

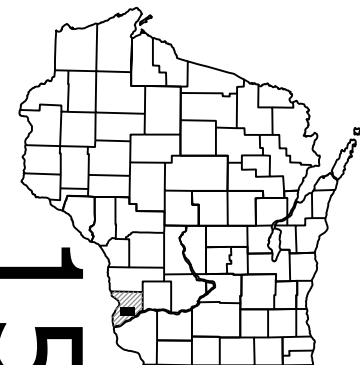
LAX MAY 2013
PROJECT ID: 5870-04-61
WITH:

COUNTY: CRAWFORD

ORDER OF SHEETS

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

TOTAL SHEETS = 134



DESIGN DESIGNATION

A.A.D.T. (2014)	=	610
A.A.D.T. (2034)	=	750
D.H.V.	=	6.4%
D.D.	=	60/40
T.	=	7.6%
DESIGN SPEED	=	
ESALS	=	102,200

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
REFERENCE LINE	
COMBUSTIBLE FLUIDS	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT

EASTMAN - STEUBEN

STH 27 TO STH 131

STH 179

CRAWFORD COUNTY

STATE PROJECT NUMBER
5870-04-61

EXCEPTION TO NET C/L LENGTH
STATION 271+44 TO STATION 272+09
B-12-0047 PINE CREEK BRIDGE

EXCEPTION TO NET C/L LENGTH
STATION 394+47 TO STATION 396+09
B-12-0363 KICKAPOO RIVER BRIDGE

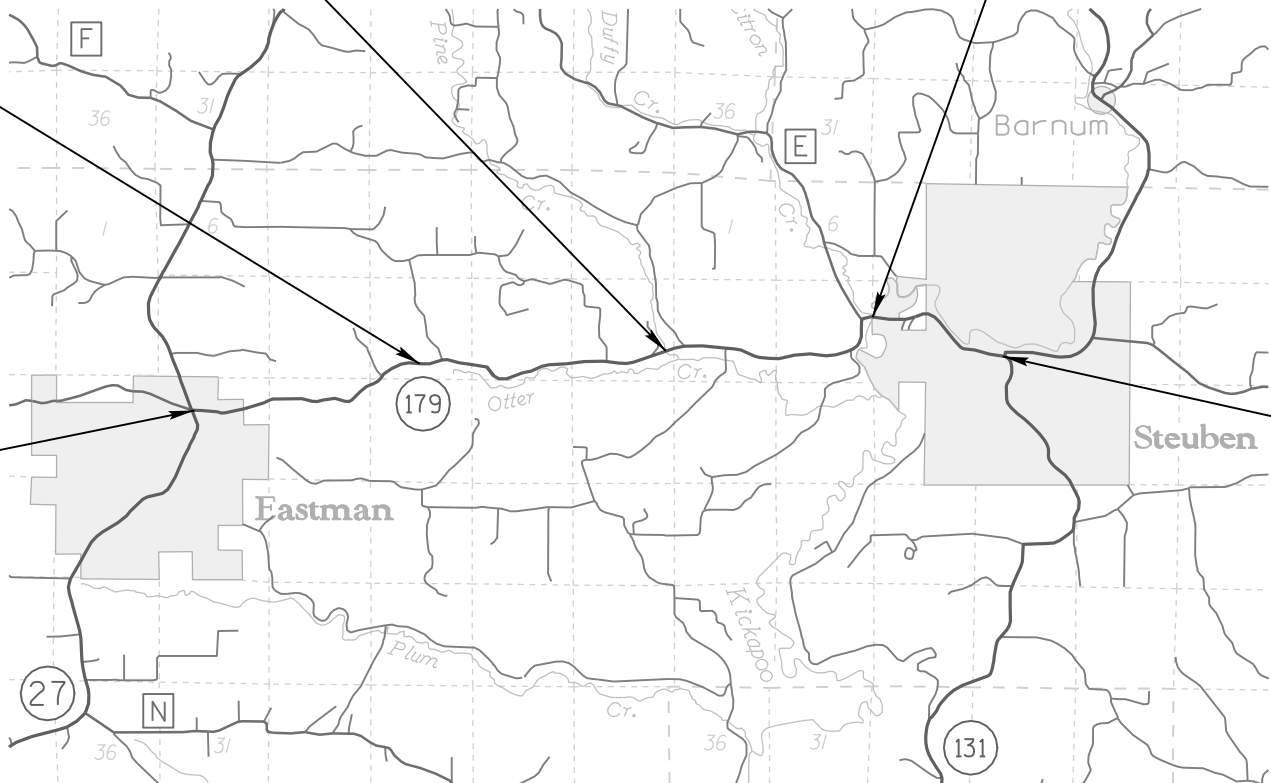
EXCEPTION TO NET C/L LENGTH
STATION 136+88 TO STATION 137+59
B-12-0024

BEGIN PROJECT 5870-04-61

STATION 9+45.34
X=352300.47
Y=165881.77

END PROJECT 5870-04-61

STATION 471+60.45
X=394388.88
Y=169157.38



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 8.696 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY
COORDINATE SYSTEM (WCCS), CRAWFORD COUNTY, NAD 83 (2007).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5870-04-61		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JAY P. ADAMS, RLS
Designer	JAY P. ADAMS, PE
Project Manager	TODD WALDO, PE
Regional Examiner	JEREMY F. KRACHEY, PE
Regional Supervisor	STEPHEN FLOTTMEYER, PE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 01/30/13

E

GENERAL NOTES

CURVE DATA IS BASED ON ARC DEFINITION.

COORDINATES SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 - 2007 ADJUSTMENT.

THERE ARE UTILITIES WITHIN THE PROJECT LIMITS WHICH ARE NOT SHOWN ON THE PLANS

ALL RADII ARE MEASURED TO EDGE OF PAVEMENT OR FLAG OF CURB UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

THE EXACT LOCATION OF PRIVATE AND FIELD ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES.

WHEN THE QUANTITY OF HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THE THICKNESS OF THE MATERIAL THAT IS SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

3.5 INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN TWO EQUAL LIFTS. A 1/2-INCH (12.5mm) NOMINAL AGGREGATE SIZE MIXTURE SHALL BE USED IN BOTH LIFTS.

THE RATE OF TACK COAT IS COMPUTED AT 0.025 GAL/SY.

CURB AND GUTTER WILL BE CONSTRUCTED AFTER THE 4-INCH BASE COURSE LIFT HAS BEEN PLACED. ALL CONSTRUCTION STAKING CURB AND GUTTER ELEVATIONS TO BE DETERMINED BASED ON GRADED ROADWAY CENTERLINE ELEVATION AND PROPOSED ROADWAY CROSS SLOPE. TRIMMING OF 2" TO 3" OF COMPACTED BASE COURSE CAN BE EXPECTED WHILE PLACING CURB AND GUTTER.

HMA PAVEMENT QUANTITY BASED ON THE UNIT DENSITY OF 112LB/SY/IN.

EXCAVATION BELOW SUBGRADE (EBS), IF REQUIRED, IS TO BE MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.

UTILITY COMPANIES & PERSONNEL

CENTURYLINK-Communication Line 333 N Front St P.O. Box 4800 LaCrosse, WI 54602 ATTN: Steve Blado PHONE: (608) 796-5543 steve.blado@centurytel.com	Scenic Rivers Energy Cooperative-Electricity 231 N Sheridan St Lancaster, WI 53813-1342 Attn:Daniel Stelpflug Phone:(608)723-2121 dstelpflug@srec.net
Alliant Energy-Electricity 4902 N Biltmore Lane Madison, WI 53718 Attn: Jason Hogan Phone: (608) 458-4871 jasonhogan@alliantenergy.com	Mediacom LLC Wisconsin-Communication Line 3033 Asbury Rd Dubuque, IA 52001 Attn:Tim Orcutt Phone:(608)326-0478 torcutt@mediacominc.com
Dairyland Cable Systems Inc.-Communication Line 1450 Veterans Dr Richland Center, WI 53581 Attn: Lonnie Freeman Phone:(800)677-6383 lonniewh@mhtc.net	Windstream KDL,Inc.-Communication Line 13935 Bishops Drive Brookfield, WI 53005 Attn:Jim Kostuch Phone:(262)792-7938 James.Kostuch@windstream.com
Madison Gas And Electric Company-Gas/Petroleum P.O. Box 1231 Madison, WI 53701-1231 Attn:Tim Statz Phone:(608)252-4727 tstatz@mge.com	Eastman Water Utility-Water P.O.Box 42 Eastman, WI 54626-0042

DOT CONTACT

Jay P. Adams
3550 Mormon Coulee Rd
La Crosse, WI 54601
Phone (608)498-0185
Jay.Adams@dot.wi.gov

DNR LIASON

Karen Kalvelage
3550 Mormon Coulee Rd
La Crosse, WI 54601
Phone (608)785-9115
Karen.Kalvelages@wi.gov

STANDARD ABBREVIATIONS

AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
D	CENTRAL ANGLE OR DELTA	V.P.I.	VERTICAL POINT OF INTERSECTION
C.M.C.P.	CORRUGATED METAL CULVERT PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE	R/L	REFERENCE LINE
C.Y.	CUBIC YARD	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL., ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L.	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT(FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST



Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

STATE PROJECT NO: 5870-04-61

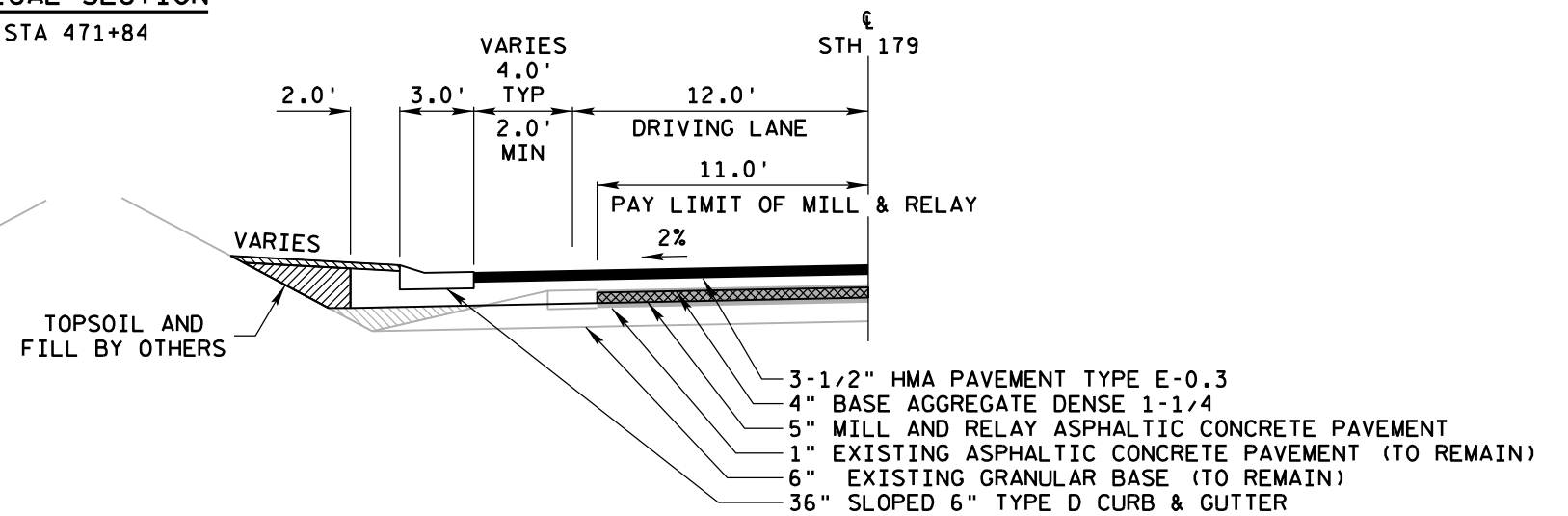
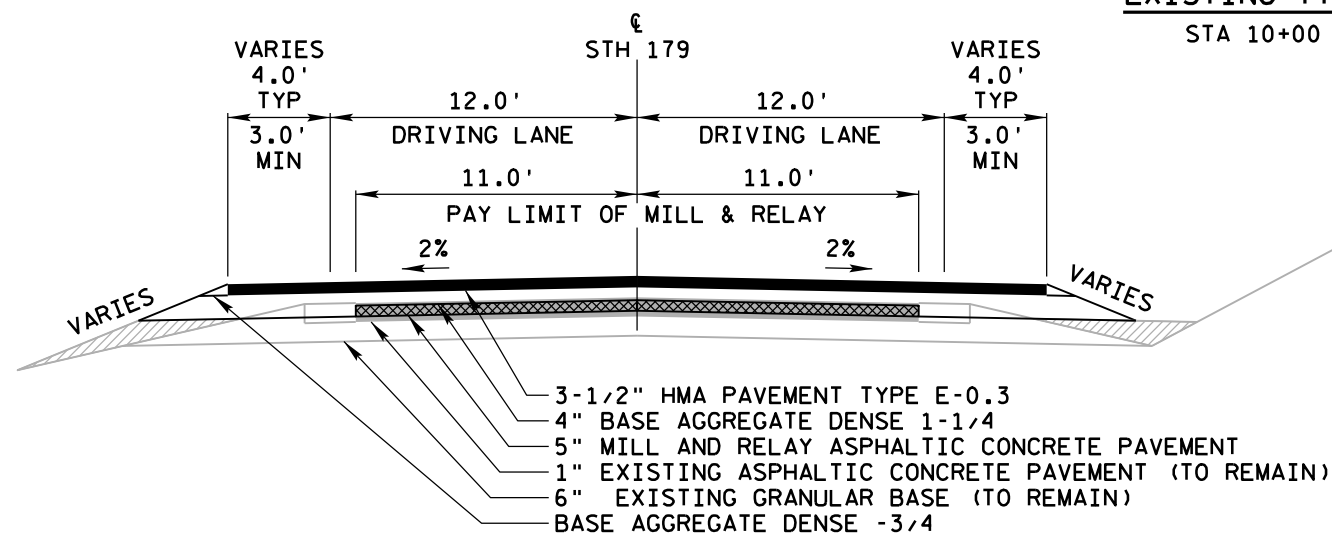
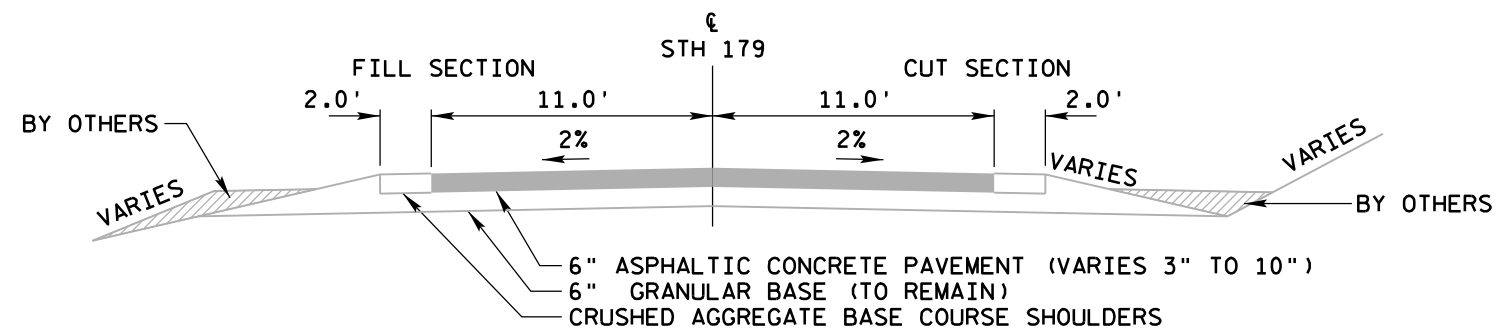
HWY: STH 179

COUNTY: CRAWFORD

GENERAL NOTES

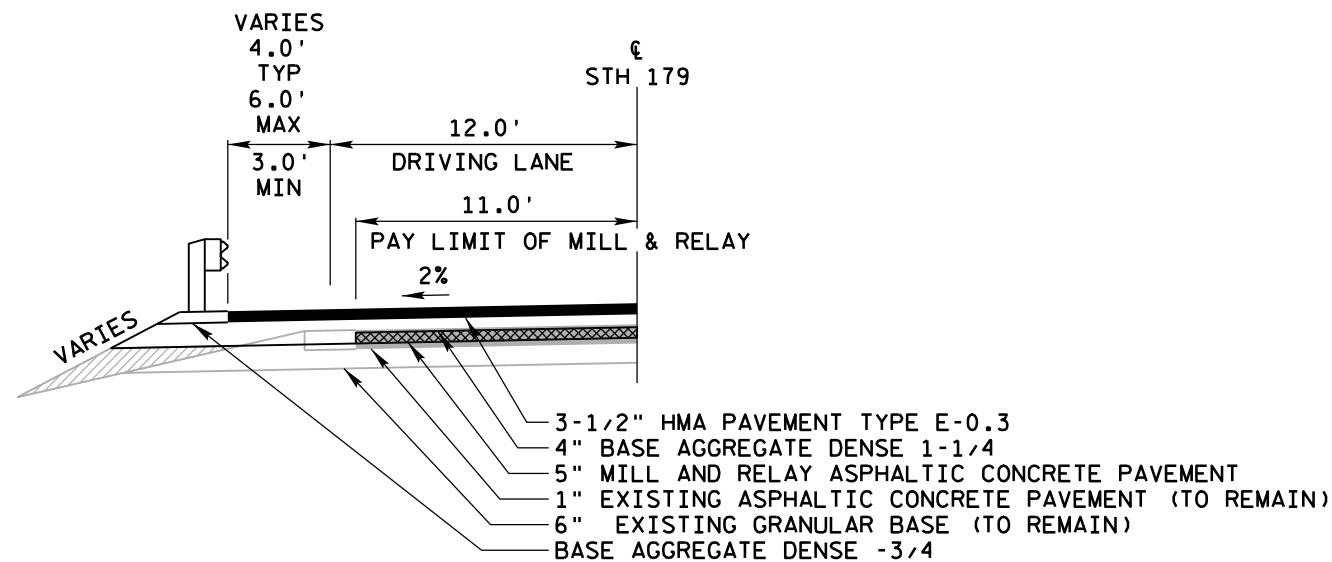
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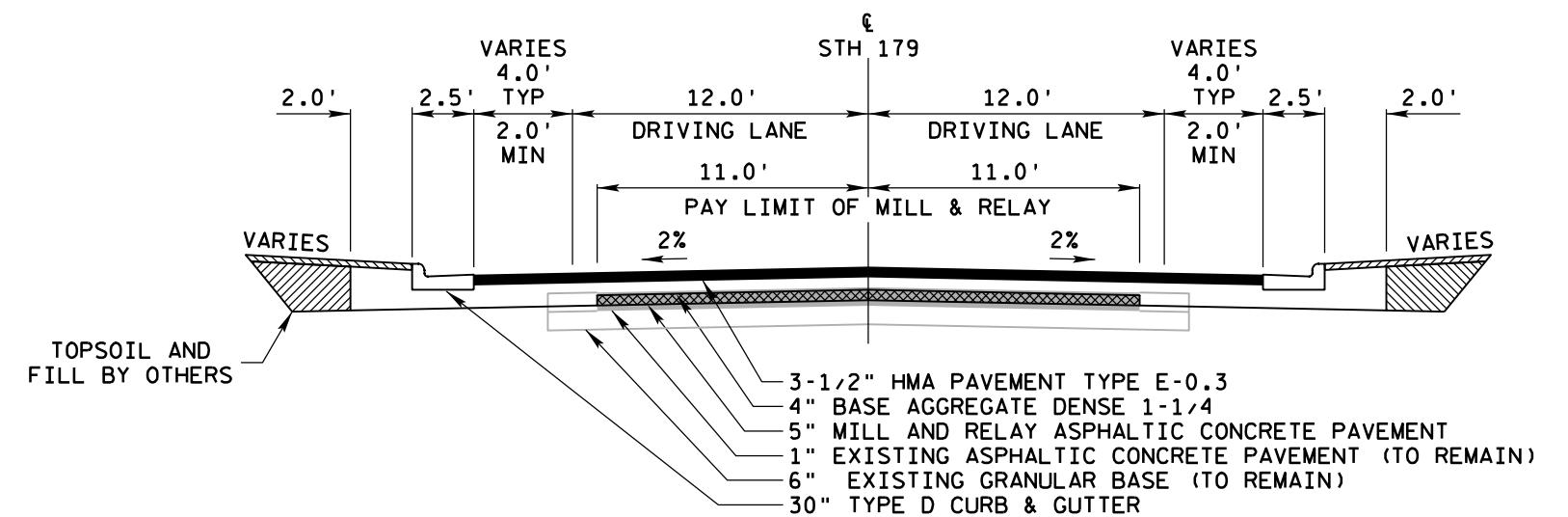


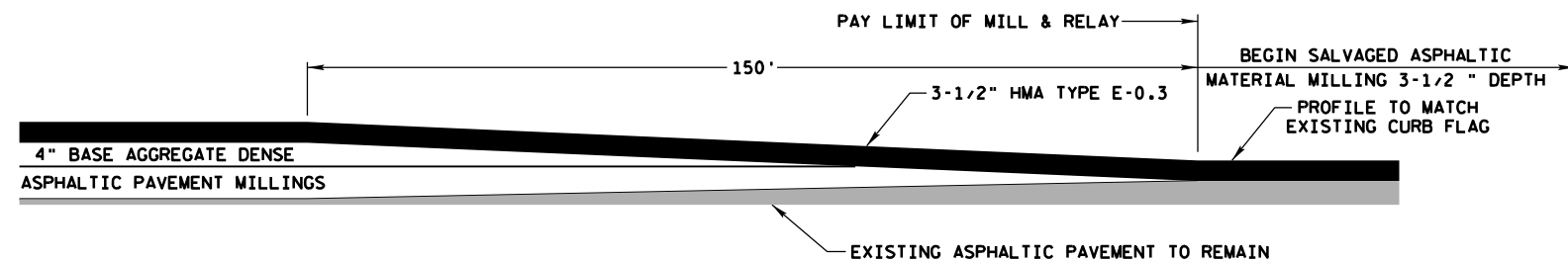
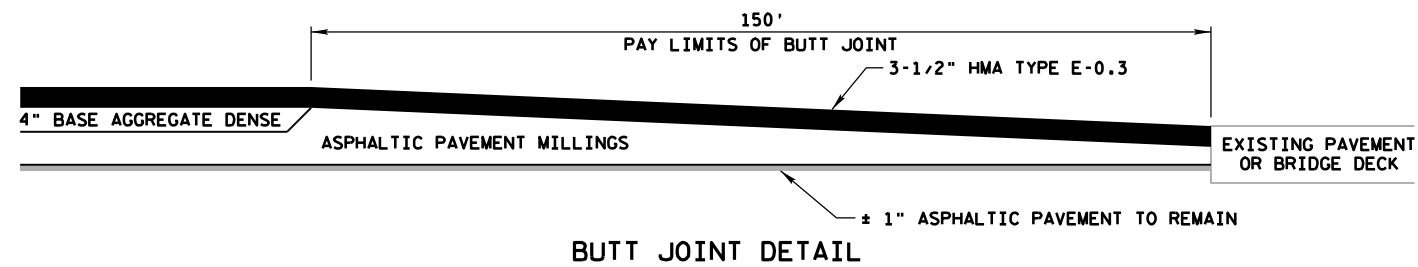
PROPOSED RURAL TYPICAL HALF SECTION WITH CURB & GUTTER

STA 9+45	-	STA 15+26	STA 242+73	-	STA 263+18
STA 15+94	-	STA 19+85	STA 281+81	-	STA 288+34
STA 22+75	-	STA 75+98	STA 291+70	-	STA 302+20
STA 82+50	-	STA 104+52	STA 304+34	-	STA 308+21
STA 8'G'+50	-	STA 9'G'+50	STA 312+22	-	STA 254+23
STA 108+38	-	STA 129+91	STA 360+00	-	STA 370+39
STA 154+89	-	STA 169+72	STA 371+78	-	STA 389+48
STA 173+60	-	STA 214+93	STA 411+85	-	STA 416+29
STA 225+45	-	STA 237+24	STA 419+34	-	STA 465+09

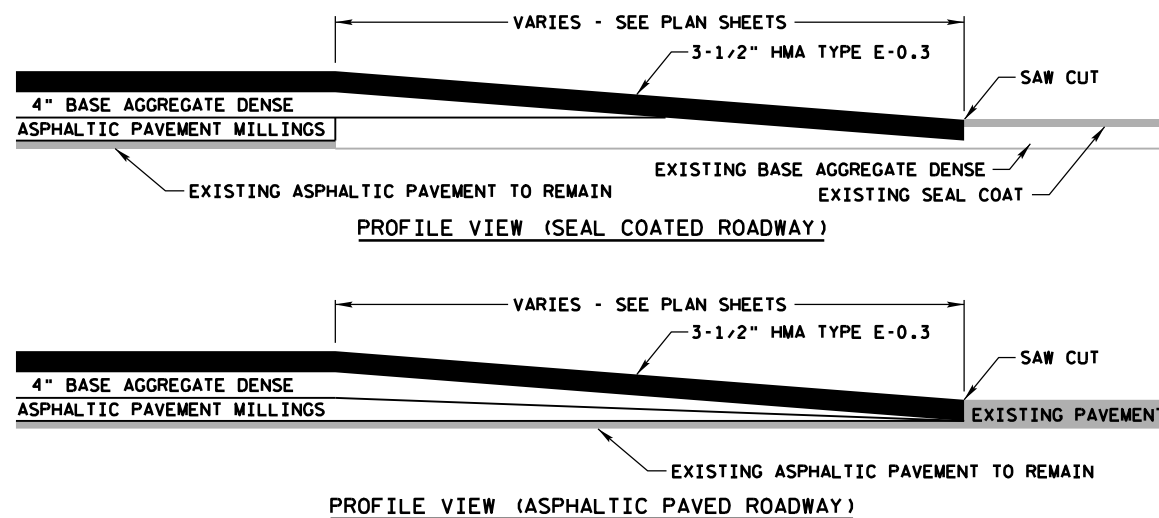
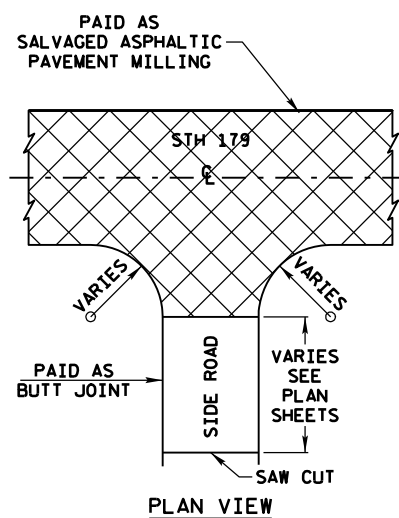


STA 18+12	-	STA 50+00	STA 370+75	-	STA 375+00
STA 71+75	-	STA 79+50	STA 390+00	-	STA 394+00
STA 86+37	-	STA 103+25	STA 417+12	-	STA 421+37
STA 214+50	-	STA 217+25	STA 426+00	-	STA 431+25
STA 219+75	-	STA 221+25	STA 447+62	-	STA 464+62
STA 270+42	-	STA 273+12			

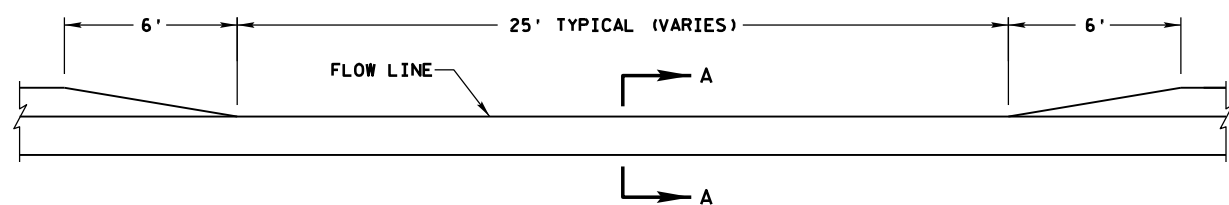




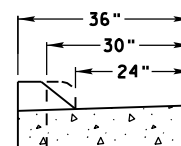
STATION 146+00, STATION 154+89, STATION 169+42, STATION 174+03



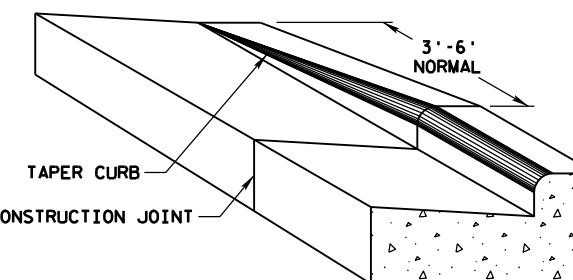
SIDE ROAD BUTT JOINT DETAIL



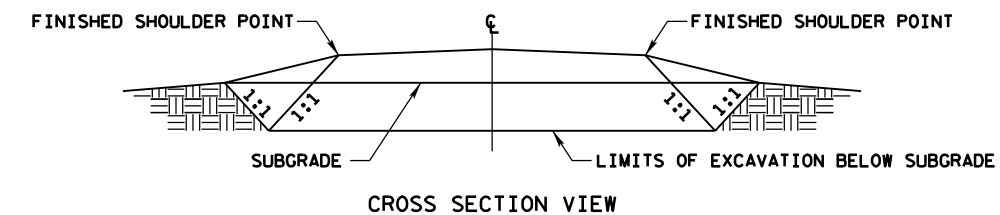
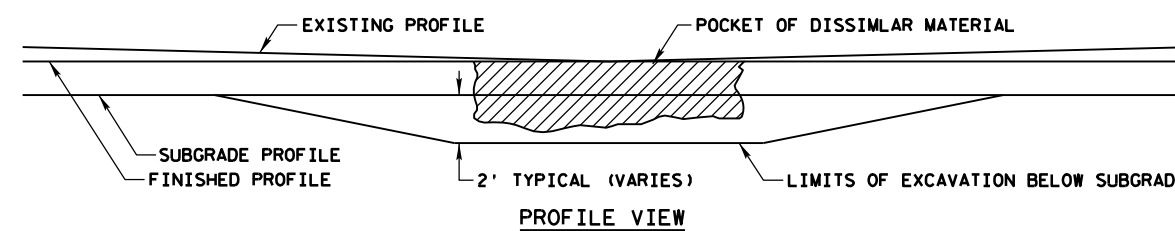
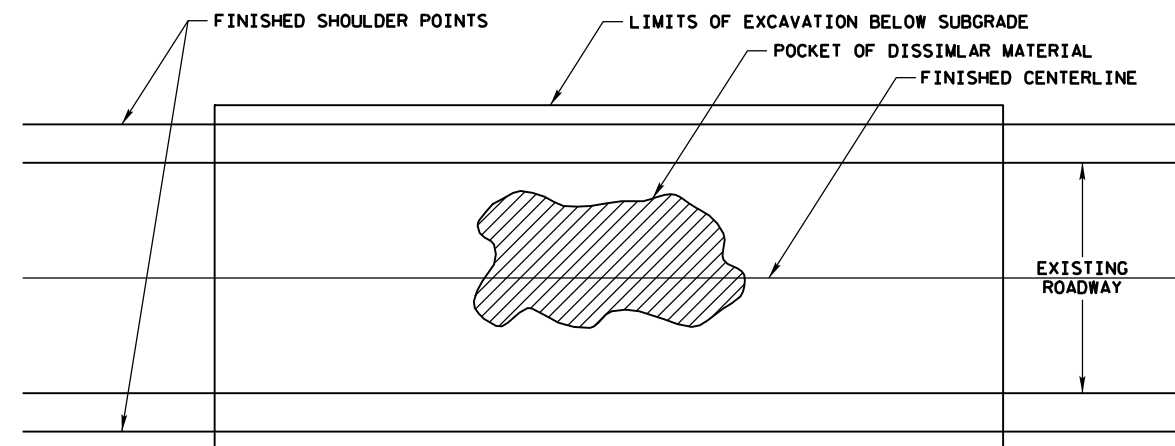
CURB OPENING AT ENTRANCES DETAIL



SECTION AA

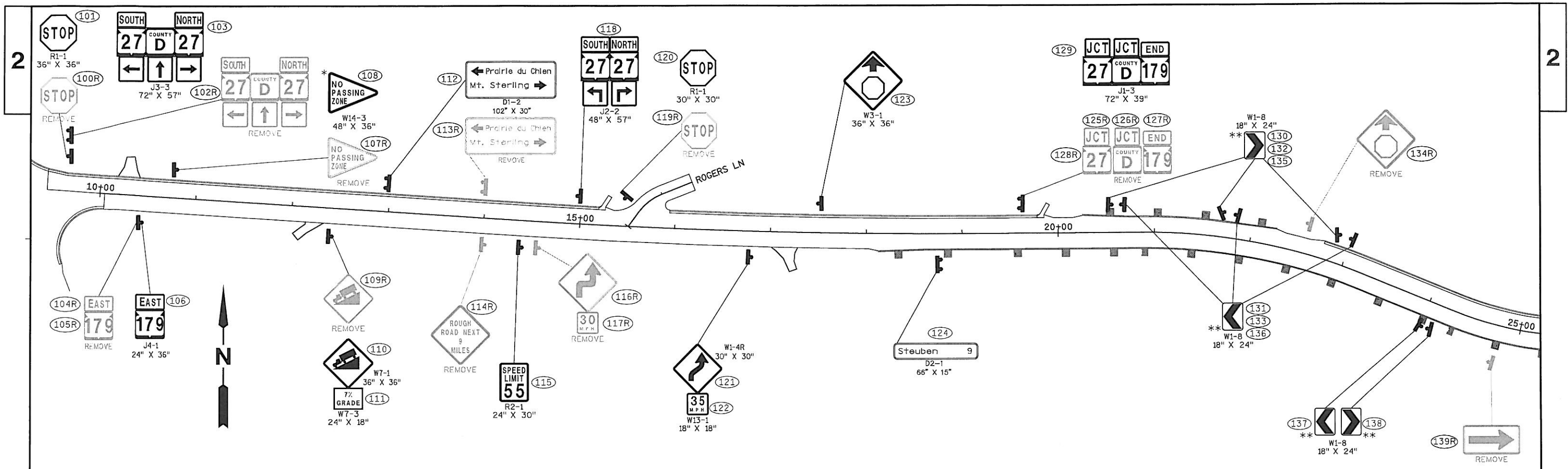


CURB & GUTTER TERMINATION DETAIL



EXCAVATION BELOW SUBGRADE (EBS)

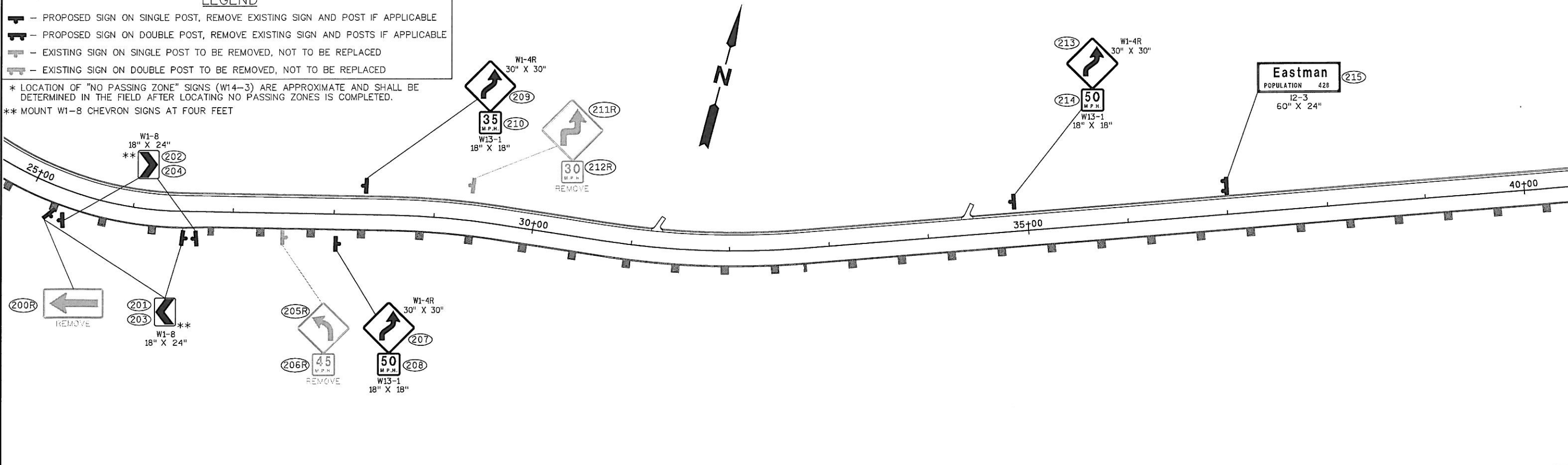
1. EXACT LOCATION OF EBS (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. EBS SHALL BE PAID FOR AS COMMON EXCAVATION. SELECT CRUSHED MATERIAL SHALL BE PLACED AS BACKFILL AND PAID FOR AS SELECT CRUSHED MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTILL EBS IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.
4. EBS MATERIAL SHALL NOT BE USED FOR THE CONSTRUCTION OF THE REMAINING SUBBASE. EBS MATERIAL CAN BE UTILIZED ON THE JOB SITE ONLY IF IT IS BANKED OUTSIDE OF THE SHOULDER SUBGRADE LIMITS AT A MAXIMUM SLOPE OF 1:1.



LEGEND

- PROPOSED SIGN ON SINGLE POST, REMOVE EXISTING SIGN AND POST IF APPLICABLE
- PROPOSED SIGN ON DOUBLE POST, REMOVE EXISTING SIGN AND POSTS IF APPLICABLE
- EXISTING SIGN ON SINGLE POST TO BE REMOVED, NOT TO BE REPLACED
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* LOCATION OF "NO PASSING ZONE" SIGNS (W14-3) ARE APPROXIMATE AND SHALL BE DETERMINED IN THE FIELD AFTER LOCATING NO PASSING ZONES IS COMPLETED.
 ** MOUNT W1-8 CHEVRON SIGNS AT FOUR FEET



PROJECT NO: 5870-04-61

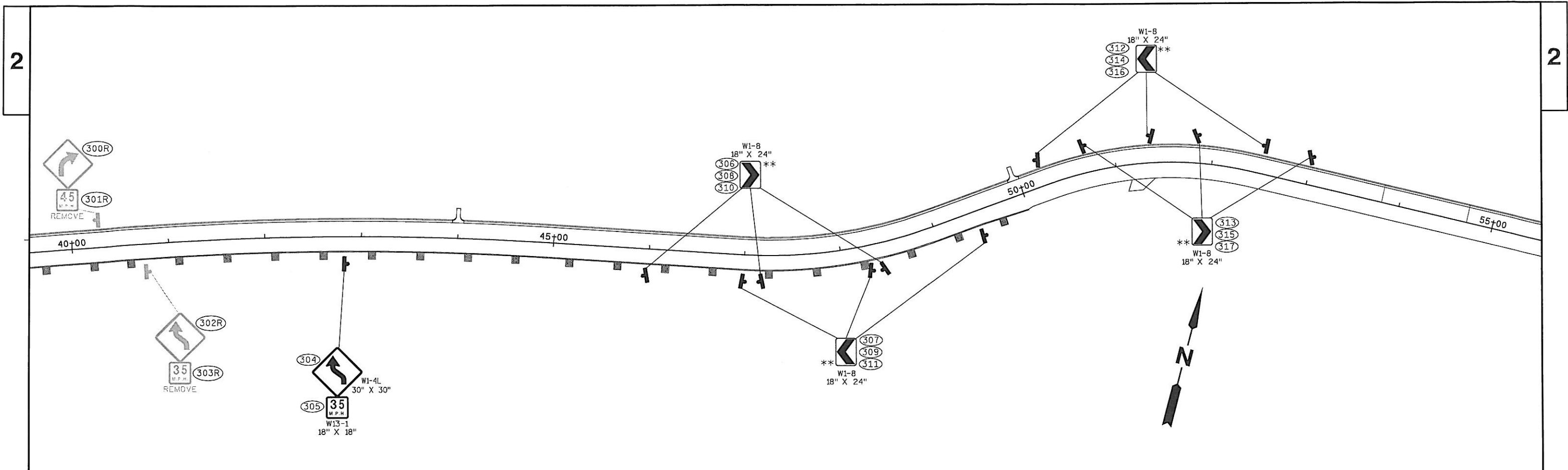
HWY: STH 179

COUNTY: CRAWFORD

PERMANENT SIGNING

SHEET

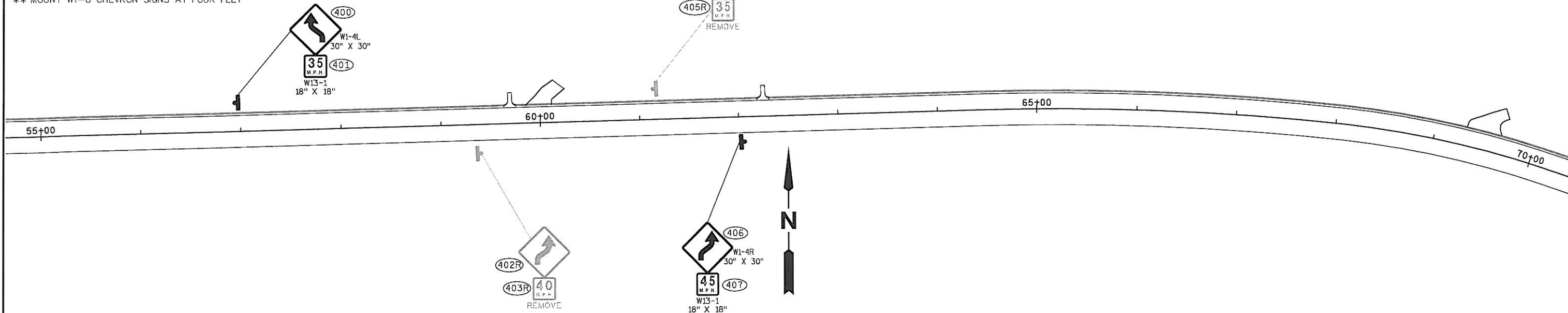
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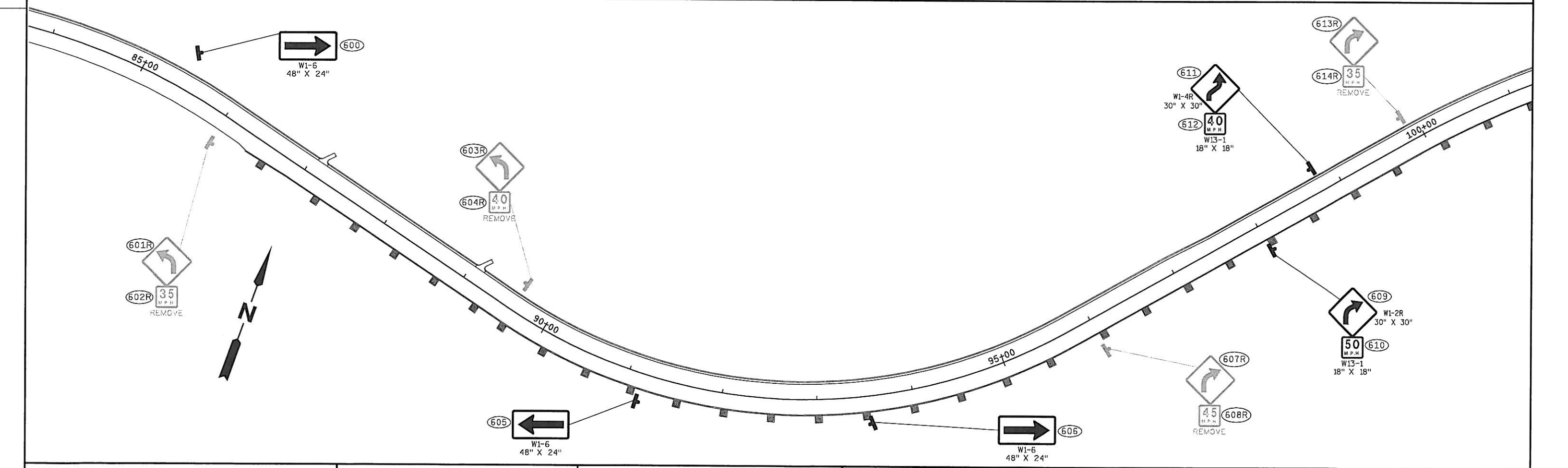
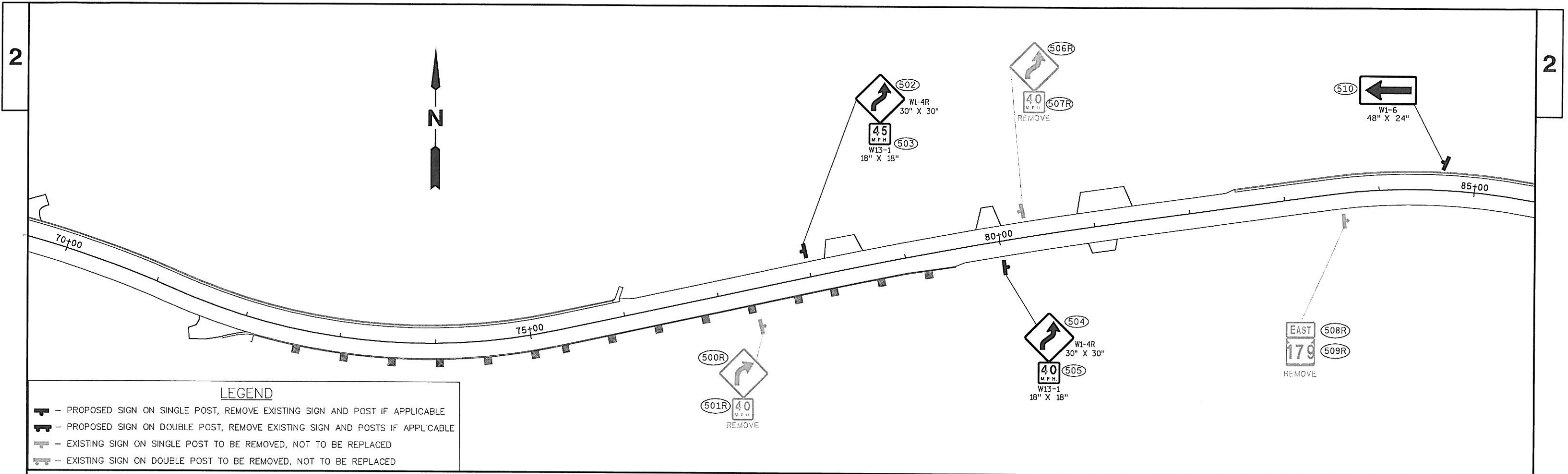


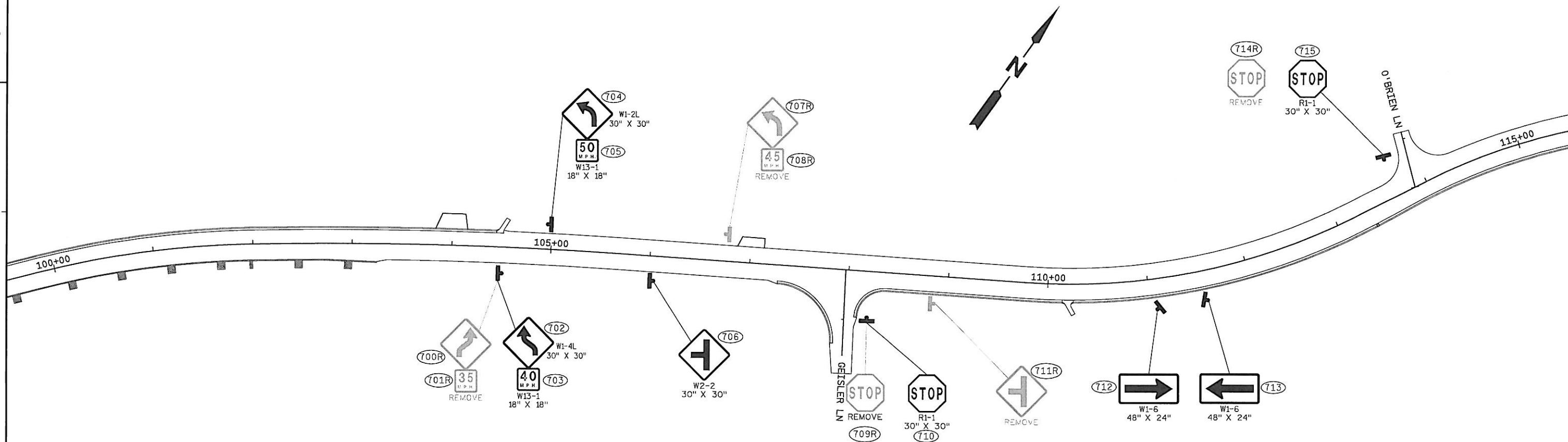
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** MOUNT W1-8 CHEVRON SIGNS AT FOUR FEET

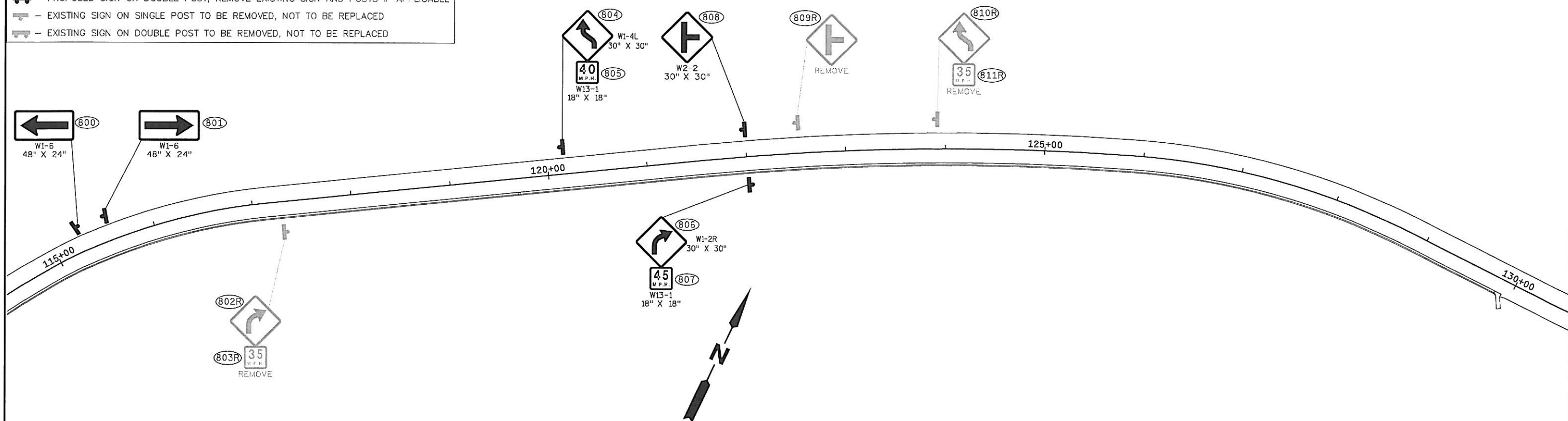


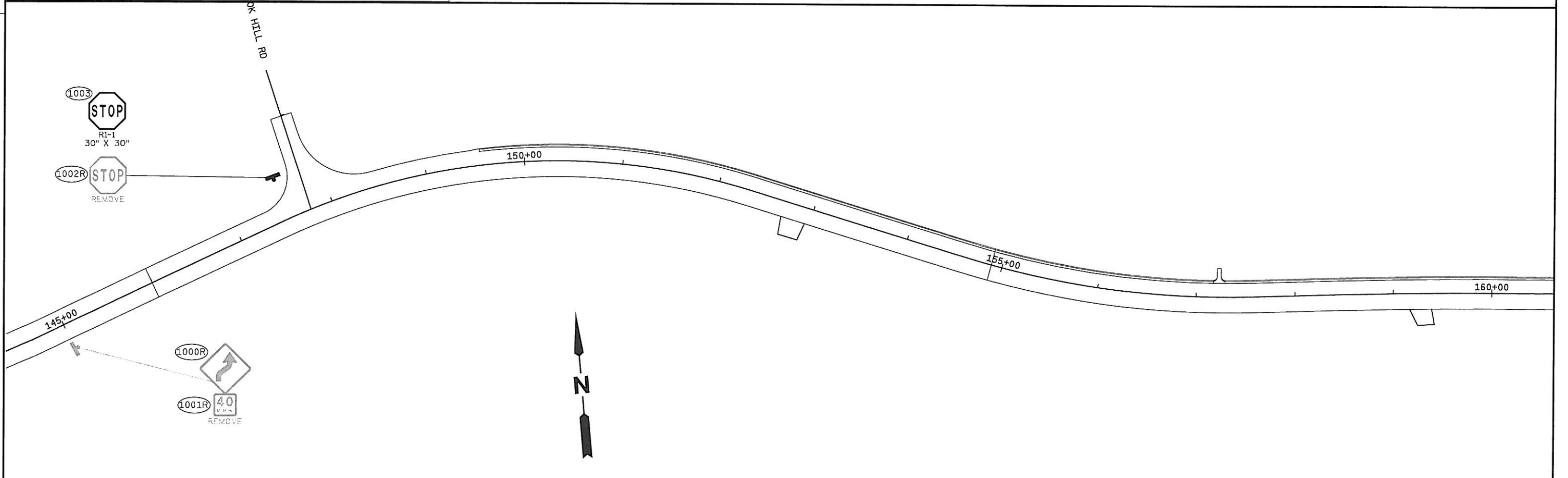
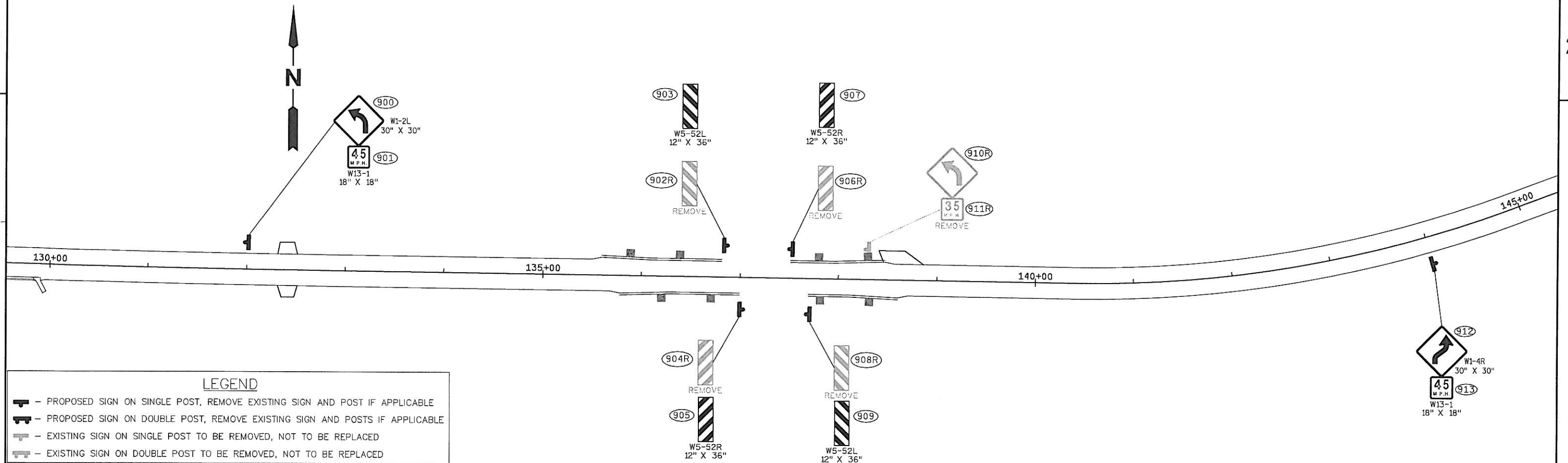


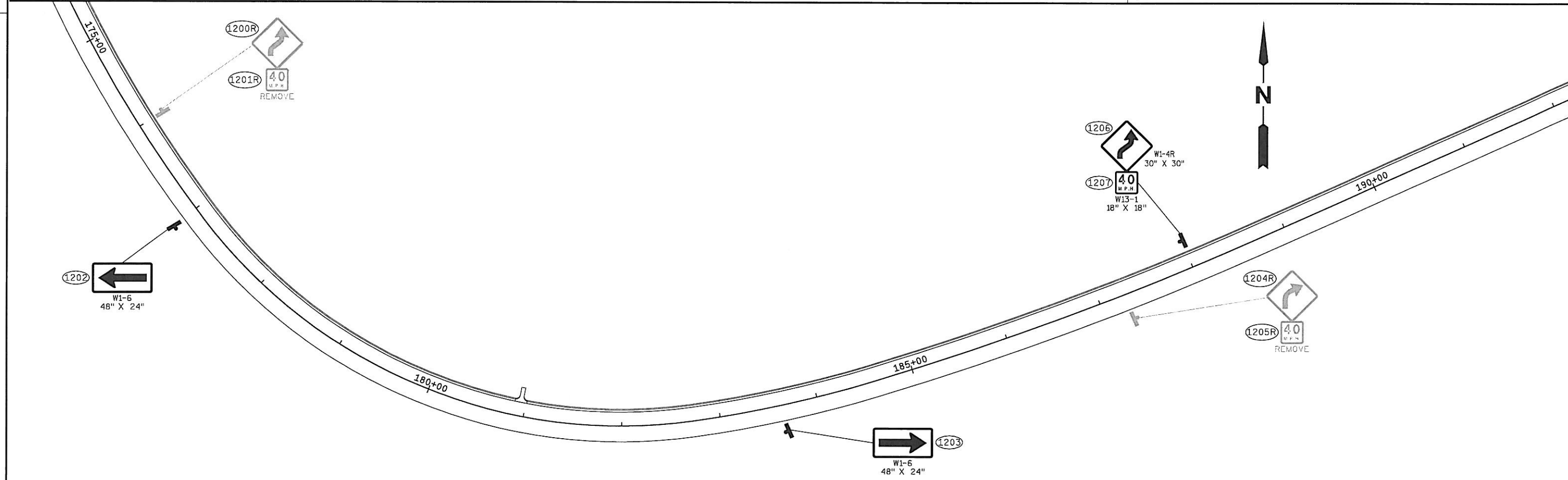
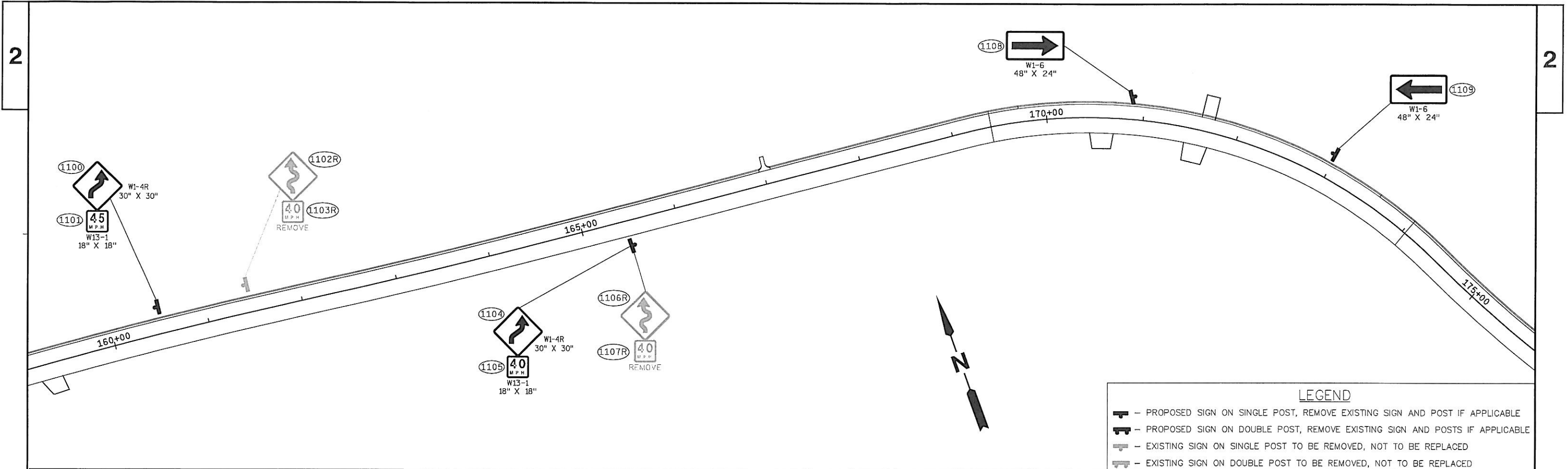


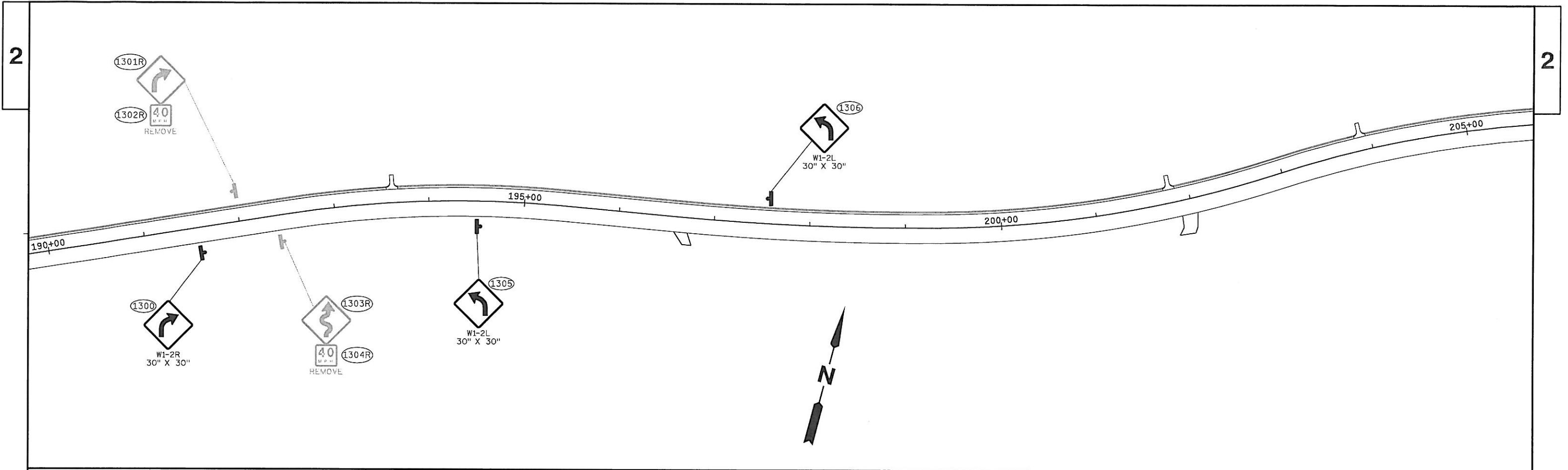
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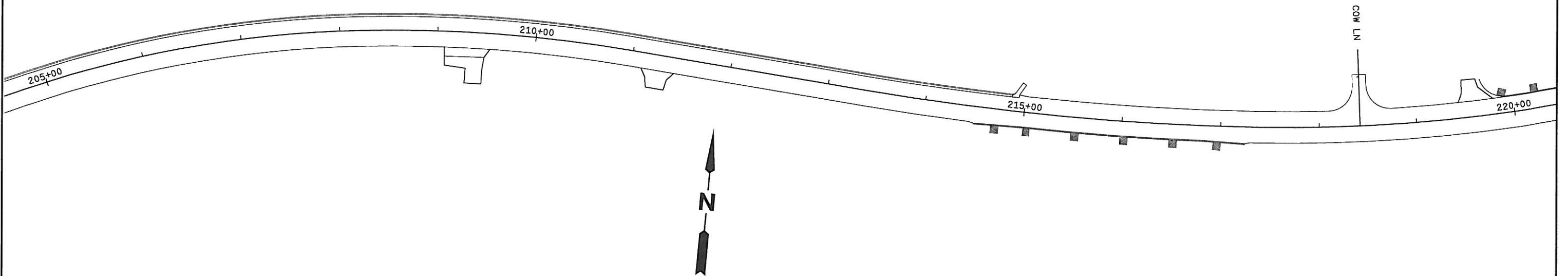






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PROJECT NO:5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

PERMANENT SIGNING

SHEET

E

FILE NAME : 023213.ps.dgn

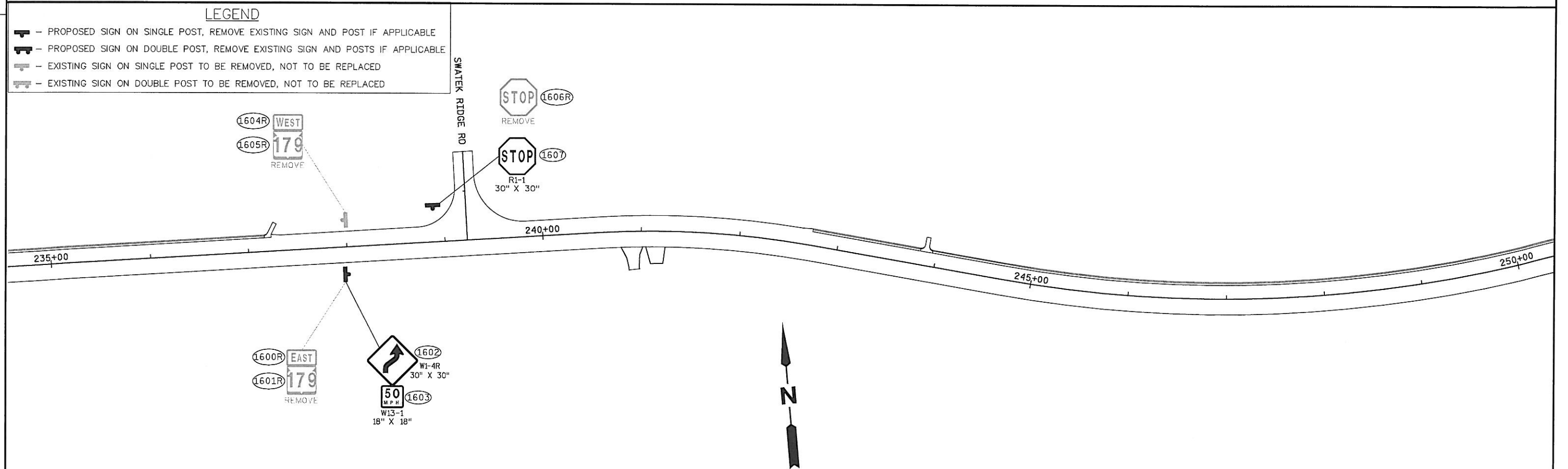
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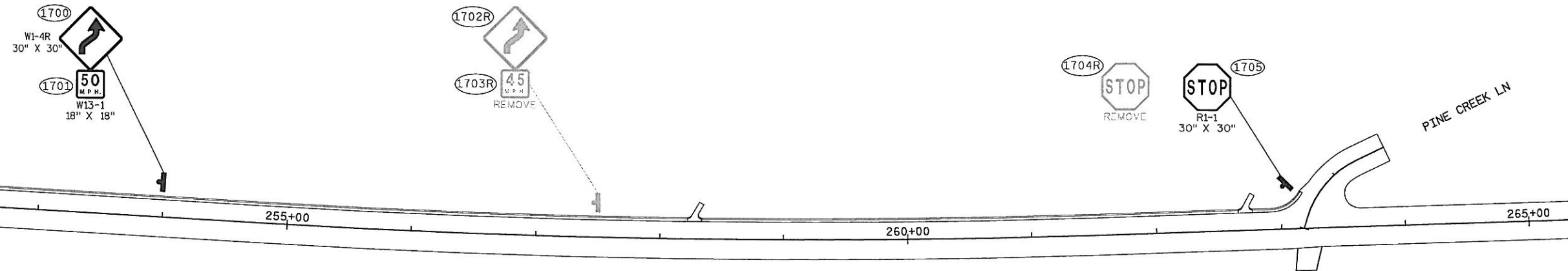
PLOT BY : tstrine

PLOT NAME :

PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDs SHEET 42

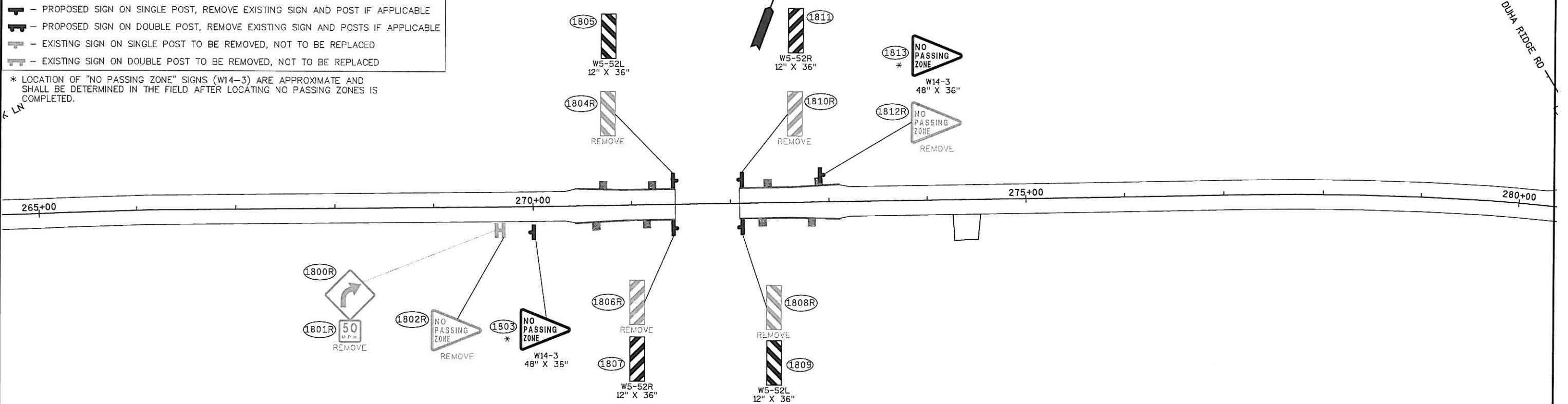


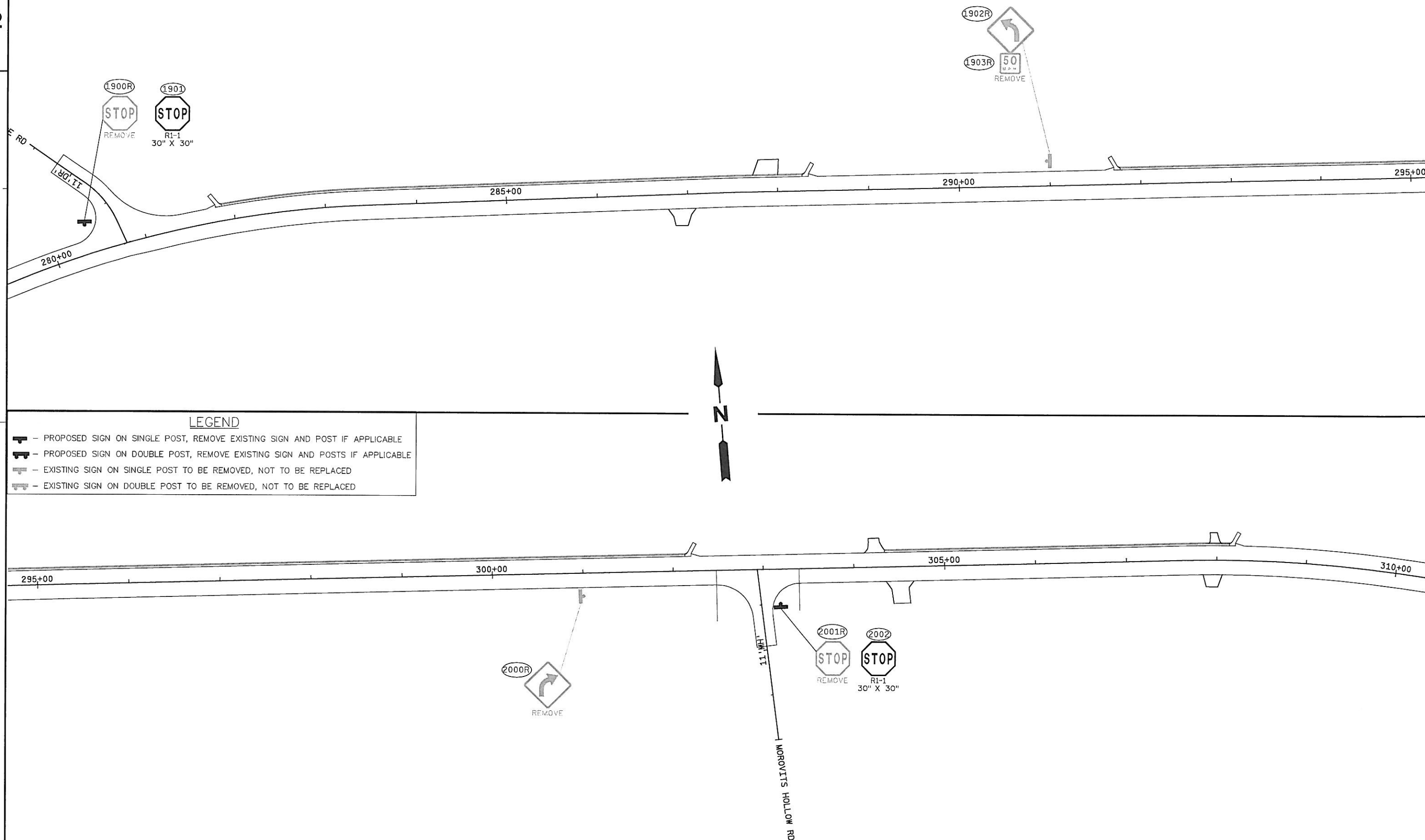
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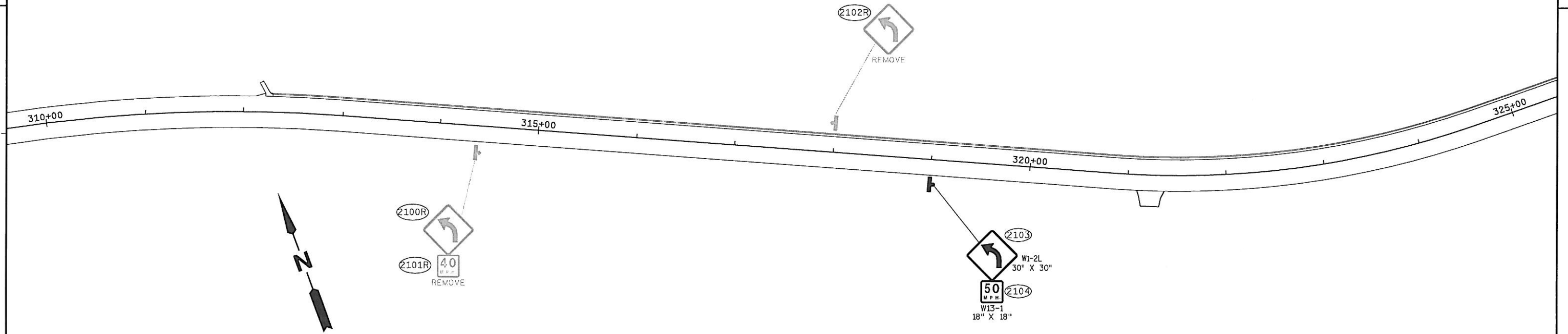
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* LOCATION OF "NO PASSING ZONE" SIGNS (W14-3) ARE APPROXIMATE AND SHALL BE DETERMINED IN THE FIELD AFTER LOCATING NO PASSING ZONES IS COMPLETED.

