GRE

NOVEMBER 2021

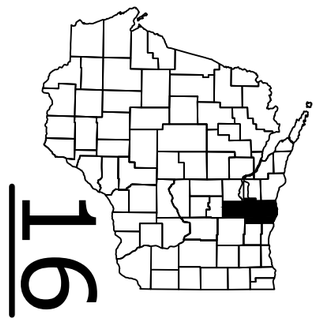
PROJECT ID: 1440-15-78

WITH: N/A

COUNTY: FOND DU LAC

ORDER OF SHEETS

TOTAL SHEETS = 108



N

DESIGN DESIGNATION

A.A.D.T.	2020	=	8000
A.A.D.T.	2040	=	11900
D.H.V.		=	1488
D.D.		=	60/40
T.		=	25.7%
DESIGN SPEED		=	70 MPH
ESALS		=	5153800

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

FOND DU LAC - PLYMOUTH

SEVEN HILLS ROAD - CTH P

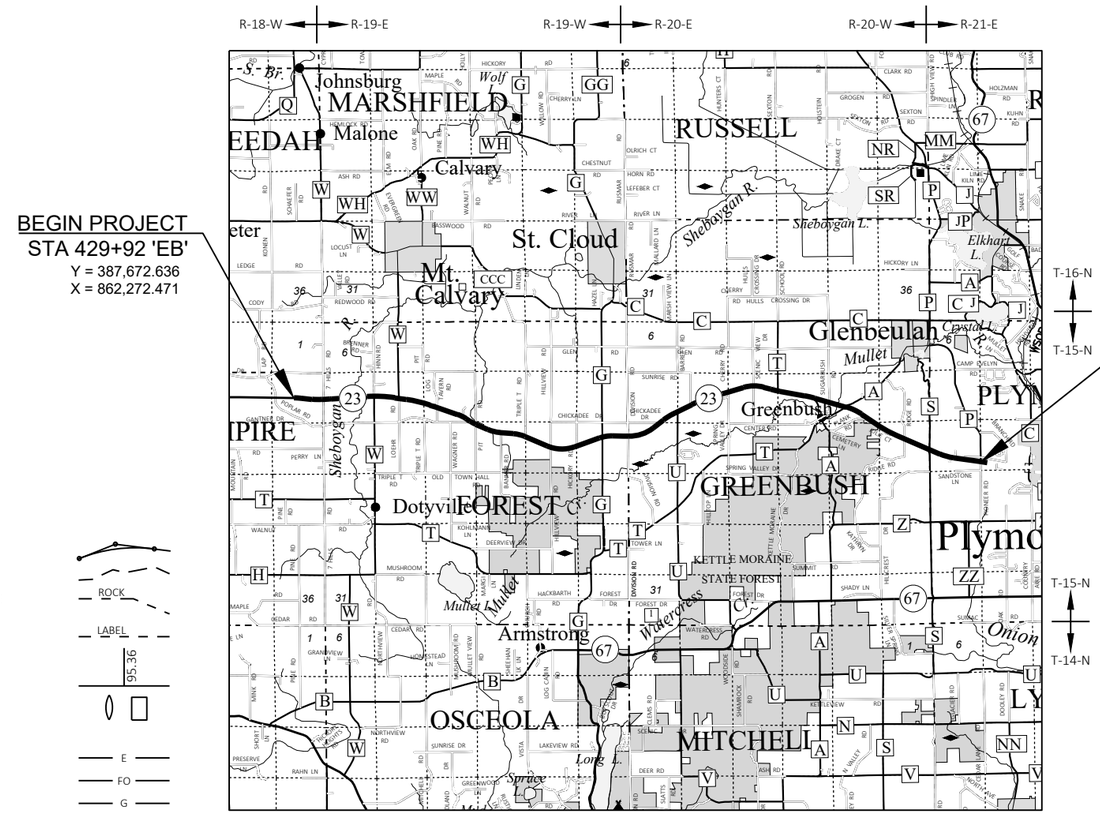
STH 23

FOND DU LAC COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1440-15-78	WISC 2022041	1

STATE PROJECT NUMBER

1440-15-78



BEGIN PROJECT
STA 429+92 'EB'
Y = 387,672.636
X = 862,272.471

END PROJECT
STA 1120+27 'EB'
Y = 381,370.836
X = 927,317.625

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 13.940 MI

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), NAD 83 (1991) FOND DU LAC COUNTY.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	E A DANKE
Project Manager	E GWIDT
Regional Examiner	
Regional Supervisor	R J WAGNER

APPROVED FOR THE DEPARTMEN

DATE: 7/27/2021 Eric Gwidt P.E.
(Signature)

E

GENERAL NOTES

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

THE EXACT CONSTRUCTION LIMITS AND LOCATIONS OF ALL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATION OF BUTT JOINTS AND SAW CUTS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

ORDER OF SECTION 2 DETAIL SHEETS

DNR LIAISON

JAY SCHIEFELBEIN (NORTHEAST-GREEN LAKE, FOND DU LAC, SHEBOYGAN, WINNEBAGO)
DNR NORTHEAST REGIONAL HEADQUARTERS
2984 SHAWANO AVE.
GREEN BAY, WI 54313
(920) 360-3784
jeremiah.schiefelbein@wisconsin.gov

SHEBOYGAN COUNTY HIGHWAY COMMISSIONER

GREG SCHNELL
1211 N 23RD ST
SHEBOYGAN, WI 53082
920-459-3822
greg.schnell@sheboygancounty.com

FOND DU LAC COUNTY HIGHWAY COMMISSIONER

TOM JANKE
301 DIXIE ST
PO BOX 1234
FOND DU LAC, WI 54936-1234
920-929-3489
tom.janke@fdlco.wi.gov

NE REGION SURVEY COORDINATOR

CORMAC MCINNIS, RLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920)492-5638
cormac.mcinnis@dot.wi.gov

UTILITIES CONTACTS

TODD BRISTER
ANR PIPELINE CO - GAS/PETROLEUM
W3925 PIPELINE LANE
EDEN, WI 53019
(920) 477-2235, (920) 979-0060
todd_brister@tcenergy.com

DOUG VOSBERG
ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
(608) 877-7650
dvosberg@atcllc.com

CHARLES BARTELT
AT&T WISCONSIN - COMMUNICATION LINE
70 E DIVISION ST
FOND DU LAC, WI 54935
(920) 929-1013, (920) 410-5104
cb1461@att.com

GRAYNE SKIBO
ALLIANT ENERGY - ELECTRICITY
883 W SCOTT ST
FOND DU LAC, WI 54937
(920) 948-4054
grayneskibo@alliantenergy.com

SCOTT RANDALL
NORTHERN MORAINE UTILITY COMMISSION - SEWER
N7025 CTH PP.O. BOX 217
GLENBEULAH, WI 53023O
(920) 526-3808, M (920) 980-7958
northernmoraineutility@gmail.com

TODD HILDEBRANDT
CHARTER COMMUNICATIONS - COMMUNICATION LINE
165 KNIGHTS WAY
FOND DU LAC, WI 54935
(920) 907-7724, (920) 794-4946
todd.hildebrandt@charter.com

RYAN ROEHRBORN
PLYMOUTH UTILITIES CO - COMMUNICATION LINE
900 CTH PP
PLYMOUTH, WI 53073
(920) 838-5231
rroehrborn@plymouthutilities.com

RYAN ROEHRBORN
PLYMOUTH UTILITIES CO - ELECTRICITY
900 CTH PP
PLYMOUTH, WI 53073
(920) 838-5231
rroehrborn@plymouthutilities.com

NICK WILBERT
WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
933 S WILDWOOD AVE
SHEBOYGAN, WI 53081
(920) 451-3733
nicholas.wilbert@wisconsinpublicservice.com

CASEY SCHWANDT
WEST SHORE PIPE LINE COMPANY - GAS/PETROLEUM
11115 WEST COUNTY LINE RD
MILWAUKEE, WI 53224
(920) 655-1428
cschwandt@buckeye.com

GREGORY BOERNER
WE ENERGIES – ELECTRICITY
500 S 116TH/ ST
WEST ALLIS, WI 53214
(618) 409-5861
gregory.boerner@we-energies.com
we-utility-relocations@we-energies.com

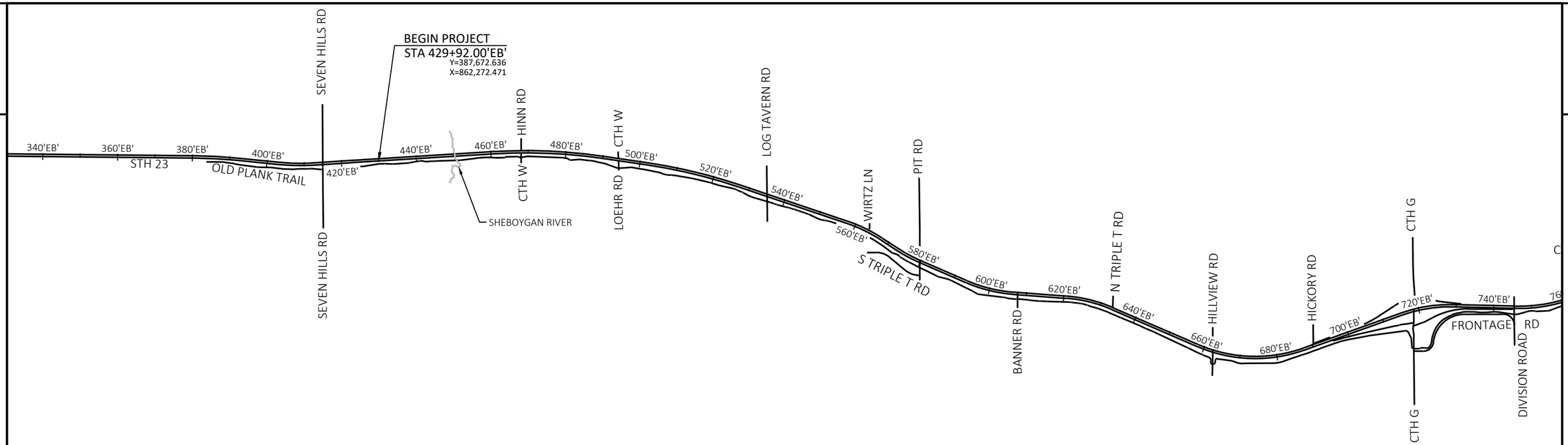
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

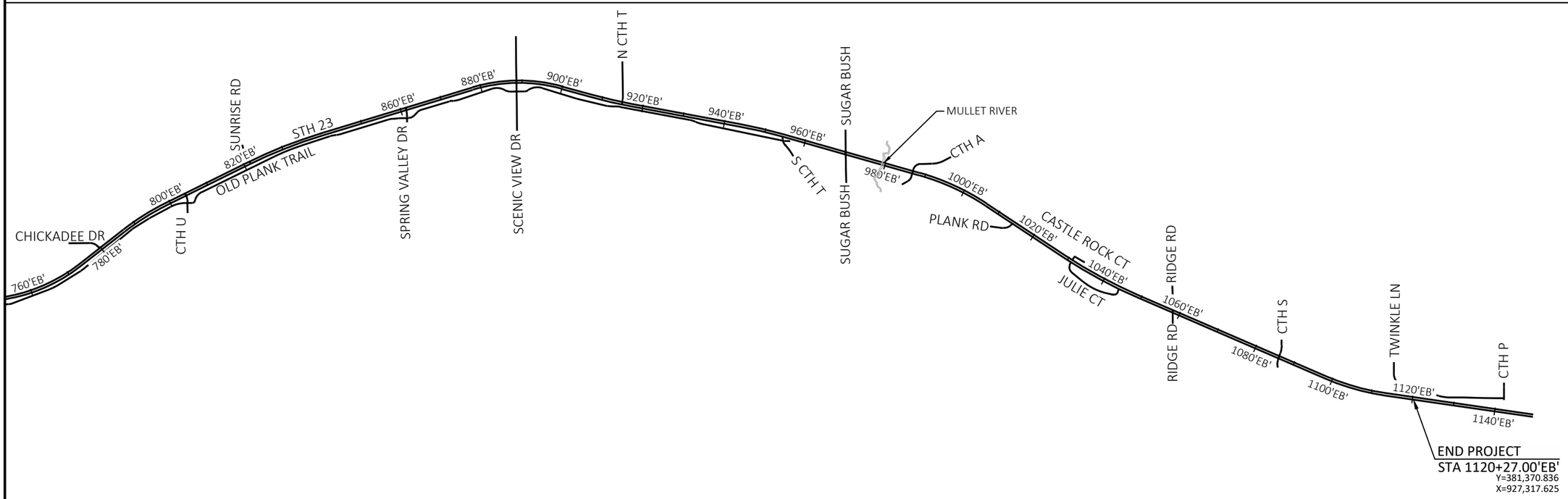
RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 51.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.0 ACRES

2

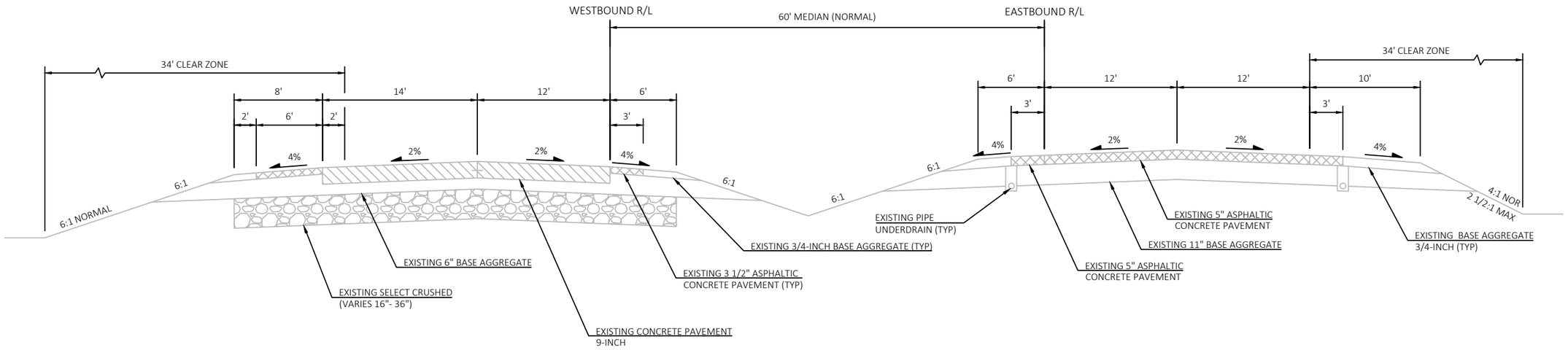




PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 3	E

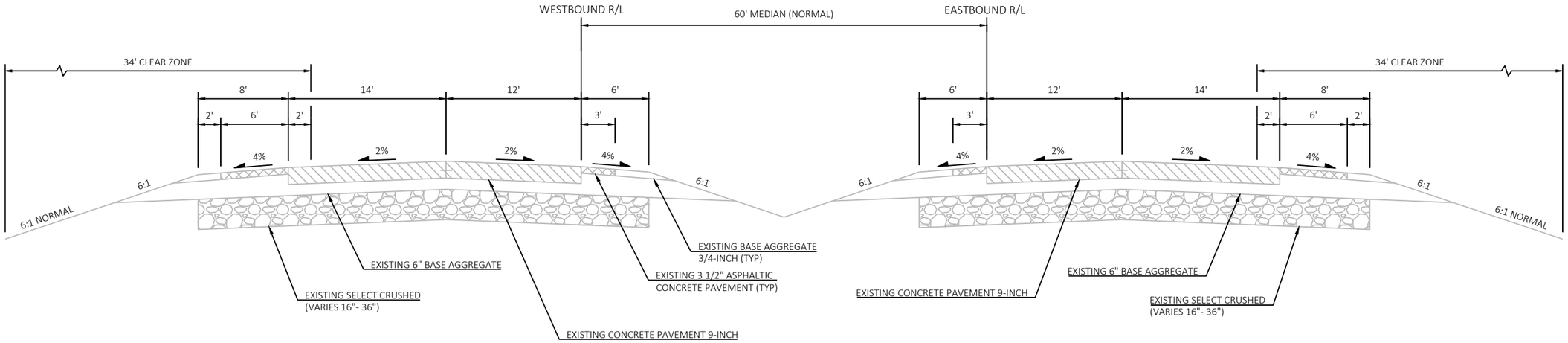
FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PROJECT OVERVIEW\020201-PO.DWG
LAYOUT NAME - 020201-po

PLOT DATE : 7/15/2021 10:15 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:0.5 MI



TYPICAL EXISTING CROSS SECTION FOR STH 23

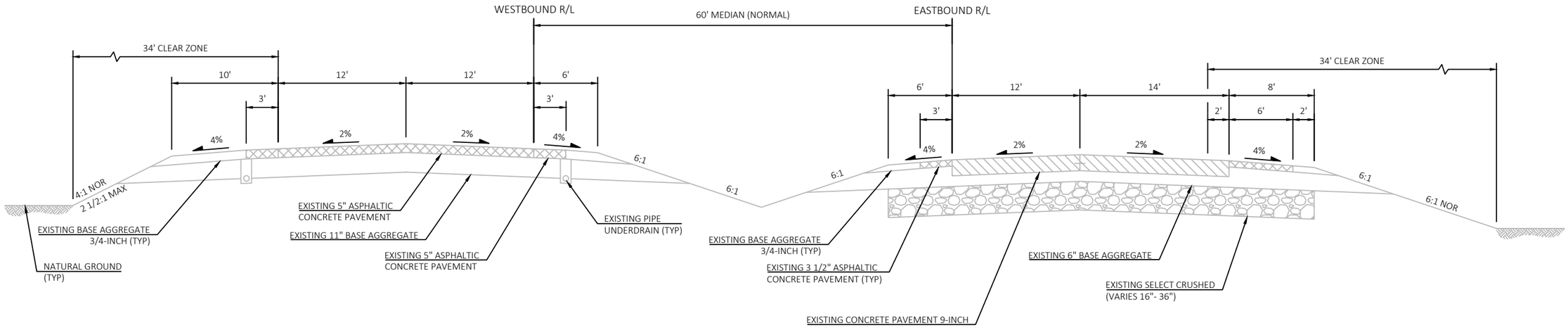
STA 429+92 TO STA 461+25



TYPICAL EXISTING CROSS SECTION FOR STH 23

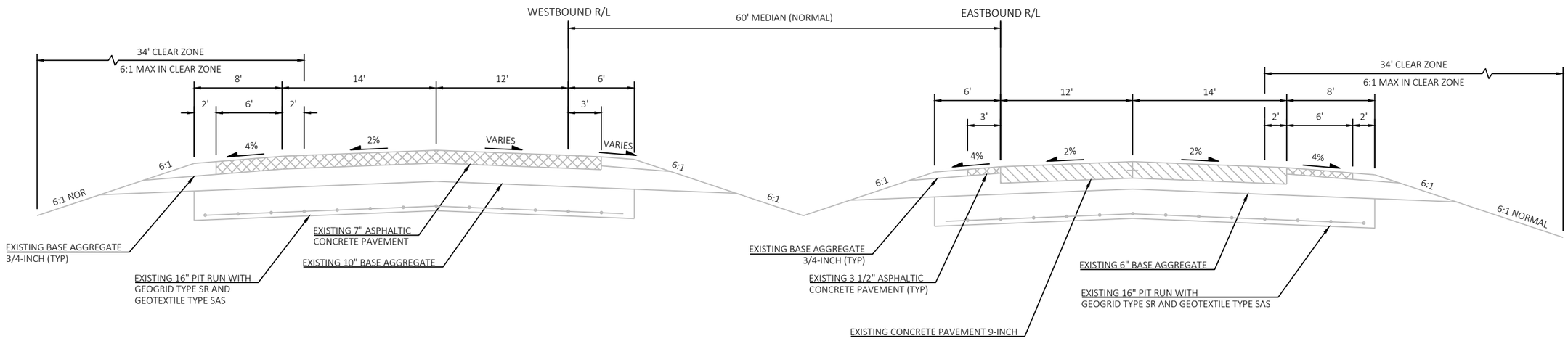
STA 461+25 TO STA 511+32

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4	E



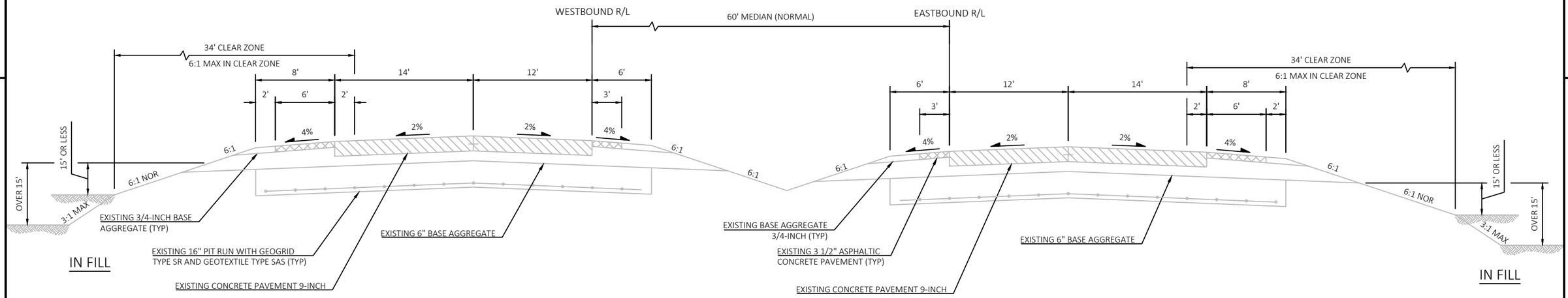
TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 511+32 TO STA 745+66



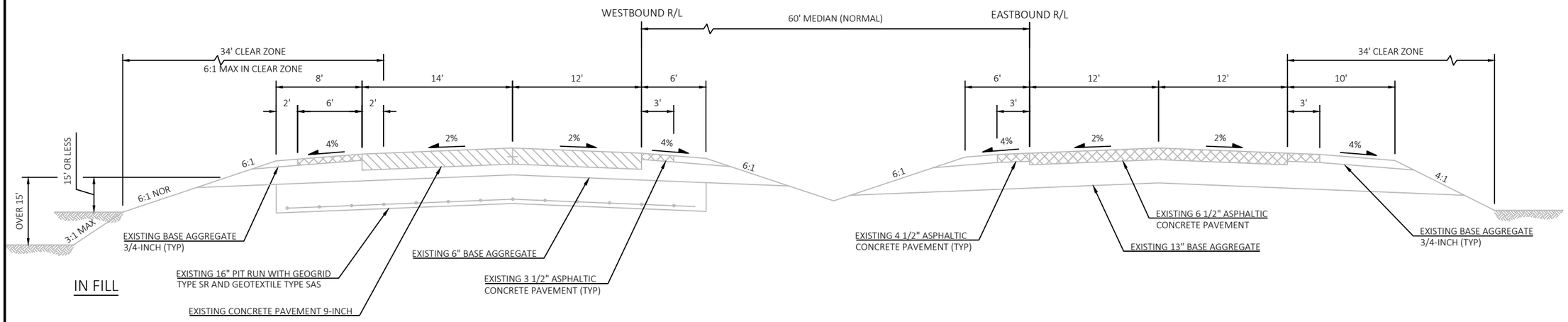
TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 745+66 TO STA 755+90



TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 755+90 TO STA 777+67



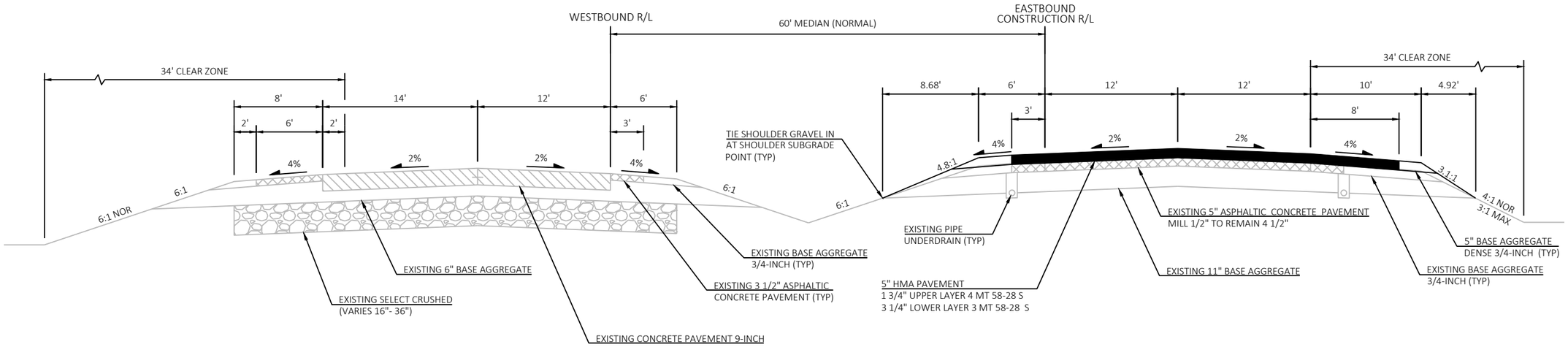
TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 777+67 TO STA 1120+27

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 6	E

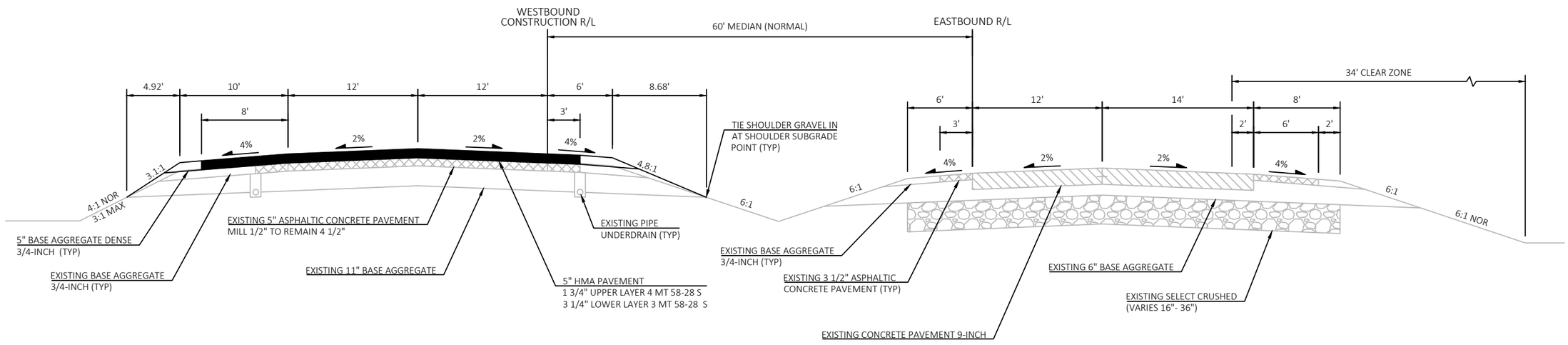
FILE NAME : N:\PDS\C3D\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\TYPICAL SECTIONS\020301-TS.DWG
LAYOUT NAME - 020303-ts

PLOT DATE : 7/19/2021 8:34 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:10 FT



TYPICAL FINISHED CROSS SECTION FOR STH 23

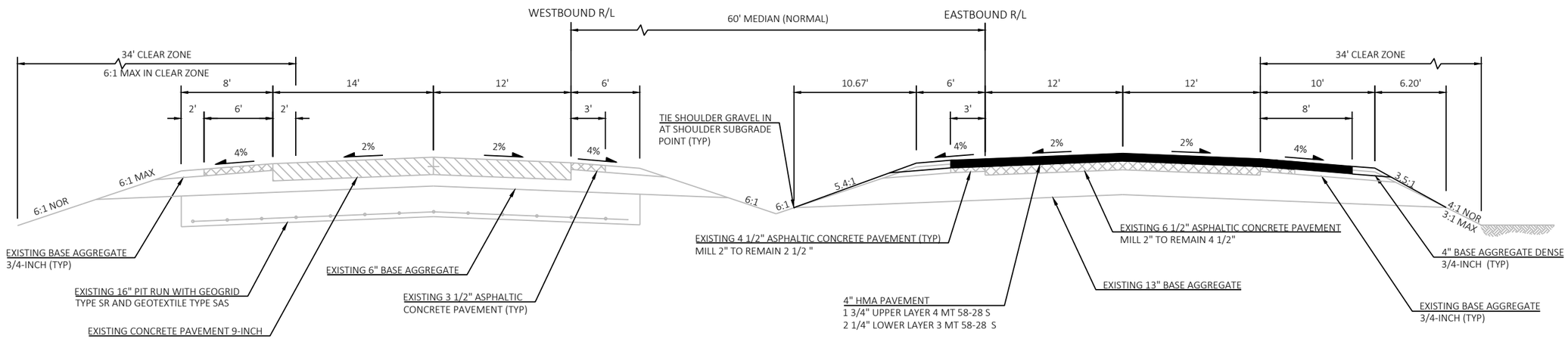
STA 429+92 TO STA 461+25



TYPICAL FINISHED CROSS SECTION FOR STH 23

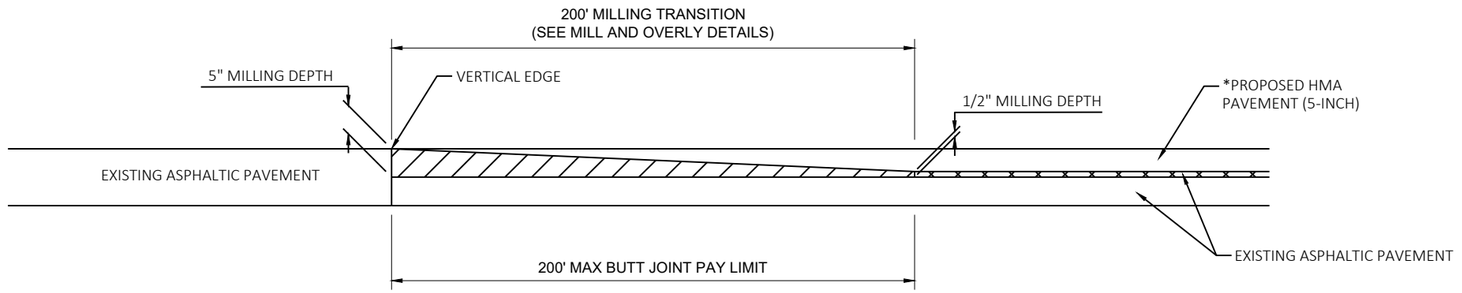
STA 511+32 TO STA 687+50

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 7	E



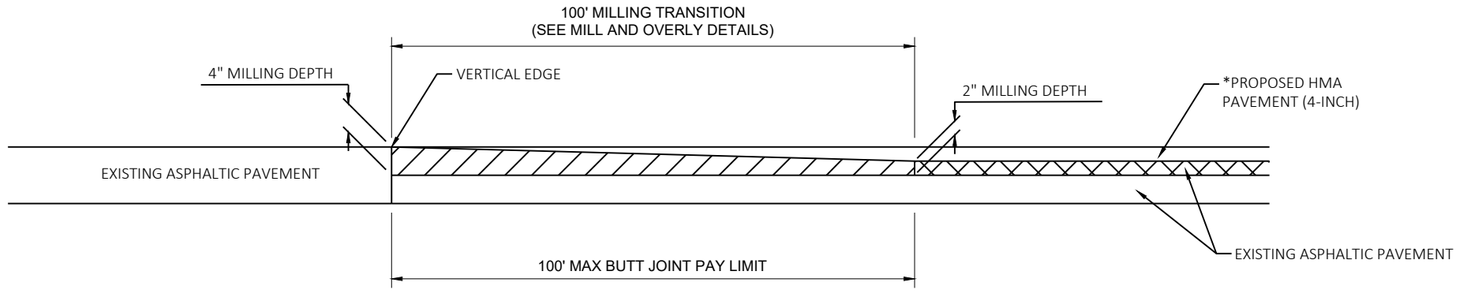
TYPICAL FINISHED CROSS SECTION FOR STH 23

STA 781+19 TO STA 1120+27



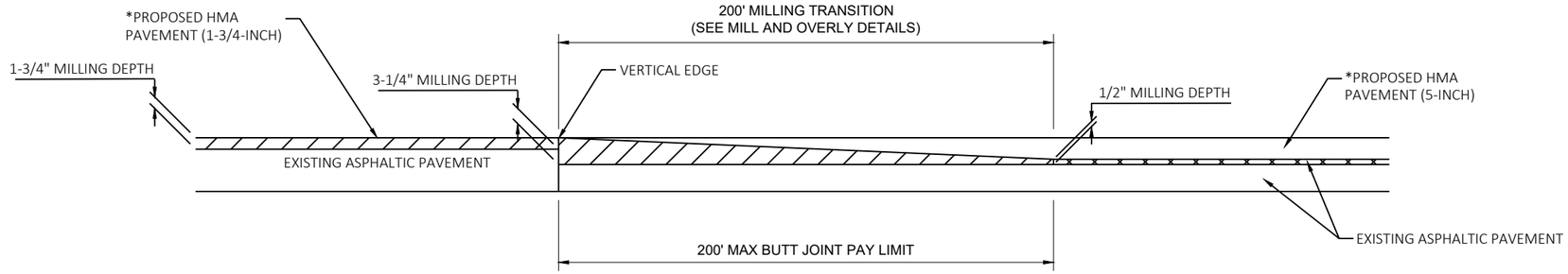
*SEE TYPICAL FINISHED CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS

BUTT JOINT AND TRANSITION DETAIL #1 FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



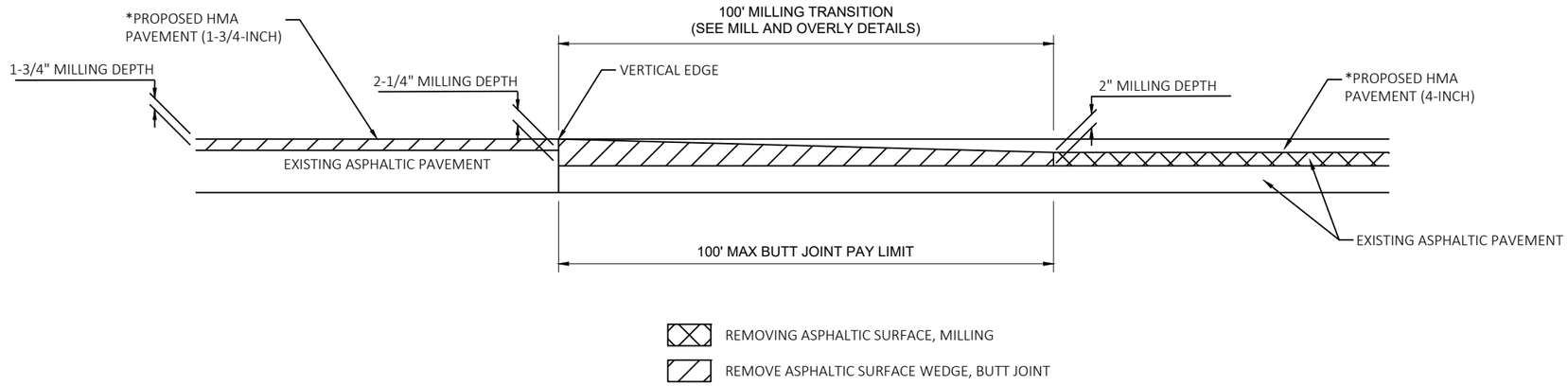
*SEE TYPICAL FINISHED CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS

BUTT JOINT AND TRANSITION DETAIL #2 FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



*SEE TYPICAL FINISHED CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS

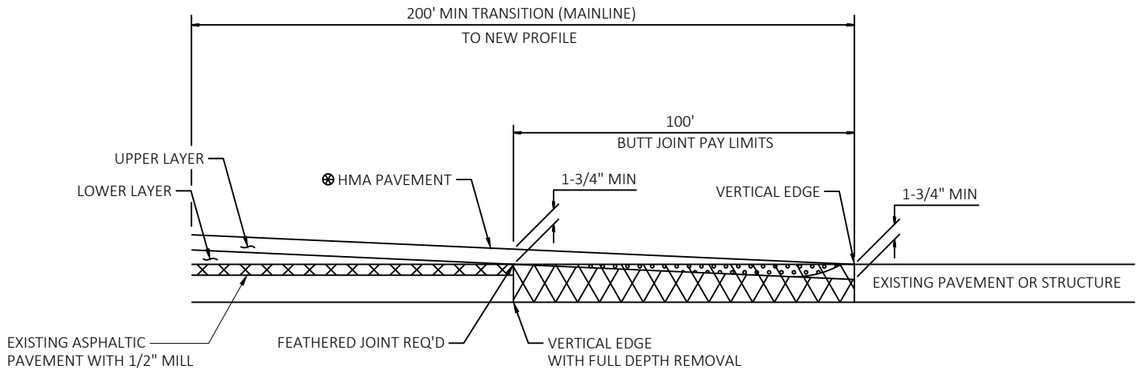
BUTT JOINT AND TRANSITION DETAIL #3 FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



