

ORDER OF SHEETS

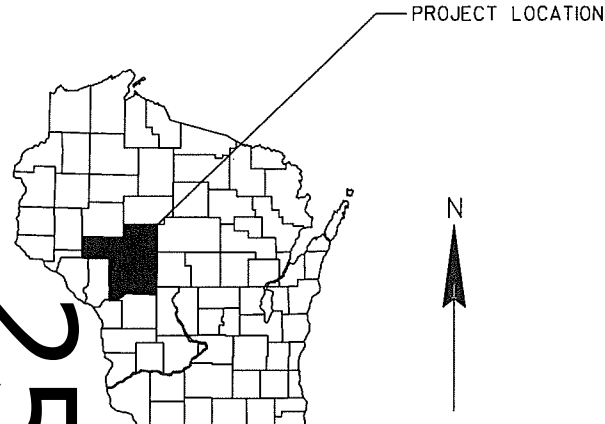
Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 5	Plan
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 9	Cross Sections

TOTAL SHEETS = 122

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT
FAIRCHILD-NEILLSVILLE
PRIMUS RD TO C.T.H. I
U.S.H. 10
JACKSON/EAU CLAIRE/CLARK COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1520-06-74	_____	_____

STATE PROJECT NUMBER
1520-06-74



DESIGN DESIGNATION

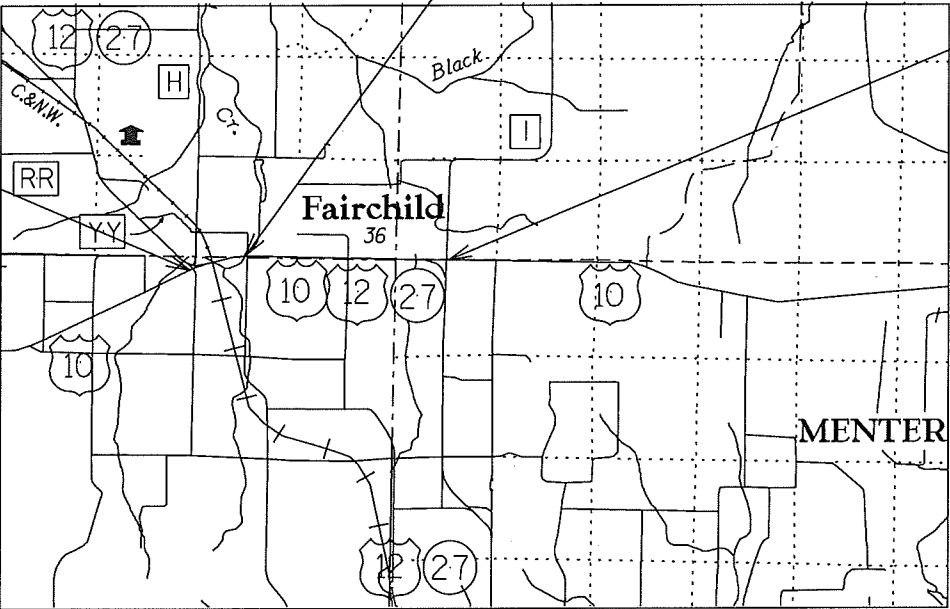
A.A.D.T. 2010	=	4550
A.A.D.T. 2030	=	5900
D.H.V.	=	8.2
D.D.	=	63/38
T.	=	10.3
DESIGN SPEED	=	55 MPH
ESALS	=	1,281,150

BEGIN PROJECT 1520-06-74
STA. 103+25
X=199628.78
Y=478556.33

CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	=====
ORIGINAL GROUND	=====
MARSH OR ROCK PROFILE (To be noted as such)	=====
SPECIAL DITCH	=====
GRADE ELEVATION	95.36
CULVERT (Profile View)	=====
UTILITIES	
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	=====
POWER POLE	=====
TELEPHONE POLE	=====



EXCEPTION TO CL LENGTH: B-18-193
STA. 133+23 - 133+90

END PROJECT 1520-06-74
STA. 241+50

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 2.6 MI.

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Chippewa County.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	NW REGION - EAU CLAIRE
Designer	KOU THAO
Project Manager	DAVID KOEPP
Regional Examiner	DAN OJIBWAY
Regional Supervisor	DAVID SOLBERG
C.O. Examiner	
APPROVED FOR THE DEPARTMENT	
DATE: 7/31/13	(Signature)

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

GENERAL NOTES

WHEN THE QUANTITY OF THE ITEMS OF SUBBASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE TOPSOILED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

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

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS-SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER.

PRIOR TO MILLING OPERATIONS WITHIN THE PROJECT AREA, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE COUNTY SURVEYOR CONCERNING MONUMENT AND PROPERTY CORNER PRESERVATION.

THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS REGARDING MAILBOX ISSUES AND ADJUST ACCORDINGLY.

THE LOCATION OF EXISTING UTILITY LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE SOME OTHER UTILITY INSTALLATIONS WITHIN THE AREA THAT ARE NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL DIGGERS HOTLINE PRIOR TO BEGINNING WORK OPERATIONS. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMEBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.



1-800-242-8511
HEARING IMPAIRED TDD 1-800-542-2289
CALL 3 WORK DAYS BEFORE YOU DIG
WWW.DIGGERSHOTLINE.COM

DEPARTMENT OF NATURAL RESOURCES

WEST CENTRAL REGION HEADQUARTERS
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
TELEPHONE: 715-839-1609
ATTENTION: NICK SCHAFF

UTILITIES

CENTURYTEL
333 N. FRONT STREET
LA CROSSE, WI 54601
TELEPHONE: 715-284-4375
ATTENTION: DONNA SMOTHERS

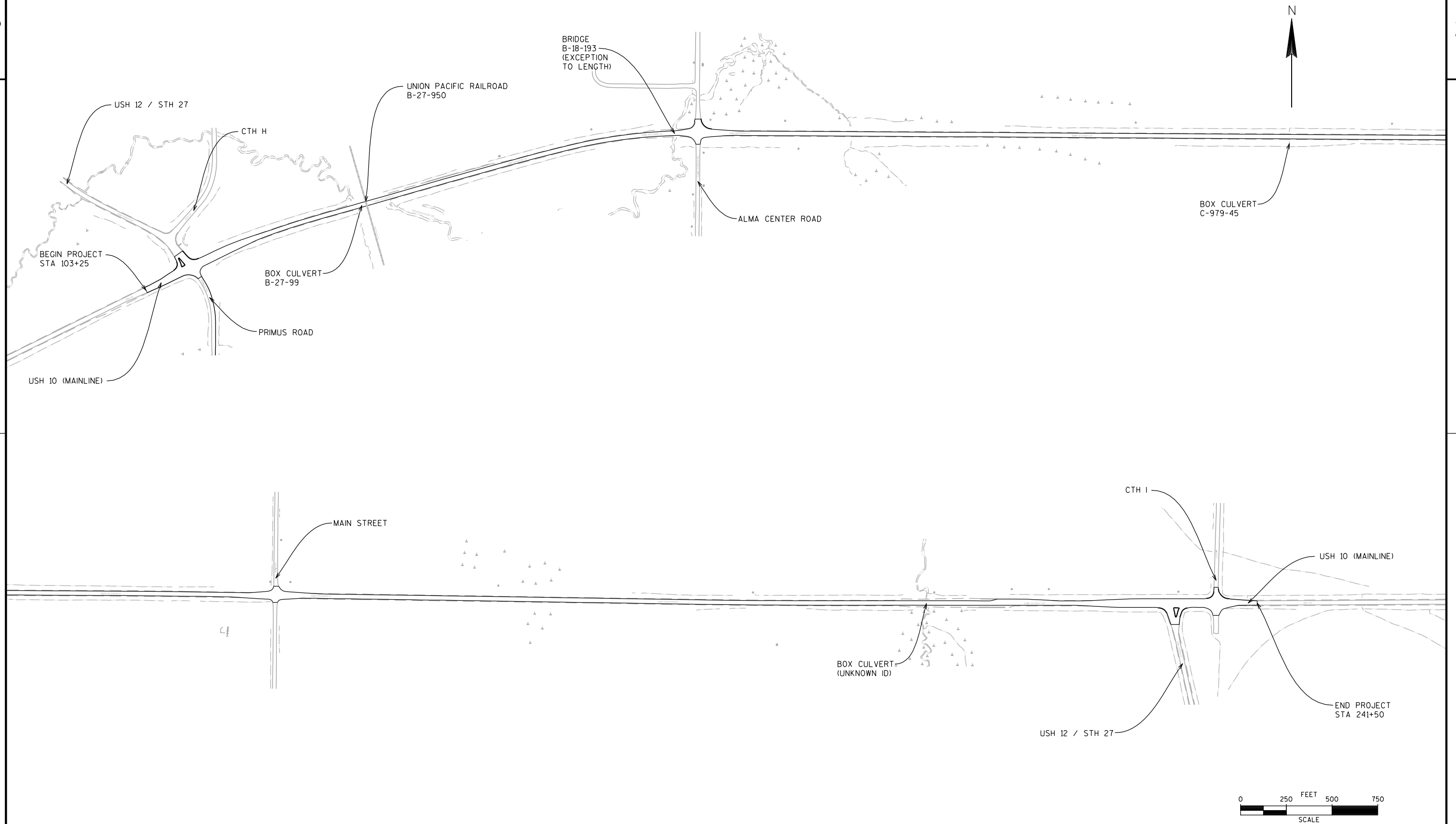
XCEL ENERGY - TRANSMISSION
1414 W. HAMILTON AVENUE
P.O. BOX 8
EAU CLAIRE, WI 54702-0008
TELEPHONE: 715-737-1306
ATTENTION: PAM TAYLOR

TRI-COUNTY COMMUNICATIONS CO-OP
23451 WHITEHALL ROAD
P.O. BOX 846
INDEPENDENCE, WI 54747
TELEPHONE: 715-985-3004
ATTENTION: MIKE LIGHTFOOT

KDL INC-COMMUNICATION LINE
13935 BISHOPS DRIVE
BROOKFIELD, WI 53005
TELEPHONE: 262-792-7938
ATTENTION: JIM KOSTUCH

UNION PACIFIC RAILROAD
101 N. WACKER DRIVE
CHICAGO, IL 60606
TELEPHONE: 312-777-2043
ATTN: JOHN VENICE

UNION PACIFIC RAILROAD
CALL BEFORE YOU DIG
TELEPHONE: 1-800-336-9193



PROJECT NO: 1520-06-74

HWY: U.S.H. 10

COUNTY: EAU CLAIRE / CLARK / JACKSON

PROJECT OVERVIEW

SHEET NO:

E

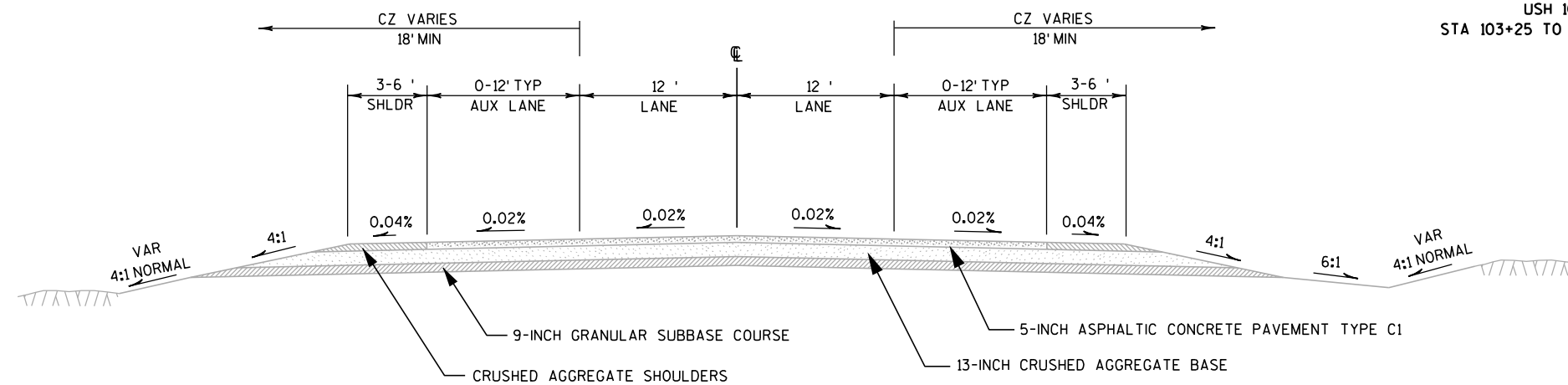
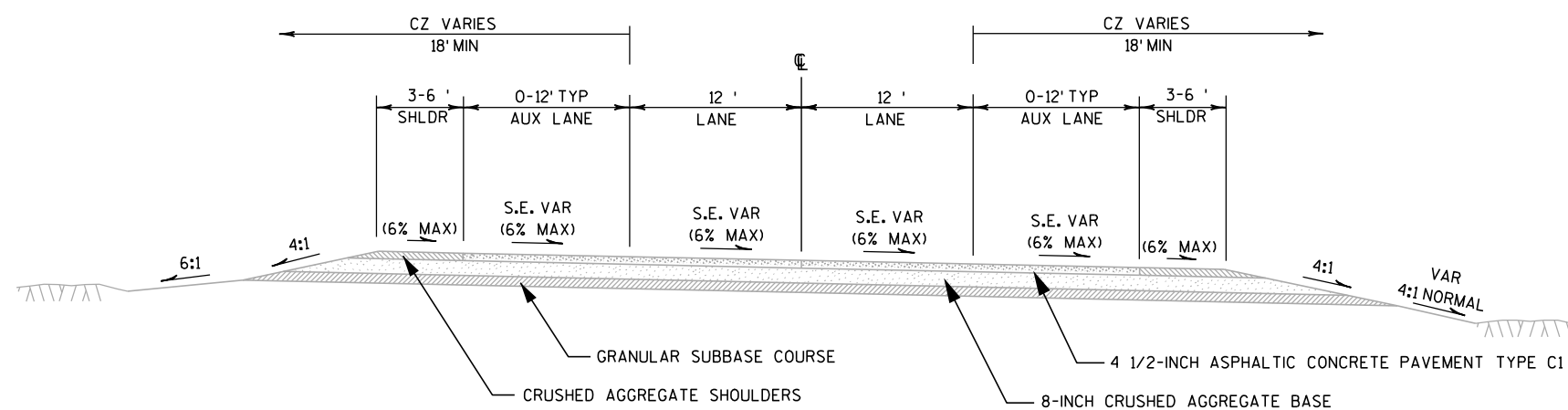
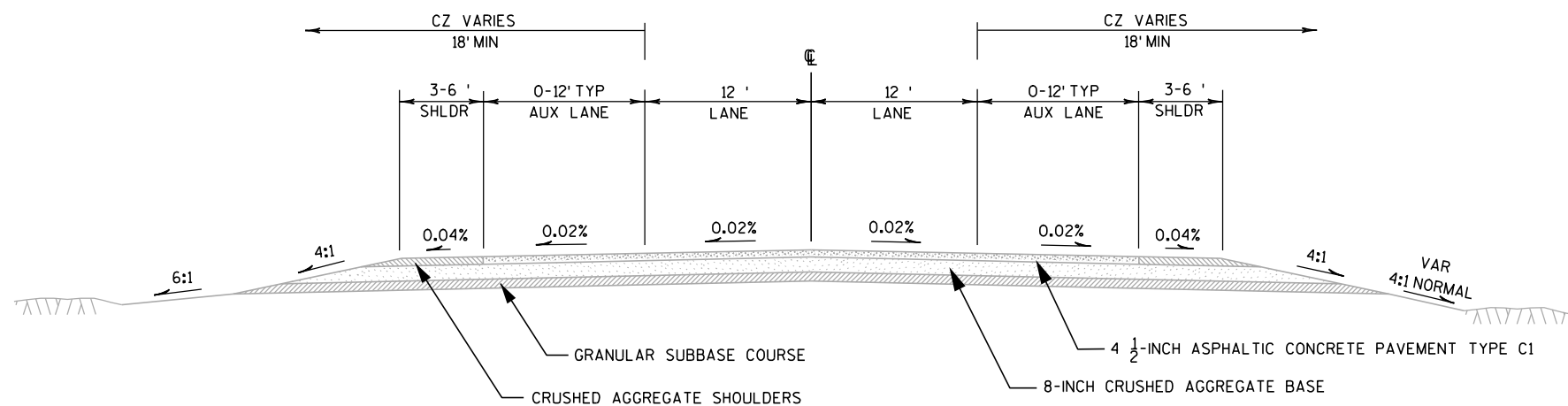
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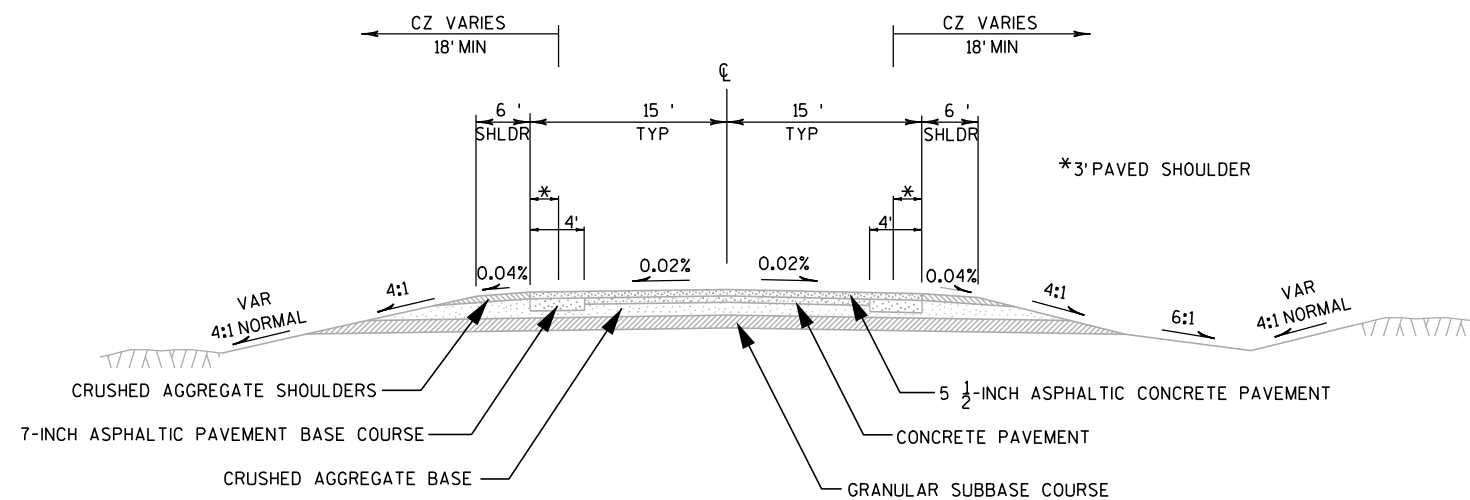
PLOT DATE : 07-JUN-2011 09:49

PLOT BY : dotk7t

PLOT NAME :

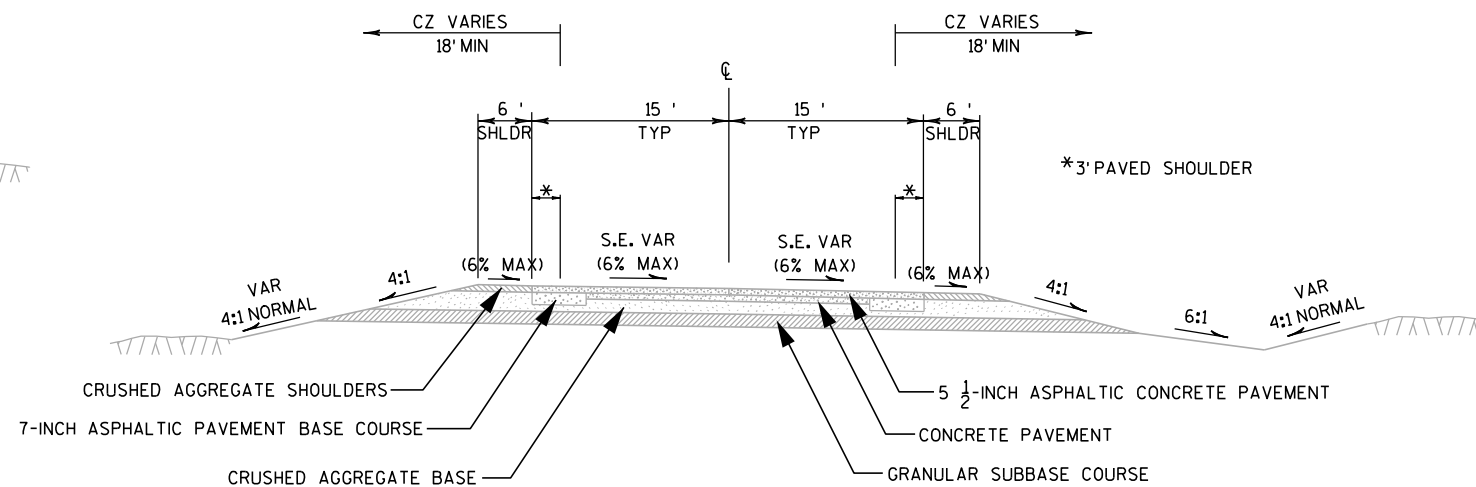
PLOT SCALE : 2.000004:1





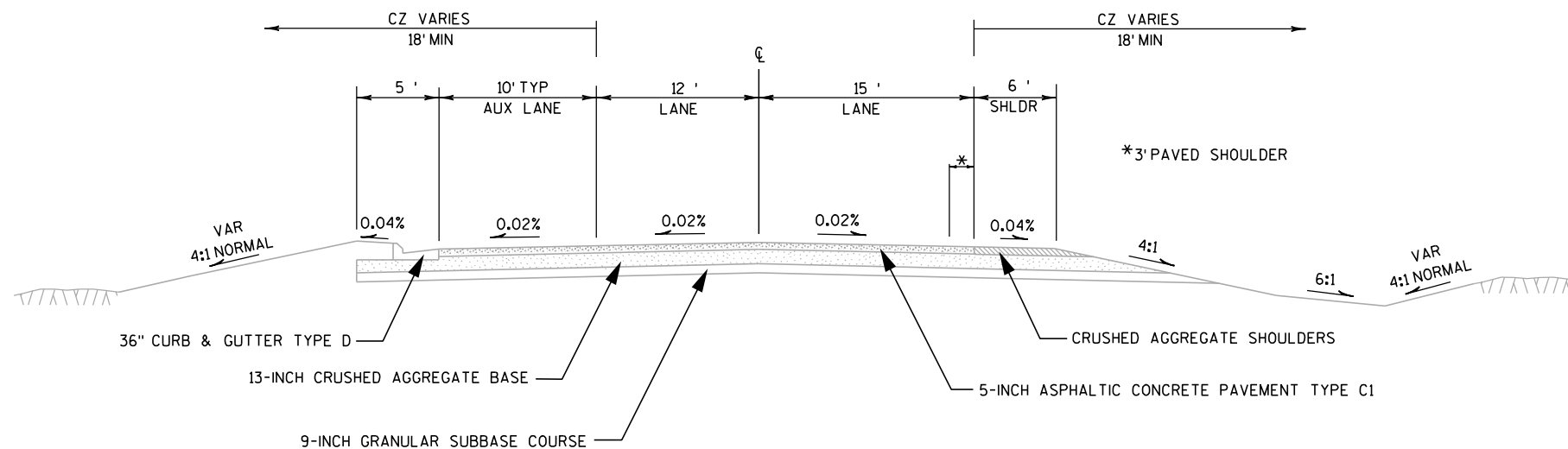
TYPICAL EXISTING SECTION

U.S.H. 10
STA 127+75 TO STA 223+75



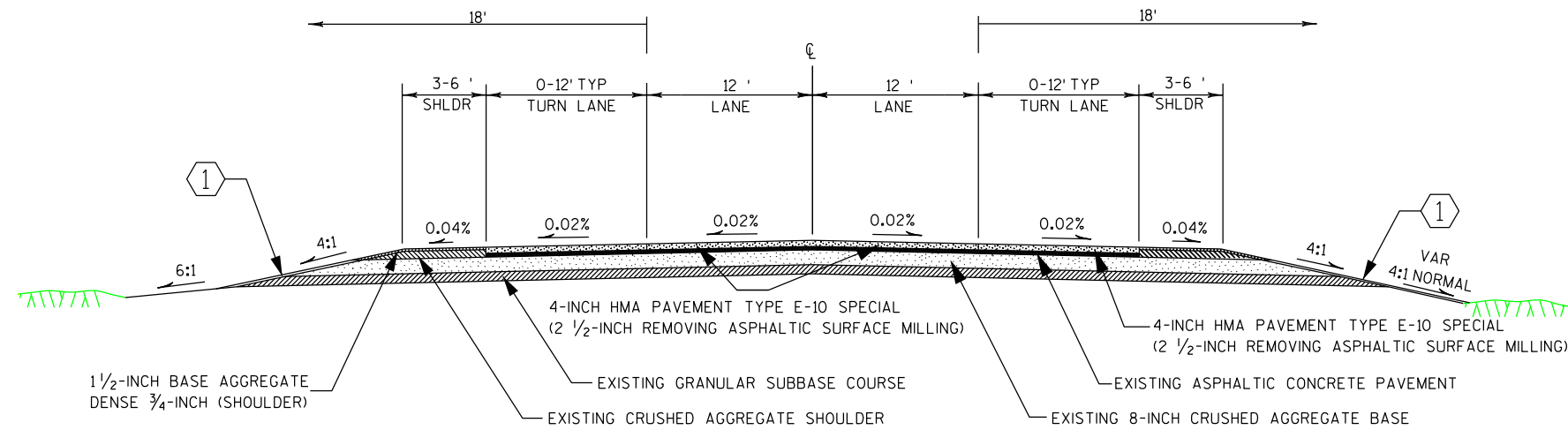
TYPICAL EXISTING SUPERELEVATION SECTION

U.S.H. 10
STA 127+75 TO STA 223+75



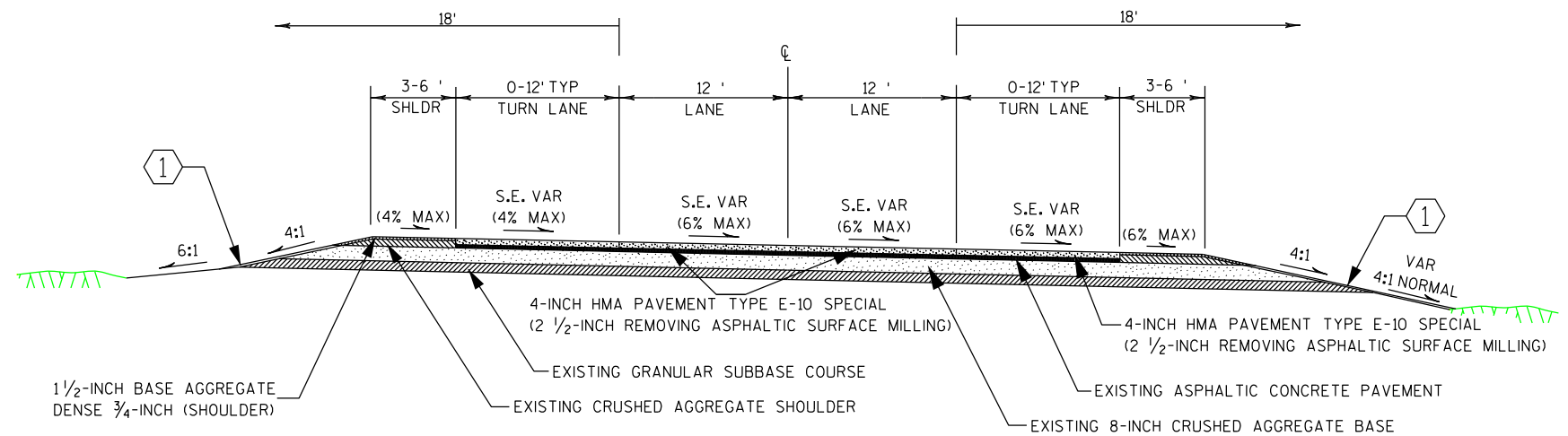
TYPICAL EXISTING SECTION

USH 10
STA 119+71 TO STA 123+22
STA 226+25 TO STA 227+75 (C&G ON EB)

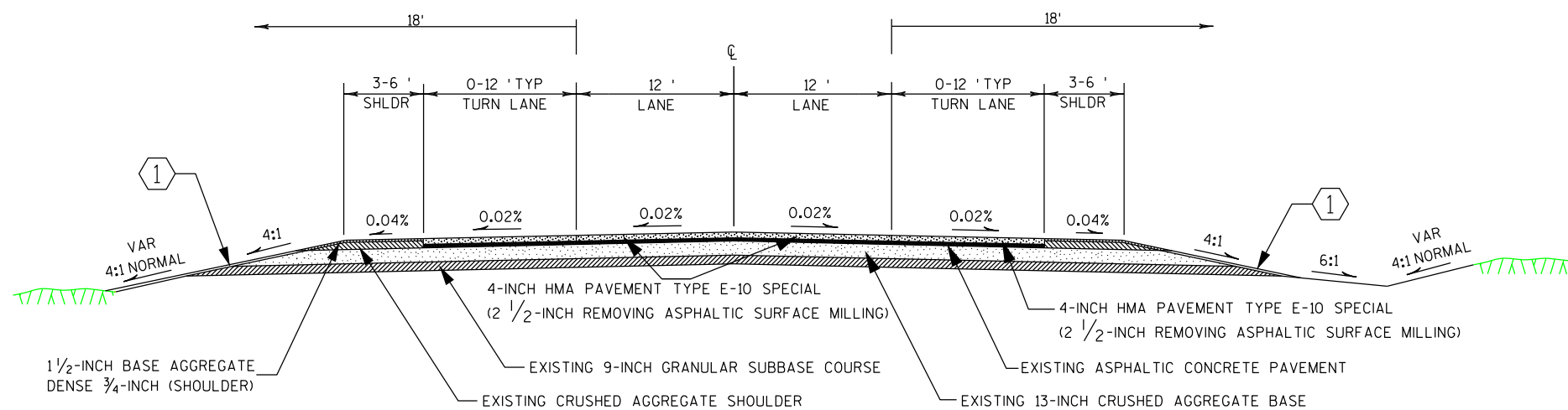


TYPICAL FINISHED SECTION
USH 10
STA 103+25 TO STA 110+75

NOTE:
RIGHT TURN LANES ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE MAINTAINED AT THE SAME SLOPE AS THE ADJACENT TRAFFIC LANE UNTIL THE SUPERELEVATION REACHES 4 PERCENT. WHEN THE ADJACENT TRAFFIC LANE IS GREATER THAN 4 PERCENT, THE TURN LANE SLOPE WILL REMAIN AT 4 PERCENT.



TYPICAL FINISHED SUPERELEVATION SECTION
USH 10



TYPICAL FINISHED SECTION
USH 10
STA 110+75 TO STA 127+75
STA 223+75 TO STA 241+50

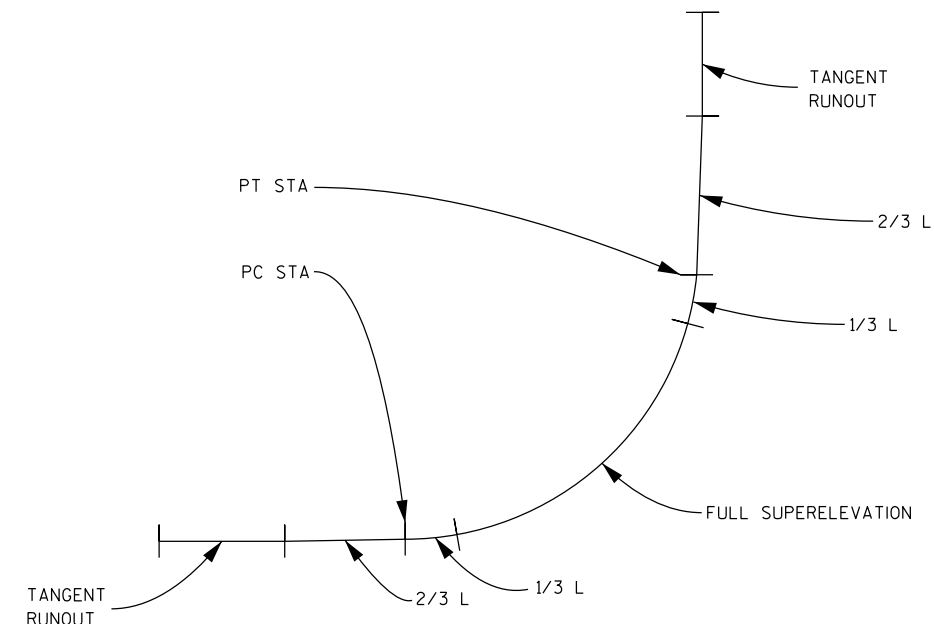
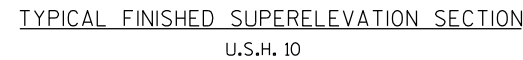
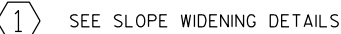
NOTE:
HMA PAVEMENT TYPE E-10 SPECIAL SHALL CONSIST OF A 2 1/4-INCH LOWER LAYER AND 1 3/4-INCH UPPER LAYER.

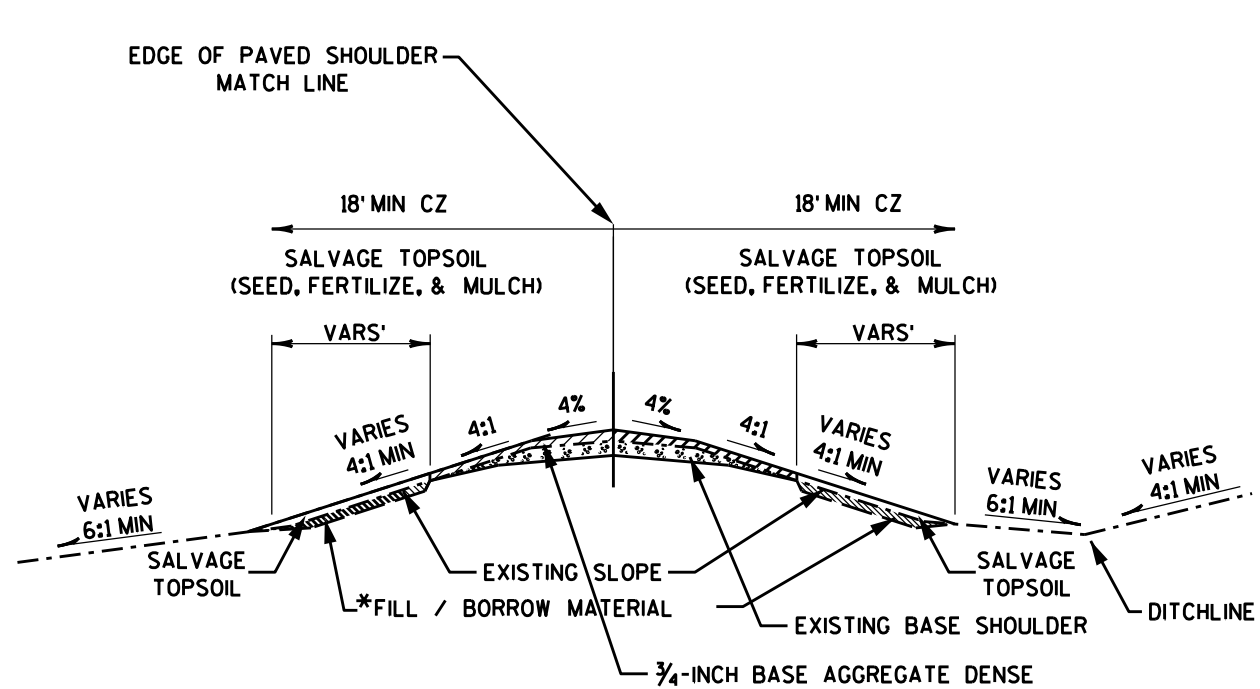
1 SEE SLOPE WIDENING DETAILS

SUPERELEVATION STATIONING

PC STA	PT STA	e(%)	*L(ft)	*T(ft)
106+79	113+09	4.0	134	211
127+40	133+46	4.5	157	234

*L = MINIMUM LENGTH OF RUNOFF
*T = SUPERELEVATION TRANSITION
(TANGENT RUNOUT + RUNOFF LENGTH)





SLOPE WIDENING/FLATTENING DETAIL

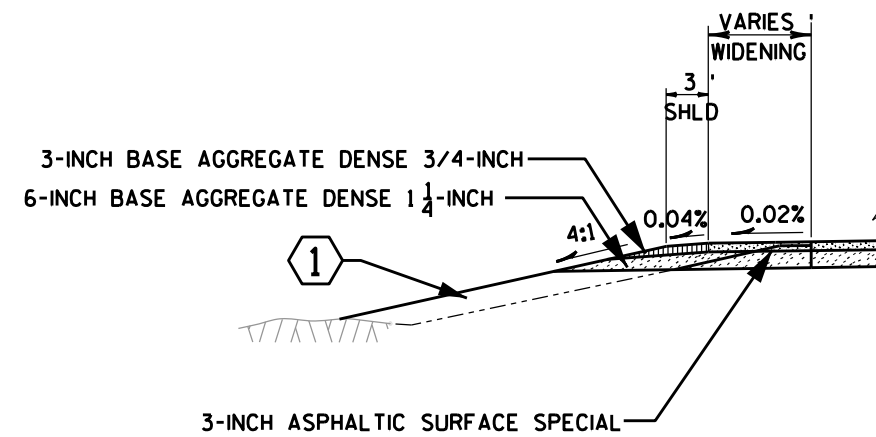
TURN LANE / TAPER
RADIUS / EATS

NOTE:

ALL ITEMS SHOWN, EXCEPT BASE AGGREGATE AND ASPHALT PAVEMENT FOR RADIUS, TURN LANE, AND TAPER WIDENING ARE INCLUDED IN BID ITEM "GRADING, SHAPING, AND FINISHING INTERSECTION." SEE SPV'S.

*SEE MISCELLANEOUS QUANTITIES FOR FILL OR BORROW QUANTITIES.

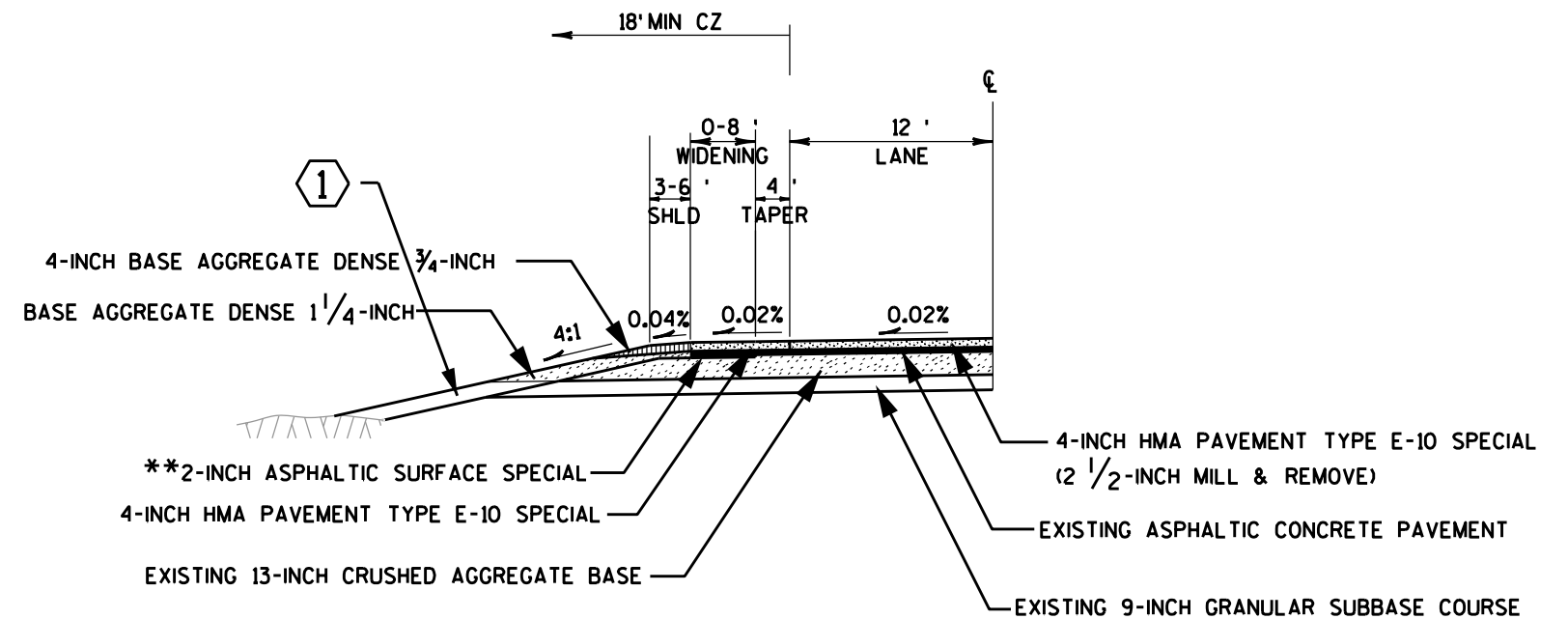
**PAVE 2-INCH ASPHALTIC SURFACE SPECIAL TO MATCH MILLED SURFACE THEN PAVE 4-INCH OVERLAY.



RADIUS WIDENING

PRIMUS RD. / ALMA CENTER RD. / MAIN ST. / CTH 1
>SEE INTERSECTION DETAIL FOR GEOMETRIC LAYOUT.<

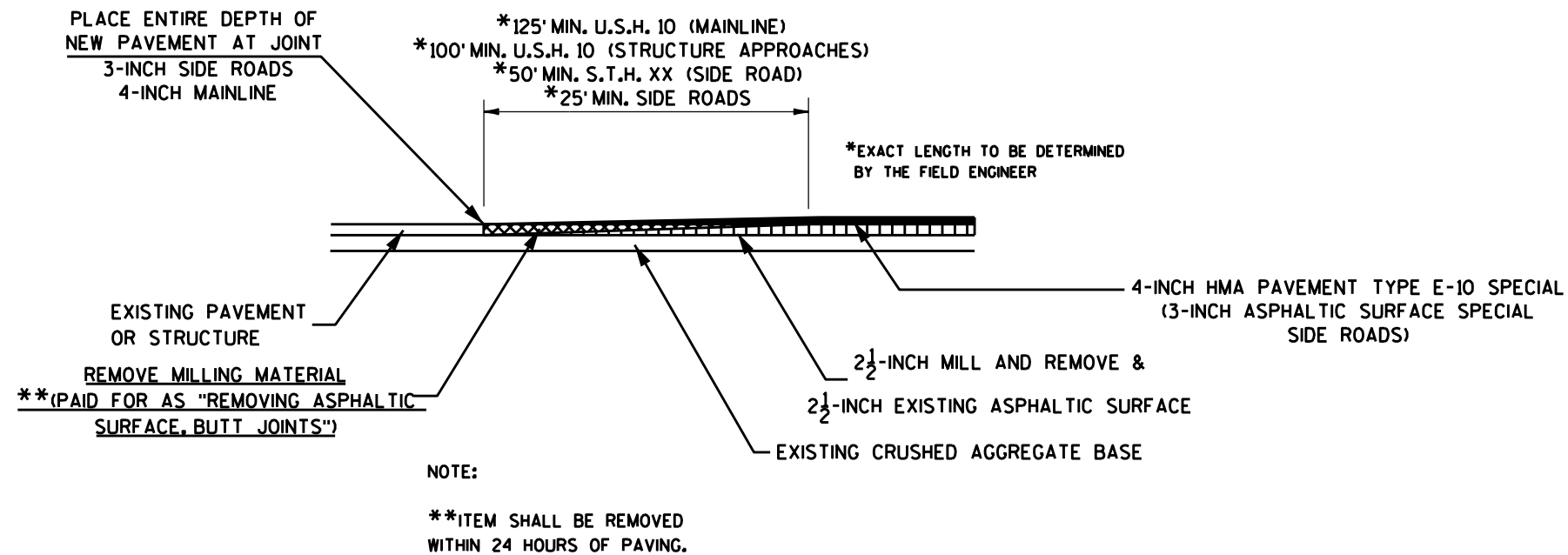
1 SEE SLOPE WIDENING DETAILS



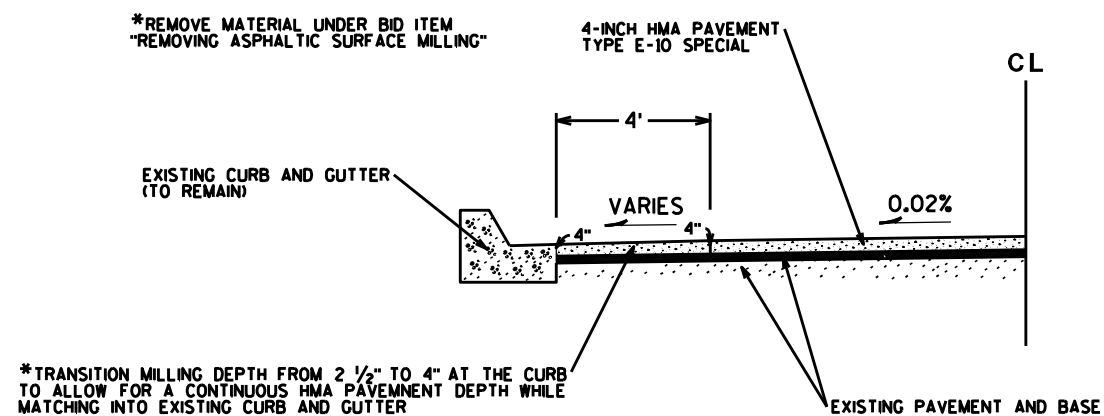
TURN LANE/TAPER WIDENING

STA 103+59 - 104+80, LT
STA 108+25 - 111+58, LT
STA 107+16 - 110+42, RT
STA 231+09 - 234+00, RT
STA 231+30 - 234+55, LT
STA 240+00 - 240+75, RT

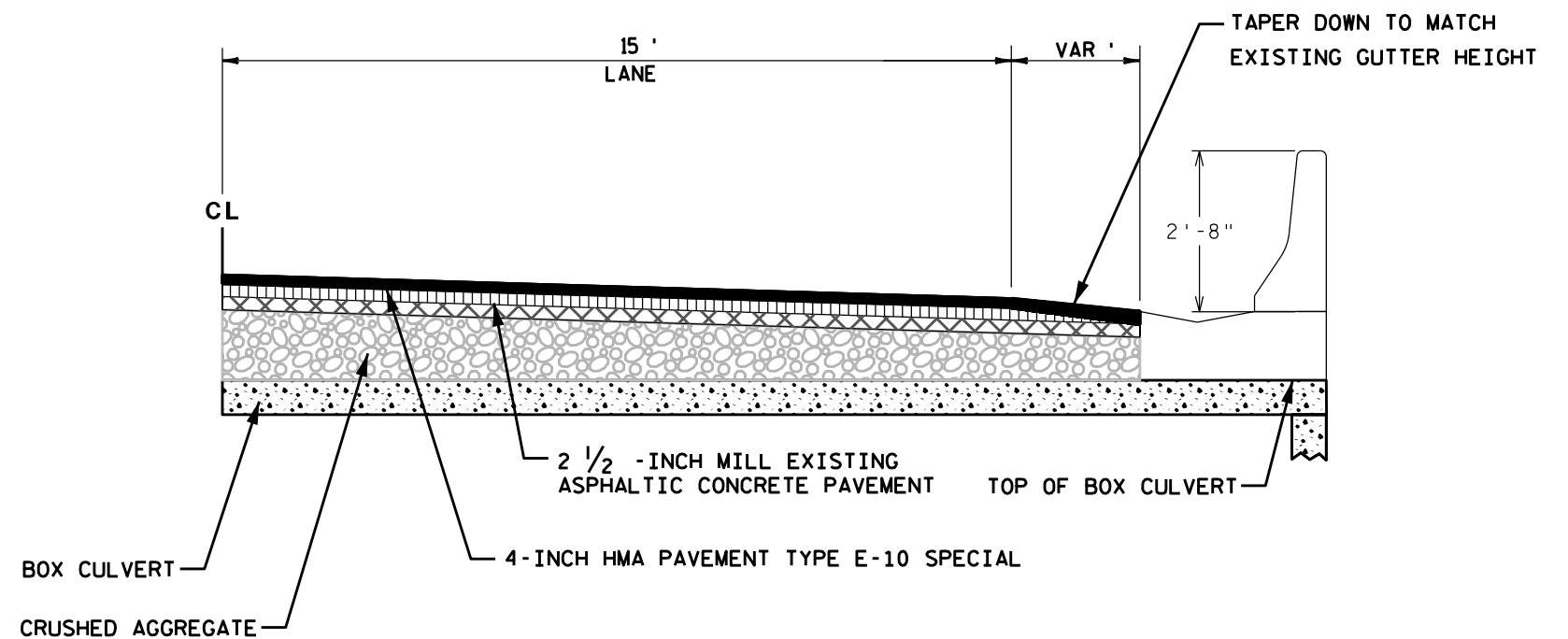
>SEE INTERSECTION DETAIL FOR GEOMETRIC LAYOUT.<



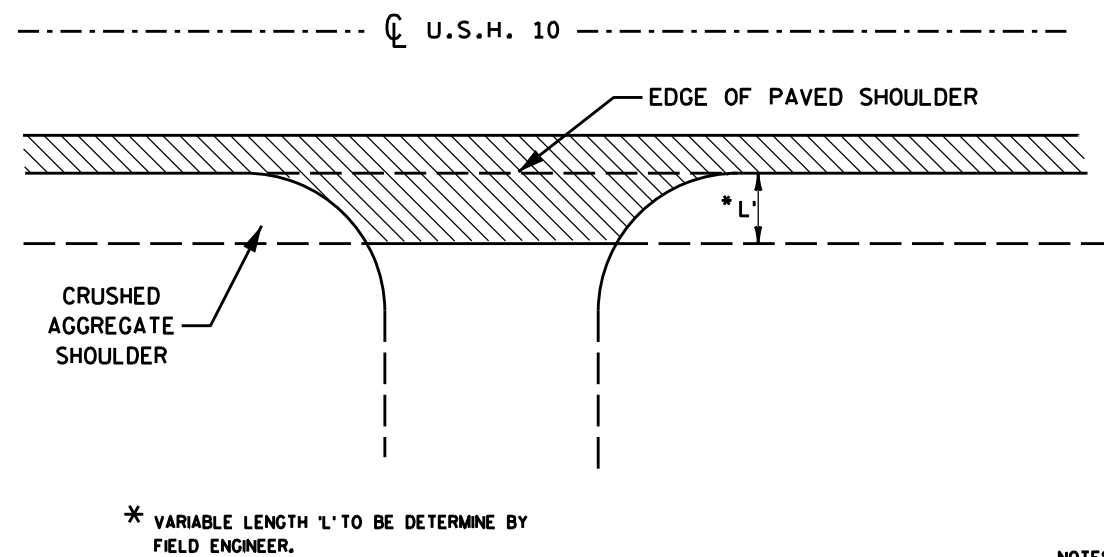
MAINLINE/SIDE ROAD JOINT DETAIL
STA 103+25 - 241+50



MILLING TRANSITION DETAIL AT CURB & GUTTER TO REMAIN



PAVING AT CONCRETE BARRIER WALL DETAIL
STA 115+42 - 117+53



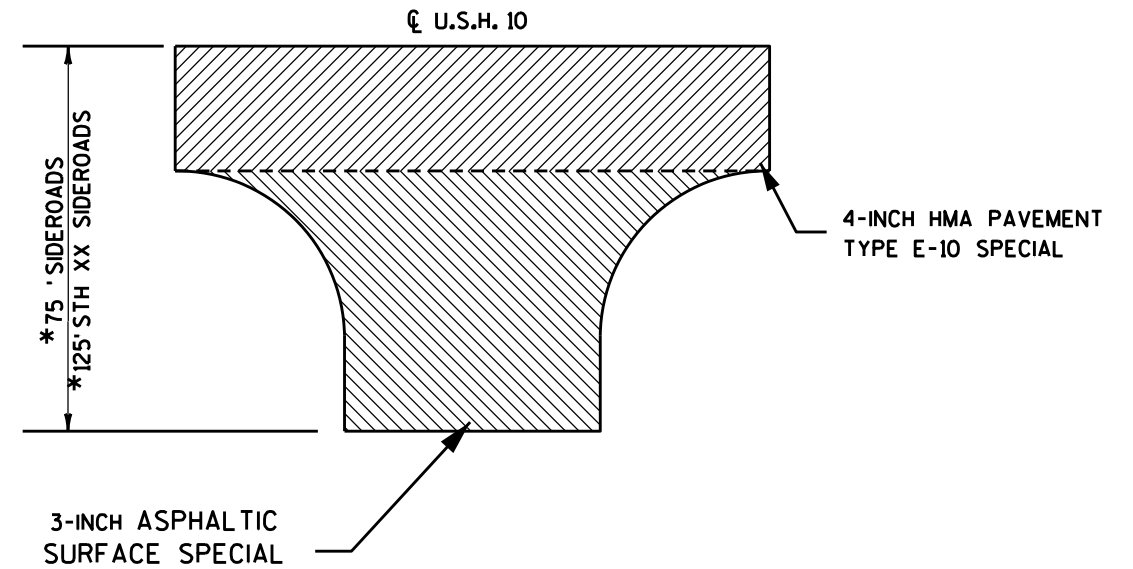
DRIVEWAY PAVING DETAIL

NOTES:

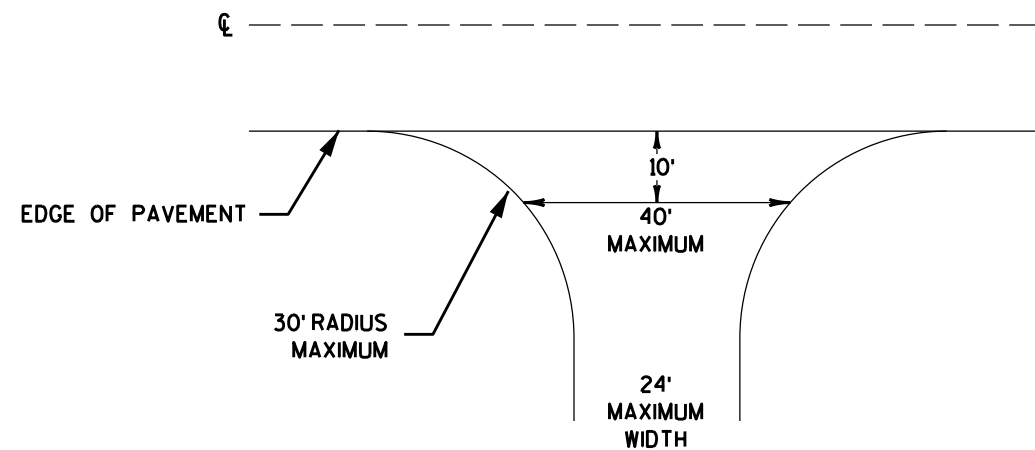
MILL AND REMOVE EXISTING SURFACE.
SIDE ROAD PAVEMENT DEPTH 3-INCH DESIRED.
RESTORE TO END OF LONGEST RADIUS, 75' OR
125' (FOR STH), WHICHEVER IS GREATER.

*(EXACT LOCATION TO BE DETERMINED BY FIELD
ENGINEER)

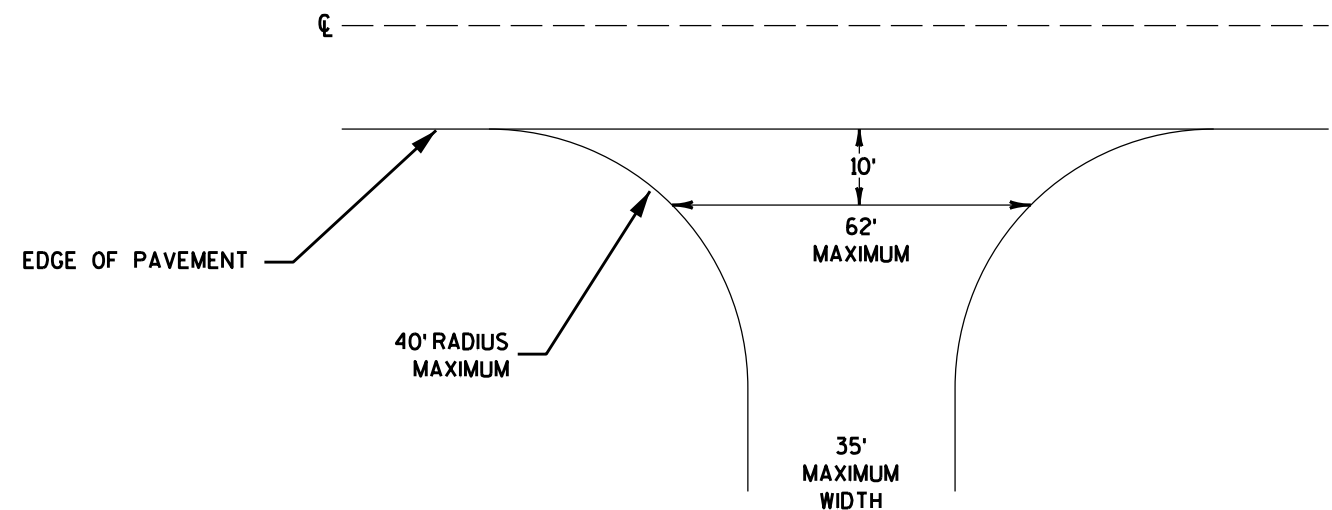
ALL PAVED ENTRANCES AND SIDE ROADS,
OTHER THAN STATE HIGHWAYS, PAVED WITH
HMA PAVEMENT TYPE E-3.



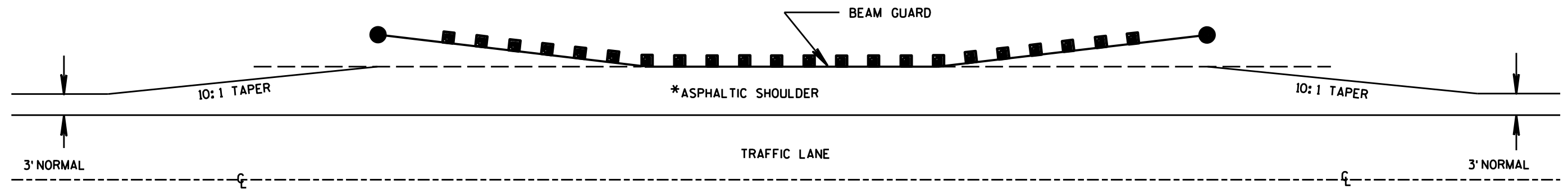
SIDE ROAD PAVING DETAIL



**PLAN VIEW
TYPICAL DRIVEWAY DETAIL
(NON-COMMERCIAL RURAL)**

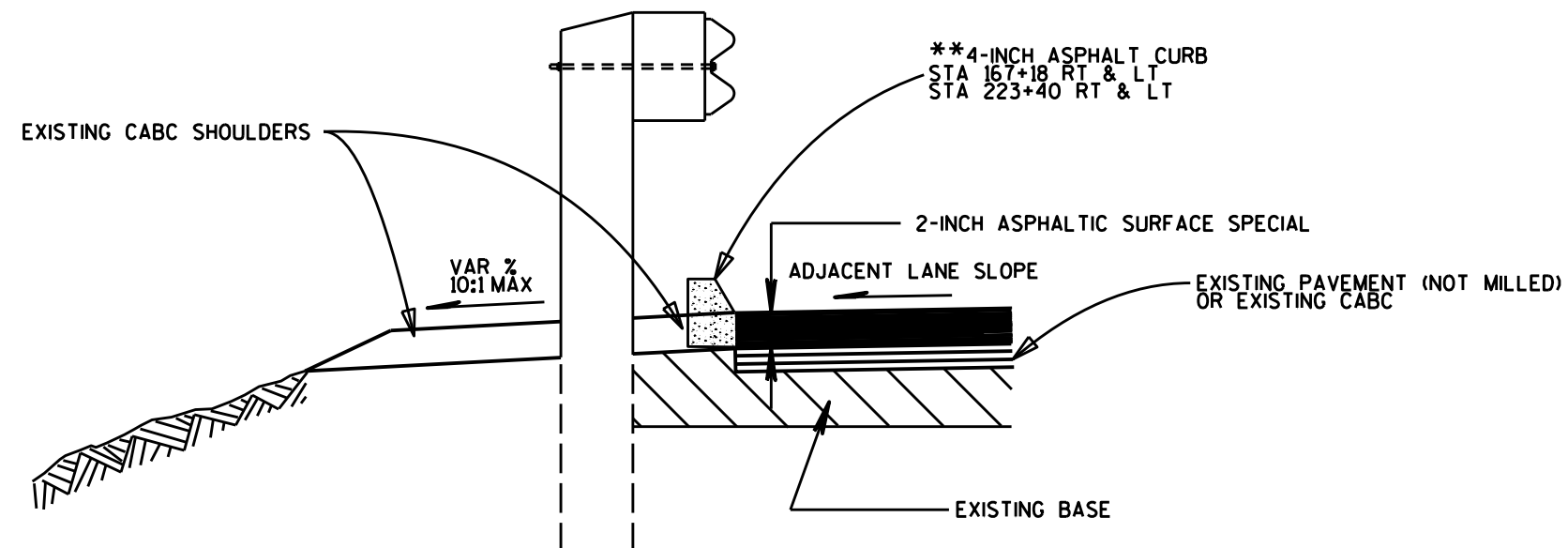


**PLAN VIEW
TYPICAL DRIVEWAY DETAIL
(COMMERCIAL RURAL)**



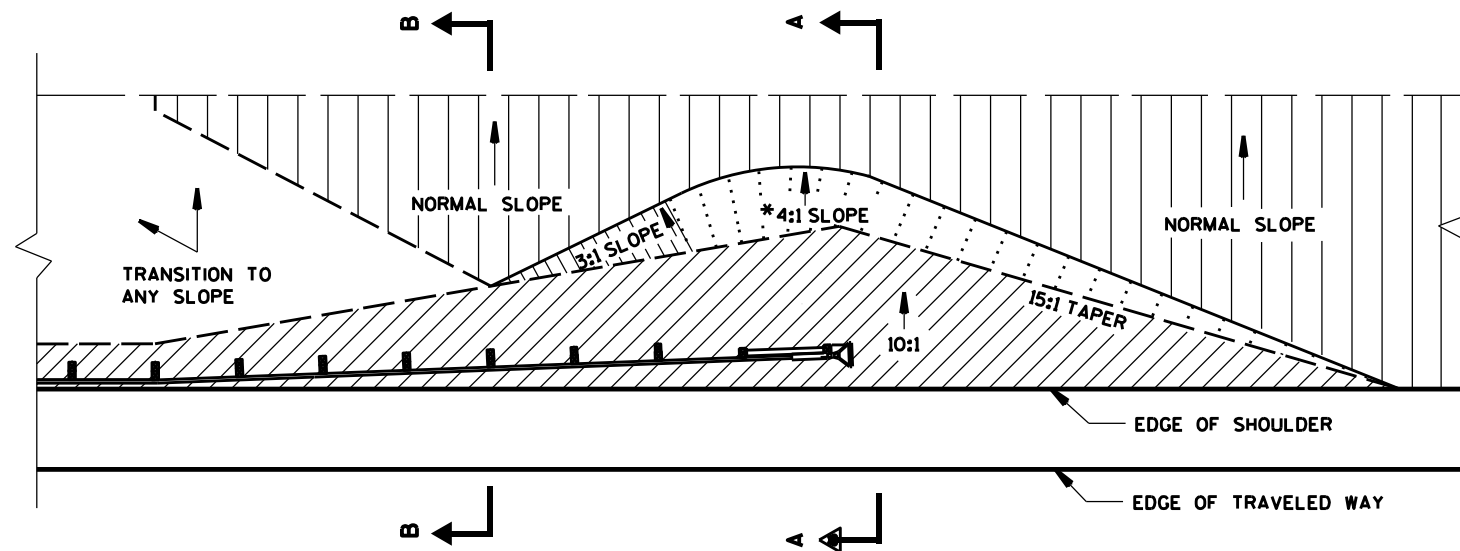
*MAINTAIN THE ADJACENT PAVE SLOPE
FOR ENTIRE WIDTH OF PAVED SHOULDER

**ALIGN FACE OF CURB WITH FACE OF BEAM GUARD.
CENTER LENGTH OF CURB WITH BOX CULVERTS.



DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD

STA 114+71-115+42, RT & LT
STA 117+53-118+25, RT & LT
STA 166+25-168+12, RT & LT
STA 221+91-224+90, RT & LT



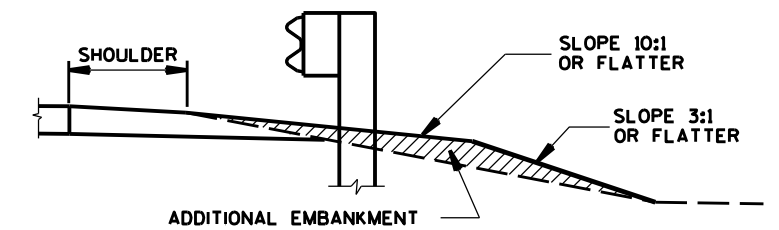
PLAN VIEW

NOTE:

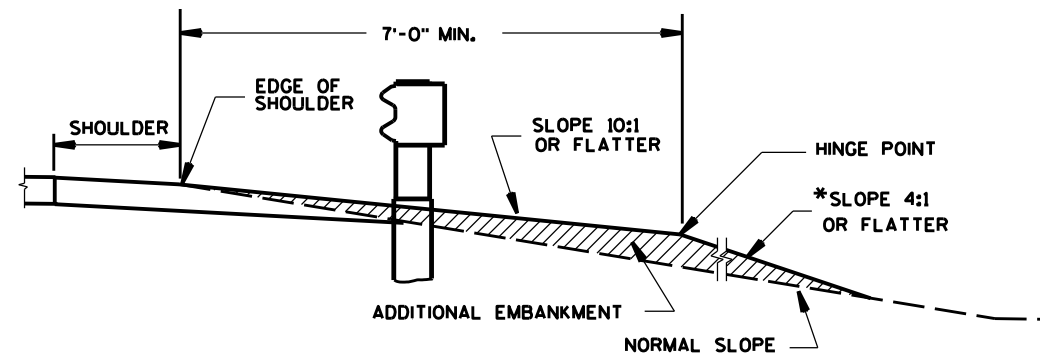
GRADING AND SHAPING BEGINS 55-FT FROM EATS.

FOR ESTIMATED QUANTITIES OF BARRIED TERMINALS,
SEE MISCELLANEOUS QUANTITIES SHEETS.

FOR GRADING & SHAPING DETAILS, SEE CROSS SECTIONS.

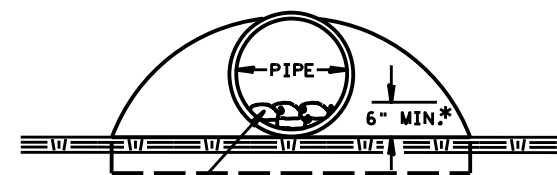


SECTION B-B



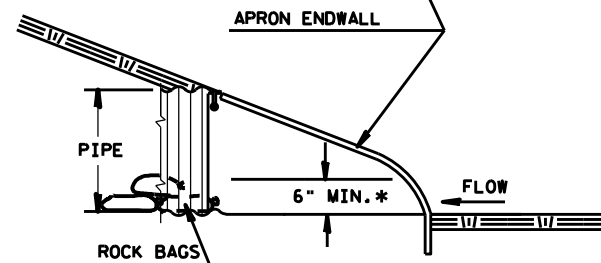
SECTION A-A

*A 3:1 MAXIMUM SLOPE MAY BE USED FOR
INSTALLATIONS ON EXISTING HIGHWAYS.



END VIEW

*OR AS DIRECTED
BY THE ENGINEER



SIDE VIEW

CULVERT PIPE CHECK

FILL AREA AT BEAM GUARD

STA 113+66 - 115+21, RT & LT
STA 117+75 - 119+30, RT & LT
STA 165+20 - 166+75, RT & LT
STA 167+62 - 169+17, RT & LT
STA 220+86 - 222+41, RT & LT
STA 224+40 - 225+95, RT & LT

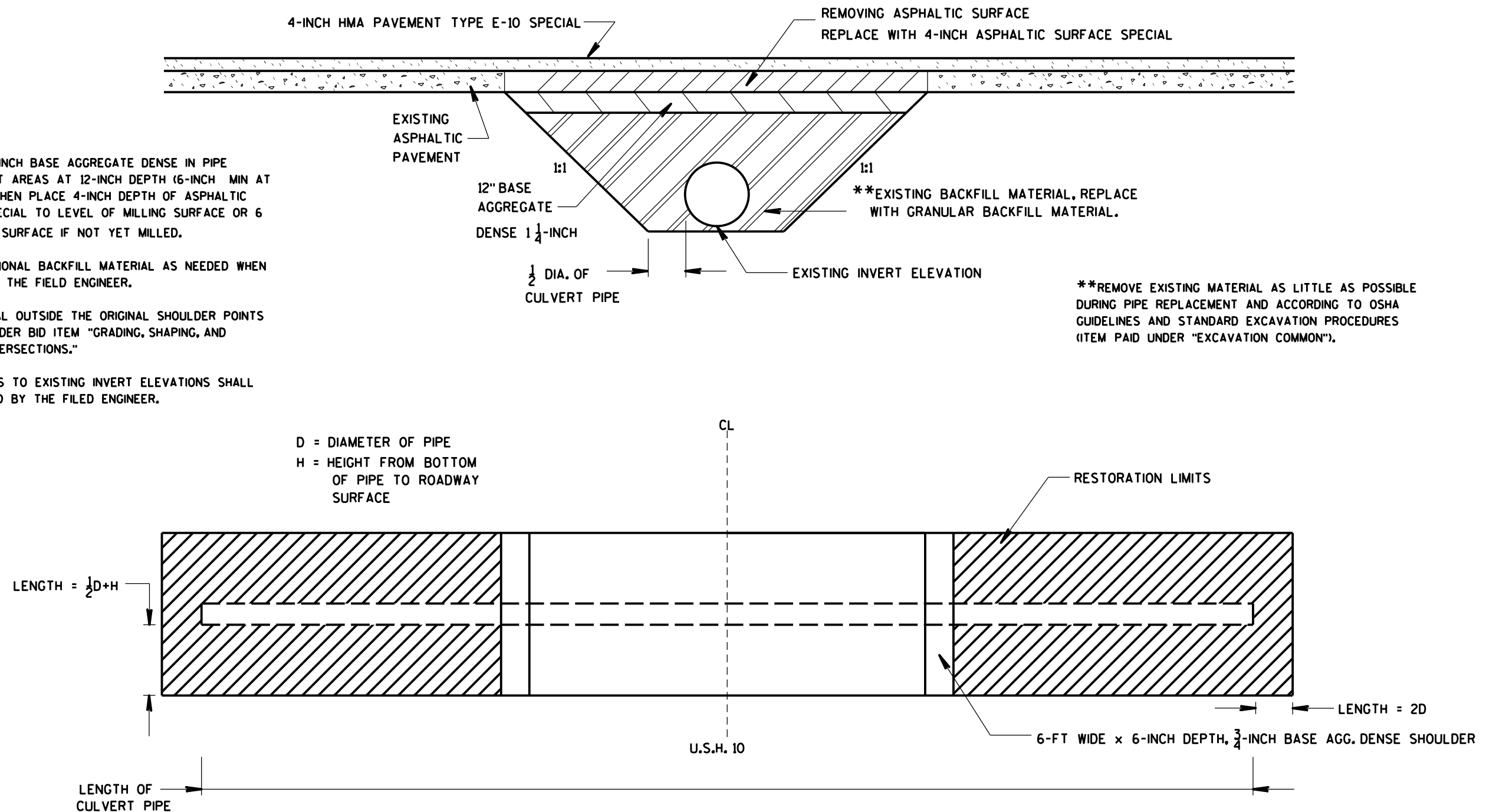
NOTE:

PLACE $1\frac{1}{4}$ -INCH BASE AGGREGATE DENSE IN PIPE REPLACEMENT AREAS AT 12-INCH DEPTH (6-INCH MIN AT SIDEROAD), THEN PLACE 4-INCH DEPTH OF ASPHALTIC SURFACE SPECIAL TO LEVEL OF MILLING SURFACE OR 6 $\frac{1}{2}$ -INCH TO SURFACE IF NOT YET MILLED.

PLACE ADDITIONAL BACKFILL MATERIAL AS NEEDED WHEN DIRECTED BY THE FIELD ENGINEER.

FILL MATERIAL OUTSIDE THE ORIGINAL SHOULDER POINTS ARE PAID UNDER BID ITEM "GRADING, SHAPING, AND FINISHING INTERSECTIONS."

ADJUSTMENTS TO EXISTING INVERT ELEVATIONS SHALL BE APPROVED BY THE FILED ENGINEER.

**DETAIL FOR CULVERT PIPE INSTALLATION**

STA 187+80 RT & STA 232+10 RT/LT

NOTES:
RADIUS IS TO FLAG OF CURB.
SEE CONSTRUCTION DETAILS
FOR WIDENING.

RADIUS POINT - SIDE ROADS					
POINT	RAD.	MAINLINE STATION	DISTANCE	N	E
C1	40'	STA 105+06.02	63.95' LT	199766.37	478690.24
C2	50'	STA 106+57.52	74.06' LT	199842.60	478821.57
C3	70'	STA 105+40.66	93.96' RT	199640.13	478791.31
C4	40'	STA 106+70.63	64.41' RT	199724.25	478894.72

Curve Data
Δ = 10°18'46.80" (RT)
D = 1°38'13.28"
T = 315.85
L = 629.99
R = 3500.00
C = 629.14
CB = N 68°50'36.60" E
DB = N 63°41'13.20" E
DA = N 74°00'00.00" E
S.E. = EXISTING 4.0%

PI100+00.00

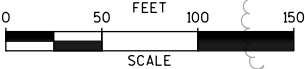
MATCH EXISTING
STA 103+25

END TAPER
BEGIN 24-FT LANE
STA 104+66

CURB ELEVATION NOTES:
ADJUST CURB ELEVATION FOR INCREASE
DUE TO ASPHALT OVERLAY AND MATCH
INTO EXISTING WHERE NEEDED.

RADIUS POINT - MEDIAN CURB

POINT	RAD.	MAINLINE STATION	DISTANCE	N	E
R1	120'	STA 104+40.13	58.81' LT	199732.55	478633.47
R2	4'	STA 105+63.50	71.07' LT	199798.22	478738.61
R3	4'	STA 105+59.78	26.26' LT	199756.40	478755.14
R4	4'	STA 105+74.91	27.56' LT	199764.27	478768.13



NOTES:
RADIUS IS TO FLAG OF CURB.
SEE CONSTRUCTION DETAILS
FOR WIDENING.