K LN

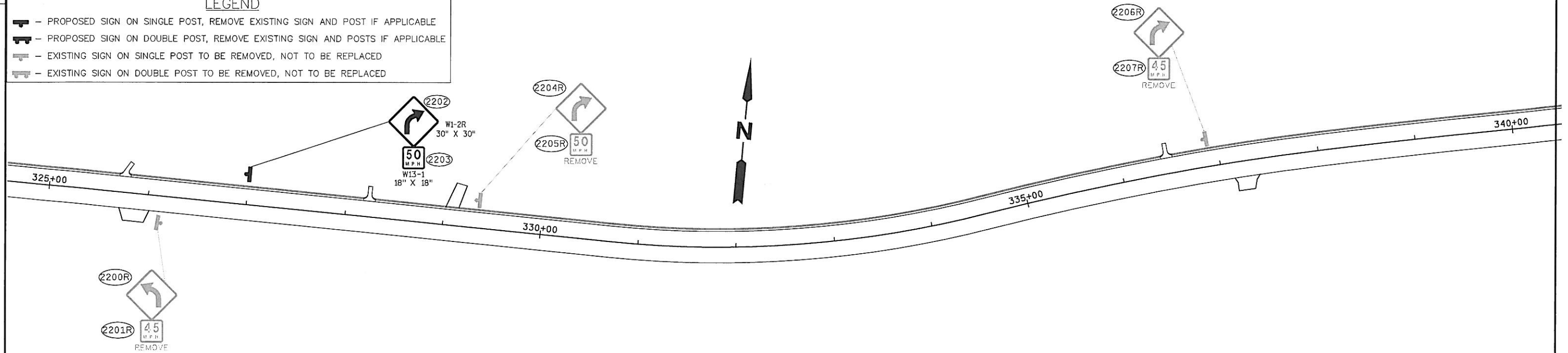


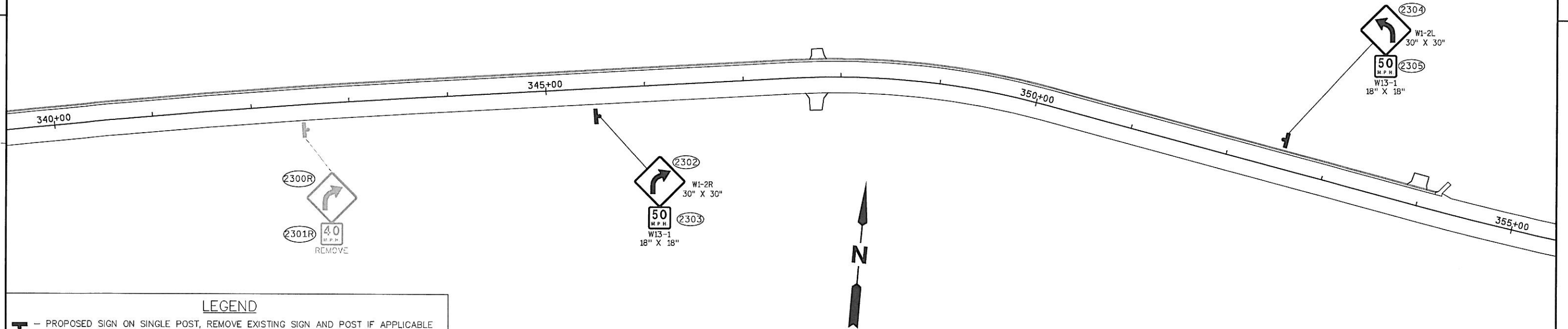




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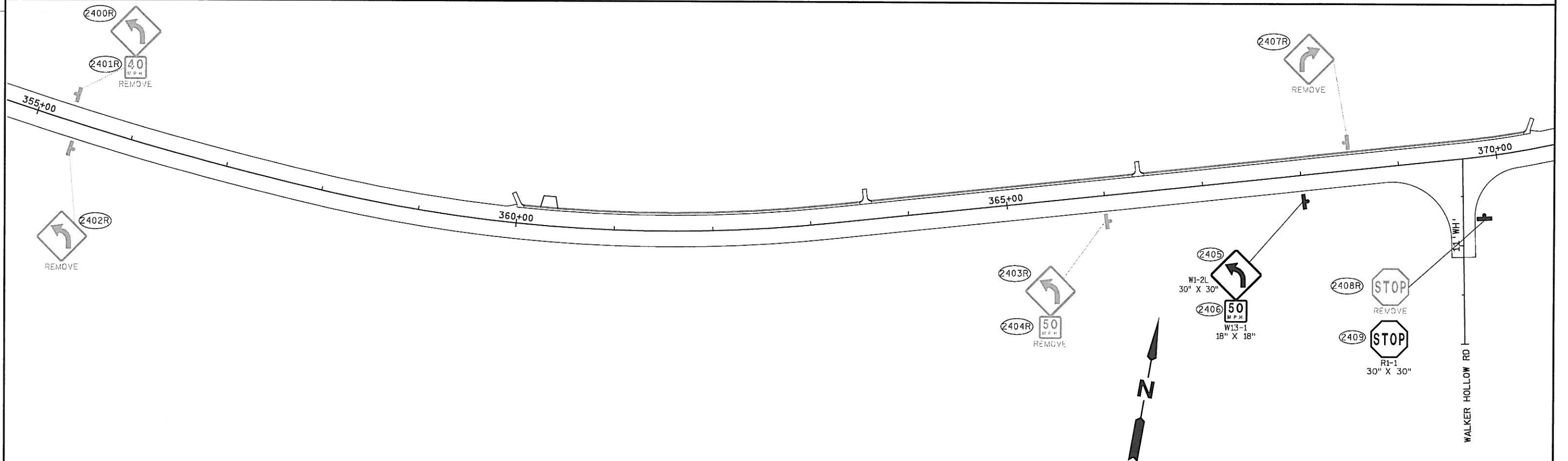
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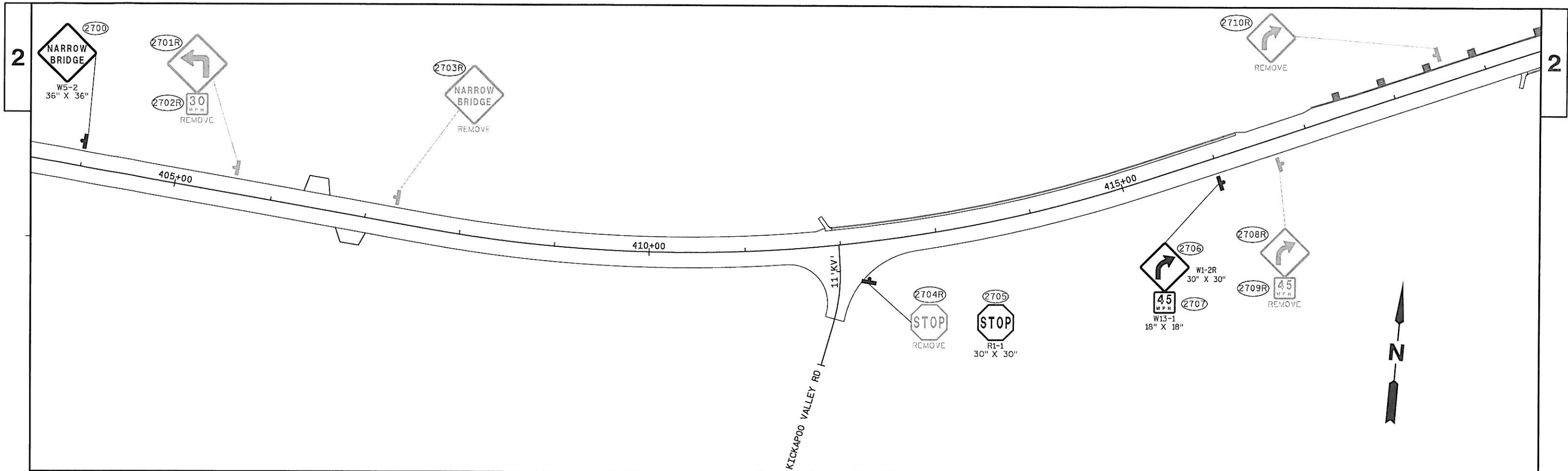




LEGEND

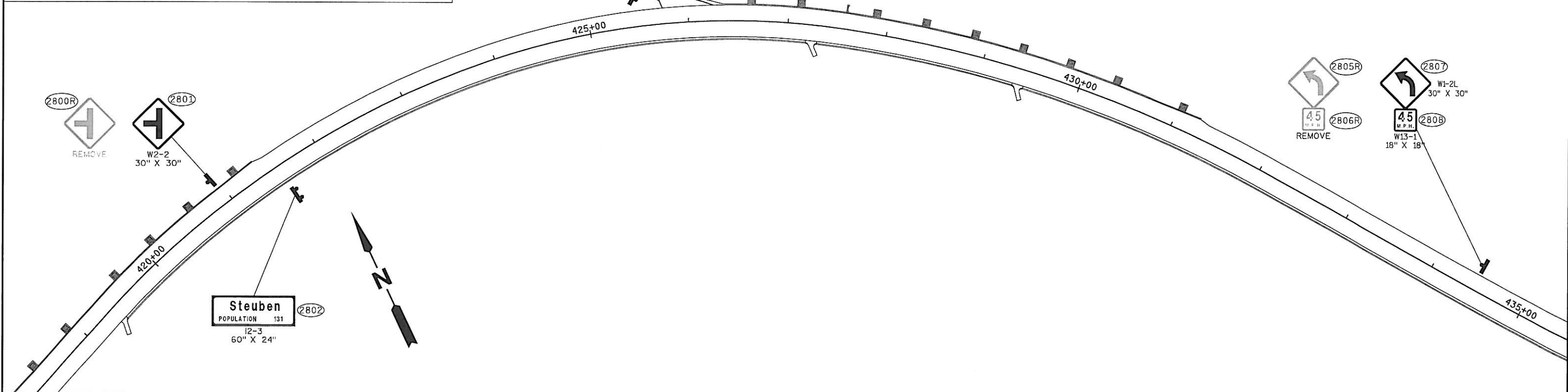
- PROPOSED SIGN ON SINGLE POST, REMOVE EXISTING SIGN AND POST IF APPLICABLE
- PROPOSED SIGN ON DOUBLE POST, REMOVE EXISTING SIGN AND POSTS IF APPLICABLE
- EXISTING SIGN ON SINGLE POST TO BE REMOVED, NOT TO BE REPLACED
- EXISTING SIGN ON DOUBLE POST TO BE REMOVED, NOT TO BE REPLACED



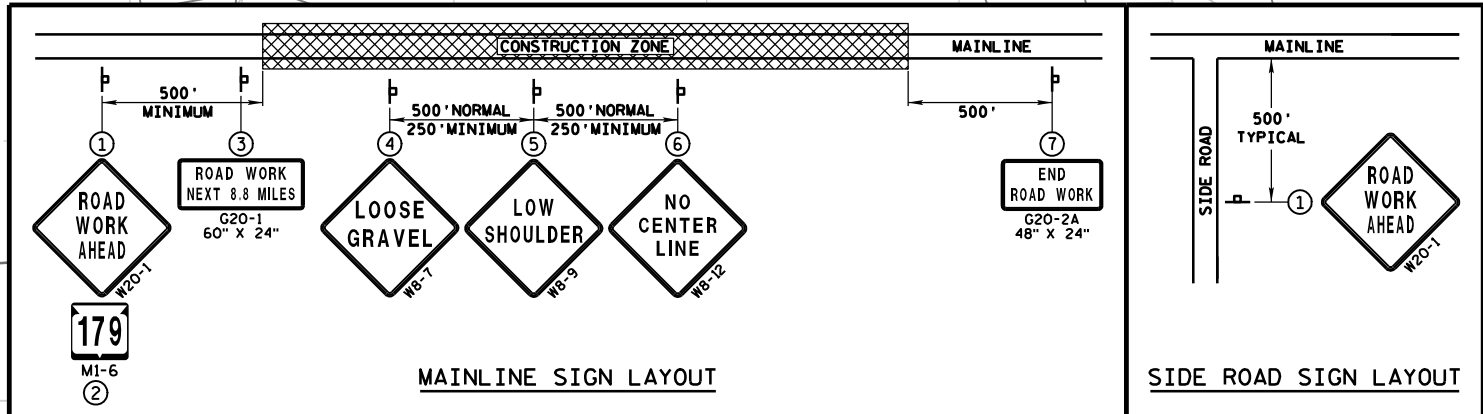


LEGEND

- PROPOSED SIGN ON SINGLE POST, REMOVE EXISTING SIGN AND POST IF APPLICABLE
- PROPOSED SIGN ON DOUBLE POST, REMOVE EXISTING SIGN AND POSTS IF APPLICABLE
- EXISTING SIGN ON SINGLE POST TO BE REMOVED, NOT TO BE REPLACED
- EXISTING SIGN ON DOUBLE POST TO BE REMOVED, NOT TO BE REPLACED







PI= 10+R'+34.92
Y = 165870.85
X = 352925.43
DELTA = 32°02'18"
D = 104°10'27"
T = 15.79
L = 30.75
R = 55.00

PI= 22+07.08
Y = 165836.33
X = 353560.82
DELTA = 22°22'47"
D = 9°24'20"
T = 120.51
L = 237.94
R = 609.17
SE = 6.0%

PI= 29+11.39
Y = 165799.44
X = 354239.90
DELTA = 7°50'14"
D = 7°04'35"
T = 55.46
L = 110.75
R = 809.68
SE = 6.0%

PC: 40+30.51
X=355328.60
Y=16119.27

BP: 9+45.34
X=352300.47
Y=165881.77

PC: 10'R'+19.13
X=352915.95
Y=165859.22

PT: 10'R'+49.88
X=353529.00.16
Y=165876.76.53

EB: 10'R'+84.32
X=353529.72.29
Y=165888.88.91

PC: 10'R'+19.13
X=352915.95
Y=165859.22

PT: 10'R'+49.88
X=353529.00.16
Y=165876.76.53

EB: 10'R'+84.32
X=353529.72.29
Y=165888.88.91

PT: 19+13.92
X=353267.67
Y=165834.89

PC: 20+86.57
X=353440.32
Y=165835.74

PT: 23+24.51
X=353672.48
Y=165791.00

PC: 24+28.51
X=353768.84
Y=165751.88

PC: 28+55.93
X=354186.05
Y=165786.15

PT: 29+66.68
X=354295.05
Y=165805.27

PC: 30+71.55
X=354399.34
Y=165816.28

PT: 32+12.19
X=354595.13
Y=165860.53

777.71'

N70°34'04"10"E

493.43'

S86°13'54.09"E

BP: 10'R'+00.00
X=352904.46
Y=165842.92

PI= 16+76.44
Y = 165833.72
X = 353030.00
DELTA = 4°03'01"
D = 0°51'09"
T = 237.68
L = 475.15
R = 6721.71
SE=2.1%

PI= 25+42.13
Y = 165709.13
X = 353874.11
DELTA = 35°57'56"
D = 16°22'05"
T = 113.62
L = 219.73
R = 350.04
SE = 6.0%

PT: 26+48.24
X=353984.42
Y=165736.37

PI= 31+72.63
Y = 165826.90
X = 354499.87
DELTA = 13°24'06"
D = 6°39'33"
T = 101.09
L = 201.25
R = 860.40
SE = 6.0%



PI= 42+71.01
Y = 166192.63
X = 355536.54
DELTA = 8°09'46"
D = 1°51'15"
T = 220.50
L = 440.25
R = 3090.14
SE = 3.8%

PC: 50+29.95
X=355216.86
Y=166429.80

PT: 48+98.55
X=355139.12
Y=166354.59

PC: 46+96.59
X=355954.65
Y=166275.94

PT: 50+29.95
X=355216.86
Y=166429.80

PT: 52+40.78
X=356444.30
Y=166494.78

1198.74'

N88°28'43.03"E

PC: 64+39.52
X=357642.62
Y=166526.60

PCC: 68+07.88
X=358010.33
Y=166510.53

PRC: 71+16.41
X=358306.66
Y=166429.10

205.83'

N78°43'50.40"E

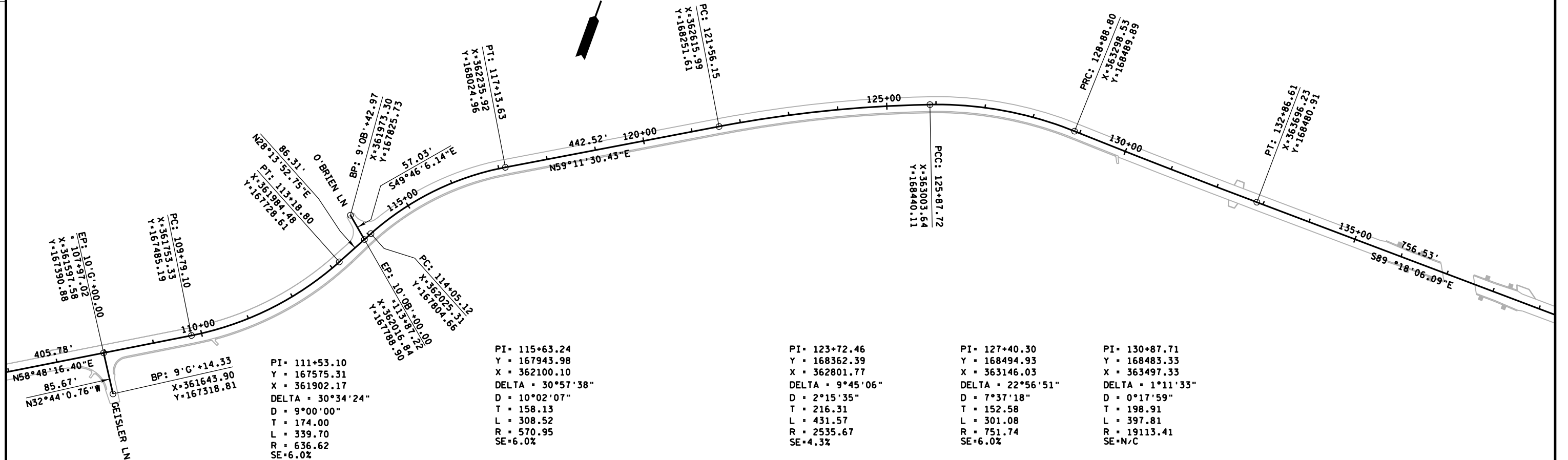
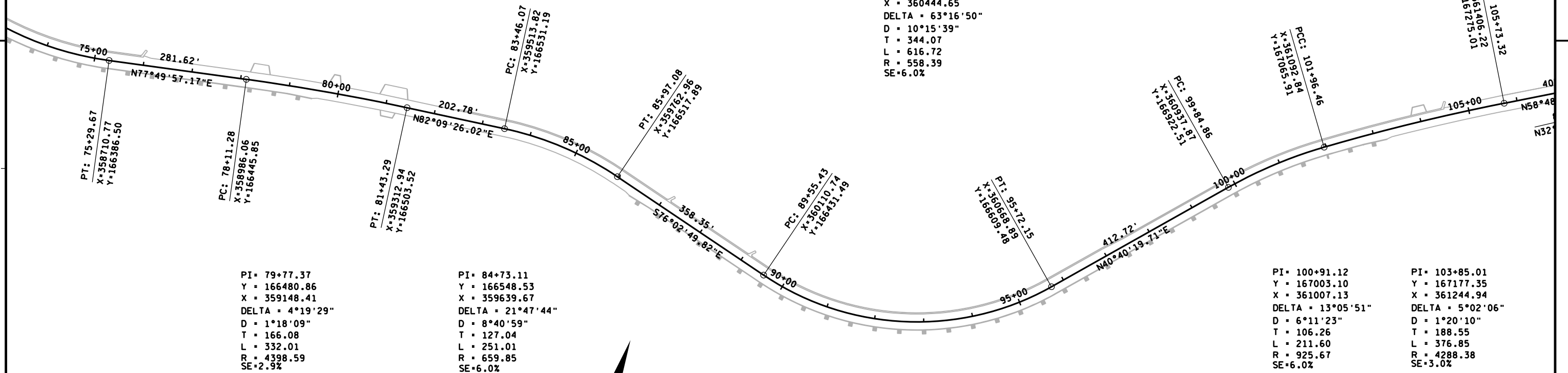
PI= 47+99.03
Y = 166295.96
X = 356055.11
DELTA = 23°38'40"
D = 11°42'26"
T = 102.44
L = 201.97
R = 489.41
SE=6.0%

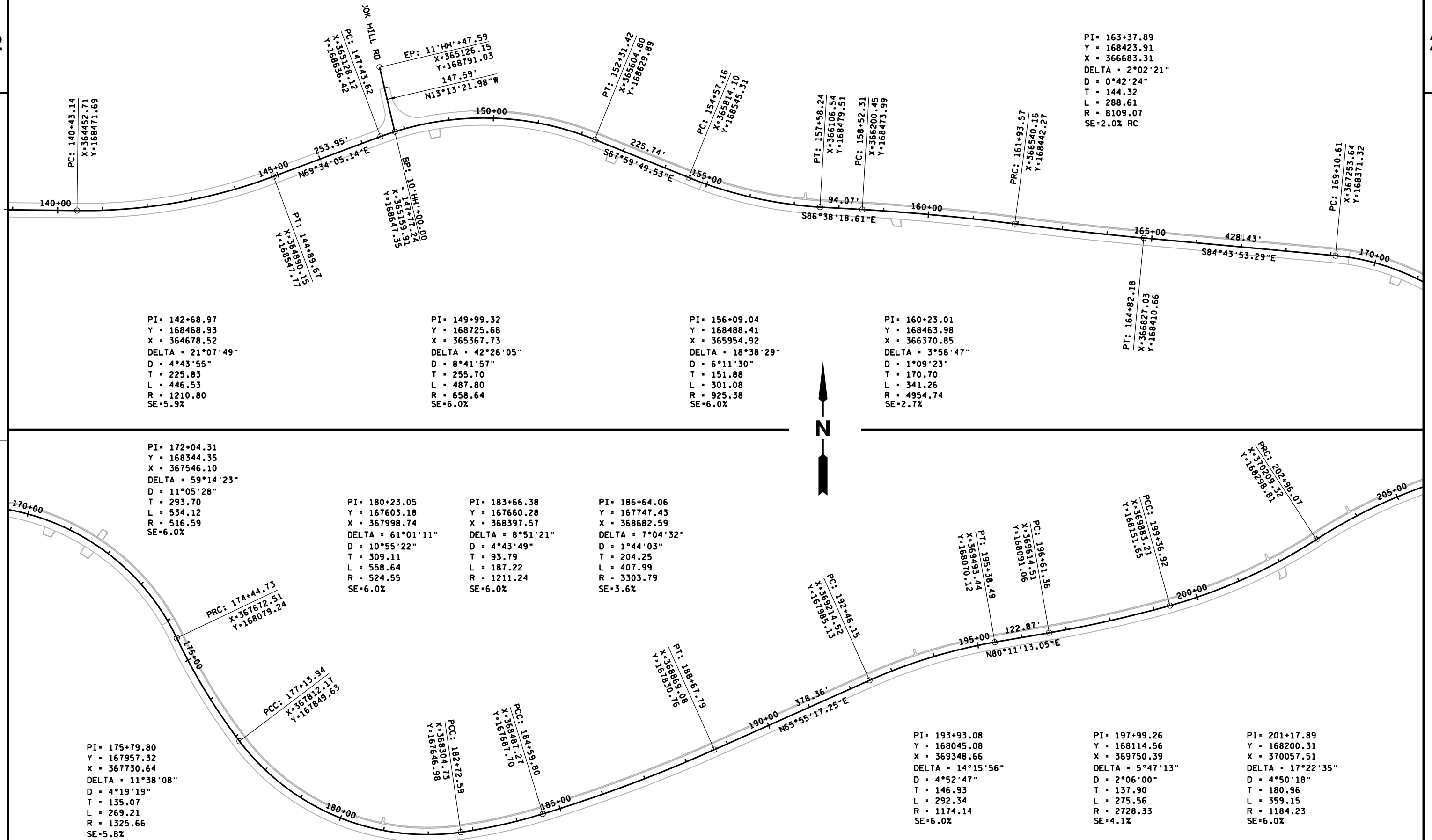
PI= 51+38.45
Y = 166491.90
X = 356335.84
DELTA = 33°23'32"
D = 15°50'19"
T = 108.50
L = 210.83
R = 361.75
SE=6.0%

PI= 66+24.00
Y = 166531.50
X = 357827.04
DELTA = 8°02'55"
D = 2°11'06"
T = 184.48
L = 368.36
R = 2622.21
SE=4.1%

PI= 69+63.38
Y = 166492.85
X = 358164.82
DELTA = 17°40'35"
D = 5°43'45"
T = 155.50
L = 308.54
R = 1000.08
SE=6.0%

PI= 73+30.27
Y = 166341.42
X = 358501.71
DELTA = 36°22'16"
D = 8°48'04"
T = 213.86
L = 413.25
R = 651.00
SE=6.0%





PI= 205+62.73
Y = 168443.95
X = 370433.02
DELTA = 26°31'10"
D = 5°03'47"
T = 266.66
L = 523.77
R = 1131.61
SE=6.0%

PCC: 208+19.84
X=370697.99
Y=168473.94

PT: 211+01.05
X=370978.73
Y=168478.78

PC: 213+38.85
X=371215.80
Y=168460.20

PCC: 217+37.44
X=371614.02
Y=168458.52

EP: 10'C'+76.98
X=371708.68
Y=168545.65

N7°4'59.91"W
76.98'

PT: 220+93.93
X=371963.94
Y=168522.96

PC: 225+35.56
X=372386.50
Y=168651.14

PT: 227+40.90
X=372589.12
Y=168678.14

PI= 209+60.87
Y = 168489.80
X = 370838.13
DELTA = 10°56'19"
D = 3°53'23"
T = 141.03
L = 281.21
R = 1472.97
SE=5.6%

PI= 215+38.51
Y = 168444.60
X = 371414.85
DELTA = 8°28'45"
D = 2°07'38"
T = 199.66
L = 398.59
R = 2693.33
SE=4.1%

PI= 219+16.47
Y = 168471.00
X = 371792.62
DELTA = 12°52'36"
D = 3°36'41"
T = 179.03
L = 356.55
R = 1586.53
SE=5.5%

PI= 226+39.12
Y = 168681.20
X = 372485.60
DELTA = 18°25'12"
D = 8°58'15"
T = 103.56
L = 205.33
R = 638.69
SE=6.0%



PI= 241+65.51
Y = 168639.97
X = 374013.22
DELTA = 13°20'59"
D = 6°12'02"
T = 108.14
L = 215.30
R = 924.03
SE=6.0%

PI= 248+39.28
Y = 168466.52
X = 374665.29
DELTA = 31°41'12"
D = 4°23'57"
T = 369.61
L = 720.28
R = 1302.41
SE=5.9%

PI= 10'PC'+41.92
Y = 168985.24
X = 376082.02
DELTA = 47°39'42"
D = 76°23'40"
T = 33.13
L = 62.39
R = 75.00

EP: 10'PC'+95.29
X=376121.74
Y=169026.45
PT: 10'PC'+71.18
X=376105.01
Y=169009.09

PI: 266+10.55
X=376355.23
Y=169053.01

464.05' 265+00
N67°56'34.76"E

PC: 10'PC'+08.79
X=376084.16
Y=168952.18

8.79'
S86°17'8.12"W

PT: 261+46.50
X=376925.14
Y=168878.75

BP: 10'PC'+00.00
X=376084.73
Y=168943.41

PI= 258+12.46
Y = 168753.13
X = 375615.11
DELTA = 5°15'58"
D = 0°47'16"
T = 334.51
L = 668.55
R = 7273.98
SE=2.0% RC

EP: 10'SR'+90.19
X=373773.21
Y=168736.68

BP: 10'SR'+00.00
X=373770.67
Y=168646.52

SWATEK RIDGE RD
90.19'
N1°36'32.51"E

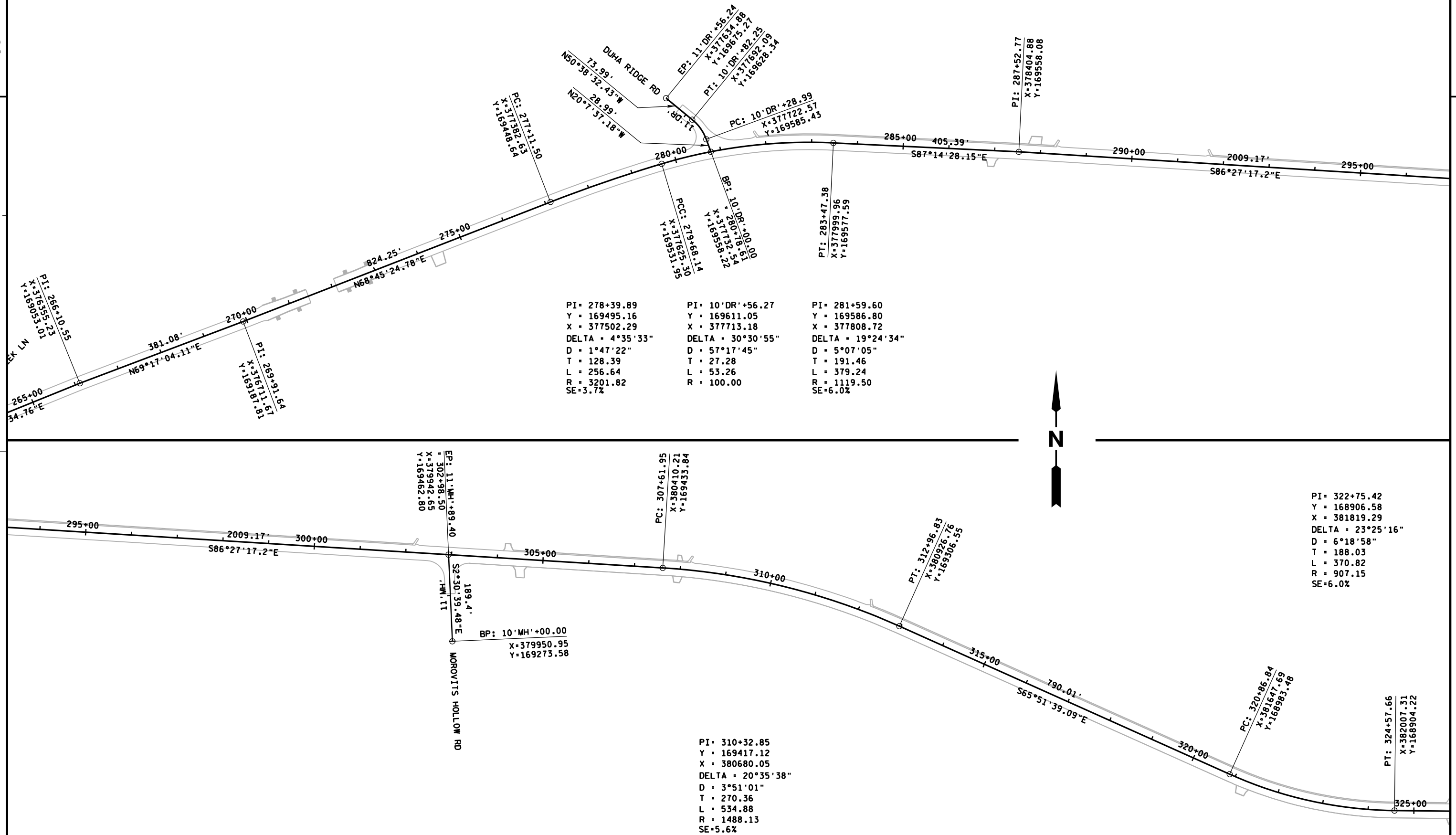
PC: 240+57.37
X=373905.12
Y=168642.89

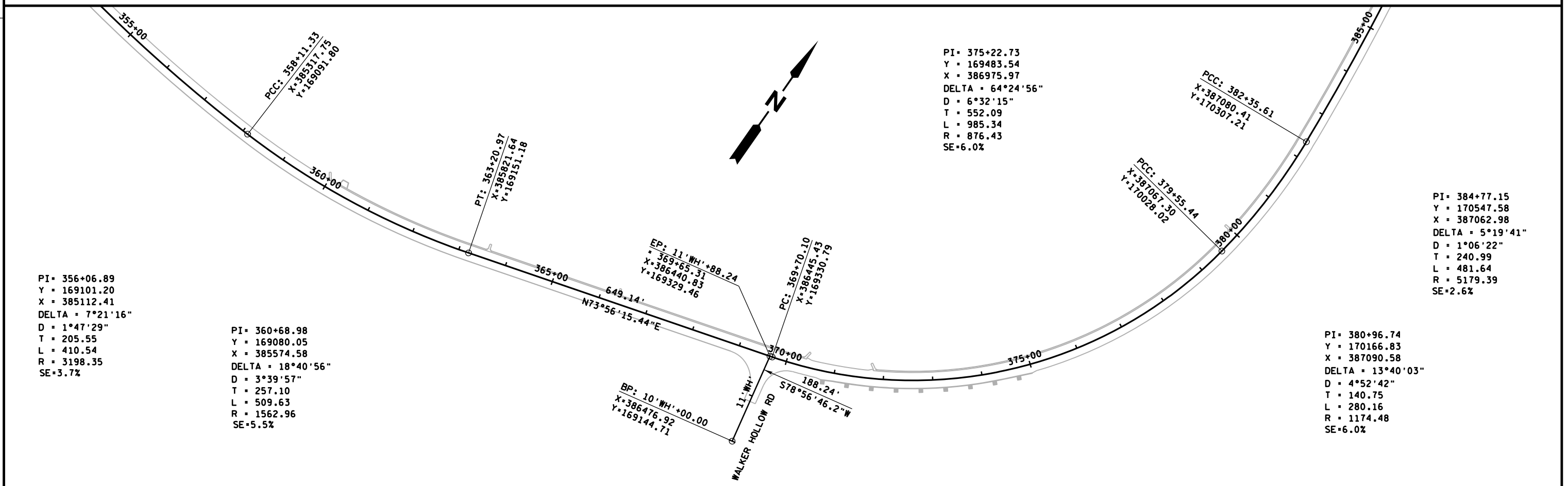
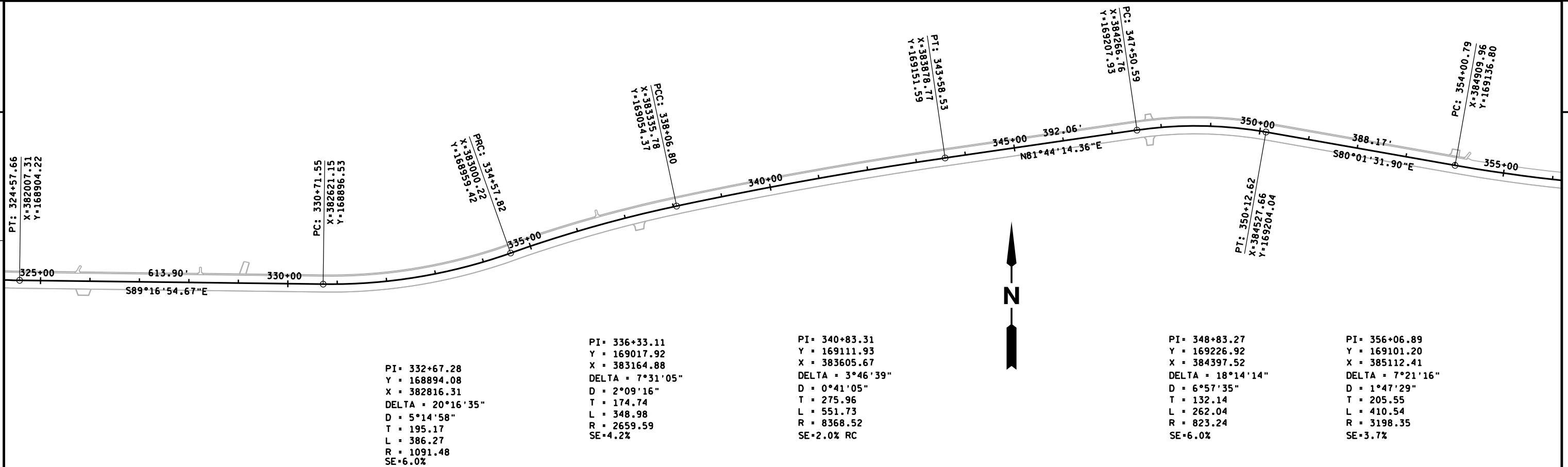
PT: 242+72.67
X=374117.72
Y=168612.18

PC: 244+69.67
X=374308.10
Y=168561.54

PT: 251+89.95
X=375019.14
Y=168573.30

PC: 254+17.95
X=375294.86
Y=168656.49





PI= 390+33.35
Y = 171096.54
X = 386971.38
DELTA = 93°01'52"
D = 19°08'38"
T = 315.56
L = 485.96
R = 299.29
SE=6.0%

PI= 384+77.15
Y = 170547.58
X = 387062.98
DELTA = 5°19'41"
D = 1°06'22"
T = 240.99
L = 481.64
R = 5179.39
SE=2.6%

BP: 7'E'+86.95
X=386931.64
Y=171165.42
213.05'
N48°12'22.61"E
EP: 10'E'+00.00
X=389+50.01
Y=171006.58
PRC: 387+17.25
X=387023.32
Y=170785.28

PCC: 392+03.21
X=387284.95
Y=171131.95

PT: 393+11.89
X=387393.44
Y=171133.08

PI: 396+08.41
X=387688.72
Y=171105.99

PI= 392+58.29
Y = 171138.06
X = 387339.13
DELTA = 11°41'02"
D = 10°45'01"
T = 54.53
L = 108.69
R = 532.98
SE=6.0%



PC: 407+65.10
X=388840.77
Y=171002.48

EP: 11'KV'+27.19
X=411+98.49
Y=171024.10

PI: 415+28.12
X=389586.46
Y=171121.89

BP: 10'KV'+00.00
X=389265.07
Y=170898.35

21.97'
N81°29'25.62"E
PT: 11'KV'+05.82
X=389275.39
Y=171002.98
PC: 10'KV'+45.39
X=389273.94
Y=170942.86
45.39'
S78°43'27.11"E

PI= 10'KV'+75.91
Y = 170972.79
X = 389228.76
DELTA = 28°27'50"
D = 3°43'50"
T = 389.55
L = 763.01
R = 1535.89
SE= 5.5%

PI= 441+72.82
Y = 170179.93
X = 391686.98
DELTA = 5°50'49"
D = 1°11'57"
T = 244.00
L = 487.58
R = 4777.80
SE=2.8%

PI= 421+70.32
Y = 171376.00
X = 390175.66
DELTA = 29°19'10"
D = 6°22'59"
T = 234.81
L = 459.32
R = 897.61
SE=6.0%

PCC: 423+94.29
X=390409.18
Y=171351.50

PCC: 427+58.97
X=390749.32
Y=171229.89

PI= 425+80.72
Y = 171332.10
X = 390594.05
DELTA = 27°21'59"
D = 7°30'15"
T = 185.89
L = 364.68
R = 763.51
SE=6.0%

PI= 429+83.95
Y = 171106.49
X = 390936.78
DELTA = 20°35'07"
D = 4°38'10"
T = 224.43
L = 444.03
R = 1235.88
SE=5.9%

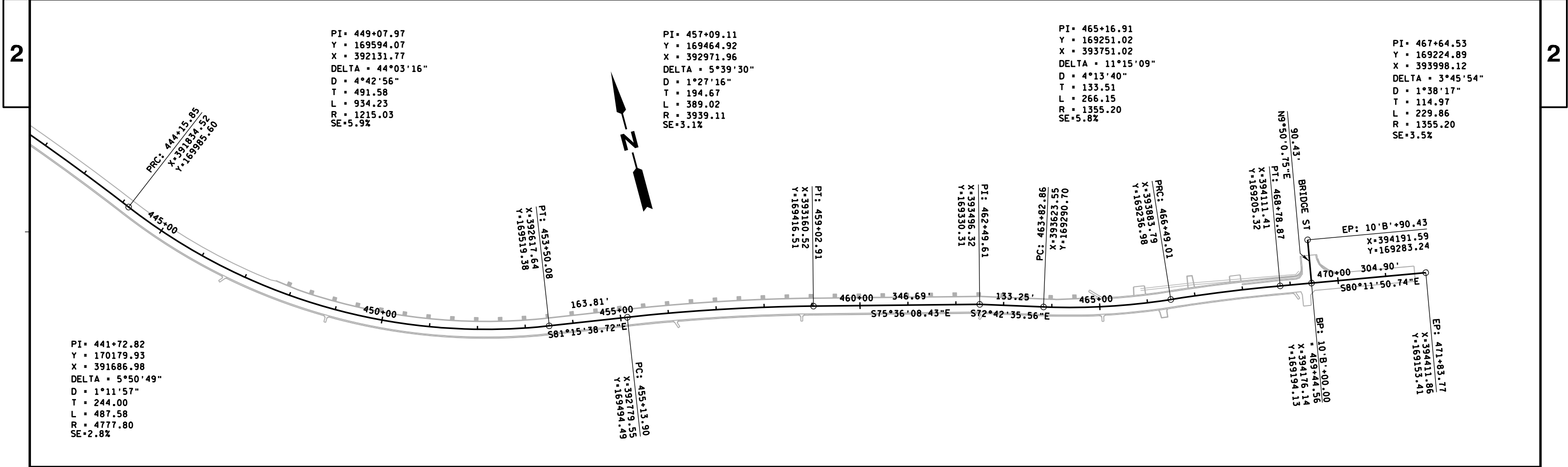
PI= 436+71.83
Y = 170546.49
X = 391344.52
DELTA = 6°59'41"
D = 1°21'33"
T = 257.63
L = 514.62
R = 4215.45
SE=3.0%

PRC: 439+28.27
X=391520.40
Y=170358.23

PRC: 444+15.85
X=391834.52
Y=169985.60

PC: 419+34.97
X=389960.05
Y=171283.01

PI: 415+28.12
X=389586.46
Y=171121.89



SURVEY CONTROL

DESIGNATION	PID	GEOGRAPHIC COORDINATES		ELLIPSOID HEIGHT	NORTHING	EASTING	ORTHOMETRIC HEIGHT
		LATITUDE	LONGITUDE				
EASTMAN GPS	DH5000	43°10'24.56256" (N)	091°01'02.06704" (W)	337.042 (m)	166,517.422	352,097.445	1210.94 (feet)
STEBEN GPS	DH5056	43°11'02.13841" (N)	090°50'28.28922" (W)	172.725 (m)	170,327.406	399,059.120	673.70 (feet)
EASTMAN E GPS	DH5057	43°10'52.43407" (N)	090°55'23.97550" (W)	181.494 (m)	169,330.016	377,151.230	701.68 (feet)
EASTMAN S GPS	DH5341	43°08'08.55004" (N)	090°56'58.59208" (W)	184.564 (m)	152,736.566	370,138.436	711.3 (feet) *
SENECA E GPS	DH5348	43°13'26.83241" (N)	090°56'42.98880" (W)	298.590 (m)	184,962.633	371,297.888	1085.7 (feet) *

* THESE HEIGHTS ARE BASED ON GPS OBSERVATIONS AND PURPOSELY ONLY ENTERED TO THE NEAREST 0.1 FEET.

DATE 06MAR13		E S T I M A T E O F Q U A N T I T I E S			
LINE					5870-04-61
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	REMOVING ASPHALTIC SURFACE	SY	338.000	338.000
0020	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	3,657.000	3,657.000
0030	204.0150	REMOVING CURB & GUTTER	LF	266.000	266.000
0040	204.0155	REMOVING CONCRETE SIDEWALK	SY	40.000	40.000
0050	204.0165	REMOVING GUARDRAIL	LF	863.000	863.000
0060	205.0100	EXCAVATION COMMON	CY	2,800.000	2,800.000
0070	213.0100	FINISHING ROADWAY (PROJECT) 01. 5870-04-61	EACH	1.000	1.000
0080	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	10,687.000	10,687.000
0090	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	64,460.000	64,460.000
0100	312.0110	SELECT CRUSHED MATERIAL	TON	5,000.000	5,000.000
0110	330.0100	MILL AND RELAY	SY	106,350.000	106,350.000
0120	416.1010	CONCRETE SURFACE DRAINS	CY	60.000	60.000
0130	440.4410.S	INCENTIVE IRI RIDE	DOL	35,012.000	35,012.000
0140	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,765.000	1,765.000
0150	455.0605	TACK COAT	GAL	4,100.000	4,100.000
0160	460.1100	HMA PAVEMENT TYPE E-O.3	TON	32,091.000	32,091.000
0170	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	20,540.000	20,540.000
0180	465.0475.S	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	33,047.000	33,047.000
0190	490.0200	SALVAGED ASPHALTIC PAVEMENT MILLING	SY	4,557.000	4,557.000
0200	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	926.000	926.000
0210	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	33,703.000	33,703.000
0220	602.0405	CONCRETE SIDEWALK 4-INCH	SF	220.000	220.000
0230	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	16.000	16.000
0240	611.0627	INLET COVERS TYPE HM	EACH	1.000	1.000
0250	611.0636	INLET COVERS TYPE HM-S	EACH	1.000	1.000
0260	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	363.000	363.000
0270	614.0370	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	EACH	1.000	1.000
0280	614.2300	MGS GUARDRAIL 3	LF	6,000.000	6,000.000
0290	614.2330	MGS GUARDRAIL 3 K	LF	2,475.000	2,475.000
0300	614.2340	MGS GUARDRAIL 3 L	LF	113.000	113.000
0310	614.2500	MGS THRIE BEAM TRANSITION	LF	158.000	158.000
0320	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	20.000	20.000
0330	614.2620	MGS GUARDRAIL TERMINAL TYPE 2	EACH	4.000	4.000
0340	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 5870-04-61	EACH	1.000	1.000
0350	619.1000	MOBILIZATION	EACH	1.000	1.000
0360	624.0100	WATER	MGAL	1,200.000	1,200.000
0370	633.0100	DELINEATOR POSTS STEEL	EACH	12.000	12.000
0380	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	42.000	42.000
0390	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	71.000	71.000
0400	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	39.000	39.000
0410	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	5.000	5.000
0420	637.0202	SIGNS REFLECTIVE TYPE II	SF	1,076.320	1,076.320
0430	638.2602	REMOVING SIGNS TYPE II	EACH	193.000	193.000
0440	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	126.000	126.000
0450	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
0460	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5870-04-61	EACH	1.000	1.000
0470	643.0300	TRAFFIC CONTROL DRUMS	DAY	13,000.000	13,000.000
0480	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,000.000	1,000.000
0490	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	183,860.000	183,860.000

DATE 06MAR13		E S T I M A T E O F Q U A N T I T I E S			
LINE					5870-04-61
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0500	646.0156	PAVEMENT MARKING EPOXY 18-INCH	LF	37.000	37.000
0510	648.0100	LOCATING NO-PASSING ZONES	MI	8.750	8.750
0520	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	185,200.000	185,200.000
0530	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	34,629.000	34,629.000
0540	650.8000	CONSTRUCTION STAKING RESURFACING	LF	46,216.000	46,216.000
0550	690.0150	REFERENCE SAWING ASPHALT	LF	443.000	443.000
0560	SPV.0180	SPECIAL 01. GEOGRID REINFORCEMENT	SY	5,000.000	5,000.000

REMOVING ASPHALTIC SURFACE

204.0110				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	60+00	LT	60	PRIVATE ENTRANCE
0010	209+28	RT	44	PRIVATE ENTRANCE
0010	240+89	RT	36	PRIVATE ENTRANCE
0010	304+50	RT	32	PRIVATE ENTRANCE
0010	329+09	LT	28	PRIVATE ENTRANCE
0010	465+87	LT	33	PRIVATE ENTRANCE
0010	467+88	LT	27	PRIVATE ENTRANCE
0010	469+34	RT	50	PRIVATE ENTRANCE
0010	469+45	LT	28	BRIDGE STREET
TOTAL 0010			338	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

204.0115				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	9+45	MAINLINE, BOP-LT	367	
0010	10'R'+84	ROGERS LN	100	
0010	136+90	MAINLINE	367	
0010	137+61	MAINLINE	367	
0010	11'HH'+48	HOOK HILL RD	122	
0010	271+44	MAINLINE	367	
0010	272+09	MAINLINE	367	
0010	10'SR'+90	SWATEK RIDGE RD	111	
0010	10'WH'+00	WALKER HOLLOW RD	133	
0010	7'E'+87	CTH E	133	
0010	394+47	MAINLINE	367	
0010	396+09	MAINLINE	367	
0010	10'KV'+00	KICKAPOO VALLEY RD	122	
0010	471+60	MAINLINE, EOP	367	
TOTAL 0010			3657	

REMOVING CURB & GUTTER

					204.0150		
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS		
0010	164+77	- 164+89	LT	12			
0010	169+60	- 169+72	LT	12			
0010	173+60	- 173+72	LT	12			
0010	467+00	- 469+25	LT	150	INCLUDES BRIDGE STREET		
0010	469+60	- 470+01	LT	80	INCLUDES BRIDGE STREET		
TOTAL 0010				<u>266</u>			

REMOVING CONCRETE SIDEWALK

				204.0155	
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	10 'B'+50 -	10 'B'+50	LT & RT	40	
TOTAL 0010				40	

REMOVING GUARDRAIL

					204.0165	
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0010	270+69	-	271+44	LT & RT	150	
0010	272+09	-	272+84	LT & RT	150	
0010	8'E'+65	-	394+00	LT	563	
TOTAL 0010					863	

EXCAVATION COMMON

					205.0100	
CATEGORY	STATION TO	STATION	LOCATION	CY	REMARKS	
0010	9+45	-	471+61	UNDISTRIBUTED	2800	EBS AREAS
				TOTAL 0010	2800	

MILL AND RELAY

330.0100						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	11+25	-	135+40		30350	
0010	139+11	-	146+00		1700	
0010	154+89	-	169+42		3550	
0010	174+03	-	269+94		23450	
0010	273+59	-	392+97		29200	
0010	397+59	-	471+60		18100	
TOTAL 0010					<u>106350</u>	

BASE AGGREGATE DENSE 3/4-INCH

BASE AGGREGATE DENSE 1 1/4-INCH

305.0110					
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	10+30		LT	18	FE
0010	12+25		RT	15	FE
0010	17+18		RT	18	FE
0010	69+50		LT	12	PE
0010	71+78		RT	9	PE
0010	79+90		LT	9	PE
0010	81+10		RT	15	FE
0010	104+00		LT	18	PE
0010	107+00		LT	18	PE
0010	132+40		LT	15	FE
0010	132+40		RT	15	FE
0010	138+65		LT	15	FE
0010	148+00		RT	15	FE
0010	152+80		RT	15	FE
0010	159+30		RT	15	FE
0010	170+55		RT	15	FE
0010	171+60		RT	15	FE
0010	171+65		LT	10	PE
0010	196+65		RT	13	FE
0010	201+97		RT	13	FE
0010	211+29		RT	10	FE
0010	219+60		LT	17	PE
0010	221+25		RT	15	PE
0010	221+37		LT	13	PE
0010	222+30		LT	13	PE
0010	241+14		RT	12	FE
0010	263+25		RT	22	PE
0010	274+40		RT	19	FE
0010	286+95		RT	10	FE
0010	287+87		LT	15	PE
0010	304+23		LT	10	PE
0010	307+95		RT	10	PE
0010	307+95		LT	18	FE
0010	321+25		RT	18	FE
0010	325+88		RT	18	FE
0010	337+28		RT	18	FE
0010	347+76		RT	18	FE
0010	347+78		LT	18	PE
0010	353+98		LT	18	FE
0010	360+33		LT	18	FE
0010	406+47		LT	18	FE
0010	406+90		RT	18	FE
0010	426+00		LT	10	PE
0010	440+85		LT	19	PE
0010	466+32		RT	18	PE
0010	466+95		LT	9	PE
0010	9+45 - 471+61		MAINLINE	10000	SHOULDERS
TOTAL 0010				10687	

305.0120					
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	9+45 - 15+50		MAINLINE	652	
0010	15+50 - 108+00		MAINLINE	11693	
0010	108+00 - 114+00		MAINLINE	711	
0010	114+00 - 136+88		MAINLINE	2607	
0010	137+59 - 146+00		MAINLINE	948	
0010	154+89 - 169+42		MAINLINE	1722	
0010	174+03 - 218+50		MAINLINE	5271	
0010	218+50 - 239+00		MAINLINE	2430	
0010	239+00 - 263+00		MAINLINE	2844	
0010	263+00 - 271+44		MAINLINE	1007	
0010	272+09 - 281+00		MAINLINE	1054	
0010	281+00 - 303+00		MAINLINE	2607	
0010	303+00 - 369+00		MAINLINE	7822	
0010	369+00 - 389+00		MAINLINE	2370	
0010	389+00 - 394+47		MAINLINE	593	
0010	396+09 - 412+00		MAINLINE	1837	
0010	412+00 - 471+61		MAINLINE	7065	
0010	10'R'+00 - 10'R'+84		LT	56	ROGERS LANE
0010	9'G'+14 - 10'G'+00		RT	64	GEISLER LANE
0010	9'OB'+43 - 10'OB'+00		LT	25	O'BRIEN LANE
0010	10'HH'+00 - 11'HH'+48		LT	120	HOOK HILL RD
0010	10'C'+00 - 10'C'+77		LT	39	COW LANE
0010	10'SR'+00 - 10'SR'+90		LT	67	SWATEK RIDGE RD
0010	10'PC'+00 - 10'PC'+95		LT	84	PINE CREEK LANE
0010	10'DR'+00 - 11'DR'+56		LT	139	DUHA RIDGE RD
0010	10'MH'+00 - 11'MH'+89		RT	73	MOROVITS HOLLOW RD
0010	10'WH'+00 - 11'WH'+88		RT	167	WALKER HOLLOW RD
0010	7'E'+87 - 10'E'+00		LT	189	CTH E
0010	10'KV'+00 - 11'KV'+28		RT	104	KICKAPOO VALLEY RD
0010	10'B'+00 - 10'B'+90		LT	100	BRIDGE STREET
0010				10000	UNDISTRIBUTED
TOTAL 0010				64460	

SELECT CRUSHED MATERIAL

312.0110					
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	9+45 - 471+61		UNDISTRIBUTED	5000	EBS AREAS
TOTAL 0010				5000	

CONCRETE SURFACE DRAINS

416.1010				
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	15+26	LT	1	
0010	19+85	LT	1	
0010	31+25	LT	1	
0010	34+40	LT	1	
0010	40+60	LT	1	
0010	44+00	LT	1	
0010	49+95	LT	1	
0010	59+70	LT	1	
0010	62+25	LT	1	
0010	75+98	LT	1	
0010	87+12	LT	1	
0010	89+10	LT	1	
0010	104+52	LT	1	
0010	9'G'+00	LT	1	
0010	110+20	RT	1	
0010	129+91	RT	1	
0010	157+23	LT	1	
0010	167+03	LT	1	
0010	180+95	LT	1	
0010	193+62	LT	1	
0010	201+80	LT	1	
0010	203+89	LT	1	
0010	214+93	LT	1	
0010	225+45	LT	1	
0010	237+24	LT	1	
0010	243+90	LT	1	
0010	252+10	LT	1	
0010	258+28	LT	1	
0010	262+71	LT	1	
0010	281+81	LT	1	
0010	288+34	LT	1	
0010	291+70	LT	1	
0010	302+20	LT	1	
0010	312+22	LT	1	
0010	325+73	LT	1	
0010	328+23	LT	1	
0010	336+47	LT	1	
0010	354+23	LT	1	
0010	360+00	LT	1	
0010	363+58	LT	1	
0010	366+36	LT	1	
0010	370+39	LT	1	
0010	371+78	LT	1	
0010	379+98	LT	1	
0010	389+30	LT	1	
0010	411+85	LT	1	
0010	419+34	RT	1	
SUB TOTAL 0010			47	

CONCRETE SURFACE DRAINS

416.1010				
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	427+25	RT	1	
0010	429+40	RT	1	
0010	436+00	RT	1	
0010	437+78	RT	1	
0010	441+36	RT	1	
0010	446+61	RT	1	
0010	448+86	RT	1	
0010	456+14	RT	1	
0010	458+78	RT	1	
0010	462+56	RT	1	
0010	464+99	LT	1	
0010	465+05	RT	1	
0010	469+05	RT	1	
SUB TOTAL 0010			13	
TOTAL 0010			60	
HMA PAVEMENT TYPE E-0.3				

460.1100					
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	9+45	- 471+61	MAINLINE	31327	
0010			ROGERS LN	29	
0010			GEISLER LN	60	
0010			OBRIEN LN	23	
0010			HOOK HILL RD	66	
0010	209+28		RT	5	PRIVATE ENTRANCE
0010			COW LN	17	
0010			SWATEK RIDGE RD	51	
0010	240+89		RT	4	PRIVATE ENTRANCE
0010			PINE CREEK LN	47	
0010			DUHA RIDGE	77	
0010			MOROVITS HOLLOW RD	44	
0010	304+50		RT	6	PRIVATE ENTRANCE
0010	329+09		LT	4	PRIVATE ENTRANCE
0010			WALKER HOLLOW RD	75	
0010			CTH 'E'	134	
0010			KICKAPOO VALLEY RD	61	
0010	465+87		LT	6	PRIVATE ENTRANCE
0010	467+88		LT	4	PRIVATE ENTRANCE
0010			RT, BRIDGE STREET	12	
0010			LT, BRIDGE STREET	38	
TOTAL 0010				32091	

ASPHALTIC MATERIAL PG58-28

455.0105					
CATEGORY	STATION	TO	STATION	LOCATION	TON
0010	9+45	-	471+61	MAINLINE	1723
0010				SIDEROADS/PES	42
TOTAL 0010					1765

TACK COAT

455.0605					
CATEGORY	STATION	TO	STATION	LOCATION	GAL
0010	9+45	-	471+61		4100
TOTAL 0010					4100

ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL

465.0475.S					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	11+05	-	13+51		246
0010	17+51	-	105+97		1846
0010	109+97	-	111+87		190
0010	115+87	-	136+65		2078
0010	137+86	-	145+77		791
0010	149+77	-	237+23		8746
0010	241+23	-	261+19		1996
0010	265+19	-	271+19		600
0010	272+34	-	278+79		645
0010	282+79	-	300+99		1820
0010	304+99	-	367+65		6266
0010	371+65	-	387+50		1585
0010	391+50	-	394+22		272
0010	396+34	-	409+98		1364
0010	413+98	-	460+00		4602
TOTAL 0010					33047

SALVAGED ASPHALTIC PAVEMENT MILLING

490.0200					
CATEGORY	STATION	TO	STATION	LOCATION	SY
0010	146+00	-	154+89		3021
0010	169+42	-	174+03		1536
TOTAL 0010					4557

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

601.0557					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	9+45	-	15+26	LT	581
0010	15+94	-	19+85	LT	390
0010	22+75	-	75+98	LT	5315
0010	82+50	-	104+52	LT	2194
0010	8'G'+50	-	9'G'+50	LT, RT	135
0010	108+38	-	129+91	RT	2144
0010	154+89	-	169+72	LT	1483
0010	173+60	-	214+93	LT	4119
0010	225+45	-	237+24	LT	1183
0010	242+73	-	263+18	LT	2041
0010	281+81	-	288+34	LT	656
0010	291+70	-	302+20	LT	1050
0010	304+34	-	308+21	LT	388
0010	312+22	-	254+23	LT	4198
0010	360+00	-	370+39	LT	1035
0010	371+78	-	389+48	LT	1785
0010	411+85	-	416+29	LT	440
0010	419+34	-	465+09	RT	4566
TOTAL 0010					33703

GEISLER LN RADIUS CURB

CONCRETE CURB & GUTTER 30-INCH TYPE D

601.0411					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	464+99	-	469+11	LT	412
0010	465+09	-	469+11	RT	402
0010	10'B'+16	-	10'B'+55	LT/RT	112
TOTAL 0010					926

BRIDGE STREET RADII

CONCRETE SIDEWALK 4-INCH

602.0405					
CATEGORY	STATION		LOCATION	SF	REMARKS
0010	10'B'+50		LT	110	BRIDGE STREET
0010	10'B'+50		RT	110	BRIDGE STREET
TOTAL 0010					220

CURB RAMP DETECTABLE WARNING FIELD YELLOW

602.0505				
CATEGORY	STATION	LOCATION	SF	REMARKS
0010	10'B'+50	LT	8	BRIDGE STREET
0010	10'B'+50	RT	8	BRIDGE STREET
TOTAL 0010			16	

INLET COVERS TYPE HM

611.0627				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	113+36	RT	1	
TOTAL 0010			1	

INLET COVERS TYPE HM-S

611.0636				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	119+80	RT	1	
TOTAL 0010			1	

STEEL PLATE BEAM GUARD CLASS A

614.0305					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	390+62.5	-	394+25	LT	363
TOTAL 0010					363

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

614.0370					
CATEGORY	STATION	TO	STATION	LOCATION	EACH
0010	390+12.5	-		18' LT	1
TOTAL 0010					1

MGS GUARDRAIL 3

614.2300					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	20+75	-	21+75	LT	100
0010	18+62.5	-	26+50	RT	788
0010	72+12.5	-	79+00	RT	688
0010	86+87.5	-	102+75	RT	1588
0010	219+70	-	221+25	LT	63
0010	270+92.1	-	271+04.6	LT	13
0010	270+92.1	-	271+04.6	RT	13
0010	272+48.4	-	272+60.9	LT	13
0010	272+48.4	-	272+60.9	RT	13
0010	371+25	-	374+45	RT	325
0010	417+62.5	-	420+87.5	LT	325
0010	426+00	-	430+75	LT	475
0010	448+12.5	-	464+12.5	LT	1600
TOTAL 0010					6000

MGS GUARDRAIL 3 K

614.2330					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	26+50	-	49+50	RT	2300
0010	215+00	-	216+75	RT	175
TOTAL 0010					2475

MGS GUARDRAIL 3 L

614.2340					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	219+70	-	221+25	LT	113
TOTAL 0010					113

MGS THRIE BEAM TRANSITION

614.2500					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	271+05	-	271+44	LT	39
0010	271+05	-	271+44	RT	39
0010	272+09	-	272+48	LT	39
0010	272+09	-	272+48	RT	39
TOTAL 0010					158

MGS GUARDRAIL TERMINAL EAT

		614.2610			
CATEGORY	STATION TO STATION	LOCATION	EACH	REMARKS	
0010	18+12.5	18' RT	1		
0010	20+25	18' LT	1		
0010	22+25	18' LT	1		
0010	50+00	17' RT	1		
0010	79+50	18' RT	1		
0010	86+37.5	18' RT	1		
0010	103+25	18' RT	1		
0010	214+50	17' RT	1		
0010	217+25	17' RT	1		
0010	270+42.5	17' RT	1		
0010	270+42.5	17' LT	1		
0010	273+11.1	17' RT	1		
0010	273+11.1	17' LT	1		
0010	370+75	18' RT	1		
0010	375+00	18' RT	1		
0010	417+12.5	18' LT	1		
0010	421+37.5	18' LT	1		
0010	431+25	18' LT	1		
0010	447+62.5	18' LT	1		
0010	464+62.5	18' LT	1		
TOTAL 0010			20		

MGS GUARDRAIL TERMINAL TYPE 2

		614.2620			
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	71+75	RT	1		
0010	219+70	LT	1		
0010	221+25	RT	1		
0010	426+00	LT	1		
TOTAL 0010			4		

WATER

		624.0100			
CATEGORY	STATION TO STATION	LOCATION	MGAL	REMARKS	
0010	9+45 - 471+61	MAINLINE	1200		
TOTAL 0010			1200		

TRAFFIC CONTROL DRUMS

		643.0300			
CATEGORY	STATION TO STATION	LOCATION	DAYS	REMARKS	
0010	18+12 - 50+00	RT	3200		
0010	20+25 - 22+25	LT	200		
0010	71+75 - 79+50	RT	800		
0010	86+37 - 103+25	RT	1700		
0010	214+50 - 217+25	RT	300		
0010	219+70 - 221+25	LT	150		
0010	270+43	LT & RT	300		
0010	273+11	LT & RT	300		
0010	370+75 - 375+00	RT	450		
0010	390+12 - 394+00	LT	400		
0010	417+12 - 421+37	LT	450		
0010	426+00 - 431+25	LT	550		
0010	447+62 - 464+62	LT	1700		
0010		UNDISTRIBUTED	2500		
TOTAL 0010			13000		

TRAFFIC CONTROL SIGNS

		643.0900			
CATEGORY	STATION TO STATION	LOCATION	DAYS	REMARKS	
0010	9+45 - 471+61		1000		
TOTAL 0010			1000		

PAVEMENT MARKING EPOXY 4-INCH

		646.0106			
CATEGORY	STATION TO STATION	LOCATION	LF	REMARKS	
0010	9+45 - 471+60	MAINLINE	91960	WHITE LONG LINES	
0010	9+45 - 471+60	MAINLINE	90800	CENTERLINE	
0010	8'E'+00 - 9'E'+75	CTH E	550	CENTERLINE	
0010	8'E'+00 - 9'E'+75	CTH E	550	WHITE LONG LINES	
TOTAL 0010			183860		

3

SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202	634.0612	634.0614	634.0616	634.0618	633.0100	638.2602	638.3000	SIGN MOUNTED ON SAME POST AS	REMARKS
								SIGN REFLECTIVE TYPE II SF	POSTS WOOD 4X6 INCH				DELINEATOR POSTS STEEL 12 FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH		
									12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH					
100R	9+50	Left	STH 27	R1-1	Stop		36 X 36	---	---	---	---	---	---	1	1		
101	9+50	Left	STH 27	R1-1	Stop		36 X 36	7.46	---	1	---	---	---	---	---		
102R	9+50	Left	STH 27	J3-3	Directional Assembly (3 Headed Panel)	SOUTH - BLANK - NORTH 27 - D - 27 [Left Arrow] [Up Arrow] [Right Arrow]	72 X 57	---	---	---	---	---	---	2	2		
103	9+50	Left	STH 27	J3-3	Directional Assembly (3 Headed Panel)	SOUTH - BLANK - NORTH 27 - D - 27 [Left Arrow] [Up Arrow] [Right Arrow]	72 X 57	28.50	---	---	1	1	---	---	---		
104R	10+50	Right		M3-2	EAST Cardinal Route Marker		24 X 12	---	---	---	---	---	---	1	---		
105R	10+50	Right		M1-6	State Route Marker	179	24 X 24	---	---	---	---	---	---	1	1		
106	10+50	Right		J4-1	Reassurance Assembly	EAST 179	24 X 36	6.00	---	---	1	---	---	---	---		
107R	10+60	Left		W14-3	No Passing Zone		48 X 36	---	---	---	---	---	---	1	1		
108	10+60	Left		W14-3	No Passing Zone		48 X 36	6.00	---	1	---	---	---	---	---		
109R	12+40	Right		W7-1	Hill		36 X 36	---	---	---	---	---	---	1	1		
110	12+40	Right		W7-1	Hill		36 X 36	9.00	---	---	---	1	---	---	---		
111	12+40	Right		W7-3	X Grade	0.07	24 X 18	3.00	---	---	---	---	---	---	---		110
112	13+00	Left		D1-2	Two Destinations (Arrows)	[Left Arrow] Prairie du Chien Mt Sterling [Right Arrow]	102 X 30	21.25	---	2	---	---	---	---	---		
113R	14+00	Left		D1-2	Two Destinations (Arrows)	[Left Arrow] Prairie du Chien Mt Sterling [Right Arrow]	108 X 30	---	---	---	---	---	---	1	2		
114R	14+00	Right		W8-8	Rough Road Next 9 Miles		36 X36	---	---	---	---	---	---	1	1		
115	14+40	Right		R2-1	Speed Limit _ MPH	55	24 X 30	5.00	---	1	---	---	---	---	---		
116R	14+60	Right		W1-3R	Right Reverse Turn		36 X 36	---	---	---	---	---	---	1	1		
117R	14+60	Right		W13-1	Advisory Speed Plate (Yellow Back)	30	24 X 24	---	---	---	---	---	---	1	---		
118	15+00	Left		J2-2	Route Turn Assembly	SOUTH - NORTH 27 - 27 [Advance Arrow Left Turn] [Advance Arrow Right Turn]	48 X 57	19.00	---	---	1	---	---	---	---		
119R	15+40	Left	Rogers Ln	R1-1	Stop		30 X 30	---	---	---	---	---	---	1	1		
120	15+40	Left	Rogers Ln	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
121	16+75	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
122	16+75	Right		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	2.25	---	---	---	---	---	---	---		121
123	22+50	Left		W3-1	Stop Ahead		36 X 36	9.00	---	---	1	---	---	---	---		
124	18+75	Right		D2-1	Destination/Distance (One) with Die Cut Letters	Steuben 9	60 X 15	6.25	---	2	---	---	---	---	---		
125R	19+60	Left		M2-1	Junction Marker		21 X 15	---	---	---	---	---	---	1	2		
126R	19+60	Left		M2-1	Junction Marker		21 X 15	---	---	---	---	---	---	1	---		
127R	19+60	Left		M4-6	End		24 X 12	---	---	---	---	---	---	1	---		
128R	19+60	Left		M50-3	Route Marker Panel - (3 Faces)	27 - D - 179	72 X 24	---	---	---	---	---	---	1	---		
129	19+60	Left		J1-3	Junction Assembly	JCT - JCT - END 27 - D - 179	72 X 39	19.50	---	2	---	---	---	---	---		
130	20+50	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
131	20+60	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
132	21+70	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
133	21+80	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
134R	22+50	Left		W3-1	Stop Ahead		36 X 36	---	---	---	---	---	---	1	1		
135	22+90	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
136	23+00	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
137	24+10	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
138		Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
139R	24+90	Right		W1-6	Night Arrow (Single)		48 X 24	---	---	---	---	---	---	1	1		
200R	25+30	Right		W1-6	Night Arrow (Single)		48 X 24	---	---	---	---	---	---	1	1		
201	25+30	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
202	25+35	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
203	26+50	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
204	26+55	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
205R	26+50	Right		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	1		
206R	26+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	---	1	---		
207	28+00	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
208	28+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	---		207
209	28+25	Left		W1-2R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---	---		
210	28+25	Left		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	2.25	---	---	---	---	---	---	---		211
211R	29+25	Left		W1-3R	Right Reverse Turn		36 X 36	---	---	---	---	---	---	1	1		
212R	29+25	Left		W13-1	Advisory Speed Plate (Yellow Back)	30	24 X 24	---	---	---	---	---	---	1	---		
213	34+80	Left		W1-4R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---	---		
214	34+80	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	---		213
SHEET TOTALS								215.14	12	12	6	2	0	23	18		

PROJECT NO: 5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

MISCELLANEOUS QUANTITIES

SHEET:

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

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SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202	634.0612 634.0614 634.0616 634.0618				633.0100	638.2602	638.3000	SIGN MOUNTED ON SAME POST AS	REMARKS
								REFLECTIVE TYPE II SF	POSTS WOOD 4X6 INCH				DELINEATOR POSTS STEEL 12 FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH		
									12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH					
215	37+00	Right		I2-3	Community Population Name Sign (With Eastman Number)	Eastman Population 428	60 X 24	10.00	---	2	---	---	---	---	---		
300R	40+25	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	---	1	1		
301R	40+25	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	---	1	---		
302R	40+80	Right		W1-4L	Left Reverse Curve		30 X 30	---	---	---	---	---	---	1	1		
303R	40+80	Right		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	---	1	---		
304	42+85	Right		W1-4L	Left Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
305	42+85	Right		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	2.25	---	---	---	---	---	---	---	304	
306	46+00	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
307	47+00	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
308	47+20	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
309	48+20	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
310	48+40	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
311	49+40	Right		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
312	50+20	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
313	50+60	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
314	51+40	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
315	51+80	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
316	52+60	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
317	53+00	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
400	57+00	Left		W1-4L	Left Reverse Curve		30 X 30	6.25	---	1	---	---	---	---	---		
401	57+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	2.25	---	---	---	---	---	---	---	400	
402R	59+50	Right		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	---	1	1		
403R	59+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	---	1	---		
404R	61+20	Left		W1-4L	Left Reverse Curve		30 X 30	---	---	---	---	---	---	1	1		
405R	61+20	Left		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	---	1	---		
406	62+00	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
407	62+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	---	406	
500R	77+40	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	---	1	1		
501R	77+40	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	---	1	---		
502	78+00	Left		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
503	78+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	---	502	
504	80+00	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
505	80+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	2.25	---	---	---	---	---	---	---	504	
506R	80+25	Left		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	---	1	1		
507R	80+25	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	---	1	---		
508R	83+50	Right		M3-2	EAST Cardinal Route Marker		24 X 12	---	---	---	---	---	---	1	1		
509R	83+50	Right		M1-6	State Route Marker	179	24 X 24	---	---	---	---	---	---	1	---		
510	84+60	Left		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
600	85+30	Left		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
601R	86+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	---	1	1		
602R	86+00	Right		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	---		
603R	89+75	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	1		
604R	89+75	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	---	1	---		
605	91+15	Right		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
606	93+60	Right		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
607R	96+00	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	---	1	1		
608R	96+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	---	1	---		
609	98+00	Right		W1-2R	Right Curve		30 X 30	6.25	---	---	1	---	---	---	---		
610	98+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	---	609	
611	98+80	Left		W1-4R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---	---		
612	98+80	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	2.25	---	---	---	---	---	---	---	611	
613R	99+80	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	---	1	1		
614R	99+80	Left		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	---	1	---		
700R	104+50	Right		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	---	1	1		
701R	104+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	---	1	---		
702	104+50	Right		W1-4L	Left Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
703	104+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	2.25	---	---	---	---	---	---	---	702	
704	106+70	Left		W1-2L	Left Curve		30 X 30	6.25	---	---	1	---	---	---	---		
705	106+70	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	---	704	
706	106+00	Right		W2-2	Side Road (90 Degrees)		30 X 30	6.25	---	1	---	---	---	---	---		
707R	106+70	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	1		
708R	106+70	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	---	1	---		
709R	108+25	Right	Geisler Ln	R1-1	Stop		30 X 30	---	---	---	---	---	---	1	1		
710	108+25	Right	Geisler Ln	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
SHEET TOTALS								165.93	12	10	7	0	0	27	14		

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PROJECT NO: 5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

MISCELLANEOUS QUANTITIES

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PLOT SCALE : 1:1

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SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202	634.0612 634.0614 634.0616 634.0618				633.0100	638.2602	638.3000	SIGN MOUNTED ON SAME POST AS	REMARKS
								SIGN REFLECTIVE TYPE II SF	POSTS WOOD 4X6 INCH				DELINEATOR POSTS STEEL 12 FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH		
									12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH					
711R	108+75	Right	Obrien Ln	W2-2	Side Road (90 Degrees)		30 X 30	---	---	---	---	---	1	1			
712	111+10	Right		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
713	111+55	Right		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
714R	113+75	Left		R1-1	Stop		30 X 30	---	---	---	---	---	---	1	1		
715	113+75	Left		R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
800	115+50	Left		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---			
801	115+80	Left		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---	---		
802R	117+25	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
803R	117+25	Right		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	1	---			
804	120+20	Left		W1-4L	Left Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
805	120+20	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	2.25	---	---	---	---	---	---	804		
806	122+00	Right		W1-2R	Right Curve		30 X 30	6.25	---	1	---	---	---	---	---		
807	122+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	---	806	
808	122+00	Left		W2-2	Side Road (90 Degrees)		30 X 30	6.25	---	1	---	---	---	---	---		
809R	122+50	Left		W2-2	Side Road (90 Degrees)		30 X 30	---	---	---	---	---	1	1			
810R	123+80	Left		W1-4L	Left Reverse Curve		30 X 30	---	---	---	---	---	1	1			
811R	123+80	Left		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	1	---			
900	132+00	Left		W1-2L	Left Curve		30 X 30	6.25	---	---	1	---	---	---			
901	132+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	---	900	
902R	136+85	Left		W5-52L	Bridge Hash Marks Left		12 X 36	---	---	---	---	---	1	1			
903	136+85	Left		W5-52L	Bridge Hash Marks Left		12 X 36	3.00	---	---	---	1	---	---			
904R	137+00	Right		W5-52R	Bridge Hash Marks Right		12 X 36	---	---	---	---	---	1	1			
905	137+00	Right		W5-52R	Bridge Hash Marks Right		12 X 36	3.00	---	---	---	1	---	---			
906R	137+50	Left		W5-52L	Bridge Hash Marks Right		12 X 36	---	---	---	---	---	1	1			
907	137+50	Left		W5-52L	Bridge Hash Marks Right		12 X 36	3.00	---	---	---	1	---	---			
908R	137+65	Right		W5-52R	Bridge Hash Marks Left		12 X 36	---	---	---	---	---	1	1			
909	137+65	Right		W5-52R	Bridge Hash Marks Left		12 X 36	3.00	---	---	---	1	---	---			
910R	138+30	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	1	1			
911R	138+30	Left		W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	---	---	---	---	---	1	---			
912	144+00	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---	---		
913	144+00	Right	Hook Hill Rd	W13-1	Advisory Speed Plate (Yellow Back)	35	18 X 18	2.25	---	---	---	---	---	---	912		
1000R	145+00	Right		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	1	1			
1001R	145+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1002R	147+50	Left		R1-1	Stop		30 X 30	---	---	---	---	---	1	1			
1003	147+50	Left		R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---			
1100	160+50	Left		W1-4R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---			
1101	160+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	---	1100	
1102R	161+50	Left		W1-5L	Left Winding Road		30 X 30	---	---	---	---	---	1	1			
1103R	161+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1104	165+50	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	---	1	---	---	---			
1105	165+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	2.25	---	---	---	---	---	---	1104		
1106R	166+50	Right		W1-5L	Left Winding Road		30 X 30	---	---	---	---	---	1	1			
1107R	166+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1108	170+90	Left		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---			
1109	173+00	Left		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---			
1200R	175+80	Left		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	1	1			
1201R	175+80	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1202	177+00	Right		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---			
1203	183+40	Right		W1-6	Night Arrow (Single)		48 X 24	8.00	---	1	---	---	---	---			
1204R	187+50	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
1205R	187+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1206	188+00	Left		W1-4R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---			
1207	188+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	2.25	---	---	---	---	---	---	1206		
1300	191+50	Right		W1-2R	Right Curve		30 X 30	6.25	---	---	1	---	---	---			
1301R	192+00	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
1302R	192+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1303R	192+50	Right		W1-5R	Right Winding Road		30 X 30	---	---	---	---	---	1	1			
1304R	192+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1305	194+50	Right		W1-2L	Left Curve		30 X 30	6.25	---	1	---	---	---	---			
1306	197+50	Left		W1-2L	Left Curve		30 X 30	6.25	---	1	---	---	---	---			
1500R	220+25	Left		W1-5R	Right Winding Road		30 X 30	---	---	---	---	---	1	1			
1501R	220+25	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1502R	220+80	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
1503R	220+80	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			

SHEET TOTALS

170.86

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16

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32

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PROJECT NO: 5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

MISCELLANEOUS QUANTITIES

SHEET:

E

FILE NAME :

PLOT DATE :

PLOT BY :

PLOT NAME :

PLOT SCALE : 1:1

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SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202	634.0612 634.0614 634.0616 634.0618				633.0100	638.2602	638.3000	SIGN MOUNTED ON SAME POST AS	REMARKS
								SIGN REFLECTIVE TYPE II SF	POSTS WOOD 4X6 INCH				DELINEATOR POSTS STEEL 12 FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH		
									12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH					
1504	220+80	Right		W1-2R	Right Curve		30 X 30	6.25	---	---	1	---	---	---			
1505	220+80	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	1504		
1506R	225+00	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
1507R	225+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1508	233+60	Left		W1-2L	Left Curve		30 X 30	6.25	---	1	---	---	---	---			
1509	233+60	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25	---	---	---	---	---	---	1508		
1510R	233+60	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	1	1			
1511R	233+60	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
1512R	234+30	Right		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	1	1			
1513R	234+30	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	1	---			
1600R	238+00	Right		M1-6	State Route Marker	179	24 X 24	---	---	---	---	---	1	1			
1601R	238+00	Right		M3-2	EAST Cardinal Route Marker		24 X 12	---	---	---	---	---	1	---			
1602	238+00	Right		W1-4R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---			
1603	238+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	1602		
1604R	238+00	Left		M1-6	State Route Marker	179	24 X 24	---	---	---	---	---	1	1			
1605R	238+00	Left		M3-4	WEST Cardinal Route Marker		24 X 12	---	---	---	---	---	1	---			
1606R	239+00	Left	Swatek Ridge Rd	R1-1	Stop		30 X 30	---	---	---	---	---	1	1			
1607	239+00	Left	Swatek Ridge Rd	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---			
1700	254+00	Left		W1-4R	Right Reverse Curve		30 X 30	6.25	---	1	---	---	---	---			
1701	254+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	1700		
1702R	257+50	Left		W1-4R	Right Reverse Curve		30 X 30	---	---	---	---	---	1	1			
1703R	257+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	1	---			
1704R	263+00	Left	Pine Creek Ln	R1-1	Stop		30 X 30	---	---	---	---	---	1	1			
1705	263+00	Left	Pine Creek Ln	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---			
1800R	269+60	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
1801R	269+60	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	---	---	---	---	---	1	---			
1802R	269+60	Right		W14-3	No Passing Zone		48 X 36	---	---	---	---	---	1	---		Existing sign on back of 1800R	
1803	270+00	Right		W14-3	No Passing Zone		48 X 36	6.00	---	1	---	---	---	---			
1804R	271+40	Left		W5-52L	Bridge Hash Marks Left		12 X 36	---	---	---	---	---	1	1			
1805	271+40	Left		W5-52L	Bridge Hash Marks Left		12 X 36	3.00	---	---	---	1	---	---			
1806R	271+40	Right		W5-52R	Bridge Hash Marks Right		12 X 36	---	---	---	---	---	1	1			
1807	271+40	Right		W5-52R	Bridge Hash Marks Right		12 X 36	3.00	---	---	---	1	---	---			
1808R	272+10	Right		W5-52L	Bridge Hash Marks Left		12 X 36	---	---	---	---	---	1	1			
1809	272+10	Right		W5-52L	Bridge Hash Marks Left		12 X 36	3.00	---	---	---	1	---	---			
1810R	272+10	Left		W5-52R	Bridge Hash Marks Right		12 X 36	---	---	---	---	---	1	1			
1811	272+10	Left		W5-52R	Bridge Hash Marks Right		12 X 36	3.00	---	---	---	1	---	---			
1812R	273+00	Left		W14-3	No Passing Zone		48 X 36	---	---	---	---	---	1	1			
1813	273+00	Left		W14-3	No Passing Zone		48 X 36	6.00	---	1	---	---	---	---			
1900R	280+40	Left	Duha Ridge Rd	R1-1	Stop		30 X 30	---	---	---	---	---	1	1			
1901	280+40	Left	Duha Ridge Rd	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---			
1902R	291+00	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	1	1			
1903R	291+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	---	---	---	---	---	1	---			
2000R	301+00	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
2001R	303+20	Right	Morovits Hollow Rd	R1-1	Stop		30 X 30	---	---	---	---	---	1	1			
2002	303+20	Right	Morovits Hollow Rd	R1-1	Stop		30 X 30	5.18	---	---	1	---	---	---			
2100R	314+50	Right		W1-2L	Left Curve		30 X 30	---	---	---	---	---	1	1			
2101R	314+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
2102R	318+00	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	1	1			
2103	319+00	Right		W1-2L	Left Curve		30 X 30	6.25	---	---	1	---	---	---			
2104	319+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	2103		
2200R	326+25	Right		W1-2L	Left Curve		30 X 30	---	---	---	---	---	1	1			
2201R	326+25	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	1	---			
2202	327+00	Left		W1-2R	Right Curve		30 X 30	6.25	---	1	---	---	---	---			
2203	327+0	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	2202		
2204R	329+40	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
2205R	329+40	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	---	---	---	---	---	1	---			
2206R	336+80	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
2207R	336+80	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---	---	---	---	---	1	---			
2300R	342+50	Right		W1-2R	Right Curve		30 X 30	---	---	---	---	---	1	1			
2301R	342+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	1	---			
2302	345+50	Right		W1-2R	Right Curve		30 X 30	6.25	---	1	---	---	---	---			
2303	345+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	2302		
2304	352+50	Left		W1-2L	Left Curve		30 X 30	6.25	---	---	1	---	---	---			
2305	352+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	2304		
SHEET TOTALS								112.72	0	10	4	0	4	38	24		

PROJECT NO: 5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

MISCELLANEOUS QUANTITIES

SHEET:

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

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SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202	634.0612 634.0614 634.0616 634.0618				633.0100	638.2602	638.3000	SIGN MOUNTED ON SAME POST AS	REMARKS
								SIGNS REFLECTIVE TYPE II	POSTS WOOD 4X6 INCH				DELINEATOR POSTS STEEL	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS EACH		
								SF	12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH	12 FT EACH	EACH	EACH		
2400R	355+40	Left		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	1		
2401R	355+40	Left		W13-1	Advisory Speed Plate (Yellow Back)	40	18 X 18	---	---	---	---	---	---	1	---		
2402R	355+50	Right		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	1		
2403R	366+00	Right		W1-2L	Left Curve		30 X 30	---	---	---	---	---	---	1	1		
2404R	366+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	---	---	---	---	---	---	1	---		
2405	368+00	Right		W1-2L	Left Curve		30 X 30	6.25	---	1	---	---	---	---	---		
2406	368+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	---	2405	
2407R	368+50	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	---	1	1		
2408R	369+80	Right	Walker Hollow Rd	R1-1	Stop		30 X 30	---	---	---	---	---	---	1	1		
2409	369+80	Right	Walker Hollow Rd	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
2500R	380+00	Right		M2-1	Junction Marker		21 X 15	---	---	---	---	---	---	1	1		
2501R	380+00	Right		M1-5A	County Marker	E	24 X 24	---	---	---	---	---	---	1	---		
2502	380+00	Right		J1-1	Junction Assembly	JCT	24 X 39	6.50	---	---	1	---	---	---	---		
						E		---	---	---	---	---	---	---	---		
2503	382+90	Right		W1-1R	Right Turn		36 X 36	9.00	---	---	---	1	---	---	---		
2504	382+90	Right		W13-1	Advisory Speed Plate (Yellow Back)	30	24 X 24	4.00	---	---	---	---	---	---	---	2503	
2505R	383+50	Right		W1-1R	Right Turn		36 X 36	---	---	---	---	---	---	1	1		
2506R	383+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	30	24 X 24	---	---	---	---	---	---	1	---		
2507	385+50	Left		W1-2R	Right Curve		30 X 30	6.25	---	---	1	---	---	---	---		
2508	385+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	2.25	---	---	---	---	---	---	---	2507	
2509	386+75	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2510R	387+00	Left		W1-2R	Right Curve		30 X 30	---	---	---	---	---	---	1	1		
2511R	387+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	50	18 X 18	---	---	---	---	---	---	1	---		
2600R	387+10	Right		W5-2	Narrow Bridge		30 X 30	---	---	---	---	---	---	1	1		
2601	387+10	Right		W5-2	Narrow Bridge		36 X 36	9.00	---	---	1	---	---	---	---		
2602	387+50	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2603	387+55	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2604R	388+30	Left		W1-6	Night Arrow (Single)		48 X 24	---	---	---	---	---	---	1	1		
2605	388+30	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2606	388+35	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2607	388+80	Left		J4-1	Reassurance Assembly	WEST	24 X 36	6.00	---	1	---	---	---	---	---		
						179		---	---	---	---	---	---	---	---		
2608R	389+10	Right		M1-5A	County Marker	E	24 X 24	---	---	---	---	---	---	1	1		
2609R	389+10	Right		M6-6	Directional Arrows	[Left and Up Arrow]	21 X 21	---	---	---	---	---	---	1	---		
2610	389+10	Right		J13-1	Route Turn Assembly	E	24 X 45	7.50	---	---	1	---	---	---	---		
						[Left and Up Arrow]		---	---	---	---	---	---	---	---		
2611	389+10	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2612	389+15	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2613R	389+20	Left		M1-5A	County Marker	E	24 X 24	---	---	---	---	---	---	1	1		
2614R	389+20	Left		M6-1	Arrow - RIGHT, LEFT, OR AHEAD	[Left Arrow]	21 X 21	---	---	---	---	---	---	1	---		
2615	389+20	Left	CTH E	J13-2	Route Turn Assembly	E - 179	48 X 45	15.00	---	1	---	---	---	---	---		
						[Left Arrow] [Left and Right Arrow]		---	---	---	---	---	---	---	---		
2616R	389+25	Left	CTH E	R1-1	Stop		30 X 30	---	---	---	---	---	---	1	1		
2617	389+25	Left	CTH E	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
2618R	389+50	Right		M1-6	State Route Marker	179	24 X 24	---	---	---	---	---	---	1	1		
2619R	389+50	Right		W1-7	Night Arrow (Double)		48 X 24	---	---	---	---	---	---	1	---		Accident Tag #6839738
2620	389+50	Right		W1-7	Night Arrow (Double)		48 X 24	8.00	---	1	---	---	---	---	---		
2621	390+00	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2622R	390+15	Left		M1-5A	County Marker	E	24 X 24	---	---	---	---	---	---	1	1		
2623R	390+15	Left		M6-1	Arrow - RIGHT, LEFT, OR AHEAD	[Right Arrow]	21 X 21	---	---	---	---	---	---	1	---		
2624	390+15	Left		J13-1	Route Turn Assembly	E	24 X 45	7.50	---	---	1	---	---	---	---		
						[Right Arrow]		---	---	---	---	---	---	---	---		
2625	390+30	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2626	390+50	Right		J4-2	Reassurance Assembly	EAST - BLANK	48 X36	12.00	---	---	1	---	---	---	---		
						179 - E		---	---	---	---	---	---	---	---		
2627	390+80	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2628	391+10	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2629	391+60	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2630R	391+90	Right		W8-8	Rough Road		30 X 30	---	---	---	---	---	---	1	1		
2631R	391+90	Left		W1-6	Night Arrow (Single)		48 X 24	---	---	---	---	---	---	1	1		
2632	391+90	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2633	392+40	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2634	392+70	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2635	393+20	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
2636	393+50	Left		W1-8	Chevron		18 X 24	3.00	1	---	---	---	---	---	---		
SHEET TOTALS								162.86	17	6	6	1	0	26	17		

PROJECT NO: 5870-04-61	HWY: STH 179	COUNTY: CRAWFORD	MISCELLANEOUS QUANTITIES	SHEET:
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PROJECT NO: 5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

MISCELLANEOUS QUANTITIES

SHEET:

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

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SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202	634.0612 634.0614 634.0616 634.0618				633.0100	638.2602	638.3000	SIGN MOUNTED ON SAME POST AS	REMARKS
								SIGN REFLECTIVE TYPE II	POSTS WOOD 4X6 INCH				DELINEATOR POSTS STEEL 12 FT	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH		
									12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH					
2637	394+30	Left		W1-8	Chevron		18 X 24	3.00		1	---	---	---	---	---		
2638R	394+50	Right		W5-52R	Bridge Hash Marks Right		12 X 36	---		---	---	---	---	1	1		
2639	394+50	Right		W5-52R	Bridge Hash Marks Right		12 X 36	3.00		---	---	---	1	---	---		
2640R	394+50	Left		W5-52L	Bridge Hash Marks Left		12 X 36	---		---	---	---	---	1	1		
2641	394+50	Left		W5-52L	Bridge Hash Marks Left		12 X 36	3.00		---	---	---	1	---	---		
2642R	396+10	Left		W5-52R	Bridge Hash Marks Right		12 X 36	---		---	---	---	---	1	1		
2643	396+10	Left		W5-52R	Bridge Hash Marks Right		12 X 36	3.00		---	---	---	1	---	---		
2644R	396+10	Right		W5-52L	Bridge Hash Marks Left		12 X 36	---		---	---	---	---	1	1		
2645	396+10	Right		W5-52L	Bridge Hash Marks Left		12 X 36	3.00		---	---	---	1	---	---		
2646	397+50	Left		W1-1L	Left Turn		36 X 36	9.00		---	---	1	---	---	---		
2647	397+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	30	24 X 24	4.00		---	---	---	---	---	---	2646	
2648R	399+00	Left		M1-5A	County Marker	E	24 X 24	---		---	---	---	---	1	1		
2649R	399+00	Left		M5-1R	Advance Arrow Right Turn		21 X 21	---		---	---	---	---	1	---		
2650	399+50	Left		J13-1	Route Turn Assembly	E	24 X 45	7.50		---	1	1	---	---	---		
					[Advance Arrow Right Turn]			---		---	---	---	---	---	---		
2651R	401+50	Right		W1-2L	Left Curve		36 X 36	---		---	---	---	---	1	1		
2700	404+00	Left		W5-2	Narrow Bridge		36 X 36	9.00		---	---	1	---	---	---		
2701R	405+70	Left		W1-1L	Left Turn		30 X 30	---		---	---	---	---	1	1		
2702R	405+70	Left		W13-1	Advisory Speed Plate (Yellow Back)	30	18 X 18	---		---	---	---	---	1	---		
2703R	407+25	Left		W5-2	Narrow Bridge		36 X 36	---		---	---	---	---	1	1		
2704R	412+25	Right	Kickapoo Valley Rd	R1-1	Stop		30 X 30	---		---	---	---	---	1	1		
2705	412+25	Right	Kickapoo Valley Rd	R1-1	Stop		30 X 30	5.18		---	1	---	---	---	---		
2706	416+00	Right		W1-2R	Right Curve		30 X 30	6.25		---	1	---	---	---	---		
2707	416+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25		---	---	---	---	---	---	2706	
2708R	416+50	Right		W1-2R	Right Curve		30 X 30	---		---	---	---	---	1	1		
2709R	416+50	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---		---	---	---	---	1	---		
2710R	418+50	Left		W1-2R	Right Curve		30 X 30	---		---	---	---	---	1	1		
2800R	421+00	Left		W2-2	Side Road (90 Degrees)		30 X 30	---		---	---	---	---	1	1		
2801	421+00	Left		W2-2	Side Road (90 Degrees)		30 X 30	6.25		---	1	---	---	---	---		
2802	421+50	Right		I2-3	Community Population Name Sign (With Steuben Number)	Steuben Population 131	60 X 24	10.00		---	2	---	---	---	---		
								---		---	---	---	---	---	---		
2803R	425+50	Left	Newman Rd	R1-1	Stop		30 X 30	---		---	---	---	---	1	1		
2804	425+50	Left	Newman Rd	R1-1	Stop		30 X 30	5.18		---	1	---	---	---	---		
2805R	434+50	Left		W1-2L	Left Curve		30 X 30	---		---	---	---	---	1	1		
2806R	434+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---		---	---	---	---	1	---		
2807	434+50	Left		W1-2L	Left Curve		30 X 30	6.25		---	---	1	---	---	---		
2808	434+50	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	2.25		---	---	---	---	---	---	2807	
2900R	443+00	Right		W1-2L	Left Curve		30 X 30	---		---	---	---	---	1	1		
2901R	443+00	Right		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---		---	---	---	---	1	---		
3000R	454+00	Right		W3-5	Speed Limit _ Ahead [Arrow]	25	36 X 36	---		---	---	---	---	1	1		
3001R	456+00	Left		W1-2R	Right Curve		30 X 30	---		---	---	---	---	1	1		
3002R	456+00	Left		W13-1	Advisory Speed Plate (Yellow Back)	45	18 X 18	---		---	---	---	---	1	---		
3003	456+75	Right		W3-5	Speed Limit _ Ahead [Arrow]	25	36 X 36	9.00		---	---	1	---	---	---		
3100R	463+00	Right		R2-1	Speed Limit _ MPH	25	24 X 30	---		---	---	---	---	1	1		
3101	463+00	Right		R2-1	Speed Limit _ MPH	25	24 X 30	5.00		---	1	---	---	---	---		
3102R	463+00	Left		R2-1	Speed Limit _ MPH	55	24 X 30	---		---	---	---	---	1	1		
3103	463+00	Left		R2-1	Speed Limit _ MPH	55	24 X 30	5.00		---	1	---	---	---	---		
3104R	464+50	Right		I-2-3	Community Population Name Sign (With Steuben Number)	Steuben Population 131	60 X 24	---		---	---	---	---	1	2		
								---		---	---	---	---	---	---		
3105R	464+50	Left		M3-4	WEST Cardinal Route Marker		24 X 12	---		---	---	---	---	1	1		
3106R	464+50	Left		M1-6	State Route Marker	179	24 X 24	---		---	---	---	---	1	---		
3107R	464+50	Left		D2-1	Destination/Distance (One) with Die Cut Letters	Eastman 9	66 X 15	---		---	---	---	---	1	---		
3108	464+50	Left		D2-1	Destination/Distance (One) with Die Cut Letters	Eastman 9	66 X 15	6.88		---	1	1	---	---	---		
3109	464+50	Right		J1-2	Junction or End Assembly (2 Headed Panel)	JCT - END 131 - 179	48 X 39	13.00		---	1	---	---	---	---		
								---		---	---	---	---	---	---		
3110R	466+50	Right		W3-1	Stop Ahead		36 X 36	---		---	---	---	---	1	1		
3111	466+50	Right		W3-1	Stop Ahead		36 X 36	9.00		---	---	1	---	---	---		
3112R	468+25	Right		M2-1	Junction Marker		21 X 15	---		---	---	---	---	1	1		
3113R	468+25	Right		M4-6	End Marker		24 X 12	---		---	---	---	---	1	---		
3114R	468+25	Right		M50-2	Route Marker Panel - (2 Faces)	131 - 179	24 X 24	---		---	---	---	---	1	---		
3115	468+25	Right		J2-3	Route Turn Assembly	NORTH - BLANK - SOUTH 131 - E - 131	72 X 57	28.50		---	---	2	---	---	---		
						[Advance Arrow Left Turn] [Advance Arrow Left Turn] [Up Arrow]		---		---	---	---	---	---	---		
3116	469+00	Left		R2-1	Speed Limit _ MPH	25	24 X 30	5.00		---	1	---	---	---	---		
3117R	469+10	Left	Bridge St	R1-1	Stop		30 X 30	---		---	---	---	---	1	1		
SHEET TOTALS								169.49	1	12	8	1	4	34	25		

PROJECT NO: 5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

MISCELLANEOUS QUANTITIES

SHEET:

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

SIGN NUMBER	APPROX. STATION	POSITION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE IN X IN	637.0202 SIGNS REFLECTIVE	634.0612 634.0614 634.0616 634.0618 POSTS WOOD 4X6 INCH				633.0100 DELINEATOR POSTS STEEL	638.2602 REMOVING SIGNS	638.3000 REMOVING SMALL SIGN SUPPORTS	SIGN MOUNTED ON SAME POST AS	REMARKS
								TYPE II SF	12 FT EACH	14 FT EACH	16 FT EACH	18 FT EACH	12 FT EACH	TYPE II EACH	EACH		
3118	469+10	Left	Bridge St	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
3119R	469+40	Right	Bridge St	R1-1	Stop		30 X 30	---	---	---	---	---	---	1	1		
3120	469+40	Right	Bridge St	R1-1	Stop		30 X 30	5.18	---	1	---	---	---	---	---		
3121R	470+40	Right		D1-2	Two Destinations (Arrows)	[Up Arrow] Wauzeka [Left Arrow] Bell Center	78 X 30	---	---	---	---	---	---	1	2		
3122	470+40	Right		D1-2	Two Destinations (Arrows)	[Up Arrow] Wauzeka [Left Arrow] Gays Mills	72 X 30	15.00	---	2	---	---	---	---	---		
3123R	470+40	Right		W14-3	No Passing Zone		48 X 36	---	---	---	---	---	---	1	---		Existing sign on back of 3120R
3124	471+00	Right		W14-3	No Passing Zone		48 X 36	6.00	---	1	---	---	---	---	---		
3125R	471+00	Left		R2-1	Speed Limit _ MPH	25	24 X 30	---	---	---	---	---	---	1	1		
3126	471+00	Left		J4-2	Reassurance Assembly	WEST - BLANK 179 - E	48 X 36	12.00	---	---	1	---	---	---	---		
3127R	471+00	Left		M3-4	WEST Cardinal Route Marker		24 X 12	---	---	---	---	---	---	1	1		
3128R	471+00	Left		M1-6	State Route Marker	179	24 X 24	---	---	---	---	---	---	1	---		
3129R	471+75	Right	STH 131	R1-1	Stop		36 X 36	---	---	---	---	---	---	1	1		
3130	471+75	Right	STH 131	R1-1	Stop		36 X 36	7.46	---	---	1	---	---	---	---		
3131R	471+75	Right	STH 131	M3-1	NORTH Cardinal Route Marker		24 X 12	---	---	---	---	---	---	1	2		
3132R	471+75	Right	STH 131	M3-3	SOUTH Cardinal Route Marker		24 X 12	---	---	---	---	---	---	1	---		
3133R	471+75	Right	STH 131	M50-3	Route Marker Panel - (3 Faces)	131 - E - 131	72 x 24	---	---	---	---	---	---	1	---		
3134R	471+75	Right	STH 131	M6-1	Left Arrow	[Left Arrow]	21 X 21	---	---	---	---	---	---	1	---		
3135R	471+75	Right	STH 131	M6-1	Left Arrow	[Left Arrow]	21 X 21	---	---	---	---	---	---	1	---		
3136R	471+75	Right	STH 131	M6-1	Up Arrow	[Up Arrow]	21 X 21	---	---	---	---	---	---	1	---		
3137	471+75	Right	STH 131	J3-3	Directional Assembly (3 Headed Panel)	NORTH - BLANK - SOUTH 131 - E - 131 [Left Arrow] [Left Arrow] [Up Arrow]	72 X 57	28.50	---	---	1	1	---	---	---		
								SHEET TOTALS	79.32	0	5	3	1	0	13	8	
								PROJECT TOTALS	1076.32	42	71	39	5	12	193	126	

PAVEMENT MARKING EPOXY 18-INCH

646.0156					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+75			MAINLINE	25
0010	471+61			MAINLINE	12
TOTAL 0010					37

LOCATING NO-PASSING ZONES

648.0100					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+45	-	471+61	MAINLINE	8.75
TOTAL 0010					8.75

TEMPORARY PAVEMENT MARKING 4-INCH

649.0100					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+45	-	471+60	MAINLINE	92600 ON BINDER COURSE
0010	9+45	-	471+60	MAINLINE	92600 ON SURFACE BEFORE RUMBLE STRIPS
TOTAL 0010					185200

* TEMPORARY MARKING ON SURFACE LIFT IS TO REMAIN THROUGH GRINDING OF RUMBLE STRIPS AT WHICH TIME IT WILL BE PAINTED OVER WITH PAVEMENT MARKING EPOXY.

