0	99	-73
1266+50	50.00	22	0	7	41	0	13	68	0	112	-44
1267+00	50.00	20	0	7	39	0	12	106	0	124	-18
1267+50	50.00	20	0	7	36	0	12	143	0	136	6
1268+00	50.00	2	0	1	20	0	7	162	0	143	19
SUBTOTAL								162	0	143	
IH 94 SB WIDENING REMOVAL					**296**	**0**	**534**	**296**	**0**	**534**	**-237**

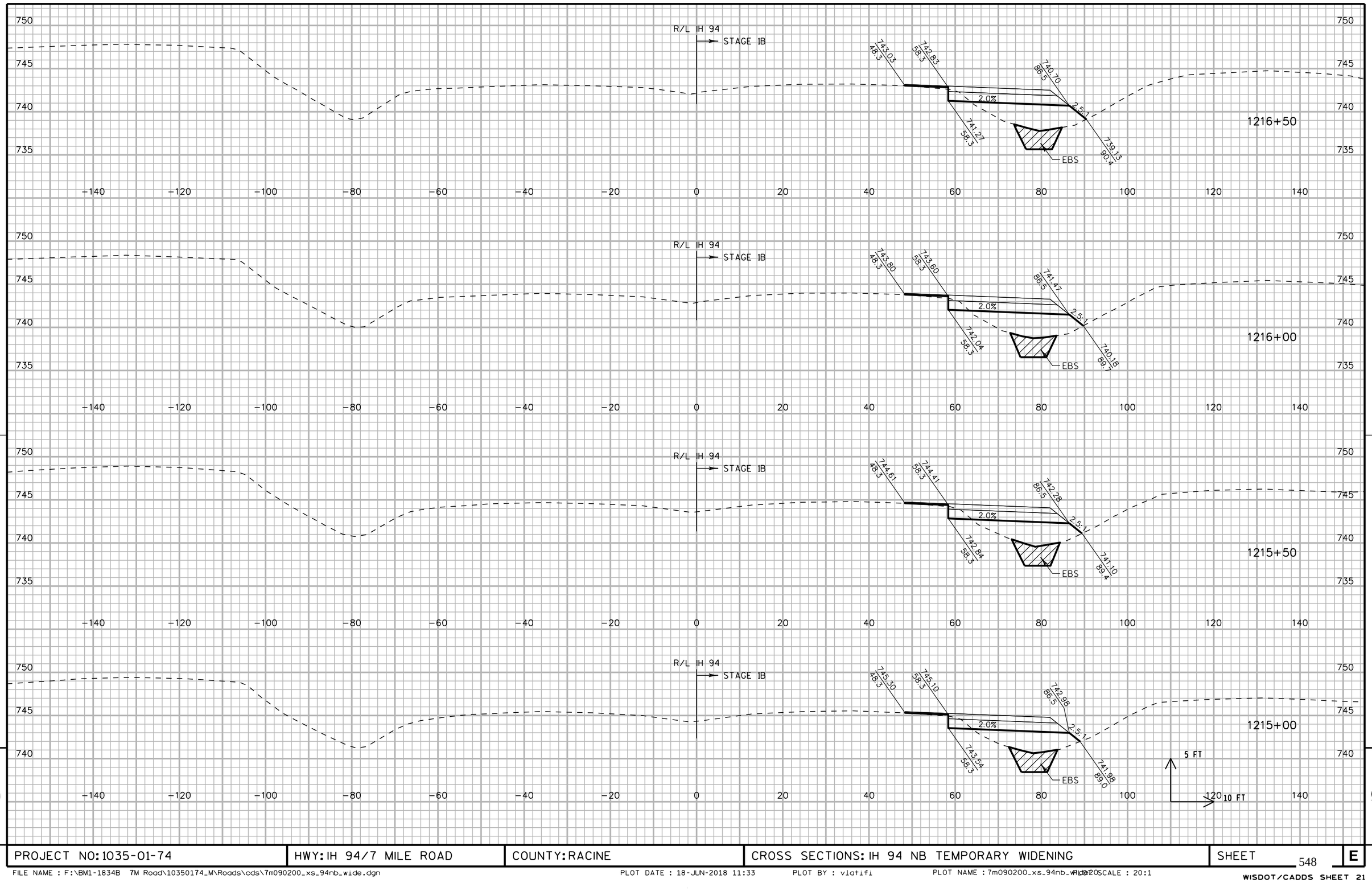
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PROJECT NO: 1035-01-74	HWY: IH 94 / 7 MILE ROAD	COUNTY: RACINE	EARTHWORK DATA	SHEET NO: 546	E



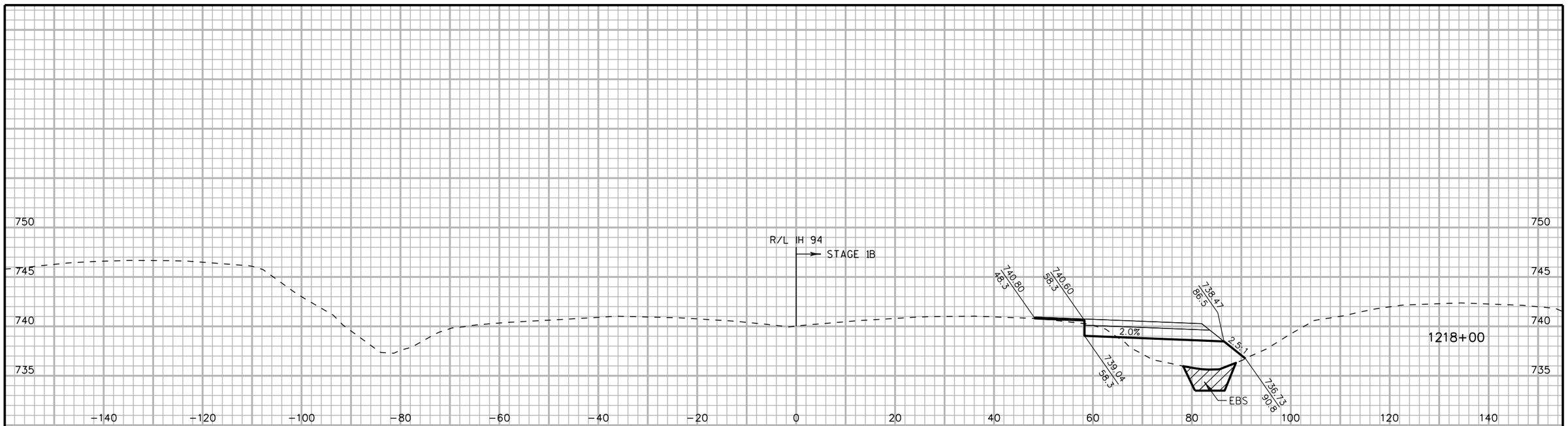
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 547	E

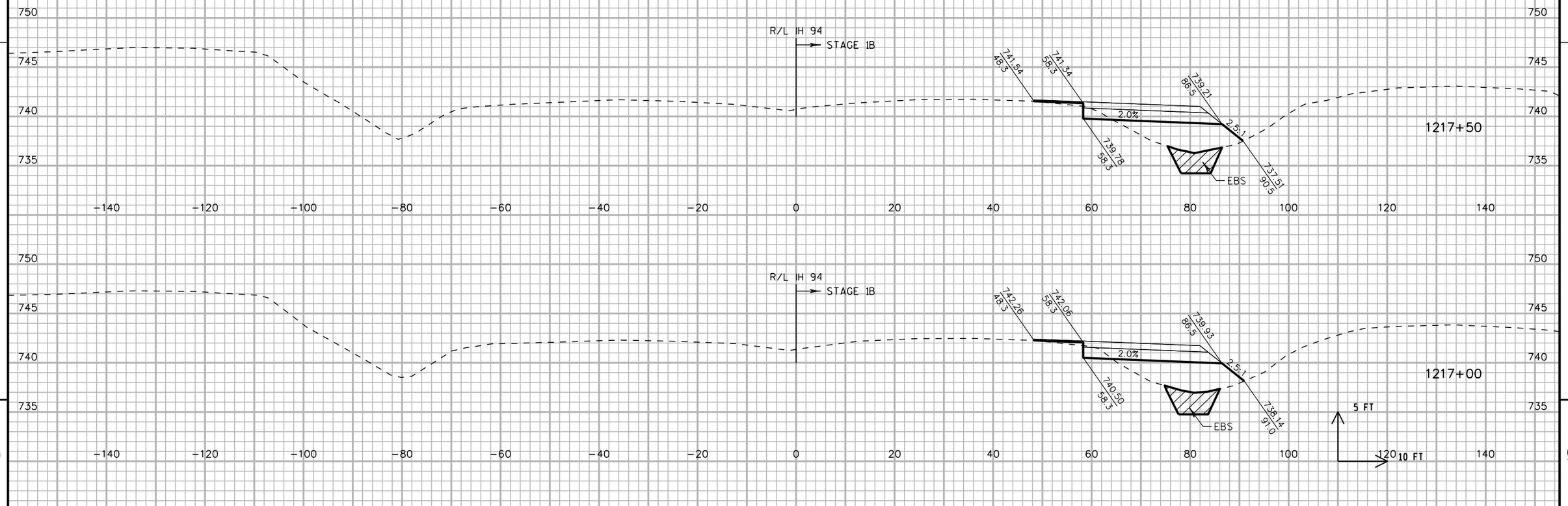


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 548 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pdf PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

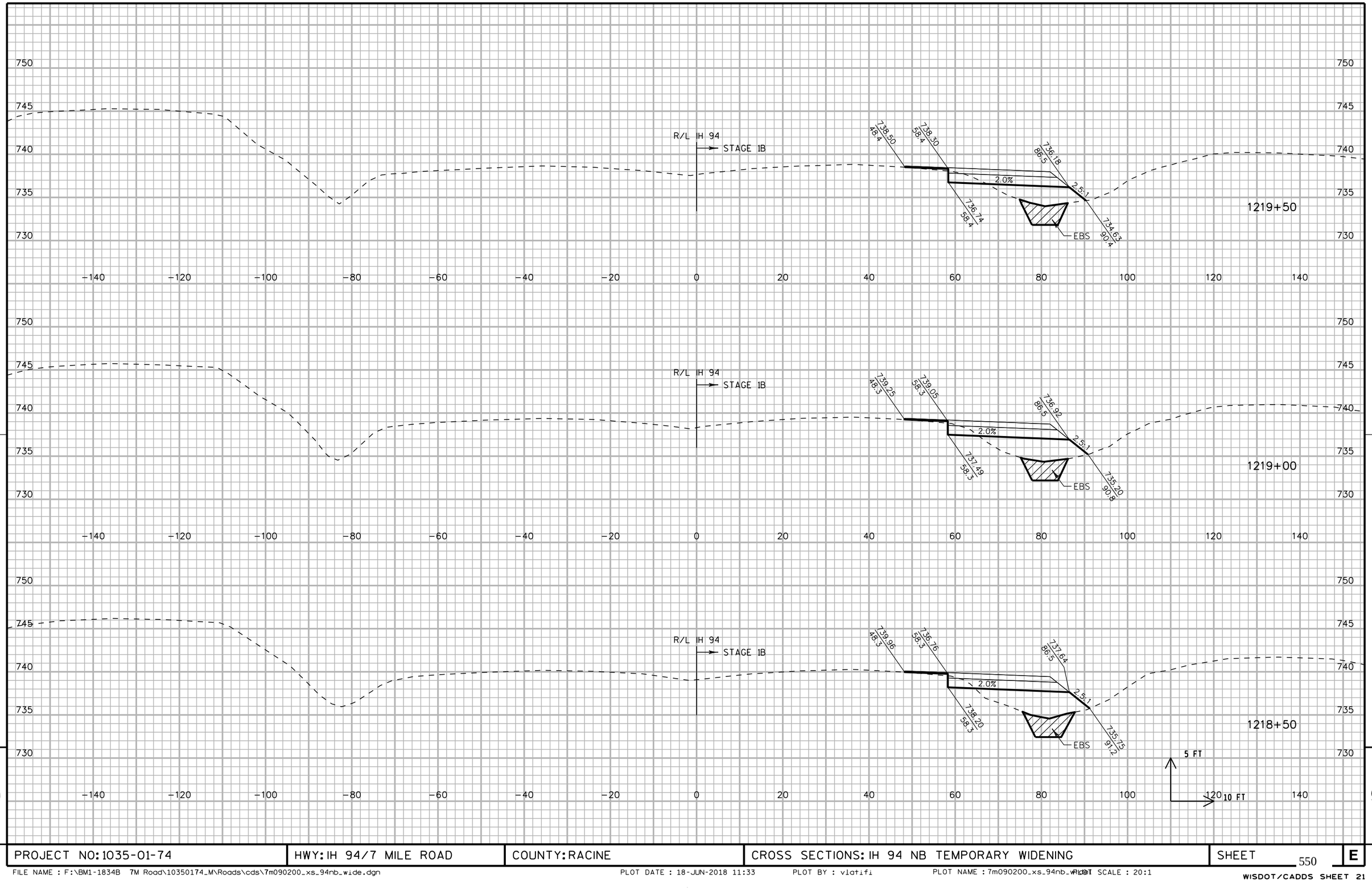




PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 549 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.dgn PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 550	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide PLOT SCALE : 20:1

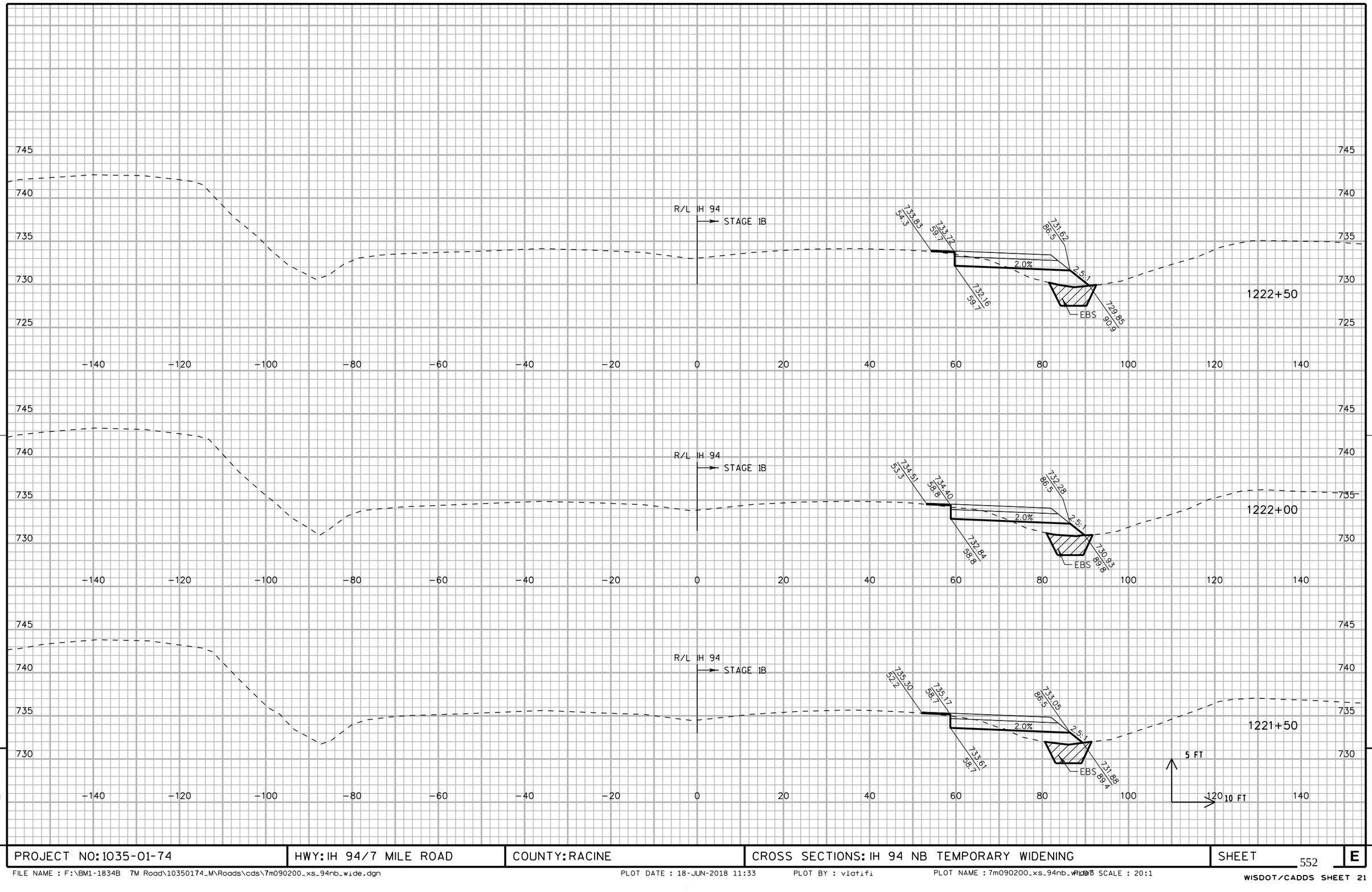
WISDOT/CADDS SHEET 21

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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 551	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pdf PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



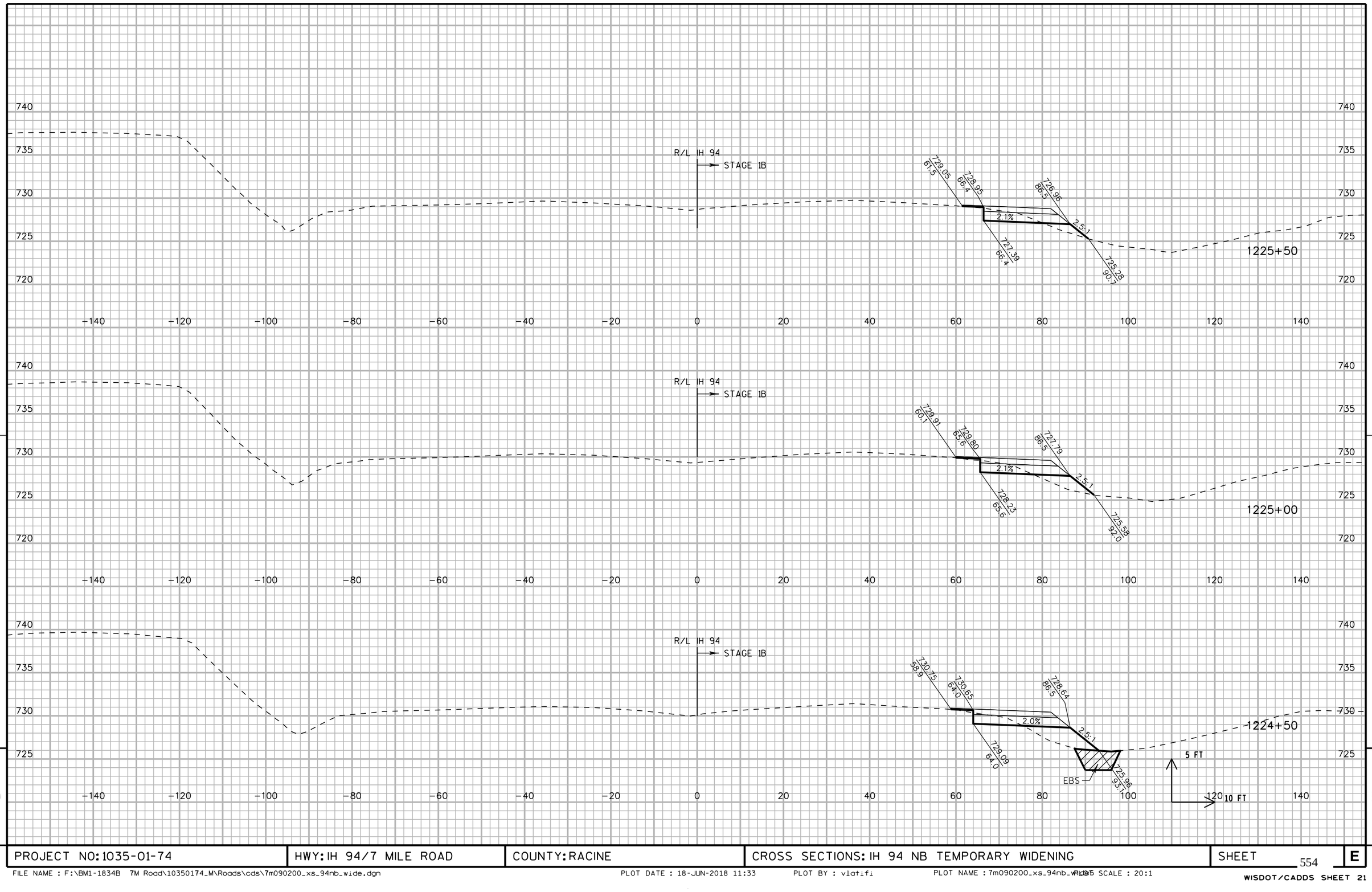
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pltPLOT SCALE : 20:1

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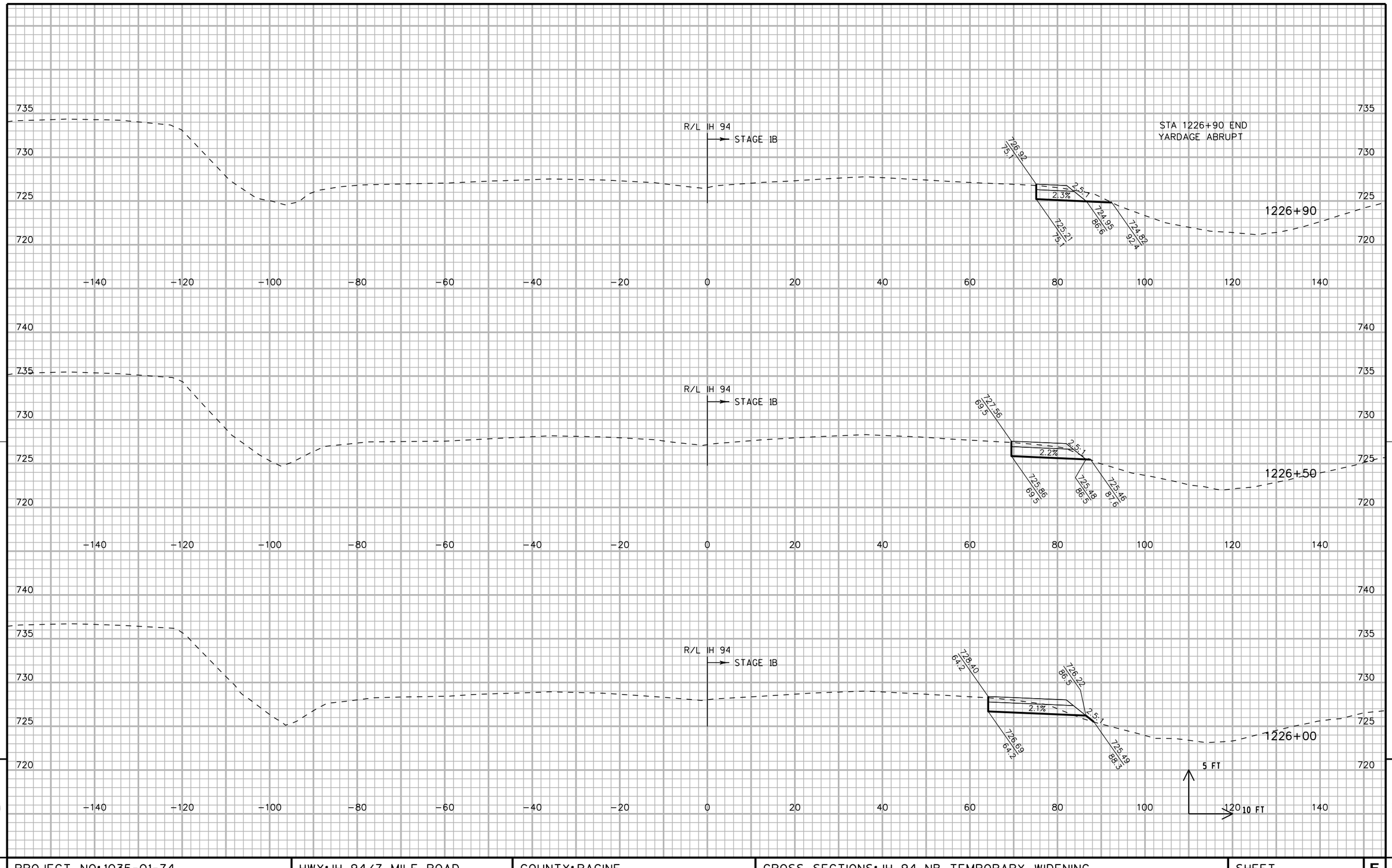
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 553	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 554	E

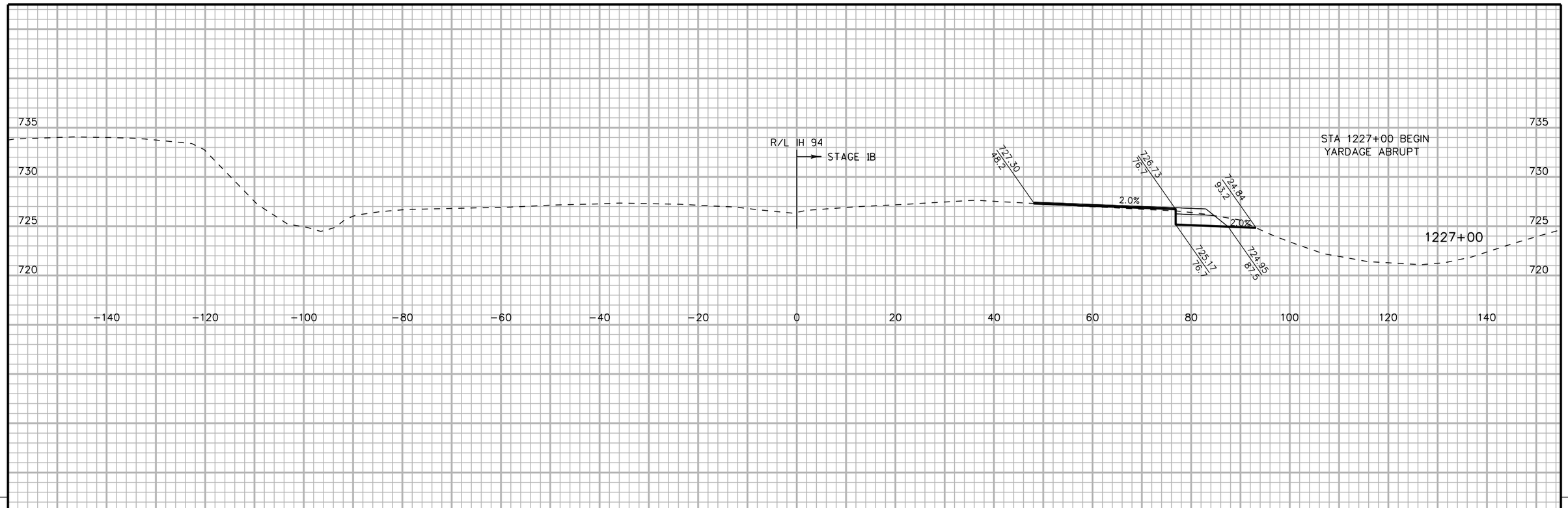
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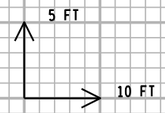
WISDOT/CADDS SHEET 21



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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 555	E



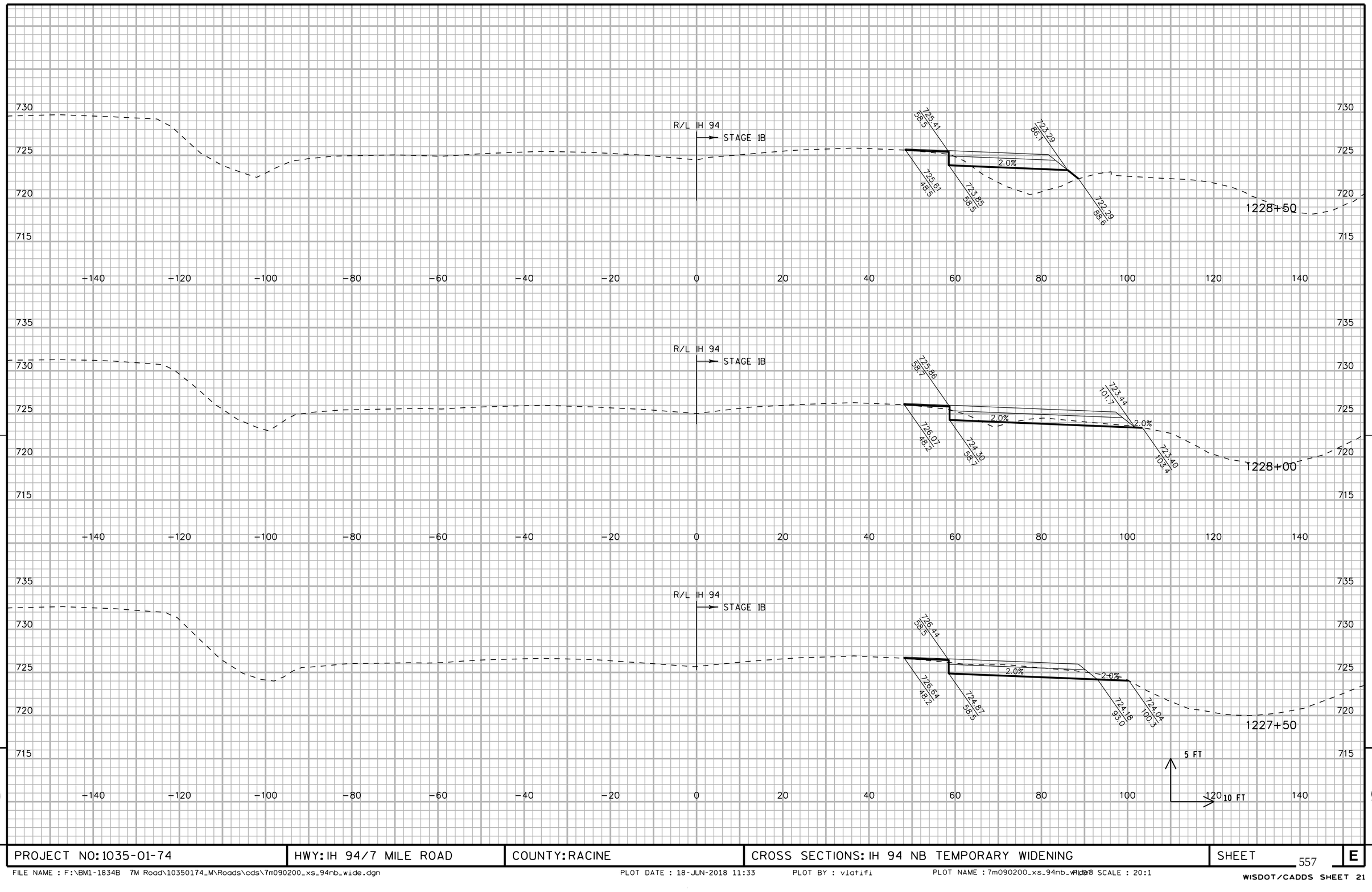


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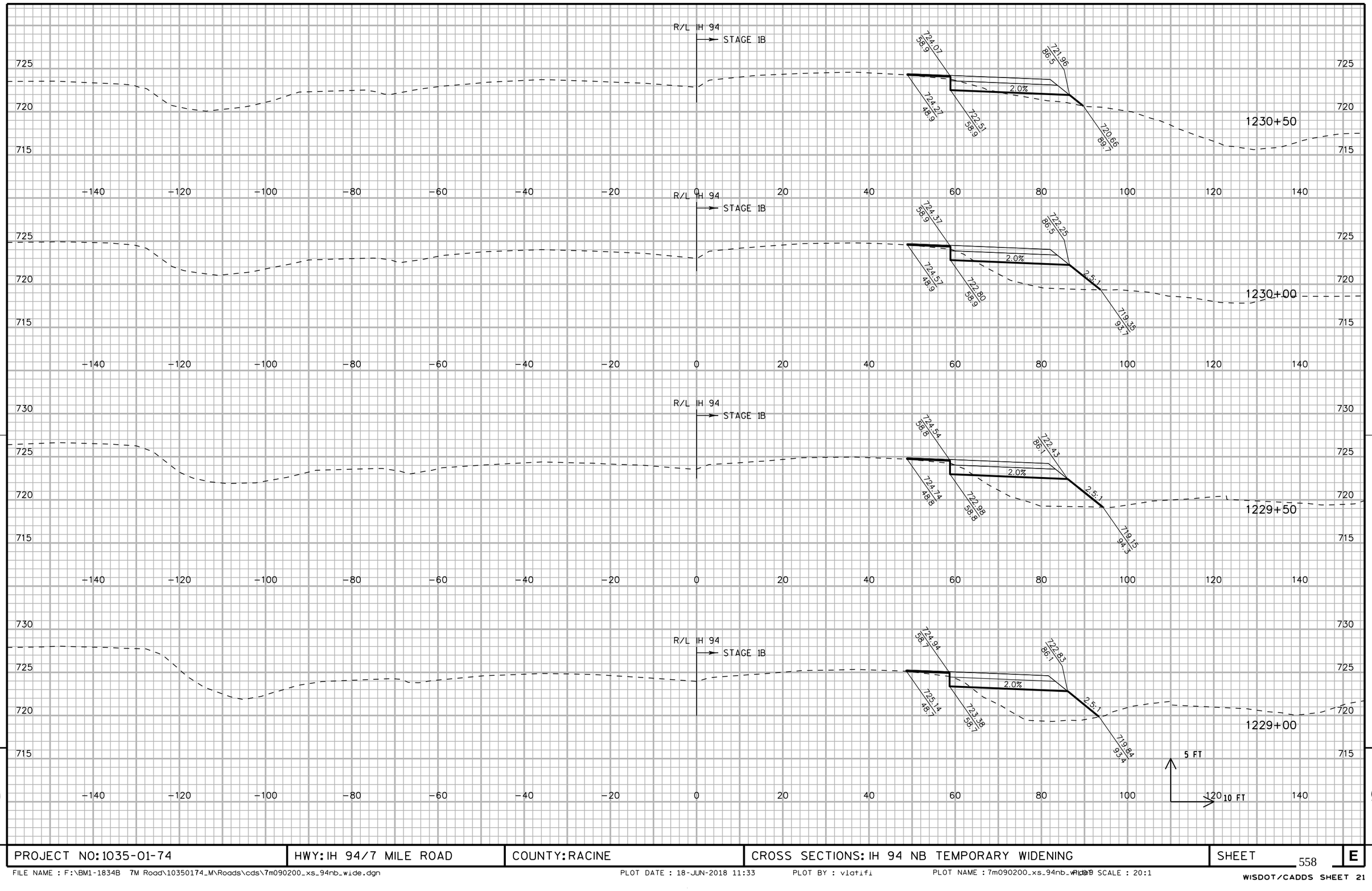
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pdf PLOT SCALE : 20:1

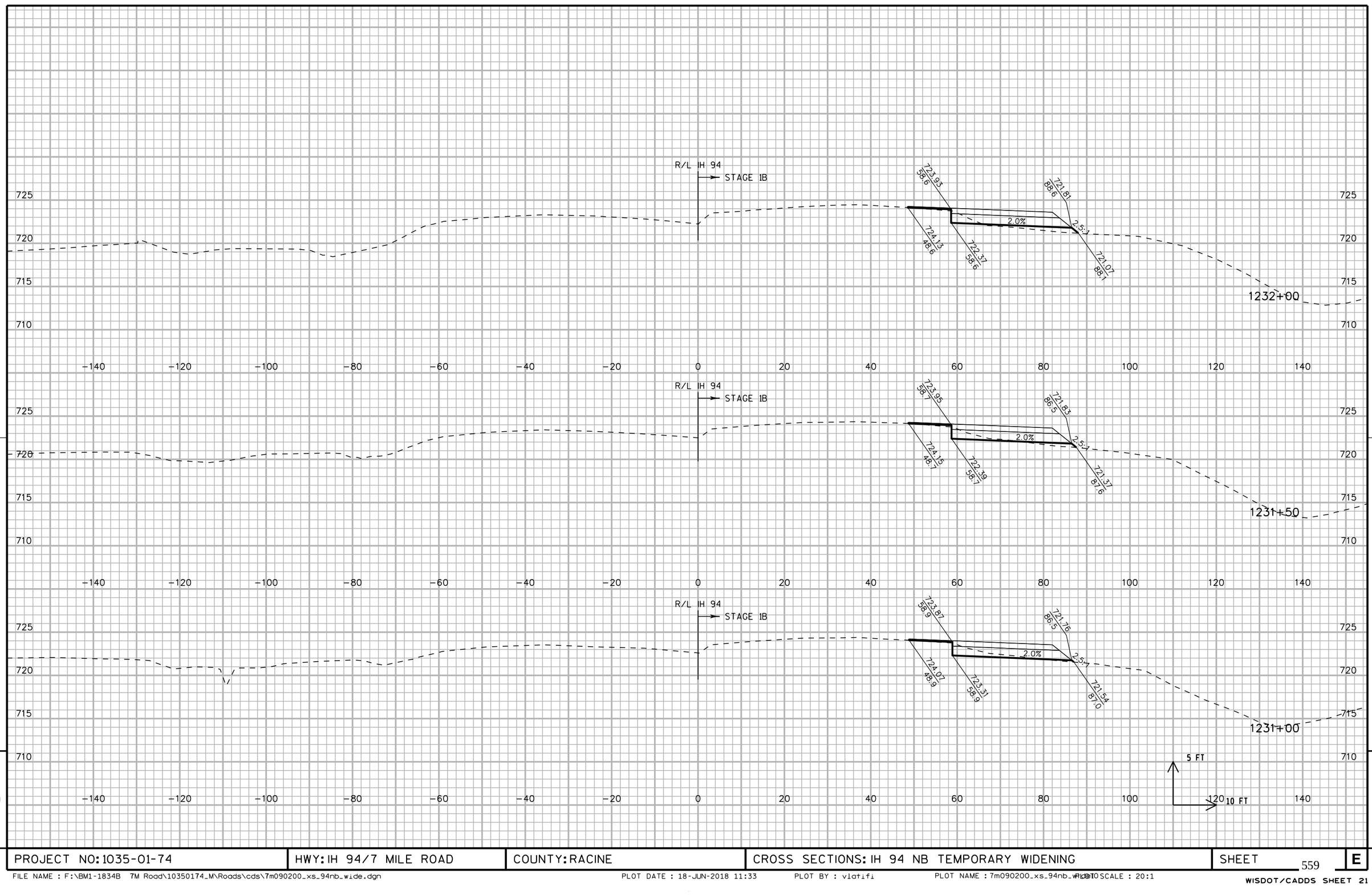


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 557	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.dgn PLOT SCALE : 20:1

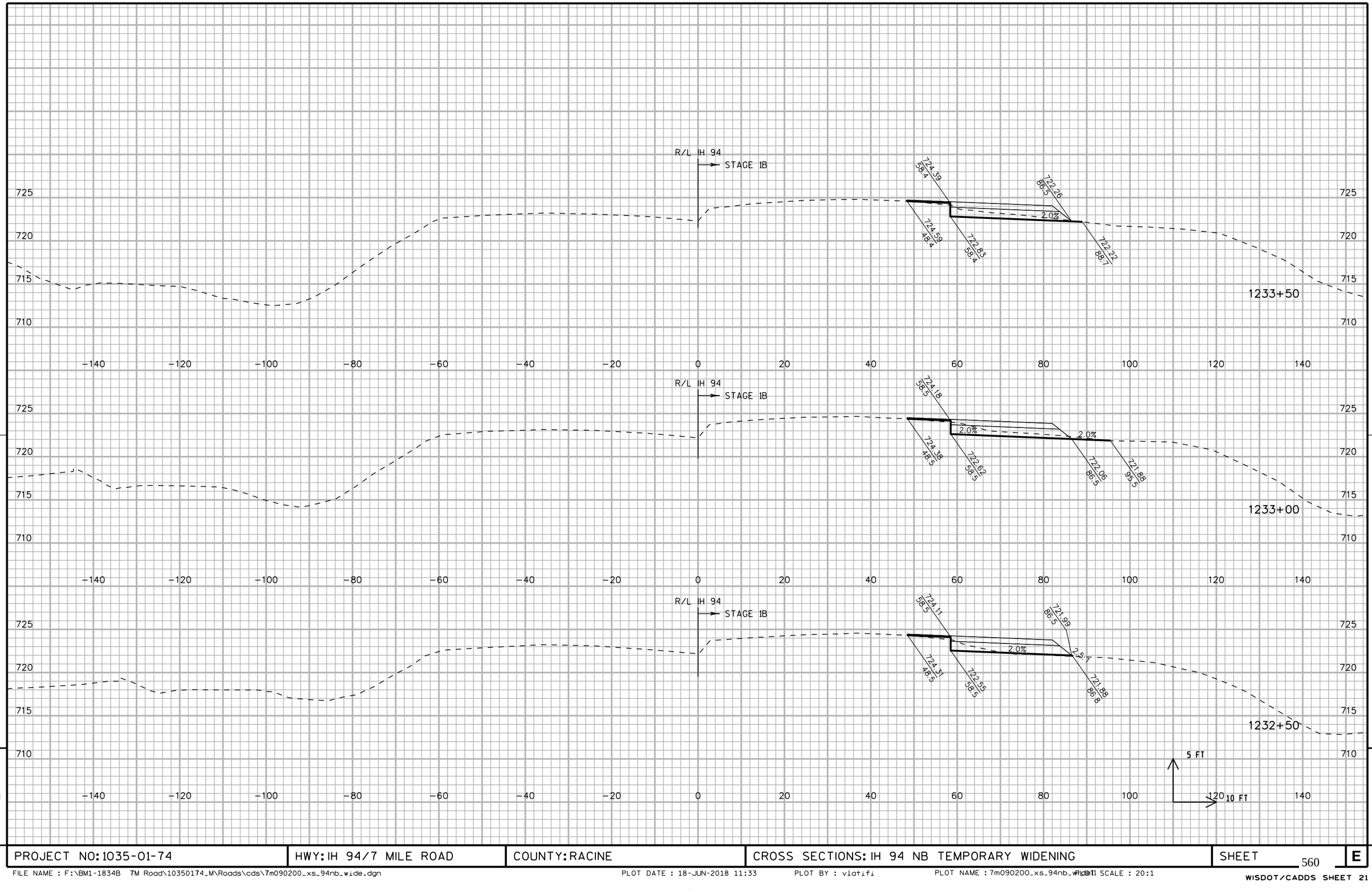


9

9

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET E

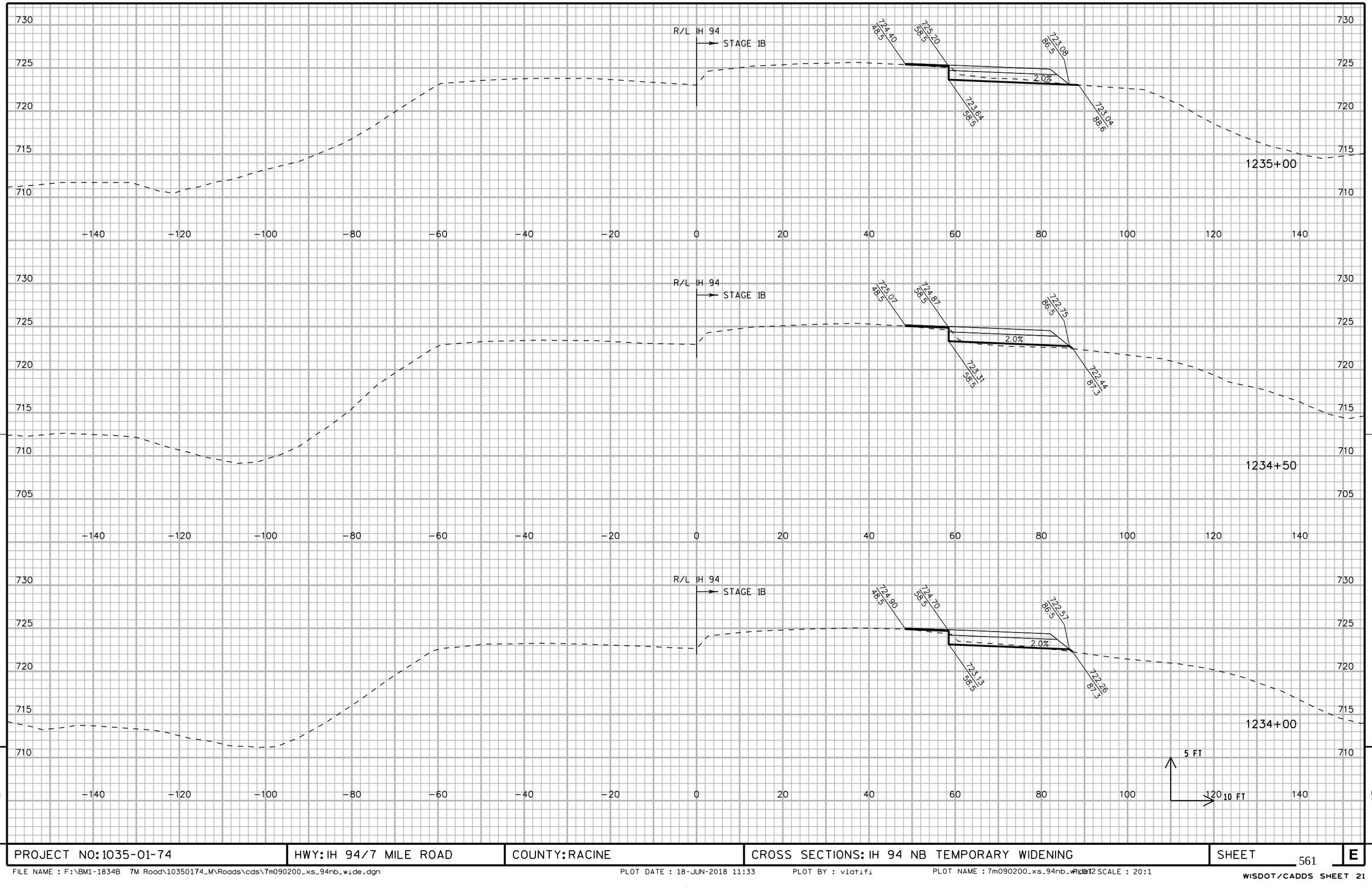
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 560	E

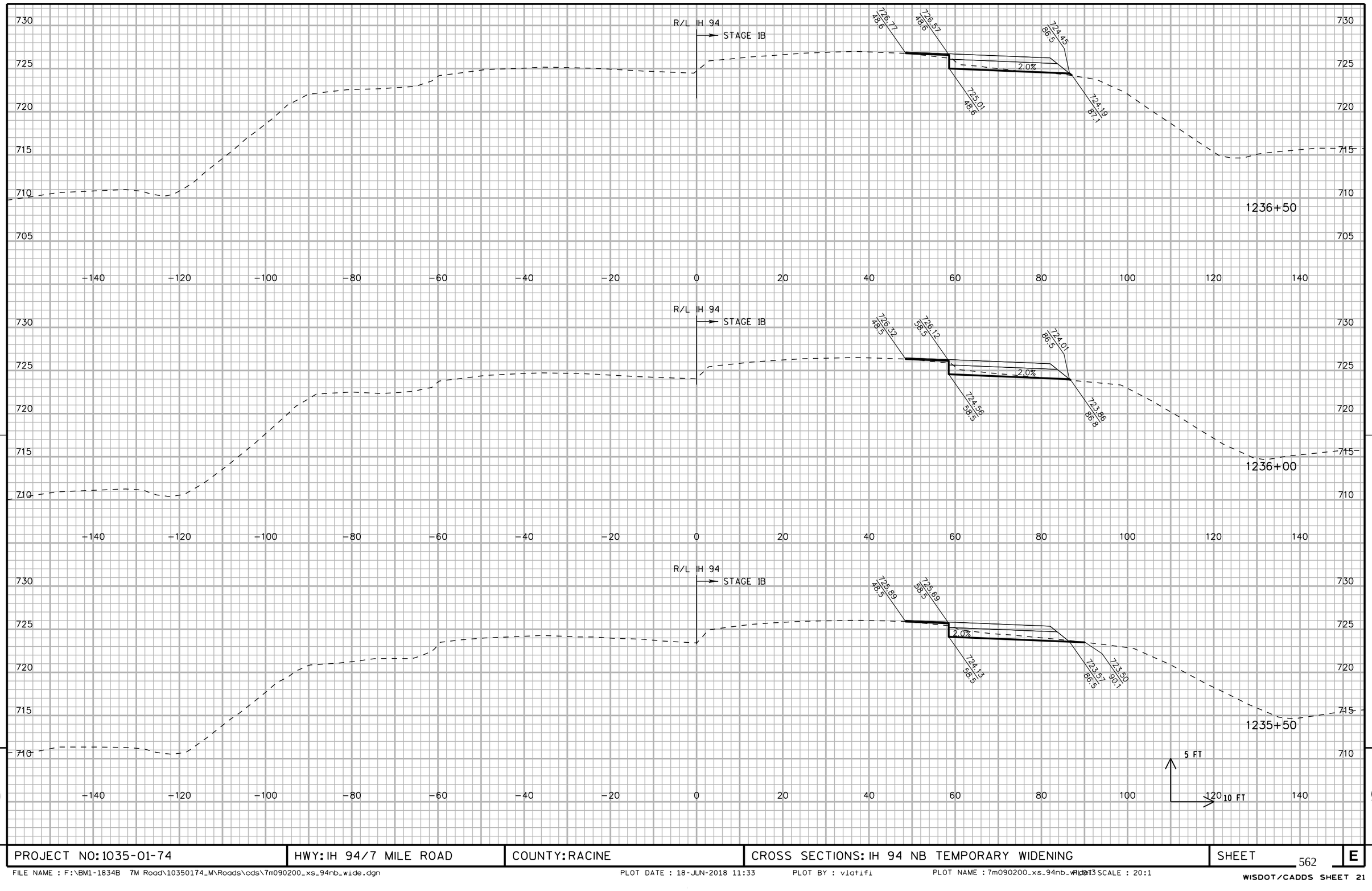
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WISDOT/CADDS SHEET 21



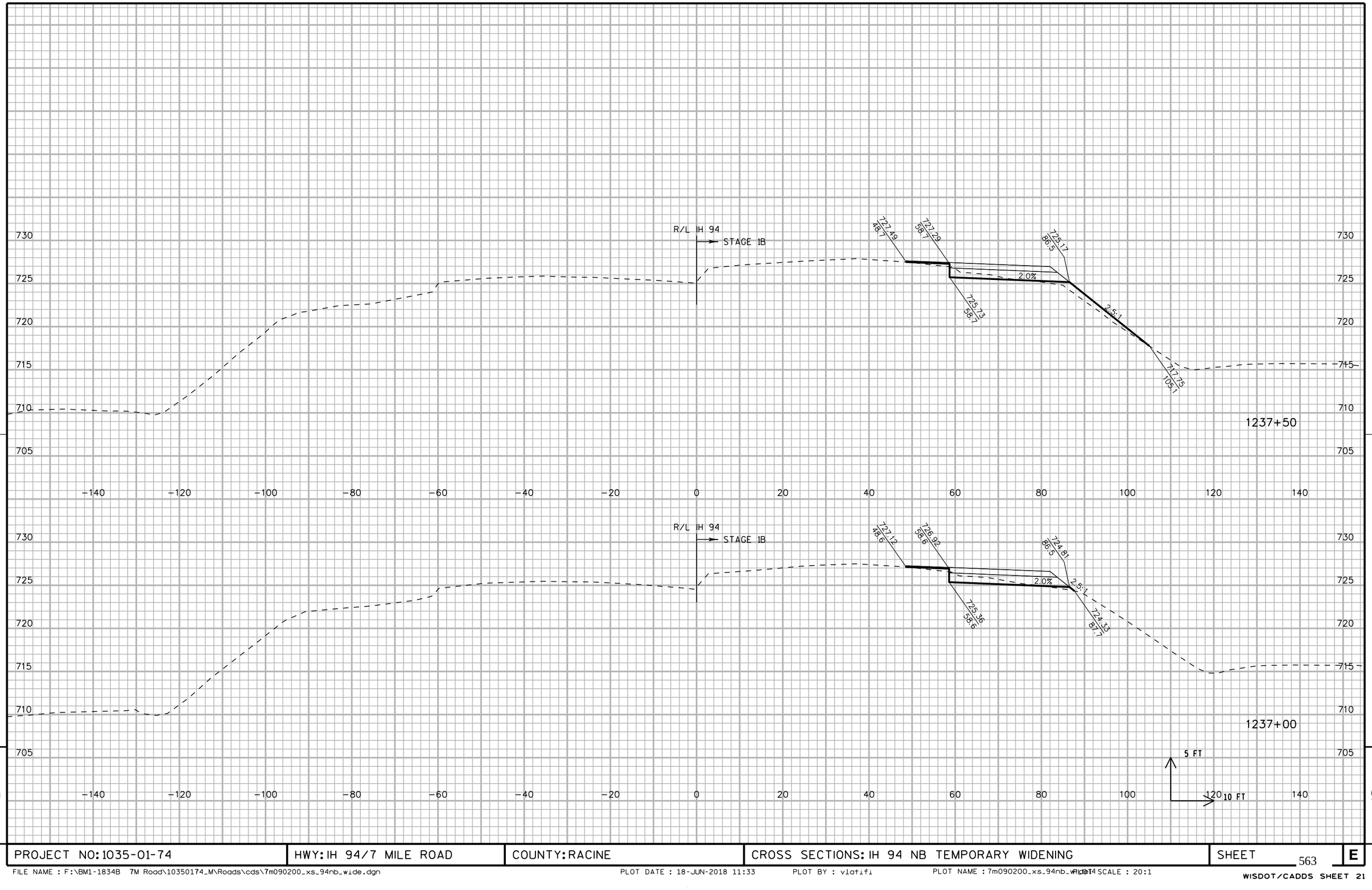
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn
PLOT DATE : 18-JUN-2018 11:33
PLOT BY : vlatifi
PLOT NAME : 7m090200_xs_94nb_wide.dgn
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

