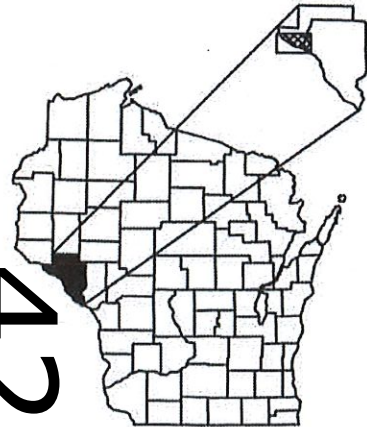


ORDER OF SHEETS

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

TOTAL SHEETS = 250



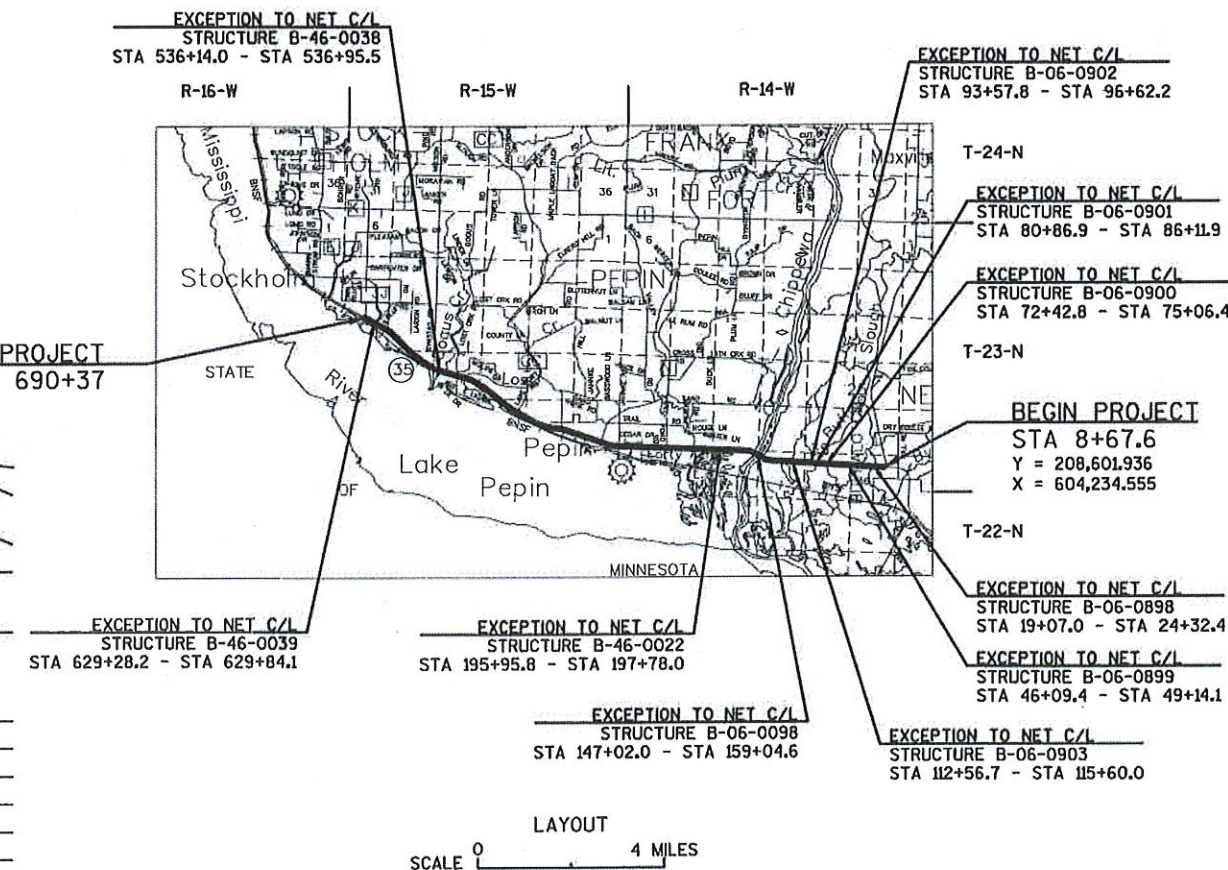
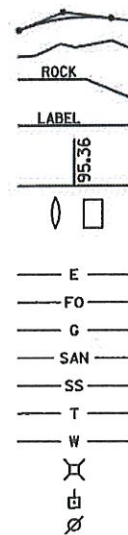
DESIGN DESIGNATION

A.A.D.T.	2018	=	2200
A.A.D.T.	2038	=	2600
D.H.V.		=	10.3
D.D.		=	62/38
T.		=	5.8
DESIGN SPEED		=	35 - 60 MPH
ESALS		=	744,600

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	---
LIMITED HIGHWAY EASEMENT	---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	300'
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)	---
SPECIAL DITCH	---
GRADE ELEVATION	95.36
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---



TOTAL NET LENGTH OF CENTERLINE = 12.201 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, PEPIN COUNTY, NAD83 (2013), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ALMA - HAGER CITY

STH 25 NORTH JUNCTION TO WALNUT STR

STH 35

PEPIN & BUFFALO COUNTY

STATE PROJECT NUMBER
1720-00-70

STATE PROJECT

1720-00-70

FEDERAL PROJECT

PROJECT

WISC 2017295

CONTRACT

1

ORIGINAL PLANS PREPARED BY

KNIGHT
Engineers & Architects831 Critter Court
Suite 400
Onalaska, WI 54560
Phone: (608) 519-1455

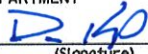
DATE: _____ (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	KNIGHT E/A INC.
Project Manager	DAVID KOEPP
Regional Examiner	TOU YANG
Regional Supervisor	TIMOTHY MASON

APPROVED FOR THE DEPARTMENT

DATE: 1/12/2017  (Signature)

E

UTILITY CONTACTS

CHARLES DIENGER

Xcel Energy - Electricity-Distribution

1414 W Hamilton Ave

P.O. Box 8

Eau Claire, WI 54702-0008

(608) 386-0046

cc:dawn.schultz@xcelenergy.com

KYLE SCHLAMPP

CenturyLink - Communication Line

20 S Wilson Ave

Rice Lake, WI 54868

(715) 234-5573

kyle.schlampp@centurylink.com

George Martinez

Midcontinent Communications

924 Lake Ave

Fairmount, MN 56031

george_martinez@mni.net

Dave Vosin

Village of Pepin Water and Sewer

508 2nd Street

P.O. Box 277

Pepin, WI 54758

CALVIN NUTT

*BNSF RAILWAY COMPANY

80 44TH AVENUE NE

MINNEAPOLIS, MN 55421

PHONE: (763) 782-3495

FAX: (763) 782-3061

EMAIL: calvin.nutt@bnsf.com

AREA CONTACTS

WISDNR: PEPIN COUNTY

CHRIS WILLGER

EAU CLAIRE OFFICE

1300 W. CLAIREMONT AVE

EAU CLAIRE, WI 54701

PHONE: (715) 839-1609

WisDOT NW Region

DAVID KOEPP, P.E.

718 W. CLAIREMONT AVE

EAU CLAIRE, WI 54701

PHONE: (715) 836-2078

EMAIL: david.koepp@dot.wi.gov

DESIGN CONTACT

KNIGHT E/A

CHAD SCHROEDER, P.E.

831 CRITTER COURT, SUITE 400

ONALASKA, WI 54650

PHONE: (608) 519-1455 EXT. #8

EMAIL: cschroeder@knightea.com



Dial 811 or (800)242-8511

www.DiggersHotline.com

* DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

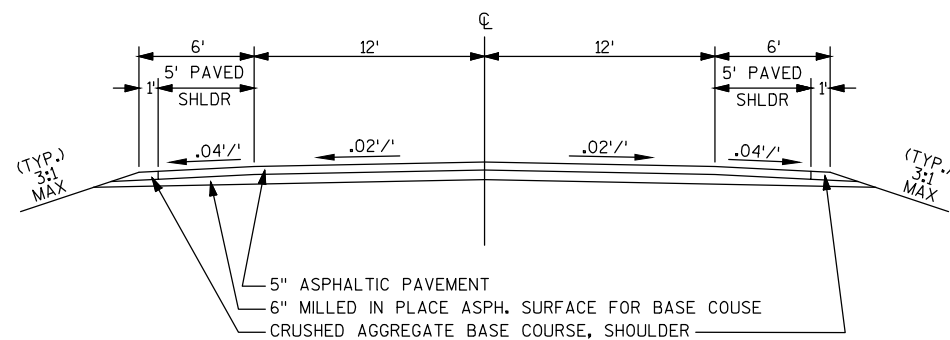
GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.
- ALL PRIVATE DRIVEWAYS AND COMMERCIAL ENTRANCES SHALL BE RESTORED IN KIND. LIMITS TO BE DETERMINED BY THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- HMA PAVEMENT TO BE PLACED IN LIFTS AS FOLLOWS:
2.00" (12MM UPPER), AND 1.5" (12MM LOWER). HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 115 LB/SY/INCH.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS.
- ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- CURVE DATA IS BASED ON ARC DEFINITION.
- SHAPING AND COMPACTING EXISTING SHOULDER MATERIAL PRIOR TO ADDING NEW SHOULDER MATERIAL, SHAPING AND COMPACTING GRAVEL SIDE ROADS, EXCAVATION, SHAPING AND DISPOSAL OF EXCESS MATERIAL AND REMOVAL OF EXISTING ASPHALTIC SURFACE TO NECESSARY LENGTHS AND DEPTHS AS DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE BID ITEM "PREPARE FOUNDATION FOR ASPHALTIC PAVING".
- TACK COAT SHALL BE REQUIRED BETWEEN THE MILLED PAVEMENT AND ASPHALTIC SURFACE. TACK COAT CALCULATIONS ARE BASED ON AN APPLICATION RATE OF 0.07 GAL/SY.
- WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

RUNOFF COEFFICIENT TABLE

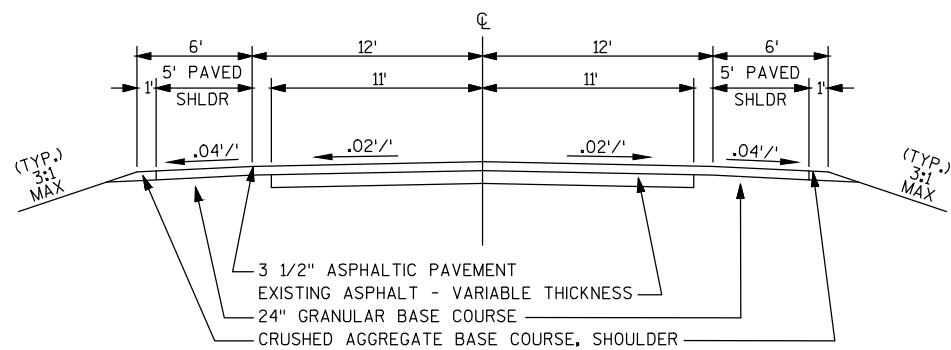
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT						.70 - .95						
CONCRETE						.80 - .95						
BRICK						.70 - .80						
DRIVES, WALKS						.75 - .85						
ROOFS						.75 - .95						
GRAVEL ROADS, SHOULDERS						.40 - .60						

TOTAL PROJECT AREA = 224.3 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 58.8 ACRES



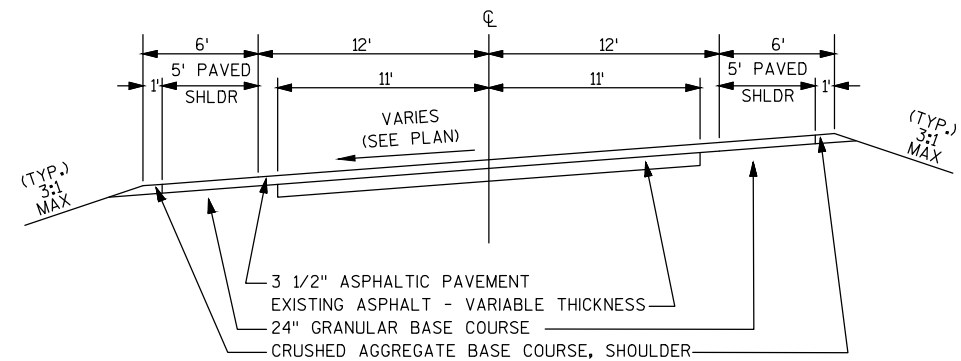
TYPICAL EXISTING TANGENT SECTION

STA 8+68 TO STA 19+07



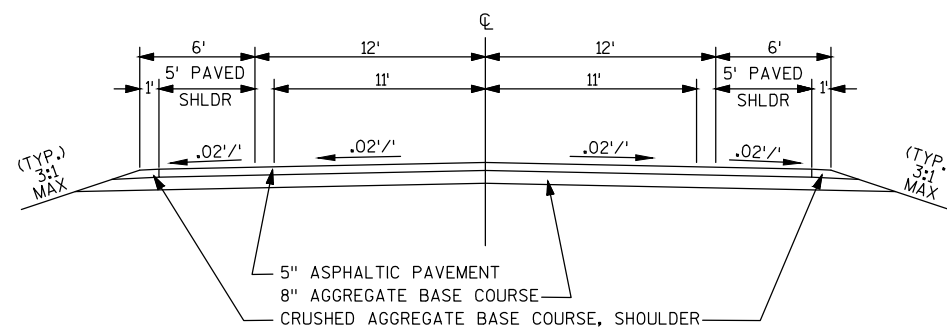
TYPICAL EXISTING TANGENT SECTION

STA 24+32 TO STA 46+09
STA 49+14 TO STA 72+43
STA 75+06 TO STA 80+87
STA 86+12 TO STA 93+58
STA 96+62 TO STA 112+57
STA 115+60 TO STA 136+88
STA 142+67 TO STA 147+02
STA 159+05 TO STA 160+01
STA 166+65 TO STA 193+84
STA 201+84 TO STA 317+94
STA 322+03 TO STA 328+83



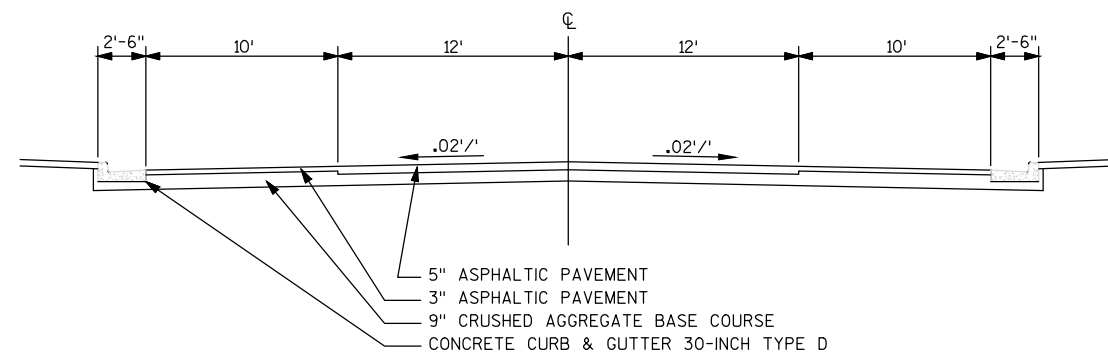
TYPICAL EXISTING SUPERELEVATED SECTION

STA 136+88 TO STA 142+67
STA 160+01 TO STA 166+65
STA 317+94 TO STA 322+03



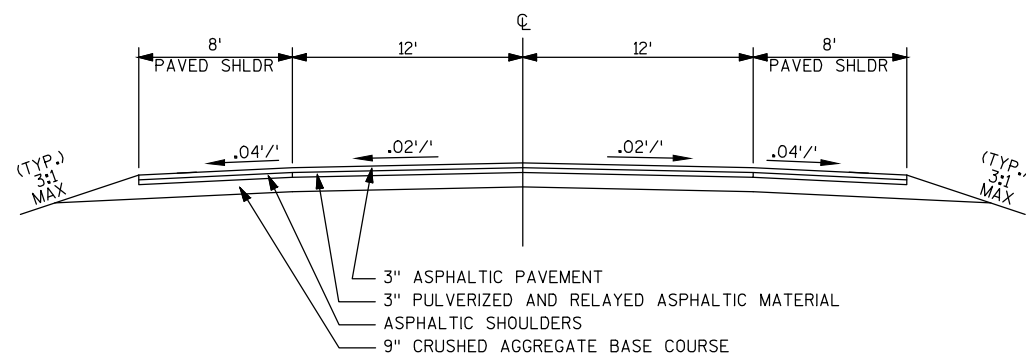
TYPICAL EXISTING TANGENT SECTION

STA 193+84 TO STA 195+96
STA 197+78 TO STA 201+84



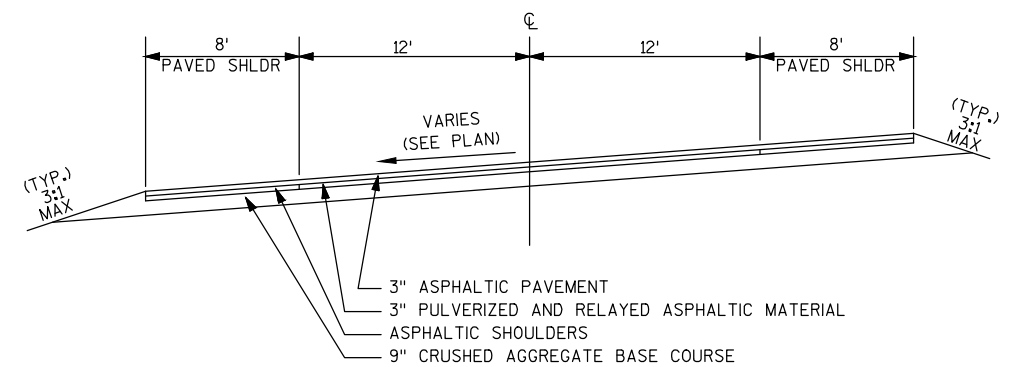
TYPICAL EXISTING TANGENT SECTION

STA 328+83 TO STA 373+43



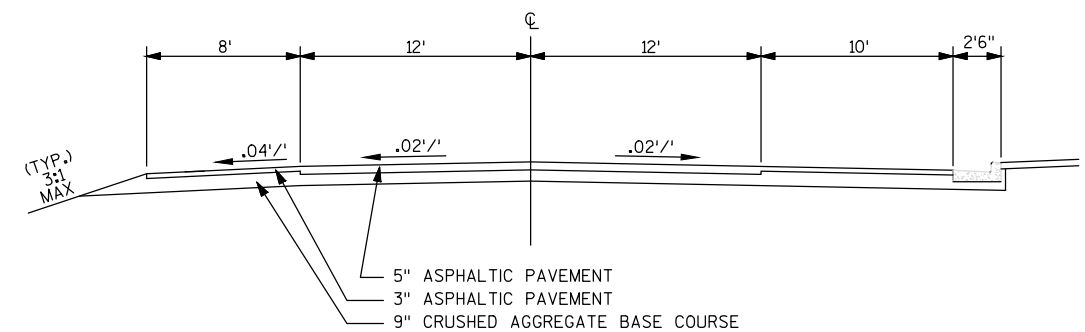
TYPICAL EXISTING TANGENT SECTION

STA 373+43 TO STA 375+69
STA 380+28 TO STA 391+74
STA 396+52 TO STA 409+49
STA 415+20 TO STA 446+76
STA 453+57 TO STA 487+67
STA 505+30 TO STA 533+87
STA 536+00 TO STA 536+14
STA 536+96 TO STA 543+12
STA 549+96 TO STA 574+98
STA 579+04 TO STA 605+64
STA 609+90 TO STA 629+28
STA 629+84 TO STA 657+79
STA 661+43 TO STA 666+92



TYPICAL EXISTING SUPERELEVATED SECTION

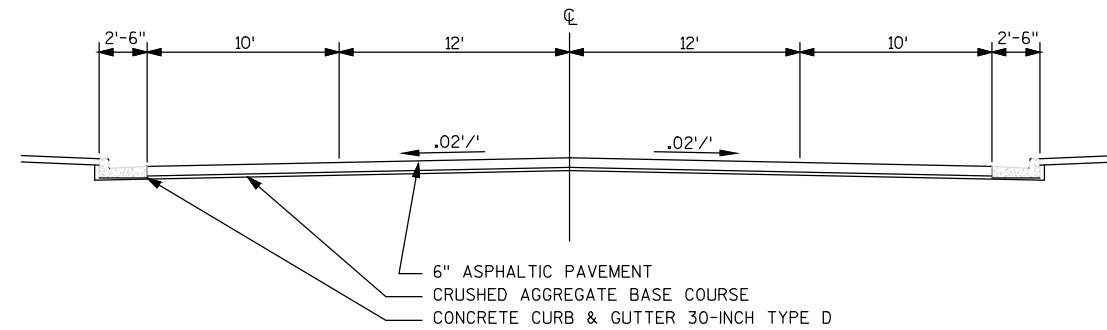
STA 375+69 TO STA 380+28
STA 391+74 TO STA 396+52
STA 409+49 TO STA 415+20
STA 446+76 TO STA 453+57
STA 487+67 TO STA 505+30
STA 533+87 TO STA 536+00
STA 543+12 TO STA 549+96
STA 574+98 TO STA 579+04
STA 605+64 TO STA 609+90
STA 657+79 TO STA 661+43



TYPICAL EXISTING TANGENT SECTION

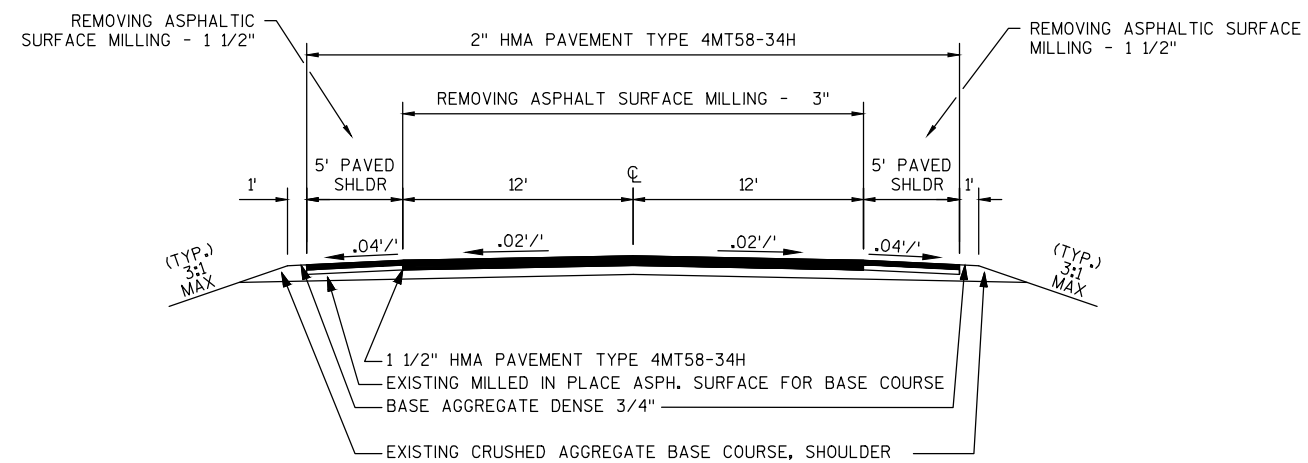
STA 666+92 TO STA 682+51

2



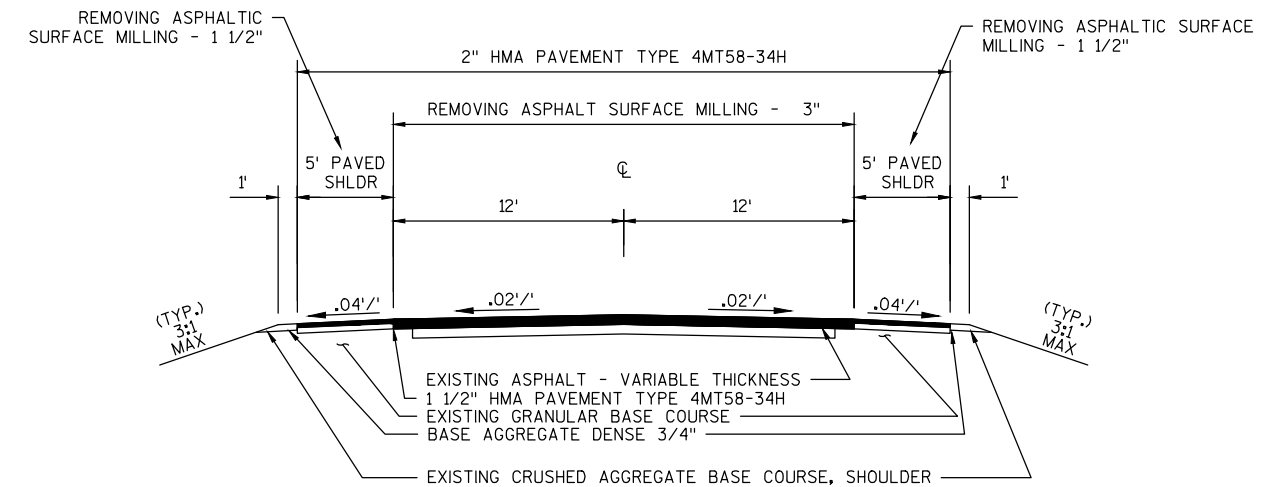
TYPICAL EXISTING TANGENT SECTION

STA 682+51 TO STA 690+37



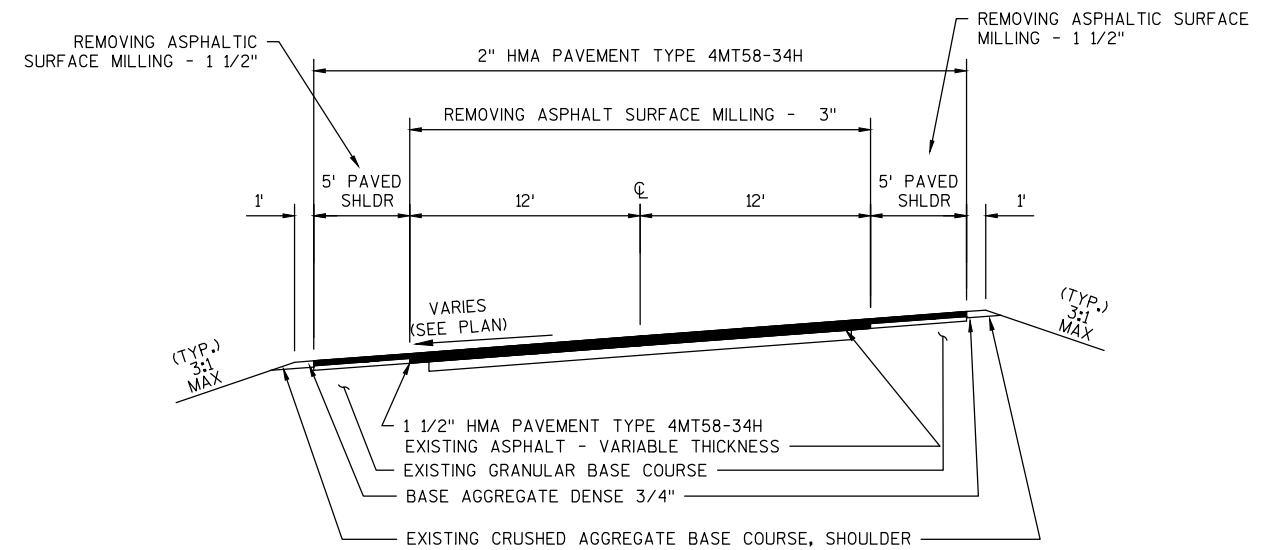
TYPICAL FINISHED TANGENT SECTION

STA 8+68 TO STA 19+07



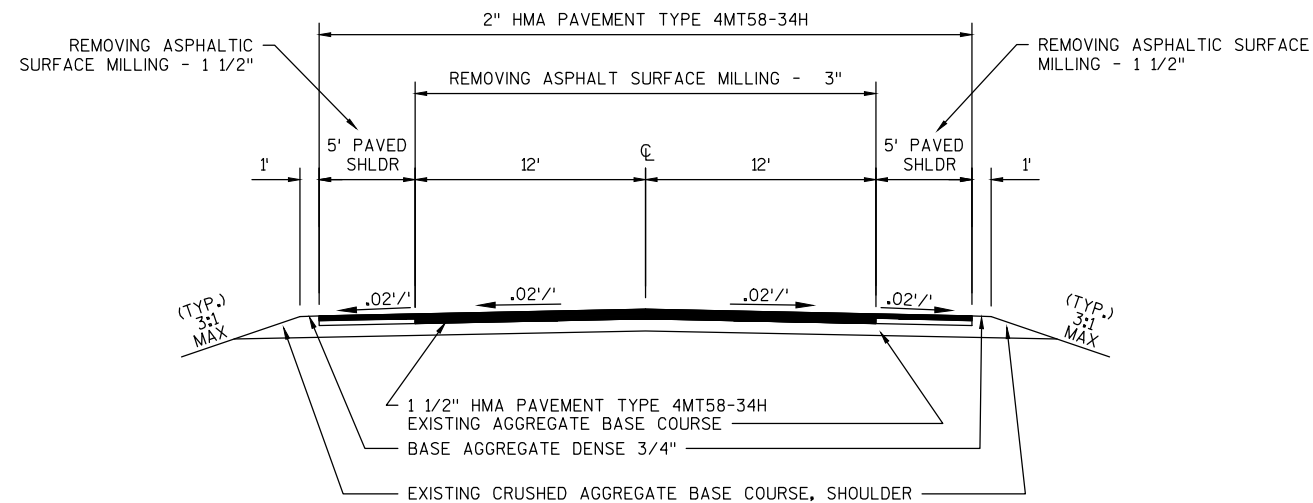
TYPICAL FINISHED TANGENT SECTION

STA 24+32	TO STA 46+09
STA 49+14	TO STA 72+43
STA 75+06	TO STA 80+87
STA 86+12	TO STA 93+58
STA 96+62	TO STA 112+57
STA 115+60	TO STA 136+88
STA 142+67	TO STA 147+02
STA 159+05	TO STA 160+01
STA 166+65	TO STA 193+84
STA 201+84	TO STA 317+94
STA 322+03	TO STA 328+83



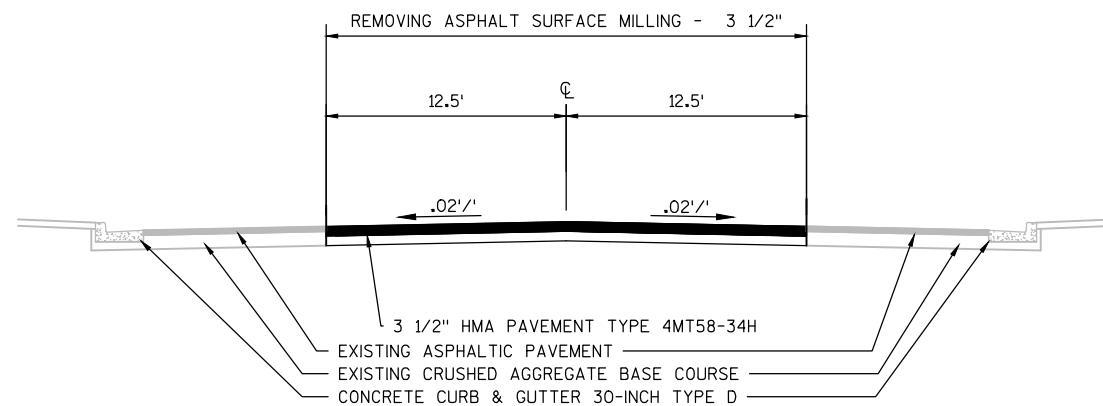
TYPICAL FINISHED SUPERELEVATED SECTION

STA 136+88 TO STA 142+67
STA 160+01 TO STA 166+65
STA 317+94 TO STA 322+03



TYPICAL FINISHED TANGENT SECTION

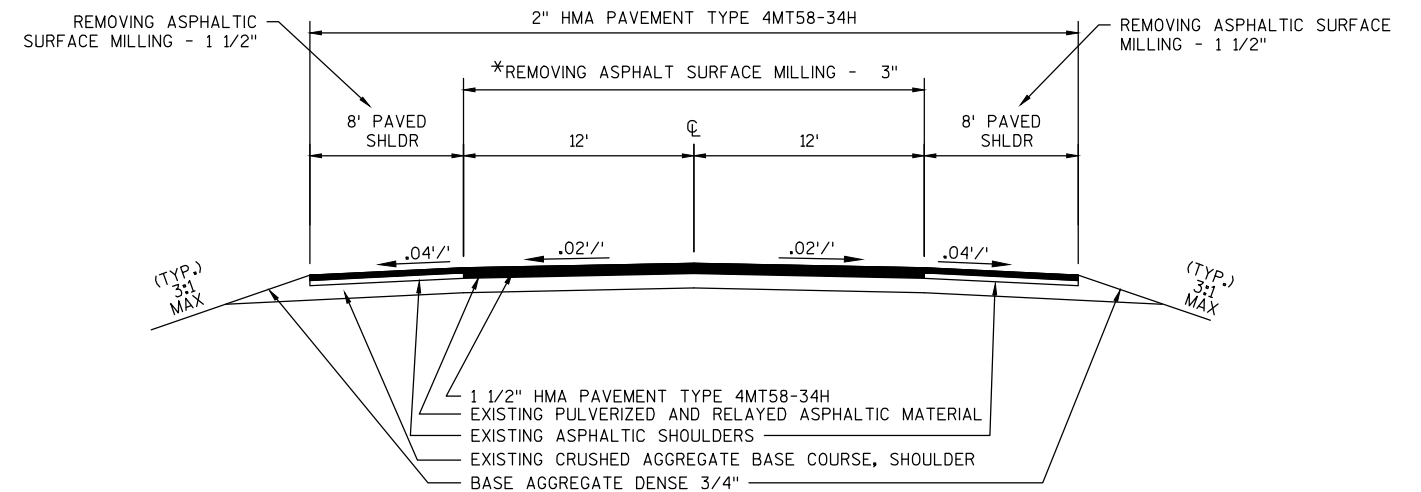
STA 193+84 TO STA 195+96
STA 197+78 TO STA 201+84



TYPICAL FINISHED TANGENT SECTION

STA 328+83 TO STA 373+43

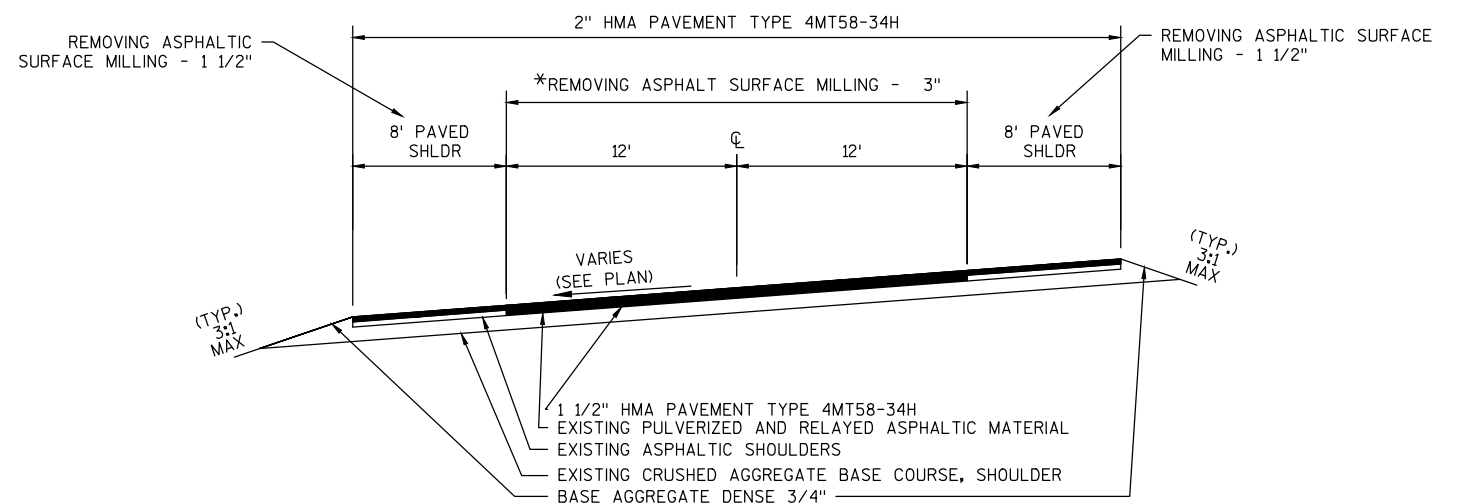
NOTE: MILLING WIDTH SHOULD INCLUDE TRAVEL LANES AND EXISTING EDGELINES ONLY. ADJUST WIDTH AS NEEDED



TYPICAL FINISHED TANGENT SECTION

STA 373+43 TO STA 375+69
STA 380+28 TO STA 391+74
STA 396+52 TO STA 409+49
STA 415+20 TO STA 446+76
STA 453+57 TO STA 487+67
STA 505+30 TO STA 533+87
STA 536+00 TO STA 536+14
STA 536+96 TO STA 543+12
STA 549+96 TO STA 574+98
STA 579+04 TO STA 605+64
STA 609+90 TO STA 629+28
STA 629+84 TO STA 657+79
STA 661+43 TO STA 666+92

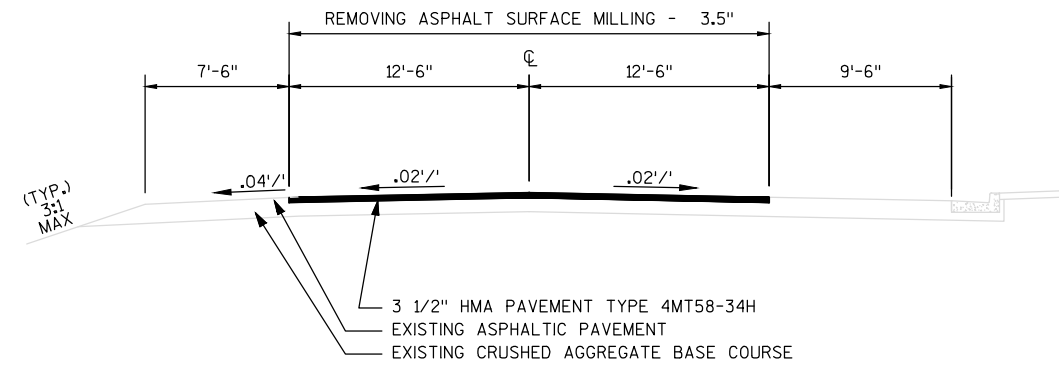
* REMOVING ASPHALT SURFACE MILLING DEPTH EXTENDS TO EXISTING PULVERIZED AND RELAY ASPHALTIC MATERIAL



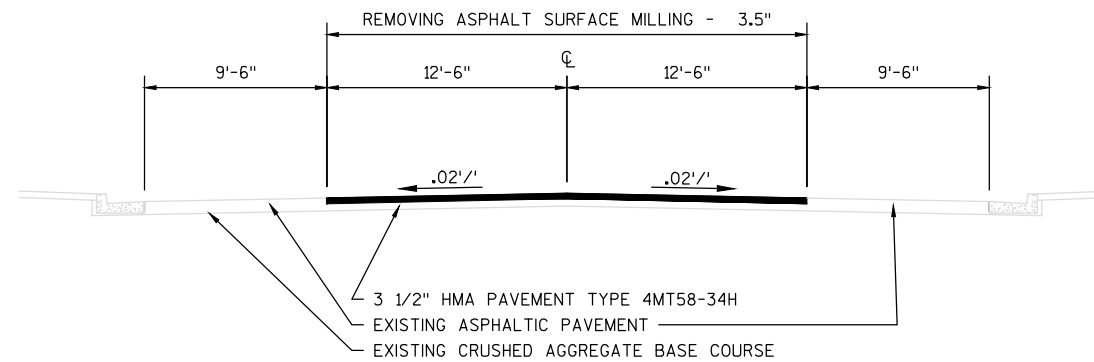
TYPICAL FINISHED SUPERELEVATED SECTION

STA 375+69 TO STA 380+28
STA 391+74 TO STA 396+52
STA 409+49 TO STA 415+20
STA 446+76 TO STA 453+57
STA 487+67 TO STA 505+30
STA 533+87 TO STA 536+00
STA 543+12 TO STA 549+96
STA 574+98 TO STA 579+04
STA 605+64 TO STA 609+90
STA 657+79 TO STA 661+43

* REMOVING ASPHALT SURFACE MILLING DEPTH EXTENDS TO EXISTING PULVERIZED AND RELAY ASPHALTIC MATERIAL



TYPICAL FINISHED TANGENT SECTION
STA 666+92 TO STA 682+51



TYPICAL FINISHED TANGENT SECTION
STA 682+51 TO STA 690+37

NOTES

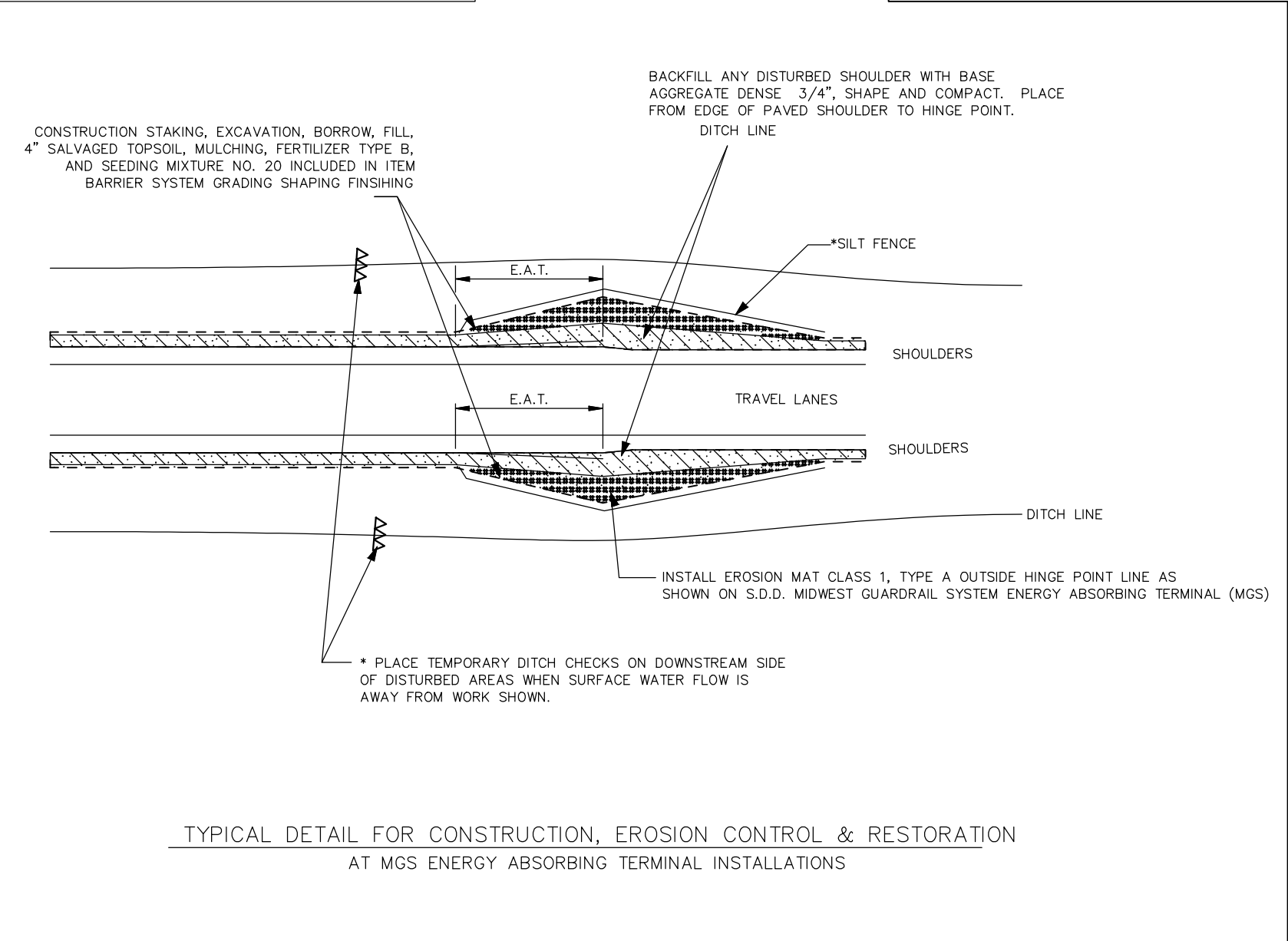
DETAILS OF CONSTRUCTION AND EROSION CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE WISCONSIN DOT STANDARD DETAILS.

BACKFILL ALL HOLES REMAINING DUE TO GUARDRAIL POST REMOVAL WITH BASE AGGREGATE DENSE 3/4-INCH

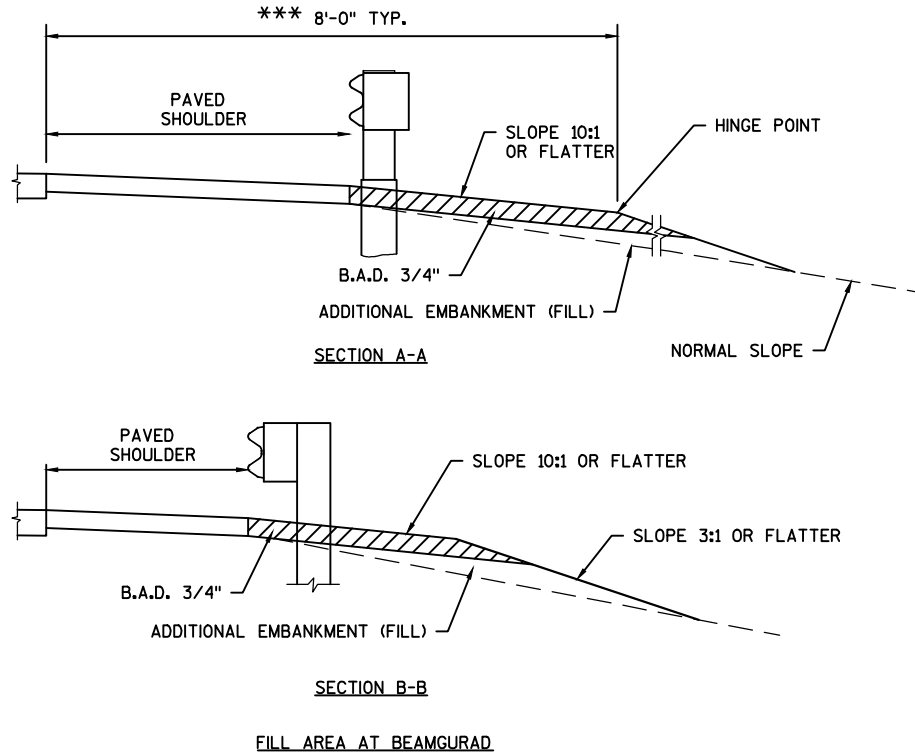
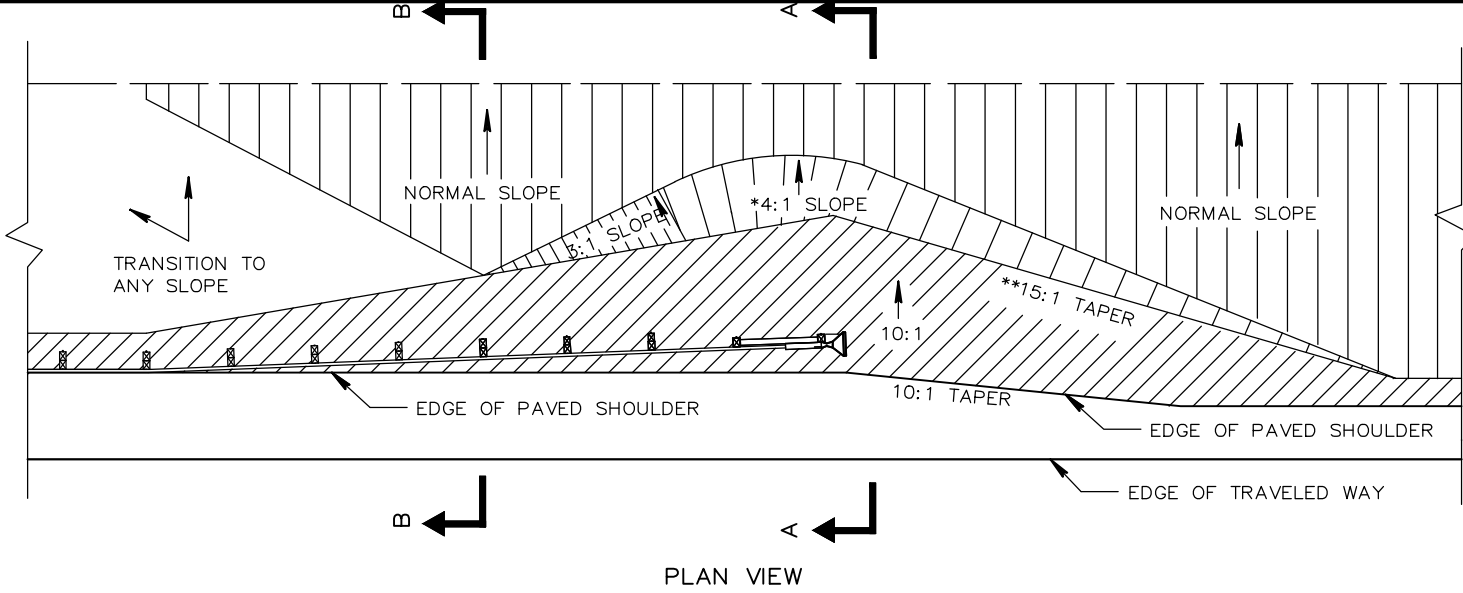
SPECIAL CONSTRUCTION, EROSION CONTROL AND RESTORATION DETAILS PROVIDED IN THE SITE SPECIFIC BEAM GUARD DETAIL.

*TYPICAL EROSION CONTROL DEVICE INSTALLATION. SEE MISCELLANEOUS QUANTITIES FOR QUANTITIES PER LOCATION. ANY EROSION CONTROL DEVICES NOT SHOWN ON THIS DETAIL WILL BE SHOWN ON THE BEAM GUARD DETAILS. EROSION CONTROL AND CONSTRUCTION REQUIRED AT EACH SITE WILL VARY.

LEGEND	
#####	EROSION MAT CLASS I, TYPE A
—●—●—●—	SILT FENCE
- - -	SLOPE INTERCEPT
△△△	TEMPORARY DITCH CHECK
▨	BASE AGGREGATE DENSE 3/4"
▤	LIMITS OF CONSTRUCTION



TYPICAL DETAIL FOR CONSTRUCTION, EROSION CONTROL & RESTORATION
AT MGS ENERGY ABSORBING TERMINAL INSTALLATIONS



NOTES

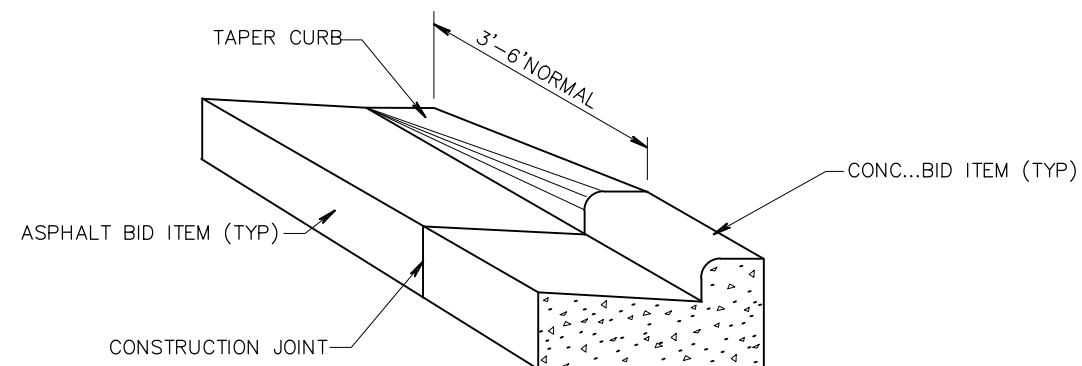
* LOCATIONS NOTED AS "MODIFIED GRADING" MAY HAVE A 2.5:1 SLOPE BEYOND THE CLEAR ZONE HINGE POINT.

** TAPER MAY BE REDUCED TO 10:1 AS APPROVED BY THE ENGINEER

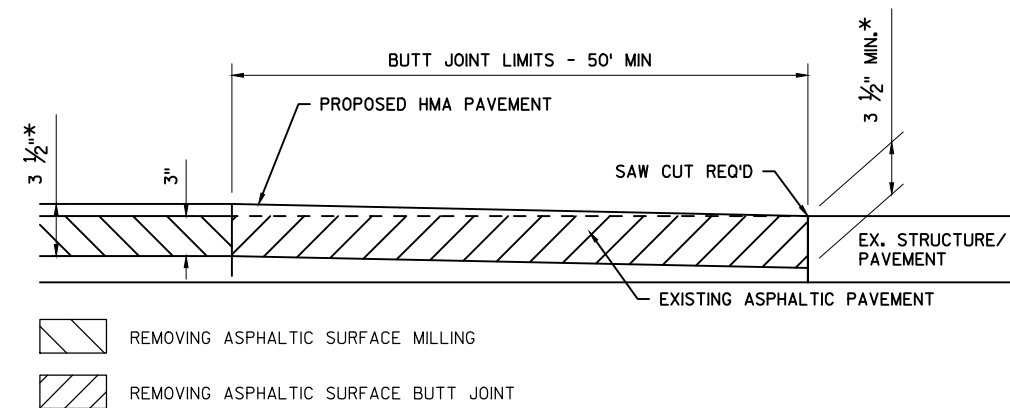
*** LOCATIONS NOTED AS "MODIFIED GRADING SECTION" MAY HAVE THE E.A.T. OFFSET REDUCED FROM 2' TO 0' AND THE SHOULDER HINGE POINT AT THE E.A.T. REDUCED FROM 8' TO 3' WITH 2.5:1 GRADING BEYOND THE SHOULDER HINGE POINT

ALL AREAS BEYOND THE AGGREGATE SHOULDER HINGE POINT SHALL BE SEEDED AND FERTILIZED

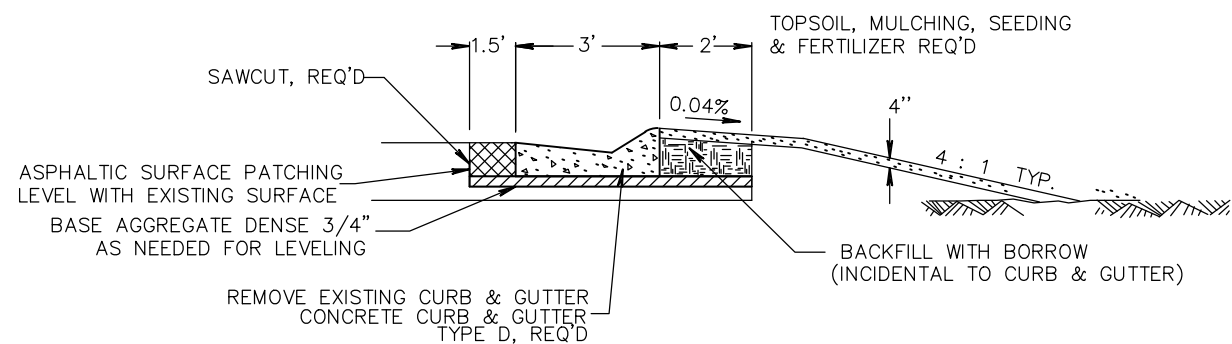
BARRIER SYSTEM GRADING SHAPING FINISHING



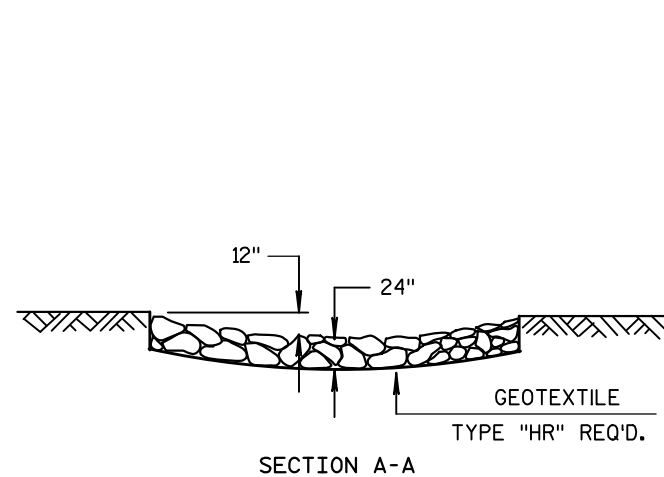
DETAIL OF CURB & GUTTER TERMINI



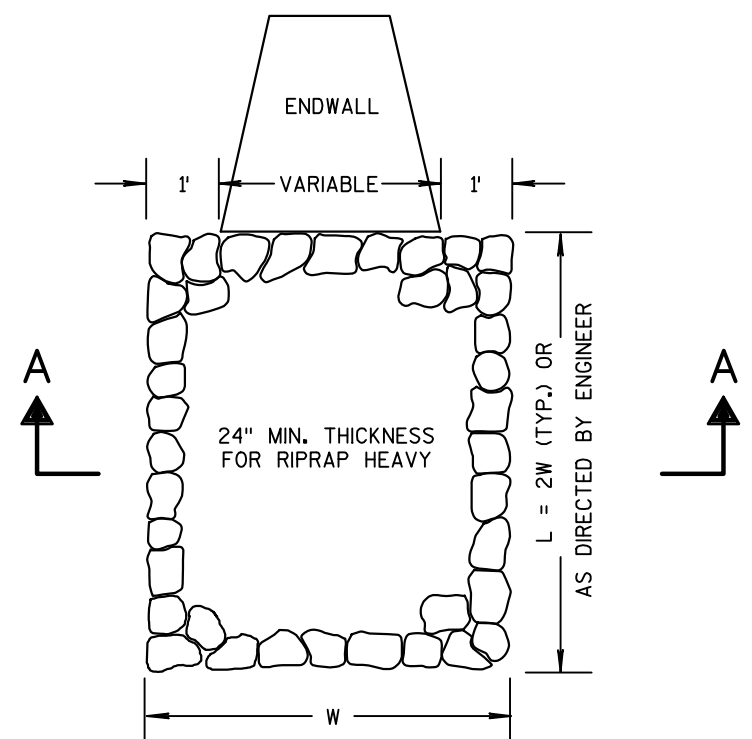
BUTT JOINT DETAIL
AT STRUCTURES AND PROJECT LIMITS
*PROPOSED TOTAL HMA OVERLAY THICKNESS

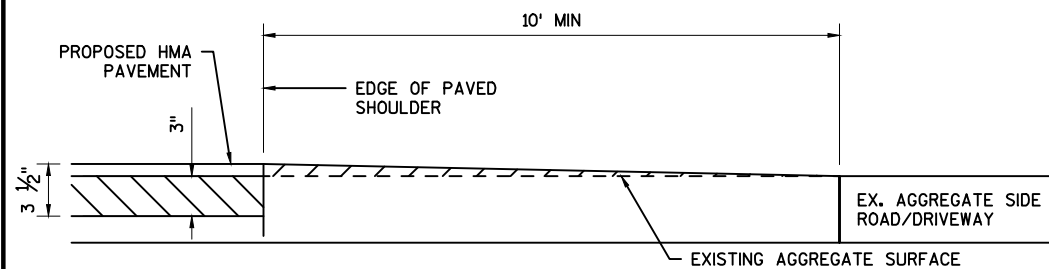
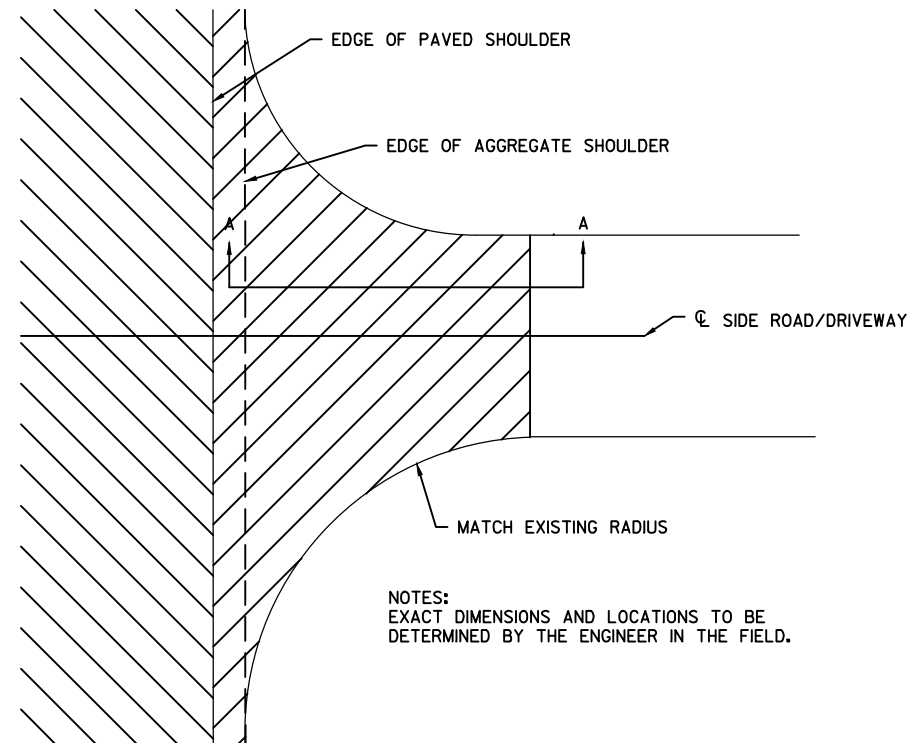


CURB & GUTTER REMOVAL AND REPLACE DETAIL
WITHIN THE VILLAGE OF PEPIN AND STOCKHOLM



RIPRAP HEAVY TREATMENT AT CULVERTS

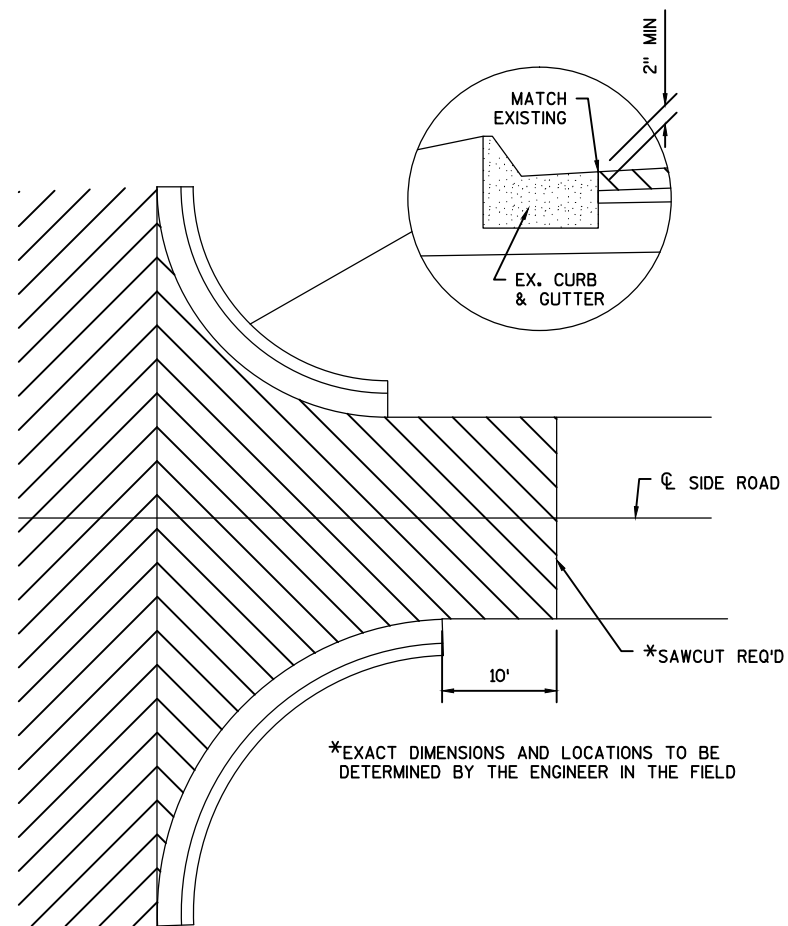




REMOVING ASPHALTIC SURFACE MILLING

BASE AGGREGATE DENSE, 3/4-INCH

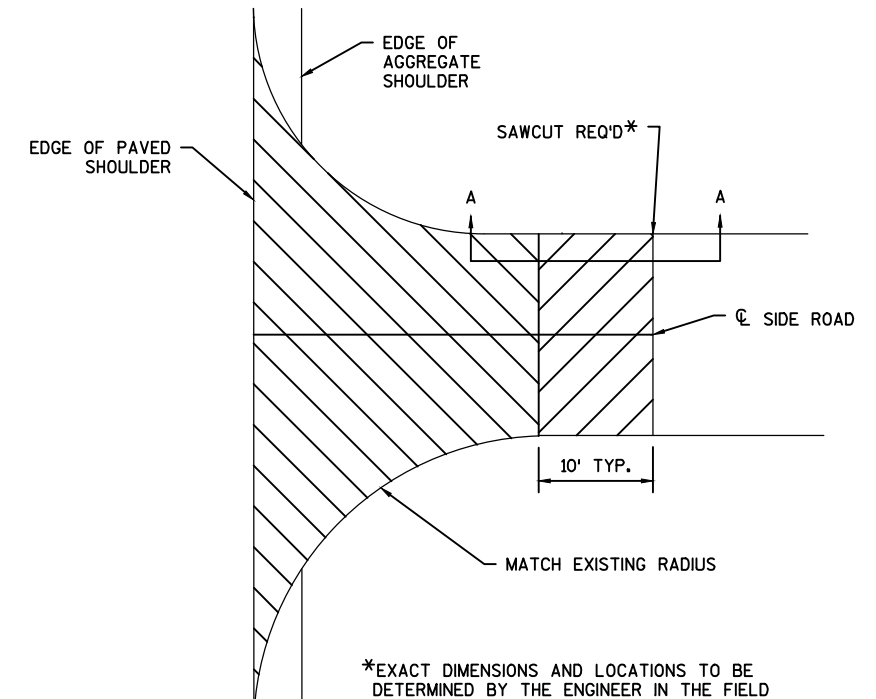
RURAL AGGREGATE SURFACE SIDE ROAD/DRIVEWAY DETAILS



3" REMOVING ASPHALTIC SURFACE/MILLING

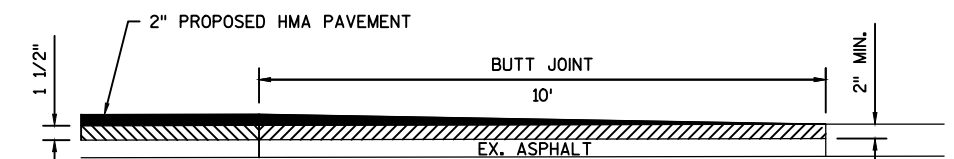
2" REMOVING ASPHALTIC SURFACE MILLING

RURAL ASPHALTIC SURFACE SIDE ROAD DETAILS
SIDE ROAD WITH CURB AND GUTTER



1 1/2" REMOVING ASPHALTIC SURFACE MILLING

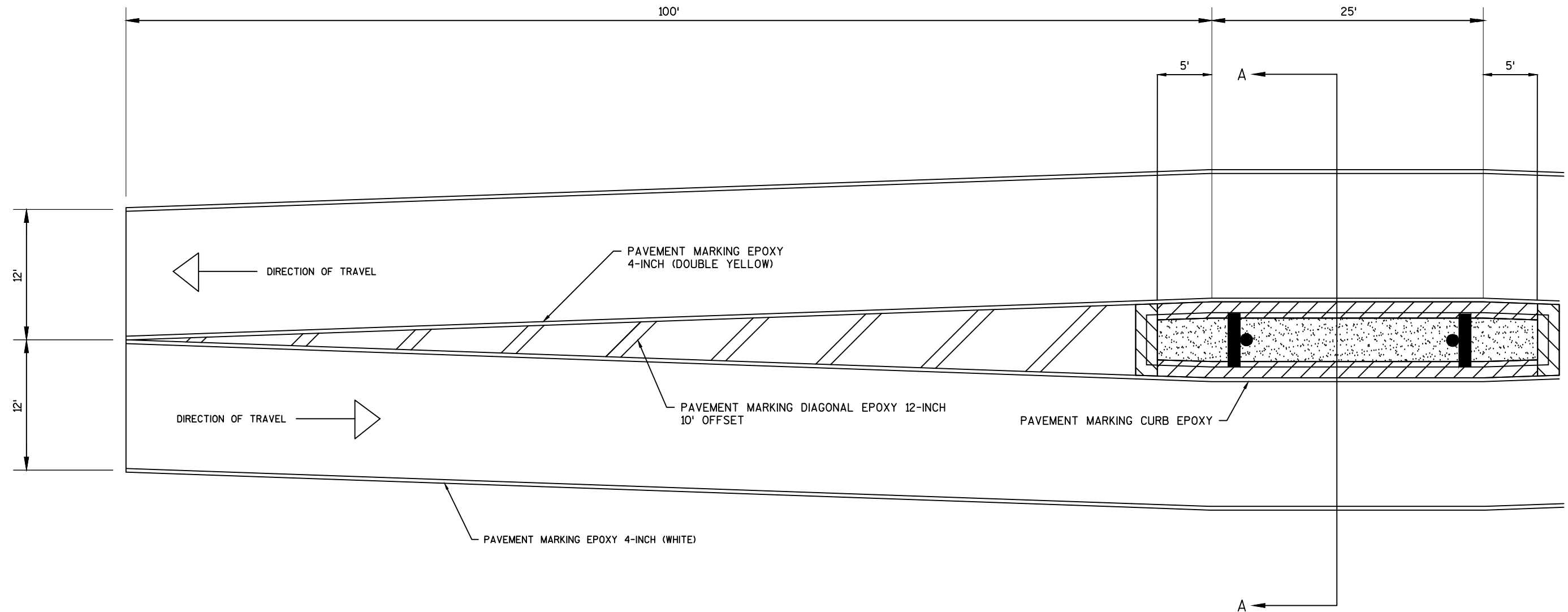
REMOVING ASPHALTIC SURFACE BUTT JOINT



RURAL ASPHALTIC SURFACE SIDE ROAD/DRIVEWAY DETAILS
SIDE ROAD WITHOUT CURB AND GUTTER

LEGEND

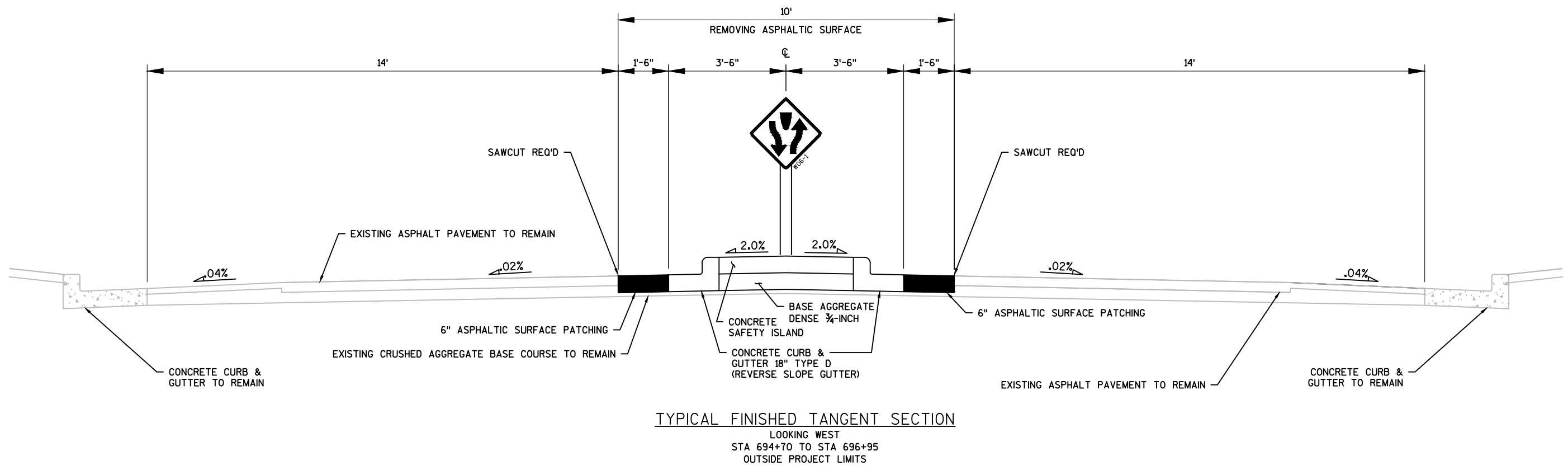
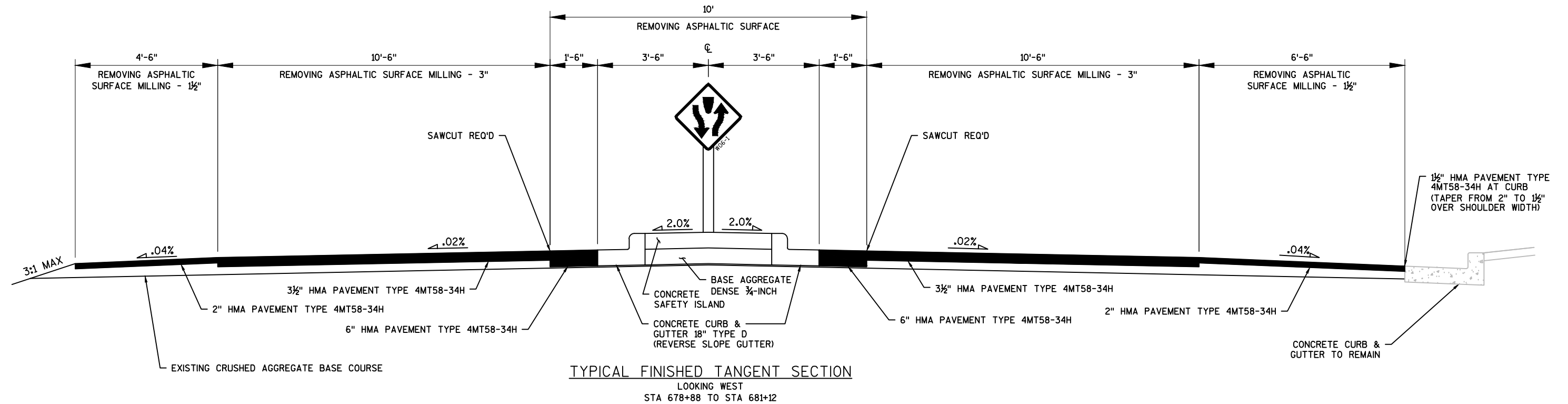
- CONCRETE SAFETY ISLAND
- CONCRETE CURB &
GUTTER 18" TYPE D
(REVERSE SLOPE GUTTER)
- CONCRETE MEDIAN
SLOPED NOSE TYPE 2

TRAFFIC CALMING ISLAND DETAIL

NOTES:
PAVEMENT MARKINGS SYMMETRICAL ABOUT
THE CENTER OF THE TRAFFIC CALMING
ISLAND.

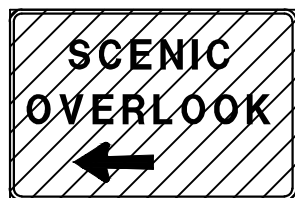
2

2 |

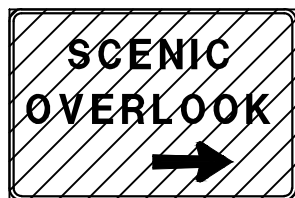




D6-51
54"X36"
STA 394+01



D6-53-L
54"X36"
STA 420+32



D6-53-R
54"X36"
STA 423+80



D6-51
54"X36"
STA 446+82

COVER EXISTING SIGNS
SIGNS ARE LOCATED ON STH 35 WITHIN
APPROXIMATELY 1/2 MILE BOTH EAST AND WEST



R7-8-A
12"X18"

R7-8-V
12"X6"

HANDICAP ACCESSIBILITY SIGN (SEE
SIGNS R7-8A & R7-8V BELOW)

EX. ASPHALT PATH

PAVEMENT MARKING PARKING
STALL EPOXY (BLUE
DIAGONAL AT 3' OFFSETS)

PAVEMENT MARKING
PARKING STALL EPOXY
(WHITE)

REMOVING CURBS TREATED
TIMBER AND CURBS
TREATED TIMBER REQ'D

LEGEND

2" REMOVE ASPHALTIC SURFACE MILLING
AND 2" HMA PAVEMENT TYPE 4MT58-34H,
REQ'D

TRAFFIC CONTROL BARRICADE TYPE 3

SCALE, FEET

2

2

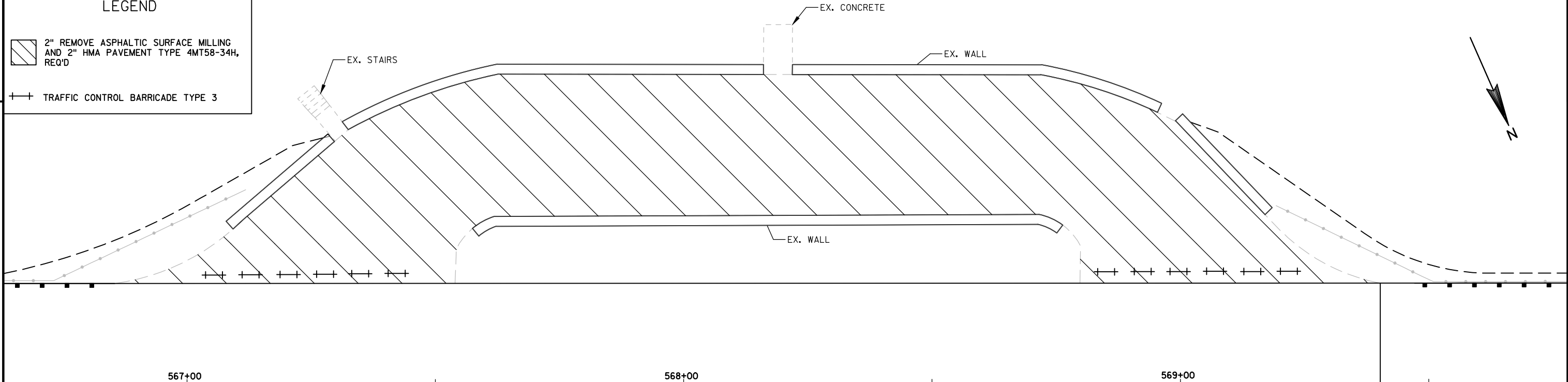
LEGEND



2" REMOVE ASPHALTIC SURFACE MILLING
AND 2" HMA PAVEMENT TYPE 4MT58-34H,
REQ'D



TRAFFIC CONTROL BARRICADE TYPE 3



SCALE, FEET



D5-63
60"X36"
STA 542+39



D5-64-L
60"X36"
STA 566+93

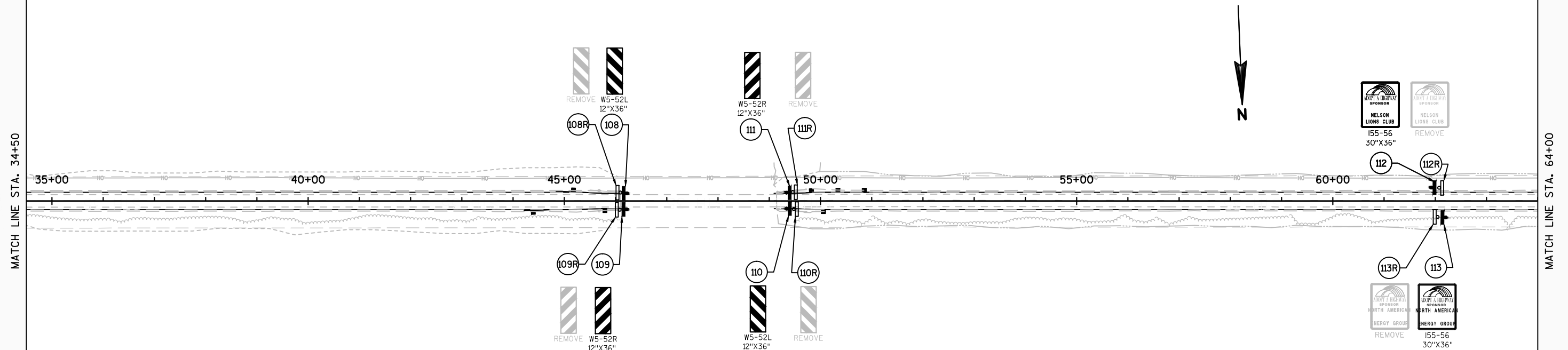


D5-64-R
60"X36"
STA 569+54



D5-63
60"X36"
STA 595+71

COVER EXISTING SIGNS
SIGNS ARE LOCATED ON STH 35 WITHIN
APPROXIMATELY 1/2 MILE BOTH EAST AND WEST

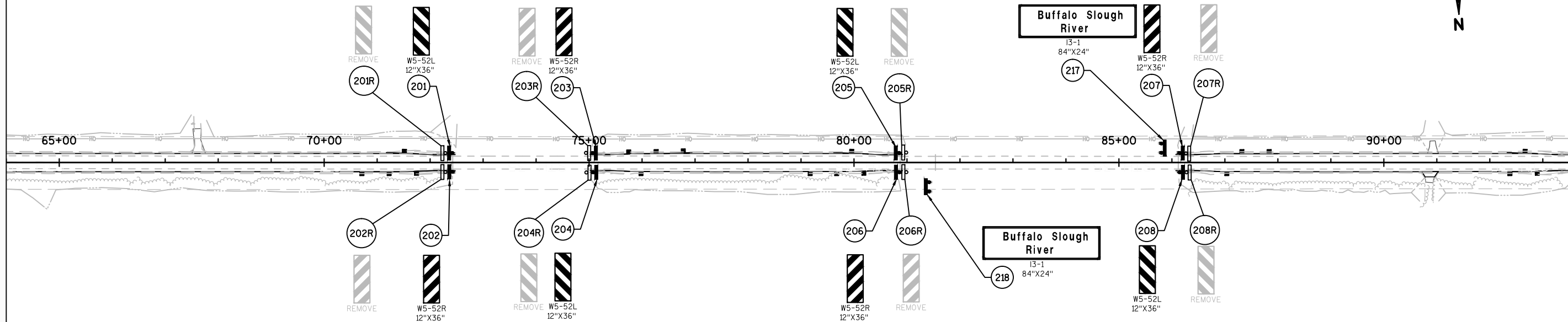


"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

E

2

MATCH LINE STA. 64+00

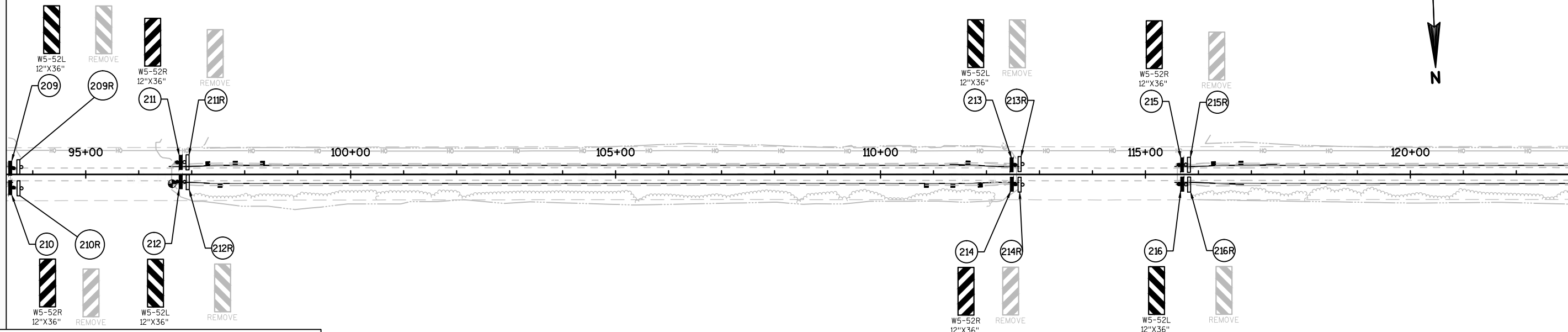


MATCH LINE STA. 93+50

2

SCALE, FEET 0 100 200

MATCH LINE STA. 93+50



MATCH LINE STA. 123+00

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE(S)
- PROPOSED SIGN MOUNTED ON POLE(S)
- DENOTES SIGN NUMBER

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

SCALE, FEET 0 100 200

PROJECT NO:1720-00-70

HWY:STH 35

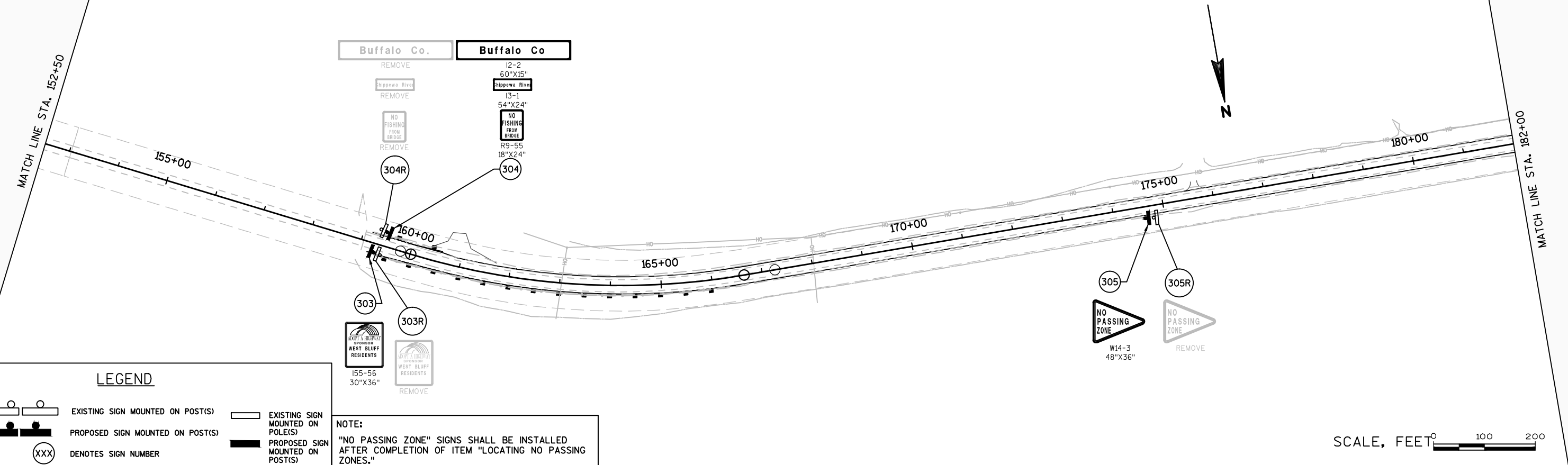
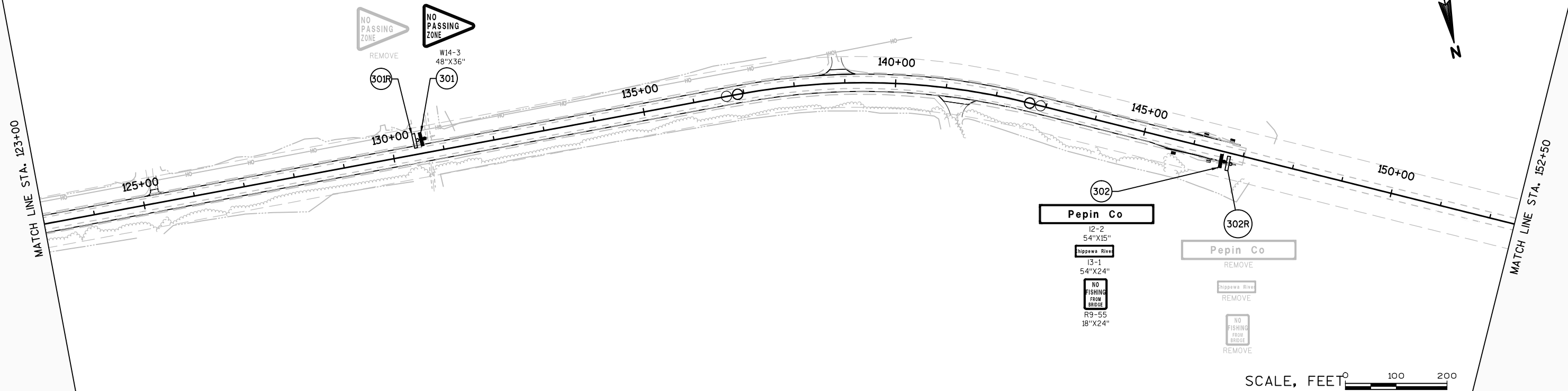
COUNTY:PEPIN & BUFFALO

PERMANENT SIGNING

SHEET

16

E



LEGEND

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

EXISTING SIGN MOUNTED ON POLE(S)

PROPOSED SIGN MOUNTED ON POST(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

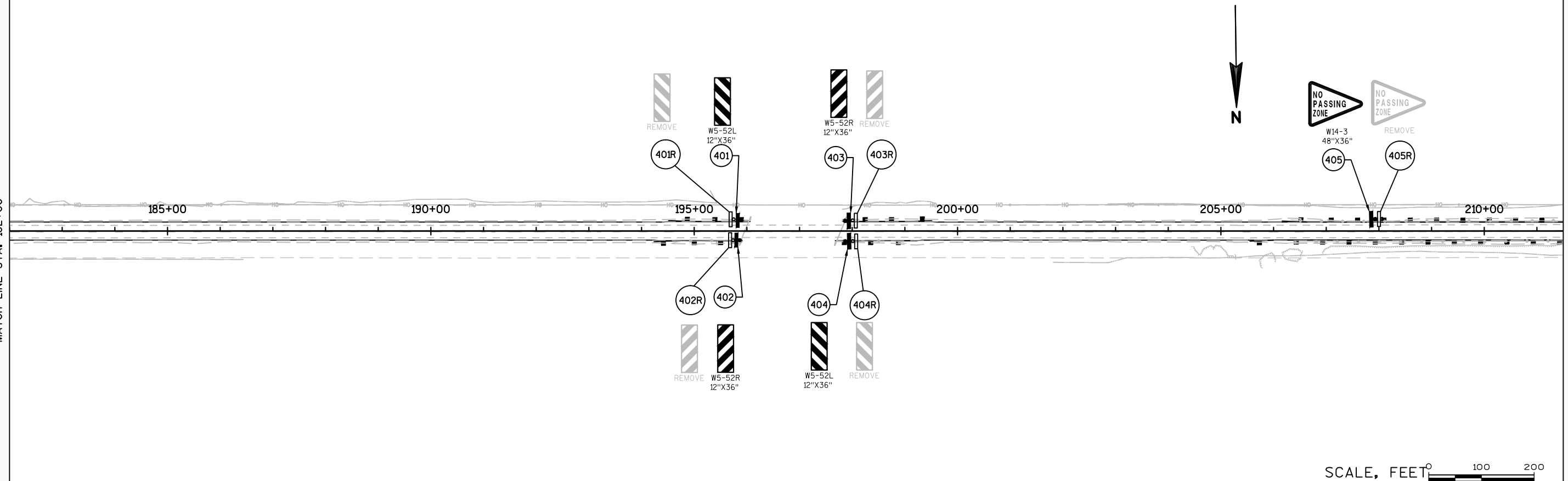
PERMANENT SIGNING

SHEET

17

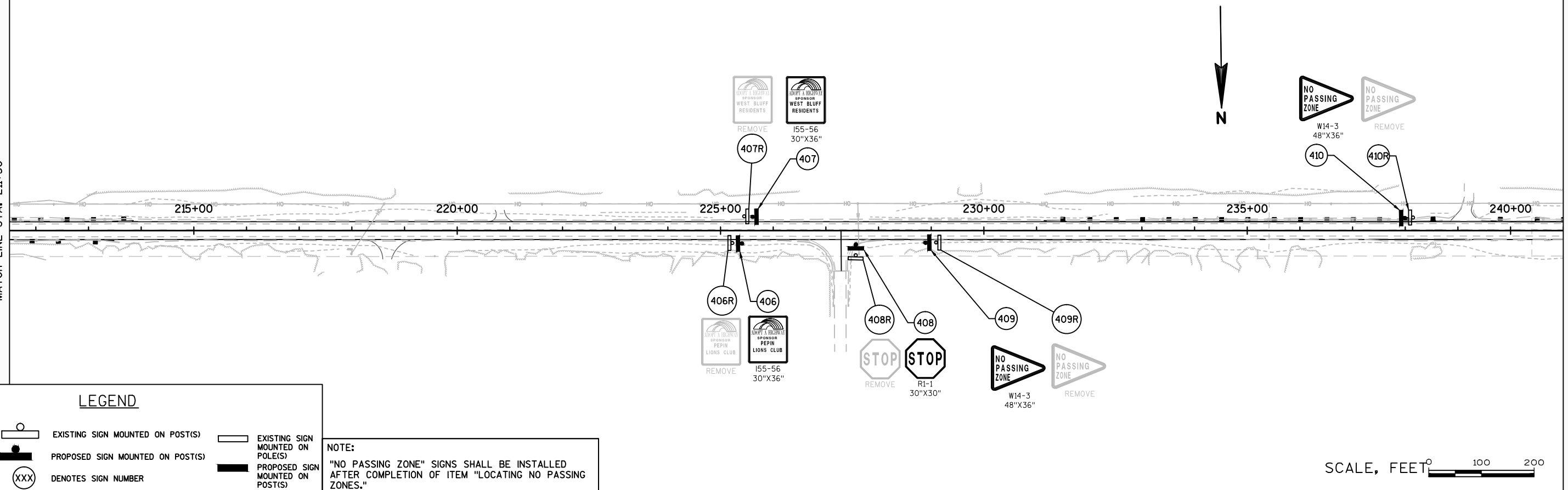
E

MATCH LINE STA. 182+00



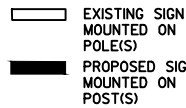
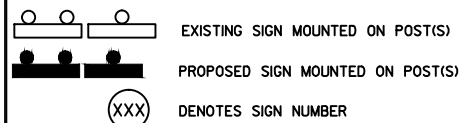
MATCH LINE STA. 211+50

MATCH LINE STA. 211+50



MATCH LINE STA. 241+00

LEGEND



NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

PERMANENT SIGNING

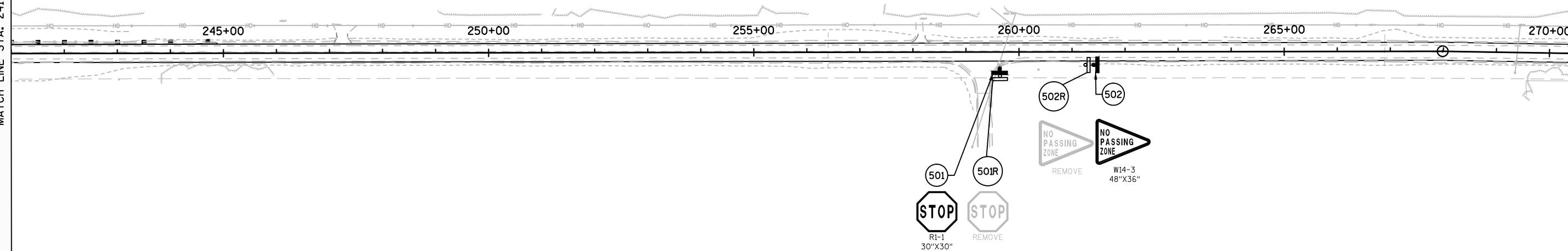
SHEET

18

E

MATCH LINE STA. 241+00

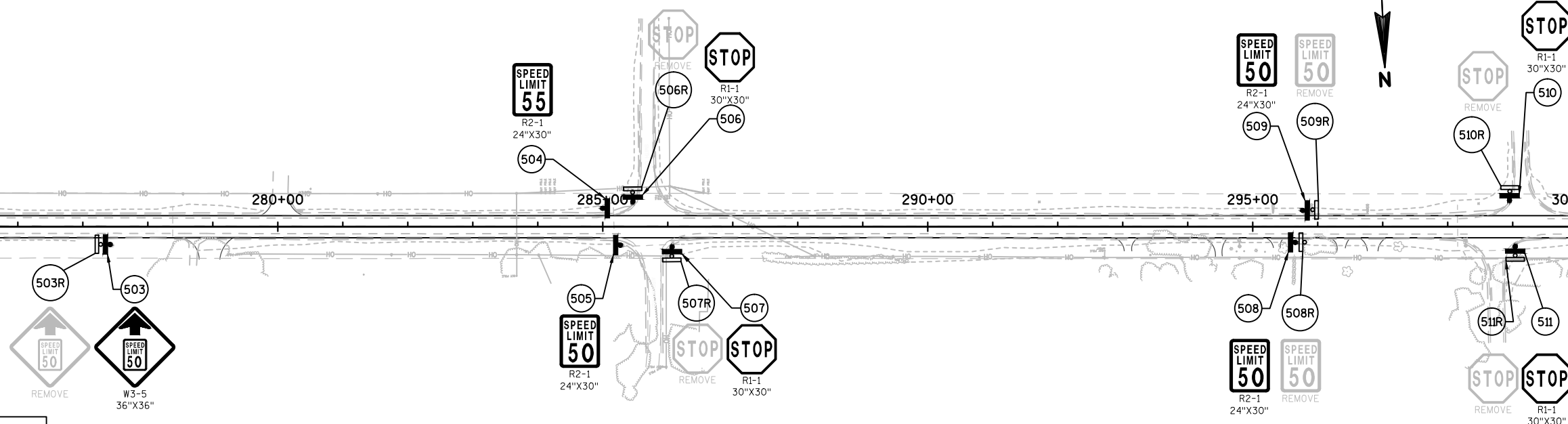
MATCH LINE STA. 270+50



SCALE, FEET 0 100 200

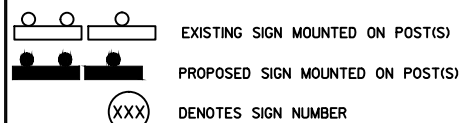
MATCH LINE STA. 270+50

MATCH LINE STA. 300+00



SCALE, FEET 0 100 200

LEGEND



EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
DENOTES SIGN NUMBER

EXISTING SIGN MOUNTED ON POLE(S)
PROPOSED SIGN MOUNTED ON POST(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

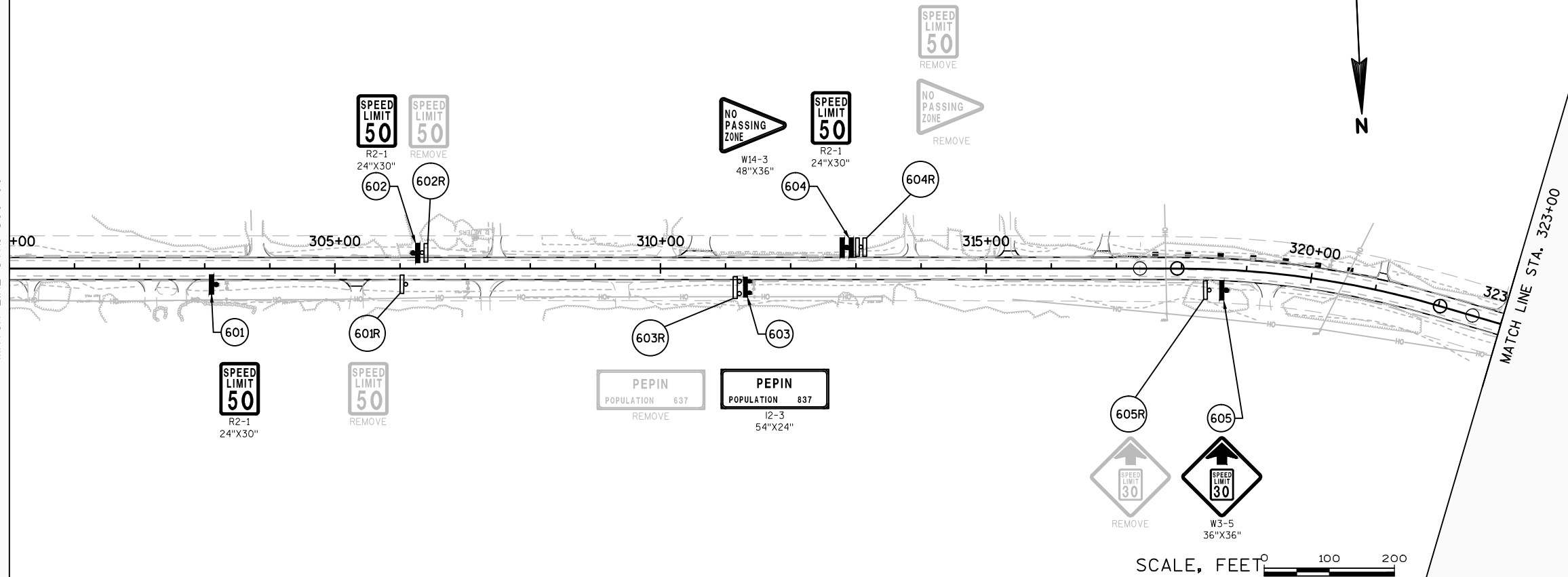
PERMANENT SIGNING

SHEET

19

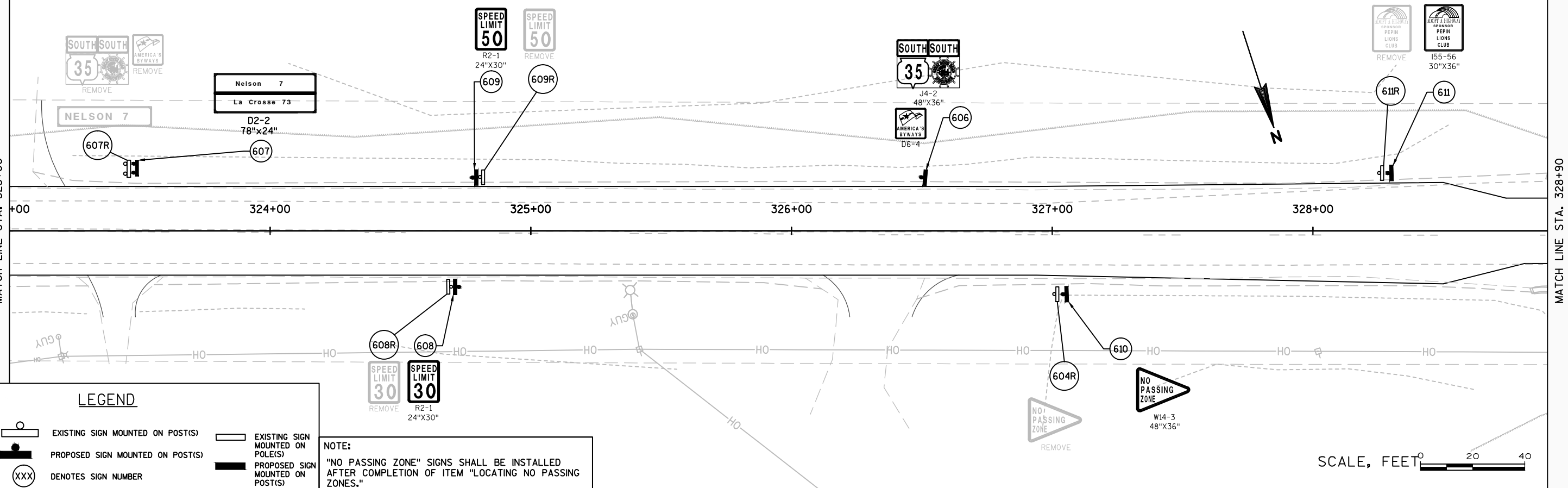
E

MATCH LINE STA. 300+00



SCALE, FEET 0 100 200

MATCH LINE STA. 323+00



SCALE, FEET 0 20 40

MATCH LINE STA. 328+90

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
(XXX) DENOTES SIGN NUMBER

- EXISTING SIGN MOUNTED ON POLE(S)
PROPOSED SIGN MOUNTED ON POST(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

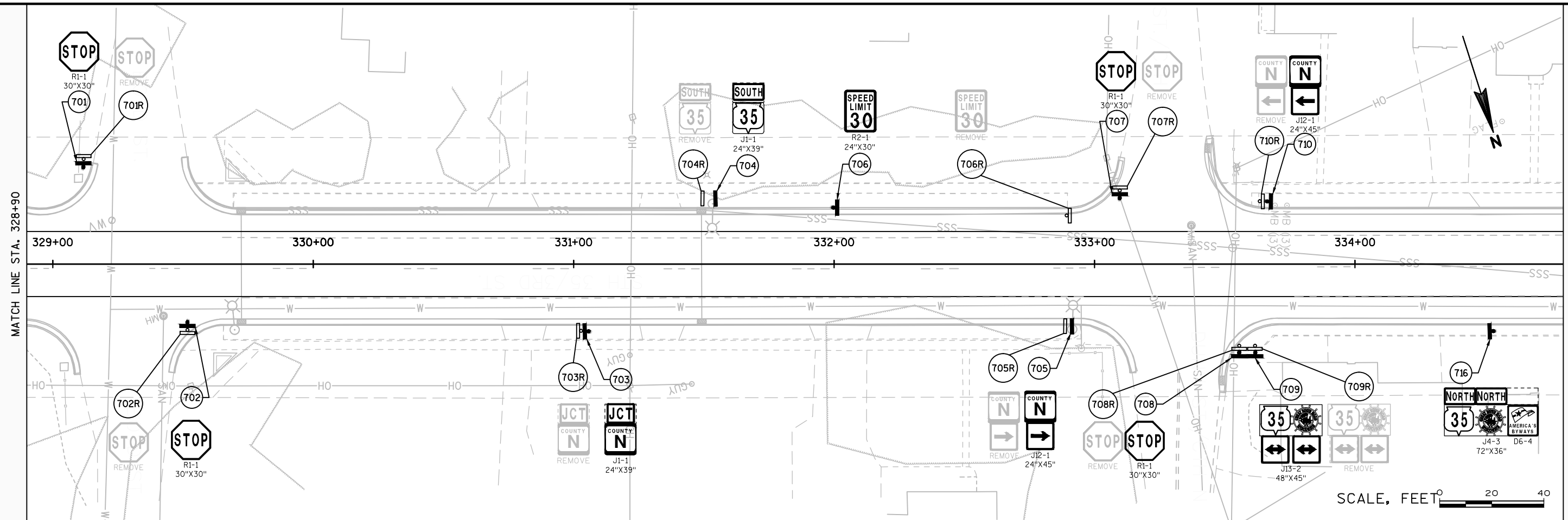
PERMANENT SIGNING

SHEET

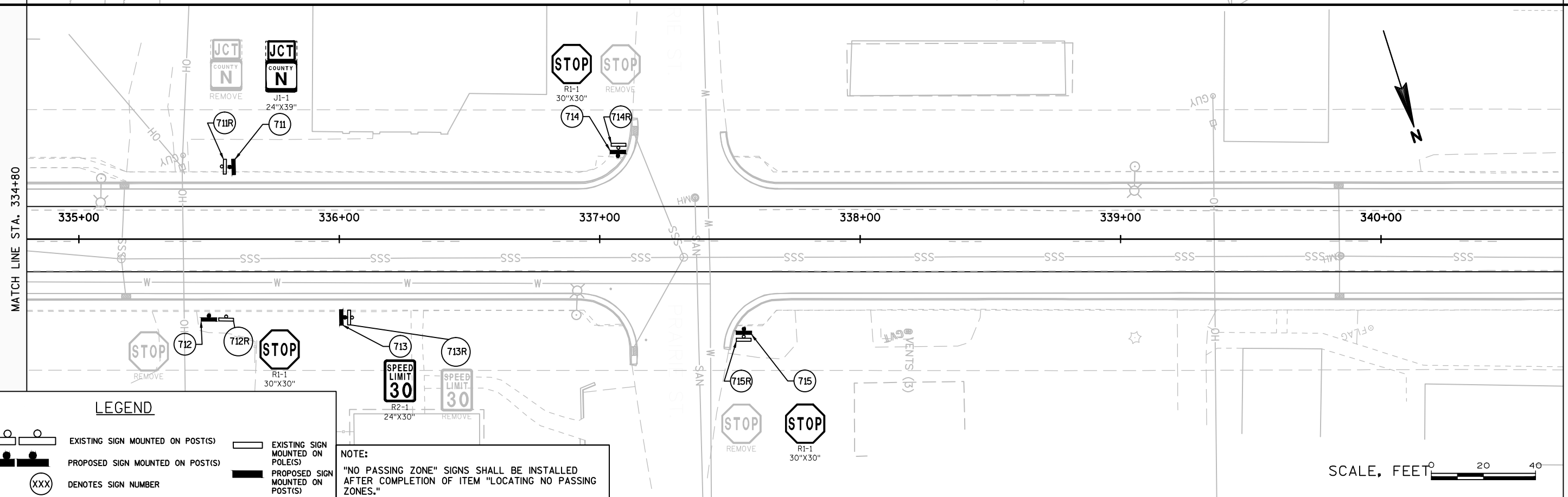
20

E

2



2



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
(XXX) DENOTES SIGN NUMBER

- EXISTING SIGN MOUNTED ON POLE(S)
PROPOSED SIGN MOUNTED ON POLE(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

PERMANENT SIGNING

SHEET

21

E

FILE NAME : W:\T062\CAD\MODELS\C3D\T062.01\SHEETSPLAN\023201.PS.DWG
LAYOUT NAME - 023207

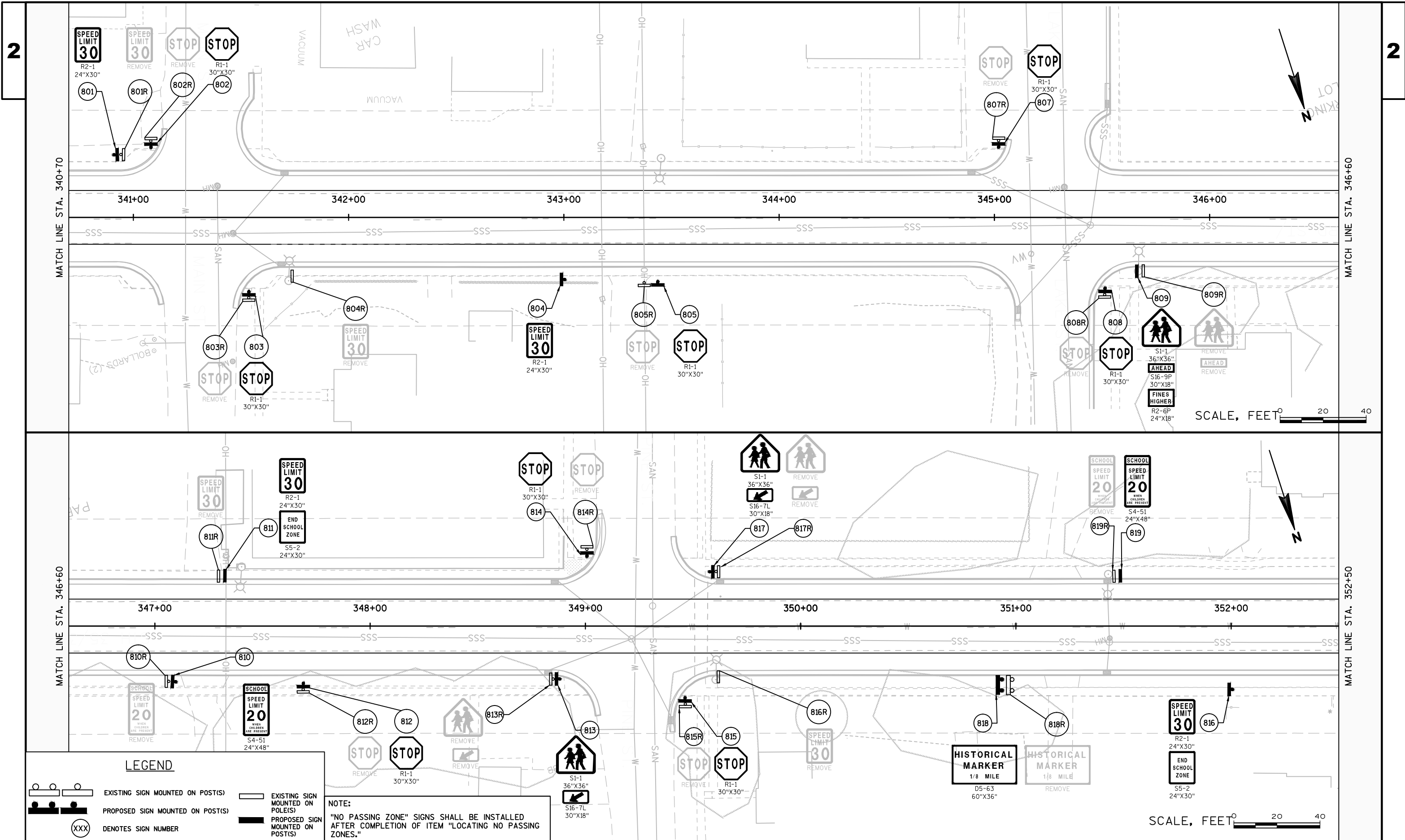
PLOT DATE : 3/6/2017 2:56 PM

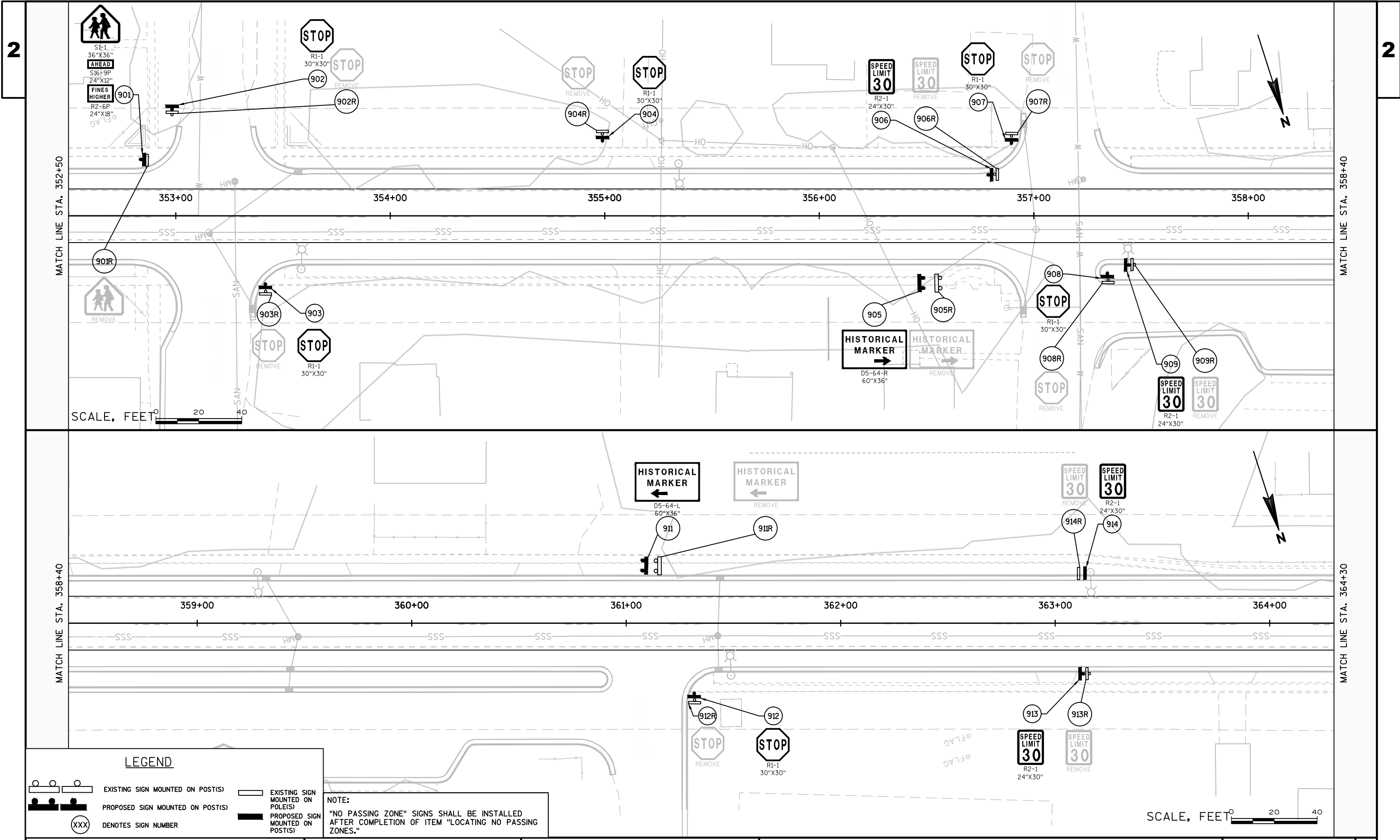
PLOT BY : KAKACEK, JOHN

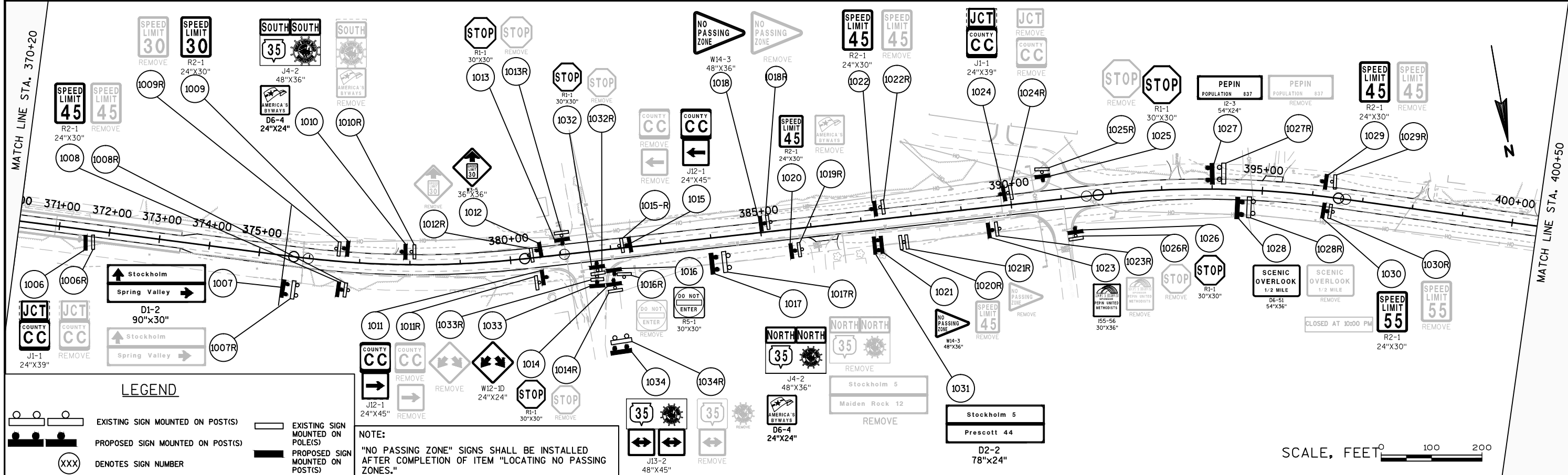
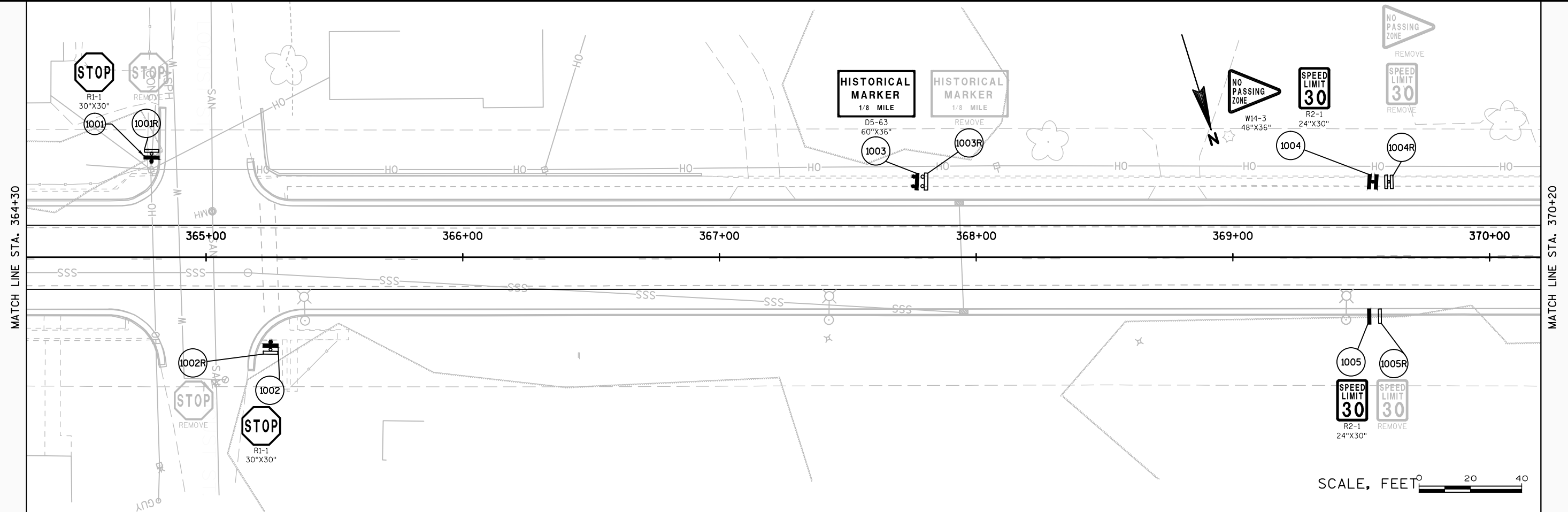
PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADS SHEET 44







LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
XXX DENOTES SIGN NUMBER

- EXISTING SIGN MOUNTED ON POLE(S)
PROPOSED SIGN MOUNTED ON POLE(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

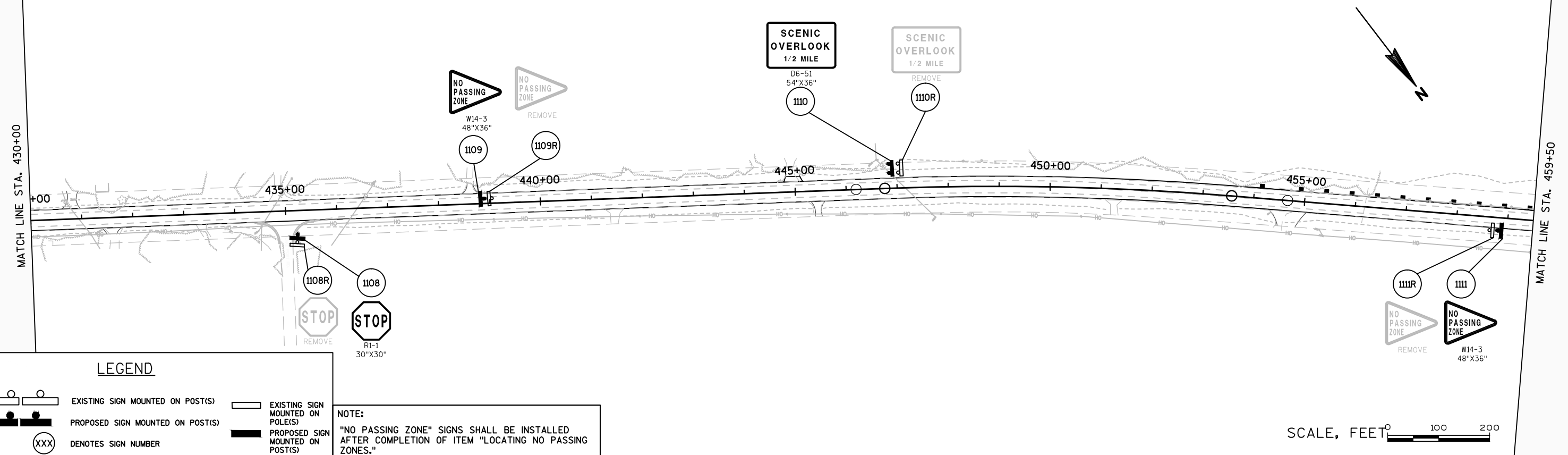
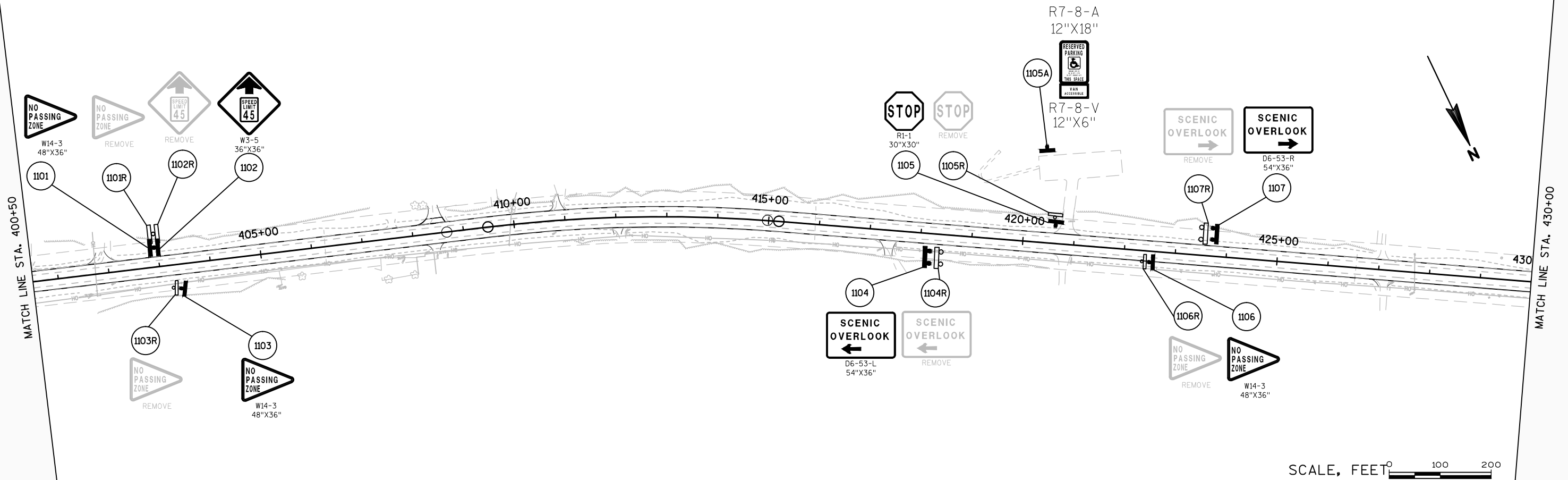
COUNTY:PEPIN & BUFFALO

PERMANENT SIGNING

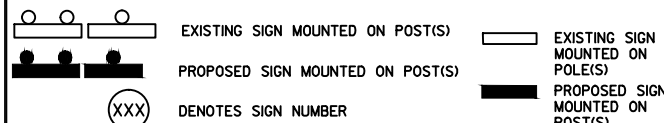
SHEET

24

E



LEGEND



NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

PERMANENT SIGNING

SHEET

25

E

MATCH LINE STA. 459+50

460+00

465+00

470+00

475+00

480+00

485+00

MATCH LINE STA. 489+00

1201

NO
PASSING
ZONE
W14-3
48"X36"

1201R

NO
PASSING
ZONE
REMOVE

SCALE, FEET 0 100 200

MATCH LINE STA. 489+00

490+00

495+00

500+00

505+00

510+00

515+00

MATCH LINE STA. 518+50

REMOVE
ADAPT A HIGHWAY
SPONSOR
PEPIN UNITED
METHODISTS

1204R

REMOVE
ADAPT A HIGHWAY
SPONSOR
PEPIN UNITED
METHODISTS

1204

STOP
R1-1
30"X30"

1205

STOP
REMOVE

1205R

1202R

REMOVE
W10-2
36"X36"

1202

W10-2
36"X36"

1203R

NO
PASSING
ZONE
REMOVE

1203

NO
PASSING
ZONE
W14-3
48"X36"

1206R

STOP
REMOVE

1206

STOP
R1-1
30"X30"

1207

ADAPT A HIGHWAY
SPONSOR
LAKEVIEW
4H CLUB
155-56
30"X36"

1207R

ADAPT A HIGHWAY
SPONSOR
LAKEVIEW
4H CLUB
REMOVE

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

(XXX) DENOTES SIGN NUMBER

EXISTING SIGN
MOUNTED ON
POLE(S)PROPOSED SIGN
MOUNTED ON
POST(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED
AFTER COMPLETION OF ITEM "LOCATING NO PASSING
ZONES."

SCALE, FEET 0 100 200

PROJECT NO:1720-00-70

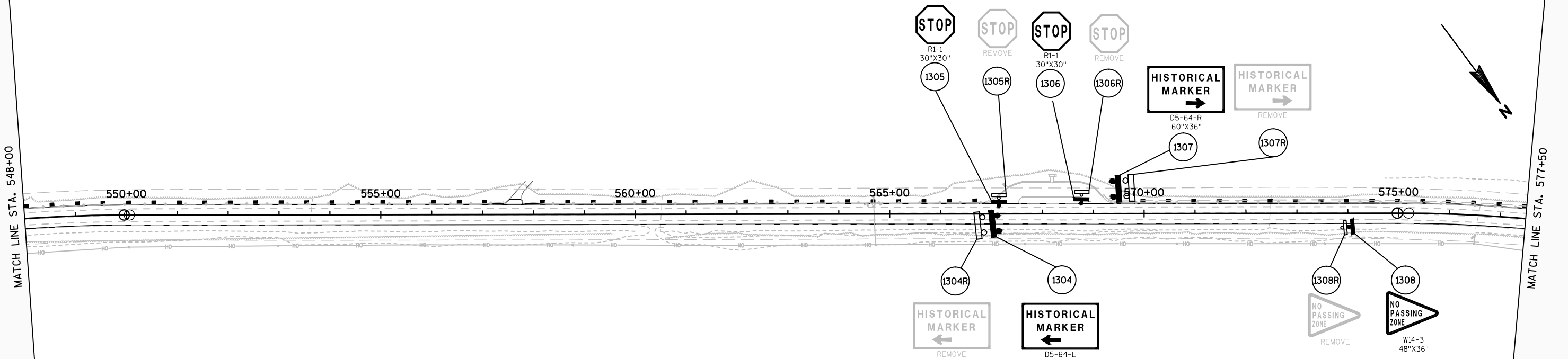
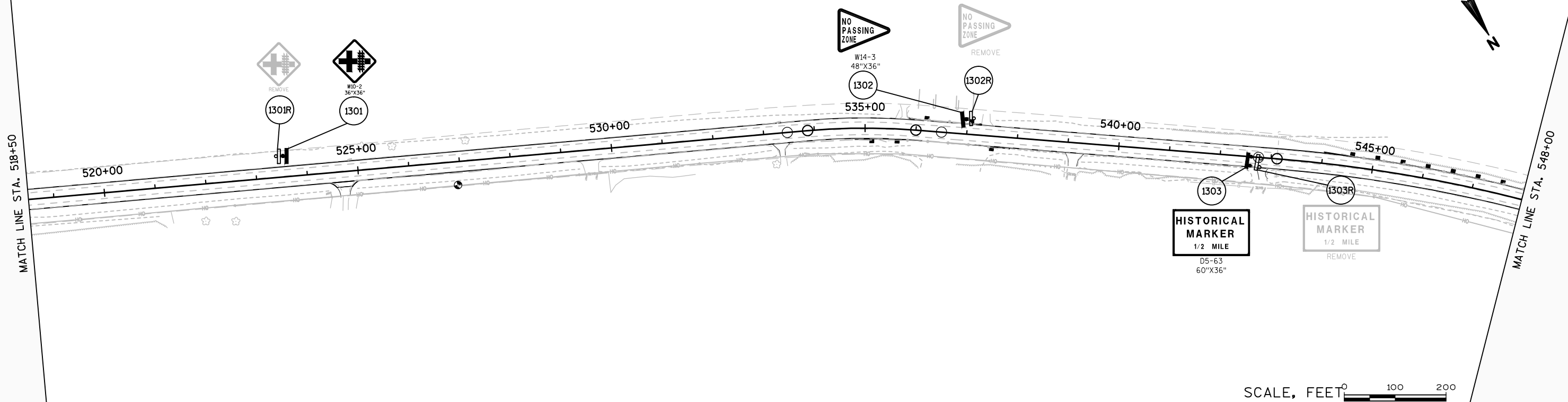
HWY:STH 35

COUNTY:PEPIN & BUFFALO

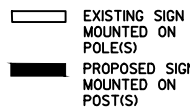
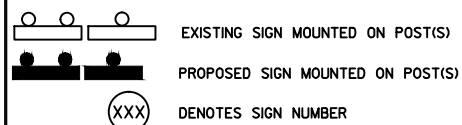
PERMANENT SIGNING

SHEET 26

E



LEGEND



NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

SCALE, FEET 0 100 200

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

PERMANENT SIGNING

SHEET

27

E

MATCH LINE STA. 577+50

MATCH LINE STA. 607+00

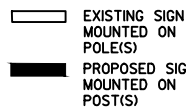
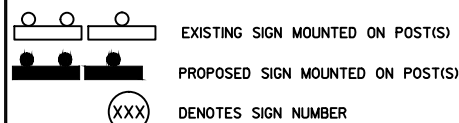
SCALE, FEET 0 100 200

MATCH LINE STA. 607+00

MATCH LINE STA. 636+50

SCALE, FEET 0 100 200

LEGEND



NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

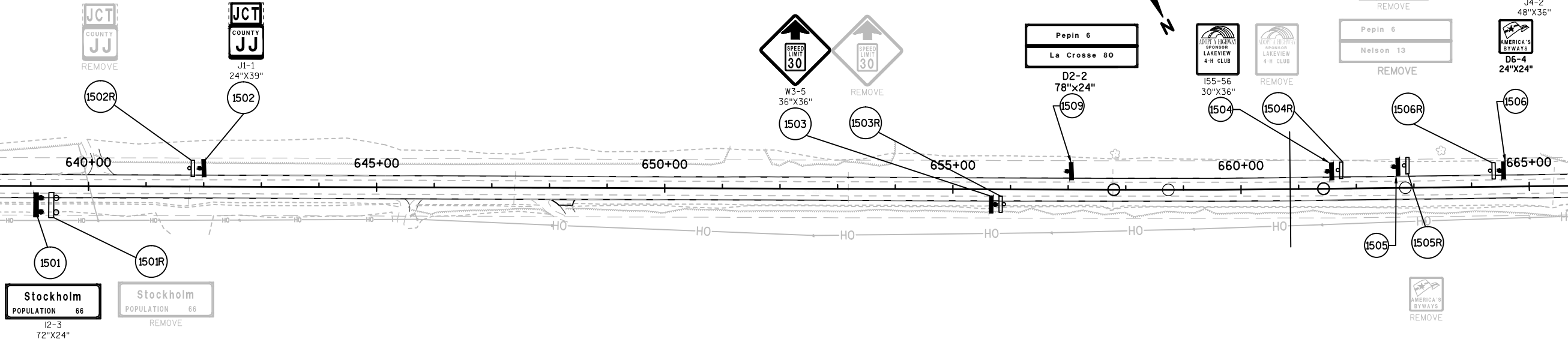
PERMANENT SIGNING

SHEET

28

E

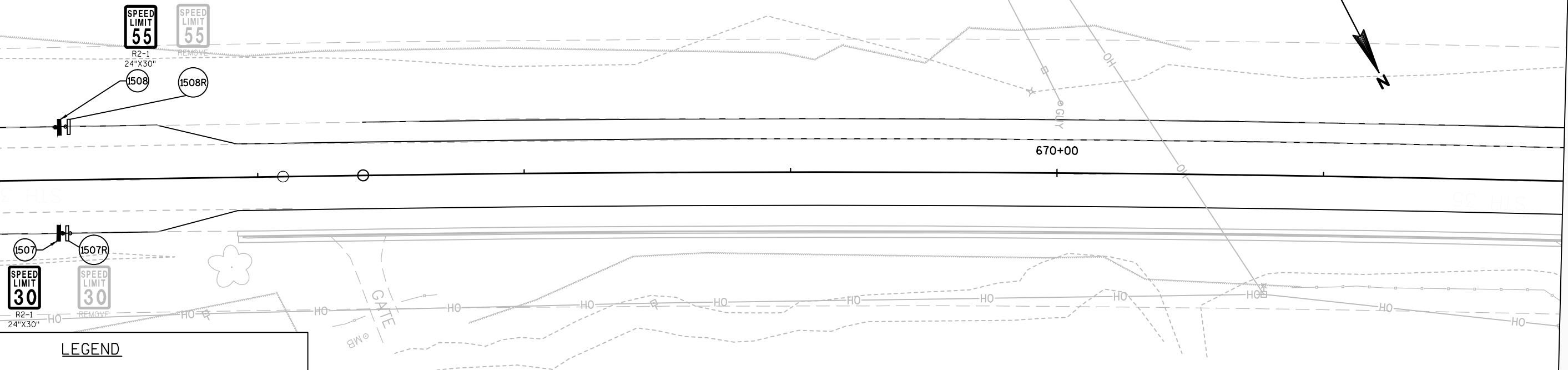
MATCH LINE STA. 636+50



SCALE, FEET 0 100 200

MATCH LINE STA. 666+00

MATCH LINE STA. 666+00



SCALE, FEET 0 20 40

MATCH LINE STA. 671+90

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
(XXX) DENOTES SIGN NUMBER

- EXISTING SIGN MOUNTED ON POLE(S)
PROPOSED SIGN MOUNTED ON POST(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

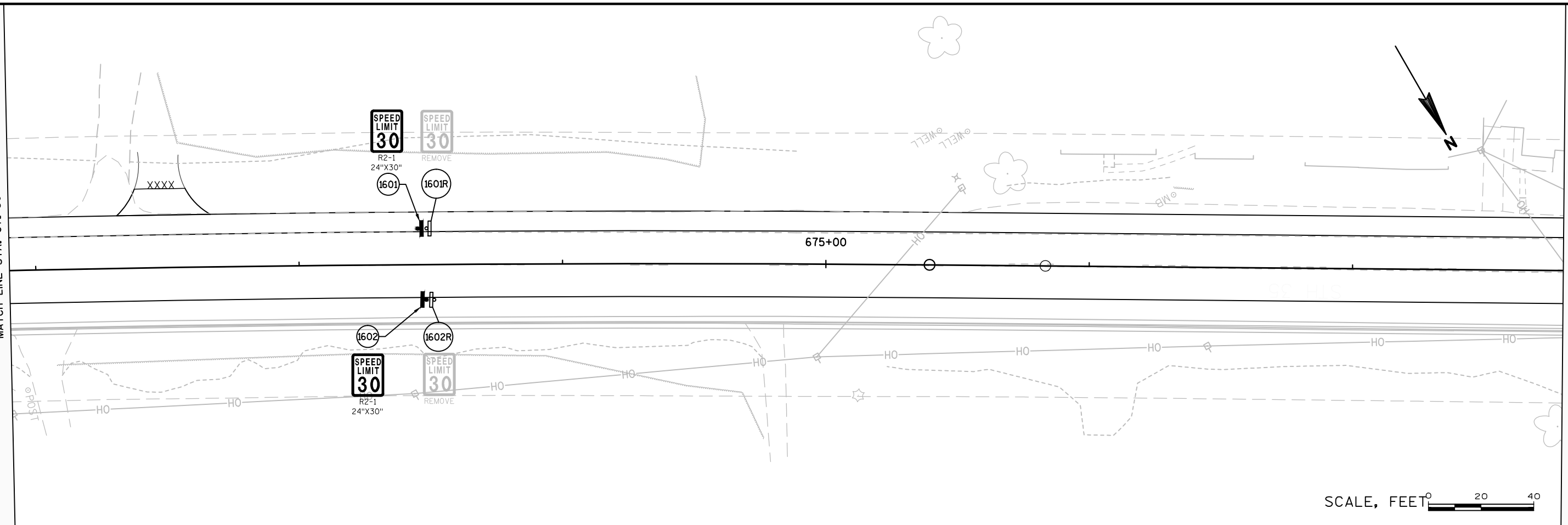
PERMANENT SIGNING

SHEET

29

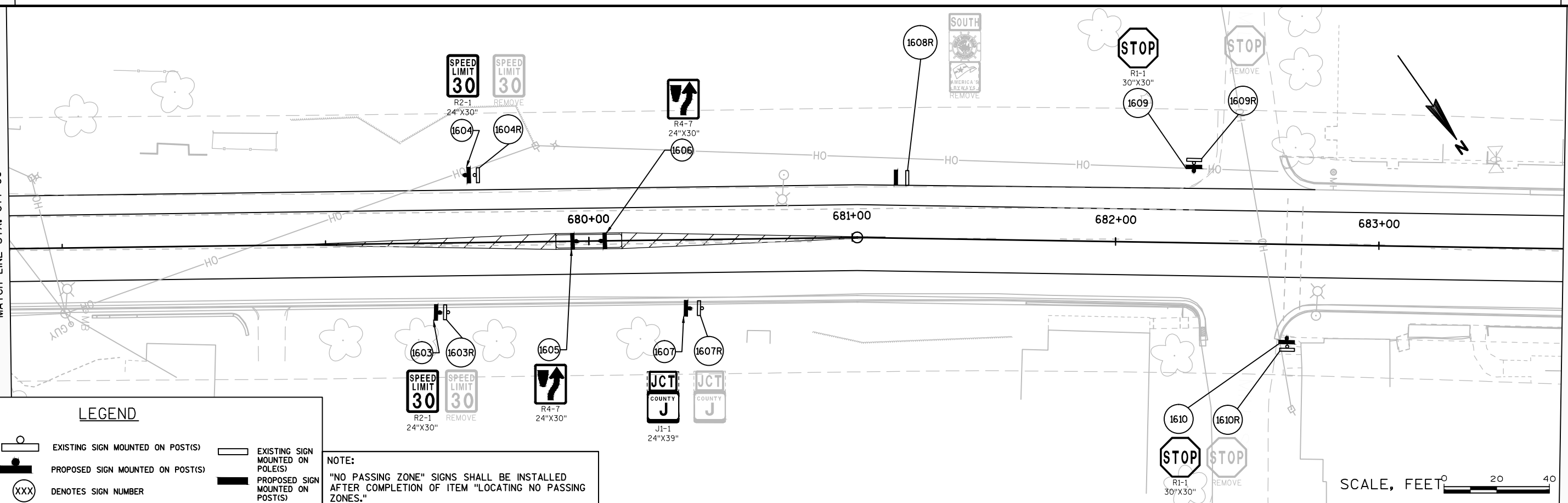
E

MATCH LINE STA. 671+90



MATCH LINE STA. 677+80

MATCH LINE STA. 677+80



MATCH LINE STA. 683+70

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
XXX DENOTES SIGN NUMBER

- EXISTING SIGN MOUNTED ON POLE(S)
PROPOSED SIGN MOUNTED ON POST(S)

NOTE:

"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."

PROJECT NO:1720-00-70

HWY:STH 35

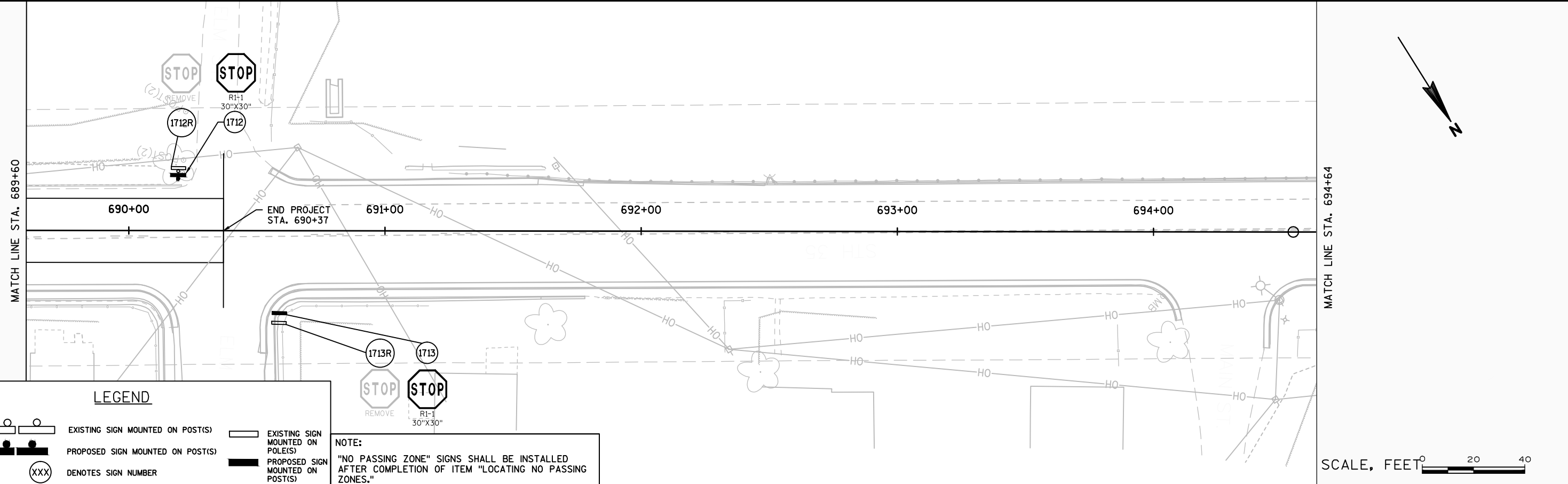
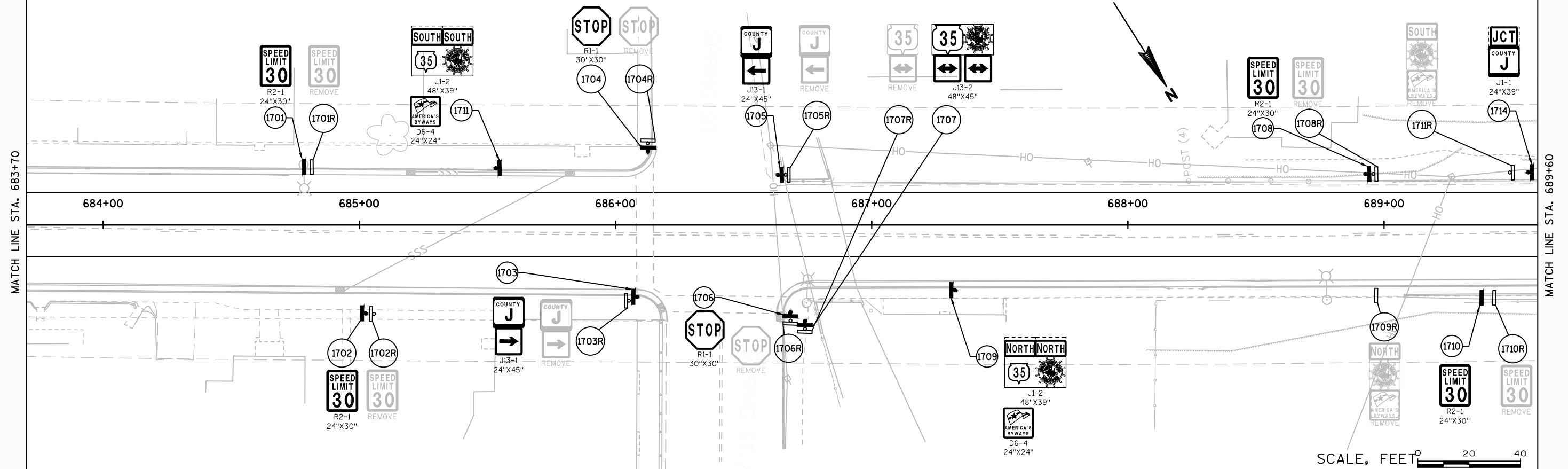
COUNTY:PEPIN & BUFFALO

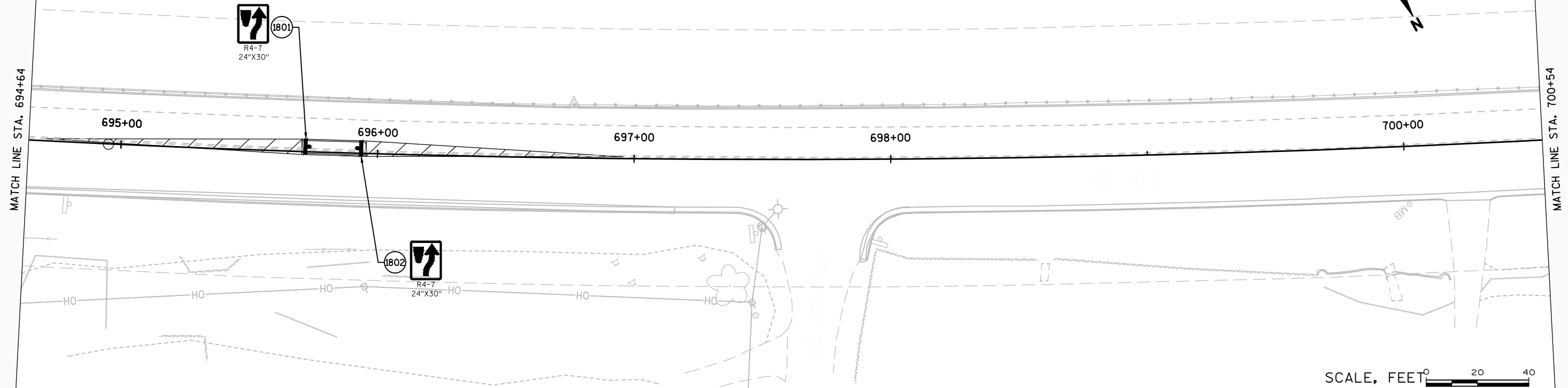
PERMANENT SIGNING

SHEET

30

E





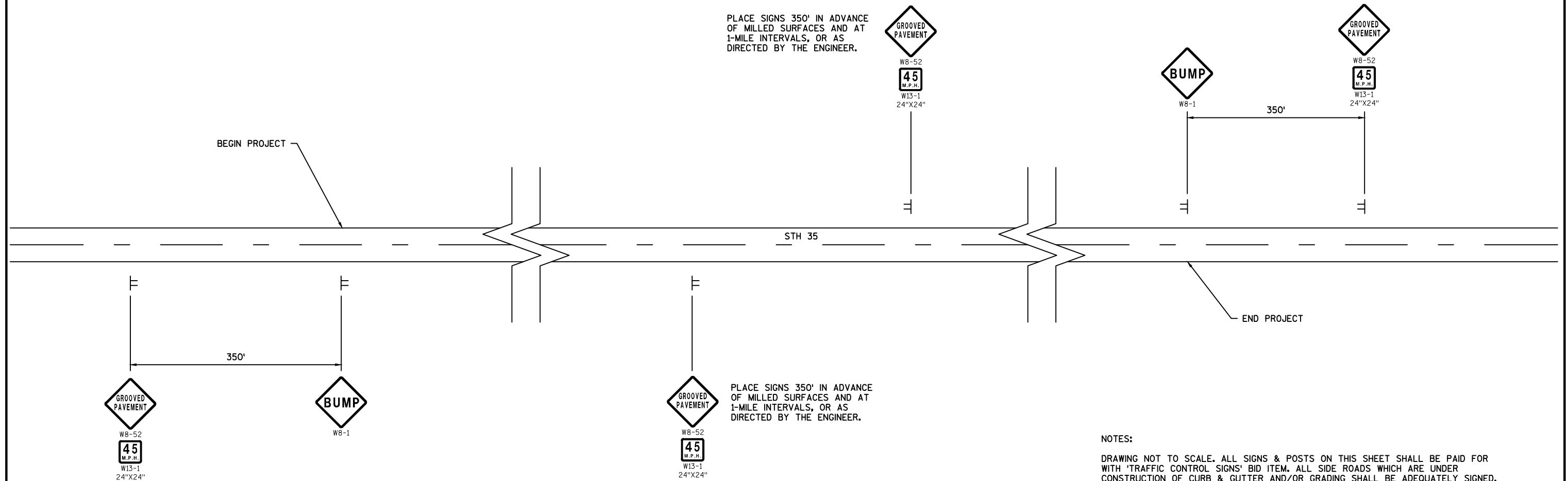
LEGEND

	EXISTING SIGN MOUNTED ON POST(S)		EXISTING SIGN MOUNTED ON POLE(S)
	PROPOSED SIGN MOUNTED ON POST(S)		PROPOSED SIGN MOUNTED ON POLE(S)
	DENOTES SIGN NUMBER	"NO PASSING ZONE" SIGNS SHALL BE INSTALLED AFTER COMPLETION OF ITEM "LOCATING NO PASSING ZONES."	

SCALE, FEET 0 20 40

2

2 |



NOTES:

DRAWING NOT TO SCALE. ALL SIGNS & POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB & GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

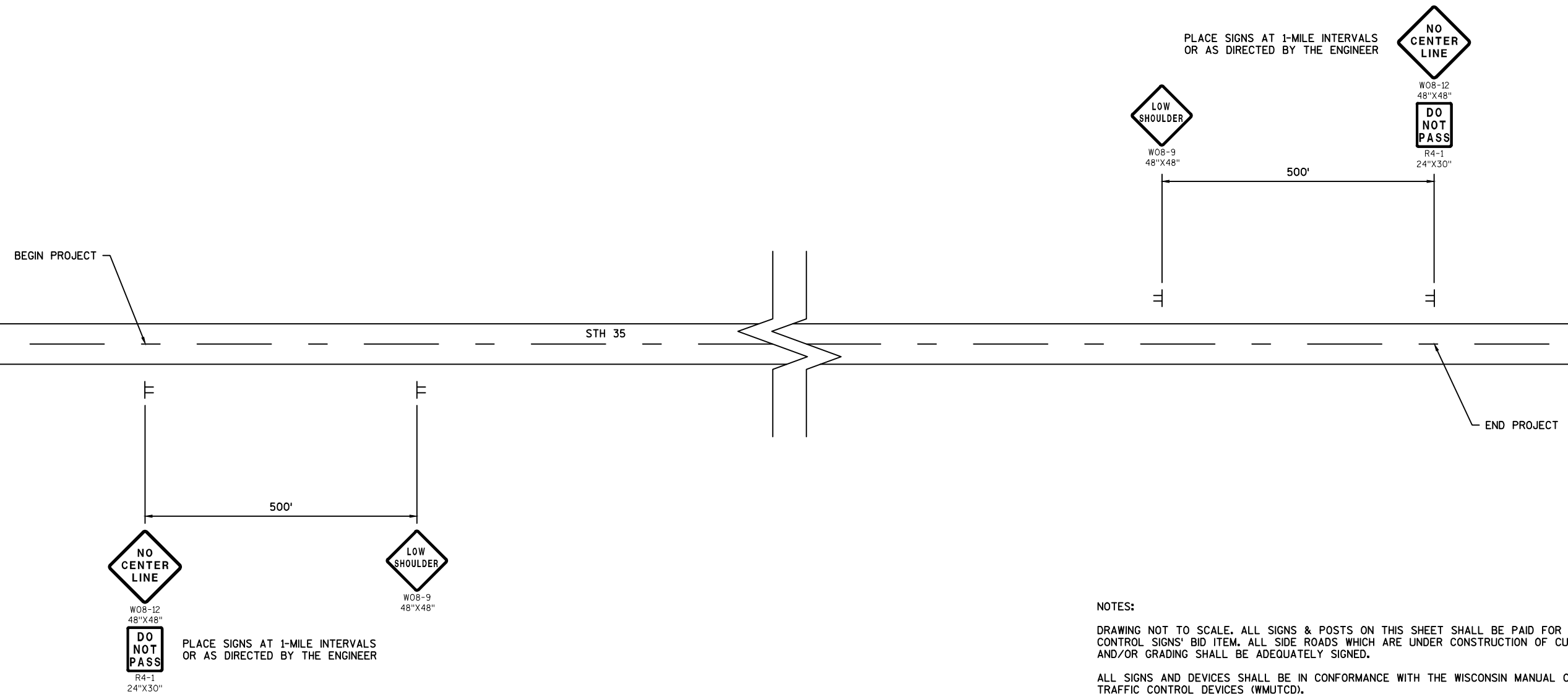
"W0" SIGNS ARE THE SAME AS "W" SIGN EXCEPT THAT THE BACKGROUND IS ORANGE. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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 INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE NEXT DETAIL SHEET FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MARKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

PROJECT NO:1720-00-70	HWY:STH 35	COUNTY:PEPIN & BUFFALO	TRAFFIC CONTROL DETAIL	SHEET 33	E
FILE NAME : W:\7062\CAD\MODELS\C3D\7062.01\SHEETSPLAN\025001_TC.DWG		PLOT DATE : 12/20/2016 8:15 AM	PLOT BY : SEBESTA, MAX	PLOT NAME :	PLOT SCALE : Custom
LAYOUT NAME - ****		WISDOT/CADDs SHEET 42			



DETAIL FOR SIGNING ON HMA PAVEMENT SURFACES

NOTES:

DRAWING NOT TO SCALE. ALL SIGNS & POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB & GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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 INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

CENTERLINE MARKINGS SHALL BE PLACED ON THE SAME DAY THAT THE EXISTING LINE IS REMOVED OR COVERED. W08-12 AND R4-1 SIGNS SHALL ONLY BE UTILIZED IF EMERGENCY SITUATIONS DO NOT ALLOW SAME DAY PLACEMENT UPON DIRECTION OF THE ENGINEER, AND ARE CONSIDERED INCIDENTAL TO THE WORK.

LOW SHOULDER SIGNS TO REMAIN IN PLACE UNTIL AGGREGATE SHOULDER IS CONSTRUCTED AND COMPACTED TO CROSS SLOPE SHOWN ON TYPICAL SECTION.

