

GRE

JUNE 2017

WITH:

PROJECT ID: 4125-08-71

COUNTY: BROWN

ORDER OF SHEETS

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

TOTAL SHEETS = 110



DESIGN DESIGNATION

A.A.D.T.	2016	=	7,100
A.A.D.T.	2036	=	10,600
D.H.V.		=	1,210
D.D.		=	0.5
T.		=	11.1%
DESIGN SPEED		=	35/45/55 mph
ESALS		=	2,100,000

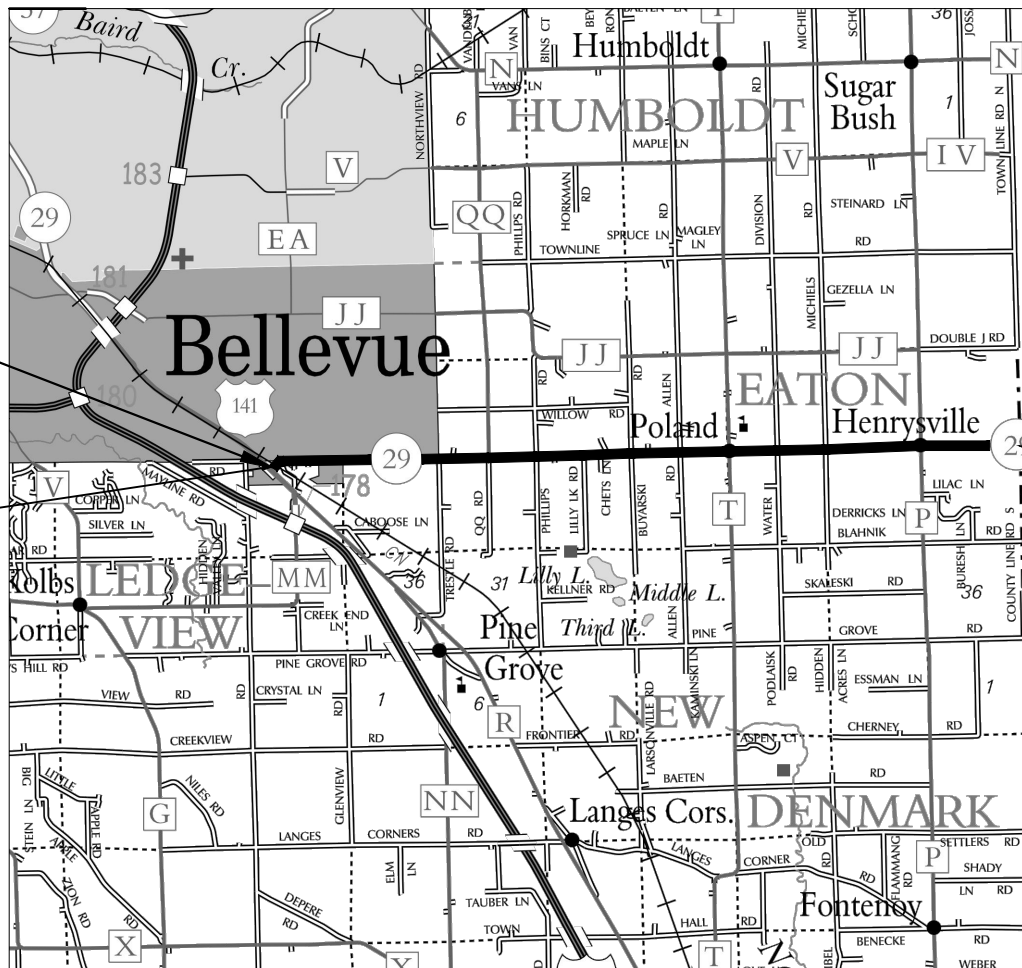
CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

BEGIN PROJECT 4125-08-71  
STA 102+00  
X = 124,087.92  
Y = 541,150.95

EXCEPTION TO NET LENGTH  
STA. 105+75-106+14



LAYOUT  
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 7.7847 MI.

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

GREEN BAY - KEWAUNEE

USH 141 - EAST COUNTY LINE

STH 29

BROWN COUNTY

STATE PROJECT NUMBER

4125-08-71

STATE PROJECT

4125-08-71

FEDERAL PROJECT

PROJECT

WISC 2017363

CONTRACT

1

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT NE REGION
Designer	MATTHEW BERTUCCI
Project Manager	ANDY FULCER
Regional Examiner	
Regional Supervisor	DAN SEGERSTROM

APPROVED FOR THE DEPARTMENT

DATE:  (Signature)

GENERAL NOTES

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST THREE WORKING DAYS PRIOR TO BEGINNING WORK.

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

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING, SEEDING AND MULCHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED OR COVERED WITH EROSION MAT.

THE EXACT LOCATIONS OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER.

DNR AREA LIAISON

DNR NORTHEAST REGIONAL HQ  
MR. JIM DOPERALSKI  
2984 SHAWANO AVE  
GREEN BAY, WI 54313  
TELEPHONE: 920-662-5119  
E-MAIL: JAMES.DOPERALSKI@WISCONSIN.GOV

UTILITY CONTACTS

VILLAGE OF BELLEVUE - SEWER & WATER  
2828 ALLOUEZ AVE  
GREEN BAY, WI 54311  
ATTN: BILL BALKE  
TELEPHONE: 920-468-5225  
E-MAIL: BILLB@VILLAGEOFBELLEVUE.ORG

CENTRAL BROWN COUNTY WATER AUTHORITY - WATER  
1195 SCHEURING RD  
DE PERE, WI 54115  
ATTN: ROB MICHAELSON  
TELEPHONE: 920-686-4354  
E-MAIL: MICHAELSON@MPU.ORG

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRIC  
700 N ADAMS ST  
P.O. BOX 19001  
GREEN BAY, WI 54307  
ATTN: RANDY STEIER  
TELEPHONE: 920-617-5167  
E-MAIL: RDSTEIER@WISCONSINPUBLICSERVICE.COM

WISCONSIN PUBLIC SERVICE CORPORATION - GAS  
700 N ADAMS ST  
P.O. BOX 19001  
GREEN BAY, WI 54307  
ATTN: SCOTT HENRY  
TELEPHONE: 920-617-5231  
E-MAIL: STHENRY@WISCONSINPUBLICSERVICE.COM

CENTURYLINK - COMMUNICATION  
144 N PEARL ST  
BERLIN, WI 54923  
ATTN: KEVIN ZICKERT  
TELEPHONE: 920-392-5200  
E-MAIL: KEVIN.ZICKERT@CENTURYLINK.COM

CHARTER COMMUNICATIONS OPERATING, LLC (TIME WARNER CABLE) - COMMUNICATION  
3520 E DESTINATION DR  
APPLETON, WI 54915  
ATTN: VINCE ALBIN  
TELEPHONE (W): 920-831-9249  
E-MAIL: VINCE.ALBIN@CHARTER.COM

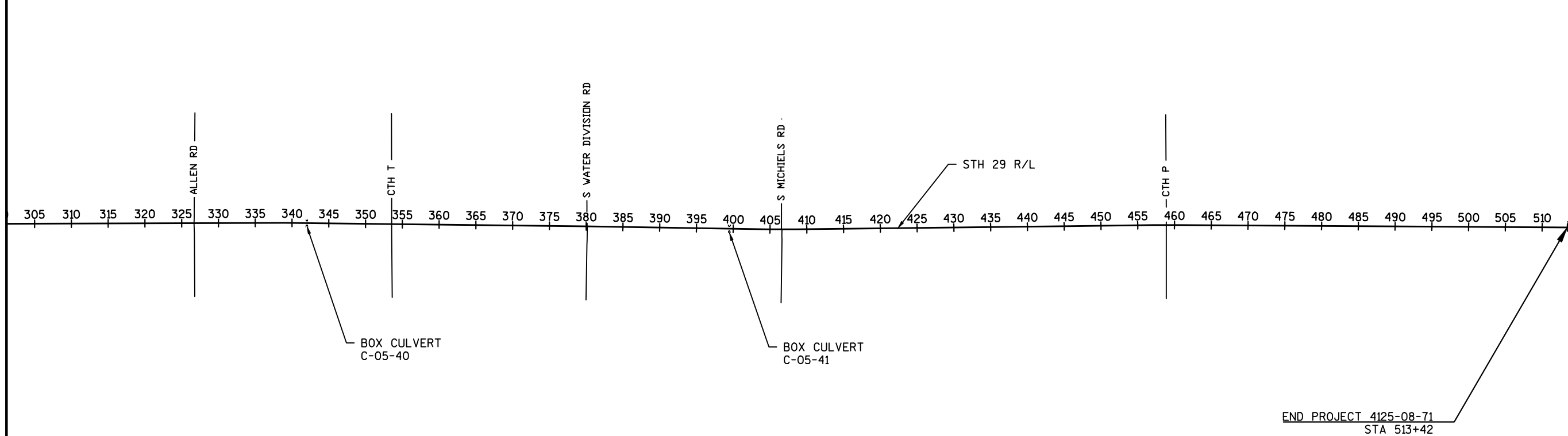
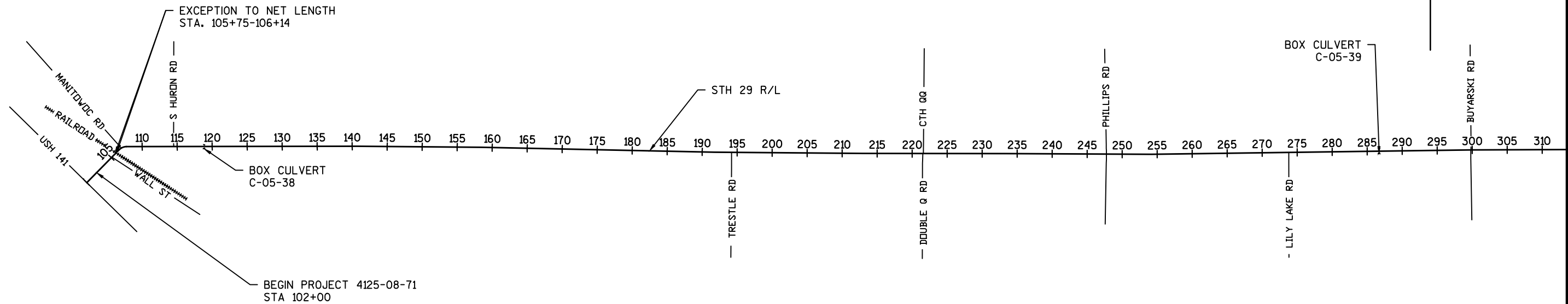
NET LEC LLC - COMMUNICATION  
450 SECURITY BLVD  
P.O. BOX 19079  
GREEN BAY, WI 54307  
ATTN: DENNIS LAFAVE  
TELEPHONE: 920-619-9774  
E-MAIL: DLAFAVE@MI-TECH.US

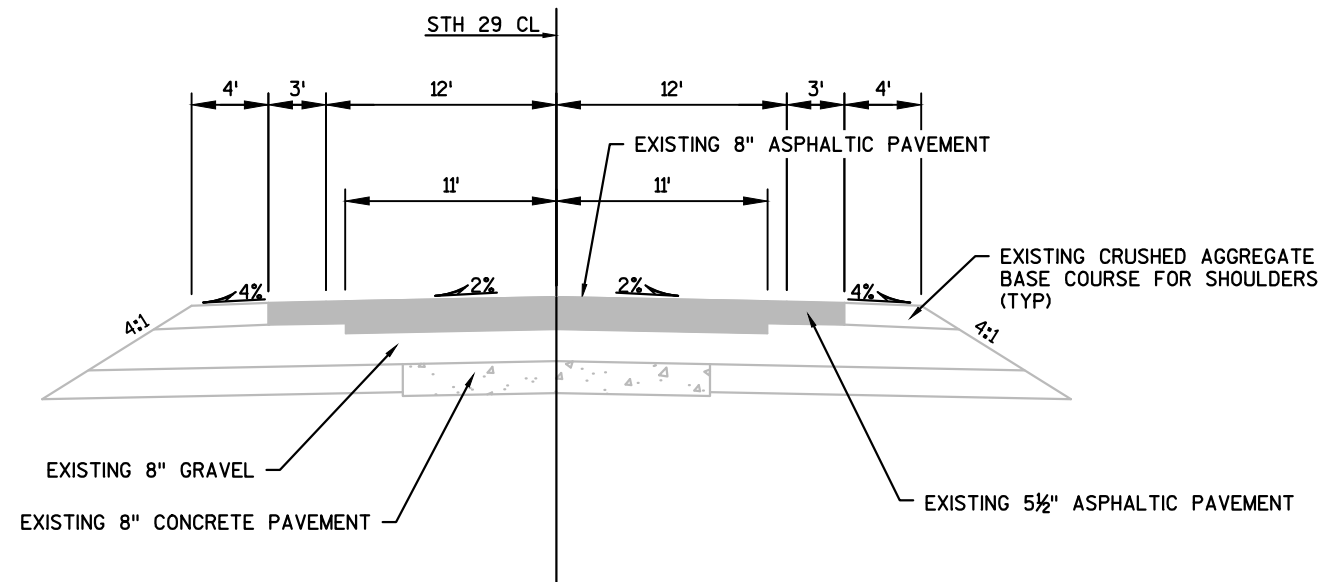
NE REGION SURVEY CONTACT PERSON

CORMAC MCINNIS  
DEPARTMENT OF TRANSPORTATION  
NORTHEAST REGION  
944 VANDERPERREN WAY  
GREEN BAY, WI 54304  
PHONE: 920-492-5638  
E-MAIL: CORMAC.MCINNIS@DOT.WI.GOV



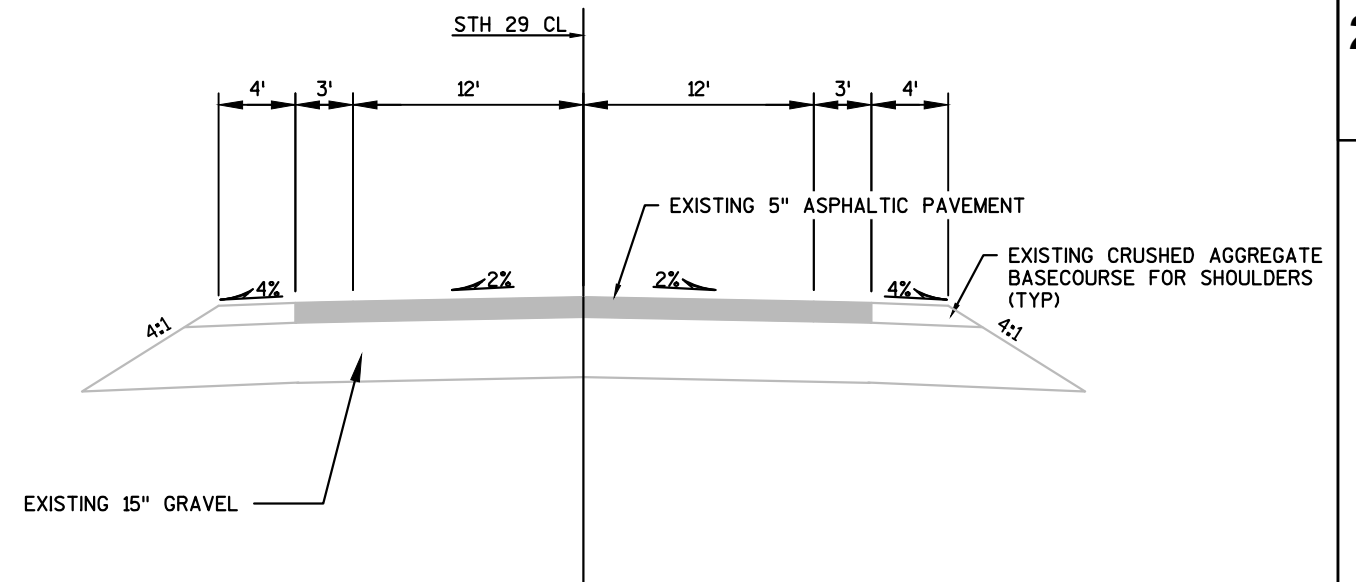
Dial 811 or (800)242-8511  
www.DiggersHotline.com





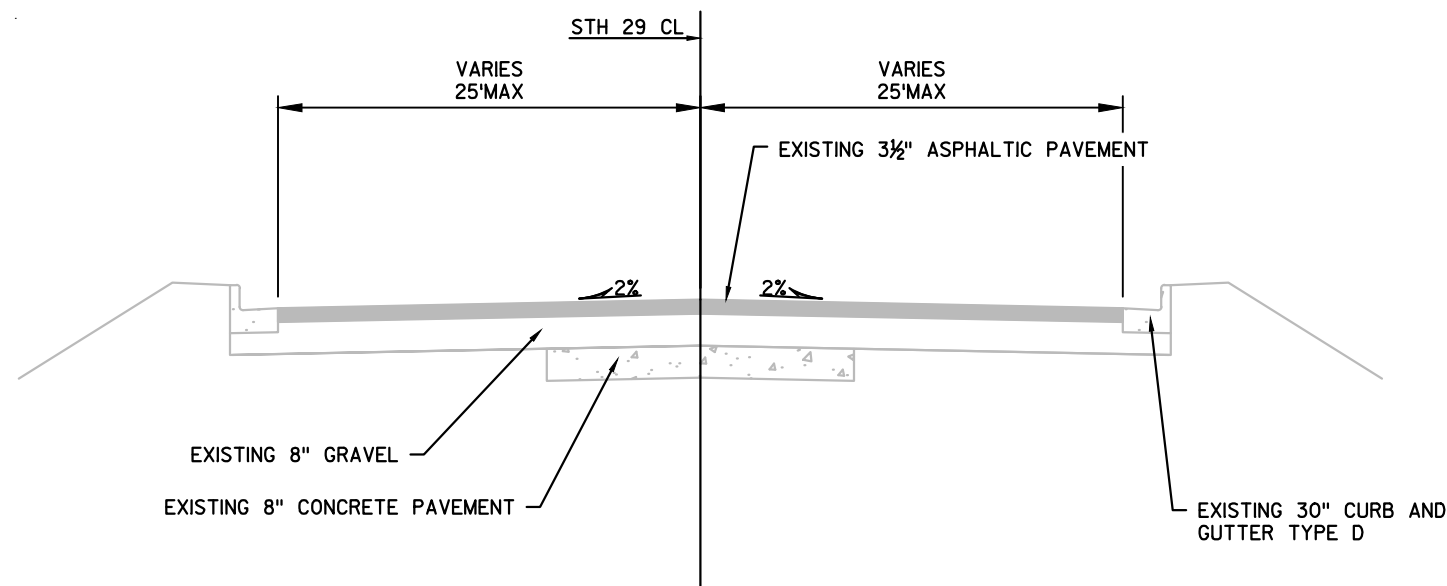
TYPICAL EXISTING CROSS SECTION FOR STH 29

STA. 102+00 TO 104+46 STA. 284+00 TO 349+30  
STA. 109+42 TO 136+91 STA. 361+10 TO 363+38  
STA. 137+97 TO 183+97 STA. 364+61 TO 376+50  
STA. 184+93 TO 211+96 STA. 379+80 TO 382+43  
STA. 214+04 TO 224+31 STA. 383+56 TO 442+05  
STA. 225+39 TO 258+00 STA. 448+50 TO 454+75  
STA. 225+39 TO 258+00 STA. 458+50 TO 459+84  
STA. 460+95 TO 513+42



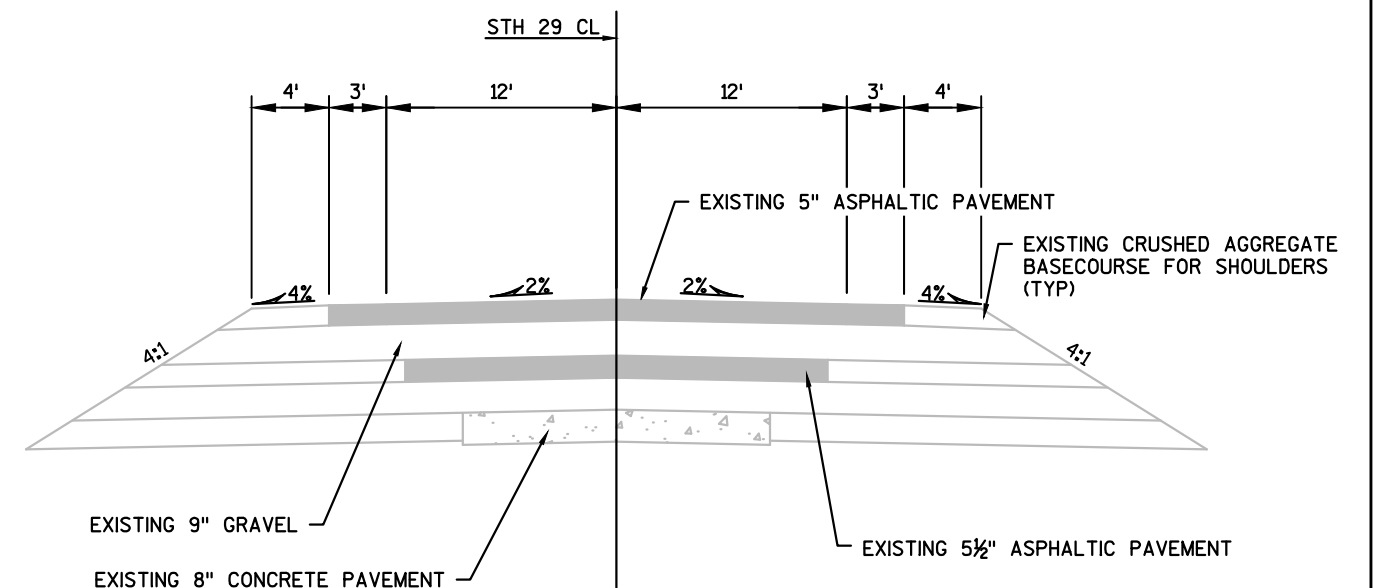
TYPICAL EXISTING CROSS SECTION FOR STH 29

STA. 136+91 TO 137+97  
STA. 183+97 TO 184+93  
STA. 211+96 TO 214+04  
STA. 224+31 TO 225+39  
STA. 363+38 TO 364+61  
STA. 382+43 TO 383+56  
STA. 459+84 TO 460+95



TYPICAL EXISTING CROSS SECTION FOR STH 29

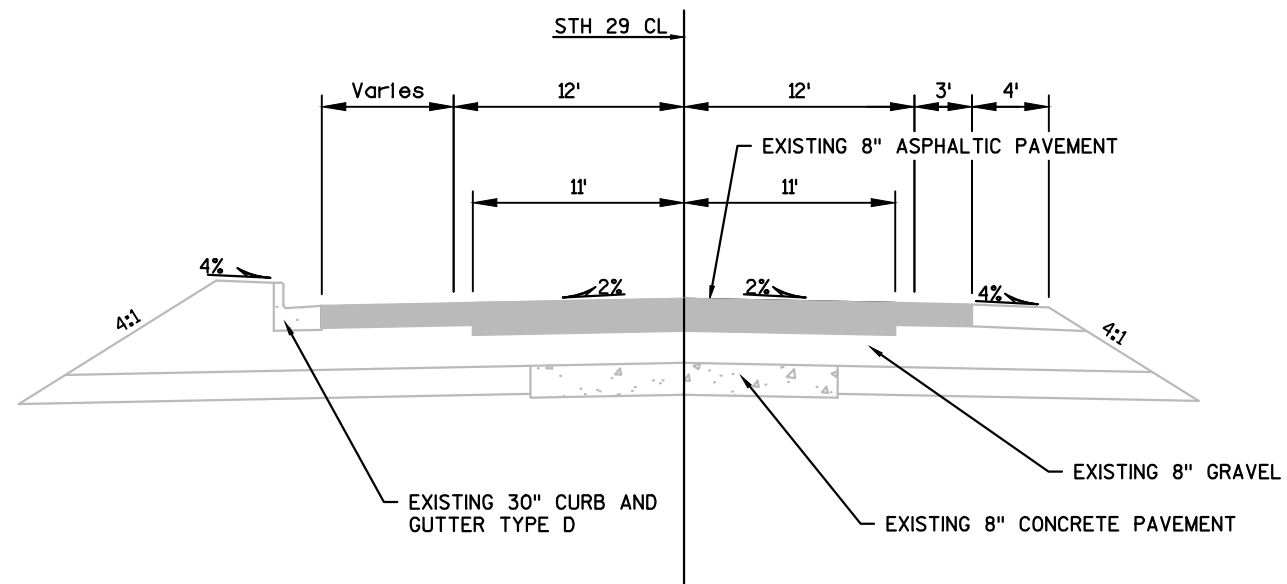
STA. 104+46 TO 105+89  
STA. 106+00 TO 109+42



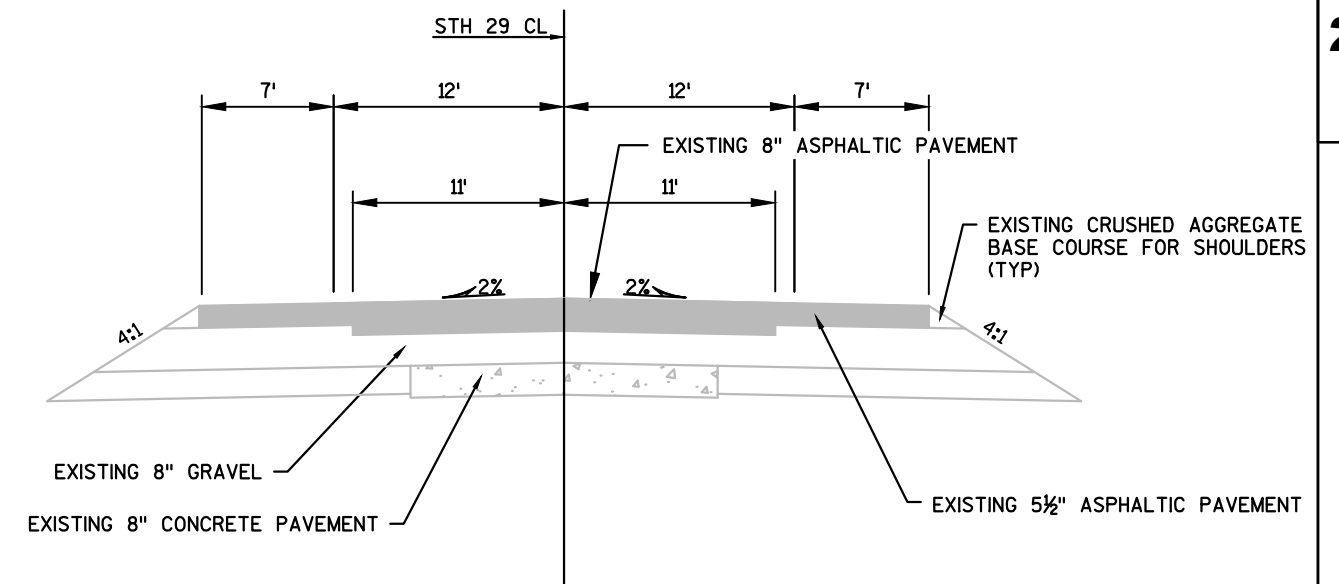
TYPICAL EXISTING CROSS SECTION FOR STH 29

STA. 258+00 TO 284+00



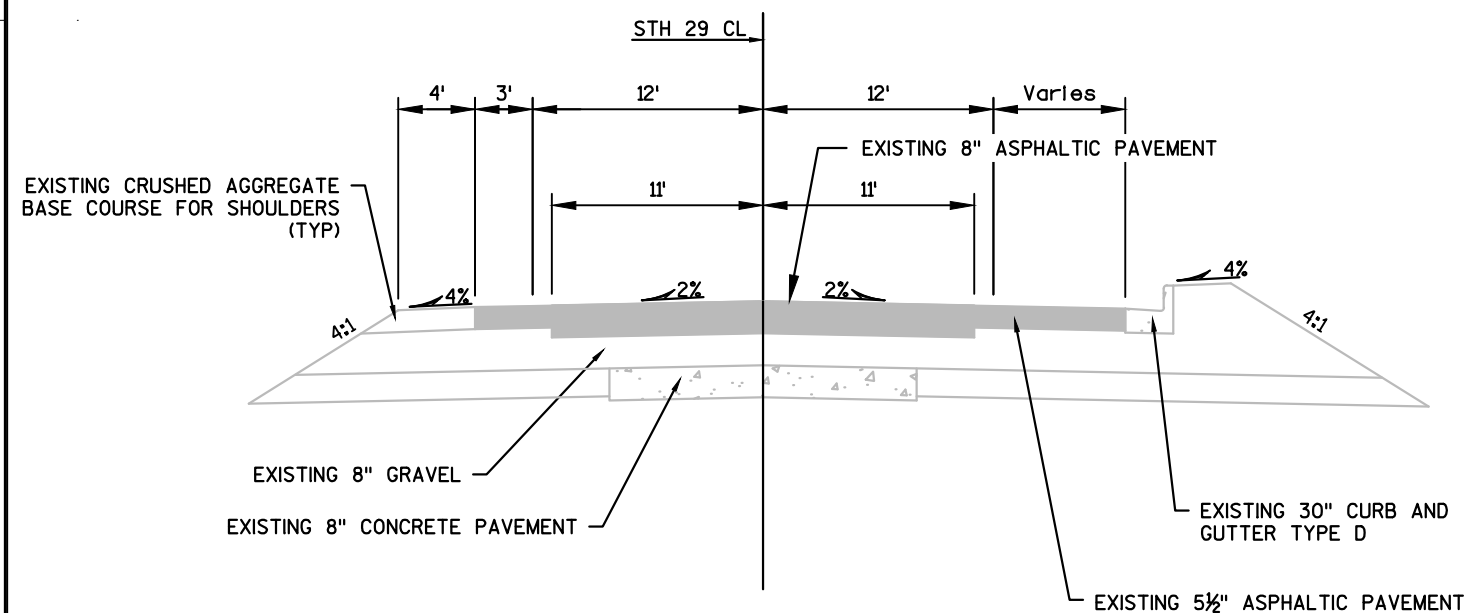


TYPICAL EXISTING CROSS SECTION FOR STH 29

STA. 349+30 TO 361+10  
STA. 376+50 TO 379+80

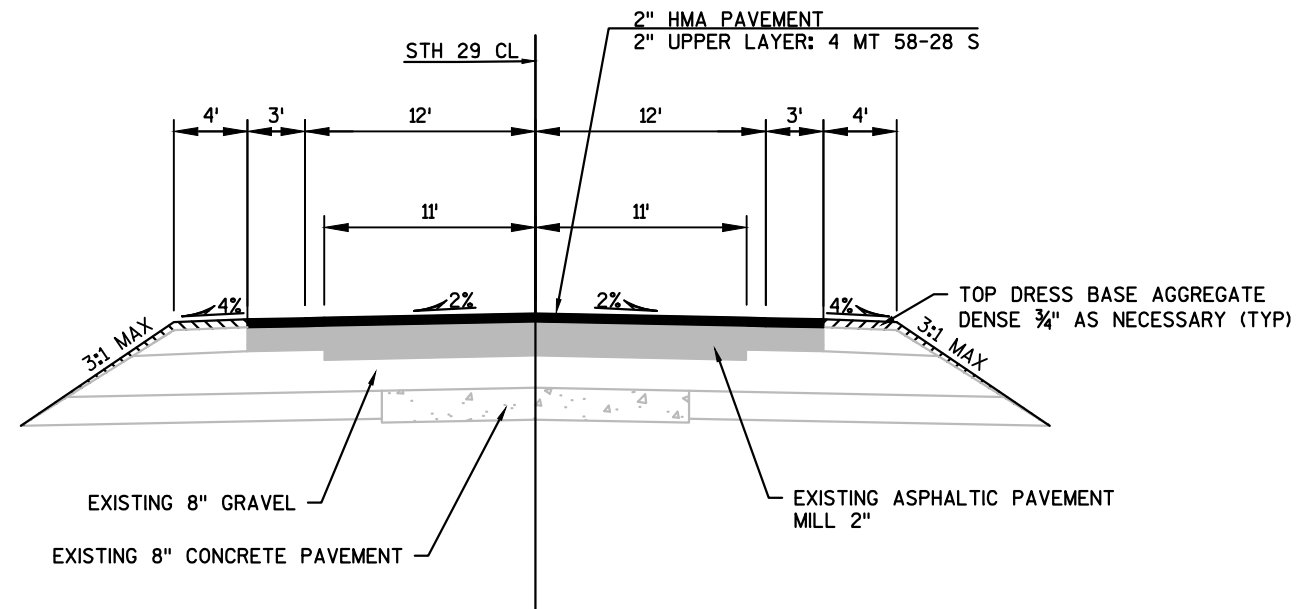
TYPICAL EXISTING CROSS SECTION FOR STH 29

STA. 454+75 TO 458+50



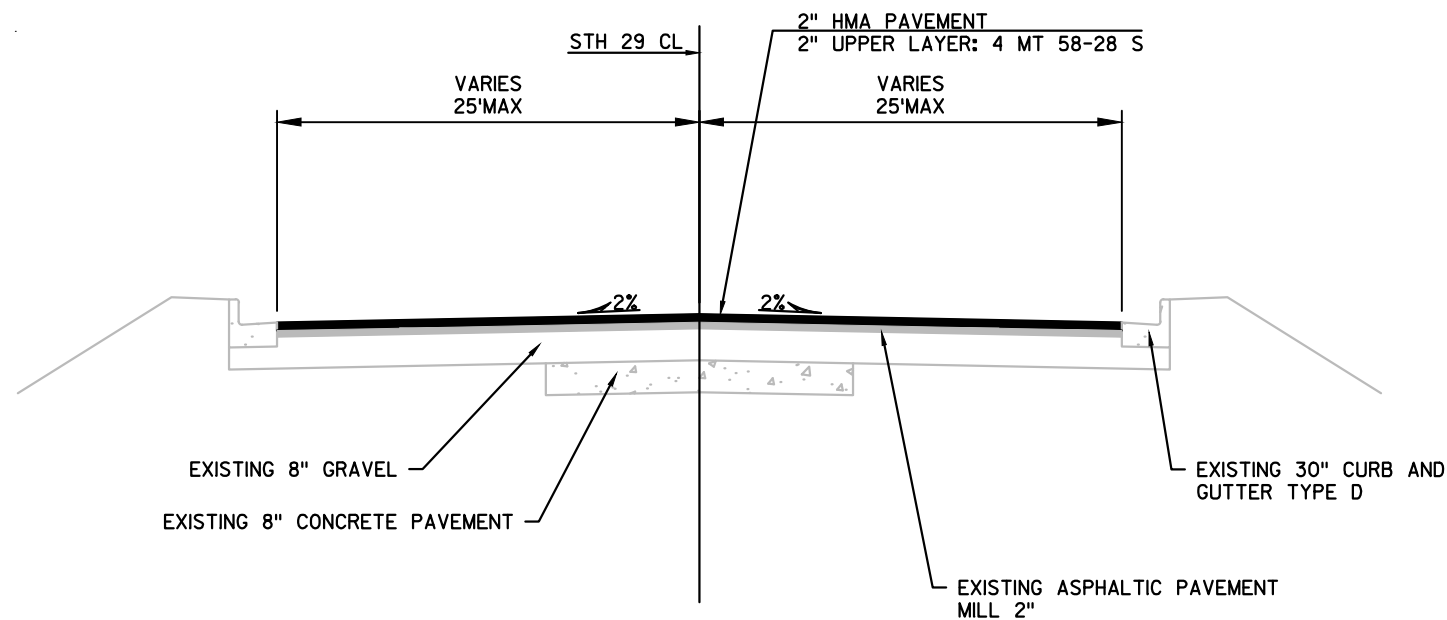
TYPICAL EXISTING CROSS SECTION FOR STH 29

STA. 442+05 TO 448+50

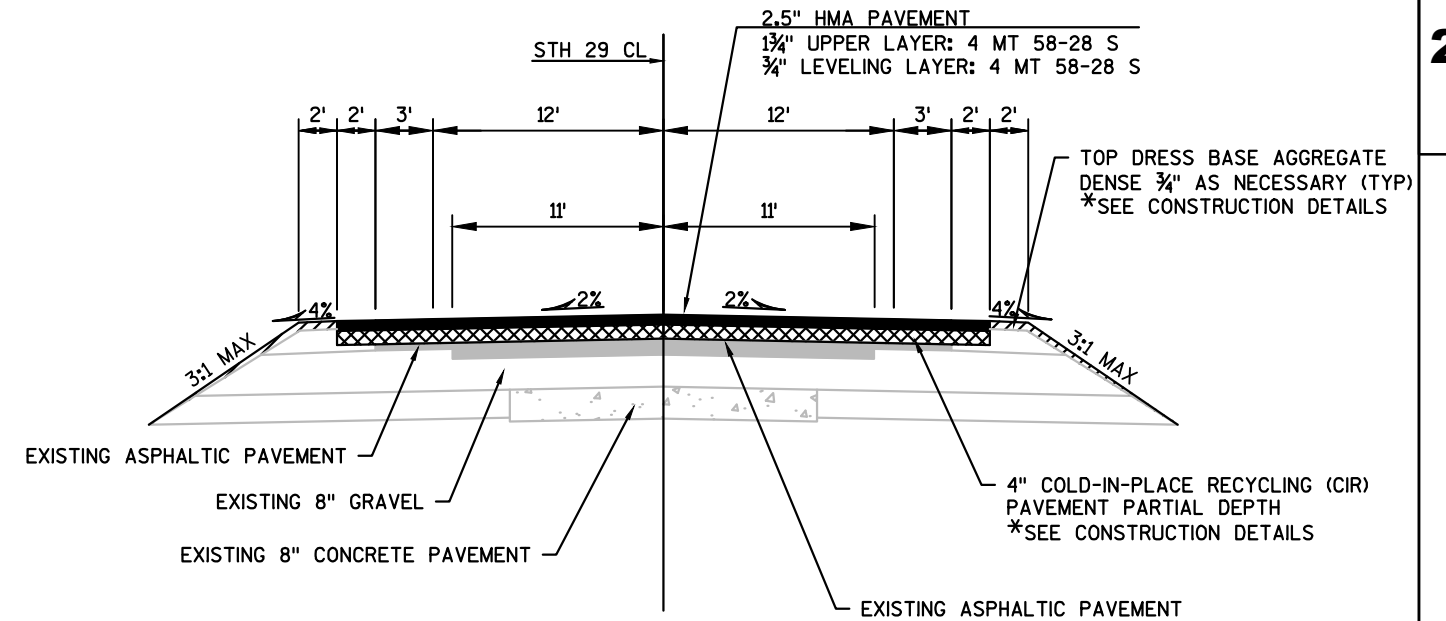


TYPICAL FINISHED CROSS SECTION FOR STH 29

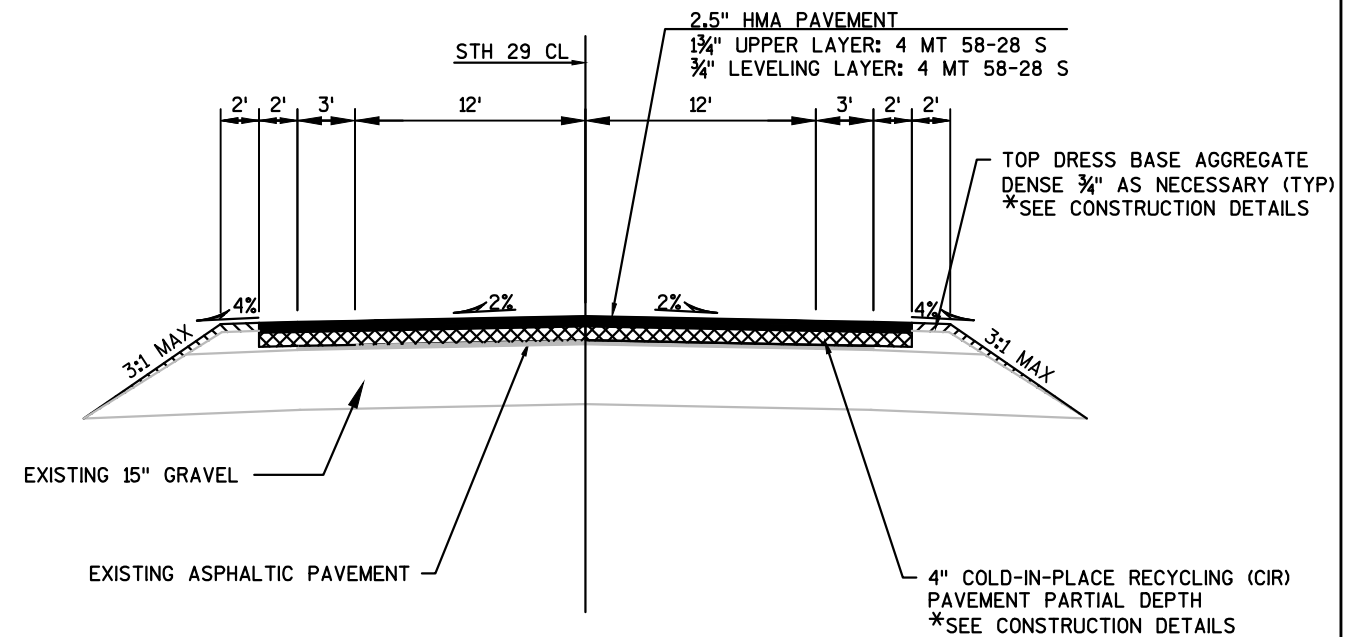
STA. 102+00 TO 104+46



TYPICAL FINISHED CROSS SECTION FOR STH 29

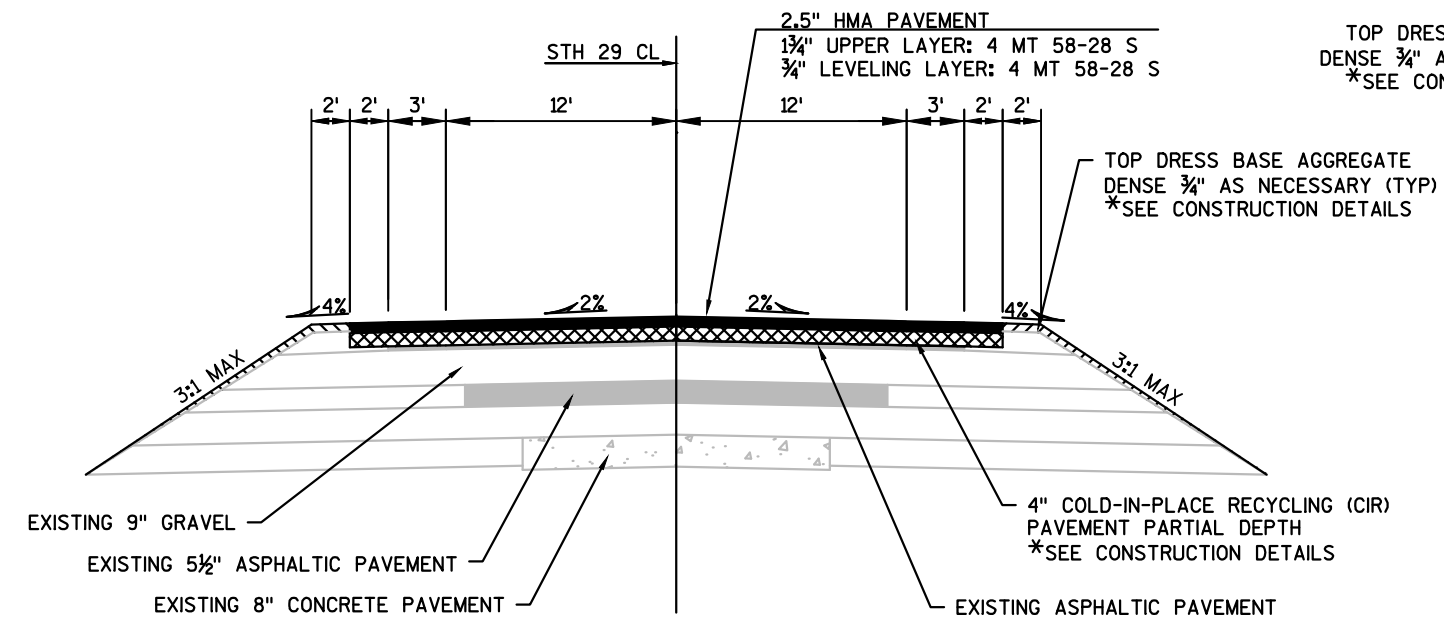
STA. 104+46 TO 105+89  
STA. 106+00 TO 109+42

TYPICAL FINISHED CROSS SECTION FOR STH 29

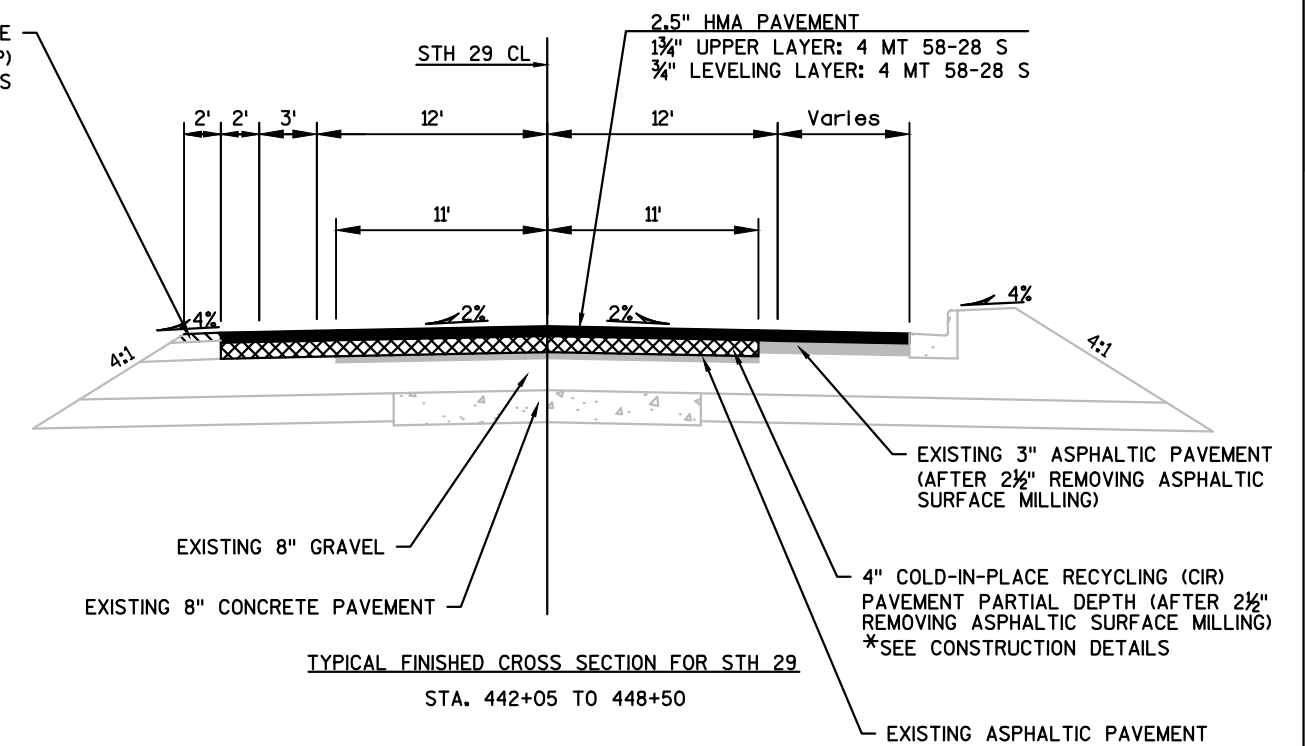
STA. 109+42 TO 136+91 STA. 361+10 TO 363+38  
STA. 137+97 TO 183+97 STA. 364+61 TO 376+50  
STA. 184+93 TO 211+96 STA. 379+80 TO 382+43  
STA. 214+04 TO 224+31 STA. 383+56 TO 442+05  
STA. 225+39 TO 258+00 STA. 448+50 TO 454+75  
STA. 225+39 TO 258+00 STA. 458+50 TO 459+84  
STA. 284+00 TO 349+30 STA. 460+95 TO 513+42

TYPICAL FINISHED CROSS SECTION FOR STH 29

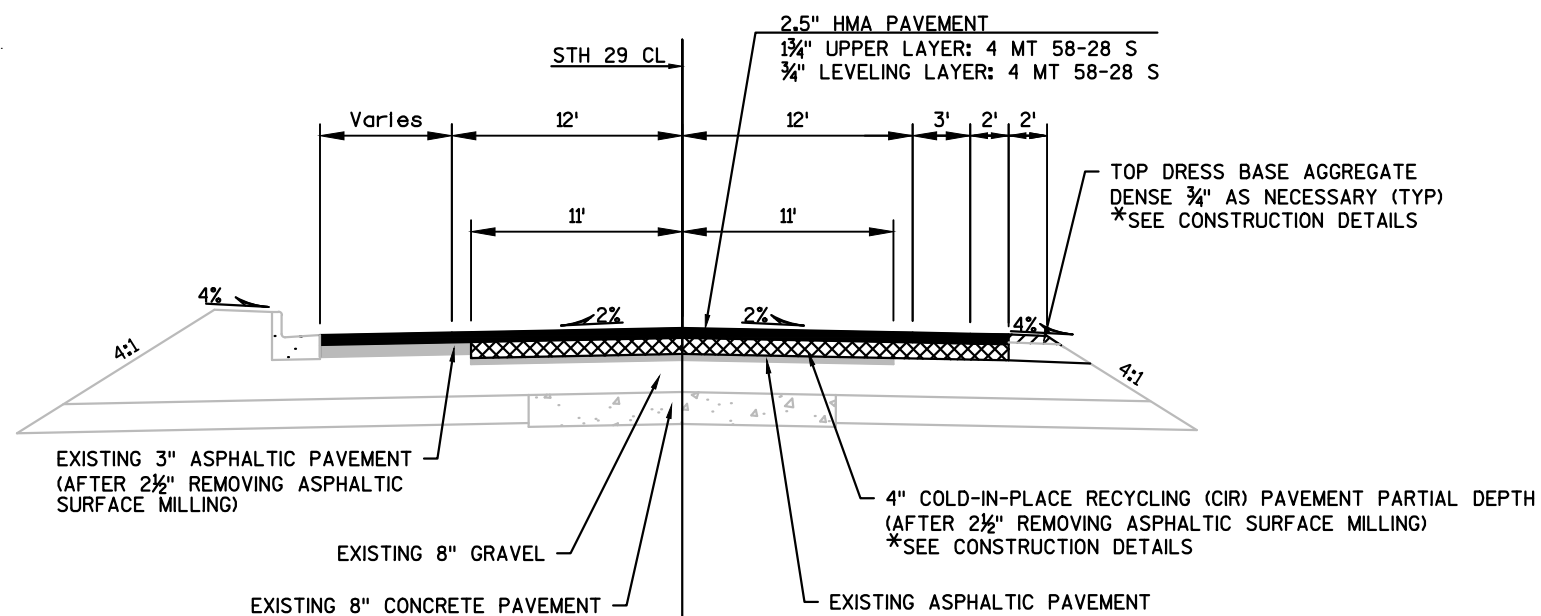
STA. 136+91 TO 137+97  
STA. 183+97 TO 184+93  
STA. 211+96 TO 214+04  
STA. 224+31 TO 225+39  
STA. 363+38 TO 364+61  
STA. 382+43 TO 383+56  
STA. 459+84 TO 460+95



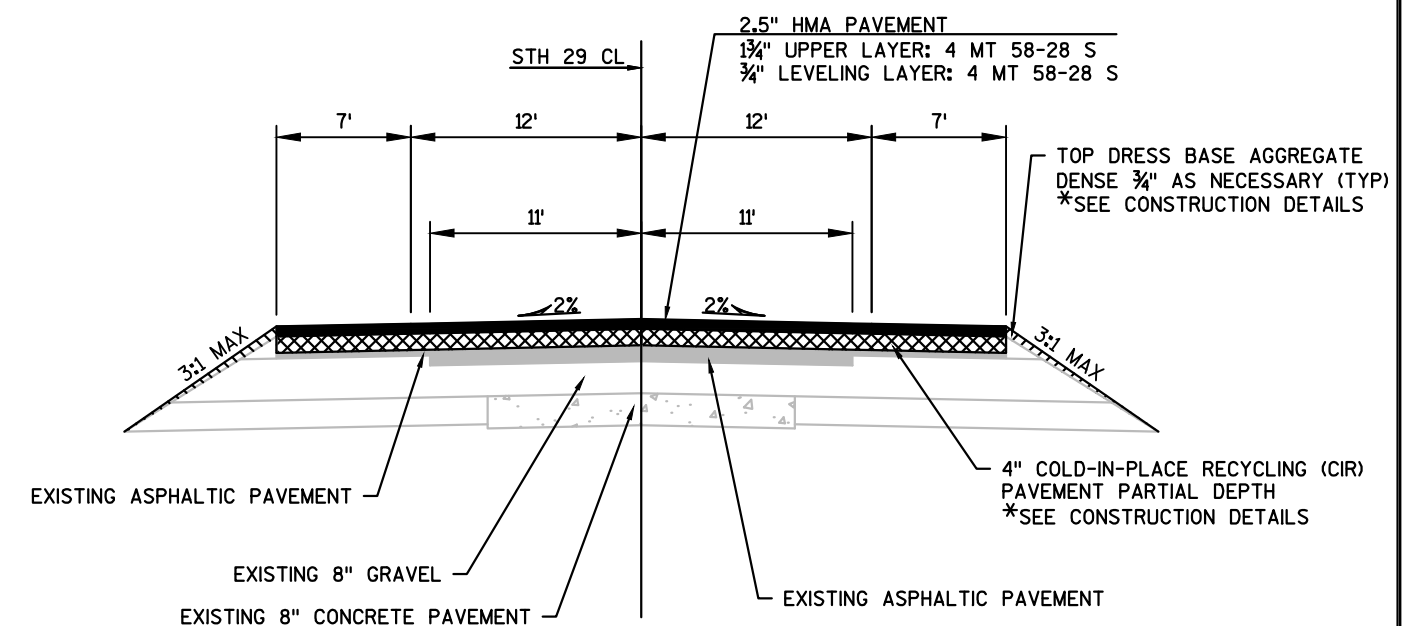
TYPICAL FINISHED CROSS SECTION FOR STH 29  
STA. 258+00 TO 284+00



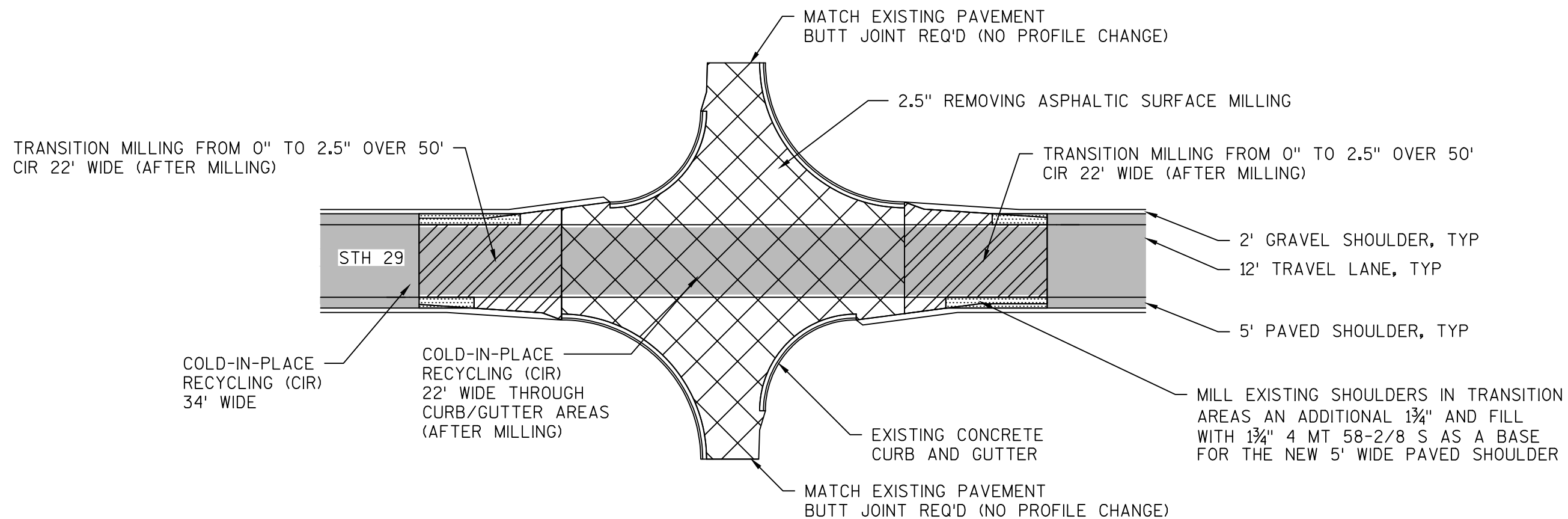
TYPICAL FINISHED CROSS SECTION FOR STH 29  
STA. 442+05 TO 448+50



TYPICAL FINISHED CROSS SECTION FOR STH 29  
STA. 349+30 TO 361+10  
STA. 376+50 TO 379+80

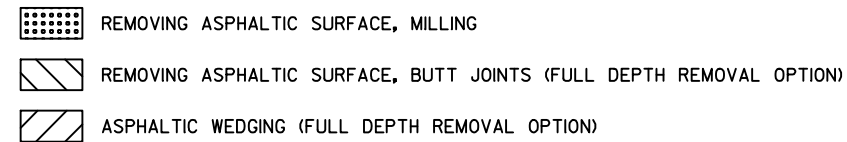


TYPICAL FINISHED CROSS SECTION FOR STH 29  
STA. 454+75 TO 458+50

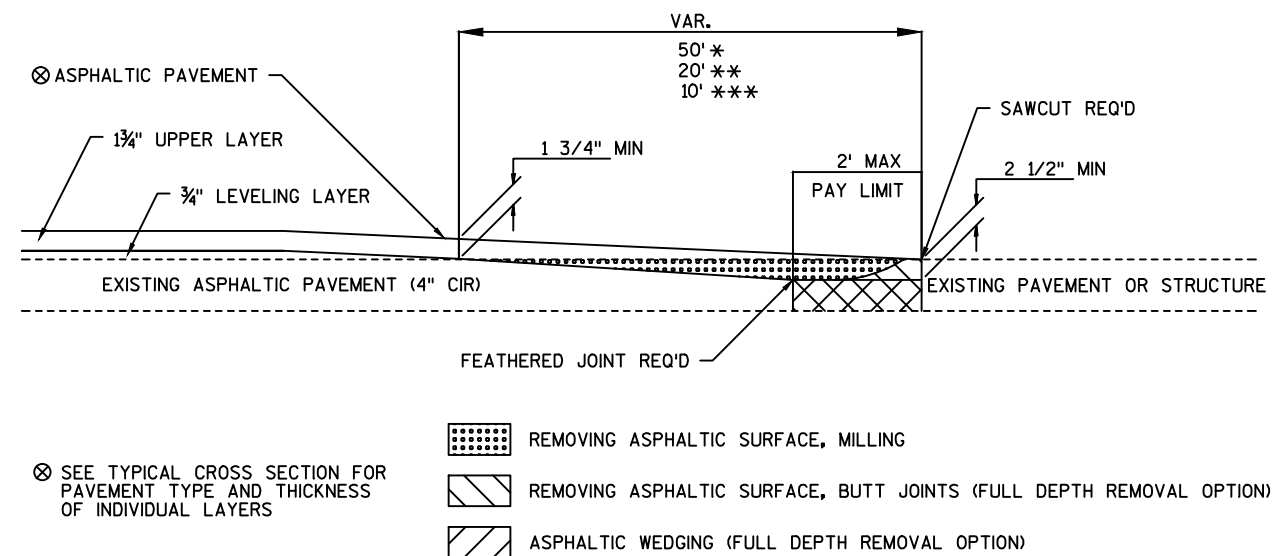


### MILLING/CIR LIMITS WITH CURB & GUTTER

S HURON RD  
TRESTLE RD  
CTH QQ/DOUBLE Q RD  
PHILLIPS RD  
LILY LAKE RD  
BUYARSKI RD  
ALLEN RD  
CTH T  
S WATER DIVISION RD  
STH 29 FROM STA. 443+01 TO 446+50  
S MICHELS RD  
CTH P