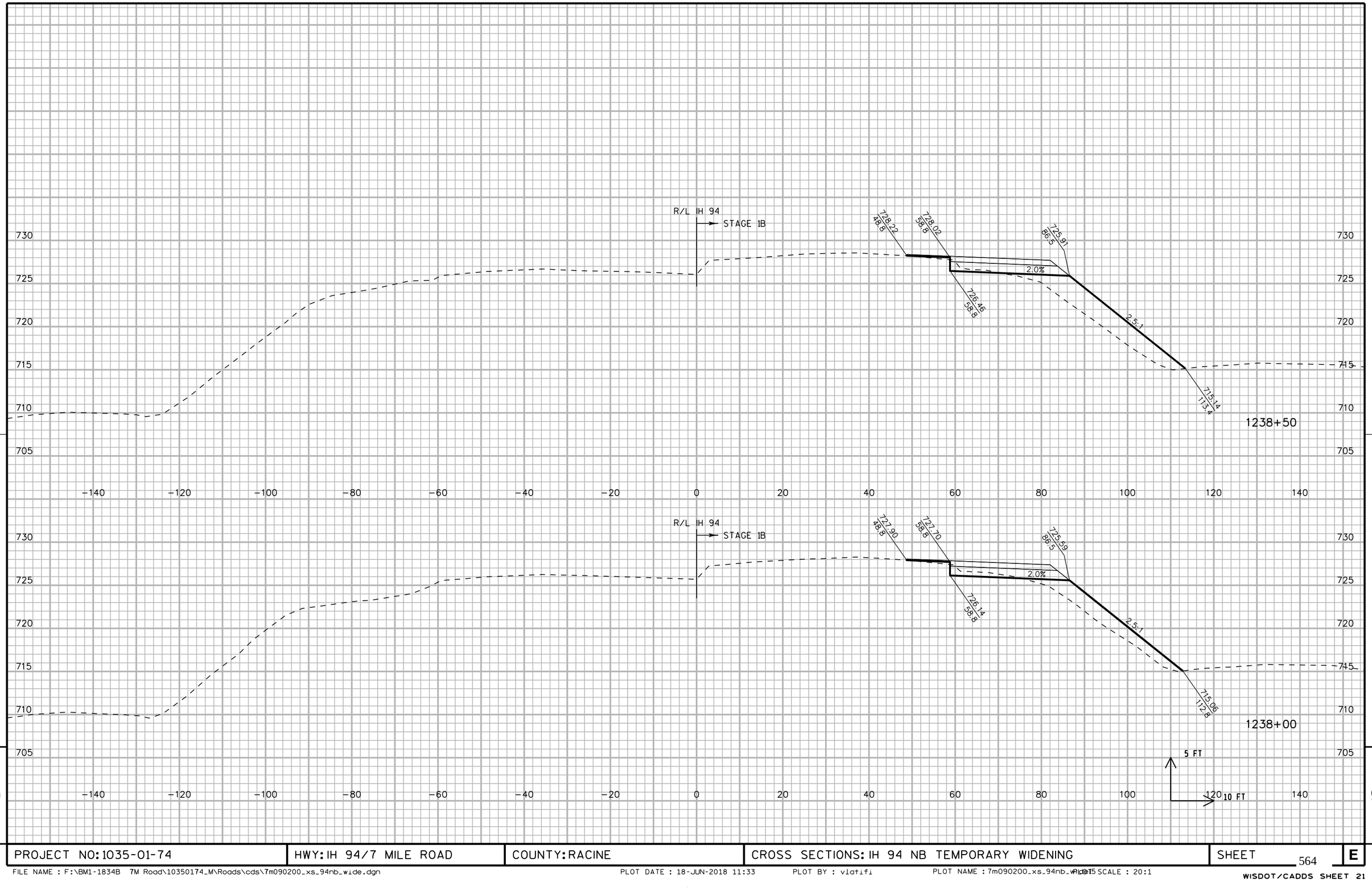
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pdf PLOT SCALE : 20:1

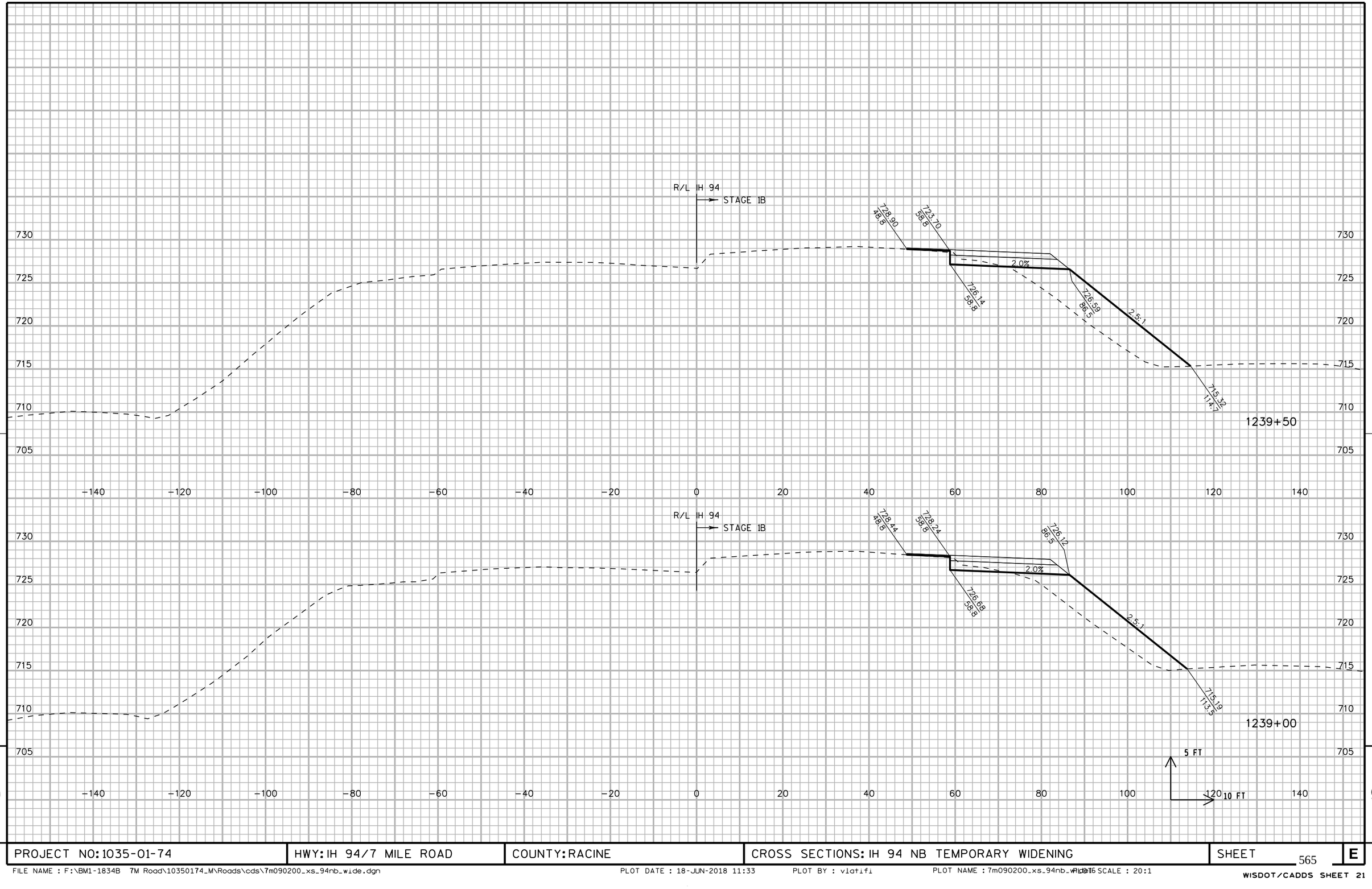
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 564	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pltPLOT SCALE : 20:1

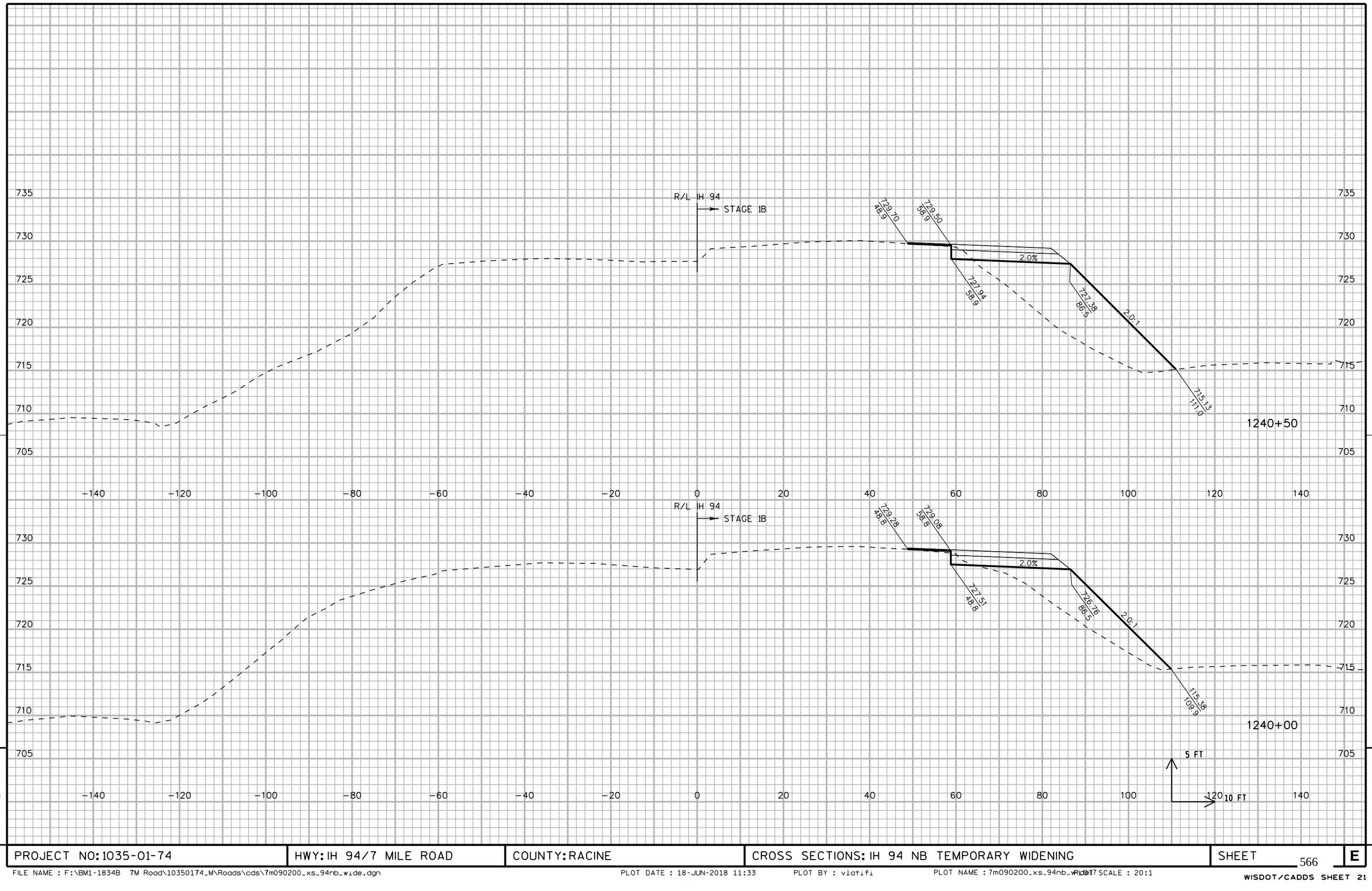
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 565	E

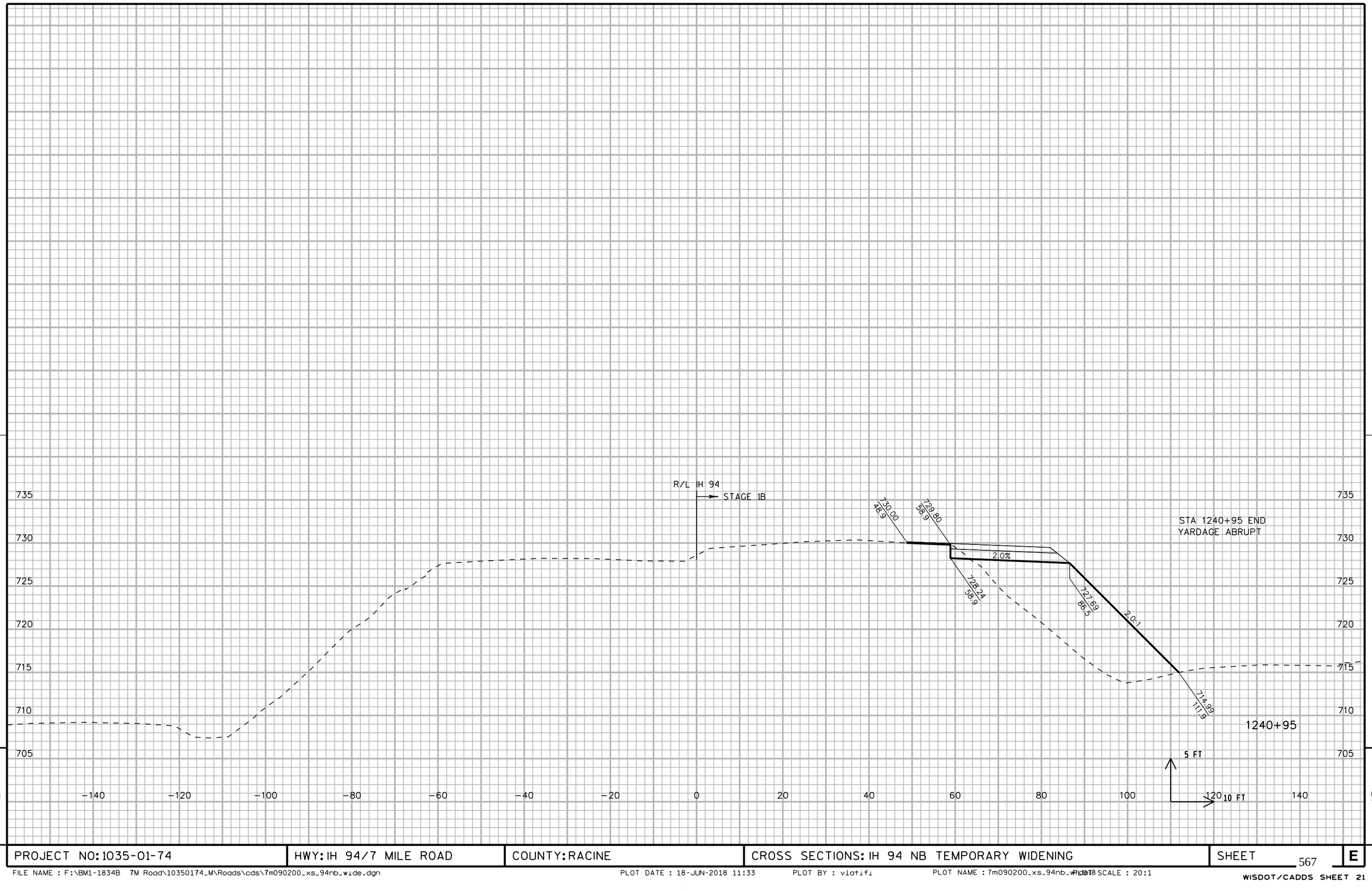
FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.pltPLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

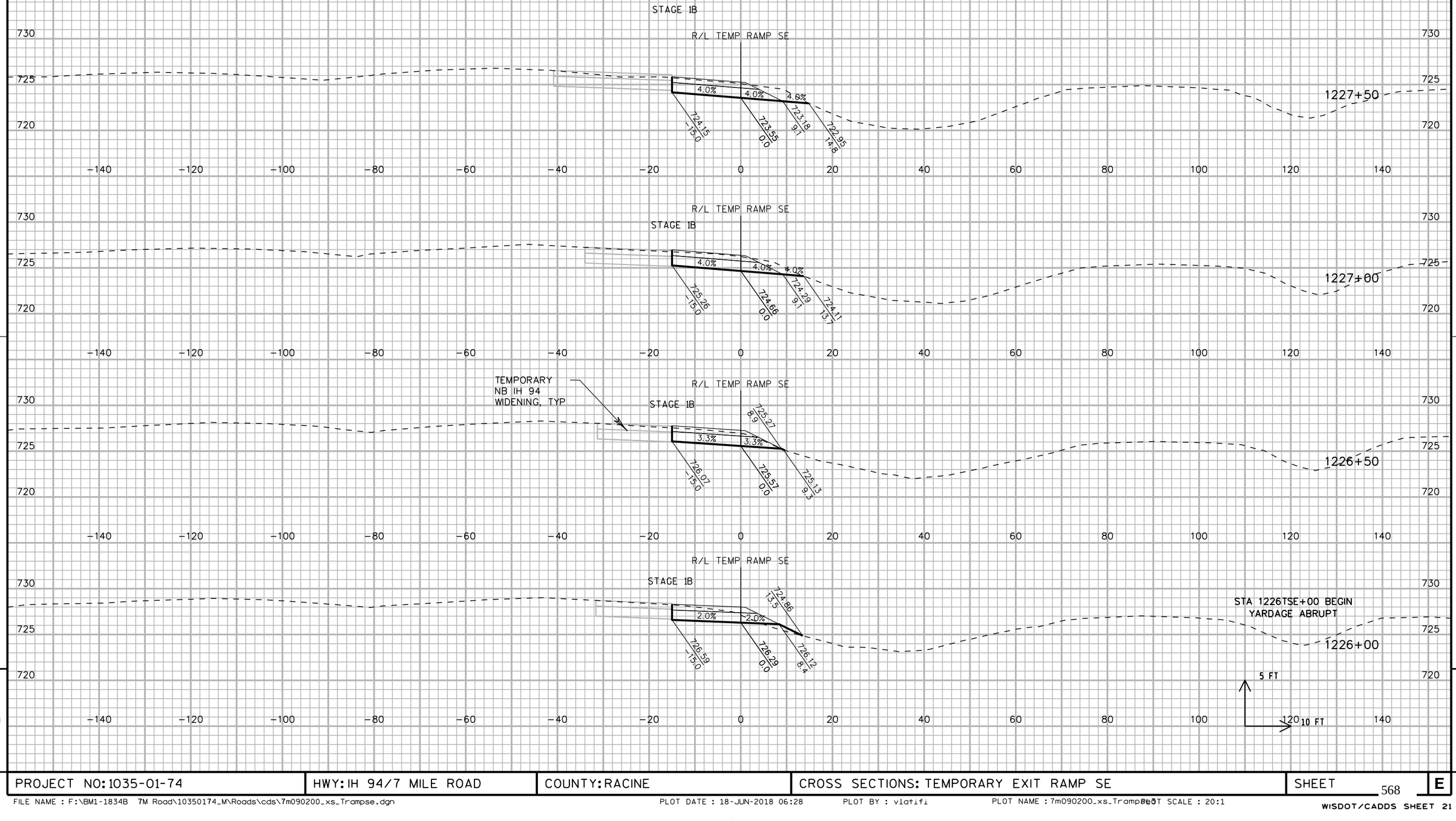


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94nb_wide.dgn PLOT DATE : 18-JUN-2018 11:33 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_94nb_wide.ctb PLOT SCALE : 20:1



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 NB TEMPORARY WIDENING	SHEET 567	E



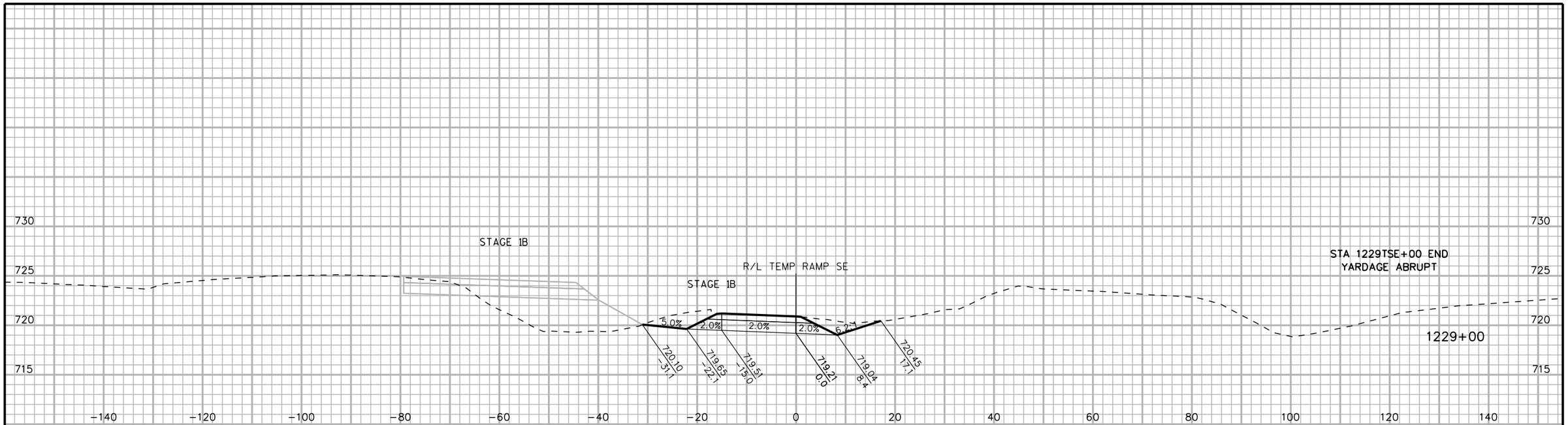
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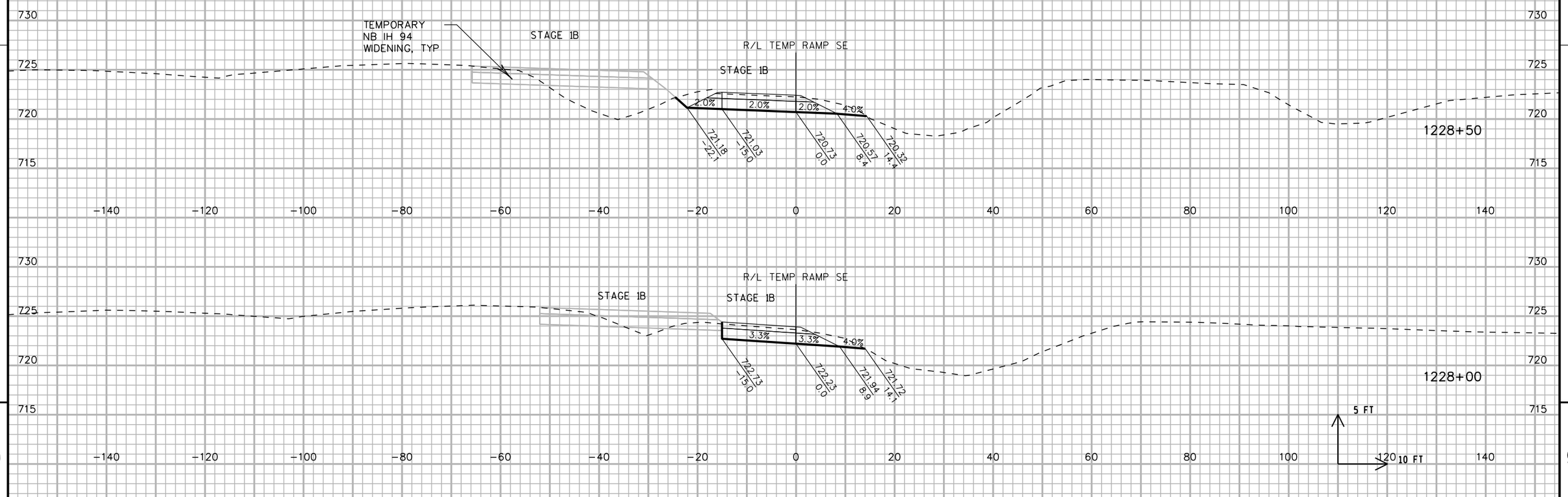
9

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY EXIT RAMP SE	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_Trampse.dgn PLOT DATE : 18-JUN-2018 06:28 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_Trampse.pdf PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

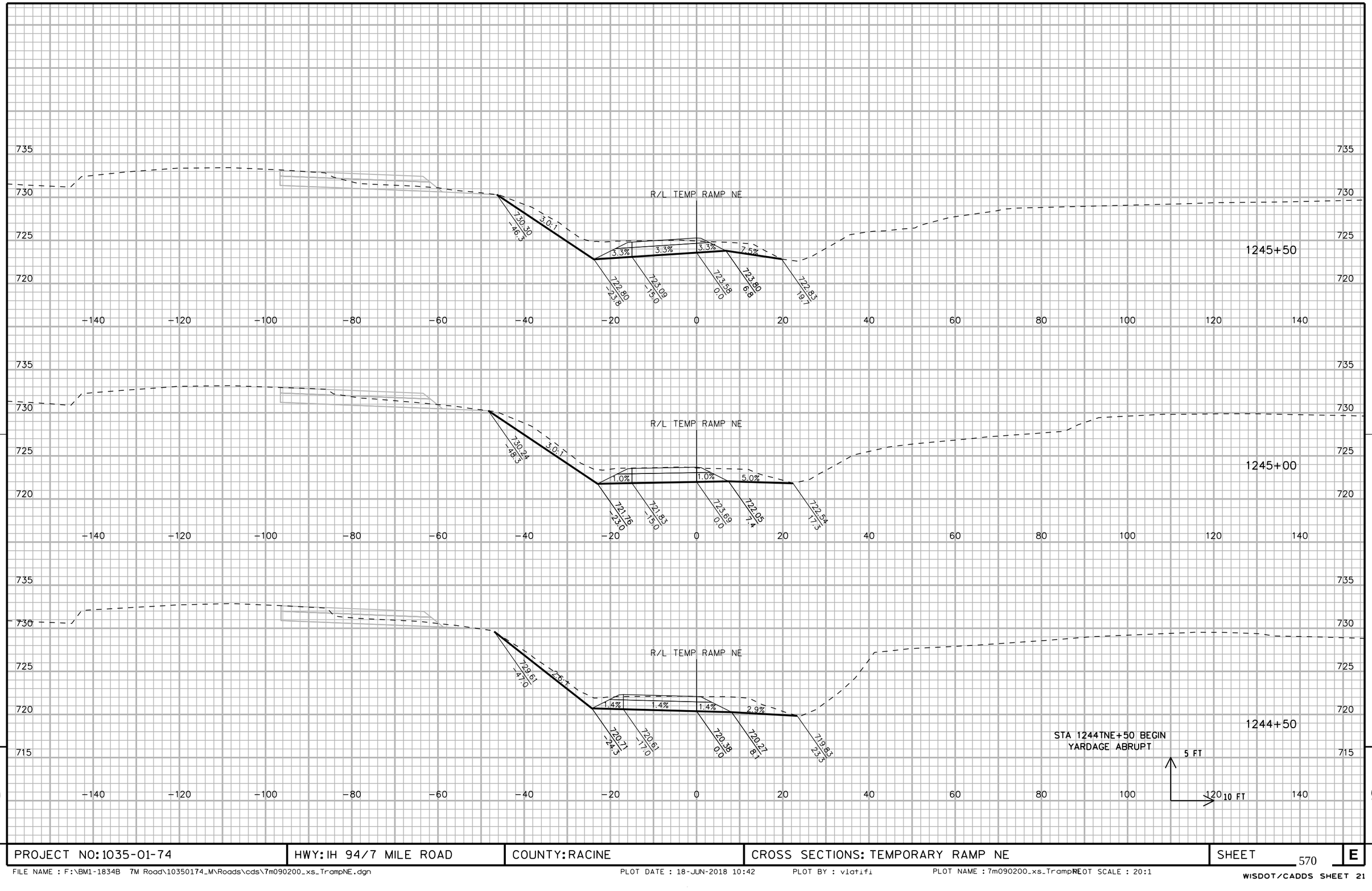




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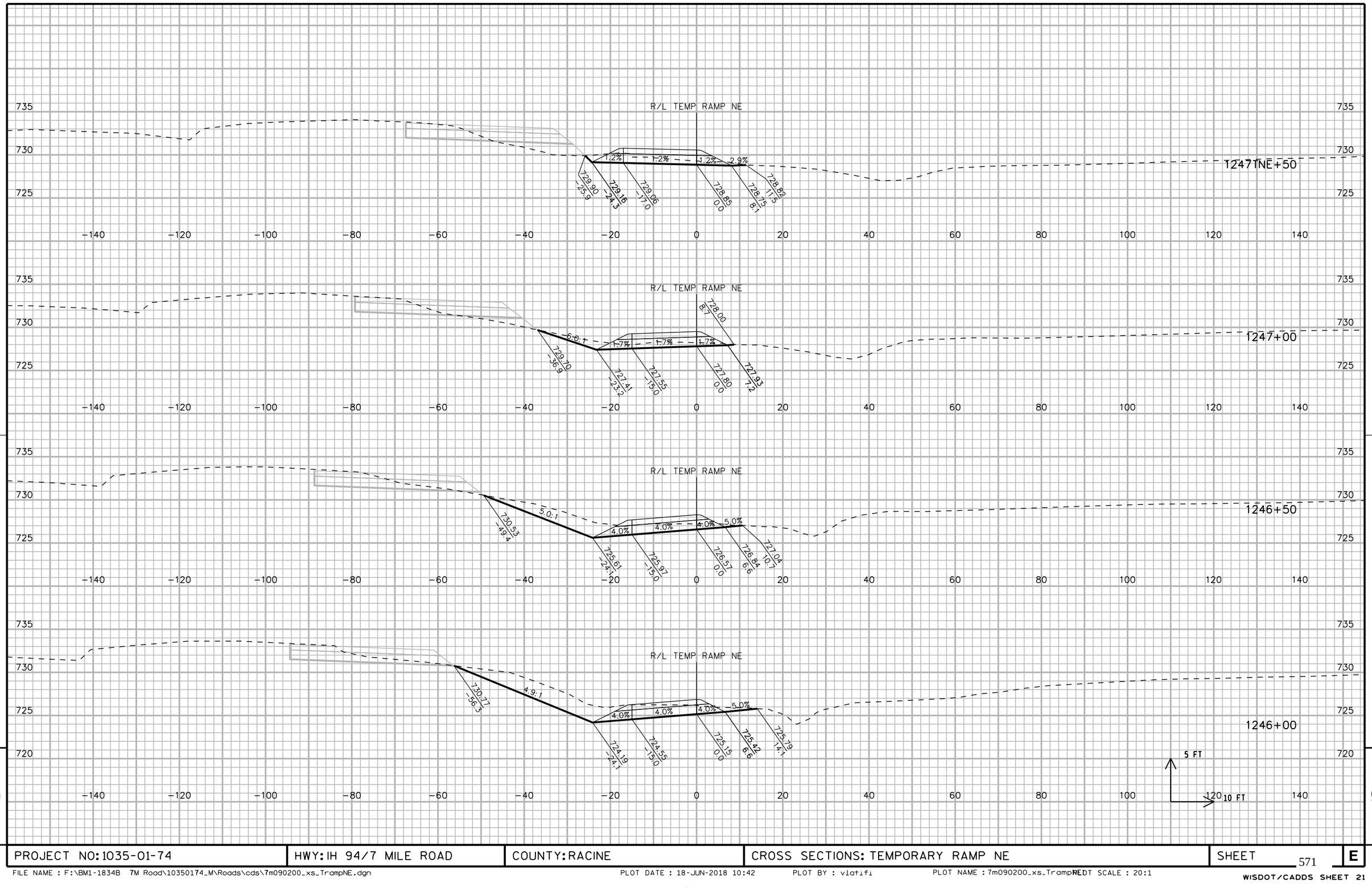
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY EXIT RAMP SE	SHEET 569	E



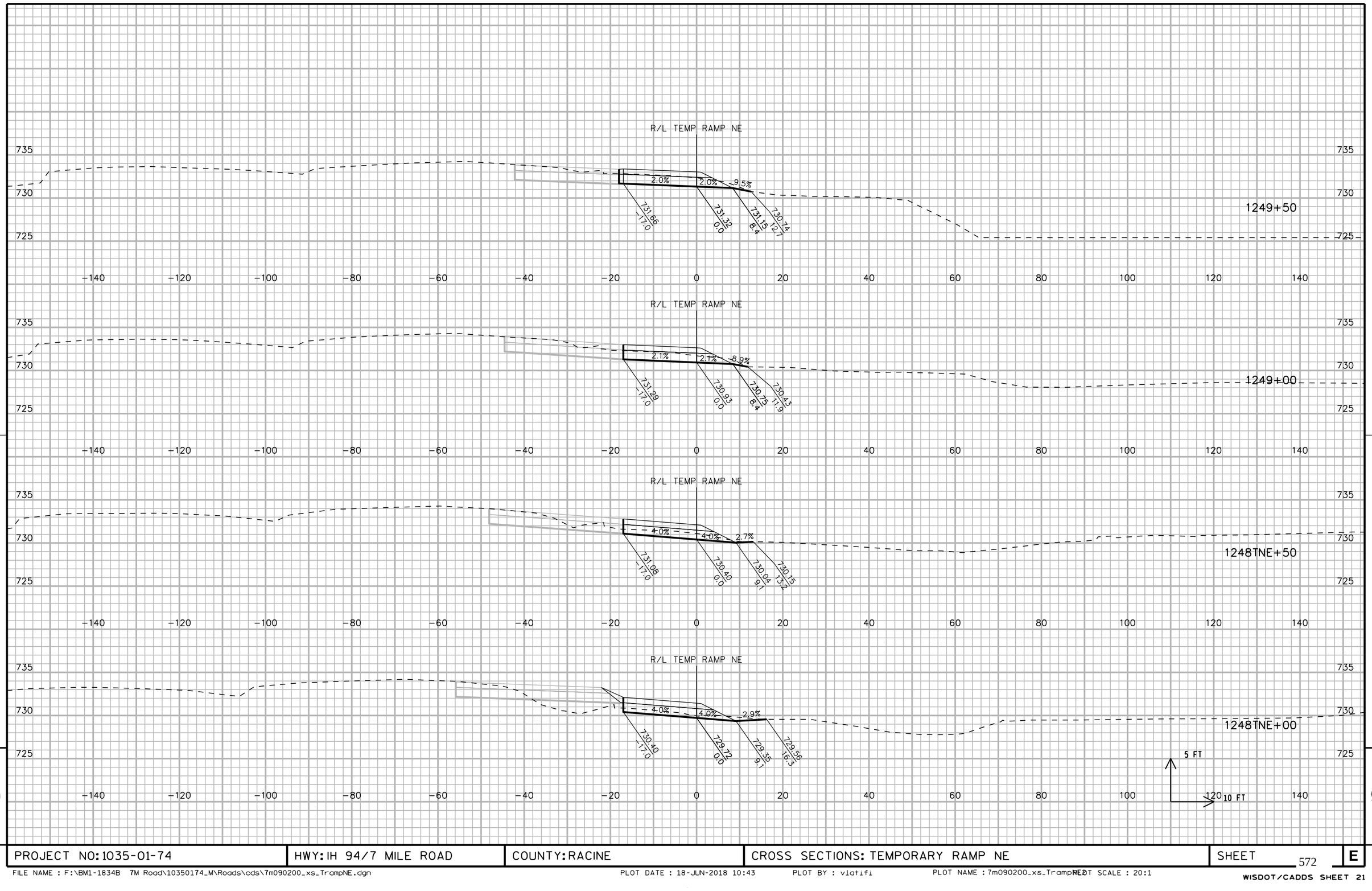
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY RAMP NE	SHEET 570	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_TrampNE.dgn PLOT DATE : 18-JUN-2018 10:42 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_TrampNE PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY RAMP NE	SHEET 571 E



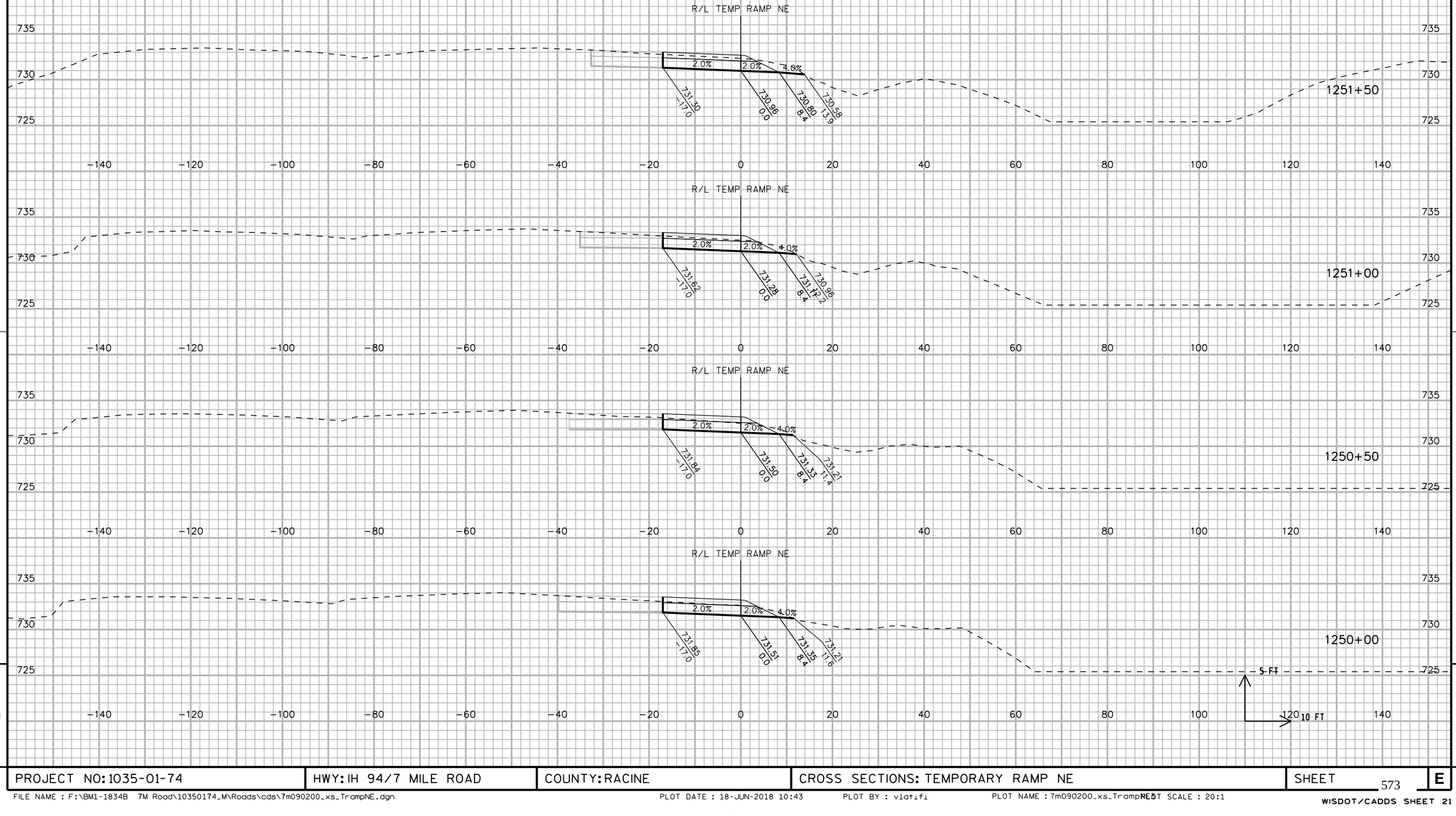
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY RAMP NE	SHEET 572	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_TrampNE.dgn PLOT DATE : 18-JUN-2018 10:43 PLOT BY : vlatifi PLOT NAME : 7m090200_xs_TrampNE2 PLOT SCALE : 20:1

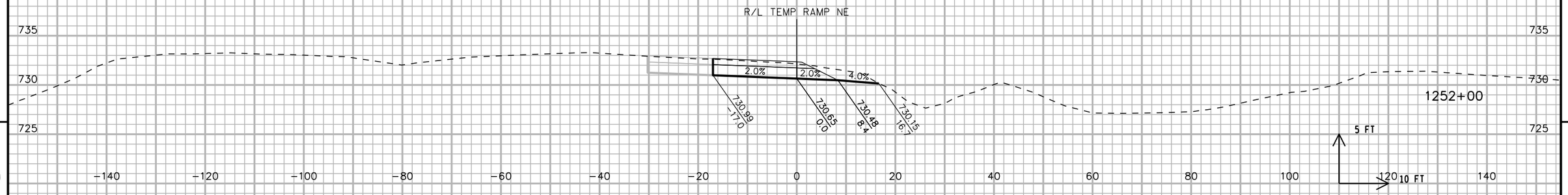
WISDOT/CADDS SHEET 21



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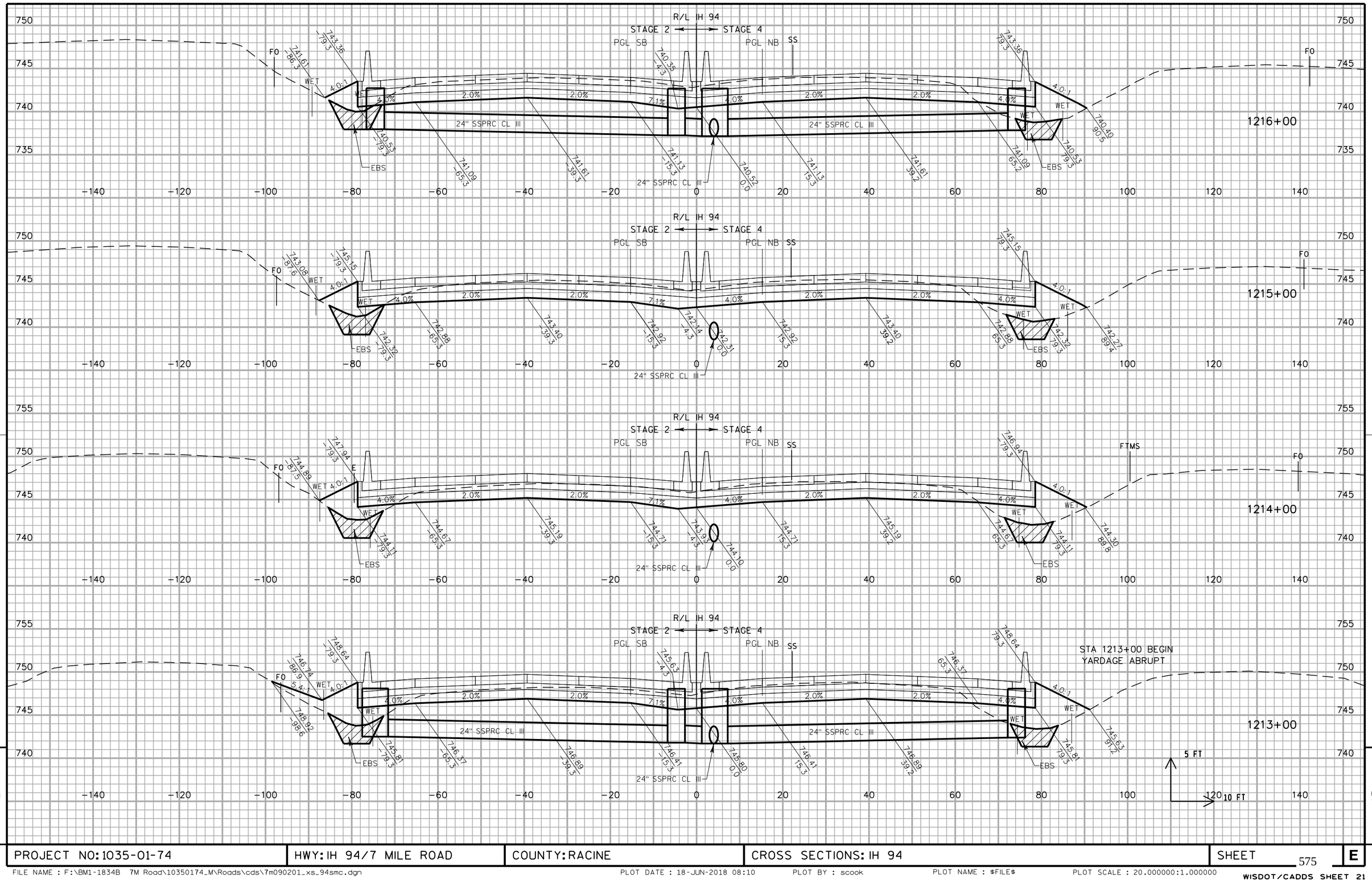
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY RAMP NE	SHEET 573	E



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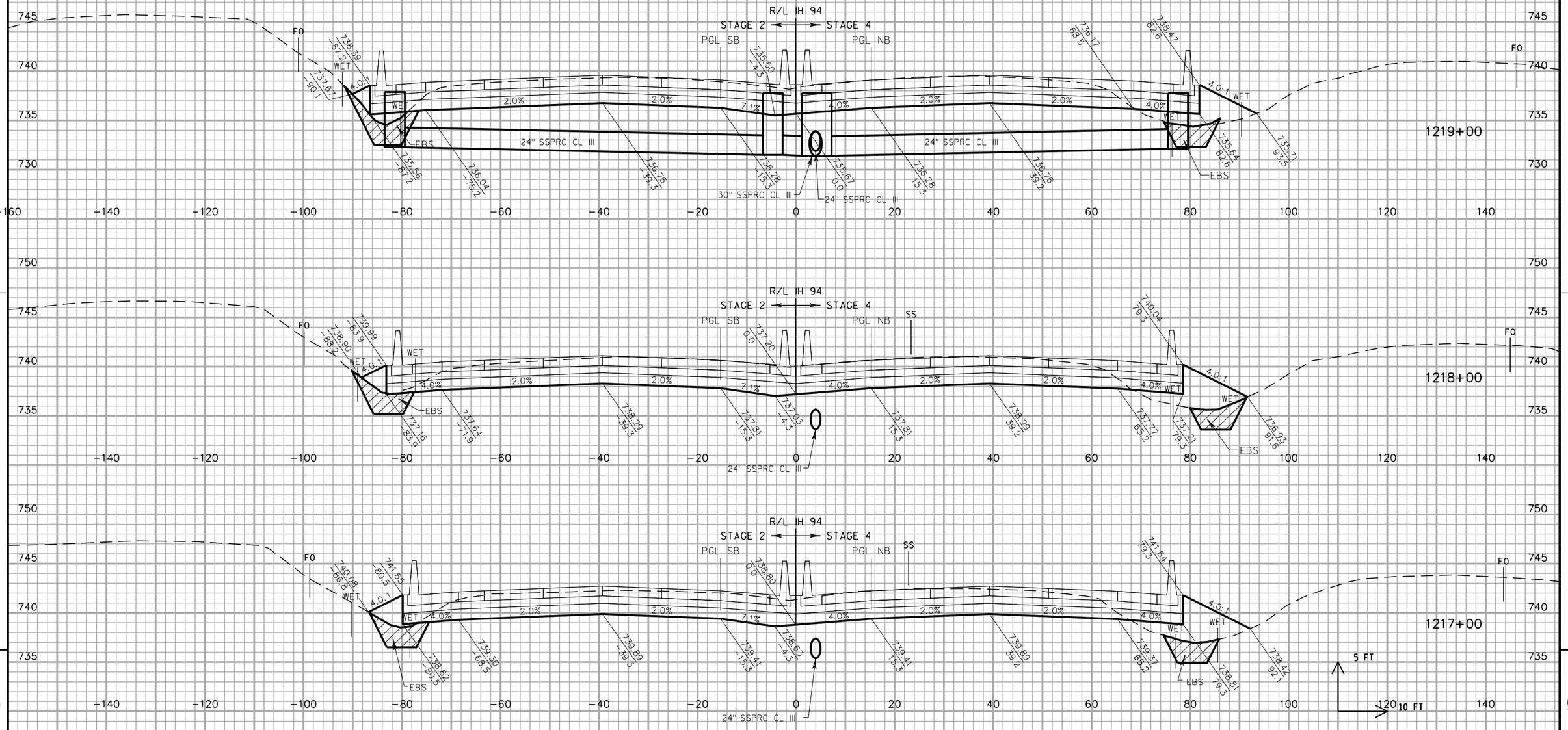
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY RAMP NE	SHEET 574	E

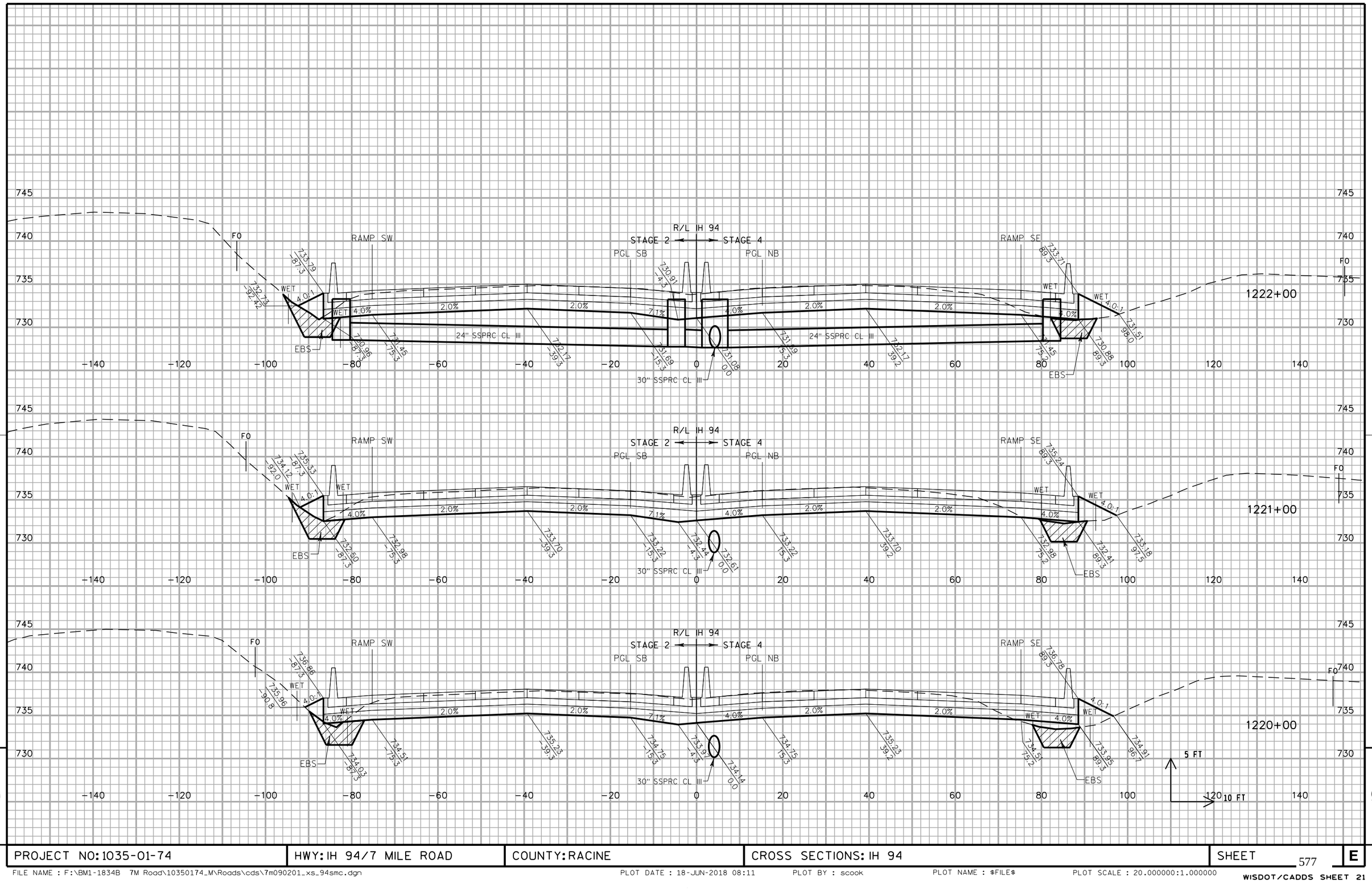


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 575	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn
PLOT DATE : 18-JUN-2018 08:10
PLOT BY : scook
PLOT NAME : $FILE$
PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 576	E