RADIUS POINT - SIDE ROADS

POINT	RAD.	MAINLINE STATION	DISTANCE	N	E
C5	50'	STA 236+10.65	74.08' RT	200330.75	491701.43
C6	40'	STA 237+72.00	64.91' RT	200339.97	491862.77
C7	40'	STA 238+73.34	65.01' LT	200469.96	491964.10
C8	60'	STA 239+97.34	82.00' LT	200487.23	492088.09
C9	60'	STA 238+50.15	83.71' RT	200321.21	491940.94
C10	40'	STA 239+80.15	64.01' RT	200341.19	492070.90
C11	182'	STA 239+05.26	114.83' RT	200290.20	491996.03

END 24-FT LANE
BEGIN TAPER
STA 234+55

END TAPER
STA 231+30

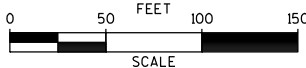
BEGIN TAPER
STA 231+09

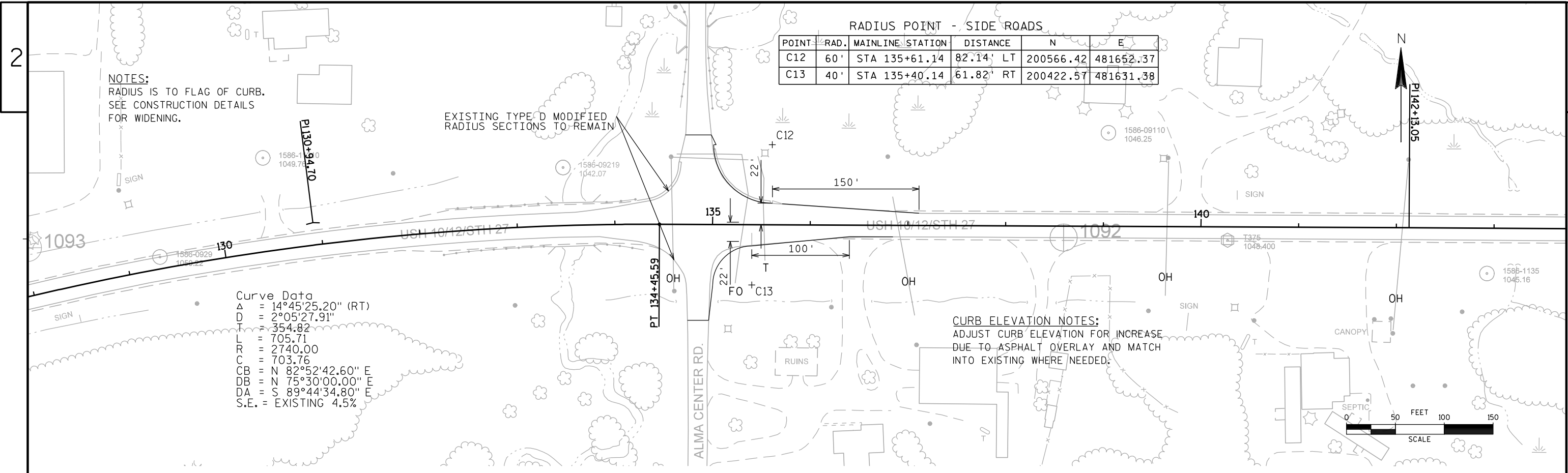
END TAPER
BEGIN 24-FT LANE
STA 232+59

RADIUS POINT - MEDIAN CURB

POINT	RAD.	MAINLINE STATION	DISTANCE	N	E
R5	4'	STA 236+96.11	28.53' RT	200376.32	491786.99
R6	4'	STA 237+19.95	29.23' RT	200375.62	491810.83
R7	4'	STA 237+05.47	73.39' RT	200331.46	491796.37
R8	200'	STA 239+05.26	114.83' RT	200290.20	491996.03

CURB ELEVATION NOTES:
ADJUST CURB ELEVATION FOR INCREASE
DUE TO ASPHALT OVERLAY AND MATCH
INTO EXISTING WHERE NEEDED.

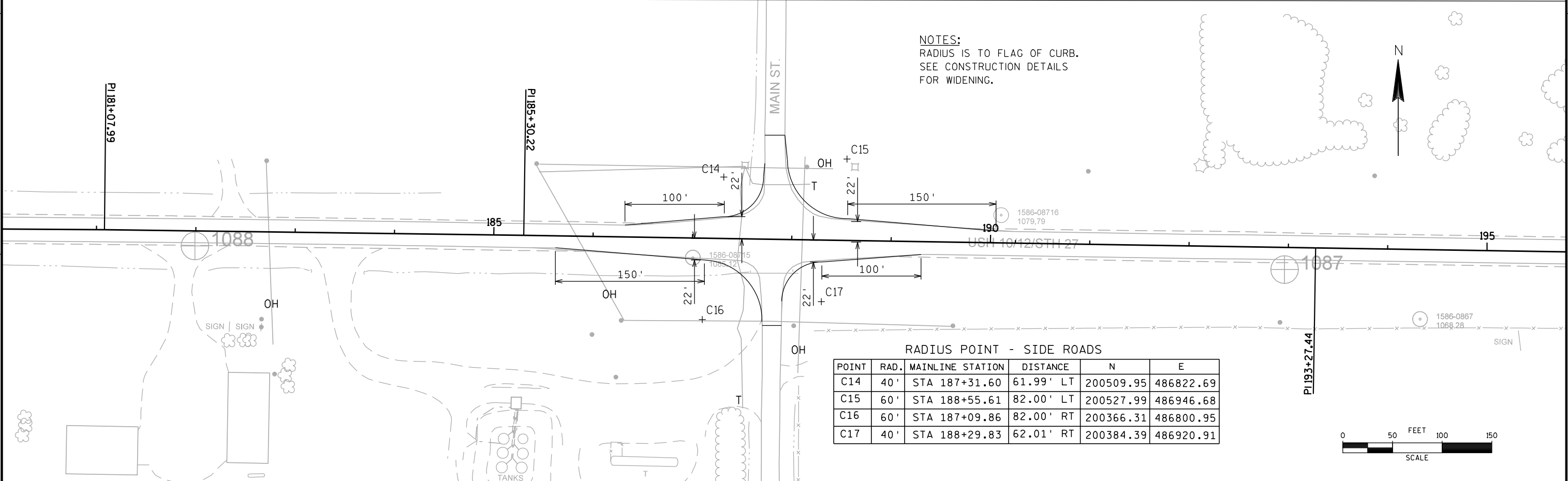




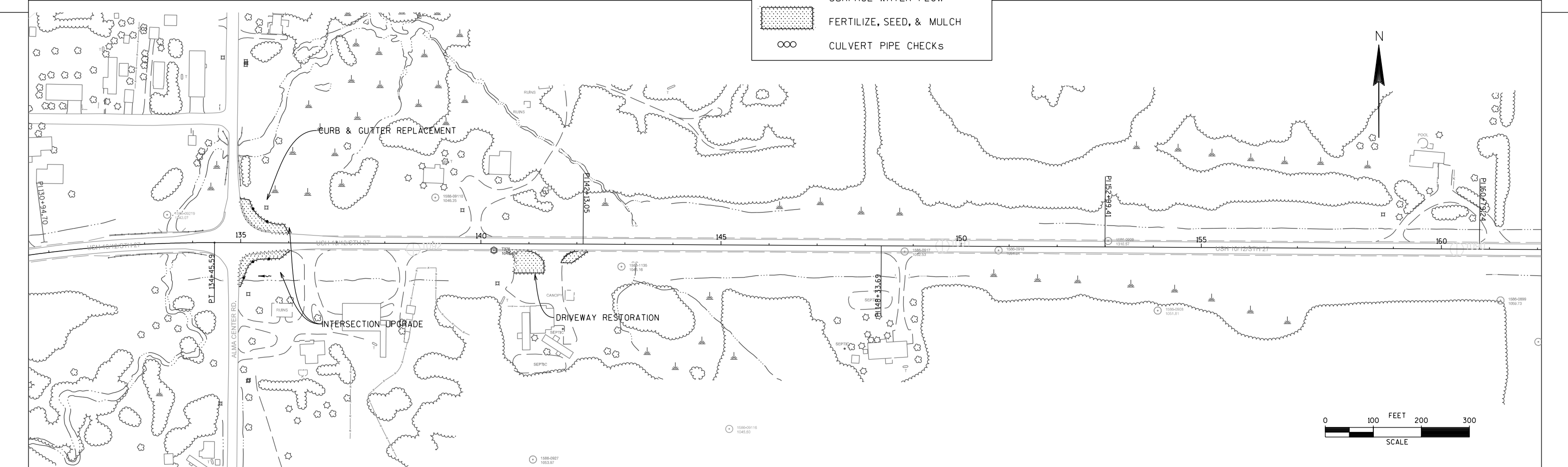
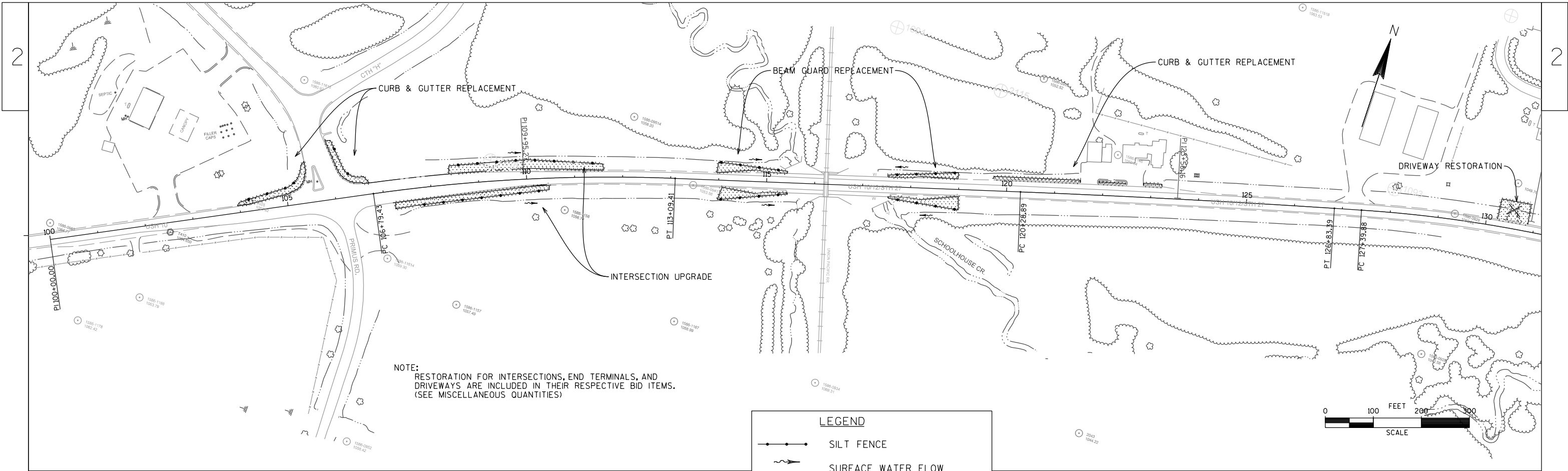
RADIUS POINT - SIDE ROADS					
POINT	RAD.	MAINLINE STATION	DISTANCE	N	E
C12	60'	STA 135+61.14	82.14' LT	200566.42	481652.37
C13	40'	STA 135+40.14	61.82' RT	200422.57	481631.38

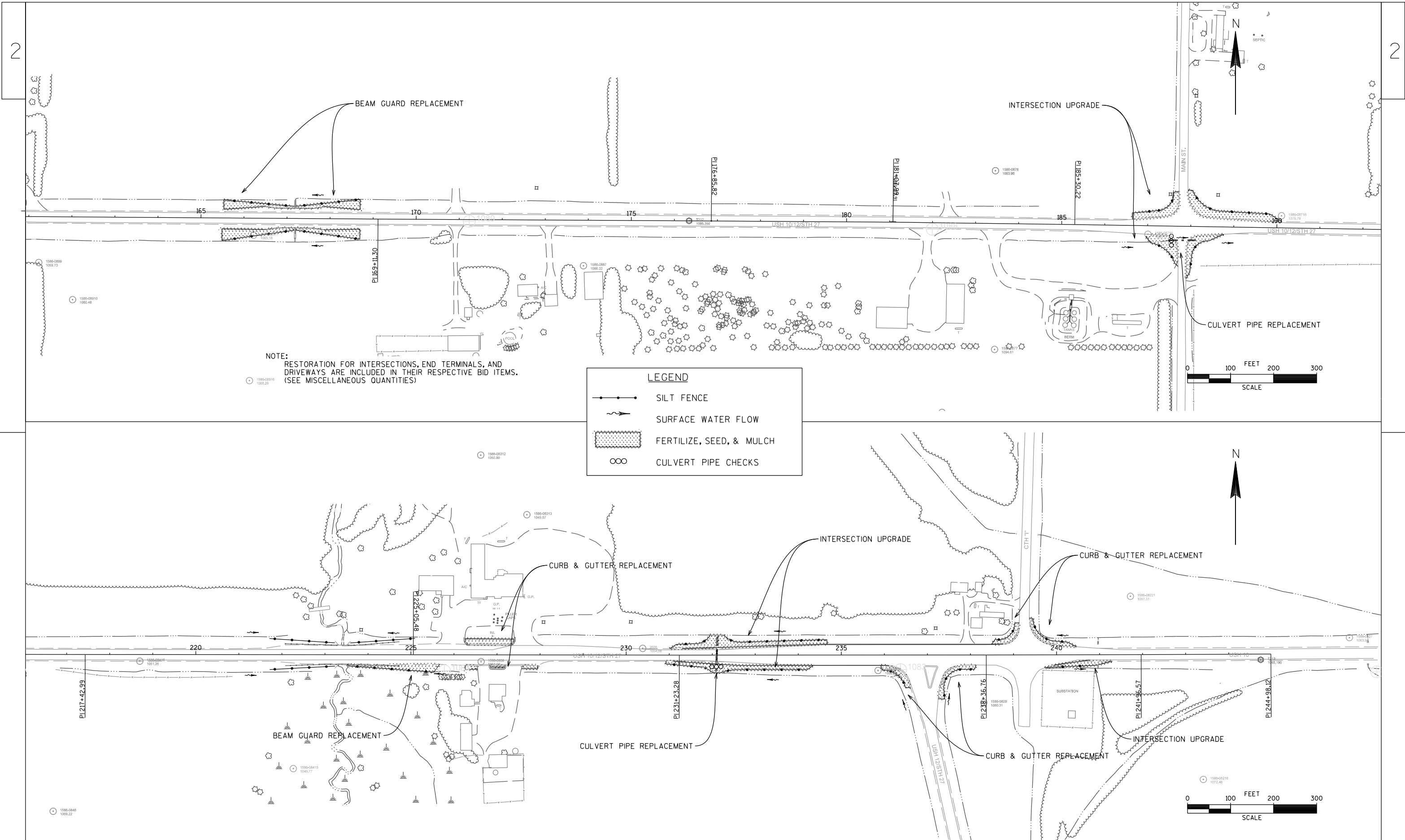
Curve Data
Δ = 14°45'25.20" (RT)
D = 2°05'27.91"
T = 354.82'
L = 705.71'
R = 2740.00'
C = 703.76'
CB = N 82°52'42.60" E
DB = N 75°30'00.00" E
DA = S 89°44'34.80" E
S.E. = EXISTING 4.5%

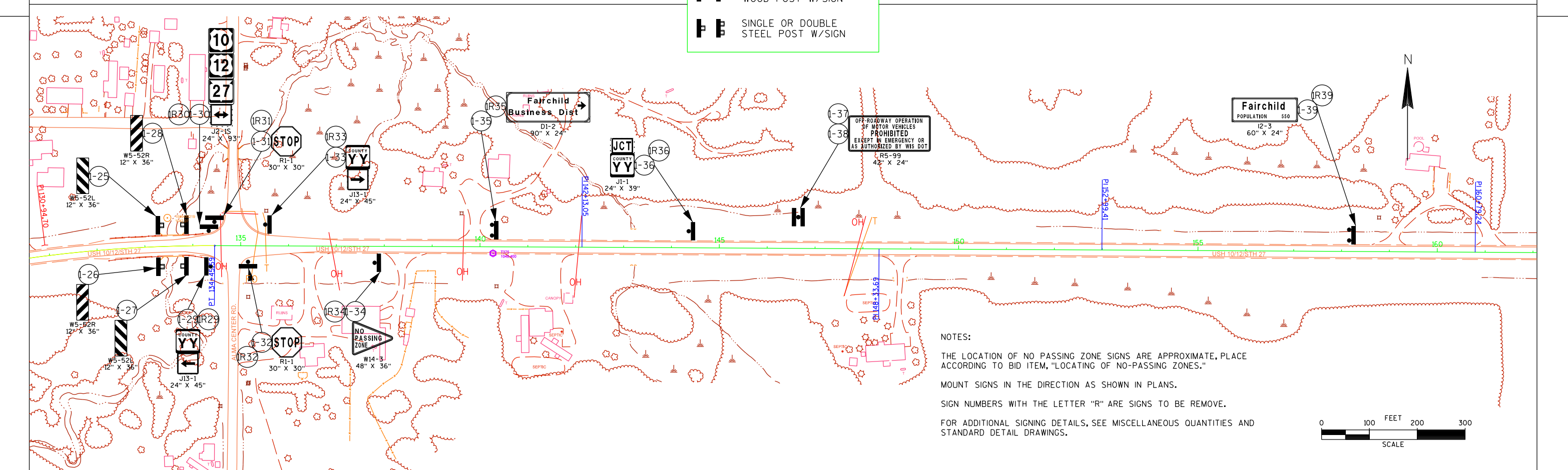
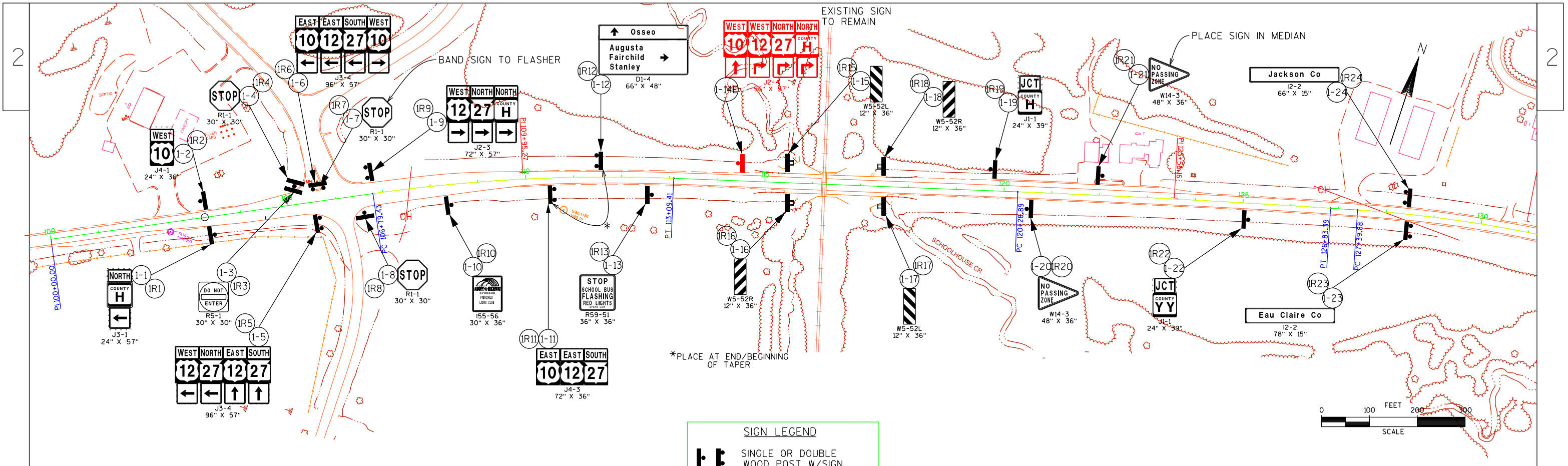
CURB ELEVATION NOTES:
ADJUST CURB ELEVATION FOR INCREASE
DUE TO ASPHALT OVERLAY AND MATCH
INTO EXISTING WHERE NEEDED.



RADIUS POINT - SIDE ROADS					
POINT	RAD.	MAINLINE STATION	DISTANCE	N	E
C14	40'	STA 187+31.60	61.99' LT	200509.95	486822.69
C15	60'	STA 188+55.61	82.00' LT	200527.99	486946.68
C16	60'	STA 187+09.86	82.00' RT	200366.31	486800.95
C17	40'	STA 188+29.83	62.01' RT	200384.39	486920.91







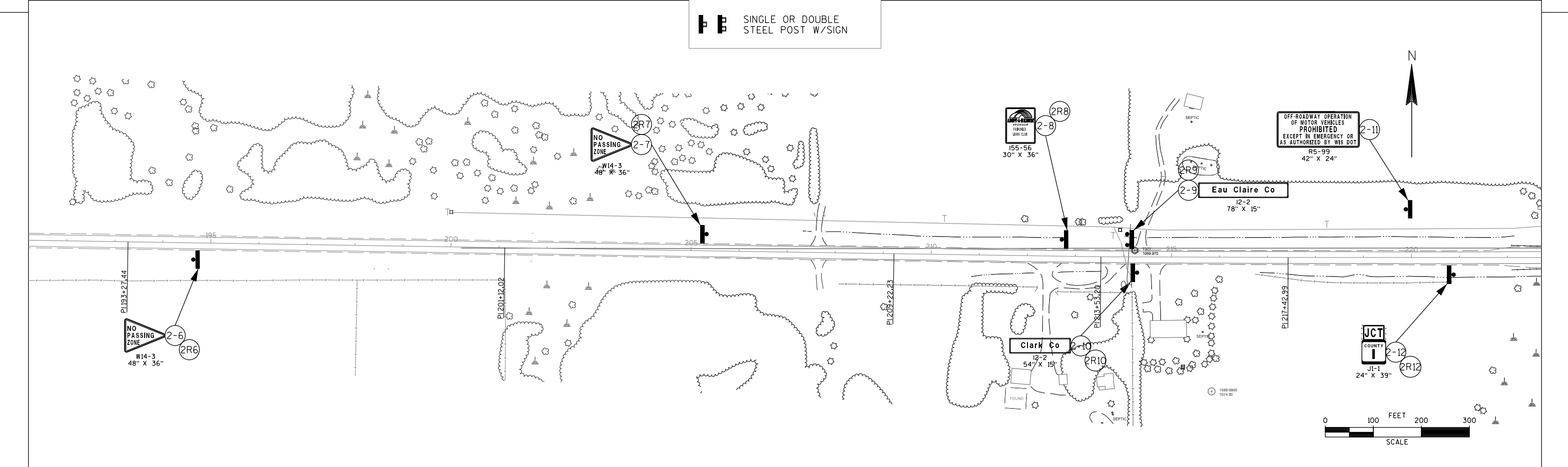
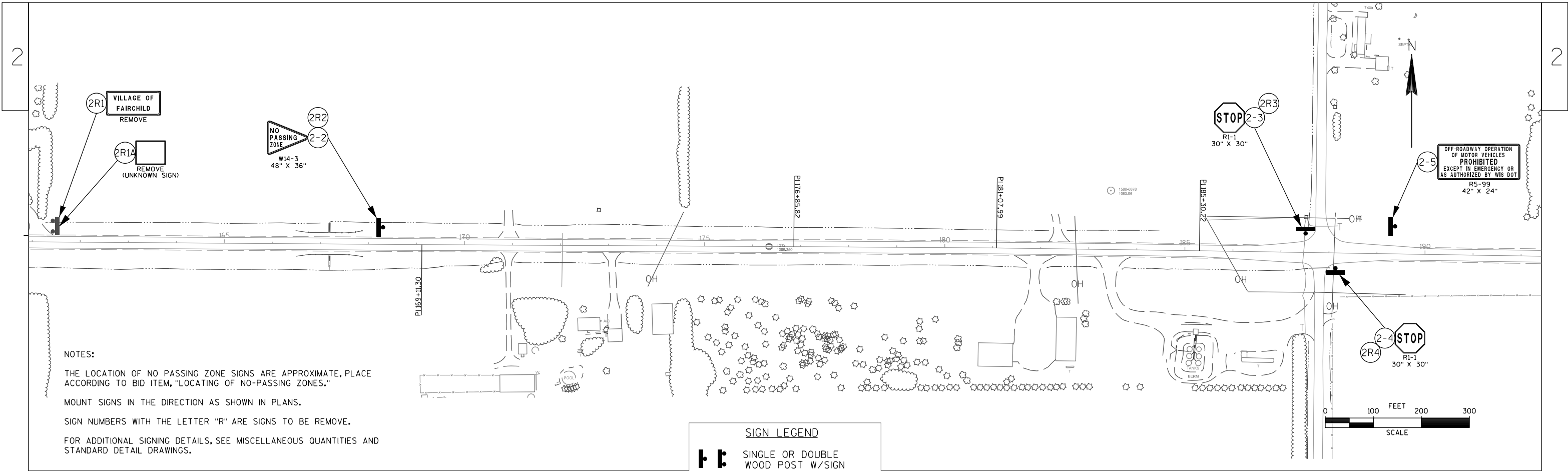
NOTES:

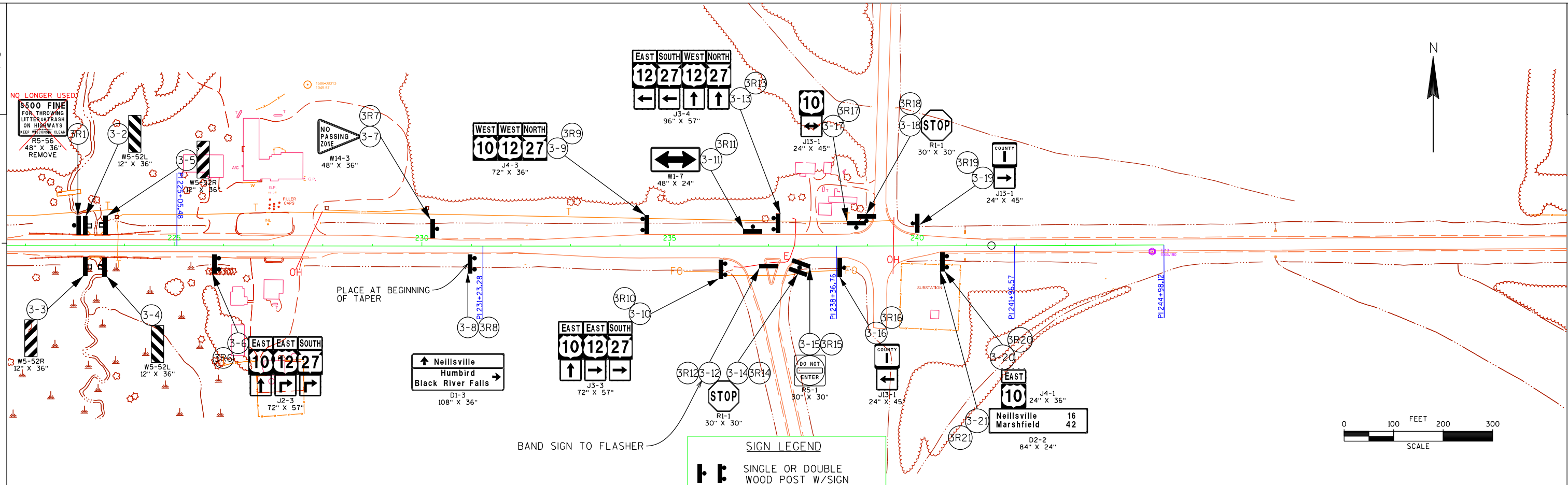
THE LOCATION OF NO PASSING ZONE SIGNS ARE APPROXIMATE, PLACE ACCORDING TO BID ITEM, "LOCATING OF NO-PASSING ZONES."

MOUNT SIGNS IN THE DIRECTION AS SHOWN IN PLANS.

SIGN NUMBERS WITH THE LETTER "R" ARE SIGNS TO BE REMOVE.

FOR ADDITIONAL SIGNING DETAILS, SEE MISCELLANEOUS QUANTITIES AND STANDARD DETAIL DRAWINGS.





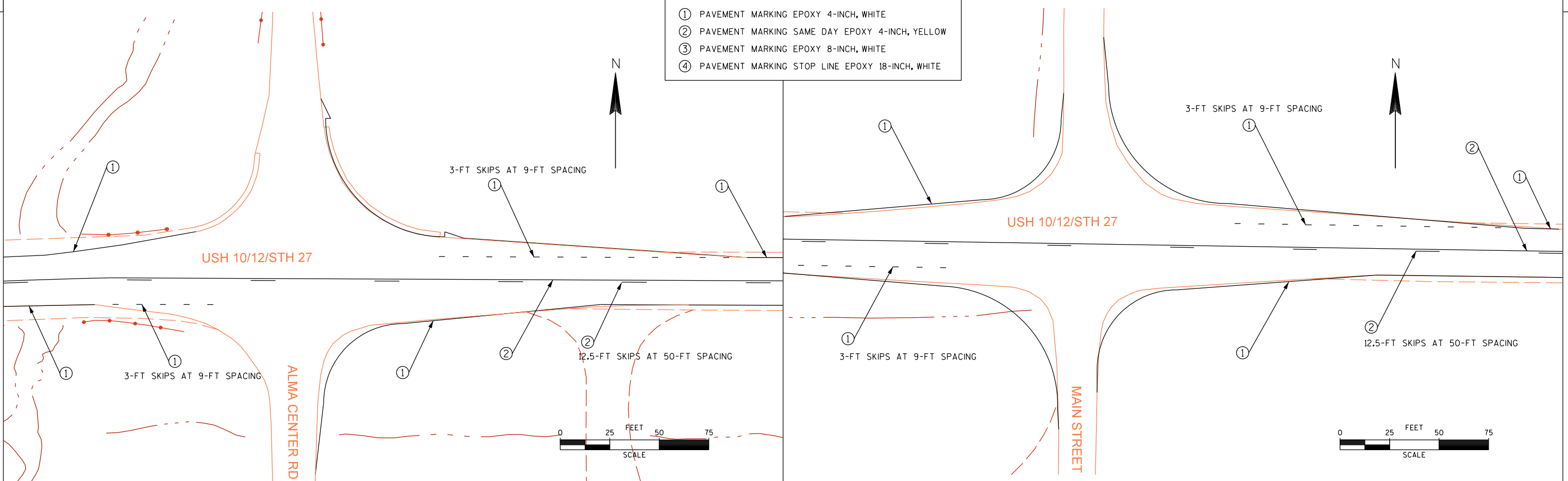
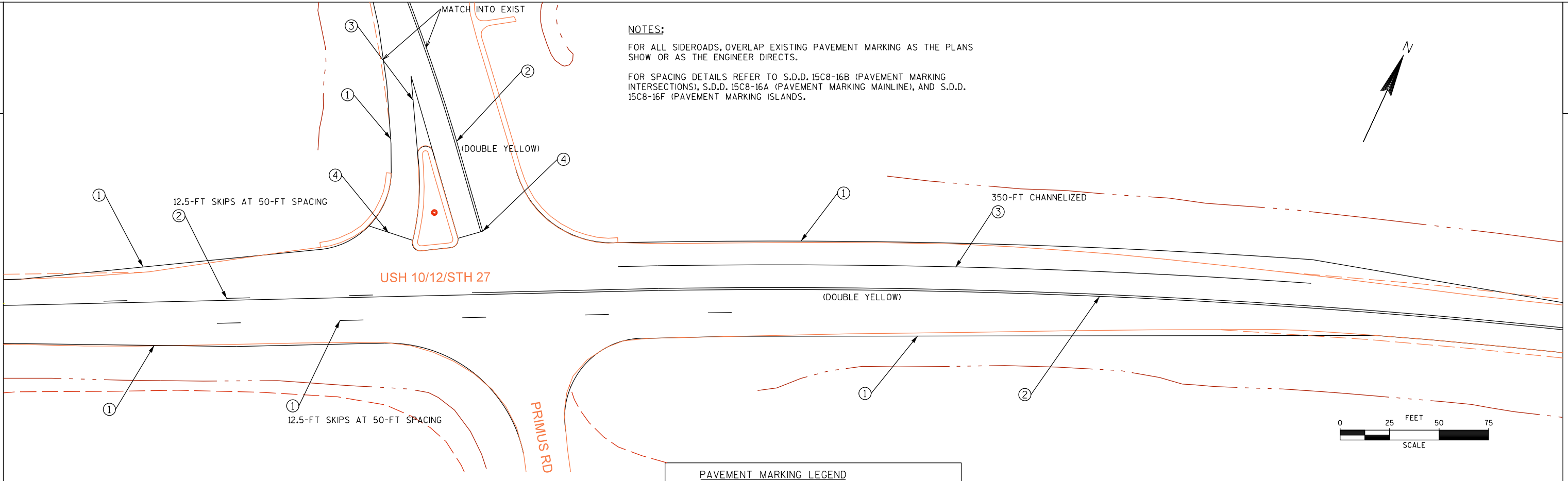
NOTES:

THE LOCATION OF NO PASSING ZONE SIGNS ARE APPROXIMATE, PLACE ACCORDING TO BID ITEM, "LOCATING OF NO-PASSING ZONES."

MOUNT SIGNS IN THE DIRECTION AS SHOWN IN PLANS.

SIGN NUMBERS WITH THE LETTER "R" ARE SIGNS TO BE REMOVE.

FOR ADDITIONAL SIGNING DETAILS, SEE MISCELLANEOUS QUANTITIES AND STANDARD DETAIL DRAWINGS.



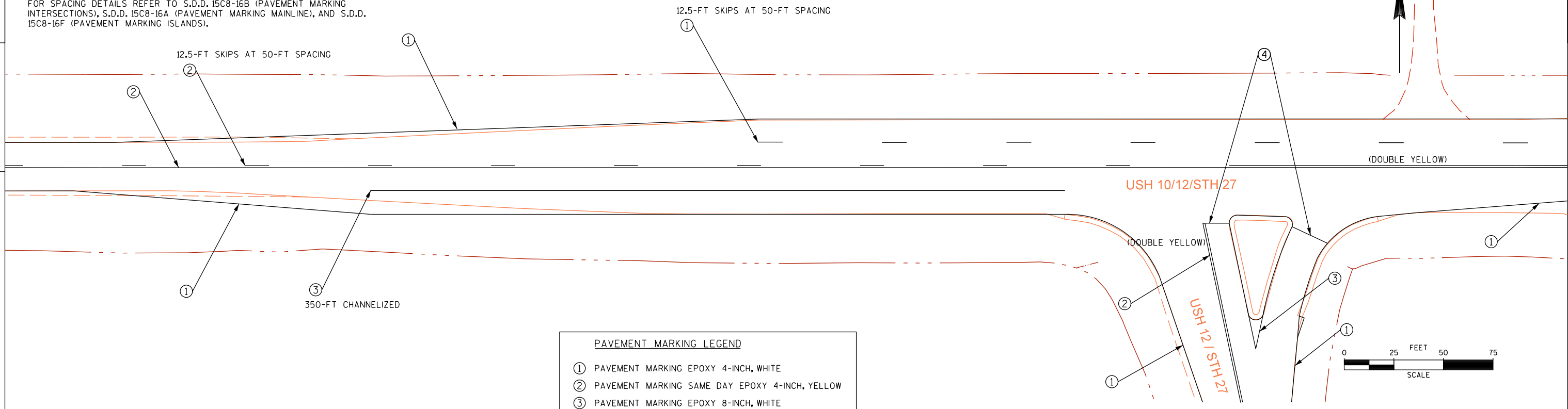
2

NOTES:

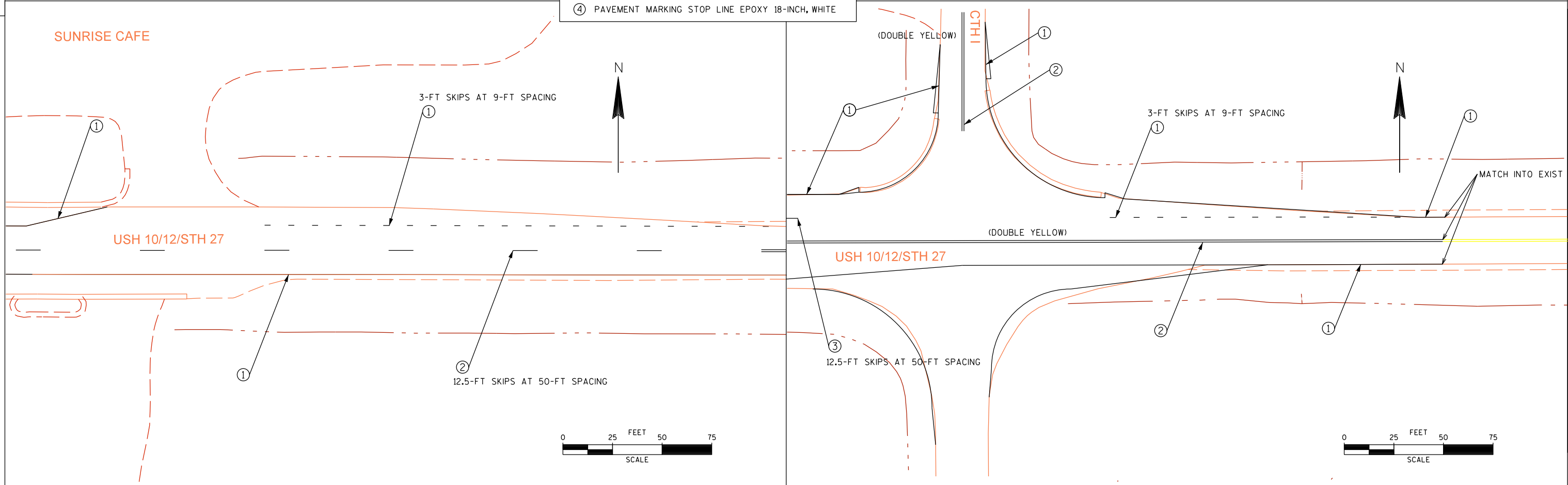
FOR ALL SIDEROADS, OVERLAP EXISTING PAVEMENT MARKING AS THE PLANS SHOW OR AS THE ENGINEER DIRECTS.

FOR SPACING DETAILS REFER TO S.D.D. 15C8-16B (PAVEMENT MARKING INTERSECTIONS), S.D.D. 15C8-16A (PAVEMENT MARKING MAINLINE), AND S.D.D. 15C8-16F (PAVEMENT MARKING ISLANDS).

2



SUNRISE CAFE



PROJECT NO: 1520-06-74

HWY: USH 10

COUNTY: JACKSON / E.C. / CLARK

PAVEMENT MARKING DETAILS

SHEET NO :

E

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FILE NAME :$$....designfile....$$
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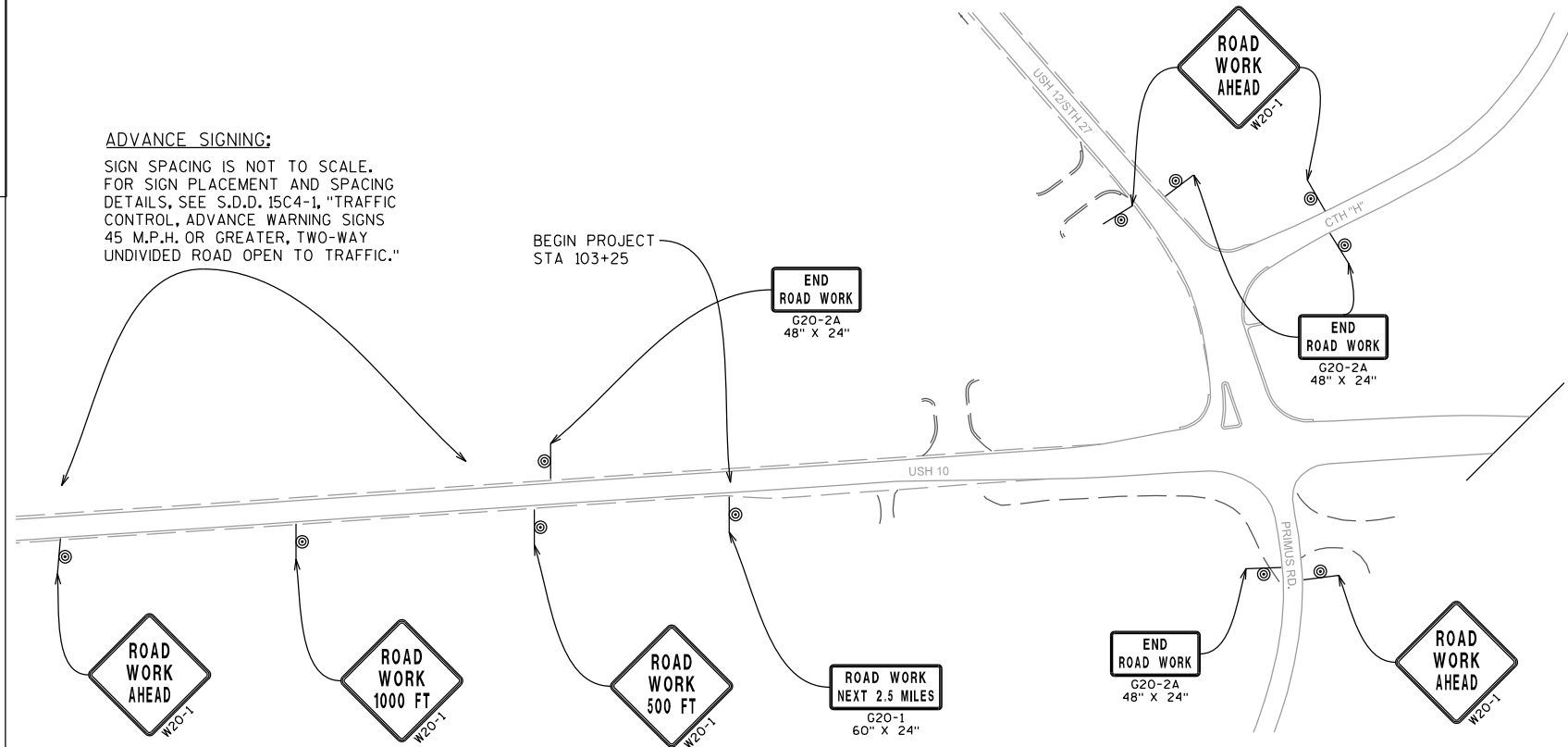
PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$ PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

ADVANCE SIGNING:

SIGN SPACING IS NOT TO SCALE.
FOR SIGN PLACEMENT AND SPACING
DETAILS, SEE S.D.D. 15C4-1, "TRAFFIC
CONTROL, ADVANCE WARNING SIGNS
45 M.P.H. OR GREATER, TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC."

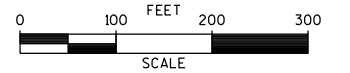
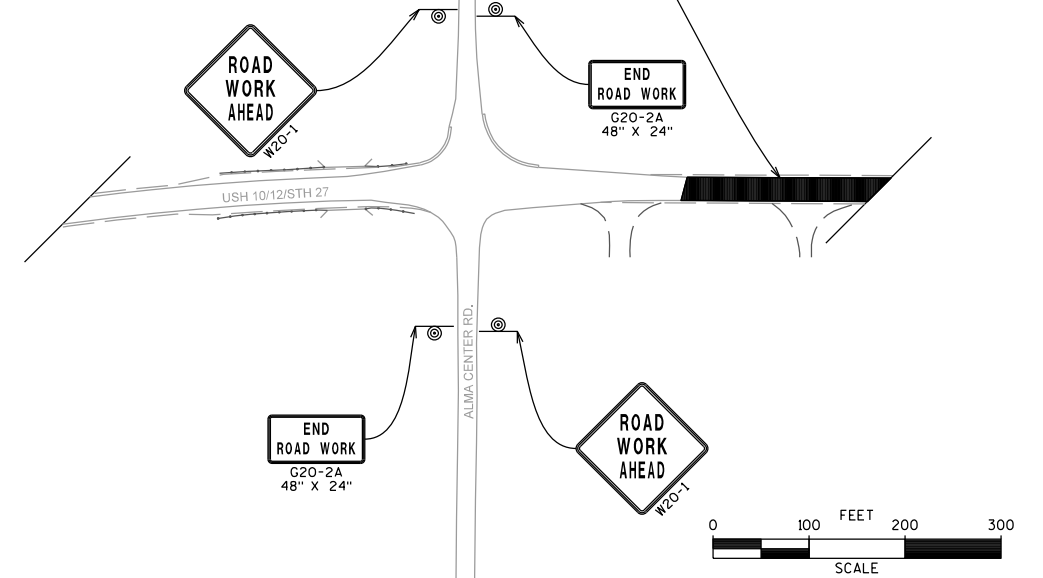
**SIGN LEGEND**

⊙ TEMPORARY POST W/SIGN MOUNT

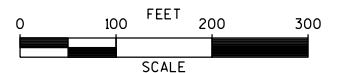
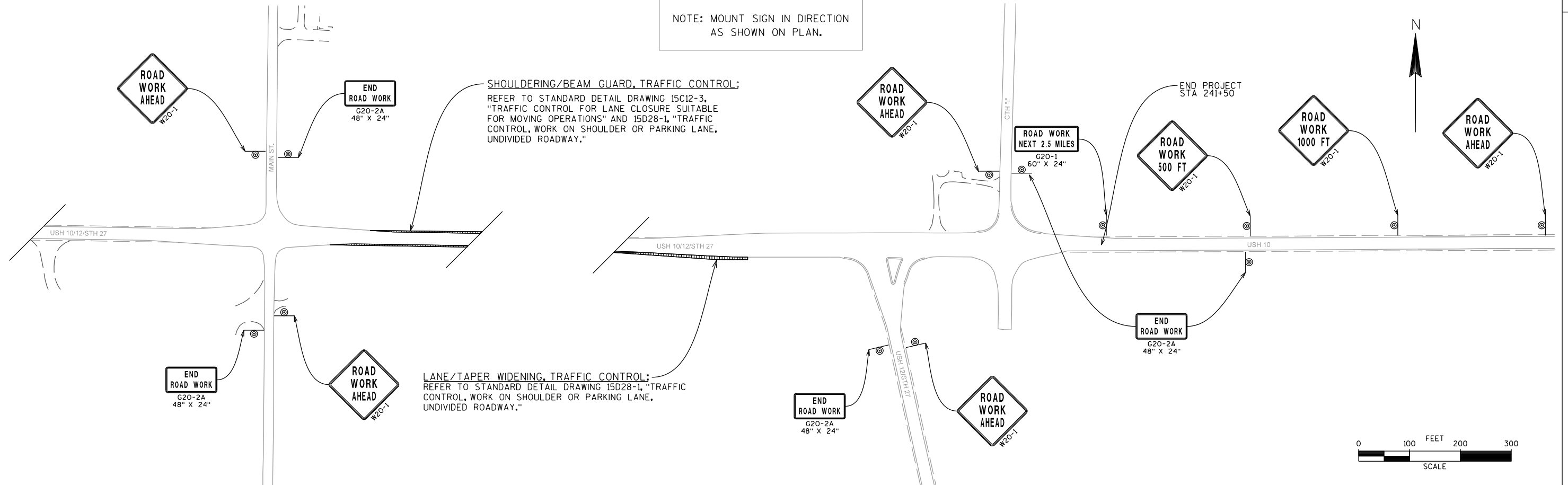
NOTE: MOUNT SIGN IN DIRECTION
AS SHOWN ON PLAN.

ASPHALT PAVING/MILL, TRAFFIC CONTROL:

REFER TO TRAFFIC CONTROL DETAILS AND
STANDARD DETAIL DRAWING 15C12-3, "TRAFFIC
CONTROL FOR LANE CLOSURE SUITABLE FOR
MOVING OPERATIONS."



N



N

PROJECT NO: 1520-06-74

HWY: U.S.H. 10

COUNTY: EAU CLAIRE/CLARK/JACKSON

TRAFFIC CONTROL PLAN

SHEET NO:

E

FILE NAME : \$\$....designfile....\$\$

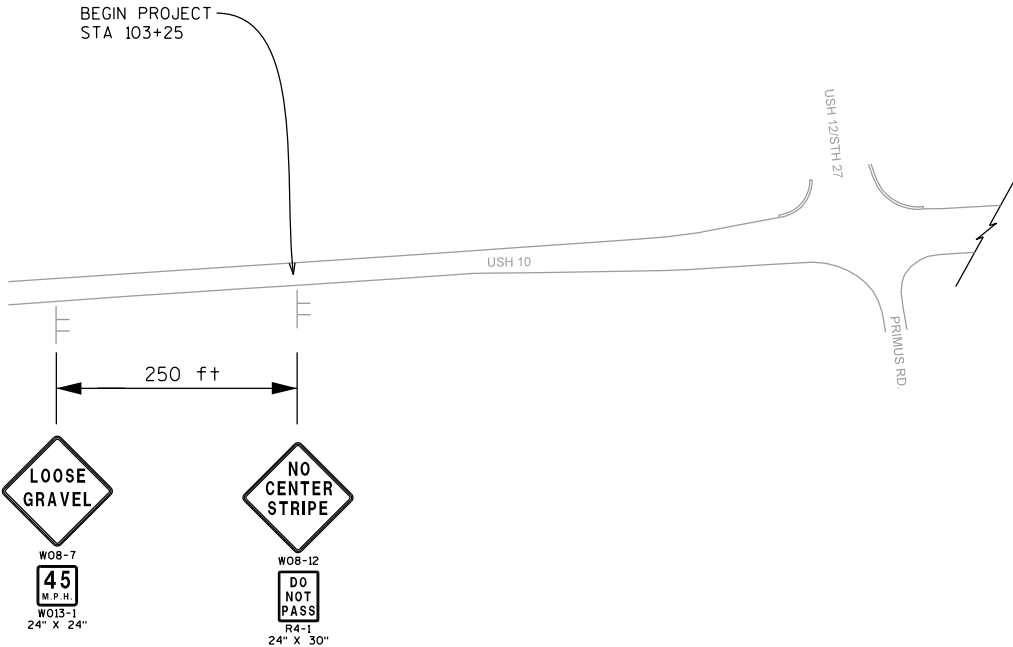
PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

DETAIL FOR SIGNING IN MILLING AREA

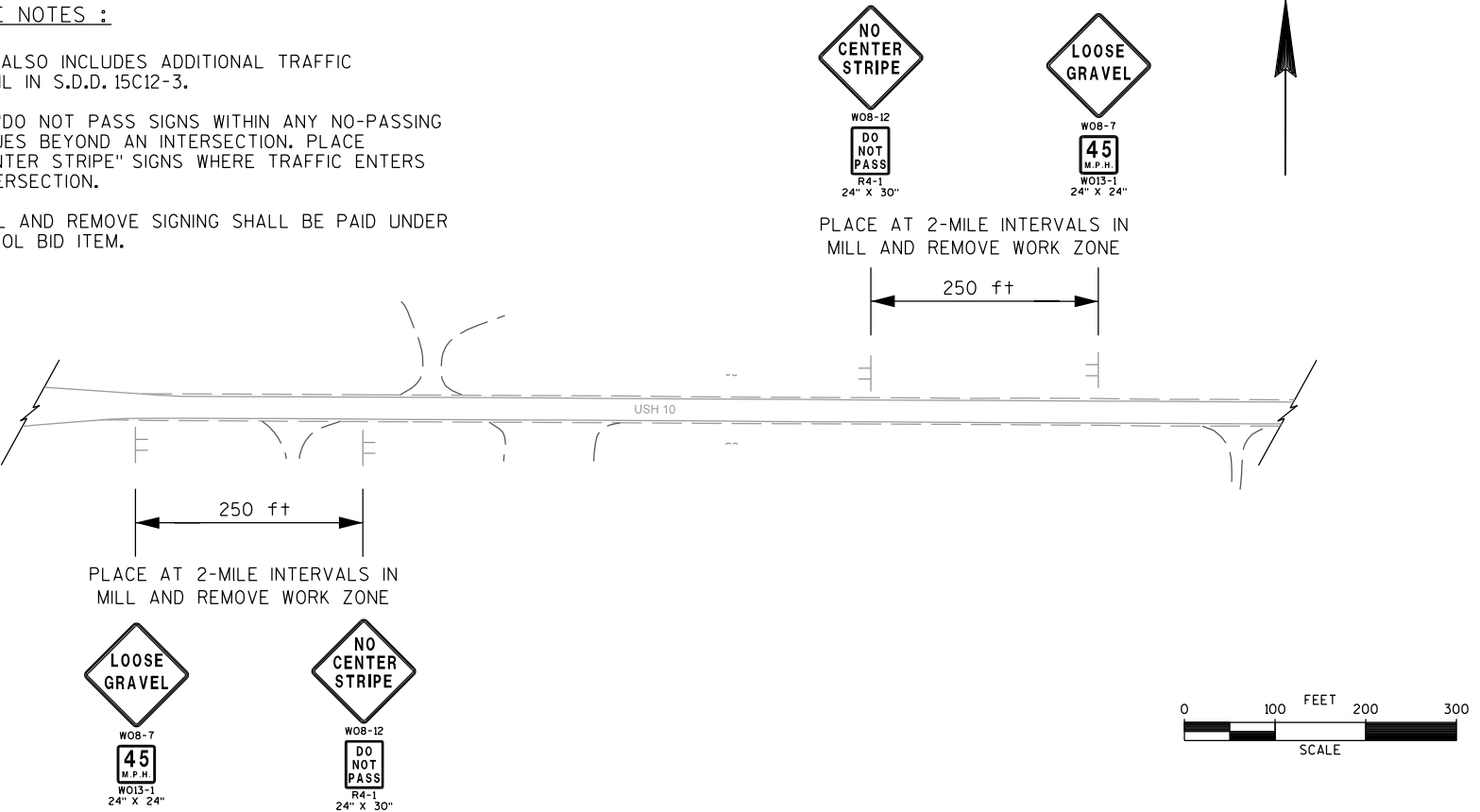


MILL AND REMOVE NOTES :

MILLING OPERATION ALSO INCLUDES ADDITIONAL TRAFFIC CONTROL, SEE DETAIL IN S.D.D. 15C12-3.

PLACE ADDITIONAL "DO NOT PASS SIGNS WITHIN ANY NO-PASSING ZONE THAT CONTINUES BEYOND AN INTERSECTION. PLACE ADDITIONAL "NO CENTER STRIPE" SIGNS WHERE TRAFFIC ENTERS FROM SUCH AN INTERSECTION.

ALL ITEMS FOR MILL AND REMOVE SIGNING SHALL BE PAID UNDER THE TRAFFIC CONTROL BID ITEM.

TRAFFIC CONTROL NOTES:

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 FIELD ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL
WORK ZONE, INCLUDING PRE-EXISTING SIGNING, SHALL BE COVERED
OR REMOVED AS DIRECTED BY THE FIELD ENGINEER.

EXISTING TRAFFIC SIGNS MAY REQUIRE RELOCATION DURING STAGES OF CONSTRUCTION AND SHALL BE LOCATED AS REQUIRED BY THE FIELD ENGINEER.

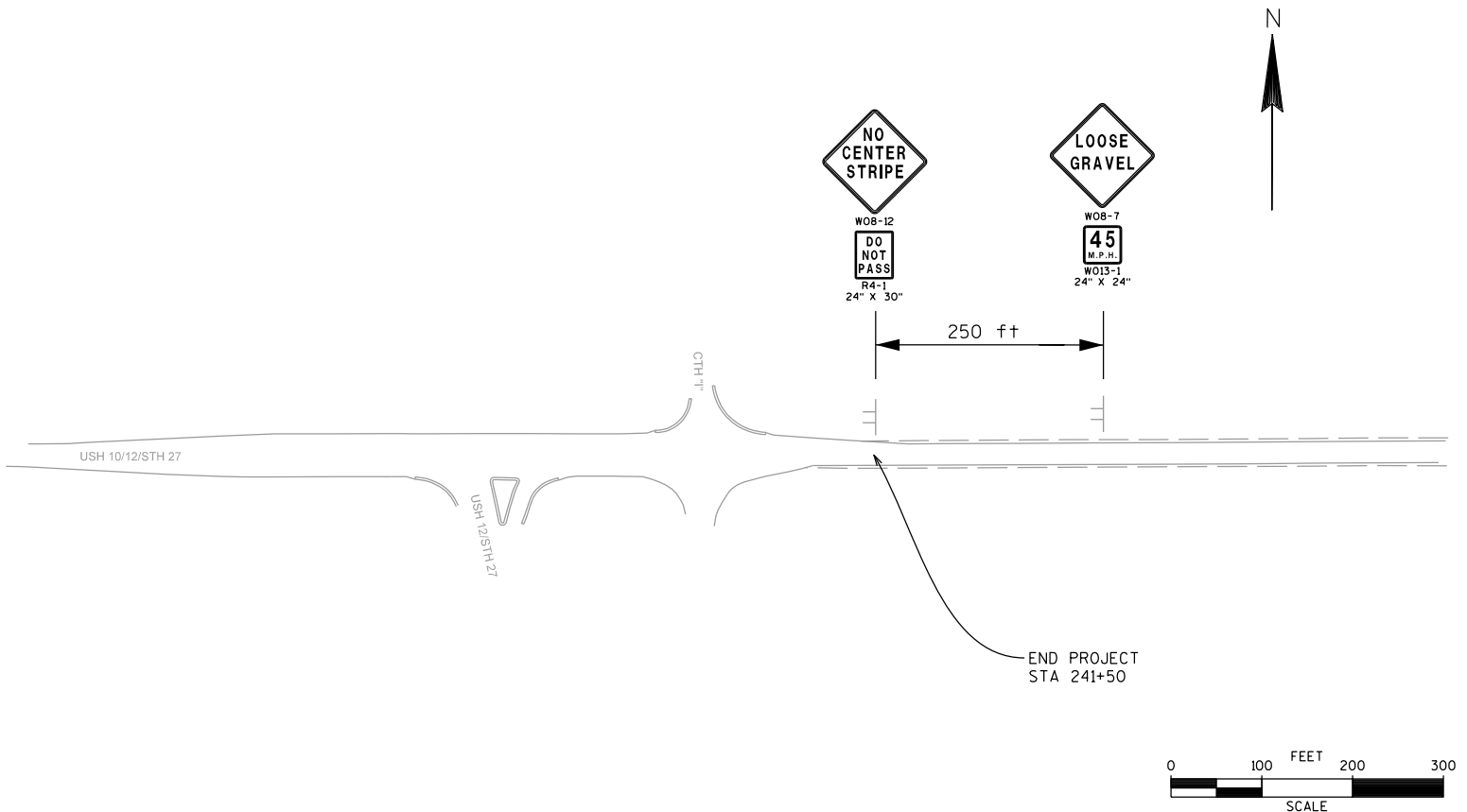
SIGNS FOR ADVANCE WARNING OF CONSTRUCTION SHALL BE PLACED IN THE INITIAL PHASE OF CONSTRUCTION.

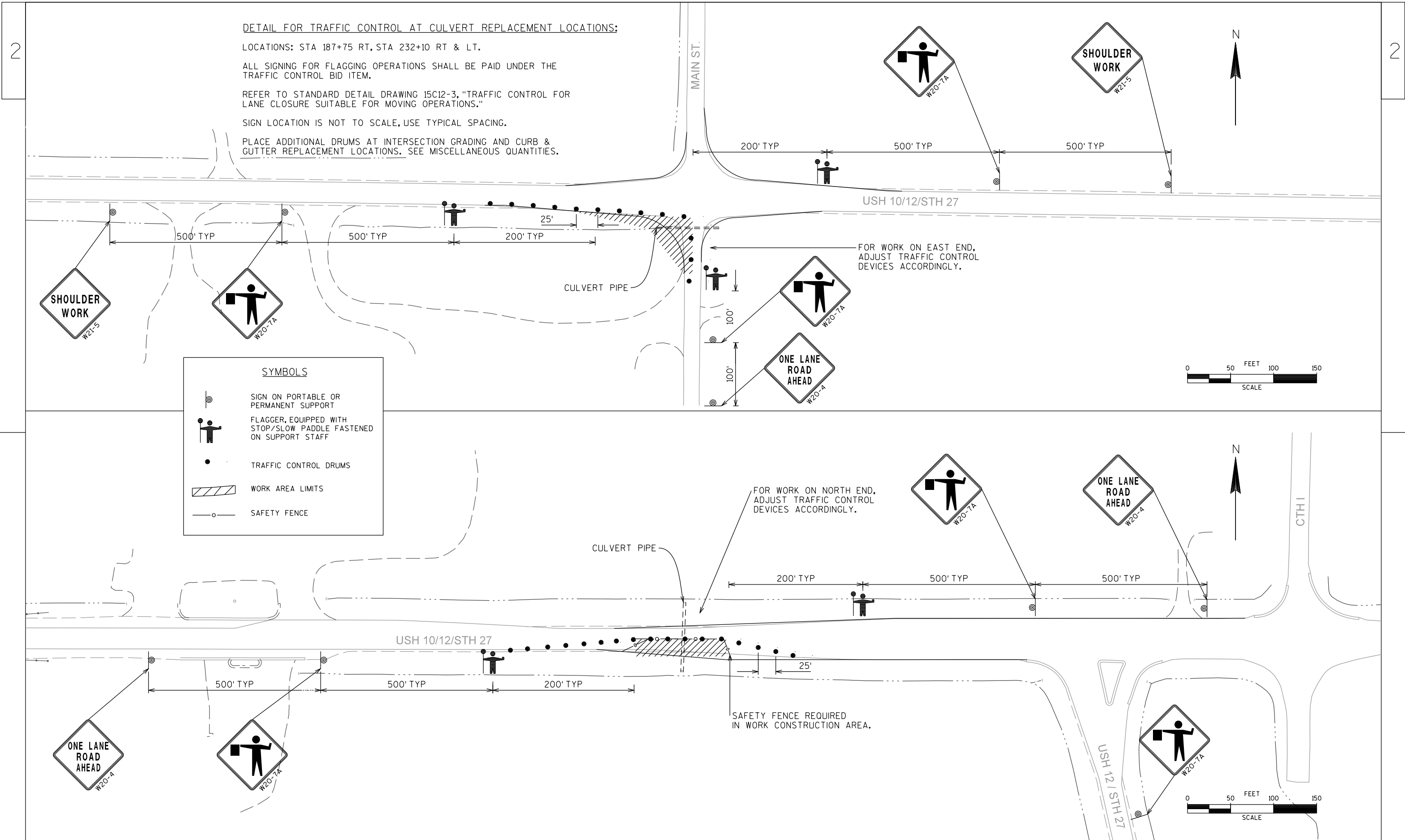
DETAILS OF CONSTRUCTION NOT ON THESE DRAWINGS SHALL
CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD
SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

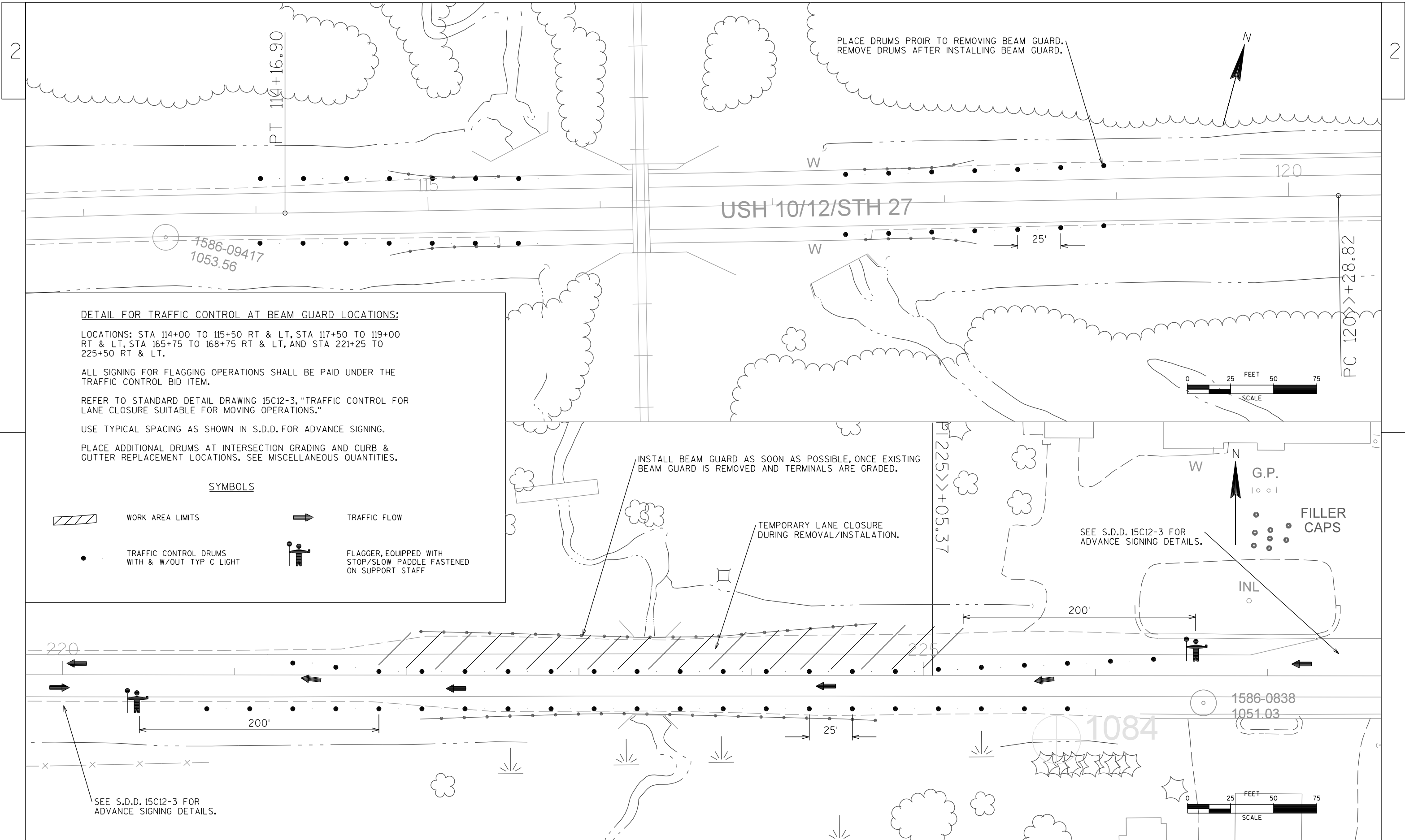
LOCAL ACCESS SHALL BE MAINTAINED AT ALL TIMES.

ROADWAY SHALL BE OPEN TO THRU TRAFFIC AT ALL TIMES.

TEMPORARY LANE CLOSURES OR FLAGGING OPERATIONS ARE ONLY ALLOWED DURING DAYLIGHT HOURS.







PROJECT NO: 1520-06-74

HWY: USH 10

COUNTY: JACKSON/ E.C./ CLARK

TRAFFIC CONTROL DETAILS

SHEET NO:

E

FILE NAME :\$\$....designfile....\$\$

PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

PLOT SCALE : \$\$....plotscale....\$\$

DATE 19SEP13		E S T I M A T E O F Q U A N T I T I E S			
LINE				1520-06-74	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	2.000	2.000
0020	204.0110	REMOVING ASPHALTIC SURFACE	SY	185.000	185.000
0030	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	3,015.000	3,015.000
0040	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	51,850.000	51,850.000
0050	204.0150	REMOVING CURB & GUTTER	LF	1,400.000	1,400.000
0060	204.0190	REMOVING SURFACE DRAINS	EACH	1.000	1.000
0070	204.9105.S	REMOVING (ITEM DESCRIPTION) 01. DRIVEWAY STA 130+56 LT	LS	1.000	1.000
0080	204.9105.S	REMOVING (ITEM DESCRIPTION) 02. DRIVEWAY STA 141+00 RT	LS	1.000	1.000
0090	204.9105.S	REMOVING (ITEM DESCRIPTION) 03.DRIVEWAY STA 213+80 RT	LS	1.000	1.000
0100	205.0100	EXCAVATION COMMON	CY	200.000	200.000
0110	205.9015.S	GRADING SHAPING & FINISHING INTERSECTION (LOCATION) 01.PRIMUS ROAD	LS	1.000	1.000
0120	205.9015.S	GRADING SHAPING & FINISHING INTERSECTION (LOCATION) 02. ALMA CENTER ROAD	LS	1.000	1.000
0130	205.9015.S	GRADING SHAPING & FINISHING INTERSECTION (LOCATION) 03. MAIN STREET	LS	1.000	1.000
0140	205.9015.S	GRADING SHAPING & FINISHING INTERSECTION (LOCATION) 04. STH 27 & USH 10	LS	1.000	1.000
0150	205.9015.S	GRADING SHAPING & FINISHING INTERSECTION (LOCATION) 05. CTH I	LS	1.000	1.000
0160	209.0100	BACKFILL GRANULAR	CY	180.000	180.000
0170	213.0100	FINISHING ROADWAY (PROJECT) 01. 1520-06-74	EACH	1.000	1.000
0180	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,795.000	2,795.000
0190	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	500.000	500.000
0200	305.0500	SHAPING SHOULDERS	STA	277.000	277.000
0210	440.4410.S	INCENTIVE IRI RIDE	DOL	10,400.000	10,400.000
0220	455.0605	TACK COAT	GAL	2,740.000	2,740.000
0230	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	7,710.000	7,710.000
0240	465.0110	ASPHALTIC SURFACE PATCHING	TON	25.000	25.000
0250	465.0310	ASPHALTIC CURB	LF	70.000	70.000
0260	465.0315	ASPHALTIC FLUMES	SY	10.000	10.000
0270	520.0115	CULVERT PIPE CLASS III 15-INCH	LF	64.000	64.000
0280	520.1015	APRON ENDWALLS FOR CULVERT PIPE 15-INCH	EACH	2.000	2.000
0290	520.7000	CLEANING CULVERT PIPES	EACH	5.000	5.000
0300	523.0119	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH	LF	80.000	80.000
0310	523.0519	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	EACH	2.000	2.000
0320	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	1,402.000	1,402.000
0330	602.0405	CONCRETE SIDEWALK 4-INCH	SF	1,120.000	1,120.000
0340	614.0010	BARRIER SYSTEM GRADING SHAPING FINISHING	EACH	9.000	9.000
0350	614.0920	SALVAGED RAIL	LF	1,070.000	1,070.000
0360	614.0950	REPLACING GUARDRAIL POSTS AND BLOCKS	EACH	6.000	6.000
0370	614.2300	MGS GUARDRAIL 3	LF	200.000	200.000
0380	614.2340	MGS GUARDRAIL 3 L	LF	375.000	375.000
0390	614.2500	MGS THRIE BEAM TRANSITION	LF	79.000	79.000
0400	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	12.000	12.000

DATE 19SEP13		E S T I M A T E O F Q U A N T I T I E S			
LINE					1520-06-74
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0410	616.0700.S	FENCE SAFETY	LF	200.000	200.000
0420	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01.1520-06-74	EACH	1.000	1.000
0430	619.1000	MOBILIZATION	EACH	1.000	1.000
0440	620.0200	CONCRETE MEDIAN BLUNT NOSE	SF	64.000	64.000
0450	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	40.000	40.000
0460	625.0500	SALVAGED TOPSOIL	SY	320.000	320.000
0470	627.0200	MULCHING	SY	320.000	320.000
0480	628.1504	SILT FENCE	LF	4,550.000	4,550.000
0490	628.1520	SILT FENCE MAINTENANCE	LF	2,300.000	2,300.000
0500	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	3.000	3.000
0510	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0520	628.7555	CULVERT PIPE CHECKS	EACH	14.000	14.000
0530	629.0205	FERTILIZER TYPE A	CWT	0.400	0.400
0540	630.0130	SEEDING MIXTURE NO. 30	LB	20.000	20.000
0550	633.5200	MARKERS CULVERT END	EACH	12.000	12.000
0560	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	50.000	50.000
0570	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	17.000	17.000
0580	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	12.000	12.000
0590	637.2210	SIGNS TYPE II REFLECTIVE H	SF	566.390	566.390
0600	637.2230	SIGNS TYPE II REFLECTIVE F	SF	86.000	86.000
0610	638.2602	REMOVING SIGNS TYPE II	EACH	153.000	153.000
0620	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	79.000	79.000
0630	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
0640	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1520-06-74	EACH	1.000	1.000
0650	643.0300	TRAFFIC CONTROL DRUMS	DAY	2,091.000	2,091.000
0660	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,260.000	1,260.000
0670	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	27,850.000	27,850.000
0680	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	830.000	830.000
0690	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	15,770.000	15,770.000
0700	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	69.000	69.000
0710	648.0100	LOCATING NO-PASSING ZONES	MI	3.000	3.000
0720	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	12,913.000	12,913.000
0730	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	1,402.000	1,402.000
0740	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	2.000	2.000
0750	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	13,825.000	13,825.000
0760	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01.1520-06-74	LS	1.000	1.000
0770	653.0900	ADJUSTING PULL BOXES	EACH	1.000	1.000
0780	690.0150	SAWING ASPHALT	LF	685.000	685.000
0790	SPV.0090	SPECIAL 01. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT	LF	1,402.000	1,402.000
0800	SPV.0105	SPECIAL 01. PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL	LS	1.000	1.000
0810	SPV.0105	SPECIAL 02. MILLING AND REMOVING TEMPORARY JOINT	LS	1.000	1.000
0820	SPV.0165	SPECIAL 01. CONCRETE SIDEWALK CURE AND SEAL TREATMENT	SF	1,120.000	1,120.000
0830	SPV.0165	SPECIAL 02.CONCRETE MEDIAN SLOPED NOSE CURE AND SEAL TREATMENT	SF	104.000	104.000
0840	SPV.0195	SPECIAL 01. HMA PAVEMENT TYPE E-10 SPECIAL	TON	10,977.000	10,977.000
0850	SPV.0195	SPECIAL 02. ASPHALTIC SURFACE SPECIAL	TON	1,564.000	1,564.000

3

REMOVING SMALL PIPE CULVERTS

		203.0100			
CATEGORY	STATION TO STATION	LOCATION	EACH	REMARKS	
0010	187+58 - 188+00	RT, MAIN STREET	1	1 - 15" CMP	
0010	232+10	RT & LT, USH 10	1	1 - 19" x 30" CPRCHE	
TOTAL 0010			2		

REMOVING ASPHALTIC SURFACE

		204.0110			
CATEGORY	STATION TO STATION	LOCATION	SY	REMARKS	
0010	105+58 - 105+76	LT	50	MEDIAN ISLAND	
0010	236+94 - 237+22	RT	75	MEDIAN ISLAND	
0010	187+58 - 188+00	RT, MAIN STREET	20	CULVERT REPLACEMENT	
0010	232+10	LT & RT, USH 10	40	CULVERT REPLACEMENT	
TOTAL 0010			185		

REMOVING ASPHALTIC SURFACE BUTT JOINTS

		204.0115			
CATEGORY	STATION TO STATION	LOCATION	SY	REMARKS	
0010	103+25 - 104+50	USH 10	500	MAINLINE	
0010	105+75	LT, STH 27 & USH 12	300	STH SIDE ROAD	
0010	106+12	RT, PRIMUS RD.	85	SIDE ROAD	
0010	132+23 - 133+23	USH 10, B-18-193	470	STRUCTURE APPROACH	
0010	133+90 - 134+90	USH 10, B-18-194	490	STRUCTURE APPROACH	
0010	134+85	LT, ALMA CENTER RD.	100	SIDE ROAD	
0010	134+85	RT, ALMA CENTER RD.	70	SIDE ROAD	
0010	187+80	LT, MAIN STREET	70	SIDE ROAD	
0010	187+80	RT, MAIN STREET	60	SIDE ROAD	
0010	237+00	RT, STH 27 & USH 12	280	STH SIDE ROAD	
0010	239+25	LT, CTH I	80	SIDE ROAD	
0010	239+25	RT, SUBSTATION EN	110	SIDE ROAD	
0010	240+25 - 241+50	USH 10	400	MAINLINE	
TOTAL 0010			3015		

REMOVING ASPHALTIC SURFACE MILLING

		204.0120			
CATEGORY	STATION TO STATION	LOCATION	SY	REMARKS	
0010	104+50 - 132+23	USH 10	9250	30' MAINLINE	
0010	134+90 - 240+25	USH 10	35100	30' MAINLINE	
0010	104+50 - 110+25	LT, USH 12 & STH 27	1050	STH SIDE RD & TURN LN	
0010	104+50 - 109+50	RT, PRIMUS RD	600	SIDE RD & BYPASS LN	
0010	114+00 - 119+00	LT, BEAM GUARD	240	B-27-99	
0010	114+00 - 119+00	RT, BEAM GUARD	320	B-27-99	
0010	119+00 - 124+25	LT, WAYSIDE INN	430	AUX LN	
0010	131+80 - 134+25	LT, BEAM GUARD	120	B-18-193, EXCLUDE BRIDGE	
0010	131+80 - 134+25	RT, BEAM GUARD	70	B-18-193, EXCLUDE BRIDGE	
0010	134+25 - 136+70	LT, ALMA CENTER RD	420	SIDE RD	
0010	134+25 - 136+10	RT, ALMA CENTER RD	310	SIDE RD	
0010	186+75 - 189+65	LT, MAIN STREET	370	SIDE RD	
0010	186+00 - 189+00	RT, MAIN STREET	270	SIDE RD	
0010	221+60 - 225+00	LT, BEAM GUARD	260	BOX CULVERT	
0010	221+80 - 225+00	RT, BEAM GUARD	220	BOX CULVERT	
0010	225+00 - 230+20	LT, SUNRISE CAFÉ	380	AUX LN	
0010	225+00 - 228+20	RT, BAR	270	AUX LN	
0010	232+70 - 238+75	LT, USH 10	490	BYPASS LN	
0010	232+25 - 238+60	RT, USH 12 & STH 27	880	STH SIDE RD & TURN LN	
0010	238+75 - 241+00	LT, CTH I	380	SIDE RD	
0010	238+60 - 240+36	RT, SUBSTATION	380	SIDE RD	
0010	214+66	RT, USH 10	40	DRIVEWAY	
TOTAL 0010			51850		

REMOVING CURB & GUTTER

		204.0150			
CATEGORY	STATION TO STATION	LOCATION	LF	REMARKS	
0010	105+09 - 105+47	LT, USH 12 & STH 27	55	NW RADIUS	
0010	105+56 - 105+80	LT, USH 12 & STH 27	120	MEDIAN ISLAND	
0010	106+00 - 106+50	LT, USH 12 & STH 27	130	NE RADIUS	
0010	119+70 - 123+22	LT, USH 10	350	WAYSIDE INN	
0010	135+00 - 135+58	LT, ALMA CENTER RD.	75	NE RADIUS	
0010	226+30 - 227+36	LT, USH 10	100	SUNRISE CAFÉ AUX LN	
0010	226+25 - 227+70	RT, USH 10	150	BAR AUX LN	
0010	236+08 - 236+57	RT, USH 12 & STH 27	60	SW RADIUS	
0010	236+92 - 237+23	RT, USH 12 & STH 27	140	MEDIAN ISLAND	
0010	237+27 - 237+67	RT, USH 12 & STH 27	70	SE RADIUS	
0010	238+73 - 239+13	LT, CTH I	60	NW RADIUS	
0010	239+37 - 239+95	LT, CTH I	90	NE RADIUS	
TOTAL 0010			1400		

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<u>FINISHING ROADWAY (01. 1520-04-76)</u>							<u>REMOVING DRIVEWAY</u>						
CATEGORY	STATION TO	STATION	LOCATION	213.0100 EACH	REMARKS		CATEGORY	STATION	LOCATION	REMOVING DRIVEWAY (STA 130+56 LT) 204.9105.S.01 LS	REMOVING DRIVEWAY (STA 141+00 RT) 204.9105.S.02 LS	REMOVING DRIVEWAY (STA 213+80 RT) 204.9105.S.03 LS	REMARKS
0010	103+25 -	241+50	PROJECT	1			0010	136+56	LT, USH 10	1	-	-	RESTORE DITCH
TOTAL 0010				1			0010	141+00	RT, USH 10	-	1	-	REPLACE W/COMMERCIAL DRIVE
							0010	213+80	RT, USH 10	-	-	1	RESTORE DITCH
							TOTAL 0010			1	1	1	
<u>REMOVING SURFACE DRAINS</u>													
CATEGORY	STATION	LOCATION	204.0190 EACH	REMARKS		<u>BASE AGGREGATE DENSE 1 1/4-INCH</u>							
0010	237+30	RT, USH 10	1	AT END OF CURB & GUTTER		305.0120							
TOTAL 0010				1			CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS	
							0010	103+50 -	111+75	STH 27/USH 12 & PRIMUS RD	90	6-12 INCH, TURN LN/TAPER	
							0010	134+95 -	135+35	ALMA CENTER RD	30	6-INCH, RADIUS	
							0010	187+47 -	188+05	MAIN STREET	30	6-INCH, CULVERT REPLACEMENT	
							0010	187+00 -	188+50	MAIN STREET	110	6-INCH, RADIUS & TAPERS	
							0010		232+10	USH 10	70	12-INCH, CULVERT REPLACEMENT	
							0010	231+00 -	238+75	STH 27/USH 12 & USH 10	90	6-12 INCH, TURN LN/TAPER	
							0010	103+25 -	241+50	UNDISTRIBUTED	80	ADD'L TURN LN/ TAPERS/ RADIUS	
							TOTAL 0010				500		
<u>EXCAVATION & BACKFILL</u>													
				EXCAVATION COMMON 205.0100 CY	BACKFILL GRANULAR 209.0100 CY	REMARKS							
0010	187+50 -	188+00	MAIN STREET	25	20	CMP REPLACEMENT	TOTAL 0010						
0010		232+10	USH 10	75	60	CPRCHE REPLACEMENT							
0010	103+25 -	241+50	UNDISTRIBUTED	100	100	ADDITIONAL & EBS							
TOTAL 0010				200	180								
<u>BASE AGGREGATE DENSE 3/4-INCH</u>													
								305.0110 TON	REMARKS				
				0010	103+25 -	241+00	USH 10, MAINLINE	2460	RT & LT SHOULDERS				
				0010	103+50 -	111+75	STH 27/USH 12 & PRIMUS RD	60	4-INCH, TURN LN/TAPER WIDENING				
				0010	134+95 -	135+35	ALMA CENTER RD	10	3-INCH, RADIUS & TAPERS				
				0010	187+47 -	188+05	MAIN STREET	5	6-INCH, CULVERT REPLACEMENT				
				0010	187+00 -	188+50	MAIN STREET	30	3-INCH, RADIUS & TAPERS				
				0010		232+10	USH 10	10	6-INCH, CULVERT REPLACEMENT				
				0010	231+00 -	238+75	STH 27/USH 12 & USH 10	60	4-INCH, TURN LN/TAPER WIDENING				
				0010	113+66 -	115+21	USH 10, RT & LT BEAMGUARD	20	ADDITIONAL EMBANKMENT				
				0010	117+75 -	119+30	USH 10, RT & LT BEAMGUARD	15	ADDITIONAL EMBANKMENT				
				0010	165+20 -	166+75	USH 10, RT & LT BEAMGUARD	5	ADDITIONAL EMBANKMENT				
				0010	167+62 -	169+17	USH 10, RT & LT BEAMGUARD	5	ADDITIONAL EMBANKMENT				
				0010	224+40 -	225+95	USH 10, RT & LT BEAMGUARD	5	ADDITIONAL EMBANKMENT				
				0010	127+00 -	214+50	USH 10, RT & LT	110	GRAVEL DRIVEWAY & ENTRANCES				
TOTAL 0010								2795					

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614.0010
BARRIER SYSTEM GRADING SHAPING FINISHING

STATION	BORROW	SALVAGED	FERTILIZER	TEMPORARY	SEEDING	MULCHING
	FILL FACTOR	TOPSOIL	TYPE B	SEEDING	MIX #30	
	1.3 (CY)	(SY)	(CWT)	(LB)	(LB)	(SY)
113+66 - 115+21, LT & RT	40	260	0.2	8	5	260
117+75 - 119+30, LT & RT	15	150	0.2	5	3	150
165+20 - 166+75, LT & RT	60	370	0.3	11	7	370
167+62 - 169+17, LT & RT	20	200	0.2	6	4	200
224+40 - 225+95, RT ONLY	10	90	0.1	3	2	90
TOTAL	145	1070	1.0	33	21	1070

NOTE: ALL QUANTITIES ARE FOR INFORMATION PURPOSES ONLY.
SEE CROSS SECTIONS FOR GRADING DETAILS AT SPECIFIC STATIONS.
TERMINALS NOT SHOWN ONLY REQUIRE BASE AGGREGATE SHOULDERS.
*ADDITIONAL TERMINALS MAY BE ADDED AT THE DISCRETION OF THE ENGINEER.