Estimate Of Quantities

1720-00-70					
Line	Item	Item Description	Unit	Total	Qty
0010	204.0110	Removing Asphaltic Surface	SY	78.000	78.000
0020	204.0115	Removing Asphaltic Surface Butt Joints	SY	4,274.000	4,274.000
0030	204.0120	Removing Asphaltic Surface Milling	SY	255,778.000	255,778.000
0040	204.0150	Removing Curb & Gutter	LF	1,112.000	1,112.000
0050	204.0155	Removing Concrete Sidewalk	SY	434.000	434.000
0060	204.0170	Removing Fence	LF	40.000	40.000
0070	204.0180	Removing Delineators and Markers	EACH	42.000	42.000
0080	204.9060.S	Removing (item description) 01. Curbs Treated Timber	EACH	30.000	30.000
0090	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1720-00-70	LS	1.000	1.000
0100	213.0100	Finishing Roadway (project) 01. 1720-00-70	EACH	1.000	1.000
0110	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,710.000	2,710.000
0120	440.4410	Incentive IRI Ride	DOL	49,040.000	49,040.000
0130	455.0605	Tack Coat	GAL	28,674.000	28,674.000
0140	460.2005	Incentive Density PWL HMA Pavement	DOL	22,523.000	22,523.000
0150	460.2010	Incentive Air Voids HMA Pavement	DOL	22,523.000	22,523.000
0160	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	64,420.000	64,420.000
0170	460.6444	HMA Pavement 4 MT 58-34 H	TON	46,285.000	46,285.000
0180	465.0110	Asphaltic Surface Patching	TON	240.000	240.000
0190	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	120.000	120.000
0200	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	94,497.000	94,497.000
0210	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	47,470.000	47,470.000
0220	520.8700	Cleaning Culvert Pipes	EACH	13.000	13.000
0230	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	2.000	2.000
0240	524.0630	Apron Endwalls for Culvert Pipe Salvaged 30-Inch	EACH	1.000	1.000
0250	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	1.000	1.000
0260	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	140.000	140.000
0270	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,112.000	1,112.000
0280	601.0600	Concrete Curb Pedestrian	LF	212.000	212.000
0290	602.0405	Concrete Sidewalk 4-Inch	SF	6,704.000	6,704.000
0300	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	304.000	304.000
0310	602.2400	Concrete Safety Islands	SF	260.000	260.000
0320	606.0300	Riprap Heavy	CY	23.000	23.000
0330	611.8110	Adjusting Manhole Covers	EACH	13.000	13.000
0340	611.8120.S	Cover Plates Temporary	EACH	13.000	13.000
0350	614.0010	Barrier System Grading Shaping Finishing	EACH	68.000	68.000
0360	614.0115	Anchorage for Steel Plate Beam Guard Type 2	EACH	2.000	2.000
0370	614.0200	Steel Thrie Beam Structure Approach	LF	41.300	41.300
0380	614.0305	Steel Plate Beam Guard Class A	LF	25.000	25.000
0390	614.0920	Salvaged Rail	LF	15,626.000	15,626.000

Estimate Of Quantities

1720-00-70					
Line	Item	Item Description	Unit	Total	Qty
0400	614.2300	MGS Guardrail 3	LF	1,862.500	1,862.500
0410	614.2310	MGS Guardrail 3 HS	LF	150.000	150.000
0420	614.2330	MGS Guardrail 3 K	LF	12,562.500	12,562.500
0430	614.2500	MGS Thrie Beam Transition	LF	1,497.200	1,497.200
0440	614.2610	MGS Guardrail Terminal EAT	EACH	68.000	68.000
0450	614.8010	Anchor Post Assembly Top Mount	EACH	16.000	16.000
0460	615.0200	Curbs Treated Timber	EACH	30.000	30.000
0470	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1720-00-70	EACH	1.000	1.000
0480	619.1000	Mobilization	EACH	1.000	1.000
0490	620.0300	Concrete Median Sloped Nose	SF	32.000	32.000
0500	625.0100	Topsoil	SY	160.000	160.000
0510	625.0500	Salvaged Topsoil	SY	275.000	275.000
0520	627.0200	Mulching	SY	435.000	435.000
0530	628.1504	Silt Fence	LF	10,500.000	10,500.000
0540	628.1520	Silt Fence Maintenance	LF	10,500.000	10,500.000
0550	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0560	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0570	628.2002	Erosion Mat Class I Type A	SY	3,000.000	3,000.000
0580	628.7015	Inlet Protection Type C	EACH	42.000	42.000
0590	628.7504	Temporary Ditch Checks	LF	400.000	400.000
0600	629.0210	Fertilizer Type B	CWT	2.900	2.900
0610	630.0120	Seeding Mixture No. 20	LB	119.000	119.000
0620	630.0200	Seeding Temporary	LB	119.000	119.000
0630	633.5200	Markers Culvert End	EACH	74.000	74.000
0640	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	218.000	218.000
0650	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	20.000	20.000
0660	637.2210	Signs Type II Reflective H	SF	1,291.730	1,291.730
0670	637.2230	Signs Type II Reflective F	SF	324.760	324.760
0680	638.2602	Removing Signs Type II	EACH	206.000	206.000
0690	638.3000	Removing Small Sign Supports	EACH	214.000	214.000
0700	642.5001	Field Office Type B	EACH	1.000	1.000
0710	643.0100	Traffic Control (project) 01. 1720-00-70	EACH	1.000	1.000
0720	643.0300	Traffic Control Drums	DAY	9,010.000	9,010.000
0730	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0740	643.0410	Traffic Control Barricades Type II	DAY	540.000	540.000
0750	643.0420	Traffic Control Barricades Type III	DAY	90.000	90.000
0760	643.0900	Traffic Control Signs	DAY	7,225.000	7,225.000
0770	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	8.000
0780	645.0120	Geotextile Type HR	SY	64.000	64.000

Estimate Of Quantities

1720-00-70					
Line	Item	Item Description	Unit	Total	Qty
0790	646.0106	Pavement Marking Epoxy 4-Inch	LF	51,560.000	51,560.000
0800	646.0107.S	Pavement Marking Grooved Epoxy 4-Inch	LF	132,750.000	132,750.000
0810	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	50,660.000	50,660.000
0820	647.0456	Pavement Marking Curb Epoxy	LF	120.000	120.000
0830	647.0656	Pavement Marking Parking Stall Epoxy	LF	354.000	354.000
0840	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	160.000	160.000
0850	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	2,992.000	2,992.000
0860	648.0100	Locating No-Passing Zones	MI	12.900	12.900
0870	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	81,040.000	81,040.000
0880	650.8000	Construction Staking Resurfacing Reference	LF	64,421.000	64,421.000
0890	650.9910	Construction Staking Supplemental Control (project) 01. 1720-00-70	LS	1.000	1.000
0900	690.0150	Sawing Asphalt	LF	1,882.000	1,882.000
0910	690.0250	Sawing Concrete	LF	470.000	470.000
0920	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,400.000	2,400.000
0930	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,380.000	1,380.000
0940	SPV.0060	Special 01. Cleaning Ditch	EACH	41.000	41.000
0950	SPV.0060	Special 02. HMA Percent Within Limits (PWL) Test Strip	EACH	2.000	2.000
0960	SPV.0105	Special 01. Material Transfer Vehicle	LS	1.000	1.000
0970	SPV.0105	Special 02. Milling And Removing Temporary Joint	LS	1.000	1.000

REMOVING FENCE

		204.0170
STATION	LOCATION	LF
333+53	LT DUNN STREET	40
PROJECT TOTALS =		40

PAVEMENT REMOVAL

				REMOVING ASPHALTIC SURFACE 204.0110	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115	REMOVING ASPHALTIC SURFACE MILLING 204.0120	REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	SY	SY	
0010	8+68	-	687+87	MAINLINE	-	4,274	253,494
0020	420+56	-	421+14	LEFT	-	-	1,021
0020	566+85	-	569+40	LEFT	-	-	594
0010	8+68	-	690+37	DRIVEWAYS	-	-	669
0010	678+88	-	696+95	MAINLINE	78	-	-
PROJECT TOTALS (CAT 0010) =					78	4,274	254,163
PROJECT TOTALS (CAT 0020) =					0	0	1,615

PREPARE FOUNDATION FOR ASPHALTIC PAVING
(PROJECT) 01. 1720-00-70

				211.0100
STATION	TO	STATION	LOCATION	LS
8+68	-	690+37	PROJECT	1
PROJECT TOTALS =				1

BASE AGGREGATE DENSE 3/4-INCH

					305.0110
STATION	TO	STATION	LOCATION	TON	REMARKS
8+68	-	690+37	MAINLINE	1,810	SHOULDER
8+68	-	690+37	MAINLINE	225	DRIVEWAY
8+68	-	690+37	MAINLINE	550	BEAMGUARD
8+68	-	690+37	MAINLINE	125	UNDISTRIBUTED
PROJECT TOTALS =					2,710

CURBS TREATED TIMBER SUMMARY

				REMOVING CURBS TREATED TIMBER 204.9060.S	CURBS TREATED TIMBER 615.0200	REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	EACH	
0020	420+18	-	421+85	LT	30	SCENIC OVERLOOK
PROJECT TOTAL =					30	30

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

CULVERT SUMMARY

STATION	REMOVING DELINEATORS AND MARKERS 204.0180 EACH	CLEANING CULVERT PIPES 520.8700 EACH	APR ENDWLS CULVERT PIPE SALVAGED 24-IN 524.0624 EACH	APR ENDWLS CULVERT PIPE SALVAGED 30-IN 524.0630 EACH	APR ENDWLS CULVERT PIPE SALVAGED 36-IN 524.0636 EACH	MARKERS CULVERT END 633.5200 EACH	CLEANING DITCH SPV.0060.01 EACH	REMARKS
235+41	1	-	-	-	-	2	1	CLEANING DITCH LT
240+40	1	-	-	-	-	2	1	CLEANING DITCH LT
256+40	1	-	-	-	-	2	2	CLEANING DITCH LT & RT
266+89	2	1	-	-	-	2	2	CLEANING DITCH LT & RT
278+38	2	1	-	-	-	2	-	
285+17	1	1	-	-	-	2	1	CLEANING DITCH RT
298+15	2	-	-	-	-	2	2	CLEANING DITCH LT & RT
317+36	2	1	-	-	-	2	2	CLEANING DITCH LT & RT
388+52	1	1	1	-	-	2	-	ADD JOINT TIES
406+27	1	1	-	-	-	2	-	
415+92	2	1	-	-	-	2	-	
426+55	2	-	-	-	-	2	2	CLEANING DITCH LT & RT
456+18	1	-	-	-	-	2	-	CLEANING DITCH RT
461+90	2	-	-	1	-	2	1	CLEANING DITCH LT, ADD JOINT TIES
472+53	2	1	-	-	-	2	1	CLEANING DITCH LT
477+52	2	-	-	-	-	2	1	CLEANING DITCH LT
495+98	-	1	-	-	-	2	2	CLEANING DITCH LT & RT
514+65	2	-	1	-	-	2	1	CLEANING DITCH RT
543+12	-	-	-	-	-	2	2	CLEANING DITCH LT & RT
553+63	1	-	-	-	-	2	1	CLEANING DITCH RT
560+51	-	1	-	-	-	2	-	
572+47	1	-	-	-	-	2	1	CLEANING DITCH RT
576+57	1	-	-	-	-	2	-	
585+98	1	-	-	-	-	2	-	
595+65	1	1	-	-	1	2	1	CLEANING DITCH RT, ADD JOINT TIES
598+86	1	-	-	-	-	2	1	CLEANING DITCH RT
606+99	-	1	-	-	-	2	2	CLEANING DITCH LT & RT
610+50	-	-	-	-	-	2	-	
617+46	1	-	-	-	-	2	1	CLEANING DITCH RT
641+76	2	-	-	-	-	2	1	CLEANING DITCH RT
647+40	2	-	-	-	-	2	2	CLEANING DITCH LT & RT
653+19	1	-	-	-	-	2	1	CLEANING DITCH LT
657+78	2	-	-	-	-	2	2	CLEANING DITCH LT & RT
665+42	1	-	-	-	-	2	2	CLEANING DITCH LT & RT
285+69	-	-	-	-	-	2	1	(AIRPORT DRIVE) CLEANING DITCH RT
298+73	-	-	-	-	-	2	2	(SPRUCE DR) CLEANING DITCH LT & RT
390+95	-	1	-	-	-	2	2	(INDUSTRIAL DRIVE) CLEANING DITCH LT & RT
420+84	-	1	-	-	-	2	2	(SCENIC OVERLOOK) CLEANING DITCH LT & RT
630+63	-	1	-	-	-	2	2	CLEANING DITCH LT & RT
PROJECT TOTALS	= 42	13	2	1	1	74	41	

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

CURB & GUTTER SUMMARY

STATION	TO	STATION	LOCATION	REMOVING CURB	CONCRETE CURB	CONCRETE CURB	REMARKS
				& GUTTER 204.0150	& GUTTER 30- INCH TYPE D 601.0411	PEDESTRIAN 601.0600	
				LF	LF	LF	
329+48	-	329+81	RIGHT	27	27	-	NORTHWEST CORNER OF BOYD STREET INTERSECTION
329+53	-	329+69	LEFT	26	26	-	SOUTHWEST CORNER OF BOYD STREET INTERSECTION
332+90	-	333+06	LEFT	29	29	-	SOUTHEAST CORNER OF COUNTY ROAD N INTERSECTION
332+95	-	333+11	RIGHT	30	30	-	NORTHEAST CORNER OF COUNTY ROAD N INTERSECTION
333+48	-	333+66	LEFT	31	31	-	SOUTHWEST CORNER OF COUNTY ROAD N INTERSECTION
333+49	-	333+69	RIGHT	31	31	18	NORTHWEST CORNER OF COUNTY ROAD N INTERSECTION
336+93	-	337+11	LEFT	26	26	18	SOUTHEAST CORNER OF PRAIRIE STREET INTERSECTION
336+94	-	337+11	RIGHT	24	24	17	NORTHEAST CORNER OF PRAIRIE STREET INTERSECTION
337+50	-	337+67	LEFT	23	23	15	SOUTHWEST CORNER OF PRAIRIE STREET INTERSECTION
337+52	-	337+68	RIGHT	25	25	16	NORTHWEST CORNER OF PRAIRIE STREET INTERSECTION
340+95	-	341+12	LEFT	30	30	20	SOUTHEAST CORNER OF MAIN STREET INTERSECTION
340+94	-	341+10	RIGHT	29	29	19	NORTHEAST CORNER OF MAIN STREET INTERSECTION
341+51	-	341+68	LEFT	27	27	14	SOUTHWEST CORNER OF MAIN STREET INTERSECTION
341+51	-	341+67	RIGHT	25	25	11	NORTHWEST CORNER OF MAIN STREET INTERSECTION
344+89	-	345+06	LEFT	19	19	11	SOUTHEAST CORNER OF LAKE STREET INTERSECTION
344+87	-	345+10	RIGHT	28	28	15	NORTHEAST CORNER OF LAKE STREET INTERSECTION
345+43	-	345+59	LEFT	27	27	10	SOUTHWEST CORNER OF LAKE STREET INTERSECTION
345+49	-	345+67	RIGHT	33	33	-	NORTHWEST CORNER OF LAKE STREET INTERSECTION
348+88	-	349+03	LEFT	26	26	16	SOUTHEAST CORNER OF PINE STREET INTERSECTION
348+85	-	349+02	RIGHT	30	30	-	NORTHEAST CORNER OF PINE STREET INTERSECTION
349+45	-	349+58	LEFT	23	23	-	SOUTHWEST CORNER OF PINE STREET INTERSECTION
349+44	-	349+61	RIGHT	28	28	-	NORTHWEST CORNER OF PINE STREET INTERSECTION
352+88	-	352+98	LEFT	31	31	-	SOUTHEAST CORNER OF CEDAR STREET INTERSECTION
352+81	-	352+98	RIGHT	31	31	-	NORTHEAST CORNER OF CEDAR STREET INTERSECTION
353+40	-	353+50	LEFT	28	28	-	SOUTHWEST CORNER OF CEDAR STREET INTERSECTION
353+40	-	353+57	RIGHT	30	30	-	NORTHWEST CORNER OF CEDAR STREET INTERSECTION
356+79	-	356+91	LEFT	30	30	-	SOUTHEAST CORNER OF WASHINGTON STREET INTERSECTION
356+82	-	356+93	RIGHT	31	31	-	NORTHEAST CORNER OF WASHINGTON STREET INTERSECTION
357+33	-	357+45	LEFT	29	29	-	SOUTHWEST CORNER OF WASHINGTON STREET INTERSECTION
357+65	-	357+90	RIGHT	26	26	-	NORTHWEST CORNER OF WASHINGTON STREET INTERSECTION
361+29	-	361+41	RIGHT	34	34	-	NORTHWEST CORNER OF ELM STREET INTERSECTION
364+62	-	364+79	RIGHT	23	23	-	NORTHEAST CORNER OF LOCUST STREET INTERSECTION
364+65	-	364+82	LEFT	31	31	13	SOUTHEAST CORNER OF LOCUST STREET INTERSECTION
365+20	-	365+32	LEFT	24	24	-	SOUTHWEST CORNER OF LOCUST STREET INTERSECTION
365+22	-	365+36	RIGHT	31	31	-	NORTHWEST CORNER OF LOCUST STREET INTERSECTION
682+62	-	682+75	LEFT	19	19	3	SOUTHWEST CORNER OF MILL ST
682+60	-	682+76	RIGHT	17	17	-	NORTHWEST CORNER OF MILL ST
686+04		686+16	LEFT	17	17	-	SOUTHEAST CORNER OF SPRING ST
686+09		686+18	RIGHT	15	15	-	NORTHEAST CORNER OF SPRING ST
686+63		686+75	RIGHT	18	18	-	NORTHWEST CORNER OF SPRING ST
				25	25	-	UNDISTRIBUTED PEPIN
				25	25	-	UNDISTRIBUTED STOCKHOLM
TOTAL				1,112	1,112	212	

NOTE: ADDITIONAL CURB AND GUTTER ITEMS LISTED ELSEWHERE

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

SIDEWALK SUMMARY

				REMOVING CONCRETE SIDEWALK 204.0155	CONCRETE SIDEWALK 4-INCH 602.0405	CURB RAMP DETECTABLE WARNING FIELD YELLOW 602.0505		
STATION	TO	STATION	LOCATION	SY	SF	SF	REMARKS	
VILLAGE OF PEPIN CURB RAMPS								
329+74	-	329+83	RIGHT	19	275	8	NORTHWEST CORNER OF BOYD STREET INTERSECTION	
329+74	-	329+83	LEFT	13	221	8	SOUTHWEST CORNER OF BOYD STREET INTERSECTION	
332+90	-	333+06	LEFT	13	205	8	SOUTHEAST CORNER OF COUNTY ROAD N INTERSECTION	
332+95	-	333+11	RIGHT	12	207	8	NORTHEAST CORNER OF COUNTY ROAD N INTERSECTION	
333+48	-	333+66	LEFT	10	220	8	SOUTHWEST CORNER OF COUNTY ROAD N INTERSECTION	
333+53	-	333+69	RIGHT	11	189	8	NORTHWEST CORNER OF COUNTY ROAD N INTERSECTION	
336+93	-	337+10	LEFT	8	134	8	SOUTHEAST CORNER OF PRAIRIE STREET INTERSECTION	
336+94	-	337+10	RIGHT	11	118	8	NORTHEAST CORNER OF PRAIRIE STREET INTERSECTION	
337+51	-	337+67	LEFT	11	131	8	SOUTHWEST CORNER OF PRAIRIE STREET INTERSECTION	
337+53	-	337+68	RIGHT	11	139	8	NORTHWEST CORNER OF PRAIRIE STREET INTERSECTION	
340+95	-	341+11	LEFT	11	149	8	SOUTHEAST CORNER OF MAIN STREET INTERSECTION	
340+94	-	341+10	RIGHT	11	145	8	NORTHEAST CORNER OF MAIN STREET INTERSECTION	
341+52	-	341+68	LEFT	10	151	8	SOUTHWEST CORNER OF MAIN STREET INTERSECTION	
341+51	-	341+67	RIGHT	13	180	8	NORTHWEST CORNER OF MAIN STREET INTERSECTION	
344+89	-	345+06	LEFT	10	113	8	SOUTHEAST CORNER OF LAKE STREET INTERSECTION	
344+87	-	345+10	RIGHT	13	182	8	NORTHEAST CORNER OF LAKE STREET INTERSECTION	
345+44	-	345+54	LEFT	13	171	8	SOUTHWEST CORNER OF LAKE STREET INTERSECTION	
345+49	-	345+67	RIGHT	13	235	8	NORTHWEST CORNER OF LAKE STREET INTERSECTION	
348+88	-	349+03	LEFT	12	182	8	SOUTHEAST CORNER OF PINE STREET INTERSECTION	
348+85	-	349+02	RIGHT	12	196	8	NORTHEAST CORNER OF PINE STREET INTERSECTION	
349+45	-	349+58	LEFT	10	146	8	SOUTHWEST CORNER OF PINE STREET INTERSECTION	
349+44	-	349+61	RIGHT	14	199	8	NORTHWEST CORNER OF PINE STREET INTERSECTION	
352+88	-	352+98	LEFT	12	222	8	SOUTHEAST CORNER OF CEDAR STREET INTERSECTION	
352+81	-	352+98	RIGHT	0	222	8	NORTHEAST CORNER OF CEDAR STREET INTERSECTION	
353+40	-	353+50	LEFT	13	240	8	SOUTHWEST CORNER OF CEDAR STREET INTERSECTION	
353+40	-	353+57	RIGHT	13	206	8	NORTHWEST CORNER OF CEDAR STREET INTERSECTION	
356+79	-	356+91	LEFT	13	220	8	SOUTHEAST CORNER OF WASHINGTON STREET INTERSECTION	
356+82	-	356+93	RIGHT	10	223	8	NORTHEAST CORNER OF WASHINGTON STREET INTERSECTION	
357+33	-	357+45	LEFT	15	203	8	SOUTHWEST CORNER OF WASHINGTON STREET INTERSECTION	
361+29	-	361+41	RIGHT	10	96	8	NORTHWEST CORNER OF ELM STREET INTERSECTION	
364+62	-	364+79	RIGHT	8	153	8	NORTHEAST CORNER OF LOCUST STREET INTERSECTION	
364+65	-	364+82	LEFT	12	218	8	SOUTHEAST CORNER OF LOCUST STREET INTERSECTION	
365+20	-	365+32	LEFT	9	139	8	SOUTHWEST CORNER OF LOCUST STREET INTERSECTION	
365+22	-	365+36	RIGHT	9	225		NORTHWEST CORNER OF LOCUST STREET INTERSECTION	
VILLAGE OF STOCKHOLM CURB RAMPS								
682+63	-	682+76	RIGHT	11	114	8	NORTHWEST CORNER OF MILL STREET INTERSECTION	
682+64	-	682+75	LEFT	10	93	8	SOUTHWEST CORNER OF MILL STREET INTERSECTION	
686+04	-	686+14	LEFT	9	79	8	SOUTHEAST CORNER OF SPRING STREET INTERSECTION	
686+09	-	686+18	RIGHT	8	68	8	NORTHEAST CORNER OF SPRING STREET INTERSECTION	
686+65	-	686+75	RIGHT	11	95	8	NORTHWEST CORNER OF SPRING STREET INTERSECTION	
TOTAL =				434	6,704	304		

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

460.4110.S				
STATION	TO	STATION	LOCATION	LF
8+68	-	19+07	C/L JOINT	1,039
24+32	-	46+09	C/L JOINT	2,177
49+14	-	72+43	C/L JOINT	2,329
75+06	-	80+87	C/L JOINT	581
86+12	-	93+58	C/L JOINT	746
96+62	-	112+57	C/L JOINT	1,595
115+60	-	147+02	C/L JOINT	3,142
159+05	-	195+95	C/L JOINT	3,690
197+78	-	536+14	C/L JOINT	33,836
536+96	-	629+28	C/L JOINT	9,232
629+84	-	690+37	C/L JOINT	6,053
PROJECT TOTALS =				64,420

RIPRAP HEAVY AND GEOTEXTILE TYPE HR

		RIPRAP HEAVY 606.0300	GEOTEXTILE TYPE HR 645.0120
STATION	LOCATION	CY	SY
514+60	C-46-36 OUTLET	4	14
595+75	C-46-43 OUTLET	6	18
611+77	BEAMGUARD LT	13	32
PROJECT TOTAL =		23	64

HMA PAVEMENT ITEMS

					HMA PAVEMENT		
					TACK COAT	4MT 58-34 H	
					455.0605	460.6444	
CATEGORY	STATION	TO	STATION	LOCATION	GAL	TON	REMARKS
0010	8+68	-	328+83	MAINLINE	27,860	44,320	
0020	420+56	-	421+14	LEFT	9	135	SCENIC OUTLOOK
0020	566+85	-	569+40	LEFT	5	80	WAYSIDE
0010				MAINLINE	800	1,750	UNDISTRIBUTED LEVELING
PROJECT TOTALS (CAT 0010) =					28,660	46,070	
PROJECT TOTALS (CAT 0020) =					14	215	

ASPHALTIC SURFACE

		ASPHALTIC SURFACE 465.0110	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 465.0120	
LOCATION	TON	TON		REMARKS
UNDISTRIBUTED	150	-		PATCHING
DRIVEWAYS	-	120		
CURB RAMPS	90	-		FRONT OF CURB AND SIDEWALK
PROJECT TOTALS =		240	120	

RUMBLE STRIP ITEM

		ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL 465.0425	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL 465.0475
STATION TO	STATION LOCATION	LF	LF
8+68 -	655+50 MAINLINE	94,497	47,470
PROJECT TOTALS =		94,497	47,470

ADJUSTING MANHOLE COVERS, AND COVER PLATES TEMPORARY

		ADJUSTING MANHOLE COVERS 611.8110	COVER PLATES TEMPORARY 611.8120.S	REMARKS
STATION	LOCATION	EACH	EACH	
333+53	6' LT	1	1	STORM SEWER
335+16	8' RT	1	1	STORM SEWER
337+32	7' RT	1	1	STORM SEWER
339+84	7' RT	1	1	STORM SEWER
341+46	7' RT	1	1	STORM SEWER
345+45	4' RT	1	1	STORM SEWER
349+21	6' RT	1	1	STORM SEWER
351+43	7' RT	1	1	STORM SEWER
353+16	8' RT	1	1	STORM SEWER
357+01	6' RT	1	1	STORM SEWER
359+47	6' RT	1	1	STORM SEWER
361+43	6' RT	1	1	STORM SEWER
365+16	6' RT	1	1	STORM SEWER
PROJECT TOTALS =		13	13	

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

3

3

BARRIER SYSTEM GRADING SHAPING FINISHING

614.0010			
STATION	LOCATION	EACH	REMARKS
17+19	RT	1	E.A.T.
17+56	LT	1	E.A.T.
25+83	RT	1	E.A.T.
26+20	LT	1	E.A.T.
44+21	RT	1	E.A.T.
44+59	LT	1	E.A.T.
50+65	RT	1	E.A.T.
51+02	LT	1	E.A.T.
70+55	RT	1	E.A.T.
70+92	LT	1	E.A.T.
76+32	RT	1	E.A.T.
76+94	LT	1	E.A.T.
78+94	RT	1	E.A.T.
79+62	LT	1	E.A.T.
87+62	RT	1	E.A.T.
88+00	LT	1	E.A.T.
92+07	LT	1	E.A.T.
91+70	RT	1	E.A.T.
98+50	LT	1	E.A.T.
98+13	RT	1	E.A.T.
111+06	LT	1	E.A.T.
110+69	RT	1	E.A.T.
116+60	RT	1	E.A.T.
117+48	LT	1	E.A.T.
145+36	RT	1	E.A.T.
145+36	LT	1	E.A.T.
166+53	RT	1	E.A.T.
160+61	LT	1	E.A.T.
194+26	RT	1	E.A.T.
194+51	LT	1	E.A.T.
199+23	RT	1	E.A.T.
199+49	LT	1	E.A.T.
205+55	RT	1	E.A.T.
213+49	RT	1	E.A.T.
206+16	LT	1	E.A.T.
213+85	LT	1	E.A.T.
231+14	LT	1	E.A.T.
238+71	LT	1	E.A.T.
239+45	LT	1	E.A.T.
244+89	LT	1	E.A.T.
317+04	LT	1	E.A.T.
320+87	LT	1	E.A.T.
453+80	LT	1	E.A.T.
463+36	LT	1	E.A.T.
480+80	LT	1	E.A.T.
486+24	LT	1	E.A.T.
495+29	LT	1	E.A.T.

SUBTOTAL #1 = 47

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

APPROXIMATE QUANTITIES FOR INFORMATIONAL PURPOSES ONLY

LOCATION POST #1 STATION	LOCATION	FILL CY	FILL (1.25) CY	CUT CY	SALVAGED TOPSOIL SY	SEED AREA SY	SEED MIX 20 LBS	SEEDING TEMPORARY LBS	FERTILIZER TYPE B CWT	MULCH SY	EACH	REMARKS
17+19	RT	6.7	9	0.9	32	32	0.6	0.9	0.02	32	1	E.A.T.
17+56	LT	6.9	9	0.8	47	47	0.8	1.3	0.03	47	1	E.A.T.
25+83	RT	1.5	2	0.2	28	28	0.5	0.8	0.02	0	1	E.A.T.
26+20	LT	5.1	7	0.8	49	49	0.9	1.3	0.03	21	1	E.A.T.
44+21	RT	1.3	2	1.6	32	32	0.6	0.9	0.02	32	1	E.A.T.
44+59	LT	0.0	0	0.1	9	9	0.2	0.2	0.01	9	1	E.A.T.
50+65	RT	15.0	19	0.8	120	120	2.2	3.2	0.08	0	1	E.A.T.
51+02	LT	1.4	2	0.0	29	29	0.5	0.8	0.02	29	1	E.A.T.
70+55	RT	5.7	8	0.0	67	67	1.2	1.8	0.04	0	1	E.A.T.
70+92	LT	1.3	2	0.0	45	45	0.8	1.2	0.03	0	1	E.A.T.
76+32	RT	13.5	17	0.0	98	98	1.8	2.6	0.06	0	1	E.A.T.
76+94	LT	18.1	23	0.0	204	204	3.7	5.5	0.13	0	1	E.A.T.
78+94	RT	5.55	7	0.0	65	65	1.17	1.755	0.04	0	1	E.A.T.
79+62	LT	33.03	42	0.0	185	185	3.33	4.995	0.12	0	1	E.A.T.
87+62	RT	10.53	14	0.0	118	118	2.124	3.186	0.07	0	1	E.A.T.
88+00	LT	1.89	3	0.0	49	49	0.882	1.323	0.03	0	1	E.A.T.
92+07	LT	0.63	1	0.0	20	20	0.36	0.54	0.01	0	1	E.A.T.
91+70	RT	0.44	1	0.5	16	16	0.288	0.432	0.01	0	1	E.A.T.
98+50	LT	1.05	2	0.0	24	24	0.432	0.648	0.02	0	1	E.A.T.
98+13	RT	2.47	4	0.0	25	25	0.45	0.675	0.02	13	1	E.A.T.
111+06	LT	0	0	0.7	6	6	0.108	0.162	0.00	6	1	E.A.T.
110+69	RT	12.76	16	0.0	132	132	2.376	3.564	0.08	0	1	E.A.T.
116+60	RT	0.56	1	1.2	19	19	0.342	0.513	0.01	0	1	E.A.T.
117+48	LT	1.41	2	0.0	33	33	0.594	0.891	0.02	33	1	E.A.T.
145+36	RT	17.39	22	0.0	65	65	1.17	1.755	0.04	65	1	E.A.T.
145+36	LT	13.4	17	0.0	71	71	1.278	1.917	0.04	0	1	E.A.T.
166+53	RT	6.09	8	0.0	47	47	0.846	1.269	0.03	0	1	E.A.T.
160+61	LT	0.57	1	0.0	6	6	0.108	0.162	0.00	6	1	E.A.T.
194+26	RT	0.78	1	4.7	34	34	0.612	0.918	0.02	34	1	E.A.T.
194+51	LT	1.26	2	2.0	15	15	0.27	0.405	0.01	0	1	E.A.T.
199+23	RT	1.77	3	3.9	20	20	0.36	0.54	0.01	20	1	E.A.T.
199+49	LT	13.21	17	0.6	164	164	2.952	4.428	0.10	3	1	E.A.T.
205+55	RT	20.95	27	0.0	140	140	2.52	3.78	0.09	0	1	E.A.T.
213+49	RT	5.01	7	0.0	33	33	0.594	0.891	0.02	33	1	E.A.T.
206+16	LT	2.26	3	0.0	18	18	0.324	0.486	0.01	18	1	E.A.T.
213+85	LT	0.19	1	1.0	7	7	0.126	0.189	0.00	7	1	E.A.T.
231+14	LT	4.92	7	1.0	41	41	0.738	1.107	0.03	41	1	E.A.T.
238+71	LT	0.2	1	1.5	6	6	0.108	0.162	0.00	6	1	E.A.T.
239+45	LT	0	0	0.7	4	4	0.072	0.108	0.00	4	1	E.A.T.
244+89	LT	0	0	1.5	7	7	0.126	0.189	0.00	7	1	E.A.T.
317+04	LT	9.92	13	0.0	66	66	1.188	1.782	0.04	0	1	MODIFIED
320+87	LT	5.9	8	0.0	28	28	0.504	0.756	0.02	0	1	MODIFIED
453+80	LT	10.21	13	0.4	67	67	1.206	1.809	0.04	0	1	E.A.T.
463+36	LT	0	0	7.5	18	18	0.324	0.486	0.01	18	1	E.A.T.
480+80	LT	4.52	6	0.0	36	36	0.648	0.972	0.02	14	1	E.A.T.
486+24	LT	9.06	12	0.0	35	35	0.63	0.945	0.02	35	1	E.A.T.
495+29	LT	10.8	14	0.0	58	58	1.044	1.566	0.04	0	1	E.A.T.

NOTES: SALVAGED TOPSOIL IS CALCULATED FOR THE SIDE SLOPES ONLY (SEE CONSTRUCTION DETAIL) SEEDING AREA INCLUDES SHOULDERS MODIFIED GRADING SECTIONS HAVE A REDUCED AGGREGATE SHOULDER AND/OR A 3:1 SIDE SLOPE (SEE CONSTRUCTION DETAILS AND CROSS-SECTIONS)

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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BARRIER SYSTEM GRADING SHAPING FINISHING

614.0010			
STATION	LOCATION	EACH	REMARKS
504+52	LT	1	E.A.T.
505+25	LT	1	E.A.T.
507+81	LT	1	E.A.T.
504+79	RT	1	E.A.T.
507+35	RT	1	E.A.T.
534+58	RT	1	E.A.T.
538+51	RT	1	E.A.T.
544+02	LT	1	E.A.T.
557+58	LT	1	E.A.T.
557+79	LT	1	E.A.T.
567+21	LT	1	E.A.T.
569+08	LT	1	E.A.T.
603+87	LT	1	E.A.T.
608+97	RT	1	E.A.T.
611+27	RT	1	E.A.T.
609+74	LT	1	E.A.T.
612+30	LT	1	E.A.T.
626+37	RT	1	E.A.T.
626+98	LT	1	E.A.T.
632+00	LT	1	E.A.T.
11+50	CTH JJ RT	1	E.A.T.

SUBTOTAL #2 = 21
+
SUBTOTAL #1 = 47

PROJECT TOTALS = 68

APPROXIMATE QUANTITIES FOR INFORMATIONAL PURPOSES ONLY

LOCATION POST #1 STATION	LOCATION	FILL CY	FILL -1.25 CY	CUT CY	SALVAGED TOPSOIL SY	SEED AREA SY	SEED MIX 20 LBS	SEEDING TEMPORARY LBS	FERTILIZER TYPE B CWT	MULCH SY	EACH	REMARKS
504+52	LT	11.49	15	0.0	60	60	1.08	1.62	0.04	0	1	E.A.T.
505+25	LT	4.6	6	0.5	21	21	0.378	0.567	0.01	21	1	E.A.T.
507+81	LT	15.52	20	0.7	72	72	1.296	1.944	0.05	72	1	E.A.T.
504+79	RT	44.52	56	2.1	85	85	1.53	2.295	0.05	85	1	E.A.T.
507+35	RT	1.21	2	1.4	15	15	0.27	0.405	0.01	15	1	E.A.T.
534+58	RT	24	30	0.0	114	114	2.052	3.078	0.07	114	1	E.A.T.
538+51	RT	19.4	25	0.0	76	76	1.4	2.1	0.05	76	1	E.A.T.
544+02	LT	57.3	72	0.0	204	204	3.7	5.5	0.13	0	1	E.A.T.
557+58	LT	11.3	15	3.5	47	47	0.8	1.3	0.03	47	1	E.A.T.
557+79	LT	14.7	19	0.0	108	106	1.9	2.9	0.07	0	1	E.A.T.
567+21	LT	0.4	1	0.0	14	14	0.3	0.4	0.01	14	1	E.A.T.
569+08	LT	0.0	0	2.8	6	6	0.1	0.2	0.00	6	1	E.A.T.
603+87	LT	51.4	65	0.0	182	182	3.3	4.9	0.11	38	1	E.A.T.
608+97	RT	28.5	36	0.0	122	122	2.2	3.3	0.08	122	1	E.A.T.
611+27	RT	2.9	4	11.8	74	74	1.3	2.0	0.05	74	1	E.A.T.
609+74	LT	51.7	65	0.0	137	137	2.5	3.7	0.09	0	1	E.A.T.
612+30	LT	70.1	88	0.0	145	145	2.6	3.9	0.09	0	1	E.A.T.
626+37	RT	18.5	24	1.5	80	80	1.4	2.2	0.05	80	1	E.A.T.
626+98	LT	15.7	20	0.0	54	54	1.0	1.5	0.03	30	1	E.A.T.
632+00	LT	34.2	43	0.0	226	226	4.1	6.1	0.14	0	1	E.A.T.
11+50	CTH JJ RT	0.0	0	2.9	10	10	0.2	0.3	0.01	10	1	E.A.T.
TOTALS		N/A	885	56.1	4052	4050	73	109	3	1159	64	

NOTES: SALVAGED TOPSOIL IS CALCULATED FOR THE SIDE SLOPES ONLY (SEE CONSTRUCTION DETAIL) SEEDING AREA INCLUDES SHOULDERS MODIFIED GRADING SECTIONS HAVE A REDUCED AGGREGATE SHOULDER AND/OR A 3:1 SIDE SLOPE (SEE CONSTRUCTION DETAILS AND CROSS-SECTIONS)

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BEAM GUARD ITEMS

				ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 614.0115	STEEL THRIE BEAM STRUCTURE APPROACH 614.0200	STEEL PLATE BEAM GUARD CLASS A 614.0305	MGS GUARDRAIL 3 614.2300	MGS GUARDRAIL 3 HS 614.2310	MGS GUARDRAIL 3 K 614.2330	MGS THRIE BEAM TRANSITION 614.2500	MGS GUARDRAIL TERMINAL EAT 614.2610	ANCHOR POSTS ASSEMBLY TOP MOUNT 614.8010	
STATION	TO	STATION	LOCATION	EACH	LF	LF	LF	LF	LF	LF	LF	EACH	EACH
17+19.2	-	19+11.7	19' RT	-	-	-	100.0	-	-	39.4	1	-	
17+56.3	-	19+11.3	19' LT	-	-	-	62.5	-	-	39.4	1	-	
24+27.8	-	25+82.8	17' RT	-	-	-	62.5	-	-	39.4	1	-	
24+27.7	-	26+20.2	17' LT	-	-	-	100.0	-	-	39.4	1	-	
44+58.9	-	46+13.8	19' LT	-	-	-	62.5	-	-	39.4	1	-	
44+21.5	-	46+14.0	17' RT	-	-	-	100.0	-	-	39.4	1	-	
49+09.7	-	50+64.7	17' RT	-	-	-	62.5	-	-	39.4	1	-	
49+09.7	-	51+01.8	17' LT	-	-	-	100.0	-	-	39.4	1	-	
70+54.9	-	72+47.4	17' RT	-	-	-	-	-	100.0	39.4	1	-	
70+92.4	-	72+47.4	19' LT	-	-	-	62.5	-	-	39.4	1	-	
75+01.9	-	76+56.9	17' RT	-	-	-	-	-	62.5	39.4	1	-	
75+01.8	-	76+94.3	19' LT	-	-	-	-	-	100.0	39.4	1	-	
78+94.4	-	80+91.5	17' RT	-	-	-	-	-	100.0	39.4	1	-	
79+36.6	-	80+91.6	19' LT	-	-	-	62.5	-	-	39.4	1	-	
SUBTOTAL 1 =				0	0	0	775	0	362.5	551.6	14	0	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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BEAM GUARD ITEMS

				ANCHORAGES FOR STEEL		STEEL THRIE BEAM		STEEL PLATE BEAM		MGS		MGS GUARDRAIL		MGS GUARDRAIL		MGS THRIE BEAM		MGS GUARDRAIL		ANCHOR POSTS	
				PLATE BEAM GUARD TYPE 2		STRUCTURE APPROACH		GUARD CLASS A		GUARDRAIL 3		3 HS		3 K		TRANSITION		TERMINAL EAT		ASSEMBLY TOP MOUNT	
				614.0115		614.0200		614.0305		614.2300		614.2310		614.2330		614.2500		614.2610		614.8010	
STATION	TO	STATION	LOCATION	EACH		LF		LF		LF		LF		LF		LF		EACH		EACH	
86+07.2	-	87+62.4	17' RT	-		-		-		62.5		-		-		39.4		1		-	
86+07.2	-	87+99.7	17' LT	-		-		-		-		-		100.0		39.4		1		-	
92+07.4	-	93+62.2	19' LT	-		-		-		62.5		-		-		39.4		1		-	
91+69.9	-	93+62.4	17' RT	-		-		-		100.0		-		-		39.4		1		-	
96+57.6	-	98+50.1	17' LT	-		-		-		-		-		100.0		39.4		1		-	
96+57.6	-	98+12.6	17' RT	-		-		-		62.5		-		-		39.4		1		-	
110+68.8	-	112+61.3	17' RT	-		-		-		-		-		100.0		39.4		1		-	
111+39.1	-	112+61.2	19' LT	-		-		-		62.5		-		-		39.4		1		-	
115+55.4	-	117+10.4	19' RT	-		-		-		62.5		-		-		39.4		1		-	
115+55.4	-	117+47.8	19' LT	-		-		-		100.0		-		-		39.4		1		-	
145+36.5	-	146+91.5	22' RT	-		-		-		62.5		-		-		39.4		1		-	
145+36.4	-	146+91.4	22' LT	-		-		-		62.5		-		-		39.4		1		-	
159+15.2	-	166+53.1	19' RT	-		-		-		-		-		650.0		39.4		1		-	
159+17.3	-	160+60.6	22' LT	-		-		-		50.0		-		-		39.4		1		-	
194+25.7	-	195+93.2	20' RT	-		-		-		-		-		75.0		39.4		1		-	
194+51.4	-	196+06.4	20' LT	-		-		-		62.5		-		-		39.4		1		-	
197+67.9	-	199+22.9	18' RT	-		-		-		-		-		62.5		39.4		1		-	
197+81.0	-	199+48.6	20' LT	-		-		-		-		-		75.0		39.4		1		-	
205+55.0	-	213+48.8	19' RT	-		-		-		-		-		687.5		-		2		-	
206+16.3	-	213+85.0	19' LT	-		-		-		-		-		662.5		-		2		-	
231+14.4	-	238+70.6	19' LT	-		-		-		-		-		650.0		-		2		-	
239+45.0	-	244+88.6	19' LT	-		-		-		-		-		462.5		-		2		-	
317+03.4	-	320+97.2	19' LT	-		-		-		-		-		287.5		-		2		-	
453+79.6	-	463+35.8	20' LT	-		-		-		-		-		850.0		-		2		-	
480+80.0	-	486+23.7	20' LT	-		-		-		-		-		437.5		-		2		-	
495+29.3	-	504+52.1	20' LT	-		-		-		-		-		812.5		-		2		-	
504+78.8	-	507+35.0	22' RT	-		-		-		75.0		75.0		-		-		2		8	
505+25.0	-	507+81.2	22' LT	-		-		-		75.0		75.0		-		-		2		8	
534+58.4	-	536+16.5	22' RT	-		-		-		-		-		75.0		39.4		1		-	
535+82.4	-	536+15.4	22' LT	1		20.65		12.5		-		-		-		-		-		-	
536+94.1	-	537+27.5	22' LT	1		20.65		12.5		-		-		-		-		-		-	
536+93.0	-	537+51.1	22' RT	-		-		-		-		-		75.0		39.4		1		-	
544+02.4	-	557+58.7	22' LT	-		-		-		-		-		1,250.0		-		2		-	
557+79.3	-	567+21.0	22' LT	-		-		-		-		-		837.5		-		2		-	
569+07.6	-	604+37.3	20' LT	-		-		-		-		-		3,387.5		-		2		-	
608+97.2	-	611+24.8	22' RT	-		-		-		125.0		-		-		-		2		-	
609+74.0	-	612+30.4	22' LT	-		-		-		-		-		150.0		-		2		-	
626+37.3	-	629+05.4	22' RT	-		-		-		-		-		175.0		39.4		1		-	
626+97.9	-	629+27.9	22' LT	-		-		-		-		-		137.5		39.4		1		-	
629+85.1	-	11+49.7 W	17' RT	-		-		-		62.5		-		-		39.4		1		-	
630+06.3	-	631+99.5	22' LT	-		-		-		-		-		100.0		39.4		1		-	
SUBTOTAL 2 =				2		41.3		25		1087.5		150		12,200.0		945.6		54		16	
SUBTOTAL 1 =				0		0		0		775		0		362.5		551.6		14		0	
PROJECT TOTALS =				2		41.3		25		1862.5		150		12562.5		1497.2		68		16	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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LANDSCAPING ITEMS

SALVAGED RAIL											
					614.0920						
STATION	TO	STATION	LOCATION	LF		TOPSOIL	SALVAGED	MULCHING	FERTILIZER	SEEDING	
						625.0100	625.0500	627.0200	TYPE B	MIXTURE	SEEDING
									629.0210	NO. 20	TEMPORARY
										630.0120	630.0200
						SY	SY	SY	CWT	LBS	LBS
8+68	-	690+37	PROJECT	15,626		160	-	160	1.1	44	44
						-	275	275	1.8	75	75
PROJECT TOTAL					15,626						
PROJECT TOTALS =						160	275	435	2.9	119	119

INLET PROTECTION TYPE C

				628.7015
STATION	LOCATION			EACH
329+72	21' RT			1
329+72	19' LT			1
331+49	19' LT			1
331+49	21' RT			1
9+56 H	14' LT			1
10+45 H	17' RT			1
335+18	21' RT			1
335+18	19' LT			1
9+58 I	16' RT			1
10+43 I	17' RT			1
339+84	21' RT			1
339+84	19' LT			1
341+69	21' RT			1
341+70	19' LT			1
344+89	20' LT			1
9+48 K	26' LT			1
10+43 K	16' RT			1
348+83	21' RT			1
348+86	19' LT			1
10+44 L	12' LT			1
349+63	20' LT			1
351+42	21' RT			1
351+43	20' LT			1
10+43 M	17' LT			1
353+57	19' LT			1
9+57 N	15' RT			1
10+44 N	15' RT			1
359+32	20' LT			1
359+43	20' RT			1
359+43	32' RT			1
361+43	21' RT			1
361+44	20' LT			1
367+93	20' LT			1
367+95	20' RT			1
370+93	20' RT			1
370+93	20' LT			1
10+34 X	15' RT			1
684+92	25' RT			1
685+20	20' LT			1
685+82	19' LT			1
10+32 Z	22' RT			1
10+36 Z	22' LT			1

TOTAL = 42

SILT FENCE SUMMARY

					628.1504	628.1520
STATION	TO	STATION	LOCATION	LF		
8+68	-	690+37	MAINLINE	10,200	10,200	BEAMGUARD
8+68	-	690+37	PROJECT	300	300	UNDISTRIBUTED
PROJECT TOTAL =					10,500	10,500

MOBILIZATION EROSION CONTROL

			628.1905	628.1910
			EROSION CONTROL	EMERGENCY
			EROSION CONTROL	EROSION CONTROL
			628.1905	628.1910
LOCATION			EACH	EACH
			6	3
PROJECT TOTAL =			6	3

EROSION MAT CLASS 1 TYPE A

					628.2002
STATION	TO	STATION	LOCATION	SY	REMARKS
8+68	-	690+37	MAINLINE	2900	BEAMGUARD
8+68	-	690+37	PROJECT	100	UNDISTRIBUTED
PROJECT TOTALS =					3000

TEMPORARY DITCH CHECKS

			628.7504
LOCATION			LF
PROJECT			340
			60
PROJECT TOTAL =			400

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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PERMANENT SIGN SUMMARY

							SIGNS TYPE II	SIGNS TYPE II	REMOVING SIGNS	REMOVING SMALL	POSTS	WOOD 4X6-INCH	POSTS	WOOD 4X6-INCH
SIGN			SIZE	SIGN		MESSAGE	REFLECTIVE H	REFLECTIVE F	TYPE II	SIGNS	SUPPORTS	X 16-FT		X 20-FT
NO.	STA	LOC.	in X in	CODE	DESCRIPTION	LINE 1	637.2210	637.2230	638.2602	638.3000		634.0616		634.0620
							SF	SF	EACH	EACH		EACH		EACH
100	11+00	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	55	5.00	-	1	1		1		-
101	17+35	STH 35 LT	72 X 57	J2-3		-	28.50	-	1	2		1		1
			24 X 12	M3-1	NORTH	-	-	-	-	-		-		-
			24 X 12	M3-3	SOUTH	-	-	-	-	-		-		-
			24 X 24	M1-56	STATE ROUTE MARKER	25	-	-	-	-		-		-
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-		-		-
			21 X 21	M6-6	Arrow - RIGHT, LEFT, OR AHEAD	-	-	-	-	-		-		-
102	17+75	STH 35 RT	48 X 36	W14-3	No Passing Zone	-	-	6.00	1	1		1		-
103	19+04	STH 35 LT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
104	19+04	STH 35 RT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
105	24+41	STH 35 LT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
106	24+41	STH 35 RT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
107	25+42	STH 35 LT	24 X 39	J1-1		-	6.50	-	1	1		1		-
			21 X 15	M2-1	Junction	-	-	-	-	-		-		-
			24 X 24	M1-56	STATE ROUTE MARKER	25	-	-	-	-		-		-
108	46+05	STH 35 LT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
109	46+05	STH 35 RT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
110	49+26	STH 35 RT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
111	49+26	STH 35 LT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
112	61+84	STH 35 LT	30 X 36	I55-56	Adopt-A-Highway [Sponsor]	NELSON LIONS CLUB	7.50	-	1	1		1		-
113	61+84	STH 35 RT	30 X 36	I55-56	Adopt-A-Highway [Sponsor]	NORTH AMERICAN ENERGY GROUP	7.50	-	1	1		1		-
114	14+00	STH 35 RT	72 X 24	D2-2	TWO DESTINATIONS W/ DISTANCES	Pepin 6	12.00	-	-	-		2		-
						Prescott 50								
115	7+00	STH 35 LT	24 X 57	J3-1			9.50	-	1	2		1		-
			12 X 12	M3-1	NORTH		-	-	-	-		-		-
			24 X 24	M1-56	STATE ROUTE MARKER	25	-	-	-	-		-		-
			24 X 24	M6-1	LEFT ARROW		-	-	-	-		-		-
116	9+00	STH 35 LT	60 X 36	D1-3	THREE DESTINATIONS W/ ARROWS	[UA] NELSON[UA] ALMA[LA] DURAND	15.00	-	1	1		2		-
117	11+00	STH 35 LT	48 X 57	J2-2			19.00	-	-	-		2		-
			24 X 12	M3-3	SOUTH		-	-	-	-		-		-
			24 X 24	M1-96	GREAT RIVER ROAD MARKER		-	-	-	-		-		-
			24 X 24	M6-1	UP ARROW		-	-	-	-		-		-
			24 X 24	D6-4	AMERICA'S BYWAYS		-	-	-	-		-		-
			24 X 24	M6-1	UP ARROW		-	-	-	-		-		-
118	8+50	STH 35 RT	72 X 36	J4-3			18.00	-	1	2		2		-
			24 X 12	M3-1	NORTH		-	-	-	-		-		-
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-		-		-
			24 X 12	M3-1	NORTH		-	-	-	-		-		-
			24 X 24	M1-96	GREAT RIVER ROAD MARKER		-	-	-	-		-		-
			24 X 24	D6-4	AMERICA'S BYWAYS		-	-	-	-		-		-
201	72+40	STH 35 LT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
202	72+40	STH 35 RT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
203	75+12	STH 35 LT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
204	75+12	STH 35 RT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
205	80+83	STH 35 LT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
206	80+83	STH 35 RT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
207	86+20	STH 35 LT	12 X 36	W5-52-R	Clearance Striper Down Right	-	-	3.00	1	1		1		-
208	86+20	STH 35 RT	12 X 36	W5-52-L	Clearance Striper Down Left	-	-	3.00	1	1		1		-
SUBTOTAL #1 =							128.50	54.00	25.00	28.00		31.00		1.00

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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PERMANENT SIGN SUMMARY

										SIGNS TYPE II		SIGNS TYPE II		REMOVING SIGNS		REMOVING SMALL		POSTS WOOD 4X6-INCH		POSTS WOOD 4X6-INCH		
SIGN				SIZE		SIGN		MESSAGE		REFLECTIVE H		REFLECTIVE F		TYPE II		SIGNS SUPPORTS		X 16-FT		X 20-FT		
NO.	STA	LOC.	in	X	in	CODE	DESCRIPTION	LINE 1		637.2210	637.2230	638.2602	638.3000	638.3000	638.3000	638.3000	638.3000	634.0616	634.0620		REMARKS	
209	93+53	STH 35	LT 12	X 36	W5-52-L		Clearance Striper Down Left	-		-	3.00	1	1		1		1		-			
210	93+53	STH 35	RT 12	X 36	W5-52-R		Clearance Striper Down Right	-		-	3.00	1	1		1		1		-			
211	96+71	STH 35	LT 12	X 36	W5-52-R		Clearance Striper Down Right	-		-	3.00	1	1		1		1		-			
212	96+71	STH 35	RT 12	X 36	W5-52-L		Clearance Striper Down Left	-		-	3.00	1	1		1		1		-			
213	112+54	STH 35	LT 12	X 36	W5-52-L		Clearance Striper Down Left	-		-	3.00	1	1		1		1		-			
214	112+54	STH 35	RT 12	X 36	W5-52-R		Clearance Striper Down Right	-		-	3.00	1	1		1		1		-			
215	115+69	STH 35	LT 12	X 36	W5-52-R		Clearance Striper Down Right	-		-	3.00	1	1		1		1		-			
216	115+69	STH 35	RT 12	X 36	W5-52-L		Clearance Striper Down Left	-		-	3.00	1	1		1		1		-			
217	81+50	STH 35	RT 84	X 24	I3-1		Lake or River Name - Stencil Message	Buffalo slough River		14.00	-	-	-		-		-		2			
218	85+75	STH 35	LT 84	X 24	I3-1		Lake or River Name - Stencil Message	Buffalo slough River		14.00	-	-	-		-		-		2			
301	130+57	STH 35	LT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-			
302	146+67	STH 35	RT 54	X 15	I-2-2		County Line Name	Pepin Co		5.63	-	1	1		1		-		1			
			54	X 24	I-3-1		Lake or River Name - Stencil Message	Chippewa River		9.00	-	-	-		-		-		-			
			18	X 24	R9-55		No Fishing From Bridge	-		3.00	-	-	-		-		-		-			
303	159+37	STH 35	RT 30	X 36	I-55-56		Adopt-A-Highway [Sponsor]	WEST BLUFF RESIDENTS		7.50	-	1	1		1		1		-			
304	150+51	STH 35	LT 60	X 15	I-2-2		County Line Name	Buffalo Co		6.25	-	1	1		1		-		1			
			54	X 24	I-3-1		Lake or River Name - Stencil Message	Chippewa River		9.00	-	-	-		-		-		-			
			18	X 24	R9-55		No Fishing From Bridge	-		3.00	-	-	-		-		-		-			
305	174+56	STH 35	RT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-			
402	195+96	STH 35	RT 12	X 36	W5-52-R		Clearance Striper Down Right	-		-	3.00	1	1		1		1		-			
403	197+97	STH 35	LT 12	X 36	W5-52-R		Clearance Striper Down Right	-		-	3.00	1	1		1		1		-			
404	197+97	STH 35	RT 12	X 36	W5-52-L		Clearance Striper Down Left	-		-	3.00	1	1		1		1		-			
405	207+88	STH 35	LT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-			
406	225+30	STH 35	RT 30	X 36	I-55-56		Adopt-A-Highway [Sponsor]	PEPIN LIONS CLUB		7.50	-	1	1		1		1		-			
407	225+73	STH 35	LT 30	X 36	I-55-56		Adopt-A-Highway [Sponsor]	WEST BLUFF RESIDENTS		7.50	-	1	1		1		1		-			
408	227+56	TRAIL RD.	30	X 30	R1-1		Stop	-		5.18	-	1	1		1		1		-			
409	229+01	STH 35	RT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-			
410	237+93	STH 35	LT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-			
501	259+55	ILL POND RD	30	X 30	R1-1		Stop	-		5.18	-	1	1		1		1		-			
502	261+50	STH 35	RT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-			
503	277+47	STH 35	RT 36	X 36	W3-5		Speed Limit _ Ahead [Arrow]	50		-	9.00	1	1		1		1		-			
504	285+11	STH 35	LT 24	X 30	R2-1		Speed Limit _ MPH	55		5.00	-	1	1		1		1		-			
505	285+22	STH 35	RT 24	X 30	R2-1		Speed Limit _ MPH	50		5.00	-	1	1		1		1		-			
506	285+47	AIRPORT DR.	30	X 30	R1-1		Stop	-		5.18	-	1	1		1		1		-			
507	285+98	ITH LAKE L	30	X 30	R1-1		Stop	-		5.18	-	1	1		1		1		-			
508	295+65	STH 35	RT 24	X 30	R2-1		Speed Limit _ MPH	50		5.00	-	1	1		1		1		-			
509	295+88	STH 35	LT 24	X 30	R2-1		Speed Limit _ MPH	50		5.00	-	1	1		1		1		-			
510	298+93	SPRUCE DR.	30	X 30	R1-1		Stop	-		5.18	-	1	1		1		1		-			
511	299+07	SCENIC LN.	30	X 30	R1-1		Stop	-		5.18	-	1	1		1		1		-			
601	303+25	STH 35	RT 24	X 30	R2-1		Speed Limit _ MPH	50		5.00	-	1	1		1		1		-			
602	306+29	STH 35	LT 24	X 30	R2-1		Speed Limit _ MPH	50		5.00	-	1	1		1		1		-			
603	311+36	STH 35	RT 54	X 24	I-2-3		Community Population Name Sign	PEPIN 837		9.00	-	1	2		2		2		-			
604	312+85	STH 35	LT 48	X 36	W14-3		No Passing Zone	-		-	6.00	1	1		1		1		-		WB TRAFFIC	
			24	X 30	R2-1		Speed Limit _ MPH	50		5.00	-	-	-		-		-		-		EB TRAFFIC	
605	318+10	STH 35	RT 36	X 36	W3-5		Speed Limit _ Ahead [Arrow]	30		-	9.00	1	1		1		1		-			

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PERMANENT SIGN SUMMARY

						SIGNS TYPE II		SIGNS TYPE II		REMOVING SIGNS		REMOVING SMALL		POSTS WOOD 4X6-INCH		POSTS WOOD 4X6-INCH			
						REFLECTIVE H		REFLECTIVE F		TYPE II		SIGNS SUPPORTS		X 16-FT		X 20-FT			
SIGN		SIZE		SIGN		MESSAGE		637.2210		637.2230		638.2602		638.3000		634.0616		634.0620	
NO.	STA	LOC.	in X in	CODE	DESCRIPTION	LINE 1	SF	SF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	REMARKS		
606	326+50	STH 35 LT	48 X 36	J4-2		-	12.00	-	-	-	-	-	1	-					
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-	-	-	-	-					
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-96	Great River Road Marker	-	-	-	-	-	-	-	-	-					
			24 X 24	D6-4	AMERICA'S BYWAYS	-	4.00	-	-	-	-	-	-	-					
607	323+50		78 X 24	D2-2	TWO DESTINATIONS W/ DISTANCES	Nelson 7 La Crosse 73	13.00	-	-	-	-	-	-	-		2			
			48 X 36	J4-2		-	-	-	1	2	-	-	-	-					
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-	-	-	-	-					
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-96	Great River Road Marker	-	-	-	-	-	-	-	-	-					
608	324+71	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	50	5.00	-	1	1	1	1	1	-					
609	324+79	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	1	1	-					
610	327+00	STH 35 RT	48 X 36	W14-3	No Passing Zone	-	-	6.00	1	1	1	1	1	-					
611	328+31	STH 35 LT	30 X 36	I-55-56	Adopt-A-Highway [Sponsor]	PEPIN LIONS CLUB	7.50	-	1	1	1	1	1	-					
701	329+12	BOYD ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
702	329+54	BOYD ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
703	331+05	STH 35 RT	24 X 39	J1-1		-	6.50	-	1	1	1	1	1	-					
			21 X 15	M2-1	JCT	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-5A	COUNTY ROUTE MARKER	N	-	-	-	-	-	-	-	-					
704	331+53	STH 35 LT	24 X 39	J1-1		-	6.50	-	1	-	-	-	-	-			MOUNTED ON POLE		
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	-					
711	335+60	STH 35 LT	24 X 39	J1-1		-	6.50	-	1	1	1	1	1	-					
			21 X 15	M2-1	JCT	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-5A	COUNTY ROUTE MARKER	N	-	-	-	-	-	-	-	-					
712	335+52	STH 35 RT	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
713	336+01	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	1	1	-					
714	337+07	PRAIRIE ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
715	337+56	PRAIRIE ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
716	334+60	STH 35 RT	72 X 36	J4-3		-	18.00	-	-	-	-	-	-	2					
			24 X 12	M3-1	NORTH	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-	-	-	-	-					
			24 X 12	M3-1	NORTH	-	-	-	-	-	-	-	-	-					
			24 X 24	M1-96	GREAT RIVER ROAD MARKER	-	-	-	-	-	-	-	-	-					
			24 X 24	D6-4	AMERICA'S BYWAYS	-	-	-	-	-	-	-	-	-					
801	340+93	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	1	1	-					
802	341+08	MAIN ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
803	341+54	MAIN ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
804	343+00	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	-	1	1	1	-			MOUNTED ON POLE		
805	343+43	STH 35 RT	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
807	345+01	LAKE ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
808	345+51	LAKE ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	1	1	-					
809	345+67	STH 35 RT	36 X 36	S1-1	SCHOOL ZONE	-	-	6.75	1	-	-	-	-	-			MOUNTED ON POLE		
			30 X 18	S16-9P	AHEAD	-	-	3.75	-	-	-	-	-	-			MOUNTED ON POLE		
			24 X 18	R2-6P	FINES HIGHER		3.00	-	-	-	-	-	-	-					
SUBTOTAL #3 =							153.80	16.50	22.00	20.00	20.00	20.00	4.00						

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

PERMANENT SIGN SUMMARY

SIGN NO.	STA	LOC.	SIZE in X in	SIGN CODE	DESCRIPTION	MESSAGE LINE 1	SIGNS TYPE II REFLECTIVE H	SIGNS TYPE II REFLECTIVE F	REMOVING SIGNS TYPE II	REMOVING SMALL SIGNS SUPPORTS	POSTS WOOD 4X6-INCH X 16-FT	POSTS WOOD 4X6-INCH X 20-FT	REMARKS
							637.2210	637.2230	638.2602	638.3000	634.0616	634.0620	
							SF	SF	EACH	EACH	EACH	EACH	
810	347+08	STH 35 RT	24 X 48	S4-51	School Speed Limit	20	6.62	1.38	1	1	1	-	
811	347+32	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	-	-	-	MOUNTED ON POLE
			24 X 30	S5-2	END SCHOOL ZONE	-	5.00	-	-	-	-	-	MOUNTED ON POLE
812	347+69	STH 35 RT	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
813	348+88	STH 35 RT	36 X 36	S1-1	SCHOOL ZONE	-	-	6.75	1	1	1	-	
			30 X 18	S16-7L	Left Diagonal Downward Arrow	-	-	3.75	-	-	-	-	
814	349+01	PINE ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
815	349+46	PINE ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
816	352+00	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	-	1	-	
			24 X 30	S5-2	END SCHOOL ZONE	-	5.00	-	-	-	-	-	
817	349+61	STH 35 LT	36 X 36	S1-1	SCHOOL ZONE	-	-	6.75	1	1	1	-	
			30 X 18	S16-7L	Left Diagonal Downward Arrow	-	-	3.75	-	-	-	-	
818	350+91	STH 35 RT	60 X 36	D5-63	Historical Marker _ Mile	1/8	15.00	-	1	2	2	-	
819	351+46	STH 35 LT	24 X 48	S4-51	School Speed Limit	20	6.62	1.38	1	-	-	-	MOUNTED ON POLE
901	352+84	STH 35 LT	36 X 36	S1-1	SCHOOL ZONE	-	-	6.75	1	1	1	-	
			30 X 18	S16-9P	AHEAD	-	-	3.75	-	-	-	-	
			24 X 18	R2-6P	FINES HIGHER	-	3.00	-	-	-	-	-	
902	352+99	CEDAR ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
903	353+42	CEDAR ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
904	354+99	STH 35 LT	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
905	356+55	STH 35 RT	60 X 36	D5-64R	Historical Marker (Right Arrow)	-	15.00	-	1	2	2	-	
906	356+81	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	-	
907	356+90	WASH ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
908	357+33	WASH ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
909	357+44	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	-	
911	361+18	STH 35 LT	60 X 36	D5-64L	Historical Marker (Left Arrow)	-	15.00	-	1	2	2	-	
912	361+31	ELM ST. RT	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
913	363+16	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	-	
914	363+14	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	-	-	-	
1001	364+79	LOCUST ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
1002	365+24	LOCUST ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
1003	367+76	STH 35 LT	60 X 36	D5-63	Historical Marker _ Mile	1/8	15.00	-	1	2	2	-	
1004	369+46	STH 35 LT	48 X 36	W14-3	No Passing Zone	-	-	6.00	1	1	1	-	WB TRAFFIC
	369+46	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	-	-	-	-	EB TRAFFIC
1005	369+53	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	-	-	-	MOUNTED ON POLE
1006	371+84	STH 35 RT	24 X 39	J1-1			6.50	-	1	-	-	-	MOUNTED ON POLE
			21 X 15	M2-1	JCT	CC	-	-	-	-	-	-	MOUNTED ON POLE
			24 X 24	M1-5-A	COUNTY ROUTE MARKER	CC	-	-	-	-	-	-	MOUNTED ON POLE
1007	375+53	STH 35 RT	90 X 30	D1-2	TWO DESTINATIONS W/ ARROWS	[UA] Stockholm Spring Valley [RA]	18.75	-	1	2	2	-	
1008	376+75	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	45	5.00	-	1	1	1	-	
1009	376+80	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30	5.00	-	1	1	1	-	
SUBTOTAL #4 =							218.47	40.26	32.00	31.00	32.00	0.00	

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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PERMANENT SIGN SUMMARY

SIGN NO.	STA	LOC.	SIZE in X in	SIGN CODE	DESCRIPTION	MESSAGE LINE 1	SIGNS TYPE II	SIGNS TYPE II	REMOVING SIGNS	REMOVING SMALL	POSTS WOOD 4X6-INCH	POSTS WOOD 4X6-INCH	REMARKS
							REFLECTIVE H	REFLECTIVE F	TYPE II	SIGNS SUPPORTS	X 16-FT	X 20-FT	
							637.2210 SF	637.2230 SF	638.2602 EACH	638.3000 EACH	634.0616 EACH	634.0620 EACH	
1010	377+95	STH 35 LT	48 X 36	J4-2		-	12.00	-	-	-	-	2	
			24 X 39	J1-1		-	-	-	1	1	-	-	
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-	-	-	
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	
			24 X 24	M1-96	Great River Road Marker	-	-	-	-	-	-	-	
			24 X 24	D6-4	AMERICA'S BYWAYS	-	4.00	-	-	-	-	-	
1011	380+60	STH 35 RT	24 X 45	J12-1		-	7.50	-	1	1	1	-	
			24 X 24	M1-5-A	COUNTY ROUTE MARKER	CC	-	-	-	-	-	-	
			21 X 21	M6-1	DIRECTIONAL ARROW RIGHT	-	-	-	-	-	-	-	
1012	380+63	STH 35 LT	36 X 36	W3-5	SPEED LIMIT AHEAD	30	-	9.00	1	1	1	-	
1013	381+09	CTH CC	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
1014	381+64	CTH CC	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	2 SIGN LOCATIONS
1015	382+40	STH 35 LT	24 X 45	J12-1		-	7.50	-	1	1	1	-	
			24 X 24	M1-5-A	COUNTY ROUTE MARKER	CC	-	-	-	-	-	-	
			21 X 21	M6-1	DIRECTIONAL ARROW LEFT	-	-	-	-	-	-	-	
1016	382+01	CTH CC	30 X 30	R5-1	Do Not Enter	-	6.26	-	1	1	1	-	
1017	384+02	STH 35 RT	48 X 36	J4-2		-	12.00	-	1	2	-	2	
	384+02	STH 35 RT	24 X 12	M3-3	NORTH	-	-	-	-	-	-	-	
	384+02	STH 35 RT	24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-	-	-	
	384+02	STH 35 RT	24 X 12	M3-1	NORTH	-	-	-	-	-	-	-	
	384+02	STH 35 RT	24 X 24	M1-96	Great River Road Marker	-	-	-	-	-	-	-	
	384+02	STH 35 RT	24 X 24	D6-4	AMERICA'S BYWAYS	-	4.00	-	-	-	-	-	
1018	385+00	STH 35 LT	48 X 36	W14-3	No Passing Zone	-	-	6.00	1	1	1	-	
1019	385+52	STH 35 RT	24 X 24	D6-4	AMERICA'S BYWAYS	-	-	-	1	1	-	-	
1020	385+60	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	45	5.00	-	1	1	1	-	
1021	387+38	STH 35 RT	48 X 36	W14-3	No Passing Zone	-	-	6.00	-	-	-	-	
1022	387+39	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	45	5.00	-	1	1	1	-	
1023	388+57	STH 35 RT	30 X 36	I-55-56	Adopt-A-Highway [Sponsor]	PEPIN UNITED METHODISTS	7.50	-	1	1	1	-	
1024	389+89	STH 35 LT	24 X 39	J1-1		-	6.50	-	1	1	1	-	
	389+89	STH 35 LT	21 X 15	M2-1	JCT	CC	-	-	-	-	-	-	
	389+89	STH 35 LT	24 X 24	M1-5-A	COUNTY ROUTE MARKER	CC	-	-	-	-	-	-	
1025	390+70	FIRST ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
1026	391+23	FIRST ST.	30 X 30	R1-1	Stop	-	5.18	-	1	1	1	-	
1027	394+01	STH 35 LT	54 X 24	I2-3	Community Population Name Sign	PEPIN 837	9.00	-	1	2	2	-	
1028	394+51	STH 35 RT	54 X 36	D6-51	Scenic Overlook 1/2 Mile	-	13.50	-	1	2	2	-	
1029	396+25	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	45	5.00	-	1	1	1	-	
1030	396+25	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	55	5.00	-	1	1	1	-	
1031	387+38	STH 35 RT	78 X 24	D2-2	TWO DESTINATIONS W/ DISTANCES	Stockholm Prescott	13.00	-	-	-	2	-	
						5 44							
1032	381+64	CTH CC	30 X 30	R1-1	STOP	-	5.18	-	1	1	1	-	
1033	381+62	CTH CC	24 X 24	W12-1D	DOUBLE DOWN ARROWS	-	-	4.00	1	1	1	-	
1034	382+00	CTH CC	48 X 45	J13-2		-	15	-	-	-	-	2	
			24 X 45	J13-1		-	-	-	1	1	-	-	
			24 X 24	M1-56	STATE ROUTE MARKER	35	-	-	-	-	-	-	
			24 X 24	M1-96	Great River Road Marker	-	-	-	-	-	-	-	
			24 X 24	M6-4	DOUBLE ARROW	-	-	-	-	-	-	-	
			24 X 24	M6-4	DOUBLE ARROW	-	-	-	-	-	-	-	
SUBTOTAL #5 =							163.66	25.00	23.00	26.00	23.00	6.00	

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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PERMANENT SIGN SUMMARY

SIGN		STA	LOC.	SIZE		SIGN CODE	DESCRIPTION	MESSAGE LINE 1	SIGNS TYPE II	SIGNS TYPE II	REMOVING SIGNS	REMOVING SMALL	POSTS WOOD 4X6-	POSTS WOOD 4X6-
NO.				in X in					637.2210	637.2230	638.2602	638.3000	634.0616	634.0620
									REFLECTIVE H	REFLECTIVE F	TYPE II	SIGNS SUPPORTS	INCH X 16-FT	INCH X 20-FT
									637.2210	637.2230	638.2602	638.3000	634.0616	634.0620
									SF	SF	EACH	EACH	EACH	EACH
1101	402+39	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1102	402+39	STH 35	LT	36 X 36	W3-5	SPEED LIMIT AHEAD	45	-	-	9.00	-	-	-	-
1103	403+47	STH 35	RT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1104	420+32	STH 35	RT	54 X 36	D6-53L	SCENIC OVERLOOK LEFT ARROW	-	13.50	-	-	1	2	2	-
1105	420+63	STH 35	LT	30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-
1105A	420+80	WAYSIDE	12 X 18	R7-8-A	RESERVED PARKING	-	1.50	-	-	-	-	-	1	-
			12 X 6	R7-8-V	VAN ACCESSIBLE	-	0.50	-	-	-	-	-	-	-
1106	422+56	STH 35	RT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1107	423+80	STH 35	LT	54 X 36	D6-53R	SCENIC OVERLOOK RIGHT ARROW	-	-	-	-	1	2	2	-
1108	435+20	LAKE PORT RD.		30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-
1109	438+82	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1110	446+82	STH 35	LT	54 X 36	D6-51	Scenic Overlook 1/2 Mile	-	13.50	-	-	1	2	2	-
1111	458+88	STH 35	RT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1201	478+86	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1202	506+63	STH 35	RT	36 X 36	W10-2	Cross Road Tracks LEFT Side	-	9.00	-	-	1	1	1	-
1203	509+98	STH 35	RT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1204	513+94	STH 35	LT	30 X 36	I-55-56	Adopt-A-Highway [Sponsor]	PEPIN UNITED METHODISTS	7.50	-	-	1	1	1	-
1205	515+31	BOGUS RD.		30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-
1206	515+61	BOGUS RD.		30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-
1207	517+12	STH 35	RT	30 X 36	I-55-56	Adopt-A-Highway [Sponsor]	LAKEVIEW 4-H CLUB	7.50	-	-	1	1	1	-
1301	523+60	STH 35	LT	36 X 36	W10-2	Cross Road Tracks RIGHT Side	-	9.00	-	-	1	1	1	-
1302	536+45	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1303	542+39	STH 35	RT	60 X 36	D5-63	Historical Marker [1/2] Mile	-	15.00	-	-	1	2	2	-
1304	566+93	STH 35	RT	60 X 36	D5-64L	Historical Marker (Left Arrow)	-	15.00	-	-	1	2	2	-
1305	567+12	STH 35	LT	30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-
1306	568+72	STH 35	LT	30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-
1307	569+54	STH 35	LT	60 X 36	D5-64R	Historical Marker (Right Arrow)	-	15.00	-	-	1	2	2	-
1308	574+10	STH 35	RT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1401	583+47	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1402	595+71	STH 35	LT	60 X 36	D5-63	Historical Marker [1/2] Mile	-	15.00	-	-	1	2	2	-
1403	615+26	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1404	583+47	STH 35	LT	48 X 36	W14-3	No Passing Zone	-	-	-	6.00	1	1	1	-
1405	620+53		24 X 39	J1-1		-	-	6.50	-	-	1	1	1	-
			21 X 15	M2-1	JCT	-	-	-	-	-	-	-	-	
			24 X 24	M1-5A	COUNTY ROUTE MARKER	JJ	-	-	-	-	-	-	-	
1406	627+02	STH 35	24 X 39	J1-1		-	-	-	-	-	1	1	-	-
			48 X 39	J1-2		-	13.00	-	-	-	-	-	-	
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	
			24 X 24	M1-96	Great River Road Marker	-	-	-	-	-	-	-	-	
			24 X 12	M3-3	SOUTH	-	-	-	-	-	-	-	-	
			24 X 24	M1-6	STATE ROUTE MARKER	35	-	-	-	-	-	-	-	
			24 X 24	D6-4	AMERICA'S BYWAYS	-	4.00	-	-	-	-	-	-	
1407	629+94	STH 35	24 X 45	J13-1		-	7.50	-	-	1	1	1	-	
			24 X 24	M1-5A	COUNTY ROUTE MARKER	JJ	-	-	-	-	-	-	-	
			21 X 21	M6-1	DIRECTIONAL ARROW RIGHT	-	-	-	-	-	-	-	-	
1408	630+93	CTH JJ	30 X 30	R1-1	Stop	-	5.18	-	-	1	1	1	-	
SUBTOTAL #6 =									189.26	81.00	33.00	40.00	40.00	0.00

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PERMANENT SIGN SUMMARY

						SIGNS TYPE II	SIGNS TYPE II	REMOVING SIGNS	REMOVING SMALL	POSTS	WOOD 4X6-INCH	POSTS	WOOD 4X6-INCH
SIGN			SIZE	SIGN		REFLECTIVE H	REFLECTIVE F	TYPE II	SIGNS	SUPPORTS	X 16-FT		X 20-FT
NO.	STA	LOC.	in X in	CODE	DESCRIPTION	MESSAGE							
						LINE 1							
1409	630+97	CTH JJ	48 X 45	J13-2									
			24 X 24	M1-6	STATE ROUTE MARKER	35		-		1	1	1	-
			21 x 21	M6-4	DIRECTIONAL ARROW LT OR RT	-		-		-	-	-	-
			24 X 24	M1-96	Great River Road Marker	-		-		-	-	-	-
			21 x 21	M6-4	DIRECTIONAL ARROW LT OR RT	-		-		-	-	-	-
1410	631+73	STH 35 RT	24 X 45	J13-1									
			24 X 24	M1-5A	COUNTY ROUTE MARKER	JJ		-		-	-	-	-
			21 X 21	M6-1	DIRECTIONAL ARROW LEFT	-		-		-	-	-	-
1411	631+93	STH 35 RT	48 X 36	W14-3	No Passing Zone	-		-	6.00	1	1	1	-
1412	633+89	STH 35 RT	48 X 39	J1-2		-		13.00	-	1	1	2	2
			24 X 12	M3-3	NORTH	-		-		-	-	-	-
			24 X 24	M1-96	Great River Road Marker	-		-		-	-	-	-
			24 X 12	M3-3	NORTH	-		-		-	-	-	-
			24 X 24	M1-6	STATE ROUTE MARKER	35		-		-	-	-	-
			24 X 24	D6-4	AMERICA'S BYWAYS	-		4.00		-	-	-	-
1501	639+17	STH 35 RT	72 X 24	I2-3	Community Population Name Sign	STOCKHOLM 66		12.00	-	1	2	2	-
1502	642+00	STH 35 LT	24 X 39	J1-1		-		6.50		1	1	1	-
			21 X 15	M2-1	JCT	-		-		-	-	-	-
			24 X 24	M1-5A	COUNTY ROUTE MARKER	JJ		-		-	-	-	-
1503	655+69	STH 35 RT	36 X 36	W3-5	Speed Limit _ Ahead [Arrow]	30		-	9.00	1	1	1	-
1504	661+59	STH 35 LT	30 X 36	I55-56	Adopt-A-Highway [Sponsor]	LAKEVIEW 4-H CLUB		7.50		1	1	1	-
1505	662+80	STH 35 LT	24 X 24	D6-4	AMERICA'S BYWAYS	-		-		1	1	-	-
1506	665+00	STH 35 LT	48 X 36	J4-2	STATE ROUTE MARKER	-		12.00		1	1	1	-
			24 X 24	M1-96	Great River Road Marker	-		-		-	-	-	-
			24 X 12	M3-3	SOUTH	-		-		-	-	-	-
			24 X 24	M1-56	35 MARKER	-		-		-	-	-	-
			24 X 24	D6-4	AMERICA'S BYWAYS	-		4.00		-	-	-	-
1507	666+13	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30		5.00		1	1	1	-
1508	666+18	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	55		5.00		1	1	1	-
1509	657+00	STH 35 LT	78 X 24	D2-2	TWO DESTINATIONS W/ DISTANCES	Pepin 6 La Crosse 80		13.00		-	-	2	-
1601	673+53	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30		5.00		1	1	1	-
1602	673+66	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30		5.00		1	1	1	-
1603	679+27	STH 35 RT	24 X 30	R2-1	Speed Limit _ MPH	30		5.00		1	1	1	-
1604	679+55	STH 35 LT	24 X 30	R2-1	Speed Limit _ MPH	30		5.00		1	1	1	-
1605	679+95	STH 35	24 X 30	R4-7	KEEP RIGHT	-		5.00		-	-	1	-
1606	680+05	STH 35	24 X 30	R4-7	KEEP RIGHT	-		5.00		-	-	1	-
1607	680+95	STH 35 RT	24 X 39	J1-1		-		6.50		1	1	1	-
			21 X 15	M2-1	JCT	-		-		-	-	-	-
			24 X 24	M1-5A	COUNTY ROUTE MARKER	J		-		-	-	-	-
1608	681+18	STH 35 LT	24 X 39	J1-1		-		-		1	1	-	-
			24 X 12	M3-3	SOUTH	-		-		-	-	-	-
			24 X 24	M1-96	Great River Road Marker	-		-		-	-	-	-
			24 X 24	D6-4	AMERICA'S BYWAYS	-		4.00		-	-	-	-
1609	682+30	MILL ST.	30 X 30	R1-1	Stop	-		5.18		1	1	1	-
1610	682+65	MILL ST.	30 X 30	R1-1	Stop	-		5.18		1	1	1	-
SUBTOTAL #7 =								155.36	15.00	20.00	21.00	24.00	2.00

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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PERMANENT SIGN SUMMARY

										SIGN TYPE II		SIGN TYPE II		REMOVING SIGNS		REMOVING SMALL		POSTS WOOD 4X6-INCH		POSTS WOOD 4X6-INCH	
SIGN				SIZE		SIGN		MESSAGE		REFLECTIVE H		REFLECTIVE F		TYPE II		SIGNS SUPPORTS		X 16-FT		X 20-FT	
NO.	STA	LOC.	in	x	in	CODE	DESCRIPTION	LINE 1		637.2210	637.2230	638.2602	638.3000	634.0616	634.0620						
										SF	SF	EACH	EACH	EACH	EACH	REMARKS					
1701	684+78	STH 35 LT	24	x	30	R2-1	Speed Limit _ MPH	30		5.00	-	1	-	-	-	MOUNTED ON POLE					
1702	685+02	STH 35 RT	24	x	30	R2-1	Speed Limit _ MPH	30		5.00	-	1	1	1	-						
1703	686+08	STH 35 RT	24	x	45	J13-1				7.50	-	1	1	1	-						
			24	x	24	M1-5A	COUNTY ROUTE MARKER	J		-	-	-	-	-	-						
			21	x	21	M6-1	DIRECTIONAL ARROW RIGHT	-		-	-	-	-	-	-						
1704	686+13	CTH J	30	x	30	R1-1	Stop	-		5.18	-	1	1	1	-						
1705	686+65	CTH J	24	x	45	J13-1				7.50	-	1	1	1	-						
			24	x	24	M1-5A	COUNTY ROUTE MARKER	J		-	-	-	-	-	-						
			21	x	21	M6-1	DIRECTIONAL ARROW LEFT	-		-	-	-	-	-	-						
1706	686+67	CTH J	30	x	30	R1-1	Stop	-		5.18	-	1	1	1	-						
1707	686+74	CTH J	24	x	45	J13-1		-		-	-	1	1	-	-						
	686+74	CTH J	48	x	45	J13-2		-		15.00	-	-	-	1	-						
			24	x	24	M1-6	STATE ROUTE MARKER	35		-	-	-	-	-	-						
			21	x	21	M6-4	DIRECTIONAL ARROW LT OR RT	-		-	-	-	-	-	-						
1708	688+78	STH 35 RT	24	x	30	R2-1	Speed Limit _ MPH	30		5.00	-	1	-	-	-						
1709	688+78	STH 35 RT	24	x	39	J1-1		-		-	-	1	1	-	-	MOUNTED ON POLE					
	687+30	STH 35 RT	48	x	39	J1-2				13.00	-	-	-	-	1						
			24	x	12	M3-1	NORTH	-		-	-	-	-	-	-						
			24	x	24	M1-96	Great River Road Marker	-		-	-	-	-	-	-						
			24	x	12	M3-1	NORTH	-		-	-	-	-	-	-						
			24	x	24	M1-6	STATE ROUTE MARKER	35		-	-	-	-	-	-						
			24	x	24	D6-4	AMERICA'S BYWAYS	-		4.00	-	-	-	-	-						
1710	689+47	STH 35 LT	24	x	30	R2-1	Speed Limit _ MPH	30		5.00	-	1	-	-	-	MOUNTED ON POLE					
1711	689+40	STH 35 LT	24	x	60	J2-1		-		-	-	1	1	-	-						
	685+50	STH 35 LT	48	x	39	J1-2		-		13.00	-	-	-	1	-						
			24	x	12	M3-3	SOUTH	-		-	-	-	-	-	-						
			24	x	24	M1-96	Great River Road Marker	-		-	-	-	-	-	-						
			24	x	24	D6-4	AMERICA'S BYWAYS	-		4.00	-	-	-	-	-						
			24	x	12	M3-3	SOUTH	-		-	-	-	-	-	-						
			24	x	24	M1-6	STATE ROUTE MARKER	35		-	-	-	-	-	-						
1712	690+19	ELM ST.	30	x	30	R1-1	Stop	-		5.18	-	1	1	1	-						
1713	690+45	ELM ST.	30	x	30	R1-1	Stop	-		5.18	-	1	-	-	-	MOUNTED ON POLE					
1714	689+50	STH 35 RT	24	x	39	J1-1		-		6.50	-	-	-	1	-						
			21	x	15	M2-1	JUNCTION	JCT		-	-	-	-	-	-						
			24	x	24	M1-5A	COUNTY ROUTE MARKER	J		-	-	-	-	-	-						
1801	695+73	STH 35	24	x	30	R4-7	KEEP RIGHT	-		5.00	-	-	-	1	-						
1802	695+92	STH 35	24	x	30	R4-7	KEEP RIGHT	-		5.00	-	-	-	1	-						
SUBTOTAL #8 =										121.22	0.00	13.00	9.00	11.00	1.00						
SUBTOTAL #1 =										128.50	54.00	25.00	28.00	31.00	1.00						
SUBTOTAL #2 =										161.46	93.00	38.00	39.00	37.00	6.00						
SUBTOTAL #3 =										153.80	16.50	22.00	20.00	20.00	4.00						
SUBTOTAL #4 =										218.47	40.26	32.00	31.00	32.00	0.00						
SUBTOTAL #5 =										163.66	25.00	23.00	26.00	23.00	6.00						
SUBTOTAL #6 =										189.26	81.00	33.00	40.00	40.00	0.00						
SUBTOTAL #7 =										155.36	15.00	20.00	21.00	24.00	2.00						
PROJECT TOTAL										1291.73	324.76	206	214	218	20						

ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE

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TRAFFIC CALMING ISLAND SUMMARY

				CONCRETE CURB & GUTTER 18- INCH TYPE D 601.0407	CONCRETE SAFETY ISLAND 602.2400	CONCRETE MEDIAN SLOPED NOSE 620.0300	REMARKS
STATION	TO	STATION	LOCATION	LF	SF	SF	
678+88	-	681+12	MAINLINE	70	130	16	
694+70	-	696+95	MAINLINE	70	130	16	OUTSIDE PAVING LIMITS
PROJECT TOTAL =				140	260	32	

TRAFFIC CONTROL DEVICES

		DRUMS 643.0300		BARRICADES TYPE II 643.0410		BARRICADES TYPE III 643.0420		SIGNS 643.0900	
LOCATION	DURATION	EACH	(1) DAYS	EACH	(1) (2) DAYS	EACH	(1) (3) DAYS	EACH	(1) DAYS
PROJECT LIMITS	85 DAYS	106	9010	27	540	18	90	85	7225
PROJECT TOTALS =			9010		540		90		7225

- (1) - NOT A BID ITEM, FOR INFORMATION ONLY.
(2) - CURB RAMPS; APPROXIMATE DURATION 20 DAYS
(3) - WAYSIDE AND SCENIC OVERLOOK; APPROXIMATE DURATION 5 DAYS EACH SITE

3

TEMPORARY PORTABLE RUMBLE STRIPS

			643.0310.S
STATION	TO	STATION	LS
		PROJECT	1
PROJECT TOTALS =			1

				EPOXY 4-INCH 646.0106	GROOVED EPOXY 4-INCH 646.0107.S	SAME DAY EPOXY 4-INCH 646.0406	CURB EPOXY 647.0456	DIAGONAL EPOXY 12-INCH 647.0726	TEMPORARY PAINT 4-INCH 649.0402	REMARKS
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	LF	
8+68	-	690+37	MAINLINE	-	132,750	-	-	-	-	WHITE
8+68	-	690+37	MAINLINE	50,660	-	50,660	60	80	81,040	YELLOW
694+71	-	696+96	TRAFFIC CALMING ISLAND	900	-	-	60	80	-	YELLOW
PROJECT TOTALS =				51,560	132,750	50,660	120	160	81,040	

PAVEMENT MARKING CROSSWALK EPOXY 6-INCH

				647.0766	REMARKS
STATION	TO	STATION	LOCATION	LF	
329+74	-	329+83	MAINLINE	100	STH 35/BOYD STREET INTERSECTION
332+99	-	333+05	MAINLINE	347	STH 35/COUNTY ROAD N INTERSECTION
337+01	-	337+07	MAINLINE	347	STH 35/PRAIRIE STREET INTERSECTION
341+00	-	341+06	MAINLINE	351	STH 35/MAIN STREET INTERSECTION
344+97	-	345+03	MAINLINE	347	STH 35/LAKE STREET INTERSECTION
348+93	-	349+99	MAINLINE	339	STH 35/PINE STREET INTERSECTION
352+89	-	352+95	MAINLINE	345	STH 35/CEDAR STREET INTERSECTION
356+84	-	356+90	MAINLINE	347	STH 35/WASHINGTON STREET INTERSECTION
364+70	-	364+76	MAINLINE	182	STH 35/LOCUST STREET INTERSECTION
682+65	-	682+71	MAINLINE	99	STH 35/MILL STREET INTERSECTION
686+10	-	686+16	MAINLINE	188	STH 35/SPRING STREET INTERSECTION
PROJECT TOTAL =				2,992	

PAVEMENT MARKING PARKING STALL EPOXY

					647.0656	
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0020	420+28	-	421+70	LEFT	354	SCENIC OVERLOOK
PROJECT TOTALS =					354	

TRAFFIC CONTROL COVERING
SIGNS TYPE II

		643.0920
LOCATION	EACH	
WAYSIDE	4	
SCENIC OVERLOOK	4	
PROJECT TOTAL =		8

LOCATING NO-PASSING ZONES

				648.0100
STATION	TO	STATION	LOCATION	MI
8+68	-	690+37	MAINLINE	12.9
PROJECT TOTALS =				12.9

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CONSTRUCTION STAKING RESURFACING REFERENCE

				650.8000
STATION	TO	STATION	LOCATION	LF
8+68	-	19+07	CENTERLINE	1,039
24+32	-	46+09	CENTERLINE	2,177
49+14	-	72+43	CENTERLINE	2,329
75+06	-	80+87	CENTERLINE	581
86+12	-	93+58	CENTERLINE	746
96+62	-	112+57	CENTERLINE	1,595
115+60	-	147+02	CENTERLINE	3,142
159+05	-	195+96	CENTERLINE	3,691
197+78	-	536+14	CENTERLINE	33,836
536+96	-	629+28	CENTERLINE	9,232
629+84	-	690+37	CENTERLINE	6,053
PROJECT TOTALS =				64,421

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL
(PROJECT) 1720-00-70

				650.9910
STATION	TO	STATION	LOCATION	LS
8+68	-	690+37	PROJECT	1
PROJECT TOTALS =				1

SAWING ASPHALT

				690.0150
STATION	TO	STATION	LOCATION	LF
8+68	-	690+37	PROJECT LIMITS	73
8+68	-	690+37	DRIVEWAYS	472
8+68	-	690+37	SIDEROADS	349
			TRAFFIC ISLANDS	208
8+68	-	690+37	CURB AND GUTTER	780
PROJECT TOTALS =				1,882

SAWING CONCRETE

				690.0250	
STATION	TO	STATION	LOCATION	LF	REMARKS
329+47	-	365+33	PEPIN	380	C&G AND SIDEWALKS
682+61	-	686+75	STOCKHOLM	90	C&G AND SIDEWALKS
PROJECT TOTAL =				470	

HOT MIX ASPHALT PERCENT WITHIN LIMITS
(PWL) TEST STRIP

				SPV.0060.02
STATION	TO	STATION	LOCATION	EACH
8+68	-	690+37	PROJECT	1
PROJECT TOTALS =				1

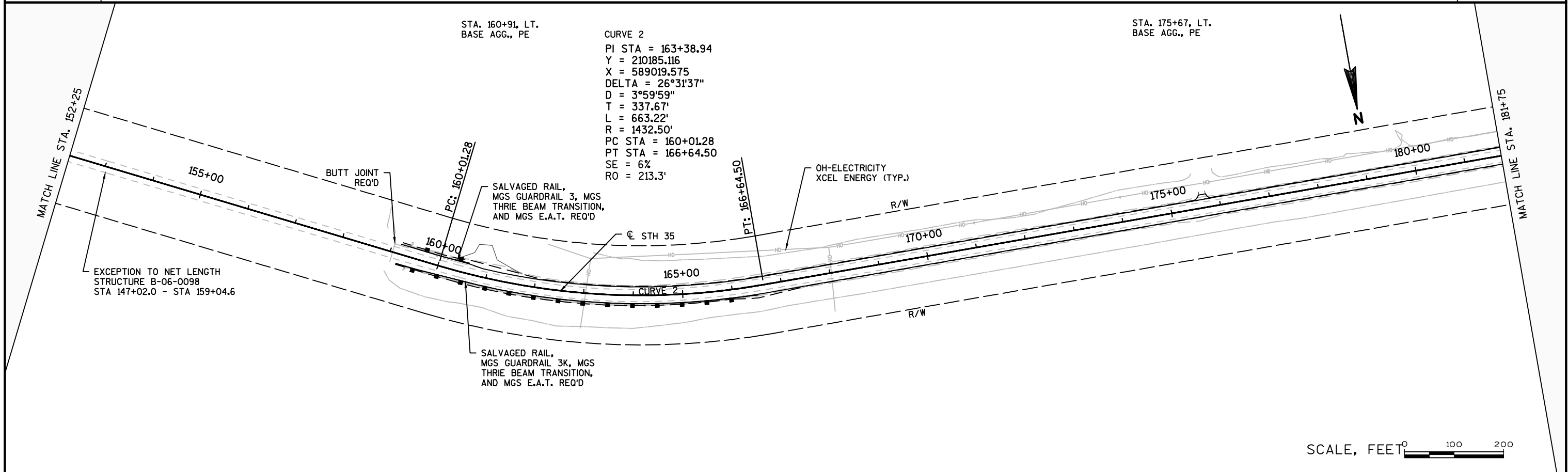
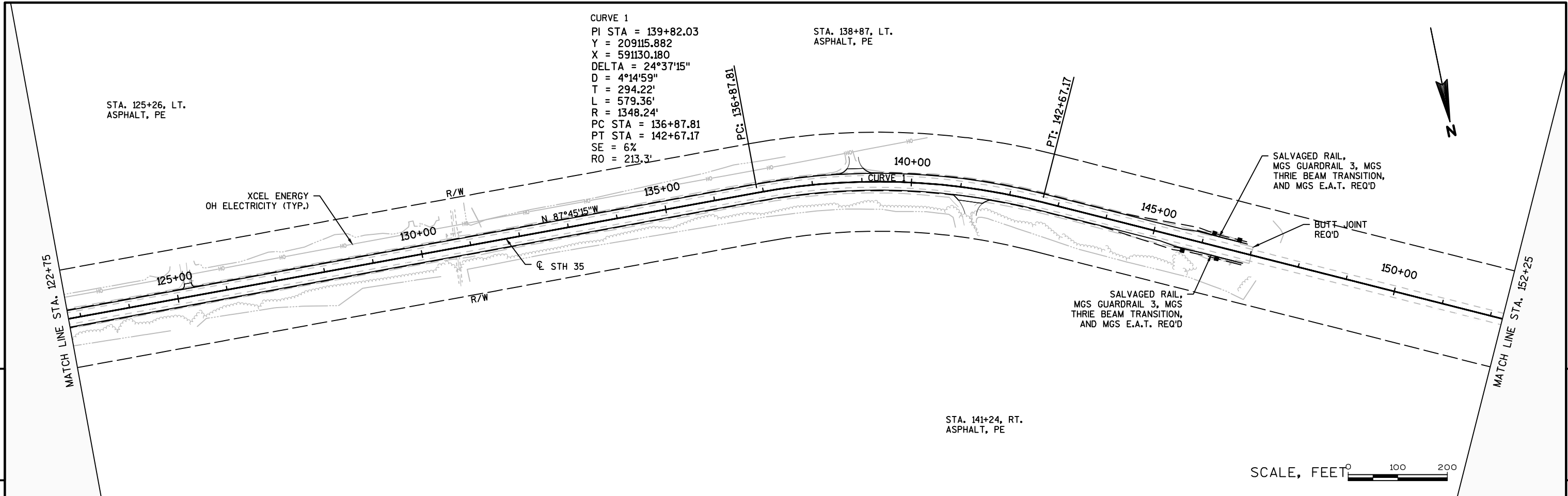
MATERIAL TRANSFER VEHICLE

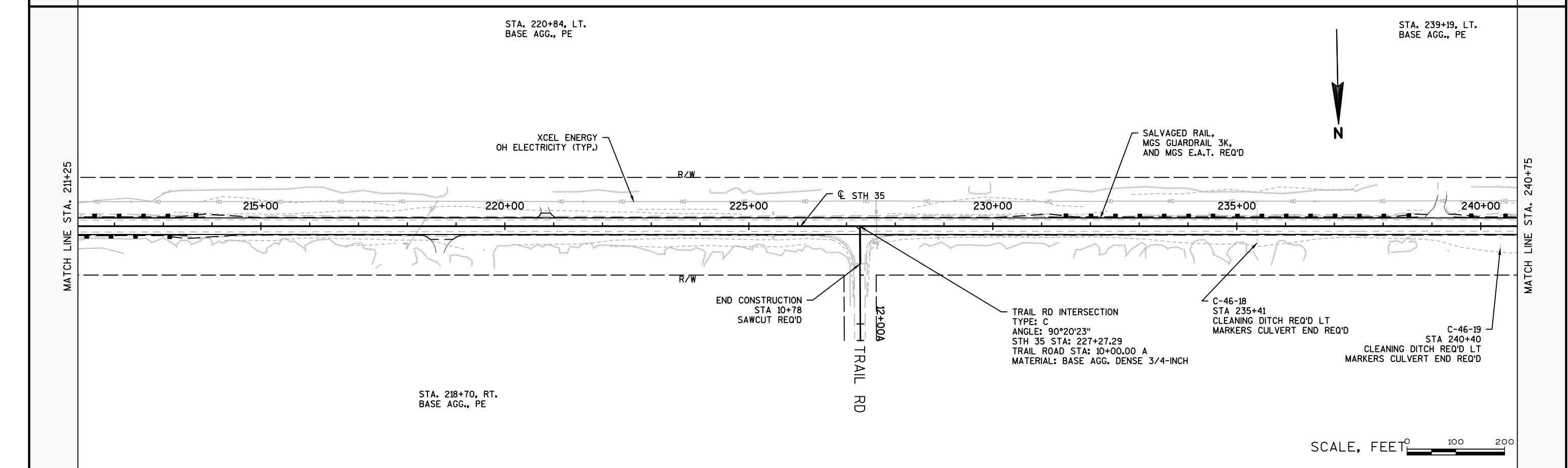
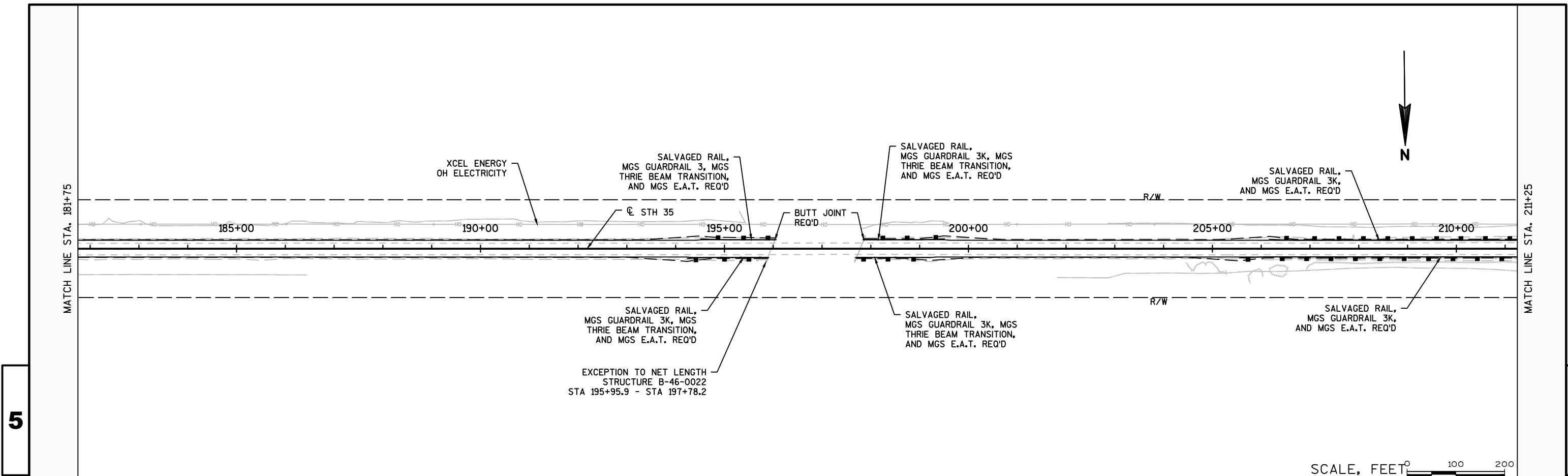
				SPV.0105.01	
STATION	TO	STATION	LOCATION	LS	REMARKS
8+68	-	690+37	PROJECT	1	UPPER LAYER ONLY
PROJECT TOTALS =				1	

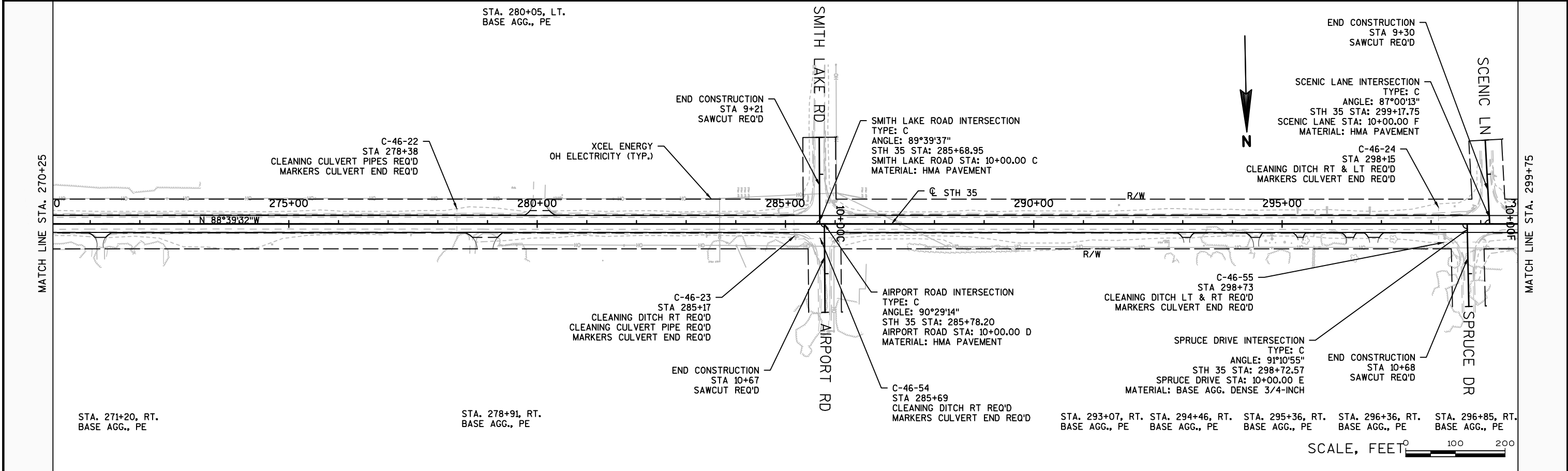
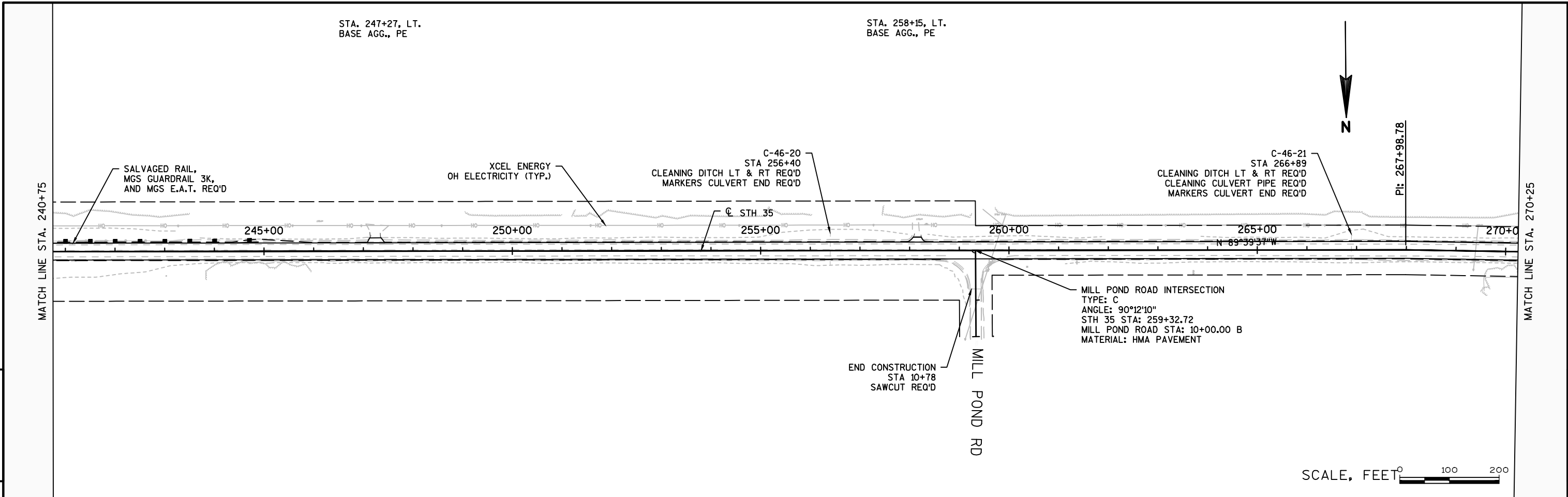
MILLING AND REMOVING TEMPORARY JOINT

				SPV.0105.02
STATION	TO	STATION	LOCATION	LS
8+68	-	690+37	PROJECT	1
PROJECT TOTALS =				1

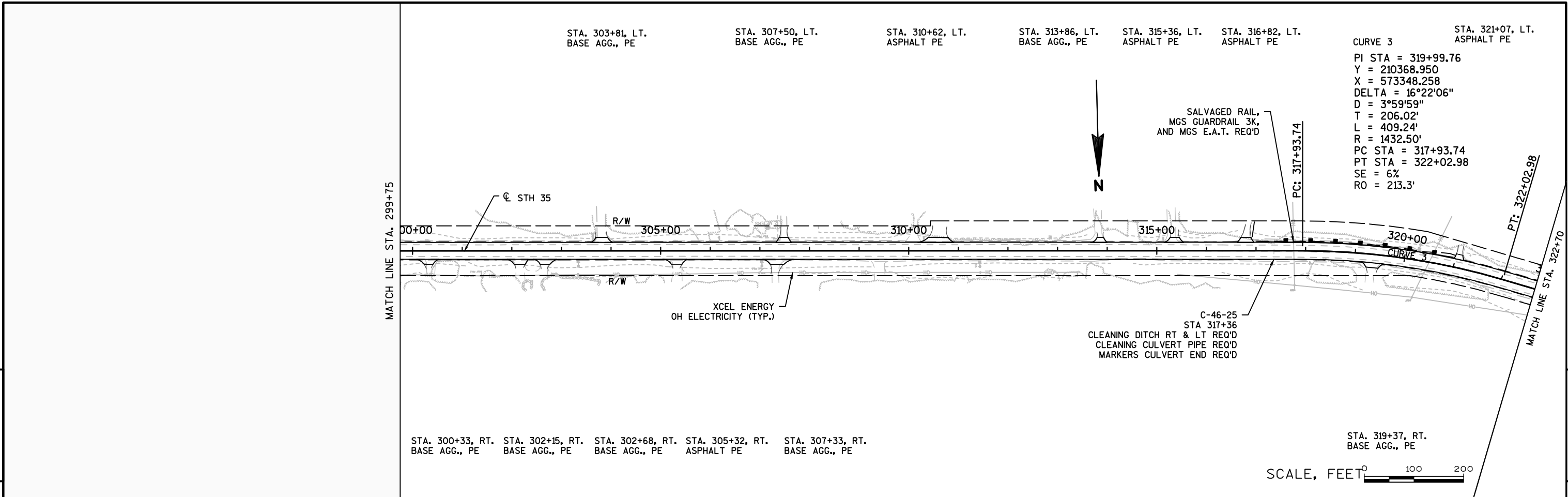
ALL ITEMS ARE CAT 0010 UNLESS NOTED OTHERWISE



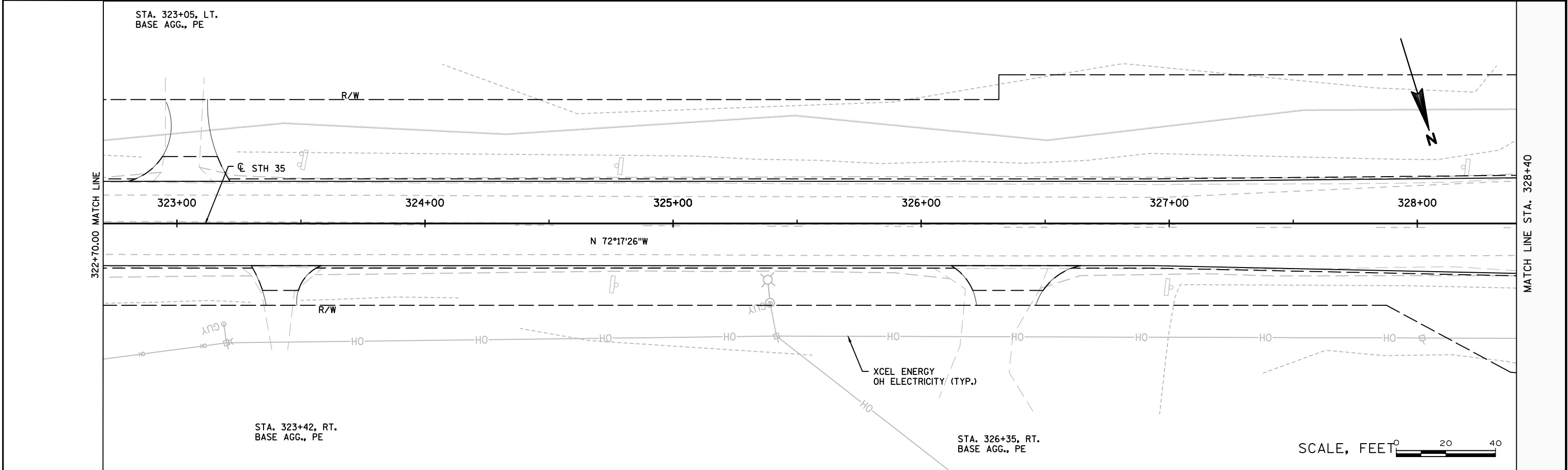


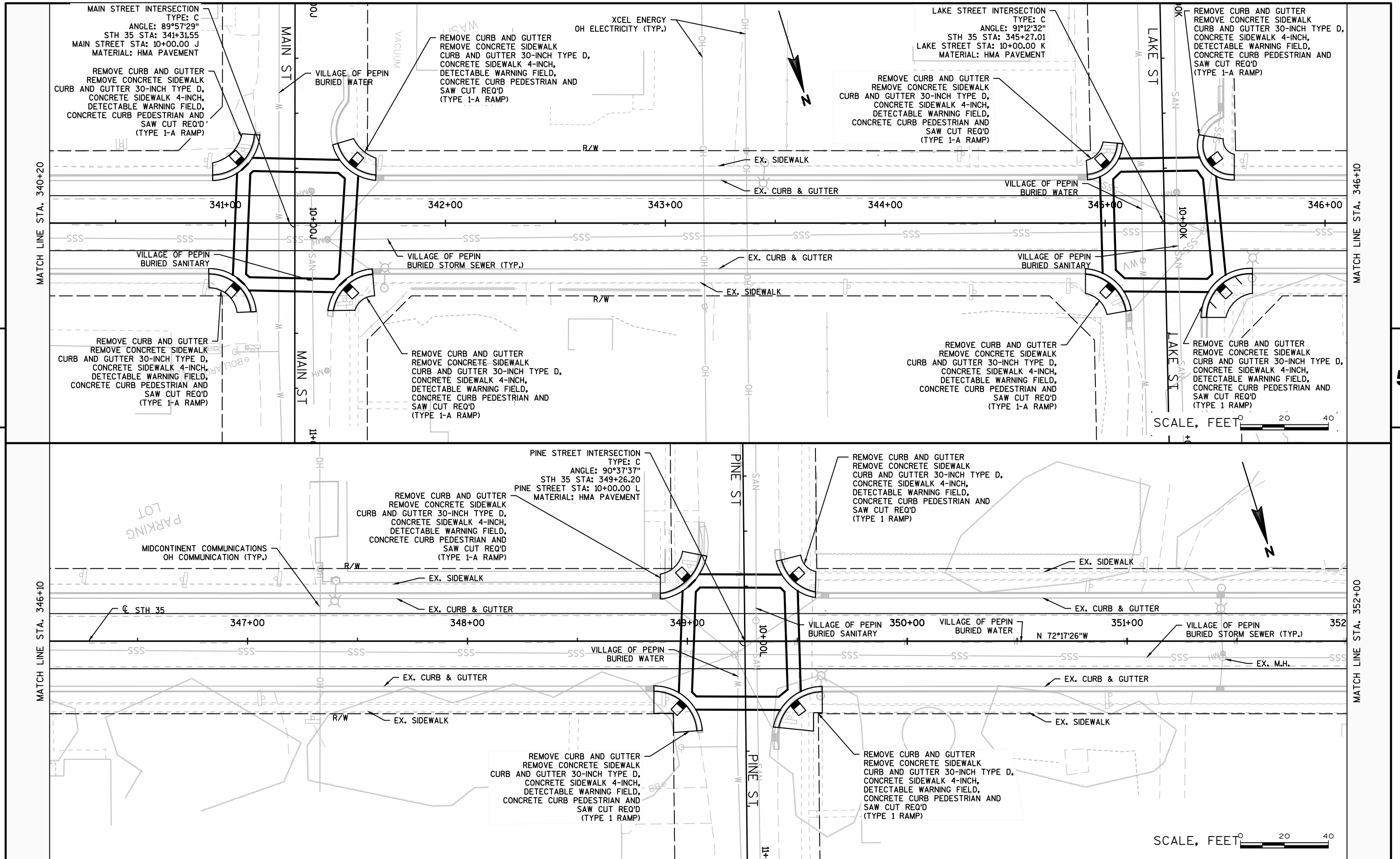


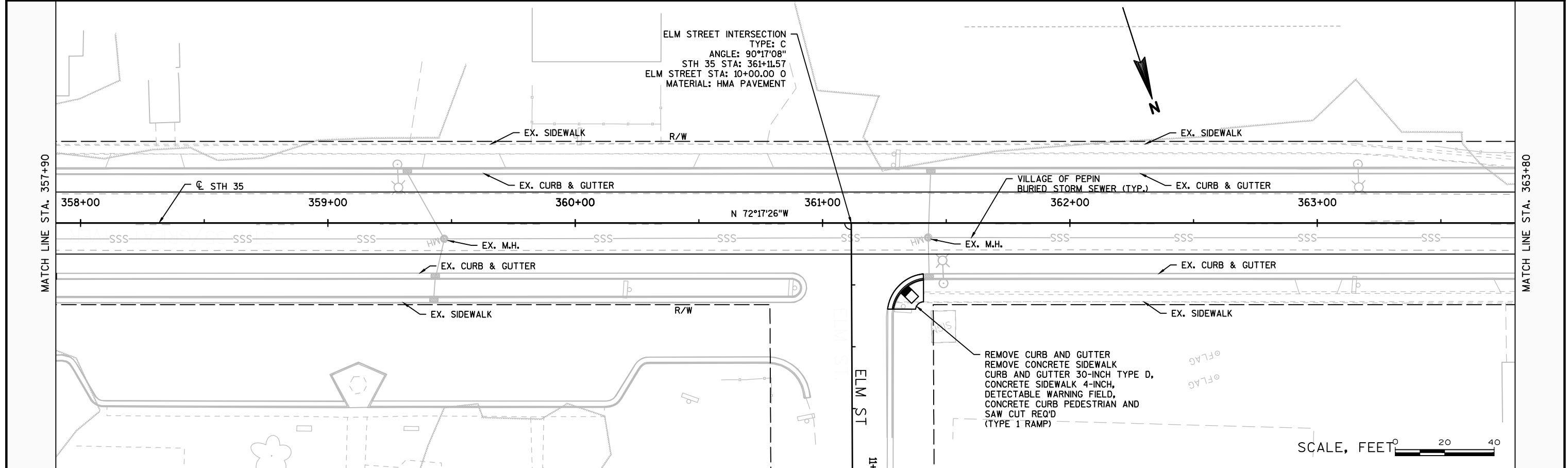
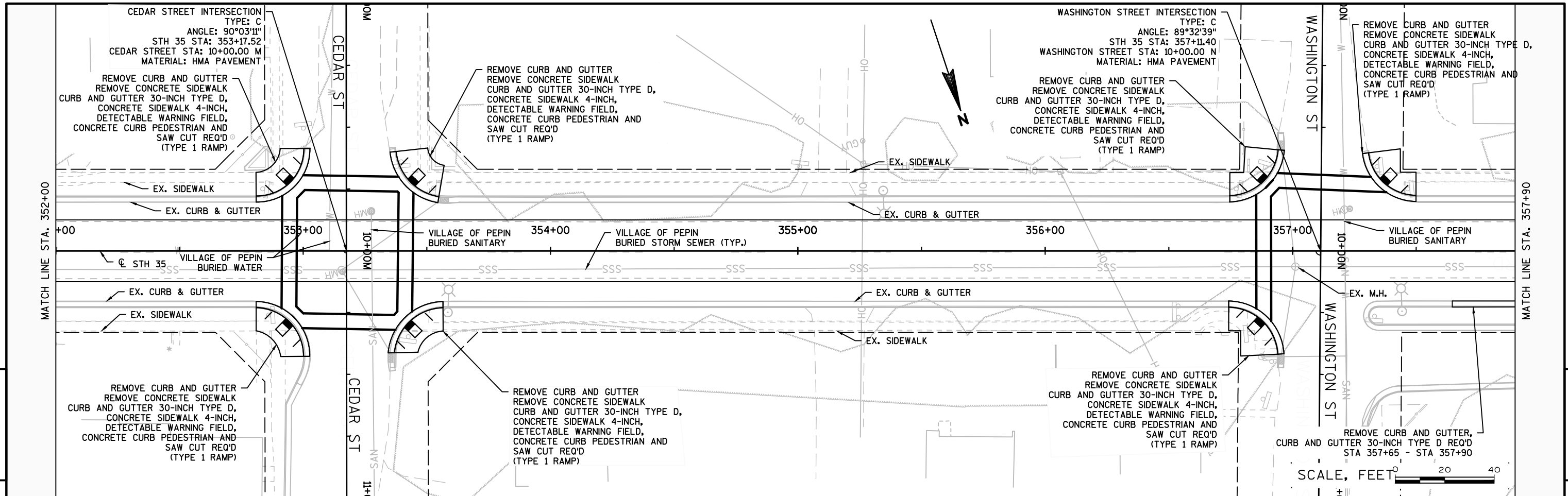
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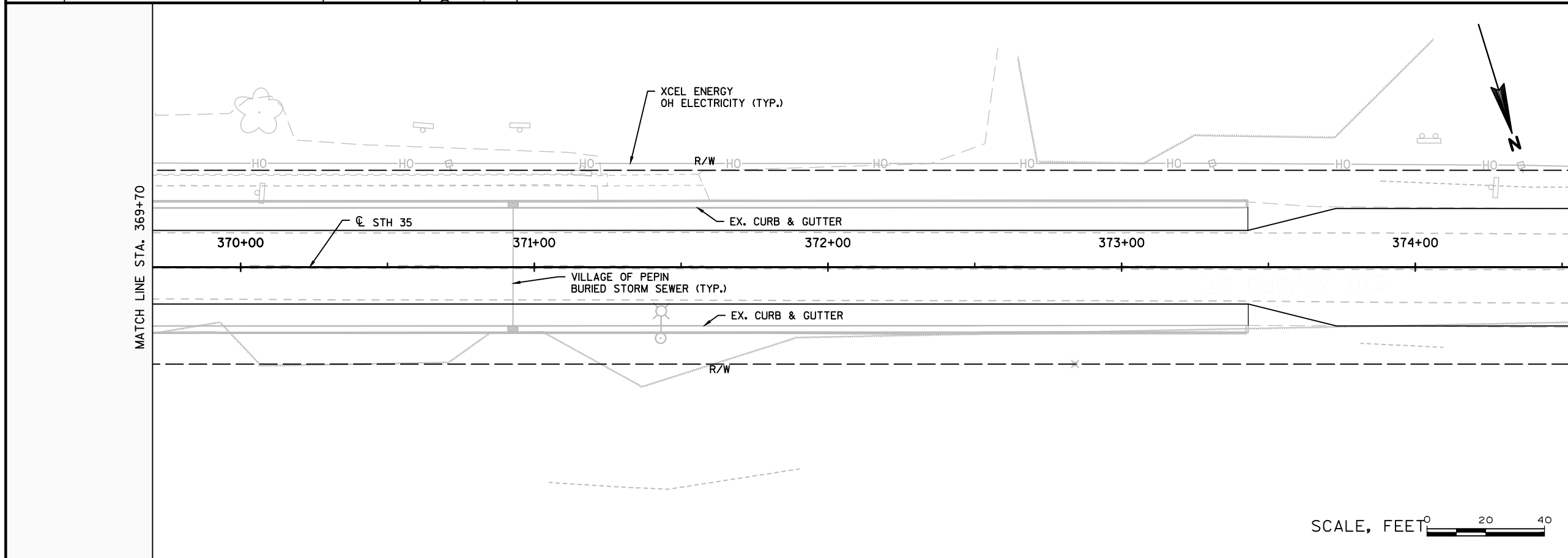
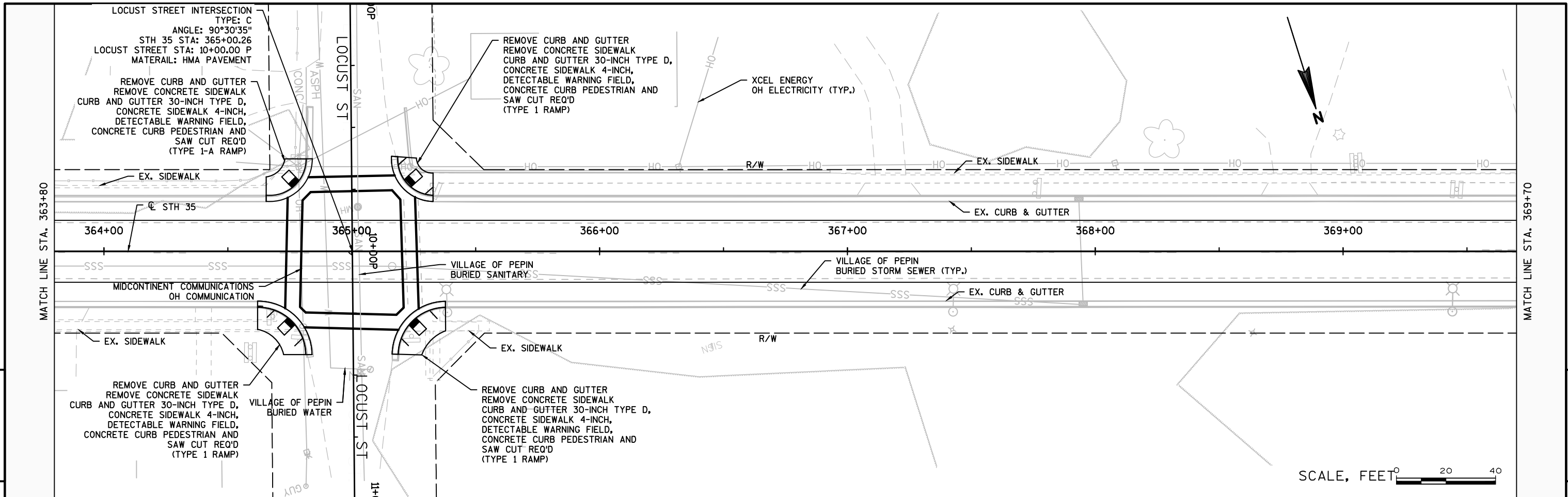


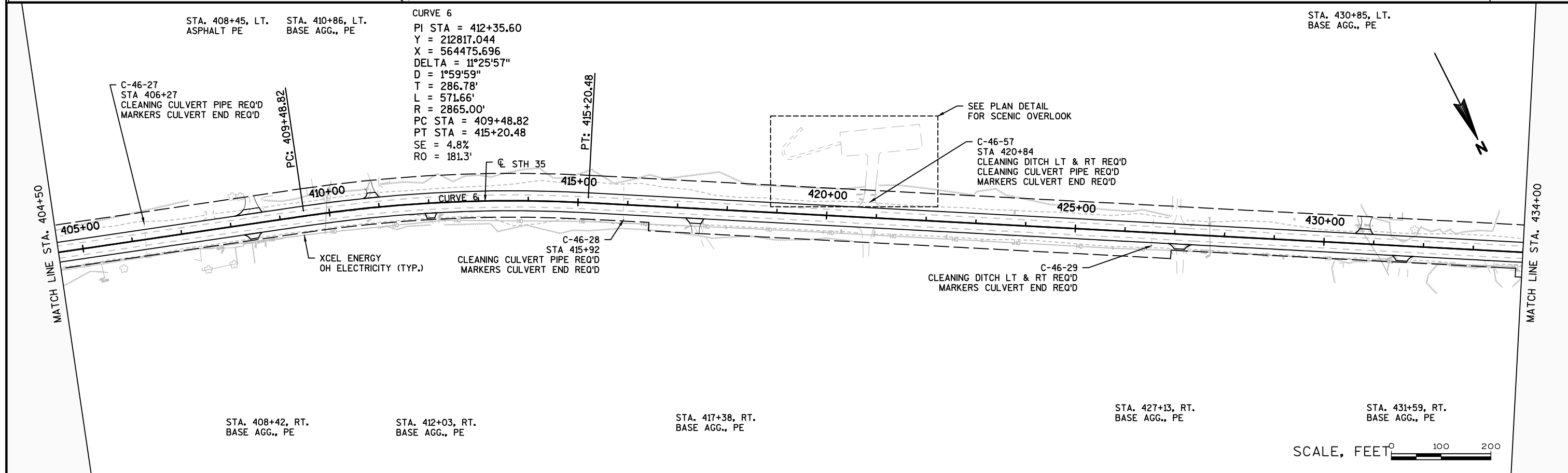
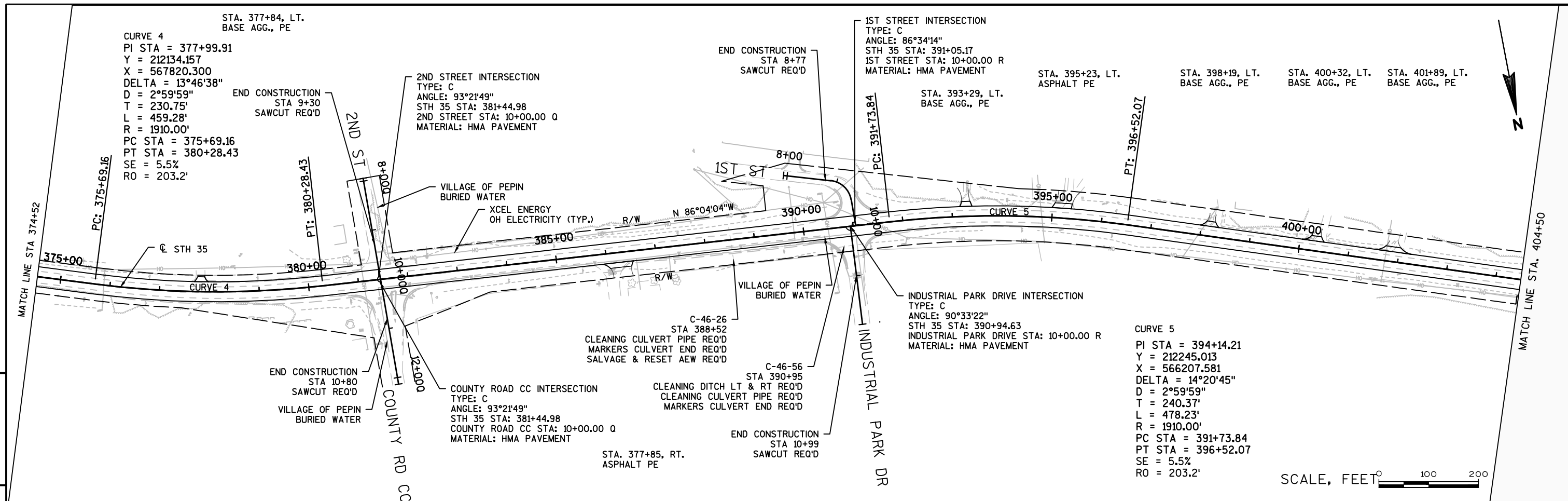
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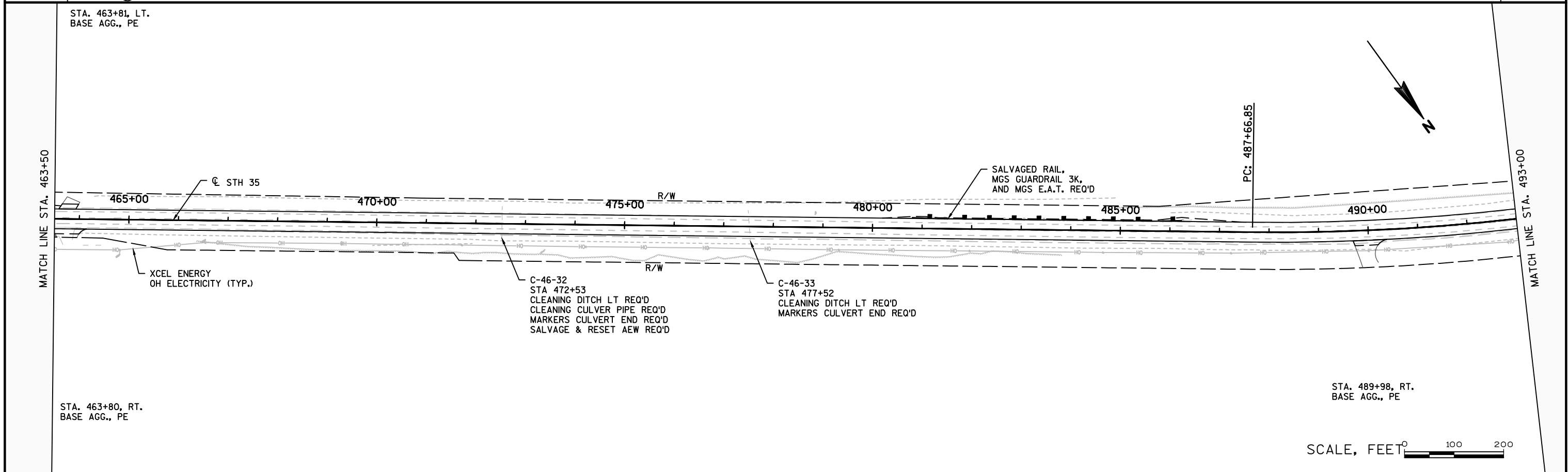
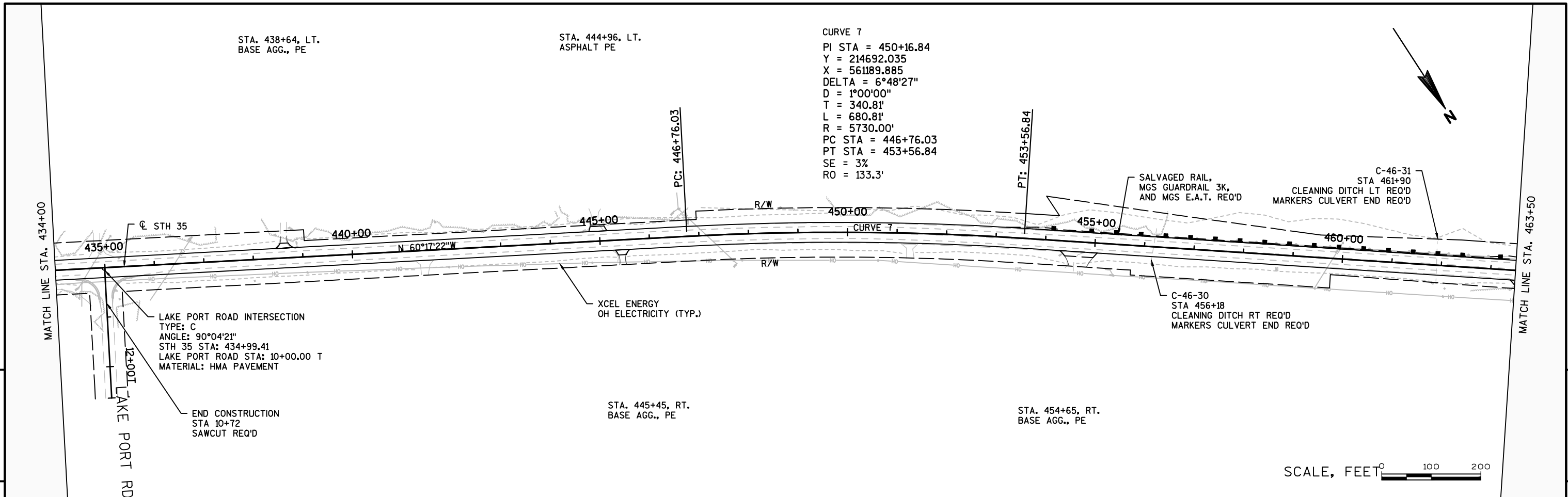


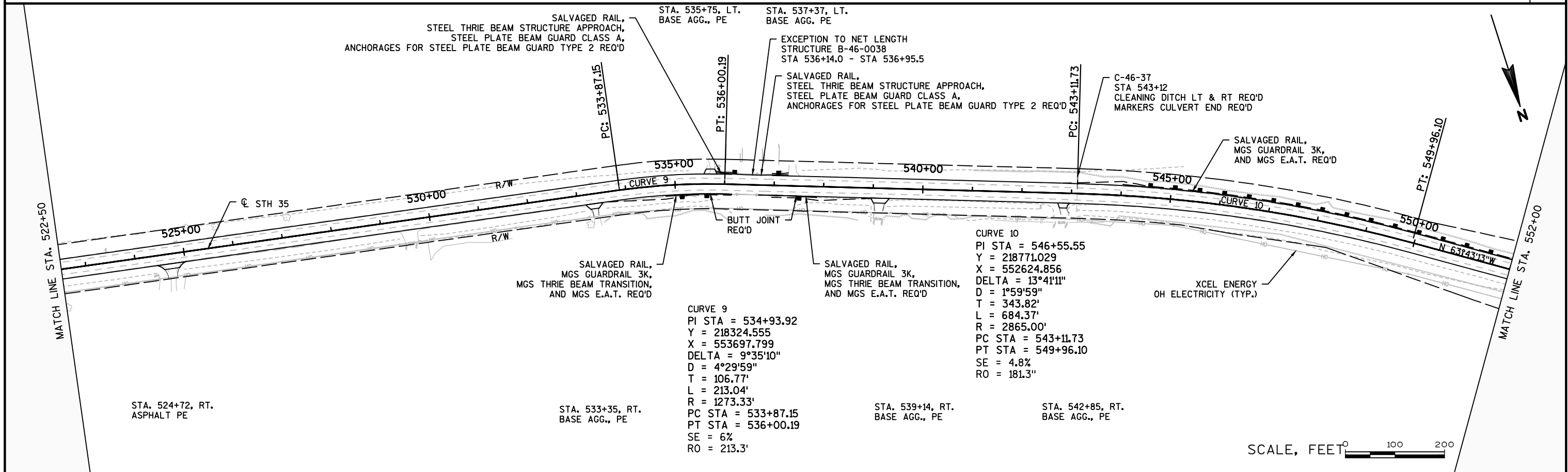
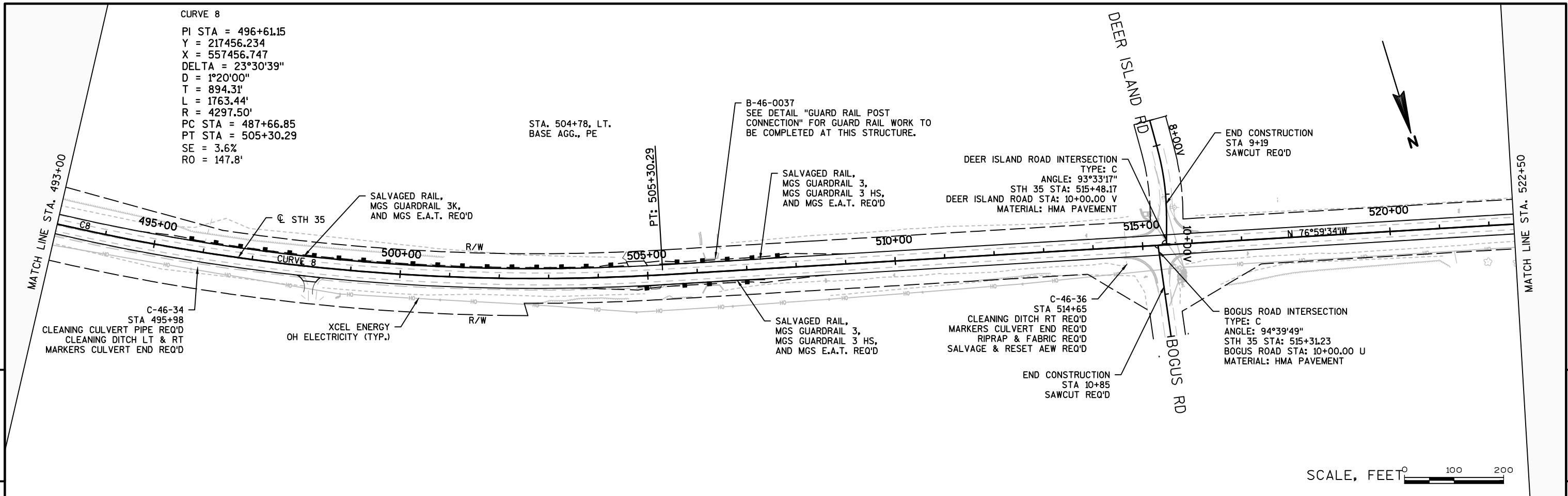


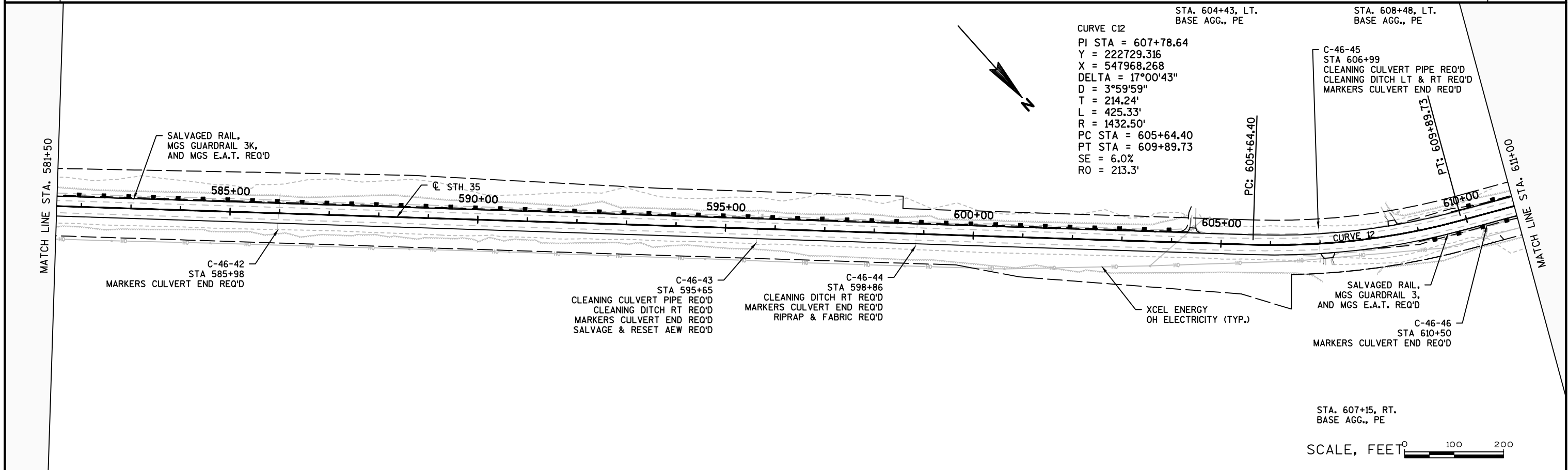
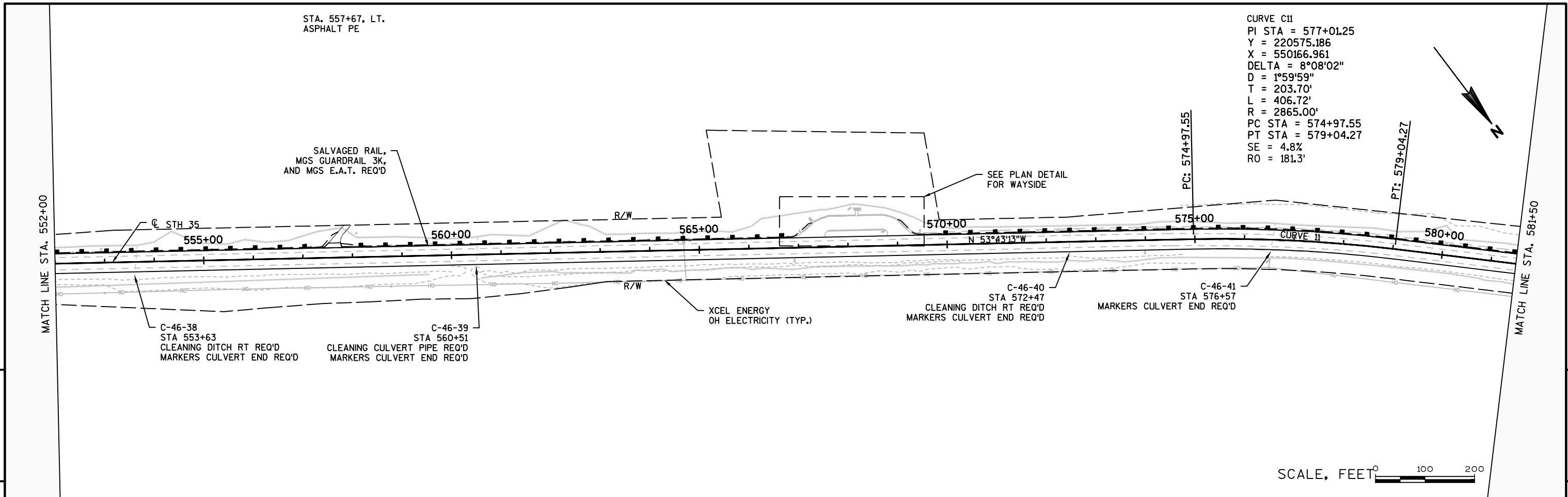


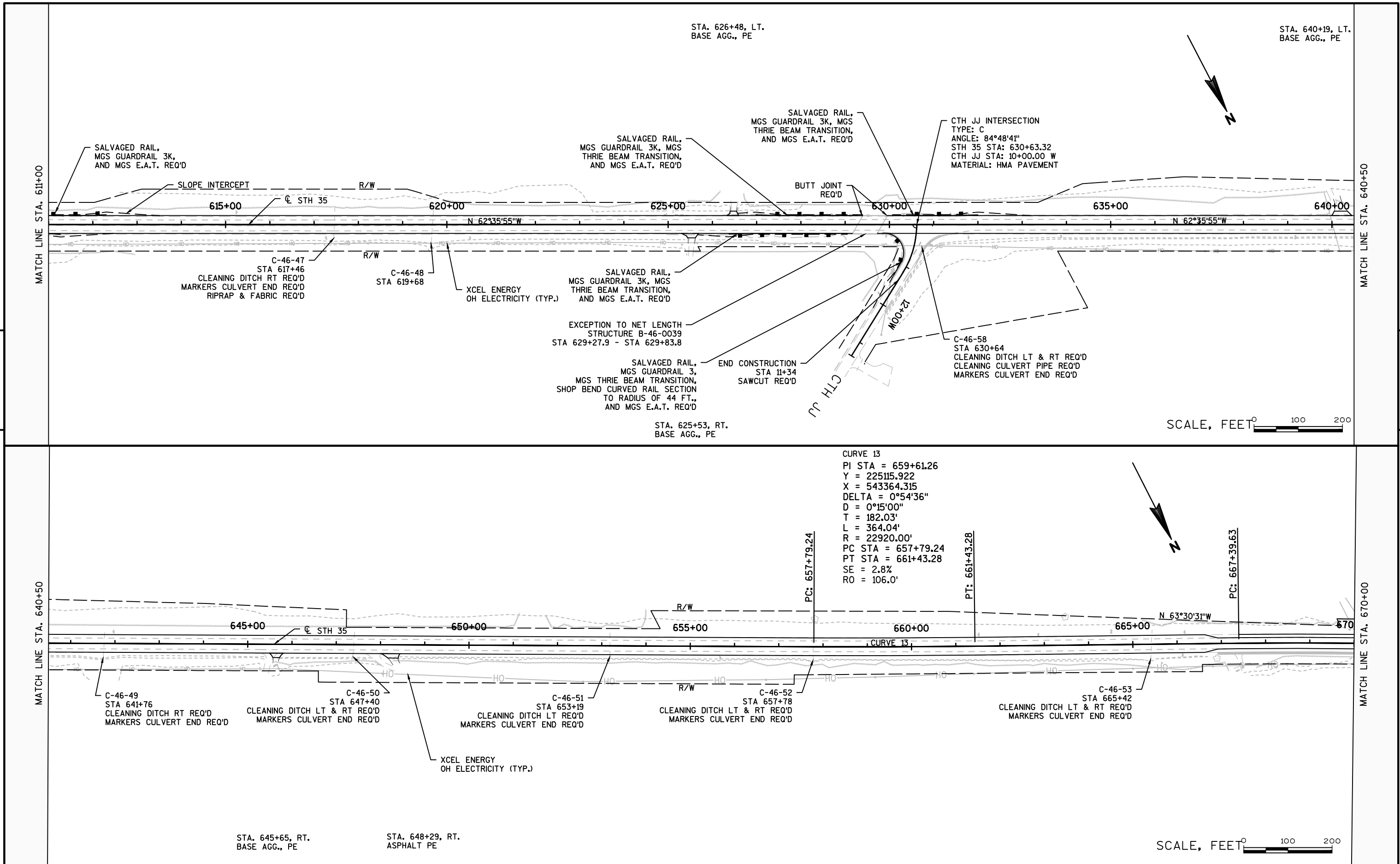


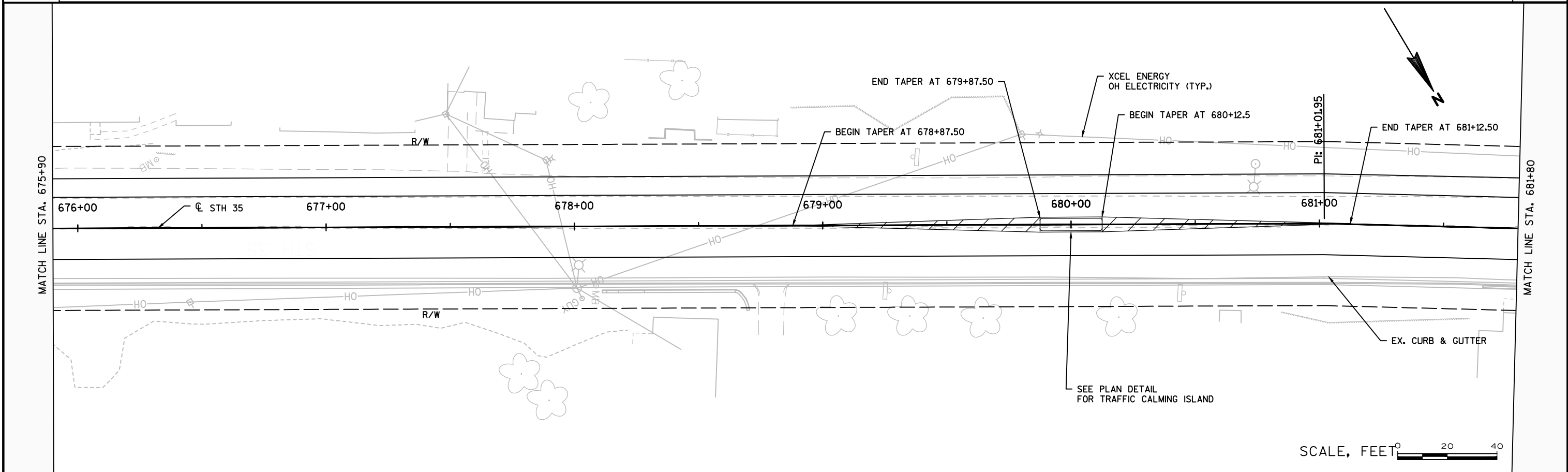
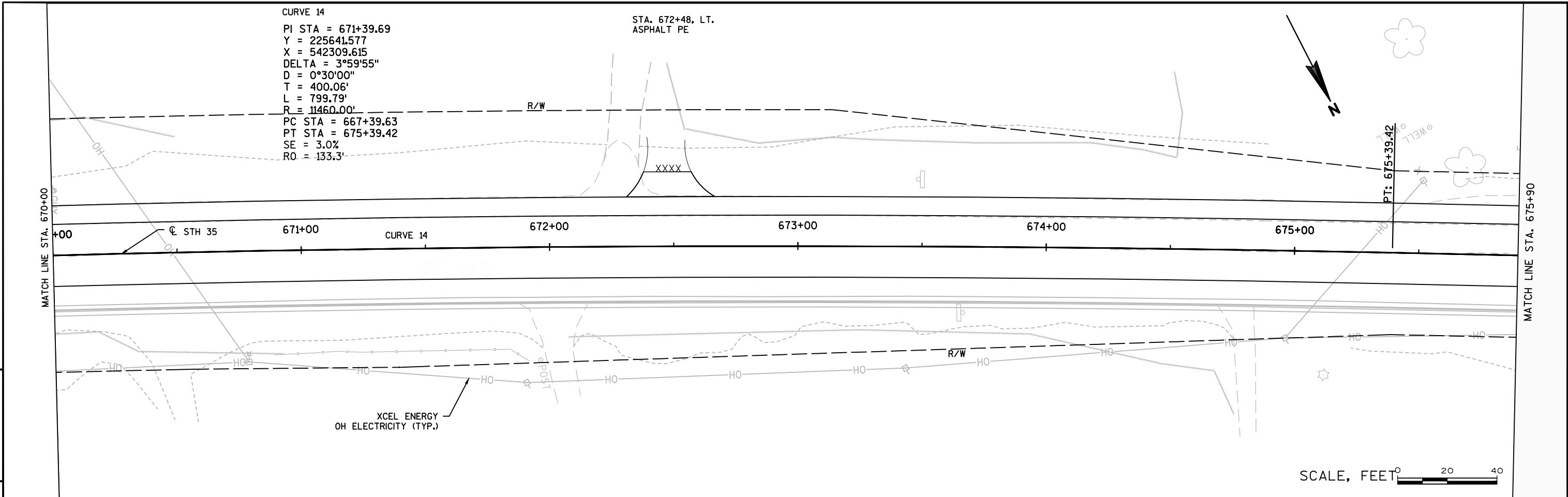


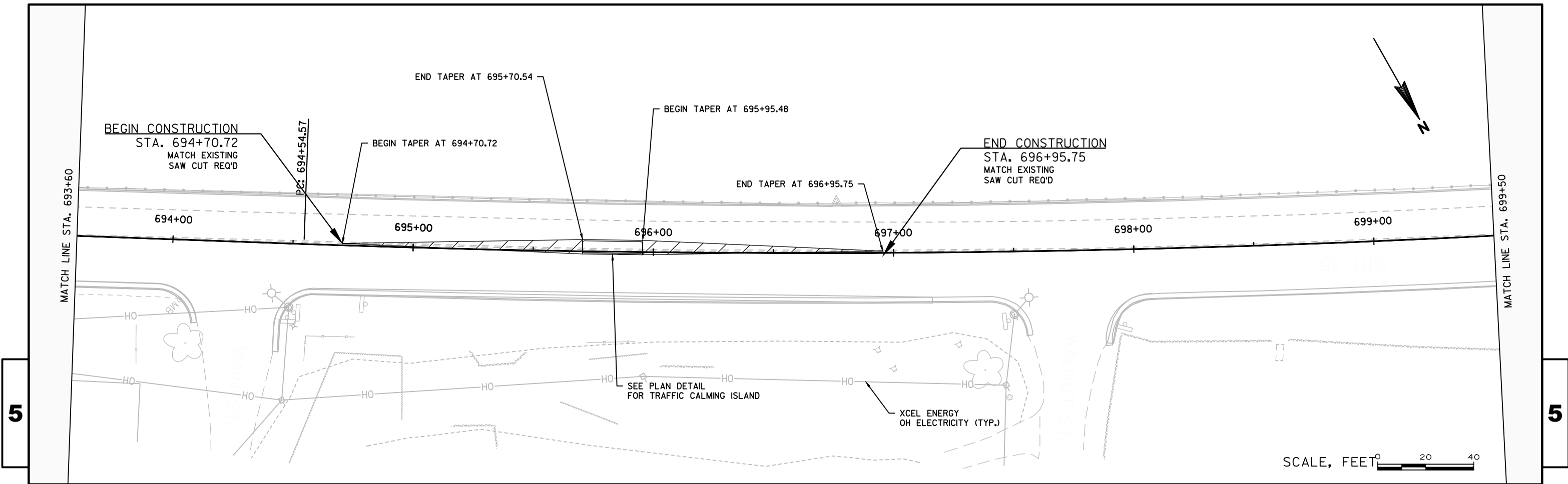






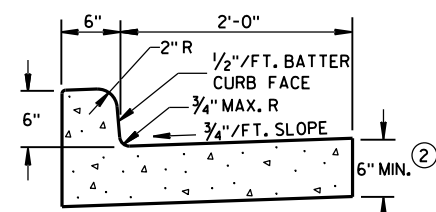




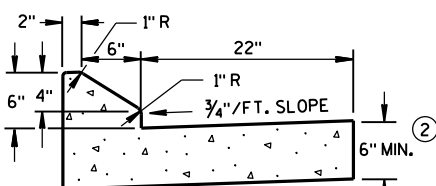


Standard Detail Drawing List

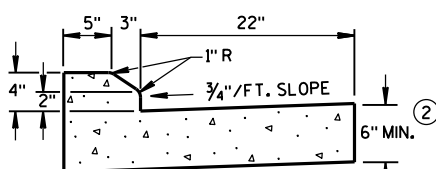
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-18A	CURB RAMPS TYPES 1 AND 1-A
08D05-18B	CURB RAMPS TYPES 2 AND 3
08D05-18C	CURB RAMPS TYPES 4A AND 4A1
08D05-18D	CURB RAMPS TYPE 4B AND 4B1
08D05-18E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
11B02-02	CONCRETE MEDIAN NOSE
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B15-09A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B16-04A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-04B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B18-06B	STEEL PLATE BEAM GUARD, CLASS "A" AT MEDIAN APPROACH TO BRIDGES
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-11E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	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)
14B51-01A	ANCHOR POST ASSEMBLY TOP-MOUNTED
14B51-01B	ANCHOR POST ASSEMBLY TOP-MOUNTED
14B51-01C	ANCHOR POST ASSEMBLY TOP-MOUNTED
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-08	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-03	MEDIAN ISLAND MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TYPES A & D ①

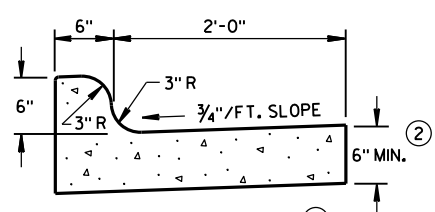


6" SLOPED CURB TYPES G & J ①



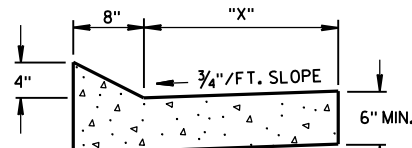
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



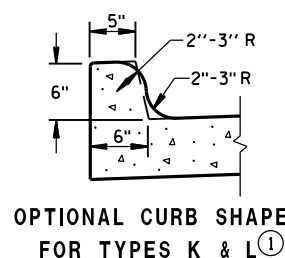
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

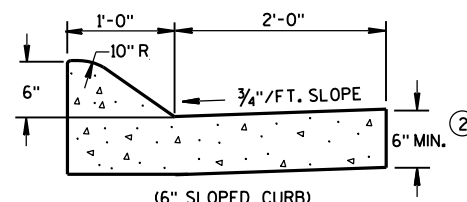


TYPES TBT & TBTT ①
CONCRETE CURB & GUTTER

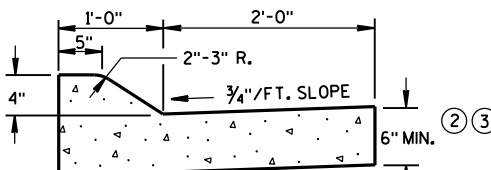
TBT & TBTT	"X"
30"	22"
36"	28"



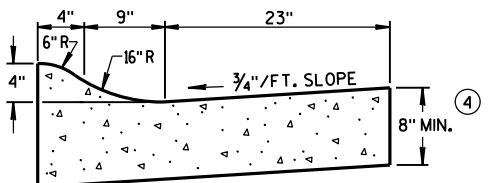
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)



(4" SLOPED CURB)
TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ⑤
CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

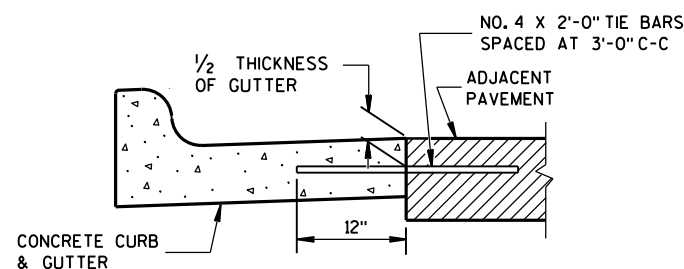
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

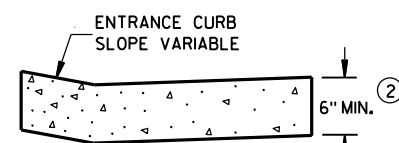
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

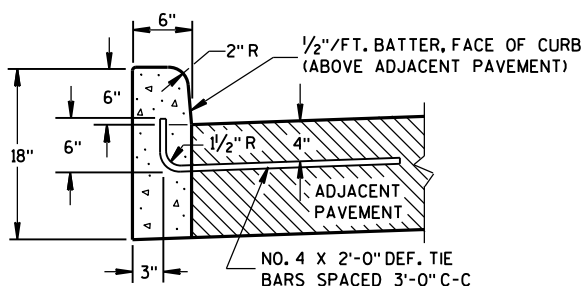
- TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- 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.
- THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



TYPICAL TIE BAR LOCATION ①

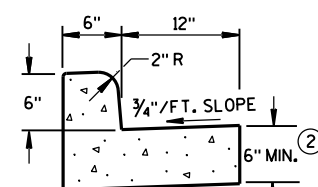


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

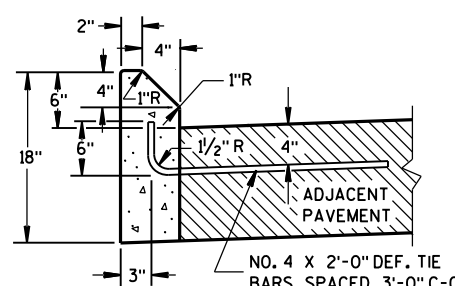


TYPES A & D ①

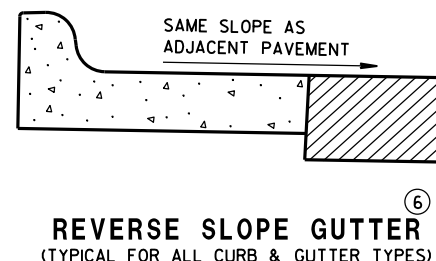
CONCRETE CURB



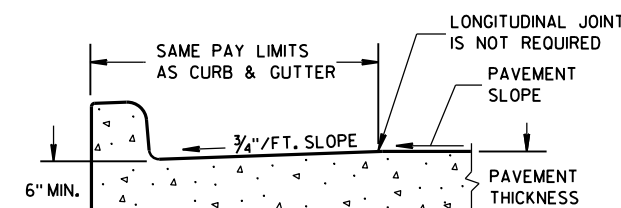
TYPES A & D
CONCRETE CURB & GUTTER 18"



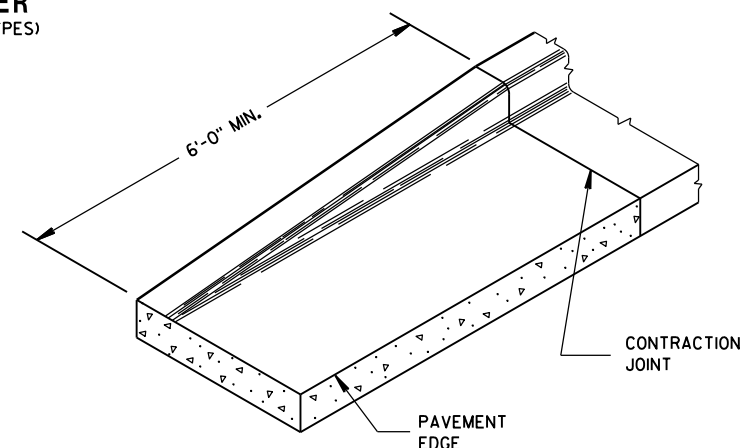
TYPES G & J ①



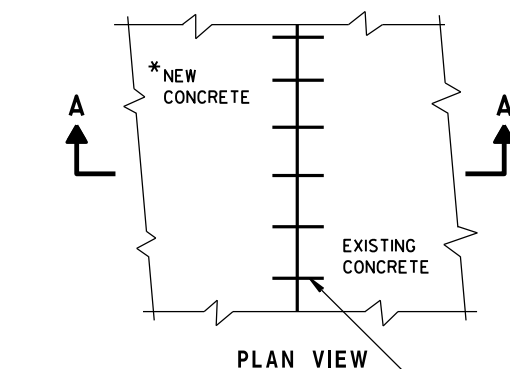
REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



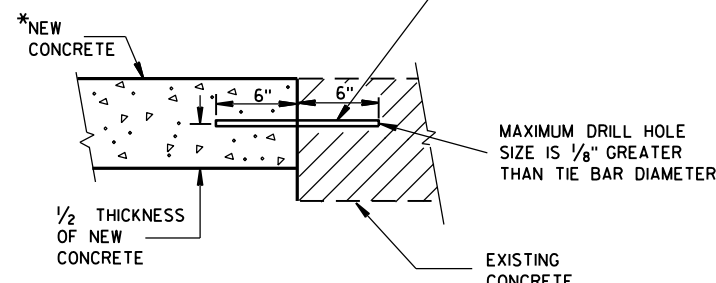
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER



PLAN VIEW



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

* NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

EXISTING CONCRETE

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

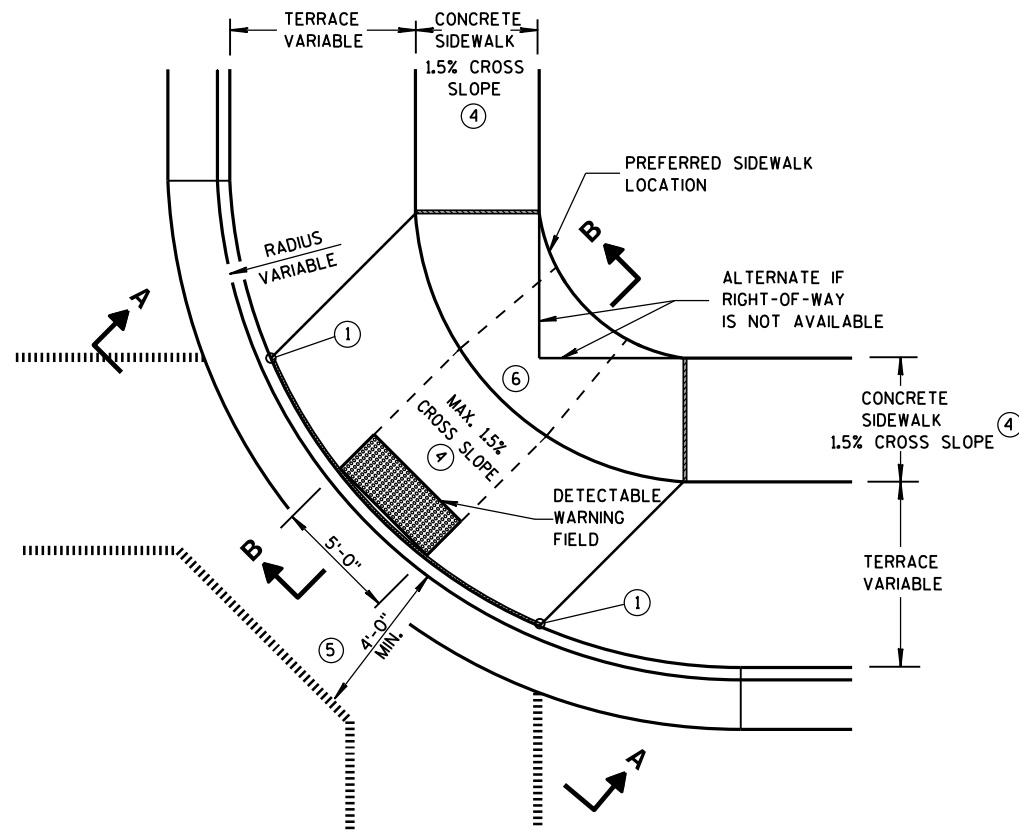
June, 2016

DATE

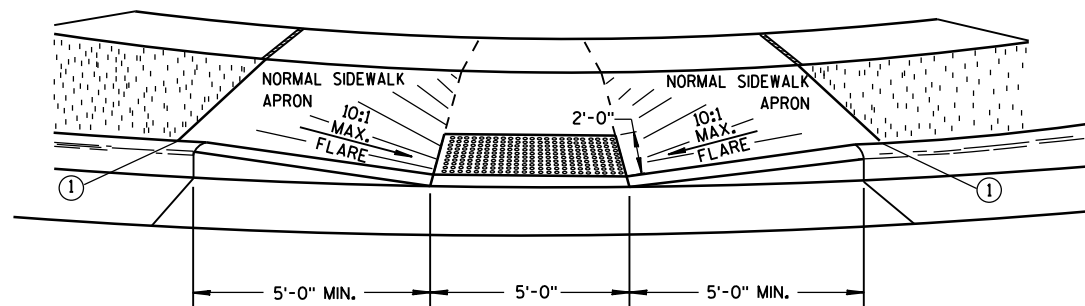
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