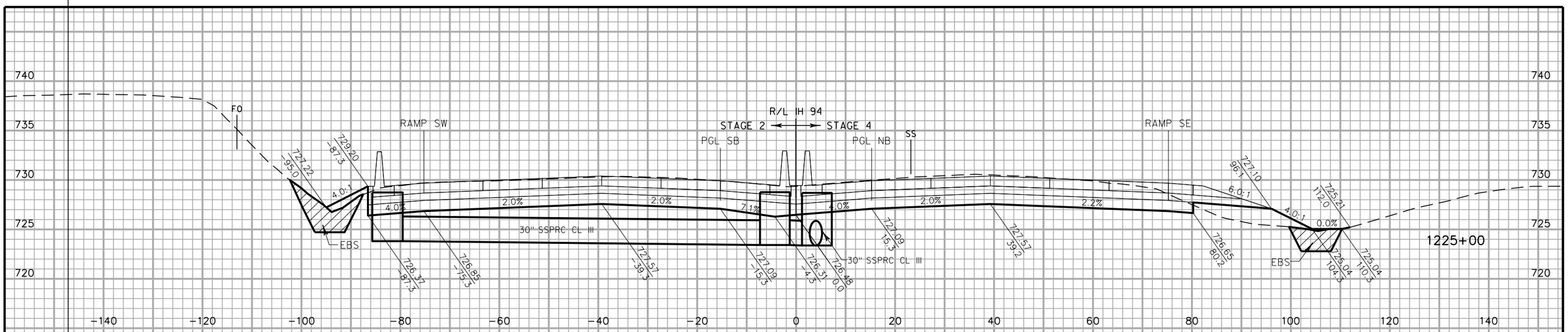


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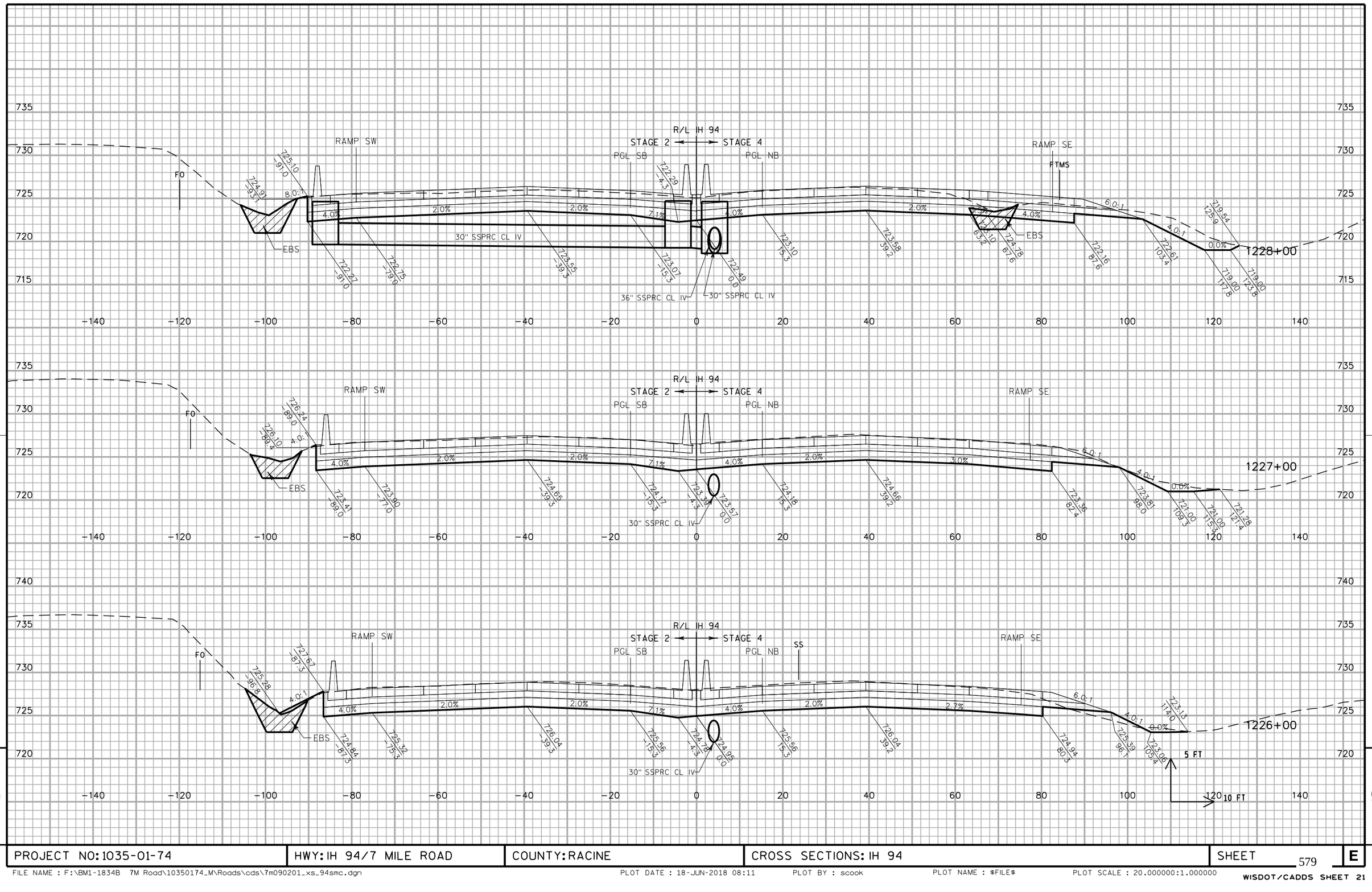
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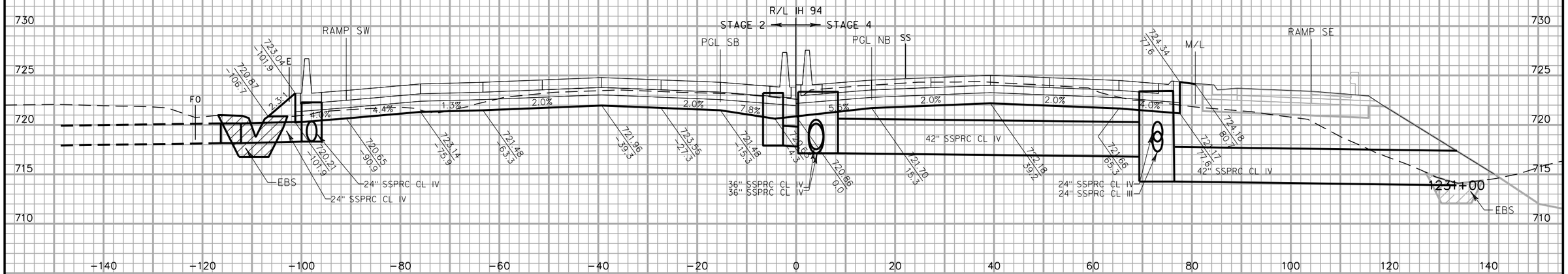
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WISDOT/CADDS SHEET 21

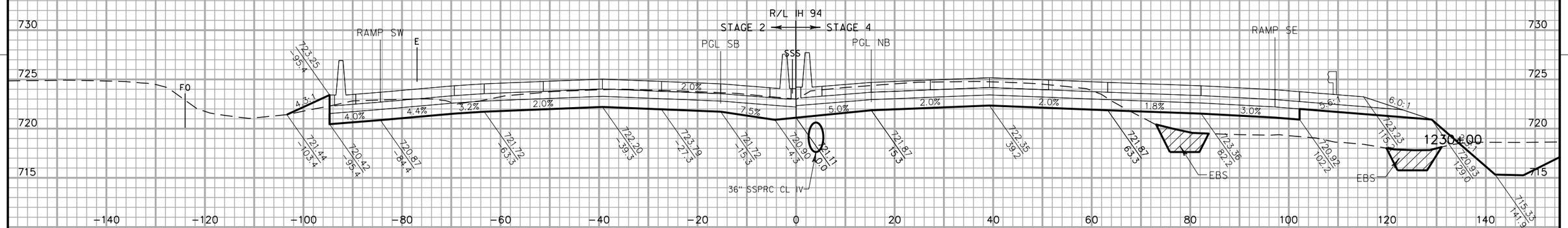


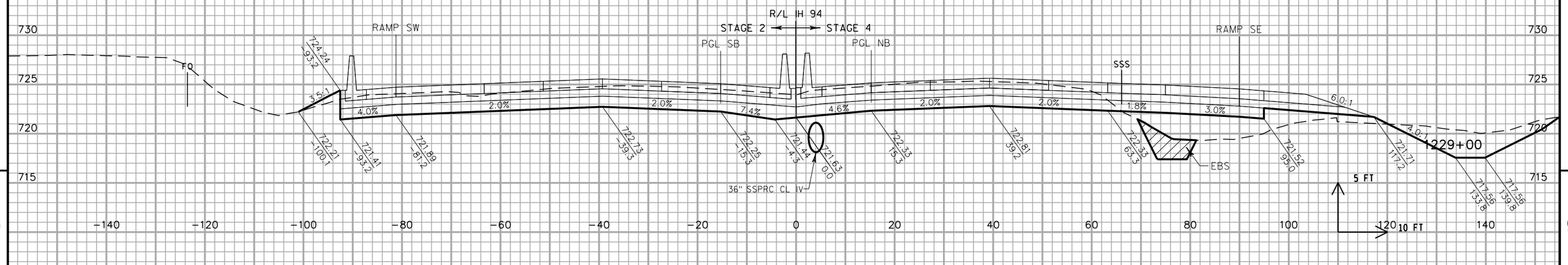
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 578	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 579	E



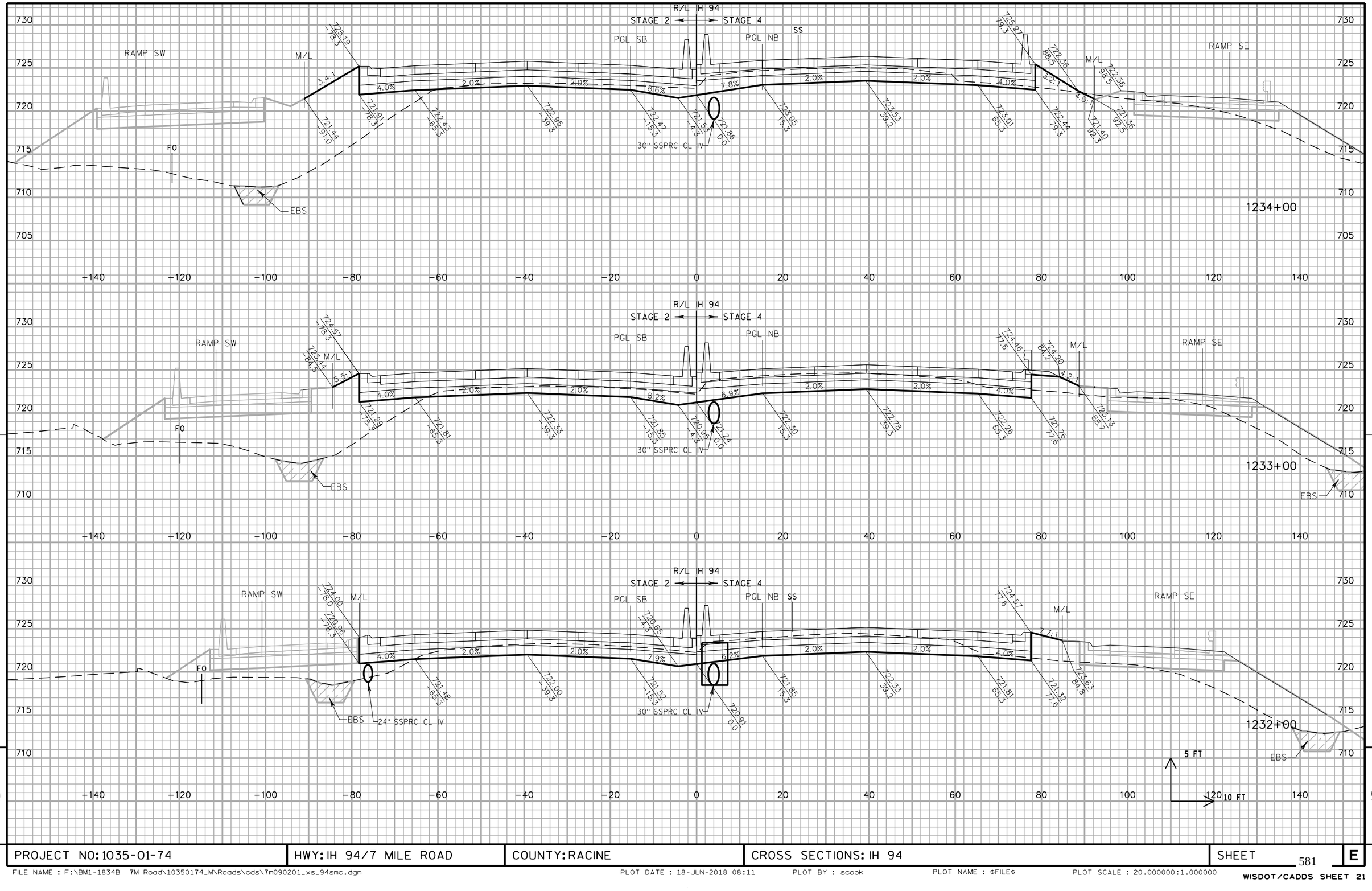




PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 580 E

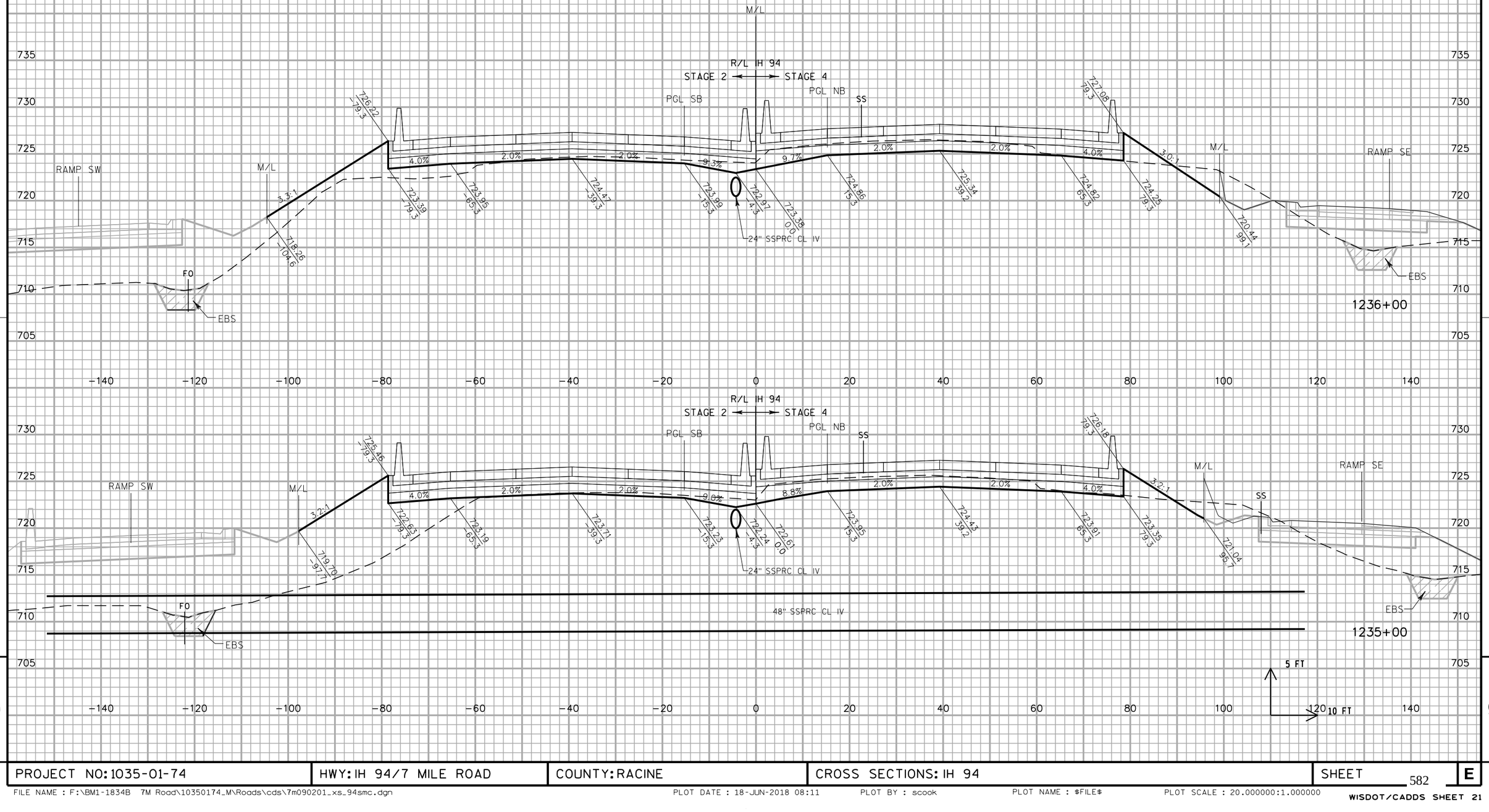
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WISDOT/CADDS SHEET 21

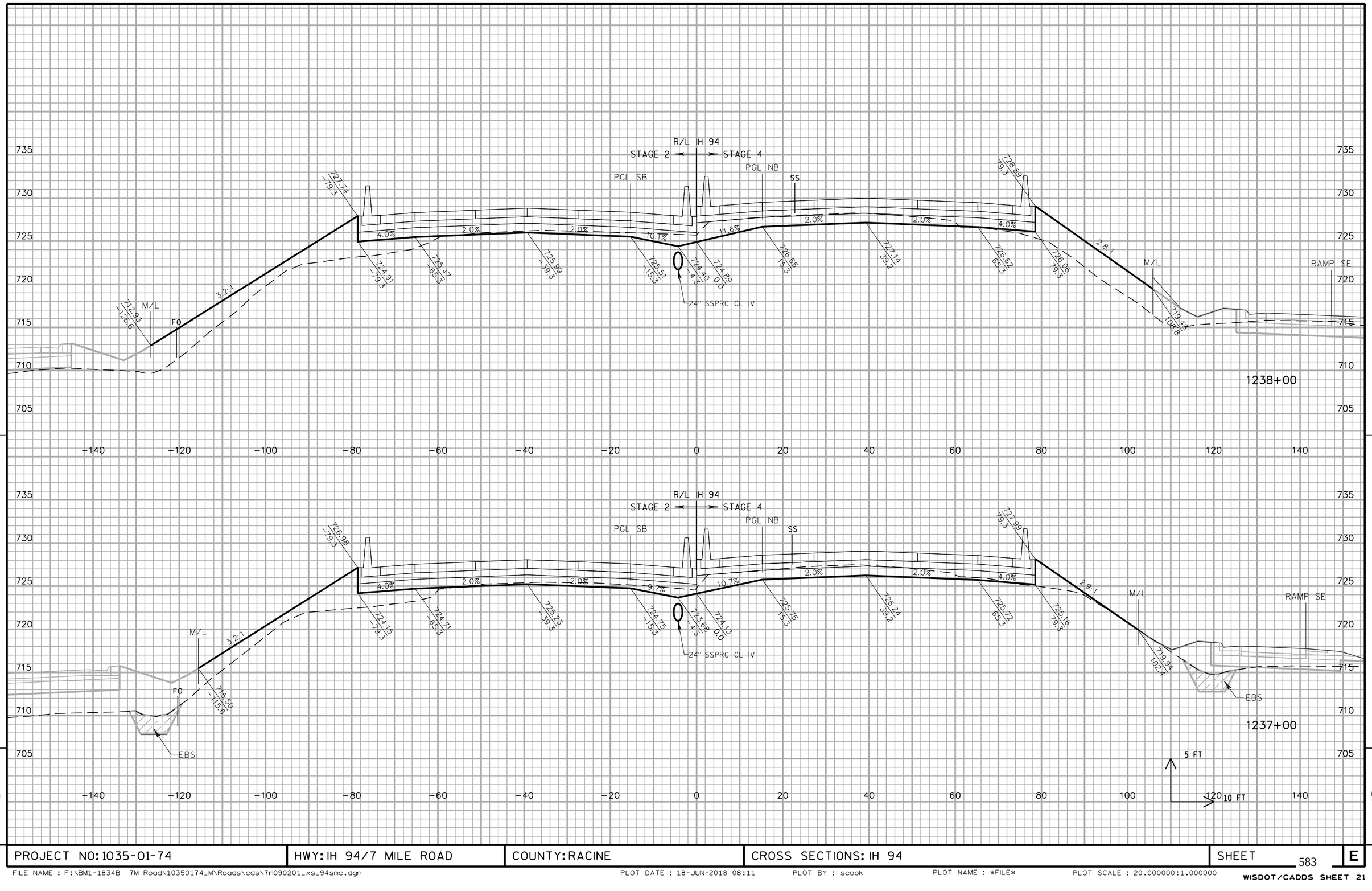


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn PLOT DATE : 18-JUN-2018 08:11 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21



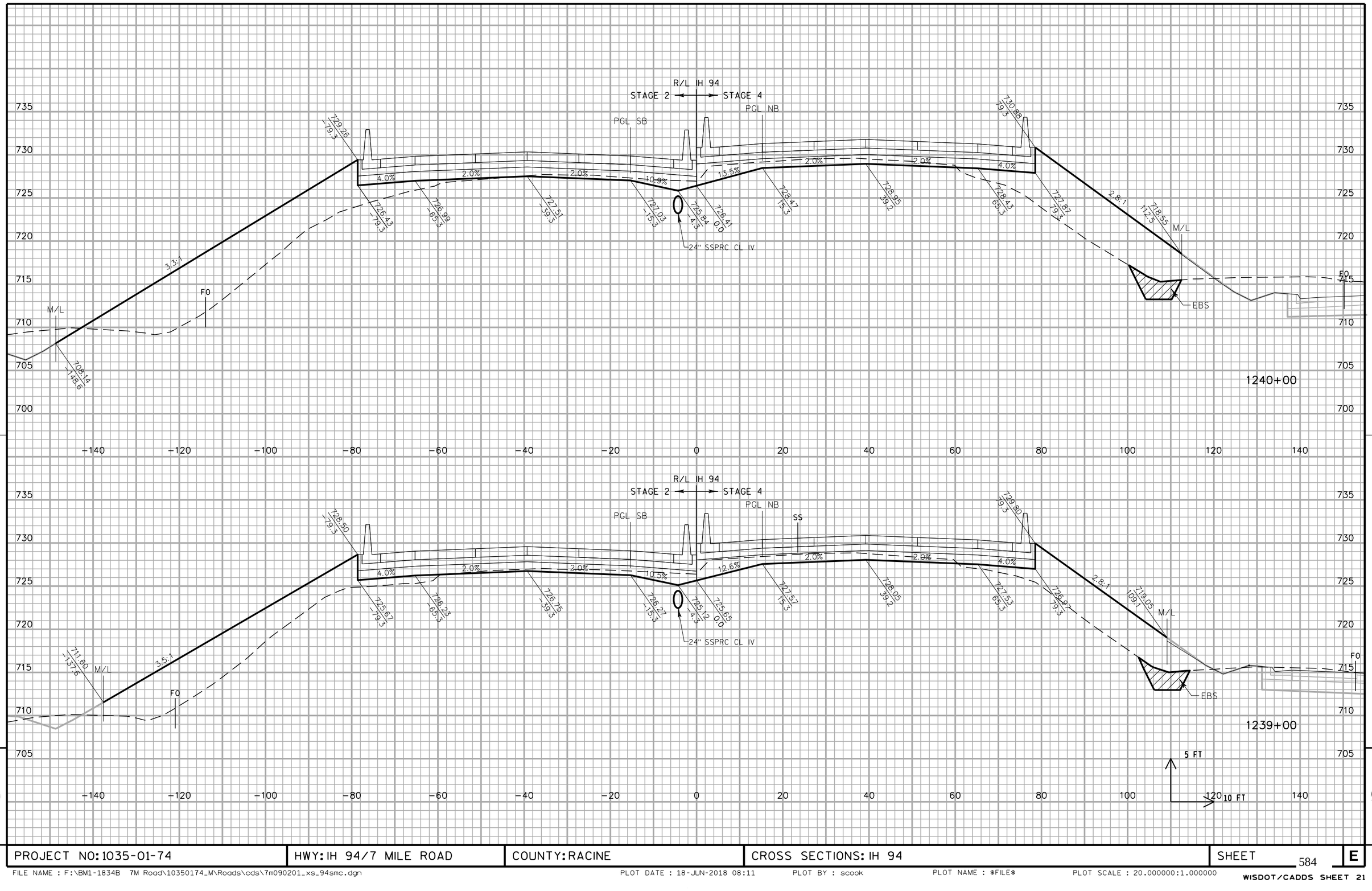
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 582	E



9

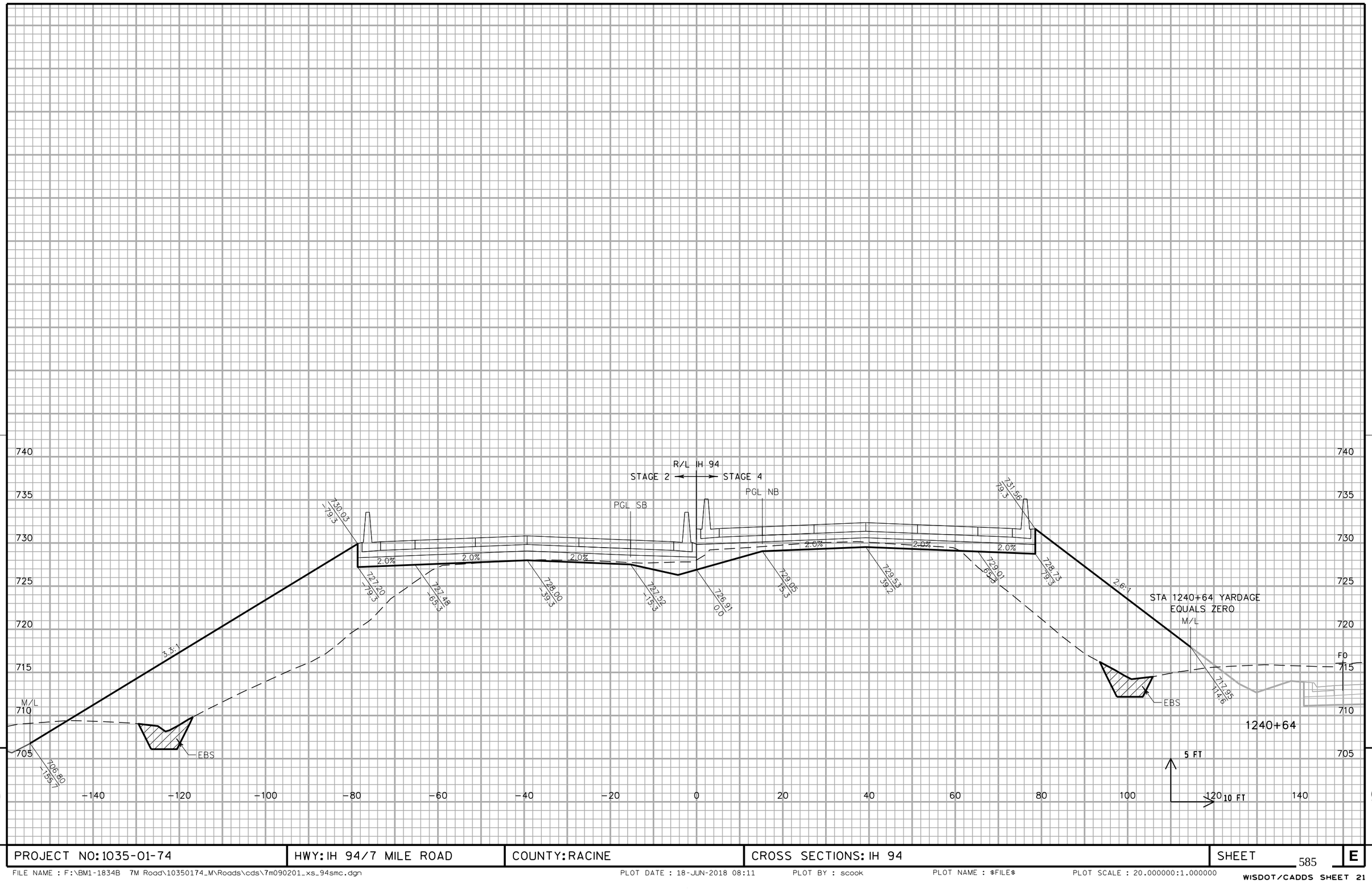
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 583	E

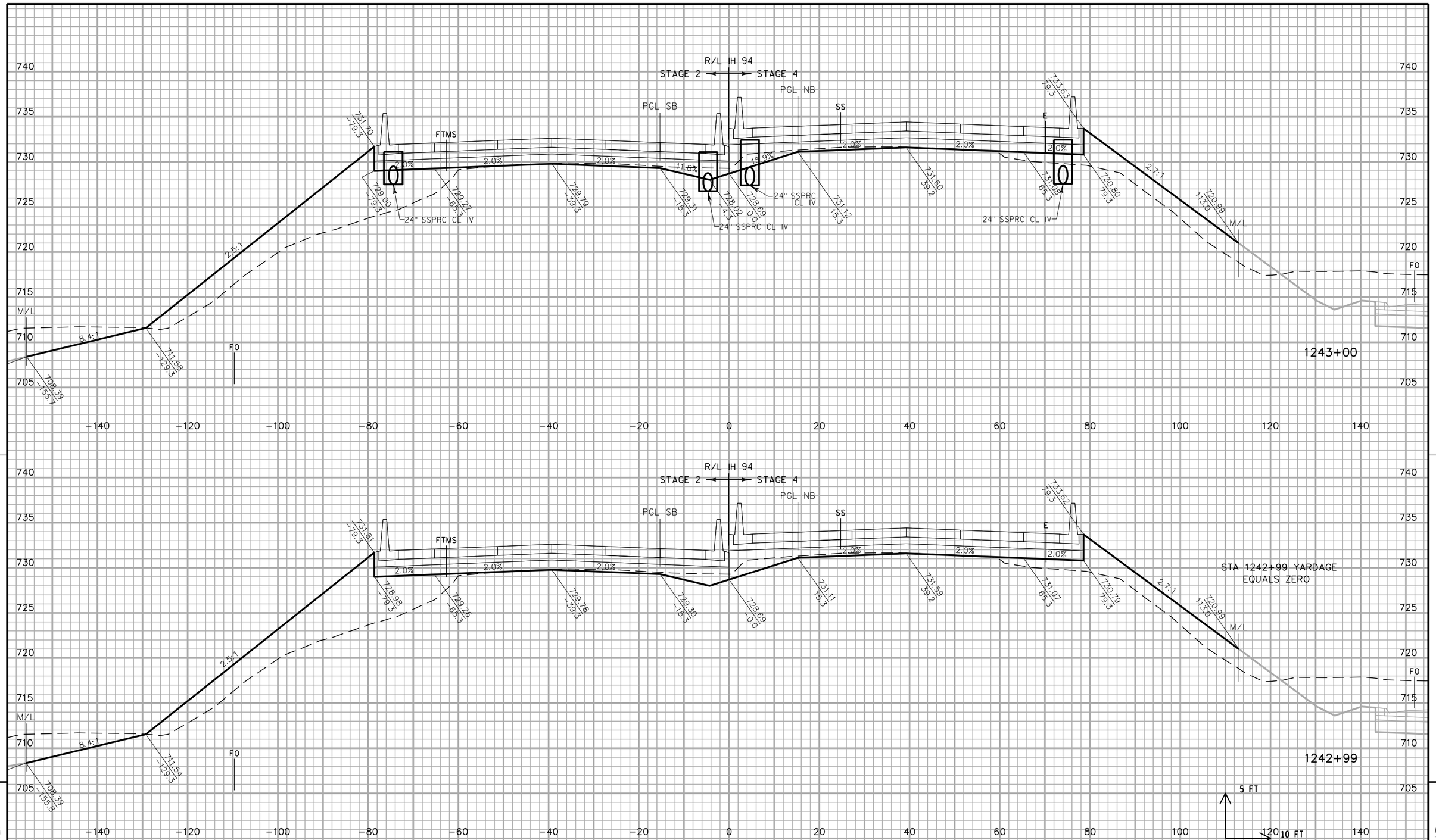


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 584	E

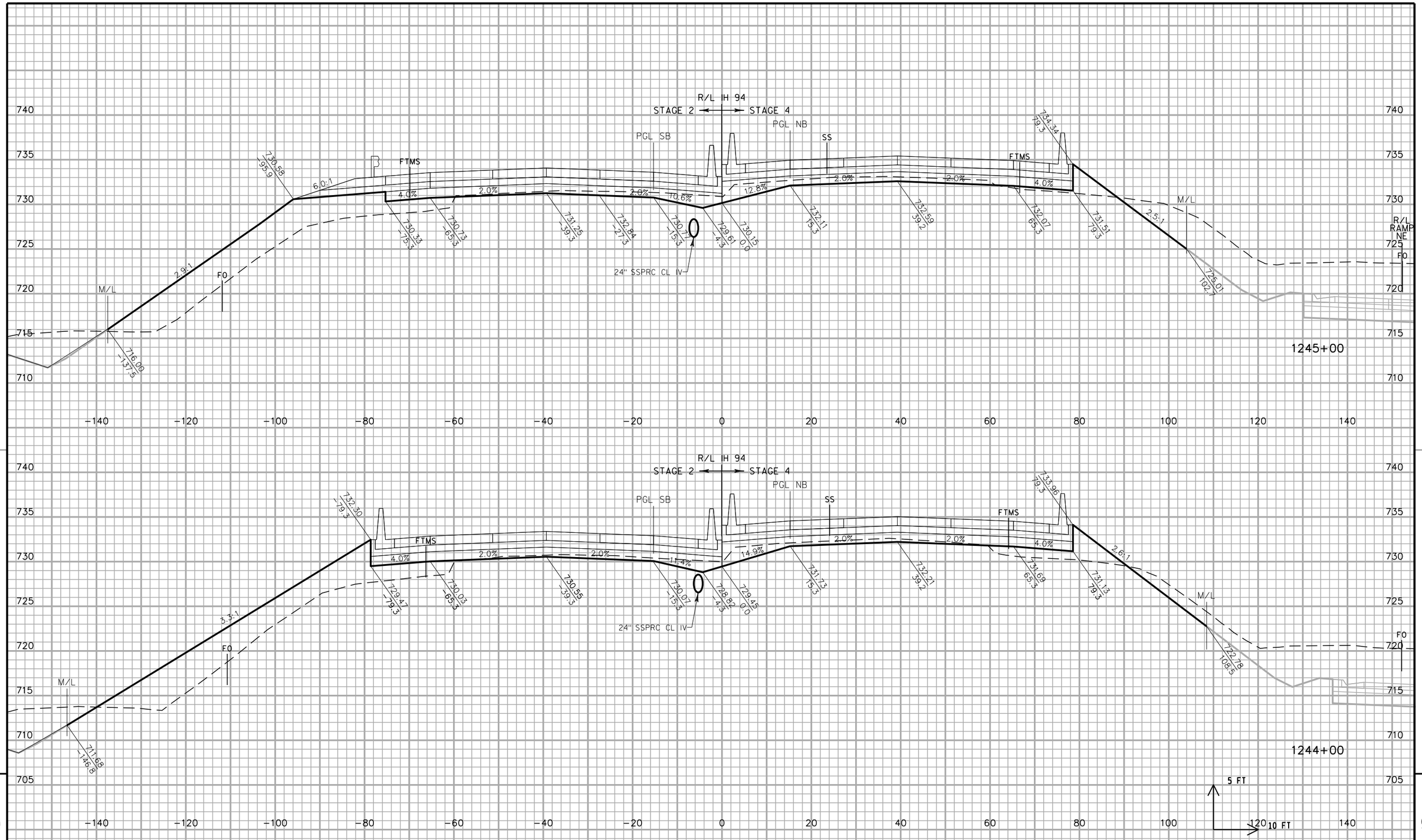
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WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 585	E

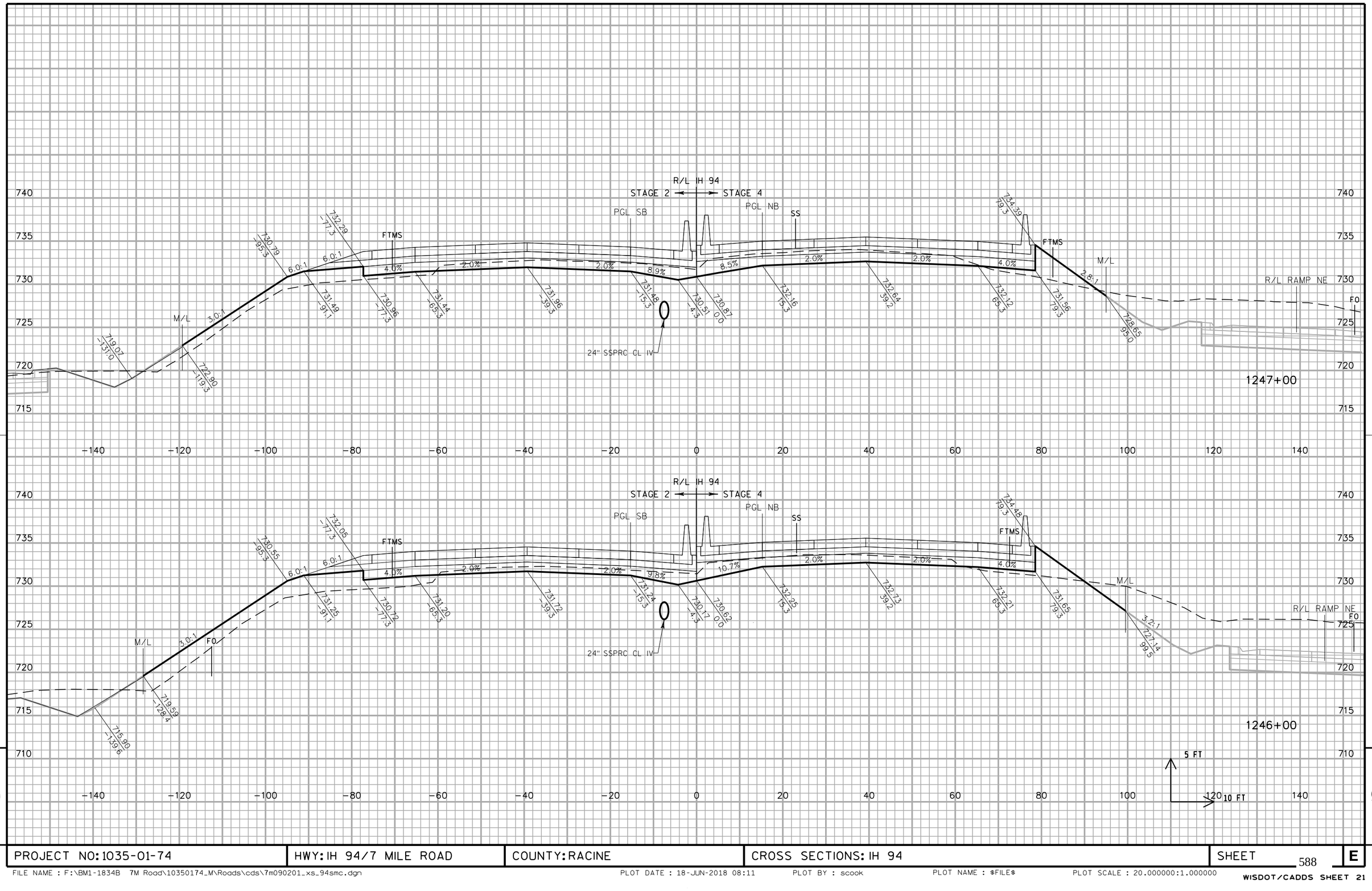


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 586	E



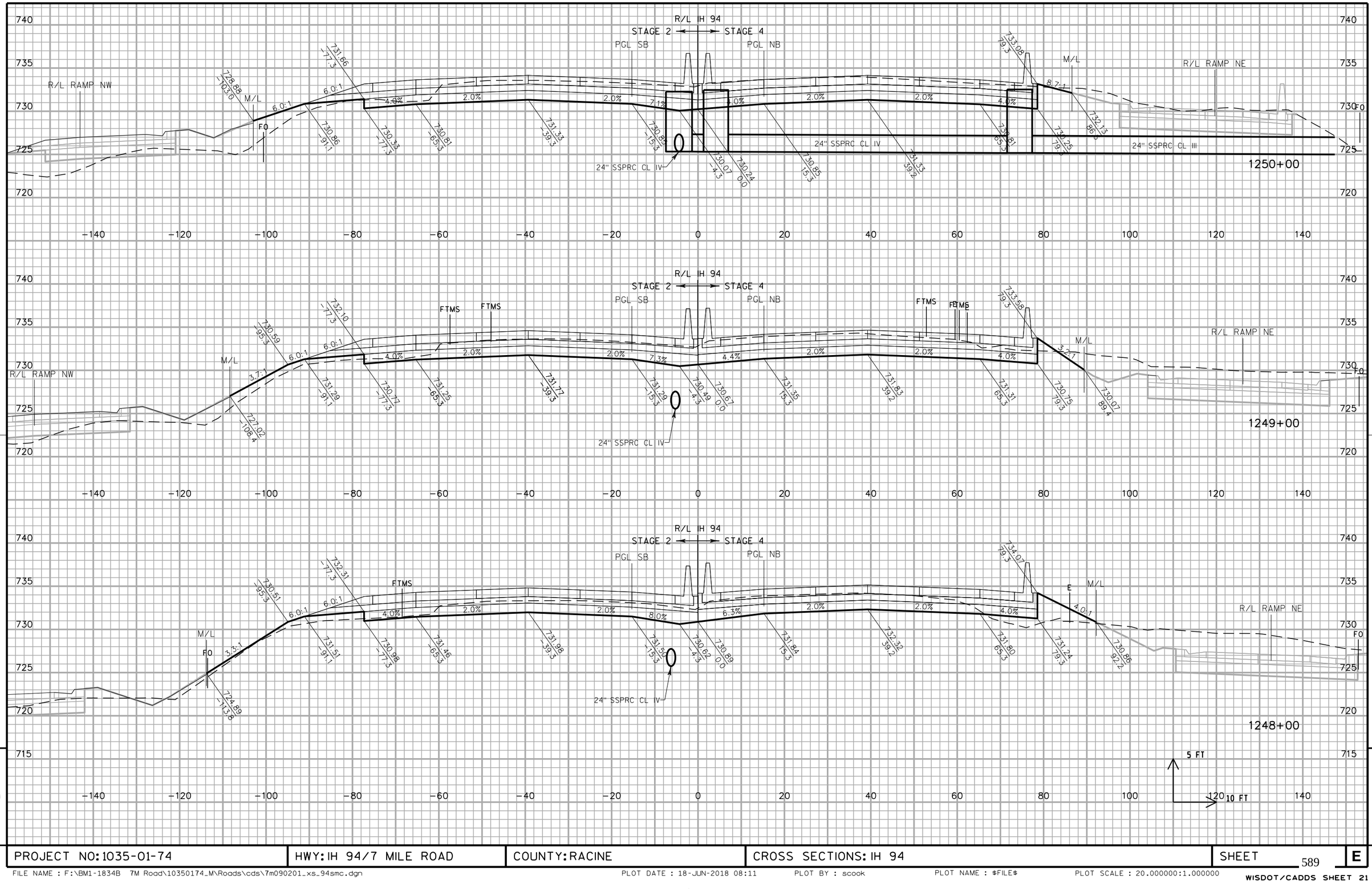
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FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn PLOT DATE : 18-JUN-2018 08:11 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21

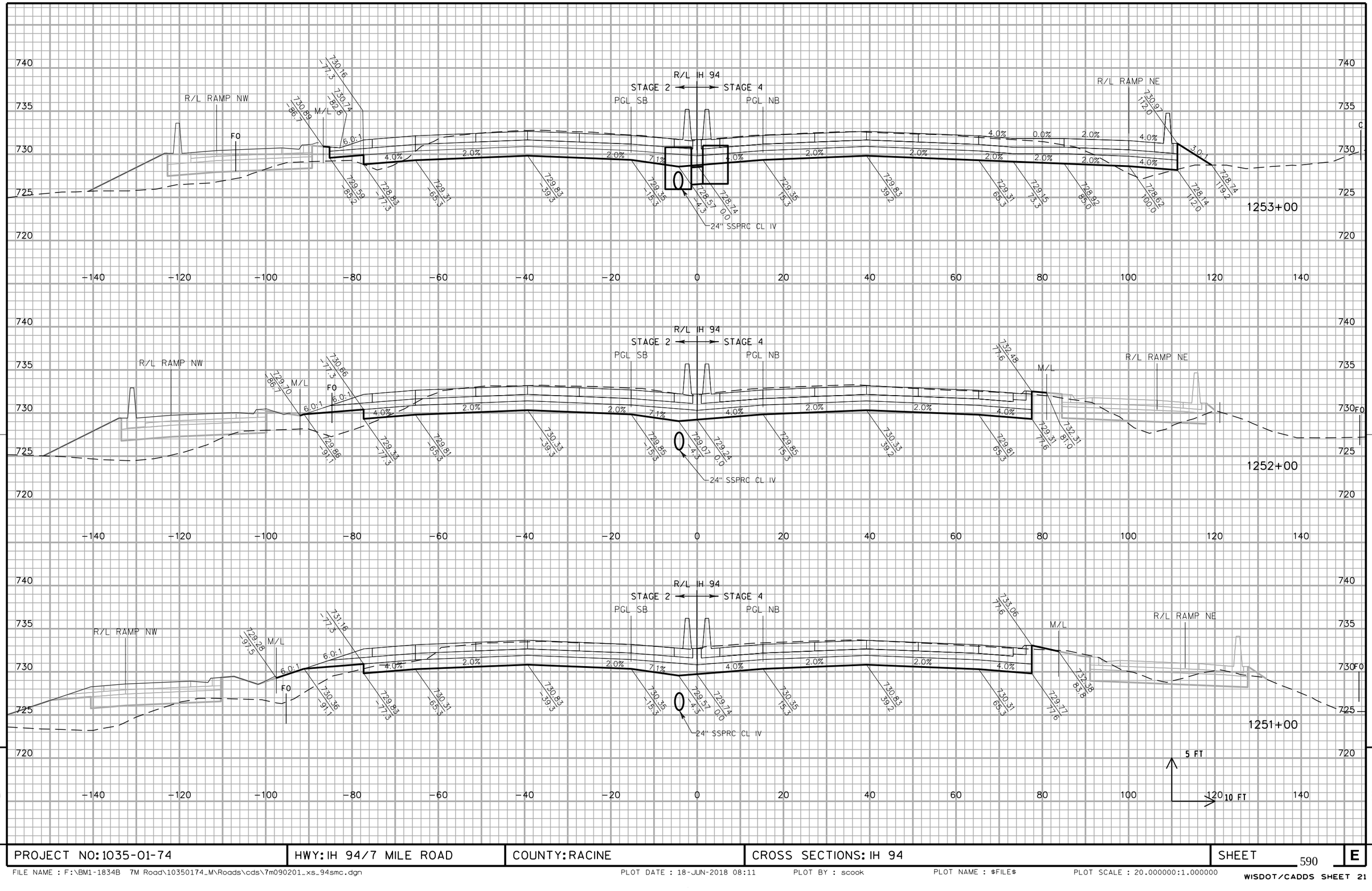


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 588	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn PLOT DATE : 18-JUN-2018 08:11 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000 WISDOT/CADDS SHEET 21