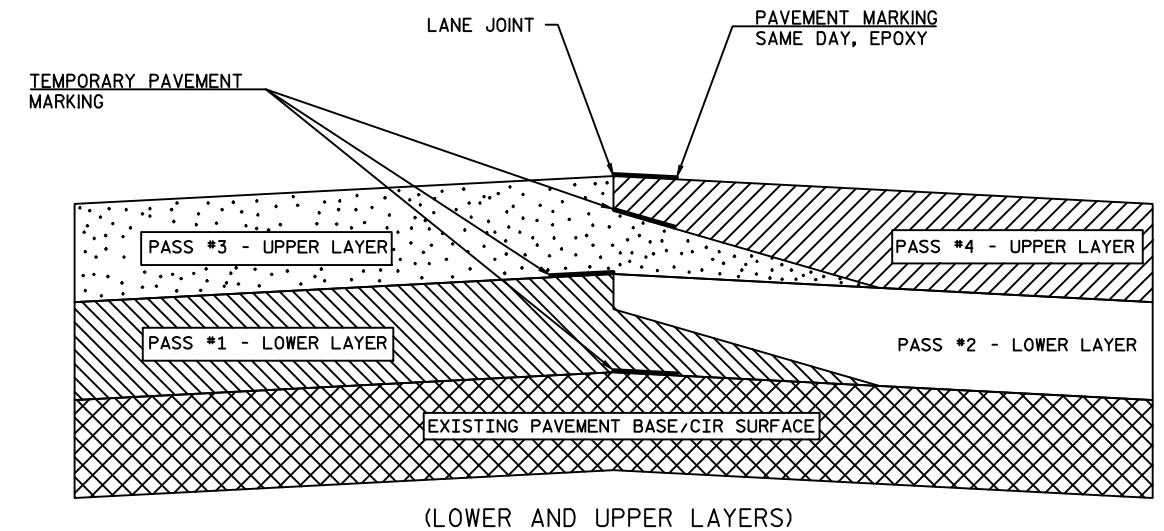


BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

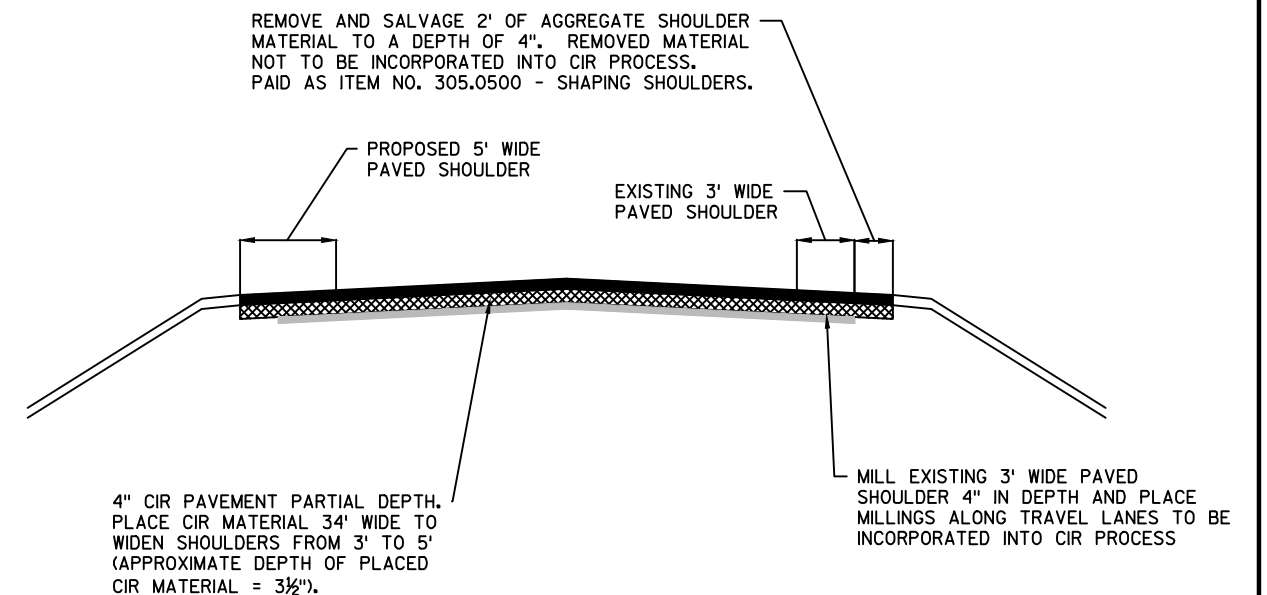
- \* MAINLINE
- \*\* SIDEROADS
- \*\*\* PRIVATE ENTRANCES/DRIVEWAYS



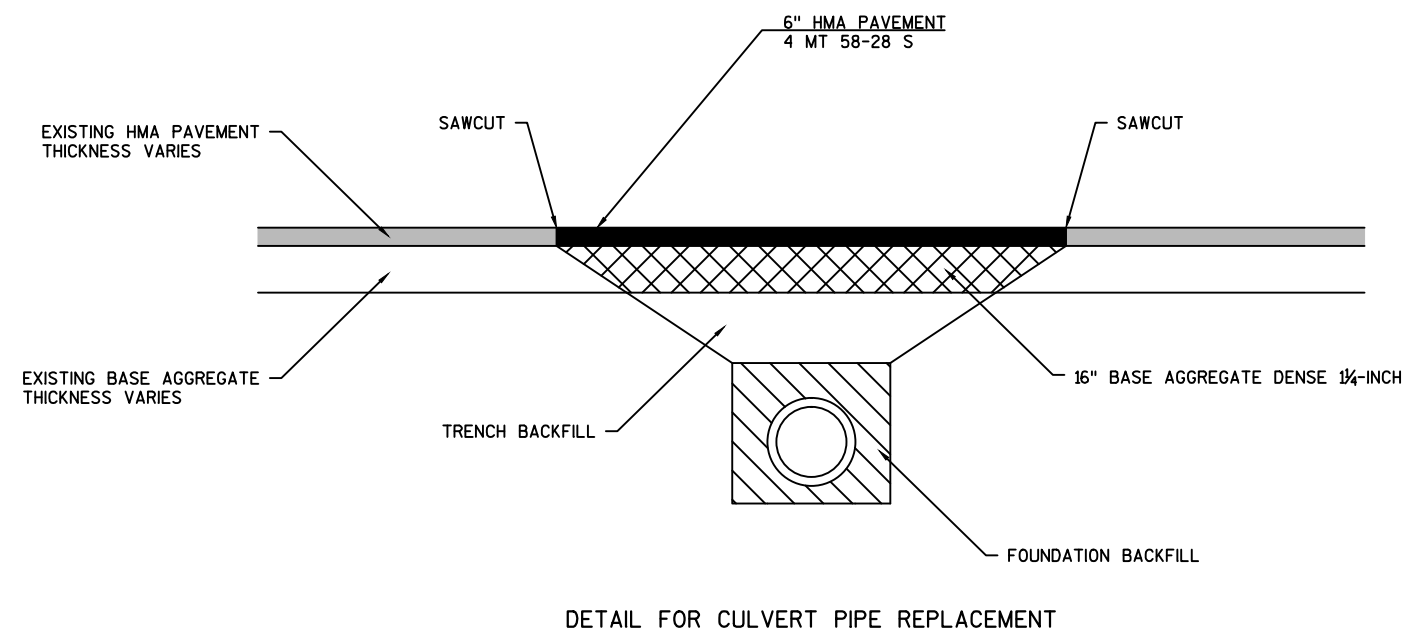
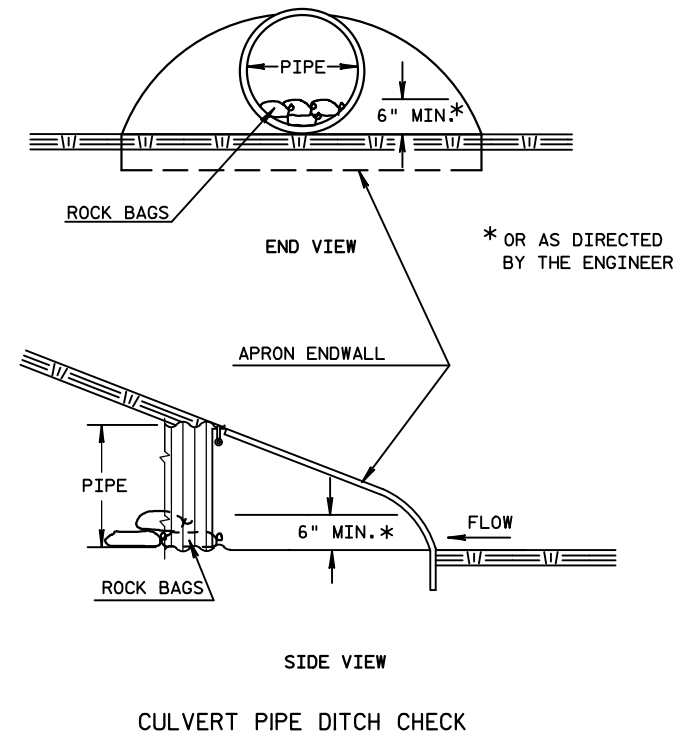
## PAVEMENT MARKING DETAIL

---

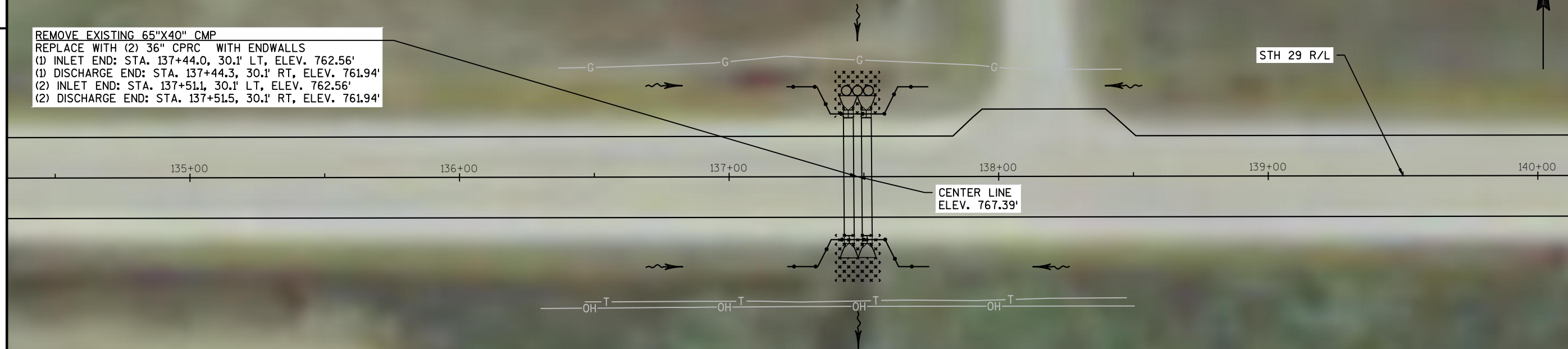
### TAPERED AND NOTCHED LONGITUDINAL JOINTS



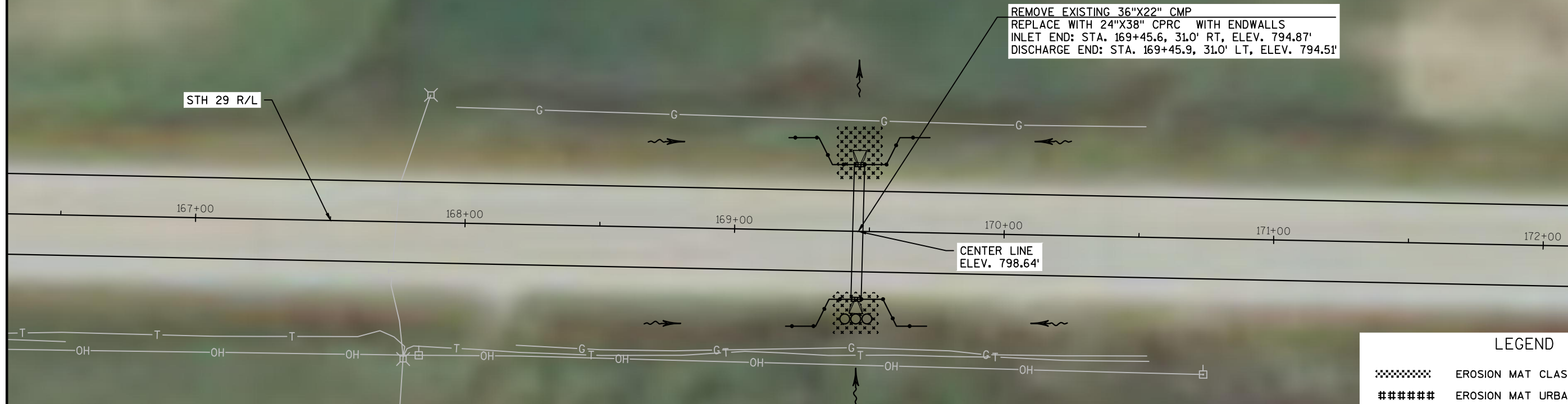
TYPICAL CROSS SECTION FOR STH 29  
SHOULDER WIDENING DETAIL



REMOVE EXISTING 65"X40" CMP  
REPLACE WITH (2) 36" CPRC WITH ENDWALLS  
(1) INLET END: STA. 137+44.0, 30.1' LT, ELEV. 762.56'  
(1) DISCHARGE END: STA. 137+44.3, 30.1' RT, ELEV. 761.94'  
(2) INLET END: STA. 137+51.1, 30.1' LT, ELEV. 762.56'  
(2) DISCHARGE END: STA. 137+51.5, 30.1' RT, ELEV. 761.94'

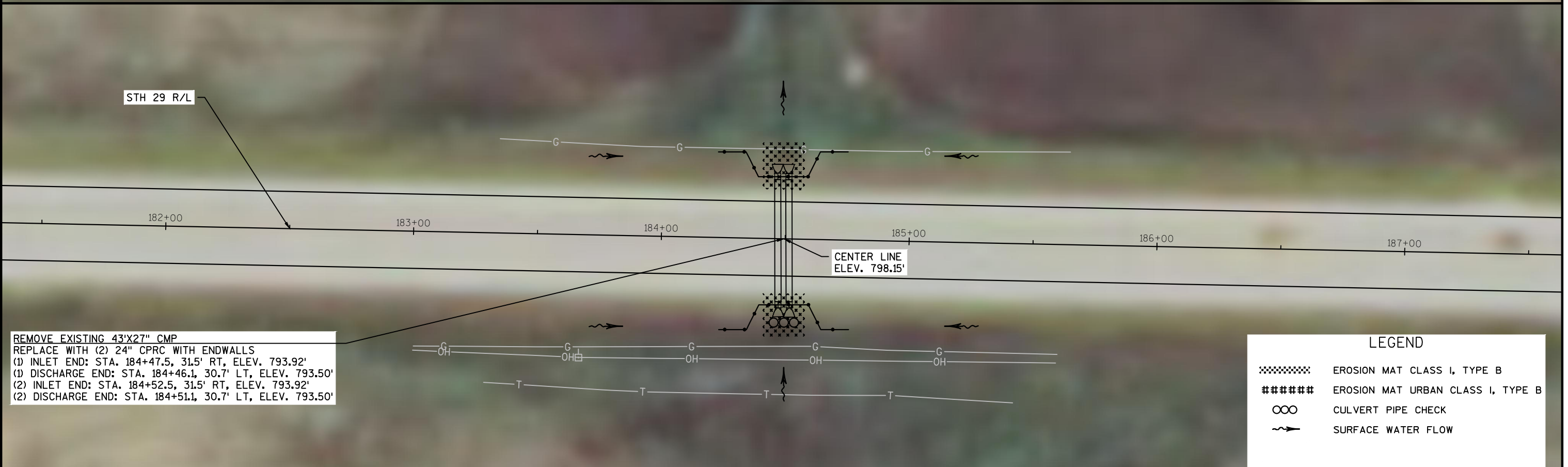
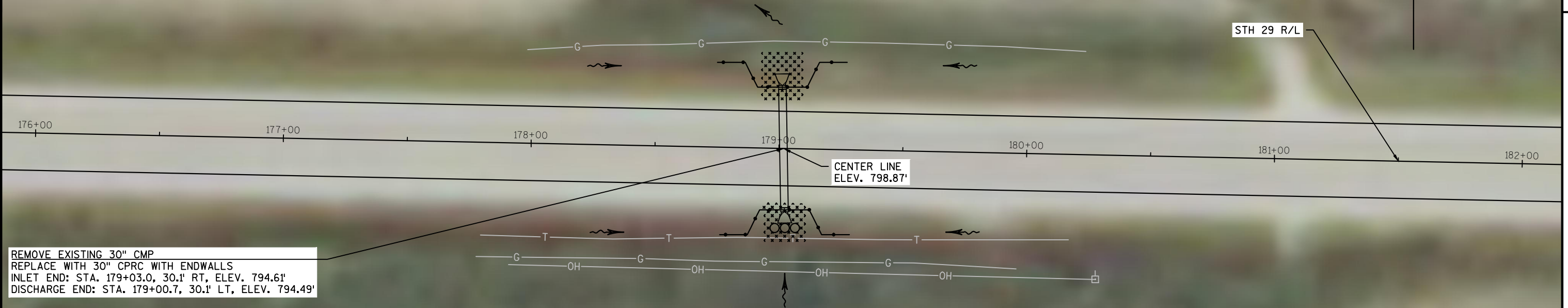


REMOVE EXISTING 36"X22" CMP  
REPLACE WITH 24"X38" CPRC WITH ENDWALLS  
INLET END: STA. 169+45.6, 31.0' RT, ELEV. 794.87'  
DISCHARGE END: STA. 169+45.9, 31.0' LT, ELEV. 794.51'



## LEGEND

- XXXXXX EROSION MAT CLASS I, TYPE B
- ##### EROSION MAT URBAN CLASS I, TYPE B
- OOO CULVERT PIPE CHECK
- ~> SURFACE WATER FLOW

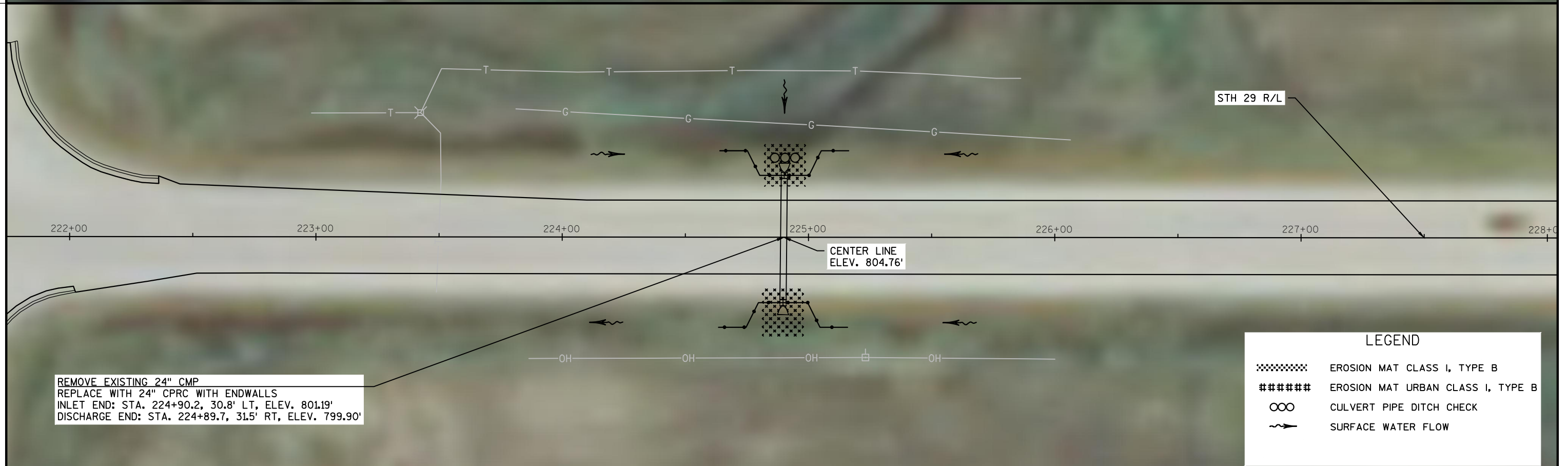
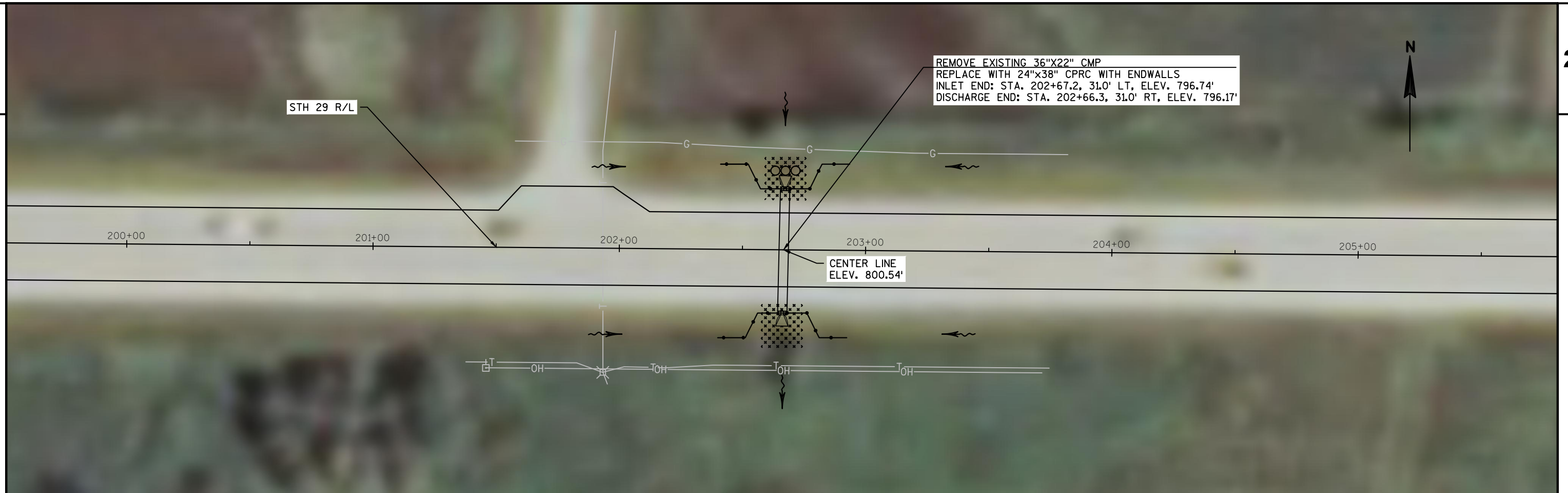


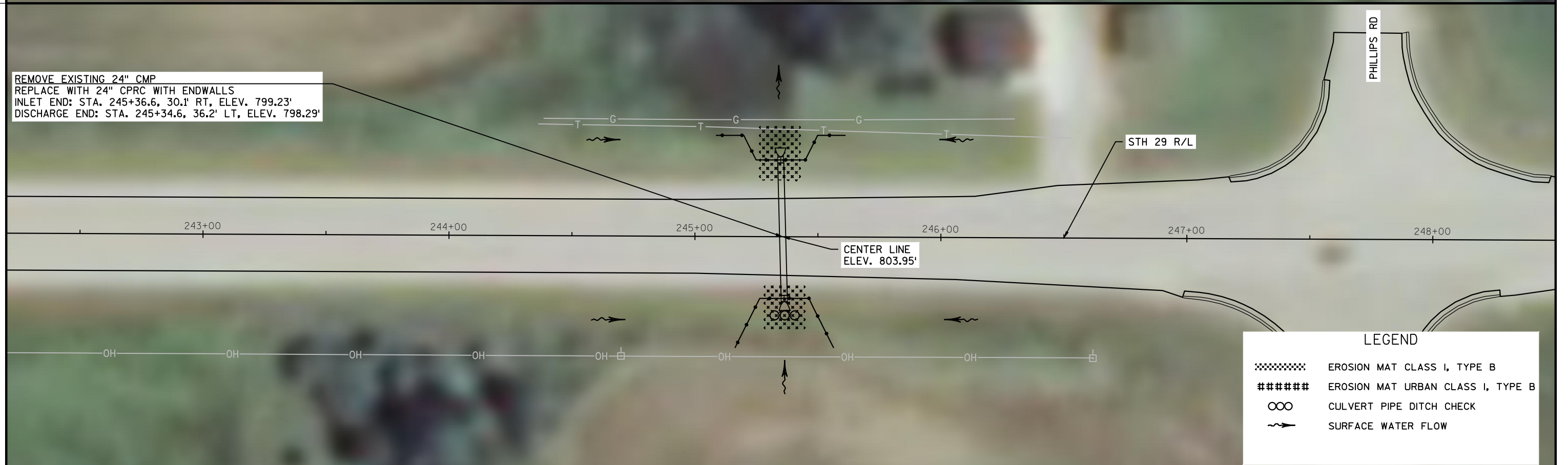
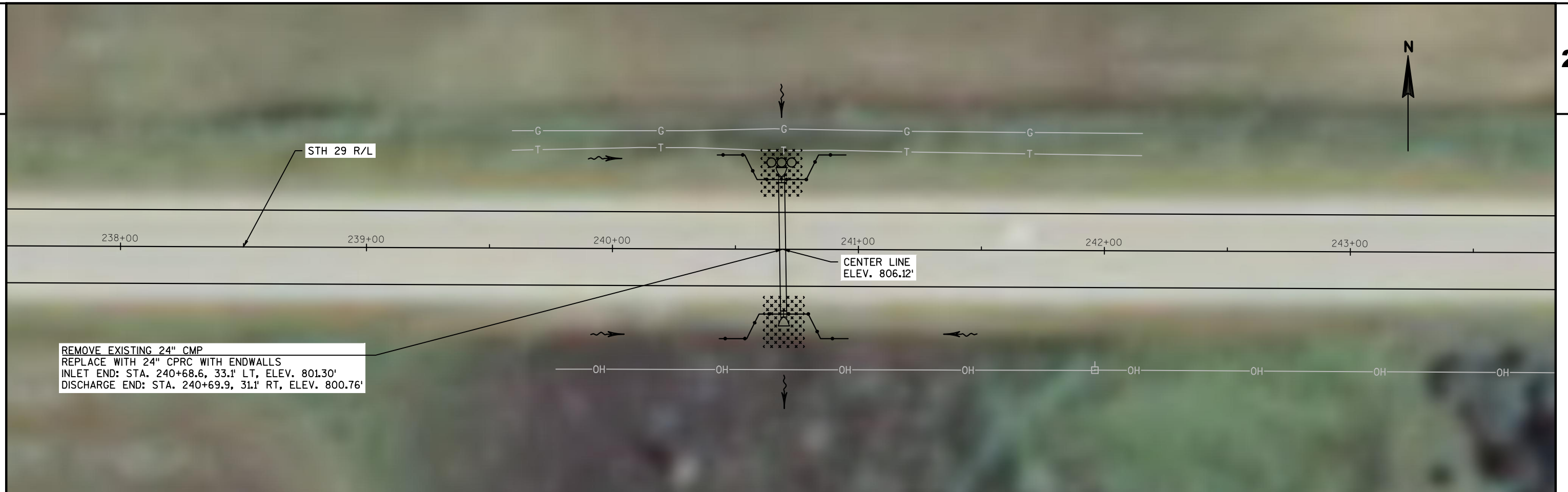
LEGEND	
XXXXXX	EROSION MAT CLASS I, TYPE B
#####	EROSION MAT URBAN CLASS I, TYPE B
OO	CULVERT PIPE CHECK
~>	SURFACE WATER FLOW



2

2





2

REMOVE EXISTING 36" CMP  
REPLACE WITH 36" CPRC WITH ENDWALLS  
INLET END: 316+56.6, 47.7' LT, ELEV. 802.25'  
DISCHARGE END: STA. 316+54.6, 46.5' RT, ELEV. 802.08'



2

314+00

315+00

316+00

317+00

318+00

319+00

STH 29 R/L

CENTER LINE  
ELEV. 811.82'

REMOVE EXISTING 30" CMP  
REPLACE WITH 30" CPRC WITH ENDWALLS  
INLET END: 335+86.1, 31.4' RT, ELEV. 807.56'  
DISCHARGE END: STA. 335+86.5, 32.9' LT, ELEV. 807.14'

STH 29 R/L

333+00

334+00

335+00

336+00

337+00

338+00

339+00

CENTER LINE  
ELEV. 814.08'

LEGEND

- XXXXXX EROSION MAT CLASS I, TYPE B
- ##### EROSION MAT URBAN CLASS I, TYPE B
- OOO CULVERT PIPE DITCH CHECK
- ~> SURFACE WATER FLOW

PROJECT NO:4125-08-71

HWY:STH 29

COUNTY:BROWN

CULVERT REPLACEMENT AND EROSION CONTROL DETAILS

SHEET

E

FILE NAME : N:\PDS\C3D\41250800\SHEETSPLAN\022501\_SS.DWG  
LAYOUT NAME - 022501\_SS - 022505\_SS

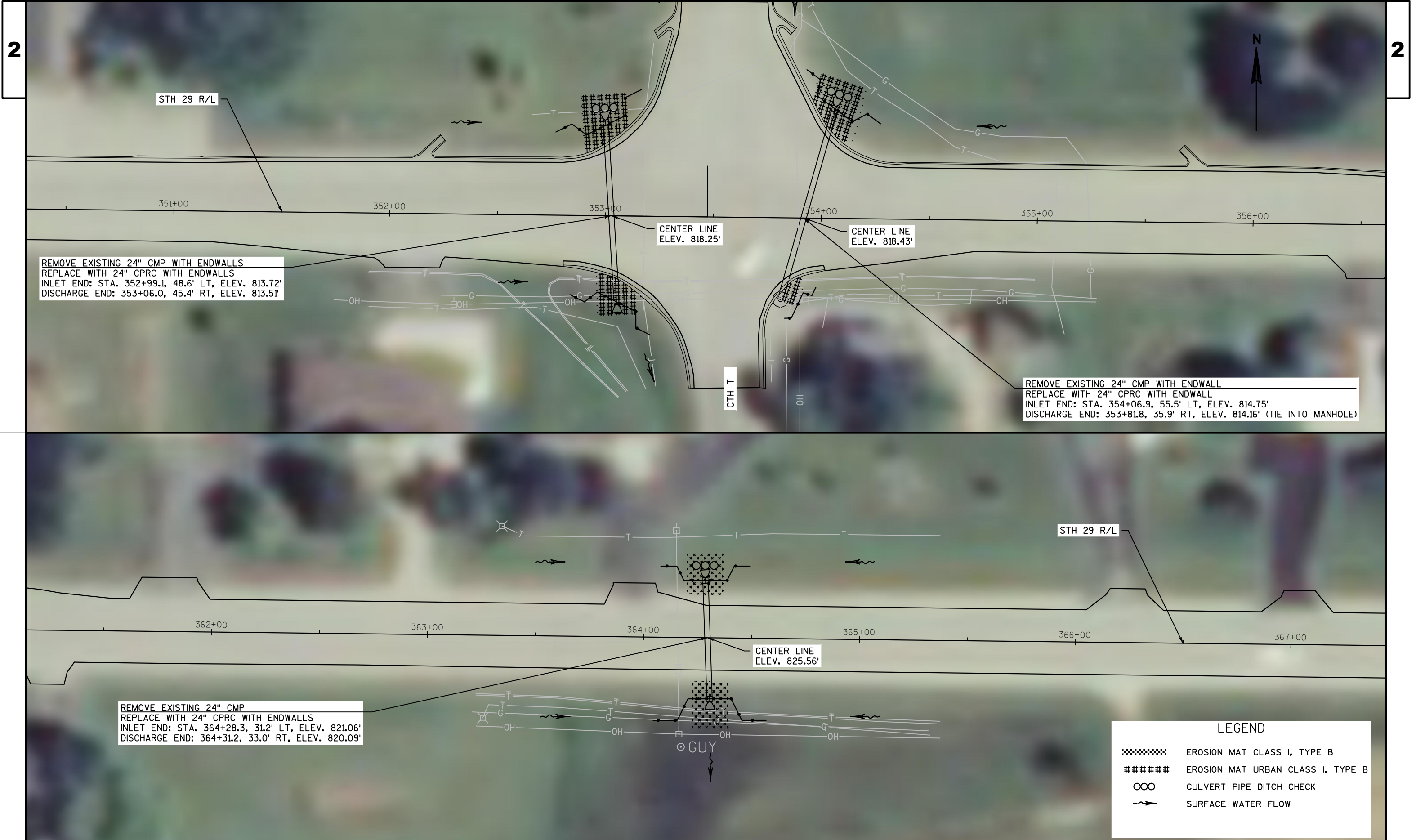
PLOT DATE : 12/22/2016 3:21 PM

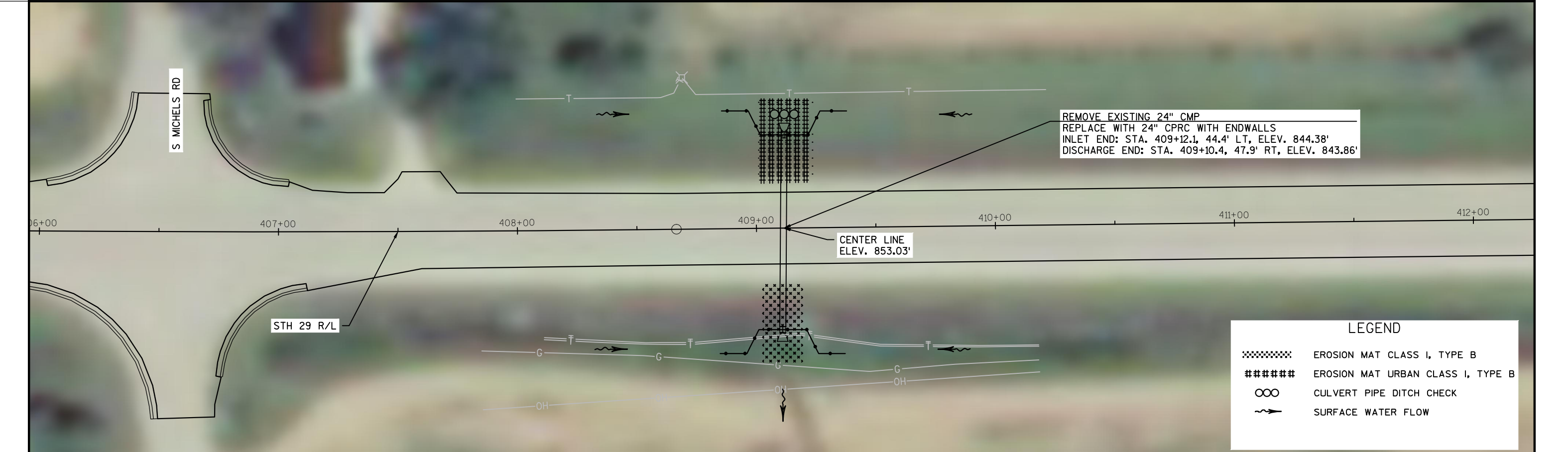
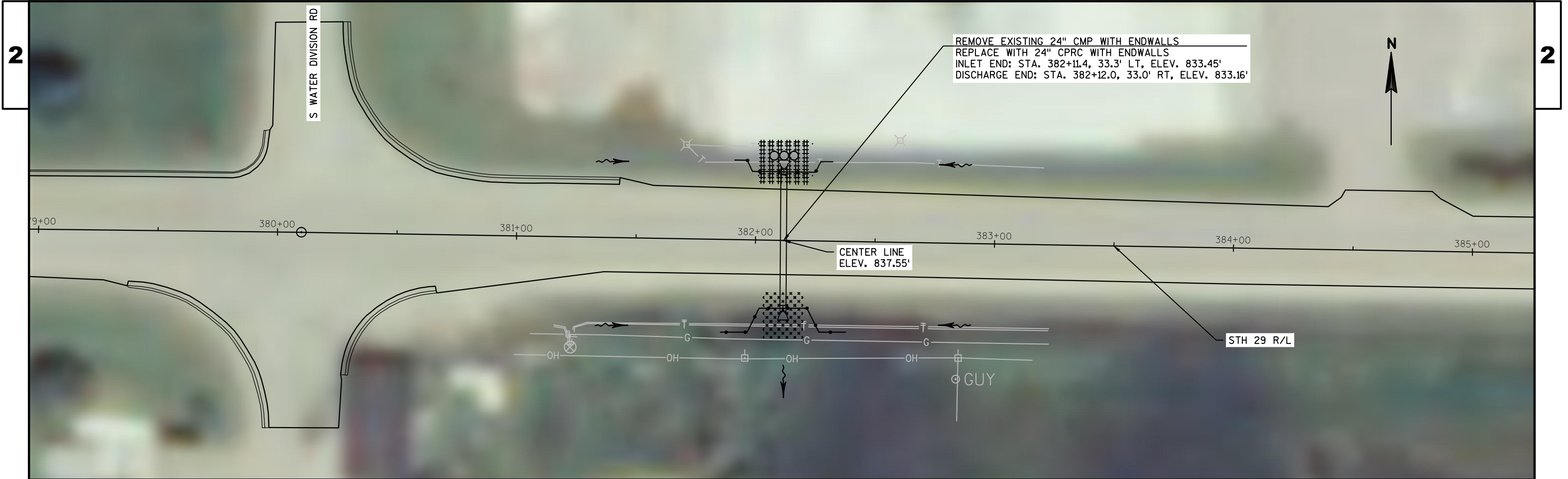
PLOT BY : BERTUCCI, MATTHEW T PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDs SHEET 44







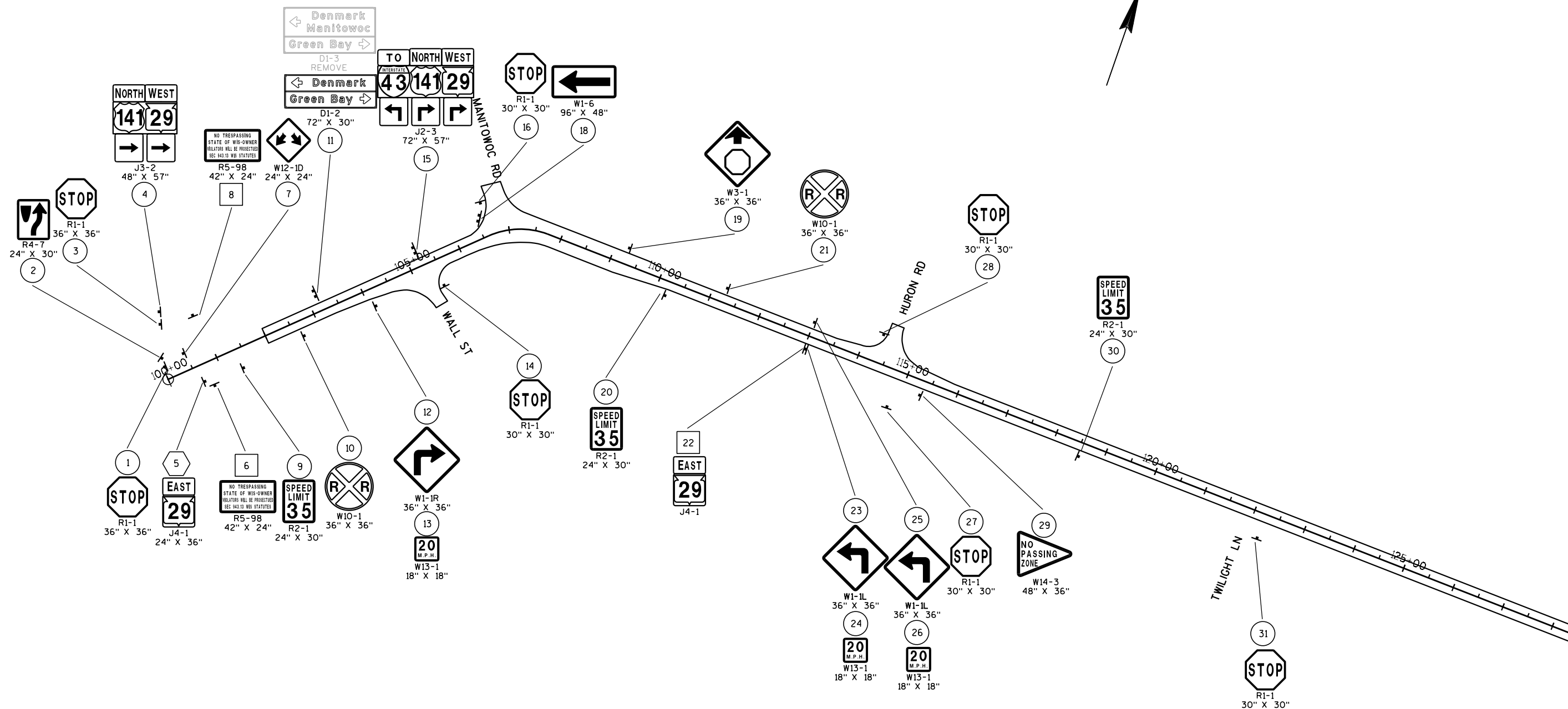
LEGEND	
XXXXXX	EROSION MAT CLASS I, TYPE B
#####	EROSION MAT URBAN CLASS I, TYPE B
OOO	CULVERT PIPE DITCH CHECK
~>	SURFACE WATER FLOW




## SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



-  SIGN-REMOVE AND REPLACE
-  SIGN-ONLY REMOVE
-  SIGN-NEW PLACEMENT

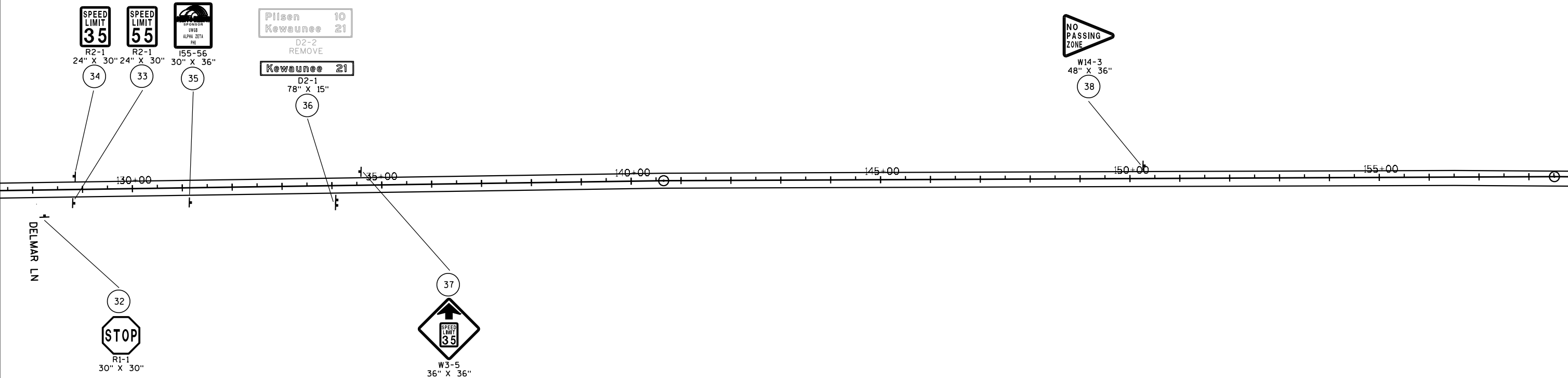
PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



- SIGN-REMOVE AND REPLACE
- SIGN-ONLY REMOVE
- SIGN-NEW PLACEMENT

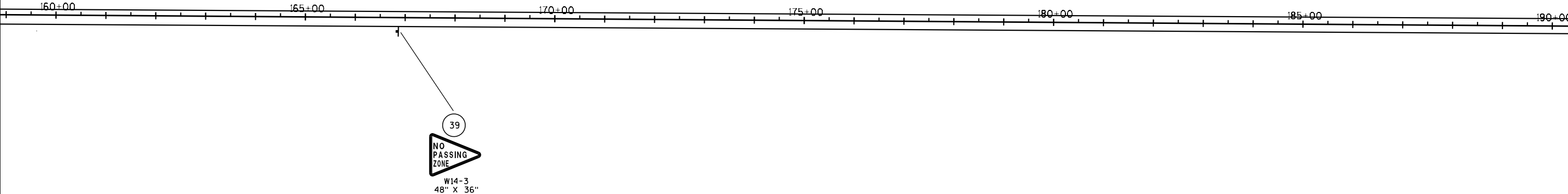
PLAN SHEET PRODUCED  
BY WisDOT-NE REGION




SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



-  SIGN-REMOVE AND REPLACE
-  SIGN-ONLY REMOVE
-  SIGN-NEW PLACEMENT

PLAN SHEET PRODUCED  
BY WisDOT-NE REGION

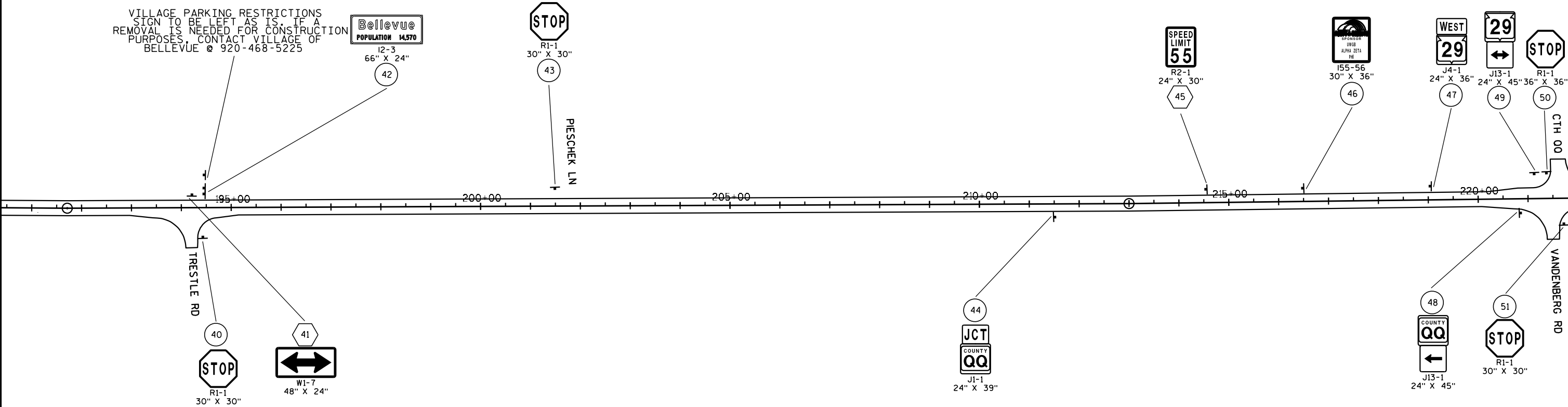


SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



- SIGN-REMOVE AND REPLACE
- SIGN-ONLY REMOVE
- SIGN-NEW PLACEMENT

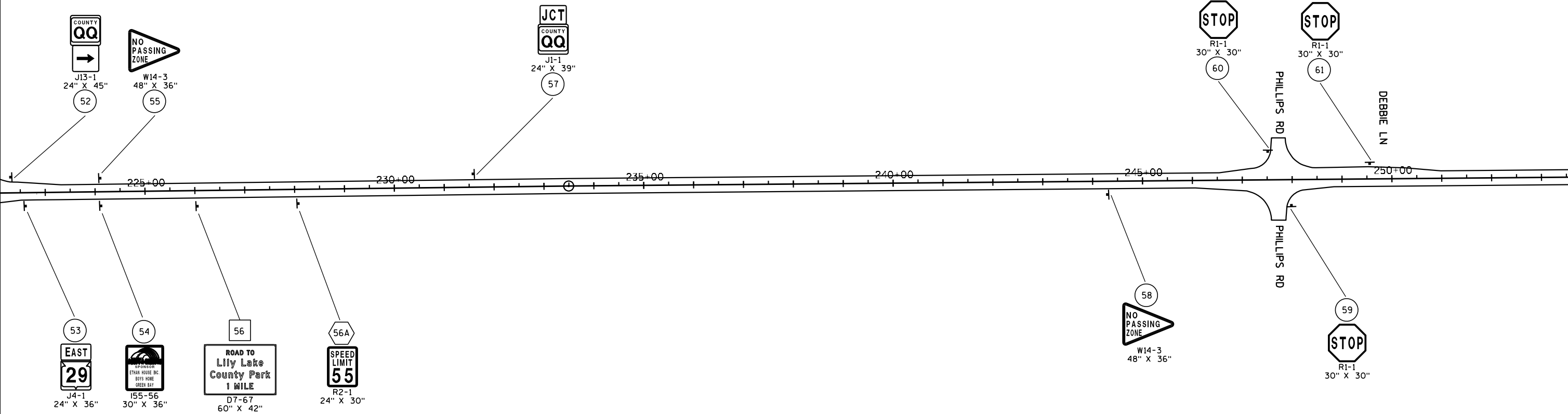
PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



- SIGN-REMOVE AND REPLACE
- SIGN-ONLY REMOVE
- SIGN-NEW PLACEMENT

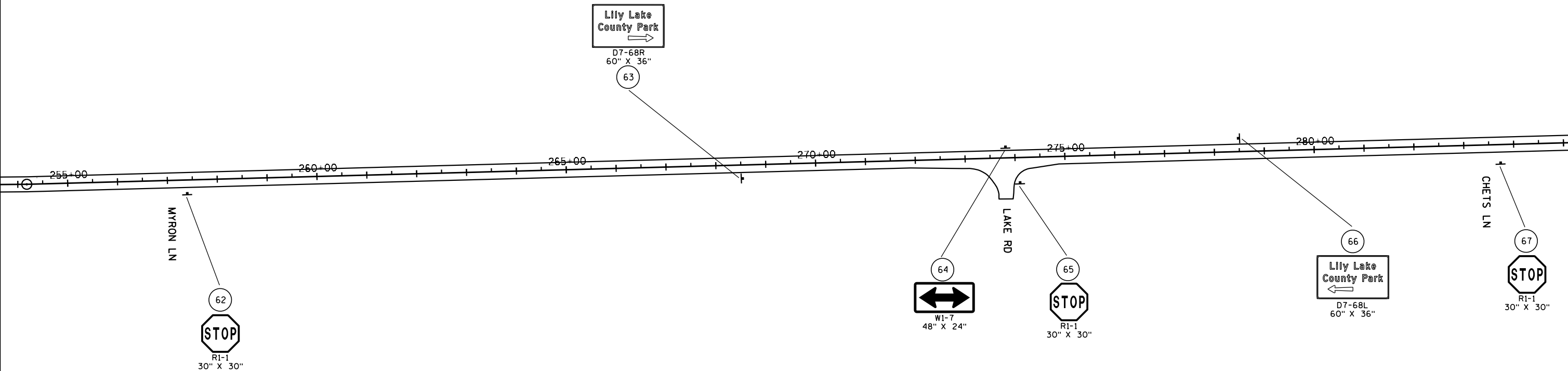
PLAN SHEET PRODUCED  
BY WisDOT-NE REGION

SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



- SIGN-REMOVE AND REPLACE
- SIGN-ONLY REMOVE
- SIGN-NEW PLACEMENT

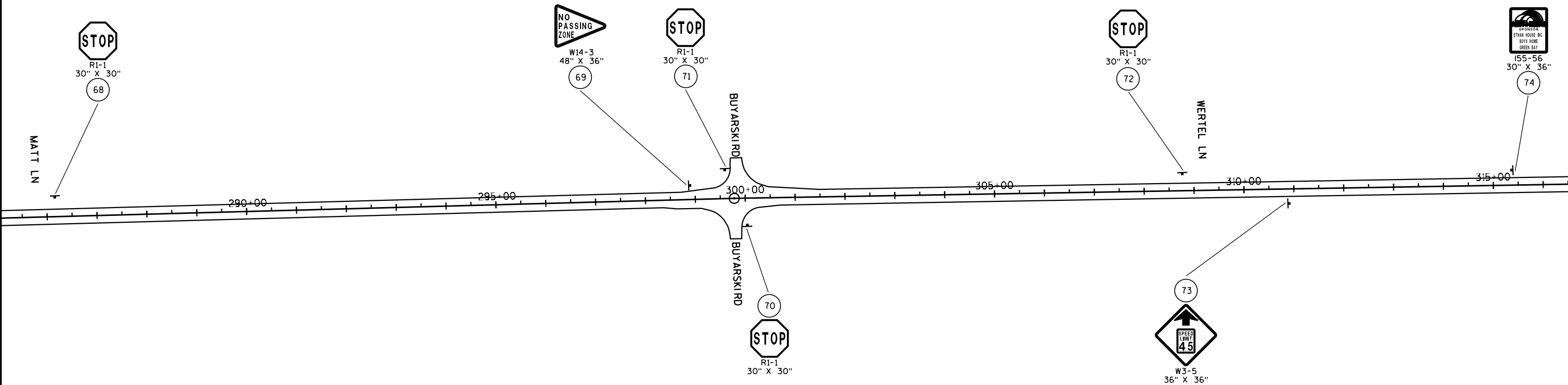
PLAN SHEET PRODUCED  
BY WisDOT-NE REGION




SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



-  SIGN-REMOVE AND REPLACE
-  SIGN-ONLY REMOVE
-  SIGN-NEW PLACEMENT

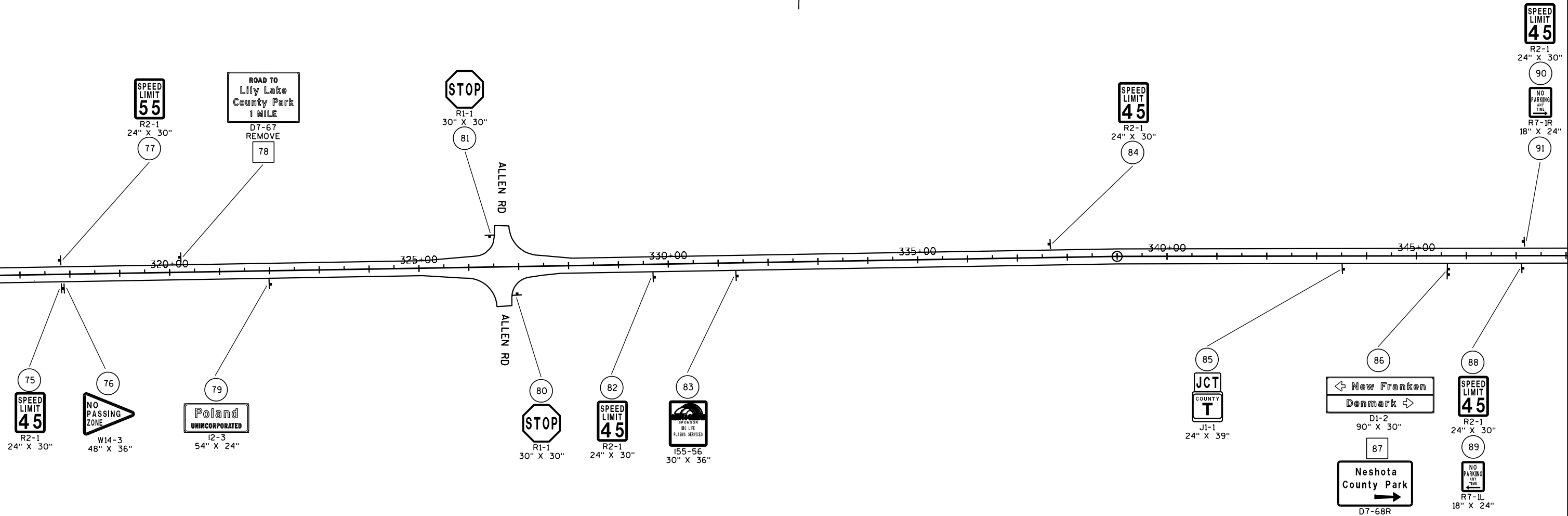
PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



- SIGN-REMOVE AND REPLACE
- SIGN-ONLY REMOVE
- SIGN-NEW PLACEMENT

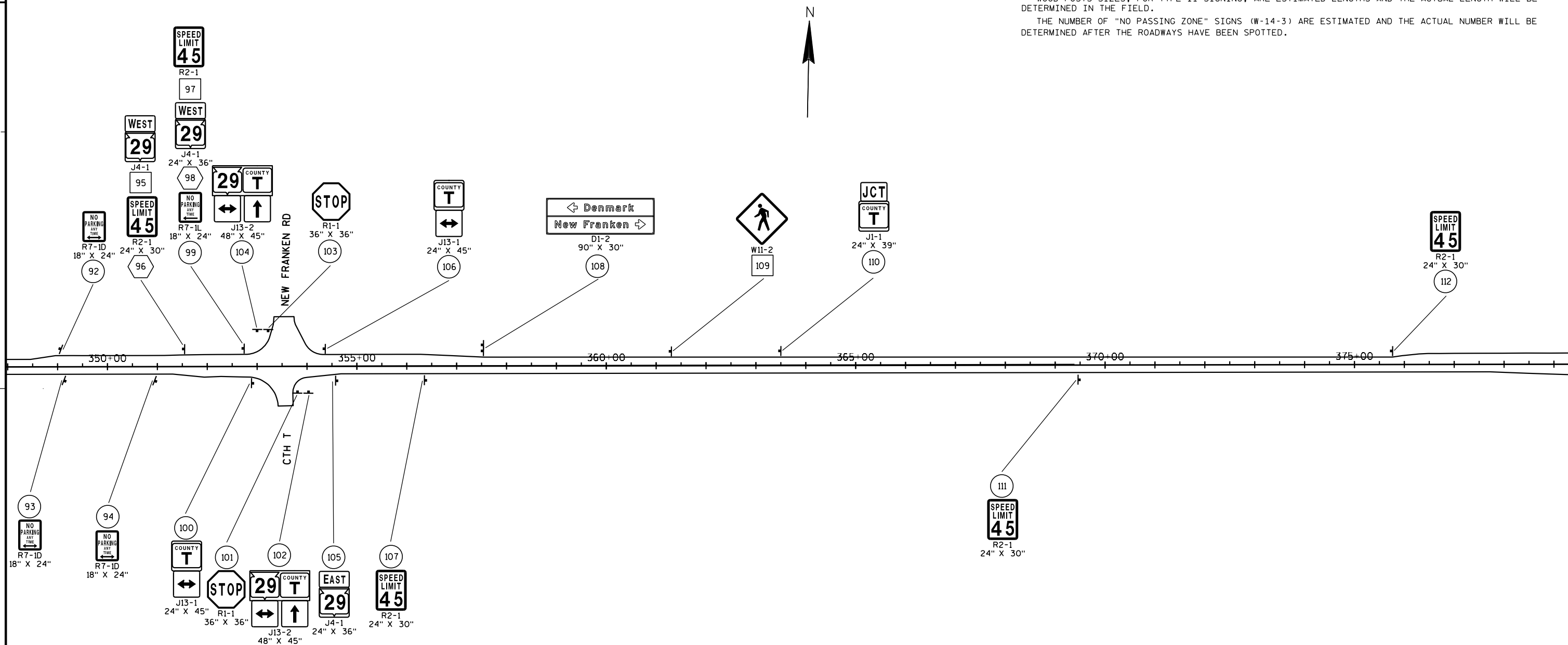
PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

## SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



○ SIGN-REMOVE AND REPLACE

□ SIGN-ONLY REMOVE

⬡ SIGN-NEW PLACEMENT

PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

PROJECT NO: 4125-08-71

HWY: STH 29

COUNTY: BROWN

PERMANENT SIGNING PLAN

SHEET

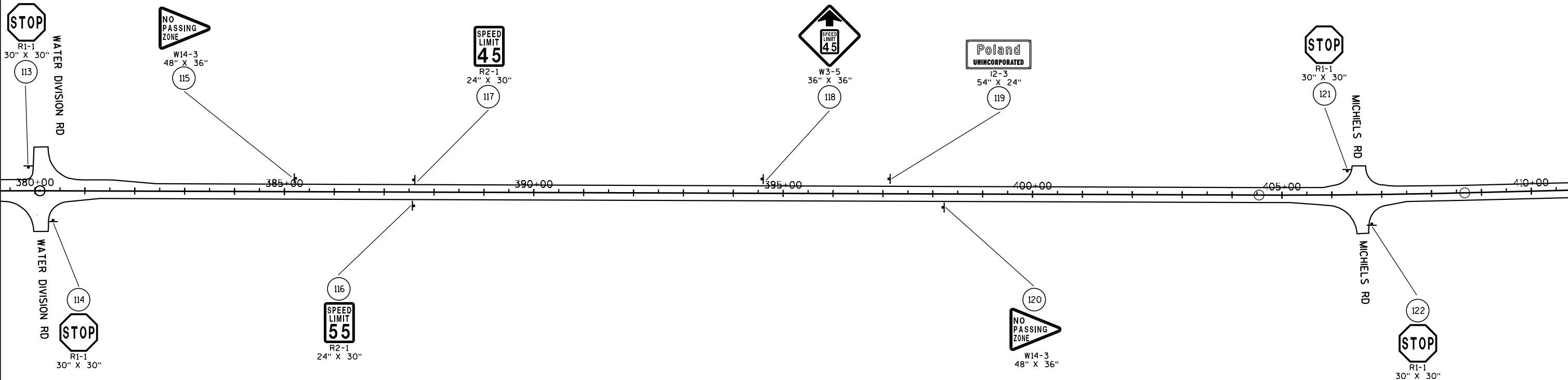
E




SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



-  SIGN-REMOVE AND REPLACE
-  SIGN-ONLY REMOVE
-  SIGN-NEW PLACEMENT

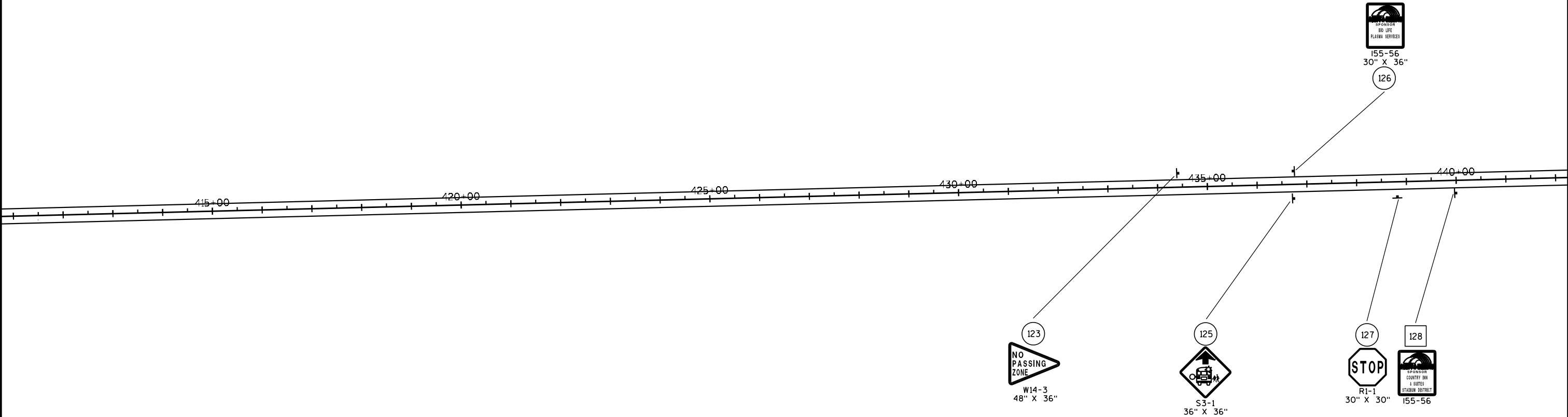
PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