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

650.5500					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+45	-	471+61	VARIOUS	34629
TOTAL 0010					34629

CONSTRUCTION STAKING RESURFACING REFERENCE

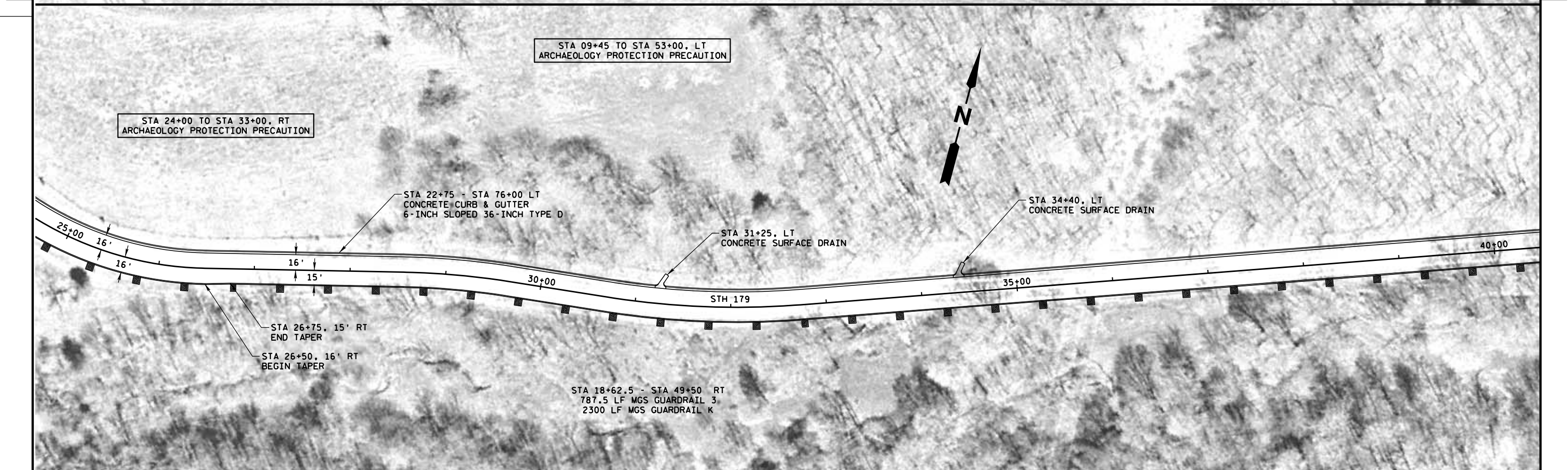
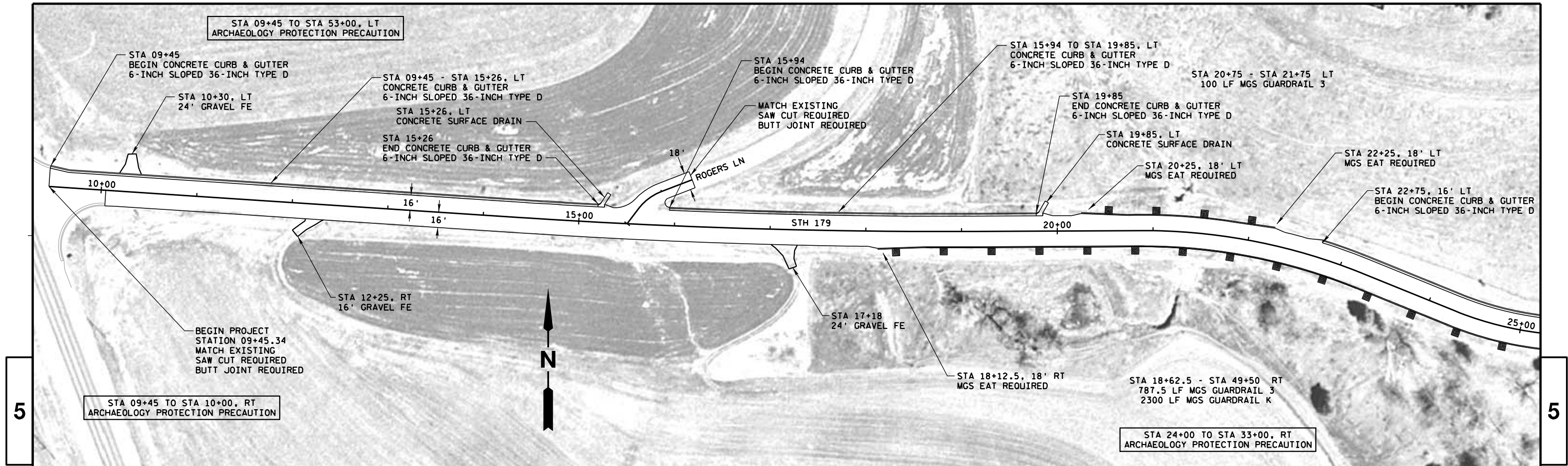
650.8000					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+45	-	471+61		46216
TOTAL 0010					46216

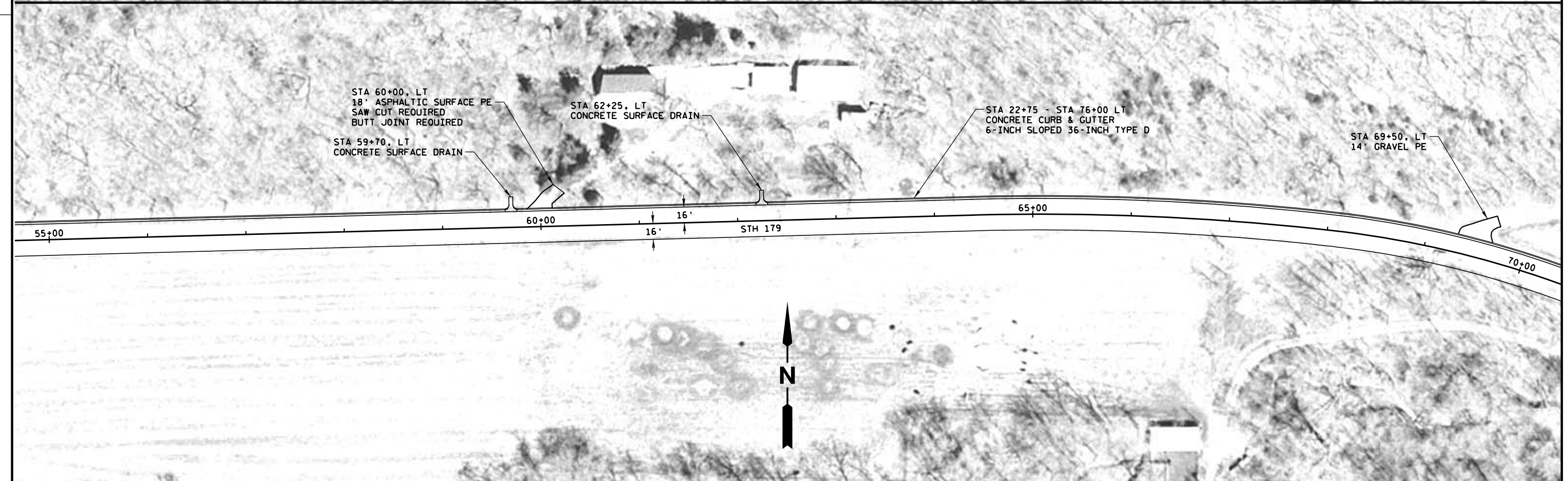
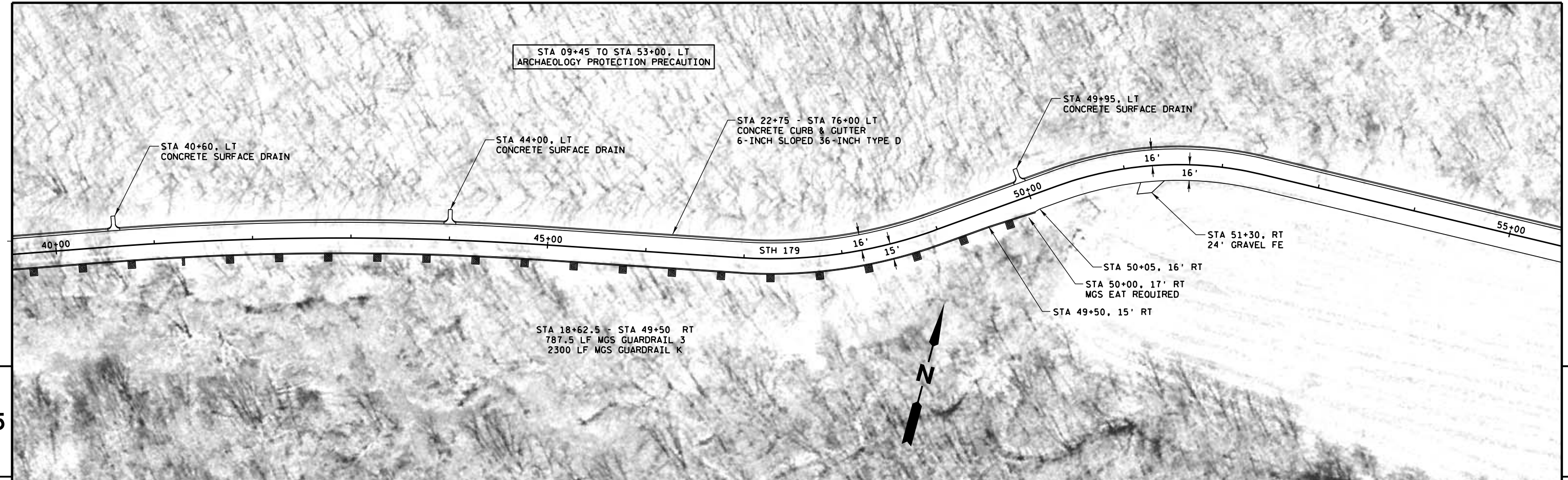
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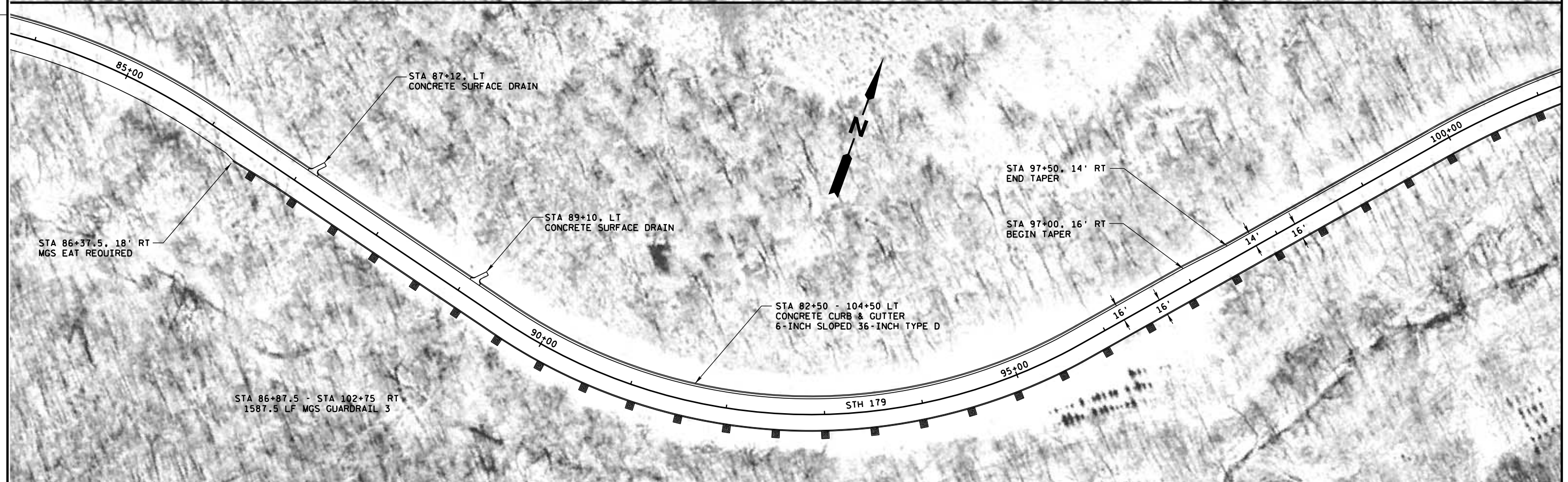
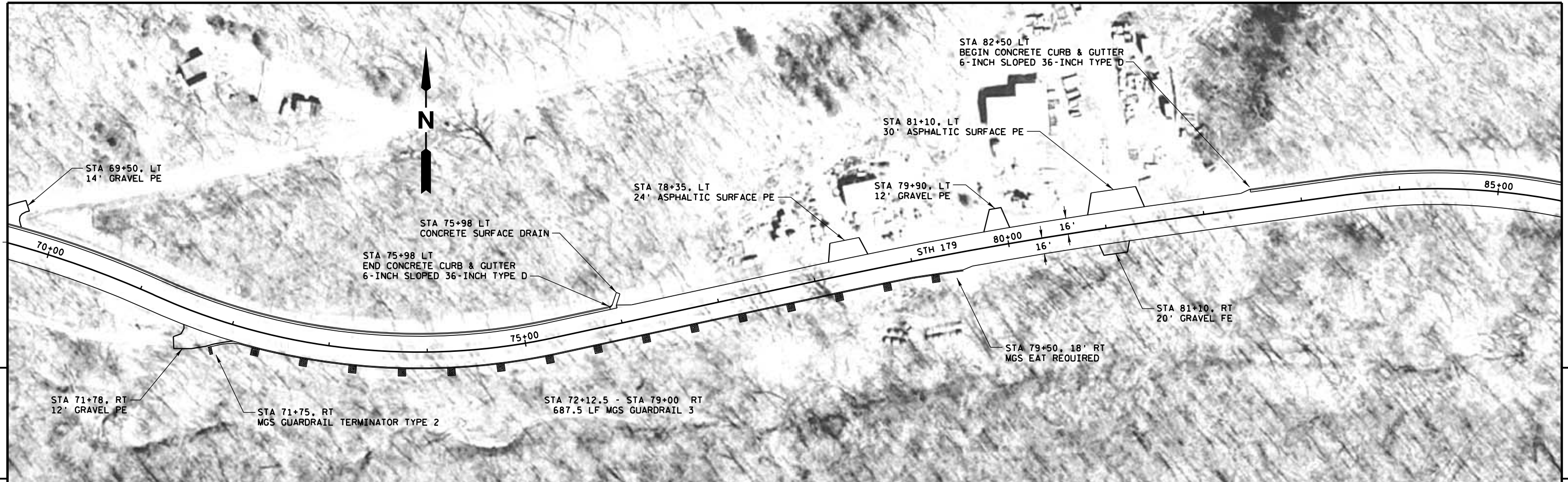
690.0150					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+45			ML	20 WB BOP
0010	9+45	-	10+05	ML	60 C/L
0010	10+05			ML	10 EB BOP
0010	10'R'+84				18 ROGERS LN
0010	60+00			LT	18 PRIVATE ENTRANCE
0010	11'HH'+50				22 HOOK HILL RD
0010	209+28			RT	40 PRIVATE ENTRANCE
0010	10'SR'+90				20 SWATEK RIDGE RD
0010	240+89			RT	16 PRIVATE ENTRANCE
0010	11'DR'+56				24 DUHA RIDGE RD
0010	329+09			LT	12 PRIVATE ENTRANCE
0010	10'WH'+00				24 WALKER HOLLOW RD
0010	7'E'+87				24 CTH E
0010	10'KV'+00				22 KICKAPOO VALLEY RD
0010	465+87				20 PRIVATE ENTRANCE
0010	467+88				24 PRIVATE ENTRANCE
0010	469+34				17 BRIDGE ST
0010	469+45				30 BRIDGE ST
0010	471+61			ML	22 EOP
TOTAL 0010					443

GEOGRID REINFORCEMENT

SPV.0180.01					REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	
0010	9+45	-	471+61	UNDISTRIBUTED	5000 EBS AREAS
TOTAL 0010					5000







PROJECT NO:5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

SPLIT PLAN SHEETS

SHEET

E

FILE NAME : N:\PDS\c3d\58700430\Design\EPlans\050205.pn.dgn

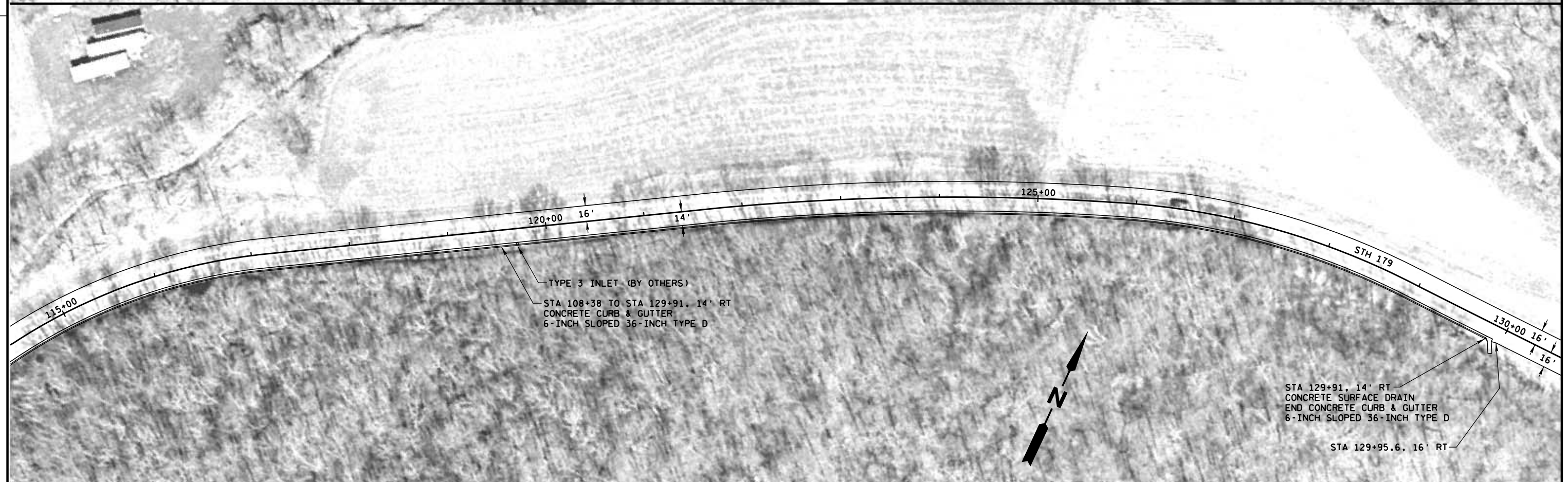
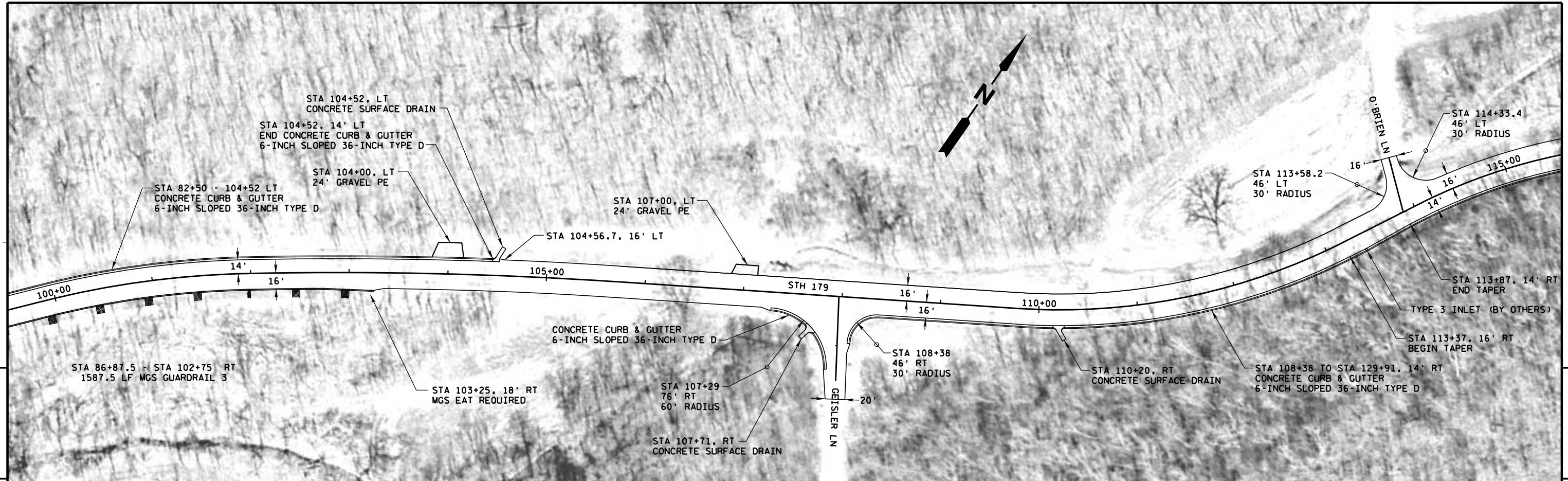
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PLOT BY : dotwov

PLOT NAME :

PLOT SCALE : 100:1

WISDOT/CADDs SHEET 44



PROJECT NO:5870-04-61

HWY: STH 179

COUNTY:CRAWFORD

SPLIT PLAN SHEETS

SHEET

E

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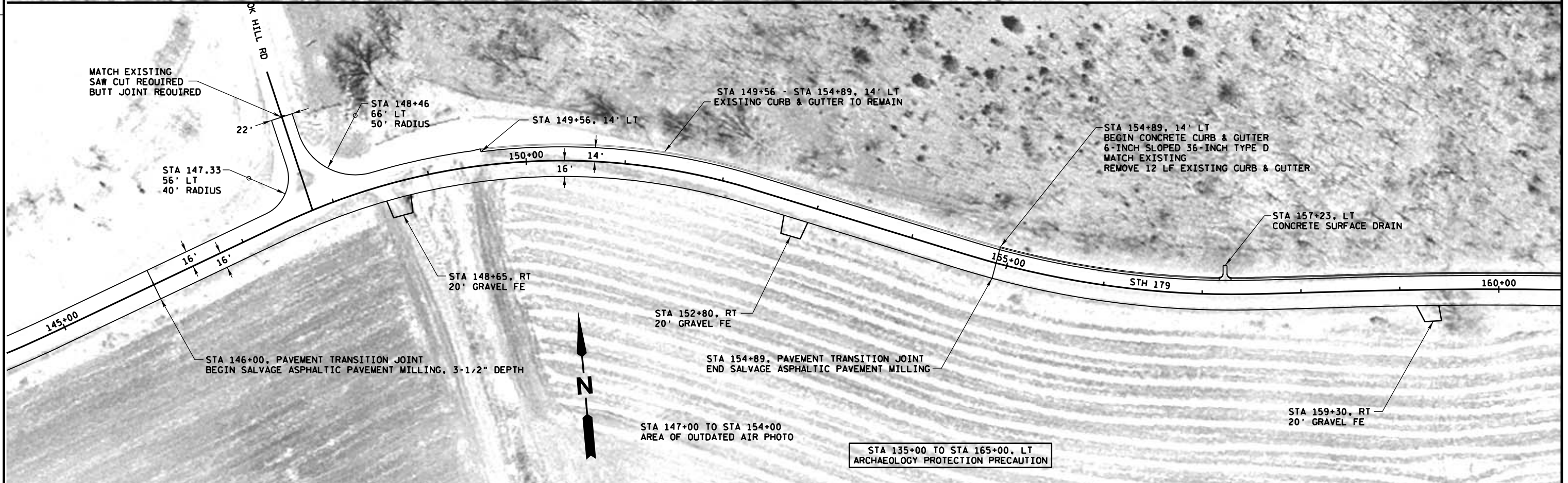
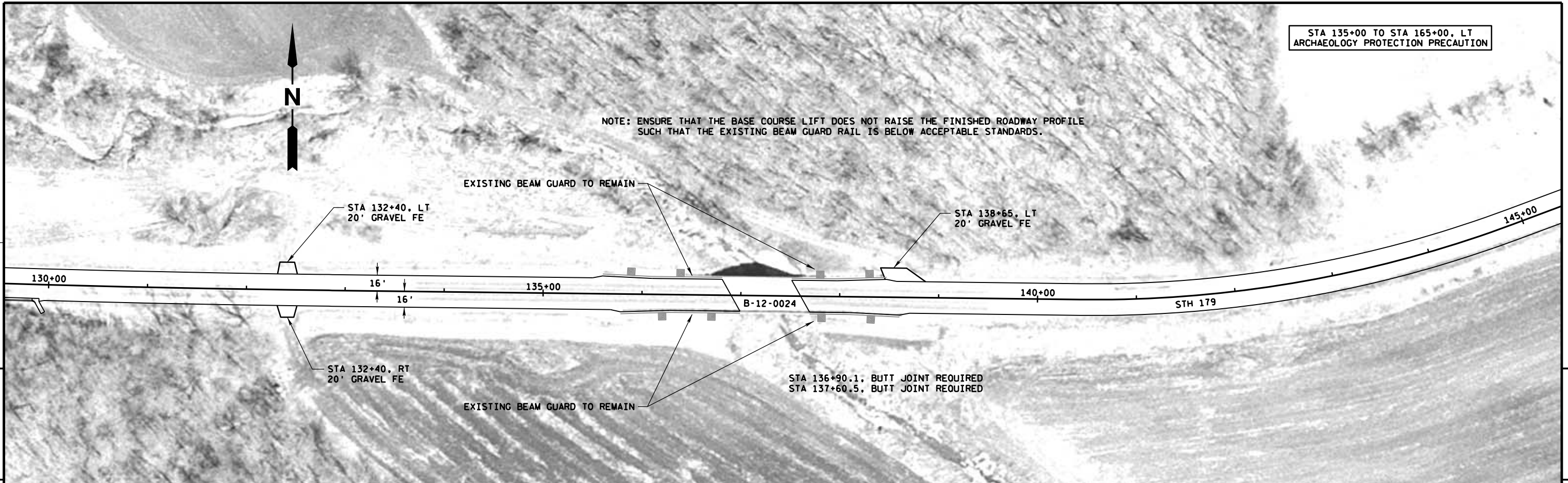
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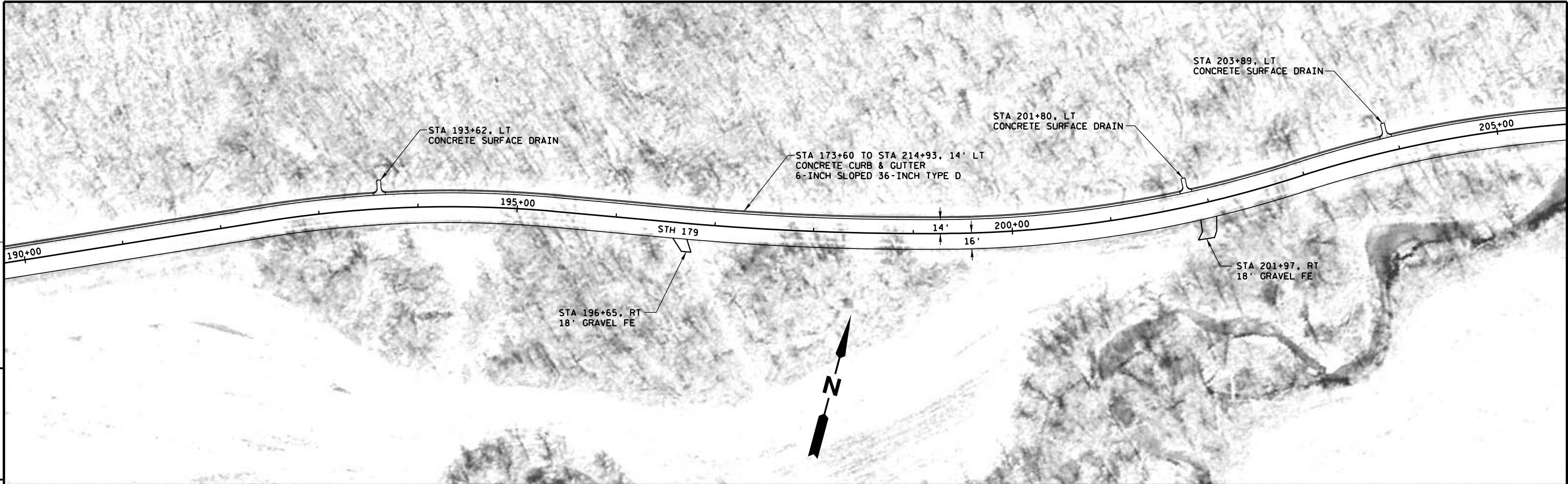
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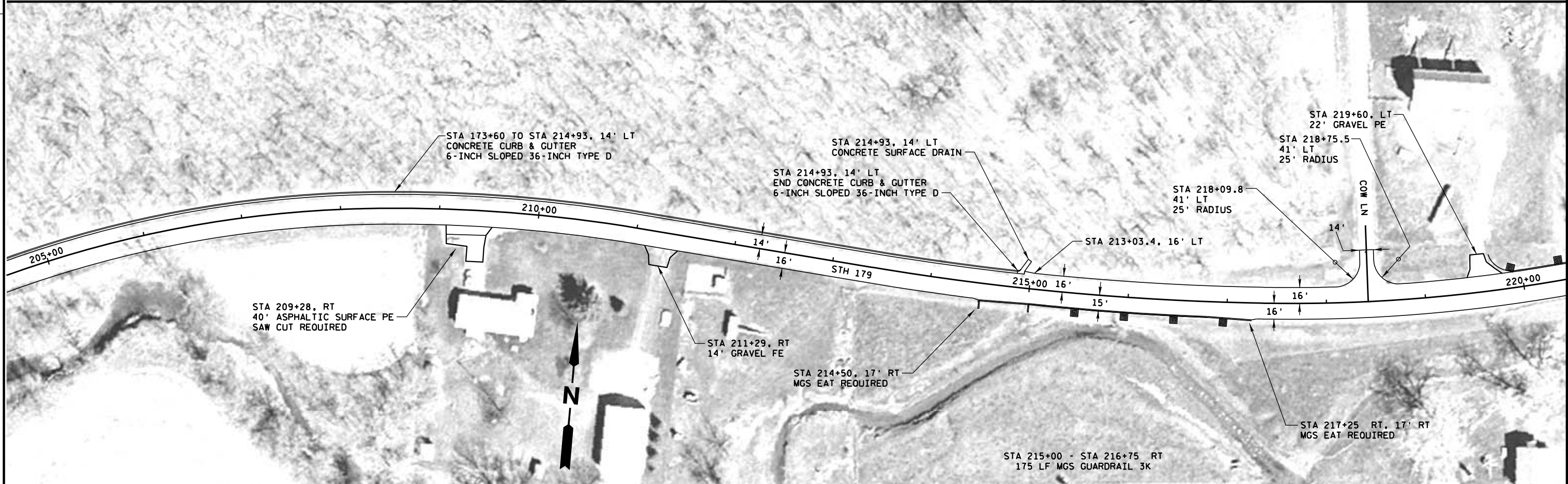
WISDOT/CADDs SHEET 44



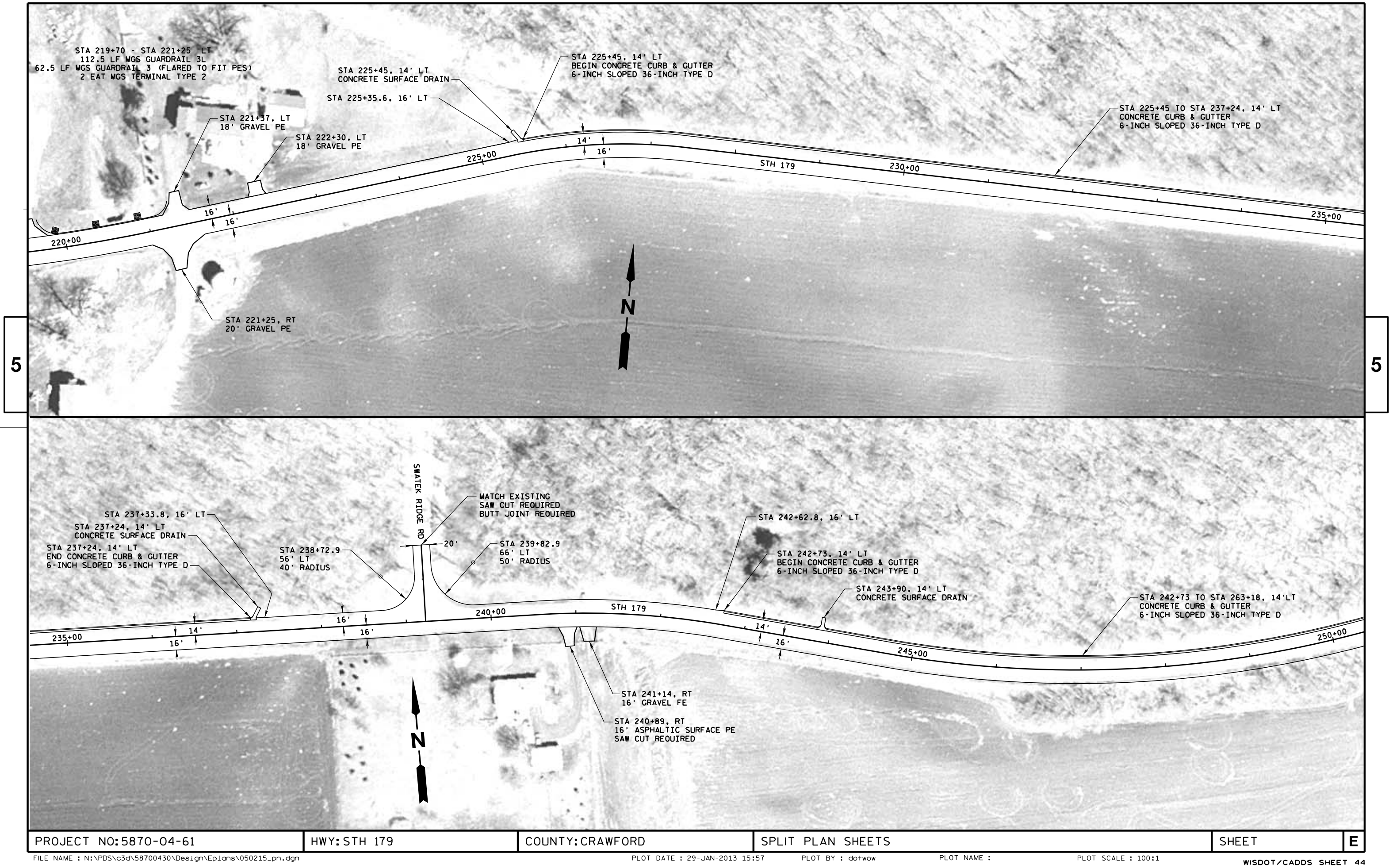
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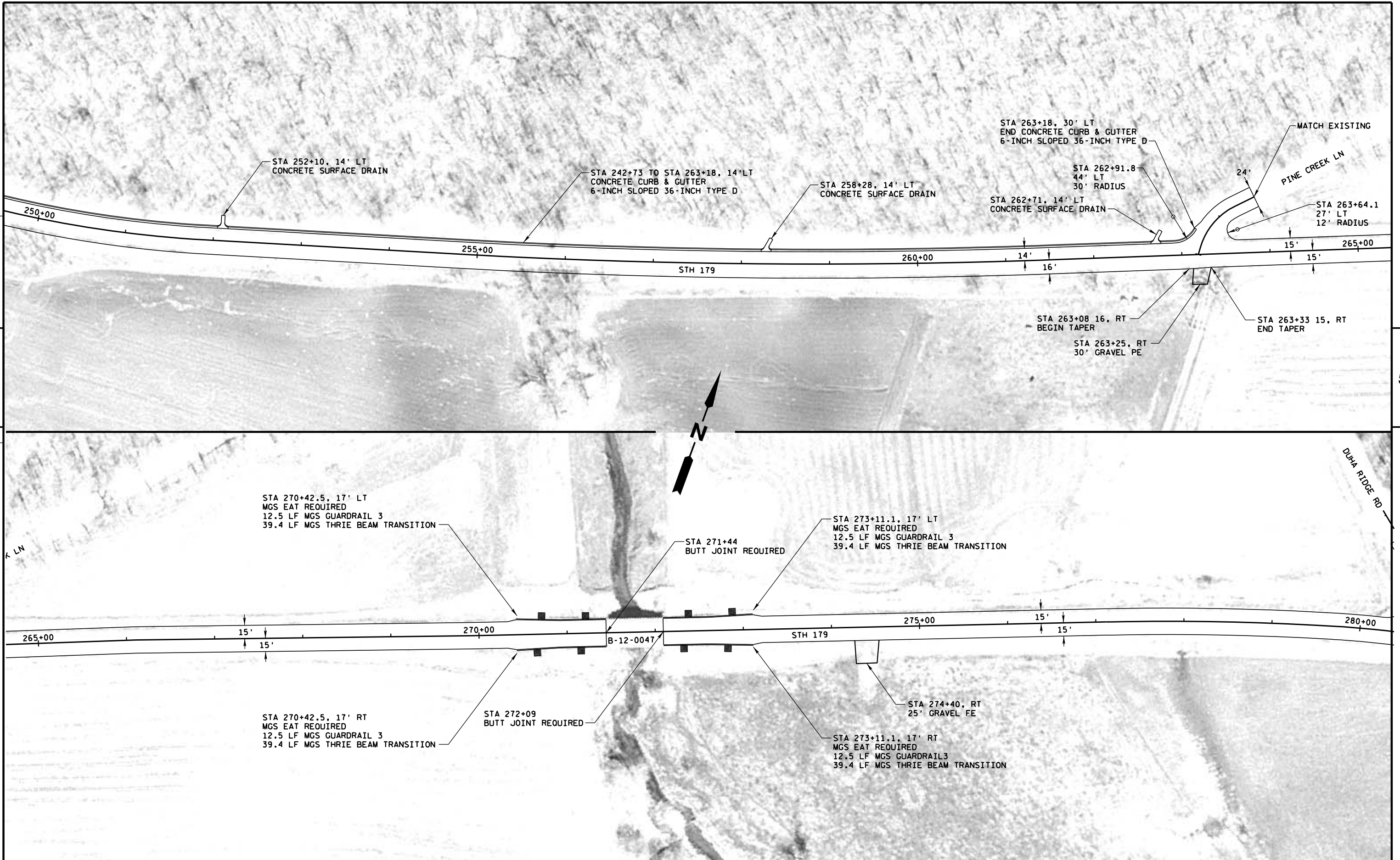


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PROJECT NO: 5870-04-61	HWY: STH 179	COUNTY: CRAWFORD	SPLIT PLAN SHEETS	SHEET	E
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PROJECT NO:5870-04-61

HWY: STH 179

COUNTY:CRAWFORD

SPLIT PLAN SHEETS

SHEET

E

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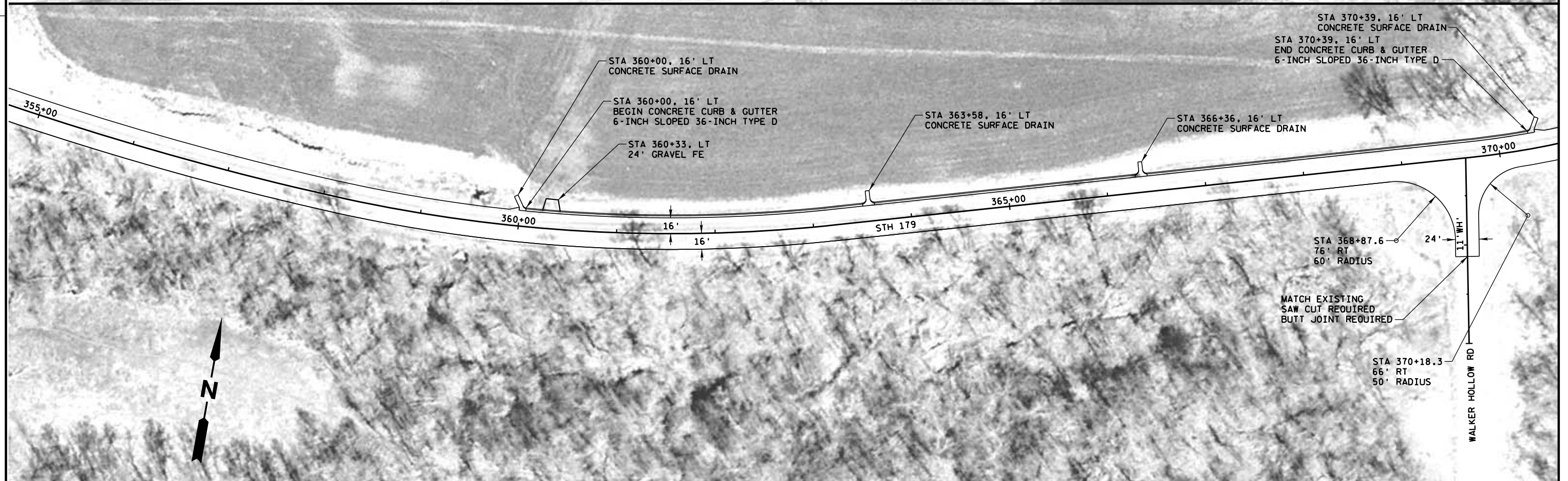
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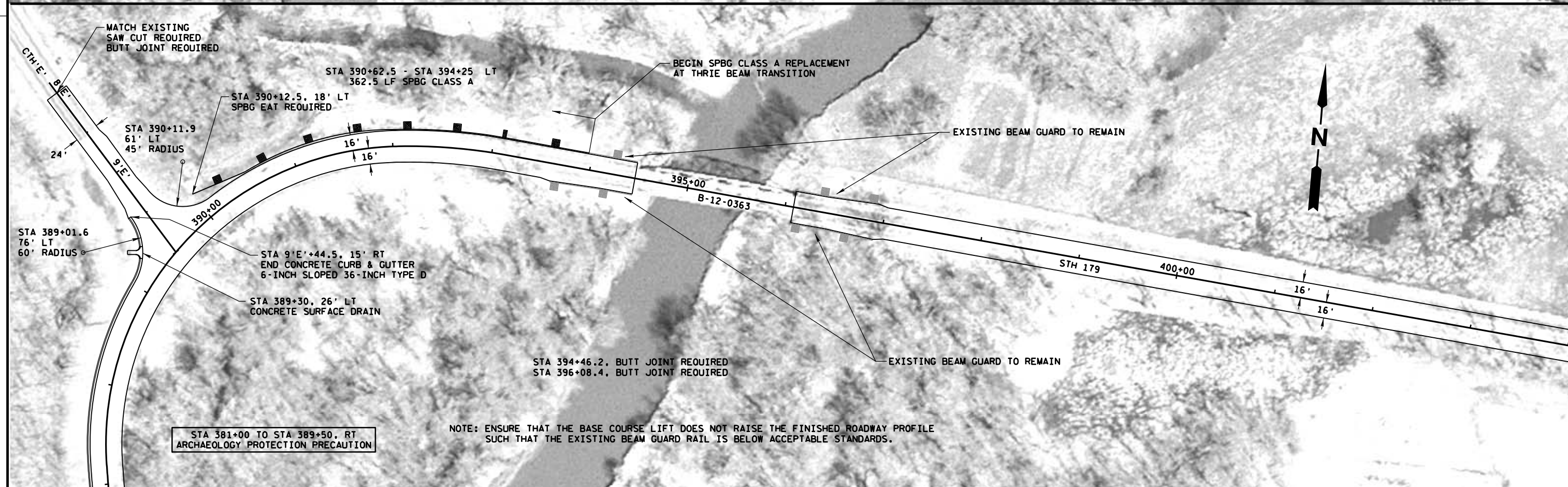
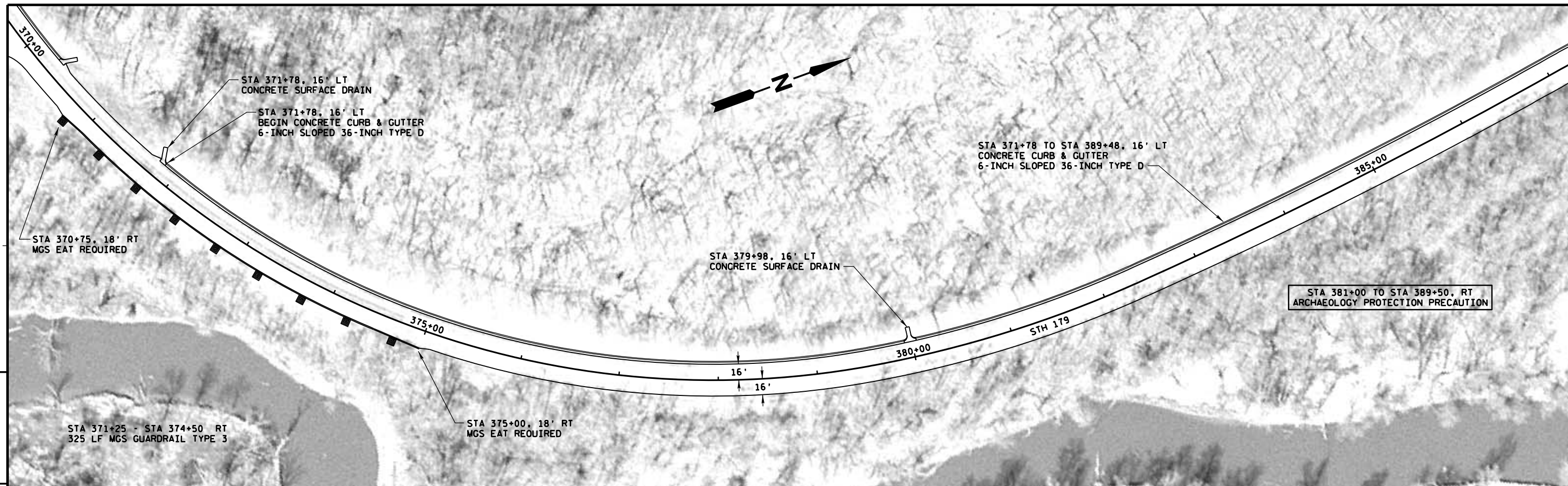
PLOT NAME :

PLOT SCALE : 100:1

WISDOT/CADDs SHEET 44







PROJECT NO:5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

SPLIT PLAN SHEETS

SHEET

E

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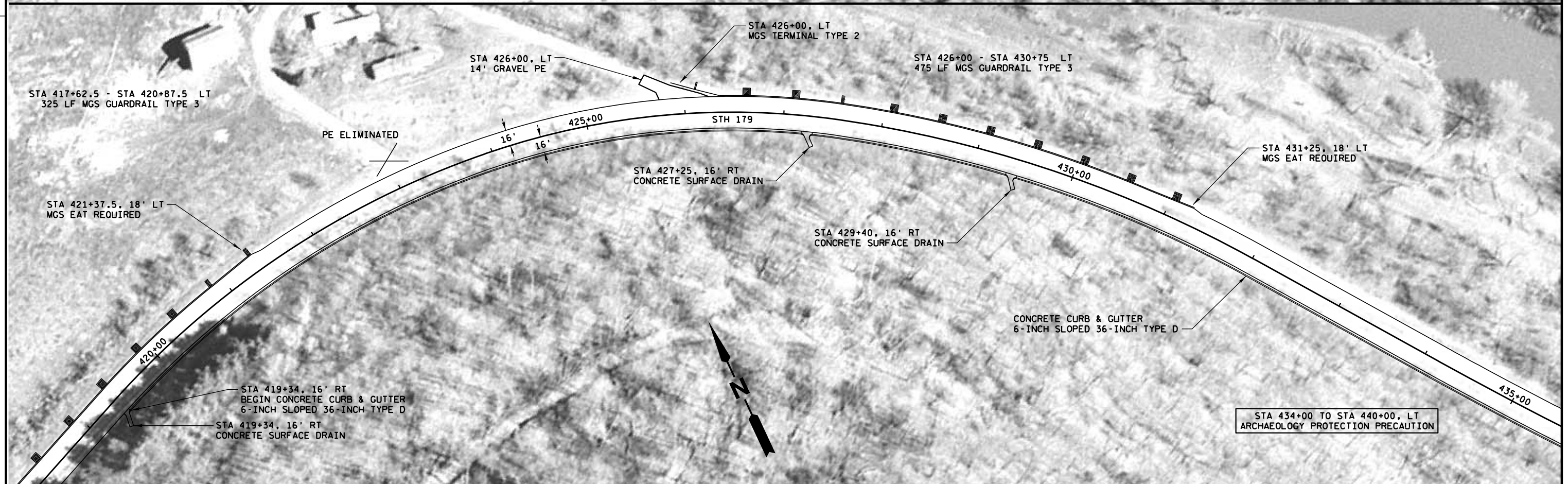
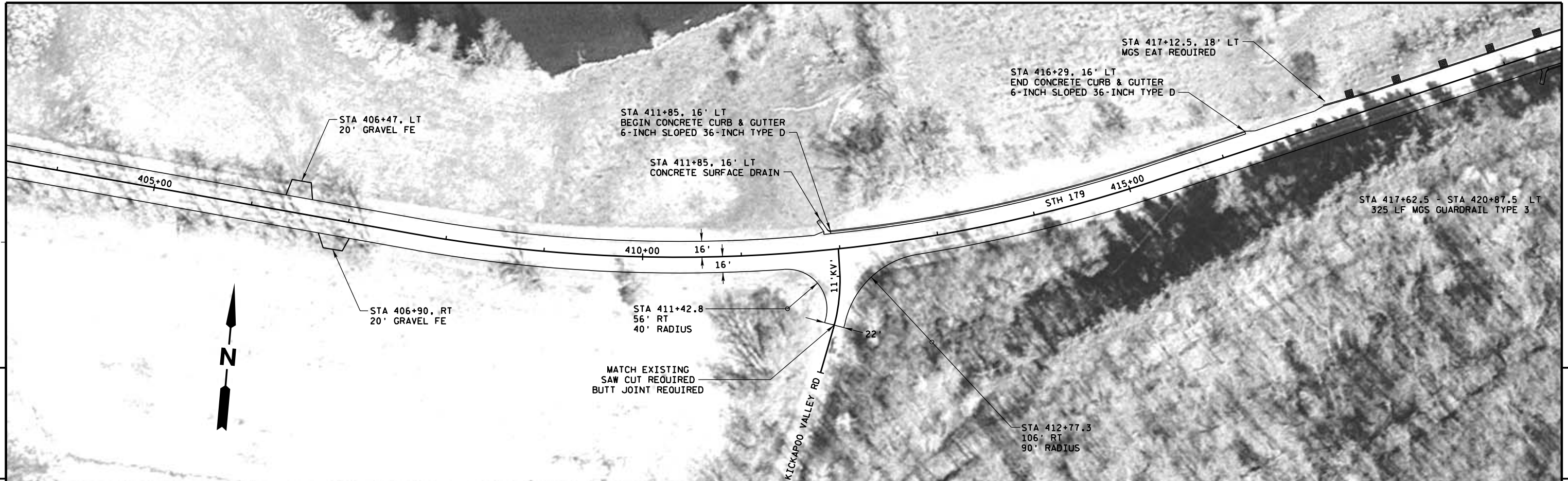
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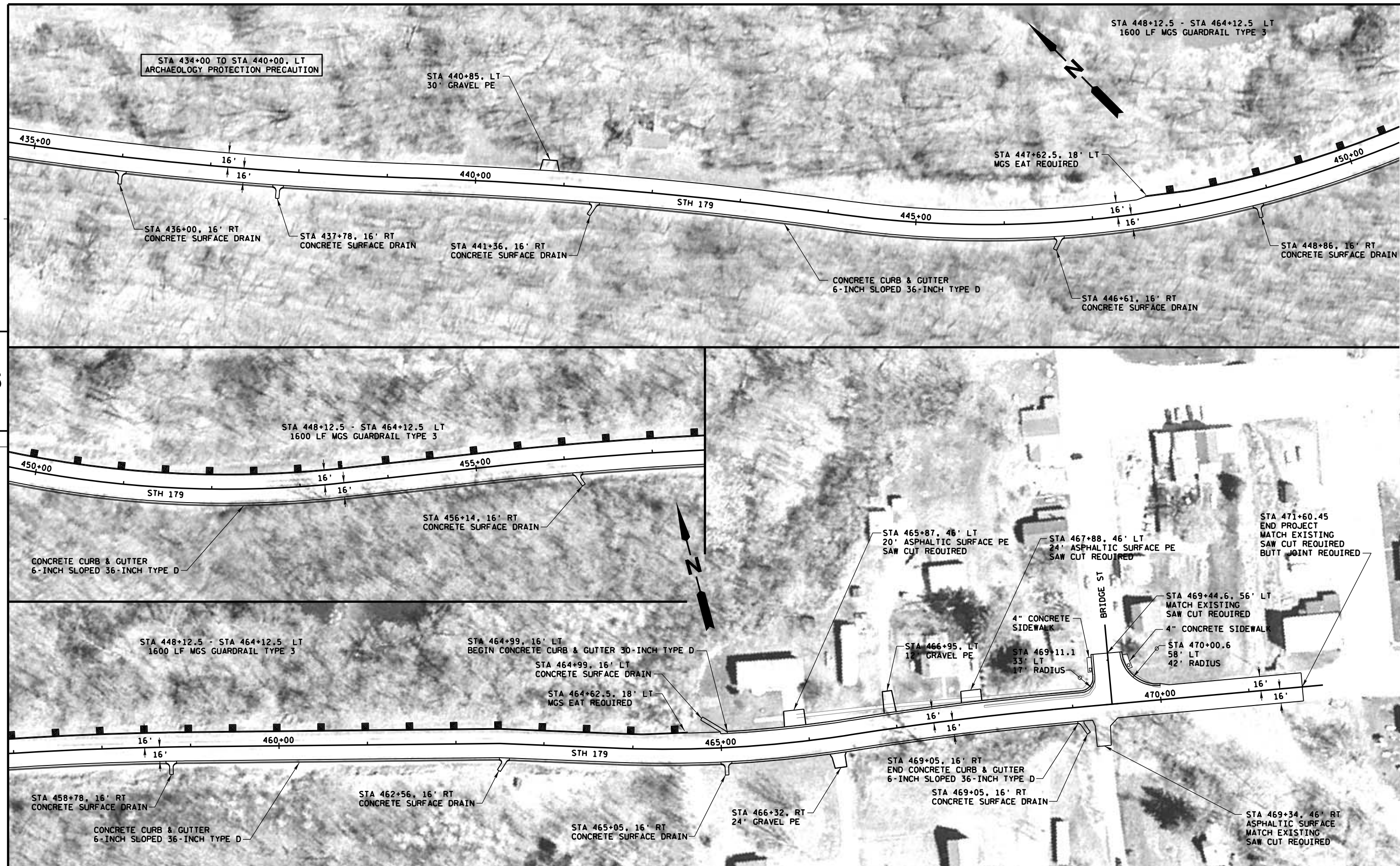
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PLOT NAME :

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WISDOT/CADDs SHEET 44





5

5

PROJECT NO:5870-04-61

HWY: STH 179

COUNTY: CRAWFORD

SPLIT PLAN SHEETS

SHEET

E

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PLOT DATE : 29-JAN-2013 10:51

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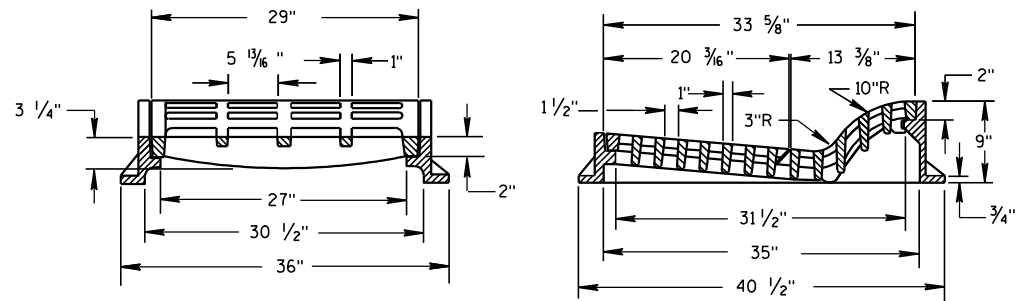
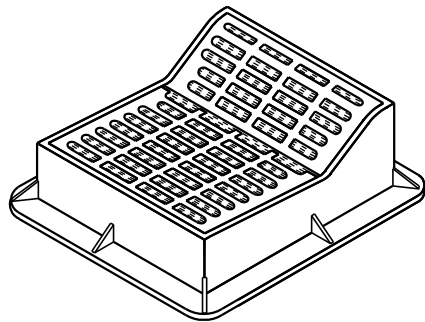
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PLOT SCALE : 100.000000:1.000000

WISDOT/CADDs SHEET 44

Standard Detail Drawing List

08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-01A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-01B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B15-07A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDERoads/DRI VEWAYS)
14B24-07A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-02A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-02C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-01A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-01B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-01C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A02-07	DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-05	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-01A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

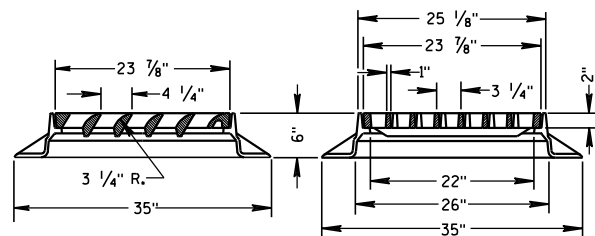
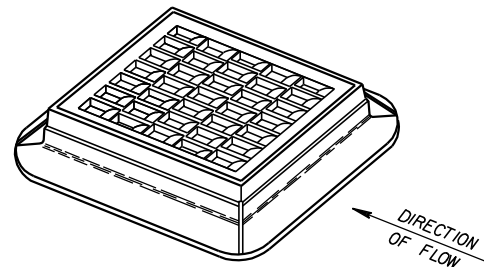


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

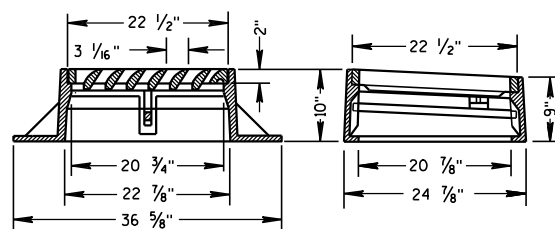
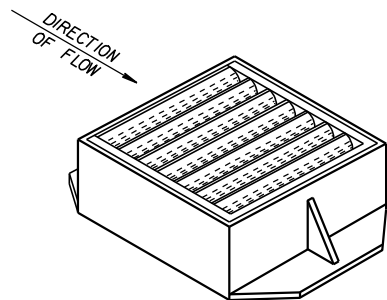
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE.....169 LBS.



TYPE "V"

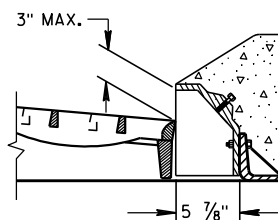
(APPROXIMATE WEIGHT 410 LBS.)

FRAME.....269 LBS.
GRATE.....136 LBS.
SAFETY BAR.....5 LBS.

**ALTERNATIVE CURB BOX
FOR TYPE "HM" COVER**

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE



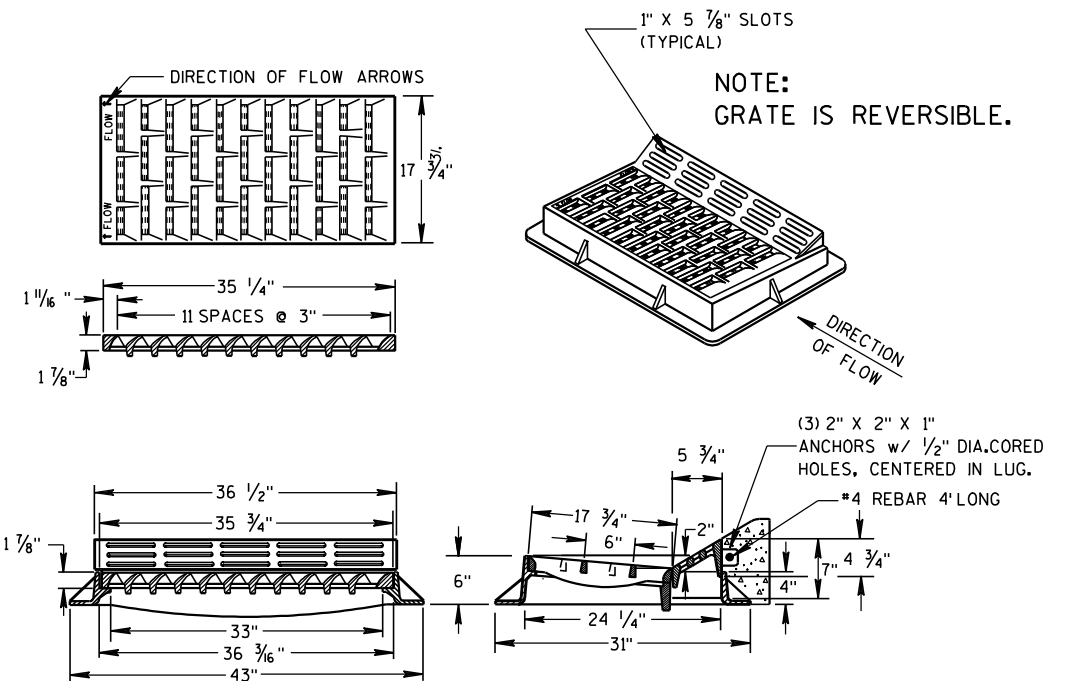
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



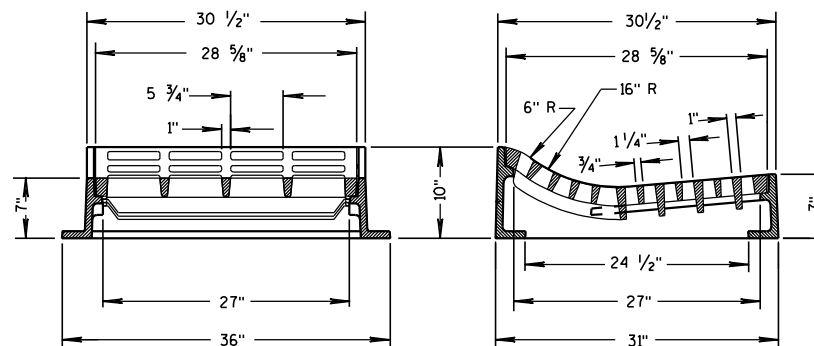
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)

FRAME.....181 LBS.
GRATE.....159 LBS.
CURB BOX.....74 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

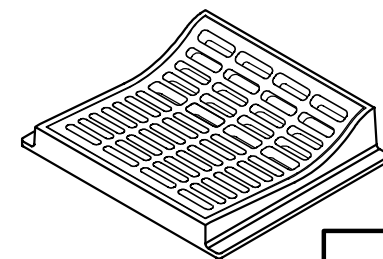


TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)

FRAME.....270 LBS.
GRATE.....260 LBS.

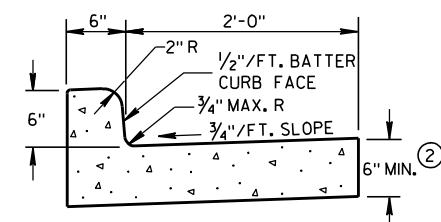
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



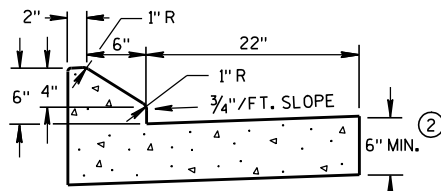
INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

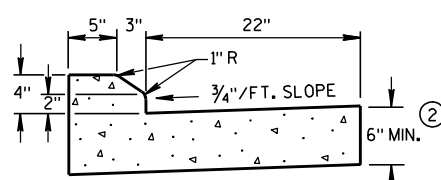
APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



TYPES A & D ①



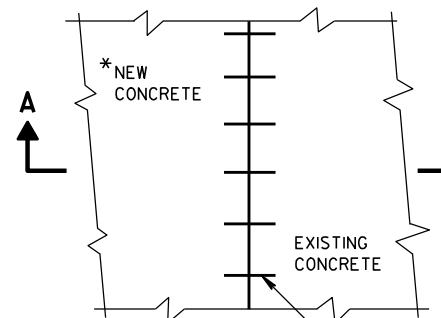
6" SLOPED CURB TYPES G & J ①



4" SLOPED CURB TYPES G & J ①

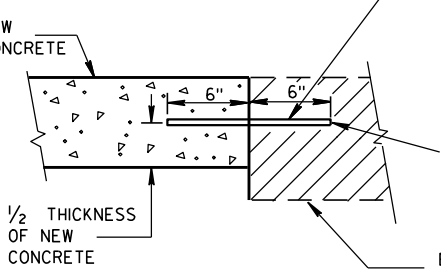
CONCRETE CURB & GUTTER 30"

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

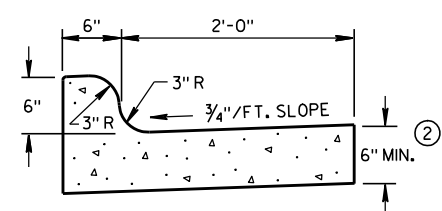


PLAN VIEW

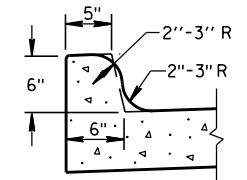
NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.