INT

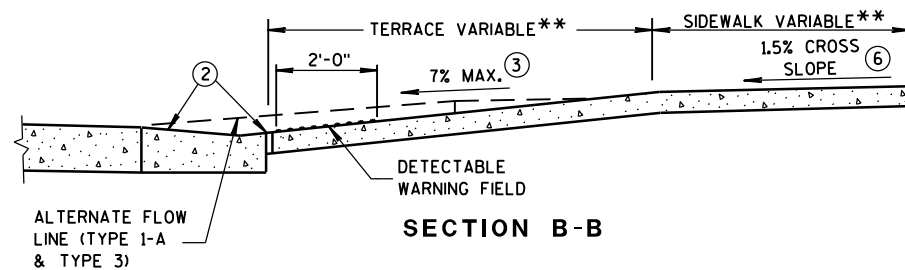


**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



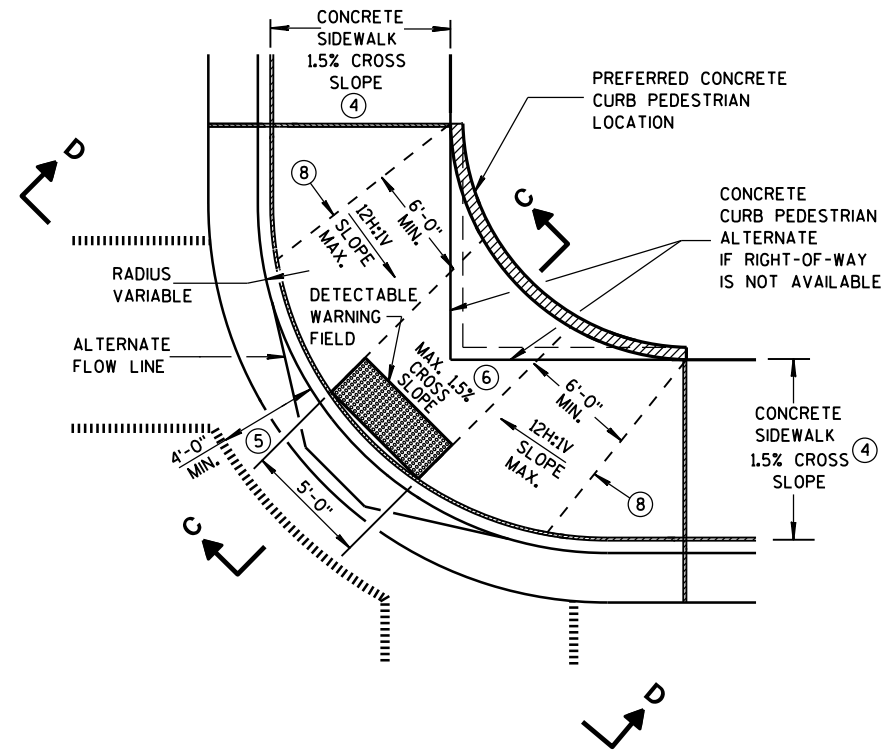
VIEW A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

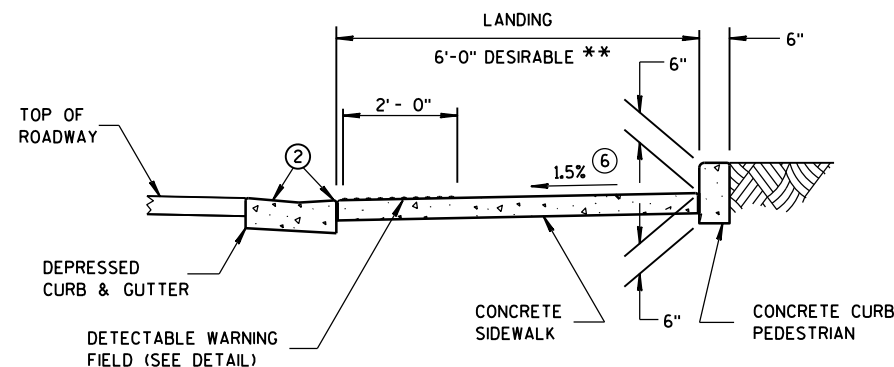


SECTION B-B

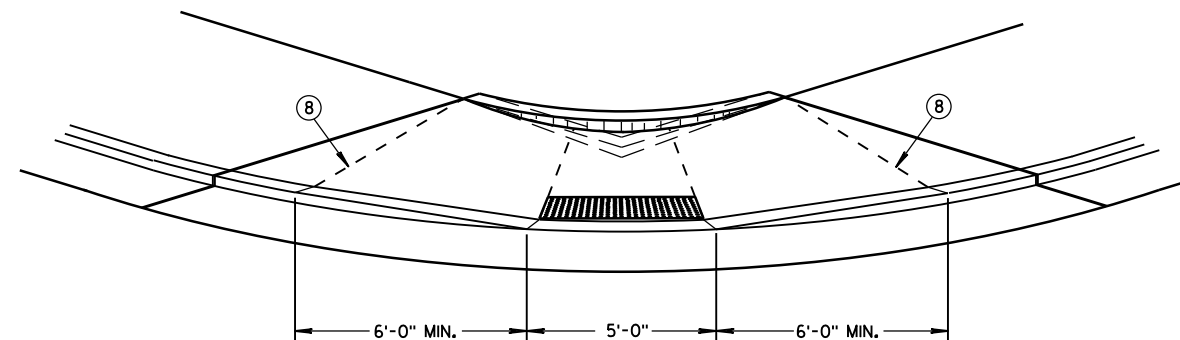
ALTERNATE FLOW
LINE (TYPE 1-A
& TYPE 3)



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



SECTION C-C



VIEW D-D

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

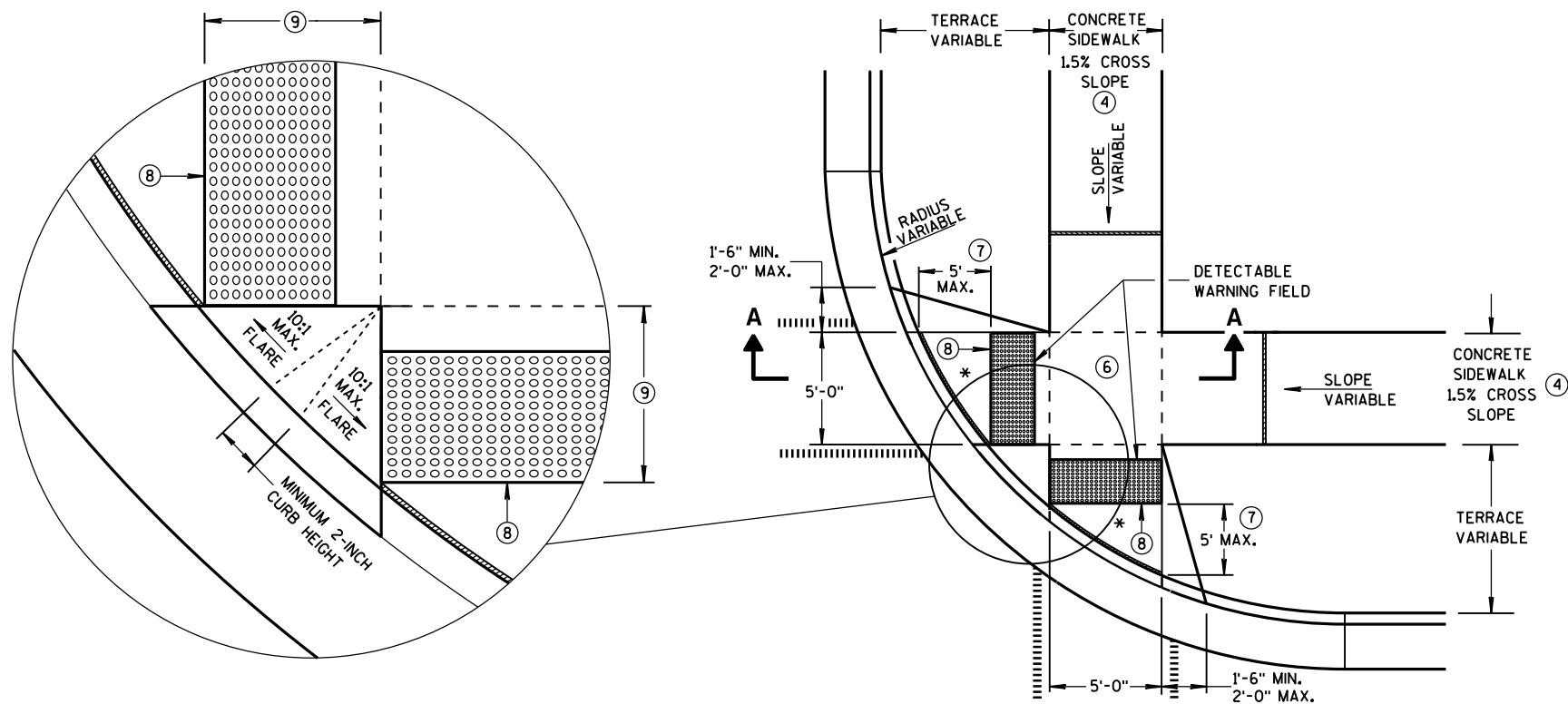
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

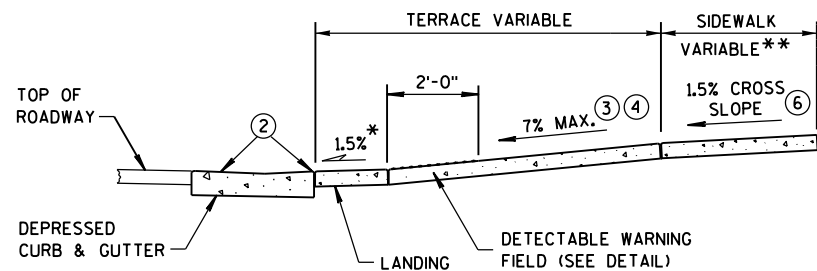
**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



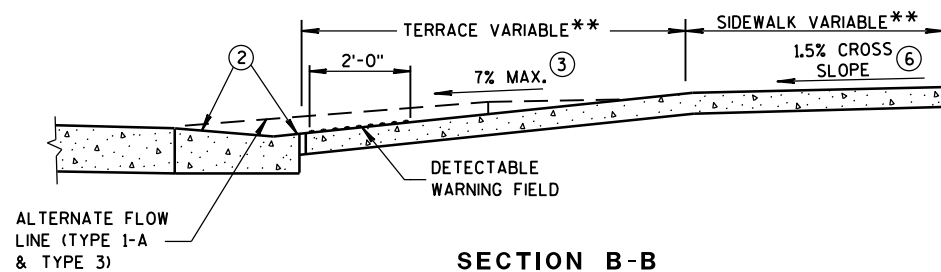
**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION B-B

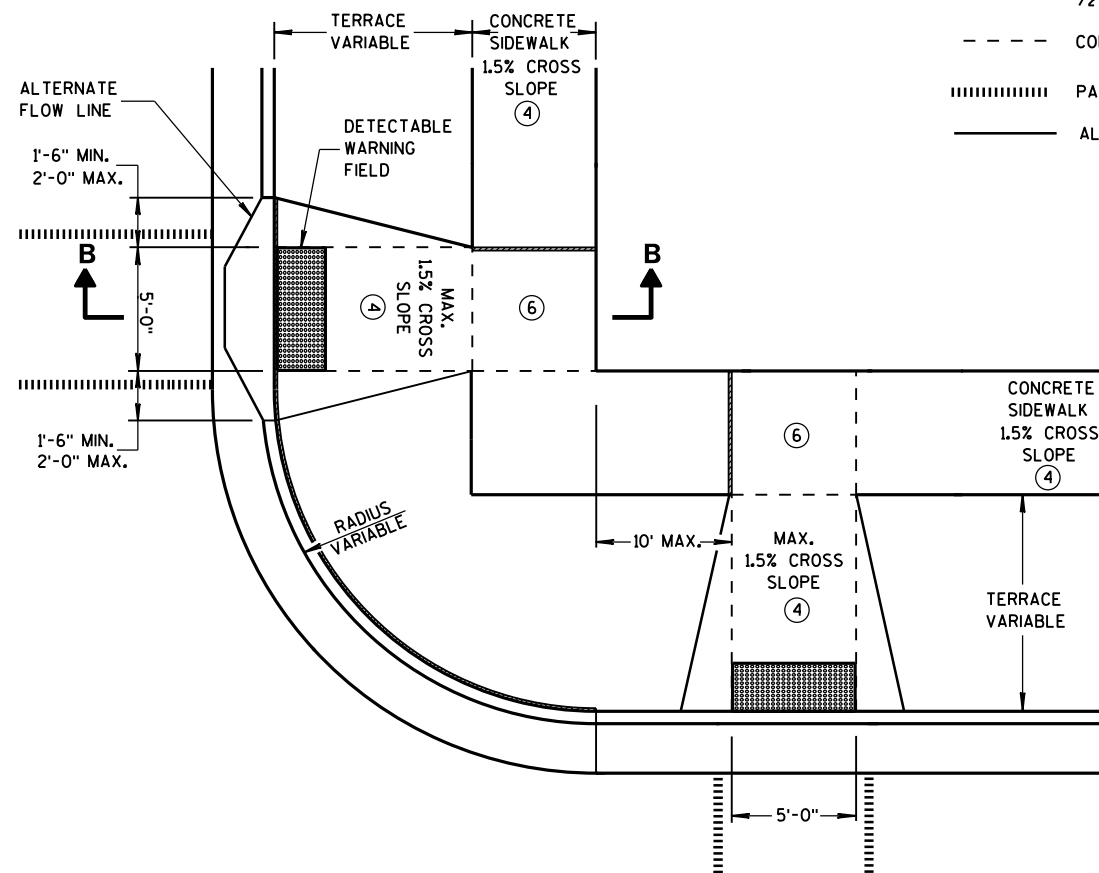
GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

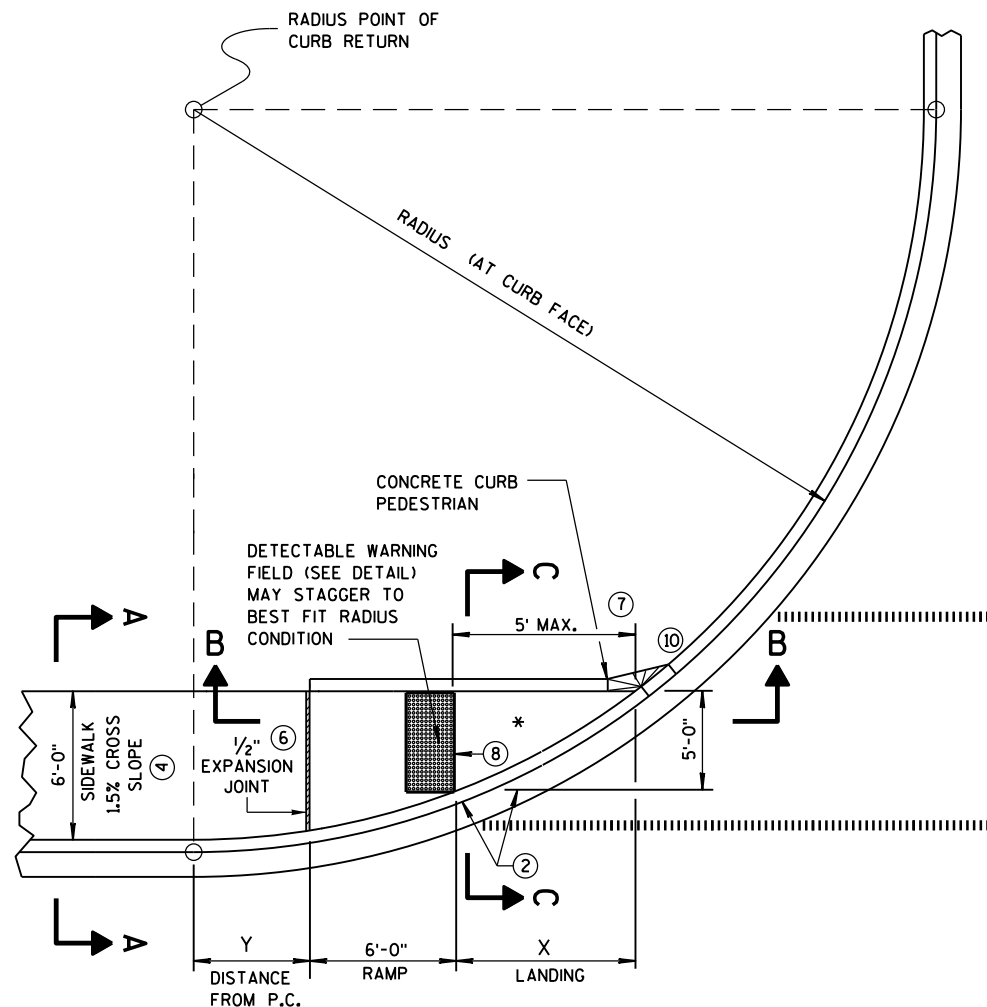
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



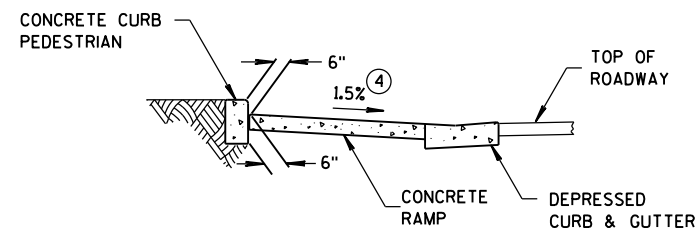
**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

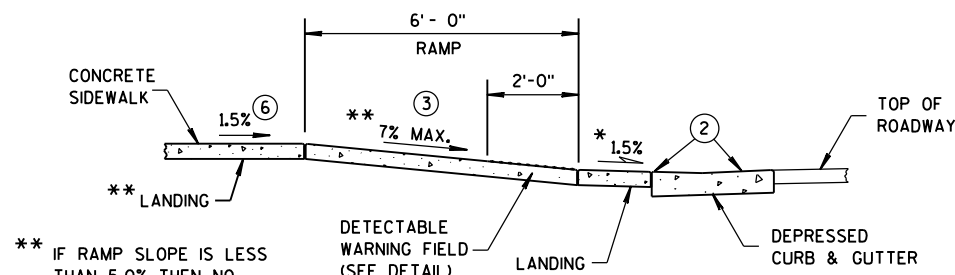
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A
PLAN VIEW



SECTION C-C FOR TYPE 4A



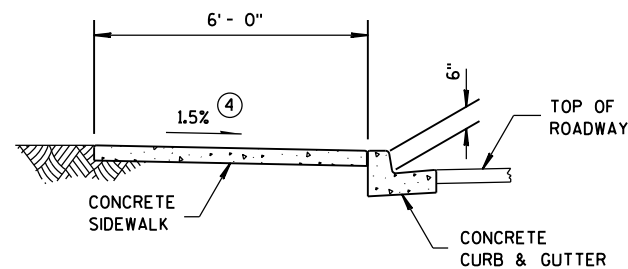
SECTION B-B FOR TYPE 4A

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

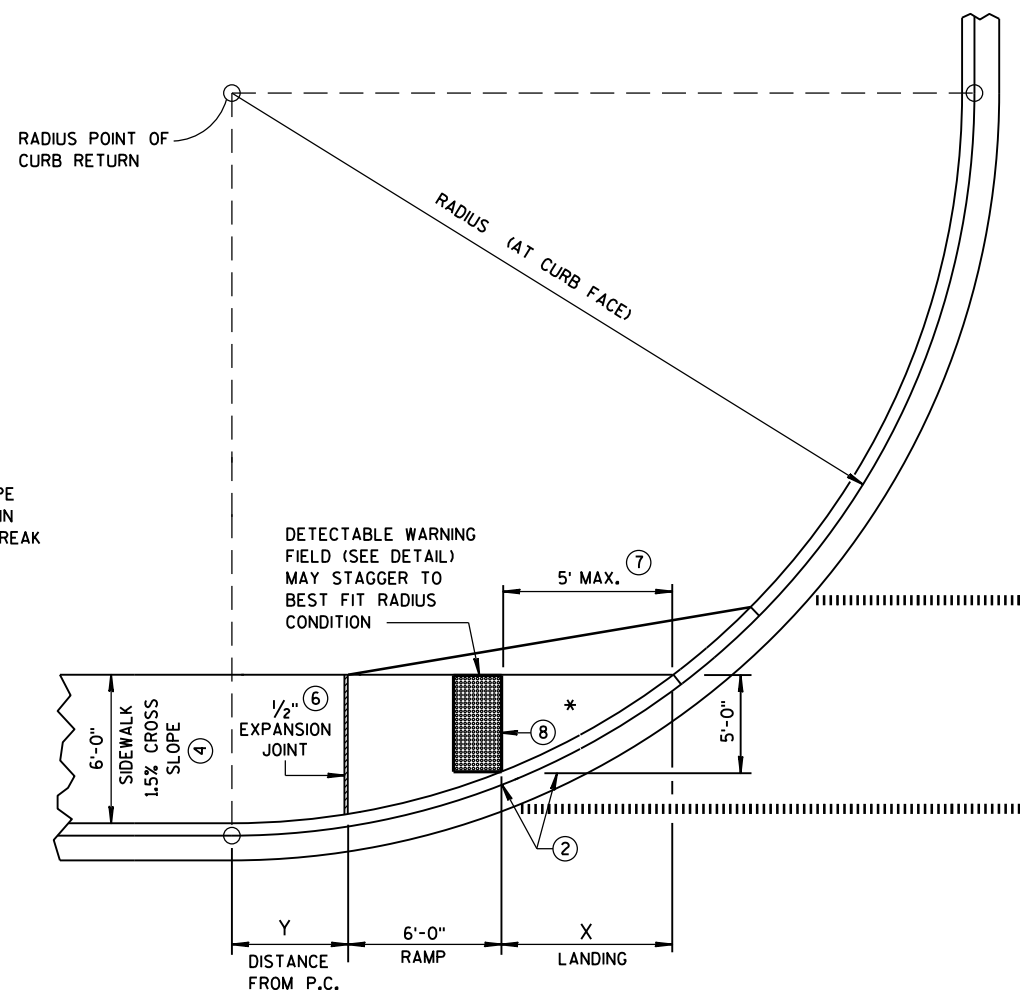
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2 3/4"	1'-7 1/2"
40 FEET	12'-1 1/4"	2'-10"
50 FEET	13'-8 3/4"	3'-10 3/4"
60 FEET	15'-2"	4'-10 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



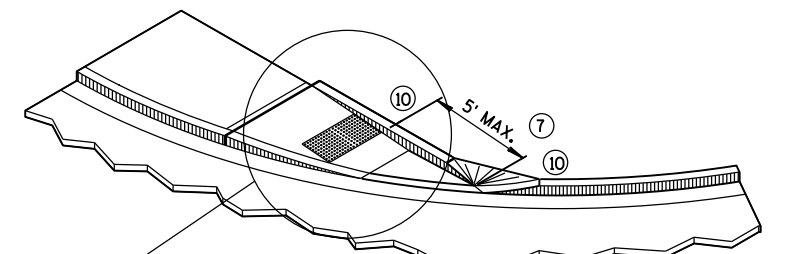
CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

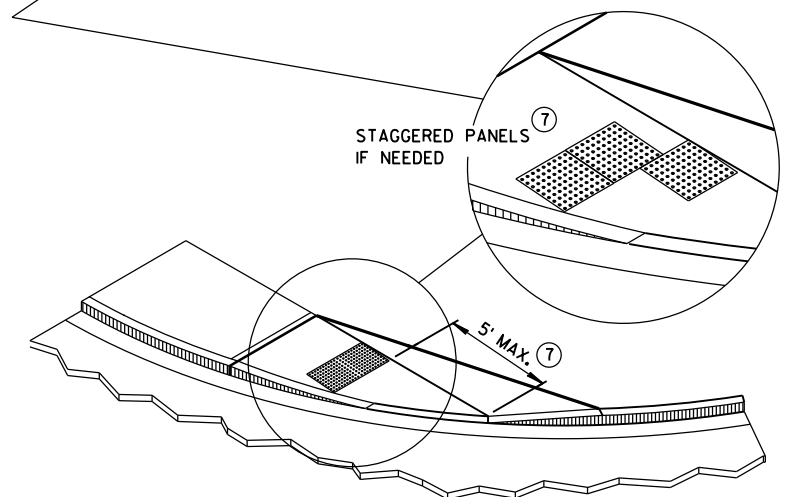
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



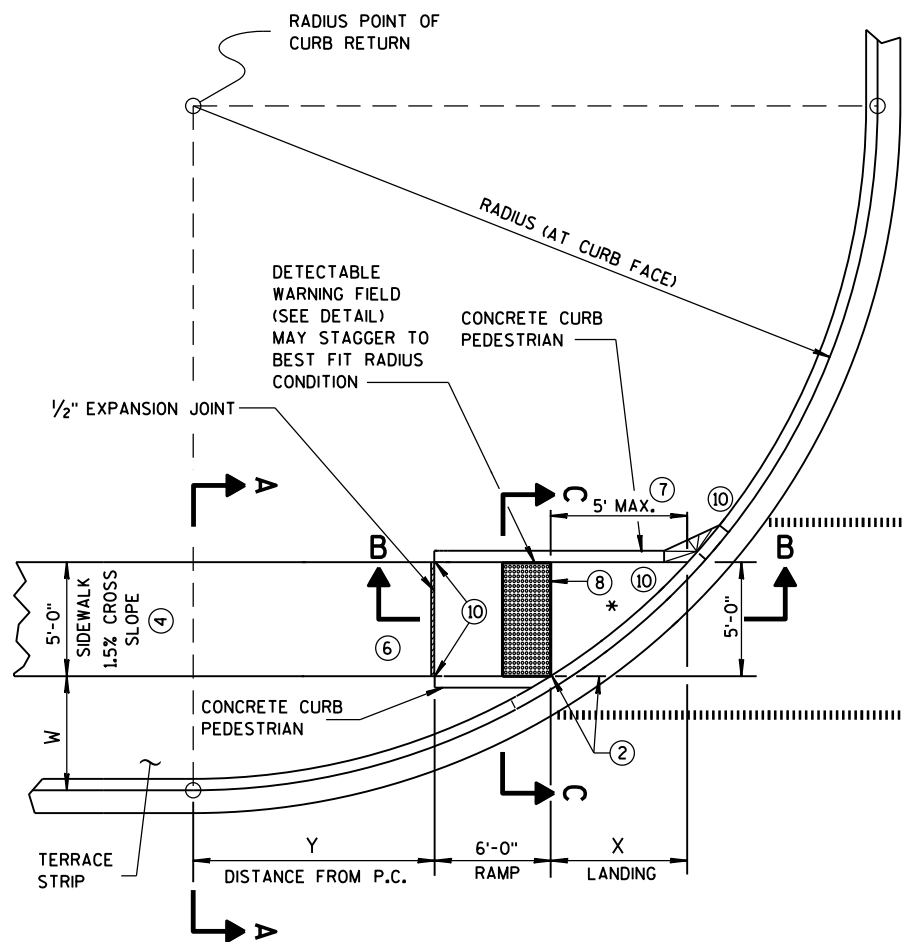
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

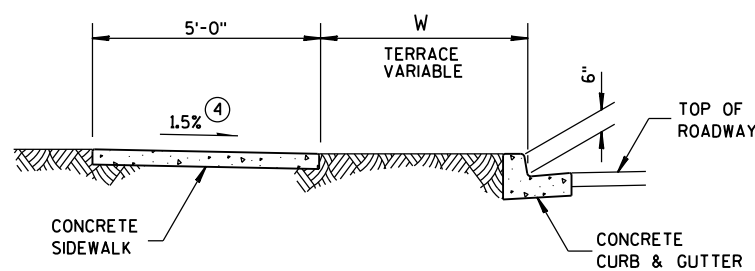
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

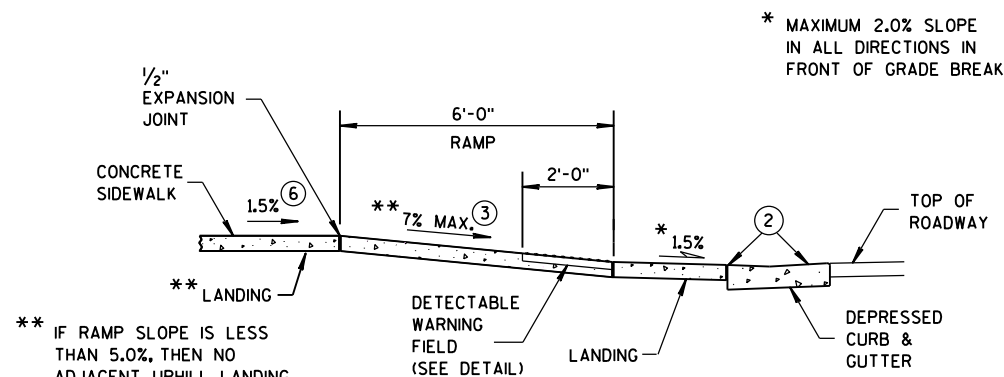
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4B
PLAN VIEW

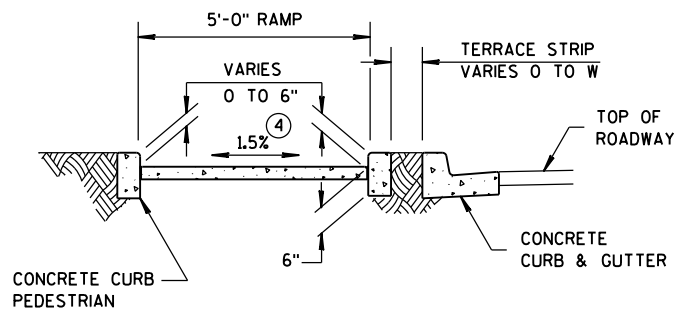


SECTION A-A FOR TYPE 4B

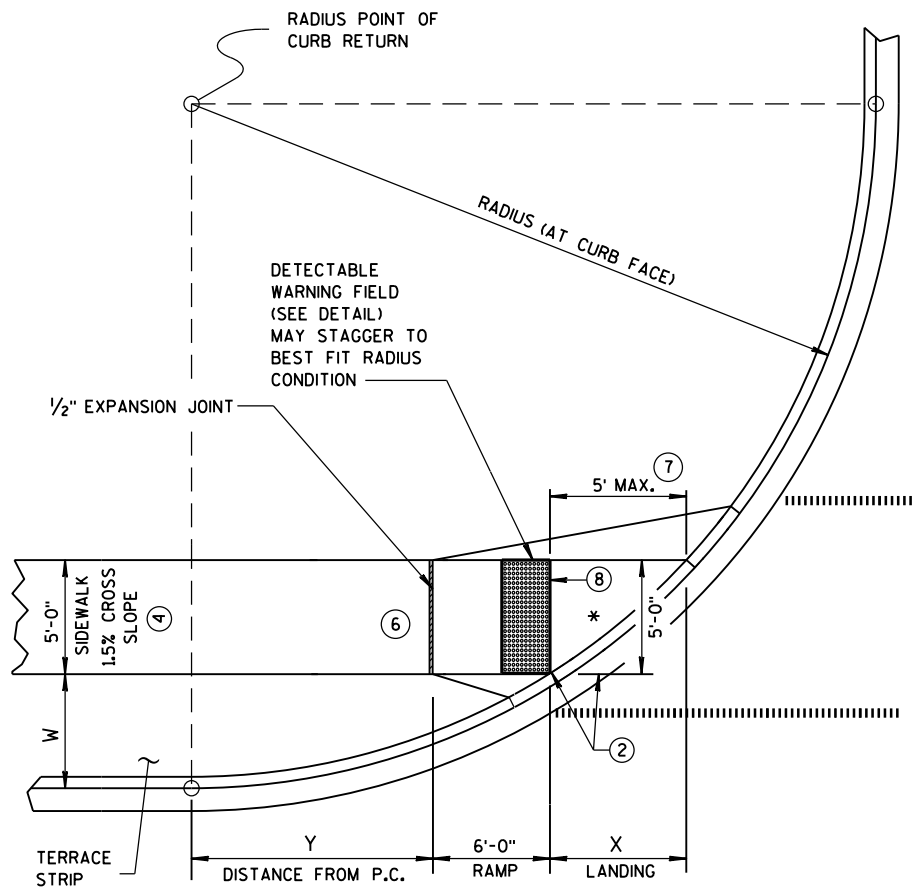


SECTION B-B FOR TYPE 4B

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

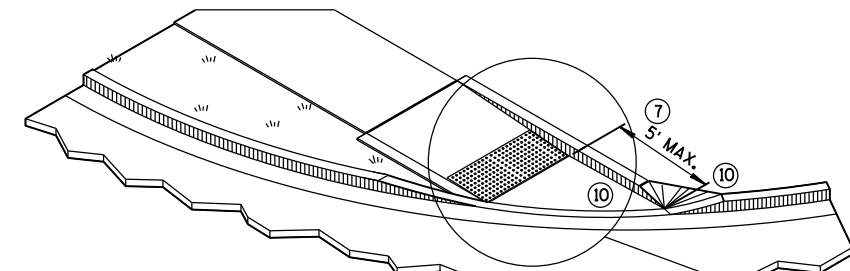


CURB RAMP TYPE 4B1
PLAN VIEW

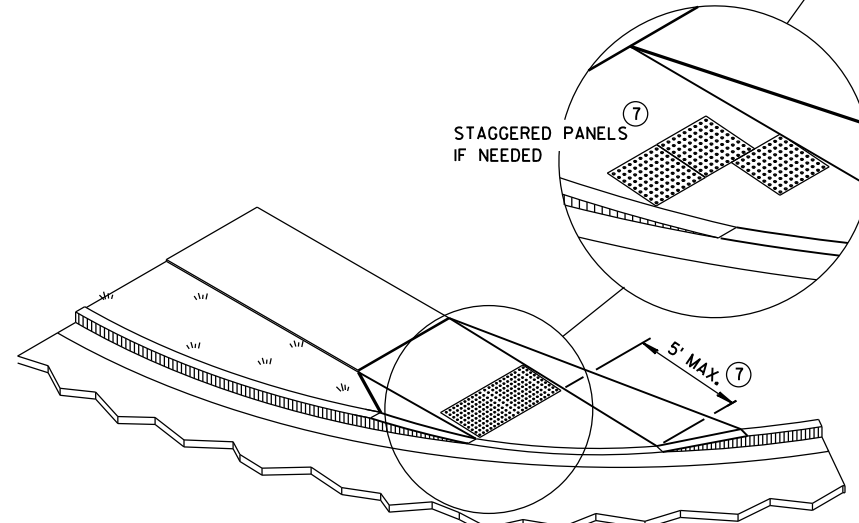
RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9 3/4"	3'-6 1/2"	4'-11 1/2"	5'-1 3/4"	4'-3 3/4"	6'-5 1/2"	3'-8 3/4"	7'-6 3/4"	3'-3"	8'-6 1/4"
30 FEET	7'-9 1/4"	5'-10 1/2"	6'-9 1/2"	7'-11 1/4"	6'-0 1/4"	9'-8"	5'-5"	11'-1 3/4"	4'-10 3/4"	12'-5 3/4"
40 FEET	9'-4"	7'-10"	8'-2 3/4"	10'-3"	7'-4 3/4"	12'-3 3/4"	6'-8 1/2"	14'-1 1/4"	6'-1 3/4"	15'-8 1/2"
50 FEET	10'-8"	9'-6 1/2"	9'-5 1/2"	12'-3 1/4"	8'-6 1/2"	14'-7 1/2"	7'-9 3/4"	16'-8 1/4"	7'-2 1/2"	18'-6 1/4"
60 FEET	11'-10 1/4"	11'-0 3/4"	10'-6 1/2"	14'-1 1/4"	9'-6 1/2"	16'-8 1/2"	8'-9 1/4"	18'-11 3/4"	8'-1 1/2"	21'-0 1/2"

GENERAL NOTES

- INTERMEDIATE RADII CAN BE INTERPOLATED
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



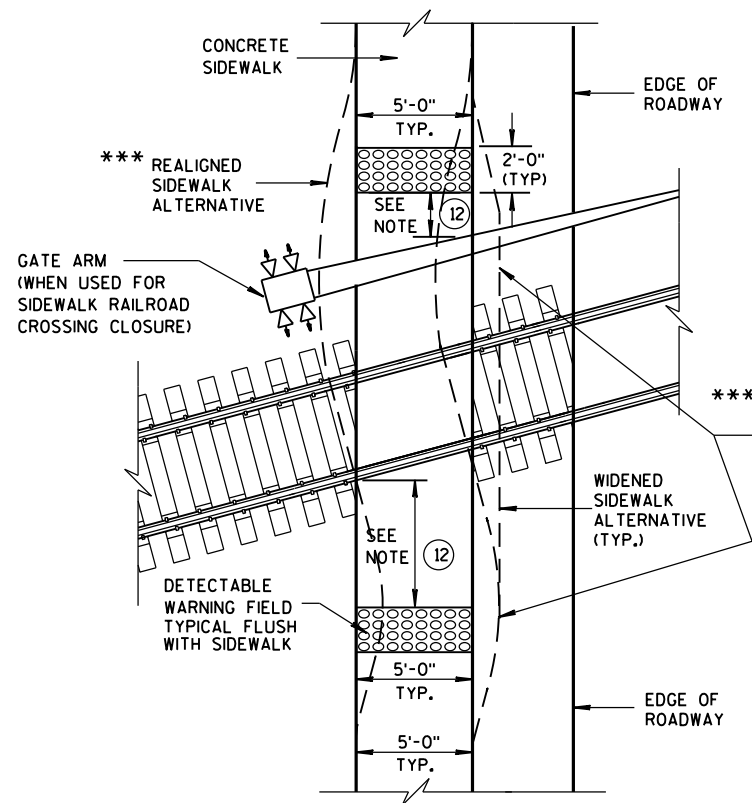
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

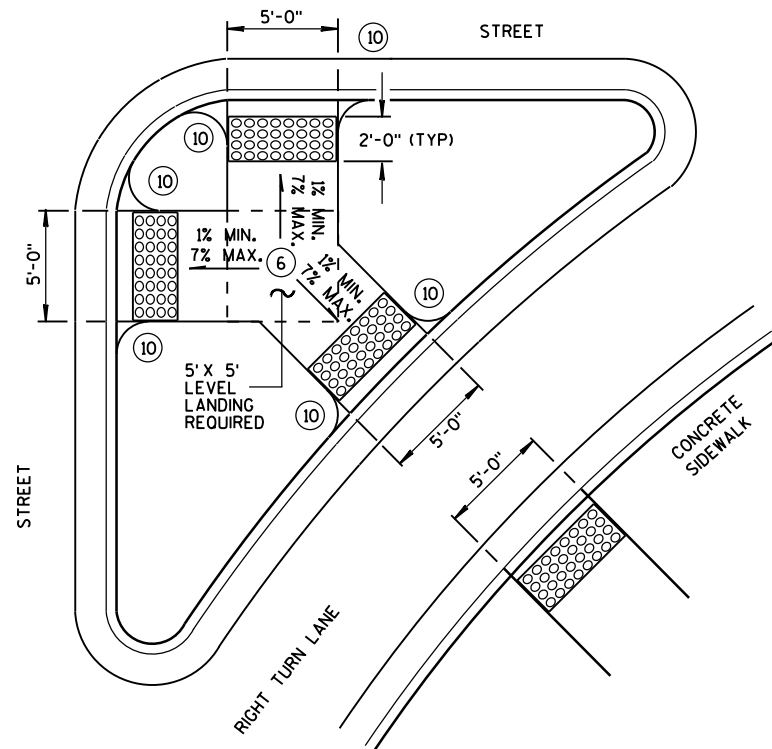
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

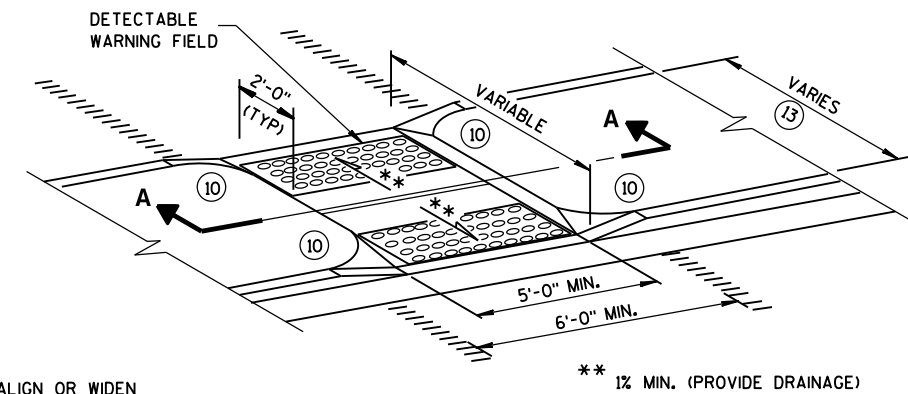


TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING

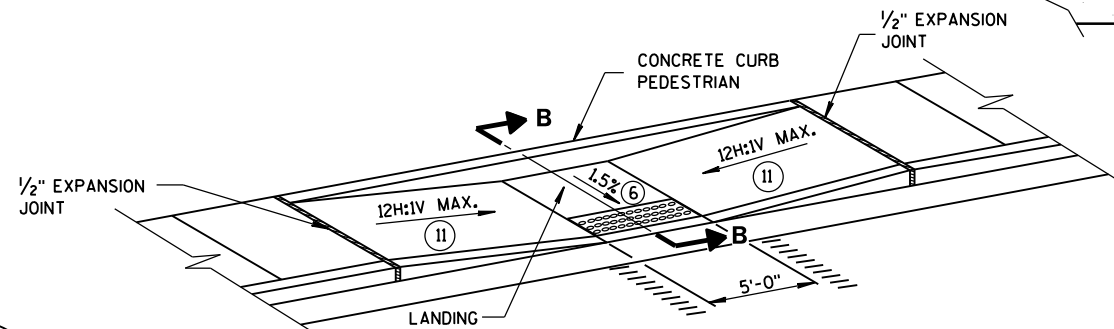
REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS



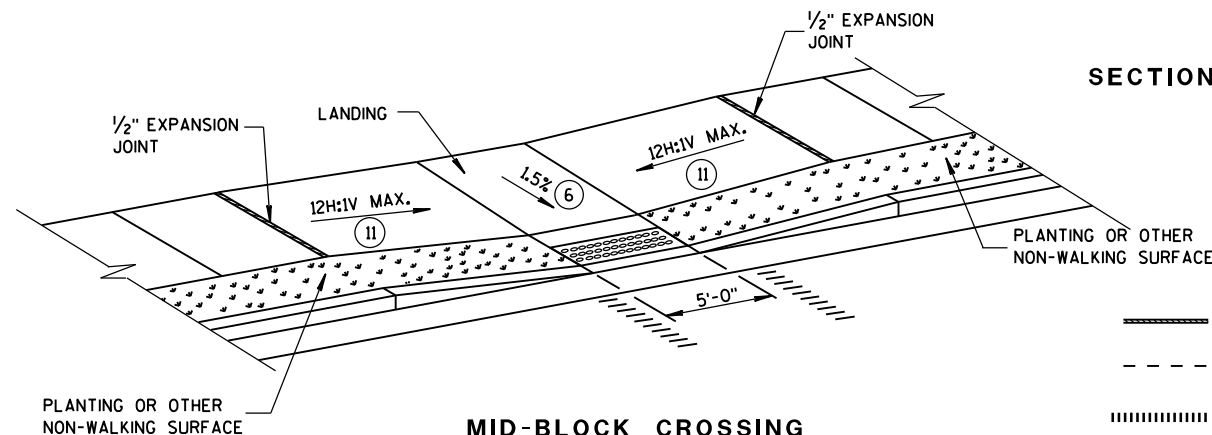
TYPE 6
DETECTABLE WARNING AT ISLANDS



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A

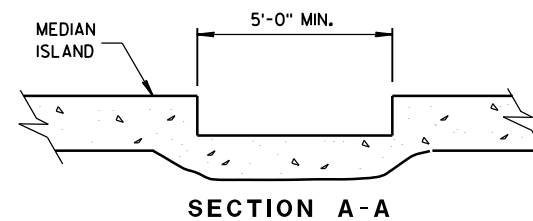


MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

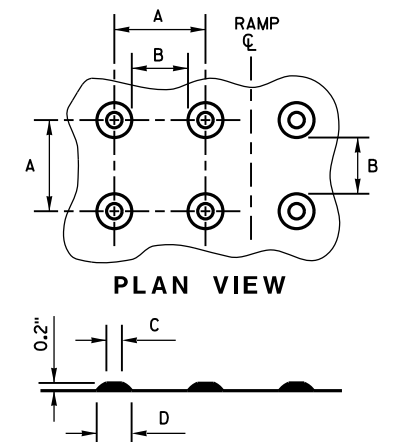
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



SECTION A-A

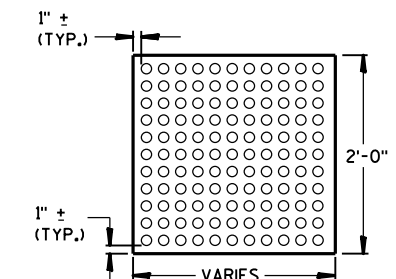
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



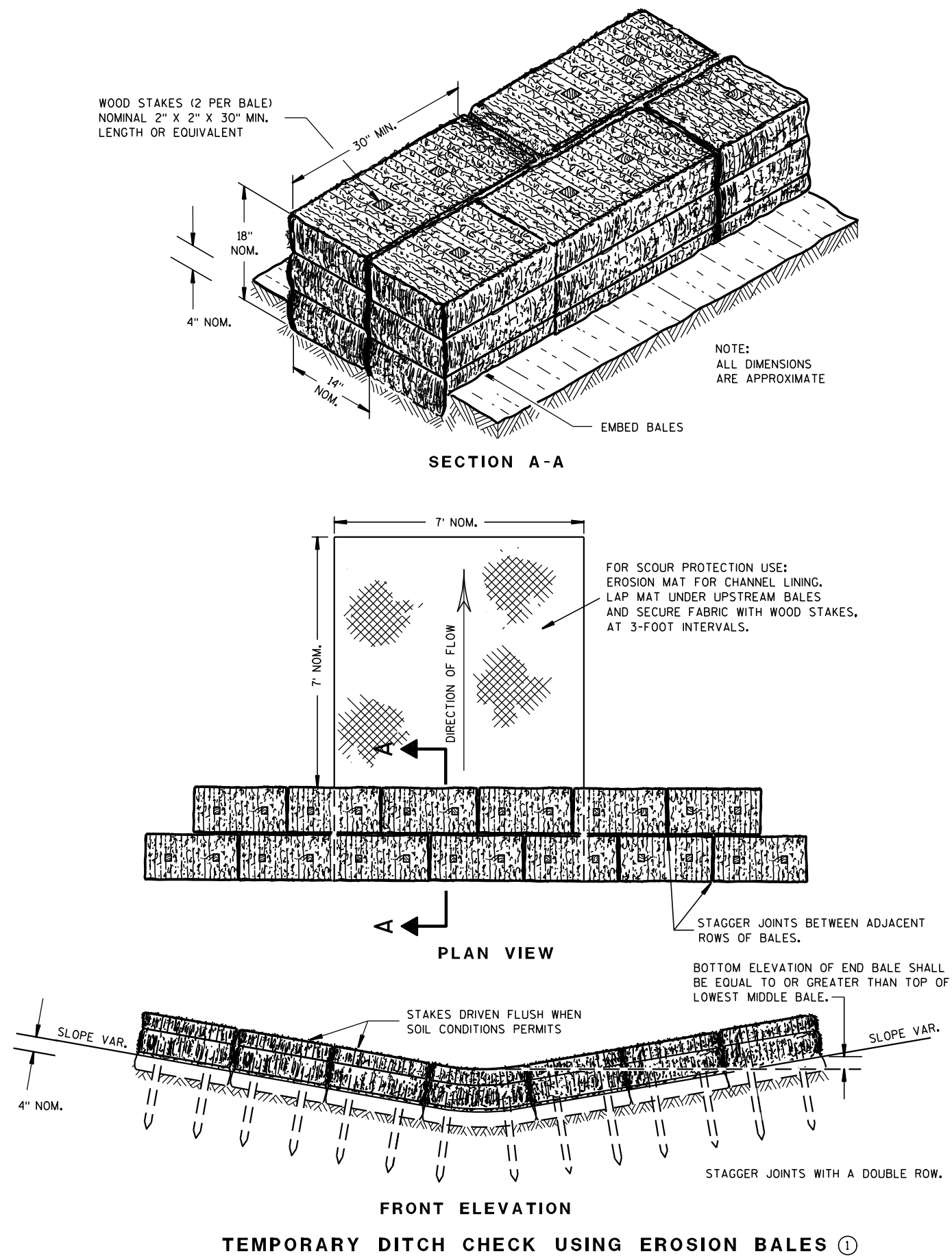
PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

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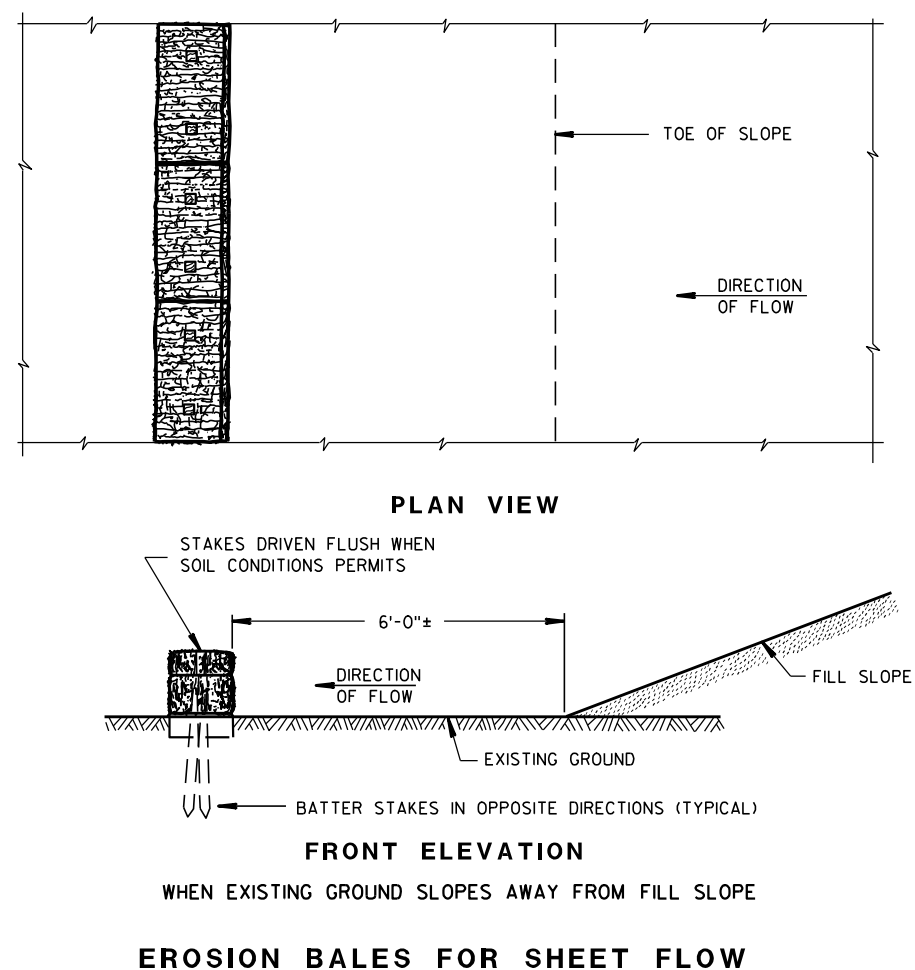
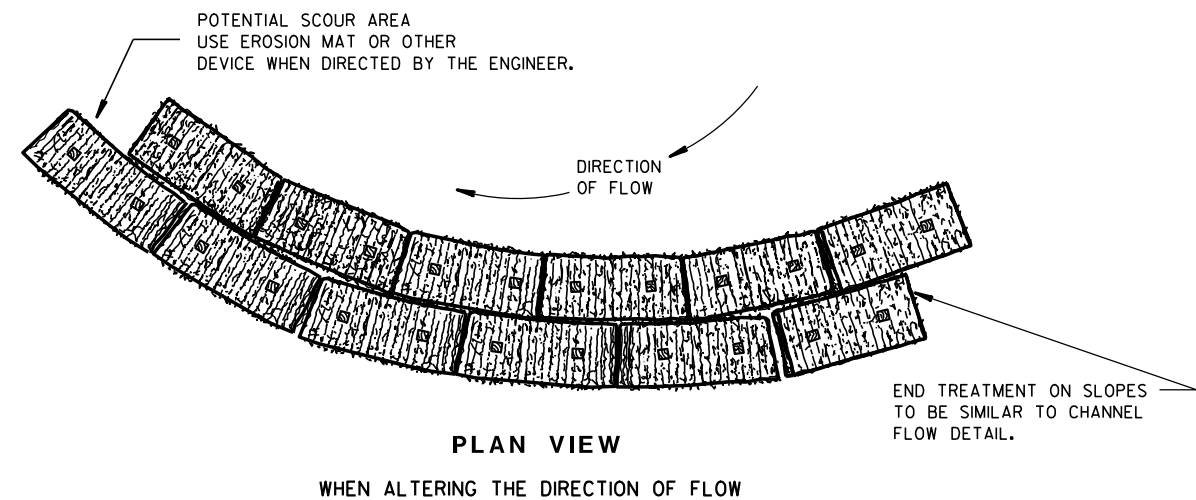
APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS 81 ENT
FHWA UNIT SUPERV



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.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

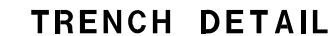
APPROVED

6/04/02
DATE/S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER 82 ENGINEER

FHWA



- 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 1 1/8" X 1 1/8" 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.

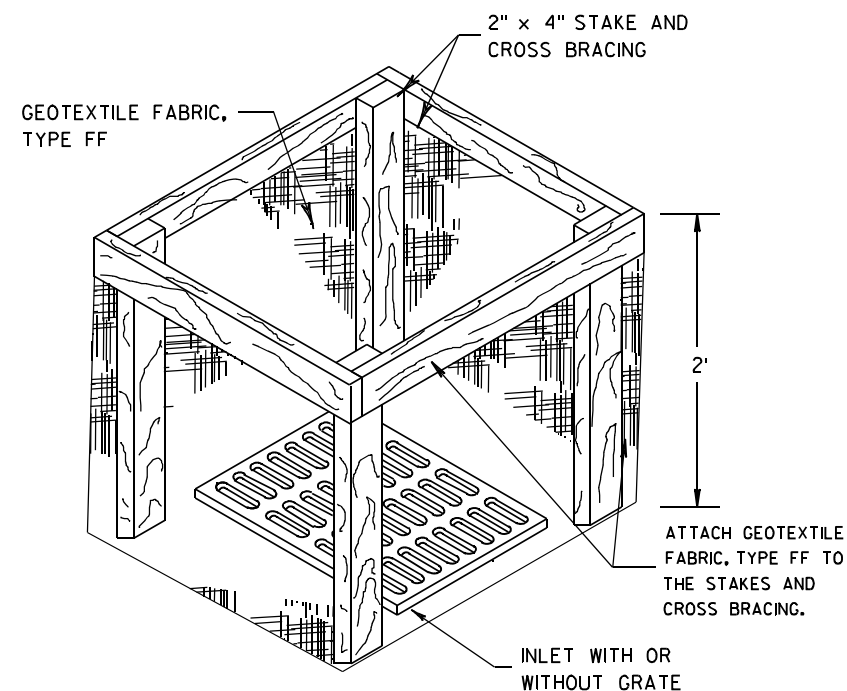
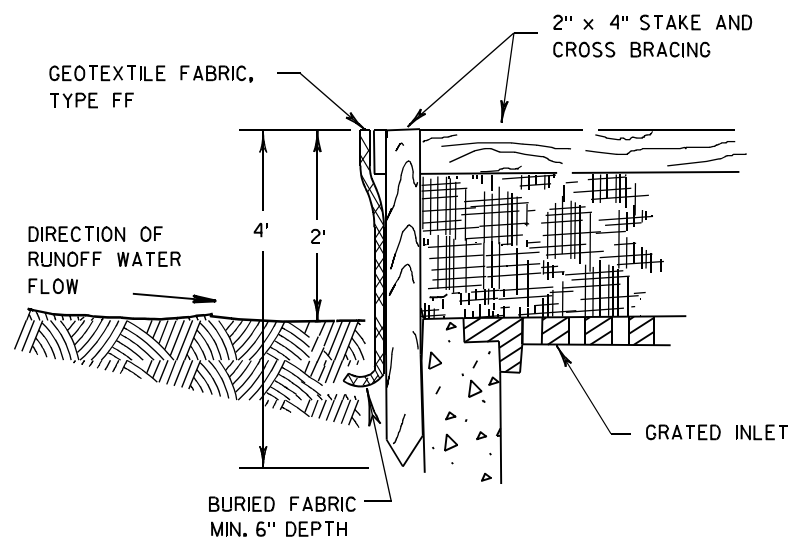


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE /S/ Beth Cannata
CHIEF ROADWAY DEVELOPMENT **83** INCHES

FHWA



INLET PROTECTION, TYPE A

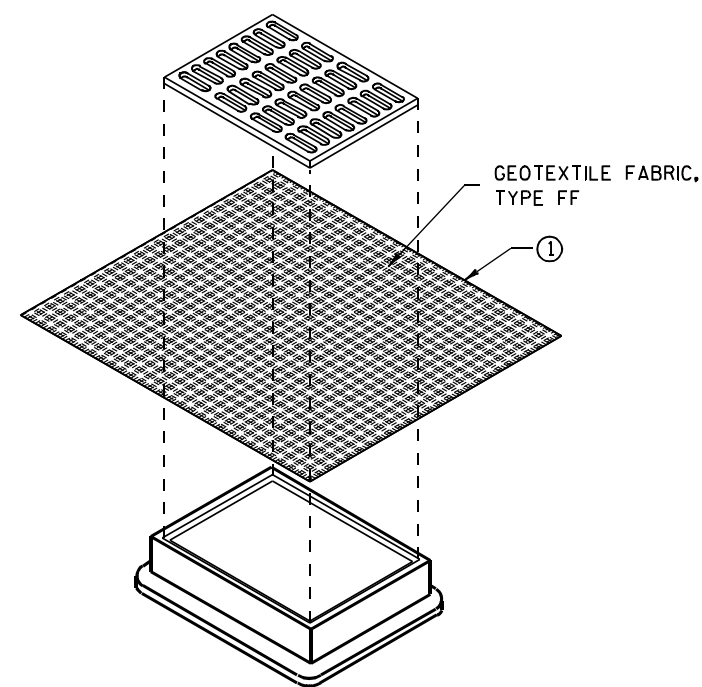
GENERAL NOTES

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.

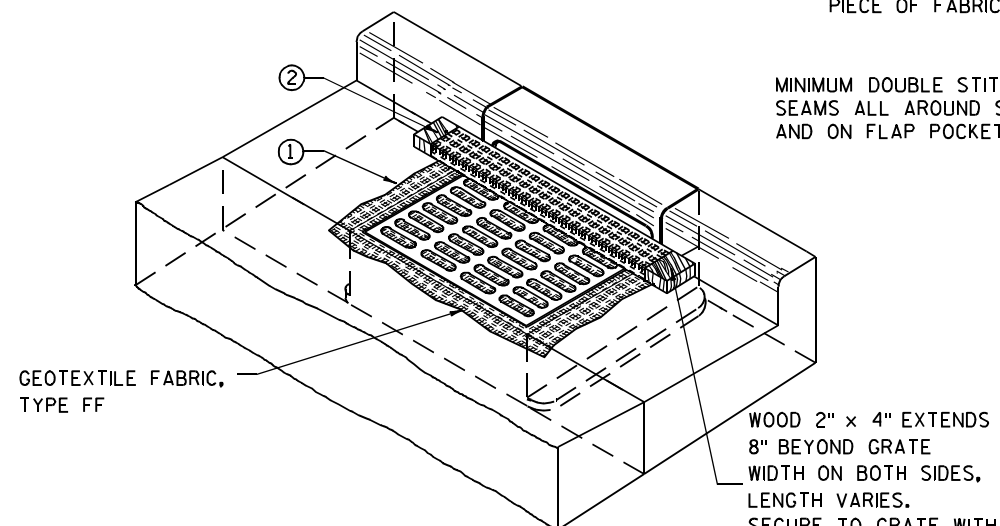
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

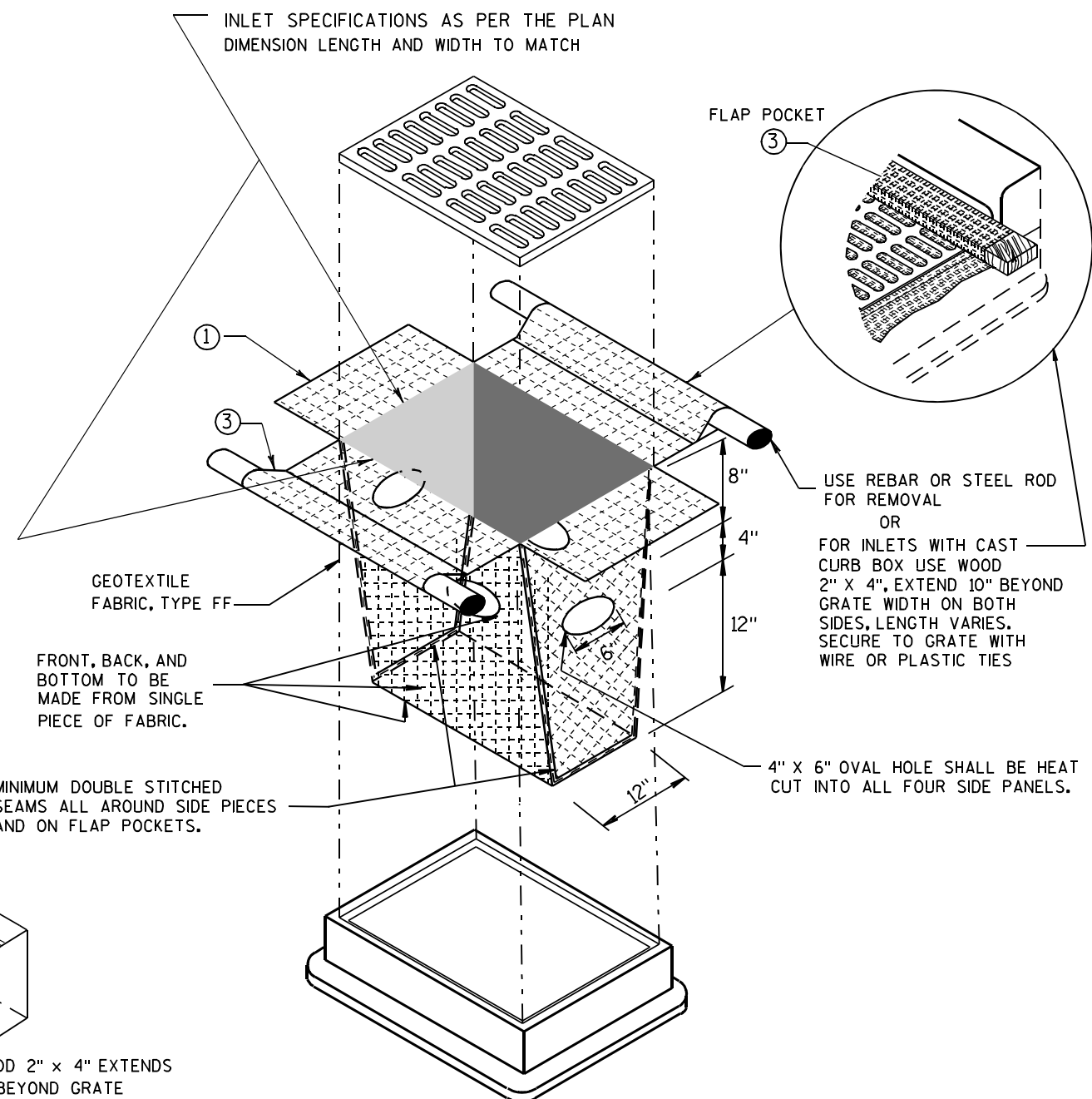
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



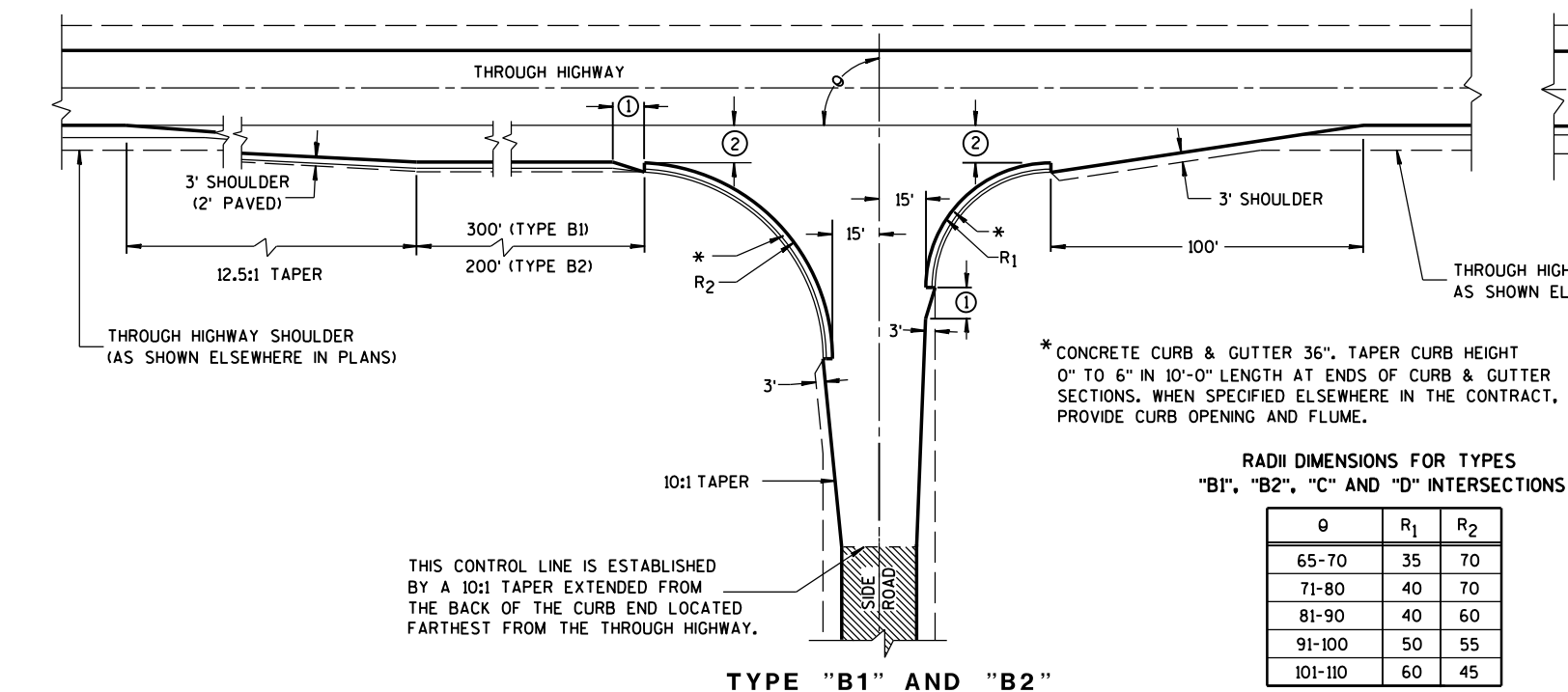
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 84
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

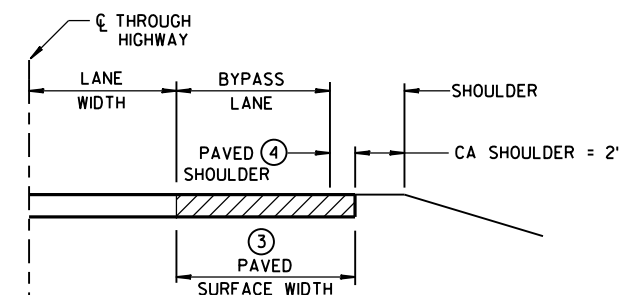
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

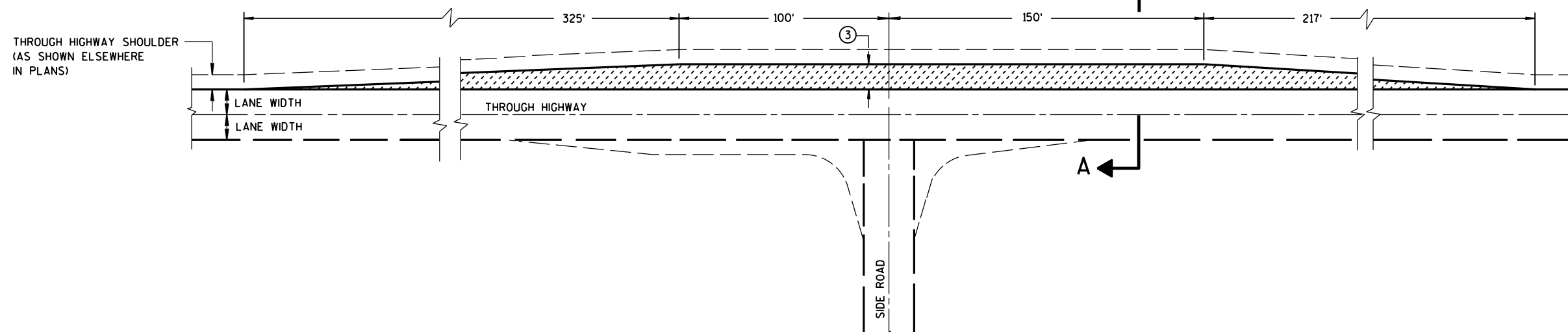
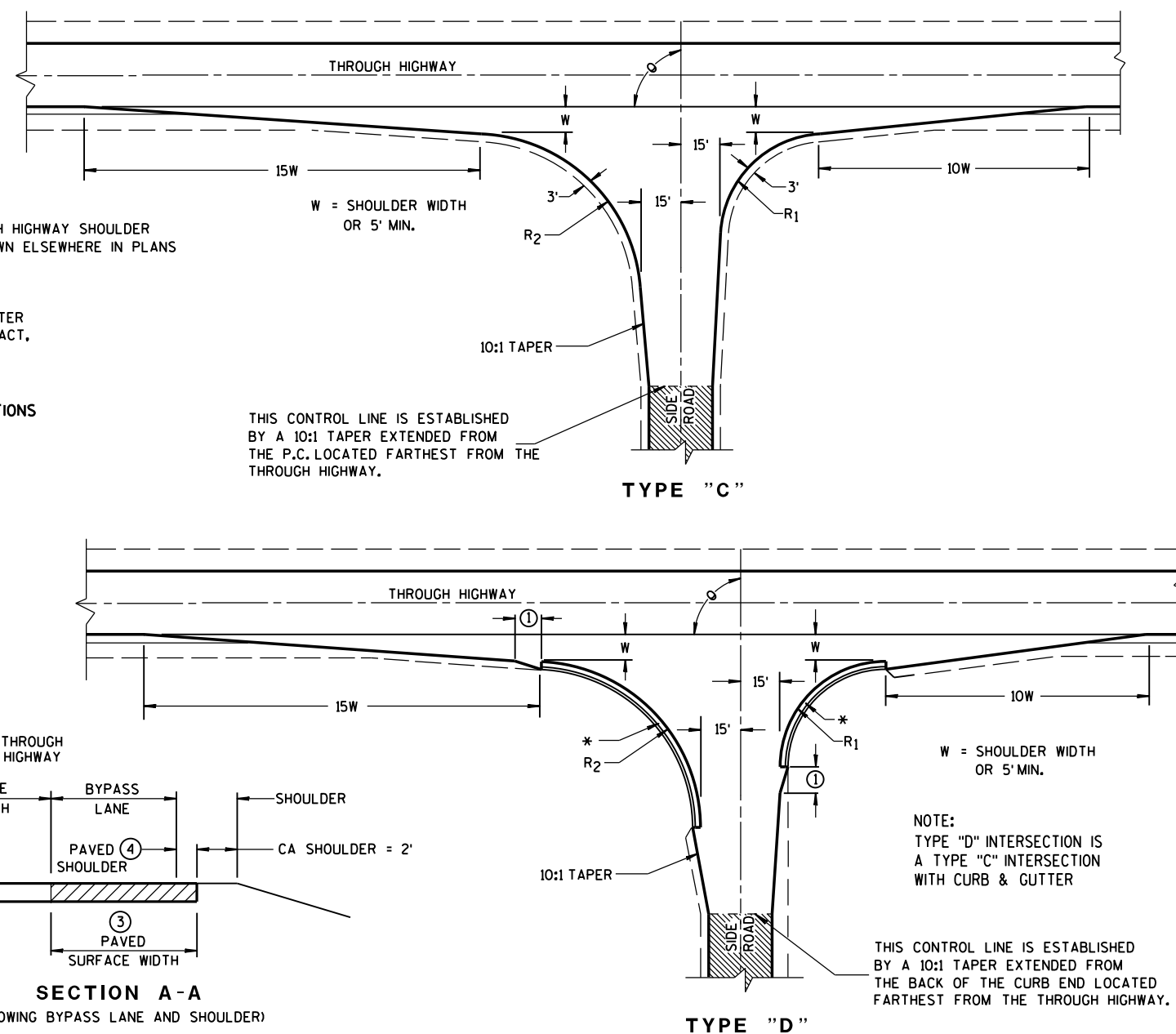
EXISTING PAVED SURFACE

BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.
- **10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



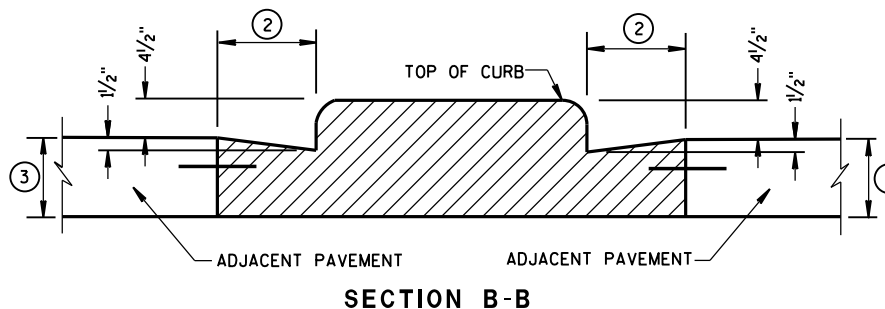
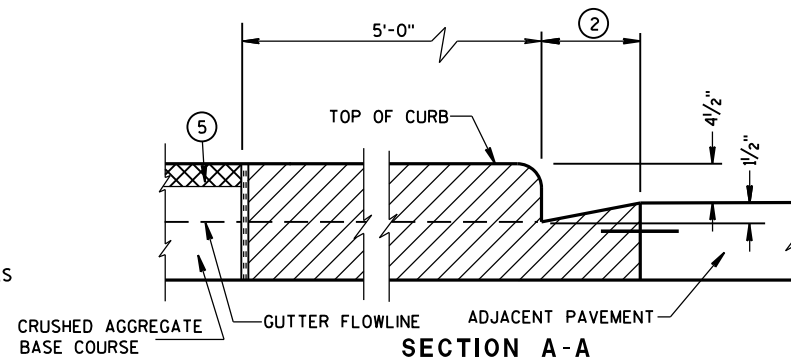
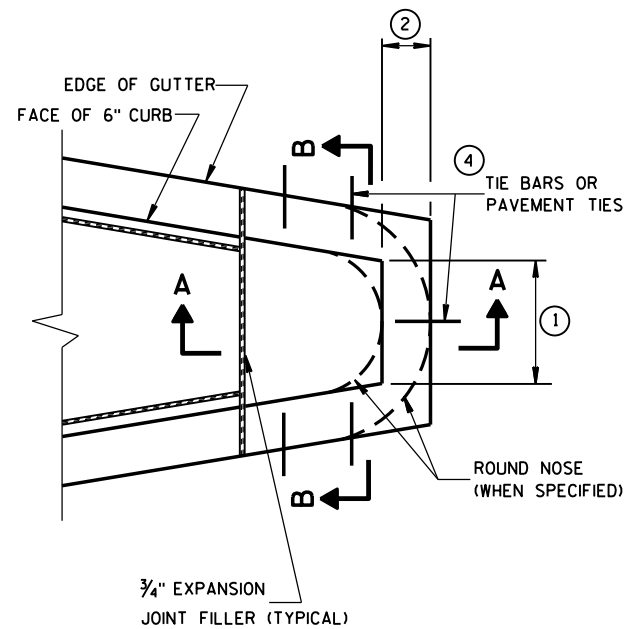
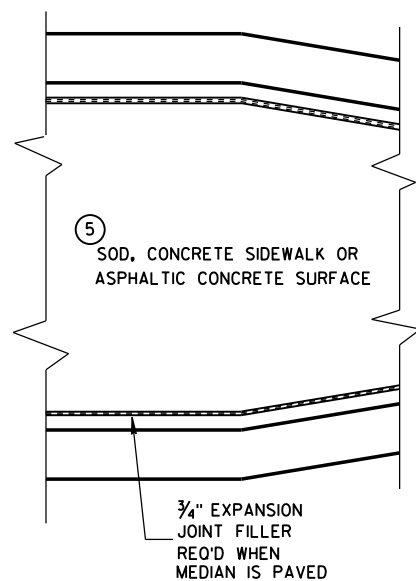
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



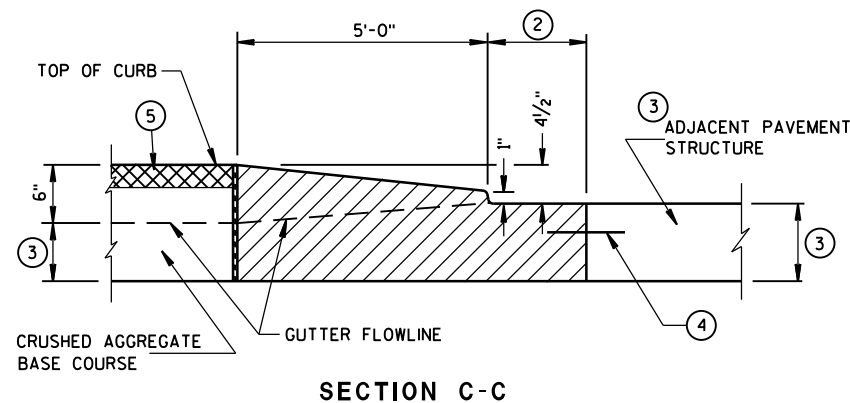
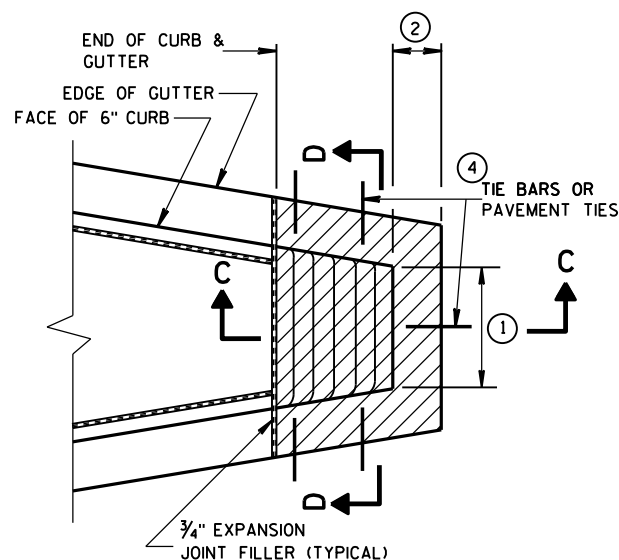
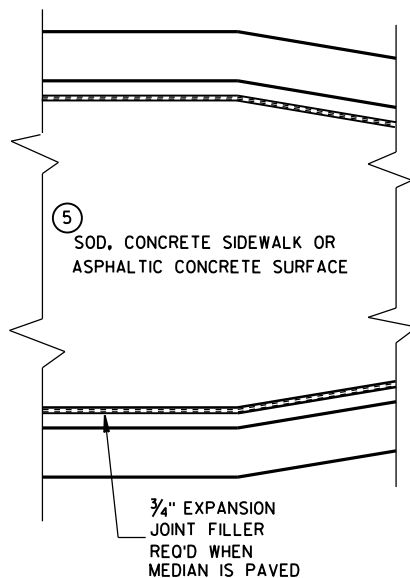
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

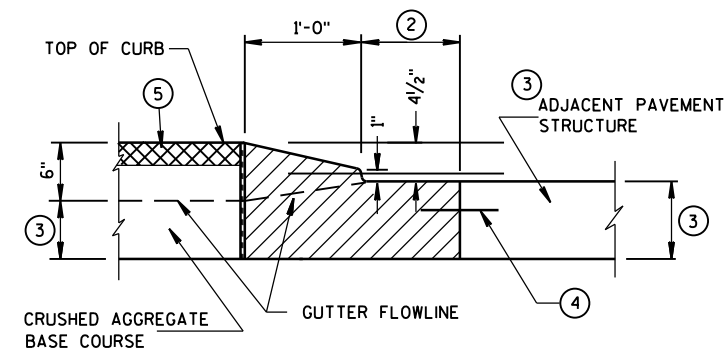
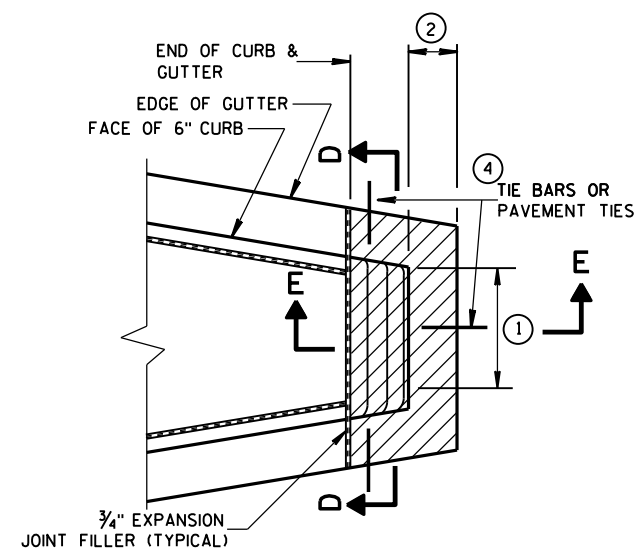
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



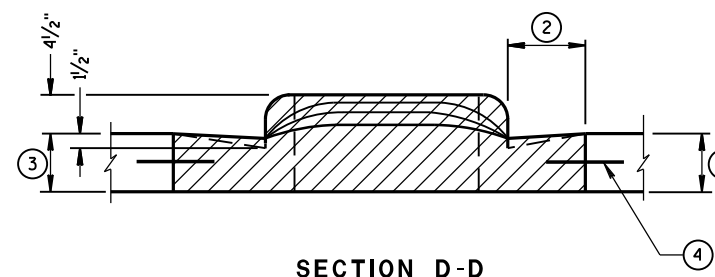
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



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 NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

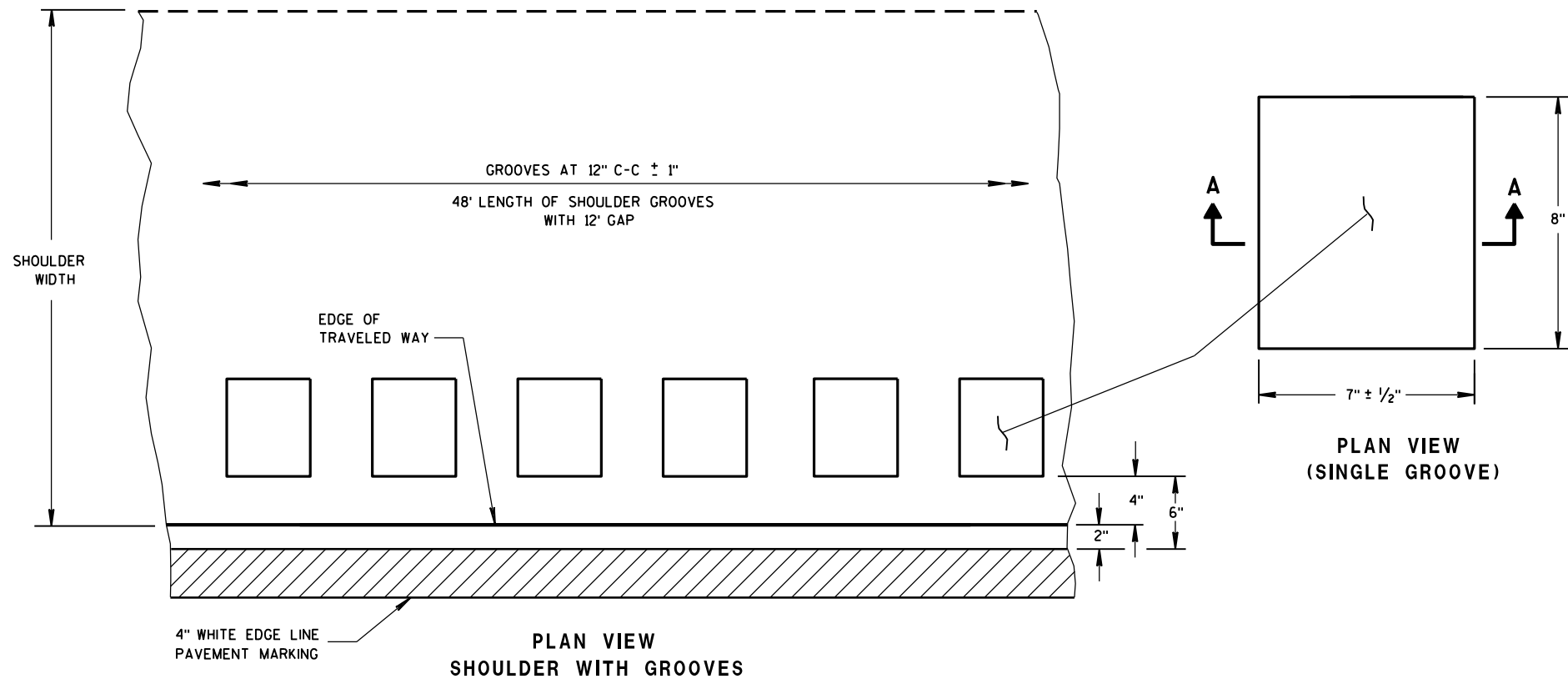
6/8/2006

DATE

FHWA

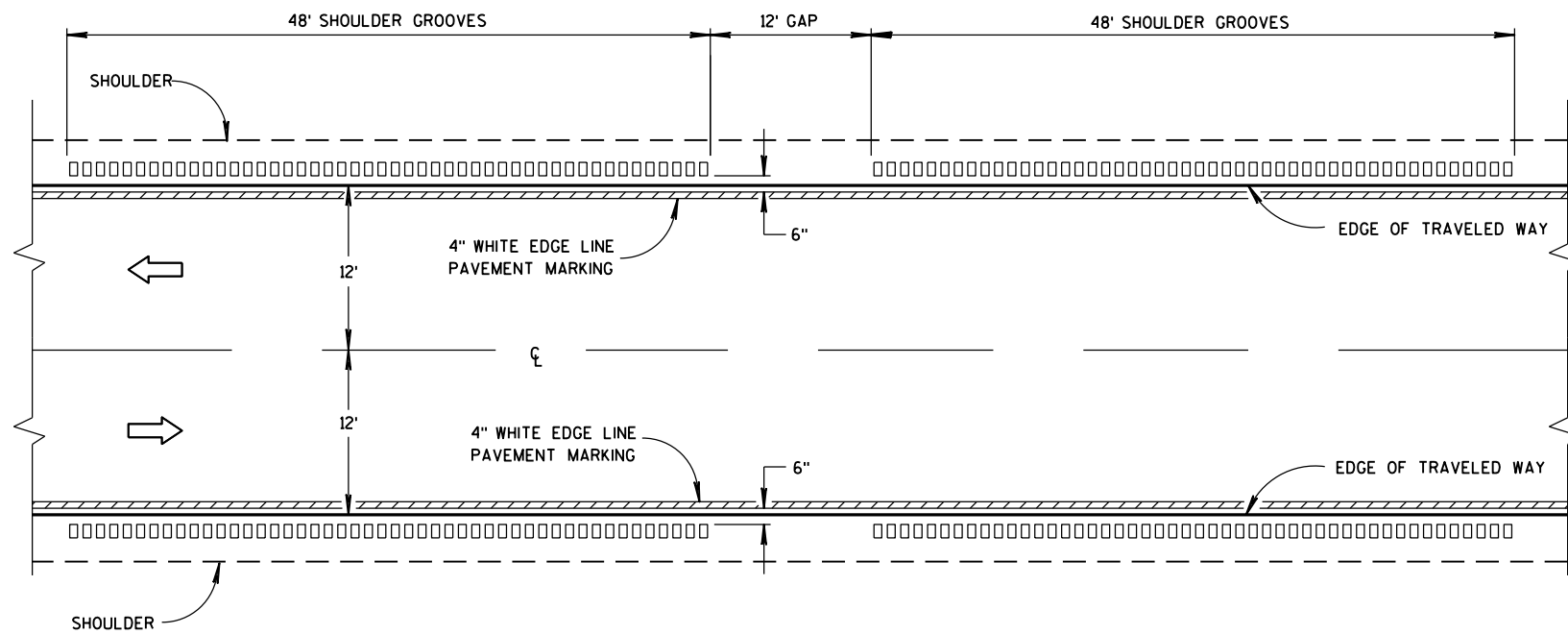
/S/ Jerry H. Zoag
ROADWAY STANDARDS ENGINEER

4T



6

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



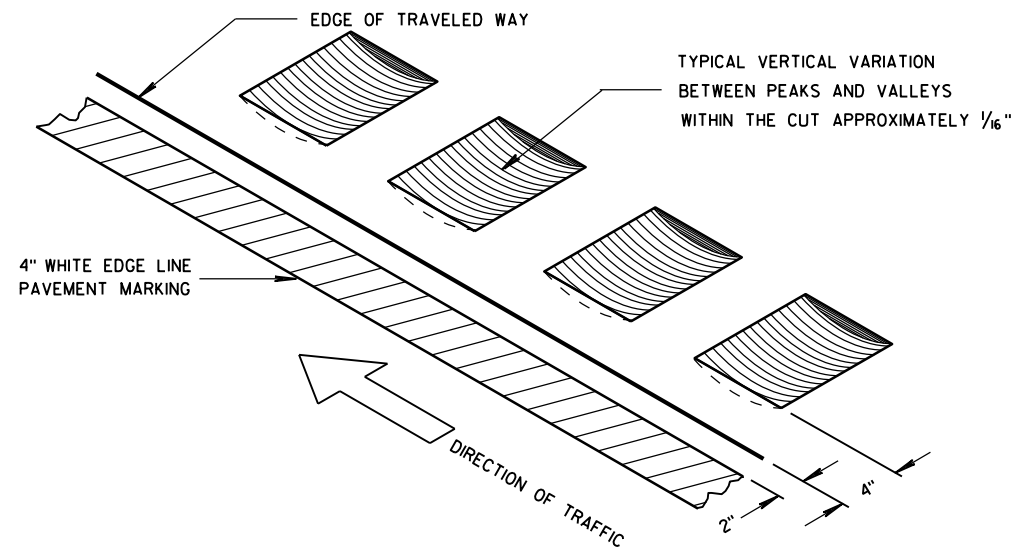
TYPE 1
2-LANE SHOULDER RUMBLE STRIP

GENERAL NOTES

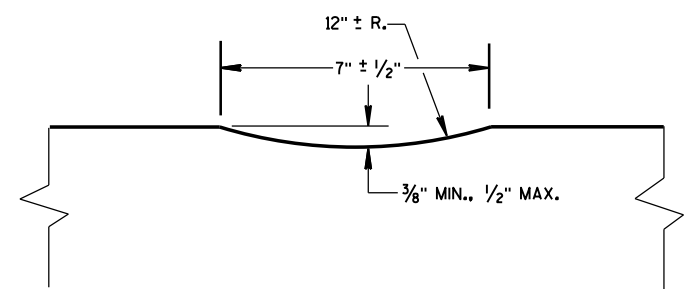
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



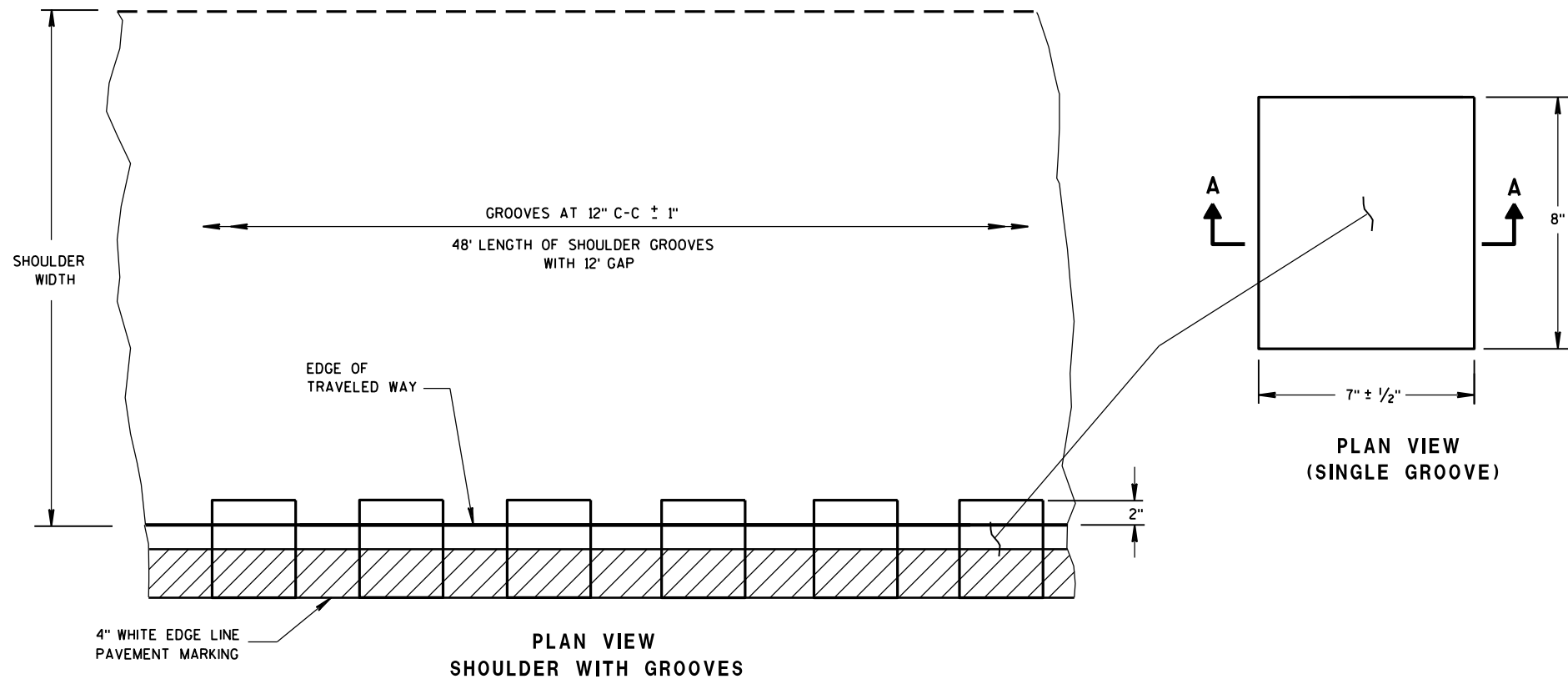
ISOMETRIC



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

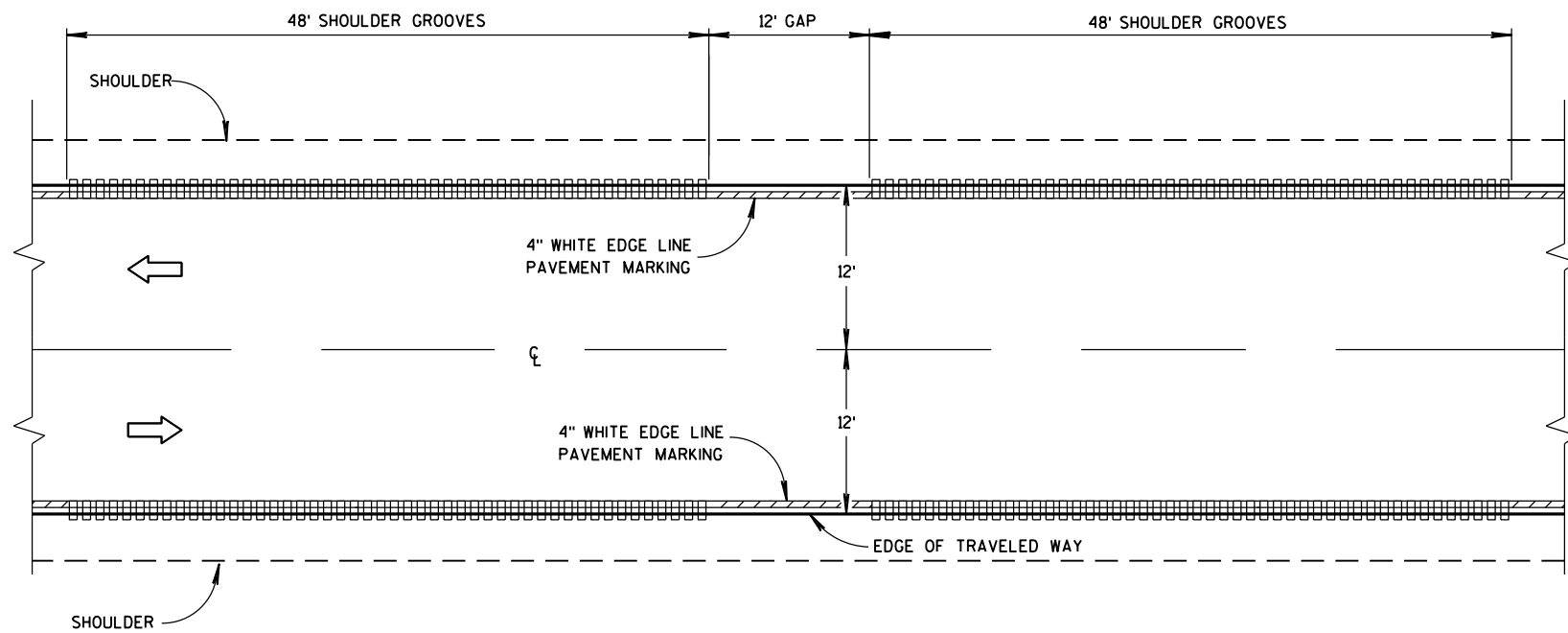
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

6
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

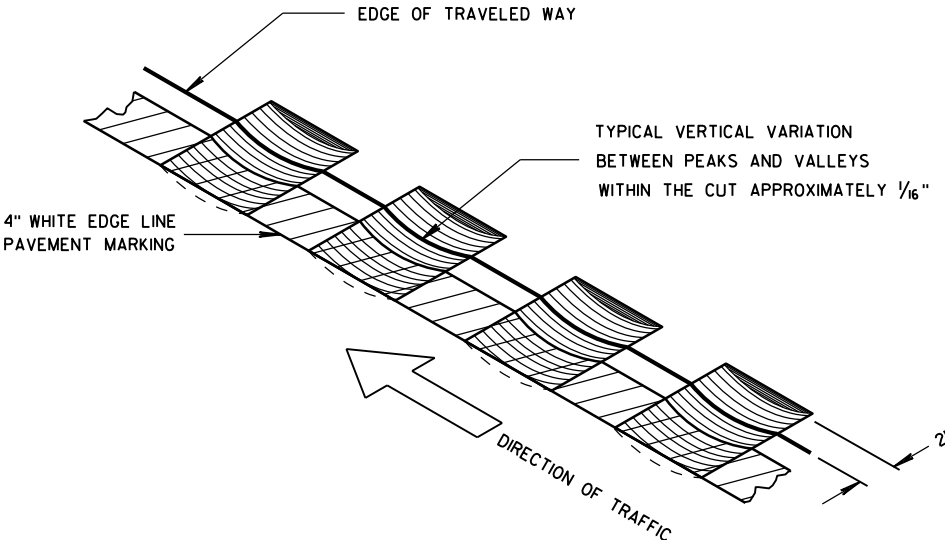


TYPE 2
2-LANE SHOULDER RUMBLE STRIP

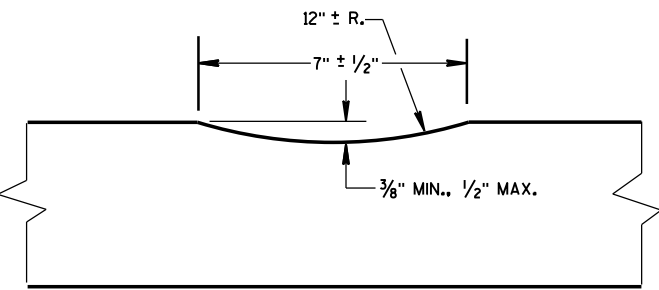
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



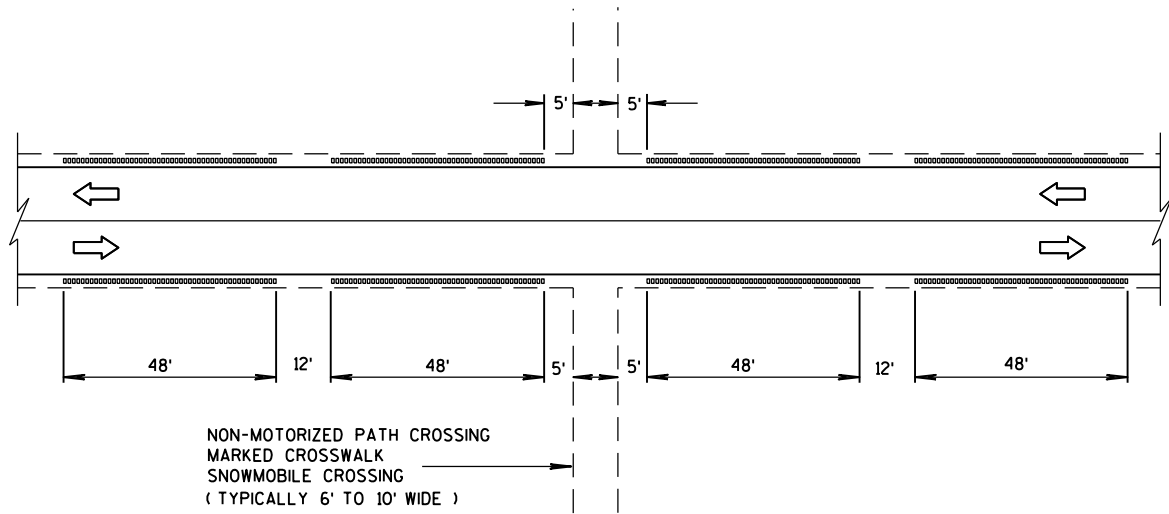
ISOMETRIC



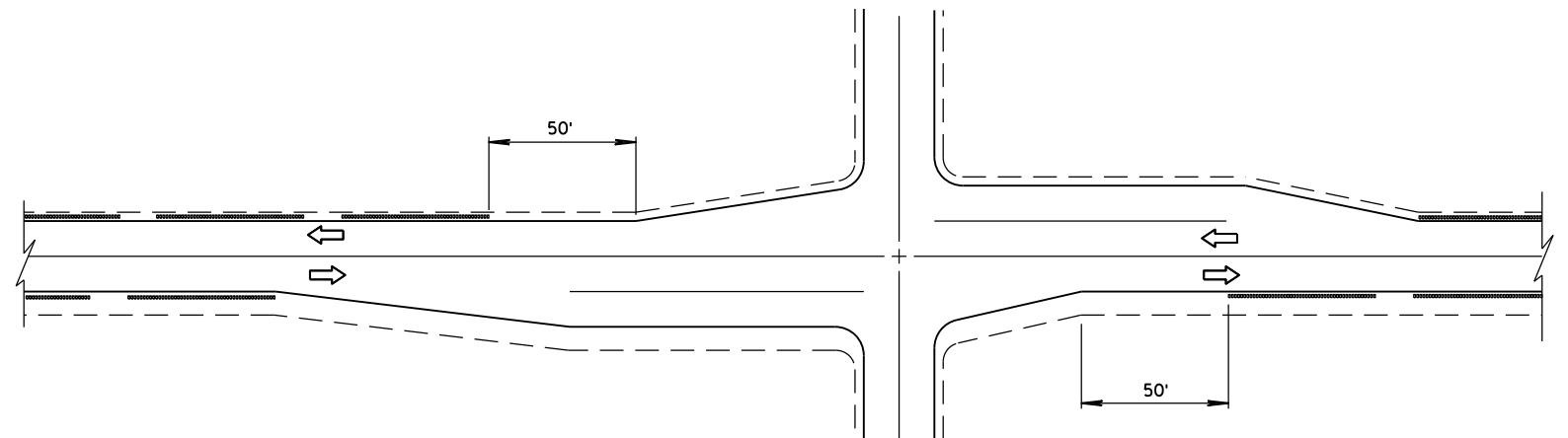
SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

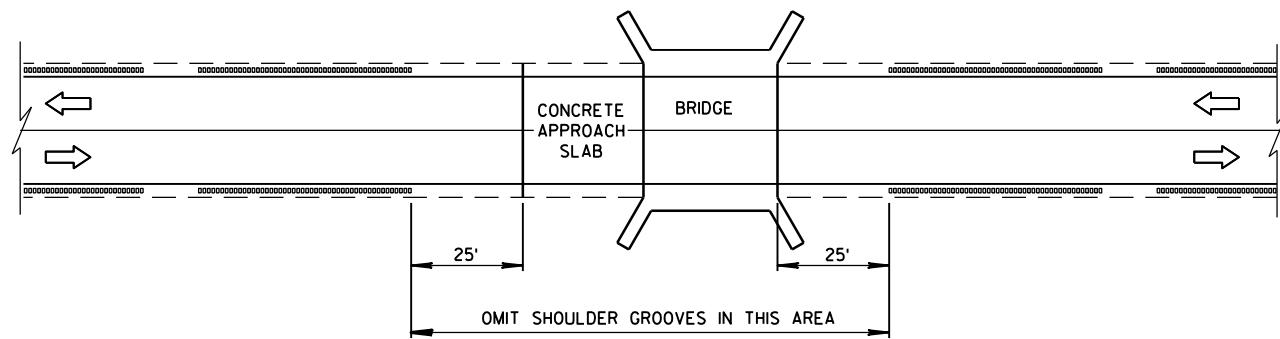
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



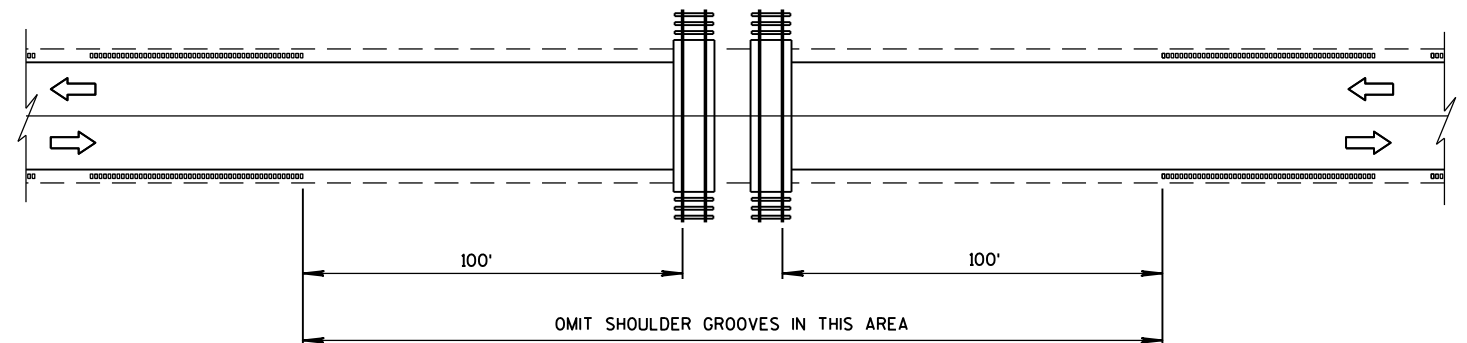
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



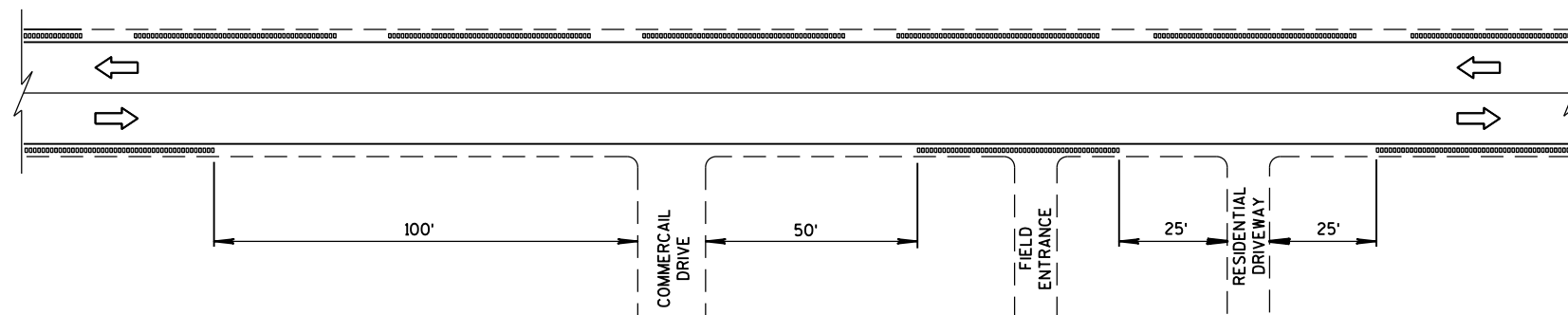
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



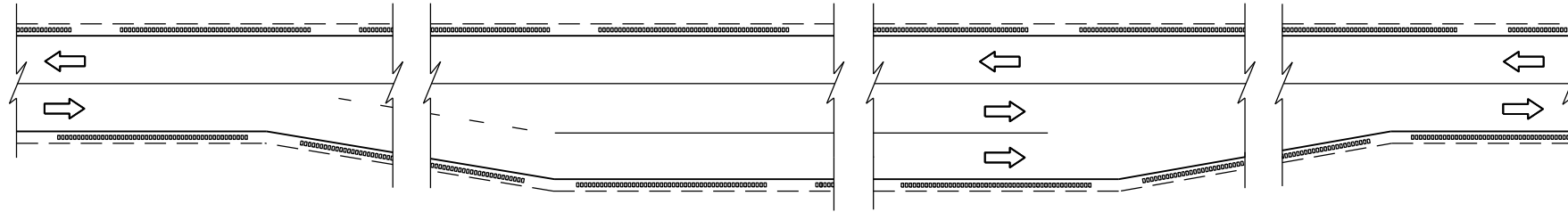
SHOULDER GROOVES AT RAILROADS



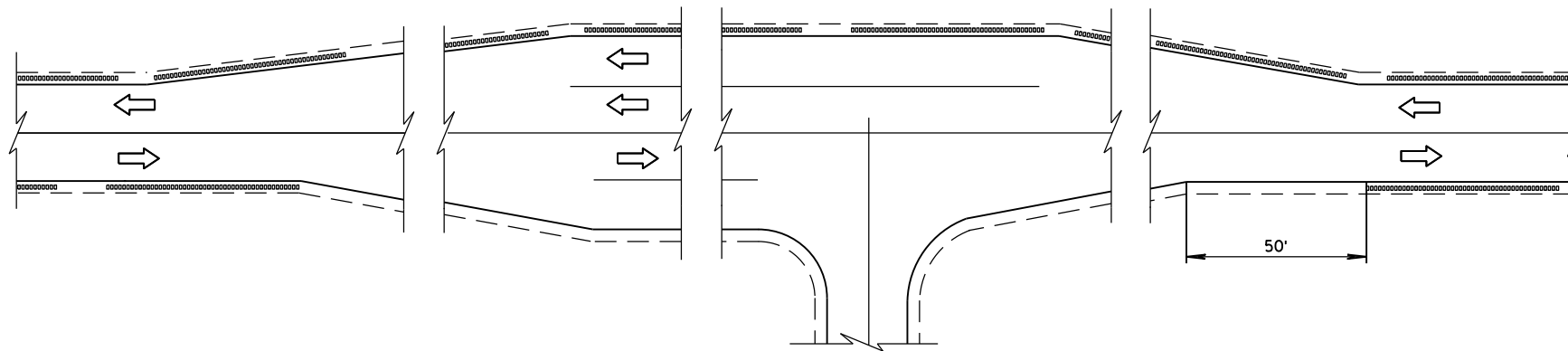
SHOULDER GROOVES AT DRIVEWAYS^①

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN¹
DEPARTMENT OF TRANSPORTATION⁸⁹



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 12/17/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER	ENT
FHWA		

GENERAL NOTES

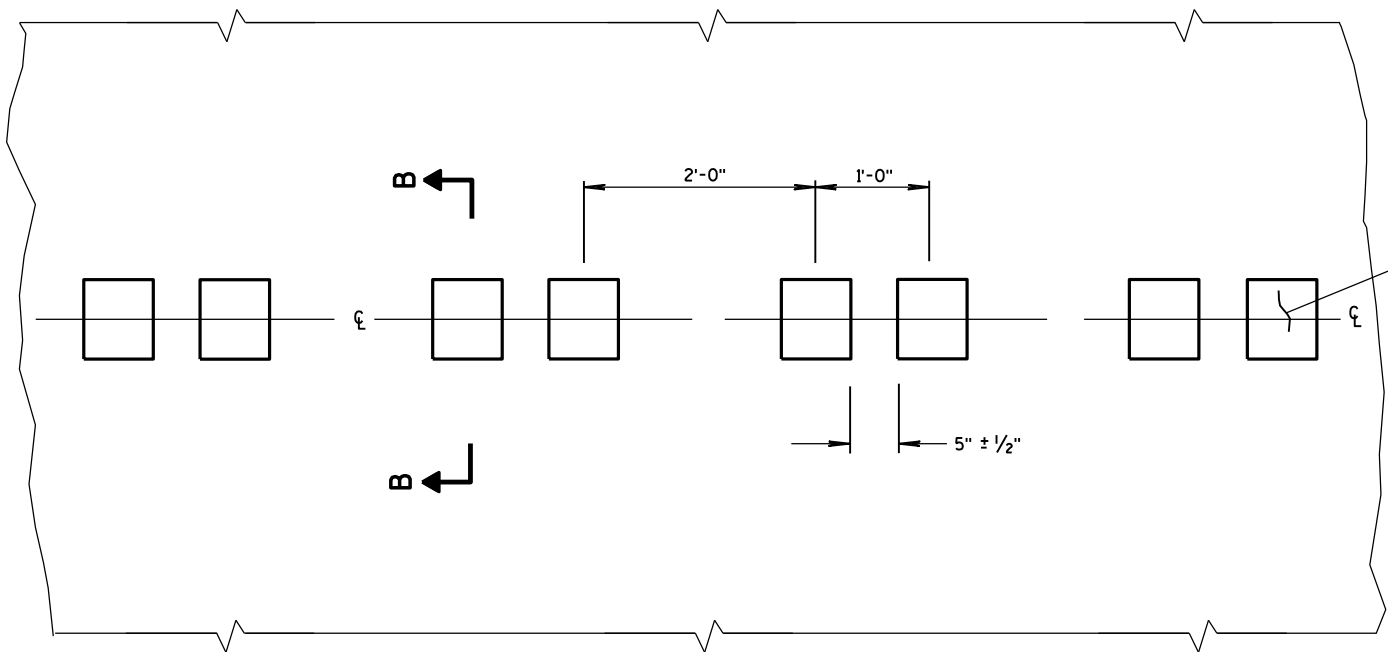
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

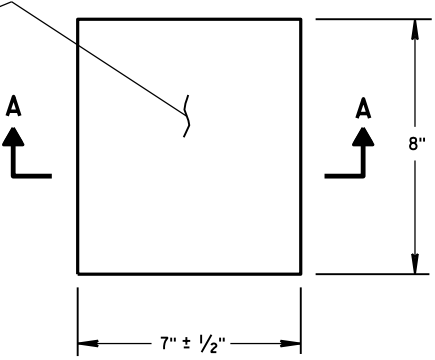
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

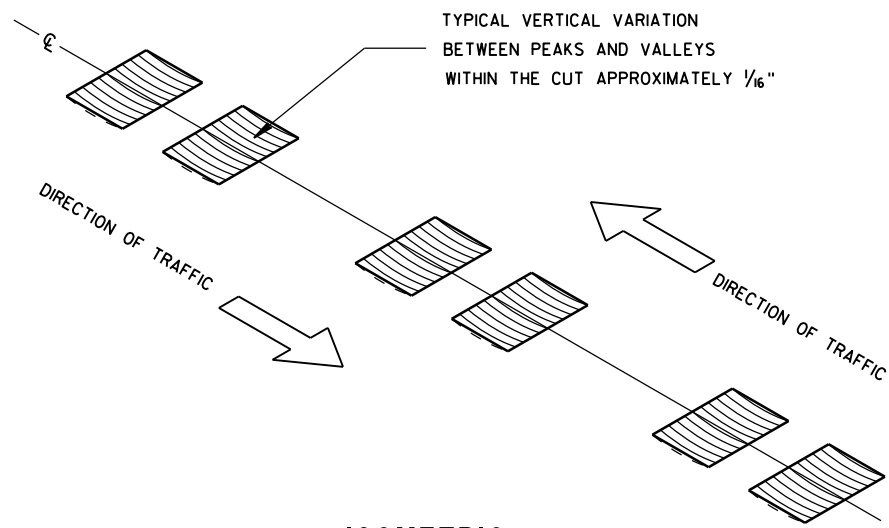
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



PLAN VIEW
CENTER LINE WITH GROOVES

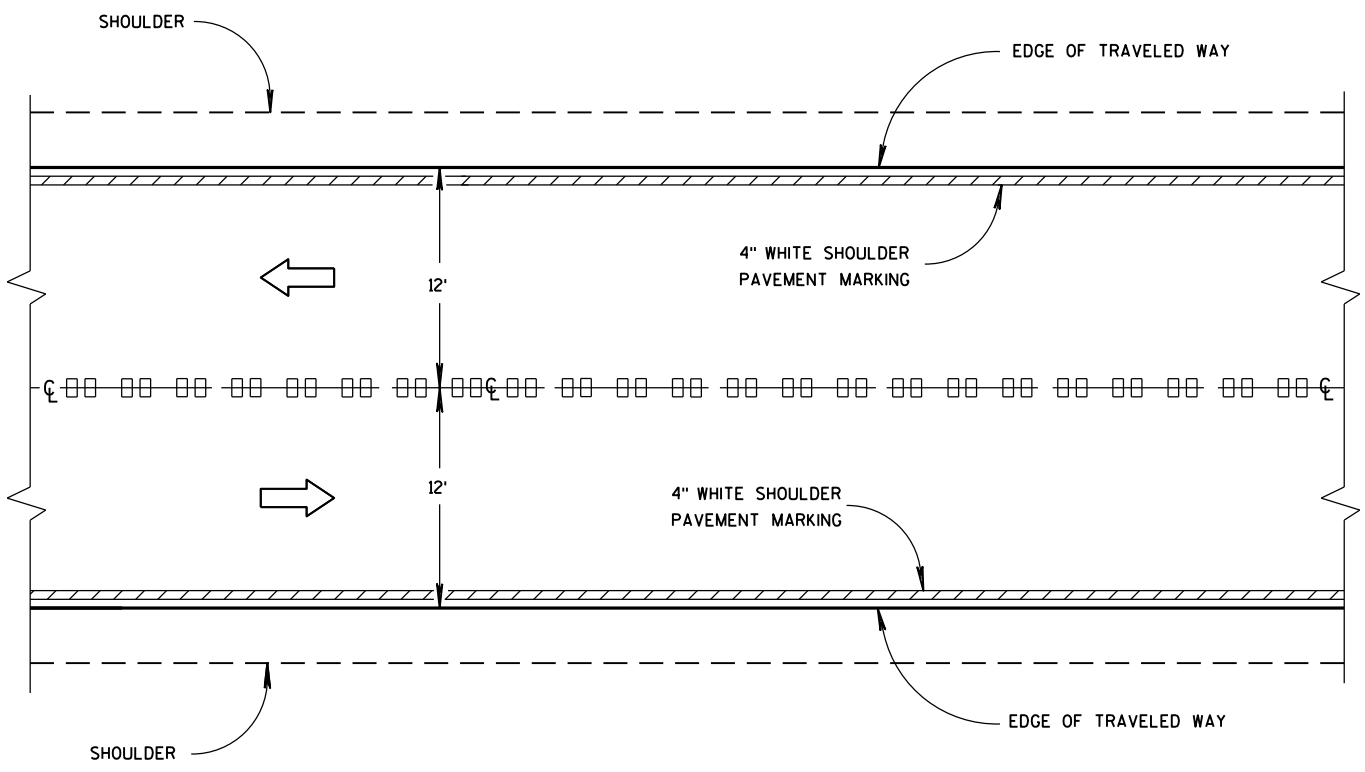


PLAN VIEW
(SINGLE GROOVE)

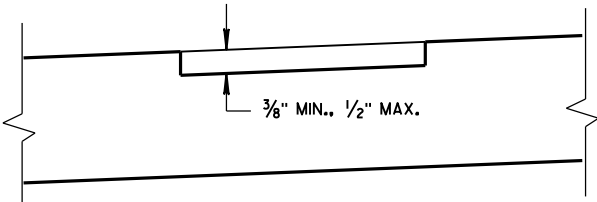


ISOMETRIC

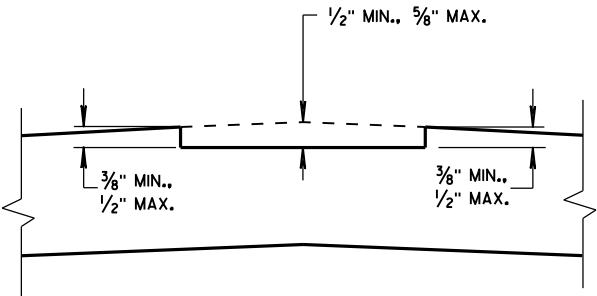
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



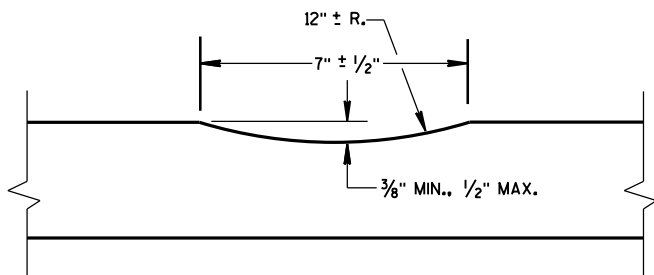
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



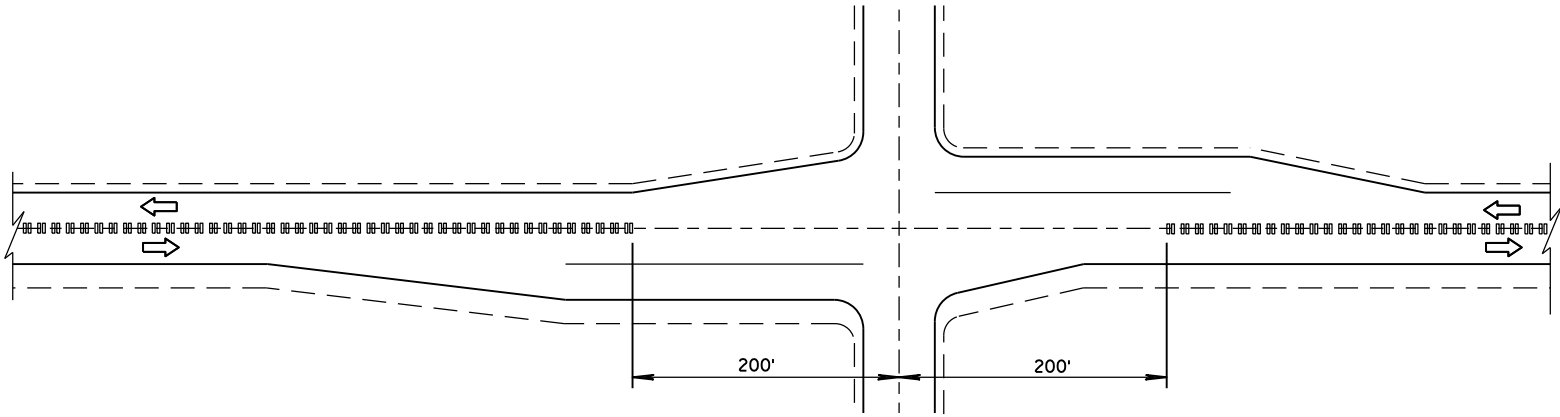
SECTION B-B
CROWNED ROADWAY



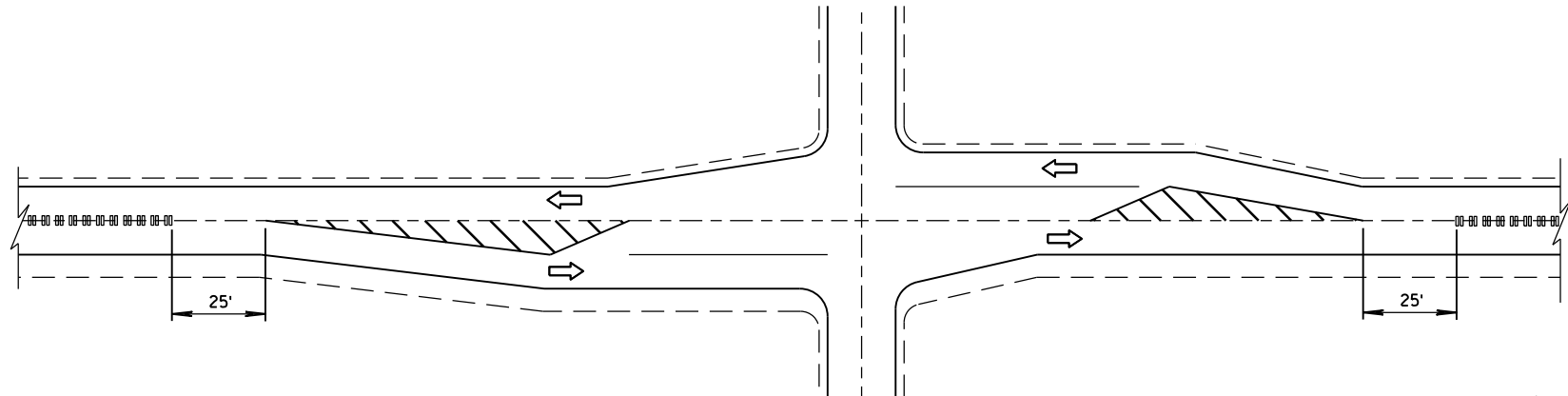
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

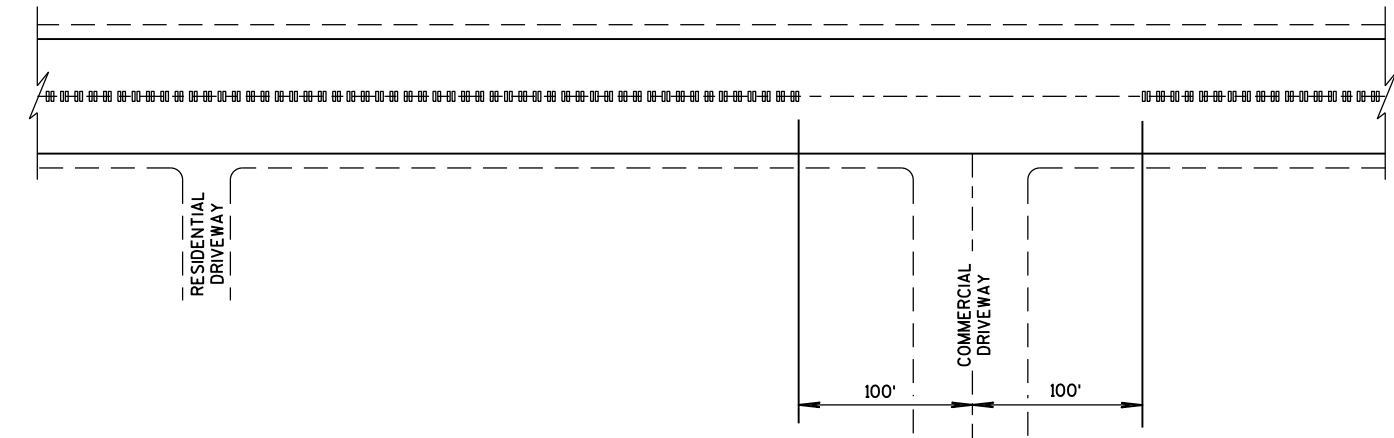
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

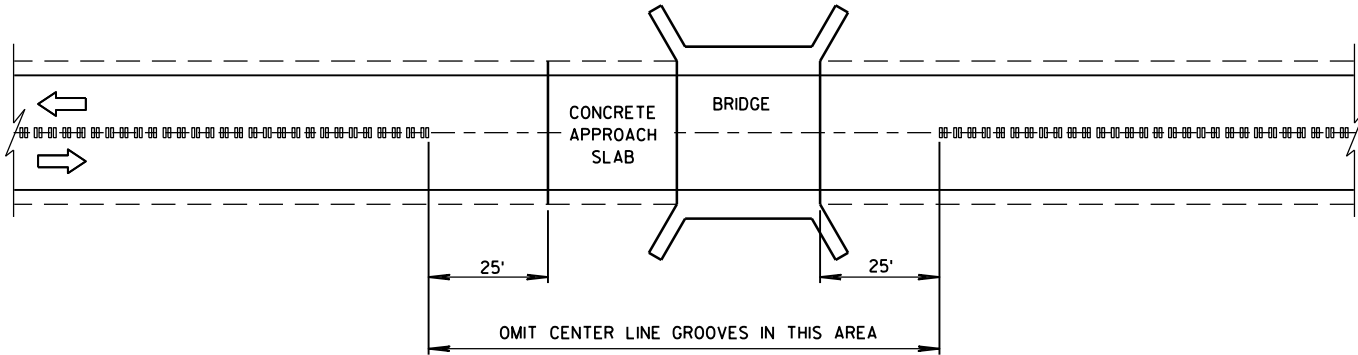


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

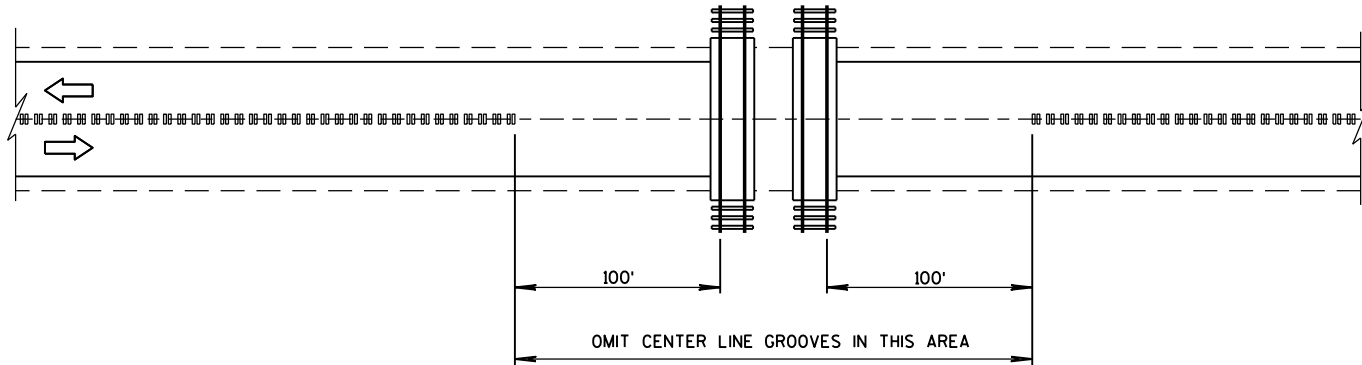


CENTER LINE GROOVES AT DRIVEWAYS^①

① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

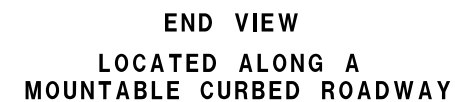
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 5/15/2013	/S/ Jerry H. Zoog ROADWAY STANDARDS ENGINEER 92 NT
FHWA	

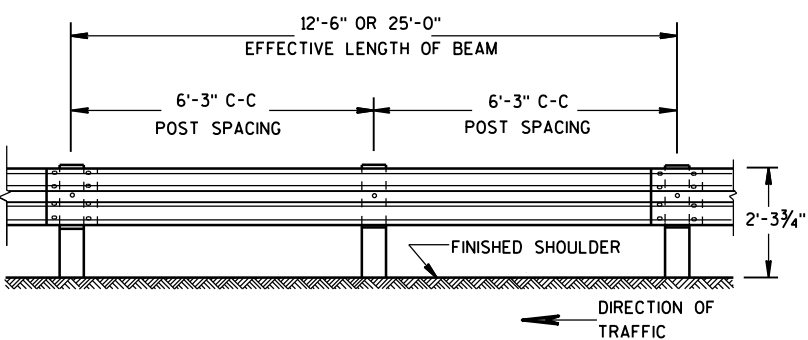
6

- S.D.D. 14 B 15-9a



TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

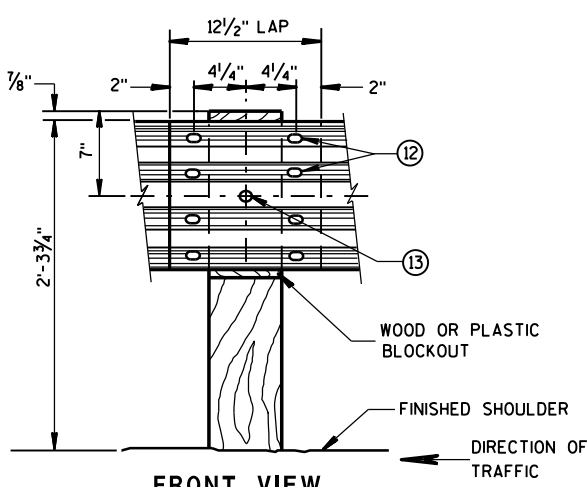
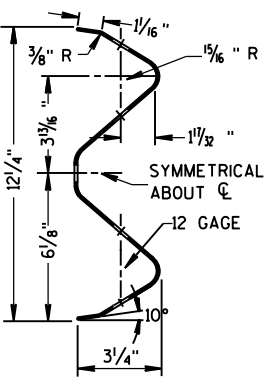
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 93



FRONT VIEW

POST SPACING STANDARD INSTALLATION

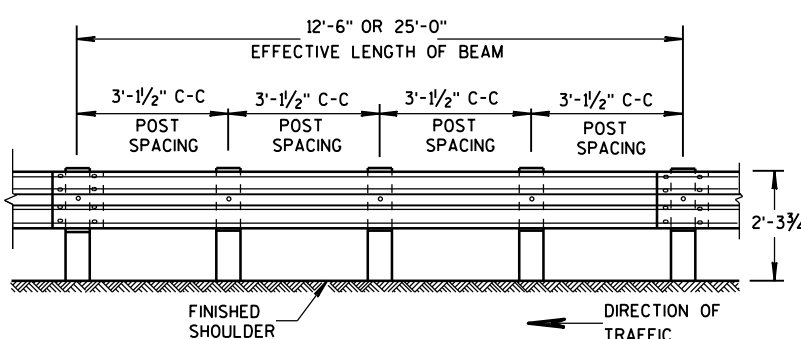
SECTION THRU W BEAM



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

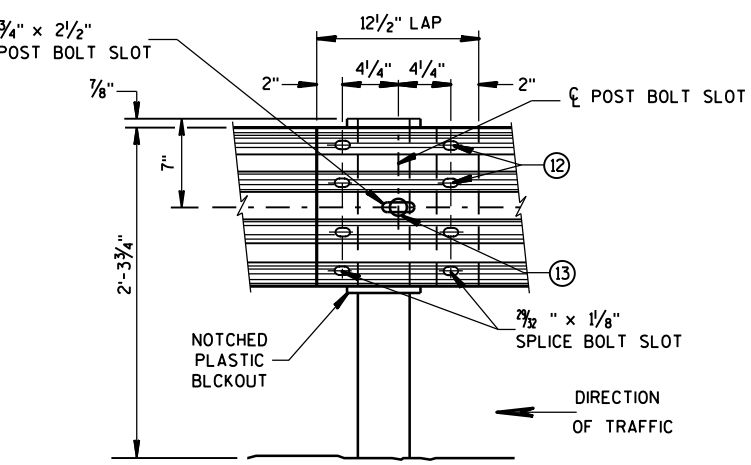
GENERAL NOTES

- ⑧ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ⑩ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ⑪ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑫ 8 - 5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

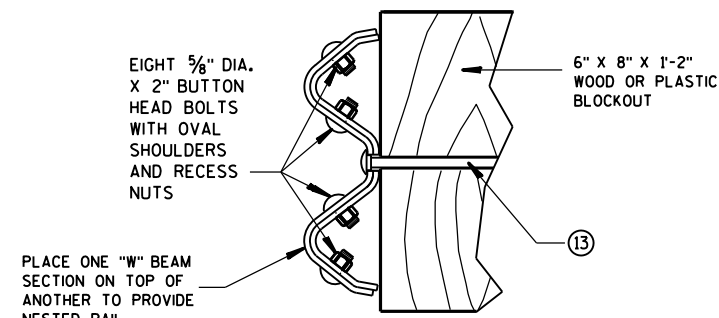


FRONT VIEW

POST SPACING FOR LONGER POST
AT HALF POST SPACING W BEAM (LHW)



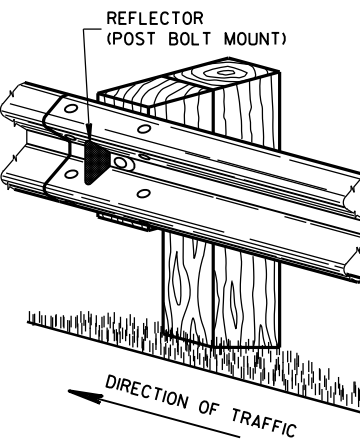
FRONT VIEW
BEAM SPLICE AT STEEL POST
TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD



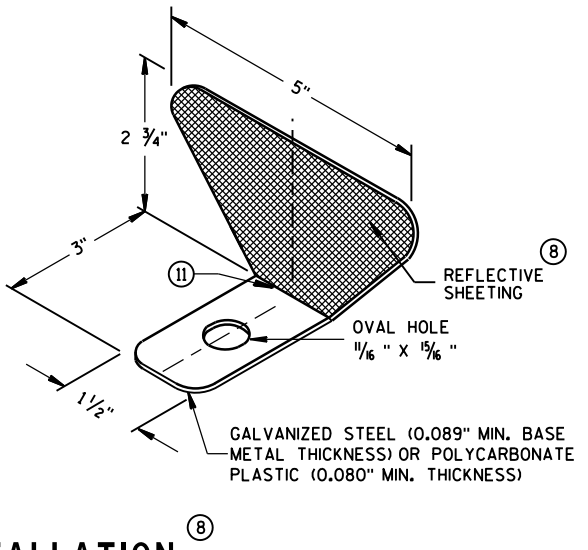
NESTED W BEAM (NW)
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING ⑨

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ⑩	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ⑪	3
	> 200'	100' C-C	2	

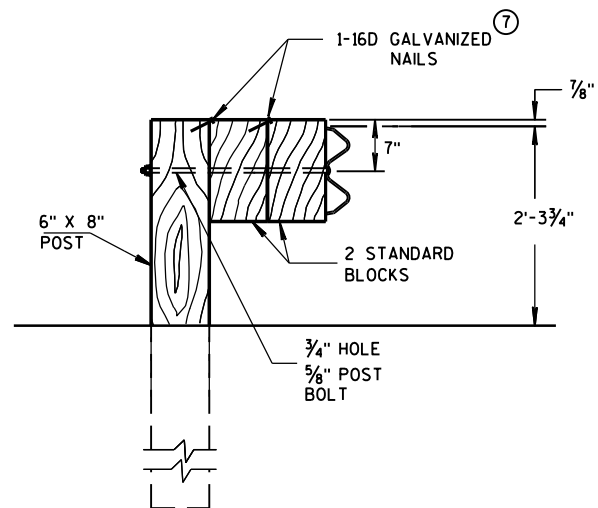


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



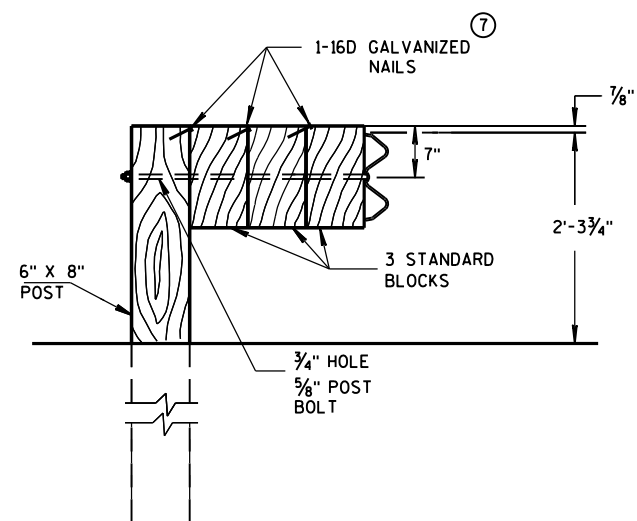
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

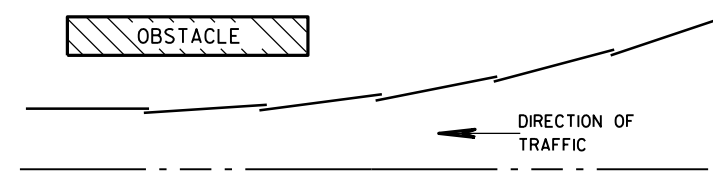


DETAIL FOR TRIPLE BLOCKS

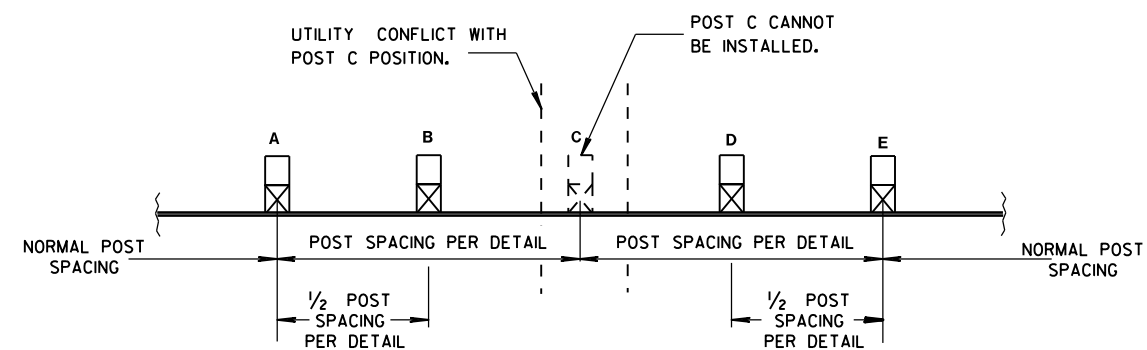
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

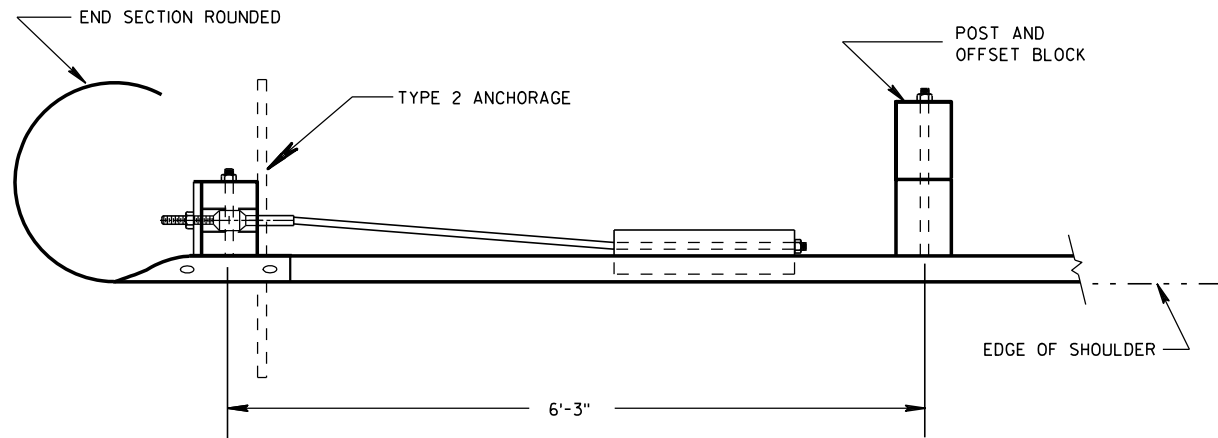
APPROVED

June 2016
DATE

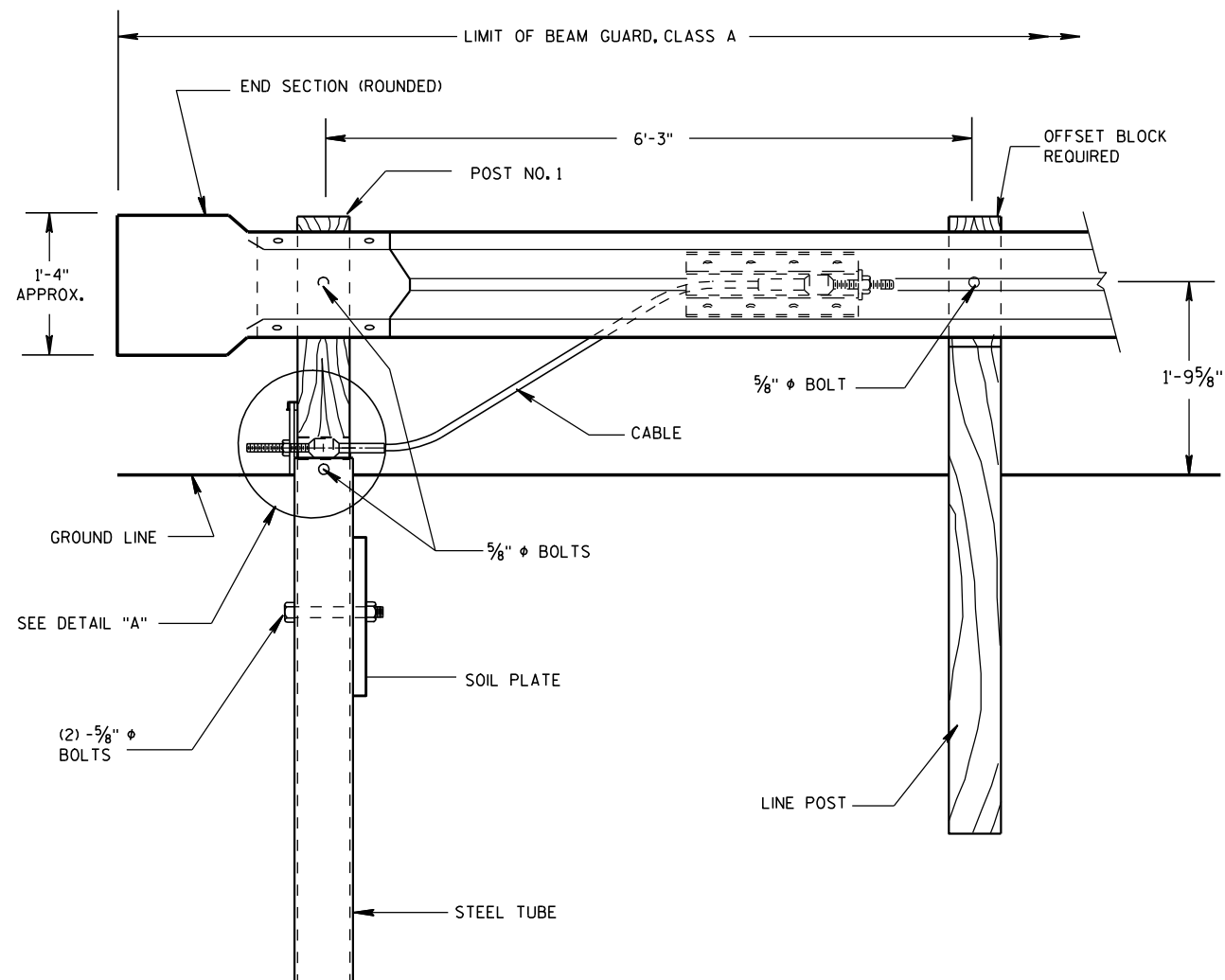
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

INT



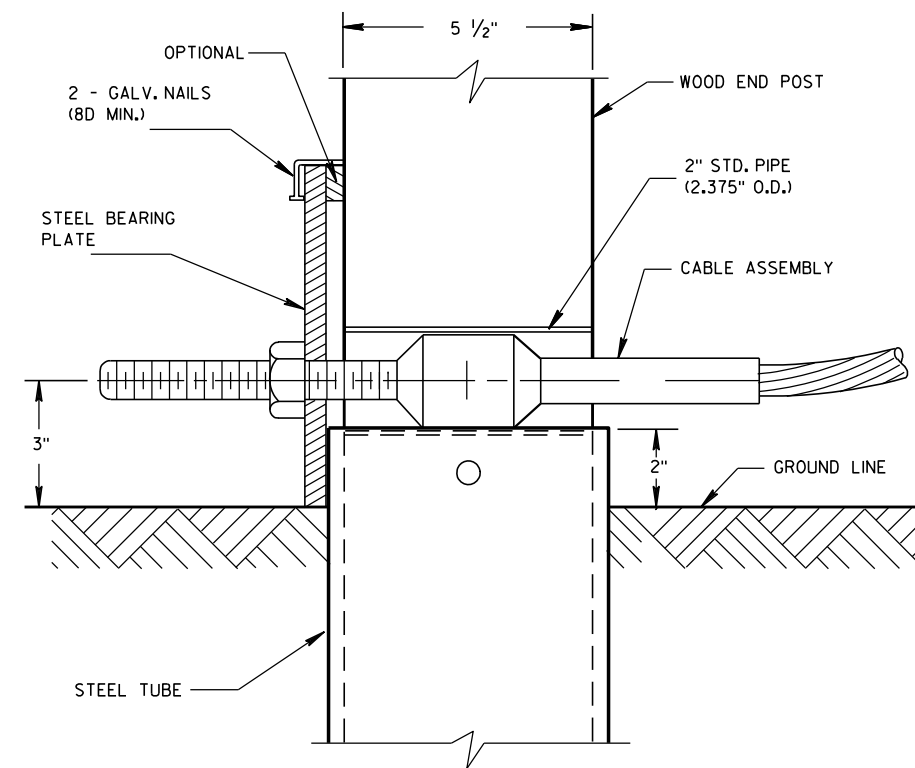
PLAN VIEW



FRONT VIEW

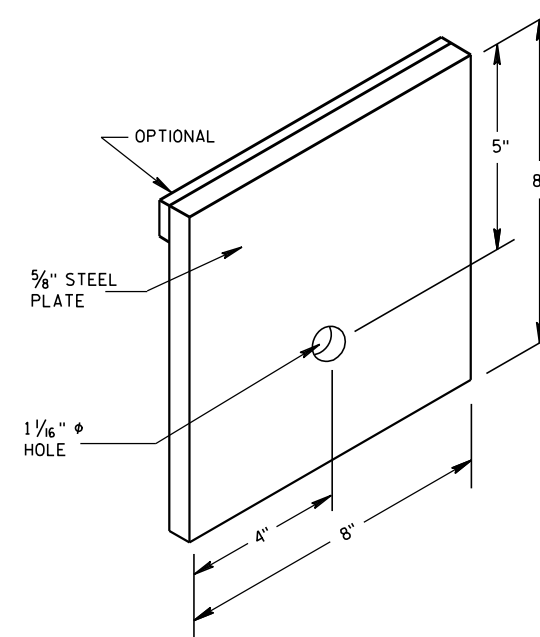
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

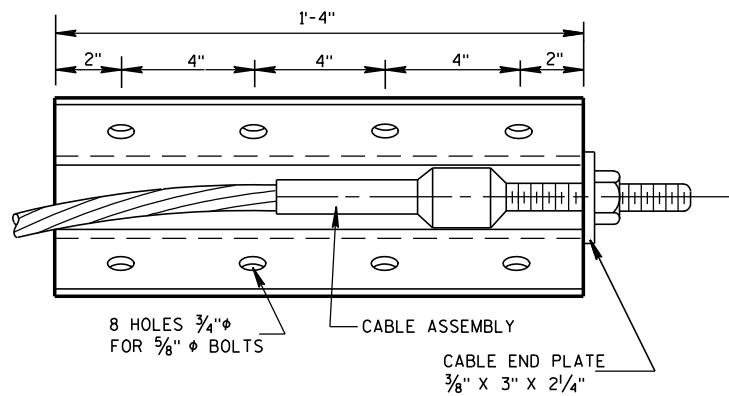
POST NO. 1



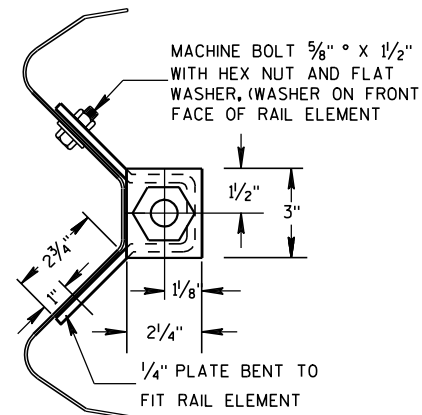
STEEL BEARING PLATE

**ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

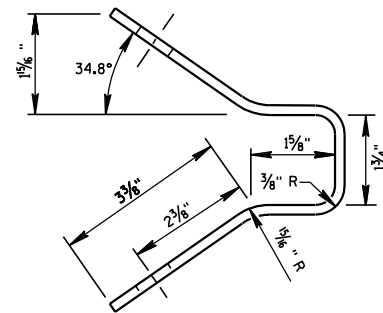


FRONT VIEW

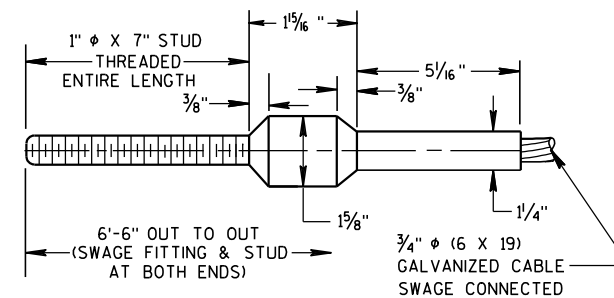


END VIEW

ANCHOR PLATE DETAIL



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)

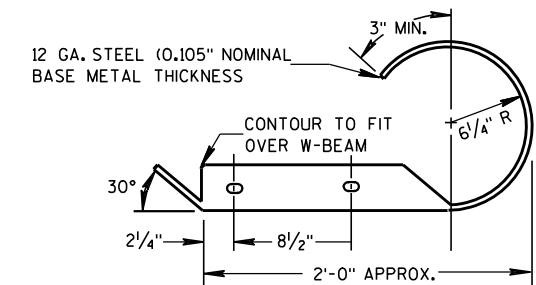
GENERAL NOTES

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

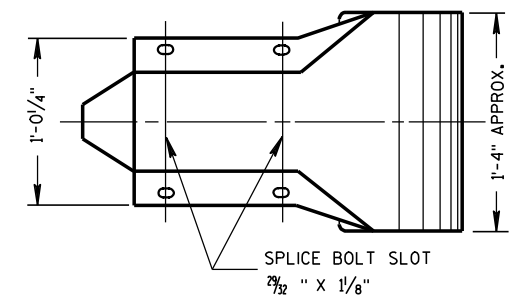
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

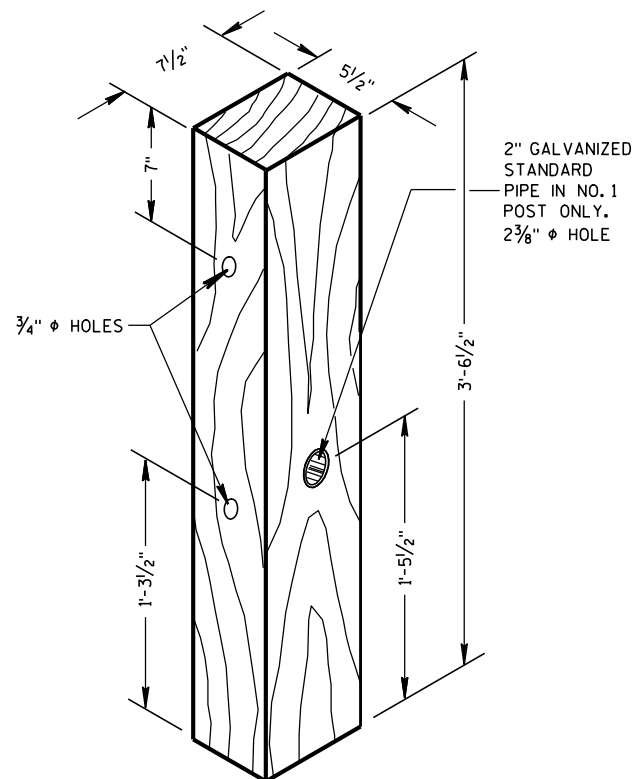
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE, WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



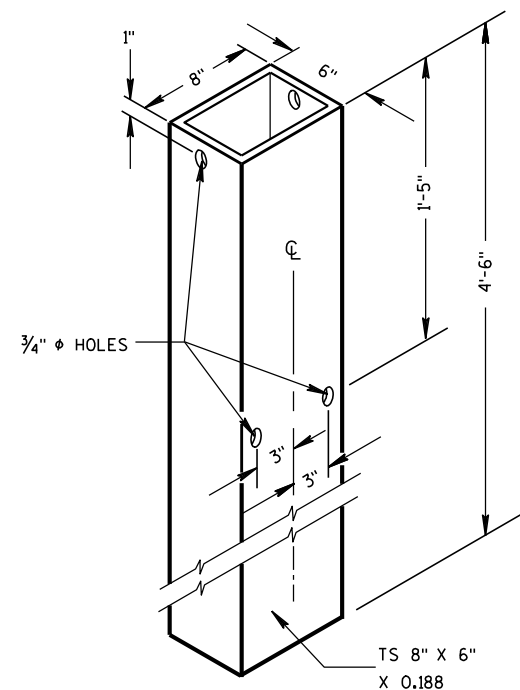
PLAN VIEW



FRONT VIEW
W BEAM END SECTION ROUNDED

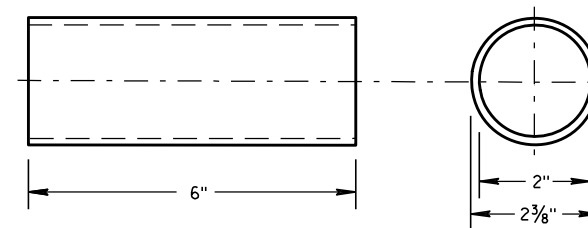


WOOD BREAKAWAY POST



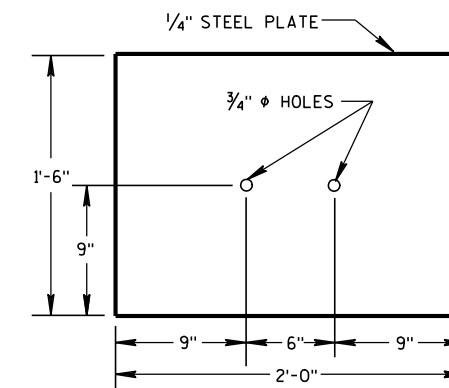
STEEL TUBE

STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500



BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



SOIL PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/21/2007

DATE

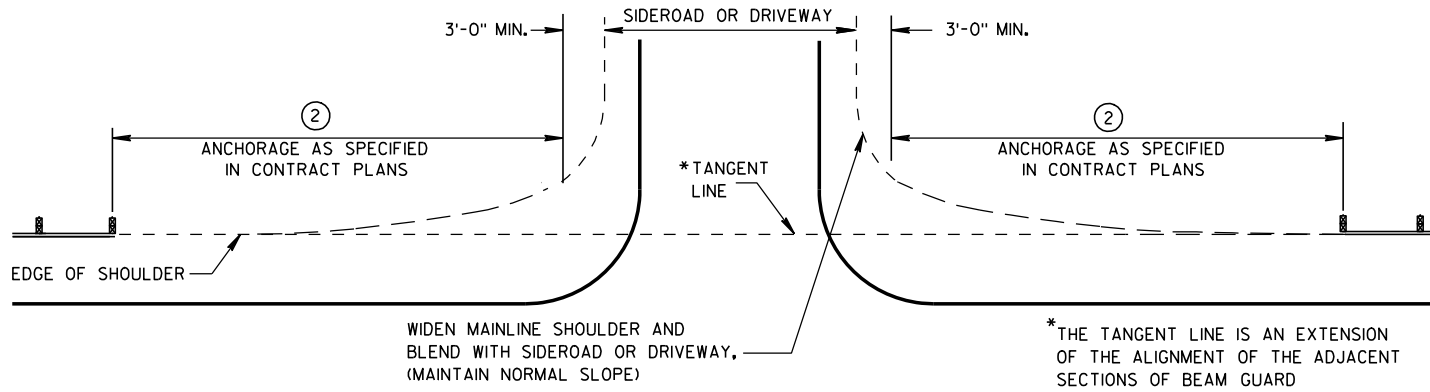
FHWA

/S/ Jerry H. 7

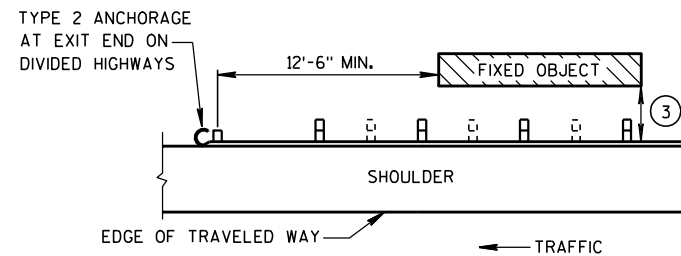
ROADWAY STANDARDS 97

ENGINEER

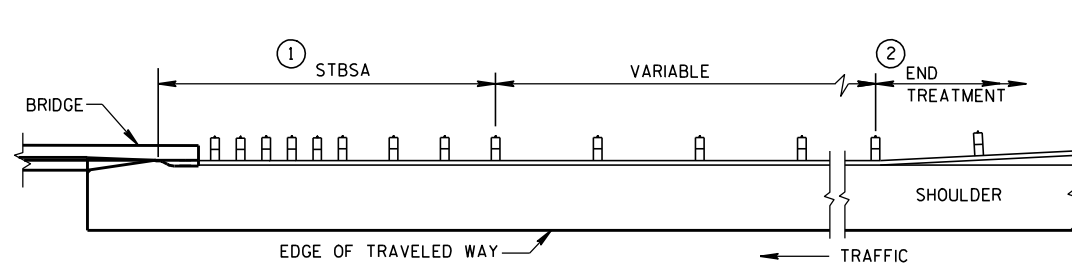
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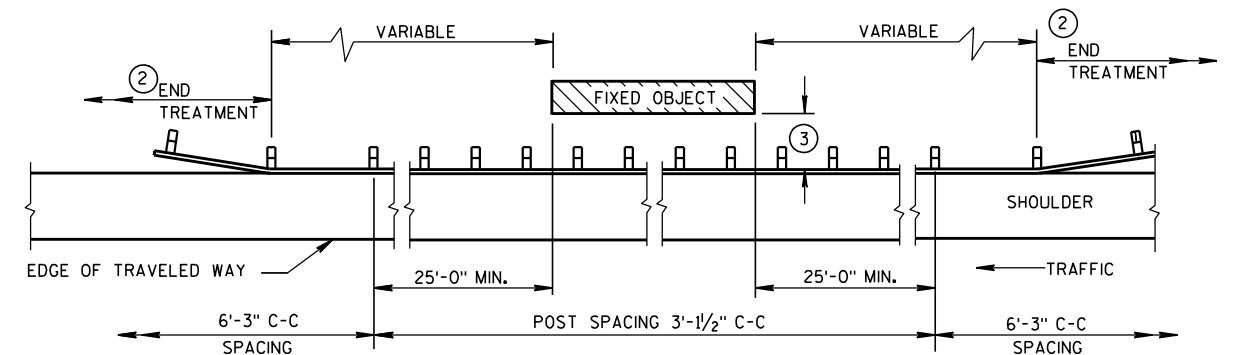
BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC



BEAM GUARD AT FULL WIDTH BRIDGES

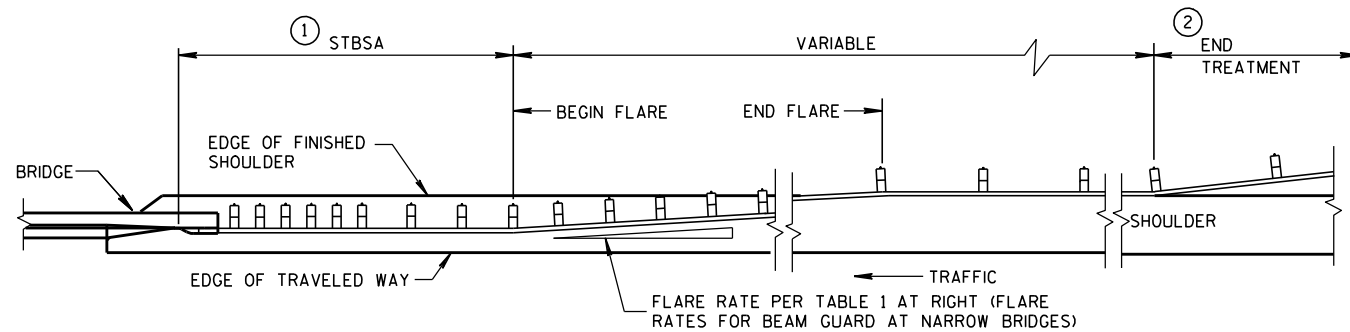


BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")

TABLE 1
FLARE RATES FOR BEAM
GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1



BEAM GUARD AT NARROW BRIDGES (FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

- STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.
- USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1 1/2"
4'-6"	6' - 3"

STEEL PLATE BEAM GUARD
CLASS "A"
AT BRIDGES, OBSTACLES
AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-21-07

DATE

FHWA

/s/ Jerry H. Zoon

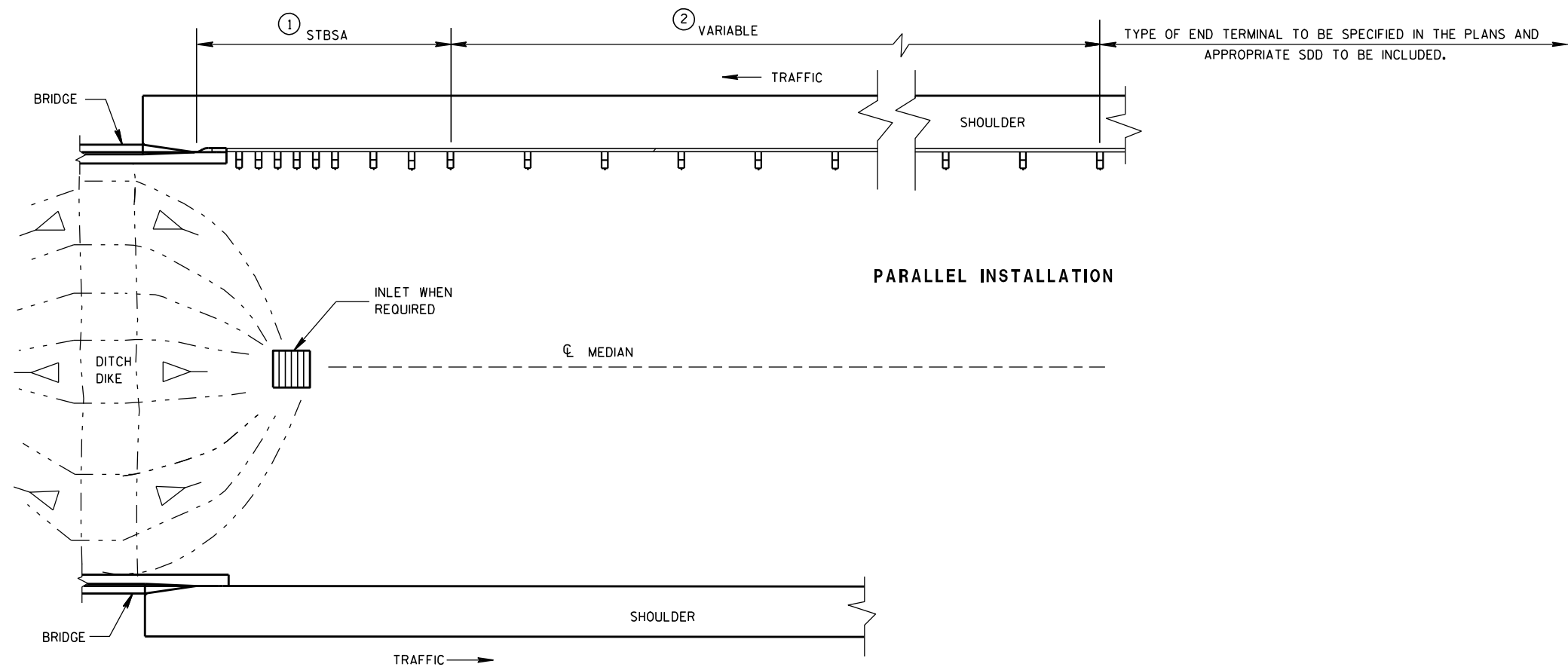
ROADWAY STANDARDS

ENGINEER

INT

GENERAL NOTES

- ① STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.
- ② LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.