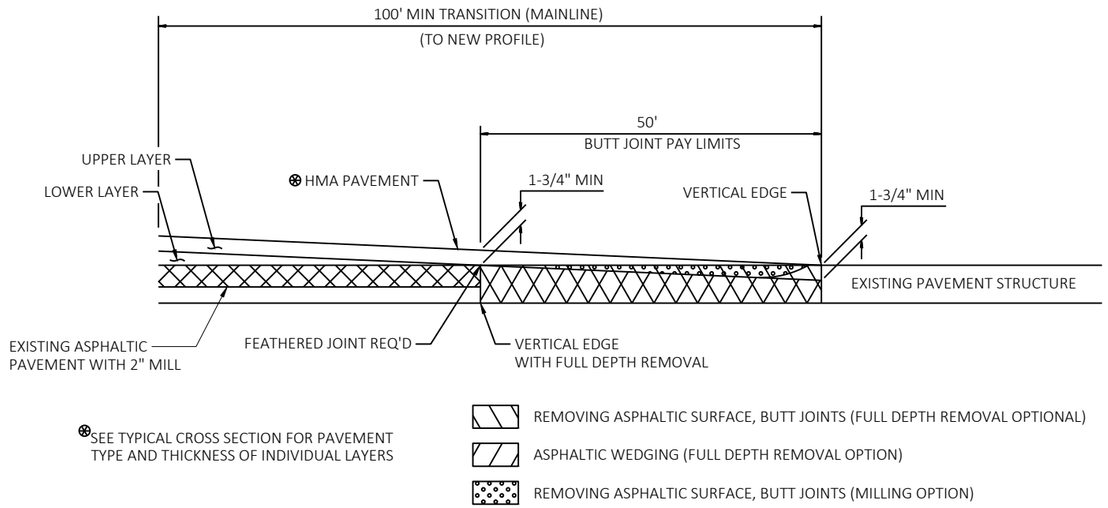
*SEE TYPICAL FINISHED CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS

BUTT JOINT AND TRANSITION DETAIL #4 FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)

2

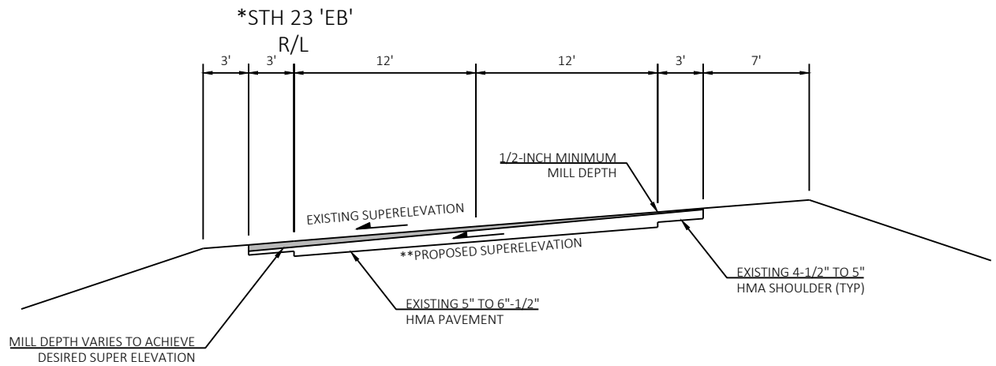


BUTT JOINT AND TRANSITION DETAIL #5 FOR ASPHALTIC PAVEMENTS (PROFILE CHANGE)



BUTT JOINT AND TRANSITION DETAIL #6 FOR ASPHALTIC PAVEMENTS (PROFILE CHANGE)

2



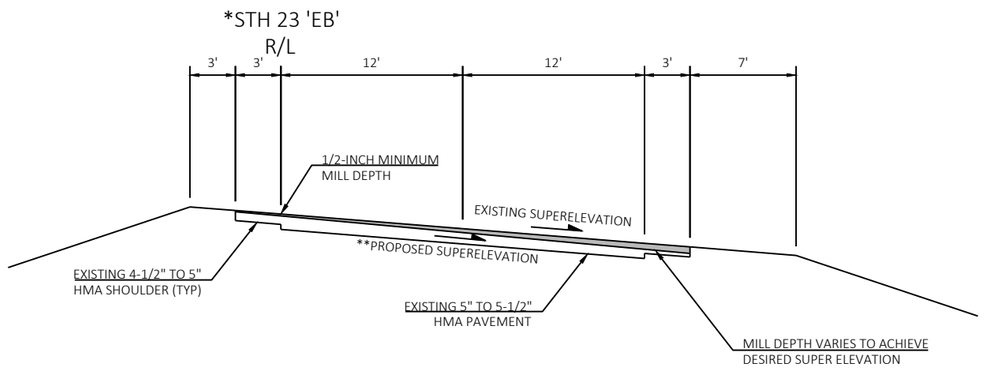
SUPERELEVATION CORRECTION: MILLING OPERATION

(CURVES TO THE LEFT)

** SEE ALIGNMENT DETAILS FOR EXISTING AND PROPOSED CURVE SUPER ELEVATIONS

* STH 23 WB SUPER ELEVATION CORRECTION IS A MIRROR IMAGE OF WHAT IS SHOWN ABOVE

VARIABLE DEPTH MILLING

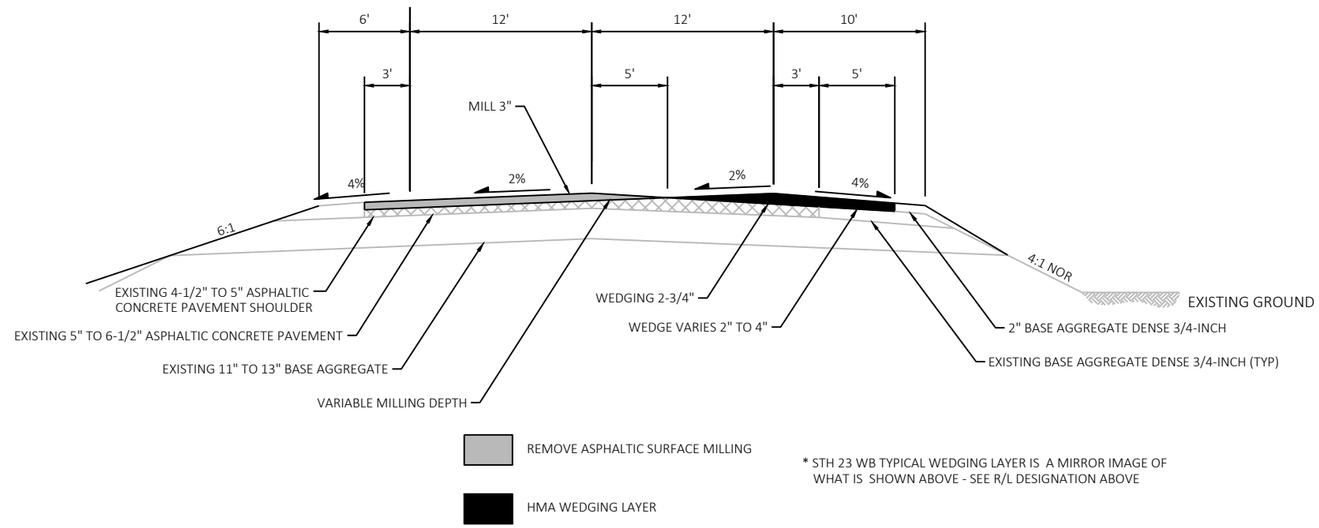


SUPERELEVATION CORRECTION: MILLING OPERATION

(CURVES TO THE RIGHT)

2

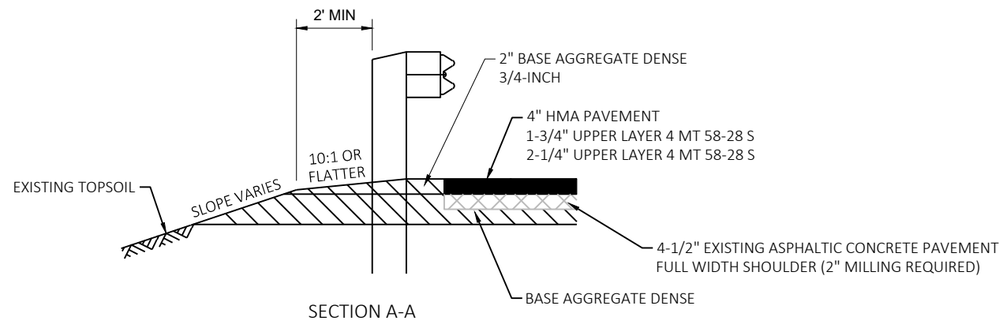
*STH 23 'EB'
CONSTRUCTION R/L



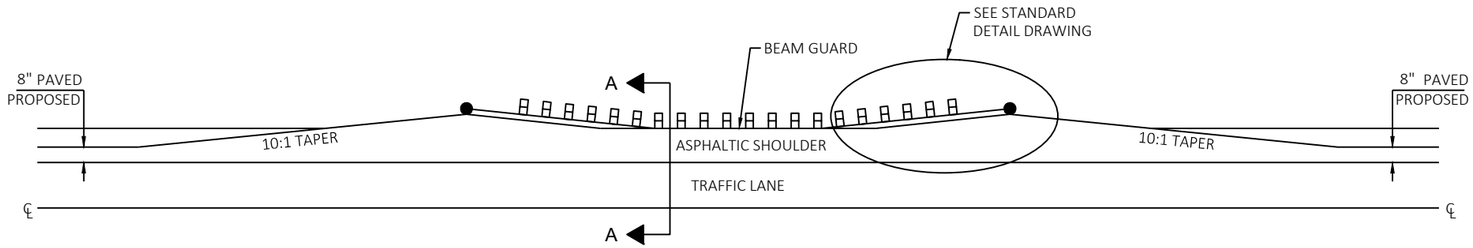
* STH 23 WB TYPICAL WEDGING LAYER IS A MIRROR IMAGE OF WHAT IS SHOWN ABOVE - SEE R/L DESIGNATION ABOVE

WEDGE LAYER FOR NORMAL CROWN TO REVERSE CROWN SUPERELEVATION

STA 511+32 TO STA 527+22 WB
STA 907+68 TO STA 916+85 EB



SECTION A-A

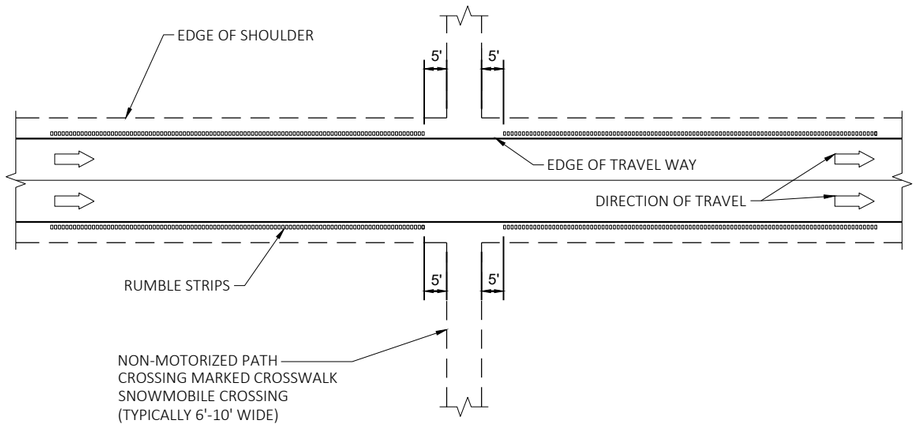


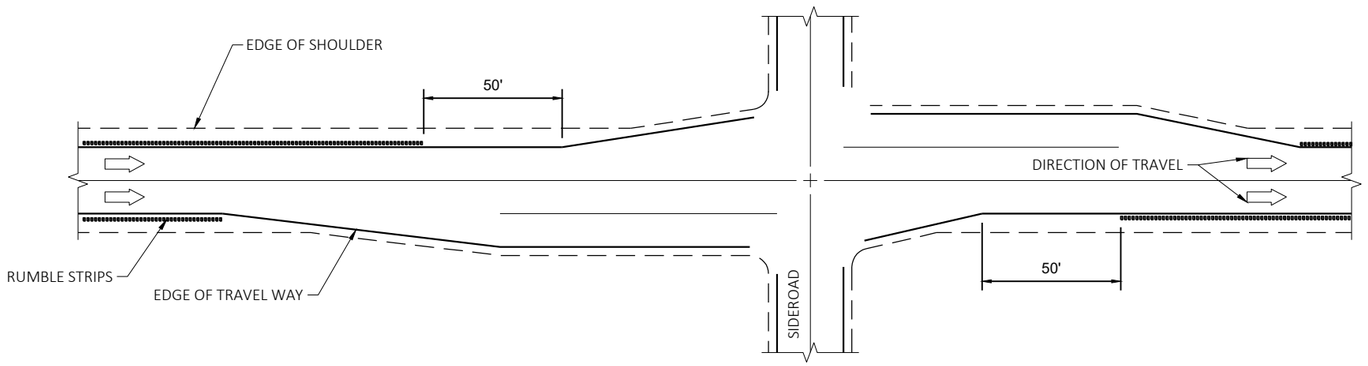
DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD

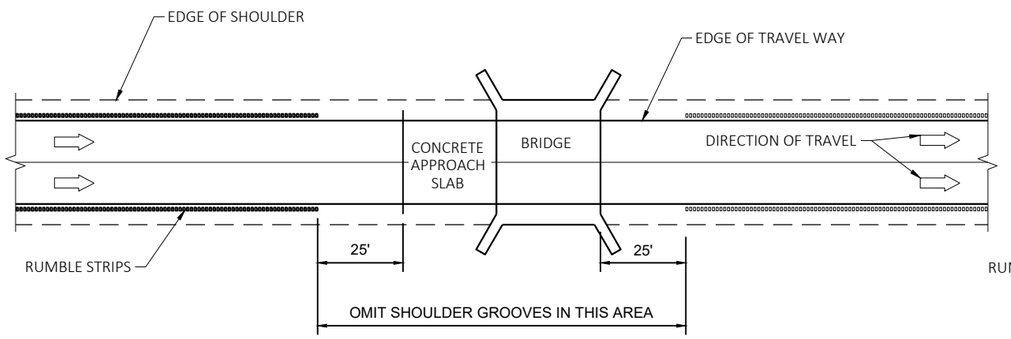
STA 975+63 TO STA 980+50 EB RT
STA 1102+25 TO STA 1114+76 EB RT

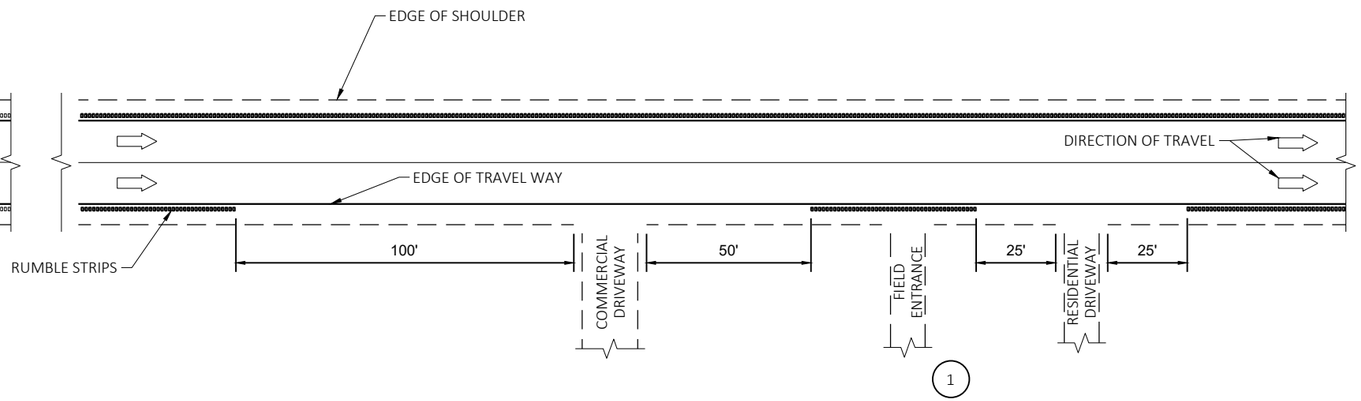
PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 13	E

2







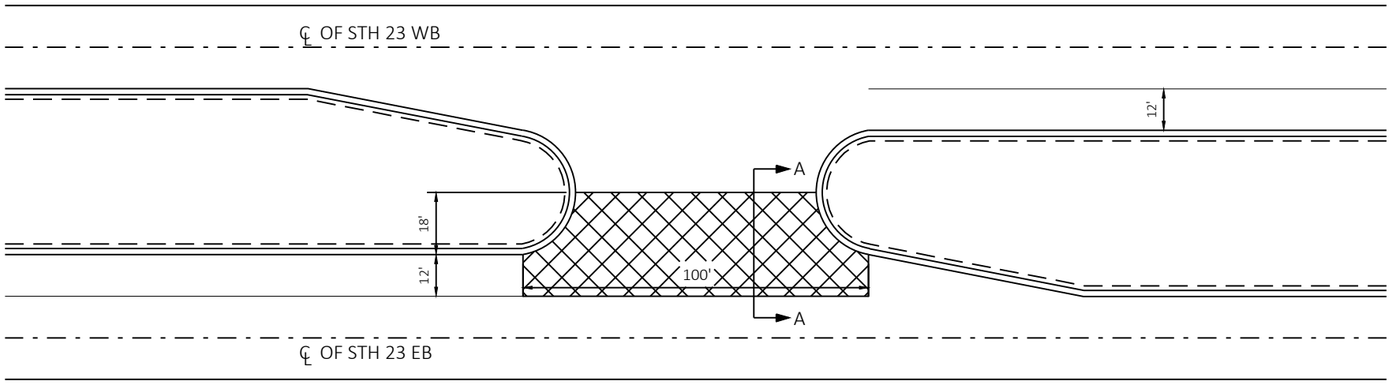


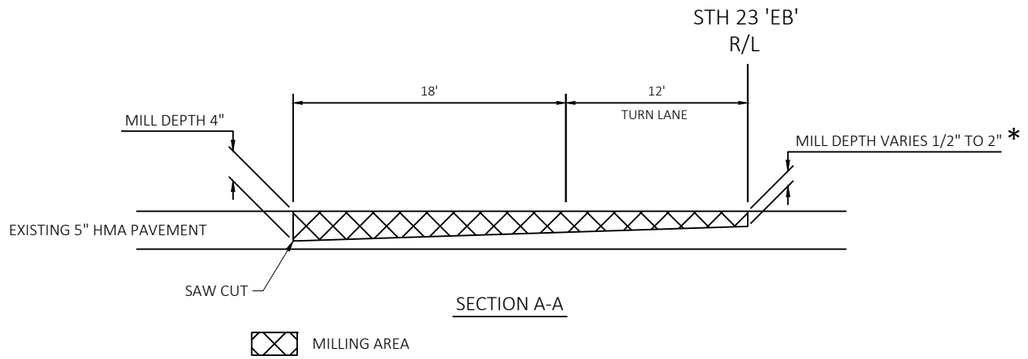
RUMBLE STRIP AT CROSSINGS, INTERSECTIONS, BRIDGES, AND DRIVEWAYS

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

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 14	E

2





SECTION A-A

MILLING AREA

MILLING DETAILS AT MEDIAN CROSSOVERS FOR STH 23

* SEE STATION DESIGNATION BELOW

STA 620+50 (1/2" MILL DEPTH)
STA 786+65 (2" MILL DEPTH)
STA 840+59 (2" MILL DEPTH)
STA 933+00 (2" MILL DEPTH)
STA 1019+50 (2" MILL DEPTH)

2

2

N

800'WB' 801'WB' 802'WB' 803'WB' 804'WB' 805'WB' 806'WB'

STH 23

A D D

804'EB'+26.4
0.00'

800'EB' 801'EB' 802'EB' 803'EB' 804'EB' 805'EB' 806'EB'

B C B

CTH U

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

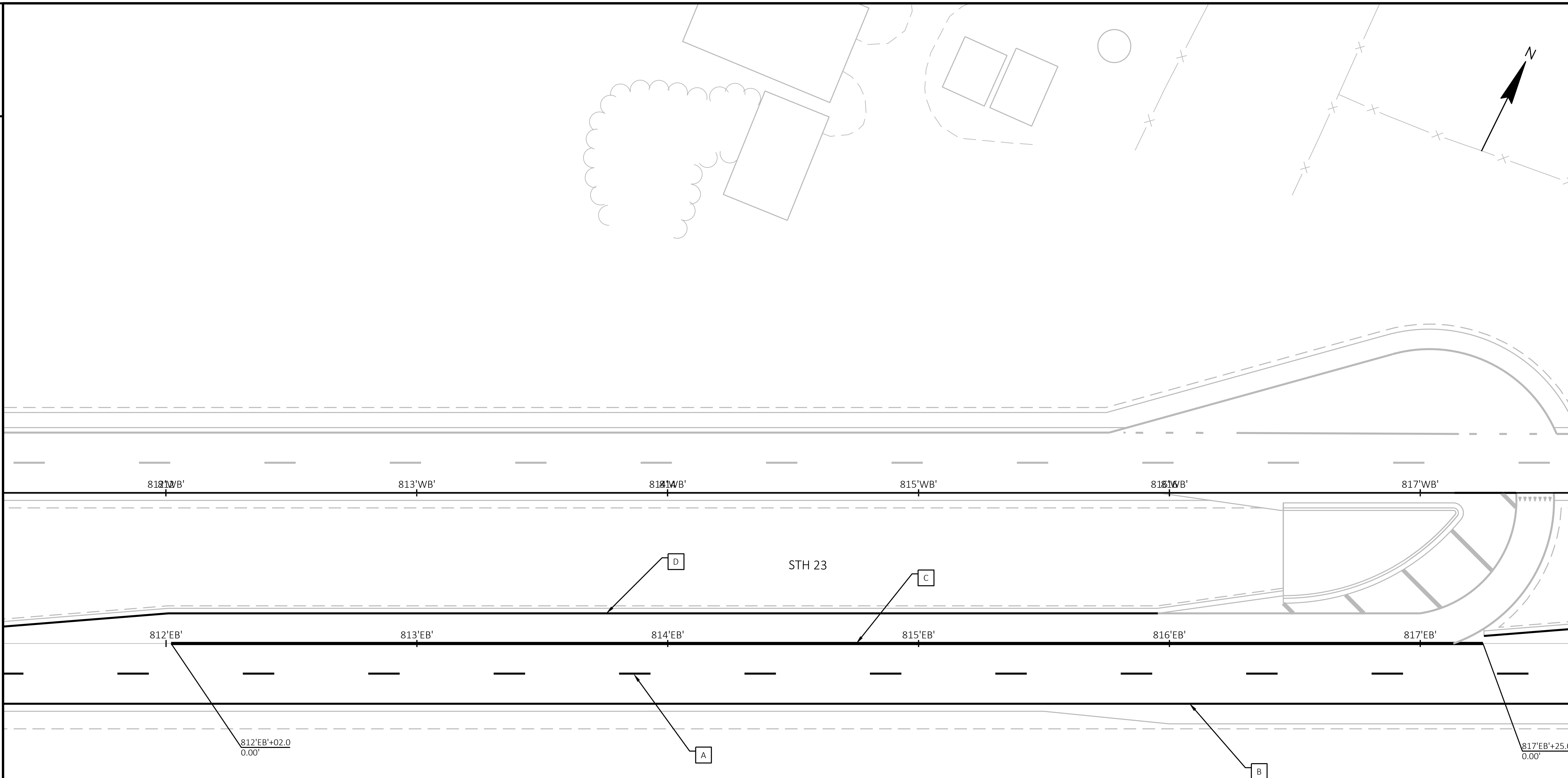
PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH U	SHEET 16	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024504-pm

PLOT DATE : 9/13/2021 1:06 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2



LEGEND

A	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
D	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
E	MARKING CHEVRON EPOXY 24-INCH (WHITE)
F	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH U - R CUT	SHEET 17	E

2

2

N

859'WB'

860'WB'

861'WB'

862'WB'

863'WB'

864'WB'

D

C

860'EB'+50.6
0.00' LT

859'EB'

860'EB'

861'EB'

862'EB'

863'EB'

864'EB'

STH 23

D

860'EB'+42.5
24.00' RT

B

A

B

SPRING VALLEY DR

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - SPRING VALLEY ROAD	SHEET 18	E

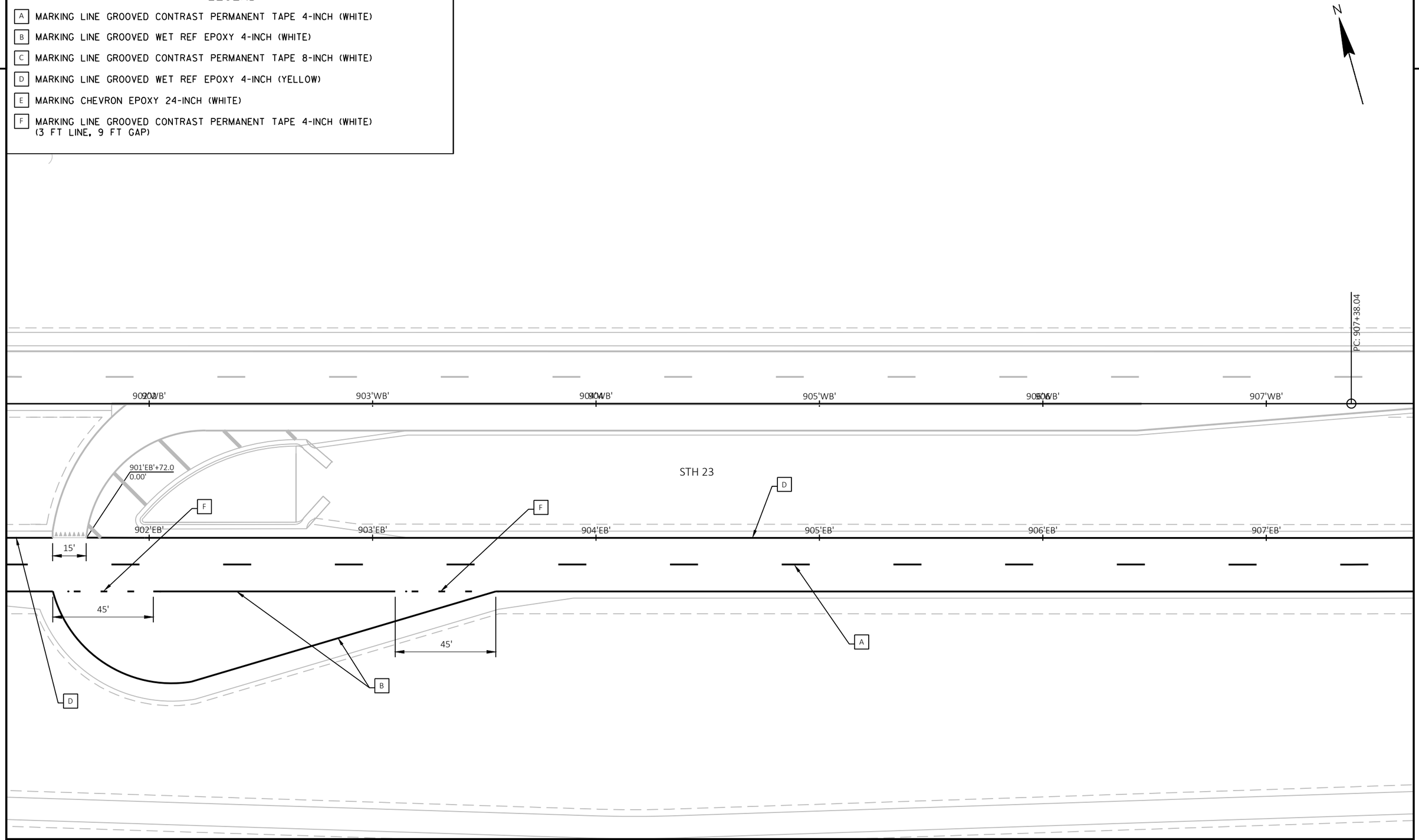
FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024506-pm

PLOT DATE : 9/13/2021 1:07 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)



PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH T NORTH - R CUT	SHEET 19	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024508-pm

PLOT DATE : 9/13/2021 1:07 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

CTH T NORTH

N

910'WB'
911'WB'
912'WB'
913'WB'
914'WB'
915'WB'
916'WB'

STH 23

910'EB'+21.4
0.00'

914'EB'+37.1
0.00'

910'EB'
911'EB'
912'EB'
913'EB'
914'EB'
915'EB'
916'EB'

25' TYP

A
B
C
D
E

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH T NORTH	SHEET 20	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024509-pm

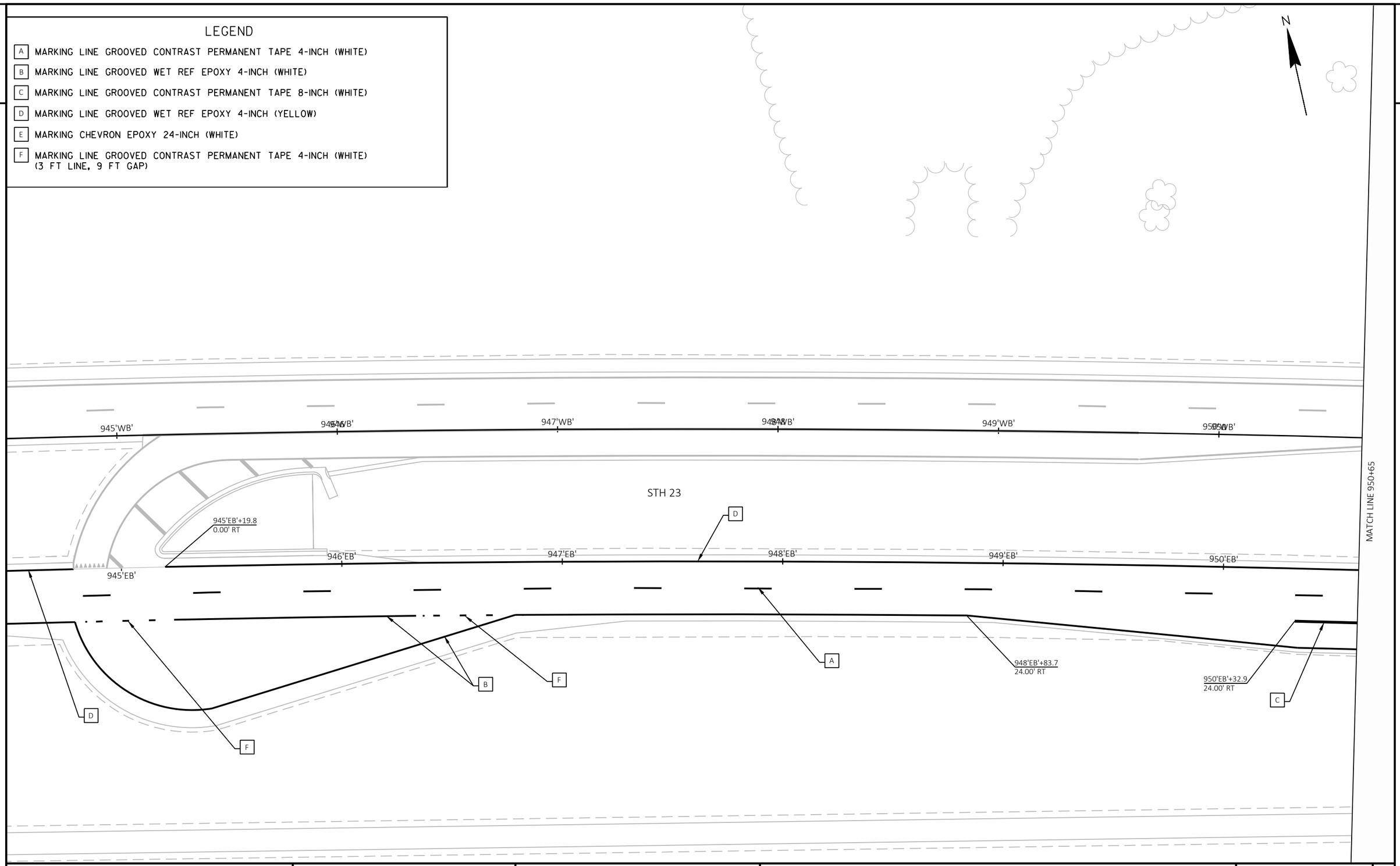
PLOT DATE : 9/13/2021 1:07 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)



2

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING -SUGARBAUSH ROAD - R CUT	SHEET 21	E

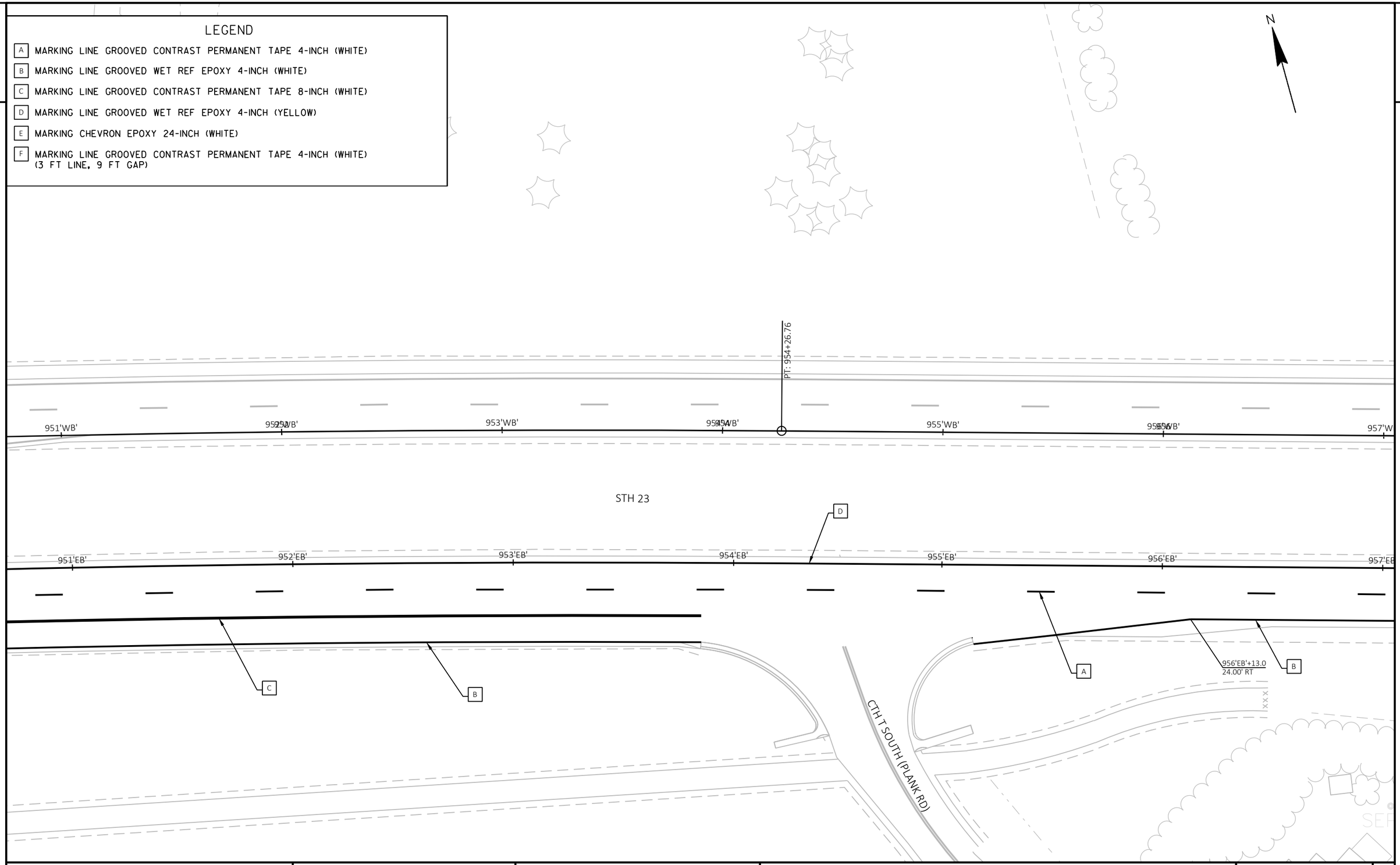
FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024510-pm

PLOT DATE : 9/13/2021 1:08 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)