- SIGN-REMOVE AND REPLACE
- SIGN-ONLY REMOVE
- SIGN-NEW PLACEMENT

PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

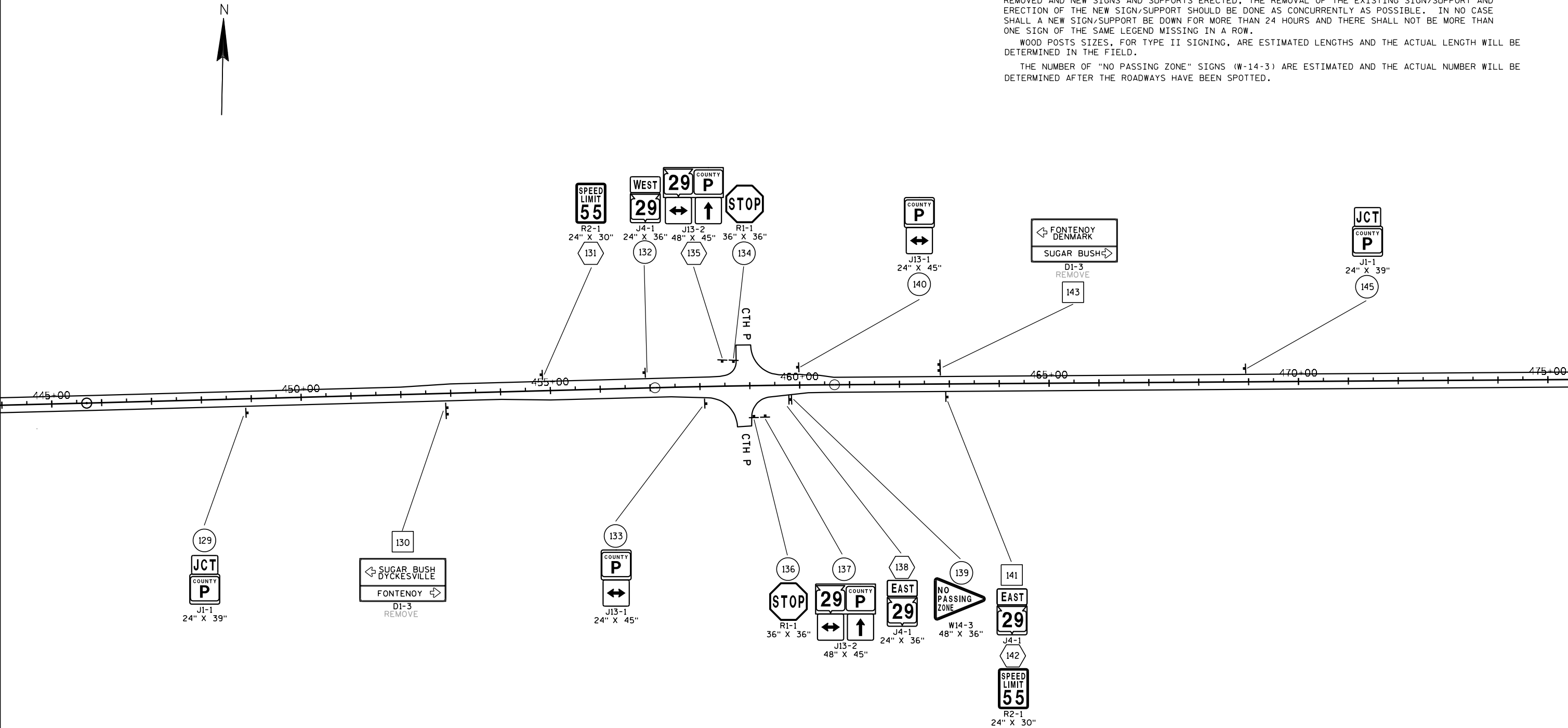





SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



-  SIGN-REMOVE AND REPLACE
-  SIGN-ONLY REMOVE
-  SIGN-NEW PLACEMENT

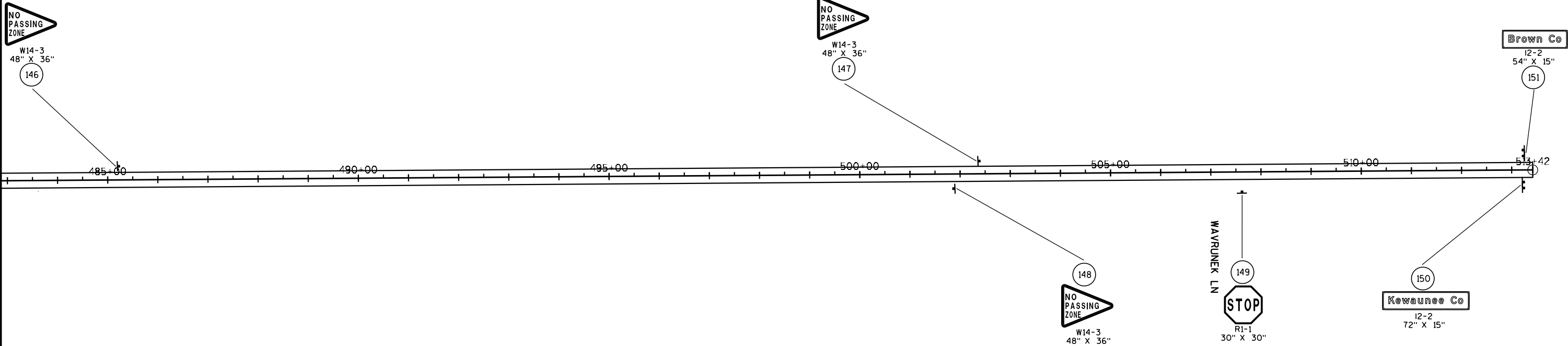
PLAN SHEET PRODUCED  
BY WisDOT-NE REGION

SIGNING NOTES

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

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

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



PLAN SHEET PRODUCED  
BY WISDOT-NE REGION

PROJECT NO: 4125-08-71	HWY: STH 29	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
------------------------	-------------	---------------	------------------------	-------	---

Estimate Of Quantities

4125-08-71

Line	Item	Item Description	Unit	Total	Qty
0010	203.0100	Removing Small Pipe Culverts	EACH	15.000	15.000
0020	204.0115	Removing Asphaltic Surface Butt Joints	SY	527.000	527.000
0030	204.0120	Removing Asphaltic Surface Milling	SY	31,260.000	31,260.000
0040	204.0150	Removing Curb & Gutter	LF	138.000	138.000
0050	213.0100	Finishing Roadway (project) 01. 4125-08-71	EACH	1.000	1.000
0060	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,521.000	2,521.000
0070	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,057.000	1,057.000
0080	305.0500	Shaping Shoulders	STA	747.000	747.000
0090	440.4410	Incentive IRI Ride	DOL	31,168.000	31,168.000
0100	450.4000	HMA Cold Weather Paving	TON	2,500.000	2,500.000
0110	455.0605	Tack Coat	GAL	18,235.000	18,235.000
0120	460.2000	Incentive Density HMA Pavement	DOL	445.000	445.000
0130	460.2005	Incentive Density PWL HMA Pavement	DOL	11,447.000	11,447.000
0140	460.2010	Incentive Air Voids HMA Pavement	DOL	17,221.000	17,221.000
0150	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	81,542.000	81,542.000
0160	460.5224	HMA Pavement 4 LT 58-28 S	TON	24,671.000	24,671.000
0170	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	233.000	233.000
0180	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	53,513.000	53,513.000
0190	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	28,737.000	28,737.000
0200	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	613.000	613.000
0210	522.0330	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	100.000	100.000
0220	522.0336	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	166.000	166.000
0230	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	19.000	19.000
0240	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	4.000	4.000
0250	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	6.000	6.000
0260	523.0424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	100.000	100.000
0270	523.0524	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	4.000	4.000
0280	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	138.000	138.000
0290	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4125-08-71	EACH	1.000	1.000
0300	619.1000	Mobilization	EACH	1.000	1.000
0310	624.0100	Water	MGAL	36.000	36.000
0320	628.1504	Silt Fence	LF	2,294.000	2,294.000
0330	628.1520	Silt Fence Maintenance	LF	2,294.000	2,294.000
0340	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0350	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000

Estimate Of Quantities

4125-08-71

Line	Item	Item Description	Unit	Total	Qty
0360	628.7555	Culvert Pipe Checks	EACH	94.000	94.000
0370	633.5200	Markers Culvert End	EACH	33.000	33.000
0380	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	110.000	110.000
0390	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	22.000	22.000
0400	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	5.000	5.000
0410	637.2210	Signs Type II Reflective H	SF	738.830	738.830
0420	637.2230	Signs Type II Reflective F	SF	228.890	228.890
0430	638.2602	Removing Signs Type II	EACH	132.000	132.000
0440	638.3000	Removing Small Sign Supports	EACH	139.000	139.000
0450	642.5001	Field Office Type B	EACH	1.000	1.000
0460	643.0100	Traffic Control (project) 01. 4125-08-71	EACH	1.000	1.000
0470	643.0300	Traffic Control Drums	DAY	240.000	240.000
0480	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0490	643.0900	Traffic Control Signs	DAY	3,074.000	3,074.000
0500	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0510	646.0106	Pavement Marking Epoxy 4-Inch	LF	21,281.000	21,281.000
0520	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	21,281.000	21,281.000
0530	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	75,302.000	75,302.000
0540	646.2308.S	Pavement Marking Grooved Wet Reflective Epoxy 8-Inch	LF	185.000	185.000
0550	647.0110	Pavement Marking Railroad Crossings Epoxy	EACH	2.000	2.000
0560	648.0100	Locating No-Passing Zones	MI	7.780	7.780
0570	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	9,871.000	9,871.000
0580	650.6000	Construction Staking Pipe Culverts	EACH	17.000	17.000
0590	650.8000	Construction Staking Resurfacing Reference	LF	41,142.000	41,142.000
0600	650.9910	Construction Staking Supplemental Control (project) 01. 4125-08-71	LS	1.000	1.000
0610	690.0150	Sawing Asphalt	LF	3,291.000	3,291.000
0620	690.0250	Sawing Concrete	LF	30.000	30.000
0630	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,320.000	1,320.000
0640	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	2,000.000	2,000.000
0650	SPV.0035	Special 01. Base Repair for CIR Pavement	CY	500.000	500.000
0660	SPV.0060	Special 01. Reconnect Existng Storm Sewer Lateral	EACH	3.000	3.000
0670	SPV.0060	Special 02. Sawing Storm Sewer Structure	EACH	1.000	1.000
0680	SPV.0060	Special 03. Grading, Shaping and Finishing Cross Culverts	EACH	15.000	15.000
0690	SPV.0060	Special 04. Hot Mix Asphalt Percent Within Limits (PWL) Test Strip	EACH	1.000	1.000
0700	SPV.0105	Special 01. Prepare Foundation for CIR Asphalt Pavement 4125-08-71	LS	1.000	1.000

Estimate Of Quantities

4125-08-71

Line	Item	Item Description	Unit	Total	Qty
0710	SPV.0105	Special 02. Prepare Foundation for HMA Layer 4125-08-71	LS	1.000	1.000
0720	SPV.0180	Special 01. Cold-In-Place Recycling (CIR) Partial Depth	SY	148,213.000	148,213.000
0730	SPV.0195	Special 01. Asphalt Stabilizing Agent	TON	740.000	740.000

REMOVING SMALL PIPE CULVERTS

203. 0100  
REMOVING  
SMALL PIPE  
CULVERTS

STATION	LOCATION	EACH	PIPE SIZE/ TYPE	ENDWALL TYPE
137+48	STH 29	1	65"X40" /CMP	--
169+46	STH 29	1	36"X22" /CMP	--
179+02	STH 29	1	30" /CMP	--
184+49	STH 29	1	43"X27" /CMP	--
202+67	STH 29	1	36"X22" /CMP	--
224+90	STH 29	1	24" /CMP	--
240+69	STH 29	1	24" /CMP	--
245+36	STH 29	1	24" /CMP	STONE/MASONRY
316+55	STH 29	1	36" /CMP	STONE/MASONRY
335+86	STH 29	1	30" /CMP	--
353+03	STH 29	1	24" /CMP	METAL
353+94	STH 29	1	24" /CMP	METAL
364+30	STH 29	1	24" /CMP	STONE/MASONRY
382+12	STH 29	1	24" /CMP	METAL
409+11	STH 29	1	24" /CMP	STONE/MASONRY

TOTAL 15

PAVEMENT REMOVAL SUMMARY

204. 0115  
REMOVING  
ASPHALTIC  
SURFACE  
BUTT JOINTS

204. 0120  
REMOVING  
ASPHALTIC  
SURFACE  
MILLING

STATION	TO	STATION	LOCATION	SY	SY
102+00	-	109+42	STH 29	38	3, 667
109+42	-	116+00	STH 29	25	1, 509
116+00	-	195+00	STH 29	62	1, 429
195+00	-	223+00	STH 29	25	1, 928
223+00	-	249+00	STH 29	19	1, 878
249+00	-	275+00	STH 29	23	1, 325
275+00	-	301+00	STH 29	52	1, 841
301+00	-	328+00	STH 29	44	2, 002
328+00	-	362+00	STH 29	94	6, 448
362+00	-	382+00	STH 29	24	3, 394
382+00	-	408+00	STH 29	44	1, 633
408+00	-	460+50	STH 29	46	3, 929
460+50	-	513+42	STH 29	31	277

TOTAL 527 31, 260

REMOVING CURB & GUTTER

204. 0150

STATION	OFFSET	TO	STATION	OFFSET	LOCATION	LF	REMARKS
273+22	24' RT	-	273+61	62' RT	STH 29/LILY LAKE Rd	58	CURB REPLACEMENT
352+91	28' LT	-	353+08	38' LT	STH 29/CTH T	20	CULVERT REPLACEMENT
352+95	24' RT	-	353+13	32' RT	STH 29/CTH T	20	CULVERT REPLACEMENT
353+76	40' RT	-	353+90	26' RT	STH 29/CTH T	20	CULVERT REPLACEMENT
353+97	49' RT	-	354+09	34' RT	STH 29/CTH T	20	CULVERT REPLACEMENT

TOTAL 138

BASE AGGREGATE SUMMARY

				305. 0110	305. 0120	305. 0500	624. 0100						
				BASE	BASE								
				AGGREGATE	AGGREGATE								
				DENSE	DENSE	SHAPING							
				3/4- INCH	1 1/4- INCH	SHOULDERS	WATER						
STATION	TO	STATION	LOCATION	TON	TON	STA	MGAL	REMARKS					
102+00	-	109+42	STH 29	14	--	5	0. 1						
109+42	-	114+50	STH 29	29	--	9	0. 3						
114+50	-	194+25	STH 29	528	286	154	8	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
194+25	-	221+50	STH 29	176	57	52	2	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
221+50	-	247+75	STH 29	165	194	49	4	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
247+75	-	273+75	STH 29	162	--	49	2						
273+75	-	299+75	STH 29	153	--	47	2						
299+75	-	326+75	STH 29	166	65	49	2	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
326+75	-	353+50	STH 29	149	159	44	3	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
353+50	-	380+25	STH 29	130	180	38	3	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
380+25	-	406+50	STH 29	161	57	48	2	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
406+50	-	458+75	STH 29	325	59	97	4	1 1/4- INCH	BAD	AT	CULVERT	REPLACEMENT	LOCATIONS
458+75	-	513+42	STH 29	363	--	106	4						
TOTAL				2, 521	1, 057	747	36						

ASPHALTIC MATERIALS SUMMARY

Station	To	Station	Location	SPV. 0180. 01 CIR Partial Depth SY	SPV. 0195. 01 Asphalt Stabilizing Agent TON	456. 0605  Tack Coat GAL	Leveling Layer	Upper Layer				460. 4110. S Reheating HMA Pavement Longitudinal Joints LF	465. 0120 ASPHALTIC SURFACE AND FIELD ENTRANCES TON
							HMA Pavement 4 MT 58-28 S	HMA Pavement 4 MT 58-28 S					
							460. 6224 TON	460. 6224 TON	PWL Density Incentive TON*	PWL Air Voids TON**	Incentive Density HMA Pavment TON***		
102+00		109+42	STH 29	--	--	259	--	445	--	--	445	742	--
109+42		116+00	STH 29	2, 227	12	324	122	305	186	305	--	1, 316	13
116+00		195+00	STH 29	29, 580	147	3, 349	1, 250	3, 209	2, 238	3, 209	--	15, 800	42
195+00		223+00	STH 29	10, 210	51	1, 258	471	1, 209	793	1, 209	--	5, 600	10
223+00		249+00	STH 29	9, 525	48	1, 187	444	1, 143	737	1, 143	--	5, 200	5
249+00		275+00	STH 29	9, 614	48	1, 139	425	1, 095	737	1, 095	--	5, 200	9
275+00		301+00	STH 29	9, 503	48	1, 177	435	1, 119	737	1, 119	--	5, 200	29
301+00		328+00	STH 29	9, 903	50	1, 238	460	1, 183	765	1, 183	--	5, 400	21
328+00		362+00	STH 29	11, 868	58	1, 624	601	1, 546	963	1, 546	--	6, 800	36
362+00		382+00	STH 29	6, 767	34	956	358	919	567	919	--	4, 000	8
382+00		408+00	STH 29	9, 603	48	1, 169	435	1, 114	737	1, 114	--	5, 200	25
408+00		460+50	STH 29	19, 421	97	2, 346	876	2, 255	1, 488	2, 255	--	10, 500	19
460+50		513+42	STH 29	19, 992	99	2, 209	825	2, 124	1, 499	2, 124	--	10, 584	16
TOTAL				148, 213	740	18, 235	6, 702	17, 666	11, 447	17, 221	445	81, 542	233

Total HMA Pavement 4 MT 58-28 S (Item No. 460. 6224): 6, 702 TON Leveling Layer + 17, 666 Upper Layer + 303 TON for culvert pipe replacements = **24, 671 TON**

\* Tonnage is eligible for Incentive Density PWL 460. 2005 and Incentive Air Voids 460. 2010.

\*\* Tonage is eligible for Incentive Air Voids 460. 2010 and density is tested for acceptance in those areas.

\*\*\* Tonnage is eligible for Incentive Density HMA Pavement 460. 2000

ASPHALT SHOULDER RUMBLE STRIPS 2-LANE

465. 0425					
				LT	RT
STATION	TO	STATION	LOCATION	LF	LF
102+00	-	109+42	STH 29	--	--
109+42	-	116+00	STH 29	--	--
116+00	-	195+00	STH 29	6, 175	5, 755
195+00	-	223+00	STH 29	2, 137	2, 396
223+00	-	249+00	STH 29	2, 260	2, 220
249+00	-	275+00	STH 29	2, 114	2, 084
275+00	-	301+00	STH 29	1, 907	1, 820
301+00	-	328+00	STH 29	1, 598	1, 657
328+00	-	362+00	STH 29	--	--
362+00	-	382+00	STH 29	--	--
382+00	-	408+00	STH 29	1, 105	1, 774
408+00	-	460+50	STH 29	4, 498	3, 822
460+50	-	513+42	STH 29	5, 172	5, 019
SUBTOTAL				26, 966	26, 547
TOTAL				53, 513	

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE

465. 0475				
STATION	TO	STATION	LOCATION	LF
129+00	-	192+19	STH 29	6, 319
196+19	-	219+56	STH 29	2, 337
223+56	-	245+74	STH 29	2, 218
249+74	-	271+80	STH 29	2, 206
275+80	-	297+81	STH 29	2, 201
301+81	-	317+95	STH 29	1, 614
387+00	-	404+59	STH 29	1, 759
408+59	-	456+89	STH 29	4, 830
460+89	-	513+42	STH 29	5, 253
TOTAL				28, 737



3

3

522. 0324	522. 0330	522. 0336	522. 1024	522. 1030	522. 1036	523. 0424	523. 0524	633. 5200	SPV. 0060. 02	SPV. 0060. 03
CPRC	CPRC	CPRC	AEW	AEW	AEW	CPRC	AEW	MARKERS	SAWING	GRADING, SHAPING
CLASS IV	CLASS IV	CLASS IV	CPRC	CPRC	CPRC	CLASS HE-IV	CPRC-HE	CULVERT	STORM SEWER	AND FINISHING
24-INCH	30-INCH	36-INCH	24-INCH	30-INCH	36-INCH	24X38-INCH	24X38-INCH	END	STRUCTURE	CROSS CULVERTS

	TOTALS	613	100	166	19	4	6	100	4	33	1	15
--	--------	-----	-----	-----	----	---	---	-----	---	----	---	----

NOTE:  
1) STATION OFFSETS SHOWN ARE TO THE END OF THE APRON ENDWALL

**CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D**

601. 0557						
STATION	OFFSET	TO	STATION	OFFSET	LOCATION	LF
273+22	24'	RT -	273+61	62' RT	STH 29/LILY LAKE RD	58
352+91	28'	LT -	353+08	38' LT	STH 29/CTH T	20
352+95	24'	RT -	353+13	32' RT	STH 29/CTH T	20
353+76	40'	RT -	353+90	26' RT	STH 29/CTH T	20
353+97	49'	RT -	354+09	34' RT	STH 29/CTH T	20

<b>TOTAL</b>	<b>138</b>
--------------	------------

FINISHING SUMMARY

STATION	OFFSET	*	*	*	*	*	*	*
		TOPSOIL	EROSION MAT CLASS I TYPE B	EROSION MAT URBAN CLASS I TYPE B	FERTILIZER TYPE B	SEEDING MIXTURE NO. 20	SEEDING MIXTURE NO. 40	SEEDING TEMPORARY
		SY	SY	SY	CWT	LB	LB	LB
137+48	30' LT	32	32	--	0.02	0.9	--	0.4
137+48	30' RT	34	34	--	0.02	0.9	--	0.5
169+46	31' RT	19	19	--	0.01	0.5	--	0.3
169+46	30' LT	23	23	--	0.01	0.6	--	0.3
179+03	30' RT	20	20	--	0.01	0.5	--	0.3
179+01	30' LT	25	25	--	0.02	0.7	--	0.3
184+50	32' RT	28	28	--	0.02	0.8	--	0.4
184+48	30' LT	30	30	--	0.02	0.8	--	0.4
202+67	30' LT	22	22	--	0.01	0.6	--	0.3
202+66	31' RT	21	21	--	0.01	0.6	--	0.3
224+90	30' LT	23	23	--	0.01	0.6	--	0.3
224+90	32' RT	26	26	--	0.02	0.7	--	0.4
240+69	33' LT	29	29	--	0.02	0.8	--	0.4
240+70	31' RT	30	30	--	0.02	0.8	--	0.4
245+37	30' RT	28	28	--	0.02	0.8	--	0.4
245+35	36' LT	32	32	--	0.02	0.9	--	0.4
316+57	47' LT	53	53	--	0.03	1.4	--	0.7
316+55	46' RT	52	52	--	0.03	1.4	--	0.7
335+86	31' RT	33	33	--	0.02	0.9	--	0.4
335+87	33' LT	38	38	--	0.02	1.0	--	0.5
352+99	45' LT	38	--	38	0.02	--	0.7	0.5
353+06	41' RT	28	--	28	0.02	--	0.5	0.4
354+06	52' LT	38	--	38	0.02	--	0.7	0.5
353+83	33' RT	6	--	6	0.01	--	0.1	0.1
364+28	31' LT	29	29	--	0.02	0.8	--	0.4
364+31	33' RT	32	32	--	0.02	0.9	--	0.4
382+11	30' LT	23	--	23	0.01	--	0.4	0.3
382+12	30' RT	25	25	--	0.02	0.7	--	0.3
409+12	44' LT	47	--	47	0.03	--	0.9	0.6
409+10	47' RT	46	46	--	0.03	1.2	--	0.6
TOTAL		910	730	180	0.58	20	3	12

NOTE:  
1) APPLY TEMP SEED AT HALF THE RATE SPECIFIED IN SECTION 630 OF THE STANDARD SPECIFICATIONS.  
2) PAYMENT FOR FURNISHING AND PLACING TOPSOIL, FERTILIZER, SEED, AND EROSION MAT IS INCIDENTAL TO ITEM NO. SPV.0060.03 - GRADING, SHAPING AND FINISHING CROSS CULVERTS.  
\* ITEMS AND QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES.

EROSION CONTROL SUMMARY

		628. 1504	628. 1520	628. 1905	628. 1910	628. 7555
		SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	CULVERT PIPE CHECKS
STATION	OFFSET	LF	LF	EACH	EACH	EACH
137+44	30' LT	33	33	--	--	7
137+45	30' RT	33	33	--	--	--
137+51	30' LT	33	33	--	--	7
137+51	30' RT	33	33	--	--	--
169+46	31' RT	65	65	--	--	7
169+46	30' LT	65	65	--	--	--
179+01	30' LT	65	65	--	--	--
179+03	30' RT	65	65	--	--	5
184+46	30' LT	33	33	--	--	--
184+48	32' RT	33	33	--	--	3
184+51	30' LT	33	33	--	--	--
184+52	32' RT	33	33	--	--	3
202+66	31' RT	65	65	--	--	--
202+67	30' LT	65	65	--	--	7
224+90	32' RT	65	65	--	--	--
224+90	30' LT	65	65	--	--	3
240+69	33' LT	65	65	--	--	3
240+70	31' RT	65	65	--	--	--
245+35	36' LT	65	65	--	--	--
245+37	30' RT	65	65	--	--	3
316+55	46' RT	65	65	--	--	--
316+57	47' LT	65	65	--	--	7
335+86	31' RT	65	65	--	--	5
335+87	33' LT	65	65	--	--	--
352+99	45' LT	55	55	--	--	3
353+06	41' RT	50	50	--	--	--
353+83	33' RT	25	25	--	--	--
354+06	52' LT	50	50	--	--	3
364+28	31' LT	50	50	--	--	3
364+31	33' RT	65	65	--	--	--
382+11	30' LT	45	45	--	--	3
382+12	30' RT	65	65	--	--	--
409+10	47' RT	65	65	--	--	--
409+12	44' LT	65	65	--	--	3
UNDI STRI BUTED		459	459	3	1	19
TOTAL		2, 294	2, 294	3	1	94

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	STH 29, AT US 141 INTERSECTION	R1-1	36" X 36"	7.46	---	1	---	---	1	1	
2	"	R4-7	24" X 30"	5.00	---	1	---	---	1	1	
3	"	R1-1	36" X 36"	7.46	---	1	---	---	1	1	
4	"	J3-2	48" X 57"	19.00	---	---	1	---	1	1	NORTH US 141, WEST STH 29
5	STH 29, E. OF US 141 INTERSECTION	J4-1	24" X 36"	6.00	---	1	---	---	---	---	EAST STH 29
6	"	R5-98	---	---	---	---	---	---	1	1	
7	"	W12-1D	24" X 24"	---	4.00	1	---	---	1	1	
8	"	R5-98	---	---	---	---	---	---	1	1	
9	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
10	"	W10-1	36" X 36"	---	7.07	1	---	---	1	1	
11	"	D1-2	72" X 30"	15.00	---	2	---	---	1	2	SEE SIGN DETAIL SHEET
12	"	W1-1R	36" X 36"	---	9.00	---	---	1	1	1	
13	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	20 MPH, PART OF REMOVAL FOR SIGN #12
14	WALL ST	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
15	STH 29, E. OF US 141 INTERSECTION	J2-3	72" X 57"	28.50	---	---	---	2	1	2	TO I-43, NORTH US 141, WEST STH 29, SEE PLAN SHEET
16	MANITOWOC RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
17	VACANT	---	---	---	---	---	---	---	---	---	
18	STH 29, AT MANITOWOC RD INTERSECTION	W1-6	96" X 48"	---	32.00	---	2	---	1	1	
19	STH 29, E. OF MANITOWOC RD INTERSECTION	W3-1	36" X 36"	---	9.00	---	1	---	1	1	
20	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
21	"	W10-1	36" X 36"	---	7.07	1	---	---	1	1	
22	"	J4-1	---	---	---	---	---	---	1	1	
23	"	W1-1L	36" X 36"	---	9.00	---	---	1	1	1	
24	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	20 MPH, PART OF REMOVAL FOR SIGN #23
25	"	W1-1L	36" X 36"	---	9.00	---	---	1	1	1	
26	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	20 MPH, PART OF REMOVAL FOR SIGN #25
27	COTTAGE RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
28	HURON RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
29	STH 29, E. OF HURON RD	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
30	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
31	TWILIGHT LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
32	DELMAR LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
33	STH 29, E. OF DELMAR LN	R2-1	24" X 30"	5.00	---	1	---	---	1	1	55 MPH
34	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
35	"	I55-56	30" X 36"	7.50	---	1	---	---	1	1	UWGB ALPHA ZETA PHI, PLACE BRACKET AS SHOWN ON I55-56B
36	"	D2-1	78" X 15"	8.13	---	2	---	---	1	2	SEE SIGN DETAIL SHEET
PAGE SUBTOTALS				160.13	98.89	24	4	5	31	34	

PLAN SHEET PRODUCED  
BY WisDOT - NE REGION

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II												
SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS	
37	STH 29, E. OF DELMAR LN	W3-5	36" X 36"	---	9.00	---	1	---	1	1	35 MPH	
38	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1		
39	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1		
40	TRESTLE RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
41	STH 29, AT TRESTLE RD INTERSECTION	W1-7	48" X 24"	---	8.00	1	---	---	---	---		
42	"	I2-3	66" X 24"	11.00	---	2	---	---	1	2	BELLEVUE POP. 14,570	
43	PIESCHEK LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
44	STH 29, W. OF CTH QQ	J1-1	24" X 39"	6.50	---	1	---	---	1	1	JCT CTH QQ	
45	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH	
46	"	I55-56	30" X 36"	7.50	---	1	---	---	1	1	UWGB ALPHA ZETA PHI, PLACE BRACKET AS SHOWN ON I55-56B	
47	"	J4-1	24" X 36"	6.00	---	1	---	---	1	1	WEST STH 29	
48	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	CTH QQ, SEE PLAN SHEET	
49	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	STH 29, SEE PLAN SHEET	
50	CTH QQ	R1-1	36" X 36"	7.46	---	1	---	---	1	1		
51	VANDENBERG RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
52	STH 29, E. OF CTH QQ	J13-1	24" X 45"	7.50	---	---	1	---	1	1	CTH QQ, SEE PLAN SHEET	
53	"	J4-1	24" X 36"	6.00	---	1	---	---	1	1	EAST STH 29	
54	"	I55-56	30" X 36"	7.50	---	1	---	---	1	1	ETHAN HOUSE INC. BOYS HOME GREEN BAY, PLACE BRACKET AS SHOWN ON I55-56B	
55	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1		
56	"	D7-67	---	---	---	---	---	---	1	1	SEE SIGN DETAIL SHEET	
56A	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH	
57	"	J1-1	24" X 39"	6.50	---	1	---	---	1	1	JCT CTH QQ	
58	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1		
59	PHILLIPS RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
60	"	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
61	DEBBIE LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
62	MYRON LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
63	STH 29, E. OF MYRON LN	D7-68R	60" X 36"	15.00	---	1	---	---	1	1	SEE SIGN DETAIL SHEET	
64	STH 29, AT LAKE RD INTERSECTION	W1-7	48" X 24"	---	8.00	1	---	---	1	1		
65	LAKE RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
66	STH 29, E. OF LAKE RD	D7-68L	60" X 36"	15.00	---	1	---	---	1	1	SEE SIGN DETAIL SHEET	
67	CHETS LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
68	MATT LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
69	STH 29, W. OF BUYARSKI RD	W14-3	48" X 36"	---	6.00	1	---	---	1	1		
70	BUYARSKI RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
71	"	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
72	WERTEL LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1		
PAGE SUBTOTALS				188.30	55.00	33	4	0	34	35		
PLAN SHEET PRODUCED BY WisDOT - NE REGION												
PROJECT NUMBER: 4125-08-71		HWY: STH 29		COUNTY: BROWN			MISCELLANEOUS QUANTITIES				SHEET	E

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
73	STH 29, E. OF WERTEL LN	W3-5	36" X 36"	---	9.00	---	1	---	1	1	45 MPH
74	"	I55-56	30" X 36"	7.50	---	1	---	---	1	1	ETHAN HOUSE INC. BOYS HOME GREEN BAY, PLACE BRACKET AS SHOWN ON I55-56B
75	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
76	"	W14-3	48" X 36"	---	6.00	1	---	---	---	---	PART OF REMOVAL FOR SIGN #75
77	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	55 MPH
78	"	D7-67	---	---	---	---	---	---	1	1	SEE SIGN DETAIL SHEET
79	"	I2-3	54" X 24"	9.00	---	1	---	---	1	1	SEE SIGN DETAIL SHEET
80	ALLEN RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
81	"	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
82	STH 29, E. OF ALLEN RD	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
83	"	I55-56	30" X 36"	7.50	---	1	---	---	1	1	BIOLIFE PLASMA SERVICES, PLACE BRACKET AS SHOWN ON I55-56B
84	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
85	"	J1-1	24" X 39"	6.50	---	1	---	---	1	1	JCT CTH T
86	"	D1-2	90" X 30"	18.75	---	2	---	---	1	2	SEE SIGN DETAIL SHEET
87	"	D7-68R	---	---	---	---	---	---	---	---	PART OF REMOVAL FOR SIGN #86
88	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	45 MPH
89	"	R7-1L	18" X 24"	3.00	---	---	---	---	---	---	MOUNT BELOW SIGN #88, PART OF REMOVAL FOR SIGN #88
90	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	45 MPH
91	"	R7-1R	18" X 24"	3.00	---	---	---	---	---	---	MOUNT BELOW SIGN #90, PART OF REMOVAL FOR SIGN #90
92	"	R7-1D	18" X 24"	3.00	---	1	---	---	1	1	
93	"	R7-1D	18" X 24"	3.00	---	1	---	---	1	1	
94	"	R7-1D	18" X 24"	3.00	---	1	---	---	1	1	
95	"	J4-1	---	---	---	---	---	---	1	1	
96	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	45 MPH
97	STH 29, W. OF CTH T/NEW FRANKEN RD	R2-1	---	---	---	---	---	---	1	1	
98	"	J4-1	24" X 36"	6.00	---	---	1	---	---	---	WEST STH 29
99	"	R7-1L	18" X 24"	3.00	---	---	---	---	---	---	MOUNT BELOW SIGN #98, PART OF REMOVAL FOR SIGN #97
100	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	CTH T, SEE PLAN SHEET
101	CTH T/NEW FRANKEN RD	R1-1	36" X 36"	7.46	---	1	---	---	1	1	
102	"	J13-2	48" X 45"	15.00	---	---	1	---	1	1	STH 29, CTH T, SEE PLAN SHEET
103	"	R1-1	36" X 36"	7.46	---	1	---	---	1	1	
104	"	J13-2	48" X 45"	15.00	---	---	1	---	1	1	STH 29, CTH T, SEE PLAN SHEET
105	STH 29, E. OF CTH T/NEW FRANKEN RD	J4-1	24" X 36"	6.00	---	1	---	---	1	1	EAST STH 29
106	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	CTH T, SEE PLAN SHEET
107	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
108	"	D1-2	90" X 30"	18.75	---	2	---	---	1	2	SEE SIGN DETAIL SHEET
PAGE SUBTOTALS				208.28	15.00	23	8	0	29	31	

PLAN SHEET PRODUCED  
BY WisDOT - NE REGION

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
109	STH 29, E. OF CTH T/NEW FRANKEN RD	W11-2	---	---	---	---	---	---	1	1	
110	"	J1-1	24" X 39"	6.50	---	1	---	---	1	1	JCT CTH T
111	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
112	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
113	WATER DIVISION RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
114	"	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
115	STH 29, E. OF WATER DIVISION RD	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
116	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	55 MPH
117	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
118	"	W3-5	36" X 36"	---	9.00	---	1	---	1	1	45 MPH
119	"	I2-3	54" X 24"	9.00	---	1	---	---	1	1	SEE SIGN DETAIL SHEET
120	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
121	MICHIELS RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
122	"	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
123	STH 29, E. OF MICHIELS RD	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
124	VACANT	---	---	---	---	---	---	---	---	---	
125	STH 29, E. OF MICHIELS RD	S3-1	36" X 36"	---	9.00	---	1	---	1	1	
126	"	I55-56	30" X 36"	7.50	---	1	---	---	1	1	BIOLIFE PLASMA SERVICES, PLACE BRACKET AS SHOWN ON I55-56B
127	KUHLANEK LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
128	STH 29, W. OF CTH P	I55-56	---	---	---	---	---	---	1	1	
129	"	J1-1	24" X 39"	6.50	---	1	---	---	1	1	JCT CTH P
130	"	D1-1	---	---	---	---	---	---	1	1	SEE SIGN DETAIL SHEET
131	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH
132	"	J4-1	24" X 36"	6.00	---	1	---	---	1	1	WEST STH 29
133	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	CTH P, SEE PLAN SHEET
134	CTH P	R1-1	36" X 36"	7.46	---	1	---	---	1	1	
135	"	J13-2	48" X 45"	15.00	---	---	1	---	1	1	STH 29, CTH P, SEE PLAN SHEET
136	"	R1-1	36" X 36"	7.46	---	1	---	---	1	1	
137	"	J13-2	48" X 45"	15.00	---	---	1	---	1	1	STH 29, CTH P, SEE PLAN SHEET
138	STH 29, E. OF CTH P	J4-1	24" X 36"	6.00	---	1	---	---	---	---	EAST STH 29
139	"	W14-3	48" X 36"	---	6.00	---	---	---	1	1	MOUNT ON BACK OF SIGN #138
140	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	CTH P, SEE PLAN SHEET
141	"	J4-1	---	---	---	---	---	---	1	1	
142	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH
143	"	D1-1	---	---	---	---	---	---	1	1	SEE SIGN DETAIL SHEET
144	VACANT	---	---	---	---	---	---	---	---	---	SEE SIGN DETAIL SHEET
145	STH 29, E. OF CTH P	J1-1	24" X 39"	6.50	---	1	---	---	1	1	JCT CTH P
146	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
147	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
148	"	W14-3	48" X 36"	---	6.00	1	---	---	1	1	
149	WAVRUNEK LN	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
150	STH 29, BROWN/KEWAUNEE CO LINE	I2-2	72" X 15"	7.50	---	2	---	---	1	2	SEE SIGN DETAIL SHEET
151	"	I2-2	54" X 15"	5.63	---	1	---	---	1	1	SEE SIGN DETAIL SHEET

TRAFFIC CONTROL SUMMARY

		643. 0300			643. 0900		643. 1050		643. 0310. S	
		APPROXIMATE SERVICE PERIOD			DRUMS		SIGNS		PCMS	
		DAYS			NO. IN SERVICE		DAYS		NO. IN SERVICE	
STATION	LOCATION	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	RUMBLE STRIPS	PORTABLE LUMP SUM
109+75	WEST PROJECT LIMITS	7	--	--	--	--	1	7	--	--
109+75	WEST PROJECT LIMITS	106	--	--	5	530	--	--	--	--
114+51	S HURON RD	106	--	--	1	106	--	--	--	--
137+48	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
169+46	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
179+02	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
184+49	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
194+19	TRESTLE RD	106	--	--	1	106	--	--	--	--
202+67	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
221+56	CTH QQ/DOUBLE Q RD	106	--	--	2	212	--	--	--	--
224+90	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
240+69	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
245+36	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
247+74	PHILLIPS RD	106	--	--	2	212	--	--	--	--
273+80	LILY LAKE RD	106	--	--	1	106	--	--	--	--
299+81	BUYARSKI RD	106	--	--	2	212	--	--	--	--
316+55	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
326+69	ALLEN RD	106	--	--	2	212	--	--	--	--
335+86	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
353+03	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
353+55	CTH T	106	--	--	2	212	--	--	--	--
353+94	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
364+30	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
380+14	S WATER DIVISION RD	106	--	--	2	212	--	--	--	--
382+12	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
406+59	S MICHELS RD	106	--	--	2	212	--	--	--	--
409+11	CULVERT REPLACEMENT	2	8	16	--	--	--	--	--	--
458+89	CTH P	106	--	--	2	212	--	--	--	--
513+42	EAST PROJECT LIMITS	7	--	--	--	--	1	7	--	--
513+42	EAST PROJECT LIMITS	106	--	--	5	530	--	--	--	--
UNDISTRIBUTED		--	--	--	--	--	--	--	--	1
TOTAL				240		3, 074		14		1



PAVEMENT MARKING SUMMARY

646. 0106			646. 0406		646. 2304. S		646. 2308. S	647. 0110	649. 0402		REMARKS
PAVEMENT MARKING EPOXY 4-INCH			PAVEMENT MARKING SAME DAY EPOXY 4-INCH		GROOVED WET REFLECTIVE		REFLECTIVE 8-INCH	PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING		
YELLOW CENTERLINE SOLID			YELLOW CENTERLINE DASHED		YELLOW CENTERLINE SOLID		WHITE EDGELINE	WHITE CHANNELIZING LANE LINE	RAILROAD CROSSINGS EPOXY	PAINT 4-INCH YELLOW 4' DASH/46' SKIP	
STATION	TO	STATION	LF	LF	LF	LF	LF	LF	EACH	LF	
102+00	-	107+73	1, 124	--	1, 124	--	462	--	2	135	DOUBLE SOLID
107+73	-	115+00	727	182	727	182	1, 042	--	--	174	EB DASHED/WB SOLID
115+00	-	150+30	--	883	--	883	6, 991	--	--	847	EB/WB DASHED
150+30	-	156+75	645	161	645	161	1, 290	--	--	155	EB SOLID/WB DASHED
156+75	-	161+60	--	121	--	121	970	--	--	116	EB/WB DASHED
161+60	-	167+20	560	140	560	140	1, 120	--	--	134	EB DASHED/WB SOLID
167+20	-	224+55	--	1, 434	--	1, 434	10, 792	--	--	1, 376	EB/WB DASHED
224+55	-	234+35	980	245	980	245	1, 960	--	--	235	EB SOLID/WB DASHED
234+35	-	236+50	--	54	--	54	430	--	--	52	EB/WB DASHED
236+50	-	243+20	670	168	670	168	1, 340	--	--	161	EB DASHED/WB SOLID
243+20	-	299+05	--	1, 396	--	1, 396	10, 375	--	--	1, 340	EB/WB DASHED
299+05	-	304+70	565	141	565	141	800	--	--	136	EB SOLID/WB DASHED
304+70	-	312+15	--	186	--	186	1, 490	--	--	179	EB/WB DASHED
312+15	-	317+95	580	145	580	145	1, 160	--	--	139	EB DASHED/WB SOLID
317+95	-	385+10	--	1, 679	--	1, 679	10, 625	185	--	1, 612	EB/WB DASHED
385+10	-	390+85	575	144	575	144	1, 150	--	--	138	EB SOLID/WB DASHED
390+85	-	396+70	--	146	--	146	1, 170	--	--	140	EB/WB DASHED
396+70	-	401+50	480	120	480	120	960	--	--	115	EB DASHED/WB SOLID
401+50	-	434+35	--	821	--	821	6, 249	--	--	788	EB/WB DASHED
434+35	-	444+40	1, 005	251	1, 005	251	1, 875	--	--	241	EB SOLID/WB DASHED
444+40	-	446+65	--	56	--	56	235	--	--	54	EB/WB DASHED
446+65	-	455+65	900	225	900	225	1, 800	--	--	216	EB DASHED/WB SOLID
455+65	-	485+00	--	734	--	734	5, 332	--	--	704	EB/WB DASHED
485+00	-	491+25	625	156	625	156	1, 250	--	--	150	EB SOLID/WB DASHED
491+25	-	496+40	--	129	--	129	1, 030	--	--	124	EB/WB DASHED
496+40	-	502+60	620	155	620	155	1, 240	--	--	149	EB DASHED/WB SOLID
502+60	-	513+42	1, 082	271	1, 082	271	2, 164	--	--	260	EB SOLID/WB DASHED
SUBTOTAL			11, 138	10, 143	11, 138	10, 143	75, 302	185	2	9, 871	
TOTAL			21, 281		21, 281		75, 302	185	2	9, 871	

NOTE: PAVEMENT MARKING SAME DAY EPOXY 4-INCH TO BE APPLIED BEFORE CENTERLINE RUMBLE STRIPS ARE INSTALLED  
PAVEMENT MARKING EPOXY 4-INCH TO BE APPLIED AFTER CENTERLINE RUMBLE STRIPS ARE INSTALLED

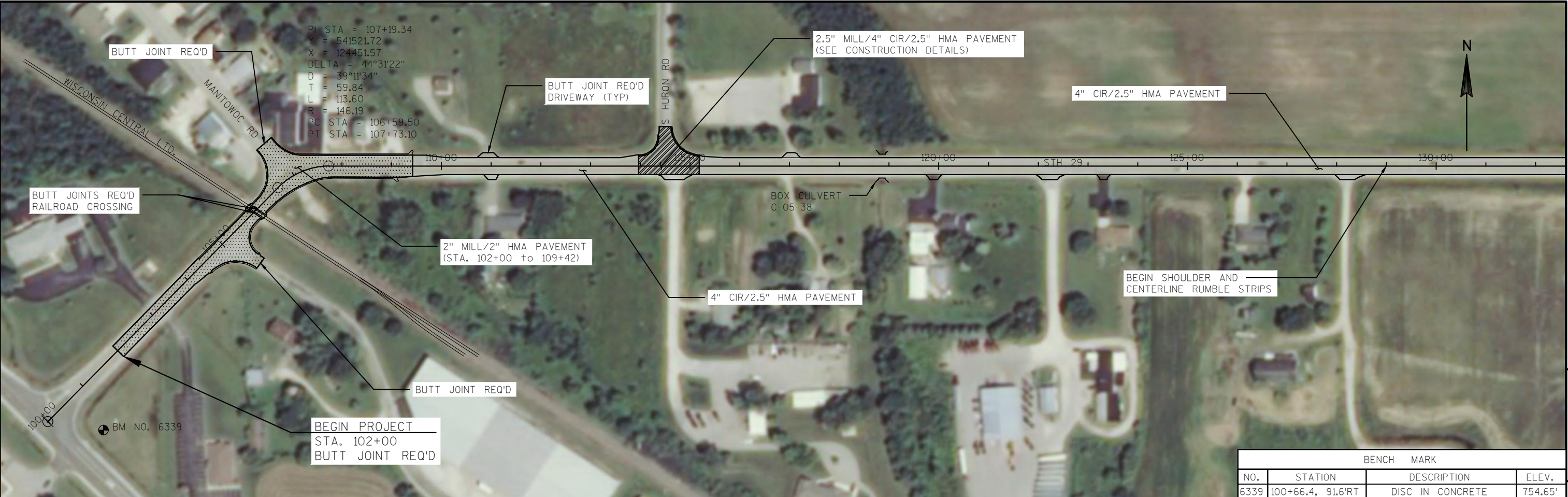
CONSTRUCTION STAKING SUMMARY

LOCATION	650. 6000	650. 8000	650. 9910
	CONSTRUCTION STAKING PIPE CULVERTS	CONSTRUCTION STAKING RESURFACING REFERENCE	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL
	LF	LF	LS
PROJECT	17	41, 142	1
TOTAL	17	41, 142	1

SAWING SUMMARY

			690. 0150	690. 0250				690. 0150	690. 0250				690. 0150	690. 0250
			SAWING	SAWING				SAWING	SAWING				SAWING	SAWING
			ASPHALT	CONCRETE				ASPHALT	CONCRETE				ASPHALT	CONCRETE
STATION	OFFSET	LOCATION	LF	LF	STATION	OFFSET	LOCATION	LF	LF	STATION	OFFSET	LOCATION	LF	LF
102+00	0'	STH 29	30	--	275+98	25' LT	DRI VEWAY	16	--	353+90	26' RT	CURB	--	3
105+57	81' RT	WALL ST	25	--	278+12	25' LT	DRI VEWAY	17	--	353+97	49' LT	CURB	--	3
105+89	0'	STH 29	40	--	282+94	25' RT	DRI VEWAY	38	--	354+09	34' LT	CURB	--	3
106+00	0'	STH 29	40	--	286+29	25' LT	DRI VEWAY	30	--	356+52	25' RT	DRI VEWAY	25	--
106+87	86' LT	MANITOWOC RD	37	--	295+31	25' LT	DRI VEWAY	33	--	358+00	25' RT	DRI VEWAY	32	--
110+94	25' LT	DRI VEWAY	22	--	298+41	25' RT	DRI VEWAY	17	--	359+63	25' RT	DRI VEWAY	22	--
111+01	25' RT	DRI VEWAY	15	--	299+80	81' RT	BUYARSKI RD	23	--	361+24	25' RT	DRI VEWAY	15	--
114+50	79' LT	S HURON RD	24	--	299+83	81' LT	BUYARSKI RD	23	--	361+80	25' LT	DRI VEWAY	24	--
114+69	25' RT	DRI VEWAY	40	--	309+06	25' LT	DRI VEWAY	34	--	363+96	25' LT	DRI VEWAY	19	--
117+03	25' LT	DRI VEWAY	16	--	322+86	25' LT	DRI VEWAY	16	--	366+24	25' LT	DRI VEWAY	14	--
119+90	25' RT	DRI VEWAY	16	--	323+85	25' LT	DRI VEWAY	24	--	367+04	25' LT	DRI VEWAY	13	--
122+23	25' RT	DRI VEWAY	31	--	324+55	25' RT	DRI VEWAY	32	--	380+12	88' LT	S WATER DI VISION RD	28	--
123+31	25' RT	DRI VEWAY	14	--	324+80	25' LT	DRI VEWAY	27	--	380+12	82' RT	S WATER DI VISION RD	29	--
128+22	25' RT	DRI VEWAY	31	--	326+67	82' LT	ALLEN RD	28	--	384+65	25' LT	DRI VEWAY	33	--
138+17	25' LT	DRI VEWAY	41	--	326+70	79' RT	ALLEN RD	30	--	390+35	25' LT	DRI VEWAY	29	--
164+44	25' RT	DRI VEWAY	65	--	329+45	25' LT	DRI VEWAY	32	--	392+07	25' LT	DRI VEWAY	41	--
194+20	80' RT	TRESTLE RD	23	--	332+17	25' LT	DRI VEWAY	20	--	393+76	25' LT	DRI VEWAY	15	--
201+79	25' LT	DRI VEWAY	33	--	337+59	25' RT	DRI VEWAY	41	--	395+65	25' LT	DRI VEWAY	19	--
210+97	25' LT	DRI VEWAY	10	--	339+26	25' RT	DRI VEWAY	15	--	406+56	58' LT	S MI CHI ELS RD	30	--
212+05	25' LT	DRI VEWAY	14	--	341+29	25' RT	DRI VEWAY	21	--	406+62	78' RT	S MI CHI ELS RD	24	--
221+50	82' RT	DOUBLE Q RD	24	--	347+06	25' RT	DRI VEWAY	15	--	407+60	25' LT	DRI VEWAY	14	--
221+60	79' LT	CTH Q	30	--	348+15	25' LT	DRI VEWAY	29	--	417+32	25' LT	DRI VEWAY	27	--
232+89	25' RT	DRI VEWAY	26	--	349+57	25' RT	DRI VEWAY	23	--	438+77	25' RT	DRI VEWAY	23	--
247+72	81' RT	PHI LLIPS RD	29	--	352+11	25' RT	DRI VEWAY	29	--	455+39	25' RT	DRI VEWAY	75	--
247+73	84' LT	PHI LLIPS RD	28	--	352+91	28' LT	CURB	--	3	458+88	82' LT	CTH P	32	--
250+54	25' LT	DRI VEWAY	32	--	352+95	24' RT	CURB	--	3	458+88	81' RT	CTH P	28	--
257+57	25' RT	DRI VEWAY	24	--	353+08	38' LT	CURB	--	3	461+19	25' LT	DRI VEWAY	49	--
273+22	24' RT	CURB	--	3	353+13	32' RT	CURB	--	3	507+35	25' RT	DRI VEWAY	56	--
273+61	62' RT	CURB	--	3	353+54	100' LT	CTH T	40	--	513+42	0' RT	STH 29	30	--
273+79	82' RT	LILY LAKE RD	26	--	353+57	79' RT	CTH T	30	--	VARIES		CULVERTS	1, 049	--
275+55	25' RT	DRI VEWAY	25	--	353+76	40' RT	CURB	--	3	--	--	--	--	--
SUBTOTAL			812	6	SUBTOTAL			683	15	SUBTOTAL			1, 796	9
					TOTAL			3, 291	30					

















BENCH MARK			
NO.	STATION	DESCRIPTION	NO.
2477	341+94.4, 30.4'LT	NW CORNER OF BOX CLVT	813.44'











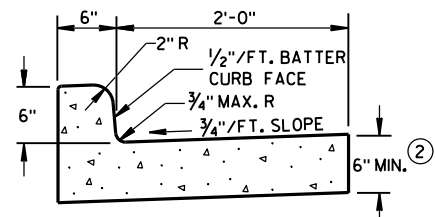


PROJECT NO: 4125-08-71	HWY: STH 29	COUNTY: BROWN	PLAN	SHEET	E
------------------------	-------------	---------------	------	-------	---

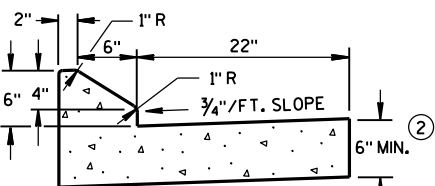
Standard Detail Drawing List

08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C09-10A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)

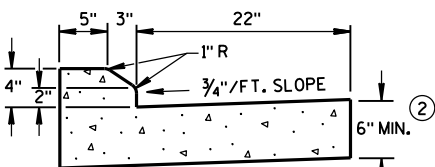




TYPES A & D ①

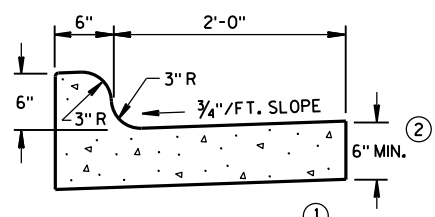


6" SLOPED CURB TYPES G & J ①



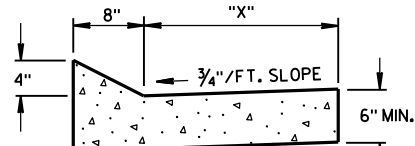
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



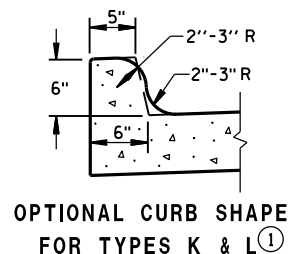
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

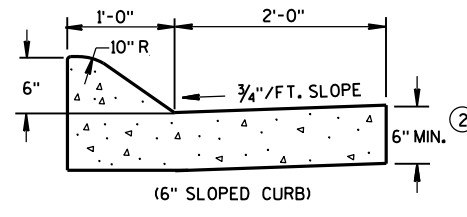


TYPES TBT & TBTT ①  
CONCRETE CURB & GUTTER

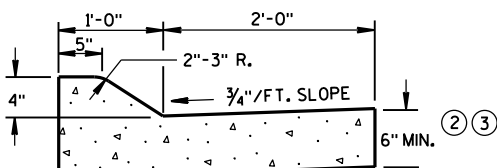
TBT & TBTT	"X"
30"	22"
36"	28"



OPTIONAL CURB SHAPE  
FOR TYPES K & L ①

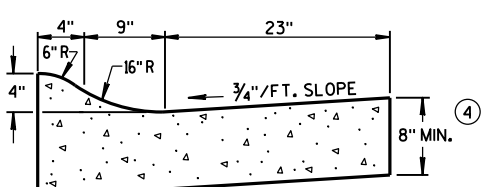


(6" SLOPED CURB)



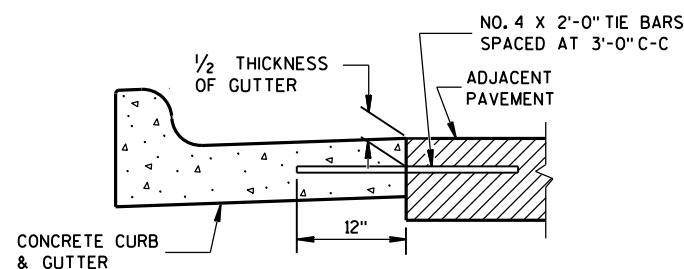
(4" SLOPED CURB)

TYPES A & D ①

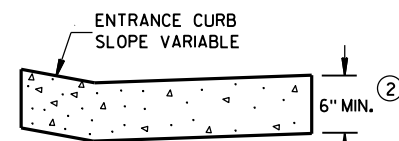


4" SLOPED CURB TYPES R & T ① ⑤

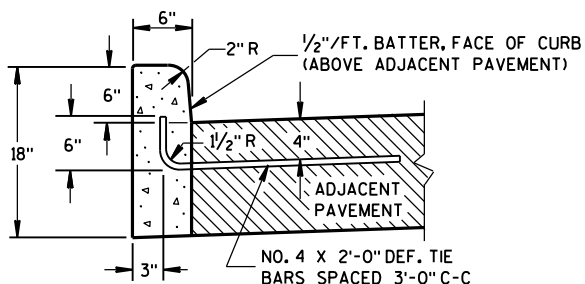
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

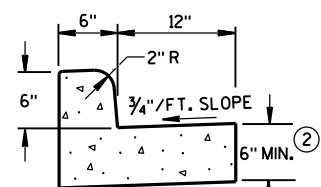


DRIVEWAY ENTRANCE CURB  
(WHEN DIRECTED BY THE ENGINEER)

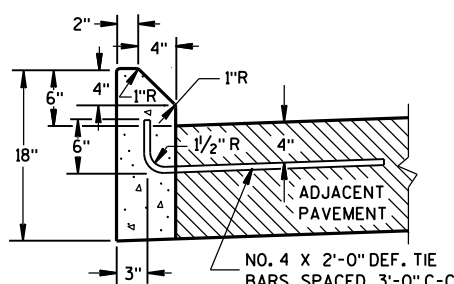


TYPES A & D ①

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.

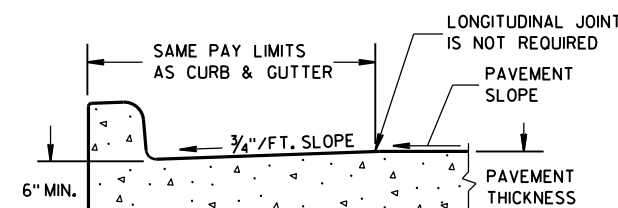
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.