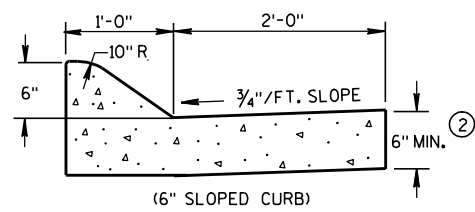
SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT



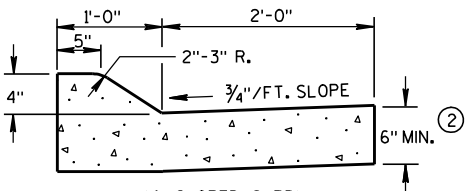
TYPES K & L ①



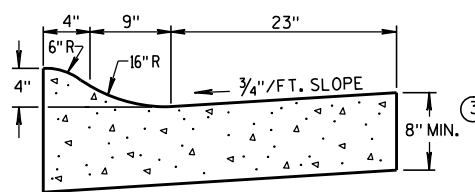
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)

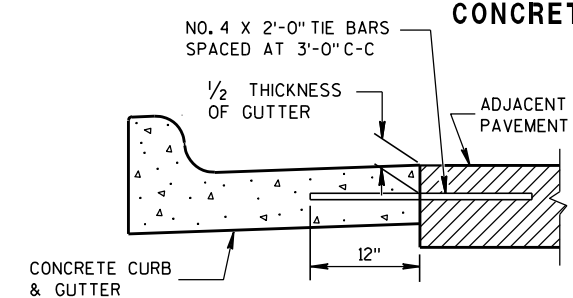


(4" SLOPED CURB)

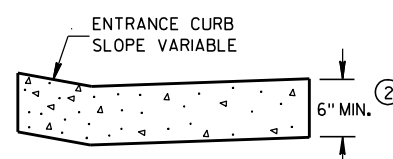


4" SLOPED CURB TYPES R & T ① ④

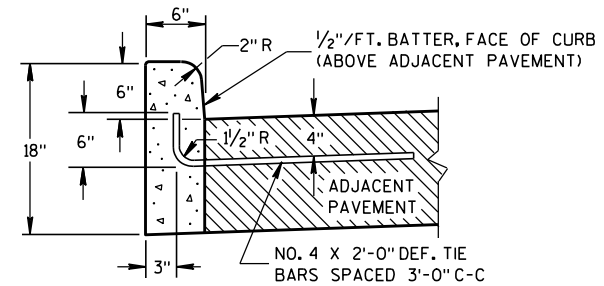
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

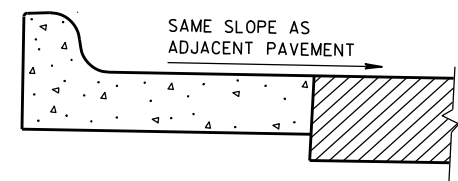


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

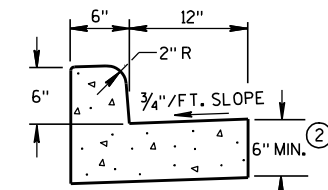


TYPES A & D ①

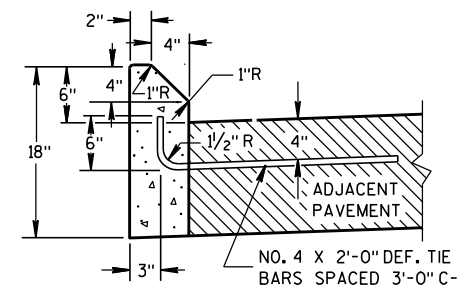
CONCRETE CURB



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



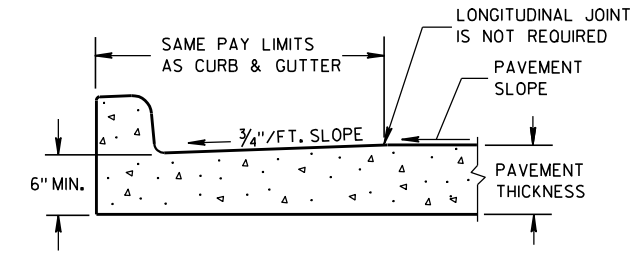
TYPES A & D
CONCRETE CURB & GUTTER 18"



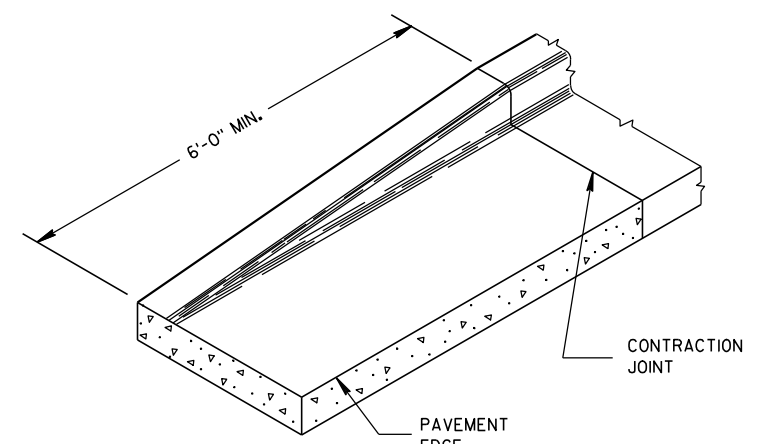
TYPES G & J ①

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.
- INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.
- WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.
- UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
 - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
 - ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
 - ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
 - ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

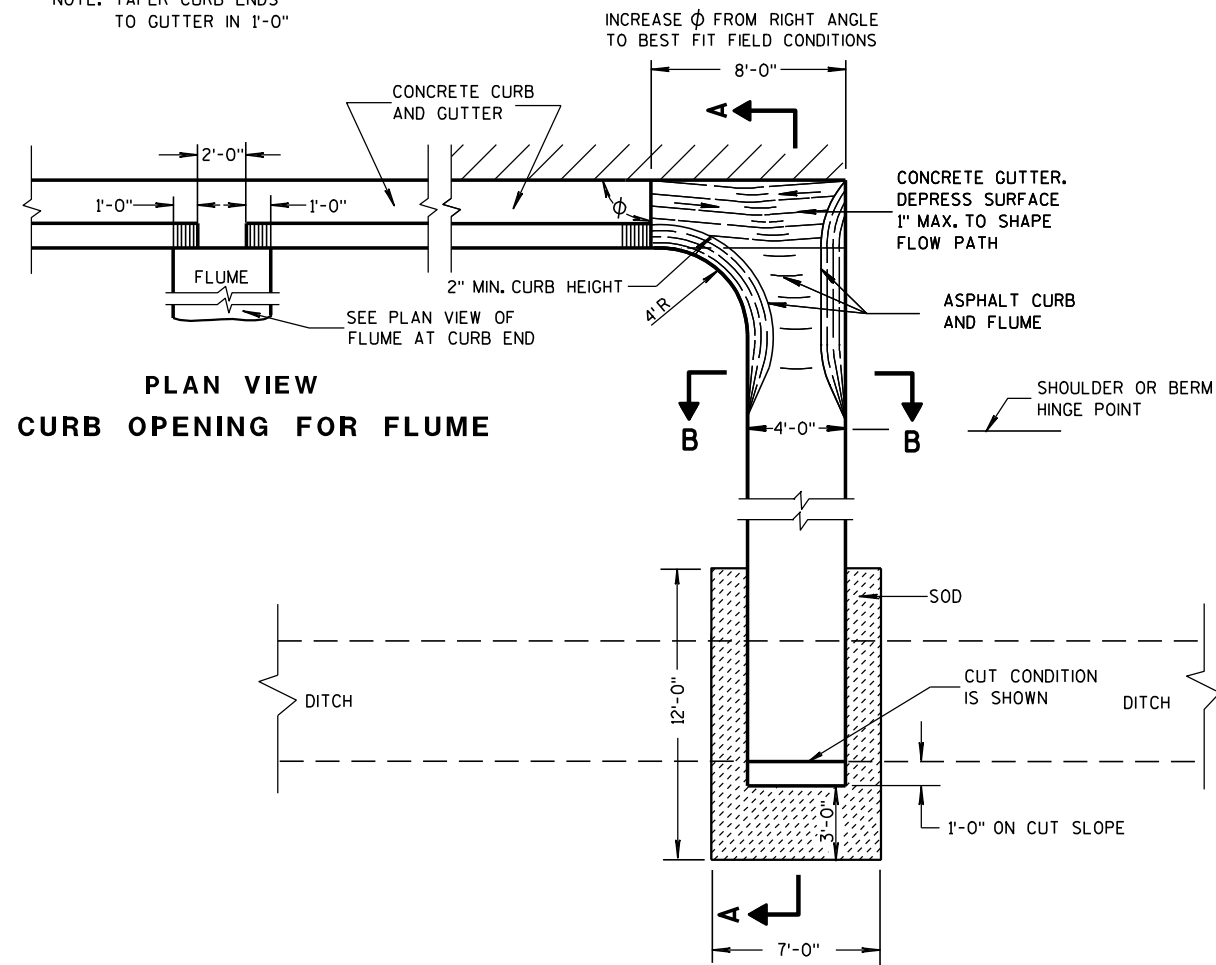
CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

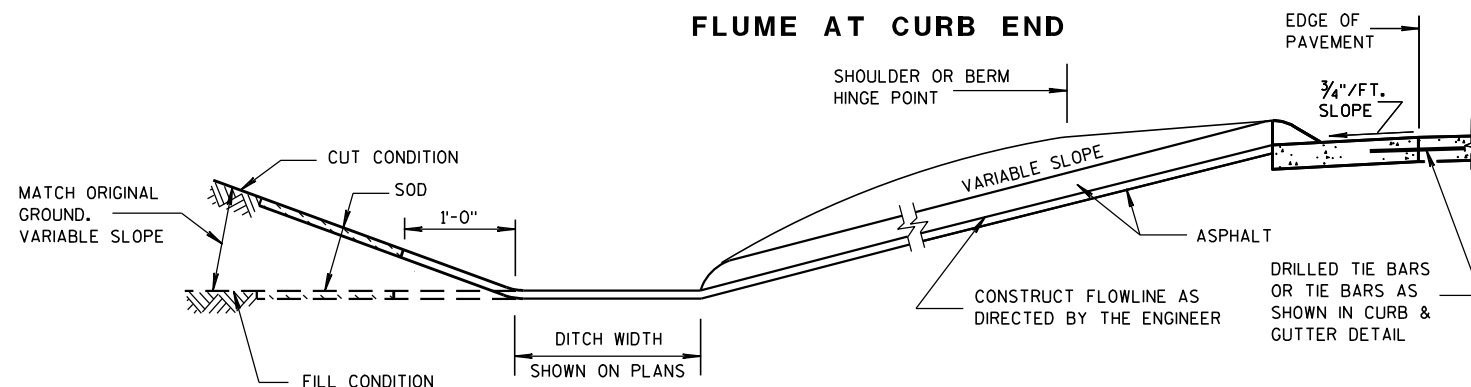
ASPHALTIC FLUME

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

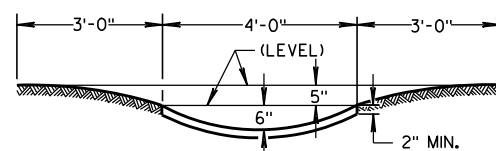


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

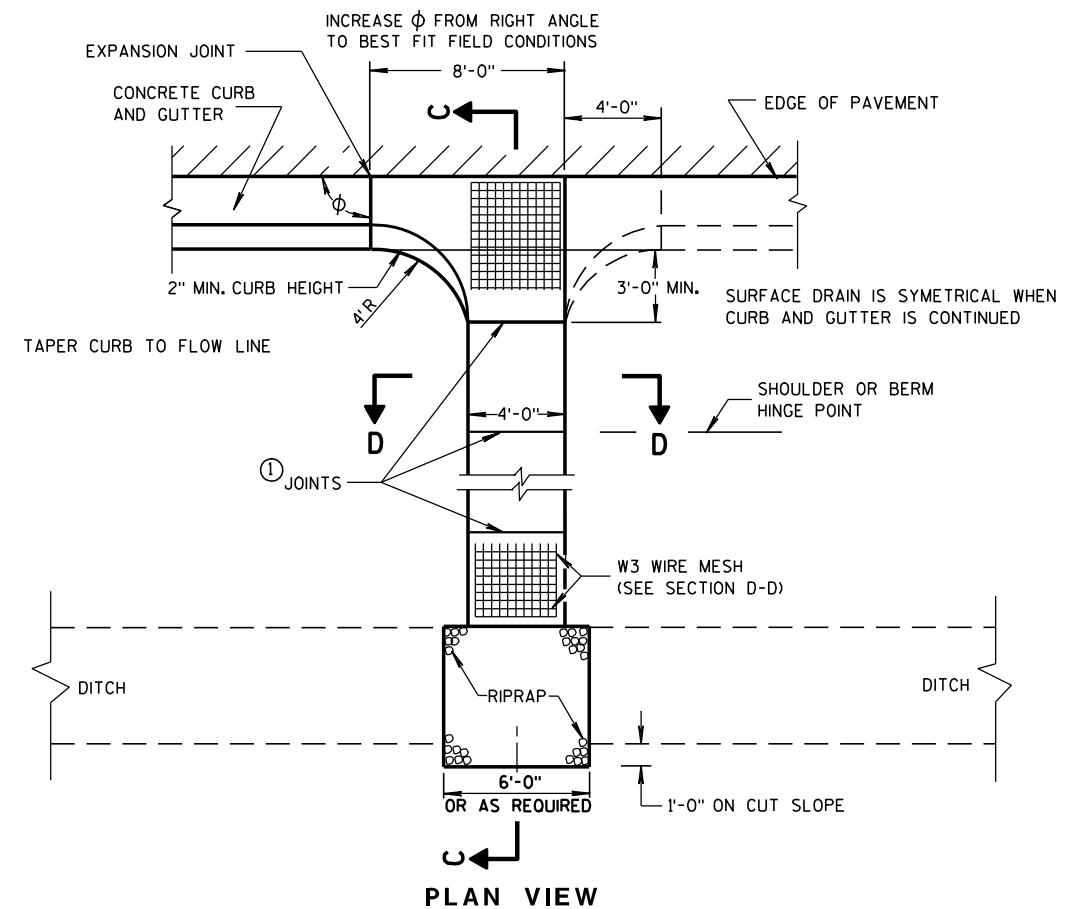
GENERAL NOTES

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

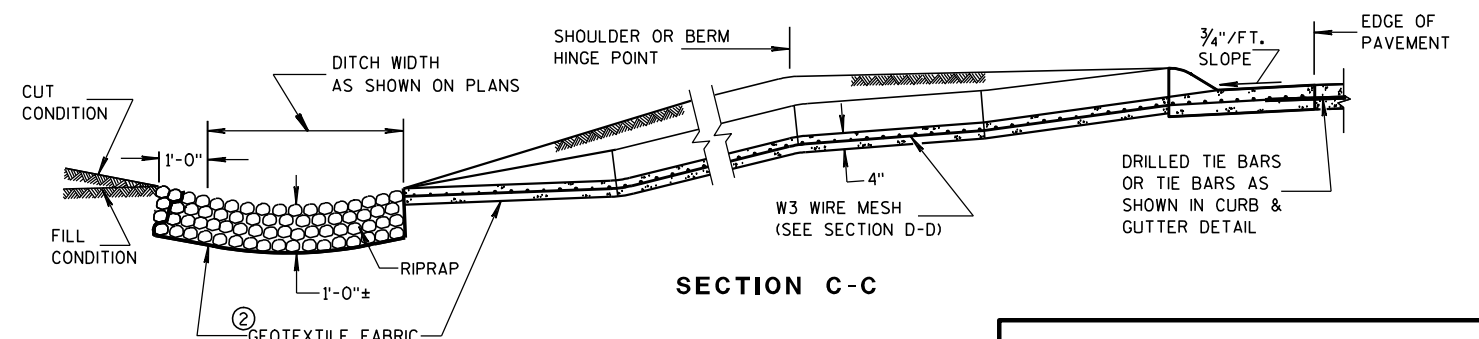
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

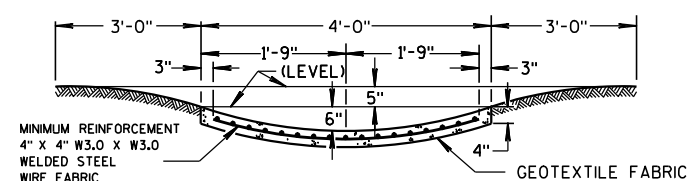
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

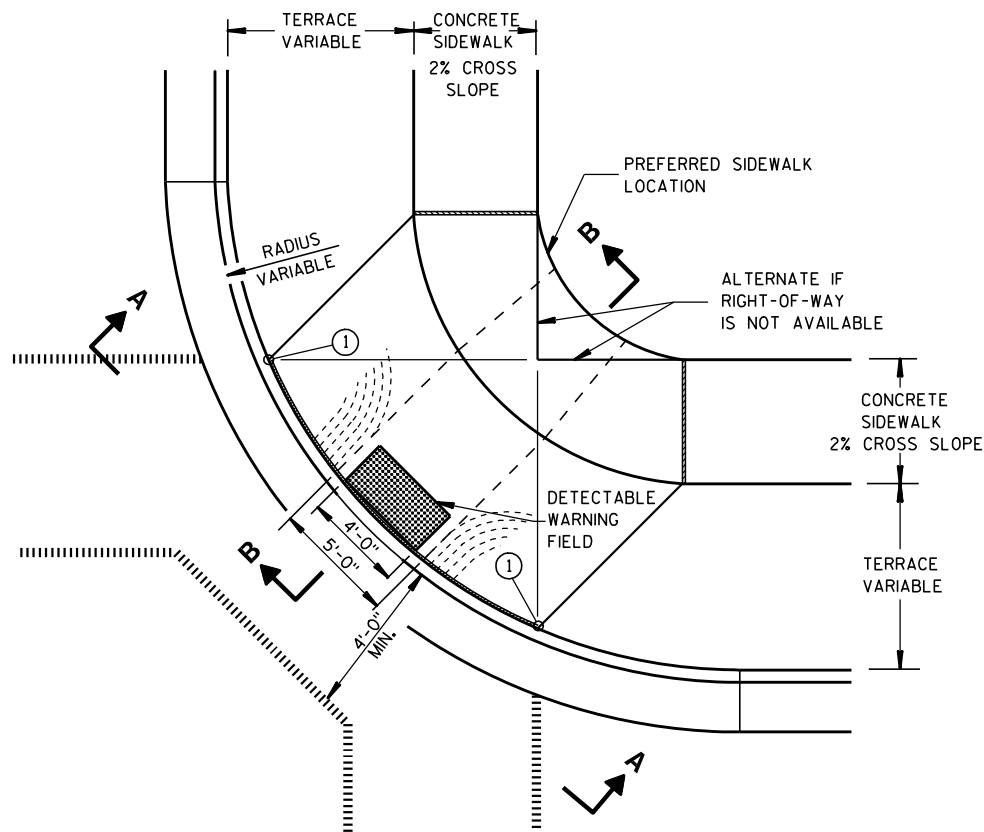
APPROVED

9-4-08

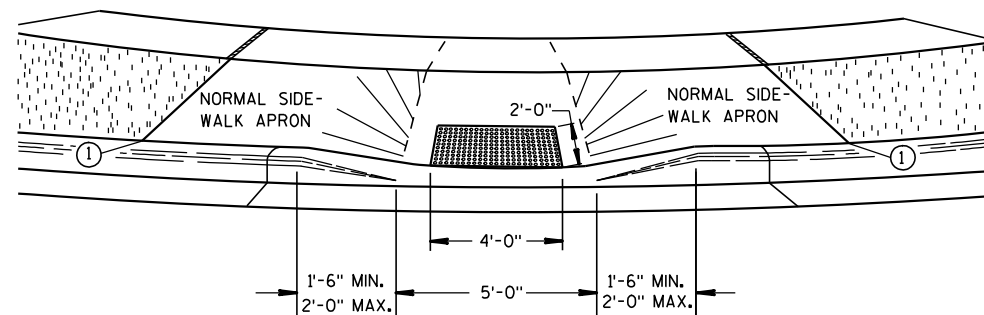
DATE

FHWA

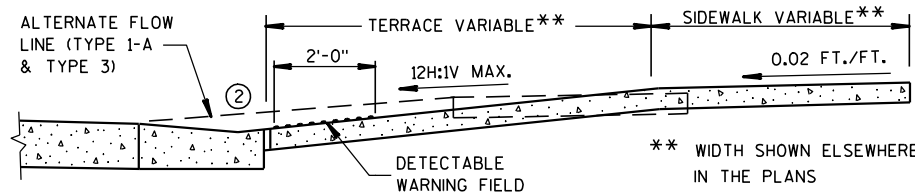
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



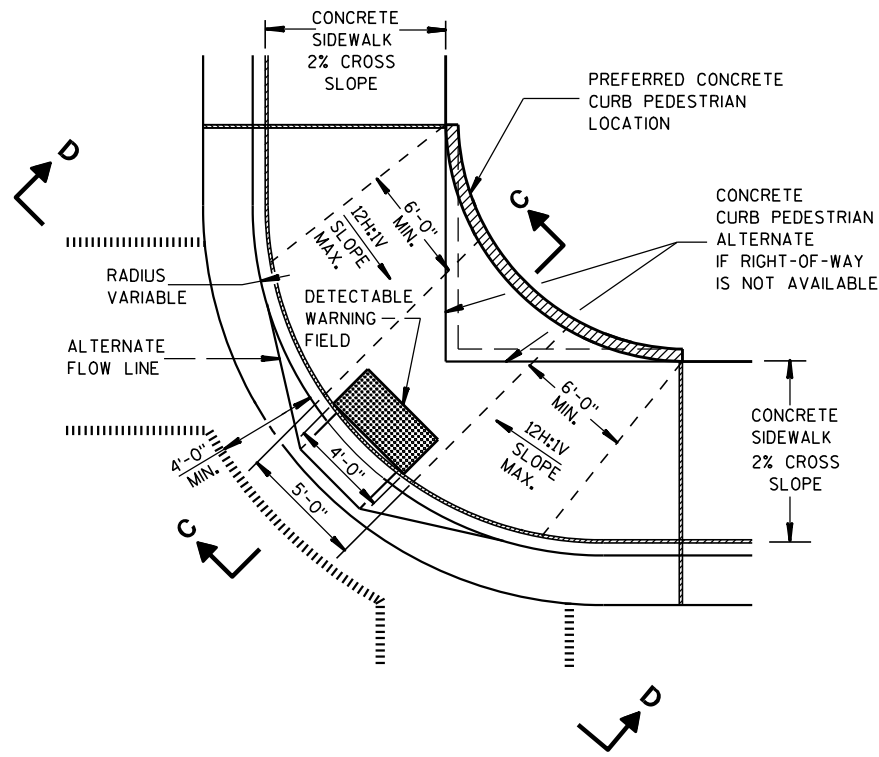
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



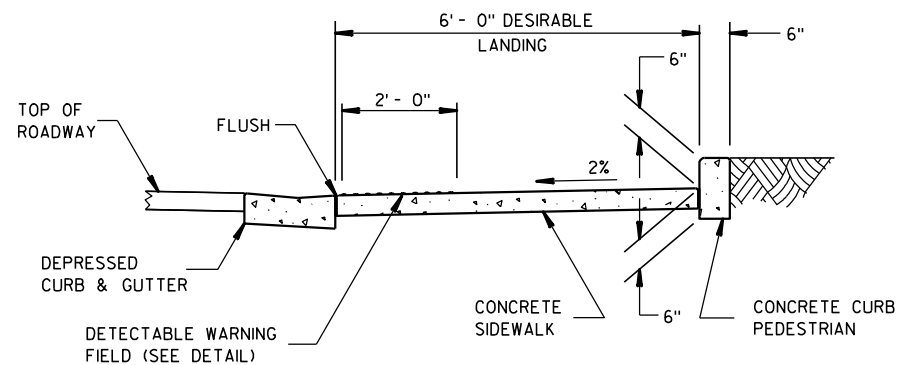
VIEW A-A



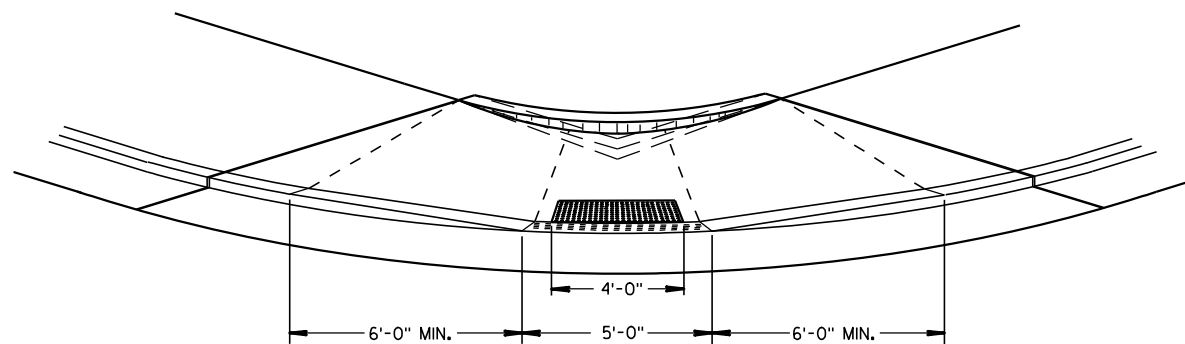
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

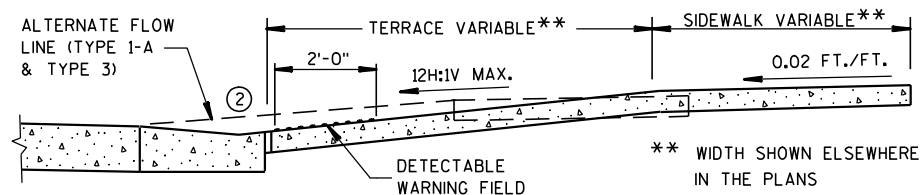
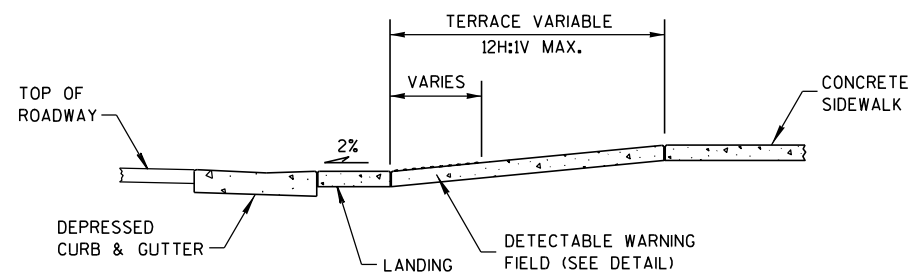
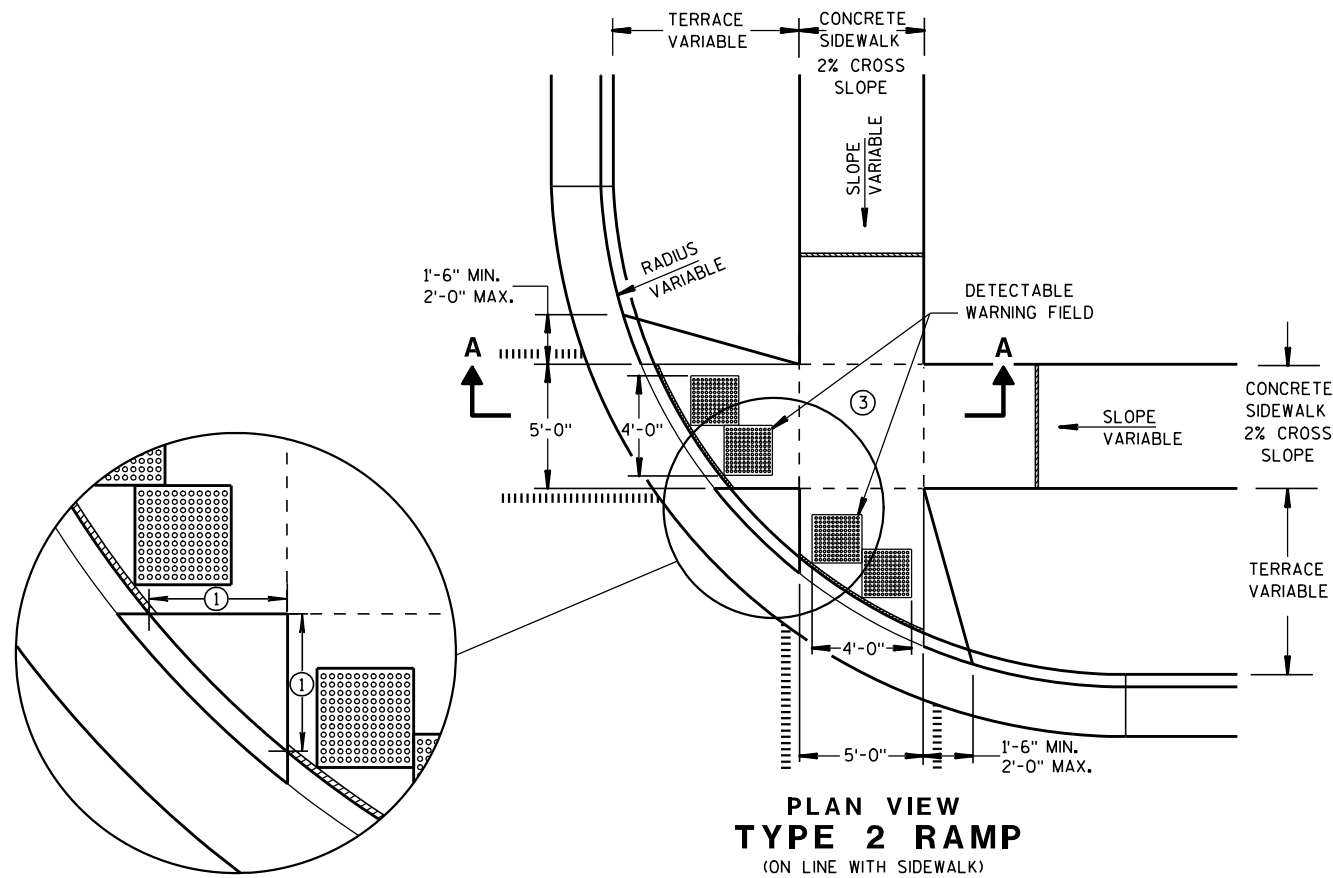
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

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

CURB RAMPS
TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



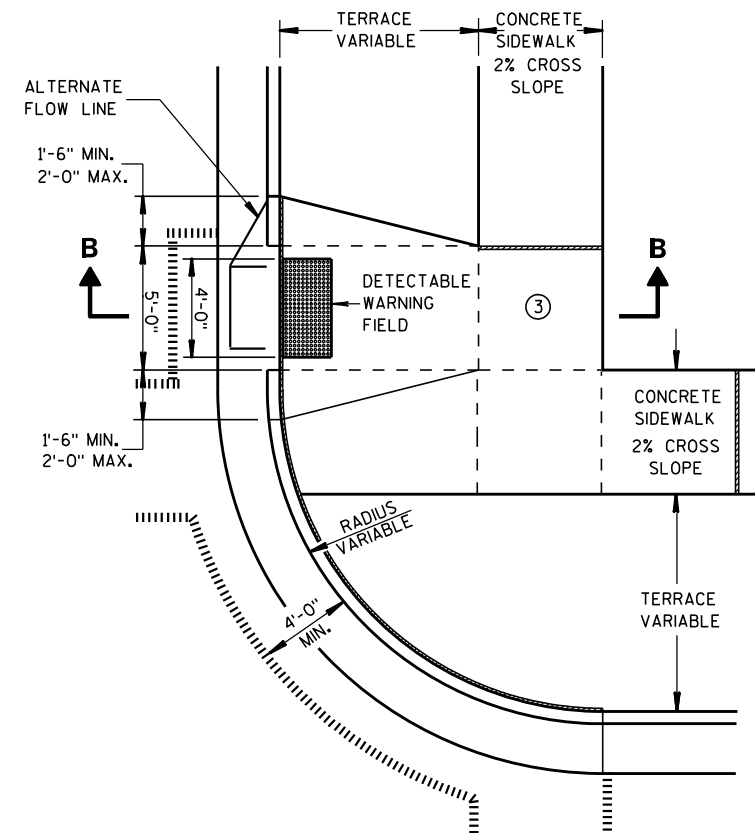
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

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



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

**CURB RAMPS
TYPES 2 AND 3**

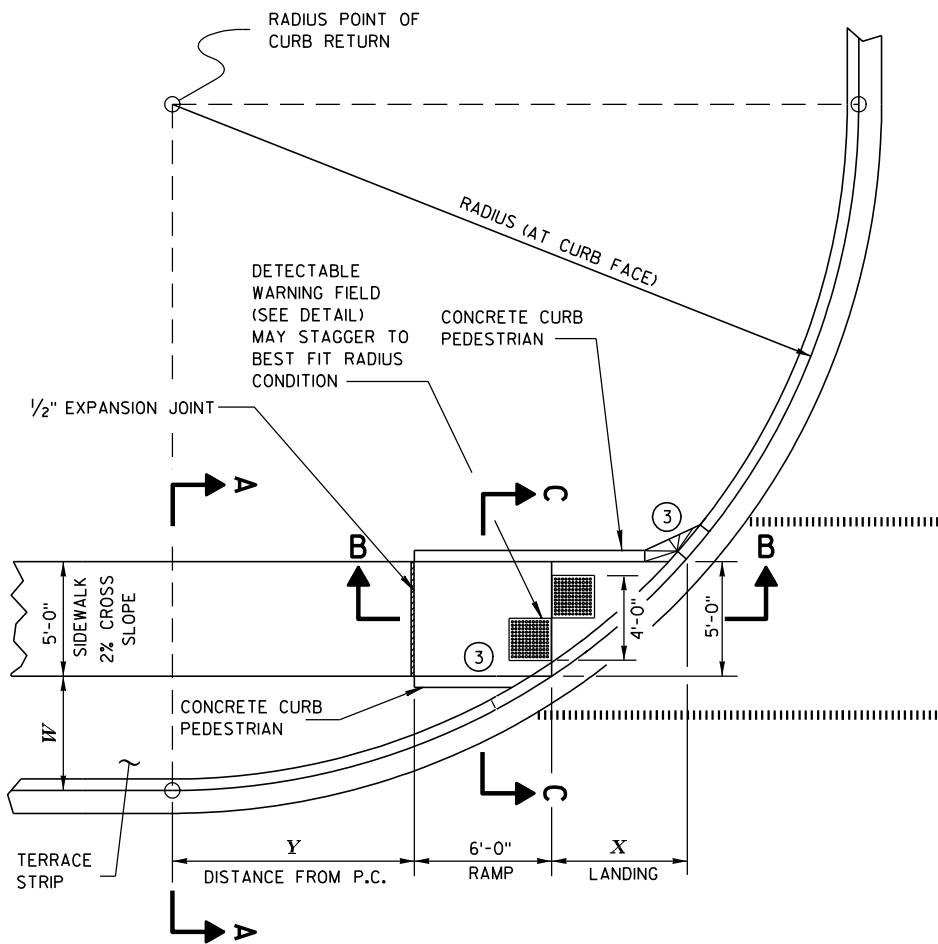
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



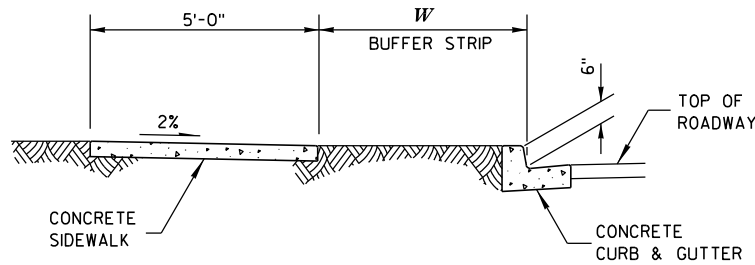
INTERMEDIATE RADII CAN BE INTERPOLATED



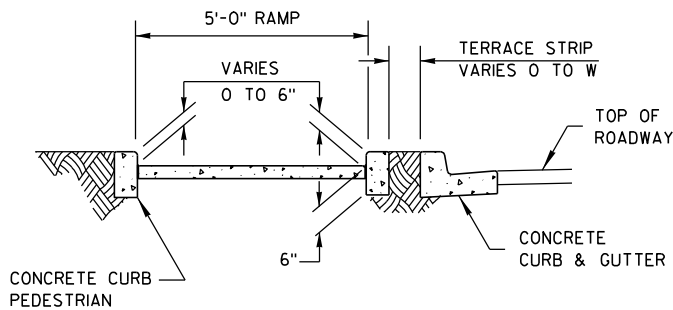
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



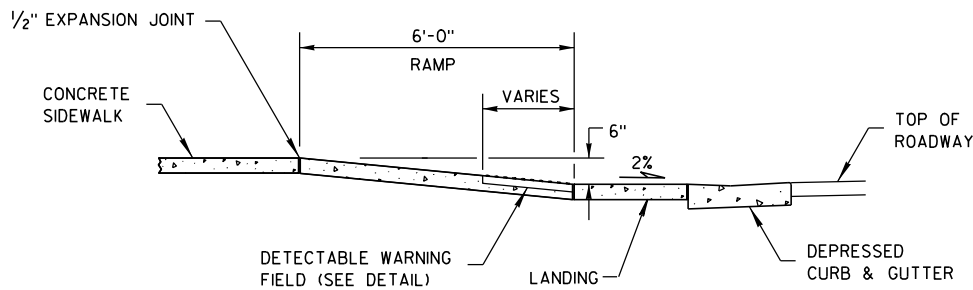
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

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

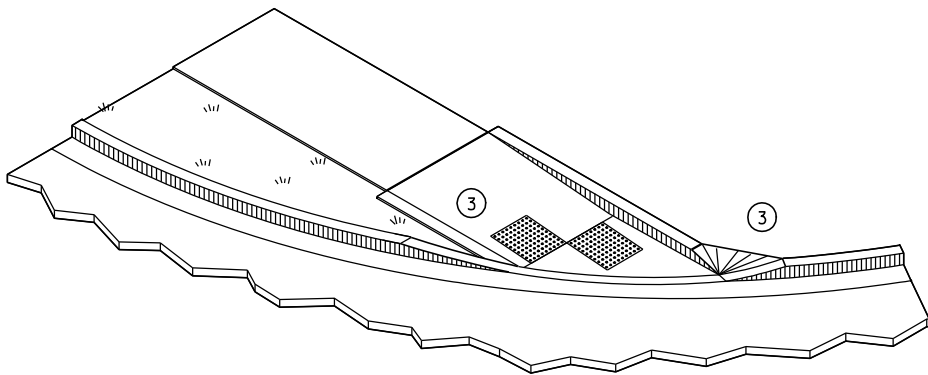
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS).
DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



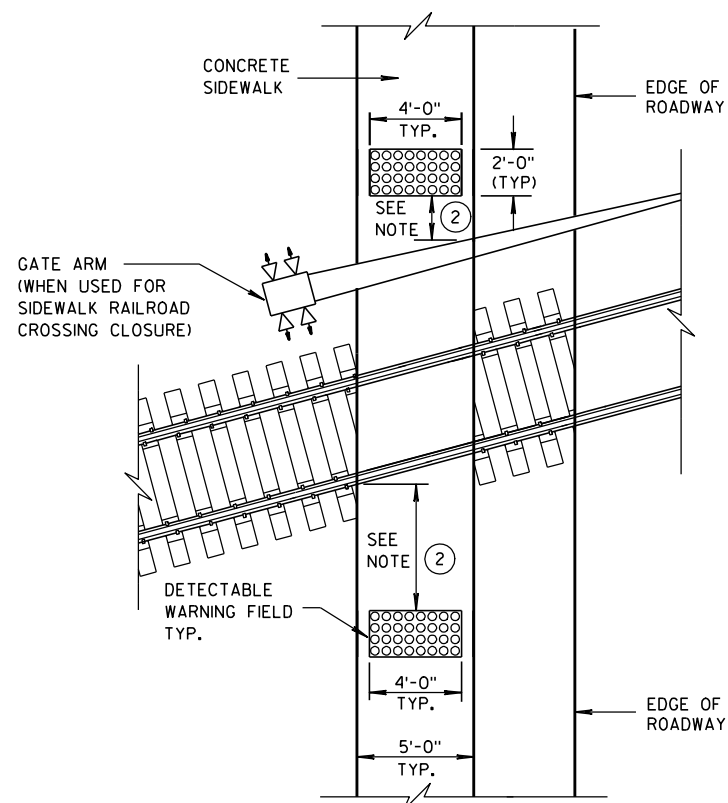
ISOMETRIC VIEW

LEGEND

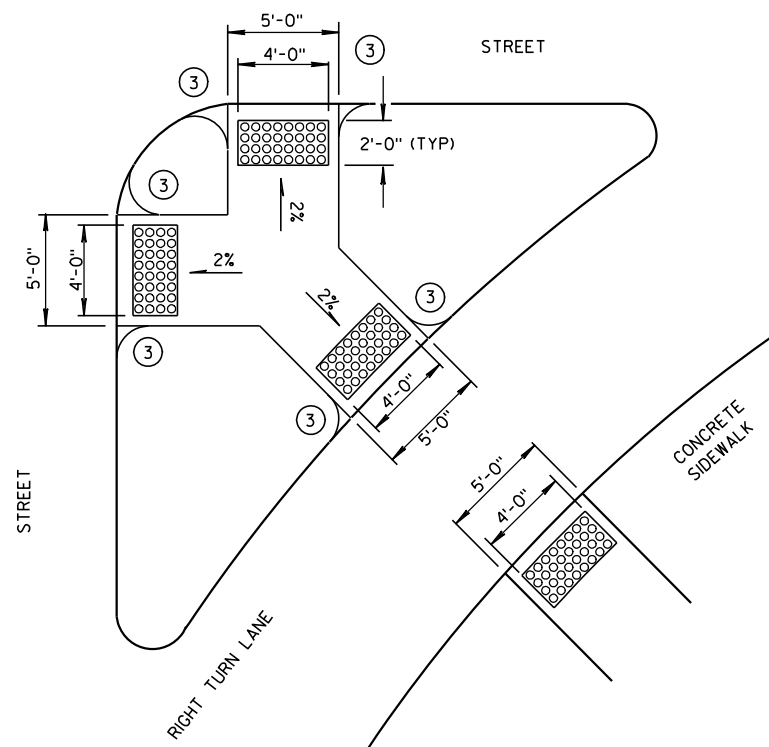
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

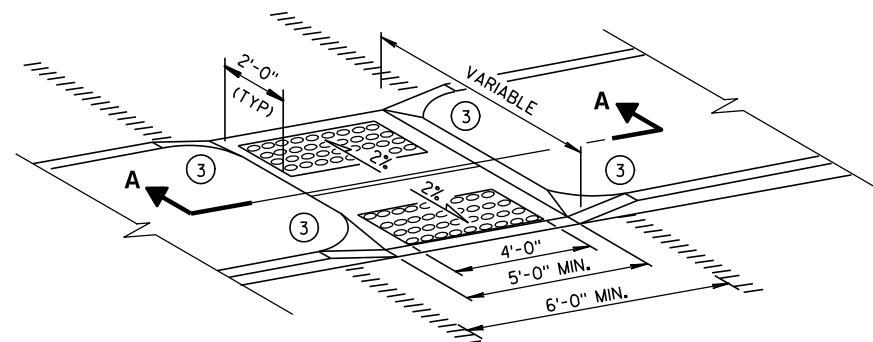
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



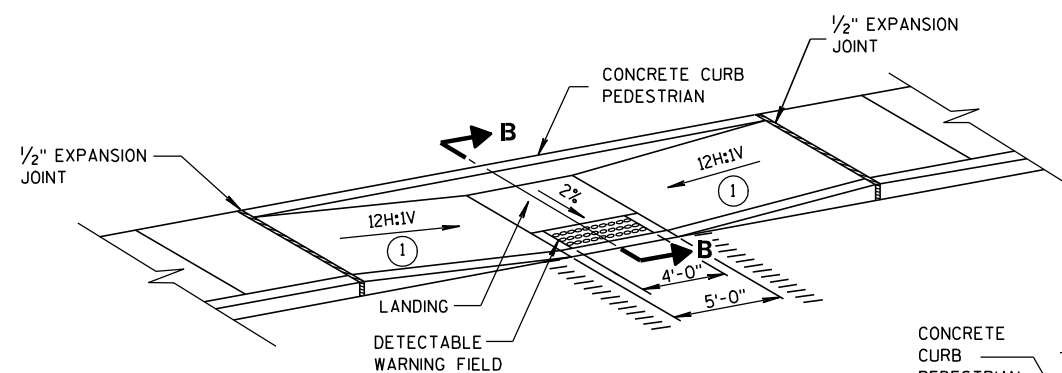
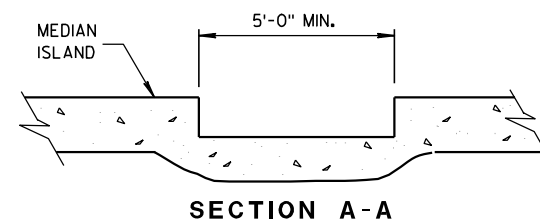
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



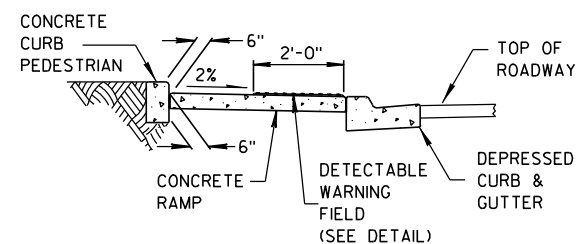
TYPE 6
DETECTABLE WARNING AT ISLANDS



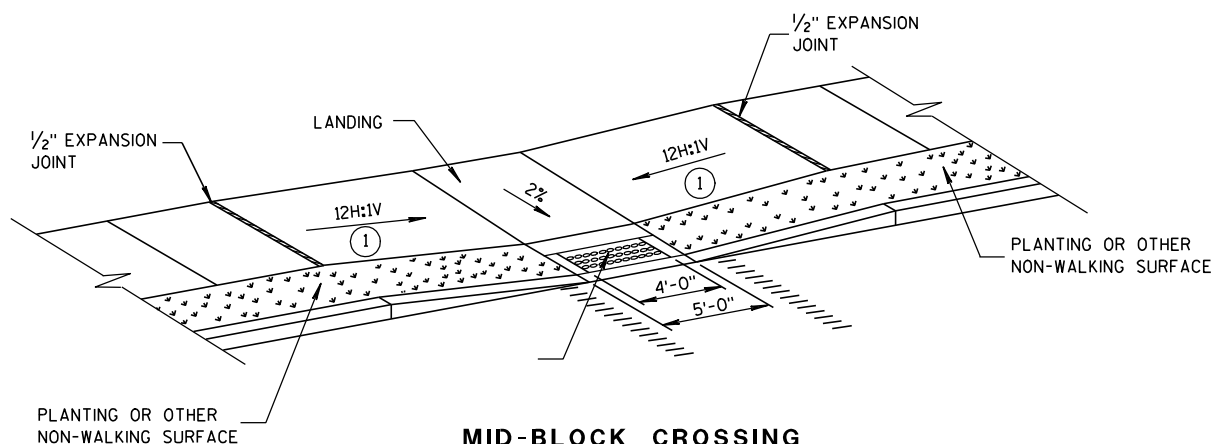
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

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

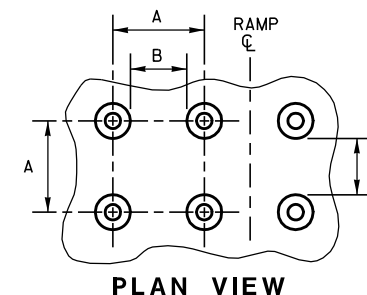
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ② THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET \pm 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

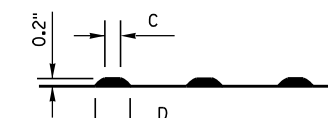
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

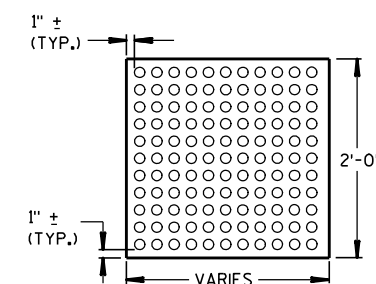
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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



ELEVATION VIEW

TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

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

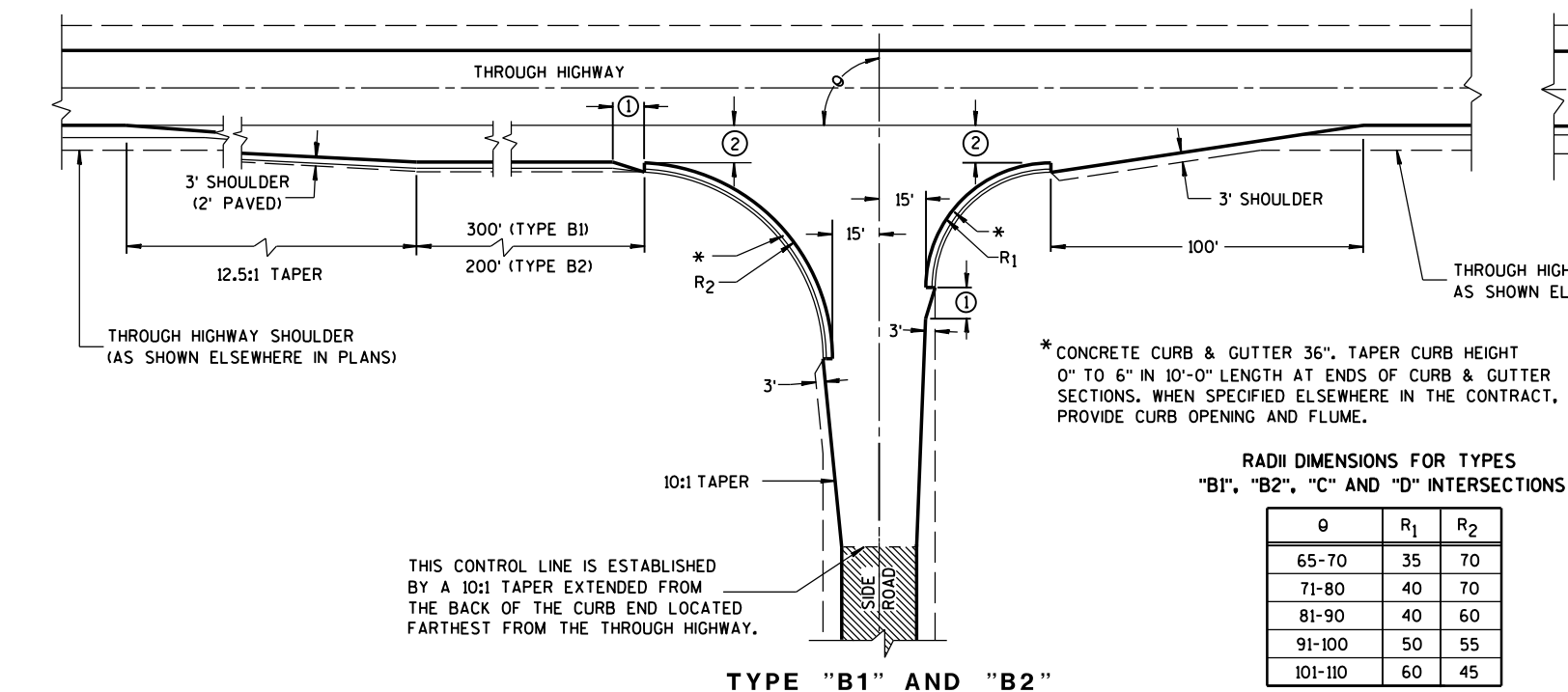
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-9-10
DATE

FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

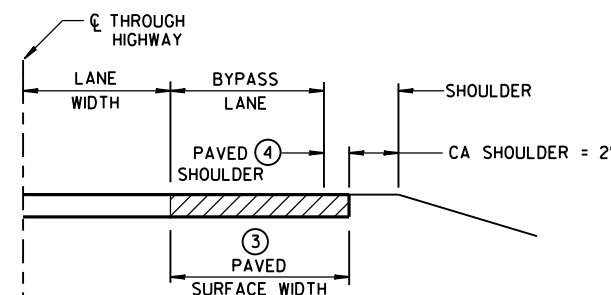
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

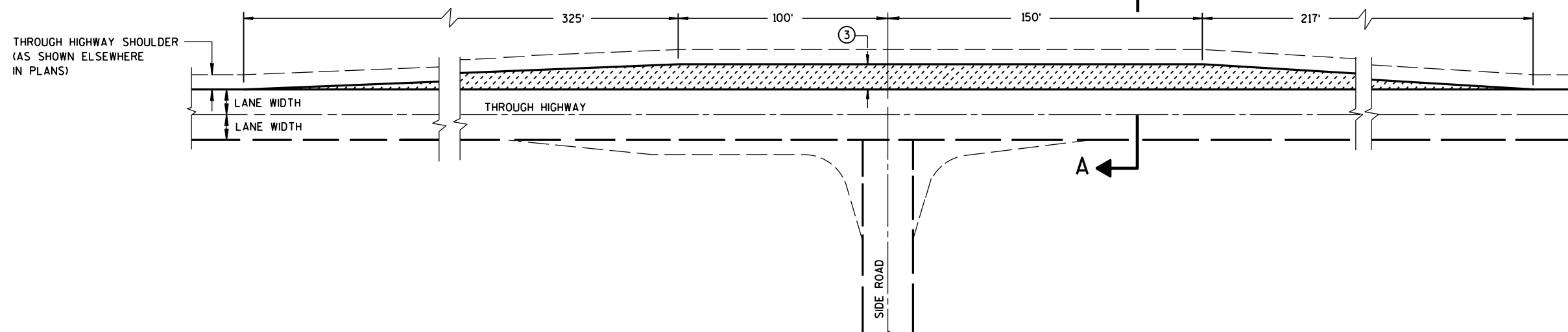
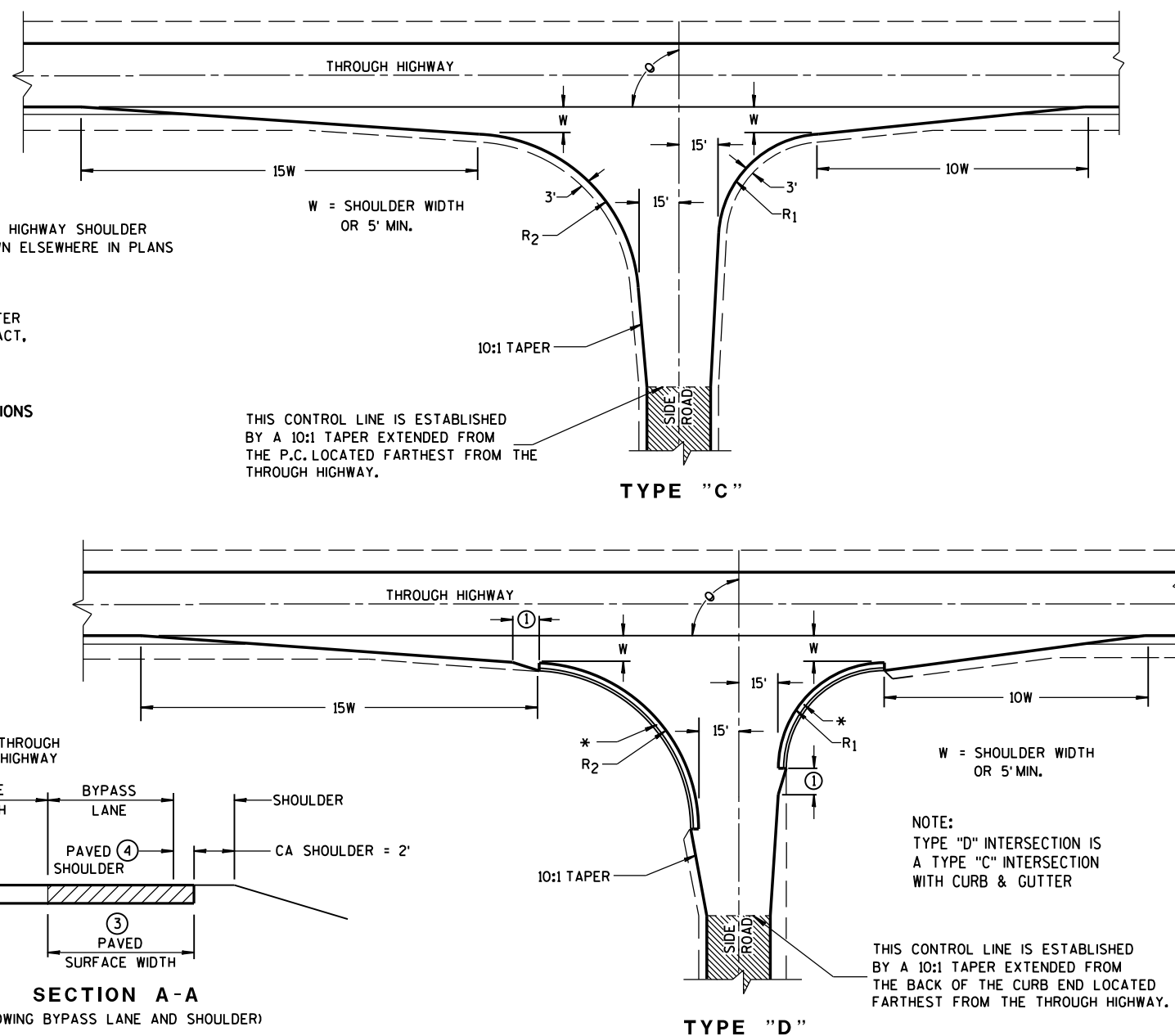
EXISTING PAVED SURFACE

BYPASS LANE

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



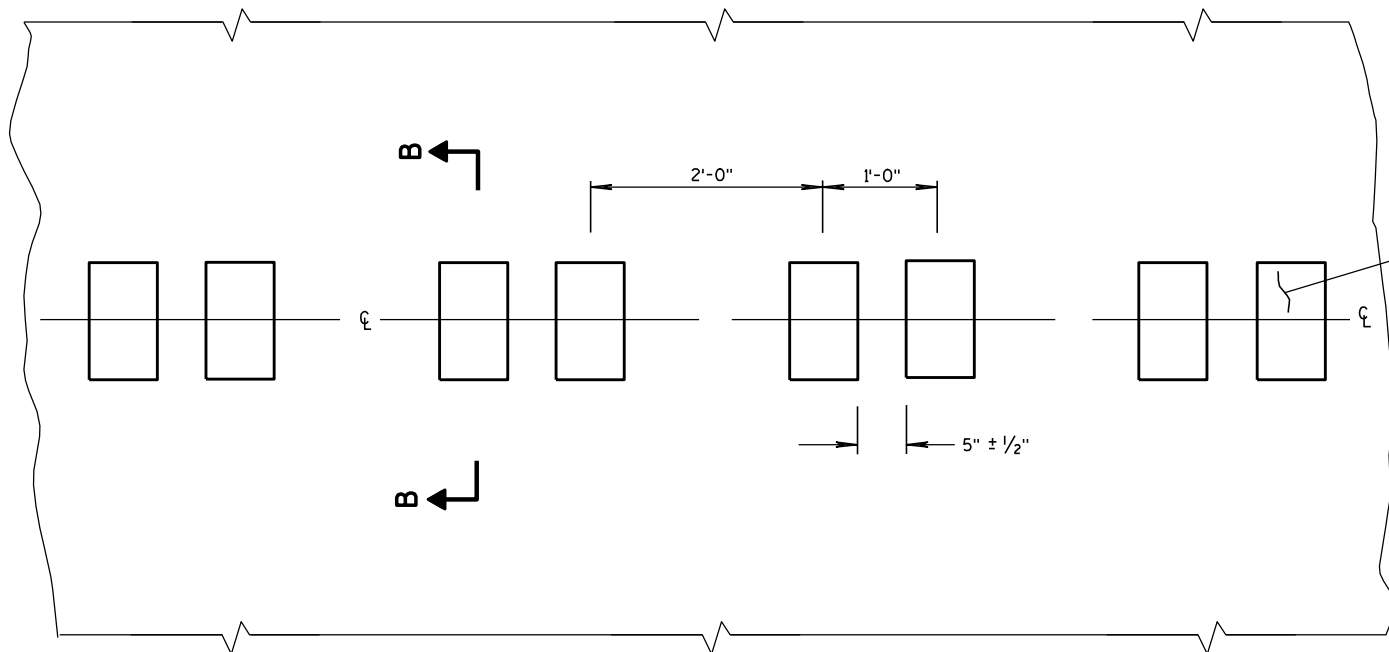
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

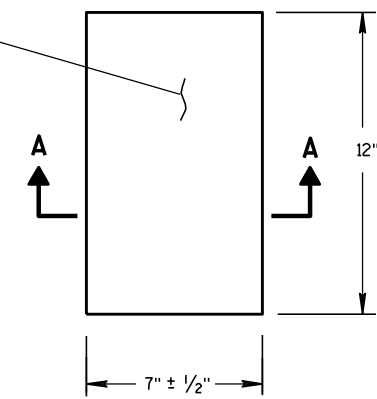


PLAN VIEW
CENTER LINE WITH GROOVES

6

6

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

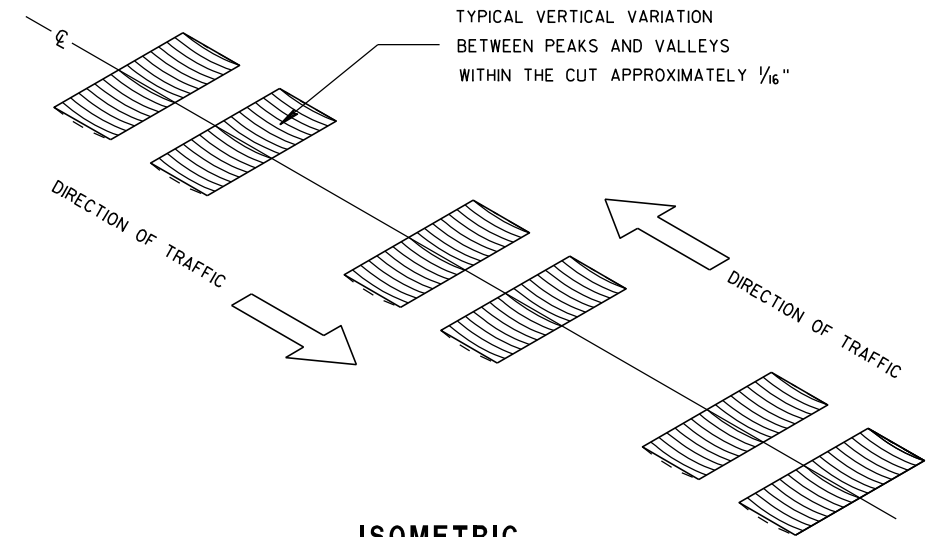
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

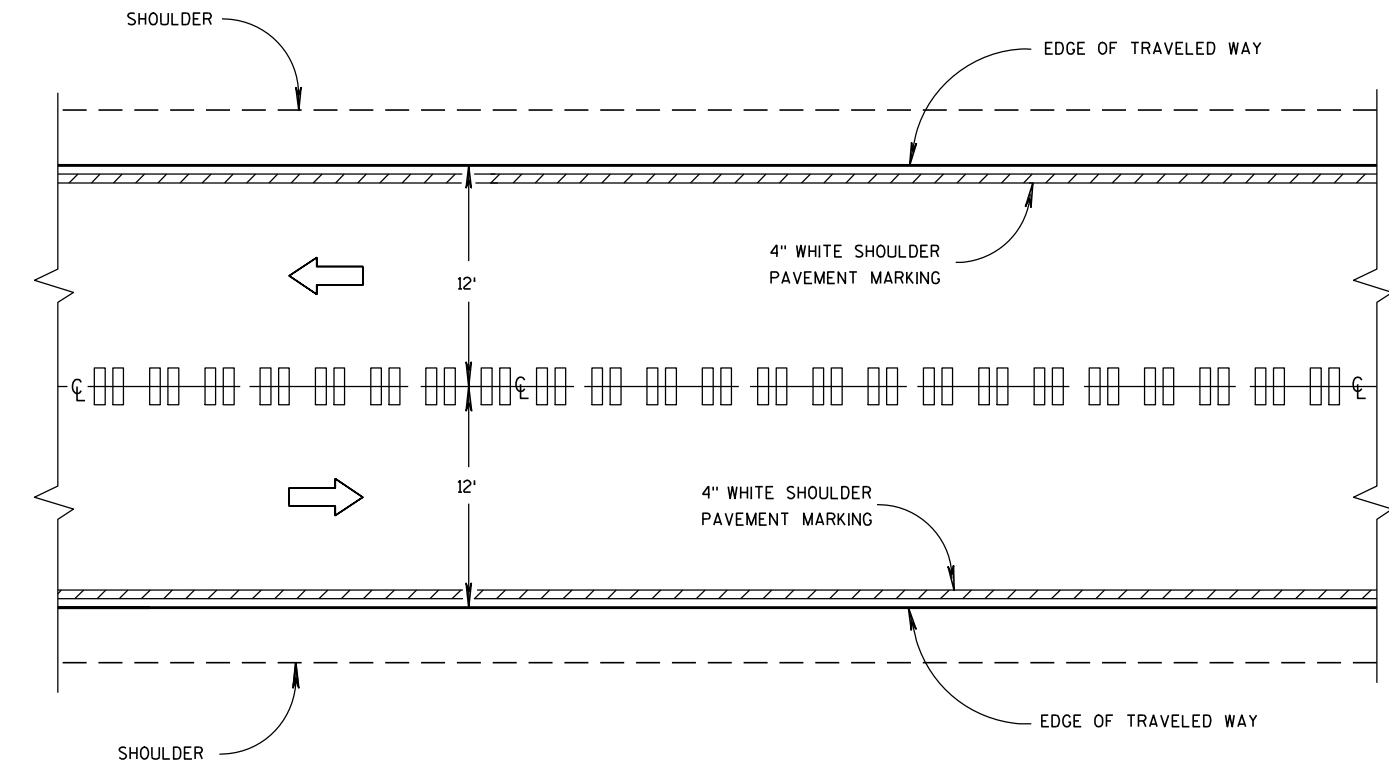
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

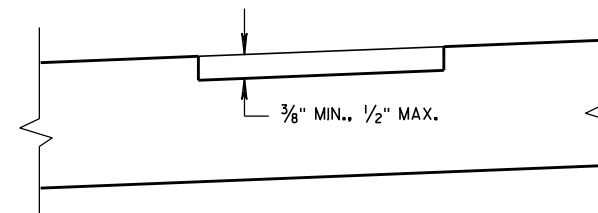
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



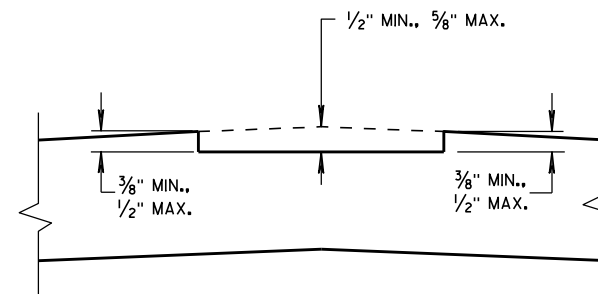
ISOMETRIC



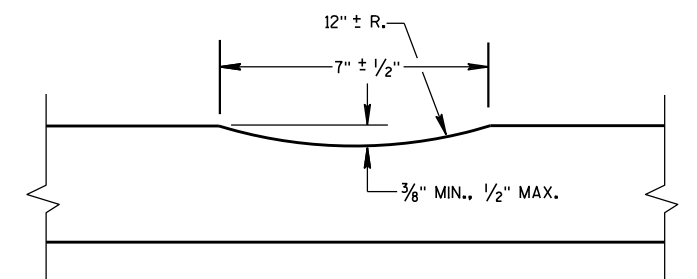
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



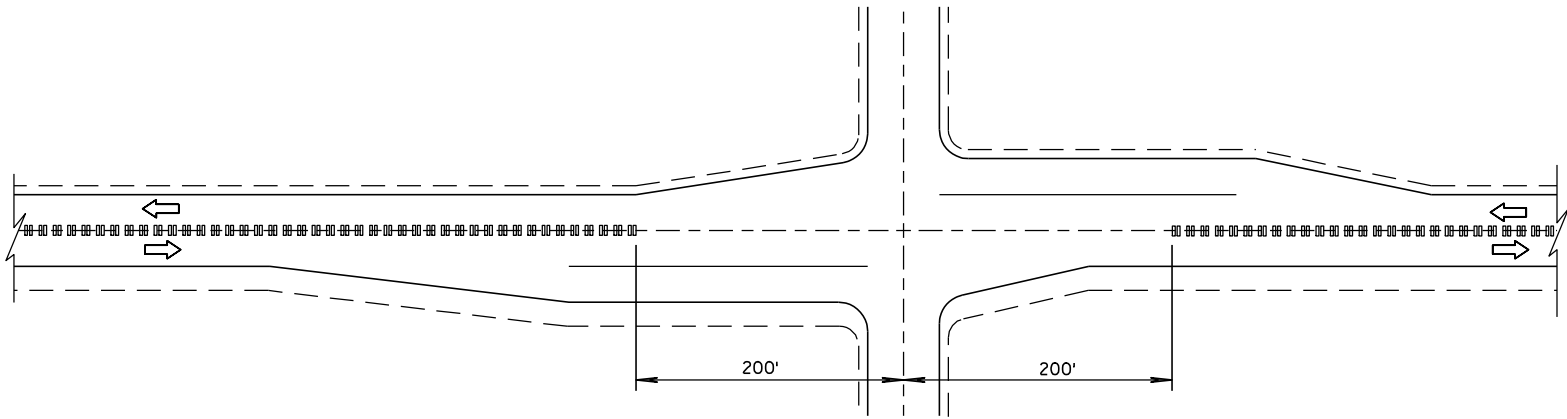
SECTION B-B
CROWNED ROADWAY



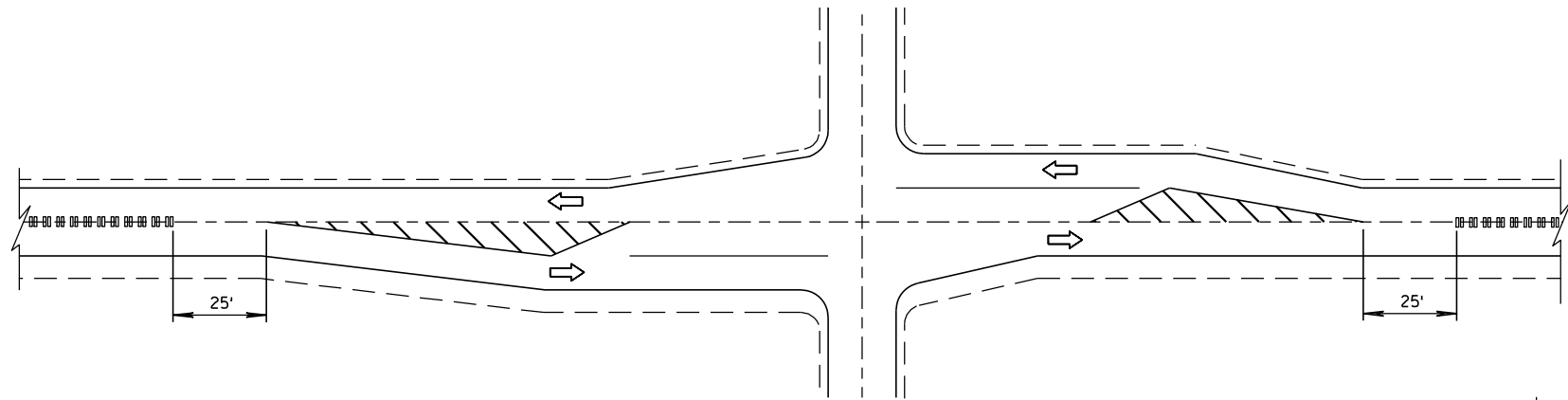
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

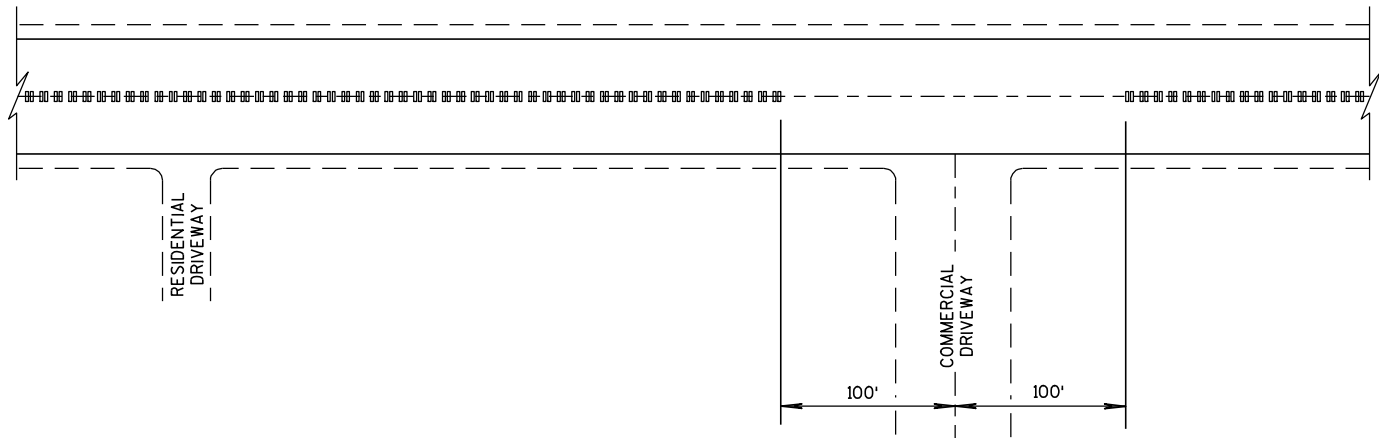
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

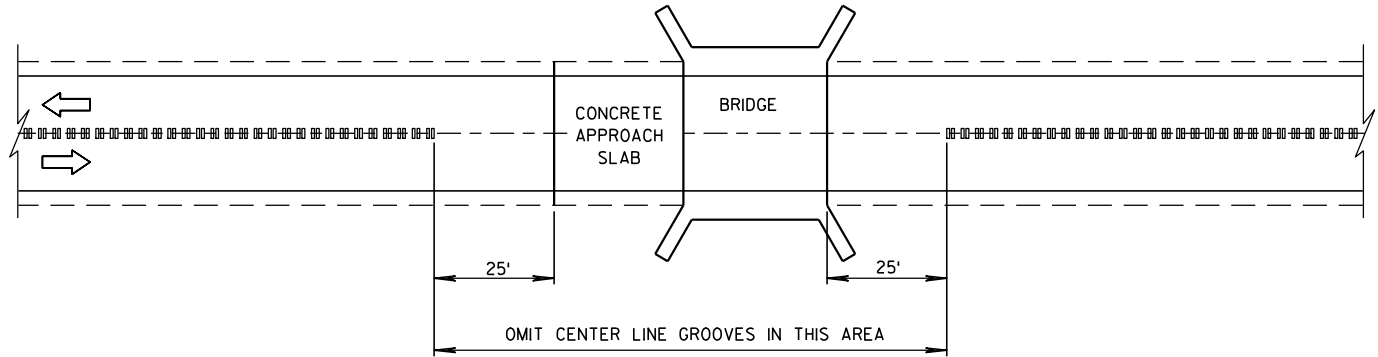


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

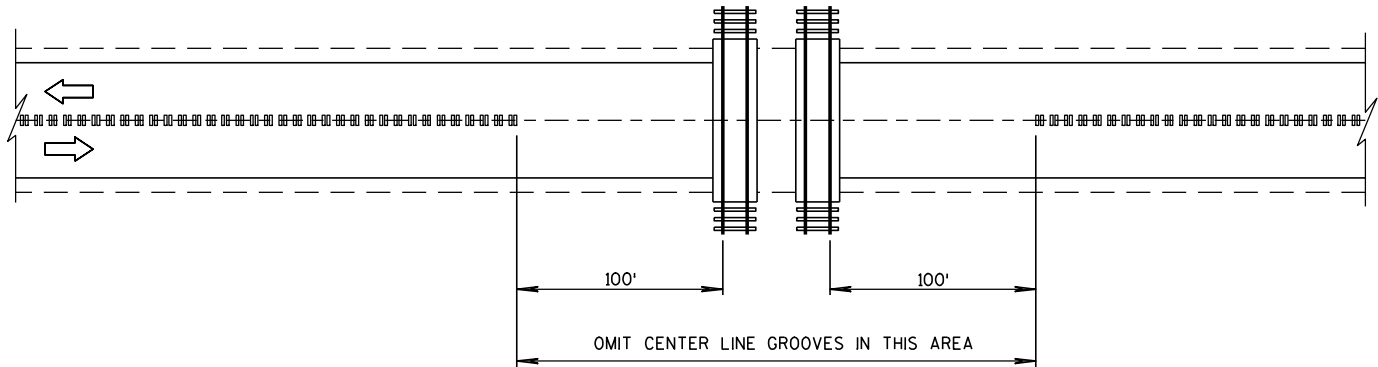


CENTER LINE GROOVES AT DRIVEWAYS^①

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



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/28/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

6

S.D.D. 14 B 15-7a

- 6

S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a

S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



S.D.D. 14 B 15-7a



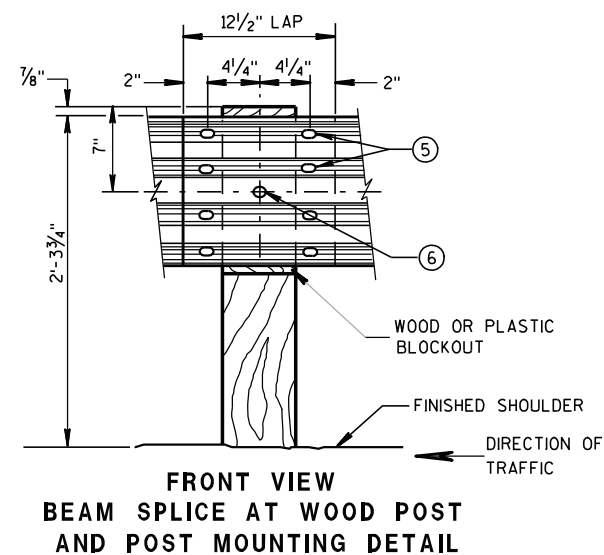
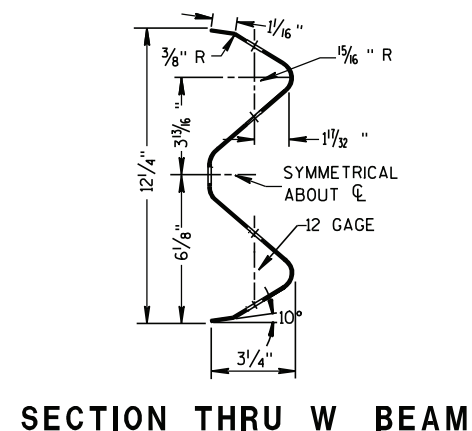
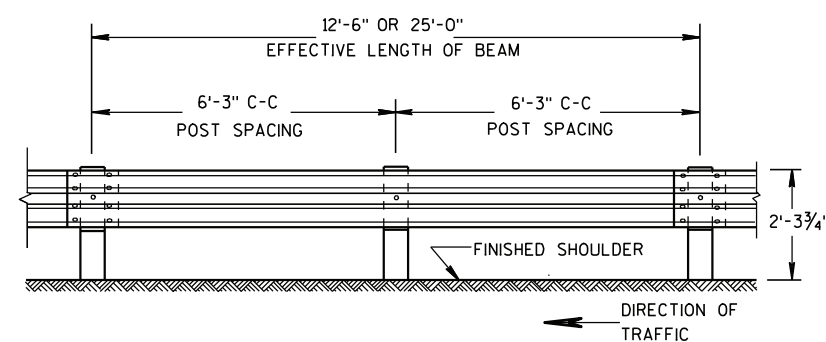
S.D.D. 14 B 15-7a



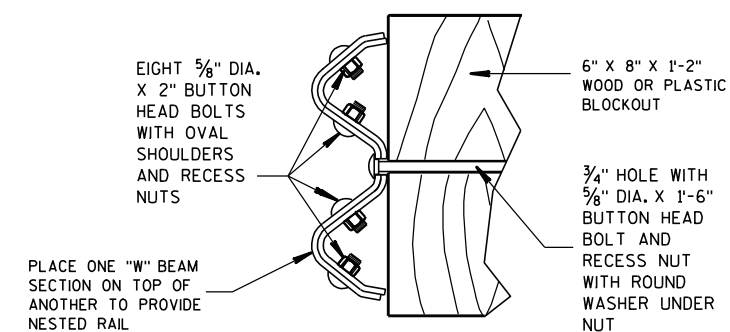
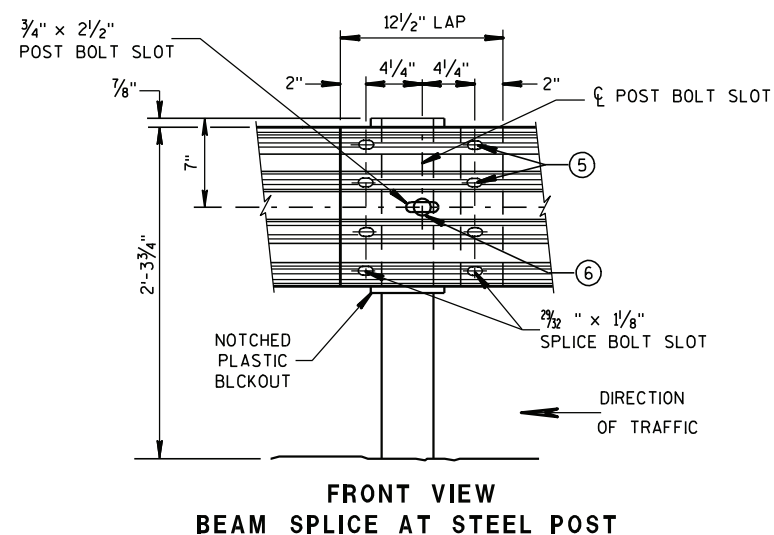
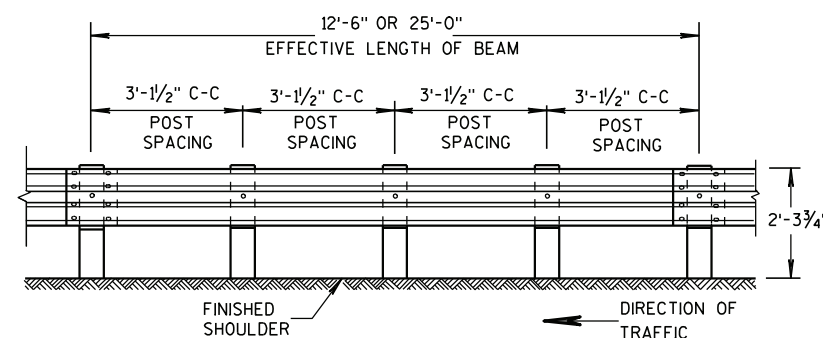
S.D.D. 14 B 15-7a

S.D.D. 14 B 15-7a

S.D.D. 14 B 15-7a

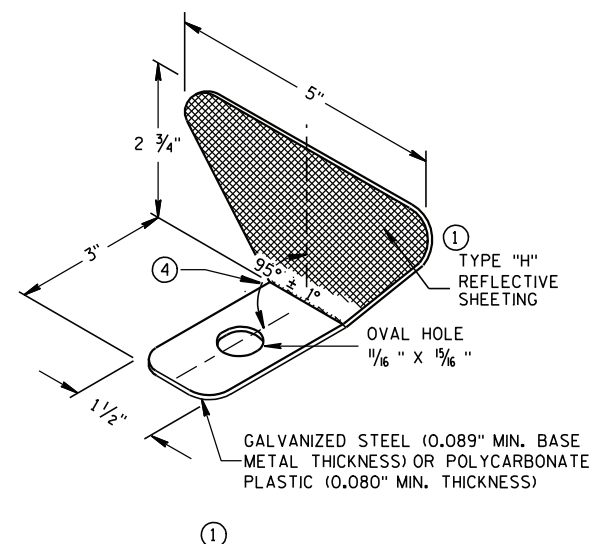
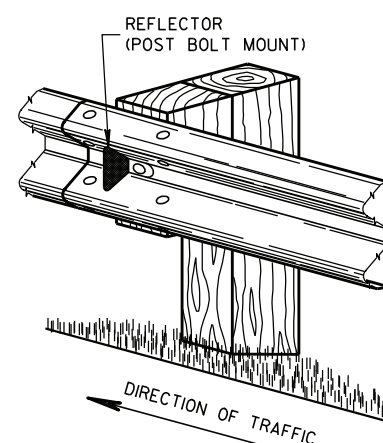


- ## GENERAL NOTES
- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
 - ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
 - ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ④ PROVIDE AN ANGLE OF BEND OF $90^{\circ} \pm 1^{\circ}$ FOR TWO-SIDED REFLECTORS.
 - ⑤ 8 - $\frac{5}{8}$ " ϕ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
 - ⑥ $\frac{5}{8}$ " ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



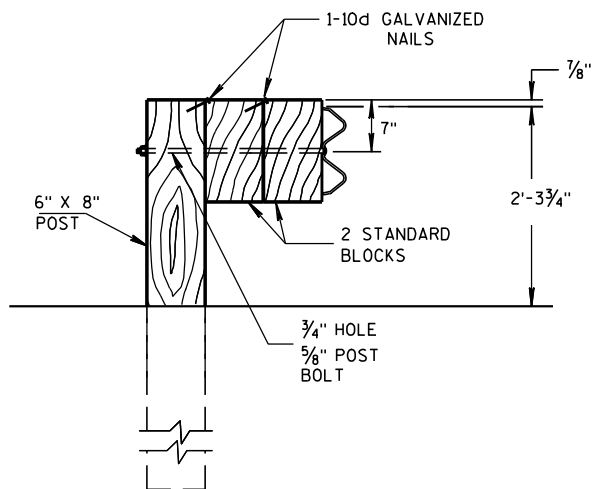
NESTED W BEAM (NW)
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 (3)	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 (4)	3



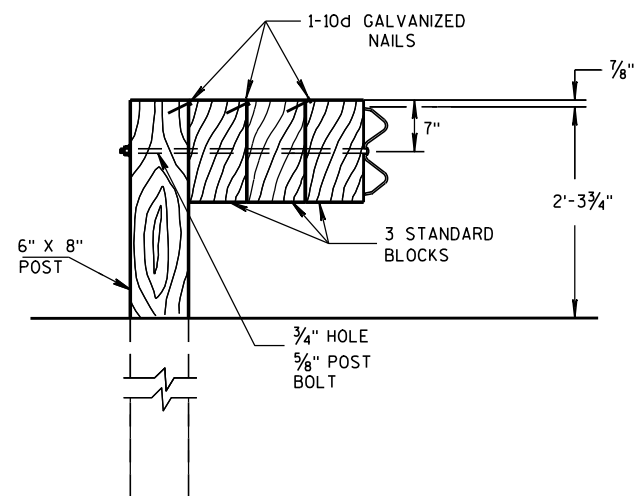
STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

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

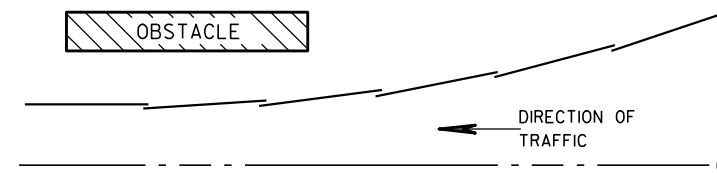


DETAIL FOR TRIPLE BLOCKS

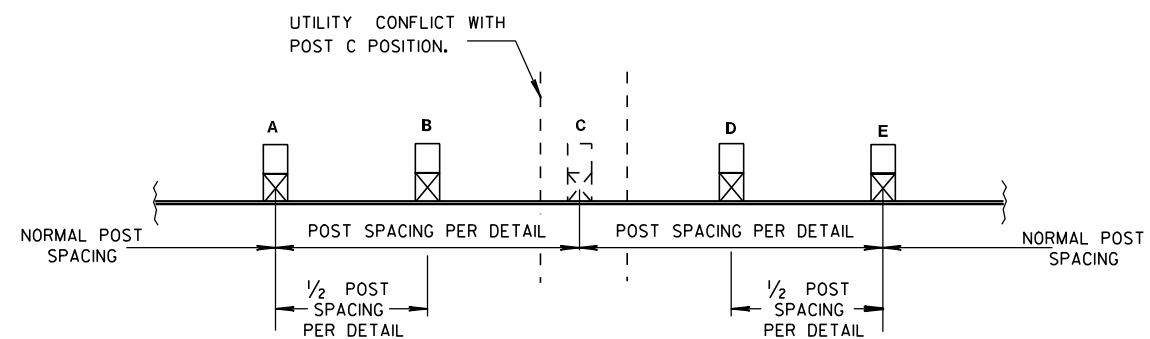
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

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

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND
SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION
DISTANCE OF THE BARRIER.