BEAM GUARD AT MEDIAN APPROACH TO BRIDGES

STEEL PLATE BEAM GUARD CLASS "A" AT MEDIAN APPROACH TO BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-21-07 /S/ Jerry H. Zane
DATE ROADWAY STANDARDS ENGINEER 99 ENT

FHWA

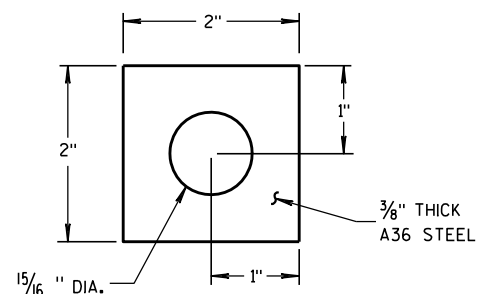
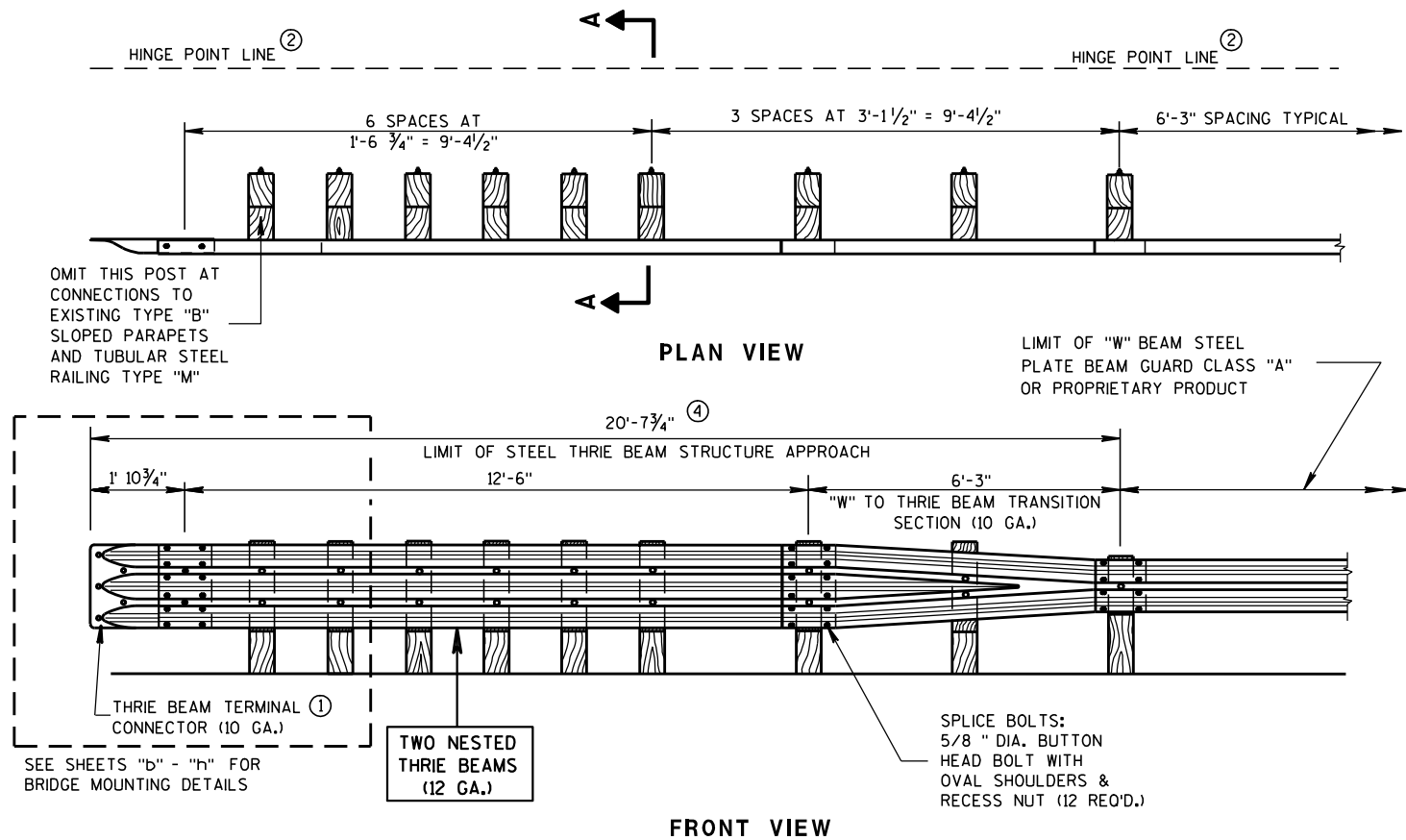


PLATE WASHER DETAIL

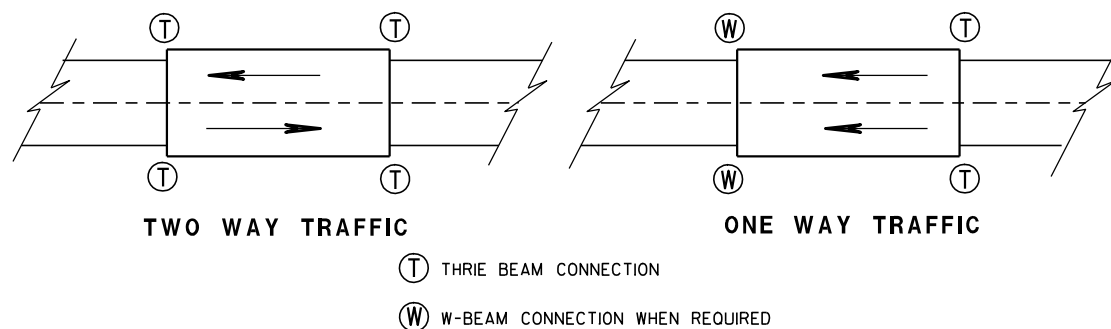
GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

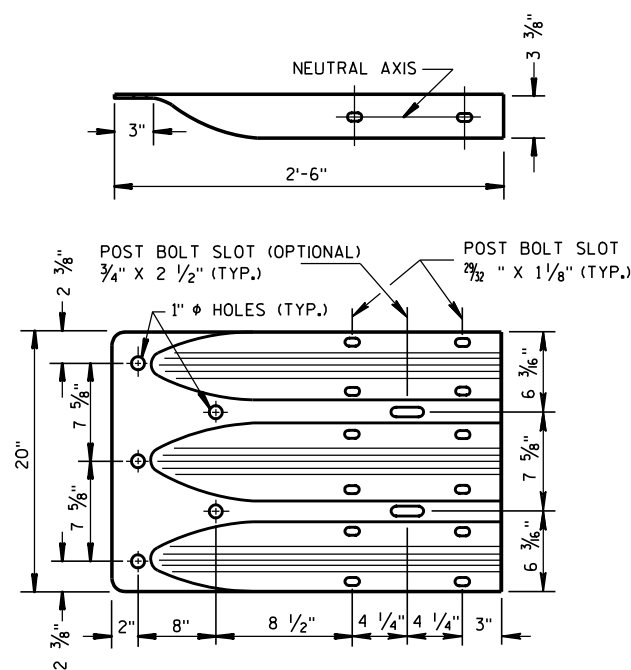
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

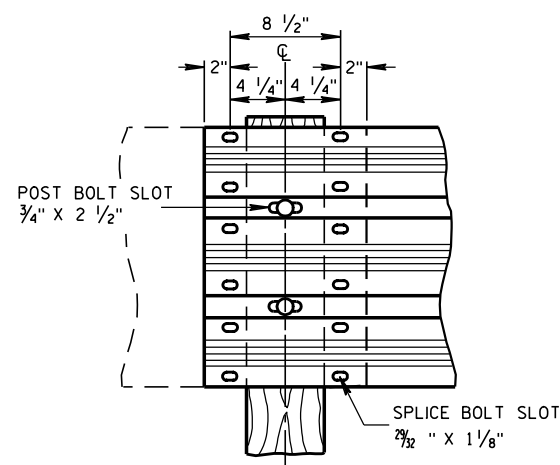
- ① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.
- ② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.
- ③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.
- ④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



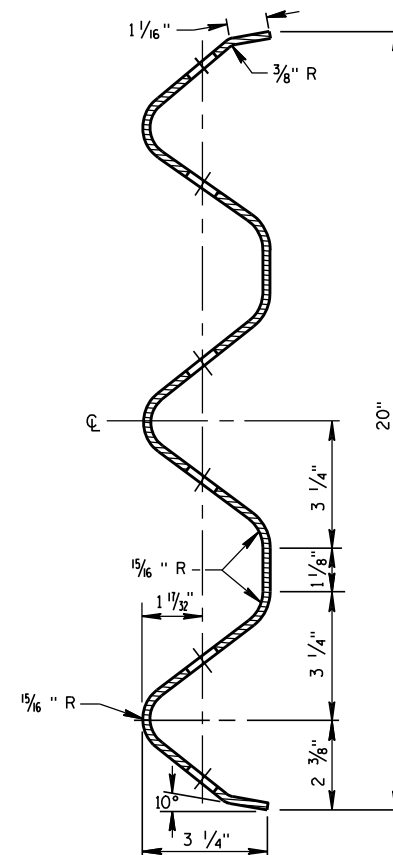
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



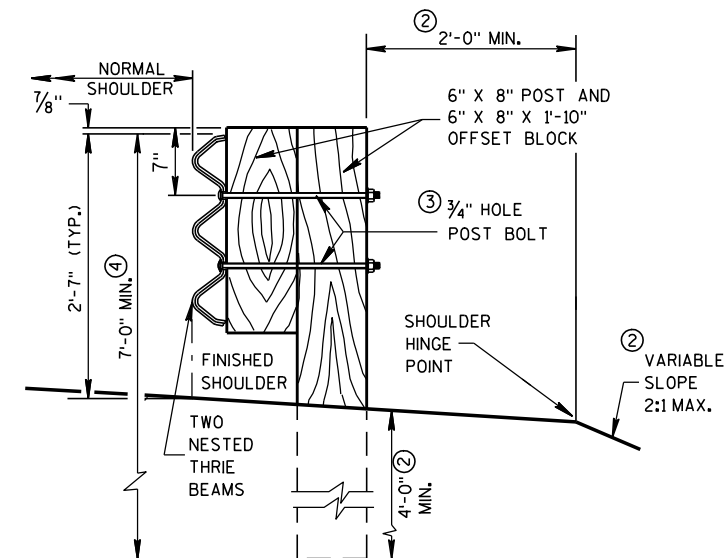
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

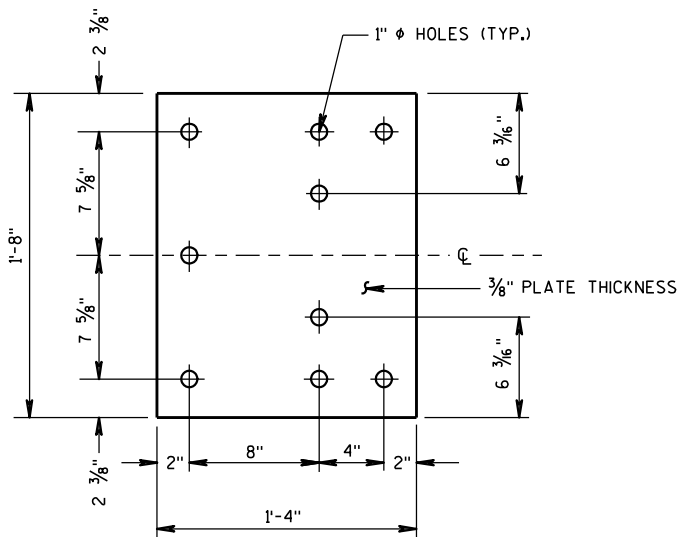
DATE

FHWA

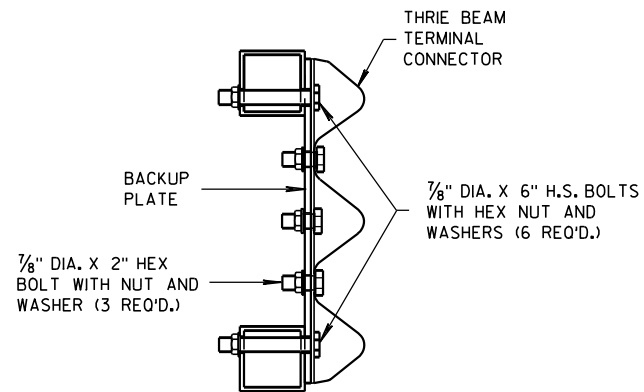
/s/ Jerry H. Zoon

ROADWAY STANDARDS 100

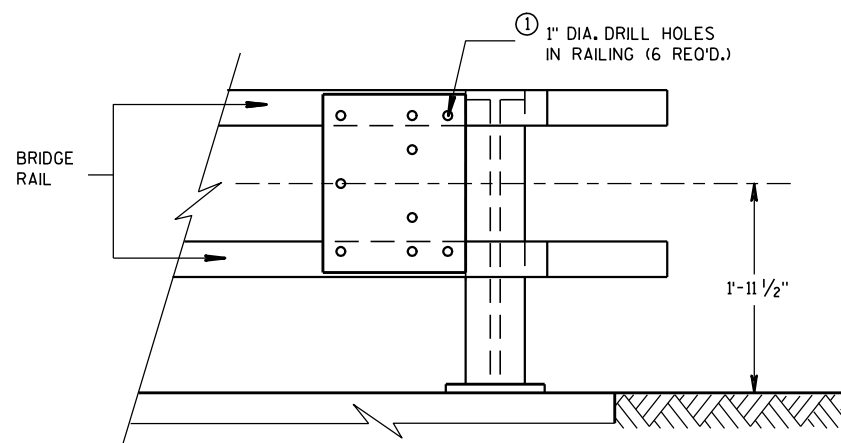
ENGINEER



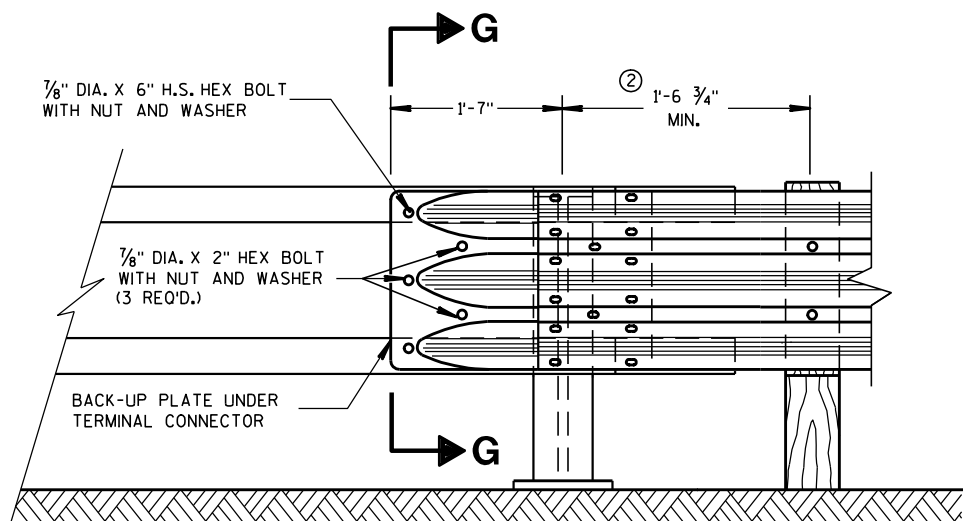
BACK-UP PLATE DETAIL



SECTION G-G

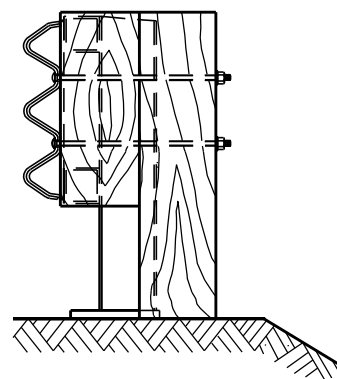


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



FRONT VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

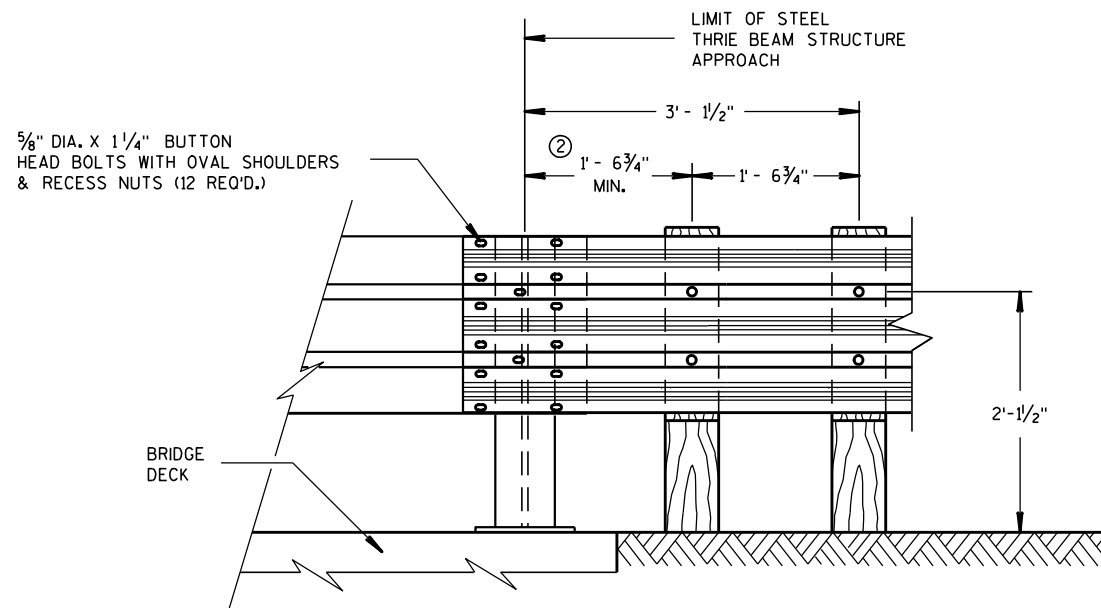


END VIEW

GENERAL NOTES

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL AS CLOSE AS FEASIBLE TO THE STEEL END POST.



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"

STEEL THRIE BEAM STRUCTURE
APPROACH, CONNECTION TO BRIDGE
RAILING TYPES "F" AND "W"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

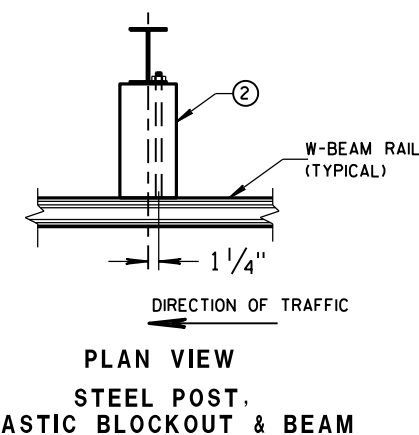
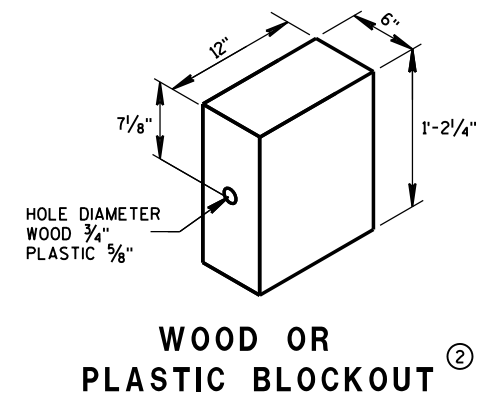
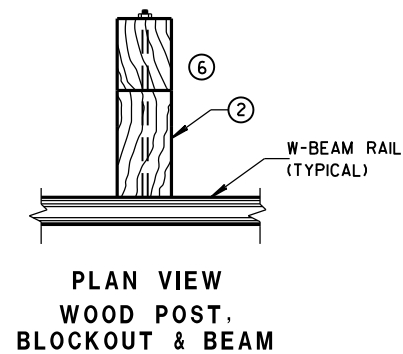
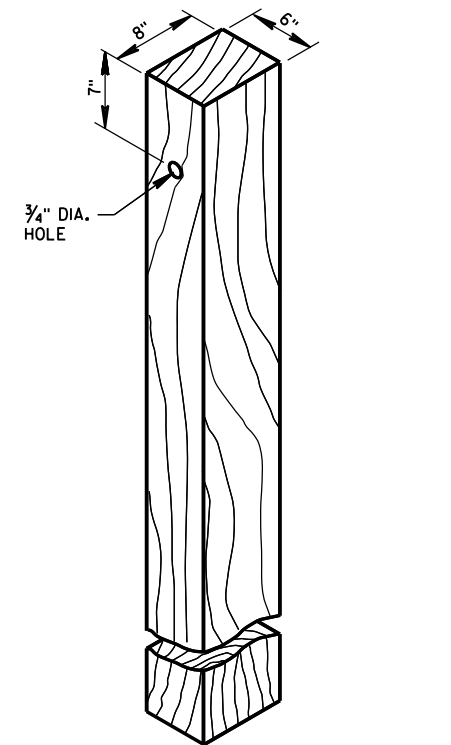
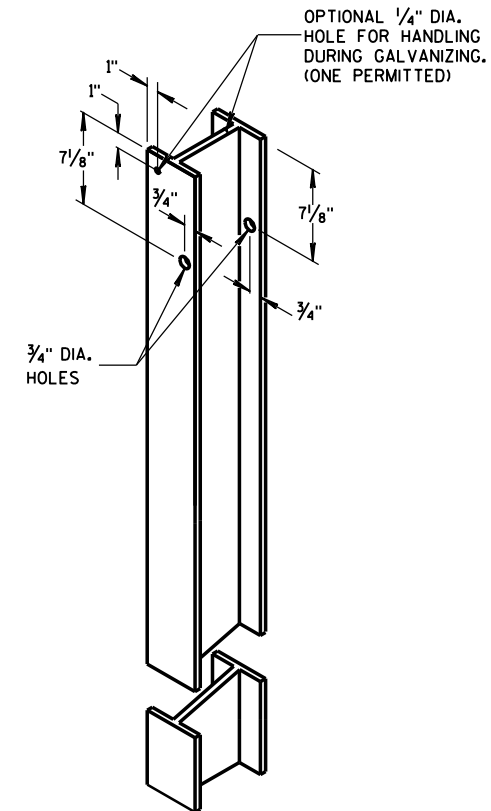
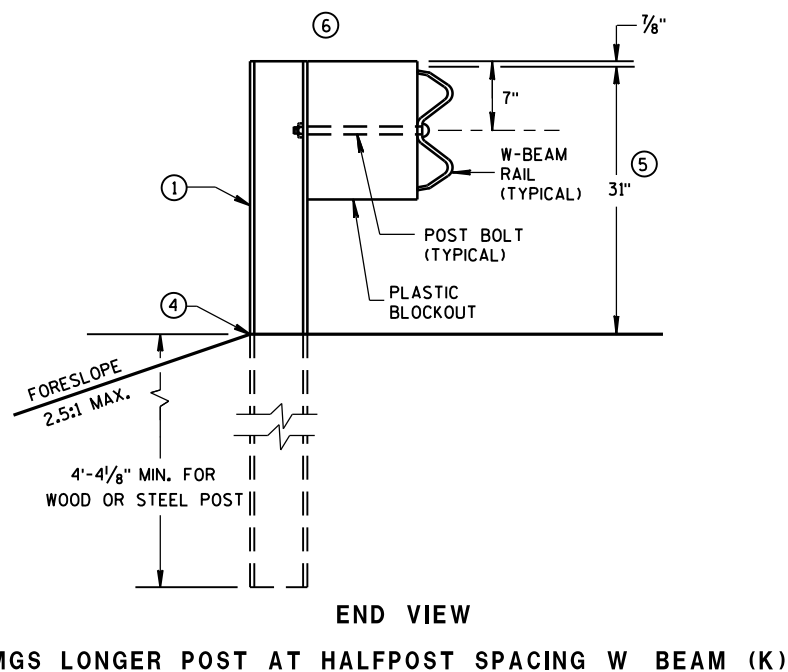
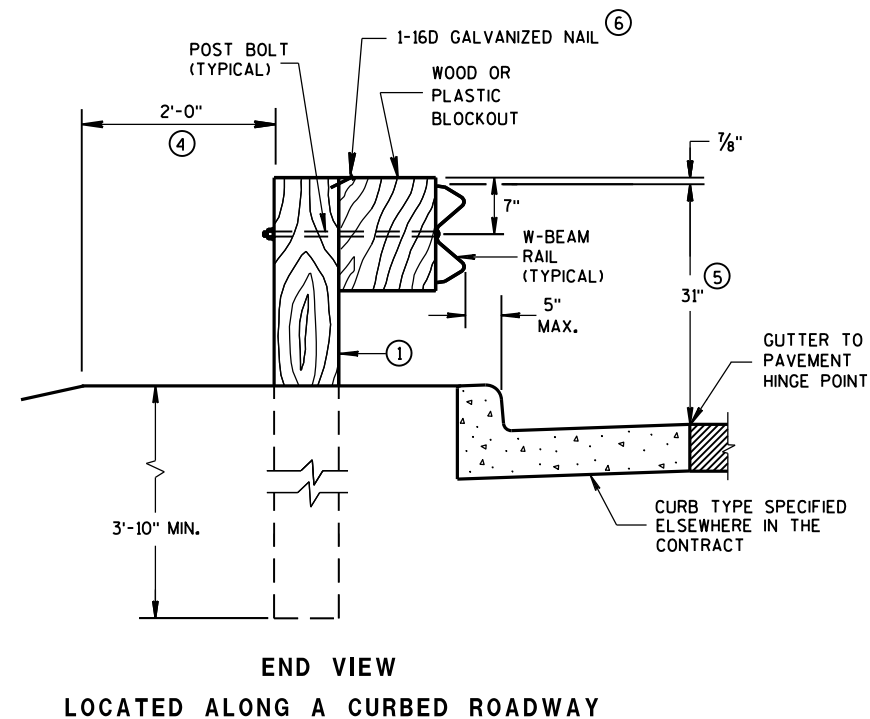
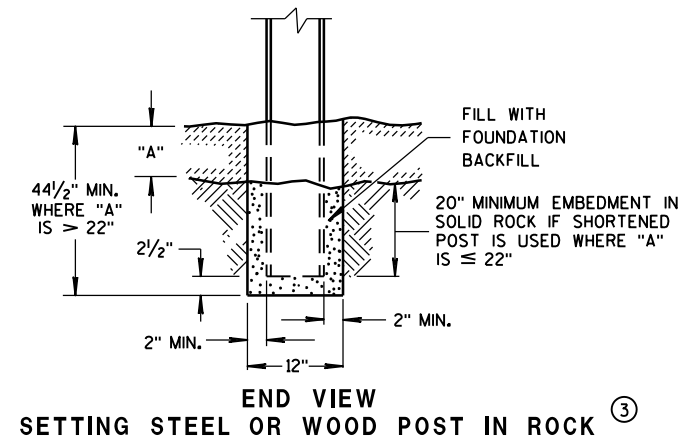
APPROVED

8/31/2012
DATE

FHWA

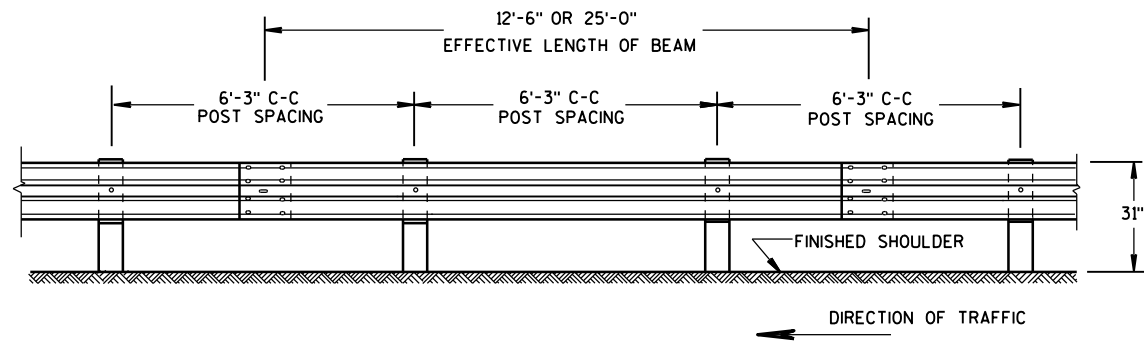
/S/ Jerry H. Zapp
ROADWAY STANDARDS 101 ENT
ENGINEER

- 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 TO LENGTH AND 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.



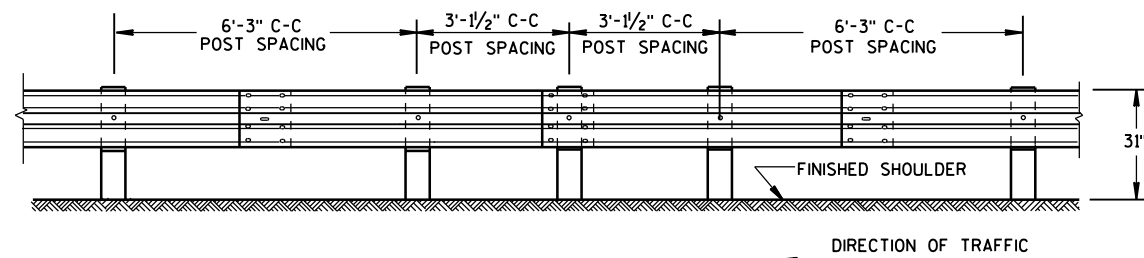
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 102



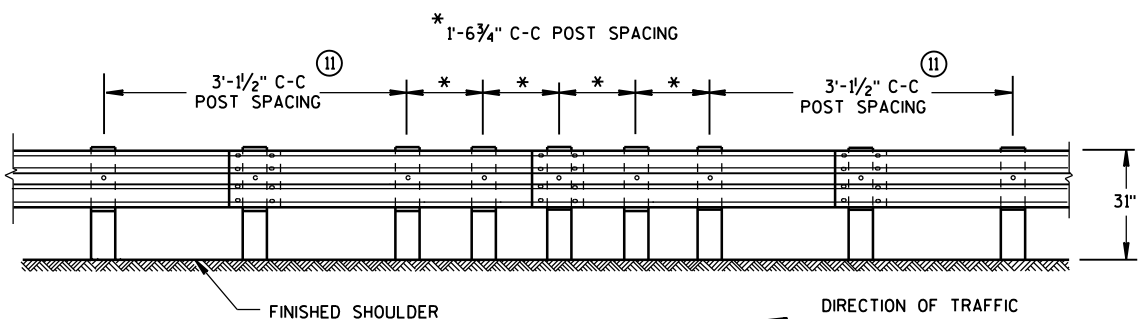
FRONT VIEW

POST SPACING STANDARD INSTALLATION



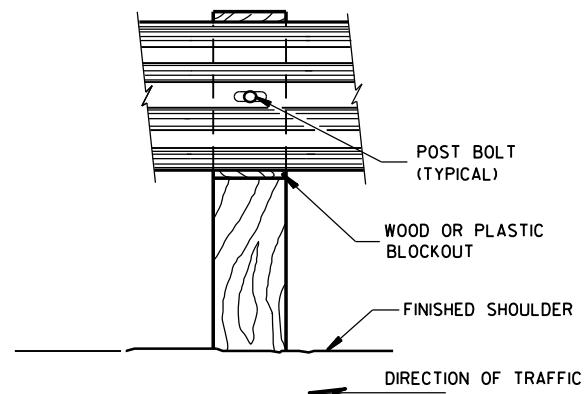
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

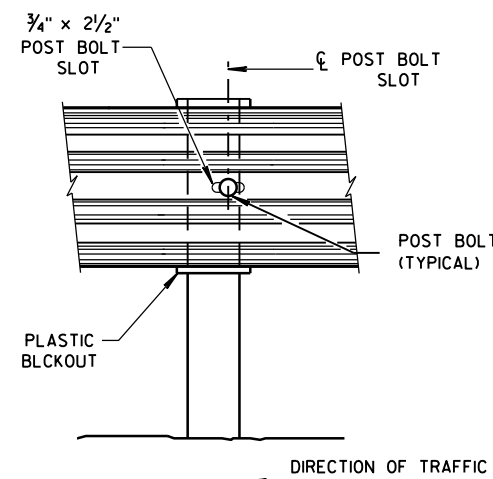


FRONT VIEW

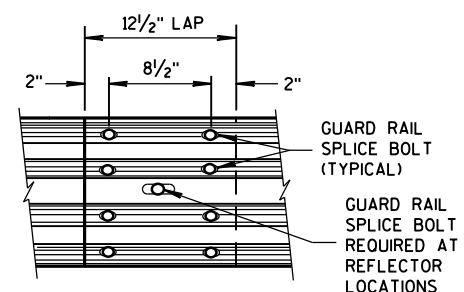
QUARTER POST SPACING (QS)



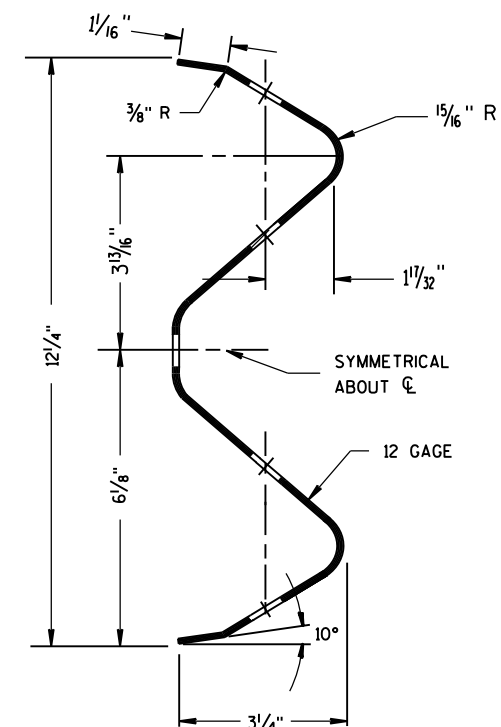
FRONT VIEW AT WOOD POST



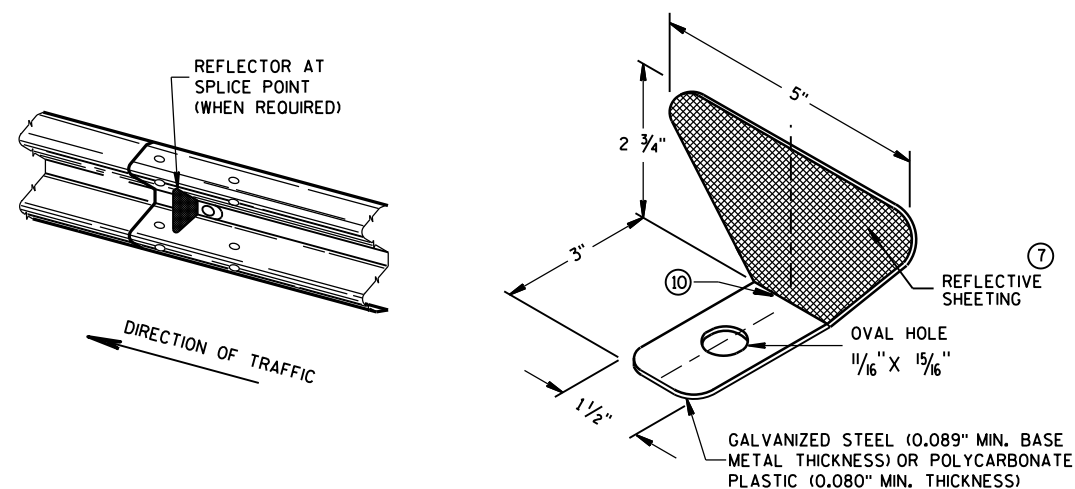
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

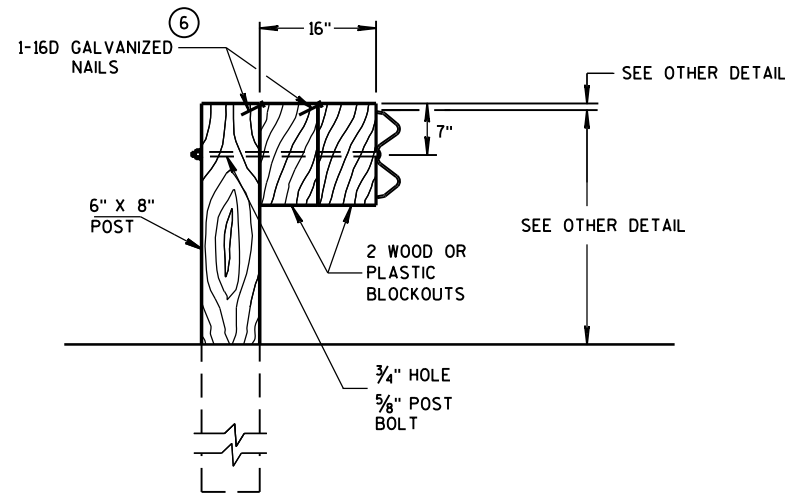
- ⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
 - ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - ⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ⑩ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
 - ⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ⑩	3
	> 200'	100' C-C	2	

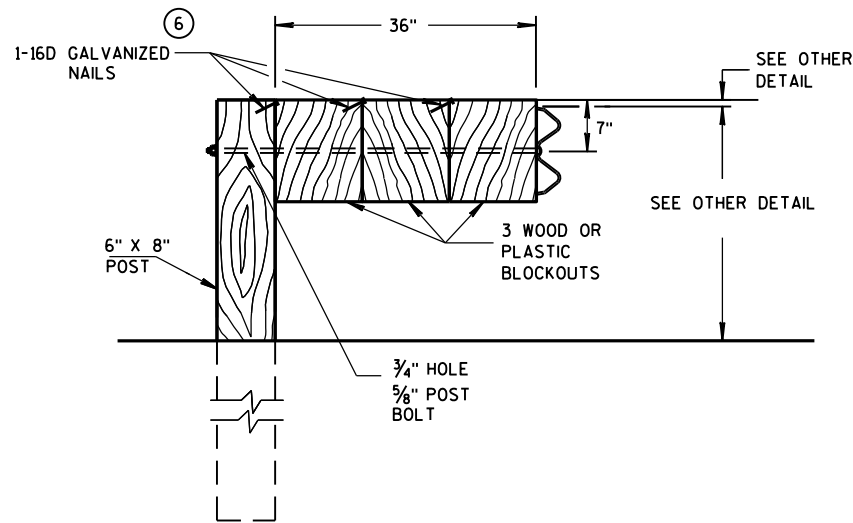
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

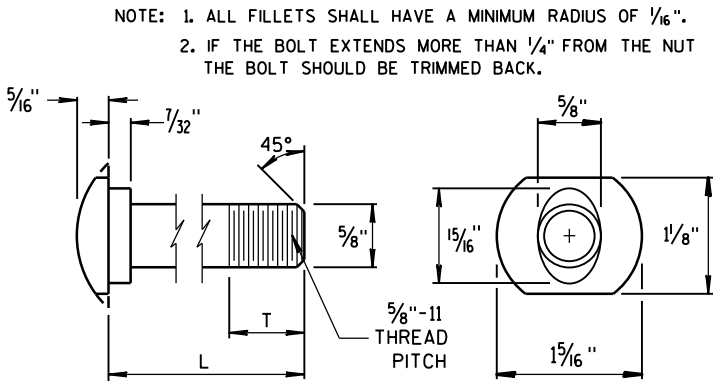
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



DETAIL FOR 36" BLOCKOUT DEPTH

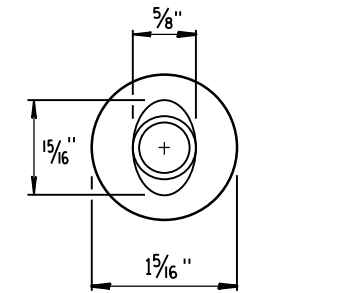
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

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.

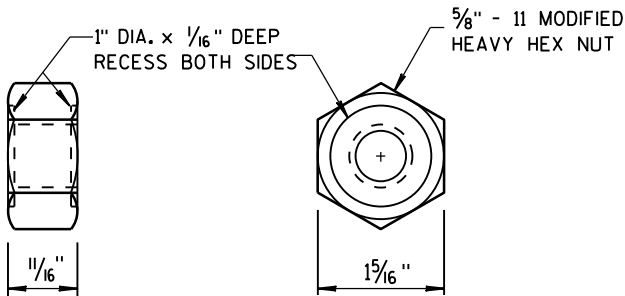


POST BOLT TABLE

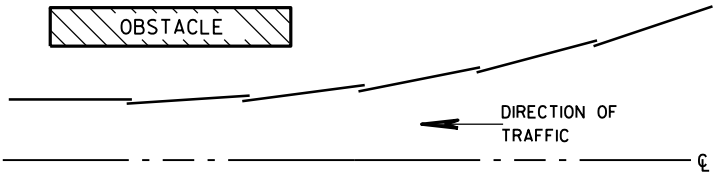
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



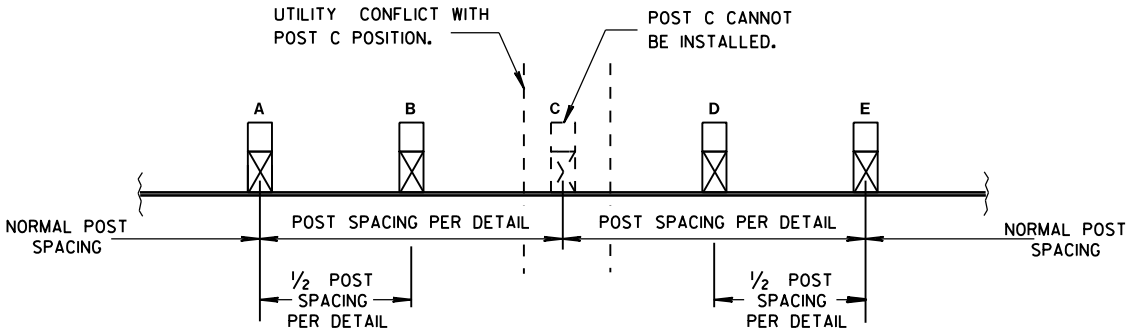
ALTERNATE BOLT HEAD



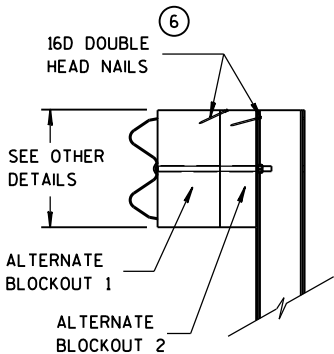
POST BOLT, SPLICE BOLT AND RECESS NUT



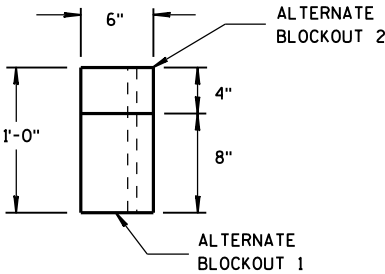
PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 104 ENT
FHWA ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (G) $\frac{1}{2}$ " DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

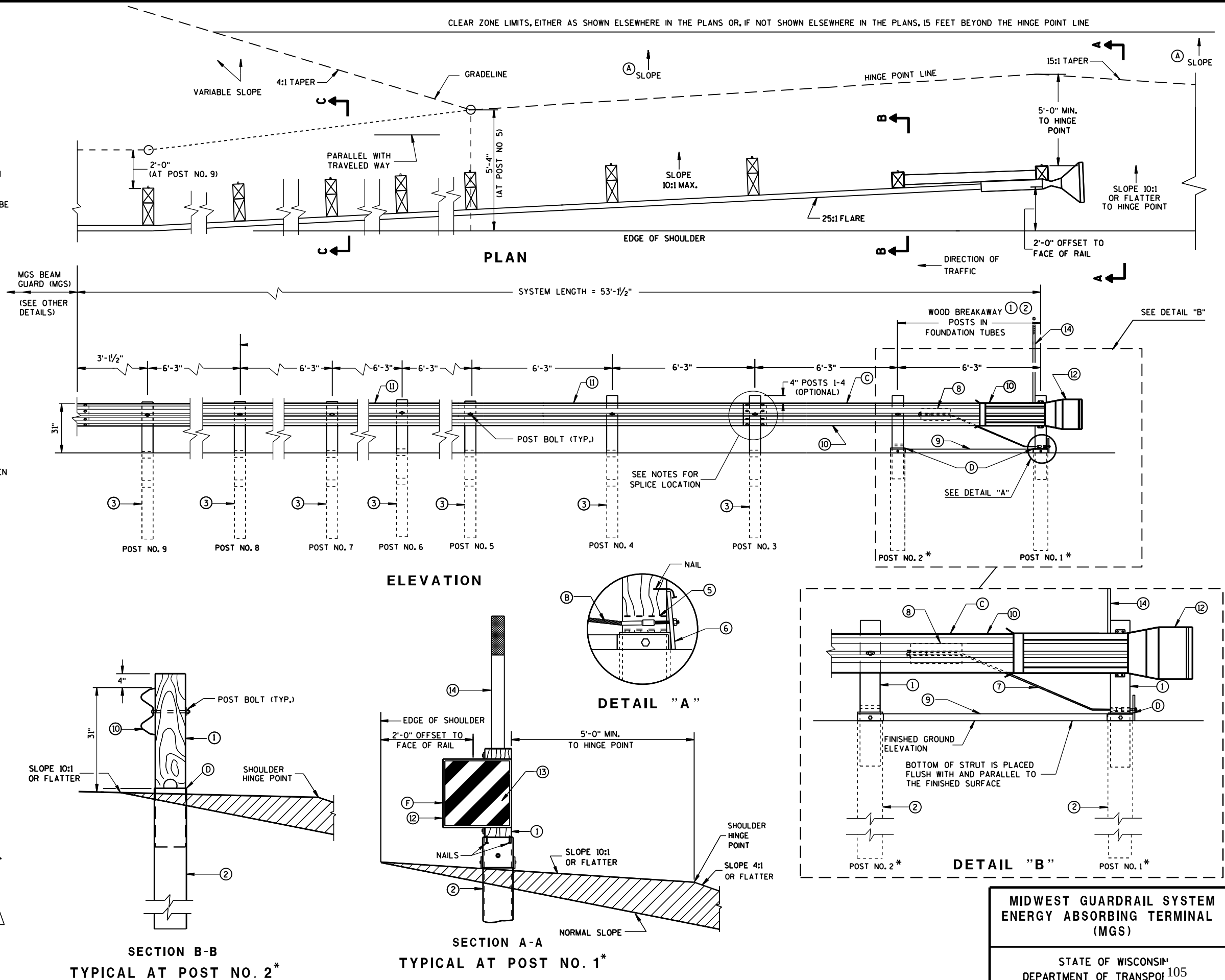
SEE SDD 14B42 FOR MORE INFORMATION.

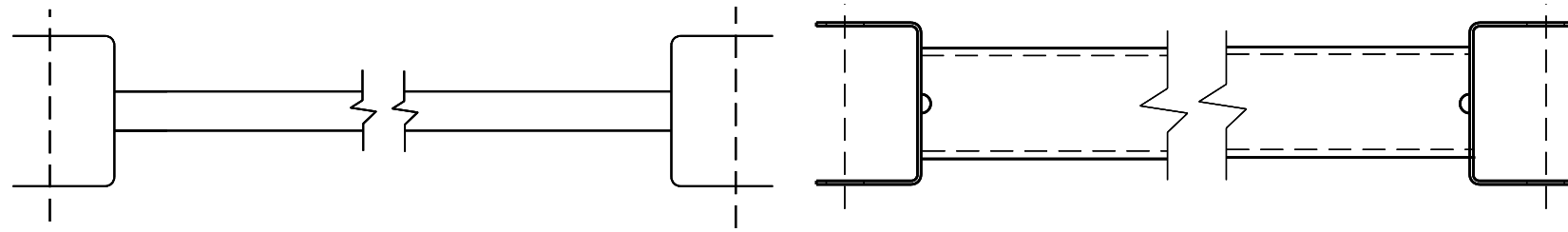
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

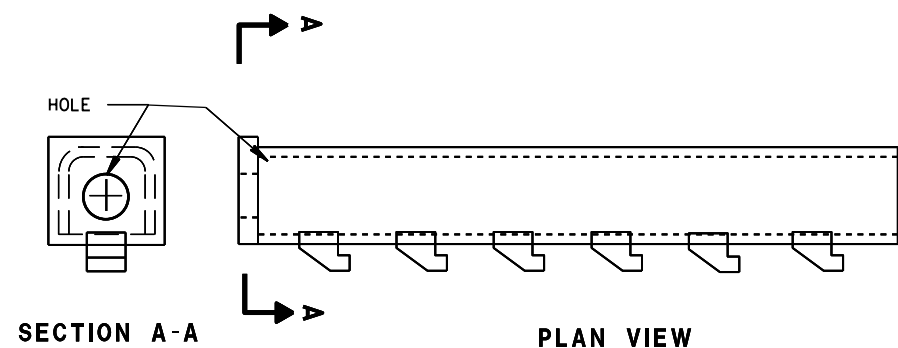
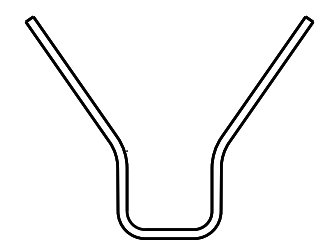
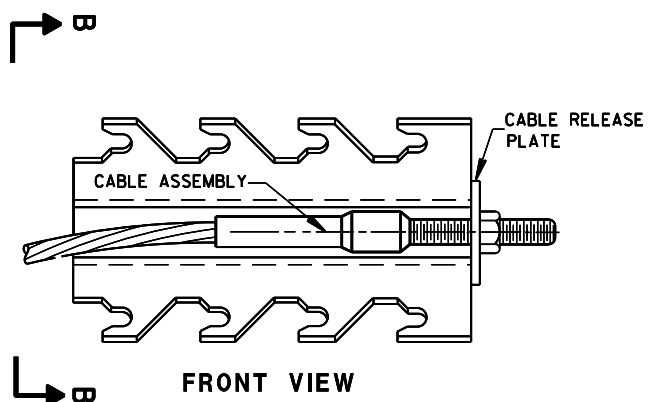
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER $\frac{3}{4}$ " 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.





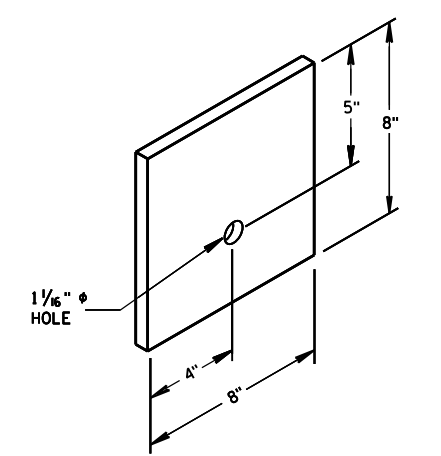
9 H
GENERIC GROUND STRUT



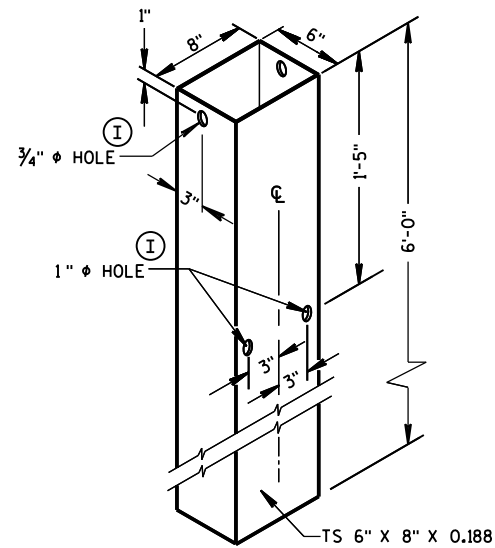
8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

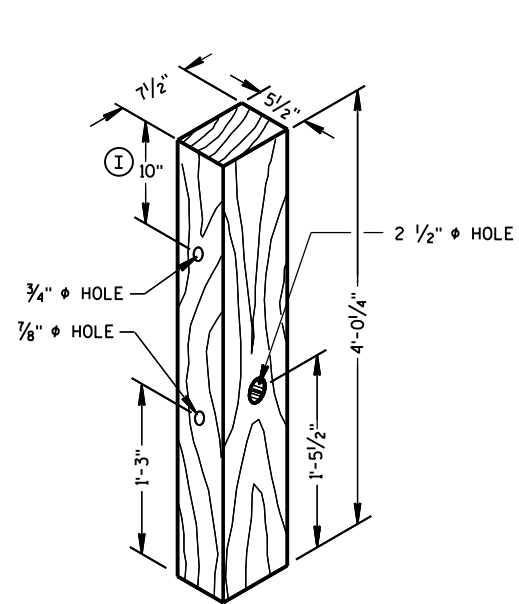
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



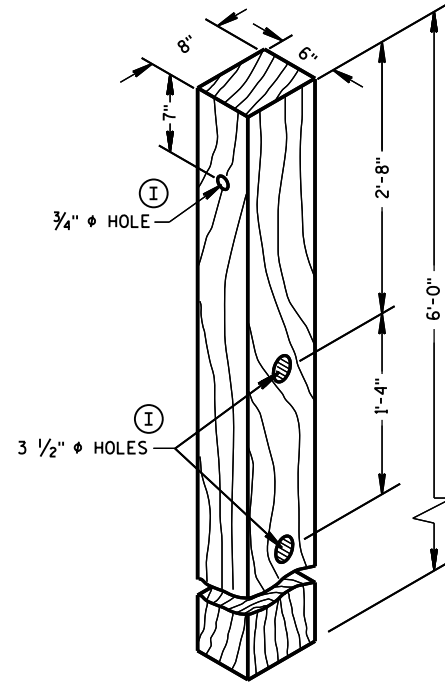
⑥
BEARING PLATE



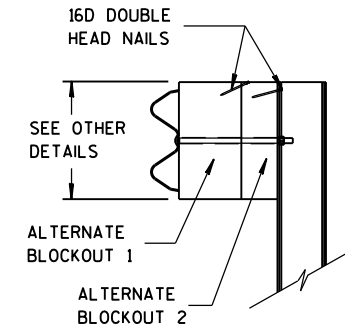
FOUNDATION TUBE ②



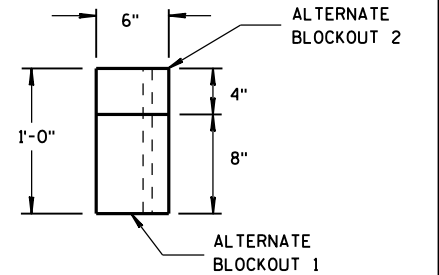
POSTS NUMBER 1 AND 2
WOOD BREAKAWAY POST ①



POSTS NUMBER 3-9
WOOD CRT POST ③

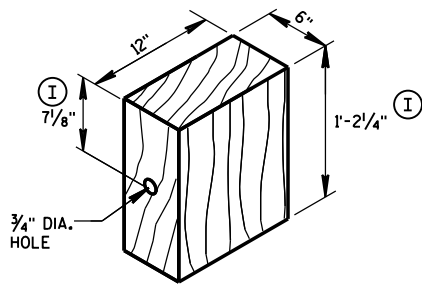


SIDE VIEW



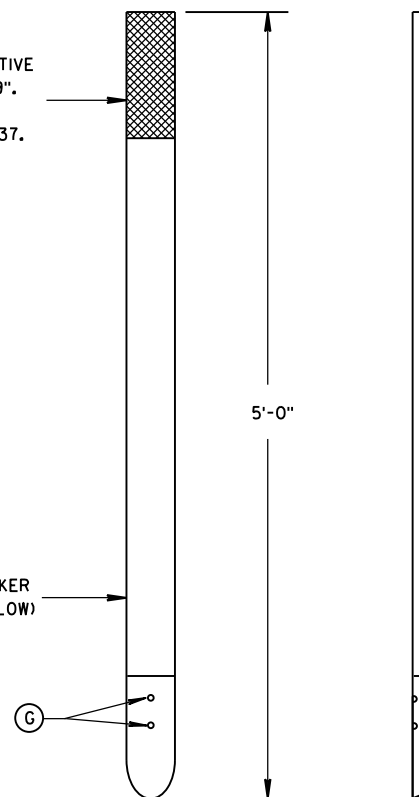
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL



WOOD BLOCKOUT ④
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

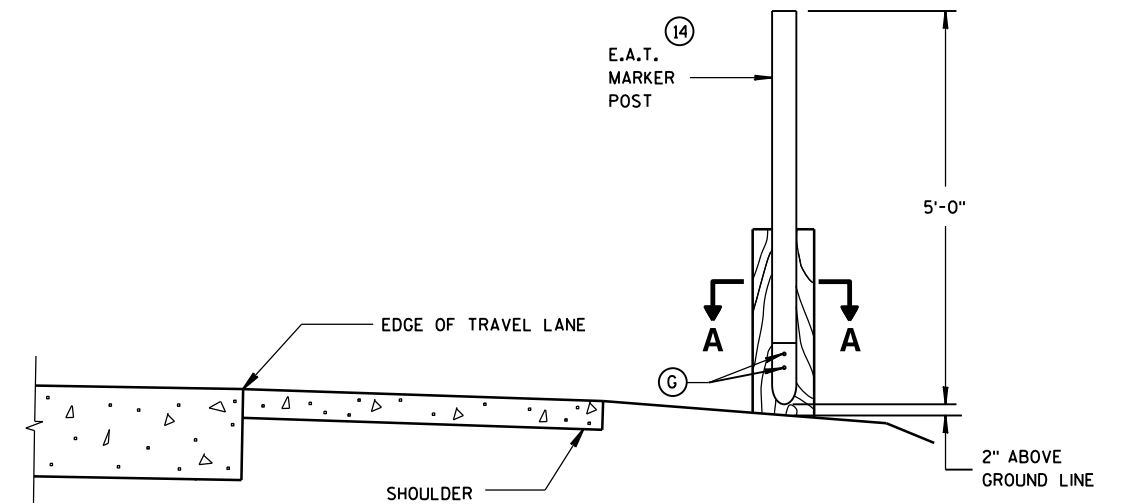
TYPE H
YELLOW REFLECTIVE
SHEETING 3" X 9".
SEE STANDARD
SPECIFICATION 637.



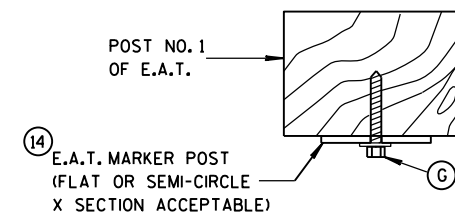
FRONT VIEW

SIDE VIEW

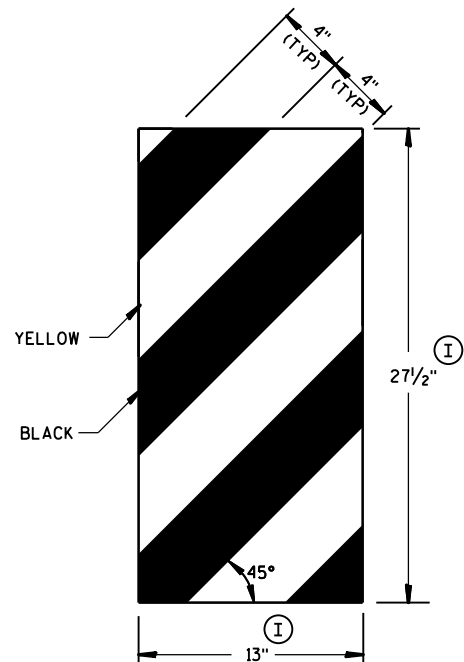
E.A.T. MARKER POST ⑭



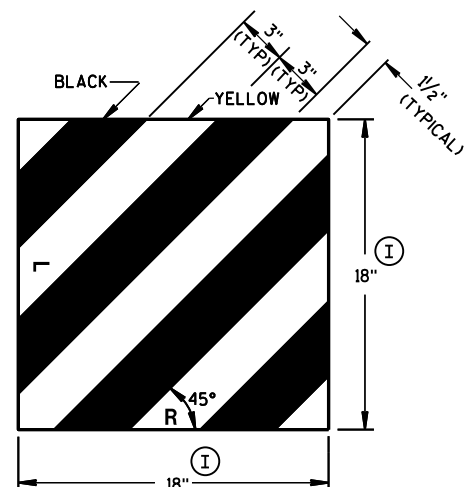
TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A



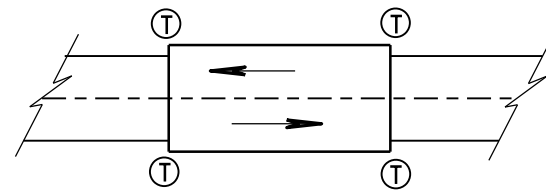
GENERIC REFLECTIVE SHEETING ⑬ ①



MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

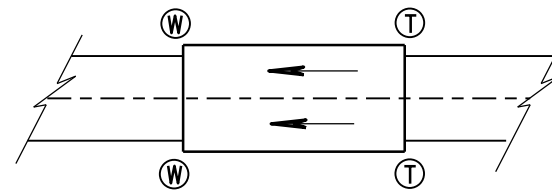
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 107 ENT
FHWA ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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.

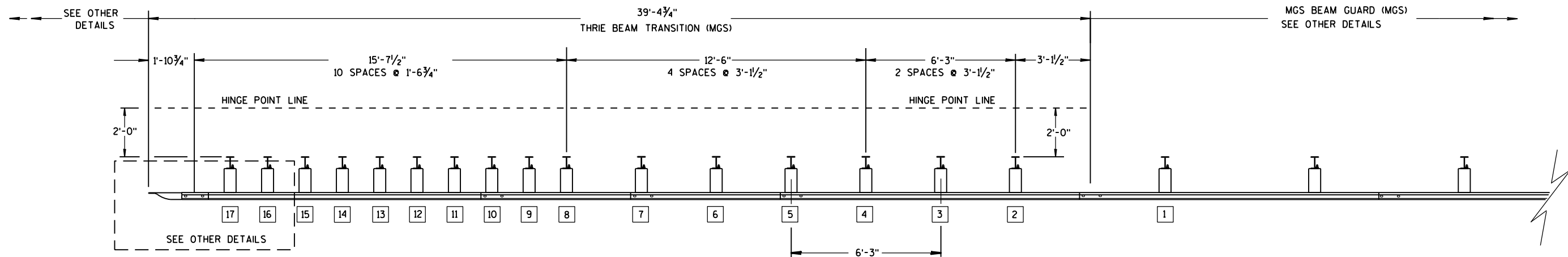
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

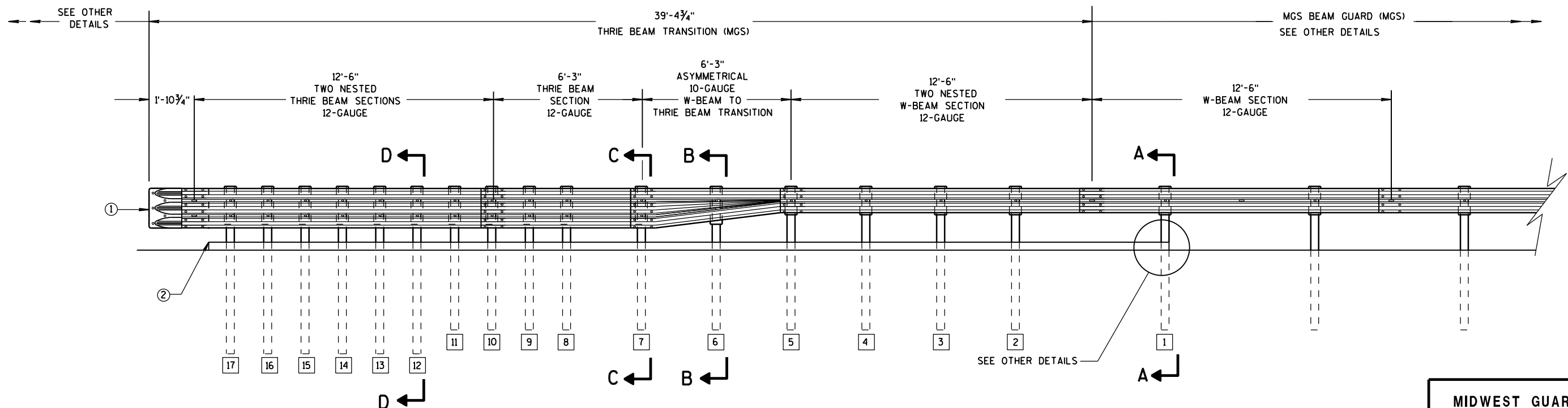
① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



PLAN VIEW



ELEVATION VIEW

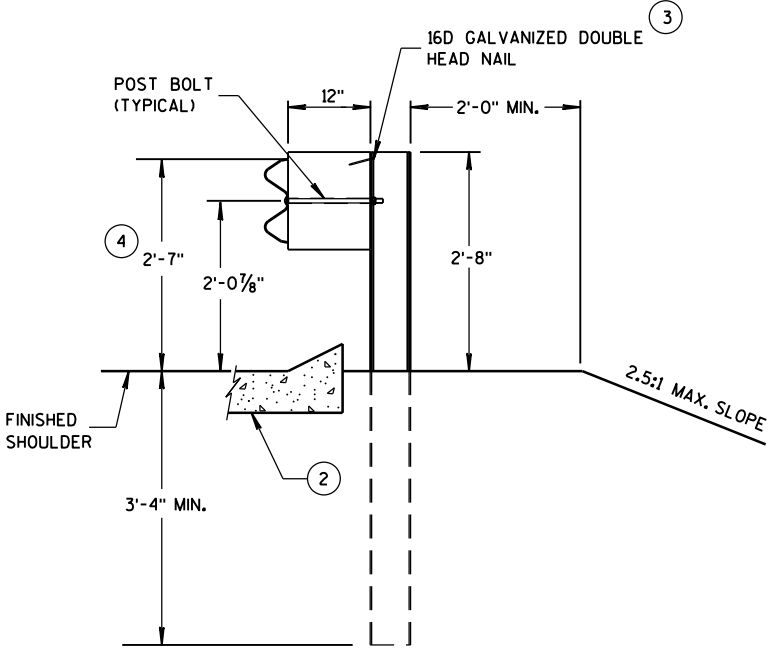
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

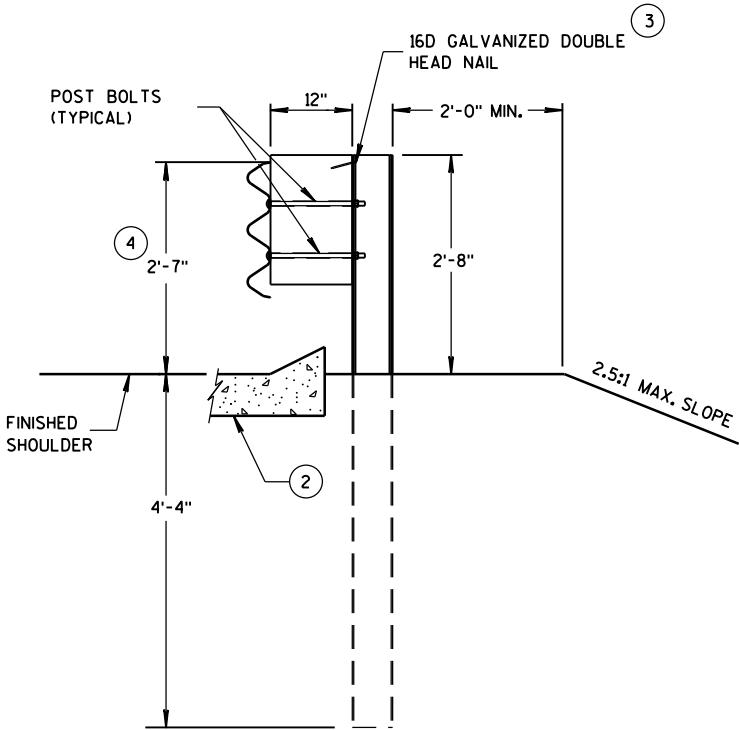
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 108

GENERAL NOTES

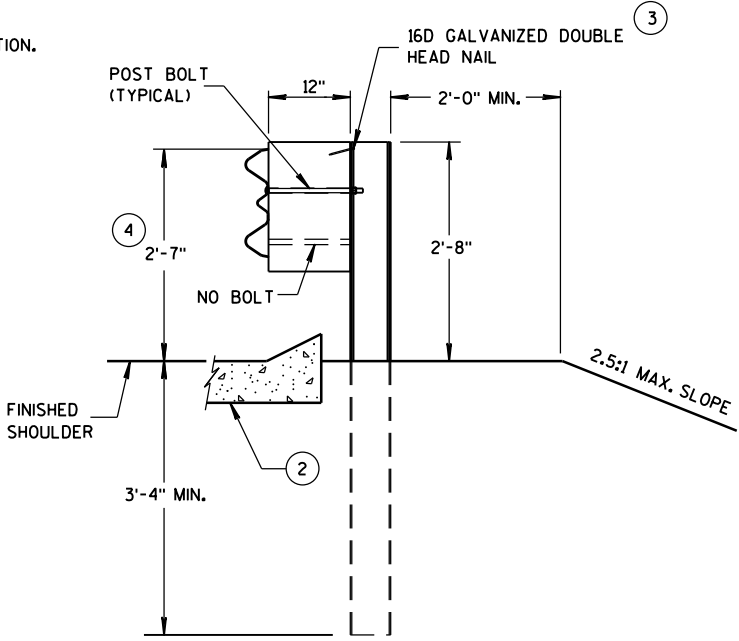
- 2 OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- 3 WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- 4 TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



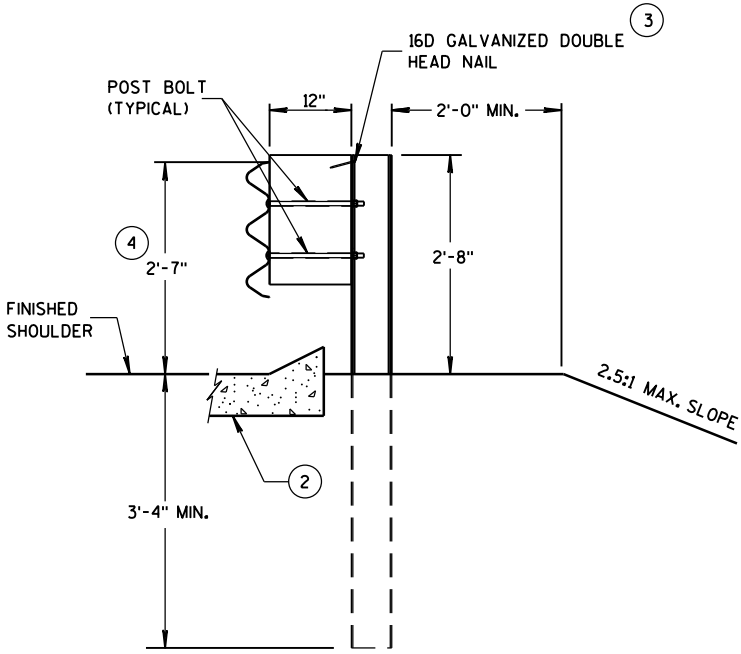
SECTION A-A
POSTS 1-5



SECTION D-D
POSTS 12-17



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11

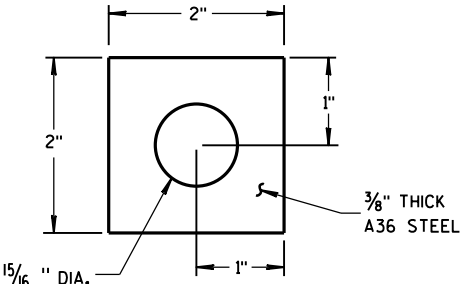
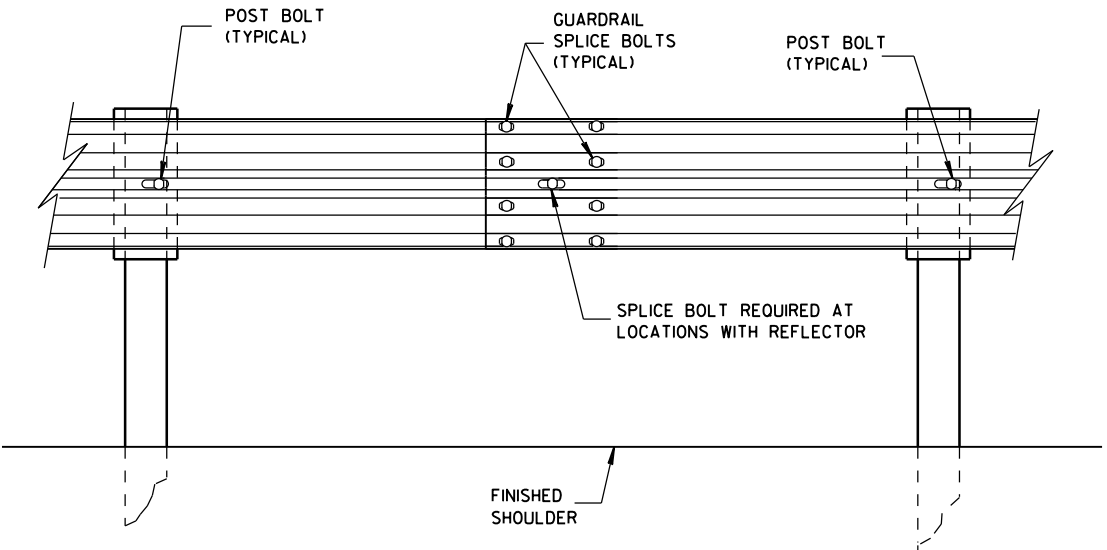
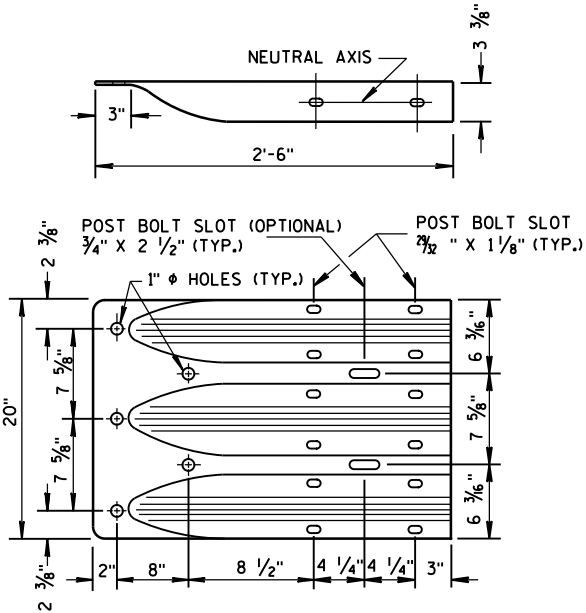


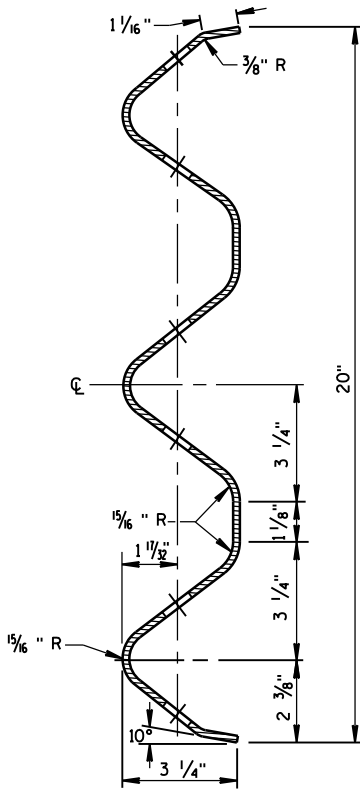
PLATE WASHER DETAIL



SPlice DETAIL



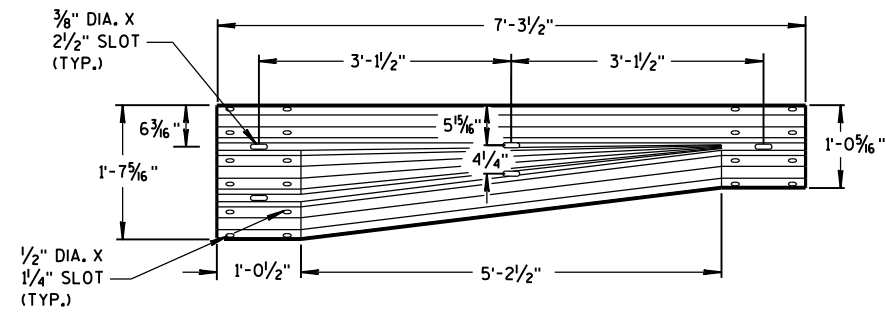
THRIE BEAM
TERMINAL CONNECTOR



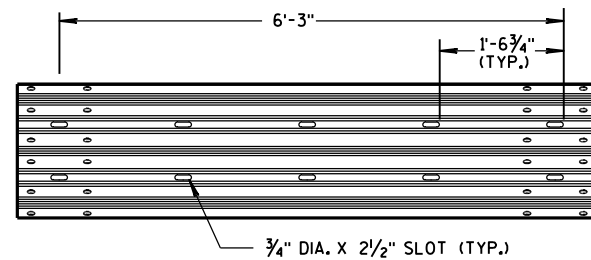
SECTION THRU THRIE
BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

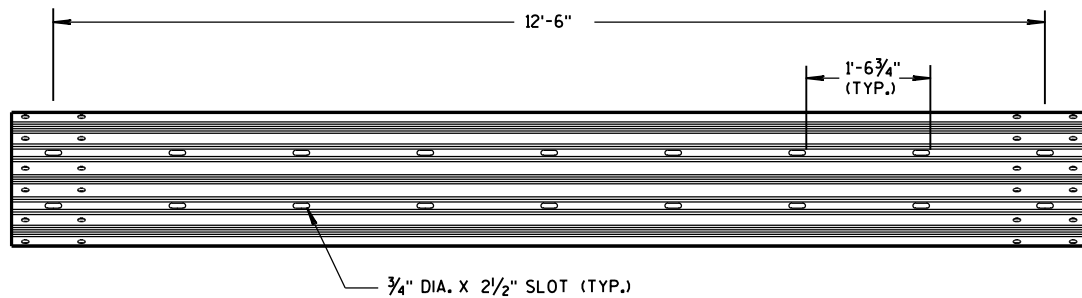
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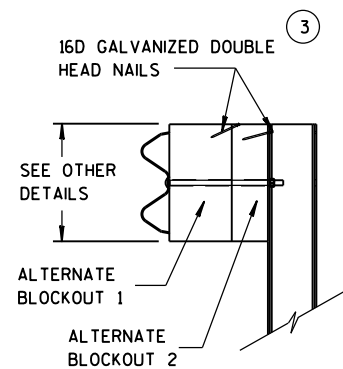
W-BEAM TO THRIE BEAM TRANSITION SECTION



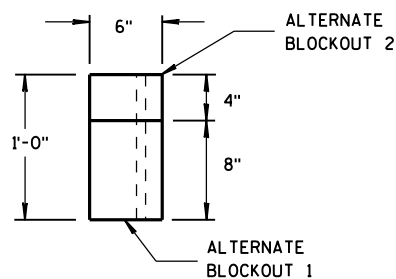
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

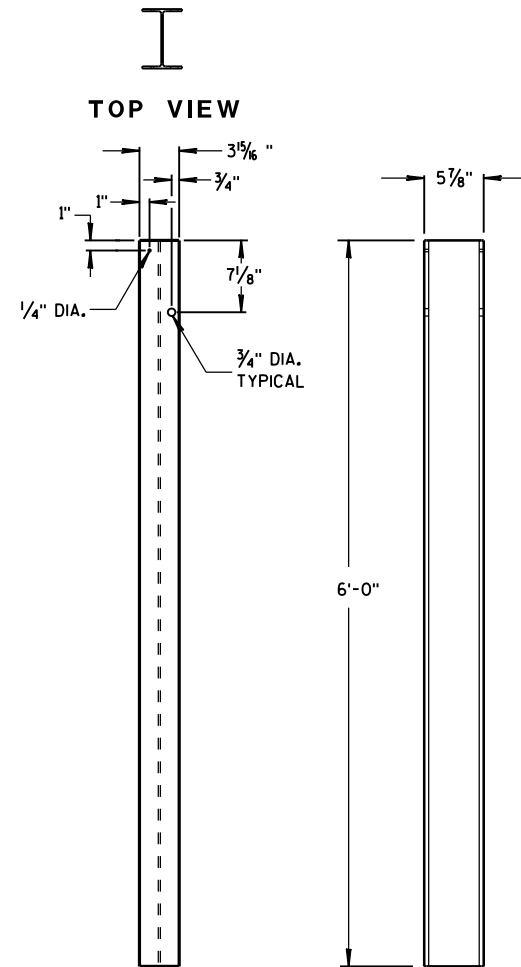


SIDE VIEW



TOP VIEW

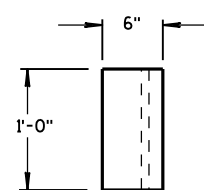
ALTERNATE WOOD BLOCKOUT DETAIL



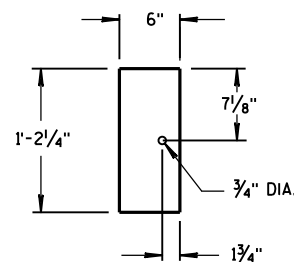
FRONT VIEW

SIDE VIEW

STEEL POSTS 1-5

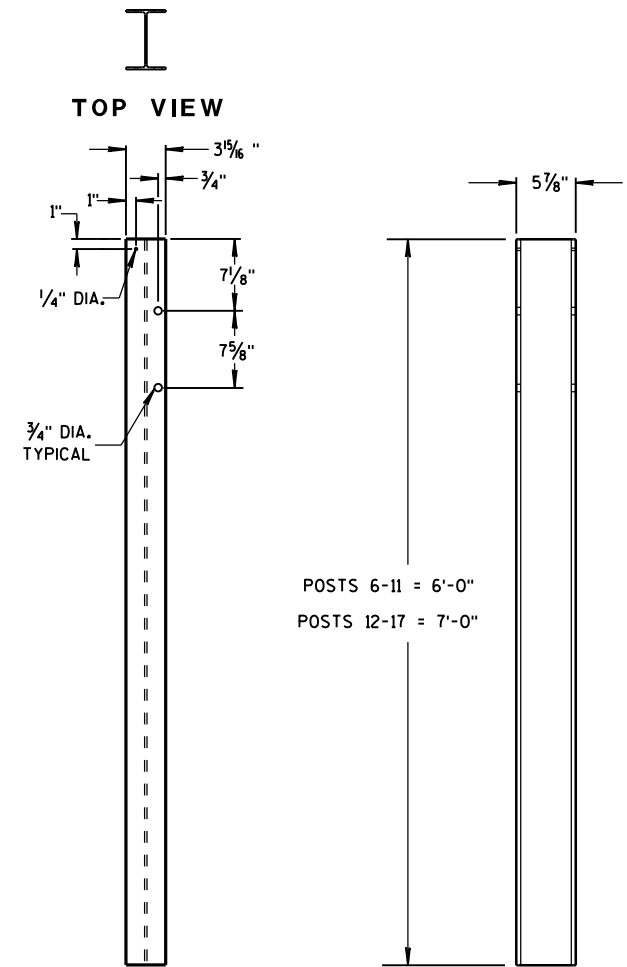


TOP VIEW



FRONT VIEW

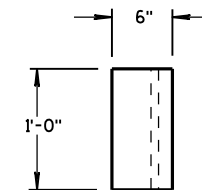
BLOCKOUT
POSTS 1-5



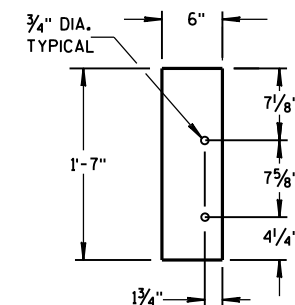
FRONT VIEW

SIDE VIEW

STEEL POSTS 6-17



TOP VIEW



FRONT VIEW

BLOCKOUT
POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

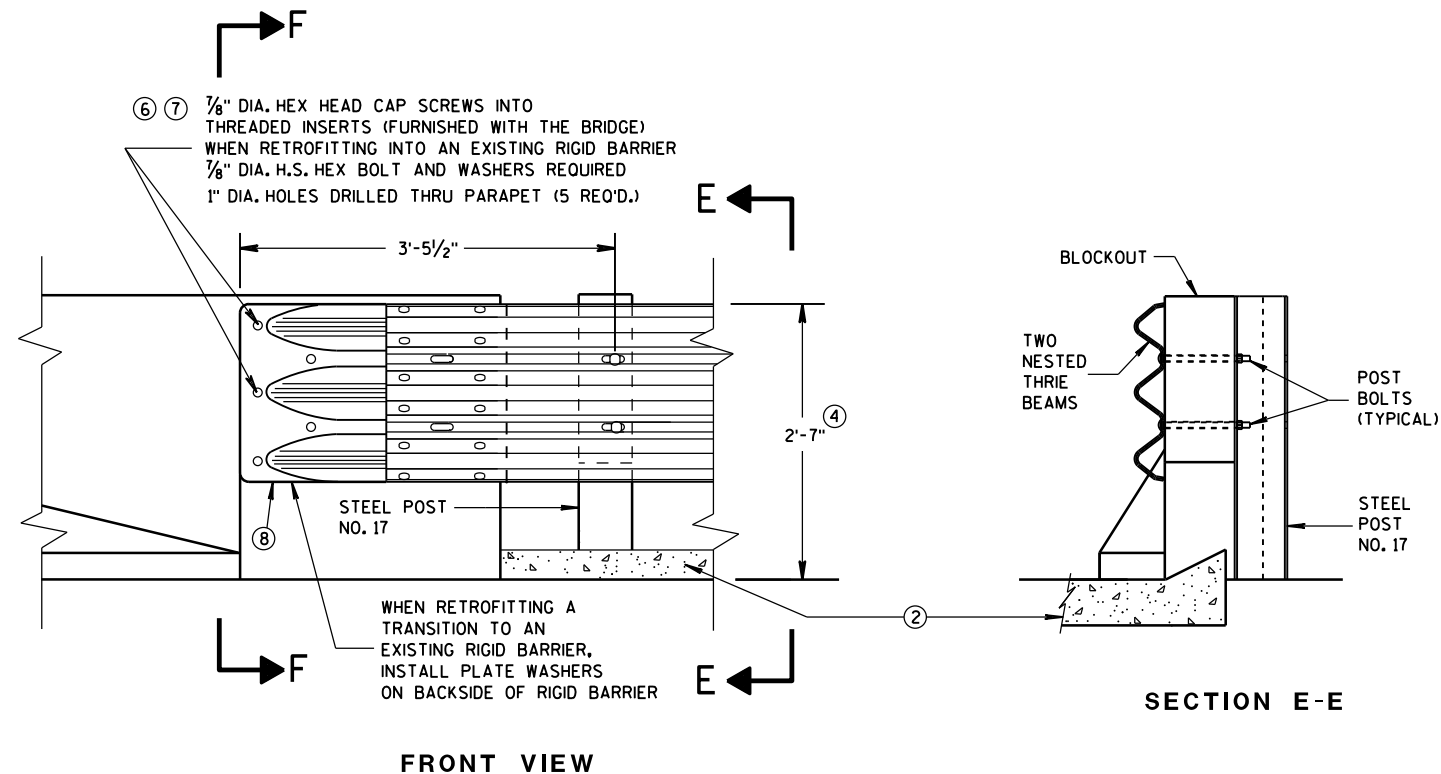
BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

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)

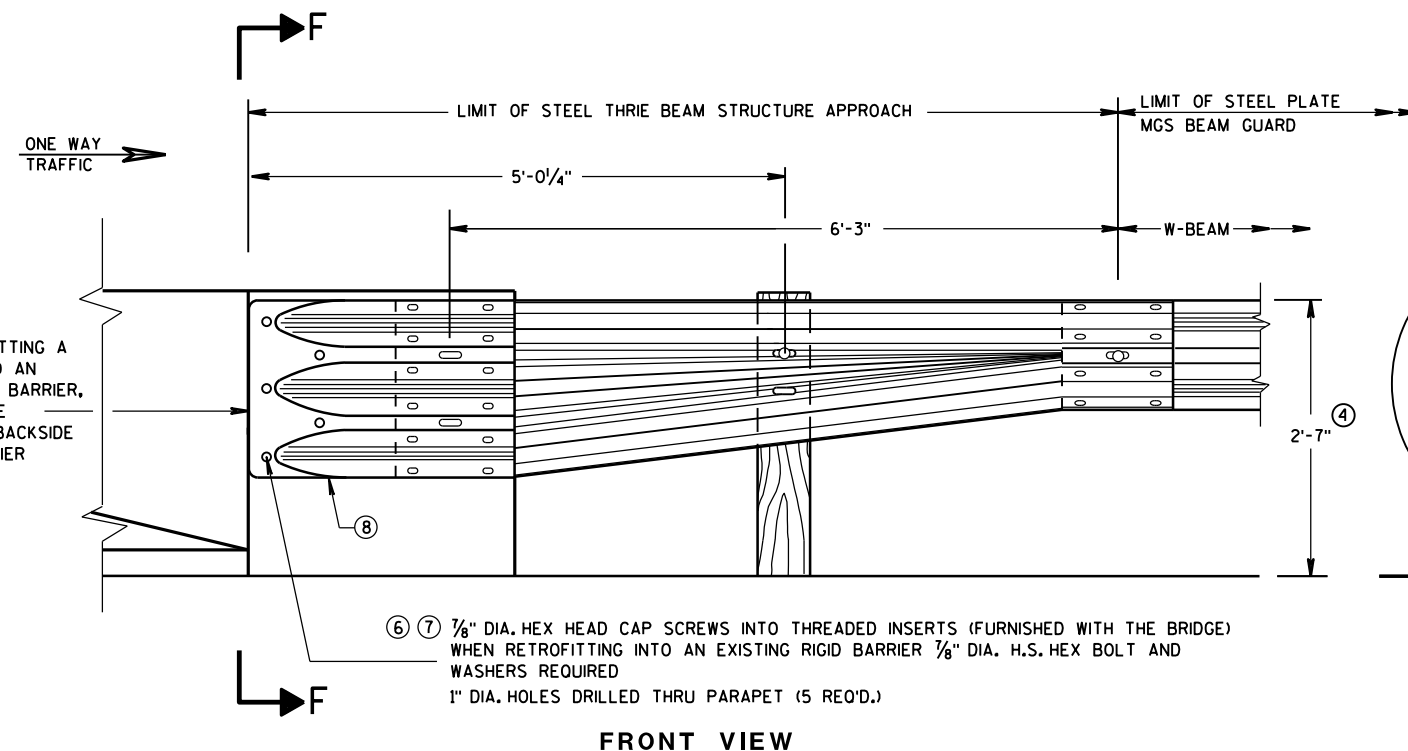
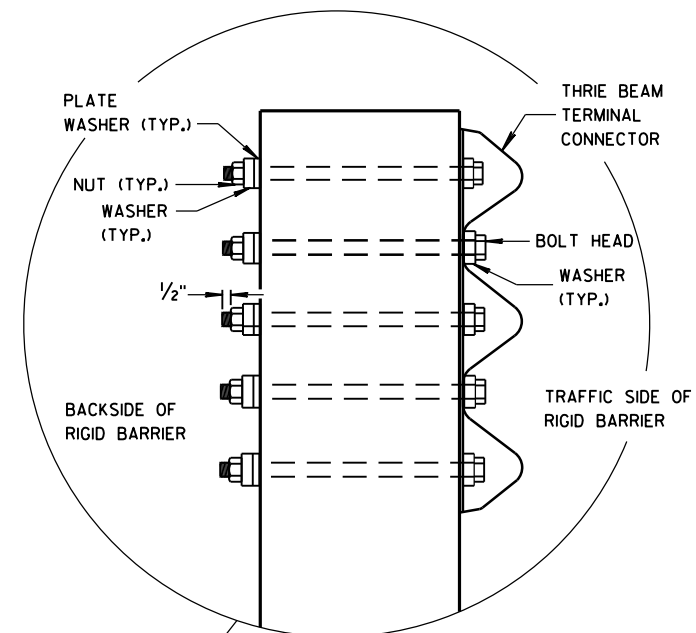
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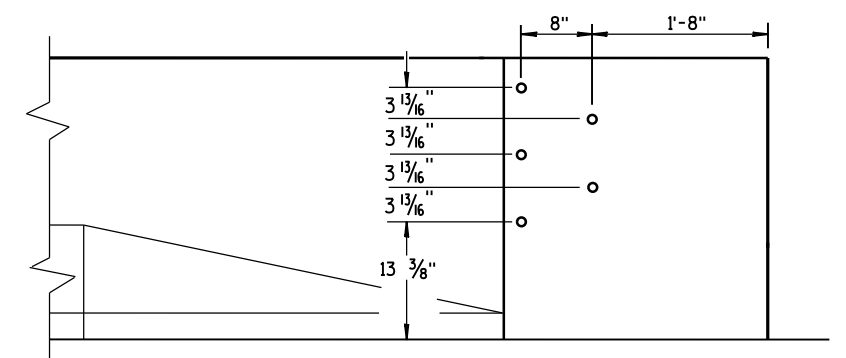
GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSITION 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 $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- 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.
- 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".



SECTION F-F



DRILL HOLE LOCATION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

DATE

FHWA

/S/ Jerry H. Zogg

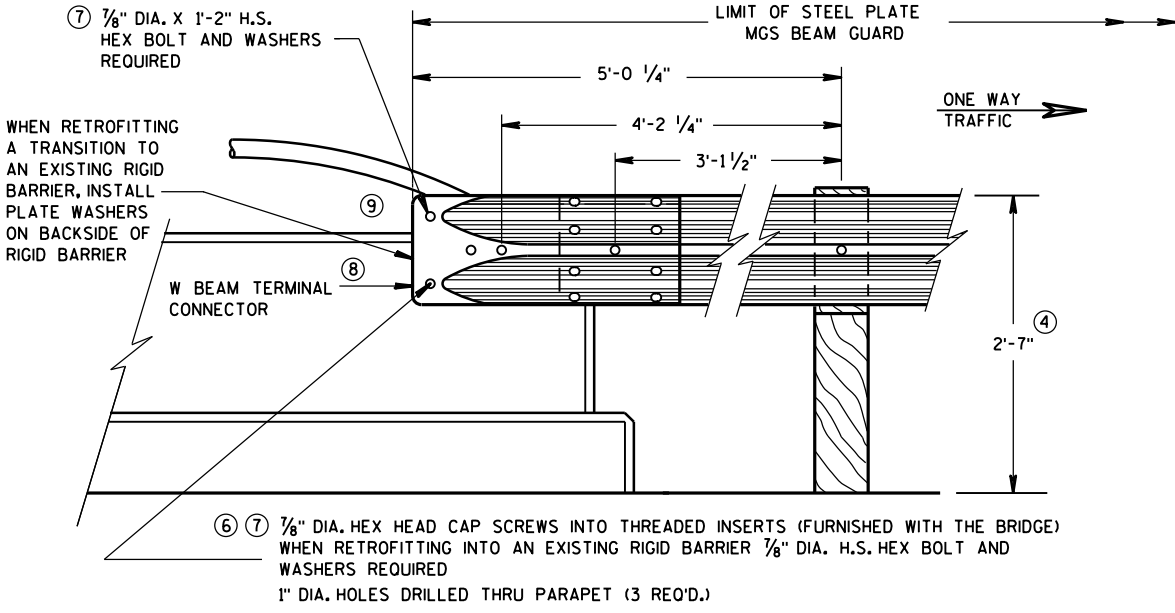
ROADWAY STANDARDS 0111

ENGINEER

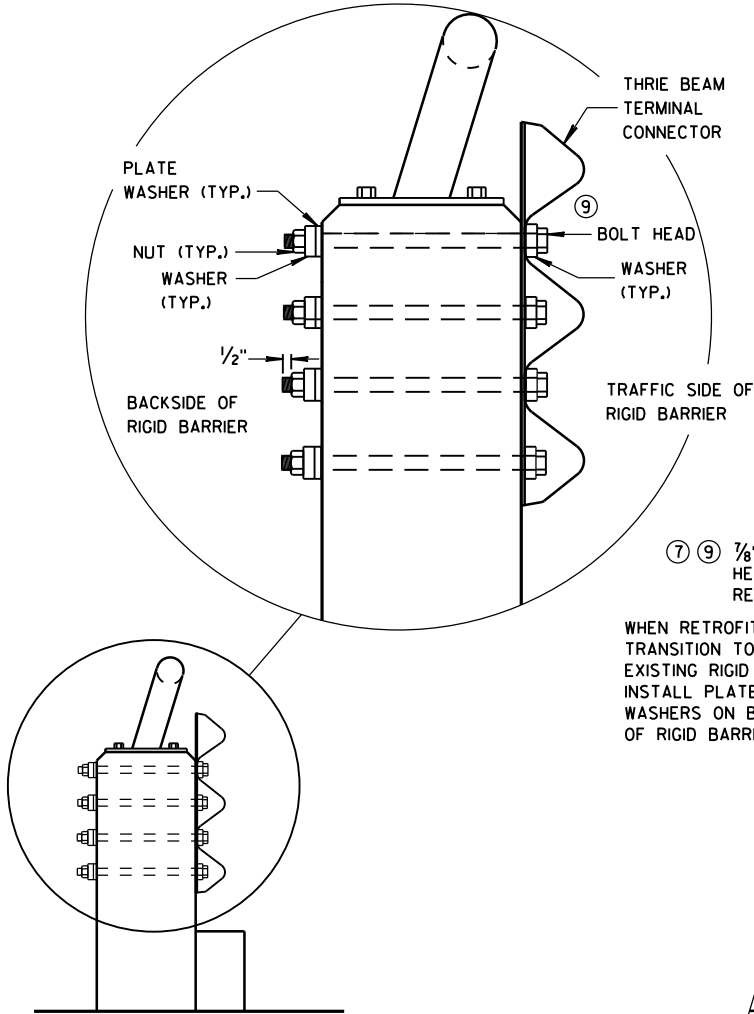
GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

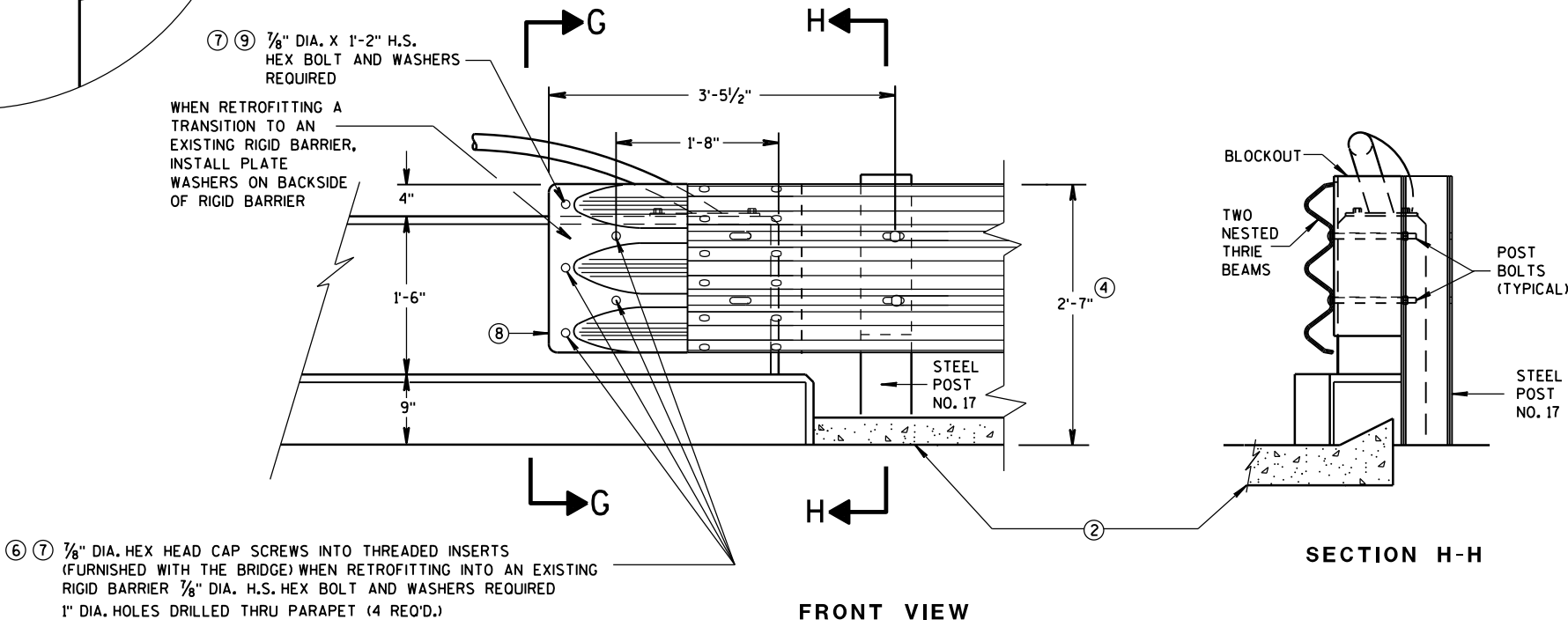
- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH 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 $\frac{5}{8}"$ THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- 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 $\frac{1}{2}"$.
- 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.



FRONT VIEW
W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

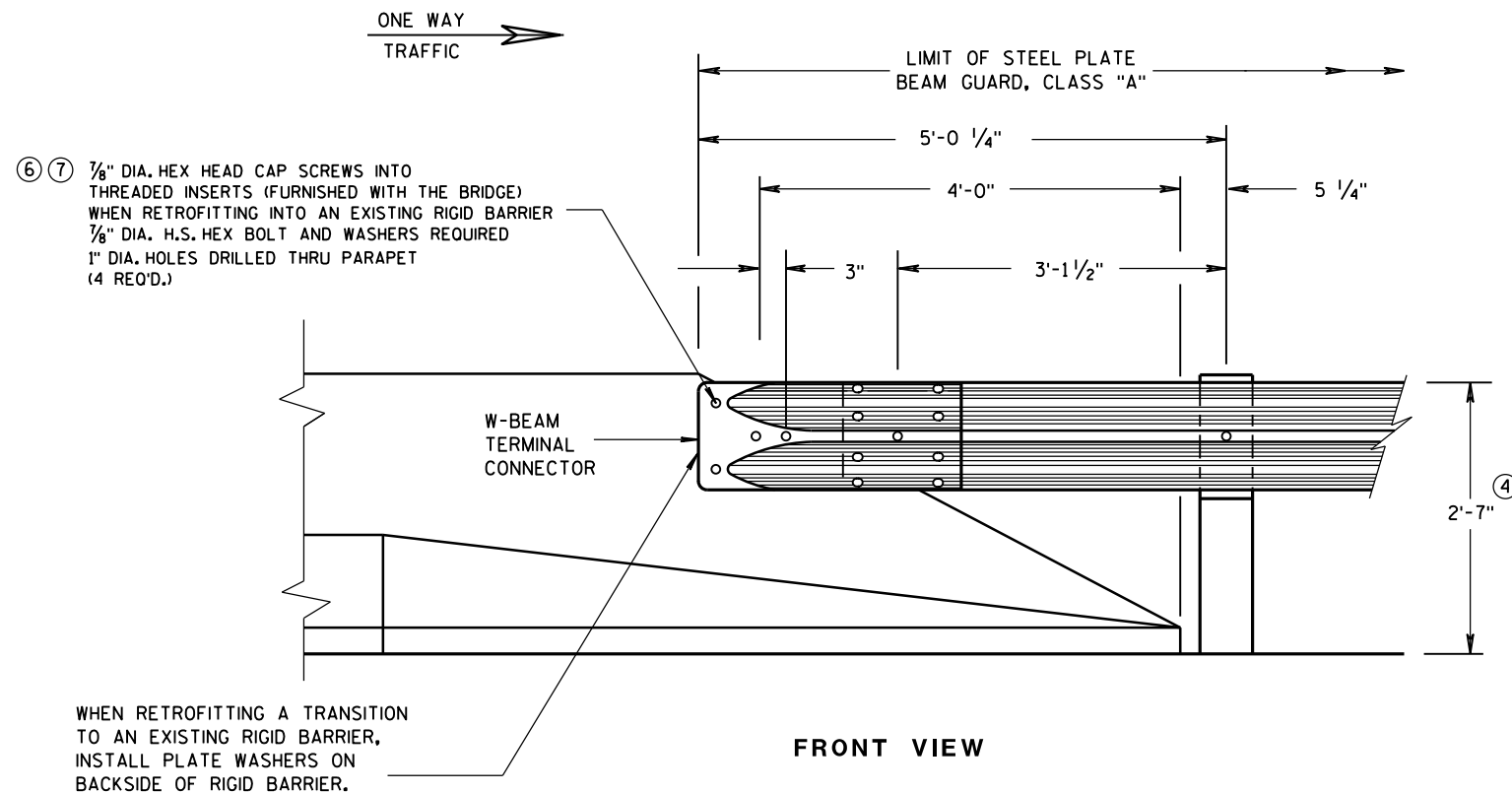


SECTION G-G



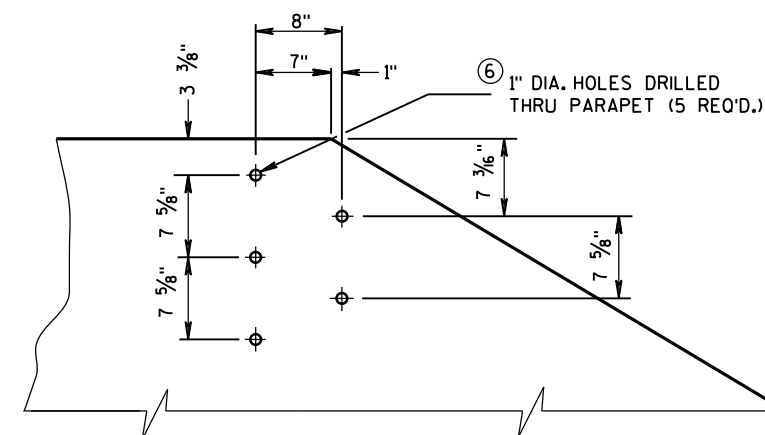
FRONT VIEW
THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED June, 2015	/S/ Jerry H. Zogg		
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FHWA	ENGINEER		

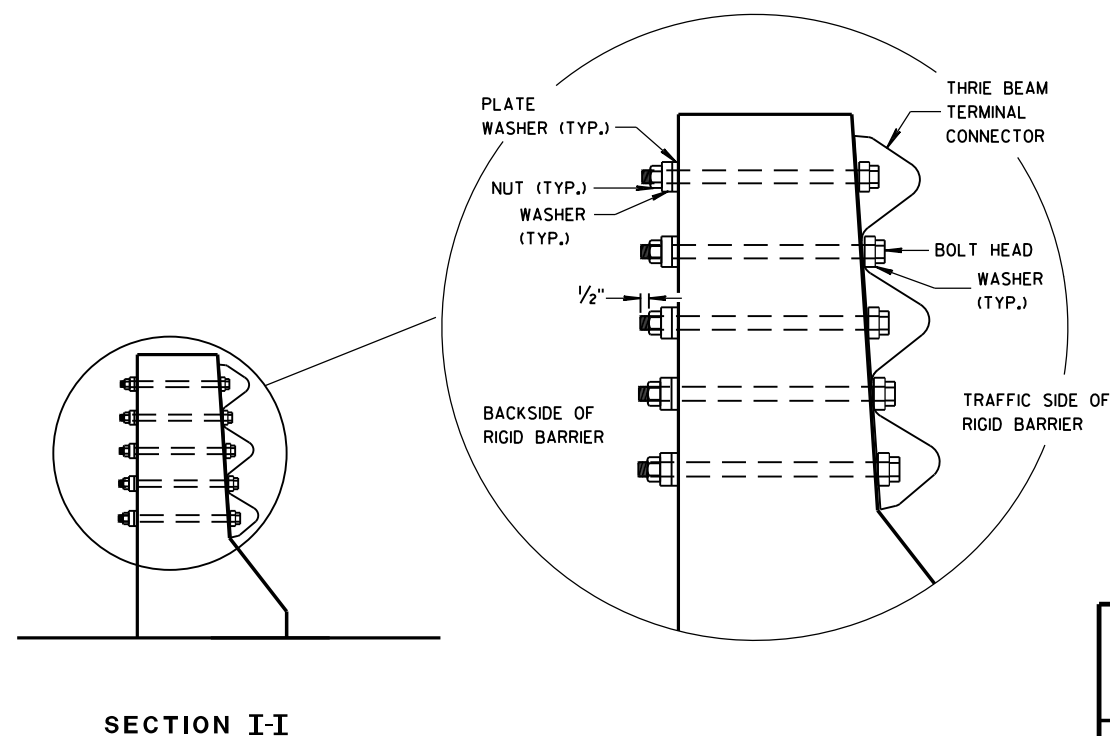
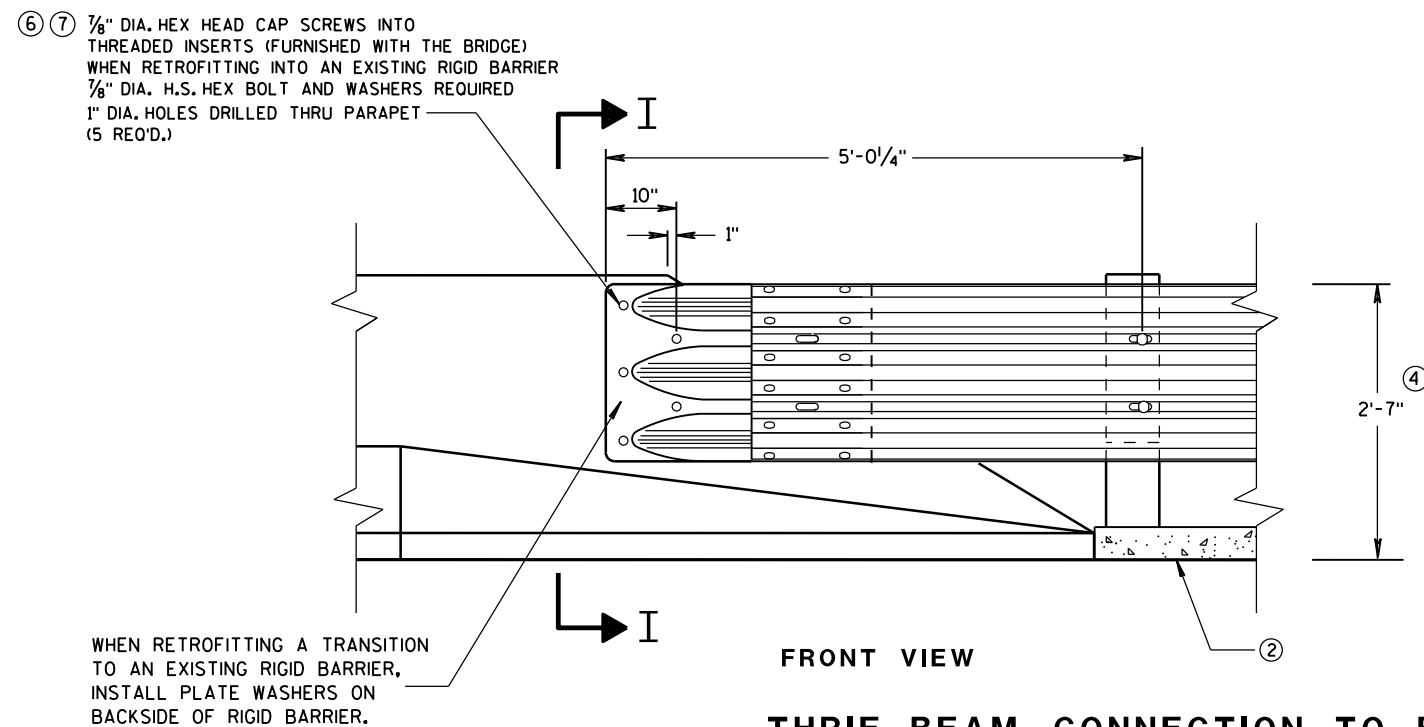


GENERAL NOTES

- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- 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.



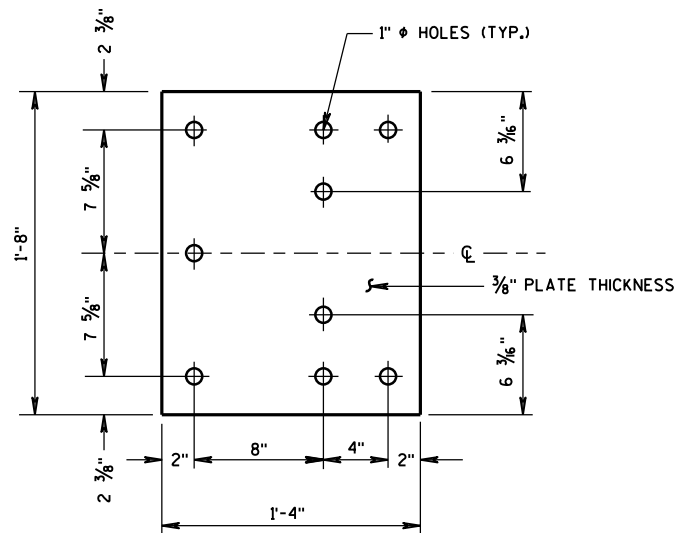
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



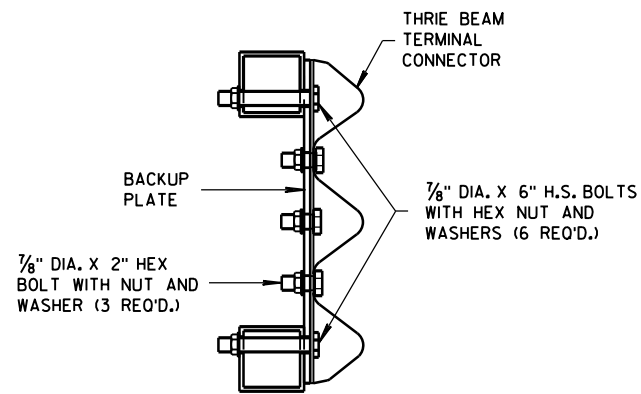
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

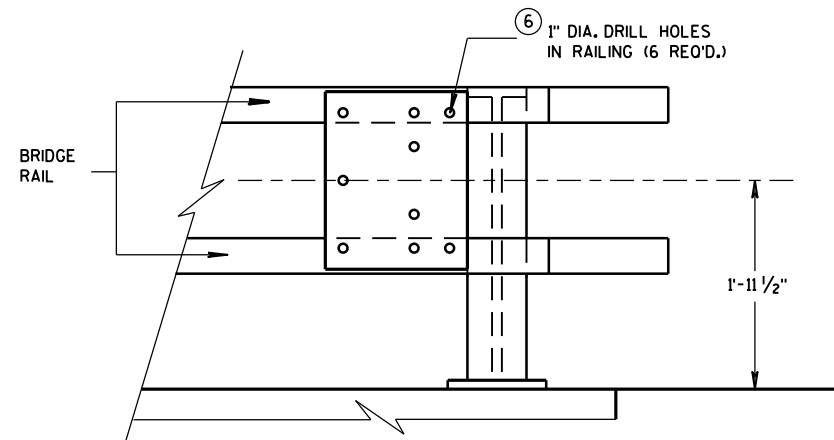
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FHWA



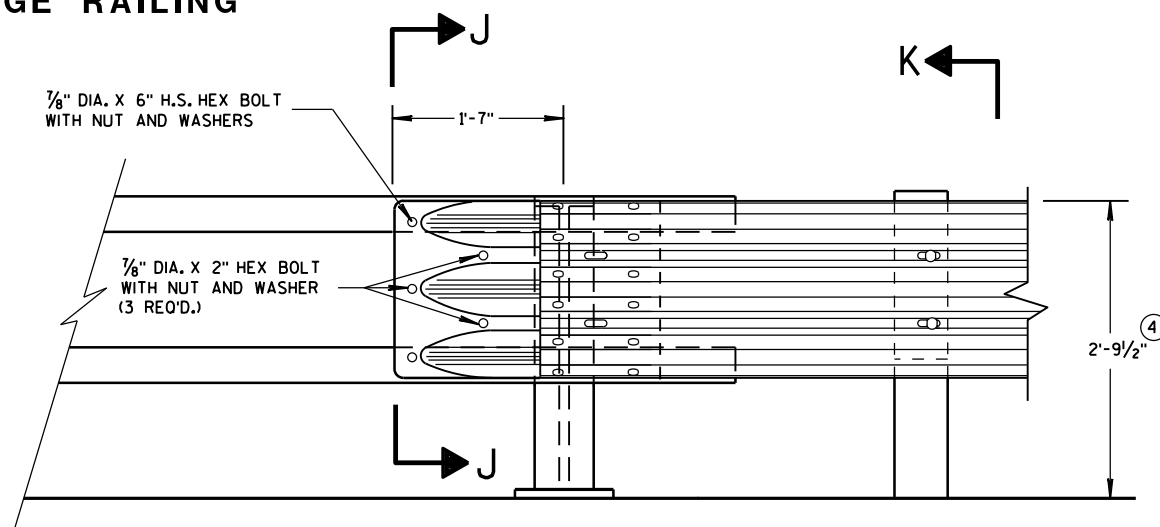
BACK-UP PLATE DETAIL



SECTION J-J

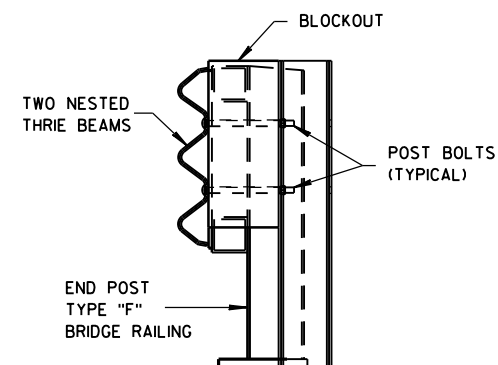


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



FRONT VIEW

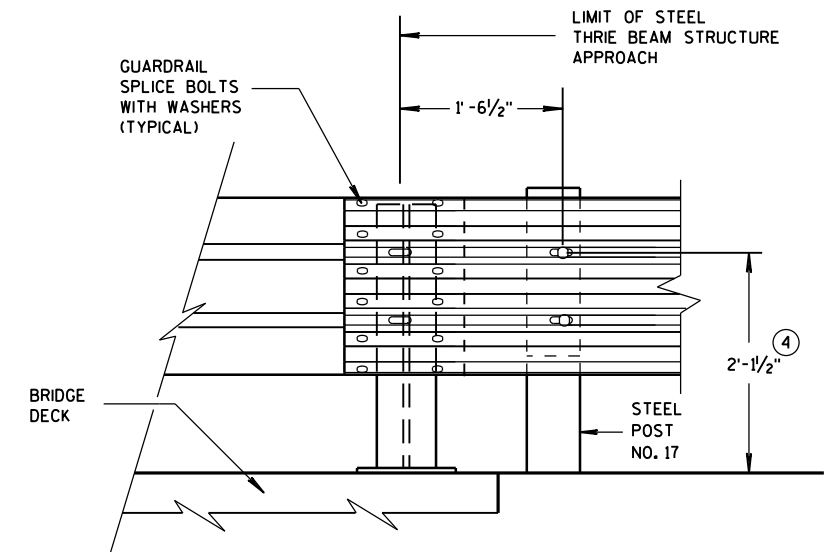
THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"



SECTION K-K

GENERAL NOTES

- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"

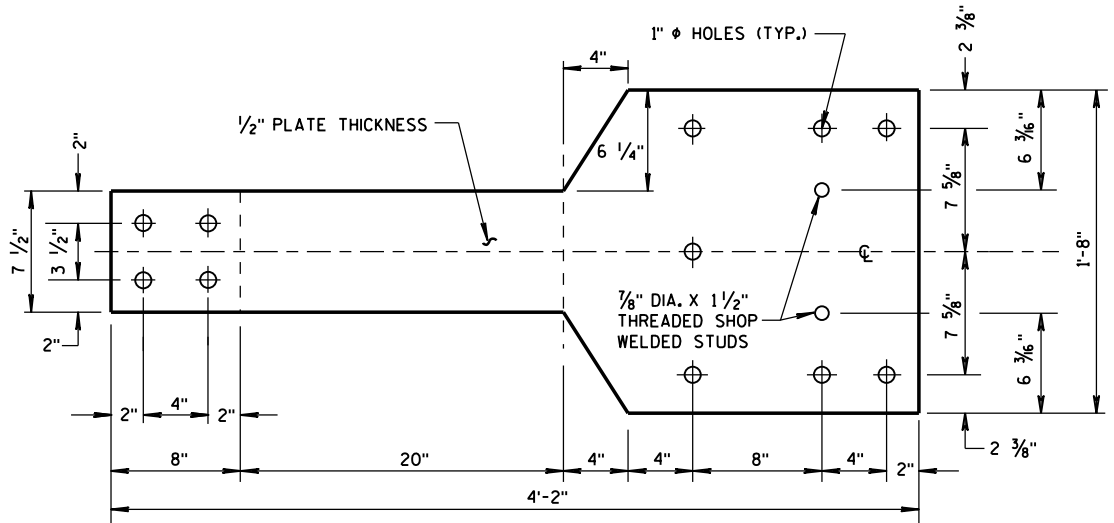
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

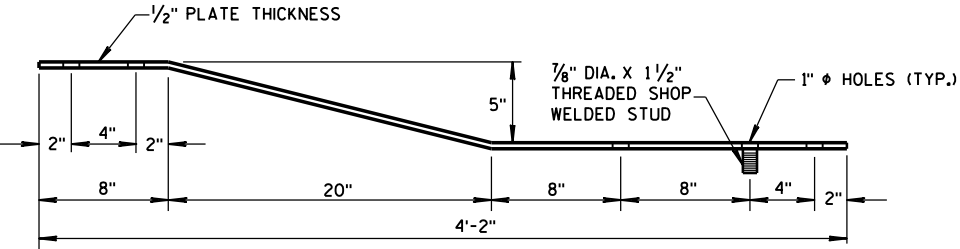
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DATE ROADWAY STANDARDS D 114 NT
FHWA ENGINEER

GENERAL NOTES

④ TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.

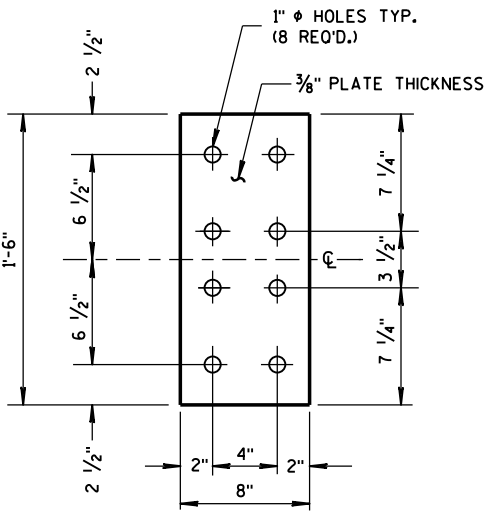


FRONT VIEW



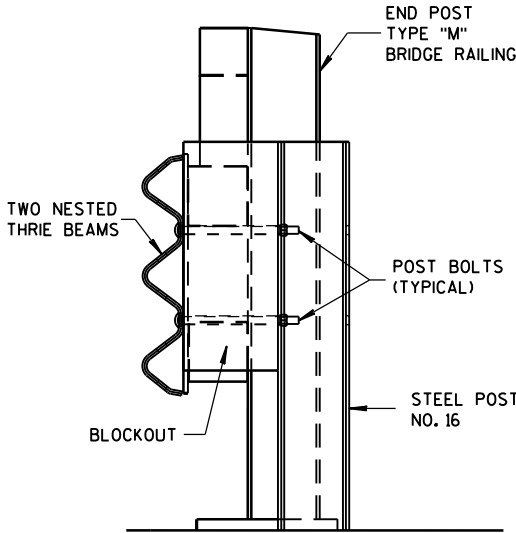
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

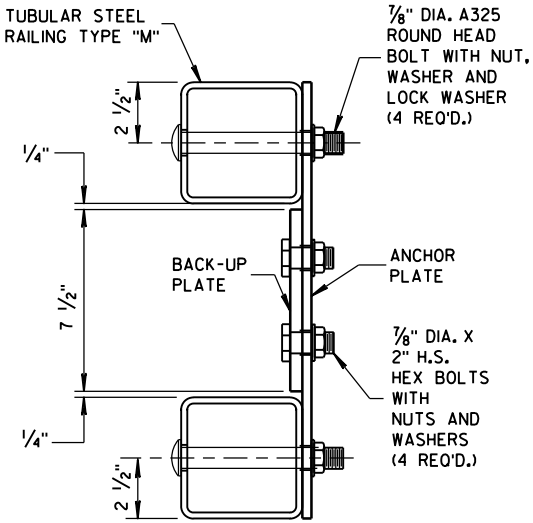


FRONT VIEW

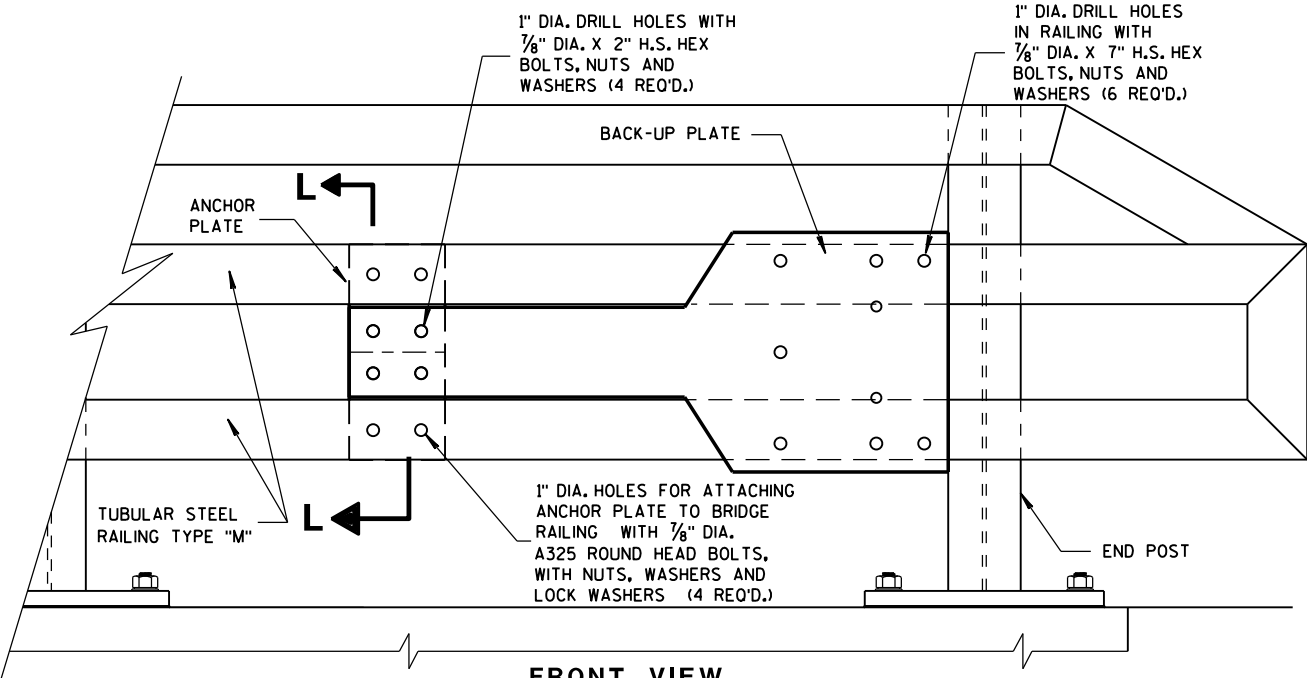
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

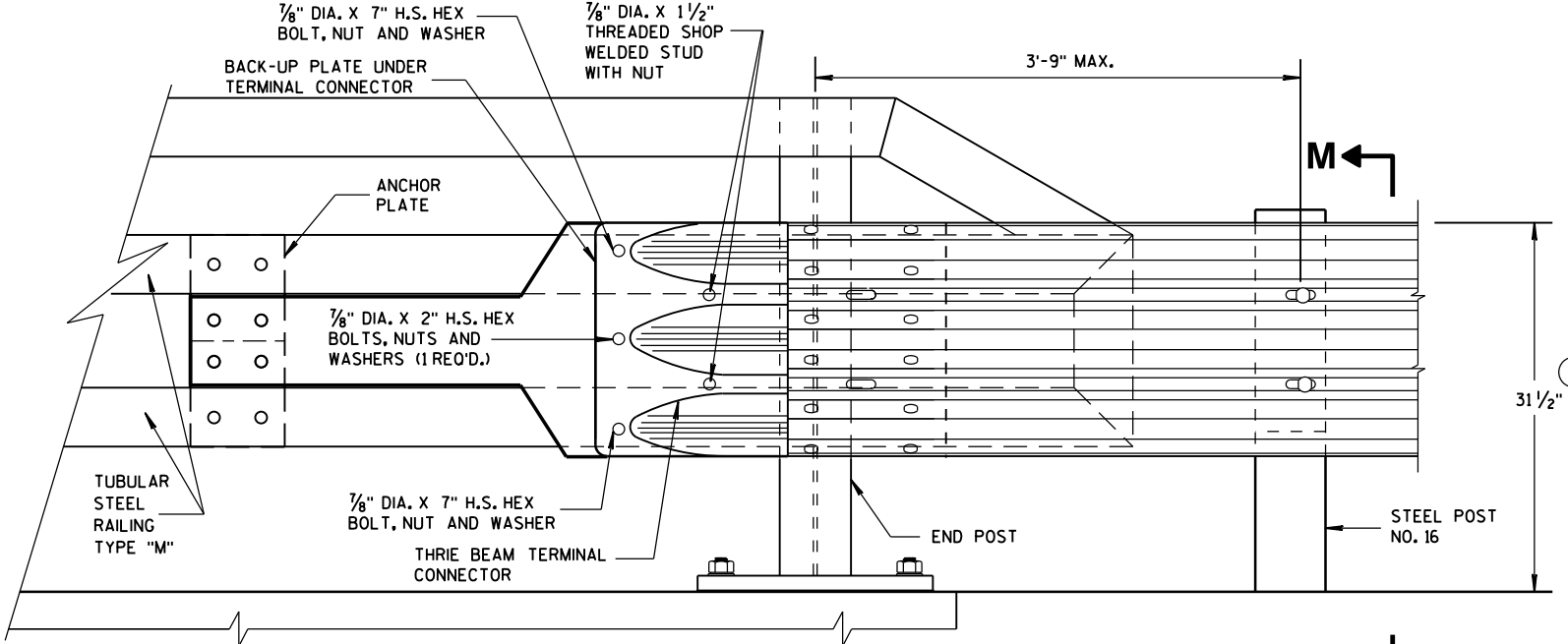


SECTION L-L

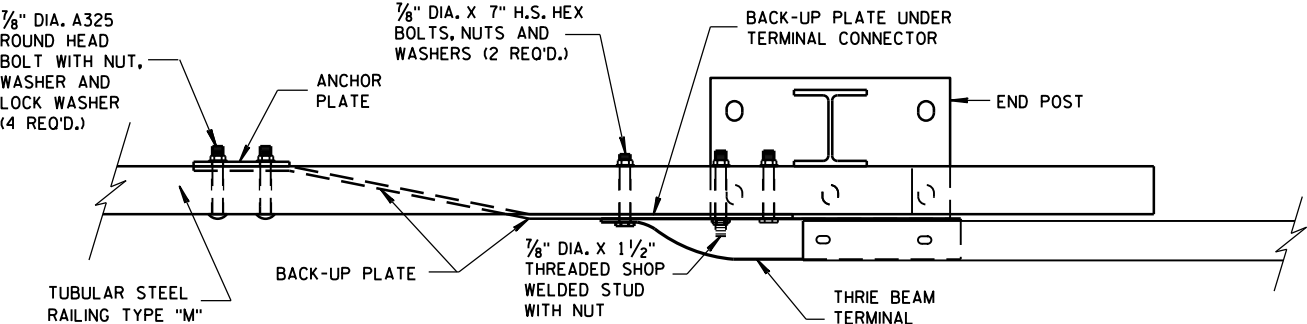


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



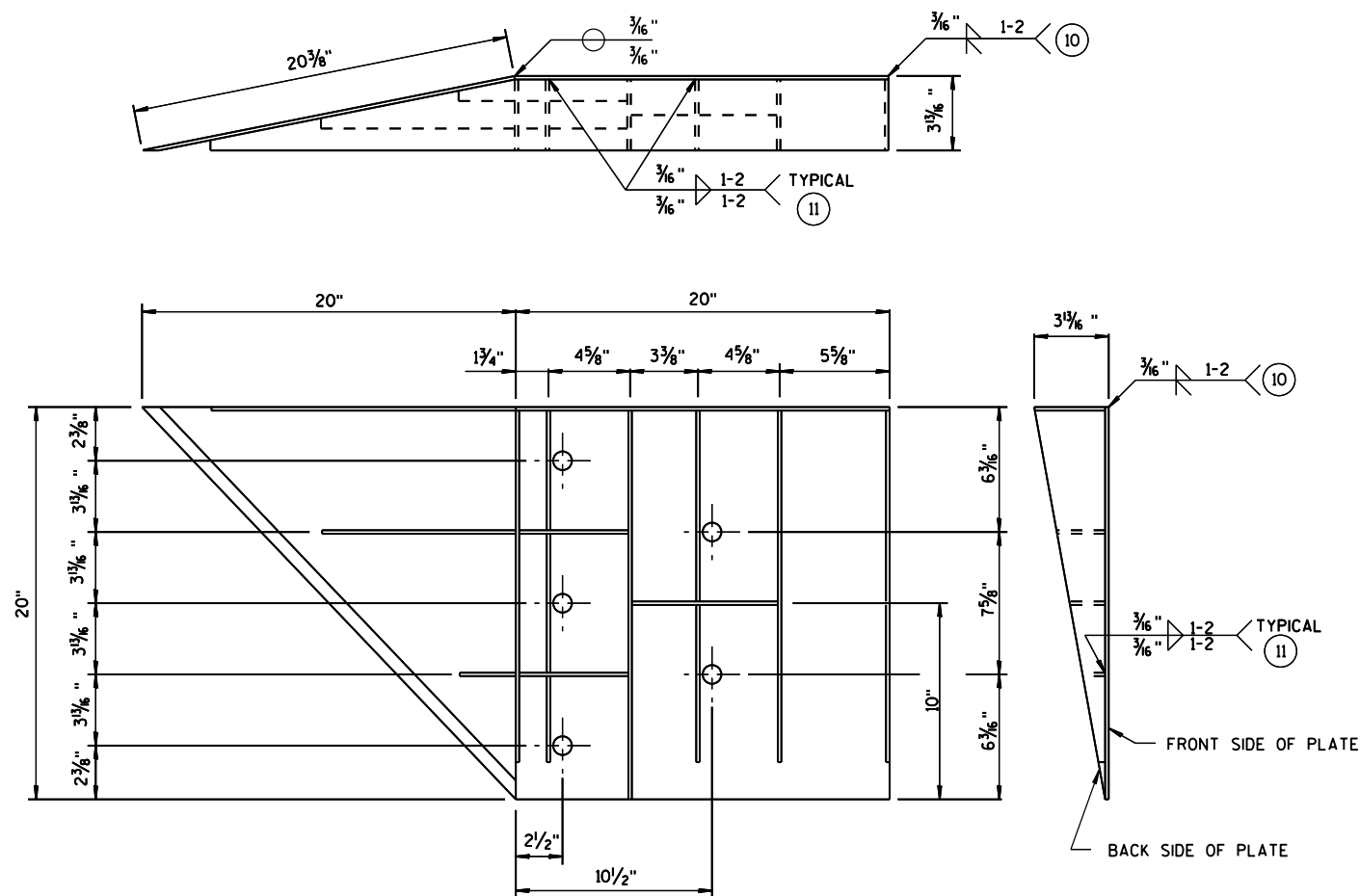
PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
115
INT
FHWA



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

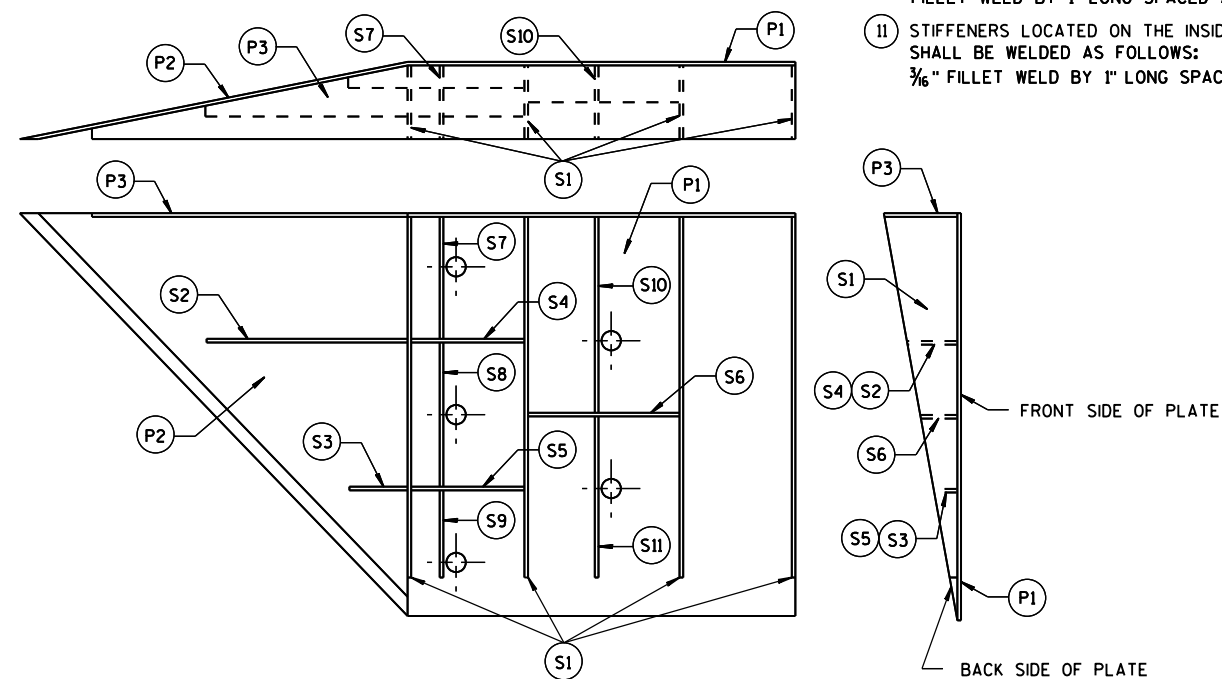


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE $\frac{3}{16}$ " THICK.

ALL STIFFENERS ARE $\frac{1}{4}$ " THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

- ⑩ STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND $\frac{3}{16}$ " 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:
 $\frac{3}{16}$ " 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"	$\frac{3}{16}$ "
P2	1		20" x 20" x $28\frac{7}{16}$ "	$\frac{3}{16}$ "
P3	1		39" x $3\frac{5}{8}$ " x 20" x $19\frac{5}{16}$ "	$\frac{3}{16}$ "
S1	4		$18\frac{7}{16}$ " x $3\frac{5}{8}$ " x $18\frac{3}{4}$ "	$\frac{1}{4}$ "
S2	1		$10\frac{1}{4}$ " x $2\frac{1}{16}$ " x $10\frac{3}{8}$ " x $\frac{1}{2}$ "	$\frac{1}{4}$ "
S3	1		3" x $1\frac{1}{16}$ " x $3\frac{1}{8}$ " x $\frac{1}{2}$ "	$\frac{1}{4}$ "
S4	1		$6\frac{1}{8}$ " x $2\frac{1}{16}$ "	$\frac{1}{4}$ "
S5	1		$6\frac{1}{8}$ " x $1\frac{1}{16}$ "	$\frac{1}{4}$ "
S6	1		$7\frac{3}{4}$ " x $1\frac{3}{4}$ "	$\frac{1}{4}$ "
S7	1		$2\frac{9}{16}$ " x 6" x $3\frac{5}{8}$ " x $5\frac{1}{8}$ "	$\frac{1}{4}$ "
S8	1		$1\frac{1}{32}$ " x $7\frac{1}{2}$ " x $2\frac{1}{2}$ " x $7\frac{3}{8}$ "	$\frac{1}{4}$ "
S9	1		$6\frac{1}{16}$ " x $6\frac{3}{16}$ " x $1\frac{1}{32}$ "	$\frac{1}{4}$ "
S10	1		$1\frac{1}{8}$ " x $9\frac{7}{8}$ " x $3\frac{5}{8}$ " x $9\frac{1}{16}$ "	$\frac{1}{4}$ "
S11	1		$8\frac{1}{2}$ " x $8\frac{3}{4}$ " x $1\frac{1}{16}$ "	$\frac{1}{4}$ "

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THREE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015
DATE

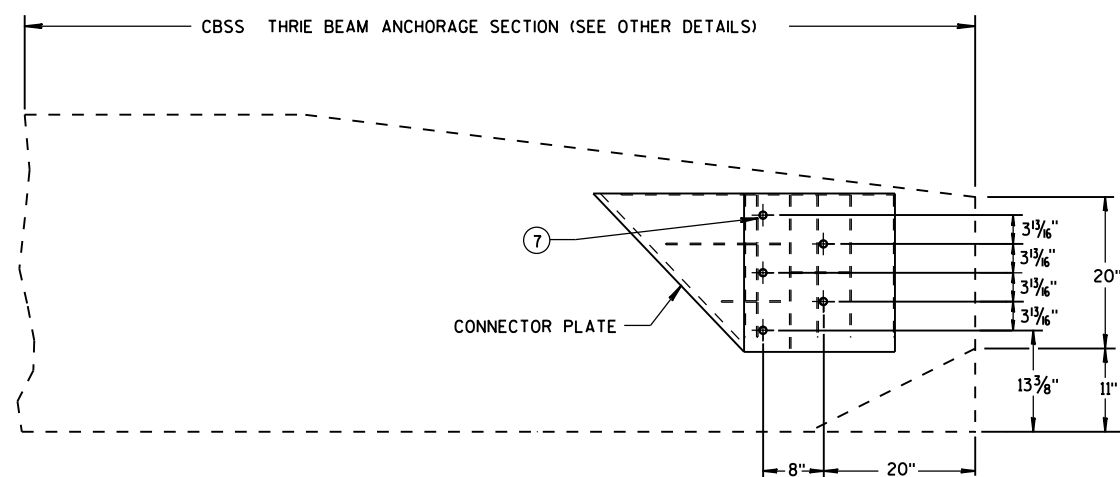
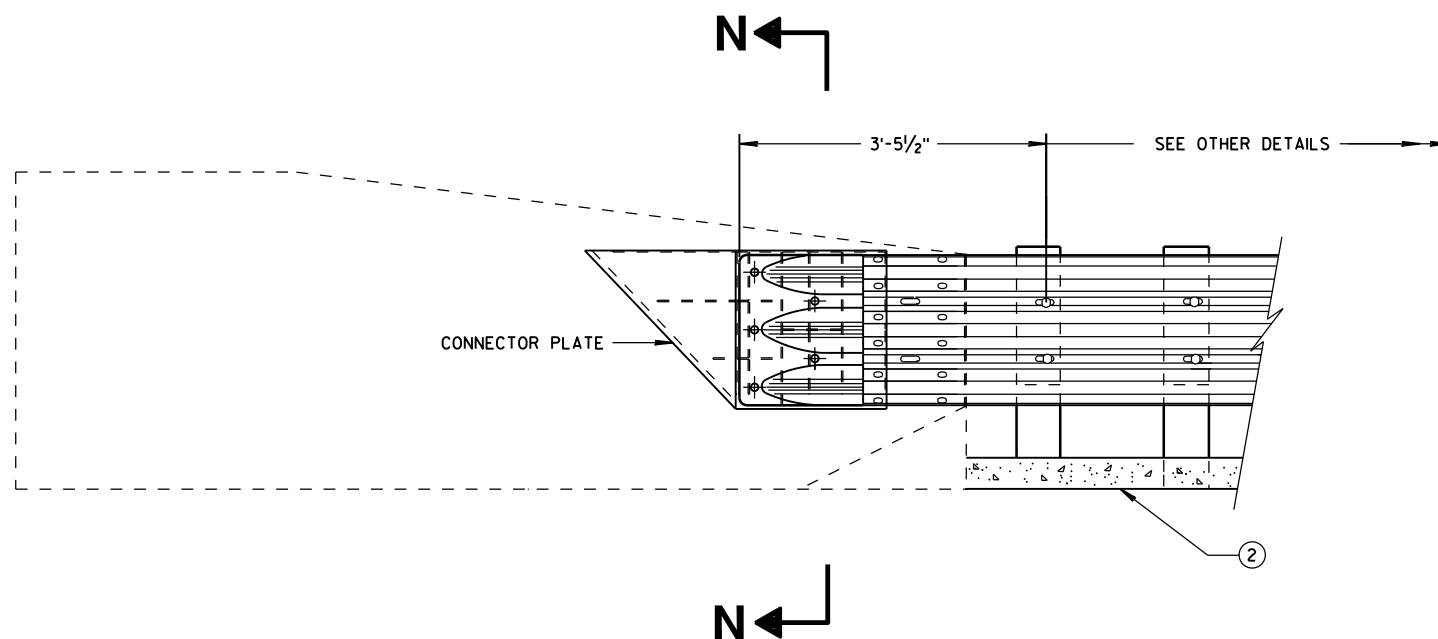
/S/ Jerry H. Zogg
ROADWAY STANDARDS
ENGINEER

116

ENT

FHWA

THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



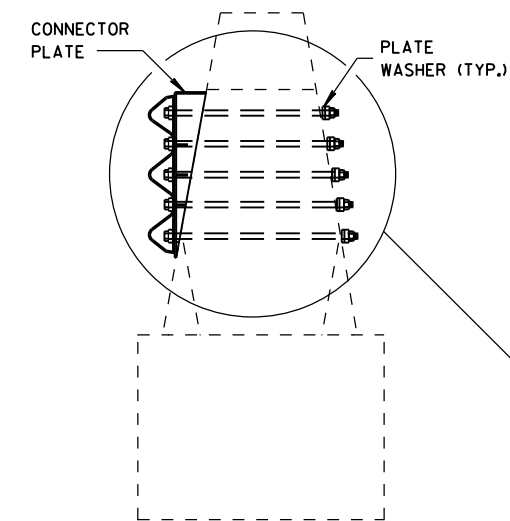
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

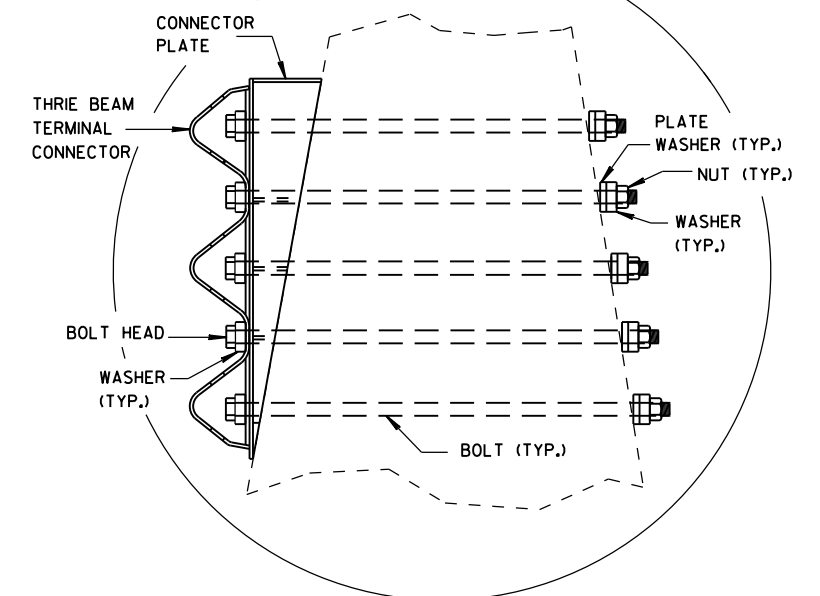
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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

FHWA

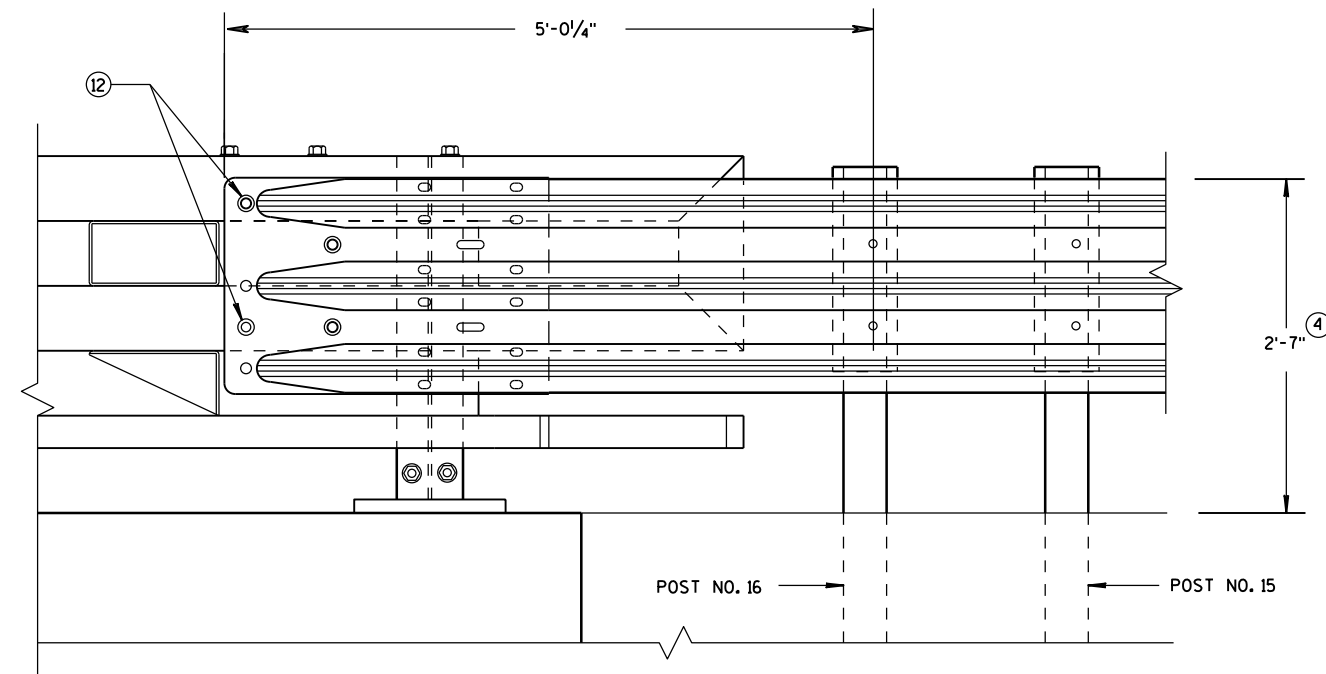
/s/ Jerry H. Zoog
ROADWAY STANDARDS D 117
ENGINEER

NT

GENERAL NOTES

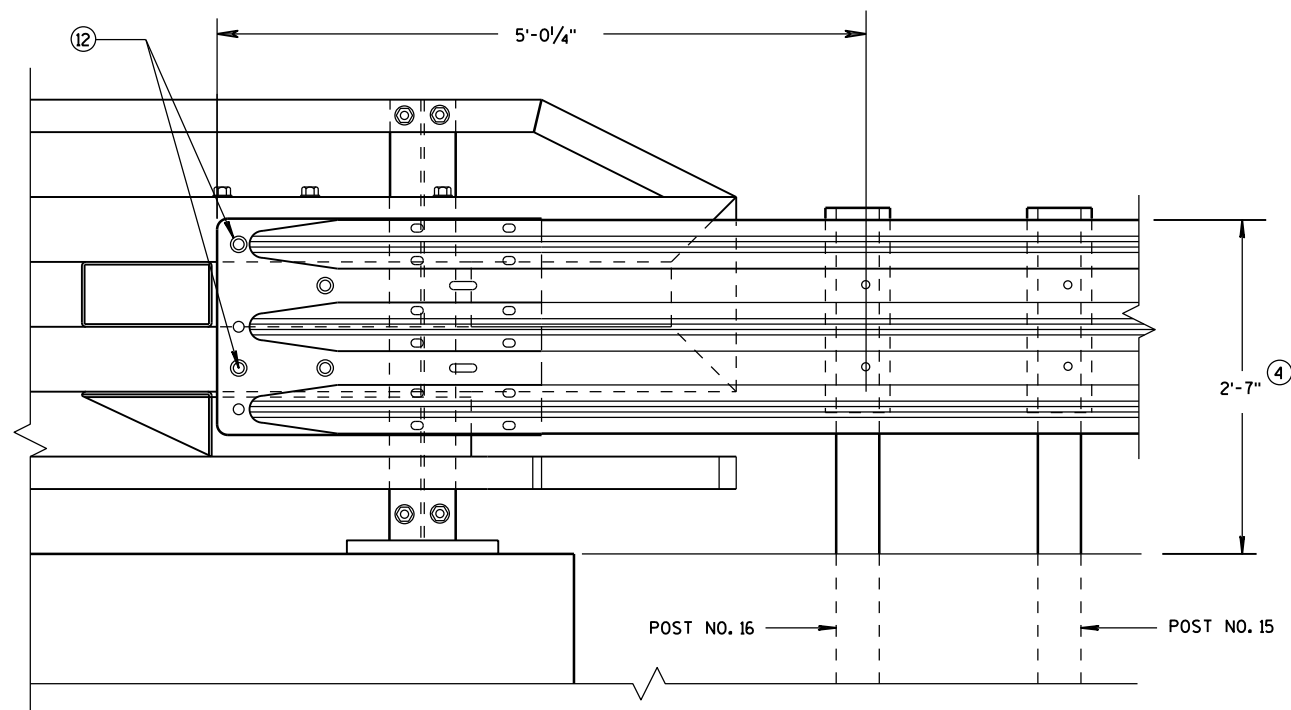
④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

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 $\frac{1}{2}$ -INCH BEYOND NUT.