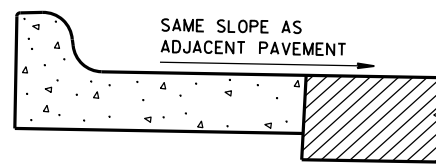
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

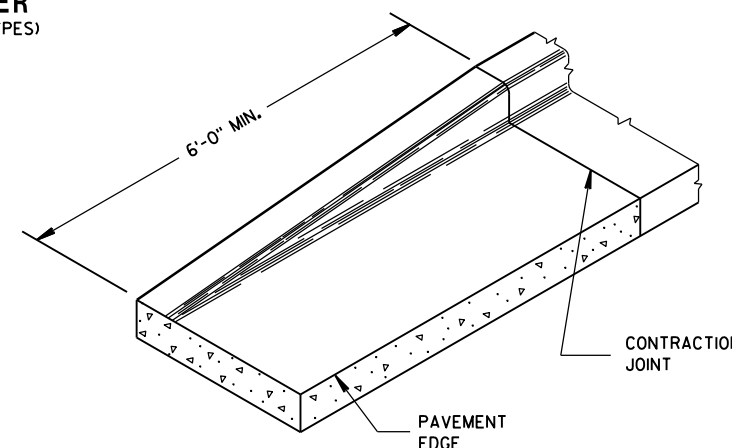
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH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



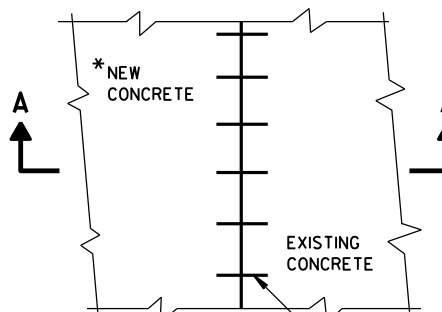
PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER



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



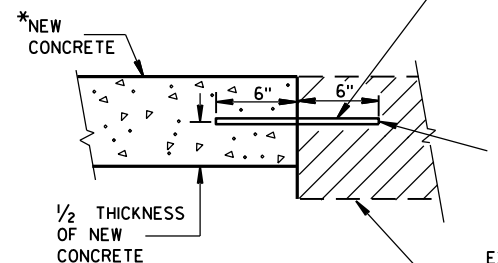
END SECTION CURB & GUTTER



PLAN VIEW

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

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



SECTION A-A  
TIE BARS DRILLED  
INTO EXISTING PAVEMENT

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

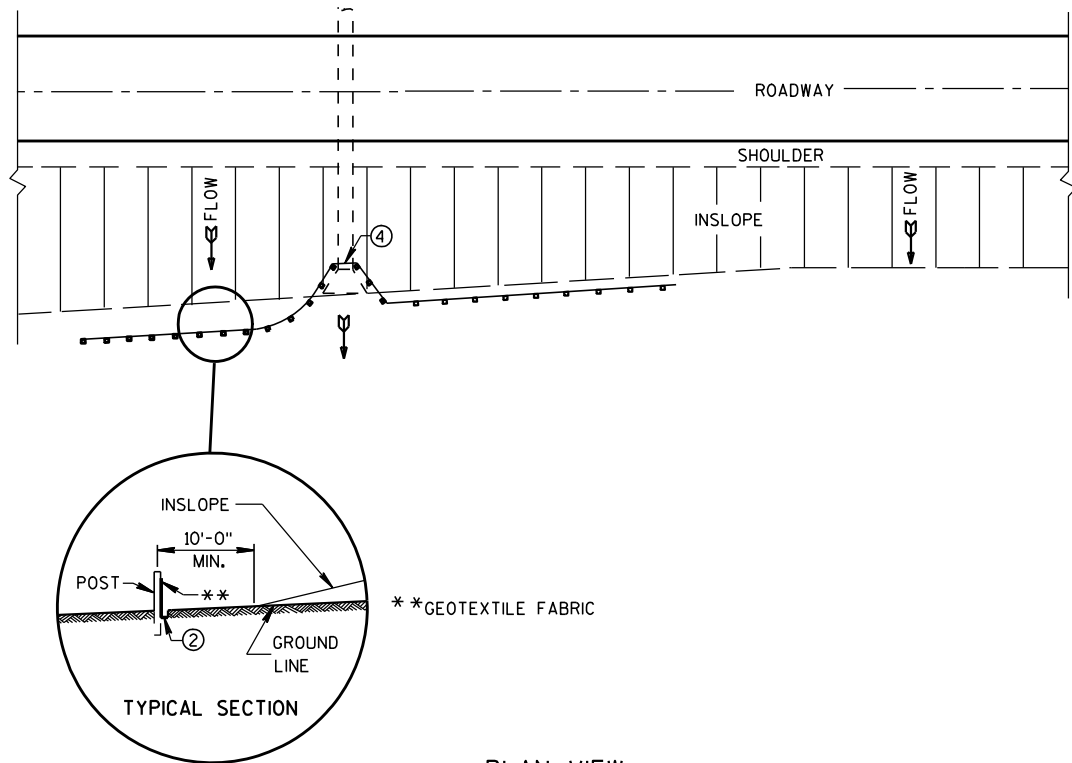
EXISTING CONCRETE

CONCRETE CURB, CONCRETE  
CURB & GUTTER AND TIES

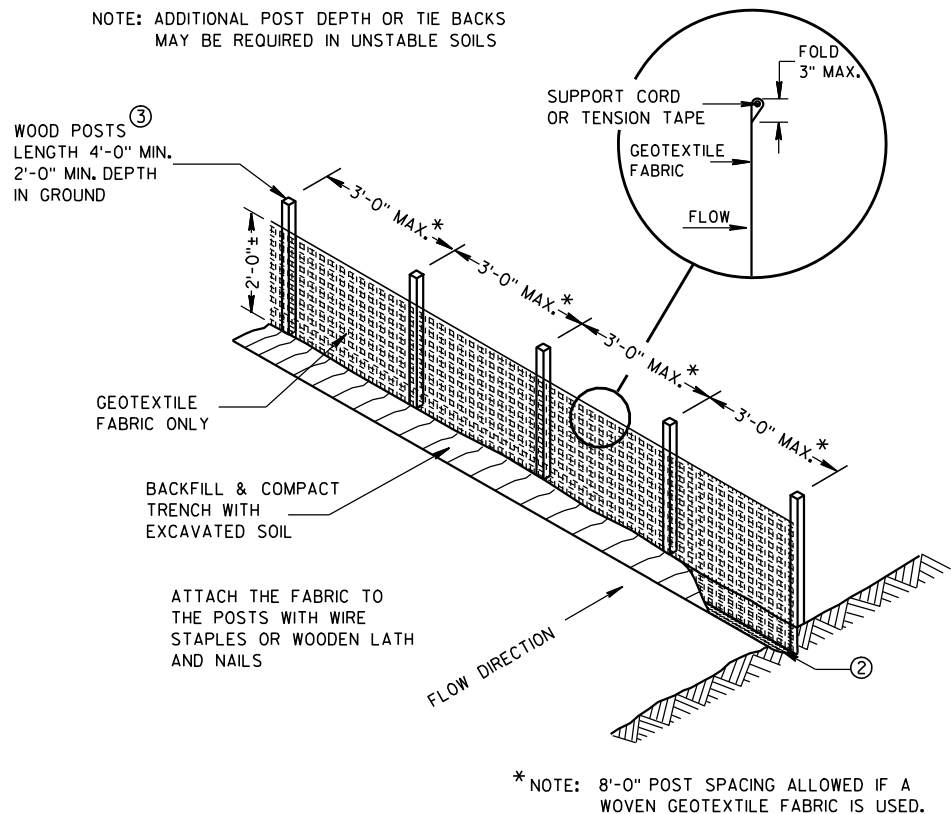
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June, 2016  
DATE  
FHWA

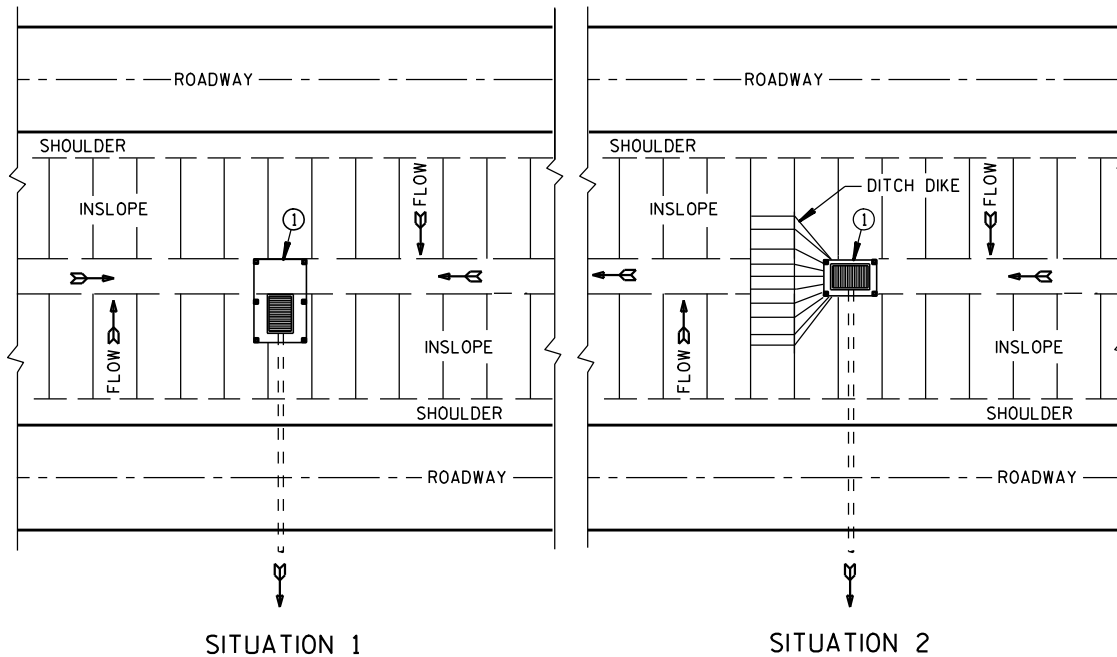
/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



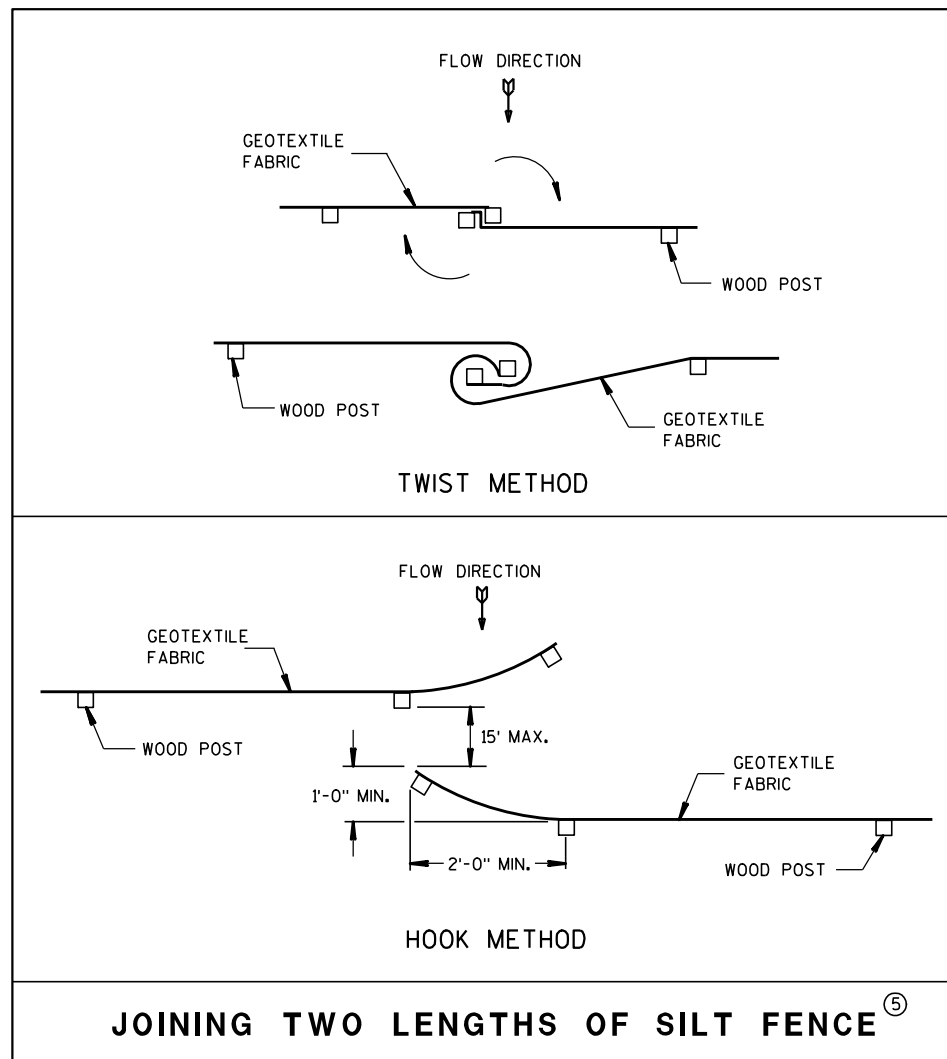
PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

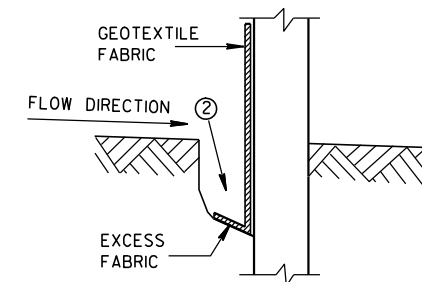


JOINING TWO LENGTHS OF SILT FENCE (5)

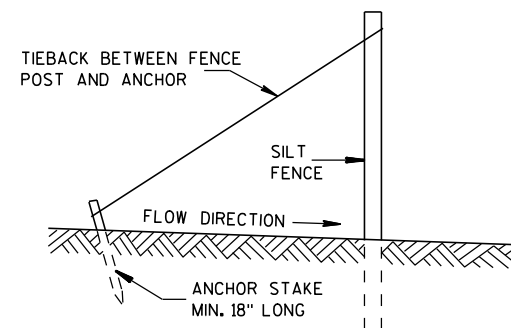
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

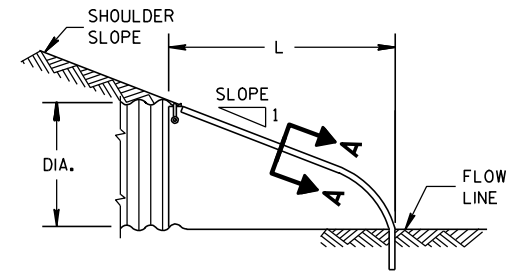
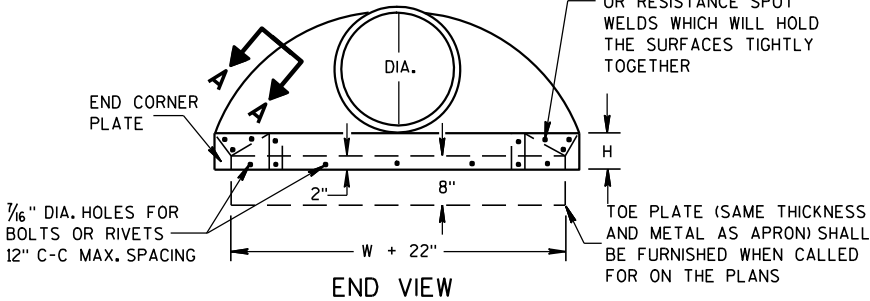
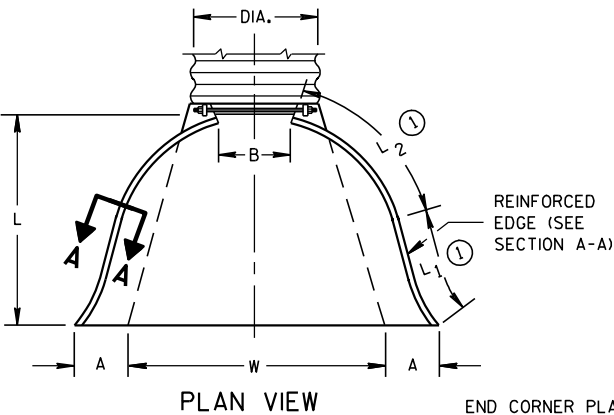
SILT FENCE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
4-29-05 /S/ Beth Canestra  
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER  
FHWA

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")	L <sub>1</sub> ①	L <sub>2</sub> 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.	

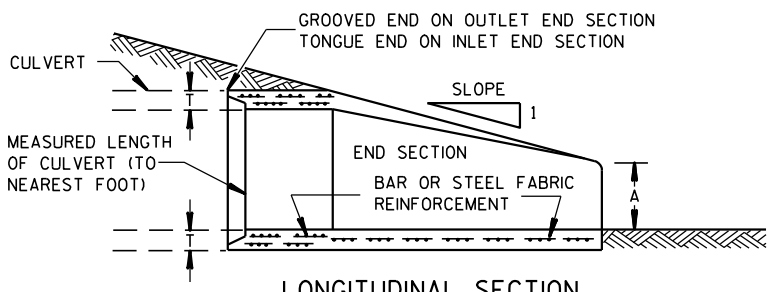
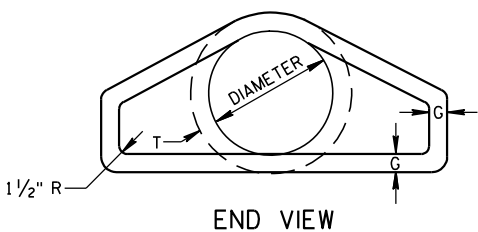
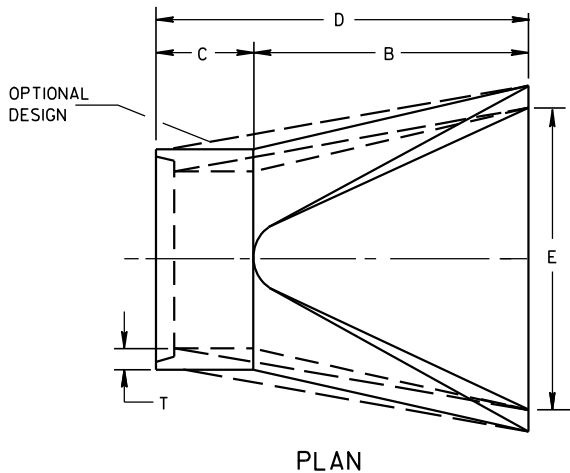
\* EXCEPT CENTER PANEL  
SEE GENERAL NOTES



SIDE ELEVATION  
METAL ENDWALLS

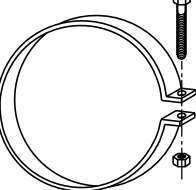
REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 <sup>7</sup> / <sub>8</sub>	72 <sup>7</sup> / <sub>8</sub>	24	2	3 to 1
15	2 <sup>1</sup> / <sub>4</sub>	6	27	46	73	30	2 <sup>1</sup> / <sub>4</sub>	3 to 1
18	2 <sup>2</sup> / <sub>2</sub>	9	27	46	73	36	2 <sup>2</sup> / <sub>2</sub>	3 to 1
21	2 <sup>3</sup> / <sub>4</sub>	9	36	37 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>	42	2 <sup>3</sup> / <sub>4</sub>	3 to 1
24	3	9 <sup>1</sup> / <sub>2</sub>	43 <sup>1</sup> / <sub>2</sub>	30	73 <sup>1</sup> / <sub>2</sub>	48	3	3 to 1
27	3 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>2</sub>	49 <sup>1</sup> / <sub>2</sub>	24	73 <sup>1</sup> / <sub>2</sub>	54	3 <sup>1</sup> / <sub>4</sub>	3 to 1
30	3 <sup>1</sup> / <sub>2</sub>	12	54	19 <sup>3</sup> / <sub>4</sub>	73 <sup>1</sup> / <sub>2</sub>	60	3 <sup>1</sup> / <sub>2</sub>	3 to 1
36	4	15	63	34 <sup>3</sup> / <sub>4</sub>	97 <sup>3</sup> / <sub>4</sub>	72	4	3 to 1
42	4 <sup>1</sup> / <sub>2</sub>	21	63	35	98	78	4 <sup>1</sup> / <sub>2</sub>	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 <sup>1</sup> / <sub>2</sub>	27	65	<sup>**</sup> 33 <sup>1</sup> / <sub>4</sub> - <sup>**</sup> 35	<sup>**</sup> 98 <sup>1</sup> / <sub>4</sub> - <sup>**</sup> 100	90	5 <sup>1</sup> / <sub>2</sub>	2 <sup>2</sup> / <sub>5</sub> to 1
60	6	<sup>**</sup> 30- <sup>**</sup> 35	60	39	99	96	5	2 to 1
66	6 <sup>1</sup> / <sub>2</sub>	<sup>**</sup> 24- <sup>**</sup> 30	<sup>**</sup> 72- <sup>**</sup> 78	<sup>**</sup> 21- <sup>**</sup> 27	99	102	5 <sup>1</sup> / <sub>2</sub>	2 to 1
72	7	<sup>**</sup> 24- <sup>**</sup> 36	78	21	99	108	6	2 to 1
78	7 <sup>1</sup> / <sub>2</sub>	<sup>**</sup> 24- <sup>**</sup> 36	78	21	99	114	6 <sup>1</sup> / <sub>2</sub>	2 to 1
84	8	36	90 <sup>1</sup> / <sub>2</sub>	21	111 <sup>1</sup> / <sub>2</sub>	120	6 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub> to 1
90	8 <sup>1</sup> / <sub>2</sub>	41	87 <sup>1</sup> / <sub>2</sub>	24	111 <sup>1</sup> / <sub>2</sub>	132	6 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub> to 1

\* MINIMUM  
\*\* MAXIMUM

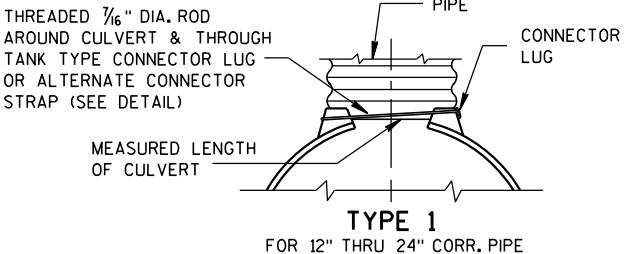


LONGITUDINAL SECTION  
CONCRETE ENDWALLS

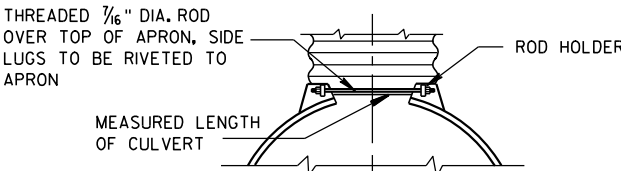
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



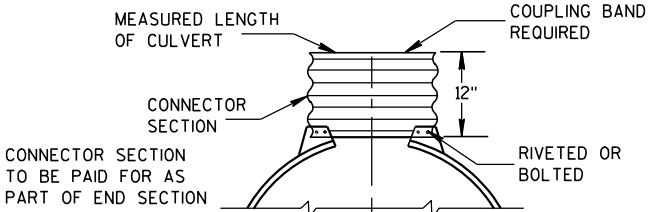
ALTERNATE FOR TYPE 1 CONNECTION  
END SECTION CONNECTOR STRAP



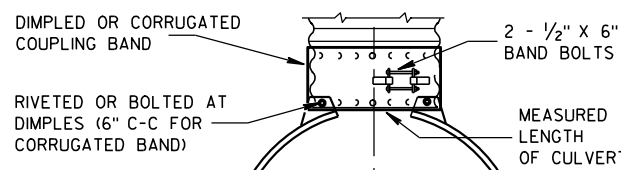
TYPE 1  
FOR 12" THRU 24" CORR. PIPE



TYPE 2  
FOR 30" THRU 96" CORR. PIPE



TYPE 3  
FOR 42" THRU 96" CORR. PIPE



TYPE 5  
ALTERNATE FOR:  
ALL SIZES CORRUGATED CIRCULAR PIPE

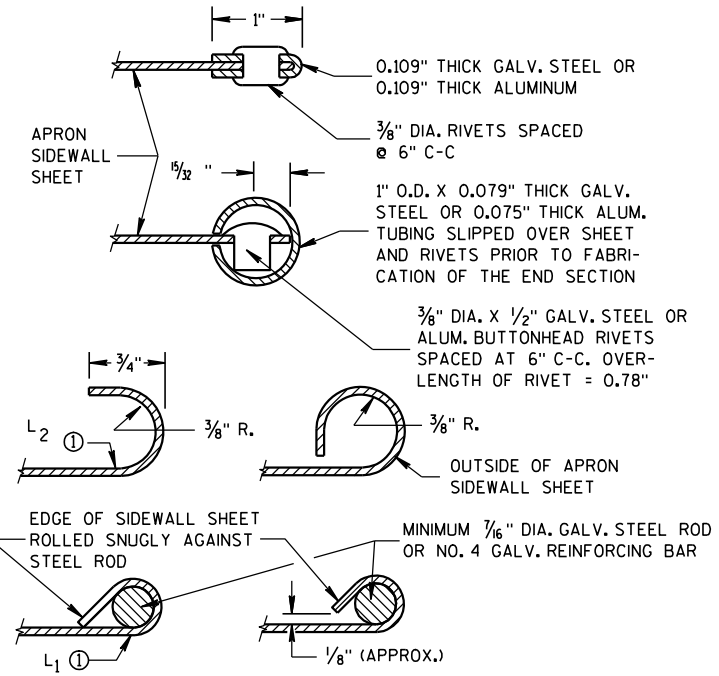
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

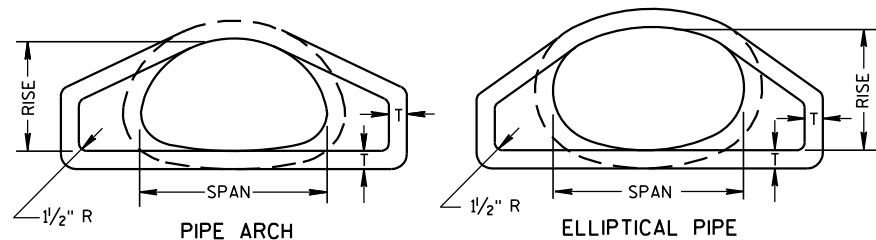
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

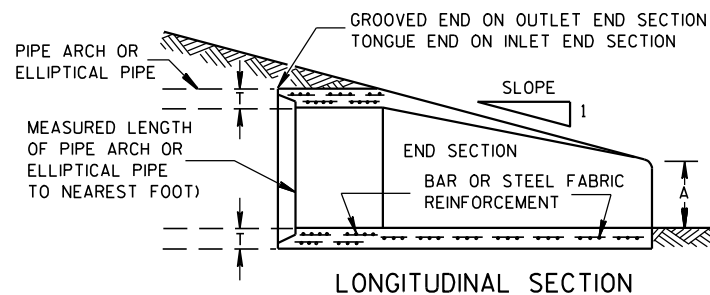
APRON ENDWALLS FOR  
CULVERT PIPE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

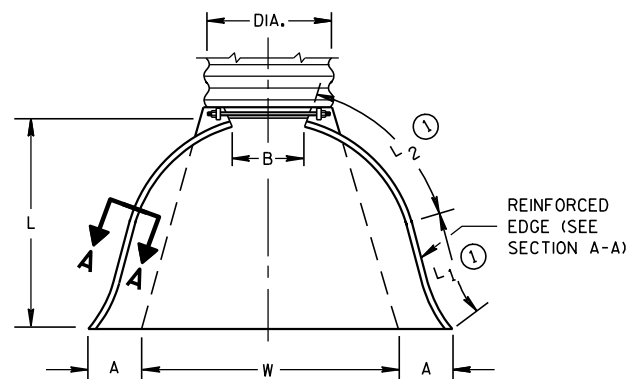


END VIEW



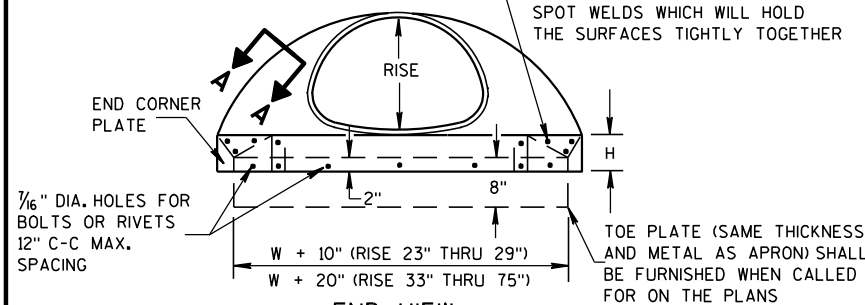
LONGITUDINAL SECTION

## CONCRETE ENDWALLS

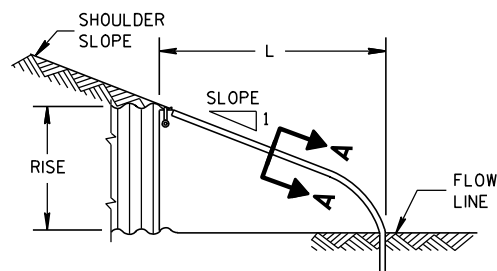
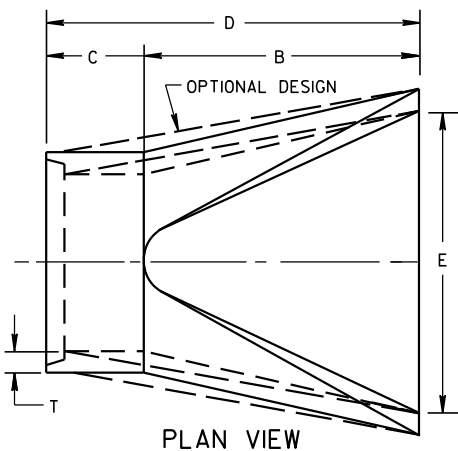


PLAN VIEW

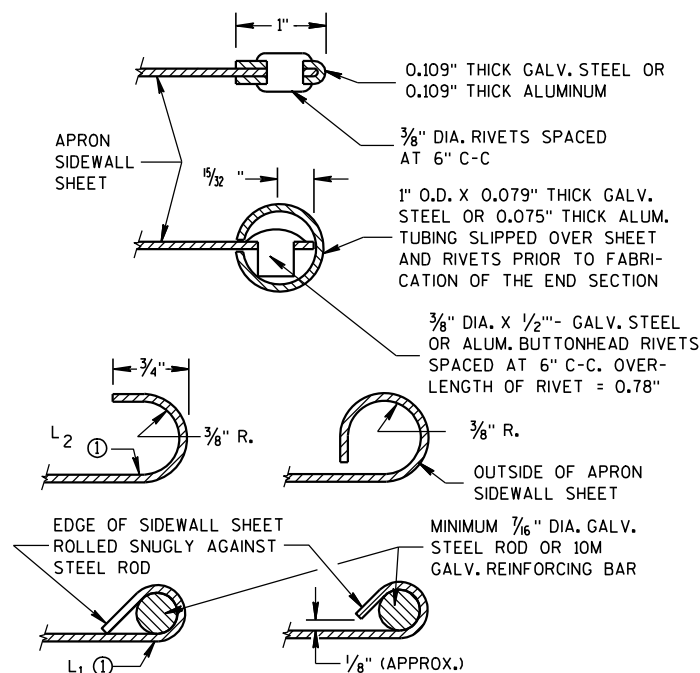
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



END VIEW

SIDE ELEVATION  
METAL ENDWALLS

PLAN VIEW

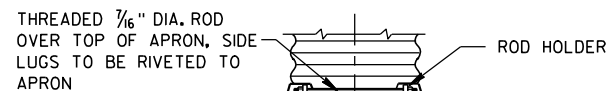


SECTION A-A

2- 2 2/3" X 1/2" 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")	L1 ①	L2 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.

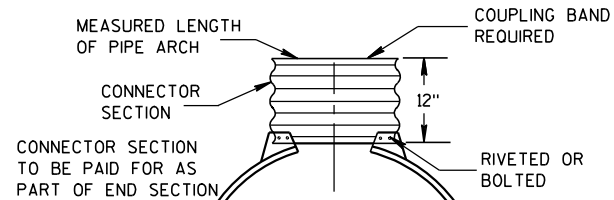
3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 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	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

\* EXCEPT CENTER PANEL  
SEE GENERAL NOTES

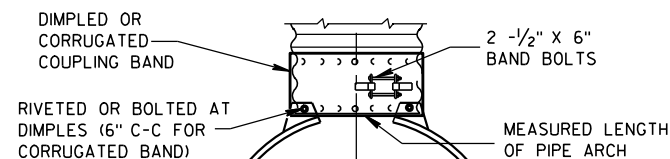
TYPE 2

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 ARCHESNOTE: 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 1/16	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.

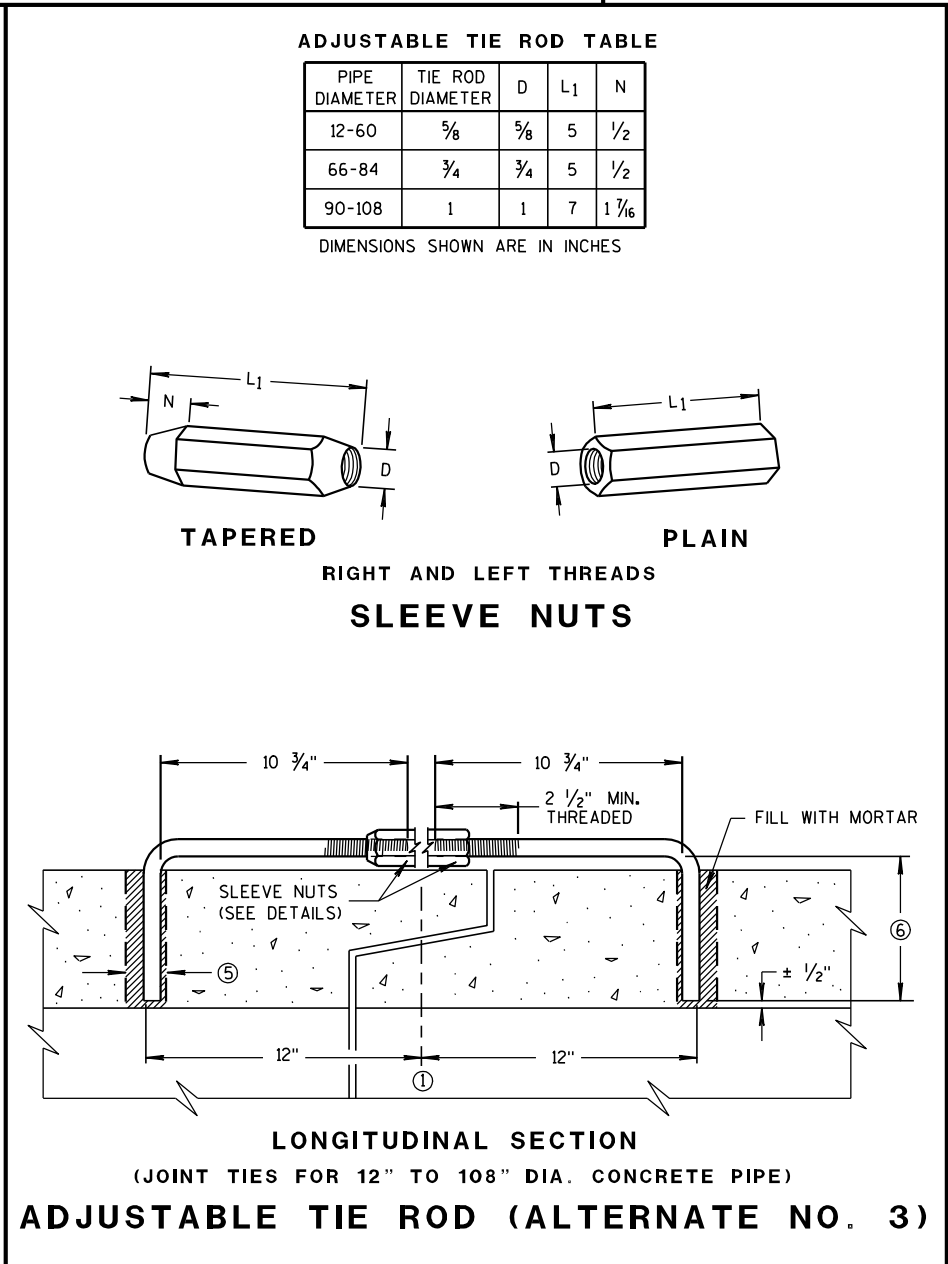
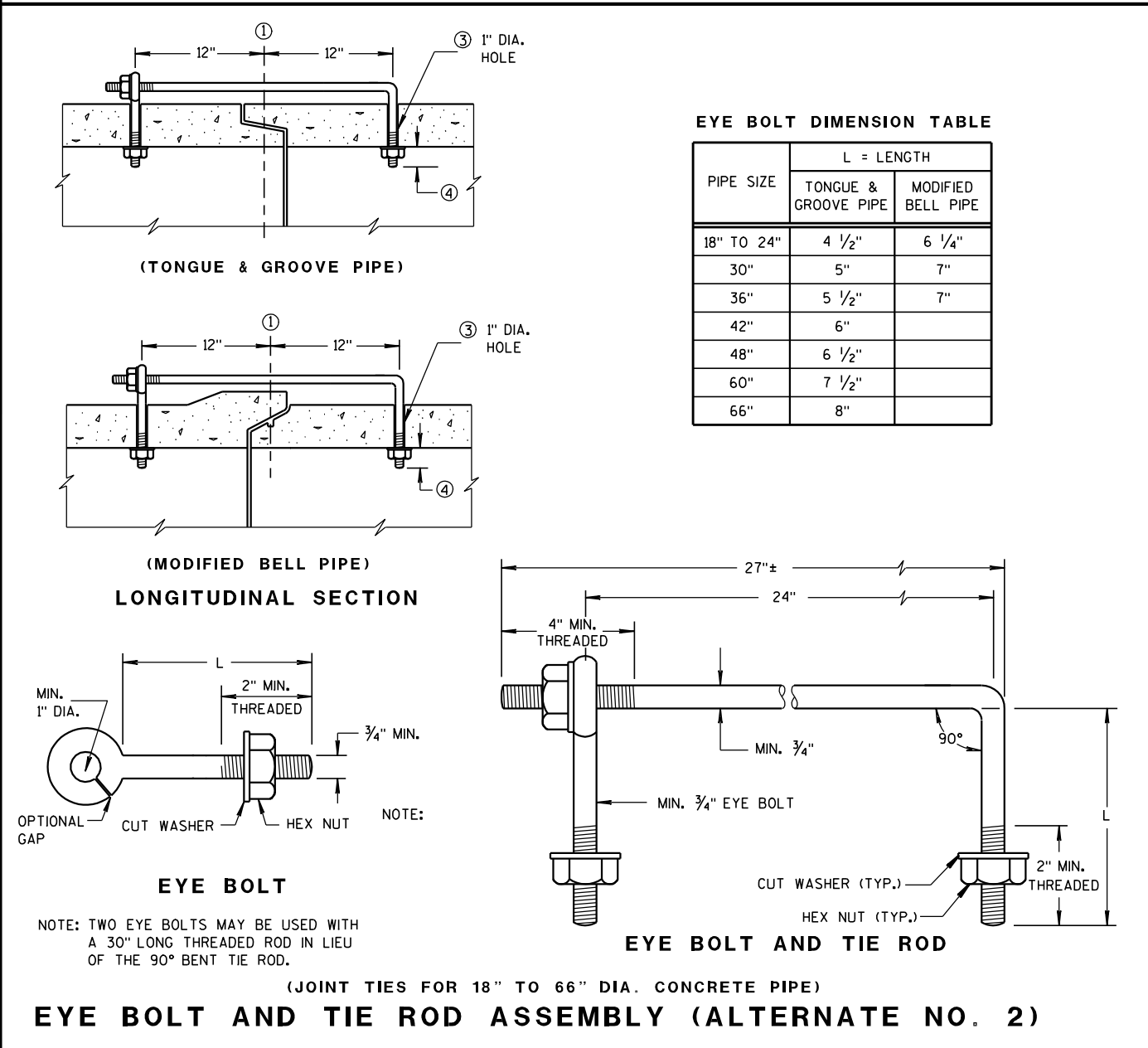
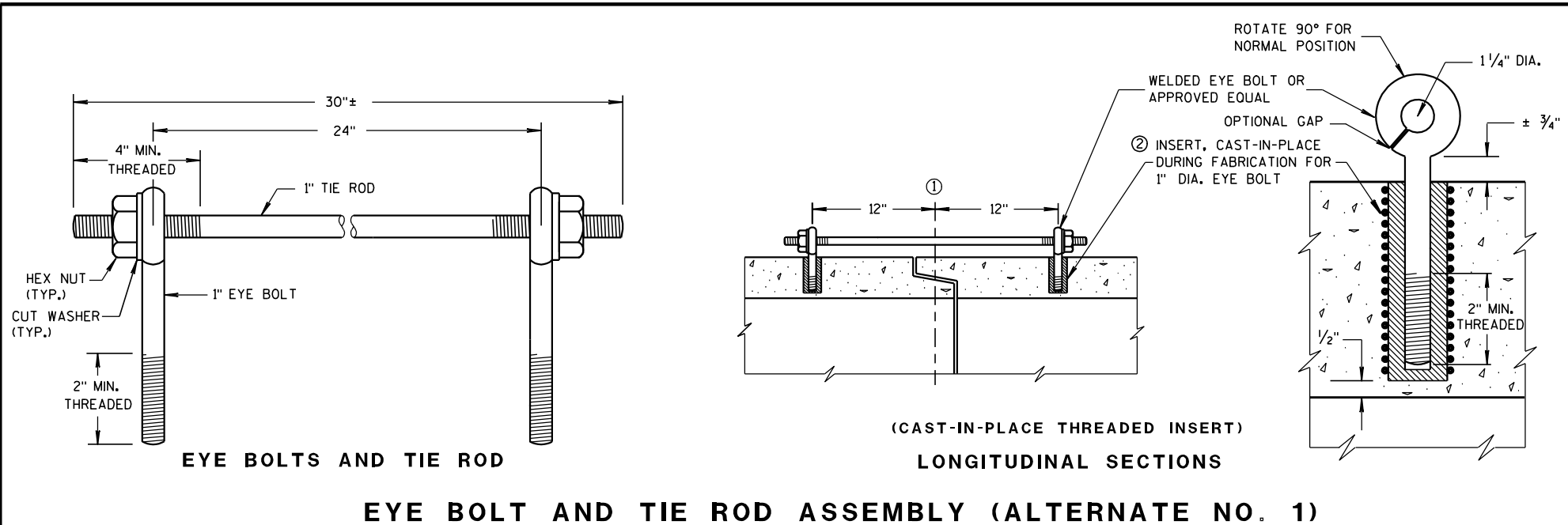
① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

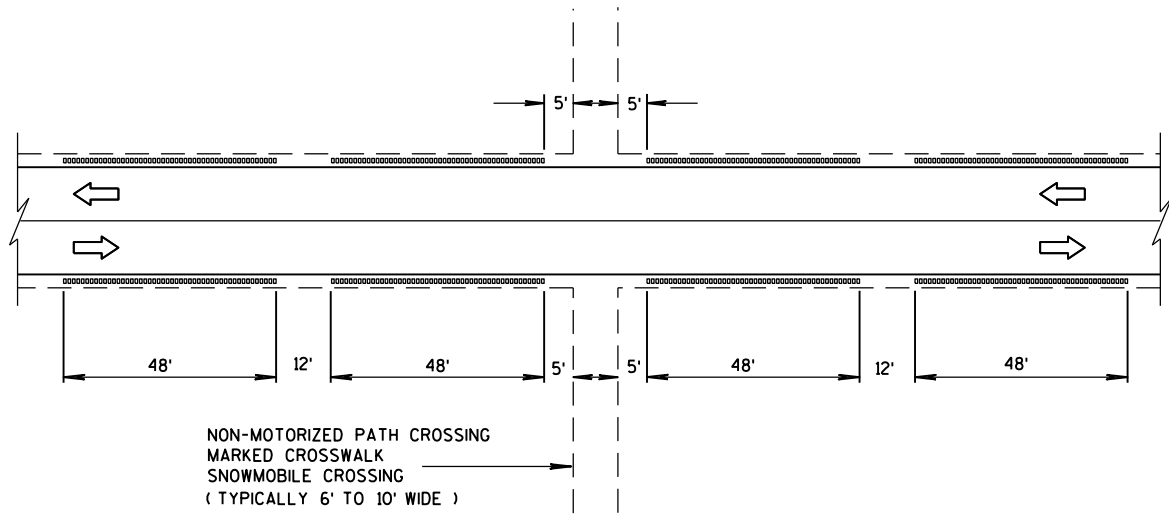
APRON ENDWALLS FOR  
PIPE ARCH AND  
ELLIPTICAL PIPESTATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

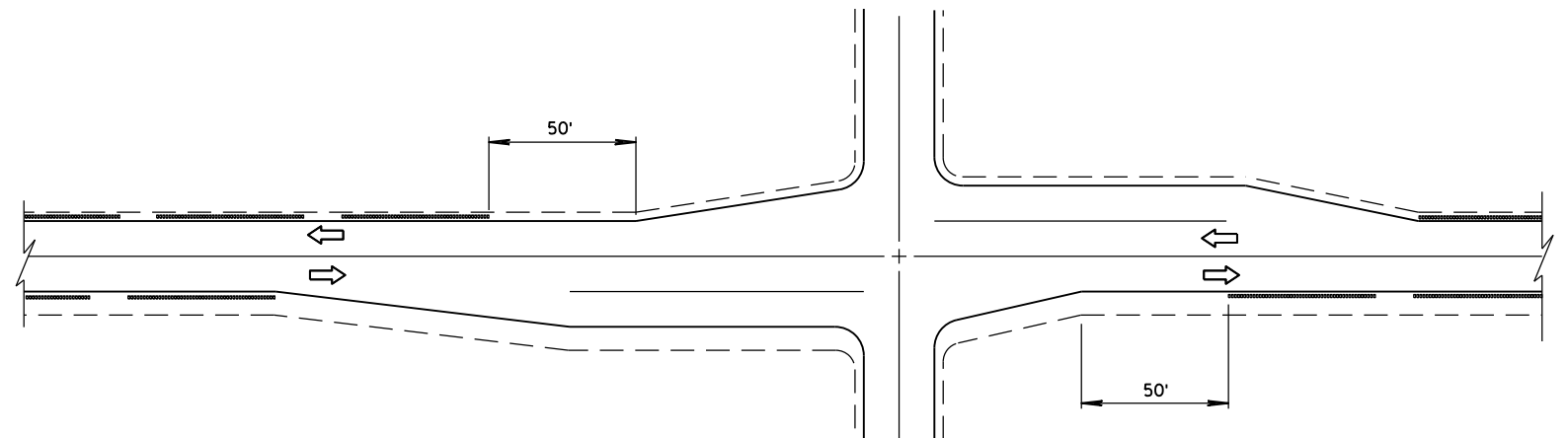
11/30/94  
DATE/S/ Rory L. Rhinesmith  
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

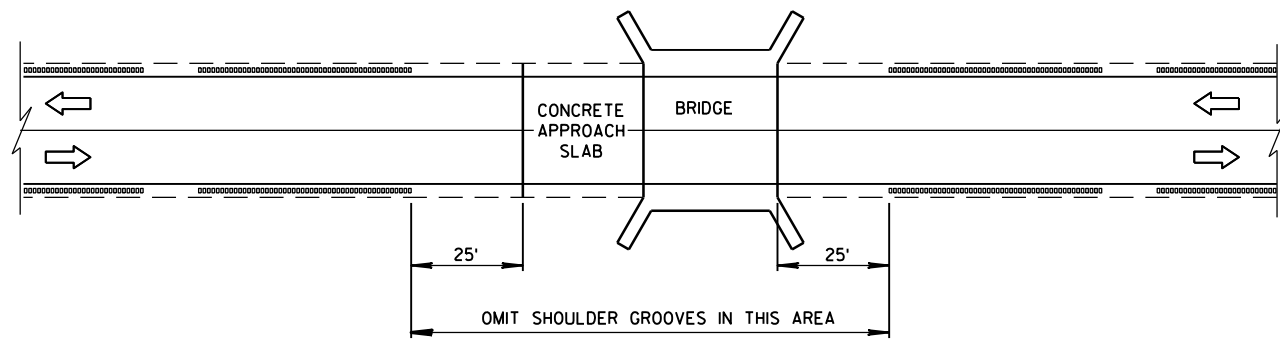




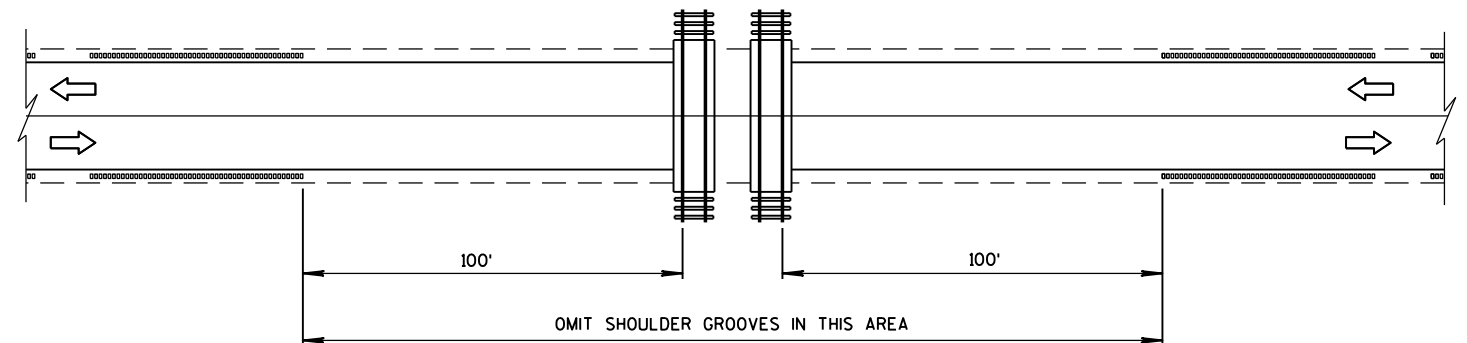
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



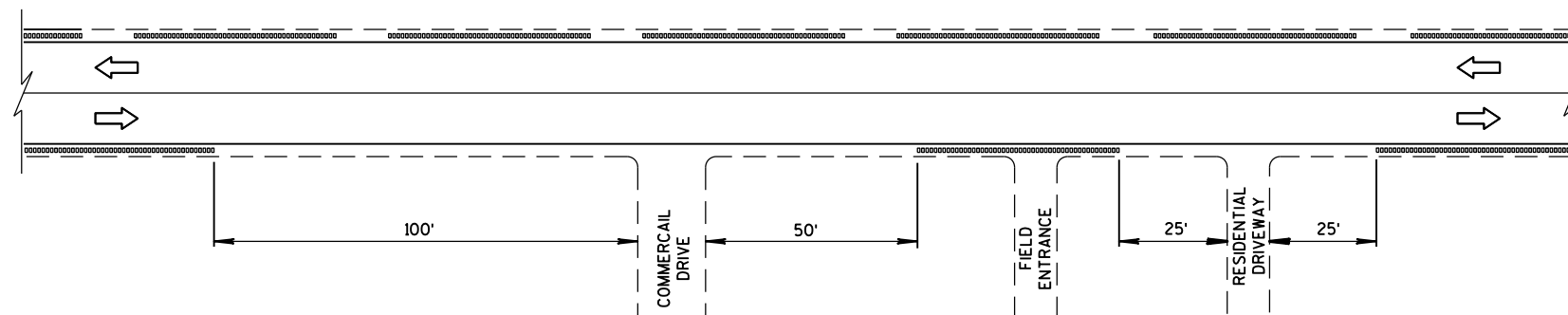
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS

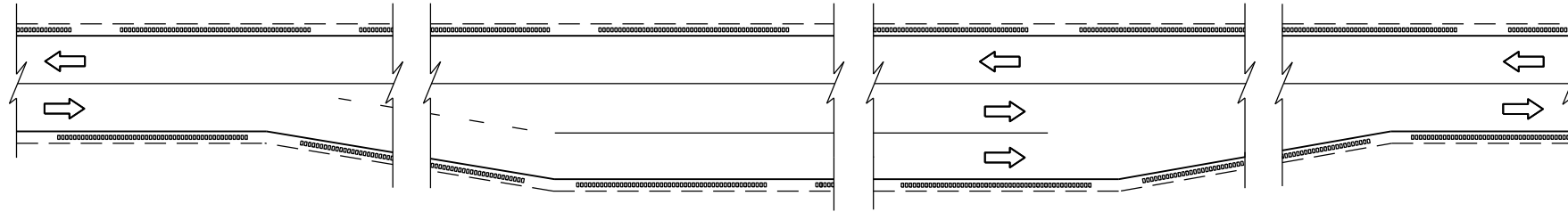


SHOULDER GROOVES AT DRIVEWAYS<sup>①</sup>

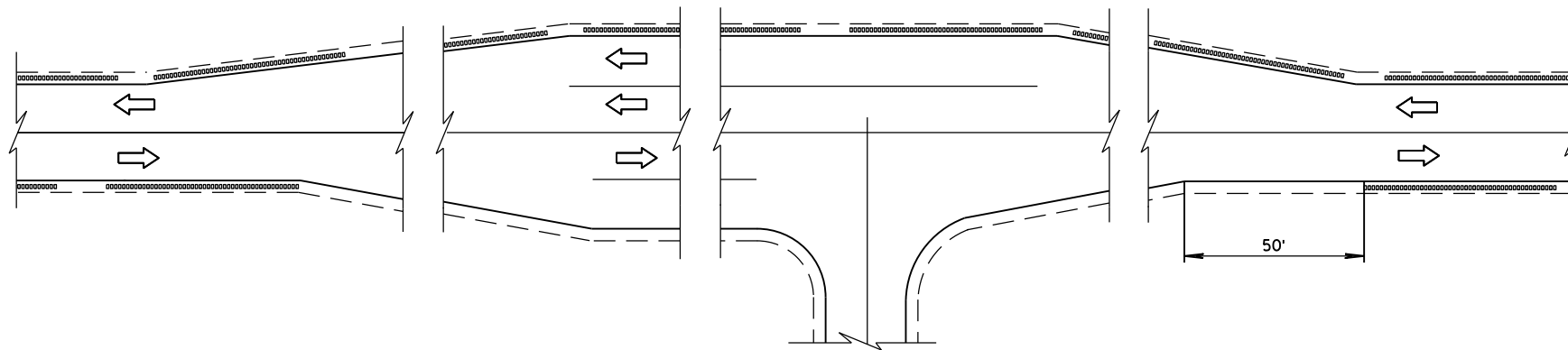
2-LANE RURAL  
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION





SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

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

GENERAL NOTES

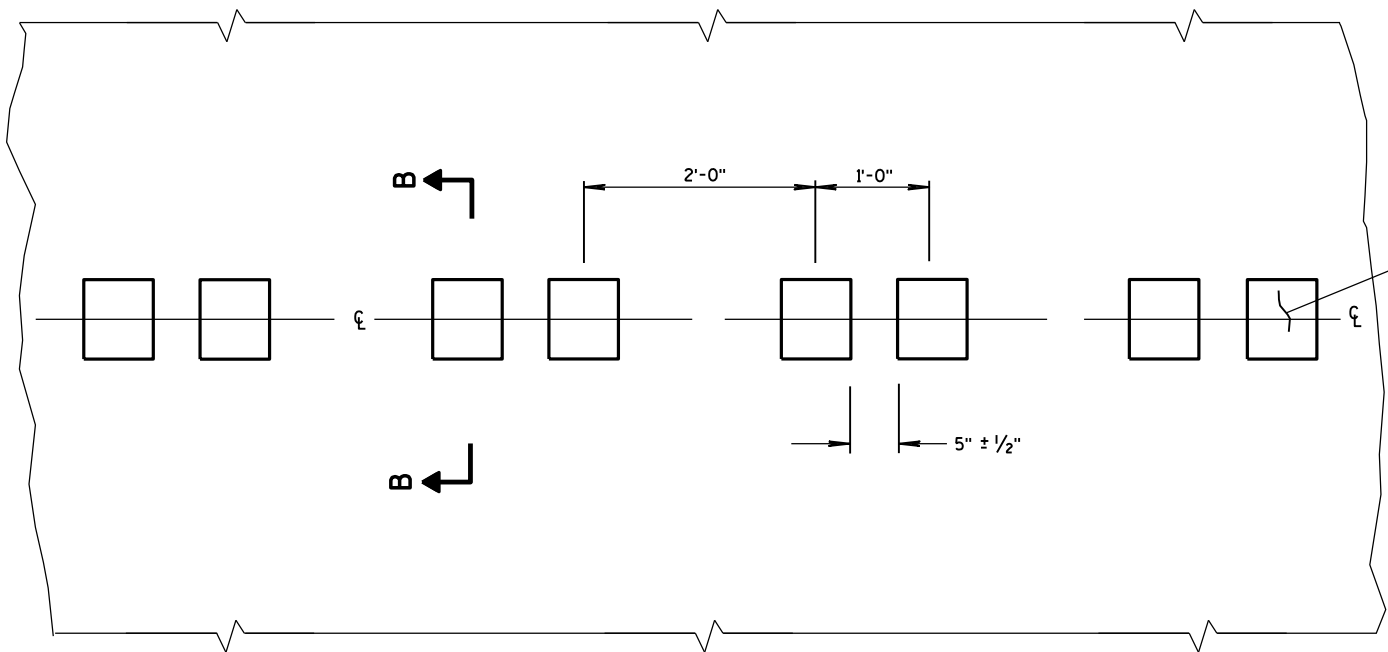
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

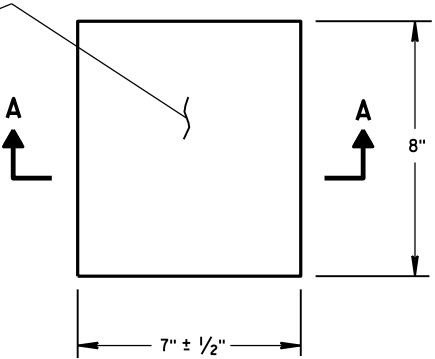
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

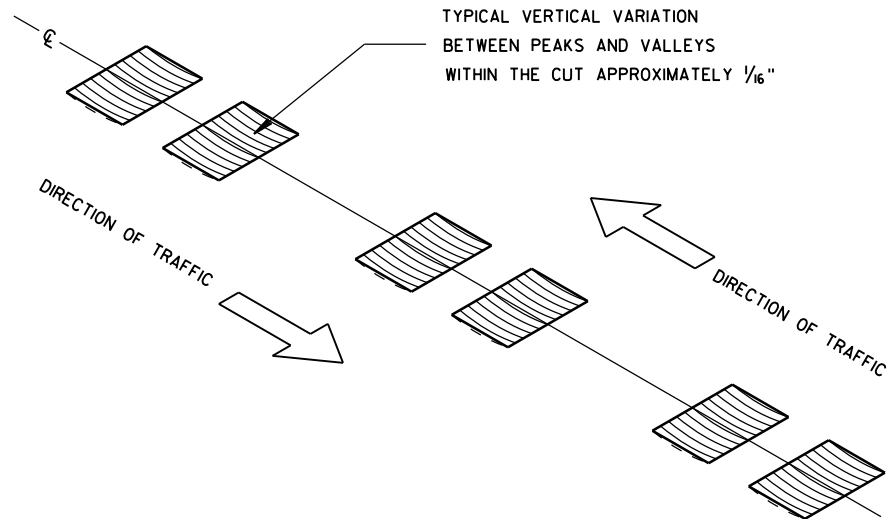
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



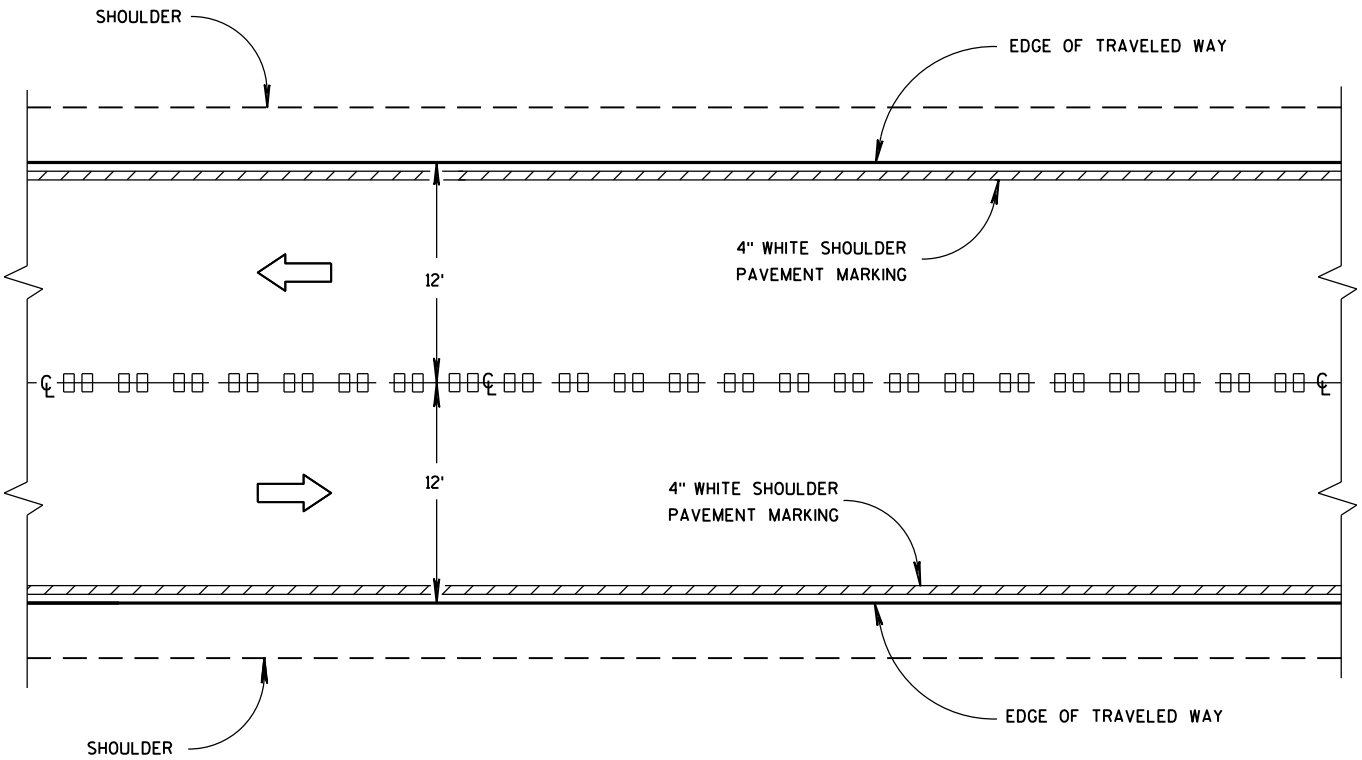
PLAN VIEW  
CENTER LINE WITH GROOVES



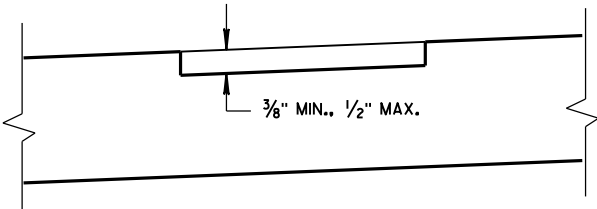
PLAN VIEW  
(SINGLE GROOVE)



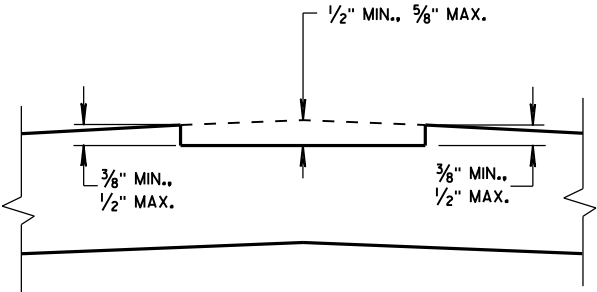
ISOMETRIC



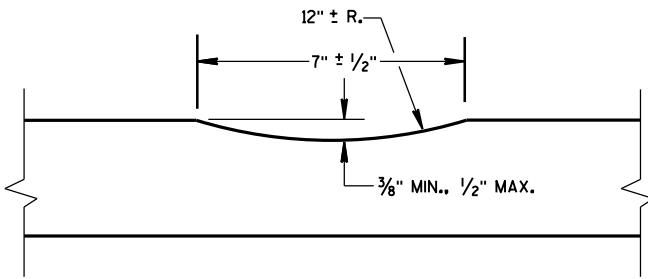
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B  
SUPERELEVATED ROADWAY