BARRIER SYSTEM GRADING SHAPING FINISHING

614.0010					
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	113+66 -	115+21	LT, USH 10	1	B-27-99 APPROACH
0010	113+66 -	115+21	RT, USH 10	1	B-27-99 APPROACH
0010	117+75 -	119+30	LT, USH 10	1	B-27-99 APPROACH
0010	117+75 -	119+30	RT, USH 10	1	B-27-99 APPROACH
0010	165+20 -	166+75	LT, USH 10	1	C-979-45 BOX CULVERT
0010	165+20 -	166+75	RT, USH 10	1	C-979-45 BOX CULVERT
0010	167+62 -	169+17	LT, USH 10	1	C-979-45 BOX CULVERT
0010	167+62 -	169+17	RT, USH 10	1	C-979-45 BOX CULVERT
0010	224+40 -	225+95	RT, USH 10	1	BOX CULVERT
TOTAL 0010				9	

INTERSECTION GRADING

			GRADING SHAPING & FINISHING INTERSECTION (PRIMUS RD) 205.9015.S.01	GRADING SHAPING & FINISHING INTERSECTION (ALMA CENTER RD) 205.9015.S.02	GRADING SHAPING & FINISHING INTERSECTION (MAIN STREET) 205.9015.S.03	GRADING SHAPING & FINISHING INTERSECTION (STH 27 & USH 10) 205.9015.S.04	GRADING SHAPING & FINISHING INTERSECTION (CTH I) 205.9015.S.05	REMARKS
CATEGORY	STATION	LOCATION	LS	LS	LS	LS	LS	
0010	106+00, RT & LT	USH 10/USH 12 & PRIMUS RD	1	-	-	-	-	INCL TAPER, TURN LN, & BY PASS LN
0010	134+85, RT & LT	ALMA CENTER RD	-	1	-	-	-	INCL TAPER
0010	187+85, RT & LT	MAIN STREET	-	-	1	-	-	INCL TAPERS
0010	237+00, RT	USH 10/STH 27	-	-	-	1	-	INCL TAPER, TURN LN, & BY PASS LN
0010	239+25, RT & LT	CTH I & SUBSTATION ENT	-	-	-	-	1	INCL TAPERS
TOTAL 0010			1	1	1	1	1	

205.9015.S
GRADING, SHAPING & FINISHING INTERSECTIONS (LS)

STATION/ LOCATION	BORROW	SALVAGED	FERTILIZER	TEMPORARY	SEEDING	MULCHING
	FILL FACTOR	TOPSOIL	TYPE B	SEEDING	MIX #30	
	1.3 (CY)	(SY)	(CWT)	(LB)	(LB)	(SY)
106+00, PRIMUS RD & USH 10	80	500	0.4	15	10	500
135+00, ALMA CENTER & USH 10	30	140	0.1	4	3	140
187+85, MAIN ST & USH 10.	70	330	0.3	10	7	330
237+00, STH 27/USH 12 & USH 10	55	400	0.3	12	8	400
239+35, CTH I & USH 10	10	90	0.1	3	2	90
TOTAL	245	1460	1.2	44	30	1460

NOTE: ALL QUANTITIES ARE FOR INFORMATION PURPOSES ONLY.
SEE CONSTRUCTION AND INTERSECTION DETAILS.
*INCLUDES ALL TURN LANES, BYPASS LANES, AND TAPERS.

SHAPING SHOULDERS

305.0500				
CATEGORY	STATION TO	STATION	LOCATION	STA
0010	103+25	- 241+50	PROJECT	277
TOTAL 0010				277

TACK COAT

455.0605				
CATEGORY	STATION TO	STATION	LOCATION	GAL
0010	103+25	- 241+50	PROJECT	1370
0010	103+25	- 241+50	PROJECT	1370
TOTAL 0010				2740

ASPHALTIC CURB

465.0310				
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	167+18	LT, USH 10	10	FRONT OF BOX; ALINE W/RAIL
0010	167+18	RT, USH 10	10	FRONT OF BOX; ALINE W/RAIL
0010	223+40	LT, USH 10	25	FRONT OF BOX; ALINE W/RAIL
0010	223+40	RT, USH 10	25	FRONT OF BOX; ALINE W/RAIL
TOTAL 0010			70	

CULVERT PIPE

				CULVERT PIPE		AEW FOR		CULVERT PIPE		AEW FOR		CULVERT PIPE		AEW FOR		CULVERT PIPE		AEW FOR	
				CLASS III		CULVERT PIPE		RC HORIZONTAL		ELLIPTICAL		CLASS HE-III		RC HORIZONTAL		ELLIPTICAL		CLASS HE-III	
				15-INCH		15-INCH		19 x 30-INCH		19 x 30-INCH		19 x 30-INCH		19 x 30-INCH		19 x 30-INCH		19 x 30-INCH	
				520.0115		520.1015		523.0119		523.0519		523.0519		523.0519		523.0519		523.0519	
CATEGORY	STATION TO	STATION	LOCATION	LF	EACH	LF	EACH	LF	EACH	LF	EACH	LF	EACH	LF	EACH	LF	EACH	LF	EACH
0010	187+42	- 188+06	RT, MAIN STREET	64	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0010		232+10	LT & RT, USH 10	-	-	-	-	80	2	80	2	80	2	80	2	80	2	80	2
TOTAL 0010				64	2	80	2	80	2	80	2	80	2	80	2	80	2	80	2

ASPHALTIC SURFACE PATCHING

465.0110				
CATEGORY	STATION TO	STATION	LOCATION	TON
0010	103+25	- 241+50	PROJECT	25
TOTAL 0010				25

ASPHALTIC FLUMES

465.0315				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	119+70	LT, USH 10	4	END OF CURB & GUTTER
0010	237+30	RT, USH 12/STH 27	6	END OF CURB & GUTTER
TOTAL 0010			10	

CULVERT PIPE MAINTENANCE

				CLEANING	MARKERS	
				CULVERT PIPE	CULVERT END	
				520.7000	633.5200	
CATEGORY	STATION TO	STATION	LOCATION	EACH	EACH	REMARKS
0010	117+31 -	117+66	USH 10	1	2	
0010		143+16	USH 10	1	2	
0010		143+24	USH 10	1	2	
0010	187+58 -	188+00	RT, MAIN STREET	-	2	
0010		201+68	USH 10	1	2	
0010	236+28 -	237+49	RT, USH 12 & STH 27	1	-	
0010		232+10	LT & RT, USH 10	-	2	19" x 30" CPRCHE
TOTAL 0010				5	12	

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CONCRETE CURB AND GUTTER

				CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D 601.0557	CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT SPV.0090	REMARKS
CATEGORY	STATION TO	STATION	LOCATION	LF	LF	
0010	105+09	- 105+47	LT, USH 12 & STH 27	58	58	NW RADIUS
0010	105+56	- 105+80	LT, USH 12 & STH 27	110	110	MEDIAN ISLAND
0010	106+00	- 106+50	LT, USH 12 & STH 27	130	130	NE RADIUS
0010	119+70	- 123+22	LT, USH 10	350	350	WAYSIDE INN
0010	135+00	- 135+58	LT, ALMA CENTER RD.	94	94	NE RADIUS
0010	226+25	- 227+40	LT, USH 10	115	115	SUNRISE CAFÉ
0010	226+25	- 227+70	RT, USH 10	145	145	BAR AUX LN
0010	236+08	- 236+57	RT, USH 12 & STH 27	60	60	SW RADIUS
0010	236+92	- 237+23	RT, USH 12 & STH 27	120	120	MEDIAN ISLAND
0010	237+27	- 237+67	RT, USH 12 & STH 27	68	68	SE RADIUS
0010	238+73	- 239+13	LT, CTH I	60	60	NW RADIUS
0010	239+37	- 239+95	LT, CTH I	92	92	NE RADIUS
TOTAL 0010				1402	1402	

FENCE SAFETY

				616.0700.S	REMARKS
CATEGORY	STATION TO	STATION	LOCATION	LF	
0010	STA 231+10	- 233+10	USH 10 MAINLINE	200	CULVERT REPLACEMENT
TOTAL 0010				200	

BEAM GUARD

REPLACING
GUARDRAIL
POST AND
BLOCKS
614.0950

CATEGORY	STATION TO	STATION	LOCATION	EACH	LF	LF	LF	LF	EACH	REMARKS
0010	223+30	- 223+50	LT & RT, USH 10	6	-	-	-	-	-	STEEL RAILING TYPE W
0010	114+71	- 115+21	LT & RT, USH 10	-	-	-	-	-	2	B-27-99
0010	115+21	- 115+42	LT & RT, USH 10	-	-	-	-	39.5	-	B-27-99
0010	117+54	- 117+75	LT & RT, USH 10	-	-	-	-	39.5	-	B-27-99
0010	117+75	- 118+25	LT & RT, USH 10	-	-	-	-	-	2	B-27-99
0010	166+25	- 166+75	LT & RT, USH 10	-	-	-	-	-	2	C-979-45
0010	166+75	- 167+62	RT & LT, USH 10	-	-	175	-	-	-	C-979-45
0010	167+62	- 168+12	LT & RT, USH 10	-	-	-	-	-	2	C-979-45
0010	221+91	- 222+41	LT & RT, USH 10	-	-	-	-	-	2	BOX CULVERT
0010	222+41	- 222+90	LT & RT, USH 10	-	100	-	-	-	-	BOX CULVERT
0010	222+90	- 223+90	RT & LT, USH 10	-	-	200	-	-	-	BOX CULVERT
0010	223+90	- 224+40	LT & RT, USH 10	-	100	-	-	-	-	BOX CULVERT
0010	224+40	- 224+90	LT & RT, USH 10	-	-	-	-	-	2	BOX CULVERT
TOTAL 0010				6	200	375	79	12		

CONCRETE SIDEWALK

				CONCRETE SIDEWALK 602.0405 SF	CONCRETE SIDEWALK CURE AND SEAL TREATMENT SPV.0165 SF	REMARKS
CATEGORY	STATION TO	STATION	LOCATION	SF	SF	
0010	105+58	- 105+76	LT	430	430	MEDIAN ISLAND
0010	236+94	- 237+22	RT	690	690	MEDIAN ISLAND
TOTAL 0010				1120	1120	
				SALVAGED RAIL		
				614.0920		
CATEGORY	STATION TO	STATION	LOCATION	LF		REMARKS
0010	114+77	- 115+42	LT & RT, USH 10	130		B-27-99 APPROACH
0010	117+53	- 118+18	LT & RT, USH 10	130		B-27-99 APPROACH
0010	166+48	- 167+88	LT & RT, USH 10	280		C-979-45 BOX CULVERT
0010	222+08	- 224+73	LT & RT, USH 10	530		BOX CULVERT
TOTAL 0010				1070		

MAINTENANCE AND REPAIR OF HAUL ROADS (1520-06-74)

				618.0100	REMARKS
CATEGORY	STATION	LOCATION		EACH	
0010	PROJECT	USH 10		1	
TOTAL 0010				1	

PROJECT NO: 1520-06-74

HWY: USH 10

COUNTY: JACKSON/ E.C./CLARK

MISCELLANEOUS QUANTITIES

SHEET

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MOBILIZATION

CATEGORY	STATION	LOCATION	MOBILIZATION	MOBILIZATIONS	MOBILIZATIONS	REMARKS
			619.1000	EROSION	EMERGENCY	
EACH	EACH	EACH	EACH	CONTROL	EROSION	CONTROL
0010	PROJECT	USH 10	1	3	2	
TOTAL 0010			1	3	2	

CONCRETE MEDIAN

CATEGORY	STATION	LOCATION	CONCRETE MEDIAN	CONCRETE MEDIAN	REMARKS
			BLUNT NOSE	SLOPE NOSE	
SF	SF	SF	SF	SF	SF
0010	105+60	26' LT, USH 12 & STH 27	16	-	R3
0010	105+63	71' LT, USH 12 & STH 27	-	20	R2
0010	105+75	28' LT, USH 12 & STH 27	16	-	R4
0010	236+96	28' RT, USH 12 & STH 27	16	-	R5
0010	237+05	73' RT, USH 12 & STH 27	-	20	R7
0010	237+20	29' RT, USH 12 & STH 27	16	-	R6
TOTAL 0010			64	40	

FIELD OFFICE TYPE C (1520-06-74)

CATEGORY	STATION	LOCATION	642.5201	REMARKS
EACH	EACH	EACH	EACH	EACH
0010	PROJECT	USH 10	1	
TOTAL 0010			1	

RESTORATION

CATEGORY	STATION TO	STATION	LOCATION	SALVAGED	MULCHING	FERTILIZER	SEEDING	REMARKS
				TOPSOIL	627.0200	TYPE A	MIXTURE	
SY	SY	CWT	LB	SY	SY	CWT	LB	REMARKS
0010	119+75 -	123+25	LT, USH 10	150	150	0.2	10	WAYSIDE INN
0010	226+00 -	228+00	LT & RT, USH 10	90	90	0.1	5	SUNRISE CAFÉ/BAR
0010	232+00 -	232+20	LT & RT, USH 10	80	80	0.1	5	ADD'L AT CULVERT
TOTAL 0010				320	320	0.4	20	

SILT FENCE

CATEGORY	STATION TO	STATION	LOCATION	SILT	SILT	REMARKS
				FENCE	FENCE	
LF	LF	LF	LF	LF	LF	LF
0010	104+00 -	105+50	LT, USH 12 & STH 27	150	75	NW QUAD
0010	106+00 -	107+00	LT, USH 12 & STH 27	125	65	NE QUAD
0010	107+50 -	110+50	RT, USH 10	275	140	TAPER
0010	108+50 -	111+50	LT, USH 10	325	165	TURN LN
0010	114+00 -	115+50	LT & RT, USH 10	300	150	BEAM GUARD
0010	117+50 -	119+00	LT & RT, USH 10	300	150	BEAM GUARD
0010	135+00 -	136+00	RT, ALMA CENTER RD	125	65	SE QUAD
0010	135+00 -	136+00	LT, ALMA CENTER RD	100	50	NE QUAD
0010	165+50 -	167+00	LT & RT, USH 10	300	150	BEAM GUARD
0010	167+25 -	168+75	LT & RT, USH 10	300	150	BEAM GUARD
0010	186+50 -	187+50	LT, MAIN STREET	125	65	NW QUAD
0010	187+00 -	187+50	RT, MAIN STREET	75	40	SW QUAD
0010	188+00 -	188+50	RT, MAIN STREET	100	50	SE QUAD
0010	188+00 -	190+00	LT, MAIN STREET	200	100	NE QUAD
0010	221+75 -	223+25	LT & RT, USH 10	300	150	BEAM GUARD
0010	223+50 -	225+00	LT, USH 10	150	75	BEAM GUARD
0010	223+50 -	225+50	RT, USH 10	200	100	BEAM GUARD
0010	231+00 -	232+00	RT, USH 10	100	50	CULVERT & TURN LN
0010	231+25 -	232+00	LT, USH 10	75	40	CULVERT & TAPER
0010	232+25 -	234+25	RT, USH 10	200	100	TURN LN
0010	232+25 -	234+75	LT, USH 10	250	125	TAPER
0010	236+00 -	236+50	LT, USH 12 & STH 27	75	40	SW QUAD
0010	237+25 -	238+00	RT, USH 12 & STH 27	125	65	SE QUAD
0010	238+60 -	239+10	LT, CTH I	75	40	NW QUAD
0010	239+50 -	240+25	LT, CTH I	100	50	NE QUAD
0010	240+00 -	241+00	RT, USH 10	100	50	TAPER
TOTAL 0010				4550	2300	

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PERMANENT SIGNING

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER

APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210	637.2230	634.0616	634.0618	634.0814	638.2602	638.3	REMARKS
					SIGNS	SIGNS	POSTS WOOD	POSTS WOOD	POST TUBULAR	REMOVING	REMOVING	
					TYPE II REFLECTIVE H	TYPE II REFLECTIVE F	4x6-INCH x 16-FT EACH	4x6-INCH x 18-FT EACH	STEEL 2x2-INCH X 14-FT EACH	SIGNS TYPE II EACH	SMALL SIGN SUPPORT EACH	
103+25, RT	1-1	J3-1		24 x 57	9.50	-	-	1	-	-	1	
		M3-1	NORTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-5A	COUNTY MARKER H	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
103+25, LT	1-2	J4-1		24 x 36	6.00	-	1	-	-	-	1	
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
105+20, LT	1-3	R5-1	DO NOT ENTER	30 x 30	6.25	-	1	-	-	1	1	
105+20, LT	1-4	R1-1	STOP	30 x 30	5.18	-	-	-	-	1	1	MOUNT ON 1-3
105+58, RT	1-5	J3-4		96 x 57	38.00	-	-	2	-	-	2	
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-1	NORTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW AHEAD	21 x 21	-	-	-	-	-	1	-	
		M3-3	SOUTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW AHEAD	21 x 21	-	-	-	-	-	1	-	
105+62, LT	1-6	J3-4		96 x 57	38.00	-	-	2	-	-	2	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-3	SOUTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
105+71, LT	1-7	R1-1	STOP	30 x 30	5.18	-	-	-	-	1	-	MOUNT ON FLASHER
106+50, RT	1-8	R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1	
106+82, LT	1-9	J3-3		72 x 57	28.50	-	-	2	-	-	2	
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
		M3-1	NORTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
		M3-1	NORTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-5A	COUNTY MARKER H	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
108+40, RT	1-10	I55-56	ADOPT A HIGHWAY	30 x 36	7.50	-	1	-	-	1	1	

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PERMANENT SIGNING

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGNGROUP NUMBER												
APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210	637.2230	634.0616	634.0618	634.0814	638.2602	638.3	REMARKS
					SIGNS	SIGNS	POSTS WOOD	POSTS WOOD	POST TUBULAR	REMOVING	REMOVING	
					TYPE II	TYPE II	4x6-INCH x 16-FT	4x6-INCH x 18-FT	STEEL	SIGNS	SMALL SIGN	
					REFLECTIVE H	REFLECTIVE F	EACH	EACH	EACH	EACH	EACH	
110+45, RT	1-11	J4-3		72 x 36	18.00	-	2	-	-	-	2	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M3-3	SOUTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
111+60, LT	1-12	D1-4	↑ OSSEO	66 x 48	22.00	-	-	2	-	1	2	
			AUGUSTA/FAIRCHILD/STANLEY →		-	-	-	-	-	-	-	
112+50, RT	1-13	R59-51	STOP, SCHOOL BUS FLASHING	36 x 36	9.00	-	1	-	-	1	1	
115+20, LT	1-15	W5-52L	CLEARANCE STRIPER DOWN RIGHT	12 x 36	-	3.00	-	-	1	1	1	
115+20, RT	1-16	W5-52R	CLEARANCE STRIPER DOWN LEFT	12 x 36	-	3.00	-	-	1	1	1	
117+75, RT	1-17	W5-52L	CLEARANCE STRIPER DOWN RIGHT	12 x 36	-	3.00	-	-	1	1	1	
117+75, LT	1-18	W5-52R	CLEARANCE STRIPER DOWN LEFT	12 x 36	-	3.00	-	-	1	1	1	
119+70, LT	1-19	J1-1		24 x 39	6.50	-	1	-	-	-	1	
		M2-1	JCT	21 x 15	-	-	-	-	-	1	-	
		M1-5A	COUNTY MARKER H	24 x 24	-	-	-	-	-	1	-	
			NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1	
122+00, LT	1-21	W14-3	NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1	
125+15, RT	1-22	J1-1		24 x 39	6.50	-	1	-	-	-	1	
		M2-1	JCT	21 x 15	-	-	-	-	-	1	-	
		M1-5A	COUNTY MARKER YY	24 x 24	-	-	-	-	-	1	-	
128+40, RT	1-23	I2-2	EAU CLAIRE CO	78 x 15	8.13	-	2	-	-	1	2	
128+40, LT	1-24	I2-2	JACKSON CO	66 x 15	6.88	-	2	-	-	1	1	
133+36, LT	1-25	W5-52L	CLEARANCE STRIPER DOWN RIGHT	12 x 36	-	3.00	-	-	1	1	1	
133+36, RT	1-26	W5-52R	CLEARANCE STRIPER DOWN LEFT	12 x 36	-	3.00	-	-	1	1	1	
133+78, RT	1-27	W5-52L	CLEARANCE STRIPER DOWN RIGHT	12 x 36	-	3.00	-	-	1	1	1	
133+78, LT	1-28	W5-52R	CLEARANCE STRIPER DOWN LEFT	12 x 36	-	3.00	-	-	1	1	1	
134+25, RT	1-29	J13-1		24 x 45	7.50	-	1	-	-	-	1	
		M1-5A	COUNTY MARKER YY	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
134+50, LT	1-30	J2-1S		24 x 93	15.50	-	-	1	-	-	1	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
		M6-4	DIRECTIONAL ARROW LT or RT	21 x 21	-	-	-	-	-	1	-	
134+55, LT	1-31	R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1	
135+16, RT	1-32	R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1	
135+50, LT	1-33	J13-1		24 x 45	7.50	-	1	-	-	-	1	
		M1-5A	COUNTY MARKER YY	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
137+80, RT	1-34	W14-3	NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1	
140+25, LT	1-35	D1-2	FAIRCHILD BUSINESS DIST	90 x 24	15.00	-	2	-	-	1	2	
144+36, LT	1-36	J1-1		24 x 39	6.50	-	1	-	-	-	1	
		M2-1	JCT	21 x 15	-	-	-	-	-	1	-	
		M1-5A	COUNTY MARKER YY	24 x 24	-	-	-	-	-	1	-	
146+90, LT	1-37	R5-99	OFF-ROADWAY OPERATION...	42 x 24	7.00	-	1	-	-	-	-	INSTALL ON BACKSLOPE
146+90, LT	1-38	R5-99	OFF-ROADWAY OPERATION...	42 x 24	7.00	-	-	-	-	-	-	INSTALL ON BACKSLOPE

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PERMANENT SIGNING													
NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER													
APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H	637.2230 SIGNS TYPE II REFLECTIVE F	634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH	634.0618 POSTS WOOD 4x6-INCH x 18-FT EACH	634.0814 POST TUBULAR STEEL 2x2-INCH X 14-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3 REMOVING SMALL SIGN SUPPORT EACH	REMARKS	
158+25, LT	1-39	I2-3	FAIRCHILD POPULATION 550	60 x 24	10.00	-	2	-	-	1	2		
161+50, LT	2-1R	12-3A	VILLAGE OF FAIRCHILD	78 x 30	-	-	-	-	-	2	1	REMOVE ONLY	
168+25, LT	2-2	W14-3	NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1		
187+60, LT	2-3	R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1		
188+10, RT	2-4	R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1		
189+30, LT	2-5	R5-99	OFF-ROADWAY OPERATION...	42 x 24	7.00	-	1	-	-	-	-	INSTALL ON BACKSLOPE	
194+60, RT	2-6	W14-3	NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1		
205+25, LT	2-7	W14-3	NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1		
212+75, LT	2-8	I55-56	ADOPT A HIGHWAY	30 x 36	7.50	-	1	-	-	1	1		
214+15, LT	2-9	I2-2	EAU CLAIRE CO	78 x 15	8.13	-	2	-	-	1	2		
214+15, RT	2-10	I2-2	CLARK CO	54 x 15	5.63	-	1	-	-	1	1		
220+00, LT	2-11	R5-99	OFF-ROADWAY OPERATION...	42 x 24	7.00	-	1	-	-	-	-	INSTALL ON BACKSLOPE	
220+75, RT	2-12	J1-1		24 x 39	6.50	-	1	-	-	-	1		
		M2-1	JCT	21 x 15	-	-	-	-	-	1	-		
		M1-5A	COUNTY MARKER I	24 x 24	-	-	-	-	-	1	-		
223+00, LT	3R-1	R5-56	\$500 FINE FOR LITTER	48 x 36	-	-	-	-	-	1	1	REMOVE ONLY	
223+25, LT	3-2	W5-52L	CLEARANCE STRIPER DOWN RIGHT	12 x 36	-	3.00	-	-	1	1	1		
223+25, RT	3-3	W5-52R	CLEARANCE STRIPER DOWN LEFT	12 x 36	-	3.00	-	-	1	1	1		
223+55, RT	3-4	W5-52L	CLEARANCE STRIPER DOWN RIGHT	12 x 36	-	3.00	-	-	1	1	1		
223+55, LT	3-5	W5-52R	CLEARANCE STRIPER DOWN LEFT	12 x 36	-	3.00	-	-	1	1	1		
225+80, RT	3-6	J2-3		72 x 57	27.19	-	-	2	-	-	2		
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-		
		M6-1	ARROW AHEAD	21 x 21	-	-	-	-	-	1	-		
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-		
		M5-1R	ADVANCE ARROW RT TURN	21 x 21	-	-	-	-	-	1	-		
		M3-3	SOUTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-		
		M5-1R	ADVANCE ARROW RT TURN	21 x 21	-	-	-	-	-	1	-		
230+25, LT	3-7	W14-3	NO PASSING ZONE	48 x 36	-	6.00	1	-	-	1	1		
231+00, RT	3-8	D1-3	↑ NEILLSVILLE	108 x 36	27.00	-	2	-	-	1	2		
			HUMBIRD, BLACK RIVER FALLS →		-	-	-	-	-	-	-		
234+50, LT	3-9	J4-3		72 x 36	18.00	-	2	-	-	-	2		
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-		
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-		
		M3-1	NORTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-		
236+00, RT	3-10	J3-3		72 x 57	28.50	-	-	2	-	-	2		
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-		
		M6-1	ARROW AHEAD	21 x 21	-	-	-	-	-	1	-		
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-		
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-		
		M3-3	SOUTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-		
~ CONTINUE NEXT PAGE ~													
PROJECT NO: 1520-06-74			HWY: USH 10		COUNTY: JACKSON/ E.C./CLARK			MISCELLANEOUS QUANTITIES			SHEET		
FILE NAME : \$\$....designfile....\$\$			PLOT DATE : \$\$...plottingdate...\$\$			PLOT BY : \$\$...plotuser...\$\$			PLOT NAME : PLOT SCALE : \$\$.....plotscale.....\$\$			WISDOT/CADDs SHEET	

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PERMANENT SIGNING

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER

APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210	637.2230	634.0616	634.0618	634.0814	638.2602	638.3	REMARKS
					SIGNS TYPE II	SIGNS TYPE II	POSTS WOOD 4x6-INCH x 16-FT	POSTS WOOD 4x6-INCH x 18-FT	POST TUBULAR STEEL 2x2-INCH X 14-FT	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORT	
					REFLECTIVE H	REFLECTIVE F	EACH	EACH	EACH	EACH	EACH	
236+75, LT 237+00, RT 237+15, LT	3-11	M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	MOUNT ON FLASHER
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
		W1-7	DOUBLE NIGHT ARROW	48 x 24	-	8.00	1	-	-	1	1	
		R1-1	STOP	30 x 30	5.18	-	-	-	-	1	-	
		J3-4		96 x 57	38.00	-	-	2	-	-	2	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-3	SOUTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		M3-4	WEST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 12	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW AHEAD	21 x 21	-	-	-	-	-	1	-	
		M3-1	NORTH <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
237+52, RT 237+52, RT 238+50, RT	3-14	M1-6	STATE ROUTE MARKER 27	24 x 24	-	-	-	-	-	1	-	MOUNT ON 3-14
		M6-1	ARROW AHEAD	21 x 21	-	-	-	-	-	1	-	
		R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1	
		R5-1	DO NOT ENTER	30 x 30	6.25	-	-	-	-	1	1	
		J13-1		24 x 45	7.50	-	1	-	-	-	1	
		M1-5A	COUNTY MARKER I	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW LEFT	21 x 21	-	-	-	-	-	1	-	
		J13-1		24 x 45	7.50	-	1	-	-	-	1	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
		M6-4	DIRECTIONAL ARROW LT or RT	21 x 21	-	-	-	-	-	1	-	
239+05, LT	3-18	R1-1	STOP	30 x 30	5.18	-	1	-	-	1	1	MOUNT ON 3-21, 18- FT POST SECTION
240+00, LT	3-19	J13-1		24 x 45	7.50	-	1	-	-	-	1	
240+50, RT	3-20	M1-5A	COUNTY MARKER I	24 x 24	-	-	-	-	-	1	-	
		M6-1	ARROW RIGHT	21 x 21	-	-	-	-	-	1	-	
		J4-1		24 x 36	6.00	-	-	-	-	-	-	
		M3-2	EAST <i>Cardinal Route Marker</i>	24 x 12	-	-	-	-	-	1	-	
		M1-4	US ROUTE MARKER 10	24 x 24	-	-	-	-	-	1	-	
240+50, RT	3-21	D2-2	NEILLSVILLE 16 / MARSHFILED 42	84 x 24	14.00	-	1	1	-	1	2	
TOTAL 0010					567.76	86.00	50	17	12	151	79	

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TRAFFIC CONTROL

CATEGORY	STATION TO	STATION	LOCATION	TRAFFIC	TRAFFIC	TRAFFIC	REMARKS
				CONTROL PROJECT 643.0100 EACH	CONTROL DRUMS 643.0300 DAYS	CONTROL SIGNS 643.0900 DAYS	
0010		PROJECT	USH 10	1	-	-	
0010		BOP	USH 10	-	-	225	ADVANCE SIGNING
0010	103+25 -	241+50	LT & RT, USH 10	-	456	-	ALL CURB & GUTTER LOCATIONS
0010	103+50 -	105+00	LT, USH 10	-	35	-	INTERSECTION GRADING
0010		106+00	LT & RT, PRIMUS RD	-	-	270	INT ADVANCE SIGNING
0010	108+00 -	111+00	LT & RT, USH 10	-	130	-	INTERSECTION GRADING
0010	114+00 -	115+50	LT & RT, USH 10	-	140	-	BEAM GUARD
0010	117+50 -	119+00	LT & RT, USH 10	-	140	-	BEAM GUARD
0010		134+85	LT & RT, ALMA CENTER RD	-	-	180	INT ADVANCE SIGNING
0010		135+00	RT, USH 10	-	25	-	INTERSECTION GRADING
0010	165+75 -	168+75	LT & RT, USH 10	-	260	-	BEAM GUARD
0010	185+00 -	187+75	RT, USH 10	-	70	-	15" CULVERT REPLACEMENT
0010		187+85	LT & RT, MAIN STREET	-	-	180	INT ADVANCE SIGNING
0010	185+50 -	189+50	LT & RT, USH 10	-	200	-	INTERSECTION GRADING
0010	221+00 -	226+00	LT & RT, USH 10	-	420	-	BEAM GUARD
0010	229+50 -	233+50	LT & RT, USH 10	-	85	-	19" x 30" CULVERT REPLACEMENT
0010	231+00 -	234+00	LT & RT, USH 10	-	130	-	INTERSECTION GRADING
0010		237+00	LT & RT, USH 12/STH 27	-	-	90	INT ADVANCE SIGNING
0010		239+25	LT & RT, CTH I	-	-	90	INT ADVANCE SIGNING
0010		EOP	USH 10	-	-	225	ADVANCE SIGNING
TOTAL 0010				1	2091	1260	

PAVEMENT MARKING

CATEGORY	STATION TO	STATION	LOCATION	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	TEMPORARY	REMARKS
				MARKING	MARKING	MARKING	MARKING	PAVEMENT	
				EPOXY	EPOXY	EPOXY	EPOXY	MARKING	
				4-INCH	8-INCH	4-INCH	18-INCH	4-INCH	
				646.0106	646.0126	646.0406	647.0566	649.0100	
LF	LF	LF	LF	LF	LF	LF	LF	LF	LF
0010	103+25 -	241+50	USH 10	27850	-	-	-	-	WHITE EDGELINE
0010	103+25 -	241+50	USH 10	-	-	15250	-	-	YELLOW CENTERLINE
0010	103+25 -	241+50	USH 10	-	-	-	-	12913	CL, BTW 1ST & 2ND LIFT
0010		105+60	LT, USH 12/STH 27	-	90	-	-	-	PORKCHOP AREA
0010		105+75	LT, USH 12/STH 27	-	-	-	23	-	
0010		106+00	LT, USH 12/STH 27	-	-	-	13	-	
0010		106+00	LT, USH 12/STH 27	-	-	200	-	-	YELLOW CENTERLINE
0010	106+60 -	110+00	LT, USH 10	-	350	-	-	-	TURN LANE CHANNELIZE
0010	232+59 -	236+09	RT, USH 10	-	350	-	-	-	TURN LANE CHANNELIZE
0010		236+75	RT, USH 12/STH 27	-	-	200	-	-	YELLOW CENTERLINE
0010		236+80	RT, USH 12/STH 27	-	-	-	13	-	
0010		237+05	RT, USH 12/STH 27	-	40	-	-	-	PORKCHOP AREA
0010		237+30	RT, USH 12/STH 27	-	-	-	20	-	
0010		239+25	LT, CTH I	-	-	120	-	-	YELLOW CENTERLINE
TOTAL 0010				27850	830	15770	69	12913	

3

LOCATING NO-PASSING ZONES

		648.0100		
CATEGORY	STATION	LOCATION	MI	REMARKS
0010	PROJECT	USH 10	3	
TOTAL 0010			3	

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

				650.5500	
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	105+09	- 105+47	LT, USH 12 & STH 27	58	NW RADIUS
0010	105+56	- 105+80	LT, USH 12 & STH 27	110	MEDIAN ISLAND
0010	106+00	- 106+50	LT, USH 12 & STH 27	130	NE RADIUS
0010	119+70	- 123+22	LT, USH 10	350	WAYSIDE INN
0010	135+00	- 135+58	LT, ALMA CENTER RD.	94	NE RADIUS
0010	226+25	- 227+40	LT, USH 10	115	SUNRISE CAFÉ AUX LN
0010	226+25	- 227+70	RT, USH 10	145	BAR AUX LN
0010	236+08	- 236+57	RT, USH 12 & STH 27	60	SW RADIUS
0010	236+92	- 237+23	RT, USH 12 & STH 27	120	MEDIAN ISLAND
0010	237+27	- 237+67	RT, USH 12 & STH 27	68	SE RADIUS
0010	238+73	- 239+13	LT, CTH I	60	NW RADIUS
0010	239+37	- 239+95	LT, CTH I	92	NE RADIUS
TOTAL 0010				1402	

CONSTRUCTION STAKING PIPE CULVERTS

				650.6000		
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS	
0010	187+58	- 188+00	RT, MAIN STREET	1	1 - 15" CMP	
0010		232+10	LT & RT, USH 10	1	1 - 19" x 30" CPRCHE	
TOTAL 0010				2		

CONSTRUCTION STAKING RESURFACING REFERENCE

				650.8000	
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	103+25	- 241+50	USH 10	13825	
TOTAL 0010				13825	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT)

		650.9910		
CATEGORY	STATION	LOCATION	LS	REMARKS
0010	PROJECT	USH 10	1	
TOTAL 0010			1	

ADJUSTING PULLBOXES

		653.0900		
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	105+66	41.5' LT, USH 12 & STH 27	1	MEDIAN PORKCHOP
TOTAL 0010			1	

SAWING ASPHALT

		690.0150		
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	103+25	USH 10	36	
0010	105+75	LT, USH 12 & STH 27	49	
0010	106+00	RT, PRIMUS RD	24	
0010	121+75	LT, USH 10	35	WAYSIDE INN
0010	122+66	LT, USH 10	27	WAYSIDE INN
0010	134+85	LT, ALMA CENTER RD	31	
0010	134+85	RT, ALMA CENTER RD	24	
0010	187+80	LT, MAIN STREET	22	
0010	187+80	RT, MAIN STREET	20	
0010	187+80	RT, MAIN STREET	44	CULVERT REPLACEMENT
0010	214+66	RT, USH 10	26	DRIVEWAY
0010	226+00	LT, USH 10	64	SUNRISE CAFÉ
0010	226+68	RT, USH 10	28	BAR
0010	227+40	RT, USH 10	38	BAR
0010	227+68	LT, USH 10	55	SUNRISE CAFÉ
0010	232+10	USH 10	60	CULVERT REPLACEMENT
0010	237+00	RT, USH 12 & STH 27	48	
0010	239+25	LT, CTH I	24	
0010	239+25	RT, SUBSTAION	30	
TOTAL 0010			685	

3

3

SPECIAL 01. PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL

SPV.0105.01				
CATEGORY	STATION TO	STATION	LOCATION	LS
0010	103+25	- 241+50	PROJECT	1
TOTAL 0010				1

SPECIAL 02. MILLING AND REMOVING TEMPORARY JOINT

SPV.0105.02				
CATEGORY	STATION TO	STATION	LOCATION	LS
0010	103+25	- 241+50	PROJECT	1
TOTAL 0010				1

SPECIAL 01. HMA PAVEMENT TYPE E-10 SPECIAL

SPV.0195.01				
CATEGORY	STATION TO	STATION	LOCATION	TON
0010	103+25	- 106+59	LT, USH 10	125
0010	103+25	- 110+42	RT, USH 10	215
0010	106+59	- 111+58	LT, USH 10	150
0010	110+42	- 111+58	RT, USH 10	43
0010	111+58	- 119+30	RT & LT, USH 10	575
0010	119+30	- 124+25	RT & LT, USH 10	370
0010	124+25	- 133+23	RT & LT, USH 10	670
0010	133+90	- 225+40	RT & LT, USH 10	6830
0010	225+40	- 228+20	RT & LT, USH 10	210
0010	228+20	- 230+25	RT, USH 10	77
0010	228+20	- 230+25	LT, USH 10	61
0010	230+25	- 231+09	RT & LT, USH 10	63
0010	231+09	- 231+30	LT, USH 10	39
0010	231+09	- 237+75	RT, USH 10	150
0010	231+30	- 238+64	LT, USH 10	220
0010	237+75	- 241+50	RT, USH 10	200
0010	238+64	- 341+50	LT, USH 10	105
0010	103+59	- 106+59	LT, USH 12 & STH 27	47
0010	106+59	- 111+58	LT, USH 12 & STH 27	120
0010	105+07	- 106+59	LT, USH 12 & STH 27	115
0010	103+25	- 110+42	RT, PRIMUS ROAD	150
0010	231+30	- 238+64	LT, USH 10	160
0010	231+09	- 236+09	RT, USH 12 & STH 27	125
0010	236+09	- 237+75	RT, USH 12 & STH 27	37
0010	236+09	- 237+75	RT, USH 12 & STH 27	120
TOTAL 0010				10977

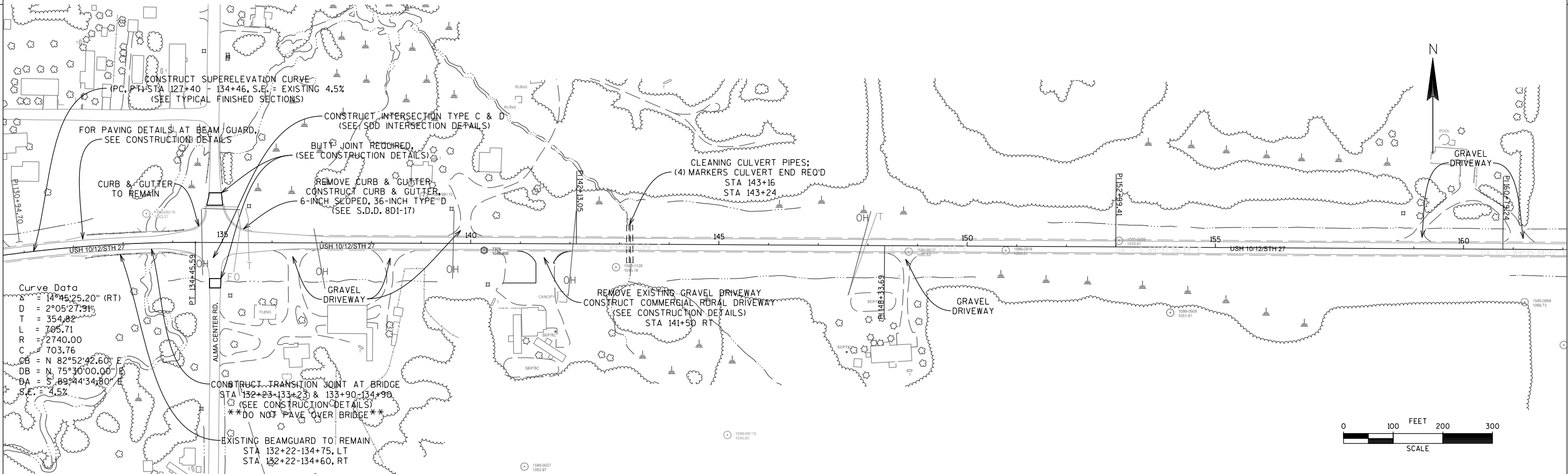
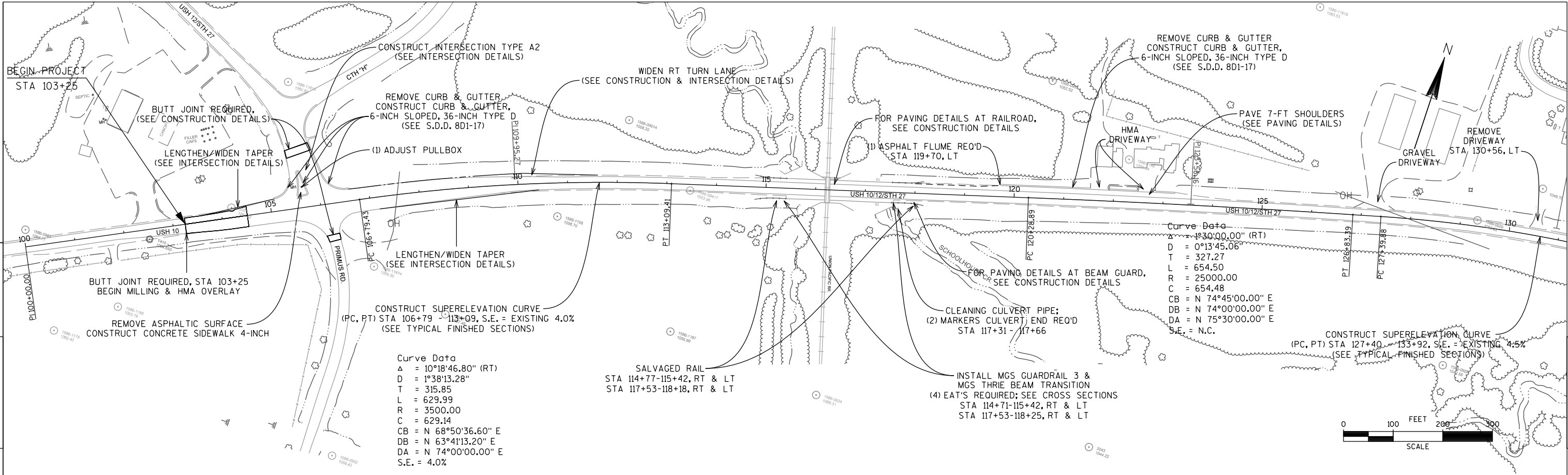
SPECIAL 02. APSHALTIC SURFACE SPECIAL

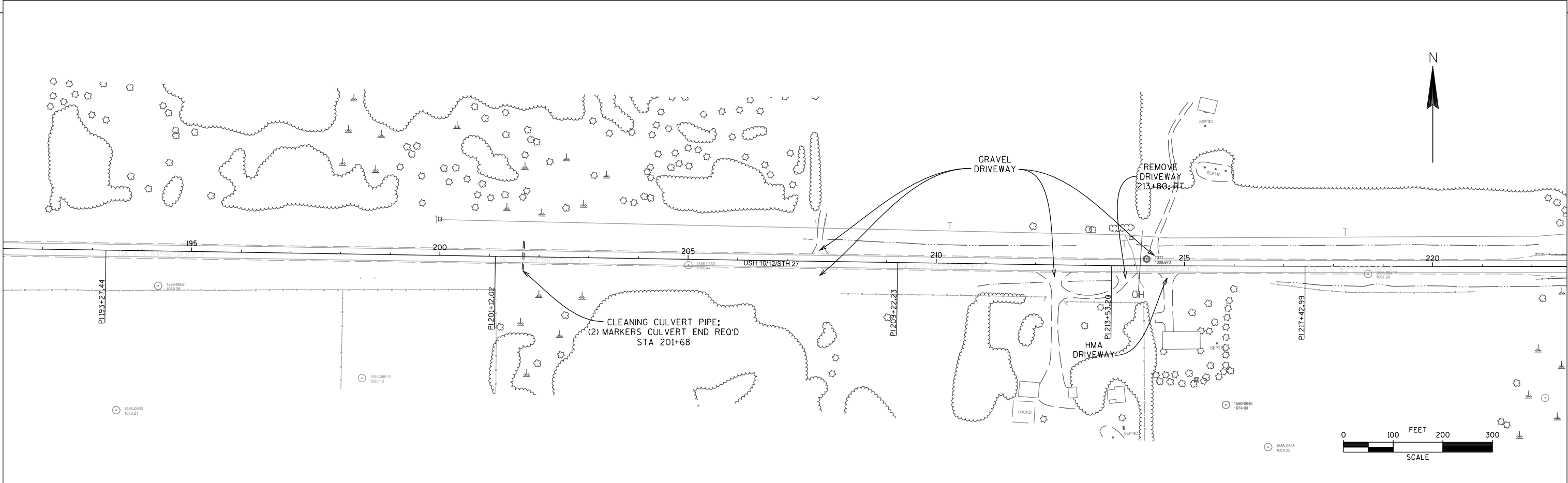
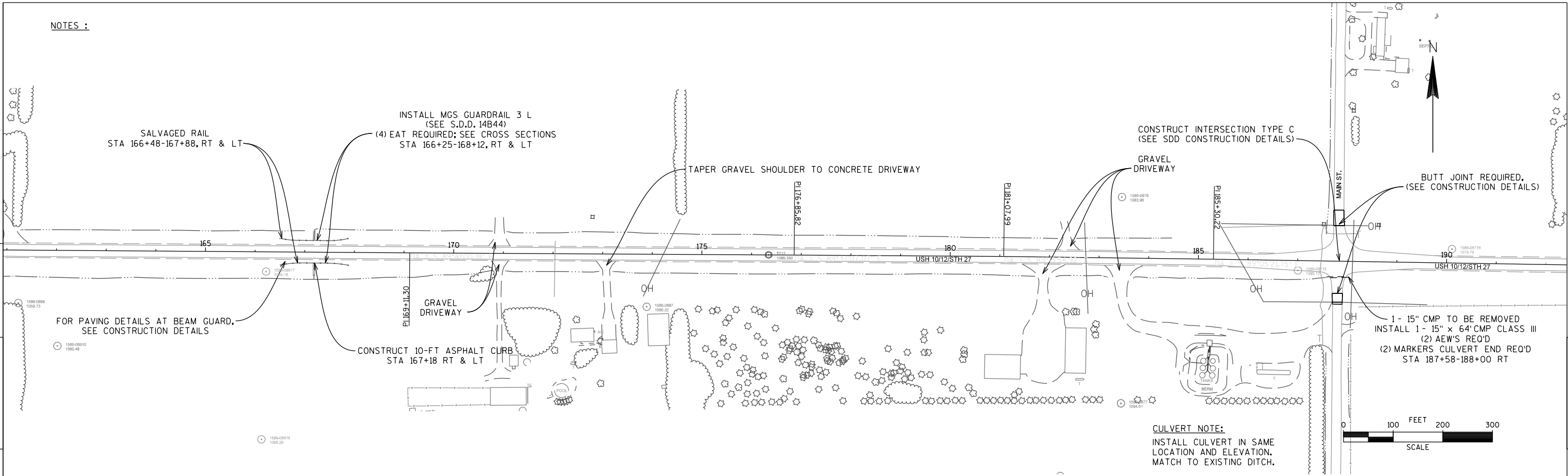
SPV.0195.02				
CATEGORY	STATION TO	STATION	LOCATION	TON
0010	105+40	- 106+74	RT, PRIMUS ROAD	41
0010	114+31	- 119+30	LT & RT, USH 10	44
0010	119+30	- 124+25	LT, USH 10; WAYSIDE INN	80
0010	121+75	& 122+65	LT, USH 10; WAYSIDE INN	4
0010	131+80	- 134+35	LT & RT, USH 10	39
0010	134+35	- 137+11	LT, ALMA CENTER ROAD	35
0010	134+35	- 135+61	LT, ALMA CENTER ROAD	62
0010	134+36	- 136+40	RT, ALMA CENTER ROAD	26
0010	134+36	- 135+40	RT, ALMA CENTER ROAD	51
0010	166+75	- 168+62	LT & RT, USH 10	30
0010	186+32	- 190+06	LT, MAIN STREET	37
0010	187+32	- 188+56	LT, MAIN STREET	57
0010	185+61	- 189+30	RT, MAIN STREET	37
0010	187+12	- 188+30	RT, MAIN STREET	45
0010		214+66	RT, USH 10	8
0010	221+41	- 225+40	LT & RT, USH 10	56
0010	225+40	- 230+25	LT, USH 10; SUNRISE CAFÉ	71
0010	225+40	- 228+20	RT, USH 10; SUNRISE CAFÉ	47
0010	226+00	& 227+60	LT, USH 10; SUNRISE CAFÉ	15
0010	226+65	& 227+35	RT, USH 10; SUNRISE CAFÉ	4
0010	238+64	- 241+50	LT, CTH I	37
0010	238+64	- 240+05	LT, CTH I	52
0010	237+75	- 239+80	RT, SUBSTATION	54
0010	238+53	- 239+80	RT, SUBSTATION	52
0010	103+60	- 105+10	LT, USH 12 & STH 27	4
0010	107+25	- 110+35	RT, PRIMUS RD	8
0010	108+50	- 111+60	LT, USH 12 & STH 27	16
0010	231+10	- 234+00	RT, USH 12 & STH 27	15
0010	231+50	- 234+60	LT, USH 12 & STH 27	7
0010	187+58	- 188+00	RT, MAIN STREET	15
0010		232+10	RT & LT, USH 10	15
0010	103+25	- 241+50	PROJECT	500
TOTAL 0010				1564

SPECIAL 02. CONCRETE MEDIAN SLOPED NOSE CURE AND SEAL TREATMENT

SPV.0165.02				
CATEGORY	STATION	LOCATION	SF	REMARKS
0010	105+60	26' LT, USH 12 & STH 27	16	R3
0010	105+63	71' LT, USH 12 & STH 27	20	R2
0010	105+75	28' LT, USH 12 & STH 27	16	R4
0010	236+96	28' RT, USH 12 & STH 27	16	R5
0010	237+05	73' RT, USH 12 & STH 27	20	R7
0010	237+20	29' RT, USH 12 & STH 27	16	R6
TOTAL 0010			104	

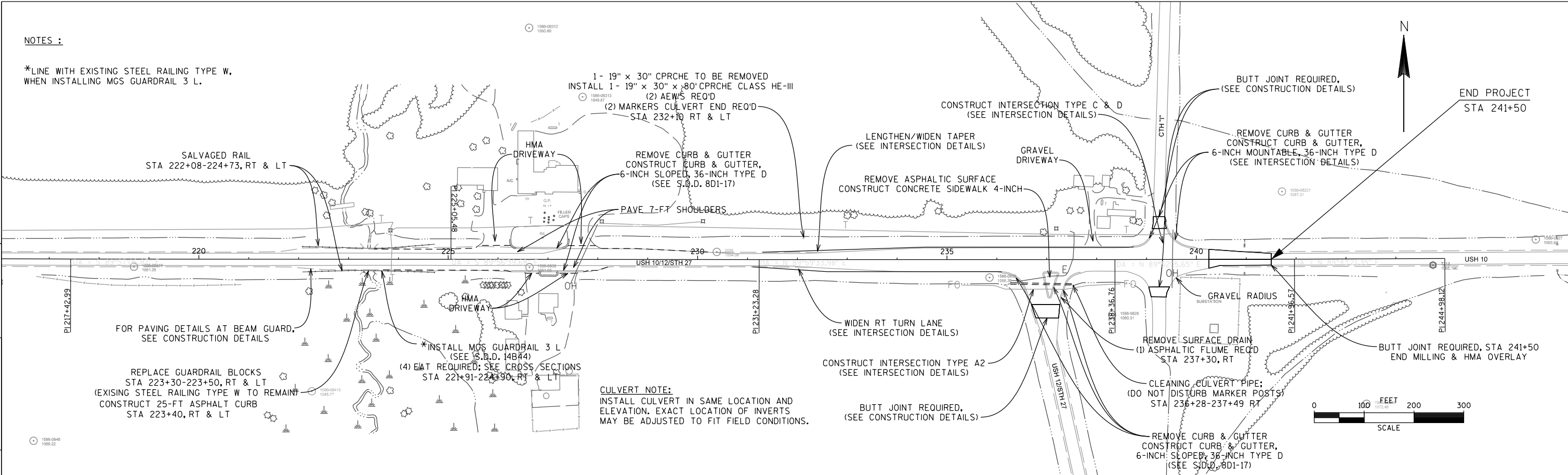
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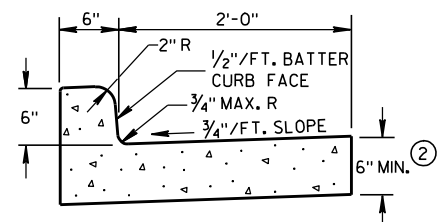
NOTES :

*LINE WITH EXISTING STEEL RAILING TYPE W,
WHEN INSTALLING MGS GUARDRAIL 3 L.

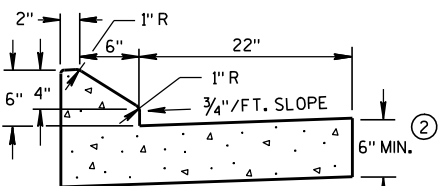


Standard Detail Drawing List

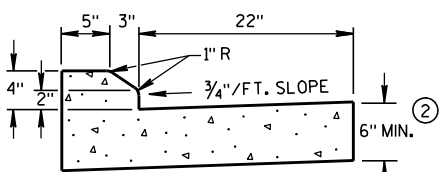
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B04-10	PULL BOX
11B02-02	CONCRETE MEDIAN NOSE
14B43-03A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-03B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-03C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



TYPES A & D ①



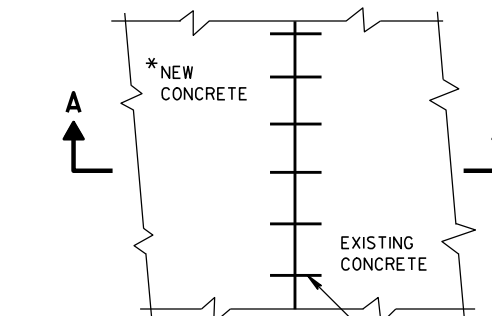
6" SLOPED CURB TYPES G & J ①



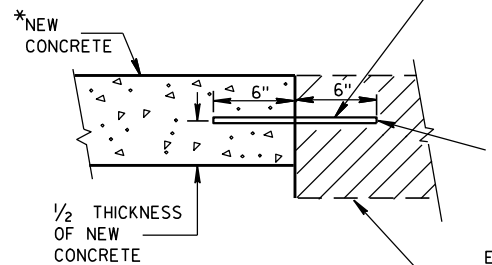
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

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



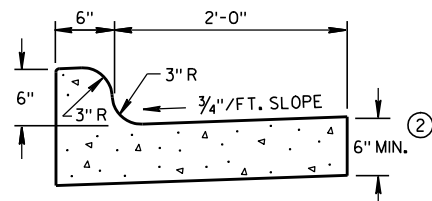
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

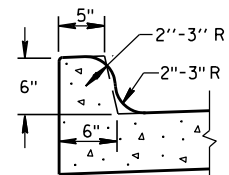
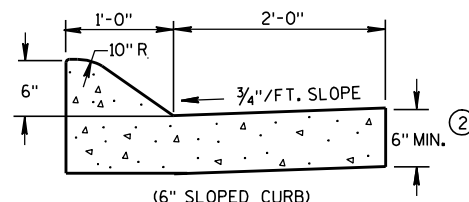
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

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

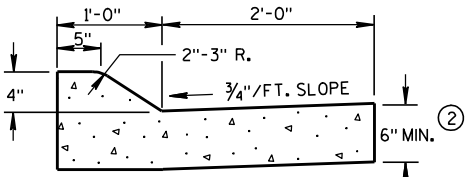
EXISTING
CONCRETE



TYPES K & L ①

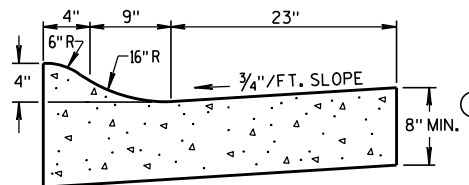
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)



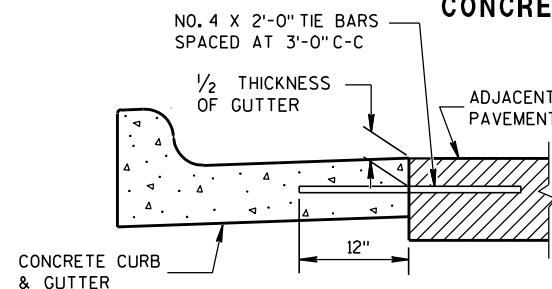
(4" SLOPED CURB)

TYPES A & D ①

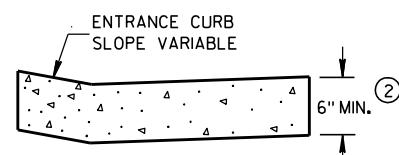


4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

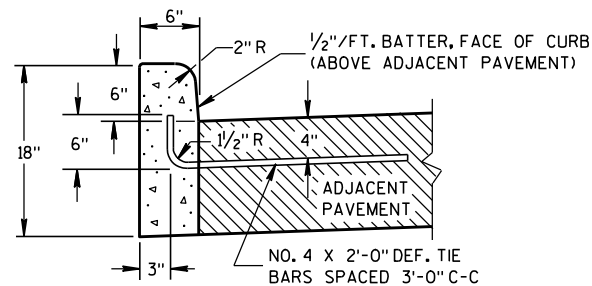


TYPICAL TIE BAR LOCATION ①



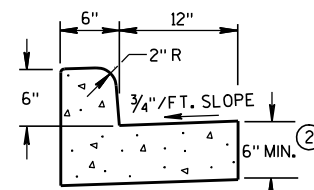
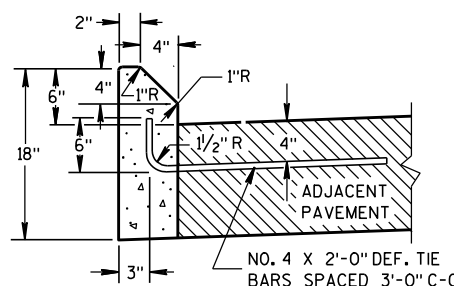
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

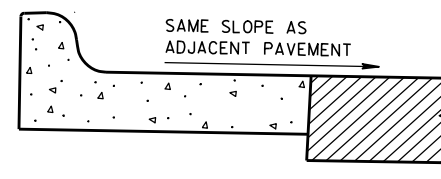
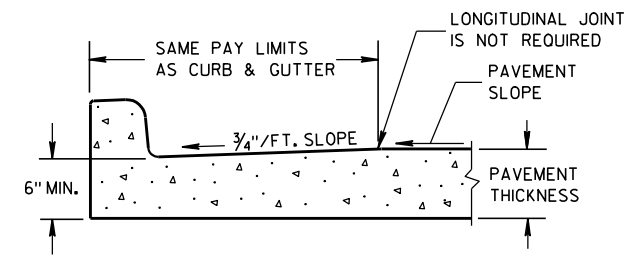
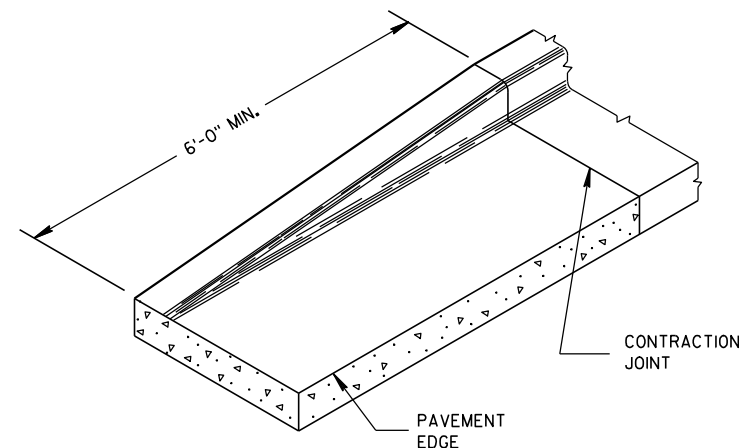
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08

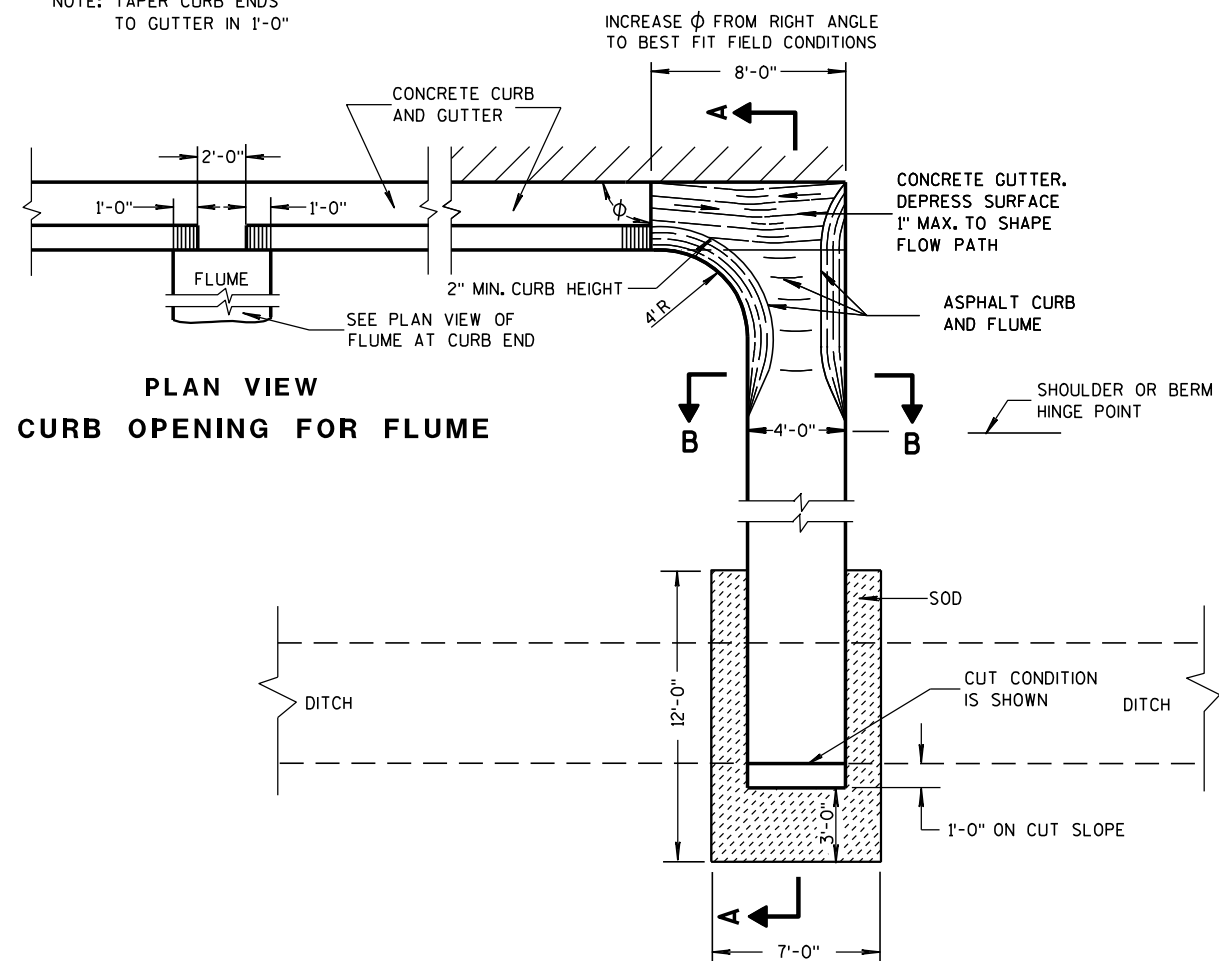
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

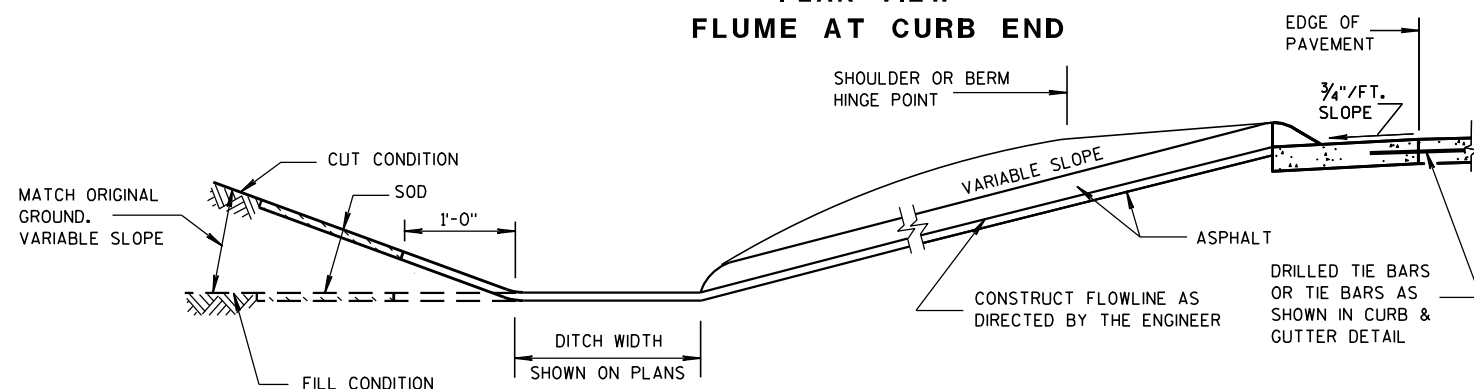
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS
TO GUTTER IN 1'-0"

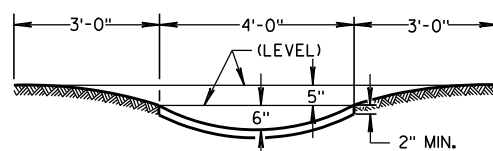


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

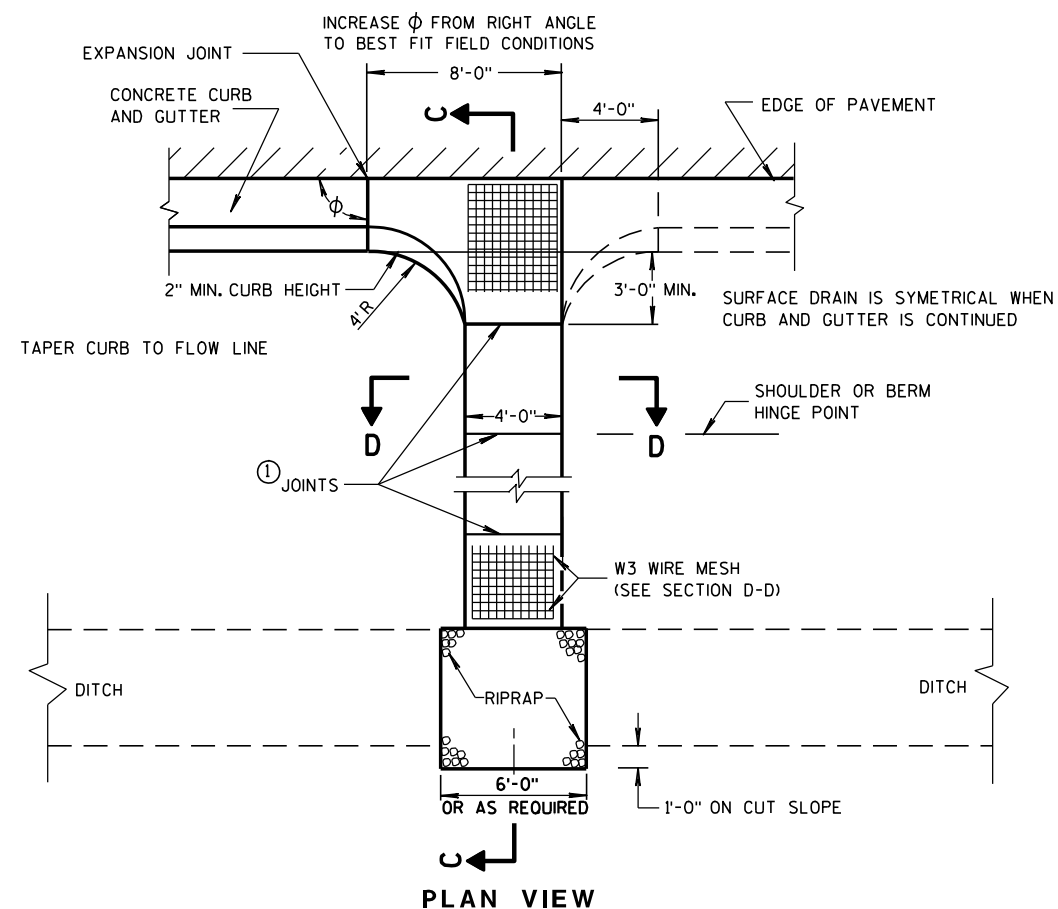
GENERAL NOTES

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

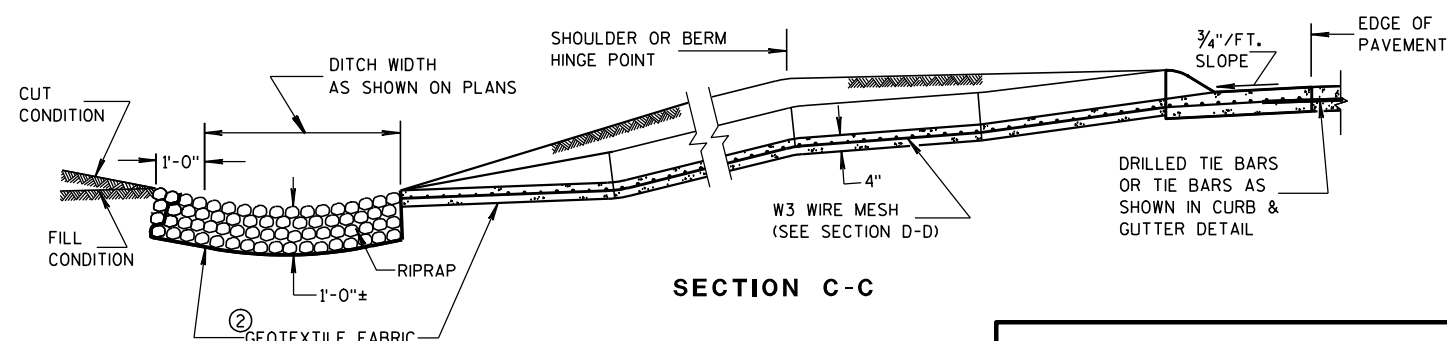
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