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

DATE

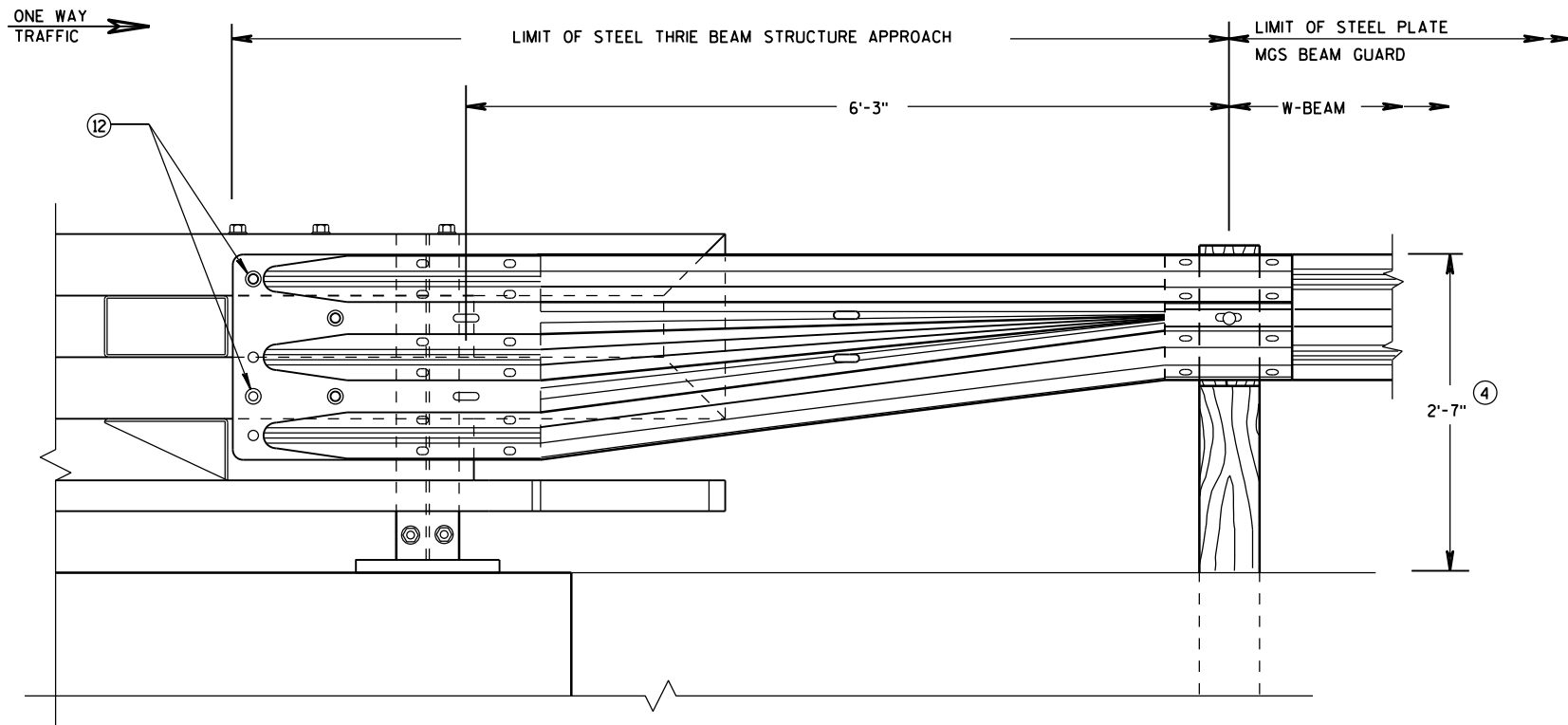
FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS D 118

ENGINEER

NT

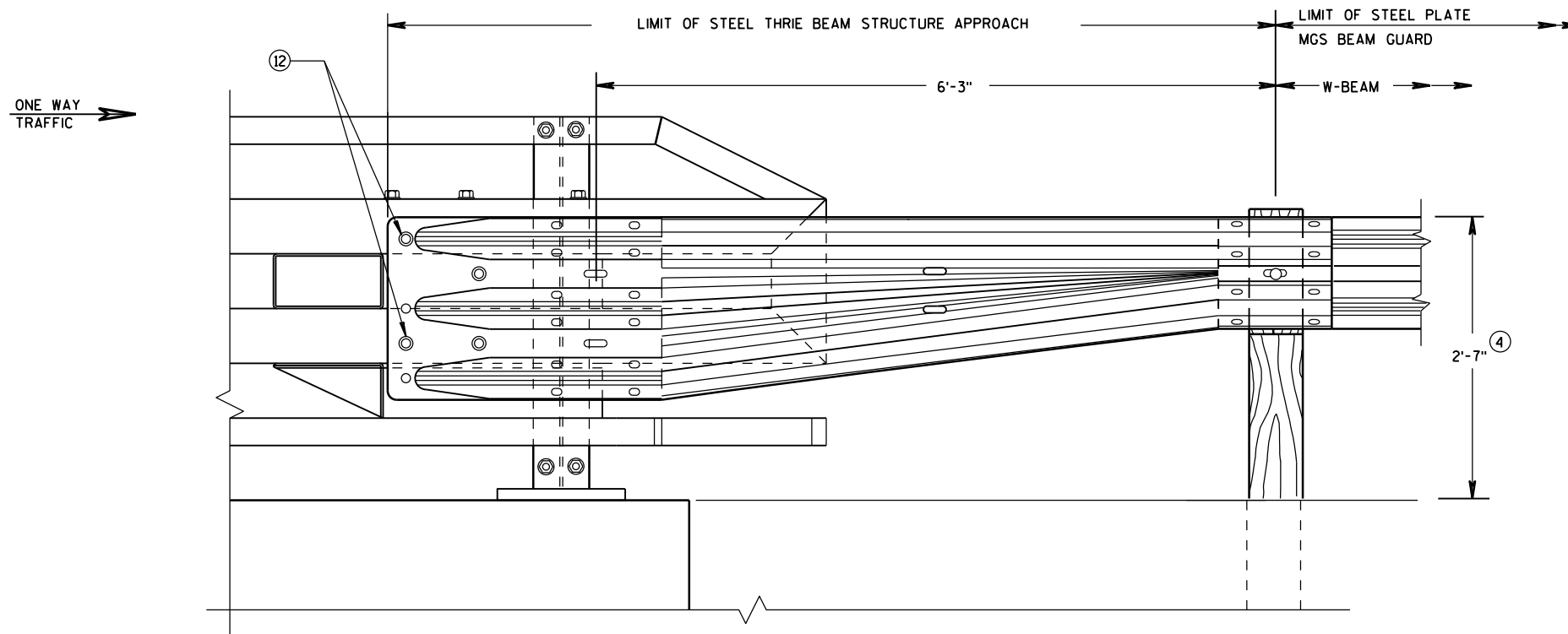


FRONT VIEW

**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 $\pm 1"$.
- 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 $\frac{1}{2}$ -INCH BEYOND NUT.



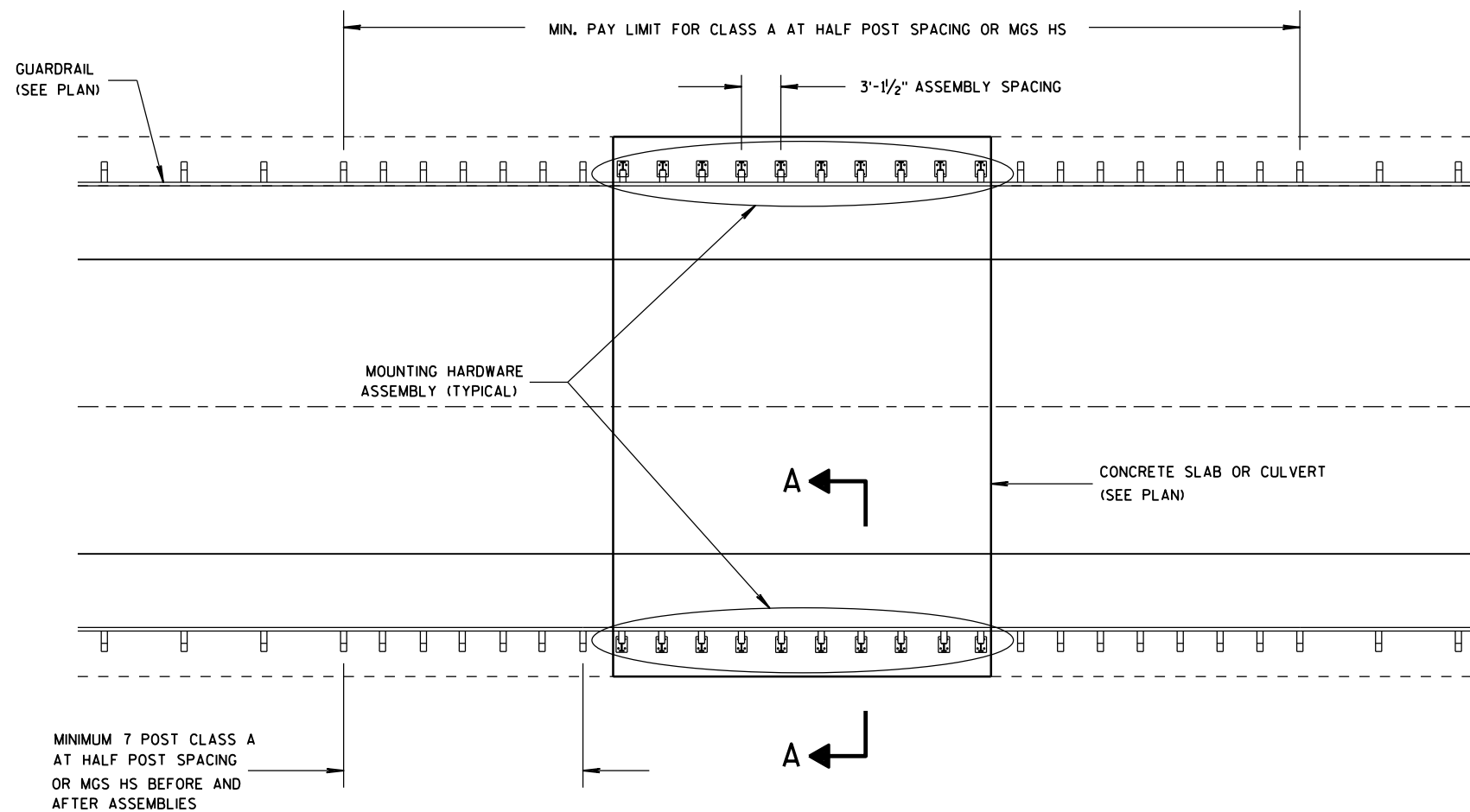
FRONT VIEW

**W BEAM TRANSITION AND
CONNECTION TO BRIDGE RAILING TYPE "NY4"**
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

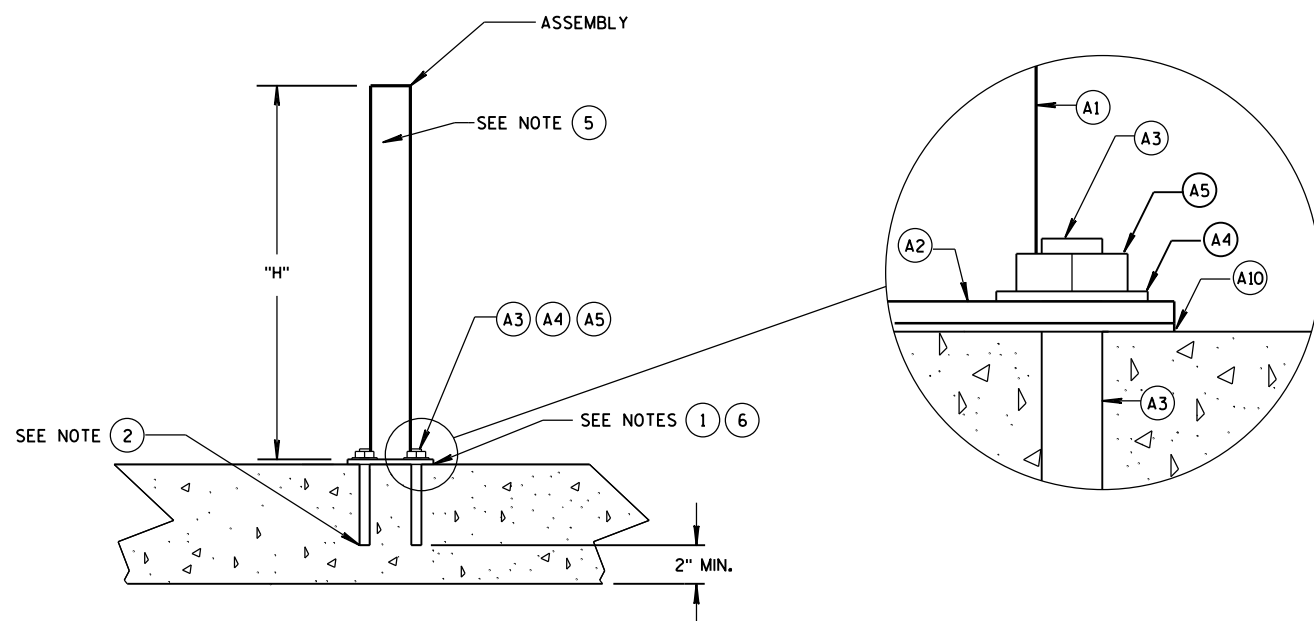
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS D 119 NT
FHWA ENGINEER

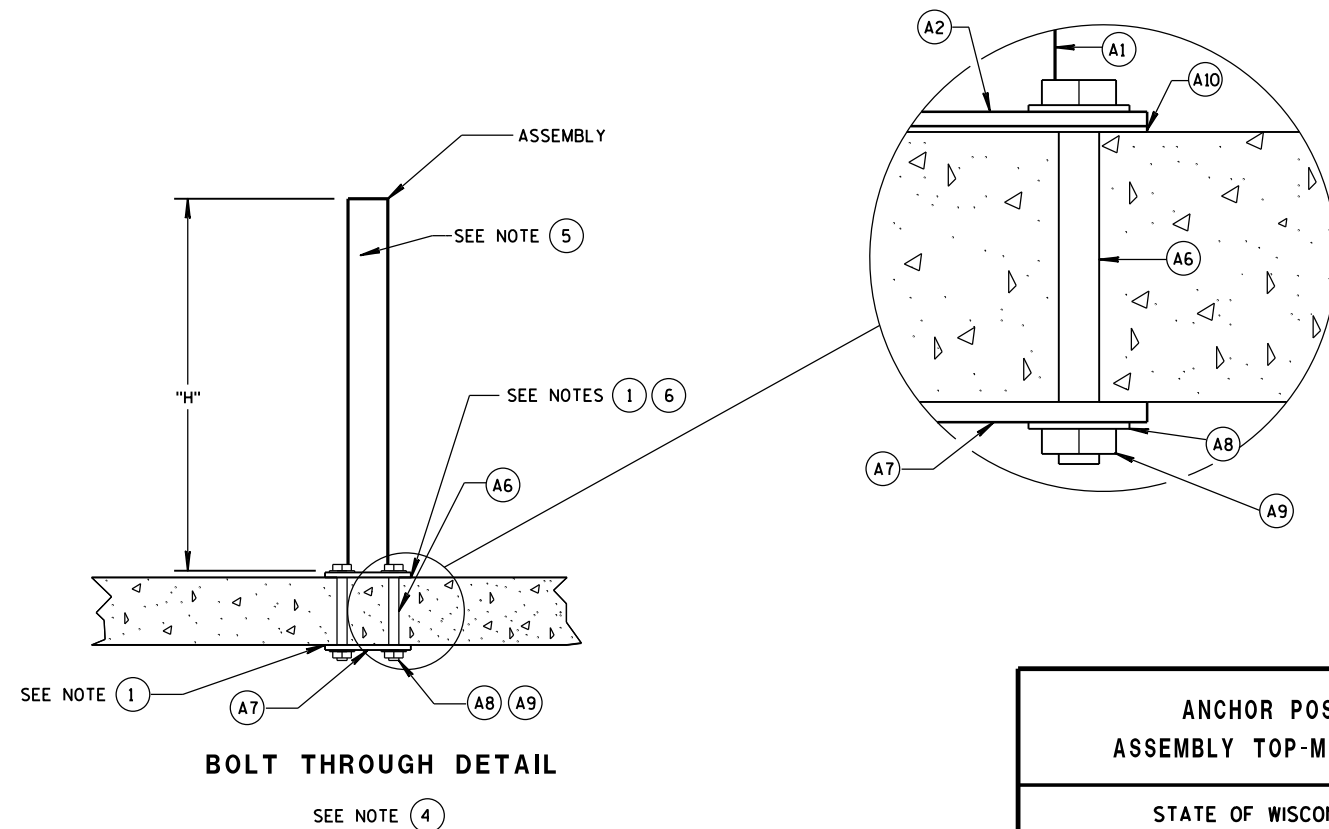


PLAN VIEW



ADHESIVE ANCHOR DETAIL

SEE NOTE 4



BOLT THROUGH DETAIL

SEE NOTE 4

GENERAL NOTES

HOLES DRILLED INTO CONCRETE SLAB OR CULVERT ARE 1/8-INCH DIAMETER.

POST BASE PLATE (AND BOTTOM PLATES IF USED) SHALL BE FLAT WITH ALL SURFACES SMOOTH, AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS. CUT BOTTOM OF POST SO THAT POST WILL BE VERTICAL WHEN POST ASSEMBLY IS PLACED ON TOP OF CONCRETE. HEX BOLTS AND THREADED RODS ARE TO BE PLACED PERPENDICULAR TO THE BASE PLATE.

"H" DIMENSION WILL VARY. SEE PLAN FOR "H" DIMENSION. CONTRACTOR HAS OPTION OF INSTALLING POSTS THAT ARE TALLER THAN "H" DIMENSION AND CUT POSTS TO PROPER "H" DIMENSION IN THE FIELD. IF ELECTING TO FIELD CUT POSTS, DRILL HOLES AT APPROPRIATE LOCATIONS AND APPLY GALVANIZATION.

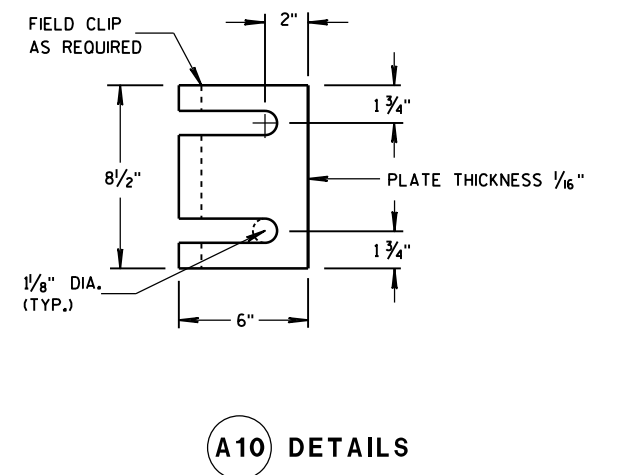
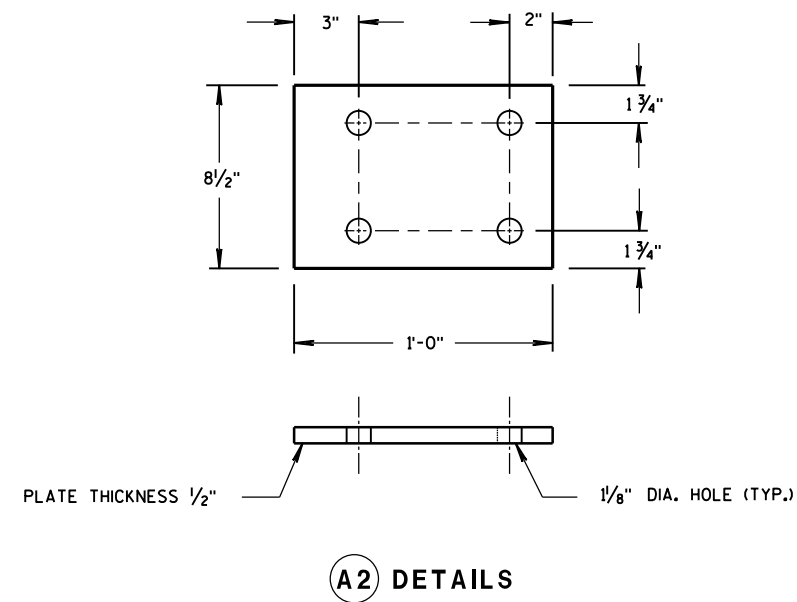
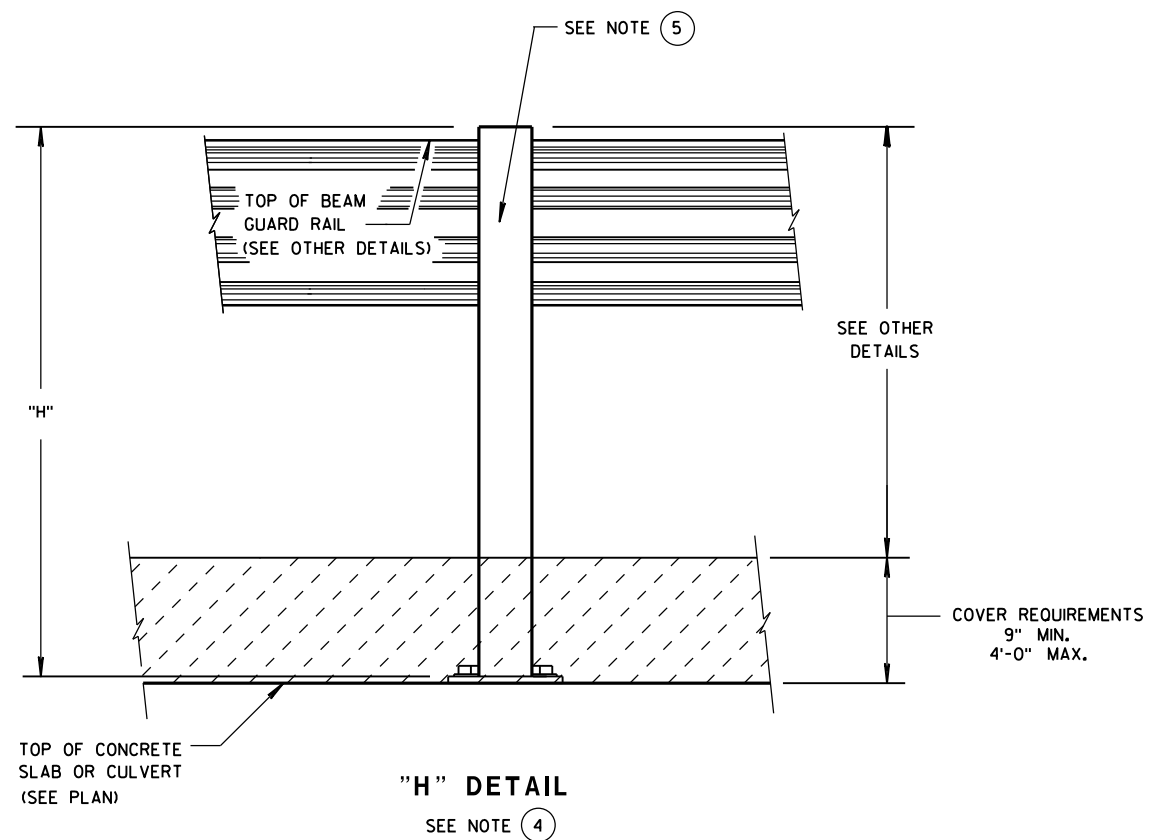
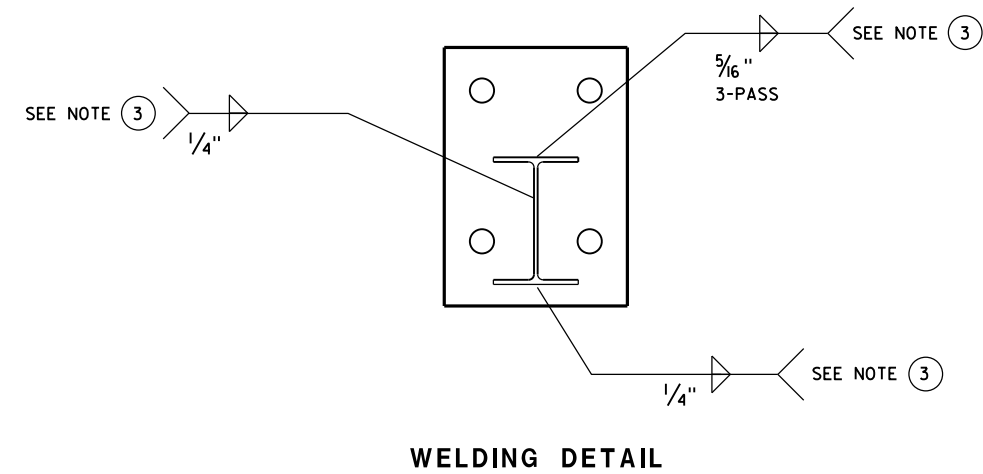
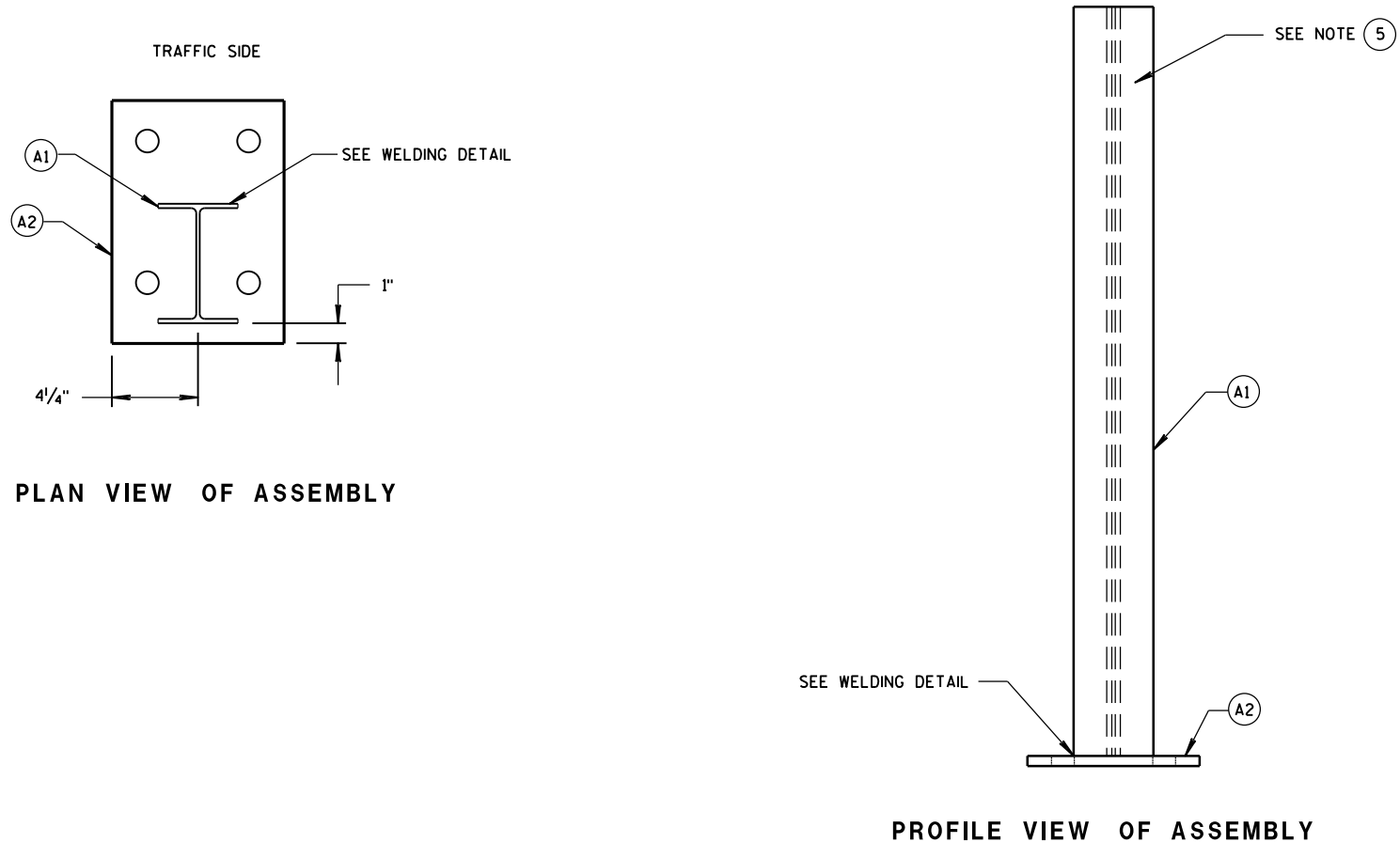
GALVANIZE STEEL COMPONENTS AFTER FABRICATION PER SECTION 614 OF THE WISCONSIN DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS.

INSTALL 1 NUT AND 1 WASHER WHERE APPLICABLE. PROVIDE SUFFICIENT LENGTH OF BOLT OR THREADED ROD TO ALLOW FOR 1/4-INCH TO 1/2-INCH OF THREAD TO BEYOND THE NUT.

- ① PLACE NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER ON THE BOTTOM (A2) AND IN DRILL HOLES FOR BOLT THROUGH OPTION.
- ② BOND STRENGTH OF ADHESIVE IS 1,305 PSI OR GREATER WITH A MINIMUM EMBEDMENT DEPTH OF 8-INCHES. IF MINIMUM EMBEDMENT CANNOT BE ACHIEVED BOLT THROUGH STRUCTURE.
- ③ USE GAS-METAL ARC WELDING (GMAW) PROCESS WITH ER70S-3 WELDING WIRE AND ARGON-OXYGEN OR CO2 COVER GAS.
- ④ OTHER COMPONENT OF BARRIER SYSTEM NOT SHOWN. SEE OTHER STANDARD DETAIL DRAWINGS. SEE SDD 14 B 15 OR SDD 14 B 42 FOR MORE DETAILS.
- ⑤ HOLES TO MOUNT BEAM GUARD AND BLOCK NOT SHOWN ON DRAWINGS. SEE OTHER STANDARD DETAIL DRAWINGS. SEE SDD 14 B 15 OR SDD 14 B 42 FOR MORE DETAILS.
- ⑥ ADD AND ADJUST SHIM PLATES AS NECESSARY TO INSTALL POST PLUMB. SEE (A10) FOR DETAIL.

ANCHOR POST
ASSEMBLY TOP-MOUNTED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 120



ANCHOR POST ASSEMBLY TOP-MOUNTED
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 121

MATERIALS LIST

ITEM	DESCRIPTION	MATERIAL SPECIFICATIONS	NOTES
(A1)	W6x9 or W6x8.5	ASTM A992, 50 KSI MIN. ASTM A709 GRADE 50 OR ASTM A36	SEE SDD 14B15 OR 14B42 LENGTH WILL VARY
(A2)	STEEL BASE PLATE	ASTM A992 50 KSI MIN., ASTM A529 GRADE 50, ASTM A572 GRADE 50, OR ASTM A36	
(A3)	1" DIA. THREADED ROD	SAE J429 GRADE 2, ASTM A307 GRADE C, OR ASTM F1554 GRADE 36	LENGTH WILL VARY
(A4)	1" DIA. FLAT WASHER	ASTM F844	
(A5)	1" HEX NUT	ASTM A563A	
(A6)	1" DIA. HEX BOLT	ASTM A307	LENGTH WILL VARY
(A7)	PLATE WASHER	ASTM A992 50 KSI MIN., ASTM A529 GRADE 50, ASTM A572 GRADE 50, OR ASTM A36	
(A8)	1" DIA. FLAT WASHER	ASTM F844	
(A9)	1" DIA. HEX NUT	ASTM A563A	
(A10)	SHIM PLATE	SEE (A2)	4 MAX PER POST

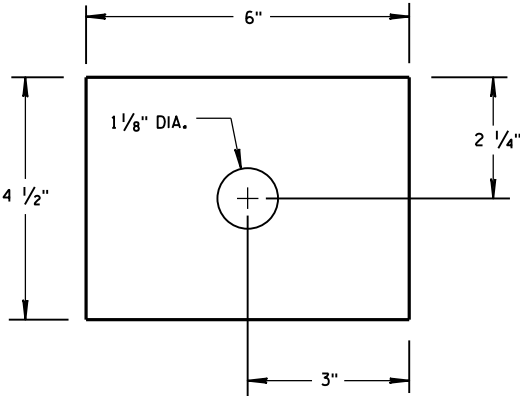
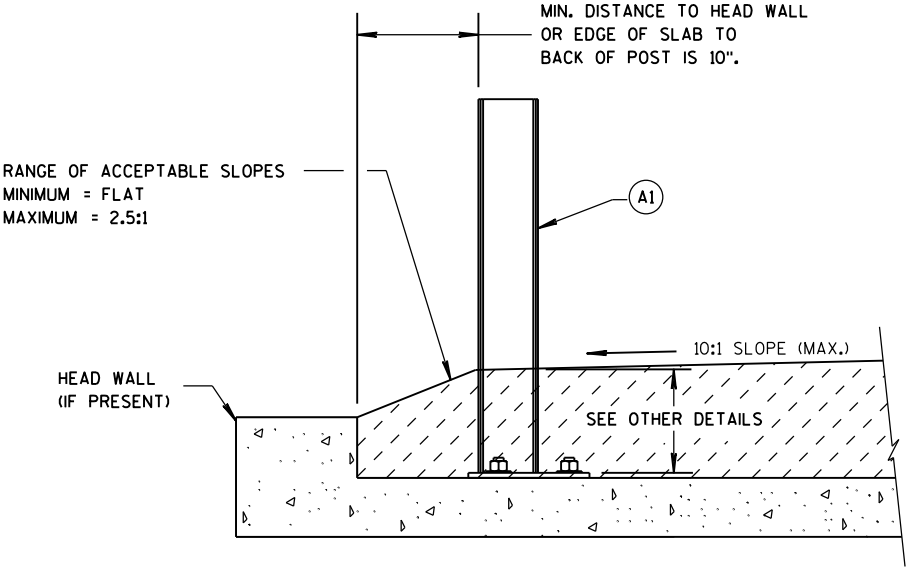
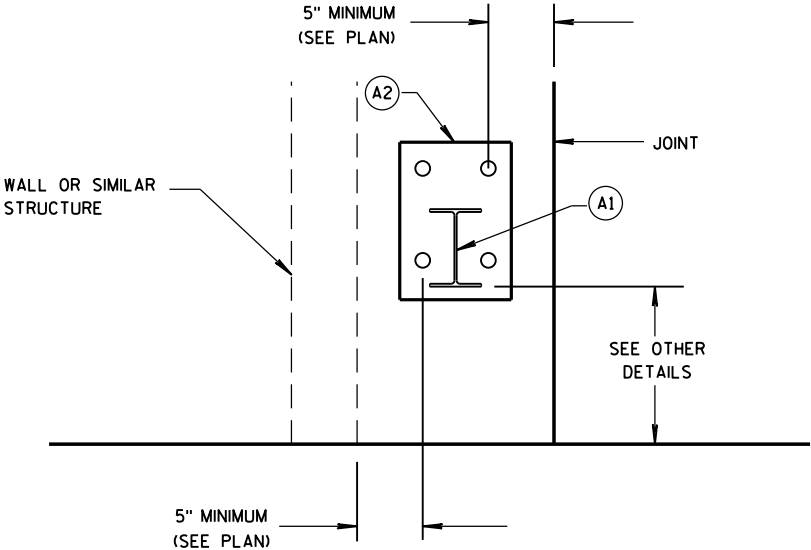


PLATE WASHER - (A7)



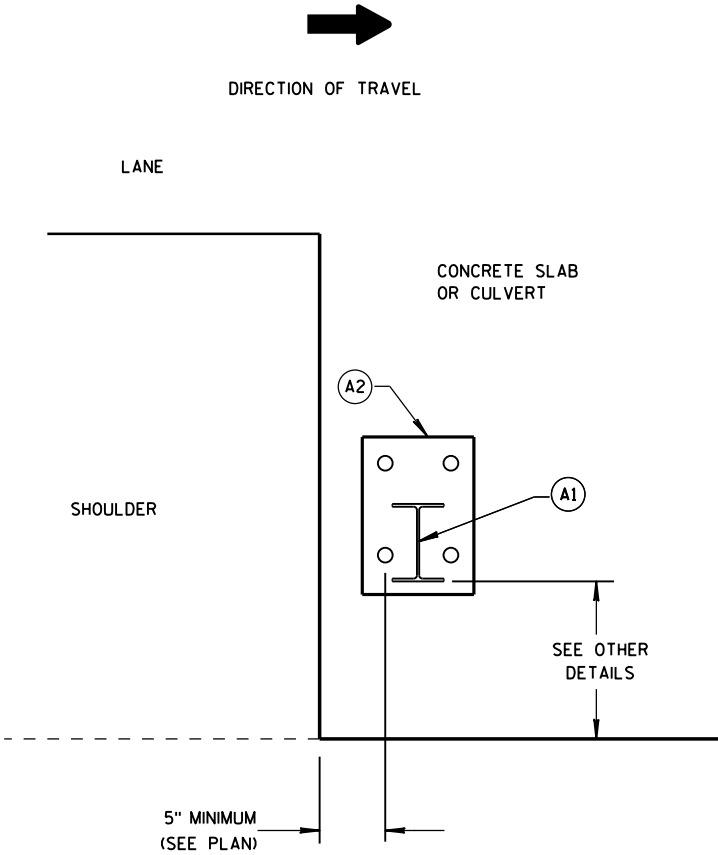
SECTION A-A

SEE NOTE (4)



OBSTRUCTION AND JOINT PLACEMENT

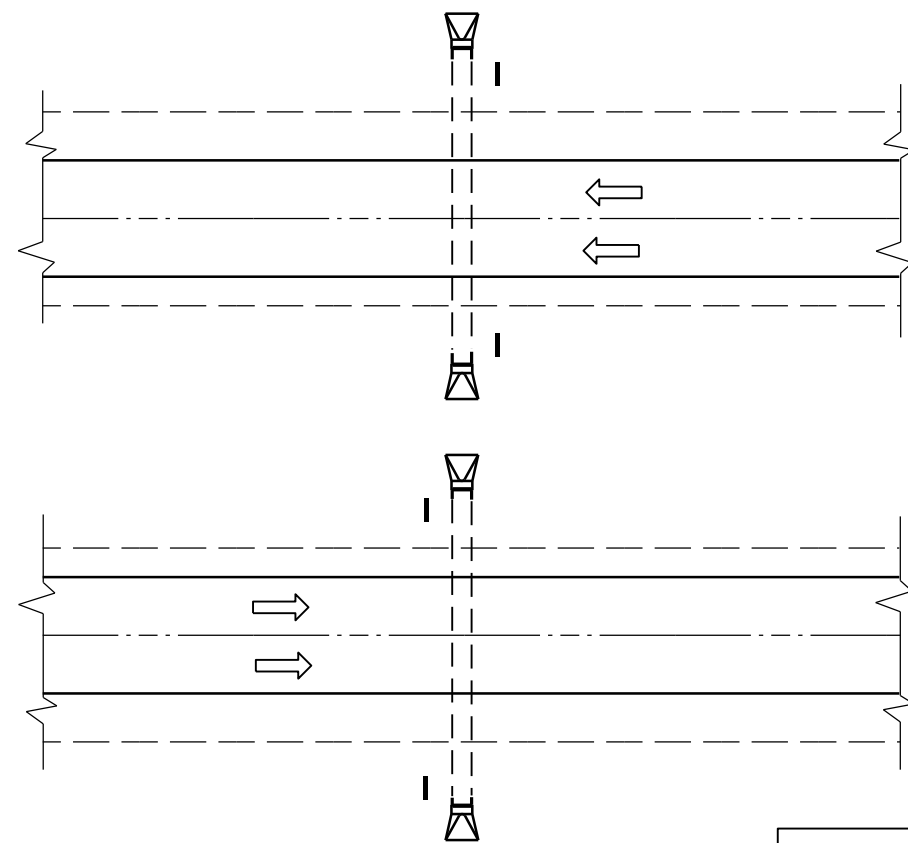
SEE NOTE (4)



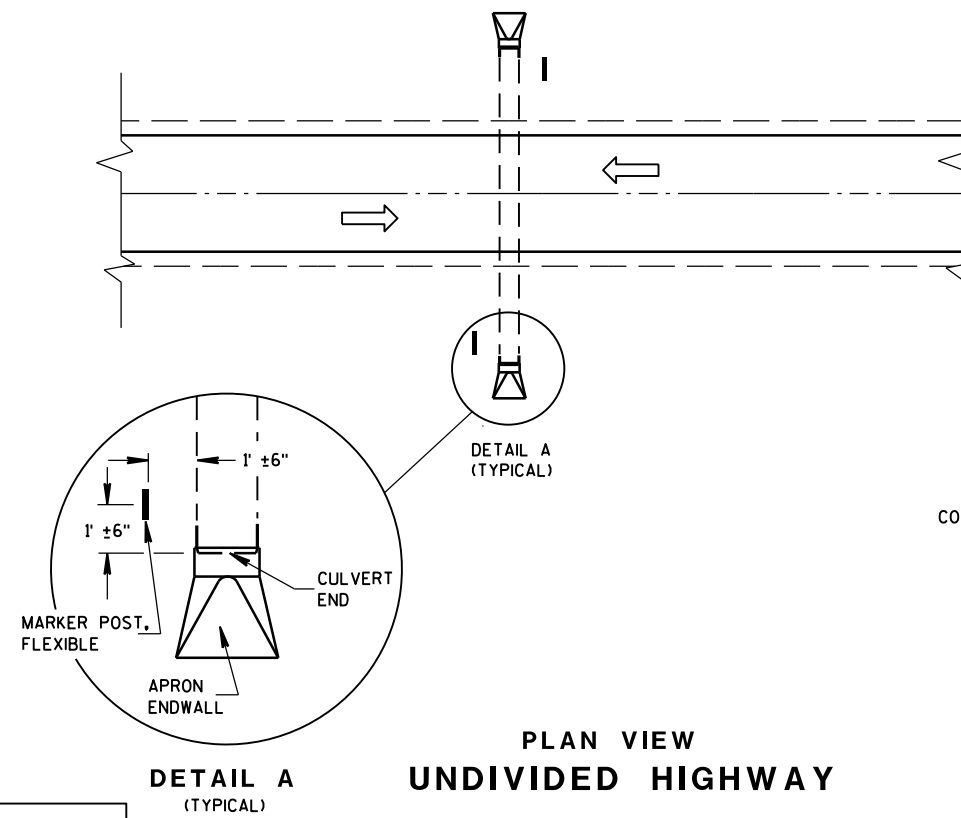
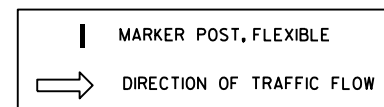
EDGE PLACEMENT

SEE NOTE (4)

ANCHOR POST ASSEMBLY TOP-MOUNTED	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2014 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS 122 ENGINEER ENT
FHWA	



PLAN VIEW
DIVIDED HIGHWAY

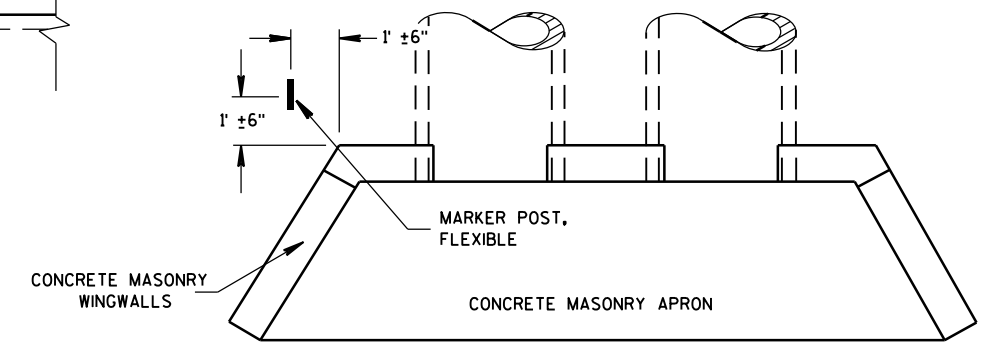


PLAN VIEW
UNDIVIDED HIGHWAY

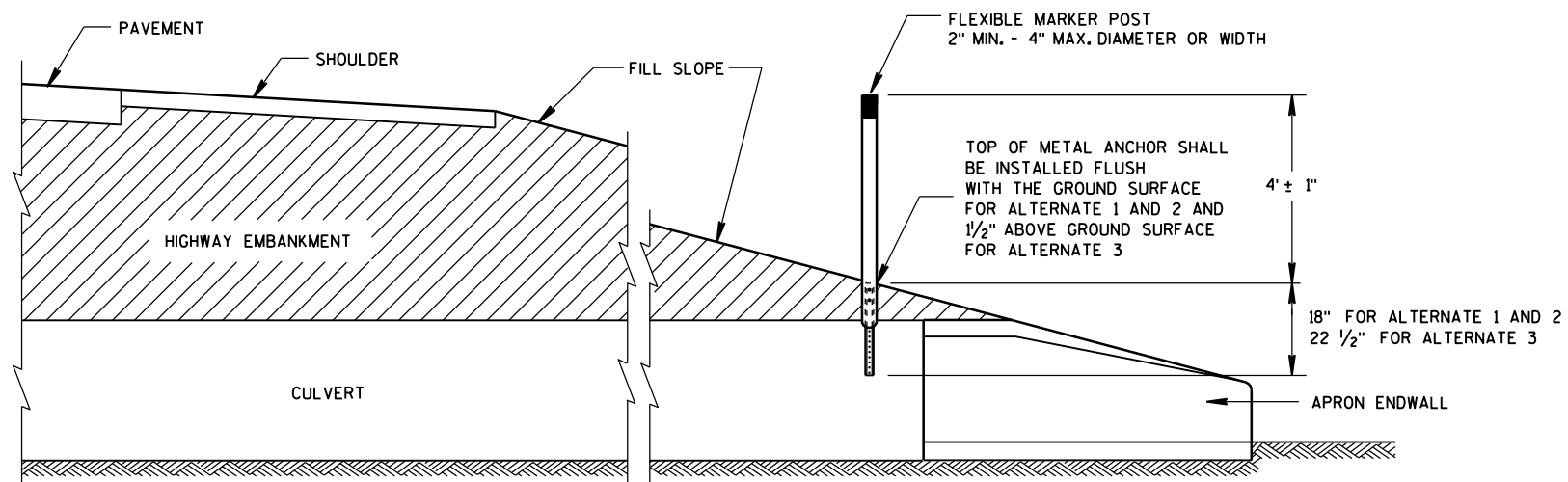
FLEXIBLE MARKER POST LOCATION

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.



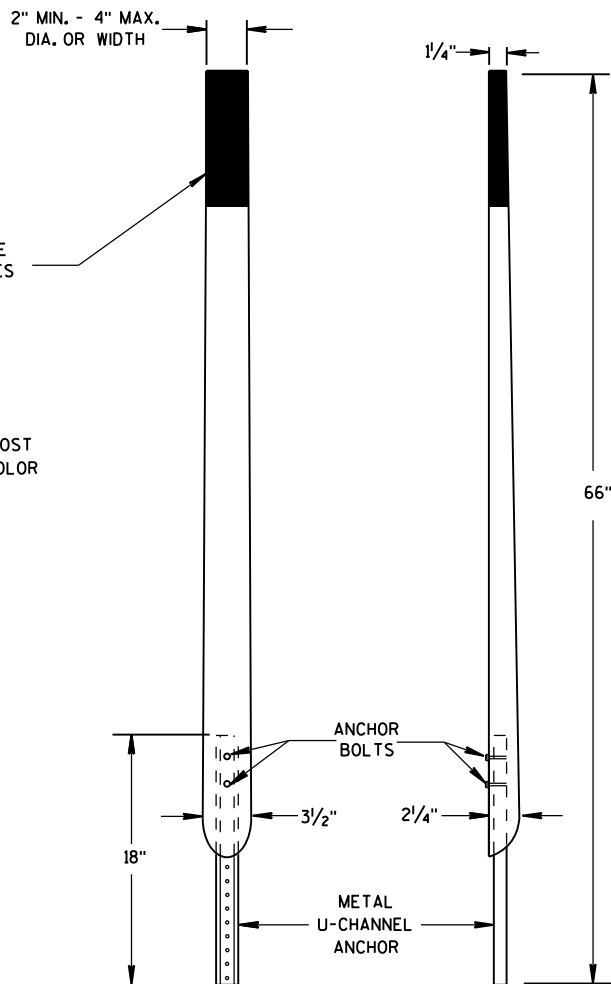
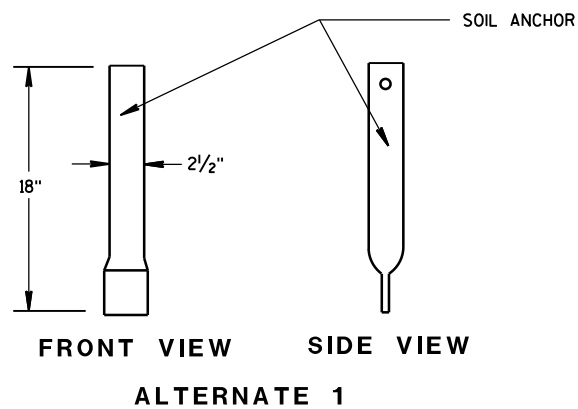
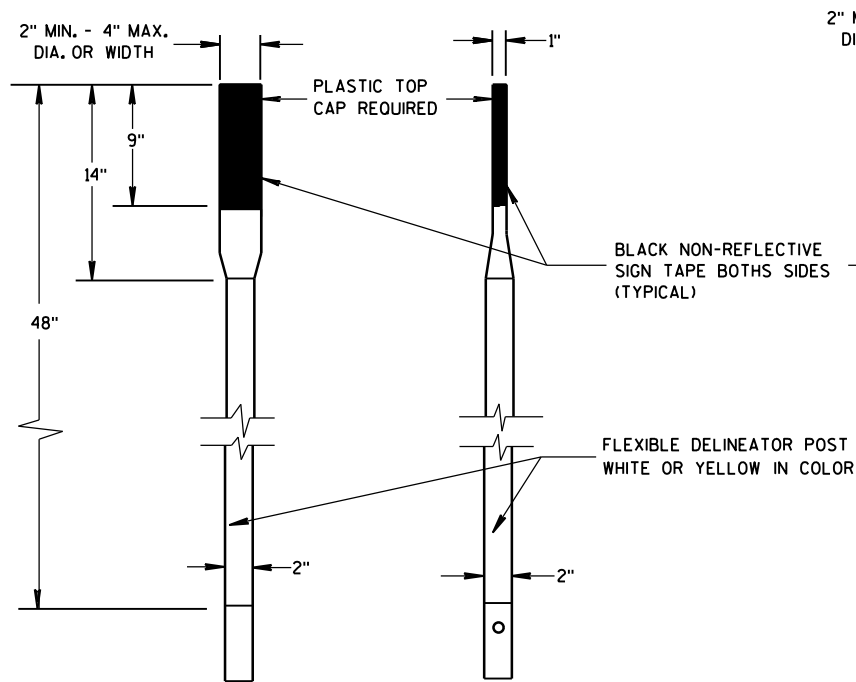
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

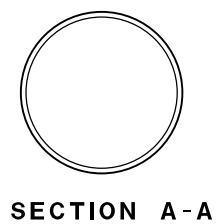
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 123

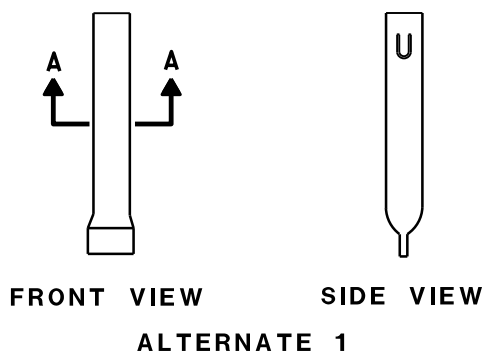


FRONT VIEW SIDE VIEW
ALTERNATE 2

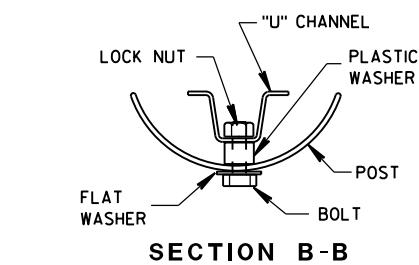
FLEXIBLE MARKER POSTS



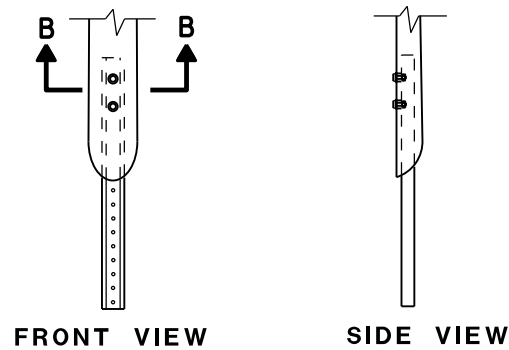
SECTION A-A



FRONT VIEW SIDE VIEW
ALTERNATE 1

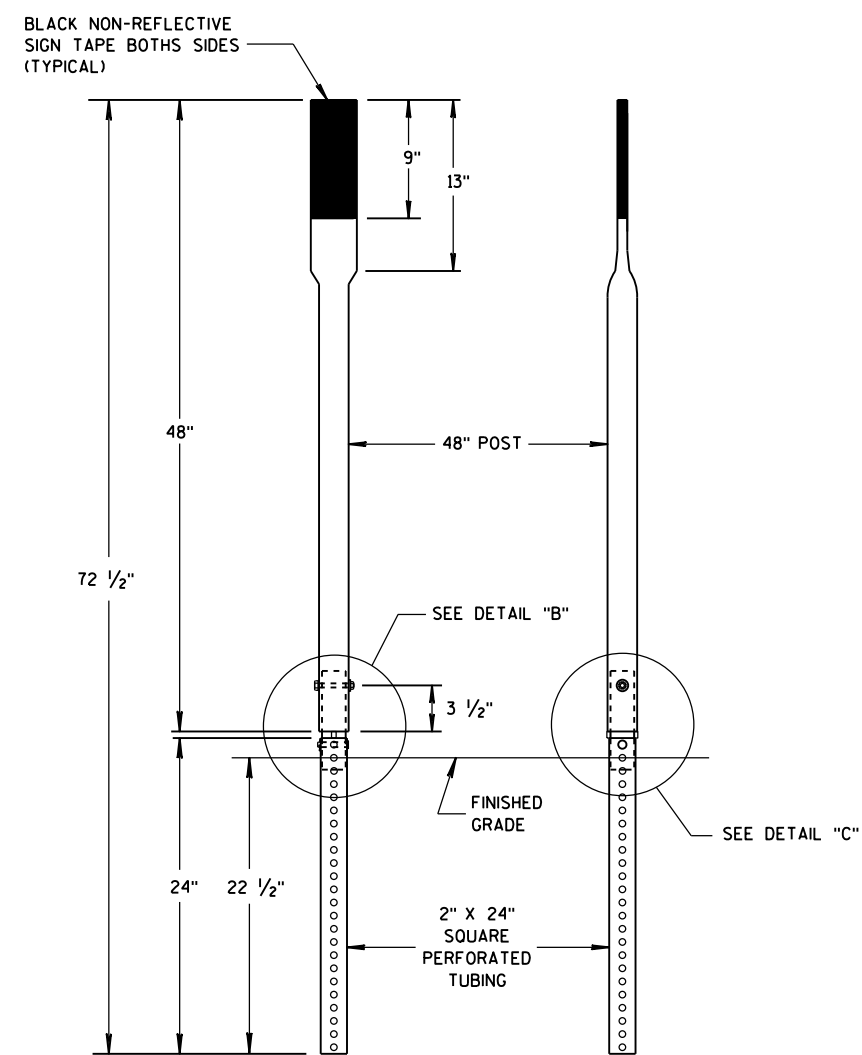


SECTION B-B

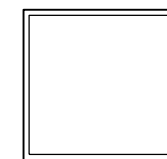


FRONT VIEW SIDE VIEW
ALTERNATE 2

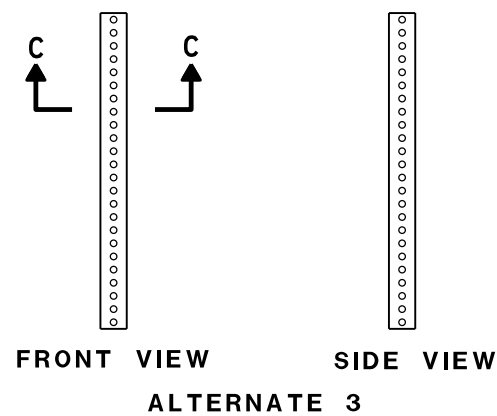
FLEXIBLE MARKER POST ANCHORS



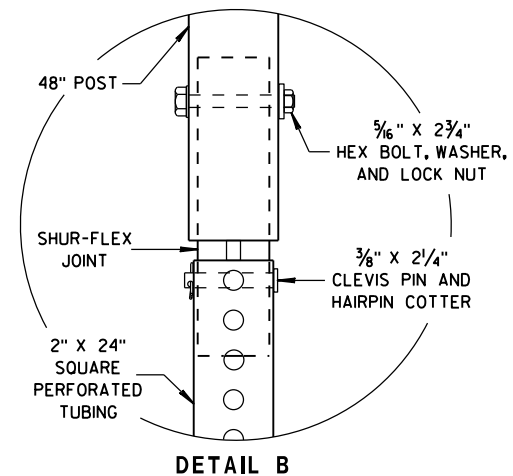
FRONT VIEW SIDE VIEW
ALTERNATE 3



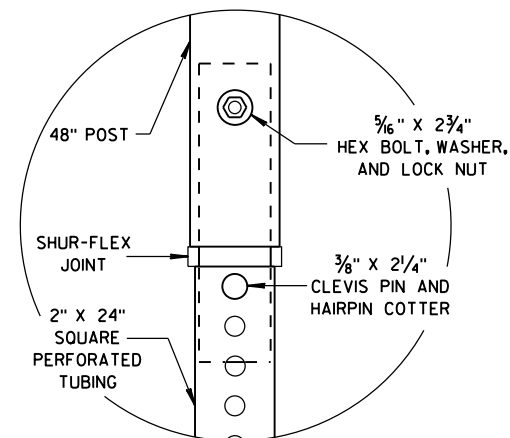
SECTION C-C



FRONT VIEW SIDE VIEW
ALTERNATE 3



DETAIL B



DETAIL C

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

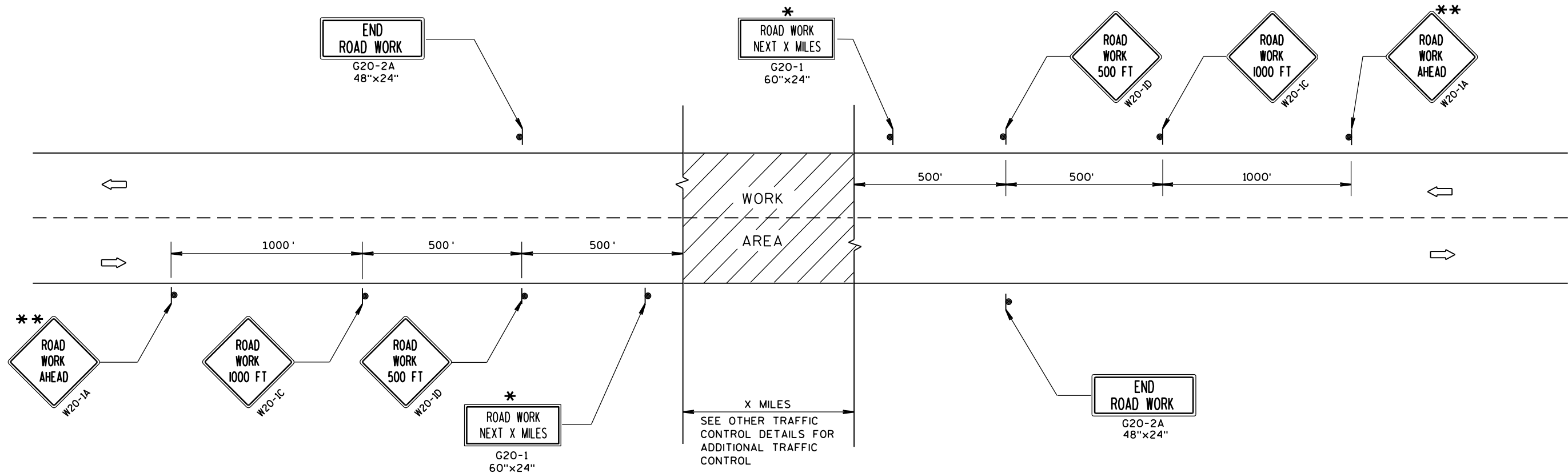
10/1/2012

DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER 124

IGN



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

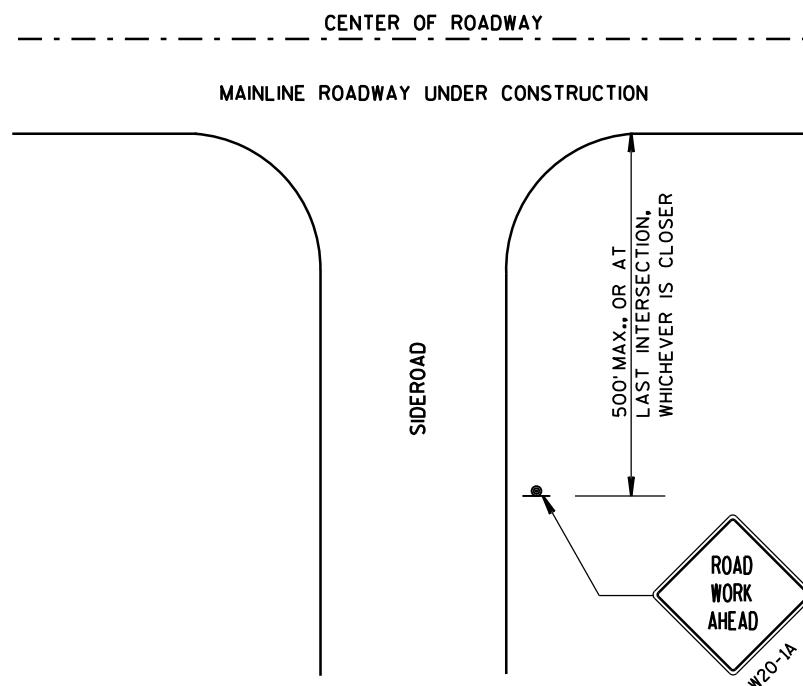
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



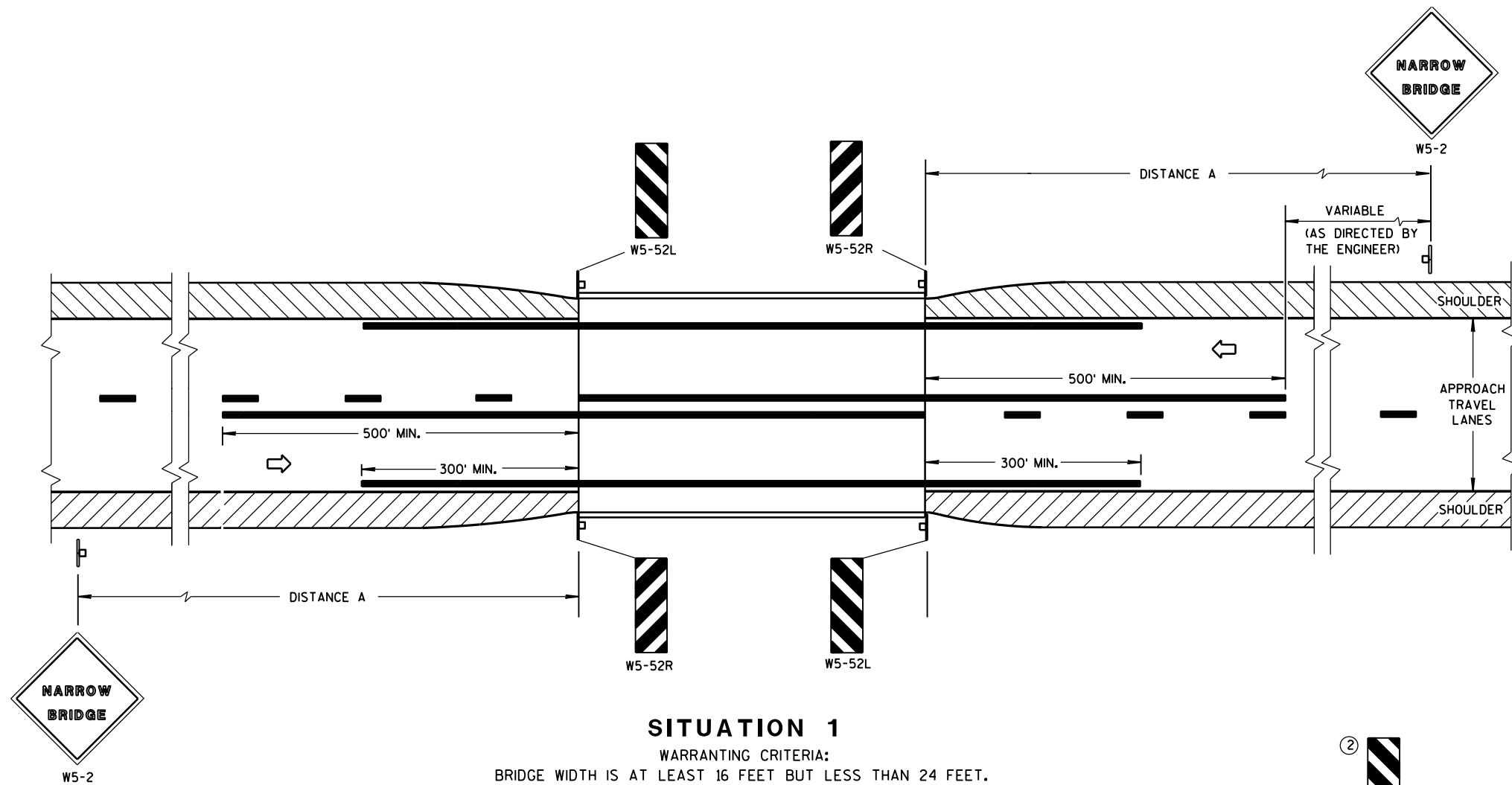
LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE Sept. 2015 /S/ Peter Amokobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA



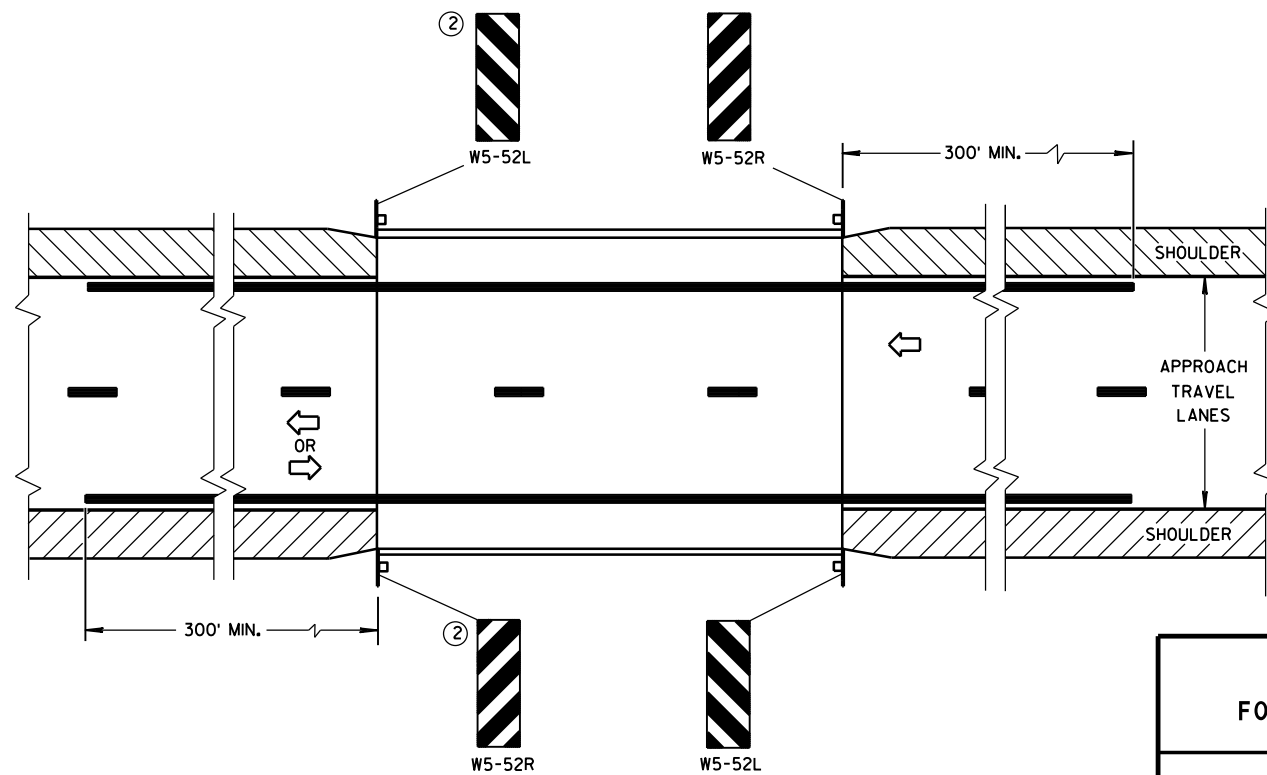
DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

- ① LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.
- ② OMIT ON ONE-WAY TRAVELLED WAYS.
- ③ EDGE OF W5-52 SIGN SHALL BE PLACED IN LINE WITH FACE OF CURB OR PARAPET.

SIGNING & MARKING
FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

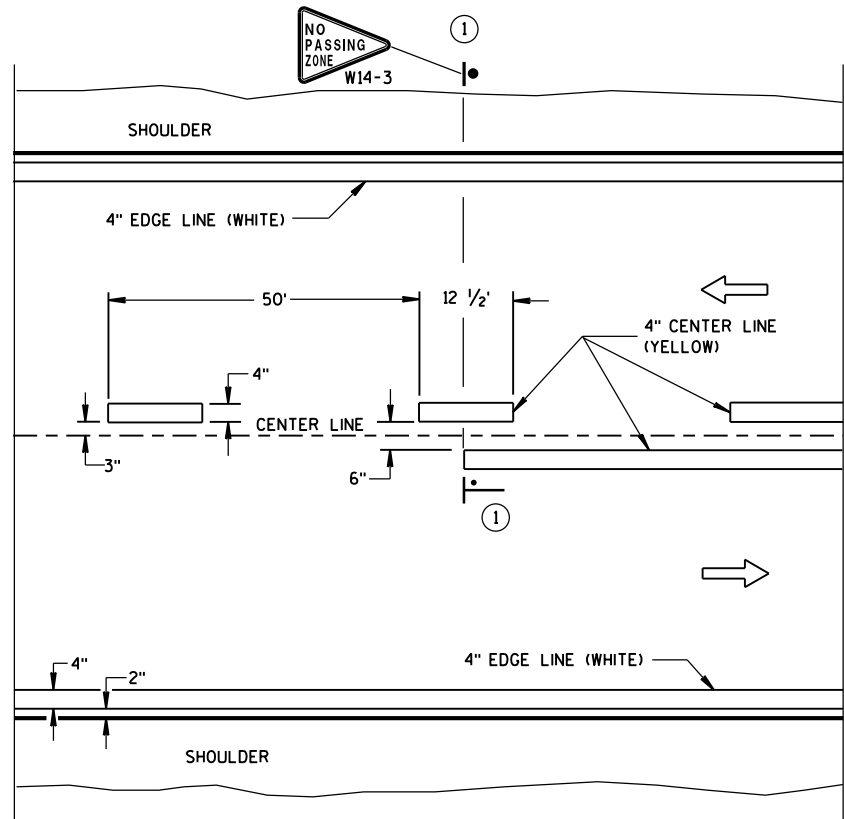
4-18-16

DATE

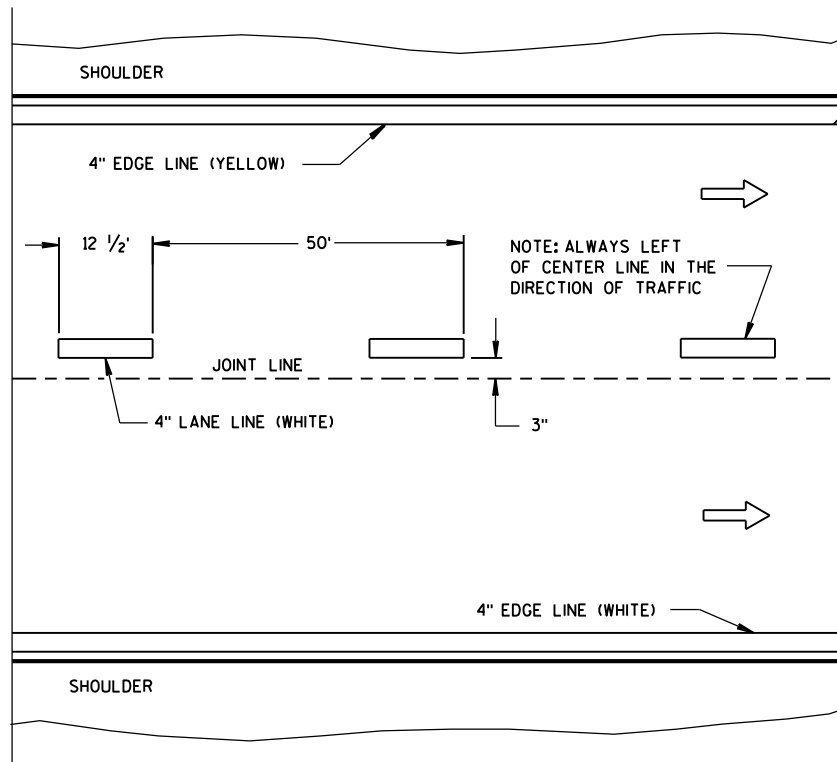
/S/ Matthew R. Rauch

STATE SIGNING AND MAR 126

FHWA

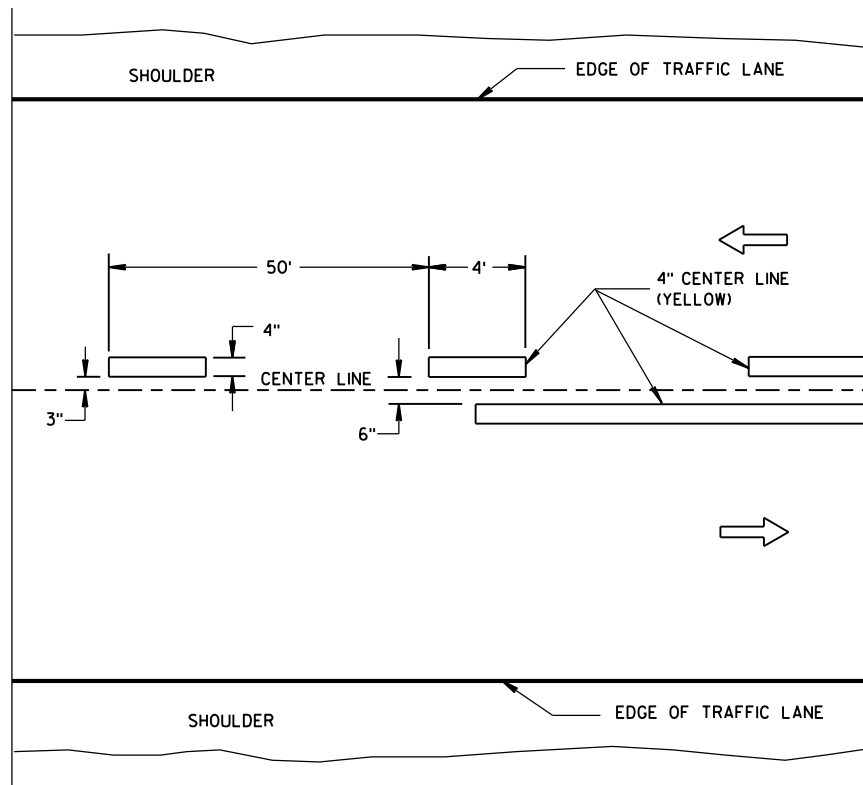


TWO WAY TRAFFIC

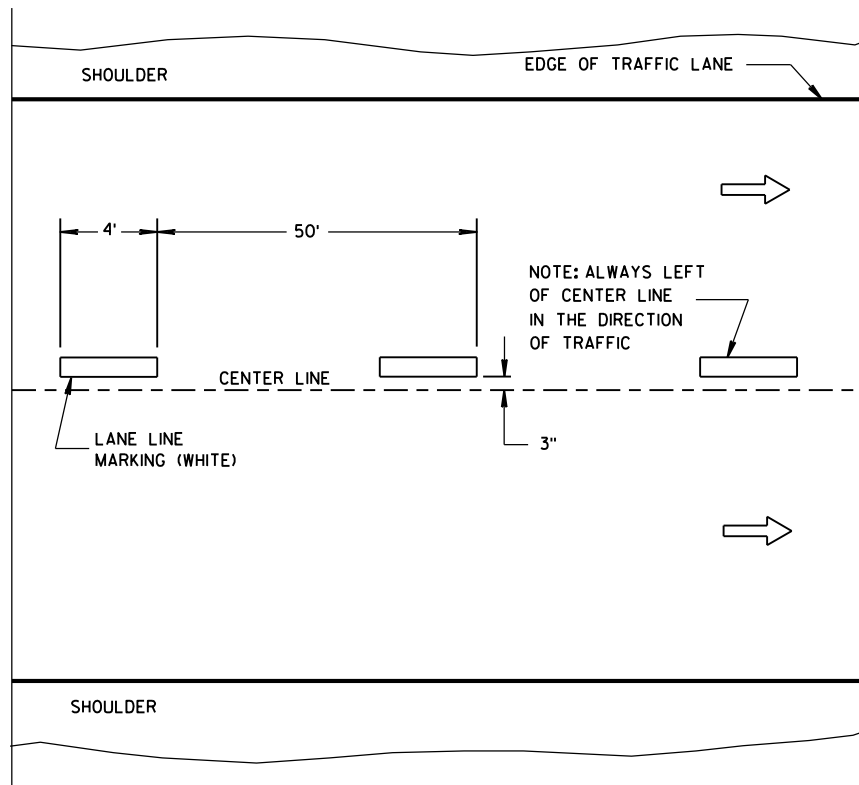


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

—●— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE Sept., 2016 /S/ Matthew R. Rauch
STATE SIGNING AND MAP 127 ENGINEER
FHWA

LEGEND

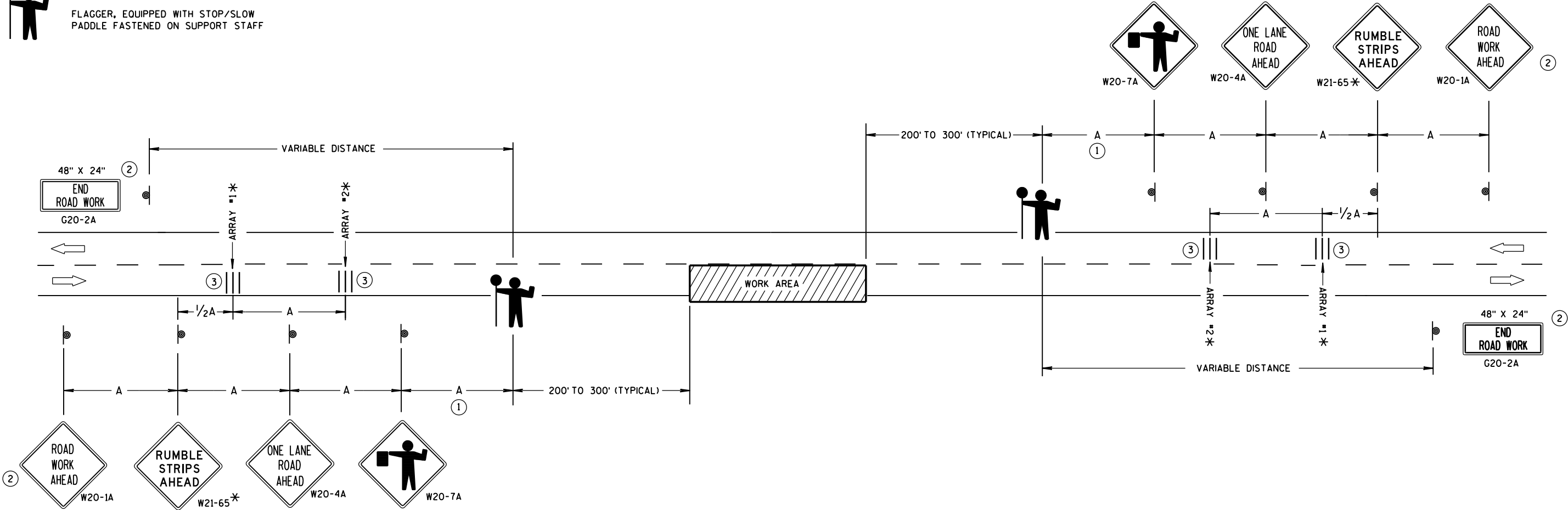
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

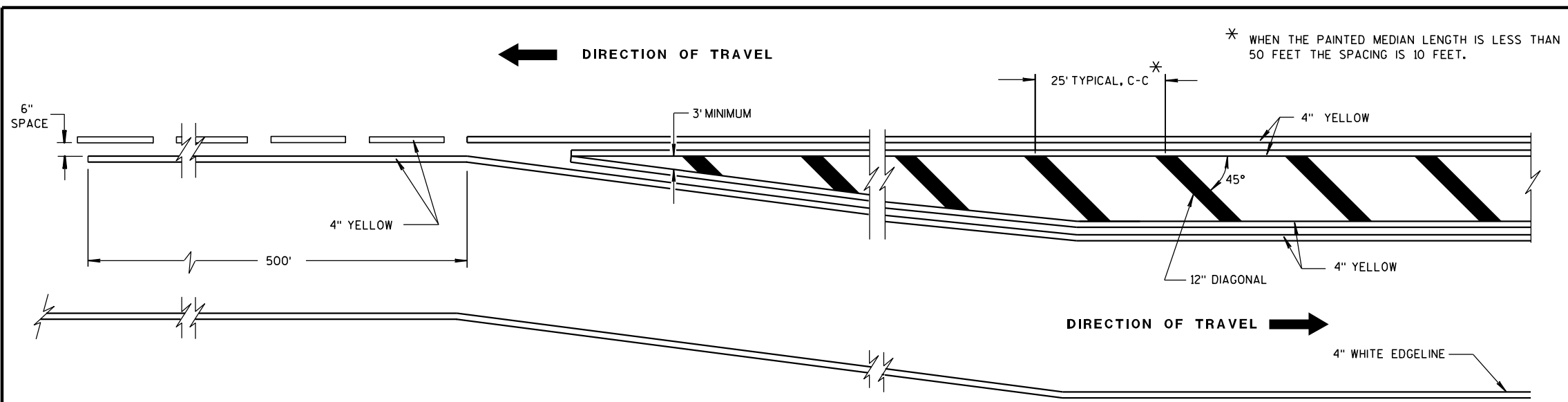
* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

- FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Andrew Heldtke
DATE WORK ZONE ENG 128
FHWA

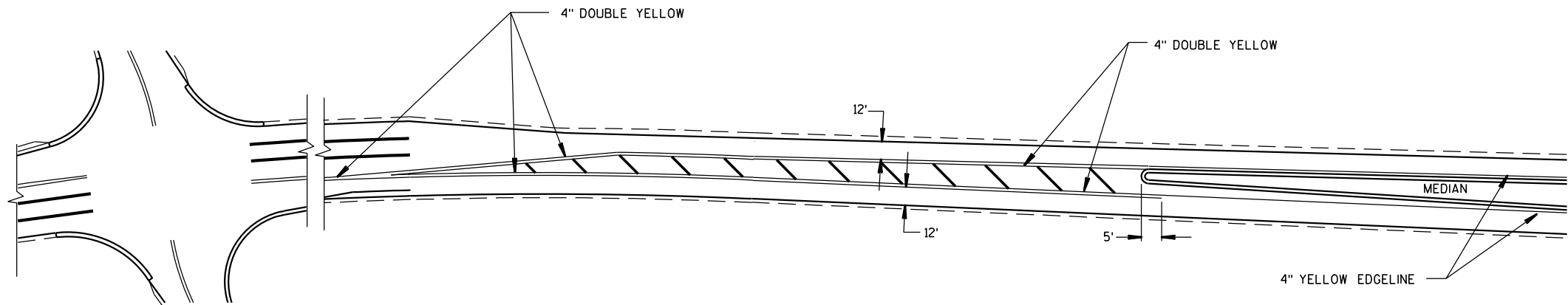


MEDIAN ISLAND DETAIL

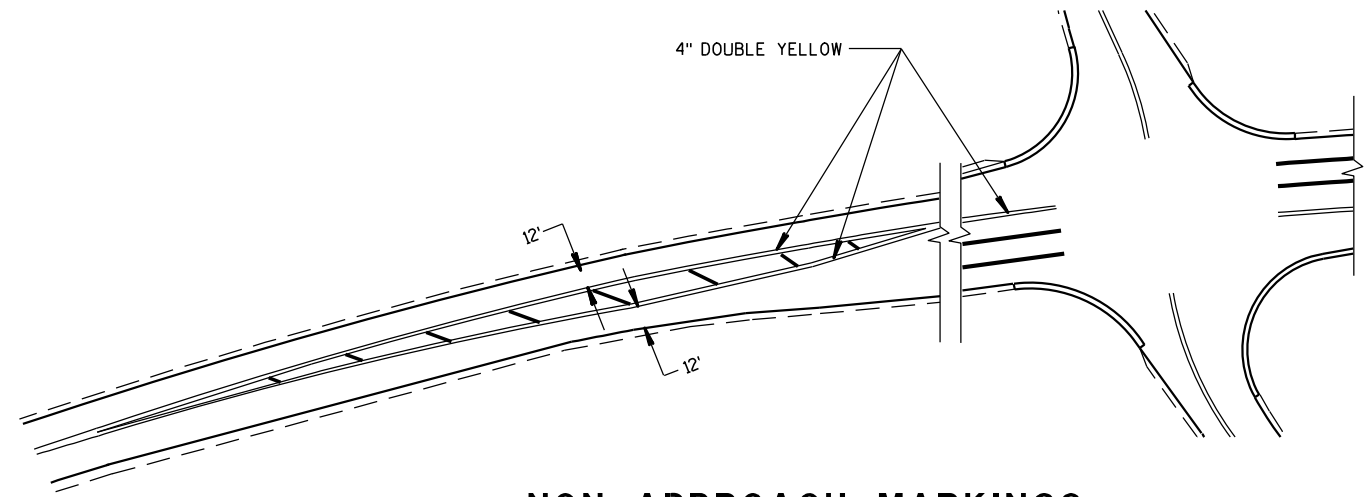
* WHEN THE PAINTED MEDIAN LENGTH IS LESS THAN 50 FEET THE SPACING IS 10 FEET.

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

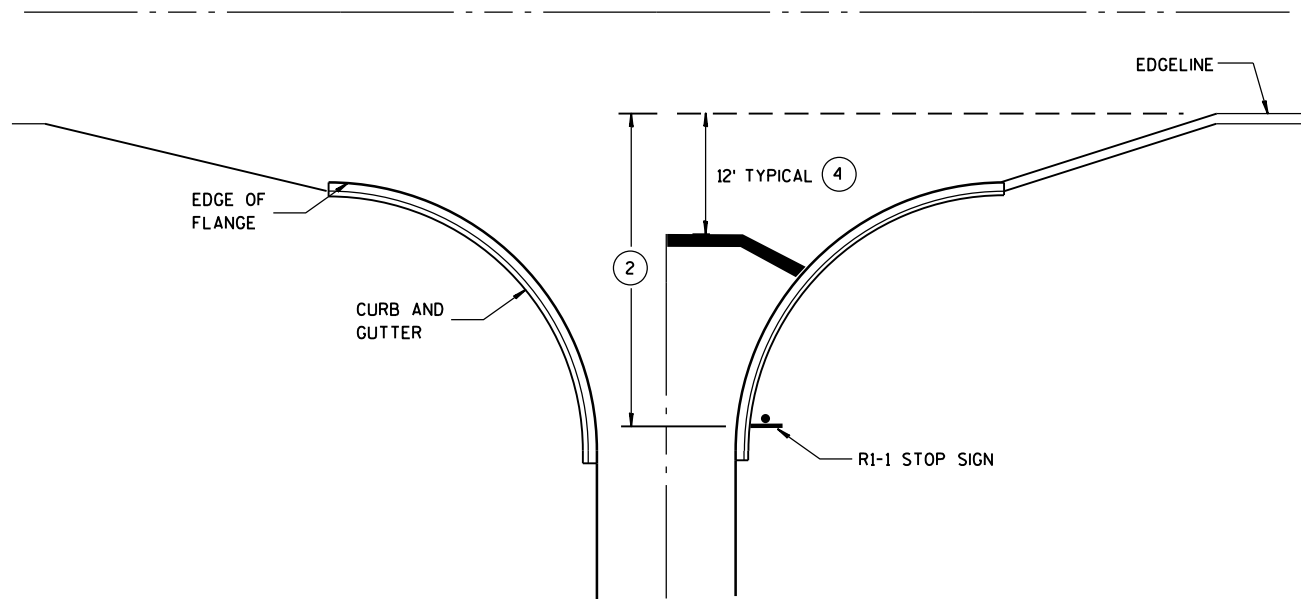


APPROACH MARKINGS FOR OTHER MEDIAN TYPES

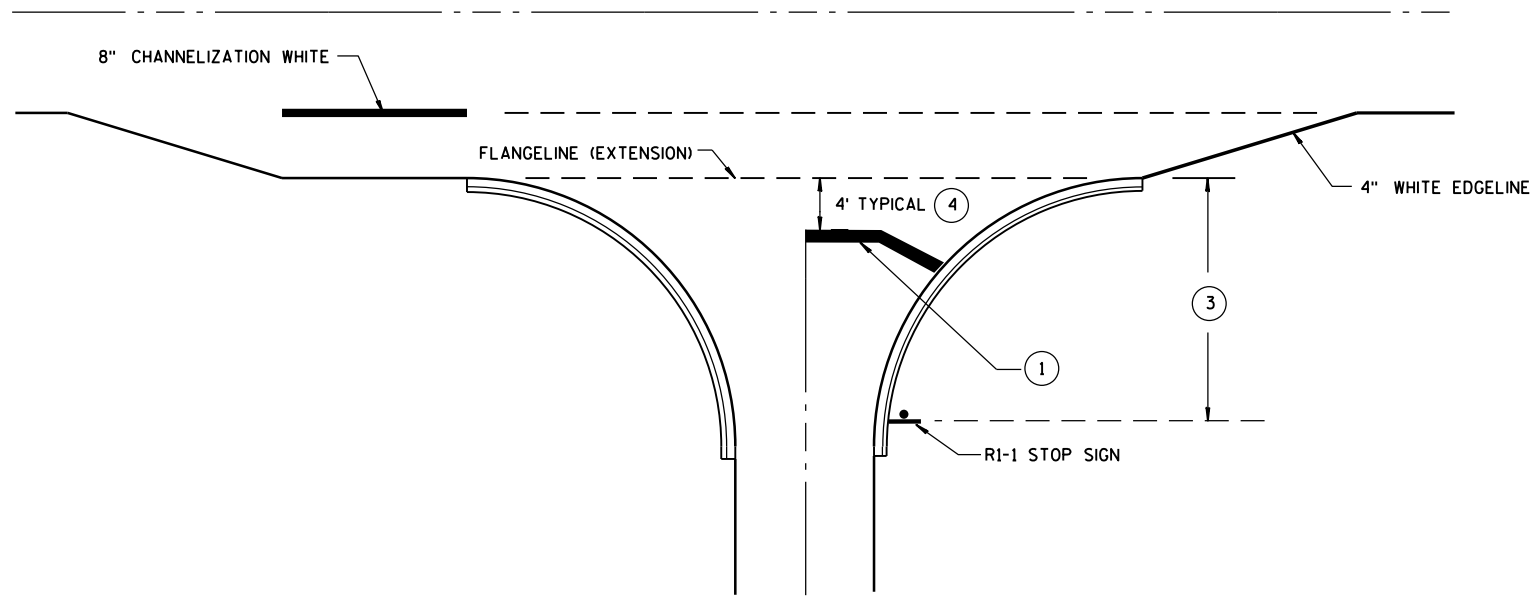


NON APPROACH MARKINGS

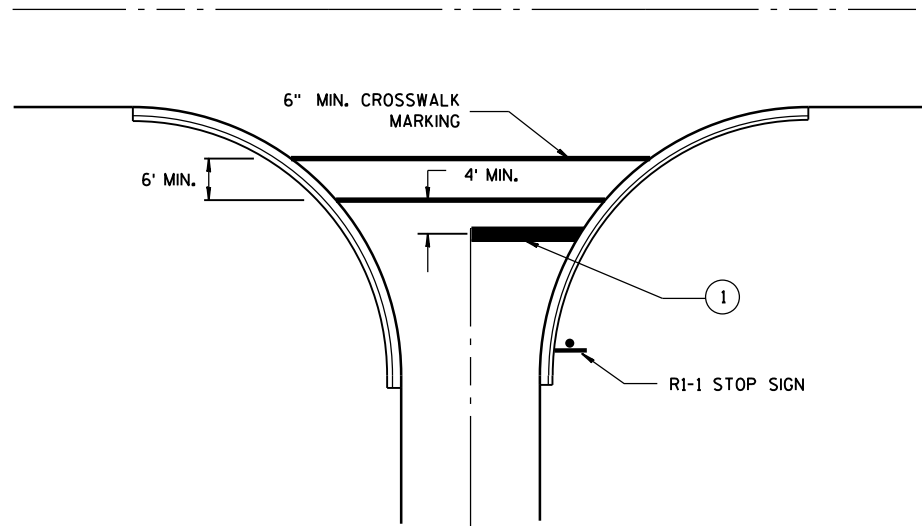
MEDIAN ISLAND MARKING			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	2-5-09	/S/ Thomas N. Nothohm	
DATE		STATE TRAFFIC ENGINEE 129	IGN
FHWA			



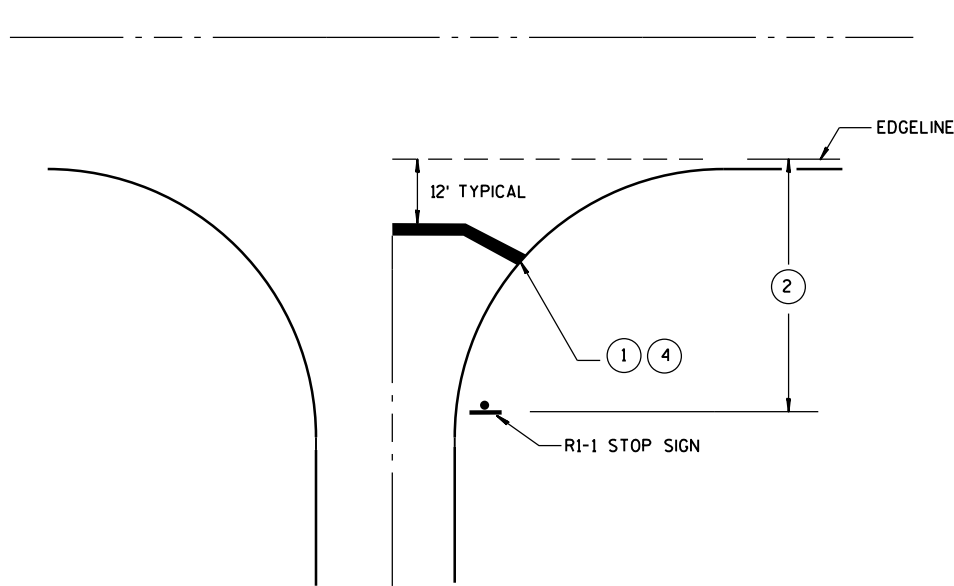
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



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

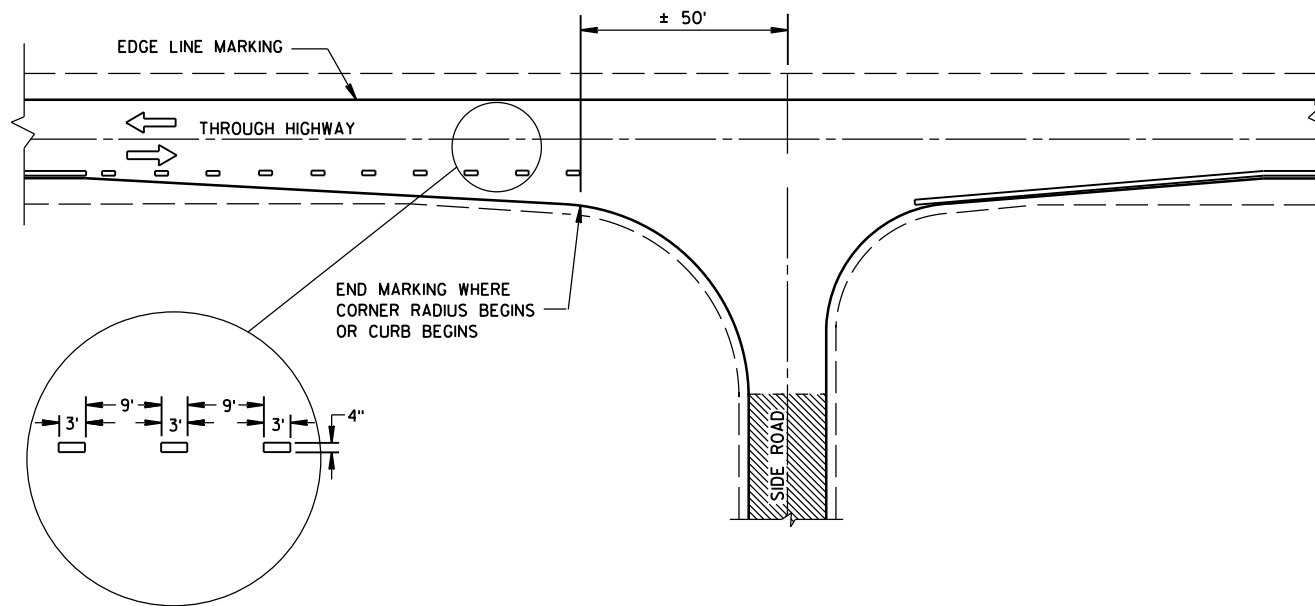
GENERAL NOTES

- 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 EDGE LINE 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
4-18-2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAR 130 JEER
FHWA



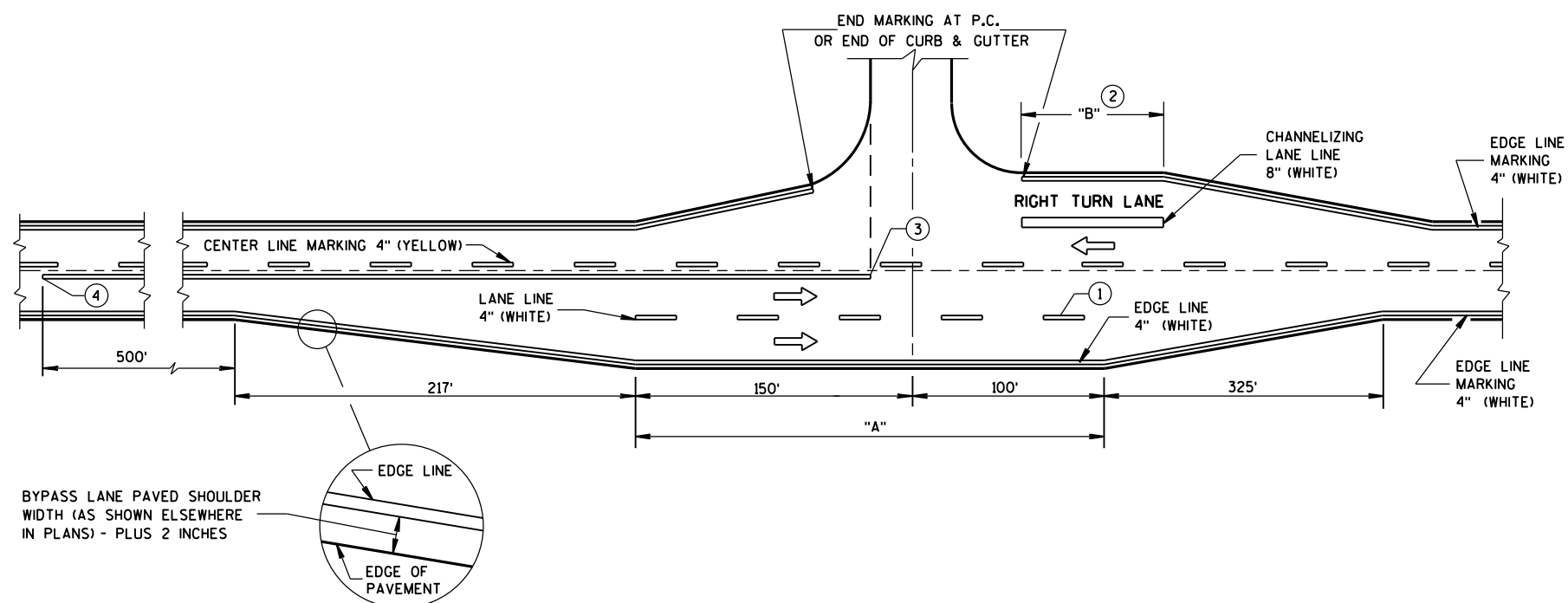
MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

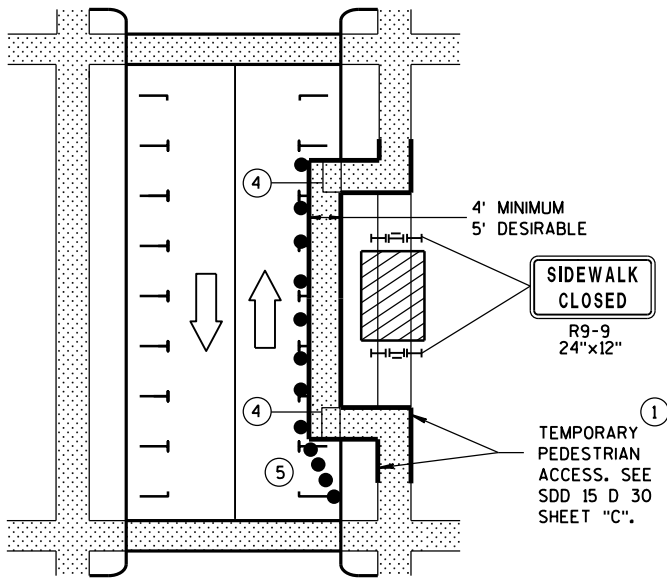


MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

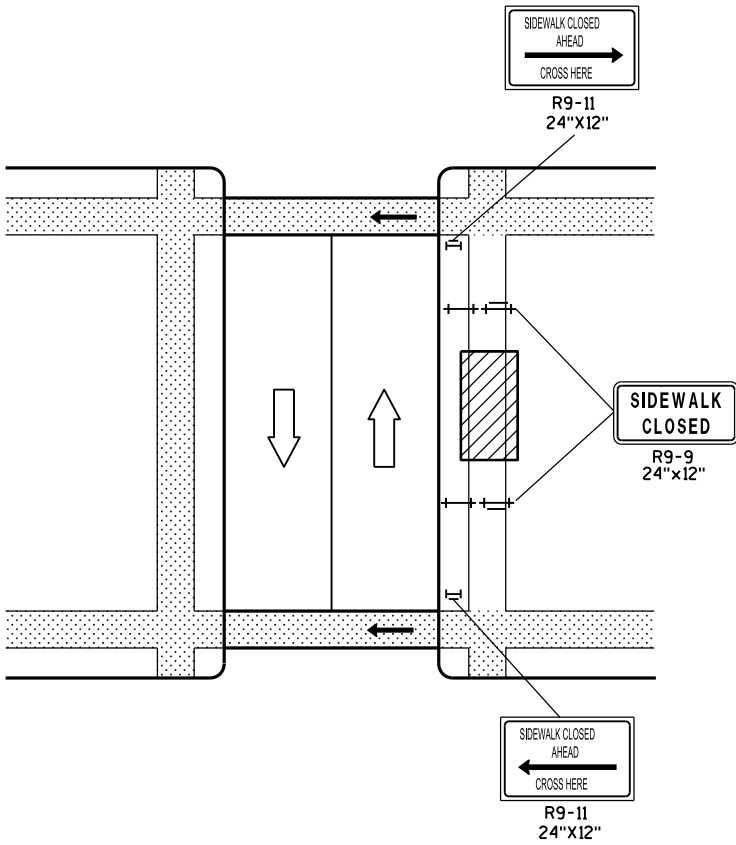
**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 131

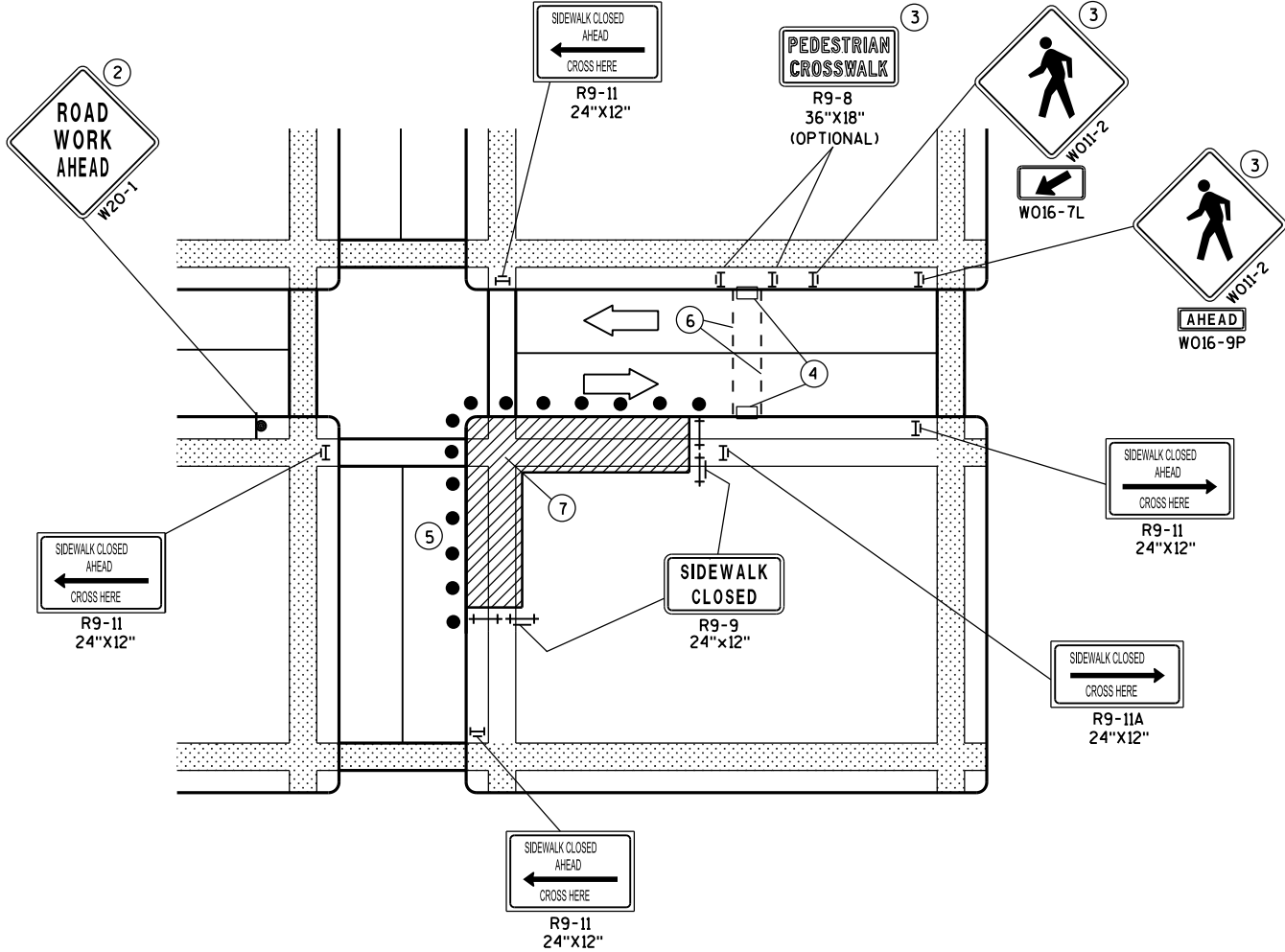
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

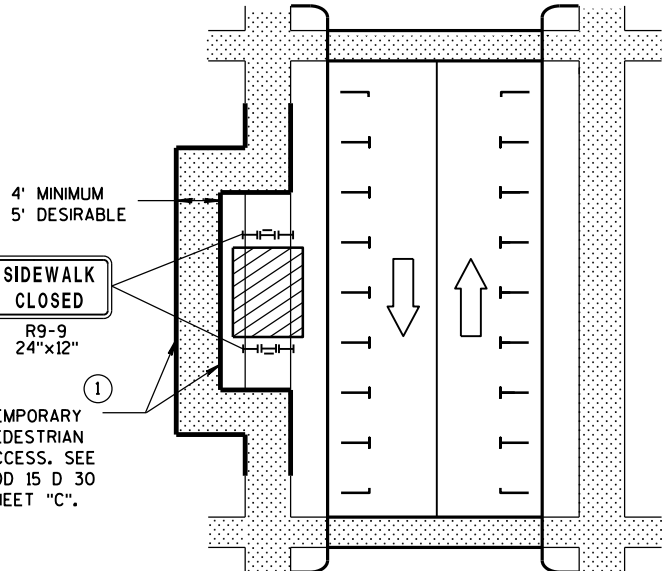


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

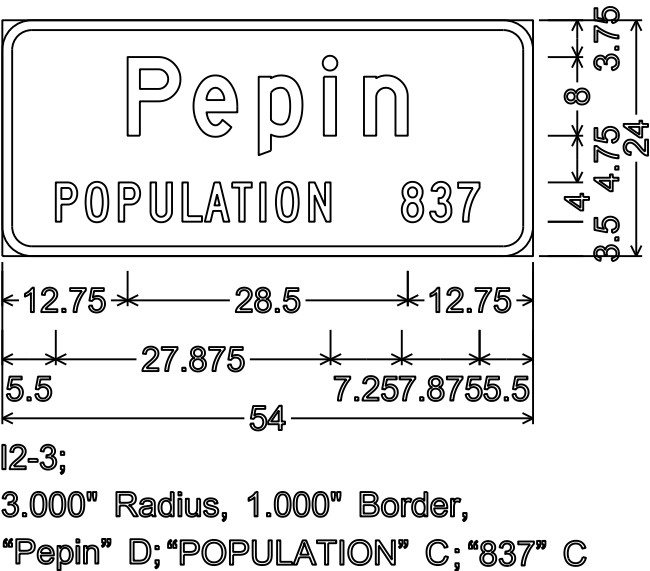
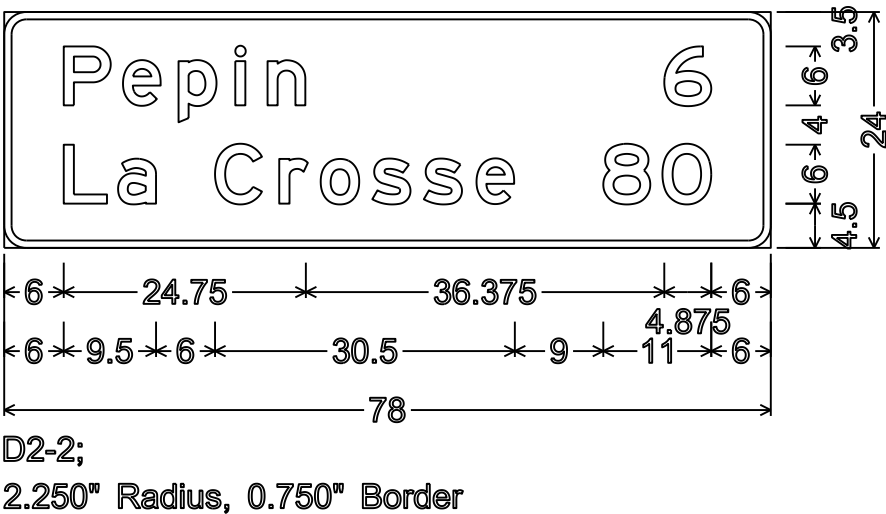
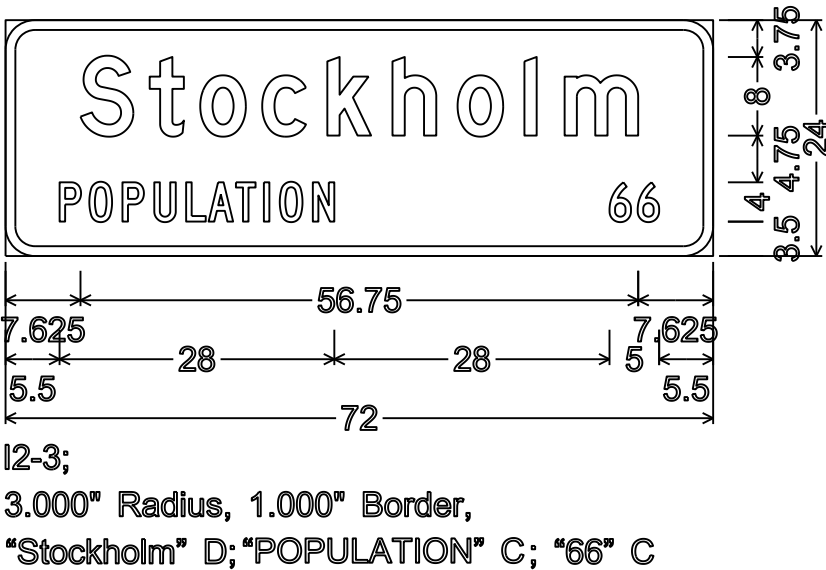
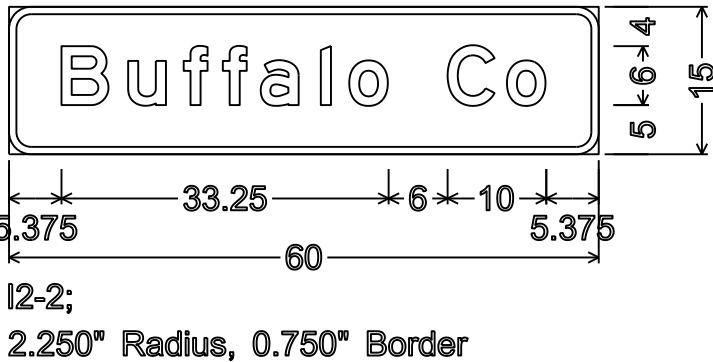
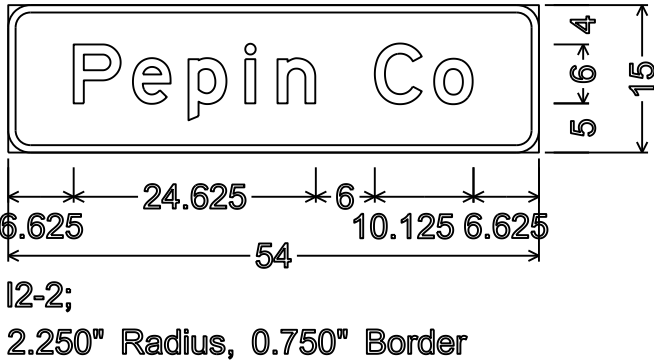
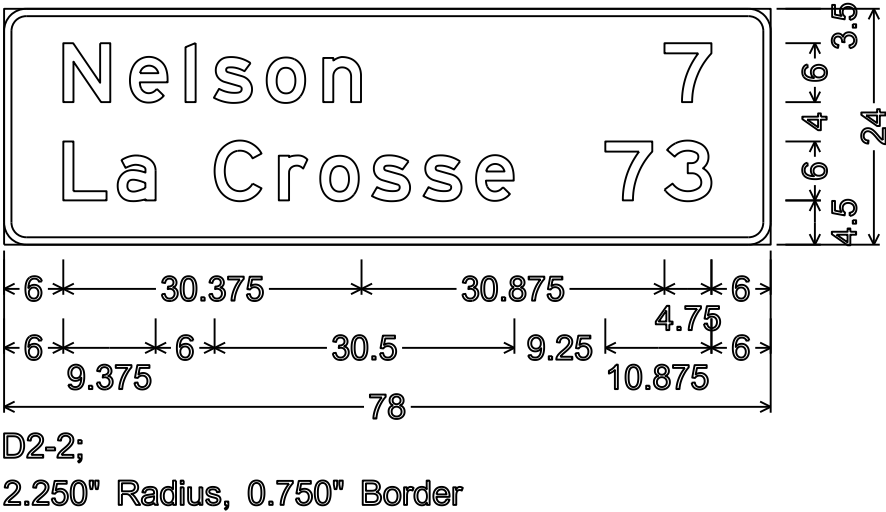
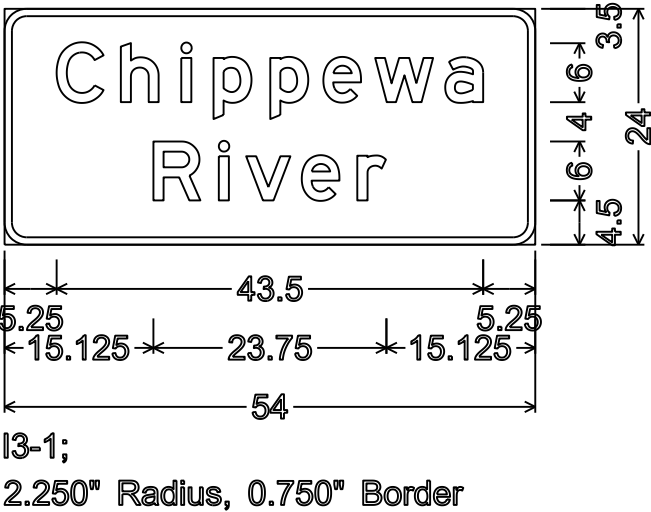
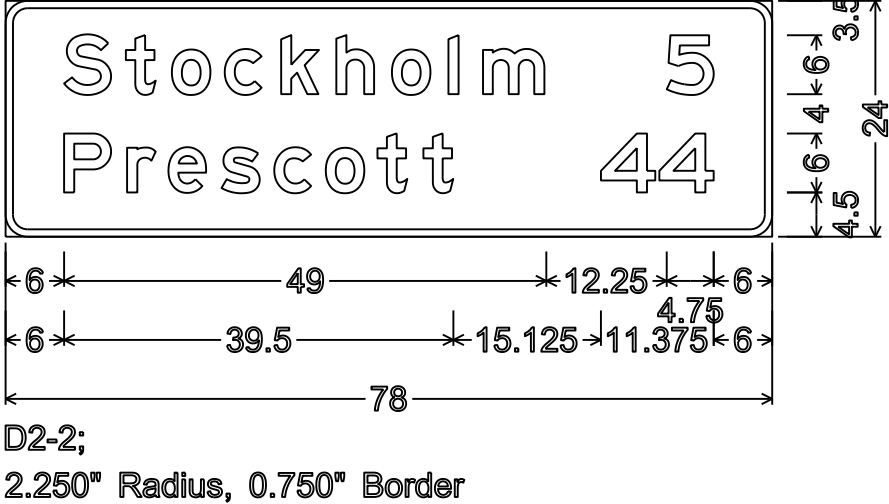
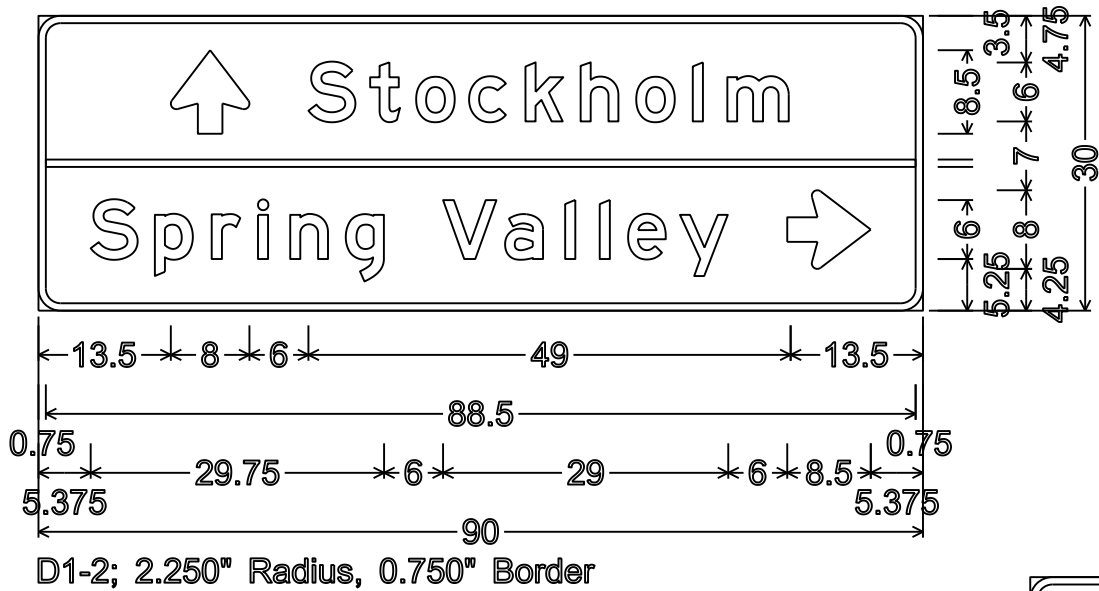
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 132

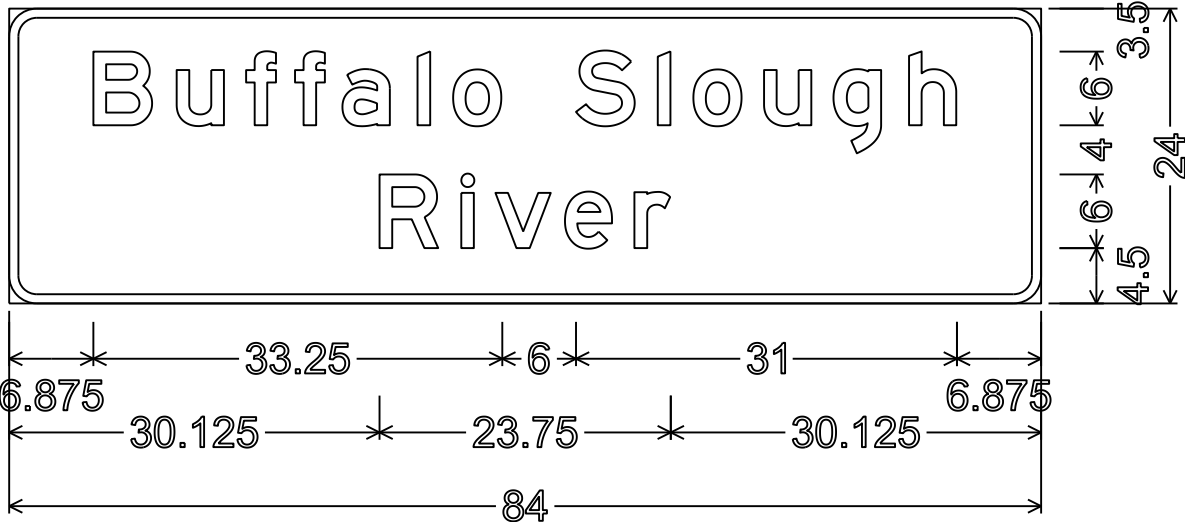
NOTES

- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - GREEN
Message - WHITE
- 3. Message Series - E except as noted

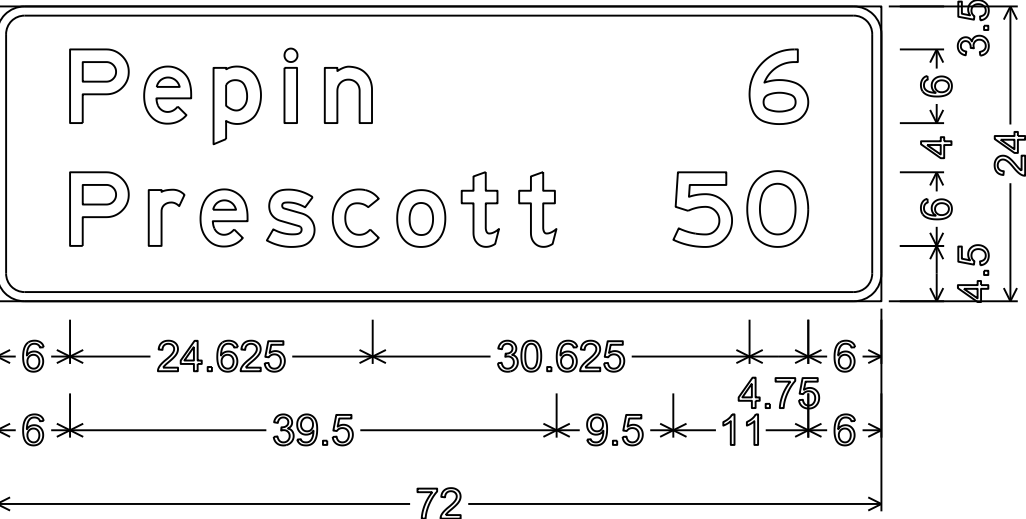


NOTES

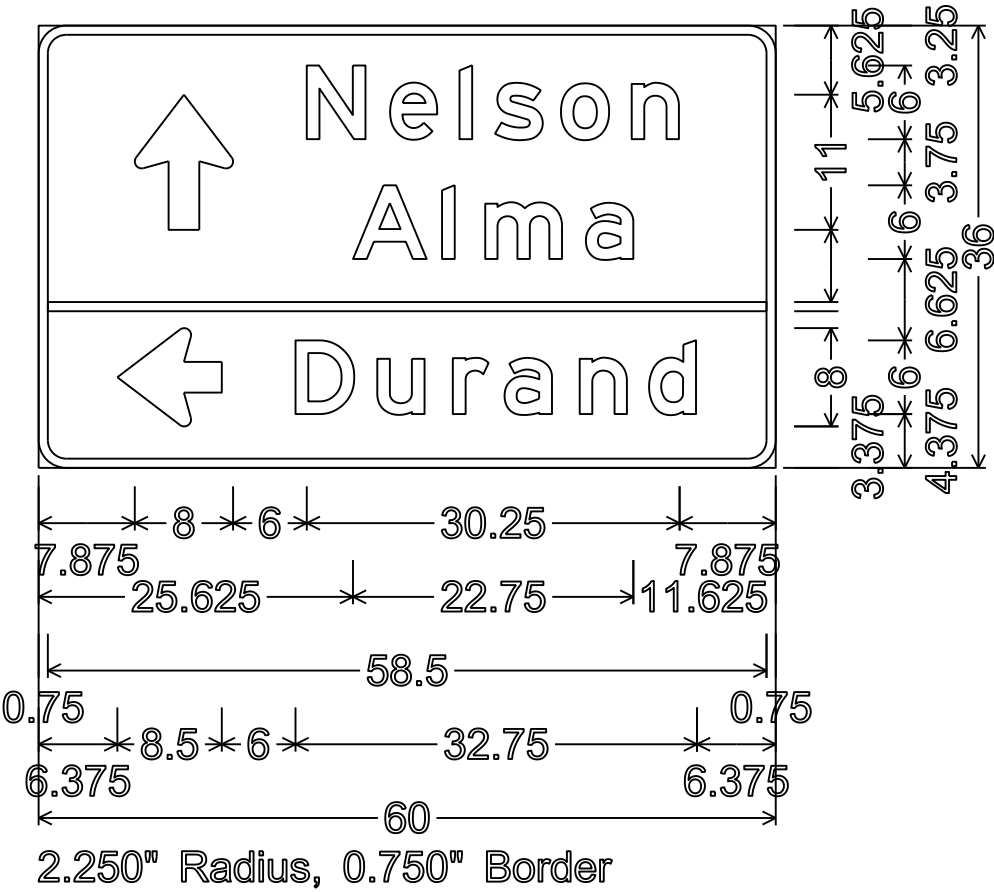
- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - GREEN
Message - WHITE
- 3. Message Series - E except as noted



I3-1;
2.250" Radius, 0.750" Border

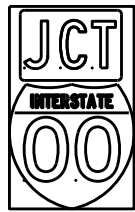


D2-2;
2.250" Radius, 0.750" Border

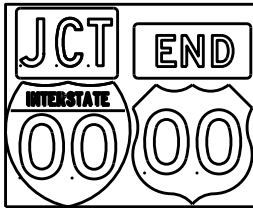


2.250" Radius, 0.750" Border

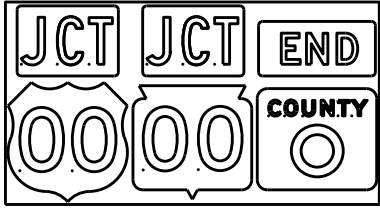
TYPICAL ASSEMBLIES



J1-1



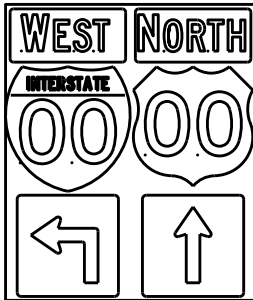
J1-2



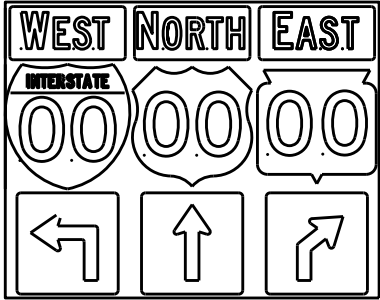
J1-3



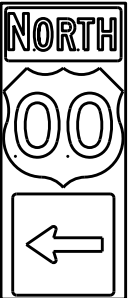
J2-1



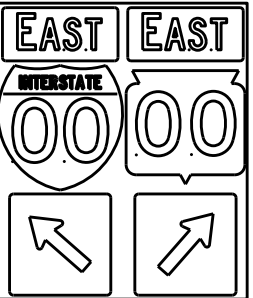
J2-2



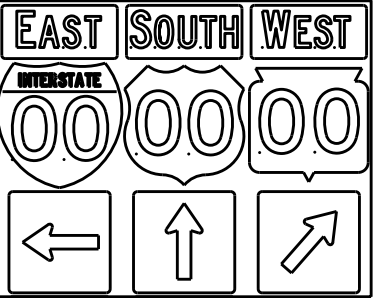
J2-3



J3-1



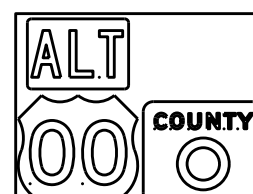
J3-2



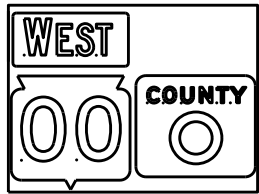
J3-3



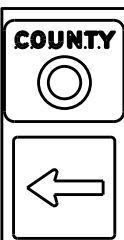
J4-1



J4-2



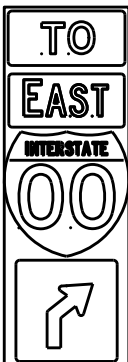
J4-2



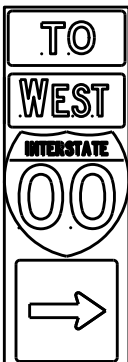
J13-1



J12-1



J32-1



J33-1



J23-1

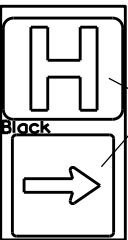


J22-1



JV

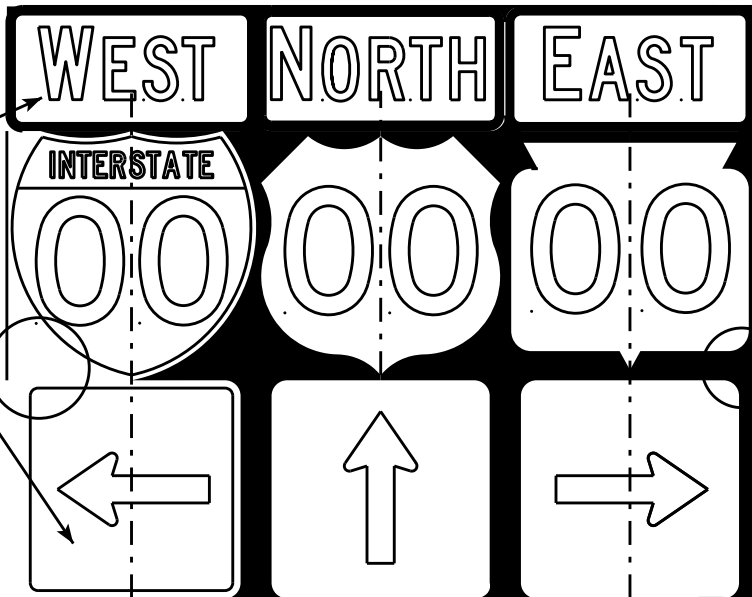
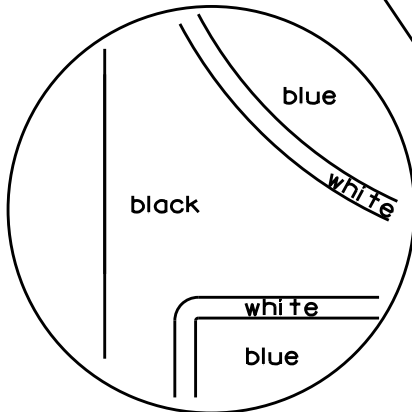
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

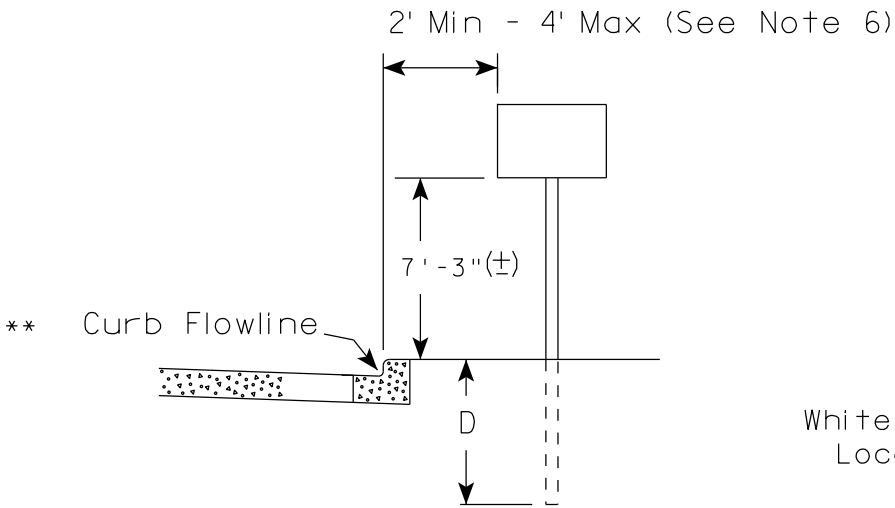
DATE 2/06/14 PL 135 A2-1S.8

SHEET NO: E

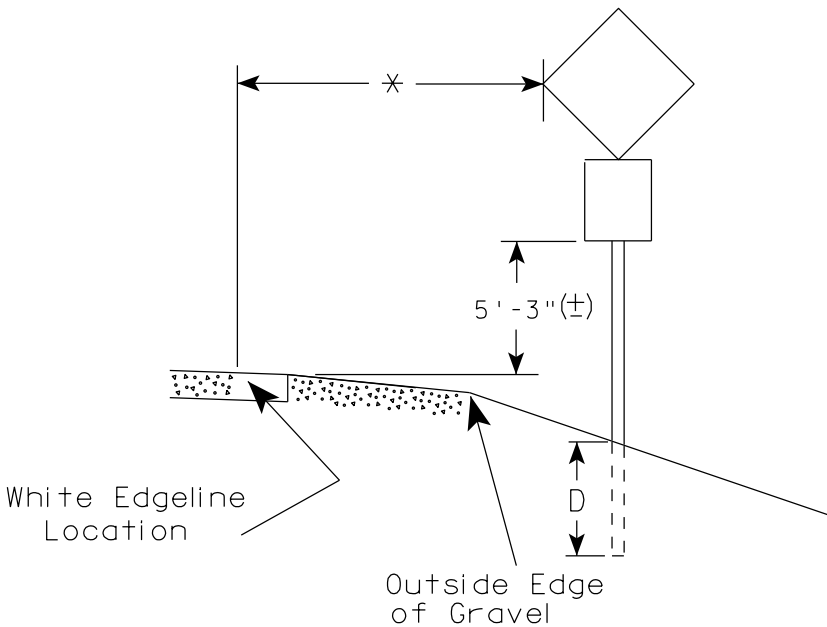
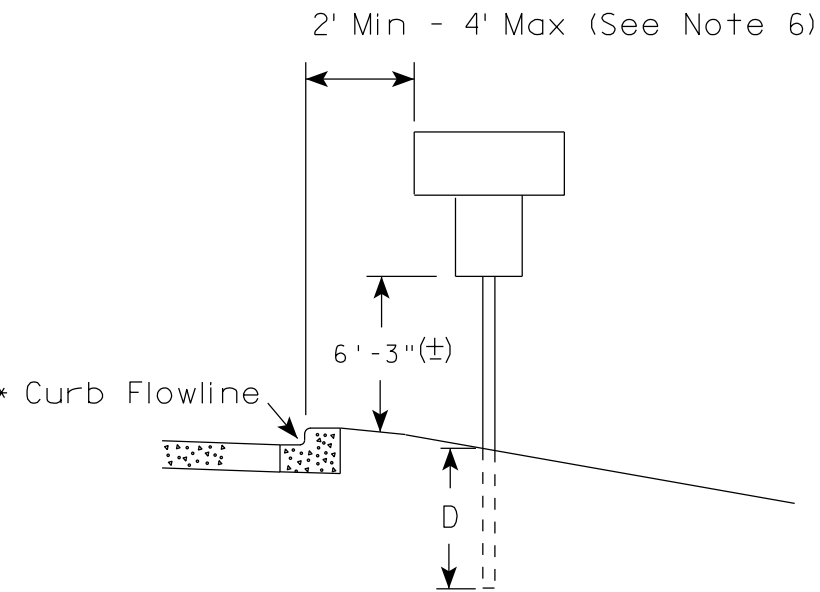
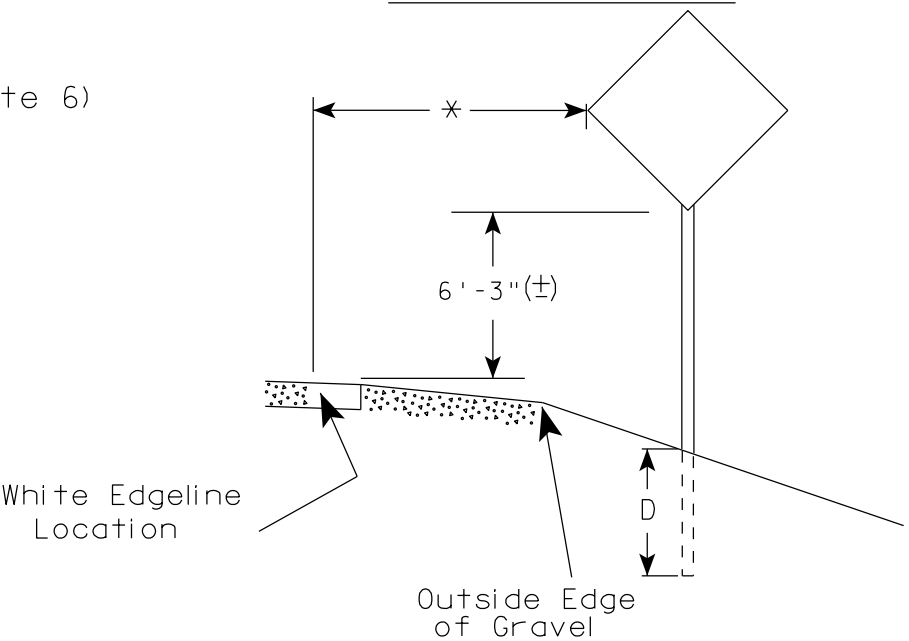
NOTES

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 inches (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.

URBAN AREA



RURAL AREA (See Note 2)



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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

×× 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.

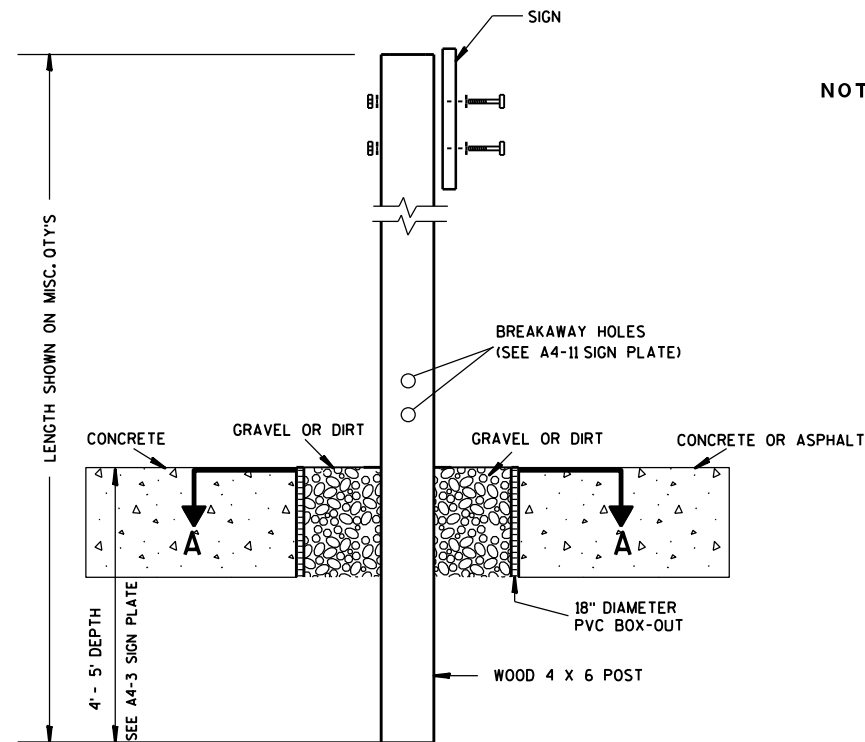
TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

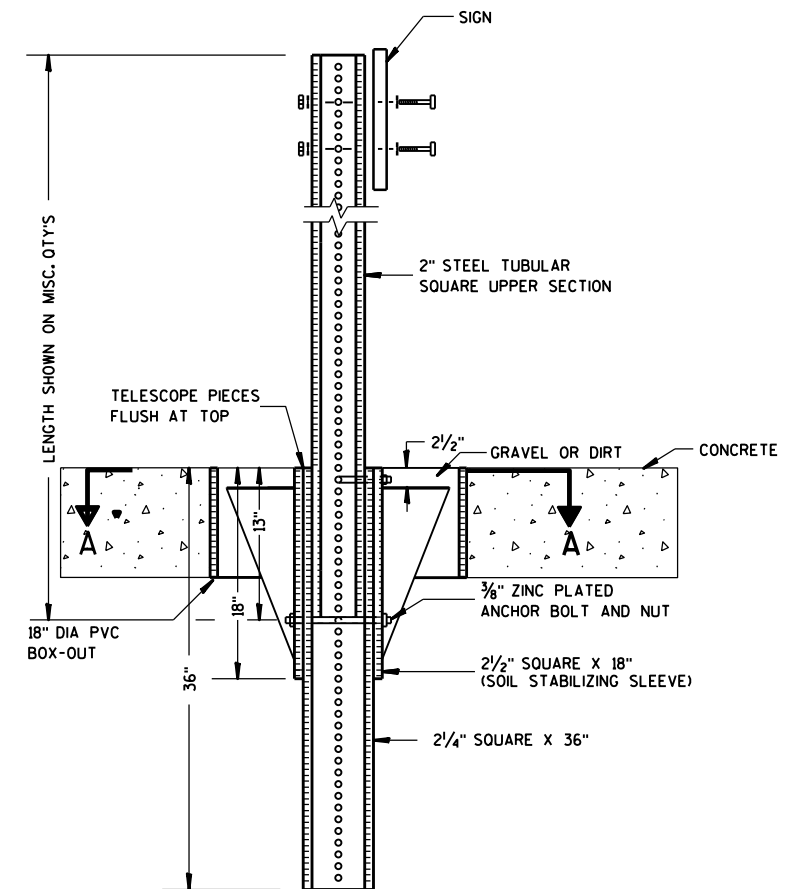
136



ELEVATION VIEW

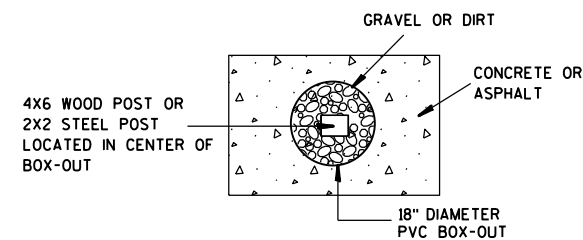
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLAT 137 A4-3B.1

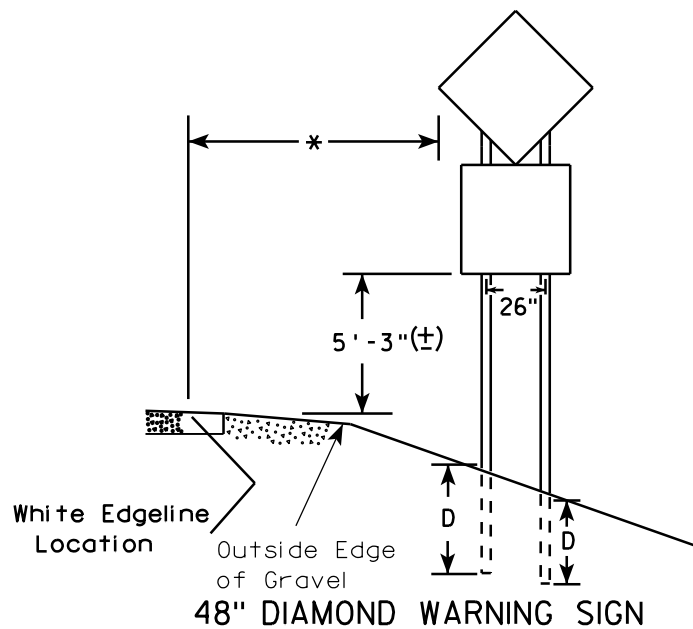
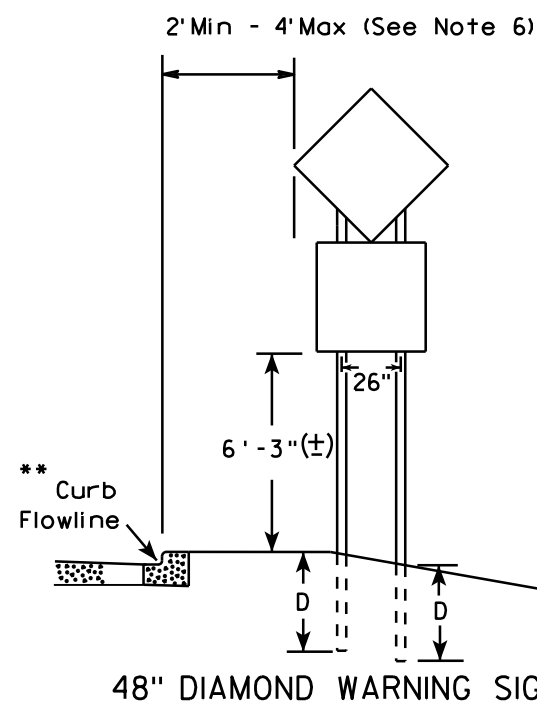
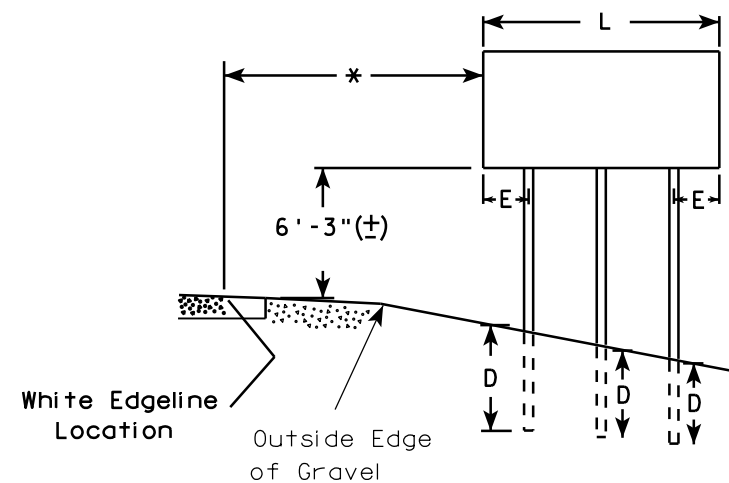
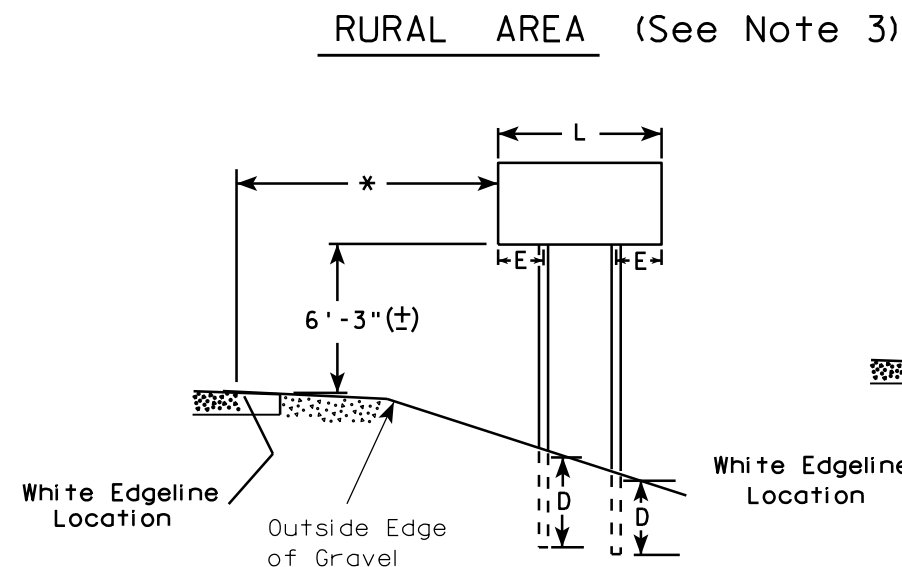
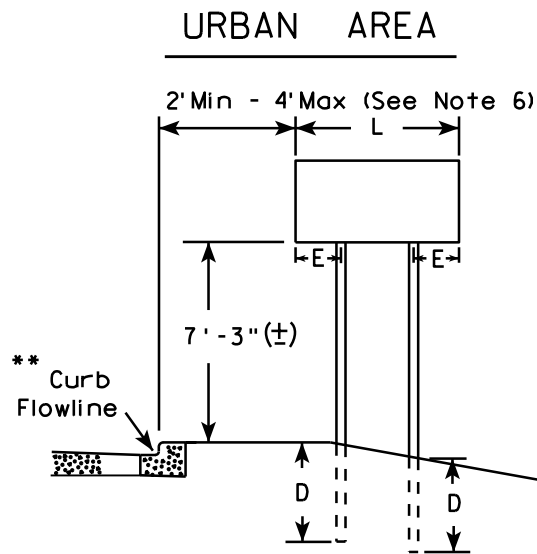
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

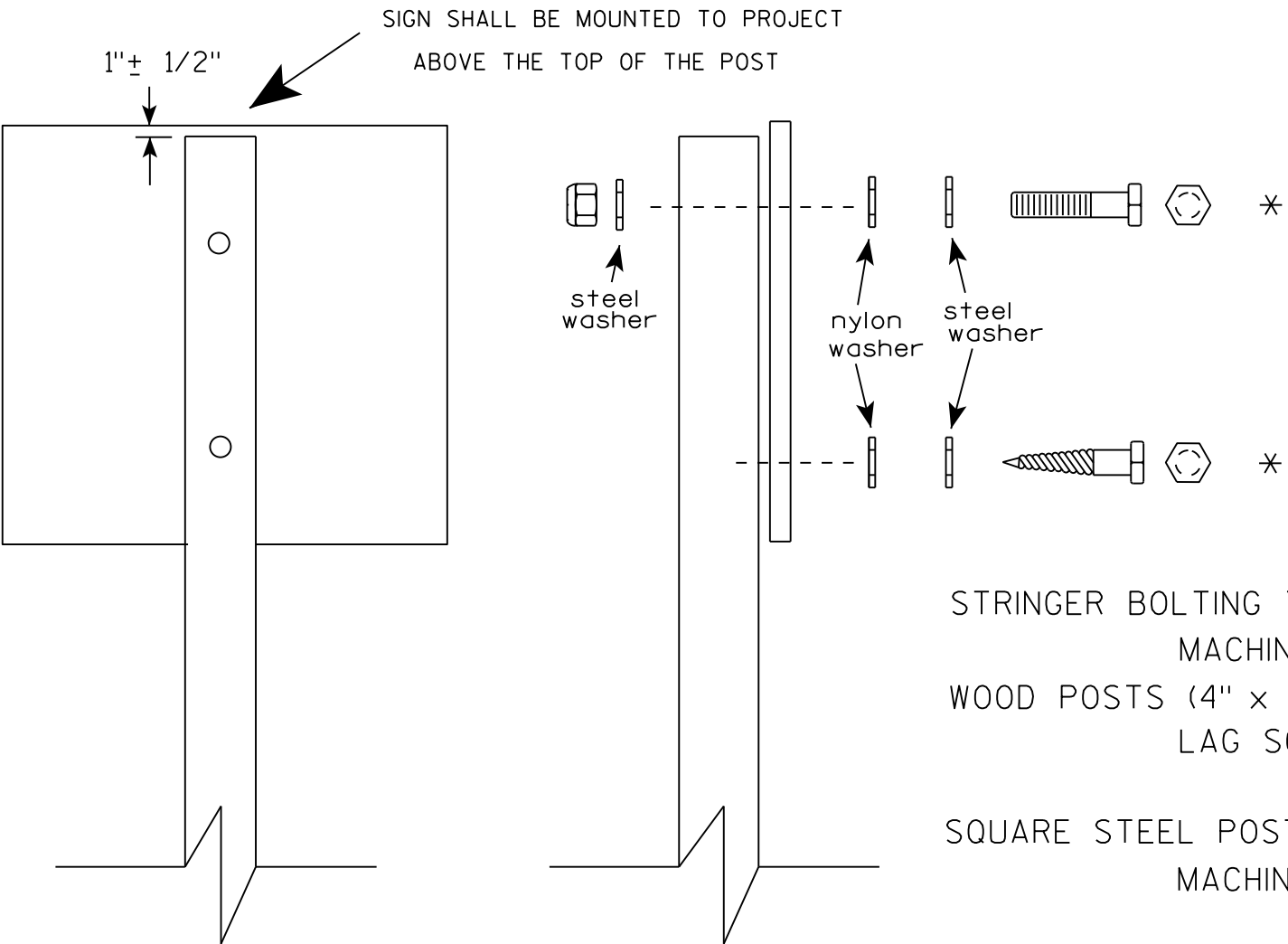
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. 138 14



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.

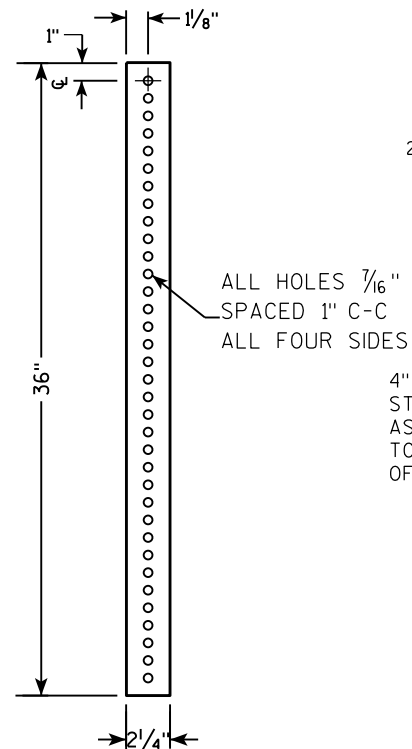
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

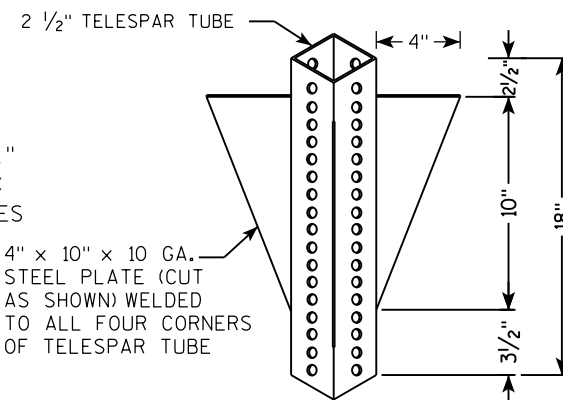
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8 139

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



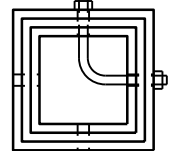
**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



SIGN
 SEE SIGN PLATE
 A4-8 FOR BOLT
 WASHER, & NUT
 MATERIAL
 2" STEEL TUBULAR
 SQUARE UPPER SECTION
 ALL HOLES $\frac{7}{16}$ "
 SPACED 1" C-C
 ALL FOUR SIDES
 $\frac{3}{8}$ " ZINC PLATED CORNER
 ANCHOR BOLT AND NUT
 2 1/2" GRAVEL OR DIRT
 TELESCOPE PIECES
 FLUSH AT TOP
 18" DIA SCHEDULE
 40 PVC
 BOX-OUT
 36"
 18"
 13"
 2 1/2" SQUARE X 18"
 (SOIL STABILIZING SLEEVE)
 2 1/4" SQUARE X 36"
 3/8" ZINC PLATED
 ANCHOR BOLT AND NUT

[illegible]

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



DIRECTION
OF TRAFFIC

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/05/15 PLATI 140 14-9.9

SHEET NO: E

PROJECT NO:	HWY:	COUNTY:	SHEET NO:
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FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN

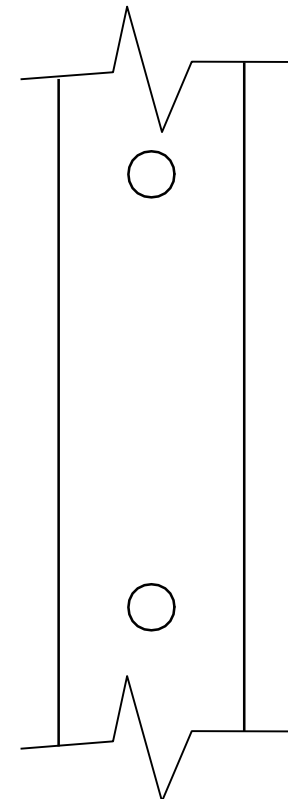
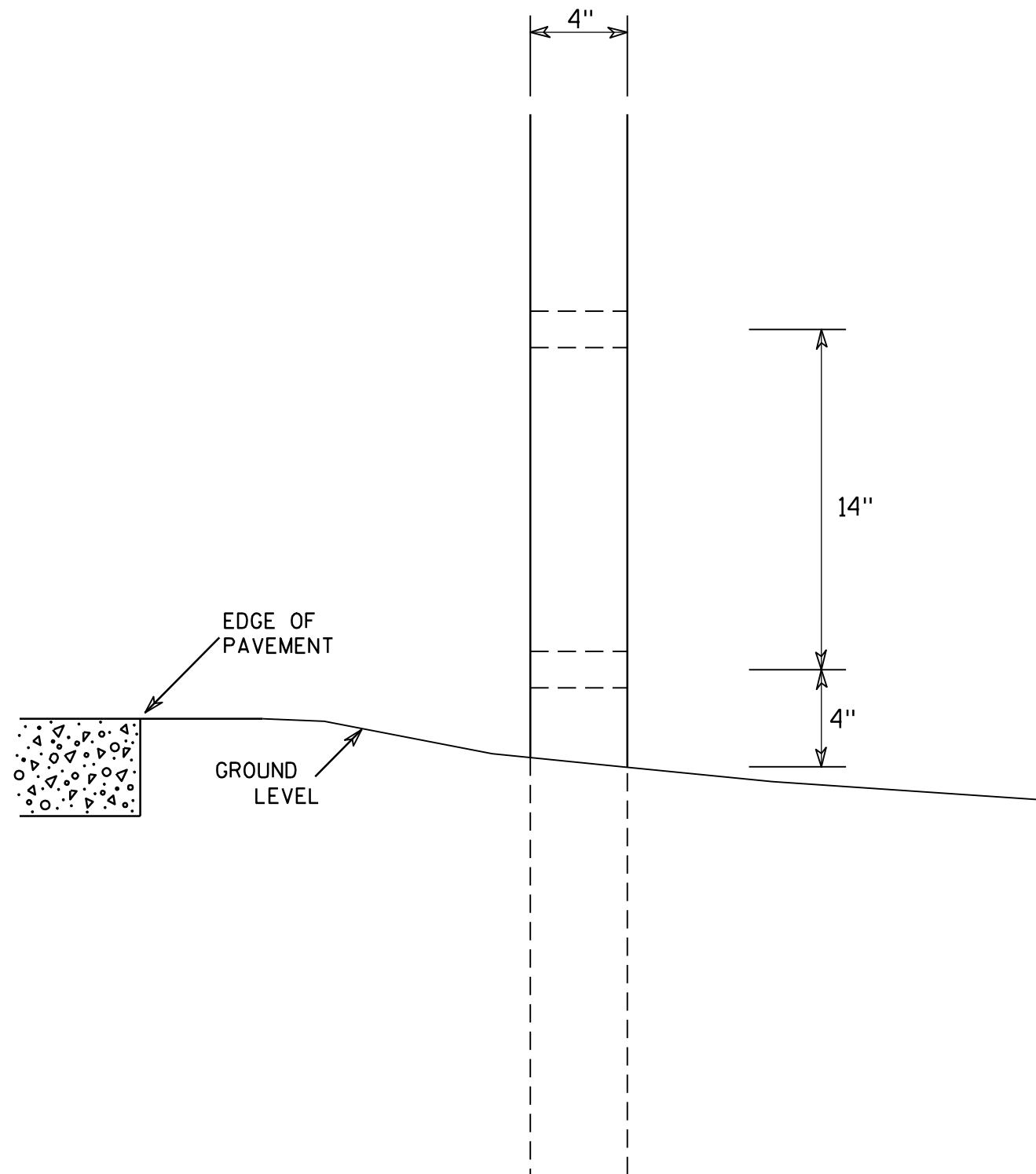
PLOT DATE : 05-FEB-2015 17:09

PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" 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:

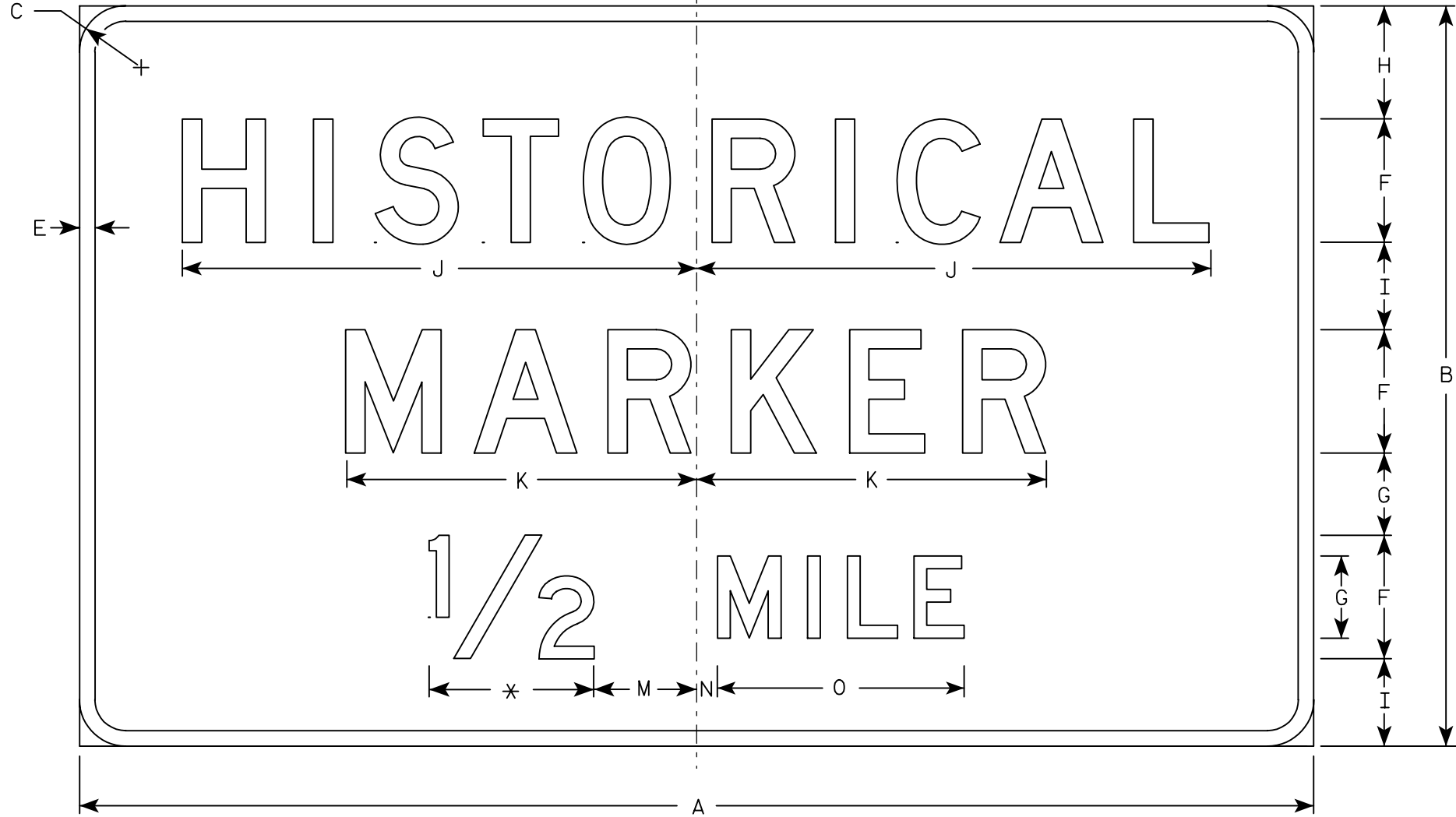
SHEET NO: 141

E

50, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6



D5-63 * See Note 5

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	60	36	2 1/4		3/4	6	4	5 1/2	4 1/4	25	17		5	1	12												15.0	1.35
3																												
4																												
5																												

STATE PROJECT NUMBER:

FILE NAME : C:\Users\Projects\tr_std\plate\D563.DGN

PLOT DATE : 09-JAN-2002 13:18

ORG DATE : 3/23/99

Originator : Don Kluever

SHEET NO: 142

E

NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Brown
Message - White
- Message Series - D
- 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.
- Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

STANDARD SIGN
D5-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
for State Traffic Engineer

DATE 3/23/99 PLATE NO. D5-63.9

58, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6, 10.