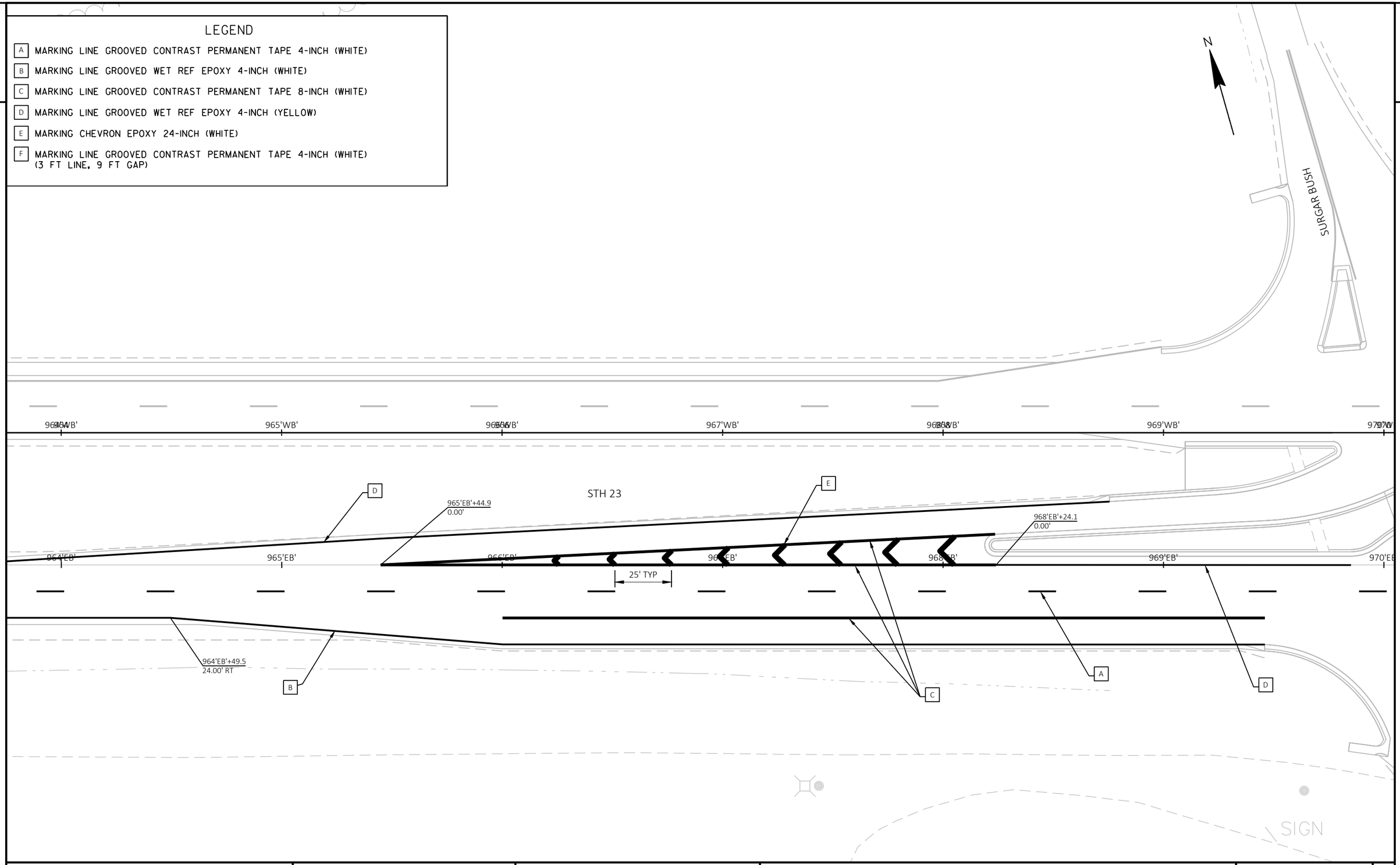
PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH T SOUTH (PLANK ROAD)	SHEET 22	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024511-pm
PLOT DATE : 9/13/2021 1:08 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)



PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - SUGARBUSH ROAD	SHEET 23	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024512-pm

PLOT DATE : 9/13/2021 1:08 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

CTH A

982'WB'

983'WB'

985'WB'

987'WB'

STH 23

982'EB'+07.5
0.00'

25' TYP

985'EB'+01.5
0.00'

982'EB'

985'EB'

986'EB'

987'EB'

D

E

C

B

A

D

CTH A

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH A	SHEET 24	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024513-pm

PLOT DATE : 9/13/2021 1:09 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

995'WB'
996'WB'
997'WB'
998'WB'
999'WB'
1000'WB'

STH 23

995'EB'
996'EB'
997'EB'
998'EB'
999'EB'
1000'EB'

D
C
D
A
B

999'EB'+91.6
0.00'

RIPRAP

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH A - R CUT	SHEET 25	E

2

2

N

1010'WB' 1011'WB' 1012'WB' 1013'WB' 1014'WB' 1015'WB'

STH 23

1010'EB' 1011'EB' 1012'EB' 1013'EB' 1014'EB' 1015'EB'

D

C

B

A

B

PLANK RD

SIGN

SIGN

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - PLANK ROAD	SHEET 26	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024515-pm

PLOT DATE : 9/13/2021 1:09 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

1054'WB'
1055'WB'
1056'WB'
1057'WB'
1058'WB'
1059'WB'

STH 23

D
C
D

1054'EB'
1055'EB'
1056'EB'
1057'EB'
1058'EB'
1059'EB'

B
A
B

RIDGE RD

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)

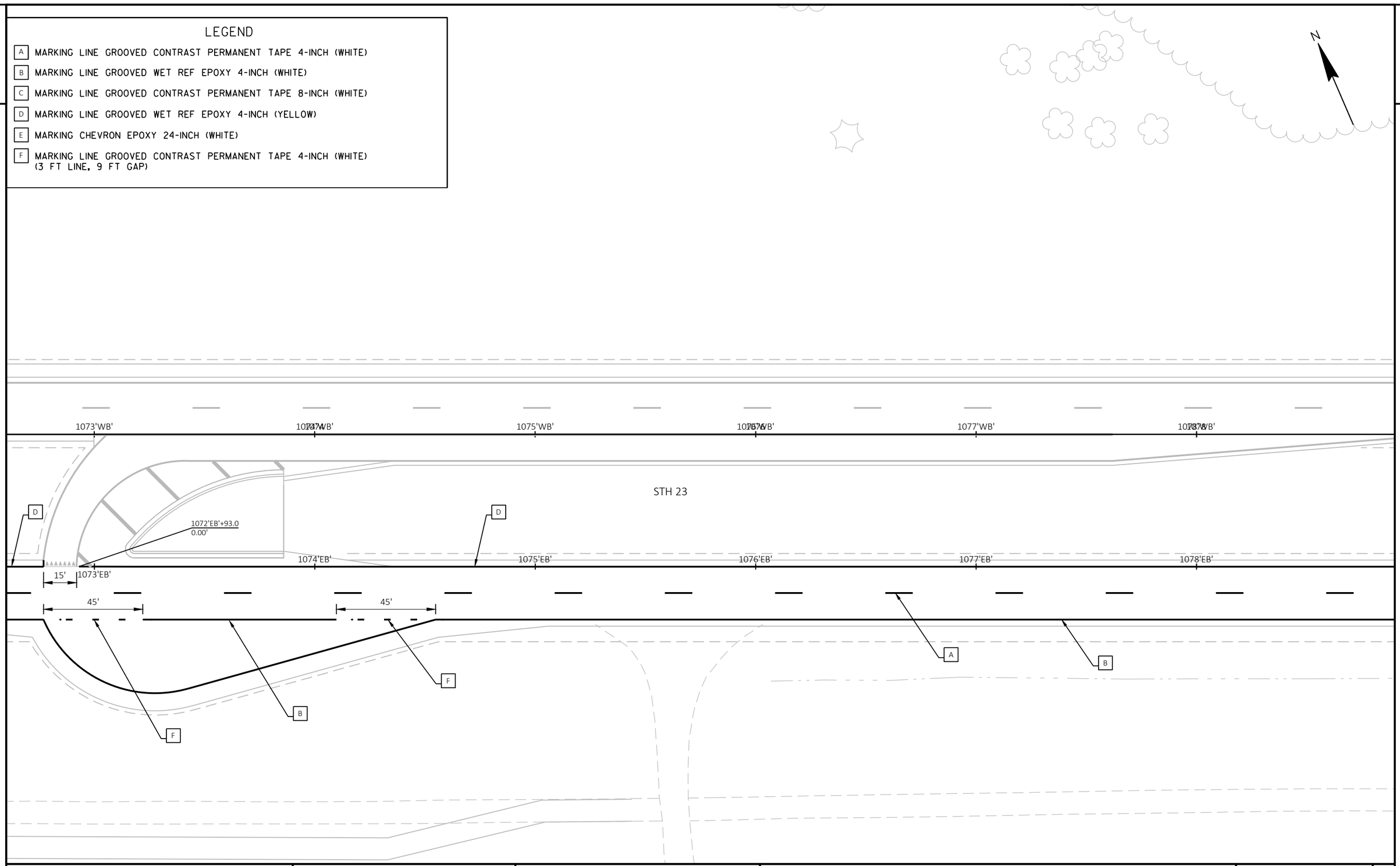
PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - RIDGE ROAD	SHEET 27	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024517-pm
PLOT DATE : 9/13/2021 1:10 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- A MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- D MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
- E MARKING CHEVRON EPOXY 24-INCH (WHITE)
- F MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) (3 FT LINE, 9 FT GAP)



2

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH S - R CUT - WEST	SHEET 28	E

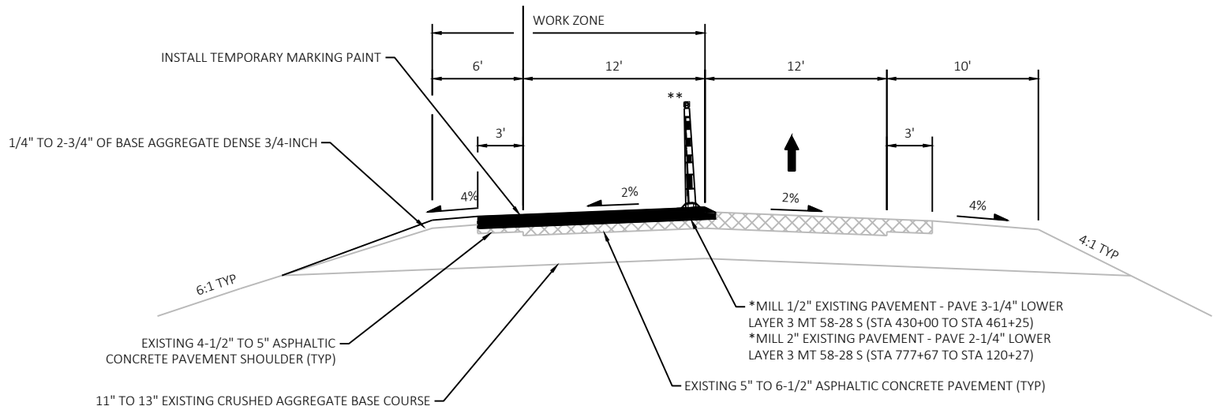
FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024518-pm

PLOT DATE : 9/13/2021 1:10 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

STH 23 EB
CONSTRUCTION R/L



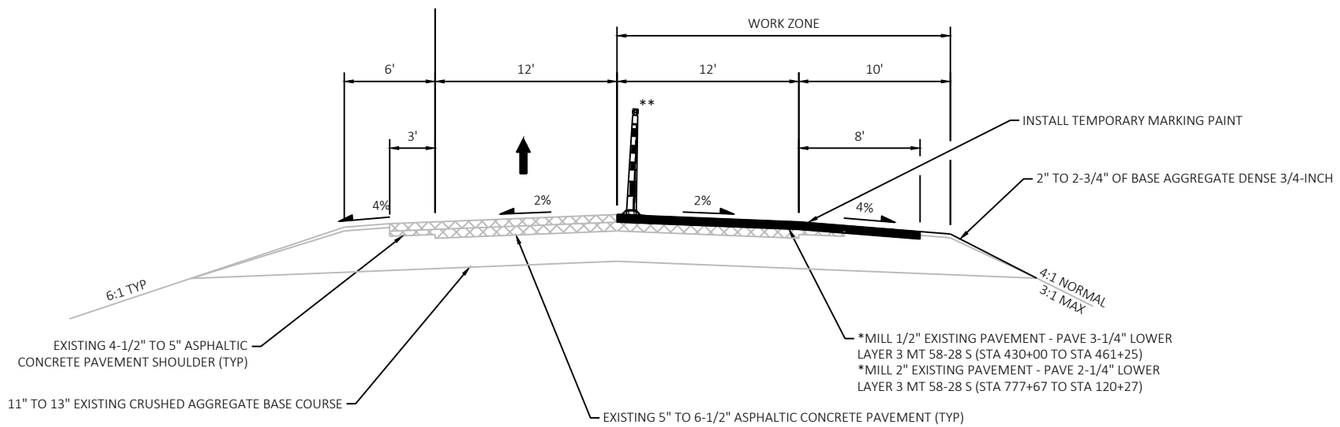
STAGE 1A FOR SECTION STH 23 EB MAINLINE

STA 429+92 TO STA 461+25
STA 781+19 TO STA 1120+27

*SEE PLAN SHEET DETAILS FOR PAVING GAPS

**CONES CAN BE MOVED OVER TO TRAFFIC SIDE OF WORK ZONE DURING WORK OPERATIONS

STH 23 EB
CONSTRUCTION R/L



STAGE 1B FOR SECTION STH 23 EB MAINLINE

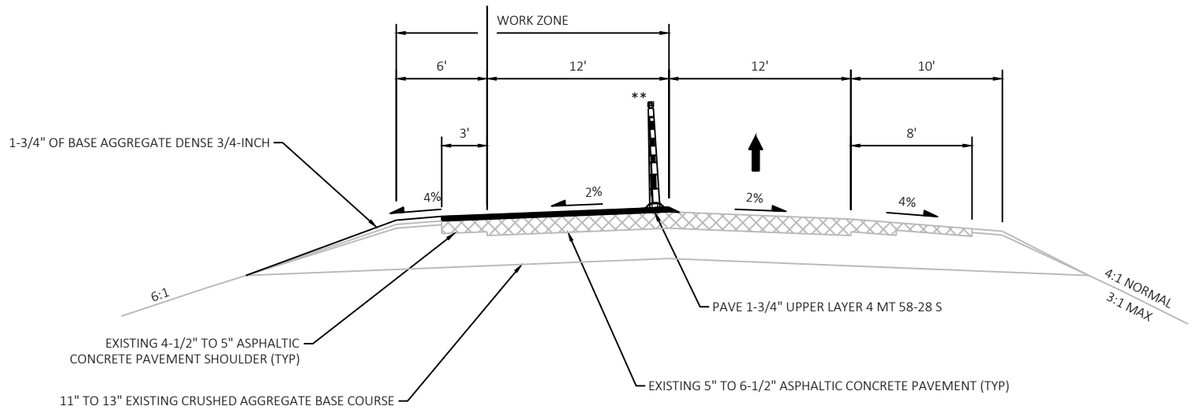
STA 429+92 TO STA 461+25
STA 781+19 TO STA 1120+27

*SEE PLAN SHEET DETAILS FOR PAVING GAPS

**CONES CAN BE MOVED OVER TO TRAFFIC SIDE OF WORK ZONE DURING WORK OPERATIONS

2

STH 23 EB
CONSTRUCTION R/L

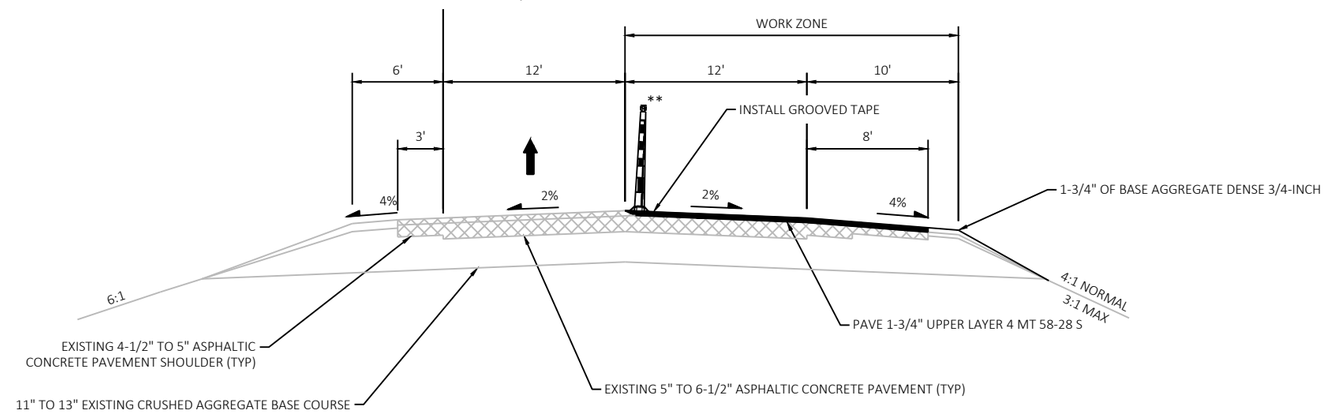


STAGE 1C FOR SECTION STH 23 EB MAINLINE

STA 429+92 TO STA 461+25
STA 781+19 TO STA 1120+27

*SEE PLAN SHEET DETAILS FOR PAVING GAPS
**CONES CAN BE MOVED OVER TO TRAFFIC SIDE
OF WORK ZONE DURING WORK OPERATIONS

STH 23 EB
CONSTRUCTION R/L



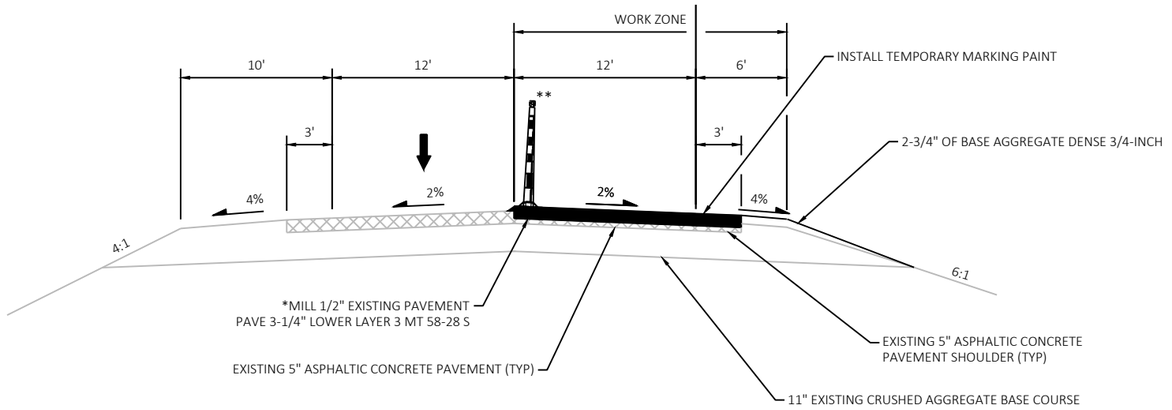
STAGE 1D FOR SECTION STH 23 EB MAINLINE

STA 429+92 TO STA 461+25
STA 781+19 TO STA 1120+27

*SEE PLAN SHEET DETAILS FOR PAVING GAPS
**CONES CAN BE MOVED OVER TO TRAFFIC SIDE
OF WORK ZONE DURING WORK OPERATIONS

2

STH 23 WB
CONSTRUCTION R/L

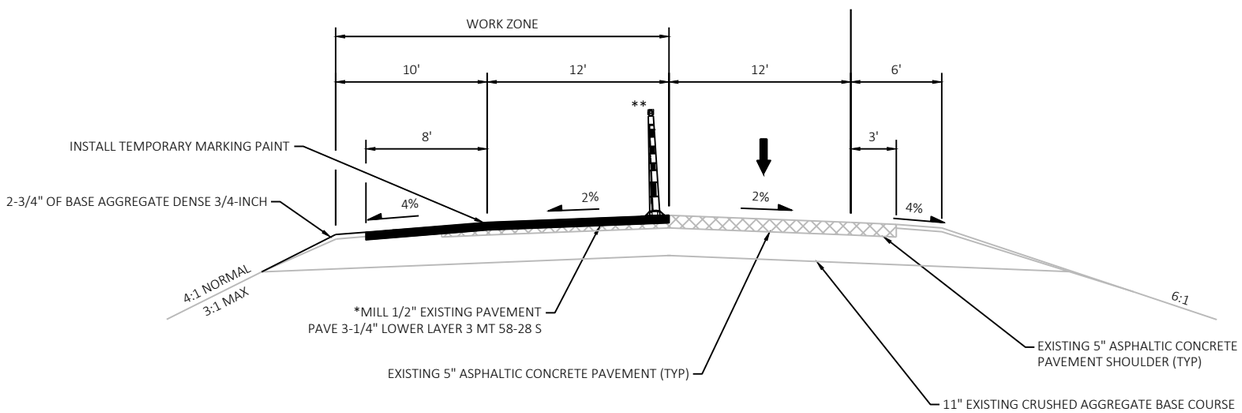


STAGE 2A FOR SECTION STH 23 WB MAINLINE

STA 511+32 TO STA 687+50

*SEE PLAN SHEET DETAILS FOR PAVING GAPS
**CONES CAN BE MOVED OVER TO TRAFFIC SIDE
OF WORK ZONE DURING WORK OPERATIONS

STH 23 WB
CONSTRUCTION R/L



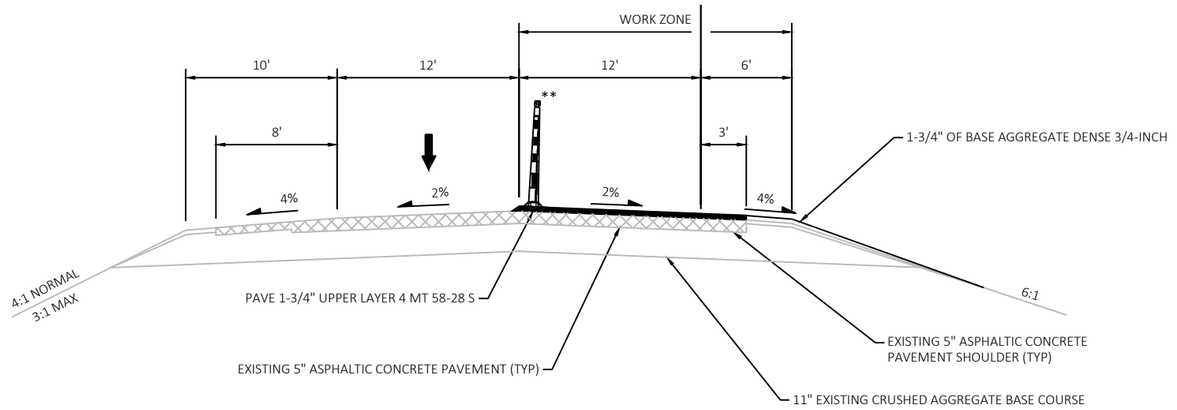
STAGE 2B FOR SECTION STH 23 WB MAINLINE

STA 511+32 TO STA 687+50

*SEE PLAN SHEET DETAILS FOR PAVING GAPS
**CONES CAN BE MOVED OVER TO TRAFFIC SIDE
OF WORK ZONE DURING WORK OPERATIONS

2

STH 23 WB
CONSTRUCTION R/L

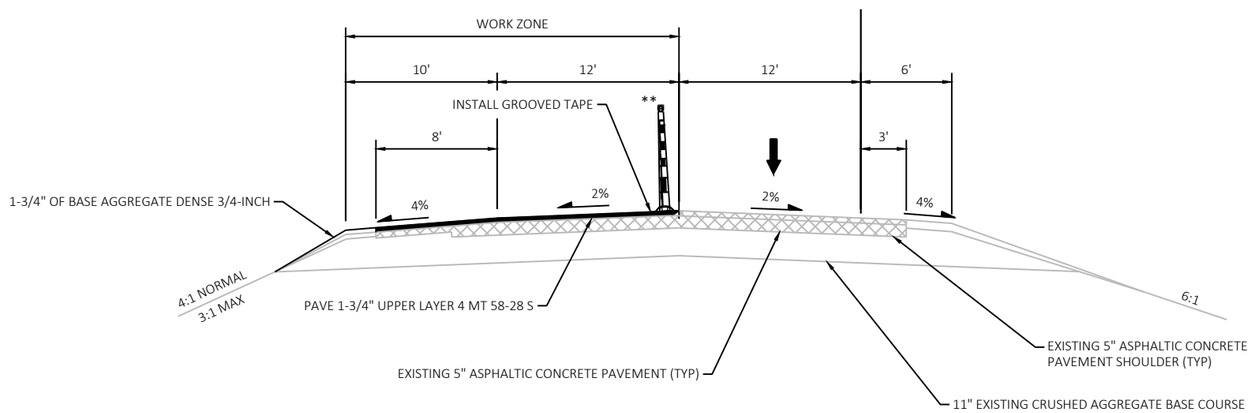


STAGE 2C FOR SECTION STH 23 WB MAINLINE

STA 511+32 TO STA 687+50

*SEE PLAN SHEET DETAILS FOR PAVING GAPS
**CONES CAN BE MOVED OVER TO TRAFFIC SIDE
OF WORK ZONE DURING WORK OPERATIONS

STH 23 WB
CONSTRUCTION R/L



STAGE 2D FOR SECTION STH 23 WB MAINLINE

STA 511+32 TO STA 687+50

*SEE PLAN SHEET DETAILS FOR PAVING GAPS
**CONES CAN BE MOVED OVER TO TRAFFIC SIDE
OF WORK ZONE DURING WORK OPERATIONS

1440-15-78

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	23,237.000	23,237.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	124,260.000	124,260.000
0006	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1440-15-78	LS	1.000	1.000
0008	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	361.000	361.000
0010	213.0100	Finishing Roadway (project) 01. 1440-15-78	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	10,456.000	10,456.000
0014	455.0605	Tack Coat	GAL	18,159.000	18,159.000
0016	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0018	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	3.000	3.000
0020	460.2005	Incentive Density PWL HMA Pavement	DOL	29,490.000	29,490.000
0022	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	48,830.000	48,830.000
0024	460.2010	Incentive Air Voids HMA Pavement	DOL	40,740.000	40,740.000
0026	460.6223	HMA Pavement 3 MT 58-28 S	TON	25,364.000	25,364.000
0028	460.6224	HMA Pavement 4 MT 58-28 S	TON	16,113.000	16,113.000
0030	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0032	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	75.000	75.000
0034	465.0400	Asphaltic Shoulder Rumble Strips	LF	65,658.000	65,658.000
0036	614.0400	Adjusting Steel Plate Beam Guard	LF	487.000	487.000
0038	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1440-15-78	EACH	1.000	1.000
0040	619.1000	Mobilization	EACH	1.000	1.000
0042	624.0100	Water	MGAL	105.000	105.000
0044	642.5001	Field Office Type B	EACH	1.000	1.000
0046	643.0300	Traffic Control Drums	DAY	46,752.000	46,752.000
0048	643.0420	Traffic Control Barricades Type III	DAY	6,730.000	6,730.000
0050	643.0705	Traffic Control Warning Lights Type A	DAY	12,546.000	12,546.000
0052	643.0715	Traffic Control Warning Lights Type C	DAY	5,780.000	5,780.000
0054	643.0800	Traffic Control Arrow Boards	DAY	524.000	524.000
0056	643.0900	Traffic Control Signs	DAY	13,194.000	13,194.000
0058	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0060	643.1070	Traffic Control Cones 42-Inch	DAY	55,072.000	55,072.000
0062	643.5000	Traffic Control	EACH	1.000	1.000
0064	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	80,694.000	80,694.000
0066	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	10,654.000	10,654.000
0068	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	5,983.000	5,983.000
0070	646.7220	Marking Chevron Epoxy 24-Inch	LF	291.000	291.000
0072	649.0105	Temporary Marking Line Paint 4-Inch	LF	81,874.000	81,874.000
0074	649.0155	Temporary Marking Line Removable Contrast Tape 4-Inch	LF	5,260.000	5,260.000
0076	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	100.000	100.000
0078	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	2,580.000	2,580.000
0080	650.8000	Construction Staking Resurfacing Reference	LF	40,937.000	40,937.000
0082	650.9910	Construction Staking Supplemental Control (project) 01. 1440-15-78	LS	1.000	1.000
0084	690.0150	Sawing Asphalt	LF	334.000	334.000
0086	740.0440	Incentive IRI Ride	DOL	55,695.000	55,695.000
0088	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0090	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,100.000	2,100.000

SINGLE UNIT BID ITEM SUMMARY

LOCATION	213.0100.01 FINISHING ROADWAY (PROJECT) 1440-15-78 EACH	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 1440-15-78 EACH	619.1000 MOBILIZATION EACH	642.5001 FIELD OFFICE TYPE B EACH	643.5000 TRAFFIC CONTROL EACH	211.0100.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 1440-15-78 LS
STH 23	1	1	1	1	1	1
PROJECT TOTAL 0010	**1**	**1**	**1**	**1**	**1**	**1**

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BUTT JOINTS SUMMARY

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
429+92	-	431+92	STH 23 EB MAINLINE	667
440+29	-	442+29	STH 23 EB MAINLINE	667
450+62	-	451+62	STH 23 EB MAINLINE	333
460+25	-	461+25	STH 23 EB MAINLINE	333
511+32	-	512+32	STH 23 WB MAINLINE	333
531+00	-	533+00	STH 23 WB MAINLINE	778
540+78	-	542+78	STH 23 WB MAINLINE	778
567+70	-	569+70	STH 23 WB MAINLINE	667
587+91	-	589+91	STH 23 WB MAINLINE	778
602+00	-	604+00	STH 23 WB MAINLINE	667
611+50	-	613+50	STH 23 WB MAINLINE	667
626+06	-	628+06	STH 23 WB MAINLINE	667
640+00	-	642+00	STH 23 WB MAINLINE	667
657+23	-	659+23	STH 23 WB MAINLINE	667
669+79	-	671+79	STH 23 WB MAINLINE	667
685+50	-	687+50	STH 23 WB MAINLINE	667
781+19	-	781+69	STH 23 EB MAINLINE	172
802+11	-	803+11	STH 23 EB MAINLINE	456
808+77	-	809+77	STH 23 EB MAINLINE	333
815+00	-	816+00	STH 23 EB MAINLINE	456
823+00	-	824+00	STH 23 EB MAINLINE	333
857+64	-	858+64	STH 23 EB MAINLINE	578
863+20	-	864+20	STH 23 EB MAINLINE	333
881+00	-	882+00	STH 23 EB MAINLINE	333
		SUBTOTAL 0010		12997

BUTT JOINTS SUMMARY CONTINUED

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
891+48	-	892+48	STH 23 EB MAINLINE	333
900+50	-	901+50	STH 23 EB MAINLINE	333
903+55	-	904+55	STH 23 EB MAINLINE	333
913+00	-	914+00	STH 23 EB MAINLINE	574
918+30	-	919+30	STH 23 EB MAINLINE	389
943+71	-	944+71	STH 23 EB MAINLINE	333
946+79	-	947+79	STH 23 EB MAINLINE	356
950+50	-	951+50	STH 23 EB MAINLINE	456
956+00	-	957+00	STH 23 EB MAINLINE	356
966+50	-	967+50	STH 23 EB MAINLINE	666
973+00	-	974+00	STH 23 EB MAINLINE	333
983+50	-	984+50	STH 23 EB MAINLINE	630
990+45	-	991+45	STH 23 EB MAINLINE	333
998+00	-	999+00	STH 23 EB MAINLINE	333
1001+00	-	1002+00	STH 23 EB MAINLINE	333
1011+00	-	1012+00	STH 23 EB MAINLINE	456
1015+39	-	1016+39	STH 23 EB MAINLINE	456
1023+77	-	1024+77	STH 23 EB MAINLINE	428
1039+33	-	1040+33	STH 23 EB MAINLINE	194
1055+61	-	1056+61	STH 23 EB MAINLINE	567
1060+42	-	1061+42	STH 23 EB MAINLINE	389
1071+72	-	1072+72	STH 23 EB MAINLINE	333
1074+57	-	1075+57	STH 23 EB MAINLINE	344
1080+60	-	1081+60	STH 23 EB MAINLINE	482
1102+54	-	1103+54	STH 23 EB MAINLINE	333
1119+77	-	1120+27	STH 23 EB MAINLINE	167
			SUBTOTAL 0010	10240
			PROJECT TOTAL 0010	**23,237**

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REMOVING ASPHALTIC SURFACE MILLING

204.0120

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	SY	REMARKS
431+92	-	440+29	STH 23 EB	2790	MAINLINE & SHOULDERS
451+62	-	460+25	STH 23 EB	2877	MAINLINE & SHOULDERS
512+32	-	531+00	STH 23 WB	6227	MAINLINE & SHOULDERS
542+78	-	567+70	STH 23 WB	8307	MAINLINE & SHOULDERS
589+91	-	602+00	STH 23 WB	4030	MAINLINE & SHOULDERS
613+50	-	619+32	STH 23 WB	1940	MAINLINE & SHOULDERS
619+32	-	620+11	STH 23 WB	303	MAINLINE, SHOULDERS,PARTIAL MED. CROSSING
620+11	-	624+59	STH 23 WB	2041	MAINLINE, SHOULDERS, & LEFT TURN LANE
624+59	-	626+06	STH 23 WB	672	MAINLINE, SHOULDERS, & LT TURN TAPER
642+00	-	657+23	STH 23 WB	5077	MAINLINE & SHOULDERS
671+79	-	685+50	STH 23 WB	4570	MAINLINE & SHOULDERS
781+69	-	782+69	STH 23 EB	394	MAINLINE, SHOULDERS, & LT TURN TAPER
782+69	-	787+16	STH 23 EB	2036	MAINLINE, SHOULDERS, & LEFT TURN LANE
787+16	-	788+16	STH 23 EB	383	MAINLINE, SHOULDERS, & MEDIAN TAPER
788+16	-	797+97	STH 23 EB	3270	MAINLINE & SHOULDERS
797+97	-	799+59	STH 23 EB	639	MAINLINE, SHOULDERS, & RT TURN TAPER
799+59	-	802+11	STH 23 EB	1148	MAINLINE, SHOULDERS, & RIGHT TURN LANE
809+77	-	810+51	STH 23 EB	247	MAINLINE & SHOULDERS
810+51	-	812+01	STH 23 EB	592	MAINLINE, SHOULDERS, & LT TURN TAPER
812+01	-	815+00	STH 23 EB	1362	MAINLINE, SHOULDERS, & LEFT TURN LANE
824+00	-	834+95	STH 23 EB	3650	MAINLINE & SHOULDERS
834+95	-	836+45	STH 23 EB	592	MAINLINE, SHOULDERS, & LT TURN TAPER
836+45	-	841+06	STH 23 EB	2100	MAINLINE, SHOULDERS, & LEFT TURN LANE
841+06	-	842+06	STH 23 EB	383	MAINLINE, SHOULDERS, & MEDIAN TAPER
842+06	-	855+44	STH 23 EB	4460	MAINLINE & SHOULDERS
855+44	-	857+01	STH 23 EB	715	MAINLINE, SHOULDERS, & RT/LT TAPERS
857+01	-	857+64	STH 23 EB	364	MAINLINE, SHOULDERS, & TURN LANES
858+64	-	863+20	STH 23 EB	1216	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
			SUBTOTAL 0010	62,385	

REMOVING ASPHALTIC SURFACE MILLING CONTINUED

204.0120

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	SY	REMARKS
864+20	-	881+00	STH 23 EB	5600	MAINLINE & SHOULDERS
892+48	-	900+50	STH 23 EB	2673	MAINLINE & SHOULDERS
901+50	-	903+55	STH 23 EB	547	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
904+55	-	908+71	STH 23 EB	1387	MAINLINE & SHOULDERS
908+71	-	910+21	STH 23 EB	592	MAINLINE, SHOULDERS, & LT TURN TAPER
910+21	-	913+00	STH 23 EB	1271	MAINLINE, SHOULDERS, & LEFT TURN LANE
914+00	-	918+30	STH 23 EB	1147	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
919+30	-	927+45	STH 23 EB	2740	MAINLINE & SHOULDERS
927+45	-	928+95	STH 23 EB	592	MAINLINE, SHOULDERS, & LT TURN TAPER
928+95	-	932+46	STH 23 EB	1599	MAINLINE, SHOULDERS, & LEFT TURN LANE
932+46	-	933+45	STH 23 EB	550	MAINLINE, SHOULDERS, MEDIAN OPENING
933+45	-	934+43	STH 23 EB	376	MAINLINE, SHOULDERS, & TAPER
934+43	-	943+71	STH 23 EB	3093	MAINLINE & SHOULDERS
944+71	-	946+79	STH 23 EB	555	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
947+79	-	948+84	STH 23 EB	350	MAINLINE & SHOULDERS
948+84	-	950+50	STH 23 EB	655	MAINLINE, SHOULDERS, & RT TURN TAPER
951+50	-	956+00	STH23 EB	1200	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
957+00	-	963+47	STH 23 EB	2157	MAINLINE & SHOULDERS
963+47	-	964+50	STH 23 EB	377	MAINLINE, SHOULDERS, & LT TURN TAPER
964+50	-	966+00	STH 23 EB	755	MAINLINE, SHOULDERS, & RT/LT TURN TAPERS
966+00	-	966+50	STH 23 EB	311	MAINLINE, SHOULDERS,RT/LT TURN LANE,
974+00	-	974+22	STH 23 EB	73	MAINLINE & SHOULDERS
974+22	-	975+63	STH 23 EB	541	MAINLINE, SHOULDERS, & BEAMGUARD TAPER
975+63	-	980+57	STH 23 EB	2141	MAINLINE & SHOULDERS THRU BEAMGUARD
980+57	-	982+43	STH 23 EB	955	MAINLINE, SHOULDERS, & RT/LT TURN TAPERS
982+43	-	983+50	STH 23 EB	642	MAINLINE, SHOULDERS, RIGHT TURN LANE, & TAPER
991+45	-	993+85	STH 23 EB	800	MAINLINE & SHOULDERS
993+85	-	995+35	STH 23 EB	592	MAINLINE, SHOULDERS, & LT TURN TAPER
995+35	-	998+00	STH 23 EB	1207	MAINLINE, SHOULDERS, & LEFT TURN LANE
999+00	-	1001+00	STH 23 EB	533	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
1002+00	-	1008+32	STH 23 EB	2107	MAINLINE & SHOULDERS
			SUBTOTAL 0010	38,118	