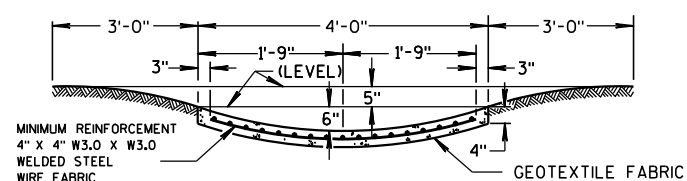
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08

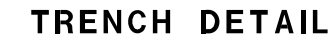
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



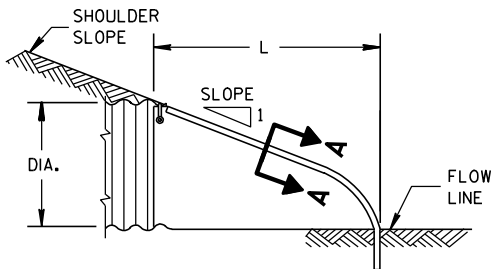
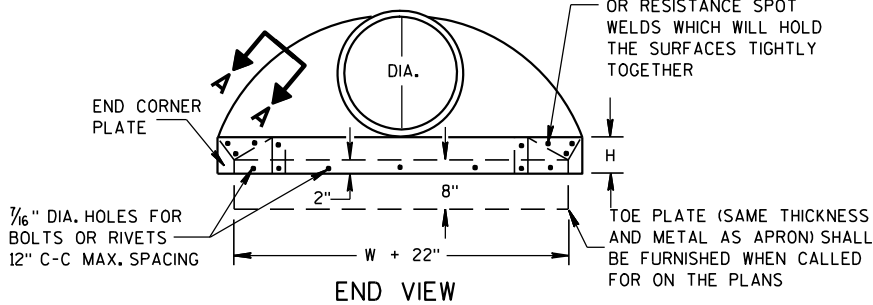
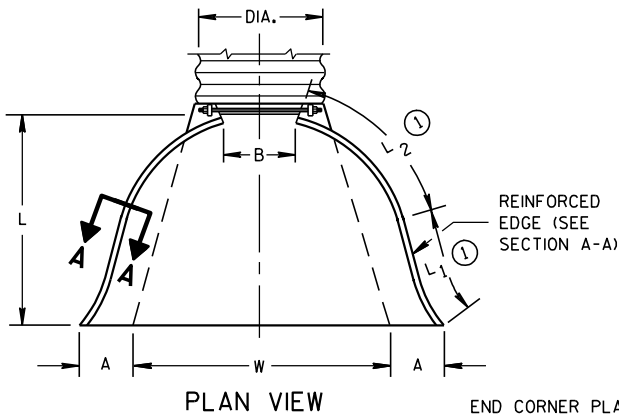
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" 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 <u>4-29-05</u> DATE	<u>/S/ Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

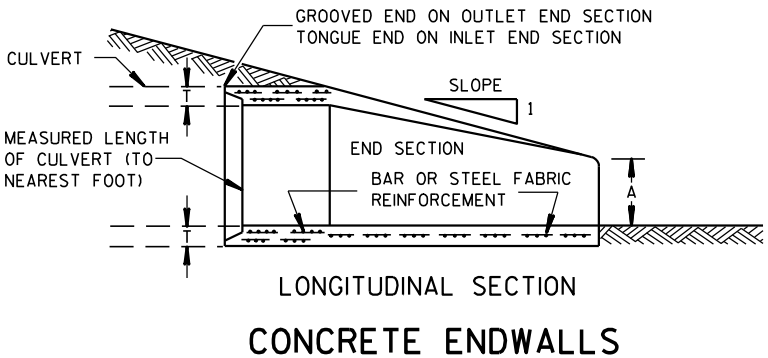
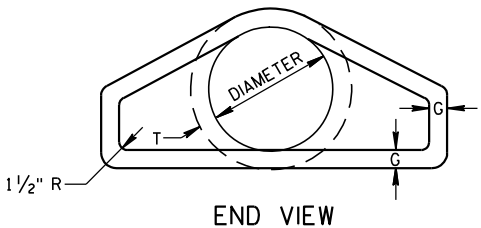
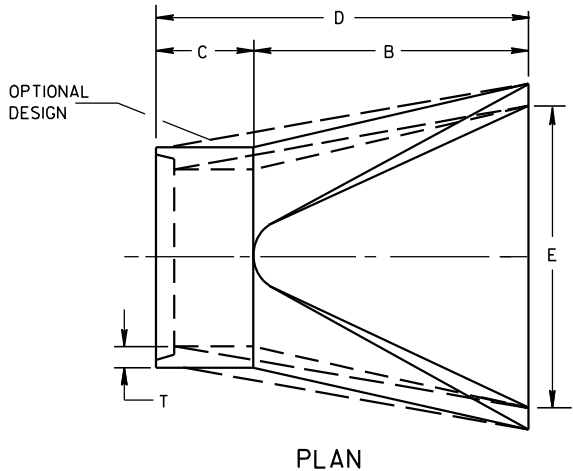
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

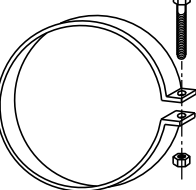
REINFORCED CONCRETE APRON ENDWALLS											
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE			
	T	A	B	C	D	E	G				
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1			
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1			
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1			
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1			
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1			
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1			
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1			
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1			
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1			
48	5	24	72	26	98	84	5	3 to 1			
54	5 1/2	27	65	33 1/4	98 1/4	90	5 1/2	2 2/5 to 1			
60	6	30-35	60	39	99	96	5	2 to 1			
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1			
72	7	24-36	78	21	99	108	6	2 to 1			
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1			
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1			
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1			

* MINIMUM
** MAXIMUM

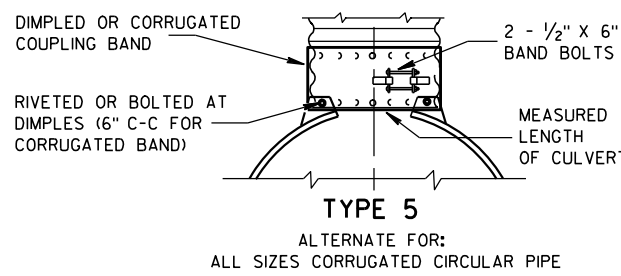
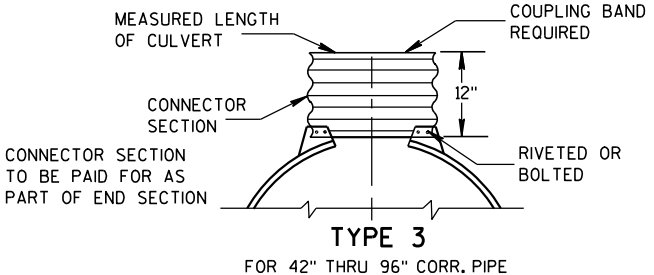
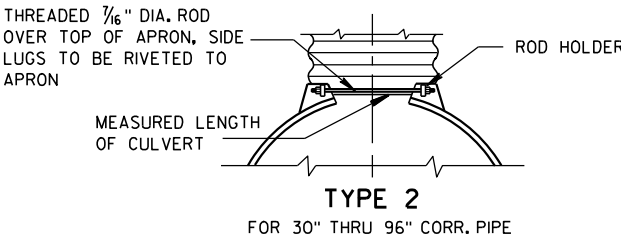
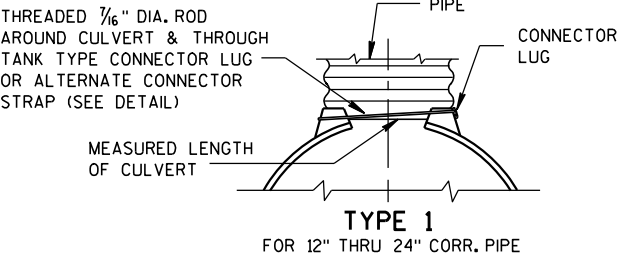


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



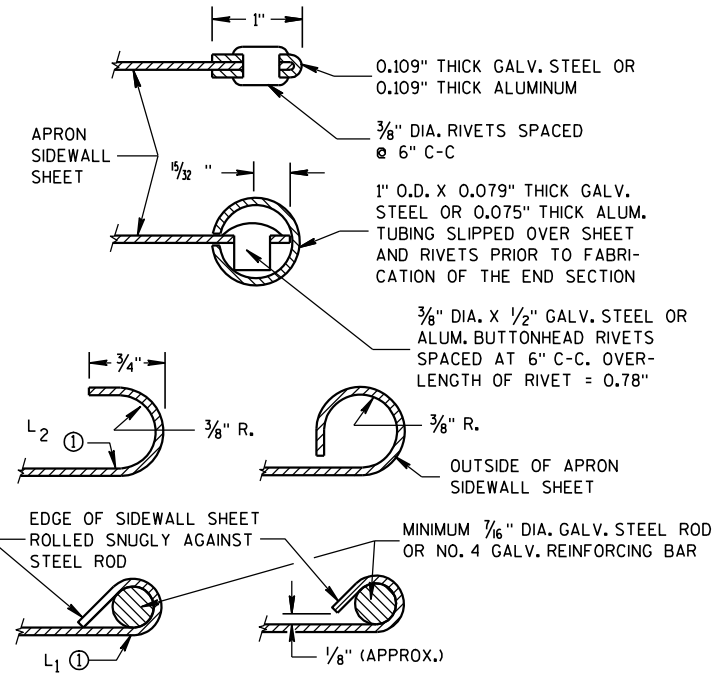
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

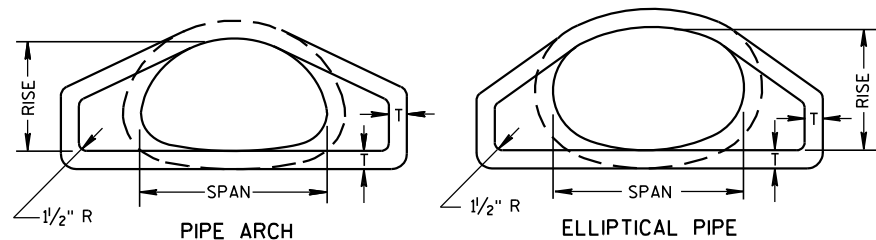
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

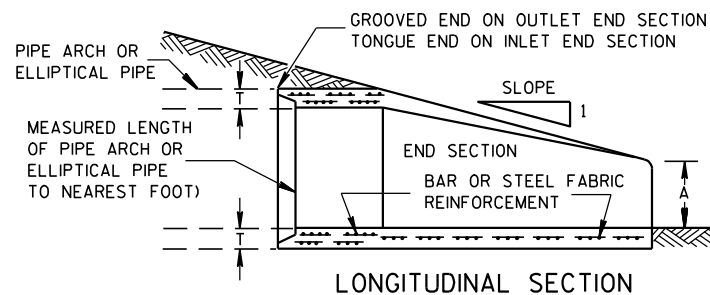
APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

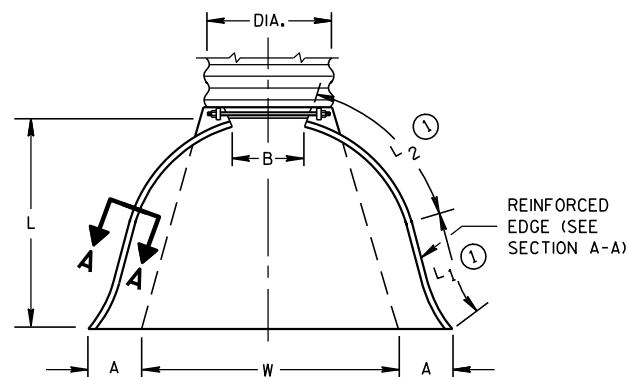


END VIEW



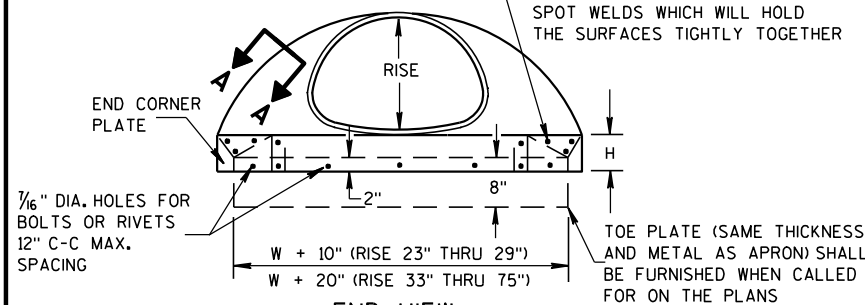
LONGITUDINAL SECTION

CONCRETE ENDWALLS

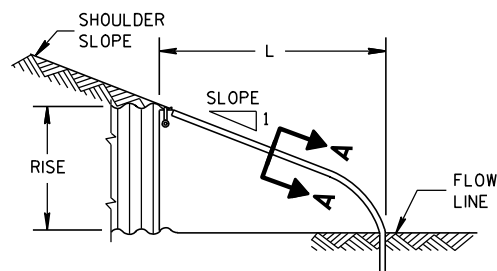
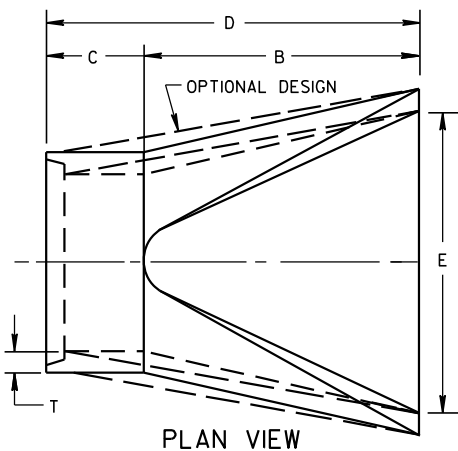


PLAN VIEW

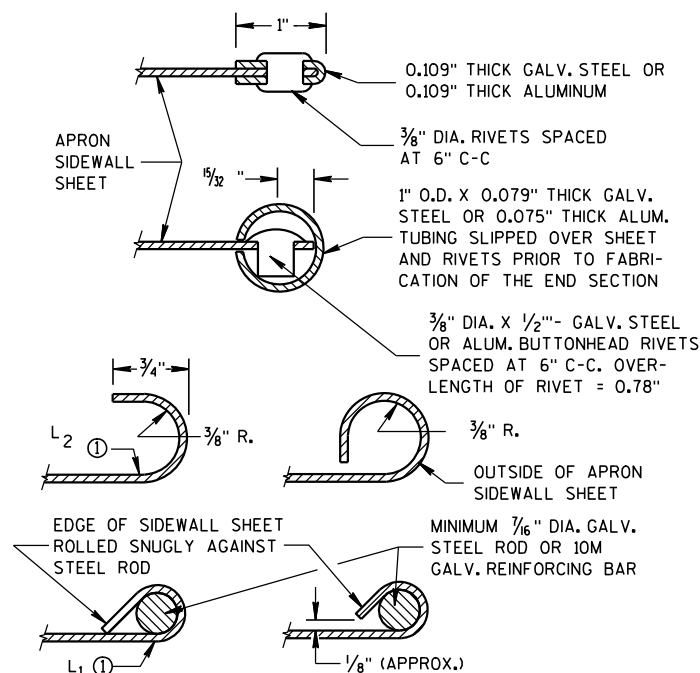
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW



SECTION A-A

2- 2 ² / ₃ " x 1 ¹ / ₂ " CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 ¹ / ₂ ")	L ₁ ①	L ₂ ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 ¹ / ₂ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 ³ / ₈	36	2 ¹ / ₂ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 ³ / ₄	42	2 ¹ / ₂ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 ¹ / ₂	48	2 ¹ / ₂ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 ⁵ / ₈	60	2 ¹ / ₂ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 ³ / ₈	75	2 ¹ / ₂ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 ³ / ₄	85	2 ¹ / ₂ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 ¹ / ₂ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 ³ / ₄	102	2 ¹ / ₄ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 ¹ / ₄	114	2 ¹ / ₄ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

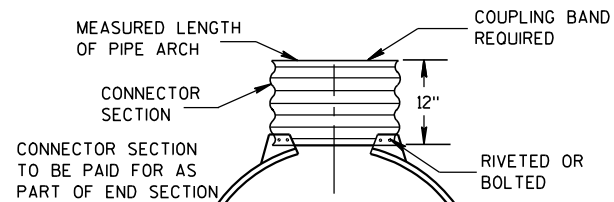
3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ⓪	L ₂ ⓪	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

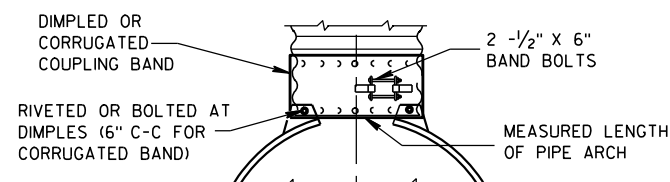
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/8	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

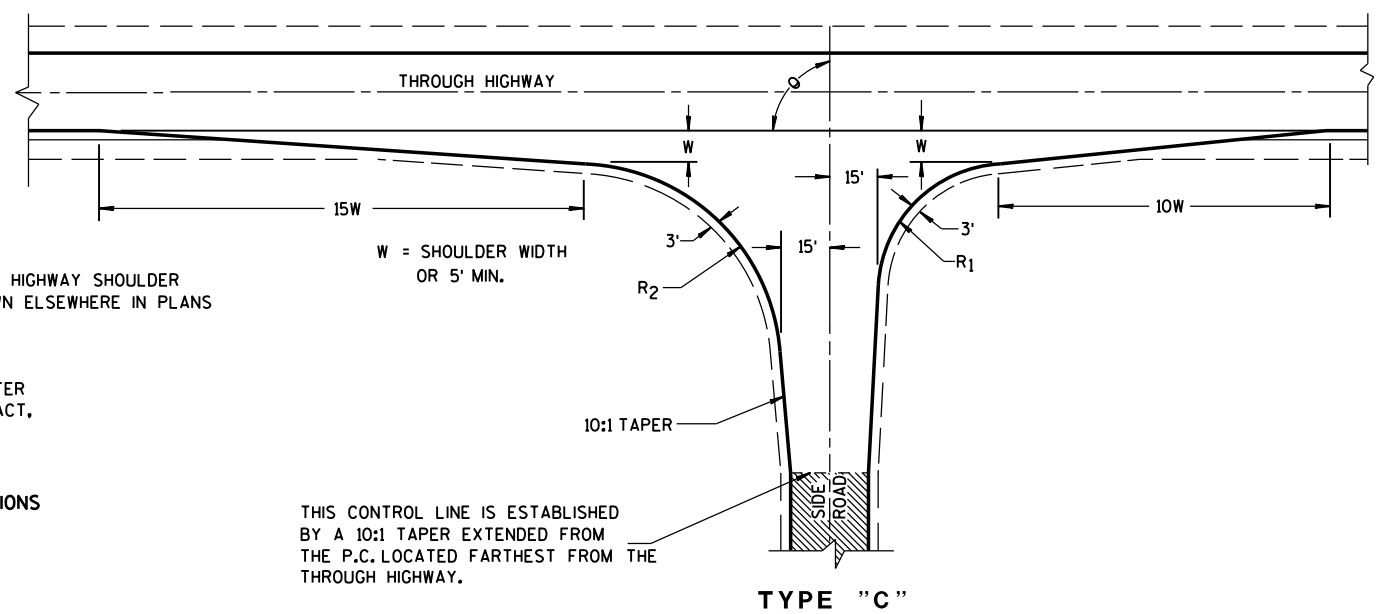
APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPESTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94
DATE

FHWA

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER



RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

9	R ₁	R ₂
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45

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

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.

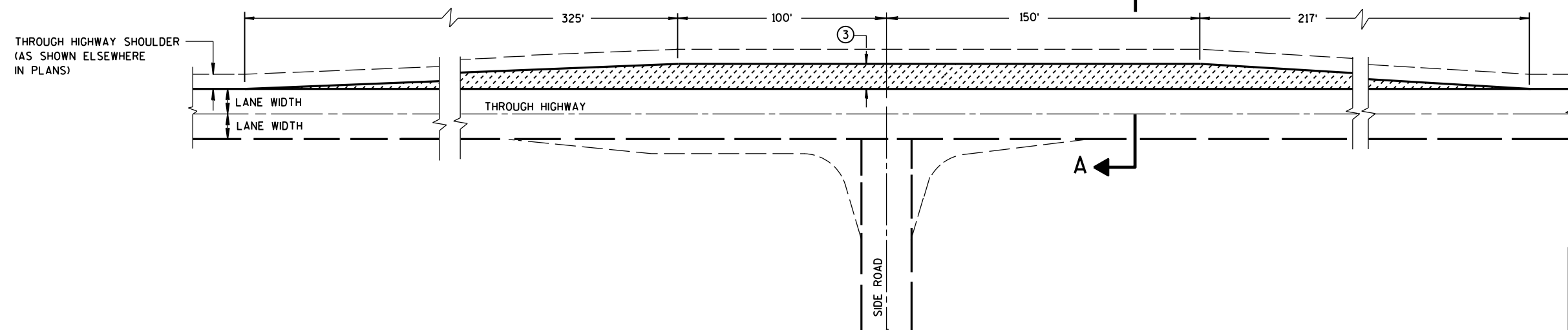
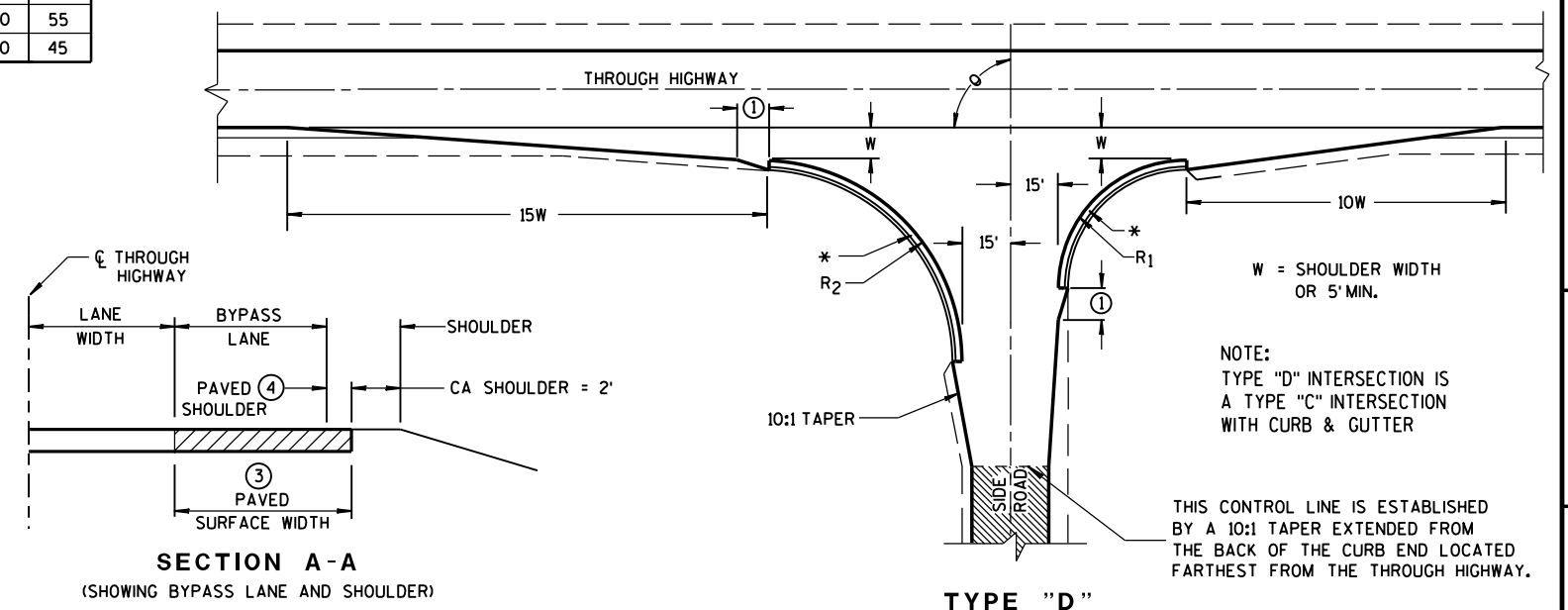
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

-  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
(INCLUDING 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

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

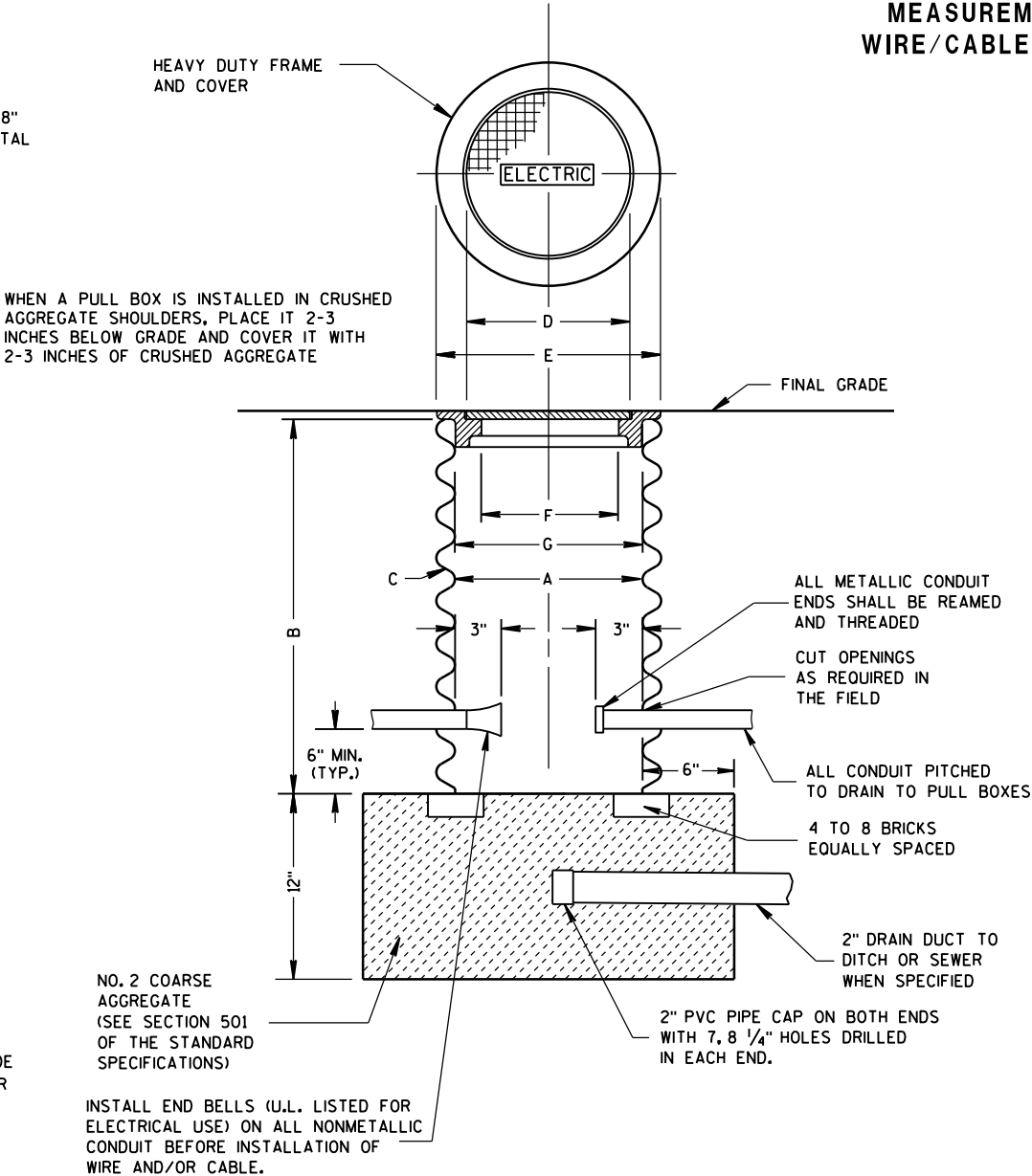
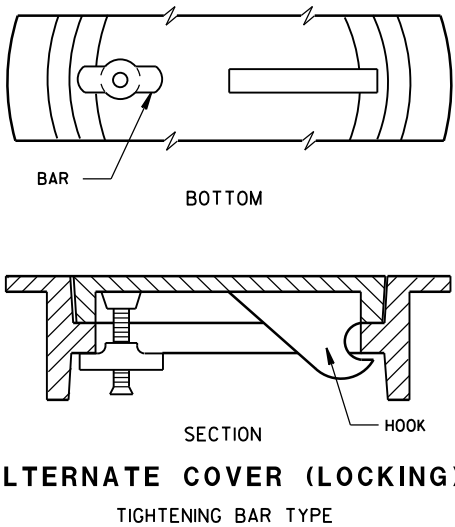
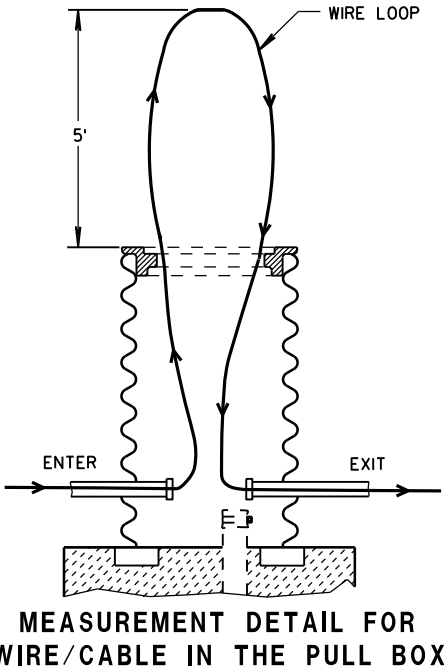
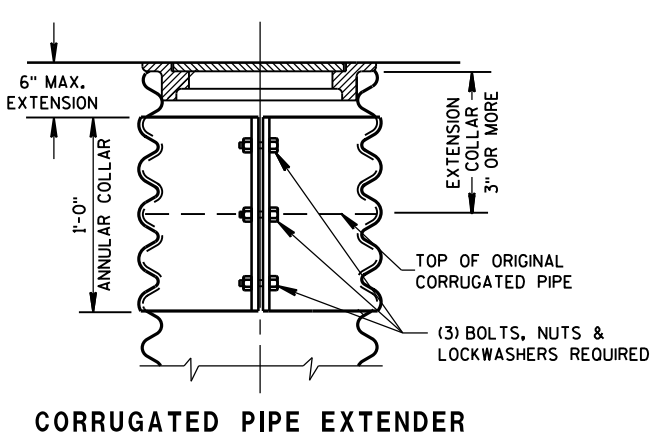
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

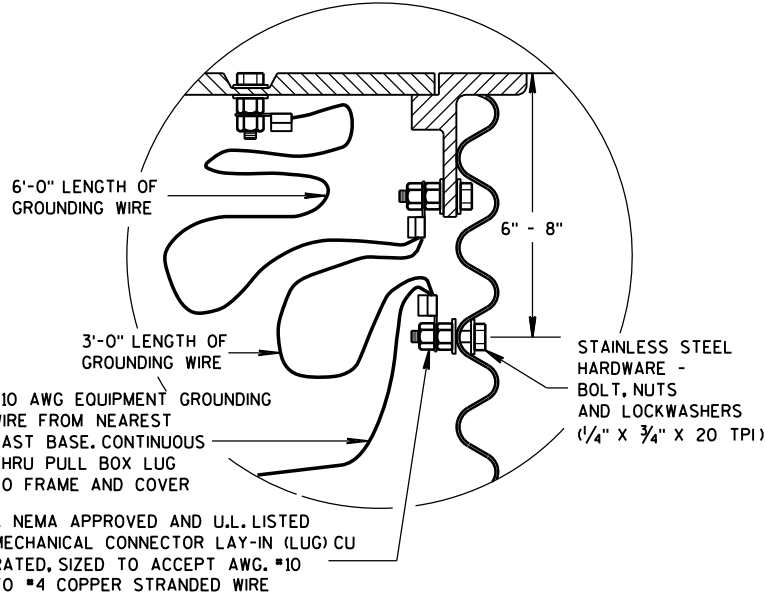
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

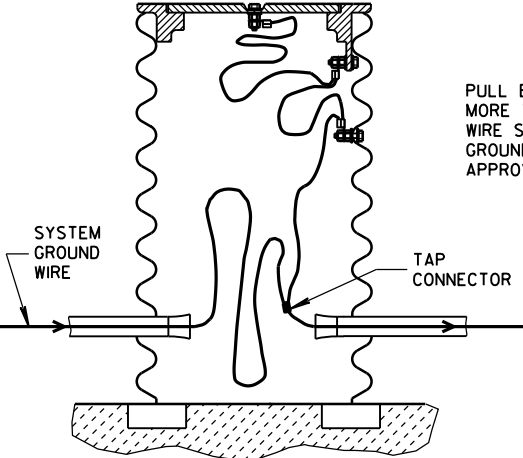
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX



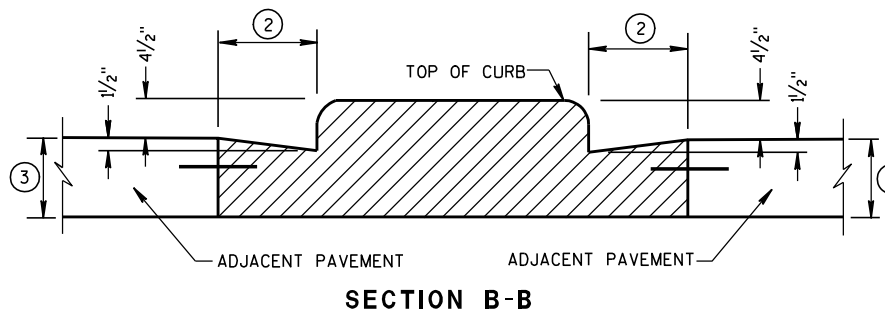
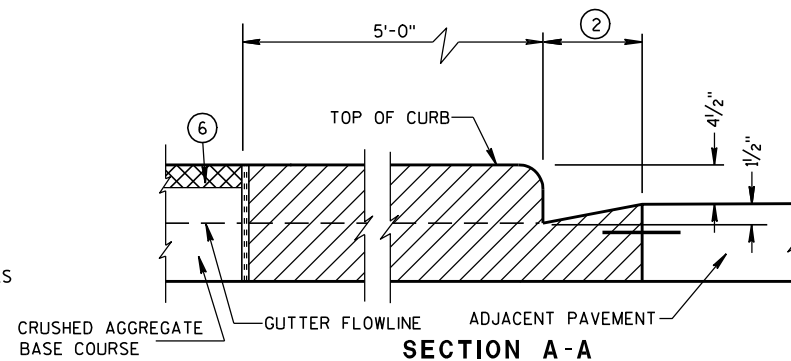
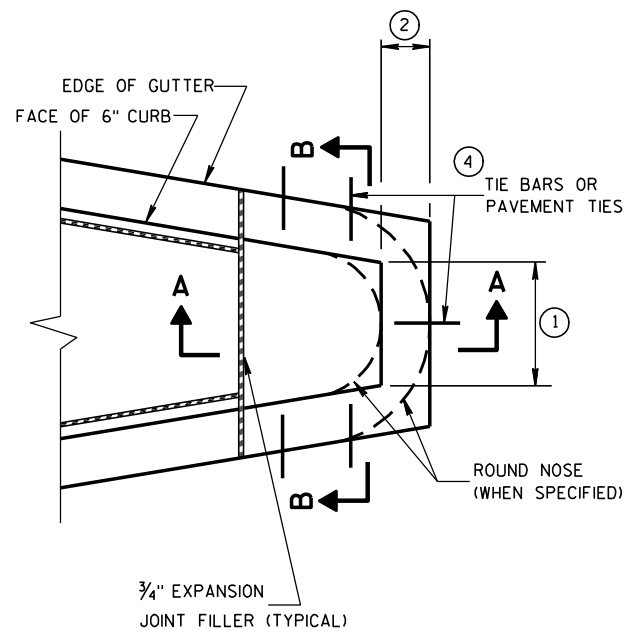
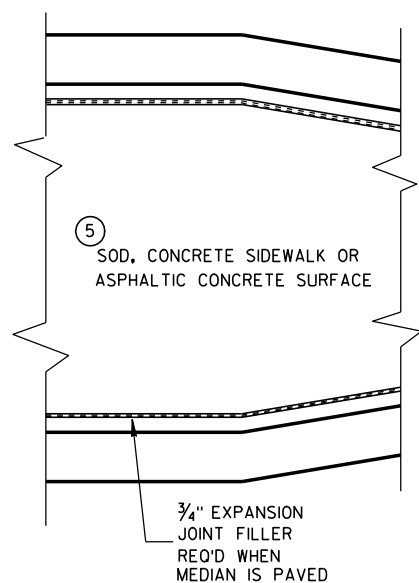
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



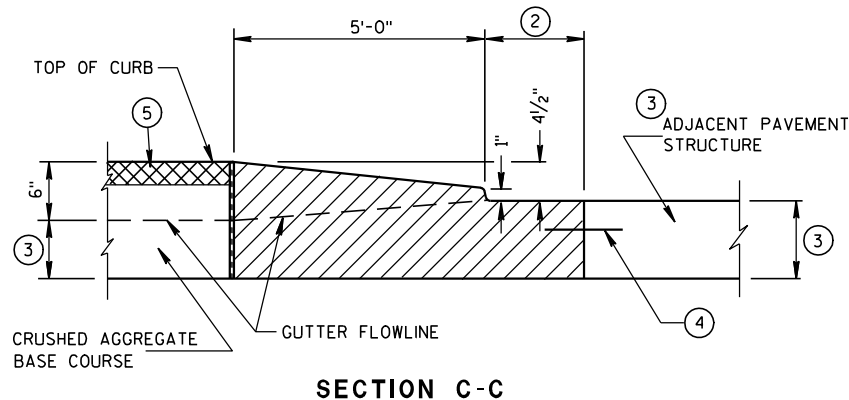
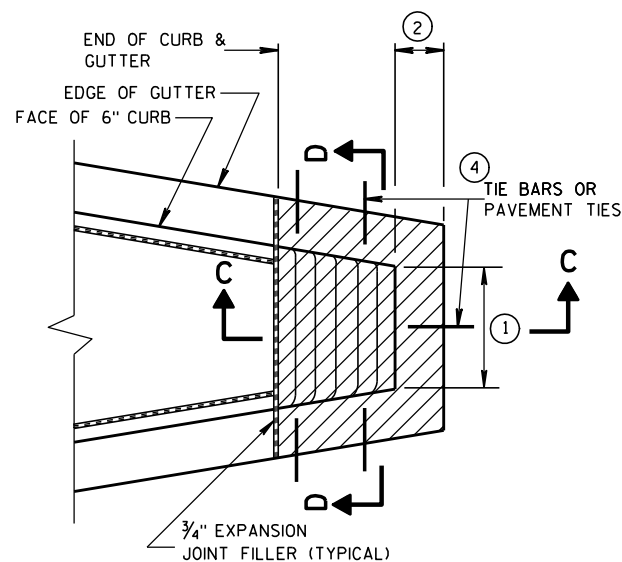
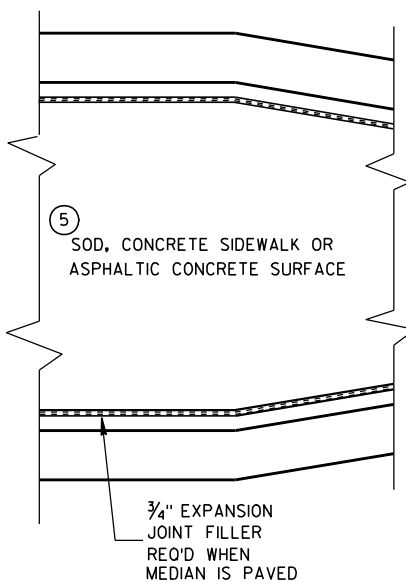
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

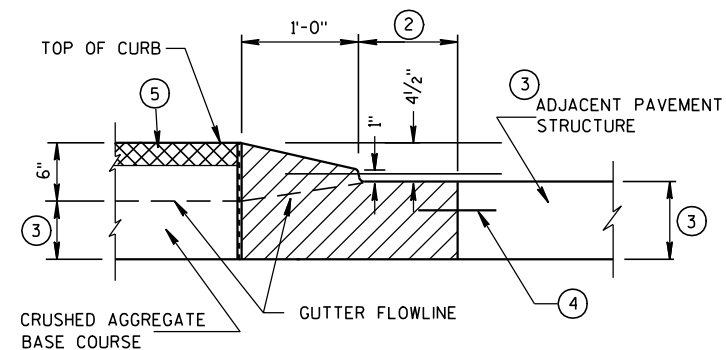
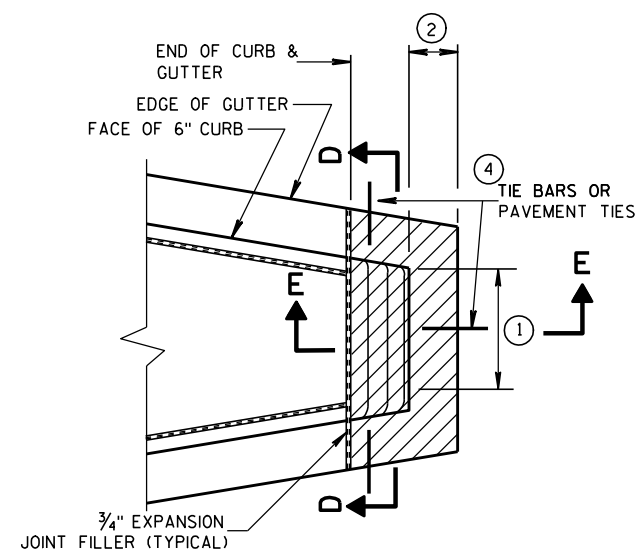
PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-7-2013 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER
FHWA	



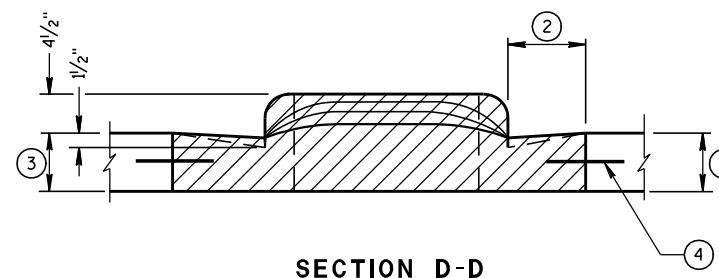
CONCRETE MEDIAN BLUNT NOSE DETAIL



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. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

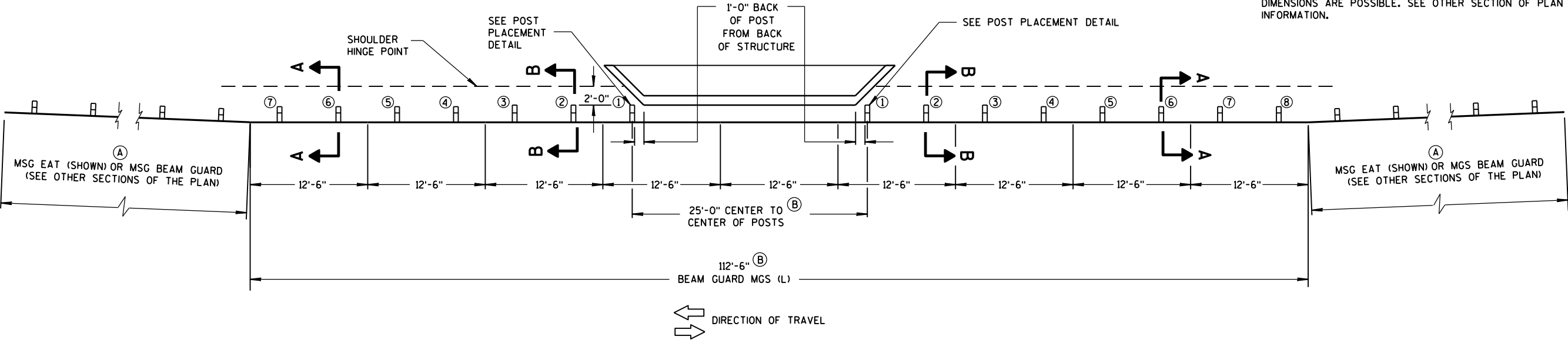
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

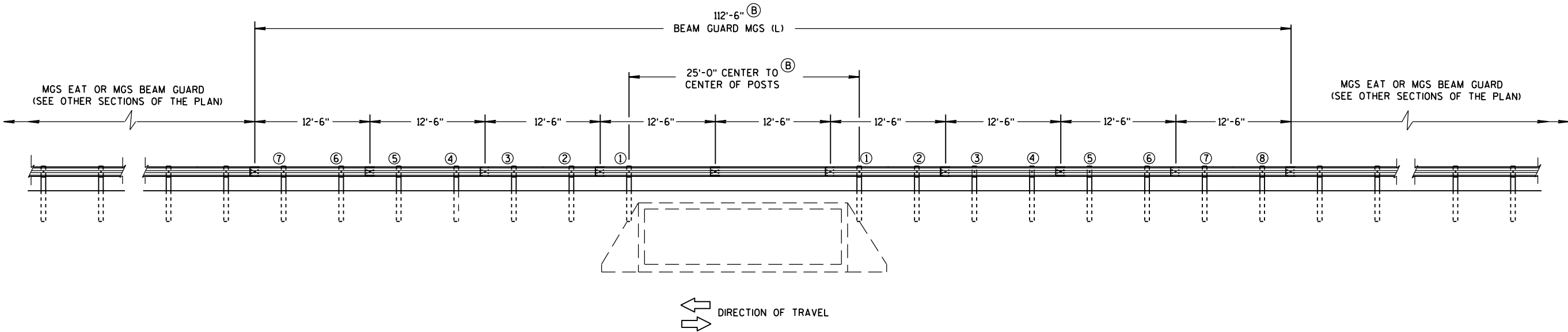
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

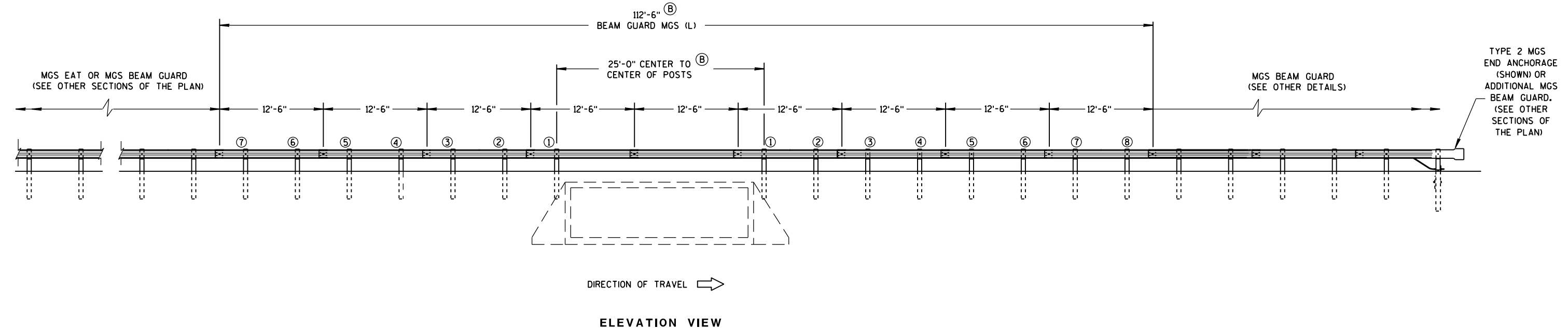
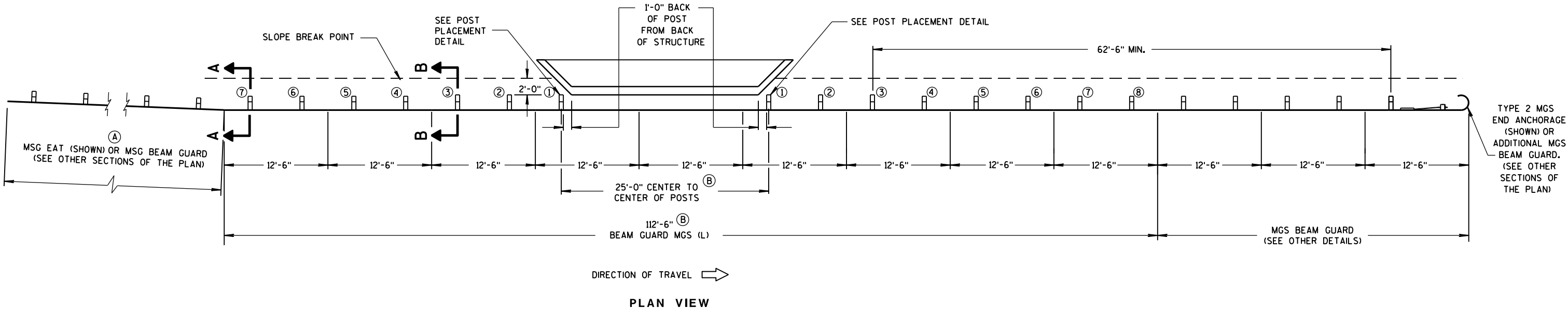
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

SEE SDD 14 B 42 FOR MORE DETAILS.

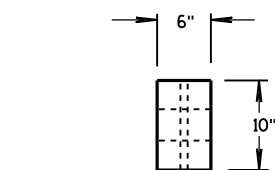
- (A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.
- (B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



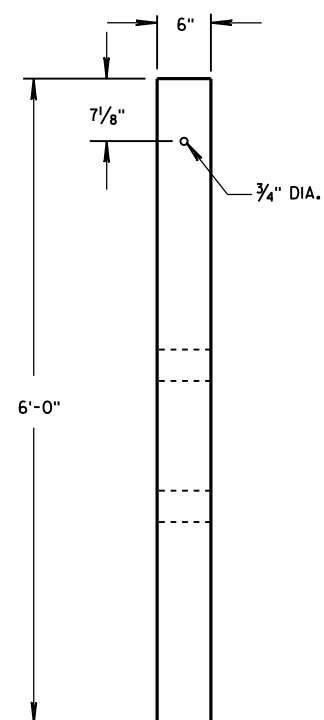
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

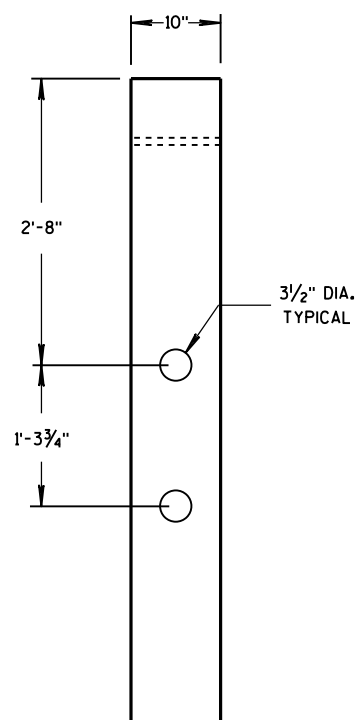


PLAN VIEW

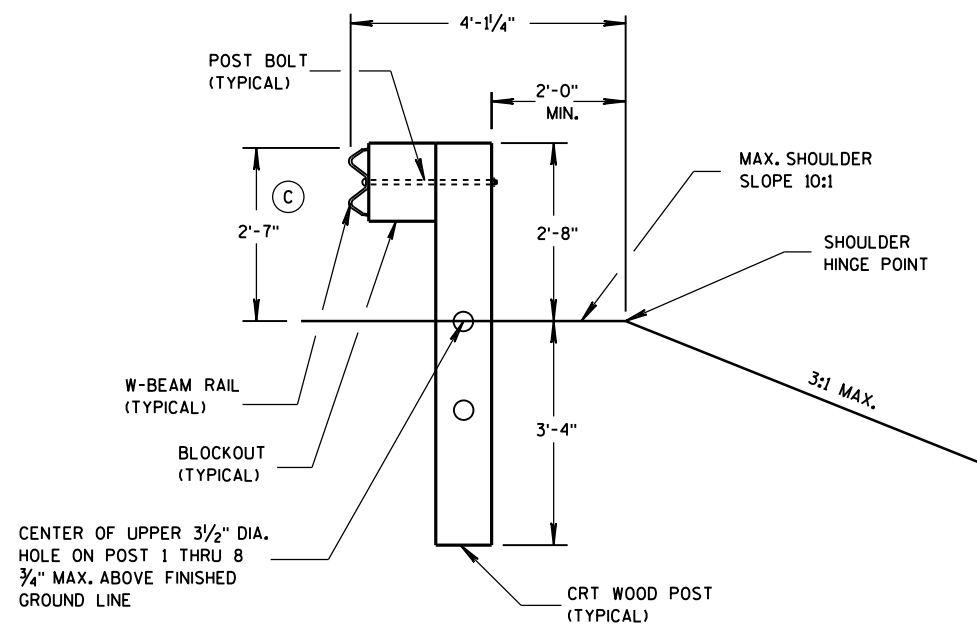


FRONT VIEW

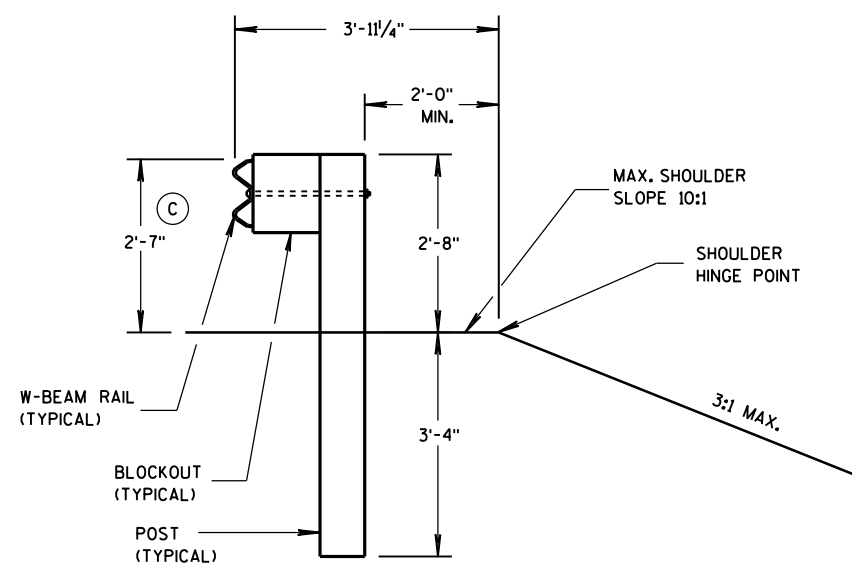
CRT WOOD POST



SIDE VIEW

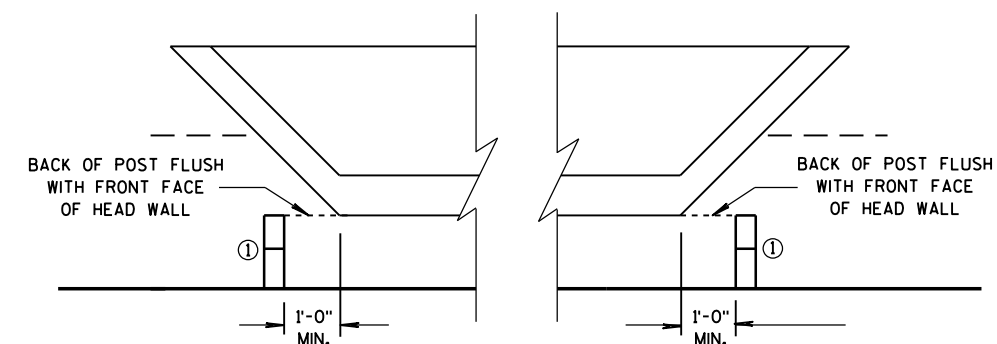
SECTION B-B
POSTS NO. 1-3

SEE OTHER DETAILS

SECTION A-A
POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.

POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
5/10/2013
DATE
FHWA/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.
- (G) 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.

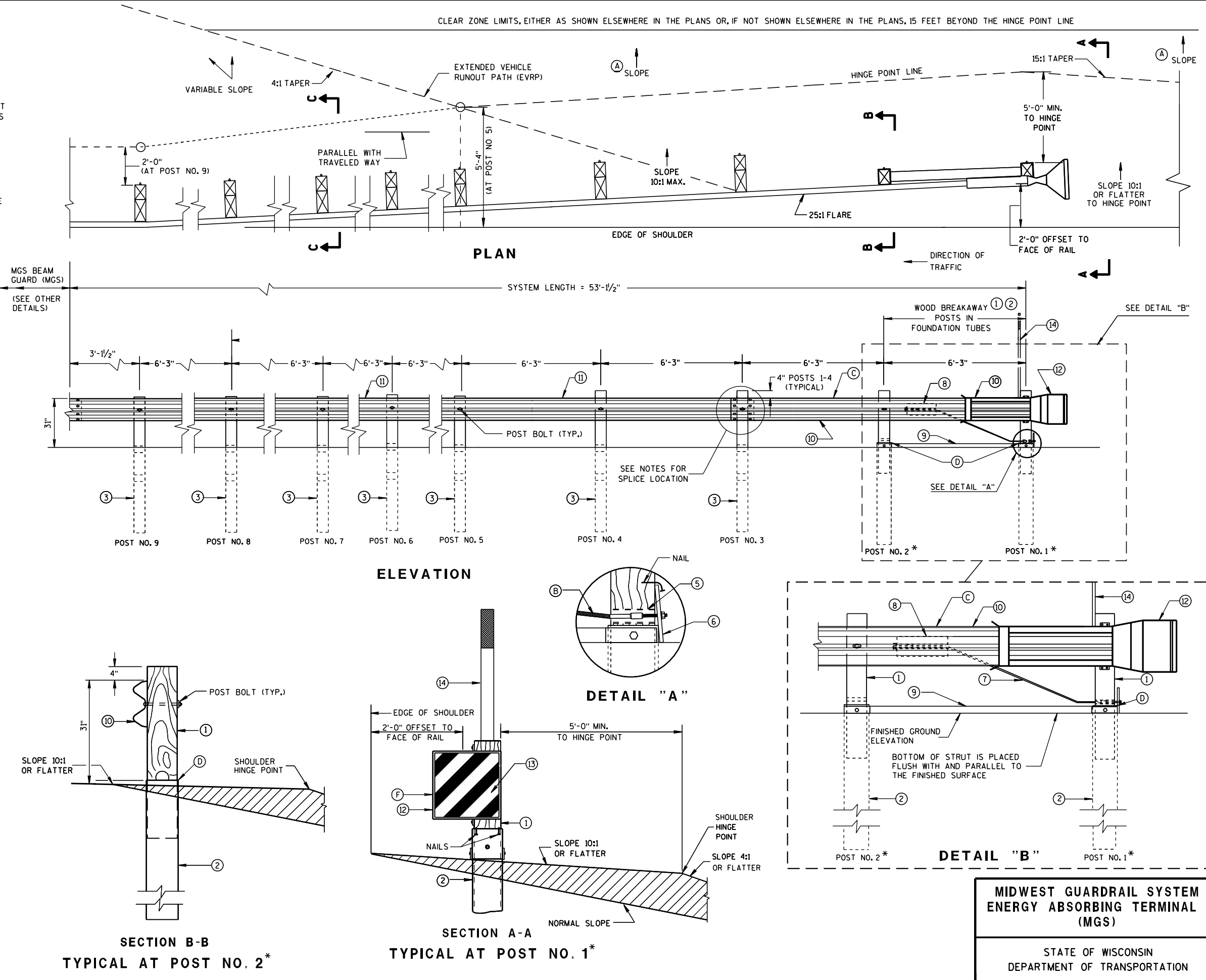
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

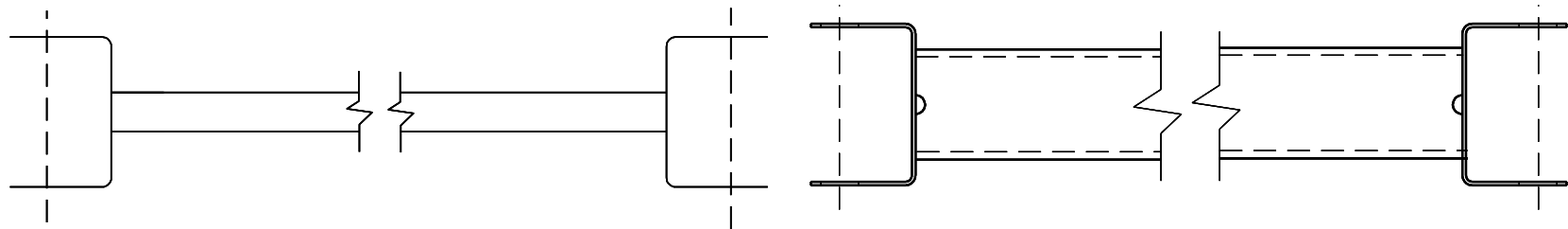
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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.

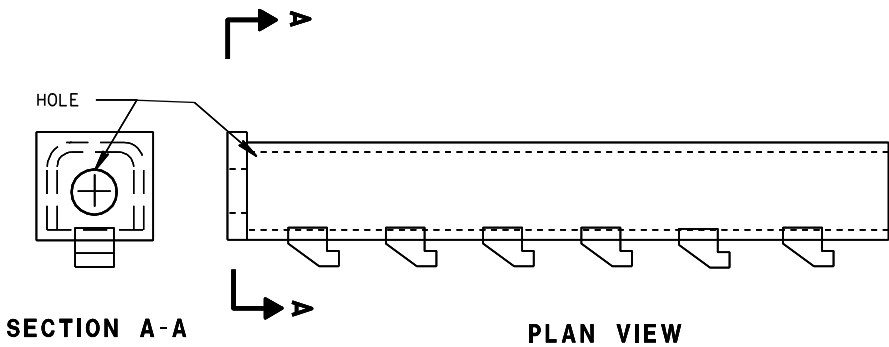
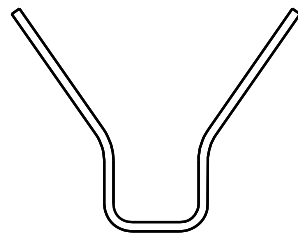
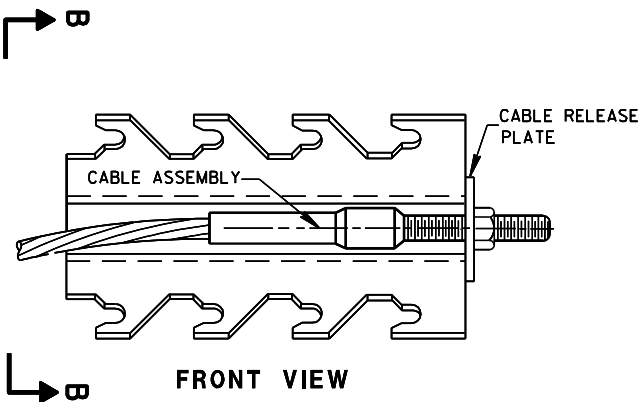
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE ($\pm \frac{3}{4}$ ")





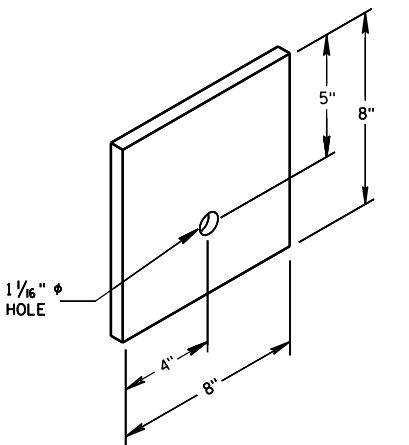
9 H
GENERIC GROUND STRUT



8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

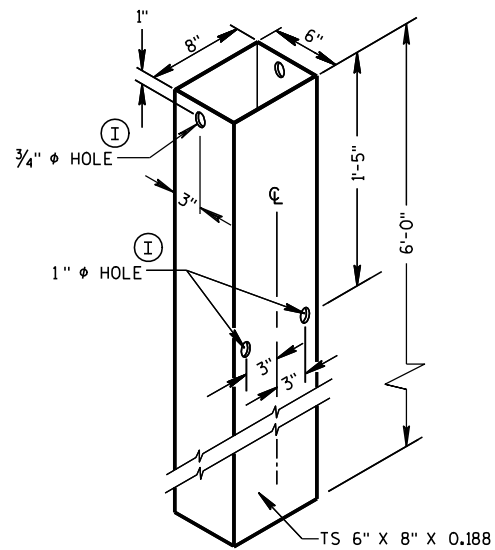
PART NO.	DESCRIPTION
	MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND 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 H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



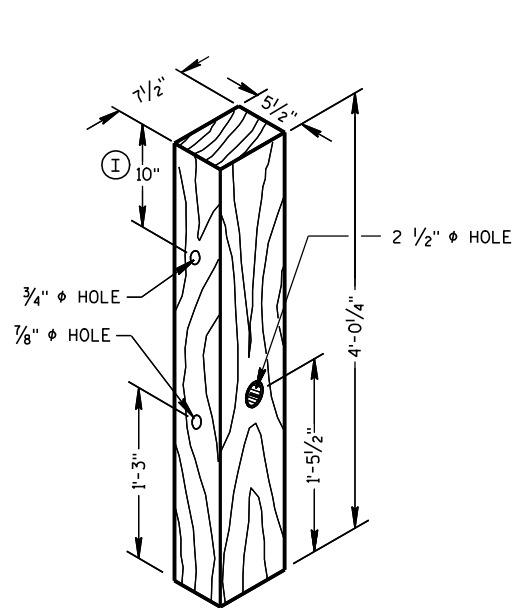
6
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

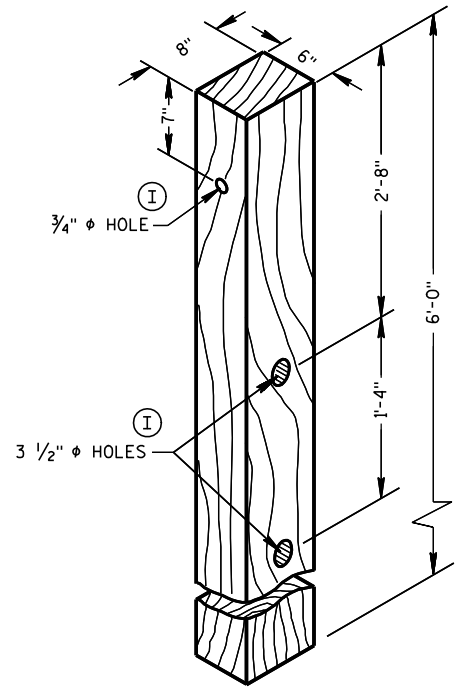
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



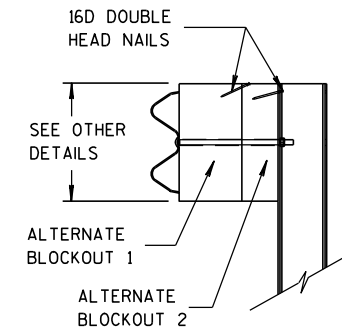
FOUNDATION TUBE ②



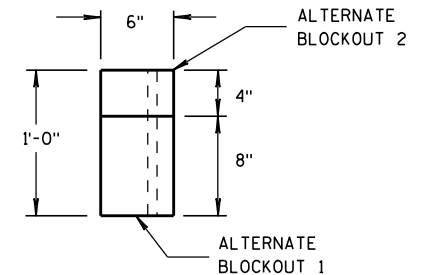
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

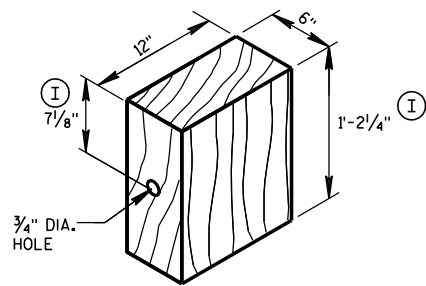


SIDE VIEW



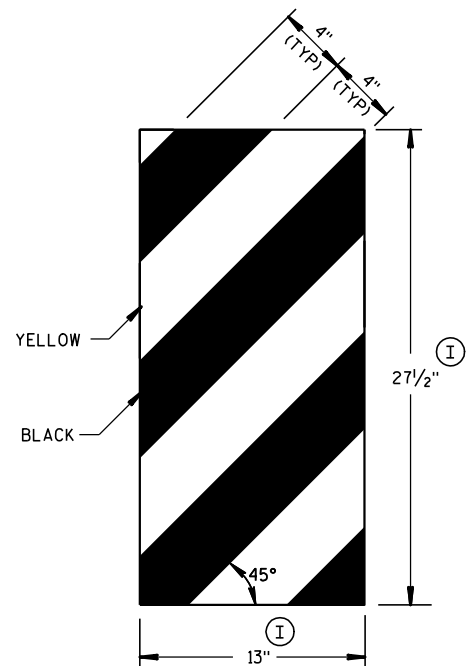
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

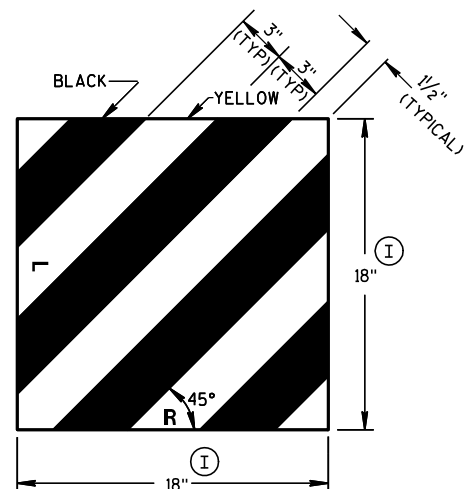


WOOD BLOCKOUT ④

YELLOW REFLECTIVE TAPE
3" X 9" TYPE H
REFLECTIVE SHEETING



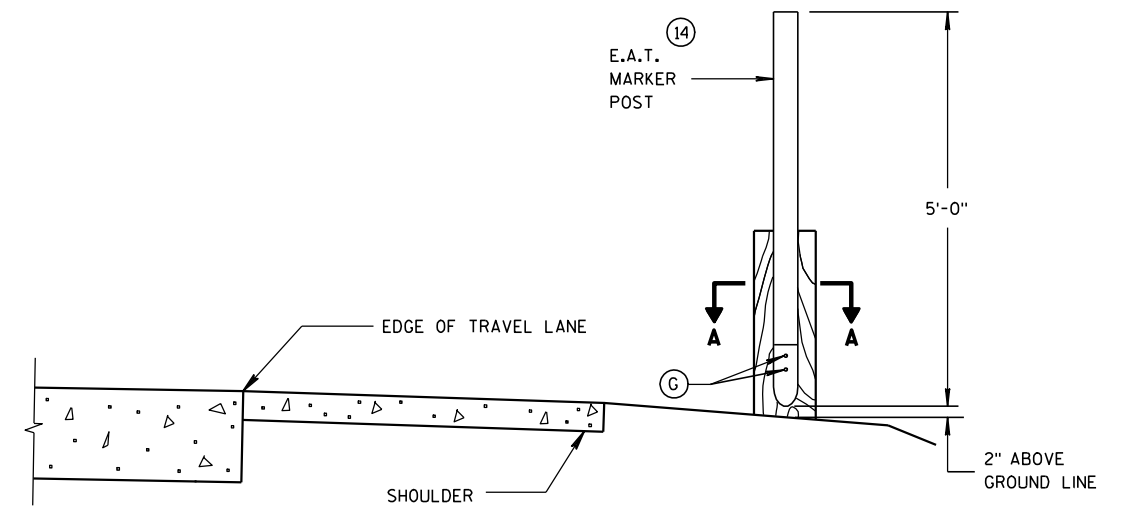
GENERIC REFLECTIVE SHEETING ⑬ ④



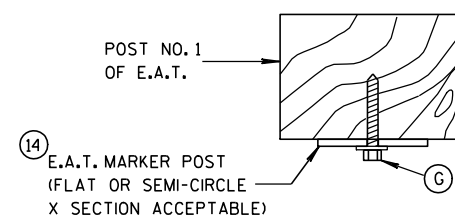
FRONT VIEW

SIDE VIEW

E.A.T. MARKER POST ⑭



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



SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

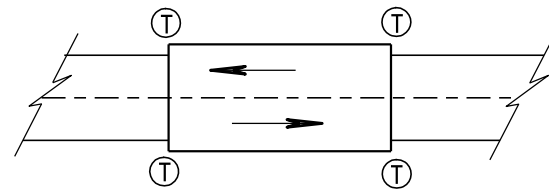
APPROVED

5/23/2011

DATE

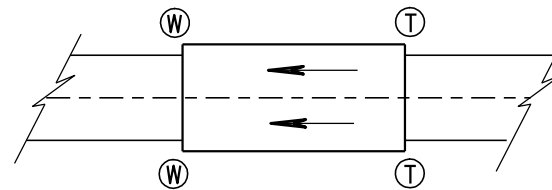
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

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

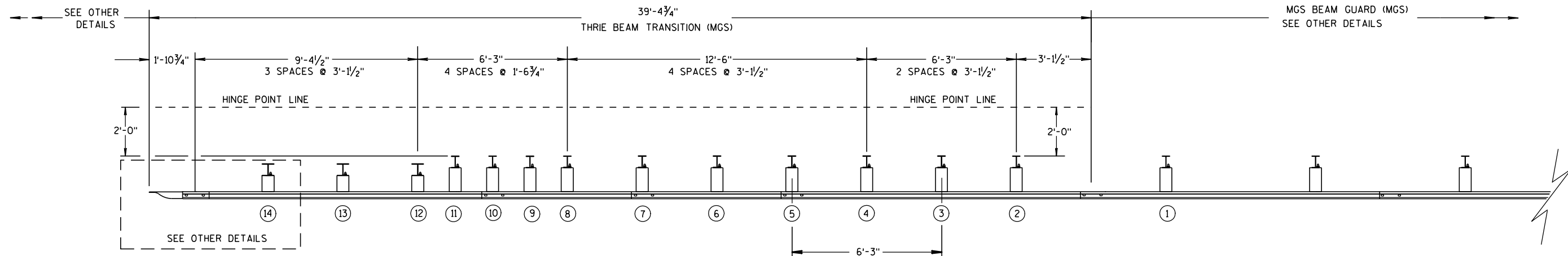
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

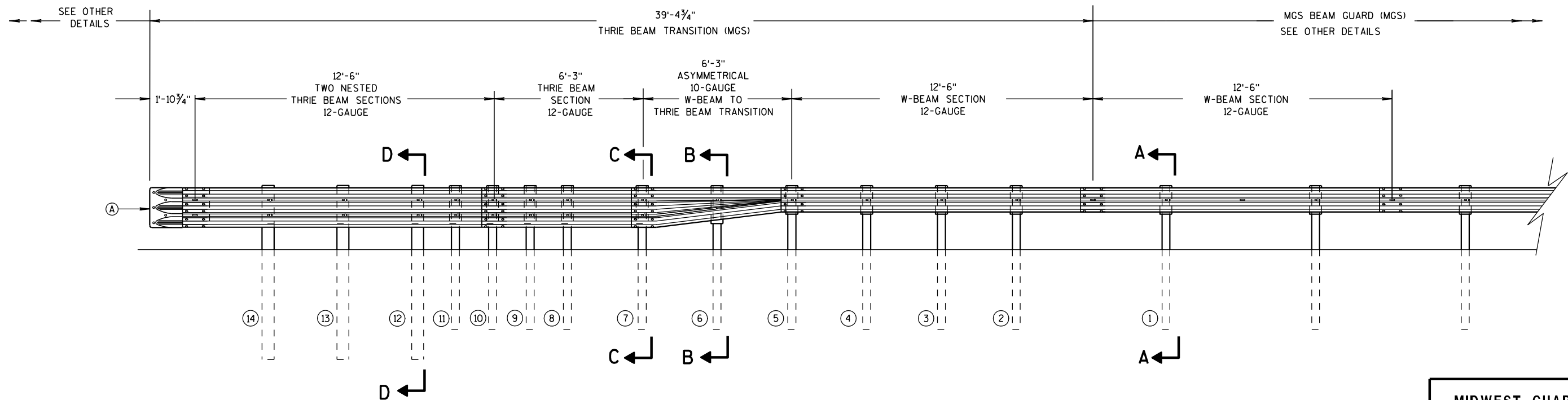
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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

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



PLAN VIEW



ELEVATION VIEW

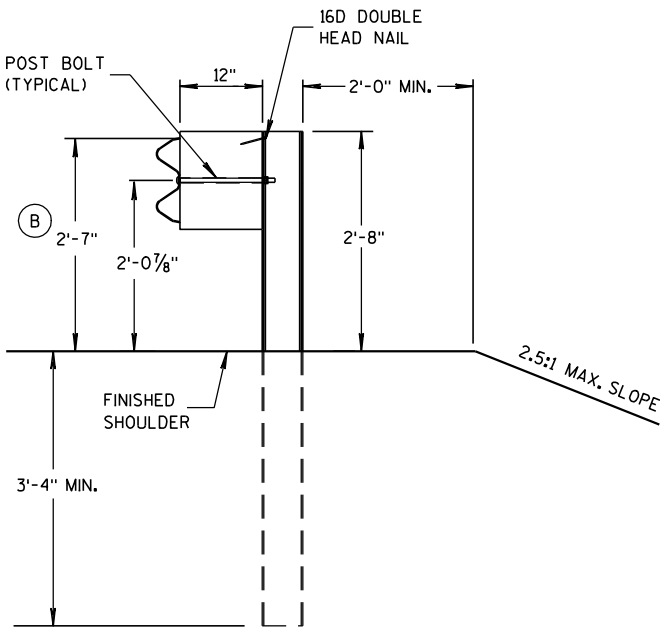
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

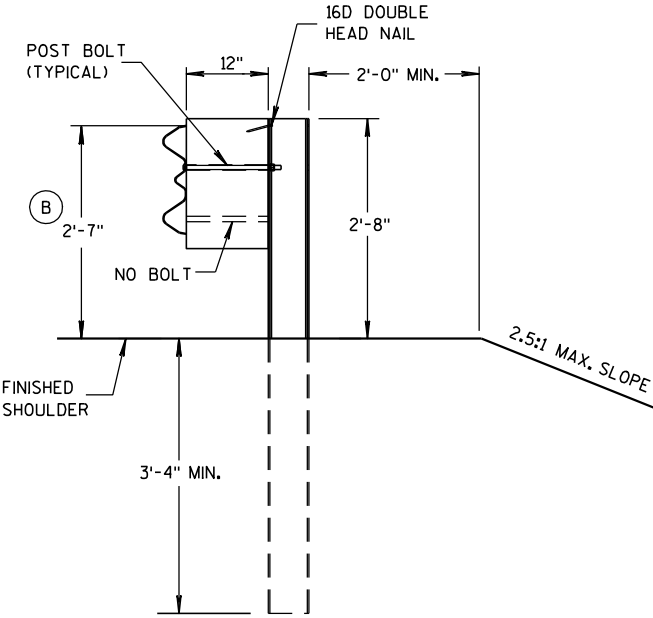
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

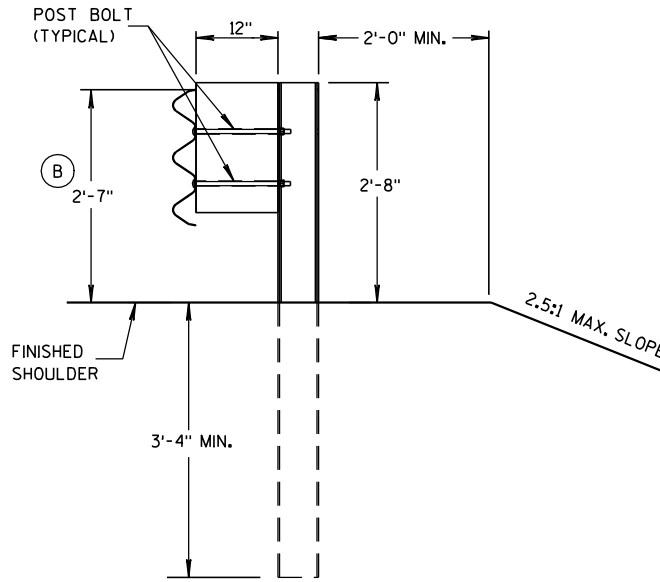
(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.