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/11

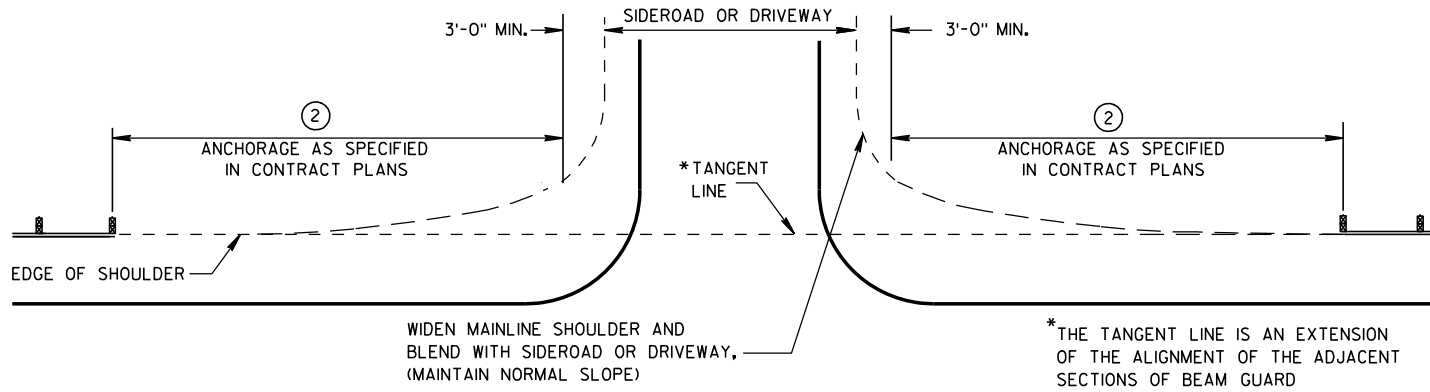
DATE

FHWA

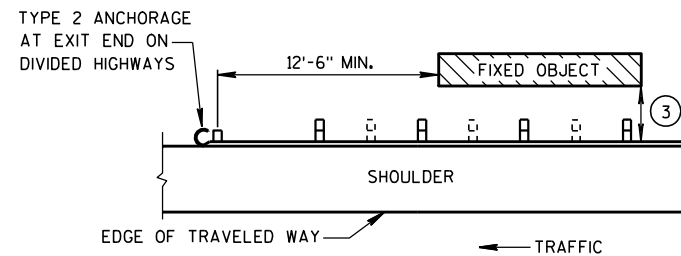
/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

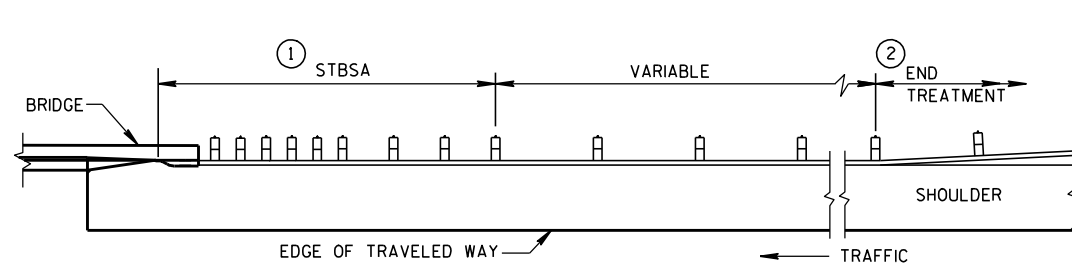
ENGINEER



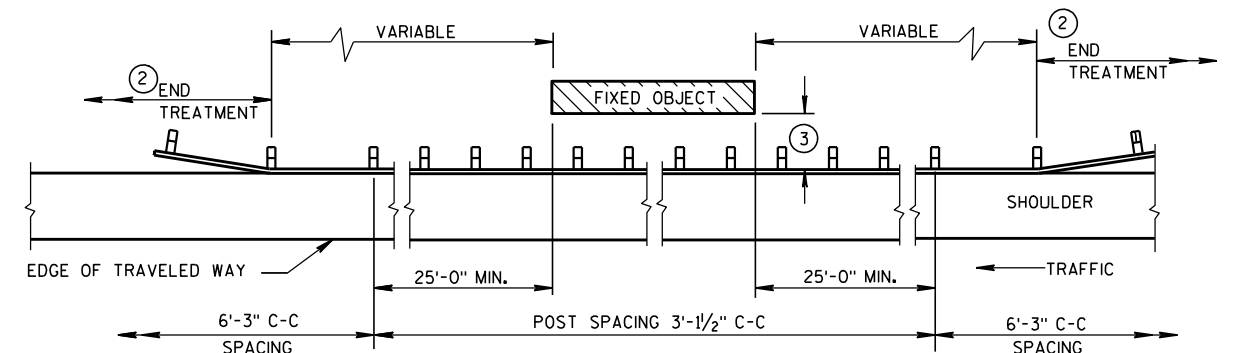
BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC



BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

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

TABLE 1
FLARE RATES FOR BEAM
GUARD AT NARROW BRIDGES

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

GENERAL NOTES

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

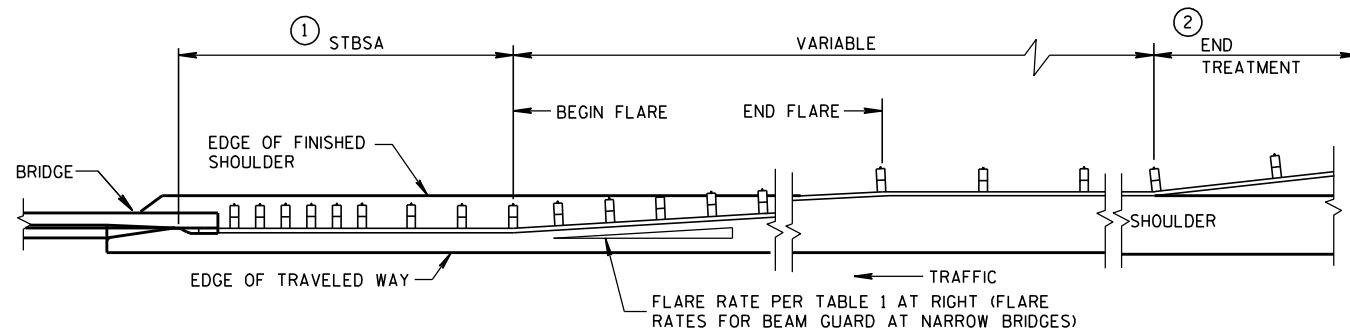
W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

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

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

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

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-21-07 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	**	STEEL TUBE: OPTION 1 - QUANTITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANTITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
③	2	SOIL PLATE: 2'-0" X 1'-6" X 1/4" **
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA, 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA, 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING TYPE H: 18" X 18"
⑮	1	E.A.T. MARKER POST

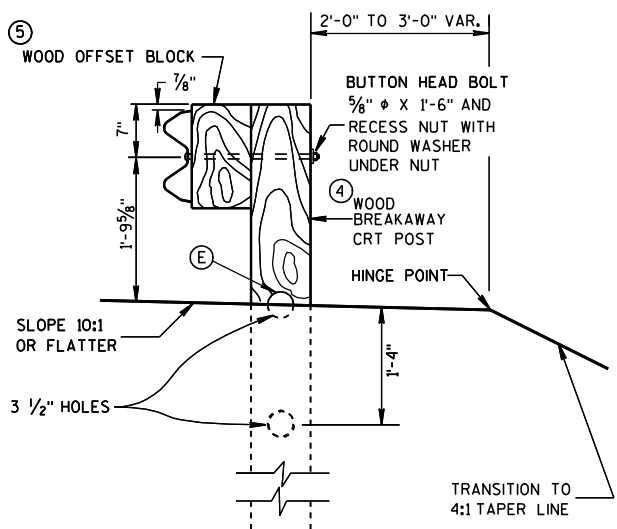
GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL 5/8" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

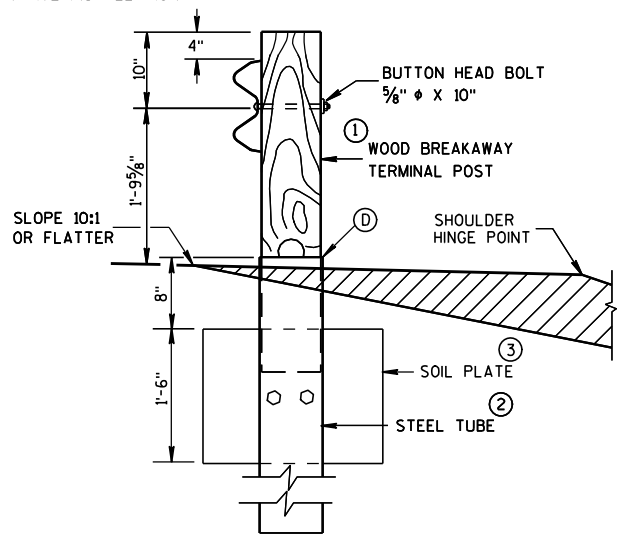
- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.
- (D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.
- (F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER OF E.A.T. STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.
- DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

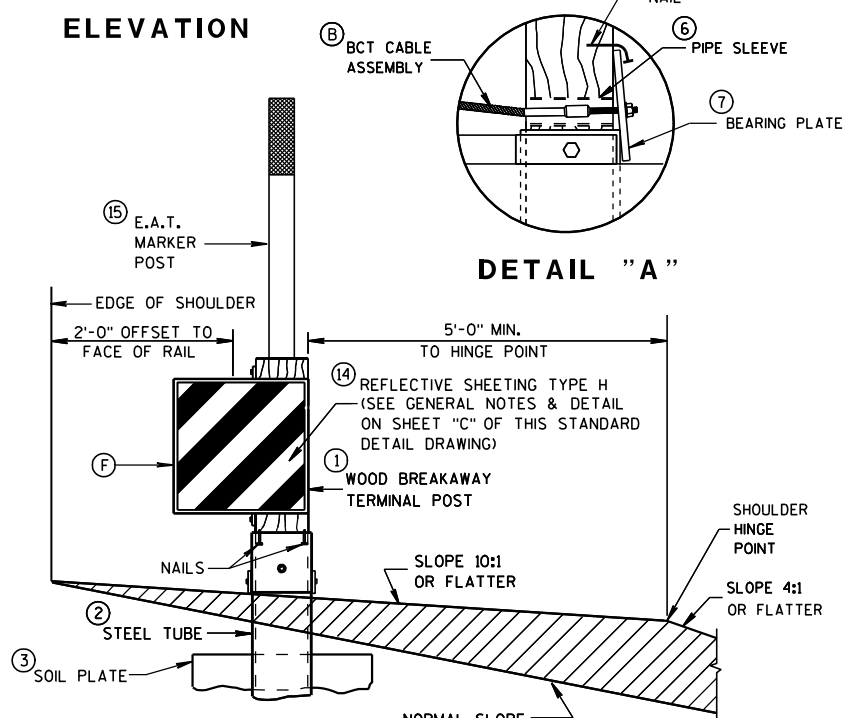
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



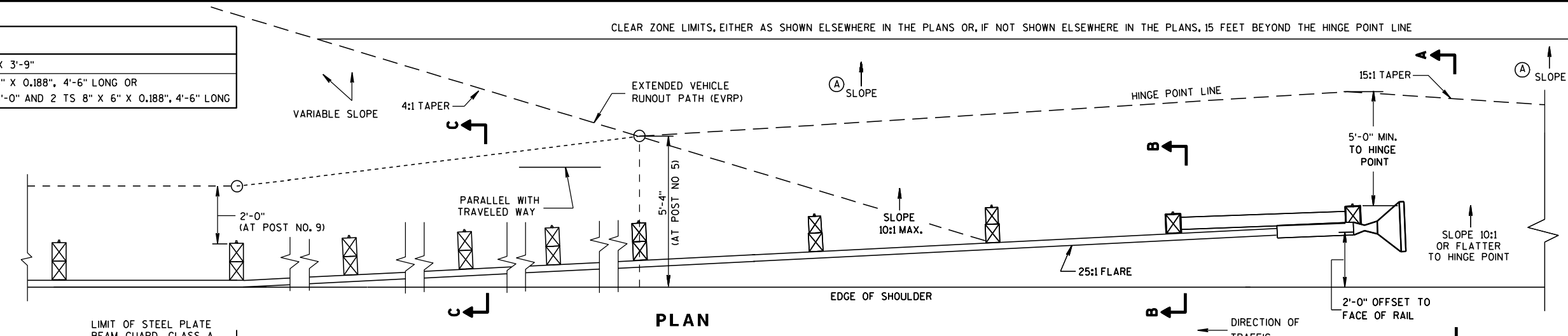
SECTION C-C
TYPICAL AT POST NOS. 6, 8



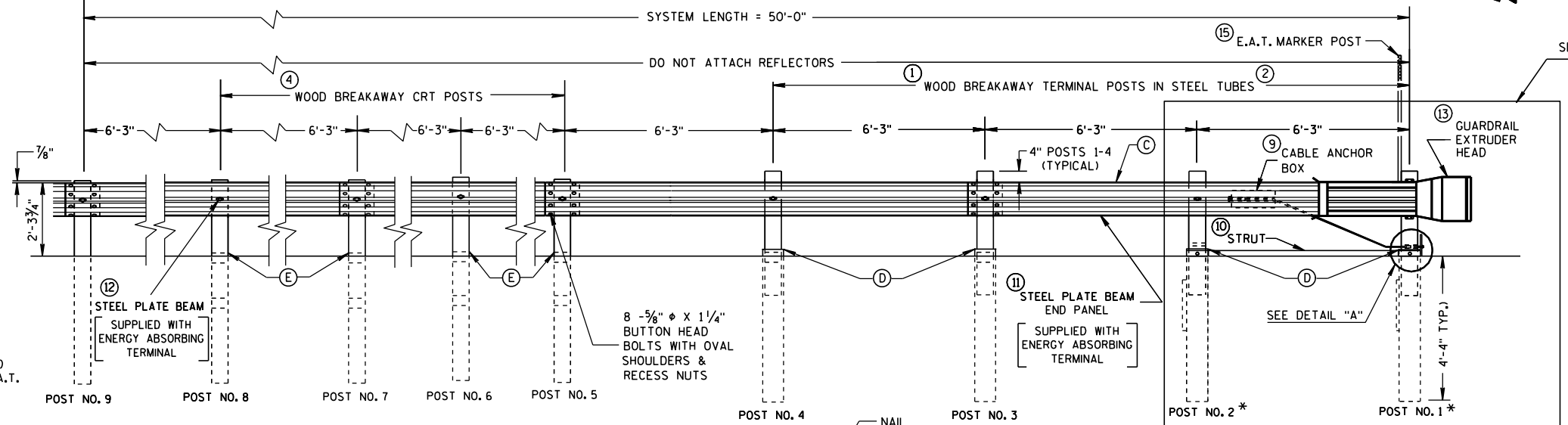
SECTION B-B
TYPICAL AT POST NO. 2*



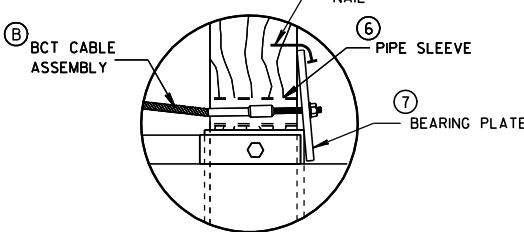
SECTION A-A
TYPICAL AT POST NO. 1*



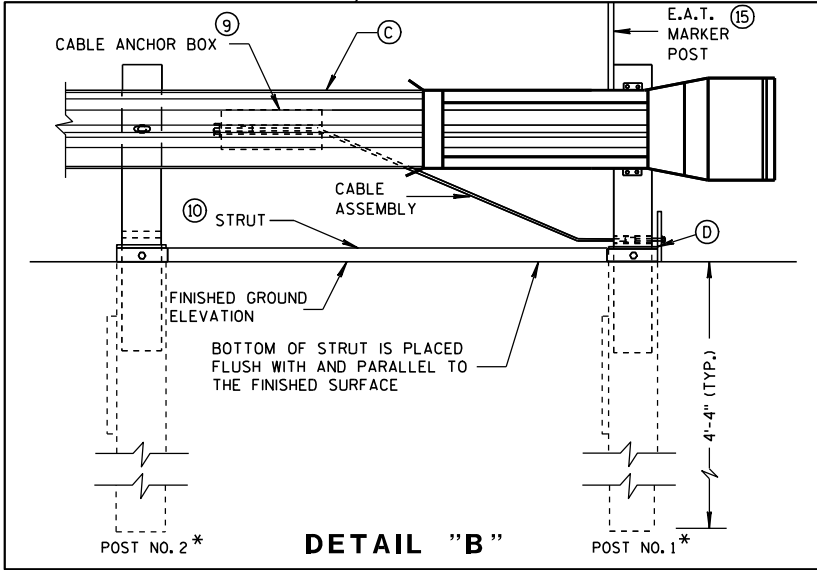
PLAN



ELEVATION



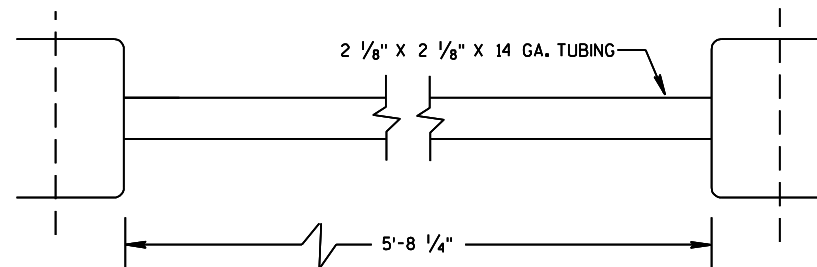
DETAIL "A"



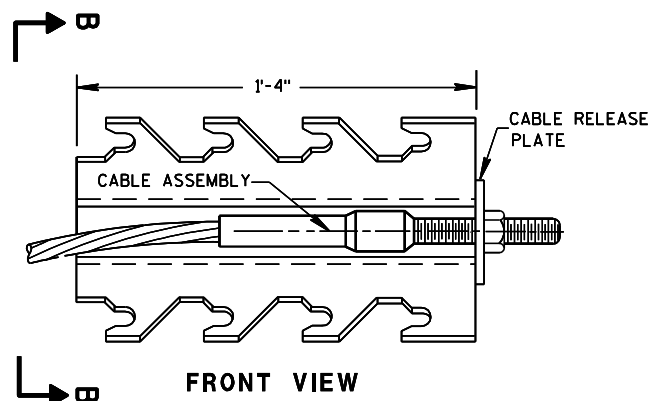
DETAIL "B"

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

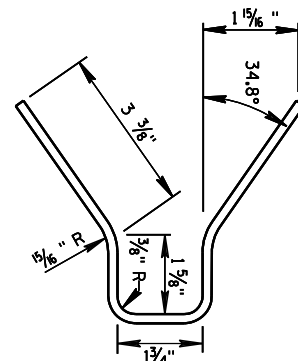
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



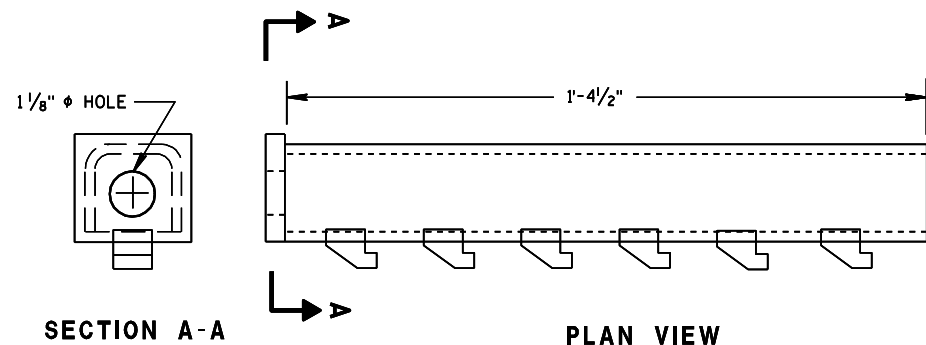
⑩ STRUT DETAIL (SKT-350)



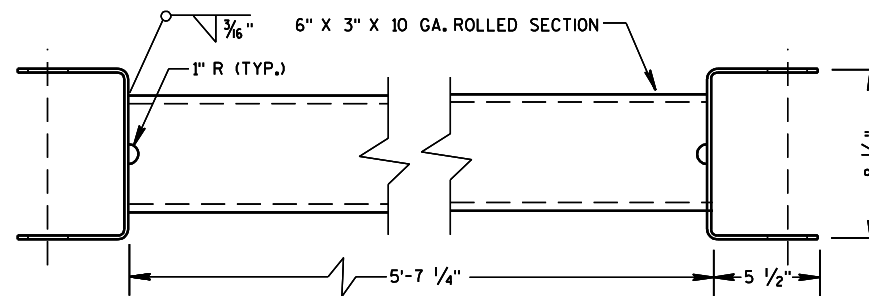
⑨ CABLE ANCHOR BOX (SKT-350)
(SKT-350)



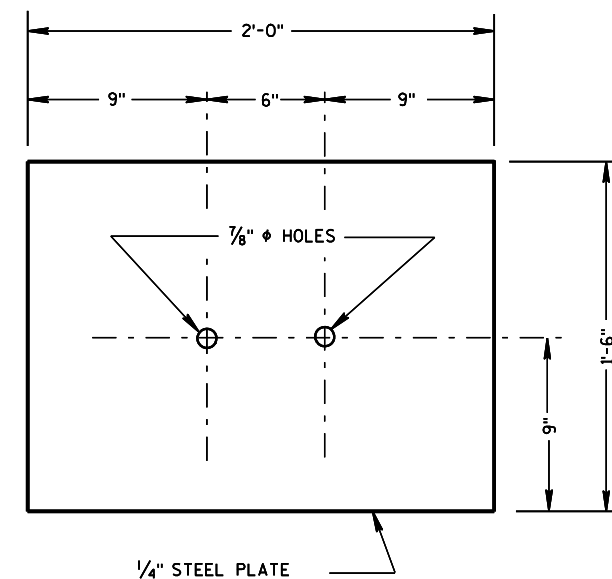
SECTION B-B



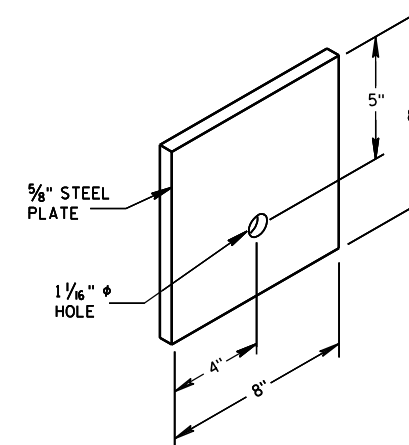
⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)
(ET-2000/ET-2000 PLUS)



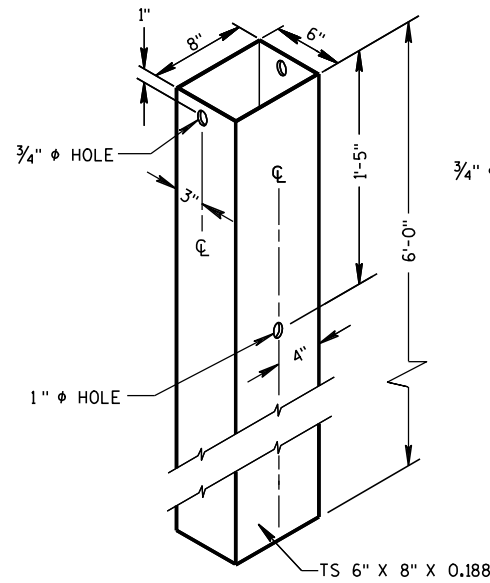
③ SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)



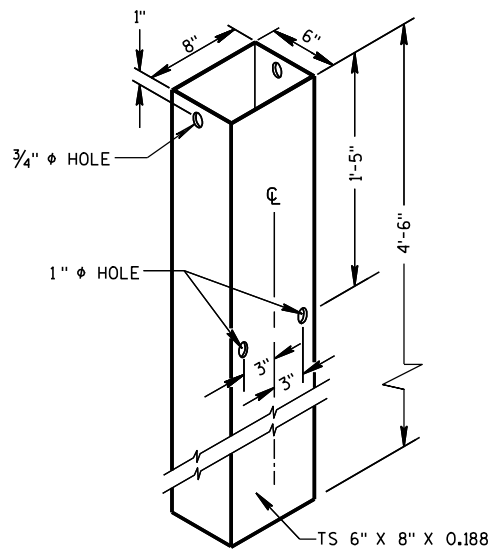
⑦ STEEL BEARING PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

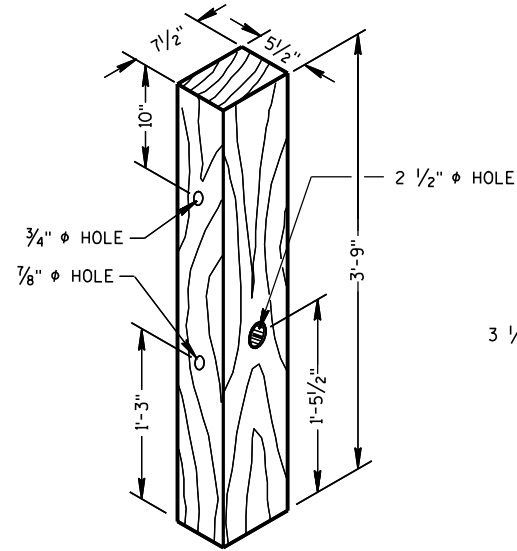
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



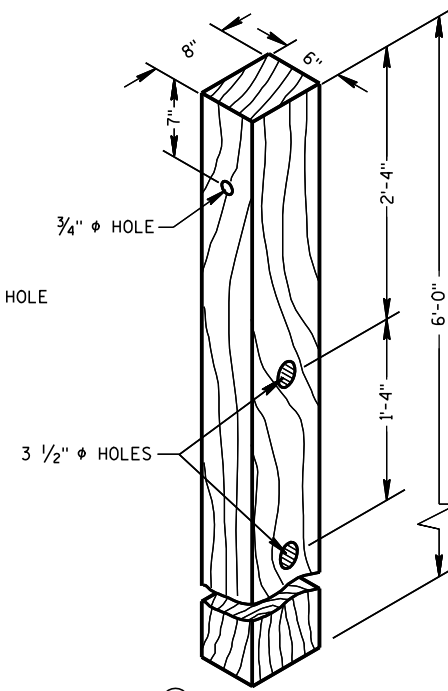
② **72" STEEL TUBE**
(POSTS NO. 1-4)



② **54" STEEL TUBE**
(POSTS NO. 1-4)

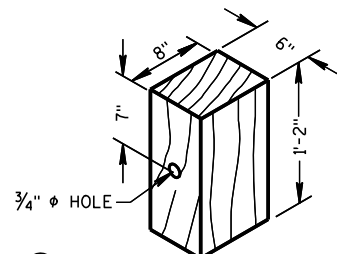


① **TERMINAL POST**
(POSTS NO. 1-4)

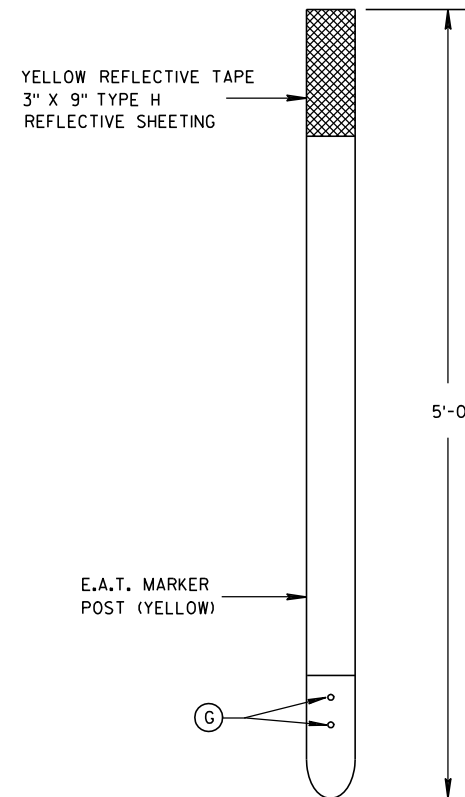


④ **CRT POST**
(POSTS NO'S 5-8)

WOOD BREAKAWAY POSTS



⑤ **WOOD OFFSET BLOCK**
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



FRONT VIEW SIDE VIEW
⑮ **E.A.T. MARKER POST**

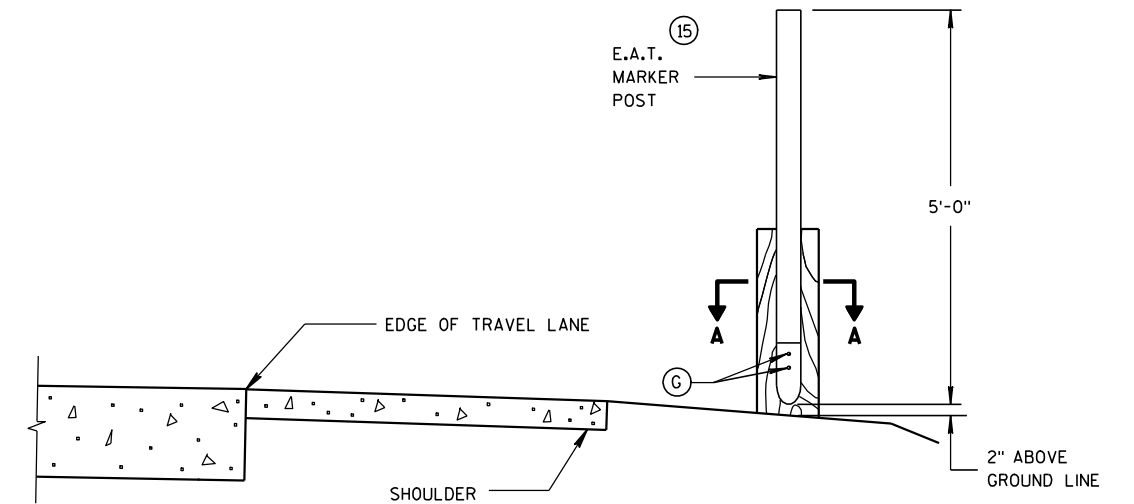
GENERAL NOTES

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

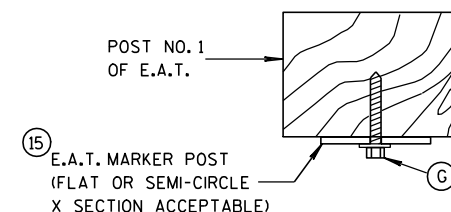
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

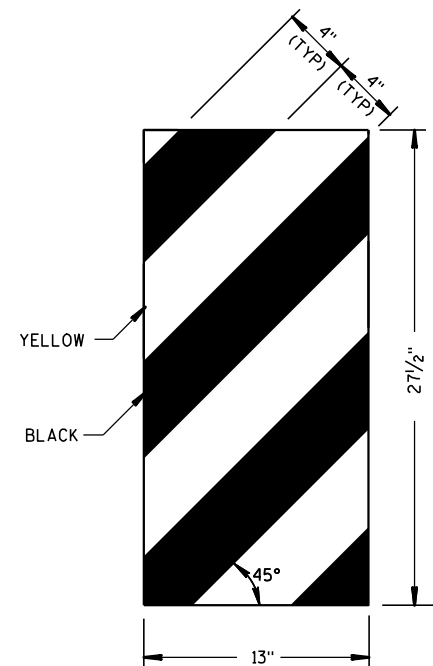
⑮ 1/2" DIA. X 3" LAG BOLT WITH WASHER.



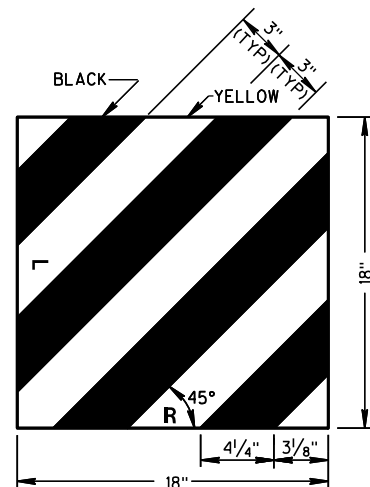
TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A



ET-2000 PLUS ONLY



ET-2000 AND SKT-350

⑭ **REFLECTIVE SHEETING DETAILS**

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

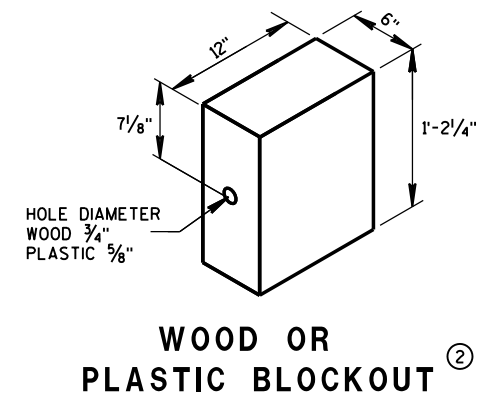
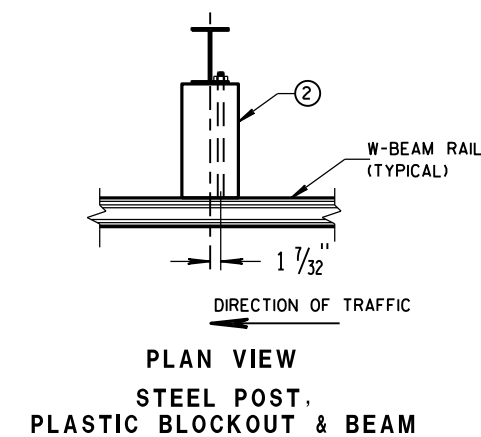
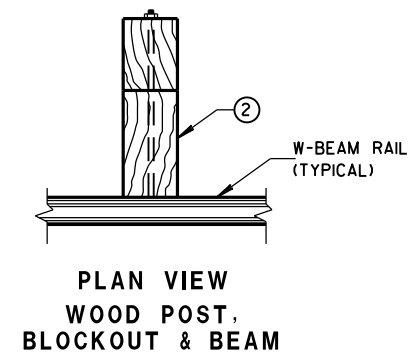
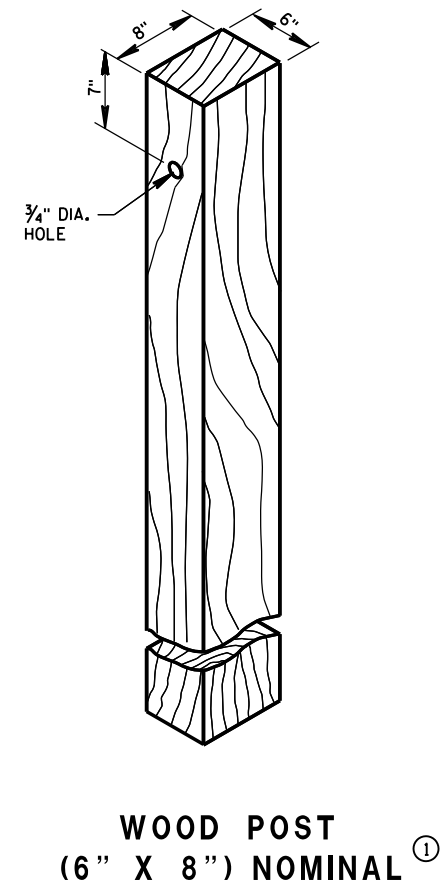
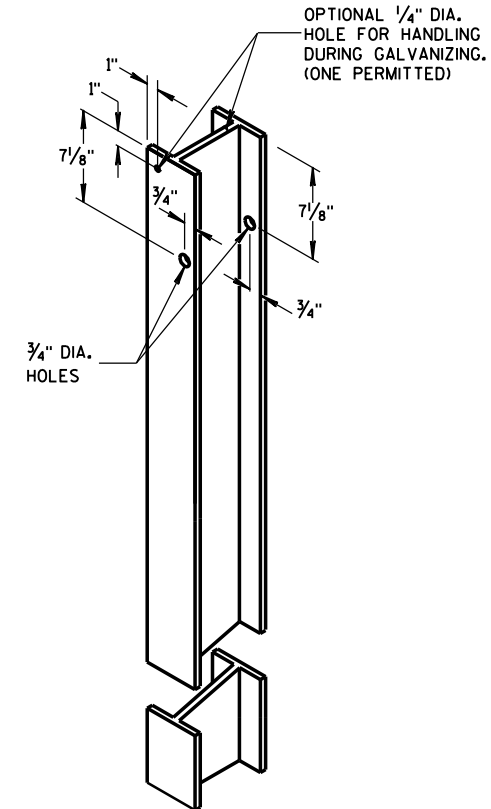
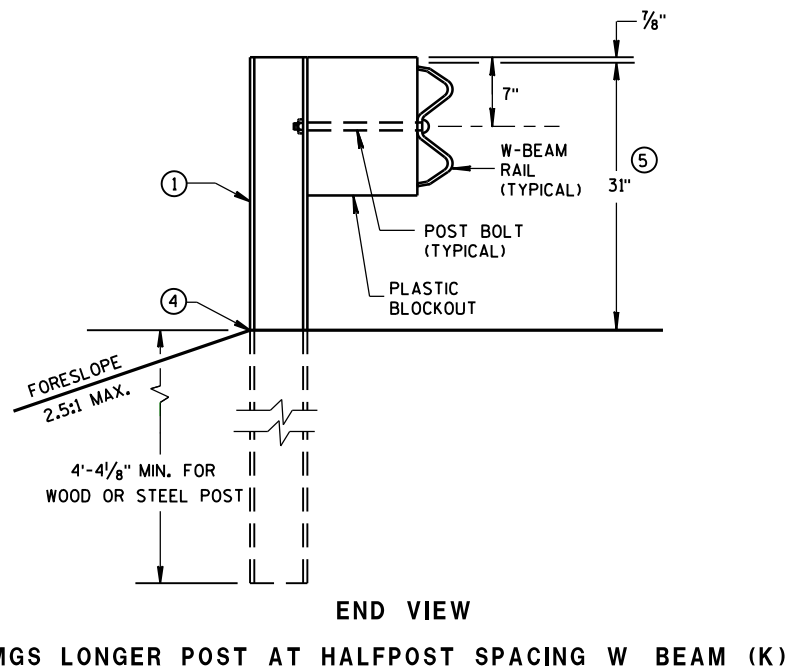
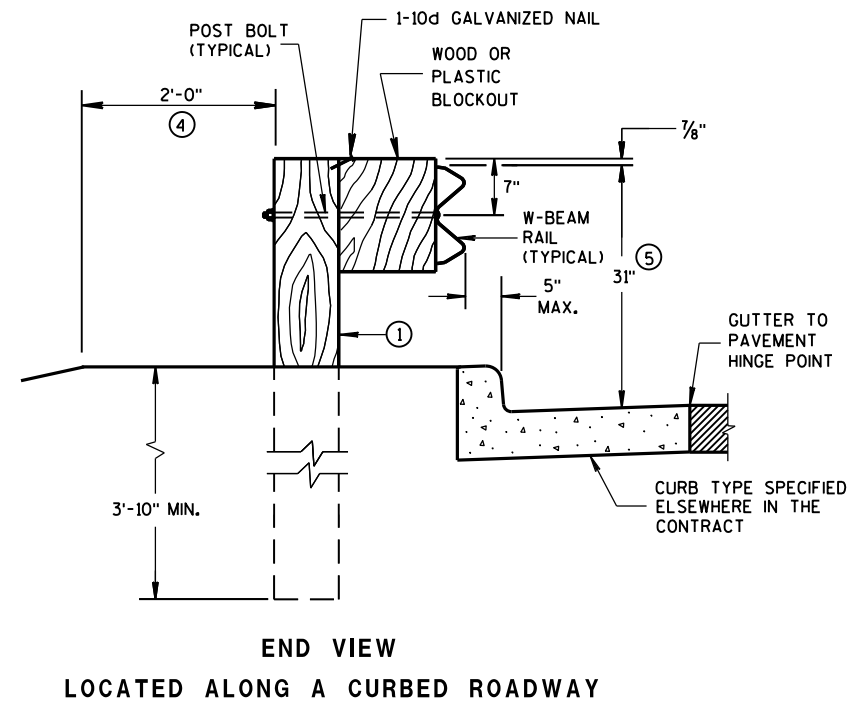
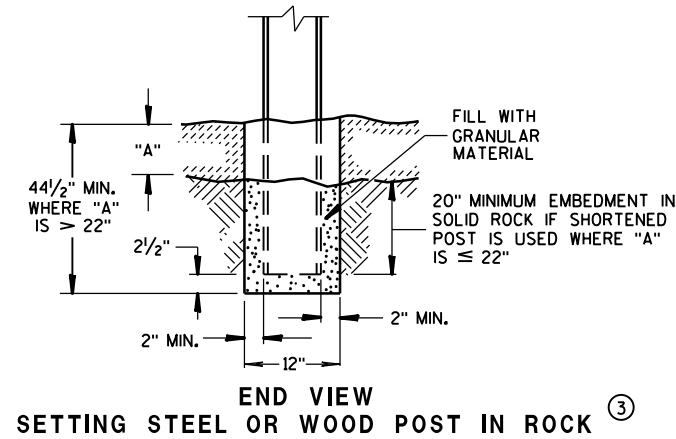
4-12-10
DATE

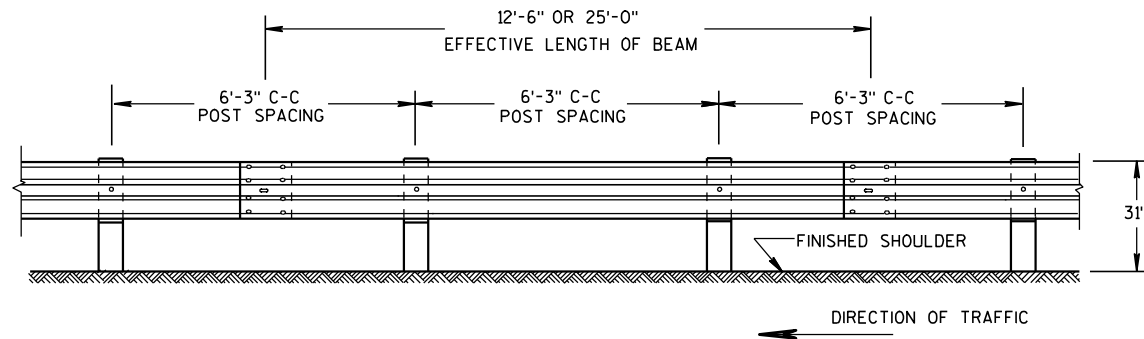
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

6

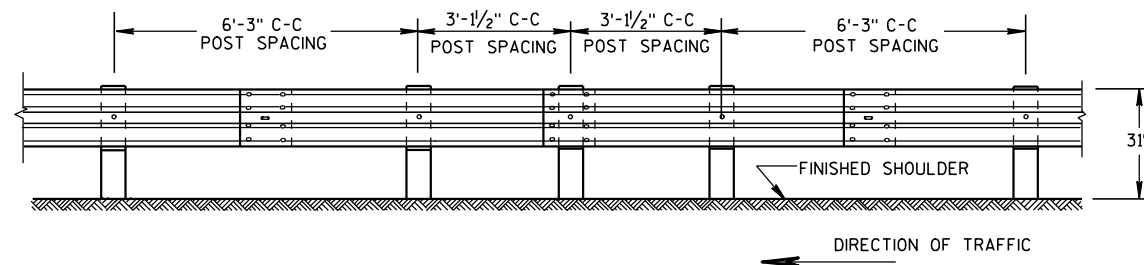
- S.D.D. 14 B 42-2a**





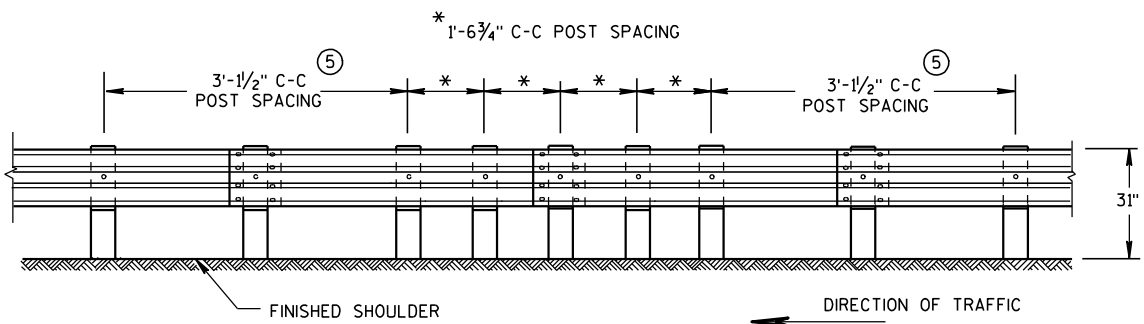
FRONT VIEW

POST SPACING STANDARD INSTALLATION



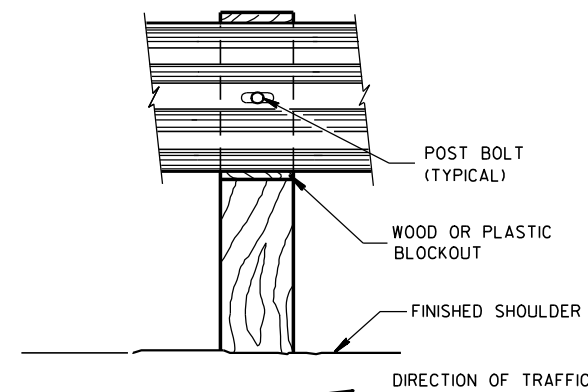
FRONT VIEW

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

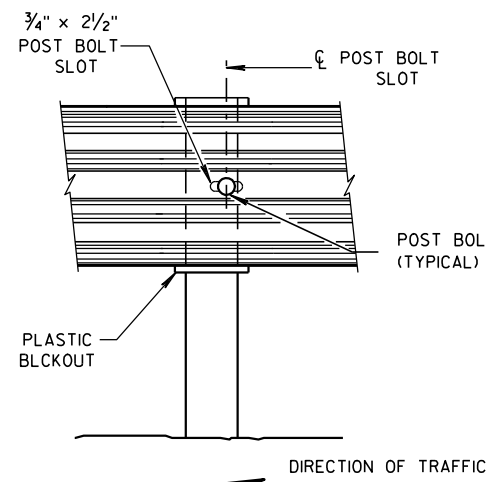


FRONT VIEW

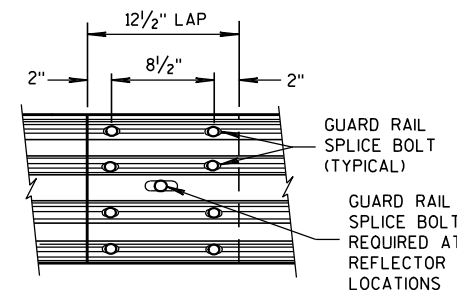
QUARTER POST SPACING (QS)



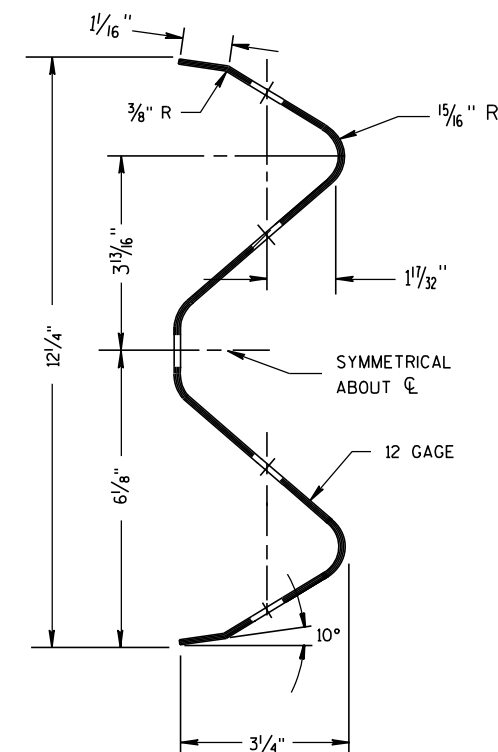
FRONT VIEW AT WOOD POST



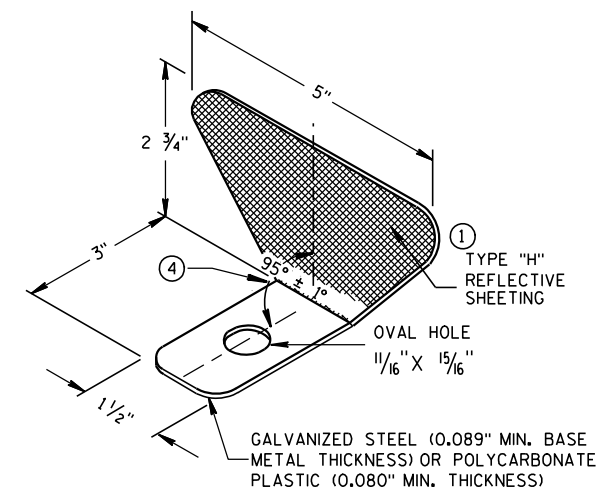
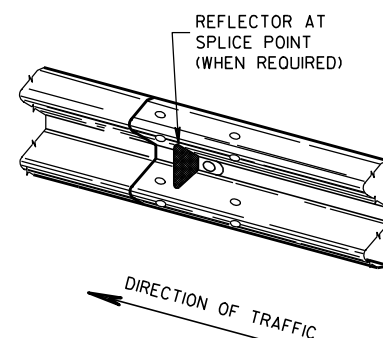
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- 1 PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- 2 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
- 3 REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- 4 PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- 5 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

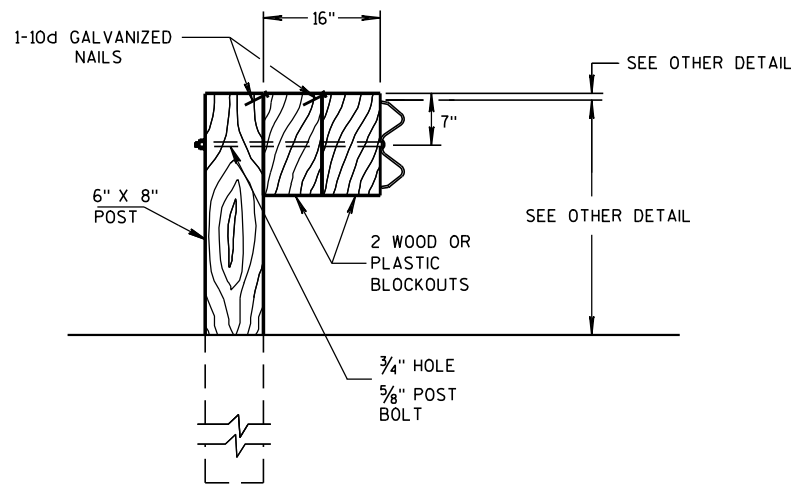
GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

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

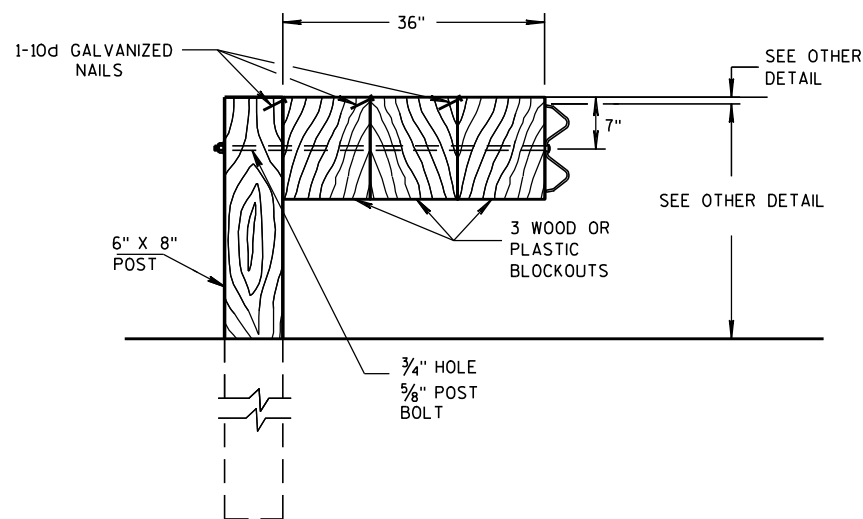
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

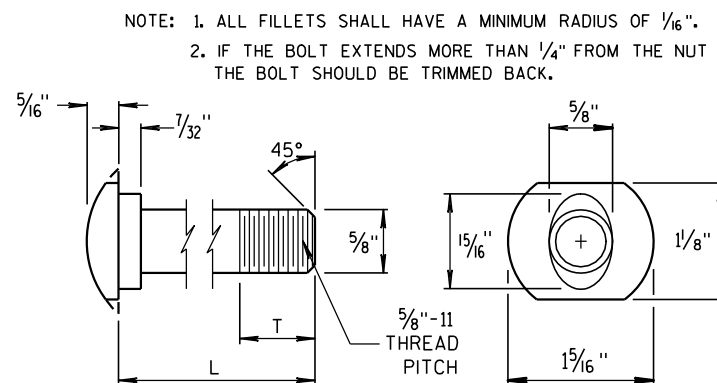
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



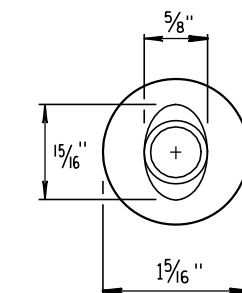
DETAIL FOR 36" BLOCKOUT DEPTH

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

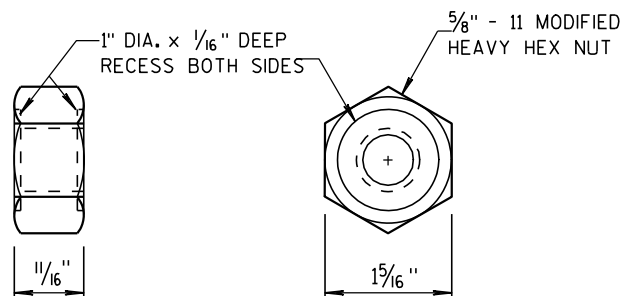
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



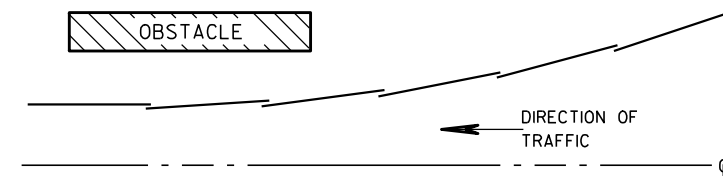
POST BOLT TABLE



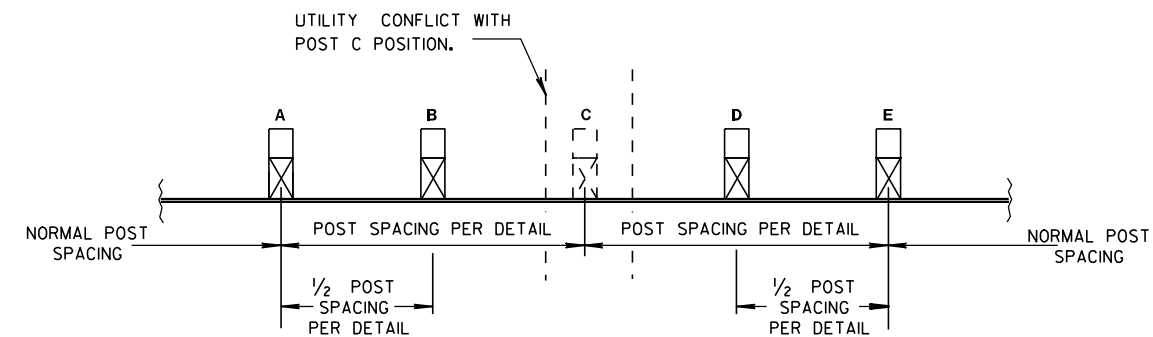
ALTERNATE BOLT HEAD



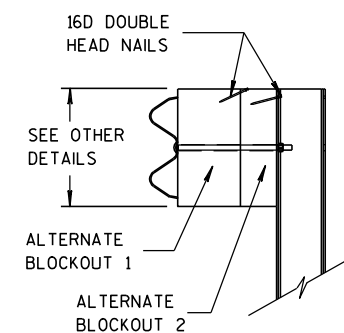
POST BOLT AND RECESS NUT



PLAN VIEW
BEAM LAPPING DETAIL

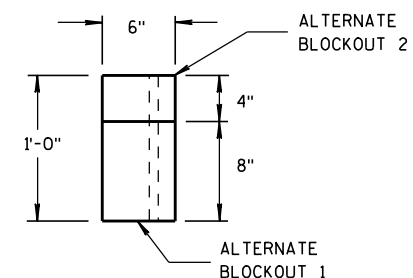


POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL



TOP VIEW

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

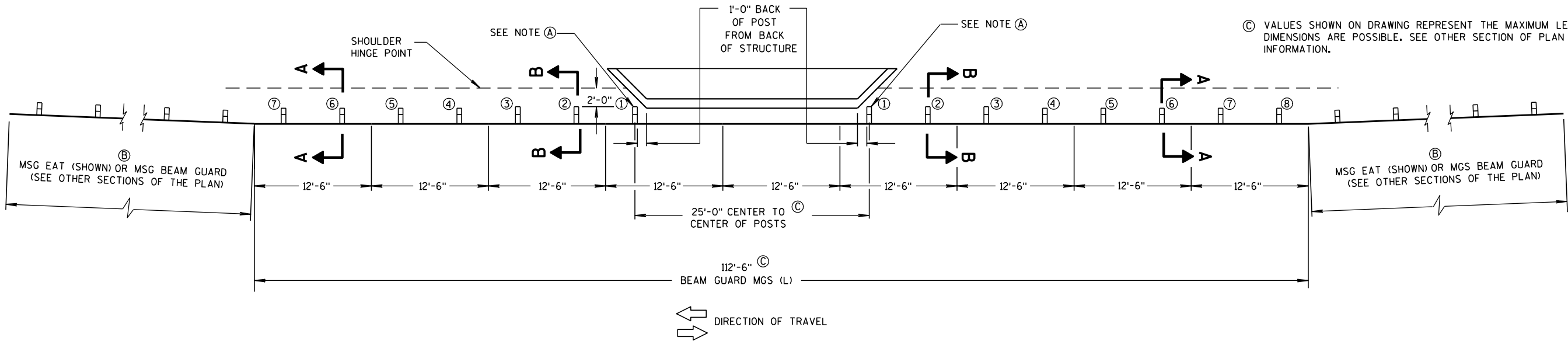
POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

SEE SDD 14 B 42 FOR MORE DETAILS.

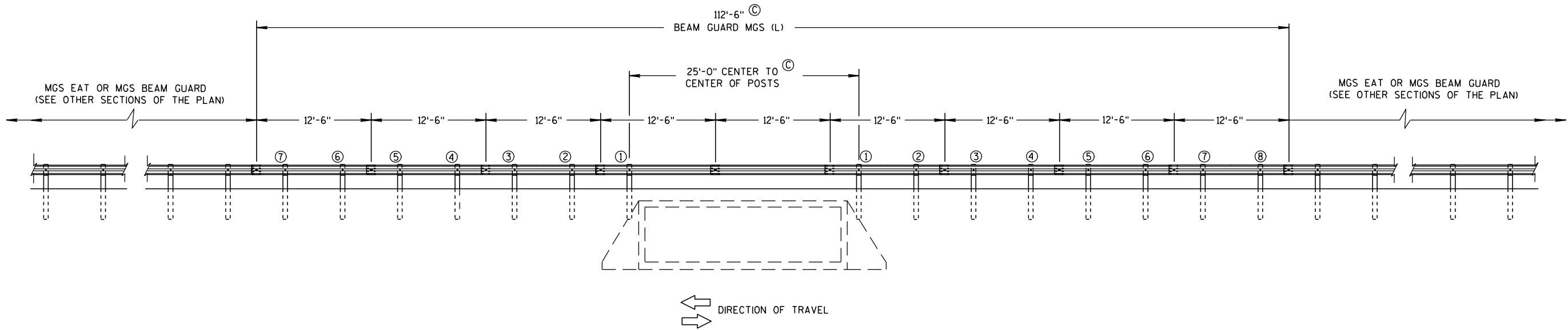
Ⓐ THE MINIMUM OFFSET FROM BACK OF POST TO BACK OF STRUCTURE IS ZERO.
LARGER OFFSETS ARE ACCEPTABLE.

Ⓑ FLARE FOR MGS EAT SHOWN, IF INSTALLING MGS NO FLARE NEEDED.

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



PLAN VIEW

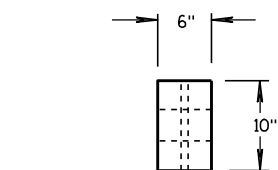


ELEVATION VIEW

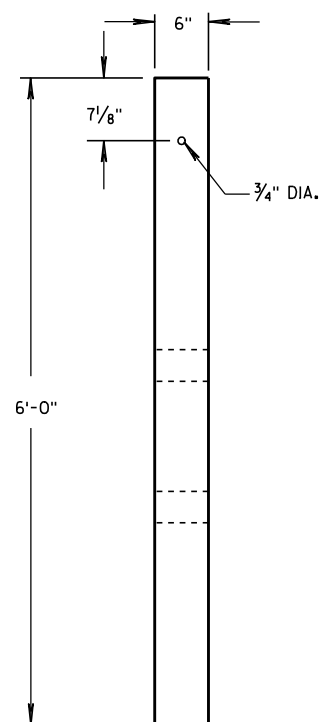
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

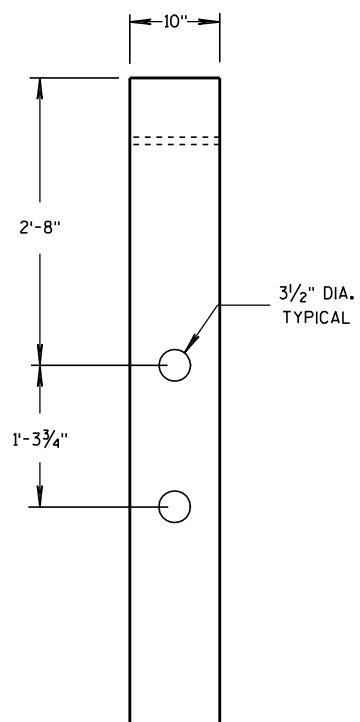


PLAN VIEW

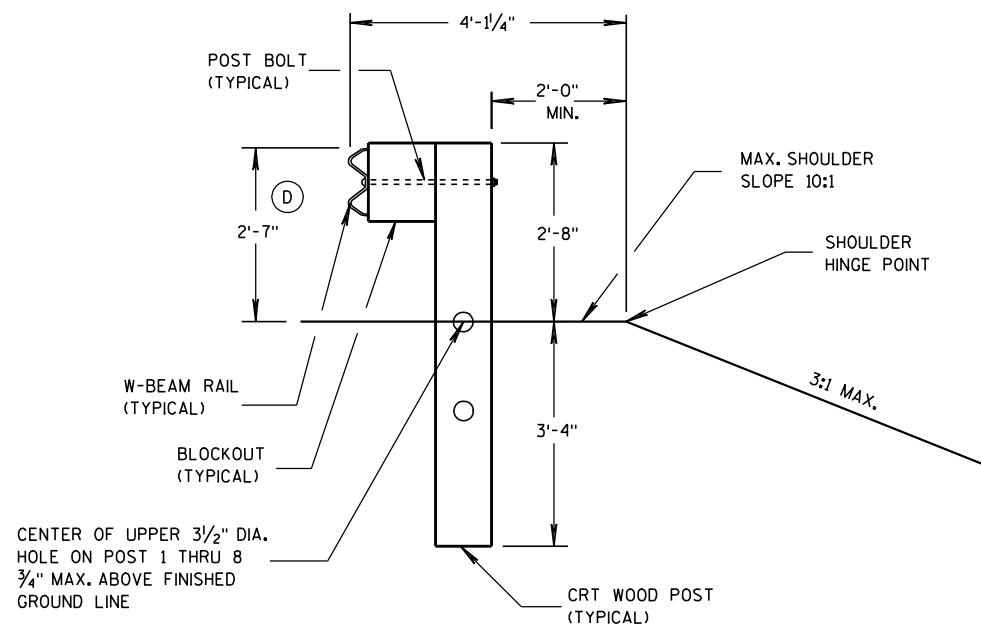


FRONT VIEW

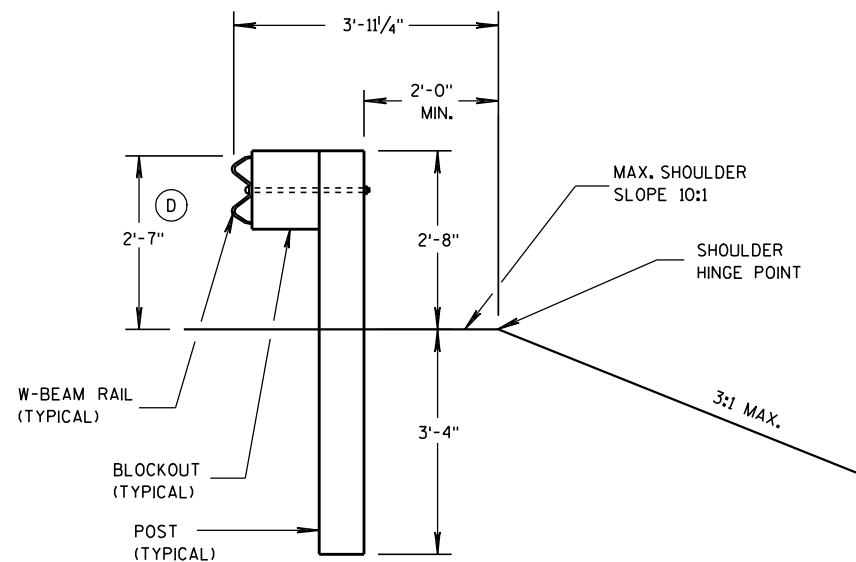
CRT WOOD POST



SIDE VIEW

SECTION B-B
POSTS NO. 1-3

SEE OTHER DETAILS

SECTION A-A
POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

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

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

DATE

FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

ENGINEER

GENERAL NOTES

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

SEE SDD 14B42 FOR MORE INFORMATION.

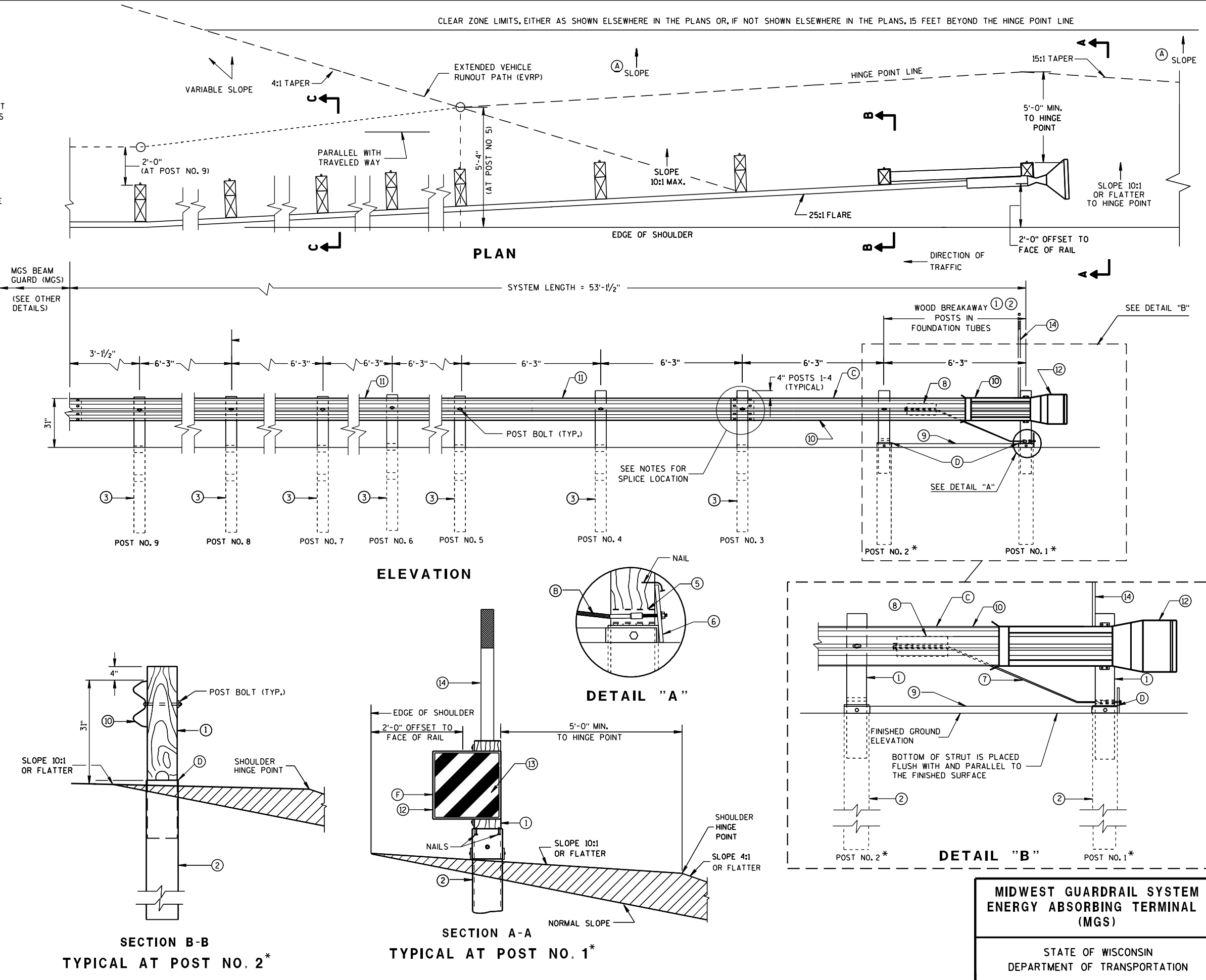
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

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

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

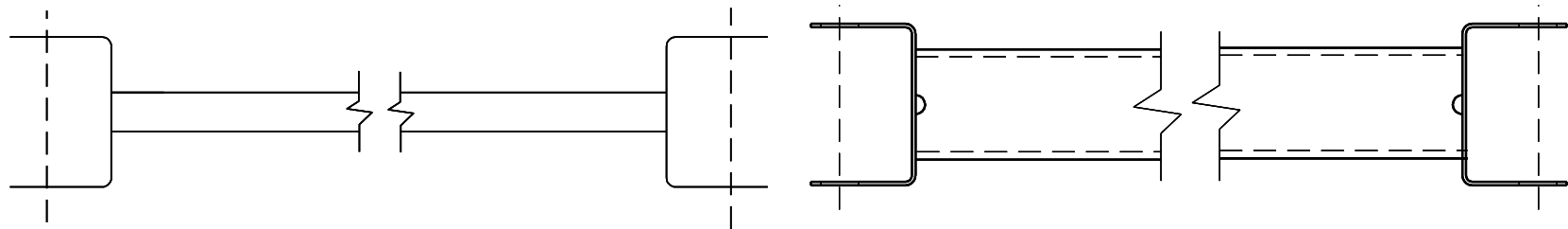
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

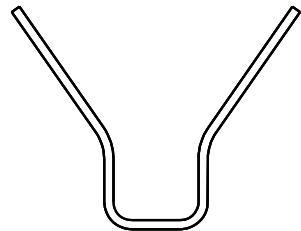
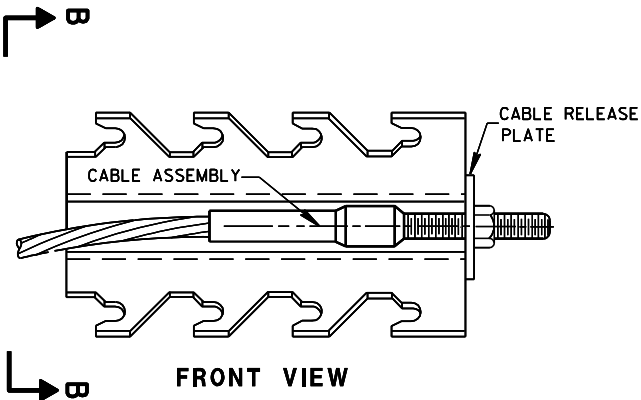


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

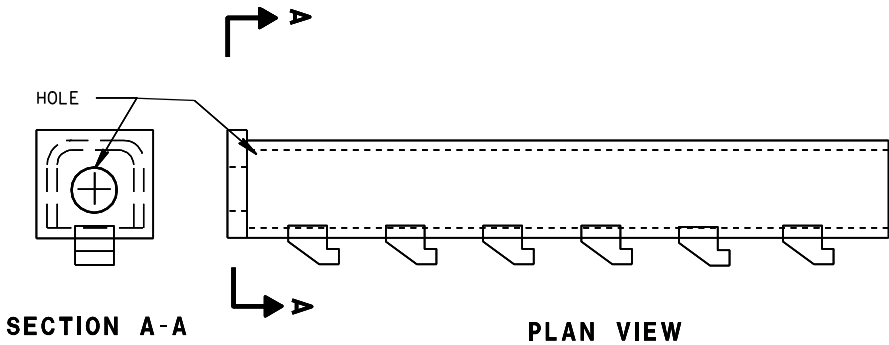
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



9 H
GENERIC GROUND STRUT

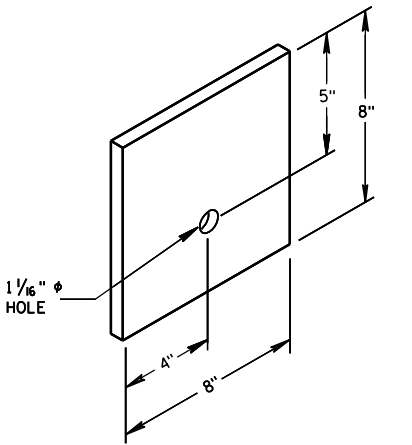


SECTION B-B
8 H
GENERIC ANCHOR CABLE BOX



BILL OF MATERIALS

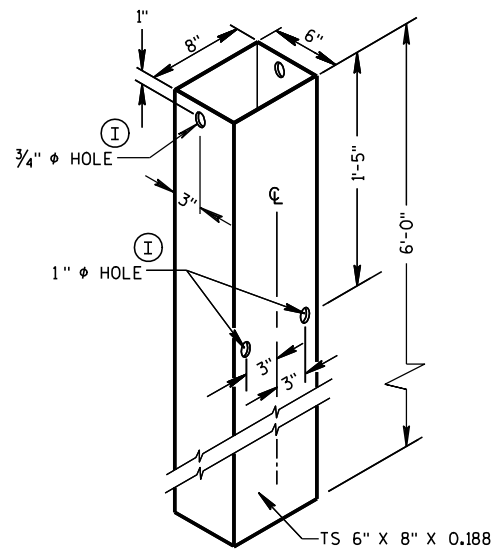
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND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



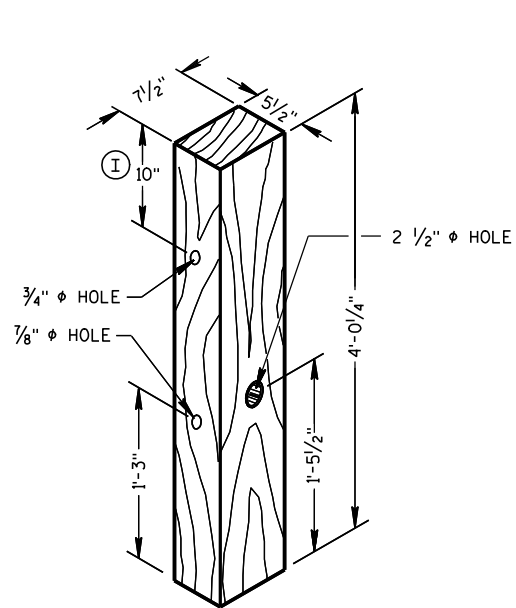
6
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

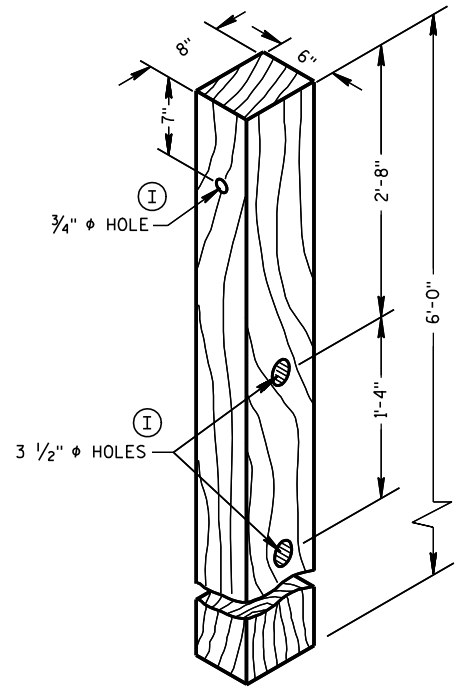
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



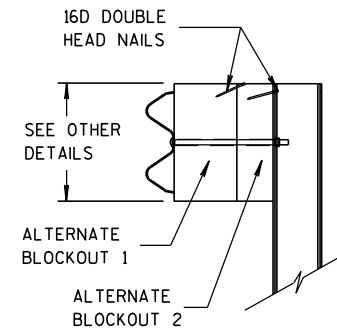
FOUNDATION TUBE ②



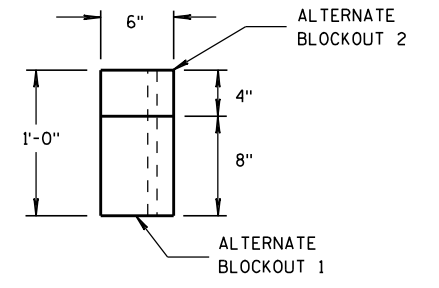
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

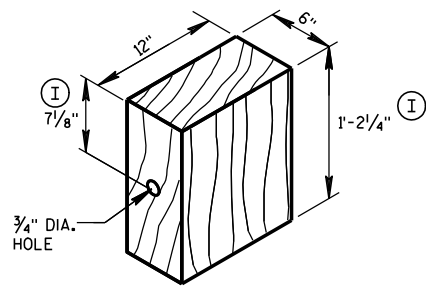


SIDE VIEW



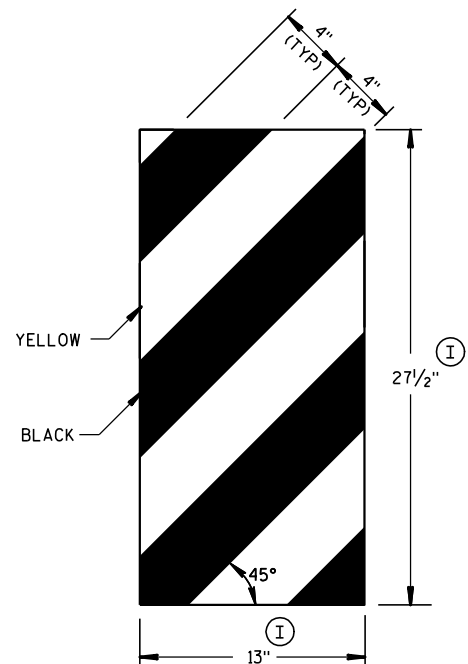
TOP VIEW

**ALTERNATE WOOD
BLOCKOUT DETAIL**

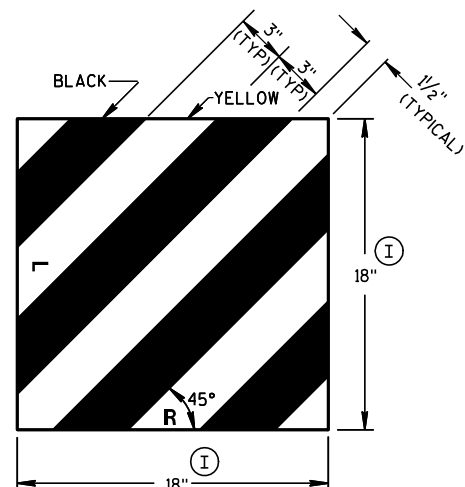


WOOD BLOCKOUT ④

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



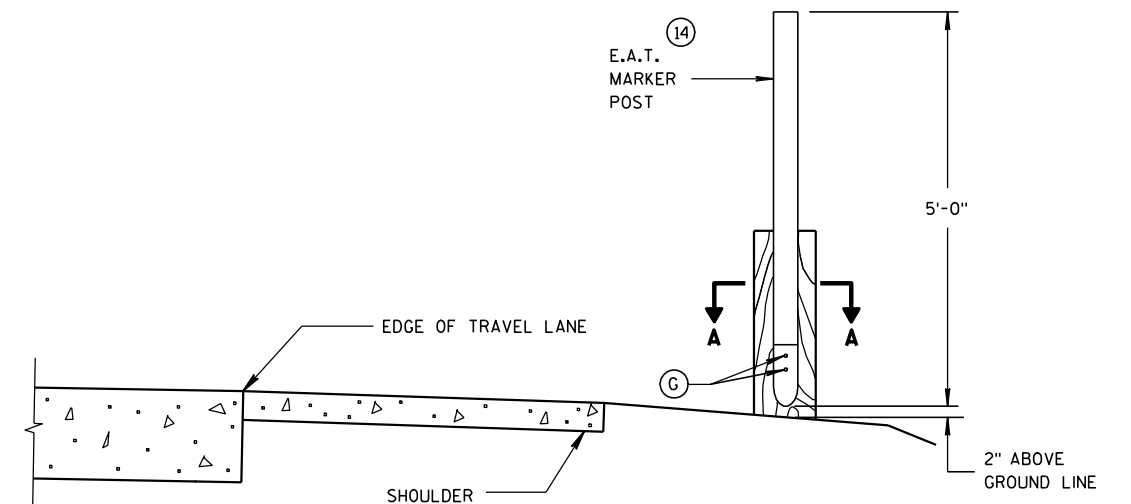
GENERIC REFLECTIVE SHEETING ⑬ ④



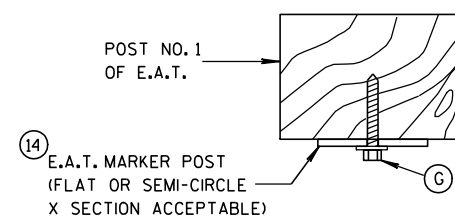
FRONT VIEW

SIDE VIEW

E.A.T. MARKER POST ⑭



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



SECTION A-A

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

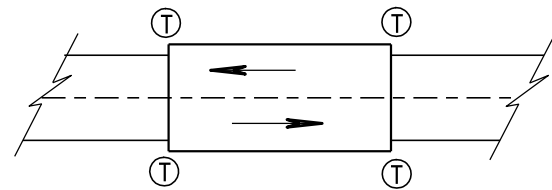
APPROVED

5/23/2011

DATE

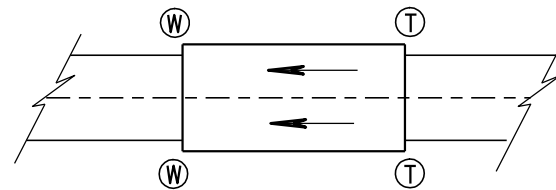
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

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

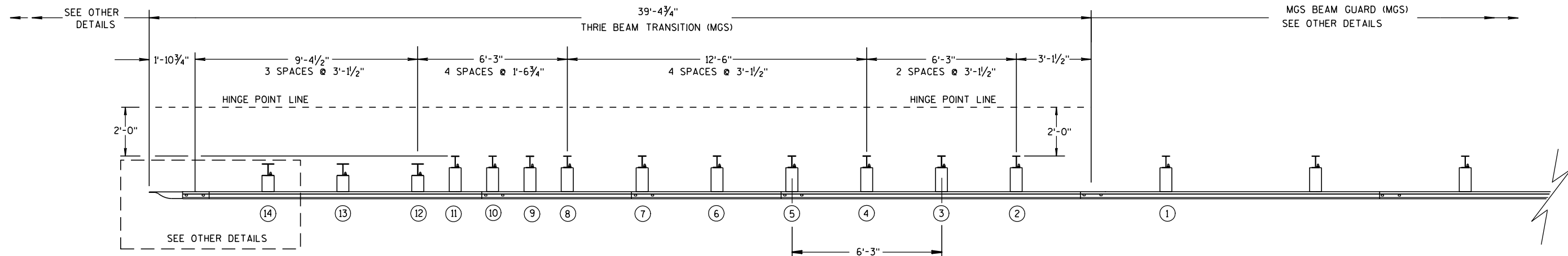
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

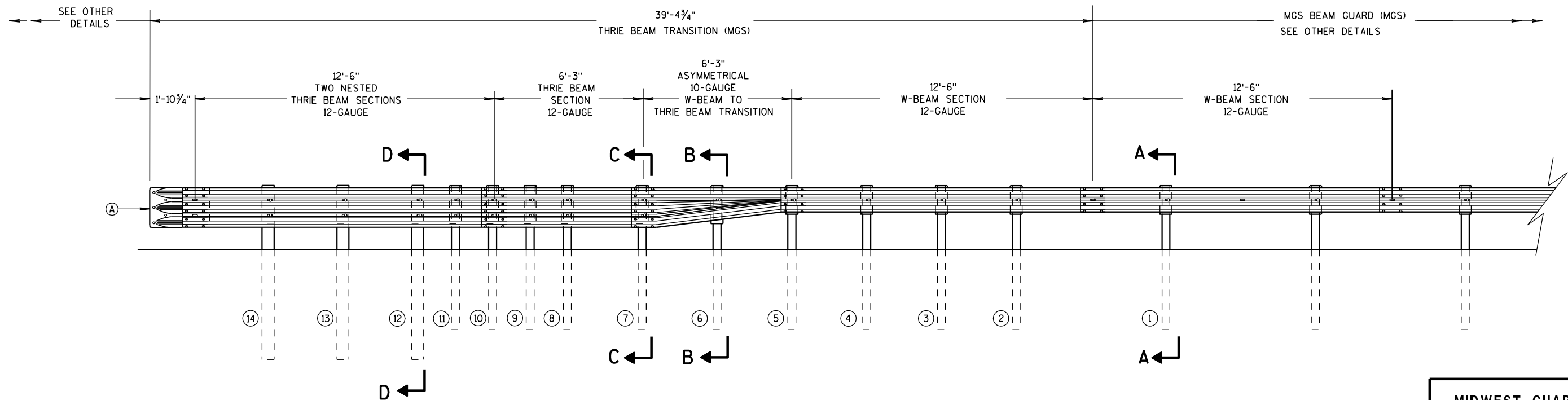
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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

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



PLAN VIEW



ELEVATION VIEW

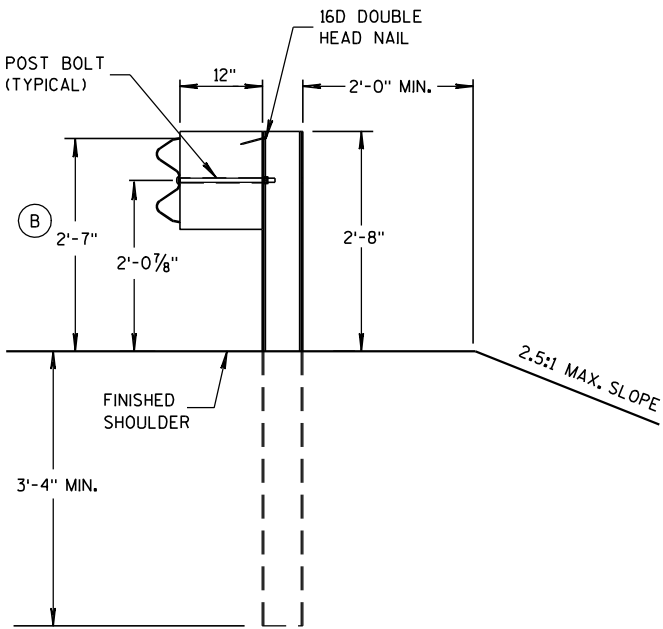
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

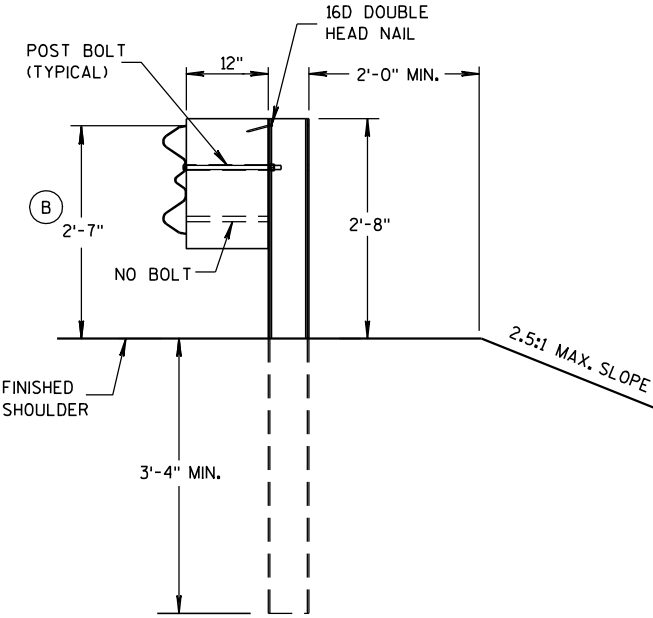
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

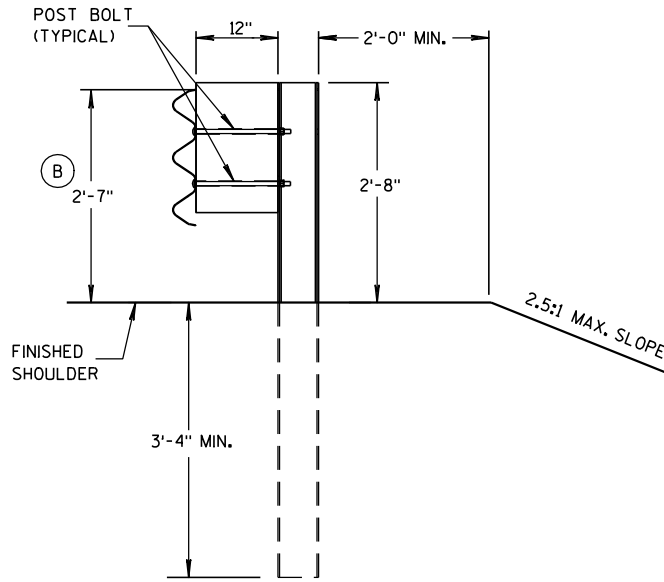
(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.