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REMOVING ASPHALTIC SURFACE MILLING CONTINUED

STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
1008+32	-	1009+82	STH 23 EB	592	MAINLINE, SHOULDERS, & RT TURN TAPER
1009+82	-	1011+00	STH 23 EB	538	MAINLINE, SHOULDERS, & RIGHT TURN LANE
1012+00	-	1015+39	STH 23 EB	904	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
1016+39	-	1019+90	STH 23 EB	1599	MAINLINE, SHLDRS, & LT TURN LANE THRU MEDIAN OPENING
1019+90	-	1020+90	STH 23 EB	483	MAINLINE, SHOULDERS, & MEDIAN TAPER
1020+90	-	1023+77	STH 23 EB	957	MAINLINE & SHOULDERS
1040+33	-	1052+58	STH 23 EB	4764	MAINLINE & SHOULDERS
1052+58	-	1054+31	STH 23 EB	869	MAINLINE, SHOULDERS, & RT/LT TURN TAPERS
1054+31	-	1055+61	STH 23 EB	751	MAINLINE, SHOULDERS, & TURN LANES
1061+42	-	1071+72	STH 23 EB	3719	MAINLINE & SHOULDERS
1072+72	-	1074+57	STH 23 EB	493	MAINLINE - 1-3/4 INCH MILL OF TRAVEL LANES ONLY
1075+57	-	1079+81	STH 23 EB	1413	MAINLINE & SHOULDERS
1079+81	-	1080+60	STH 23 EB	363	MAINLINE, SHOULDERS, & RT/LT TURN TAPERS
1103+54	-	1119+77	STH 23 EB	6,312	MAINLINE & SHOULDERS
			SUBTOTAL 0010	23,757	
			PROJECT TOTAL 0010	**124,260**	

DRIVEWAY BASE AGGREGATE

STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL
440'EB'+60	STH 23 EB, RT	5	0.1
454'EB'+00	STH 23 EB, RT	18	0.2
458'EB'+10	STH 23 EB, RT	15	0.1
459'EB'+50	STH 23 EB, RT	12	0.1
521'WB'+10	STH 23 WB, LT	33	0.3
542'WB'+70	STH 23 WB, LT	11	0.1
544'WB'+00	STH 23 WB, LT	11	0.1
557'WB'+90	STH 23 WB, LT	8	0.1
590'WB'+40	STH 23 WB, LT	11	0.1
618'WB'+10	STH 23 WB, LT	14	0.1
620'WB'+50	STH 23 WB, LT	27	0.3
623'WB'+50	STH 23 WB, LT	21	0.2
643'WB'+90	STH 23 WB, LT	9	0.1
782'EB'+50	STH 23 EB, RT	7	0.1
786'EB'+50	STH 23 EB, RT	4	0.0
824'EB'+50	STH 23 EB, RT	7	0.1
841'EB'+25	STH 23 EB, RT	6	0.1
843'EB'+50	STH 23 EB, RT	6	0.1
923'EB'+80	STH 23 EB, RT	8	0.1
998'EB'+00	STH 23 EB, RT	10	0.1
1018'EB'+10	STH 23 EB, RT	10	0.1
1048'EB'+80	STH 23 EB, RT	9	0.1
1075'EB'+60	STH 23 EB, RT	9	0.1
	SUBTOTAL 0010	271	3

BASE AGGREGATE SUMMARY

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
429+92	-	442+29	STH 23 EB	--	265	2.7	INSIDE SHOULDER
429+92	-	442+29	STH 23 EB	12	199	2.0	OUTSIDE SHOULDER
450+62	-	461+25	STH 23 EB	--	228	2.3	INSIDE SHOULDER
450+62	-	461+25	STH 23 EB	11	171	1.7	OUTSIDE SHOULDER
511+32	-	533+00	STH 23 WB	--	464	4.6	INSIDE SHOULDER
511+32	-	533+00	STH 23 WB	22	348	3.5	OUTSIDE SHOULDER
540+78	-	569+70	STH 23 WB	--	619	6.2	INSIDE SHOULDER
540+78	-	569+70	STH 23 WB	29	465	4.7	OUTSIDE SHOULDER
587+91	-	604+00	STH 23 WB	--	344	3.4	INSIDE SHOULDER
587+91	-	604+00	STH 23 WB	16	259	2.6	OUTSIDE SHOULDER
611+50	-	619+32	STH 23 WB	--	165	1.7	INSIDE SHOULDER
611+50	-	628+06	STH 23 WB	17	266	2.7	OUTSIDE SHOULDER
619+32	-	620+11	STH 23 WB	--	17	0.2	INSIDE TAPER SHOULDER
620+11	-	624+59	STH 23 WB	--	94	0.9	INSIDE TURN LANE SHOULDER
624+59	-	626+09	STH 23 WB	--	31	0.3	INSIDE TAPER SHOULDER
626+09	-	628+06	STH 23 WB	--	42	0.4	INSIDE SHOULDER
640+00	-	659+23	STH 23 WB	--	412	4.1	INSIDE SHOULDER
640+00	-	659+23	STH 23 WB	19	309	3.1	OUTSIDE SHOULDER
669+79	-	687+50	STH 23 WB	--	379	3.8	INSIDE SHOULDER
669+79	-	687+50	STH 23 WB	18	285	2.9	OUTSIDE SHOULDER
781+19	-	798+09	STH 23 EB	17	179	1.8	OUTSIDE SHOULDER, REMOVE 2" EXCESS
781+19	-	782+69	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
782+69	-	787+16	STH 23 EB	--	28	0.3	INSIDE TURN LANE SHOULDER
787+16	-	788+16	STH 23 EB	--	6	0.1	INSIDE TAPER SHOULDER
788+16	-	803+11	STH 23 EB	--	162	1.6	INSIDE SHOULDER
		SUBTOTAL 0010		160	5747	57.5	

BASE AGGREGATE SUMMARY CONTINUED

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
798+09	-	799+59	STH 23 EB	1	12	0.1	OUTSIDE TAPER SHOULDER
799+59	-	803+11	STH 23 EB	--	29	0.3	OUTSIDE TURN LN SHOULDER
808+77	-	810+51	STH 23 EB	--	19	0.2	INSIDE SHOULDER
808+77	-	816+00	STH 23 EB	7	77	0.8	OUTSIDE SHOULDER, REMOVE 2" EXCESS
810+51	-	812+01	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
812+01	-	816+00	STH 23 EB	--	25	0.3	INSIDE TURN LANE SHOULDER
823+00	-	834+95	STH 23 EB	--	129	1.3	INSIDE SHOULDER
823+00	-	855+44	STH 23 EB	32	343	3.4	OUTSIDE SHOULDER, REMOVE 2" EXCESS
834+95	-	836+45	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
836+45	-	841+06	STH 23 EB	--	29	0.3	INSIDE TURN LANE SHOULDER
841+06	-	842+06	STH 23 EB	--	6	0.1	INSIDE TAPER SHOULDER
842+06	-	855+44	STH 23 EB	--	145	1.5	INSIDE SHOULDER
855+44	-	857+01	STH 23 EB	1	13	0.1	OUTSIDE TAPER SHOULDER
855+44	-	857+01	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
857+01	-	858+64	STH 23 EB	--	14	0.1	OUTSIDE TURN LN SHOULDER
857+01	-	858+64	STH 23 EB	--	10	0.1	INSIDE TURN LANE SHOULDER
863+20	-	882+00	STH 23 EB	--	203	2.0	INSIDE SHOULDER
863+20	-	882+00	STH 23 EB	19	199	2.0	OUTSIDE SHOULDER, REMOVE 2" EXCESS
891+48	-	901+50	STH 23 EB	--	108	1.1	INSIDE SHOULDER
891+48	-	901+50	STH 23 EB	10	106	1.1	OUTSIDE SHOULDER, REMOVE 2" EXCESS
903+55	-	908+71	STH 23 EB	--	56	0.6	INSIDE SHOULDER
903+55	-	914+00	STH 23 EB	10	111	1.1	OUTSIDE SHOULDER, REMOVE 2" EXCESS
908+71	-	910+21	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
910+21	-	914+00	STH 23 EB	--	24	0.2	INSIDE TURN LANE SHOULDER
918+30	-	927+45	STH 23 EB	--	99	1.0	INSIDE SHOULDER
918+30	-	944+71	STH 23 EB	26	280	2.8	OUTSIDE SHOULDER, REMOVE 2" EXCESS
927+45	-	928+95	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
928+58	-	933+45	STH 23 EB	--	31	0.3	INSIDE TURN LANE SHOULDER
933+45	-	934+43	STH 23 EB	--	6	0.1	INSIDE TAPER SHOULDER
934+43	-	944+71	STH 23 EB	--	111	1.1	INSIDE SHOULDER
946+79	-	951+50	STH 23 EB	--	51	0.5	INSIDE SHOULDER
946+79	-	948+84	STH 23 EB	2	22	0.2	OUTSIDE SHOULDER, REMOVE 2" EXCESS
SUBTOTAL 0010				109	2308	23.1	

BASE AGGREGATE SUMMARY CONTINUED

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
948+84	-	950+35	STH 23 EB	1	12	0.1	OUTSIDE TAPER SHLDR, REMOVE 2" EXCESS
950+35	-	951+50	STH 23 EB	--	9	0.1	OUTSIDE TURN LN SHOULDER
956+00	-	963+47	STH 23 EB	--	81	0.8	INSIDE SHOULDER
956+00	-	964+50	STH 23 EB	9	90	0.9	OUTSIDE SHOULDER, REMOVE 2" EXCESS
963+47	-	976+50	STH 23 EB	--	83	0.8	INSIDE TAPER SHOULDER
964+50	-	966+00	STH 23 EB	1	12	0.1	OUTSIDE TAPER SHLDR, REMOVE 2" EXCESS
966+00	-	967+50	STH 23 EB	2	12	0.1	OUTSIDE TURN LN SHOULDER
973+00	-	980+69	STH 23 EB	--	73	0.7	INSIDE SHOULDER
973+00	-	974+22	STH 23 EB	1	13	0.1	OUTSIDE SHOULDER, REMOVE 2" EXCESS
974+22	-	975+63	STH 23 EB	1	12	0.1	OUTSIDE TAPER SHLDR, REMOVE 2" EXCESS
975+63	-	980+57	STH 23 EB	--	41	0.4	OUTSIDE WIDE SHOULDER
980+69	-	984+50	STH 23 EB	--	24	0.2	INSIDE TAPER SHOULDER
980+57	-	982+43	STH 23 EB	--	15	0.2	OUTSIDE TAPER SHOULDER
982+43	-	984+50	STH 23 EB	--	17	0.2	OUTSIDE TURN LN SHOULDER
990+45	-	993+85	STH 23 EB	--	37	0.4	INSIDE SHOULDER
990+45	-	999+00	STH 23 EB	9	92	0.9	OUTSIDE SHOULDER, REMOVE 2" EXCESS
993+85	-	995+35	STH 23 EB	--	10	0.1	INSIDE TAPER SHOULDER
995+35	-	999+00	STH 23 EB	--	23	0.2	INSIDE TURN LANE SHOULDER
1001+00	-	1012+00	STH 23 EB	--	119	1.2	INSIDE SHOULDER
1001+00	-	1008+32	STH 23 EB	7	77	0.8	OUTSIDE SHOULDER, REMOVE 2" EXCESS
1008+32	-	1009+82	STH 23 EB	1	12	0.1	OUTSIDE TAPER SHLDR, REMOVE 2" EXCESS
1009+82	-	1012+00	STH 23 EB	--	18	0.2	OUTSIDE TURN LN SHOULDER
1015+39	-	1019+90	STH 23 EB	--	29	0.3	INSIDE TURN LANE SHOULDER
1015+39	-	1024+77	STH 23 EB	9	99	1.0	OUTSIDE SHOULDER, REMOVE 2" EXCESS
1019+90	-	1020+90	STH 23 EB	--	6	0.1	INSIDE TAPER SHOULDER
1020+90	-	1023+82	STH 23 EB	--	32	0.3	INSIDE SHOULDER
1023+82	-	1024+77	STH 23 EB	--	6	0.1	INSIDE TAPER SHOULDER
1039+33	-	1052+58	STH 23 EB	--	143	1.4	INSIDE SHOULDER
1039+33	-	1052+58	STH 23 EB	13	140	1.4	OUTSIDE SHOULDER, REMOVE 2" EXCESS
1052+58	-	1054+31	STH 23 EB	--	11	0.1	INSIDE TAPER SHOULDER
1052+58	-	1054+31	STH 23 EB	1	14	0.1	OUTSIDE TAPER SHLDR, REMOVE 2" EXCESS
1054+31	-	1055+58	STH 23 EB	--	8	0.1	INSIDE TURN LANE SHOULDER
1054+31	-	1056+61	STH 23 EB	--	19	0.2	OUTSIDE TURN LN SHOULDER
1060+42	-	1072+72	STH 23 EB	--	133	1.3	INSIDE SHOULDER
SUBTOTAL 0010				55	1523	15.2	

BASE AGGREGATE SUMMARY CONTINUED

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
1060+42	-	1072+72	STH 23 EB	12	130	1.3	OUTSIDE SHOULDER, REMOVE 2" EXCESS
1074+57	-	1079+81	STH 23 EB	--	57	0.6	INSIDE SHOULDER
1074+57	-	1080+23	STH 23 EB	6	60	0.6	OUTSIDE SHOULDER, REMOVE 2" EXCESS
1079+81	-	1081+60	STH 23 EB	--	11	0.1	INSIDE TAPER SHOULDER
1080+23	-	1081+60	STH 23 EB	1	11	0.1	OUTSIDE TAPER SHLDR, REMOVE 2" EXCESS
1102+54	-	1120+27	STH 23 EB	--	192	1.9	INSIDE SHOULDER
1102+54	-	1120+27	STH 23 EB	18	146	1.5	OUTSIDE SHOULDER, REMOVE 2" EXCESS
		SUBTOTAL 0010		37	607	6.1	
		PROJECT TOTAL 0010		**361**	**10,456**	**105**	

ASPHALT WEDGE SUMMARY

*460.6223

WEDGING LAYER
3 MT 58-28 S

STATION	TO	STATION	LOCATION	TON	REMARKS
511+32	-	527+22	STH 23 WB	472	SUPERELEVATION CHANGE
907+68	-	916+85	STH 23 EB	272	SUPERELEVATION CHANGE
		SUBTOTAL 0010		744	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

HMA SUMMARY

				455.0605	HMA PAVEMENT 3 MT 58-28 S				HMA PAVEMENT 4 MT 58-28 S				465.0110	465.0120	465.0400	
STATION	TO	STATION	LOCATION	TACK COAT	*460.6223	PWL DENSITY INCENTIVE	PWL AIR VOIDS	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS	460.622	PWL DENSITY INCENTIVE	PWL AIR VOIDS	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS	ASPHALTIC SURFACE PATCHING	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASPHALTIC SHOULDER RUMBLE STRIPS	REMARKS
				GAL	TON	TON**	TON***	LF****	TON	TON**	TON***	LF****	TON	TON	LF	
429+92	-	1120+27	PROJECT										50			
429+92	-	442+29	STH 23 EB	529	924	634	924	2474	471	323	471	2474			2404	MAINLINE AND SHOULDERS
450+62	-	461+25	STH 23 EB	455	794	545	794	2126	405	278	405	2126			1866	MAINLINE AND SHOULDERS
511+32	-	533+00	STH 23 WB	935	1619	1110	1619	4336	826	566	826	4336			4096	MAINLINE AND SHOULDERS
540+78	-	569+70	STH 23 WB	1245	2159	1480	2159	5784	1102	756	1102	5784		30	5471	MAINLINE AND SHOULDERS
587+91	-	604+00	STH 23 WB	696	1201	823	1201	3218	613	420	613	3218			3218	MAINLINE AND SHOULDERS
611+50	-	619+32	STH 23 WB	335	584	400	584	1564	298	204	298	1564			1434	MAINLINE AND SHOULDERS
619+32	-	620+11	STH 23 WB	39	67	41	67	316	34	21	34	316			79	MAINLINE,OUTSIDE SHOULDER AND TAPER TO MED. CROSSING
620+11	-	624+59	STH 23 WB	257	440	421	440	1792	224	214	224	1792		20	208	MAINLINE, SHOULDERS, AND LEFT TURN LANE
624+59	-	626+09	STH 23 WB	81	129	123	129	600	66	63	66	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
626+09	-	628+06	STH 23 WB	85	147	101	147	394	75	51	75	394			294	MAINLINE AND SHOULDERS
640+00	-	659+23	STH 23 WB	823	1436	985	1436	3846	733	503	733	3846			3716	MAINLINE AND SHOULDERS
669+79	-	687+50	STH 23 WB	758	1322	906	1322	3542	675	463	675	3542			3542	MAINLINE AND SHOULDERS
781+19	-	782+69	STH 23 EB	73	92	69	92	600	66	50	66	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
782+69	-	787+16	STH 23 EB	257	311	243	311	1788	224	175	224	1788			447	MAINLINE, SHOULDERS, AND LEFT TURN LANE
787+16	-	788+16	STH 23 EB	48	57	45	57	400	41	32	41	400			100	MAINLINE, SHOULDERS, AND MEDIAN TAPER
788+16	-	797+97	STH 23 EB	420	519	356	519	1962	374	256	374	1962			1962	MAINLINE AND SHOULDERS
797+97	-	799+59	STH 23 EB	75	83	71	83	648	60	51	60	648			324	MAINLINE, SHOULDERS, AND RT TURN TAPER
799+59	-	803+11	STH 23 EB	192	218	191	218	1408	157	138	157	1408			704	MAINLINE, SHOULDERS, AND RIGHT TURN LANE
808+77	-	810+51	STH 23 EB	74	92	63	92	348	66	45	66	348			348	MAINLINE AND SHOULDERS
810+51	-	812+01	STH 23 EB	75	91	68	91	600	66	50	66	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
812+01	-	816+00	STH 23 EB	221	277	217	277	1596	200	157	200	1596			399	MAINLINE, SHOULDERS, AND LEFT TURN LANE
823+00	-	834+95	STH 23 EB	511	632	433	632	2390	455	312	455	2390			2270	MAINLINE AND SHOULDERS
834+95	-	836+45	STH 23 EB	76	93	70	93	600	67	51	67	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
836+45	-	841+06	STH 23 EB	265	320	250	320	1844	231	181	231	1844			461	MAINLINE, SHOULDERS, AND LEFT TURN LANE
841+06	-	842+06	STH 23 EB	48	57	45	57	400	41	32	41	400			30	MAINLINE, SHOULDERS, AND MEDIAN TAPER
842+06	-	855+44	STH 23 EB	572	708	486	708	2676	510	350	510	2676			2626	MAINLINE AND SHOULDERS
855+44	-	857+01	STH 23 EB	87	100	91	100	942	72	65	72	942			-	MAINLINE, SHOULDERS, AND RT/LT TAPERS
857+01	-	858+64	STH 23 EB	113	128	118	128	978	92	85	92	978			-	MAINLINE, SHOULDERS, AND TURN LANES
858+64	-	863+20	STH 23 EB	85					119	119	119	912			-	MAINLINE TRAVEL LANES ONLY
SUBTOTAL 0010				9429	14600	10385	14600	49172	8365	6013	8365	50084	50	50	36599	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

**TONNAGE IS ELIGIBLE FOR INCENTIVE DENSITY PWL 460.2005 and INCENTIVE AIR VOIDS 460.2010.

***TOTAL TONNAGE FOR EACH SEGMENT THAT IS ELIGIBLE FOR INCENTIVE AIR VOIDS 460.2010.

**** LF IS ELIGIBLE FOR INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS 460.2007

HMA SUMMARY CONTINUED

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	HMA PAVEMENT 3 MT 58-28 S *460.6223 TON	PWL DENSITY INCENTIVE TON**	PWL AIR VOIDS TON***	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS LF****	HMA PAVEMENT 4 MT 58-28 S 460.622 TON	PWL DENSITY INCENTIVE TON**	PWL AIR VOIDS TON***	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS LF****	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	REMARKS
863+20	-	882+00	STH 23 EB	804	994	682	994	3760	716	491	716	3760			3640	MAINLINE AND SHOULDERS
891+48	-	901+50	STH 23 EB	429	530	363	530	2004	382	262	382	2004			2004	MAINLINE AND SHOULDERS
901+50	-	903+55	STH 23 EB	38					54	54	54	410			-	MAINLINE TRAVEL LANES ONLY
903+55	-	908+71	STH 23 EB	221	273	187	273	1032	197	135	197	1032			1032	MAINLINE AND SHOULDERS
908+71	-	910+21	STH 23 EB	74	88	65	88	600	64	48	64	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
910+21	-	914+00	STH 23 EB	232	281	224	281	1516	202	161	202	1516			379	MAINLINE, SHOULDERS, AND LEFT TURN LANE
914+00	-	918+30	STH 23 EB	80					112	112	112	860			-	MAINLINE TRAVEL LANES ONLY
918+30	-	927+45	STH 23 EB	395	484	332	484	1830	349	239	349	1830			1750	MAINLINE AND SHOULDERS
927+45	-	928+95	STH 23 EB	74	88	65	88	600	64	48	64	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
928+95	-	933+45	STH 23 EB	265	313	245	313	1800	225	176	225	1800		25	450	MAINLINE, SHOULDERS, AND LEFT TURN LANE
933+45	-	934+43	STH 23 EB	47	56	44	56	392	41	32	41	392			98	MAINLINE, SHOULDERS, AND TAPER
934+43	-	944+71	STH 23 EB	440	544	373	544	2056	392	269	392	2056			2056	MAINLINE AND SHOULDERS
944+71	-	946+79	STH 34 EB	39					54	54	54	416			-	MAINLINE TRAVEL LANES ONLY
946+79	-	948+84	STH 23 EB	89	108	74	108	410	78	53	78	410			410	MAINLINE AND SHOULDERS
948+84	-	950+35	STH 23 EB	76	83	72	83	604	60	52	60	604			151	MAINLINE, SHOULDERS, AND RT TURN TAPER
950+35	-	951+50	STH 23 EB	58	71	62	71	460	51	45	51	460			115	MAINLINE, SHOULDERS, AND RIGHT TURN LANE
951+50	-	956+00	STH 23 EB	84					118	118	118	900			-	MAINLINE TRAVEL LANES ONLY
956+00	-	963+47	STH 23 EB	321	395	271	395	1494	285	196	285	1494			1494	MAINLINE AND SHOULDERS
963+47	-	964+50	STH 23 EB	48	59	43	59	412	43	32	43	412			103	MAINLINE, SHOULDERS, AND LT TURN TAPER
964+50	-	966+00	STH 23 EB	90	101	92	101	900	73	66	73	900			-	MAINLINE, SHOULDERS, AND RT/LT TURN TAPERS
966+00	-	967+50	STH 23 EB	72	136	127	136	900	98	91	98	900			-	MAINLINE, SHOULDERS,RT/LT TURN LANE,
973+00	-	974+22	STH 23 EB	52	65	45	65	244	46	31	46	244			194	MAINLINE AND SHOULDERS
974+22	-	975+63	STH 23 EB	66	76	53	76	282	55	38	55	282			282	MAINLINE, SHOULDERS, AND BEAMGUARD TAPER
975+63	-	980+57	STH 23 EB	251	276	179	276	988	199	129	199	988			988	MAINLINE AND SHOULDERS THRU BEAMGUARD
980+57	-	982+43	STH 23 EB	112	122	102	122	1116	88	74	88	1116			-	MAINLINE, SHOULDERS, AND RT/LT TURN TAPERS
982+43	-	984+50	STH 23 EB	156	181	168	181	828	130	121	130	828			-	MAINLINE, SHOULDERS, RIGHT TURN LANE, AND TAPER
990+45	-	993+85	STH 23 EB	145	180	123	180	680	130	89	130	680			630	MAINLINE AND SHOULDERS
993+85	-	995+35	STH 23 EB	75	92	69	92	600	66	50	66	600			150	MAINLINE, SHOULDERS, AND LT TURN TAPER
995+35	-	999+00	STH 23 EB	201	254	199	254	1460	183	143	183	1460			365	MAINLINE, SHOULDERS, AND LEFT TURN LANE
999+00	-	1001+00	STH 23 EB	37					52	52	52	400			-	MAINLINE TRAVEL LANES ONLY
1001+00	-	1008+32	STH 23 EB	313	387	265	387	1464	279	191	279	1464			1464	MAINLINE AND SHOULDERS
1008+32	-	1009+82	STH 23 EB	70	79	68	79	600	57	49	57	600			150	MAINLINE, SHOULDERS, AND RT TURN TAPER
1009+82	-	1012+00	STH 23 EB	119	135	119	135	872	97	85	97	872			218	MAINLINE, SHOULDERS, AND RIGHT TURN LANE
1012+00	-	1015+39	STH 23 EB	63					89	89	89	678			-	MAINLINE TRAVEL LANES ONLY
SUBTOTAL 0010				5639	6451	4711	6451	29904	5127	3873	5127	33568	0	25	18423	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

**TONNAGE IS ELIGIBLE FOR INCENTIVE DENSITY PWL 460.2005 and INCENTIVE AIR VOIDS 460.2010.

***TOTAL TONNAGE FOR EACH SEGMENT THAT IS ELIGIBLE FOR INCENTIVE AIR VOIDS 460.2010.

**** LF IS ELIGIBLE FOR INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS 460.2007

3

HMA SUMMARY CONTINUED

				455.0605	HMA PAVEMENT 3 MT 58-28 S				HMA PAVEMENT 4 MT 58-28 S				465.0110	465.0120	465.0400	
STATION	TO	STATION	LOCATION	TACK COAT	*460.6223	PWL DENSITY INCENTIVE	PWL AIR VOIDS	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS	460.622	PWL DENSITY INCENTIVE	PWL AIR VOIDS	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS	ASPHALTIC SURFACE PATCHING	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASPHALTIC SHOULDER RUMBLE STRIPS	REMARKS
				GAL	TON	TON**	TON***	LF****	TON	TON**	TON***	LF****	TON	TON	LF	
1015+39	-	1019+90	STH 23 EB	259	313	247	313	1804	226	179	226	1804			311	MAINLINE, SHOULDERS, AND LT LANE THRU MEDIAN OPENING
1019+90	-	1020+90	STH 23 EB	56	60	48	60	400	43	34	43	400			100	MAINLINE, SHOULDERS, AND MEDIAN TAPER
1020+90	-	1023+82	STH 23 EB	124	154	105	154	584	111	76	111	584			534	MAINLINE AND SHOULDERS
1023+82	-	1024+77	STH 23 EB	56	70	56	70	570	50	40	50	570			-55	MAINLINE, SHOULDERS, AND RT/LT TURN TAPER
1039+33	-	1052+58	STH 23 EB	605	701	481	701	2650	505	346	505	2650			2650	MAINLINE AND SHOULDERS
1052+58	-	1054+31	STH 23 EB	101	110	100	110	1038	79	71	79	1038			-	MAINLINE, SHOULDERS, AND RT/LT TURN TAPERS
1054+31	-	1056+61	STH 23 EB	159	181	167	181	1380	130	120	130	1380			-	MAINLINE, SHOULDERS, AND TURN LANES
1060+42	-	1072+72	STH 23 EB	550	651	447	651	2460	469	322	469	2460			2460	MAINLINE AND SHOULDERS
1072+72	-	1074+57	STH 23 EB	35					48	48	48	370			-	MAINLINE TRAVEL LANES ONLY
1074+57	-	1079+81	STH 23 EB	225	277	190	277	1048	200	137	200	1048			1048	MAINLINE AND SHOULDERS
1079+81	-	1081+60	STH 23 EB	101	115	104	115	1074	83	75	83	1074			42	MAINLINE, SHOULDERS, AND RT/LT TURN TAPERS
1102+54	-	1120+27	STH 23 EB	822	938	643	938	3546	676	464	676	3546			3,546	MAINLINE AND SHOULDERS
SUBTOTAL 0010				3091	3569	2587	3569	16554	2620	1912	2620	16924	0	0	10636	
PROJECT TOTAL 0010				**18,159**	**24,620**	**17,683**	**24,620**	**95,630**	**16,113**	**11,799**	**16,113**	**100,576**	**50**	**75**	**65,658**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

**TONNAGE IS ELIGIBLE FOR INCENTIVE DENSITY PWL 460.2005 and INCENTIVE AIR VOIDS 460.2010.

***TOTAL TONNAGE FOR EACH SEGMENT THAT IS ELIGIBLE FOR INCENTIVE AIR VOIDS 460.2010.

**** LF IS ELIGIBLE FOR INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS 460.2007

FILE NAME : N:\PDS\...\030200_mq.pptx PLOT DATE : June 14, 1911 PLOT BY : A.R.H. PLOT NAME : PLOT SCALE : 1:1

3

PWL MIXTURE USE TABLE

LOCATION	STATION	TO	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12 FOOT DRIVING LANES	429+92	-	442+29	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	323	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	429+92	-	442+29	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	634	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	429+92	-	442+29	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	148	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	429+92	-	442+29	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	290	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	450+62	-	461+25	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	278	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	450+62	-	461+25	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	545	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	450+62	-	461+25	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	127	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	450+62	-	461+25	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	249	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	511+32	-	533+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	566	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	511+32	-	533+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1110	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	511+32	-	533+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	260	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	511+32	-	533+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	509	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	540+78	-	569+70	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	756	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	540+78	-	569+70	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1480	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	540+78	-	569+70	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	346	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	540+78	-	569+70	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	679	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	587+91	-	604+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	420	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	587+91	-	604+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	823	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	587+91	-	604+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	193	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	587+91	-	604+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	378	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVE AND LT TURN LANES	611+50	-	628+06	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	553	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	611+50	-	628+06	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1086	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	611+50	-	628+06	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	144	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	611+50	-	628+06	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	281	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	640+00	-	659+23	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	503	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	640+00	-	659+23	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	985	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	640+00	-	659+23	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	230	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	640+00	-	659+23	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	451	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	669+79	-	687+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	463	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	669+79	-	687+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	906	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	669+79	-	687+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	212	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	669+79	-	687+50	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	416	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE

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PWL MIXTURE USE TABLE

LOCATION	STATION	TO	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12 FOOT DRIVE , RT TURN AND LT TURN LANES	781+19	-	803+01	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	702	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	781+19	-	803+01	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	975	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	781+19	-	803+01	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	220	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	781+19	-	803+01	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	305	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVE AND LT TURN LANES	808+77	-	816+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	252	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	808+77	-	816+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	348	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	808+77	-	816+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	80	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	808+77	-	816+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	112	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVE , RT TURN AND LT TURN LANES	823+00	-	858+64	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	1076	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	823+00	-	858+64	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1493	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	823+00	-	858+64	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	392	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	823+00	-	858+64	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	545	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	858+64	-	863+20	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	119	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	863+20	-	882+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	491	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	863+20	-	882+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	682	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	863+20	-	882+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	225	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	863+20	-	882+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	312	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	891+48	-	901+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	262	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	891+48	-	901+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	363	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	891+48	-	901+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	120	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	891+48	-	901+50	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	167	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	901+50	-	903+55	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	54	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	903+55	-	914+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	344	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	903+55	-	914+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	476	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	903+55	-	914+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	119	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	903+55	-	914+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	166	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	914+00	-	918+30	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	112	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	918+30	-	944+71	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	764	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	918+30	-	944+71	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1059	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	918+30	-	944+71	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	307	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	918+30	-	944+71	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	426	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	944+71	-	946+79	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	54	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND RT TURN LANES	946+79	-	951+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	150	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND RT TURN LANES	946+79	-	951+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	208	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	946+79	-	951+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	39	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	946+79	-	951+50	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	54	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	951+50	-	956+00	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	118	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	956+00	-	967+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	385	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	956+00	-	967+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	533	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	956+00	-	967+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	114	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	956+00	-	967+50	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	158	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE

PWL MIXTURE USE TABLE

LOCATION	STATION	TO	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12 FOOT DRIVE , RT TURN AND LT TURN LANES	973+00	-	984+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	393	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	973+00	-	984+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	547	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	973+00	-	984+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	125	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	973+00	-	984+50	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	173	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVE AND LT TURN LANES	990+45	-	999+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	282	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND LT TURN LANES	990+45	-	999+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	391	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	990+45	-	999+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	97	1 3/4"		
2,3 AND 8 FOOT SHOULDERS	990+45	-	999+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	135	2 1/4"		
12 FOOT DRIVING LANES ONLY	999+00	-	1001+00	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	52	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND RT TURN LANES	1001+00	-	1012+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	325	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE AND RT TURN LANES	1001+00	-	1012+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	452	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	1001+00	-	1012+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	108	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	1001+00	-	1012+00	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	149	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	1012+00	-	1015+39	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	89	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1015+39	-	1024+77	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	329	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1015+39	-	1024+77	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	456	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	1015+39	-	1024+77	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	101	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	1015+39	-	1024+77	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	141	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1039+33	-	1056+61	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	537	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1039+33	-	1056+61	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	748	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	1039+33	-	1056+61	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	177	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	1039+33	-	1056+61	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	244	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1060+42	-	1072+70	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	322	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1060+42	-	1072+70	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	447	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	1060+42	-	1072+70	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	147	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	1060+42	-	1072+70	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	204	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES ONLY	1072+70	-	1074+57	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	48	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1074+57	-	1081+60	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	212	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVE , RT TURN AND LT TURN LANES	1074+57	-	1081+60	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	294	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2,3 AND 8 FOOT SHOULDERS	1074+57	-	1081+60	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	71	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
2,3 AND 8 FOOT SHOULDERS	1074+57	-	1081+60	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	98	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
12 FOOT DRIVING LANES	1102+54	-	1120+27	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	464	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	1102+54	-	1120+27	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	643	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 AND 8 FOOT SHOULDERS	1102+54	-	1120+27	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	212	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE
3 AND 8 FOOT SHOULDERS	1102+54	-	1120+27	LOWER LAYER	MILLED HMA AND BASE AGGREGATE	3 MT 58-28 S	295	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPT. NOT ELIGIBLE FOR INCENTIVE

HMA PAVEMENT PWL ITEMS

STATION	TO	STATION	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRIC S EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
429+92	-	1120+27	PROJECT	1	3
			PROJECT TOTAL 0010	**1**	**3**

ADJUSTING BEAM GUARD

STATION	TO	STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	REMARKS
975+63	-	980+50	STH 23 EB	487	EB RIGHT
		PROJECT TOTAL 0010		**487**	

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TRAFFIC CONTROL SUMMARY

STATION	TO	STATION	LOCATION	APPROX. SERVICE PERIOD DAYS	643.0300 TRAFFIC CONTROL DRUMS NO. IN SERVICE	DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO. IN SERVICE	DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO. IN SERVICE	DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO. IN SERVICE	DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS NO. IN SERVICE	DAYS	643.0900 TRAFFIC CONTROL SIGNS NO. IN SERVICE	DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS NO. IN SERVICE	DAYS	643.1070 TRAFFIC CONTROL CONES 42-INCH NO. IN SERVICE	DAYS	REMARKS
STAGE 1A EB INSIDE LANE CLOSURE																					
430+00	-	461+25	STH 23 EB	22	80	1760	9	198	17	374	14	308	2	44	17	374	1	7	49	1078	MAINLINE AND MEDIAN
777+67	-	1120+27	STH 23 EB	22	163	3586	38	836	76	1672	14	308	2	44	79	1738	0	0	343	7546	MAINLINE/INTERSECTIONS
			STAGE 1A SUBTOTAL			5346		1034		2046		616		88		2112		7		8624	
STAGE 1B EB OUTSIDE LANE CLOSURE																					
430+00	-	461+25	STH 23 EB	15	77	1155	9	135	17	255	14	210	2	30	17	255	0	0	49	735	MAINLINE AND MEDIAN
777+67	-	1120+27	STH 23 EB	15	197	2955	41	615	72	1080	14	210	2	30	85	1275	0	0	343	5145	MAINLINE/INTERSECTIONS
			STAGE 1B SUBTOTAL			4110		750		1335		420		60		1530		0		5880	
STAGE 1C EB INSIDE LANE CLOSURE																					
430+00	-	461+25	STH 23 EB	22	80	1760	9	198	17	374	14	308	2	44	17	374	0	0	49	1078	MAINLINE AND MEDIAN
777+67	-	1120+27	STH 23 EB	22	163	3586	38	836	76	1672	14	308	2	44	79	1738	0	0	343	7546	MAINLINE/INTERSECTIONS
			STAGE 1C SUBTOTAL			5346		1034		2046		616		88		2112		0		8624	
STAGE 1D EB OUTSIDE LANE CLOSURE																					
430+00	-	461+25	STH 23 EB	27	62	1674	9	243	17	459	14	378	2	54	17	459	0	0	49	1323	MAINLINE AND MEDIAN
777+67	-	1120+27	STH 23 EB	27	182	4914	41	1107	72	1944	14	378	2	54	85	2295	0	0	343	9261	MAINLINE/INTERSECTIONS
			STAGE 1D SUBTOTAL			6588		1350		2403		756		108		2754		0		10584	
STAGE 2A WB INSIDE LANE CLOSURE																					
511+30	-	743+30	STH 23 WB	26	244	6344	28	728	51	1326	30	780	2	52	53	1378	1	7	242	6292	MAINLINE/INTERSECTIONS
			STAGE 2A SUBTOTAL			6344		728		1326		780		52		1378		7		6292	
STAGE 2B WB OUTSIDE LANE CLOSURE																					
511+30	-	743+30	STH 23 WB	15	325	4875	29	435	54	810	46	690	2	30	51	765	0	0	232	3480	MAINLINE/INTERSECTIONS
			STAGE 2B SUBTOTAL			4875		435		810		690		30		765		0		3480	
STAGE 2C WB INSIDE LANE CLOSURE																					
511+30	-	743+30	STH 23 WB	22	244	5368	28	616	51	1122	30	660	2	44	53	1166	0	0	242	5324	MAINLINE/INTERSECTIONS
			STAGE 2C SUBTOTAL			5368		616		1122		660		44		1166		0		5324	
STAGE 2D WB OUTSIDE LANE CLOSURE																					
511+30	-	743+30	STH 23 WB	27	325	8775	29	783	54	1458	46	1242	2	54	51	1377	0	0	232	6264	MAINLINE/INTERSECTIONS
			STAGE 2D SUBTOTAL			8775		783		1458		1242		54		1377		0		6264	
			PROJECT TOTAL 0010			**46752**		**6730**		**12546**		**5780**		**524**		**13194**		**14**		**55072**	