D5-64R

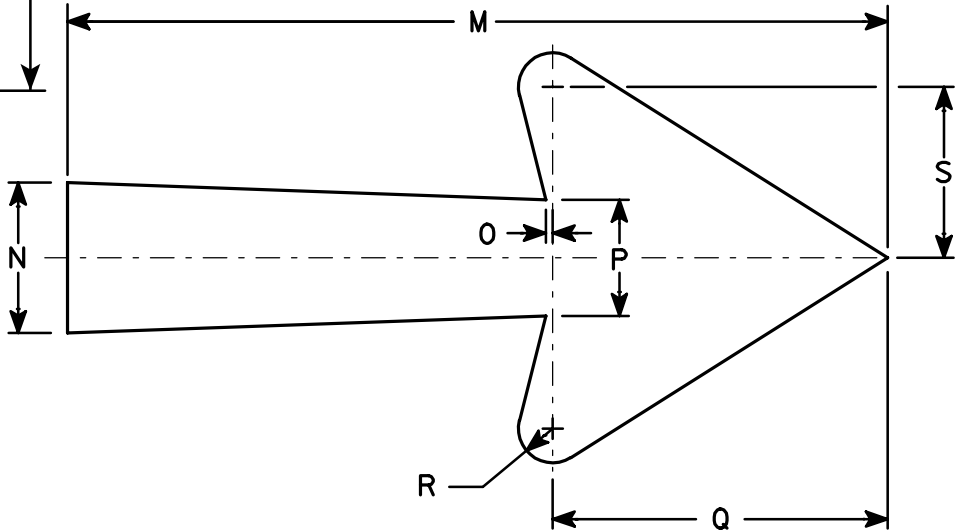
Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	60	36	2 1/4		3/4	6	5 1/2	4 1/4	7	7 1/4	25	17	15	2 3/4	1/8	2 1/8	6 1/8	5/8	3 1/8								15.0	1.35
3																												
4																												
5																												

NOTES

1. Sign Is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Brown
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.
5. D5-64L is the same as D5-64R except the arrow is reversed.



Arrow Detail

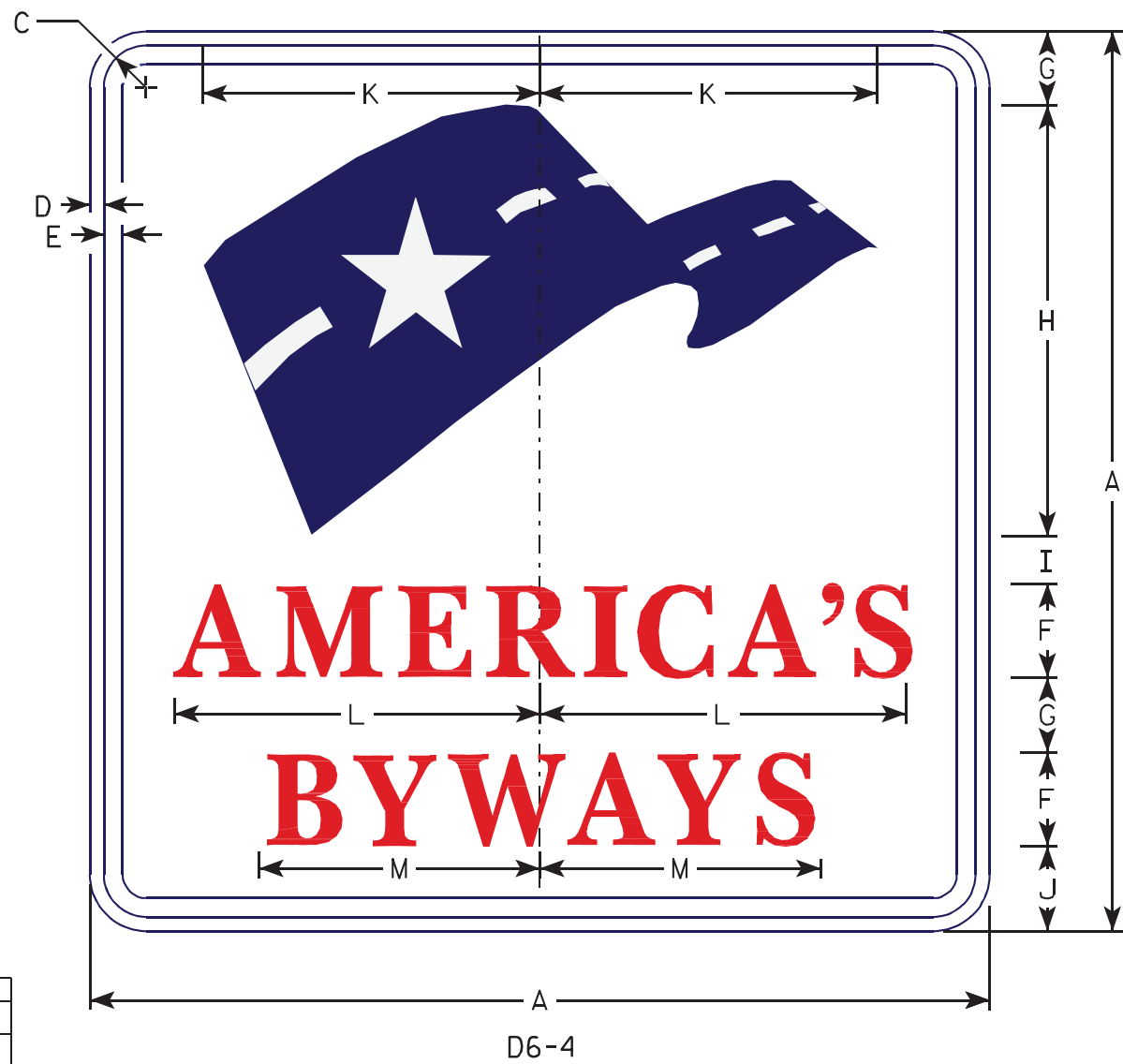
STANDARD SIGN
D5-64

WISCONSIN DEPT OF TRANSPORTATION
APPROVED
Charles J. Sperry
for State Traffic Engineer
DATE 1/09/02 PLATE NO. D5-64.5

STATE PROJECT NUMBER:

SHEET NO: 143

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 - RED Logo is Blue with White dashes and Star.
- 3. Message Series - SPECIAL FONT (See MUTCD Standard Highway Signs Manual)
- 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	
2	600 mm X 600 mm
3	
4	900 mm X 900 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq.
1																												
2	24		1 1/8	3/8	1/2	2 1/2	2	11 1/2	1 1/4	2 1/4	9	9 3/4	7 1/2													4.0	0.36	
3																												
4	36		1 5/8	3/4	5/8	3 3/4	3	17 1/4	1 7/8	3 3/8	13 1/2	14 5/8	11 1/4													9.0	0.81	
5																												

STANDARD SIGN
D6 - 4

WISCONSIN DEPT OF TRANSPORTATION

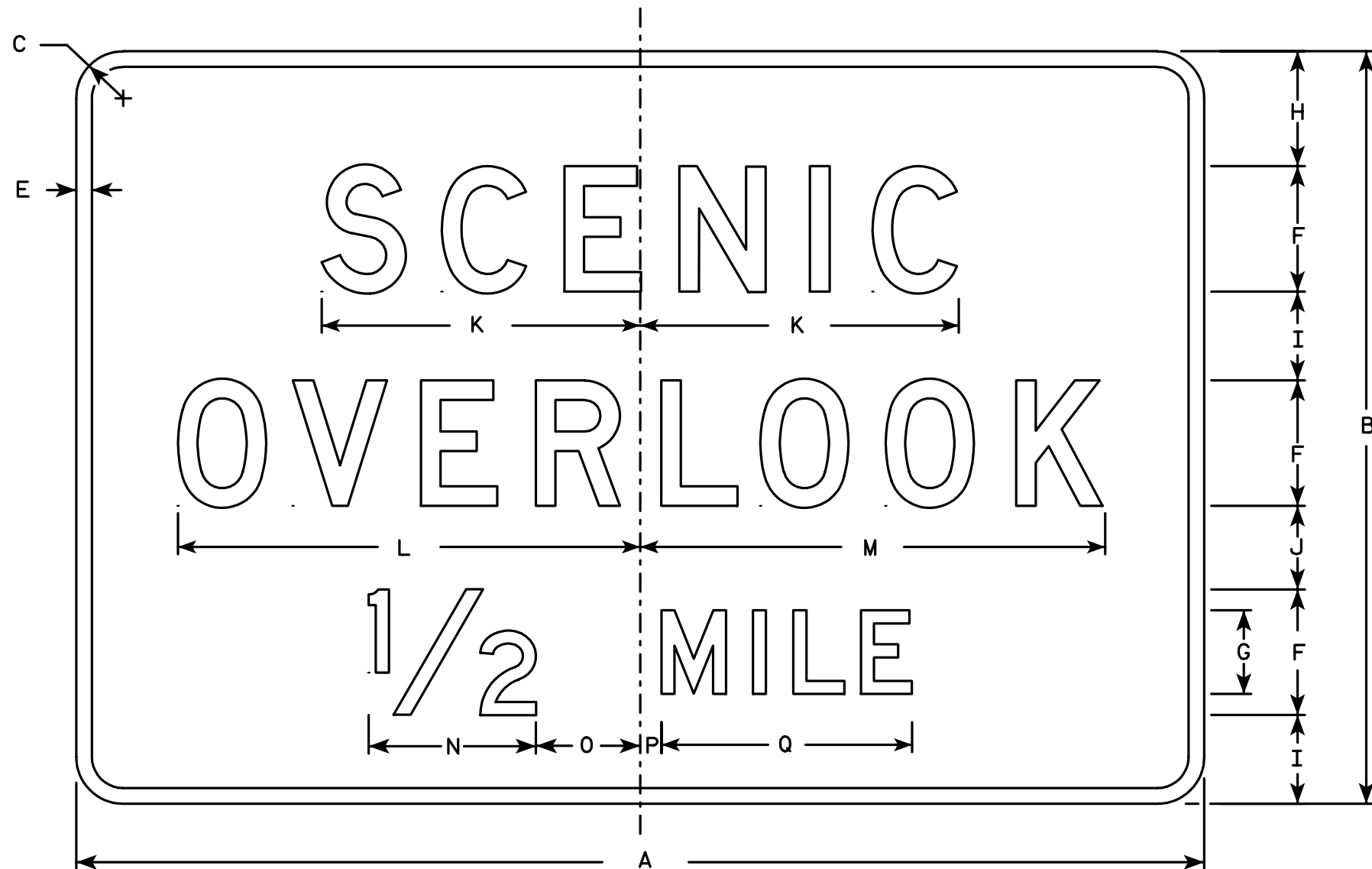
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/30/10 PLATE NO. D6-4.1

56, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6, 10,



D6-51

Metric equivalent
for this sign is:

SIZE	
1	
2	1350 mm X 900 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	54	36	2 ¼		¾	6	4	5 ½	4 ¼	4	15 ¼	22 ⅛	22 ¼	8	5	1	12										13.50	1.22
3																												
4																												
5																												

NOTES

1. Sign Is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Blue
Message - White - Type H Reflective
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.

STANDARD SIGN
D6-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Christa J. Spang
for State Traffic Engineer

DATE 1/10/02

PLATE NO. D6-51.5

STATE PROJECT NUMBER:

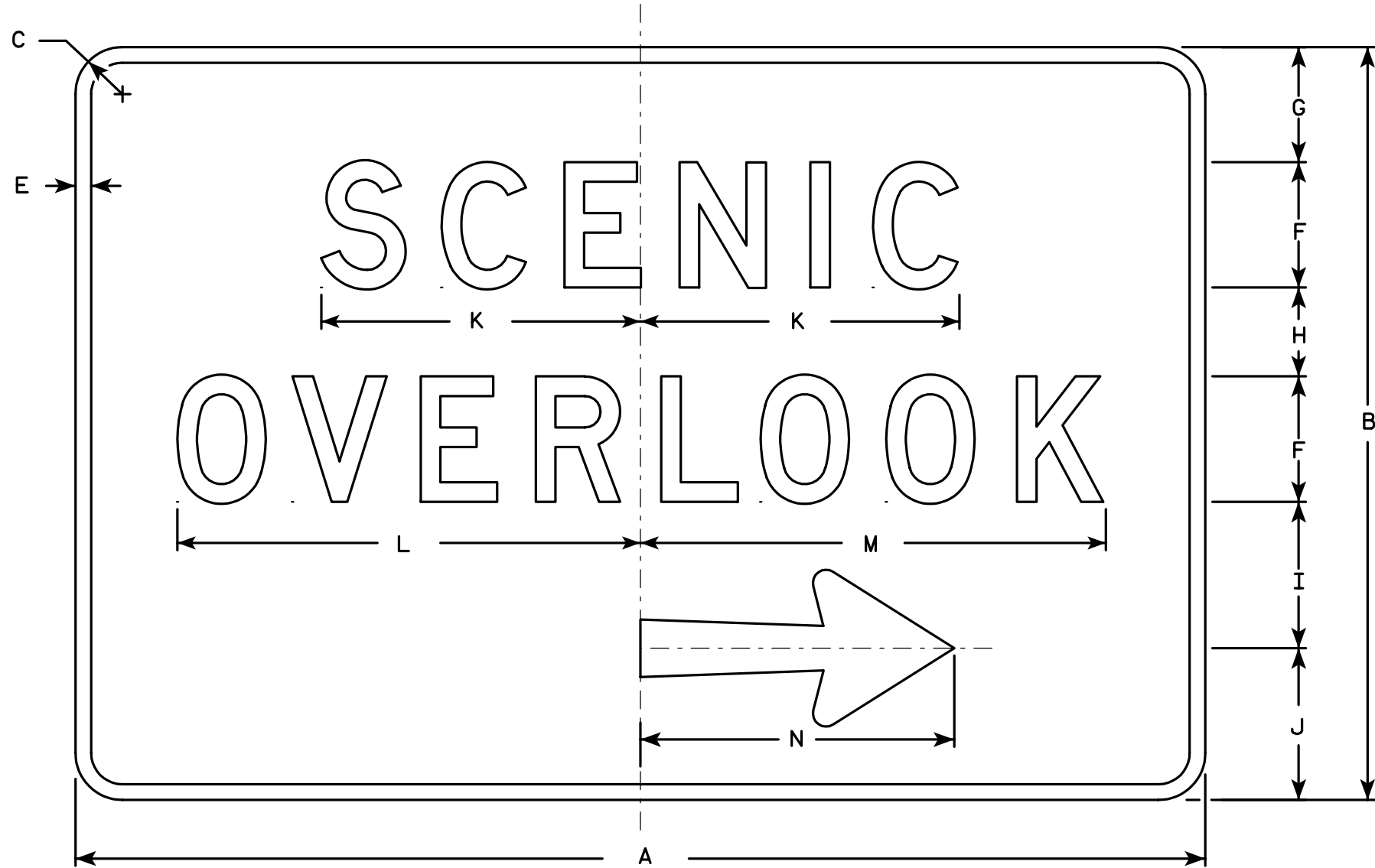
SHEET NO: 145

E

58, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6, 10.



D6-53R

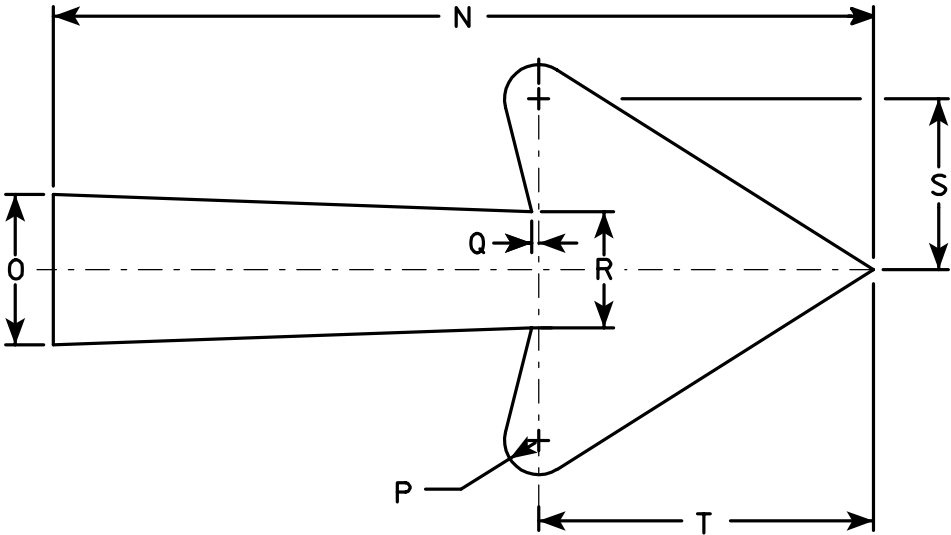
Metric equivalent
for this sign is:

SIZE	
1	
2	1350 mm X 900 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	54	36	2 1/4		3/4	6	5 1/2	4 1/4	7	7 1/4	15 1/4	22 1/8	22 1/4	15	2 3/4	5/8	1/8	2 1/8	3 1/8	6 1/8							13.50	1.22
3																												
4																												
5																												

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Blue
Message - White - Type H Reflective
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. D5-53L is the same as D6-53R except that the arrow is reversed.



Arrow Detail

STANDARD SIGN
D6-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
State Traffic Engineer

DATE 1/10/02 PLATE NO. D6-53.5

STATE PROJECT NUMBER:

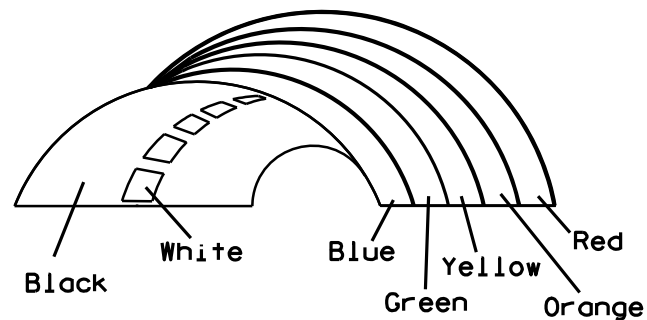
SHEET NO: 146

E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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 - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
Line 1 - Red
Line 2 - Black
Line 3-5 - Blue
6. Line 1 - Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

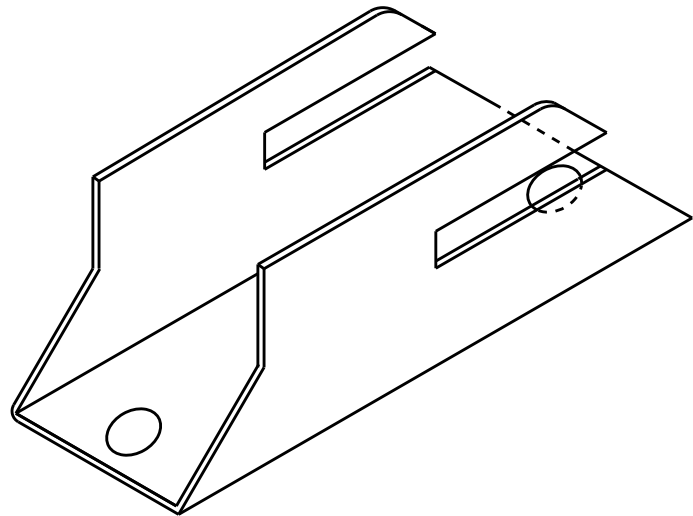
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 147
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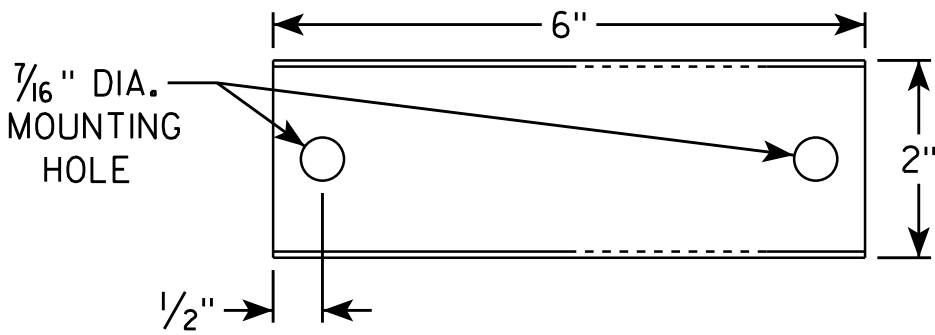
STANDARD SIGN I55-56

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 4/27/11 PLATE NO. I55-56.3

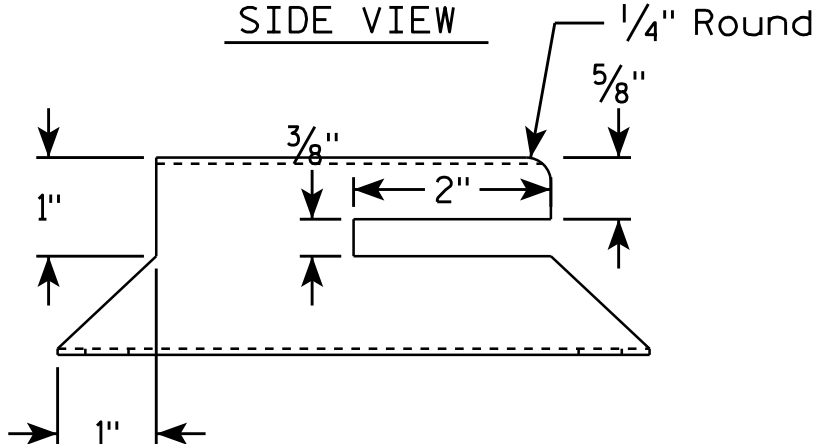
ISOMETRIC VIEW



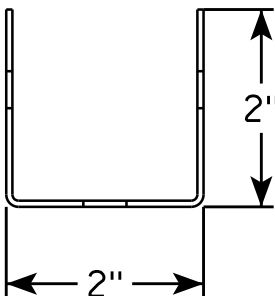
TOP VIEW



SIDE VIEW



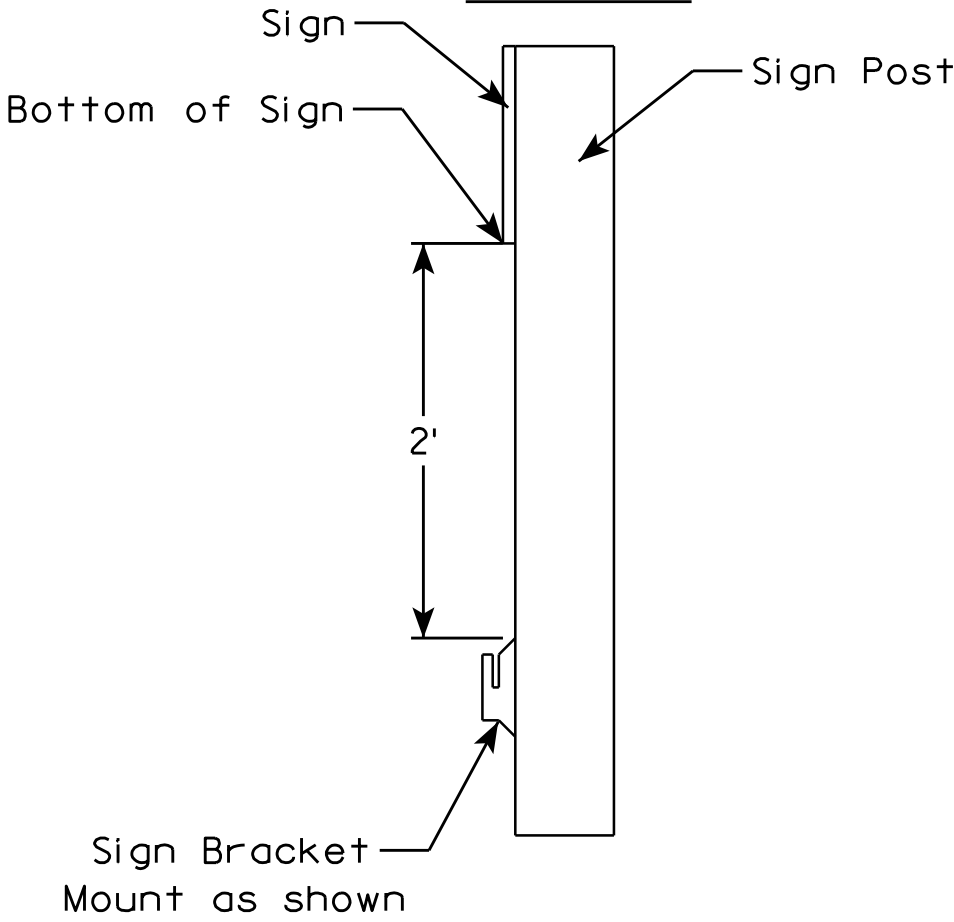
END VIEW



NOTES

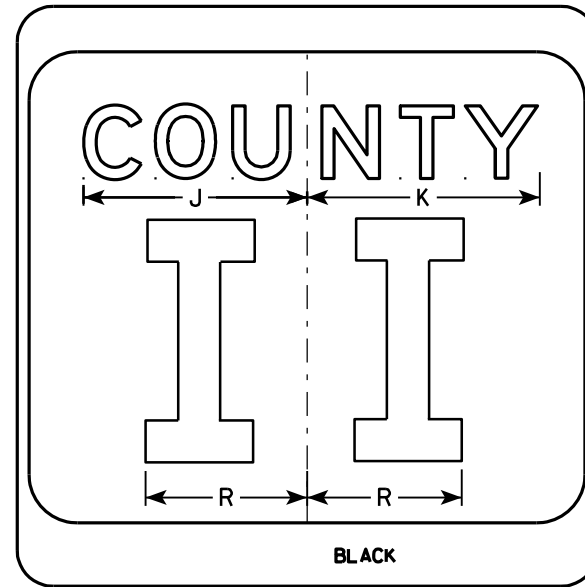
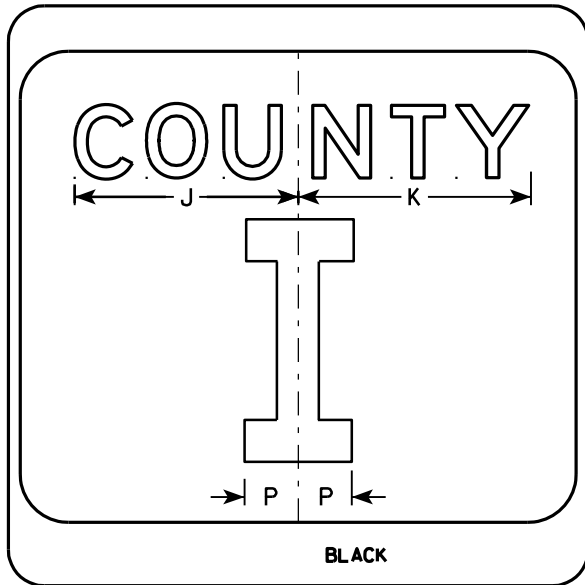
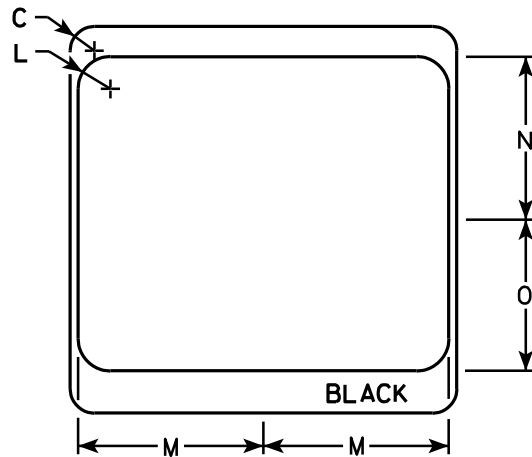
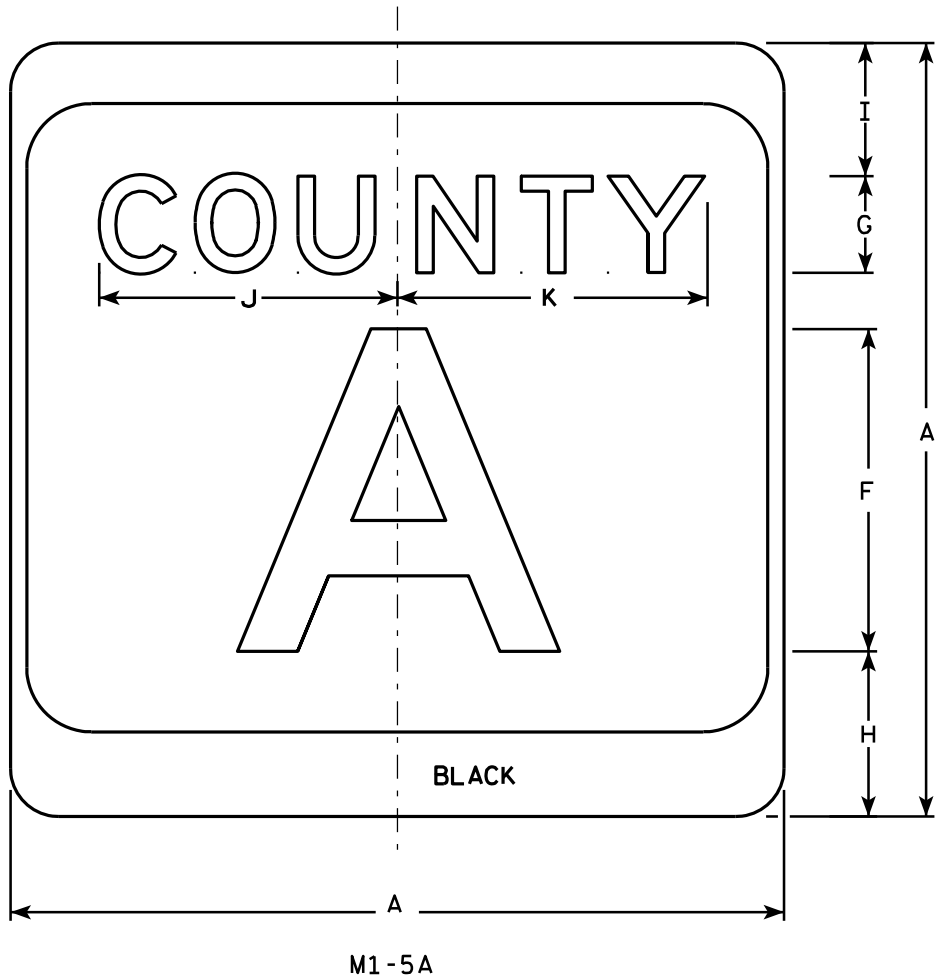
1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET I55-56B	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/26/16	PLA 148 I55-56B.2

7



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 149	E
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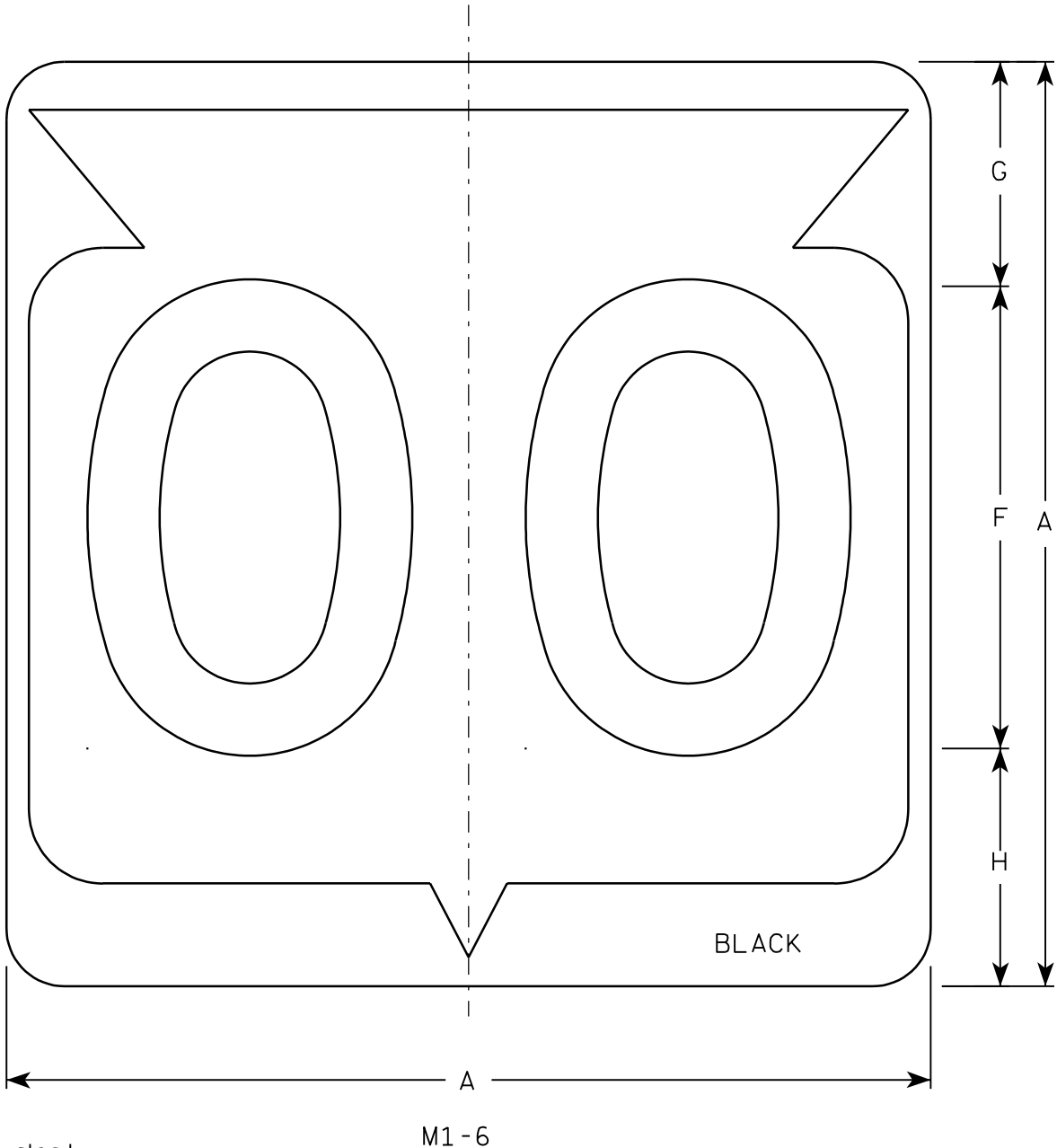
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

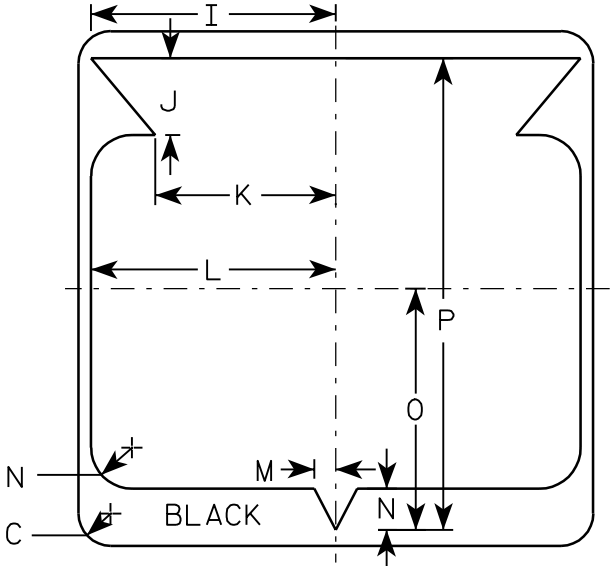
COUNTY:

SHEET NO: 150

E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

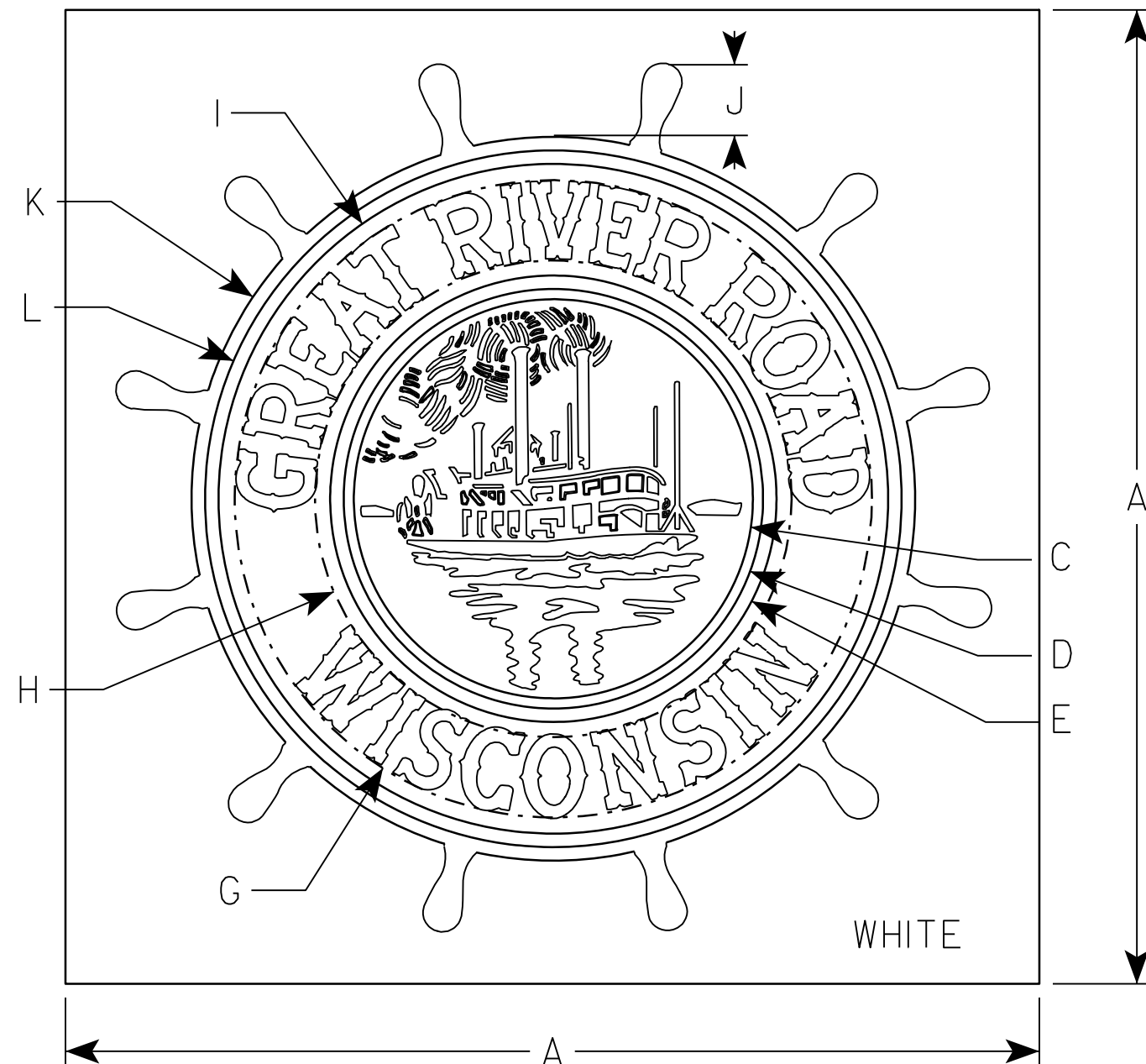
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

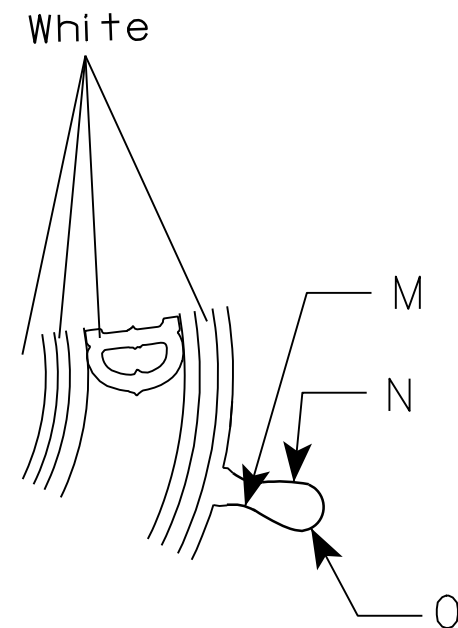
Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9



- 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 - Words - White - Graphics - Green
 3. Message Series - Special
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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		R 5	R 5 ¼	R 5 ½		R 7 ⅞	R 5 ⅞	R 8 ½	1 ¾	R 4 ½	R 8 ½	R 7 ⅞	R 3 ½	R ½												4.0
3																											
4	36		R 7 ⅞	R 7 ¾	R 8 ¼		R 11 ¾	R 8 ¾	R 12 ⅜	2 ⅝	R 13 ⅜	R 12 ⅜	R 1 ⅜	R 5 ¼	R ¾												9.0
5																											

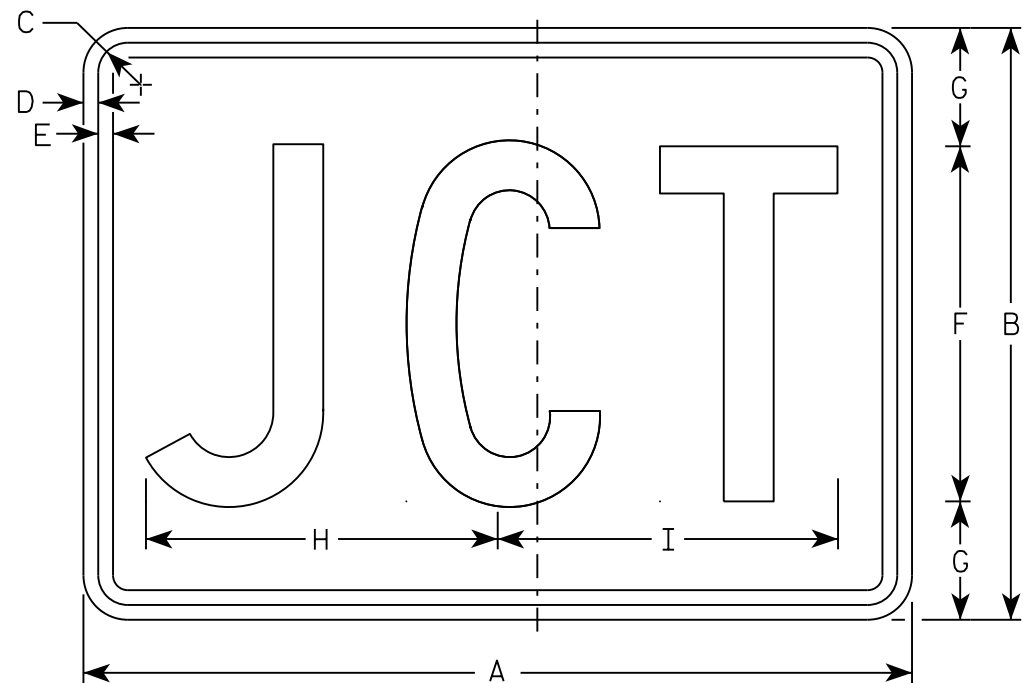
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 151	E
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STANDARD SIGN
M1-96

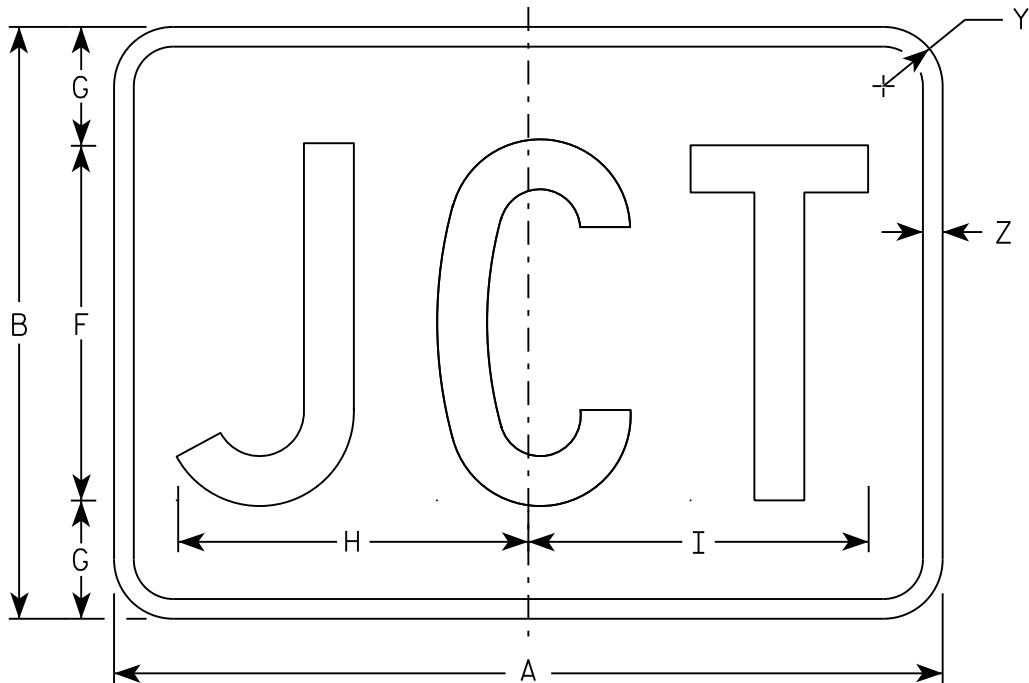
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 2/23/10 PLATE NO. M1-96.2



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
 - Background - See note 5
 - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White
 Message - Black
 MB2-1 Background - Blue
 Message - White
 MK2-1 Background - Green
 Message - White
 MM2-1 Background - White
 Message - Green
 MN2-1 Background - Brown
 Message - White
 MP2-1 Background - White
 Message - Blue
 MR2-1 Background - Brown
 Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

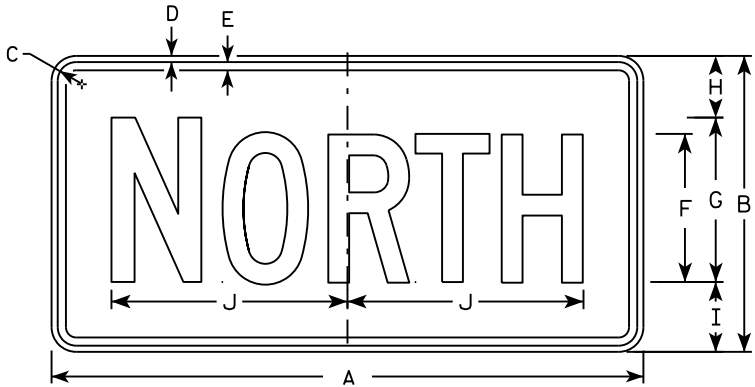
Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

PLATE 152

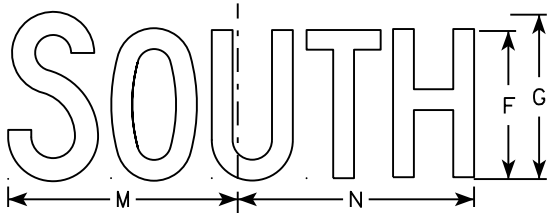
'2-1.12



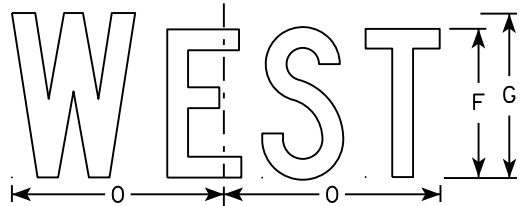
M3-1
MM3-1
MP3-1



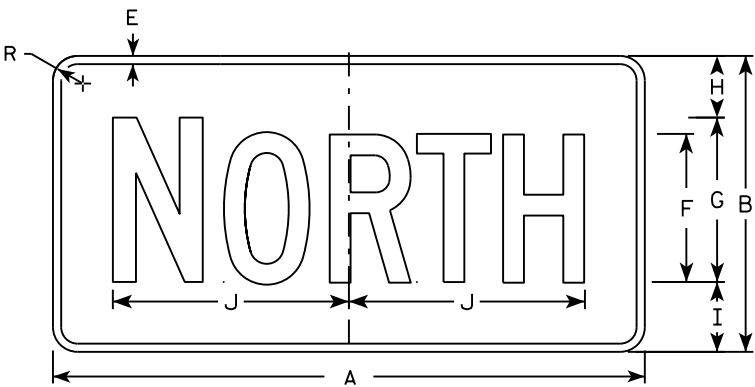
M3-2
MM3-2
MP3-2



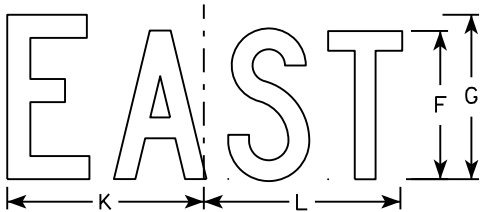
M3-3
MM3-3
MP3-3



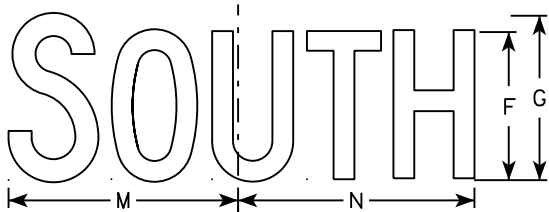
M3-4
MM3-4
MP3-4



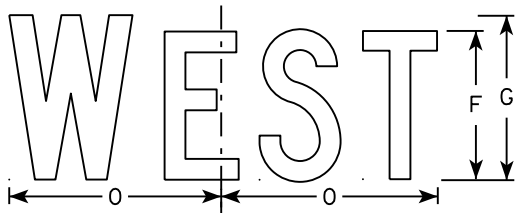
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



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.

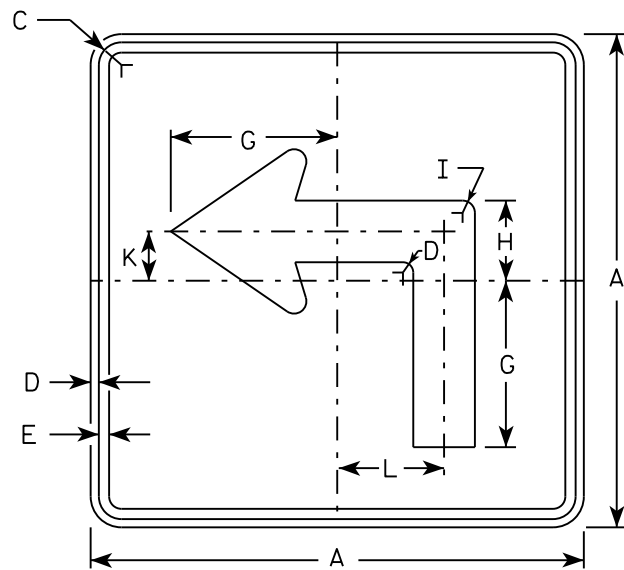
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	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 thru M3-4
SERIES

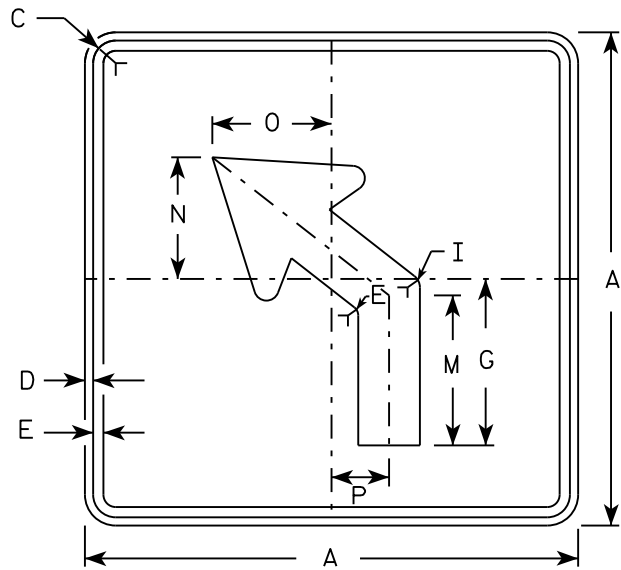
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

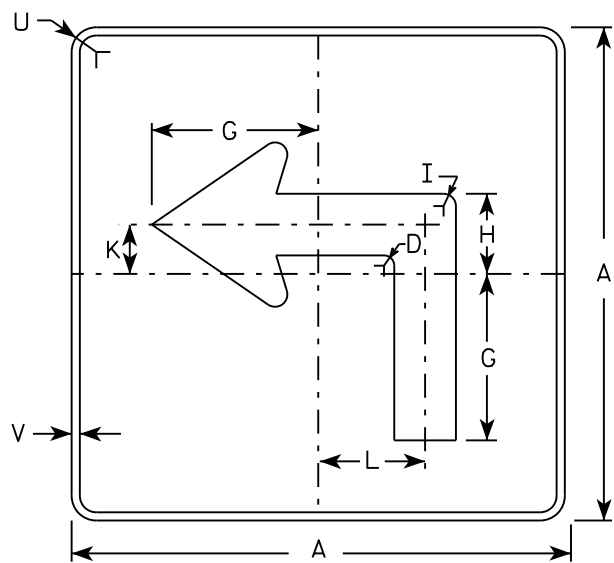
DATE 10/15/15 PLATE NO. 153 M3-1.14



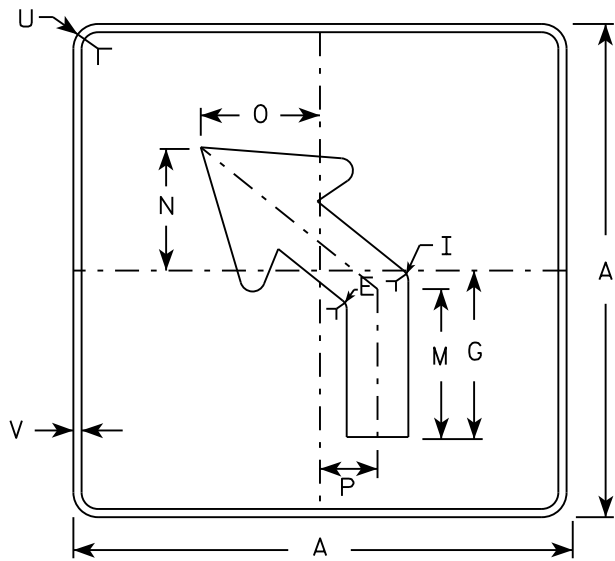
M5-1L
MM5-1L
M05-1L
MP5-1L



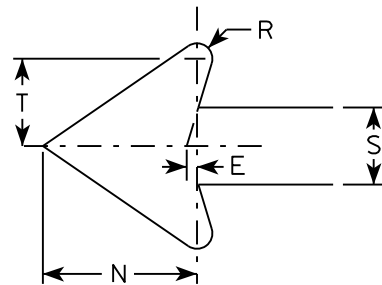
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 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.
- | | |
|-----------------|---|
| 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 |
| M05-1 and M05-2 | 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 |
- M5-1R same as M5-1L except arrow points right.
- 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

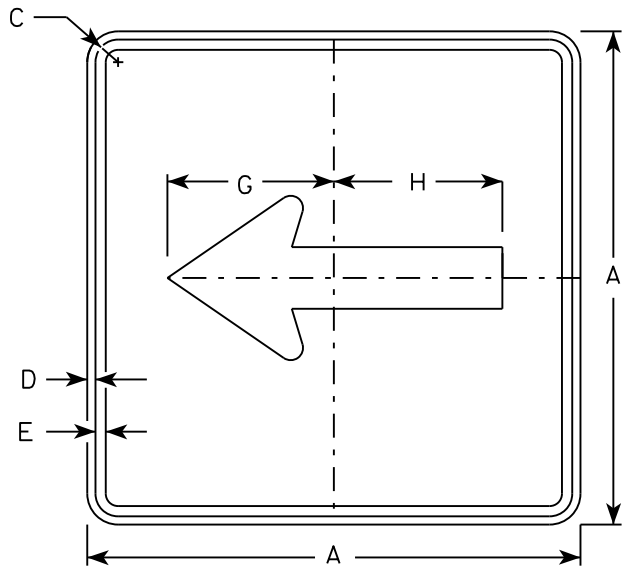
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M5-1 & M5-2

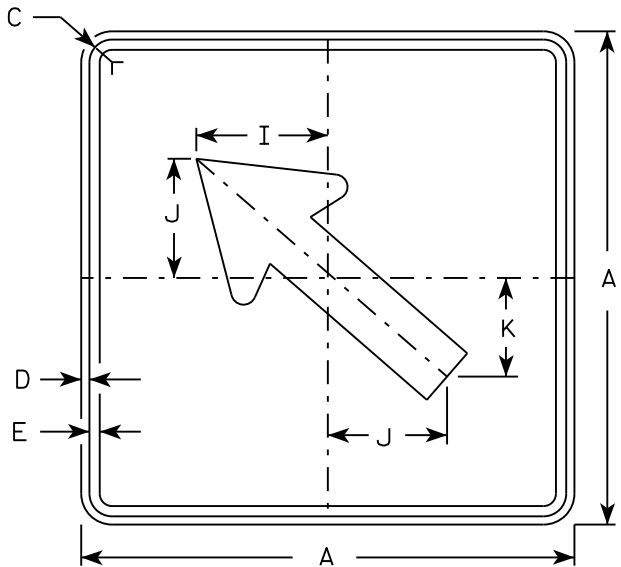
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

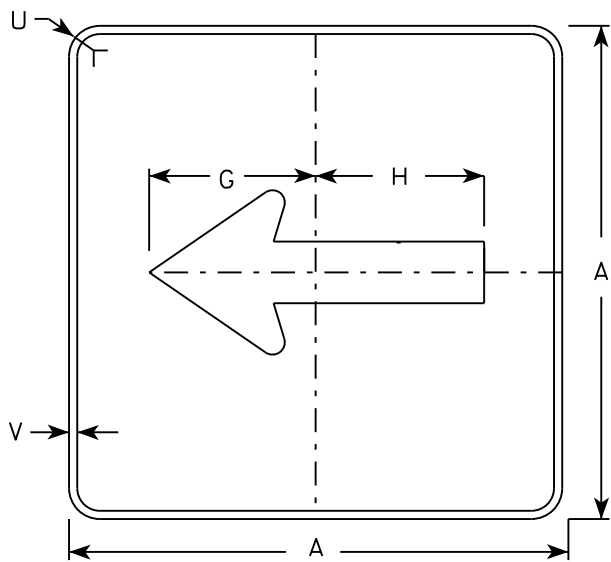
DATE 10/15/15 PLATE 154 M5-1.13



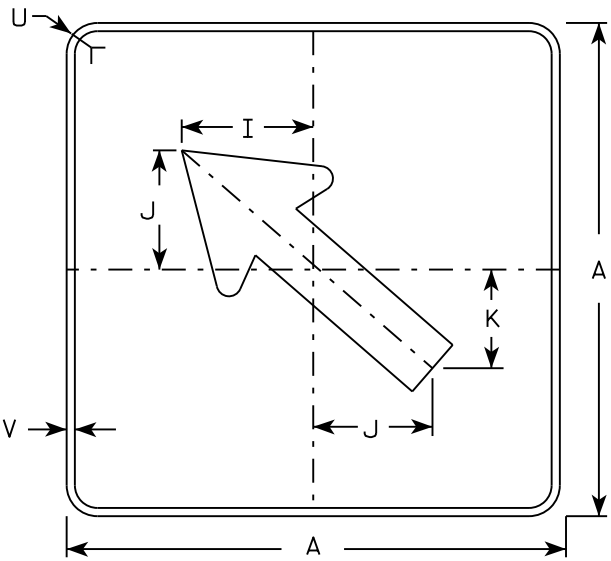
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



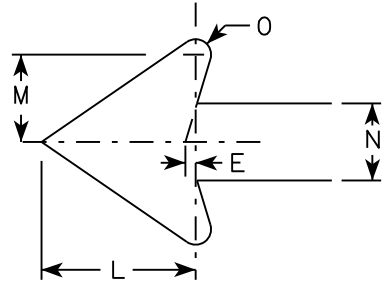
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 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.
- 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
M06-1 and M06-2 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

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

PROJECT NO:

HWY:

COUNTY:

DATE 10/15/15

PLAT 155

SHEET NO:

E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

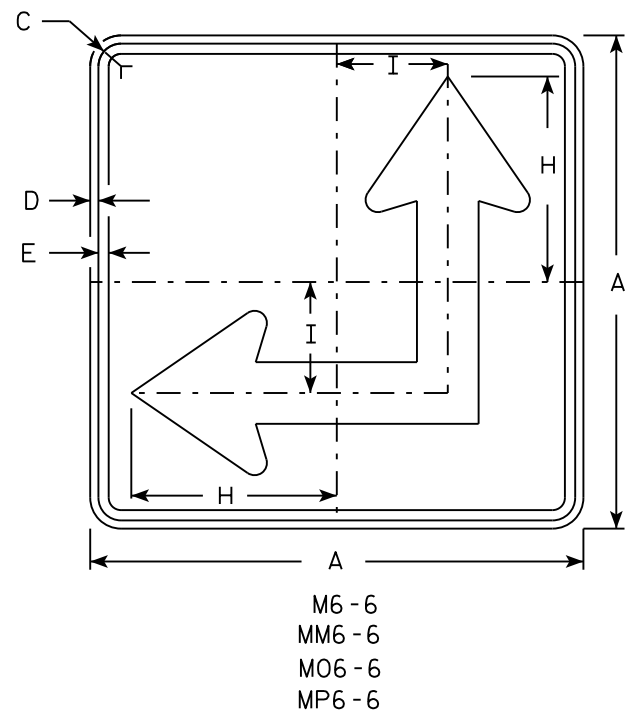
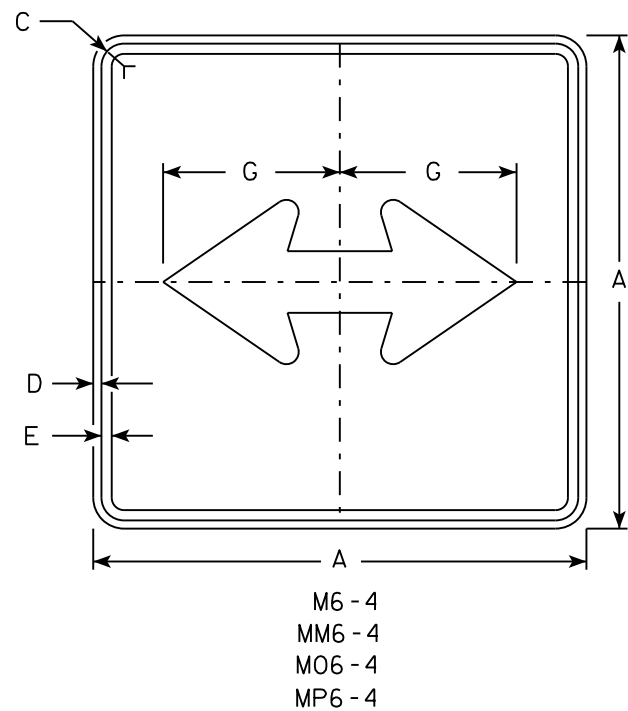
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15

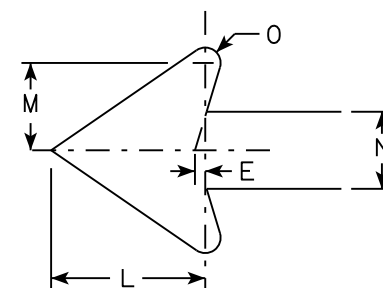
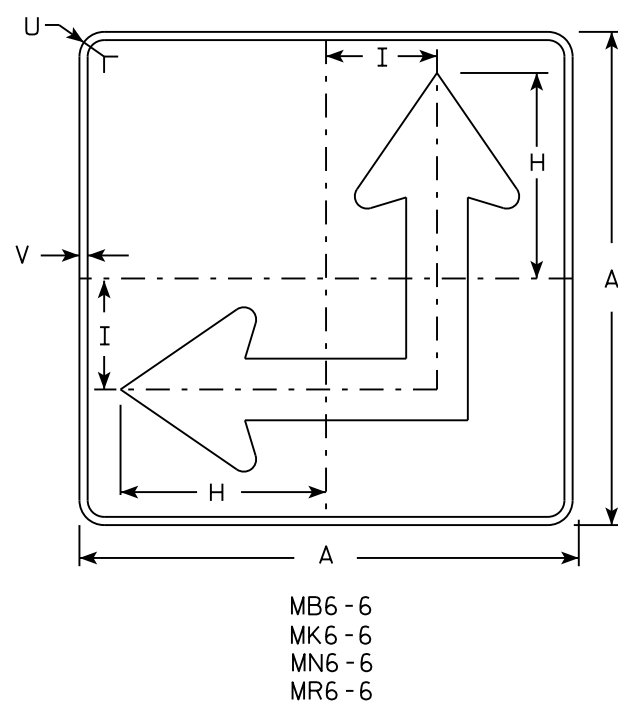
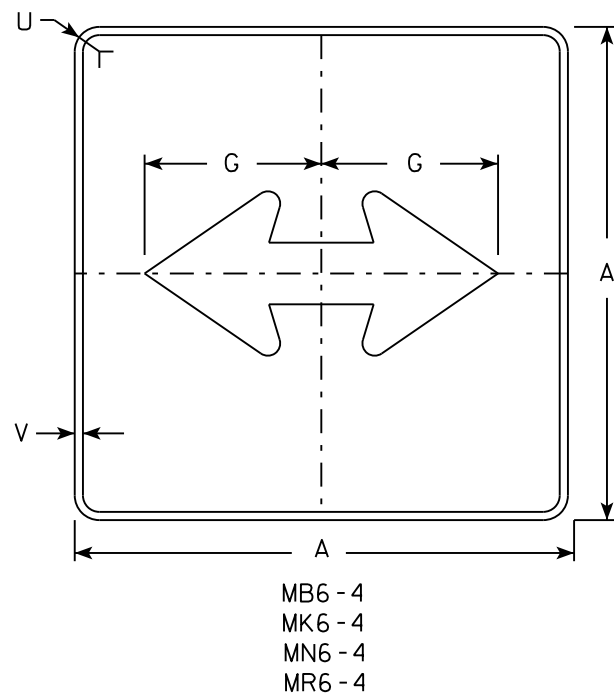
PLAT 155

M6-1.15



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See Note 4
Message - See Note 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.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
MO6-4 and MO6-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and 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 1/2	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

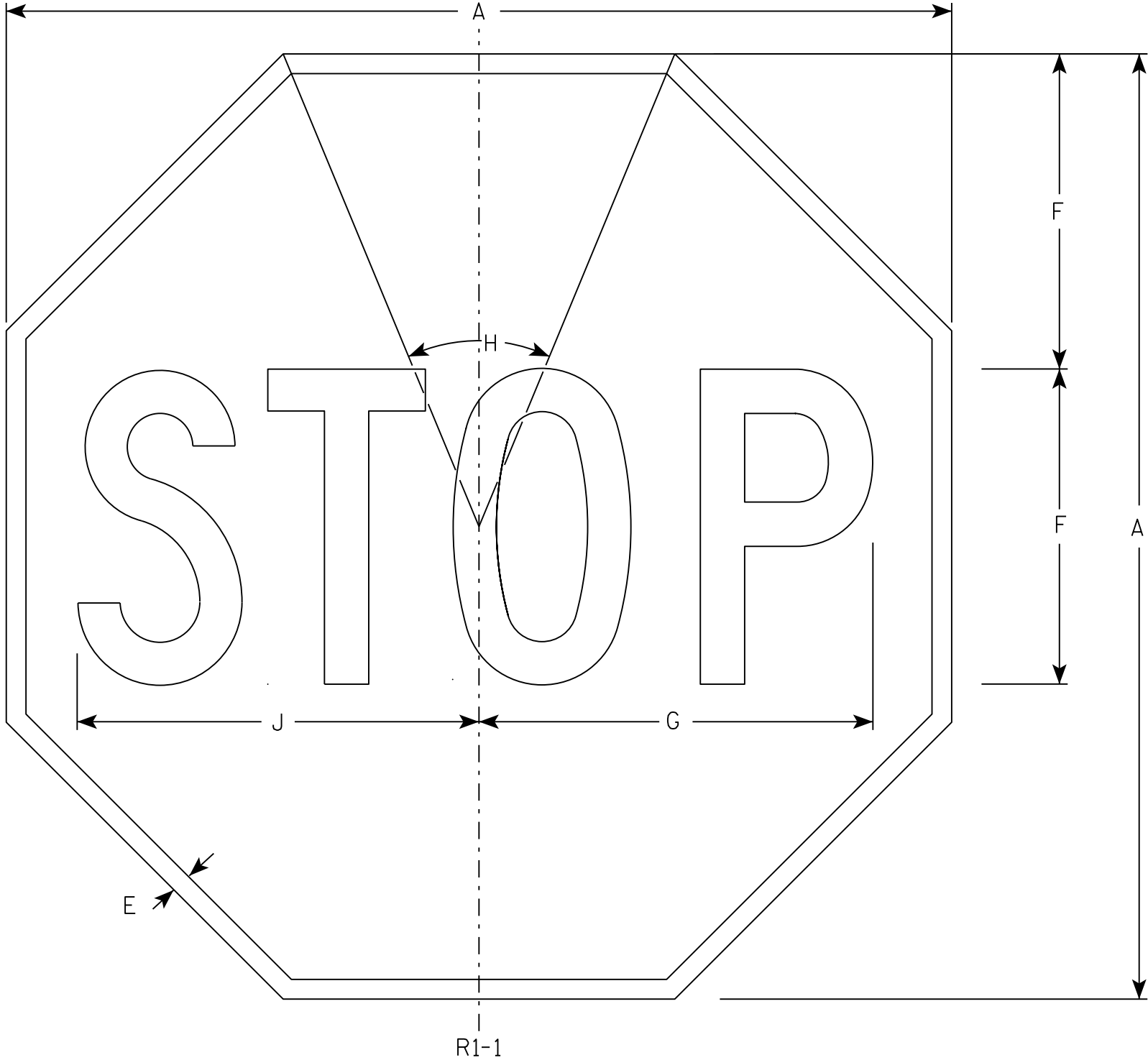
PROJECT NO:	HWY:	COUNTY:	PLAT 156	SHEET NO:	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLAT 156 M6-4.10



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 - C

R1-1

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				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

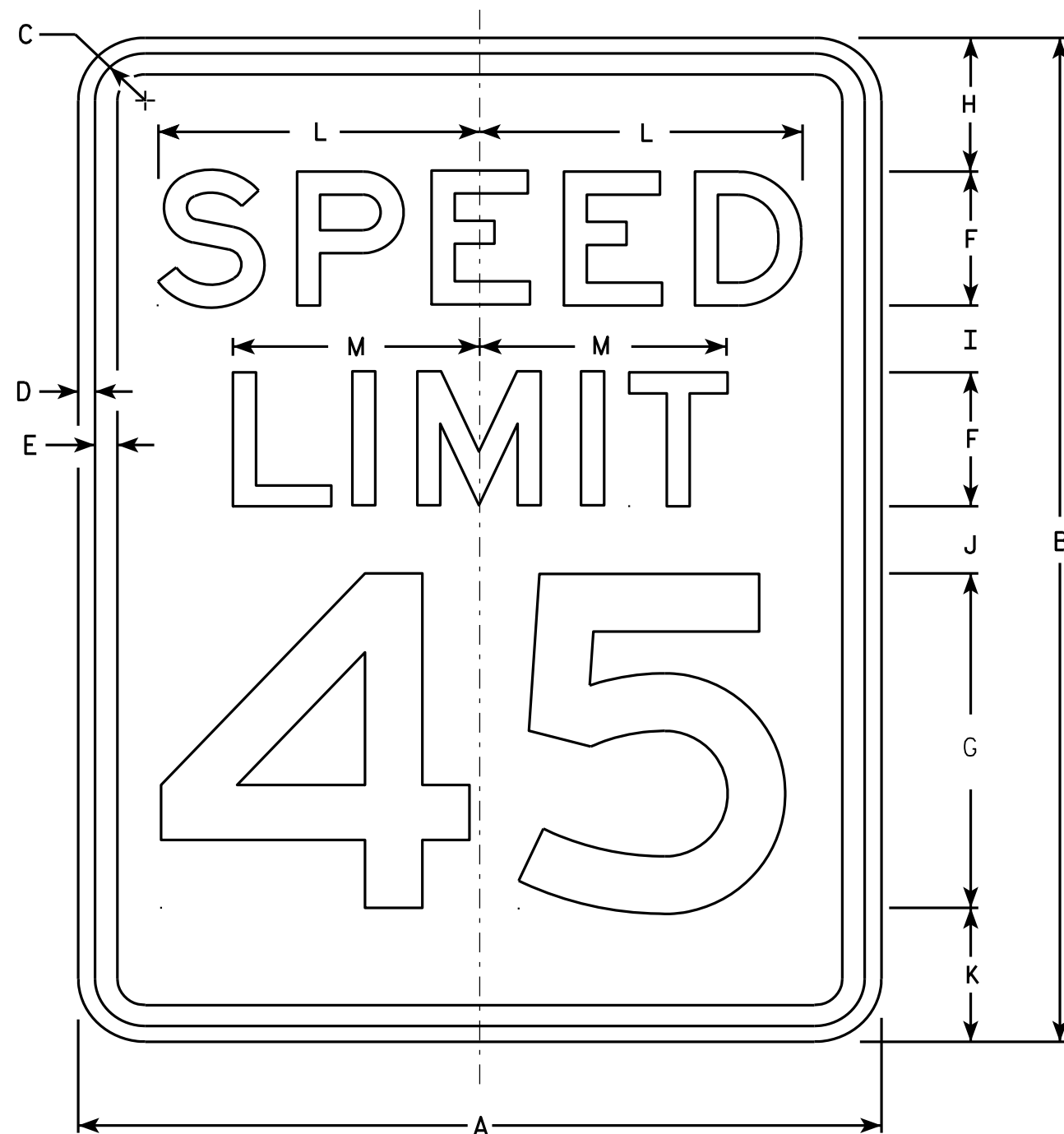
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE 157 R1-1.13



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: 158 E



R2-6P

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

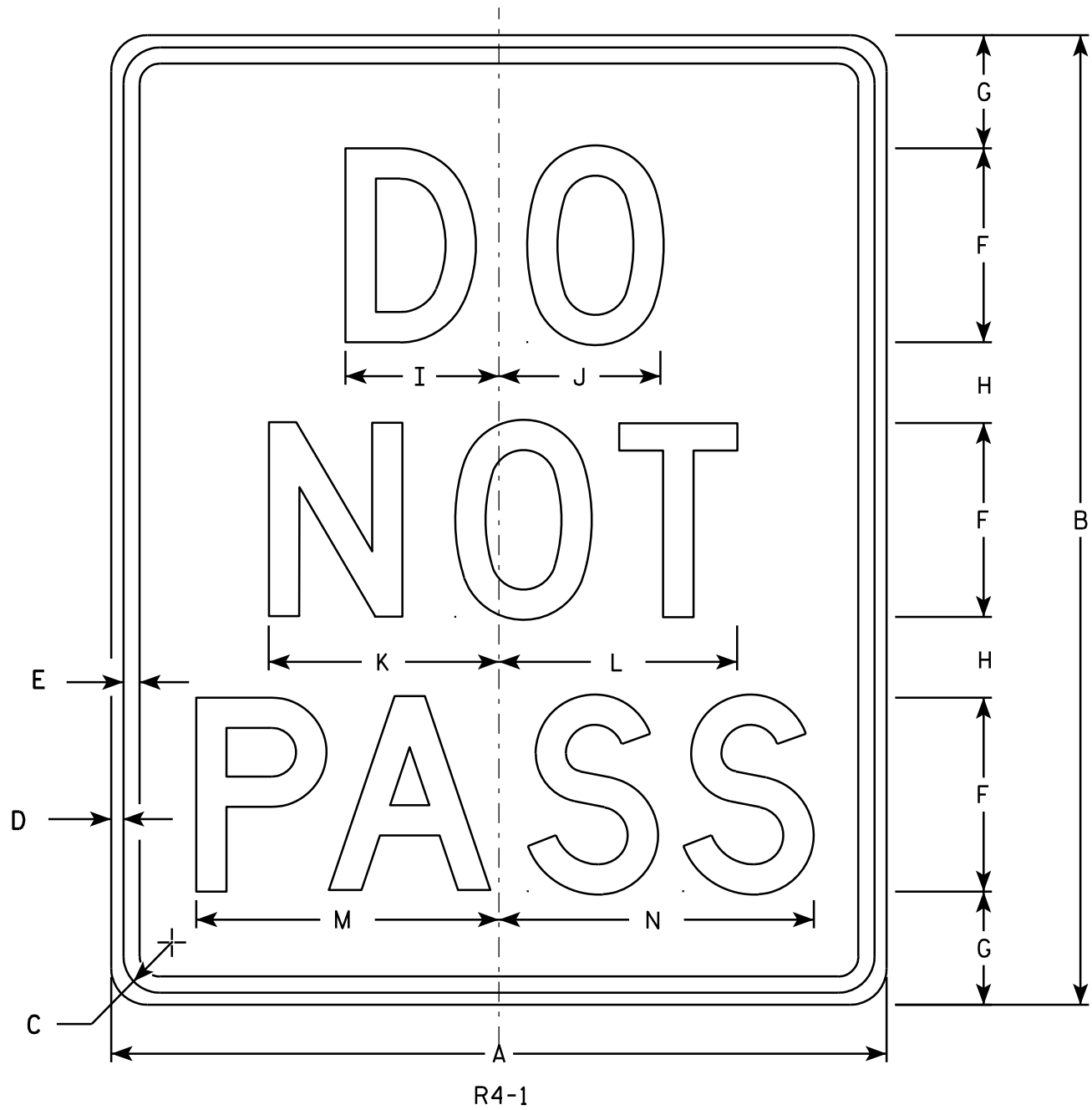
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.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.

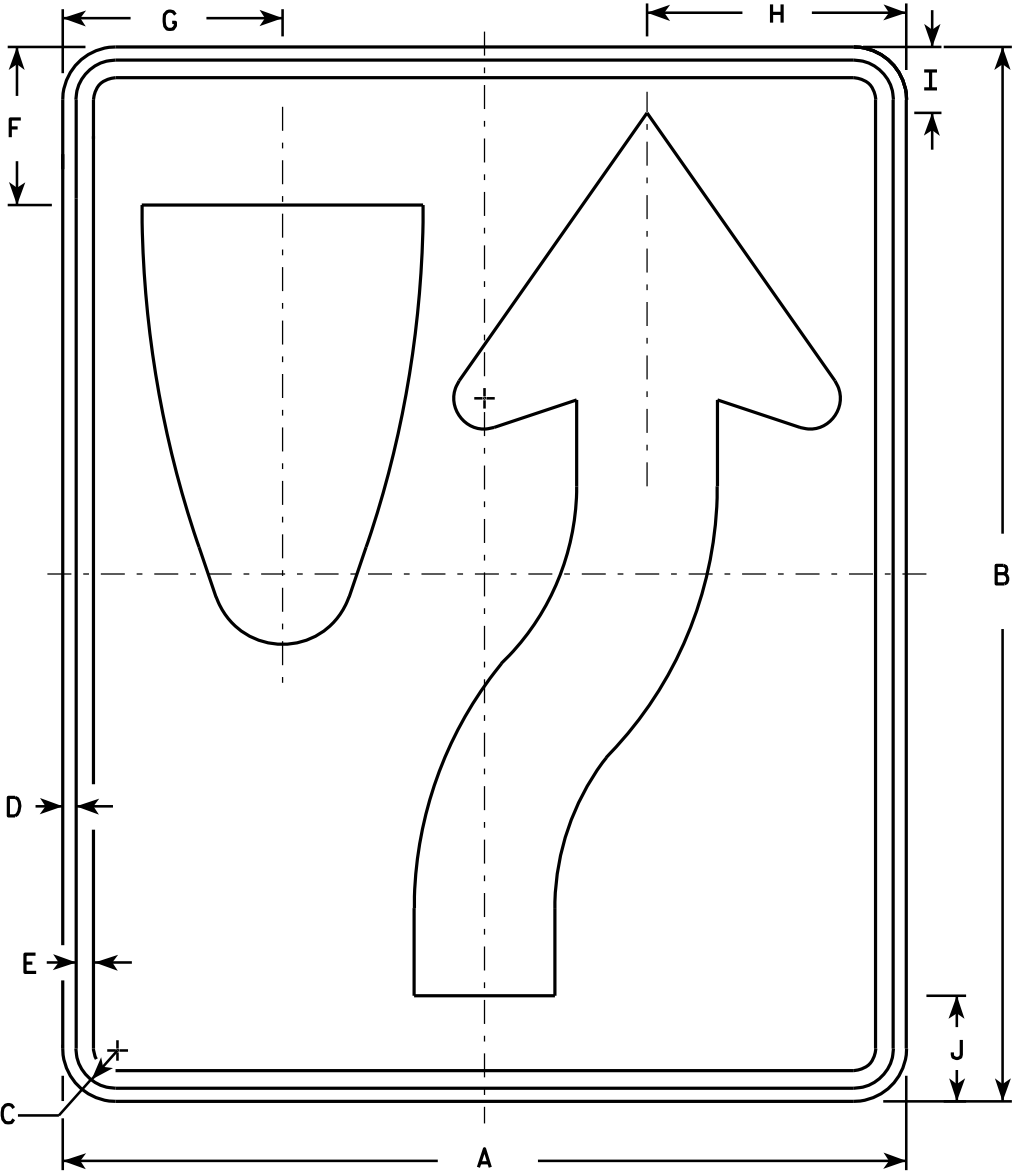
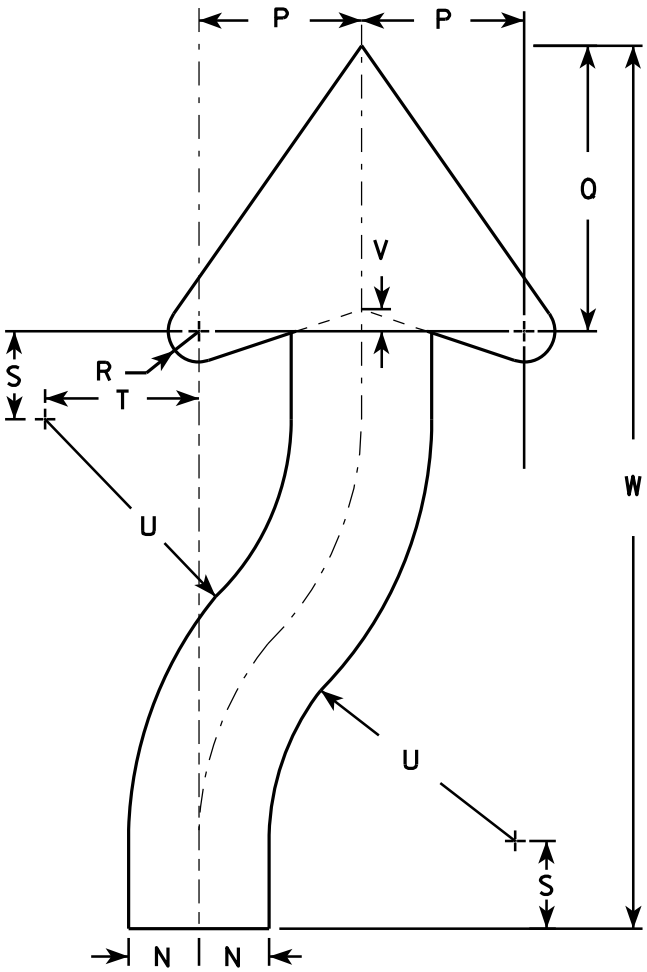
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

STANDARD SIGN R4 - 1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/25/2011	PLATE NO. R4-1.7

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 160	E
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NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
Background - White
Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



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 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN

R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:

HWY:

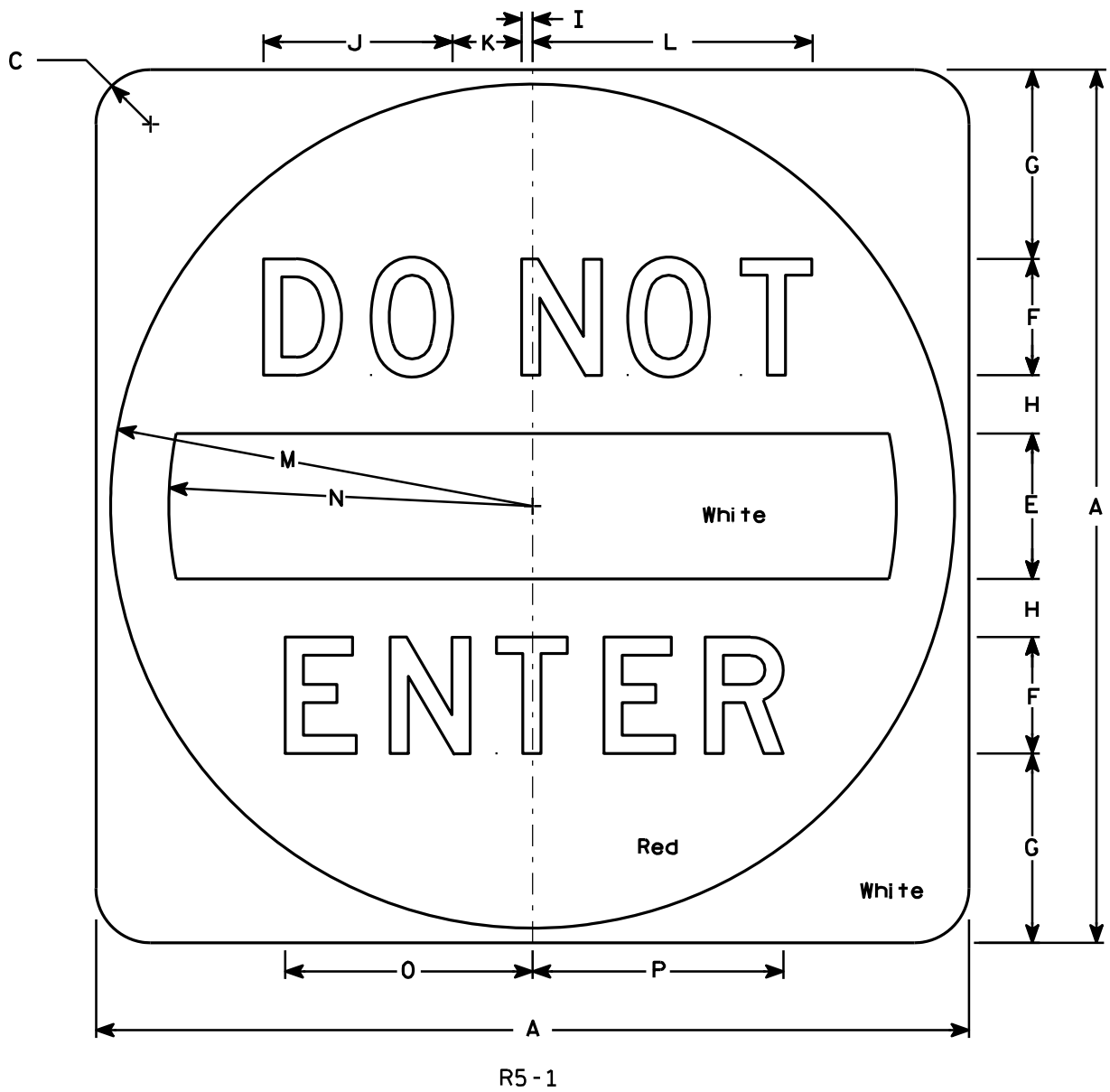
COUNTY:

SHEET NO: 161

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 - See detail
 - Message - White - Type H Reflective
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

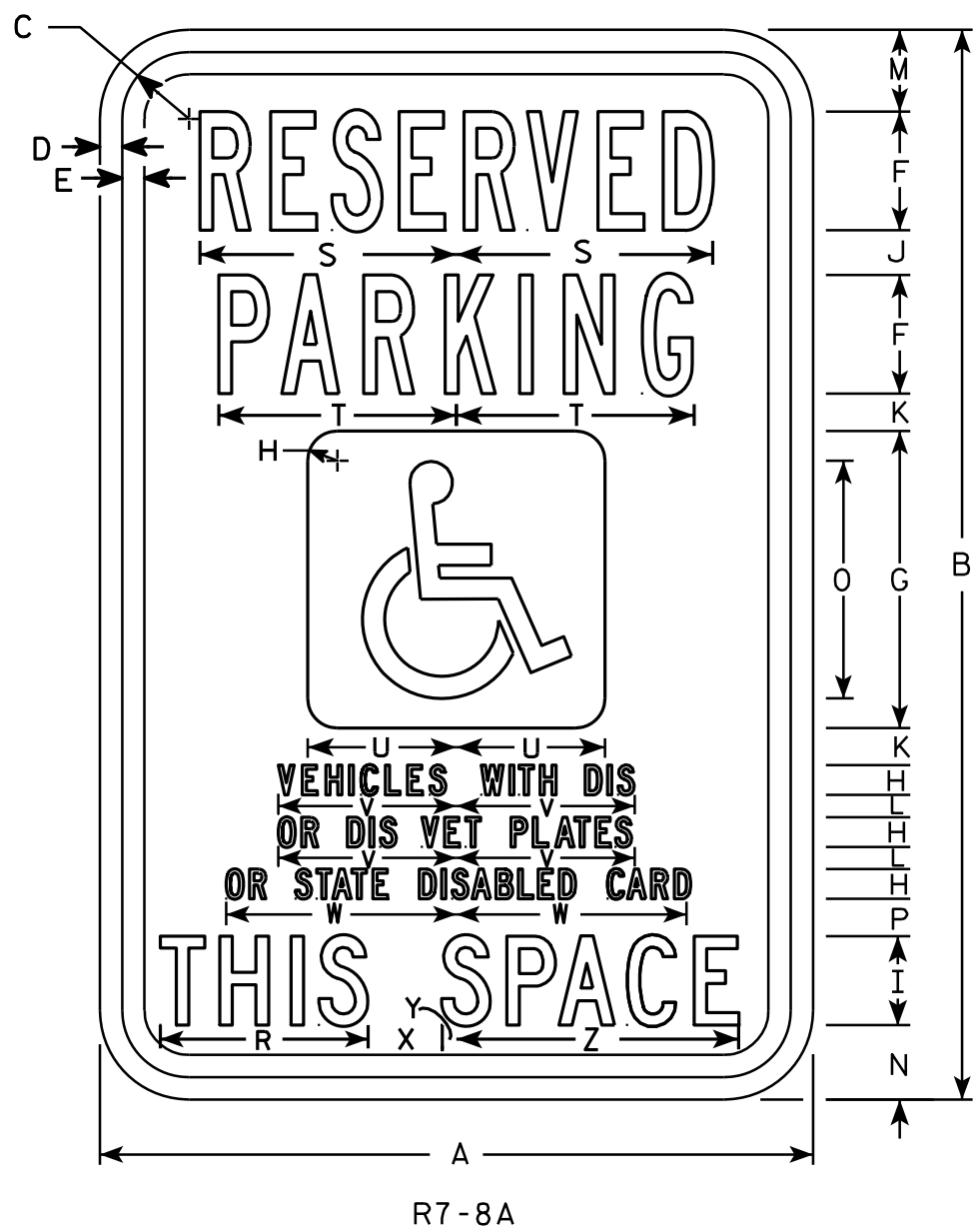
STANDARD SIGN

R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Sign is white Type H Reflective; paraplegic background is blue.
 - Message - Legend and border are green; paraplegic symbol is white
- 3. Message Series - Lines 1 & 2 are Series B
Lines 3, 4, 5 & 6 are 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																											
2S	12	18	1 1/8	3/8	3/8	2	5	1/2	1 1/2	3/4	5/8	3/8	1 3/8	1 1/4	4	5/8		3 1/2	4 3/8	4	2 1/2	3	3 7/8	1 1/4	1/4	4 3/4	1.5
2M	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
3	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
4																											
5																											

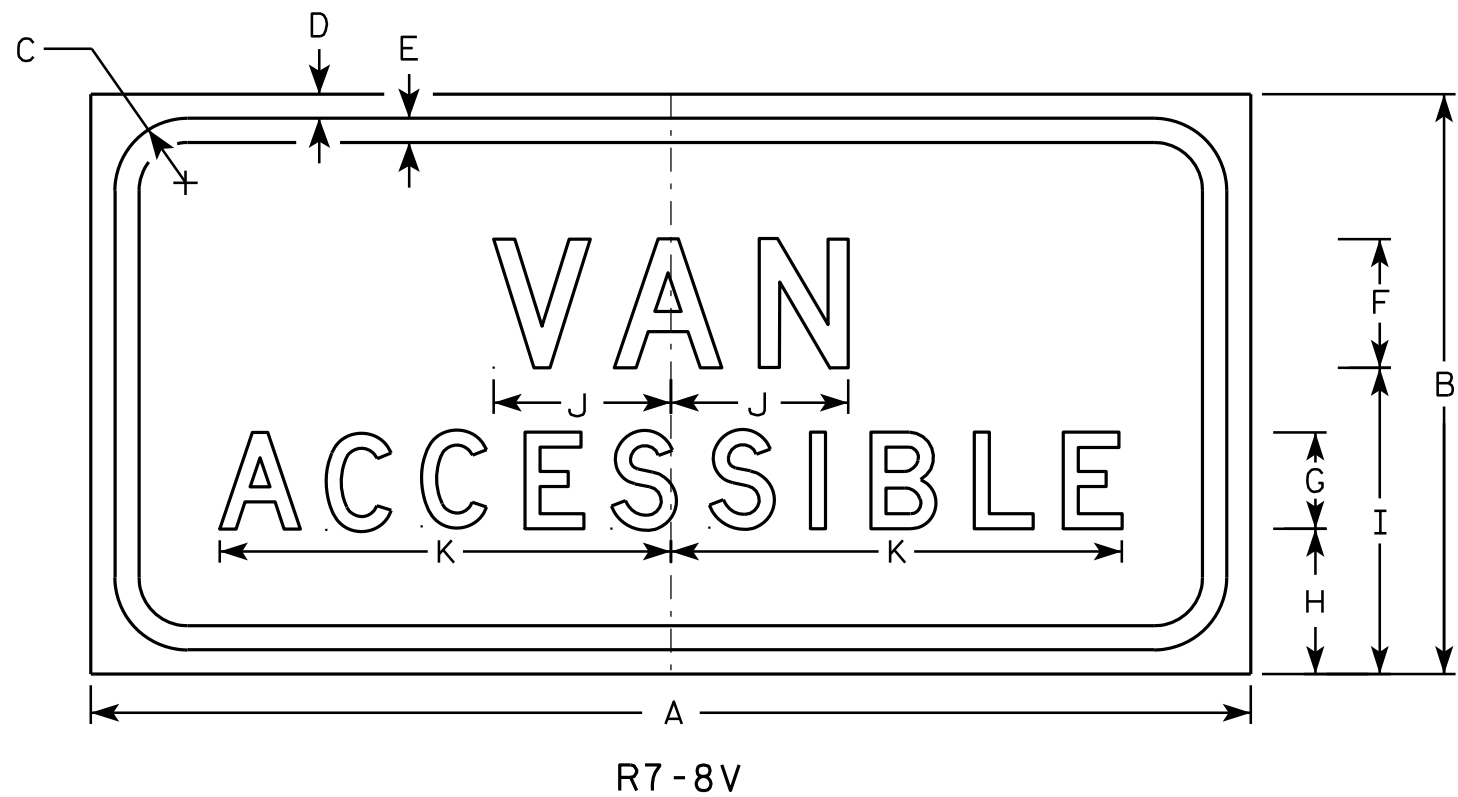
STANDARD SIGN
R7-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/25/2011 PLATE NO. R7-8A.6

7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - White
 - Message - Green - Type H Reflective
- 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.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	6	1 1/8	3/8	3/8	1 1/2	1	1 5/8	3 1/2	2	4 1/4																0.50
2M	18	9	1 1/8	3/8	3/8	2	1 1/2	2 1/4	4 3/4	2 3/4	7																0.75
3	18	9	1 1/8	3/8	3/8	2	1 1/2	2 1/4	4 3/4	2 3/4	7																0.75
4																											
5																											

STANDARD SIGN

R7-8V

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-8V.5



R9-55

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 - 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 E.
Lines 2, 3 and 4 are 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																											
2S	18	24	1 1/8	3/8	1/2	4	3	2 1/2	1 7/8	2 1/8	1 1/4	2 1/4	3 3/4	7 1/4	7 1/2	5 1/2											3.0
2M	18	24	1 1/8	3/8	1/2	4	3	2 1/2	1 7/8	2 1/8	1 1/4	2 1/4	3 3/4	7 1/4	7 1/2	5 1/2											3.0
3																											
4																											
5																											

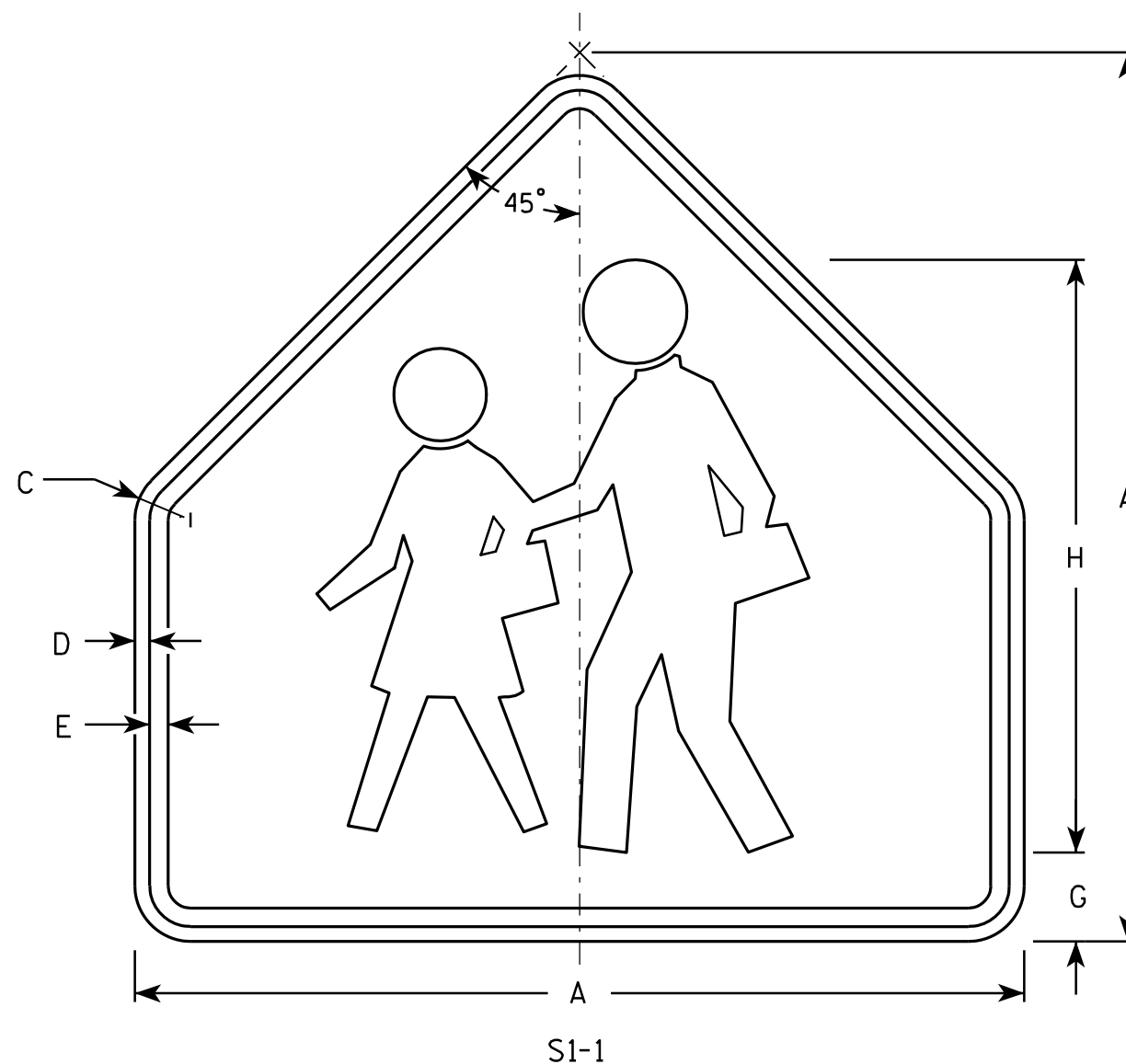
STANDARD SIGN R9-55

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/4/2011 PLATE NO. R9-55.6

PROJECT NO: HWY: COUNTY: SHEET NO: 165 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-Green
Message - Black
 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

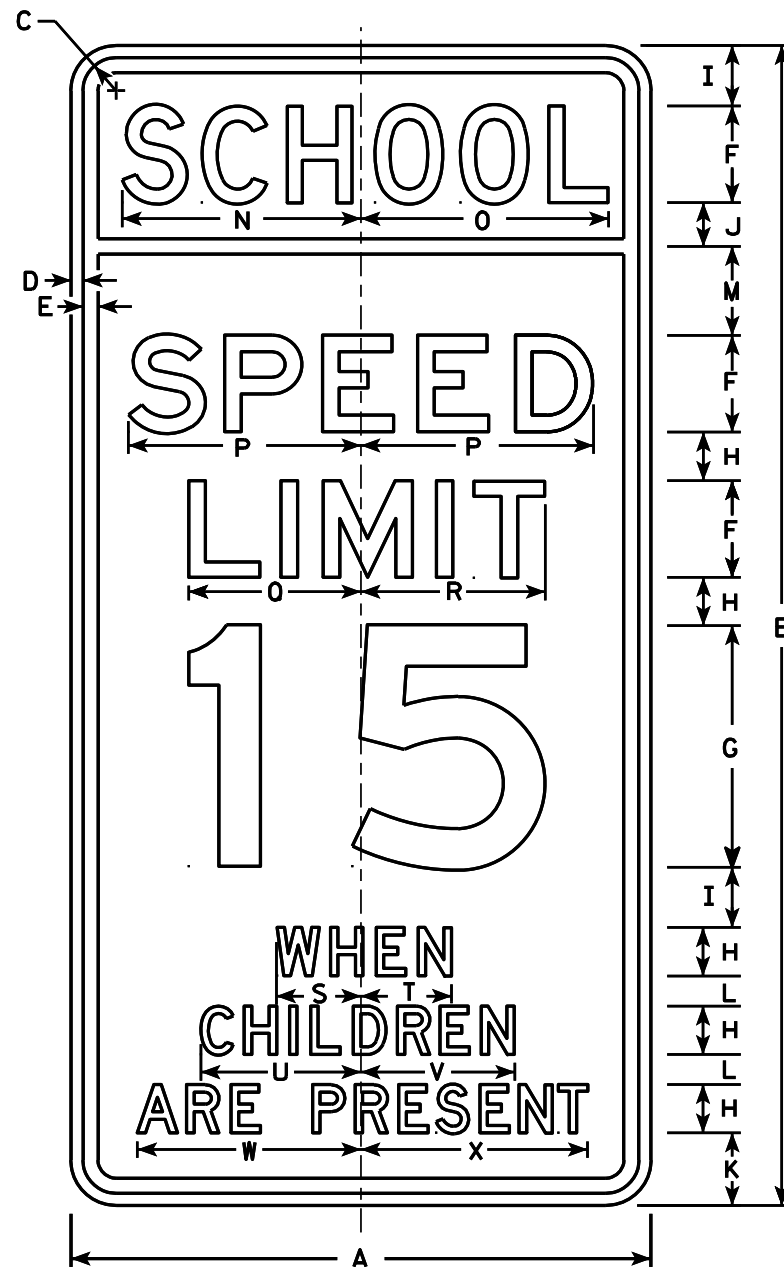
PROJECT NO: HWY: COUNTY: SHEET NO: 166 E

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24	48	1 ⅜	½	⅝	4	10	2	2 ½	1 ¾	3	1 ¼	3 ¾	9 ⅞	10 ¼	9 ⅝	7 ⅛	7 ⅝	3 ½	3 ⅜	6 ⅝	6 ⅜	9 ¼	9 ⅜			8.00	0.72
3	36	72	2 ¼	¾	1	6	15	3	3 ¾	2 ¾	4 ½	1 ⅞	5 ½	15	15 ¼	14 ½	11 ¼	11 ½	5 ½	5 ¾	10	9 ¾	14	14 ⅛			18.00	1.62
4																												
5																												

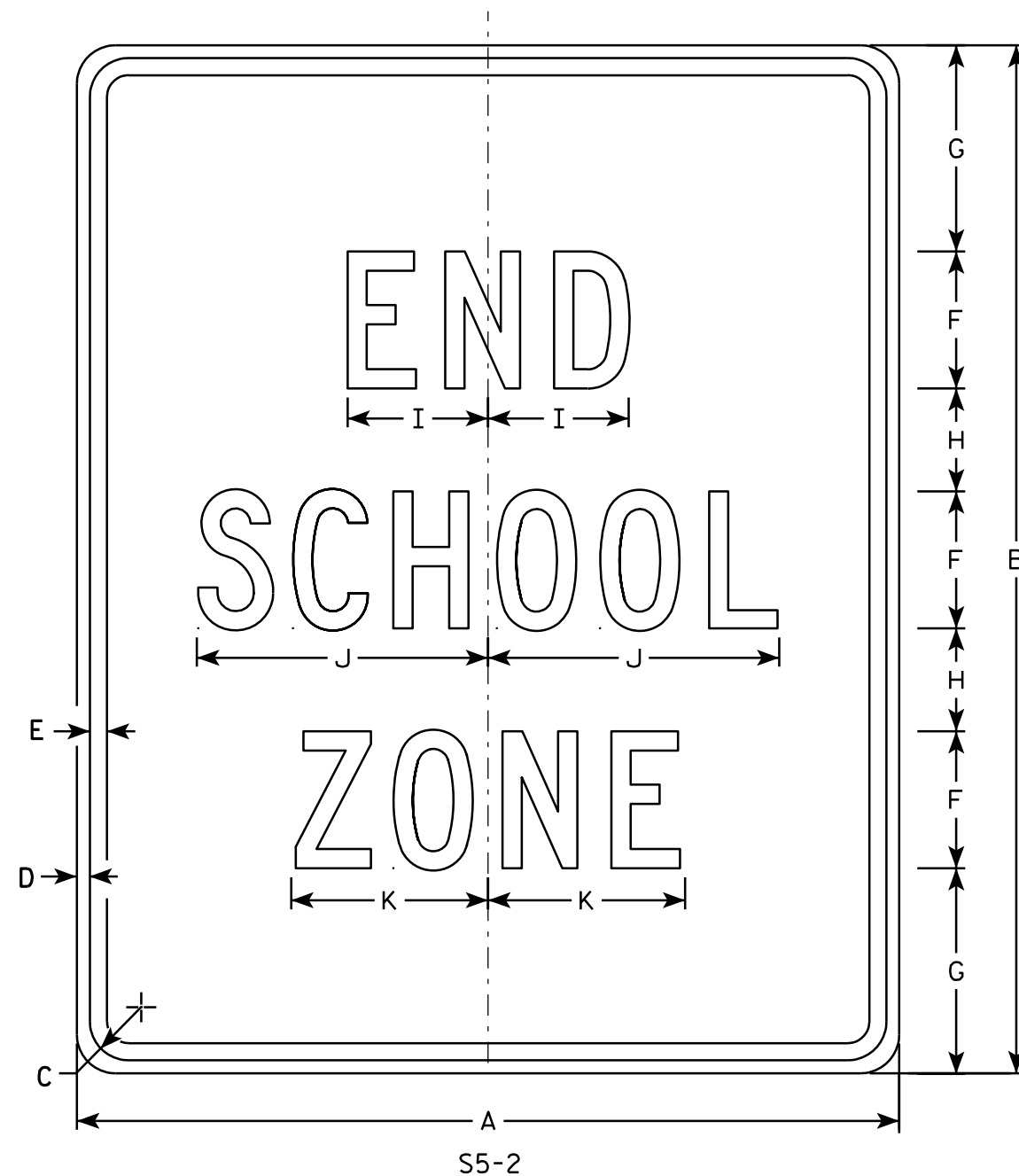
PROJECT NO:			HWY:			COUNTY:			SHEET NO: 167			E
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S4-51

NOTES

- Sign is Type II - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition. (See note 5).
- Color:
Background - See note 5
Message - Black
- Message Series - See note 6
- CornerRadius 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.
- Top panel (SCH00L) background - Yellow Green -Type F Reflective.
Lower panel background - White -Type H Reflective.
- From top to bottom:
Lines 1, 5, 6 & 7 are series D
Lines 2, 3 & 4 are series E
- Line 4 substitute appropriate numerals and
adjust spacing to achieve proper balance.



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO:

HWY:

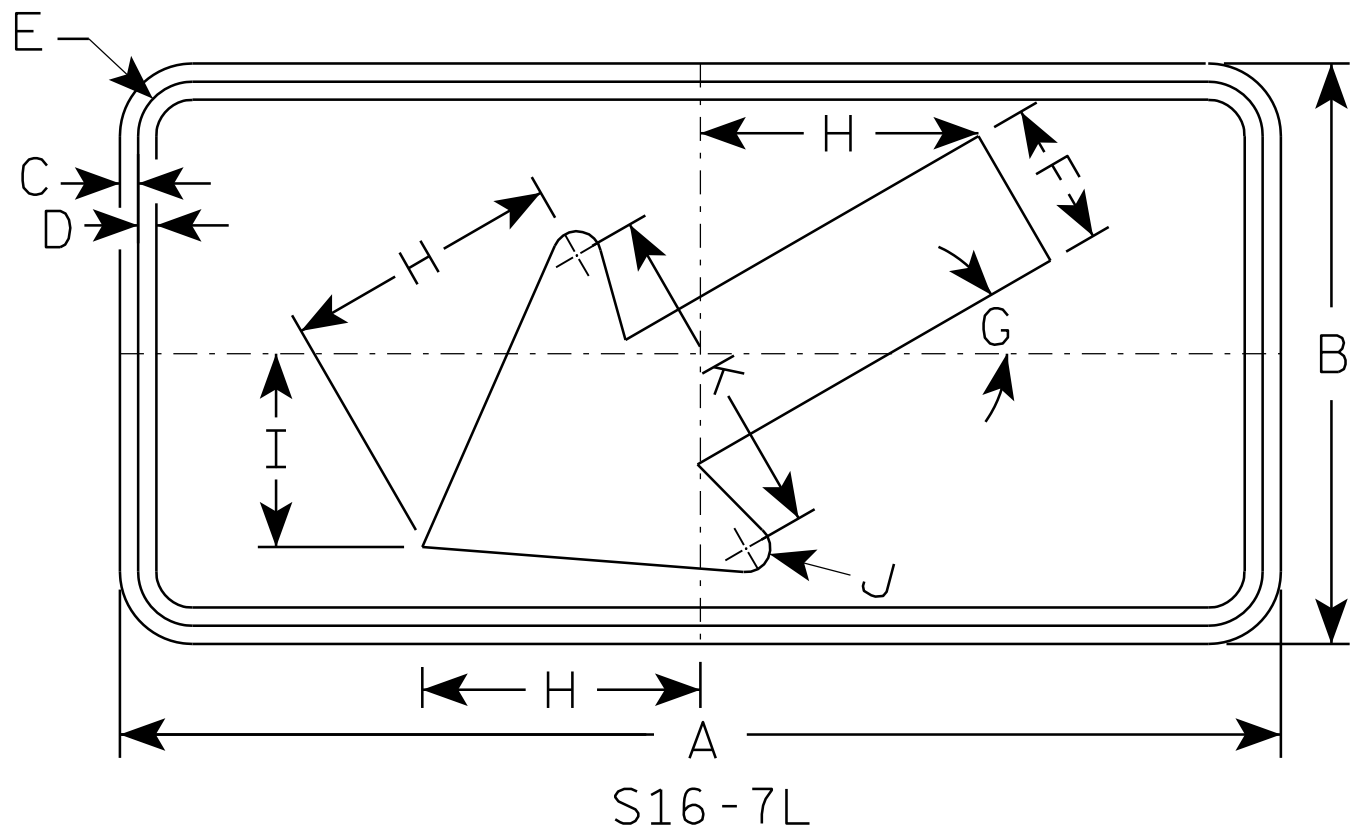
COUNTY:

SHEET NO: 168

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-Green
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. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

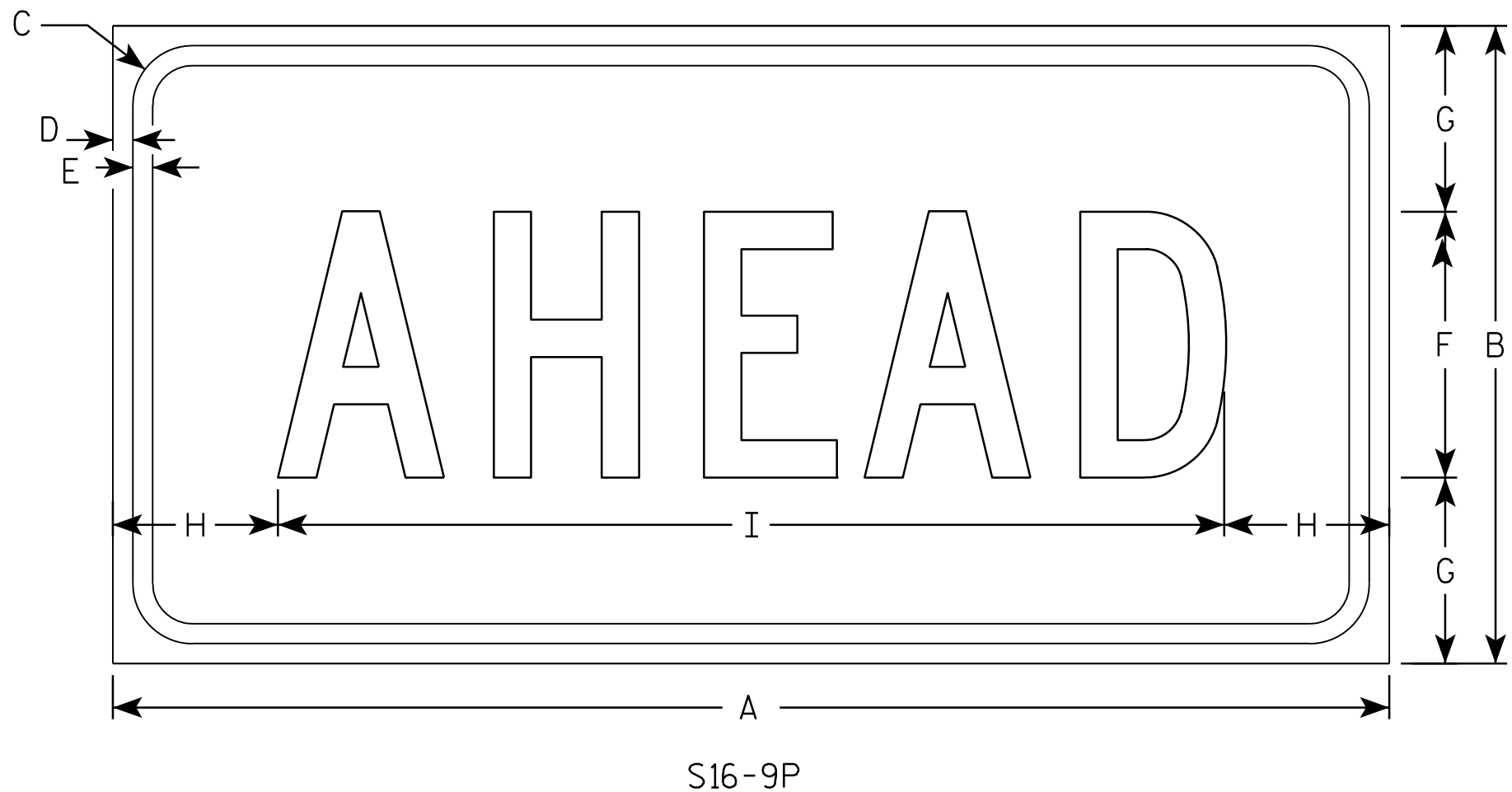


S16 - 7L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN	
S16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/22/13	PLATE NO. S16-7.1

7



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-Green
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.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

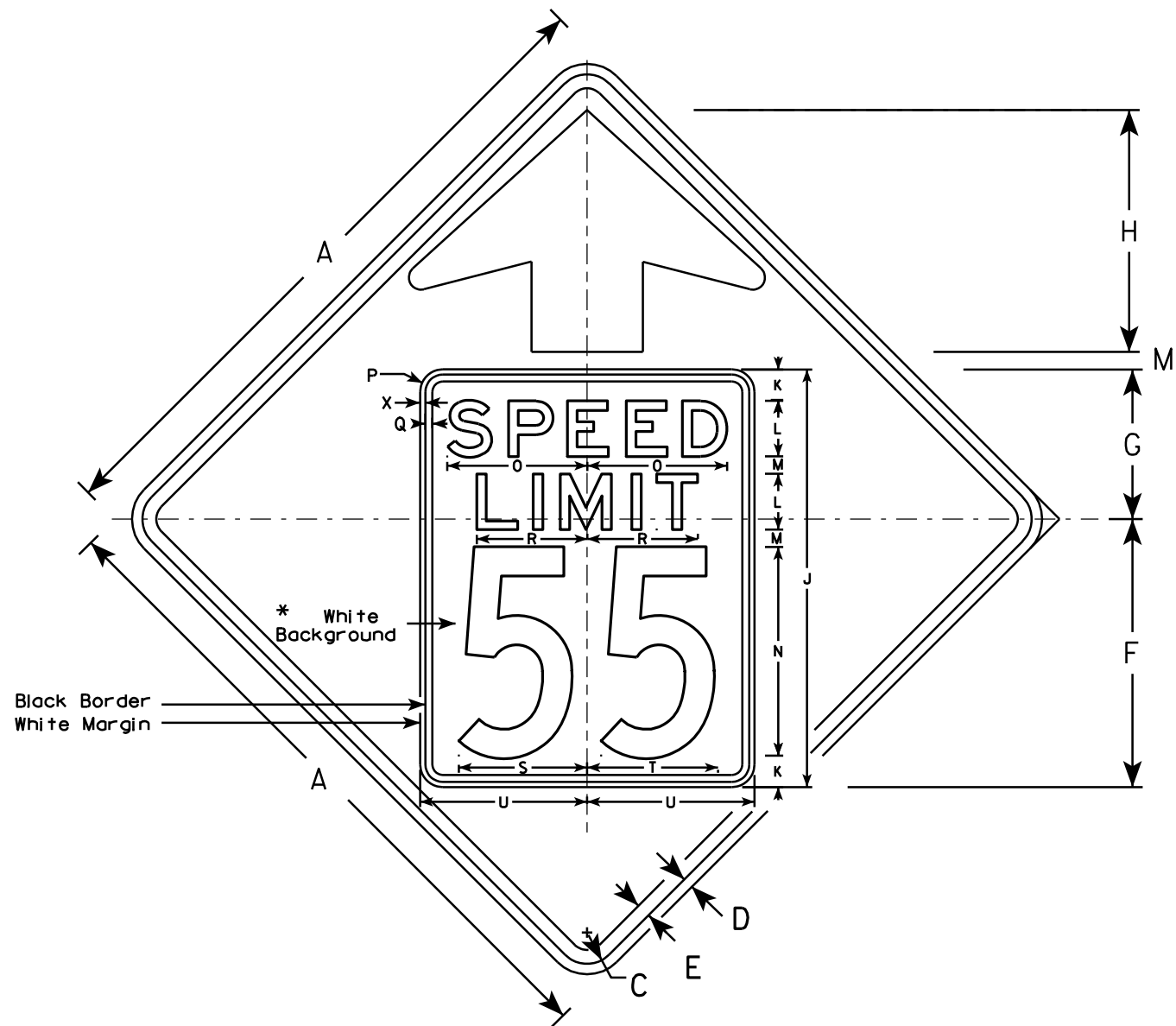
STANDARD SIGN

S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

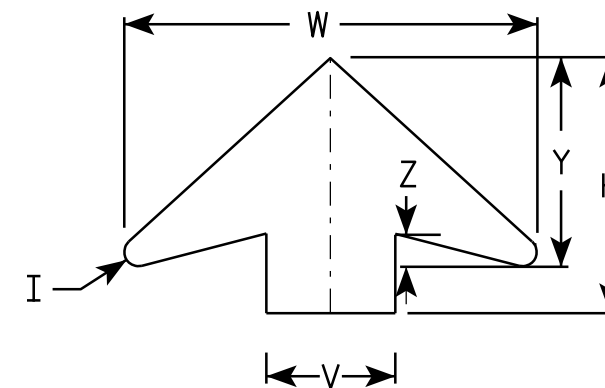


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
Background - YELLOW*
Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

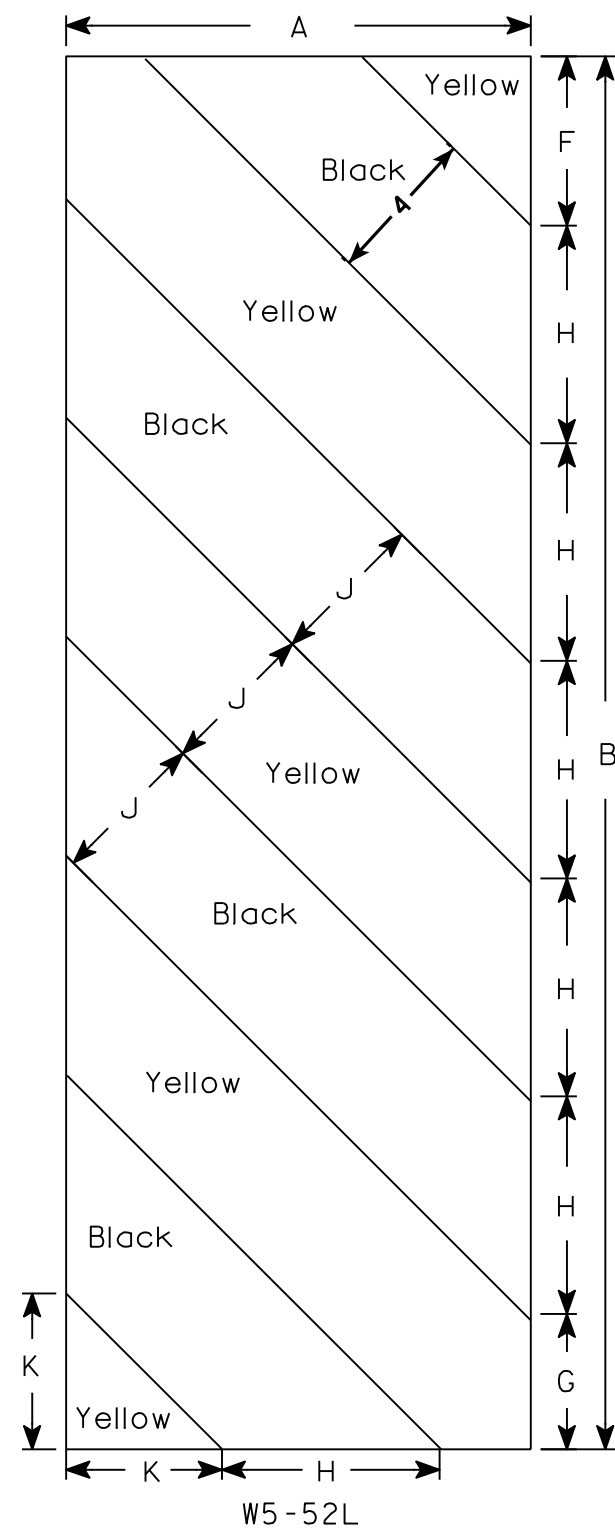
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

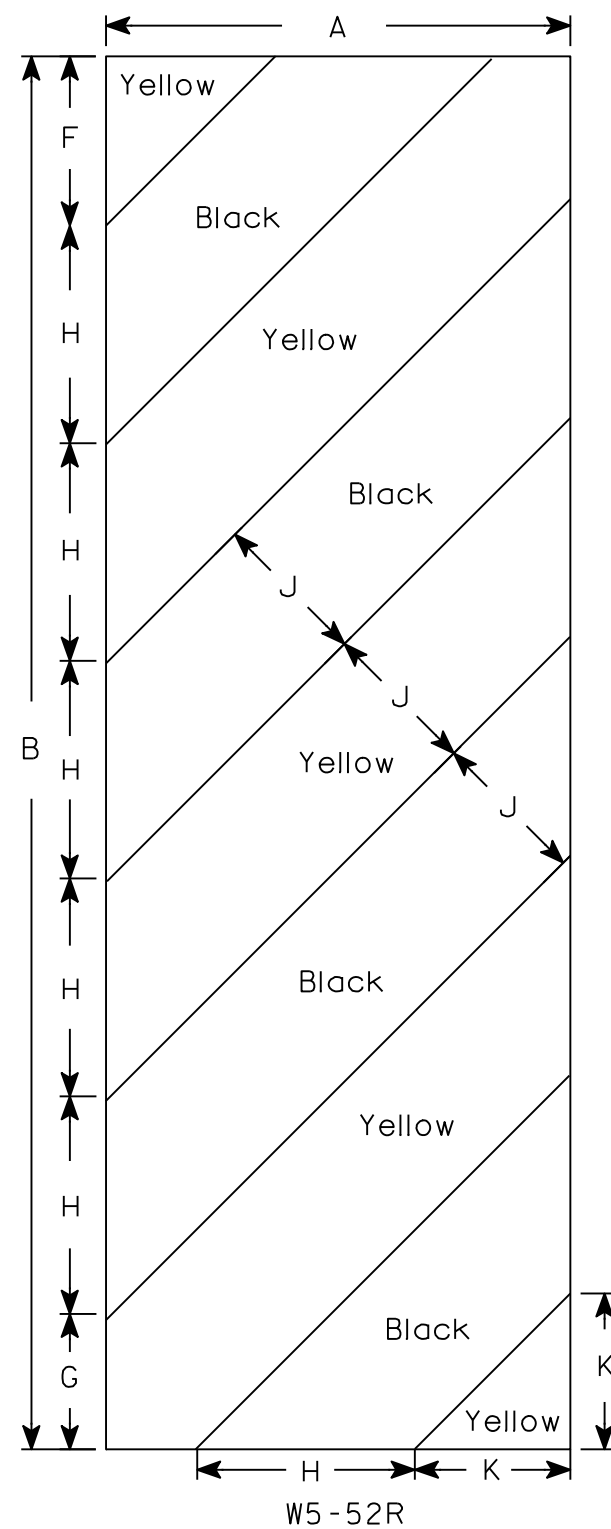
PROJECT NO:

SHEET NO: 171

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																											

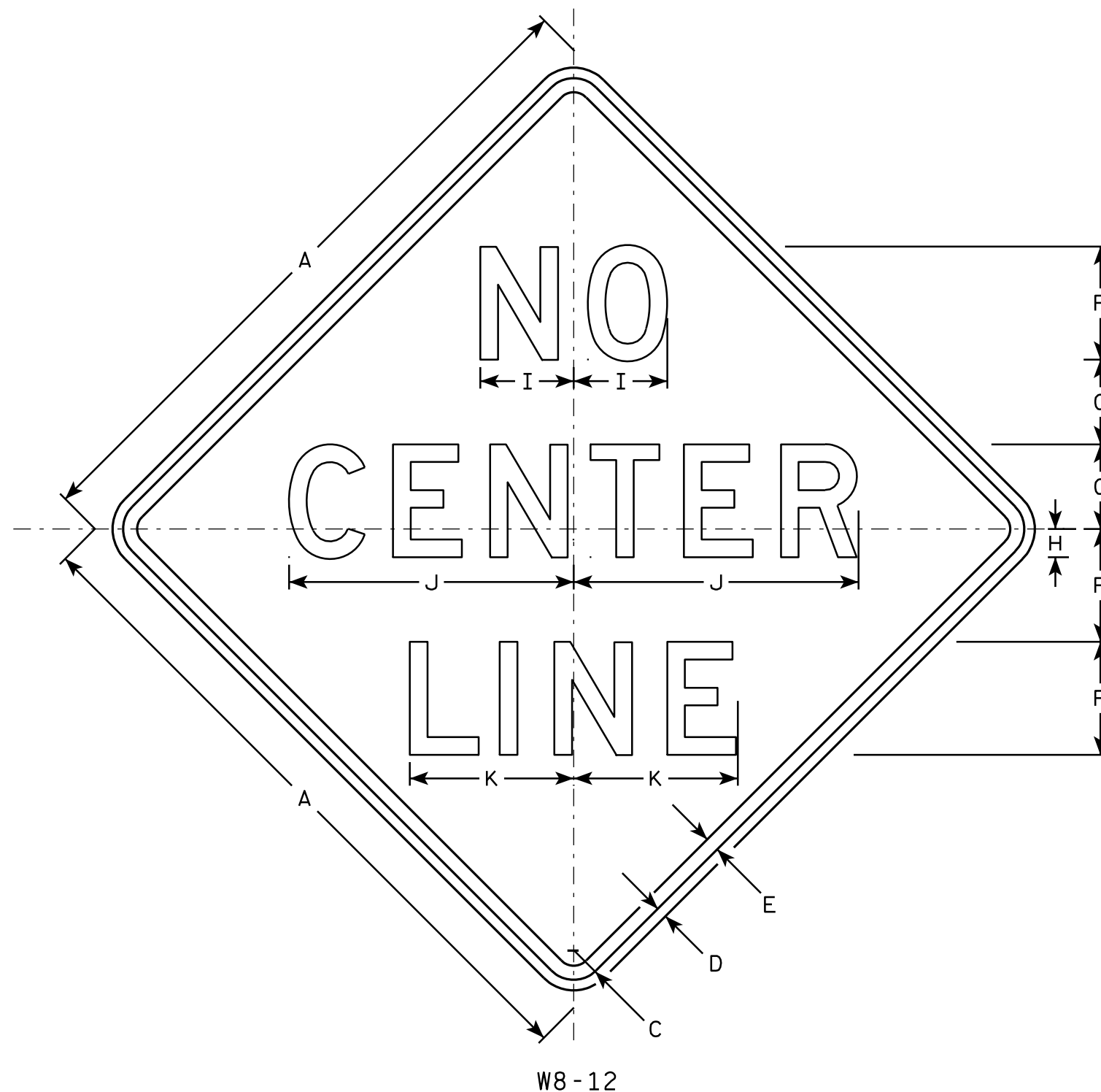
STANDARD SIGN

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



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.

7

7

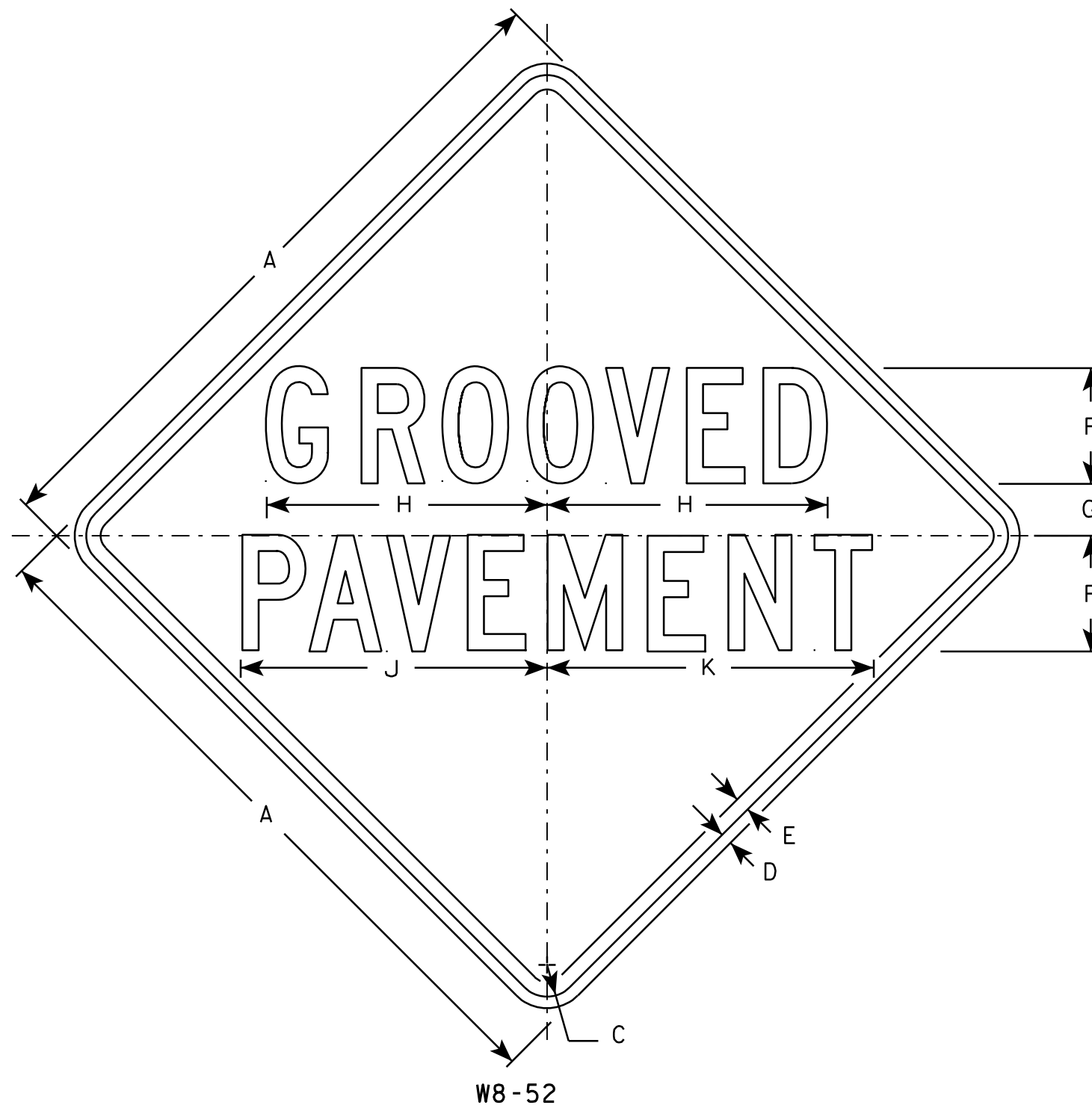
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	6	4 1⁄2	1 1⁄2	5 1⁄8	16	9																9.0
2M	36		1 5⁄8	5⁄8	3⁄4	6	4 1⁄2	1 1⁄2	5 1⁄8	16	9																9.0
3	48		2 1⁄4	3⁄4	1	8	6	2	6 5⁄8	20 1⁄4	11 5⁄8																16.0
4	48		2 1⁄4	3⁄4	1	8	6	2	6 5⁄8	20 1⁄4	11 5⁄8																16.0
5	48		2 1⁄4	3⁄4	1	8	6	2	6 5⁄8	20 1⁄4	11 5⁄8																16.0

STANDARD SIGN W8-12

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 8/24/10 PLATE NO. W8-12.3

PROJECT NO: HWY: COUNTY: SHEET NO: 173 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. 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.

W8-52

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 ³ / ₈	1/2	5/8	5	2 1/4	12 1/8		13 1/4	14 1/8																6.25
2M	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
3	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
4	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
5	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0

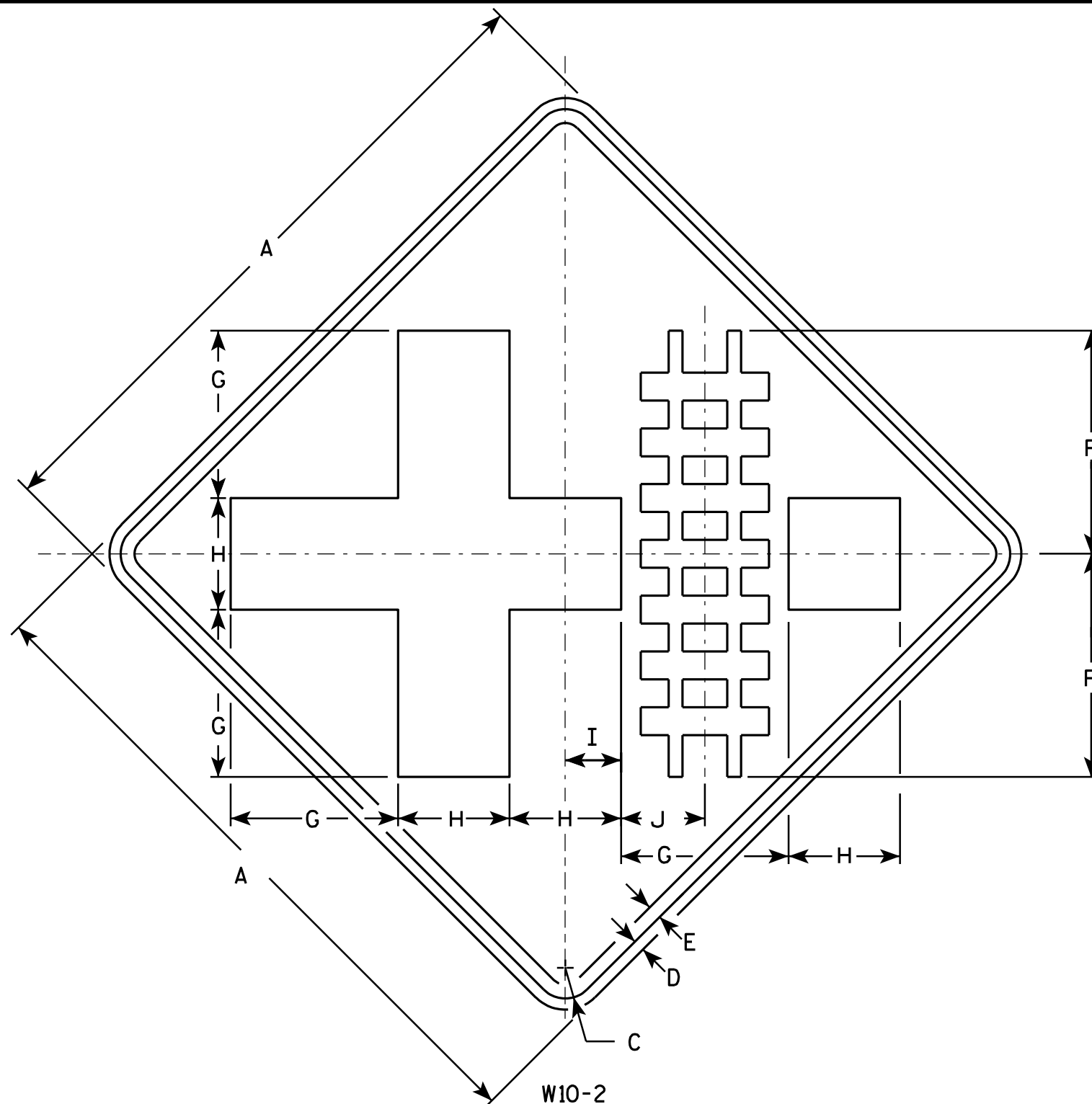
STANDARD SIGN W8-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

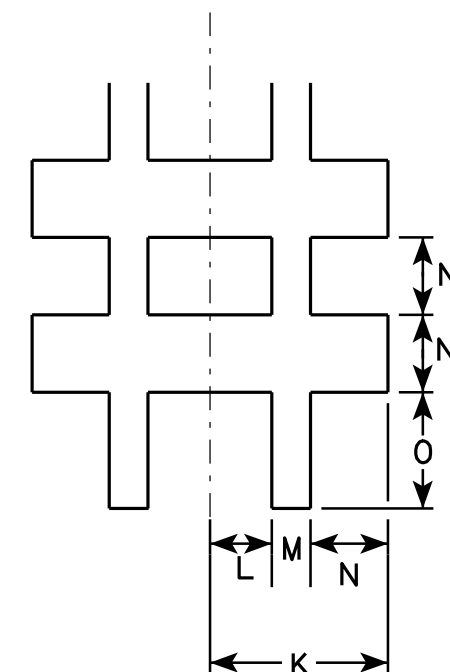
DATE 03/14/13 PLATE NO. W8-52.8

PROJECT NO: HWY: COUNTY: SHEET NO: 174 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

STANDARD SIGN W10-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-2.8

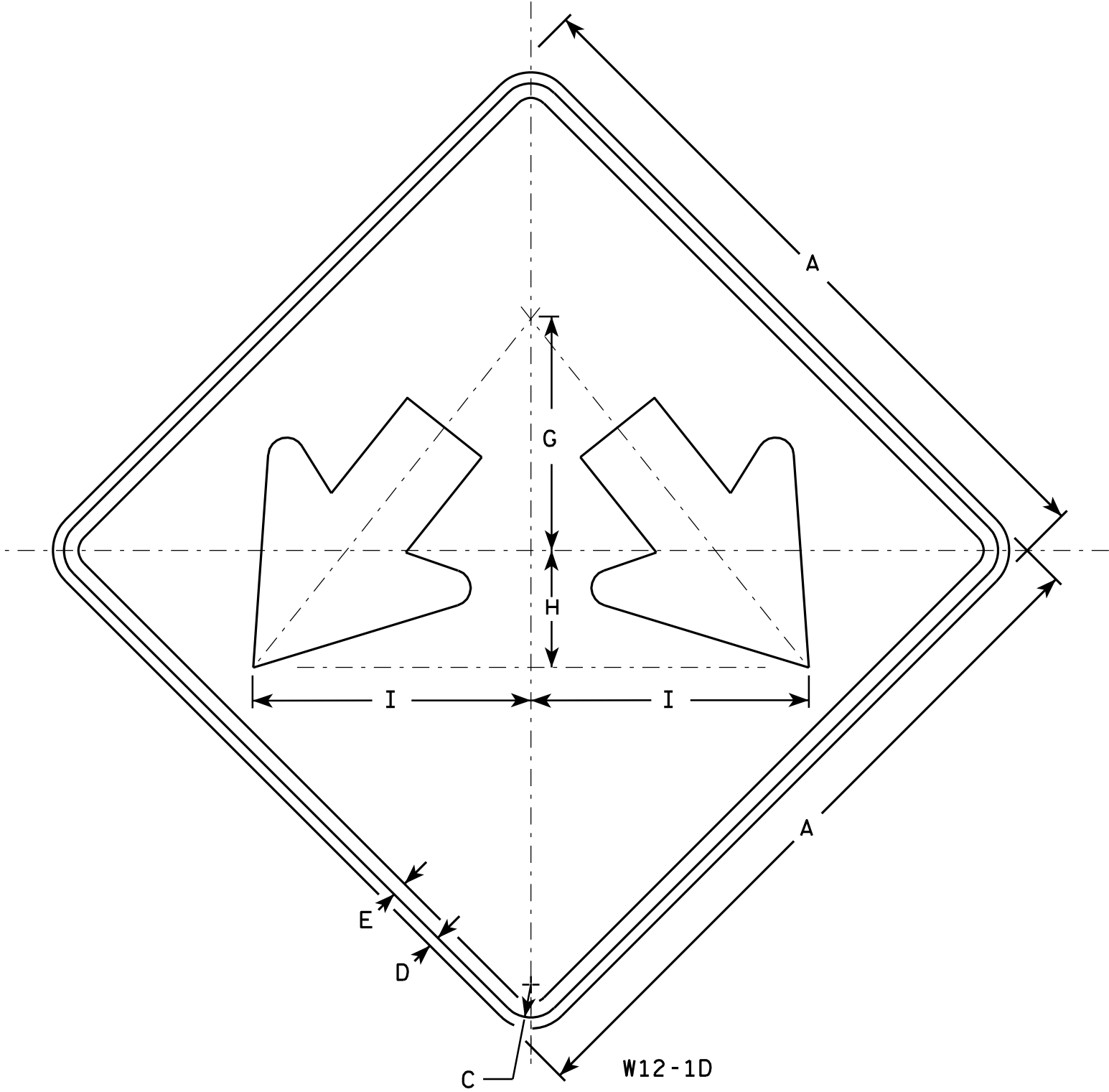
PROJECT NO:

HWY:

COUNTY:

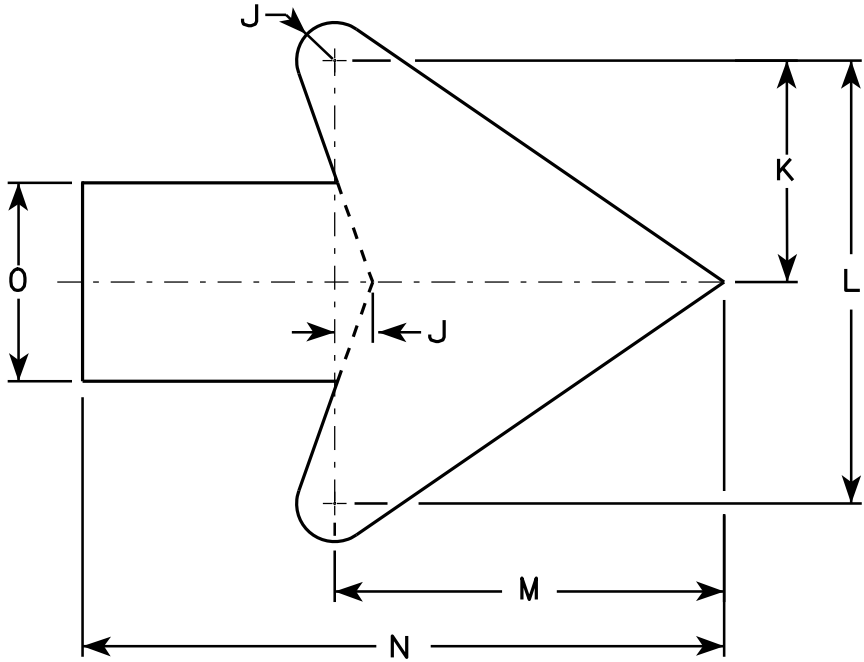
SHEET NO: 175

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

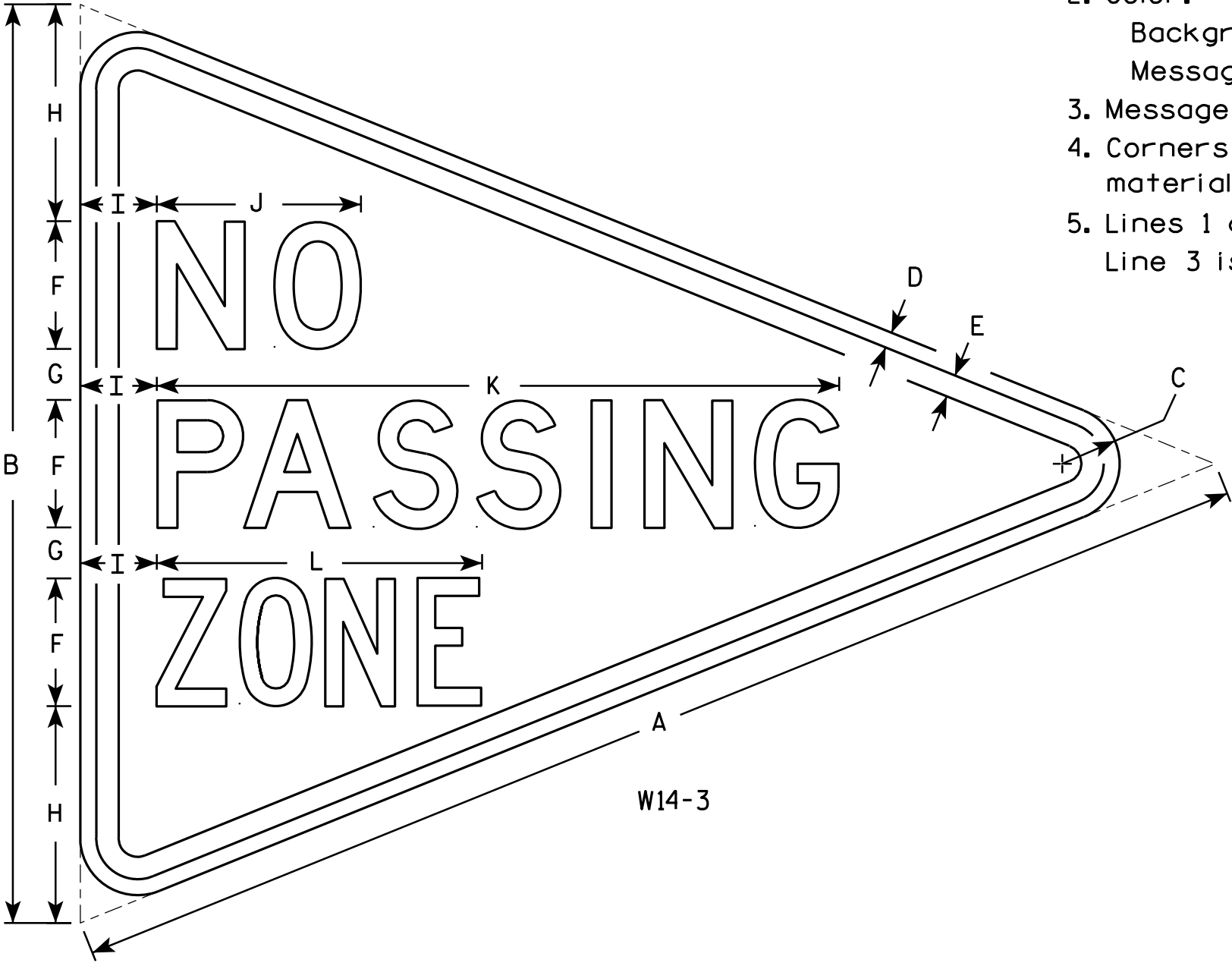
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

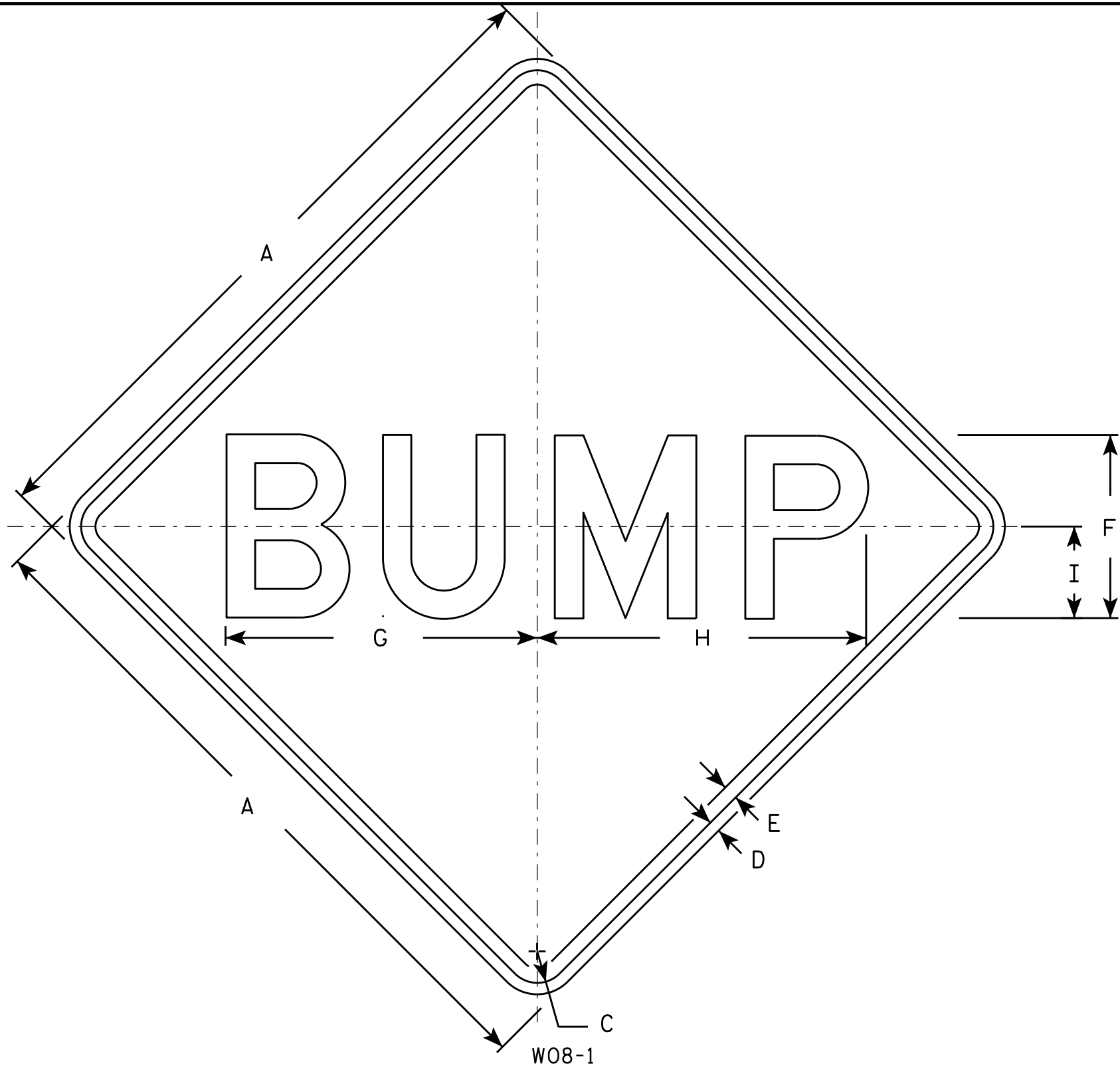
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

PROJECT NO:

HWY:

COUNTY:

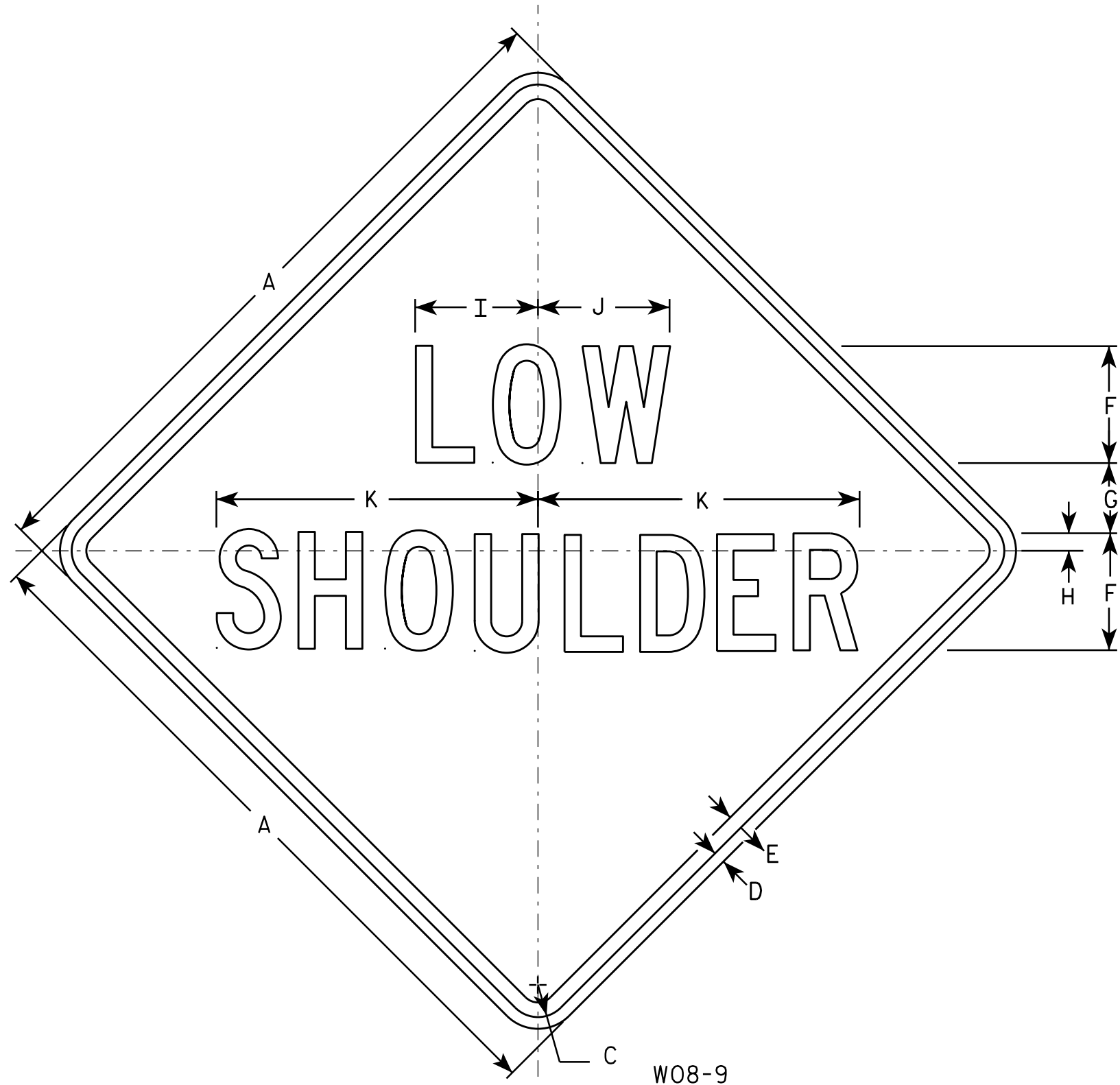
DATE 11/20/13

PLATE 178

W08-1.1

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	1	6 1/4	6 3/4	16 1/2																9.0
2S	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
2M	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
3	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
4	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
5	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0

STANDARD SIGN W08-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/20/13 PLATE 179 W08-9.1

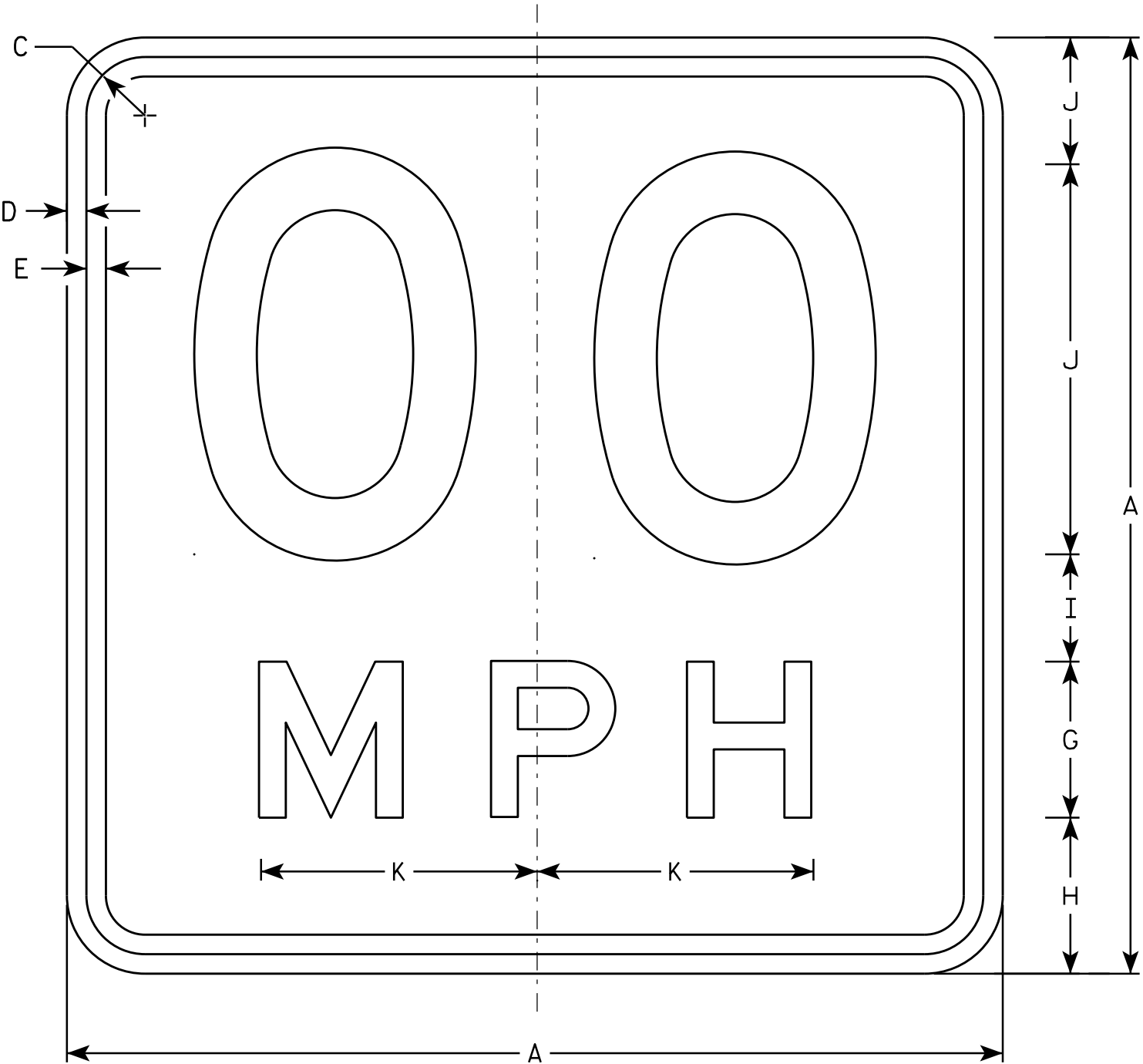
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

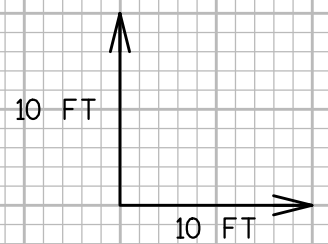
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

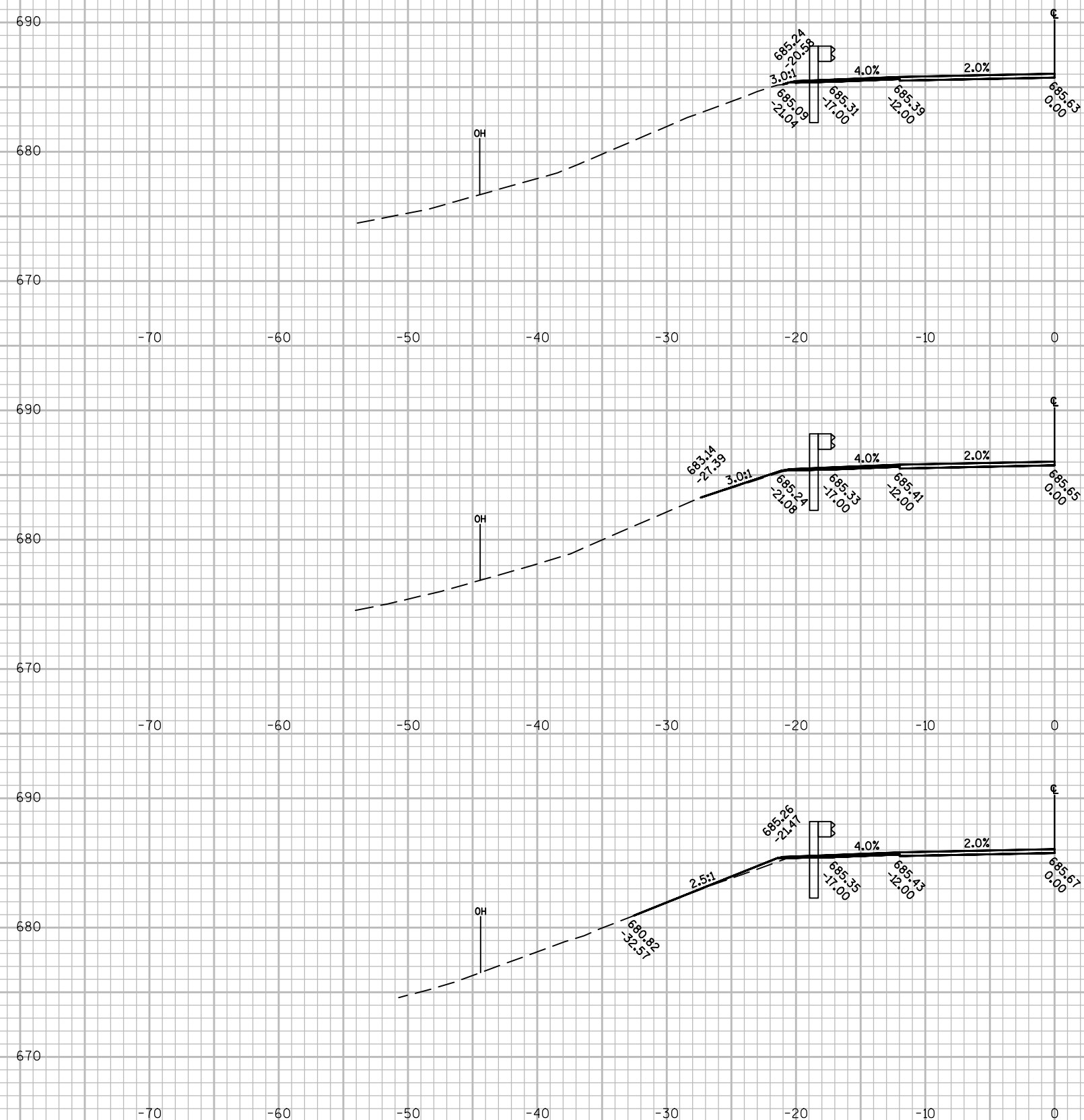
APPROVED
Matthew R. Rauch
For State Traffic Engineer

DATE 11/21/13 PLATE 180 W013-1.1

R/W IS LOCATED OUTSIDE SECTION LIMITS.