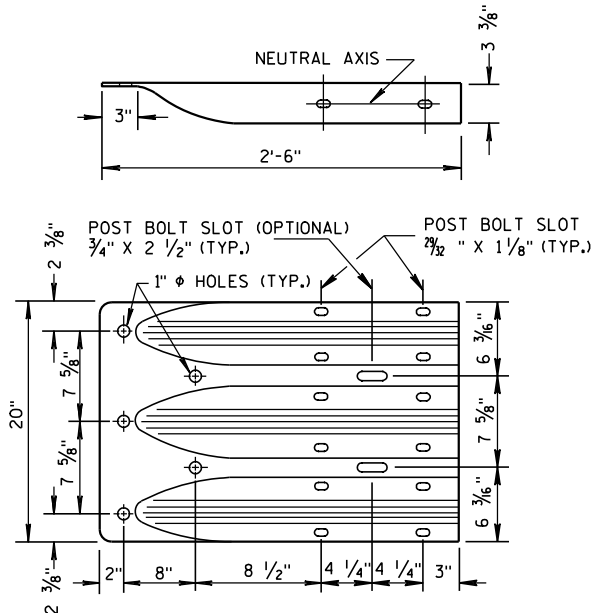
SECTION A-A
POSTS 1-5



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11



THRIE BEAM
TERMINAL CONNECTOR

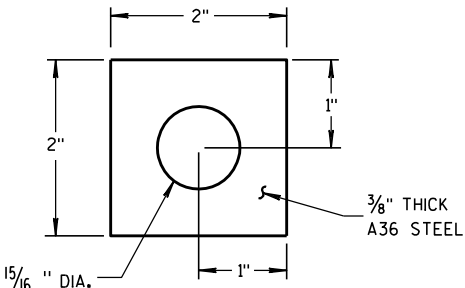
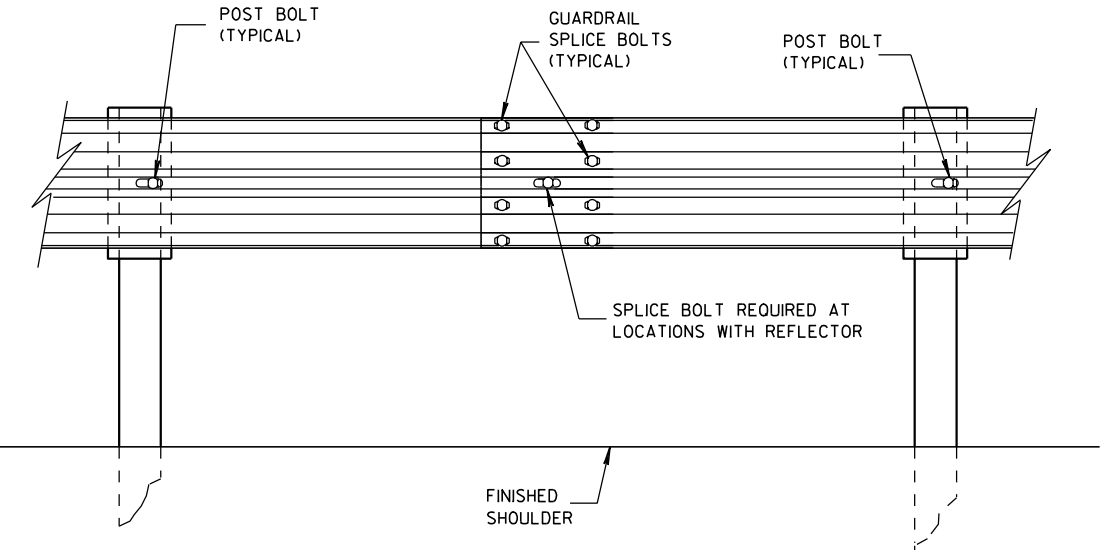
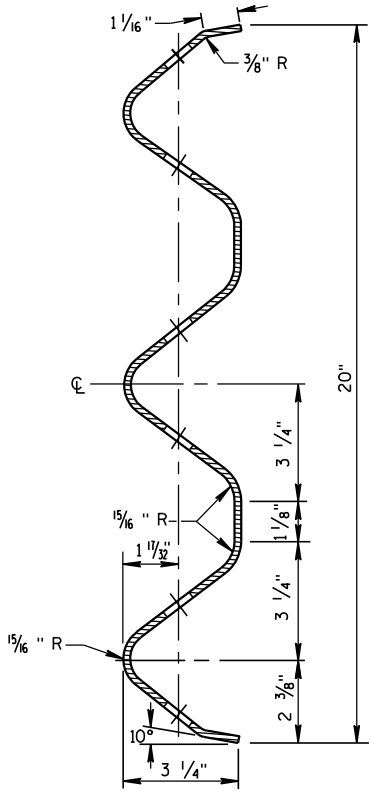


PLATE WASHER DETAIL



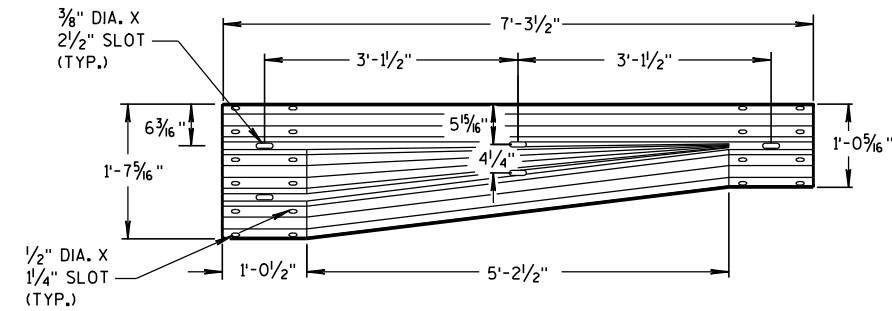
SPLICE DETAIL



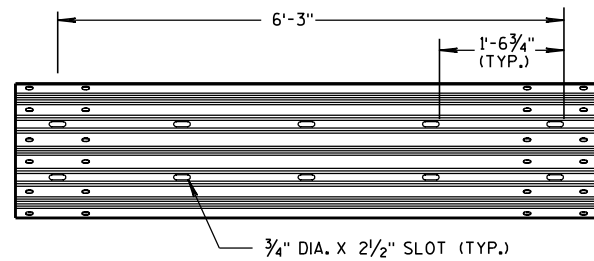
SECTION THRU THRIE
BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

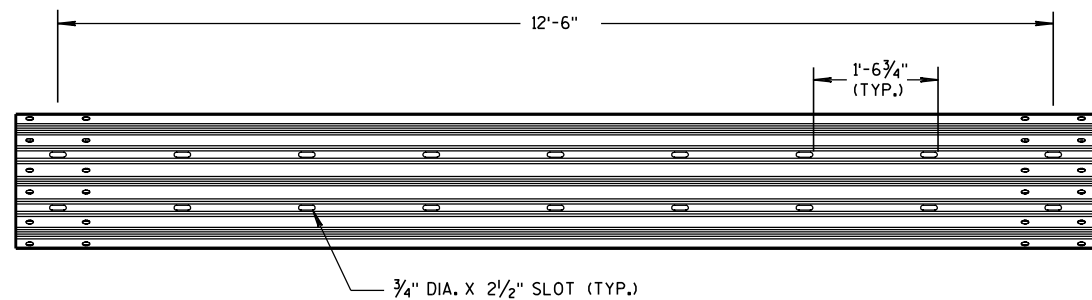
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



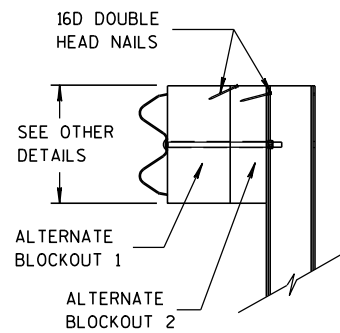
W-BEAM TO THRIE BEAM TRANSITION SECTION



6'-3" THRIE BEAM SECTION

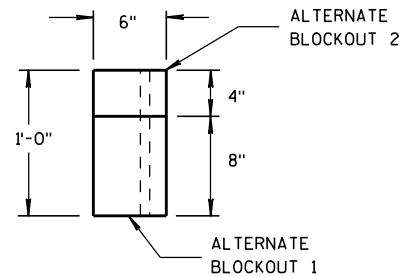


12'-6" THRIE BEAM SECTION

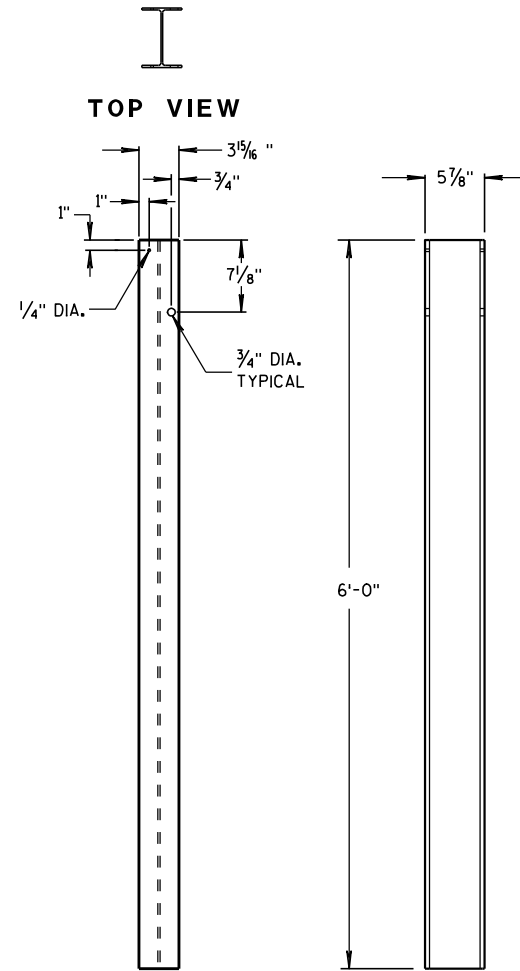


SIDE VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



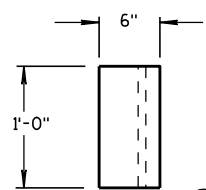
TOP VIEW



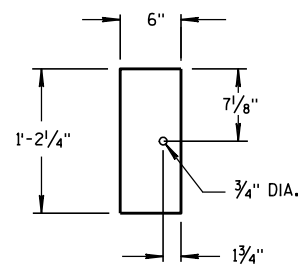
FRONT VIEW

SIDE VIEW

STEEL POSTS 1-5

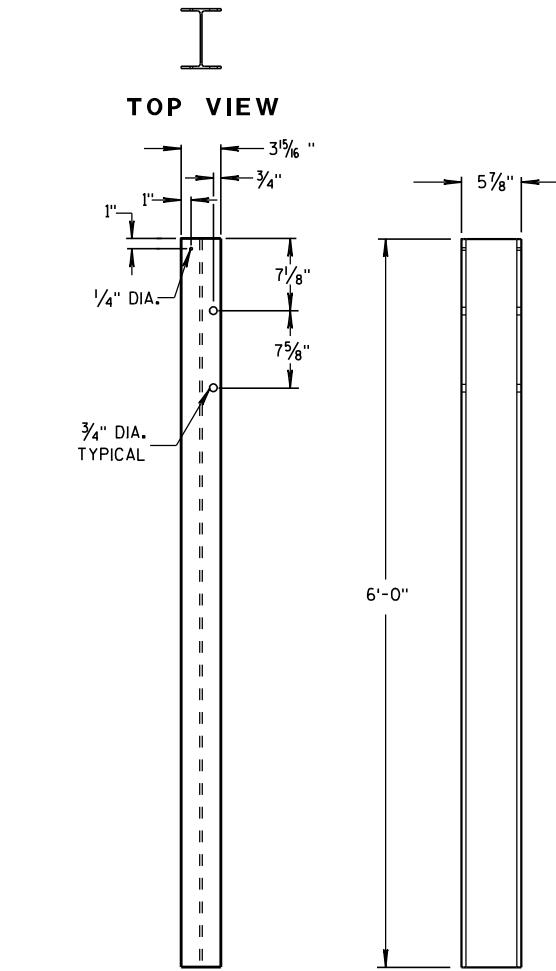


TOP VIEW



FRONT VIEW

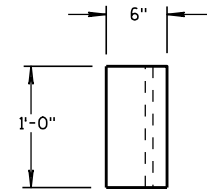
BLOCKOUT POSTS 1-5



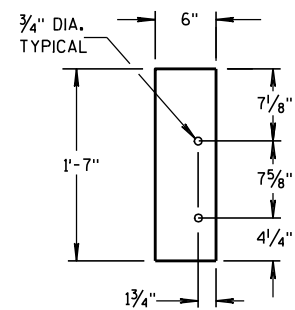
FRONT VIEW

SIDE VIEW

STEEL POSTS 6-11

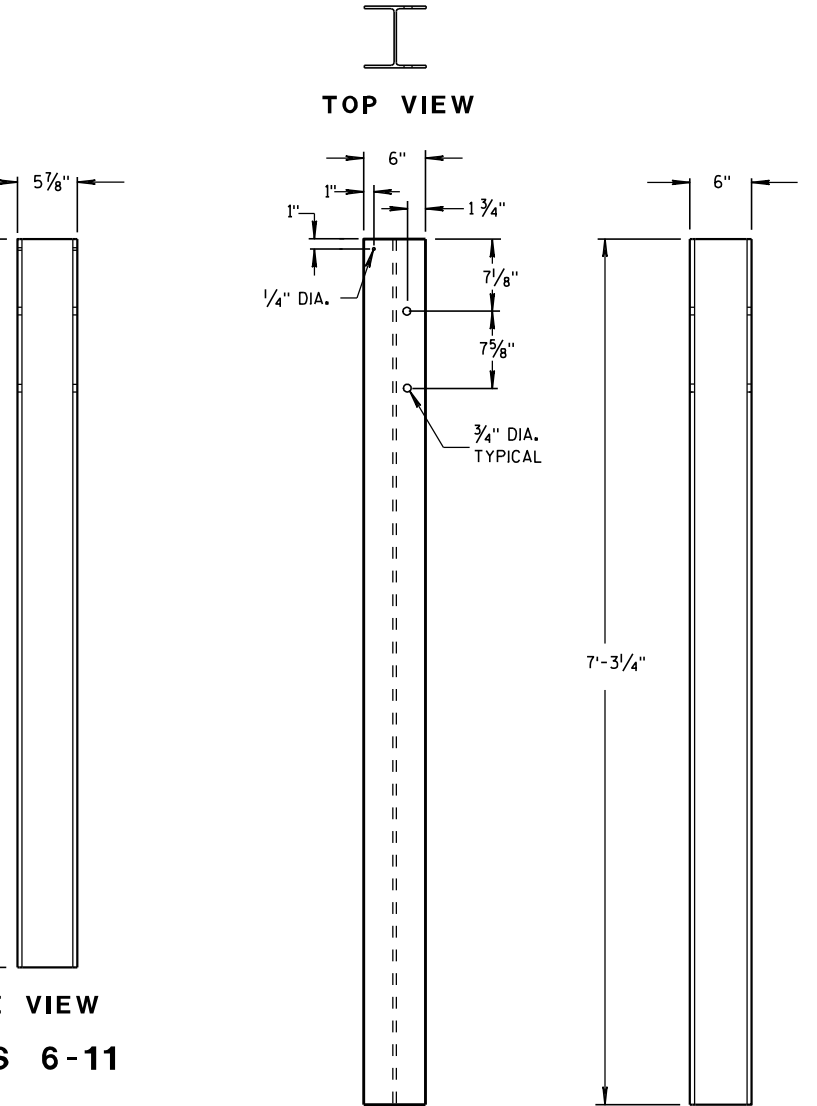


TOP VIEW



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

SIDE VIEW

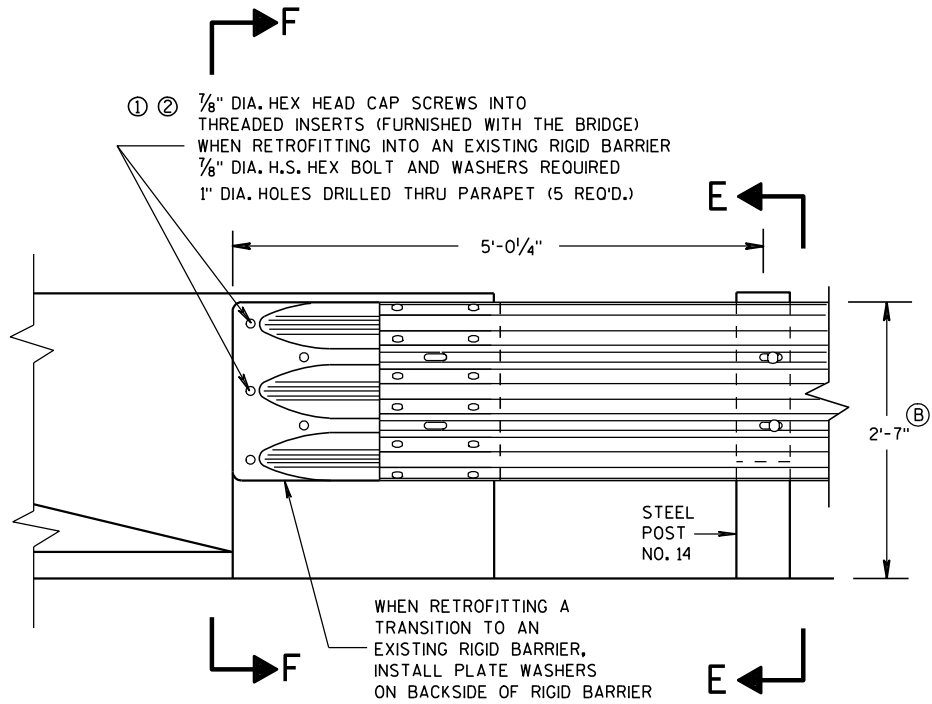
STEEL POSTS 12-14

STEEL POST SIZES

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

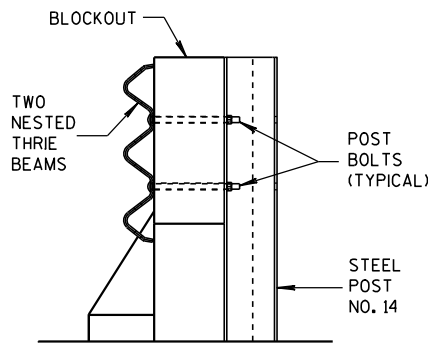
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE
PARAPET WITH SQUARE ENDS

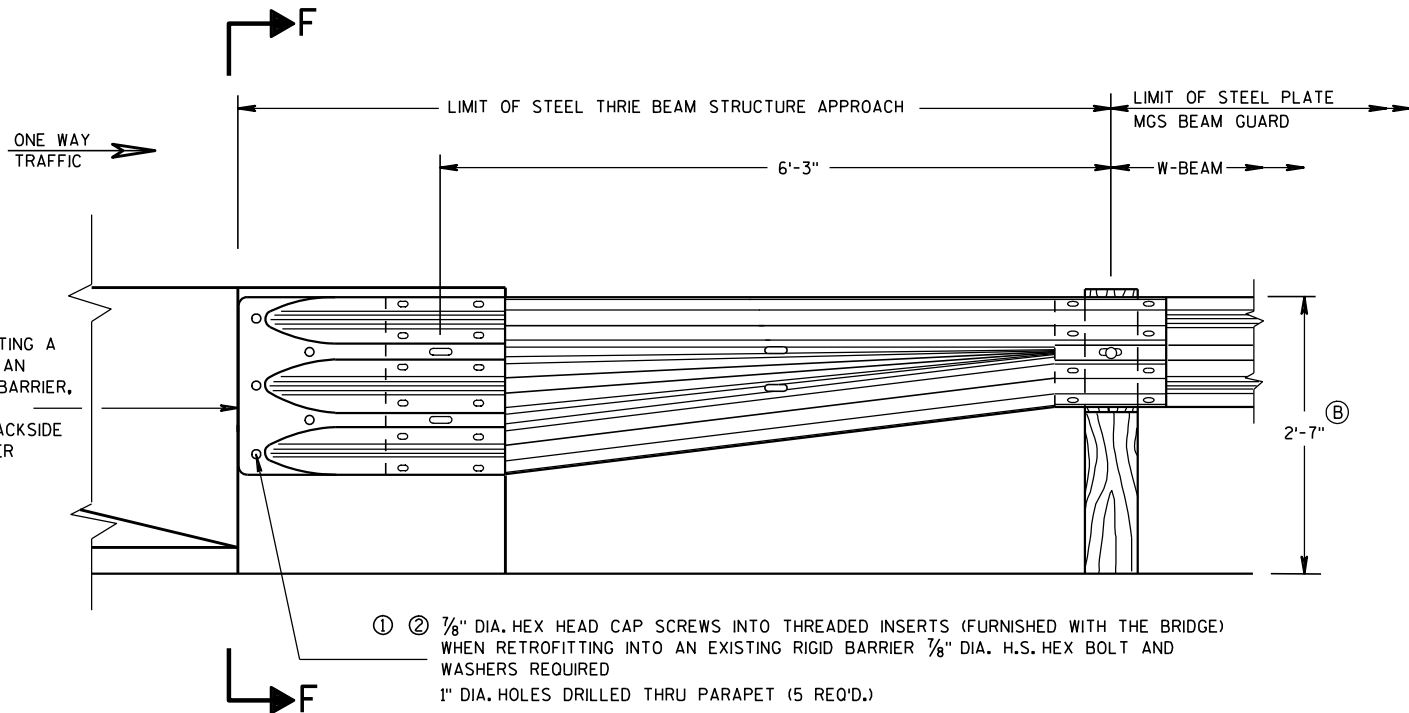


SECTION E-E

GENERAL NOTES

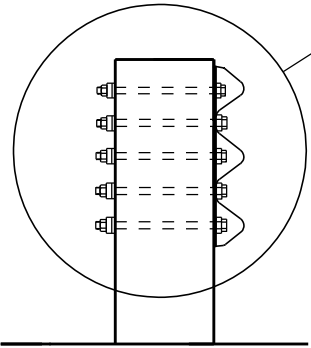
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

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

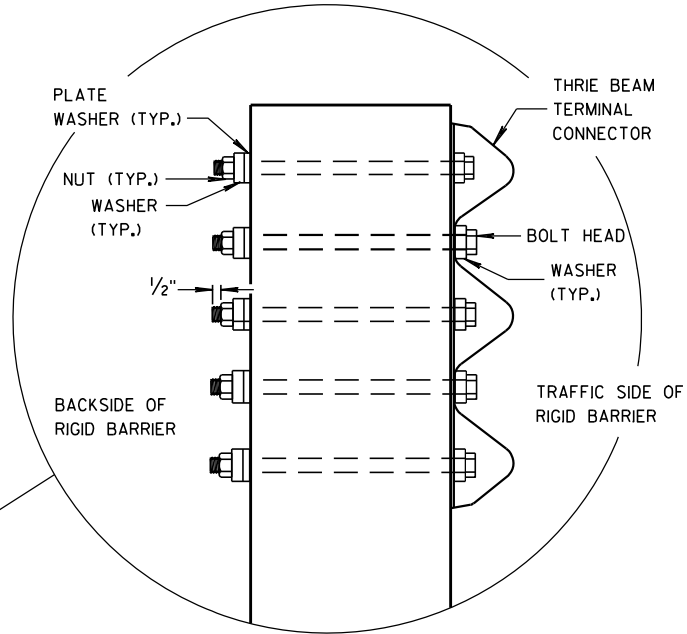


FRONT VIEW

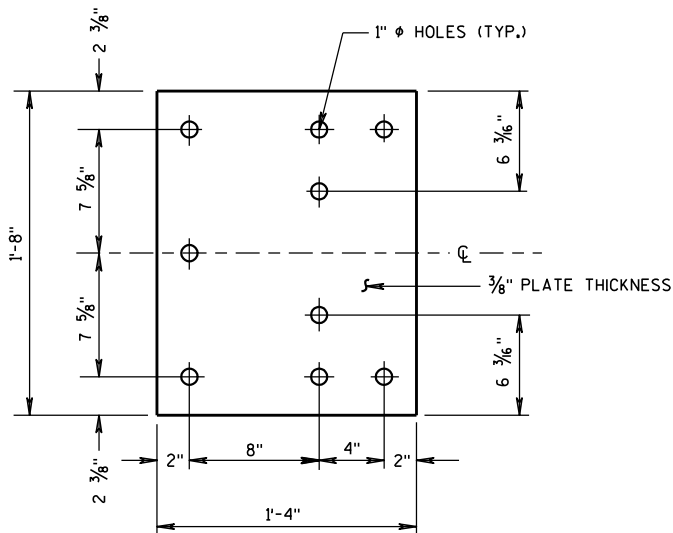
W BEAM TRANSITION AND CONNECTION TO
BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



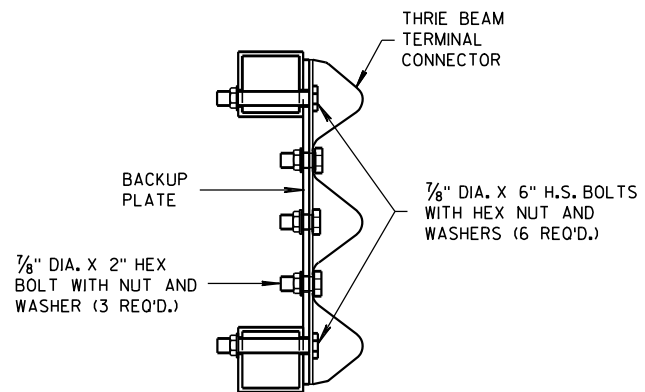
SECTION F-F



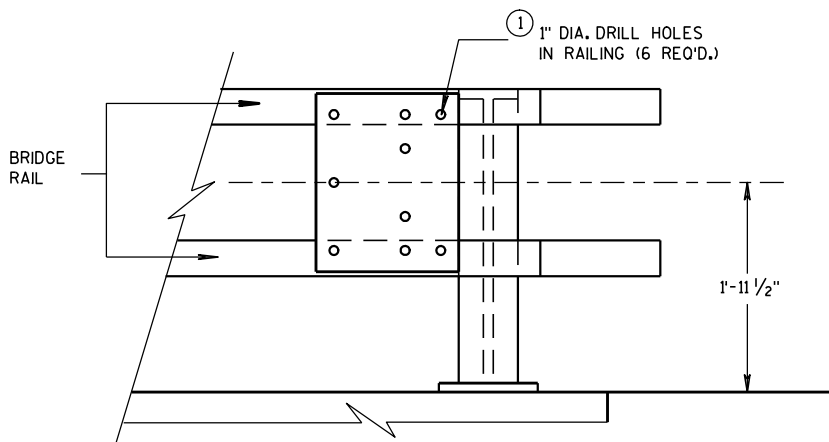
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/31/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



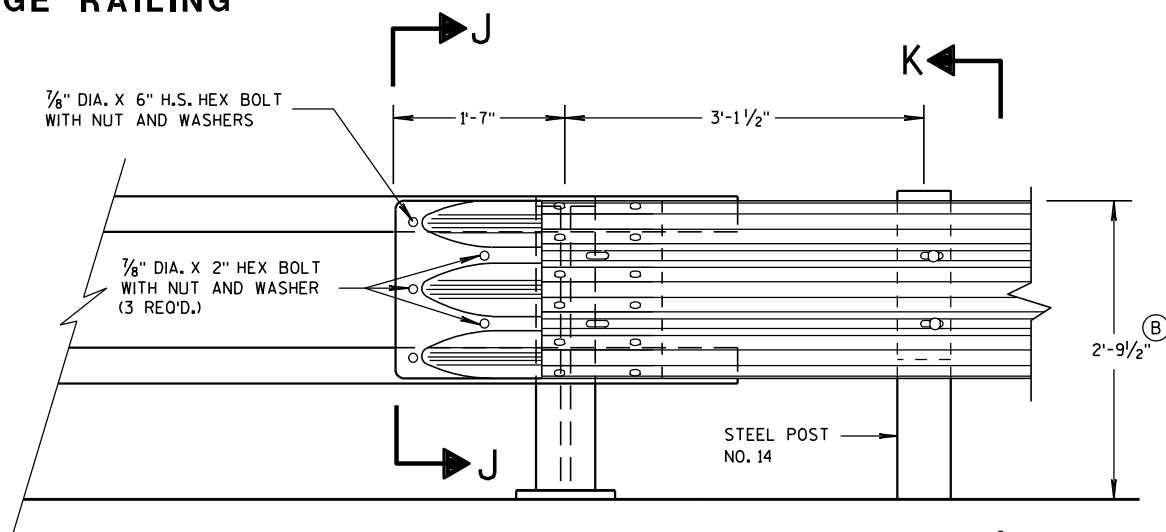
BACK-UP PLATE DETAIL



SECTION J-J

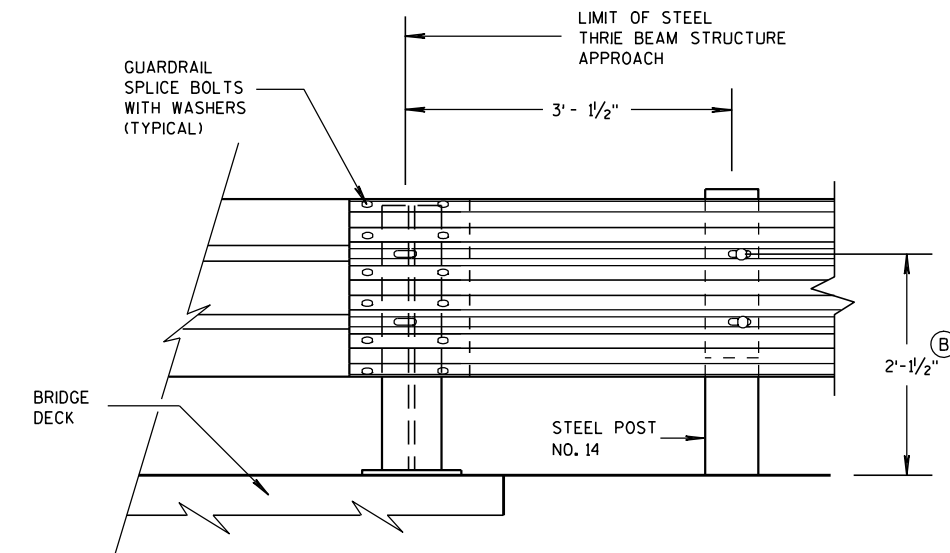


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



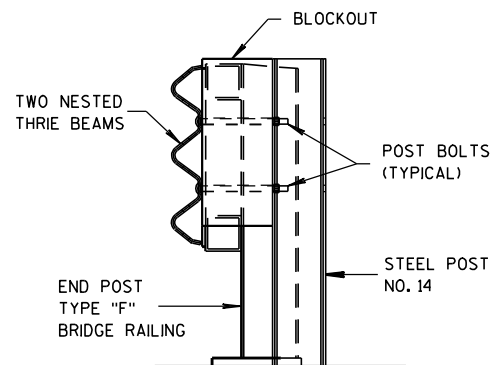
FRONT VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



SECTION K-K

GENERAL NOTES

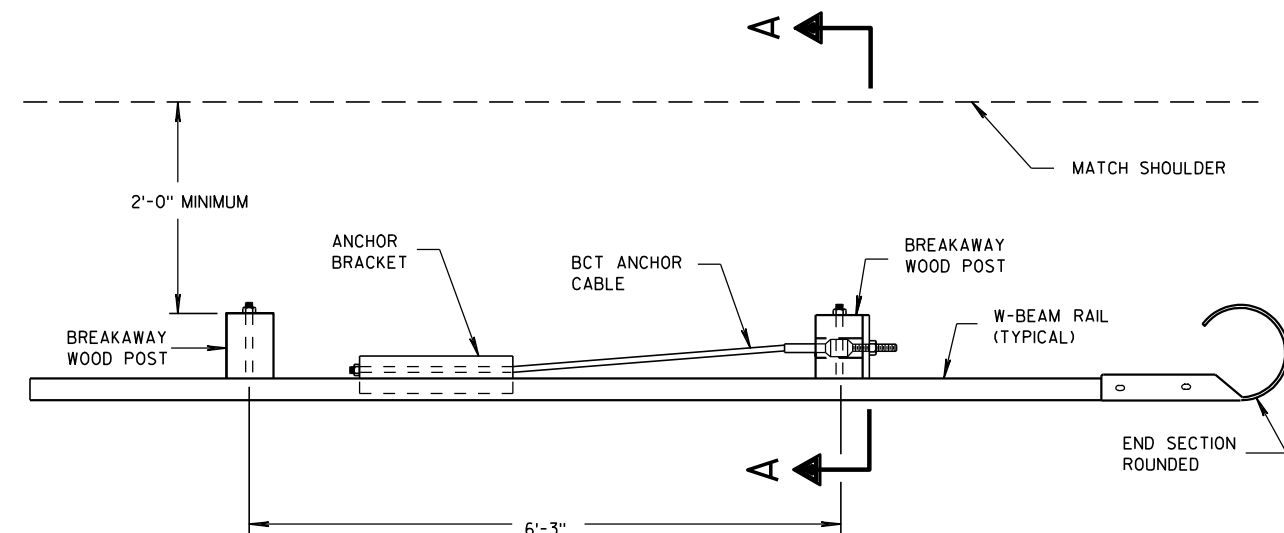
- ① DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

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

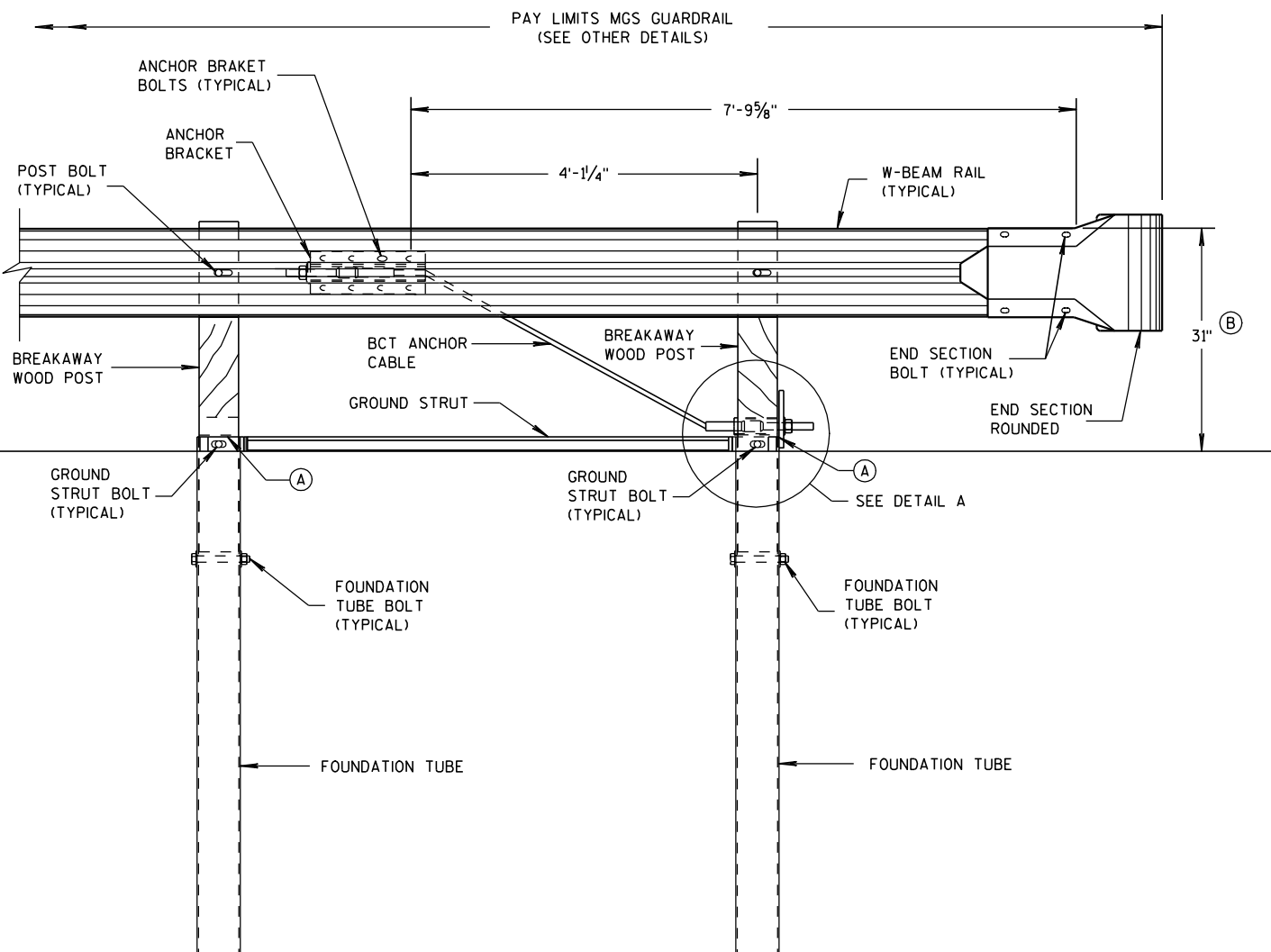
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

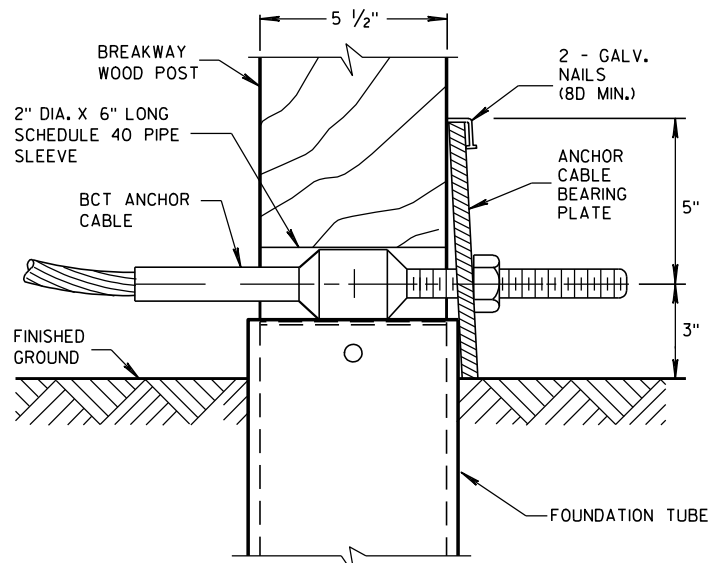


PLAN VIEW



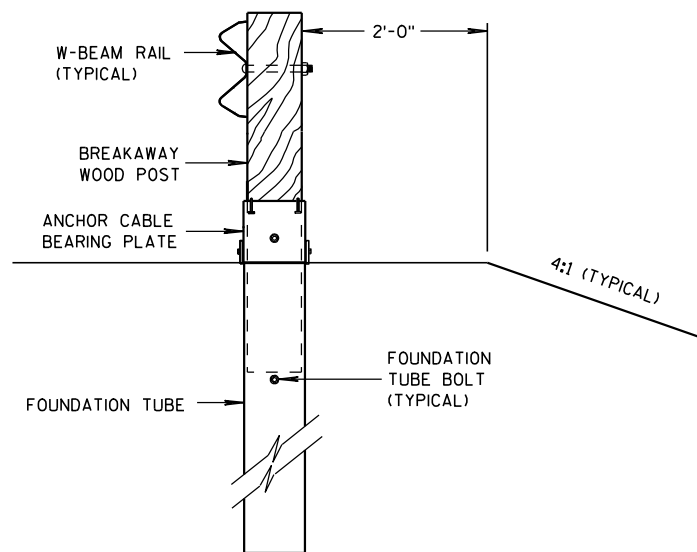
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUND STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER X 10" LONG GUARDRAIL BOLT. A POST BOLT REQUIRES A $\frac{5}{8}$ " DIAMETER DH MODIFIED (RECESSED) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER FLAT WASHER.

FOUNDATION TUBE BOLTS ARE A $\frac{7}{8}$ " DIAMETER X $7\frac{1}{2}$ " LONG HEAVY HEX HEAD BOLT. A FOUNDATION TUBE BOLT REQUIRES A $\frac{7}{8}$ " DIAMETER DH HEAVY HEX NUT AND A $\frac{5}{8}$ " DIAMETER FLAT WASHER.

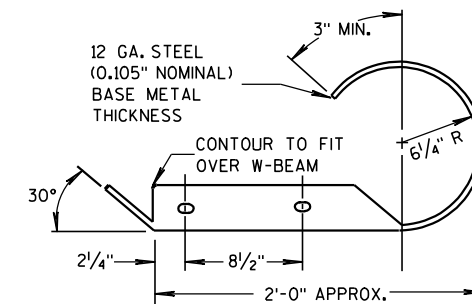
GROUND STRUT BOLTS ARE A $\frac{5}{8}$ " DIAMETER X 10" LONG HEAVY HEX HEAD BOLT. A GROUND STRUT BOLT REQUIRES A $\frac{5}{8}$ " DIAMETER DH HEAVY HEX NUT AND A $\frac{5}{8}$ " DIAMETER FLAT WASHER.

ANCHOR BRACKET BOLTS ARE A $\frac{5}{8}$ " DIAMETER X $1\frac{1}{2}$ " LONG HEAVY HEX HEAD BOLT. AN ANCHOR BRACKET BOLT REQUIRES A $\frac{5}{8}$ " DIAMETER DH HEAVY HEX NUT AND A FLAT WASHER.

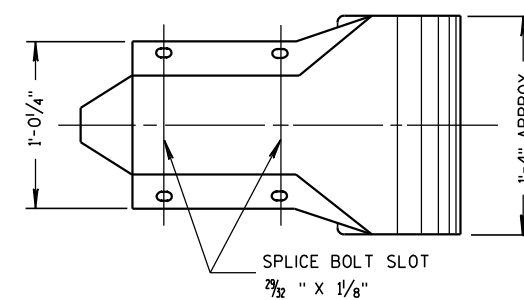
END SECTION BOLTS ARE A $\frac{5}{8}$ " DIAMETER X $1\frac{1}{2}$ " HEAVY HEX HEAD BOLT. AN END SECTION BOLT REQUIRES $\frac{5}{8}$ " DIAMETER DH HEAVY HEX NUT AND A $\frac{5}{8}$ " DIAMETER FLAT WASHER.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

- (A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.
- (B) FOR NEW CONSTRUCTION TOP OF RAIL IS $31" \pm 1"$.
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN $27\frac{3}{4}"$ TO $32" \pm 1"$.



PLAN VIEW

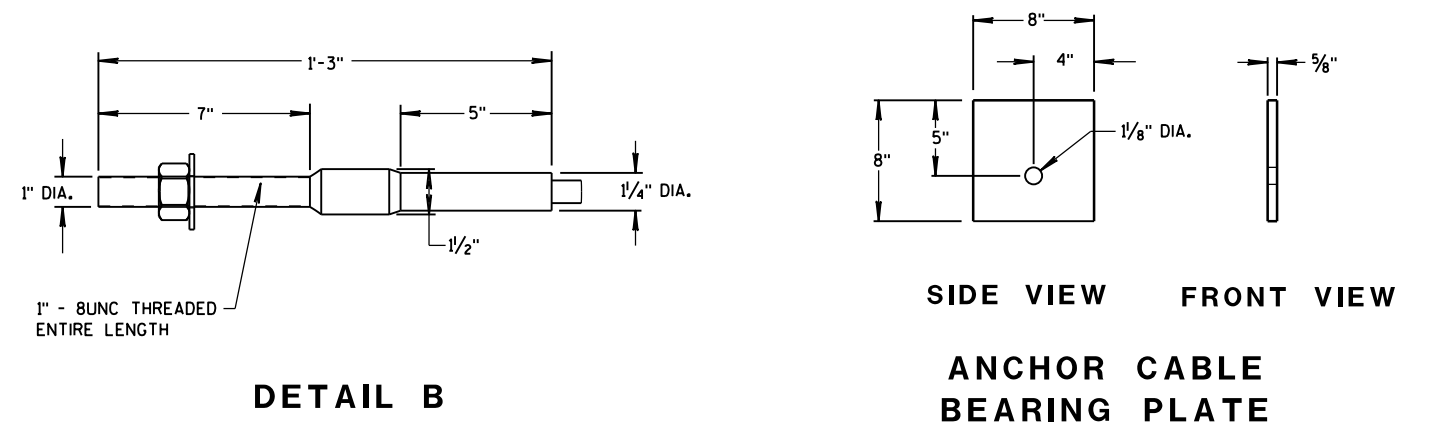
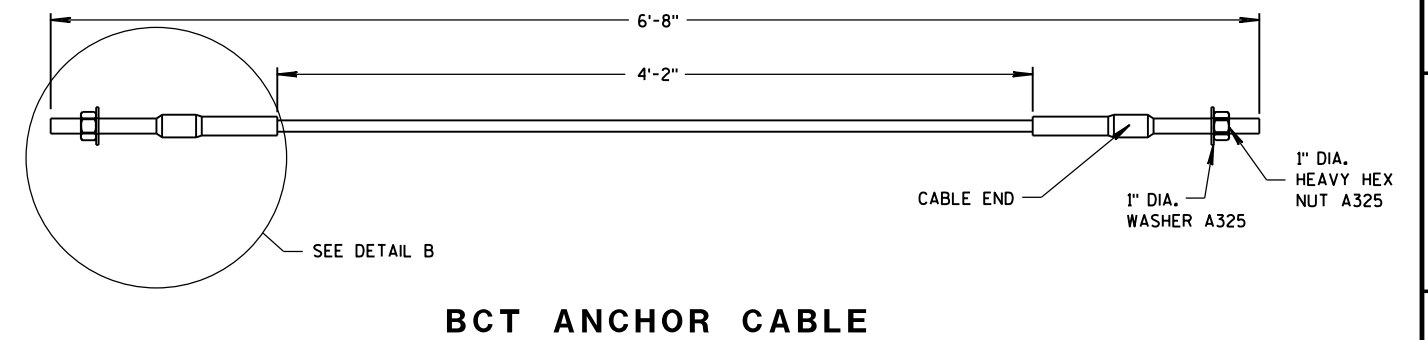
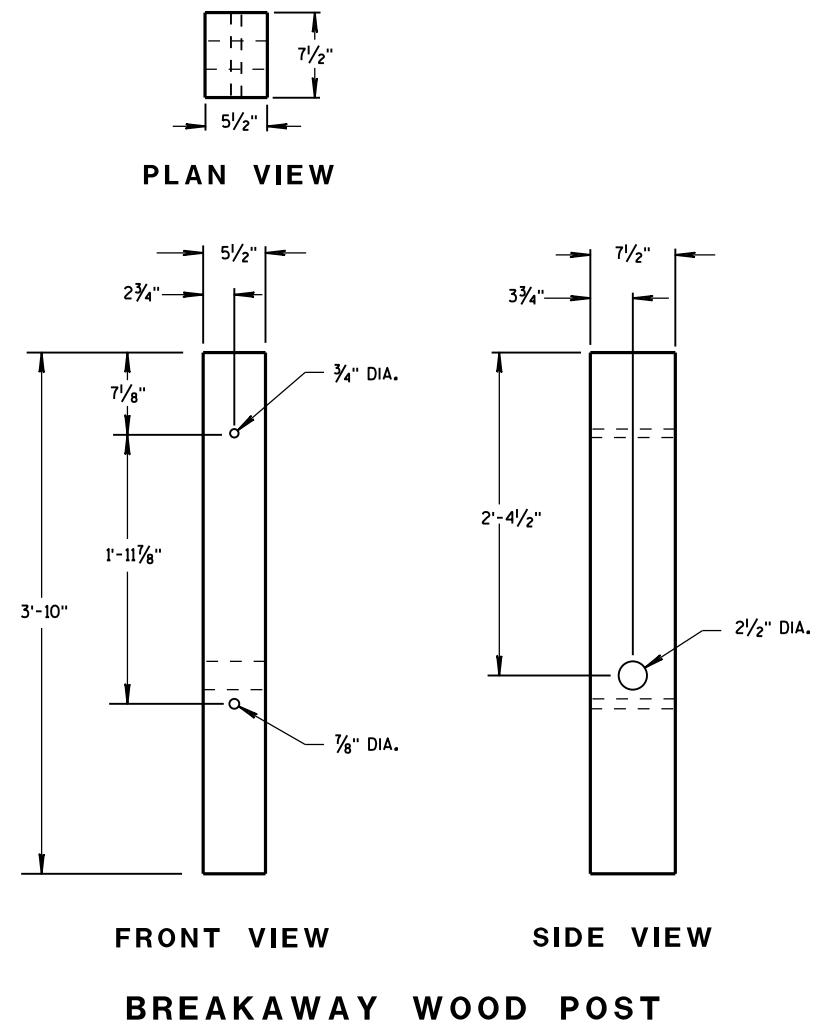
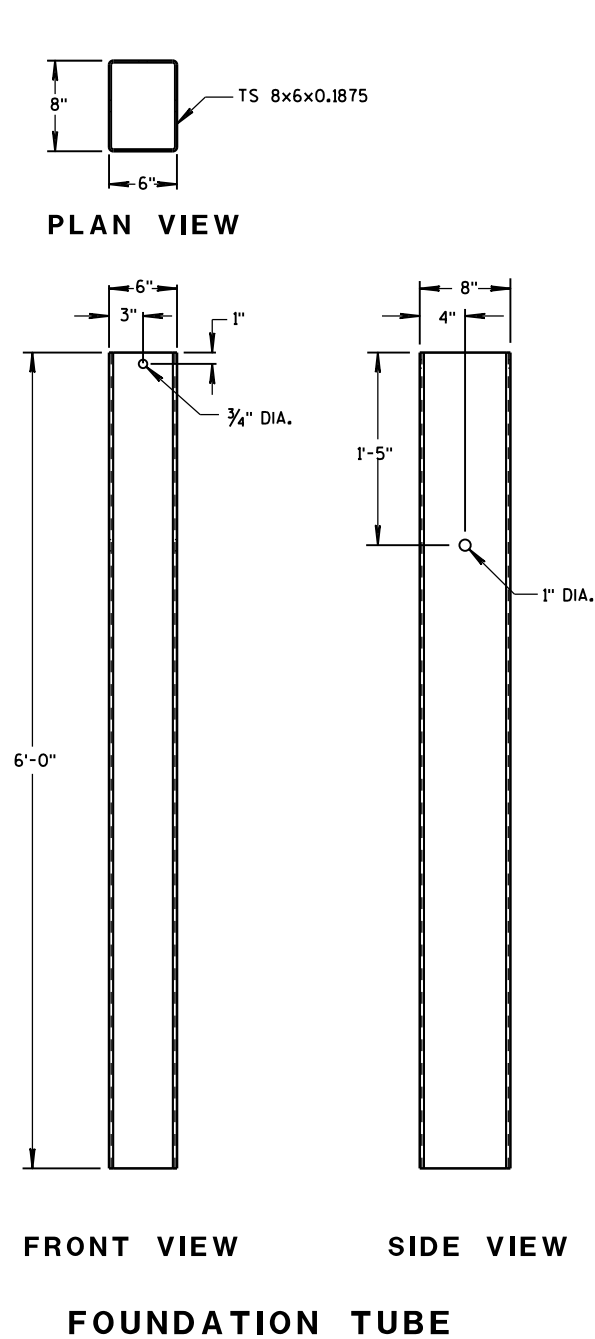


FRONT VIEW

W BEAM END
SECTION ROUNDED

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

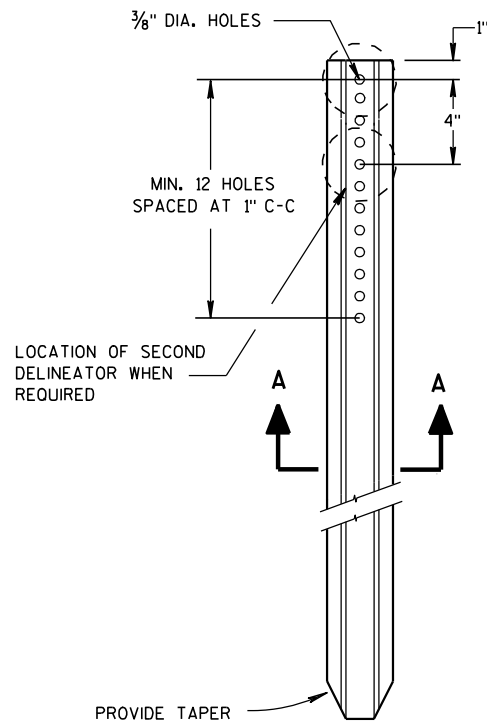
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

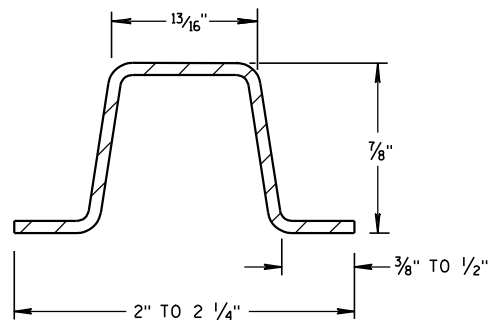
BCT ANCHOR CABLE IS A 3/8" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. THE END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. THE TREADED STUD SHOULD CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.



<p>MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL</p>
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>
<p>APPROVED</p> <p><u>5/23/2011</u> <u>/s/ Jerry H. Zogg</u> DATE ROADWAY STANDARDS DEVELOPMENT FHWA ENGINEER</p>

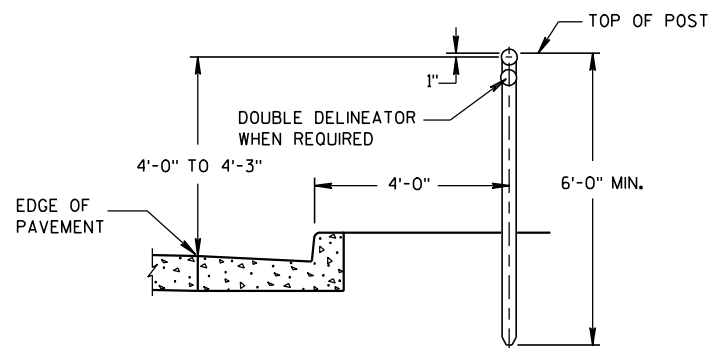
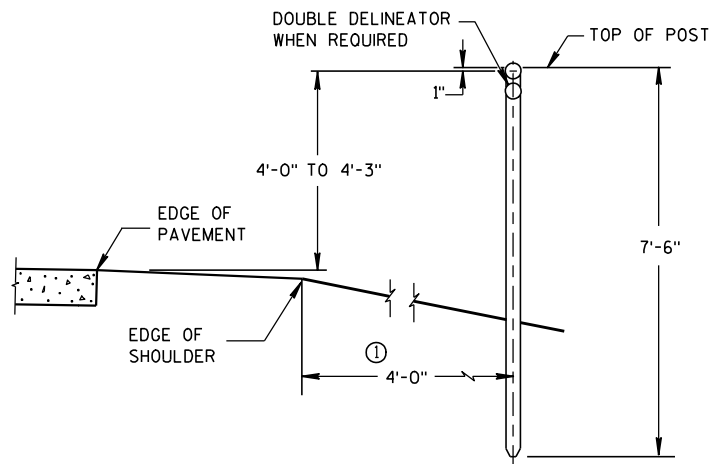


DELINEATOR POST

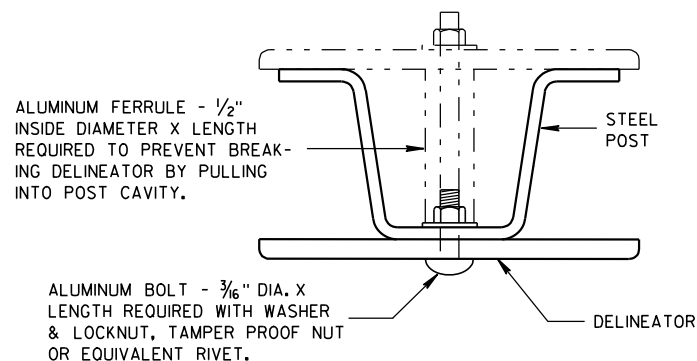


SECTION A-A

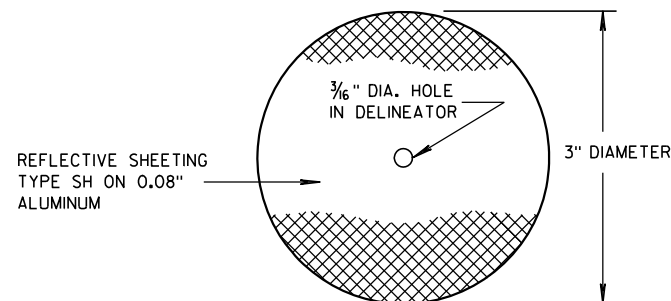
WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



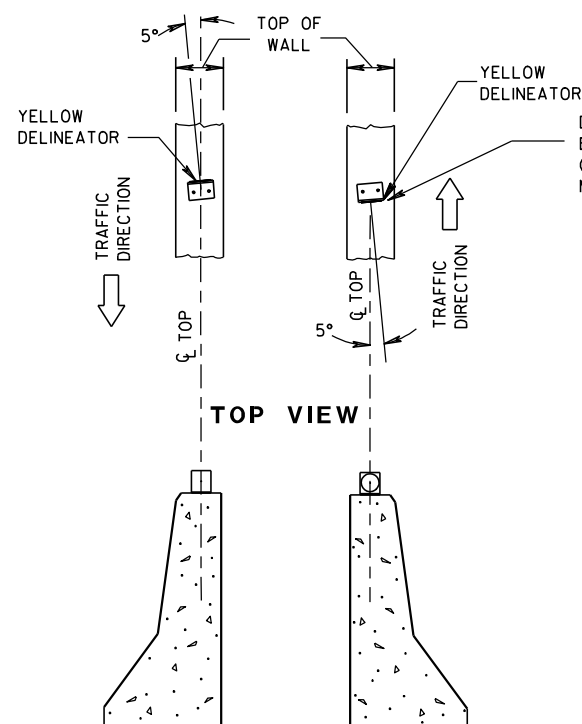
TYPICAL INSTALLATIONS OF DELINEATOR POSTS



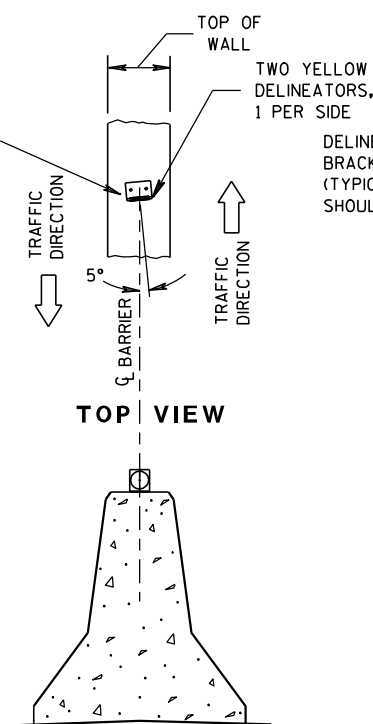
MOUNTING DETAIL FOR DELINEATOR



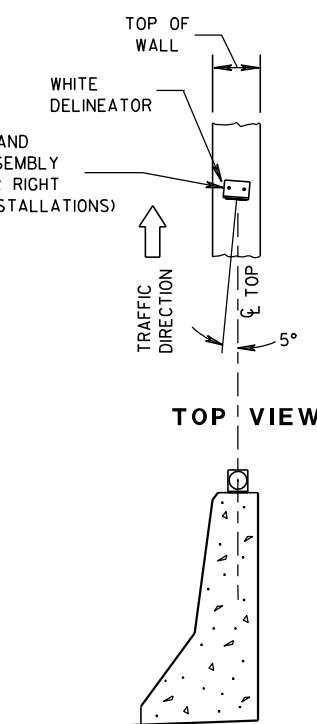
DELINEATOR



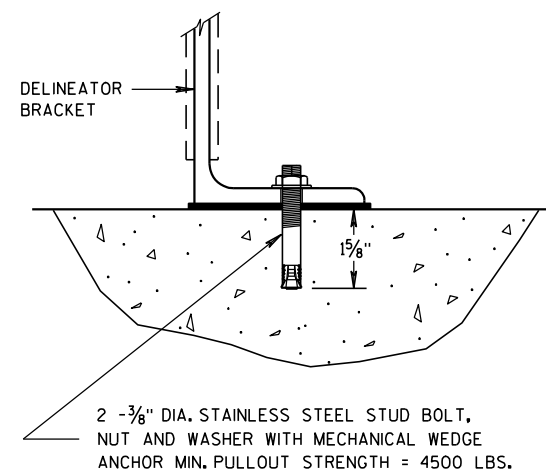
DOUBLE BARRIERS IN MEDIAN



MEDIAN BARRIER



BARRIER LOCATED TO RT. OF TRAFFIC FLOW



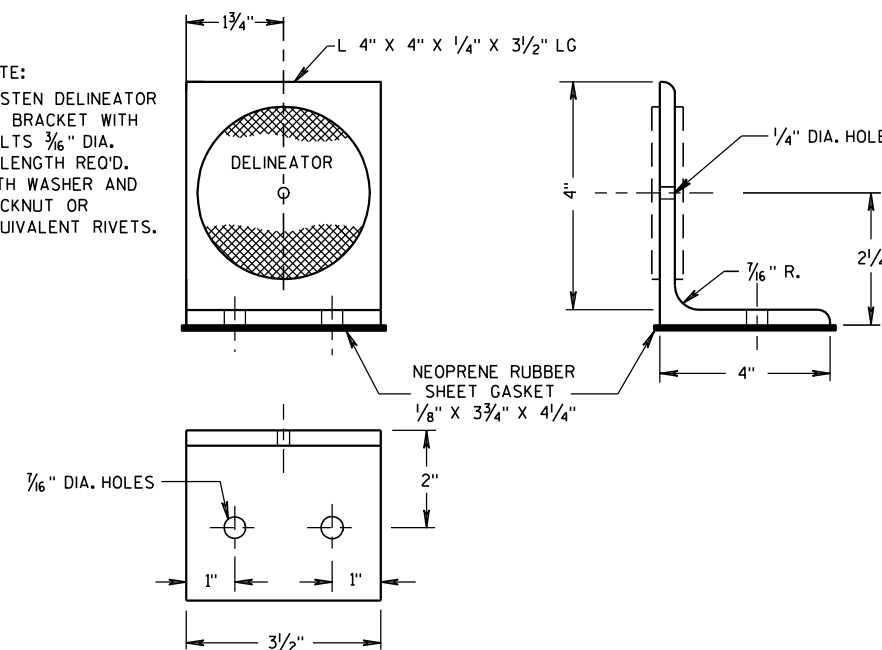
DELINEATOR BRACKET MOUNTING DETAIL

GENERAL NOTES

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

- ① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

NOTE: FASTEN DELINEATOR TO BRACKET WITH BOLTS 3/16" DIA. X LENGTH REQ'D. WITH WASHER AND LOCKNUT OR EQUIVALENT RIVETS.



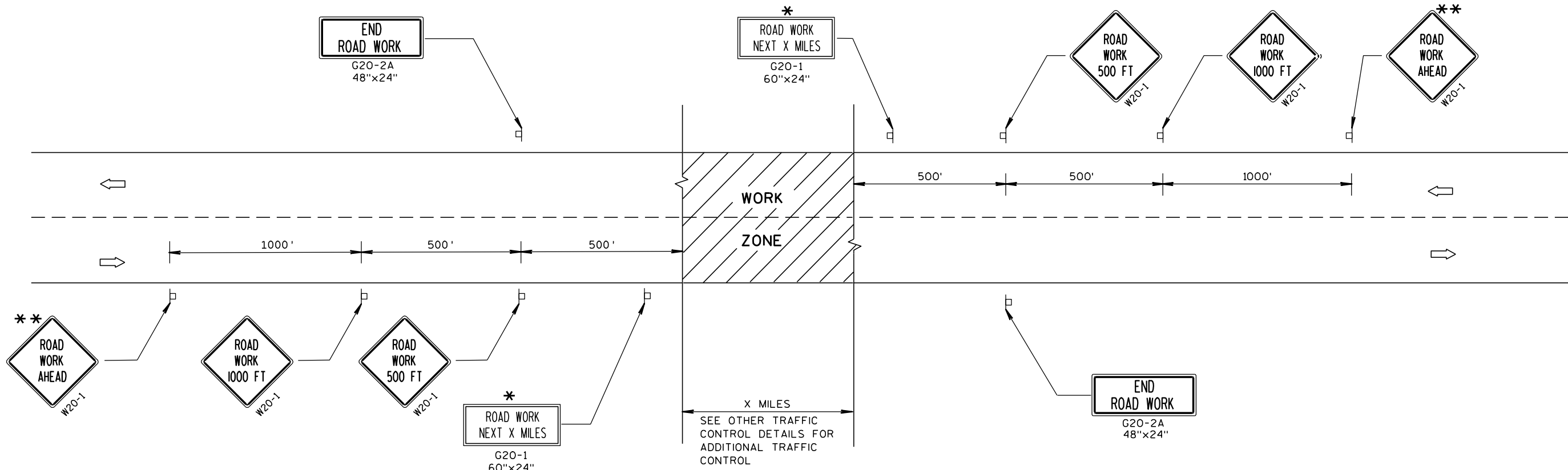
DELINEATOR BRACKET

LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS

DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/25/2011 DATE /S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

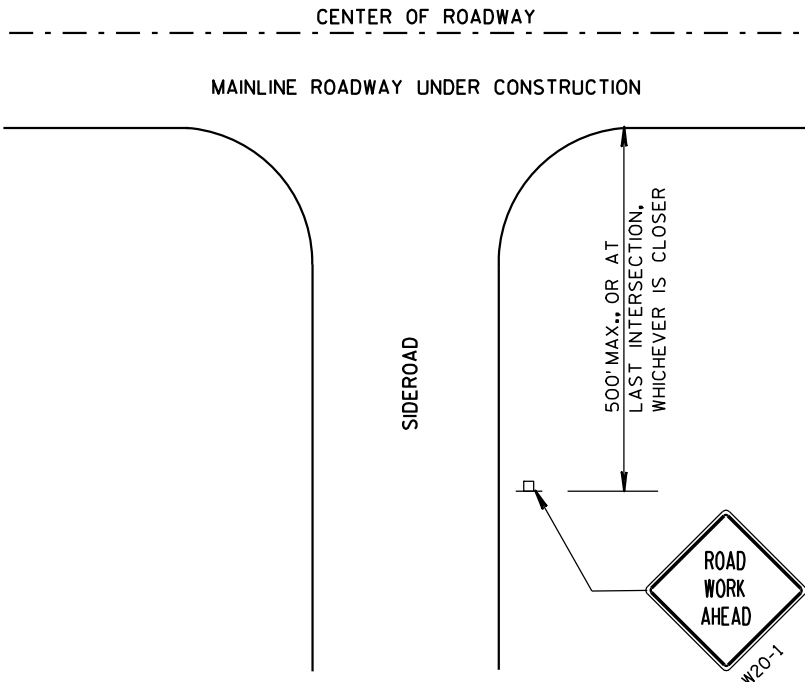
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

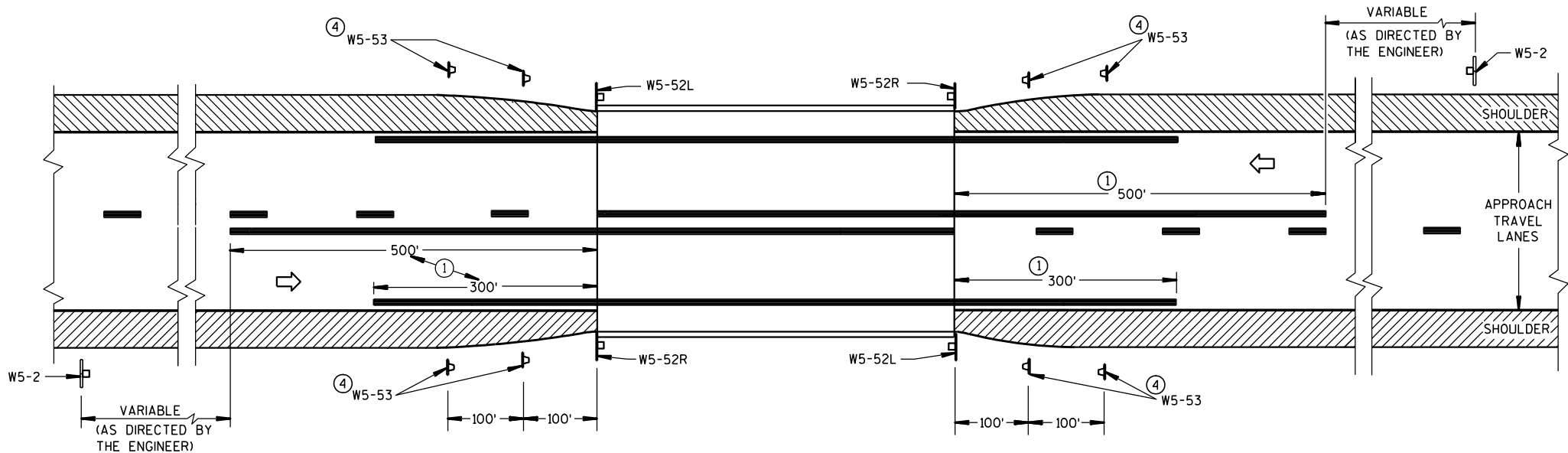
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.



LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

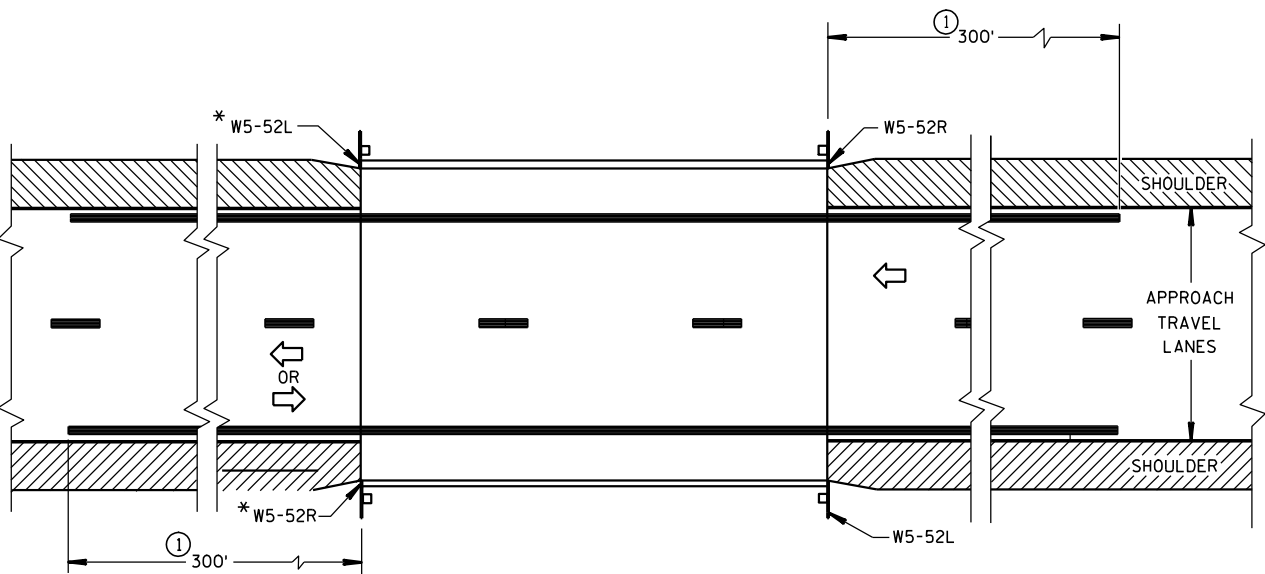
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	



SITUATION 1

WARRANTING CRITERION:

BRIDGE WIDTH IS AT LEAST 18 FEET BUT LESS THAN 24 FEET

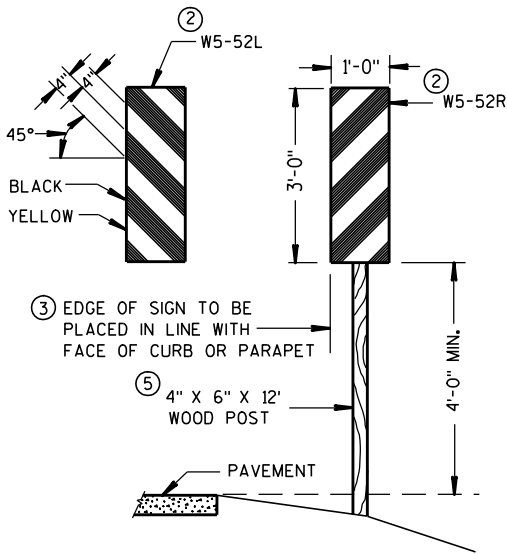


*OMIT ON ONE-WAY TRAVELLED WAYS

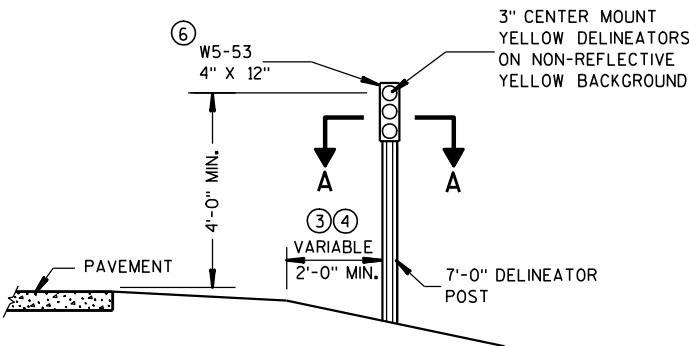
SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



OBJECT MARKER PLACEMENT

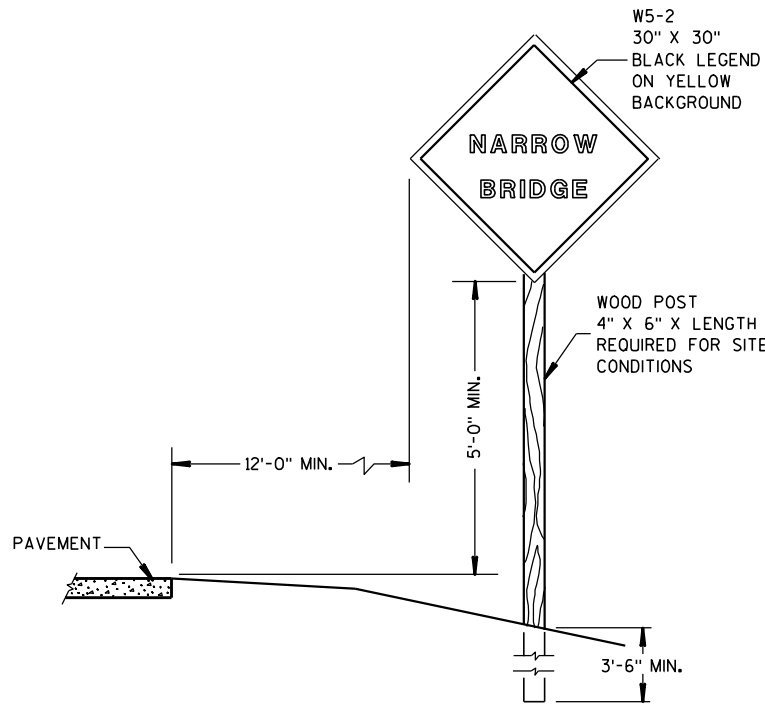


GENERAL NOTES

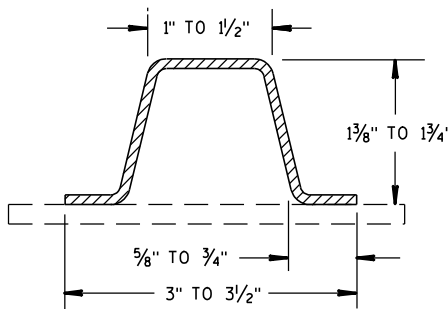
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R AND W5-52L SHALL BE COVERED WITH TYPE H REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.
- ④ OBJECT MARKERS (W5-53) SHALL BE LOCATED ALONG A LINE FLARED AWAY FROM THE BRIDGE CORNER TO DELINEATE THE NARROWING OF THE SHOULDER OR BERM.
- ⑤ A 12 FOOT DELINEATOR POST MAY BE USED INSTEAD OF A WOOD POST.
- ⑥ NON-BID ITEM. INCIDENTAL TO OTHER ITEMS.