3

PAVEMENT MARKING SUMMARY

STATION	TO	STATION	LOCATION	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH EDGELINE (WHITE) SOLID LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH EDGELINE (YELLOW) SOLID LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT (WHITE) TAPE 4-INCH LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT DASHED (WHITE) TAPE, 3' LINE,9' GAP 4-INCH	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH LF	646.7220 MARKING CHEVRON EPOXY 24-INCH LF	*649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF	649.0155 TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH LF	649.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH LF	649.0960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH LF	REMARKS
401+50	-	408+10	STH 23 EB								1320		660	TRANSITION TO LANE CLOSURE
429+92	-	442+29	STH 23 EB	1237	1237	309				2474				MAINLINE
450+62	-	461+25	STH 23 EB	1063	1063	266				2126				MAINLINE
511+32	-	533+00	STH 23 WB	2168	2168	542				4336				MAINLINE
540+78	-	569+70	STH 23 WB	2892	2892	723				5784				MAINLINE
587+91	-	604+00	STH 23 WB	1609	1609	402				3218				MAINLINE
611+50	-	628+06	STH 23 WB	1656	1656	414		400		3312				MAINLINE
640+00	-	659+23	STH 23 WB	1923	1923	481				3846				MAINLINE
669+79	-	687+50	STH 23 WB	1771	1771	443				3542				MAINLINE
692+50	-	705+50	STH 23 WB								1300	100	600	MAINLINE THRU CTH G ON-RAMP
715+50	-	722+10	STH 23 WB			165					1320		660	TRANSITION TO LANE CLOSURE
765+90	-	772+50	STH 23 EB			165					1320		660	TRANSITION TO LANE CLOSURE
781+19	-	803+11	STH 23 EB	2192	2192	548		355		4384				MAINLINE UP TO CTH U
808+77	-	816+00	STH 23 EB	723	723	181		400		1446				MAINLINE UP TO R-CUT
823+00	-	863+20	STH 23 EB	3870	3866	1,005		691		8040				MAINLINE THRU SPRING VALLEY DR
863+20	-	882+00	STH 23 EB	1880	1880	470				3760				MAINLINE THRU SCENIC VIEW DR
891+48	-	903+55	STH 23 EB	1117	1192	302	30			2414				MAINLINE THRU WEST R-CUT
903+55	-	919+30	STH 23 EB	1575	1538	394		830	81	3150				MAINLINE THRU CTH T NORTH
919+30	-	946+79	STH 23 EB	2659	2707	687	30	400		5498				MAINLINE THRU WEST R-CUT
946+79	-	956+00	STH 23 EB	798	921	230		352		1842				MAINLINE THRU CTH T SOUTH
956+00	-	967+50	STH 23 EB	1150	1150	288		450	152	2300				MAINLINE THRU SUGARBUSH RD
973+00	-	984+50	STH 23 EB	1150	1150	288		680	58	2300				MAINLINE UP TO CTH A
990+45	-	1001+00	STH 23 EB	1055	928	264		456		2110				MAINLINE THRU R-CUT
1001+00	-	1015+39	STH 23 EB	1292	1439	360		359		2878				MAINLINE THRU PLANK RD
1015+39	-	1024+77	STH 23 EB	938	938	235		360		1876				MAINLINE TO JULIE CT
1039+33	-	1056+61	STH 23 EB	1728	1628	432		250		3456				MAINLINE THRU RIDGE RD
1060+42	-	1074+57	STH 23 EB	1325	1400	354	30			2830				RIDGE RD THRU WEST R-CUT
1074+57	-	1081+60	STH 23 EB	703	703	176				1406				MAINLINE THRU CTH S
1102+54	-	1120+27	STH 23 EB	1773	1773	443				3546				MAINLINE
			SUBTOTAL 0010	40,247	40,447	10,564	90							
			PROJECT TOTAL 0010	80,694		10,654		5,983	291	81,874	5,260	100	2,580	

*INCLUDES WHITE AND YELLOW EDGELINES PLACED BETWEEN PAVEMENT LAYERS

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1440-15-78) LS	REMARKS
429+92		1120+27	STH 23		1	MAINLINE EB AND WB
429+92	-	442+29	STH 23 EB	1237		MAINLINE EB
450+62	-	461+25	STH 23 EB	1063		MAINLINE EB
511+32	-	533+00	STH 23 WB	2168		MAINLINE WB
540+78	-	569+70	STH 23 WB	2892		MAINLINE WB
587+91	-	604+00	STH 23 WB	1609		MAINLINE WB
611+50	-	628+06	STH 23 WB	1656		MAINLINE WB
640+00	-	659+23	STH 23 WB	1923		MAINLINE WB
669+79	-	687+50	STH 23 WB	1771		MAINLINE WB
781+19	-	803+11	STH 23 EB	2192		MAINLINE EB
808+77	-	816+00	STH 23 EB	723		MAINLINE EB
823+00	-	882+00	STH 23 EB	5900		MAINLINE EB
891+48	-	967+50	STH 23 EB	7602		MAINLINE EB
973+00	-	984+50	STH 23 EB	1150		MAINLINE EB
990+45	-	1024+77	STH 23 EB	3432		MAINLINE EB
1039+33	-	1056+61	STH 23 EB	1728		MAINLINE EB
1060+42	-	1081+60	STH 23 EB	2118		MAINLINE EB
1102+54	-	1120+27	STH 23 EB	1773		MAINLINE EB
			PROJECT TOTAL 0010	**40,937**	**1**	

SAWING ASPHALT

STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
564+00	STH 23 WB	20	DRIVEWAY RT
620+50	STH 23 WB	51	MEDIAN CROSSING
623+50	STH 23 WB	30	DRIVEWAY LT
786+65	STH 23 EB	51	MEDIAN CROSSING
840+59	STH 23 EB	50	MEDIAN CROSSING
933+00	STH 23 EB	50	MEDIAN CROSSING
933+00	STH 23 EB	32	DRIVEWAY RT
1019+50	STH 23 EB	50	MEDIAN CROSSING
	PROJECT TOTAL 0010	**334**	

PI STA = 386+43.52'WB'
Y = 387804.042
X = 857932.533
DELTA = 5°04'20"
D = 0°29'49"
T = 510.75'
L = 1020.82'
R = 11531.00'
PC STA = 381+32.77'WB'
PT STA = 391+53.60'WB'

PT: 391+53.60'WB'

385'WB' 390'WB' S84°19'20"E 395'WB' 400'WB' 405'WB' 410'WB'

385'EB' 390'EB' S84°19'20"E 395'EB' STH 23 400'EB' 405'EB' 410'EB'

PT: 391+43.68'EB'

PC: 403+11.88'EB'

PI STA = 386+36.26'EB'
Y = 387744.074
X = 857929.242
DELTA = 5°04'20"
D = 0°29'58"
T = 508.09'
L = 1015.51'
R = 11471.00'
PC STA = 381+28.17'EB'
PT STA = 391+43.68'EB'

PI STA = 408+29.31'WB'
Y = 387587.731
X = 860108.264
DELTA = 9°40'11"
D = 0°57'18"
T = 507.52'
L = 1012.62'
R = 6000.00'
PC STA = 403+21.79'WB'
PT STA = 413+34.42'WB'

PC: 403+21.79'WB'

PT: 413+34.42'WB'

PT: 413+34.63'EB'

PI STA = 408+24.47'EB'
Y = 387527.523
X = 860107.378
DELTA = 9°40'11"
D = 0°56'44"
T = 512.59'
L = 1022.75'
R = 6060.00'
PC STA = 403+11.88'EB'
PT STA = 413+34.63'EB'

MATCH LINE 413+49

N

LEGEND

- REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
- REMOVE ASPHALTIC SURFACE MILLING
- REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)

PI STA = 422+62.60'WB'
Y = 387687.685
X = 861540.484
DELTA = 0°28'09"
D = 0°17'11"
T = 81.89'
L = 163.77'
R = 20000.00'
PC STA = 421+80.72'WB'
PT STA = 423+44.49'WB'

PC: 421+80.72'WB'

PT: 423+44.49'WB'

415'WB' N86°00'28"E 420'WB' 425'WB' 430'WB' N86°28'37"E 435'WB' 440'WB'

415'EB' N86°00'28"E 420'EB' 425'EB' STH 23 430'EB' N86°28'37"E 435'EB' 440'EB'

PC: 421+80.93'EB'

PT: 423+44.21'EB'

PI STA = 422+62.57'EB'
Y = 387627.813
X = 861544.416
DELTA = 0°28'09"
D = 0°17'14"
T = 81.64'
L = 163.28'
R = 19940.00'
PC STA = 421+80.93'EB'
PT STA = 423+44.21'EB'

BEGIN PROJECT
STA 429+92.00'EB'
Y=387,672.636
X=862,272.471

BUTT JOINT & TRANSITION DETAIL #1

BUTT JOINT & TRANSITION DETAIL #1

MATCH LINE 413+49

MATCH LINE 443+99

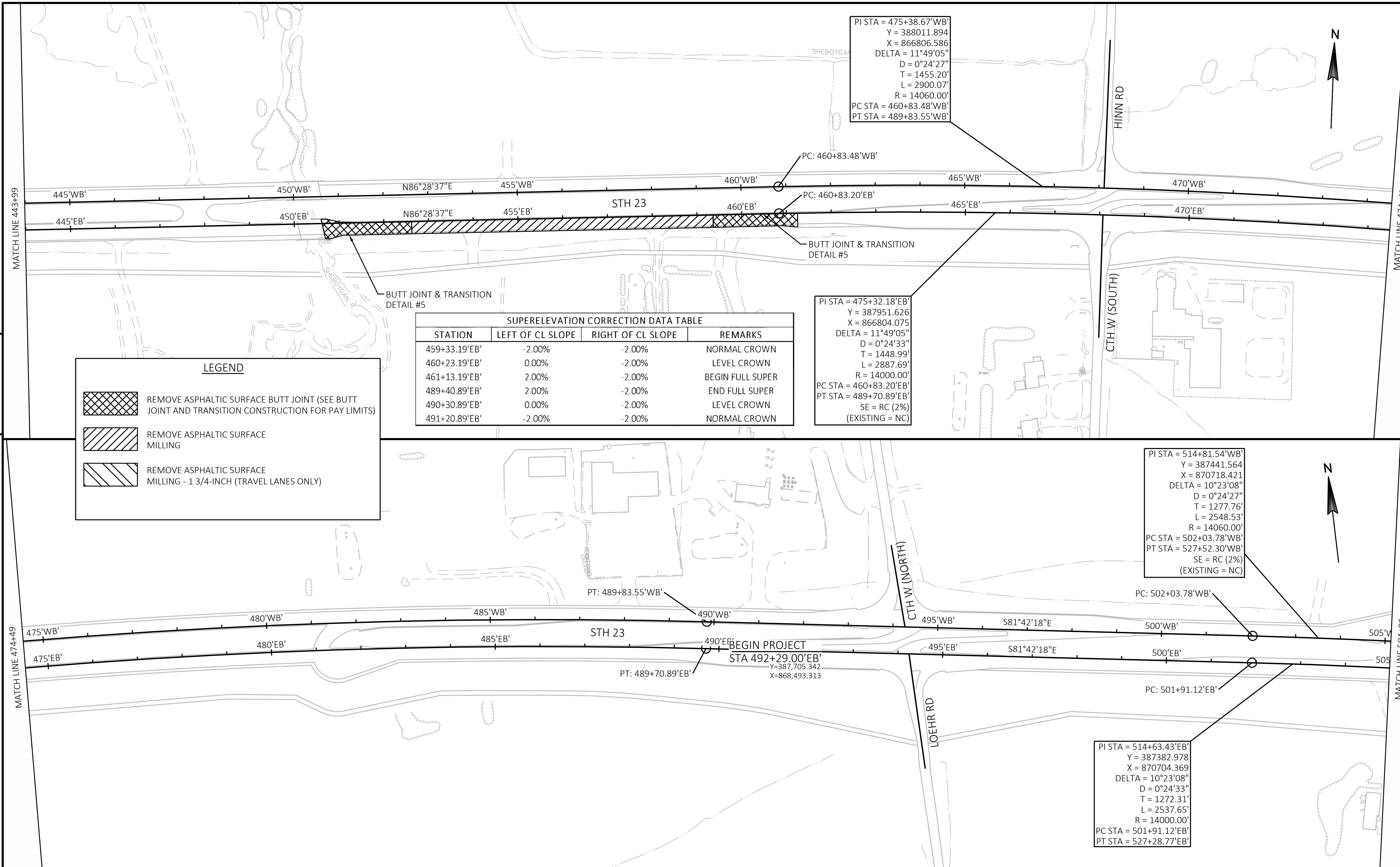
SEVEN HILLS RD

N

5

5

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 50	E



SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
459+33.19'EB'	-2.00%	-2.00%	NORMAL CROWN
460+23.19'EB'	0.00%	-2.00%	LEVEL CROWN
461+13.19'EB'	2.00%	-2.00%	BEGIN FULL SUPER
489+40.89'EB'	2.00%	-2.00%	END FULL SUPER
490+30.89'EB'	0.00%	-2.00%	LEVEL CROWN
491+20.89'EB'	-2.00%	-2.00%	NORMAL CROWN

LEGEND

- REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
- REMOVE ASPHALTIC SURFACE MILLING
- REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 51	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG PLOT DATE : 7/15/2021 4:23 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT
LAYOUT NAME - 050202-pn
WISDOT/CADDS SHEET 44

SUPERELEVATION CORRECTION DATA TABLE			
STATION	**LEFT OF CL SLOPE**	**RIGHT OF CL SLOPE**	**REMARKS**
500+53.77'WB'	-2.00%	-2.00%	NORMAL CROWN
501+43.77'WB'	0.00%	-2.00%	LEVEL CROWN
502+33.77'WB'	2.00%	-2.00%	BEGIN FULL SUPER
527+22.31'WB'	2.00%	-2.00%	END FULL SUPER
528+12.31'WB'	0.00%	-2.00%	LEVEL CROWN
529+02.31'WB'	-2.00%	-2.00%	NORMAL CROWN

PI STA = 514+81.54'WB'
Y = 387441.564
X = 870718.421
DELTA = 10°23'08"
D = 0°24'27"
T = 1277.76'
L = 2548.53'
R = 14060.00'
PC STA = 502+03.78'WB'
PT STA = 527+52.30'WB'
SE = RC (2%)
(EXISTING = NC)

BUTT JOINT & TRANSITION DETAIL #5

BUTT JOINT & TRANSITION DETAIL #1

PT: 527+52.30'WB'

PT: 527+28.77'EB'

PI: 532+93.82'EB'

STA BACK = 532+93.82'EB'
STA AHEAD = 533+00.00'EB'

MATCH LINE 504+99

MATCH LINE 535+55

LOG TAVERN RD

510'WB' 515'WB' 520'WB' 525'WB' 530'WB' S71°19'10"E 535'WB'

510'EB' 515'EB' 520'EB' STH 23 525'EB' 530'EB' S71°19'10"E 535'EB'

PI STA = 514+63.43'EB'
Y = 387382.978
X = 870704.369
DELTA = 10°23'08"
D = 0°24'33"
T = 1272.31'
L = 2537.65'
R = 14000.00'
PC STA = 501+91.12'EB'
PT STA = 527+28.77'EB'

LEGEND

- REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
- REMOVE ASPHALTIC SURFACE MILLING
- REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)

5

5

SUPERELEVATION CORRECTION DATA TABLE			
STATION	**LEFT OF CL SLOPE**	**RIGHT OF CL SLOPE**	**REMARKS**
555+74.00'WB'	-2.00%	-2.00%	NORMAL CROWN
556+64.00'WB'	0.00%	-2.00%	LEVEL CROWN
557+54.00'WB'	2.00%	-2.00%	REVERSE CROWN
558+62.00'WB'	4.40%	-4.40%	BEGIN FULL SUPER
567+52.92'WB'	4.40%	-4.40%	END FULL SUPER
568+60.92'WB'	2.00%	-2.00%	REVERSE CROWN
569+50.92'WB'	0.00%	-2.00%	LEVEL CROWN
570+40.92'WB'	-2.00%	-2.00%	NORMAL CROWN

PI STA = 563+10.18'WB'
Y = 385892.751
X = 875299.316
DELTA = 14°26'08"
D = 1°24'40"
T = 514.18'
L = 1022.91'
R = 4060.00'
PC STA = 557+96.00'WB'
PT STA = 568+18.91'WB'
SE = 4.4%
(EXISTING = 4.1%)

BUTT JOINT TRANSITION DETAIL #1

PC: 557+96.00'WB'

PC: 557+78.65'EB'

PI STA = 562+85.23'EB'
Y = 385838.345
X = 875272.900
DELTA = 14°26'08"
D = 1°25'57"
T = 506.58'
L = 1007.79'
R = 4000.00'
PC STA = 557+78.65'EB'
PT STA = 567+86.44'EB'

MATCH LINE 535+55

MATCH LINE 566+05

LOG TAVERN RD

S71°19'10"E 540'WB' 545'WB' 550'WB' STH 23 555'WB' 560'WB' 565'WB'

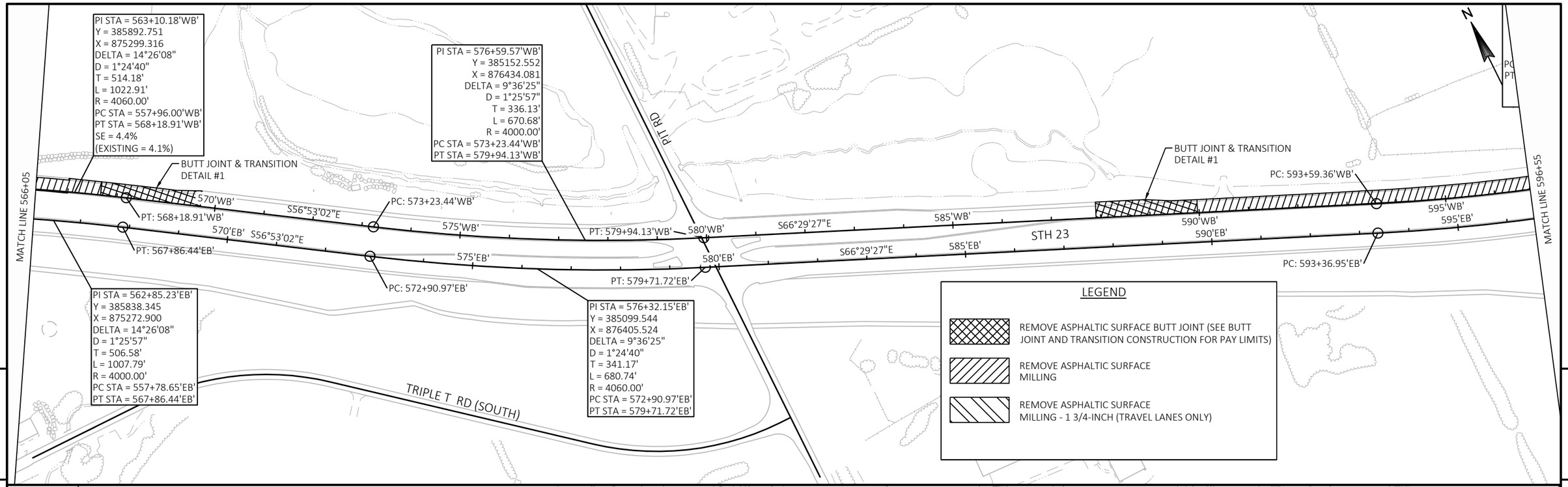
S71°19'10"E 540'EB' 545'EB' 550'EB' 555'EB' 560'EB' 565'EB'

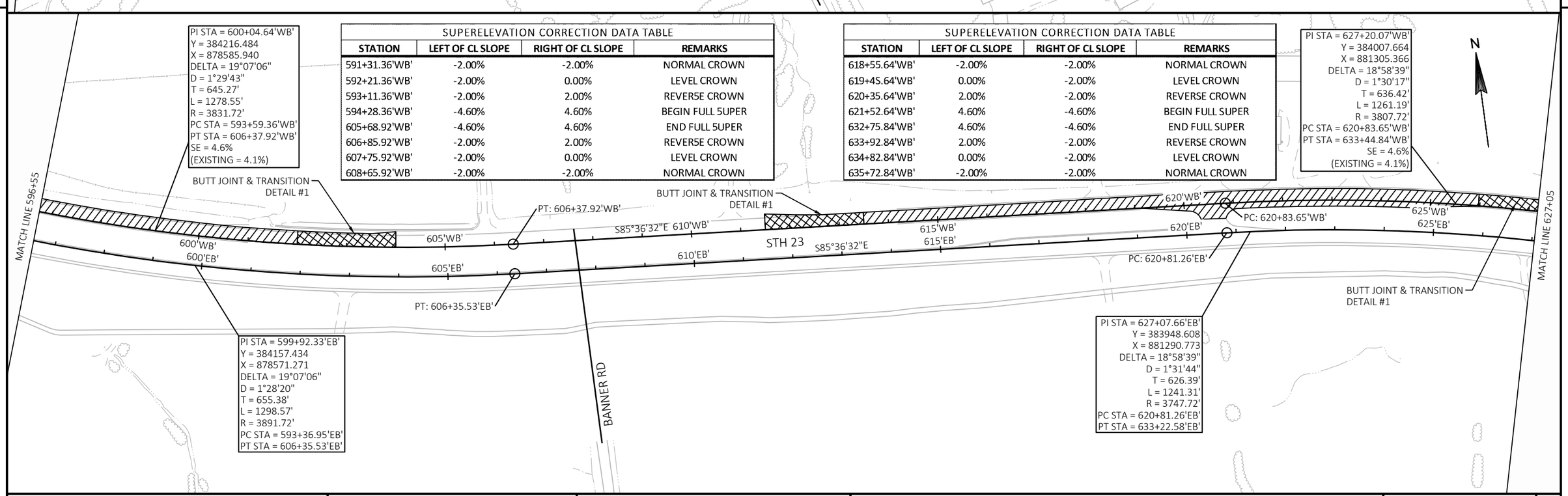
PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 52	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG
LAYOUT NAME - 050203-pn

PLOT DATE : 7/15/2021 4:24 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44





SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
591+31.36'WB'	-2.00%	-2.00%	NORMAL CROWN
592+21.36'WB'	-2.00%	0.00%	LEVEL CROWN
593+11.36'WB'	-2.00%	2.00%	REVER5E CROWN
594+28.36'WB'	-4.60%	4.60%	BEGIN FULL 5UPER
605+68.92'WB'	-4.60%	4.60%	END FULL 5UPER
606+85.92'WB'	-2.00%	2.00%	REVER5E CROWN
607+75.92'WB'	-2.00%	0.00%	LEVEL CROWN
608+65.92'WB'	-2.00%	-2.00%	NORMAL CROWN

SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
618+55.64'WB'	-2.00%	-2.00%	NORMAL CROWN
619+45.64'WB'	0.00%	-2.00%	LEVEL CROWN
620+35.64'WB'	2.00%	-2.00%	REVERSE CROWN
621+52.64'WB'	4.60%	-4.60%	BEGIN FULL SUPER
632+75.84'WB'	4.60%	-4.60%	END FULL SUPER
633+92.84'WB'	2.00%	-2.00%	REVERSE CROWN
634+82.84'WB'	0.00%	-2.00%	LEVEL CROWN
635+72.84'WB'	-2.00%	-2.00%	NORMAL CROWN

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 53 E

PI STA = 627+20.07'WB'
Y = 384007.664
X = 881305.366
DELTA = 18°58'39"
D = 1°30'17"
T = 636.42'
L = 1261.19'
R = 3807.72'
PC STA = 620+83.65'WB'
PT STA = 633+44.84'WB'
SE = 4.6%
(EXISTING = 4.1%)

TRIPLE T RD (NORTH)

BUTT JOINT & TRANSITION DETAIL #1

PT: 633+44.84'WB'

MATCH LINE 627+05

630'WB'
630'EB'
635'WB'
635'EB'
S66°37'54"E
S66°37'54"E
640'WB'
640'EB'
STH 23
645'WB'
645'EB'
650'WB'
650'EB'
655'WB'
655'EB'

MATCH LINE 657+55

PT: 633+22.58'EB'

BUTT JOINT & TRANSITION DETAIL #1

PI STA = 627+07.66'EB'
Y = 383948.608
X = 881290.773
DELTA = 18°58'39"
D = 1°31'44"
T = 626.39'
L = 1241.31'
R = 3747.72'
PC STA = 620+81.26'EB'
PT STA = 633+22.58'EB'

SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
618+55.64'WB'	-2.00%	-2.00%	NORMAL CROWN
619+4S.64'WB'	0.00%	-2.00%	LEVEL CROWN
620+35.64'WB'	2.00%	-2.00%	REVERSE CROWN
621+52.64'WB'	4.60%	-4.60%	BEGIN FULL SUPER
632+75.84'WB'	4.60%	-4.60%	END FULL SUPER
633+92.84'WB'	2.00%	-2.00%	REVERSE CROWN
634+82.84'WB'	0.00%	-2.00%	LEVEL CROWN
635+72.84'WB'	-2.00%	-2.00%	NORMAL CROWN

LEGEND

- REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
- REMOVE ASPHALTIC SURFACE MILLING
- REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)

PI STA = 673+58.36'WB'
Y = 382163.301
X = 885573.889
DELTA = 43°03'27"
D = 1°29'43"
T = 1511.58'
L = 2879.52'
R = 3831.72'
PC STA = 658+46.78'WB'
PT STA = 687+26.30'WB'
SE = 4.6%
(EXISTING = 4.1%)

BUTT JOINT & TRANSITION DETAIL #1

PC: 658+46.78'WB'

MATCH LINE 657+55

660'WB'
660'EB'
665'WB'
665'EB'
670'WB'
670'EB'
STH 23
675'WB'
675'EB'
680'WB'
680'EB'
685'WB'
685'EB'

PC: 658+24.52'EB'

BUTT JOINT & TRANSITION DETAIL #1

PT: 687+26.30'WB'

MATCH LINE 688+05

PT: 687+49.13'EB'

HILL VIEW RD

PI STA = 673+59.77'EB'
Y = 382098.834
X = 885571.818
DELTA = 43°03'27"
D = 1°28'20"
T = 1535.25'
L = 2924.61'
R = 3891.72'
PC STA = 658+24.52'EB'
PT STA = 687+49.13'EB'

SUPERELEVATION CORRECTION DATA TABLE

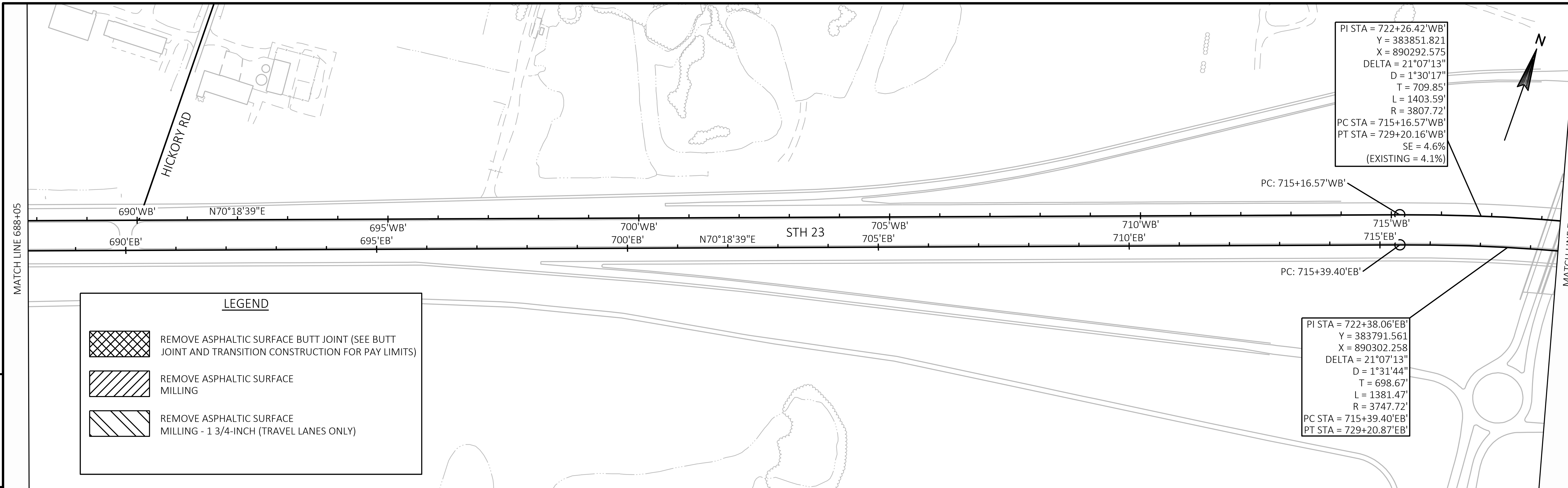
STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
656+18.77'WB'	-2.00%	-2.00%	NORMAL CROWN
657+08.77'WB'	-2.00%	0.00%	LEVEL CROWN
6S7+98.77'WB'	-2.00%	2.00%	REVERSE CROWN
659+1S.77'WB'	-4.60%	4.60%	BEGIN FULL SUPER
686+S7.31'WB'	-4.60%	4.60%	END FULL SUPER
687+74.31'WB'	-2.00%	2.00%	REVERSE CROWN
688+64.31'WB'	-2.00%	0.00%	LEVEL CROWN
689+S4.31'WB'	-2.00%	-2.00%	NORMAL CROWN

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 54	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG
LAYOUT NAME - 050205-pn

PLOT DATE : 7/15/2021 4:25 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT

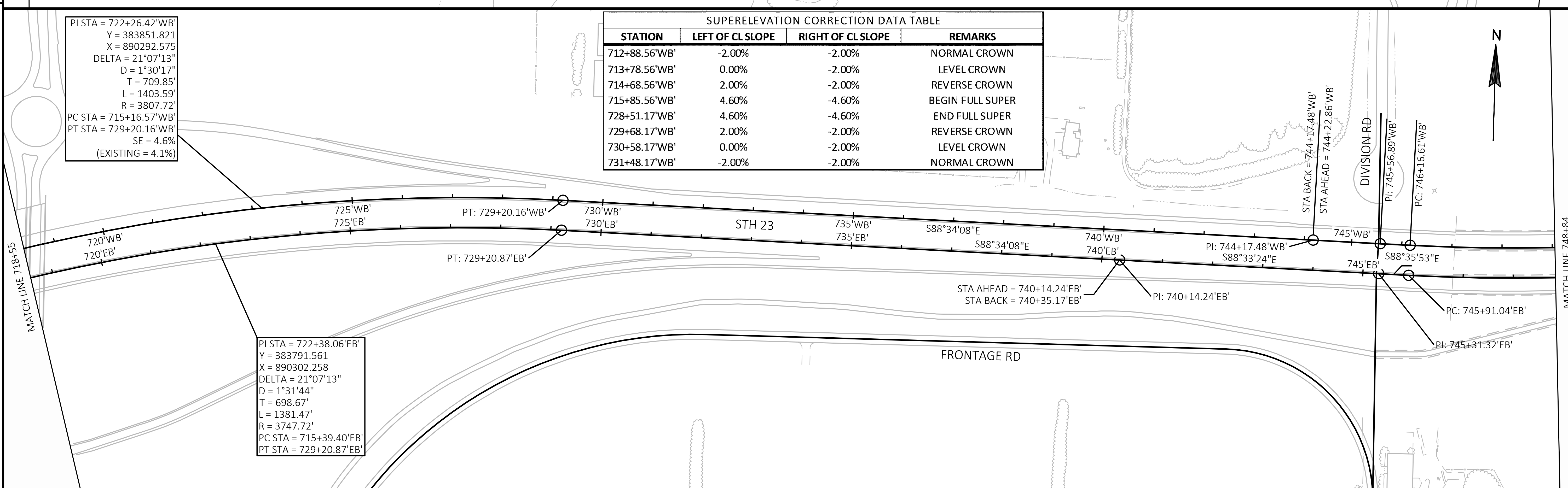
WISDOT/CADDS SHEET 44



HICKORY RD
MATCH LINE 688+05
MATCH LINE 718+55
690'WB'
N70°18'39"E
695'WB'
700'WB'
705'WB'
710'WB'
715'WB'
690'EB'
695'EB'
700'EB'
N70°18'39"E
STH 23
705'EB'
710'EB'
715'EB'
N
PI STA = 722+26.42'WB'
Y = 383851.821
X = 890292.575
DELTA = 21°07'13"
D = 1°30'17"
T = 709.85'
L = 1403.59'
R = 3807.72'
PC STA = 715+16.57'WB'
PT STA = 729+20.16'WB'
SE = 4.6%
(EXISTING = 4.1%)
PC: 715+16.57'WB'
PC: 715+39.40'EB'
PI STA = 722+38.06'EB'
Y = 383791.561
X = 890302.258
DELTA = 21°07'13"
D = 1°31'44"
T = 698.67'
L = 1381.47'
R = 3747.72'
PC STA = 715+39.40'EB'
PT STA = 729+20.87'EB'
LEGEND
REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
REMOVE ASPHALTIC SURFACE MILLING
REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)
5
5

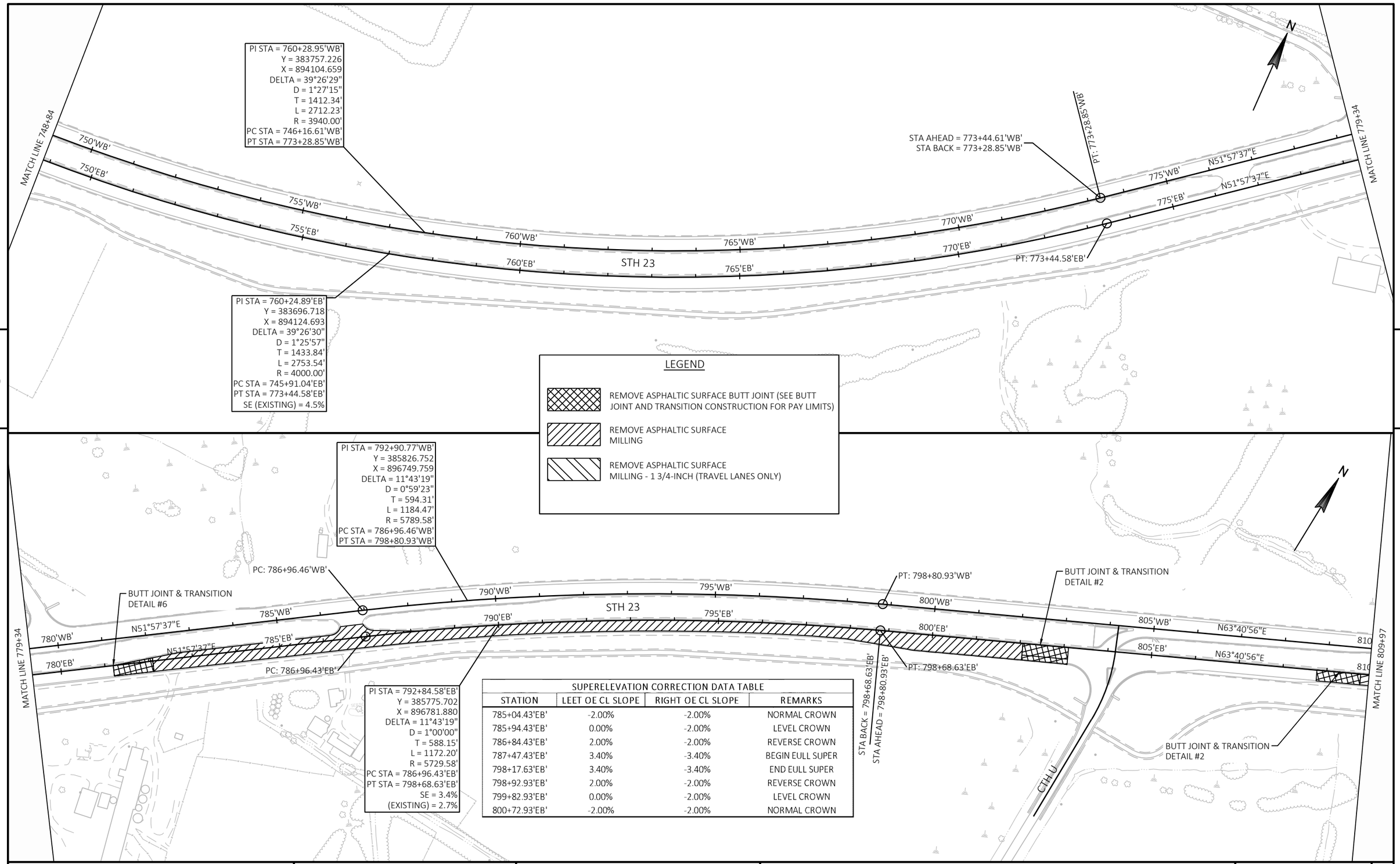
SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
712+88.56'WB'	-2.00%	-2.00%	NORMAL CROWN
713+78.56'WB'	0.00%	-2.00%	LEVEL CROWN
714+68.56'WB'	2.00%	-2.00%	REVERSE CROWN
715+85.56'WB'	4.60%	-4.60%	BEGIN FULL SUPER
728+51.17'WB'	4.60%	-4.60%	END FULL SUPER
729+68.17'WB'	2.00%	-2.00%	REVERSE CROWN
730+58.17'WB'	0.00%	-2.00%	LEVEL CROWN
731+48.17'WB'	-2.00%	-2.00%	NORMAL CROWN