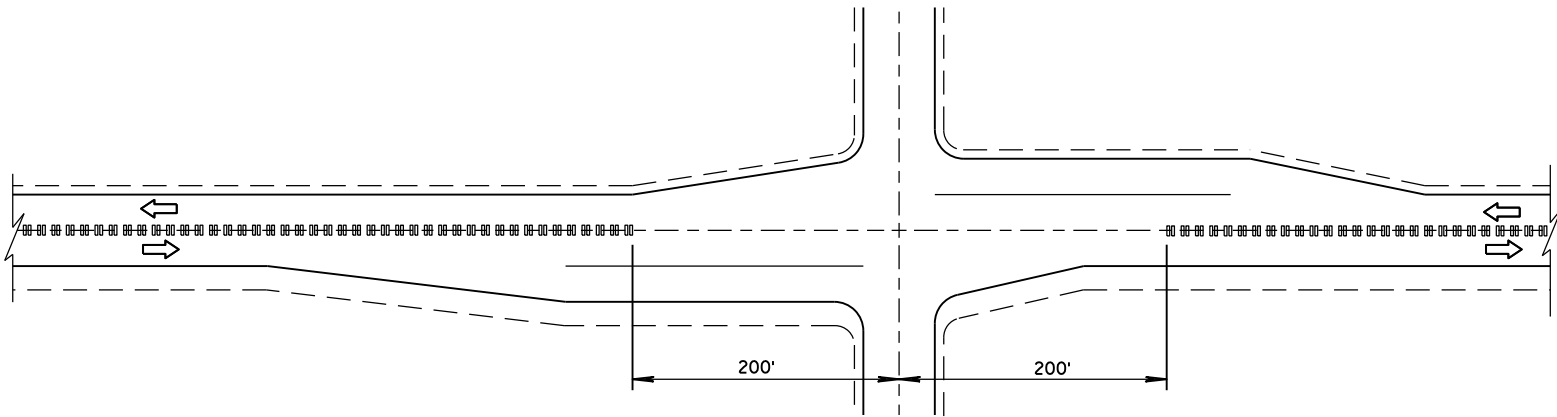
SECTION B-B  
CROWNED ROADWAY



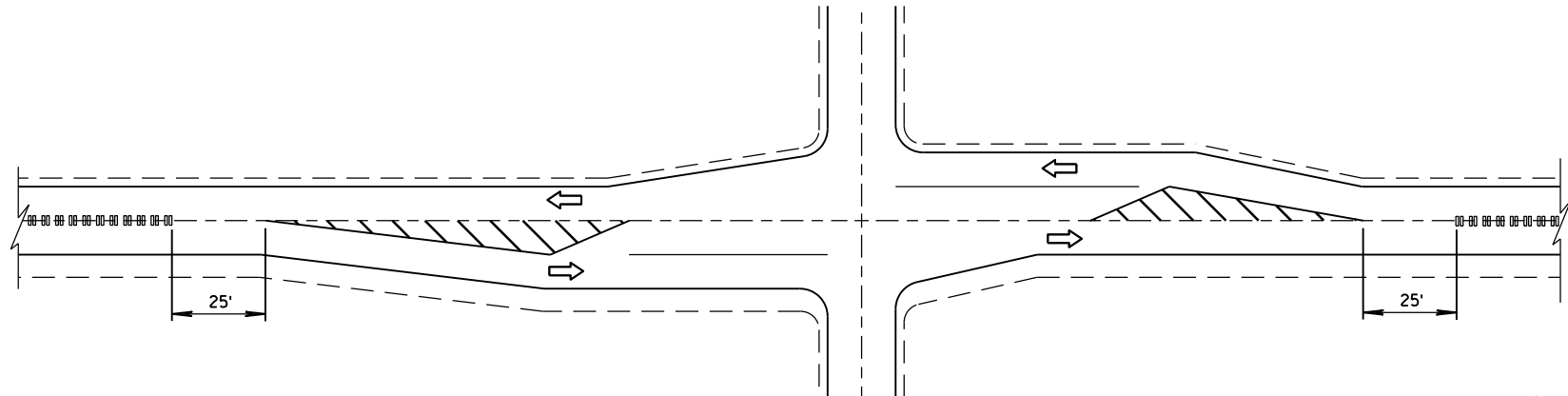
SECTION A-A

2-LANE RURAL  
CENTER LINE RUMBLE STRIP,  
MILLING

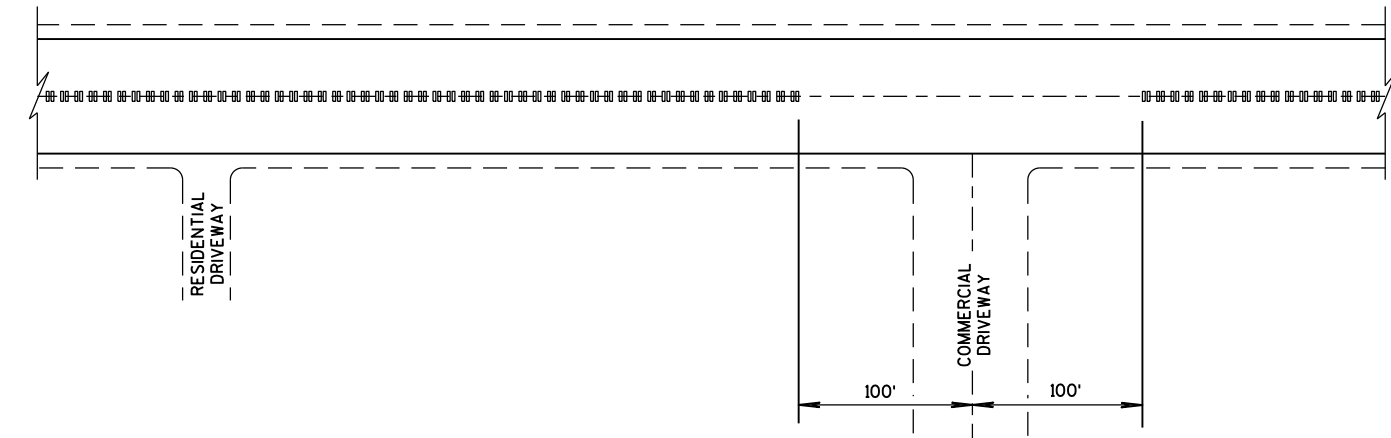
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

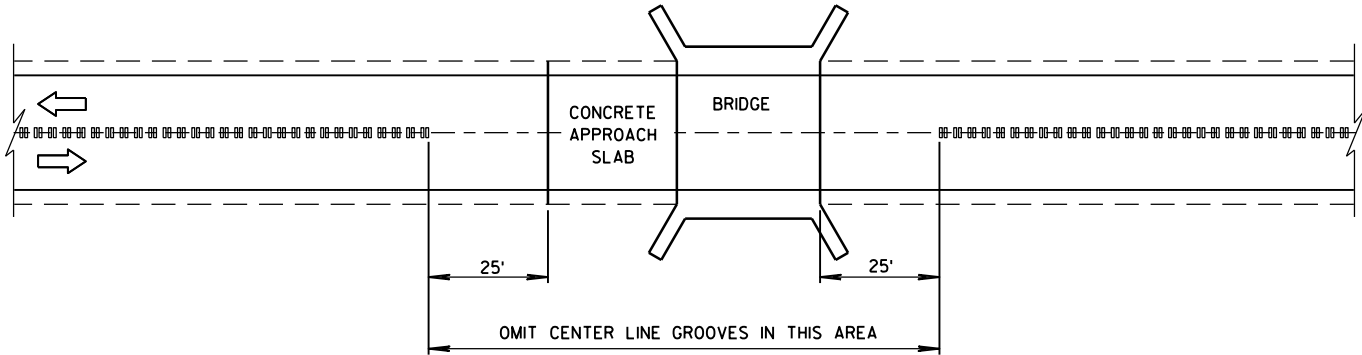


CENTER LINE GROOVES AT INTERSECTIONS  
(WITH LEFT TURN LANES)

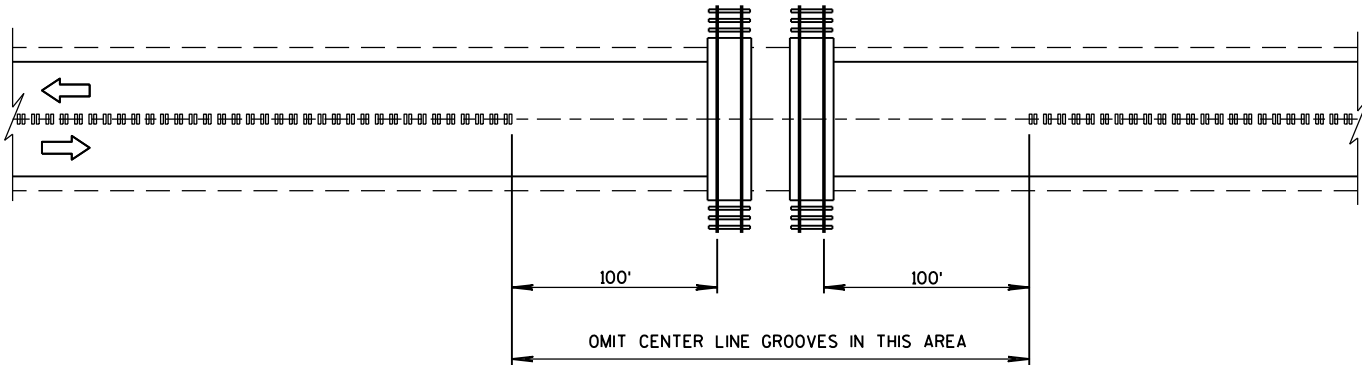


CENTER LINE GROOVES AT DRIVEWAYS<sup>1</sup>

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

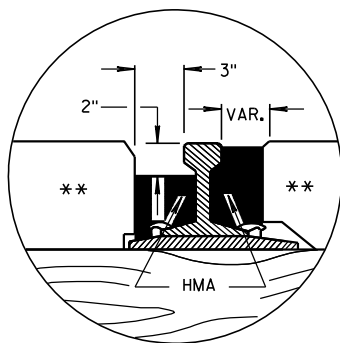
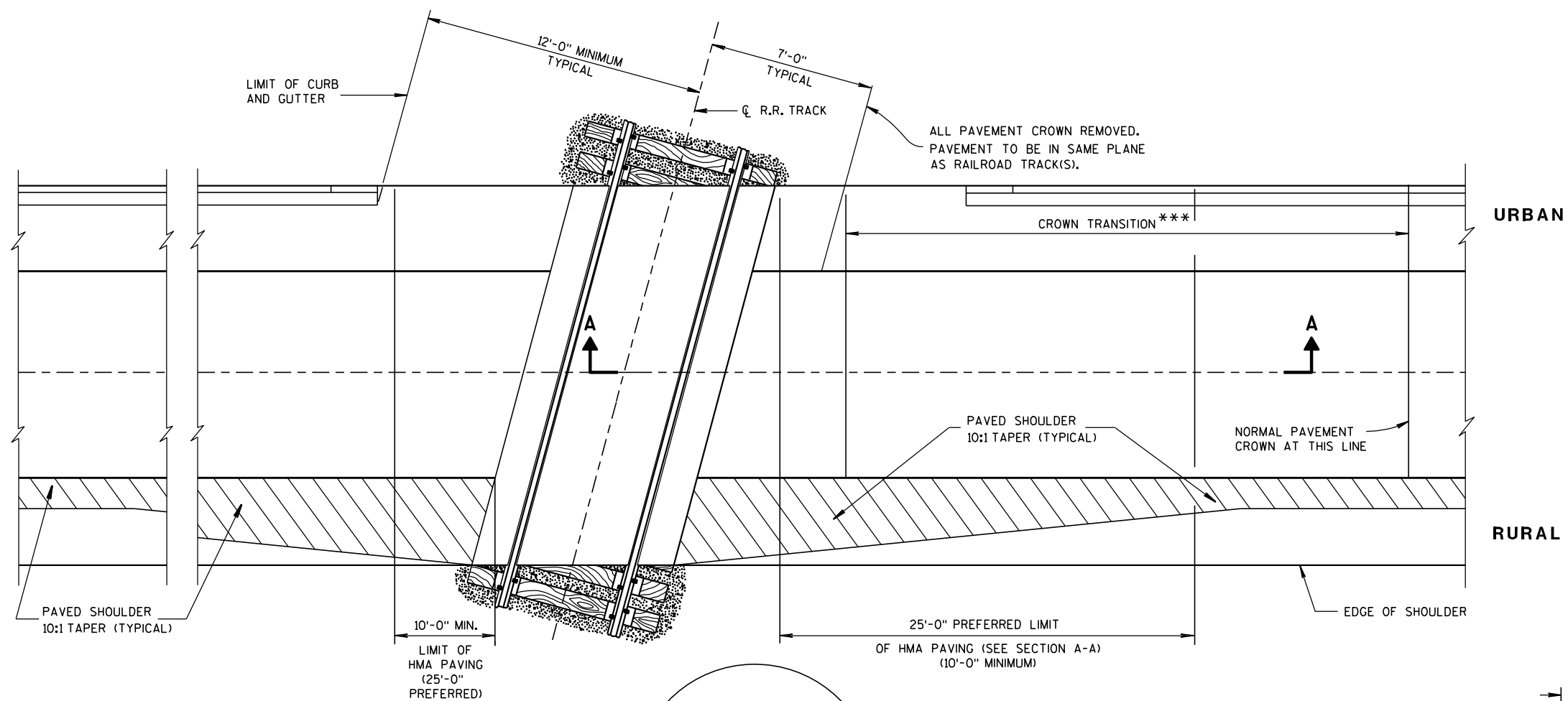


CENTER LINE GROOVES AT BRIDGES

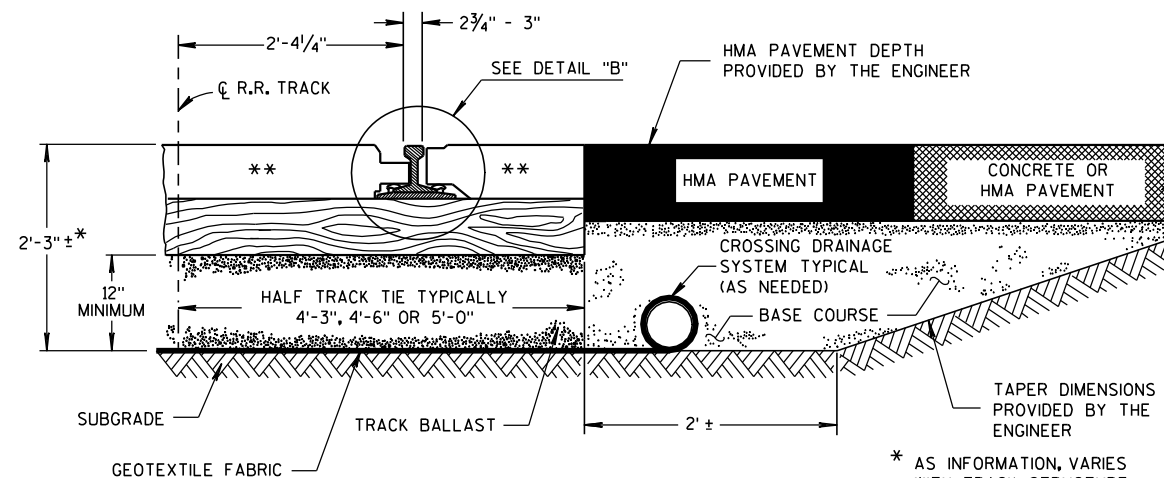


CENTER LINE GROOVES AT RAILROADS

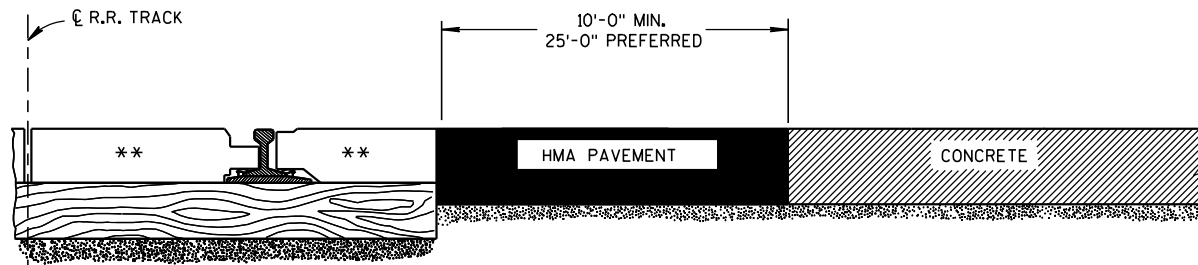
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



**DETAIL B**  
**HMA FLANGEWAY**  
**AND FIELD FILLERS**



**TYPICAL HALF SECTION**



**SECTION A-A**  
**CONCRETE PAVEMENT APPROACH**



**SECTION A-A**  
**HMA PAVEMENT APPROACH**

**EXAMPLES OF PAVEMENT APPROACHES**

### GENERAL NOTES

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

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

HMA PAVEMENT APPROACHES AND HMA PAVEMENT CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

\*\* CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

\*\*\* CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

### PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

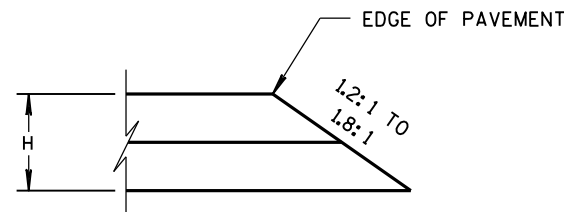
APPROVED

8-28-09

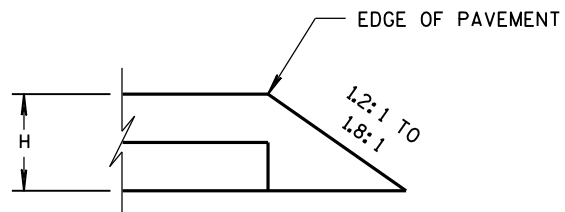
DATE

FHWA

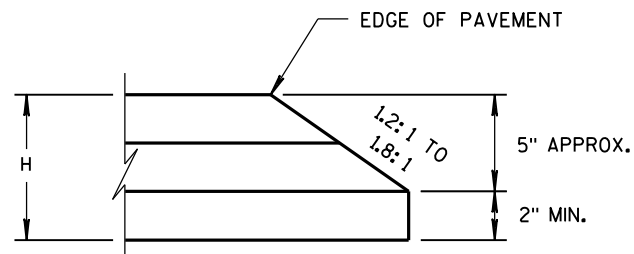
/S/ Ronald E. Adams  
CHIEF, RAILROADS & HARBORS SECTION



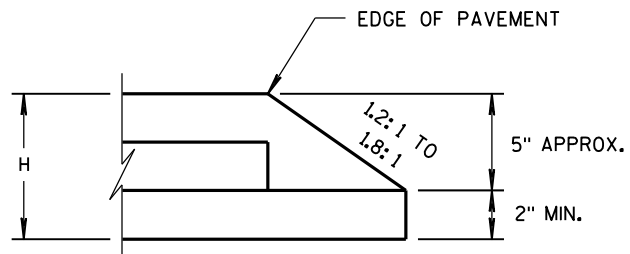
CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER  
FOR H 5" OR LESS

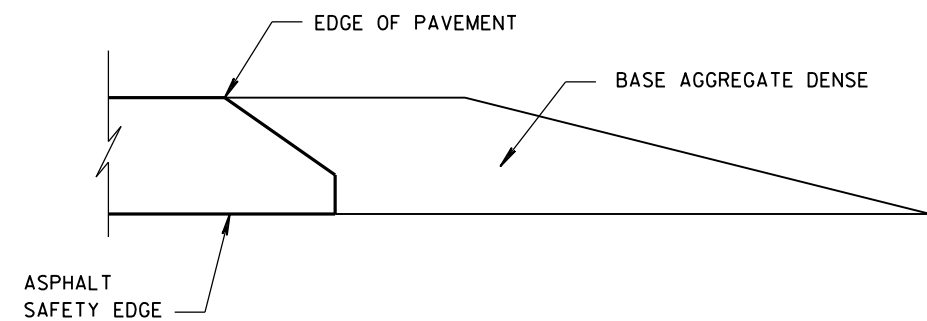


CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER  
FOR H GREATER THAN 5"

### HMA PAVEMENT AND HMA OVERLAYS



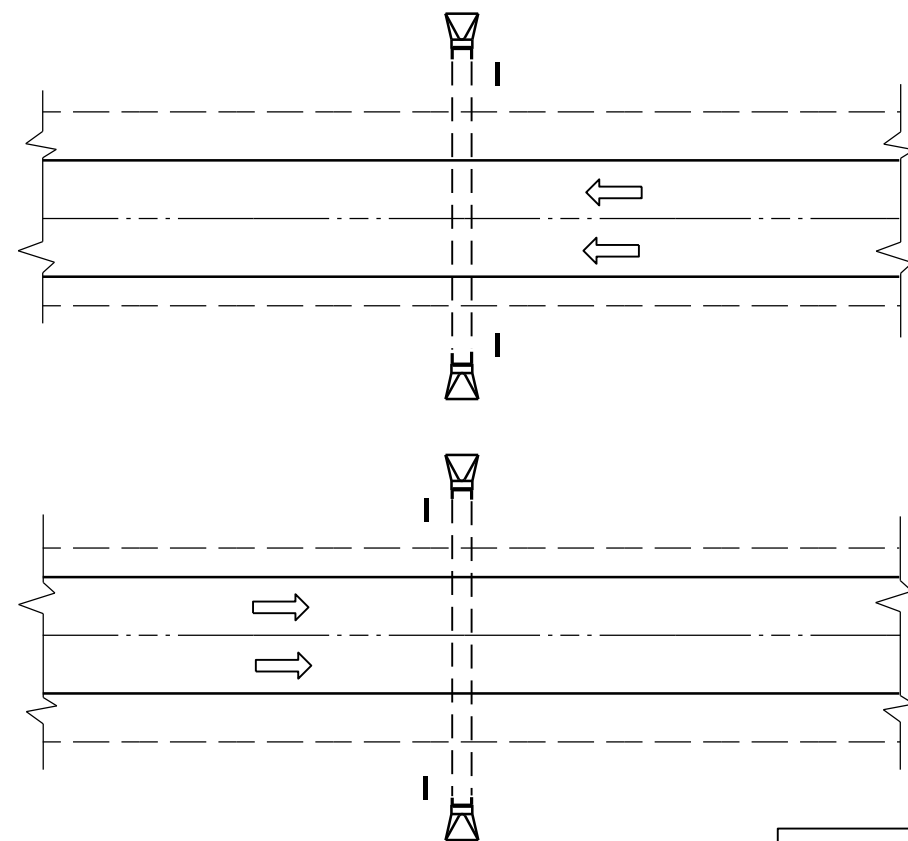
### FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE<sub>SM</sub>

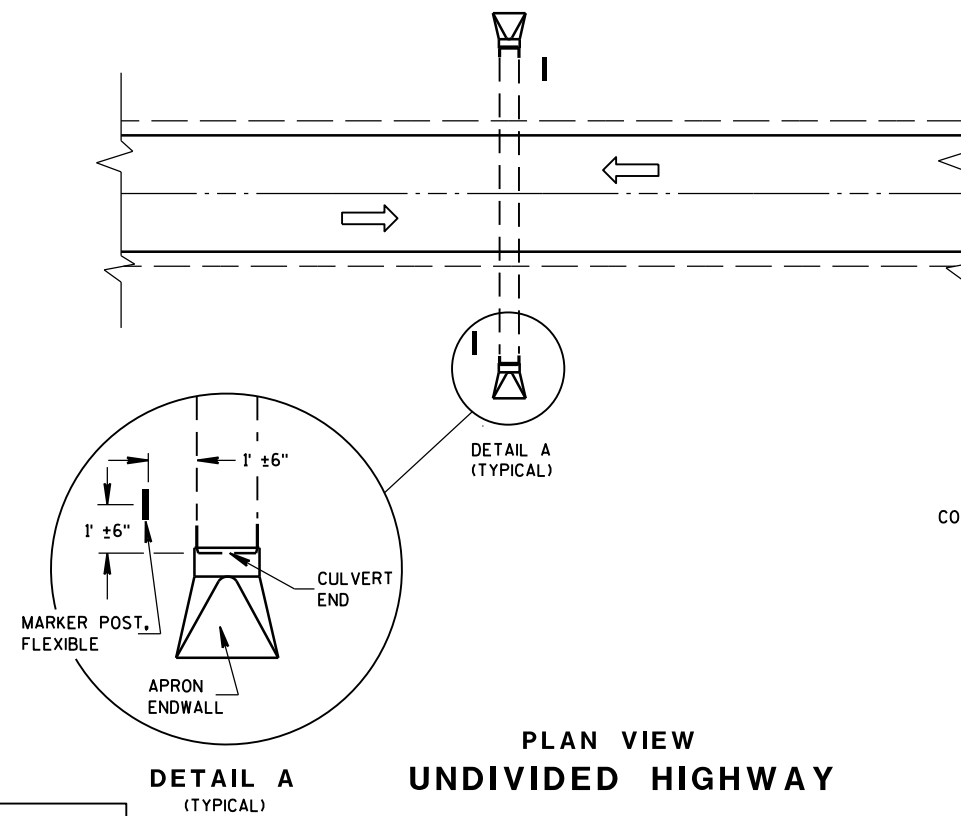
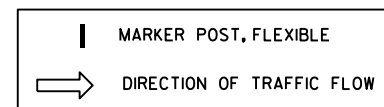
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11/30/2012  
DATE  
FHWA

/s/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



PLAN VIEW  
DIVIDED HIGHWAY

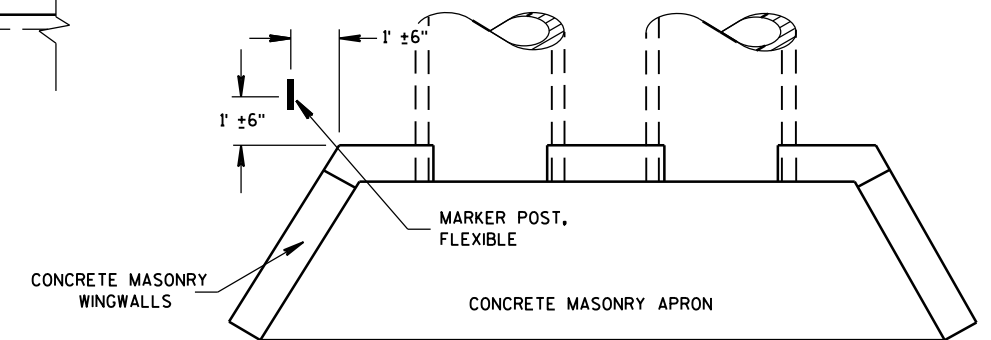


PLAN VIEW  
UNDIVIDED HIGHWAY

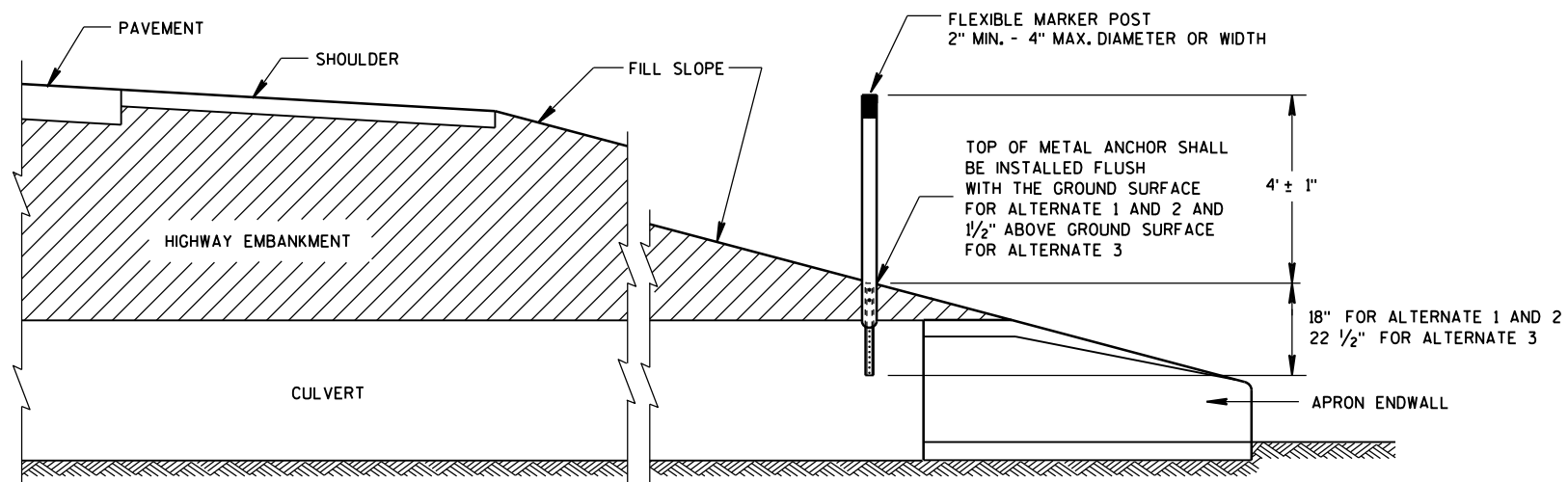
### FLEXIBLE MARKER POST LOCATION

### GENERAL NOTES

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



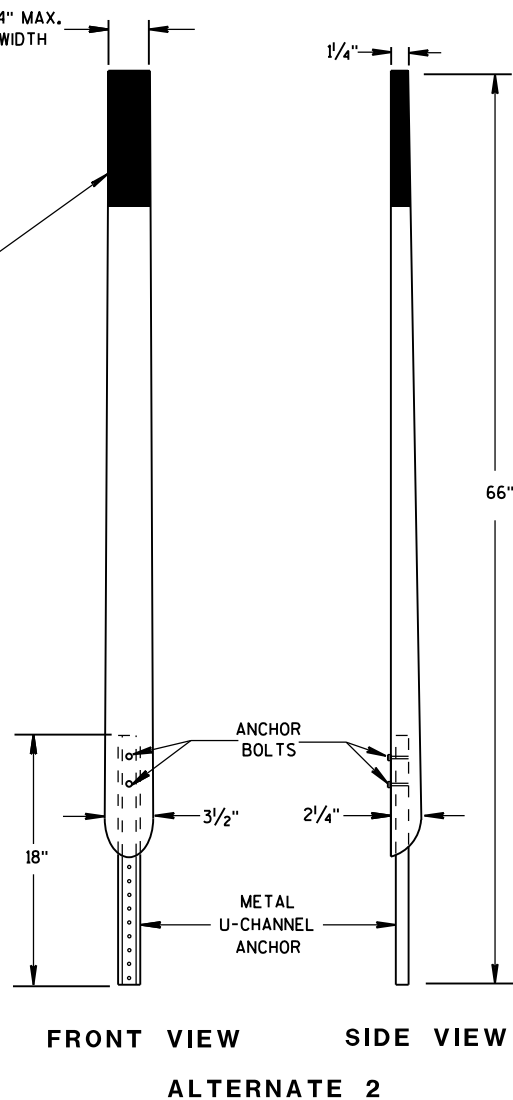
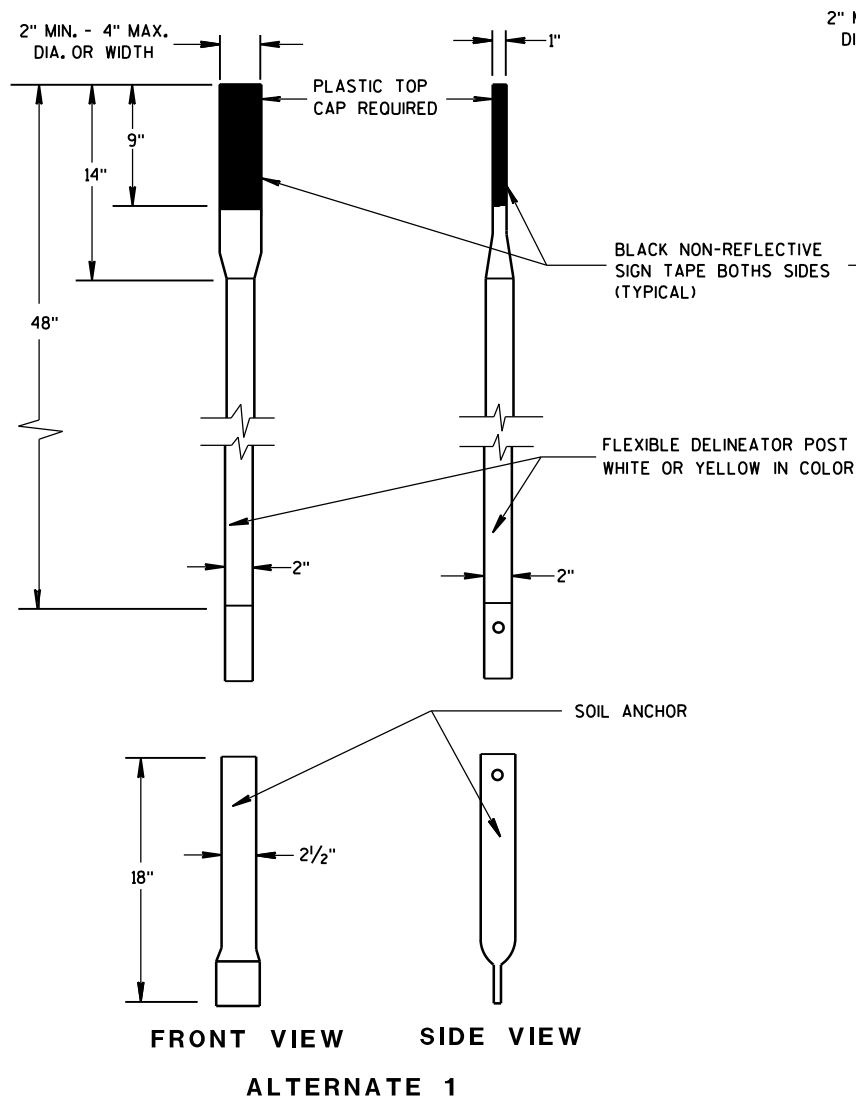
PLAN VIEW  
CONCRETE MASONRY ENDWALLS FOR  
CULVERT PIPE AND PIPE ARCH



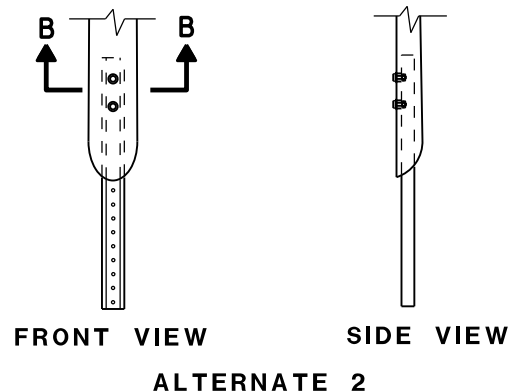
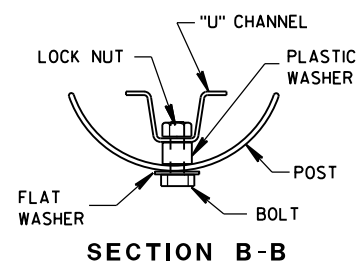
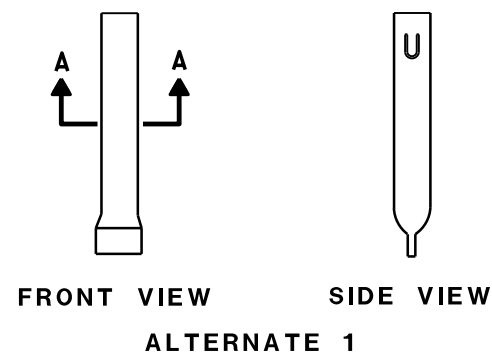
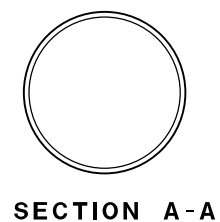
CROSS SECTION  
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST  
FOR CULVERT END

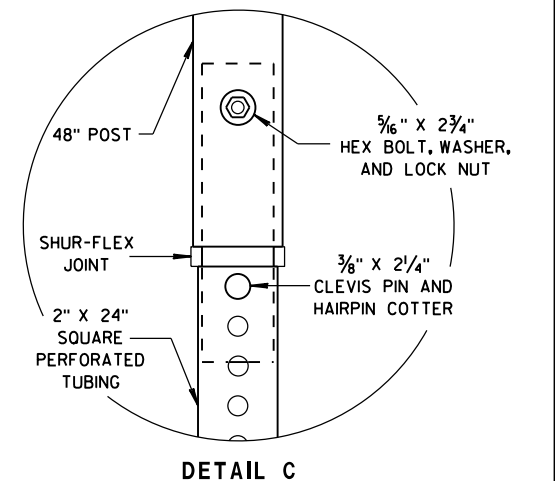
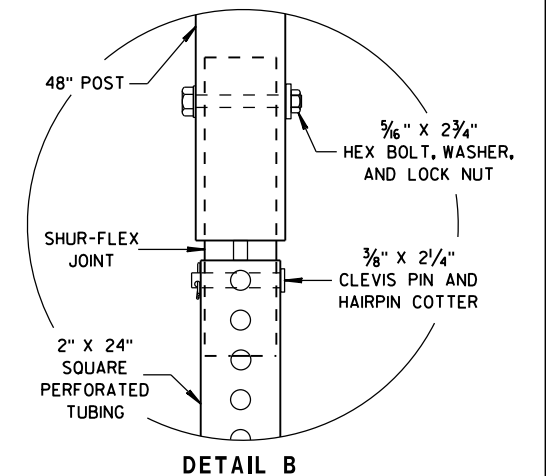
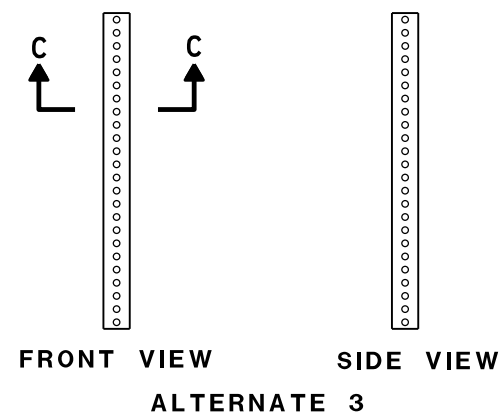
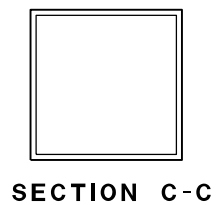
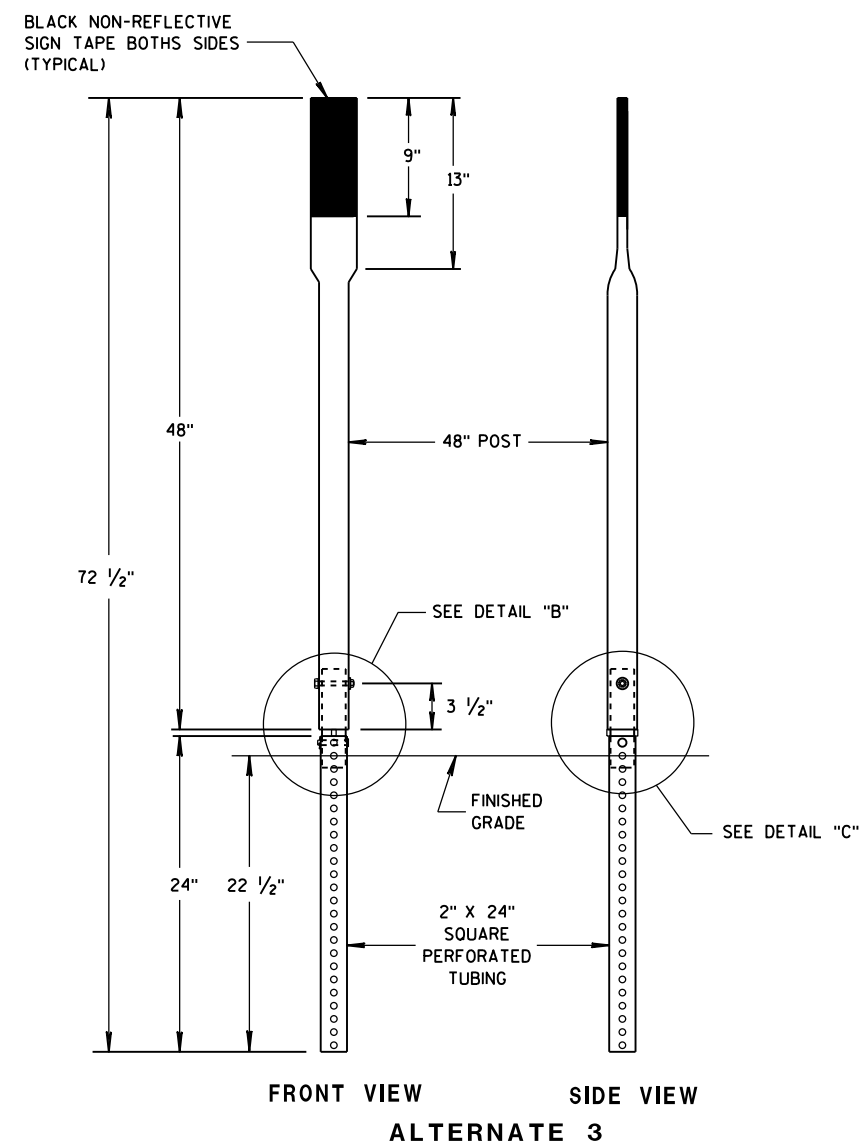
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



FLEXIBLE MARKER POSTS



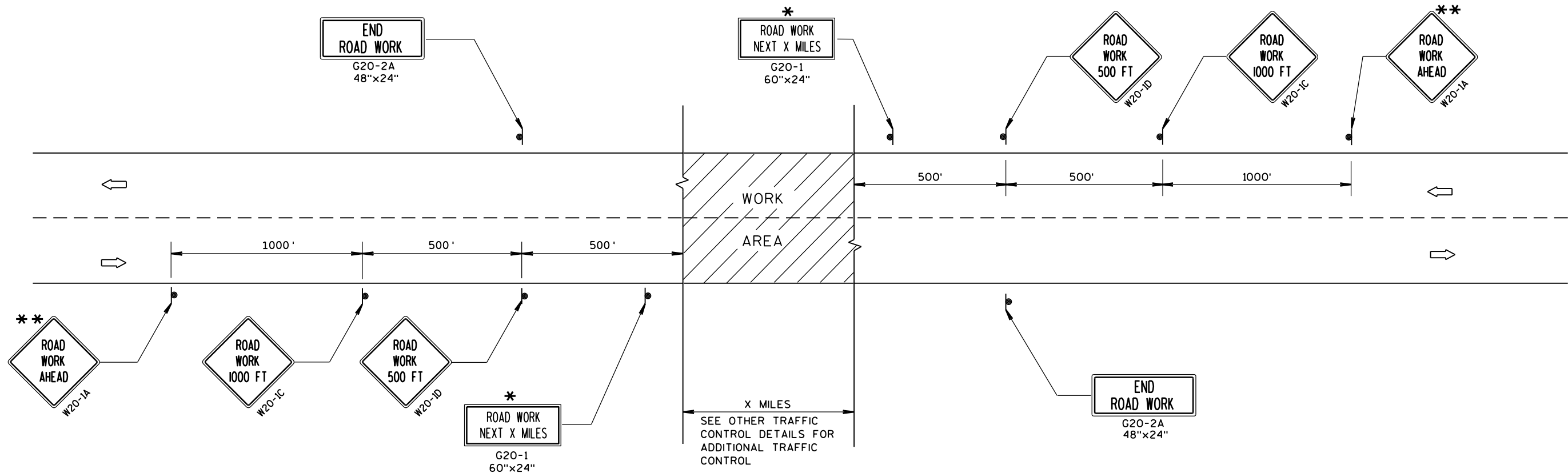
FLEXIBLE MARKER POST ANCHORS



FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10/1/2012 /S/ Travis Feltes  
DATE 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.

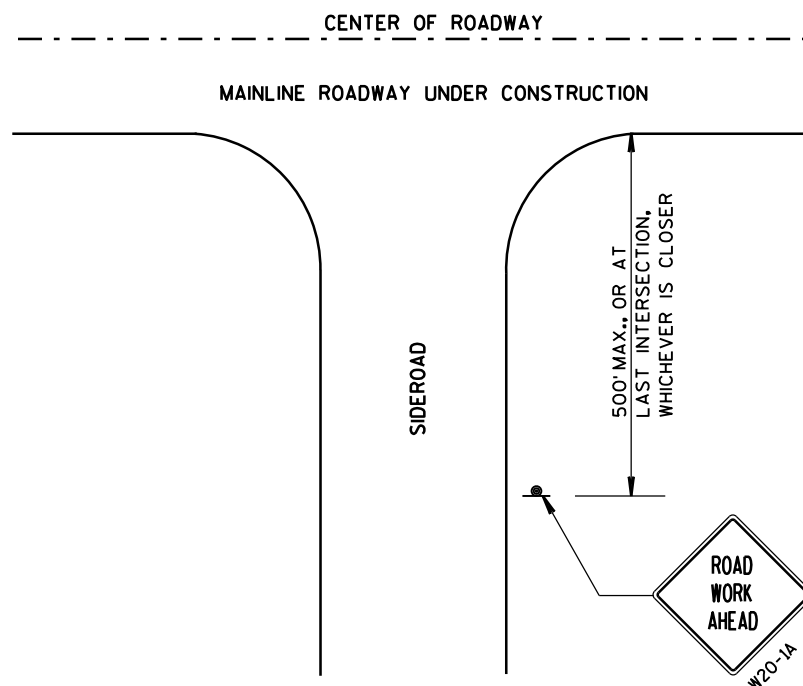
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

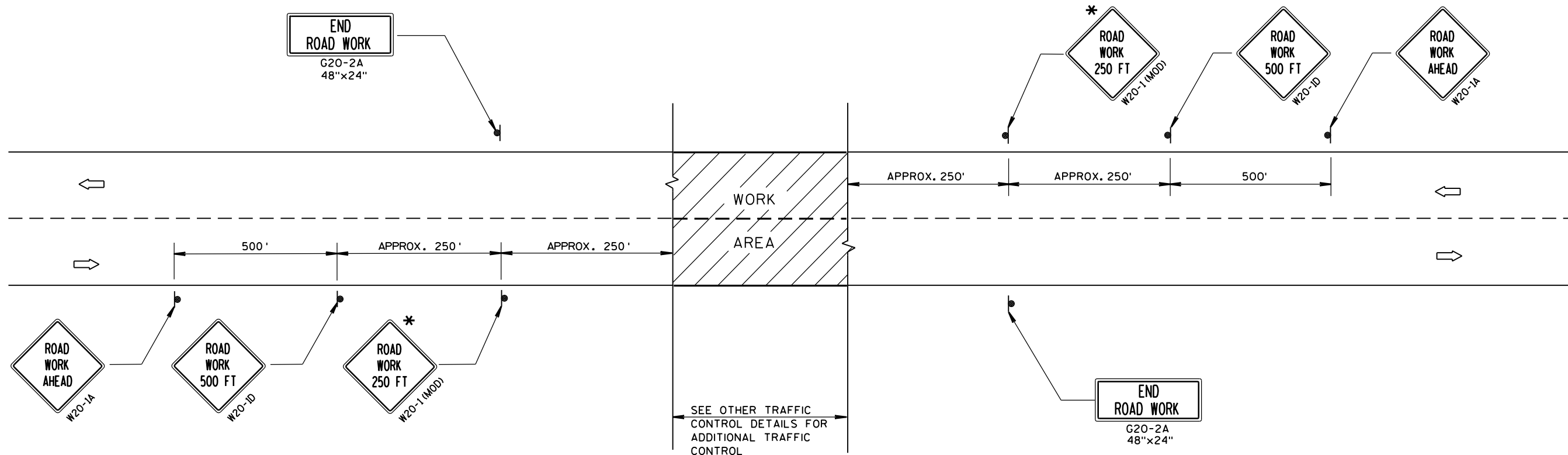


## LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
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.

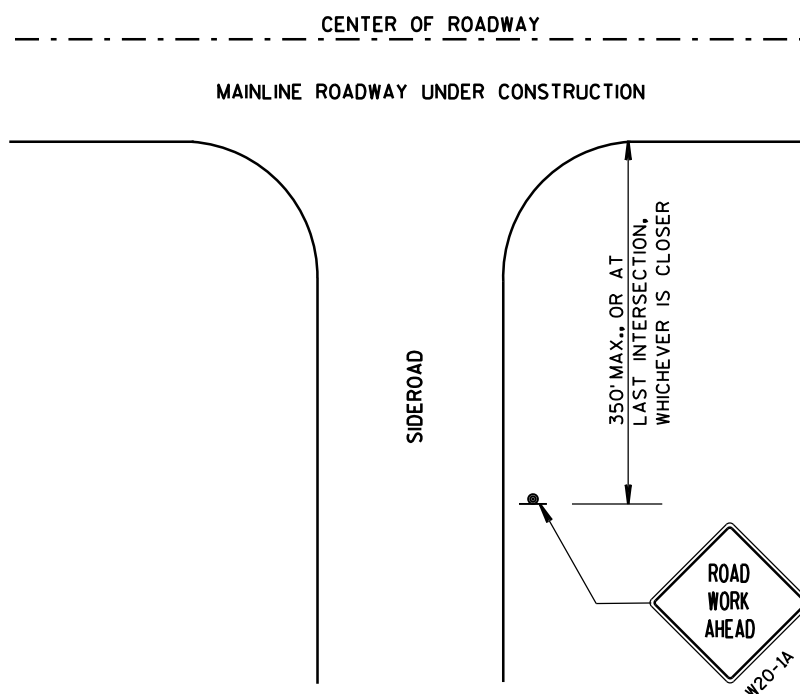
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

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

\* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



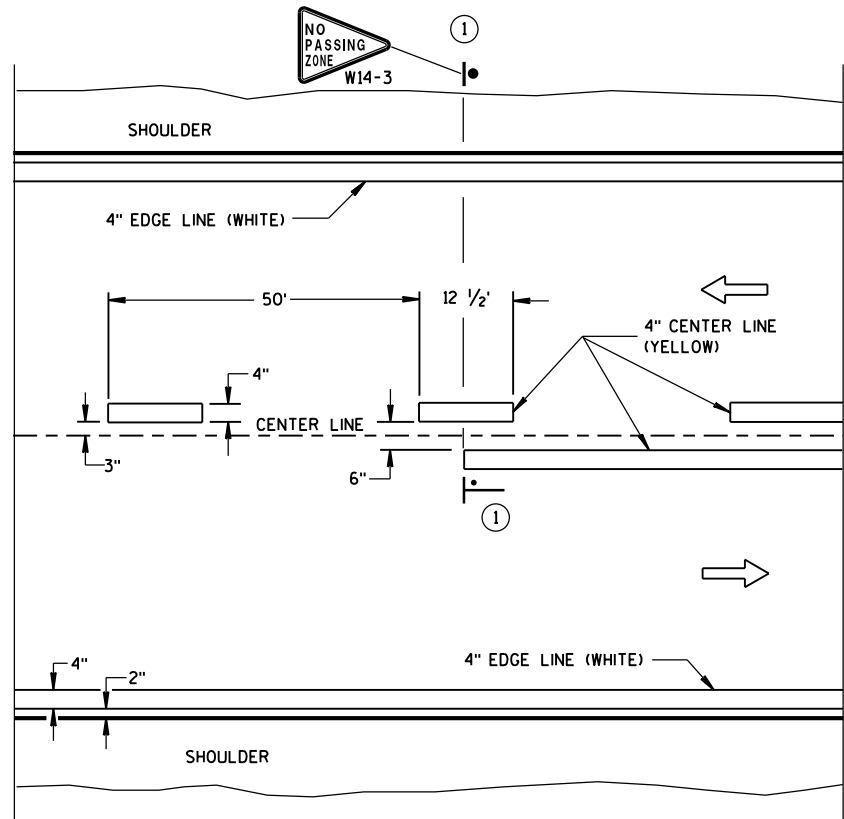
## LEGEND

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

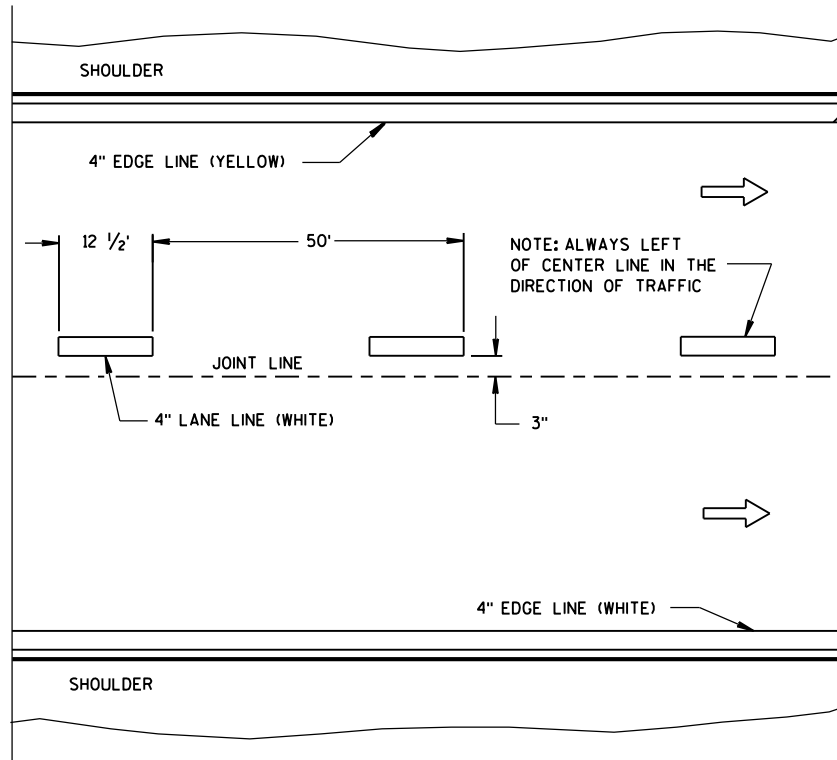
TRAFFIC CONTROL, ADVANCE  
WARNING SIGNS 40 M.P.H.  
OR LESS TWO-WAY UNDIVIDED  
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

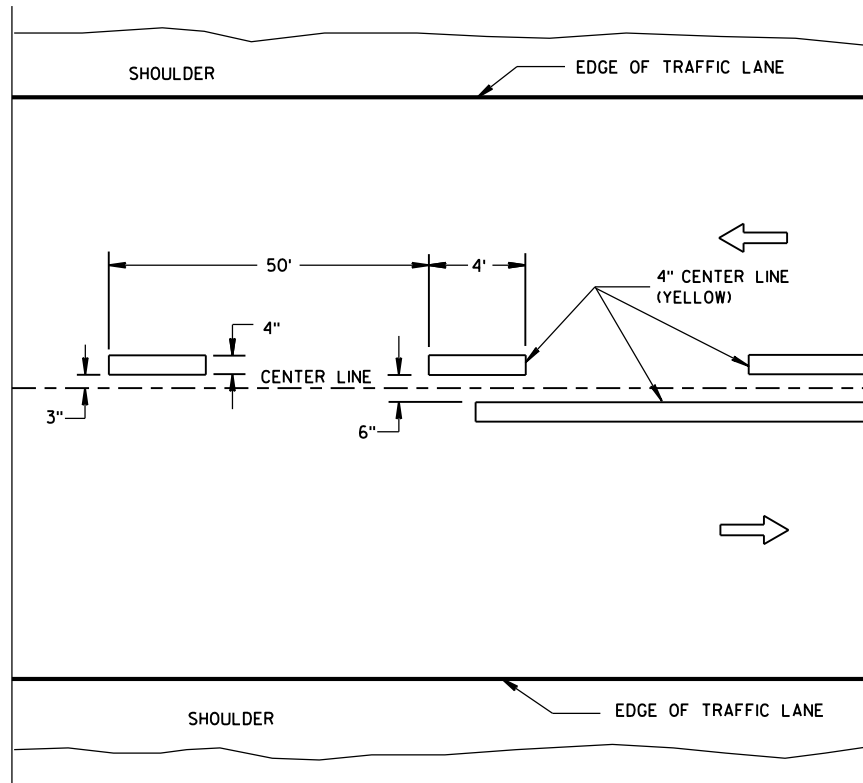


TWO WAY TRAFFIC

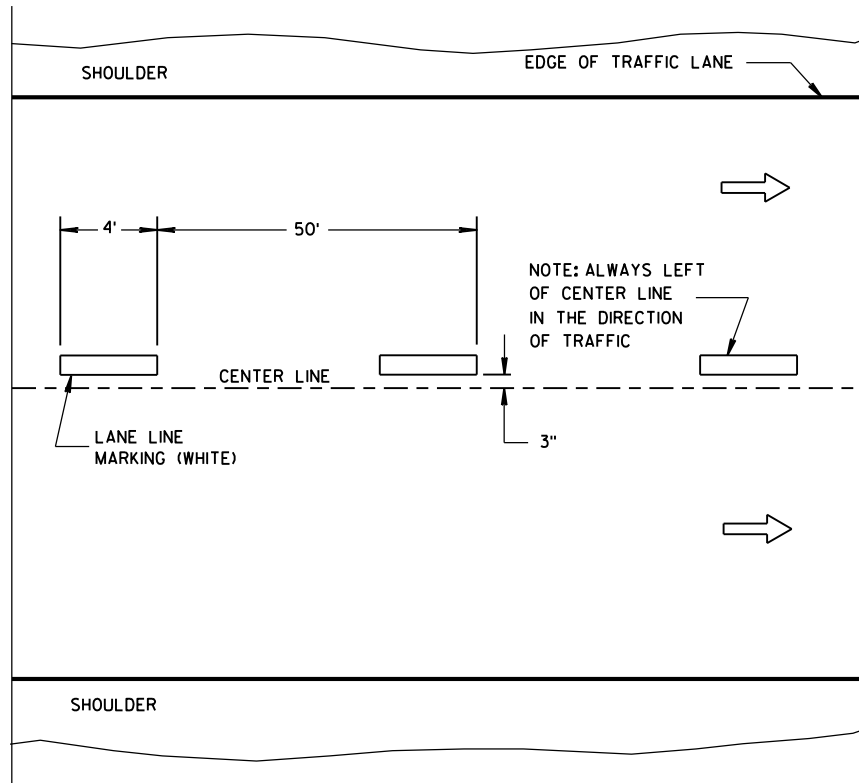


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

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

NOTE

ARROW SYMBOL ( → ) SHOWS DIRECTION OF TRAVEL

LEGEND

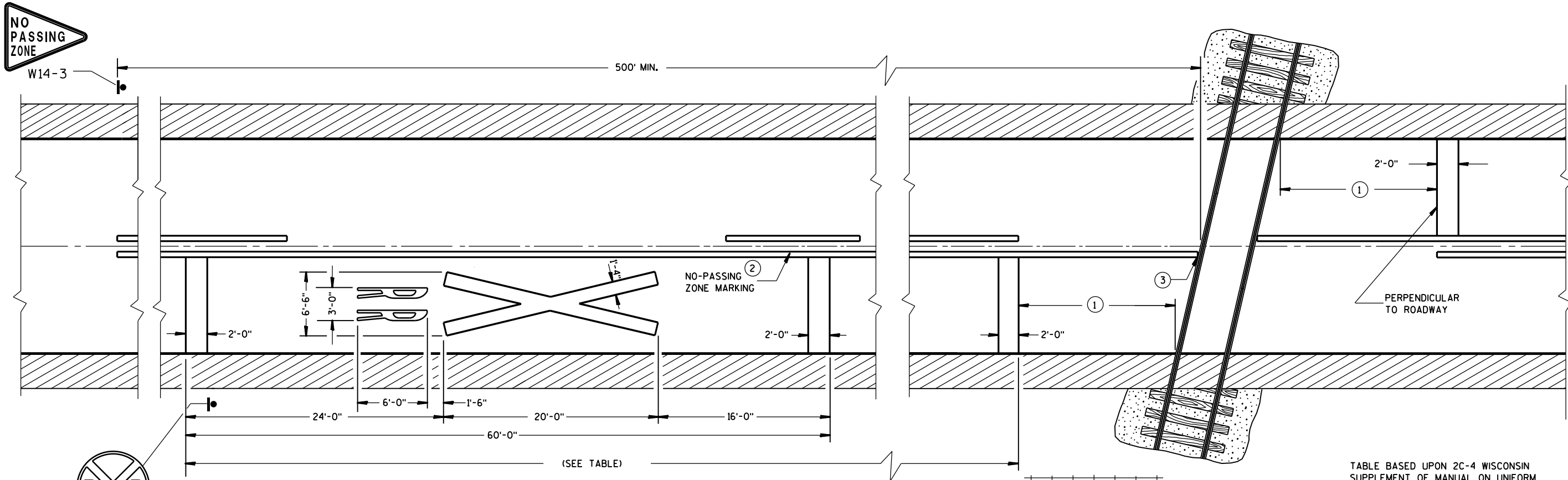
—●— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



PAVEMENT MARKING

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

RETRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

- ① MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- ② 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- ③ FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

\* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

SIGNING AND PAVEMENT MARKING  
DETAILS FOR RAILROAD-HIGHWAY  
GRADE CROSSINGS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
4-18-2016 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA

LEGEND

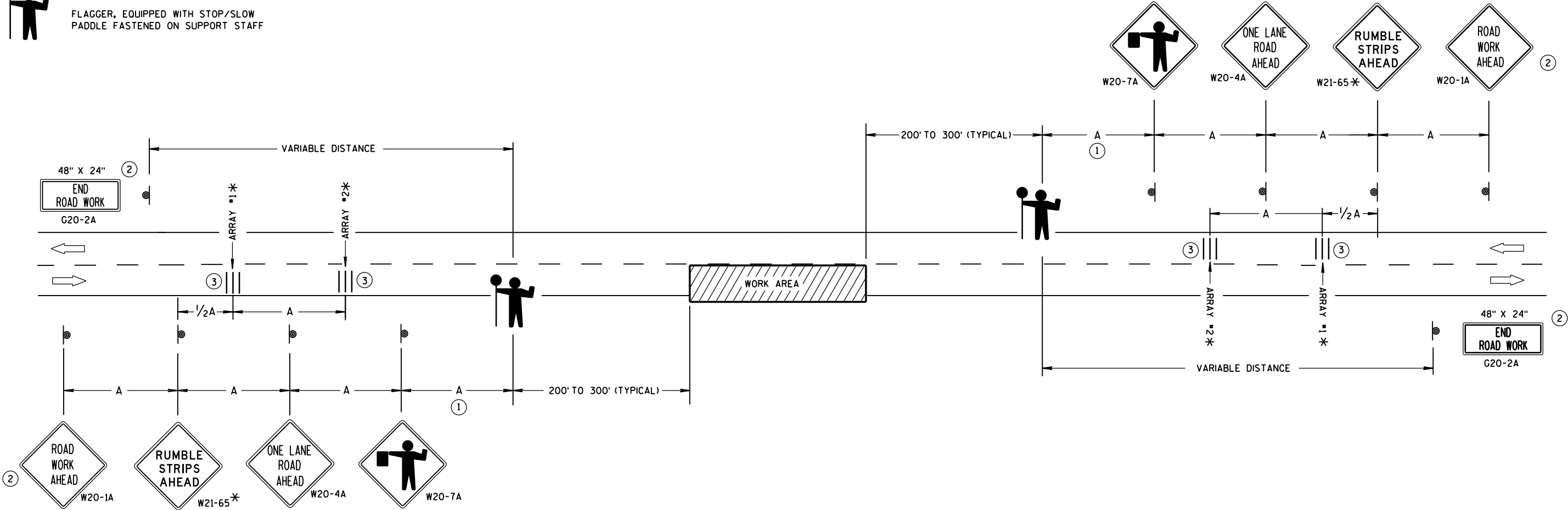
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