SIGN PLACEMENT



SECTION A-A

(MINIMUM WEIGHT 1.9 LBS. PER FT. AFTER GALVANIZING)

**SIGNING & MARKING
FOR TWO LANE BRIDGES**

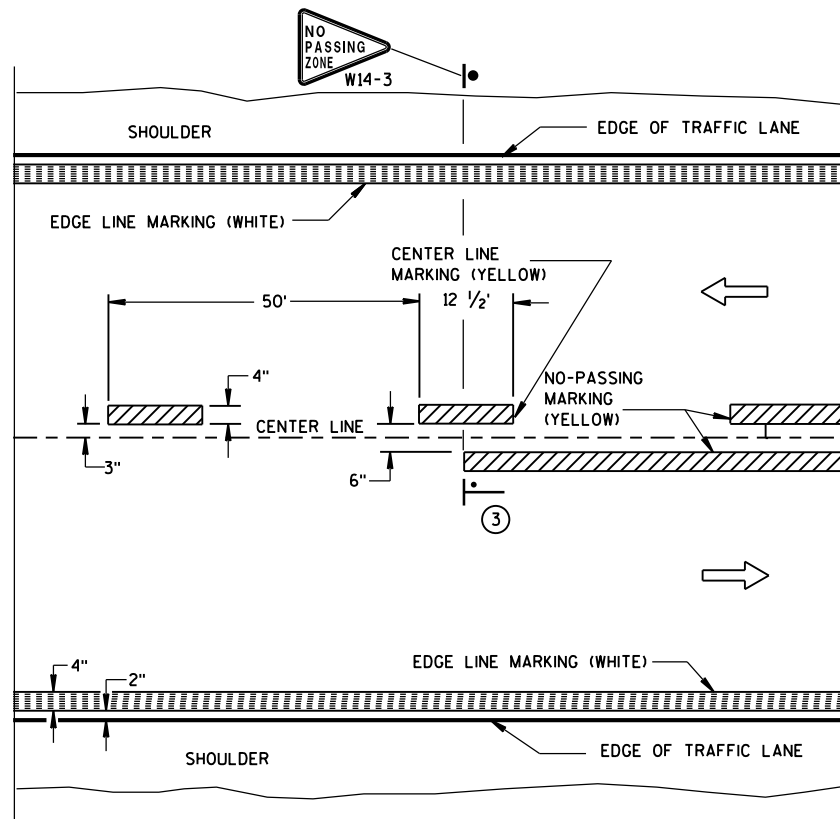
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

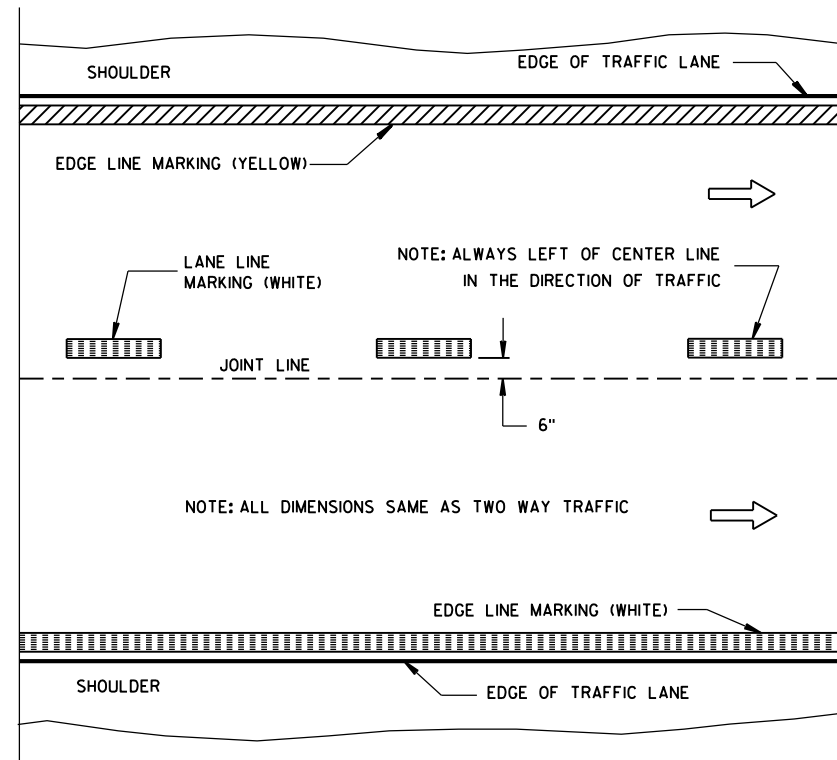
9/5/06
DATE

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

FHWA

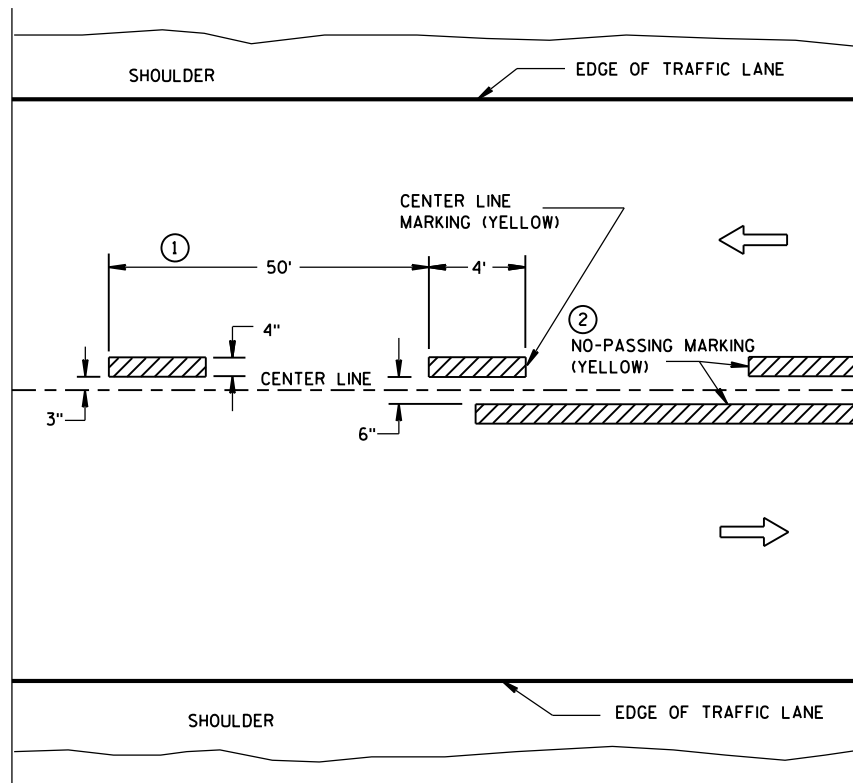


TWO WAY TRAFFIC

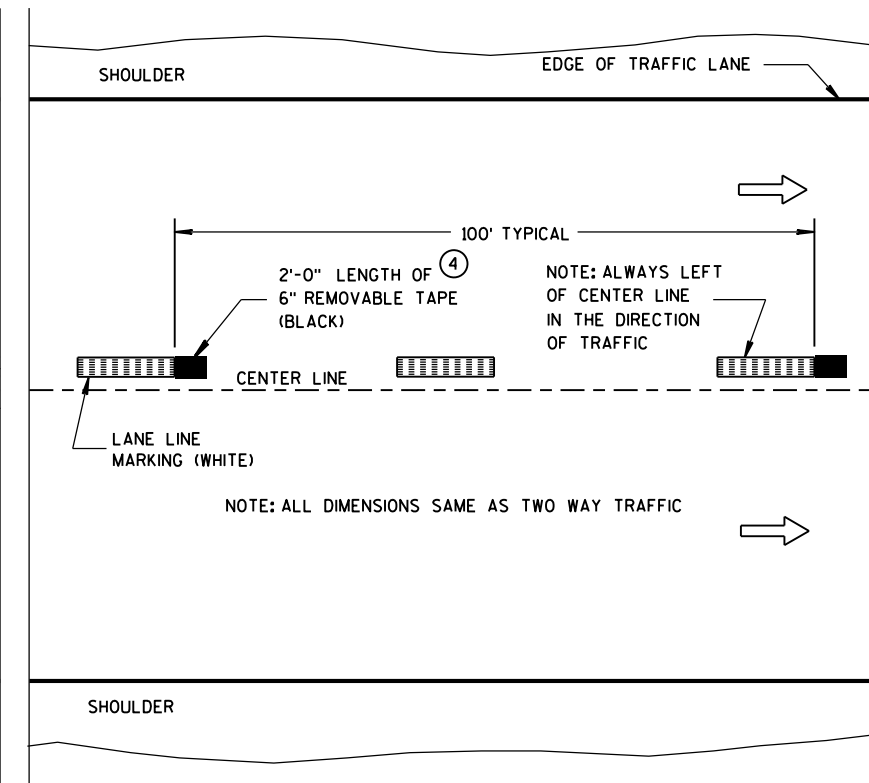


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

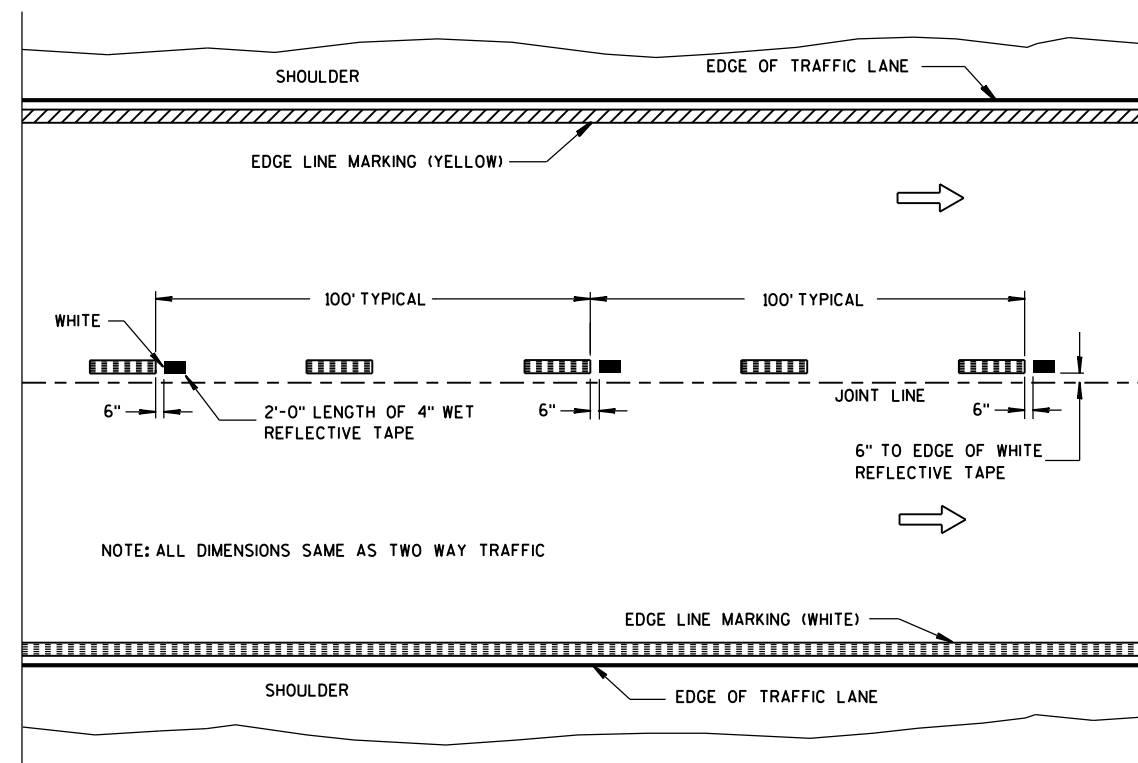
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

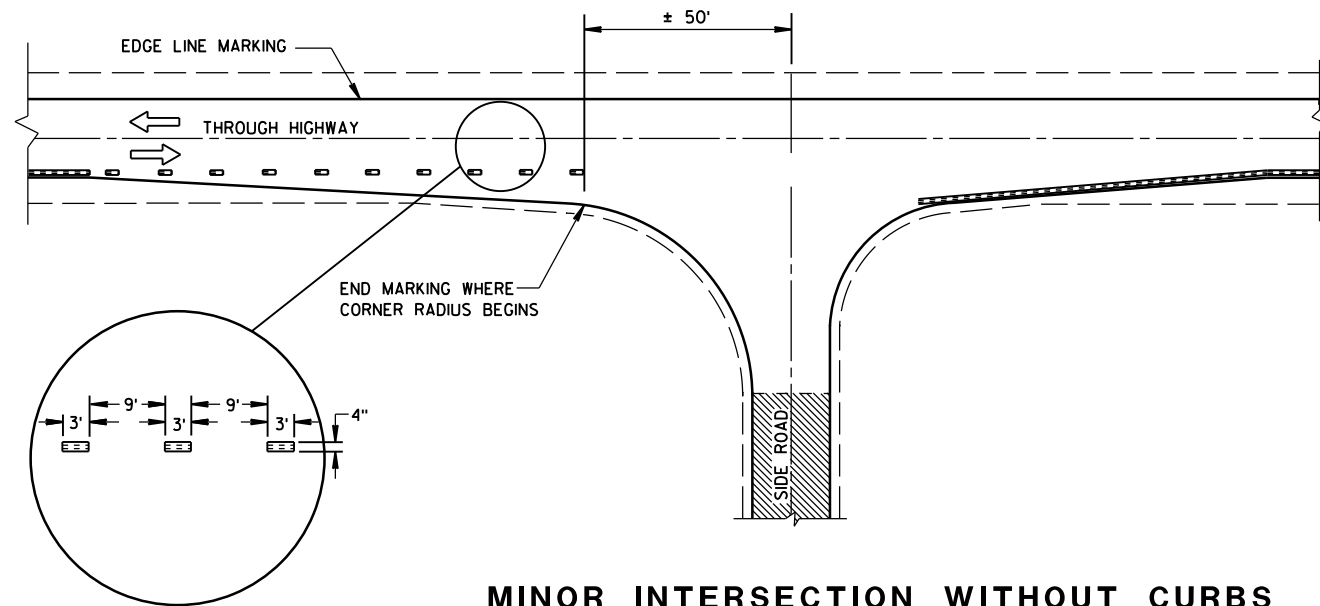
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

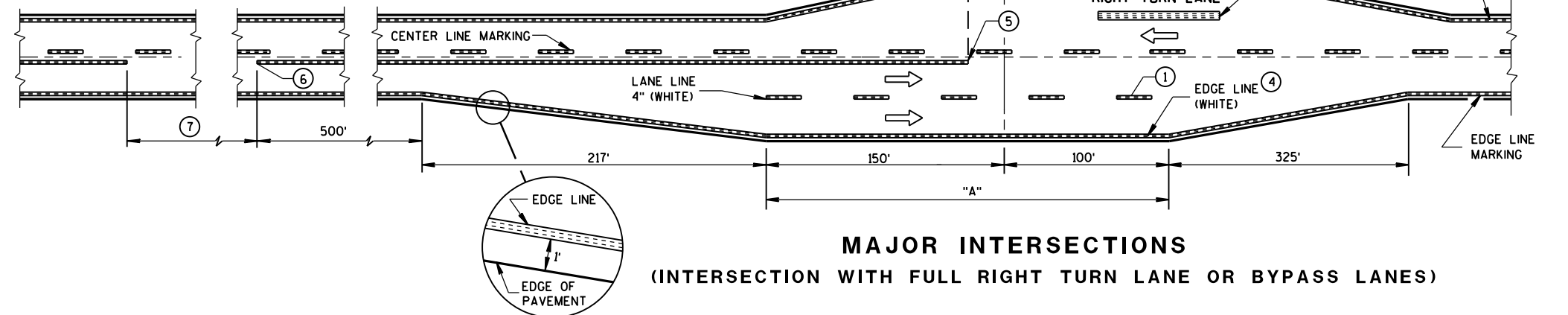
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



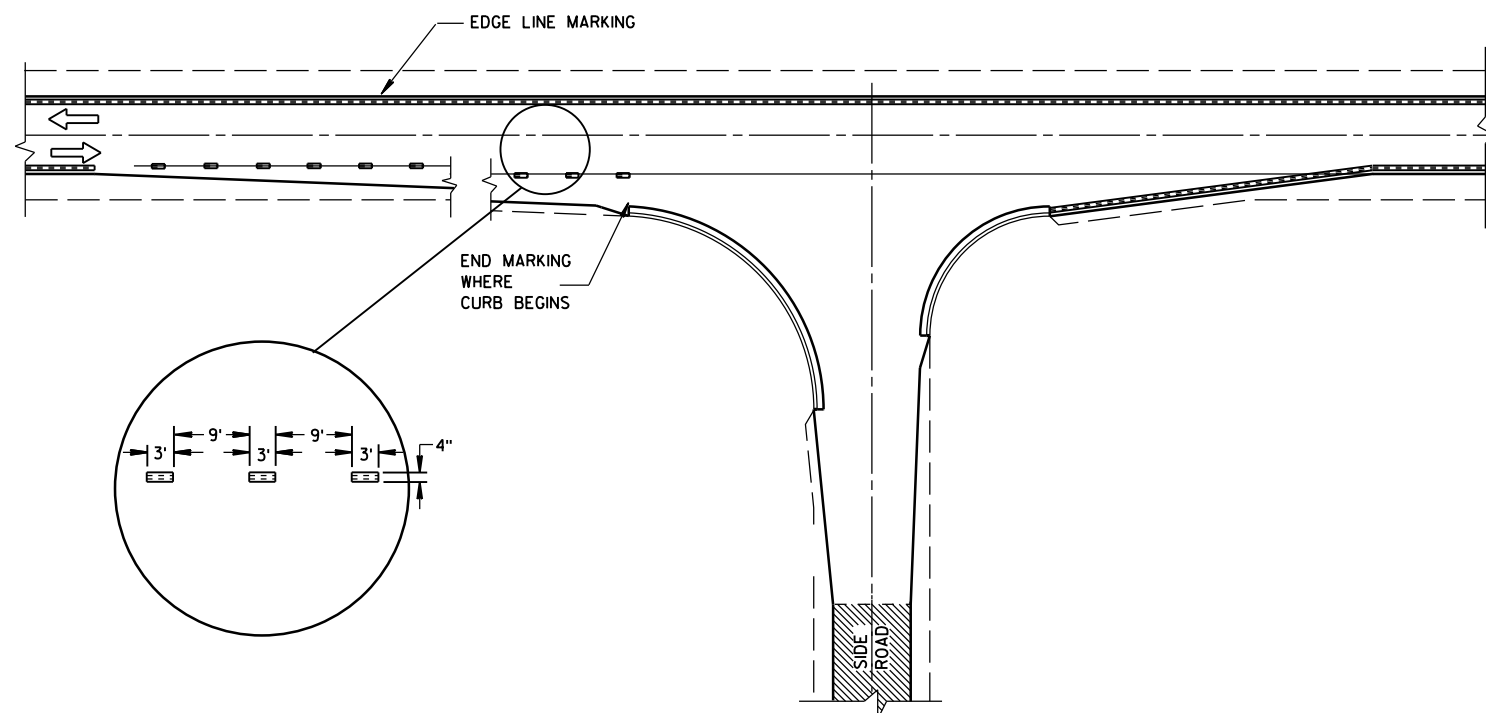
MINOR INTERSECTION WITHOUT CURBS

⑦

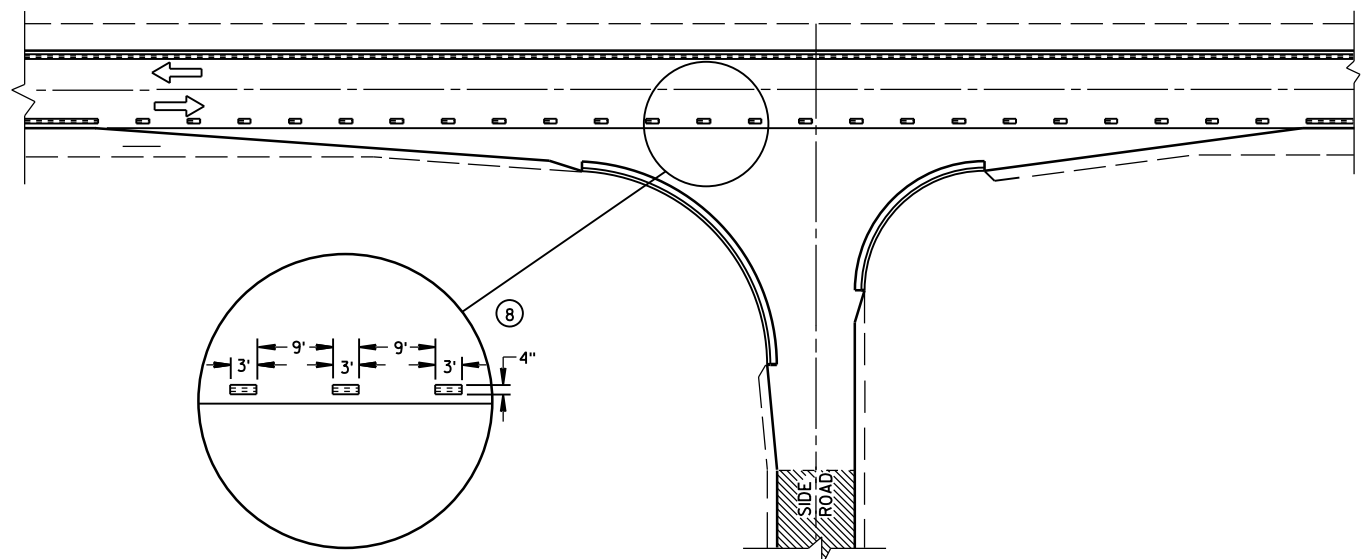
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES


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

PAVEMENT MARKING
(INTERSECTIONS)


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY


SYMBOLS



WORK AREA



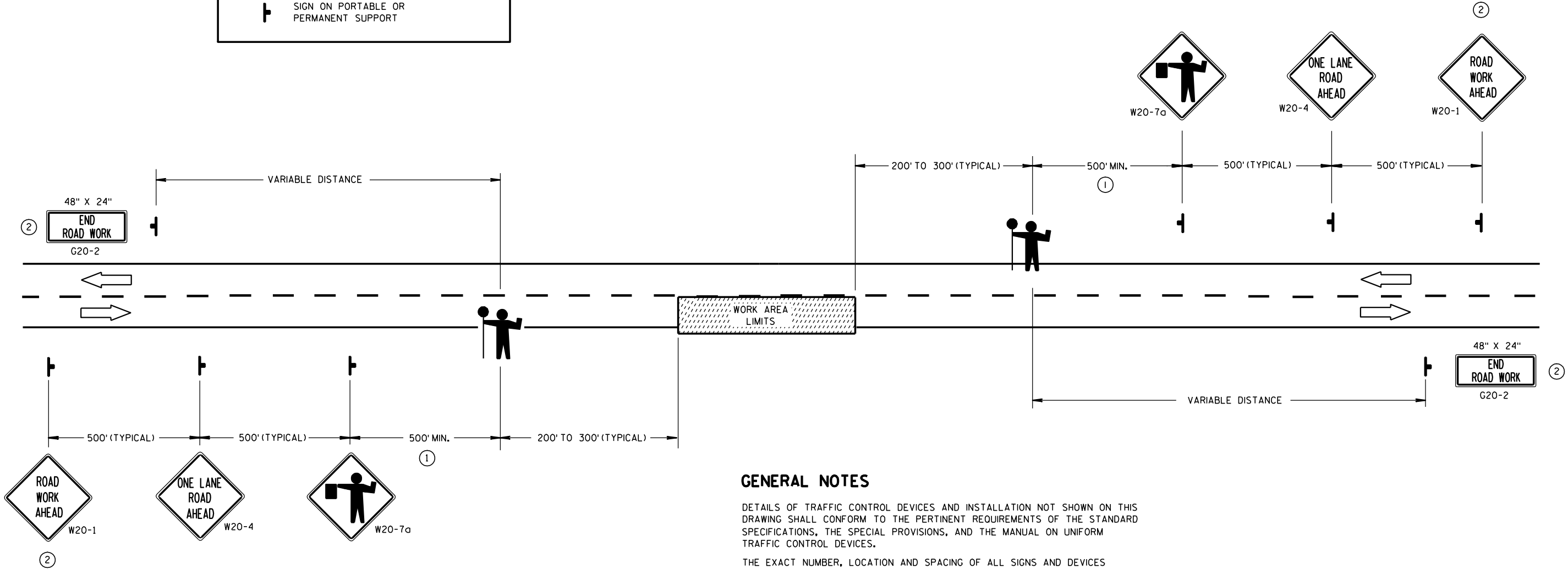
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



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



GENERAL NOTES

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

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

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

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

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

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

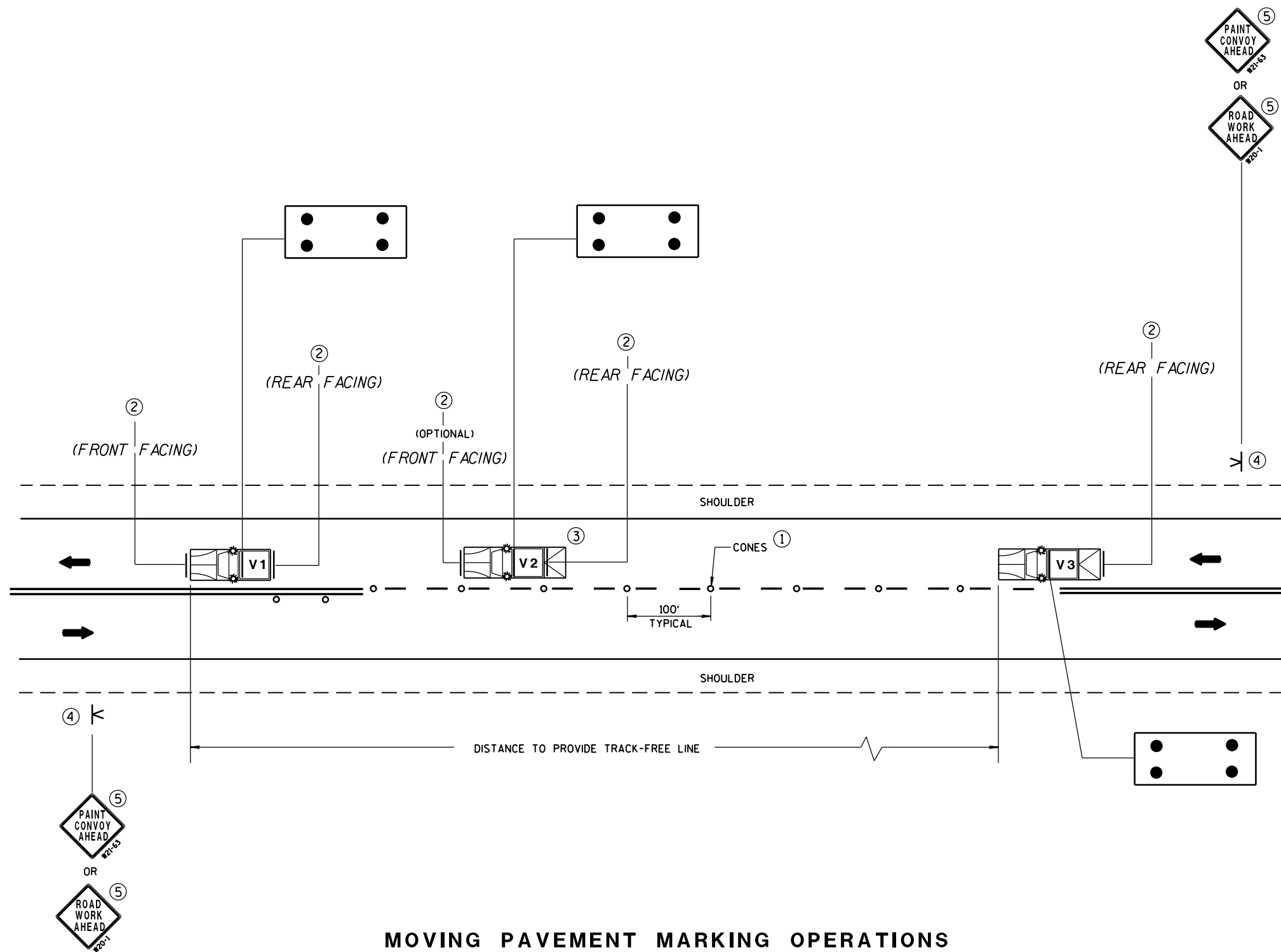
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06
DATE

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

FHWA



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.

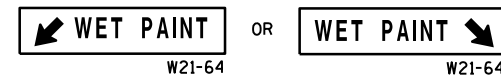
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

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

K SIGN ON PORTABLE SUPPORT

→ DIRECTION OF TRAVEL

○ CONES

⋮ FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

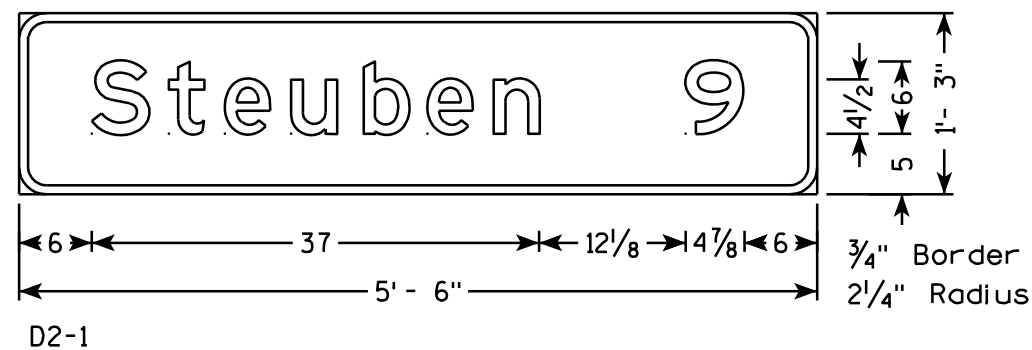
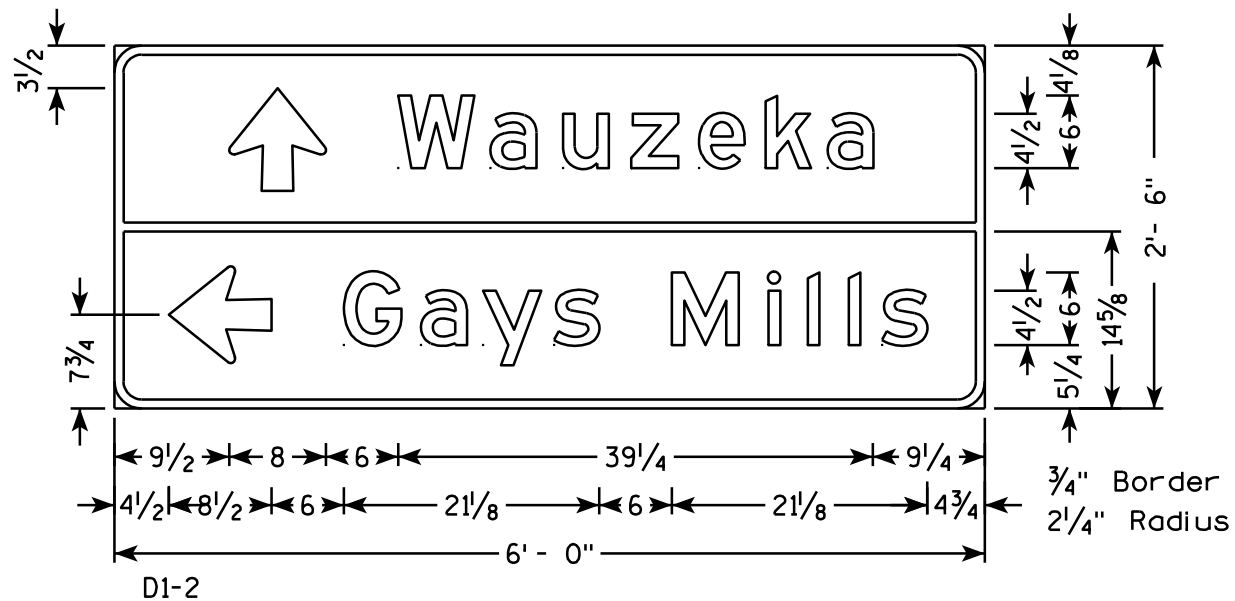
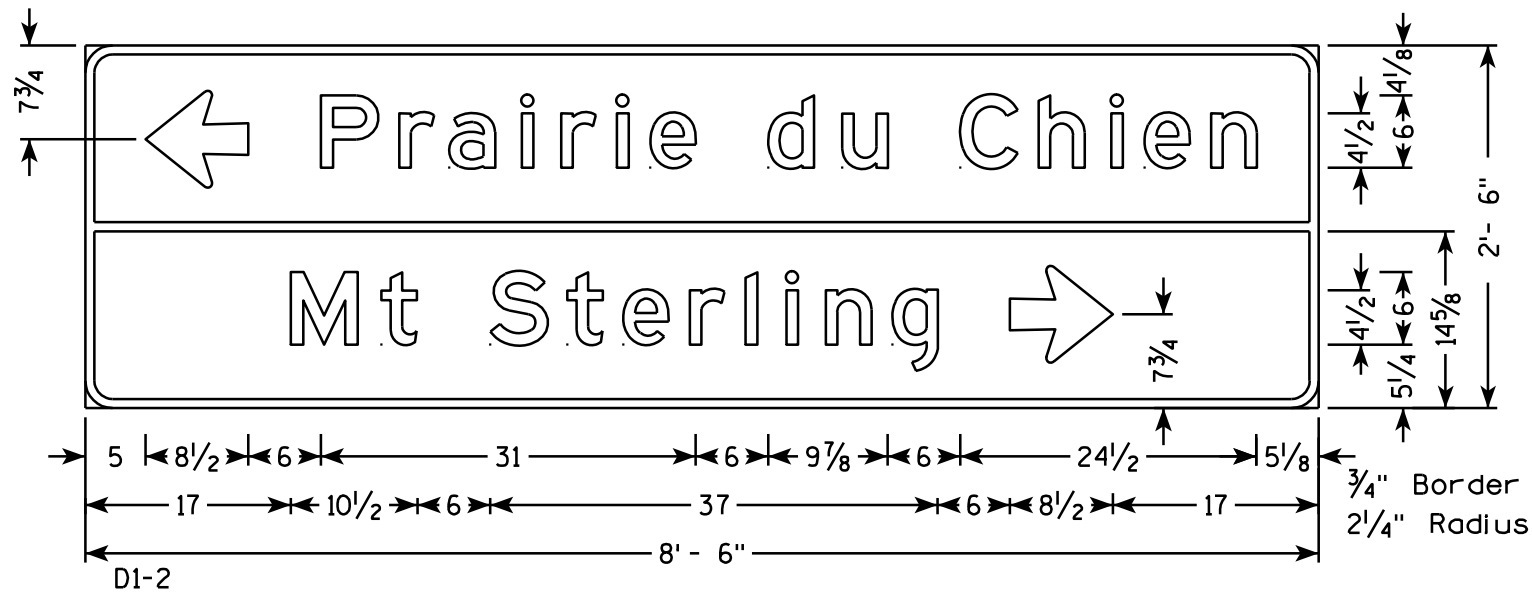
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/6/2011
DATE

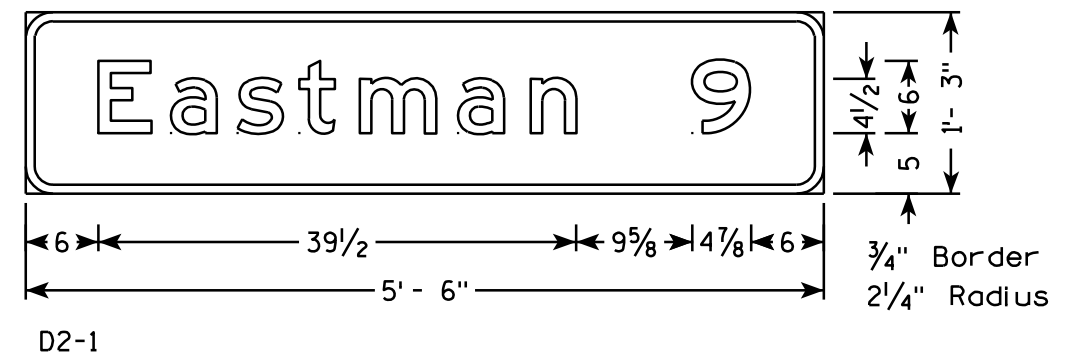
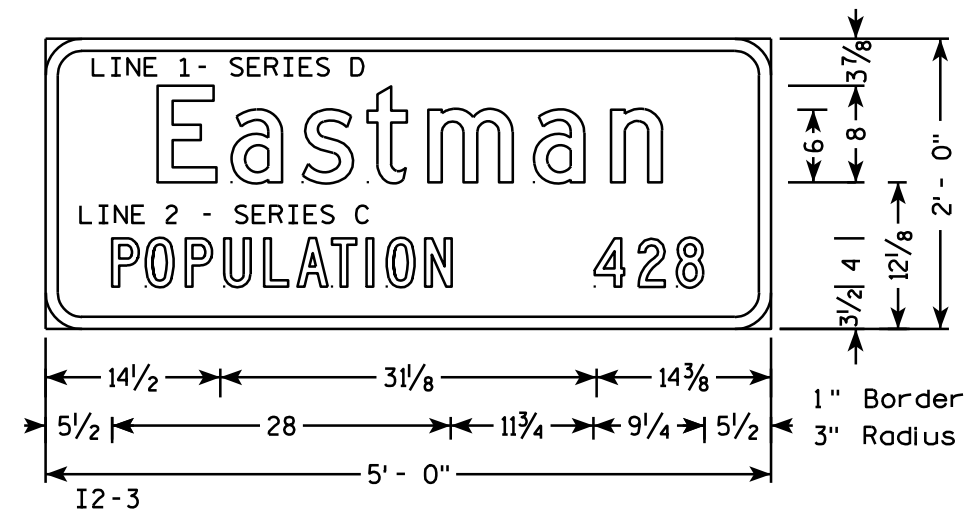
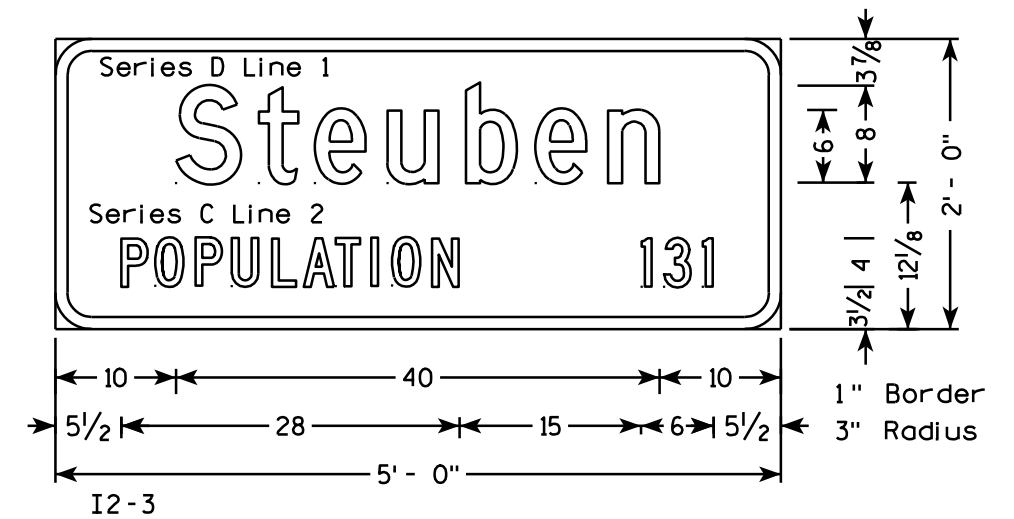
FHWA

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

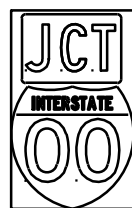


NOTES

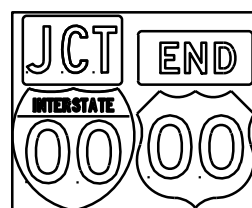
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as Shown



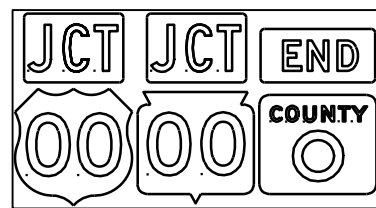
TYPICAL ASSEMBLIES



J1-1



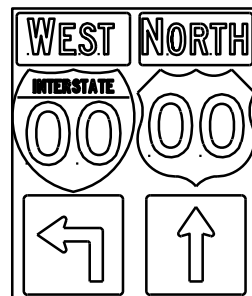
J1-2



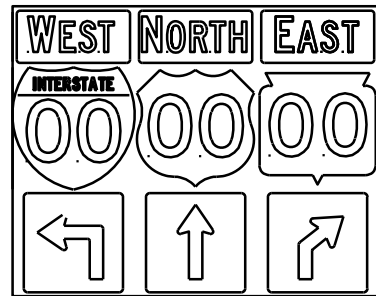
J1-3



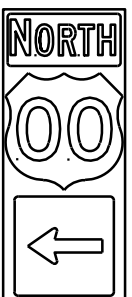
J2-1



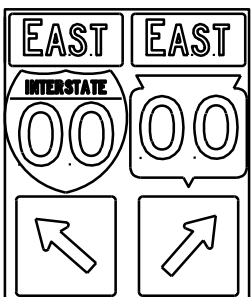
J2-2



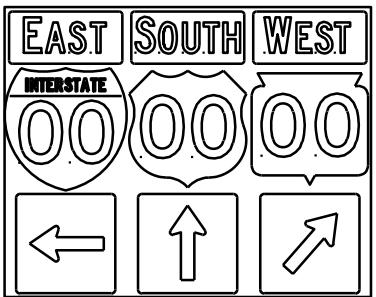
J2-3



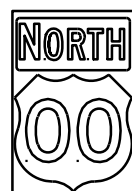
J3-1



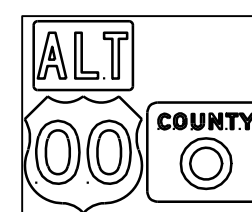
J3-2



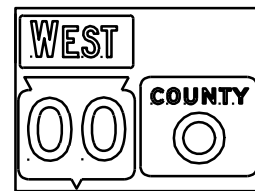
J3-3



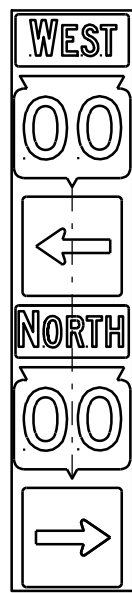
J4-1



J4-2

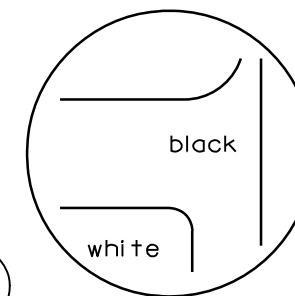
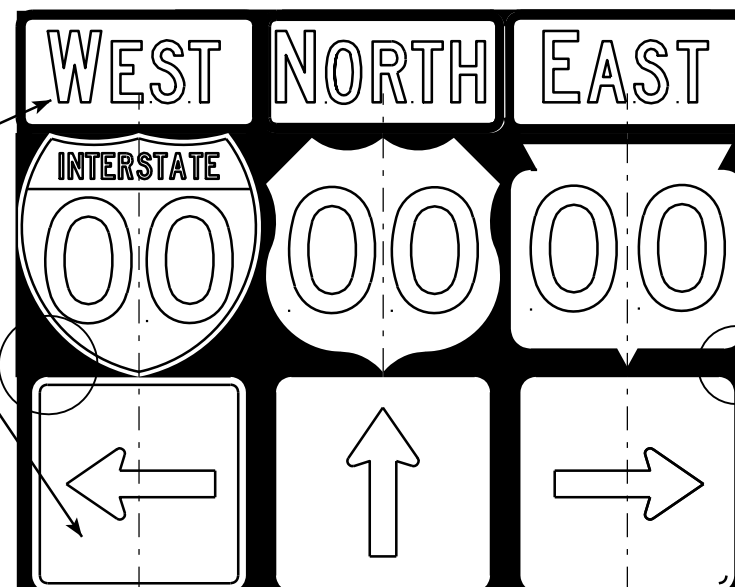
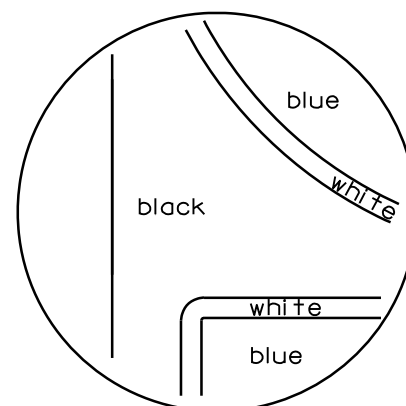


J4-2

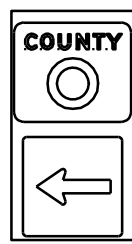


JV

[blue background with interstate]



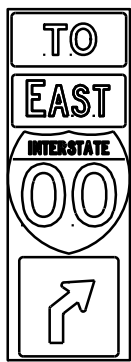
[black background]



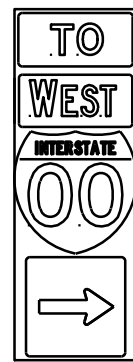
J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- 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.
- 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.
- 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.
- 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.

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
For State Traffic Engineer

DATE 10/21/09

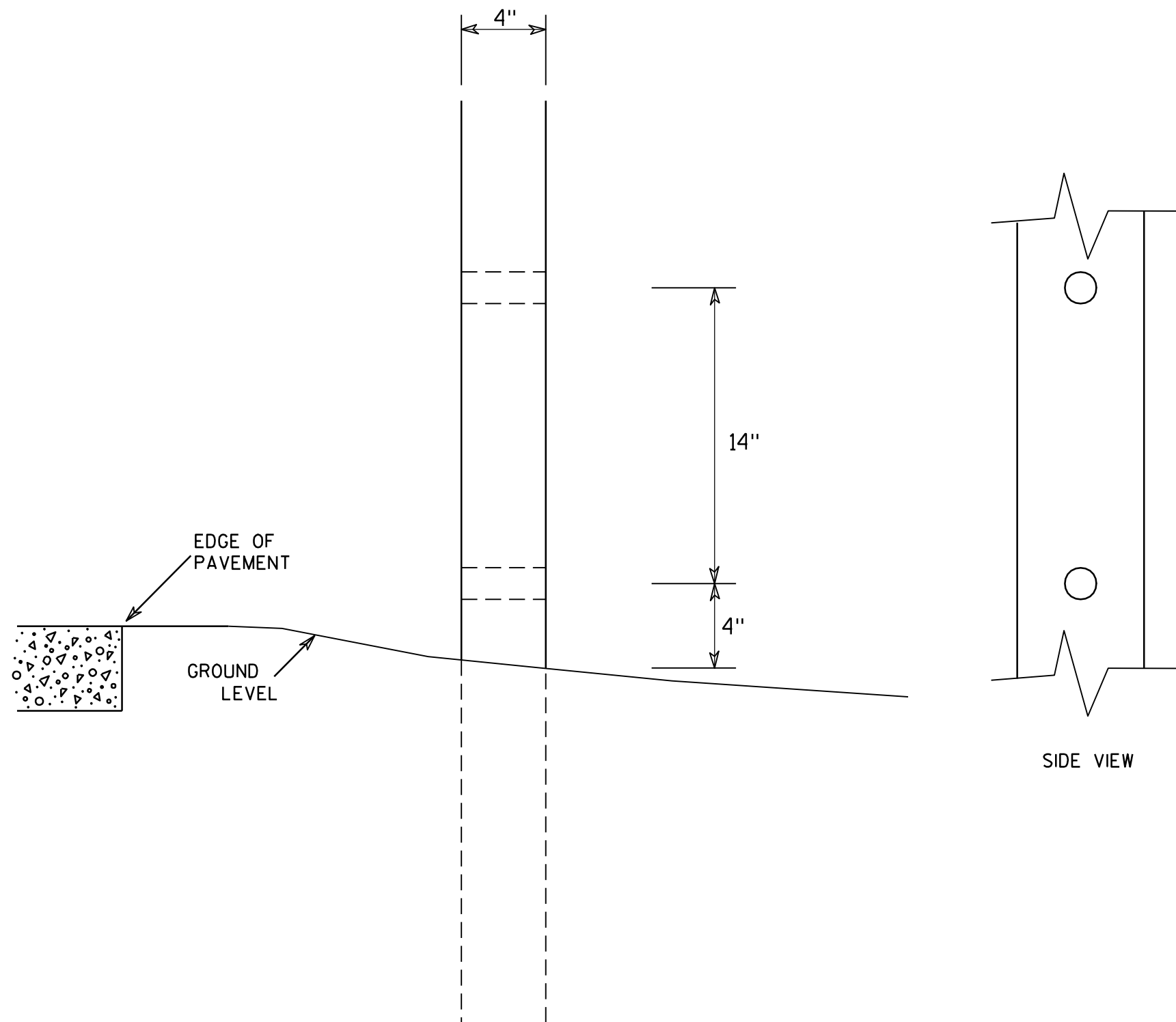
PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO:

E

7

GENERAL NOTES

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

7

**4 X 6 WOOD POST
MODIFICATIONS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

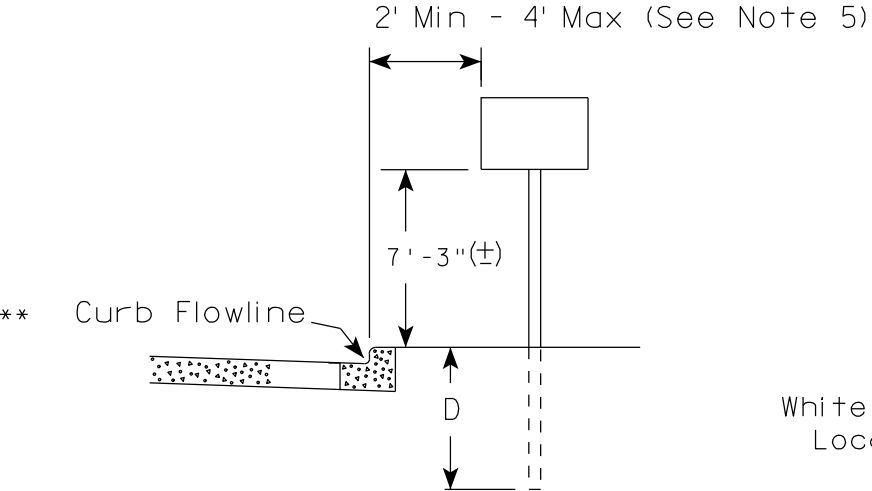
HWY:

COUNTY:

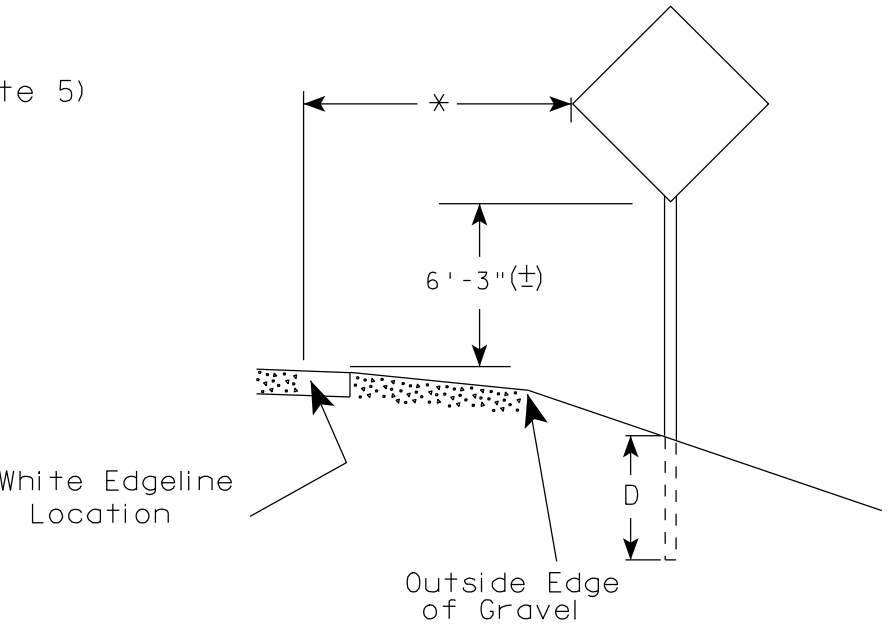
SHEET NO:

E

URBAN AREA

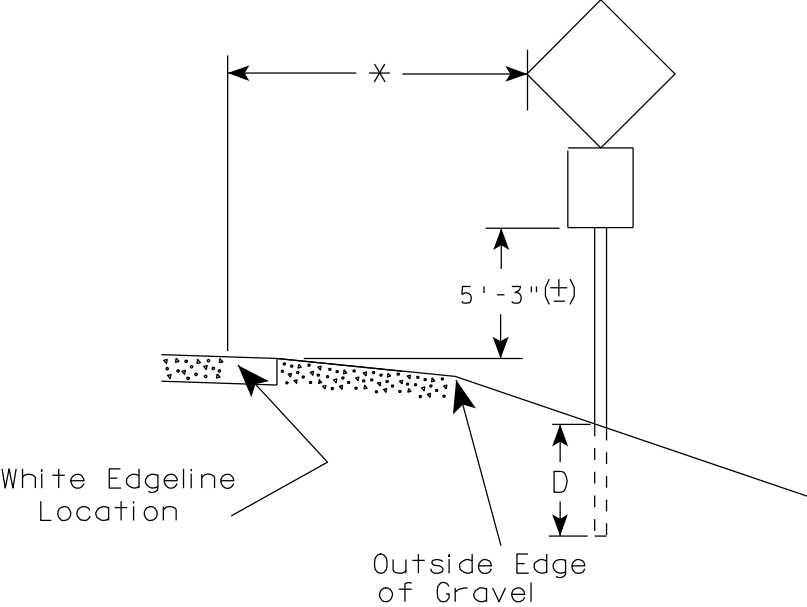
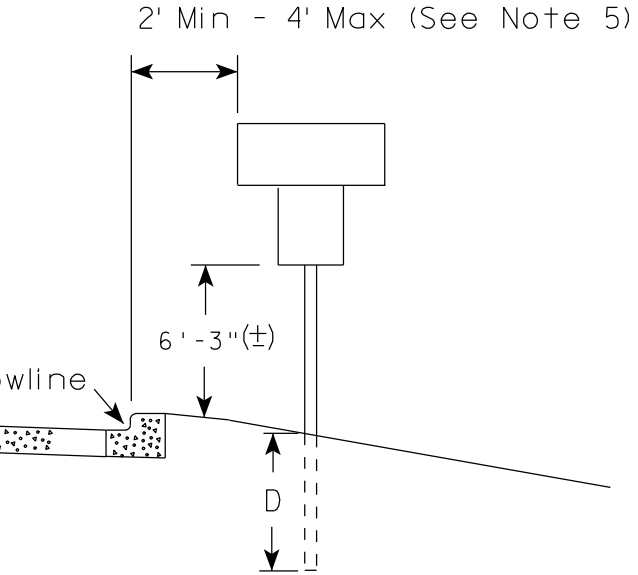


RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).



POST EMBEDMENT DEPTH

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

✱✱ 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 9/21/2011 PLATE NO. A4-3.16

GENERAL NOTES

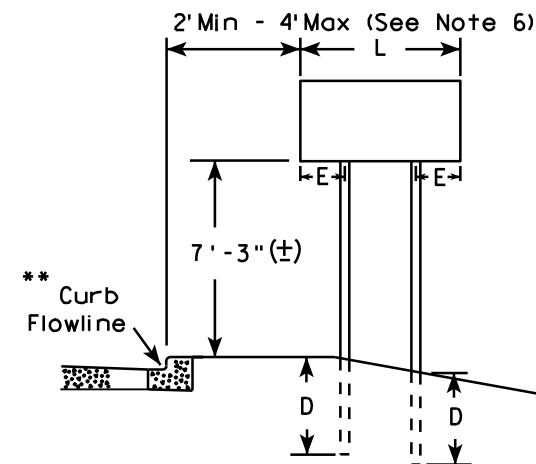
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

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

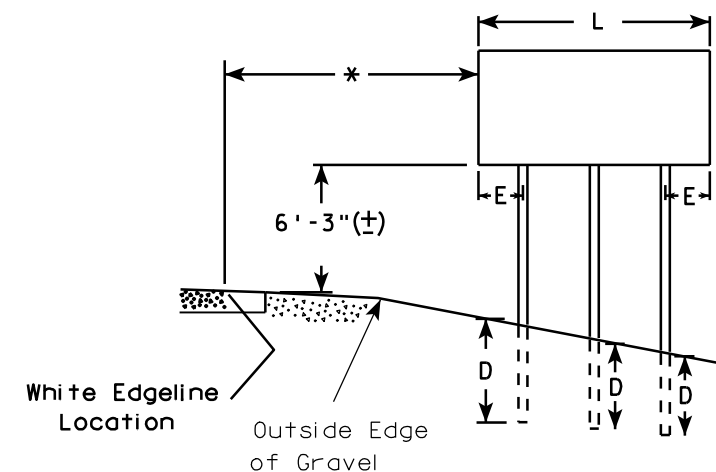
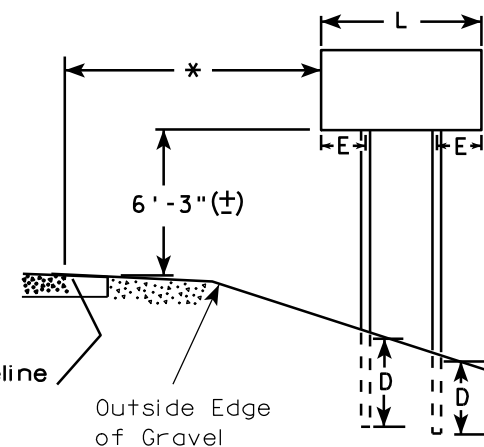
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

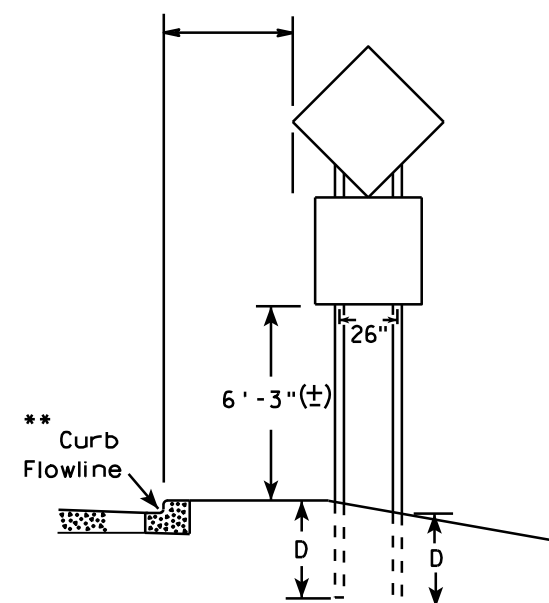
URBAN AREA



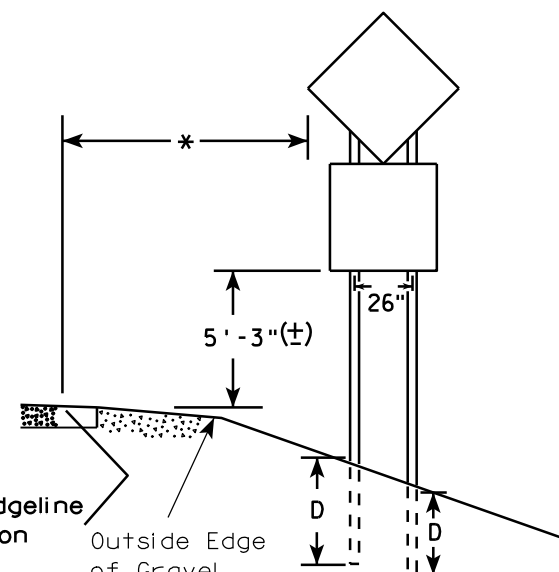
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 9/21/2011 PLATE NO. A4-4.11

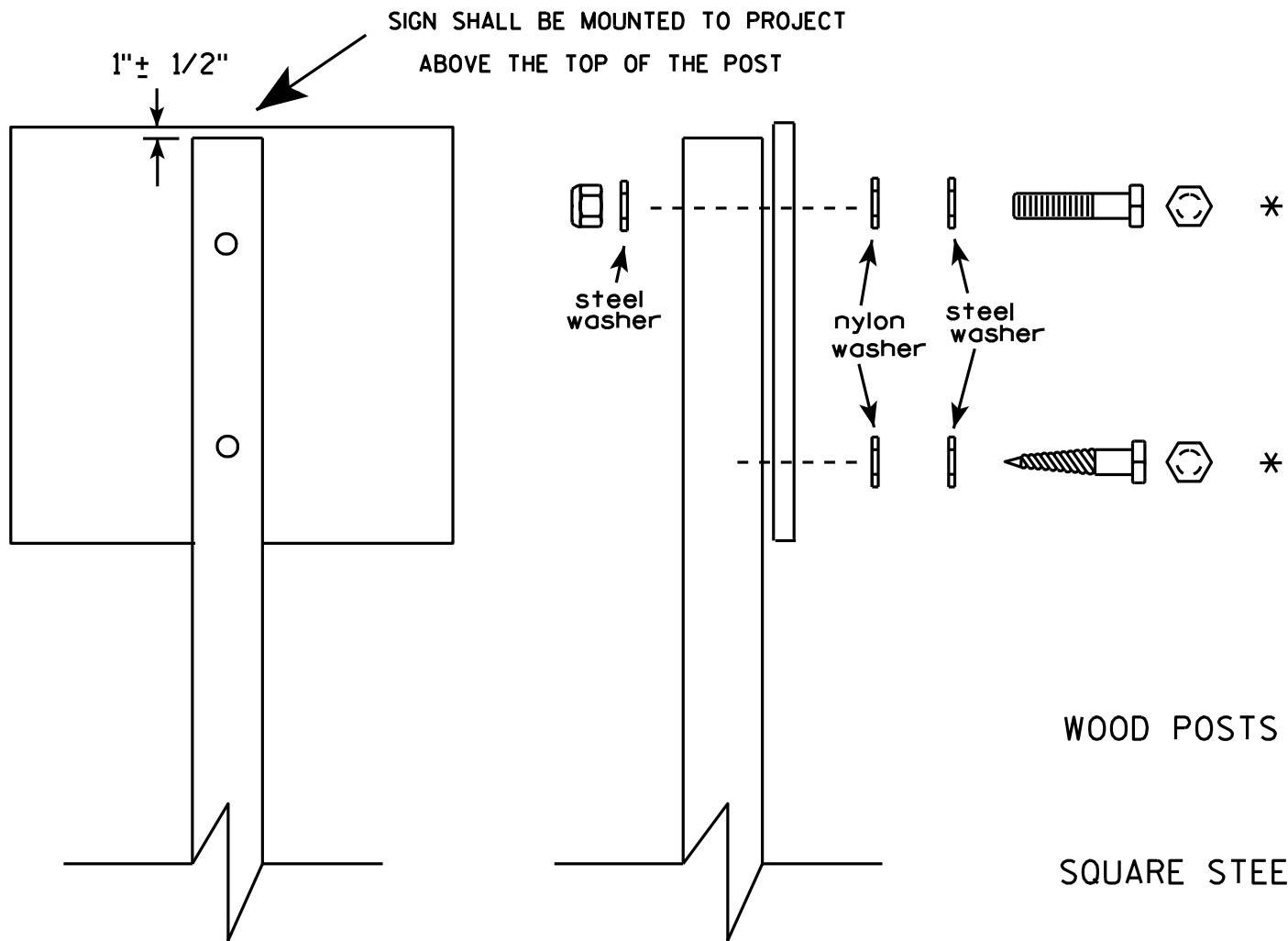
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

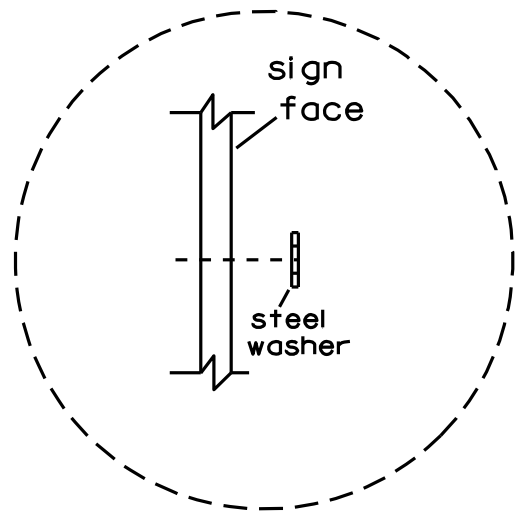


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

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

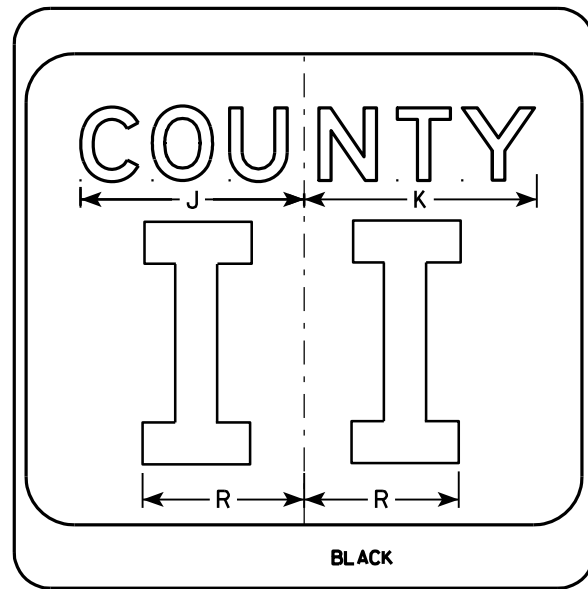
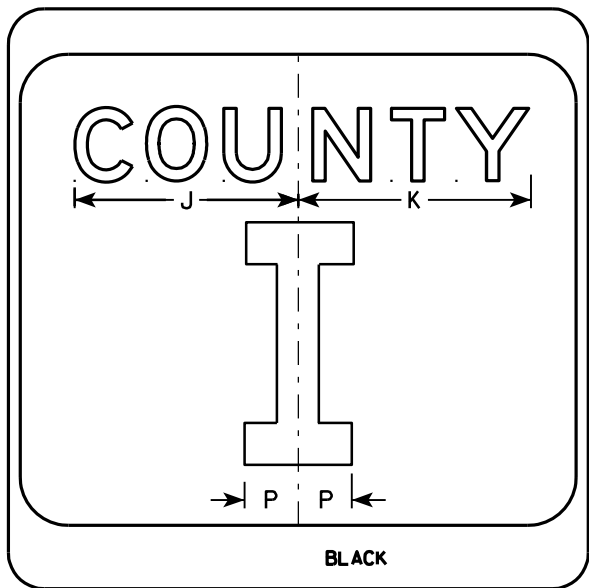
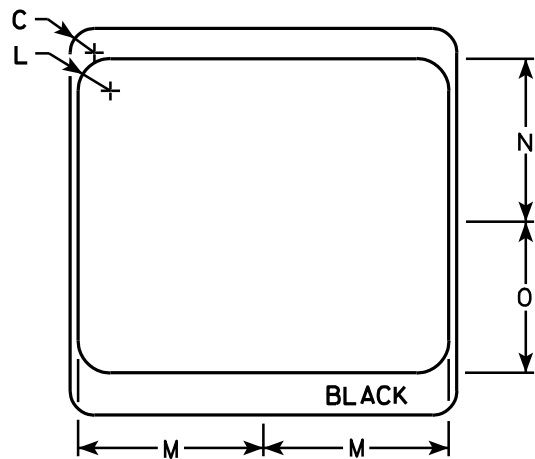
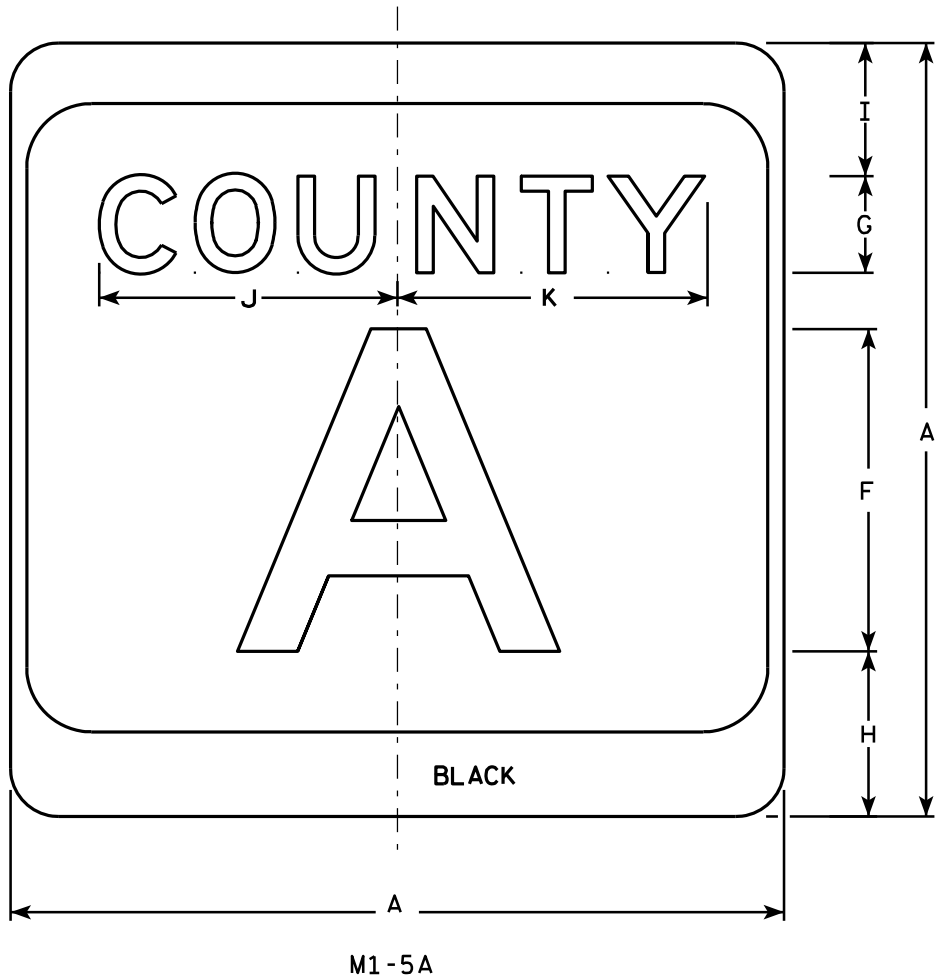


Washer Placement when Sign Has Other Than Type H or Type F Face

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

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

7



NOTES

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

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

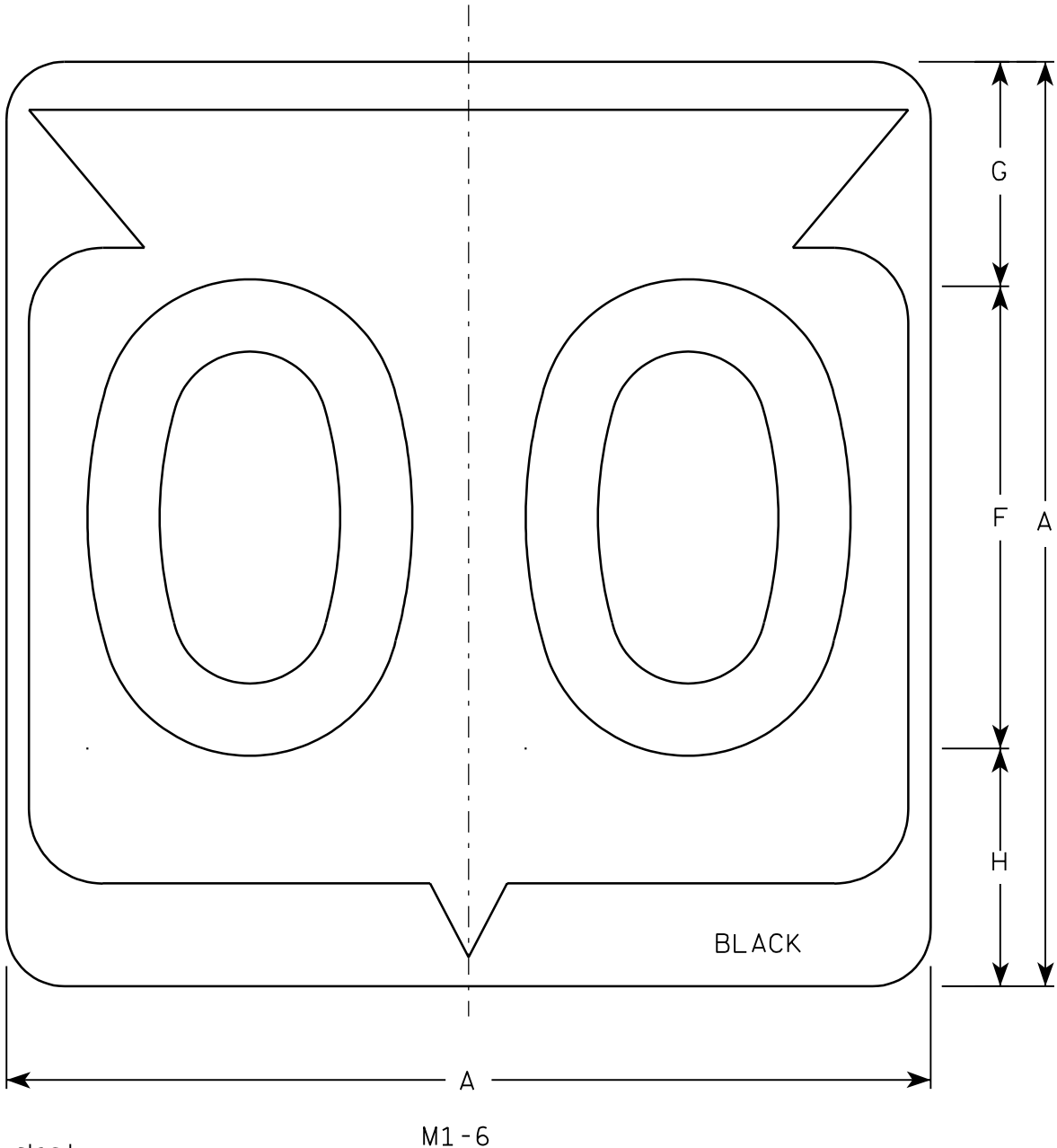
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
For State Traffic Engineer

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

7



Metric equivalent
for this sign is:

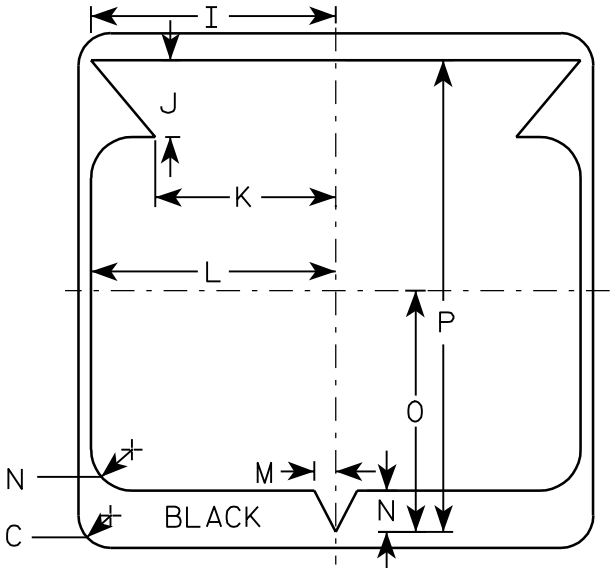
SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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

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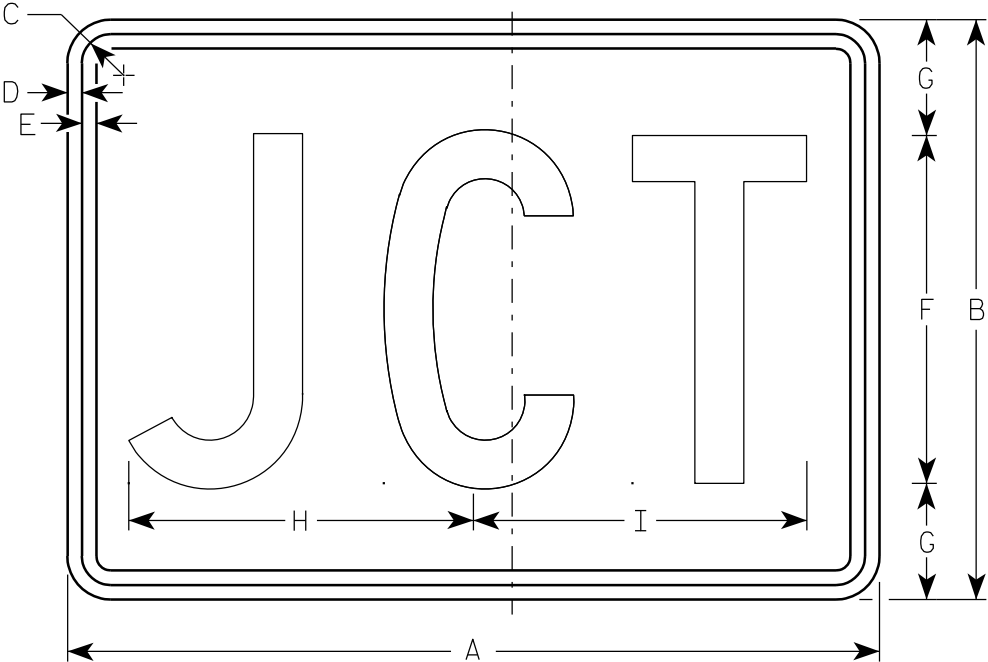
NOTES

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



7

7



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

Metric equivalent
for this sign is:

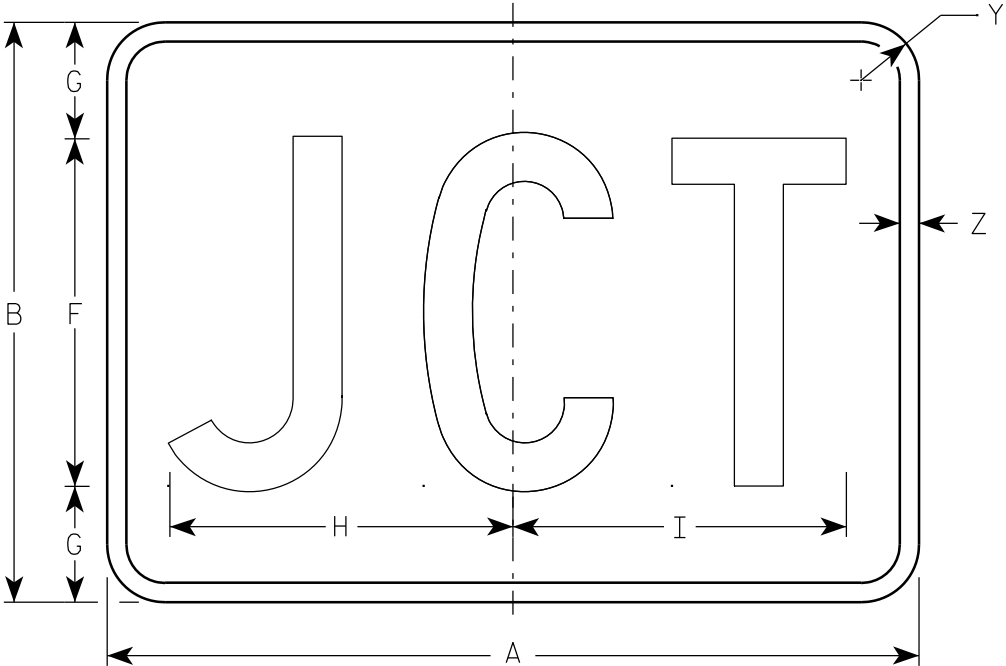
SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

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

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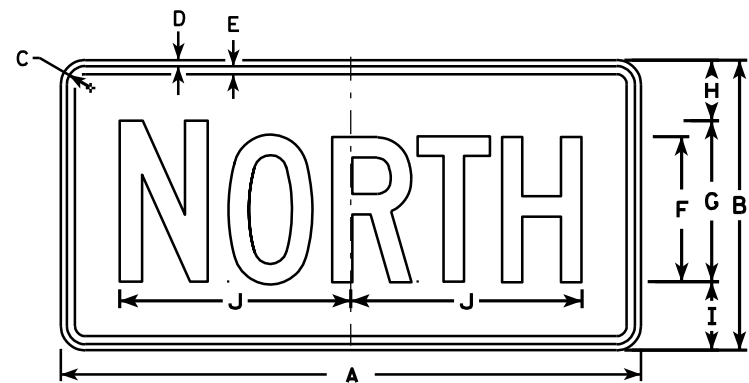
NOTES

- Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- Message Series - C
- 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.
- M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



MB2-1
MG2-1
MN2-1

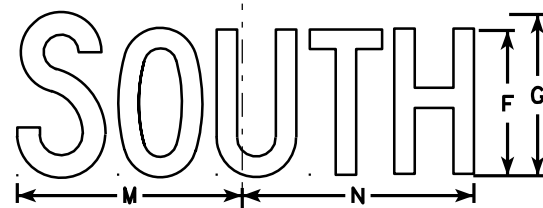
7



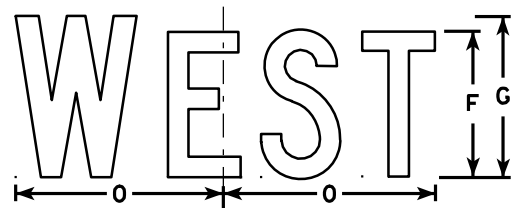
M3-1
MK3-1
M03-1



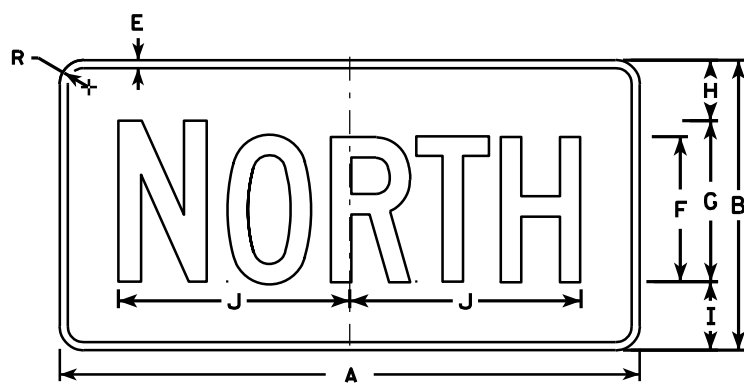
M3-2
MK3-2
M03-2



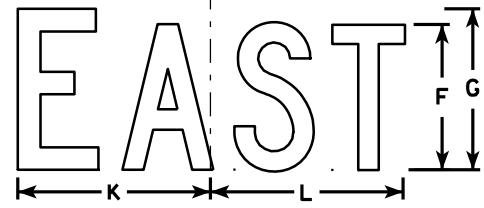
M3-3
MK3-3
M03-3



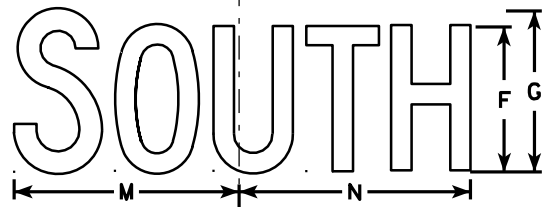
M3-4
MK3-4
M03-4



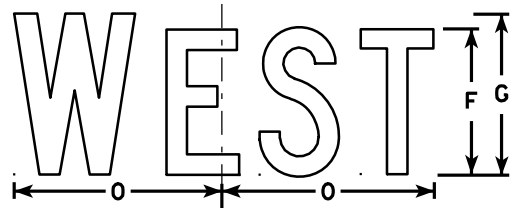
MB3-1
MG3-1
MM3-1
MN3-1



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



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



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

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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

PROJECT NO:

HWY:

COUNTY:

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

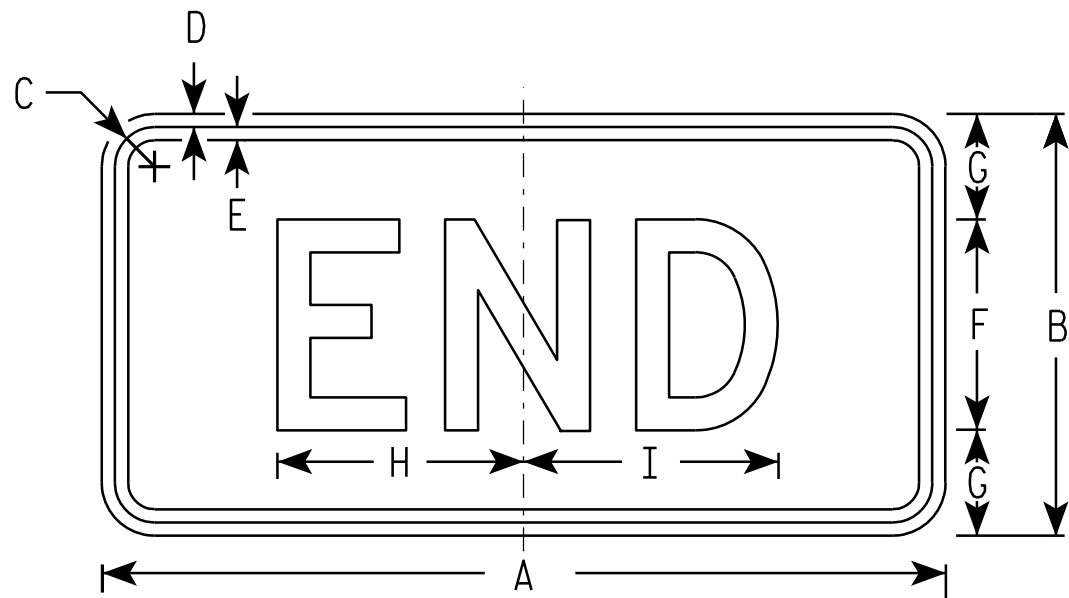
Matthew R. Rauch
for State Traffic Engineer

DATE 11/10/10

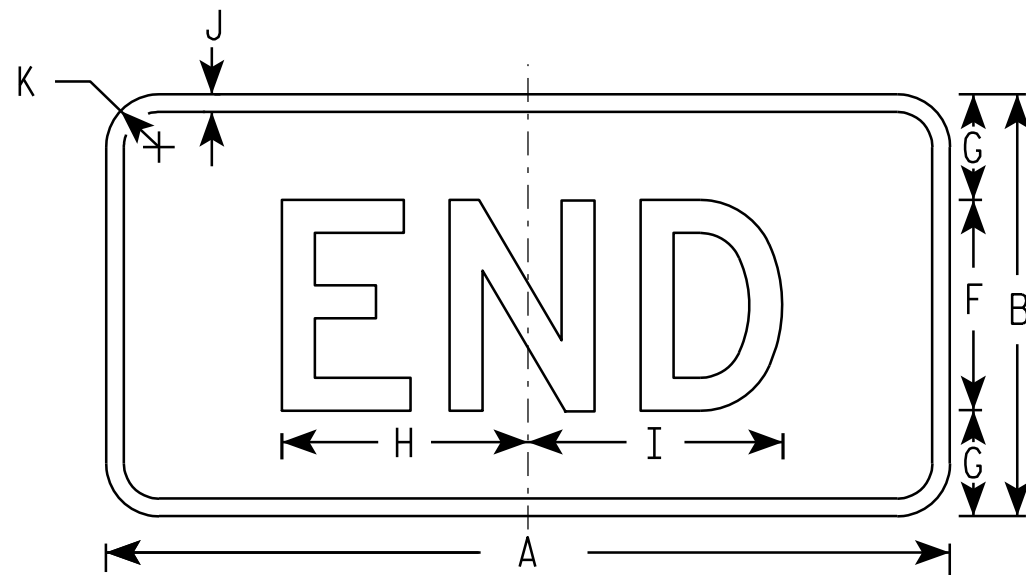
PLATE NO. M3-1.12

SHEET NO:

E



M4-6
MK4-6
MM4-6
MR4-6



MB4-6
MG4-6
MN4-6

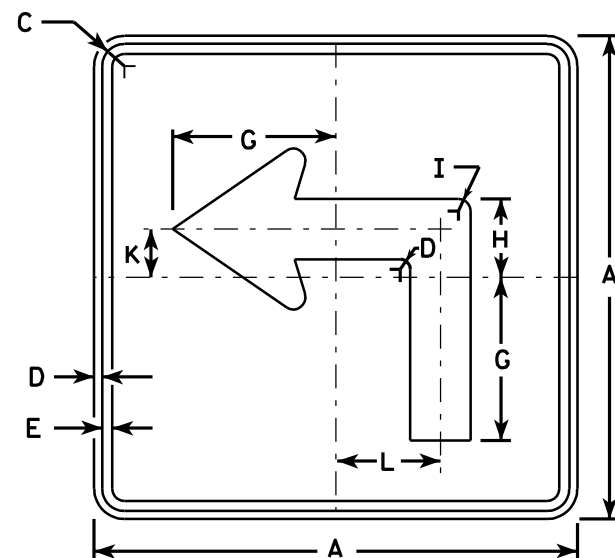
NOTES

- Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- Message Series - D
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M4-6 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB4-6 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG4-6 Background - Green
Message - White - Type H Reflective
MK4-6 Background - Green
Message - White - Type H Reflective
MM4-6 Background - White - Type H Reflective
Message - Green
MN4-6 Background - Brown
Message - White - Type H Reflective
MR4-6 Background - Brown
Message - Yellow - Type H Reflective

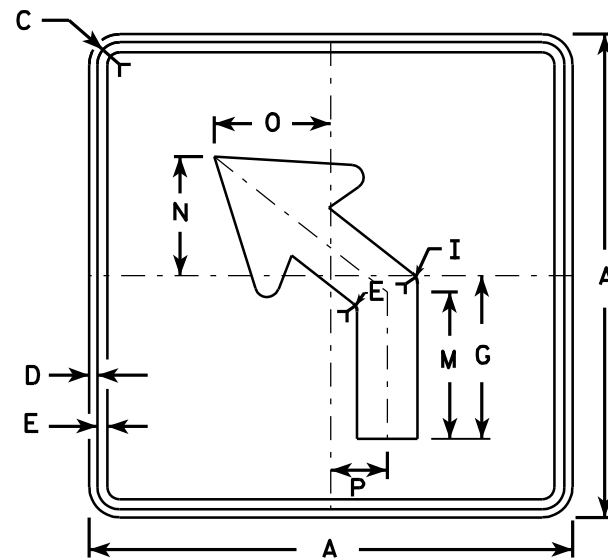
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

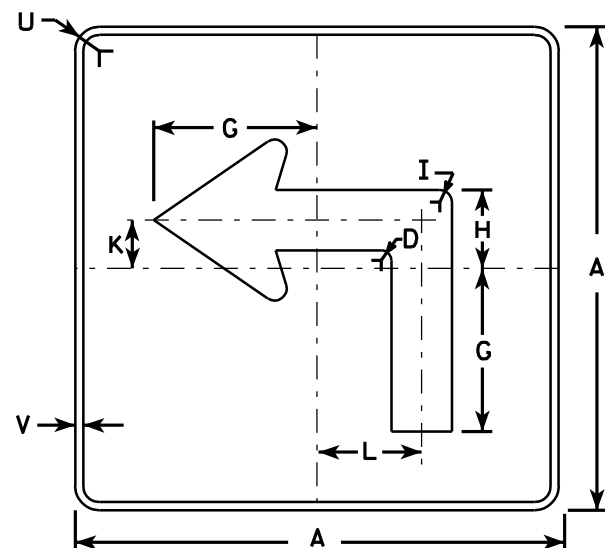
STANDARD SIGN M4 - 6	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 11/10/10	PLATE NO. M4-6.7



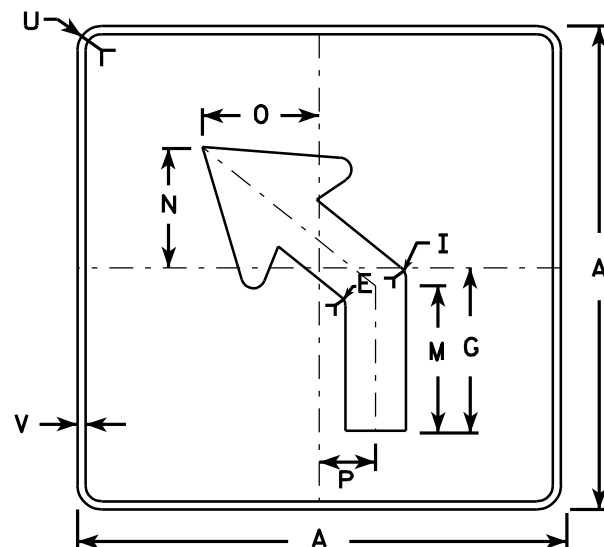
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



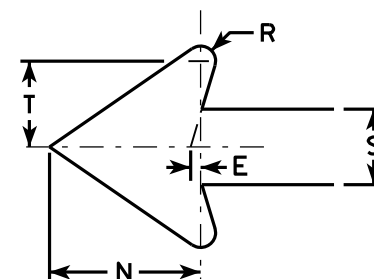
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



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



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



Metric equivalent
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21		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	0.28
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	0.56
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	0.56
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	0.56

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

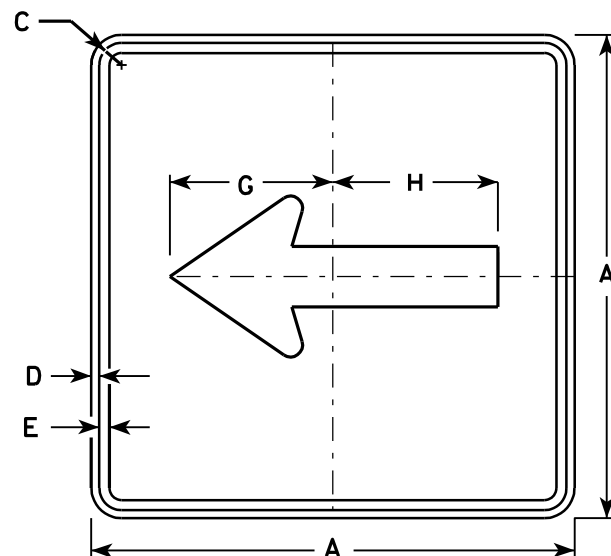
- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
MO5-1 and MO5-2 Background - Orange - Reflective
Message - Black
MR5-1 and MR5-2 Background - Brown
Message - Yellow - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

STANDARD SIGN
M5-1 & M5-2

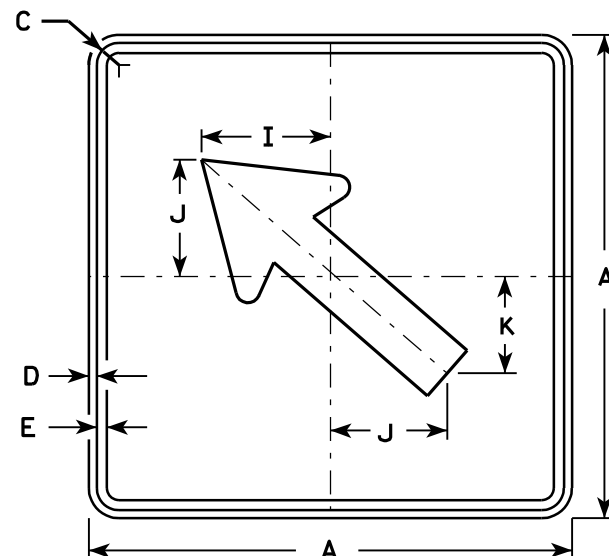
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

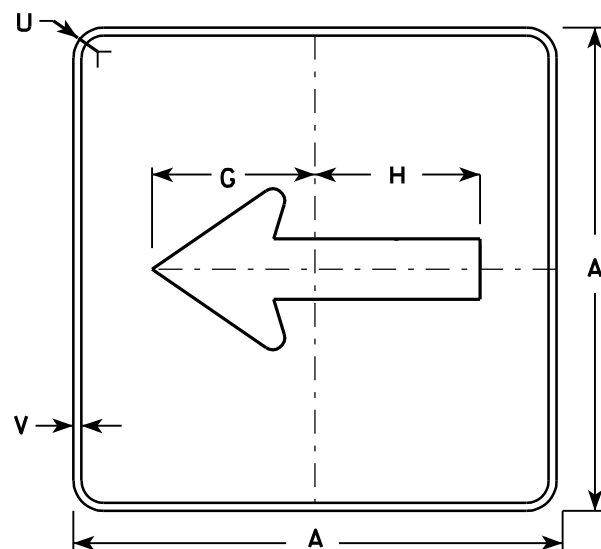
DATE 3/16/10 PLATE NO. M5-1.11



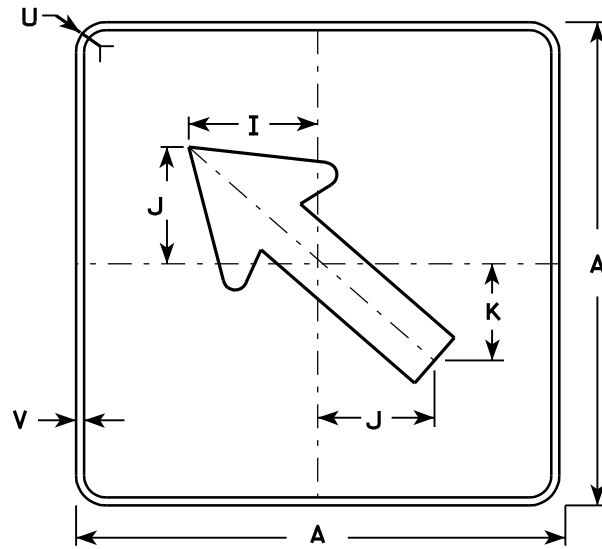
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



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



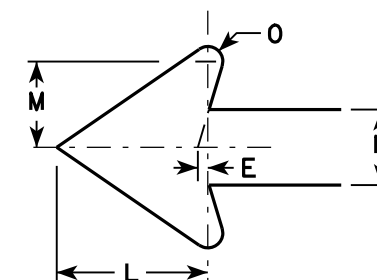
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

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

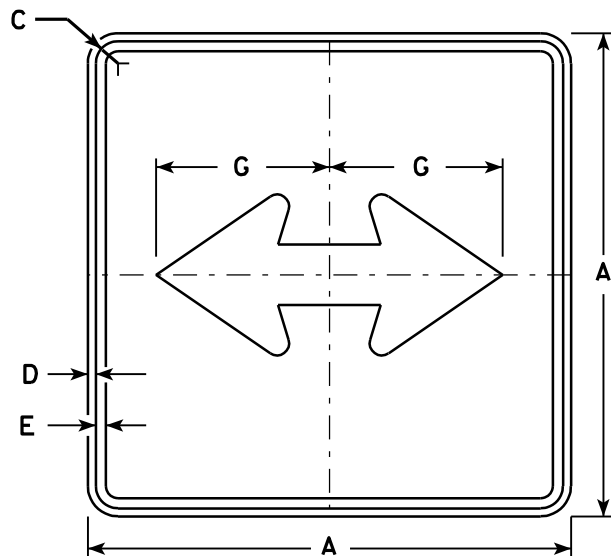


Metric equivalent
for this sign is:

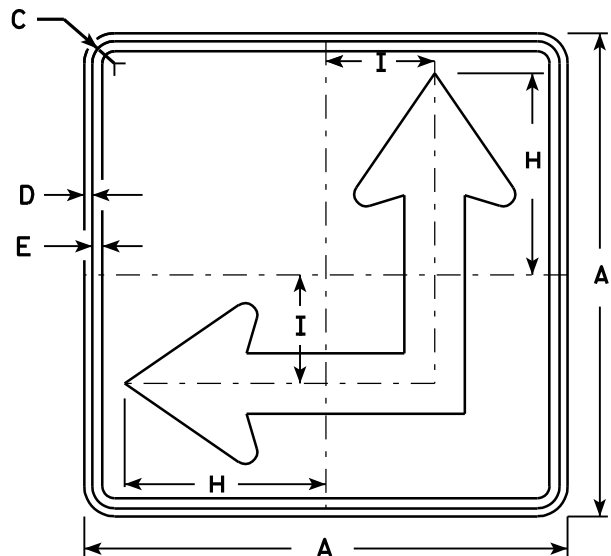
SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	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	0.28
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	0.56
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	0.56
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	0.56

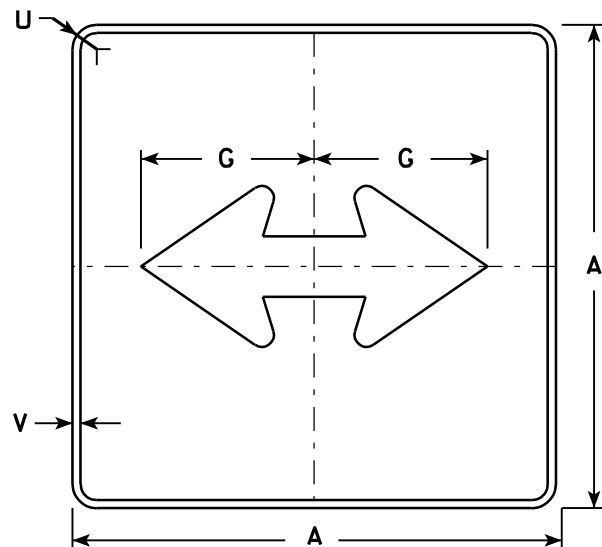
PROJECT NO: HWY: COUNTY: SHEET NO: E



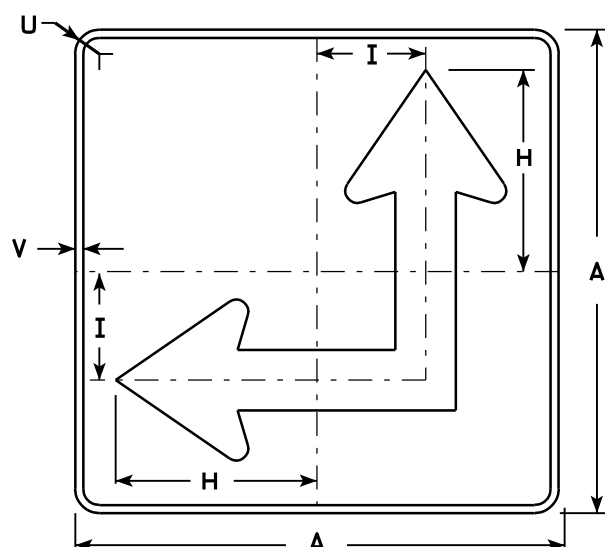
M6 - 4
MK6 - 4
MM6 - 4
MO6 - 4
MR6 - 4



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



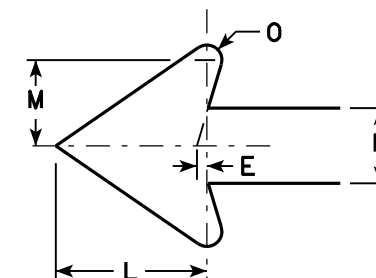
MB6 - 4
MG6 - 4
MN6 - 4



MB6 - 6
MG6 - 6
MN6 - 6

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
 - Background - See Note 4
 - Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6
 - Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
 - Message - Black
 - MB6-4 and MB6-6
 - Background - Blue
 - Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
 - MG6-4 and MG6-6
 - Background - Green
 - Message - White - Type H Reflective
 - MK6-4 and MK6-6
 - Background - Green
 - Message - White - Type H Reflective
 - MM6-4 and MM6-6
 - Background - White - Type H Reflective
 - Message - Green
 - MN6-4 and MN6-6
 - Background - Brown
 - Message - White - Type H Reflective
 - MO6-4 and MO6-6
 - Background - Orange - Reflective
 - Message - Black
 - MR6-4 and MR6-6
 - Background - Brown
 - Message - Yellow - Type H Reflective
- M6-6R same as M6-6L except arrow points ahead and right.



Metric equivalent
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21		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	0.28
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	0.56
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	0.56
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	0.56

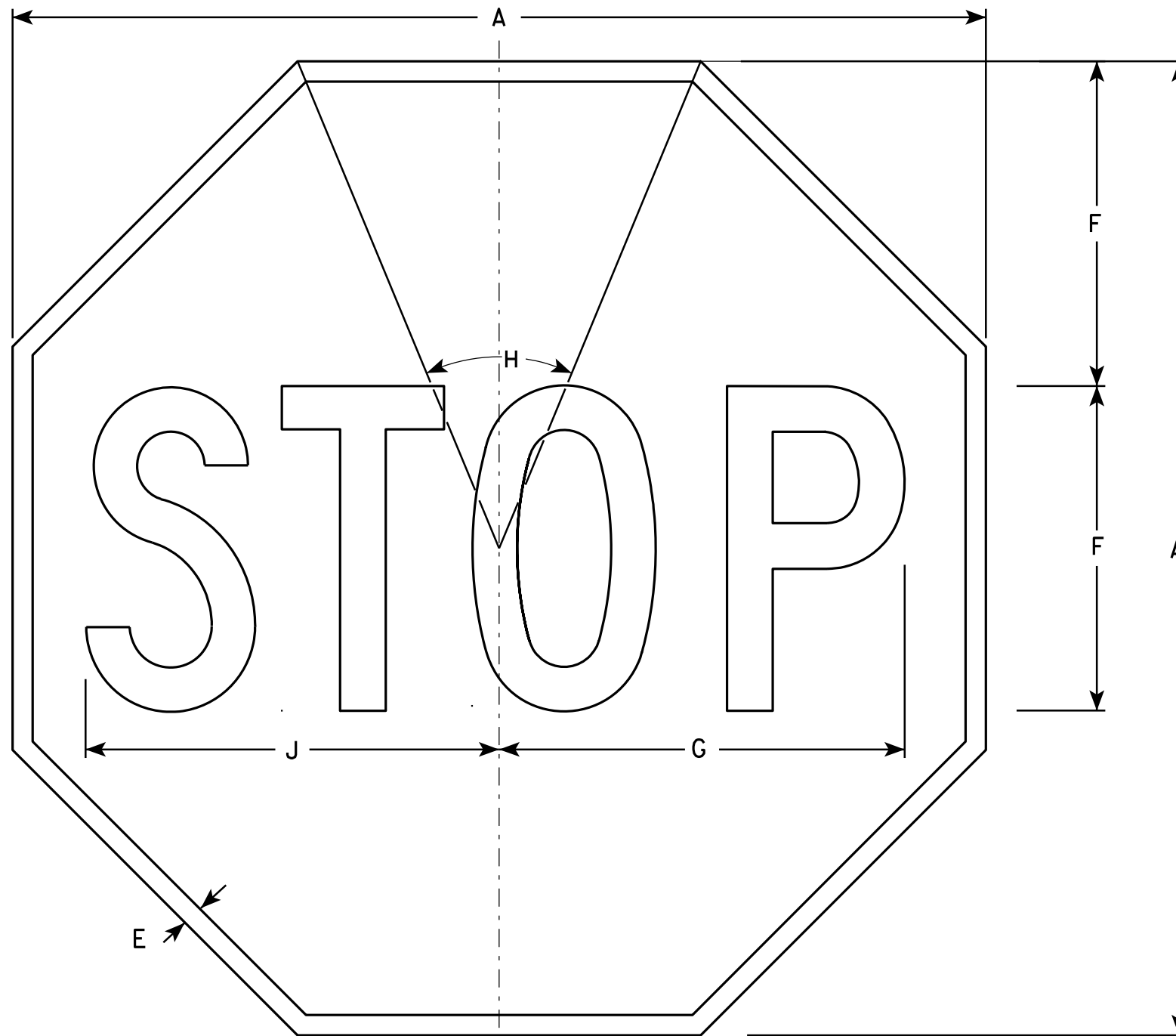
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-4.7



NOTES

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

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

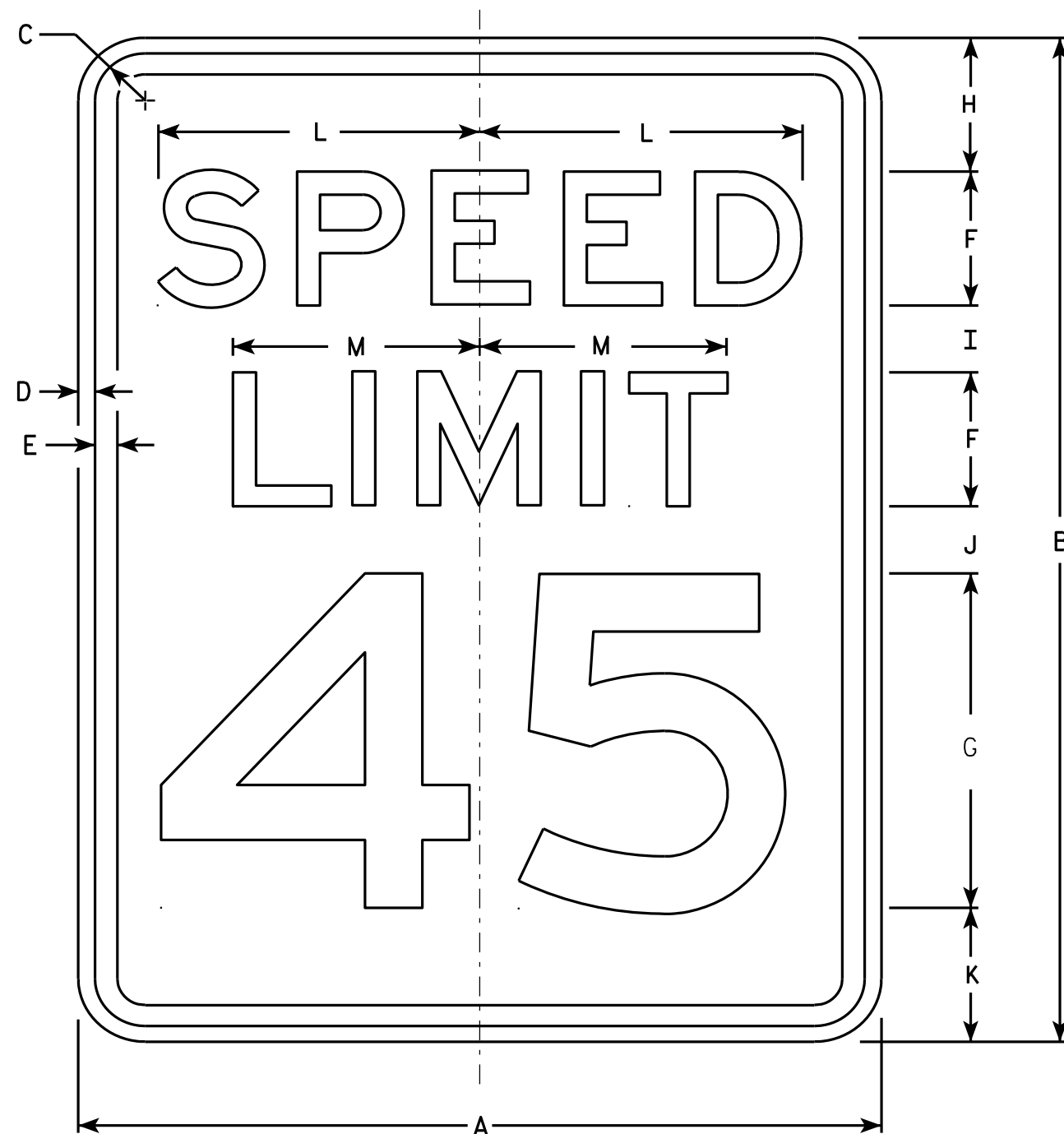
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

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

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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

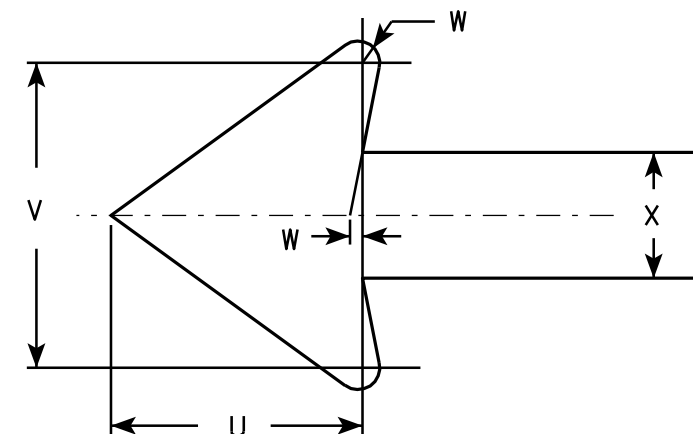
PROJECT NO: HWY: COUNTY: SHEET NO: E



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

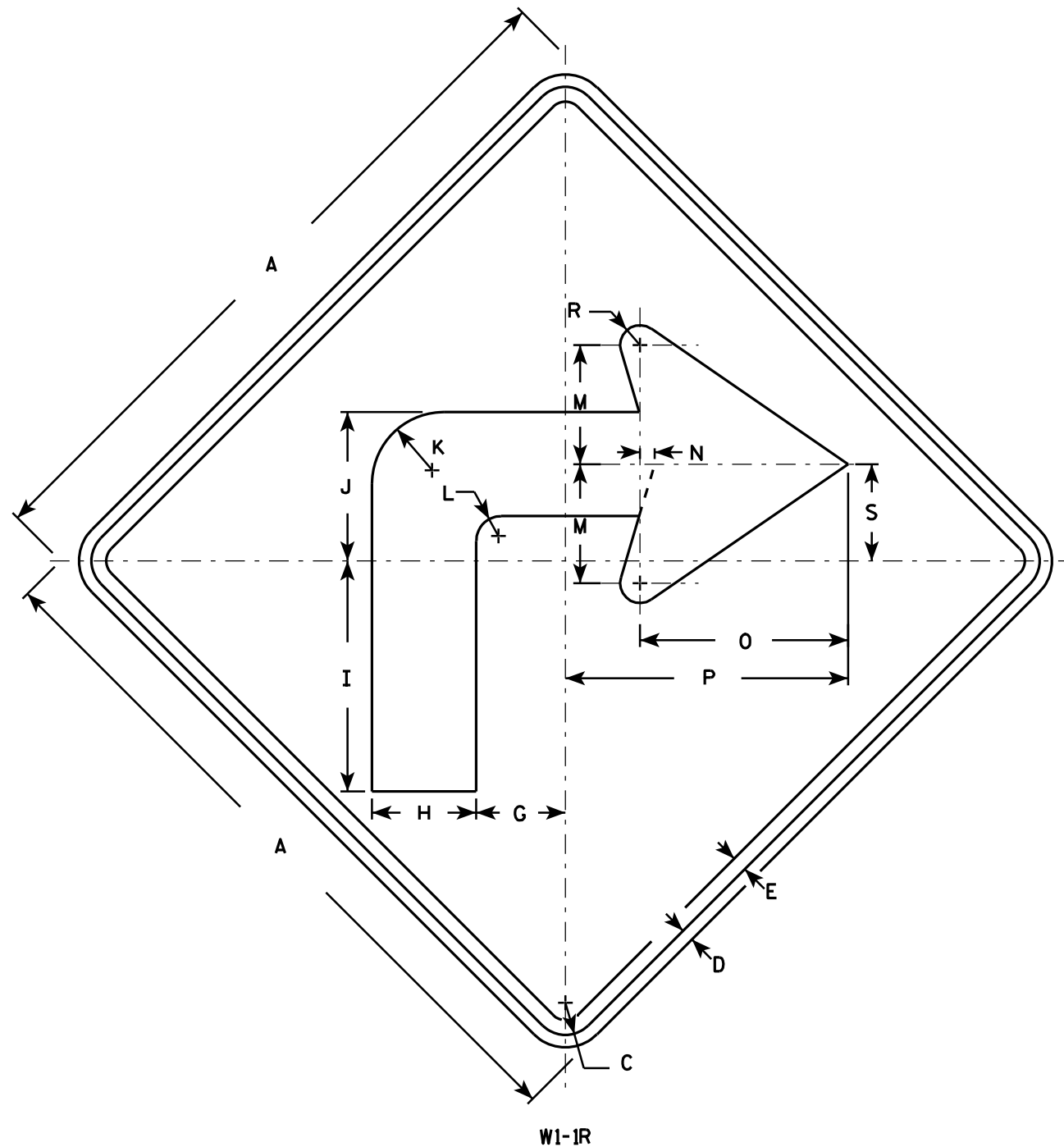
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

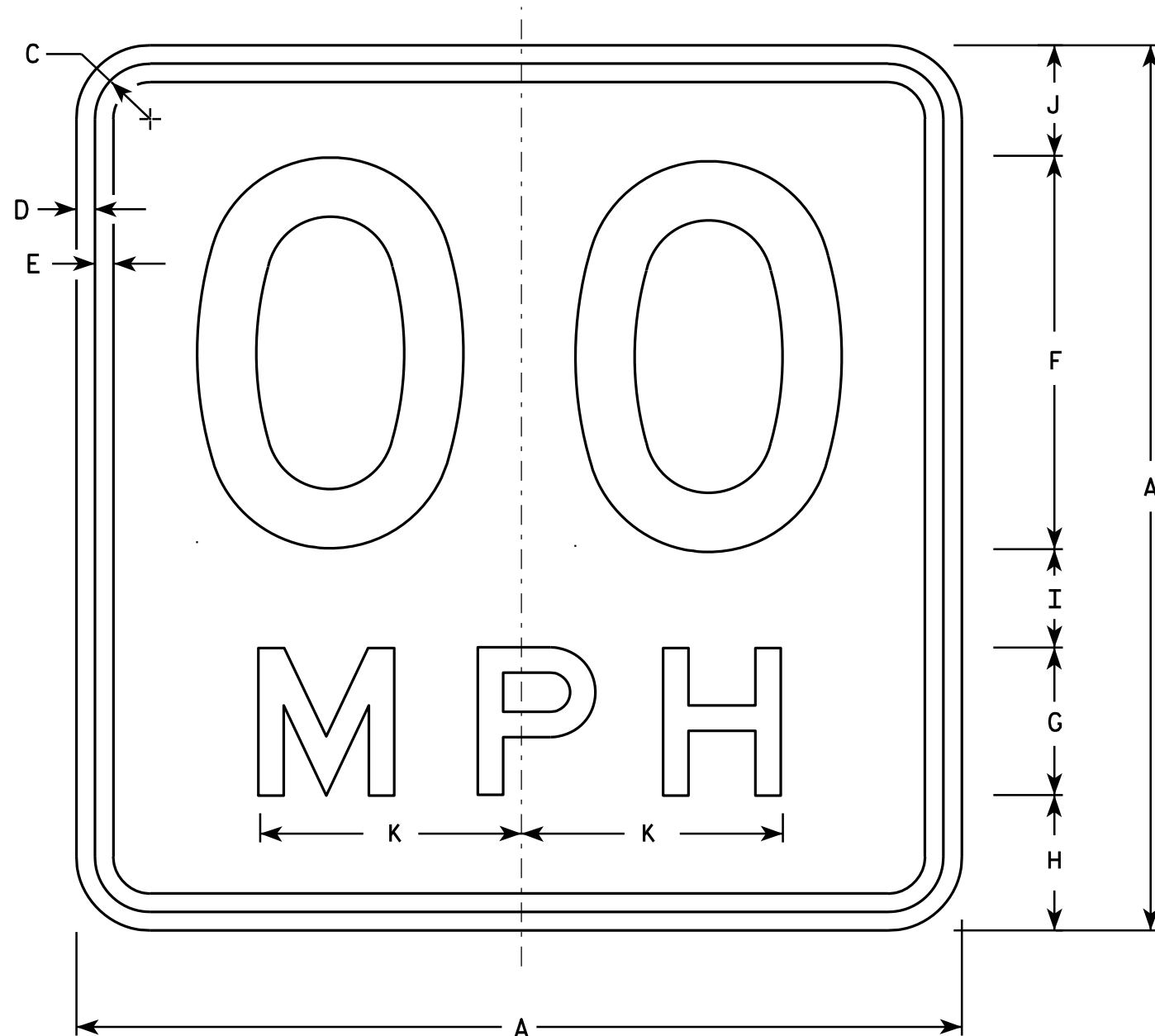
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

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

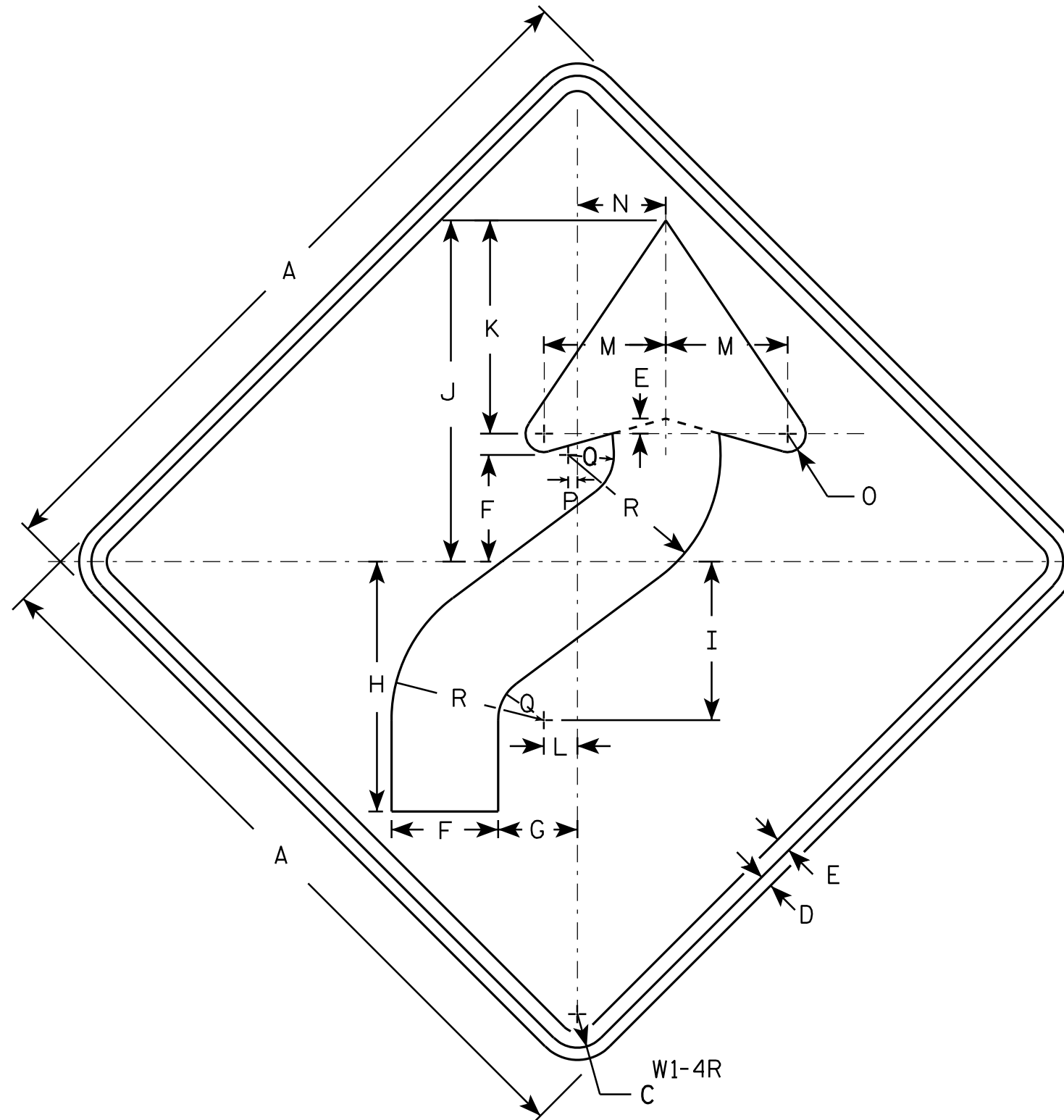
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- 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.
- W1-4L is the same as W1-4R 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 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN W1 - 4

WISCONSIN DEPT OF TRANSPORTATION

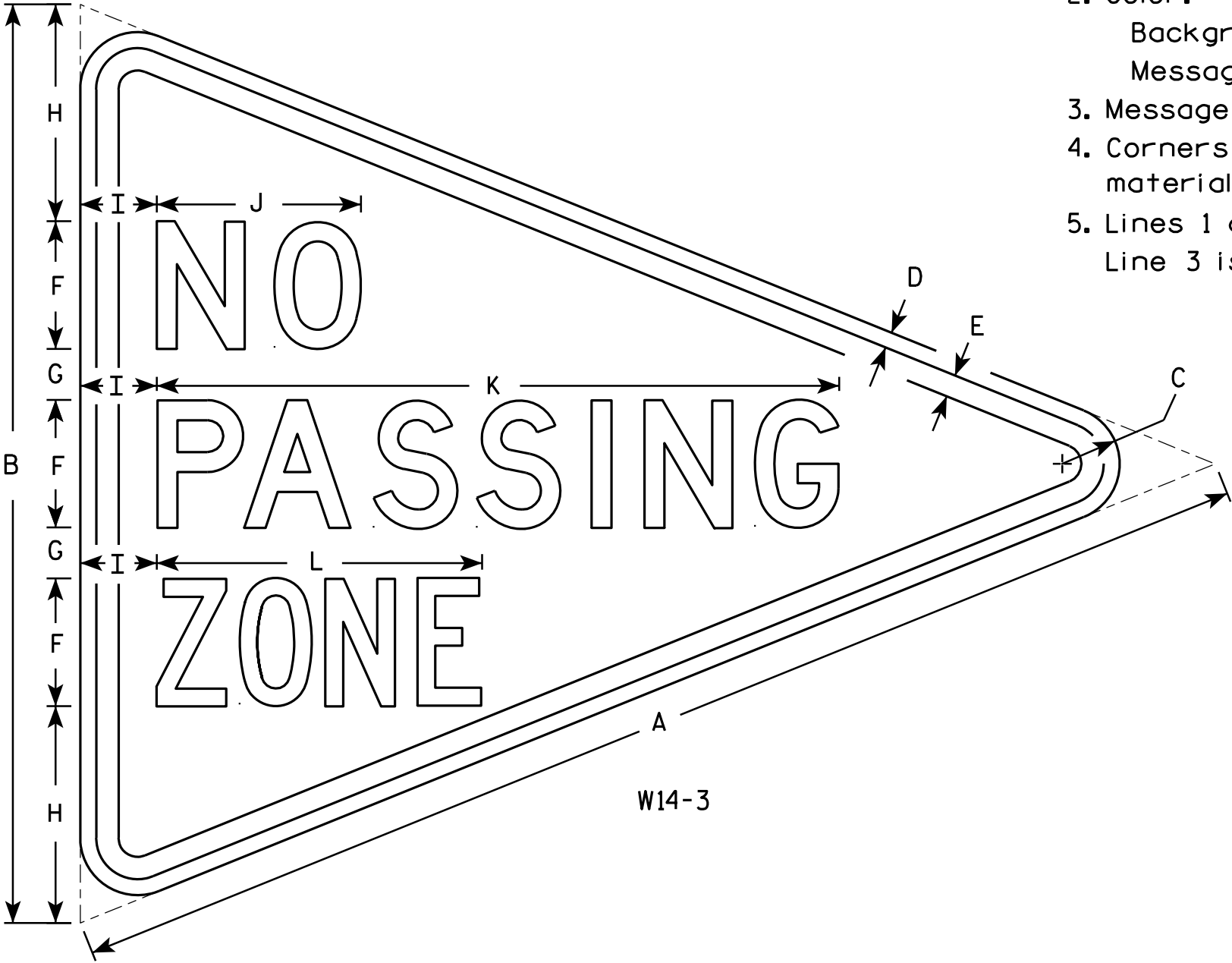
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

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

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



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

STANDARD SIGN
W14-3

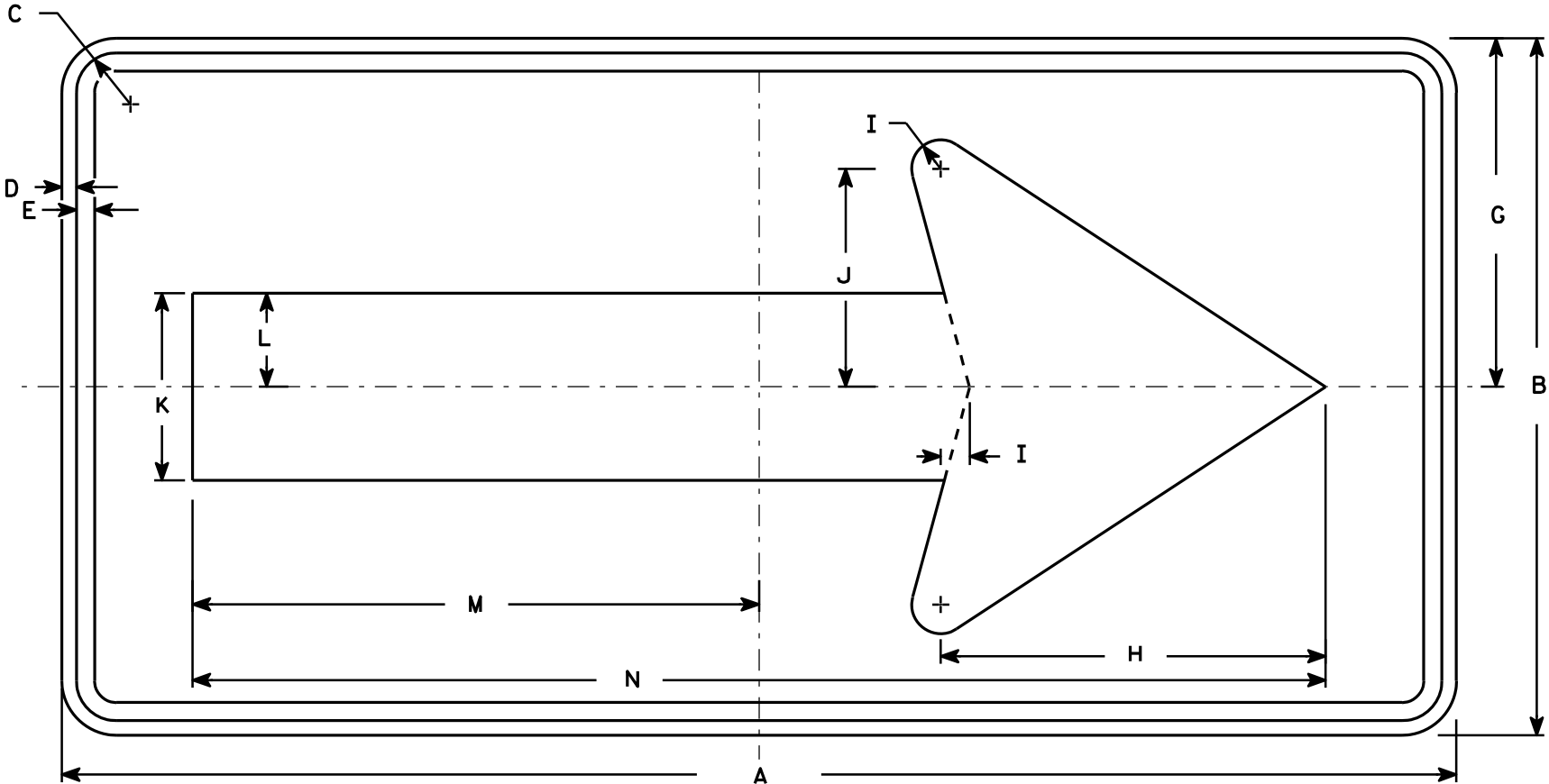
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

NOTES

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



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

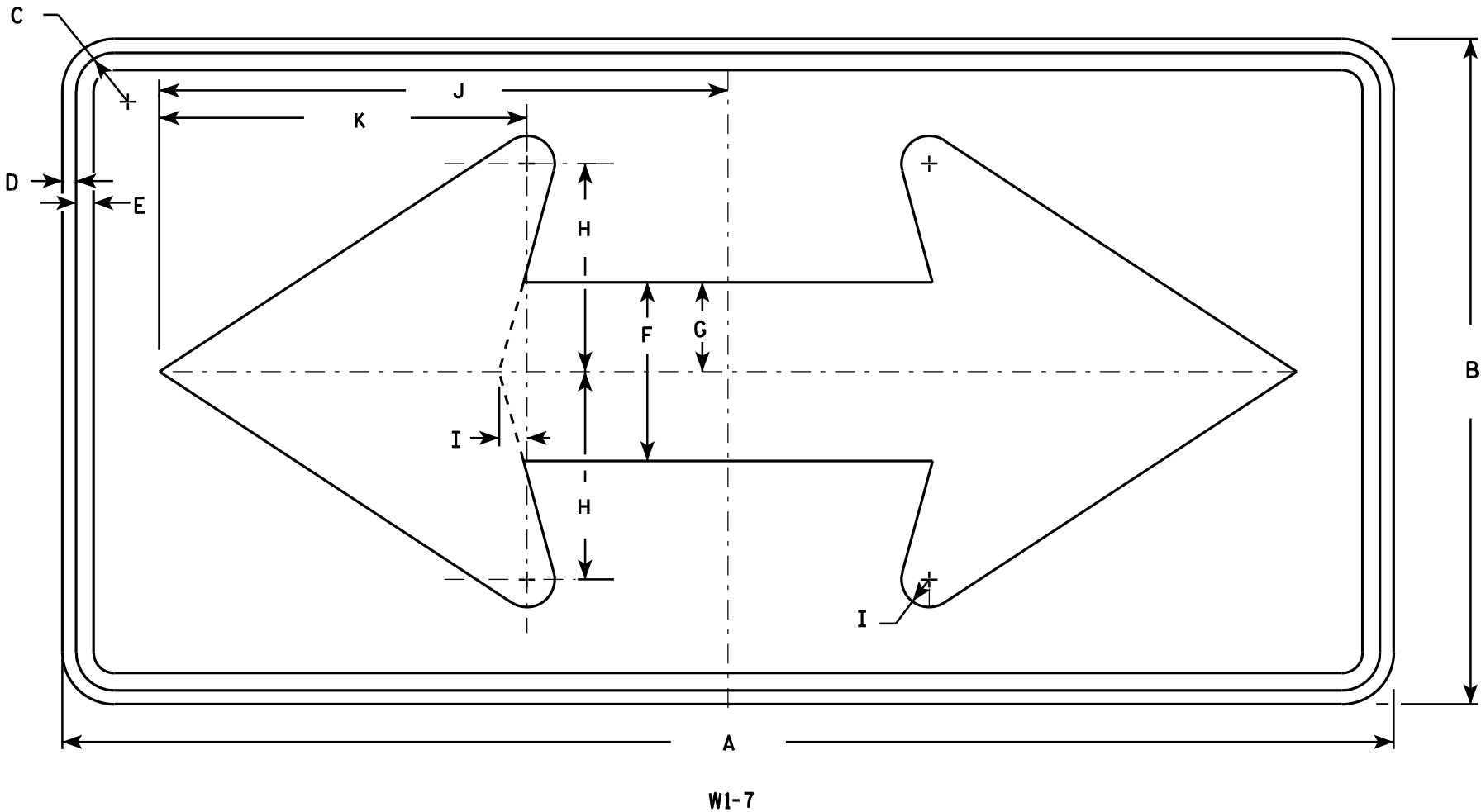
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:

HWY:

COUNTY:

SHEET NO:



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

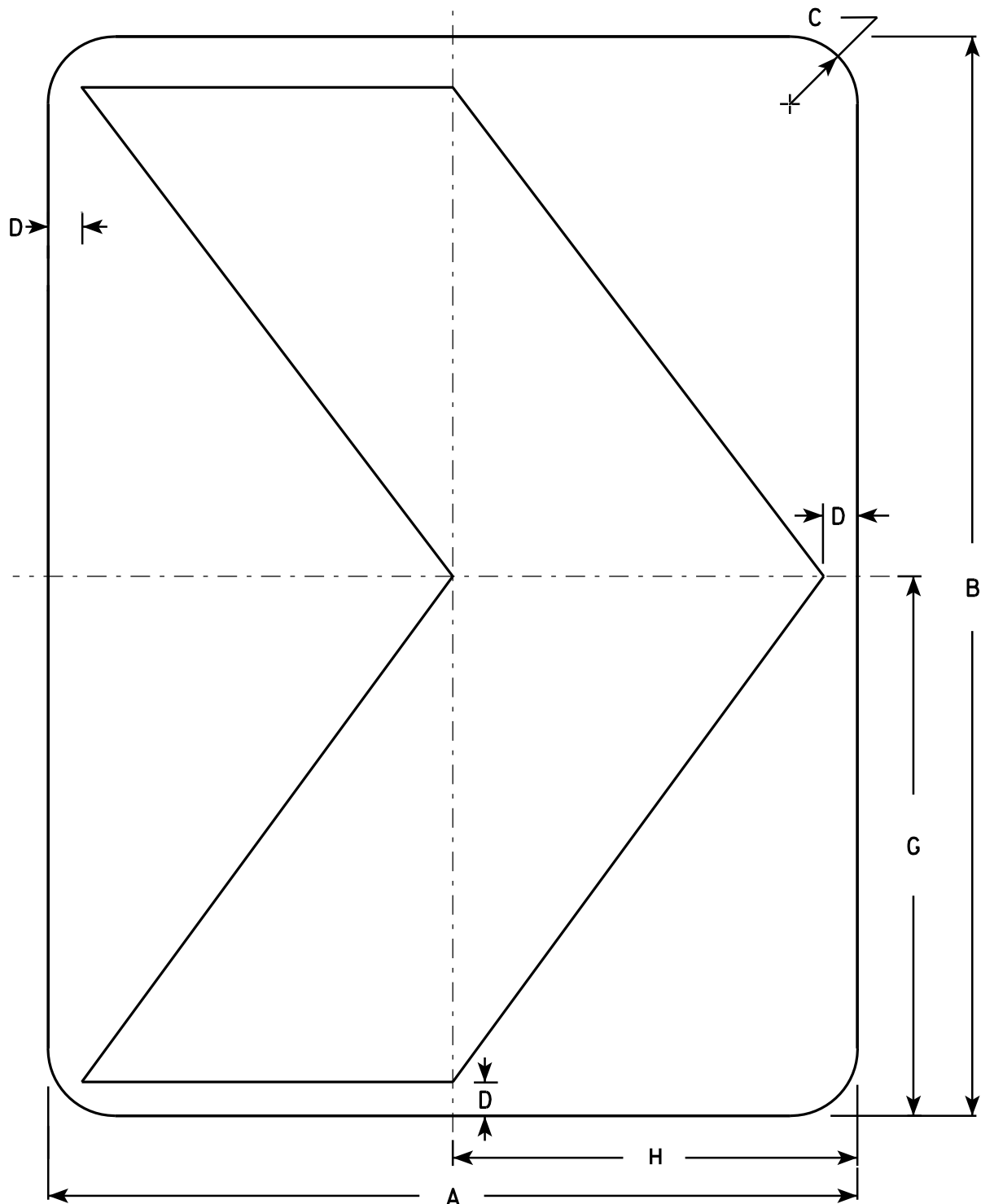
STANDARD SIGN

W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



W1-8

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	12	18	1 1/2	1/2			9	6																			1.5
2S	18	24	1 1/2	3/4			12	9																			3.0
2M	18	24	1 1/2	3/4			12	9																			3.0
3	24	30	1 1/2	1			15	12																			5.0
4	30	36	1 7/8	1 1/4			18	15																			7.5
5	36	48	2 1/4	1 1/2			24	18																			12.0

STANDARD SIGN

W1-8

WISCONSIN DEPT OF TRANSPORTATION

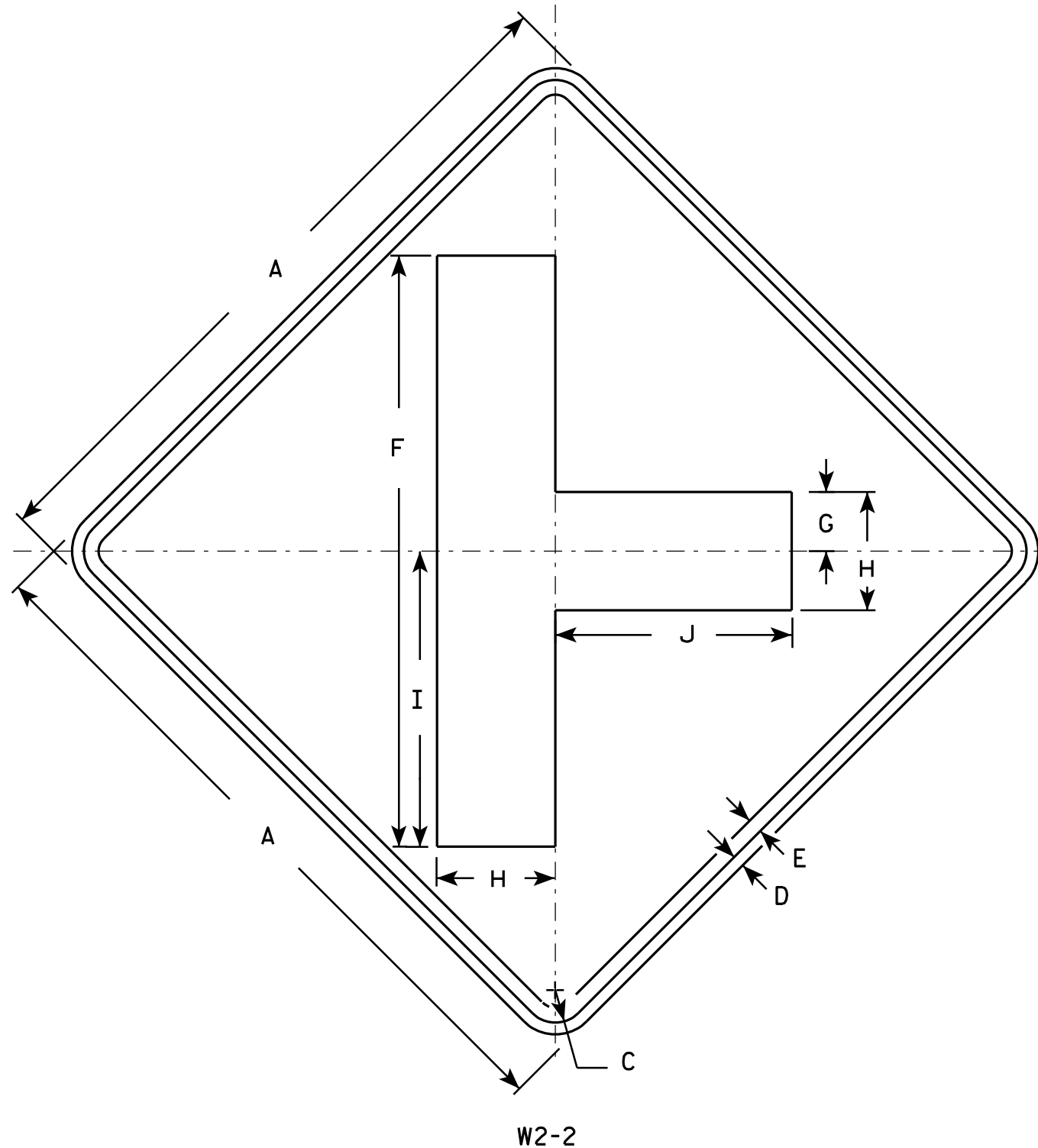
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

SHEET NO:

E



NOTES

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

W2-2

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

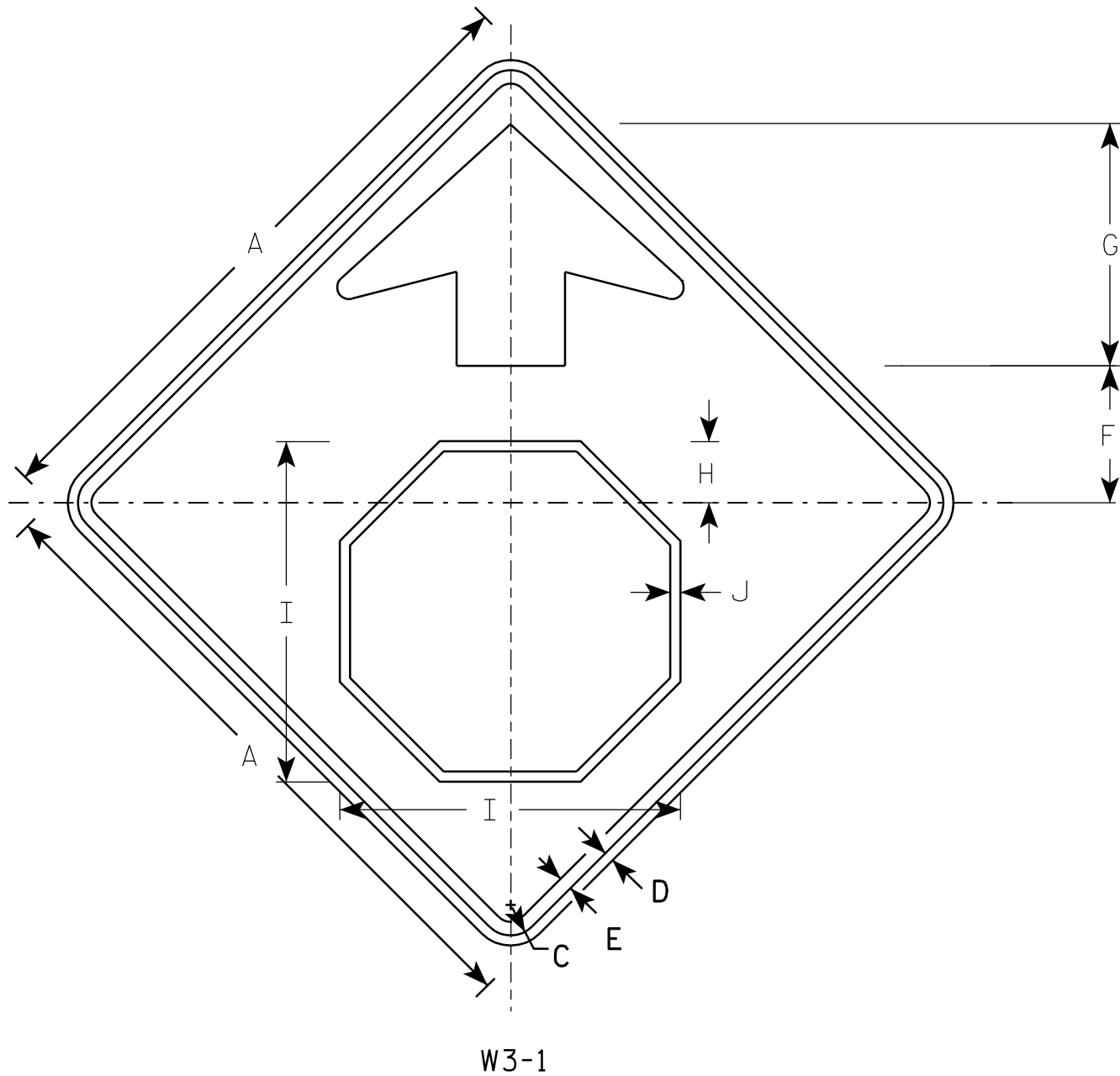
STANDARD SIGN W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

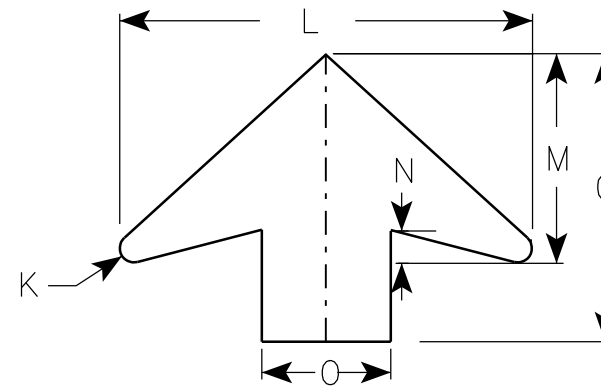
PROJECT NO: HWY: COUNTY: SHEET NO: E



W3-1

NOTES

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



ARROW DETAIL

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

PROJECT NO:				SHEET NO:	E
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STANDARD SIGN

W3-1

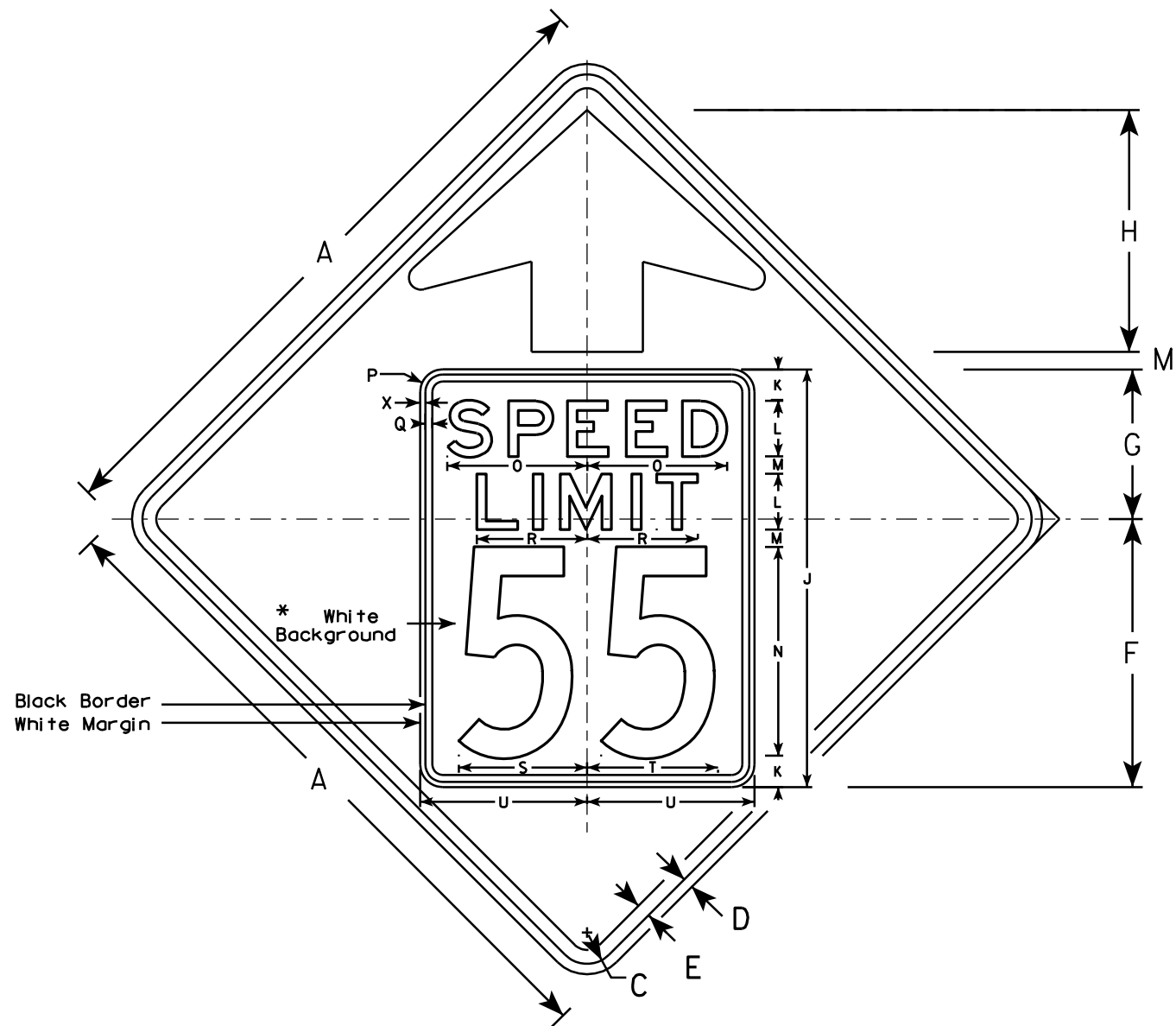
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

for State Traffic Engineer

DATE 6/7/10

PLATE NO. W3-1.12

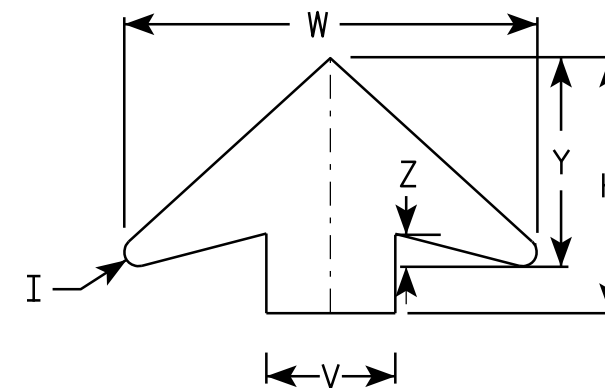


W3-5

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

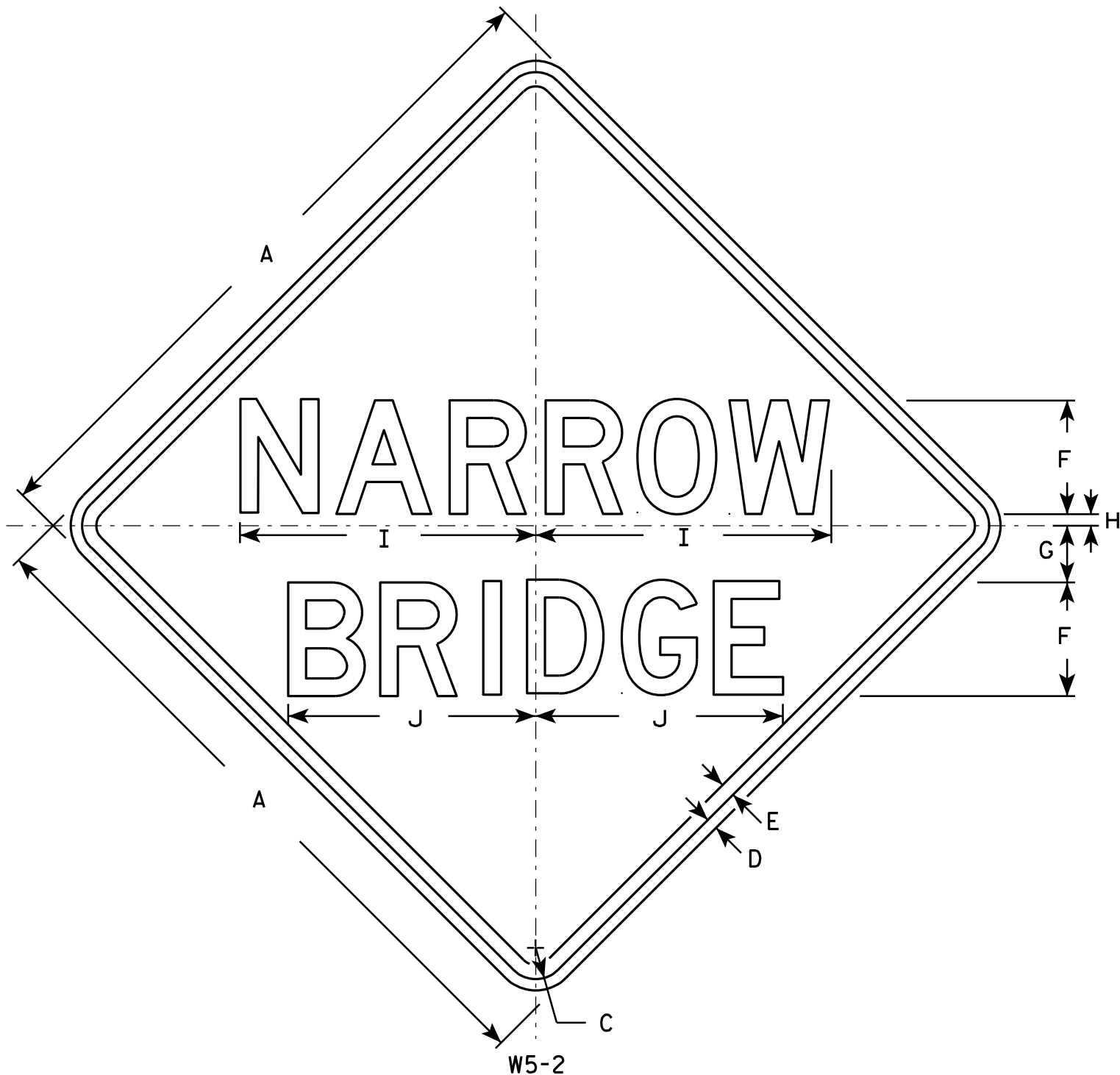
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



NOTES

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

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	5	2 1⁄2	1⁄2	13	10 7⁄8																	6.25
2S	36		1 5⁄8	5⁄8	3⁄4	6	3	3⁄4	15 5⁄8	13 1⁄8																	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	6	3	3⁄4	15 5⁄8	13 1⁄8																	9.0
3	36		1 5⁄8	5⁄8	3⁄4	6	3	3⁄4	15 5⁄8	13 1⁄8																	9.0
4	48		2 1⁄4	3⁄4	1	8	4	3⁄4	20 3⁄4	17 3⁄8																	16.0
5																											

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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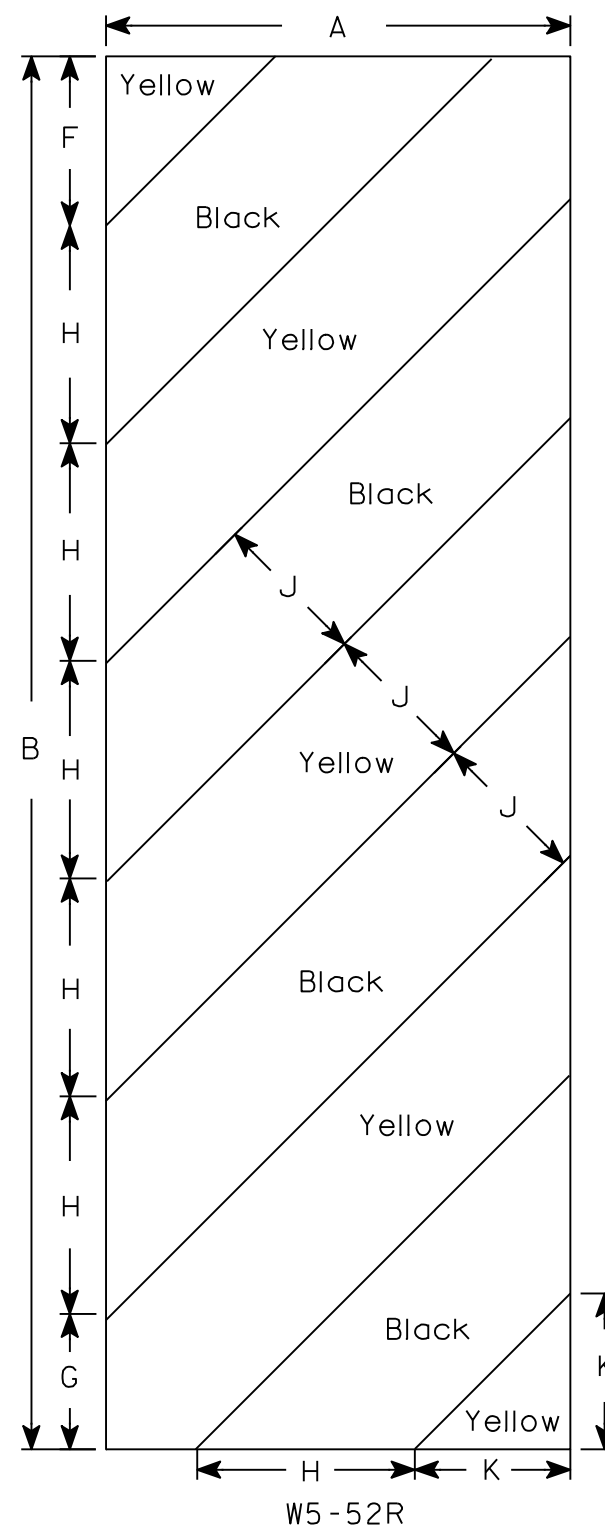
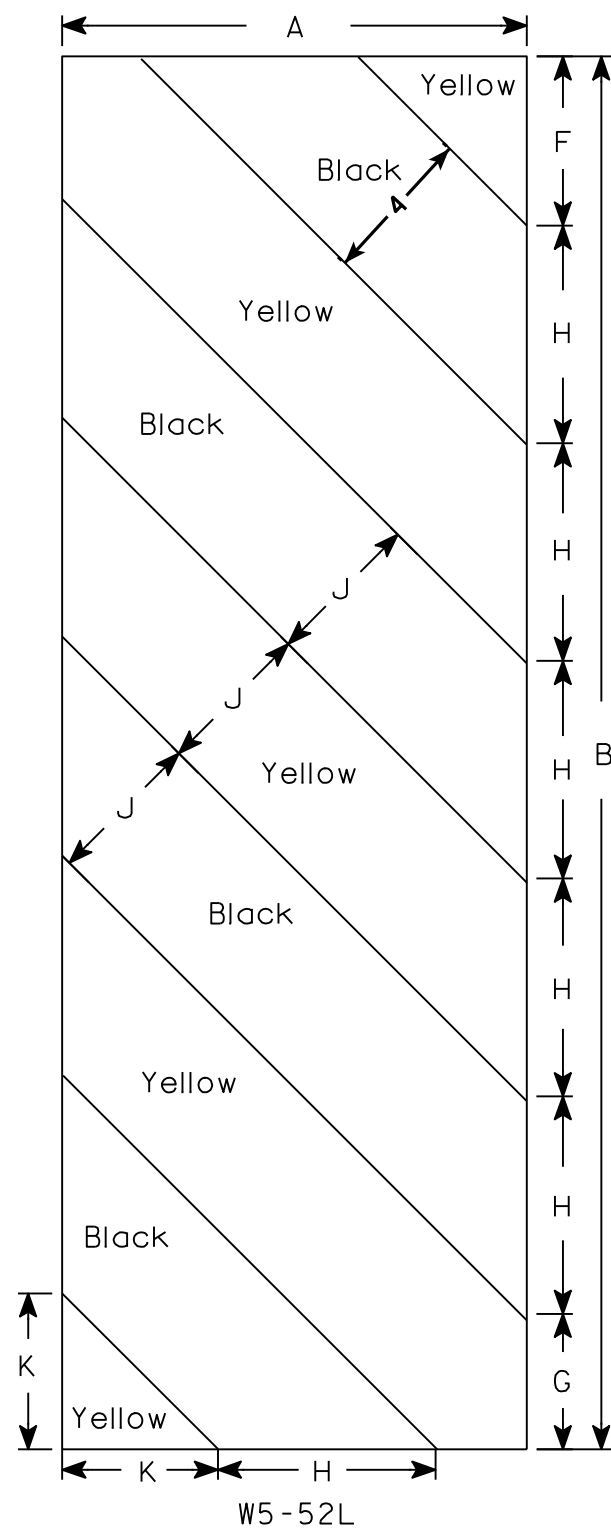
STANDARD SIGN

W5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W5-2.7



NOTES

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

[illegible]

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/29/12 PLATE NO. W5-52.9

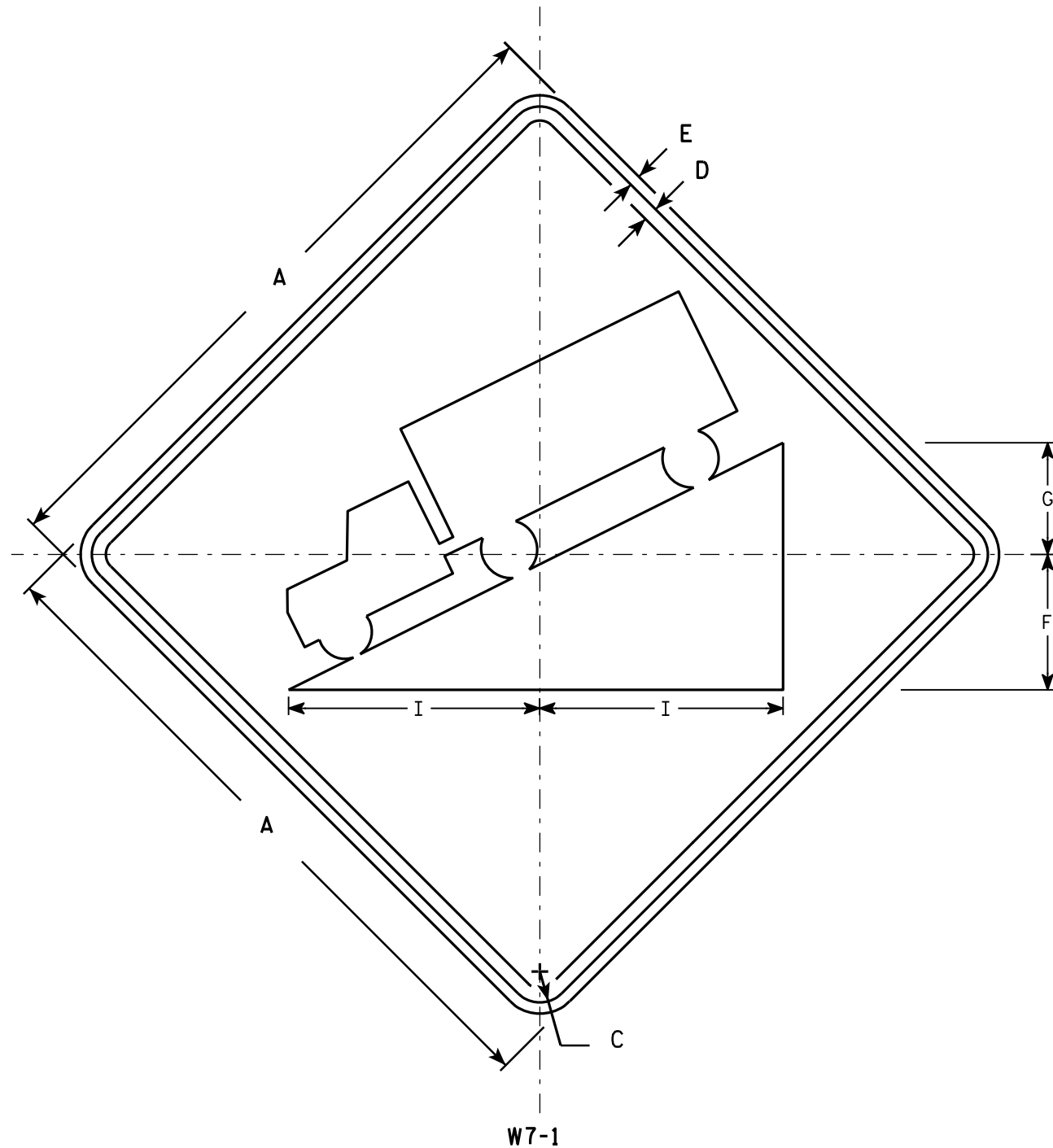
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

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

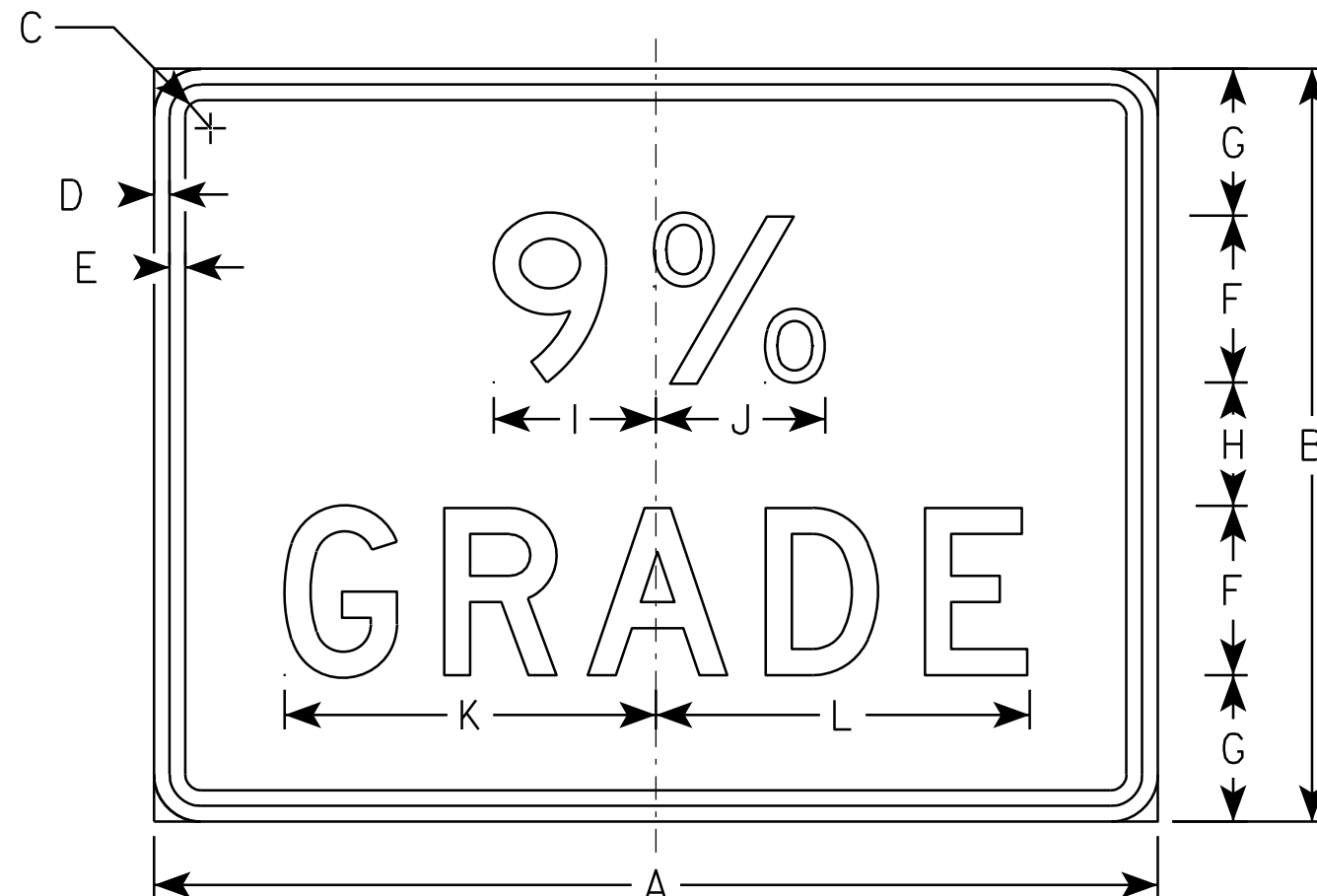
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	3/8	5	4		8 3/4																		4.0
2S	30		1 3/8	1/2	5/8	6	5		11																		6.25
2M	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
3	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
4	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
5	48		2 1/4	3/4	1	9 3/4	8		17 1/2																		16.0

STANDARD SIGN
W7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/18/11 PLATE NO. W7-1.12



W7-3

NOTES

1. Sign is Type II - Type H 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. Substitute appropriate numeral and optically adjust spacing to achieve proper balance.

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

STANDARD SIGN
W7-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W7-3.3

Notes



Wisconsin Department of Transportation

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