PI STA = 722+26.42'WB'
Y = 383851.821
X = 890292.575
DELTA = 21°07'13"
D = 1°30'17"
T = 709.85'
L = 1403.59'
R = 3807.72'
PC STA = 715+16.57'WB'
PT STA = 729+20.16'WB'
SE = 4.6%
(EXISTING = 4.1%)
N
MATCH LINE 718+55
MATCH LINE 748+84
720'WB'
720'EB'
725'WB'
725'EB'
PT: 729+20.16'WB'
730'WB'
730'EB'
STH 23
735'WB'
735'EB'
S88°34'08"E
S88°34'08"E
740'WB'
740'EB'
PT: 729+20.87'EB'
STA BACK = 744+17.48'WB'
STA AHEAD = 744+22.86'WB'
DIVISION RD
PI: 745+56.89'WB'
PC: 746+16.61'WB'
PI: 744+17.48'WB'
745'WB'
S88°33'24"E
745'EB'
S88°35'53"E
STA AHEAD = 740+14.24'EB'
STA BACK = 740+35.17'EB'
PI: 740+14.24'EB'
PC: 745+91.04'EB'
PI: 745+31.32'EB'
FRONTAGE RD
PI STA = 722+38.06'EB'
Y = 383791.561
X = 890302.258
DELTA = 21°07'13"
D = 1°31'44"
T = 698.67'
L = 1381.47'
R = 3747.72'
PC STA = 715+39.40'EB'
PT STA = 729+20.87'EB'

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 55	E



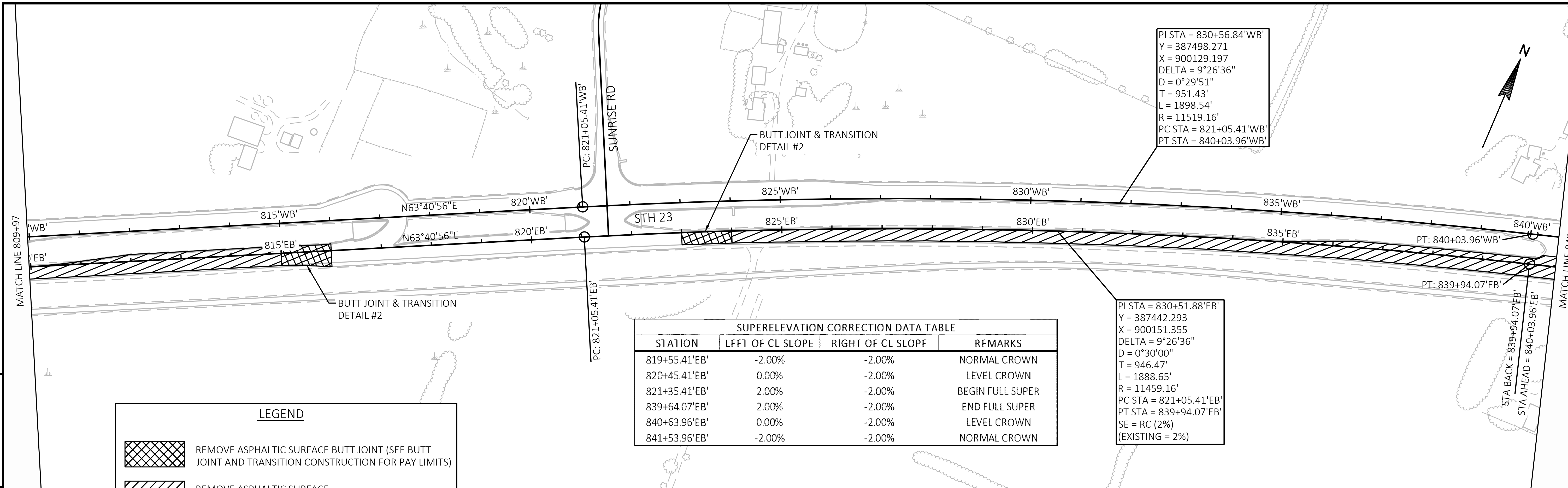
SUPERELEVATION CORRECTION DATA TABLE

STATION	LEET OE CL SLOPE	RIGHT OE CL SLOPE	REMARKS
785+04.43'EB'	-2.00%	-2.00%	NORMAL CROWN
785+94.43'EB'	0.00%	-2.00%	LEVEL CROWN
786+84.43'EB'	2.00%	-2.00%	REVERSE CROWN
787+47.43'EB'	3.40%	-3.40%	BEGIN EULL SUPER
798+17.63'EB'	3.40%	-3.40%	END EULL SUPER
798+92.93'EB'	2.00%	-2.00%	REVERSE CROWN
799+82.93'EB'	0.00%	-2.00%	LEVEL CROWN
800+72.93'EB'	-2.00%	-2.00%	NORMAL CROWN

5

5

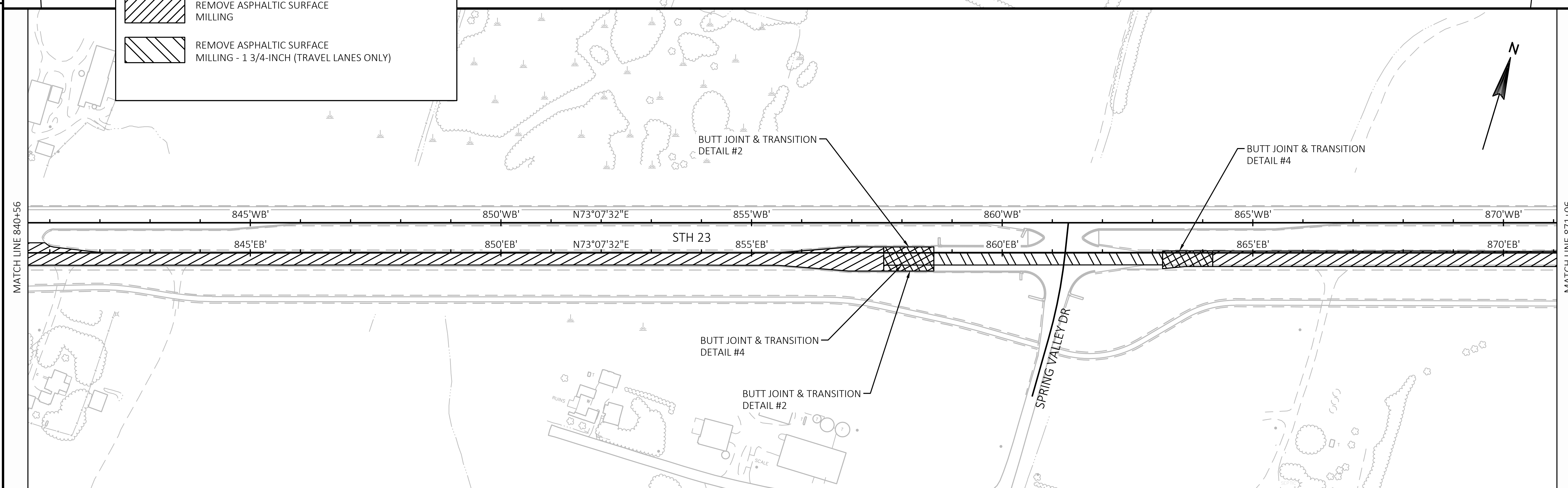
PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 56	E



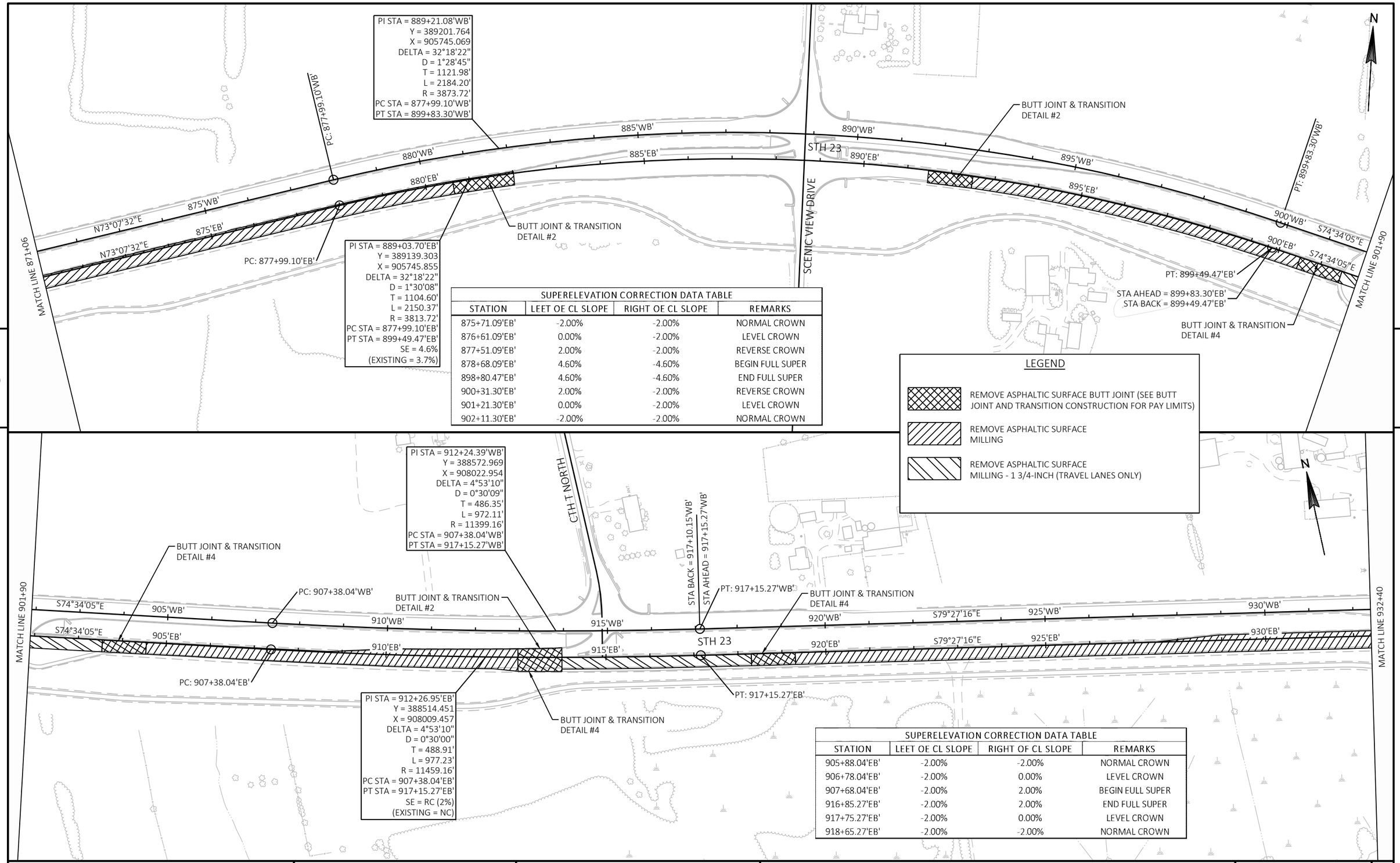
SUPERELEVATION CORRECTION DATA TABLE			
STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
819+55.41'EB'	-2.00%	-2.00%	NORMAL CROWN
820+45.41'EB'	0.00%	-2.00%	LEVEL CROWN
821+35.41'EB'	2.00%	-2.00%	BEGIN FULL SUPER
839+64.07'EB'	2.00%	-2.00%	END FULL SUPER
840+63.96'EB'	0.00%	-2.00%	LEVEL CROWN
841+53.96'EB'	-2.00%	-2.00%	NORMAL CROWN

LEGEND

- REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
- REMOVE ASPHALTIC SURFACE MILLING
- REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)



PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 57	E



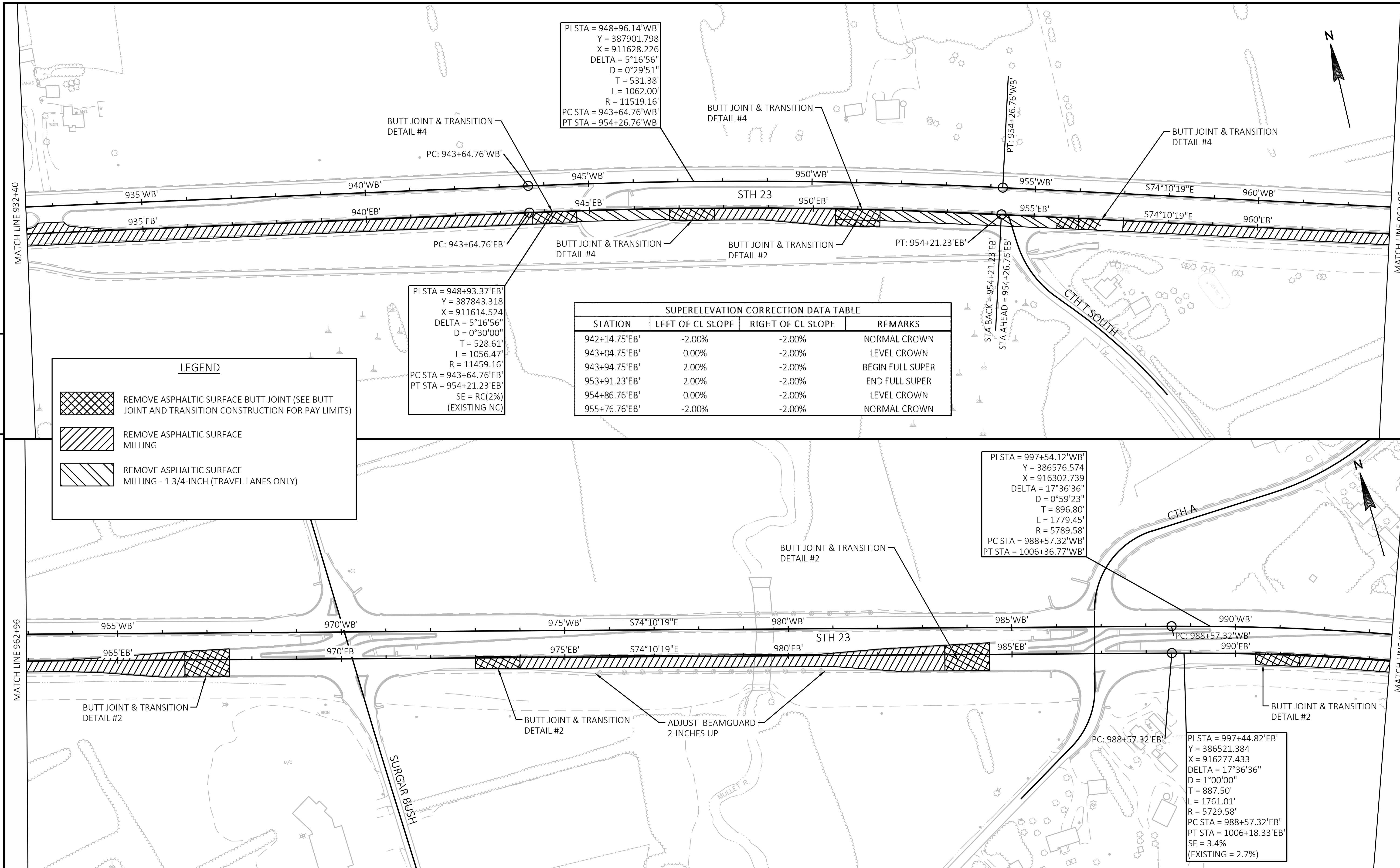
5 5

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 58	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG
LAYOUT NAME - 050209-pn

PLOT DATE : 7/15/2021 4:27 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT

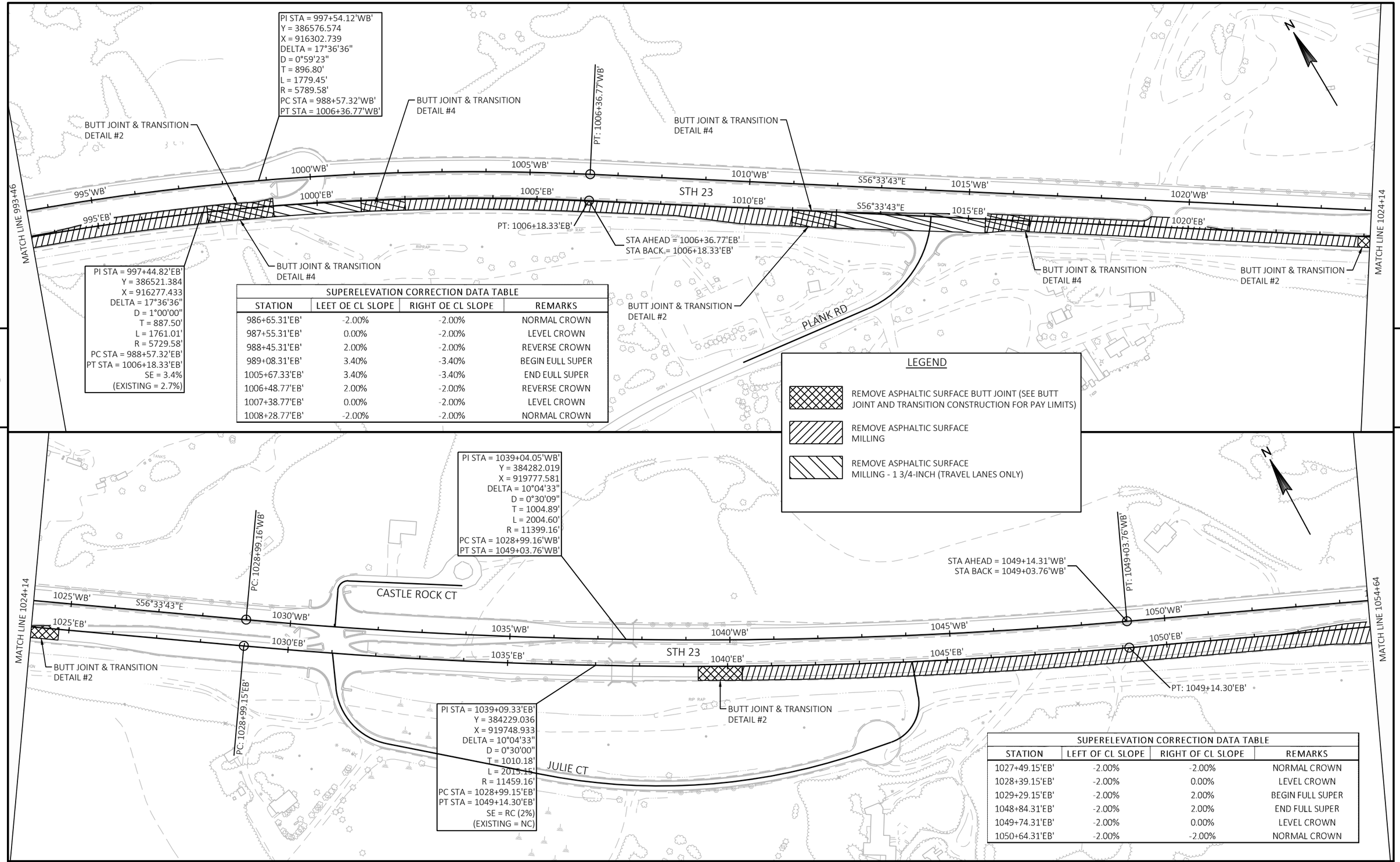
WISDOT/CADDS SHEET 44



SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
942+14.75'EB'	-2.00%	-2.00%	NORMAL CROWN
943+04.75'EB'	0.00%	-2.00%	LEVEL CROWN
943+94.75'EB'	2.00%	-2.00%	BEGIN FULL SUPER
953+91.23'EB'	2.00%	-2.00%	END FULL SUPER
954+86.76'EB'	0.00%	-2.00%	LEVEL CROWN
955+76.76'EB'	-2.00%	-2.00%	NORMAL CROWN

PROJECT NO: 1440-15-78 | HWY: STH 23 | COUNTY: FOND DU LAC | PLAN SHEETS | SHEET 59 | E

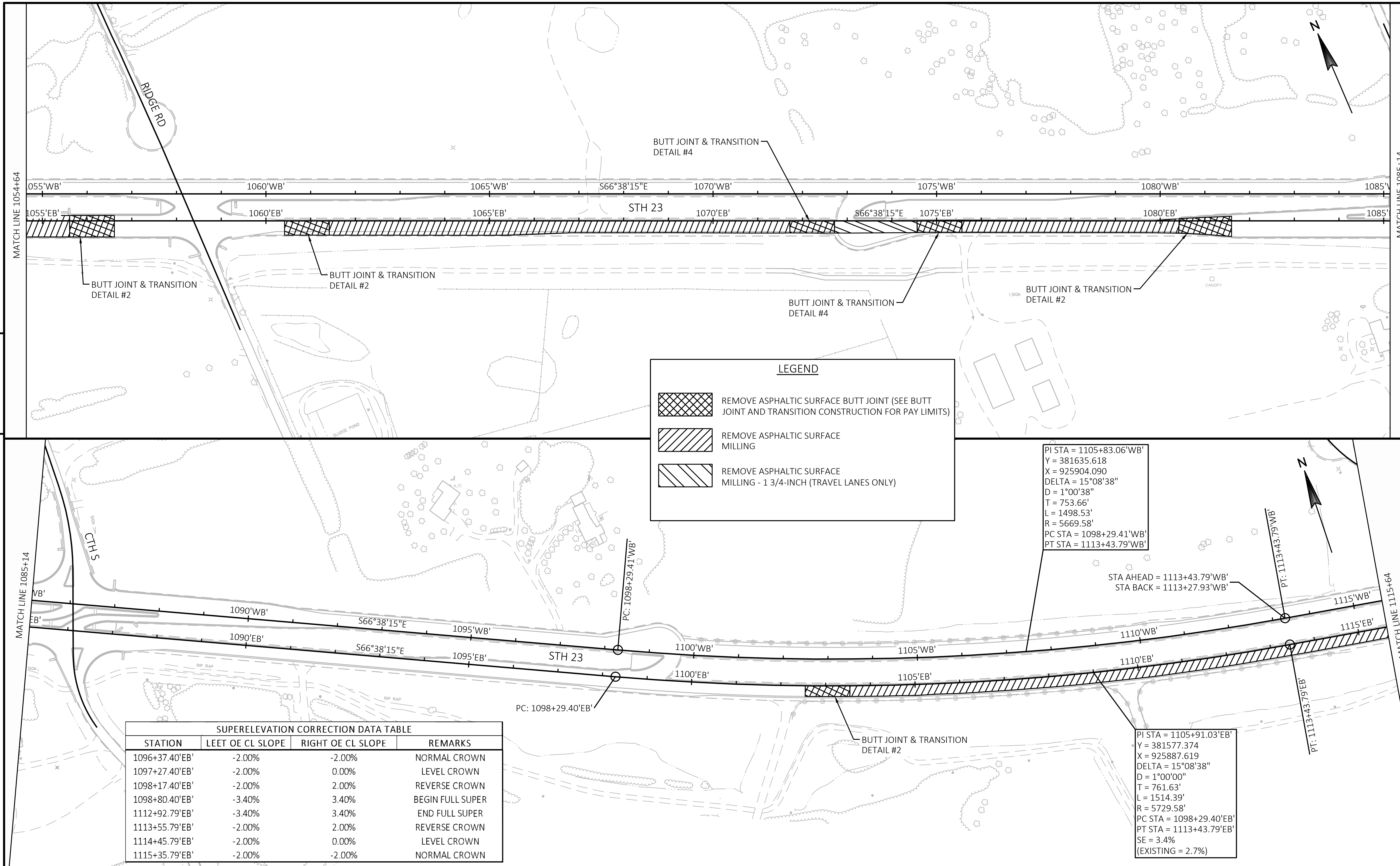


PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 60	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG
LAYOUT NAME - 050211-pn

PLOT DATE : 7/15/2021 4:28 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



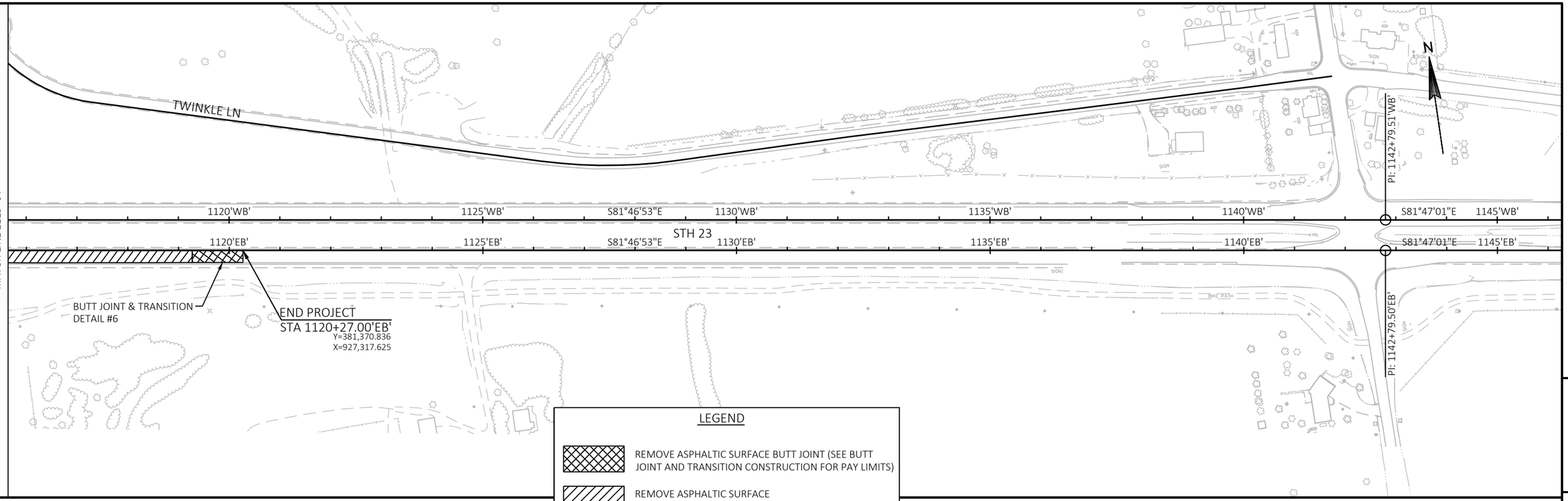
5
MATCH LINE 1054+64
MATCH LINE 1085+14
RIDGE RD
STH 23
S66°38'15"E
1055'WB'
1060'WB'
1065'WB'
1070'WB'
1075'WB'
1080'WB'
1055'EB'
1060'EB'
1065'EB'
1070'EB'
1075'EB'
1080'EB'
BUTT JOINT & TRANSITION DETAIL #4
BUTT JOINT & TRANSITION DETAIL #2
LEGEND
REMOVE ASPHALTIC SURFACE BUTT JOINT (SEE BUTT JOINT AND TRANSITION CONSTRUCTION FOR PAY LIMITS)
REMOVE ASPHALTIC SURFACE MILLING
REMOVE ASPHALTIC SURFACE MILLING - 1 3/4-INCH (TRAVEL LANES ONLY)
CTH S
MATCH LINE 1115+64
1090'WB'
1095'WB'
1100'WB'
1105'WB'
1110'WB'
1115'WB'
1090'EB'
1095'EB'
1100'EB'
1105'EB'
1110'EB'
1115'EB'
PC: 1098+29.41'WB'
PC: 1098+29.40'EB'
PT: 1113+43.79'WB'
PT: 1113+43.79'EB'
STA AHEAD = 1113+43.79'WB'
STA BACK = 1113+27.93'WB'
PI STA = 1105+83.06'WB'
Y = 381635.618
X = 925904.090
DELTA = 15°08'38"
D = 1°00'38"
T = 753.66'
L = 1498.53'
R = 5669.58'
PC STA = 1098+29.41'WB'
PT STA = 1113+43.79'WB'
PI STA = 1105+91.03'EB'
Y = 381577.374
X = 925887.619
DELTA = 15°08'38"
D = 1°00'00"
T = 761.63'
L = 1514.39'
R = 5729.58'
PC STA = 1098+29.40'EB'
PT STA = 1113+43.79'EB'
SE = 3.4%
(EXISTING = 2.7%)

SUPERELEVATION CORRECTION DATA TABLE

STATION	LEFT OF CL SLOPE	RIGHT OF CL SLOPE	REMARKS
1096+37.40'EB'	-2.00%	-2.00%	NORMAL CROWN
1097+27.40'EB'	-2.00%	0.00%	LEVEL CROWN
1098+17.40'EB'	-2.00%	2.00%	REVERSE CROWN
1098+80.40'EB'	-3.40%	3.40%	BEGIN FULL SUPER
1112+92.79'EB'	-3.40%	3.40%	END FULL SUPER
1113+55.79'EB'	-2.00%	2.00%	REVERSE CROWN
1114+45.79'EB'	-2.00%	0.00%	LEVEL CROWN
1115+35.79'EB'	-2.00%	-2.00%	NORMAL CROWN

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 61	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG
LAYOUT NAME - 050212-pn
PLOT DATE : 7/15/2021 4:29 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 1440-15-78	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 62	E

FILE NAME : C:\CIVIL 3D PROJECTS\14401501\SHEETSPLAN\1440-15-78 MILL & FILL\PLAN SHEETS\050201-PN.DWG
LAYOUT NAME - 050213-pn

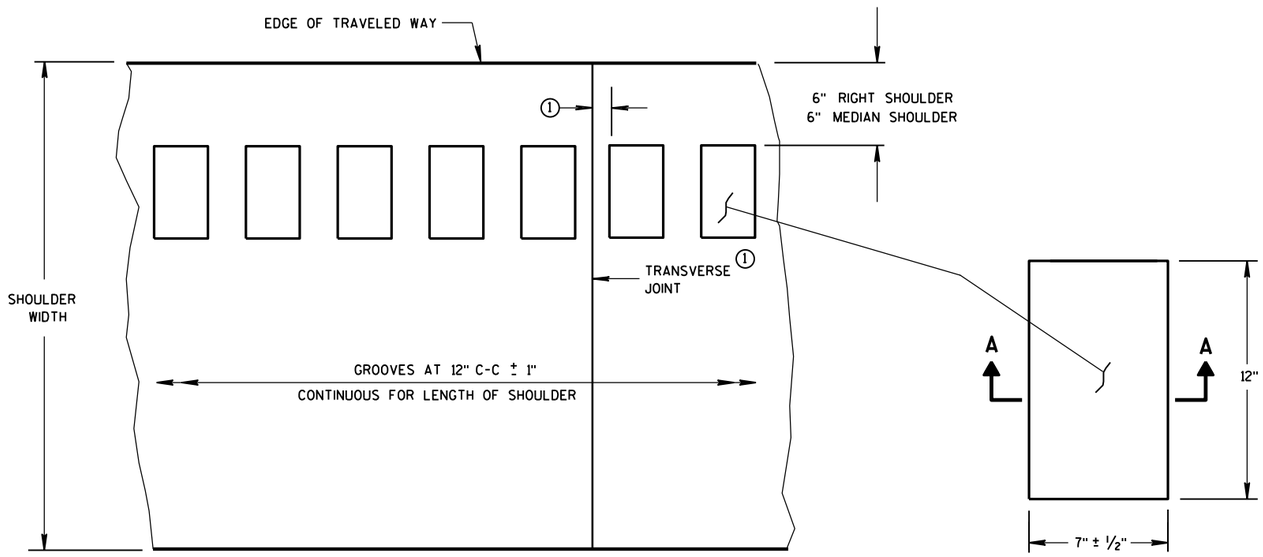
PLOT DATE : 7/15/2021 4:29 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-05C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING

6



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

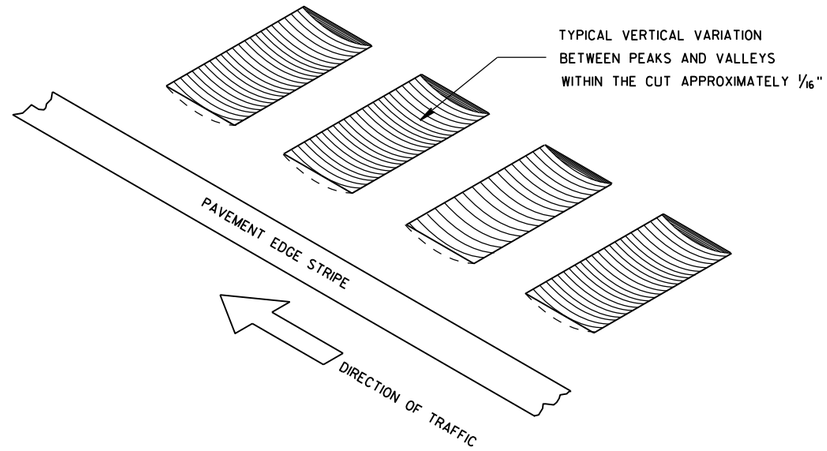
GENERAL NOTES

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

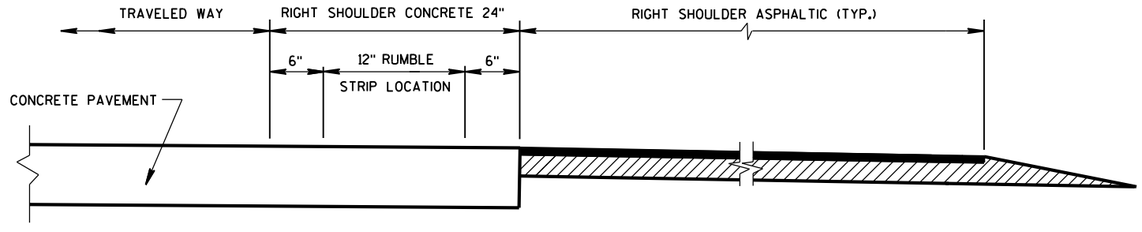
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

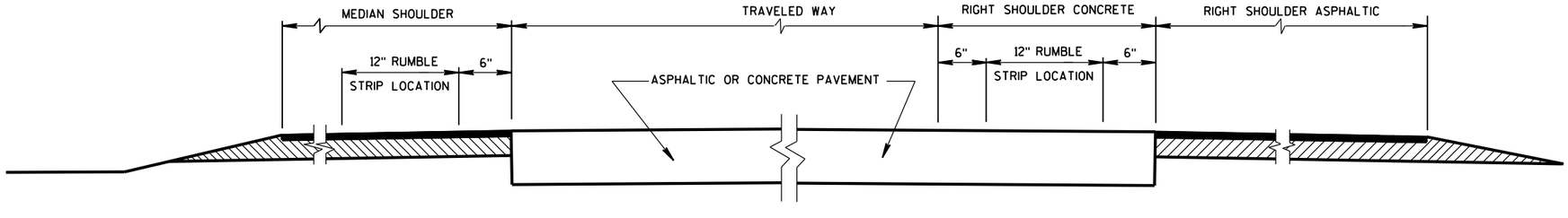
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



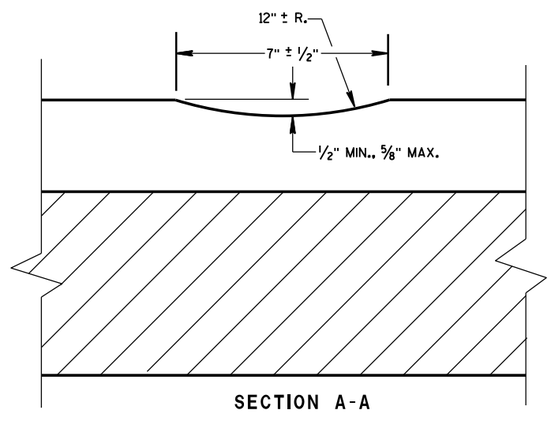
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

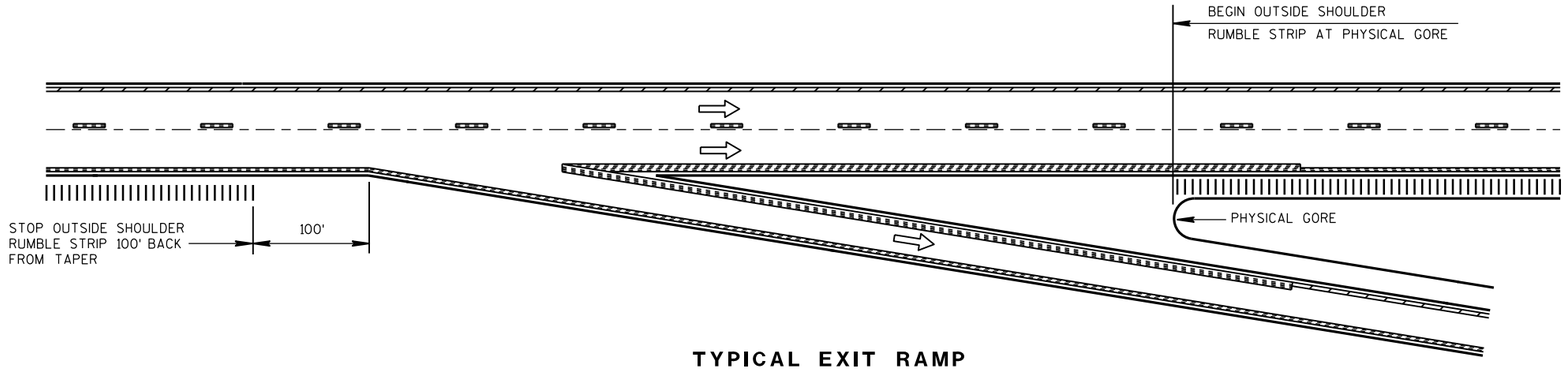
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