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

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

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

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

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

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

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

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

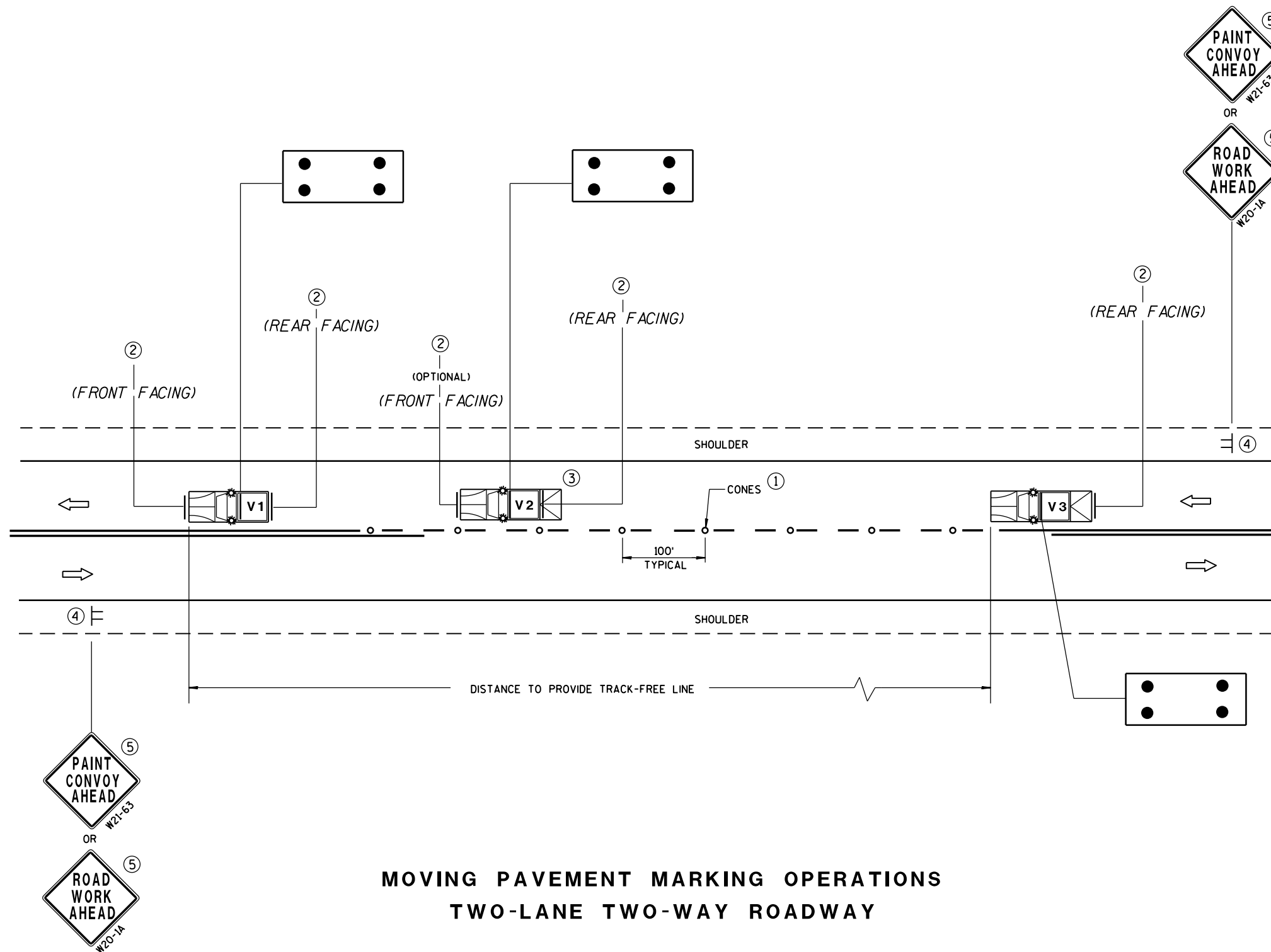
\* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



## MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

### GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

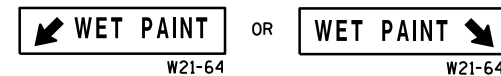
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

### LEGEND

**V1** LEAD VEHICLE

**V2** SHADOW VEHICLE

**V3** TRAIL VEHICLE WITH TMA

**TMA** TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

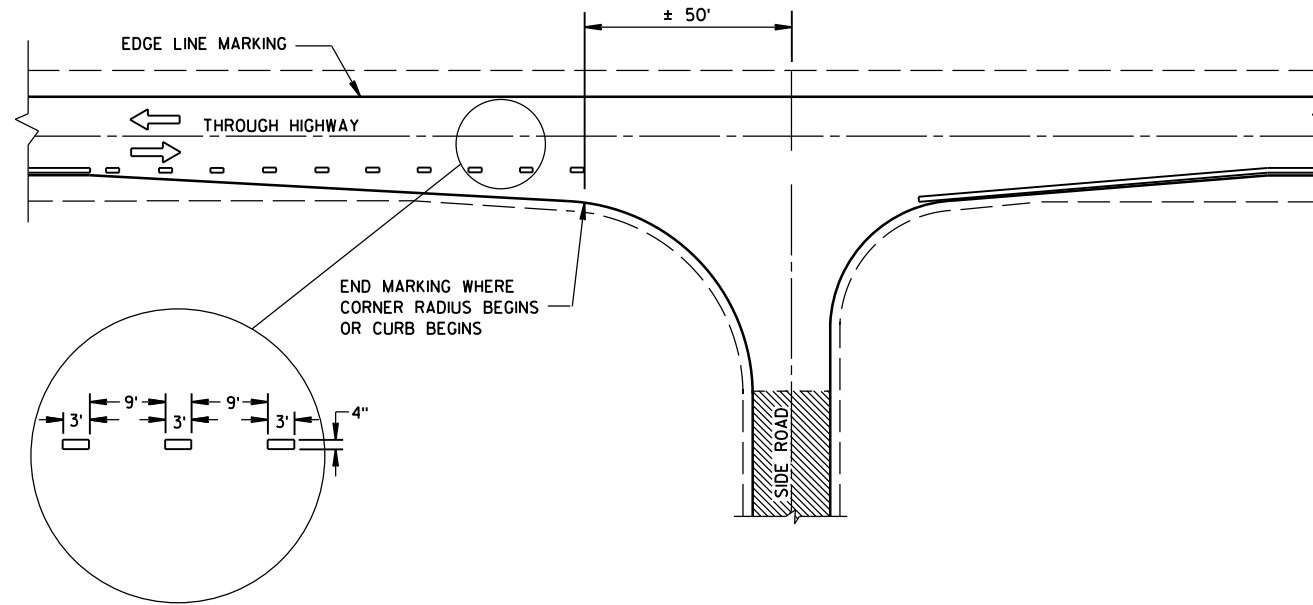
FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING  
OPERATION  
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2016  
DATE  
FHWA

/S/ Peter Amakobe Atepe  
STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER




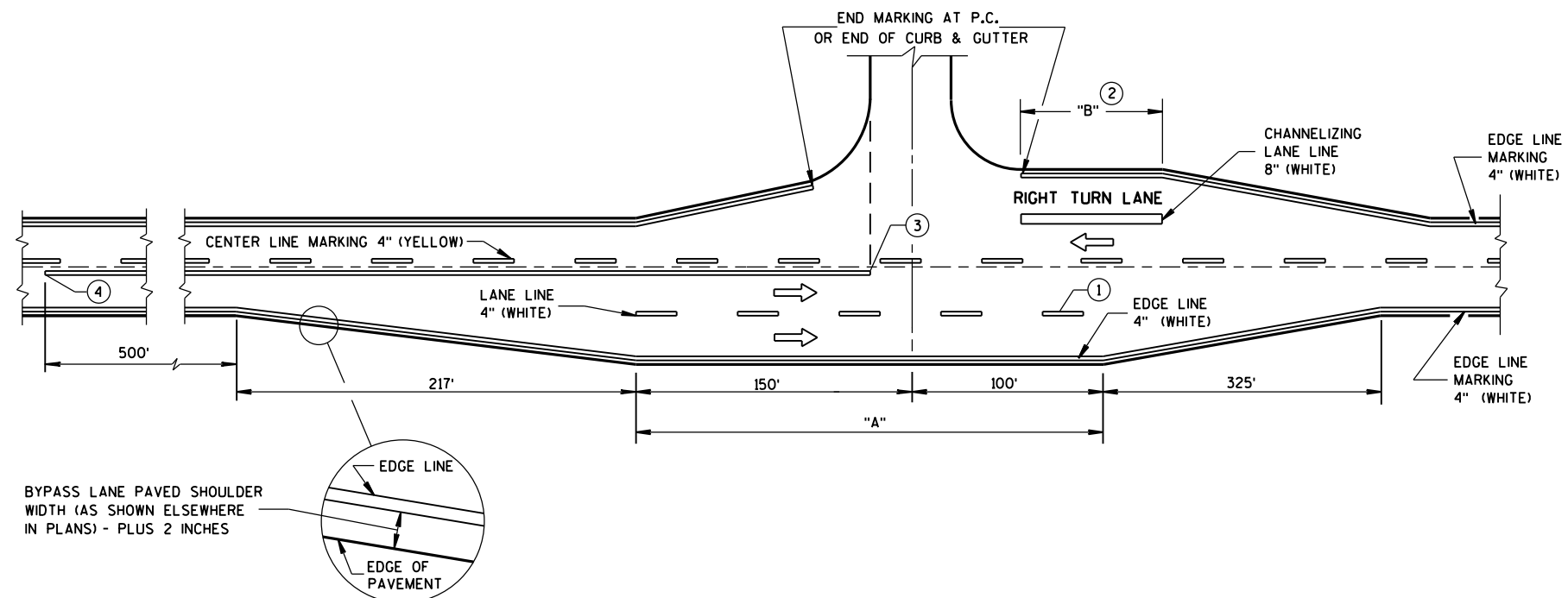
**MINOR INTERSECTION WITHOUT CURBS**

## GENERAL NOTES

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

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

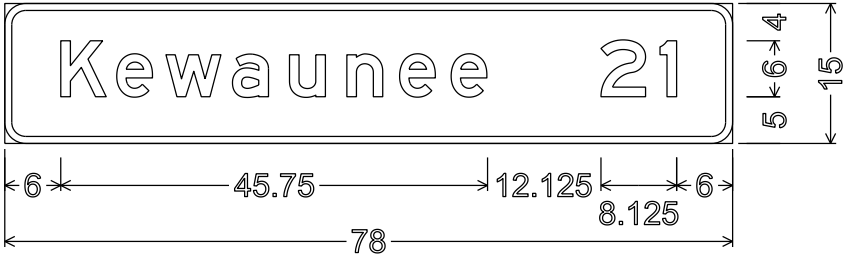
ARROW SYMBOL (  ) SHOWS DIRECTION OF TRAVEL



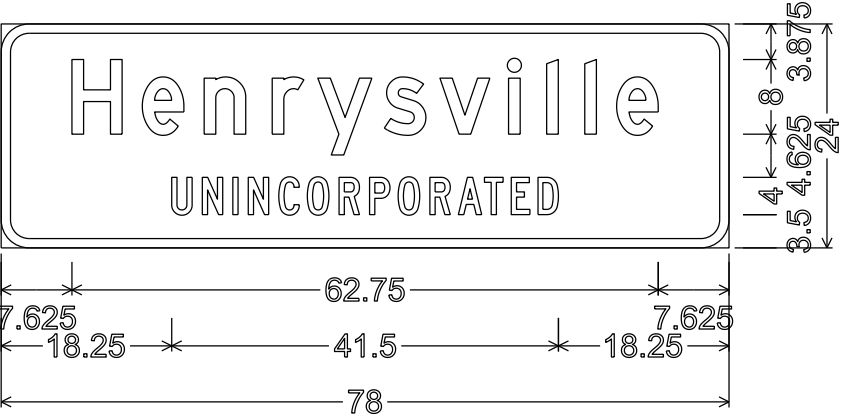
**MAJOR INTERSECTIONS**  
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

**PAVEMENT MARKING  
(INTERSECTIONS)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



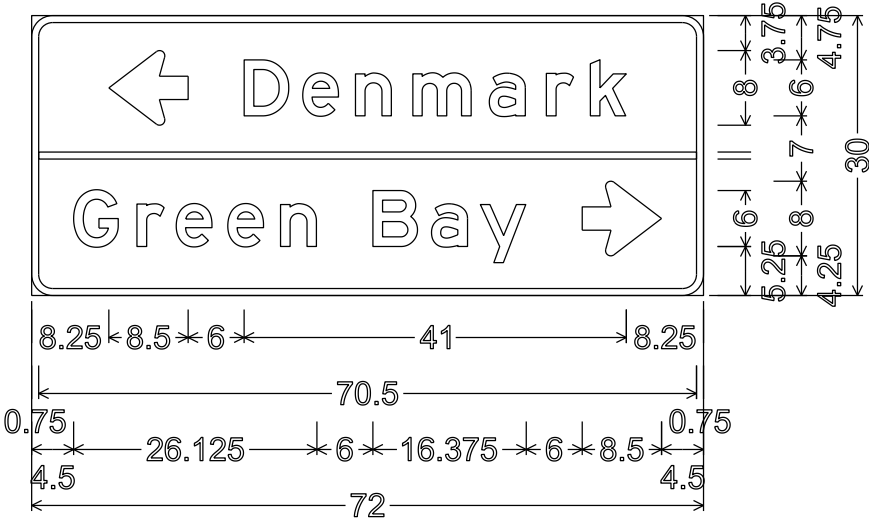
D2-1;  
2.250" Radius, 0.750" Border



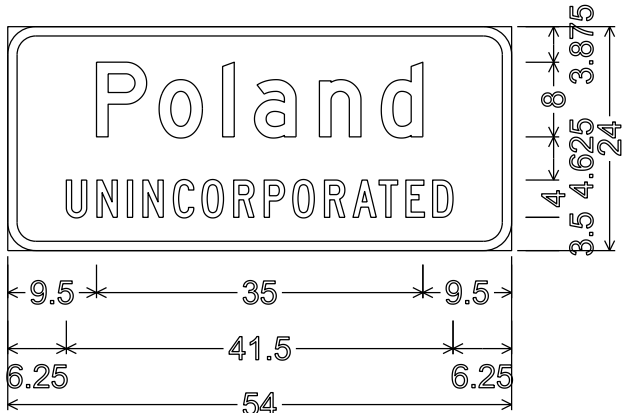
I2-3U;  
3.000" Radius, 1.000" Border  
"Henrysville" D; "UNINCORPORATED" C



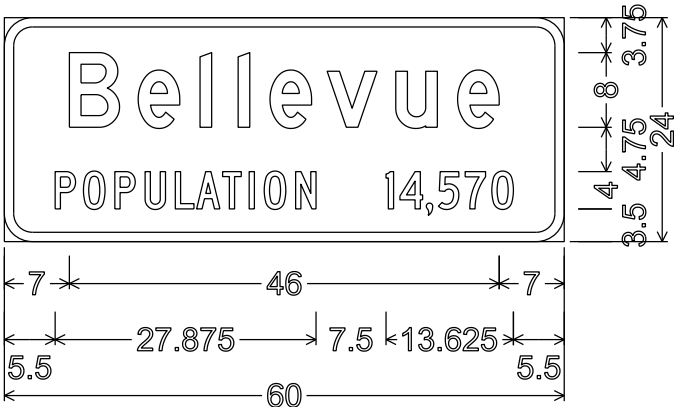
D1-1;  
2.250" Radius, 0.750" Border



D1-2;  
2.250" Radius, 0.750" Border,



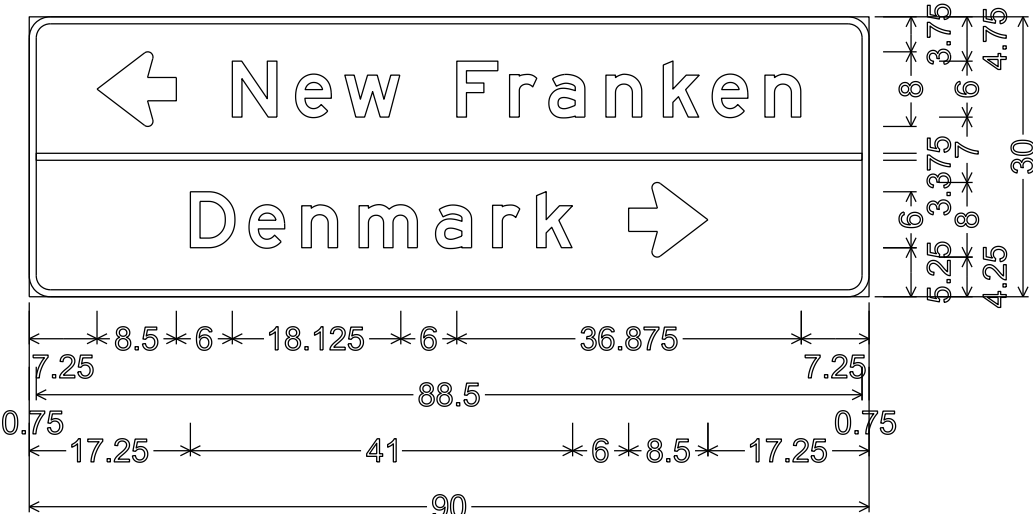
I2-3U;  
3.000" Radius, 1.000" Border  
"Poland" D; "UNINCORPORATED" C



I2-3;  
3.000" Radius, 1.000" Border  
"Bellevue" D; "POPULATION" C "14,570" C;



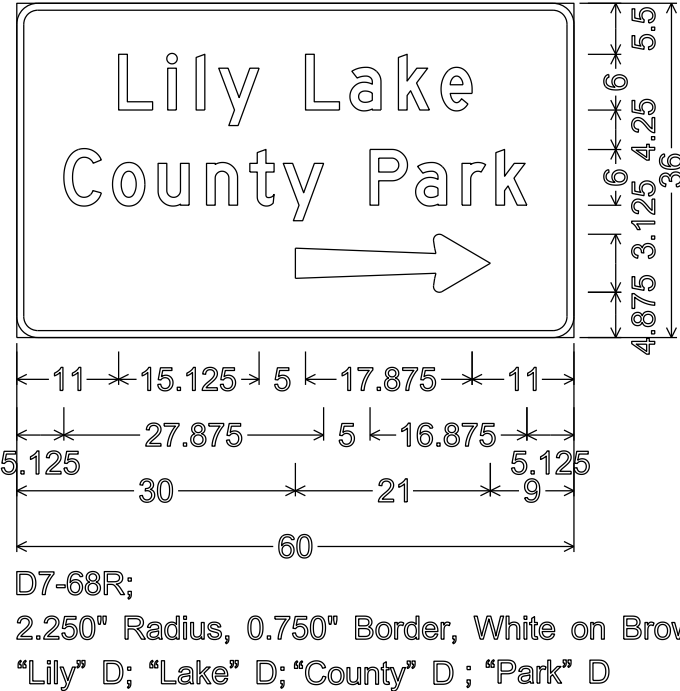
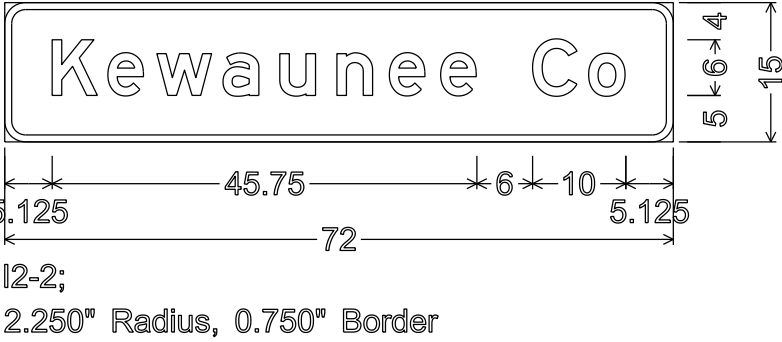
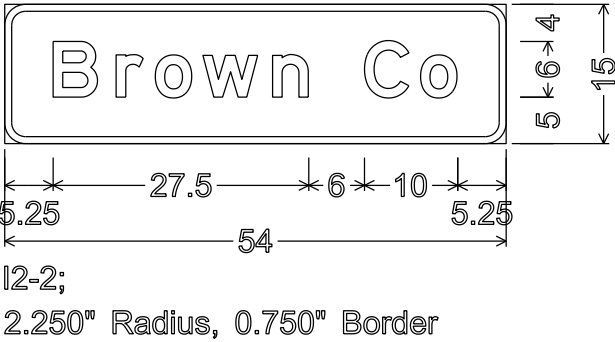
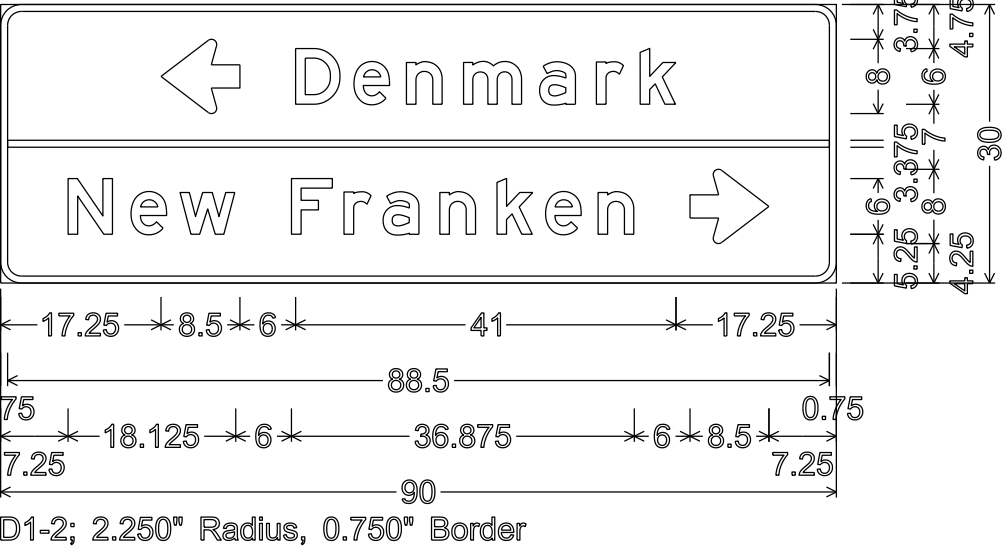
D1-1;  
2.250" Radius, 0.750" Border



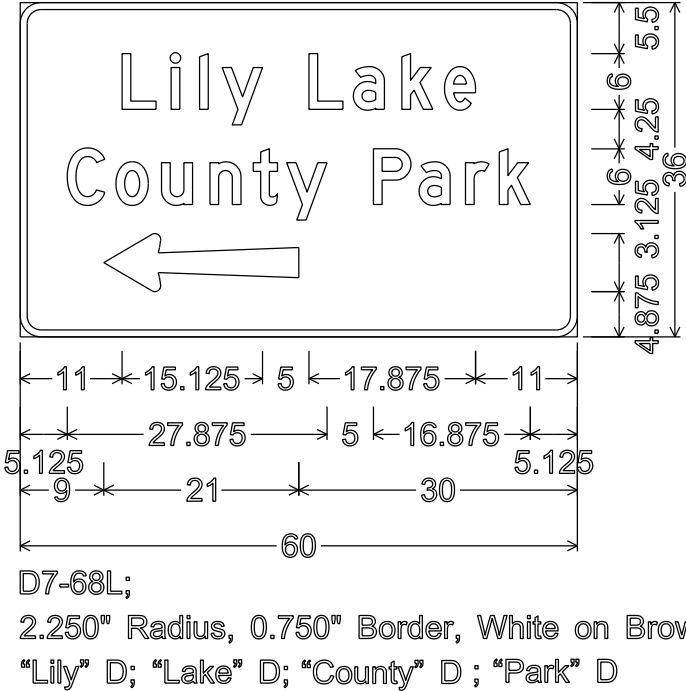
D1-2; 2.250" Radius, 0.750" Border,

NOTES

- 1. All SignType II - Type H Reflective
- 2. Color:  
Background - Green  
Message - White
- 3. Message Series - E except as noted

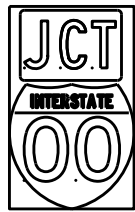


- NOTES
1. All Sign Type II - Type H Reflective
  2. Color:  
Background - Green except as noted  
Message - White
  3. Message Series - E except as noted

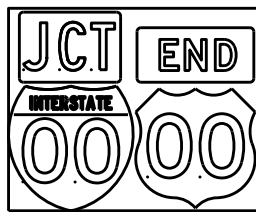




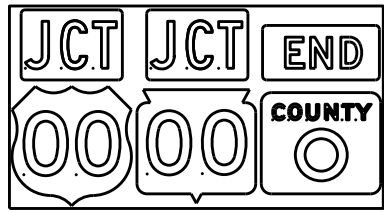
TYPICAL ASSEMBLIES



J1-1



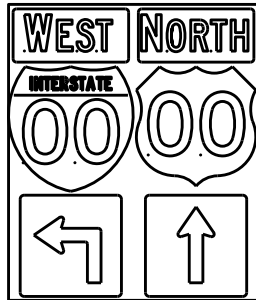
J1-2



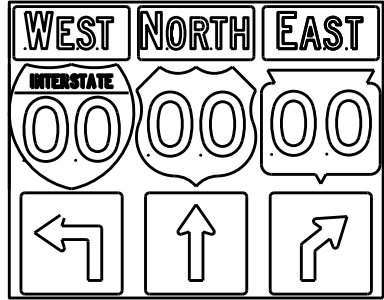
J1-3



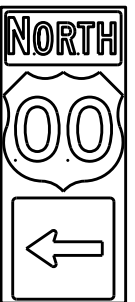
J2-1



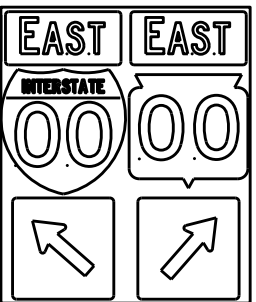
J2-2



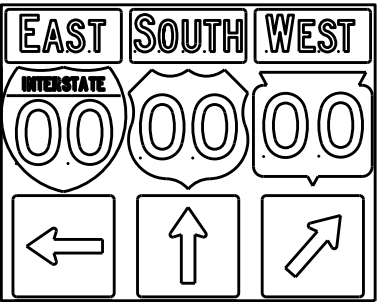
J2-3



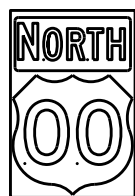
J3-1



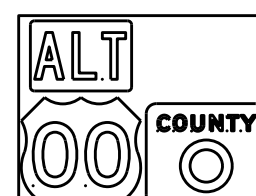
J3-2



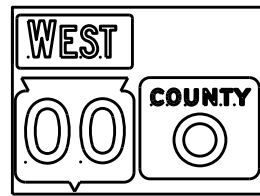
J3-3



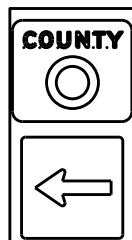
J4-1



J4-2



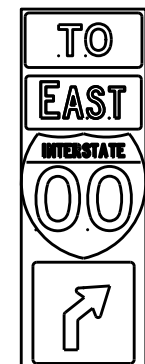
J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

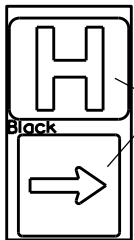


J22-1



JV

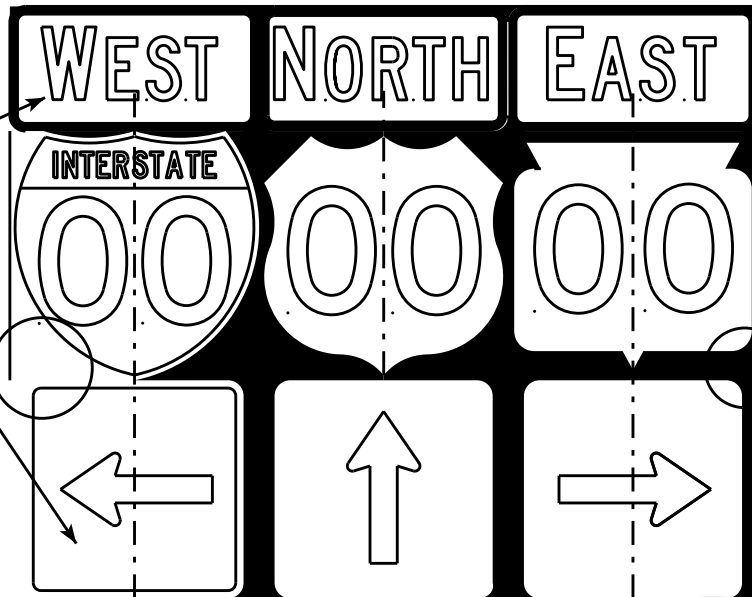
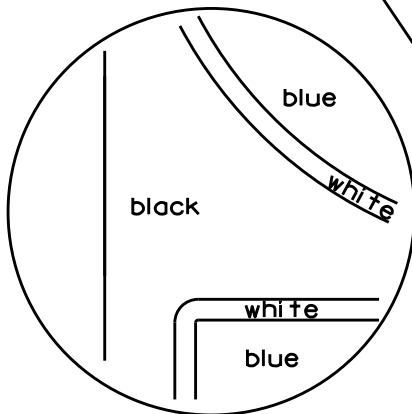
( Typical Vertical J-Assembly  
See Note 10 and 11)



JH-1

Blue Background

[blue background  
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS  
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

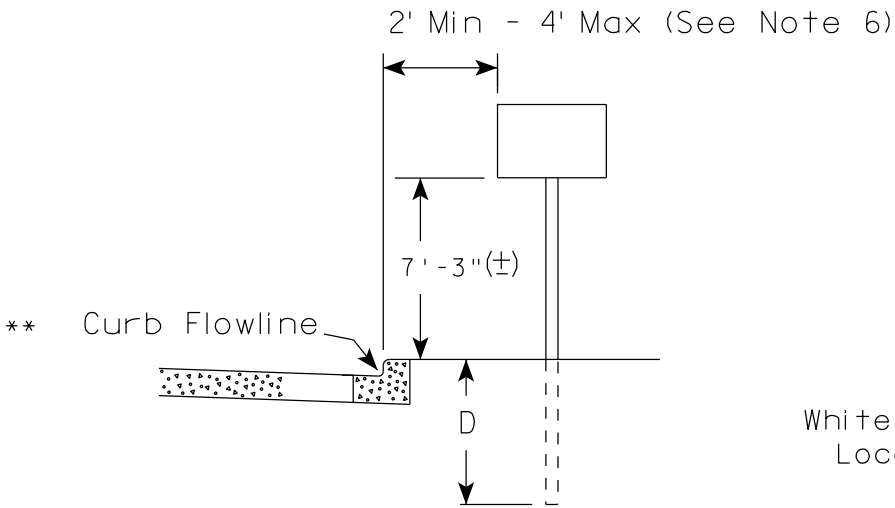
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

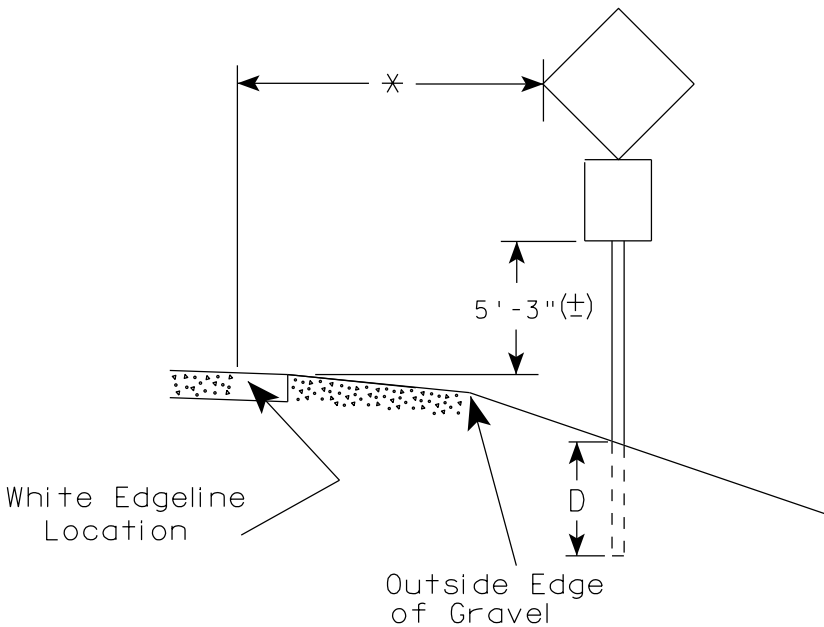
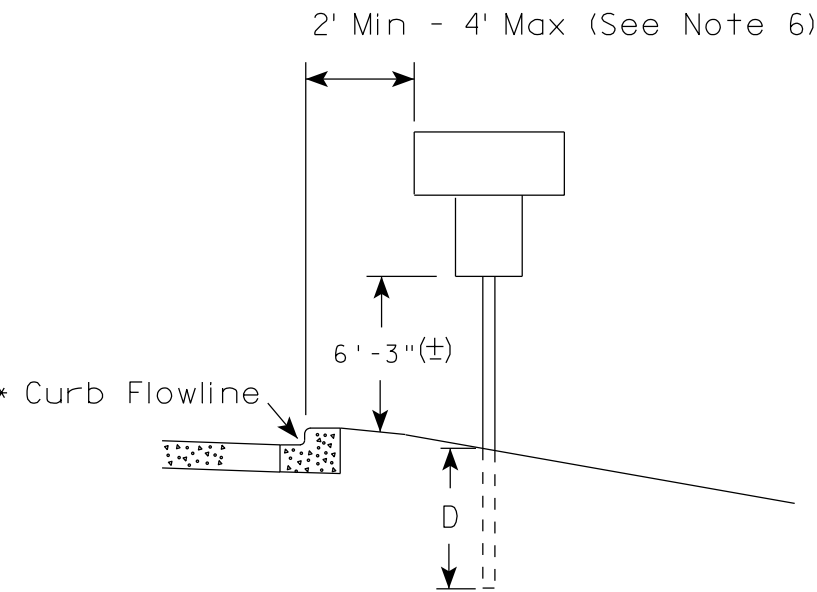
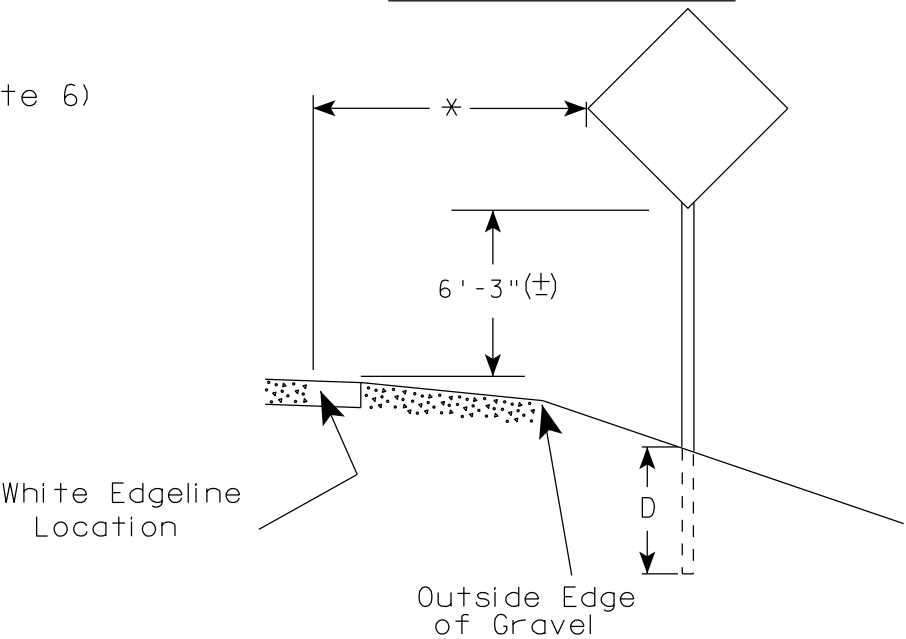
NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Black Non-reflective  
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

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

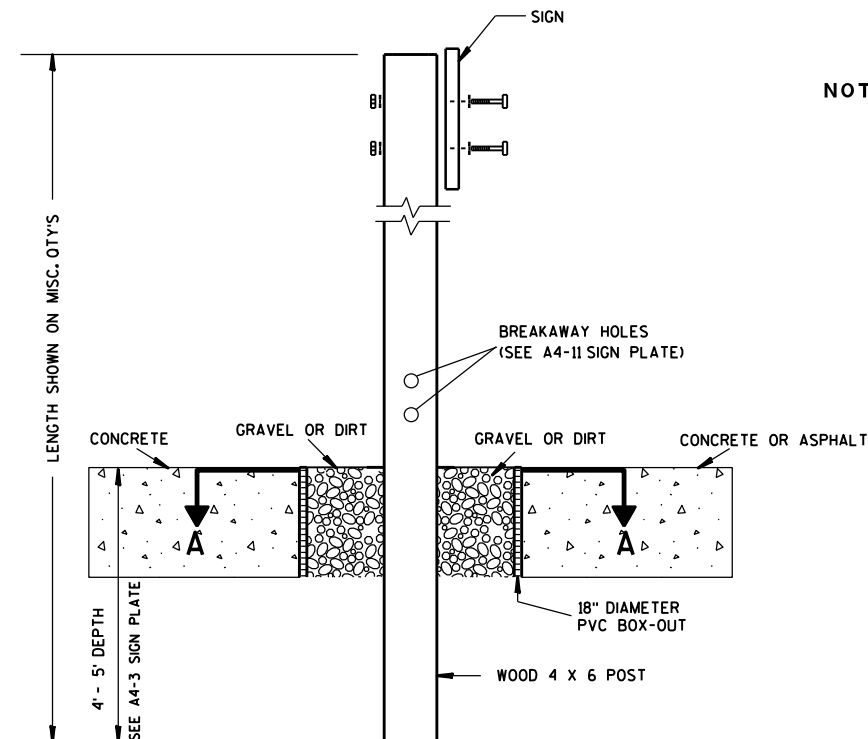
\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION  
OF PERMANENT TYPE II  
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

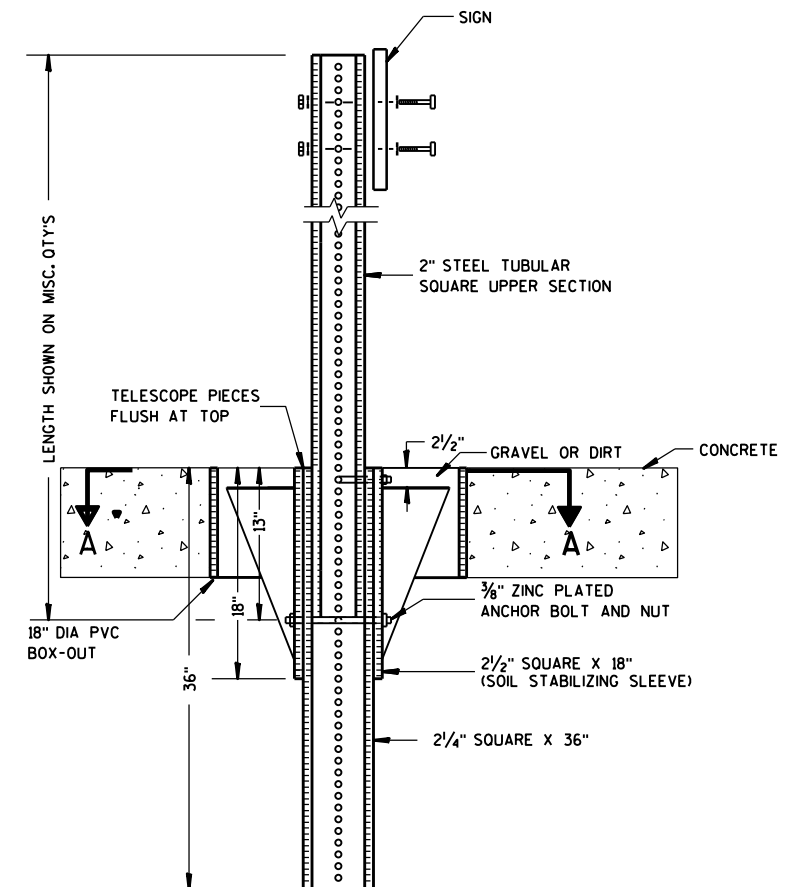
DATE 7/23/15 PLATE NO. A4-3.20



**ELEVATION VIEW**

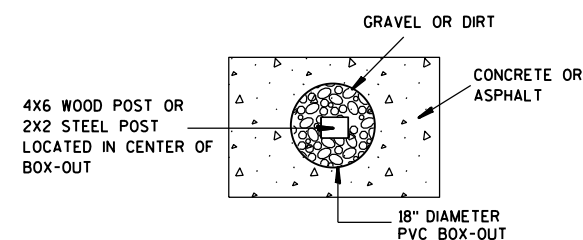
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

- NOTES:**
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
  2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
  3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



**ELEVATION VIEW**

**DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT**



**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

**SIGN POST  
BOX-OUTS  
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

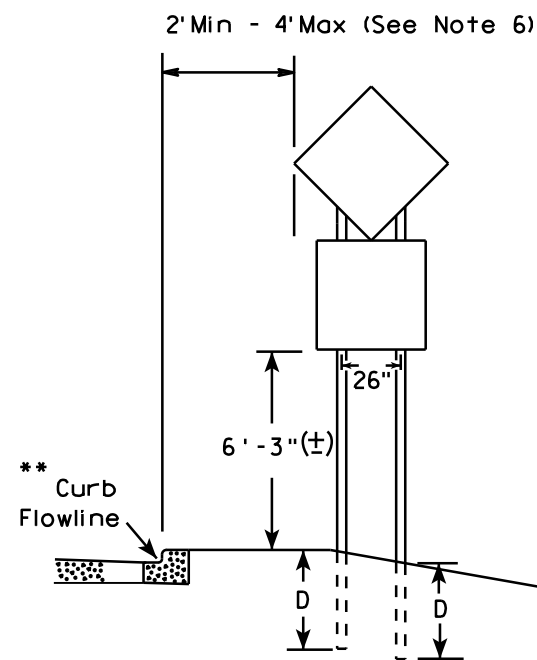
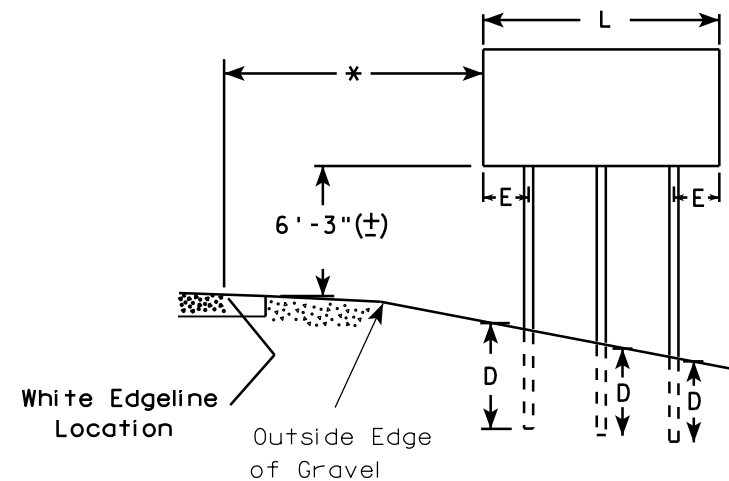
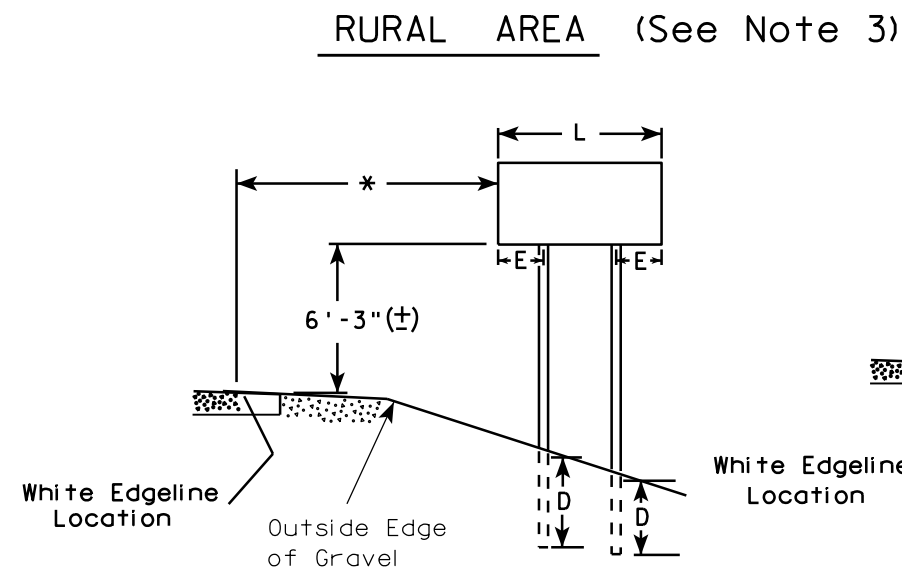
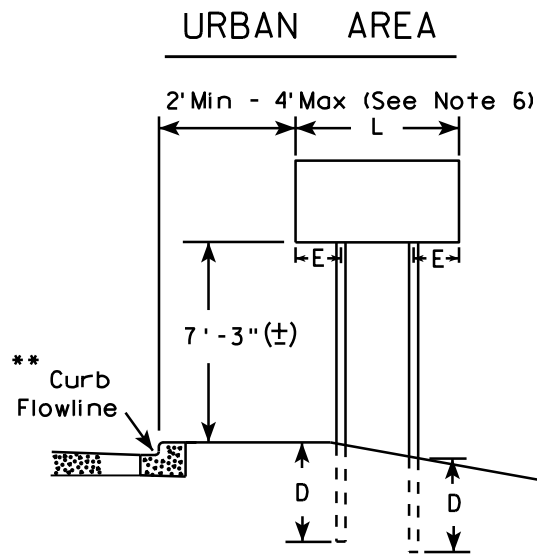
PROJECT NO:

HWY:

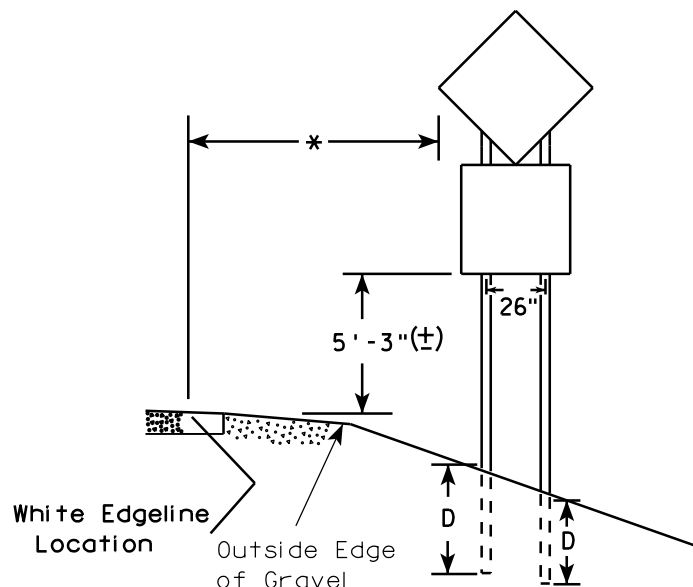
COUNTY:

SHEET NO:

**E**



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

\*\*\*

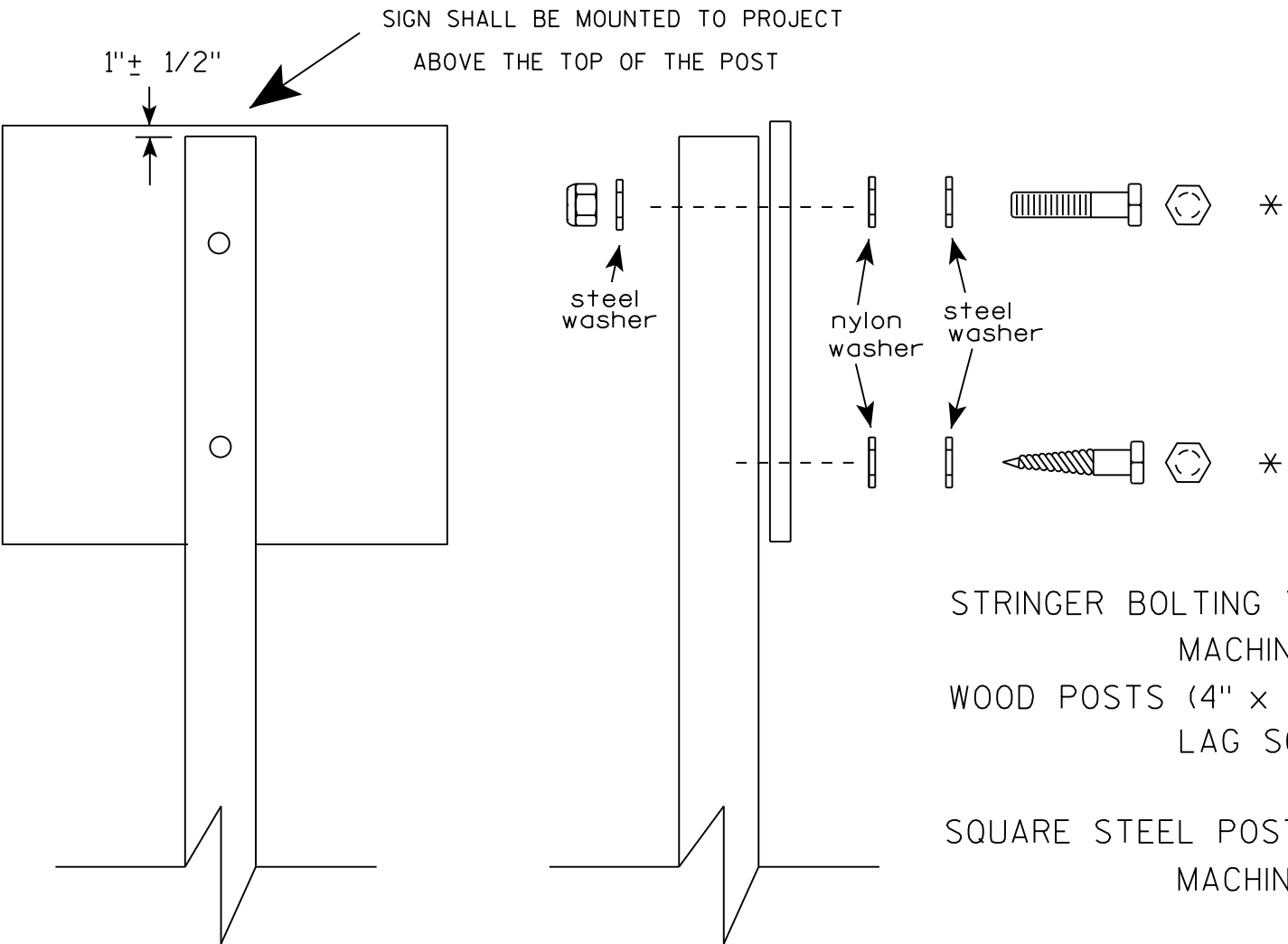
SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

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

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

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/23/15	PLATE NO. A4-4.14



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

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

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

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
  - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
  - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
  - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

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

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

4" x 10" x 10 GA. ———→  
STEEL PLATE (CUT  
AS SHOWN) WELDED  
TO ALL FOUR CORNERS  
OF TELESPAR TUBE

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

2 1/2" TELES PAR TUBE

4" x 10" x 10 GA. STEEL PLATE (CUT AS SHOWN) WELDED TO ALL FOUR CORNERS OF TELES PAR TUBE

4"

2 1/2"

10"

3 1/2"

16"

TELESCOPE PIECES  
FLUSH AT TOP

18" DIA SCHEDULE  
40 PVC  
BOX-OUT

36"

13"

18"

2 1/2" GRAVEL OR DIRT

3/8" ZINC PLATED CORNER  
ANCHOR BOLT AND NUT

2 1/2" SQUARE X 18"  
(SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

2" STEEL TUBULAR  
SQUARE UPPER SECTION

ALL HOLES 7/16"  
SPACED 1" C-C  
ALL FOUR SIDES

SEE SIGN PLATE  
A4-8 FOR BOLT  
WASHER, & NUT  
MATERIAL

SIGN

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

**Side View Dimensions:**

- Total height: LENGTH SHOWN ON MISC. QTYS
- Section A-A at base.
- Vertical dimensions from ground level: 36", 18", 12".

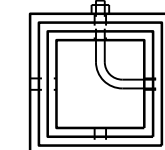
**End View Details:**

- SIGN
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
- 2" STEEL TUBULAR SQUARE UPPER SECTION
- ALL HOLES  $\frac{7}{16}$ " SPACED 1" C-C
- ALL FOUR SIDES
- $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
- 1"
- $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
- 2 $\frac{1}{2}$ " SQUARE X 18" (SOIL STABILIZING SLEEVE)
- 2 $\frac{1}{4}$ " SQUARE X 36"

**Assembly Notes:**

- TELESCOPE PIECES FLUSH AT TOP

3/8" ZINC PLATED CORNER  
ANCHOR BOLT AND NUT



DIRECTION  
OF TRAFFIC

SECTION A-A

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

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

TUBULAR STEEL  
SIGN POST  
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO:

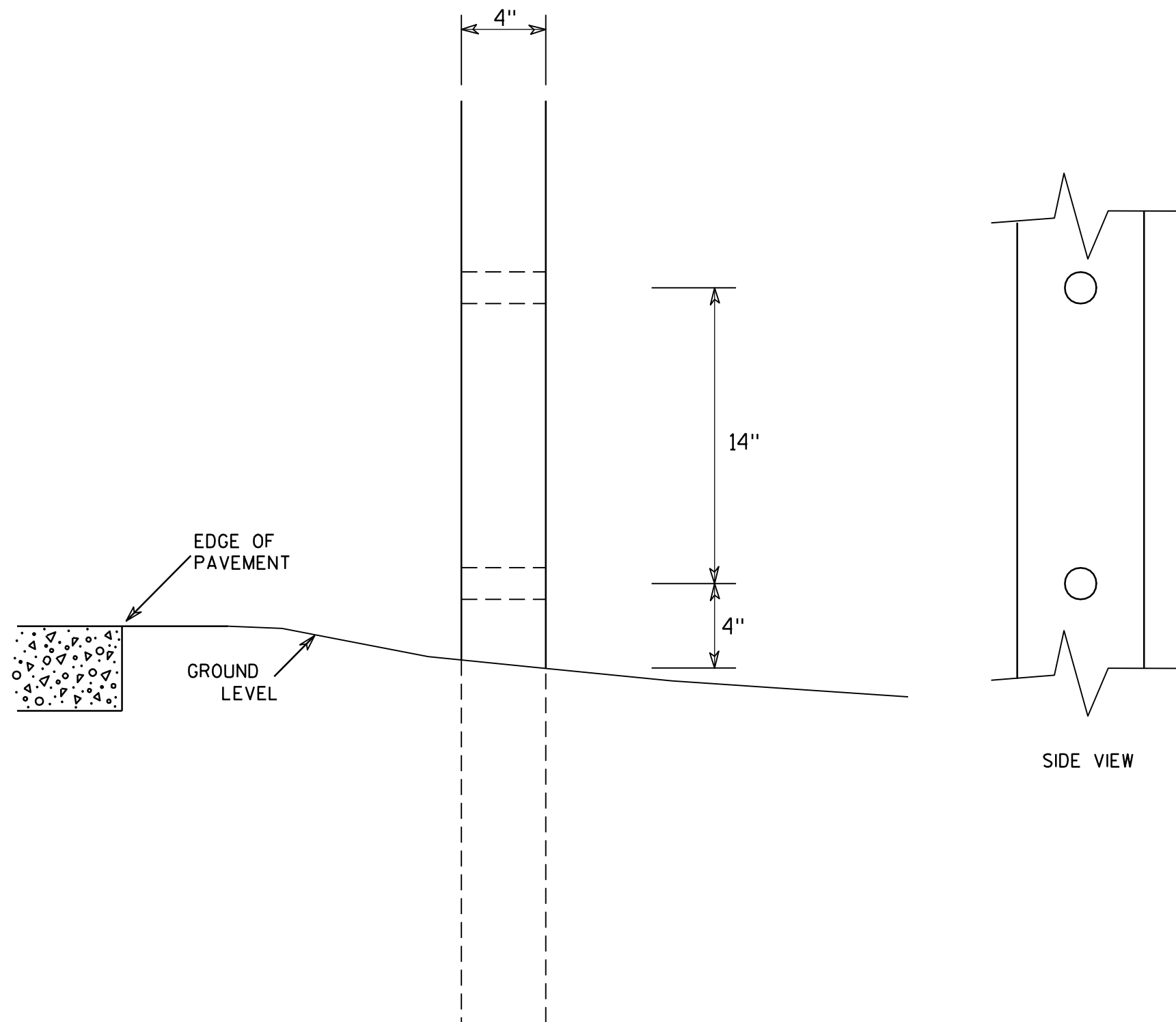
HWY:

COUNTY:

SHEET NO:

**T**

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

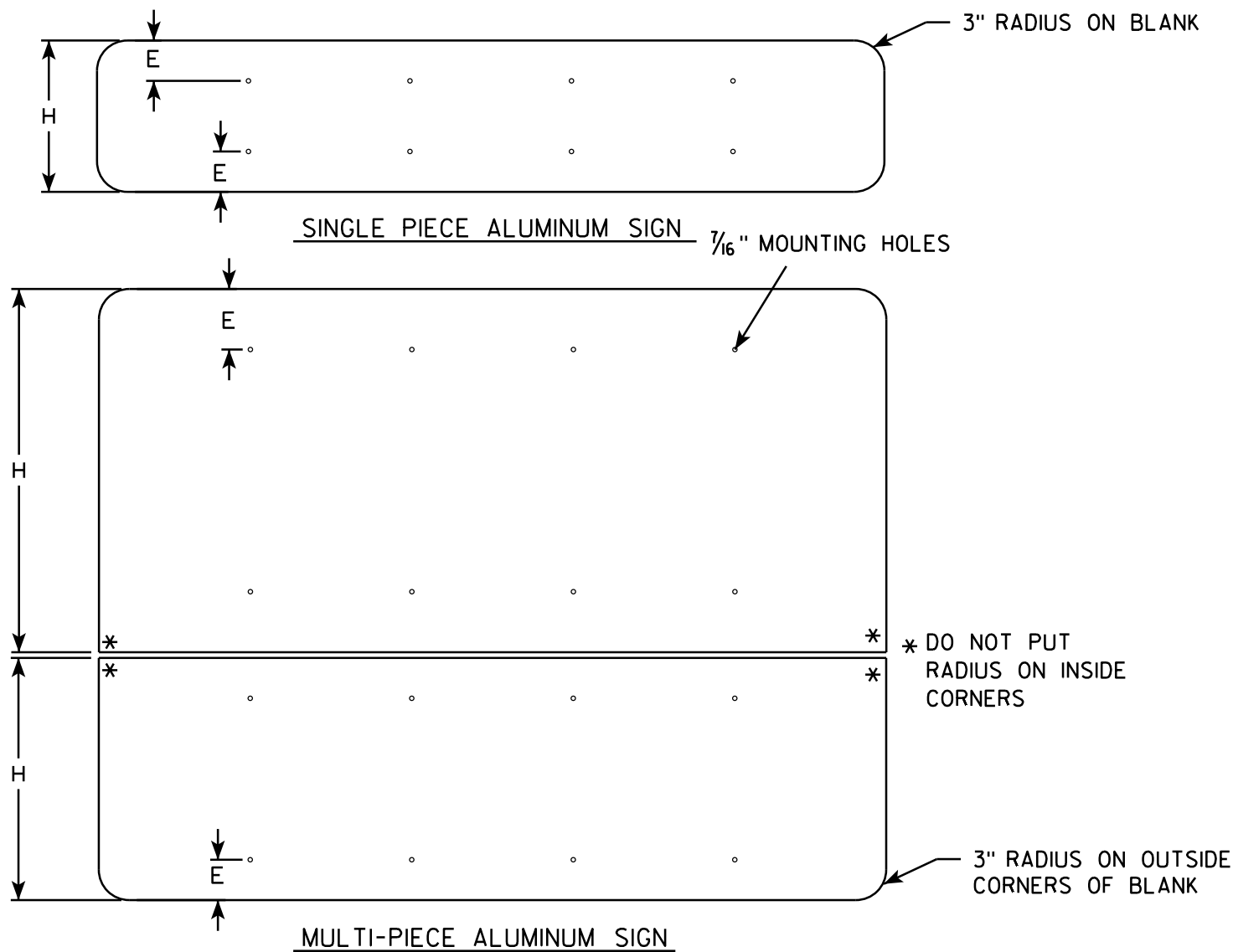
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