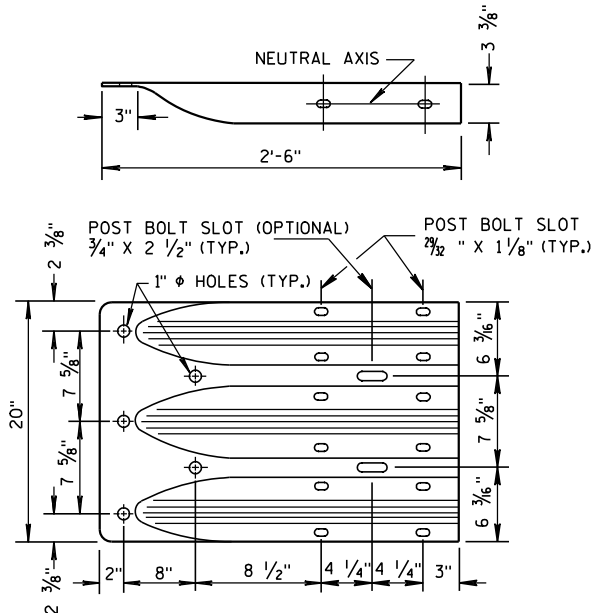
SECTION A-A
POSTS 1-5



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11



THRIE BEAM
TERMINAL CONNECTOR

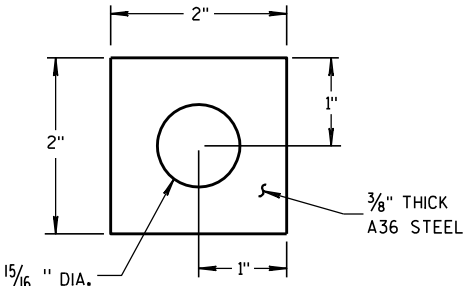
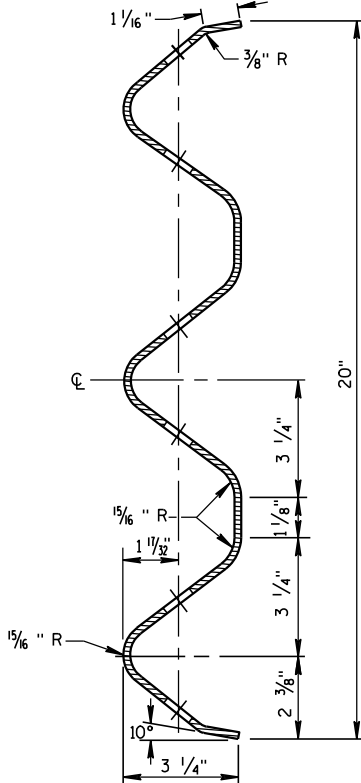
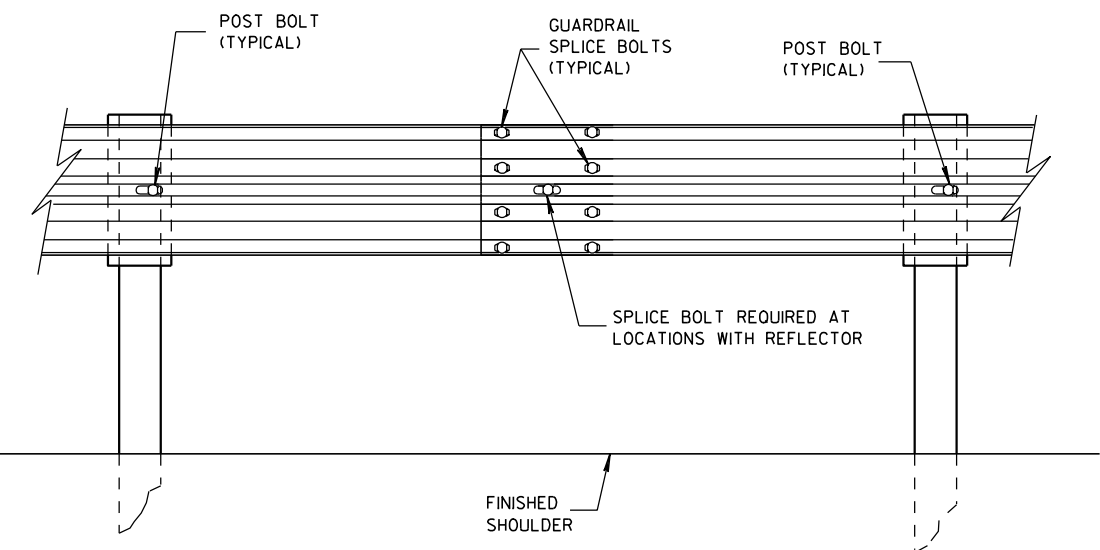


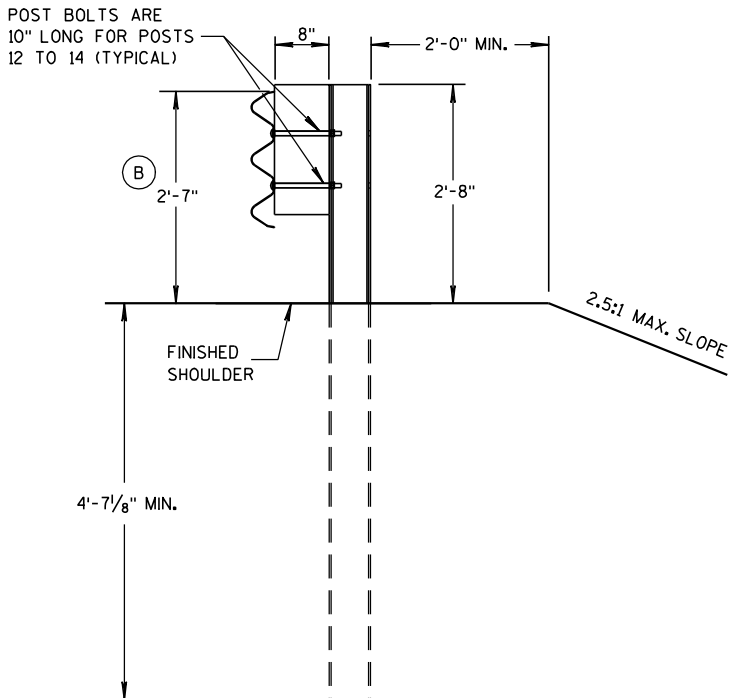
PLATE WASHER DETAIL



SECTION THRU THRIE
BEAM RAIL ELEMENT



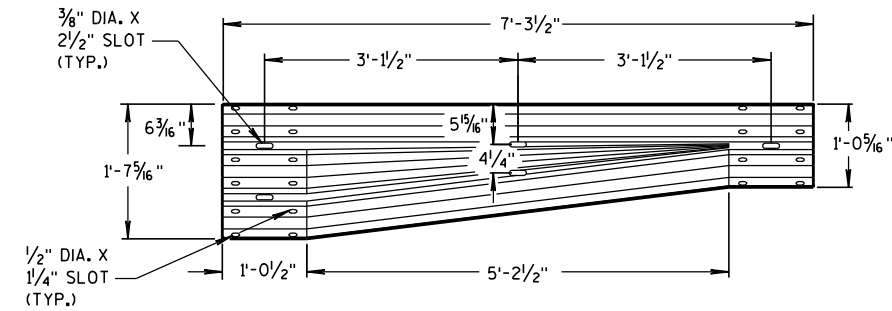
SPLICE DETAIL



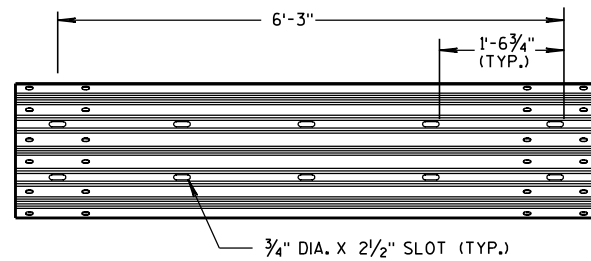
SECTION D-D
POSTS 12-14

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

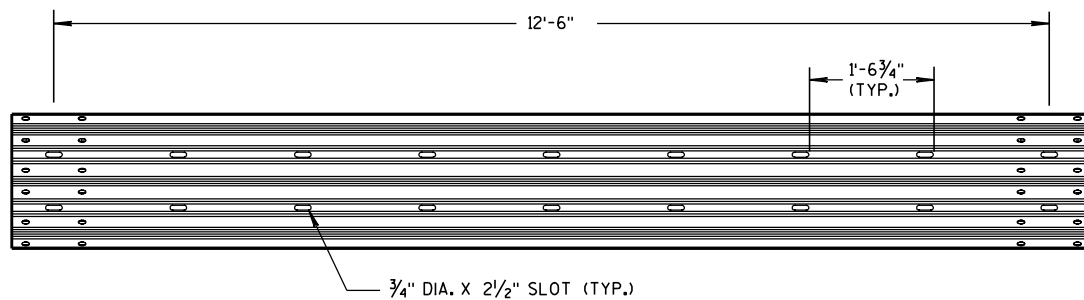
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



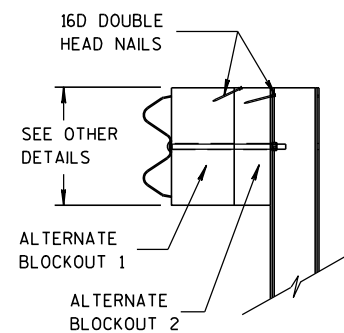
W-BEAM TO THRIE BEAM TRANSITION SECTION



6'-3" THRIE BEAM SECTION

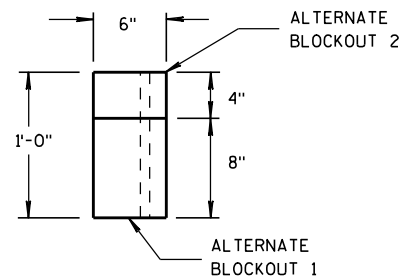


12'-6" THRIE BEAM SECTION

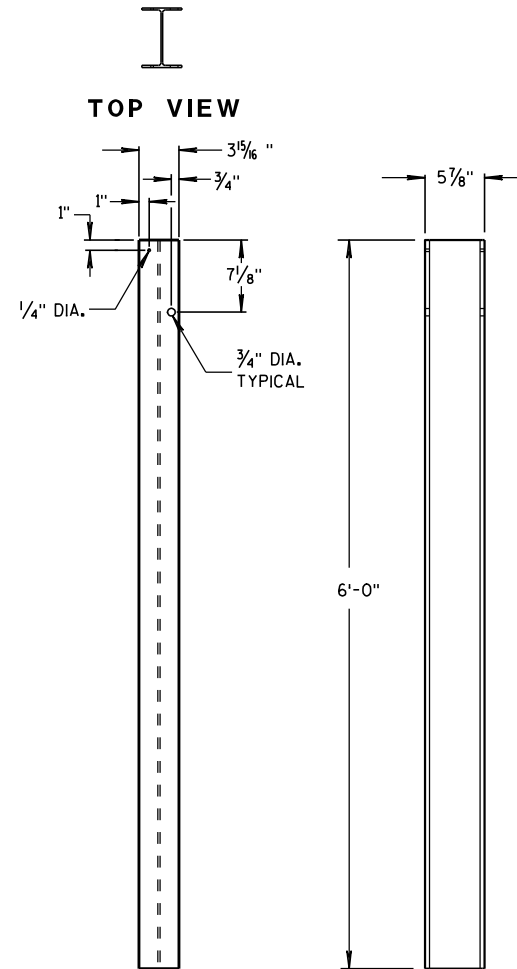


SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL



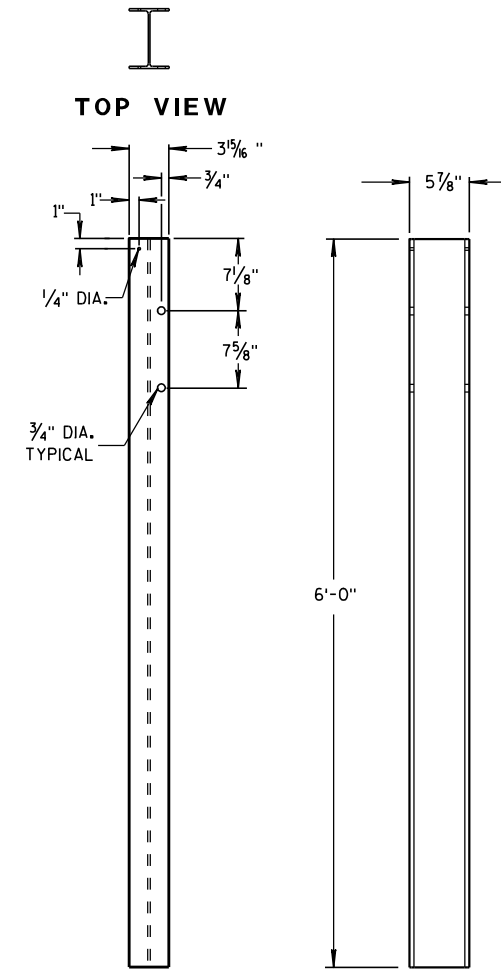
TOP VIEW



FRONT VIEW

SIDE VIEW

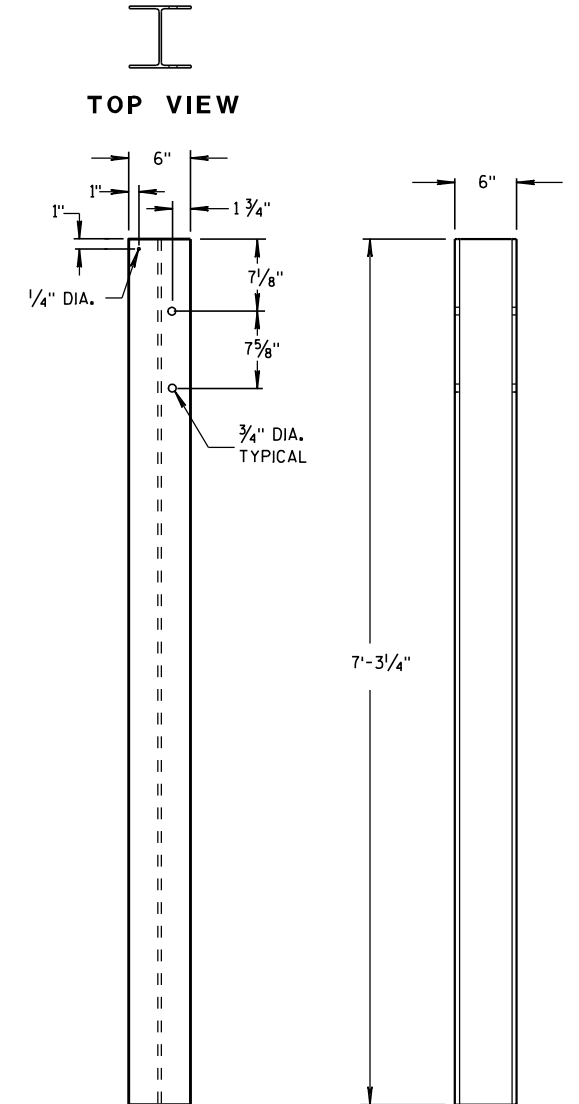
STEEL POSTS 1-5



FRONT VIEW

SIDE VIEW

STEEL POSTS 6-11

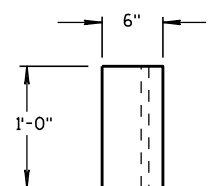


FRONT VIEW

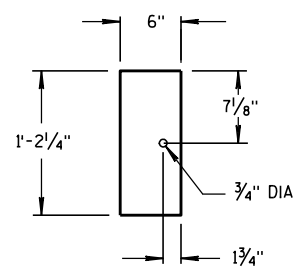
SIDE VIEW

STEEL POSTS 12-14

① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

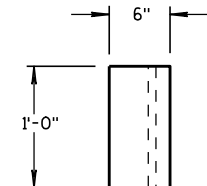


TOP VIEW

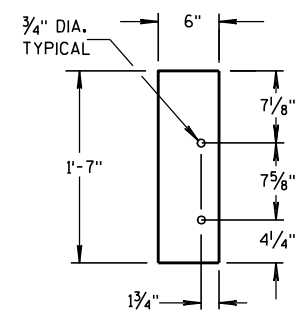


FRONT VIEW

BLOCKOUT
POSTS 1-5

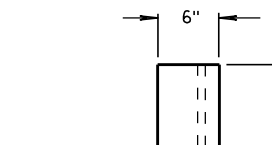


TOP VIEW

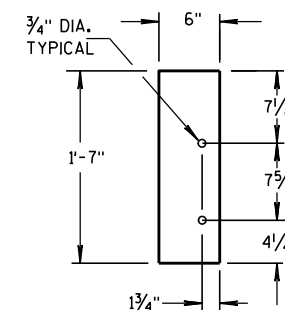


FRONT VIEW

BLOCKOUT
POSTS 6-11



TOP VIEW



FRONT VIEW

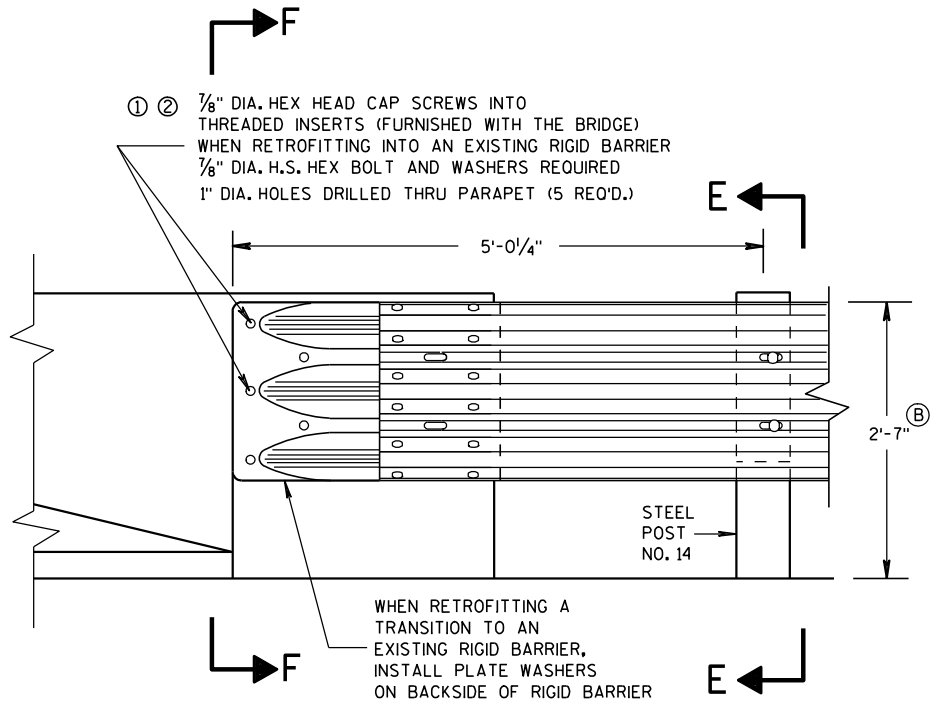
BLOCKOUT
POSTS 12-14

STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 7/8"
⑬	W6x15	87 7/8"
⑭	W6x15	87 7/8"

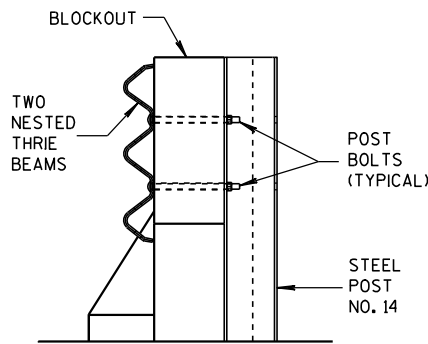
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE
PARAPET WITH SQUARE ENDS

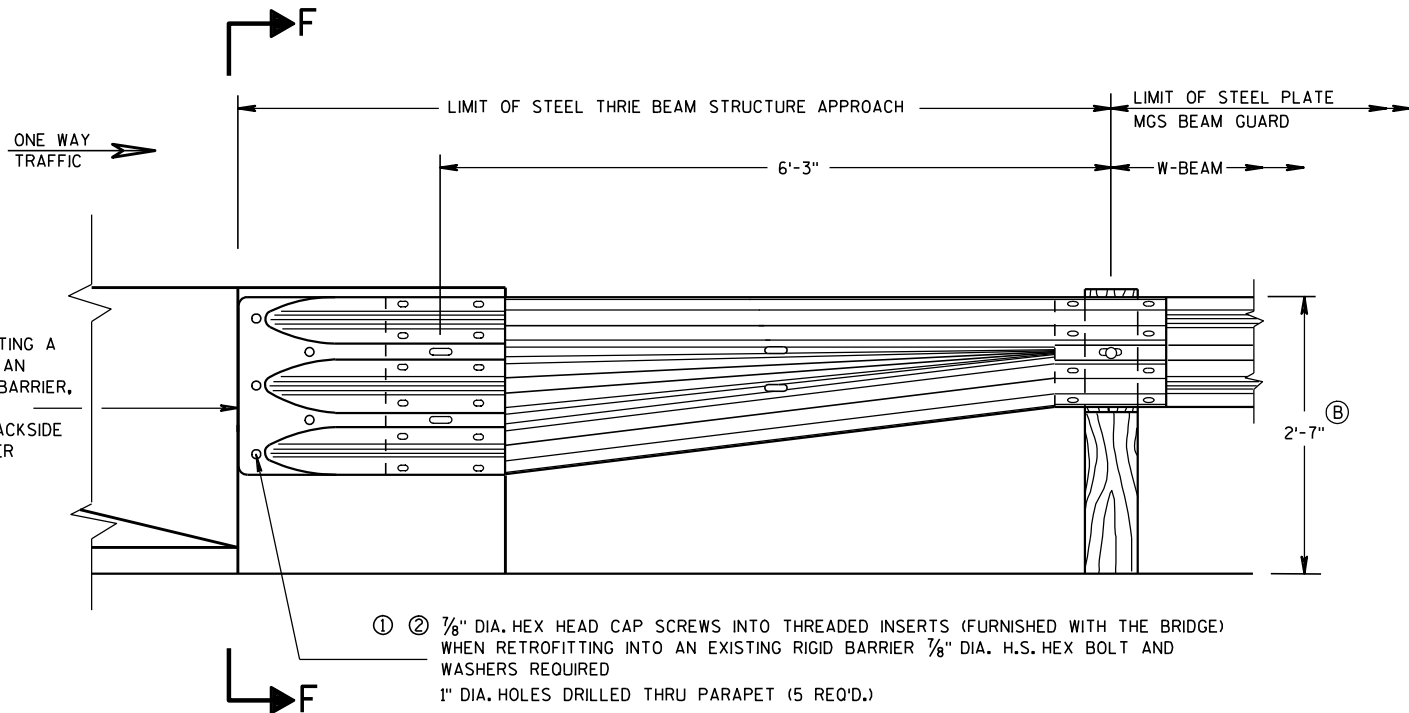


SECTION E-E

GENERAL NOTES

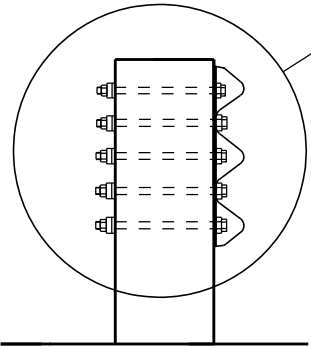
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS, BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".
- (B) TOLERANCE FOR TOP OF BEAM IS ± 1".

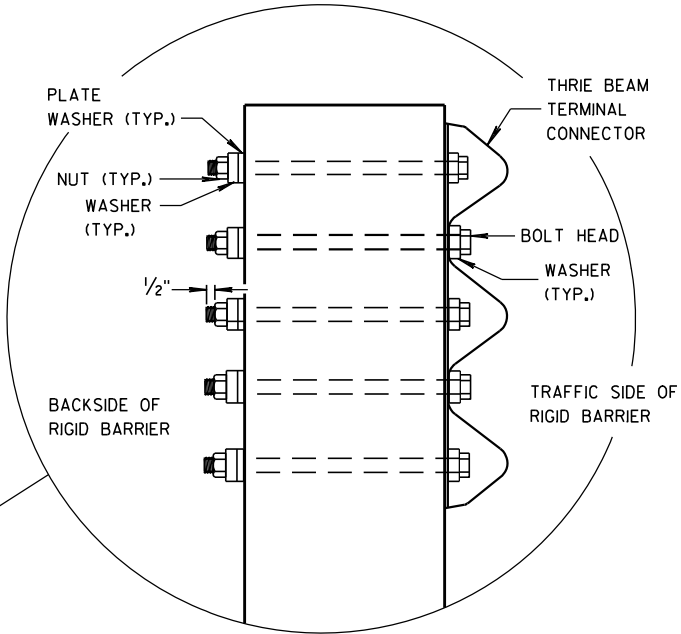


FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO
BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION F-F

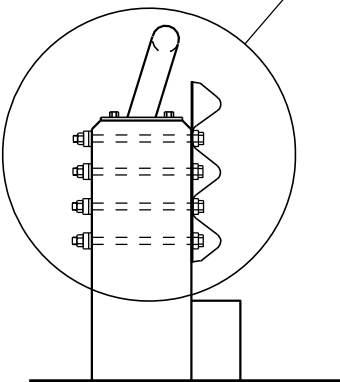
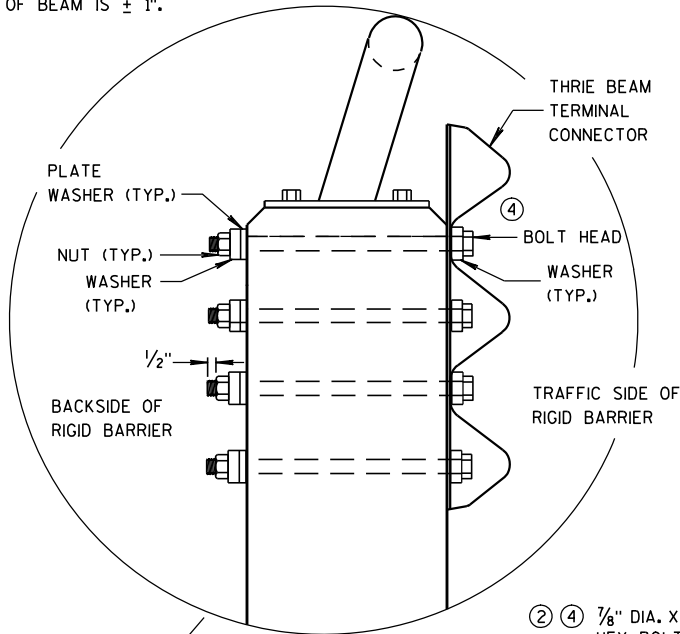


MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/31/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

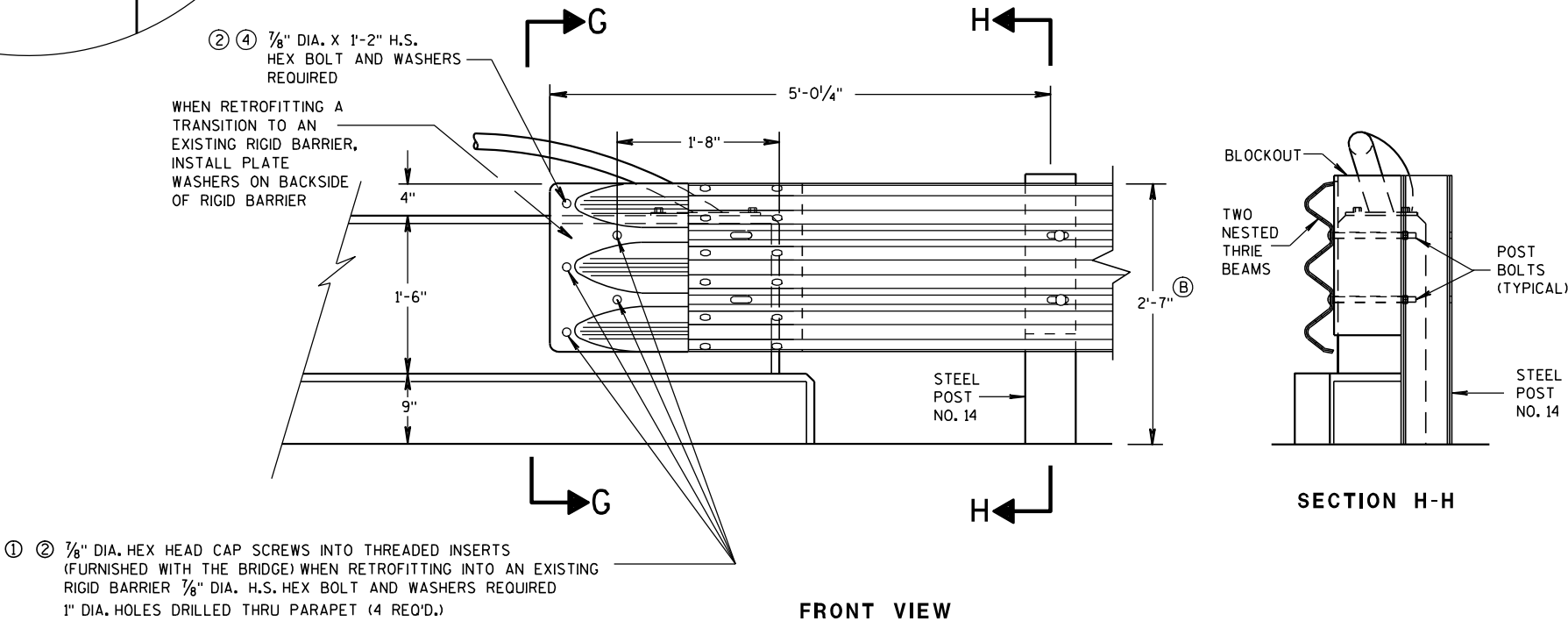
GENERAL NOTES

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

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X $\frac{5}{8}$ " THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 $\frac{1}{2}$ ". BLOCK IS INCIDENTAL TO THE CONTRACT.
- ④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.
- ⓑ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

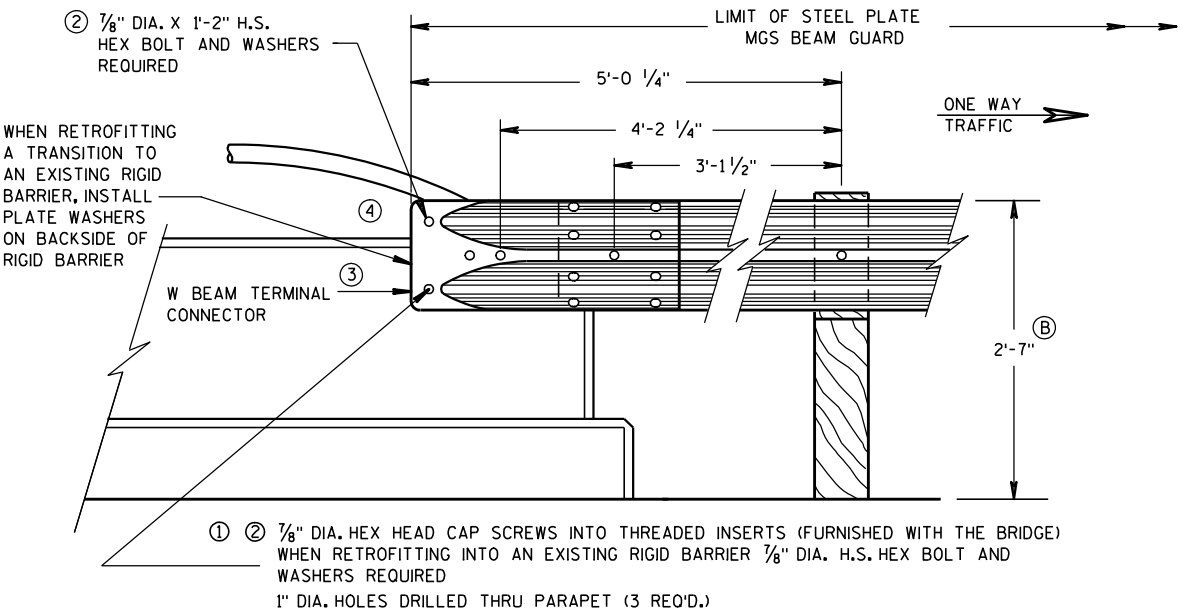


SECTION G-G



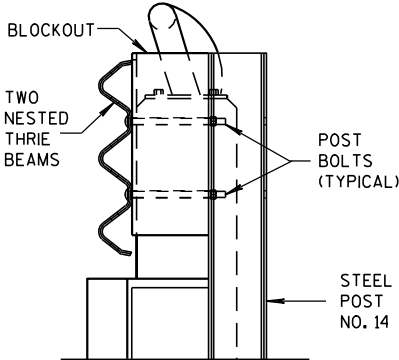
FRONT VIEW

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

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

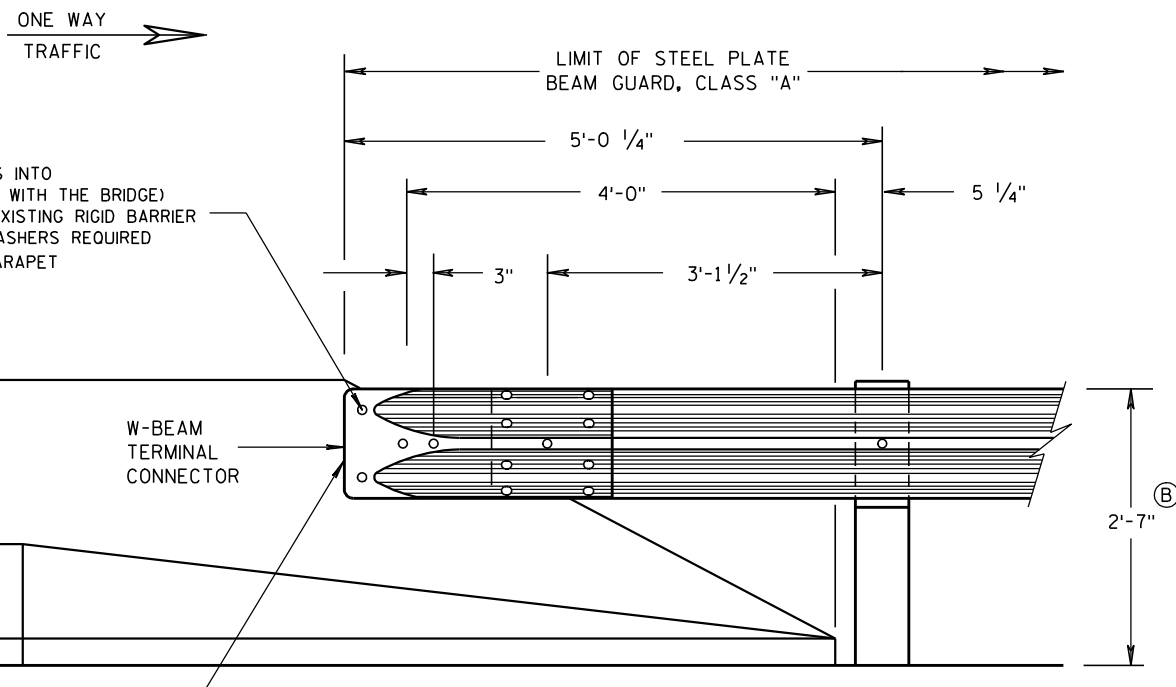


SECTION H-H

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-31-2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



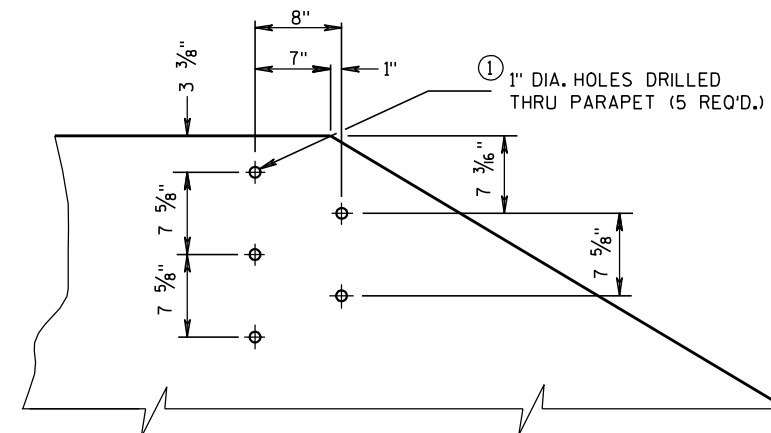
FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

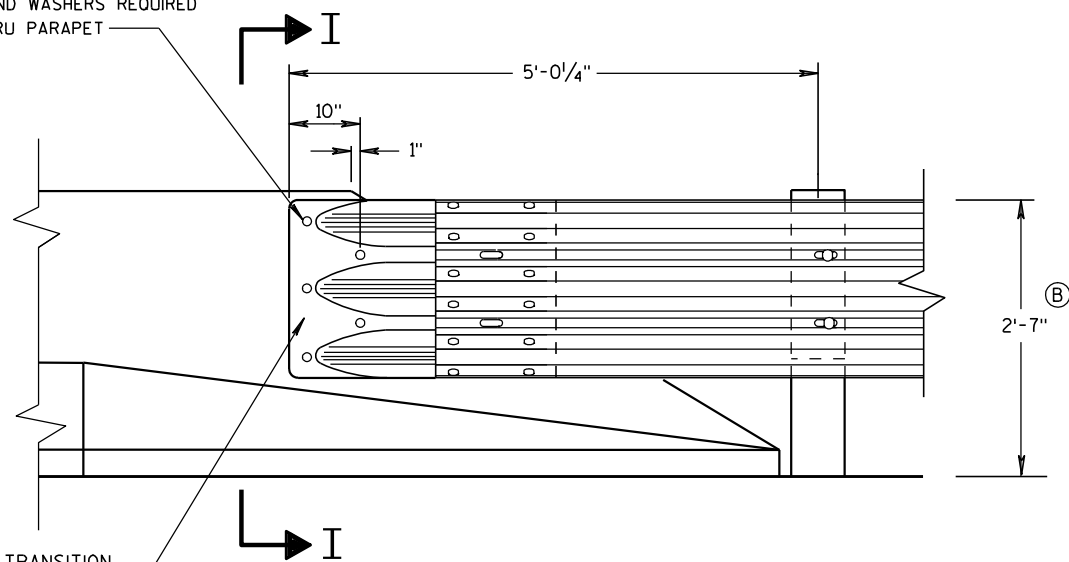
GENERAL NOTES

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ③ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.



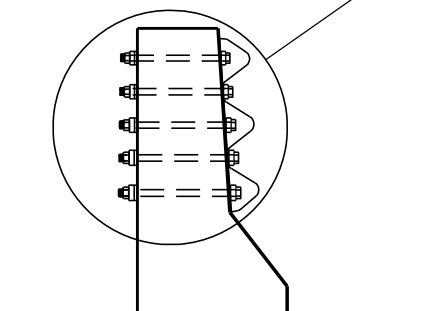
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION

- ① ② 1/8" DIA. HEX HEAD CAP SCREWS INTO
THREADED INSERTS (FURNISHED WITH THE BRIDGE)
WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER
1/8" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET
(5 REQ'D.)

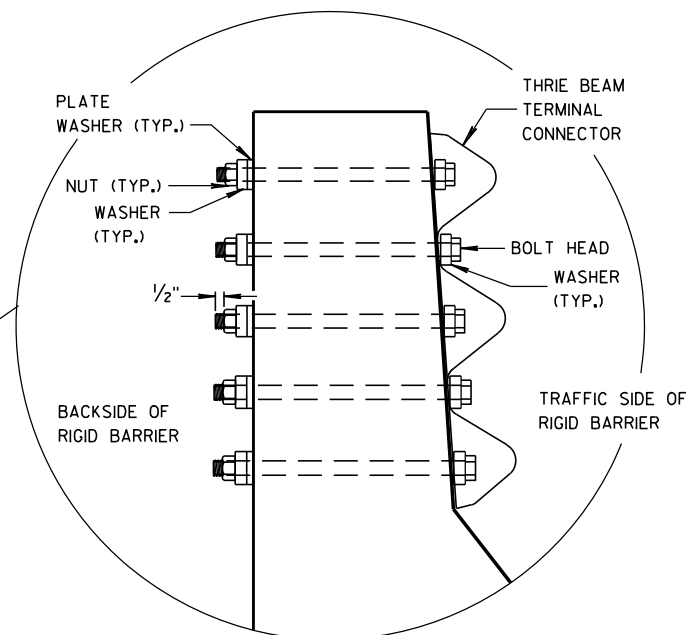


FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS



SECTION I-I

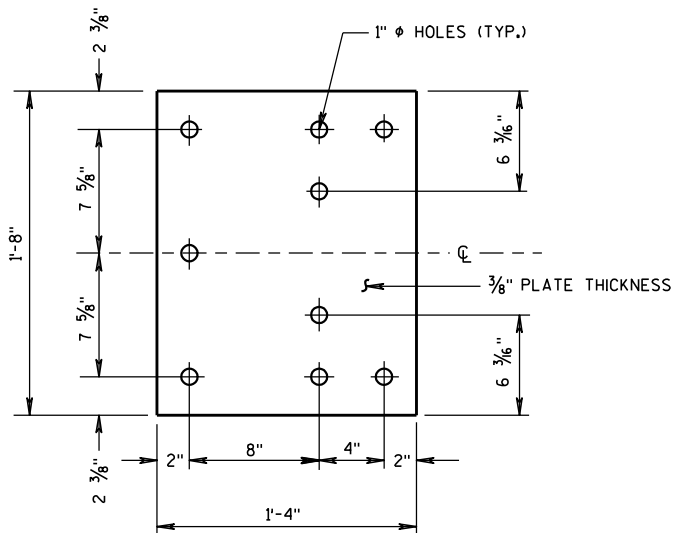


MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

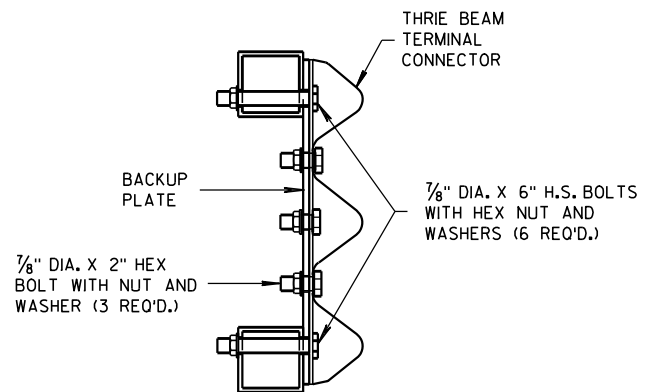
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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8/31/2012
DATE
FHWA

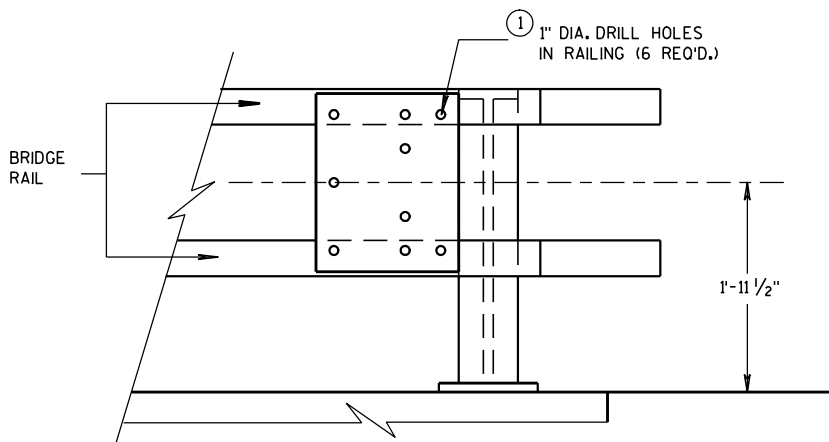
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



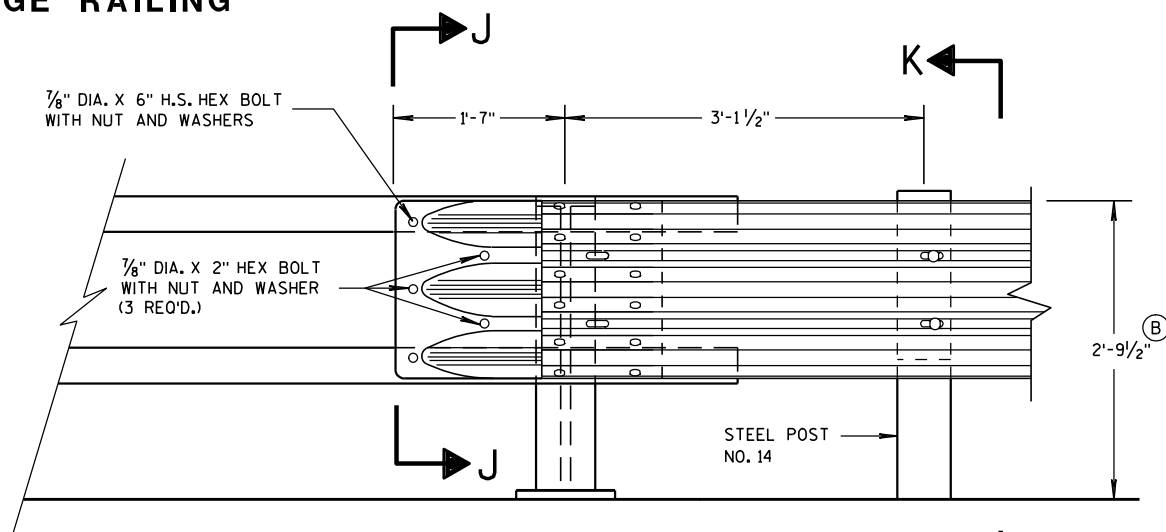
BACK-UP PLATE DETAIL



SECTION J-J

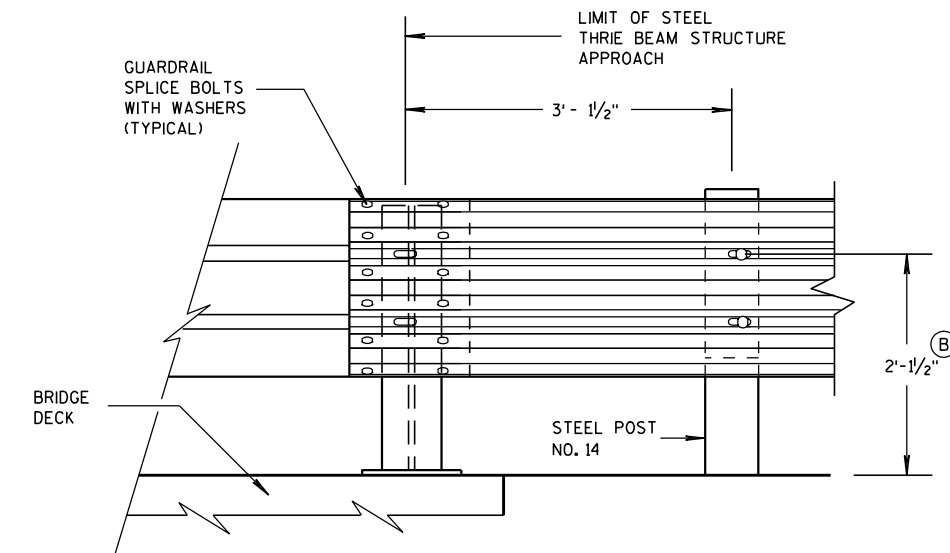


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



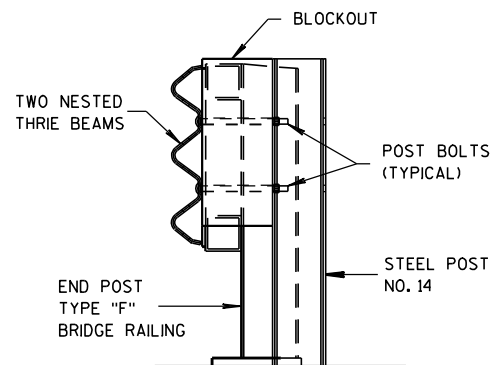
FRONT VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



SECTION K-K

GENERAL NOTES

- ① DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

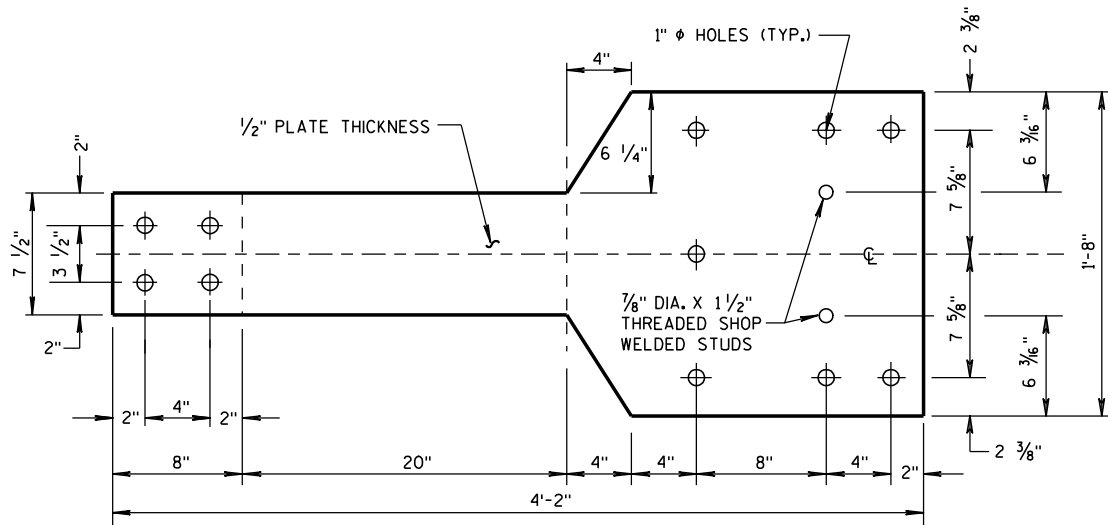
STATE OF WISCONSIN
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APPROVED
8/31/2012
DATE
FHWA

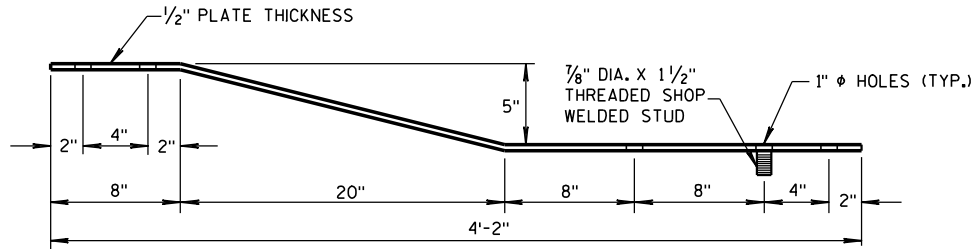
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

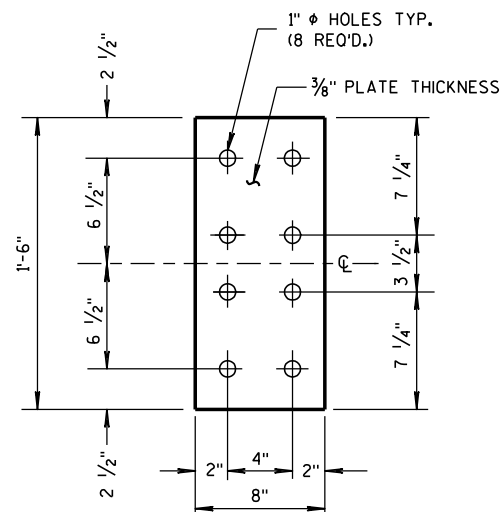
(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.



FRONT VIEW

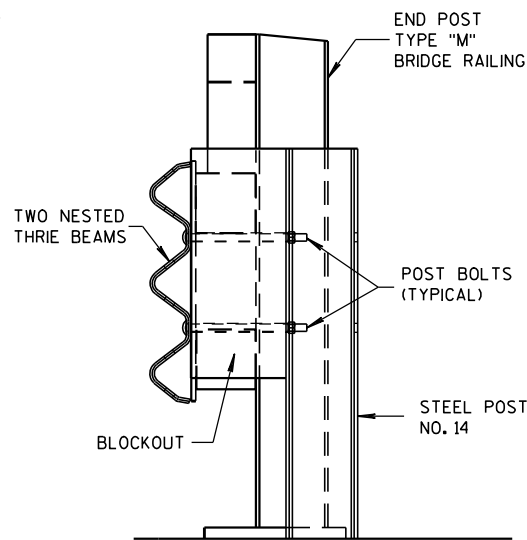


PLAN VIEW
BACK-UP PLATE DETAIL, TYPE "M"

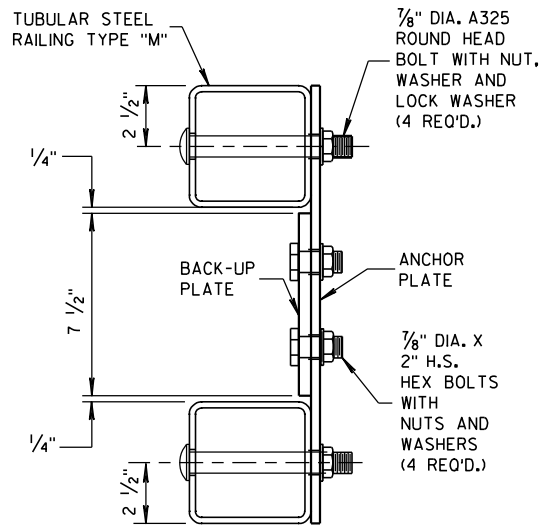


FRONT VIEW

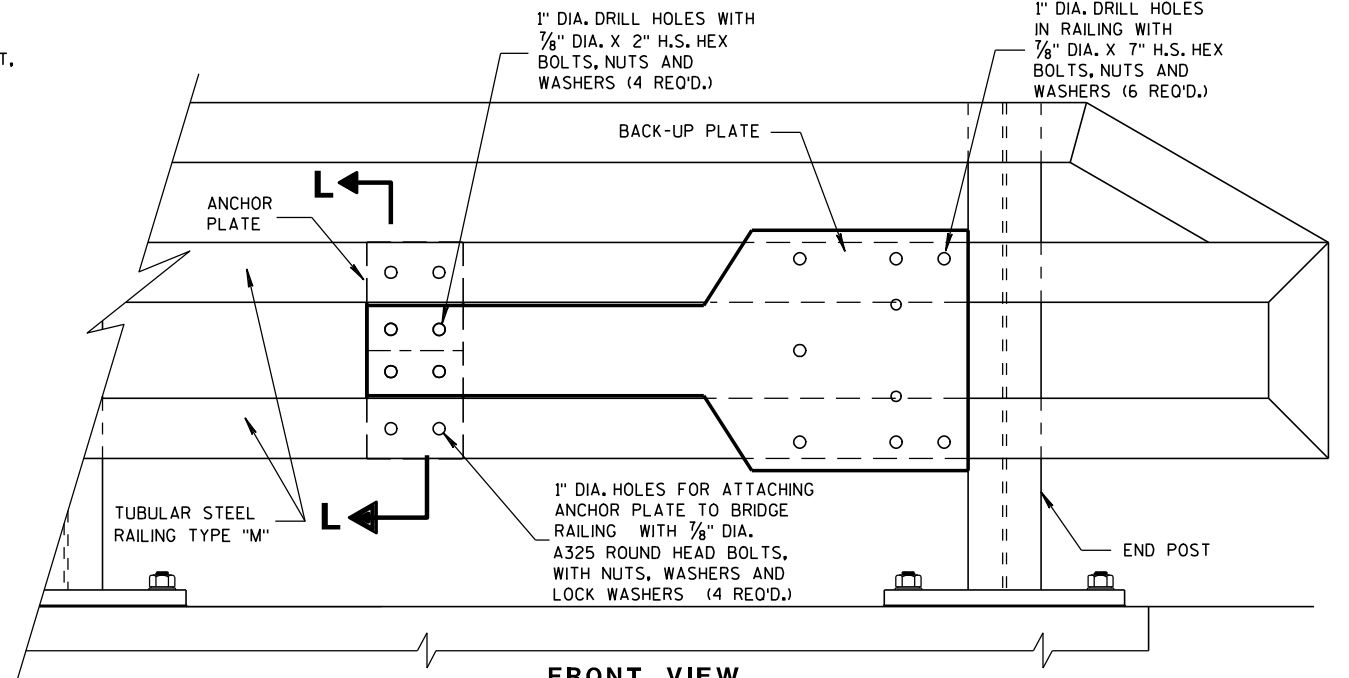
ANCHOR
PLATE DETAIL,
TYPE "M"



SECTION M-M

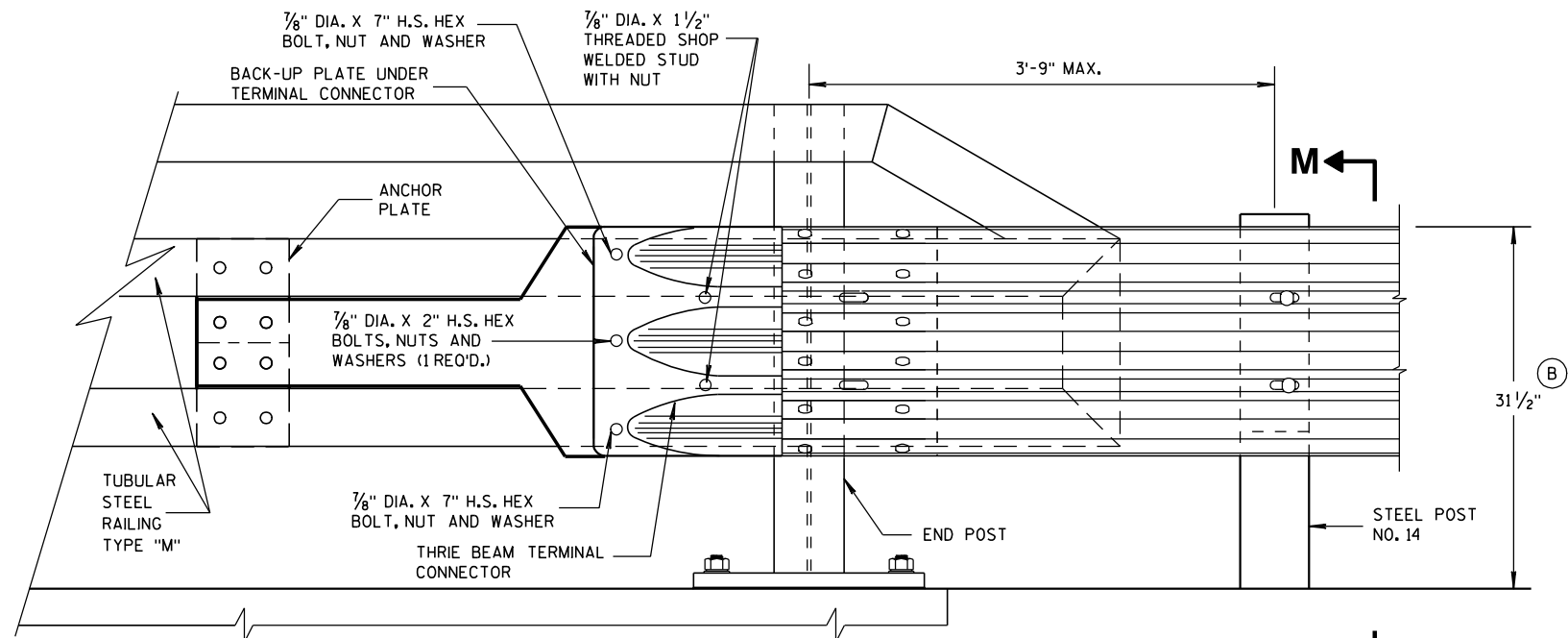


SECTION L-L

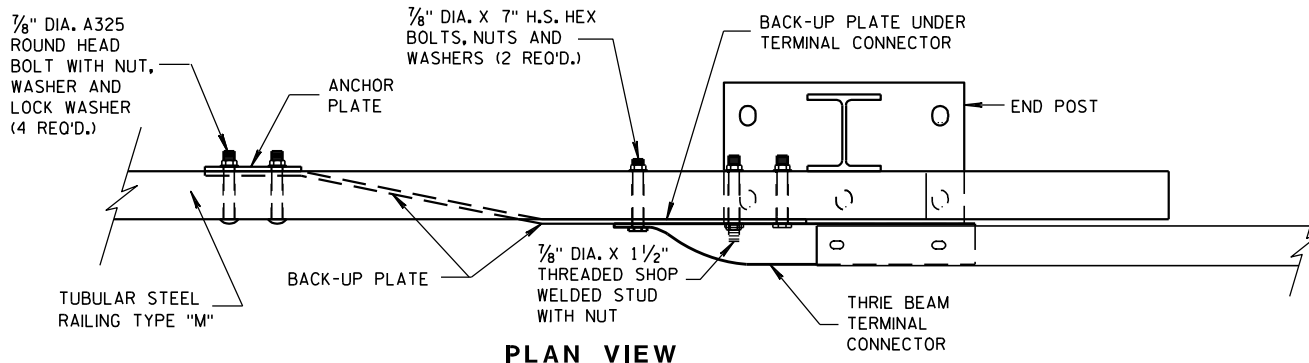


FRONT VIEW

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

APPROVED

8-31-2012

DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



- ① 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.
- ② 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".

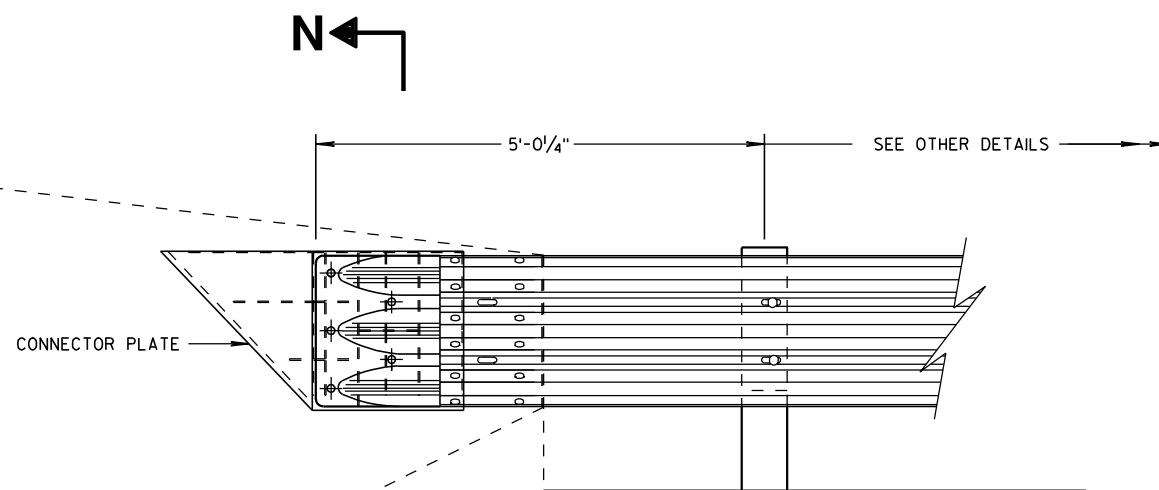
SINGLE SLOPE CONNECTION PLATE

**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

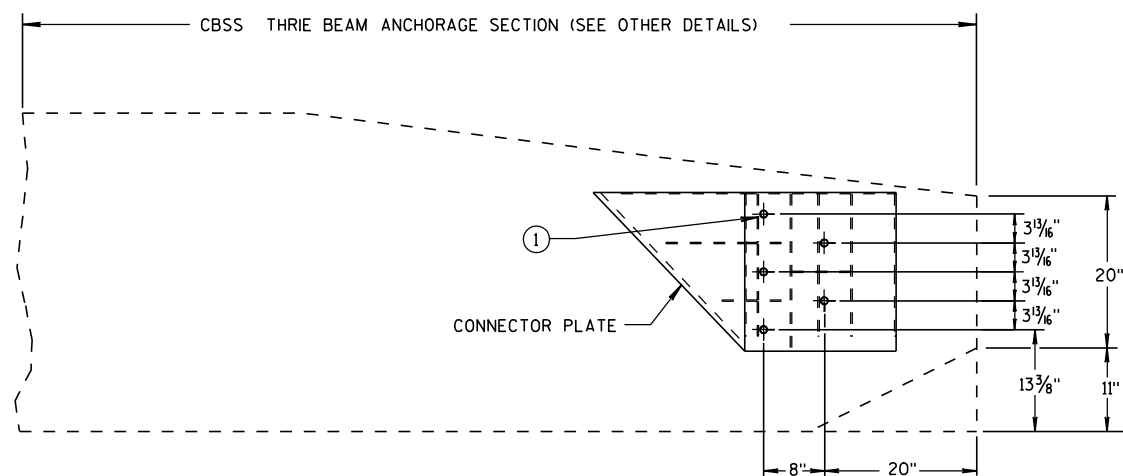
STATE OF WISCONSIN
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DATE ROADWAY STANDARDS DEVELOPMENT
FWHA ENGINEER



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

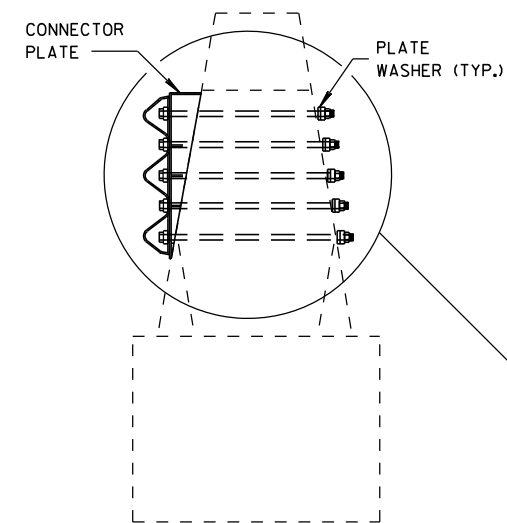


SINGLE SLOPE CONNECTION PLATE PLACEMENT

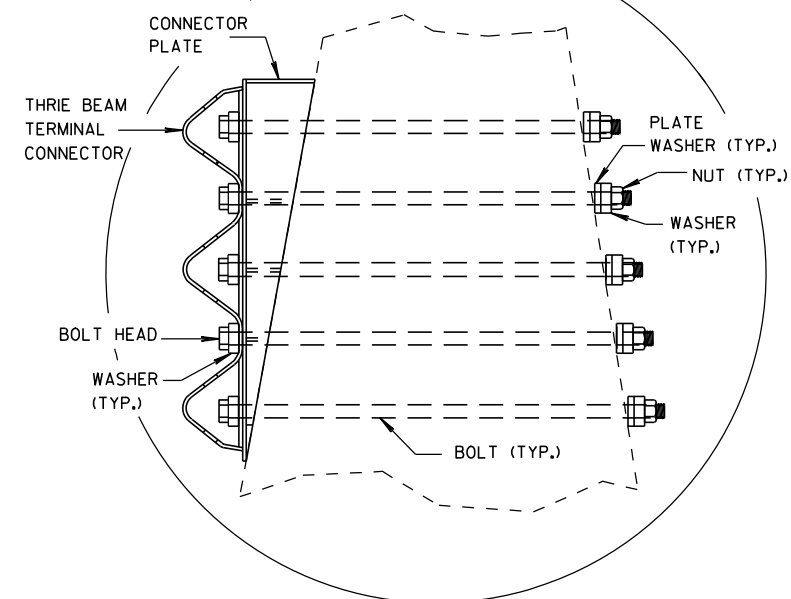
GENERAL NOTES

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

- ① BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

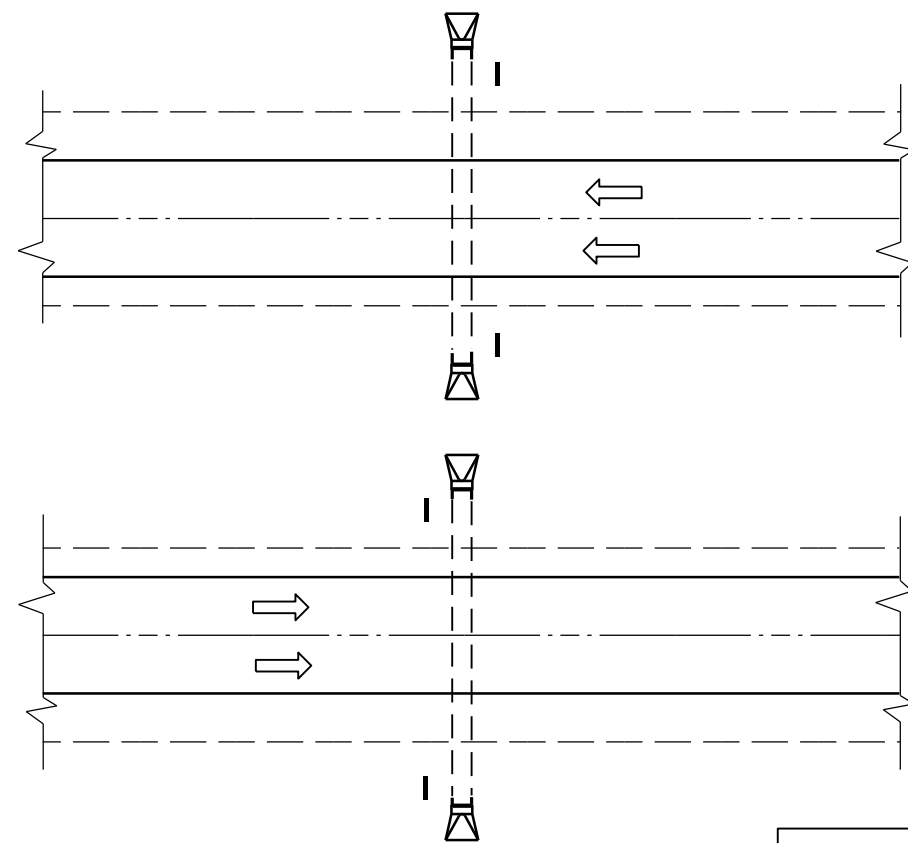
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

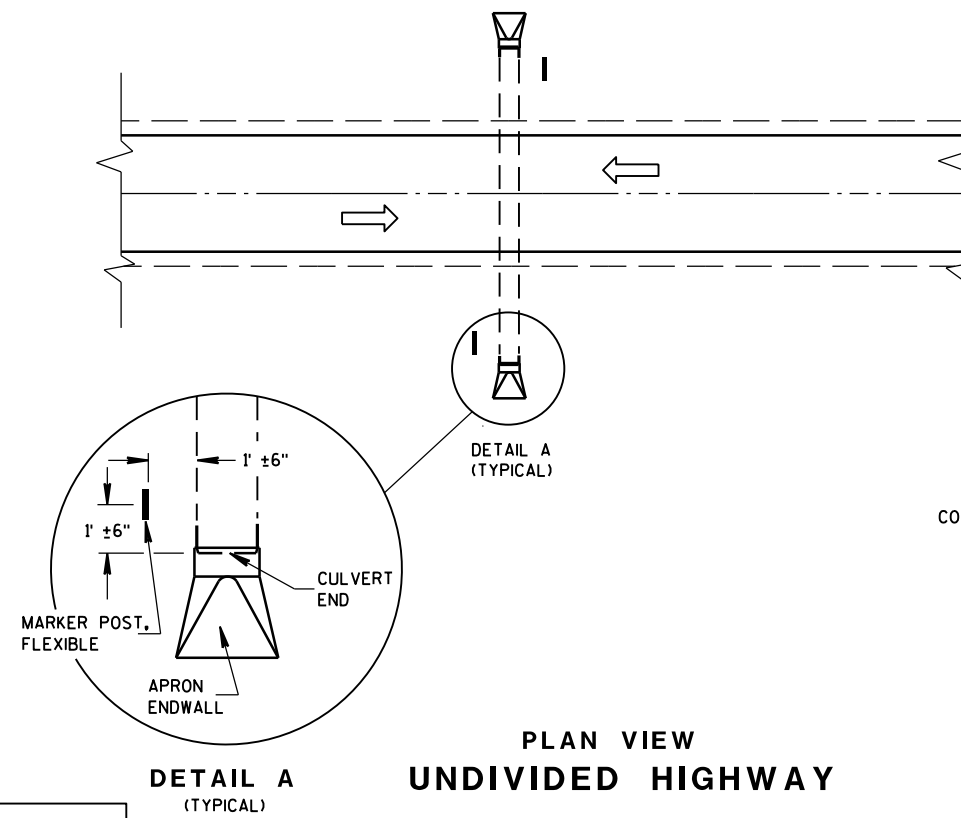
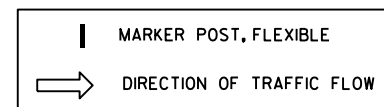
8/31/2012
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



PLAN VIEW
DIVIDED HIGHWAY



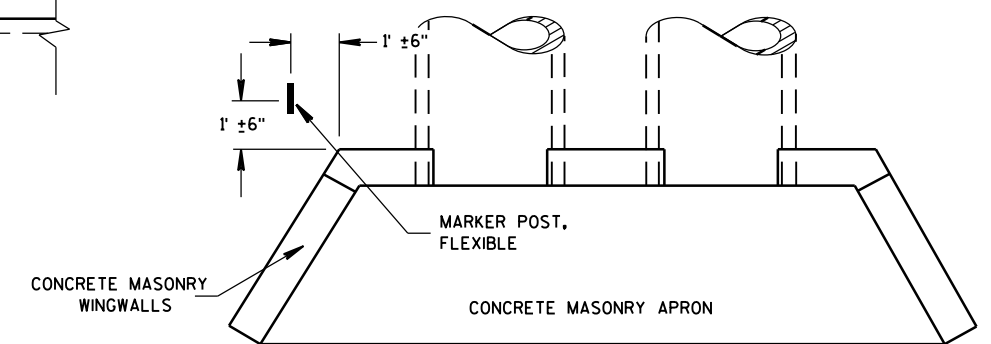
DETAIL A
(TYPICAL)

PLAN VIEW
UNDIVIDED HIGHWAY

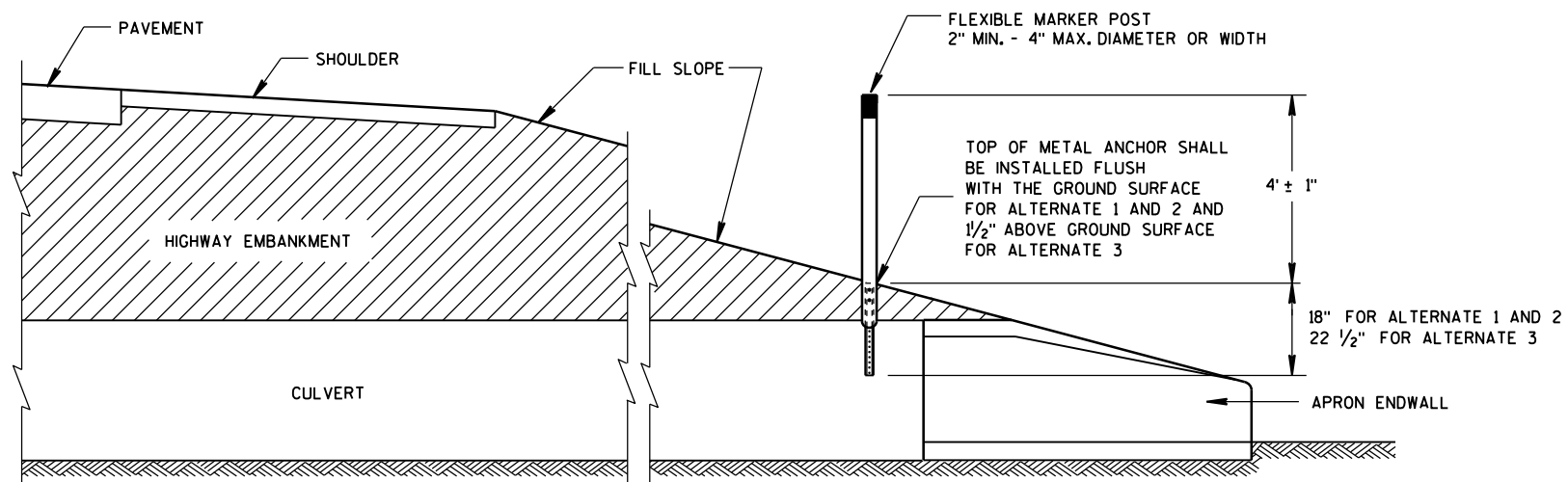
FLEXIBLE MARKER POST LOCATION

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.