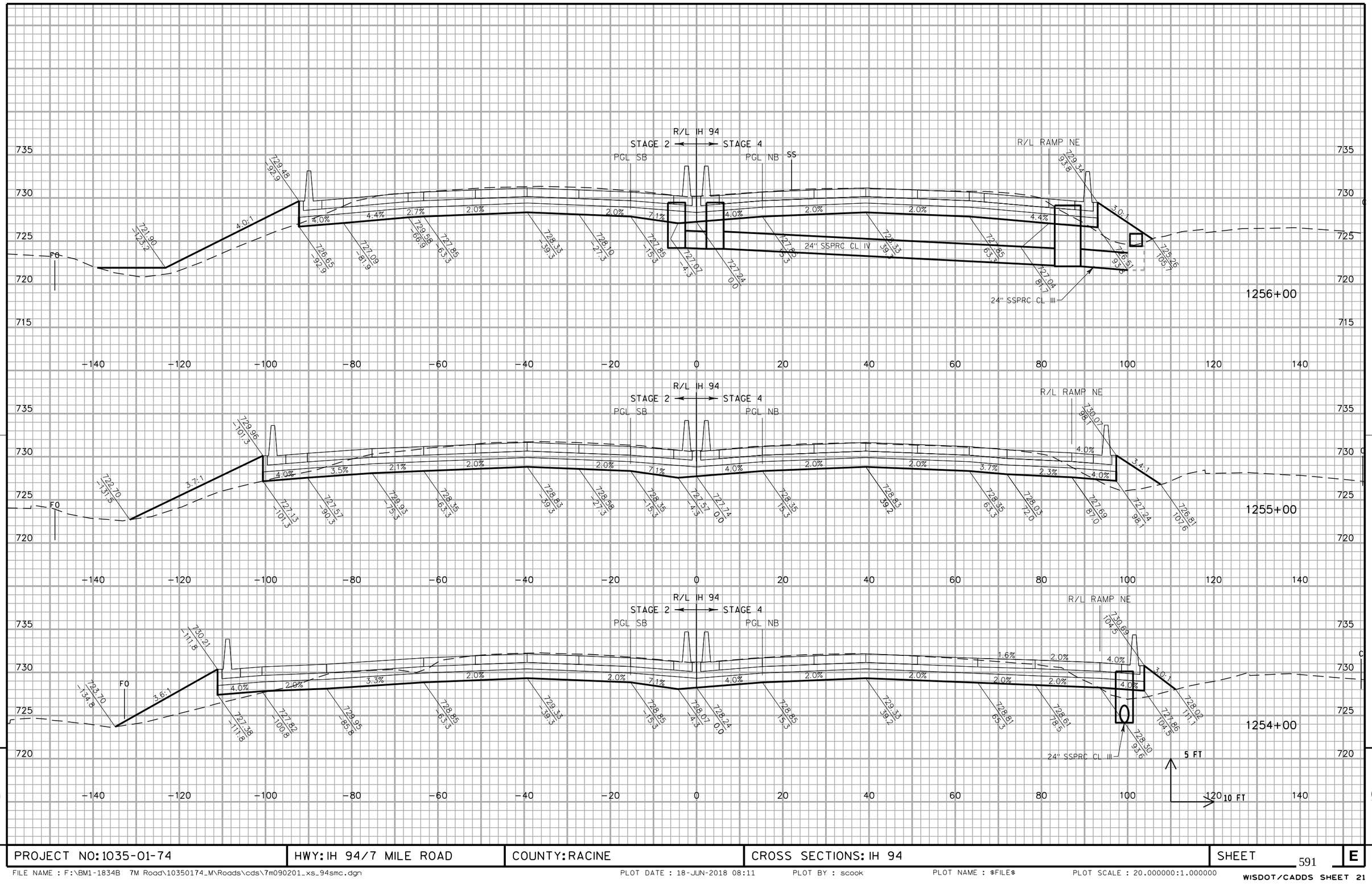


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 589	E



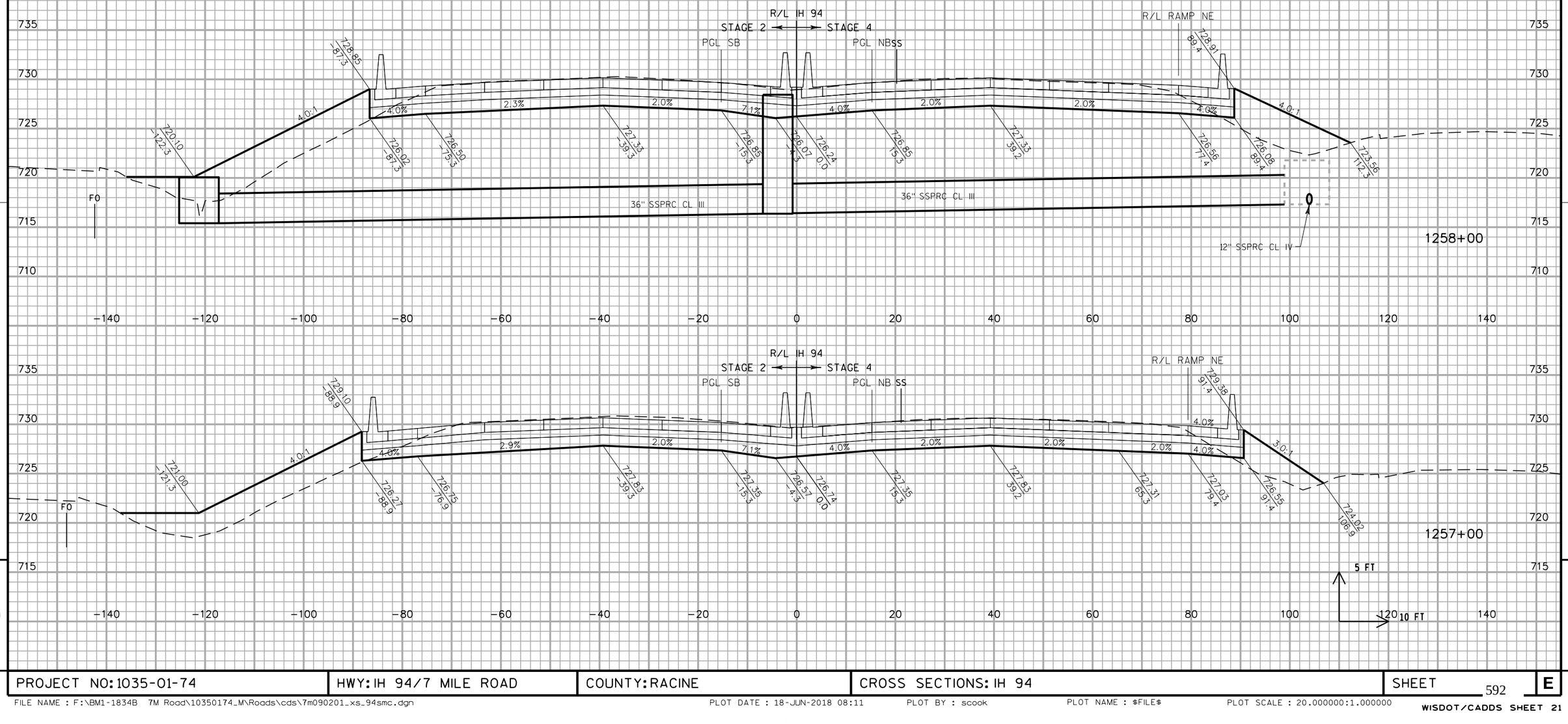
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn PLOT DATE : 18-JUN-2018 08:11 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 591	E

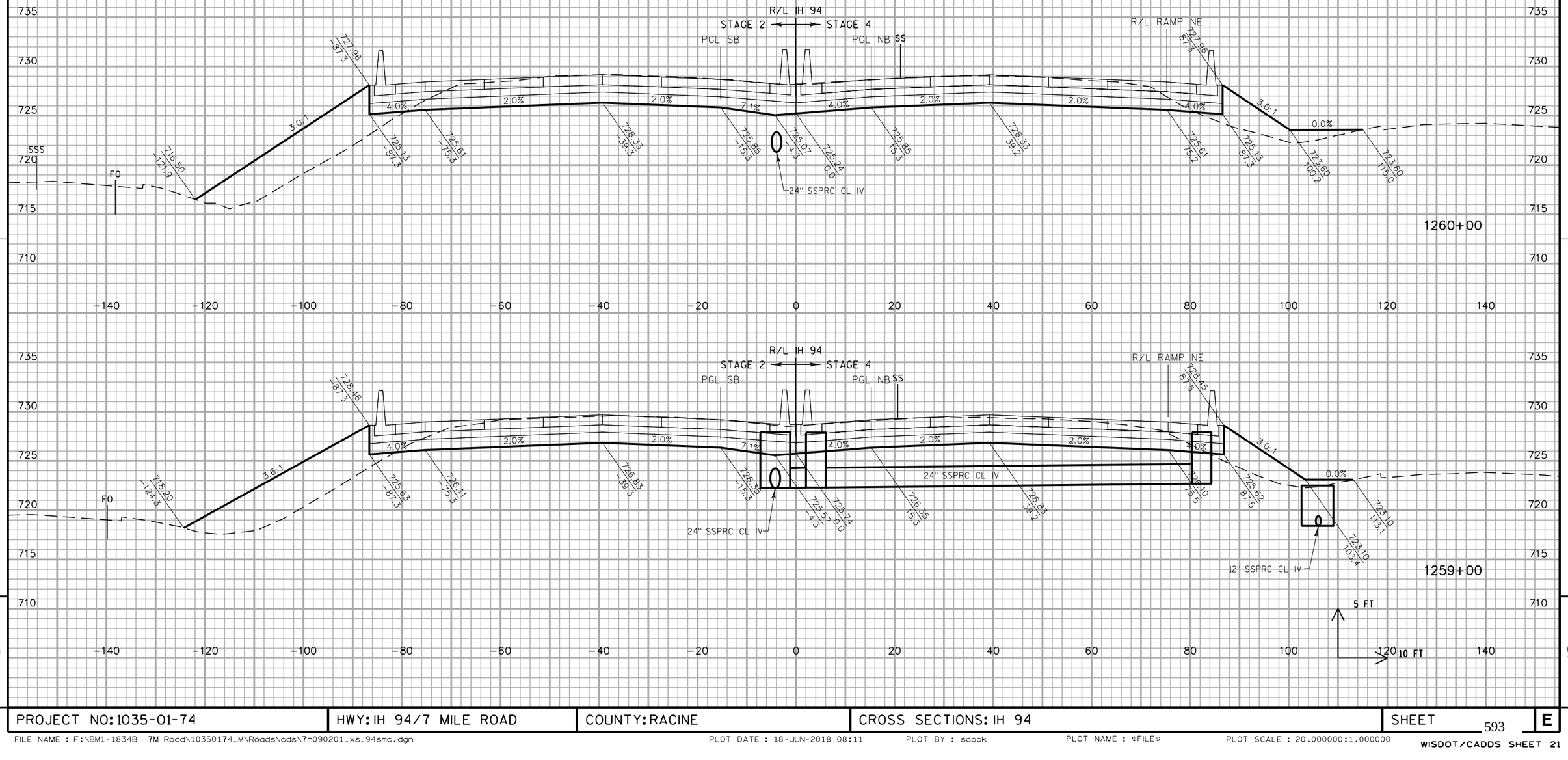
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WISDOT/CADDS SHEET 21



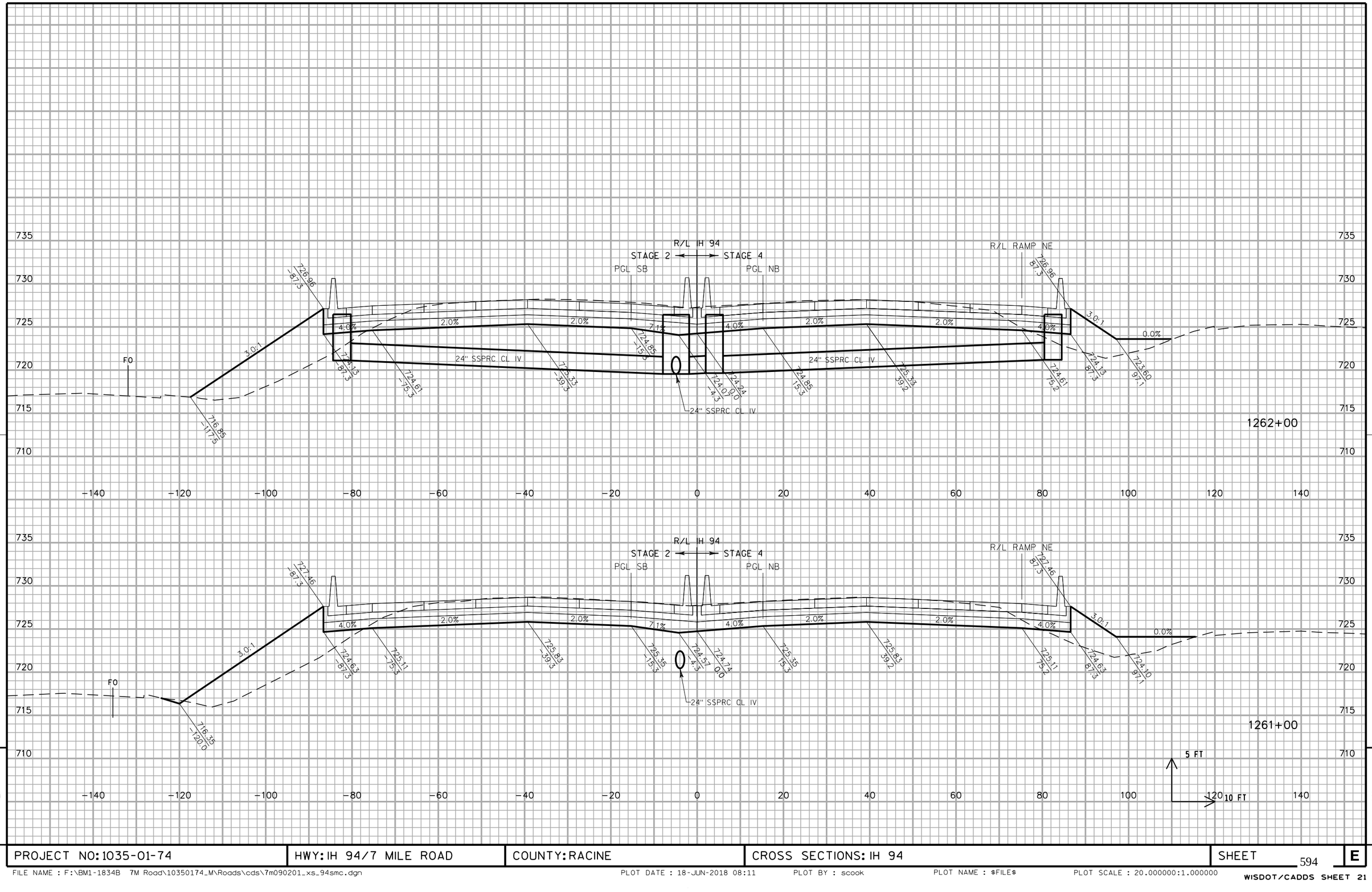
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET	E

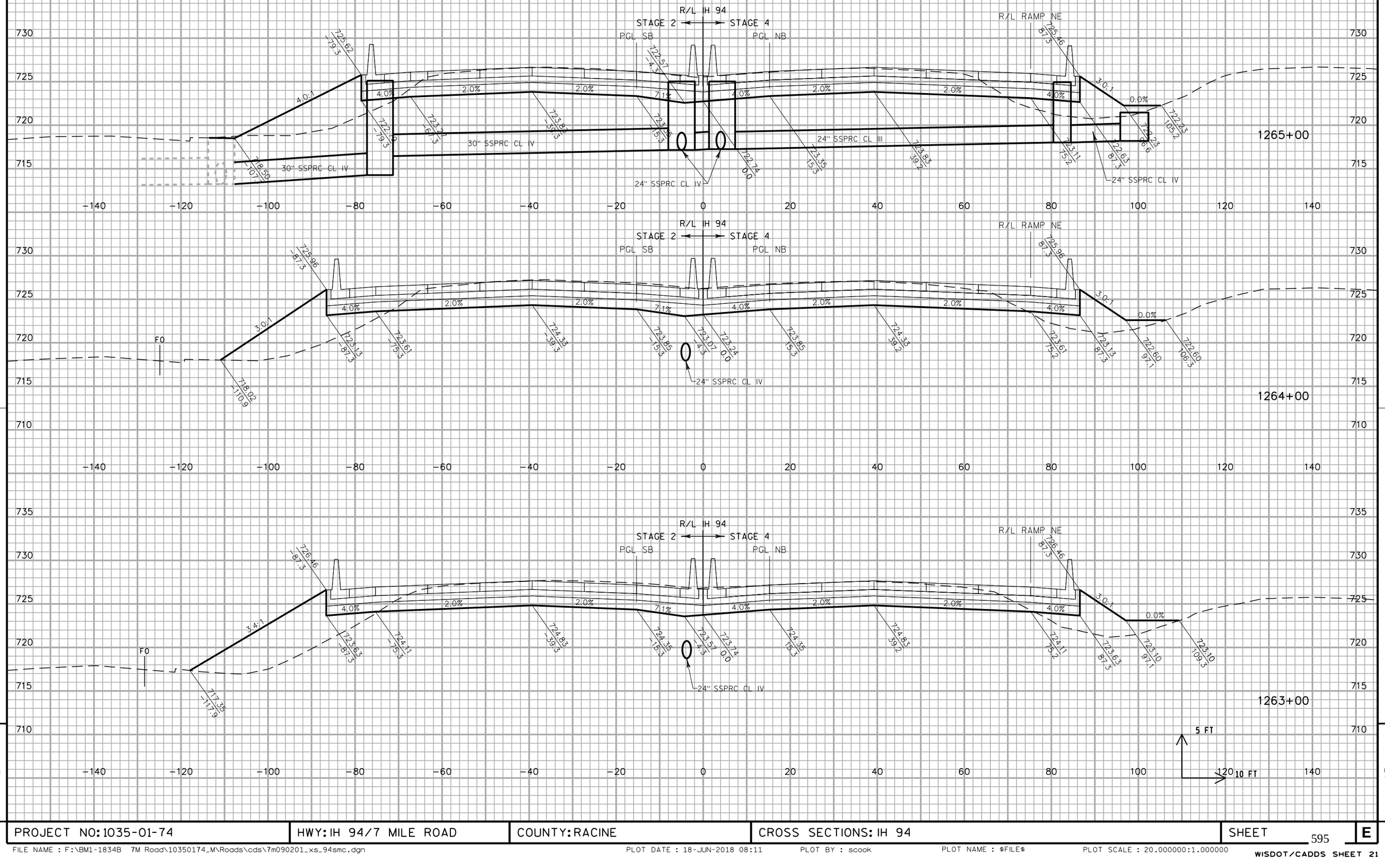
FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn PLOT DATE : 18-JUN-2018 08:11 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21



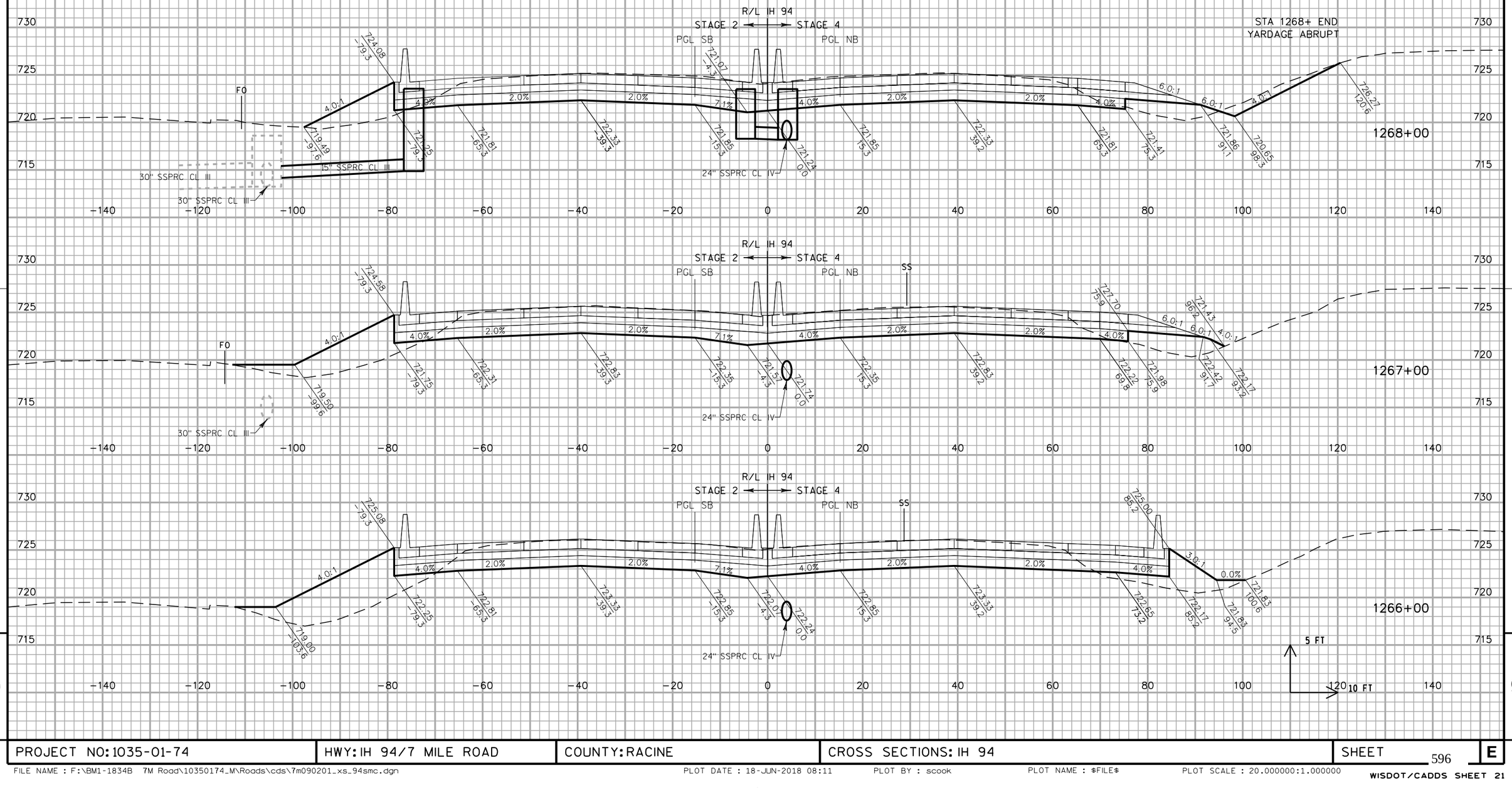
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 594	E



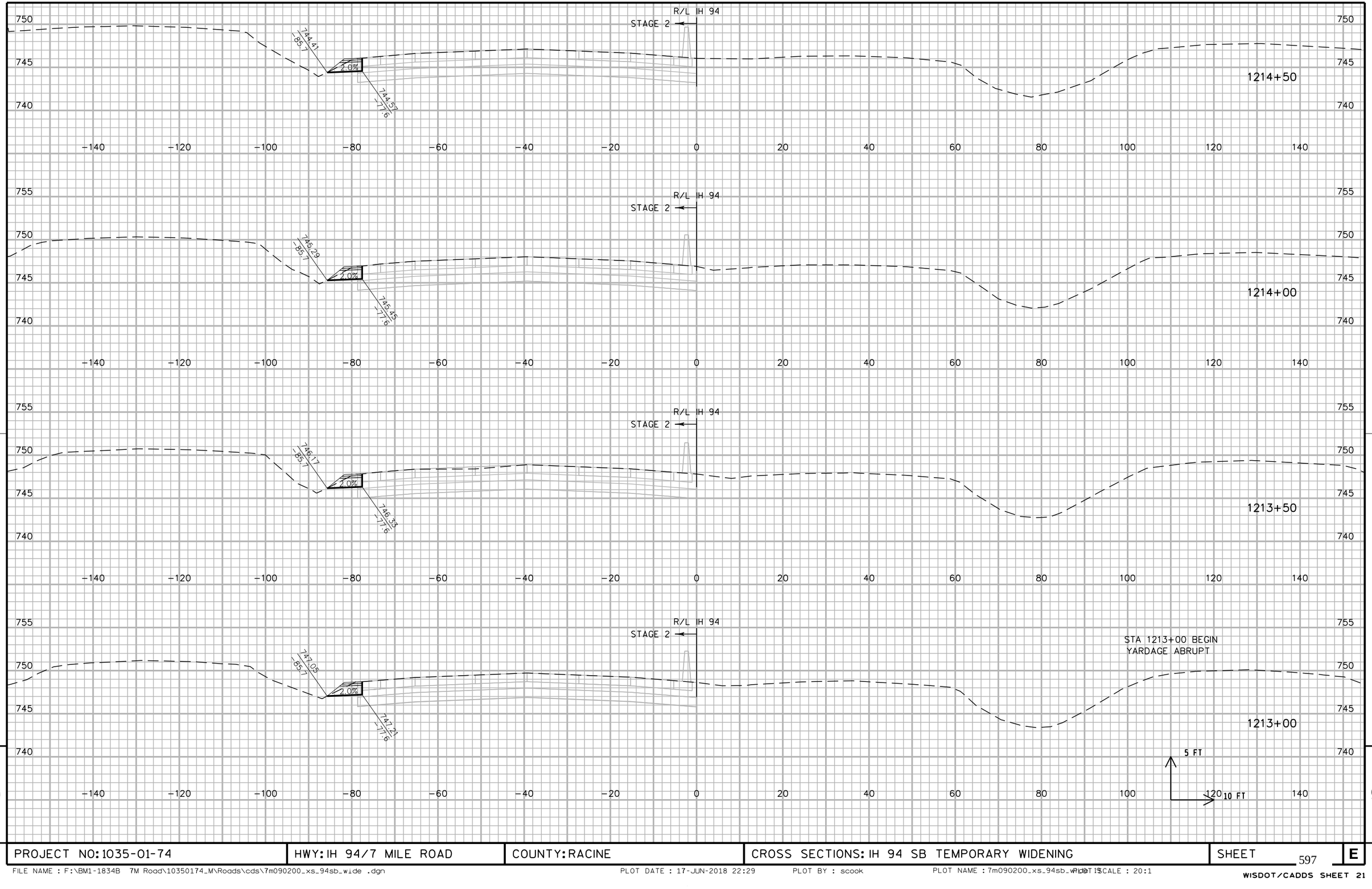
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 595	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94	SHEET 596 E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090201_xs_94smc.dgn PLOT DATE : 18-JUN-2018 08:11 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000

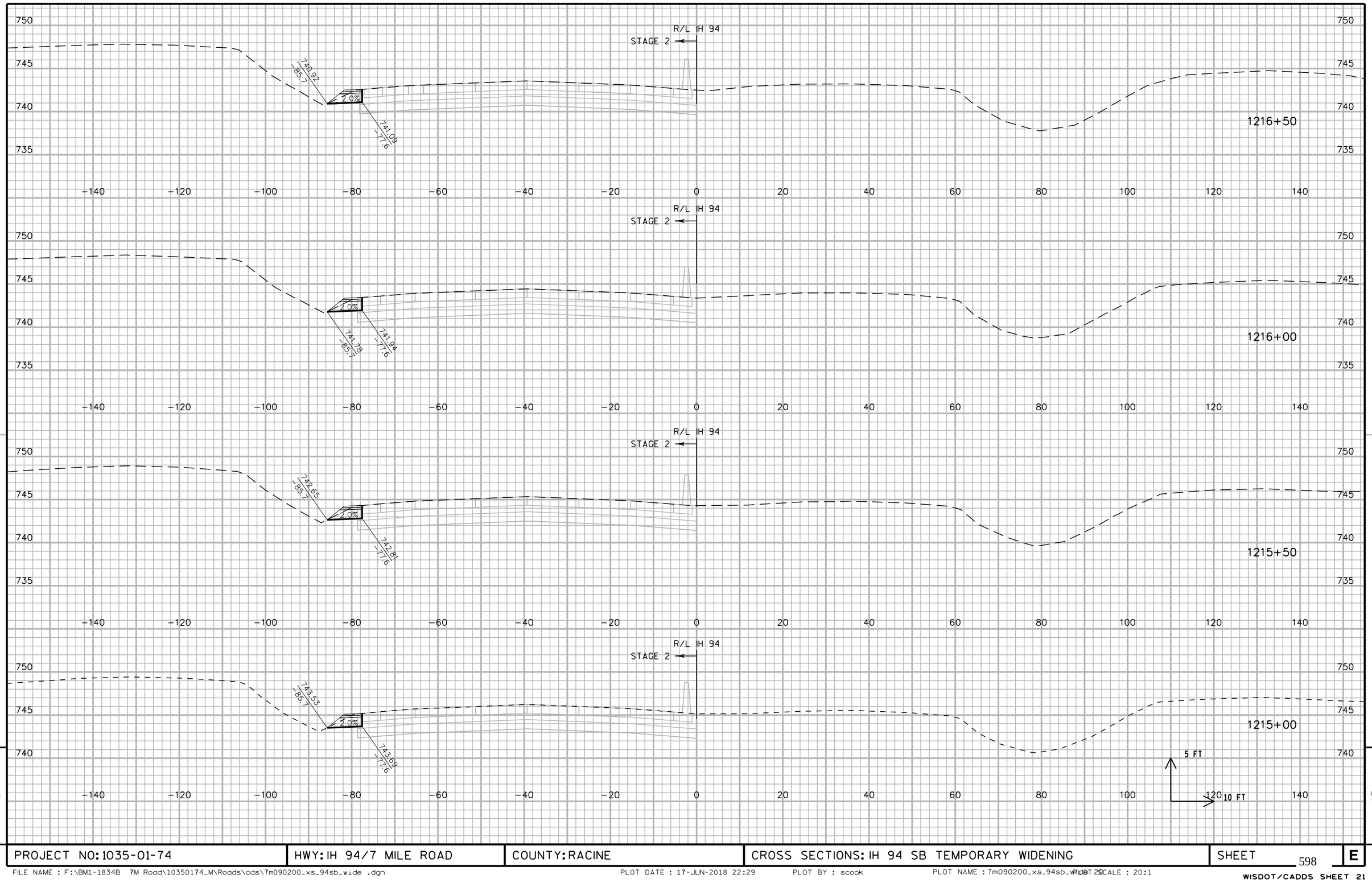
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 597	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94sb_wide .dgn PLOT DATE : 17-JUN-2018 22:29 PLOT BY : scook PLOT NAME : 7m090200_xs_94sb_wide.pdf PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



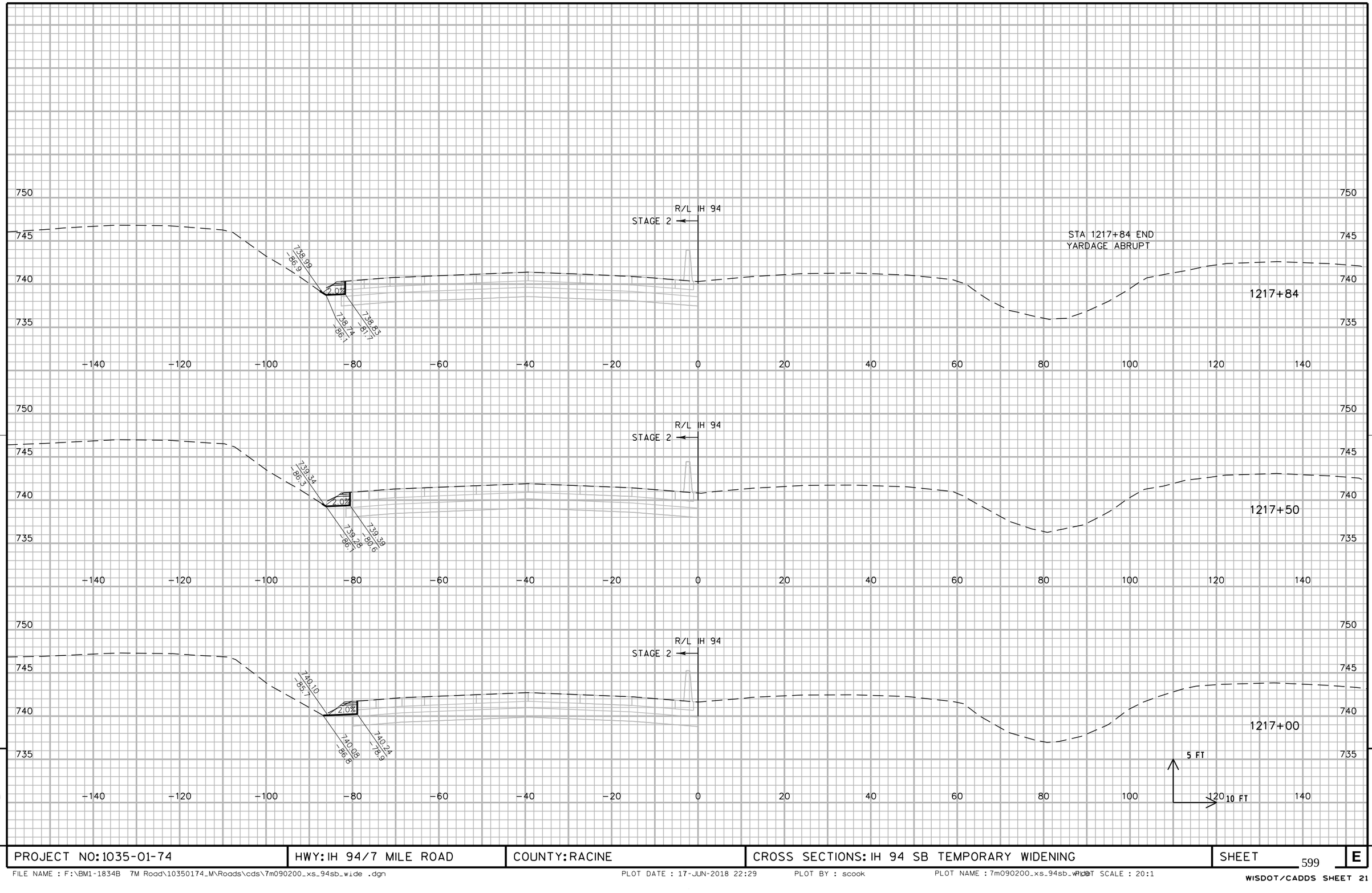
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94sb_wide .dgn PLOT DATE : 17-JUN-2018 22:29 PLOT BY : scook PLOT NAME : 7m090200_xs_94sb_wide.pdf PLOT SCALE : 20:1

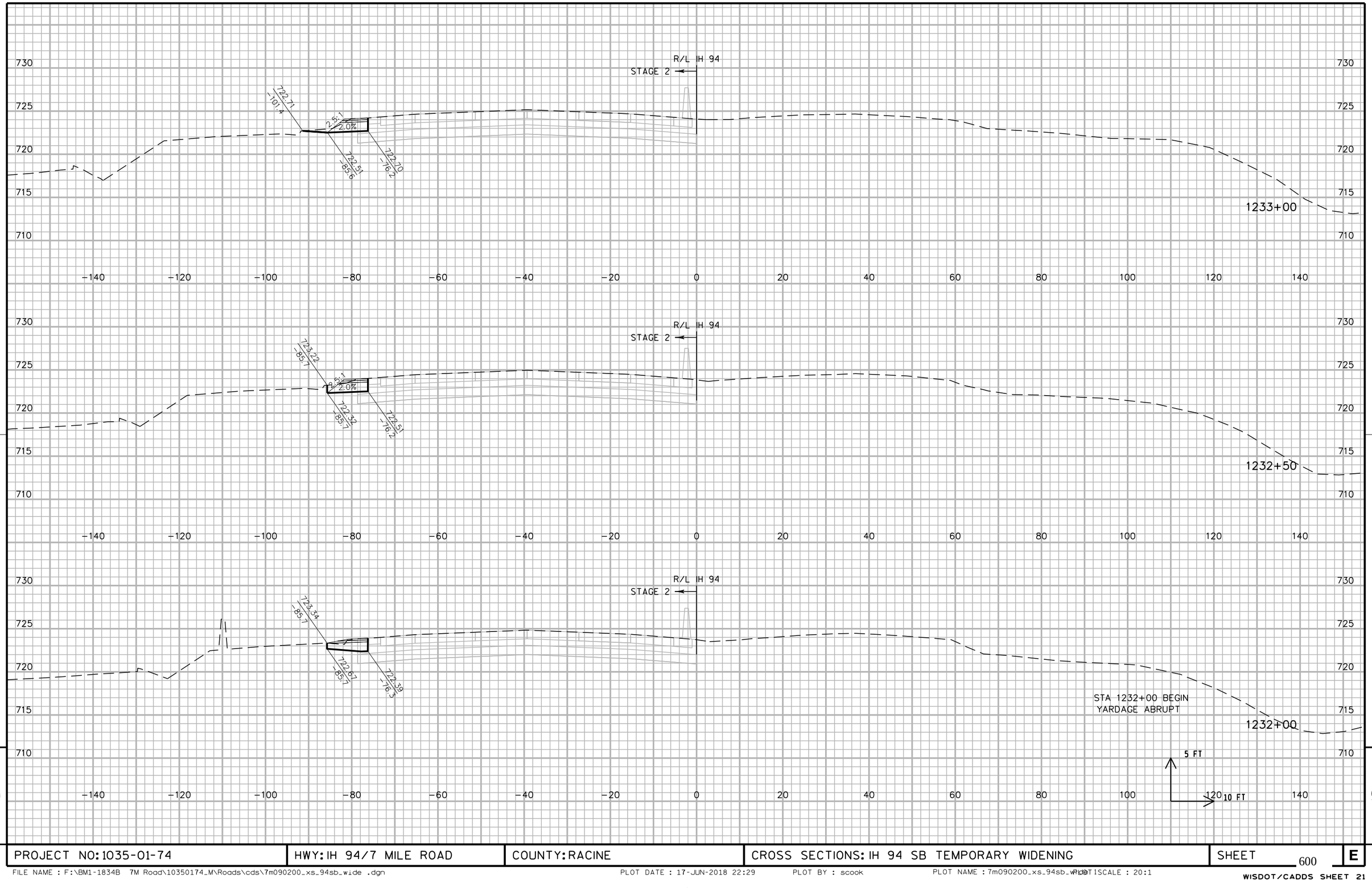
WISDOT/CADDS SHEET 21



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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 599	E

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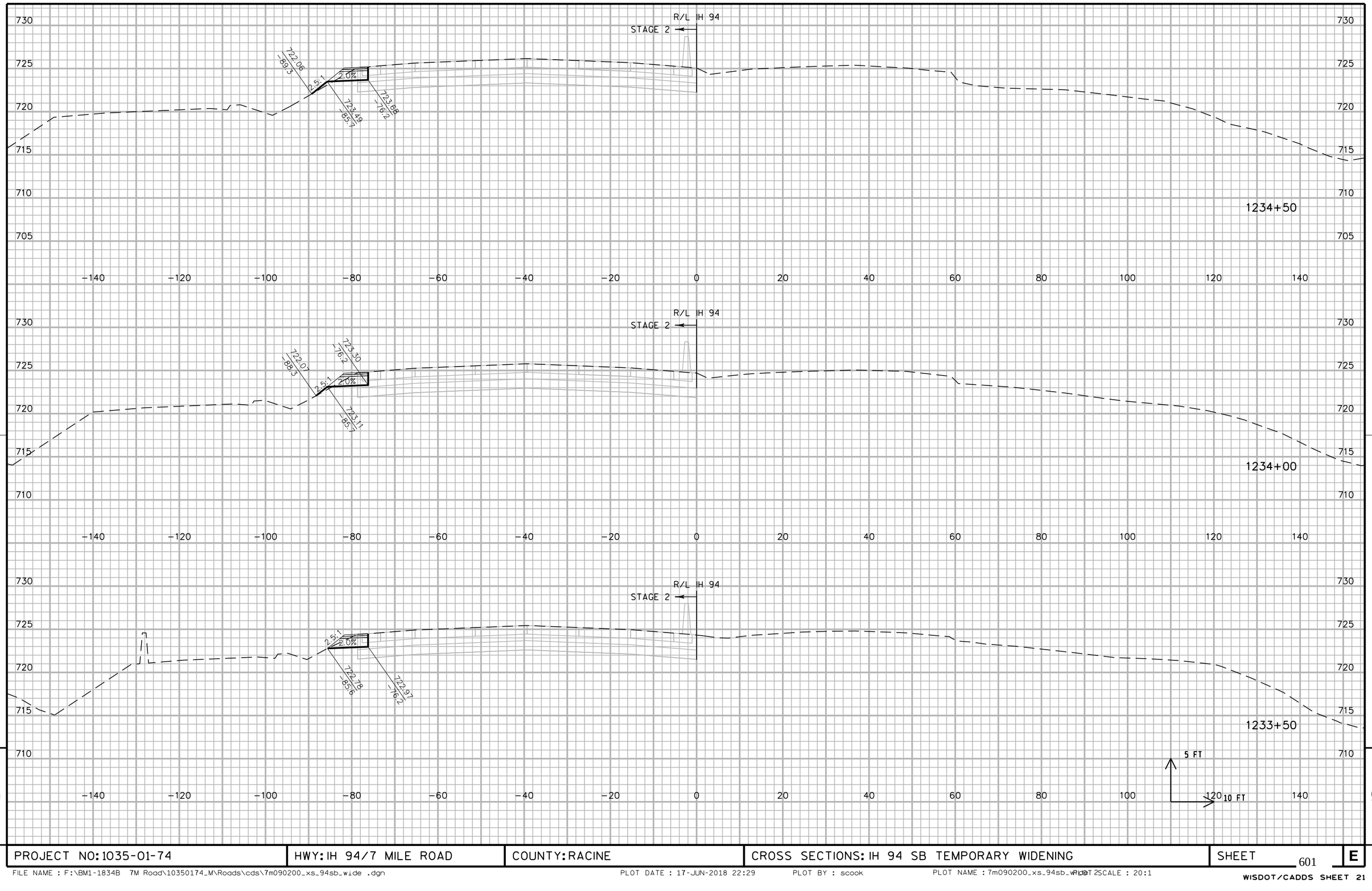


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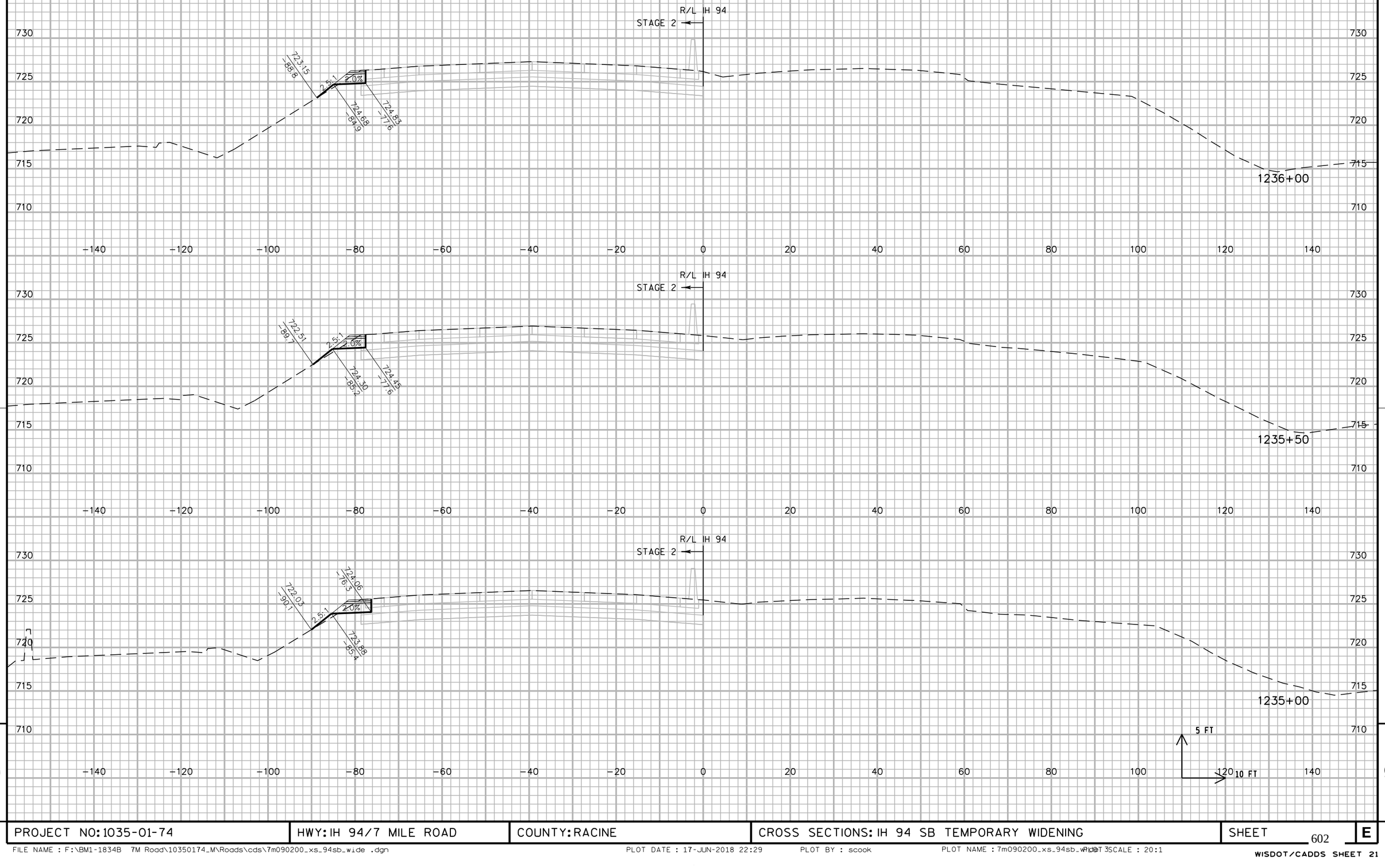
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090200_xs_94sb_wide .dgn PLOT DATE : 17-JUN-2018 22:29 PLOT BY : scook PLOT NAME : 7m090200_xs_94sb_wide.pdf PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 601 E



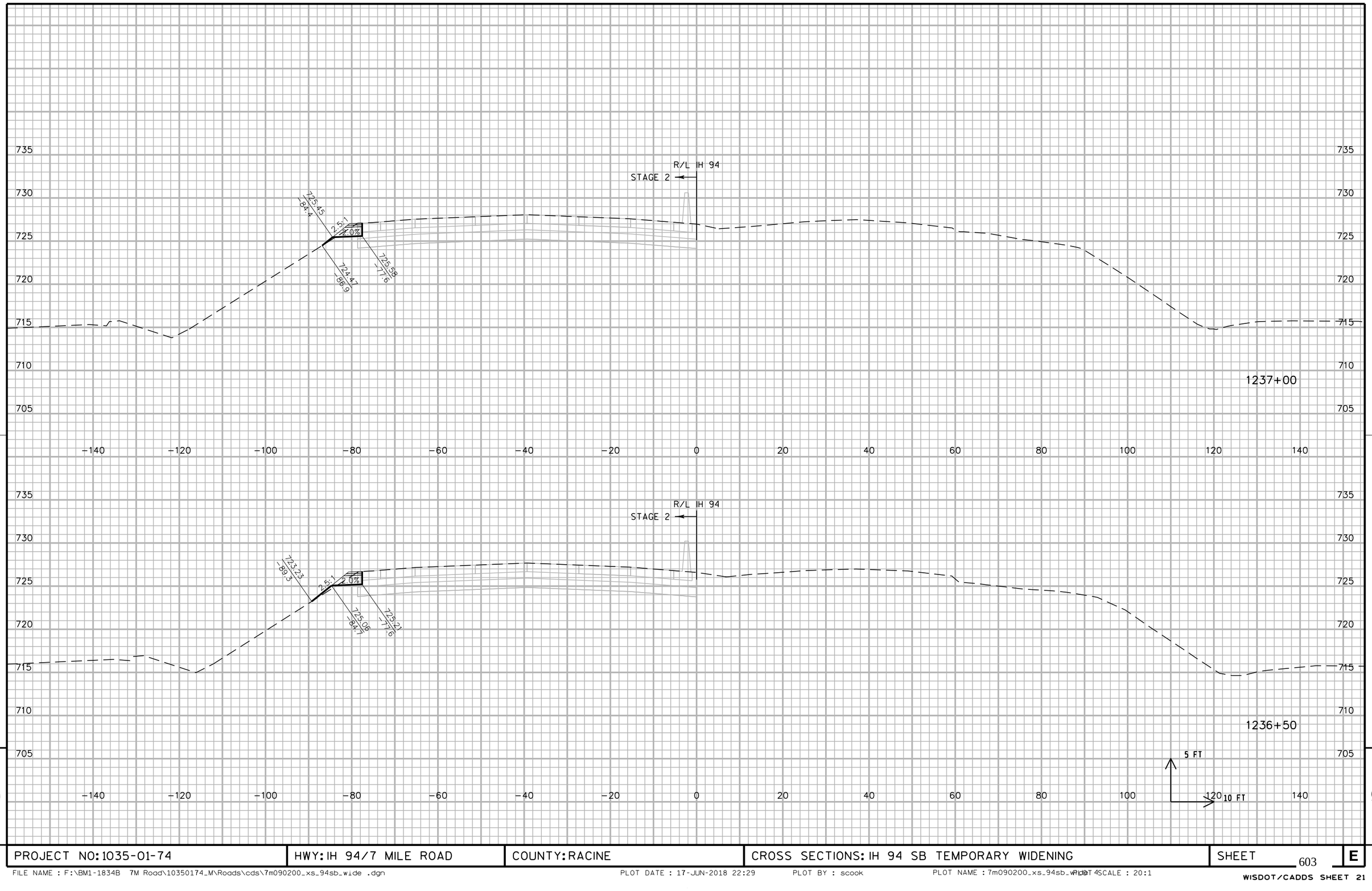
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 602	E

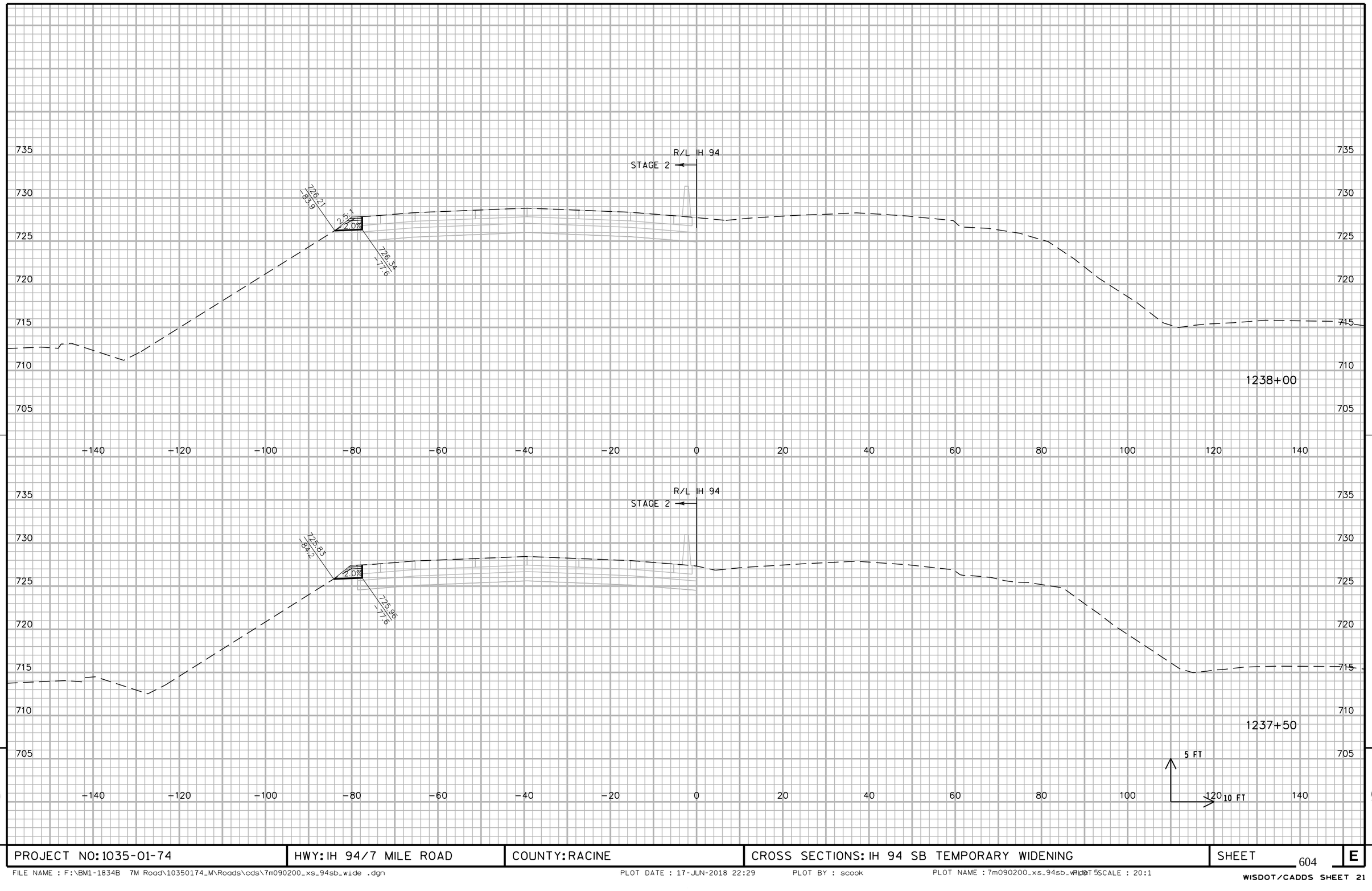
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WISDOT/CADDS SHEET 21



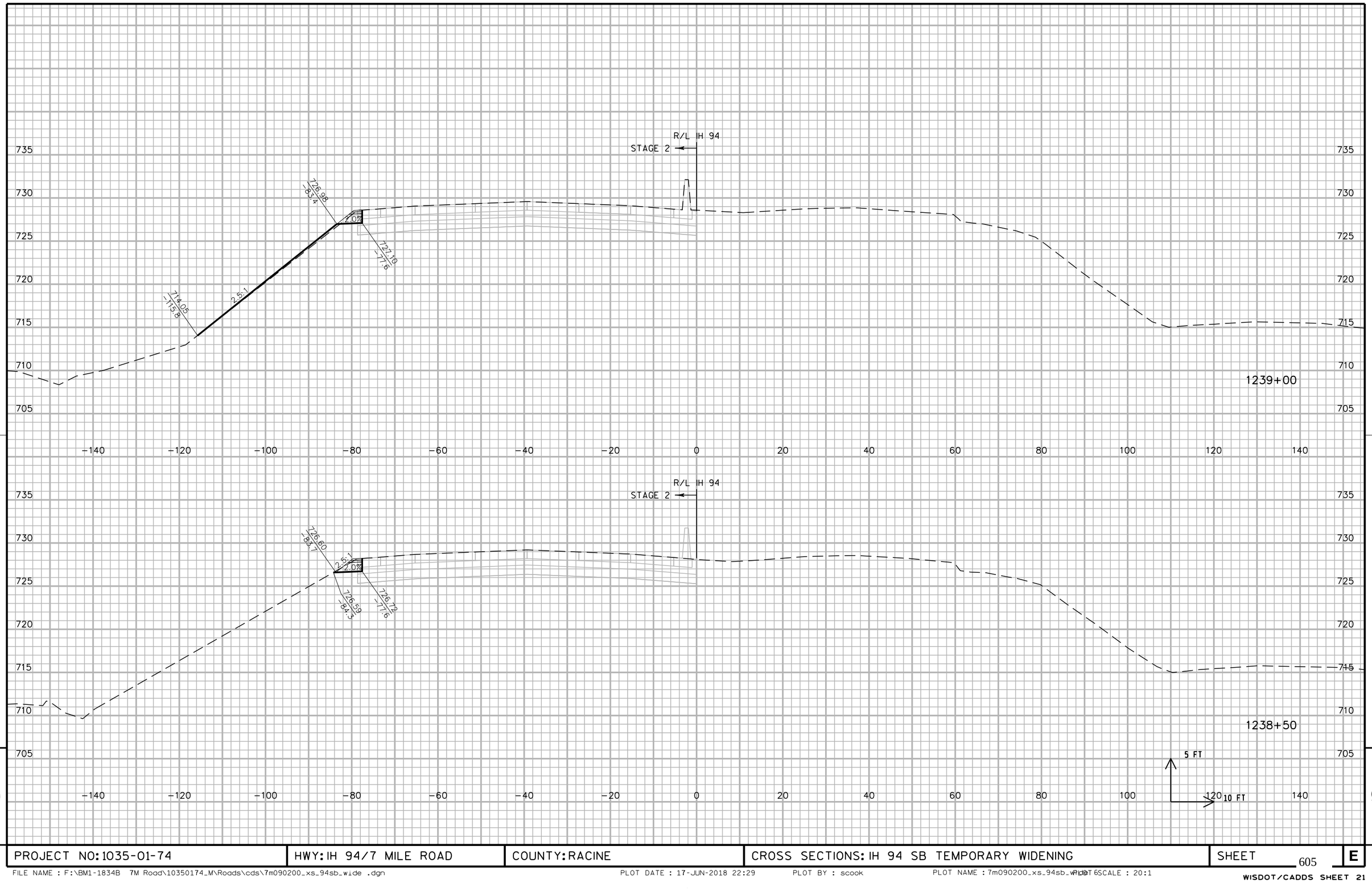
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 604	E