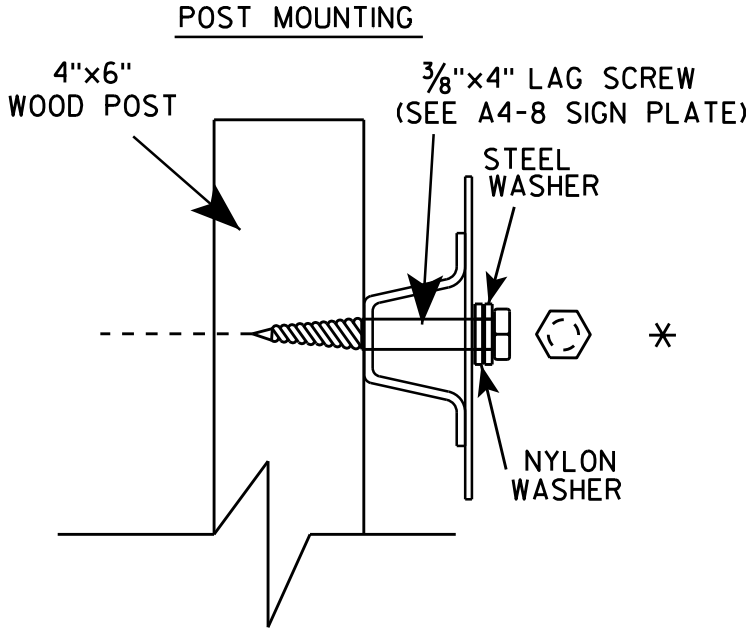
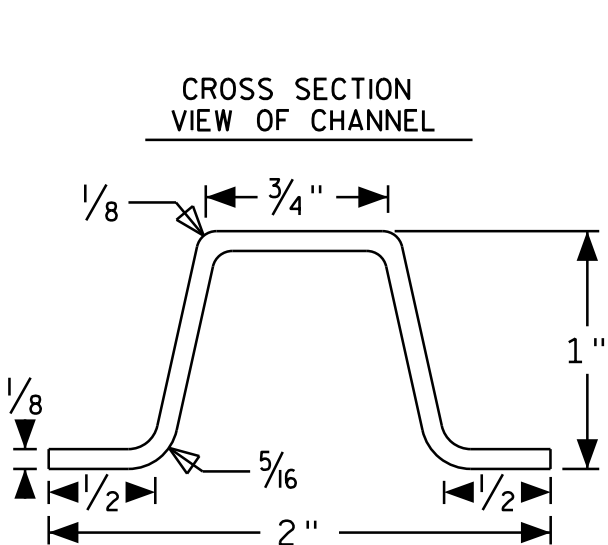
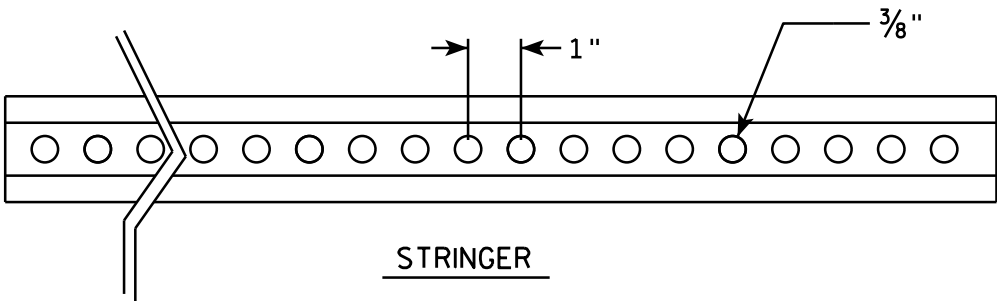
E



GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES			
78"	72"	2	16"	15"	31"	47"	63"
84"	72"	2	17"	16 1/2"	33 1/2"	50 1/2"	67 1/2"
90"	72"	2	18"	18"	36"	54"	72"
96"	90"	2	19"	19 1/2"	38 1/2"	57 1/2"	76 1/2"
102"	90"	2	20"	21"	41"	61"	81"
108"	90"	2	21"	22 1/2"	43 1/2"	64 1/2"	85 1/2"
114"	108"	3	15"	12"	27"	42"	57" 72" 87" 102"
120"	108"	3	16"	12"	28"	44"	60" 76" 92" 108"
126"	108"	3	17"	12"	29"	46"	63" 80" 97" 114"
132"	126"	3	18"	12"	30"	48"	66" 84" 102" 120"
138"	126"	3	19"	12"	31"	50"	69" 88" 107" 126"
144"	126"	3	20"	12"	32"	52"	72" 92" 112" 132"



SIGN STRINGER  
MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

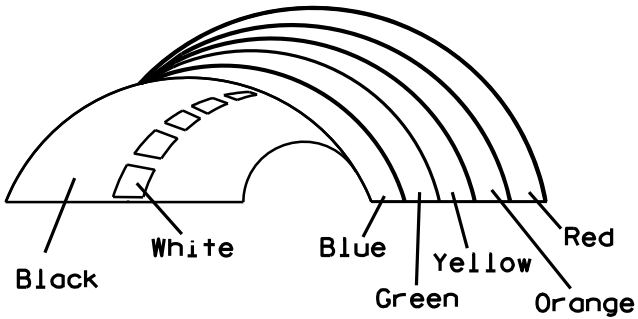
DATE 4/26/16 PLATE NO. A4-18.1





\* 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:

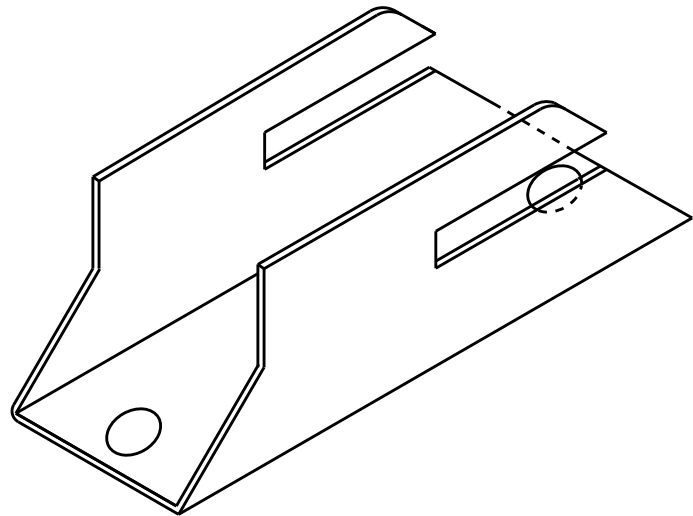
STANDARD SIGN  
I55-56

WISCONSIN DEPT OF TRANSPORTATION

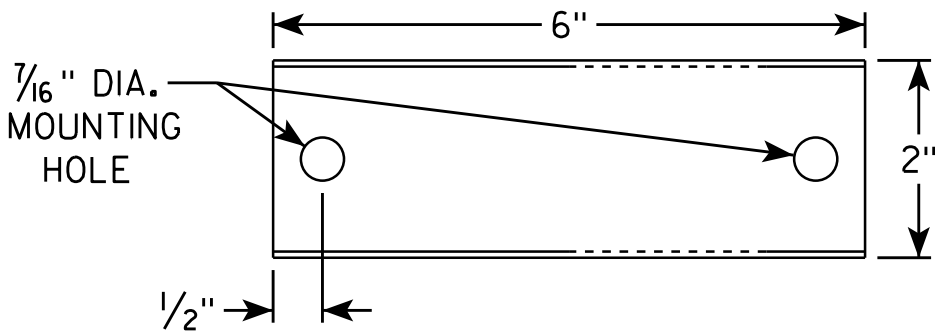
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

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

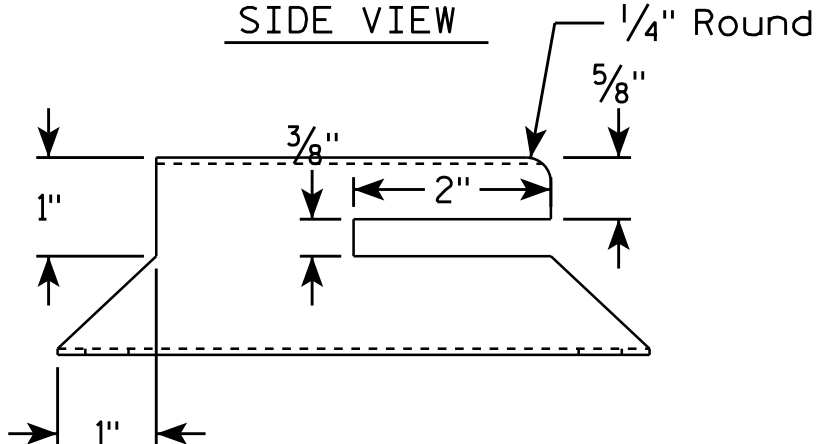
ISOMETRIC VIEW



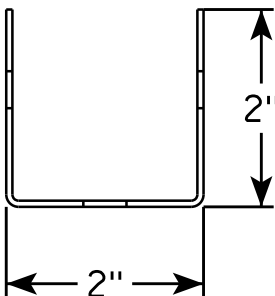
TOP VIEW



SIDE VIEW



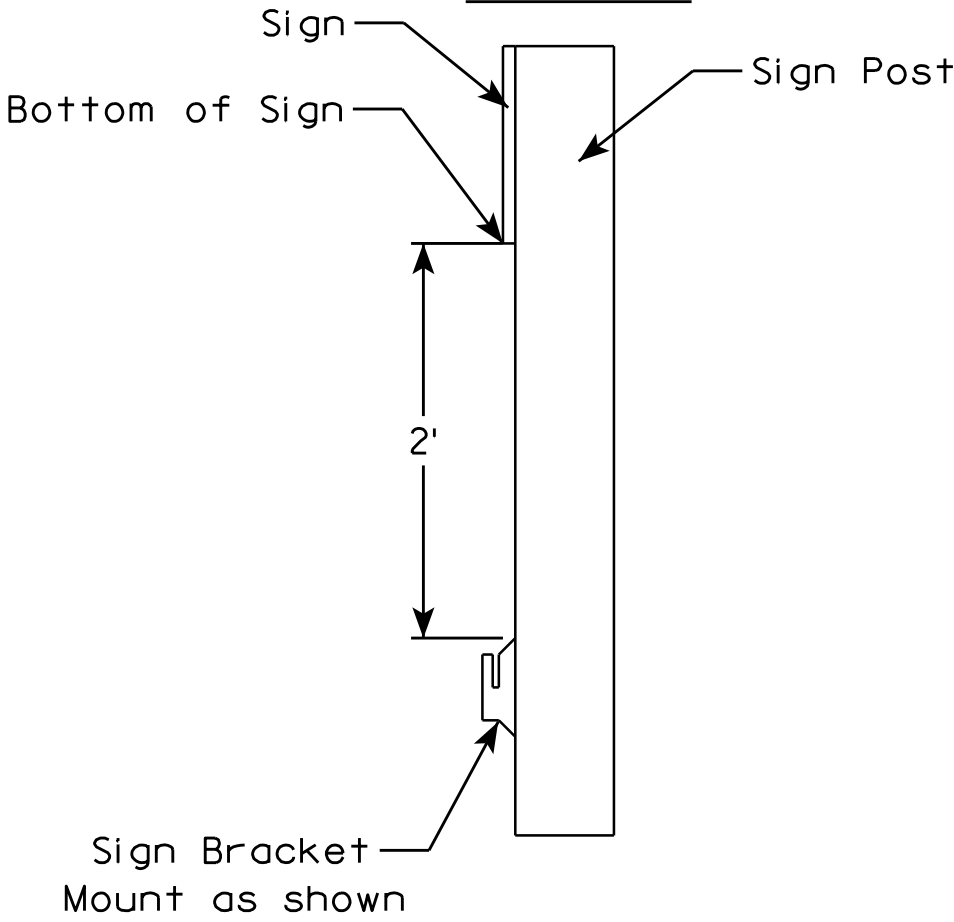
END VIEW



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.

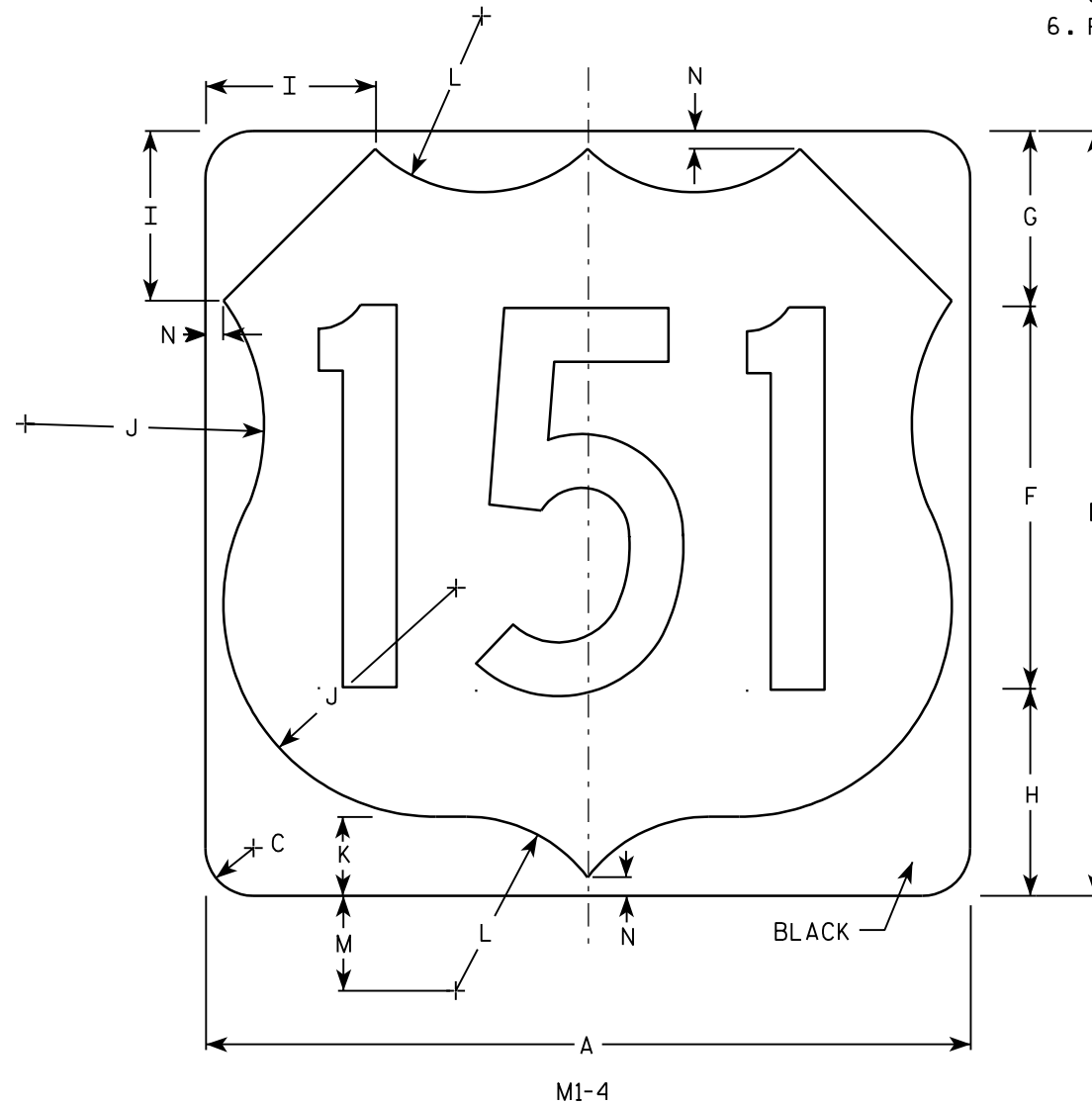
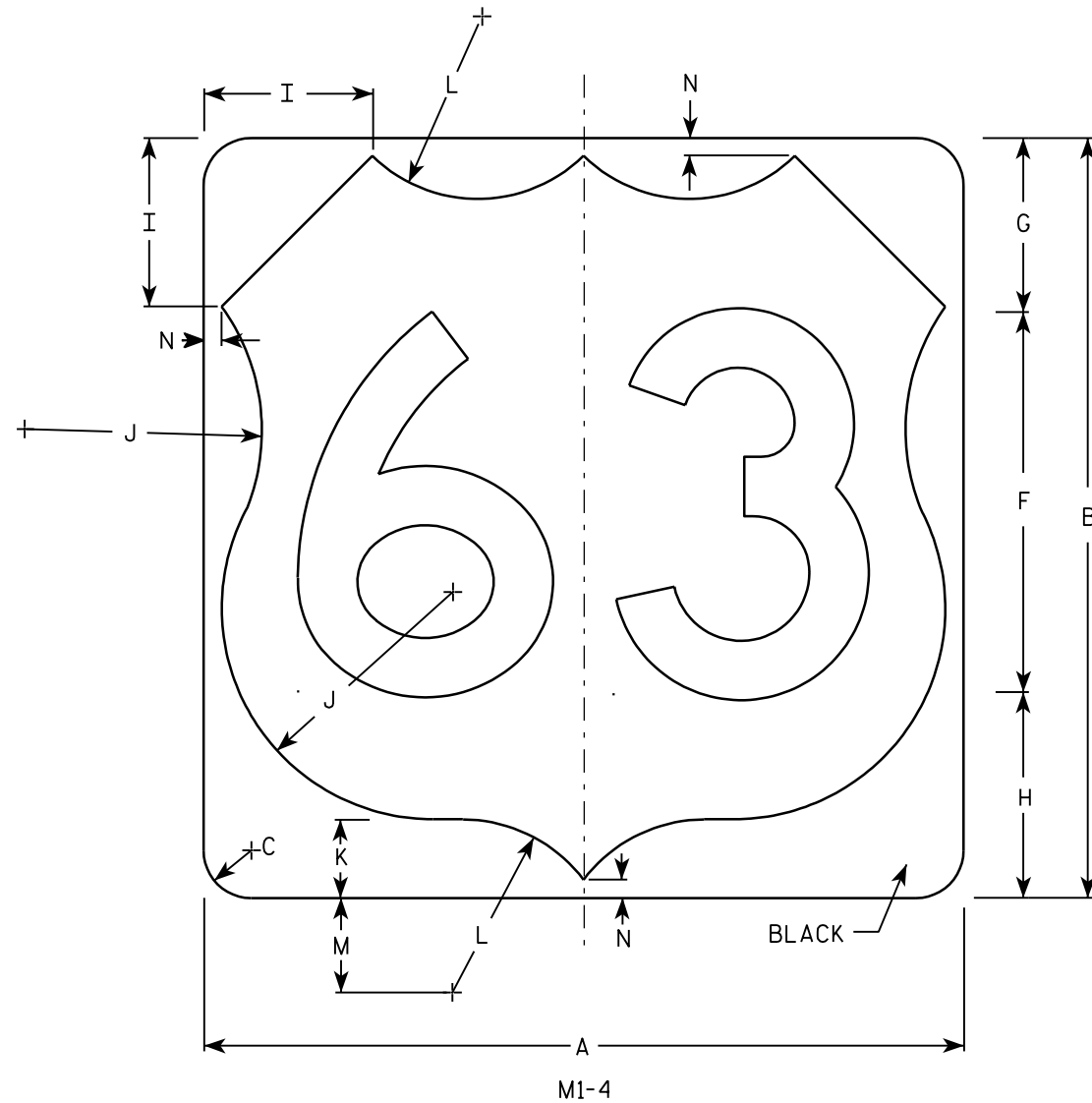
SIDE VIEW



ROLLUP SIGN BRACKET I55-56B	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/26/16	PLATE NO. I55-56B.2

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



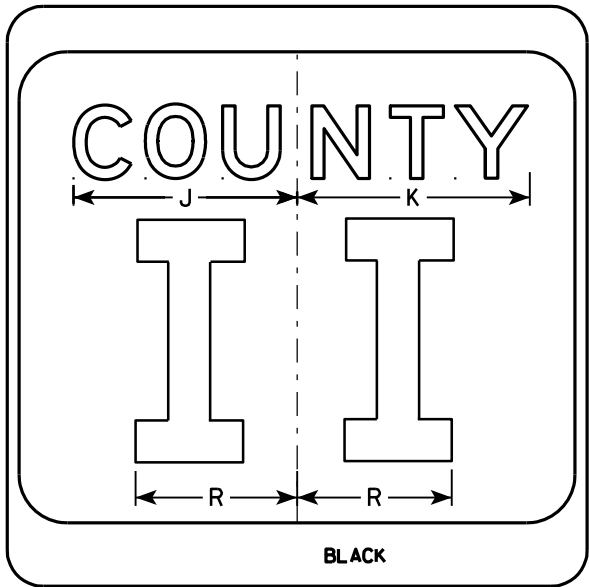
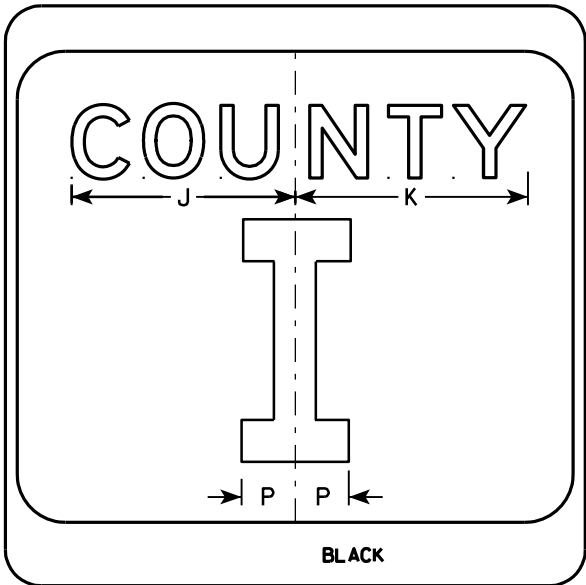
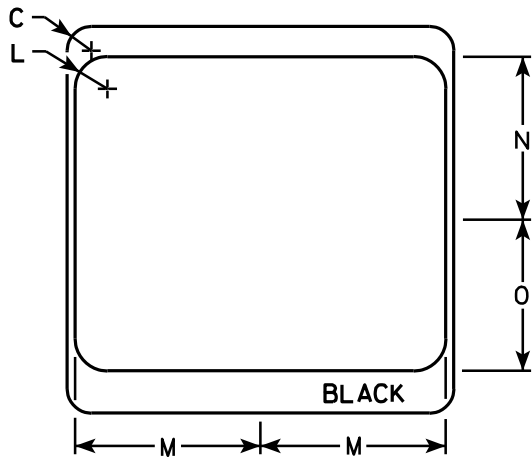
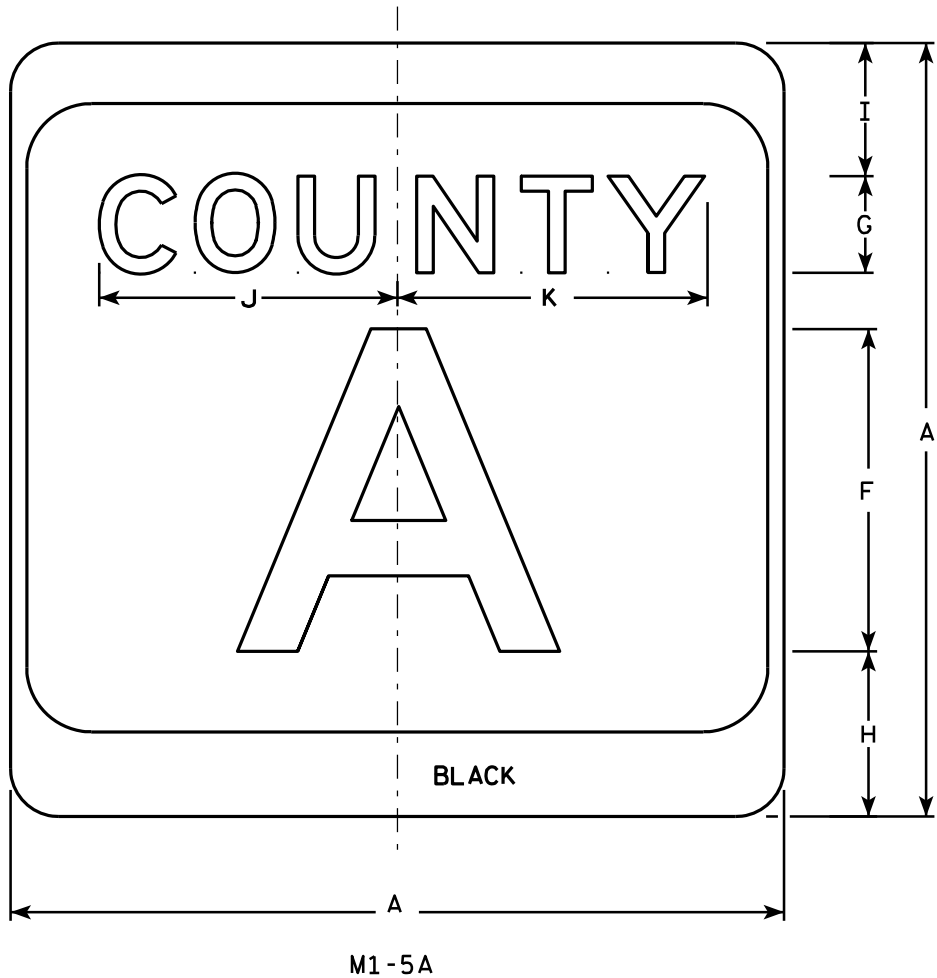
Metric equivalent  
for this sign is:

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	Areq sq. ft.	Area m <sup>2</sup>
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

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

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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---

CTH MARKER

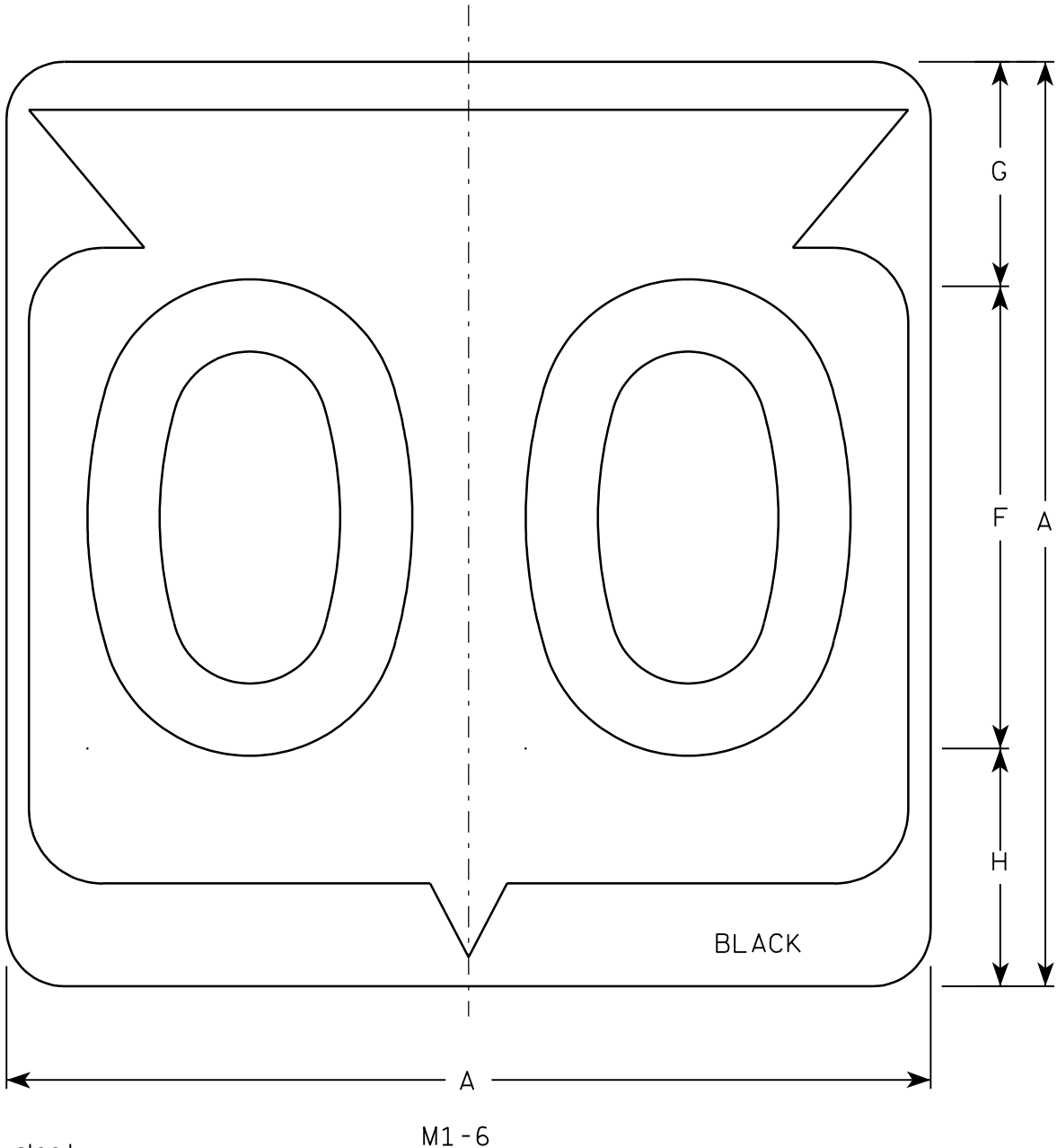
M1-5A FOR ASSEMBLIES

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 <sup>2</sup>
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

FILE NAME : C:\Users\Projects\tr\_stdp\late\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

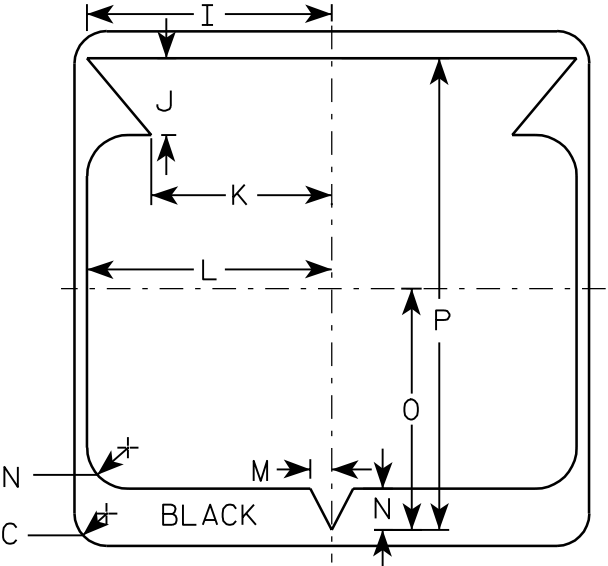
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDS SHEET 42

NOTES

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



STATE ROUTE MARKER  
M1-6 FOR ASSEMBLIES

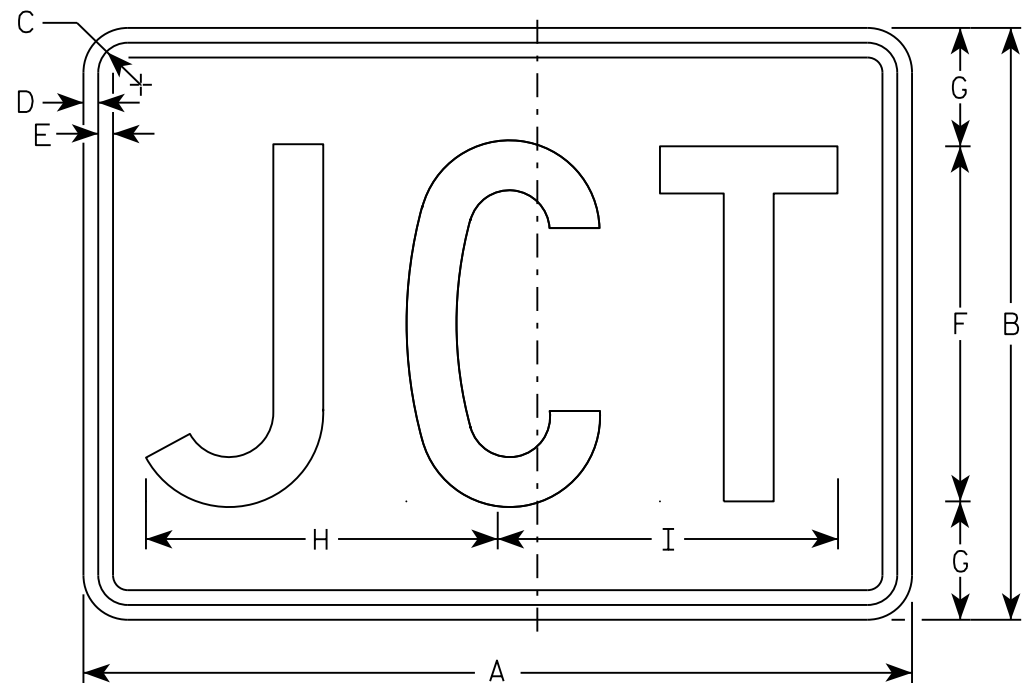
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

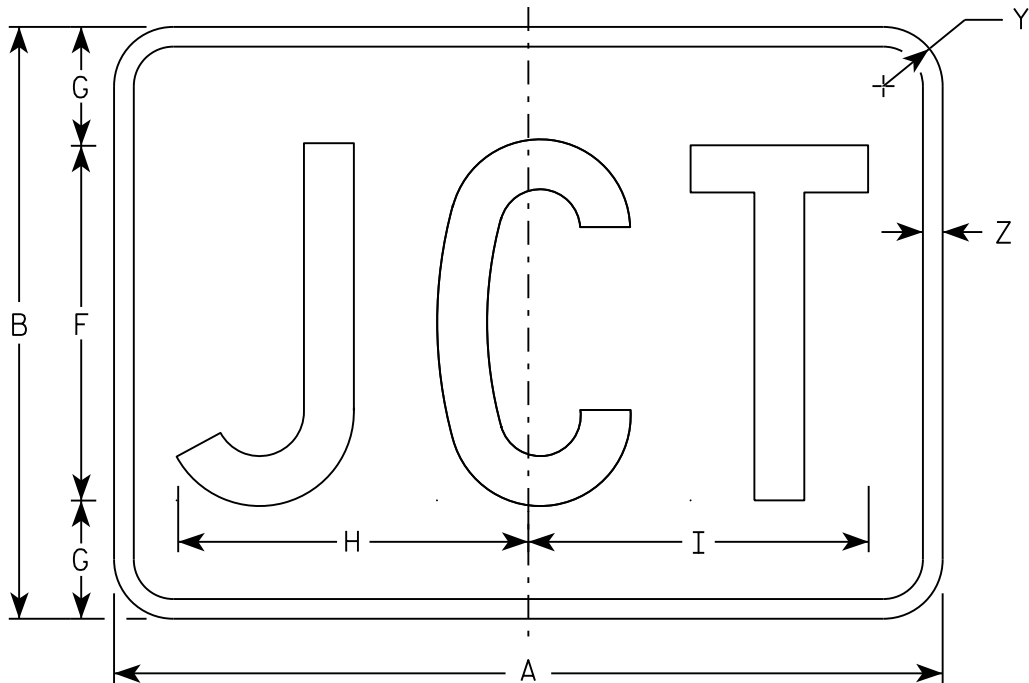
*Chester J. Spang*  
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9



M2-1  
MM2-1  
MP2-1



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

NOTES

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

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

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

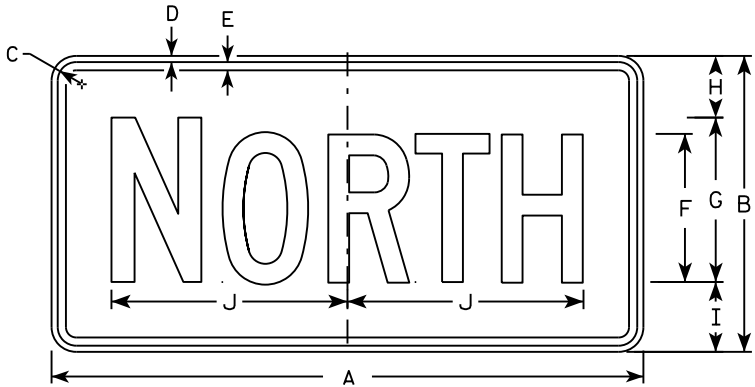
APPROVED

Matthew R. Rauch

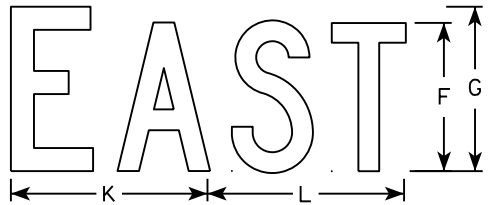
For State Traffic Engineer

DATE 10/15/15

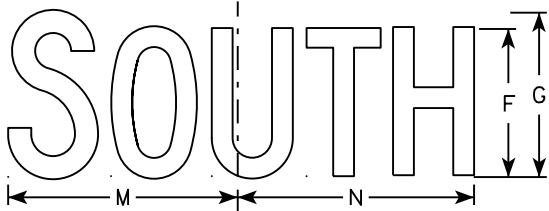
PLATE NO. M2-1.12



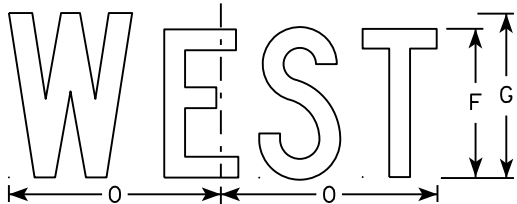
M3-1  
MM3-1  
MP3-1



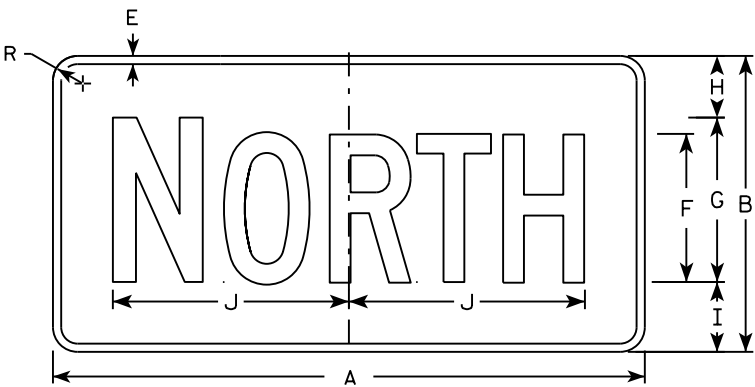
M3-2  
MM3-2  
MP3-2



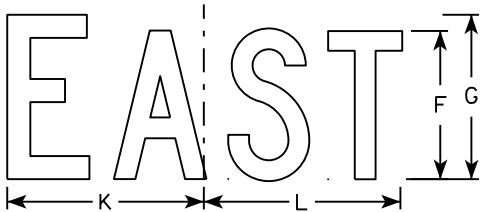
M3-3  
MM3-3  
MP3-3



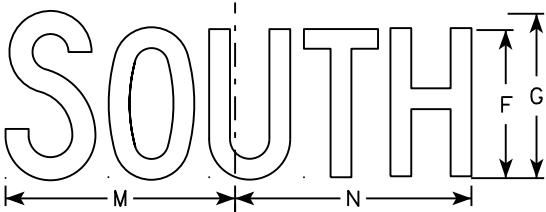
M3-4  
MM3-4  
MP3-4



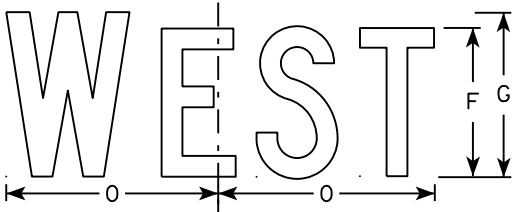
MB3-1  
MK3-1  
MN3-1



MB3-2  
MK3-2  
MN3-2



MB3-3  
MK3-3  
MN3-3



MB3-4  
MK3-4  
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:  
Background - See note 5  
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White  
Message - Black  
MB3-1 thru MB3-4 Background - Blue  
Message - White  
MK3-1 thru MK3-4 Background - Green  
Message - White  
MM3-1 thru MM3-4 Background - White  
Message - Green  
MN3-1 thru MN3-4 Background - Brown  
Message - White  
MP3-1 thru MP3-4 Background - White  
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

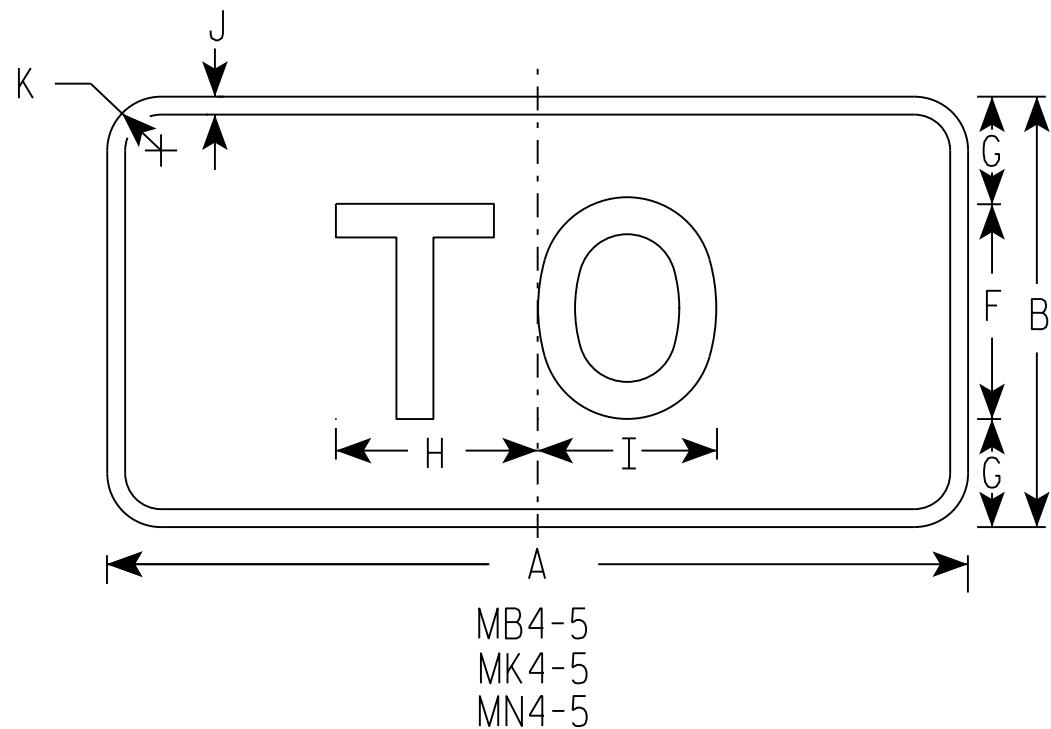
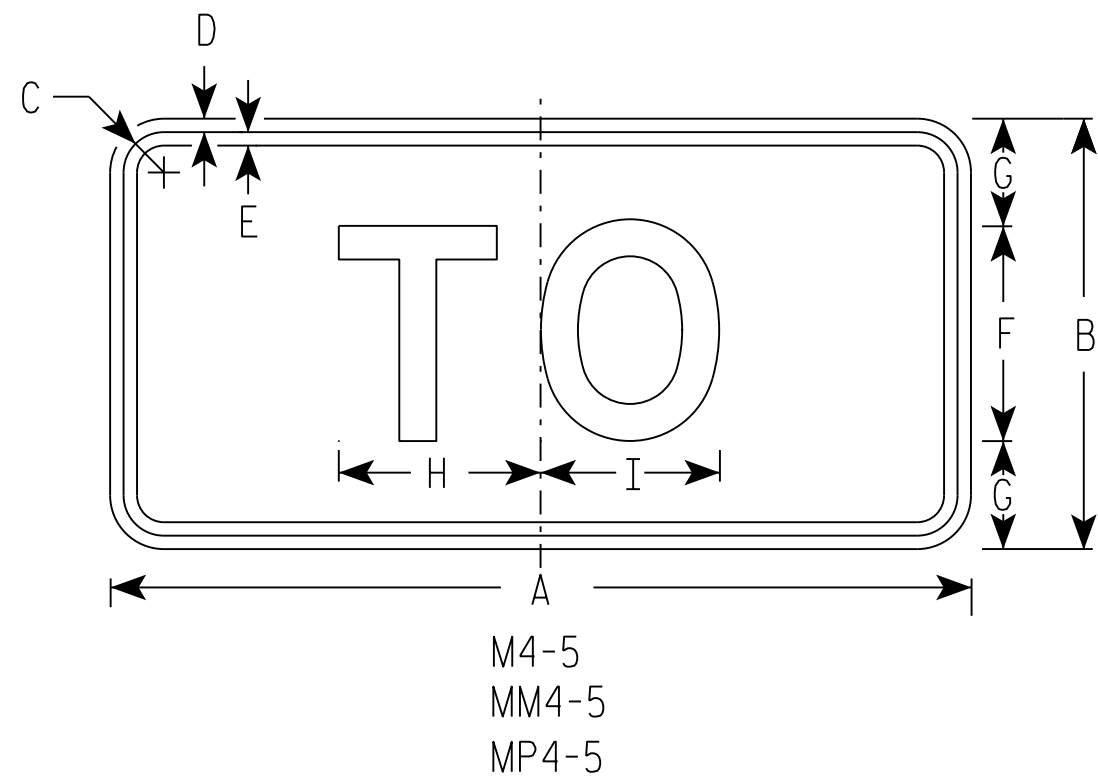
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS  
M3-1 thru M3-4  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

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



NOTES

1. Sign is Type II - Type H
2. Color:  
Background - See note 5  
Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White  
Message - Black  
MB4-5 Background - Blue  
Message - White  
MK4-5 Background - Green  
Message - White  
MM4-5 Background - White  
Message - Green  
MN4-5 Background - Brown  
Message - White  
MP4-5 Background - White  
Message - Blue

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN

M4 - 5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

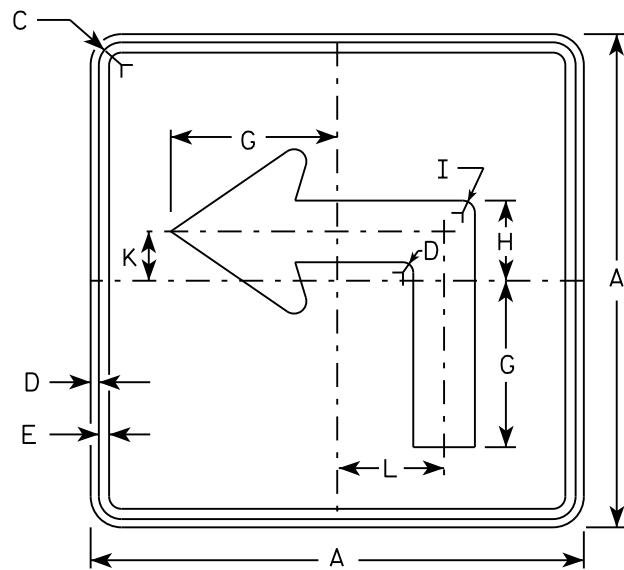
Matthew R. Rauch

for State Traffic Engineer

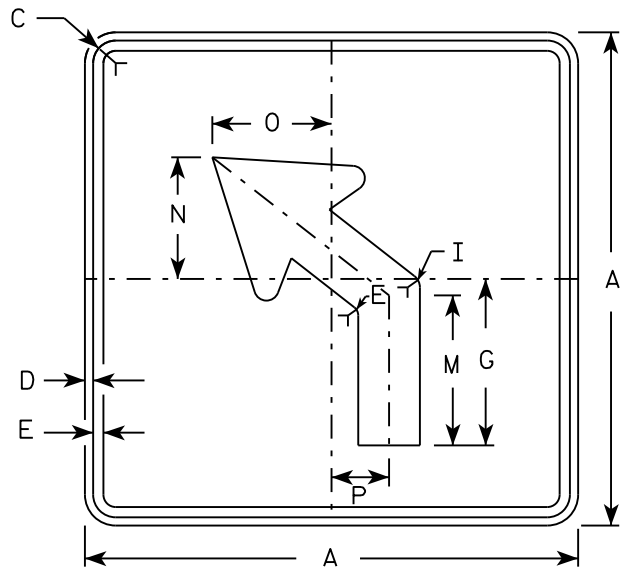
DATE 10/15/15

PLATE NO. M4-5.8

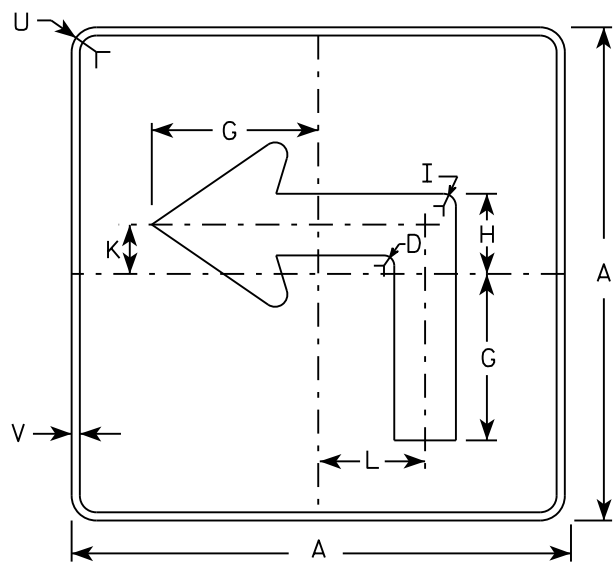




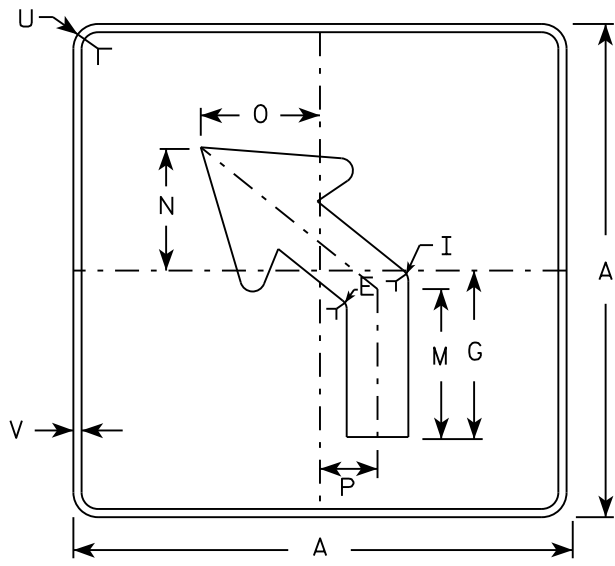
M5-1L  
MM5-1L  
M05-1L  
MP5-1L



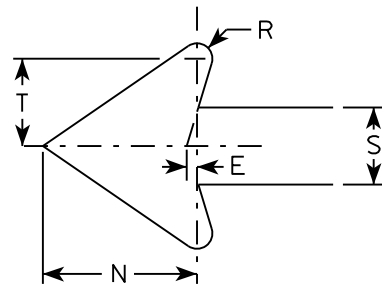
M5-2L  
MM5-2L  
M05-2L  
MP5-2L



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



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



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:  
Background - See note 4  
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M5-1 and M5-2 Background - White  
Message - Black  
MB5-1 and MB5-2 Background - Blue  
Message - White  
MK5-1 and MK5-2 Background - Green  
Message - White  
MM5-1 and MM5-2 Background - White  
Message - Green  
MN5-1 and MN5-2 Background - Brown  
Message - White  
M05-1 and M05-2 Background - Orange - Type F Reflective  
Message - Black  
MP5-1 and MP5-2 Background - White - Type H Reflective  
Message - Blue  
MR5-1 and MR5-2 Background - Brown  
Message - Yellow
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

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

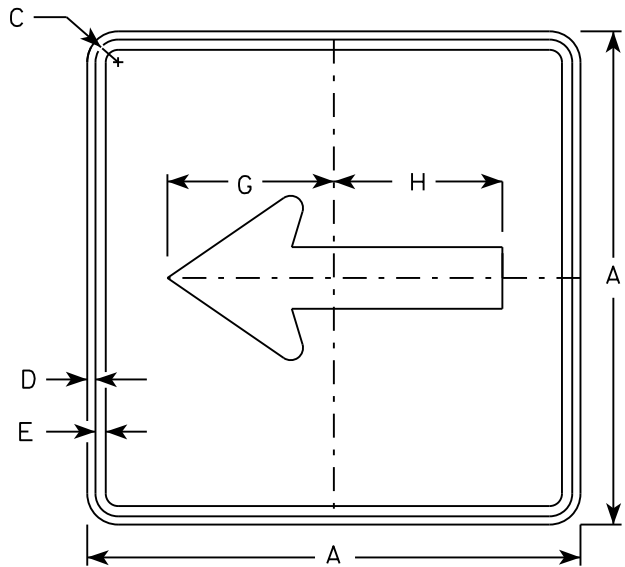
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---

STANDARD SIGN  
M5-1 & M5-2

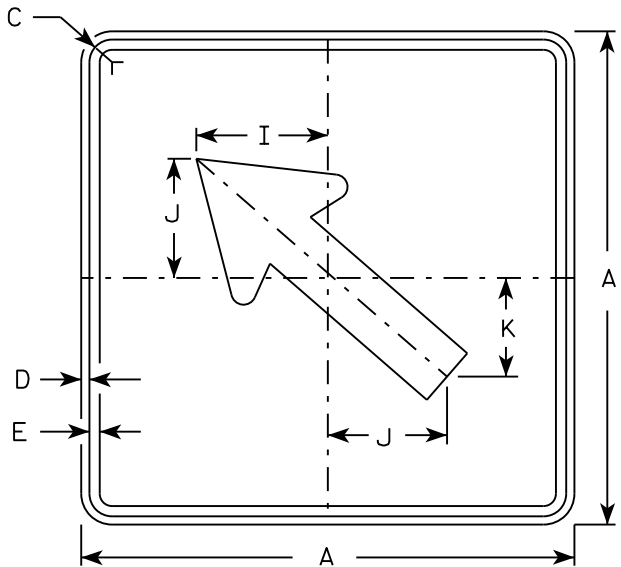
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

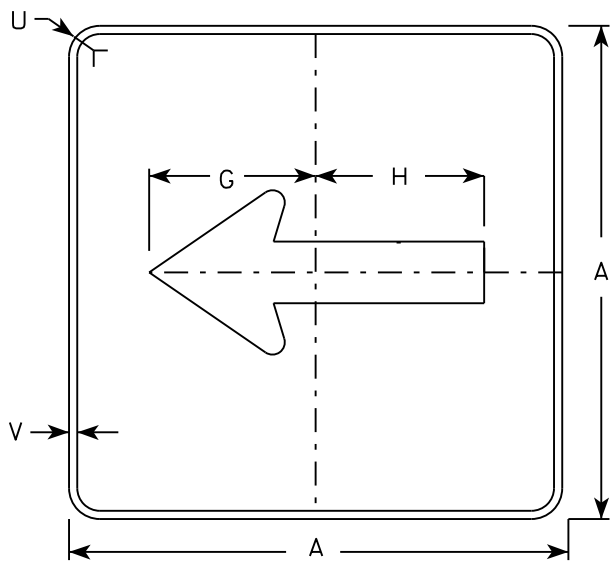
DATE 10/15/15      PLATE NO. M5-1.13



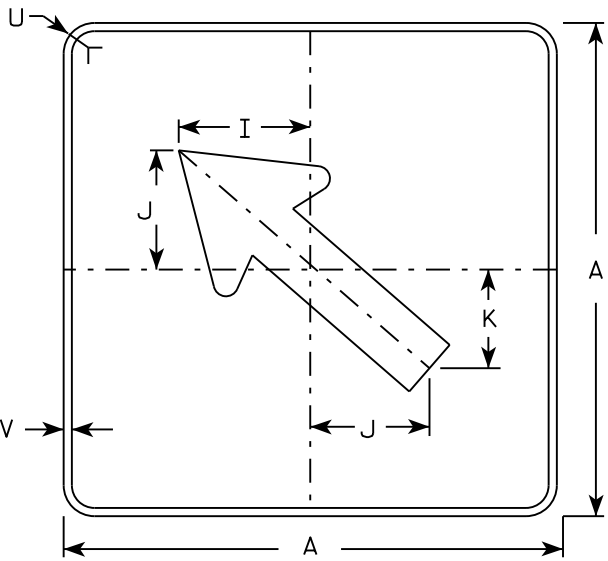
M6 - 1  
MM6 - 1  
M06 - 1  
MP6 - 1



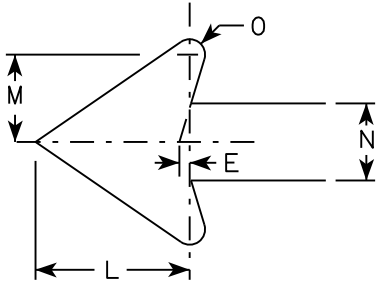
M6 - 2  
MM6 - 2  
M06 - 2  
MP6 - 2



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



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



NOTES

- Signs are Type II - Type H except as Shown
- Color:  
Background - See note 4  
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - White  
Message - Black  
MB6-1 and MB6-2 Background - Blue  
Message - White  
MK6-1 and MK6-2 Background - Green  
Message - White  
MM6-1 and MM6-2 Background - White  
Message - Green  
MN6-1 and MN6-2 Background - Brown  
Message - White  
M06-1 and M06-2 Background - Orange - Type F Reflective  
Message - Black  
MP6-1 and MP6-2 Background - White  
Message - Blue  
MR6-1 and MR6-2 Background - Brown  
Message - Yellow

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

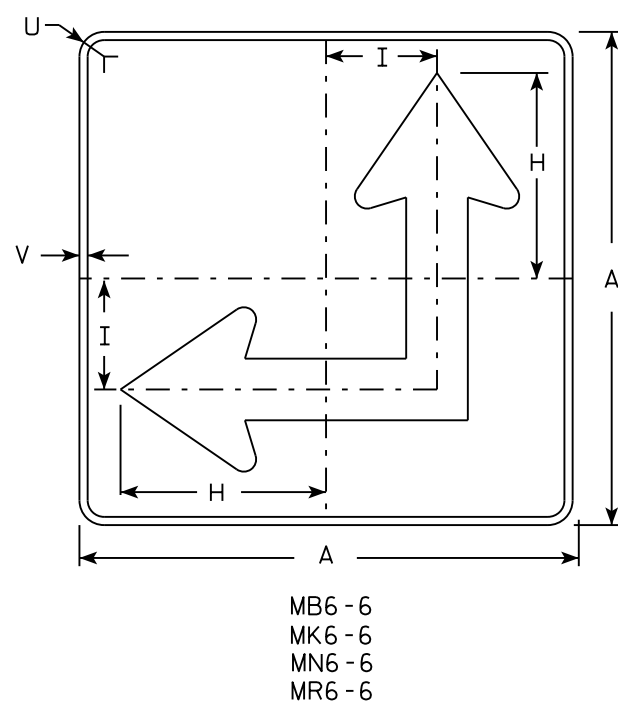
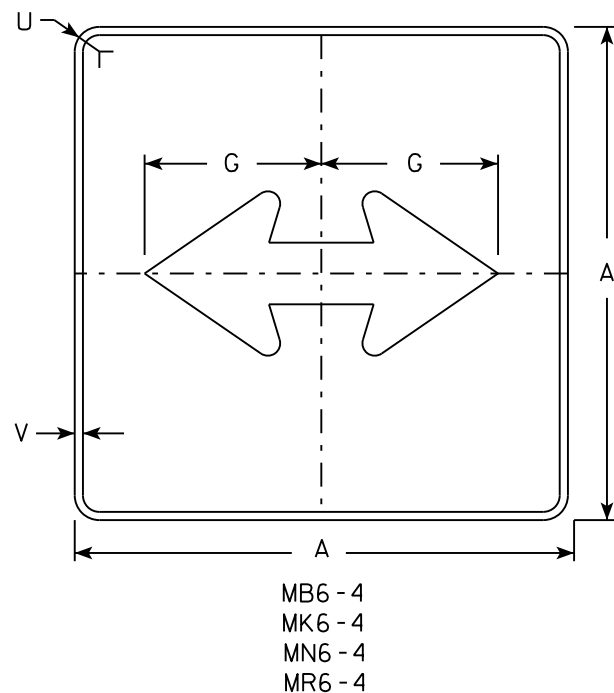
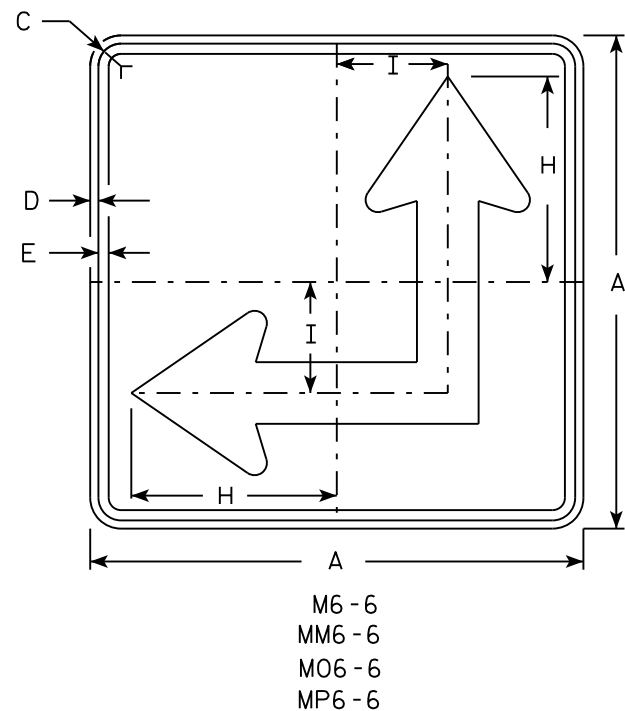
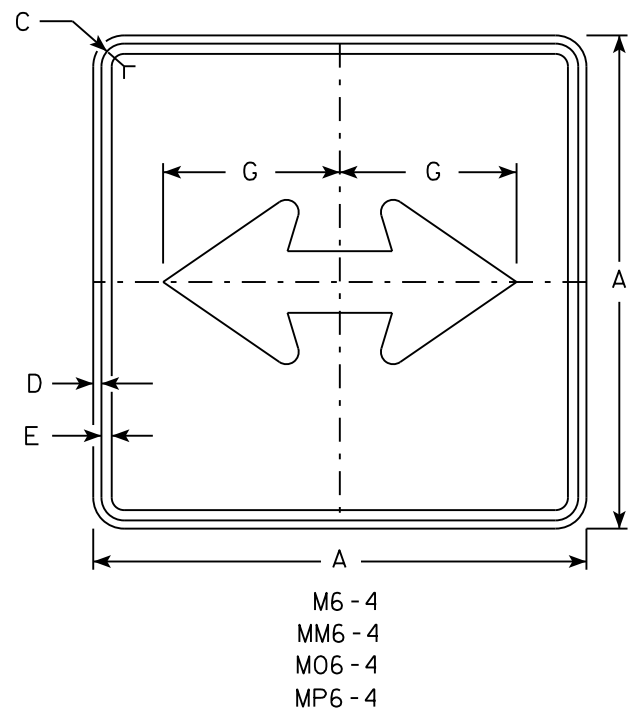
E

STANDARD SIGN  
M6 - 1 & M6 - 2  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

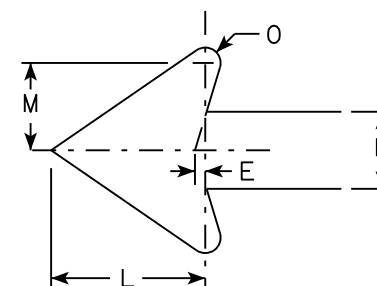
APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



NOTES

- Signs are Type II - Type H except as Shown
- Color:  
Background - See Note 4  
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White  
Message - Black  
MB6-4 and MB6-6 Background - Blue  
Message - White  
MK6-4 and MK6-6 Background - Green  
Message - White  
MM6-4 and MM6-6 Background - White  
Message - Green  
MN6-4 and MN6-6 Background - Brown  
Message - White  
M06-4 and M06-6 Background - Orange - Type F Reflective  
Message - Black  
MP6-4 and MP6-6 Background - White  
Message - Blue  
MR6-4 and MR6-6 Background - Brown  
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