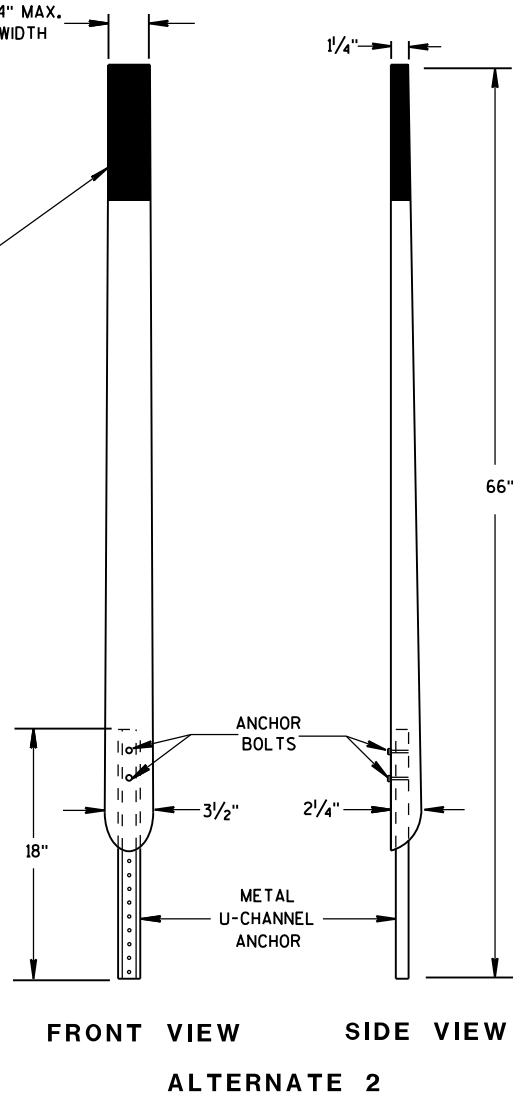
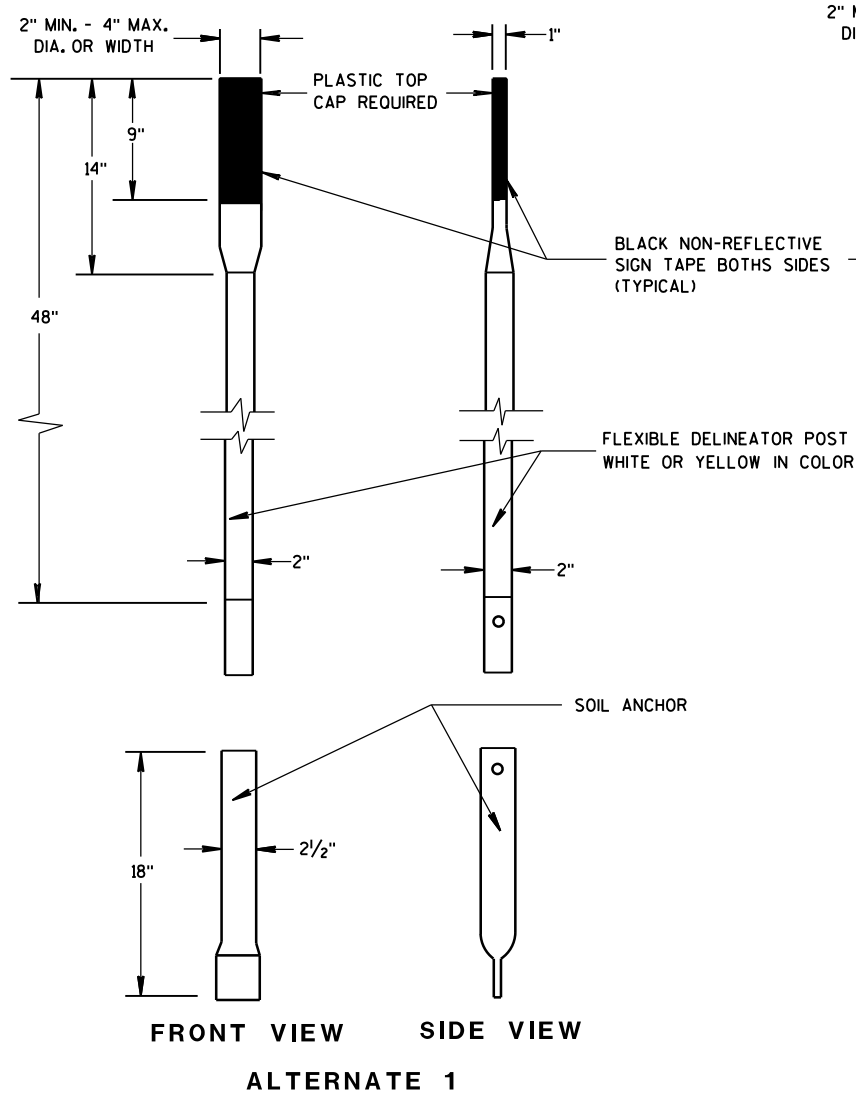
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



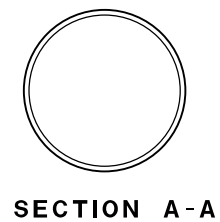
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

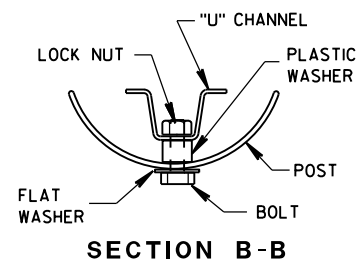
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



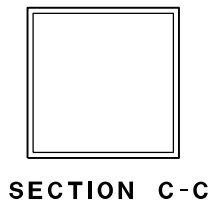
FLEXIBLE MARKER POSTS



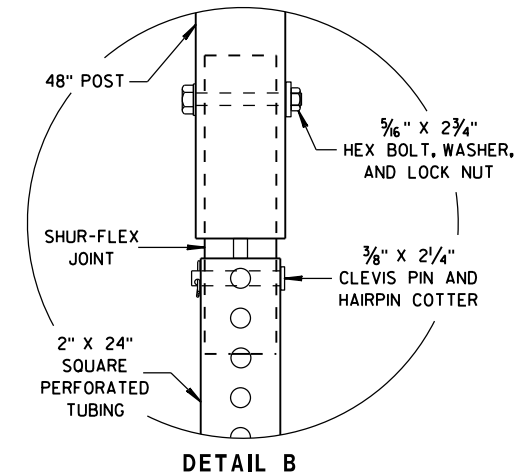
SECTION A-A



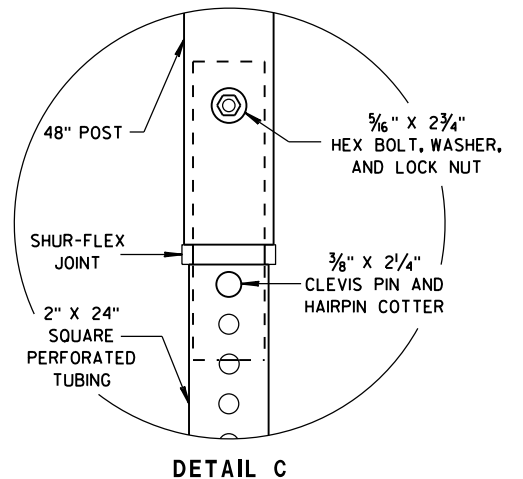
SECTION B-B



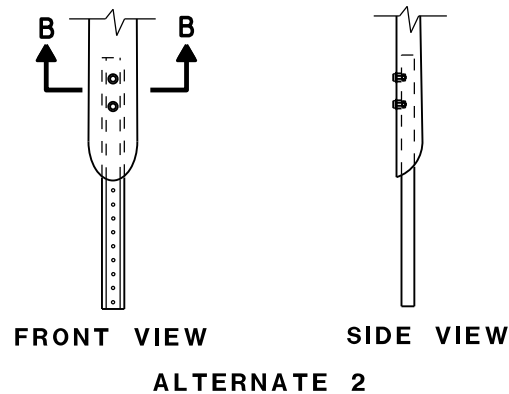
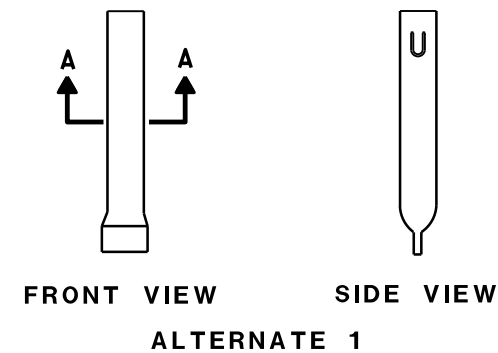
SECTION C-C



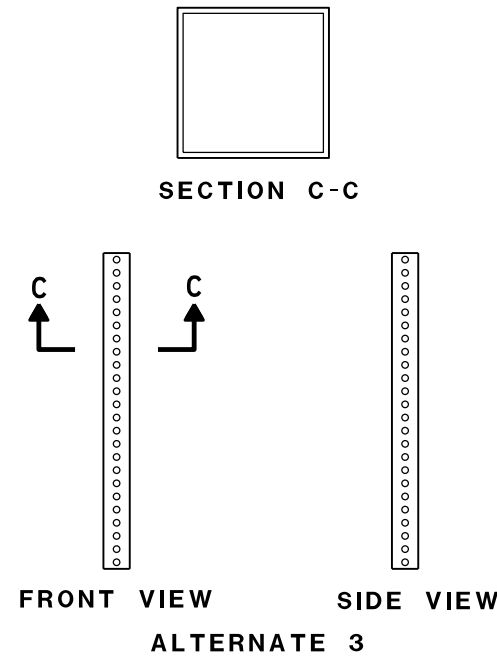
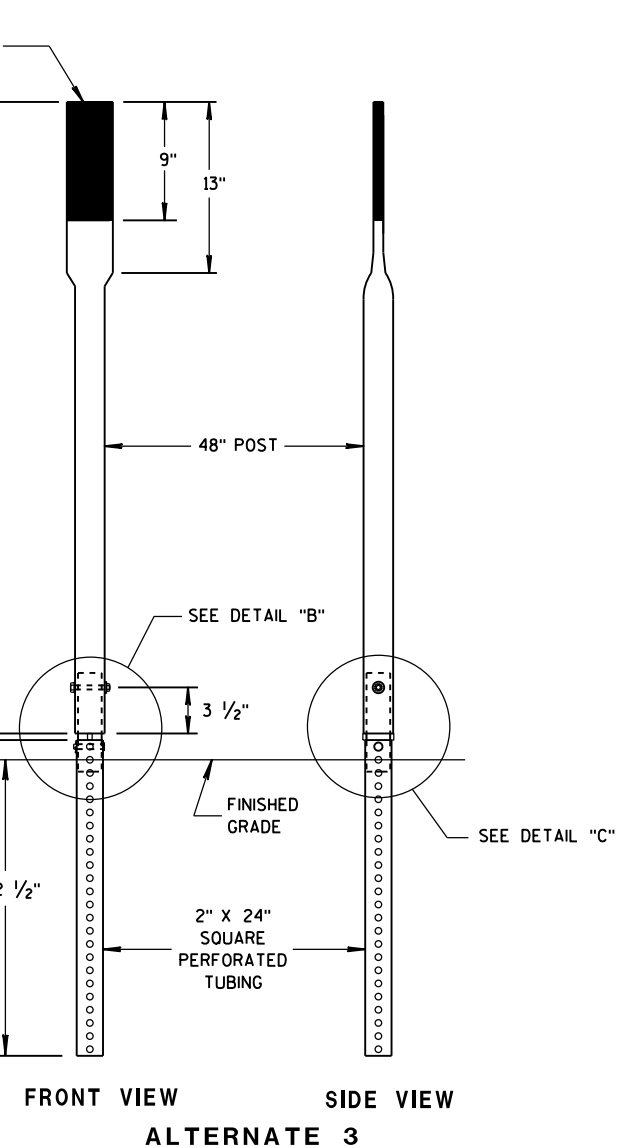
DETAIL B



DETAIL C



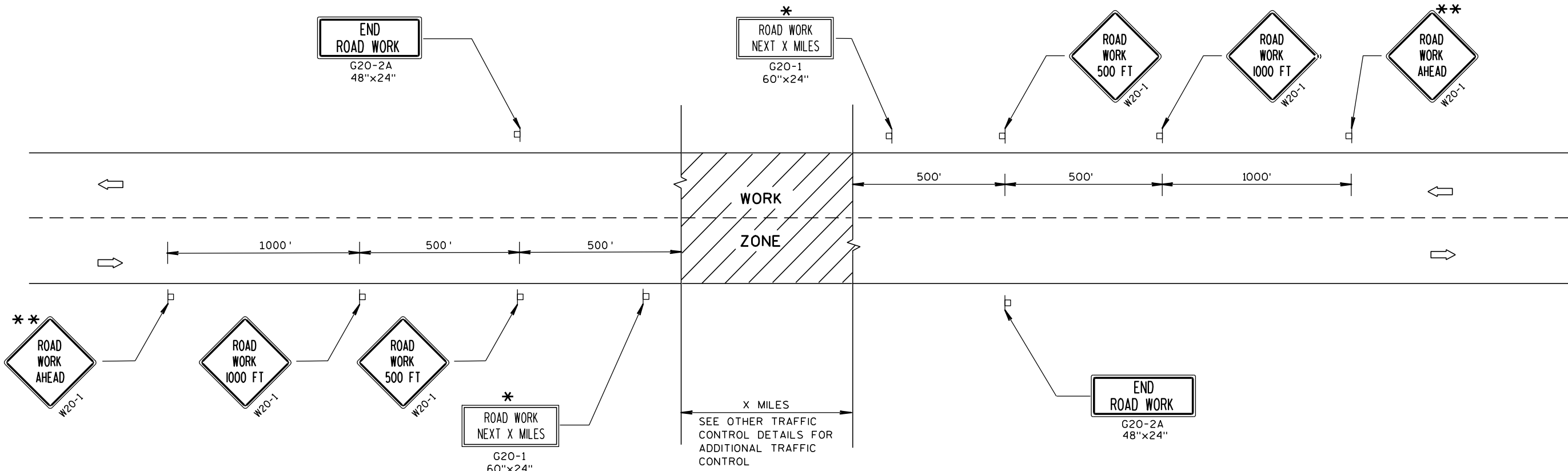
FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

LEGEND

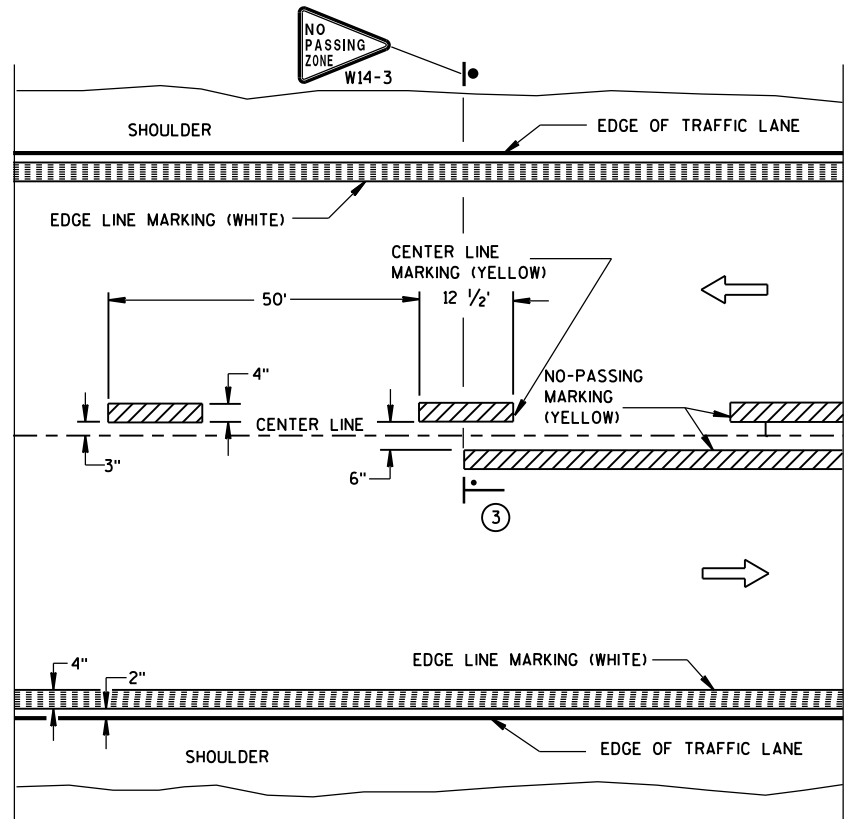
┆ POST MOUNTED SIGN

➡ DIRECTION OF TRAFFIC FLOW

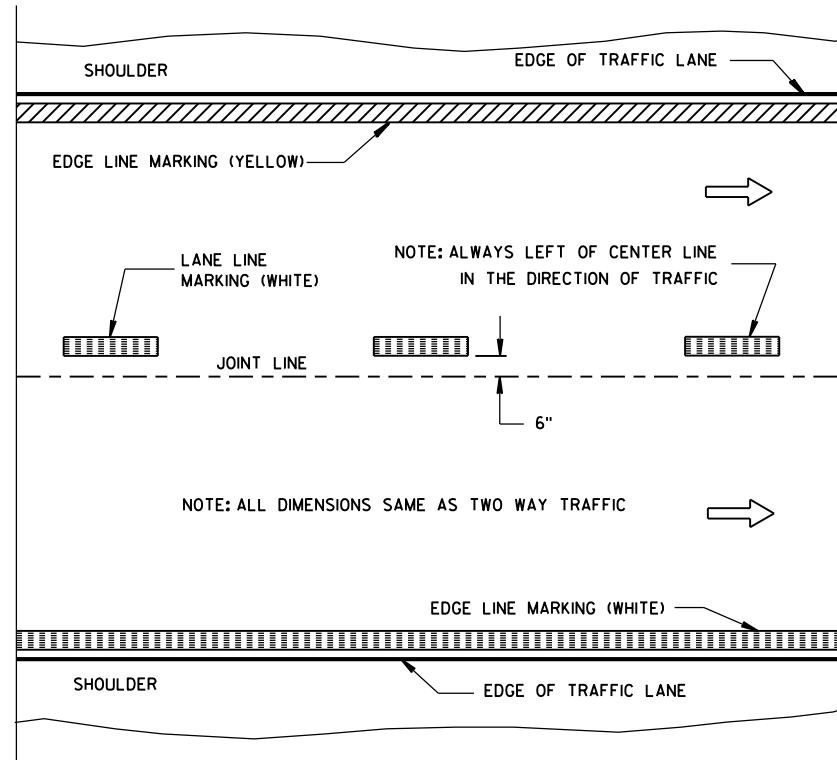
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA

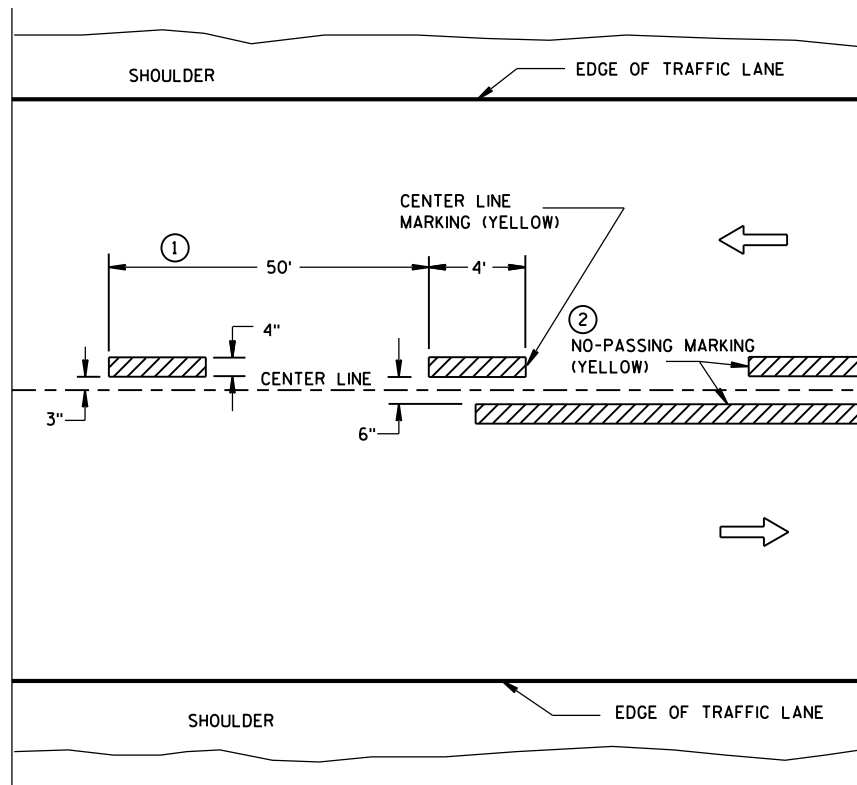


TWO WAY TRAFFIC

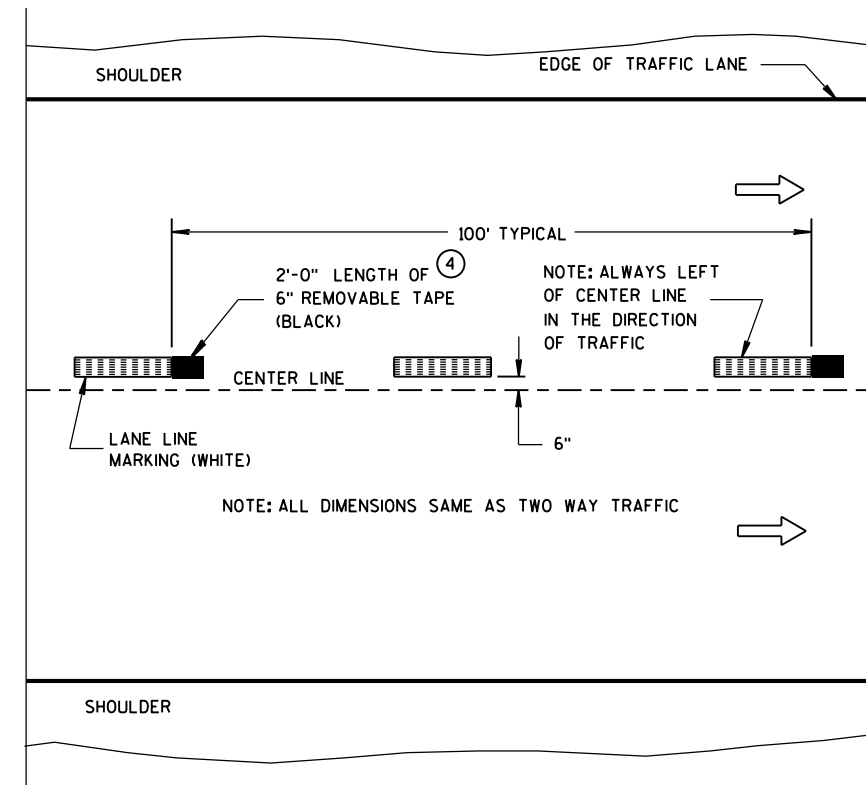


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

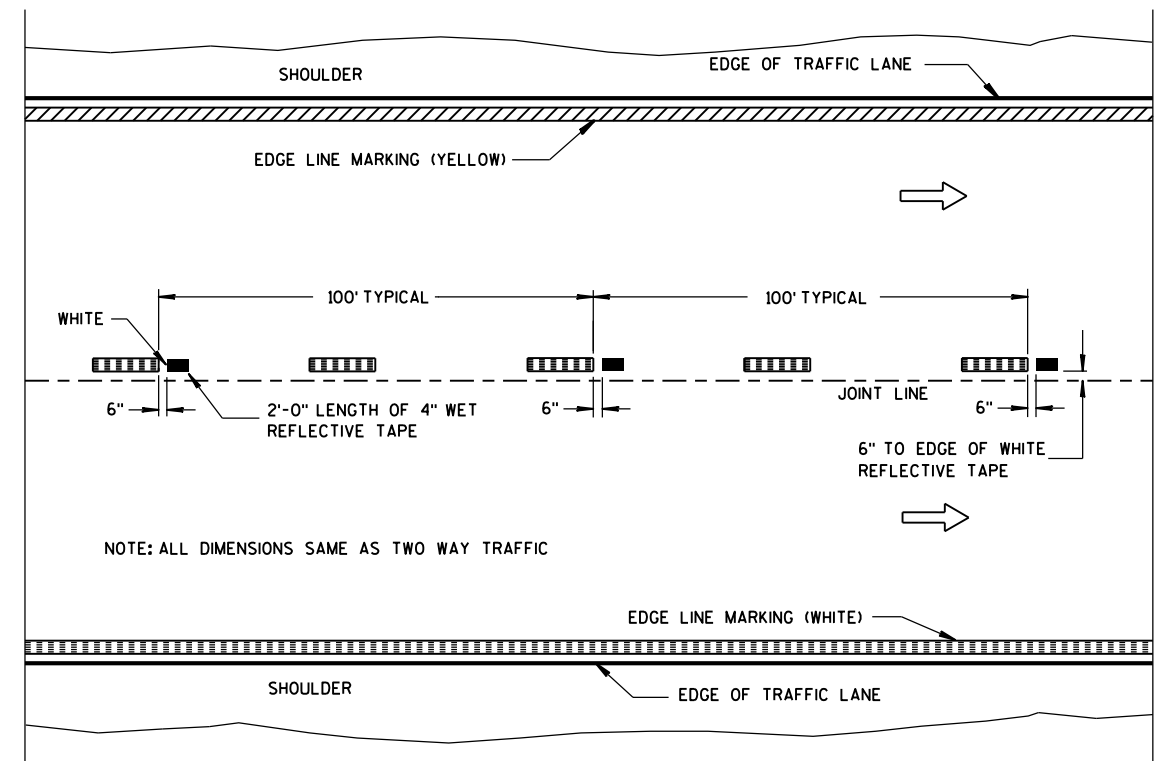
GENERAL NOTES

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

- 1 HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- 2 NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- 3 NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- 4 CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

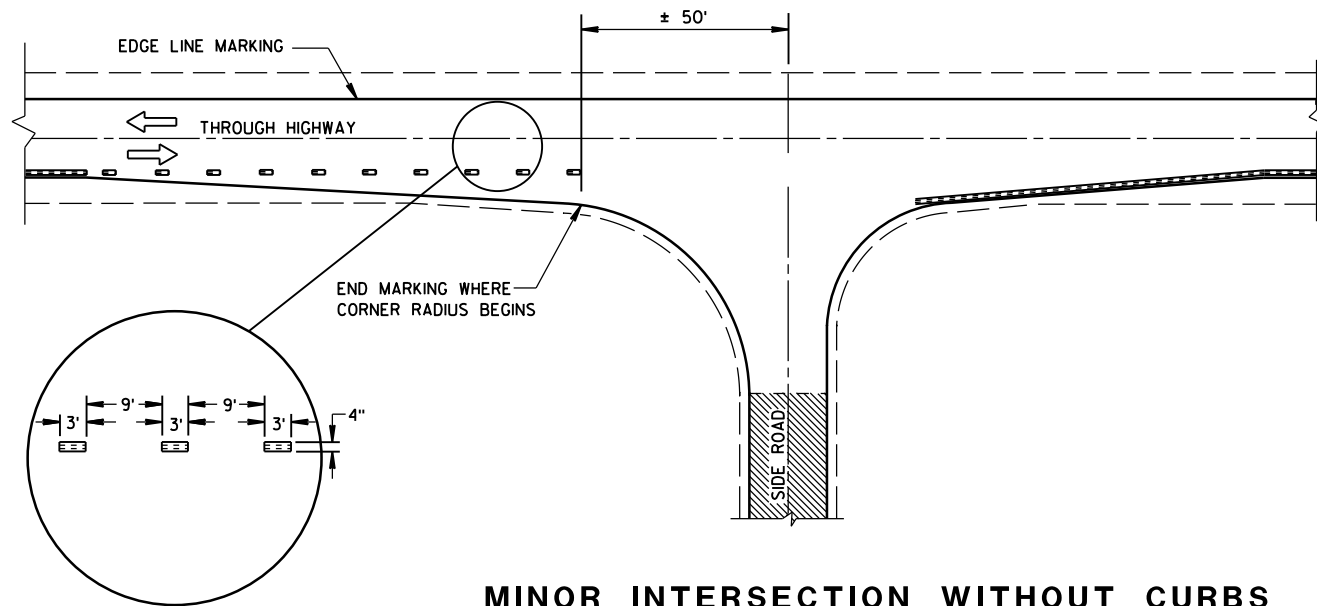
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

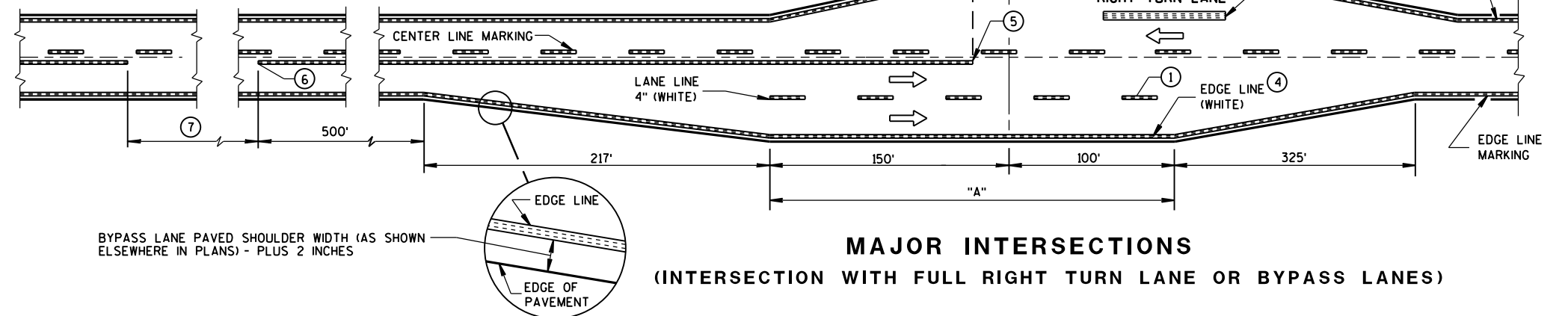
APPROVED
5-13-2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER
FHWA



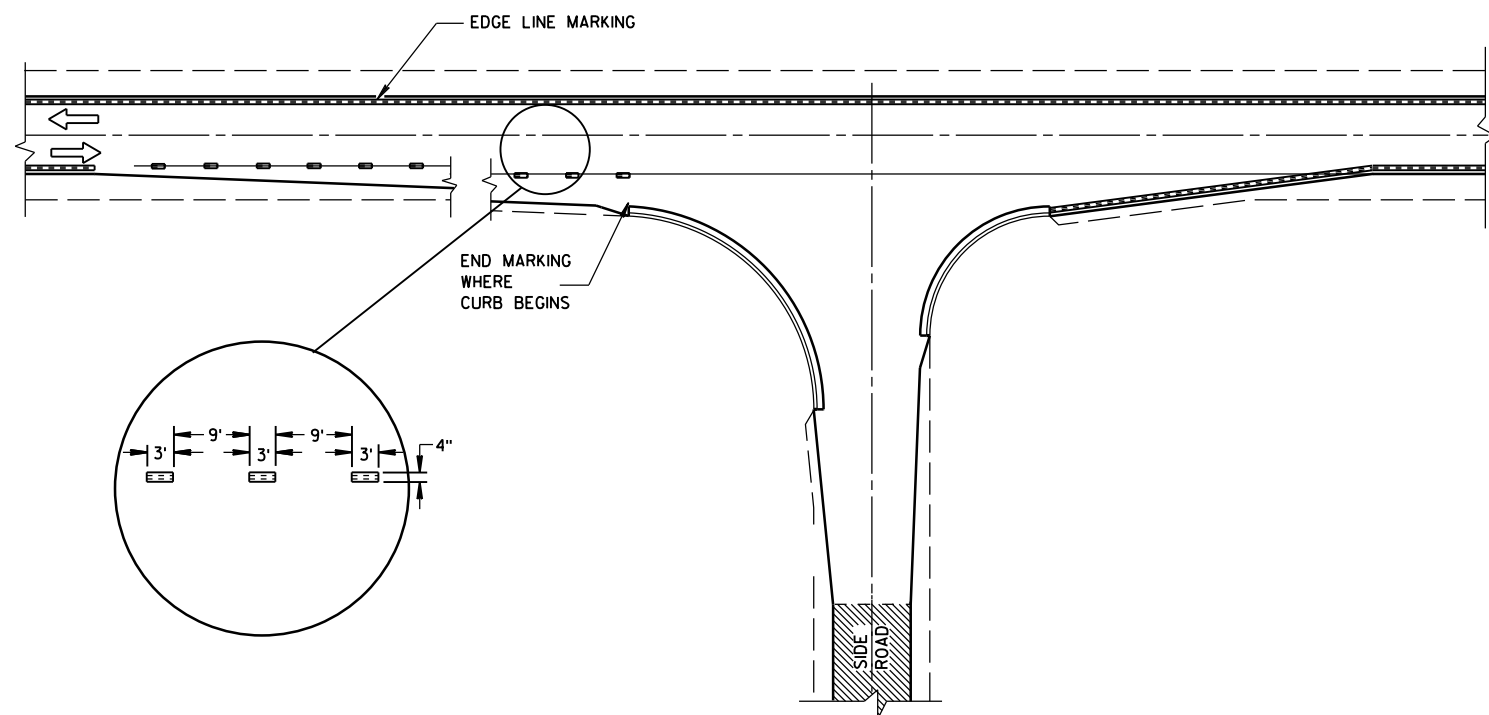
MINOR INTERSECTION WITHOUT CURBS

⑦

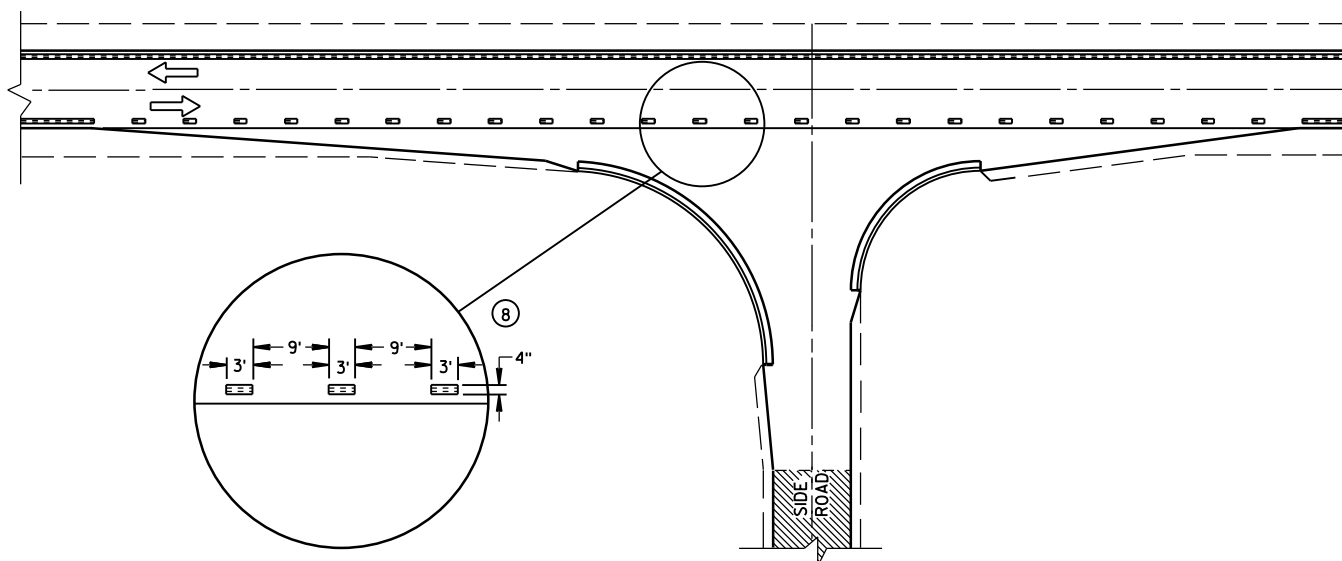
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



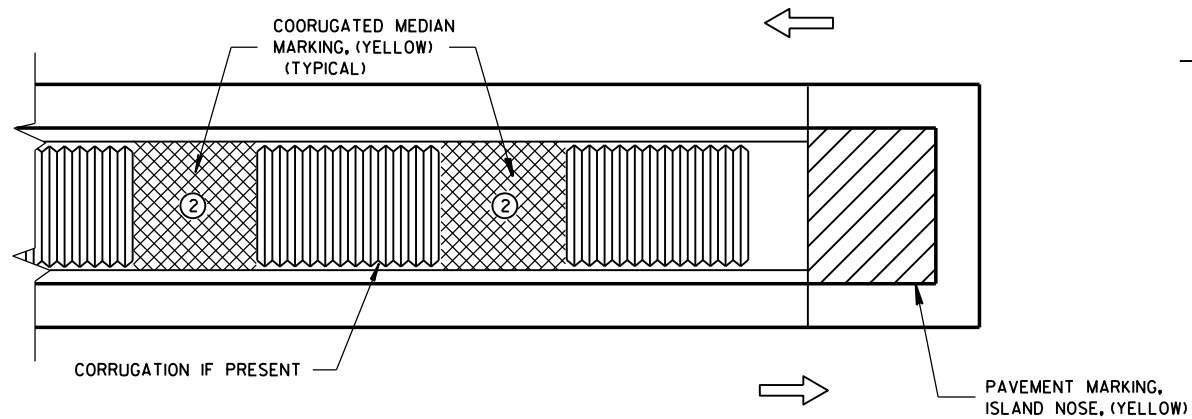
MINOR INTERSECTION WITH CURBS
⑧ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

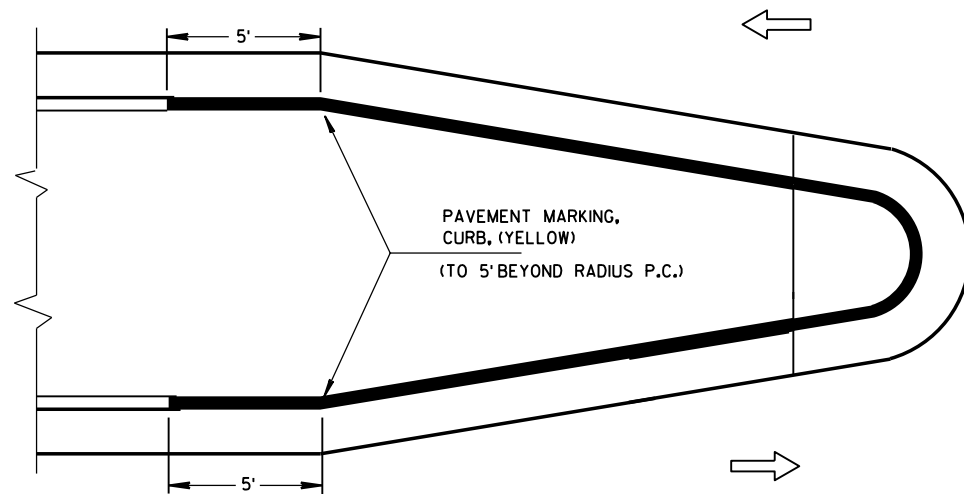
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

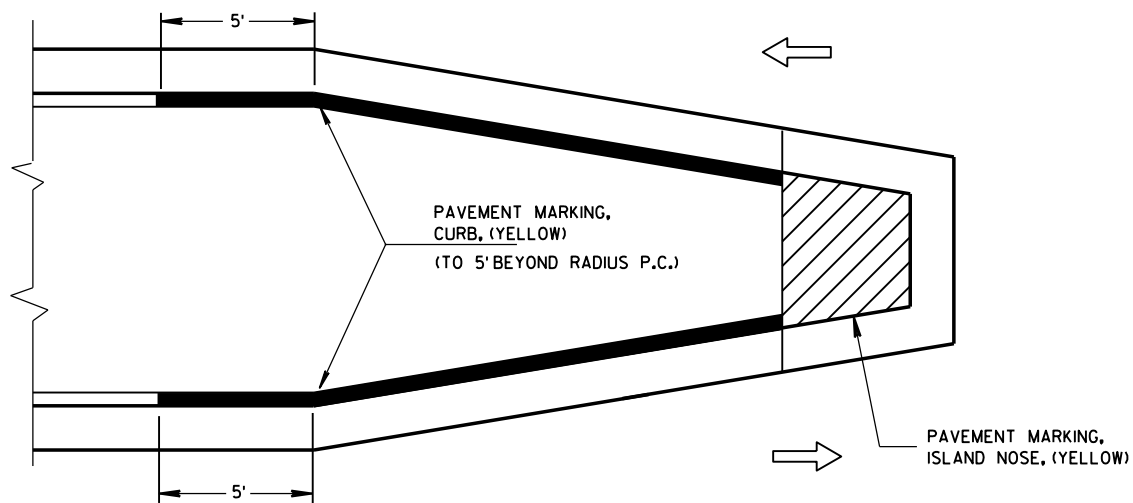
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

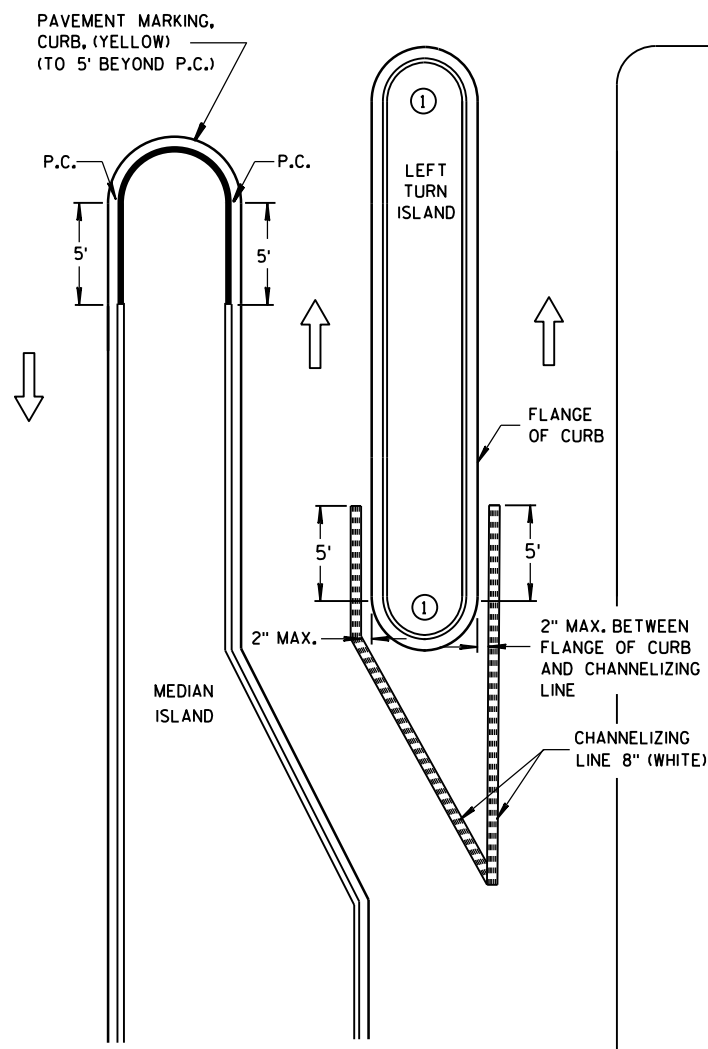


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

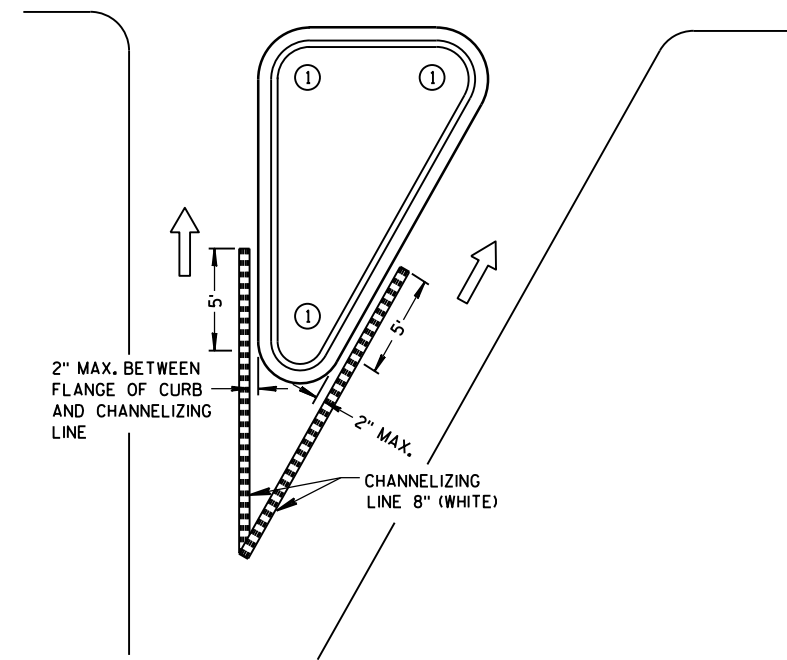
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

- 1 DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- 2 WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



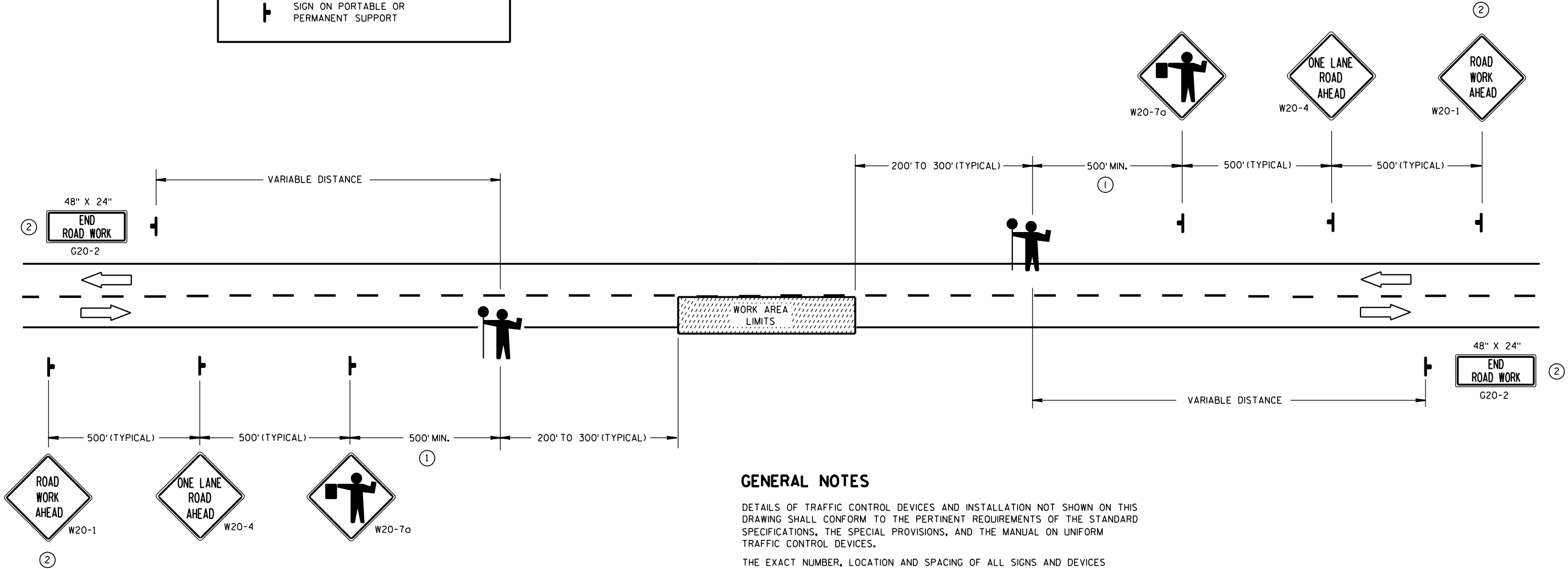
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

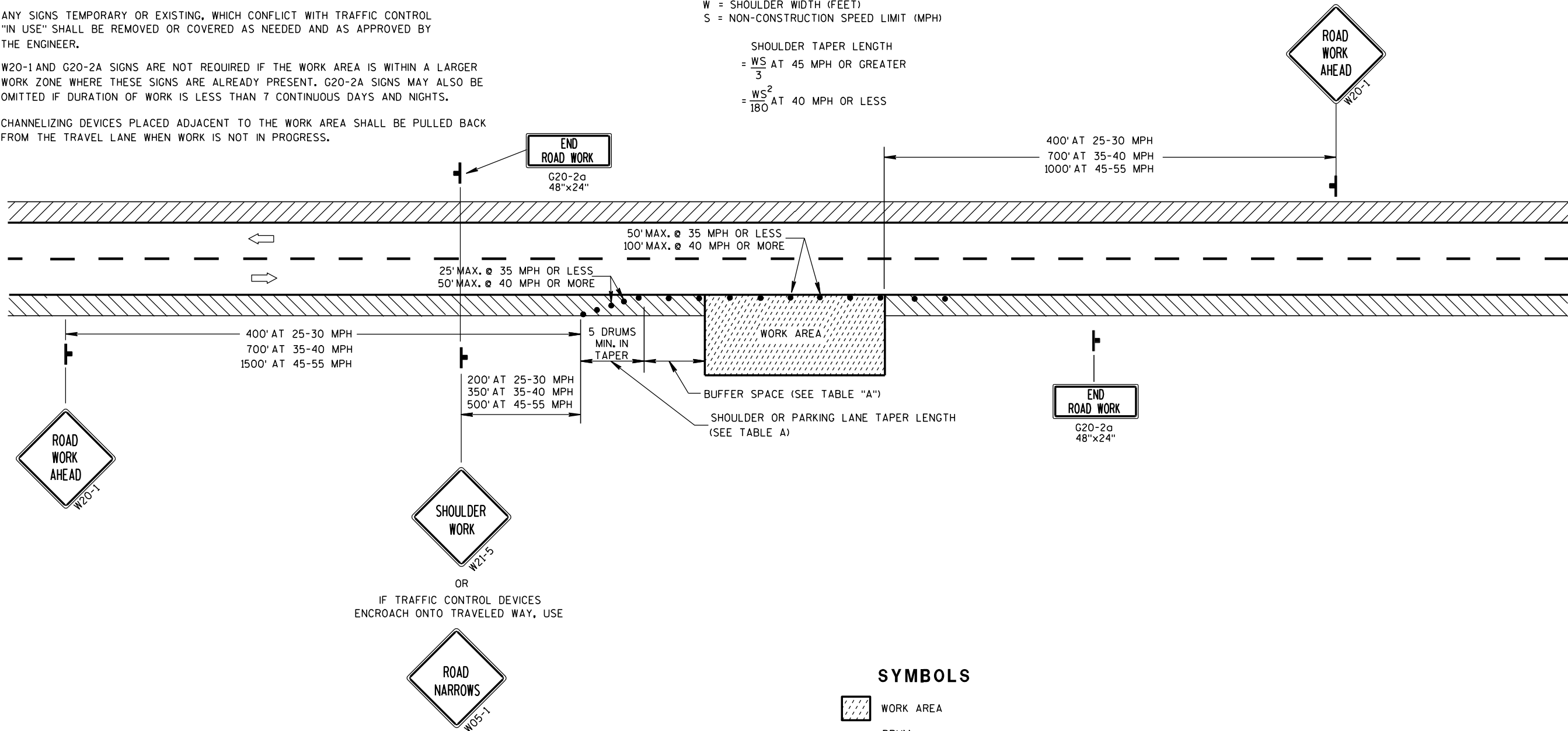
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W		SHOULDER TAPER LENGTH (FEET)				BUFFER SPACE (FEET)
		4	6	8	10	
30	20	30	40	50		85
35	30	45	55	70		120
40	40	55	75	90		170
45	60	90	120	150		220
50	70	100	135	170		280
55	75	110	150	185		335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

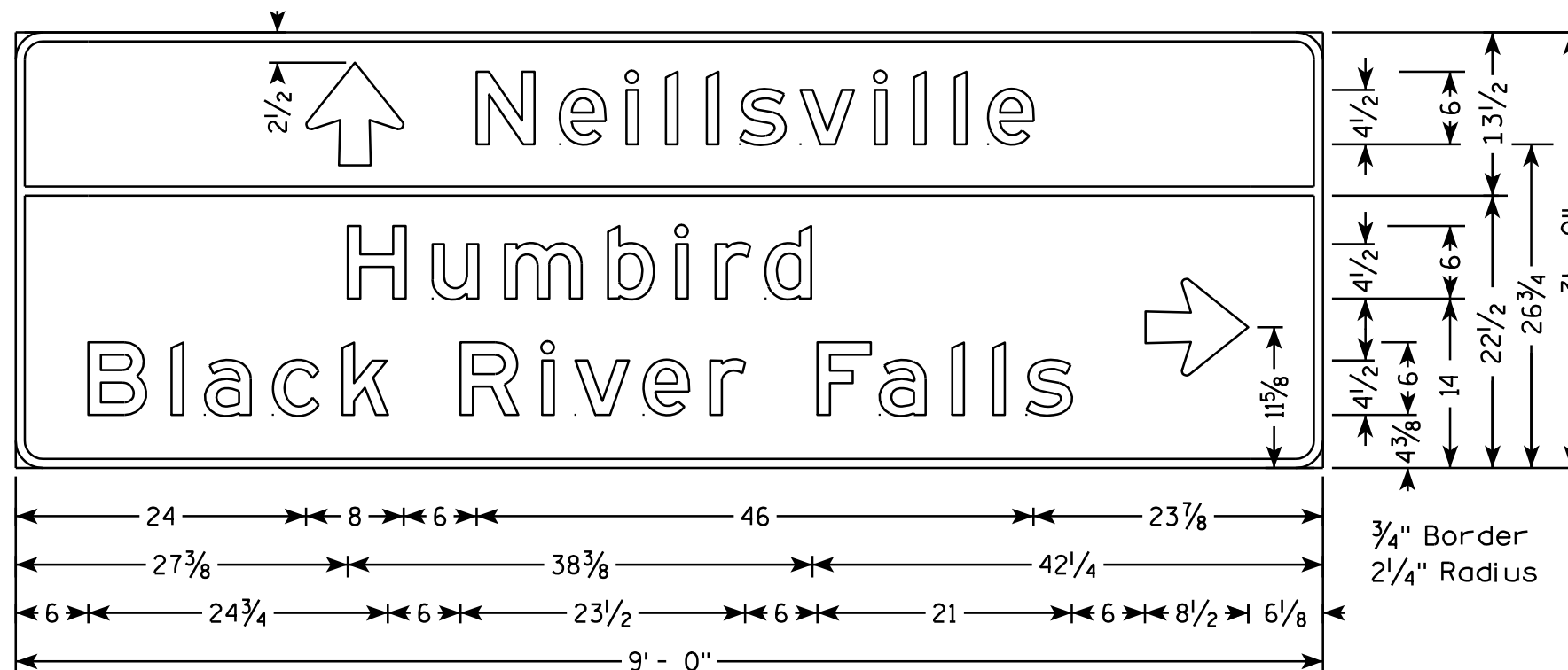
SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

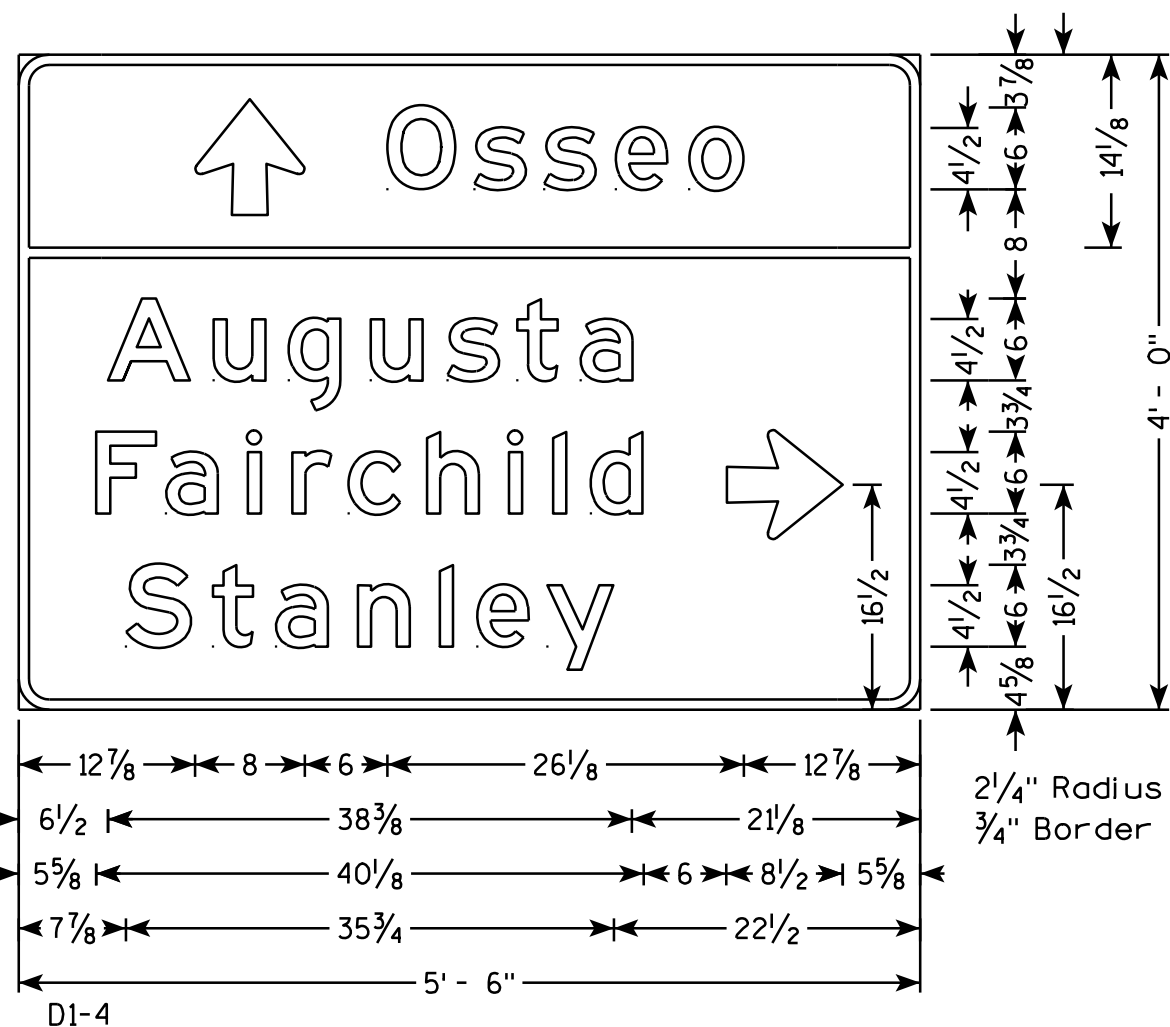
- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	

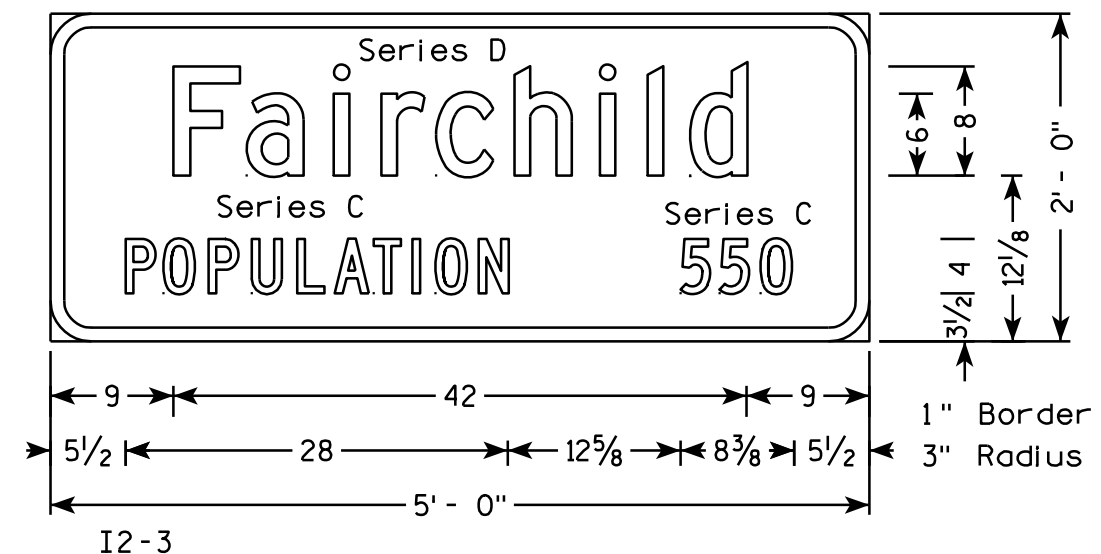


D1-3

- NOTES**
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Green
Message - White
 3. Message Series - E except as noted



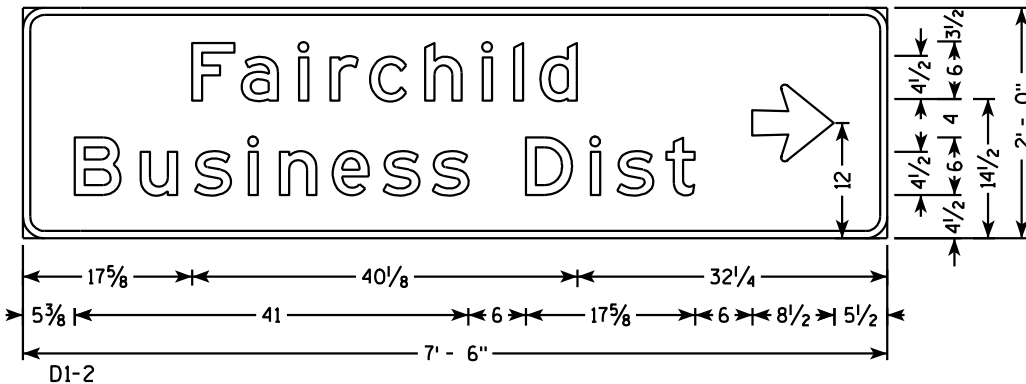
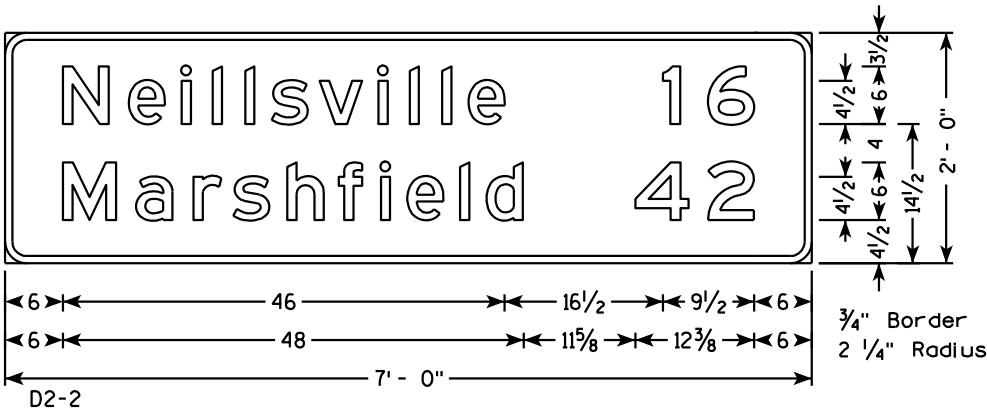
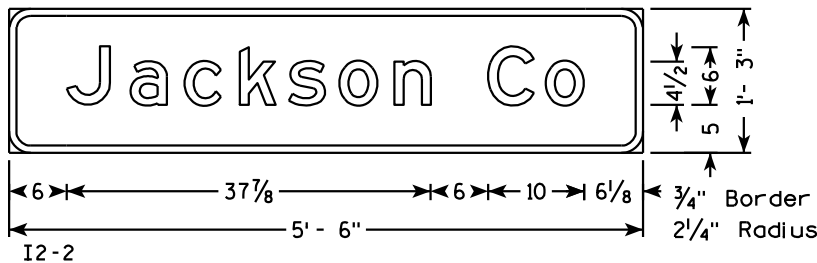
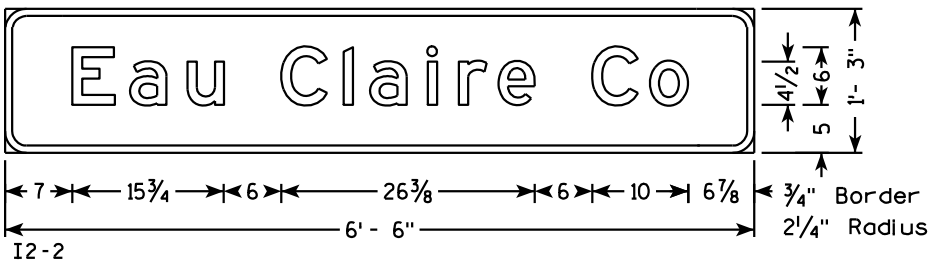
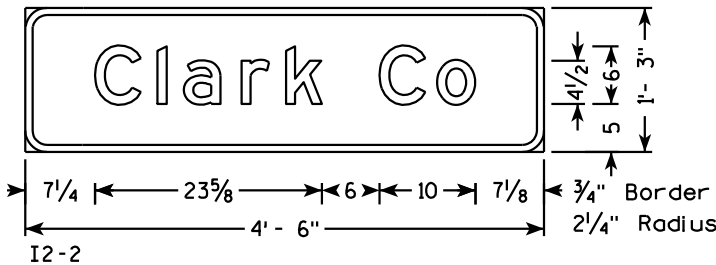
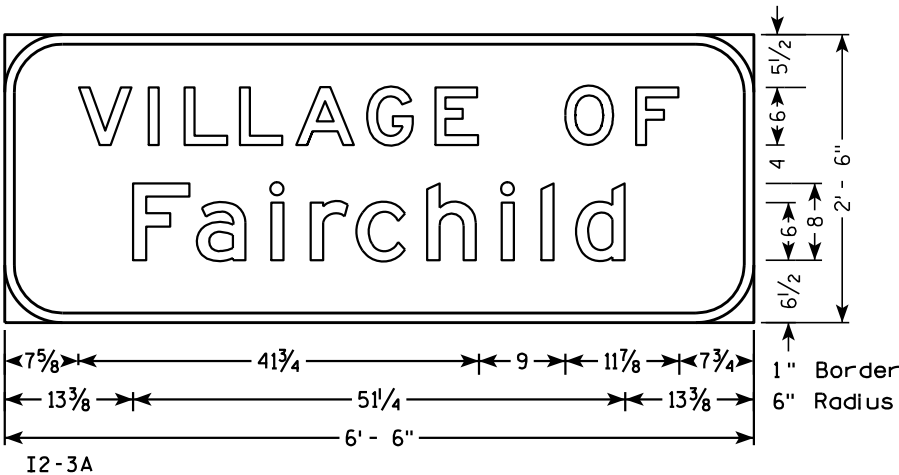
D1-4



I2-3

NOTES

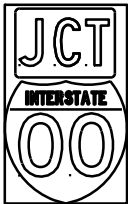
1. All SignType II - Type H Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - E except as noted



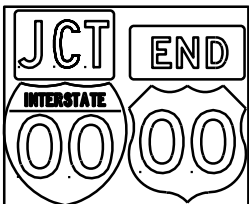
7

7

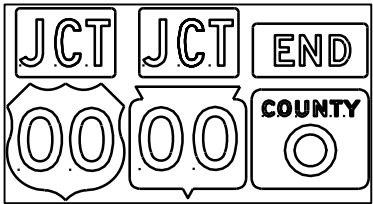
TYPICAL ASSEMBLIES



J1-1



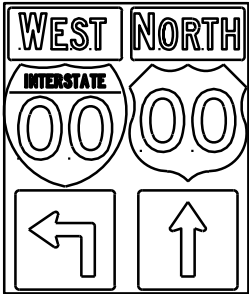
J1-2



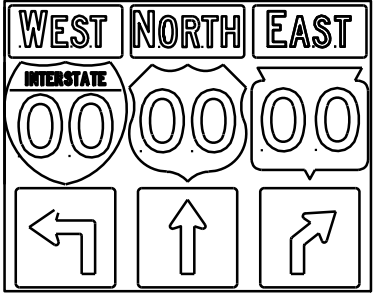
J1-3



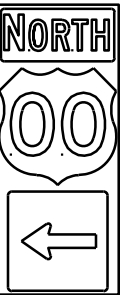
J2-1



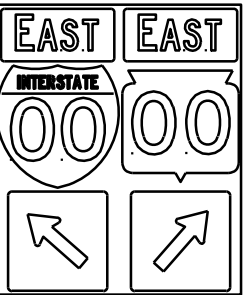
J2-2



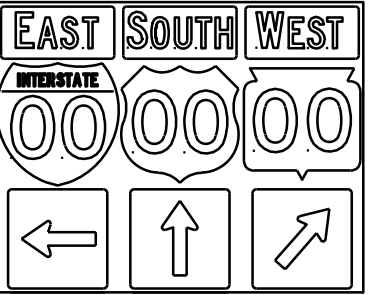
J2-3



J3-1



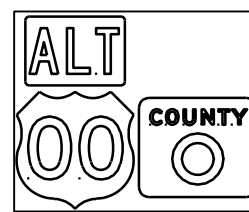
J3-2



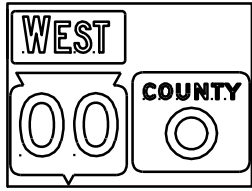
J3-3



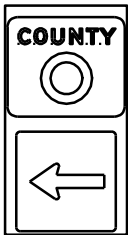
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

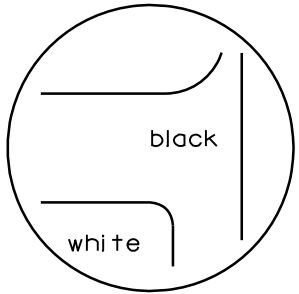
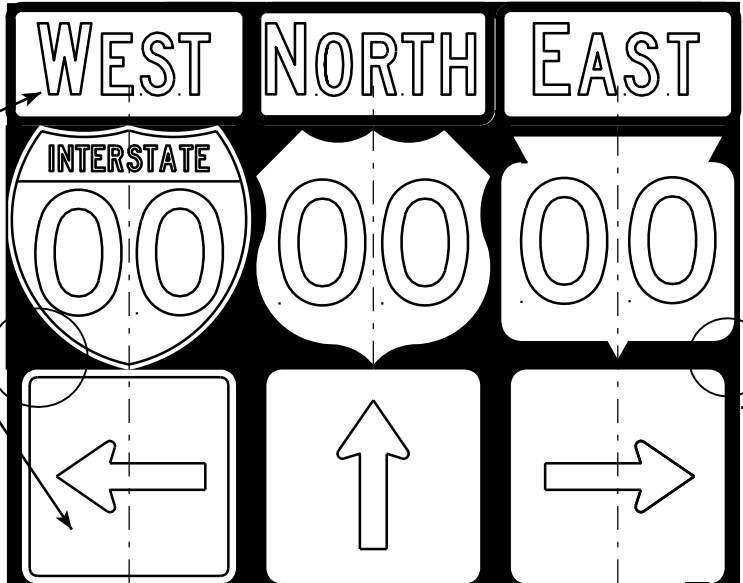
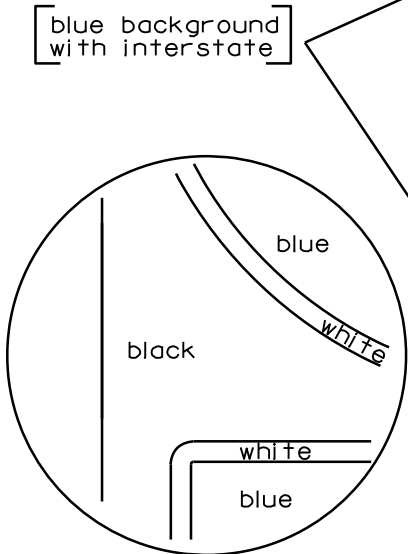


J22-1



JV

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



[black background]

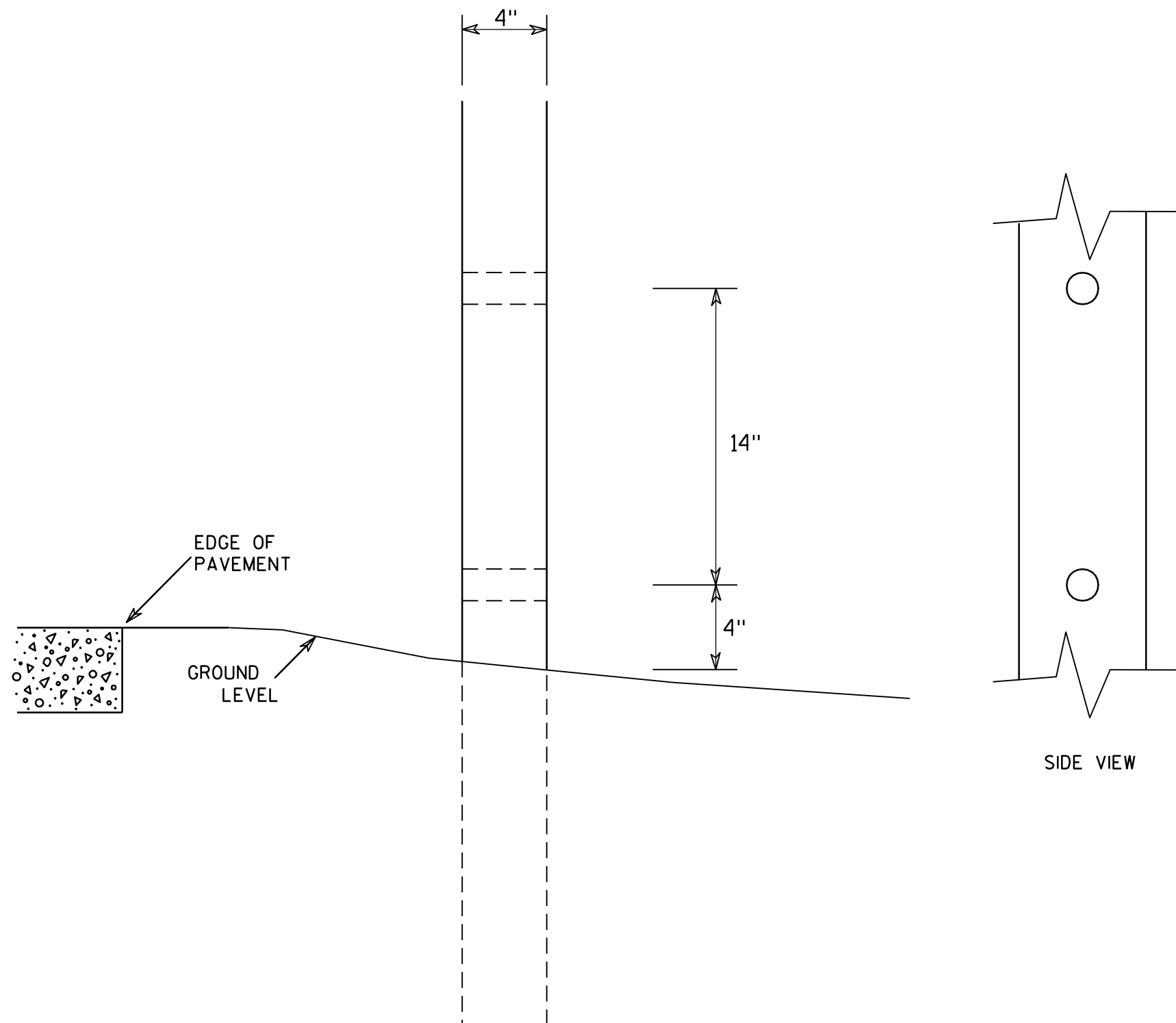
ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 3/25/13 PLATE NO. A2-1S.7

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.