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WISDOT/CADDS SHEET 21

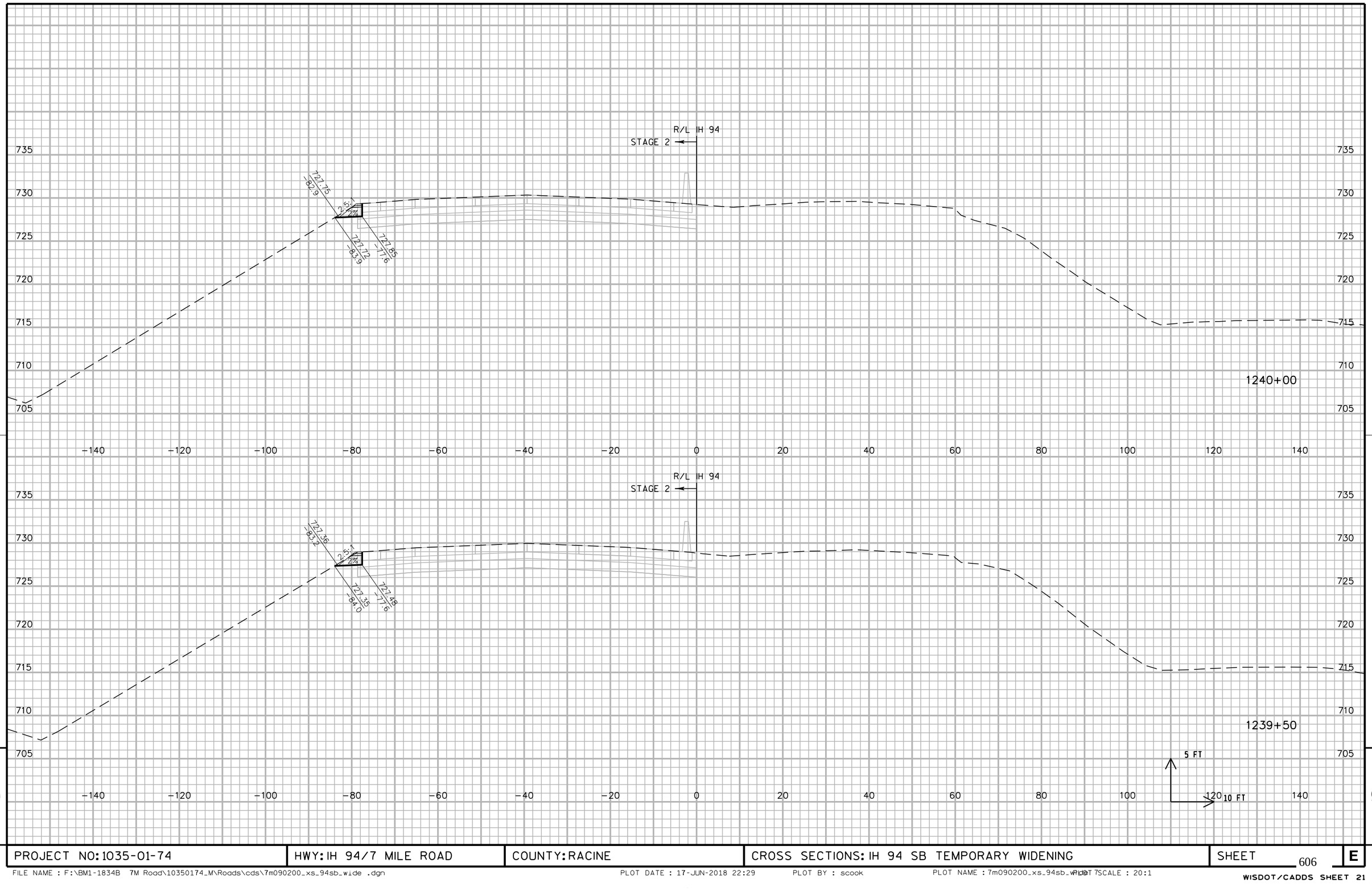


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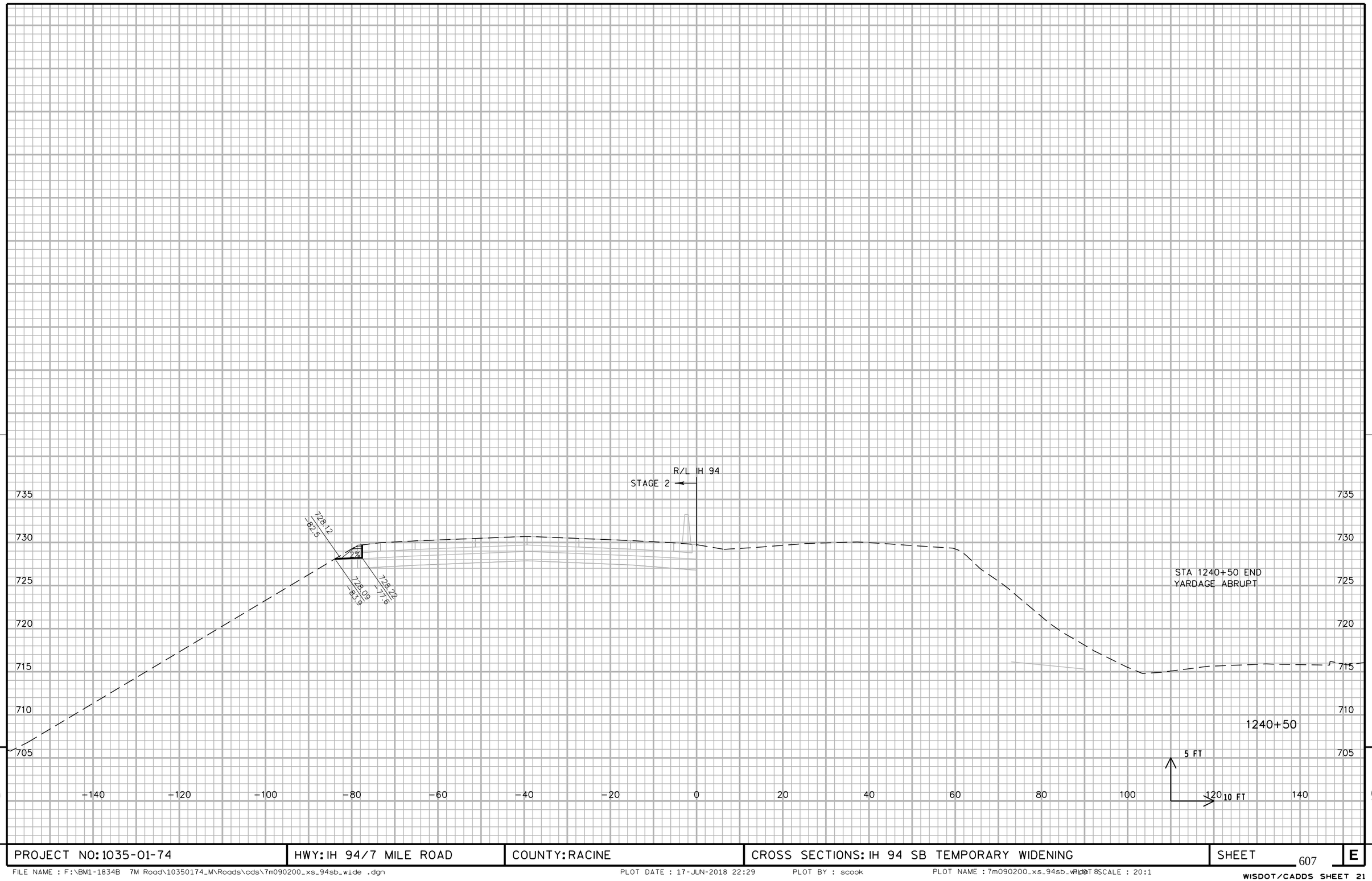
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

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PLOT NAME : 7m090200_xs_94sb_wide.pdf
PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

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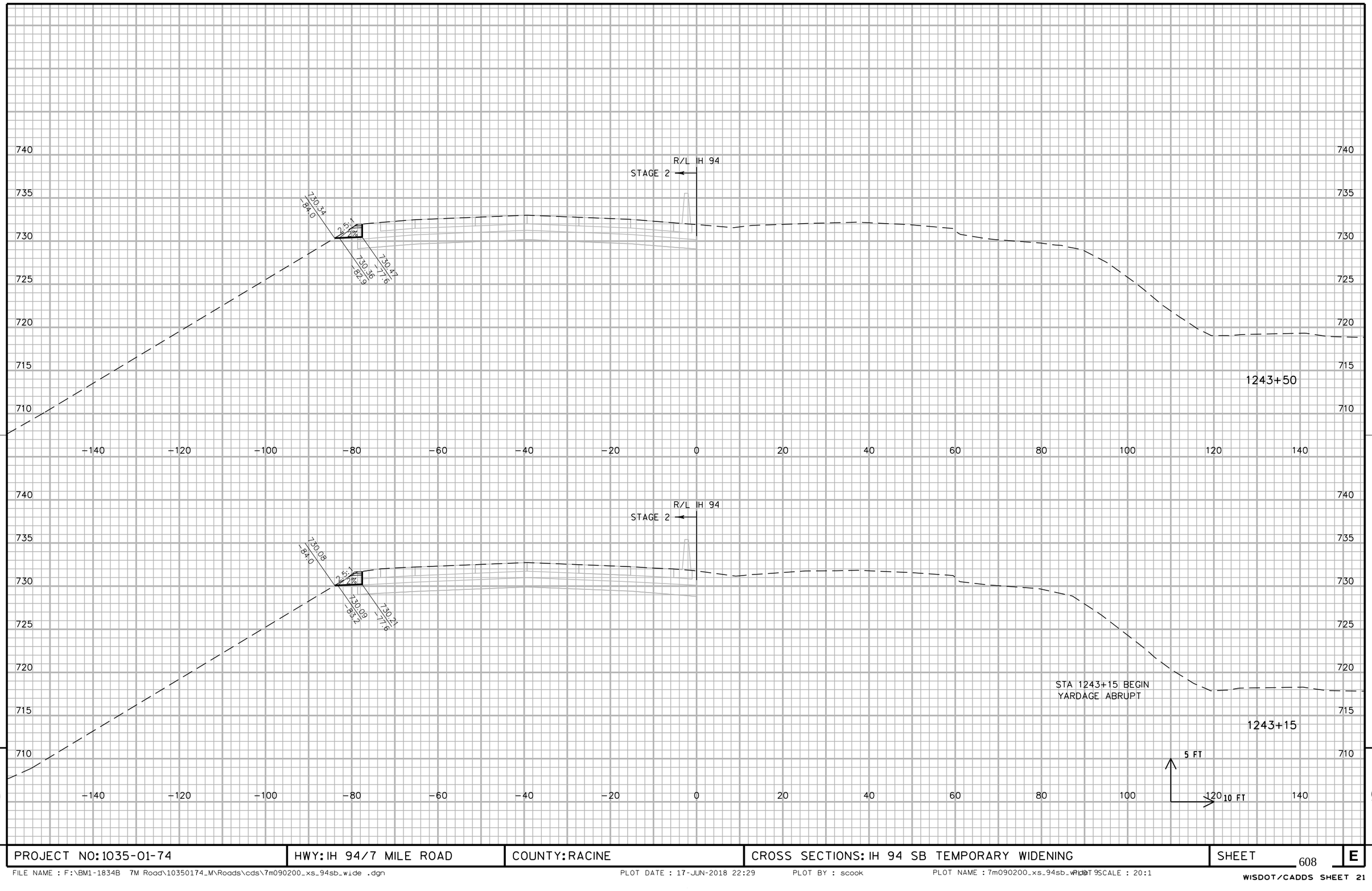
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

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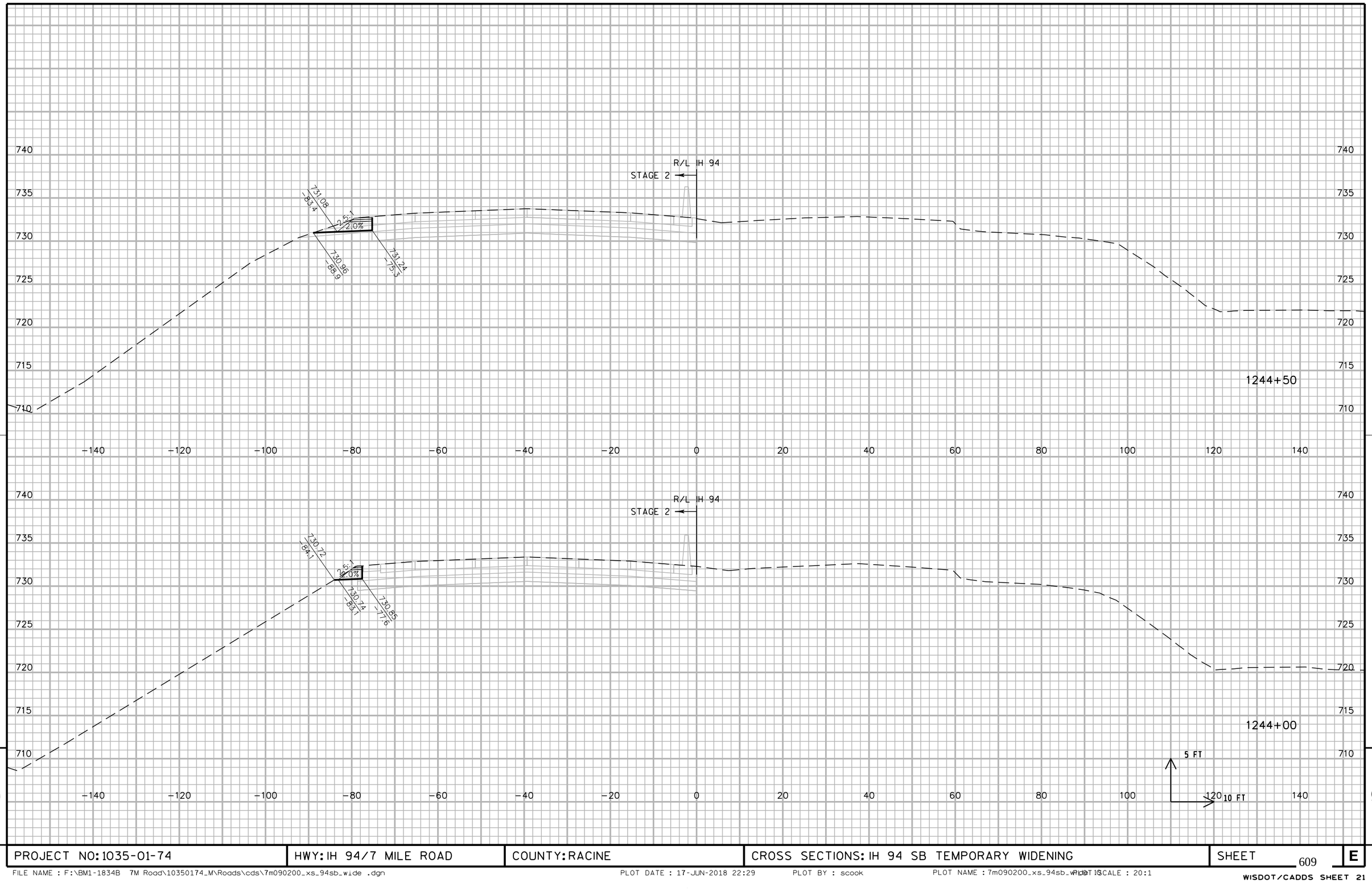
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 608 E

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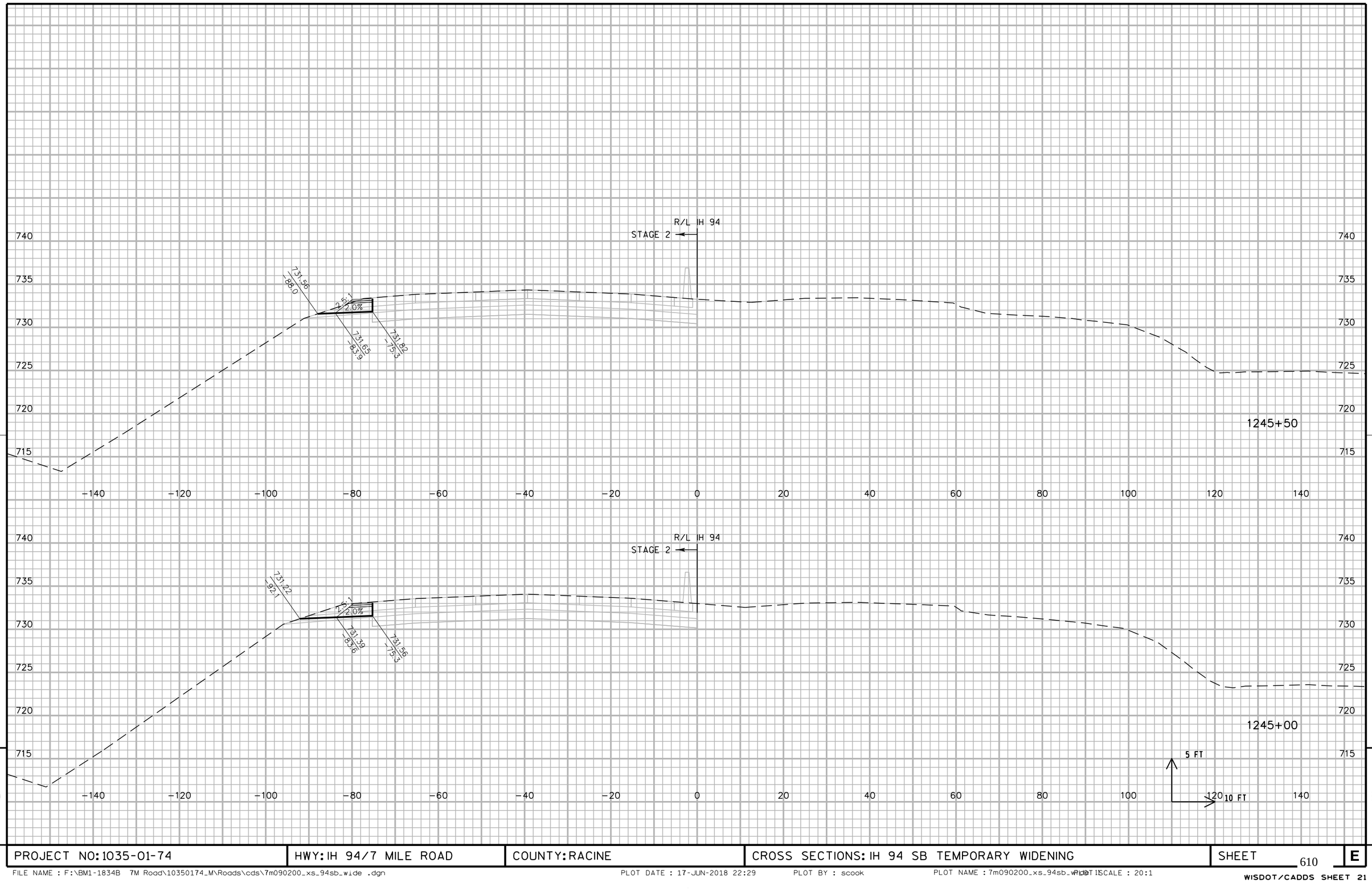
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 609	E

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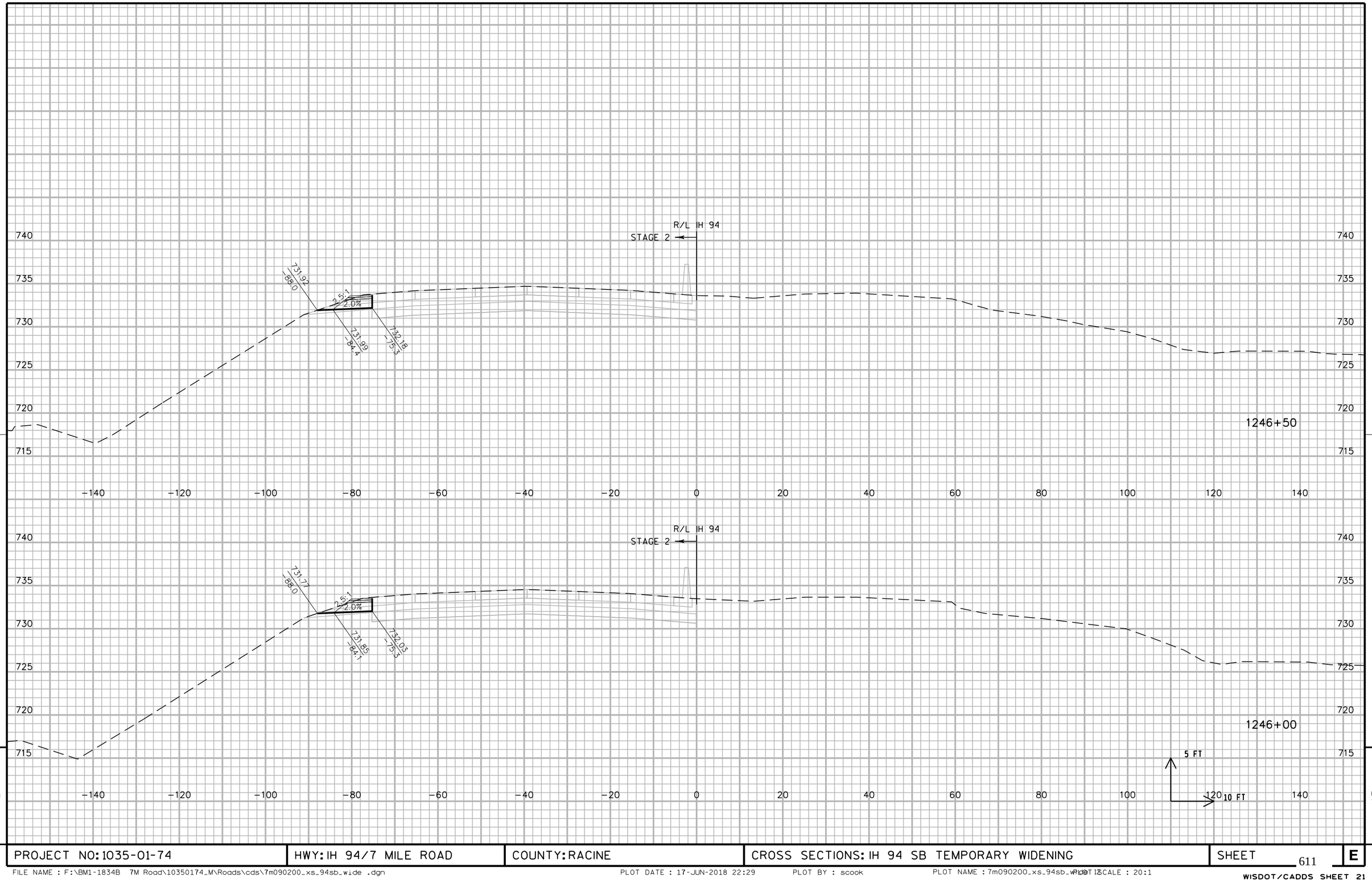
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 610	E

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WISDOT/CADDS SHEET 21



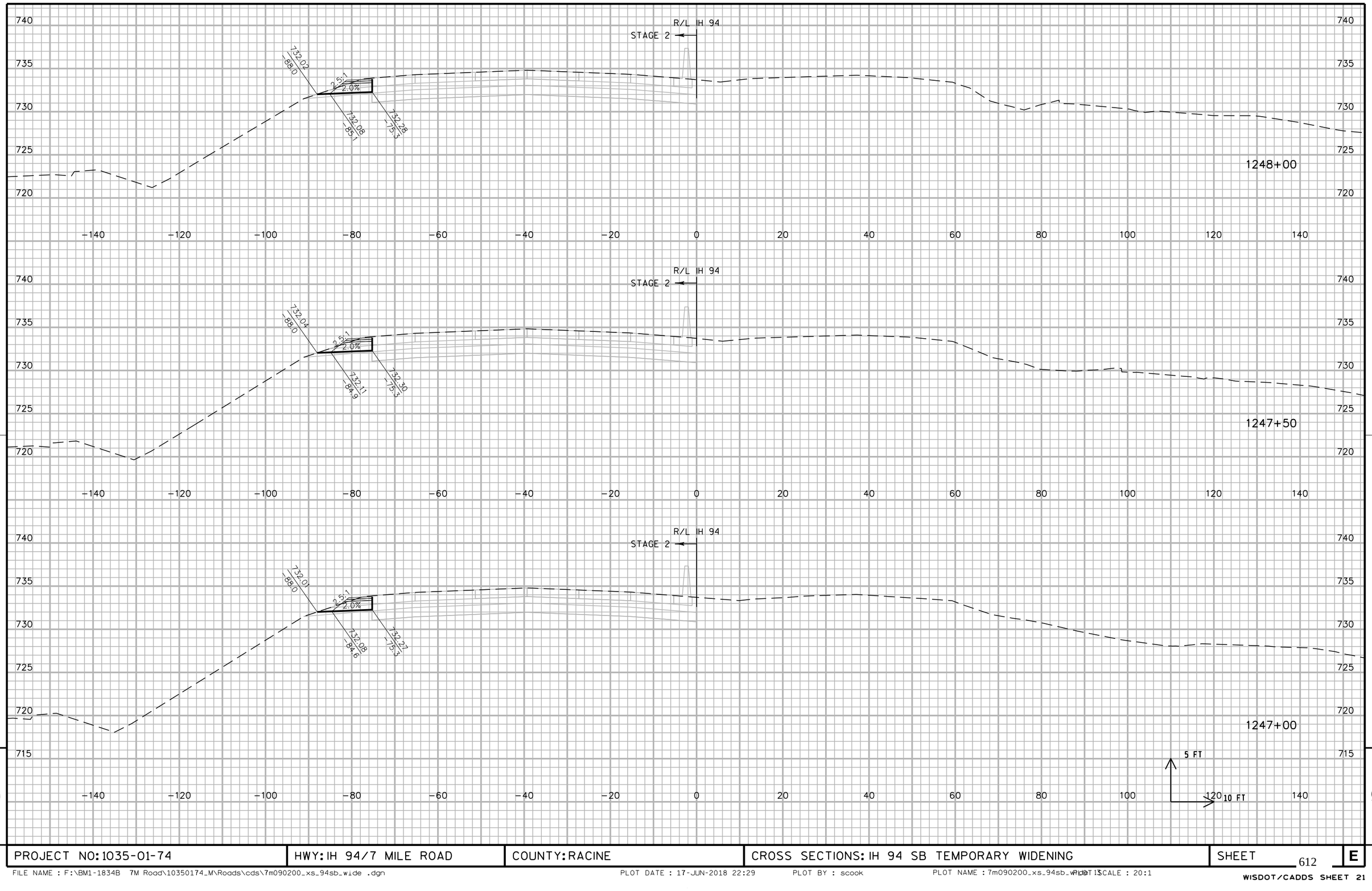
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 611	E

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WISDOT/CADDS SHEET 21

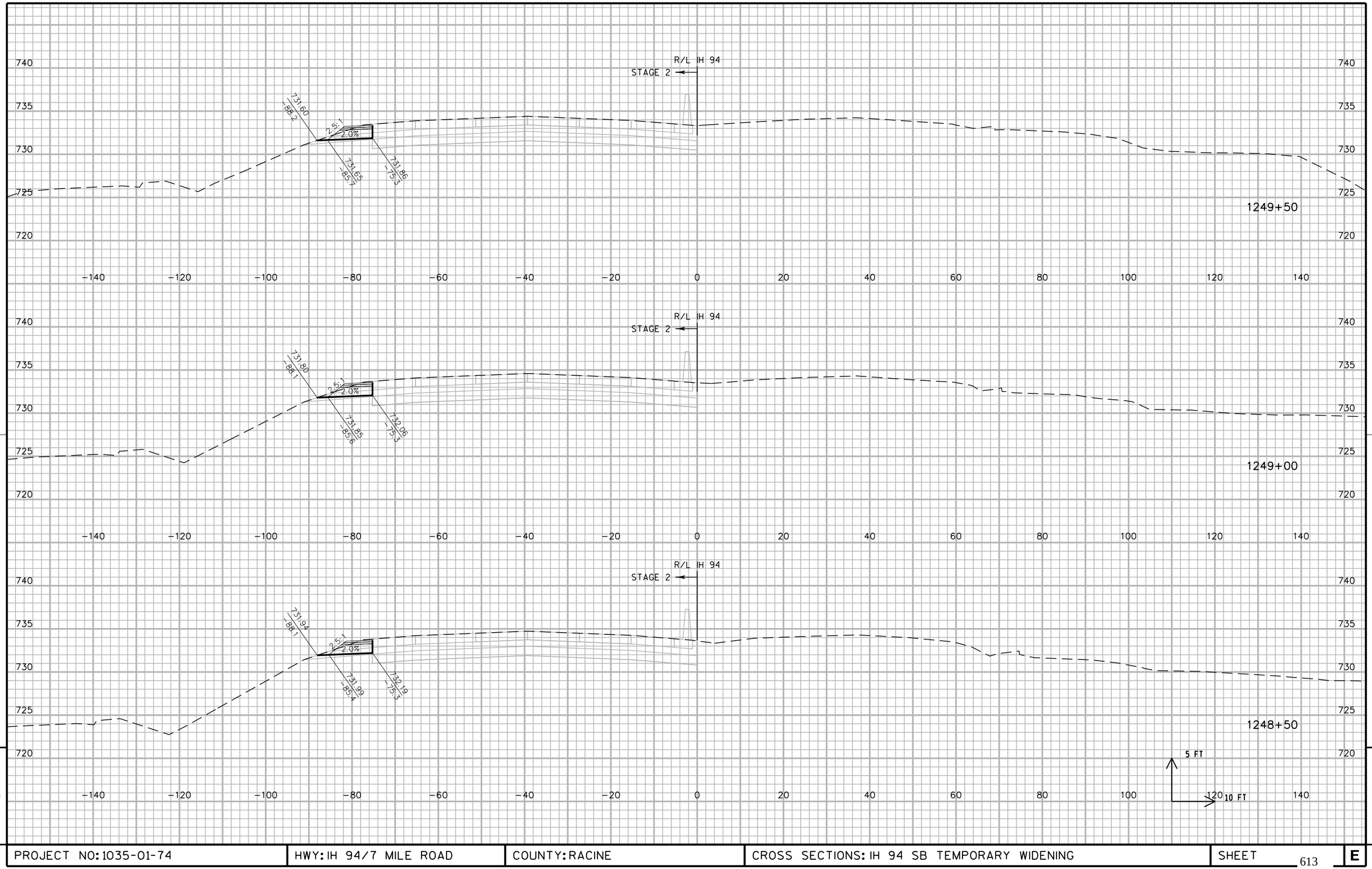


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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

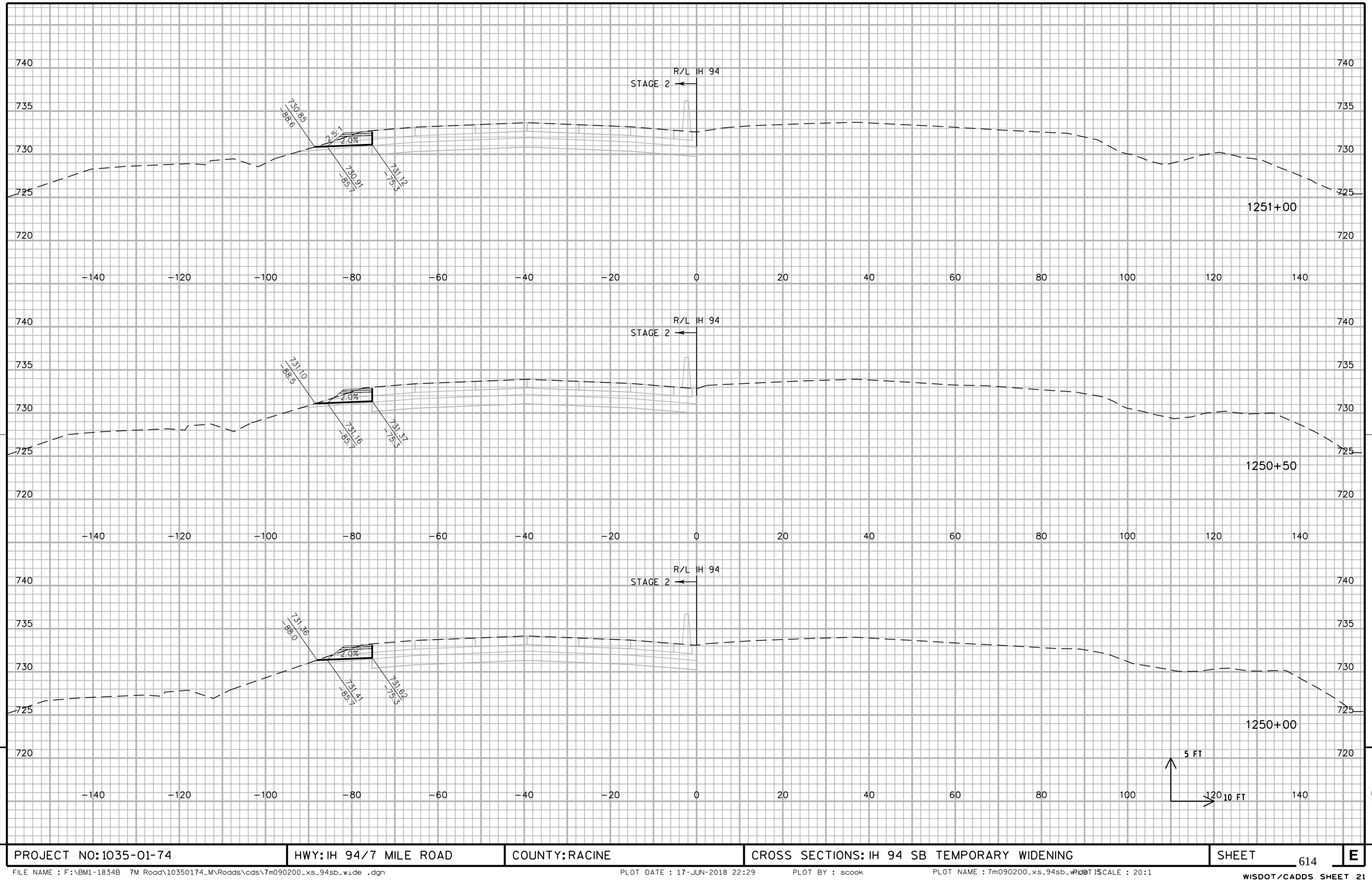
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WISDOT/CADDS SHEET 21



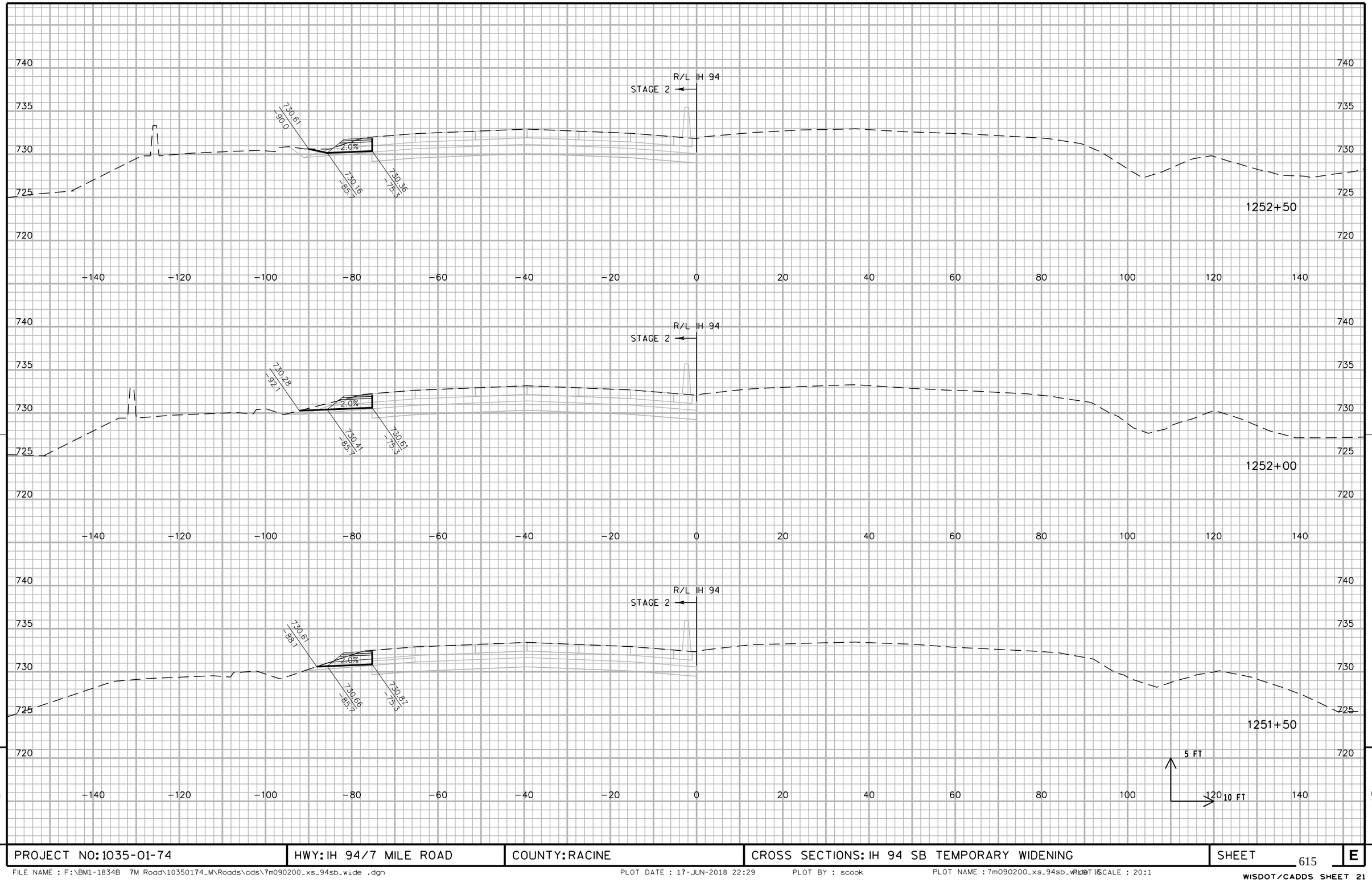
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WISDOT/CADDS SHEET 21

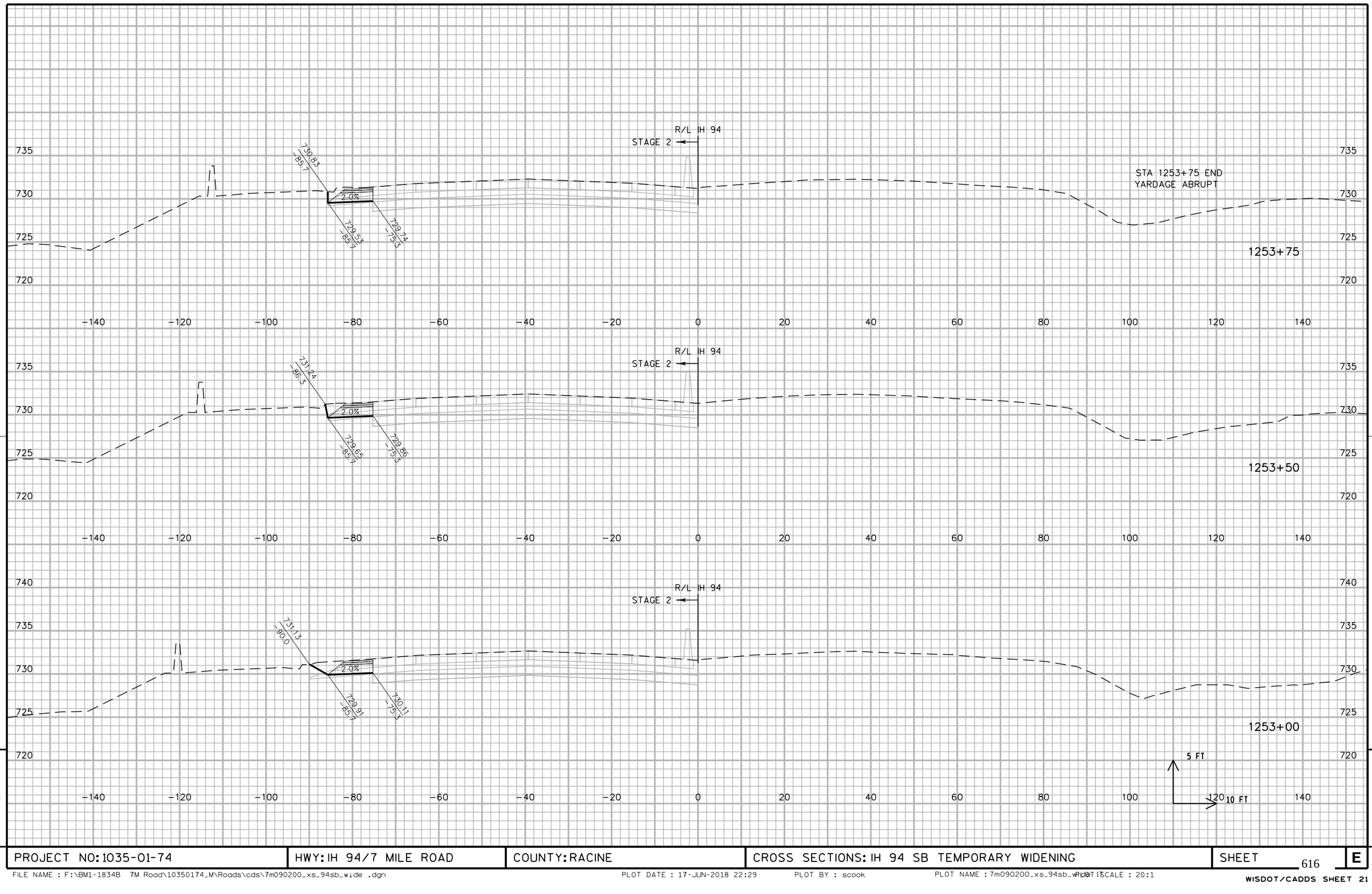


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 614	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

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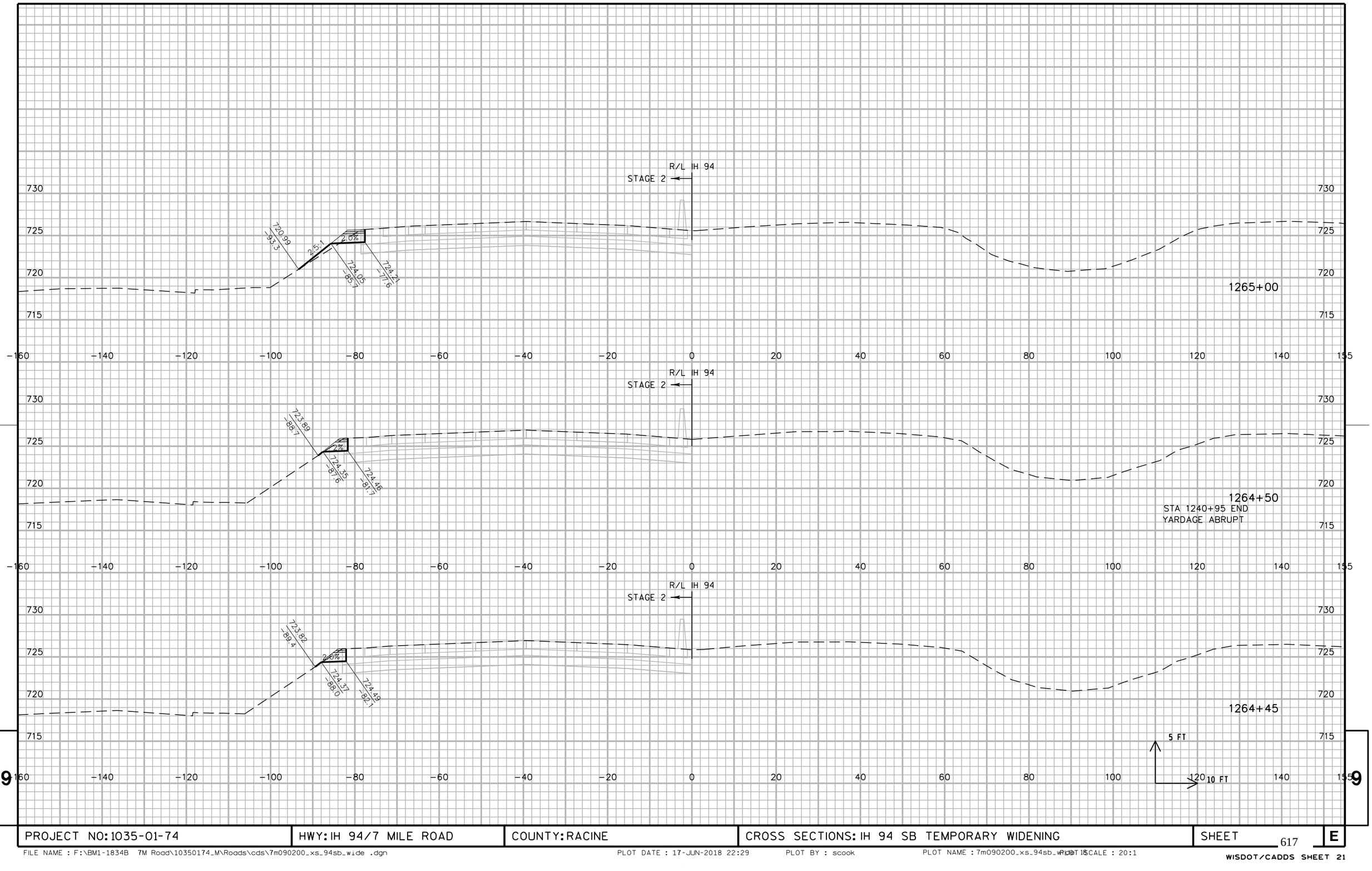
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 616	E

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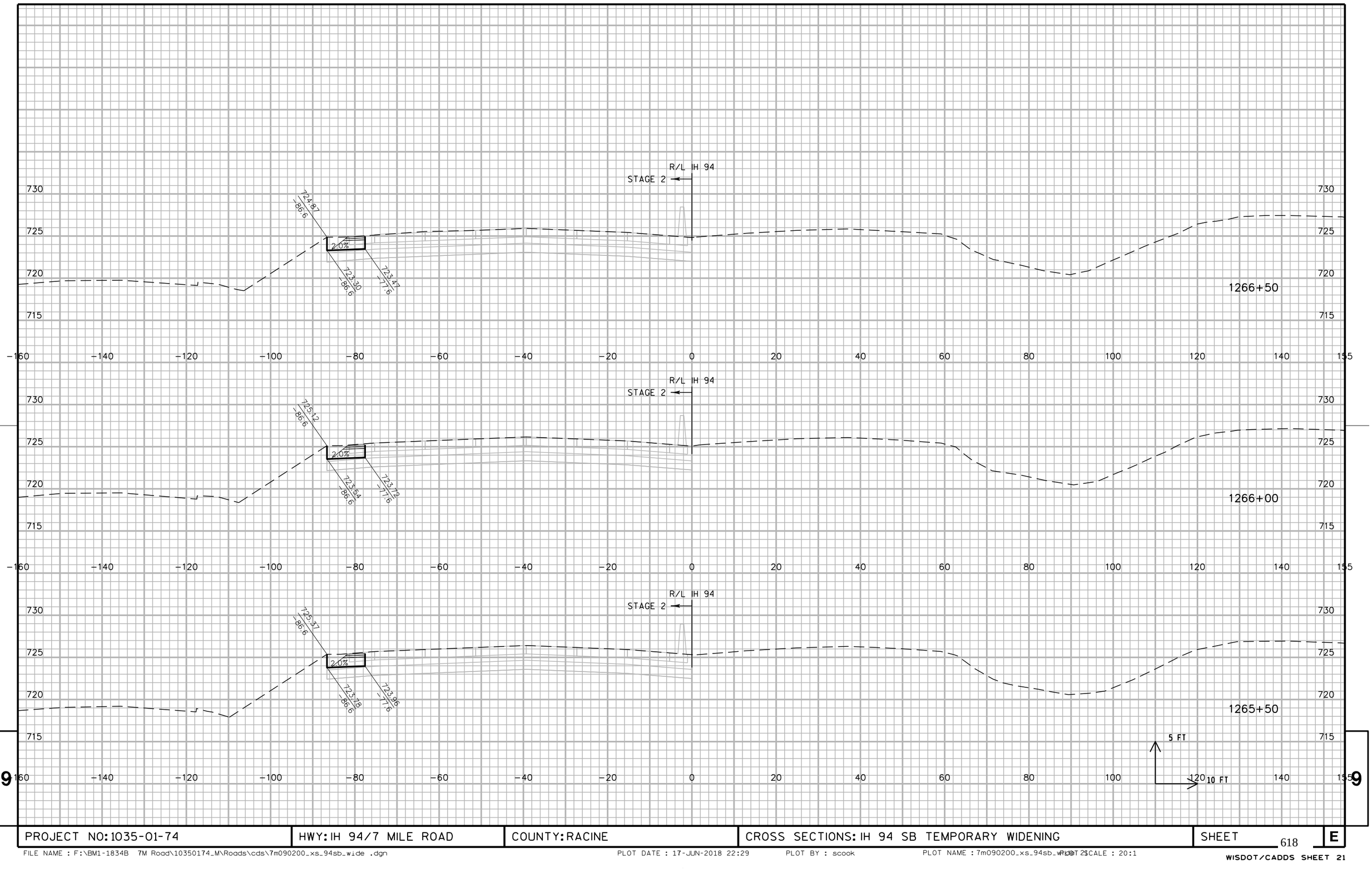
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WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET	E