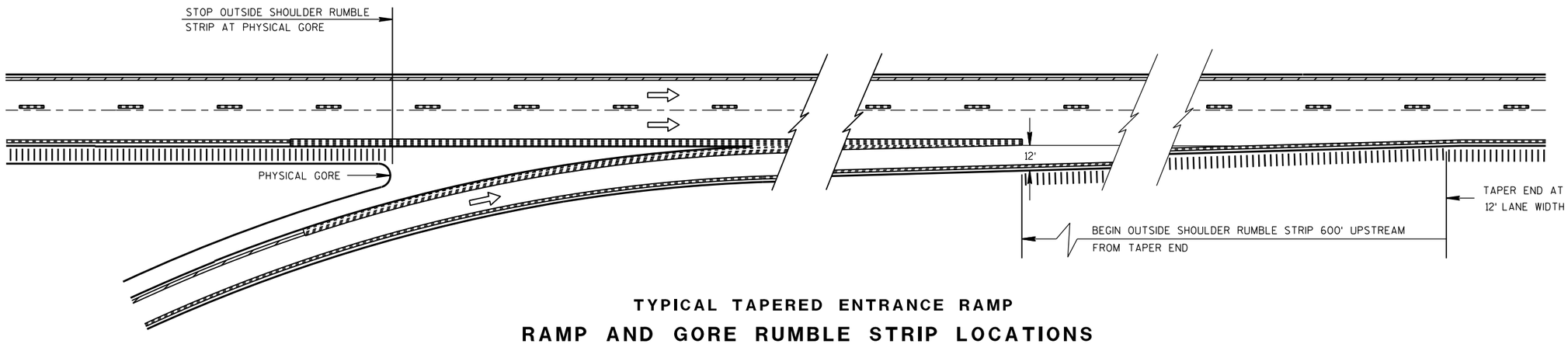
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

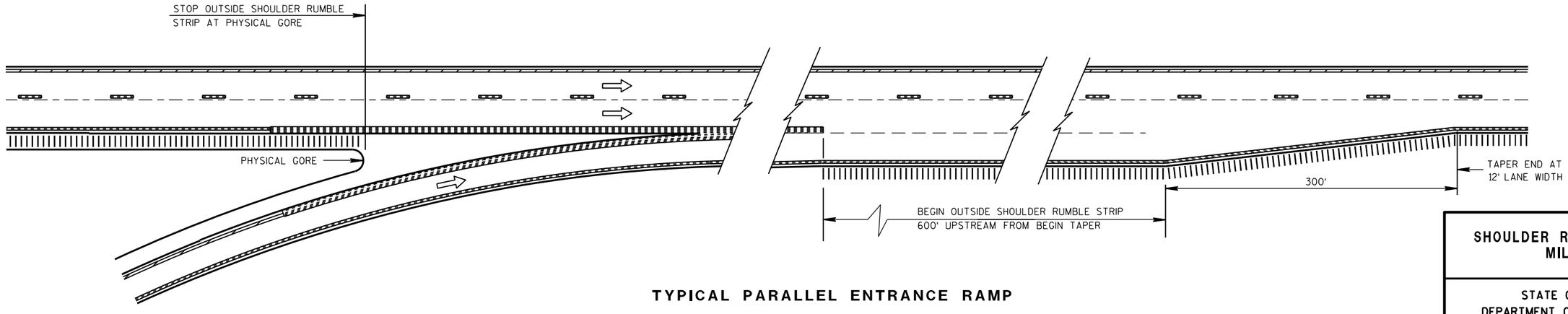
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

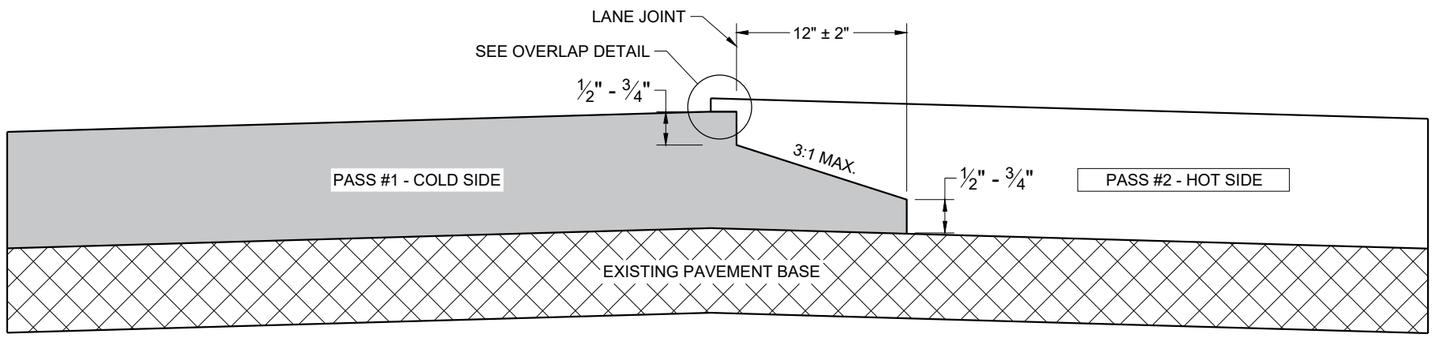
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

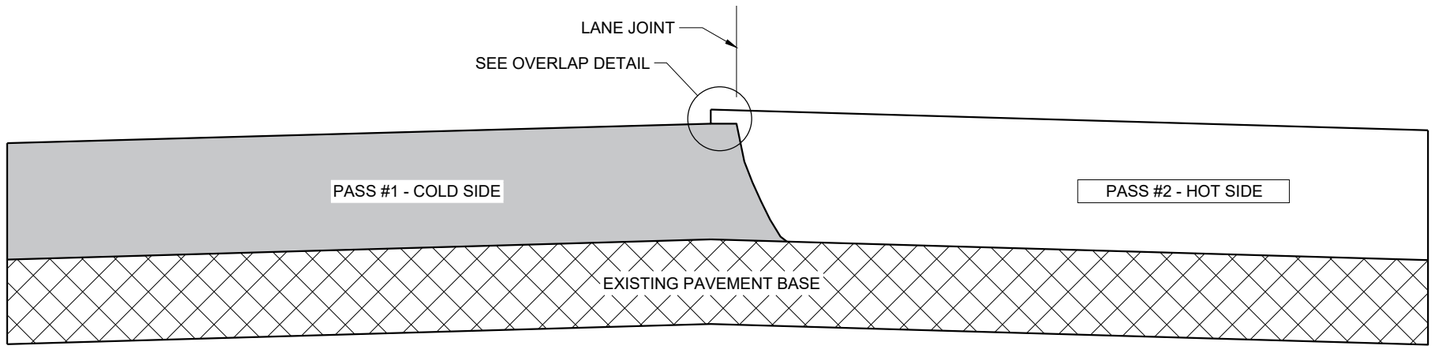
APPROVED
12/17/2012 DATE
/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER
FHWA

6

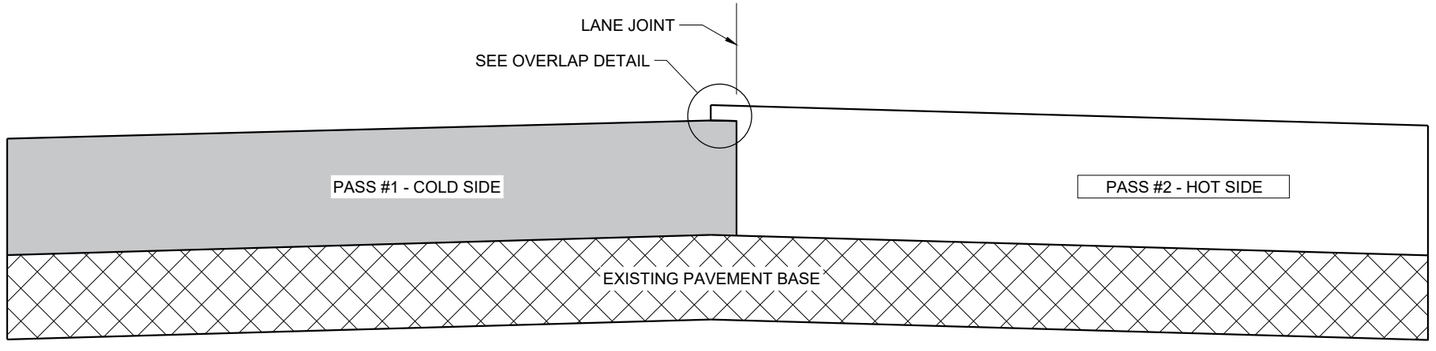
S.D.D. 13 A 5-5b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

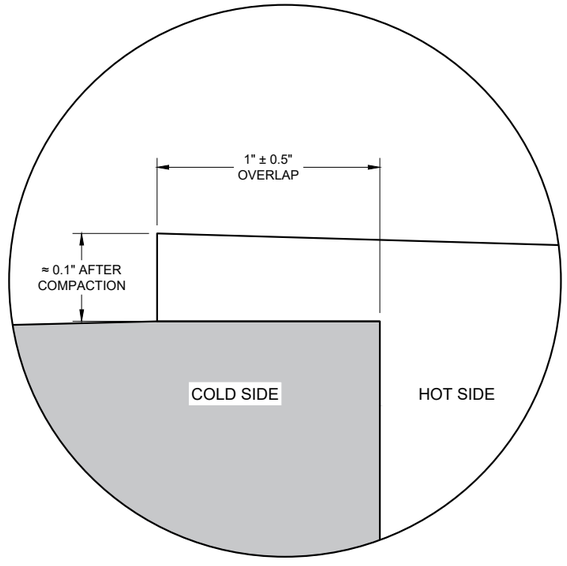
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

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SDD 13C19 - 03

SDD 13C19 - 03

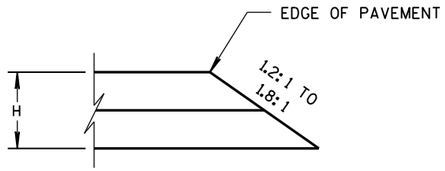
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

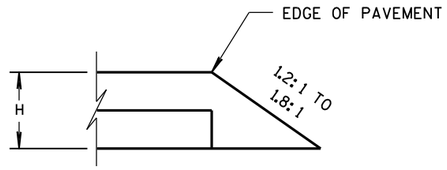
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



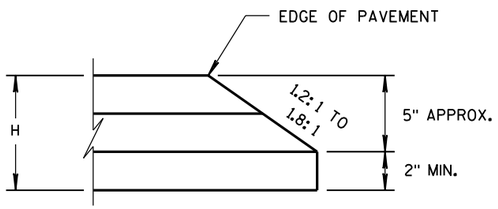
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



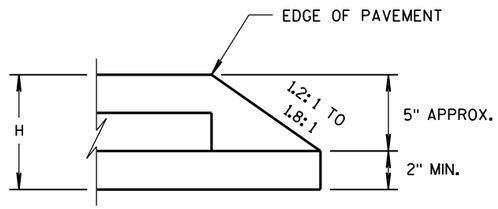
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

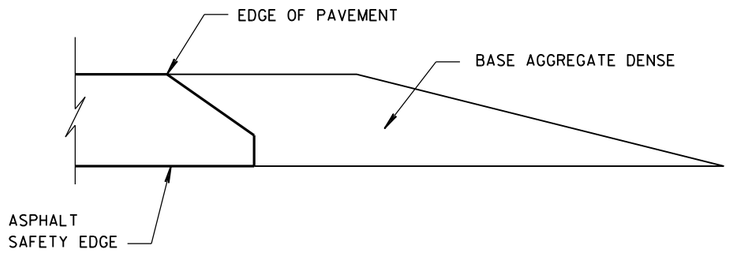
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

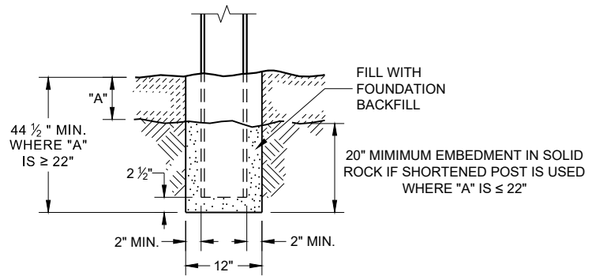
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

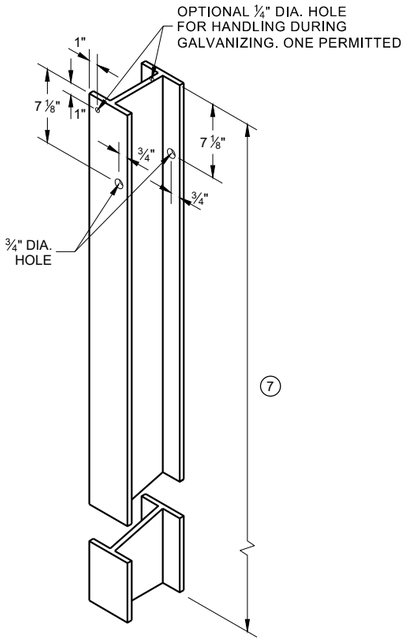
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

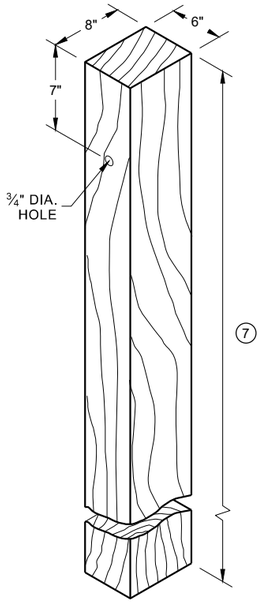
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



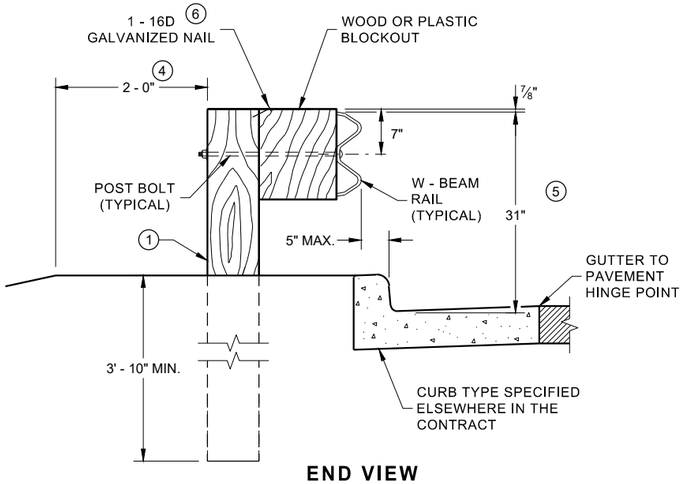
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



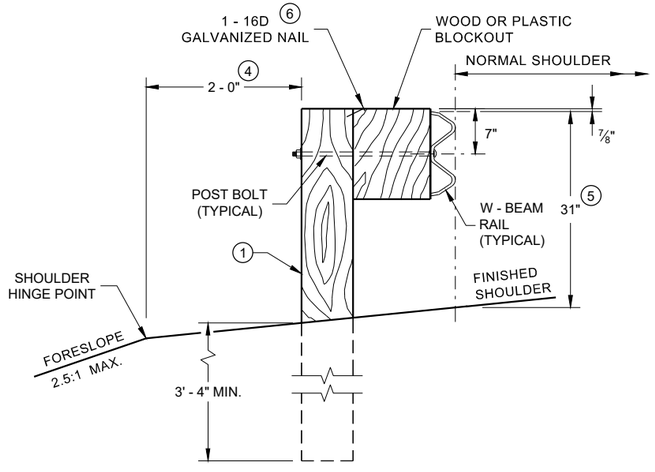
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



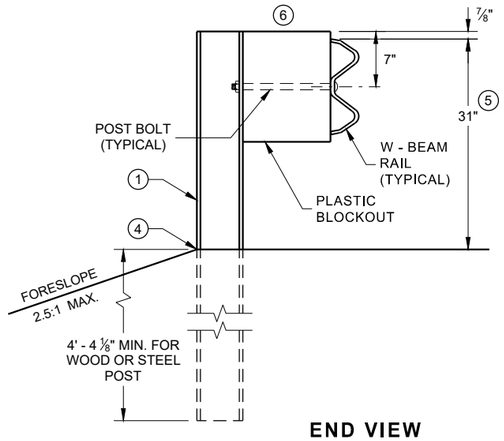
WOOD POST (6" X 8") NOMINAL (1)



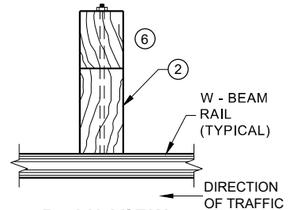
END VIEW
LOCATED ALONG A CURBED ROADWAY



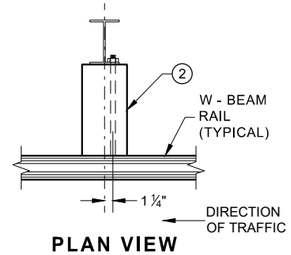
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



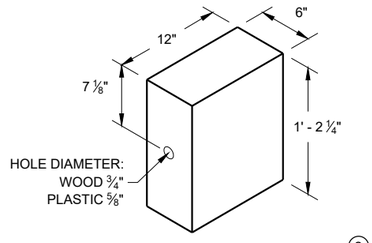
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

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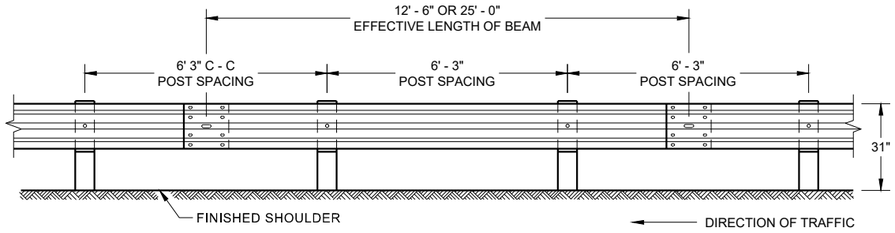
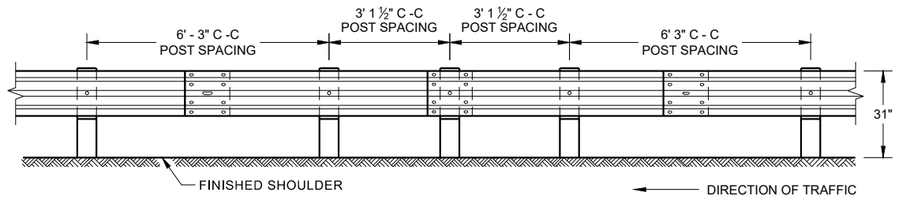
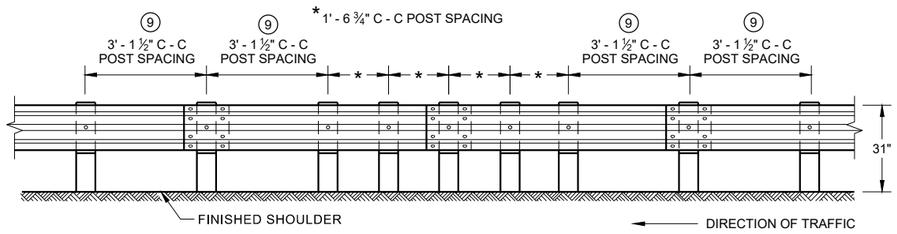
SDD 14B42 - 07a



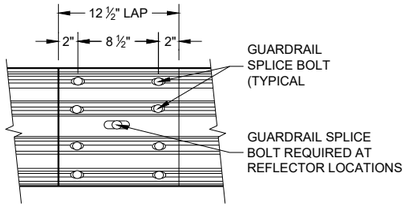
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

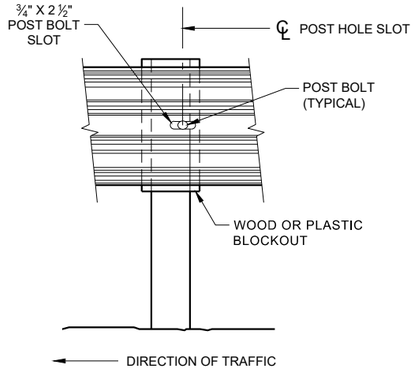
GENERAL NOTES

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

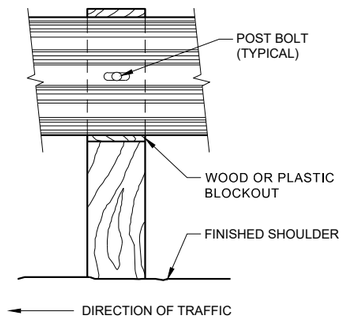
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

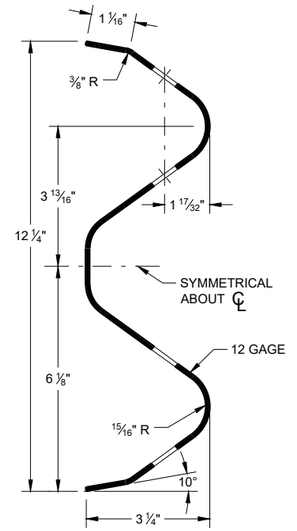
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



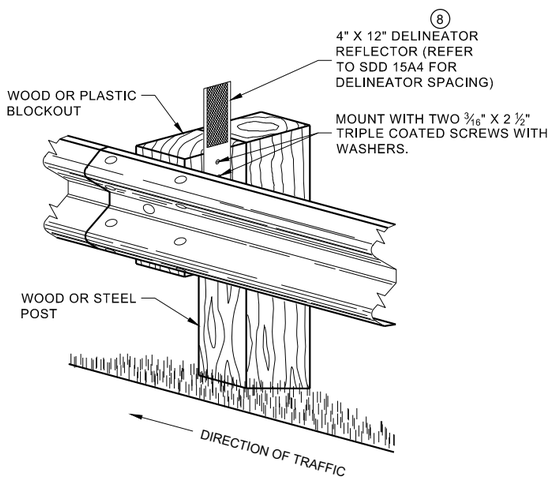
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



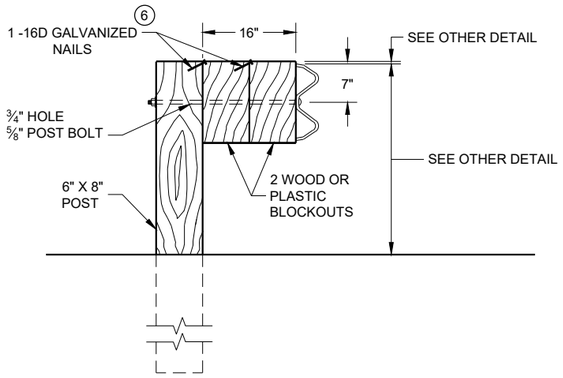
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

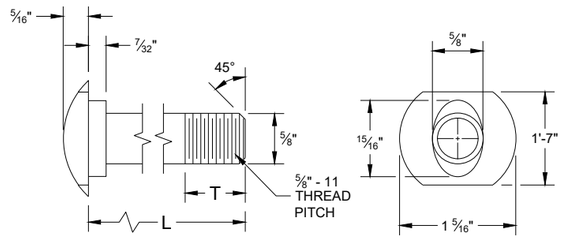


DETAIL FOR 16" BLOCKOUT DEPTH

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.

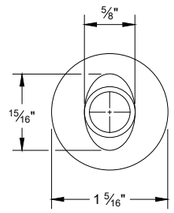
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

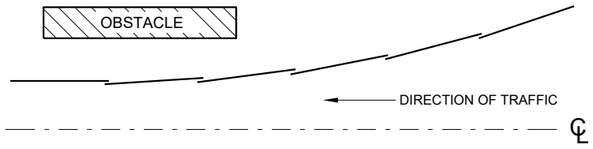


POST BOLT TABLE

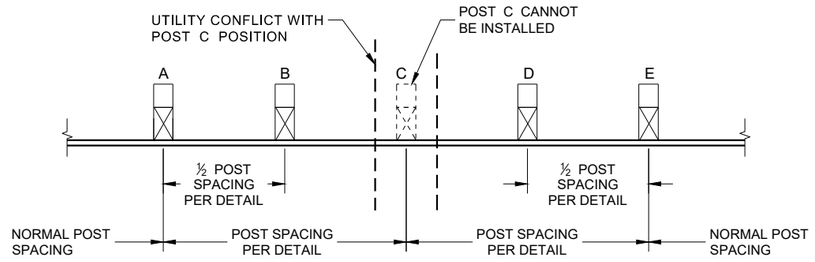
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



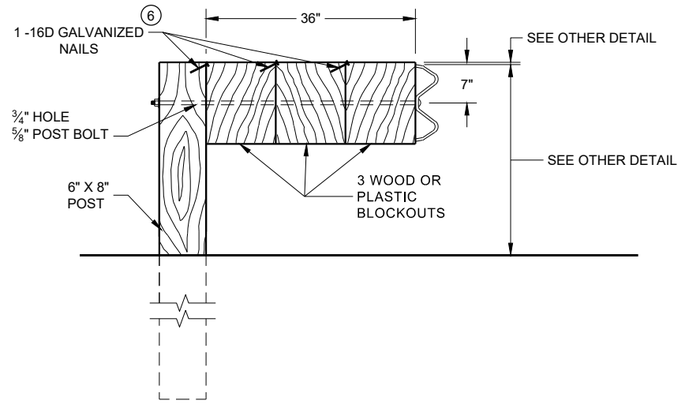
ALTERNATE BOLT HEAD



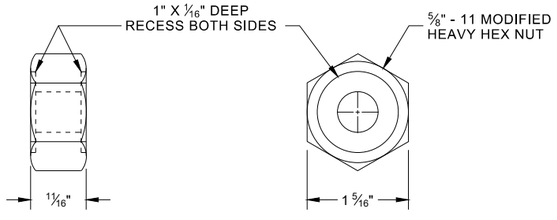
PLAN VIEW
BEAM LAPPING DETAIL



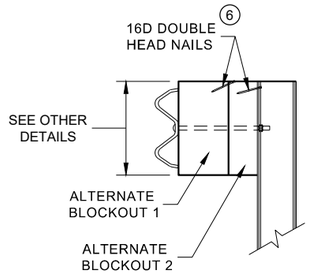
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



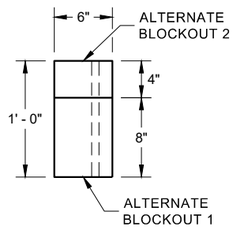
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

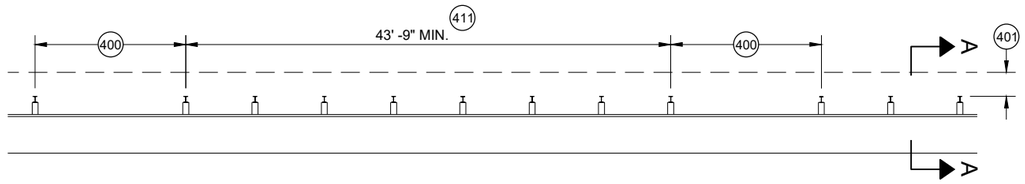
ALTERNATE WOOD BLOCKOUT DETAIL

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.

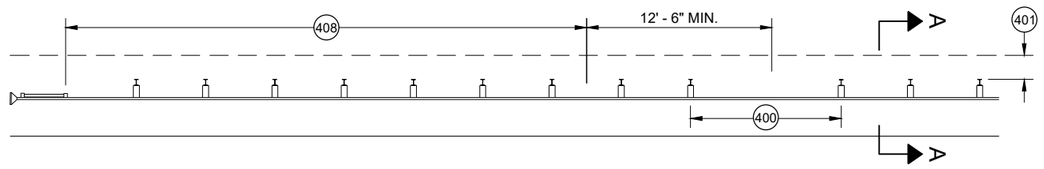
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

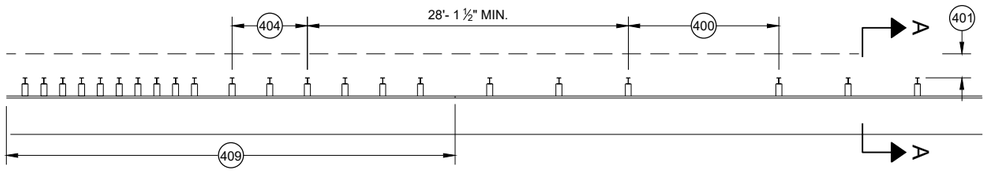
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



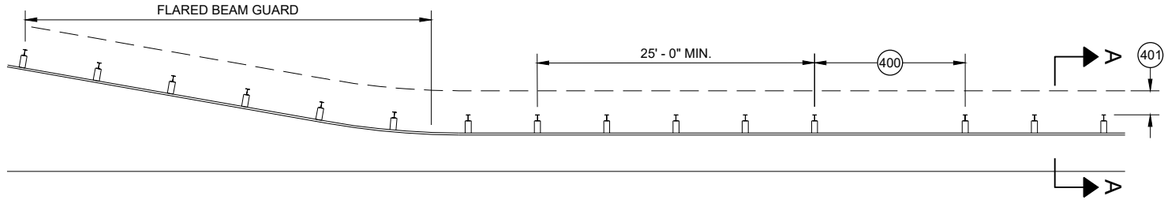
MISSING POST IN MGS GUARDRAIL



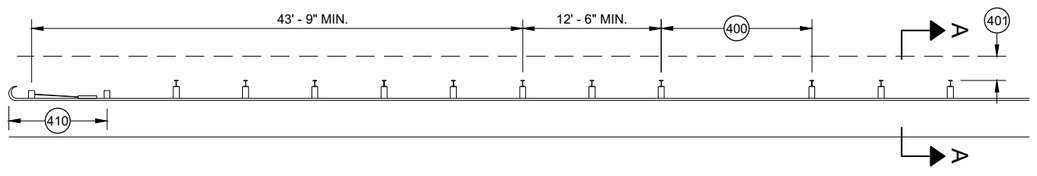
MISSING POST IN MGS GUARDRAIL NEAR EAT



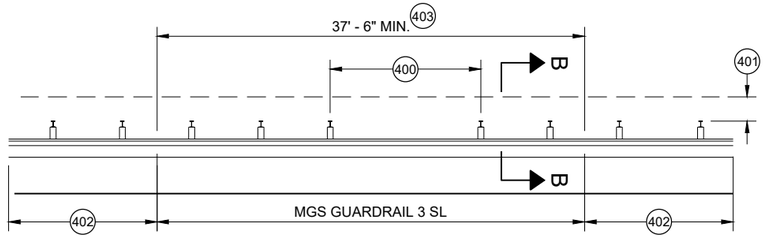
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

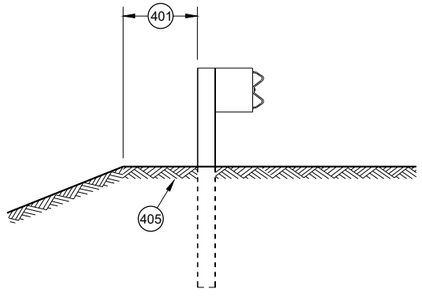


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

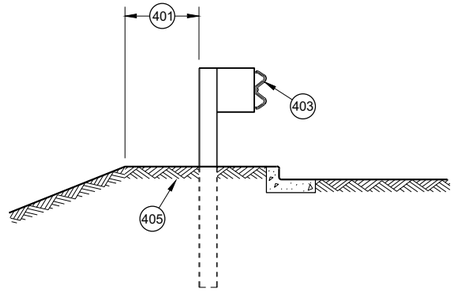


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

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SDD 14B42 - 07d

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.

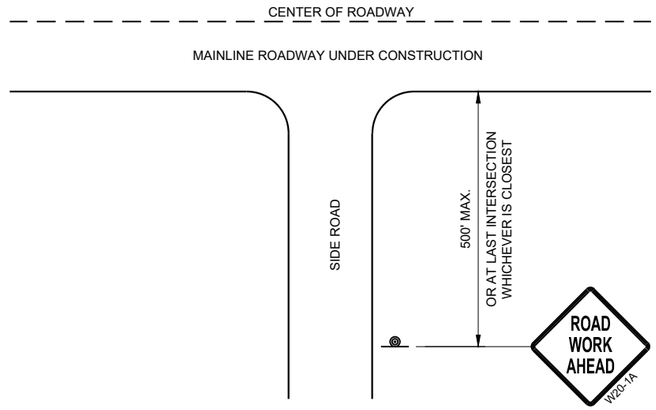
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 REESTABLISHED.