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

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:

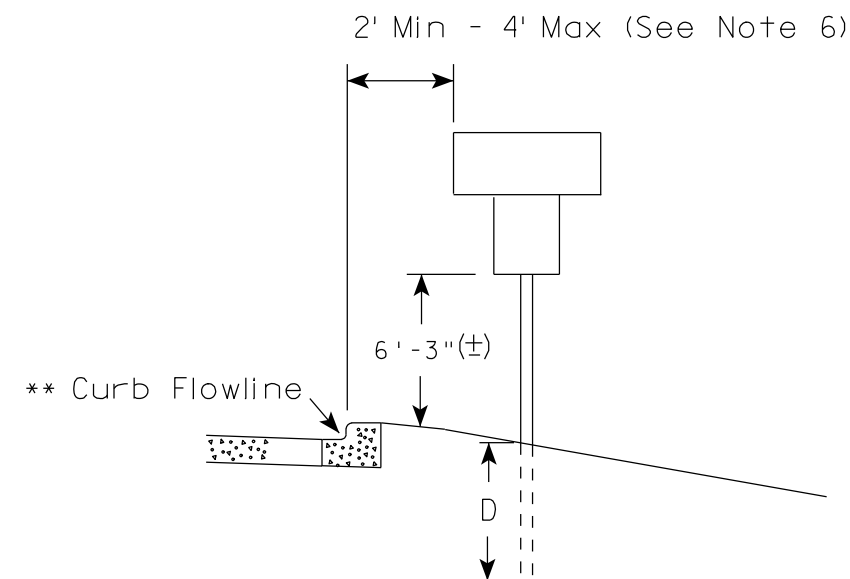
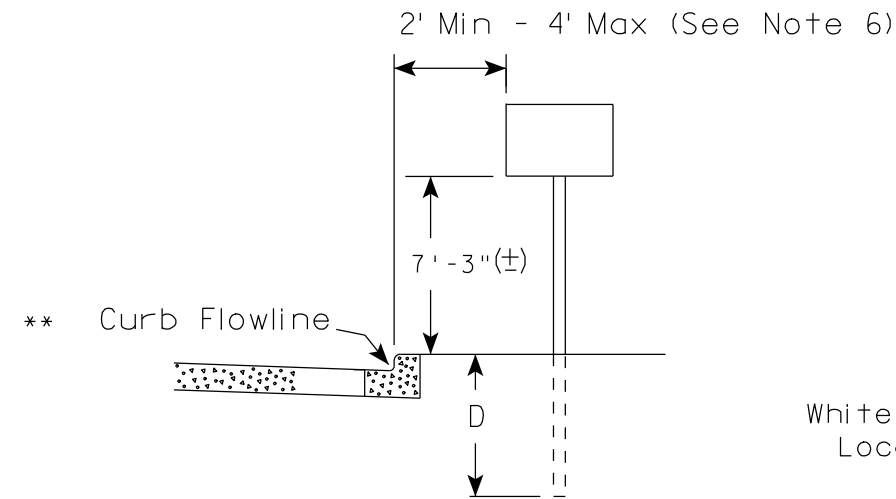
HWY:

COUNTY:

SHEET NO:

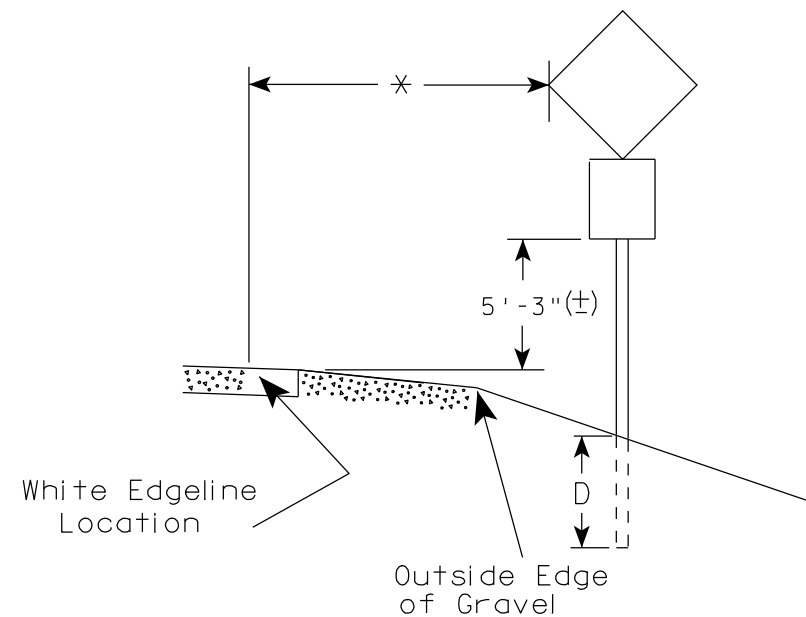
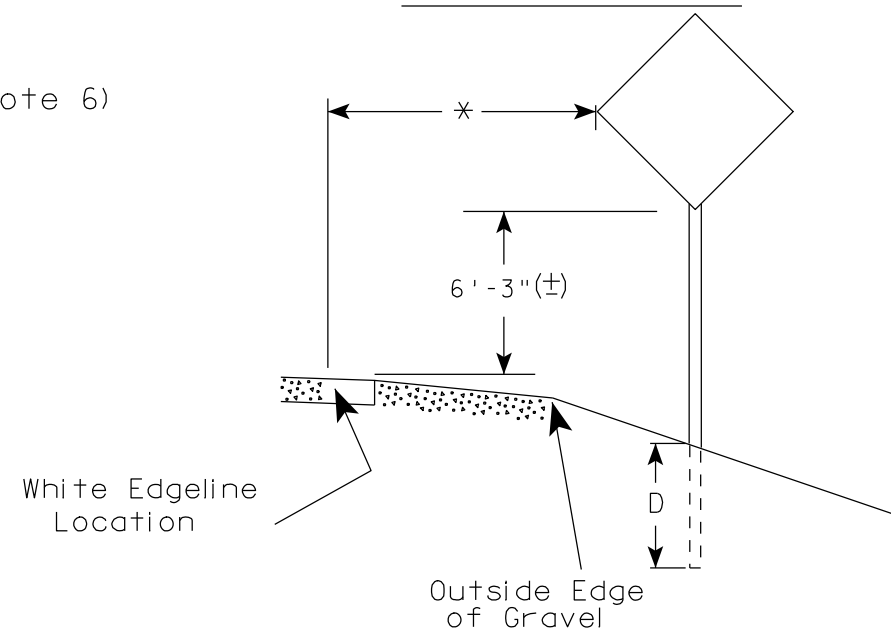
E

URBAN AREA



* * 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.

RURAL AREA (See Note 2)



* 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.

GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. 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 (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/24/2013 PLATE NO. A4-3.17

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

GENERAL NOTES

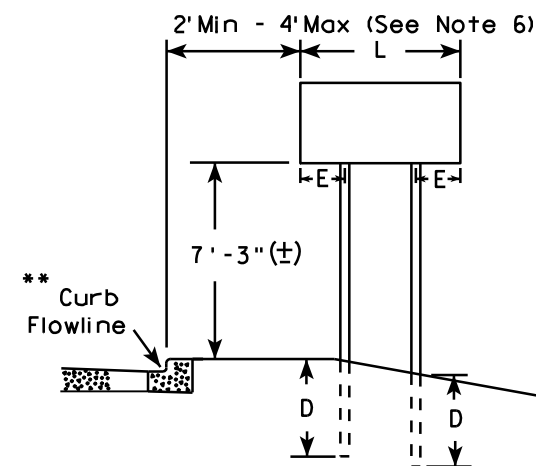
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

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

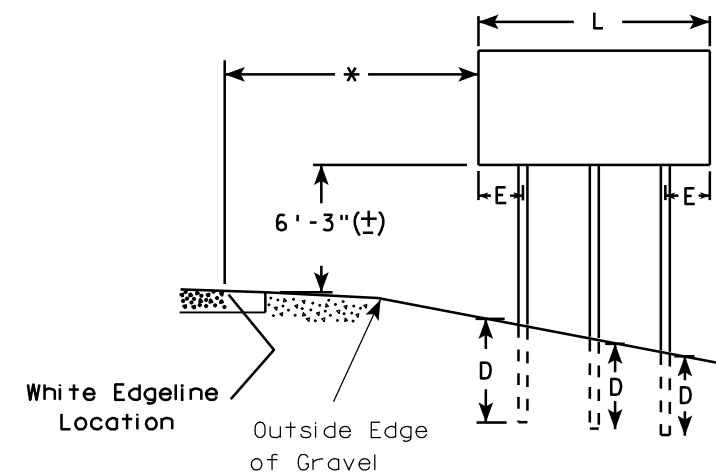
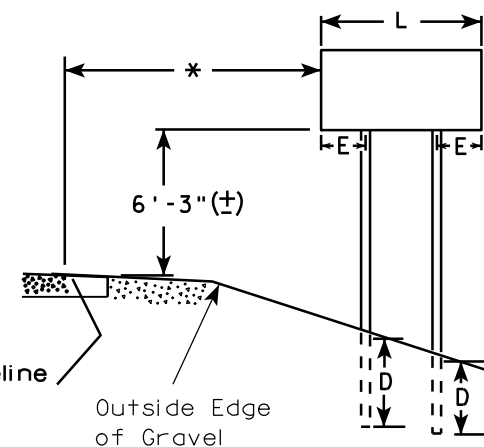
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

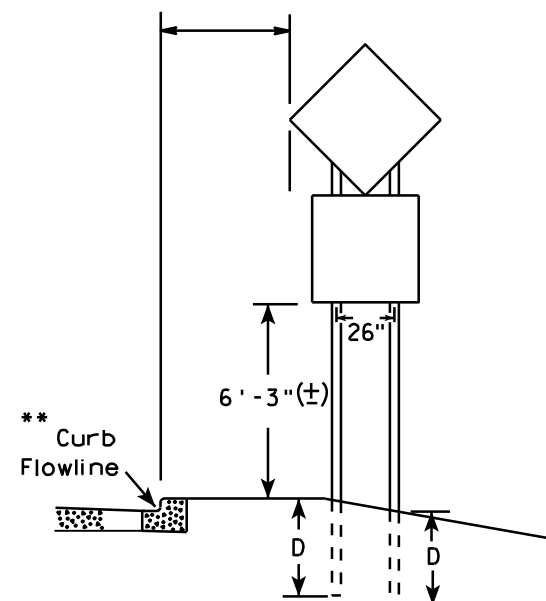
URBAN AREA



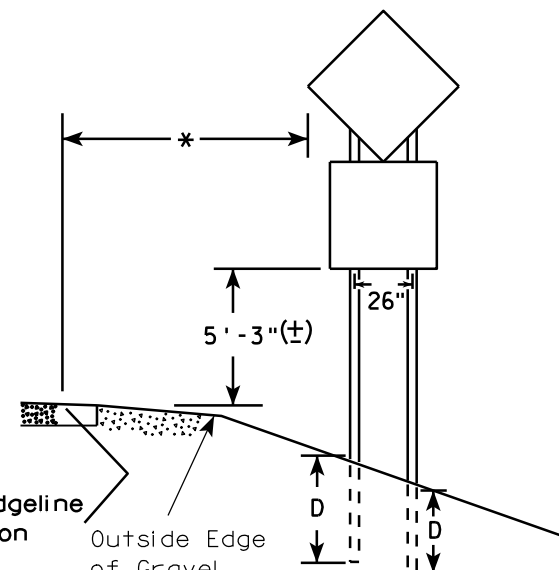
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 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 9/21/2011 PLATE NO. A4-4.11

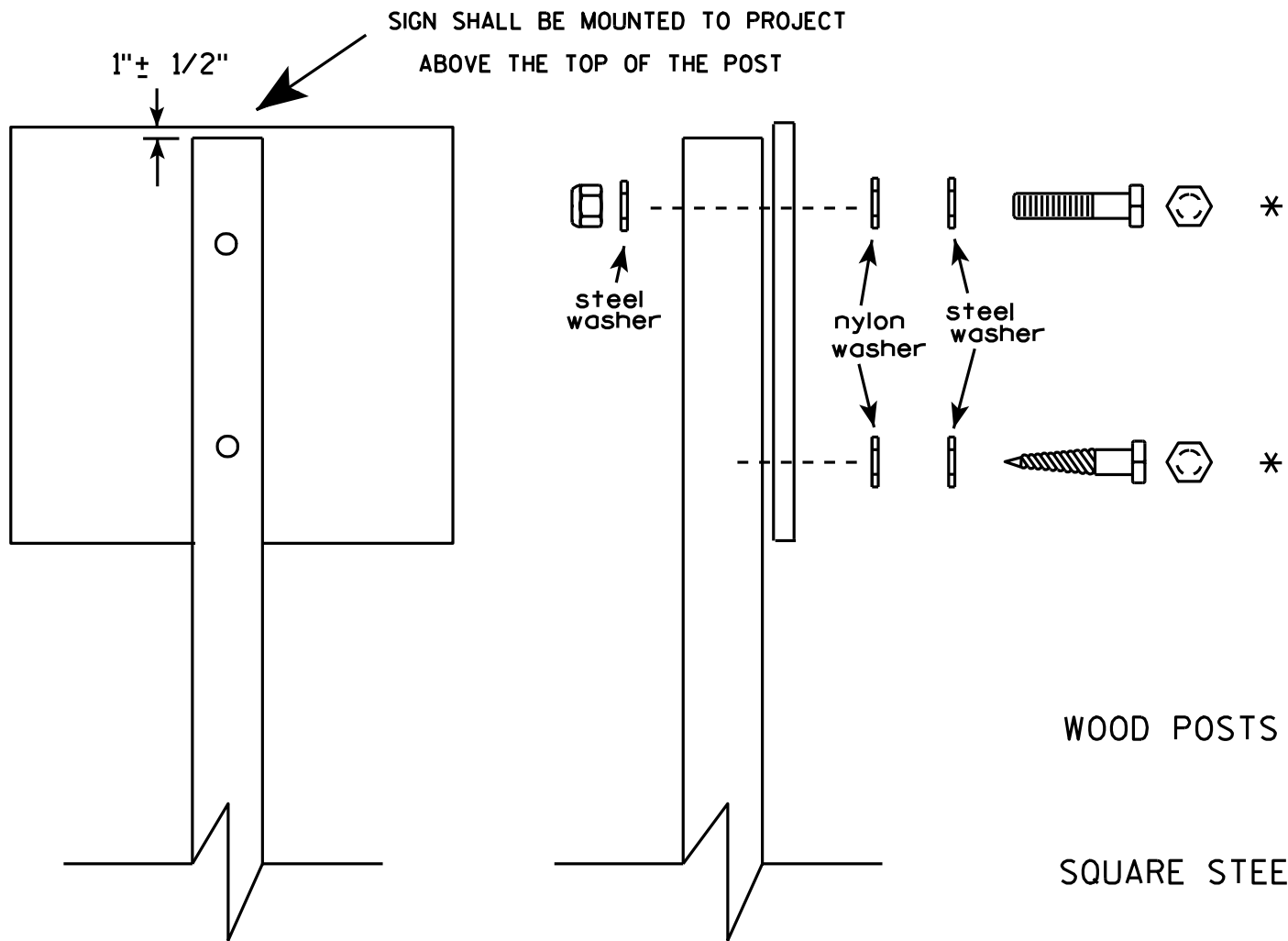
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

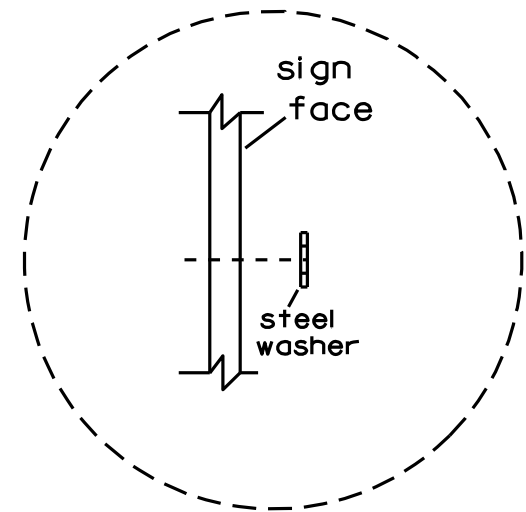


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



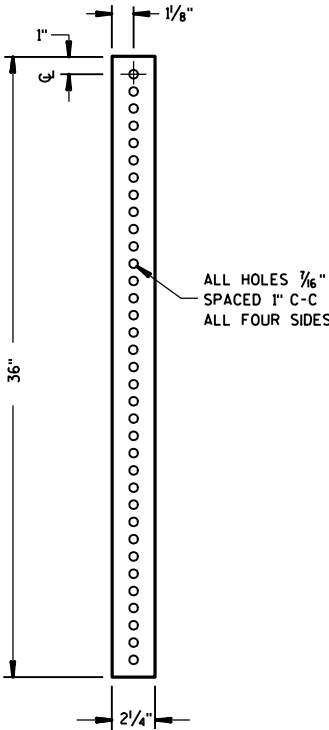
Washer Placement when Sign Has Other Than Type H or Type F Face

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

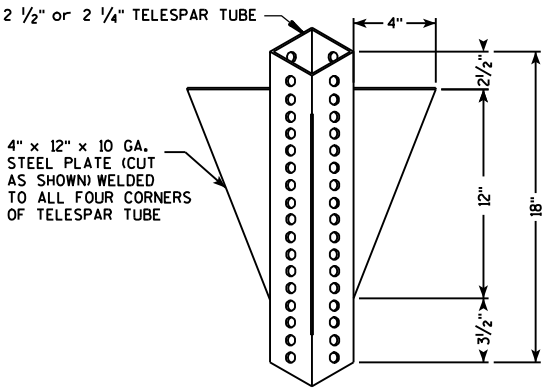
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

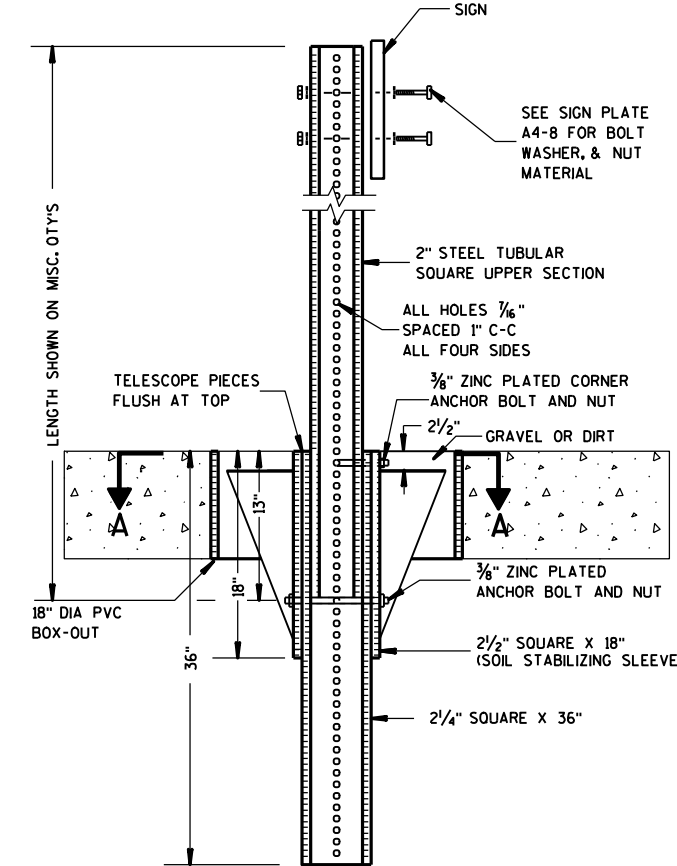
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



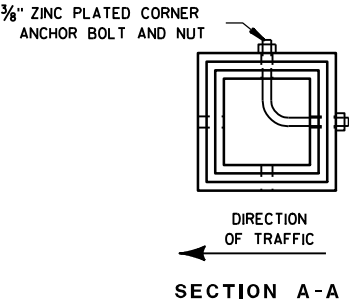
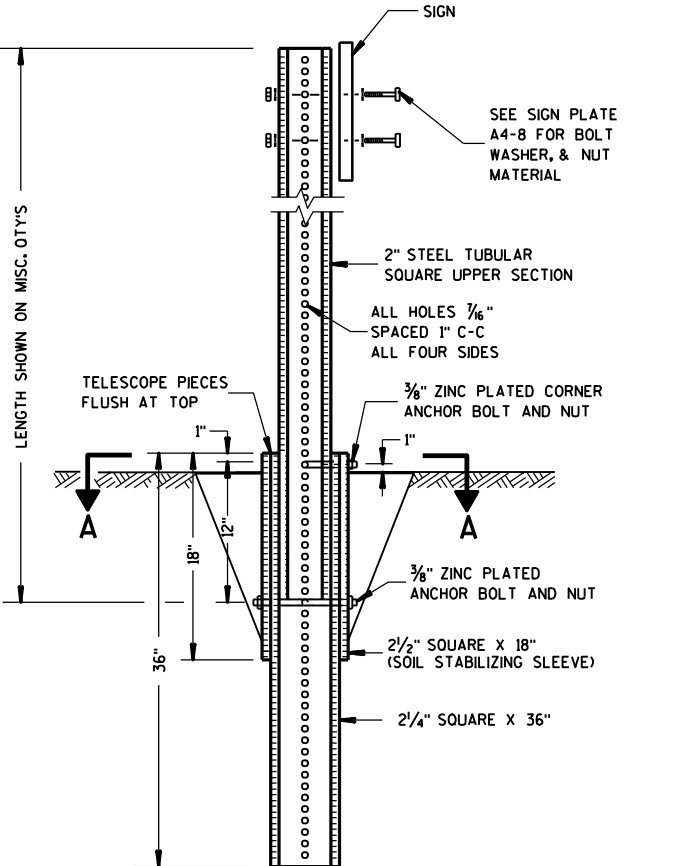
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

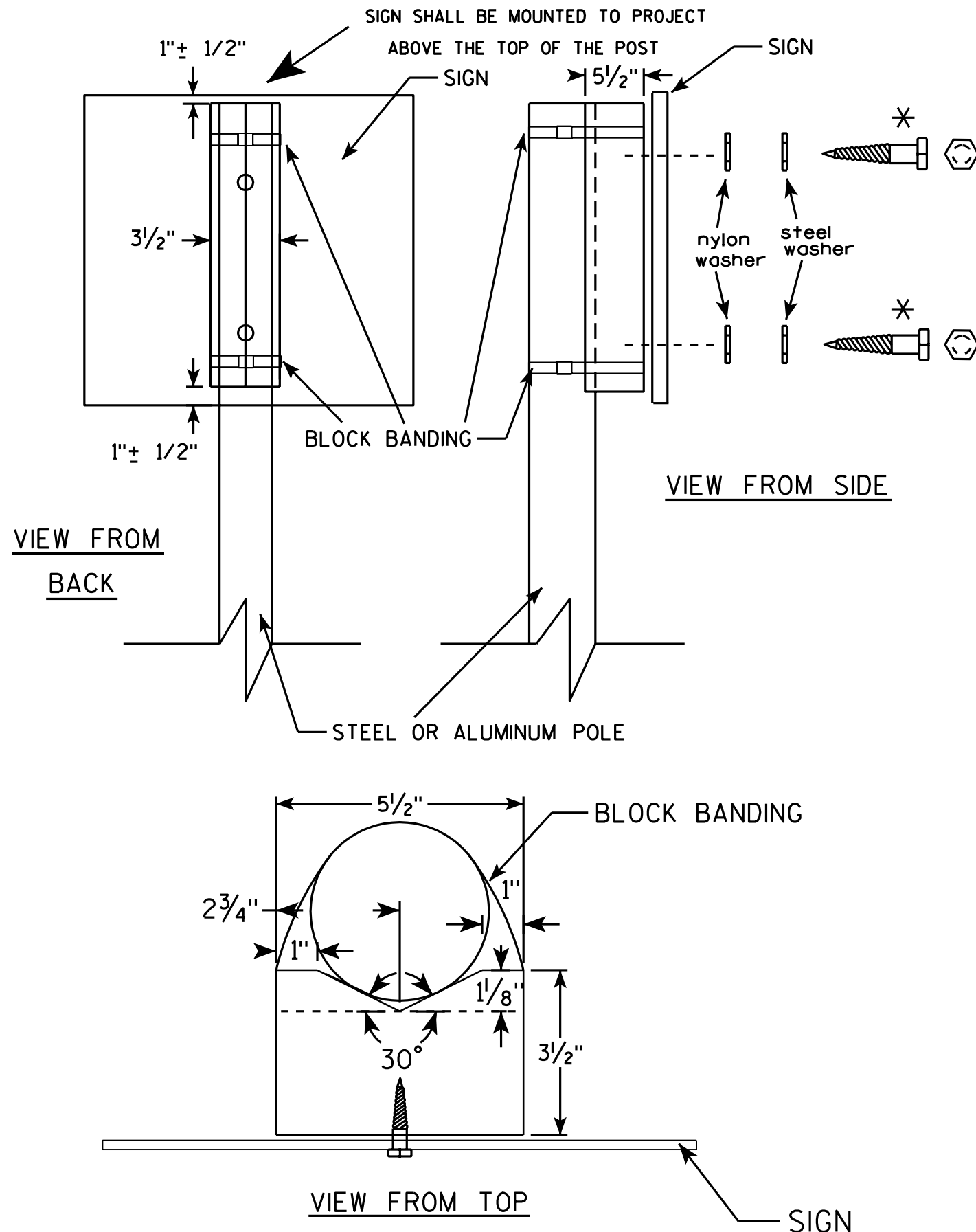
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/30/12 PLATE NO. A4-9.7



GENERAL NOTES

1. WOOD 4"x6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

* LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

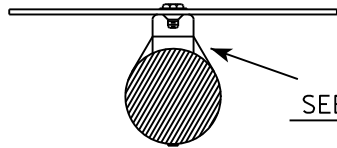
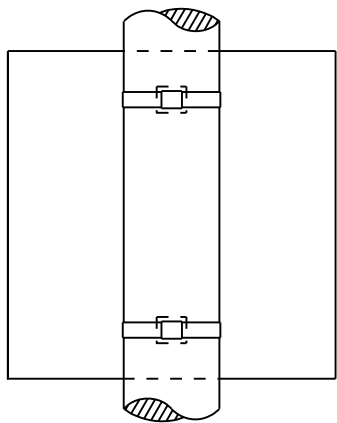
PROJECT NO:

SHEET NO:

E

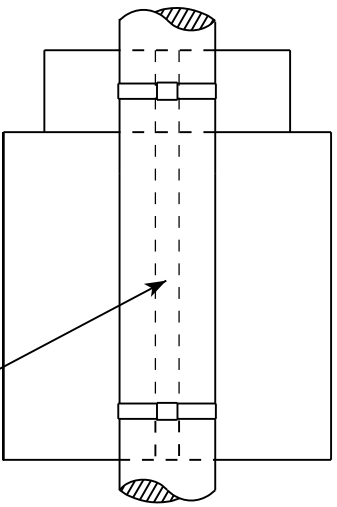
BANDING

SINGLE SIGN

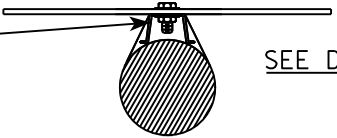


SEE DETAIL A

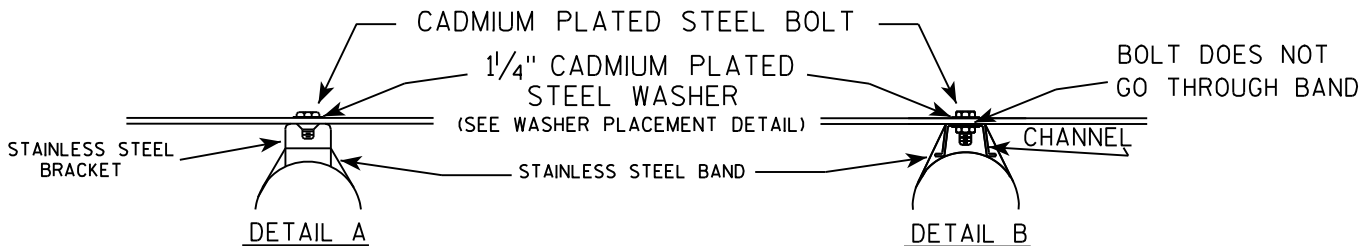
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



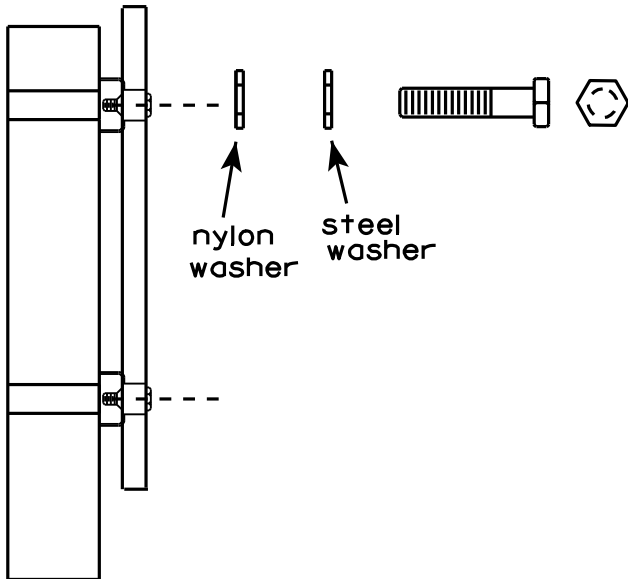
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

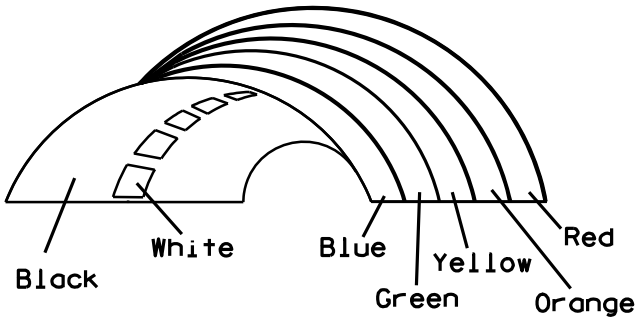
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3



* 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:

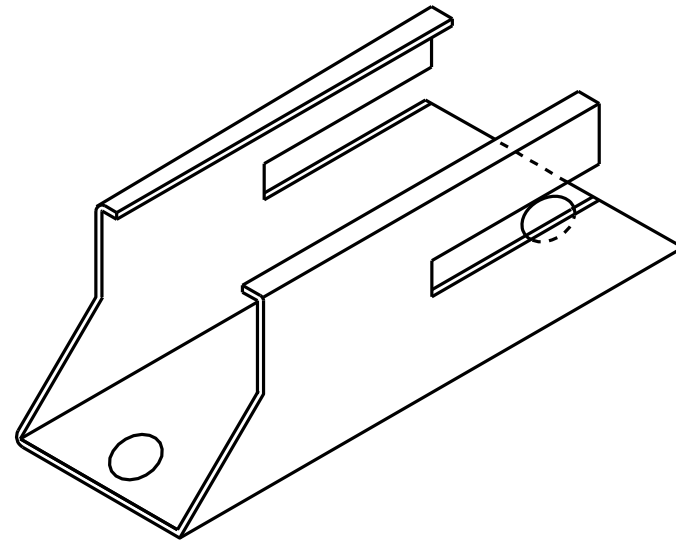
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

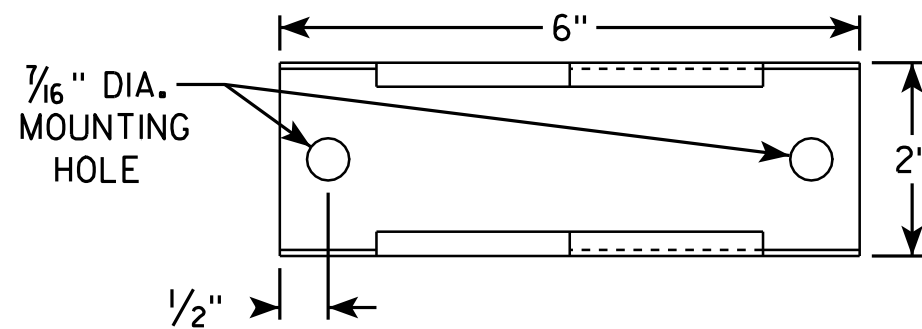
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

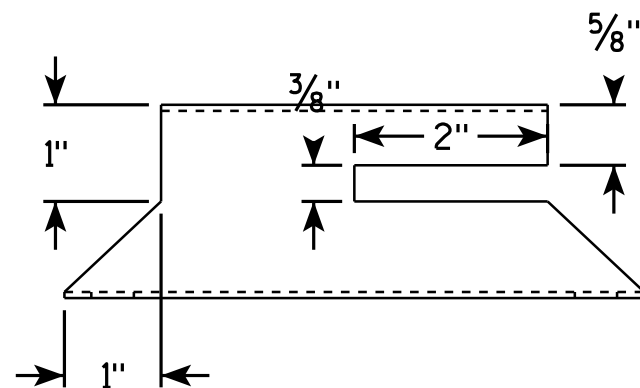
ISOMETRIC VIEW



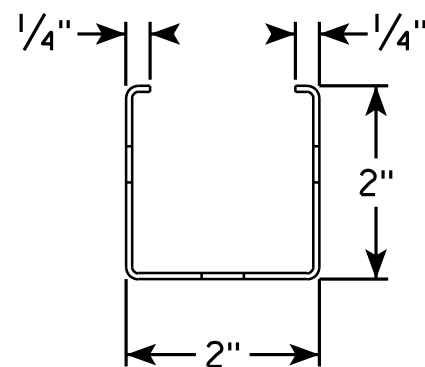
TOP VIEW



SIDE VIEW



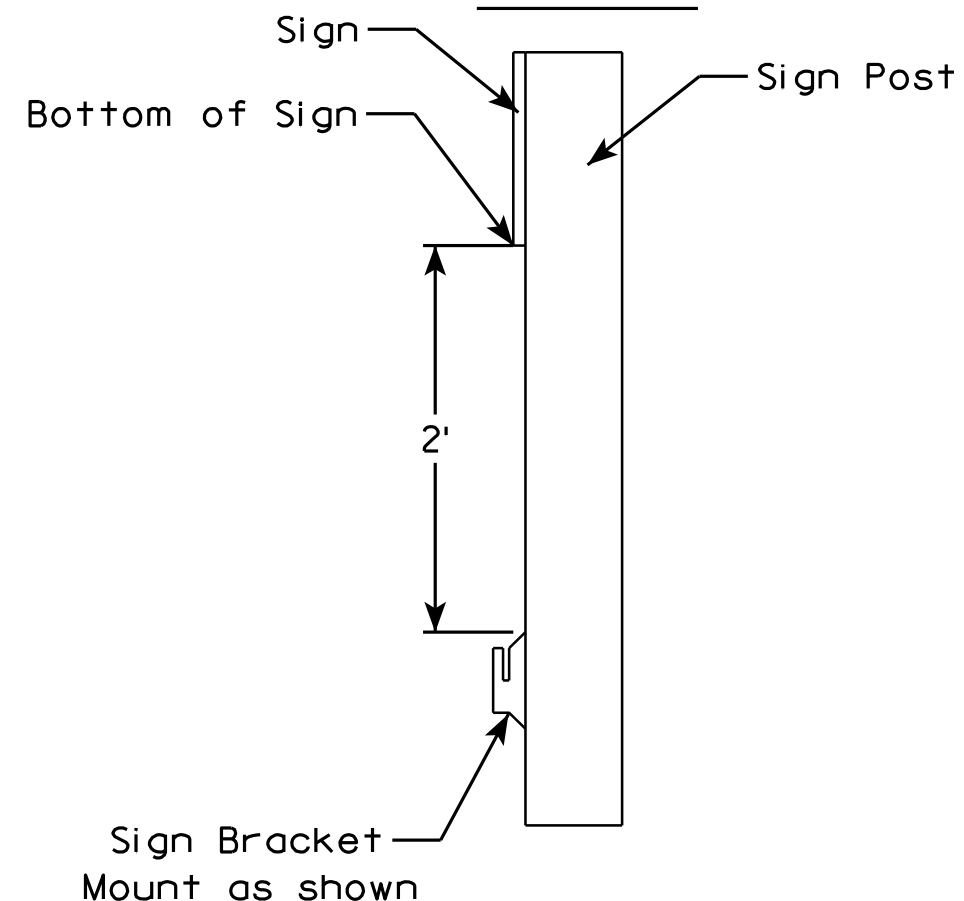
END VIEW



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

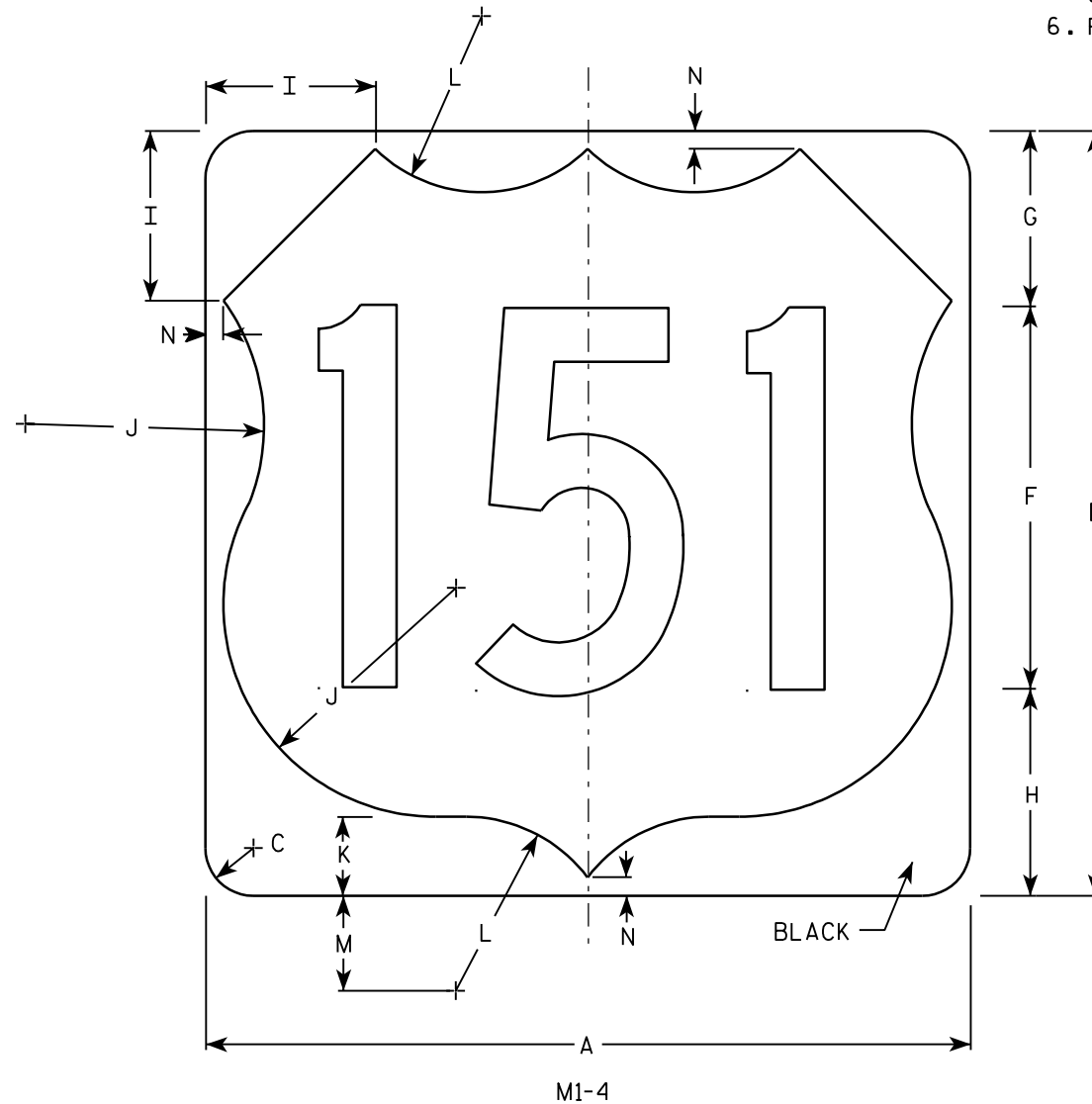
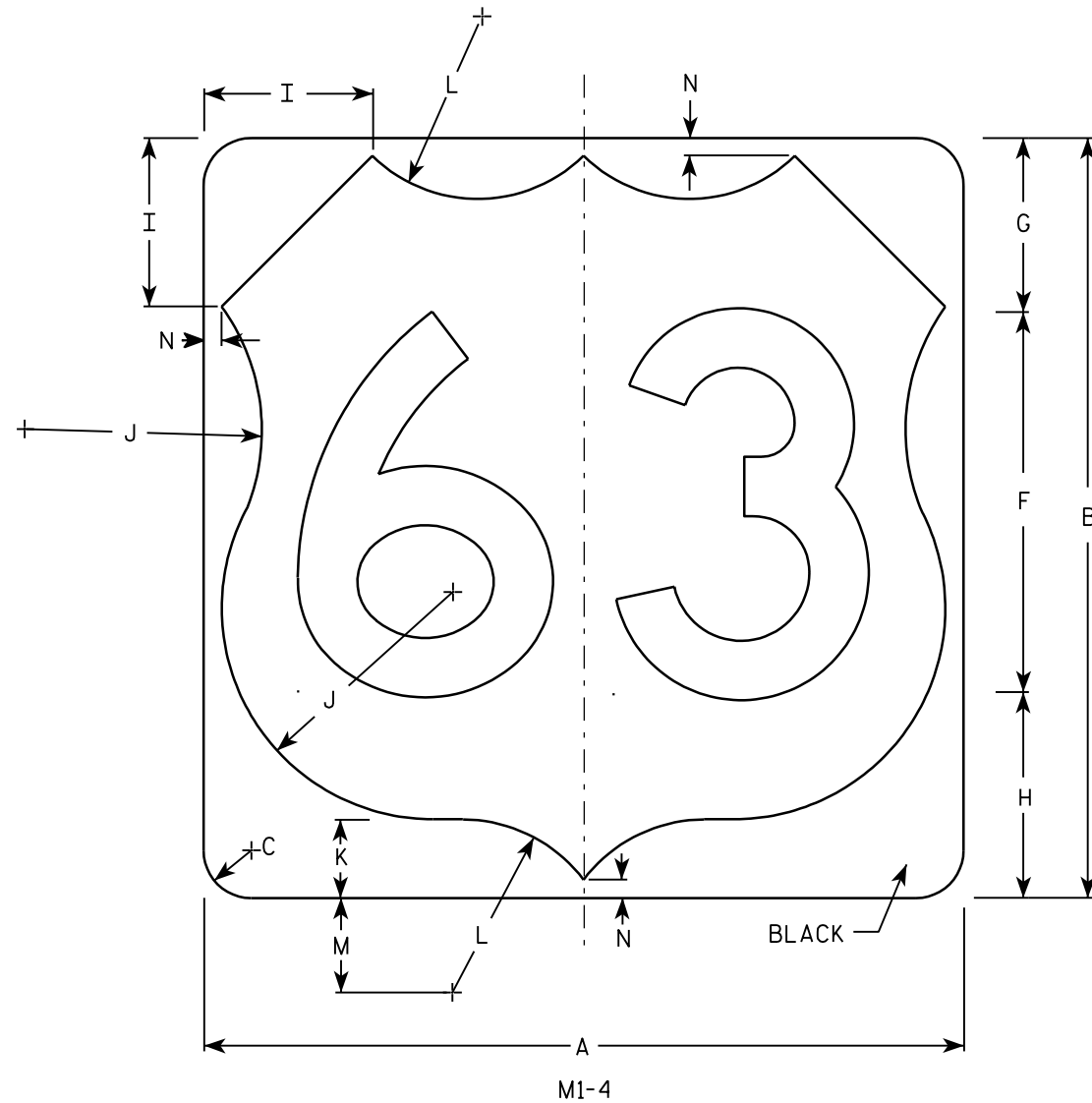
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

NOTES

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



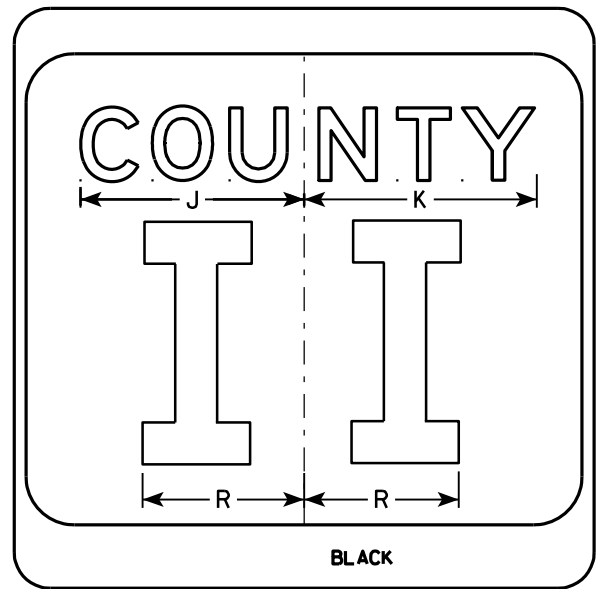
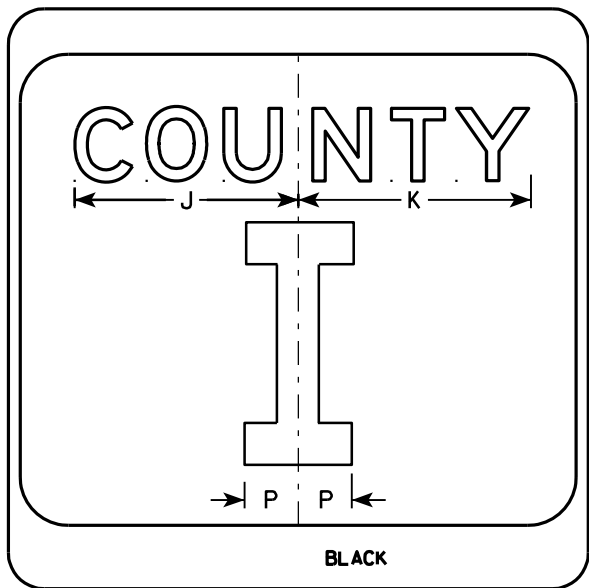
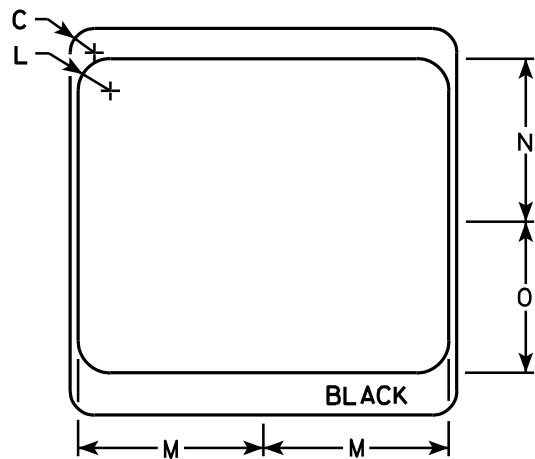
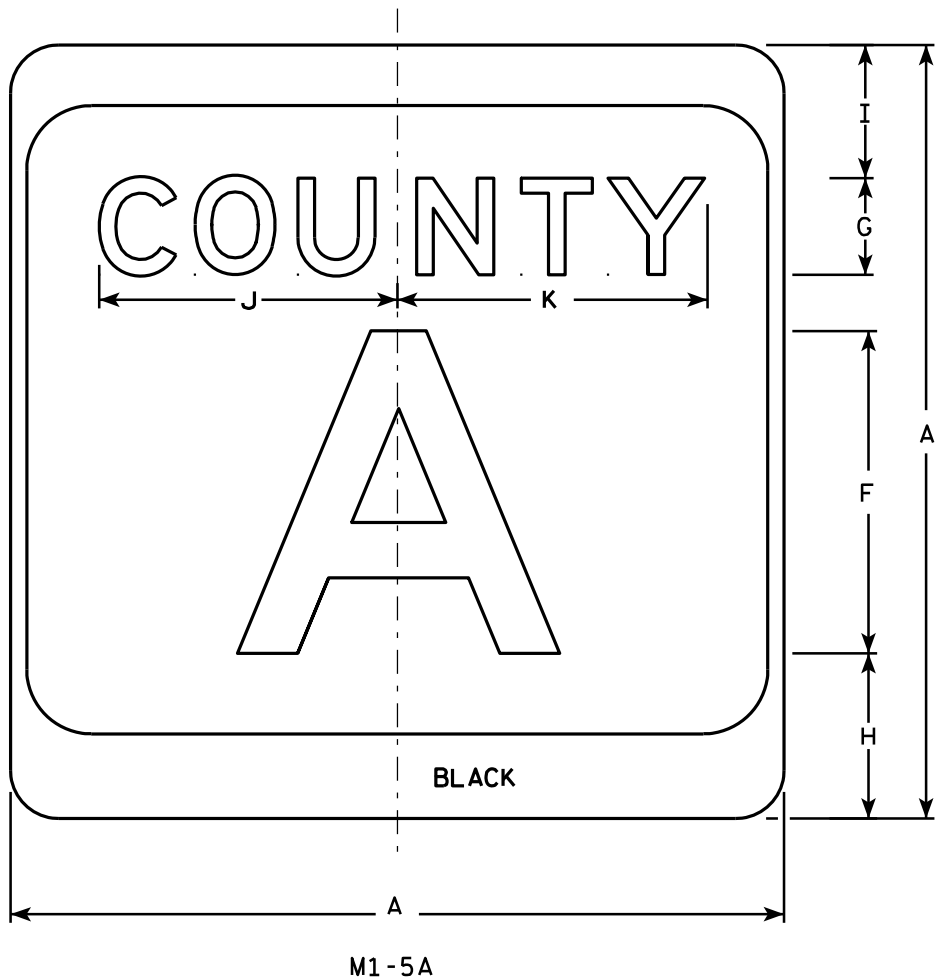
Metric equivalent
for this sign is:

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	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

PROJECT NO: HWY: COUNTY: SHEET NO: E

7



NOTES

- Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 7
Message - Black
- Message Series - see Note 5
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 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.
- Substitute appropriate letters & optically center to achieve proper balance.
- 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:

E

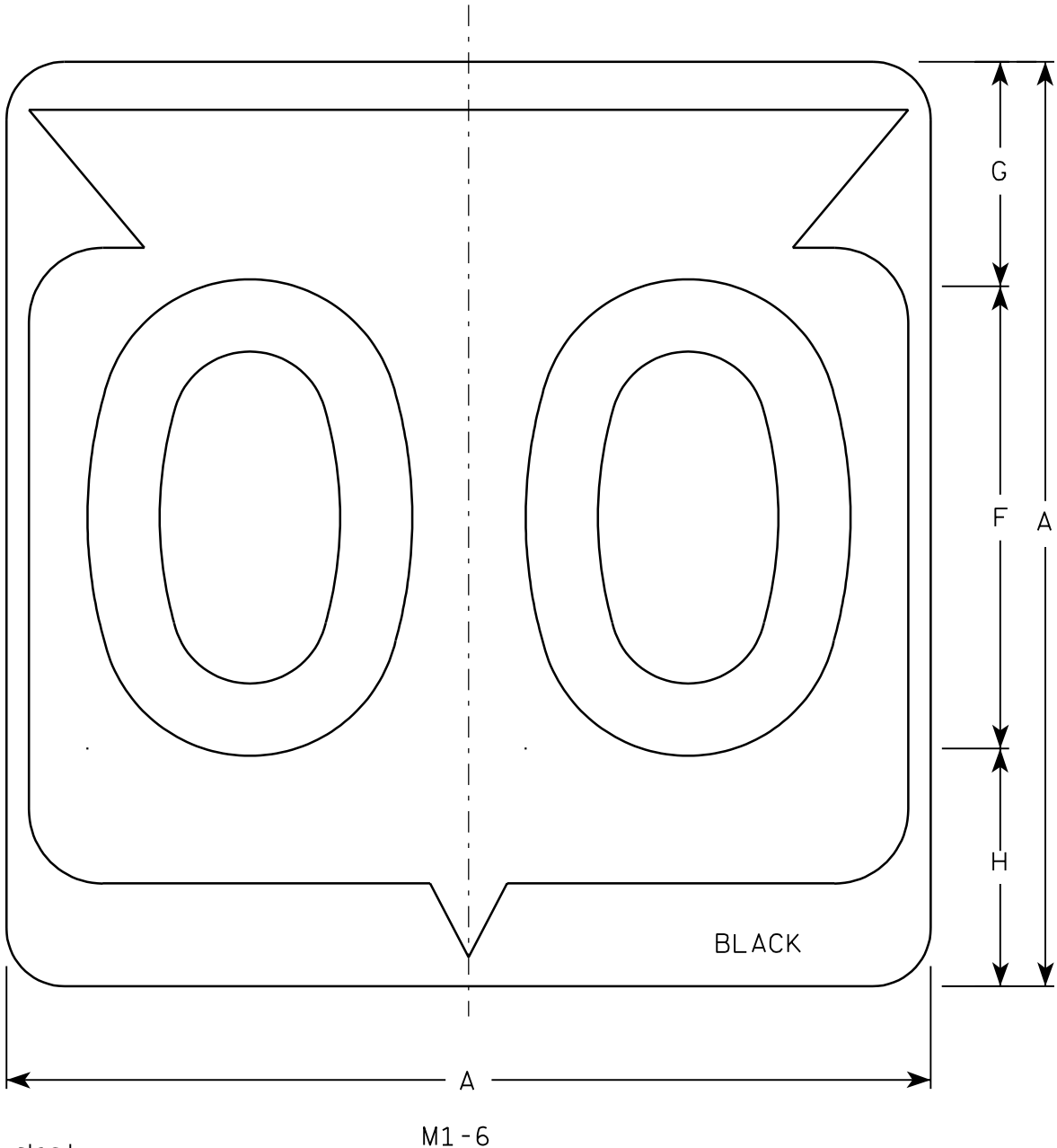
CTH MARKER
M1-5A FOR ASSEMBLIES

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:

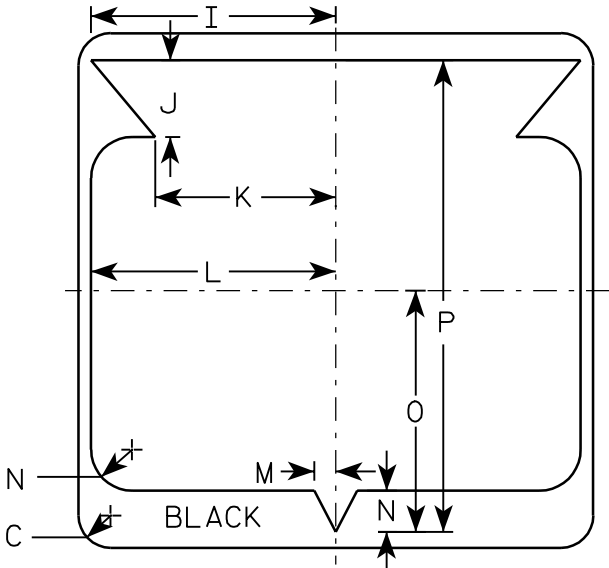
COUNTY:

SHEET NO:

E

NOTES

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



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

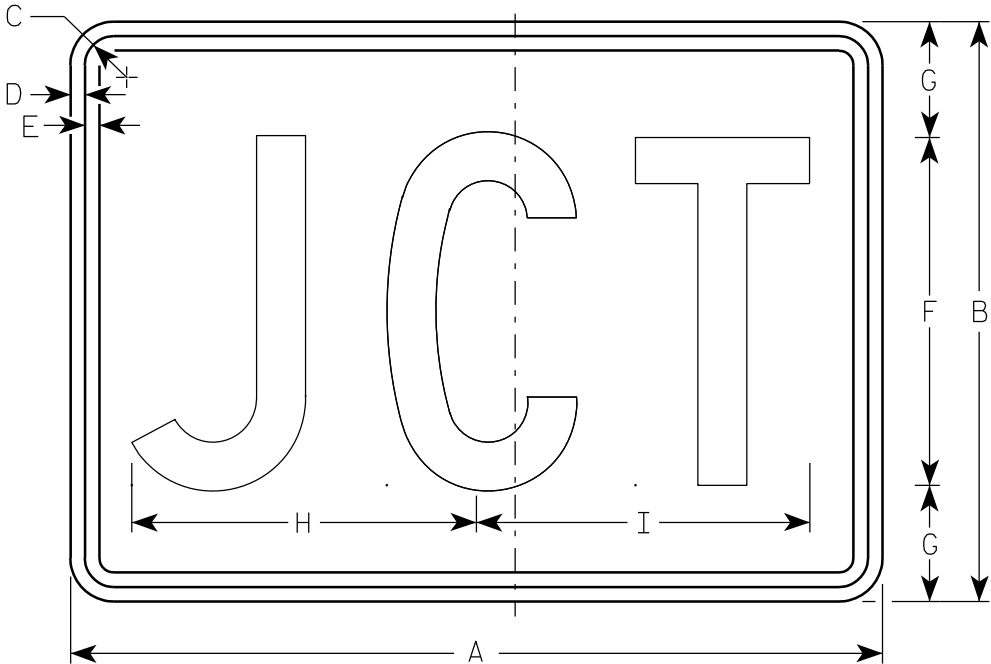
APPROVED 
for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

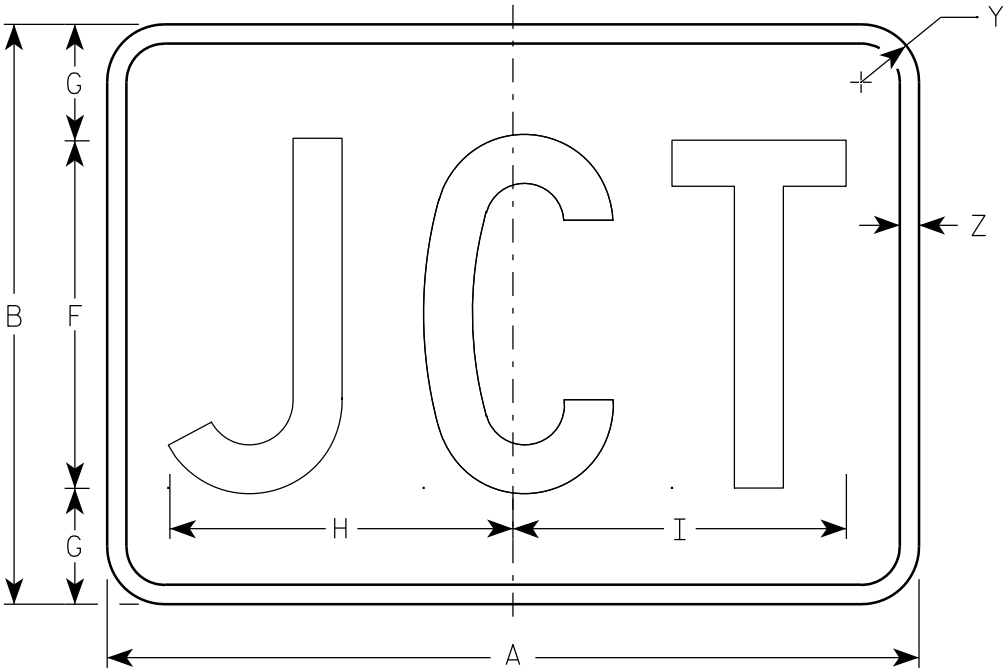
7

NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

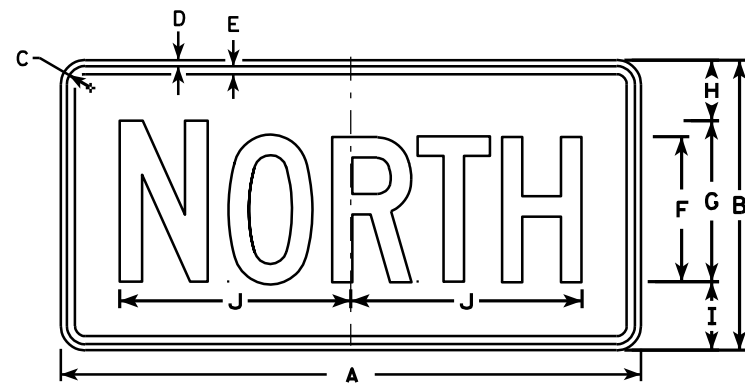
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
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	0.20

STANDARD SIGN
M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

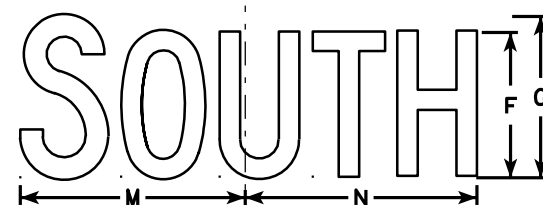
DATE 3/16/10 PLATE NO. M2-1.10



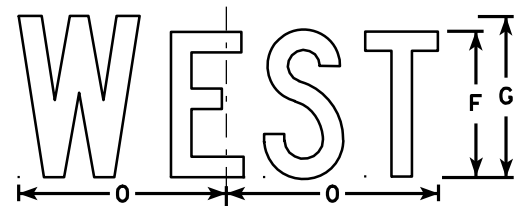
M3-1
MK3-1
M03-1



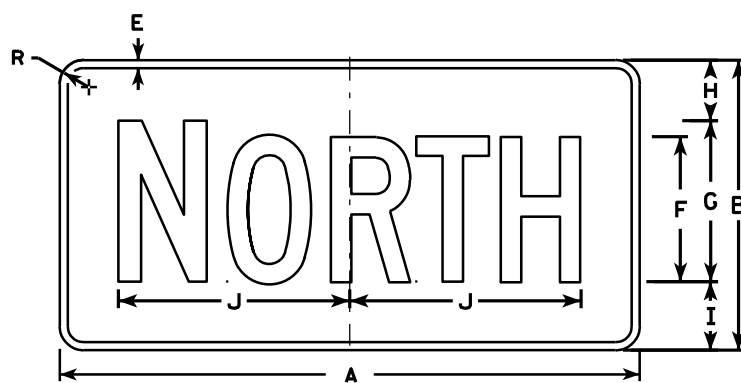
M3-2
MK3-2
M03-2



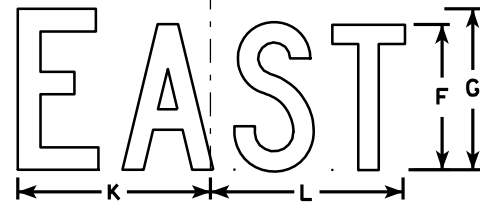
M3-3
MK3-3
M03-3



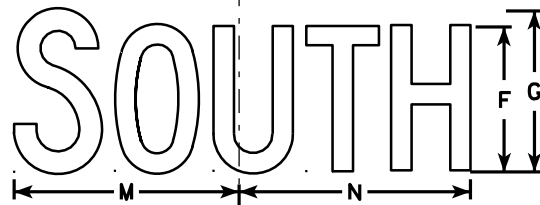
M3-4
MK3-4
M03-4



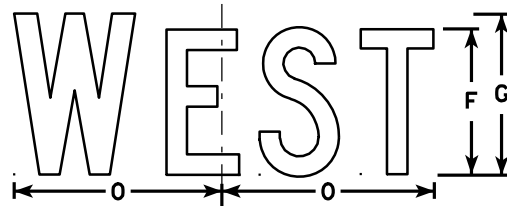
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
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

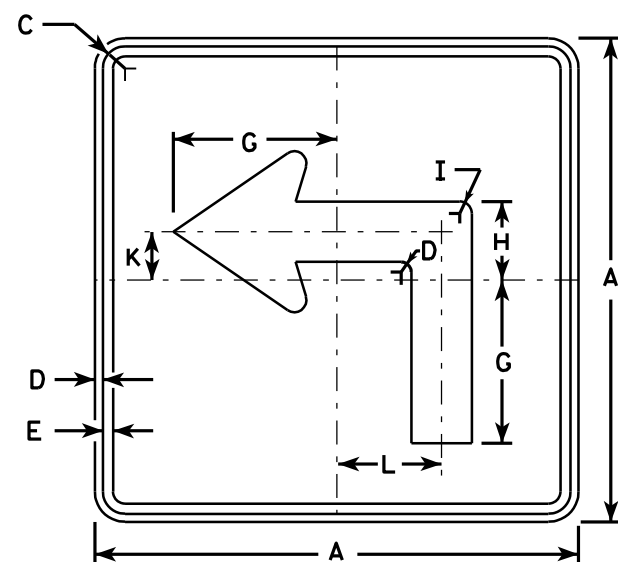
PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGNS M3-1 thru M3-4 SERIES

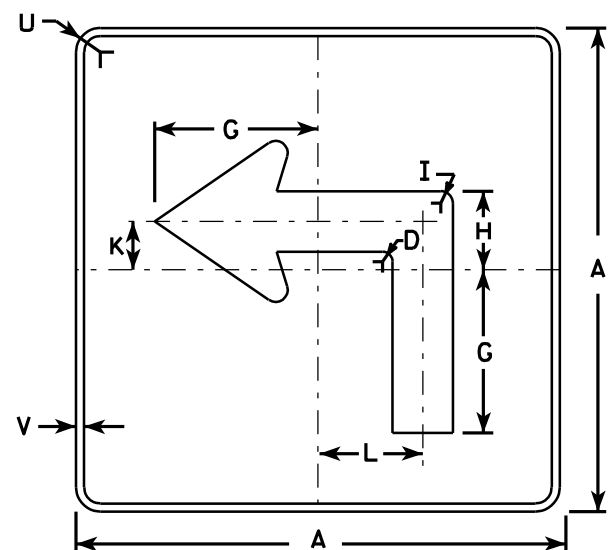
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

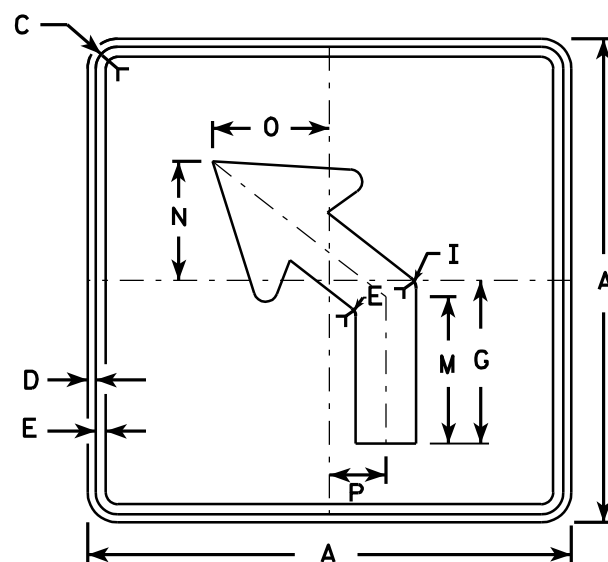
DATE 11/10/10 PLATE NO. M3-1.12



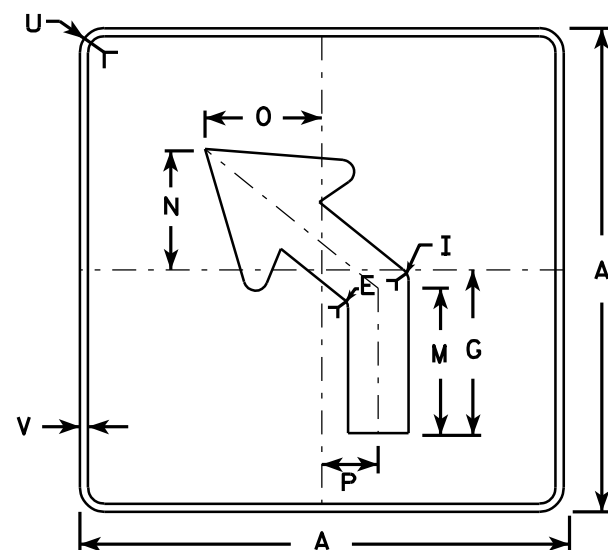
M5-1L
MK5-1L
MM5-1L
M05-1L
MP5-1L
MR5-1L



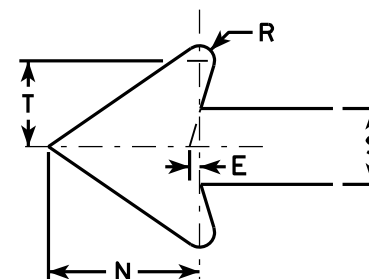
MB5-1L
MG5-1L
MN5-1L



M5-2L
MK5-2L
MM5-2L
M05-2L
MP5-2L
MR5-2L



MB5-2L
MG5-2L
MN5-2L



NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 - Type H Reflective
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
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 - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

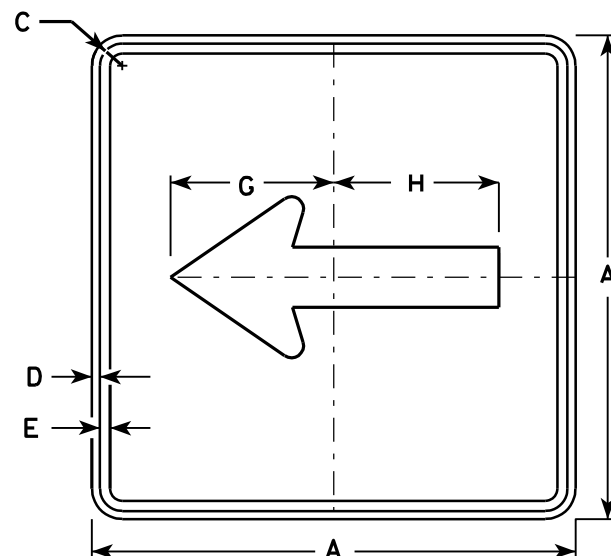
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
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

STANDARD SIGN
M5-1 & M5-2

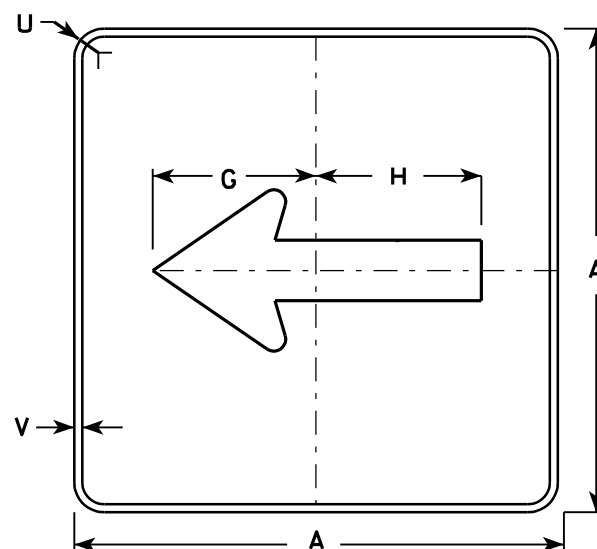
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

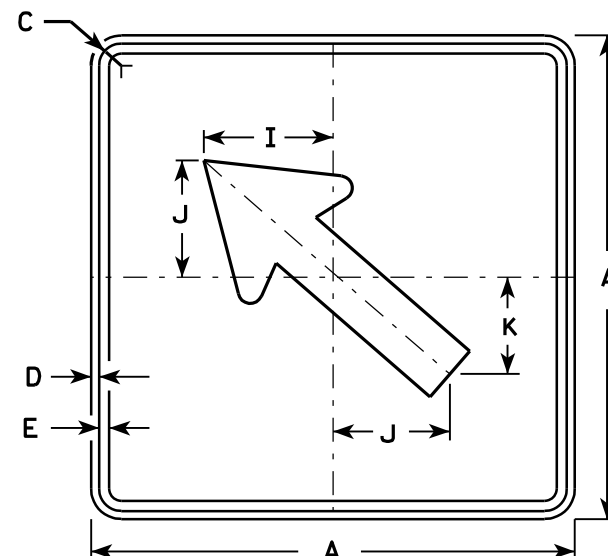
DATE 7/29/13 PLATE NO. M5-1.12



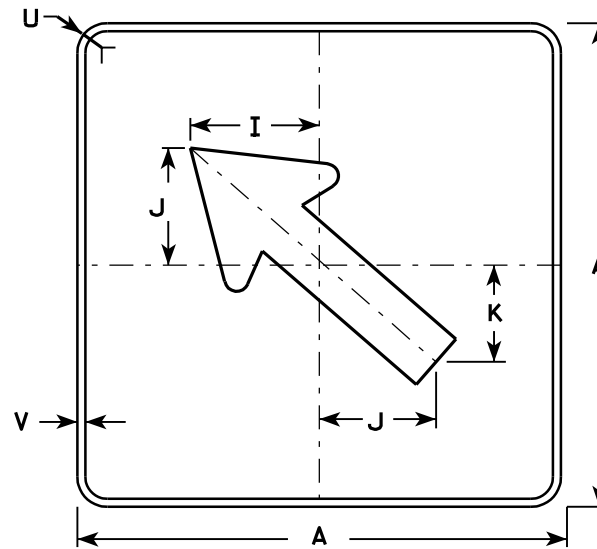
M6-1
MK6-1
MM6-1
MO6-1
MP6-1
MR6-1



MB6-1
MG6-1
MN6-1



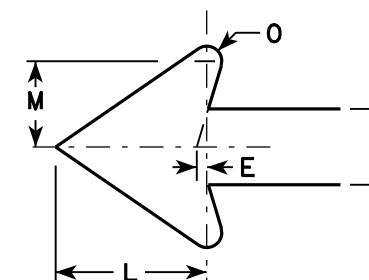
M6-2
MK6-2
MM6-2
MO6-2
MP6-2
MR6-2



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 - Type H Reflective Message - Black
 - MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective
 - MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
 - MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
 - MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
 - MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
 - MO6-1 and MO6-2 Background - Orange - Type F Reflective Message - Black
 - MP6-1 and MP6-2 Background - White - Type H Reflective Message - Blue
 - MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H 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	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-1.13