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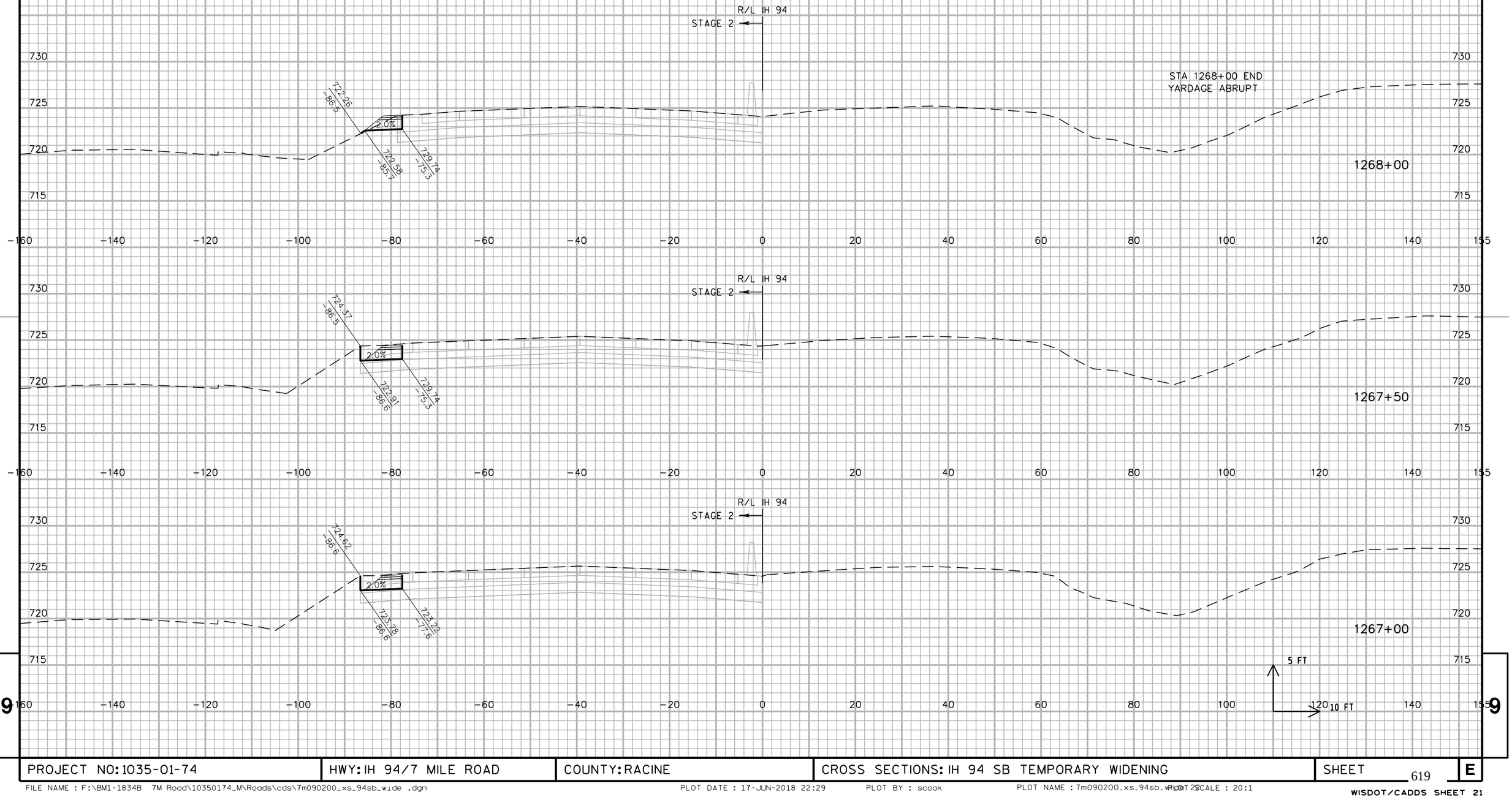


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 618 E

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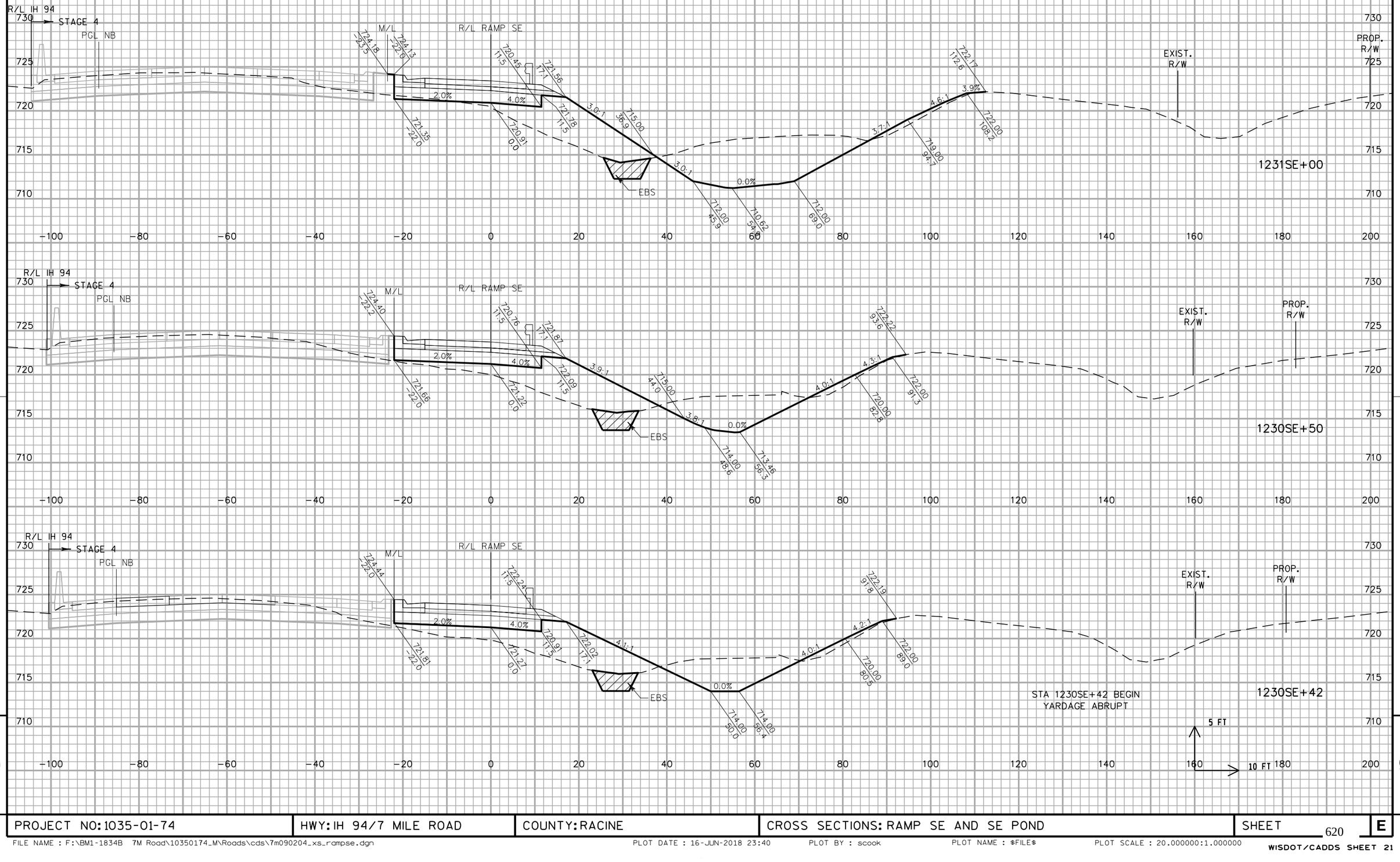
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WISDOT/CADDS SHEET 21



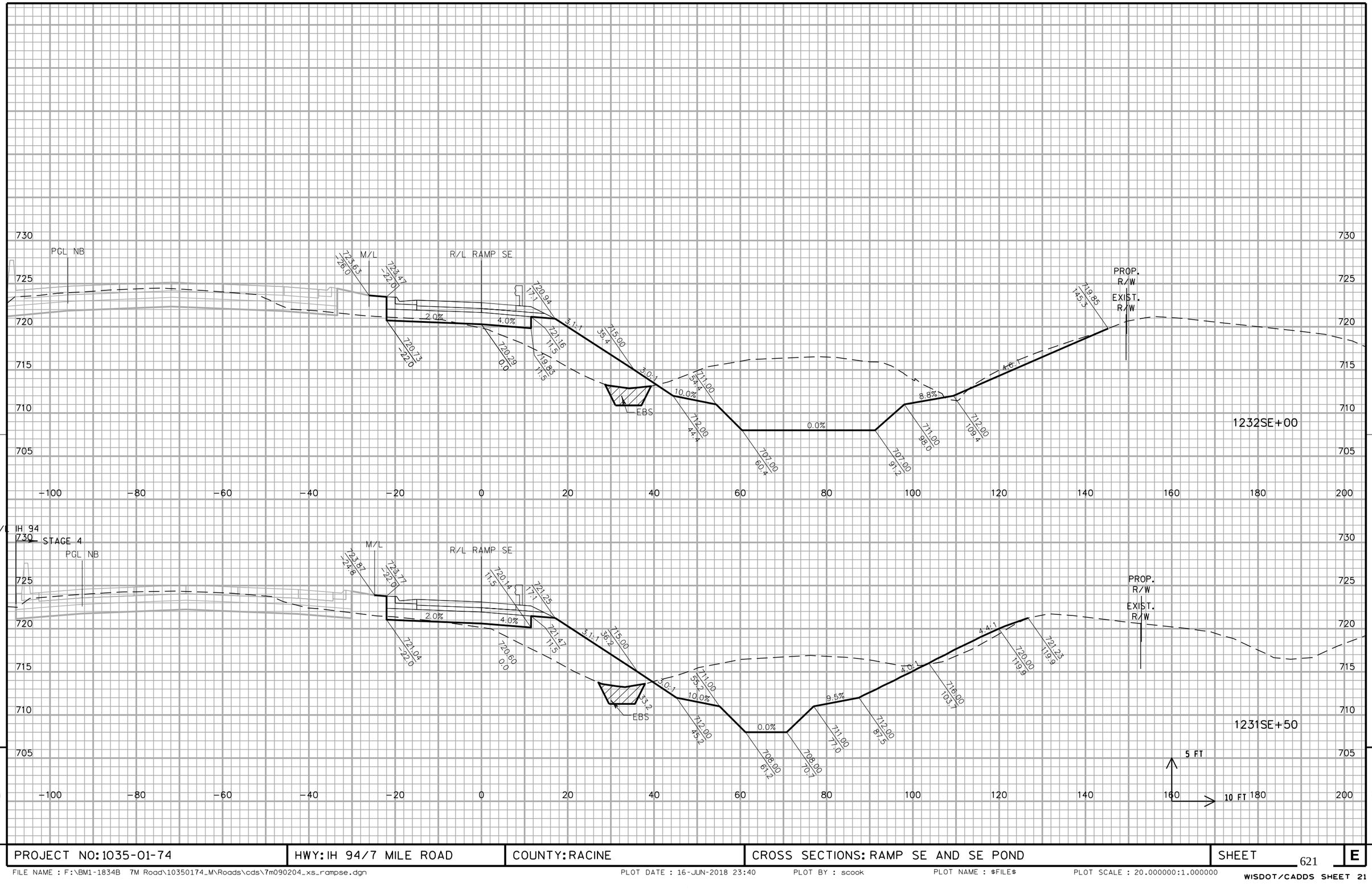
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: IH 94 SB TEMPORARY WIDENING	SHEET 619	E

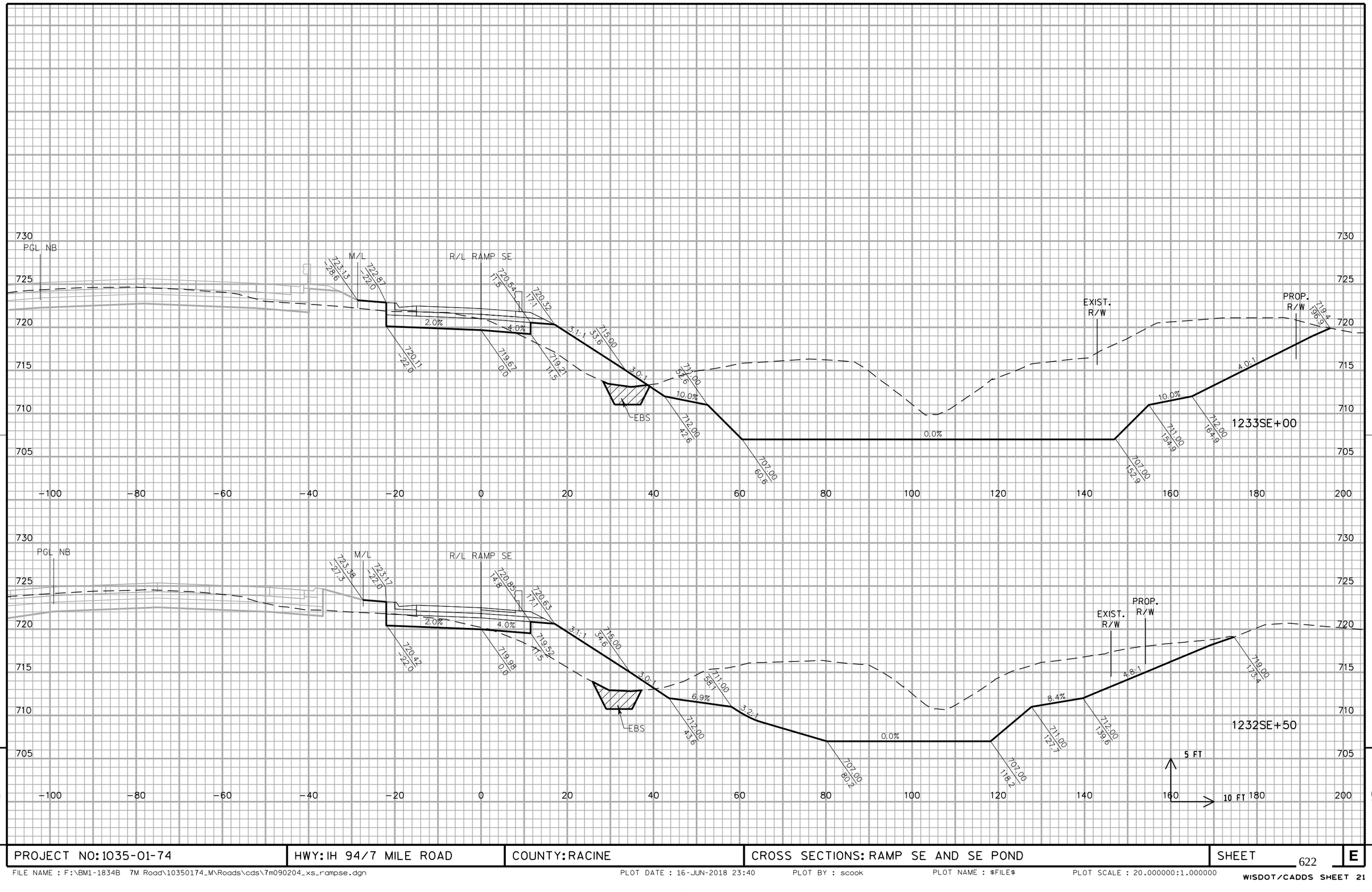


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE AND SE POND	SHEET	E

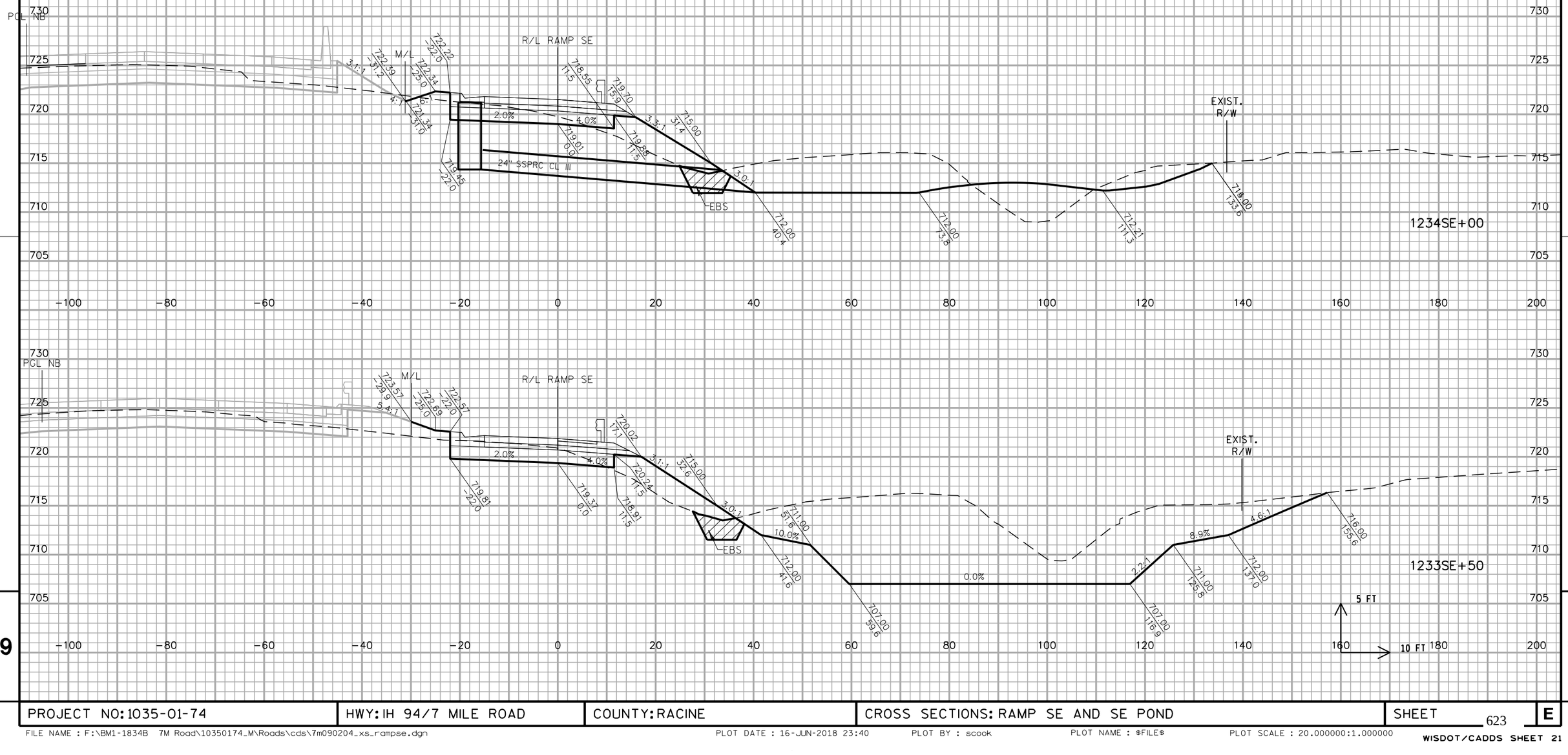
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WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE AND SE POND	SHEET 621	E

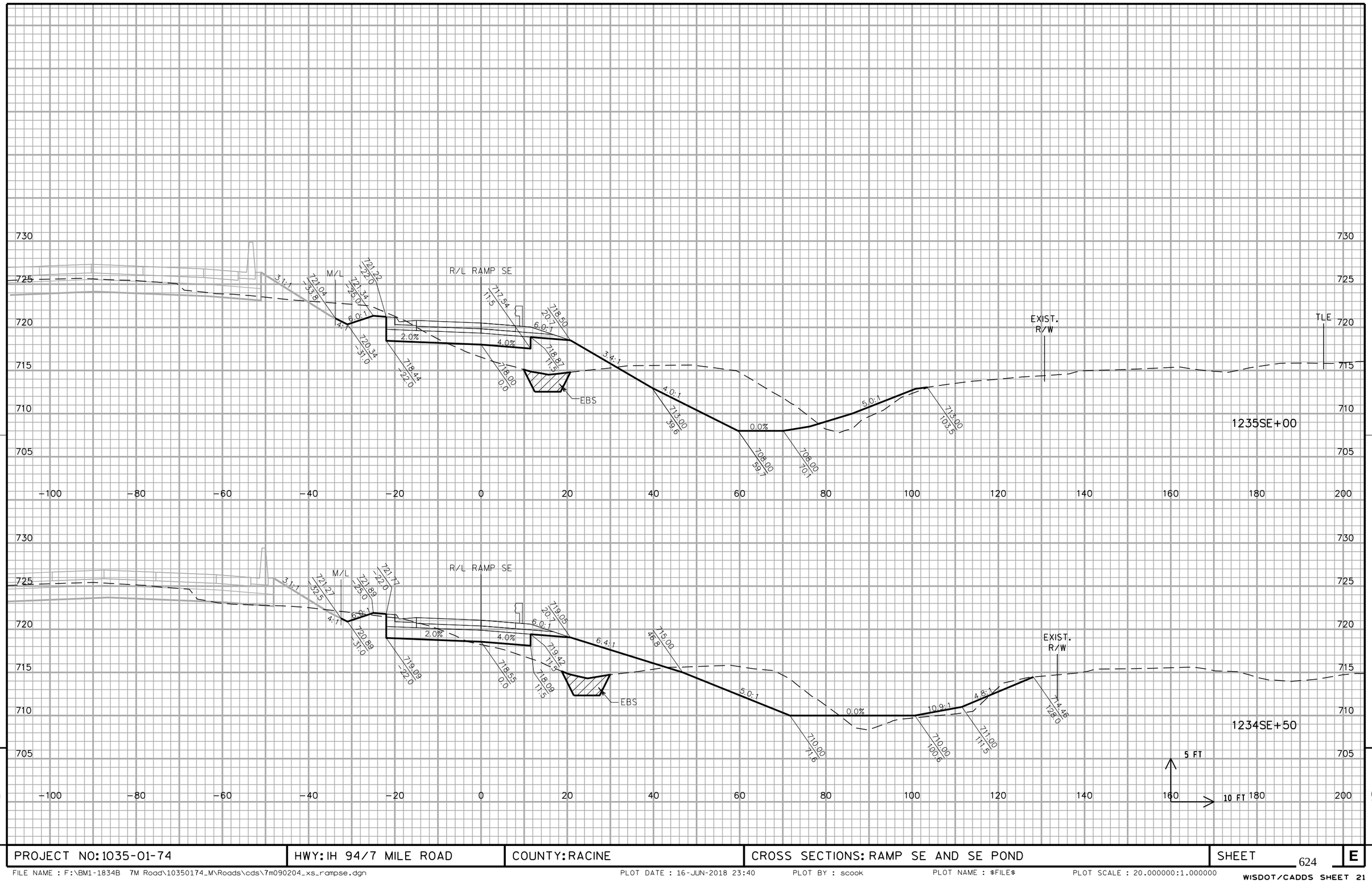


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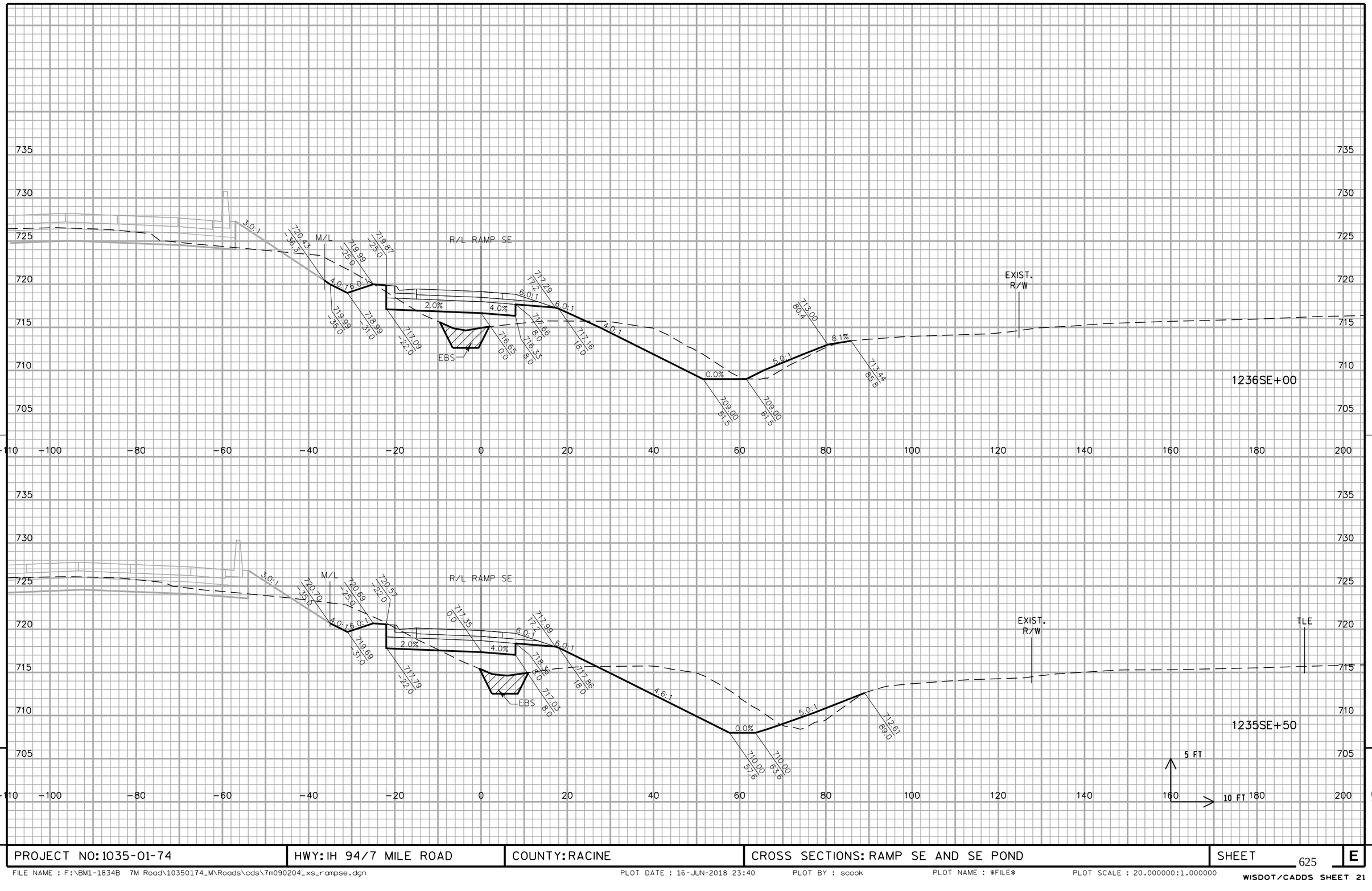
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WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE AND SE POND	SHEET 624	E

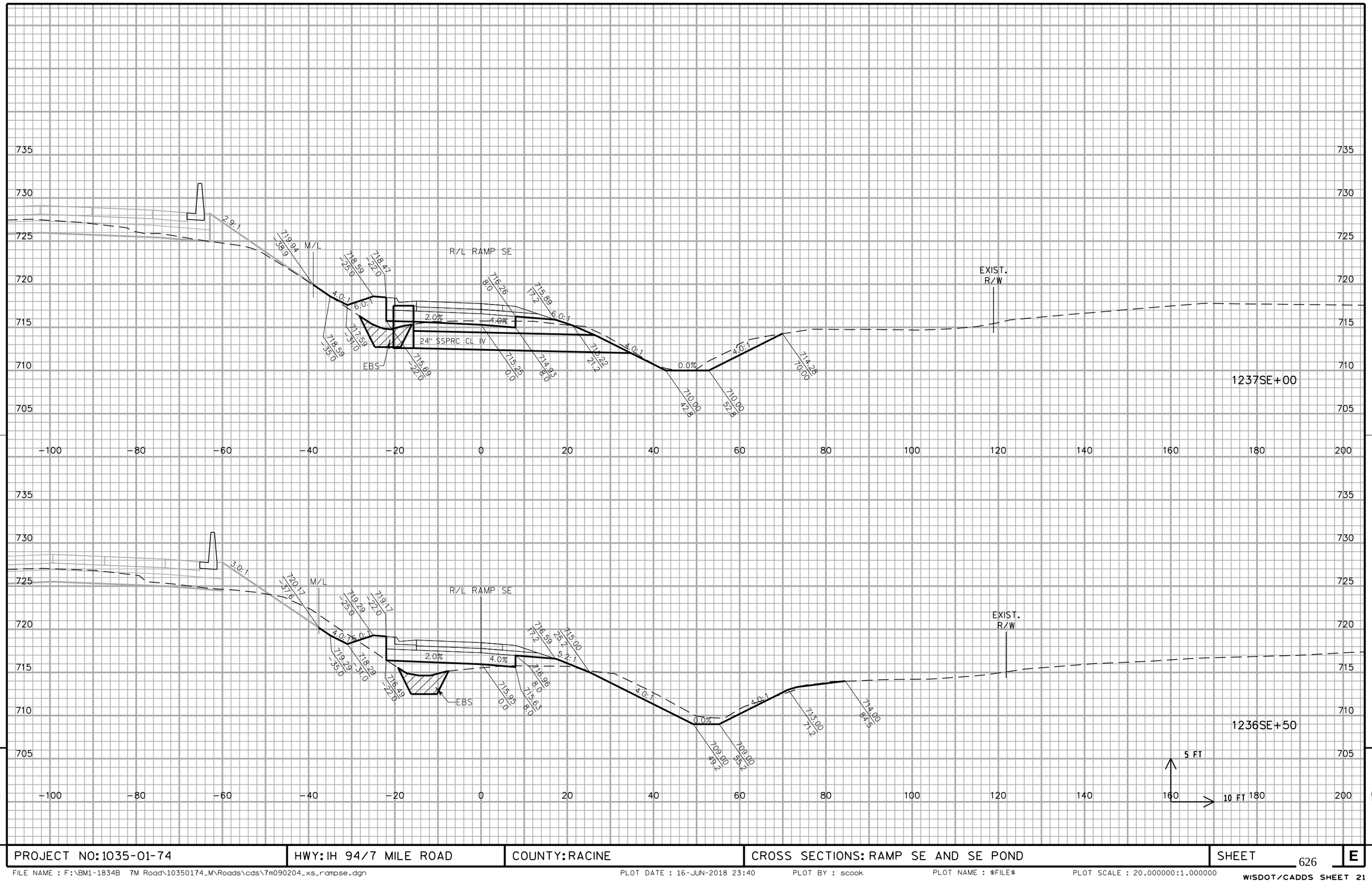
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE AND SE POND	SHEET 625	E

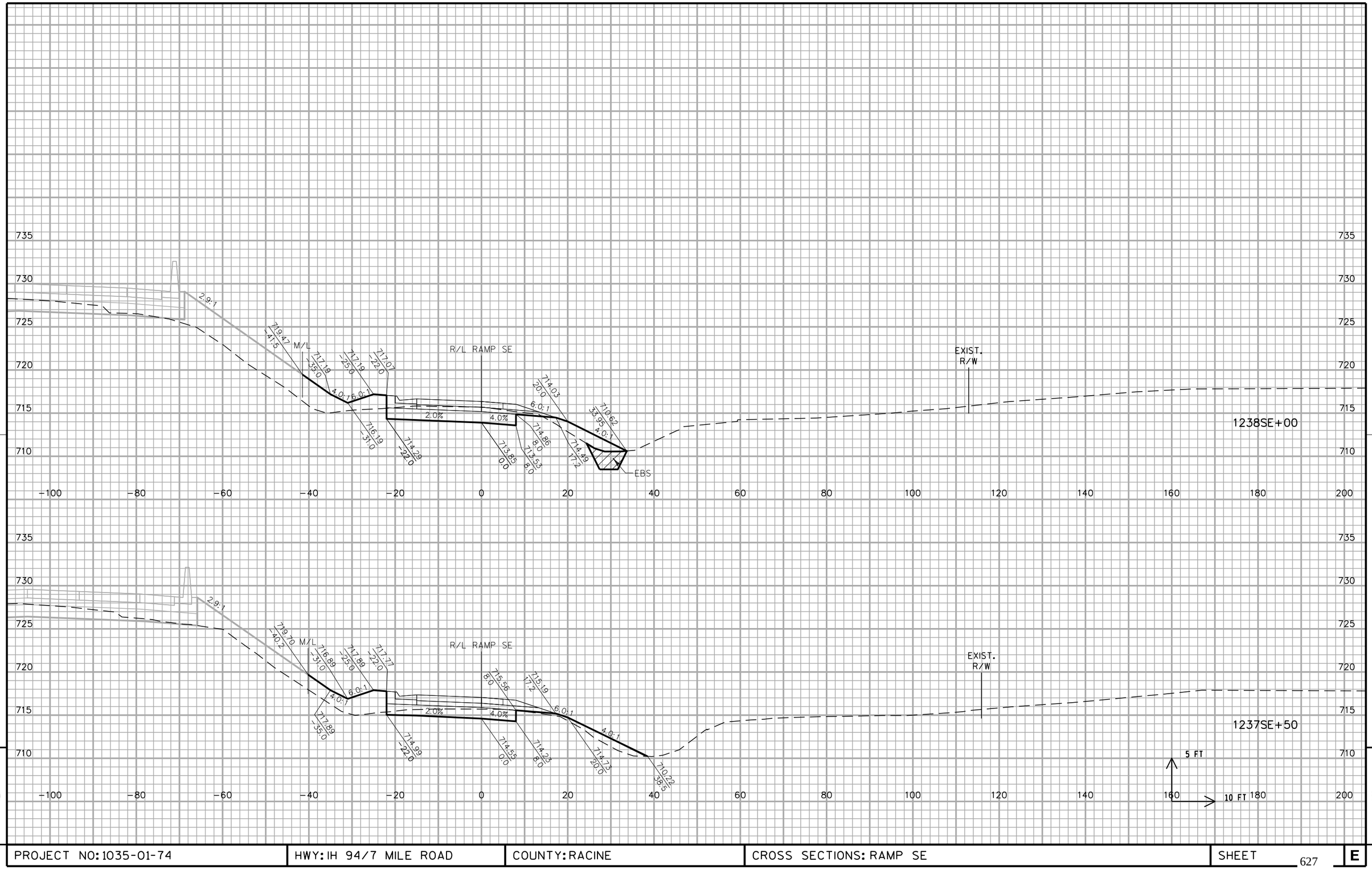


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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE AND SE POND	SHEET 626	E

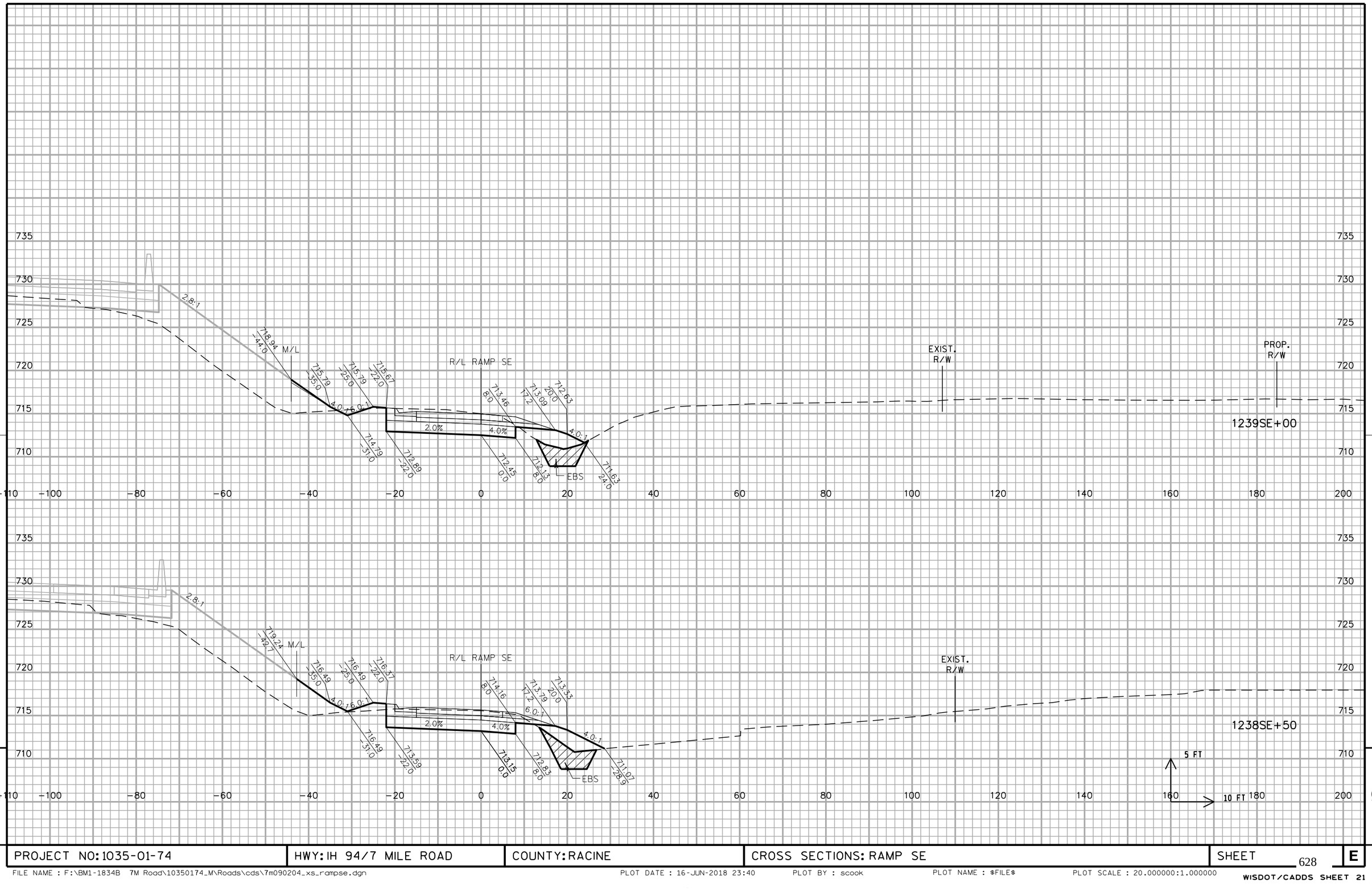
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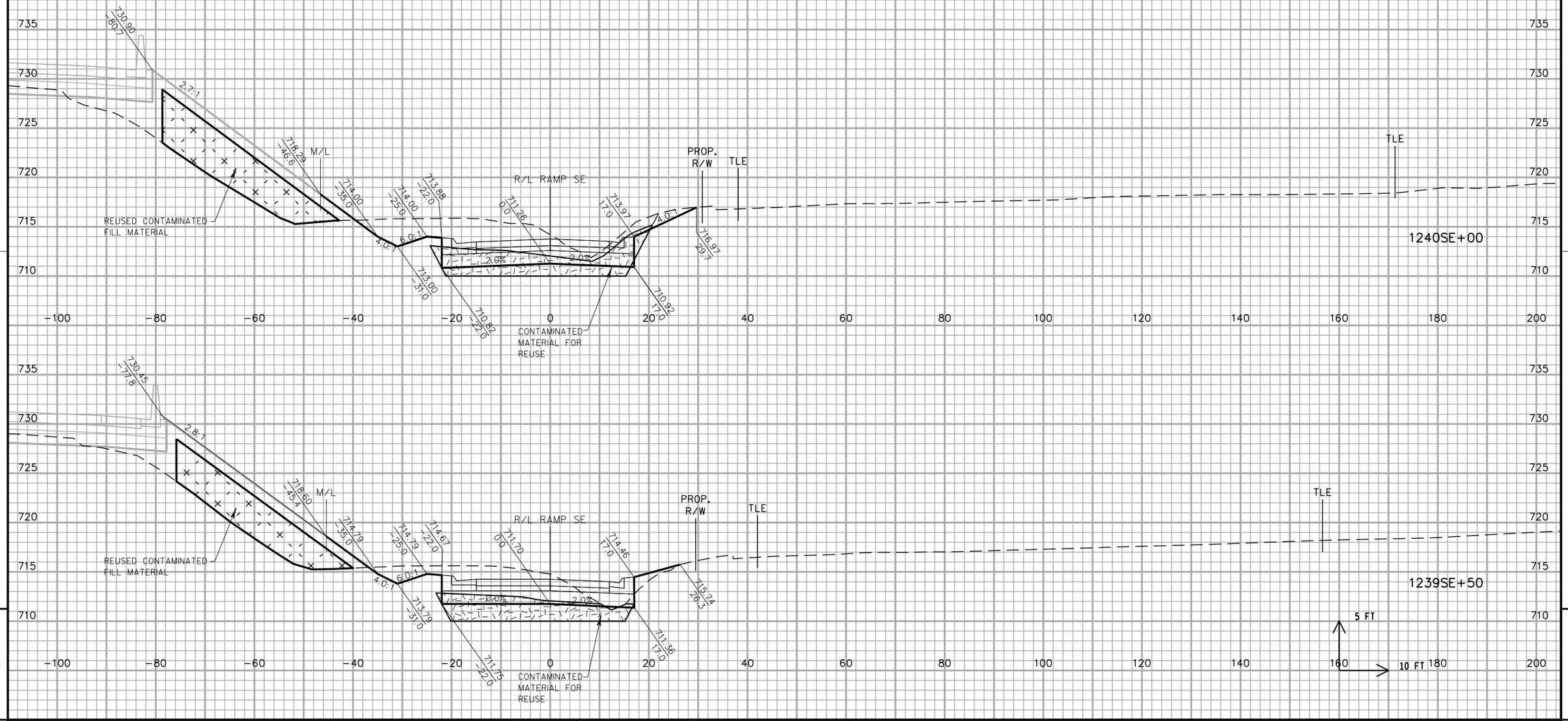
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE	SHEET 627	E



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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE	SHEET 628	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090204_xs_rampse.dgn PLOT DATE : 16-JUN-2018 23:40 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000



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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE	SHEET	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090204_xs_rampse.dgn PLOT DATE : 16-JUN-2018 23:40 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000

B-51-140

R/L RAMP SE

715.88
-33.8

714.15
-20.0

714.51
16.3

1:2.1

4.0:1

718.09
36.0

713.47
-24.1

713.91
19.3

712.81
16.5

712.79
0.0

712.44
-20.0

CONTAMINATED
MATERIAL FOR
REUSE

PROP.
R/W

TLE

TLE

1241SESE+00

731.50
-83.6

2.8:1

718.60
47.9

M/L

713.94
-35.6

713.94
-25.0

713.82
-22.0

712.94
-9.0

4.0:1

6.0:1

R/L RAMP SE

713.90
18.0

4.6:1

717.59
35.1

REUSED CONTAMINATED
FILL MATERIAL

2.0%

2.0%

24" SSPRC CL IV

24" SSPRC CL IV

24" SSPRC CL IV

711.20
0.0

710.84
16.0

710.76
-22.0

CONTAMINATED
MATERIAL FOR
REUSE

15" SSPRC CL IV

PROP.
R/W

TLE

TLE

1240SE+50

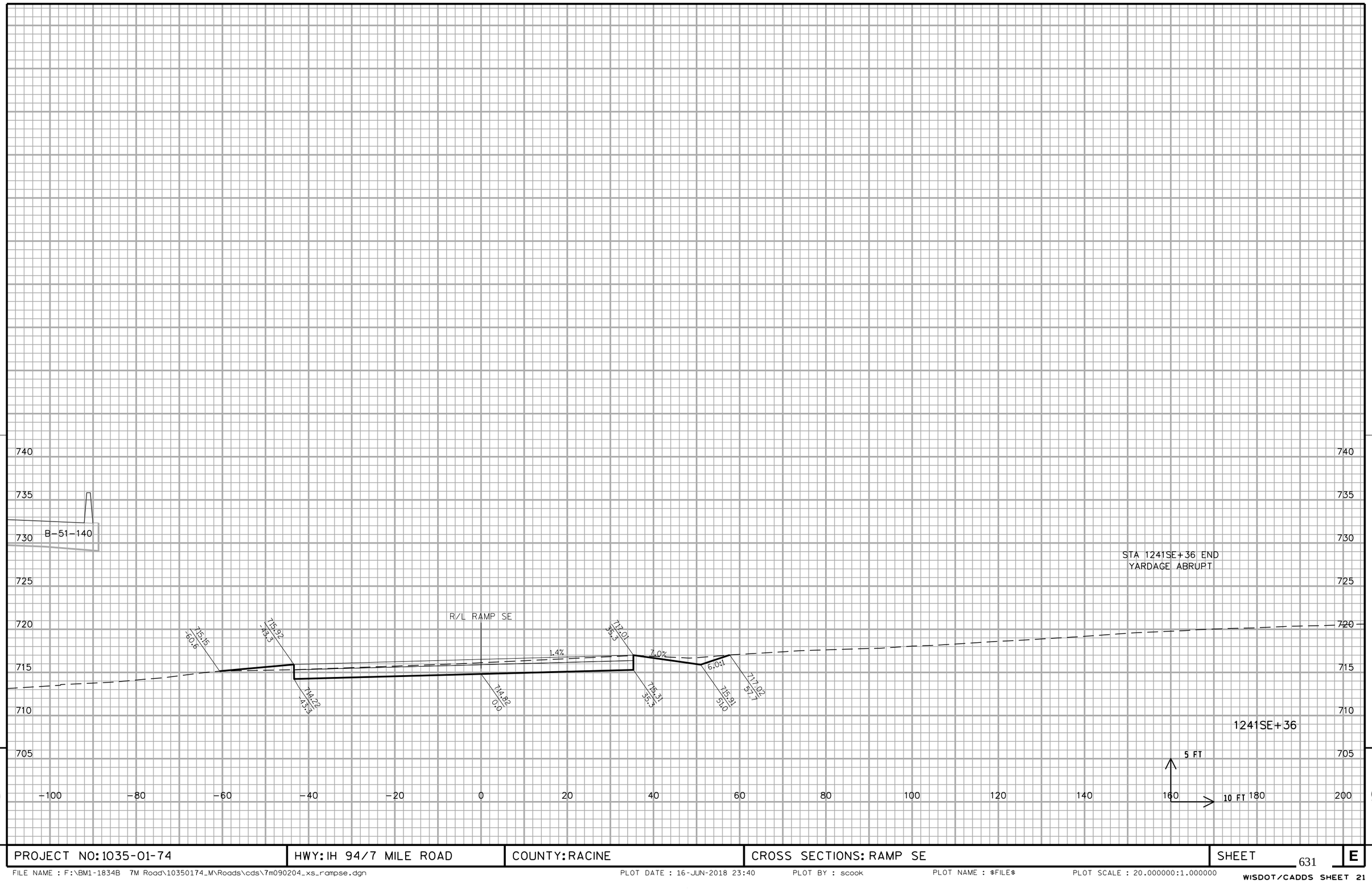
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10 FT

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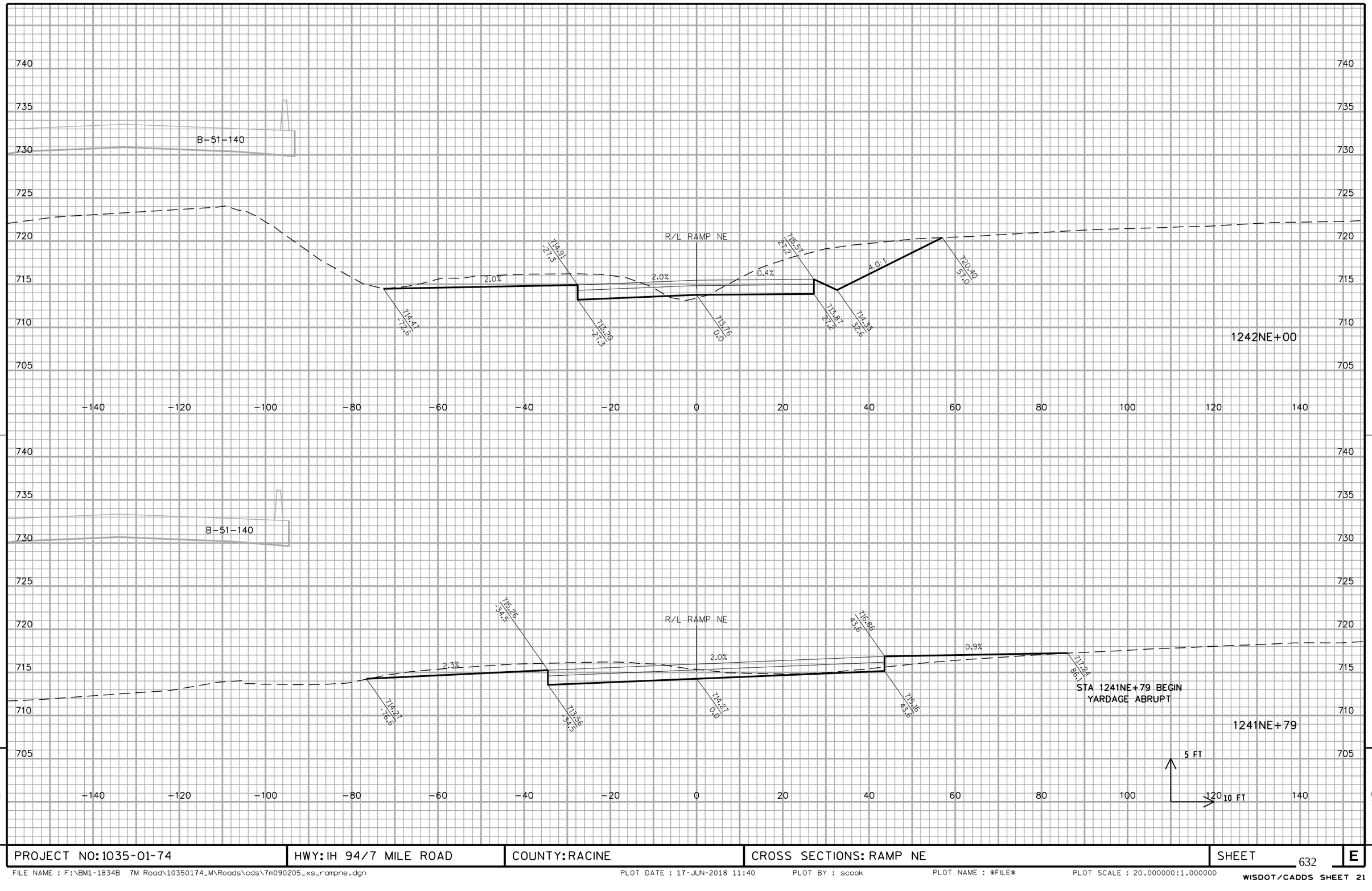
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE	SHEET 630	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SE	SHEET 631	E

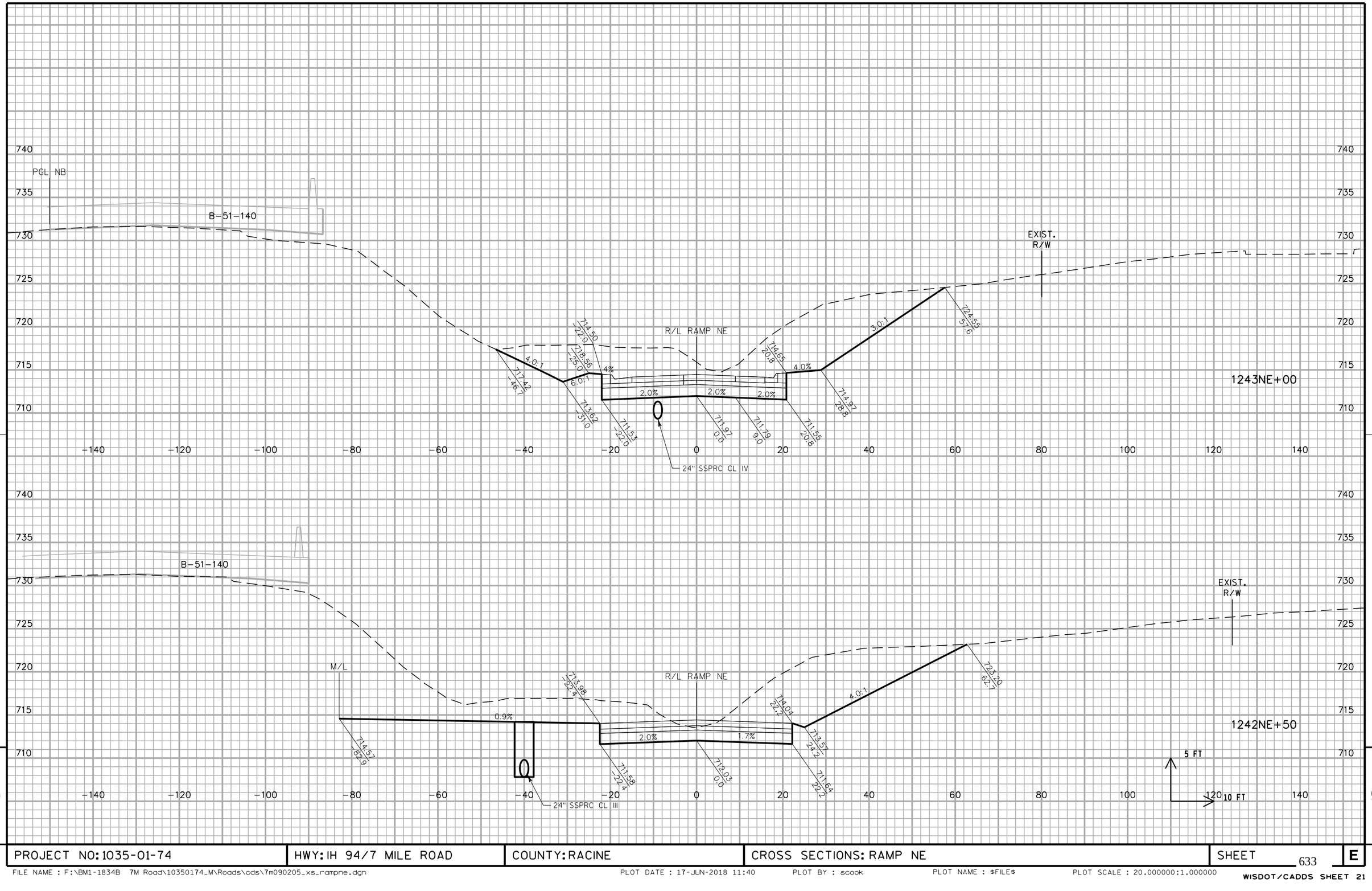
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 632	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090205_xs_rampne.dgn PLOT DATE : 17-JUN-2018 11:40 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000

WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090205_xs_rampne.dgn PLOT DATE : 17-JUN-2018 11:40 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21

R/L
IH 94

STAGE 4

PGL NB

M/L

R/L RAMP NE

EXIST.
R/W

PROP.
R/W

TLE

1244NE+00

24" SSPRC CL IV

1243NE+50

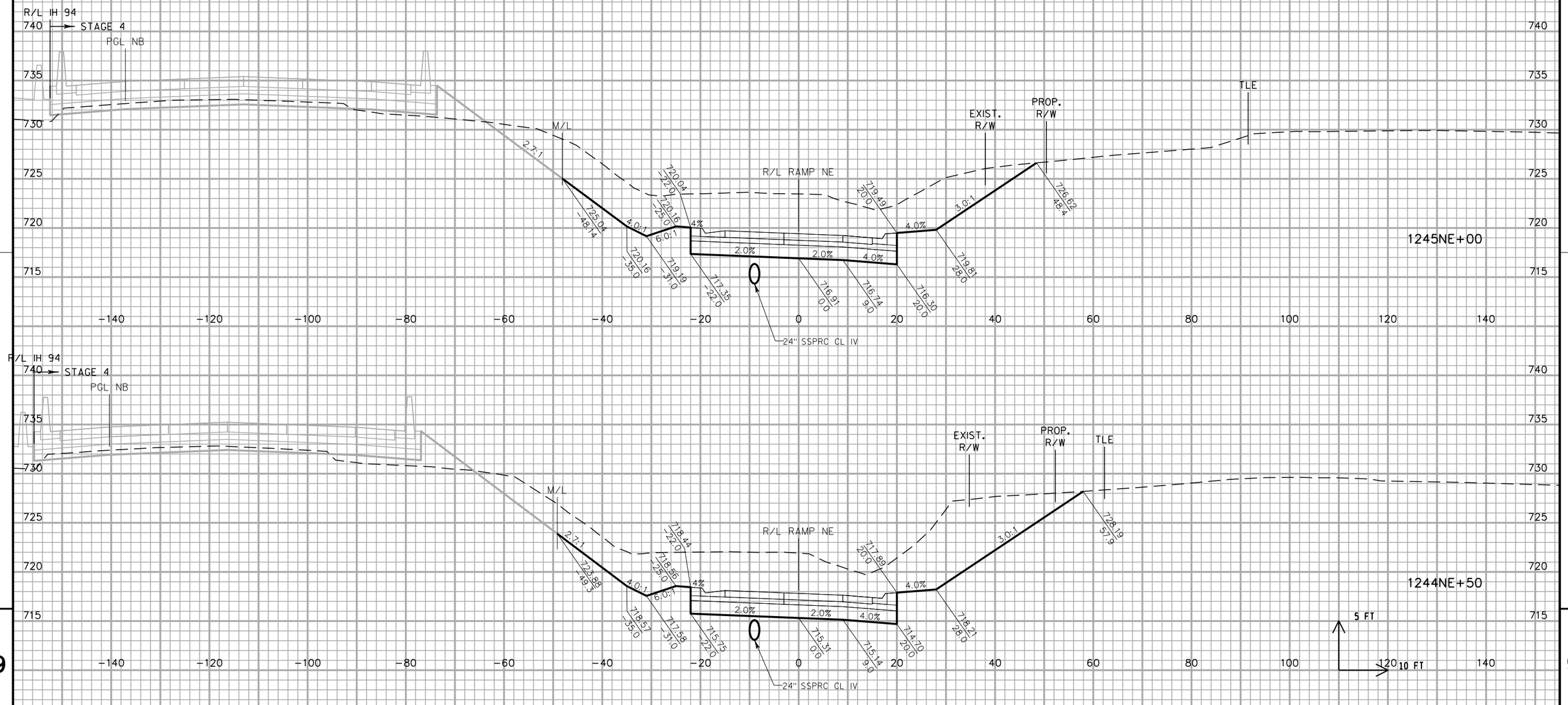
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10 FT

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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 634	E

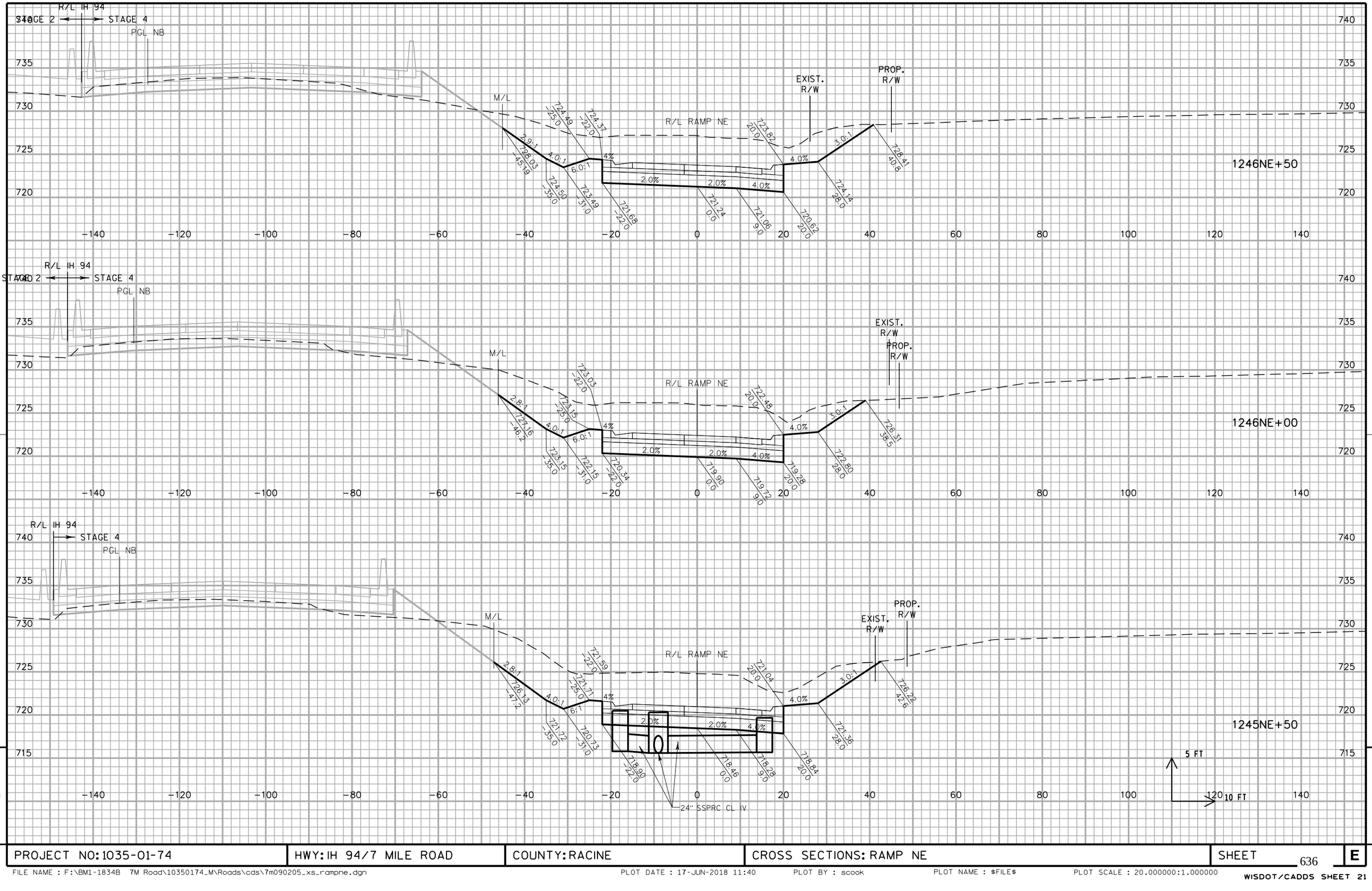


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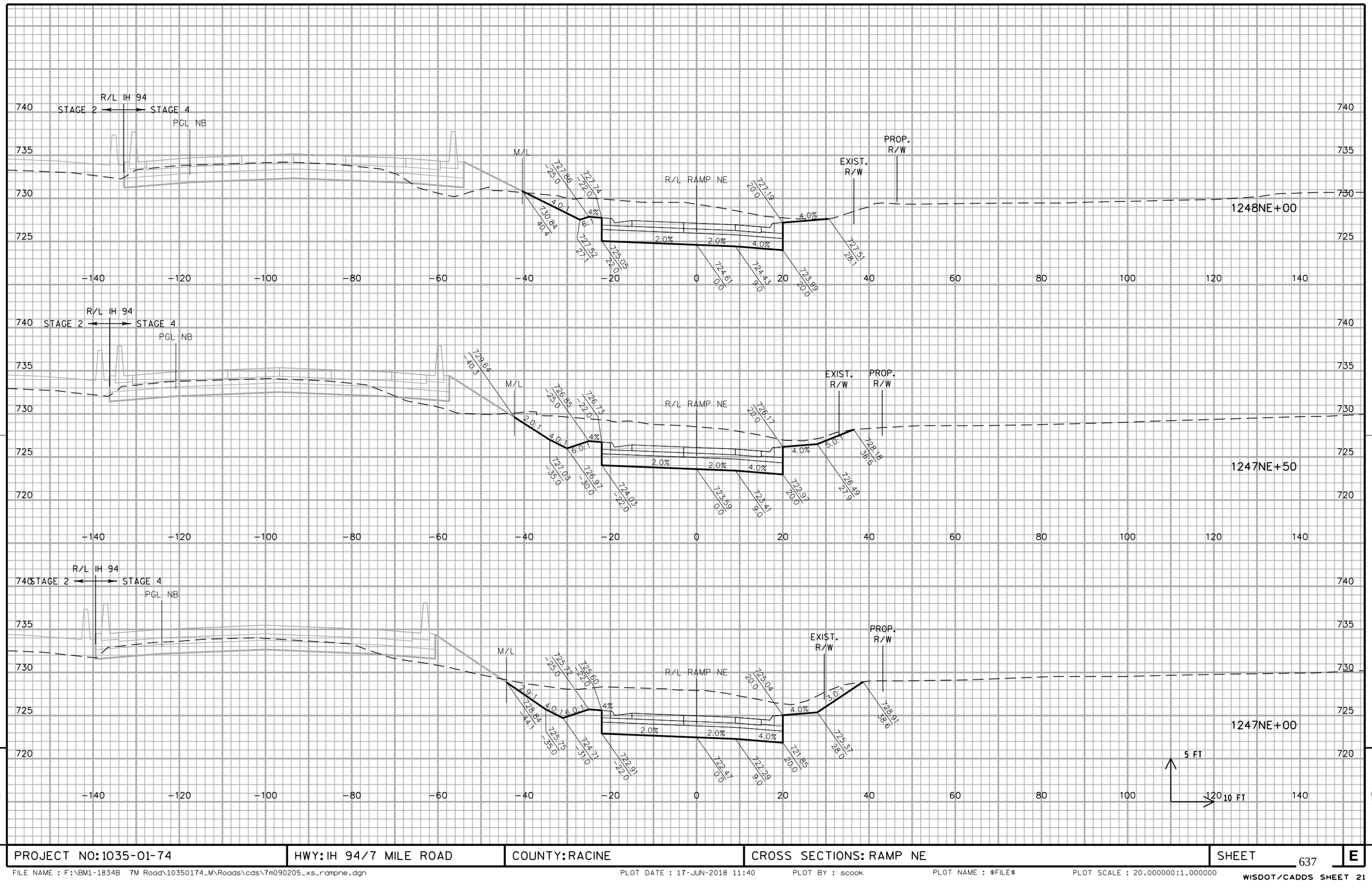
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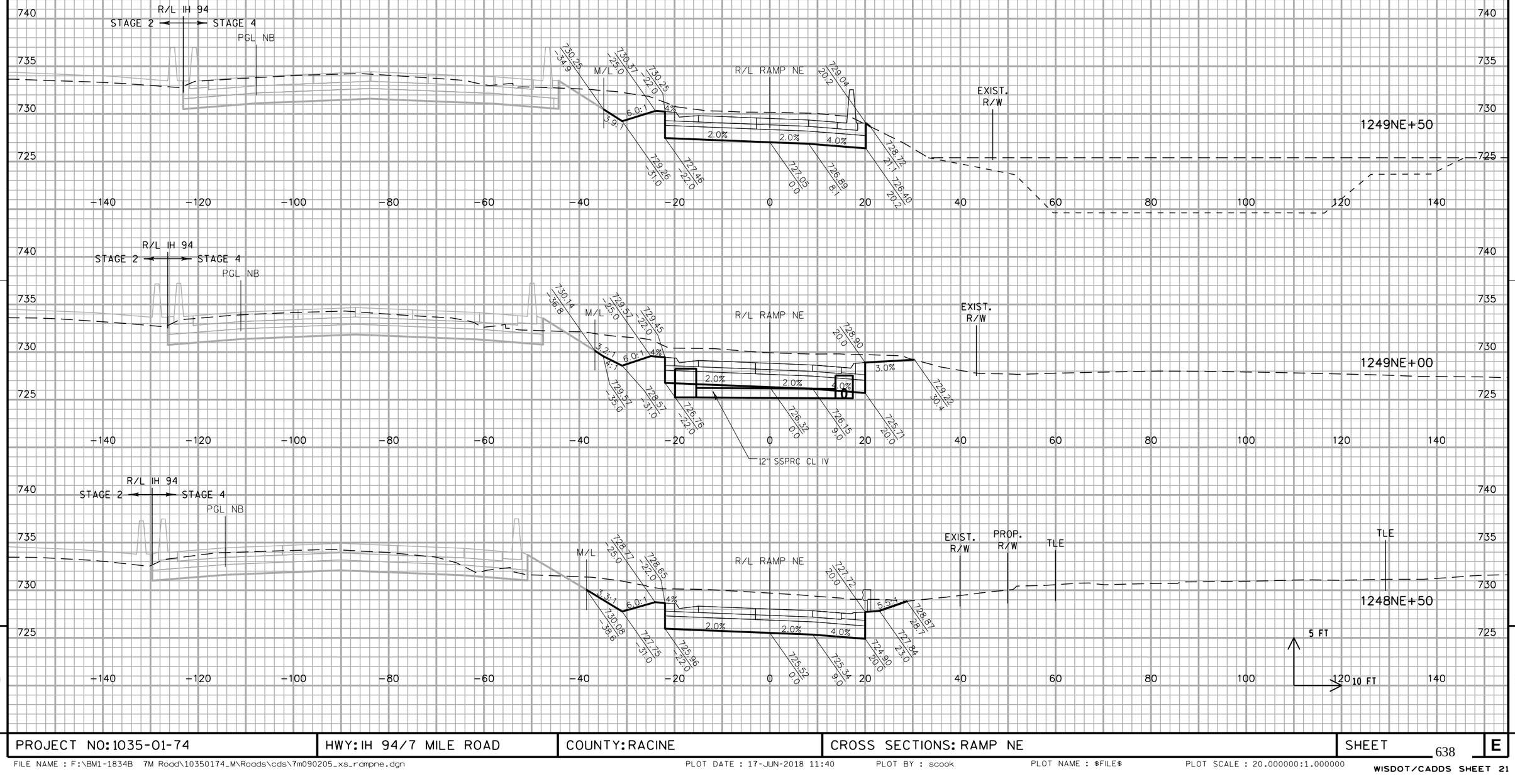
WISDOT/CADDS SHEET 21



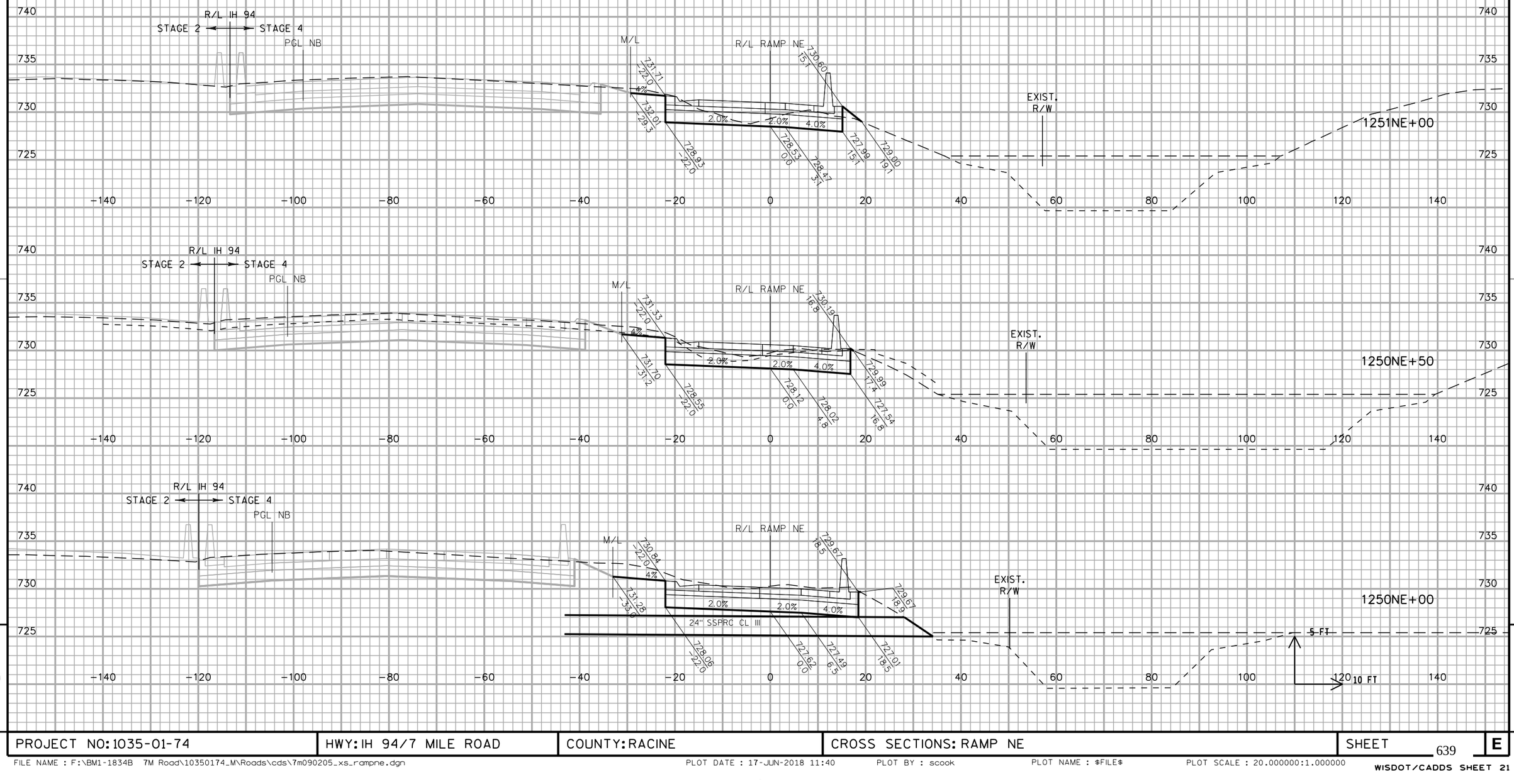
PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 636	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 637	E

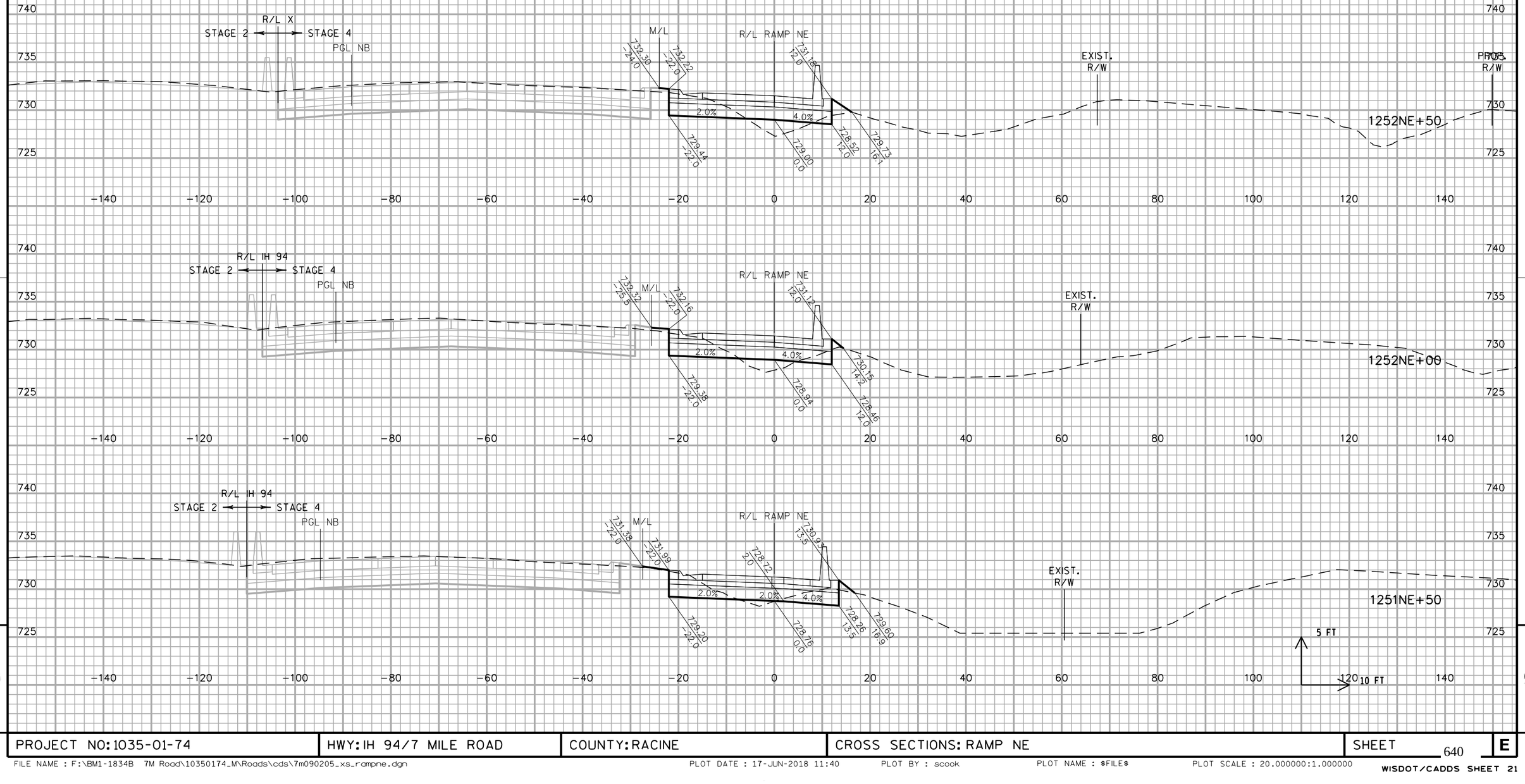


PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 638	E



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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 639	E



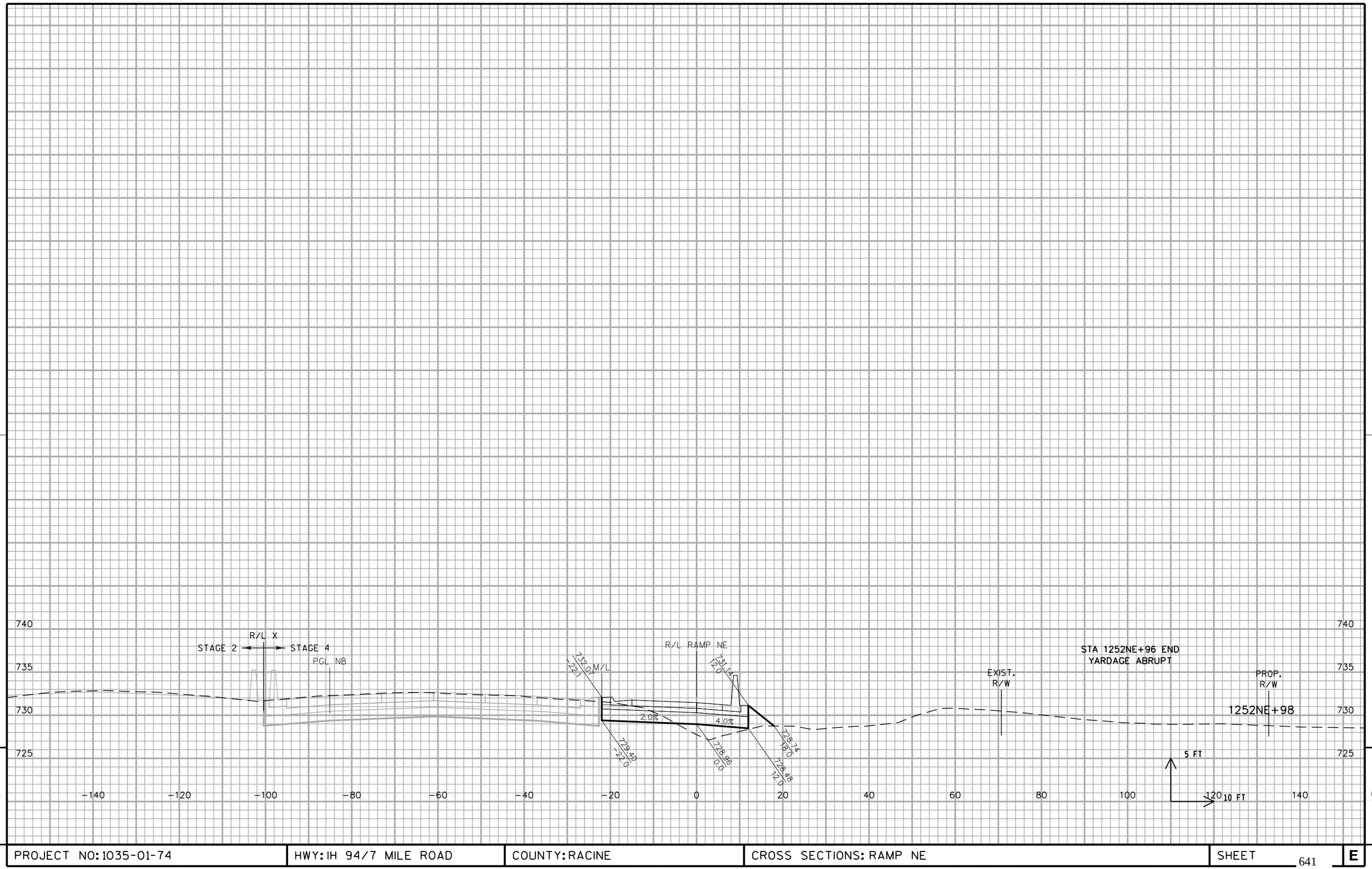
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 640	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090205_xs_rampne.dgn PLOT DATE : 17-JUN-2018 11:40 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000

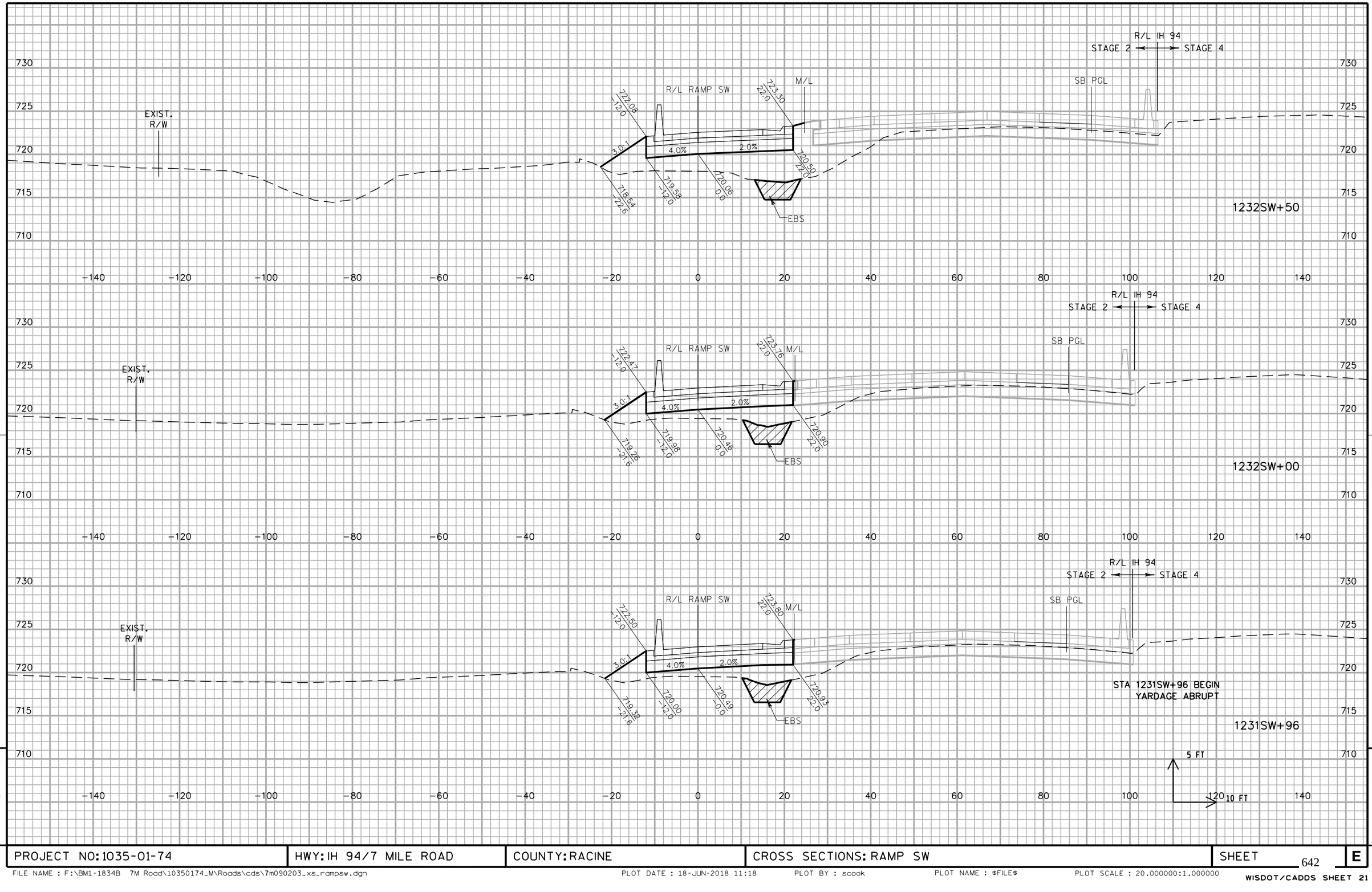
WISDOT/CADDS SHEET 21



9

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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NE	SHEET 641	E

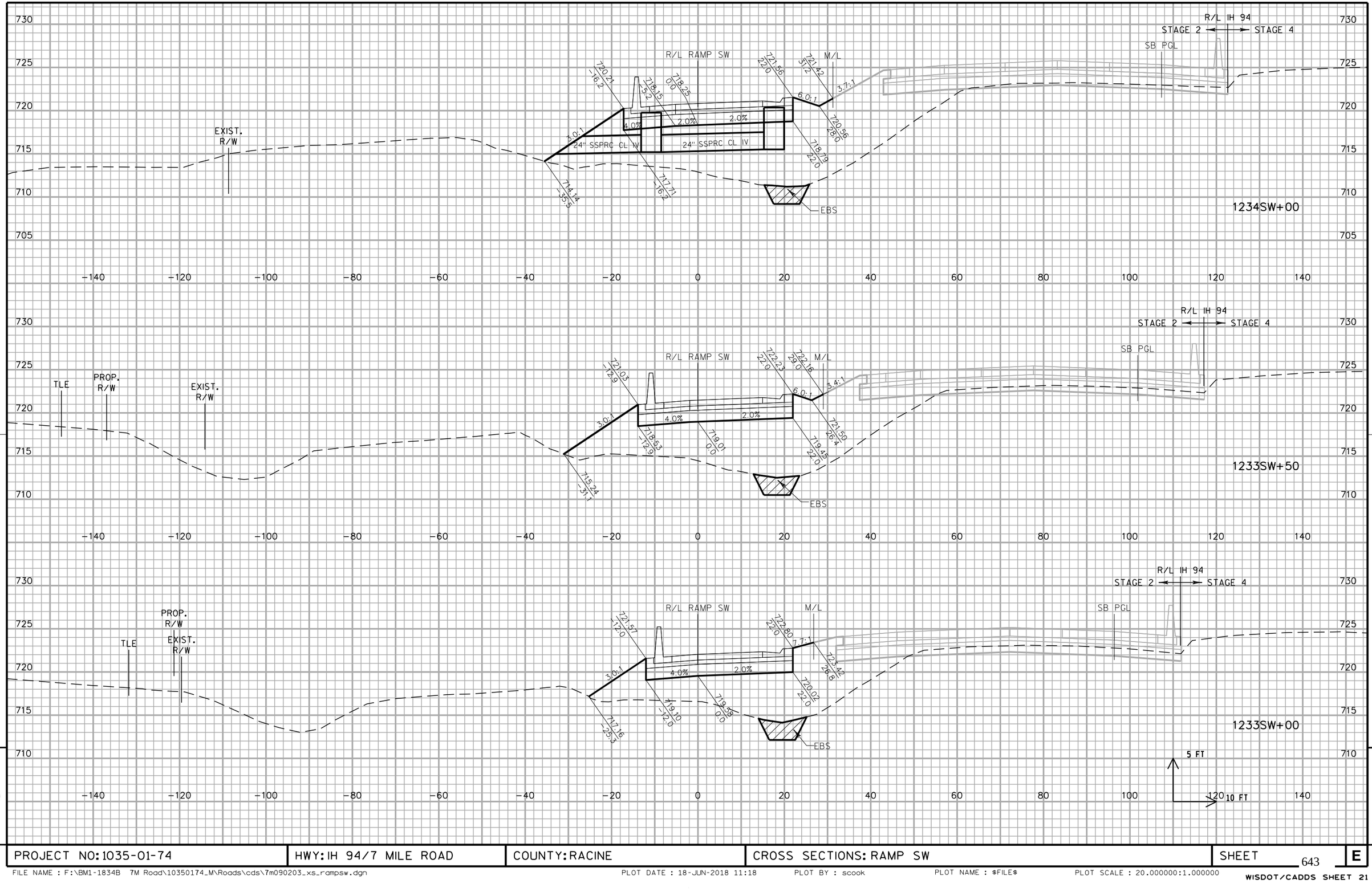


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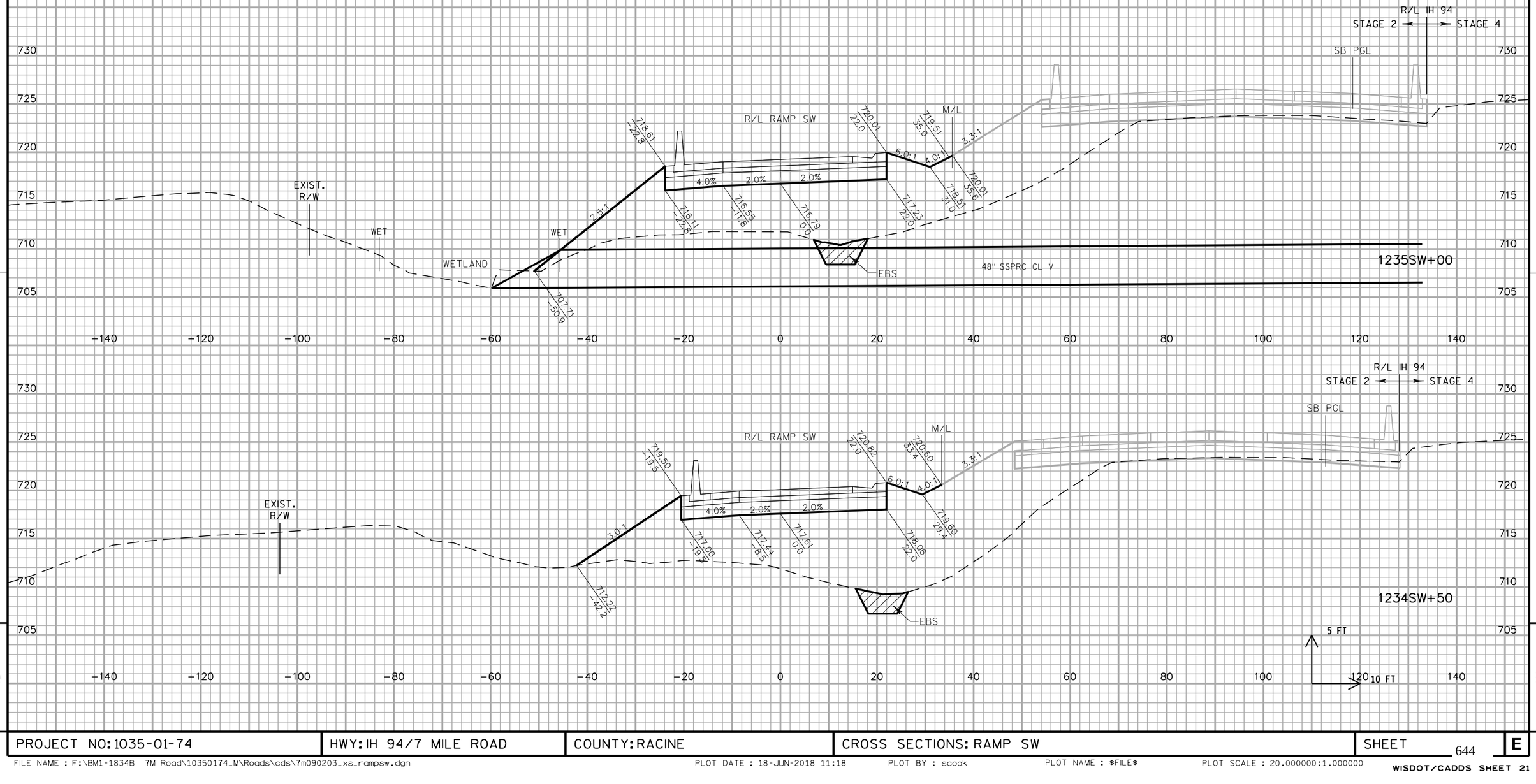
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FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090203_xs_rampsw.dgn
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WISDOT/CADDS SHEET 21



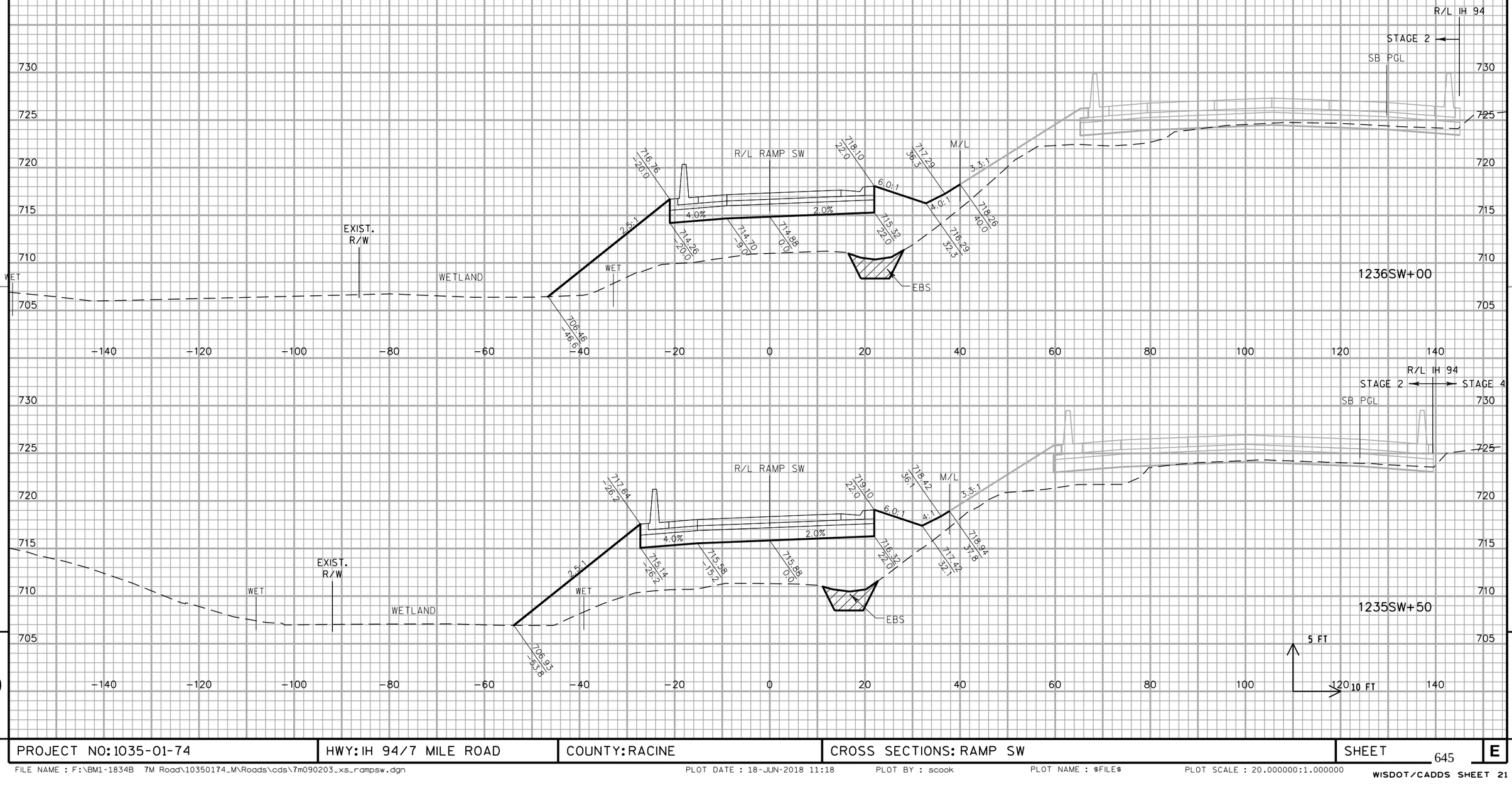
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FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090203_xs_rampsw.dgn PLOT DATE : 18-JUN-2018 11:18 PLOT BY : scook PLOT NAME : $FILE$ PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SW	SHEET 644	E

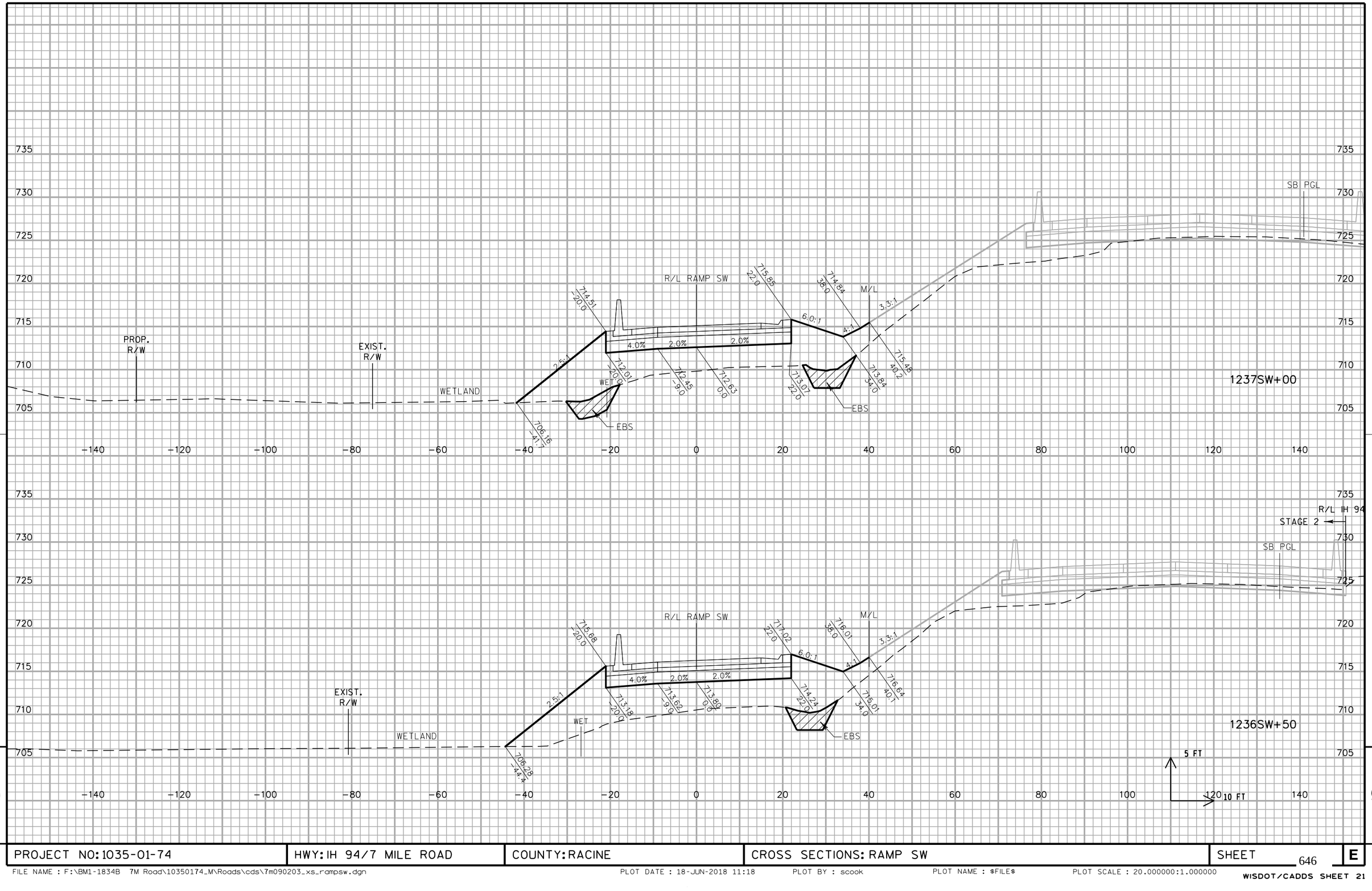
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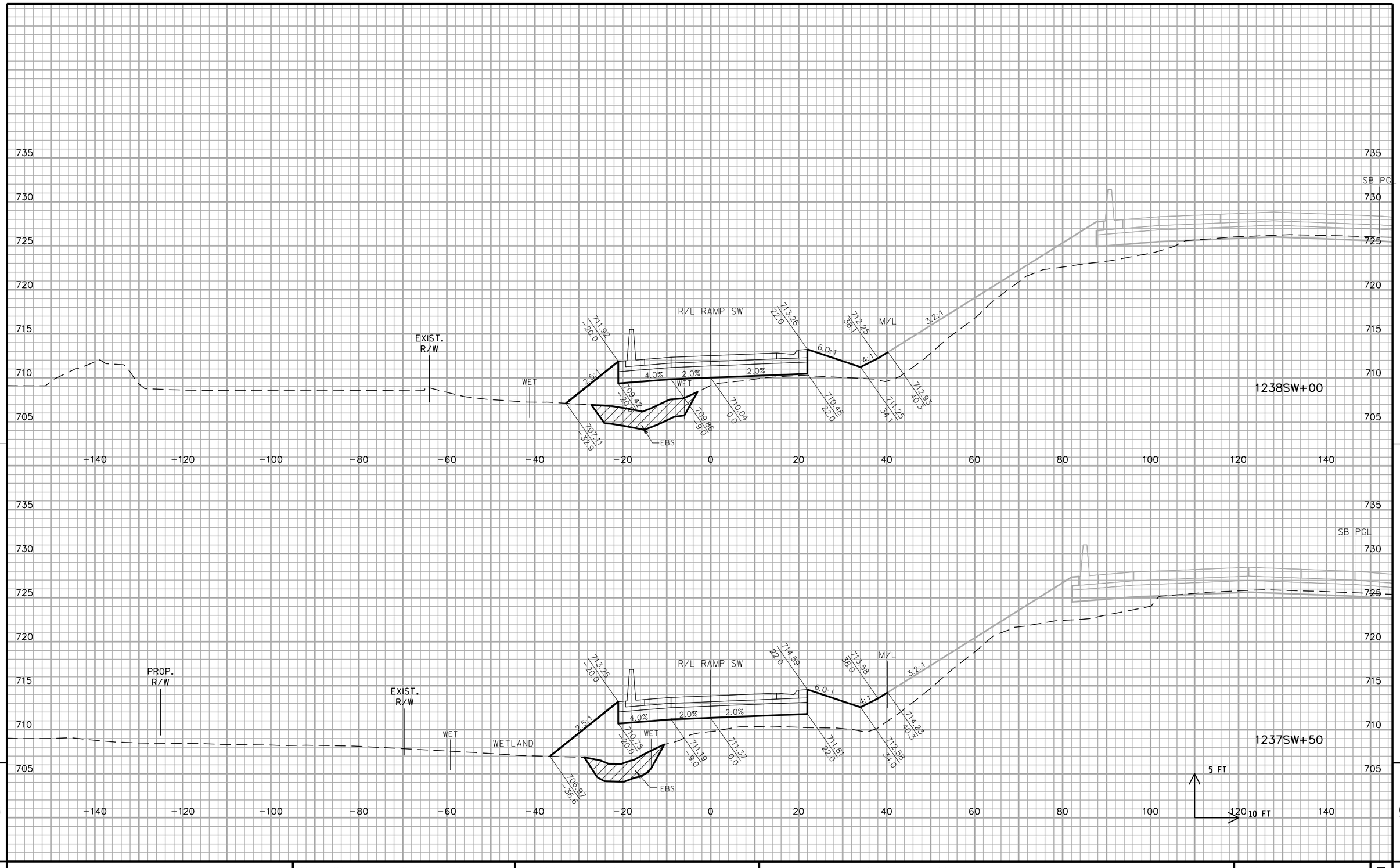
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SW	SHEET 645	E