R/W IS LOCATED OUTSIDE SECTION LIMITS.



10 FT

10 FT

PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

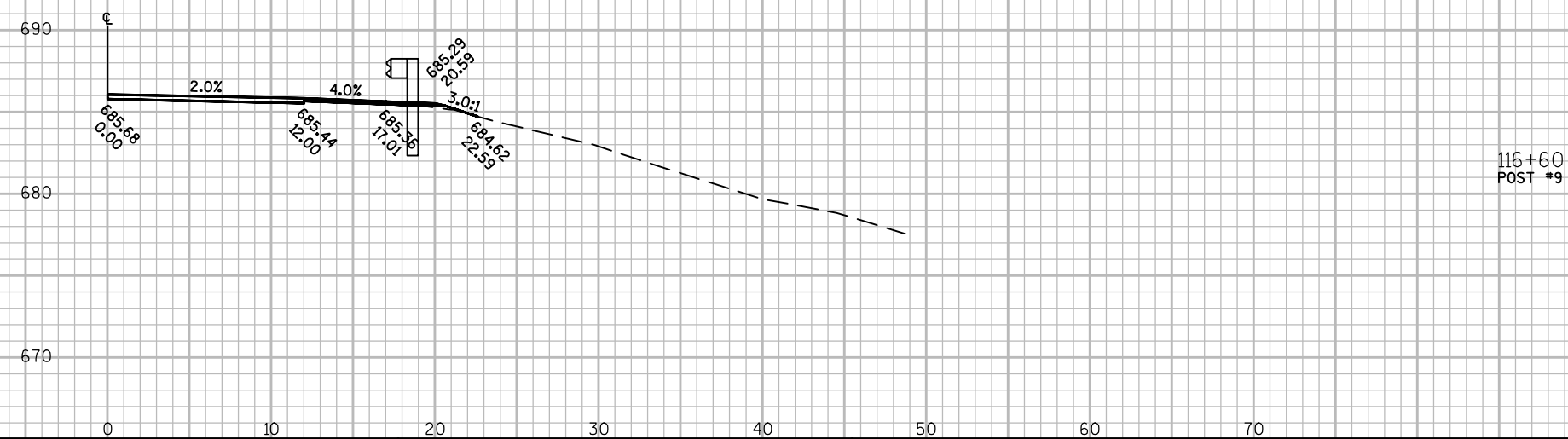
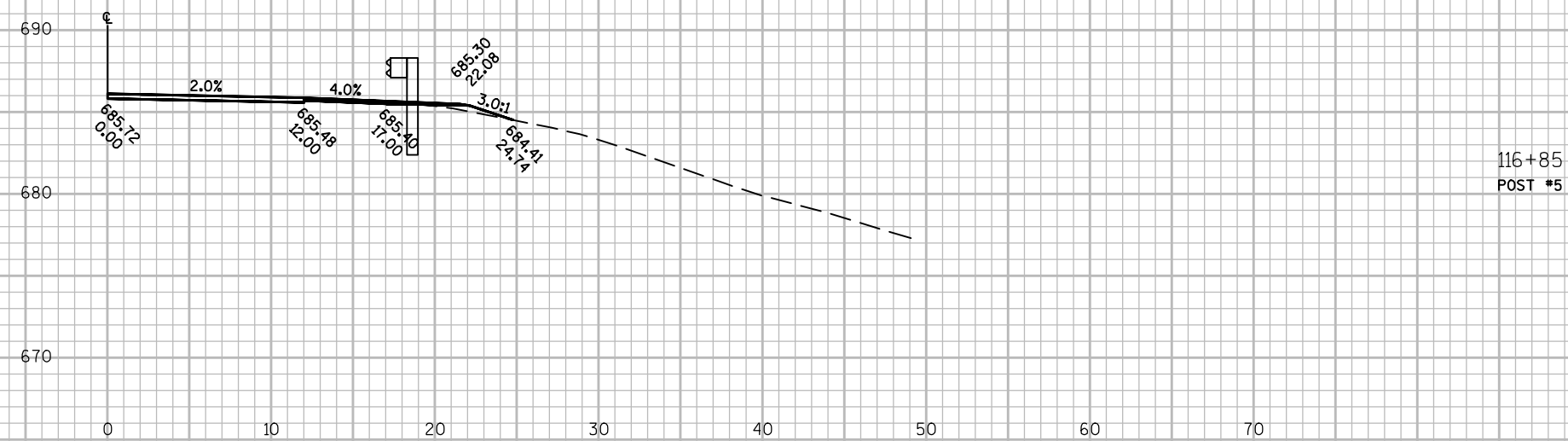
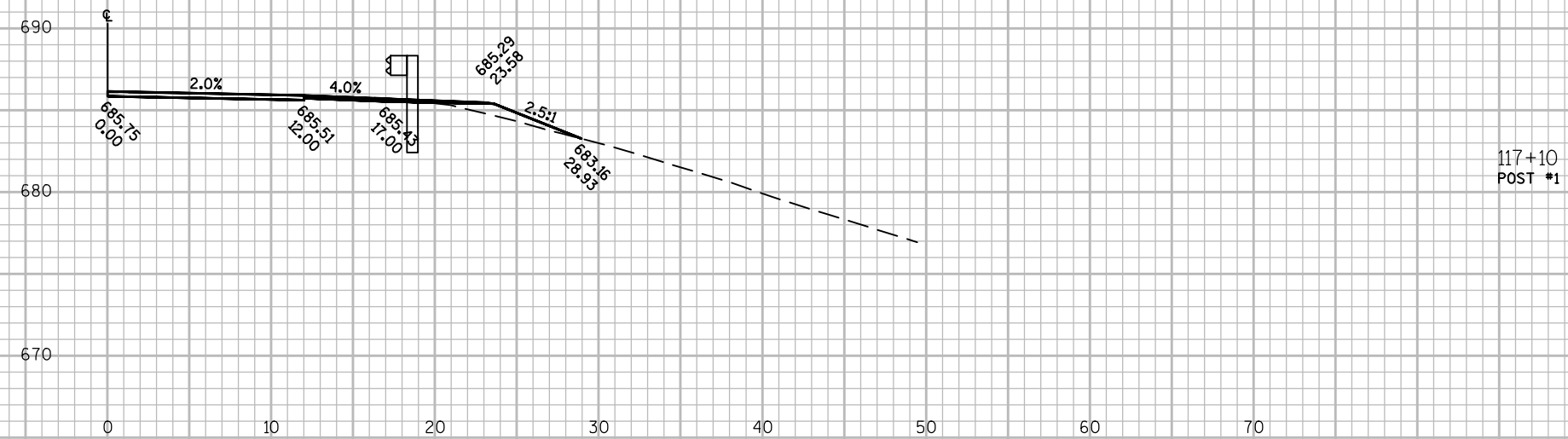
CROSS SECTIONS: STH 35

SHEET

182

E

R/W IS LOCATED OUTSIDE SECTION LIMITS.



PROJECT NO:1720-00-70

HWY: STH 35

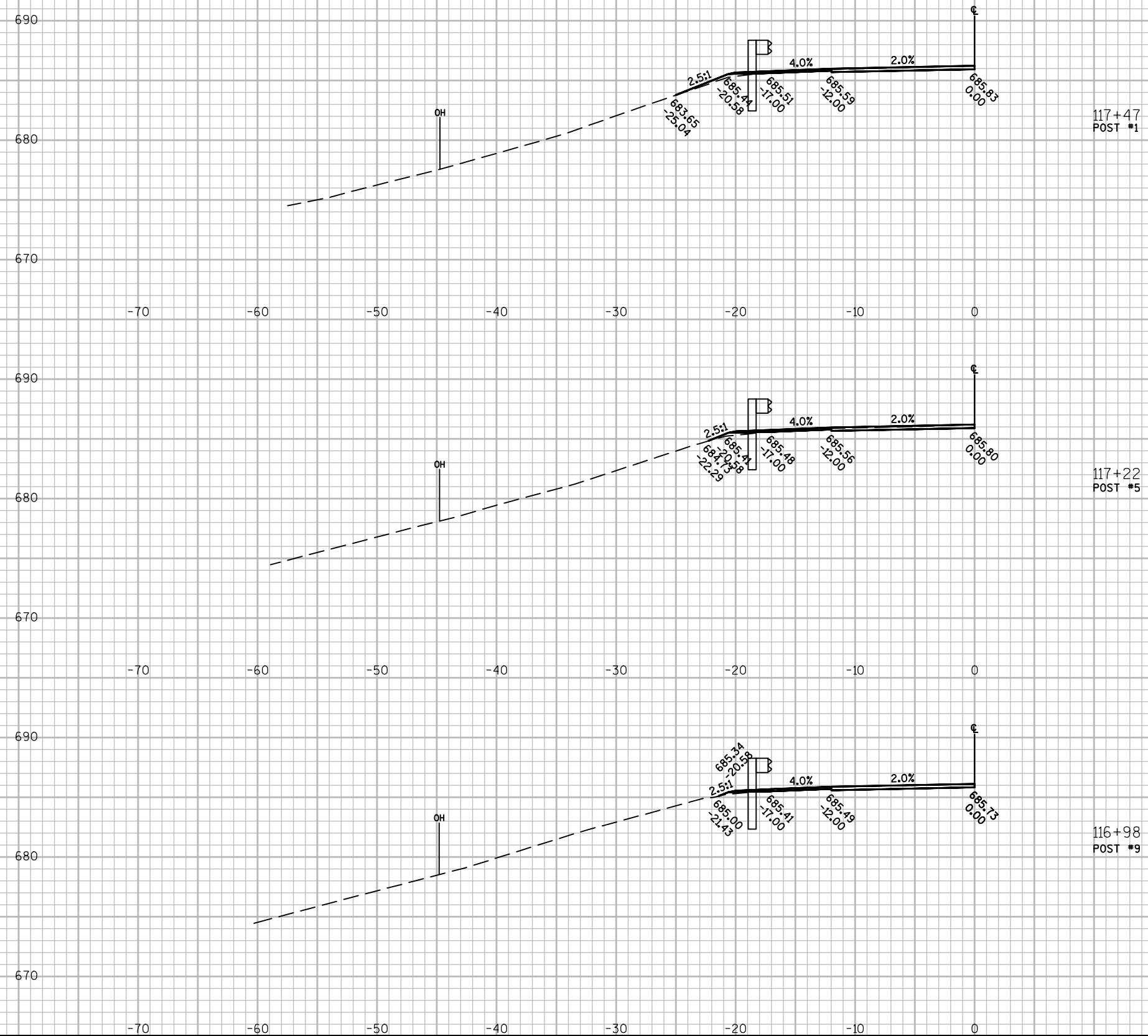
COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET	183
-------	-----

E

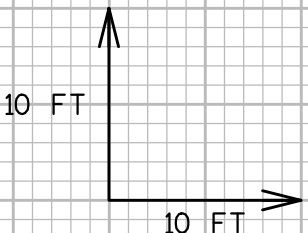
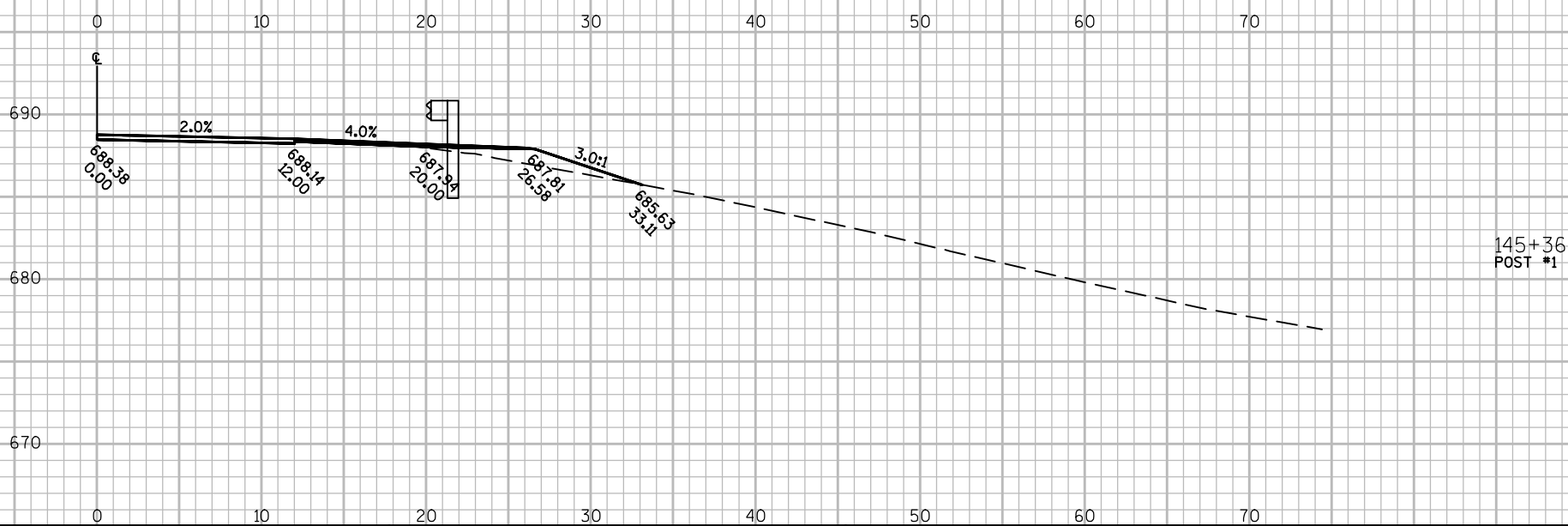
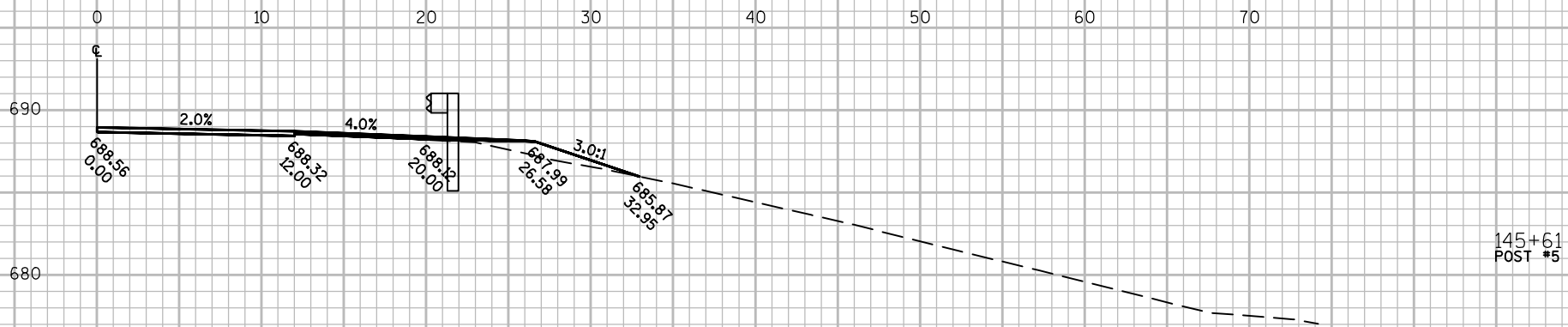
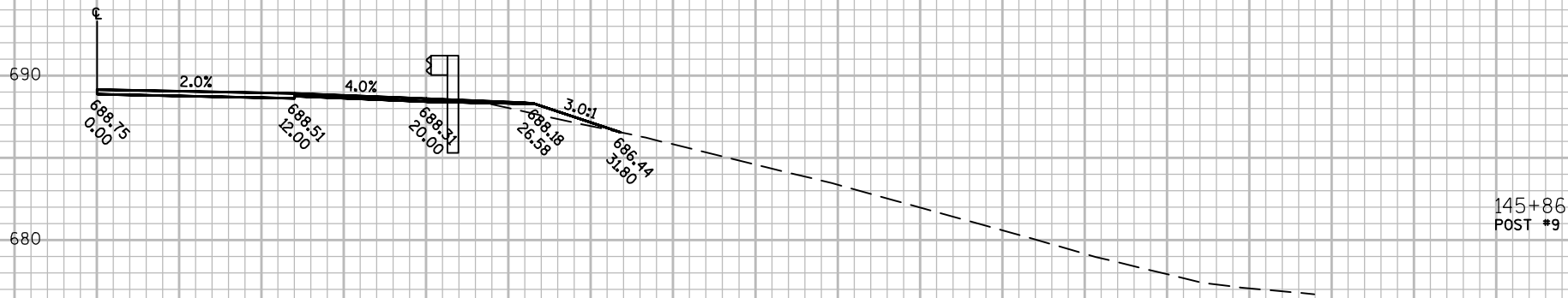
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9 |

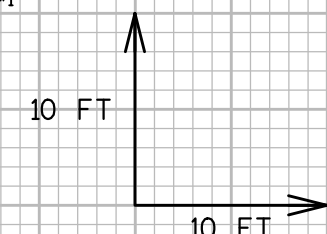
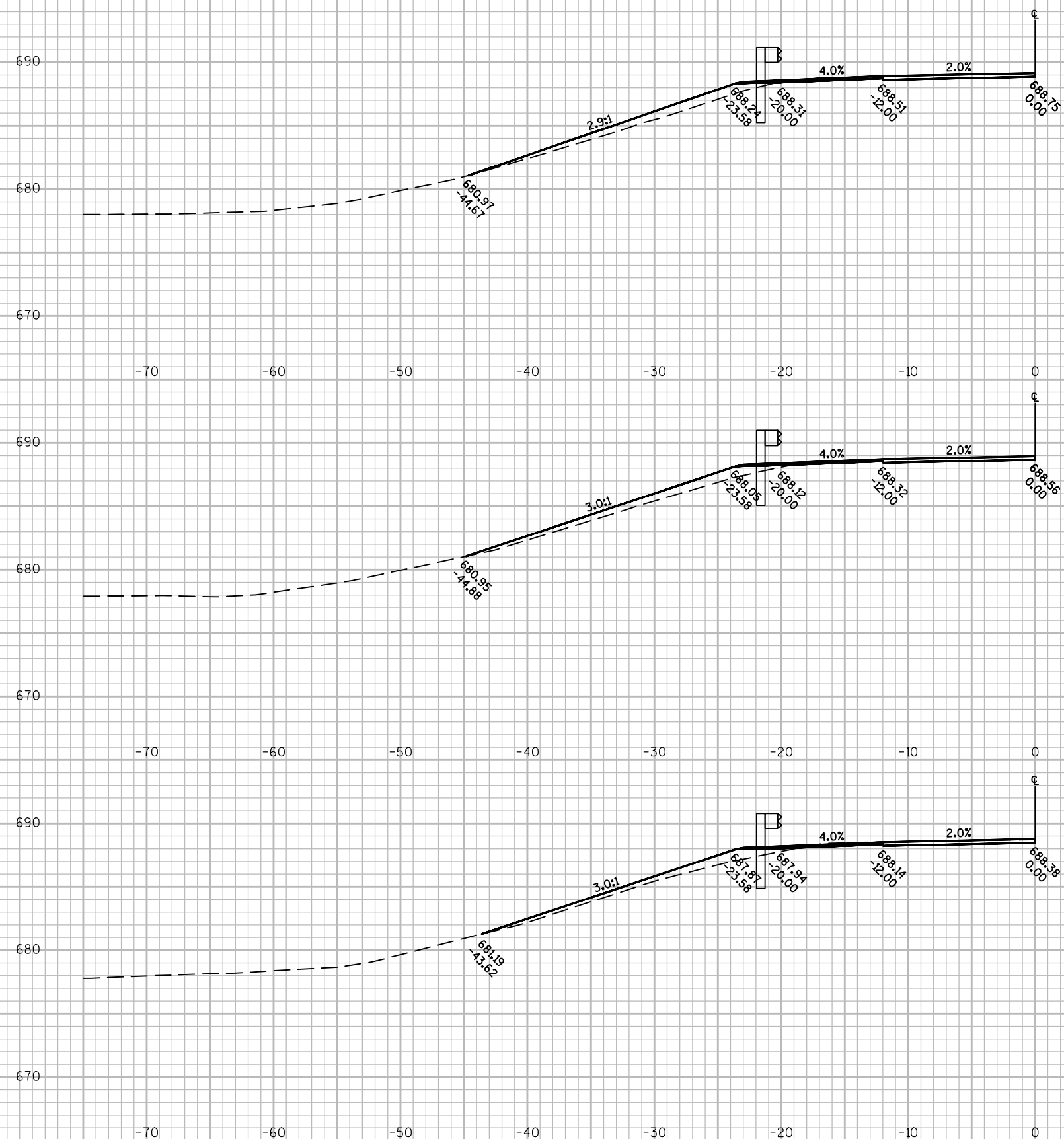
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

R/W IS LOCATED OUTSIDE SECTION LIMITS.



PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET

186

E

FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETSPLAN\090100.XS.DWG

PLOT DATE : 12/20/2016 11:18 AM

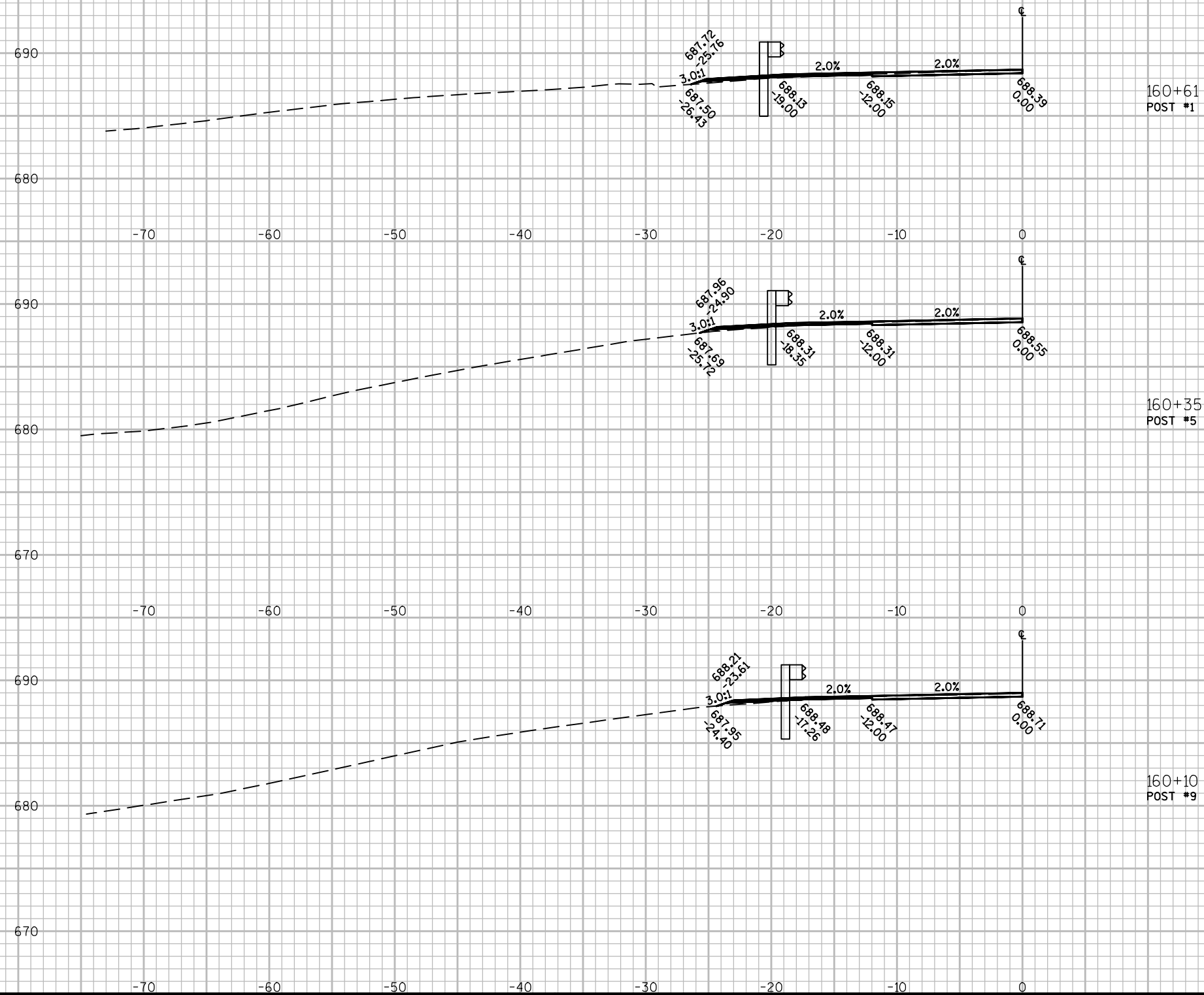
PLOT BY : DWORAK, ALEX

PLOT NAME :

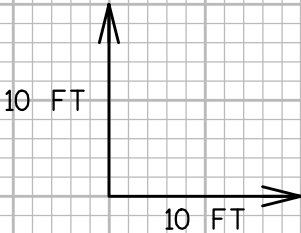
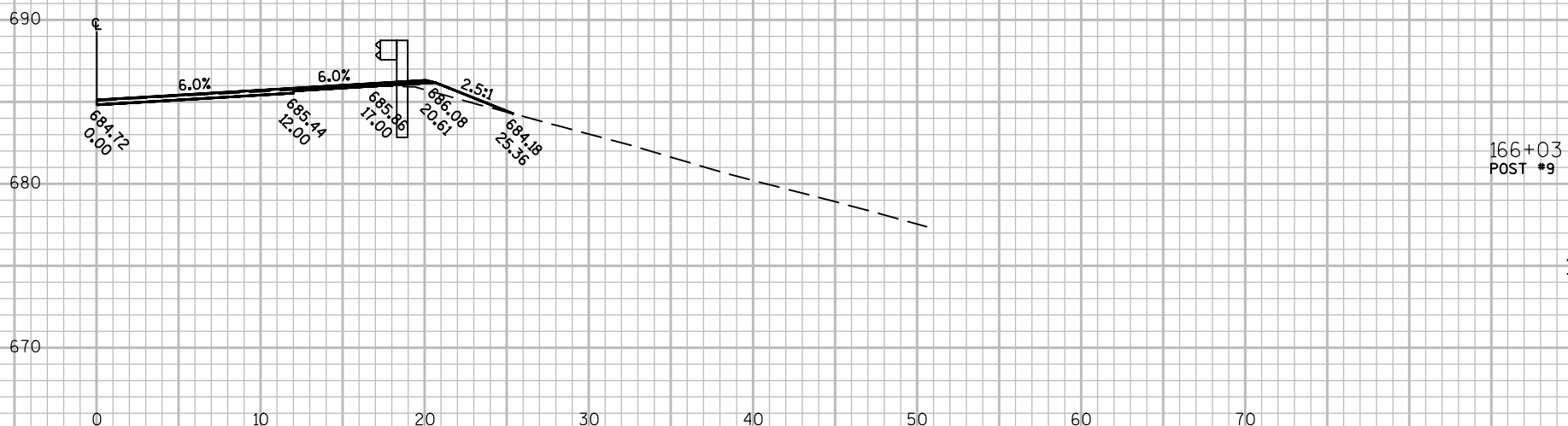
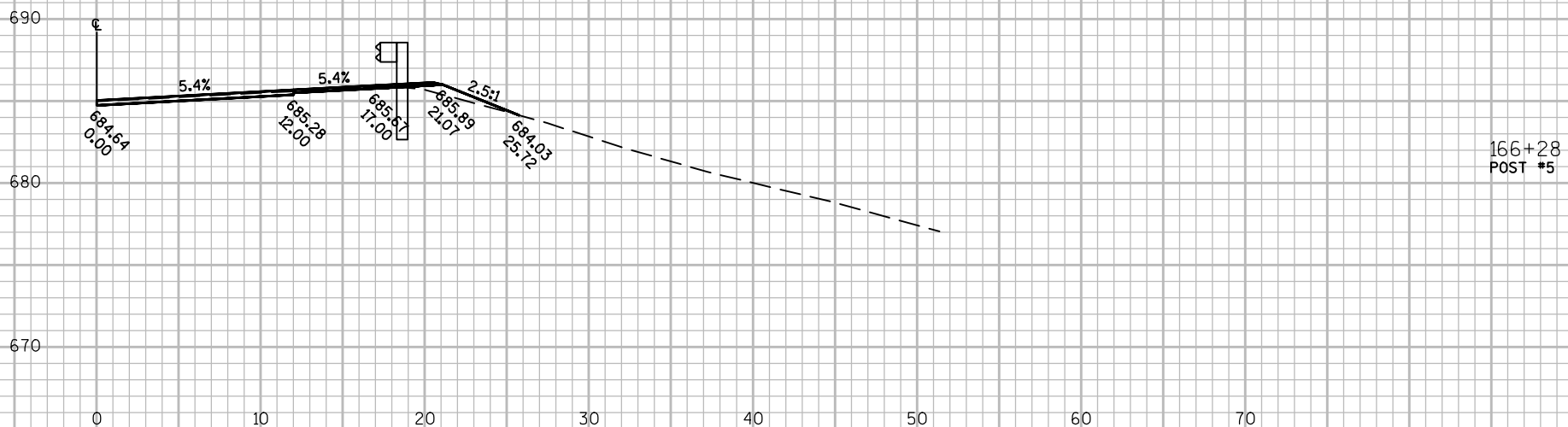
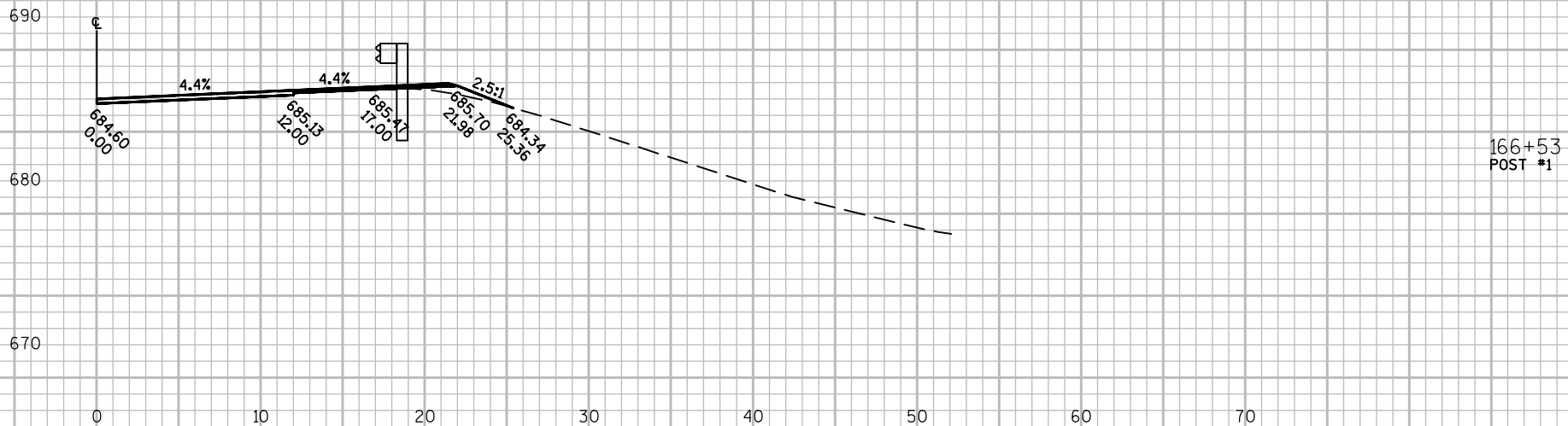
PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49

R/W IS LOCATED OUTSIDE SECTION LIMITS.



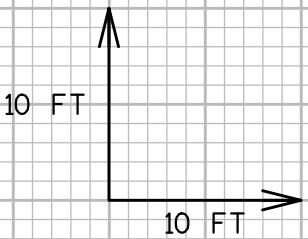
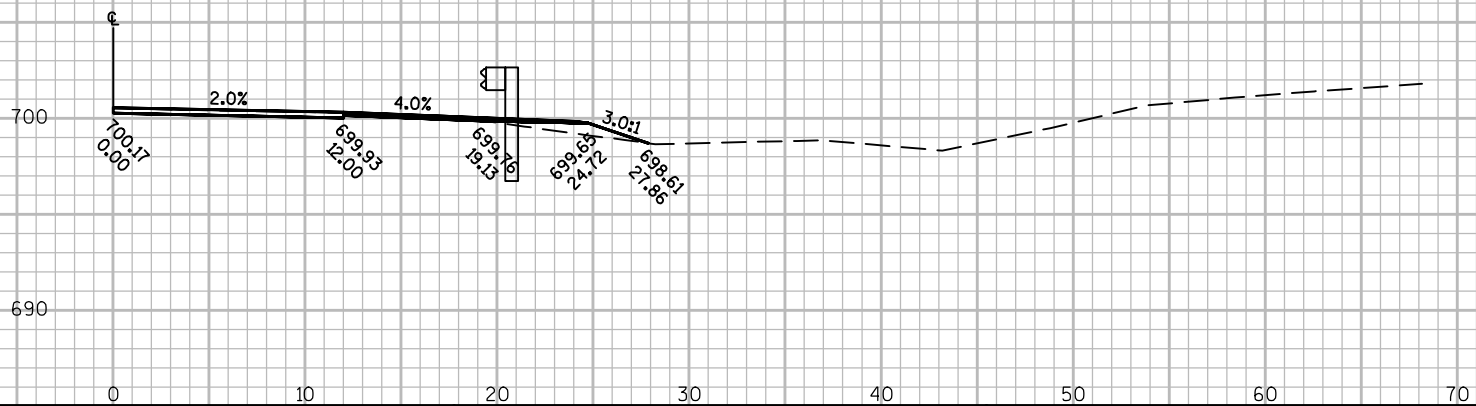
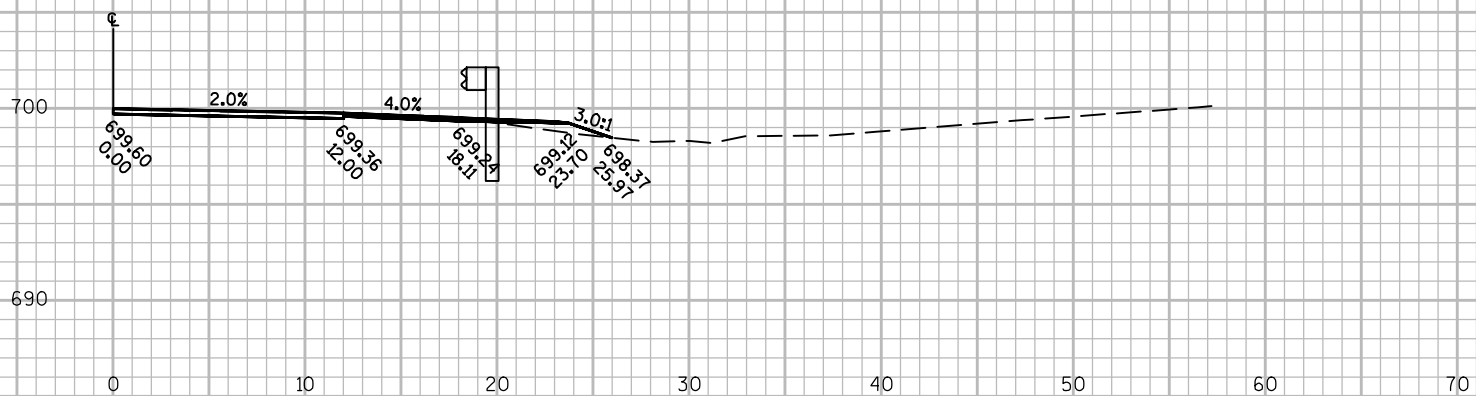
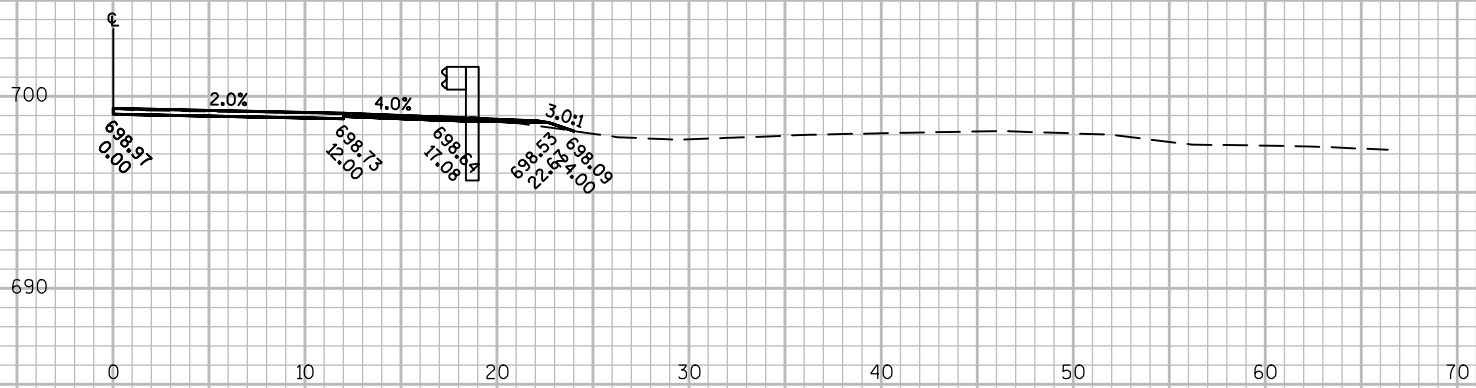
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

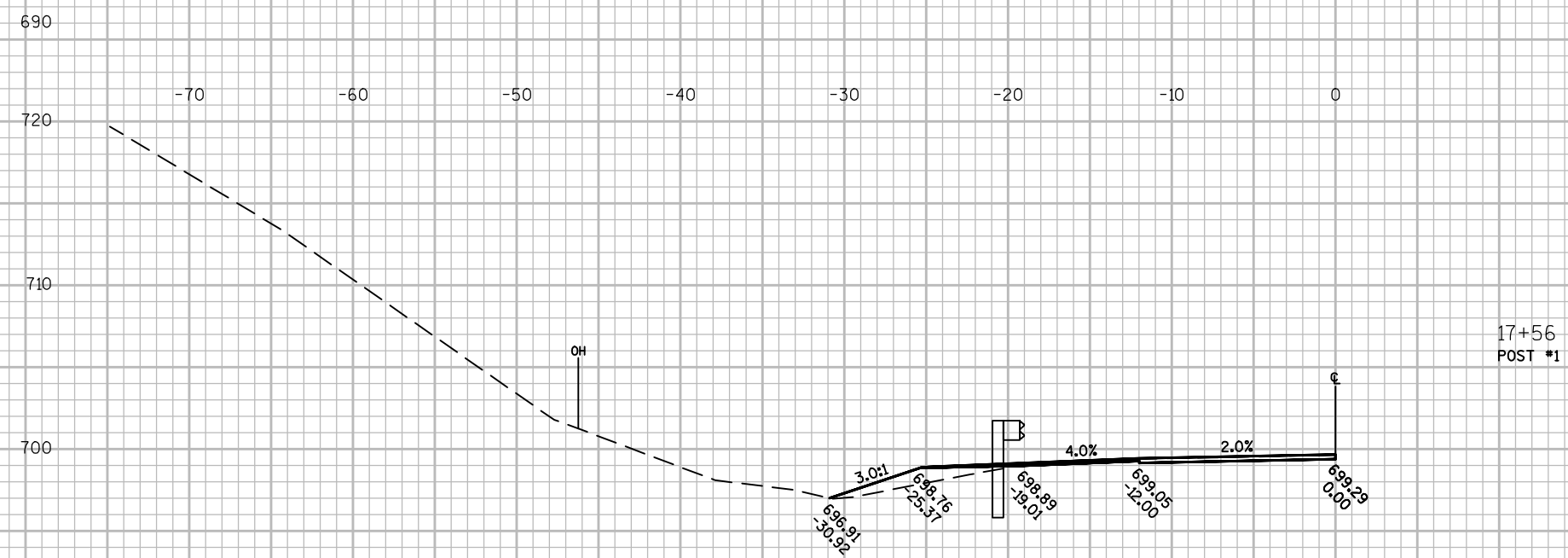
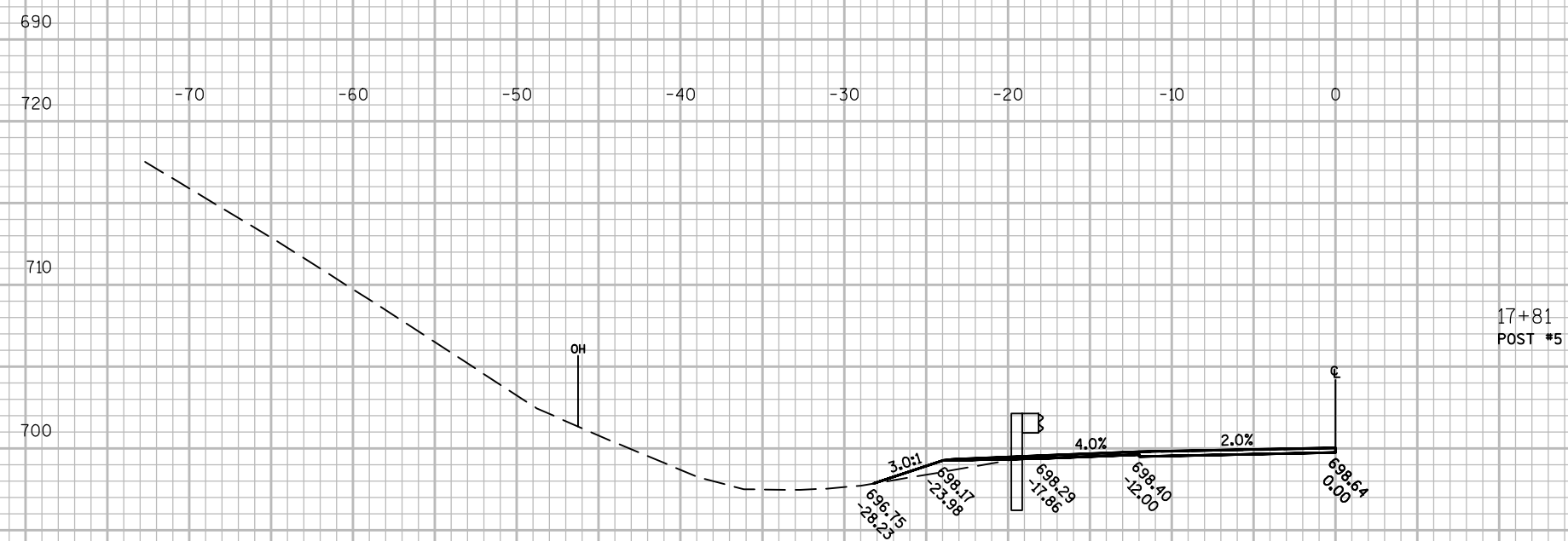
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

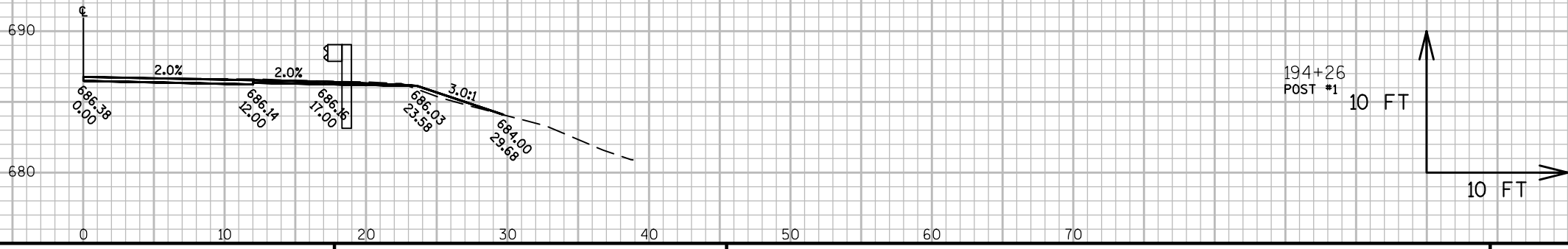
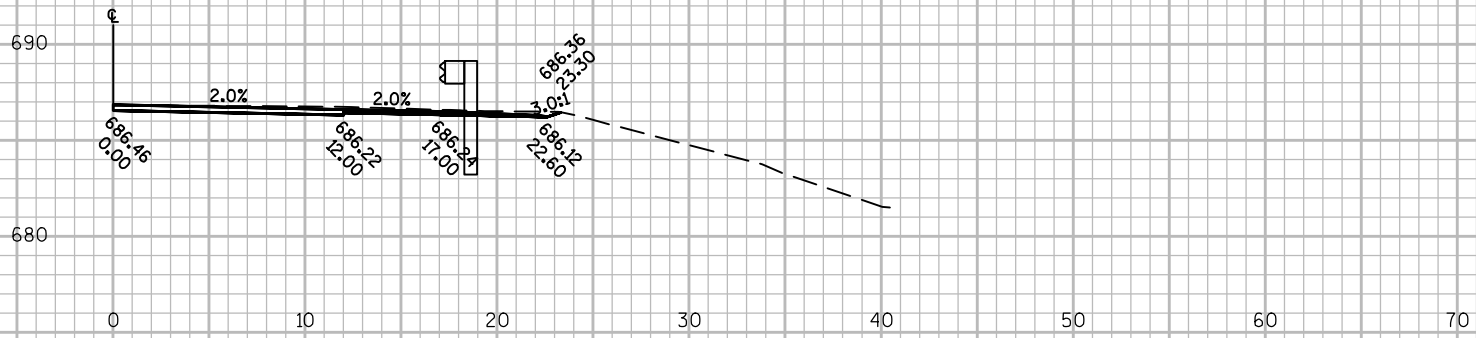
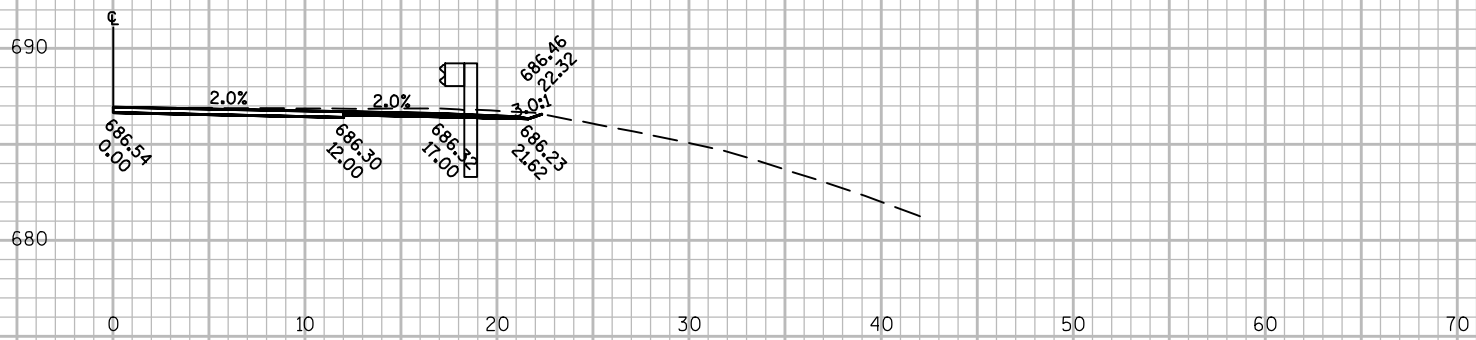
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

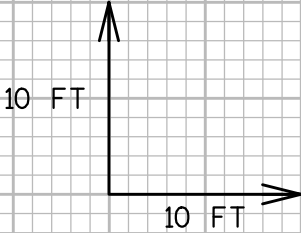
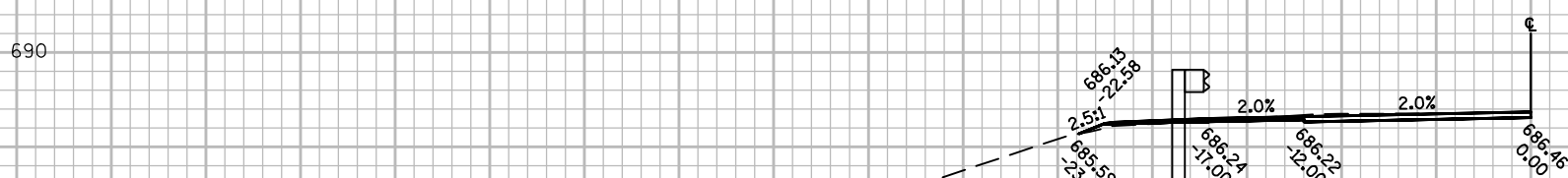
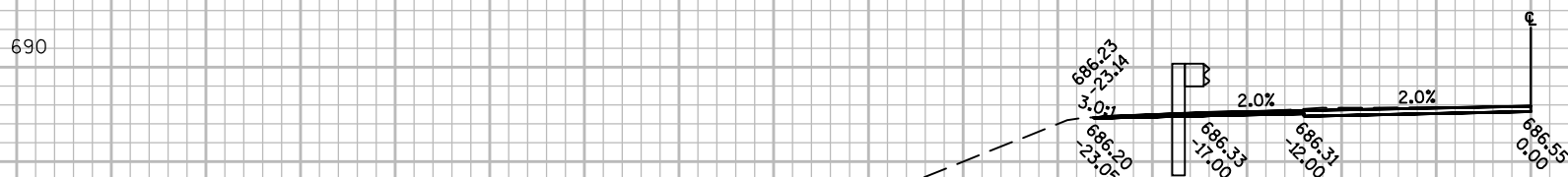
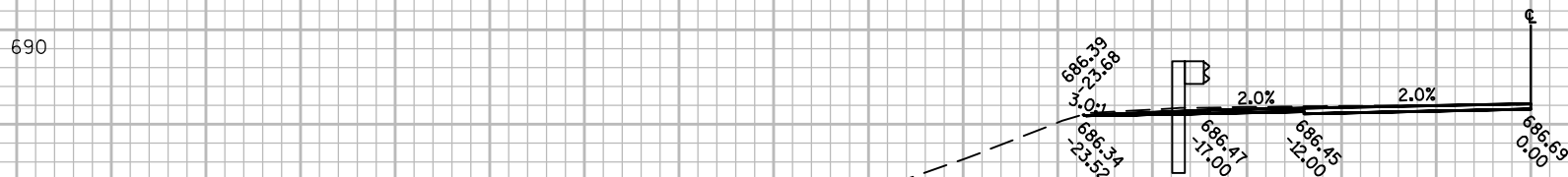
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

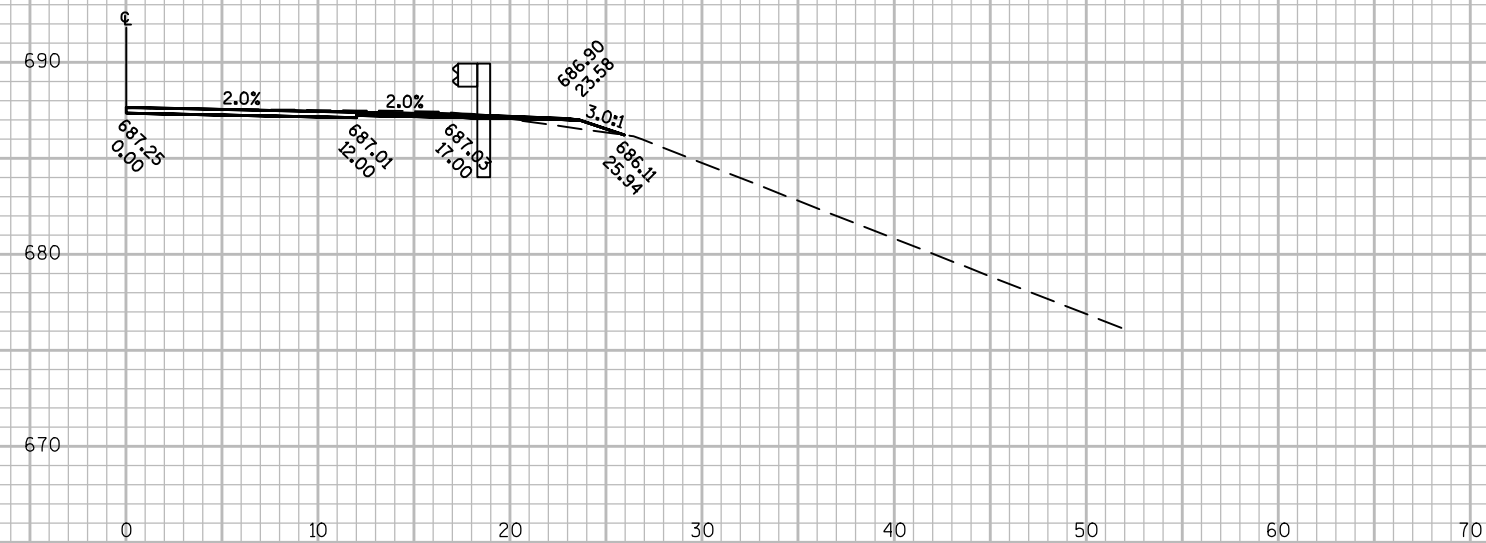
R/W IS LOCATED OUTSIDE SECTION LIMITS.



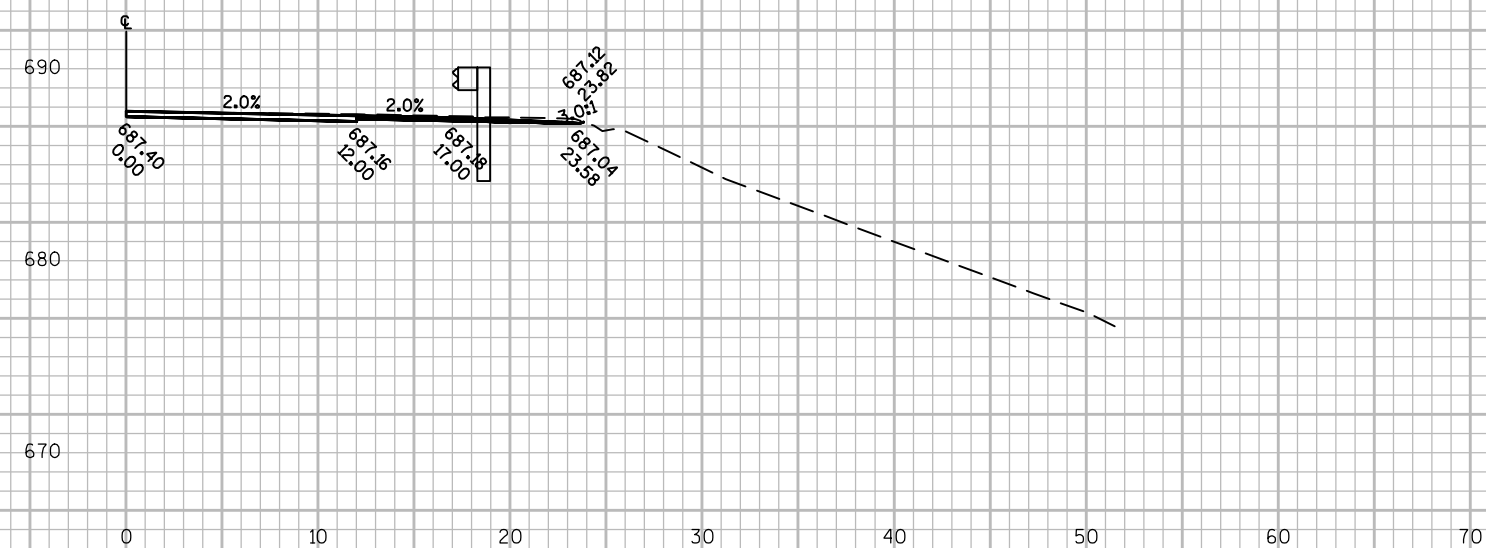
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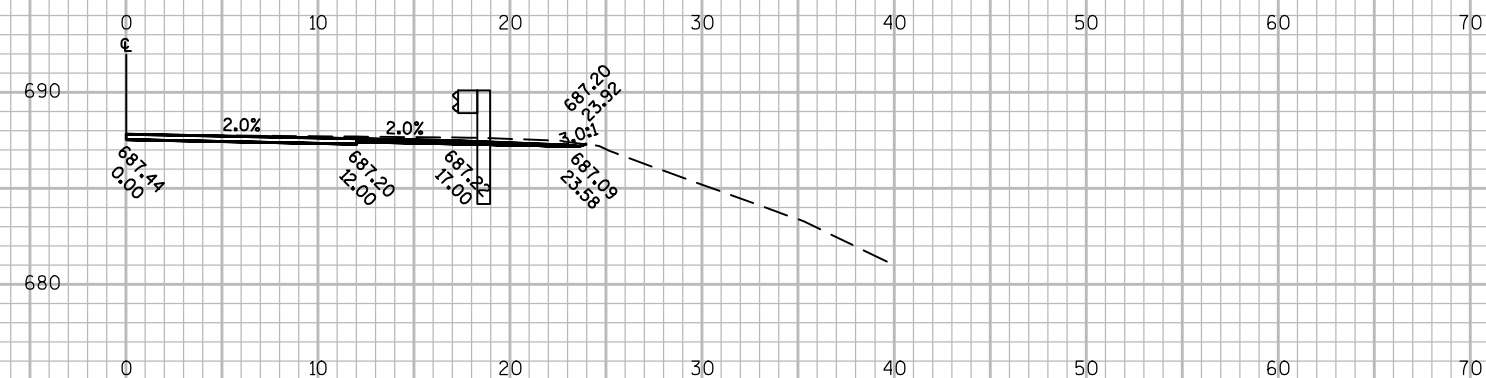
R/W IS LOCATED OUTSIDE SECTION LIMITS.



199+23
POST #1



198+98
POST #5

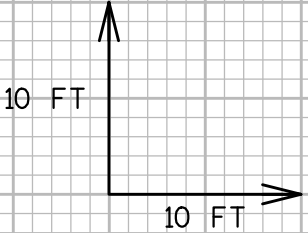
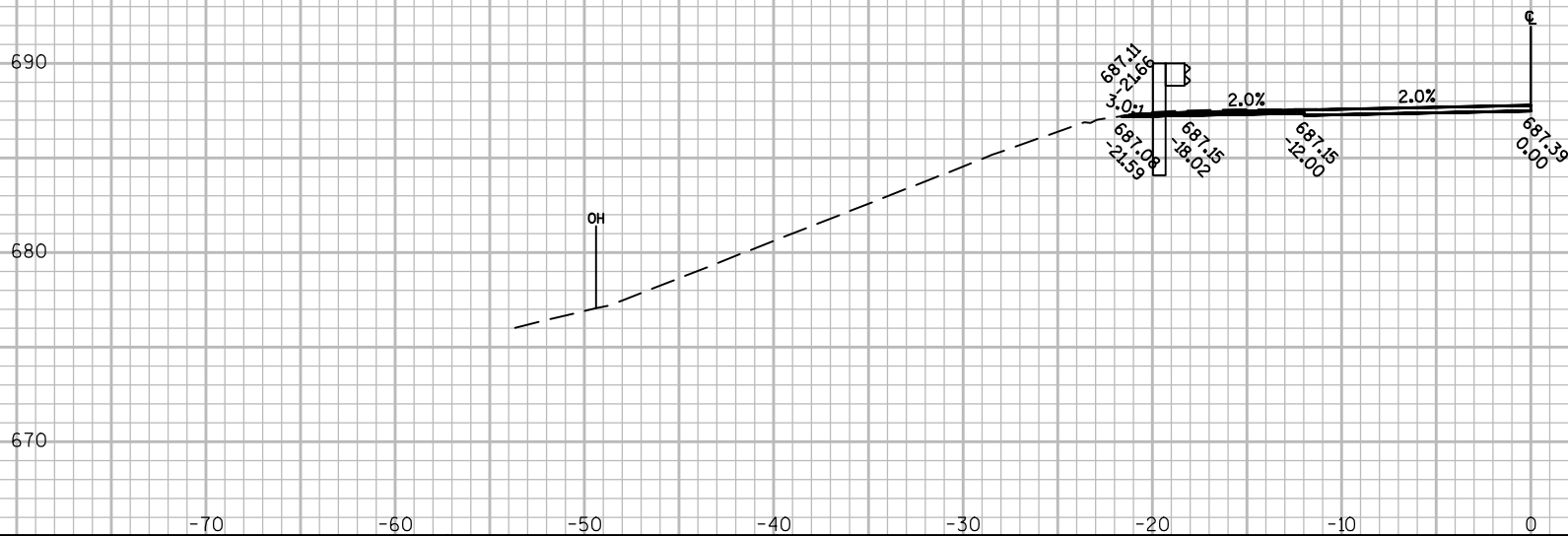
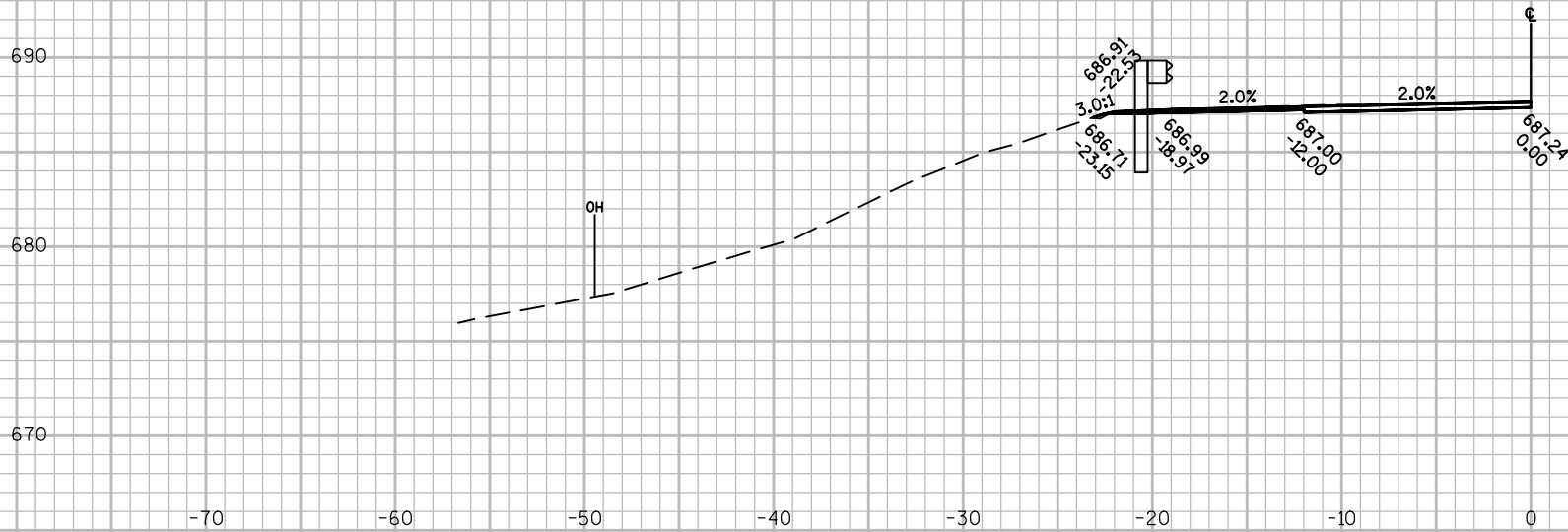
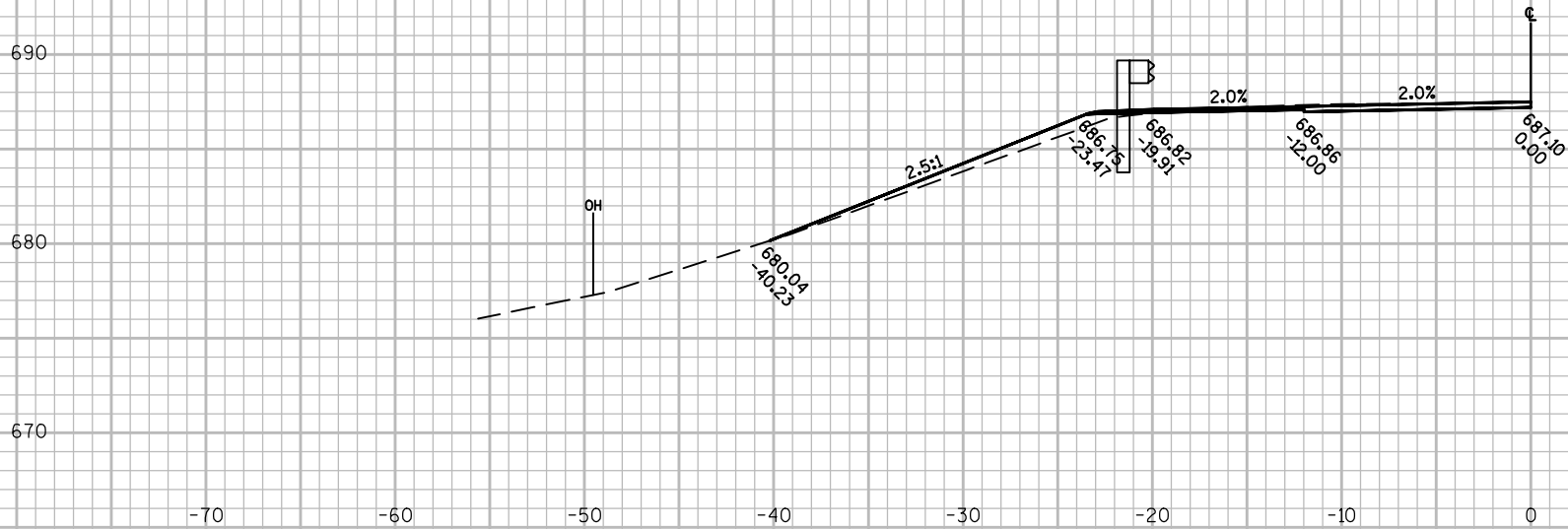


198+73
POST #9

9 10 FT

10 FT

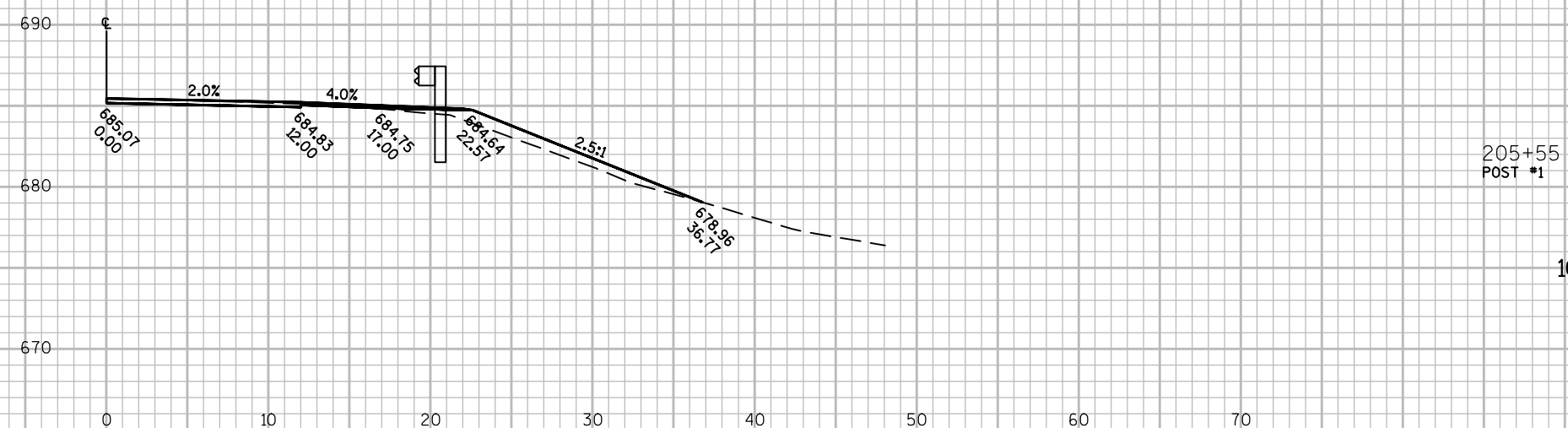
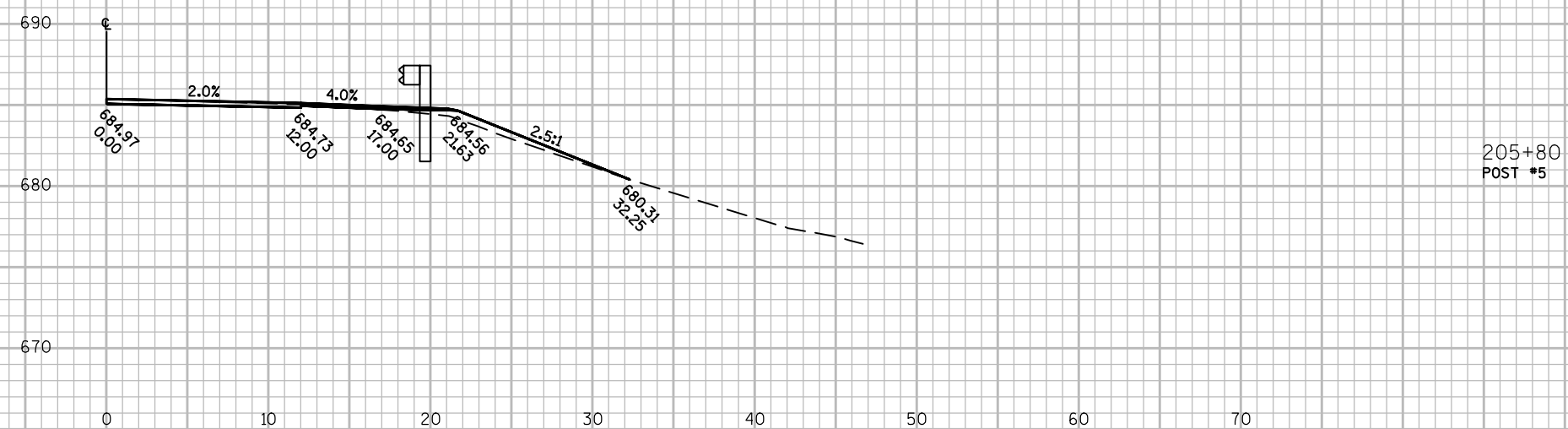
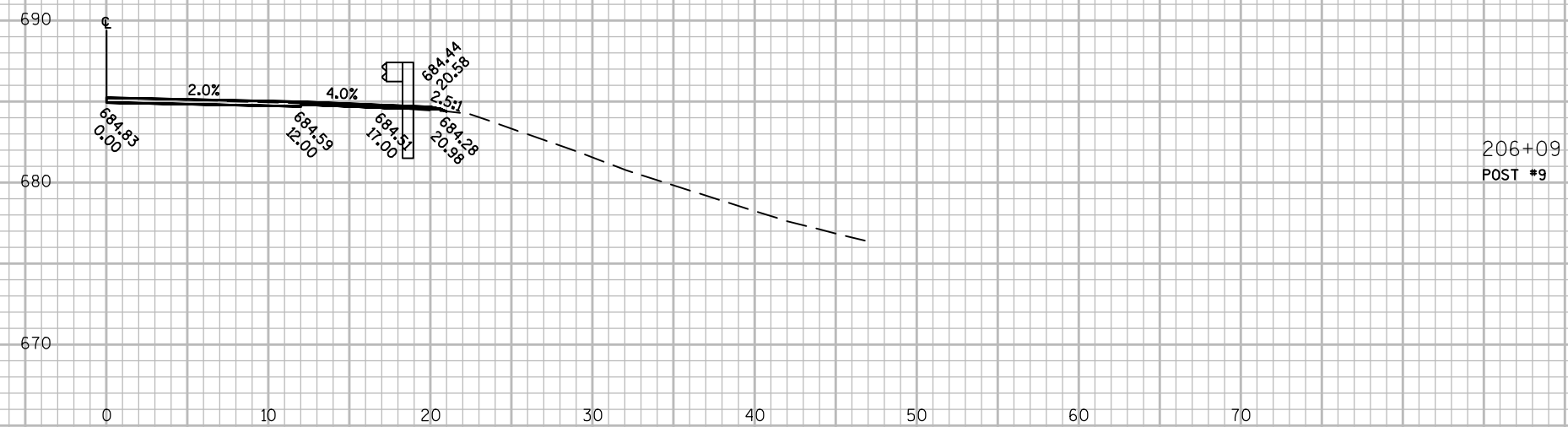
R/W IS LOCATED OUTSIDE SECTION LIMITS.



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R/W IS LOCATED OUTSIDE SECTION LIMITS.



PROJECT NO:1720-00-70

HWY: STH 35

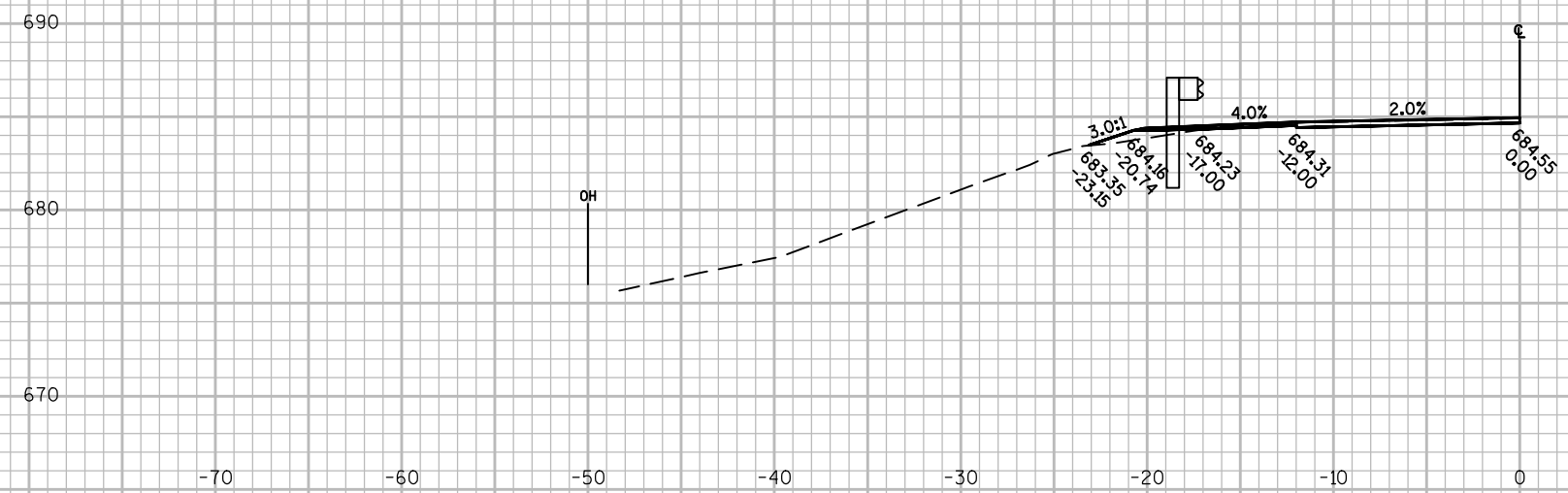
COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

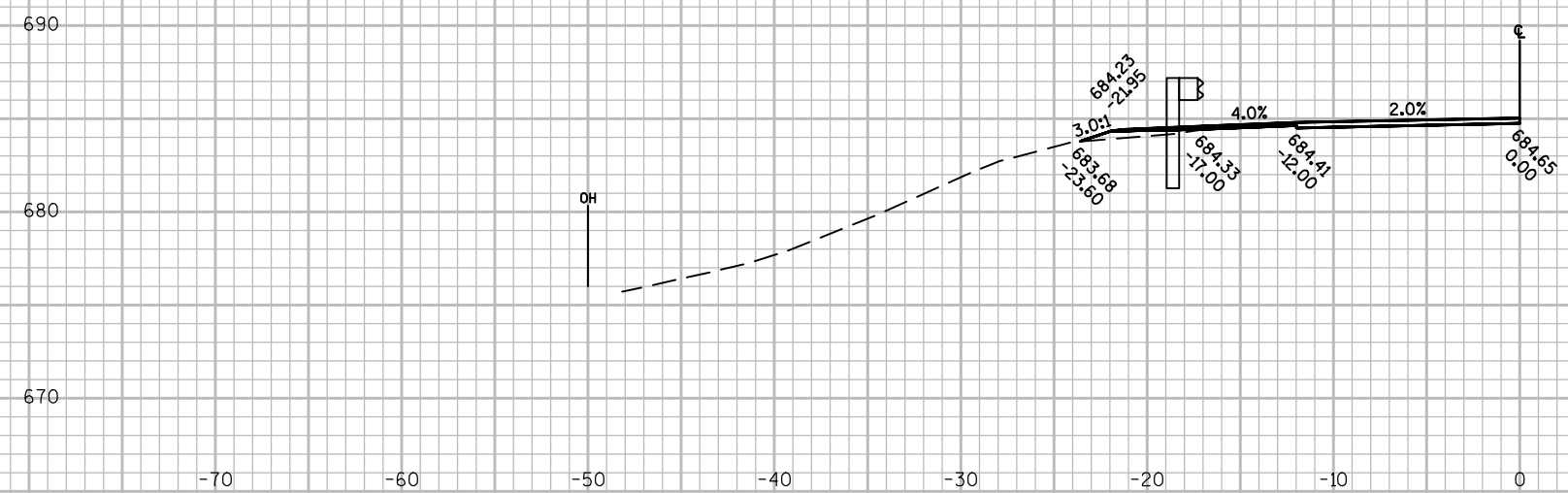
SHEET	195
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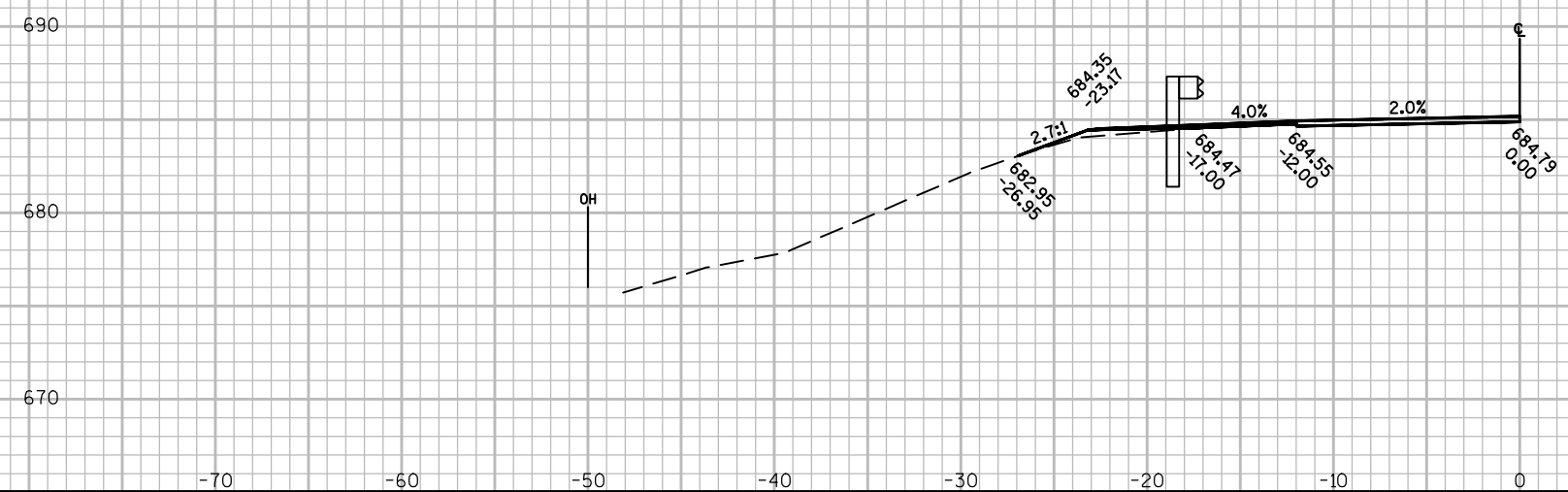
R/W IS LOCATED OUTSIDE SECTION LIMITS.



206+66
POST #9



206+41
POST #5

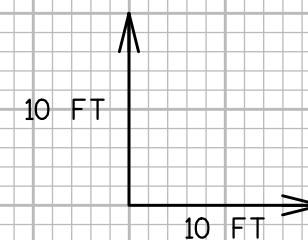
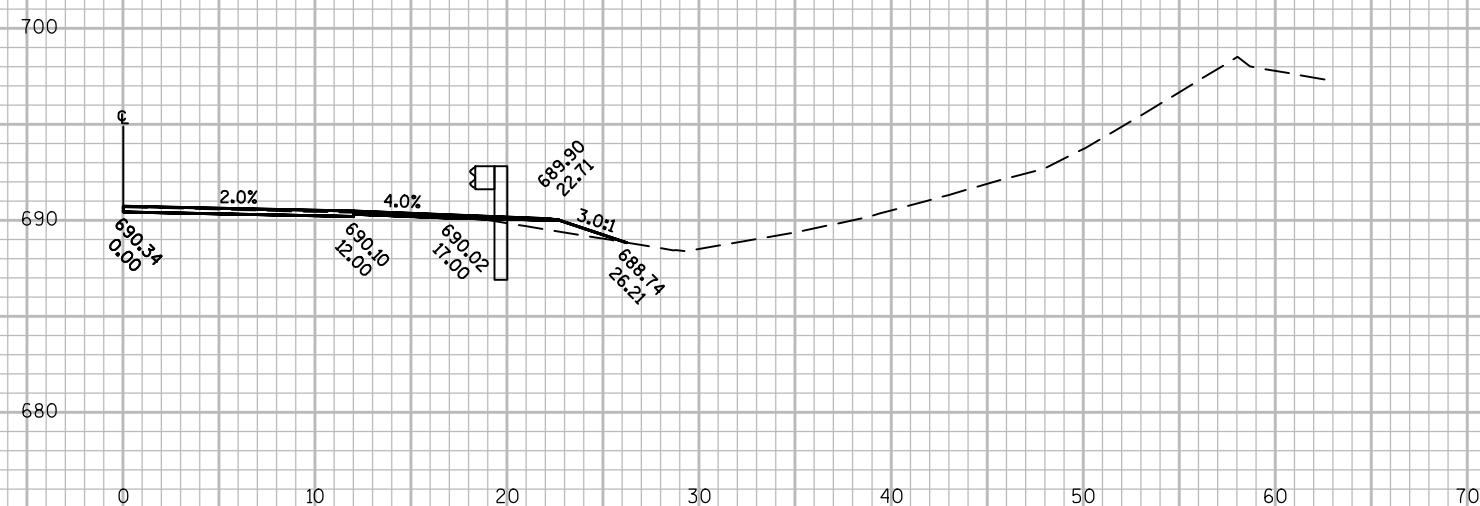
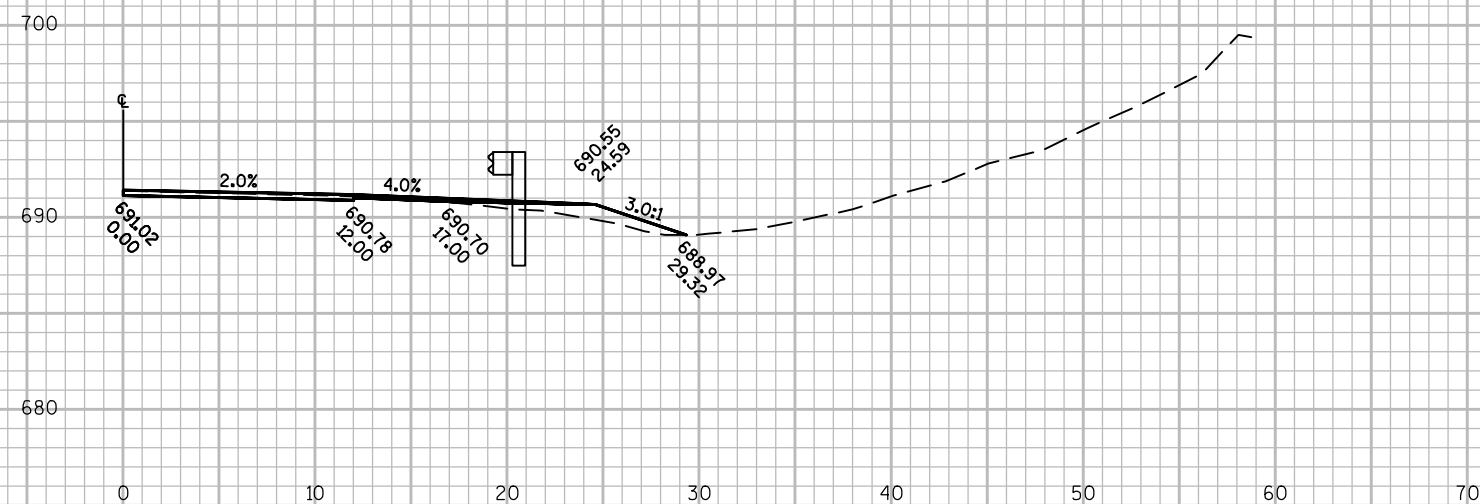


206+16
POST #1

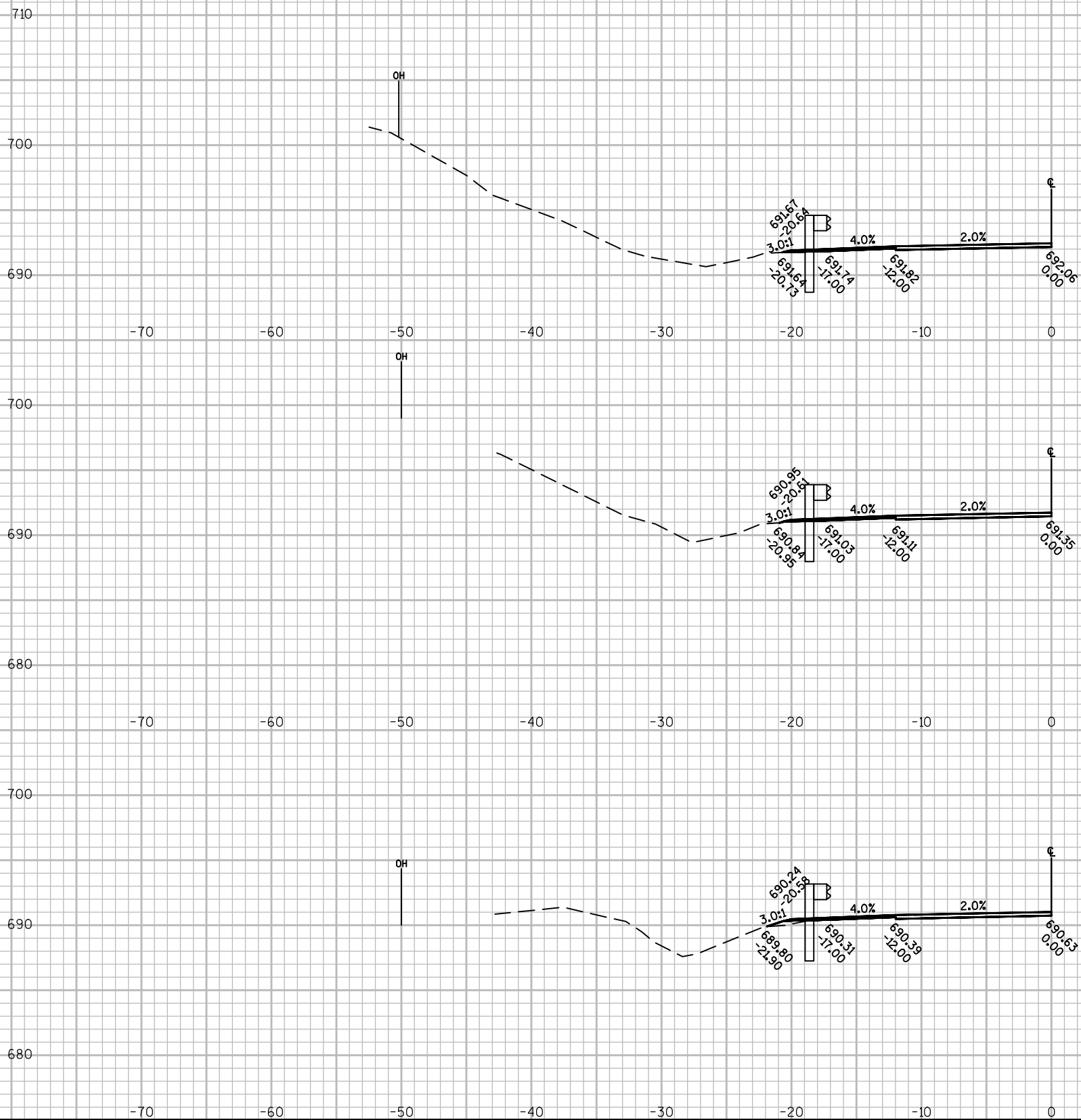
10 FT

10 FT

R/W IS LOCATED OUTSIDE SECTION LIMITS.



R/W IS LOCATED OUTSIDE SECTION LIMITS.



10 FT

10 FT

PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET

198

E

FILE NAME : W:\7062\CAD\T\MODELS\C3D\7062.01\SHEETSPLAN\090100.XS.DWG

PLOT DATE : 12/20/2016 11:20 AM

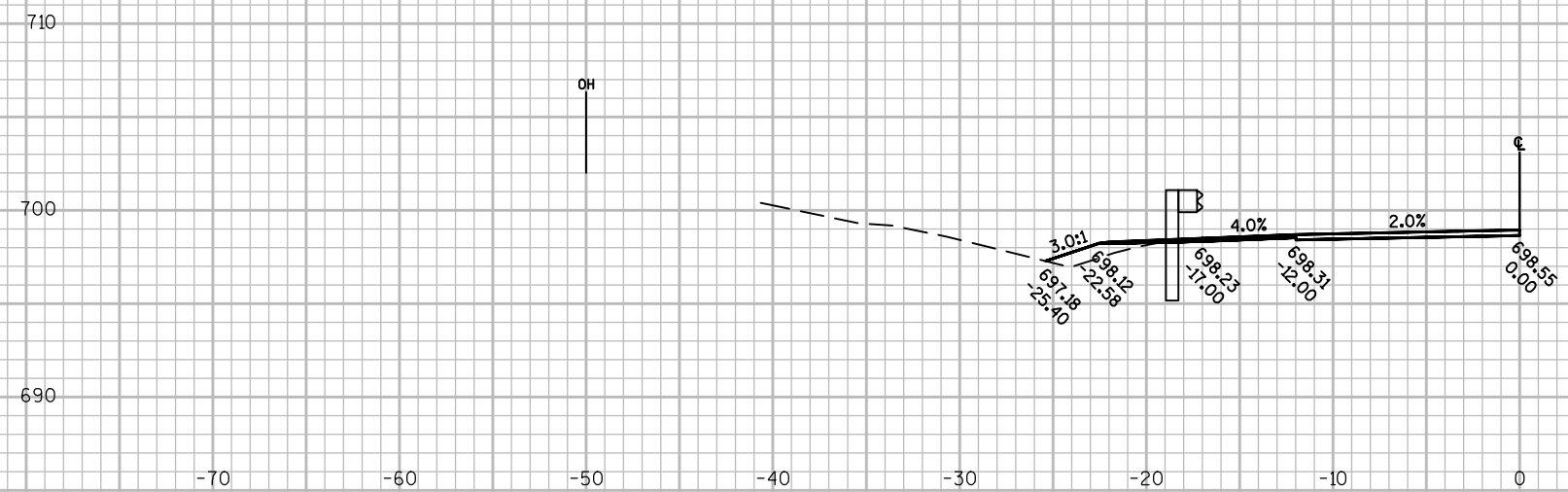
PLOT BY : DWORAK, ALEX

PLOT NAME :

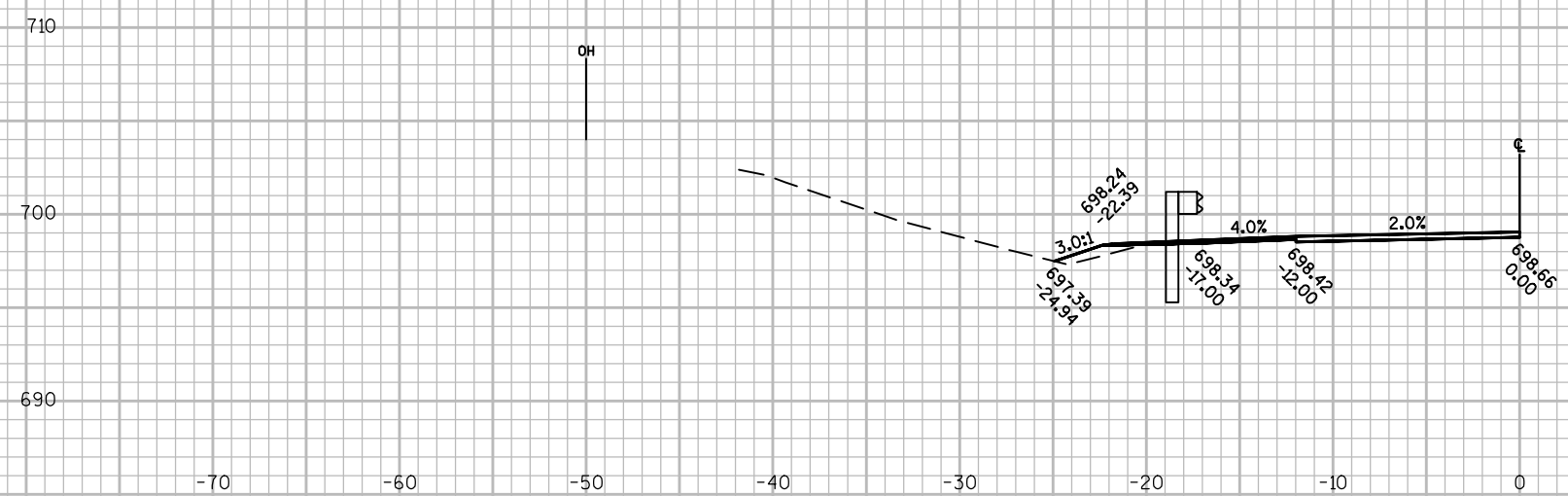
PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49

R/W IS LOCATED OUTSIDE SECTION LIMITS.



231+67
POST #9



231+39
POST #5

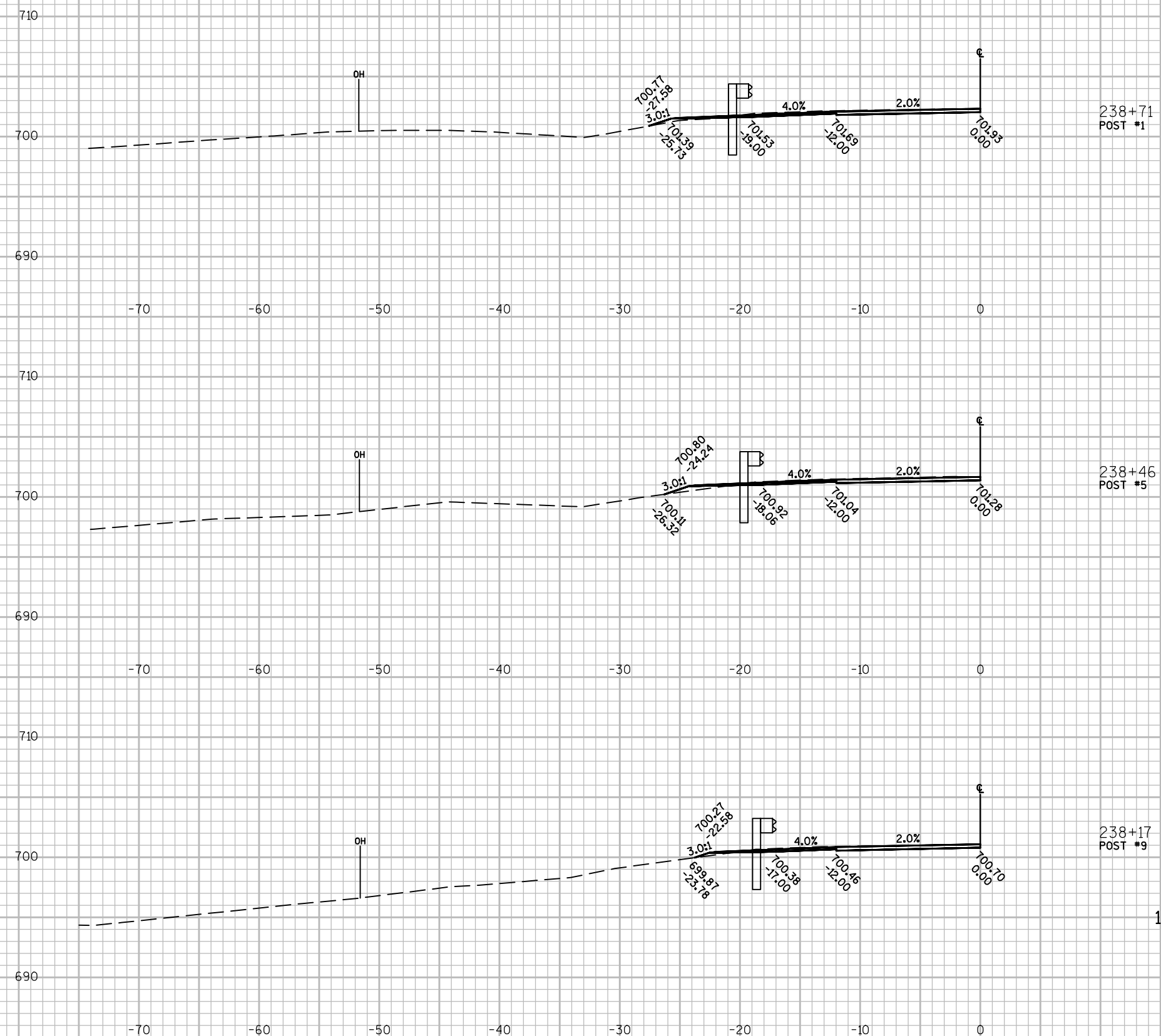


231+14
POST #1

10 FT

10 FT

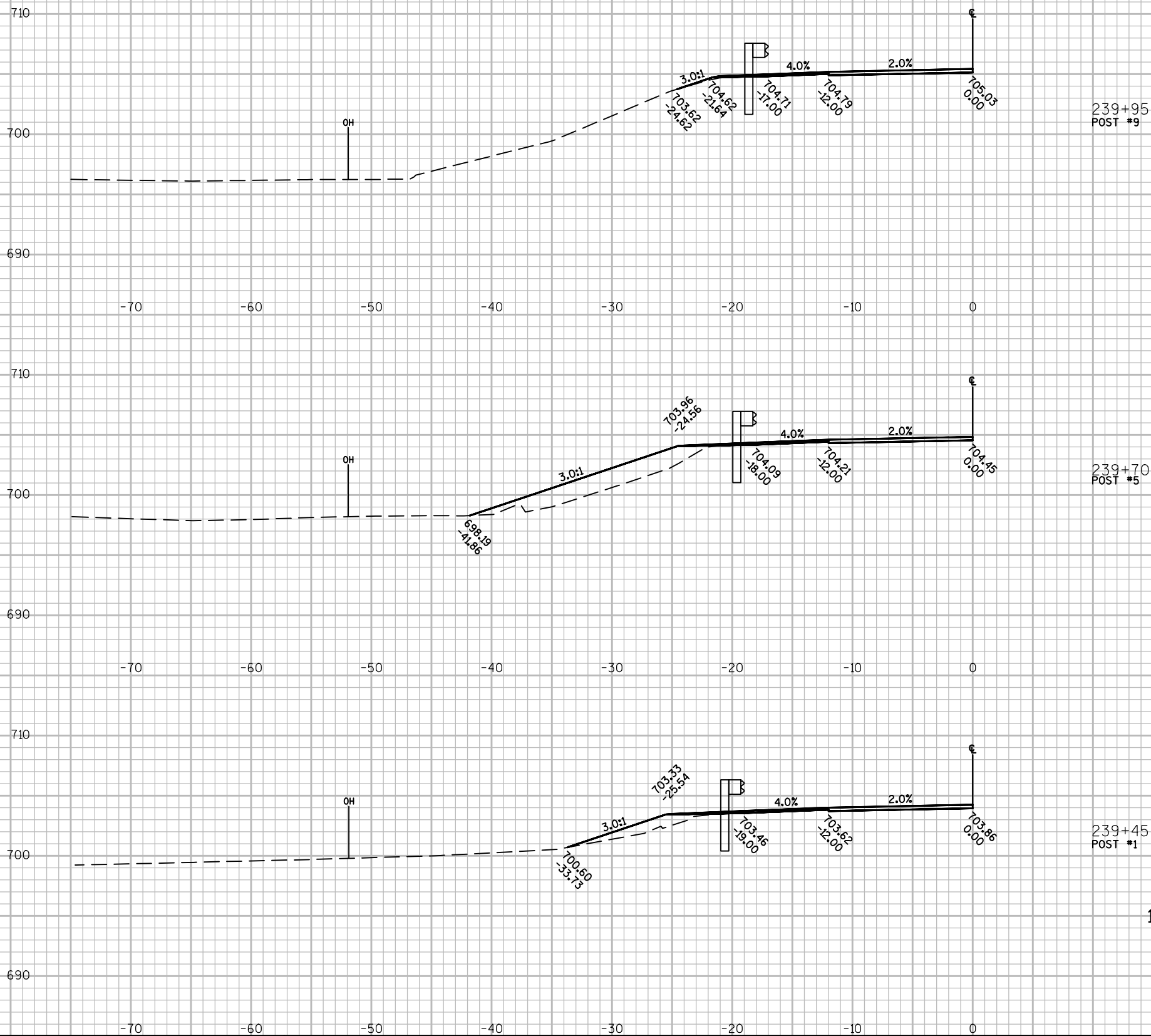
R/W IS LOCATED OUTSIDE SECTION LIMITS.



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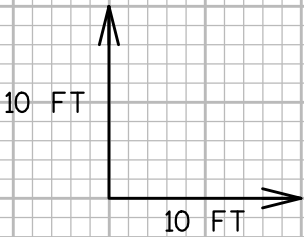
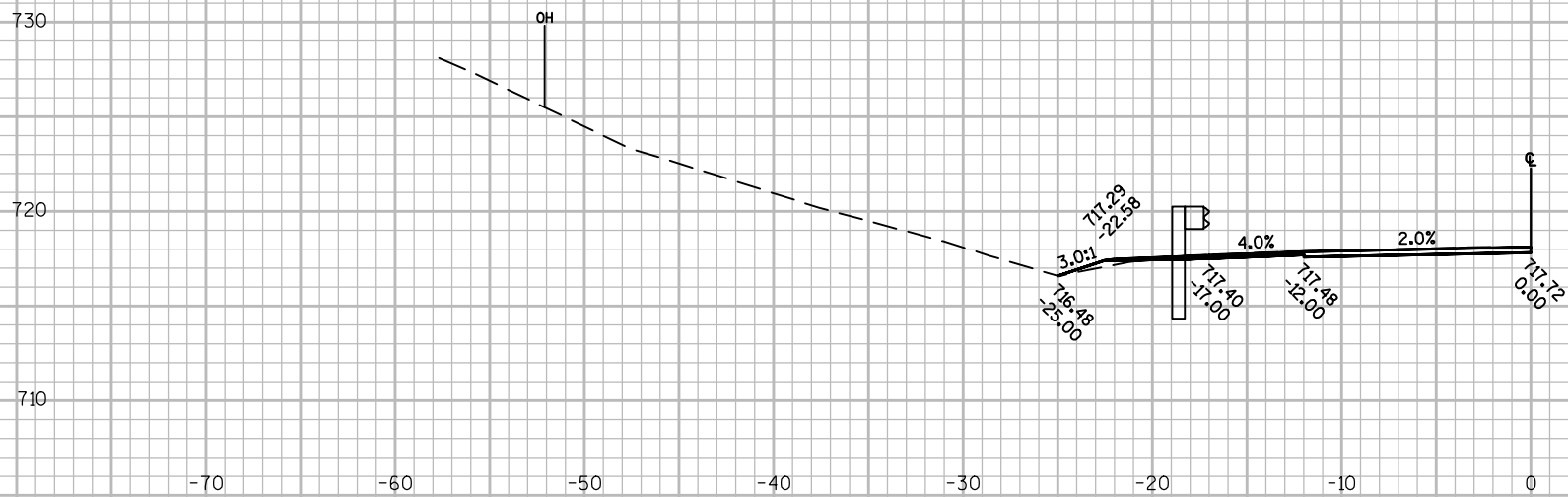
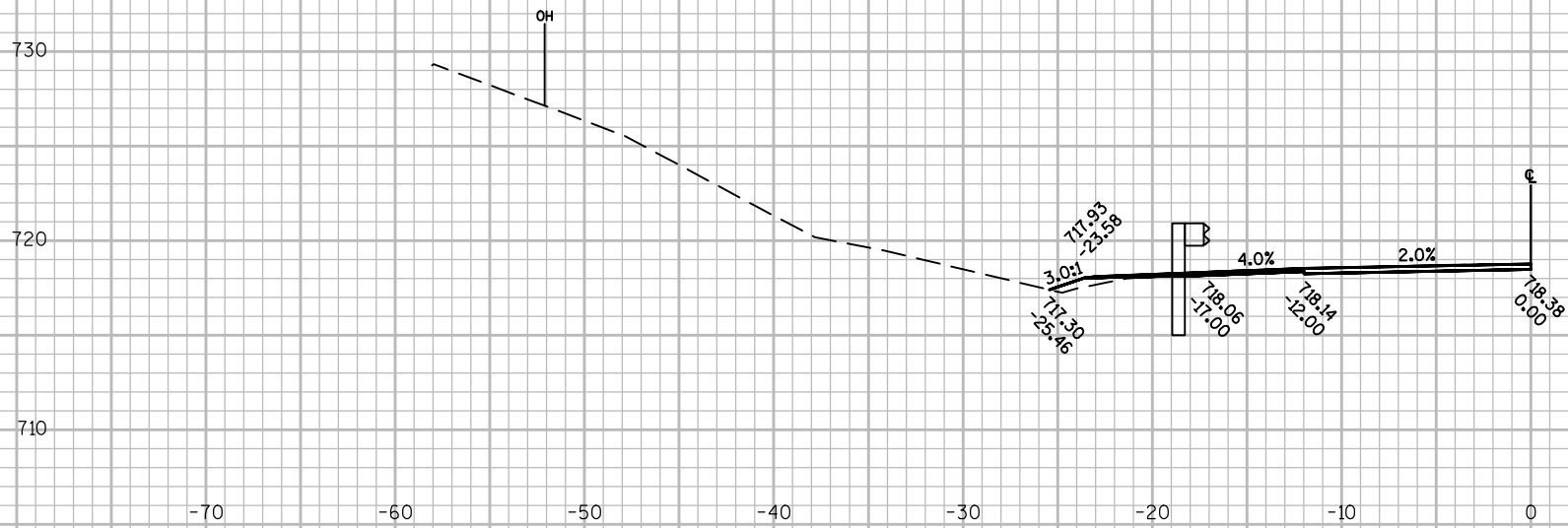
R/W IS LOCATED OUTSIDE SECTION LIMITS.



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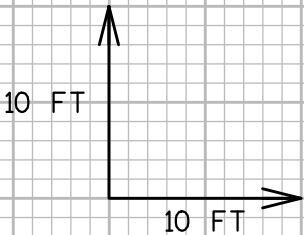
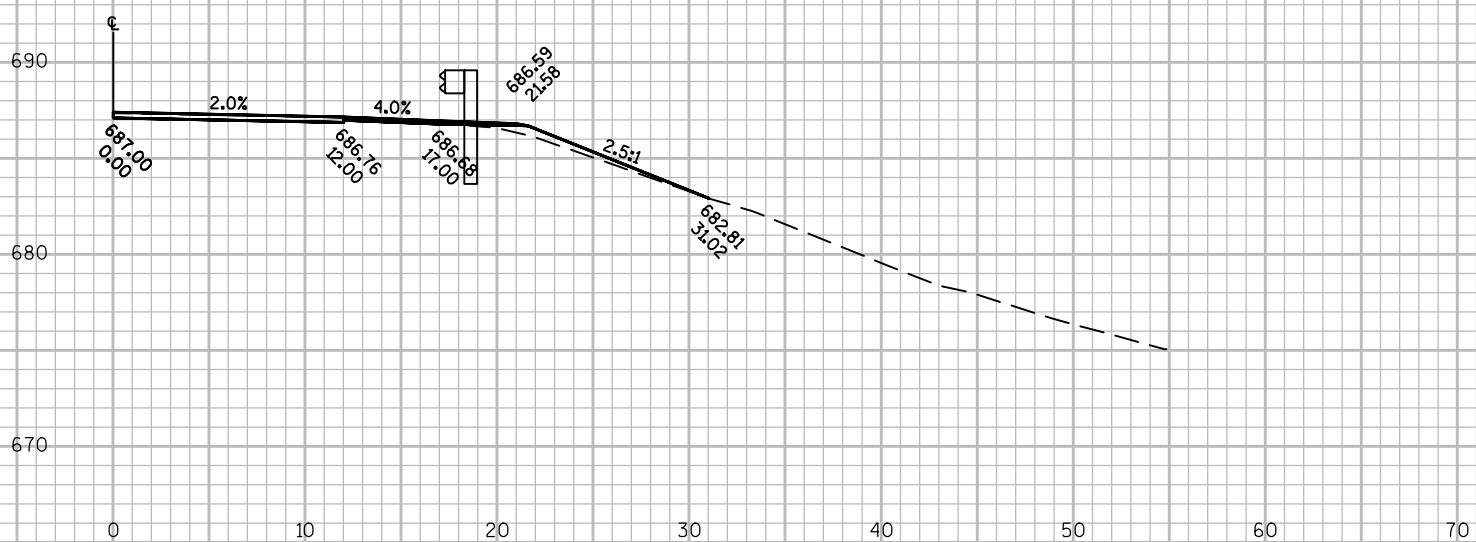
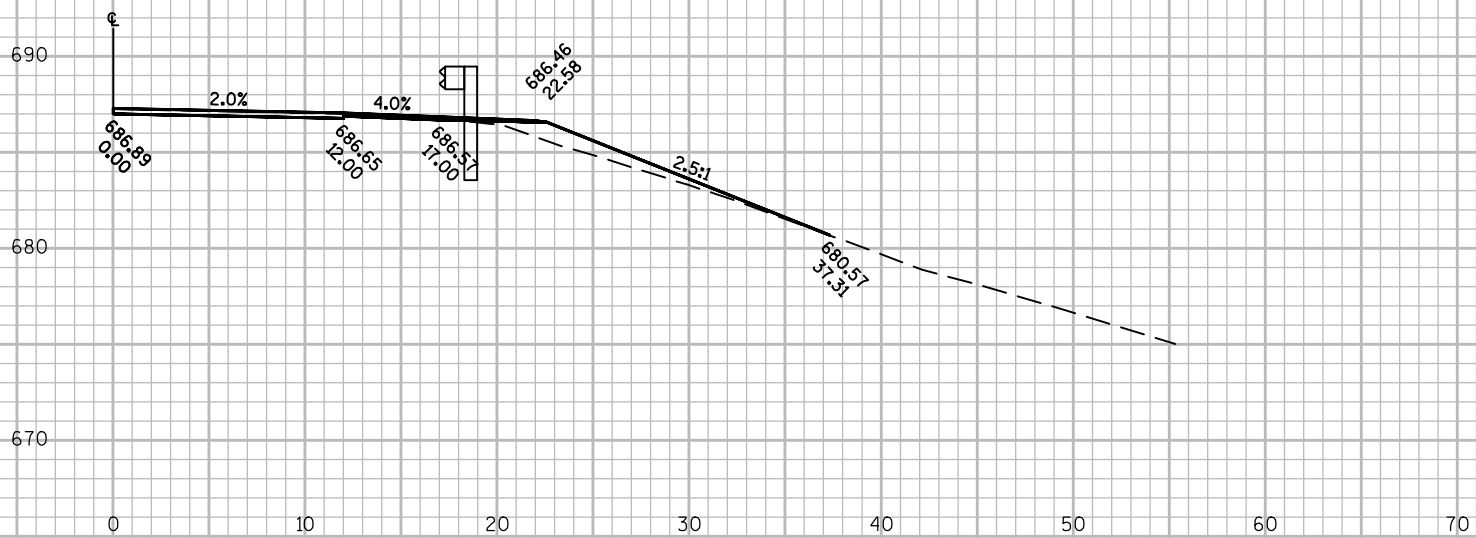
R/W IS LOCATED OUTSIDE SECTION LIMITS.



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R/W IS LOCATED OUTSIDE SECTION LIMITS.



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PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET 203

E

FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETSPLAN\090100.XS.DWG

PLOT DATE : 12/20/2016 11:21 AM

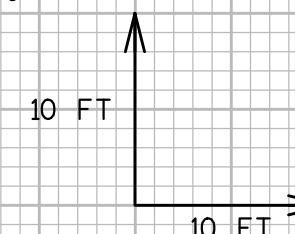
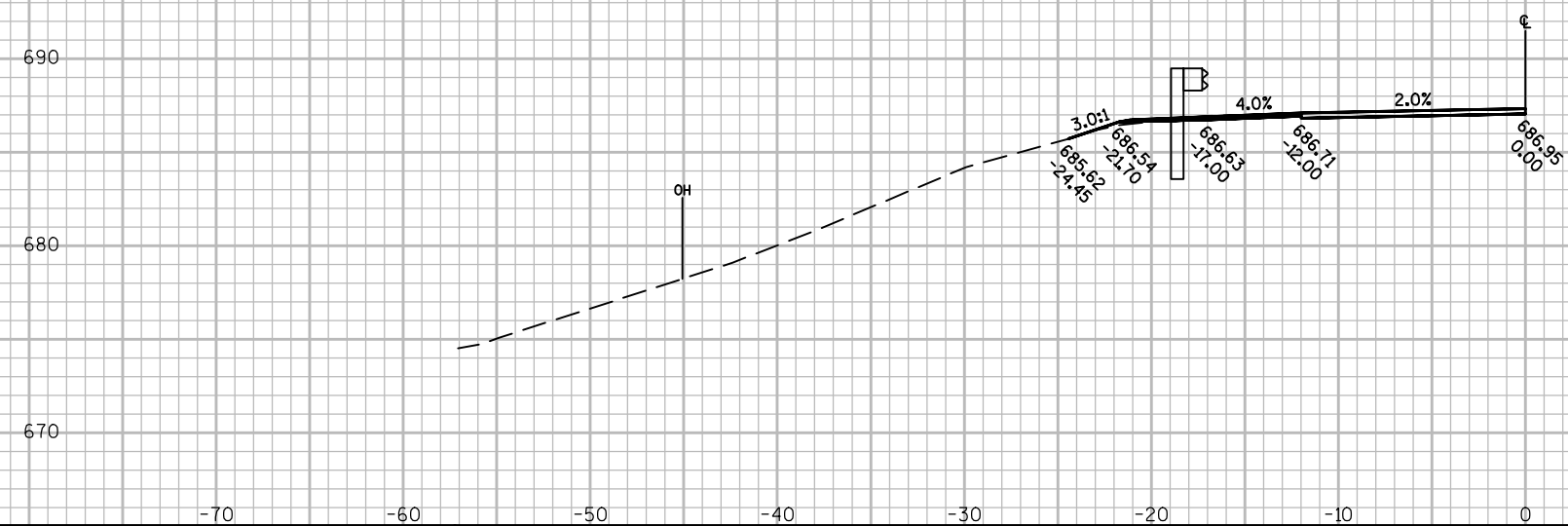
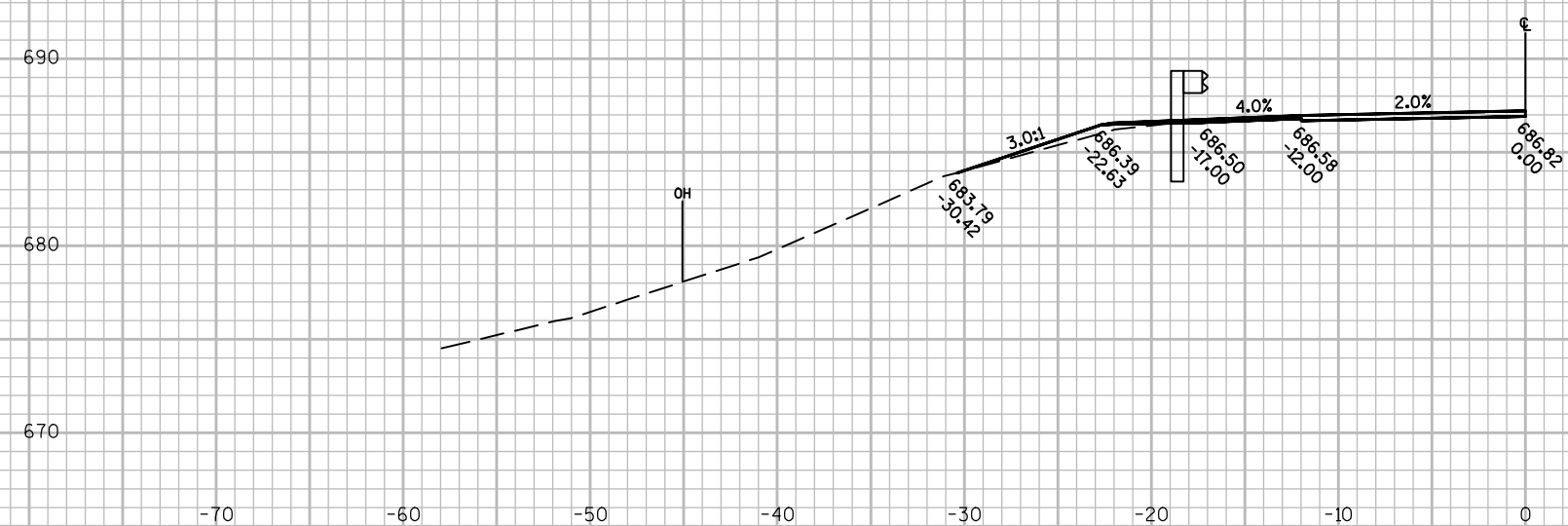
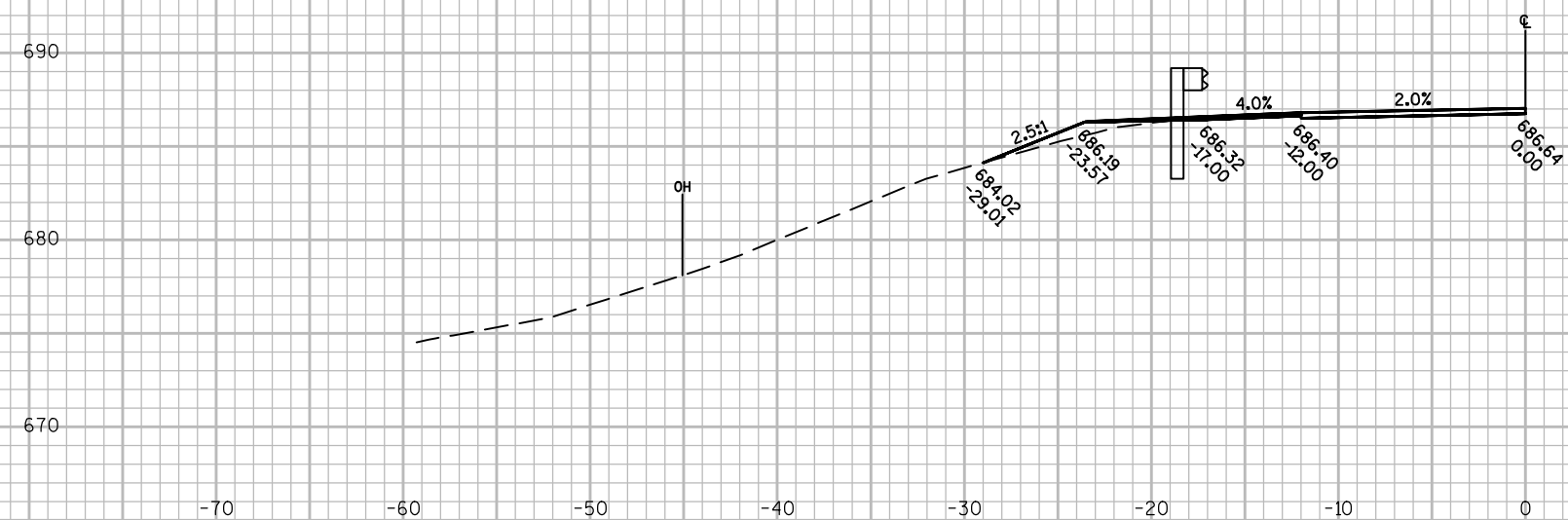
PLOT BY : DWORAK, ALEX

PLOT NAME :

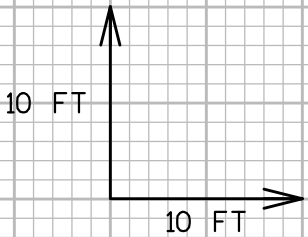
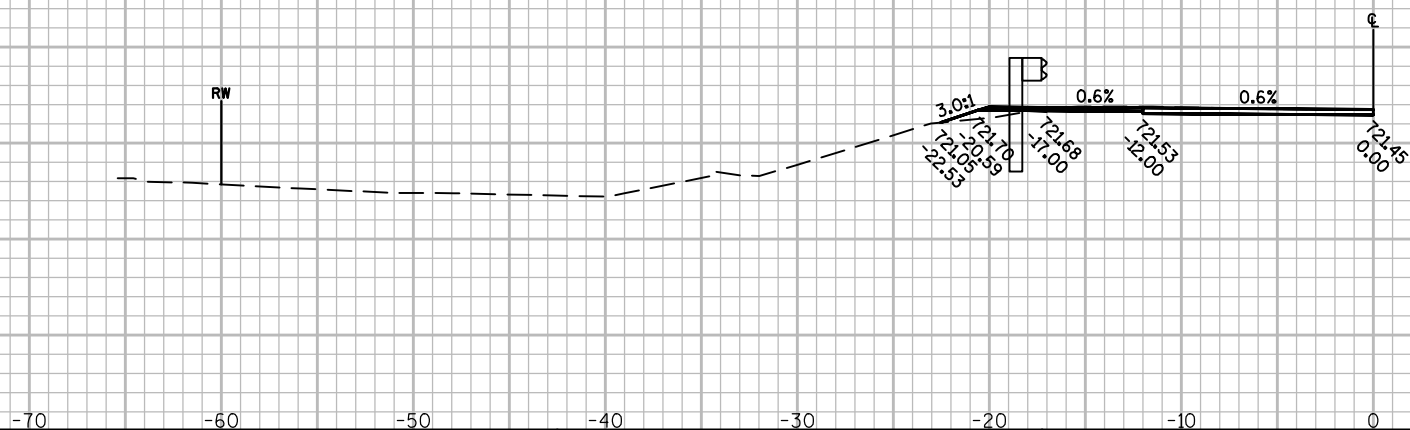
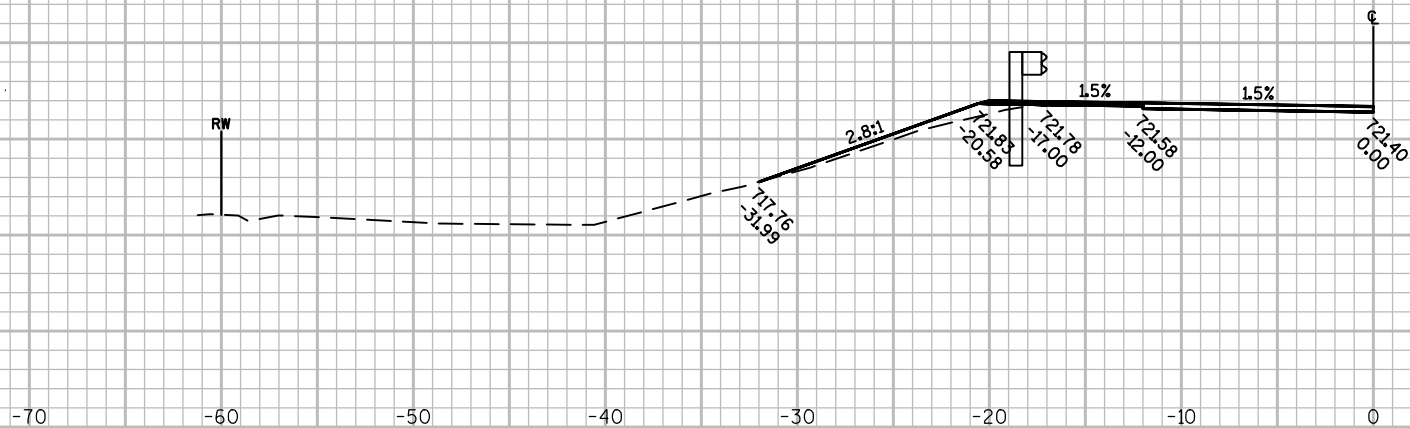
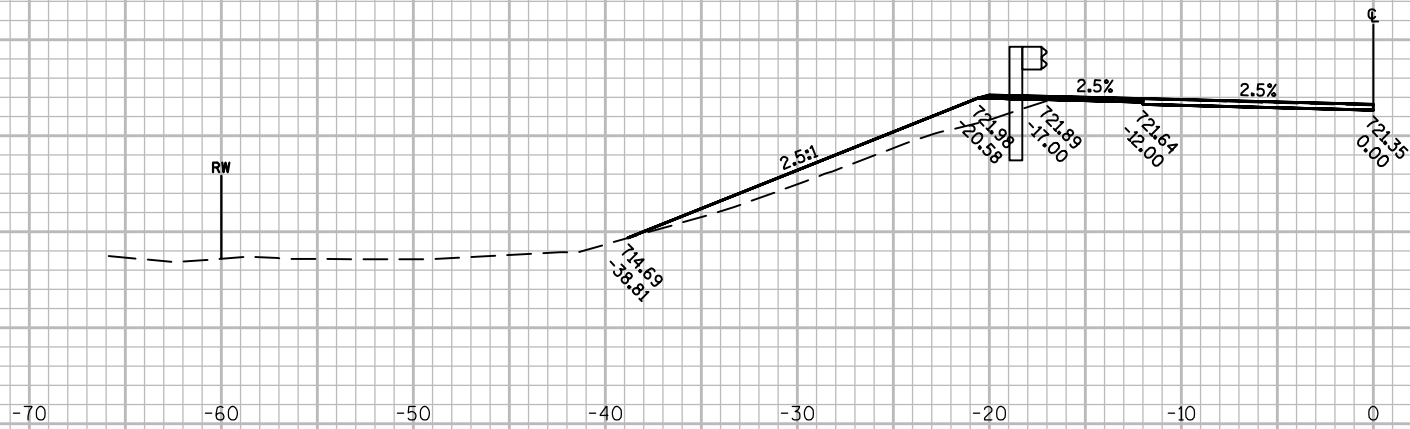
PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49

R/W IS LOCATED OUTSIDE SECTION LIMITS.



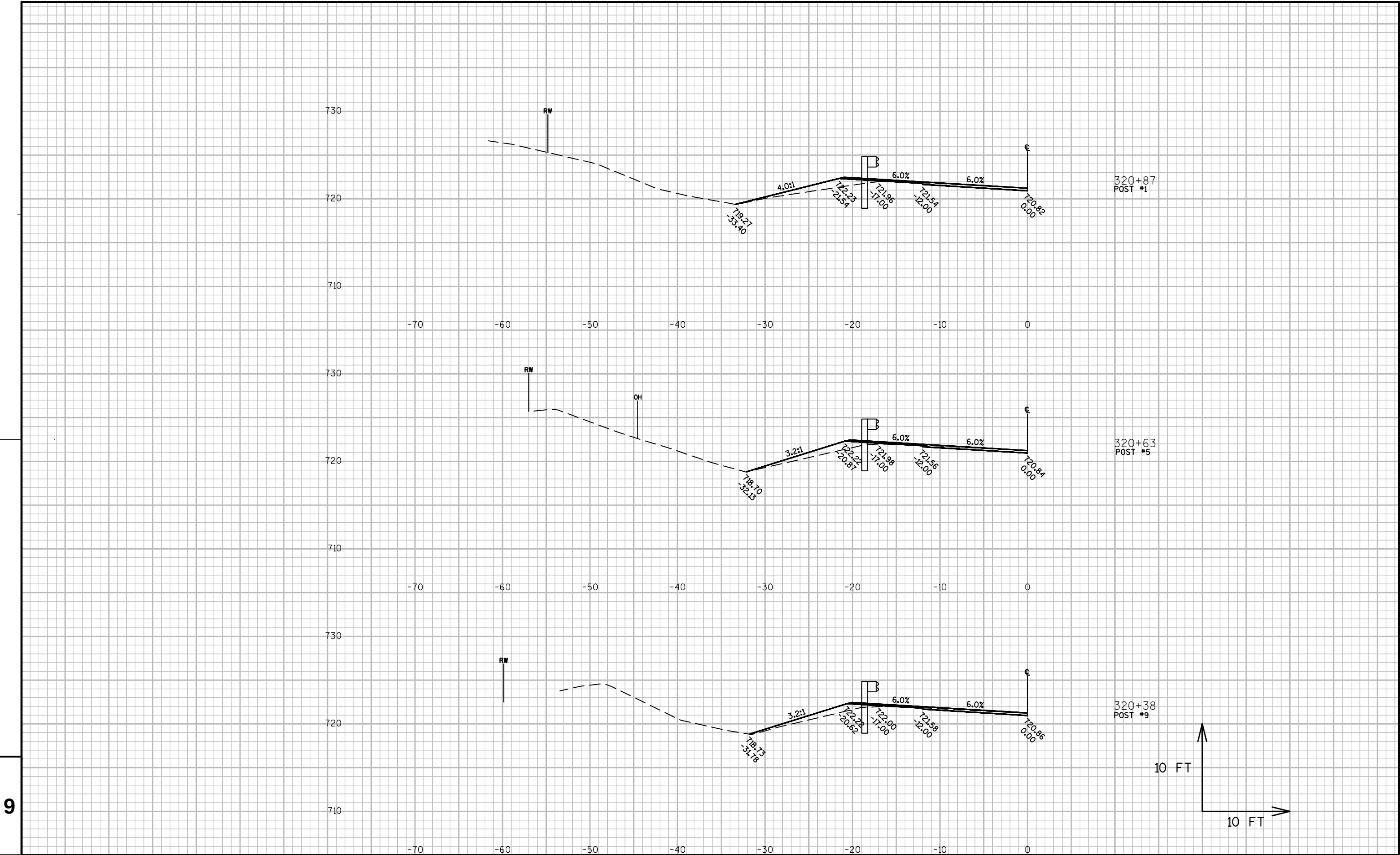
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

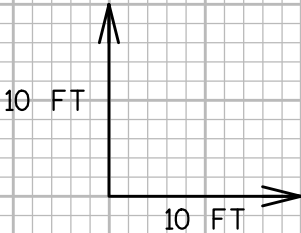
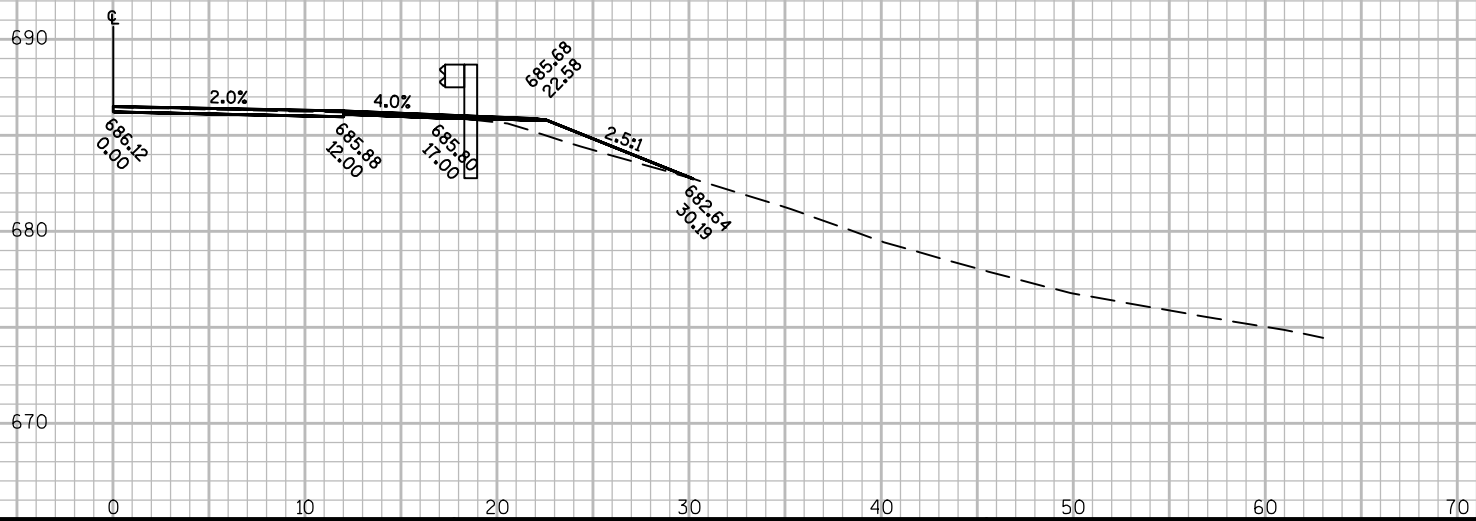
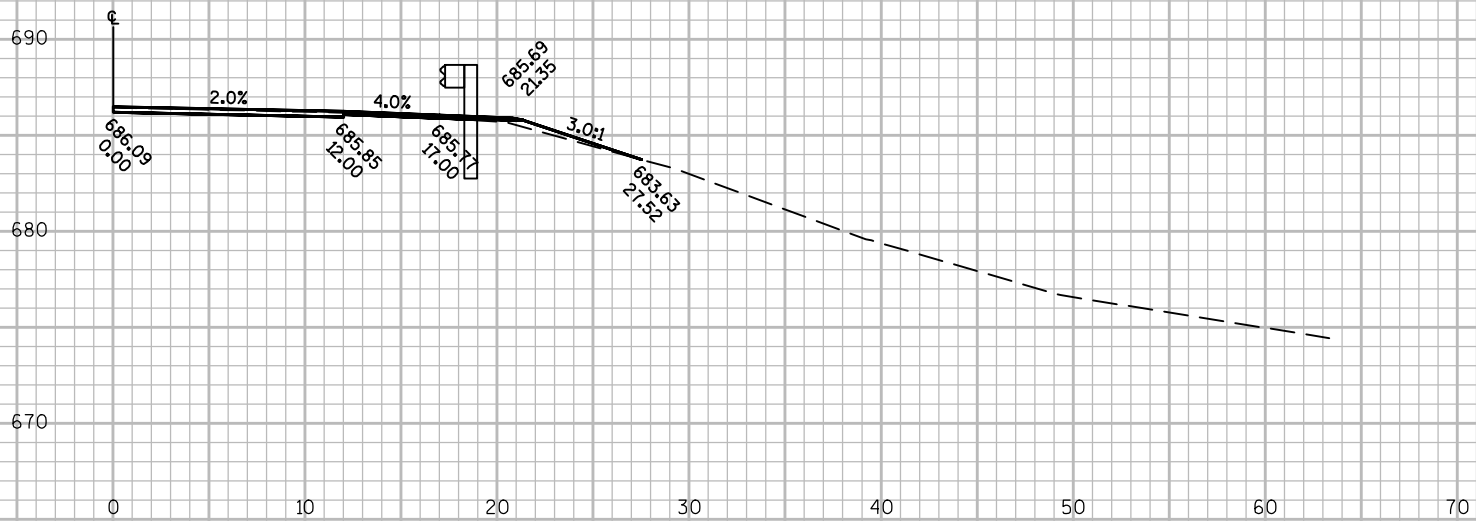
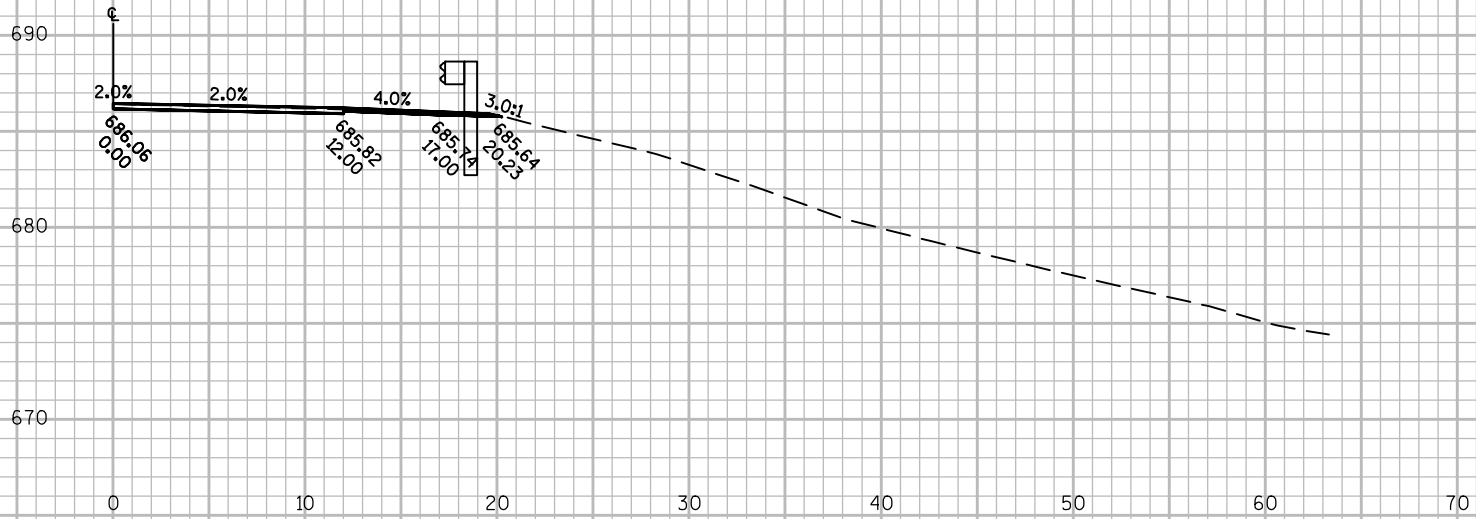
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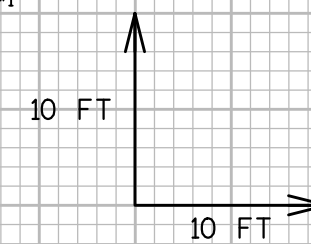
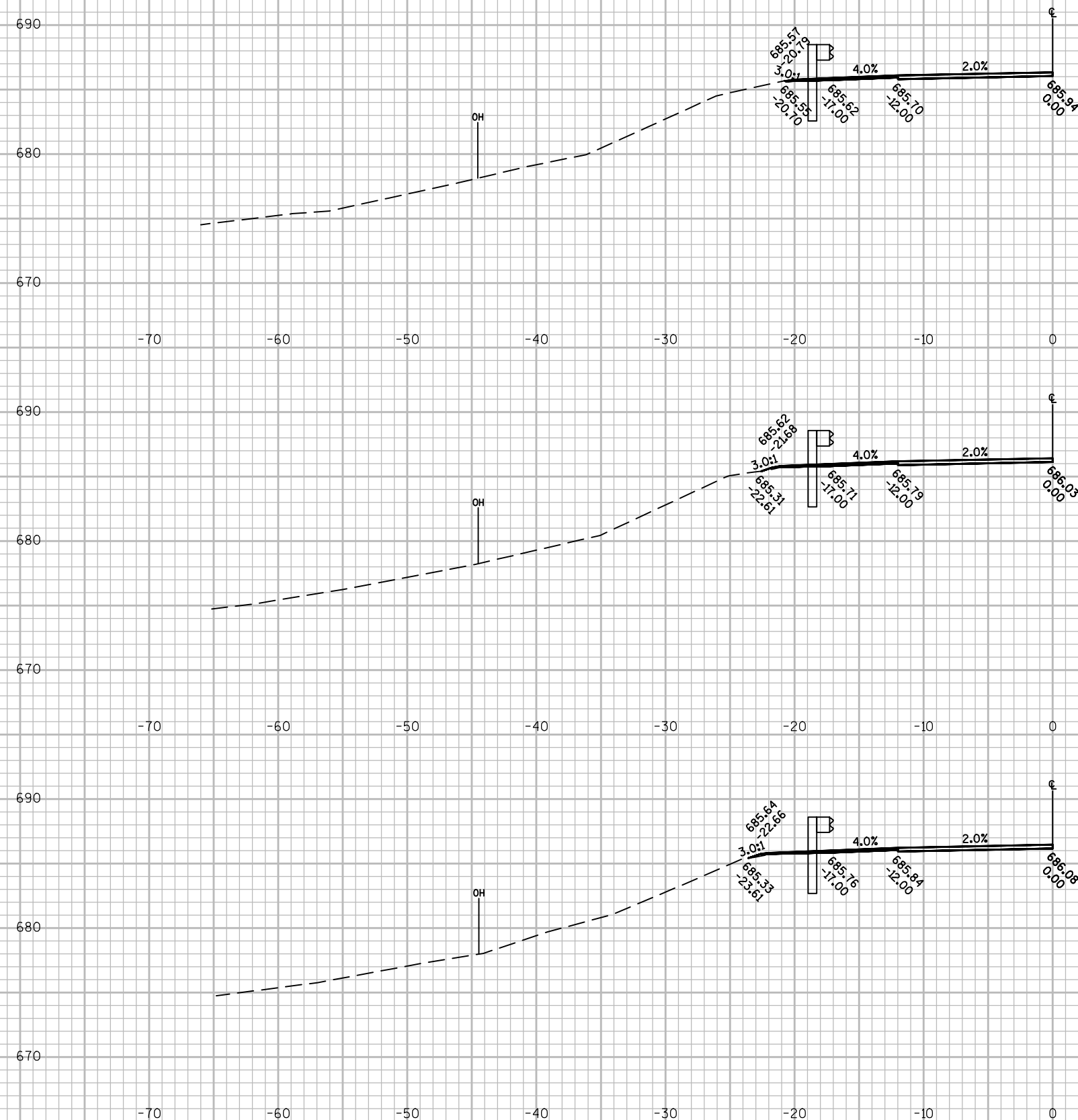
R/W IS LOCATED OUTSIDE SECTION LIMITS.

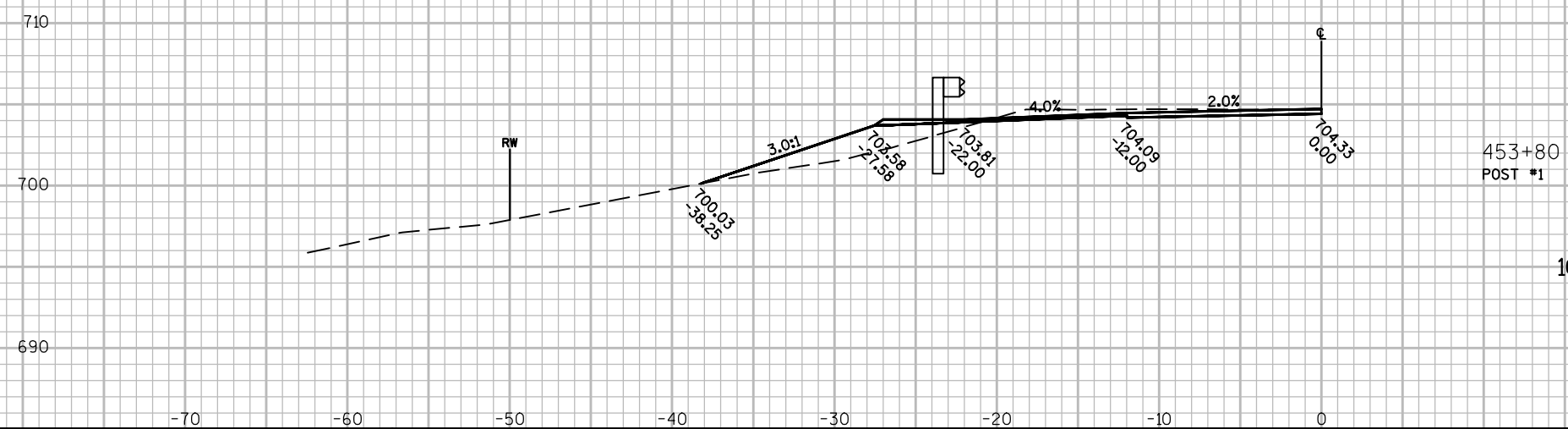
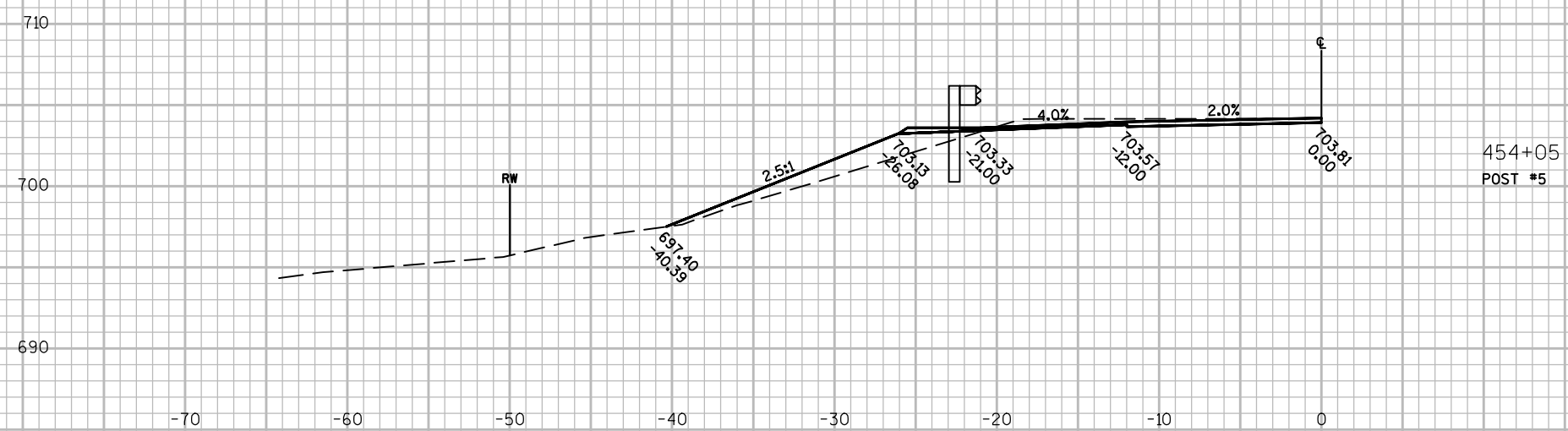
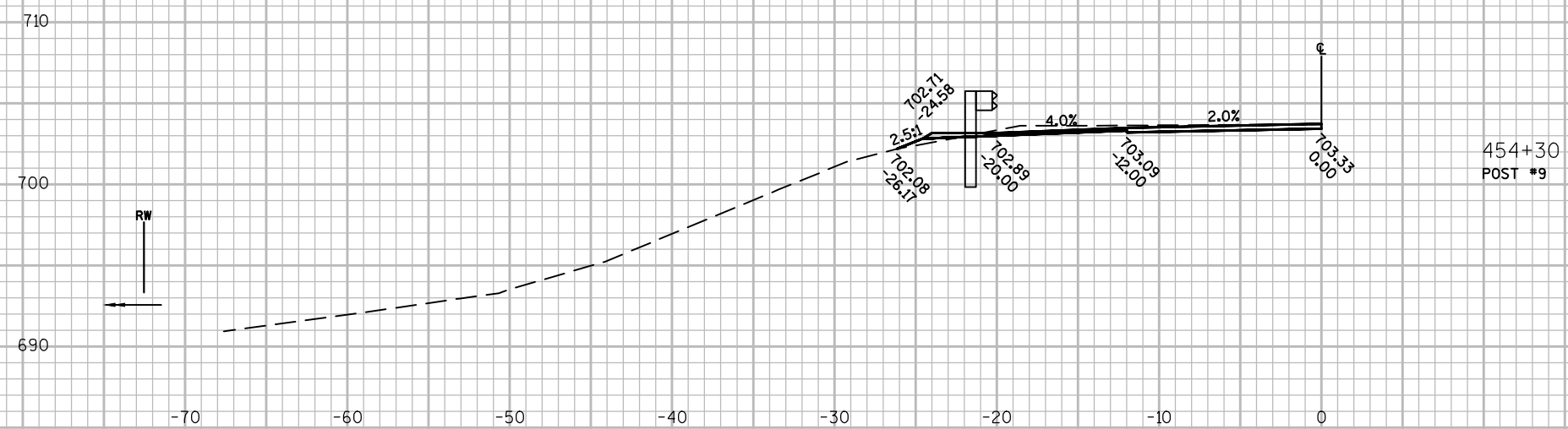


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R/W IS LOCATED OUTSIDE SECTION LIMITS.