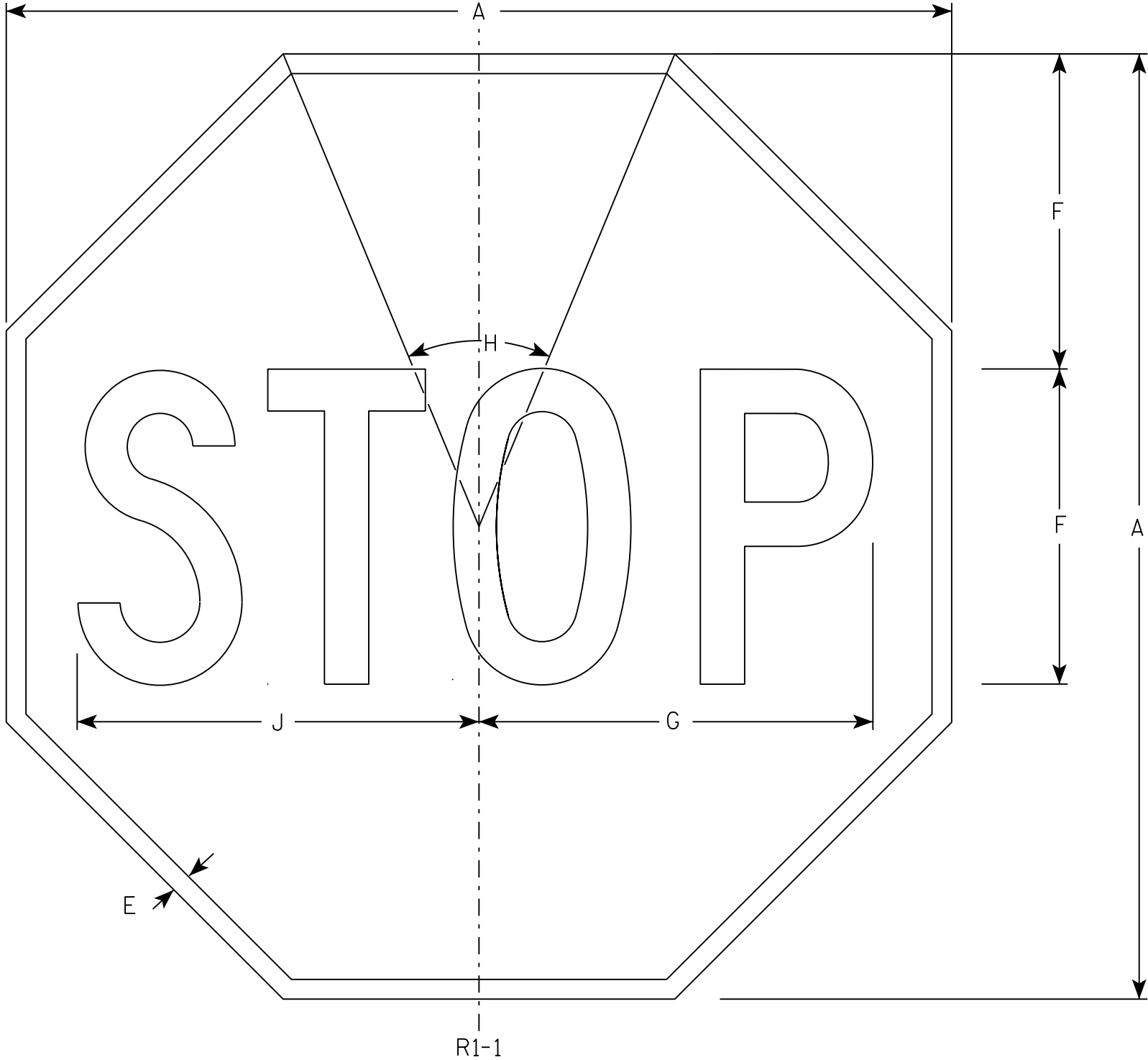
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---

STANDARD SIGN  
M6 - 4 & M6 - 6  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15      PLATE NO. M6-4.10



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

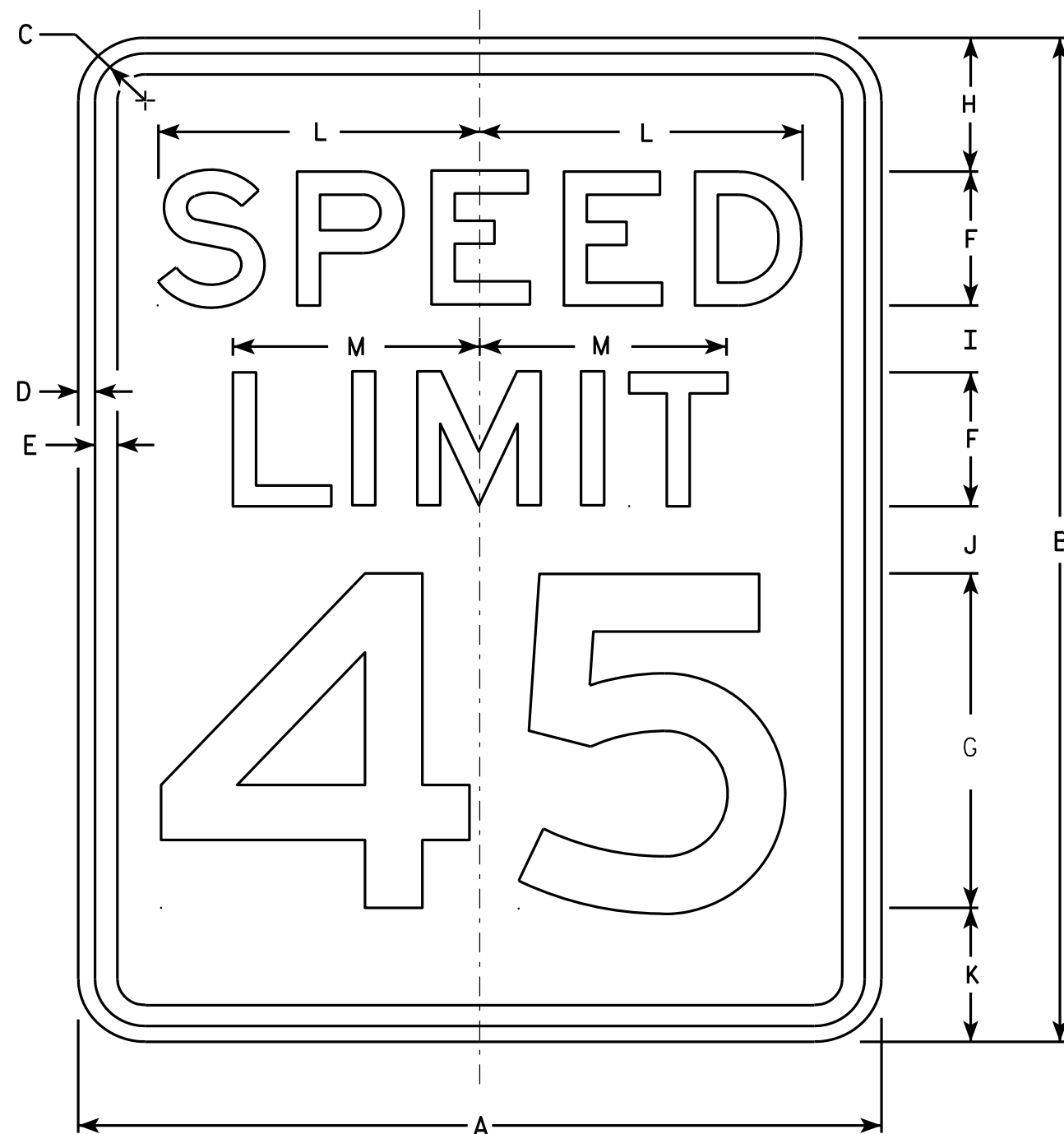
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



### NOTES

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

R2-1

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN  
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:

HWY:

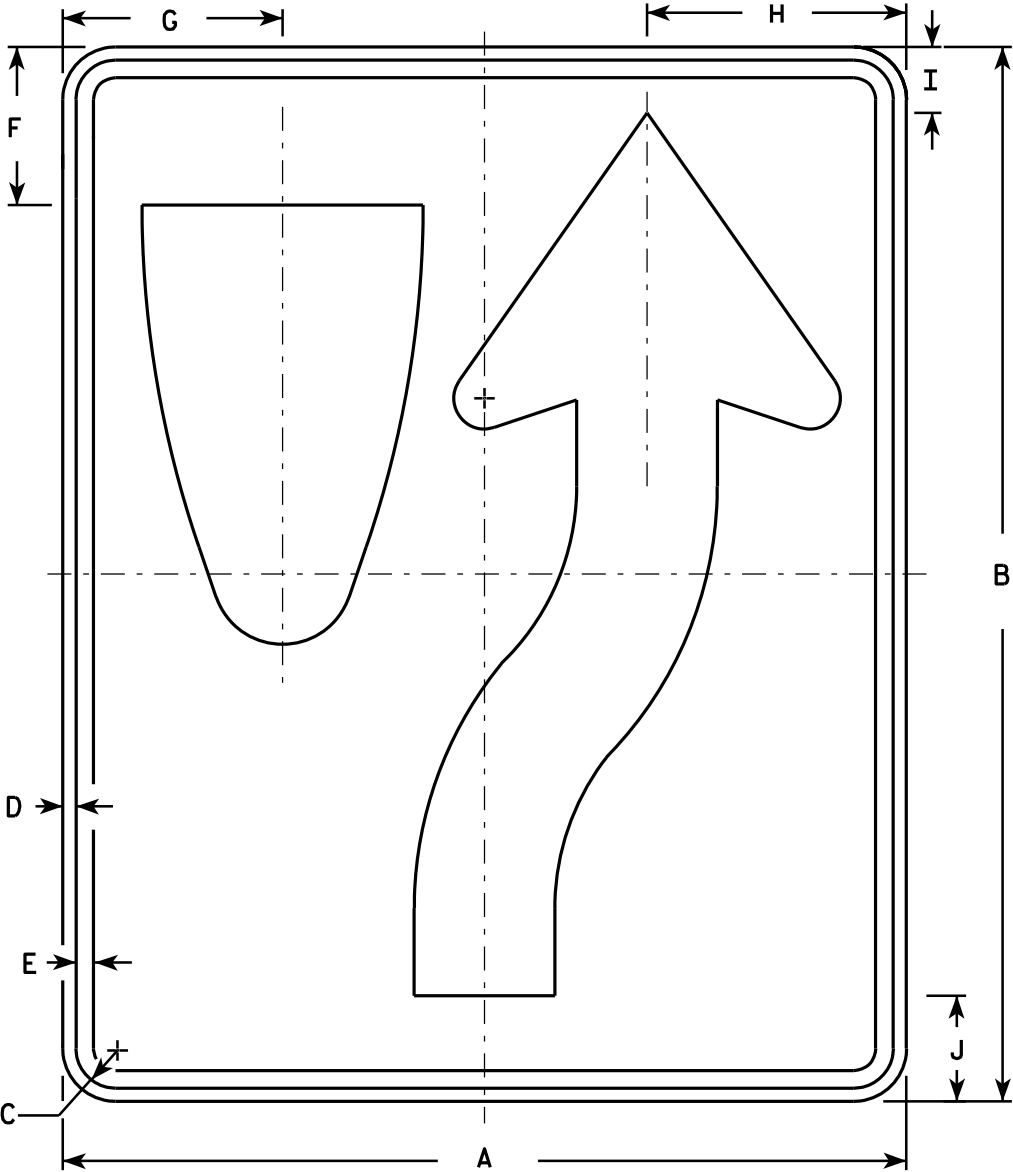
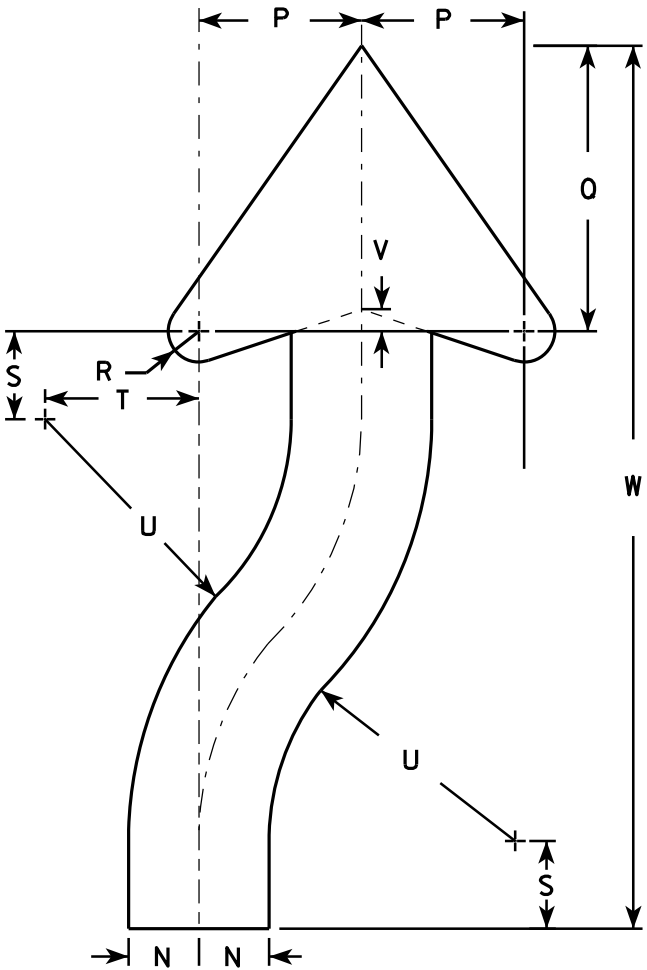
COUNTY:

SHEET NO:

E

NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN

R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

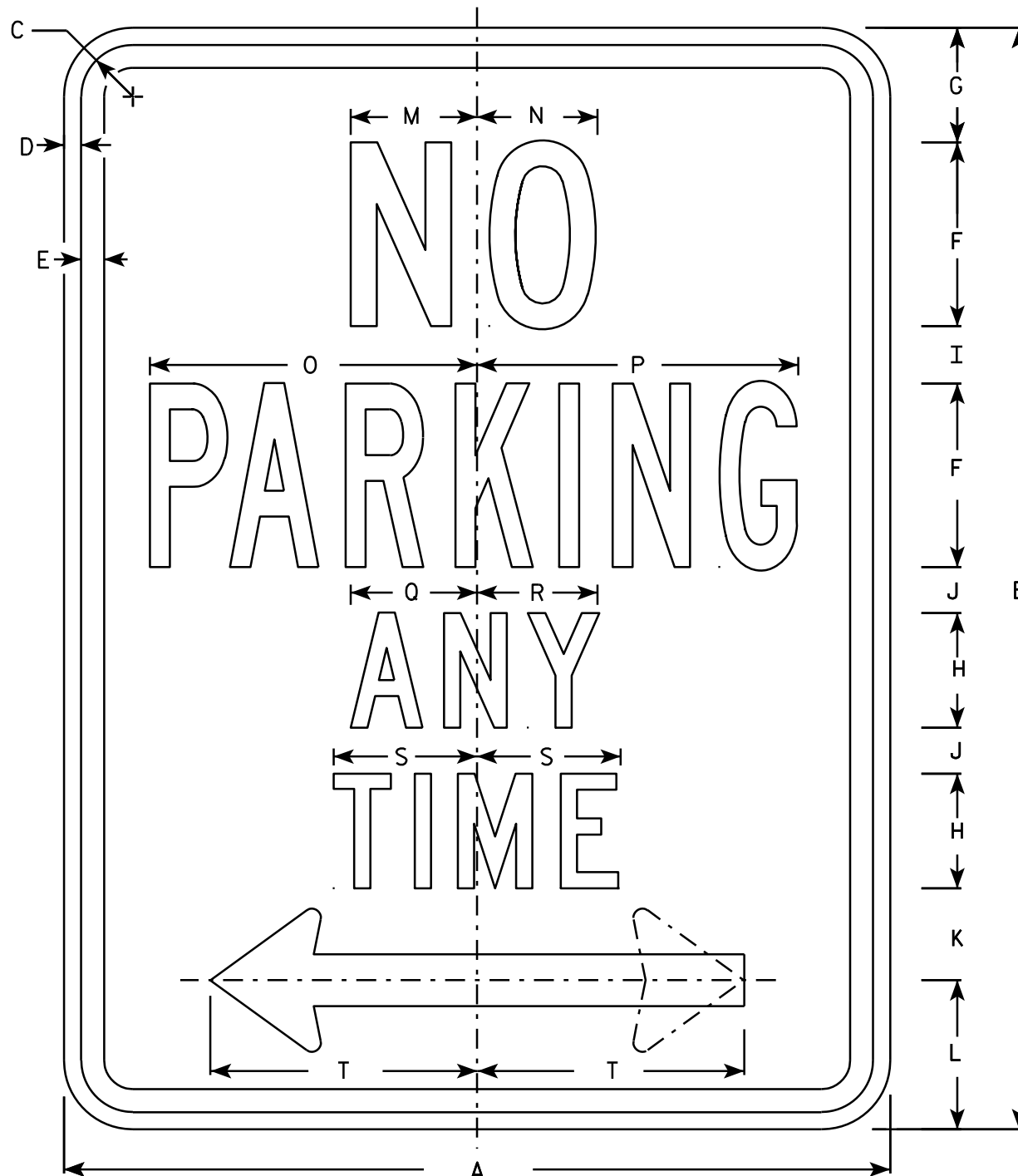
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

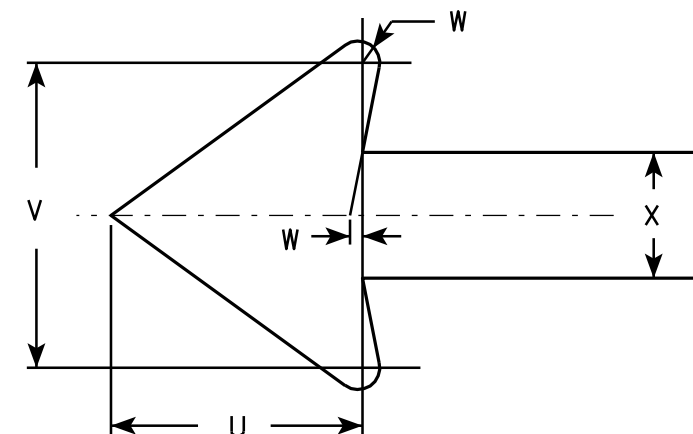
E



R7-1

### NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)  
R7-1L (left arrow)  
R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

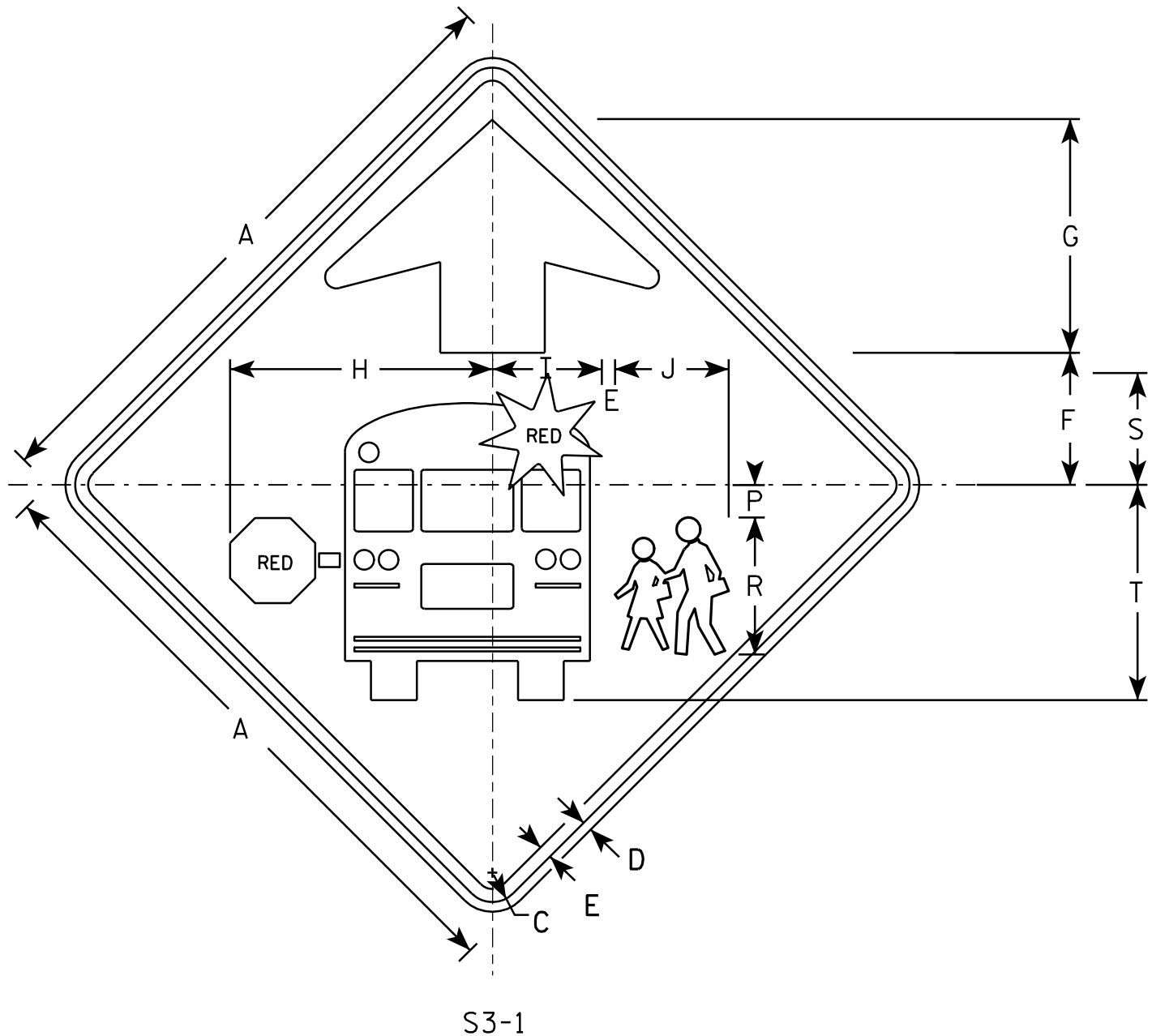
### STANDARD SIGN R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

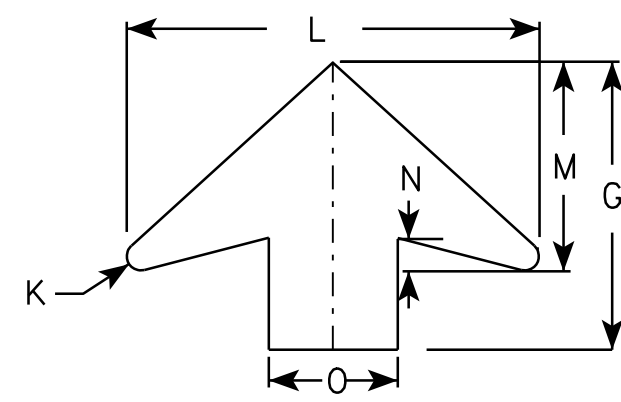
PROJECT NO: HWY: COUNTY: SHEET NO: E



S3-1

### NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - YELLOW-GREEN  
Message - BLACK except as noted  
Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

PROJECT NO:					SHEET NO:	E
-------------	--	--	--	--	-----------	---

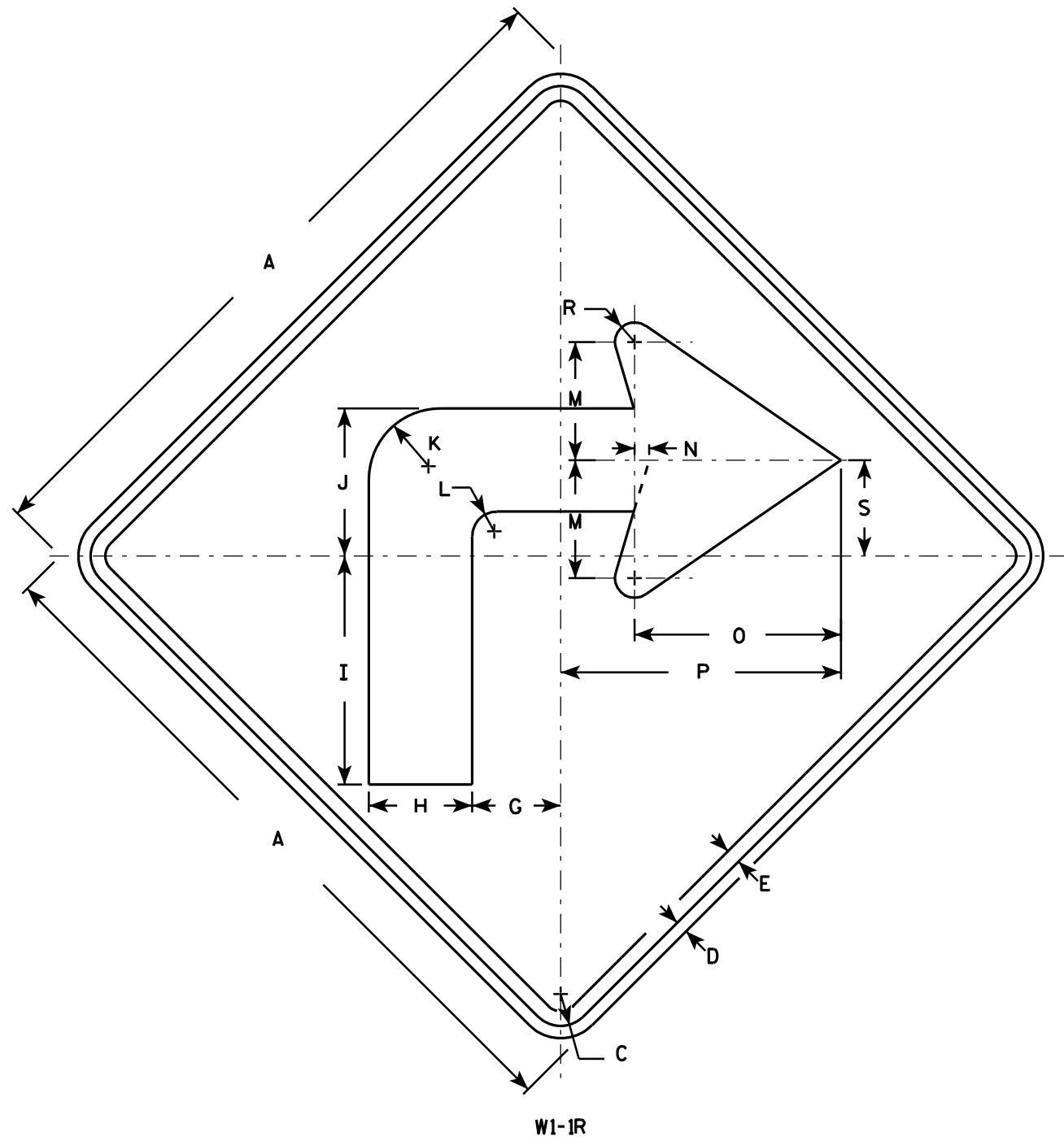
**STANDARD SIGN**  
**S3-1**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6





NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Yellow  
Message - Black
3. 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. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN

W1-1

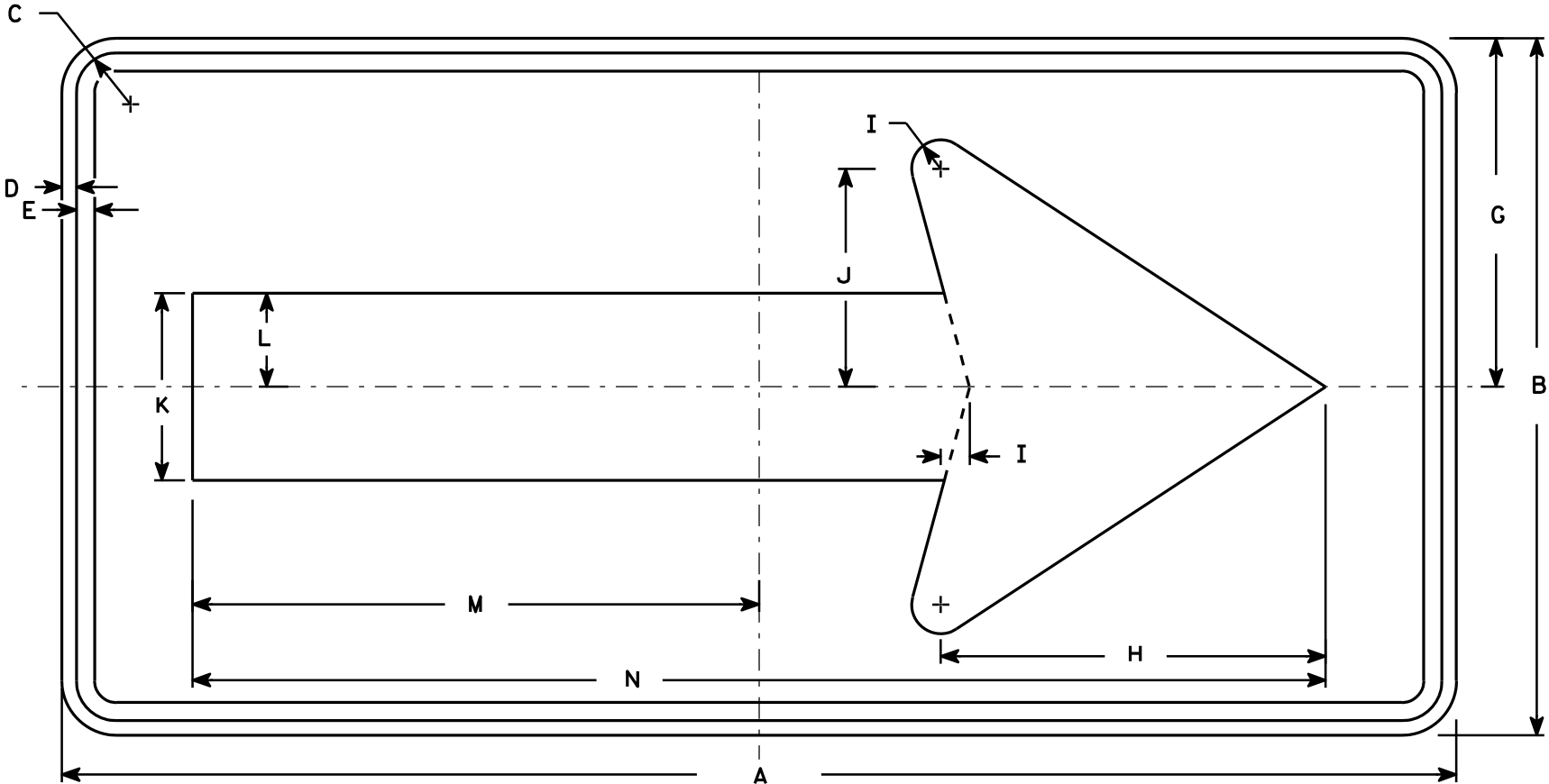
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

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.



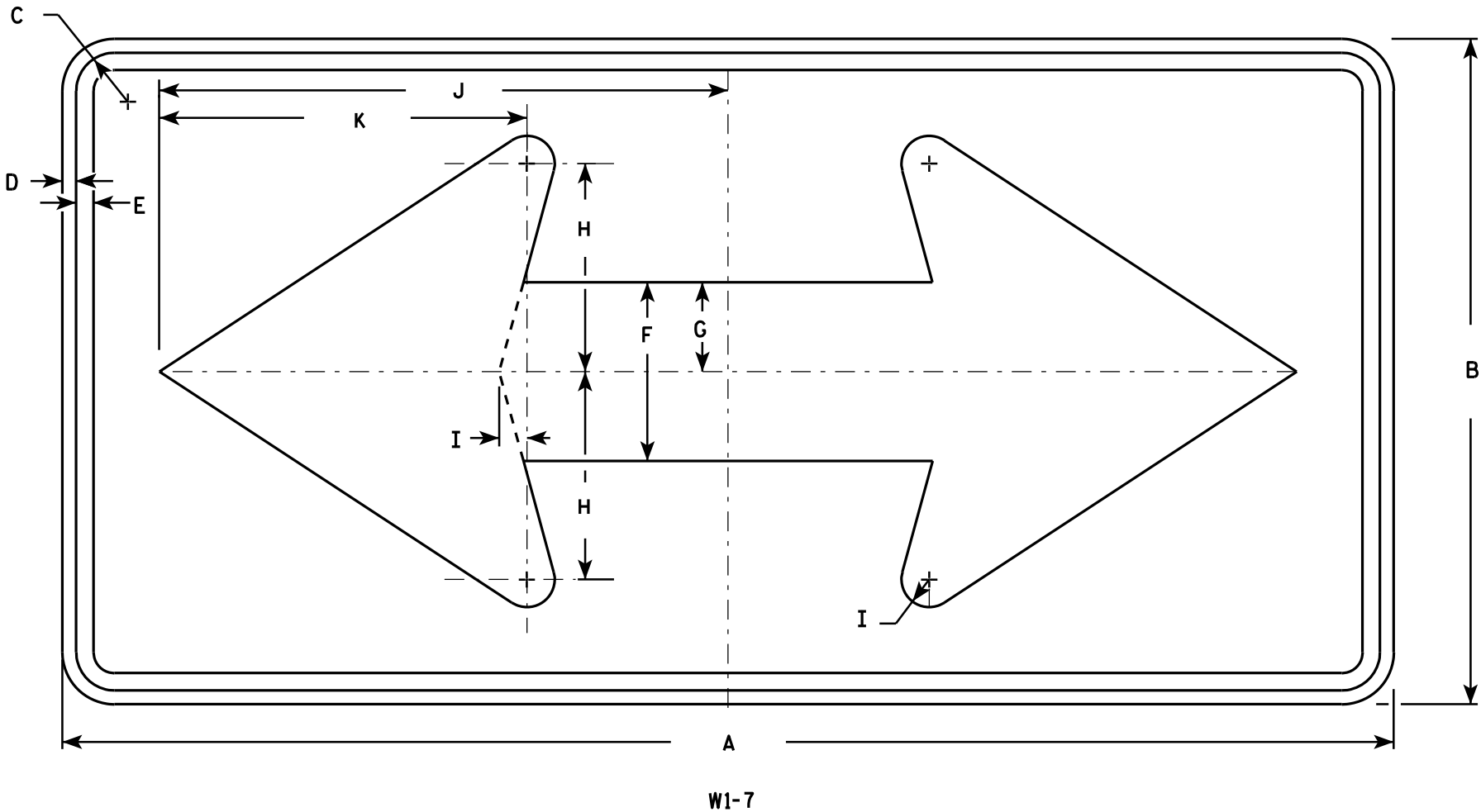
W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN  
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 6/7/10 PLATE NO. W1-6.8



NOTES

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

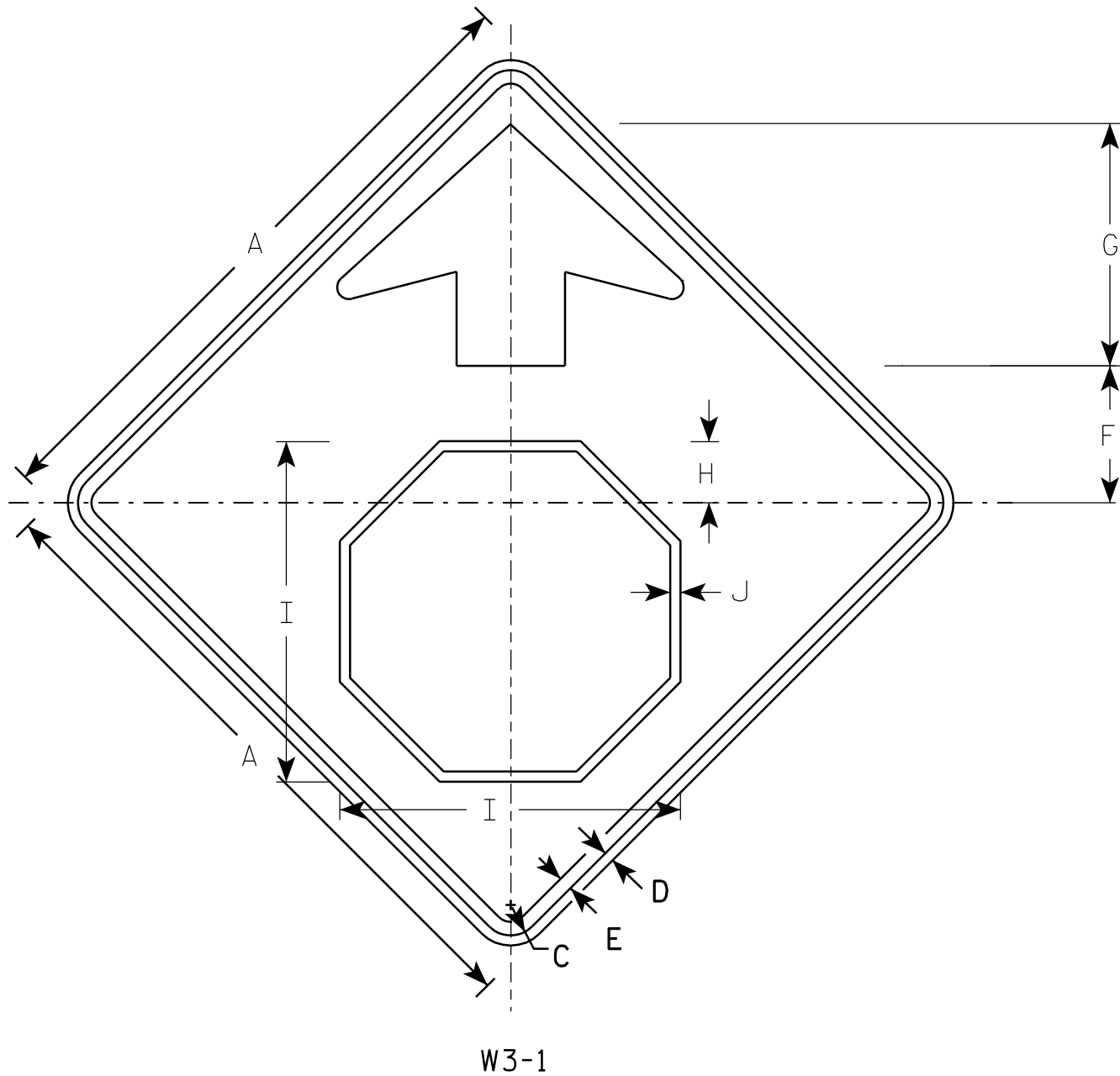
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

STANDARD SIGN  
W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

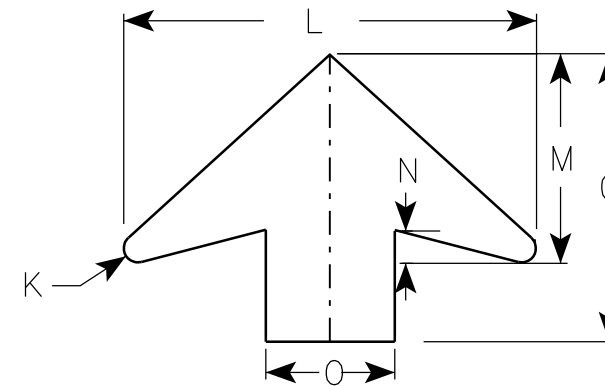
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7



### NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - YELLOW  
Arrow & Border - BLACK  
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

PROJECT NO:

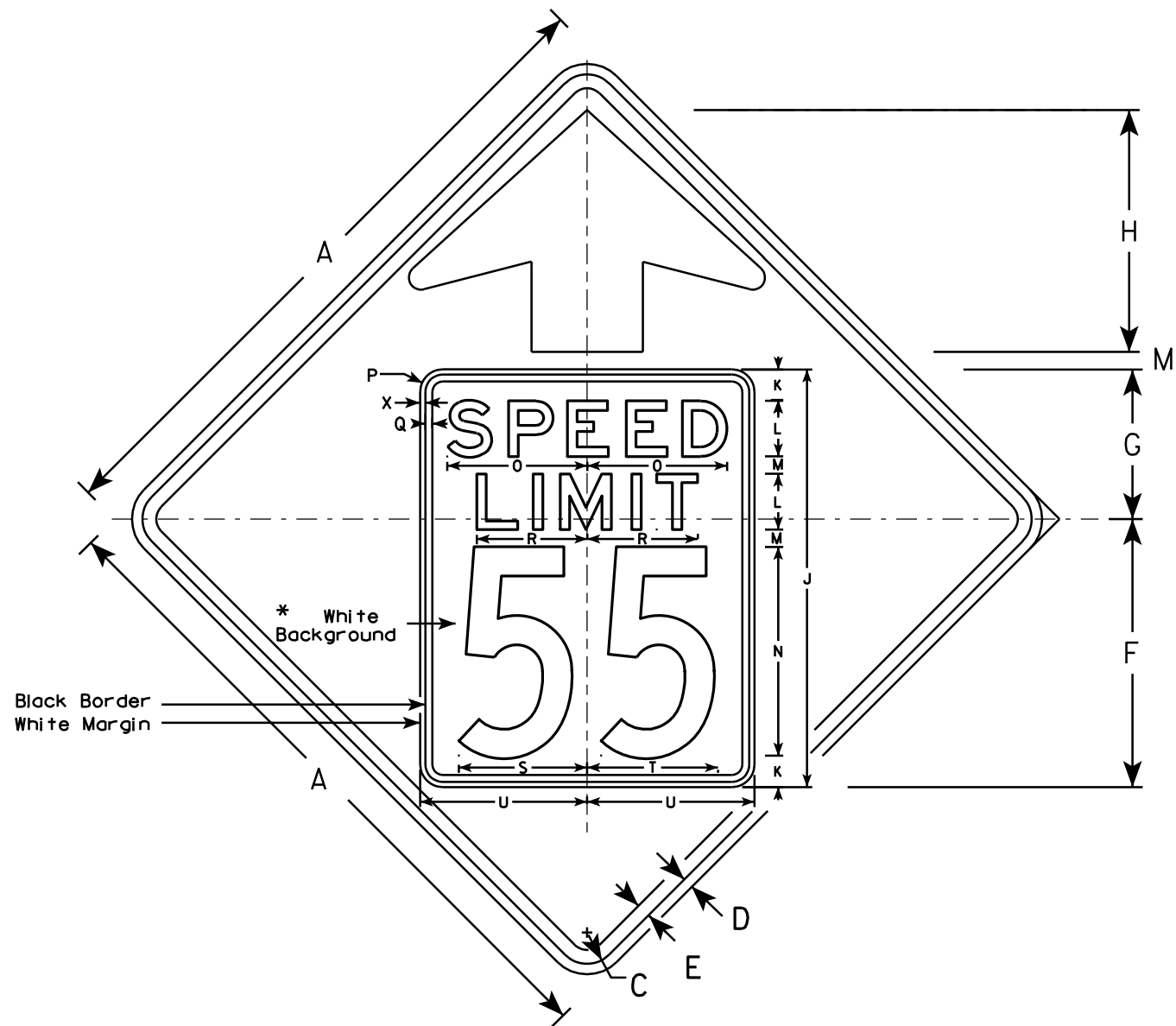
STANDARD SIGN  
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 6/7/10 PLATE NO. W3-1.12

SHEET NO:

E

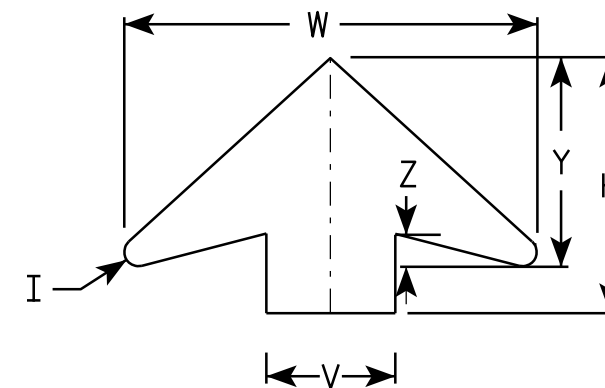


W3-5

### NOTES

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

\*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

### STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

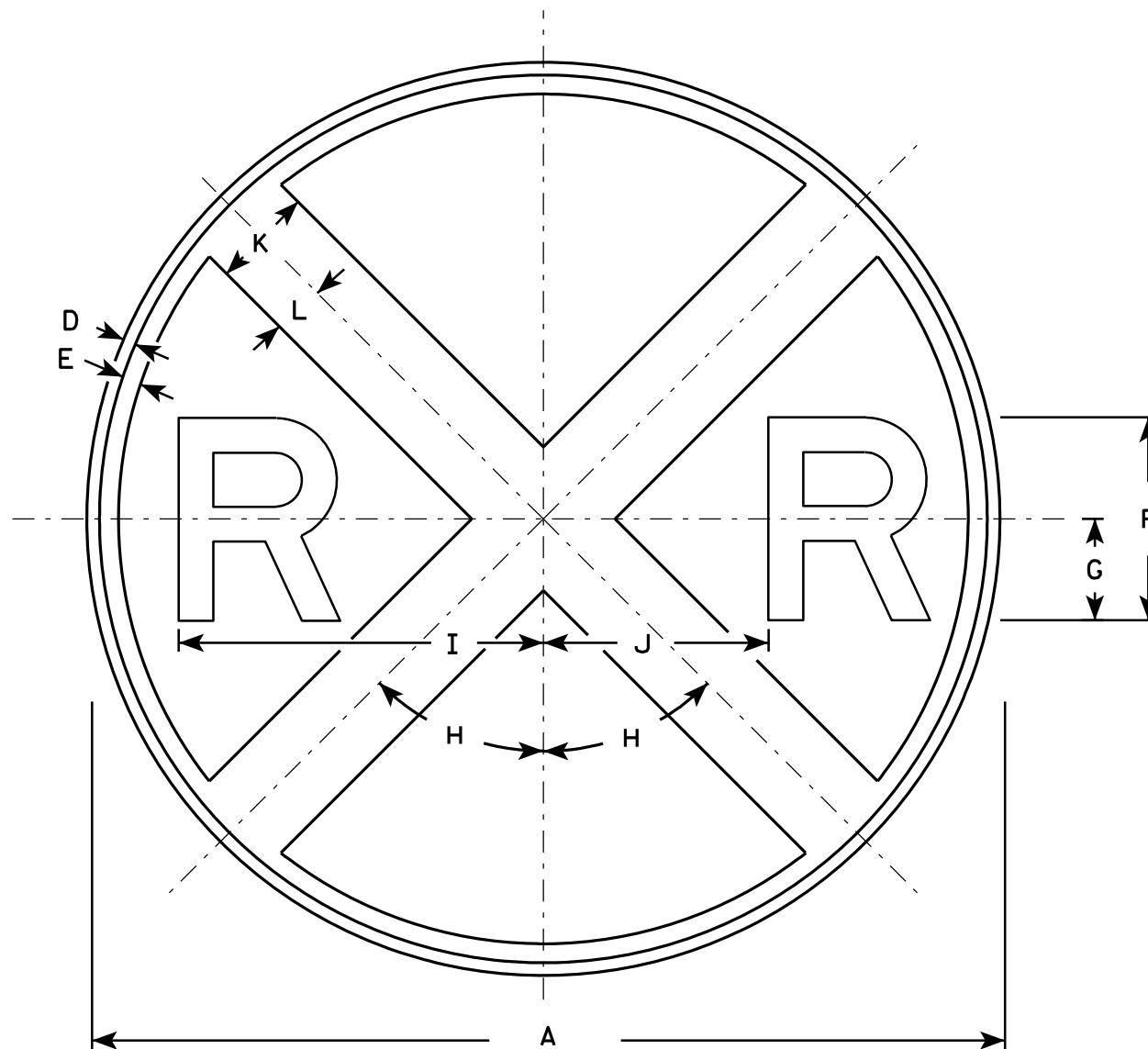
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



W10-1

NOTES

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

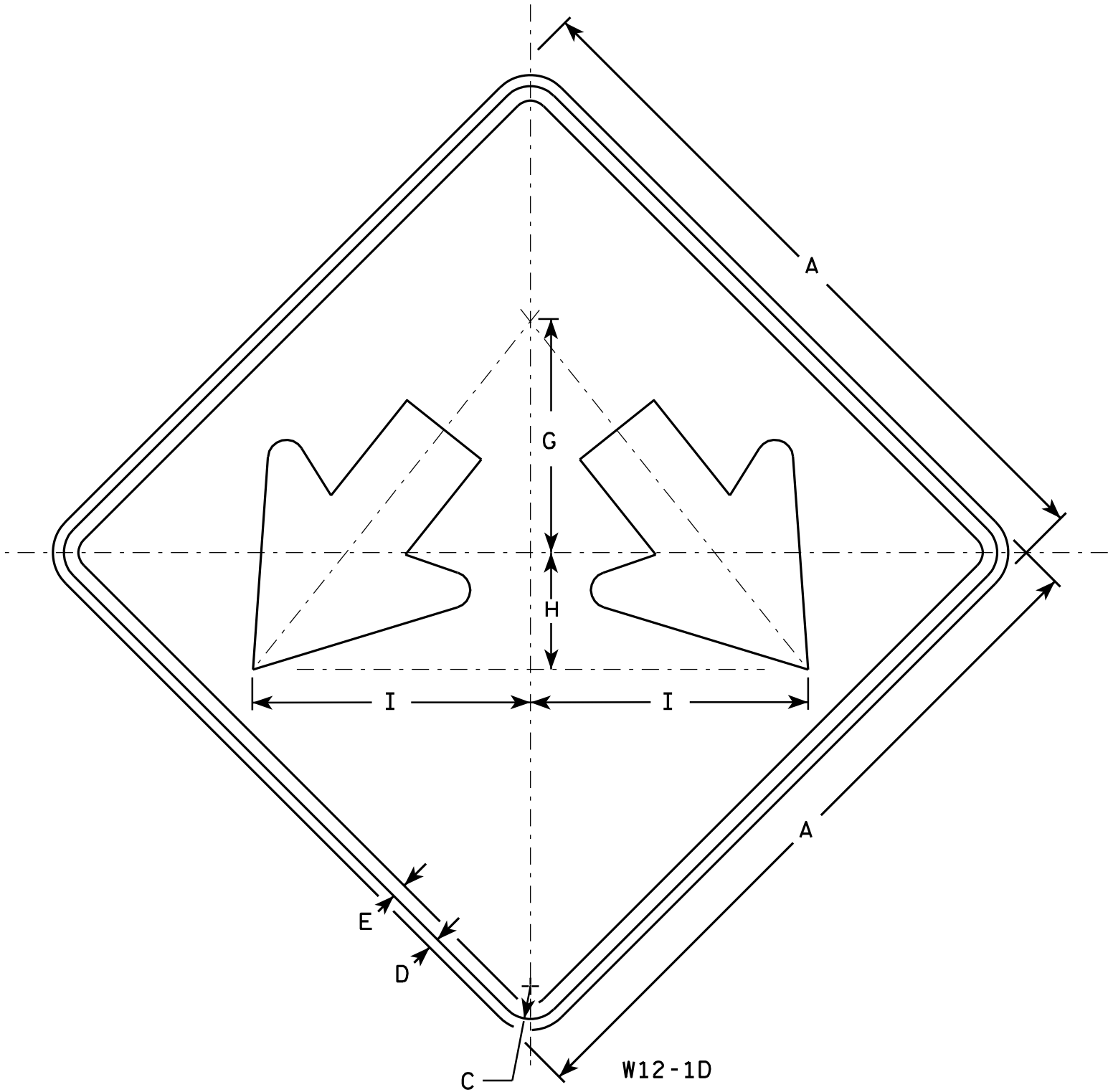
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			$\frac{3}{8}$	$\frac{5}{8}$	7	3 1/2	45°	12 $\frac{3}{8}$	7 $\frac{1}{8}$	3	1 1/2															4.91
2S	36			$\frac{5}{8}$	$\frac{3}{4}$	8	4	45°	14 $\frac{3}{8}$	8 $\frac{5}{8}$	4	2															7.07
2M	36			$\frac{5}{8}$	$\frac{3}{4}$	8	4	45°	14 $\frac{3}{8}$	8 $\frac{5}{8}$	4	2															7.07
3																											
4	48			$\frac{3}{4}$	1 1/4	10	5	45°	18 $\frac{3}{8}$	11 $\frac{5}{8}$	5	2 1/2															12.5
5																											

STANDARD SIGN  
W10-1

WISCONSIN DEPT OF TRANSPORTATION

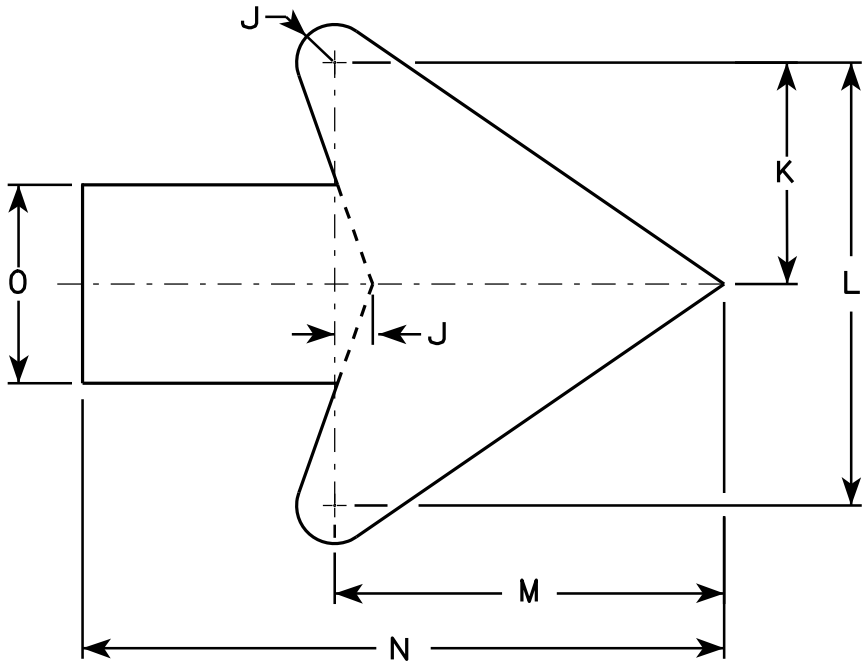
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---



NOTES

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



Arrow Detail

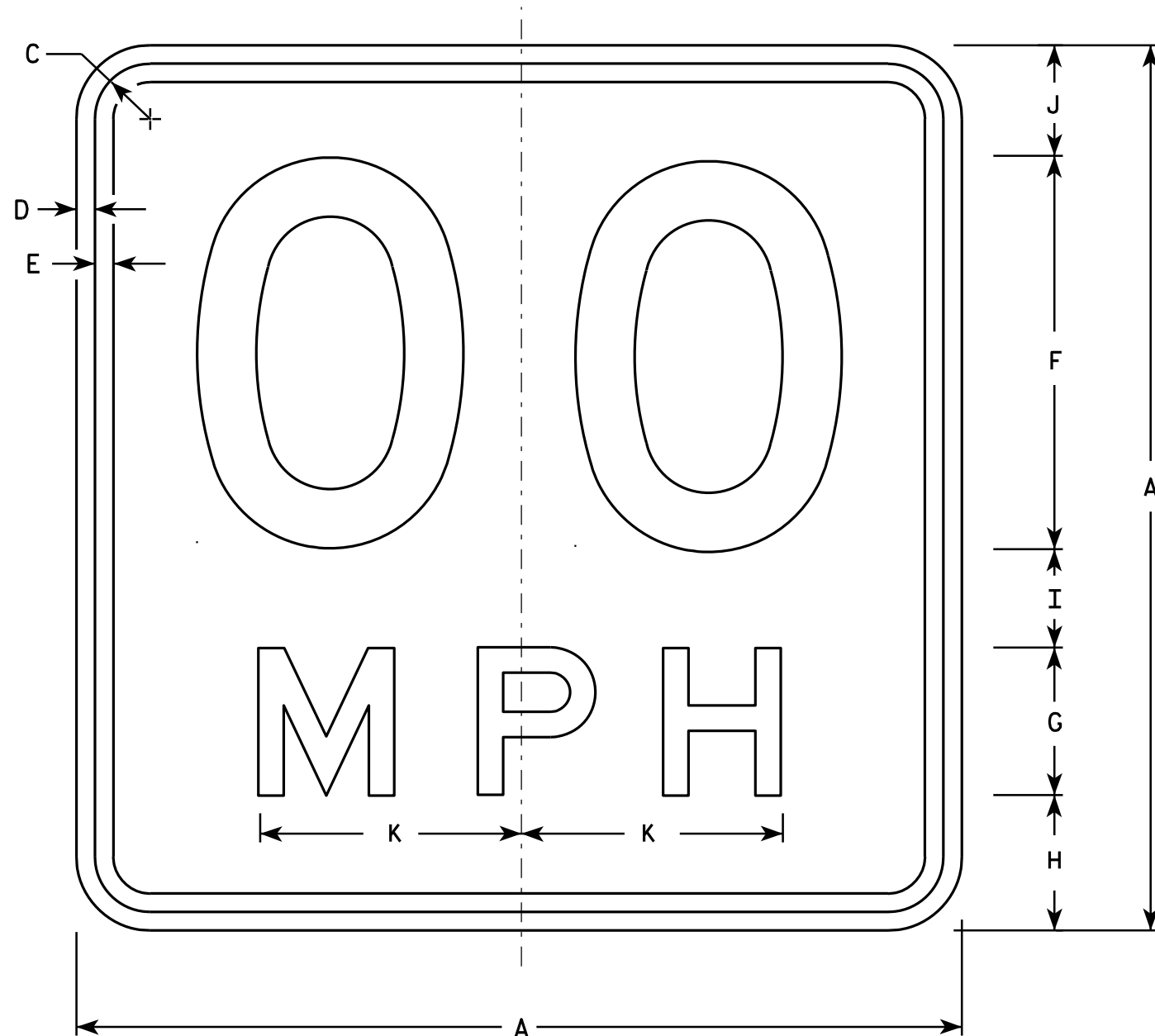
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN  
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

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



### NOTES

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

W13-1

- \* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.  
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. Ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

### STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

COUNTY:

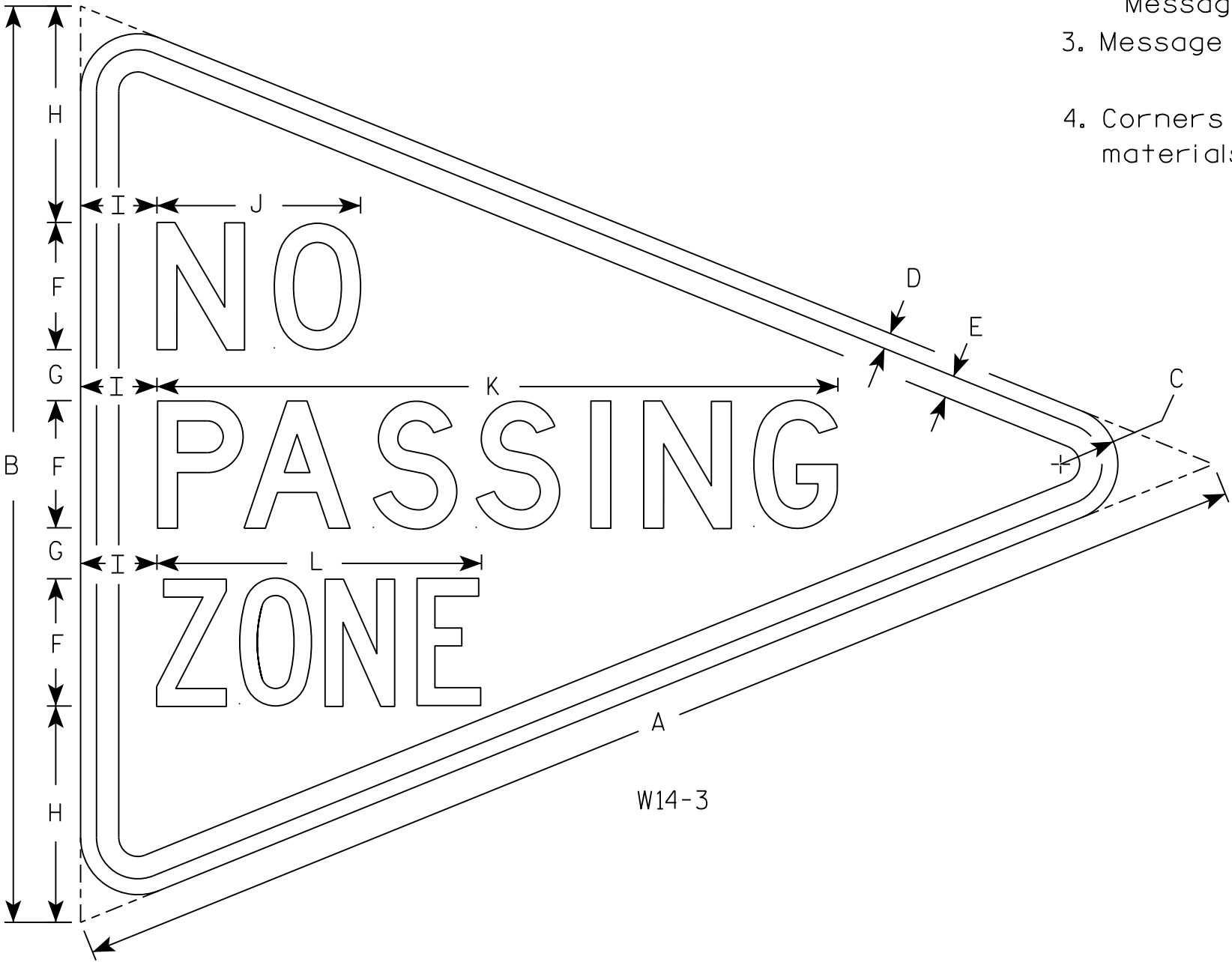
SHEET NO:

E



NOTES

- 1. Sign is Type II- Type F Reflective
- 2. Color:  
Background - Yellow  
Message - Black
- 3. Message Series - Lines 1 and 2 are Series D.  
Line 3 is series C.
- 4. Corners and borders shall be rounded on all base materials for this sign.



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															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN  
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10



## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions  
through innovation and exceptional service.

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