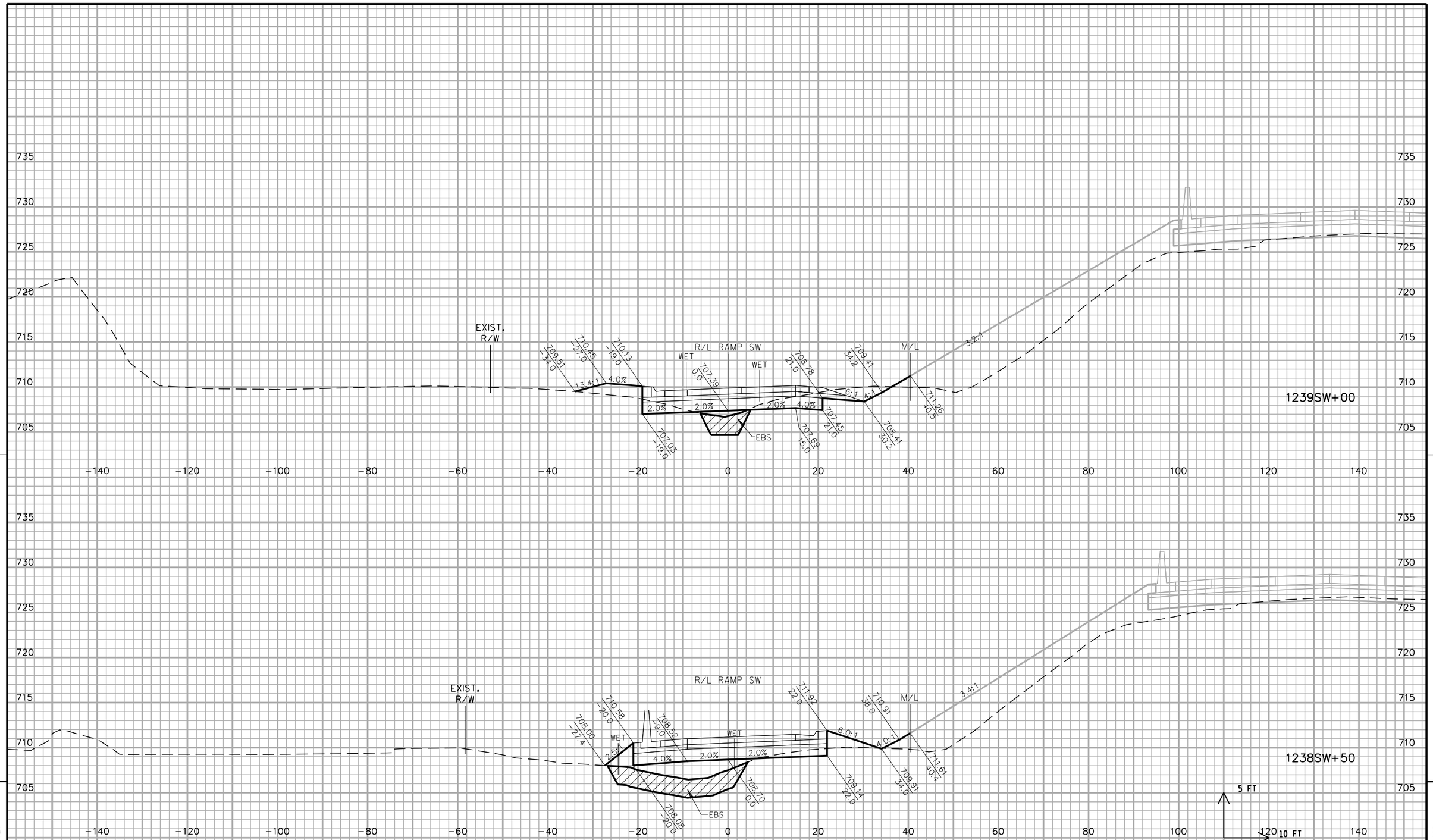


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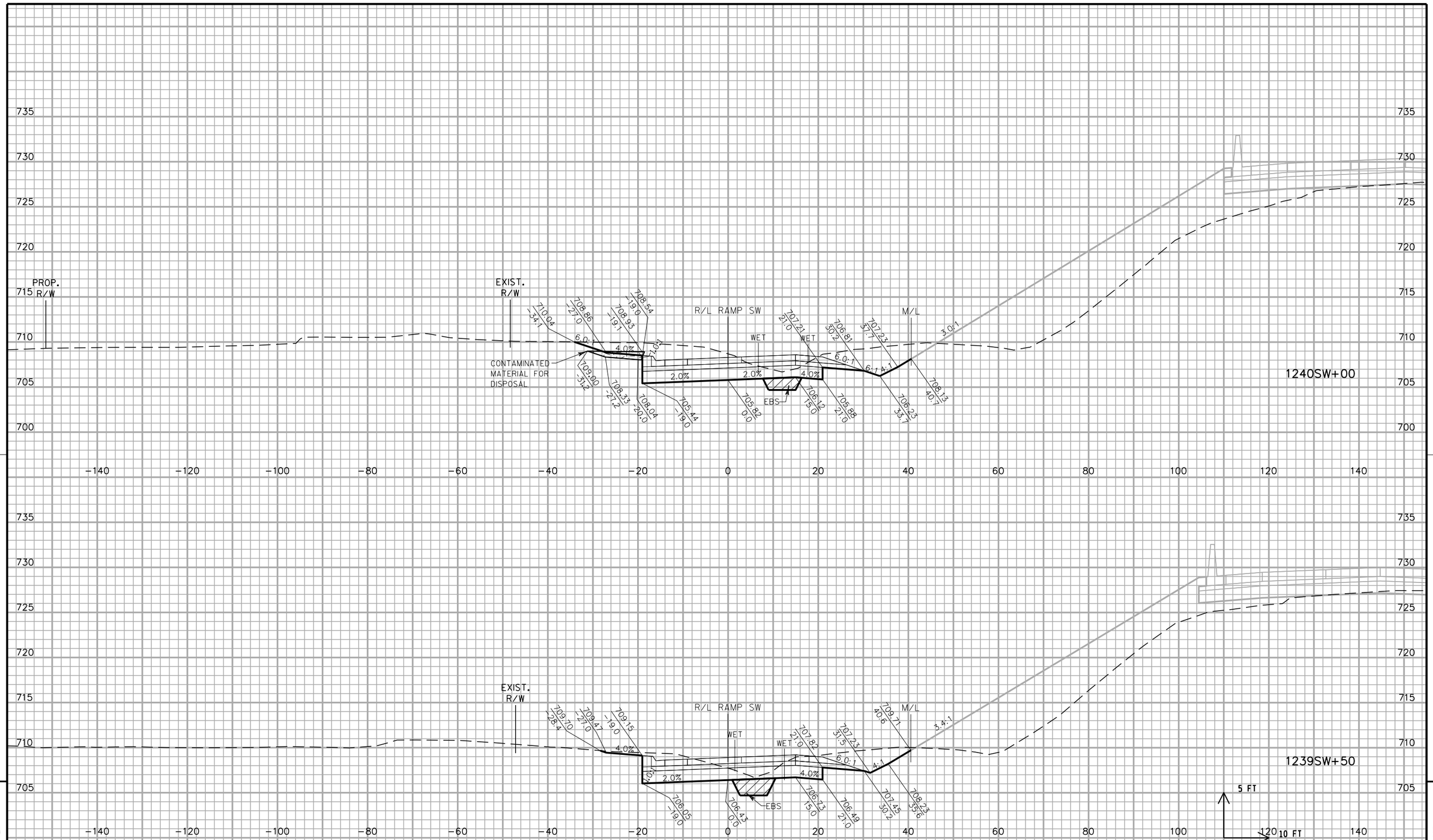
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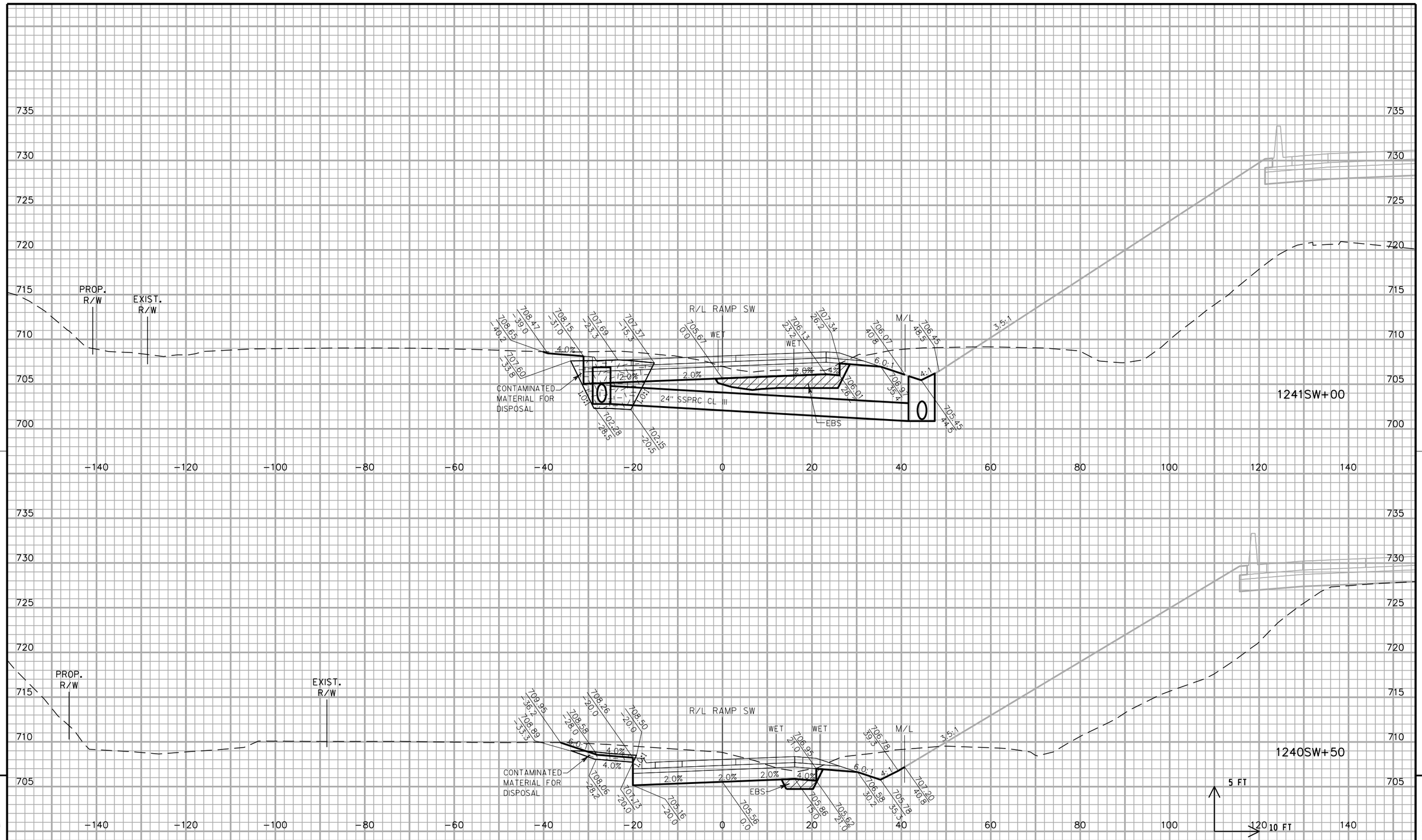
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SW	SHEET 648	E



PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SW	SHEET 649	E

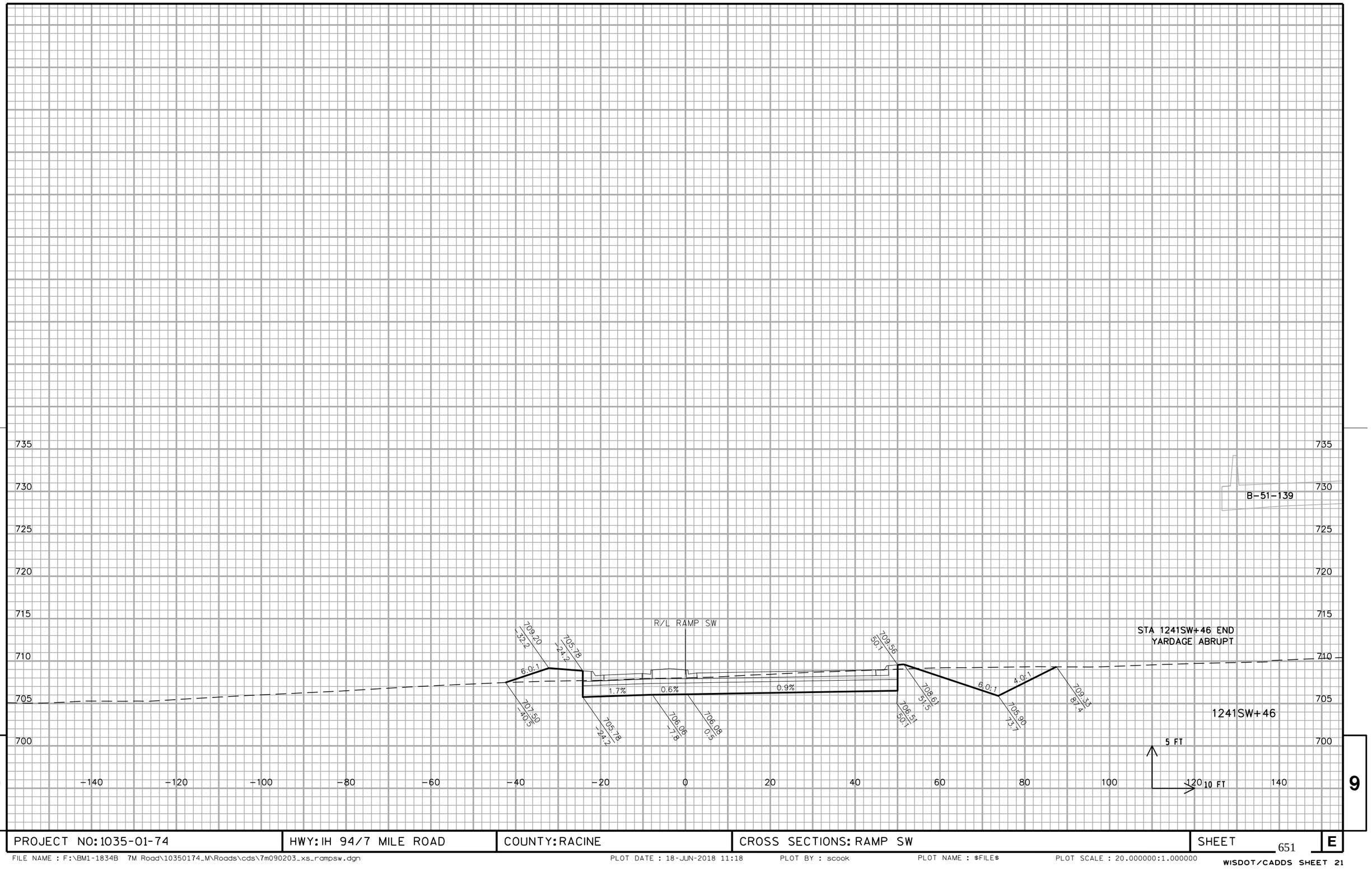


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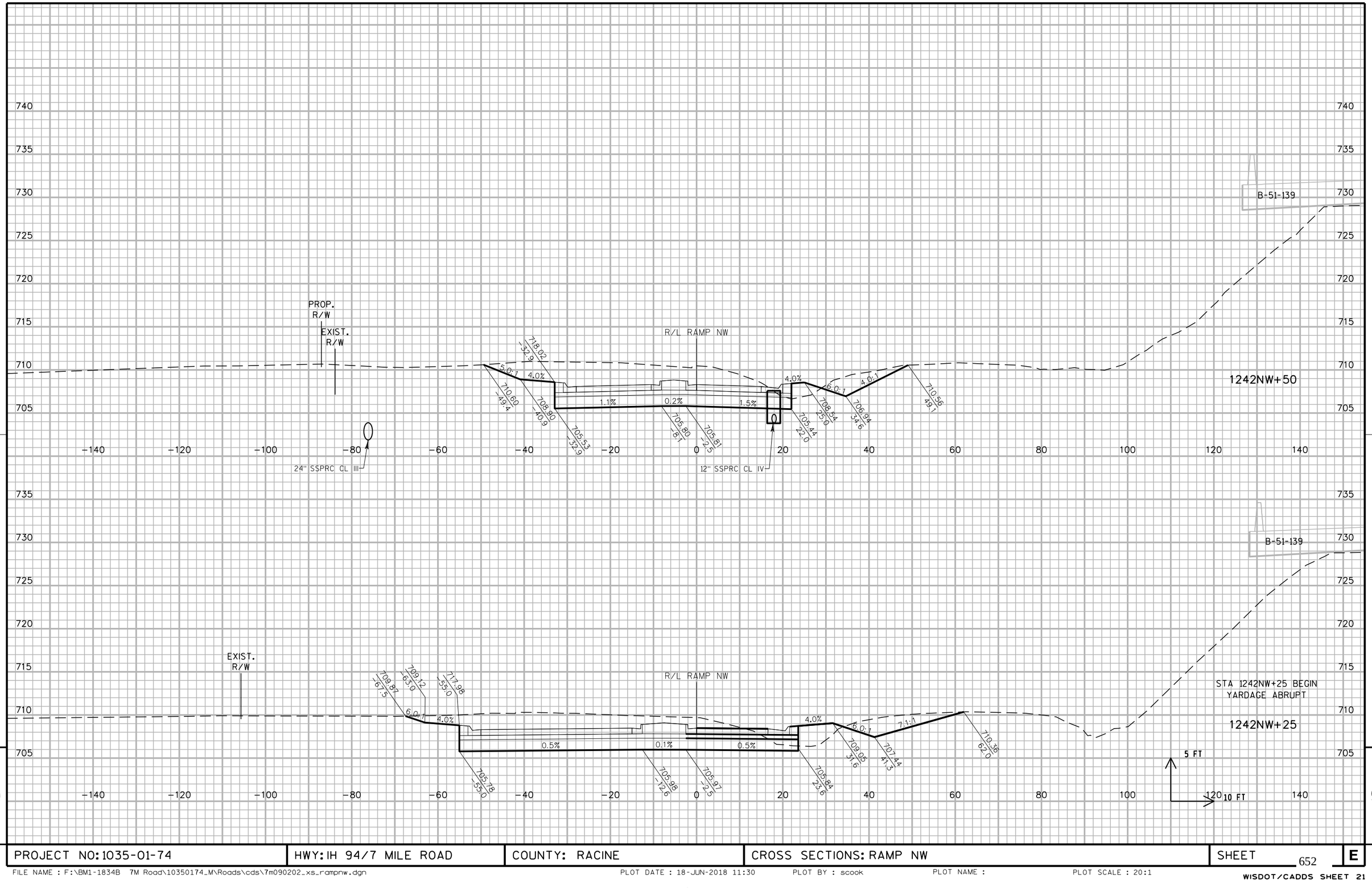
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP SW	SHEET 650	E

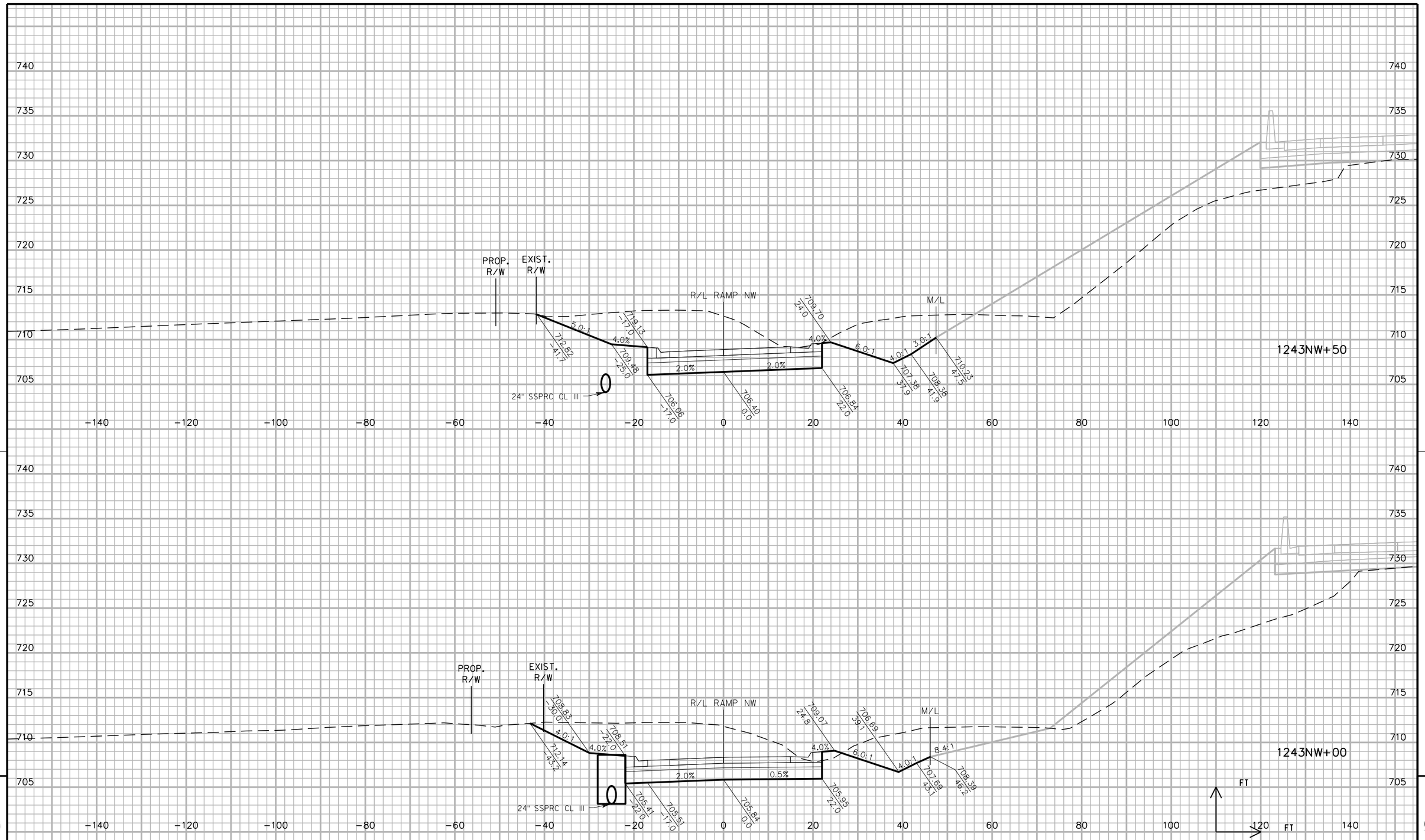
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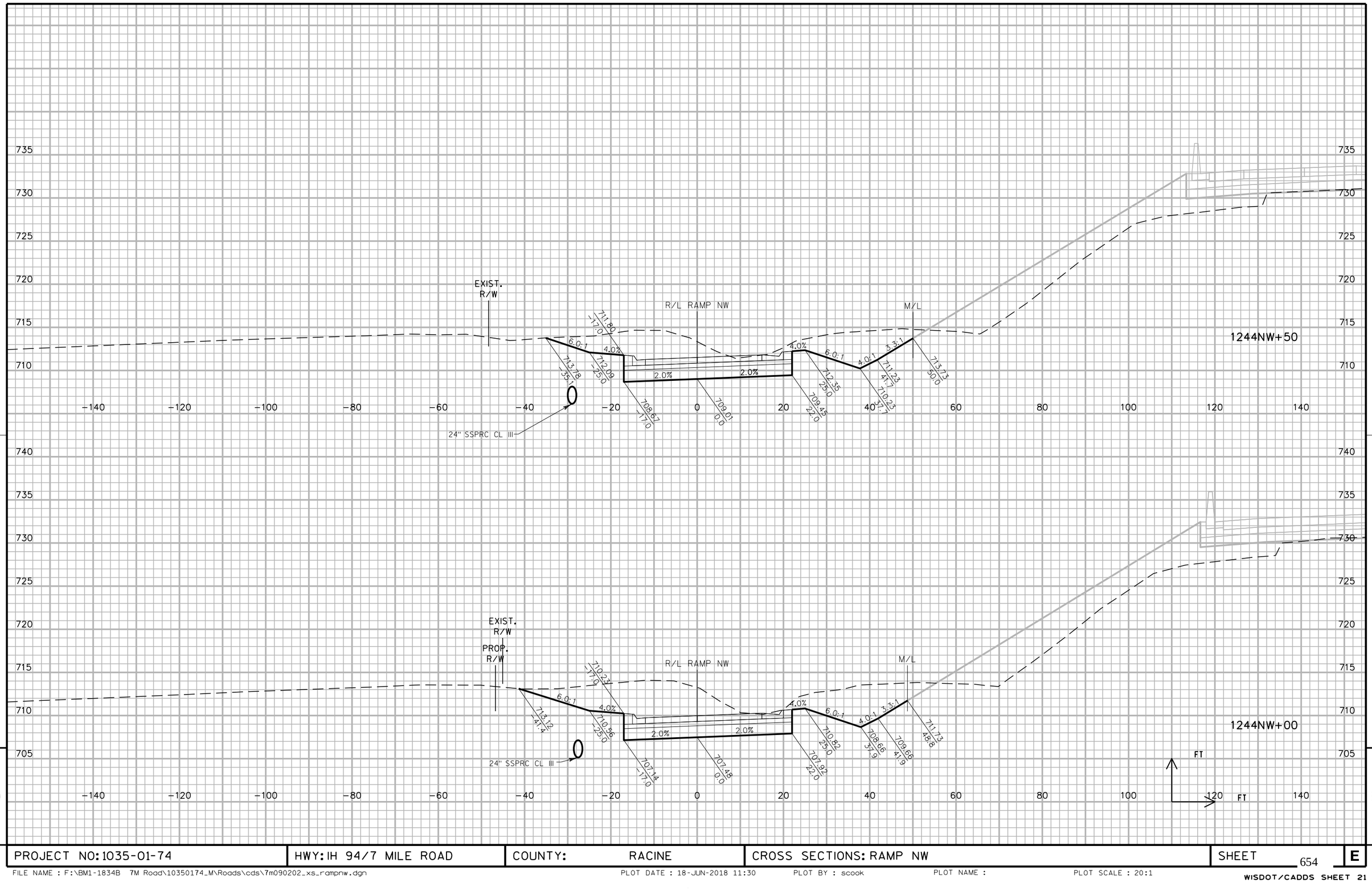
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET 652	E



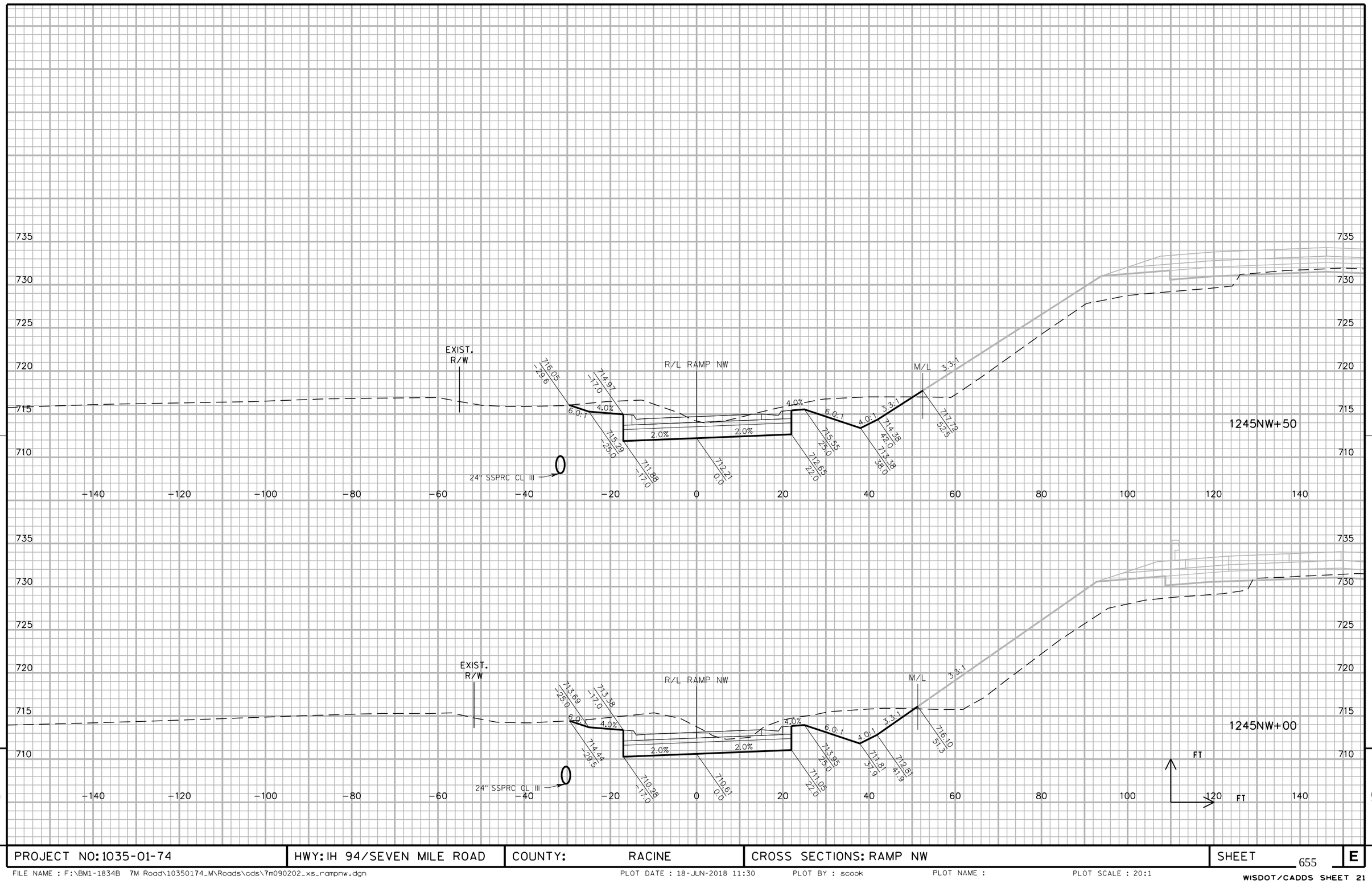
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET 654	E

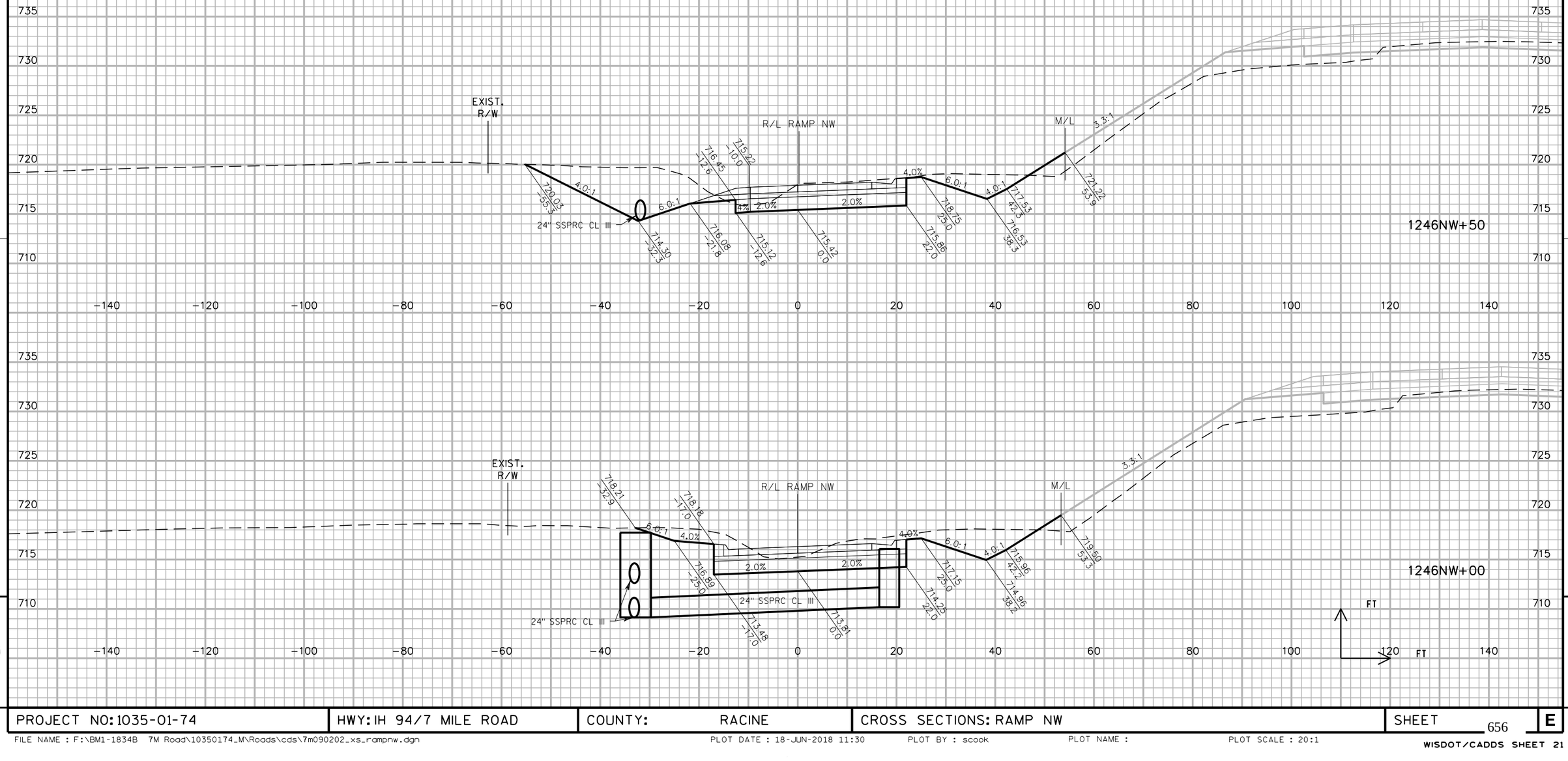
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WISDOT/CADDS SHEET 21



PROJECT NO: 1035-01-74	HWY: IH 94/SEVEN MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET E

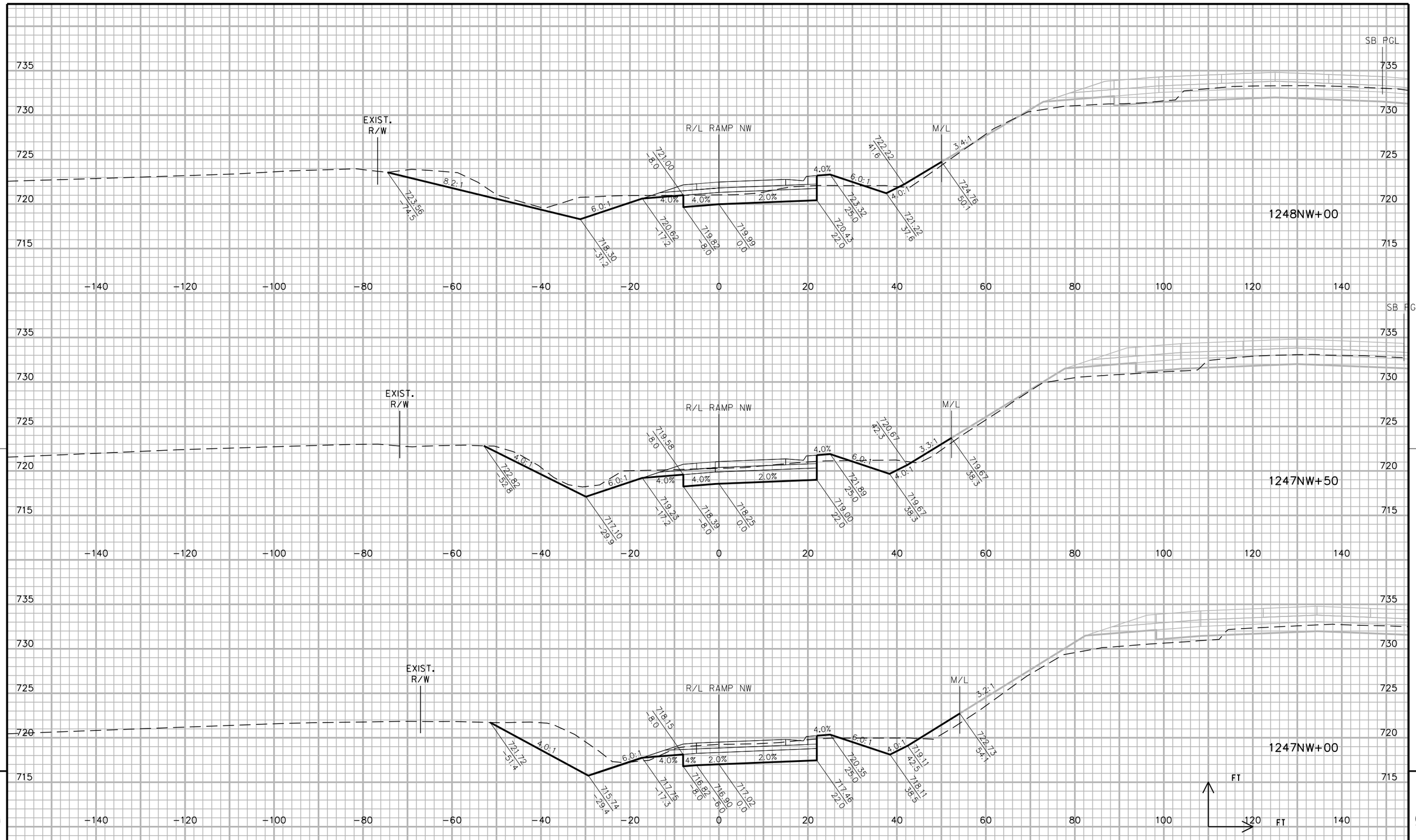
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090202_xs_rampnw.dgn PLOT DATE : 18-JUN-2018 11:30 PLOT BY : scook PLOT NAME : PLOT SCALE : 20:1

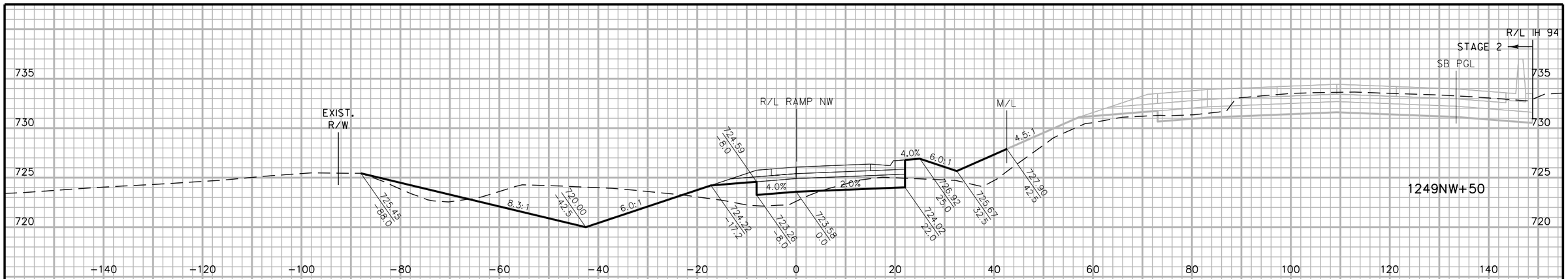


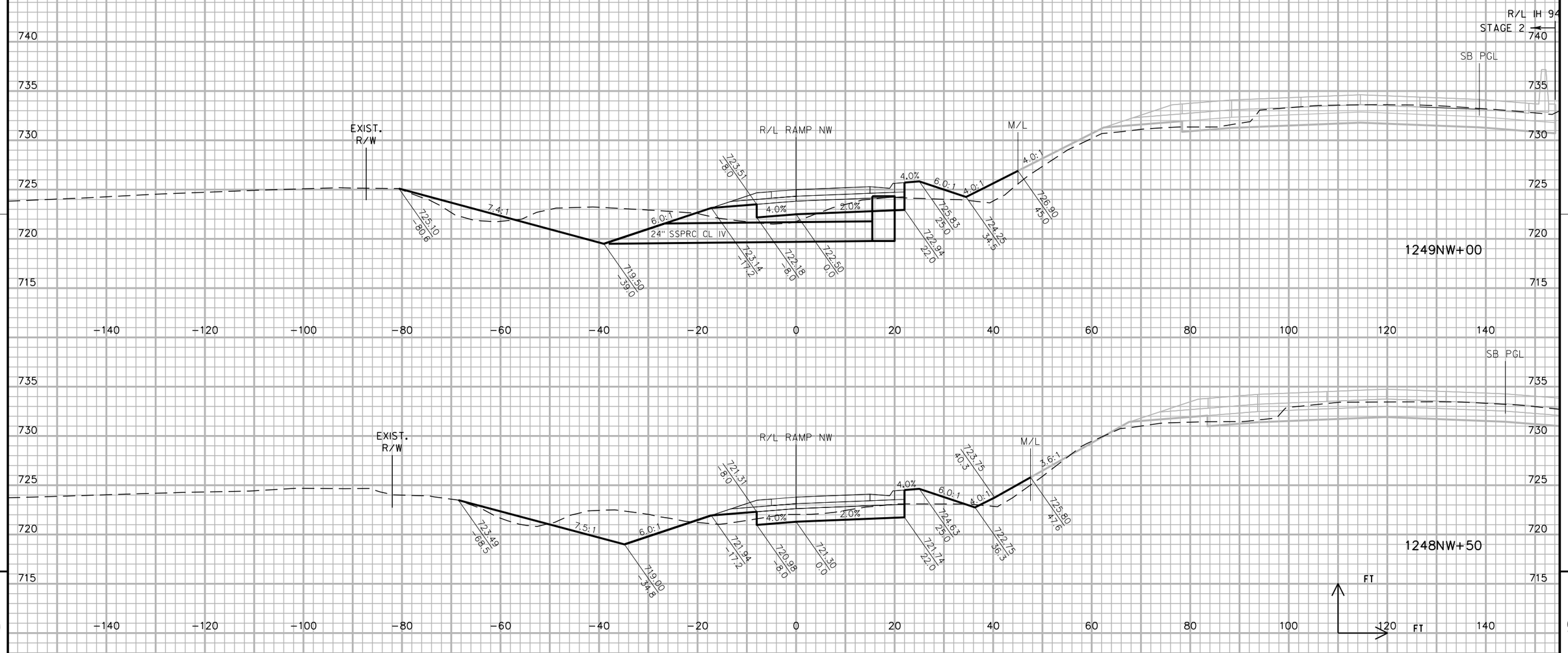
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090202_xs_rampnw.dgn PLOT DATE : 18-JUN-2018 11:30 PLOT BY : scook PLOT NAME : PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21





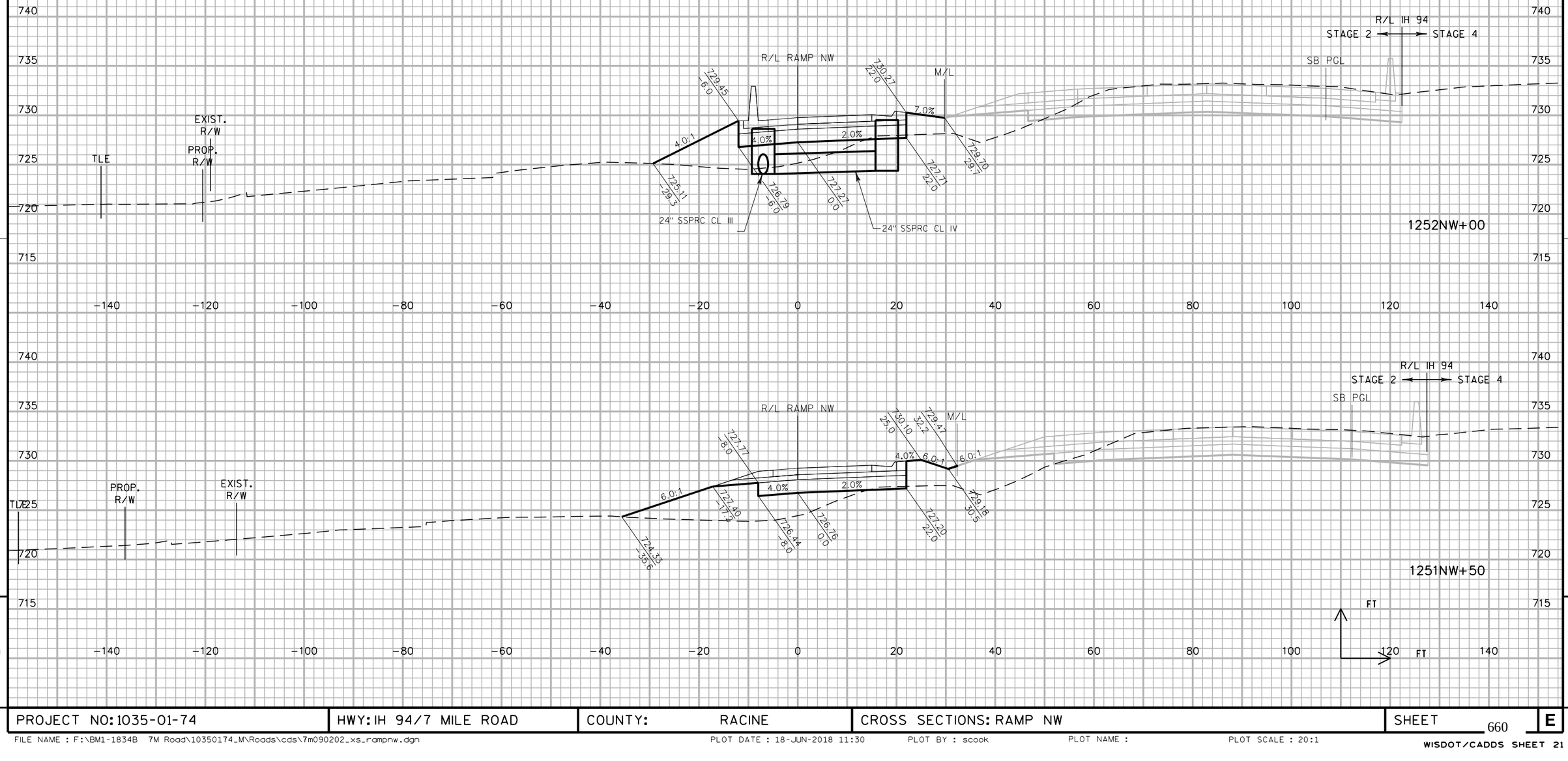
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090202_xs_rampnw.dgn PLOT DATE : 18-JUN-2018 11:30 PLOT BY : scook PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

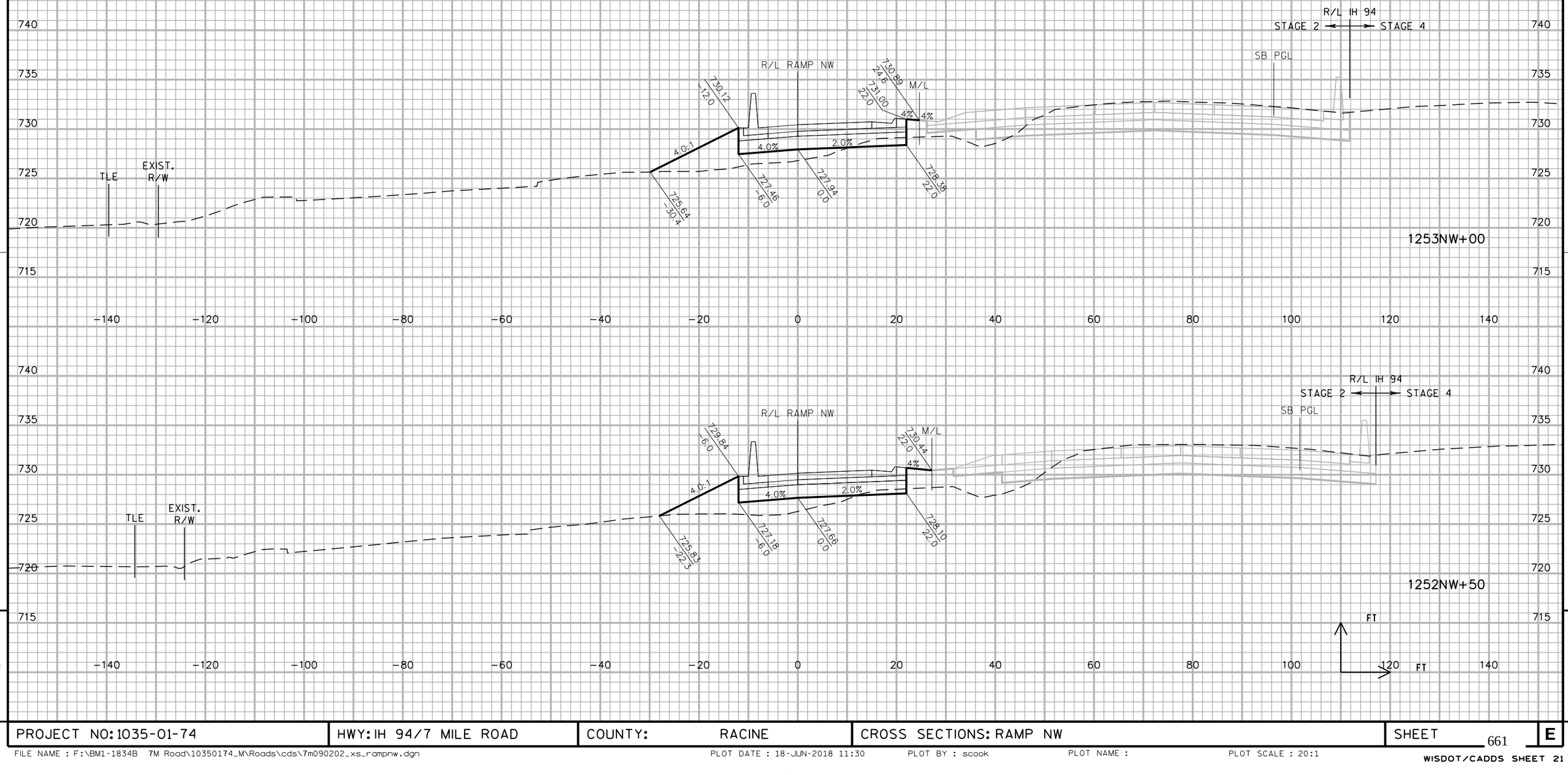
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PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET 660	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090202_xs_rampnw.dgn PLOT DATE : 18-JUN-2018 11:30 PLOT BY : scook PLOT NAME : PLOT SCALE : 20:1

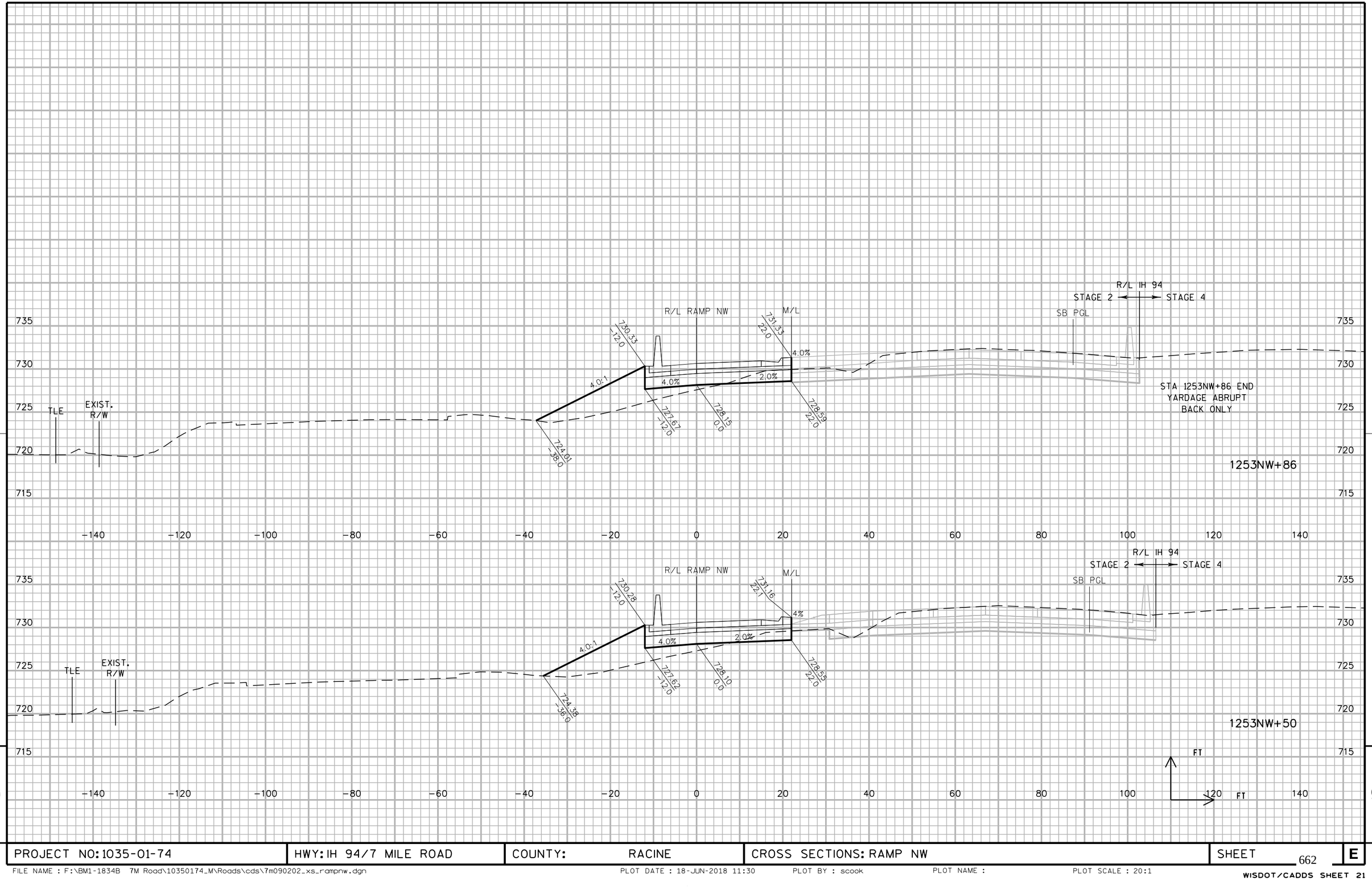
WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET 661 E



9

PROJECT NO: 1035-01-74	HWY: IH 94/7 MILE ROAD	COUNTY: RACINE	CROSS SECTIONS: RAMP NW	SHEET 662	E

FILE NAME : F:\BM1-1834B 7M Road\10350174_M\Roads\cds\7m090202_xs_rampnw.dgn PLOT DATE : 18-JUN-2018 11:30 PLOT BY : scook PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

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