10 FT

10 FT

PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET	209
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E

FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETSPLAN\090100_XS.DWG

PLOT DATE : 12/20/2016 11:21 AM

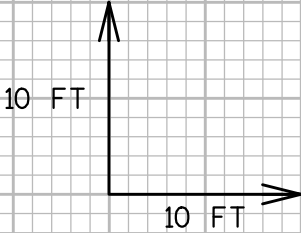
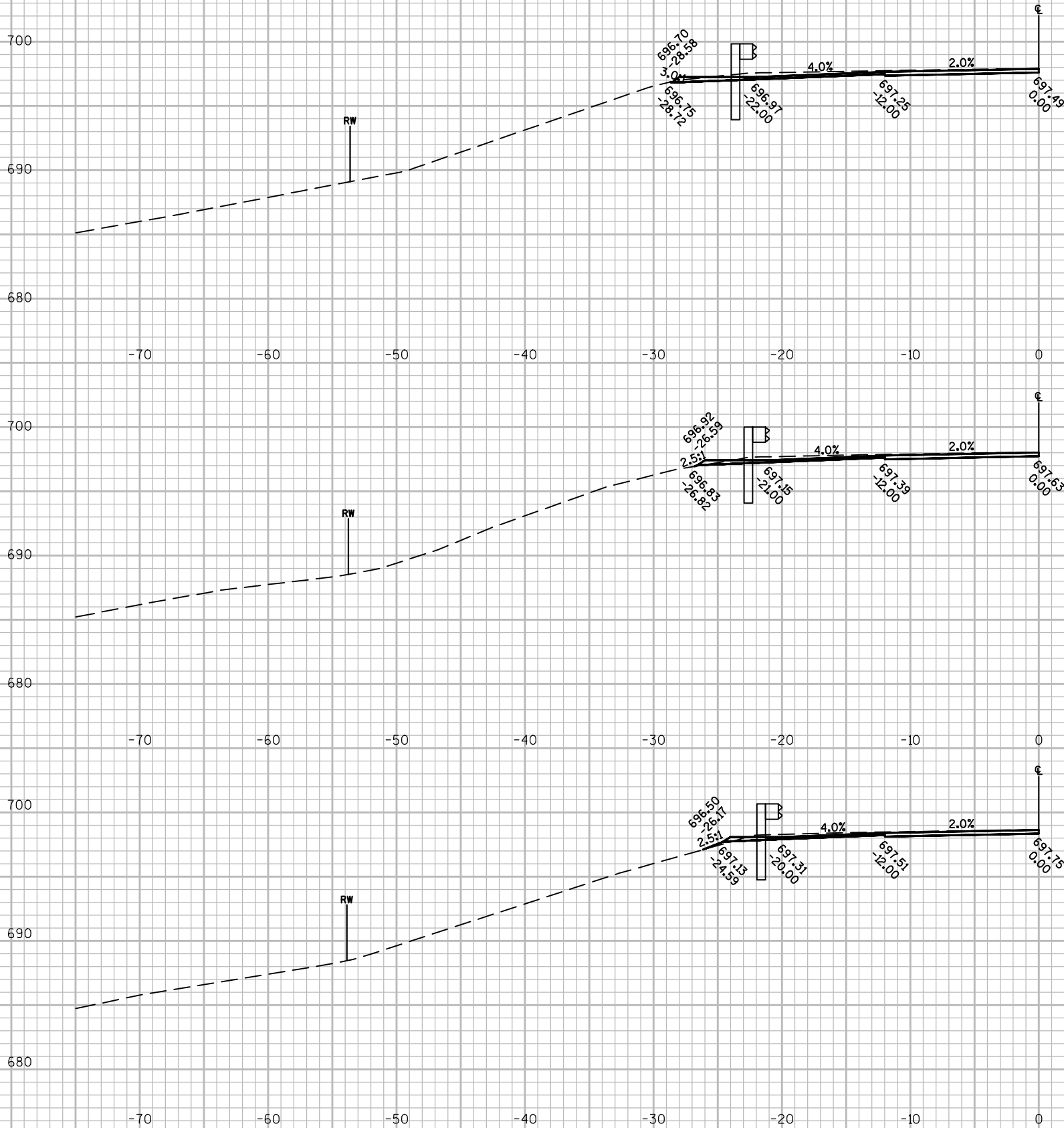
PLOT BY : DWORAK, ALEX

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

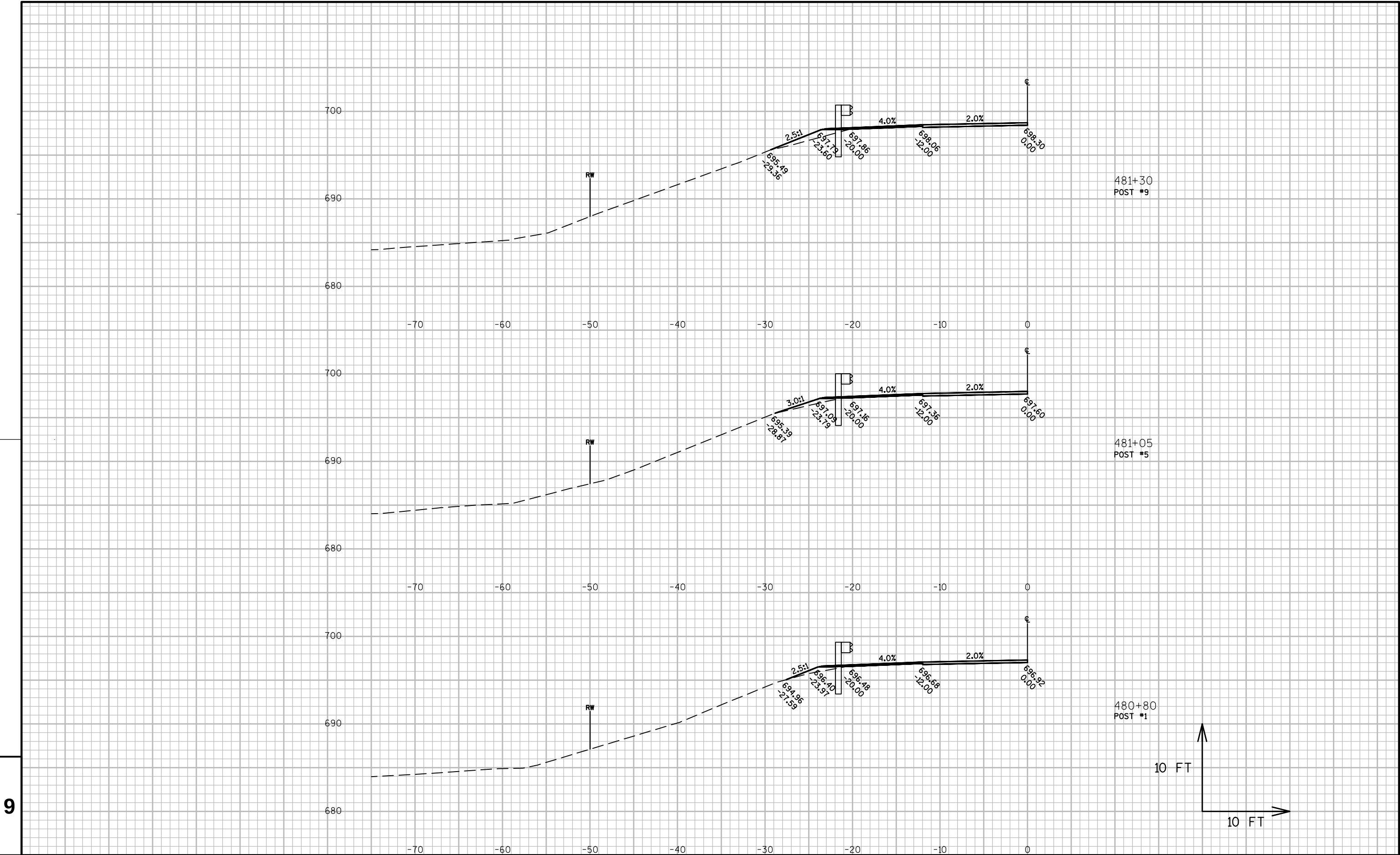
WISDOT/CADDS SHEET 49

9



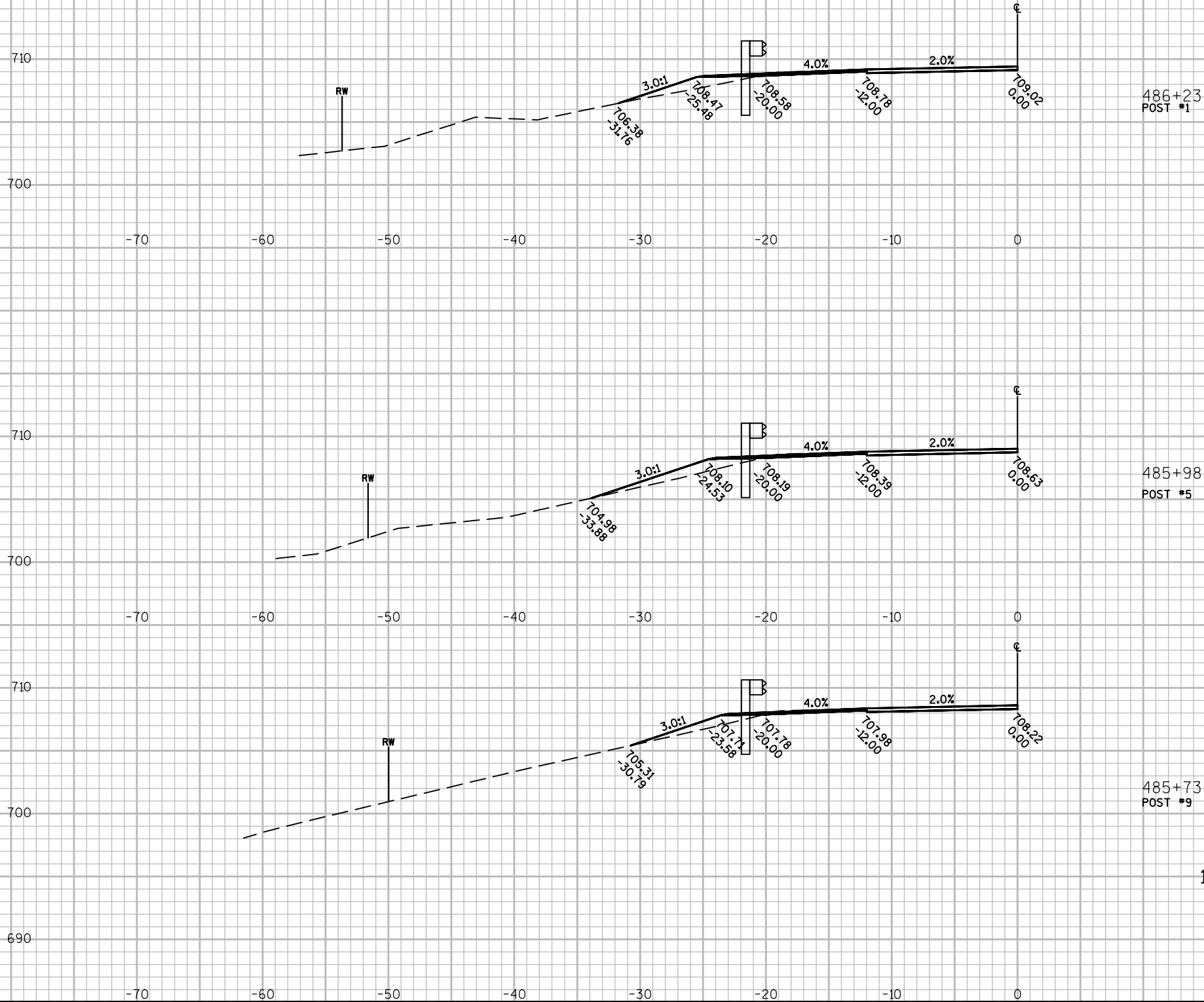
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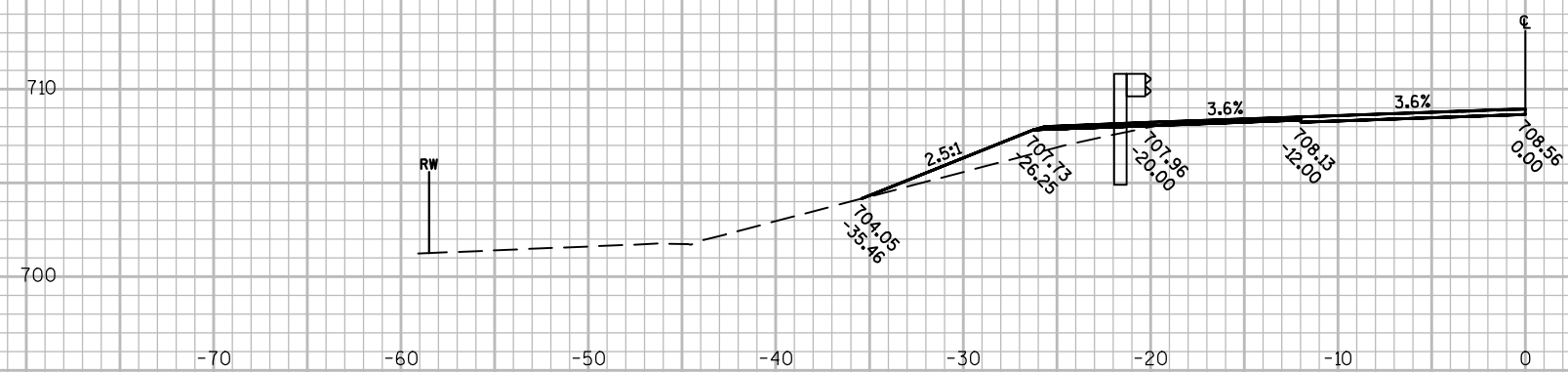
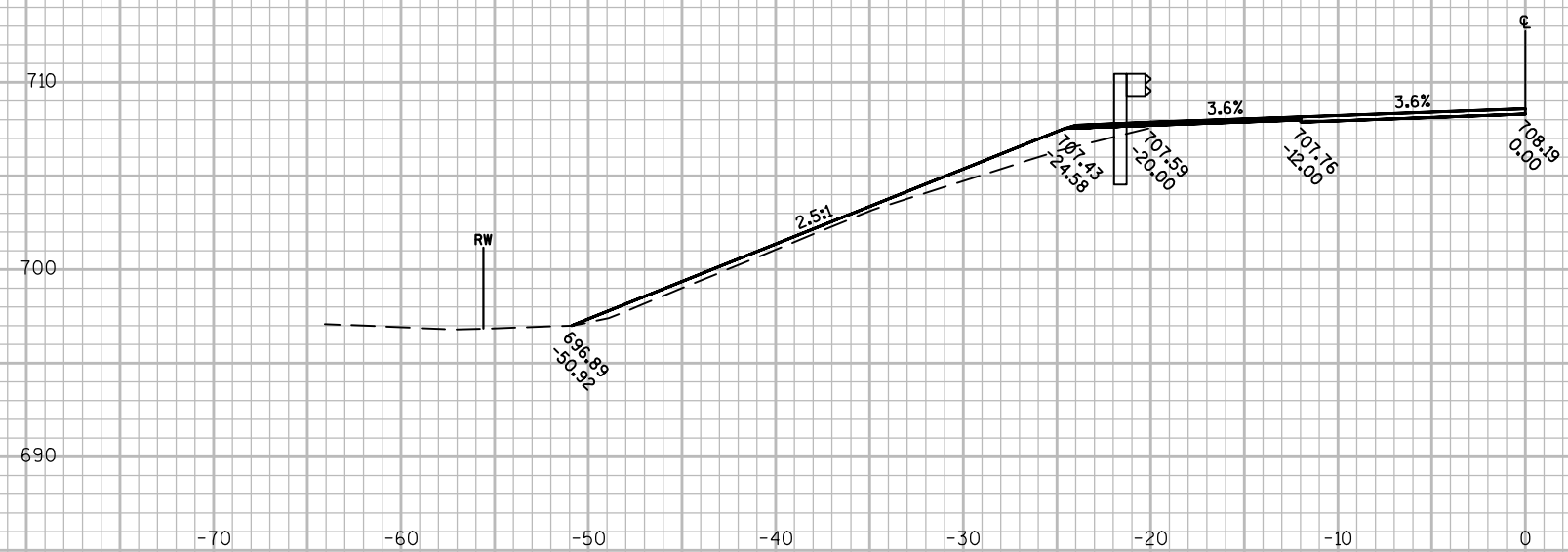


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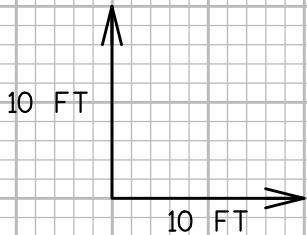
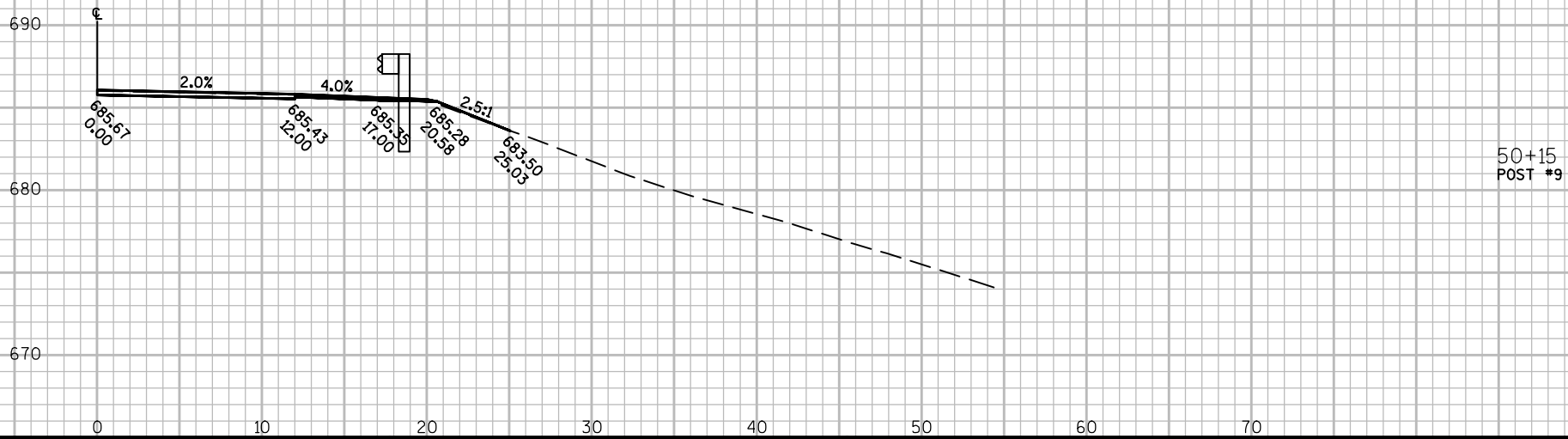
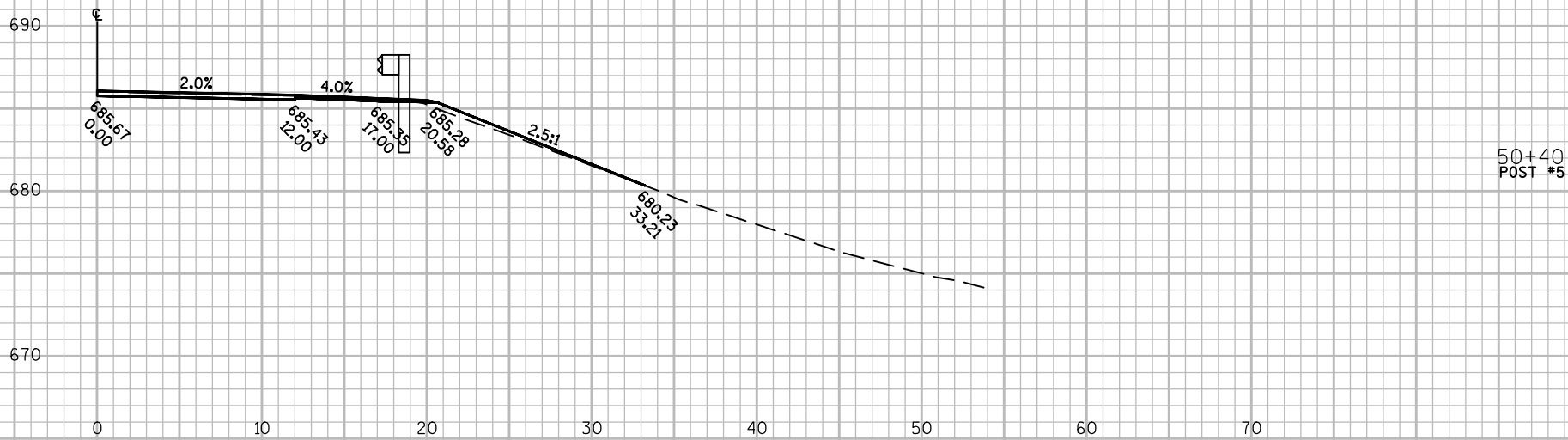
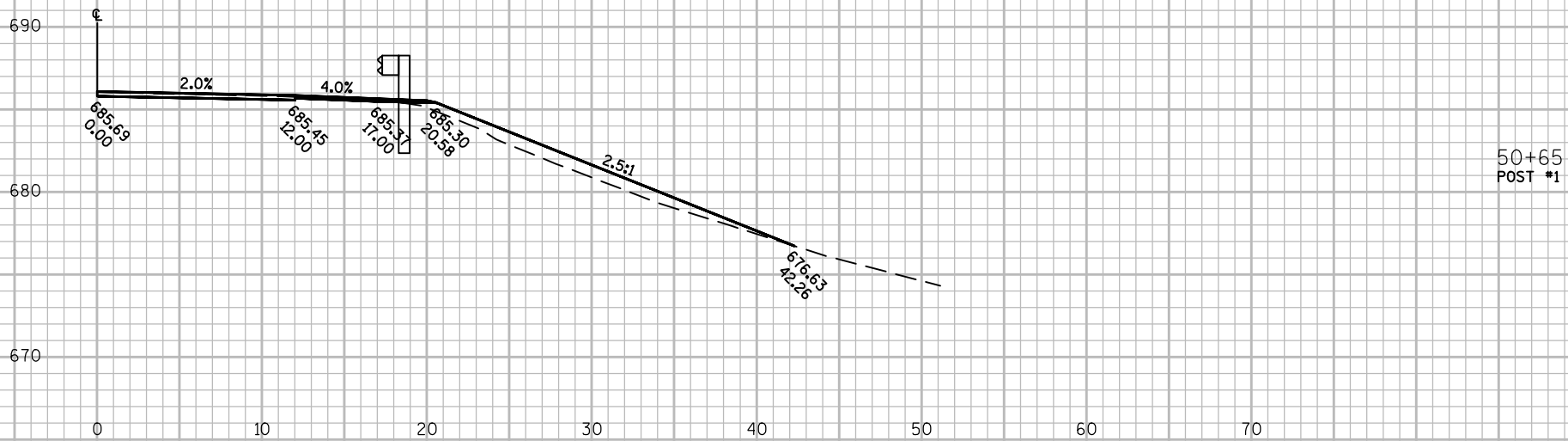
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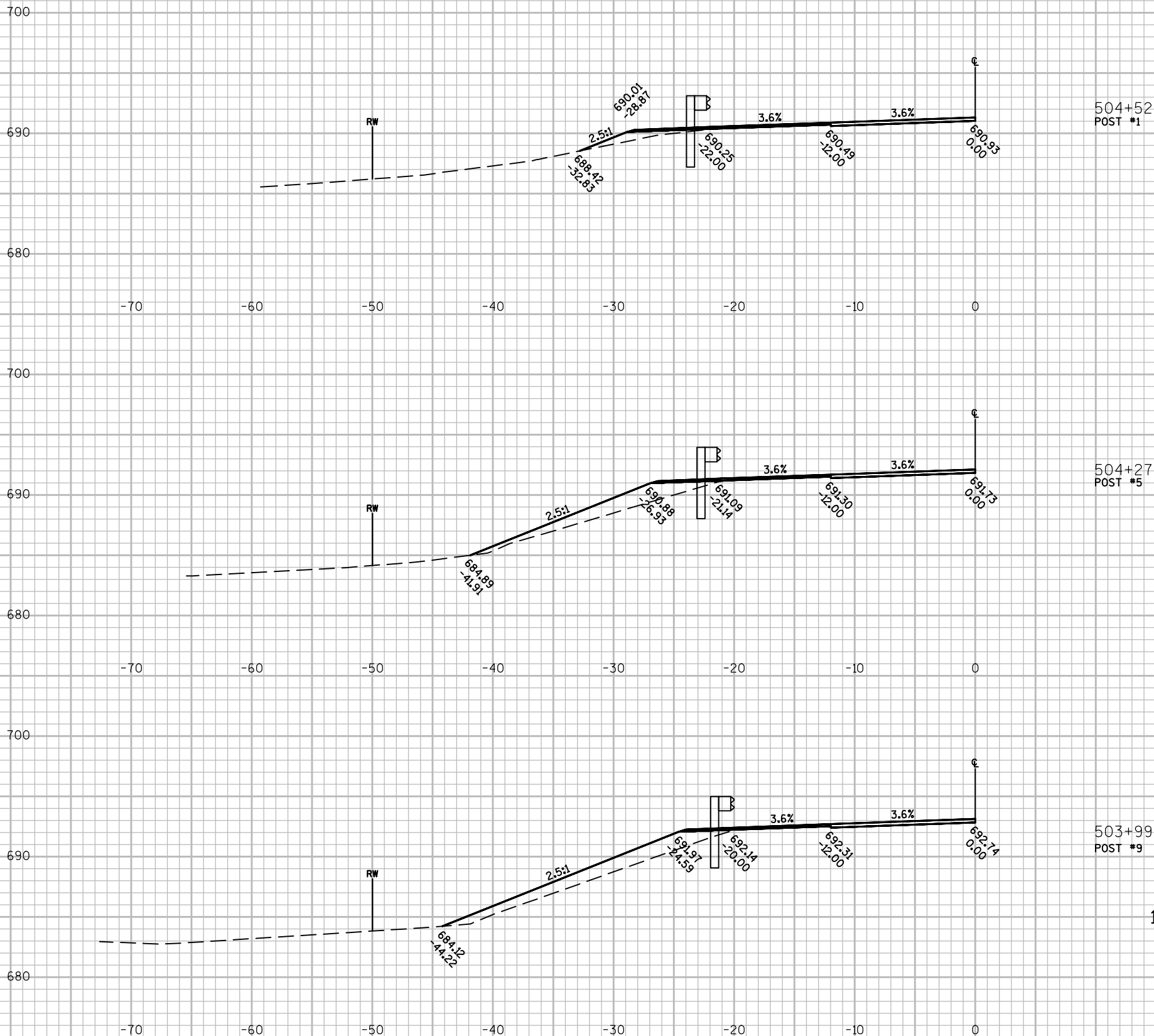
R/W IS LOCATED OUTSIDE SECTION LIMITS.



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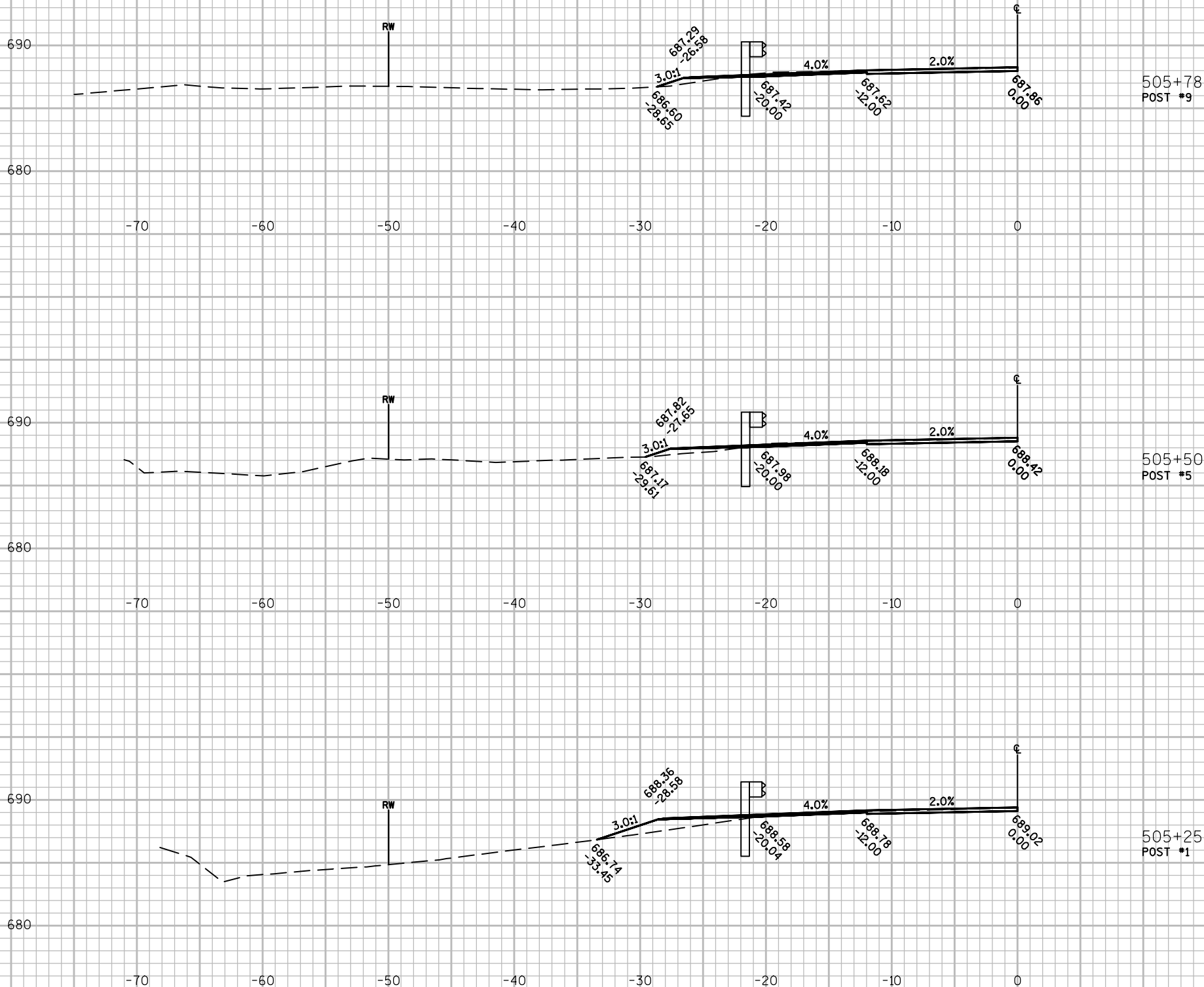
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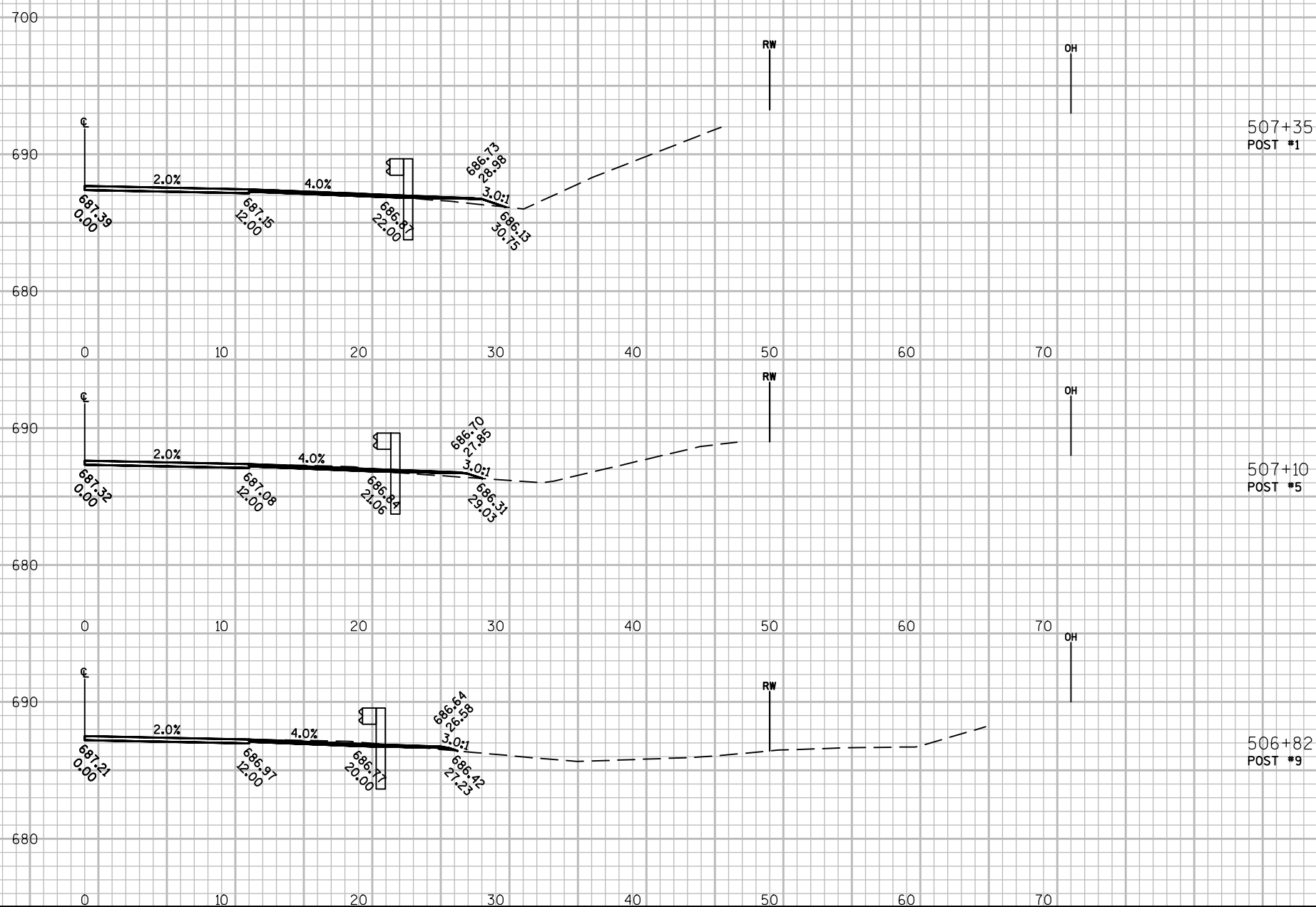


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PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET

218

E

FILE NAME : W:\7062\CAD\MODELS\C3D\7062.01\SHEETPLAN\090100.XS.DWG

PLOT DATE : 12/20/2016 11:23 AM

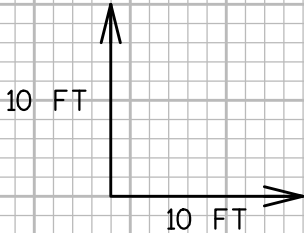
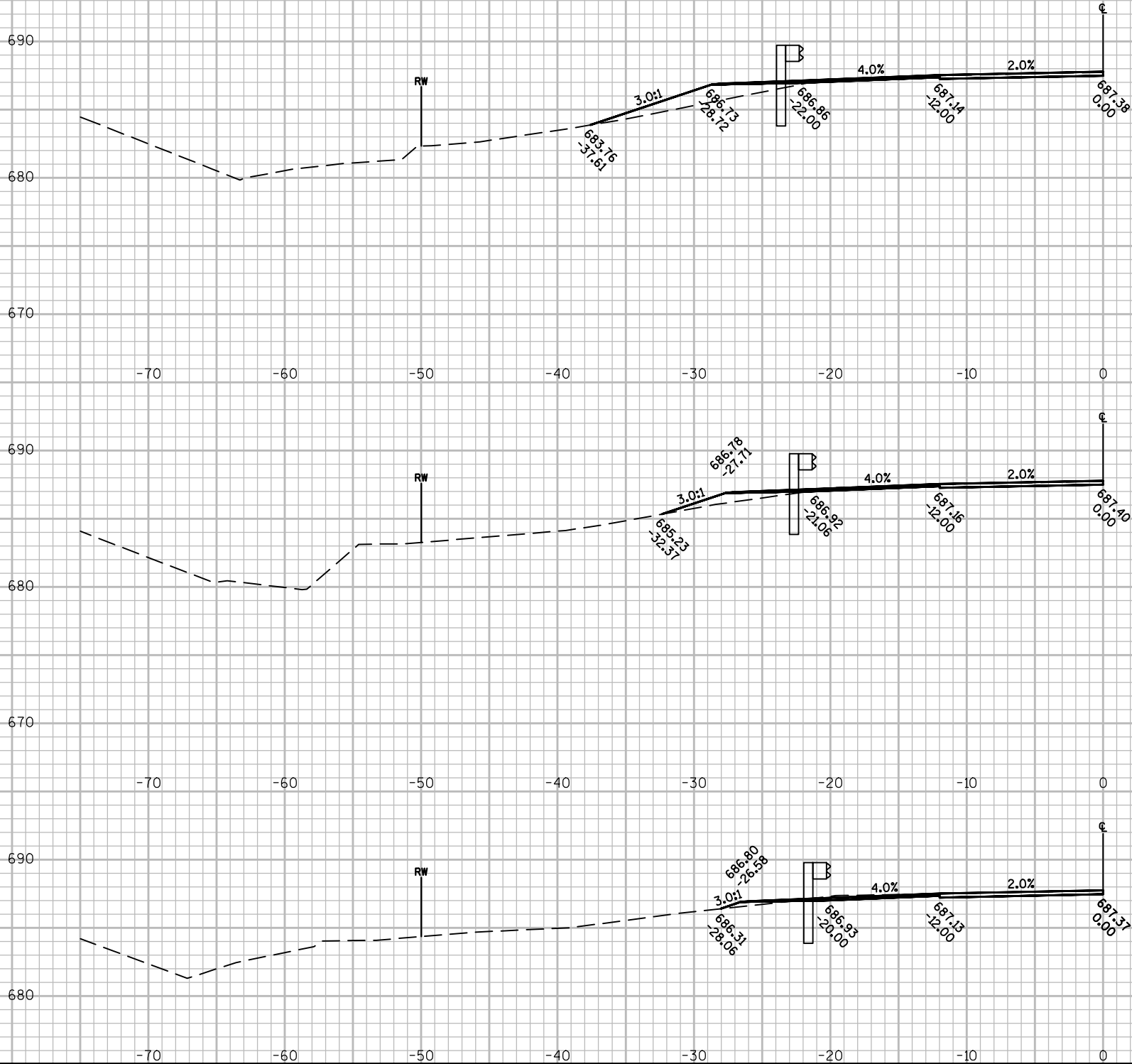
PLOT BY : DWORAK, ALEX

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

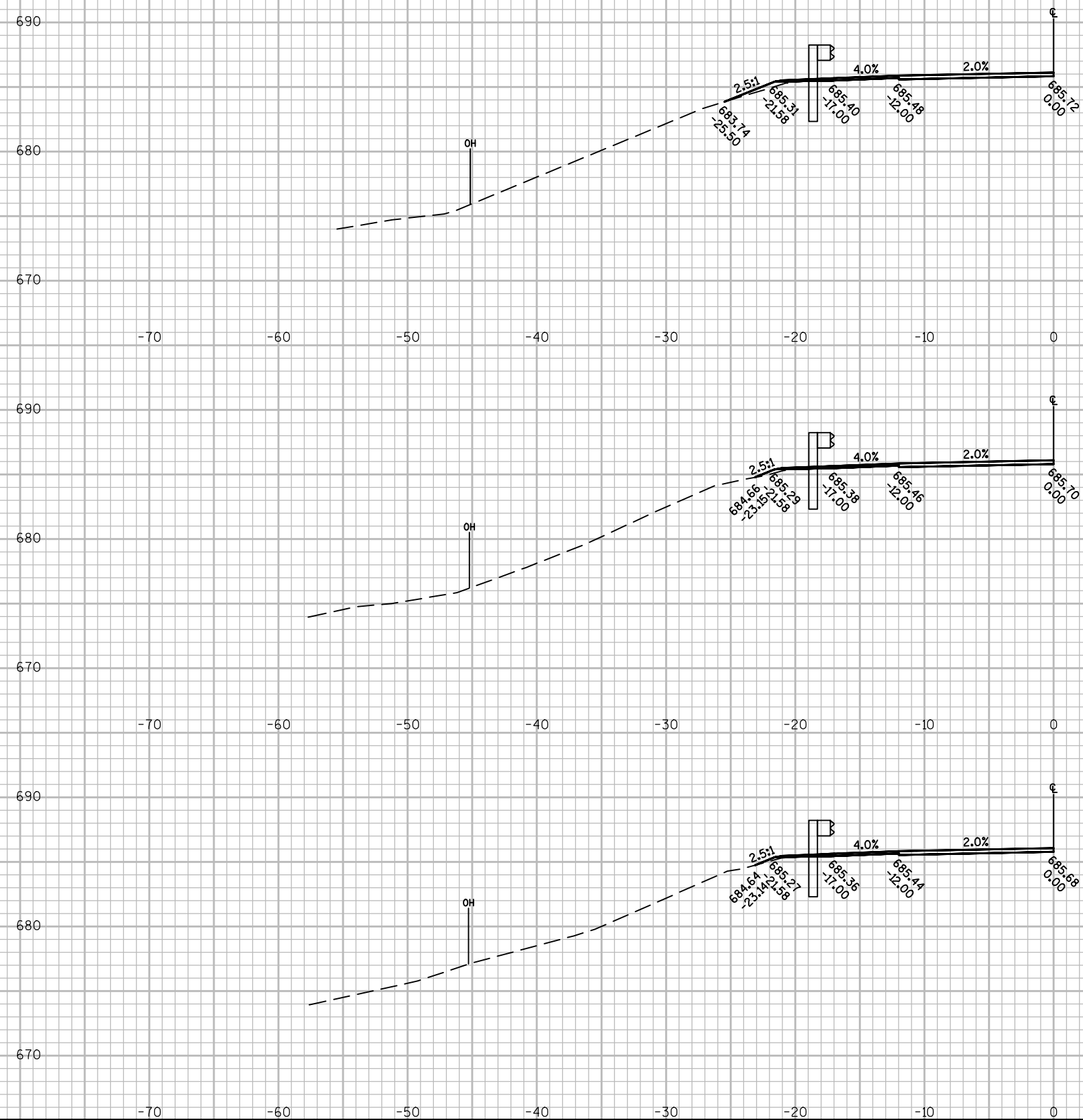
WISDOT/CADDs SHEET 49

9



9

R/W IS LOCATED OUTSIDE SECTION LIMITS.



10 FT

10 FT

PROJECT NO:1720-00-70

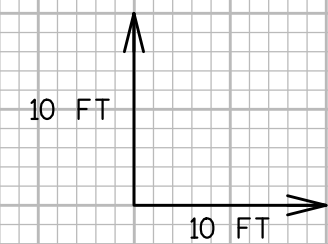
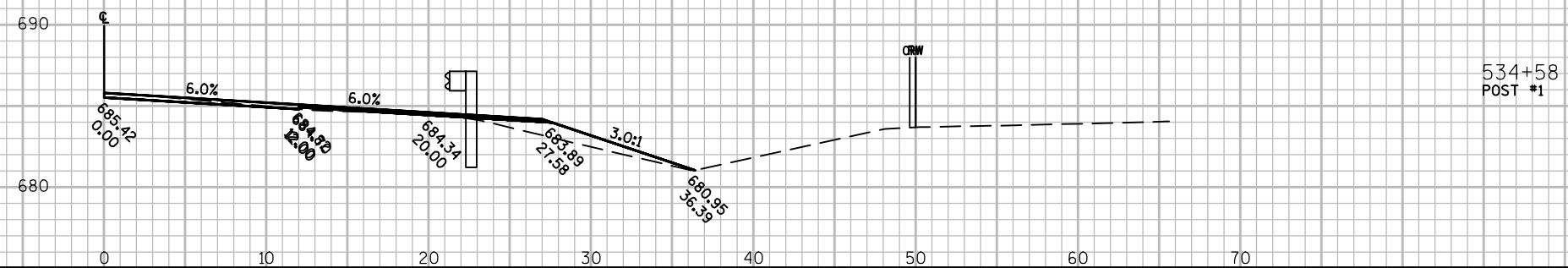
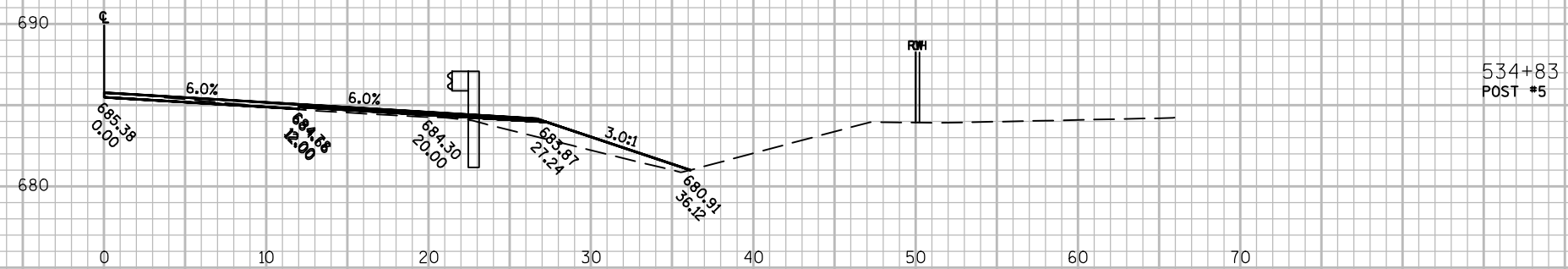
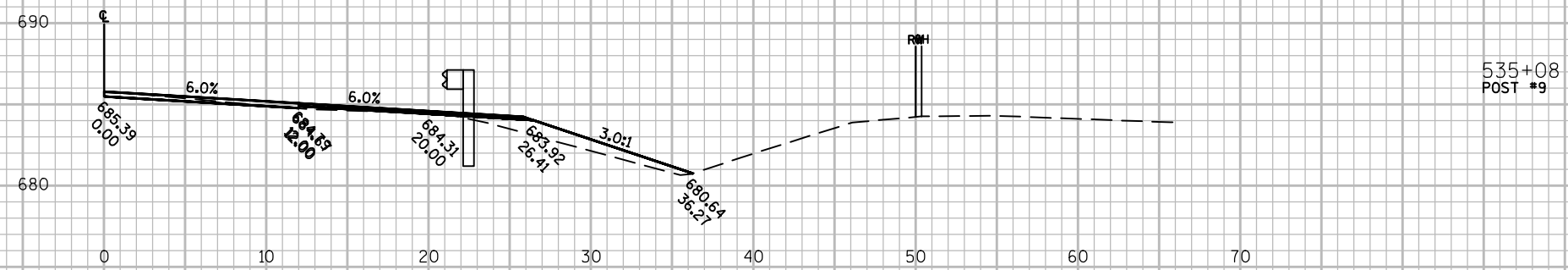
HWY: STH 35

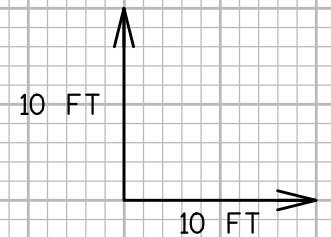
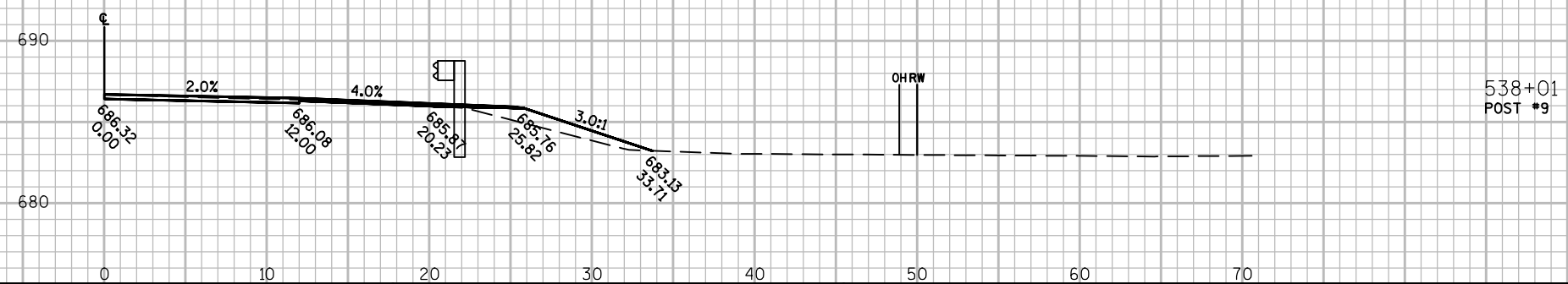
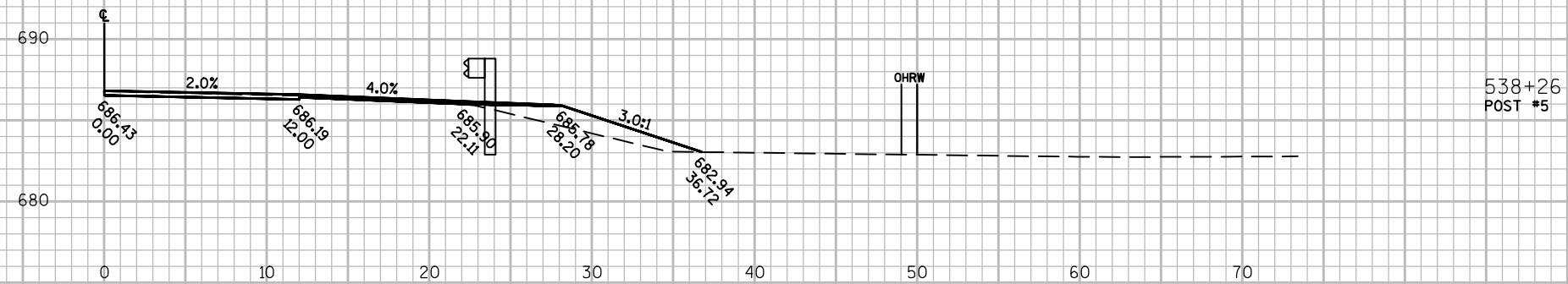
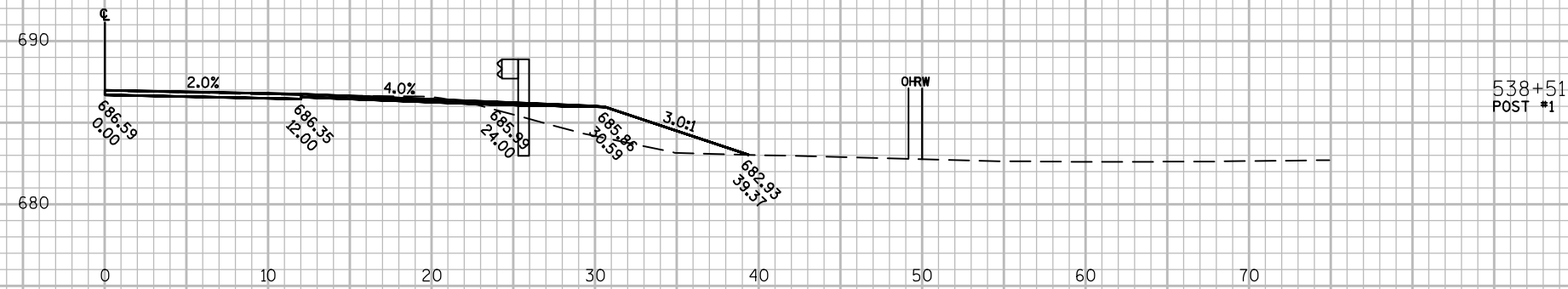
COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET	220
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E





PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET 222

E

FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETPLAN\090100.XS.DWG

PLOT DATE : 12/20/2016 11:23 AM

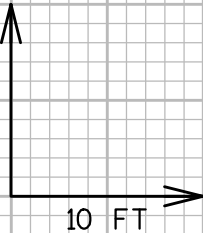
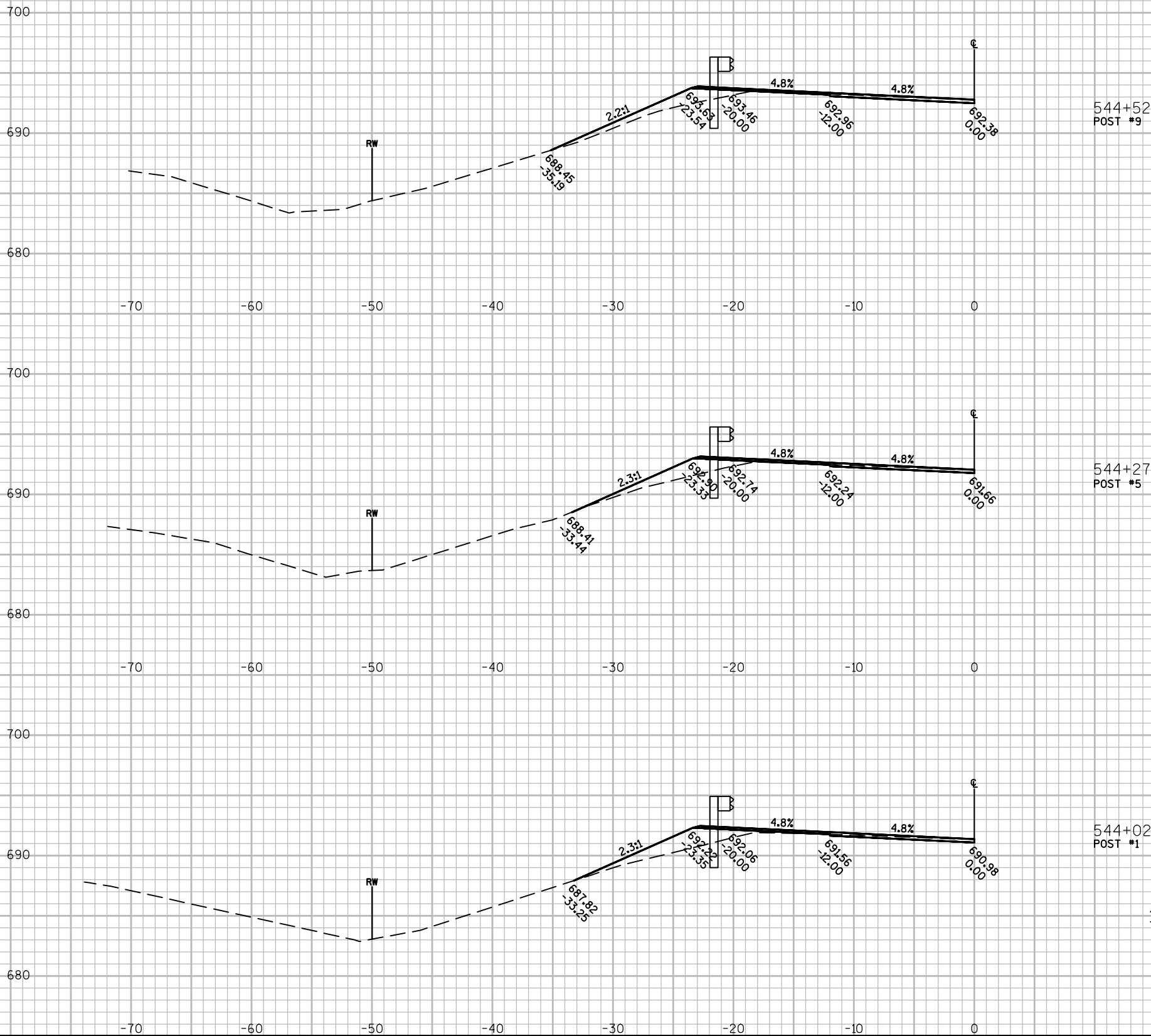
PLOT BY : DWORAK, ALEX

PLOT NAME :

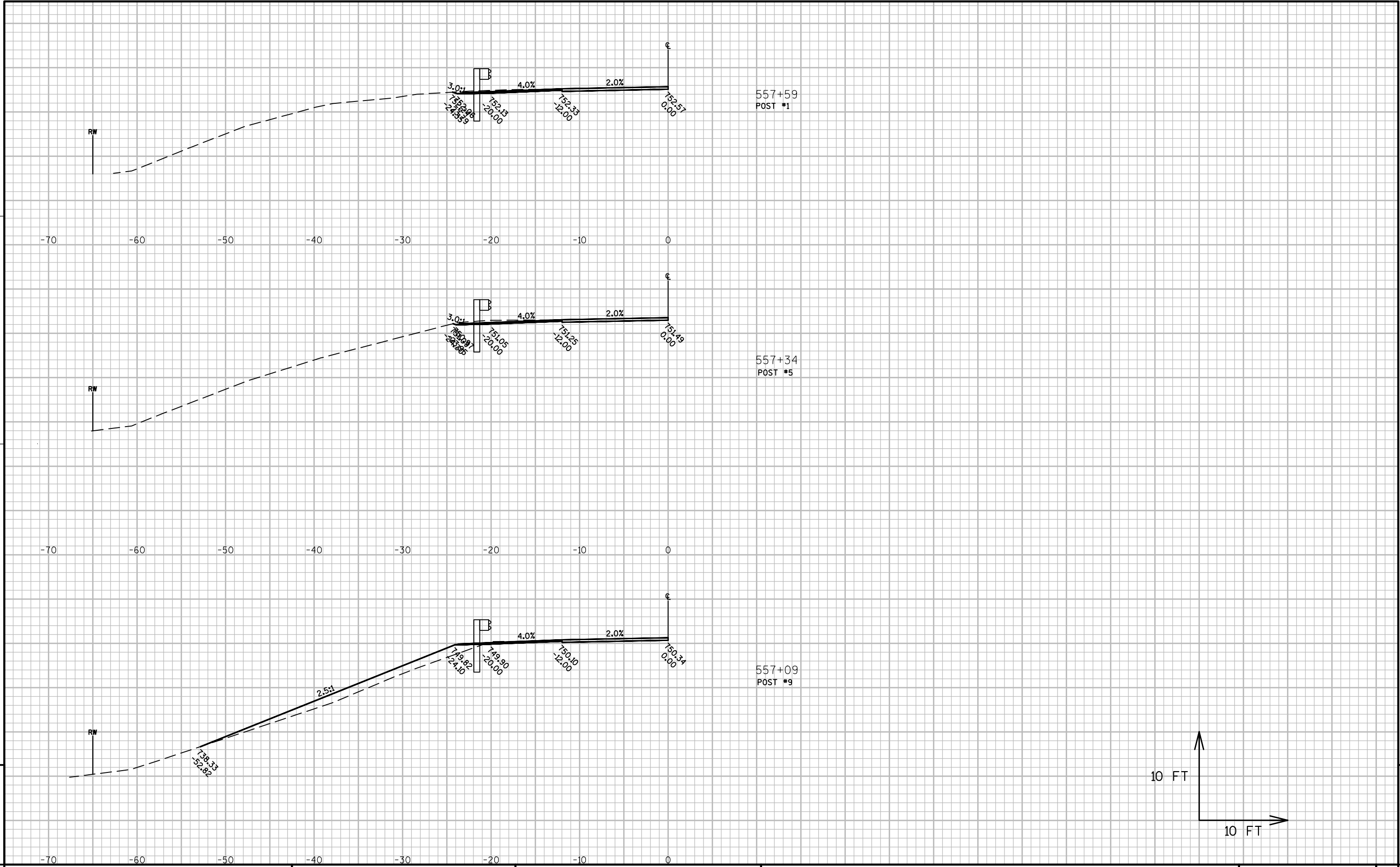
PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49

9



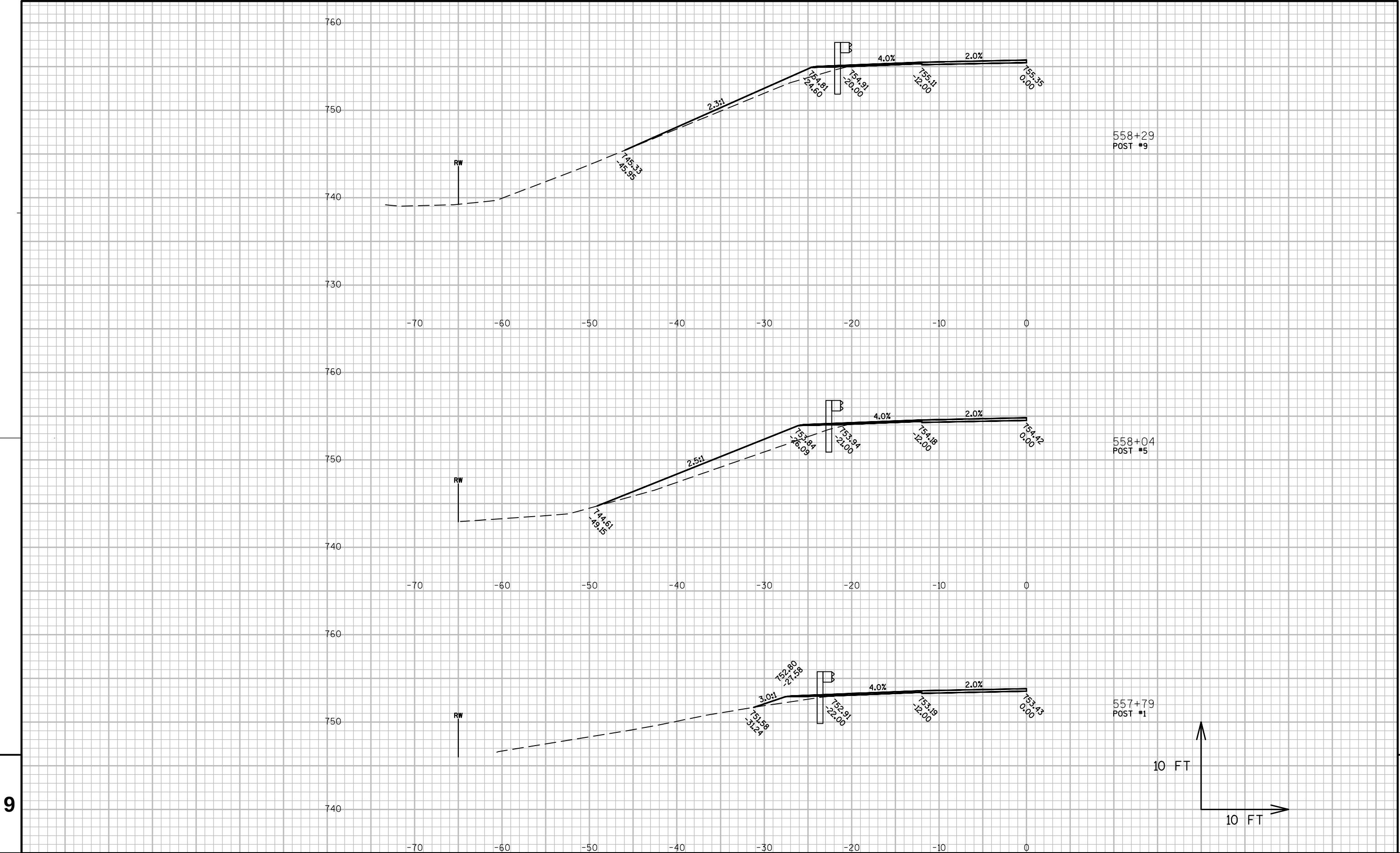
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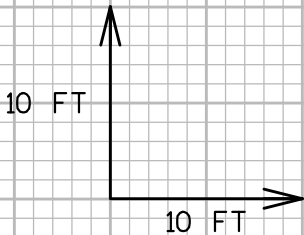
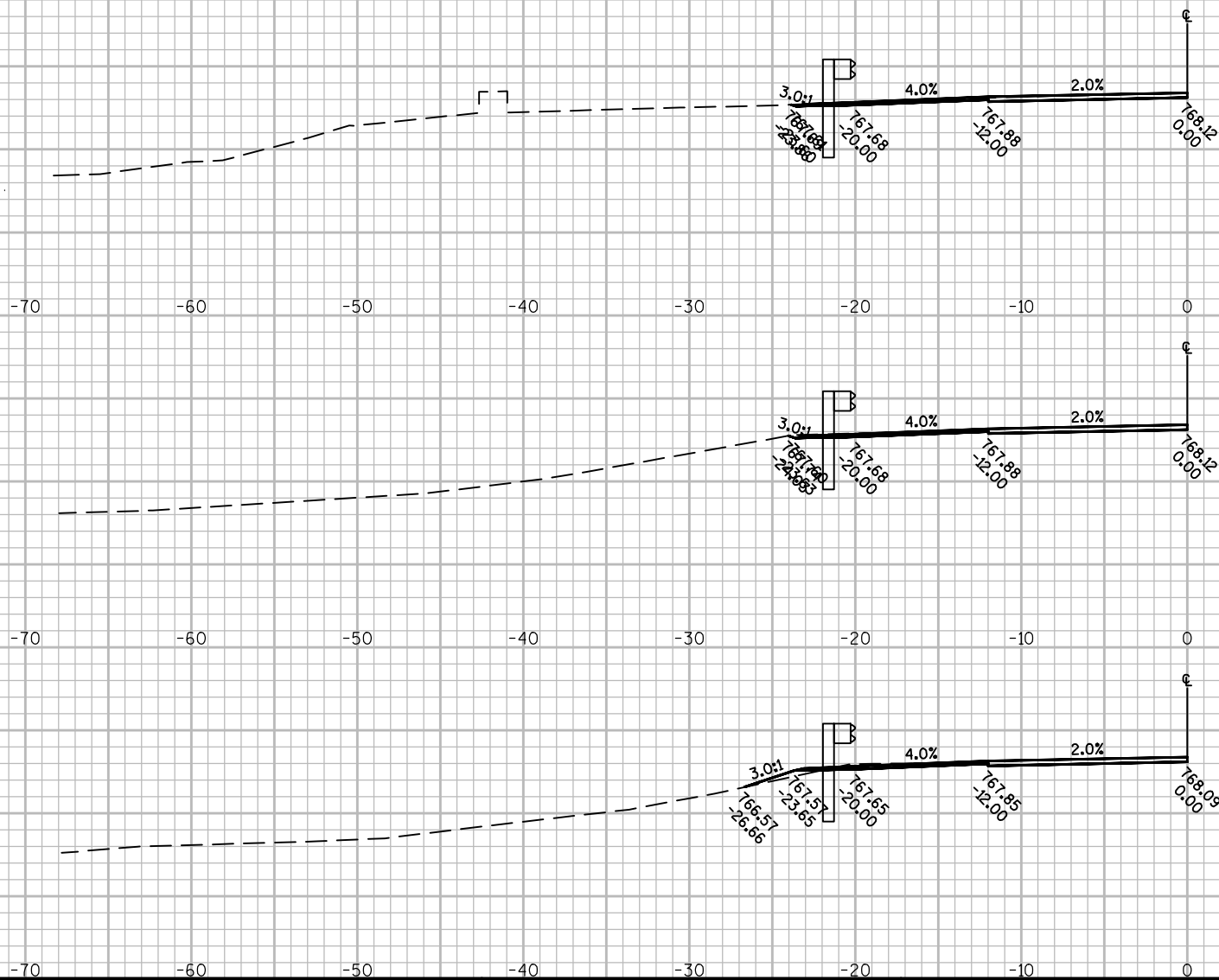
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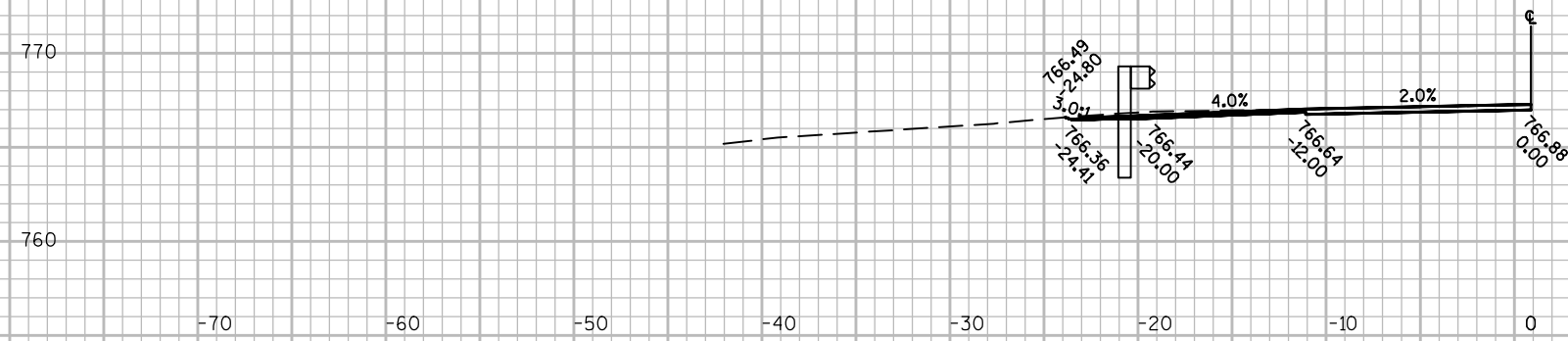


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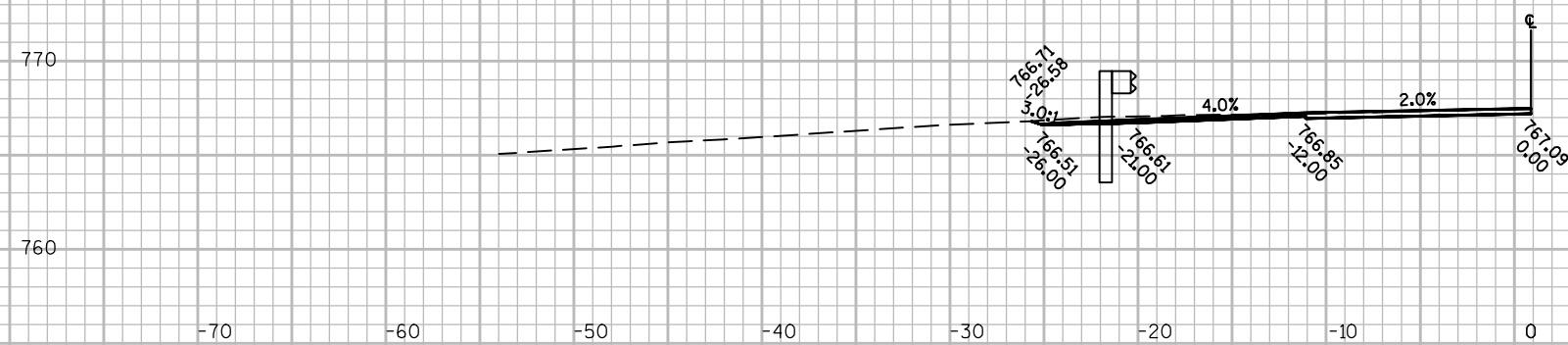
R/W IS LOCATED OUTSIDE SECTION LIMITS.



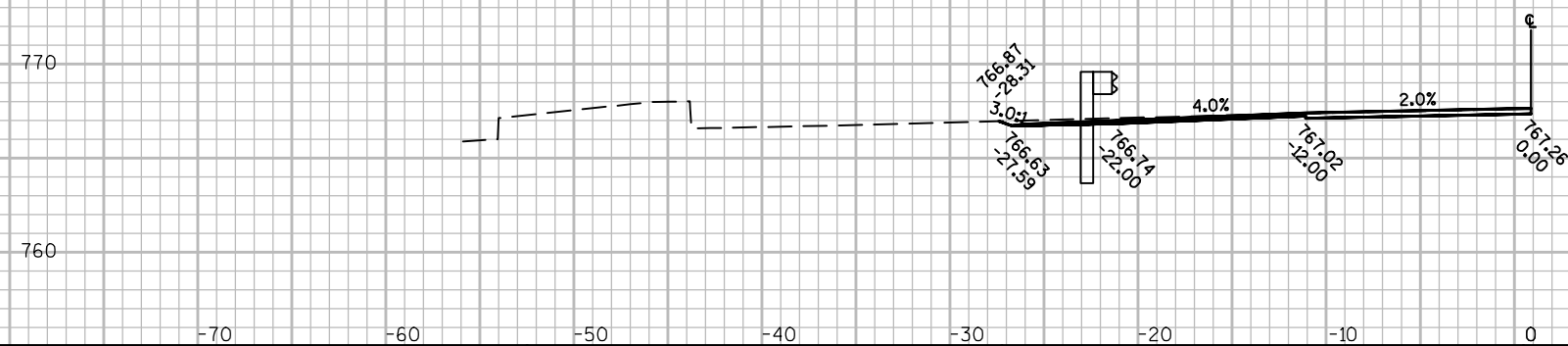
R/W IS LOCATED OUTSIDE SECTION LIMITS.



569+58
POST #9



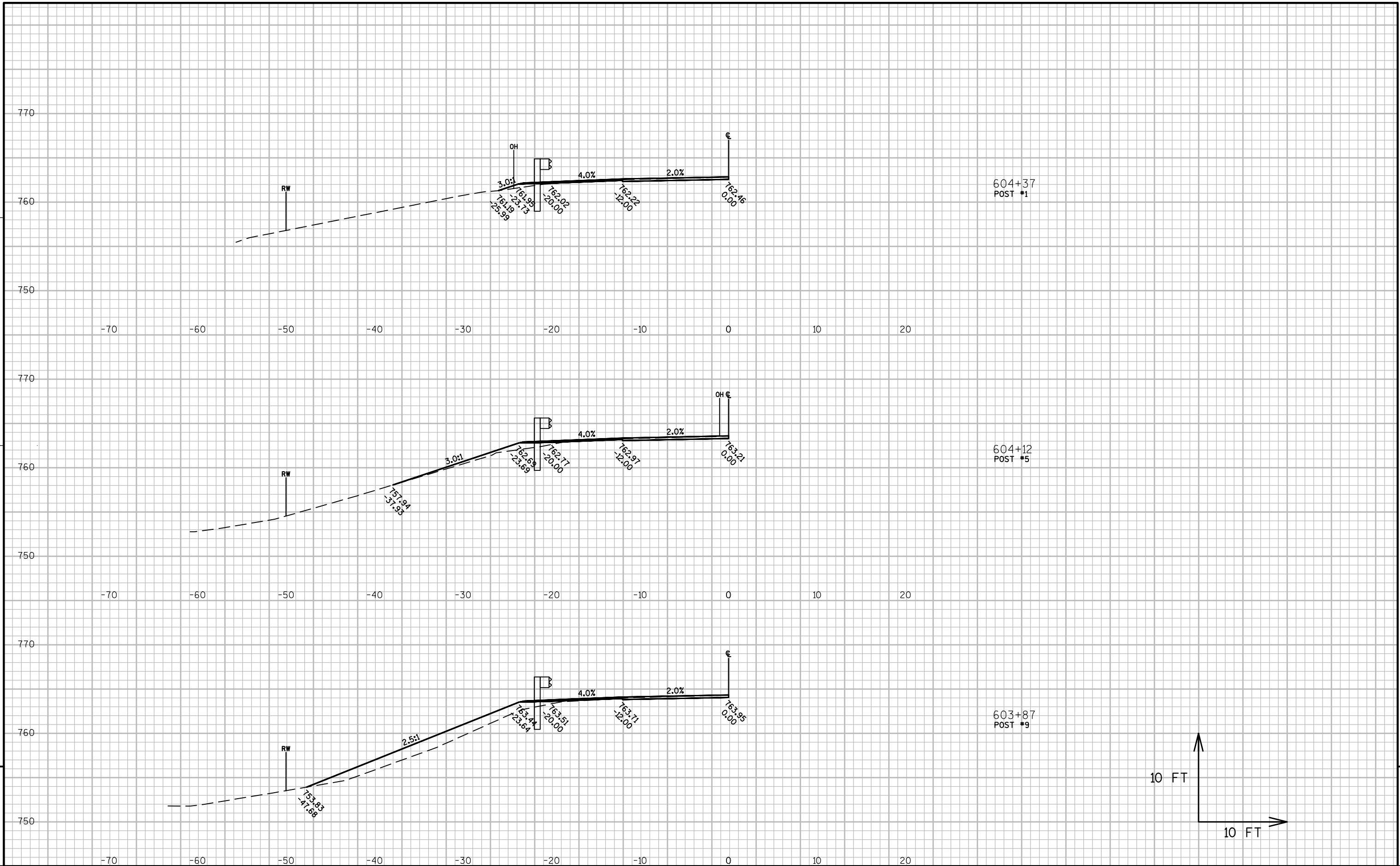
569+33
POST #5



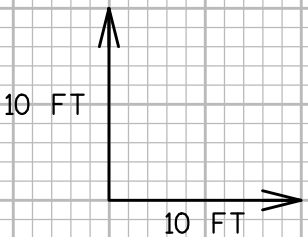
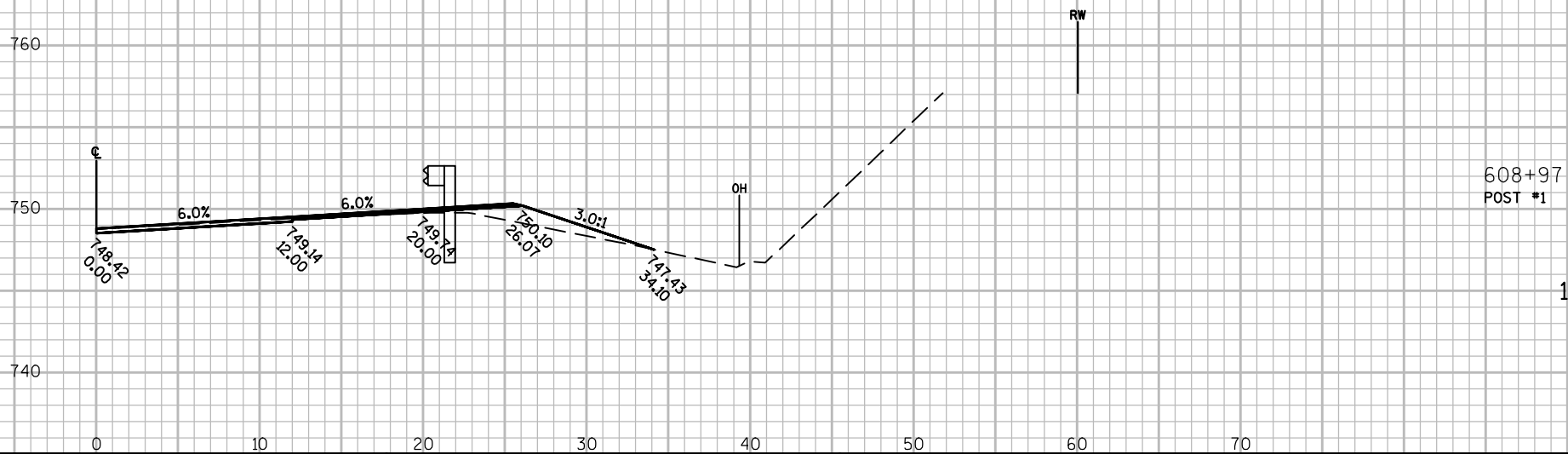
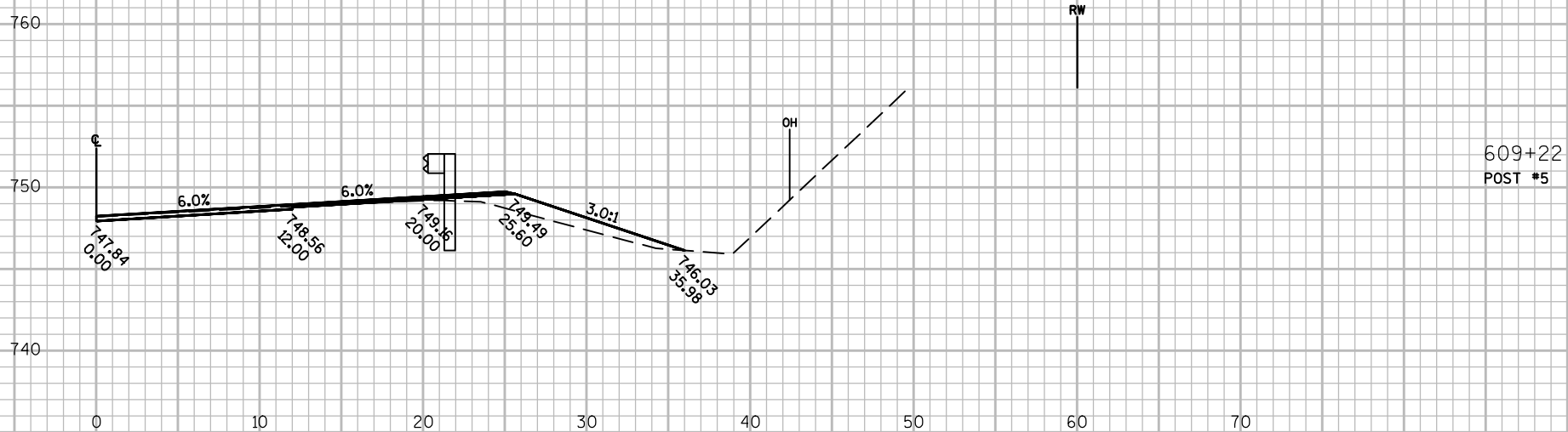
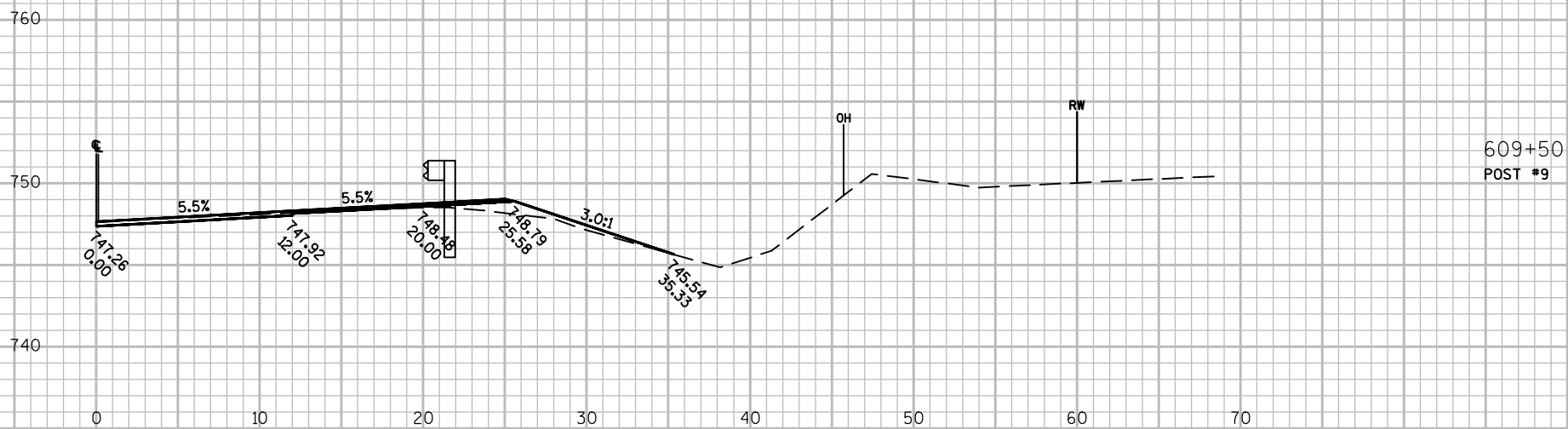
569+08
POST #1

10 FT

10 FT

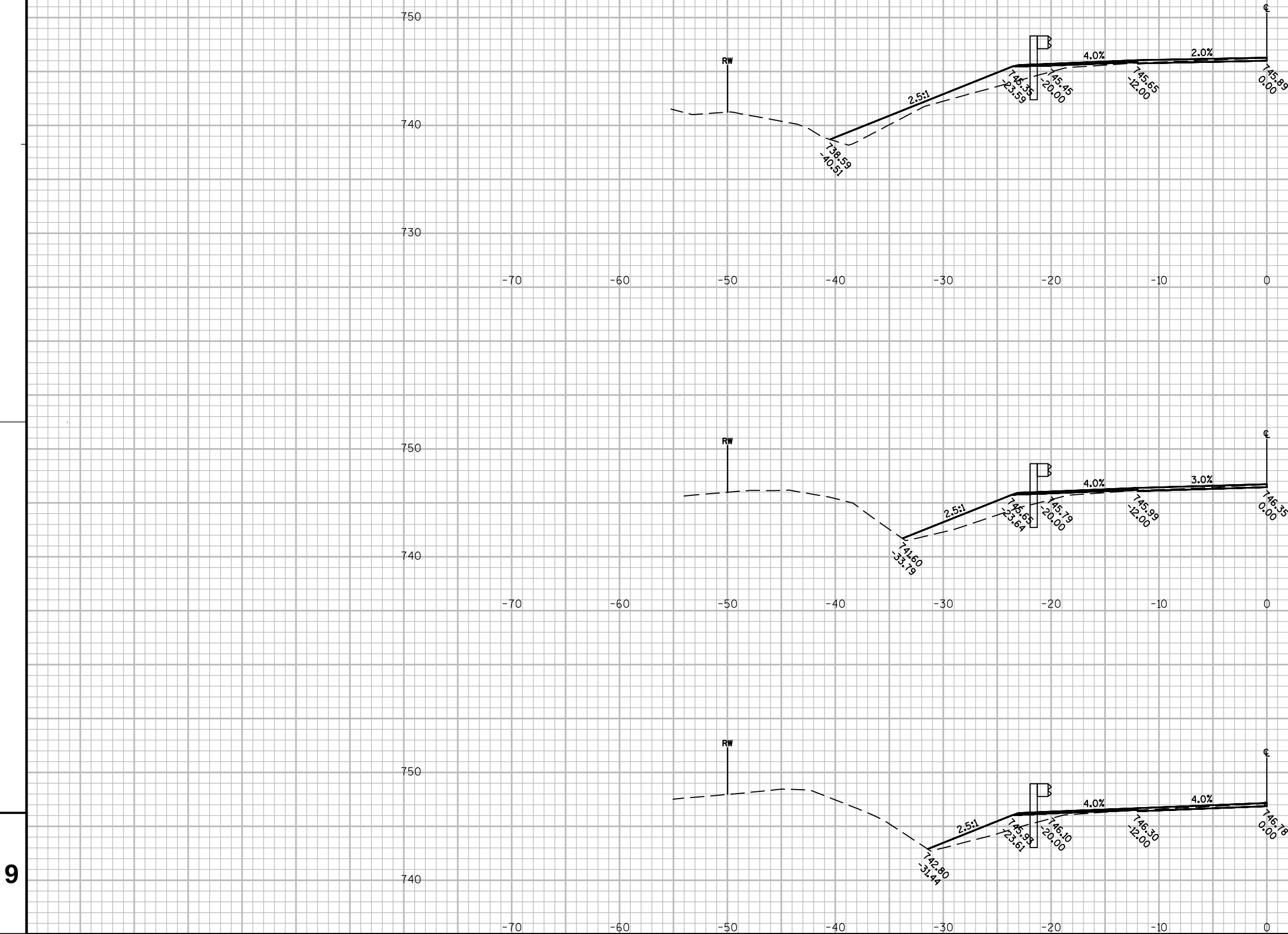


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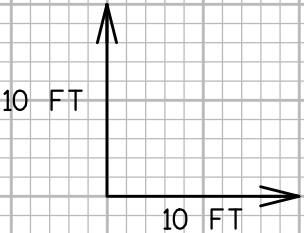
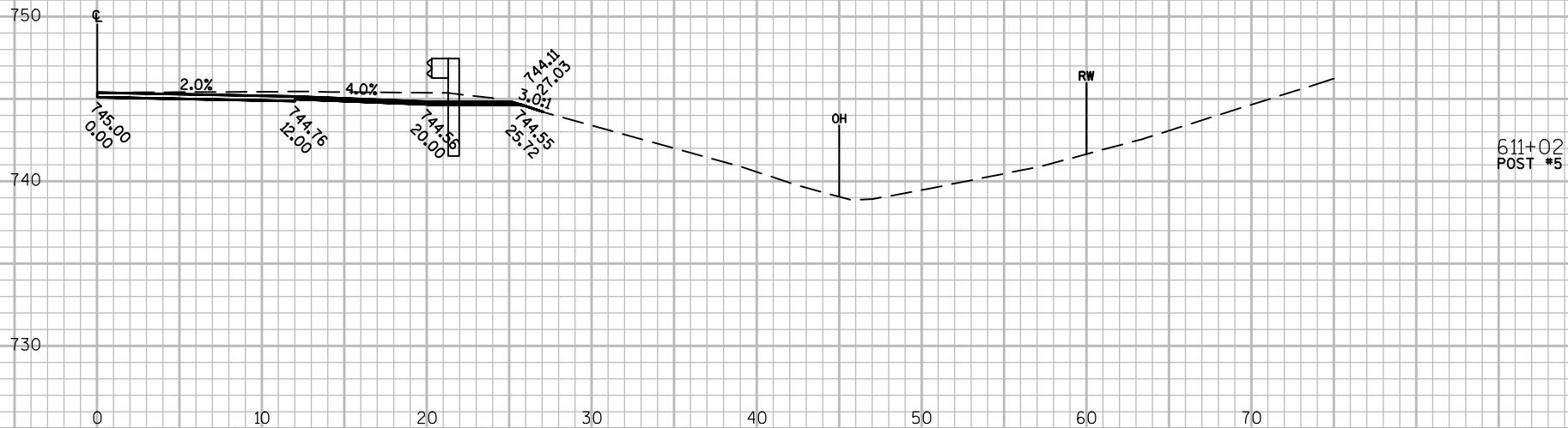
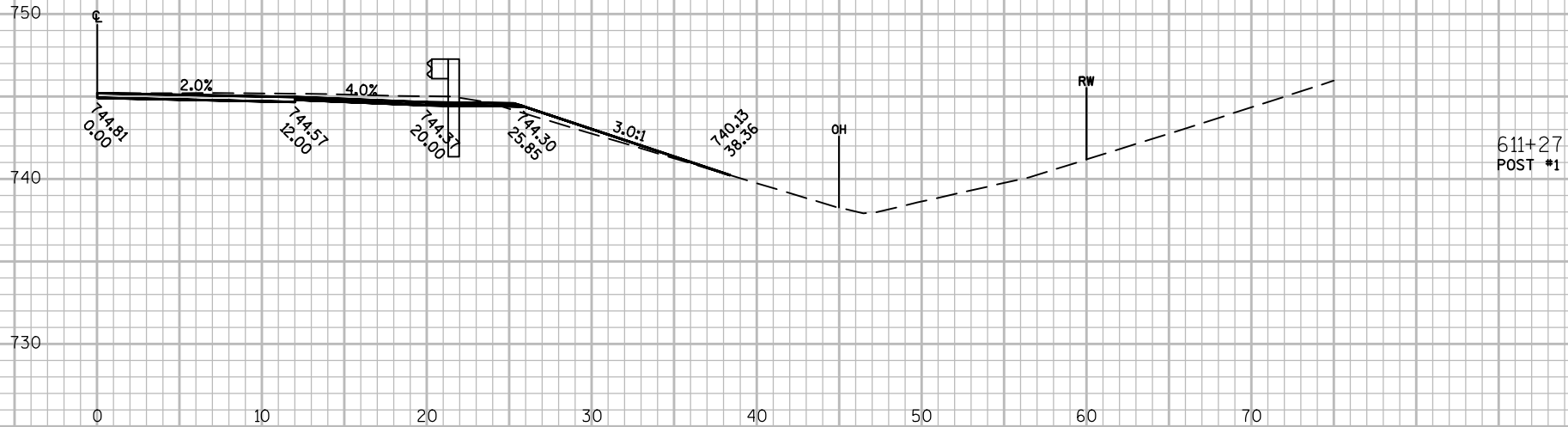
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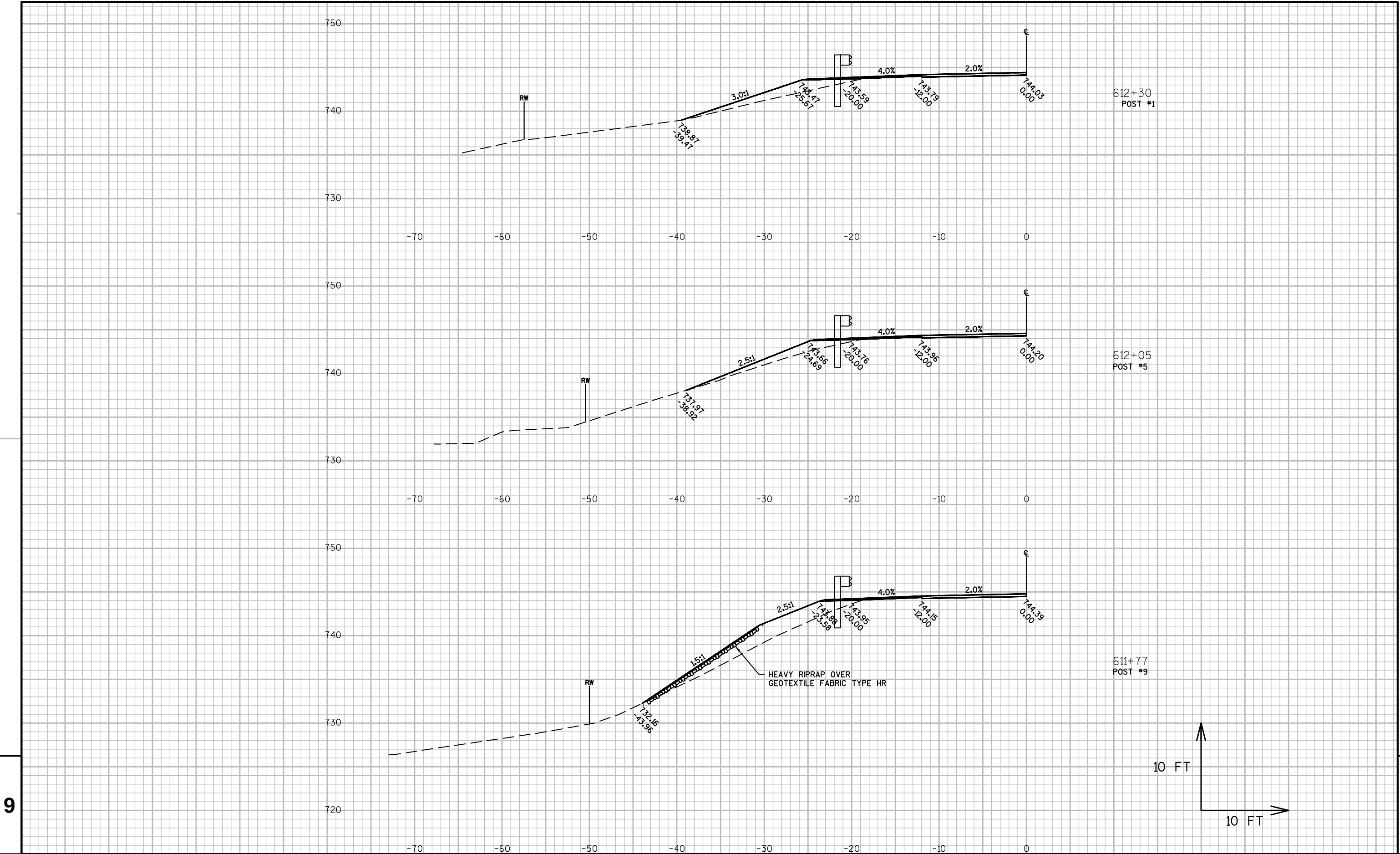
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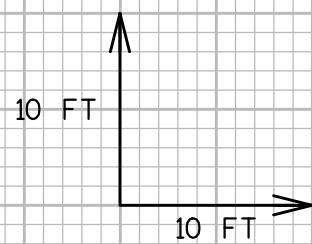
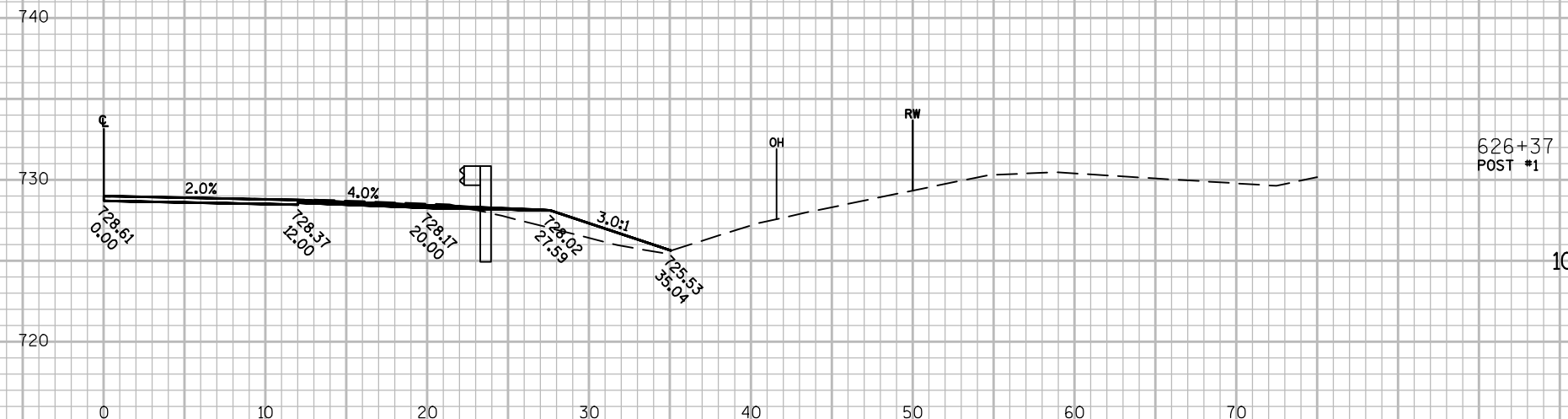
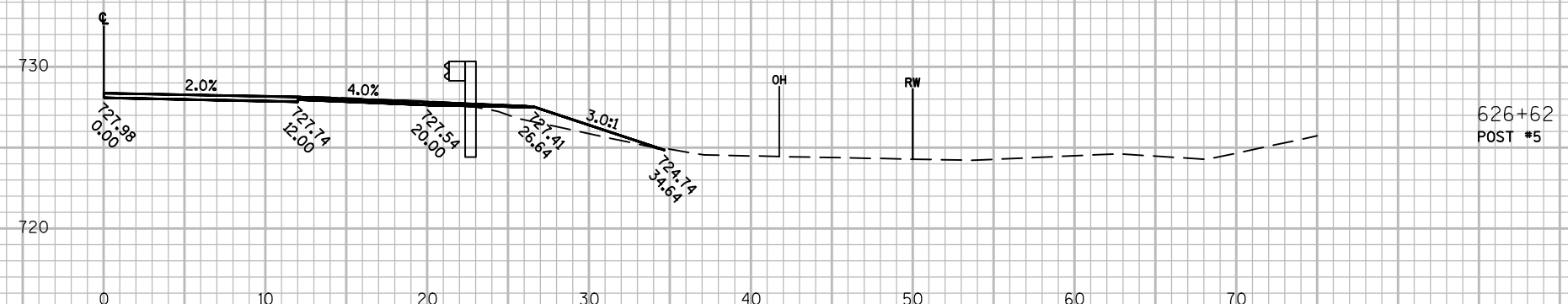


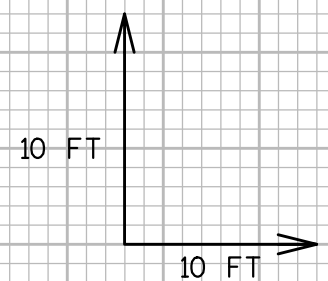
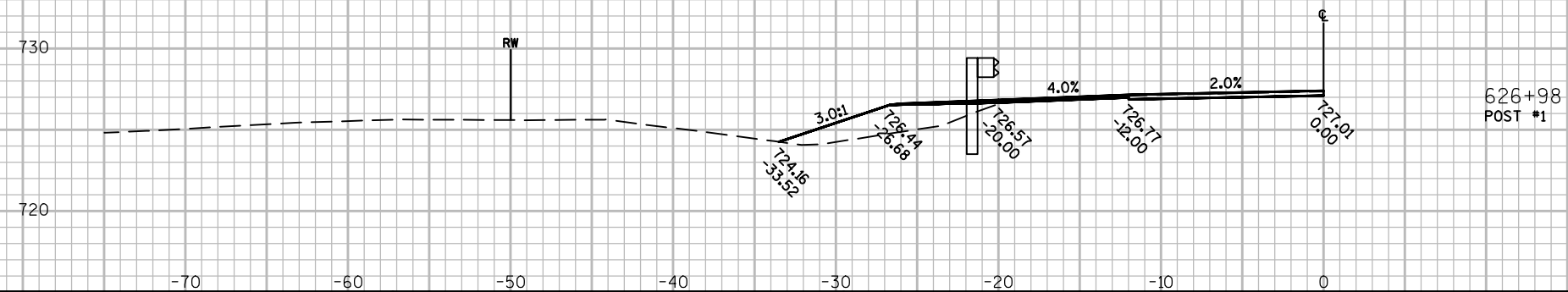
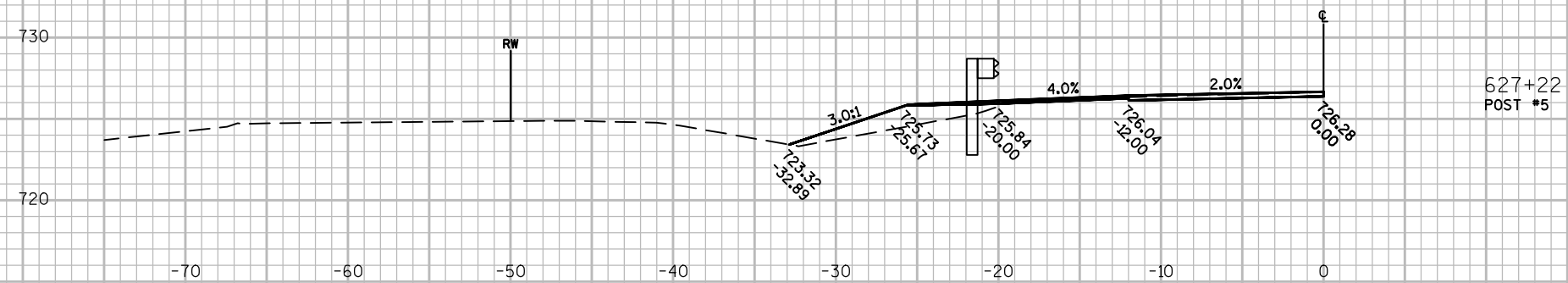
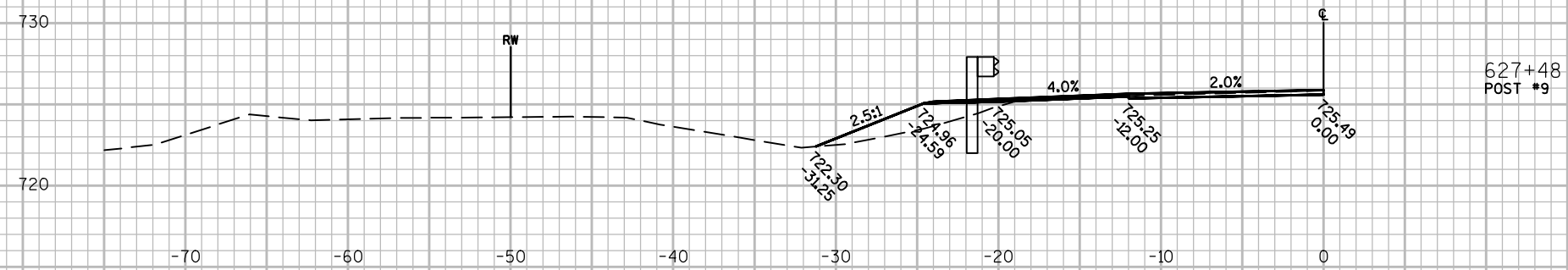
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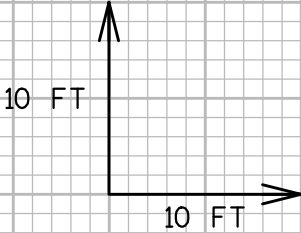
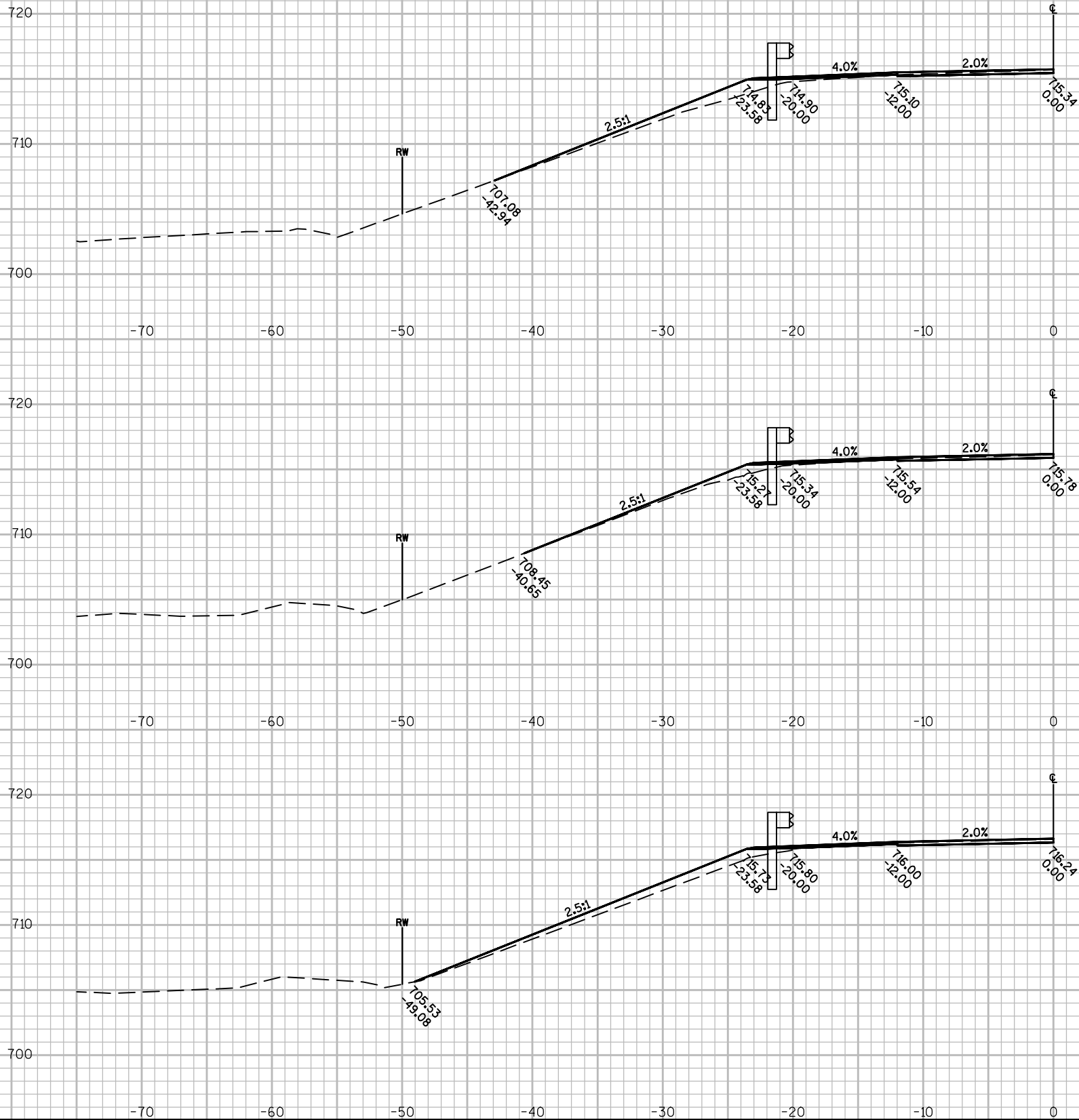


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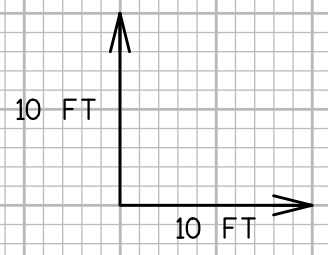


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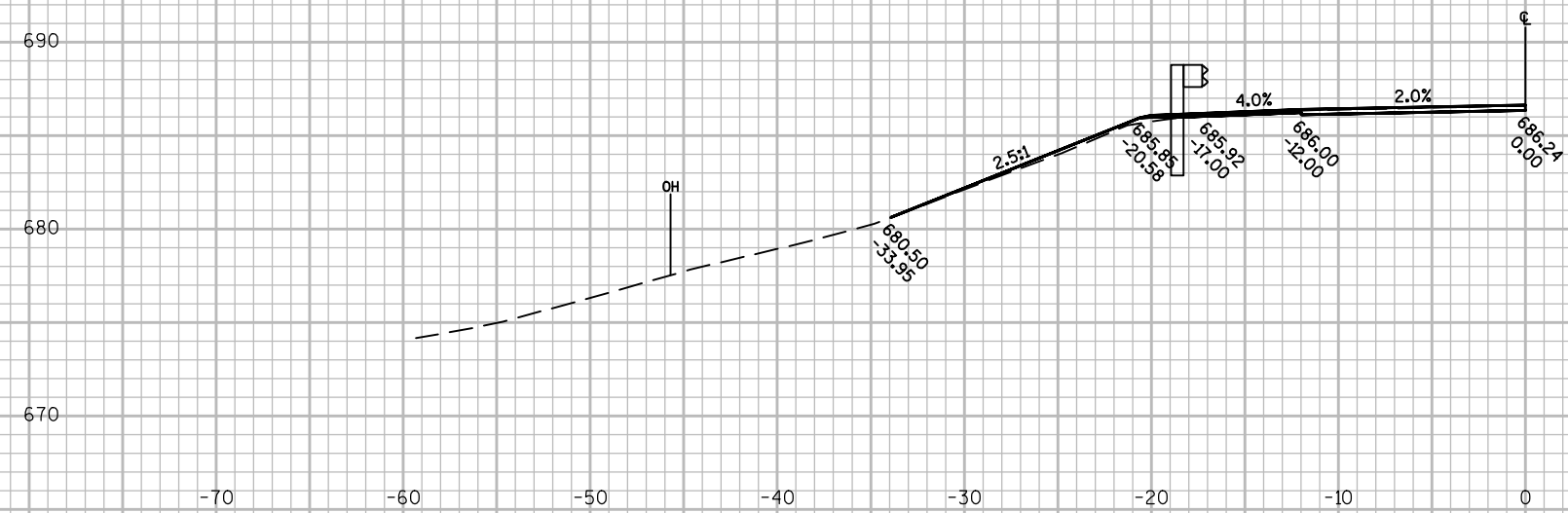


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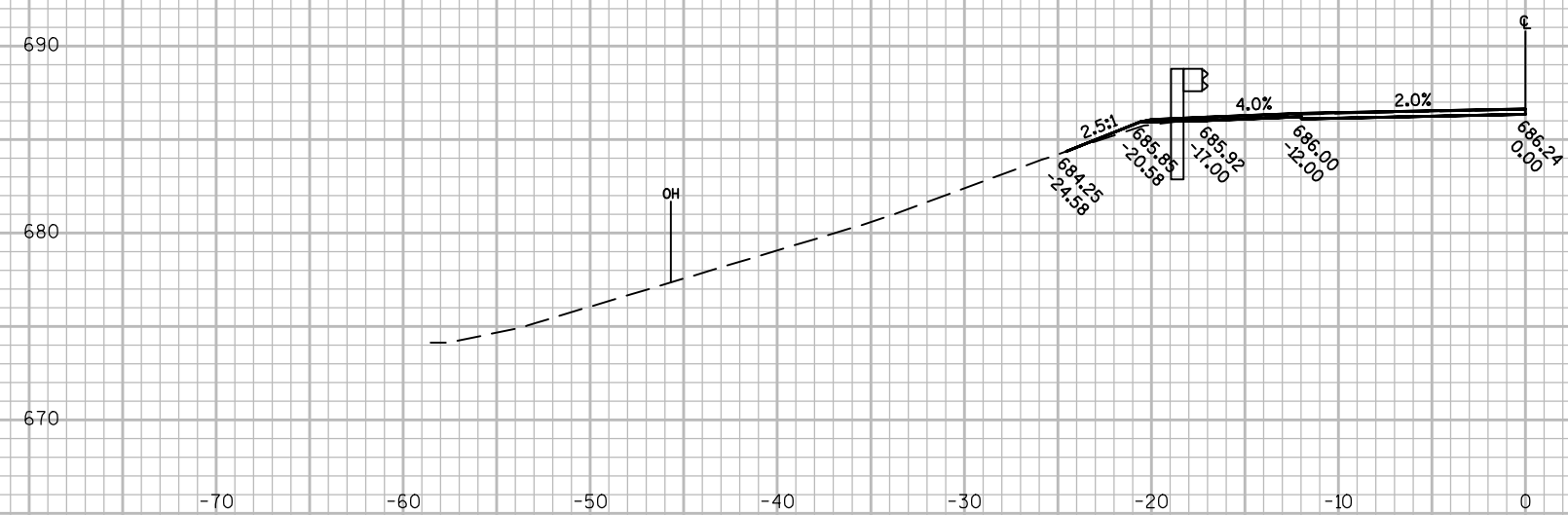
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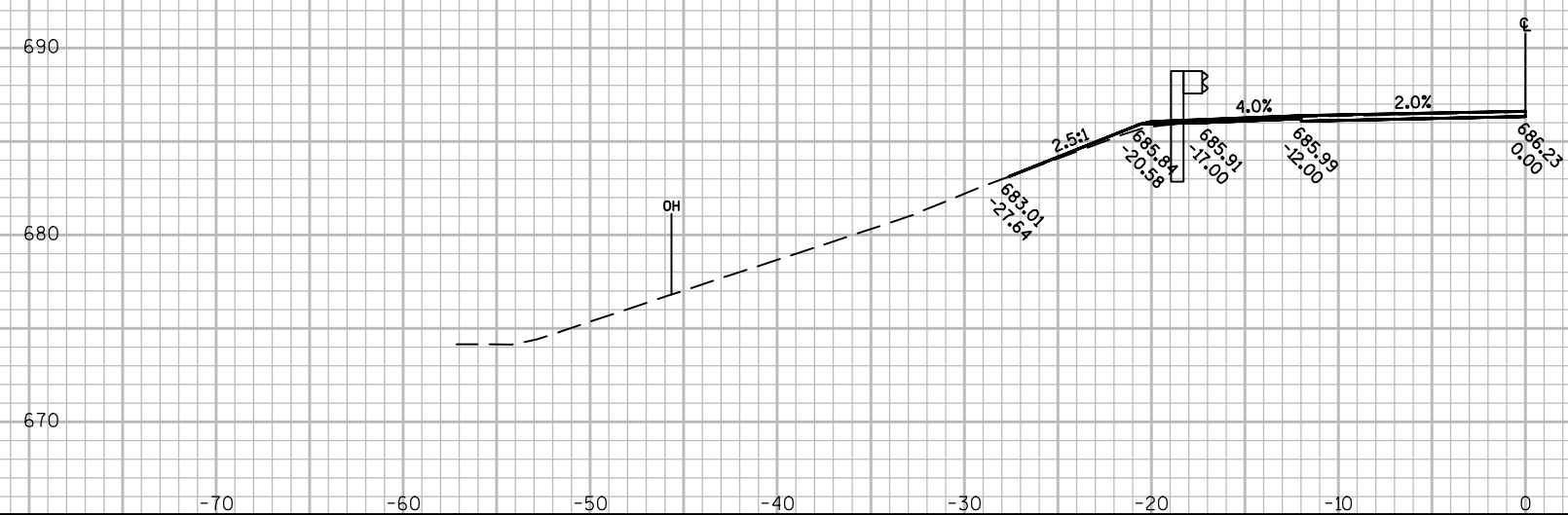
R/W IS LOCATED OUTSIDE SECTION LIMITS.



71+42
POST #9



71+17
POST #5



70+92
POST #1

10 FT

10 FT

PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET	237
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FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETSPLAN\090100_XS.DWG

PLOT DATE : 12/20/2016 11:25 AM

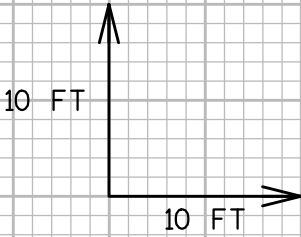
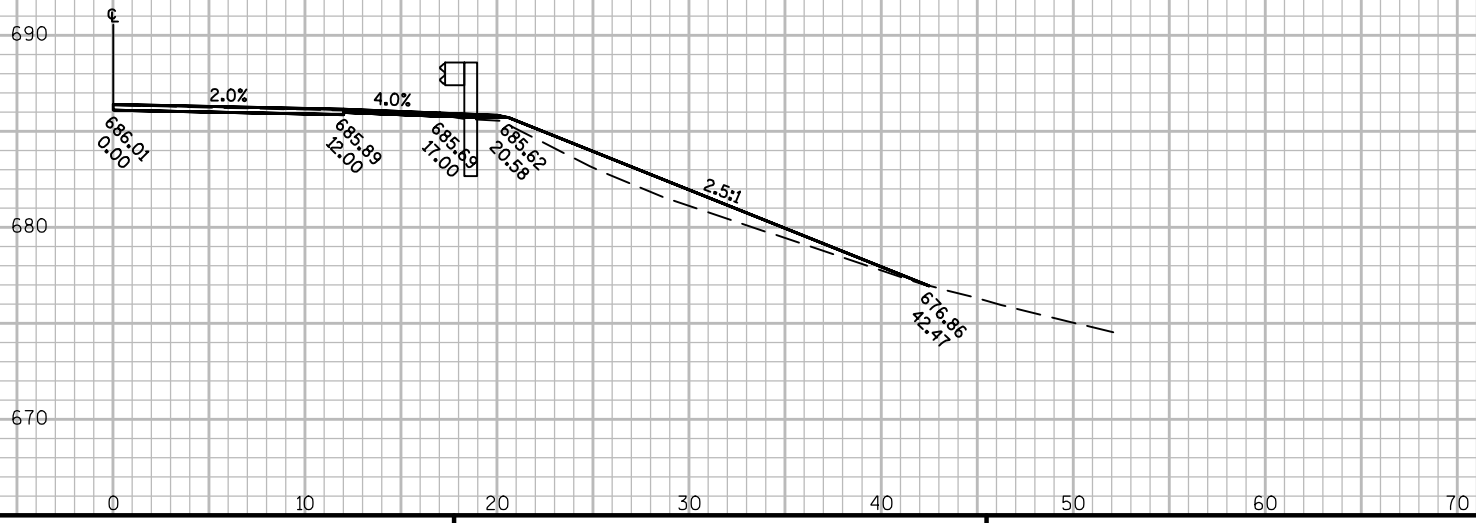
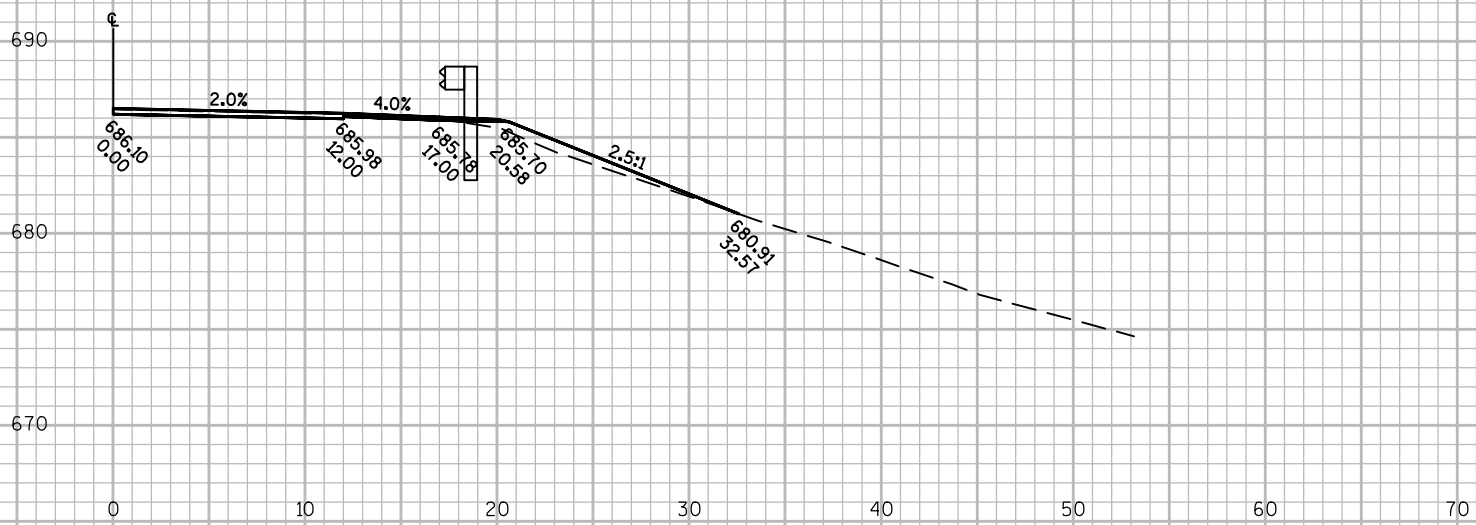
PLOT BY : DWORAK, ALEX

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

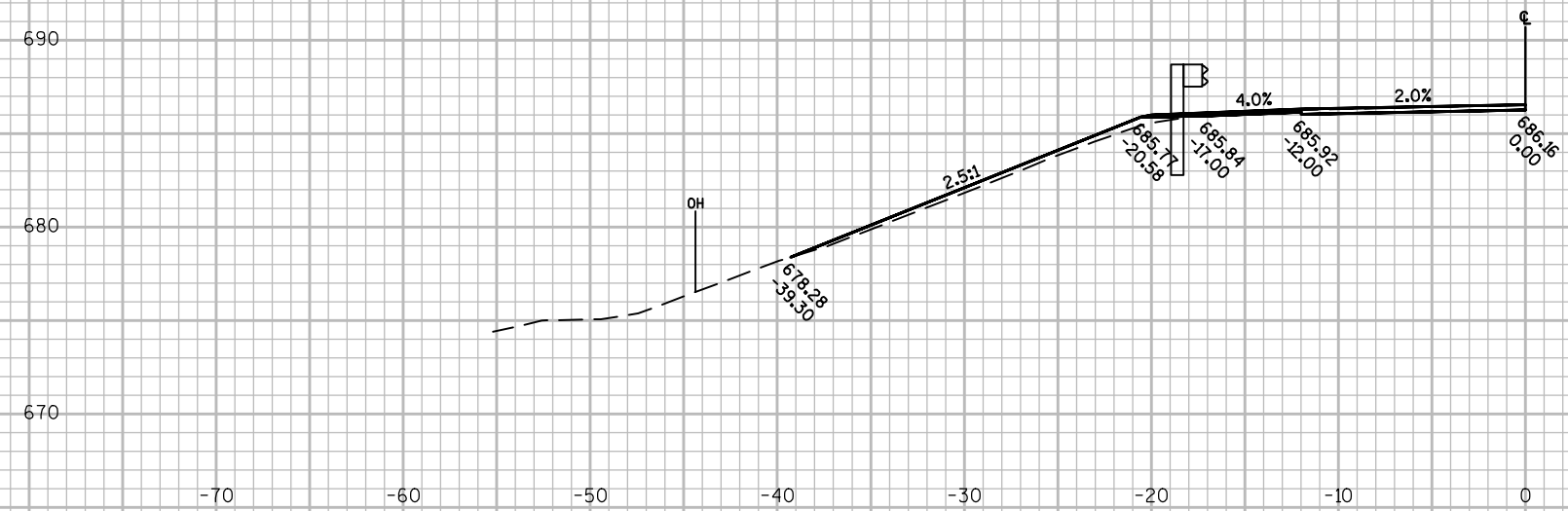
R/W IS LOCATED OUTSIDE SECTION LIMITS.



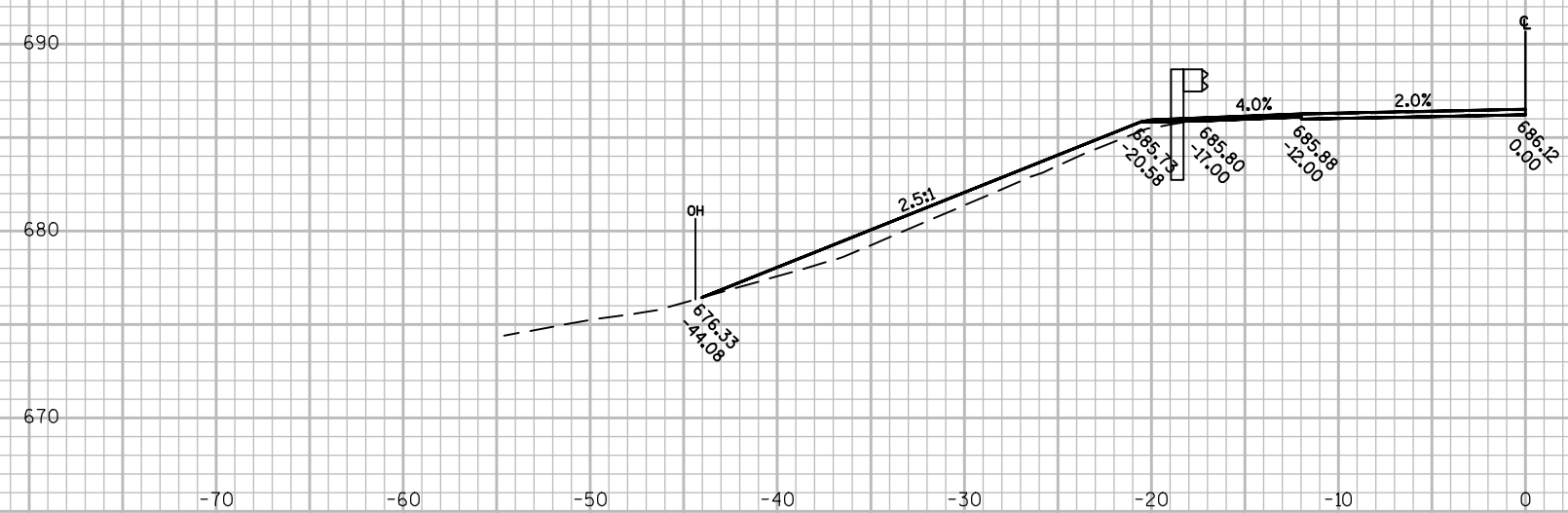
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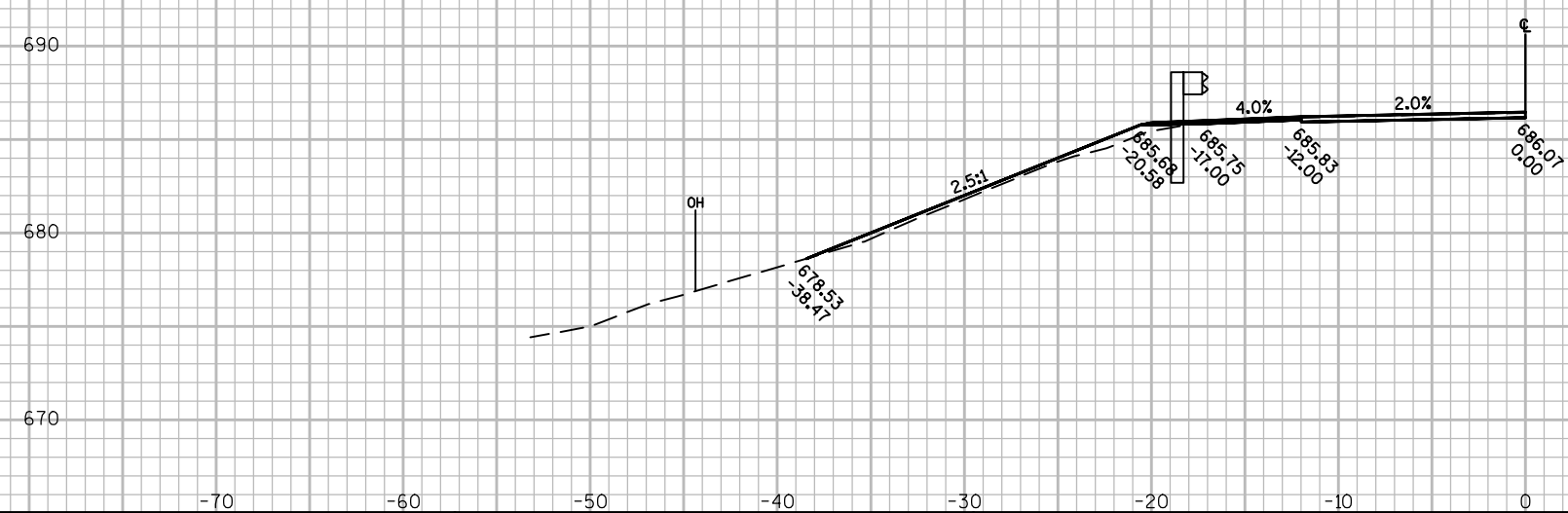
R/W IS LOCATED OUTSIDE SECTION LIMITS.



76+94
POST #1



76+69
POST #5

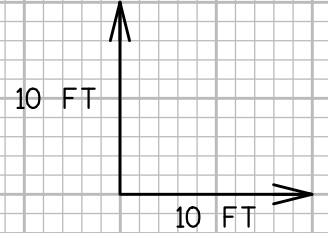
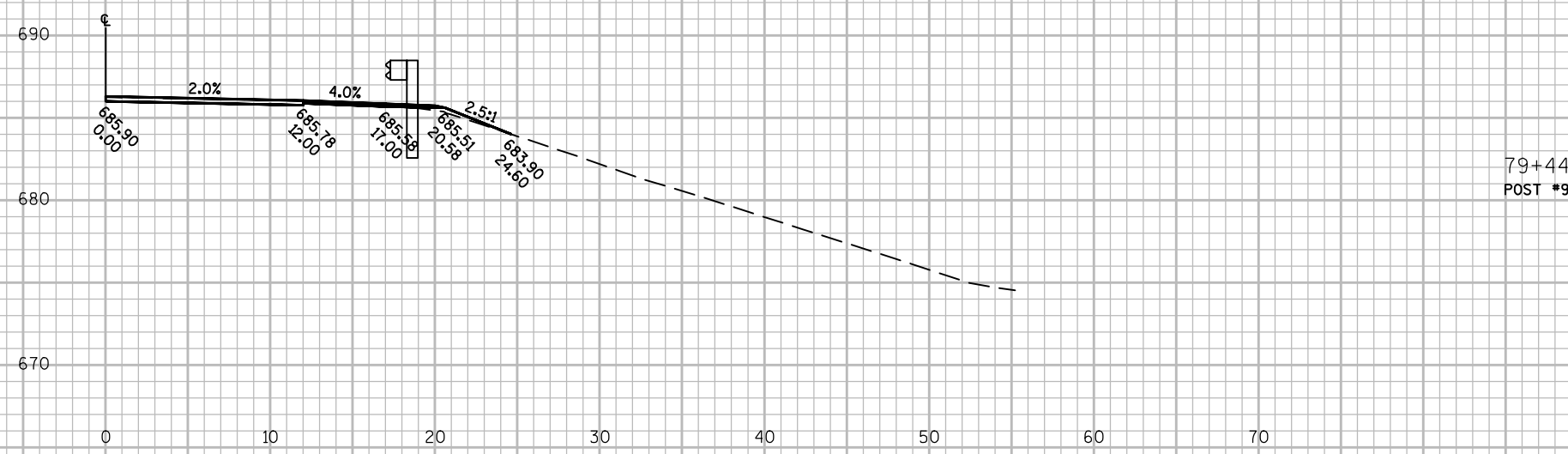


76+44
POST #9

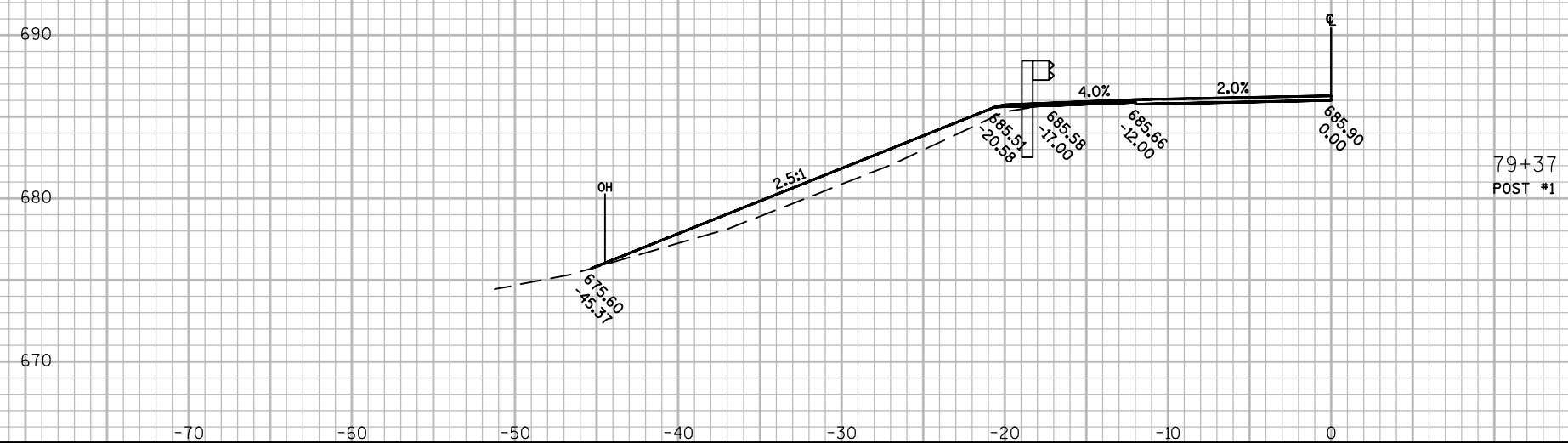
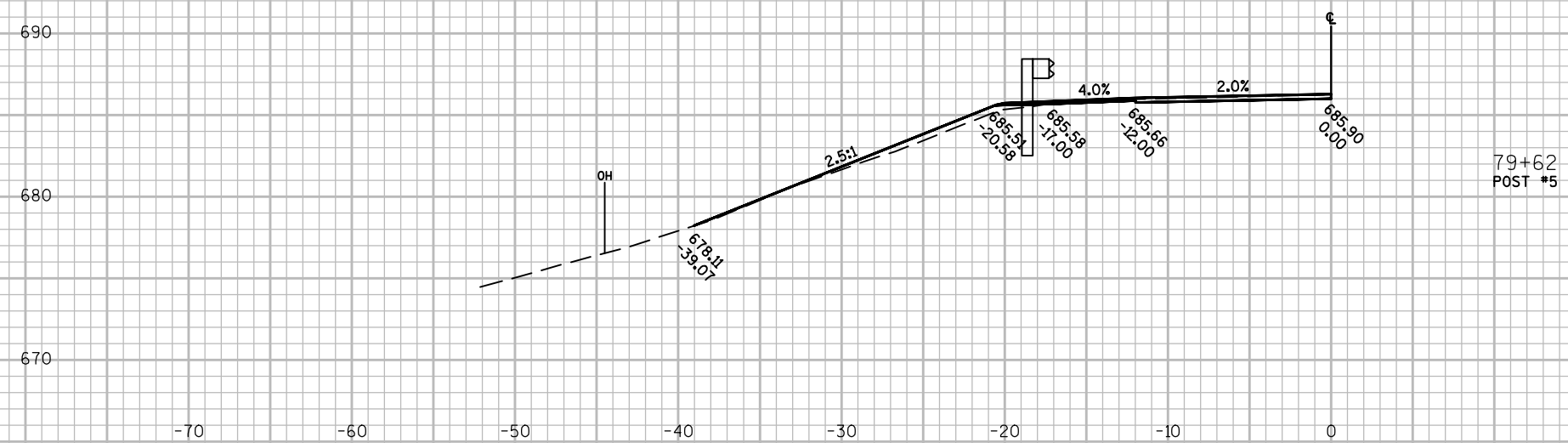
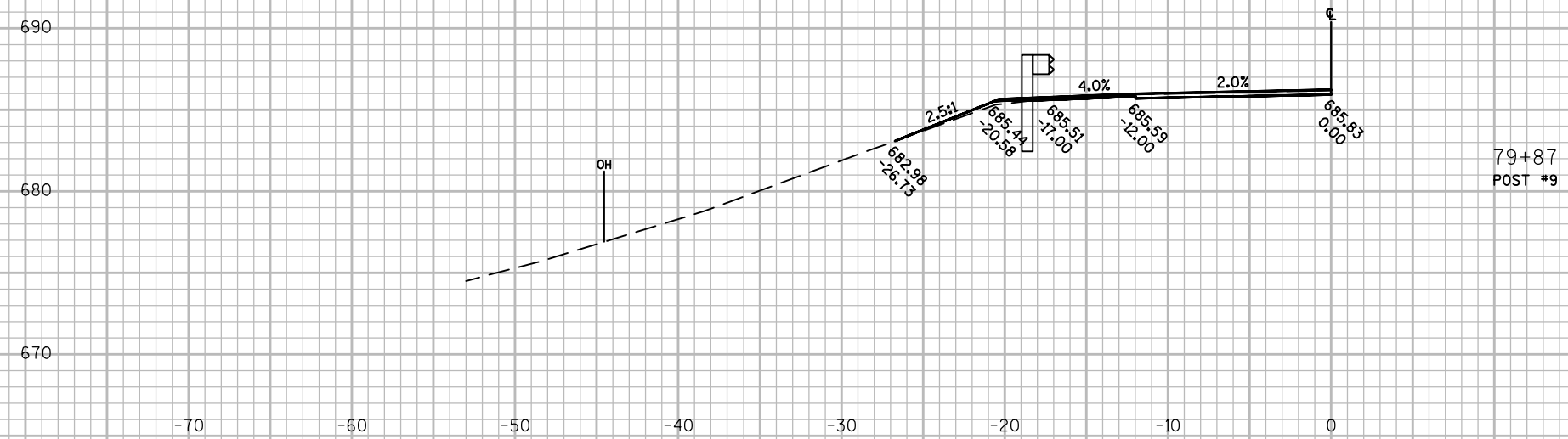
10 FT

10 FT

R/W IS LOCATED OUTSIDE SECTION LIMITS.



R/W IS LOCATED OUTSIDE SECTION LIMITS.



PROJECT NO:1720-00-70

HWY: STH 35

COUNTY: PEPIN & BUFFALO

CROSS SECTIONS: STH 35

SHEET	241
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E

FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETSPLAN\090100_XS.DWG

PLOT DATE : 12/20/2016 11:26 AM

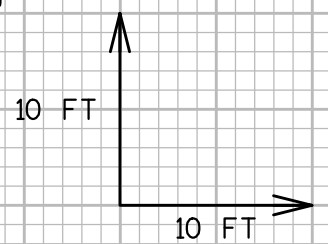
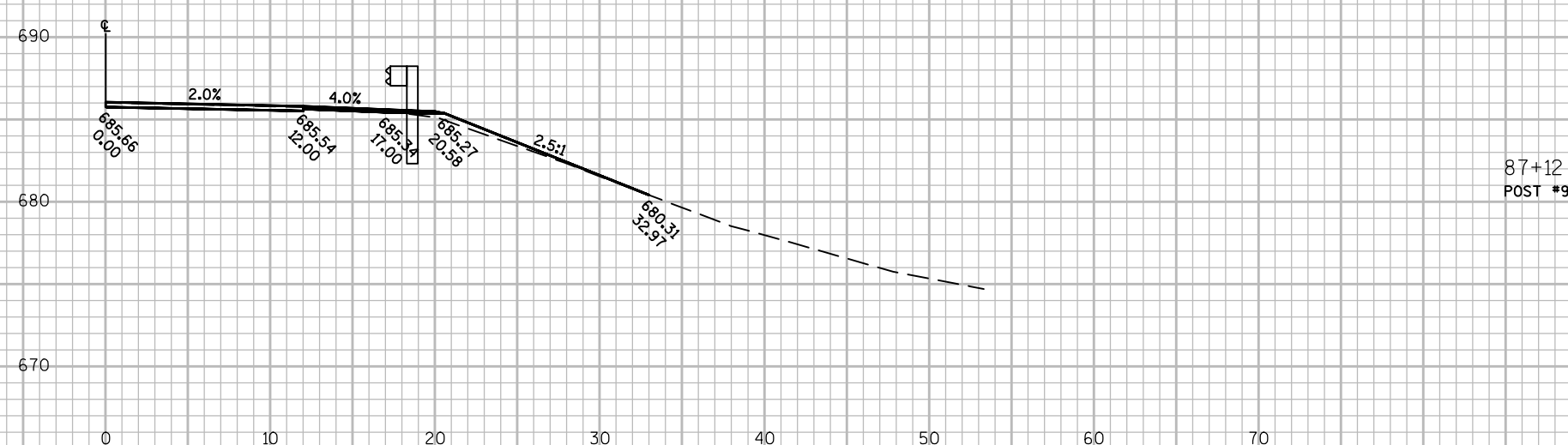
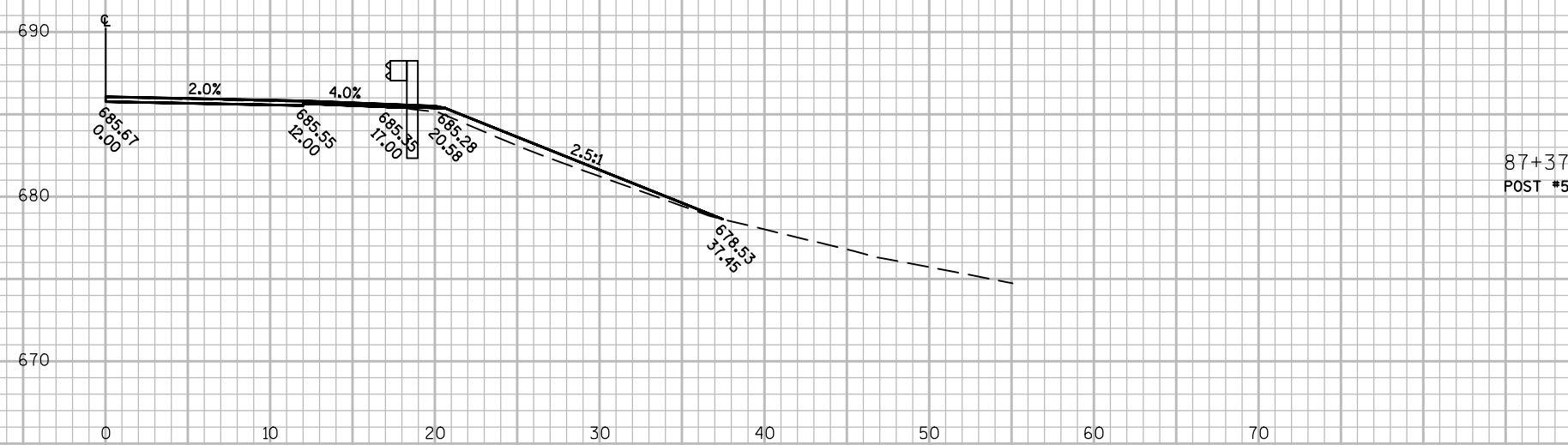
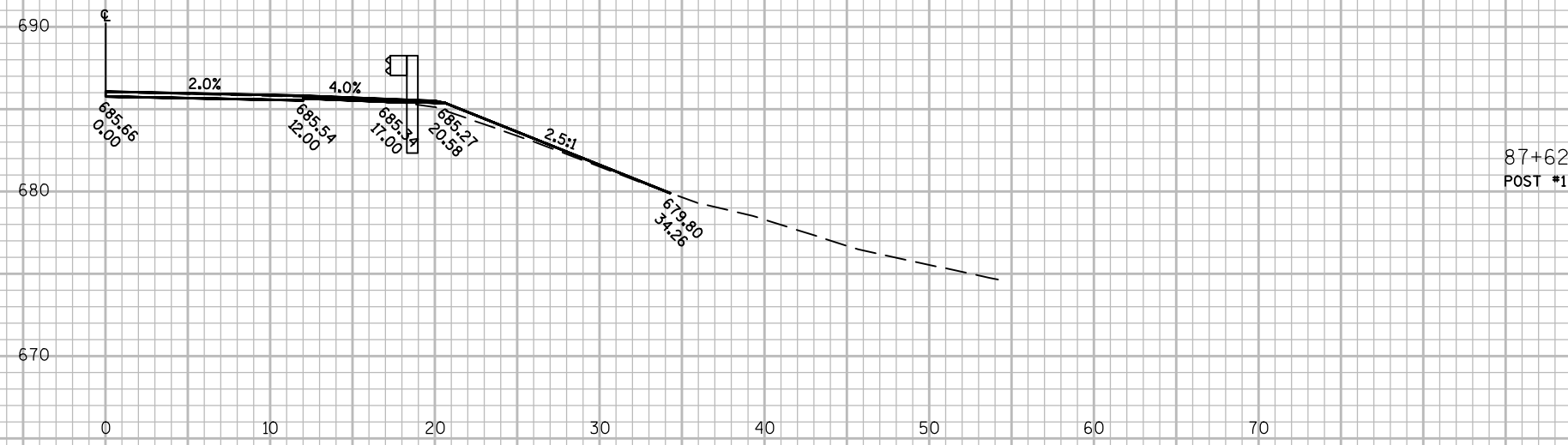
PLOT BY : DWORAK, ALEX

PLOT NAME :

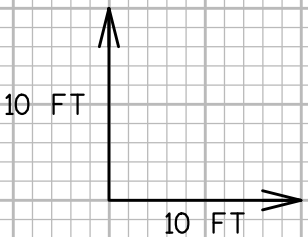
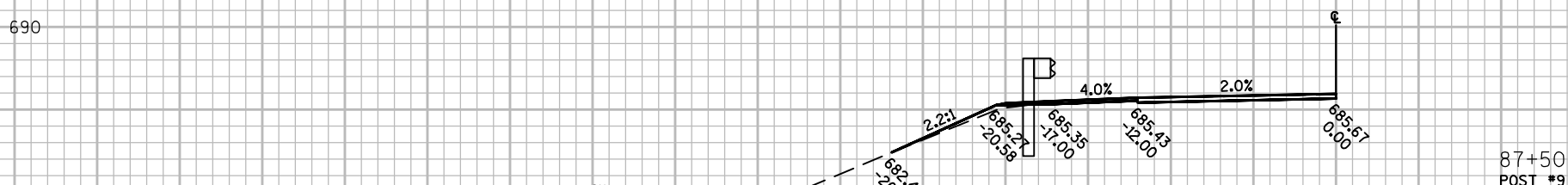
PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

R/W IS LOCATED OUTSIDE SECTION LIMITS.



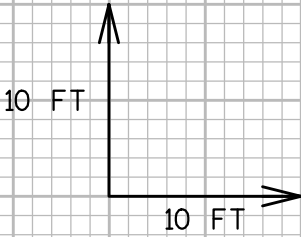
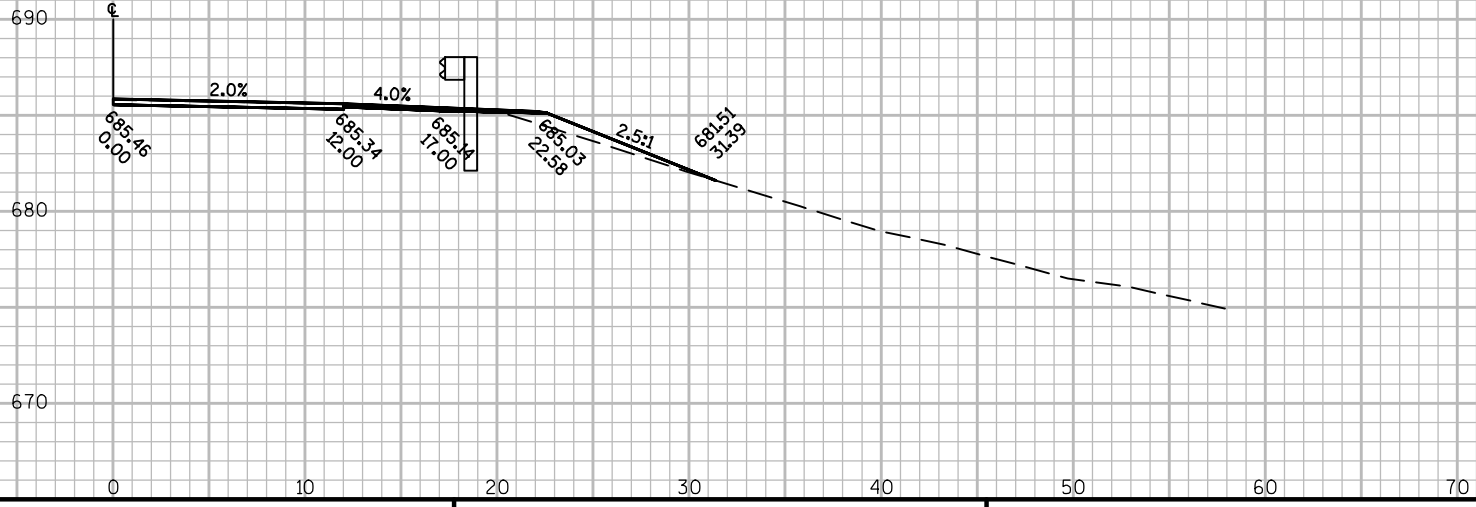
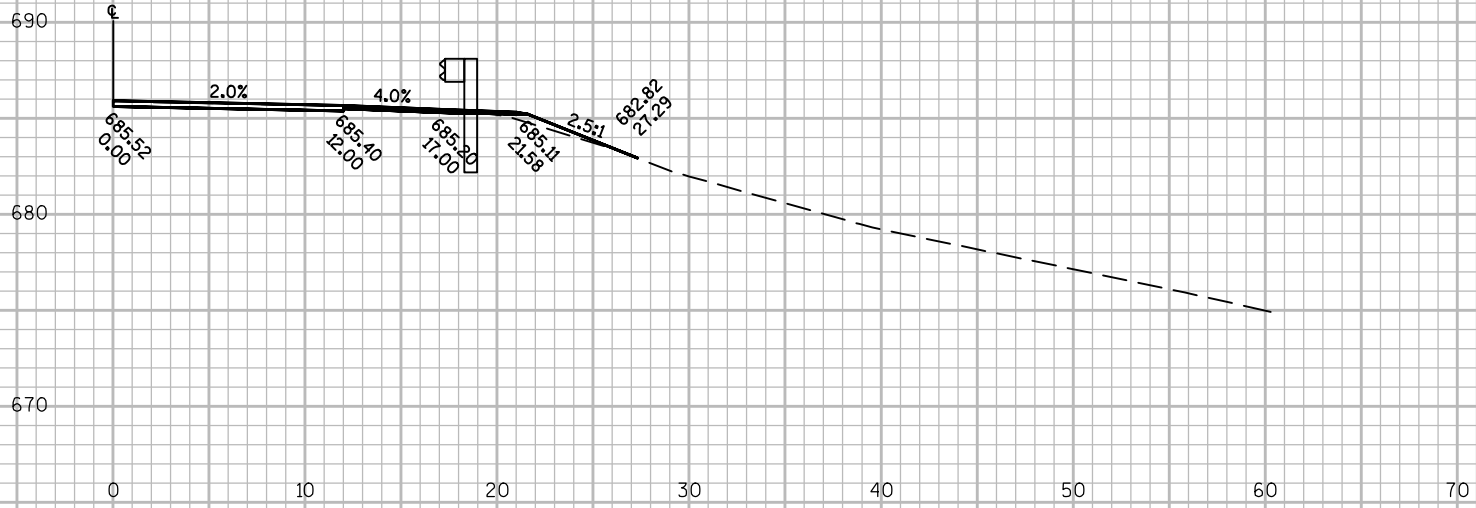
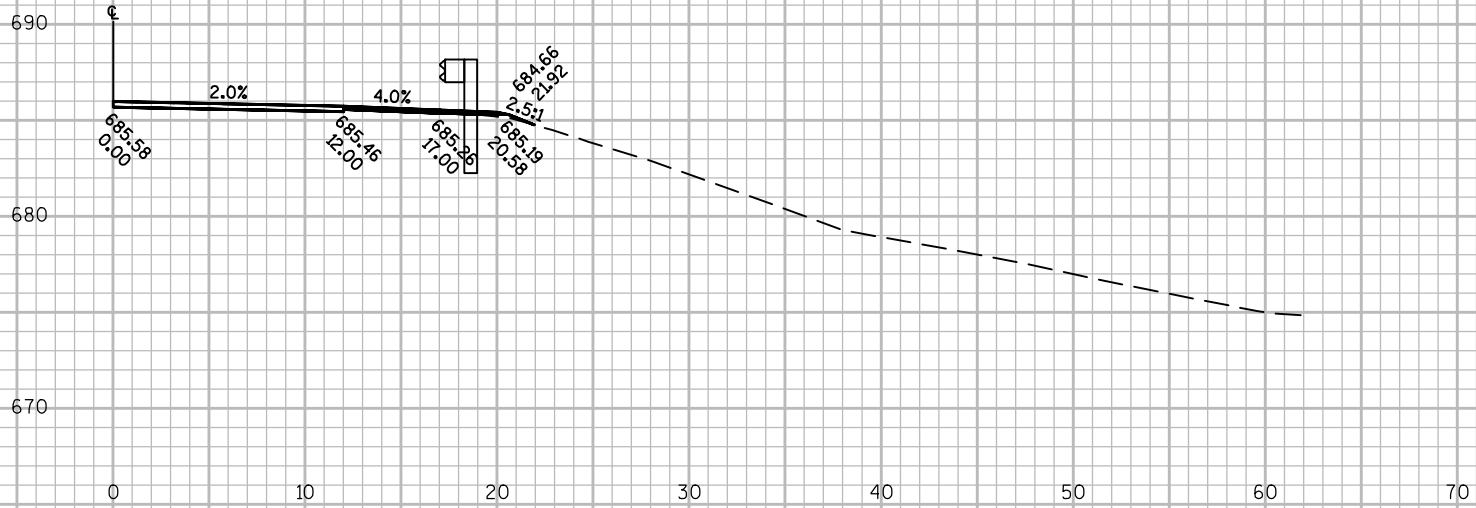
R/W IS LOCATED OUTSIDE SECTION LIMITS.



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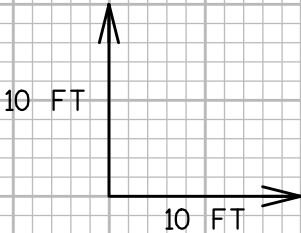
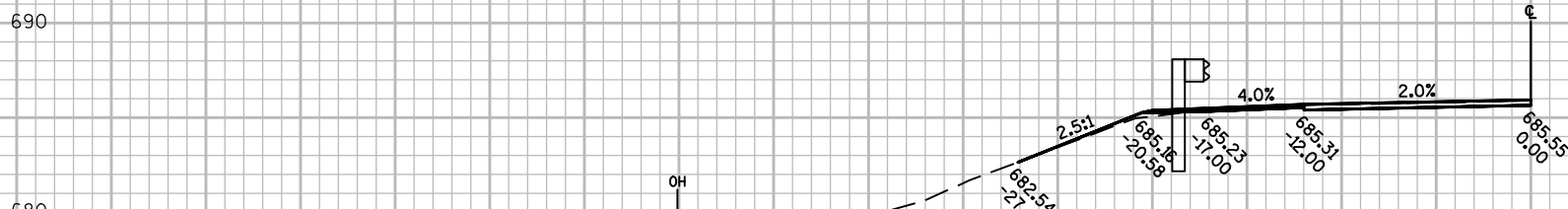
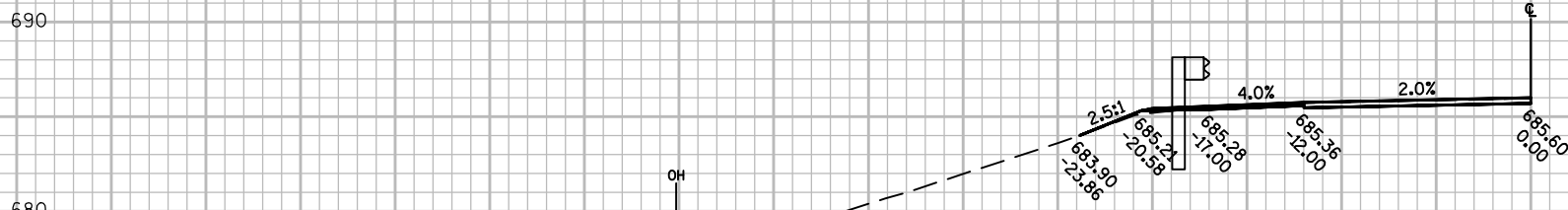
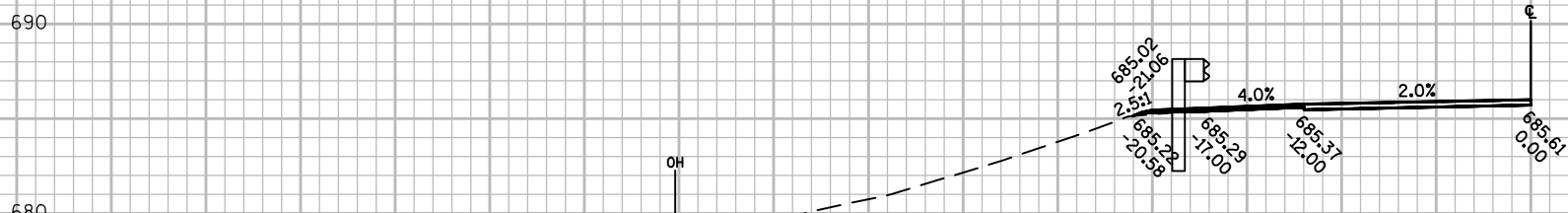
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

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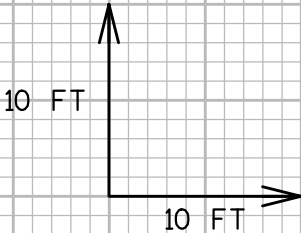
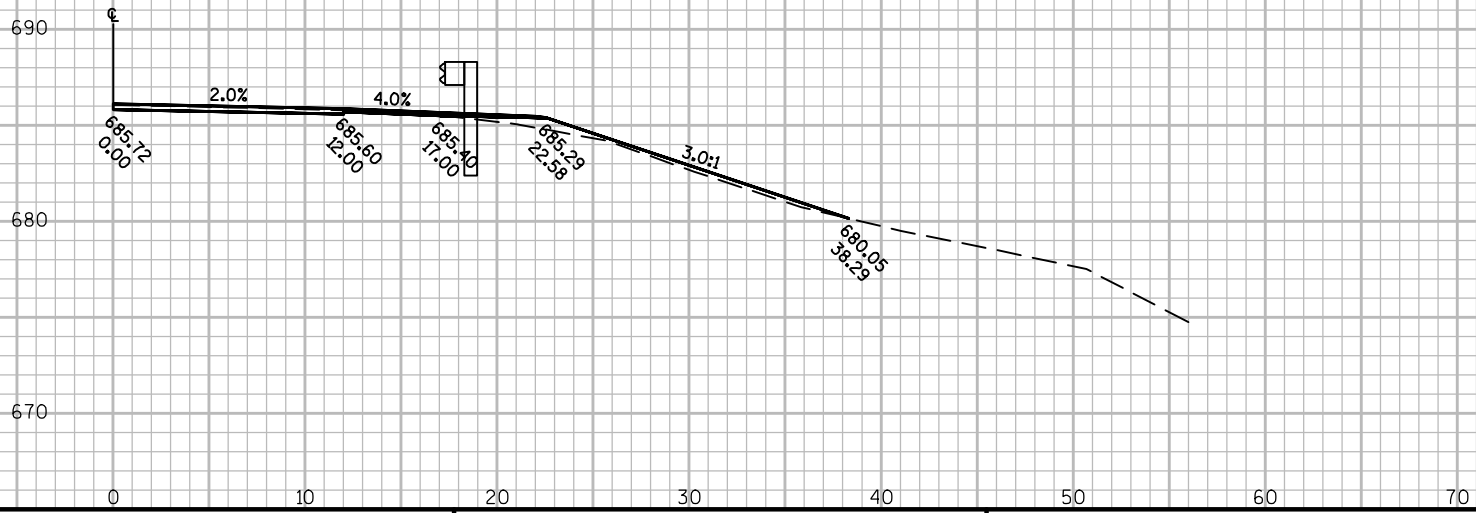
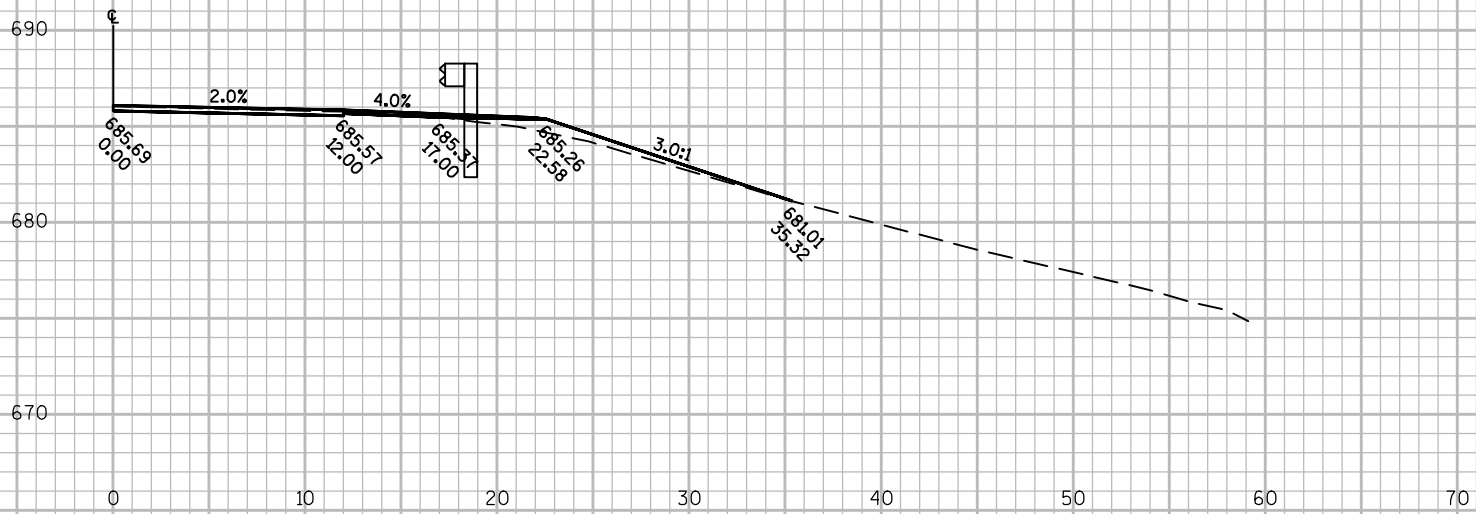
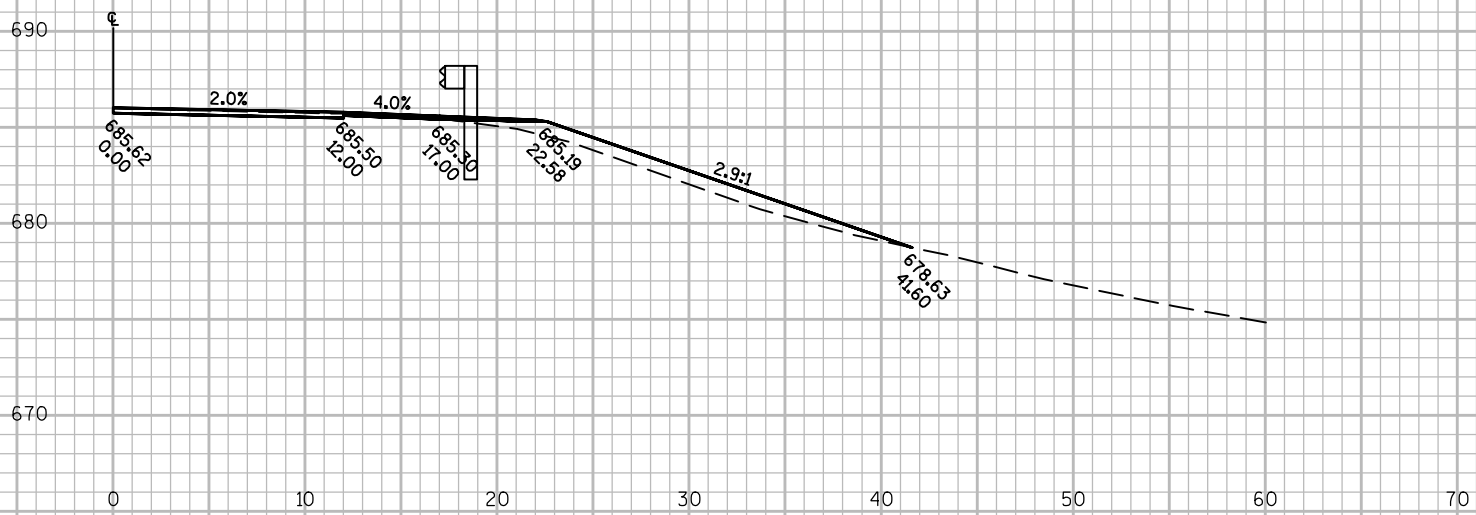
R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

R/W IS LOCATED OUTSIDE SECTION LIMITS.



9

9

PROJECT NO:1720-00-70

HWY:STH 35

COUNTY:PEPIN & BUFFALO

CROSS SECTIONS:STH 35

SHEET 246

E

FILE NAME : W:\7062\CAD\7MODELS\C3D\7062.01\SHEETPLAN\090100.XS.DWG

PLOT DATE : 12/20/2016 11:26 AM

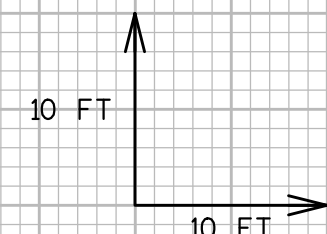
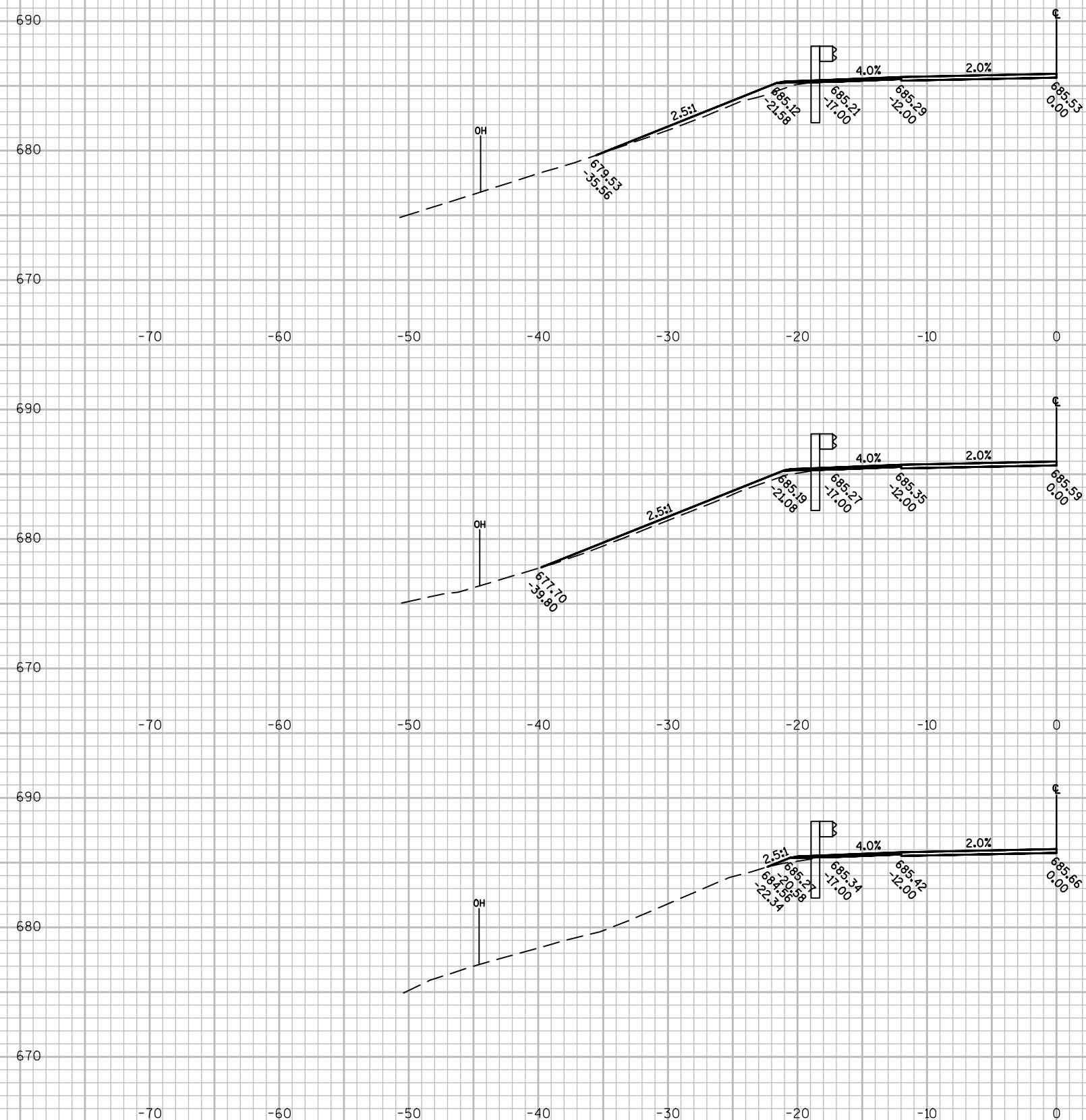
PLOT BY : DWORAK, ALEX

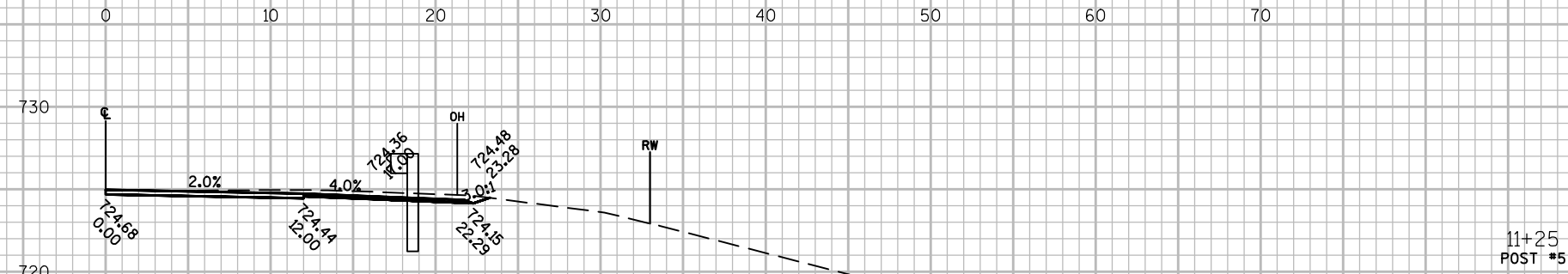
PLOT NAME :

PLOT SCALE : 1 IN:10 FT

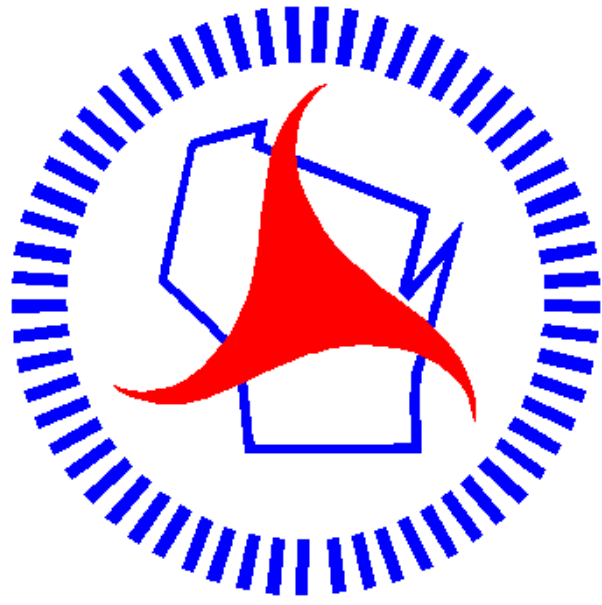
WISDOT/CADDs SHEET 49

R/W IS LOCATED OUTSIDE SECTION LIMITS.





Notes



Wisconsin Department of Transportation

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<http://www.dot.wisconsin.gov>