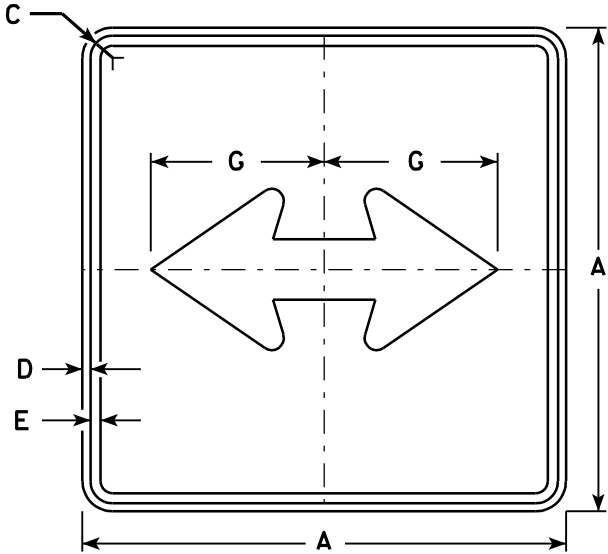
PROJECT NO:

HWY:

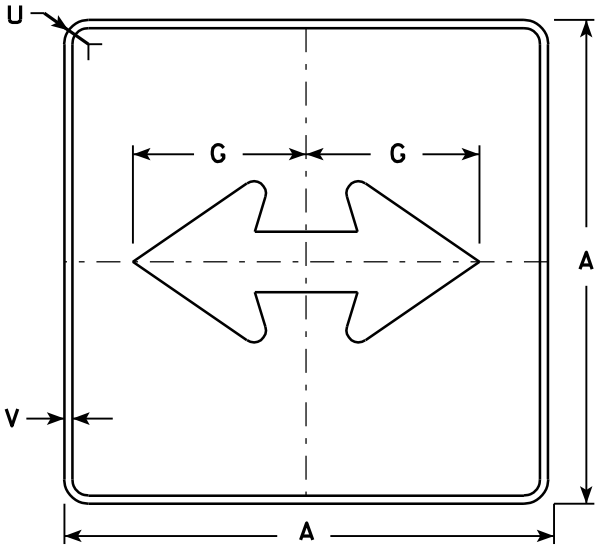
COUNTY:

SHEET NO:

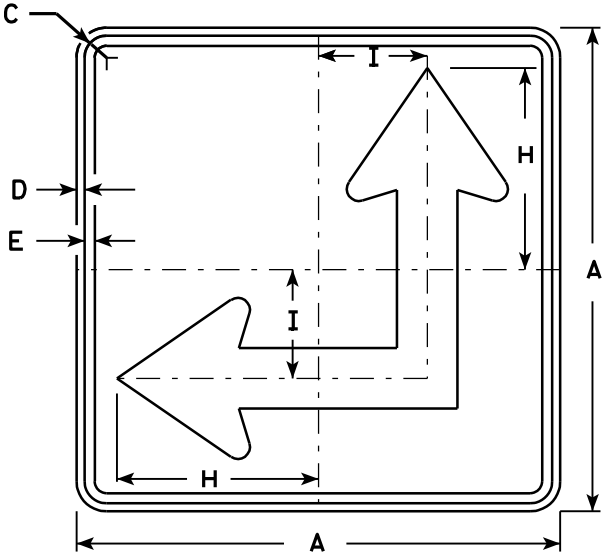
E



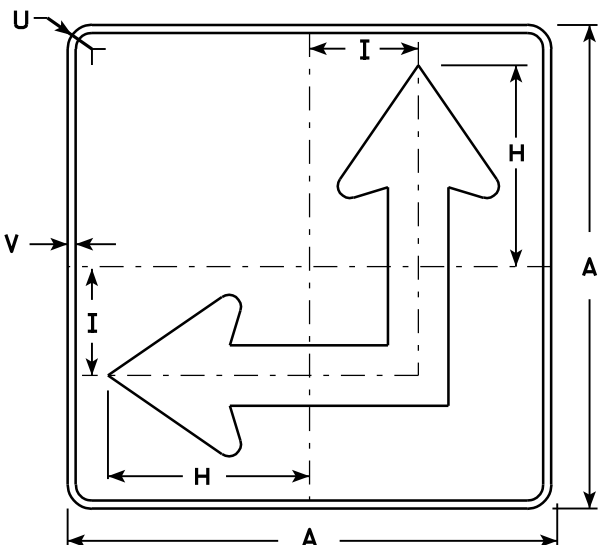
M6 - 4
MK6 - 4
MM6 - 4
MO6 - 4
MP6 - 4
MR6 - 4



MB6 - 4
MG6 - 4
MN6 - 4



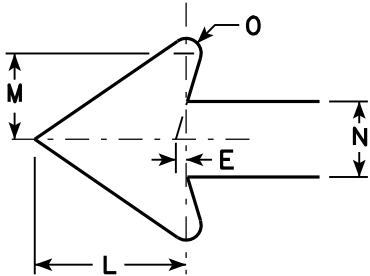
M6 - 6
MK6 - 6
MM6 - 6
MO6 - 6
MP6 - 6
MR6 - 6



MB6 - 6
MG6 - 6
MN6 - 6

NOTES

- 1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - See Note 4
 - Message - See Note 4
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M6-4 and M6-6 Background - White - Type H Reflective Message - Black
 - MB6-4 and MB6-6 Background - Blue Message - White - Type H Reflective
 - MG6-4 and MG6-6 Background - Green Message - White - Type H Reflective
 - MK6-4 and MK6-6 Background - Green Message - White - Type H Reflective
 - MM6-4 and MM6-6 Background - White - Type H Reflective Message - Green
 - MN6-4 and MN6-6 Background - Brown Message - White - Type H Reflective
 - MO6-4 and MO6-6 Background - Orange - Type F Reflective Message - Black
 - MP6-4 and MP6-6 Background - White - Type H Reflective Message - Blue
 - MR6-4 and MR6-6 Background - Brown Message - Yellow - Type H Reflective
- 5. 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:

SHEET NO:

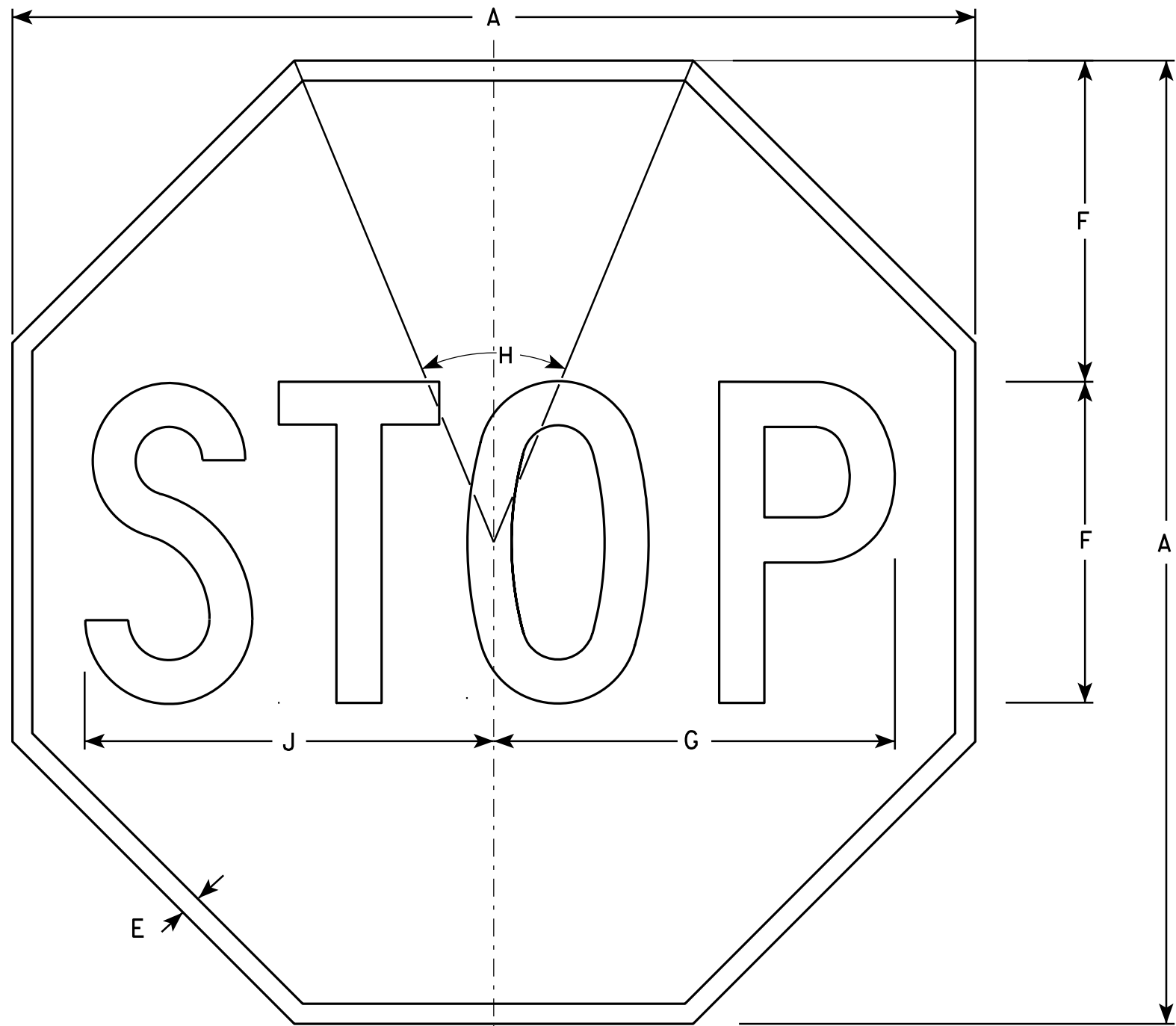
E

STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-4.8



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	24				3/8	8	10	45°		10 1/4																	3.31
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 12/03/10 PLATE NO. R1-1.12

PROJECT NO:

HWY:

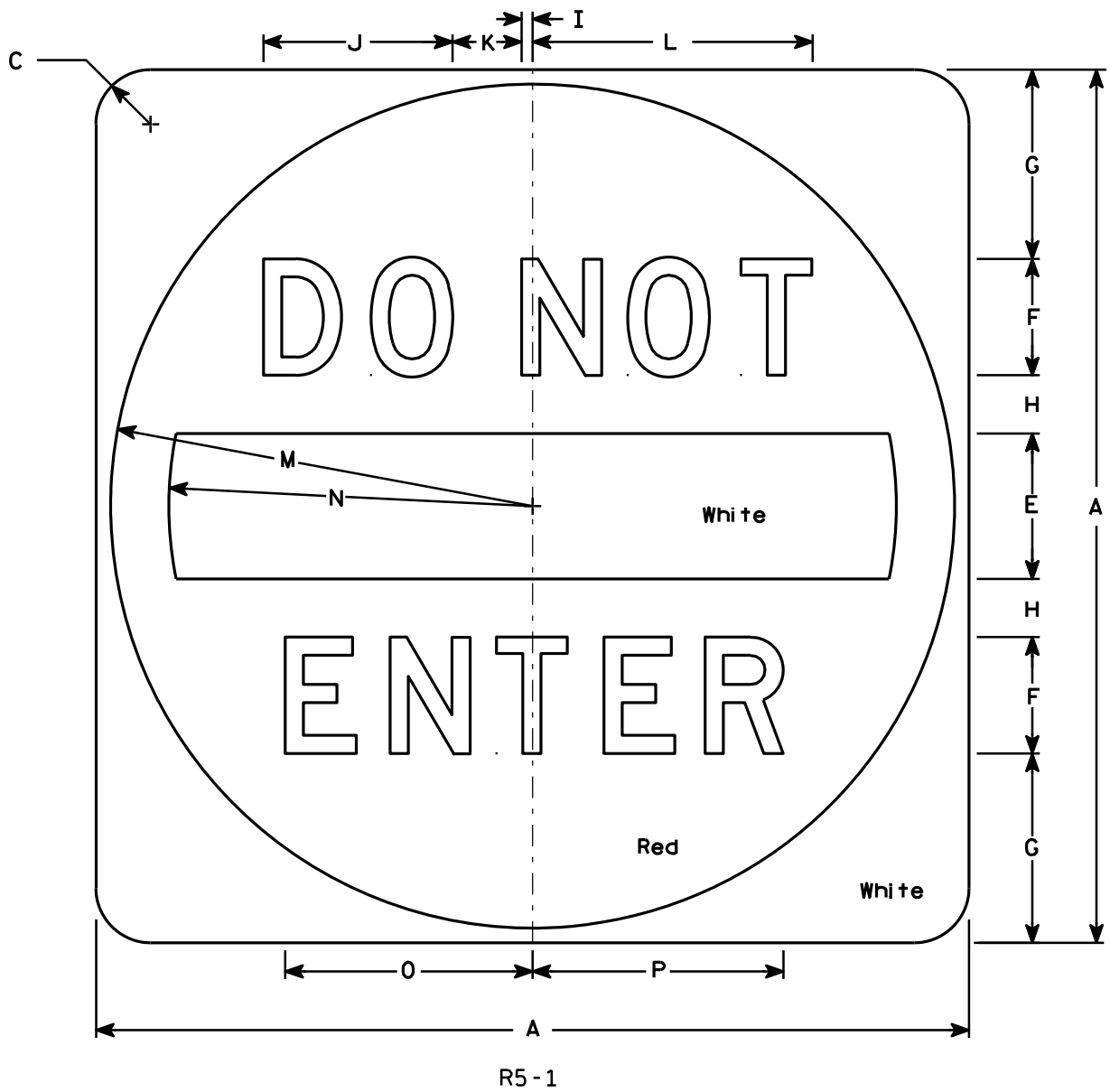
COUNTY:

SHEET NO:

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

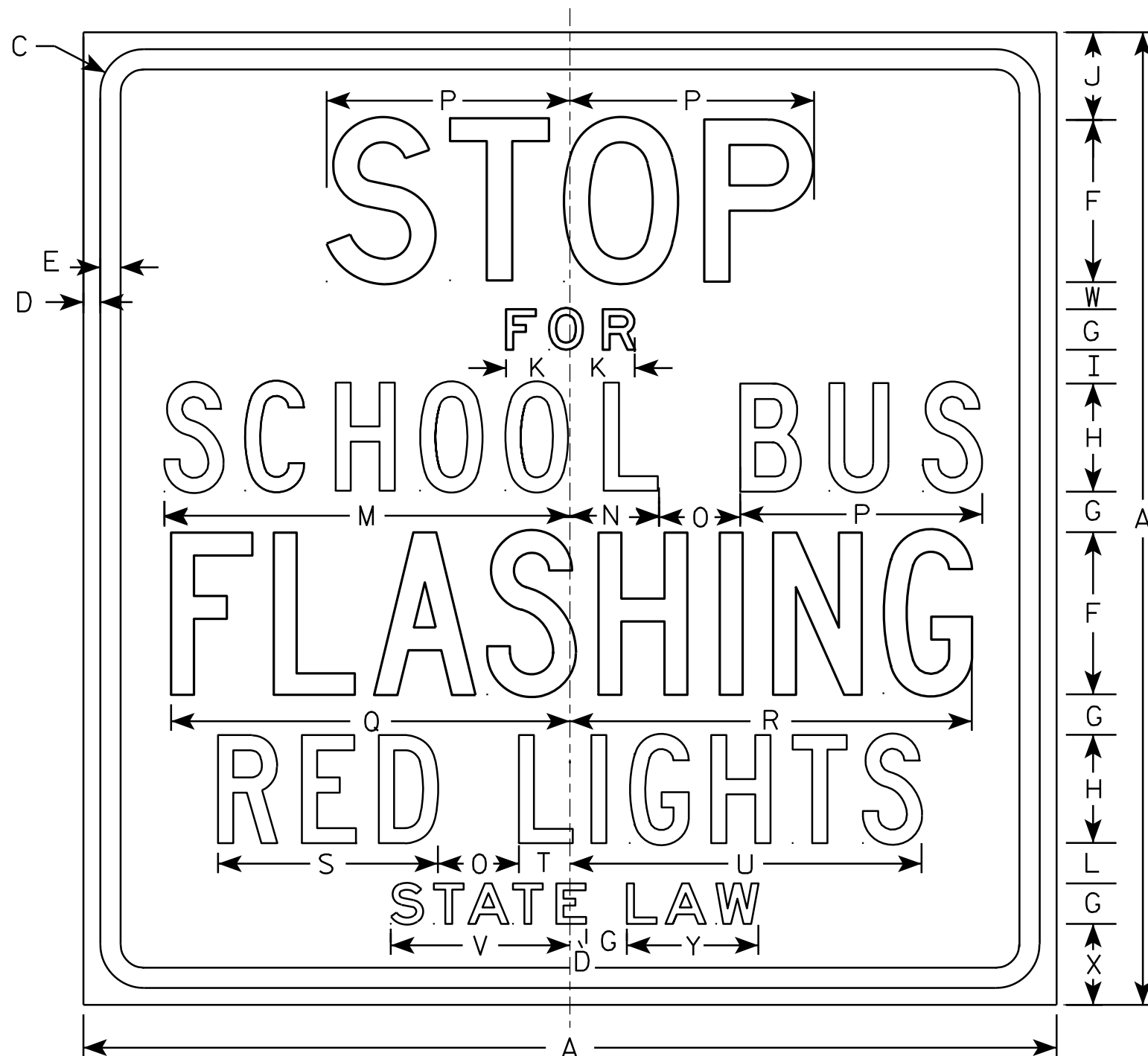
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



R59-51

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 D
Lines 2 & 6 are Series E
Line 3, 4 & 5 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	36		1 5⁄8	5⁄8	3⁄4	6	1 1⁄2	4	1 1⁄4	3 1⁄4	2 3⁄8	1 1⁄2	15	3 1⁄4	3	9	14 3⁄4	14 7⁄8	8 1⁄8	1 7⁄8	13	6 5⁄8	1	3	4 7⁄8		9.0
2M	36		1 5⁄8	5⁄8	3⁄4	6	1 1⁄2	4	1 1⁄4	3 1⁄4	2 3⁄8	1 1⁄2	15	3 1⁄4	3	9	14 3⁄4	14 7⁄8	8 1⁄8	1 7⁄8	13	6 5⁄8	1	3	4 7⁄8		9.0
3	48		2 1⁄4	3⁄4	1	8	2	6	1 1⁄4	4 3⁄4	3 1⁄4	1 1⁄2	20 1⁄4	5	3 5⁄8	12	19 1⁄2	20	11 5⁄8	3 3⁄4	19	9 1⁄2	1	3 1⁄2	6 3⁄4		16.0
4	48		2 1⁄4	3⁄4	1	8	2	6	1 1⁄4	4 3⁄4	3 1⁄4	1 1⁄2	20 1⁄4	5	3 5⁄8	12	19 1⁄2	20	11 5⁄8	3 3⁄4	19	9 1⁄2	1	3 1⁄2	6 3⁄4		16.0
5																											

STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
For State Traffic Engineer

DATE 3/30/11

PLATE NO. R59-51.10

PROJECT NO:

HWY:

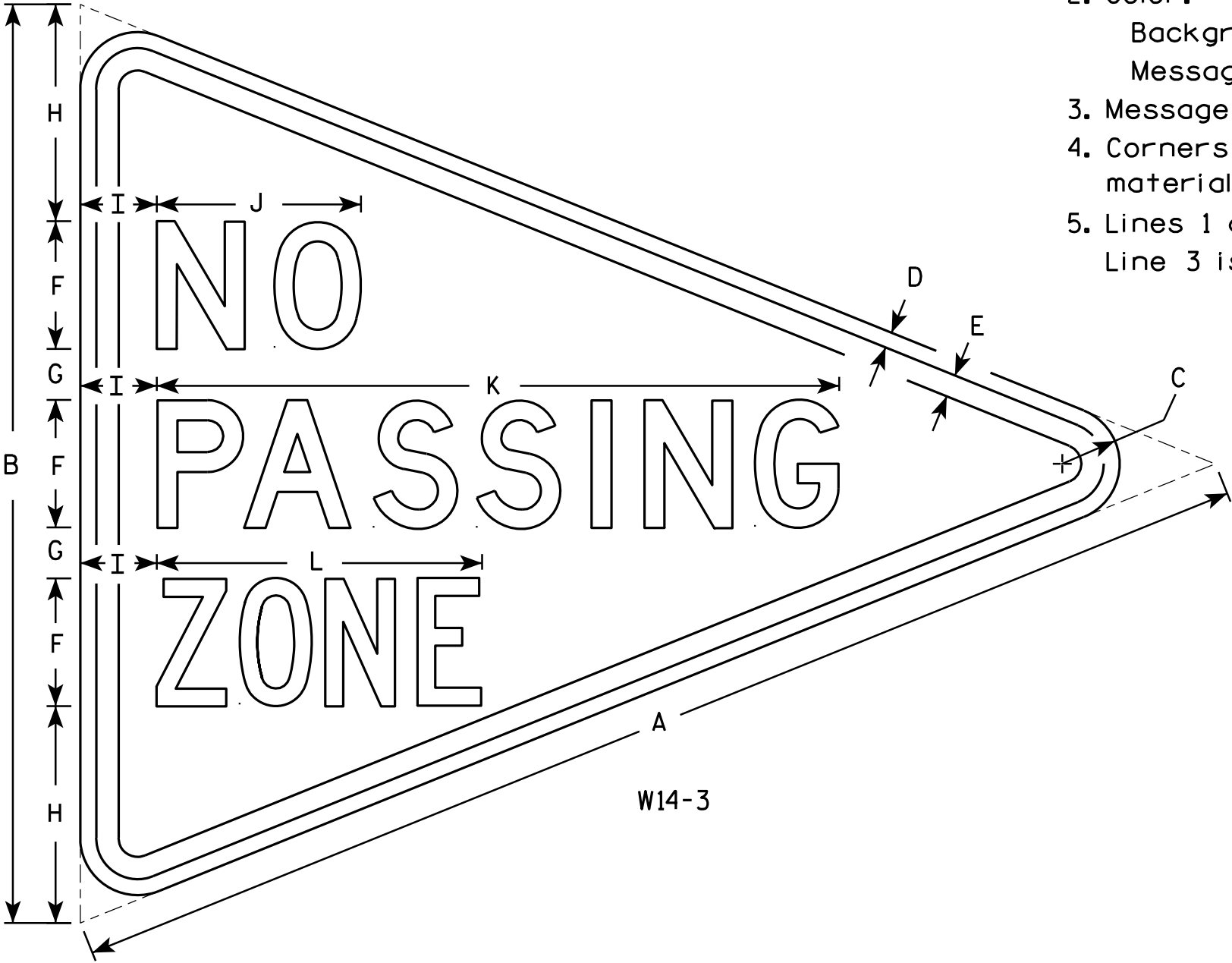
COUNTY:

SHEET NO:

E

NOTES

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

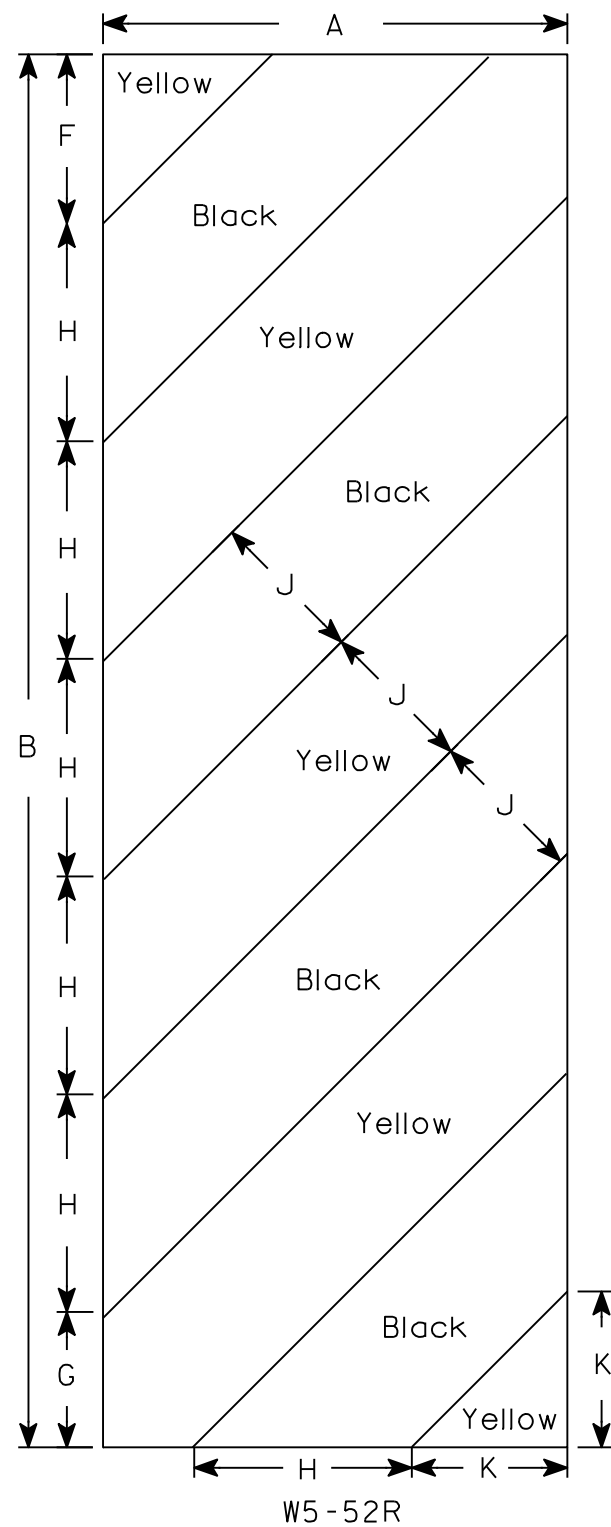
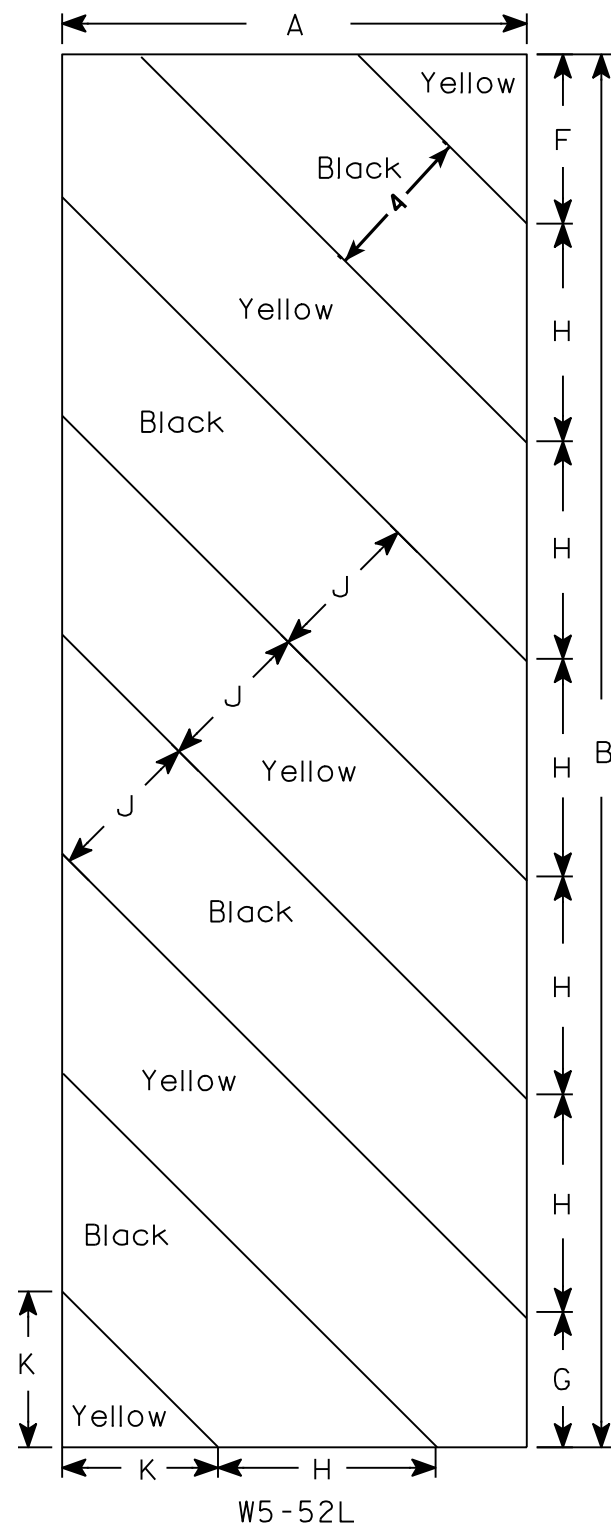
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2														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

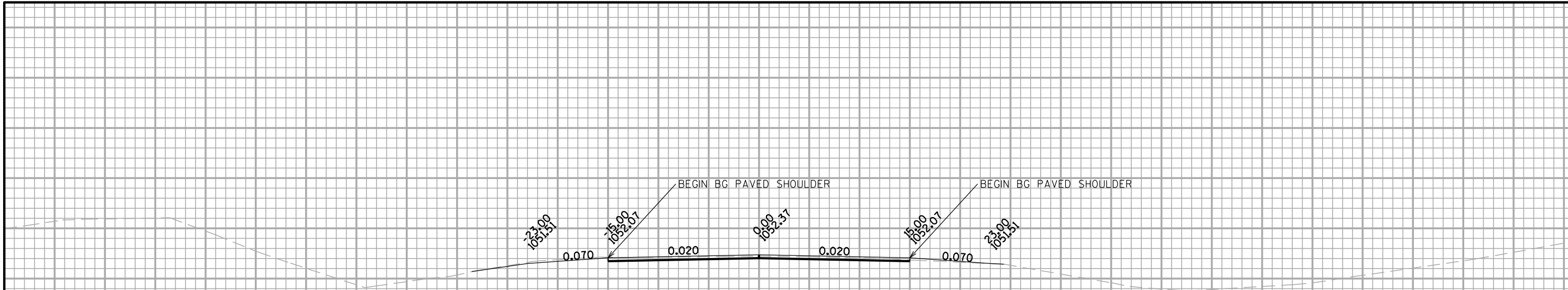
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
2M	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
3	18	54				6	5 1⁄2	8 1⁄2	45°	6	6 5⁄16																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

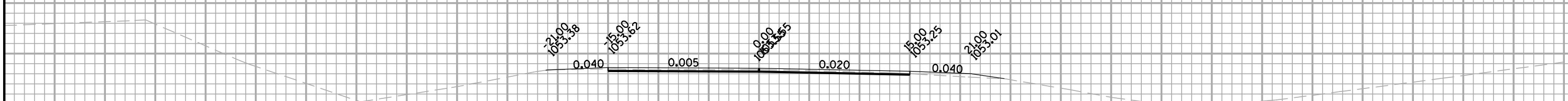
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

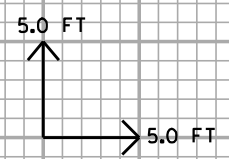
DATE 5/29/12 PLATE NO. W5-52.9

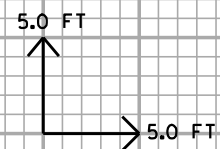
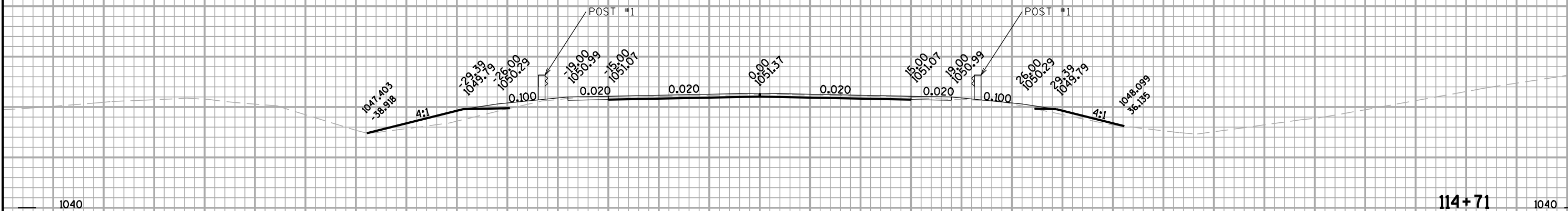
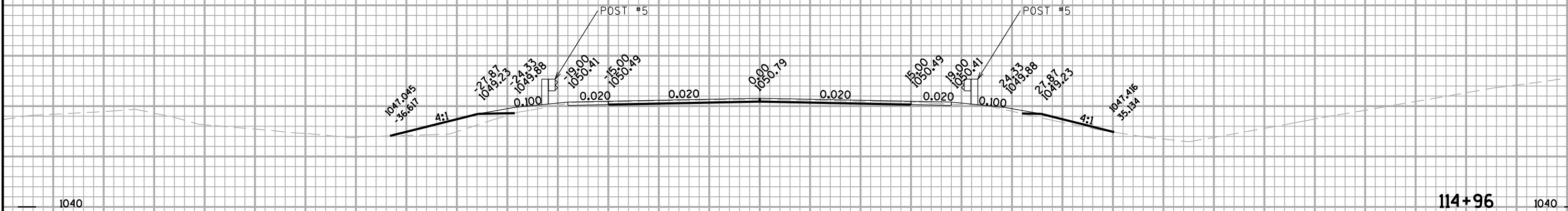


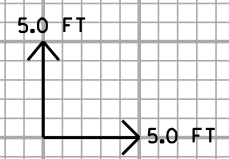
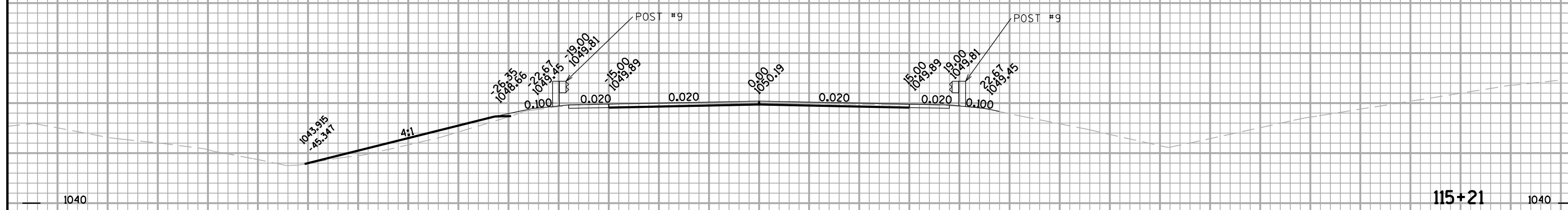
1040 114+21 1040

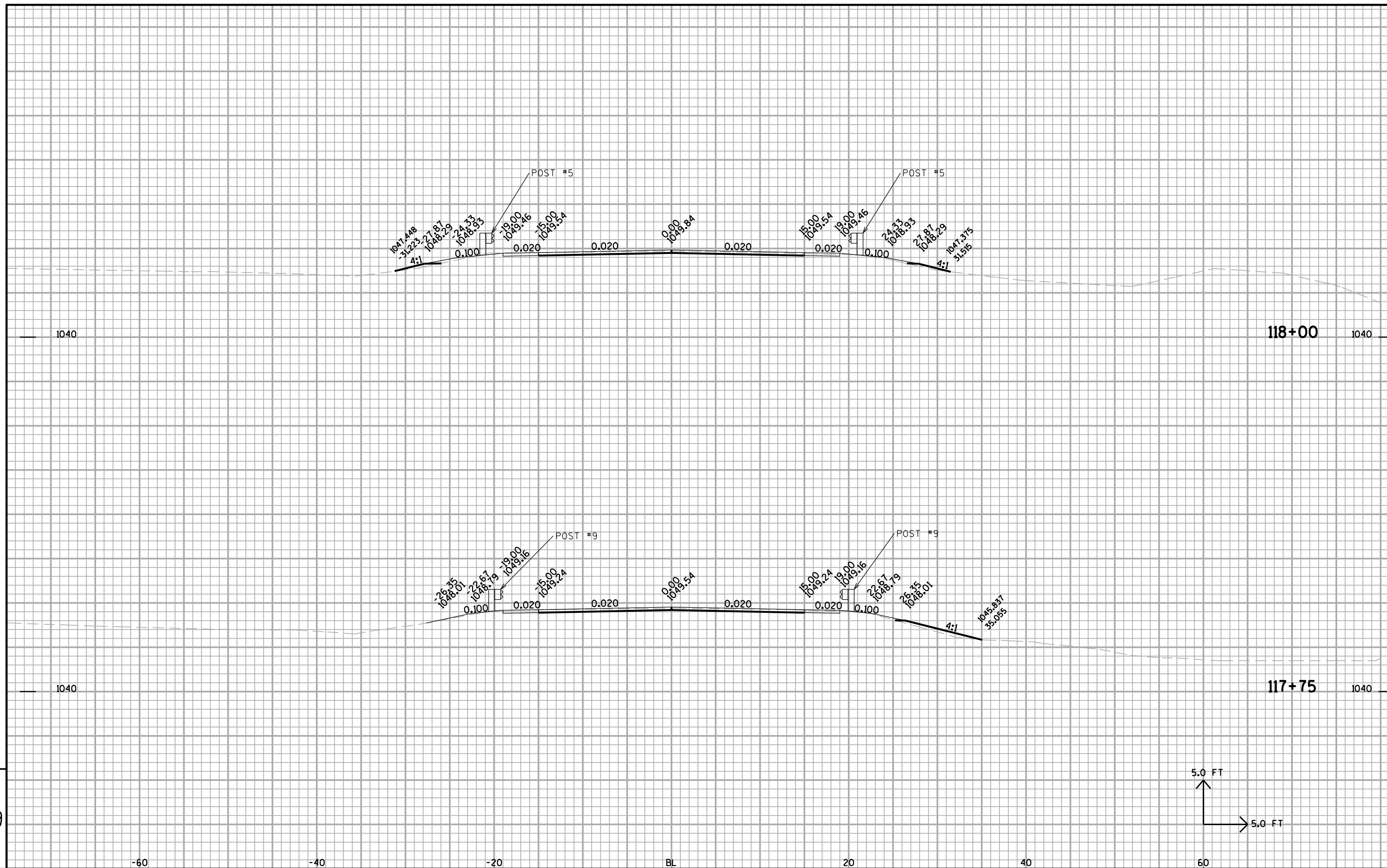


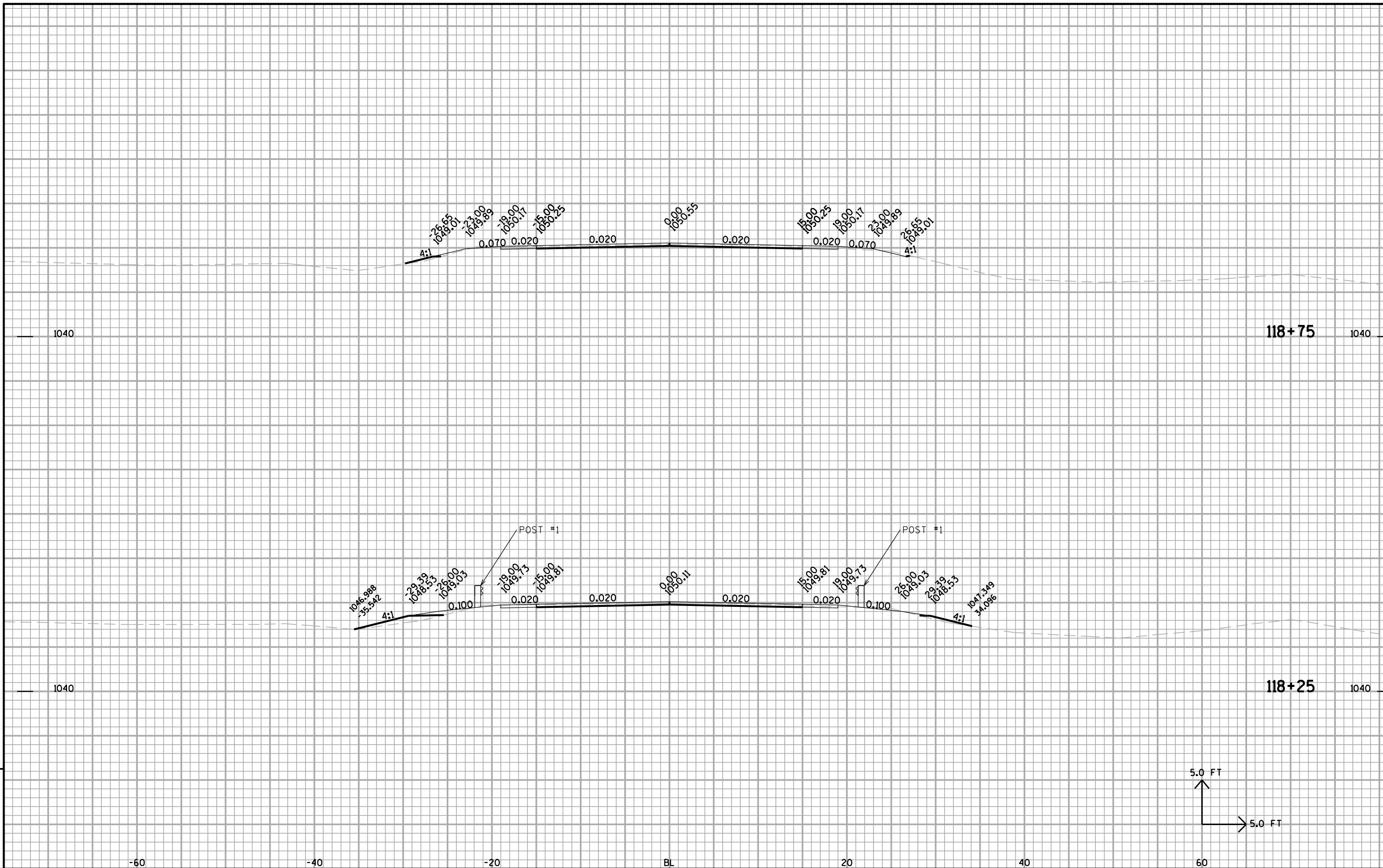
1040 113+66 1040



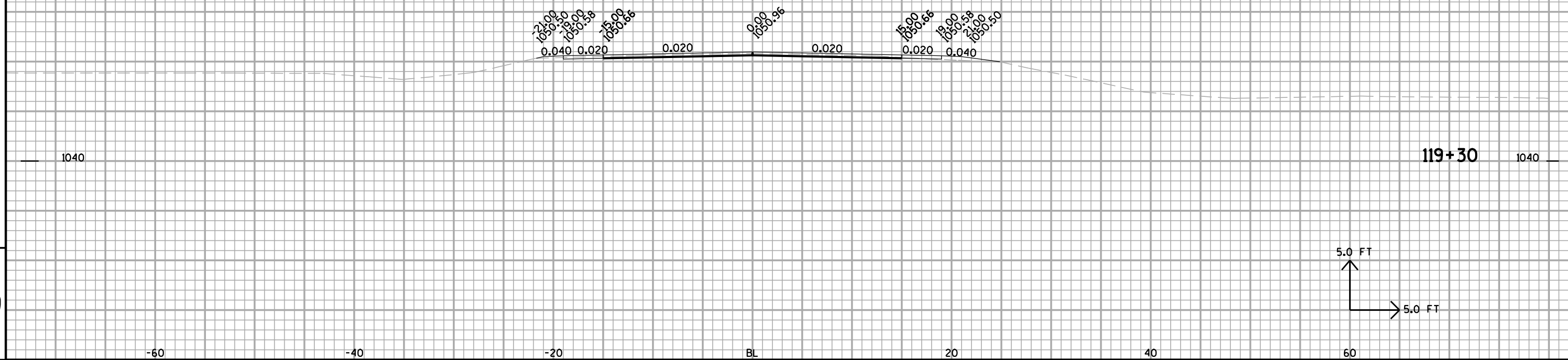








1



PROJECT NO: 1520-06-74

HWY: USH 10

COUNTY: JACKSON/ E.C./ CLARK

CROSS SECTIONS

SHEET NO:

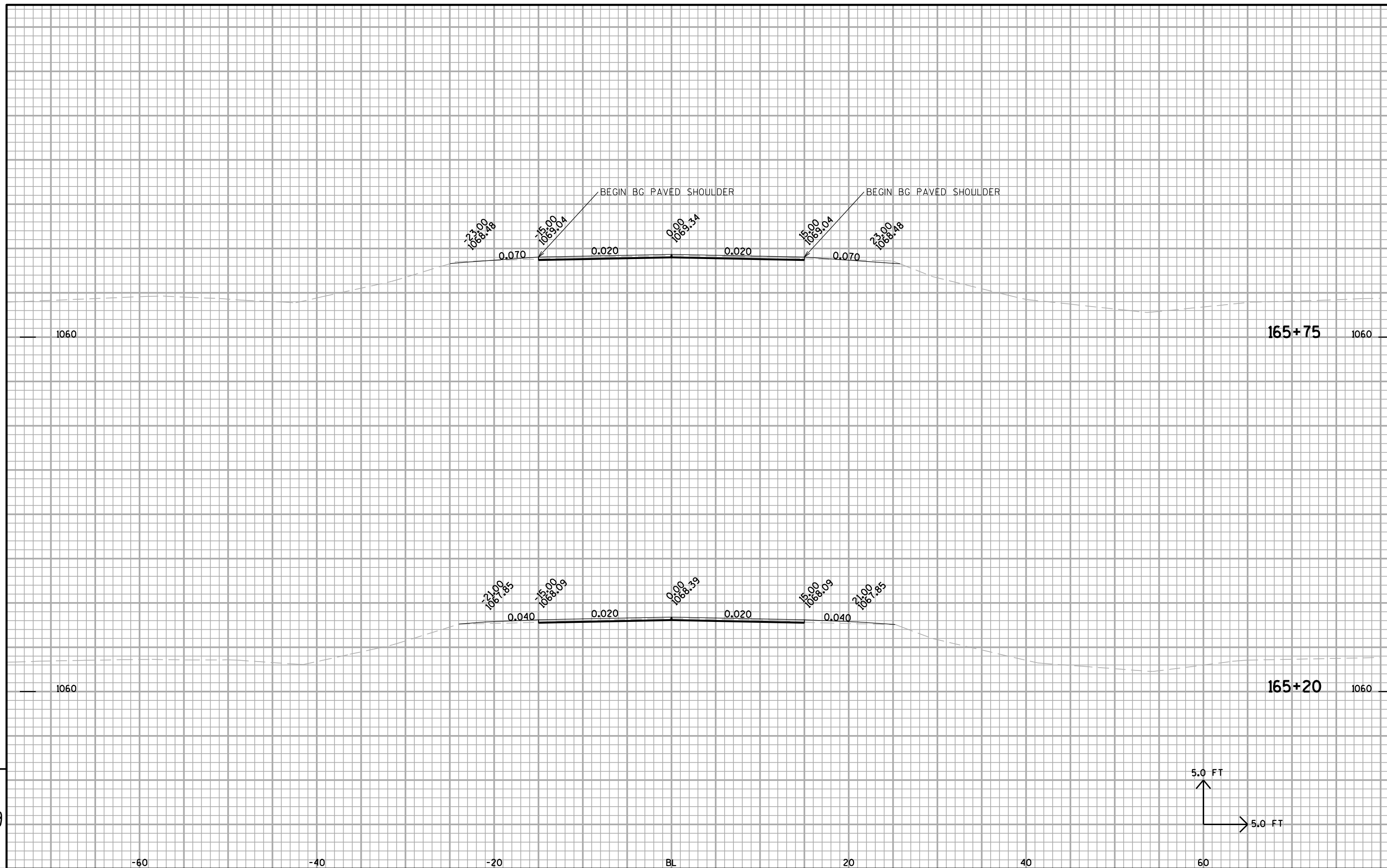
FILE NAME : C:\CAICESys\Data\User\1520KT\090101_xs_ush10_15200674.DGN

PLOT DATE : 14-APR-2011 07:18

PLOT BY : dotk7t

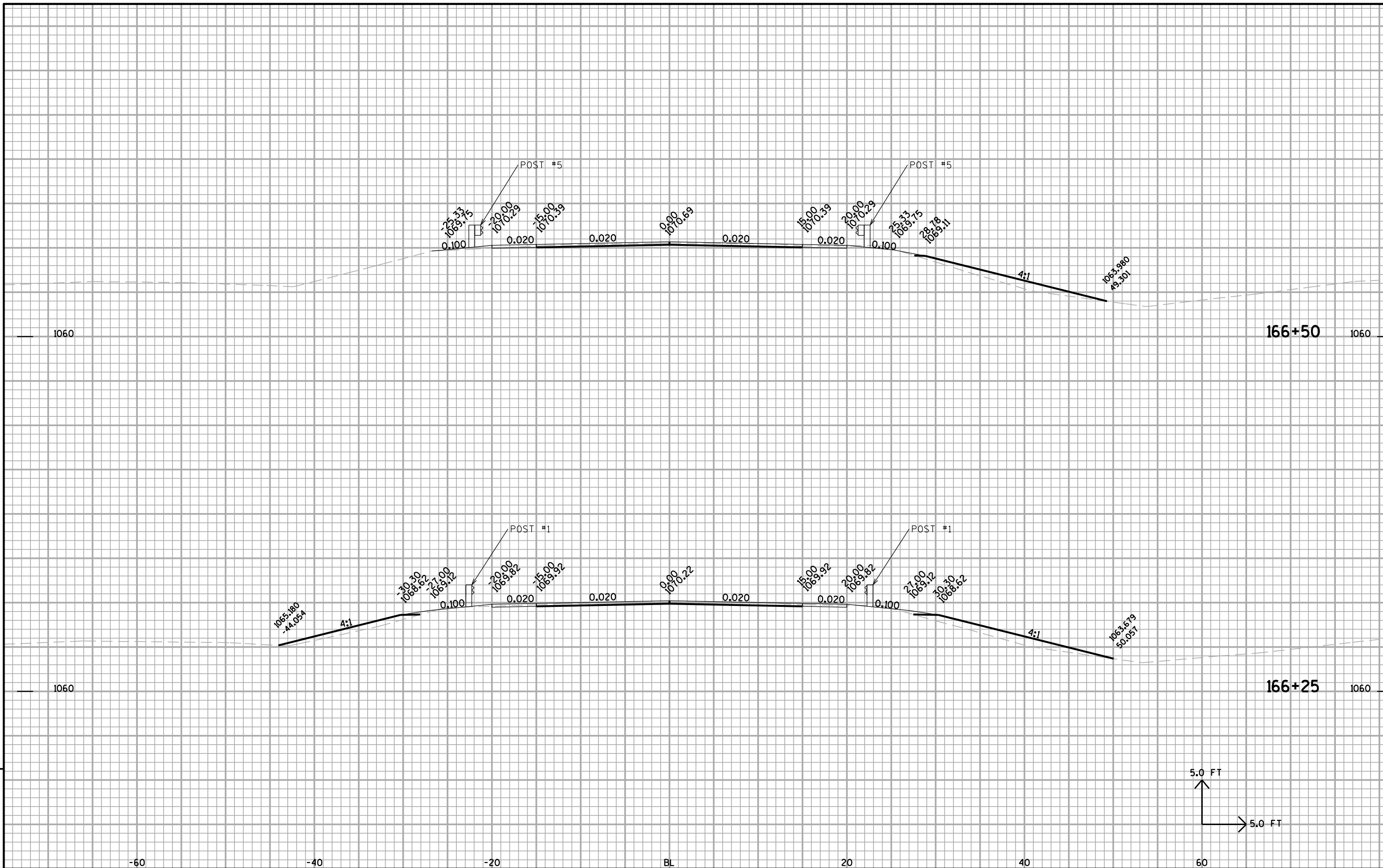
PLOT NAME :

PLOT SCALE : 10:1



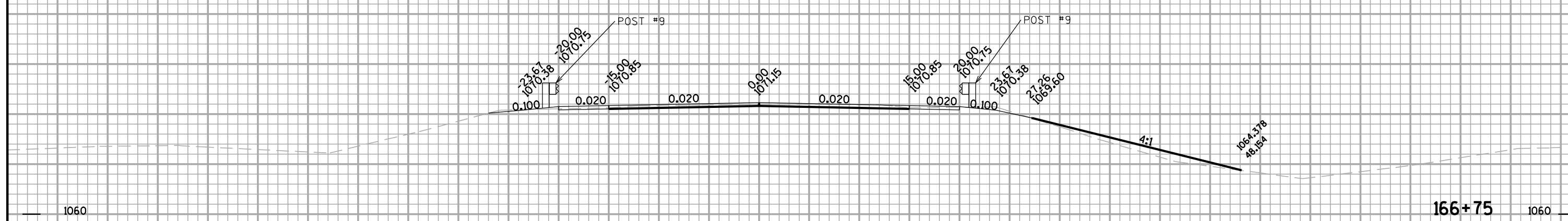
9

9



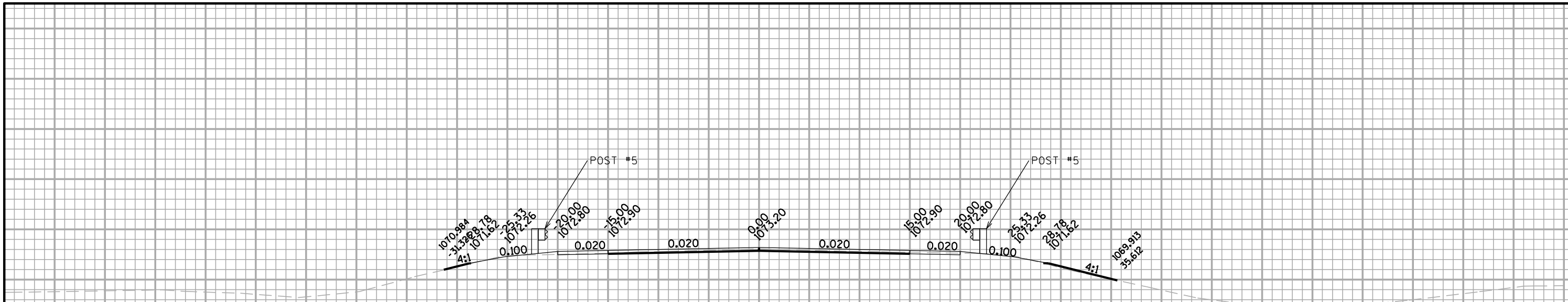
9

9



9

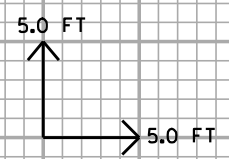
9

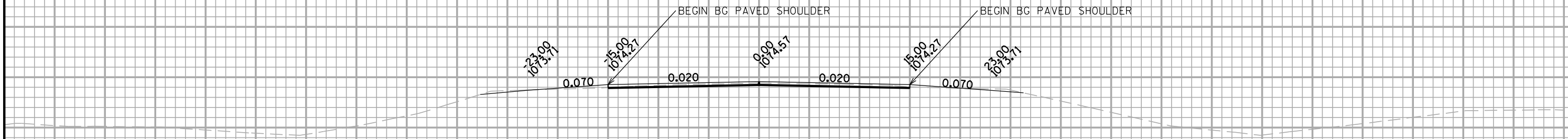


1060 167+87 1060

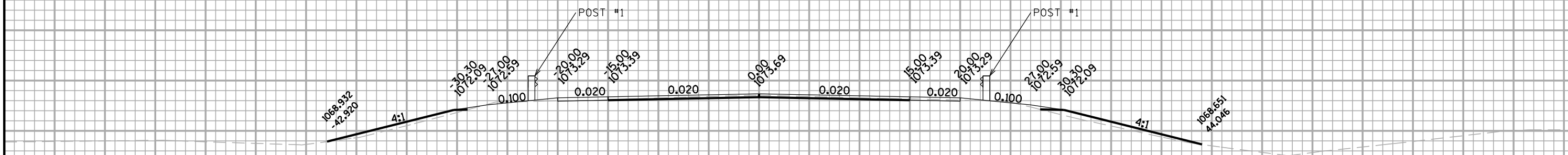


1060 167+62 1060

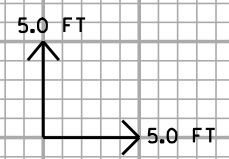




1060 168+62 1060



1060 168+12 1060



9

9



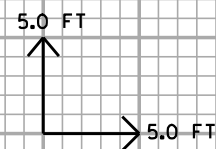
1060

169+17

1060

9

9



PROJECT NO: 1520-06-74

HWY: USH 10

COUNTY: JACKSON/ E.C./ CLARK

CROSS SECTIONS

SHEET NO:

E

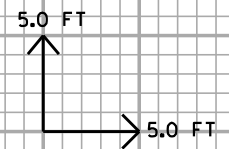
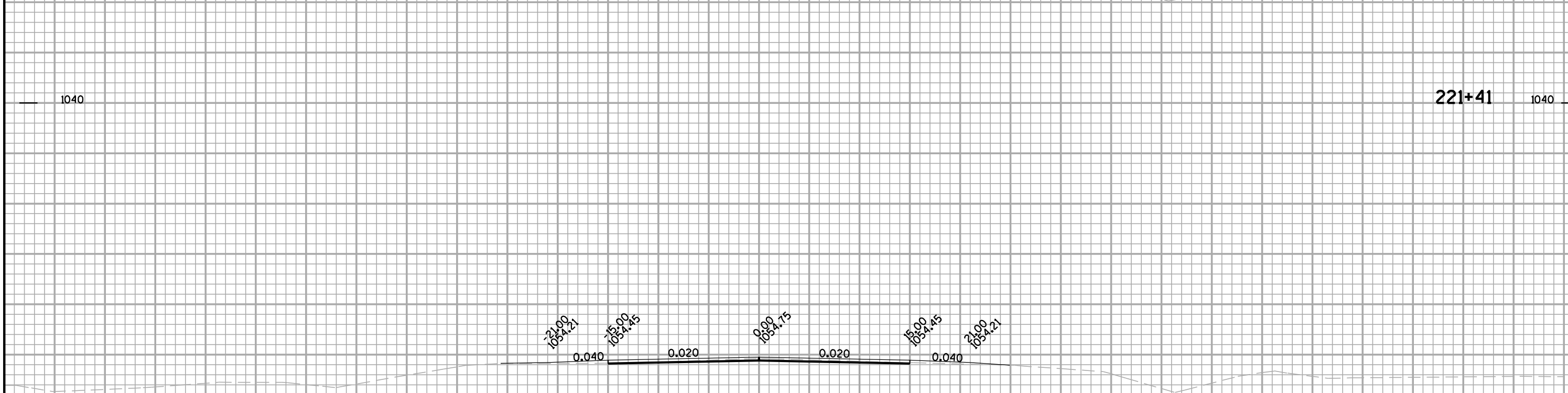
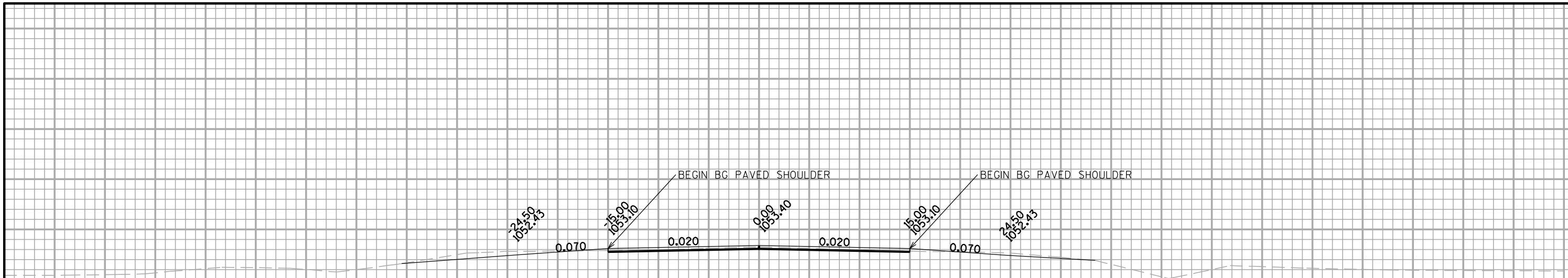
FILE NAME : C:\CAICESys\Data\User\1520KT\090101.xs_ush10_15200674.DGN

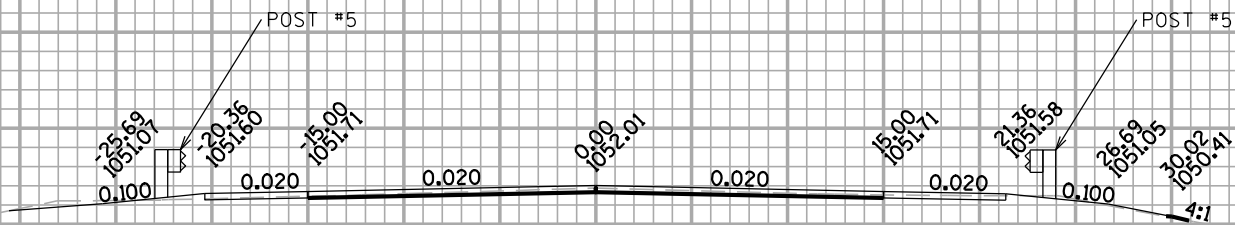
PLOT DATE : 14-APR-2011 07:19

PLOT BY : dotk7t

PLOT NAME :

PLOT SCALE : 10:1

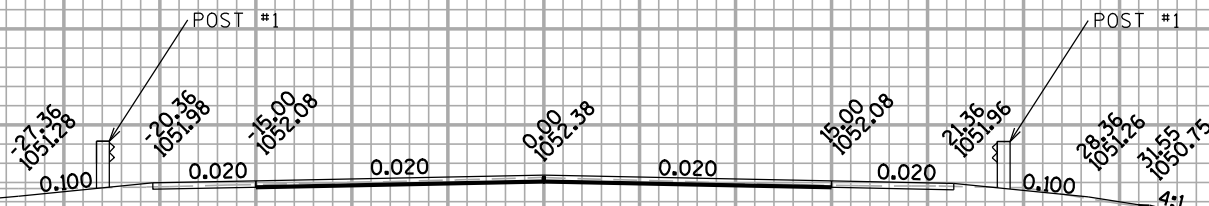




1040

222+16

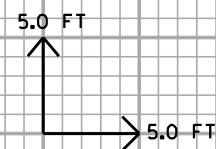
1040



1040

221+91

1040



9

9

PROJECT NO: 1520-06-74

HWY: USH 10

COUNTY: JACKSON/ E.C./ CLARK

CROSS SECTIONS

SHEET NO:

E

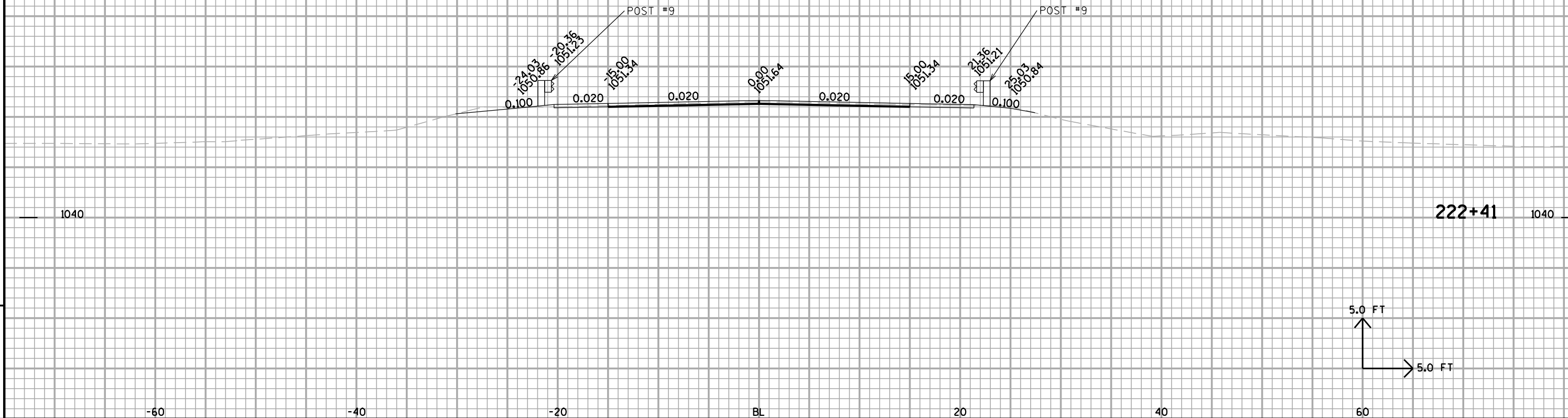
FILE NAME : C:\CAICESys\Dat\at\User\1520KT\090101.xs_ush10_15200674.DGN

PLOT DATE : 14-APR-2011 07:19

PLOT BY : dotk7+

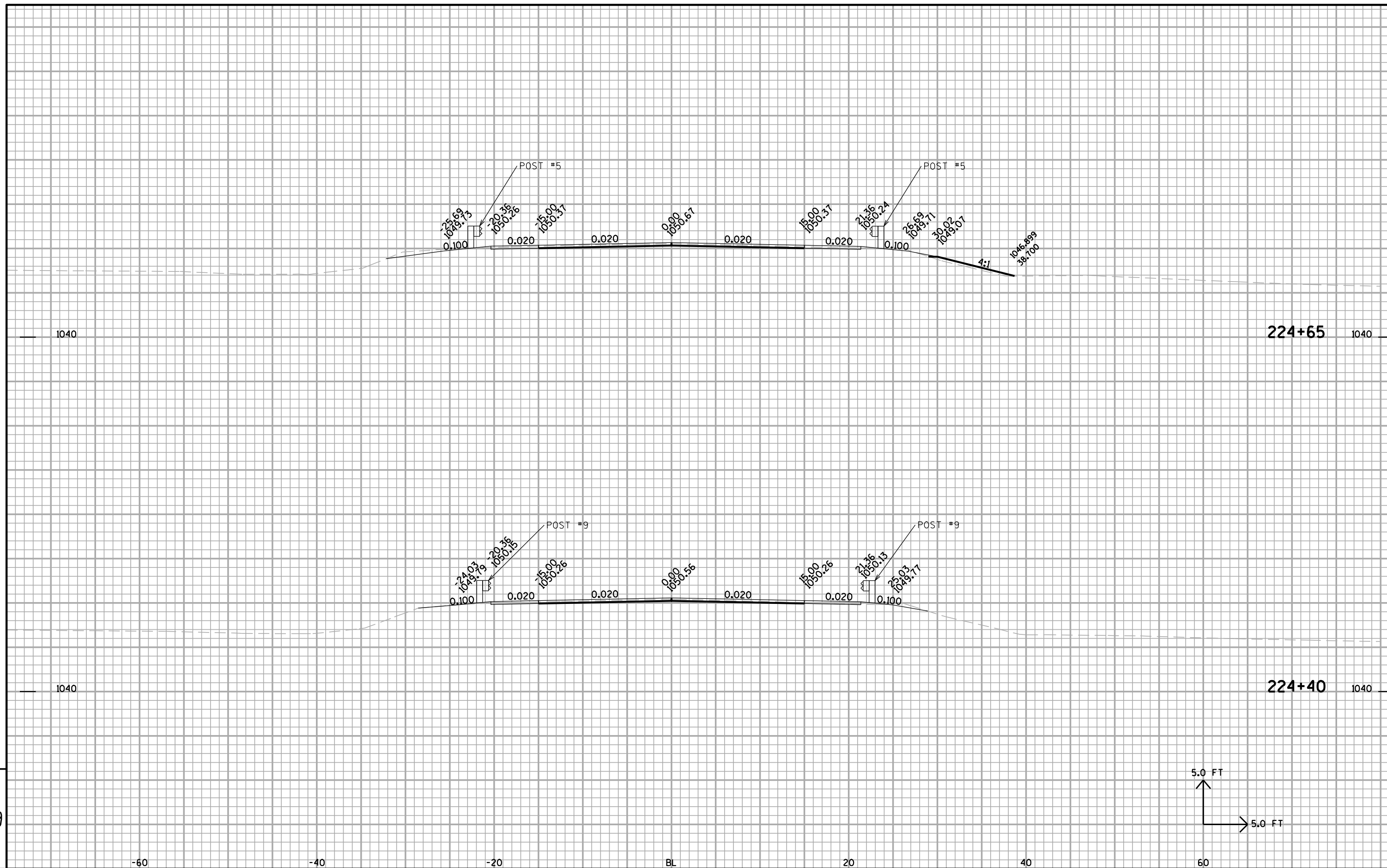
PLOT NAME :

PLOT SCALE : 10:1



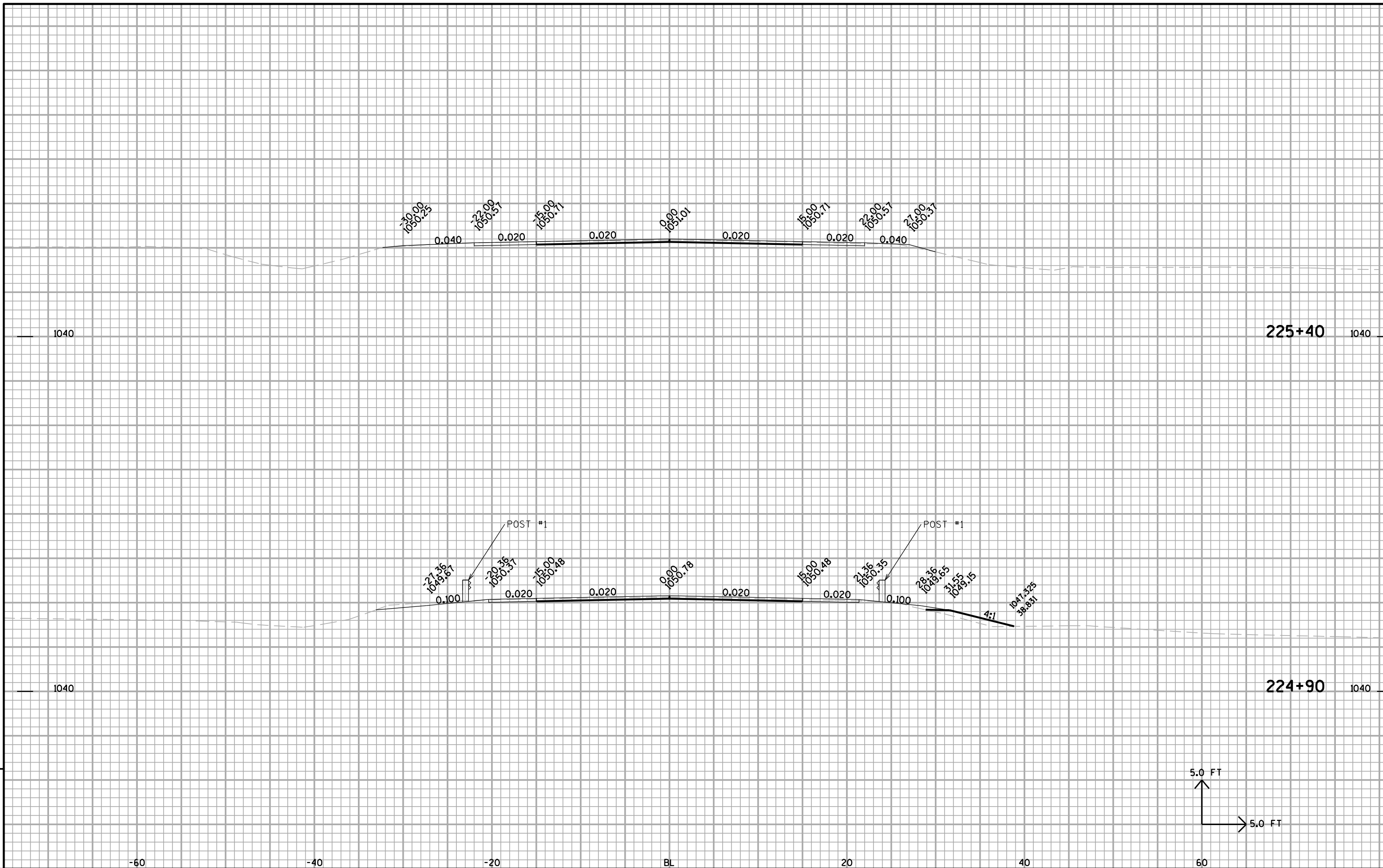
9

9



9

9

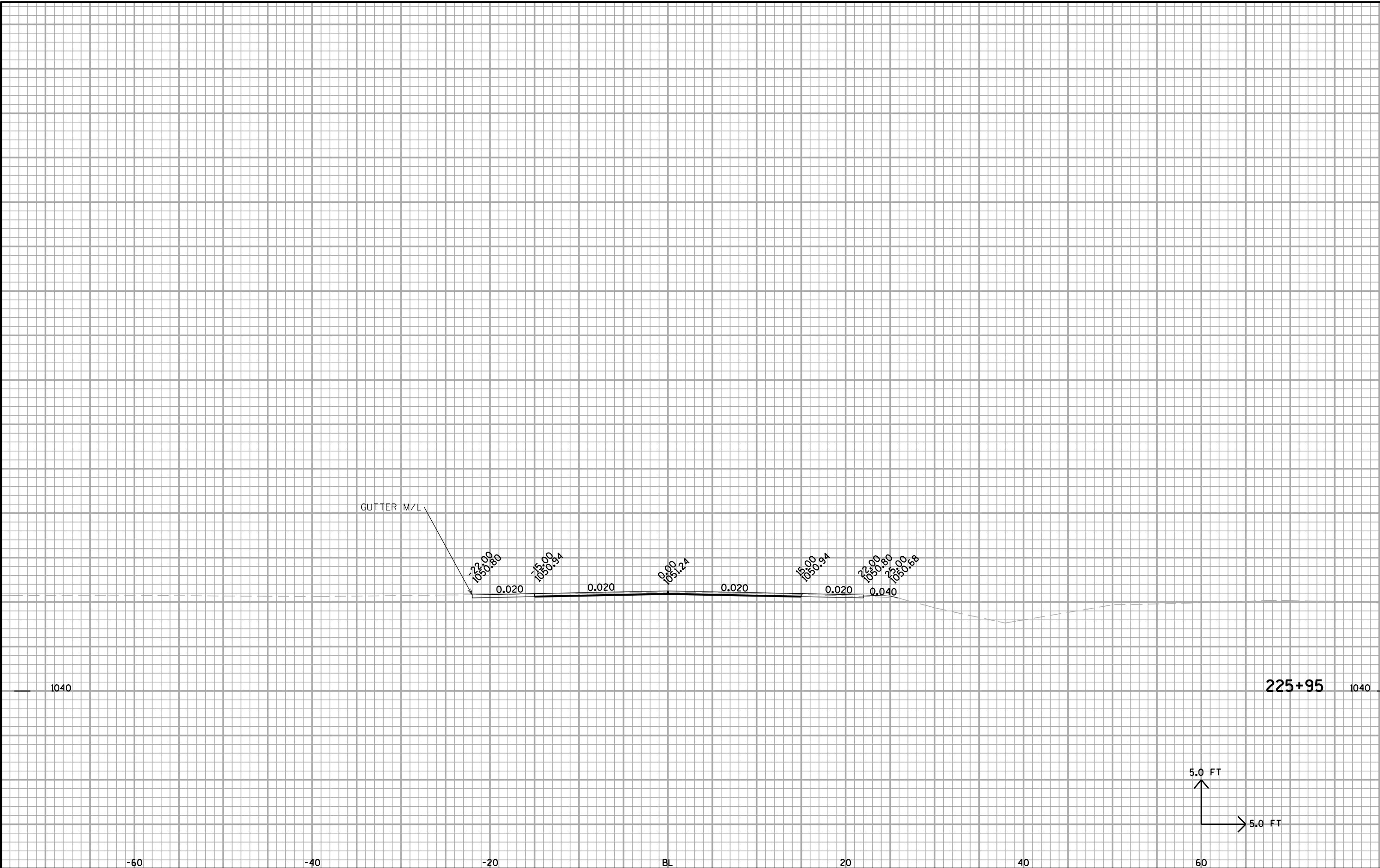


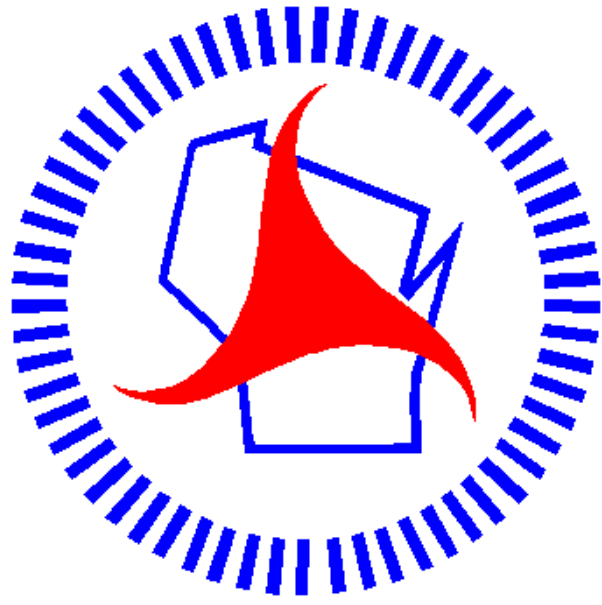
9

9

9

9





Wisconsin Department of Transportation

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