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

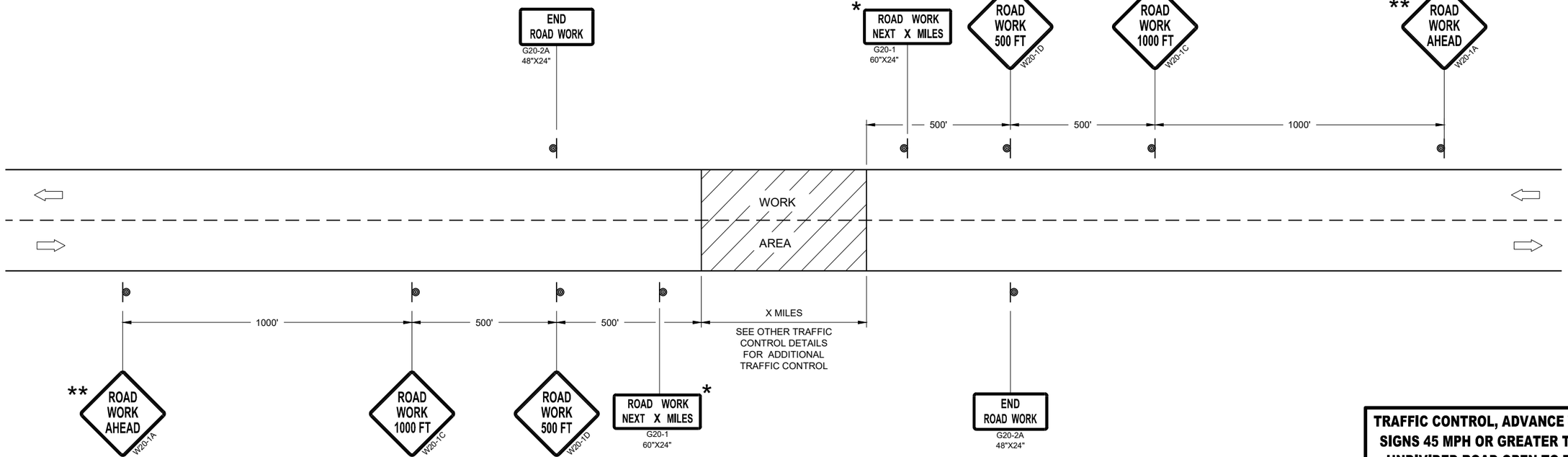
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

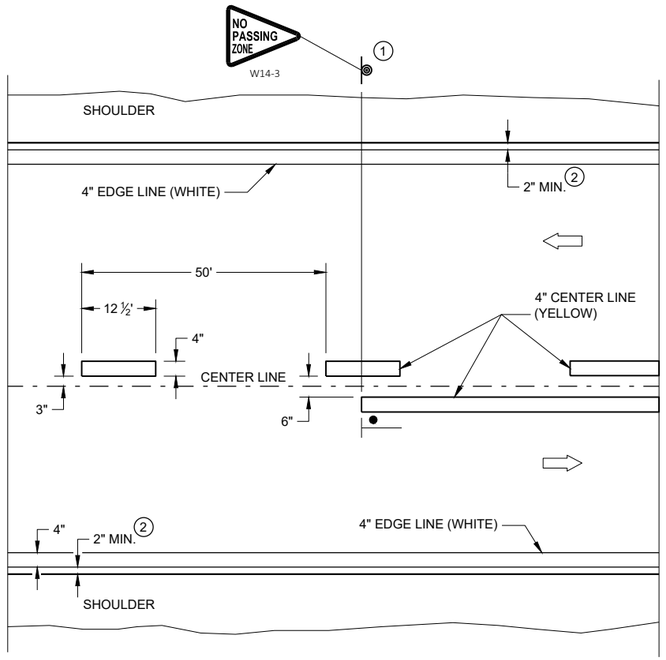
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

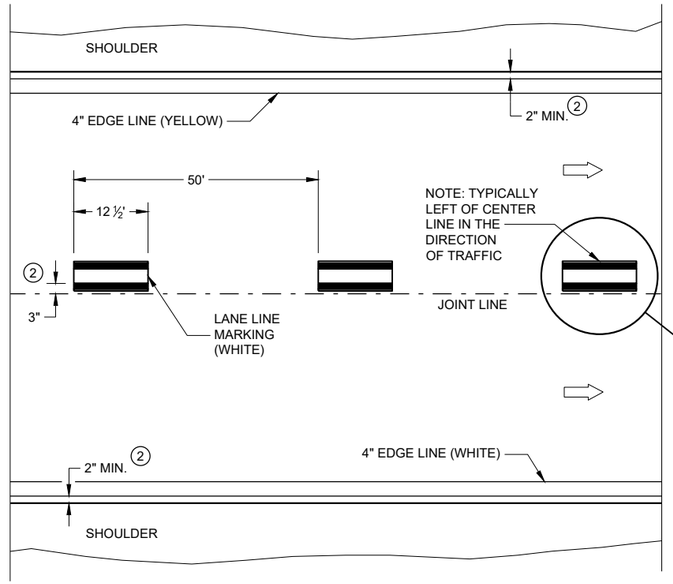
FHWA

6

SDD 15C04 - 05

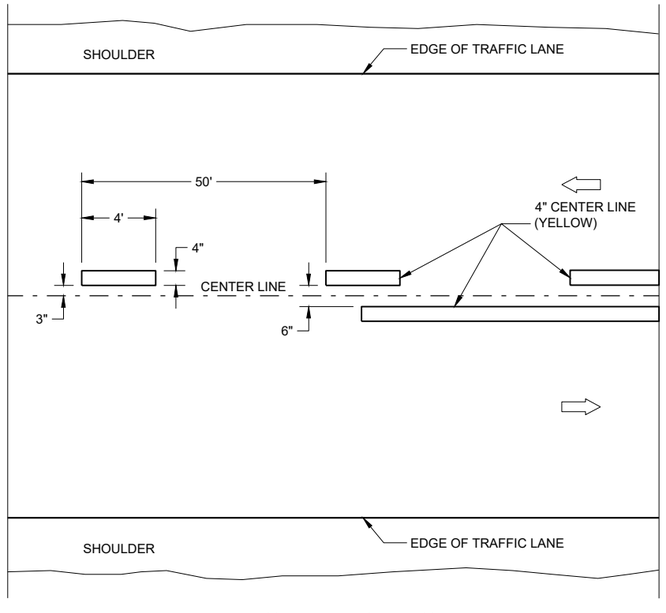


TWO WAY TRAFFIC

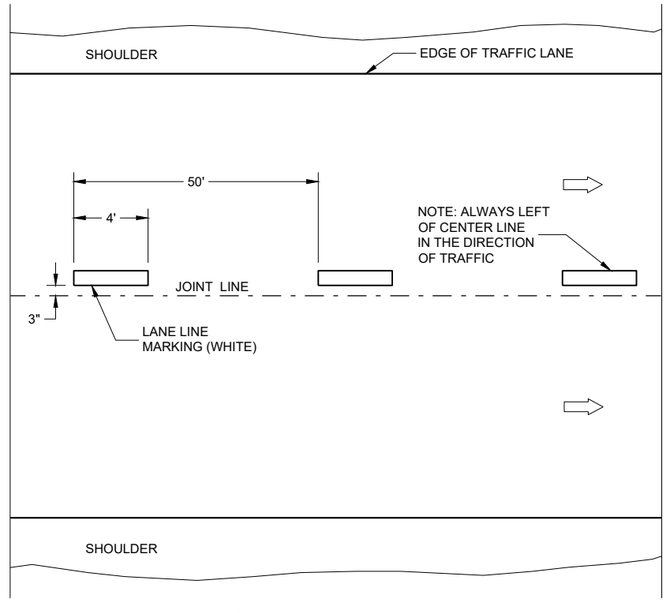


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

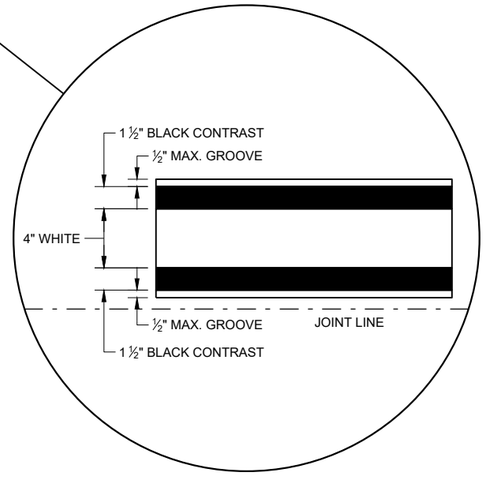
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

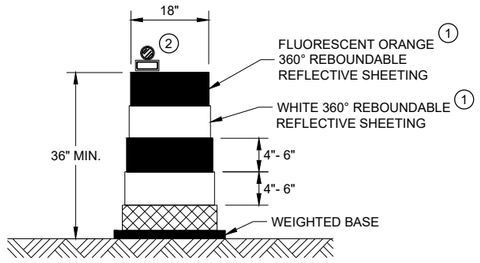
FHWA

SDD 15C08 - 20a

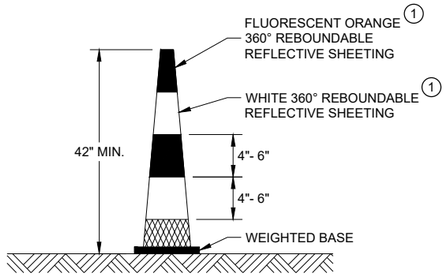
SDD 15C08 - 20a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

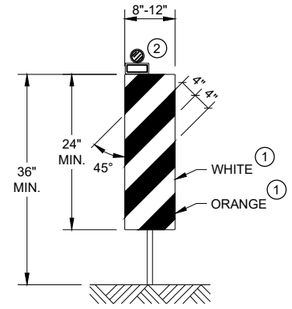


DRUM



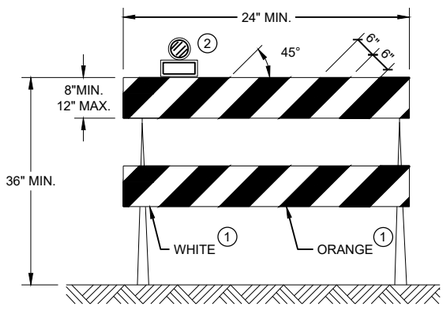
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



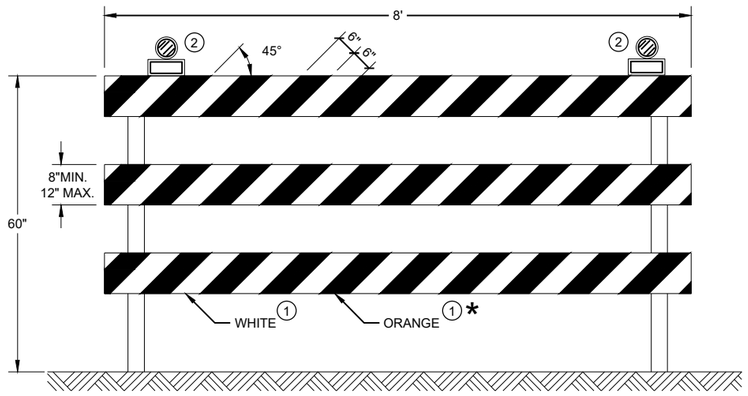
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

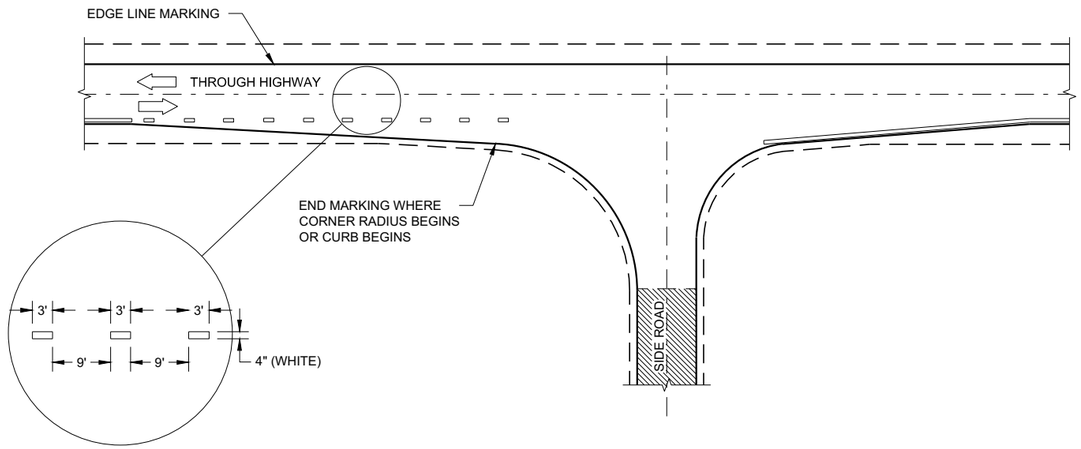
FHWA

6

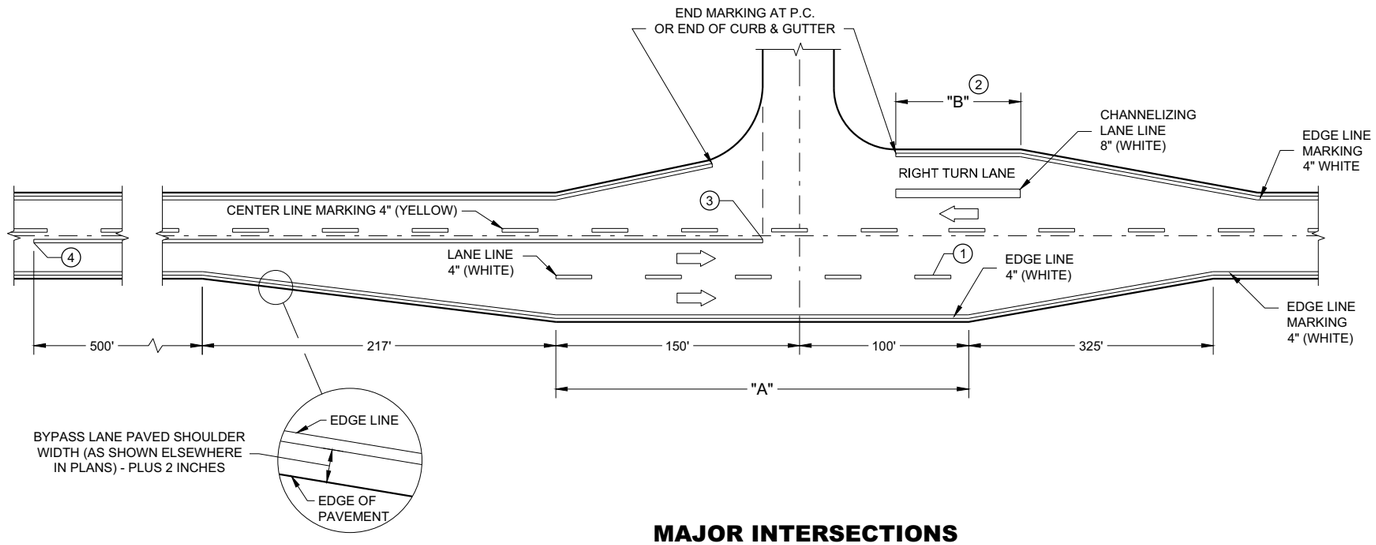
6

SDD15C11 - 09b

SDD15C11 - 09b



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

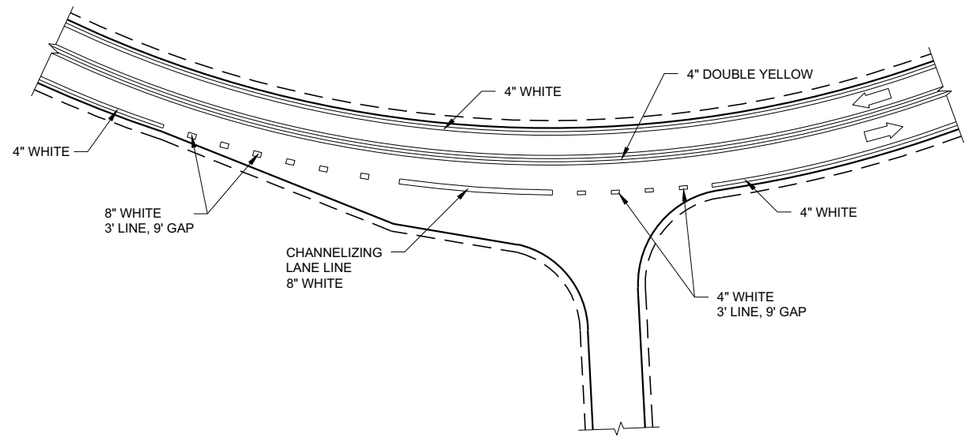
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

6

SDD 15C35 - 04a

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

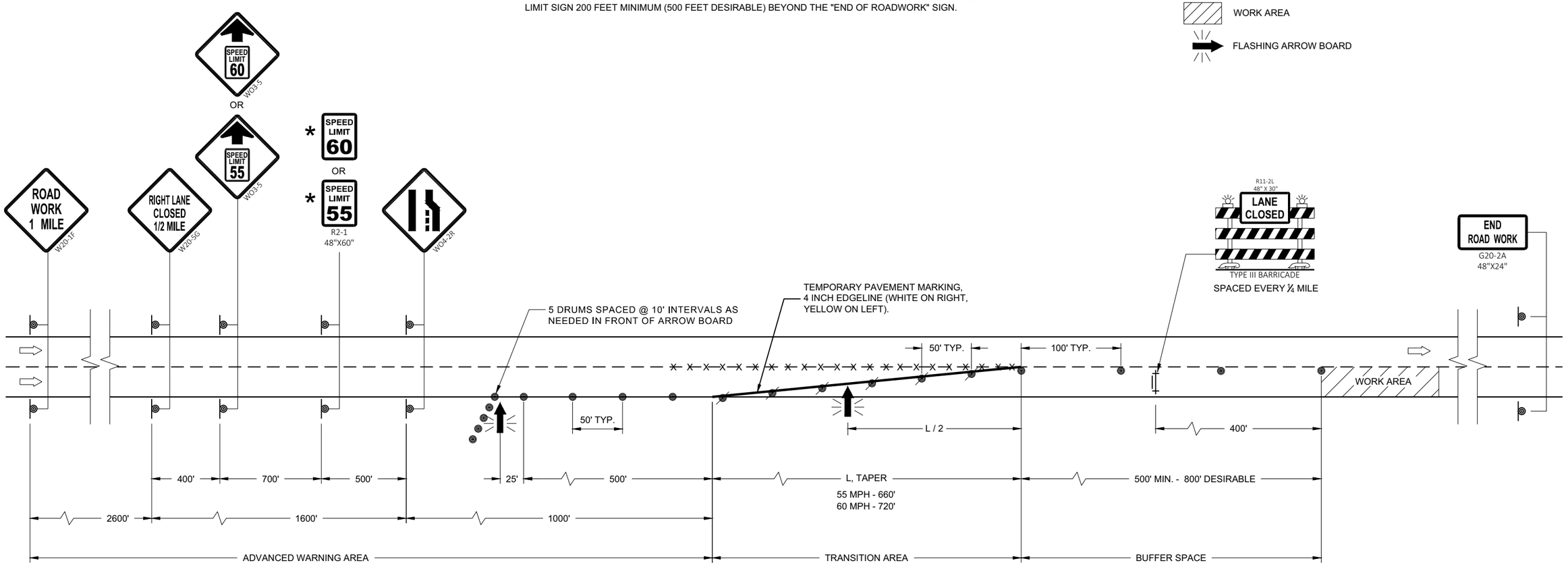
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

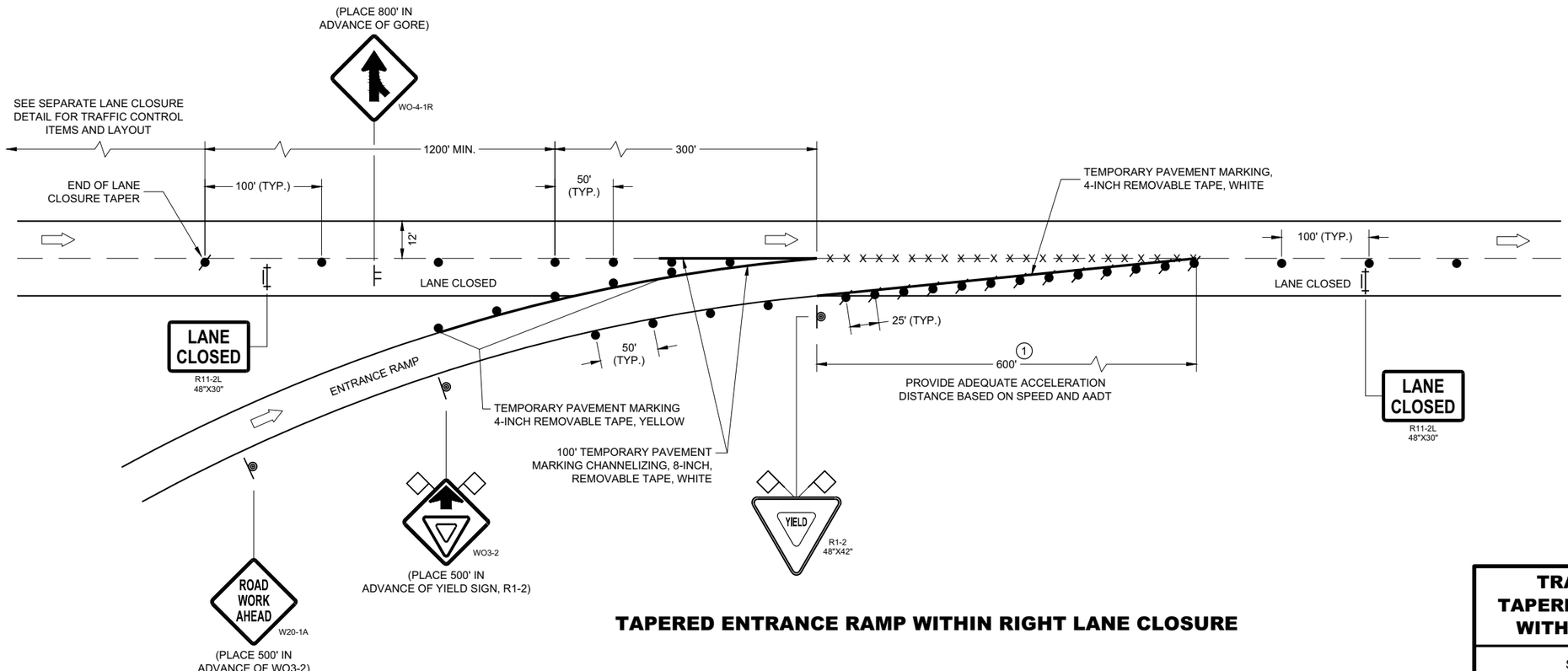
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05c

6

SDD 15D15 - 05c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

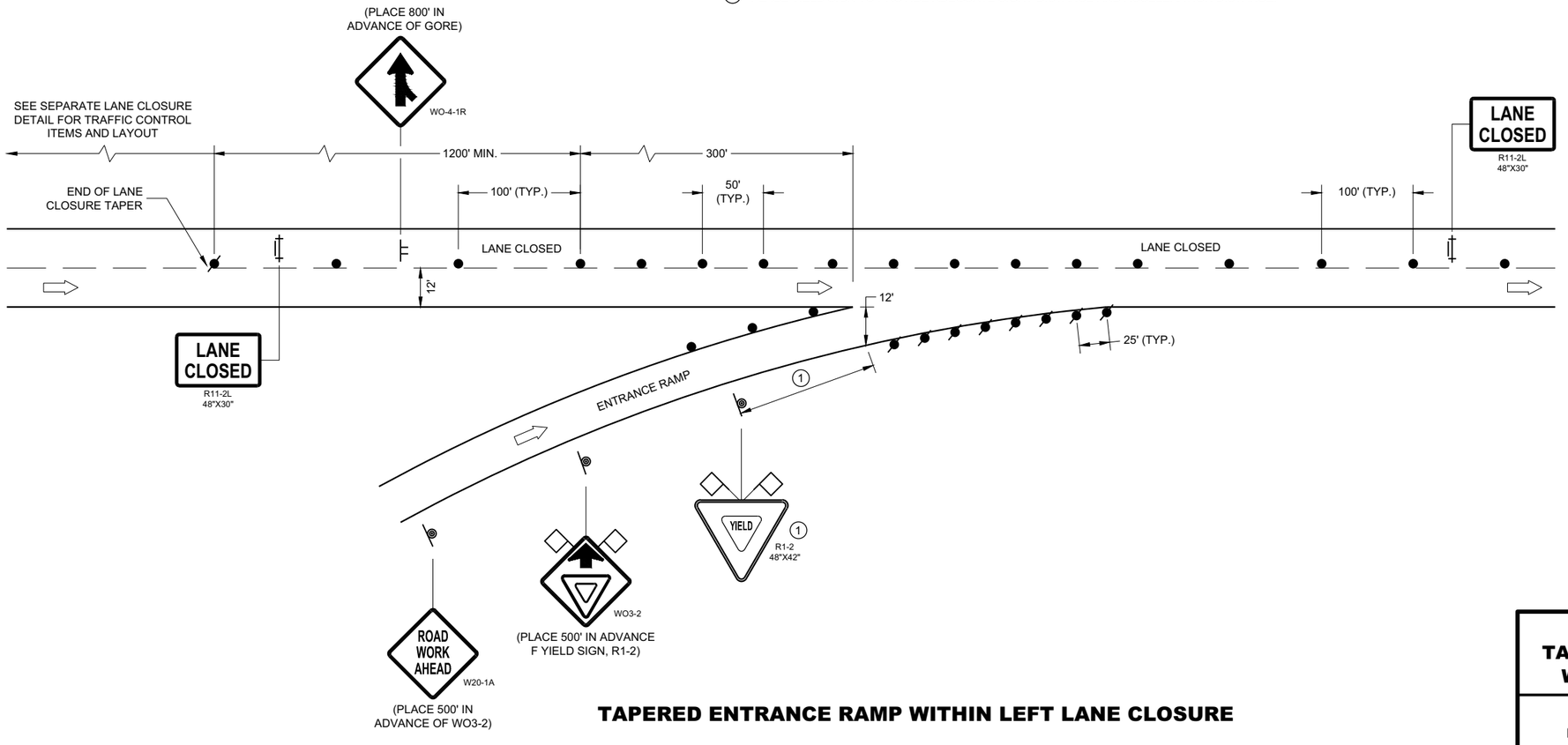
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

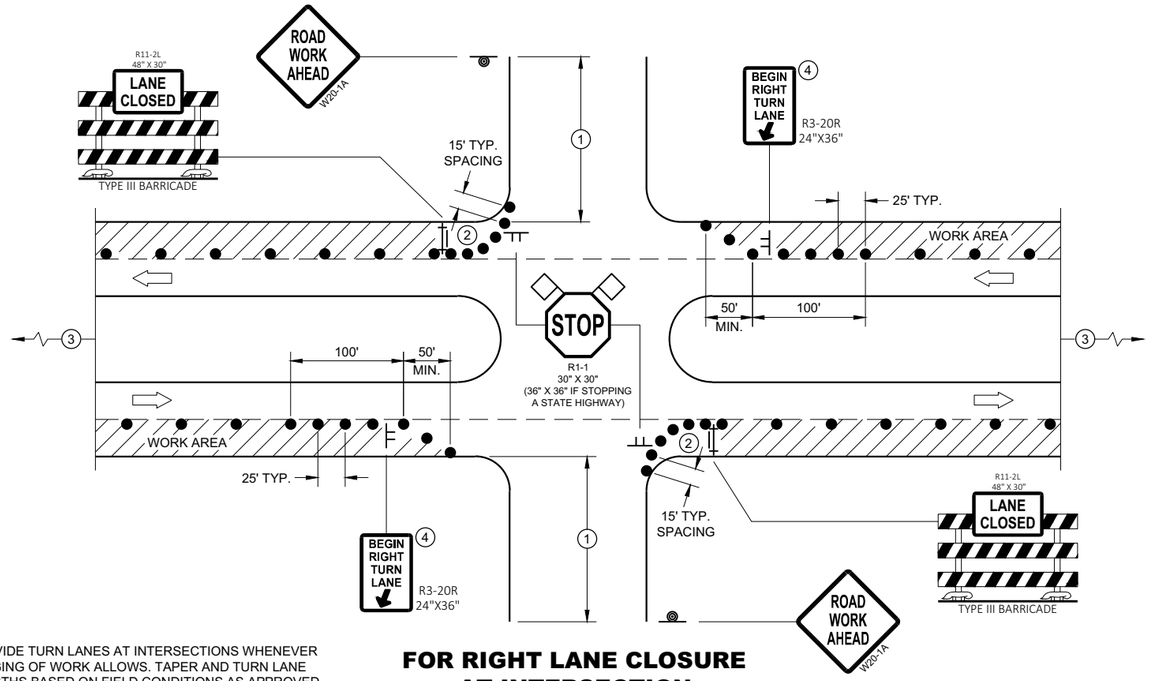
FHWA

6

SDD 15D15 - 05d

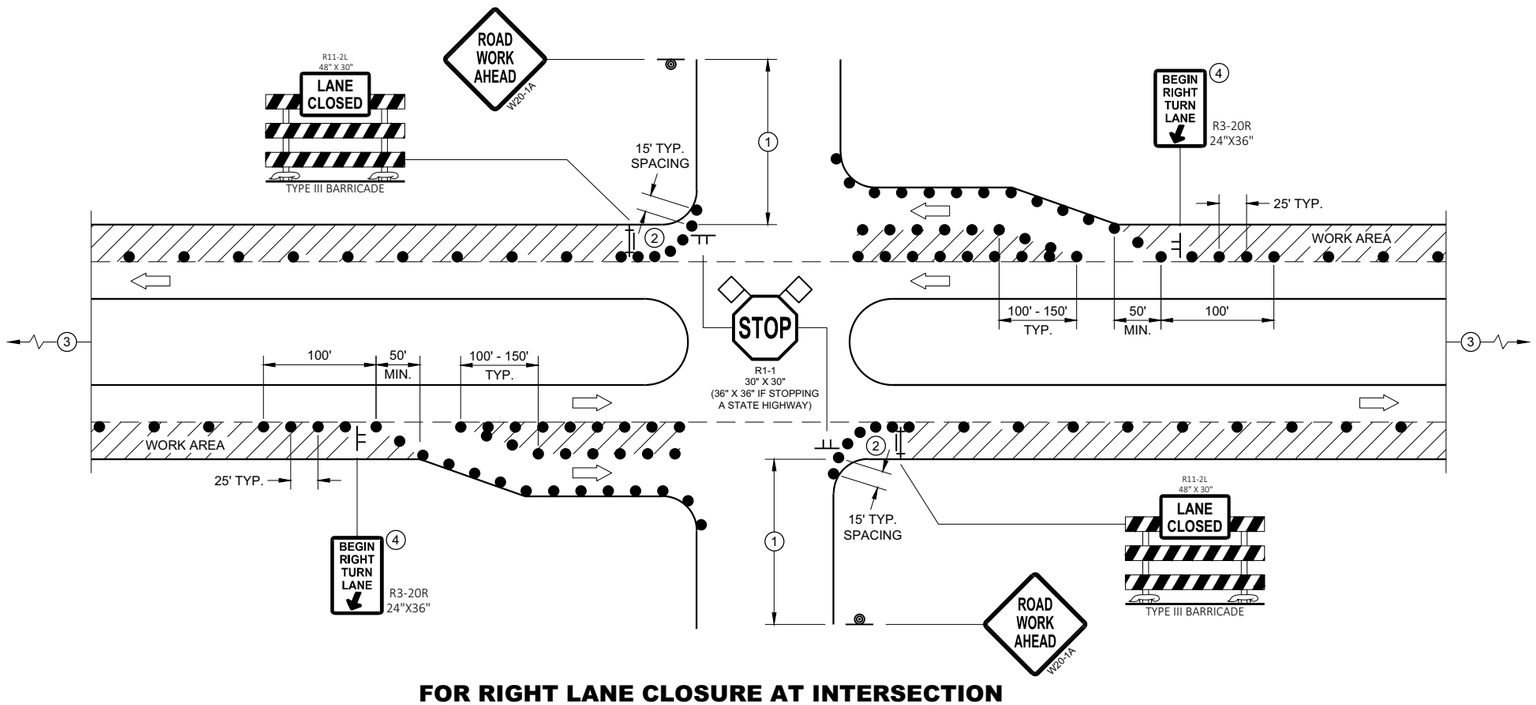
6

SDD15D15 - 05d



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

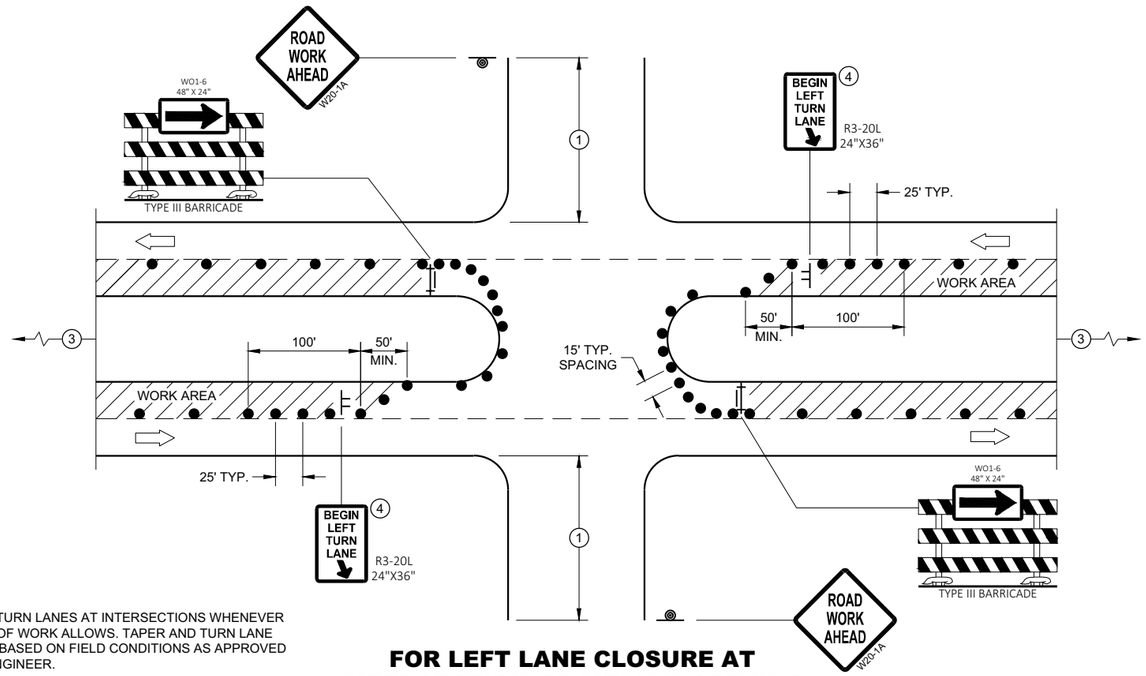
(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

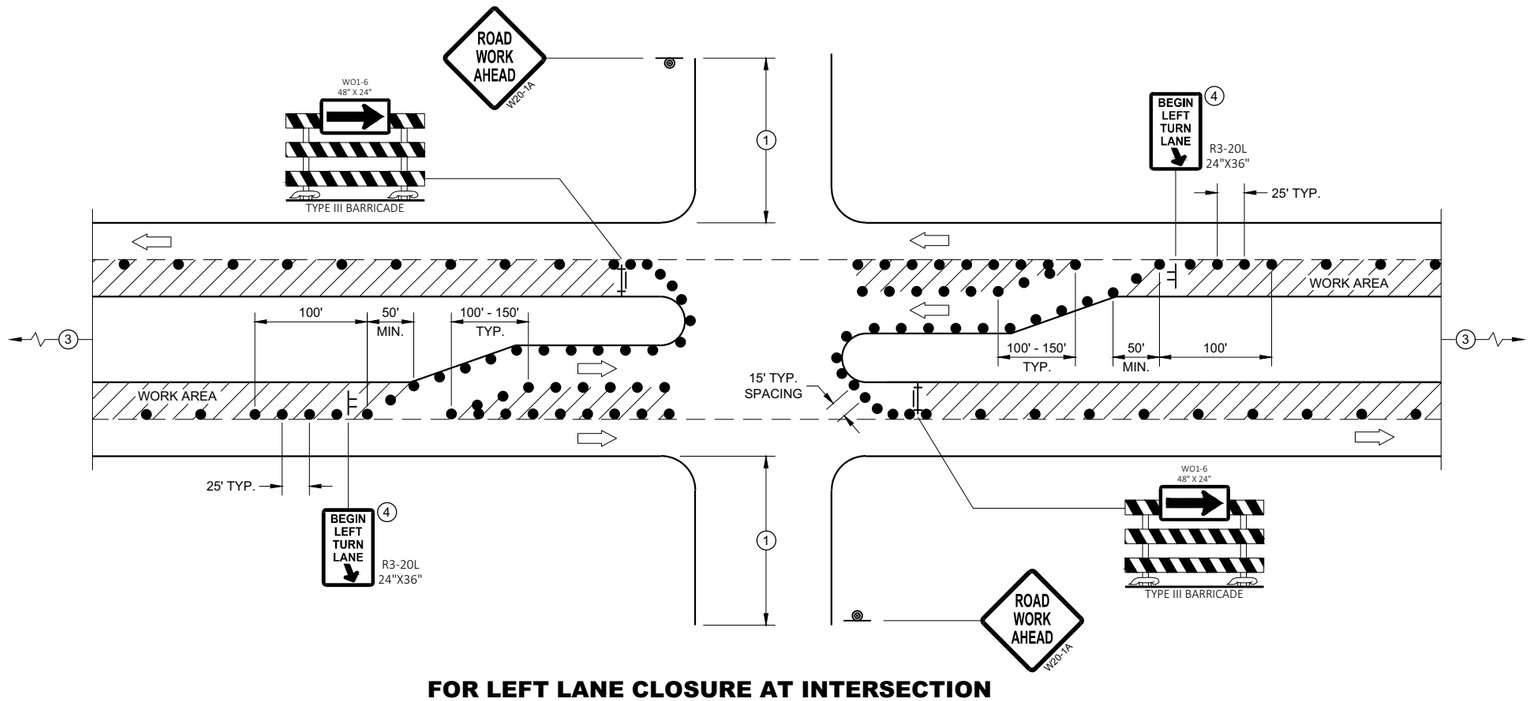
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

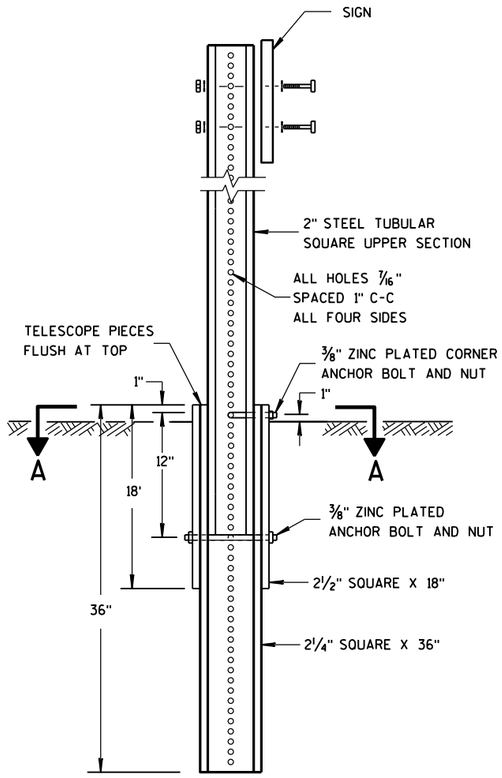
FHWA

6

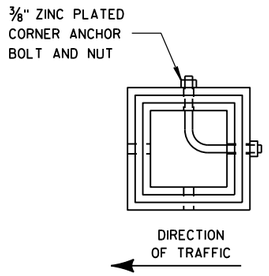
SDD 15D21 - 07b

6

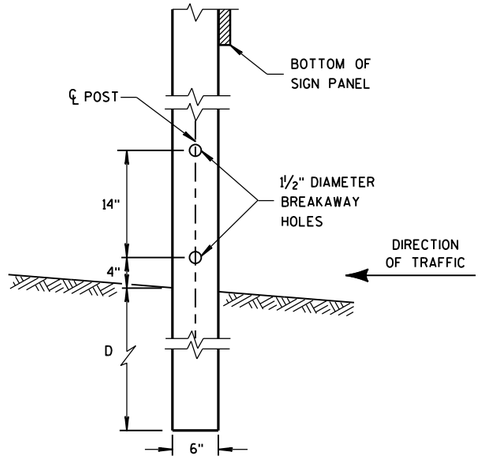
SDD 15D21 - 07b



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



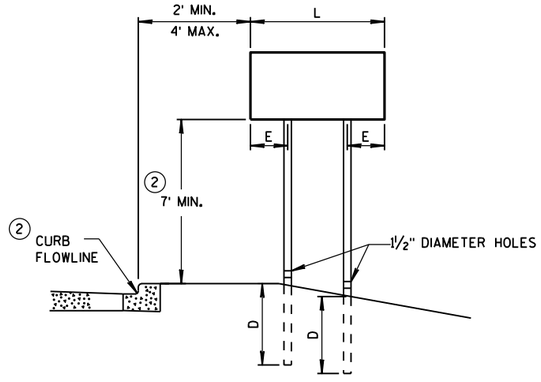
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

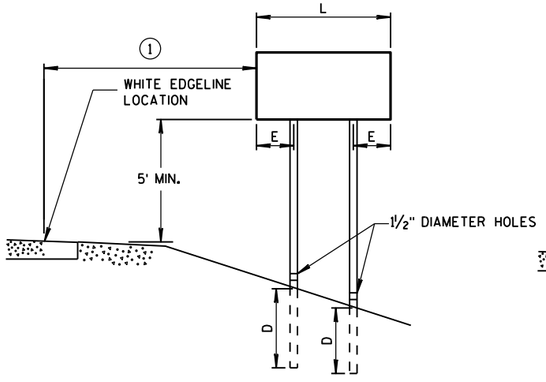
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

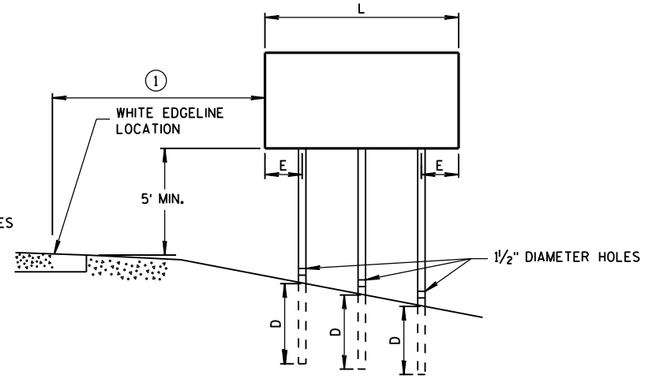
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

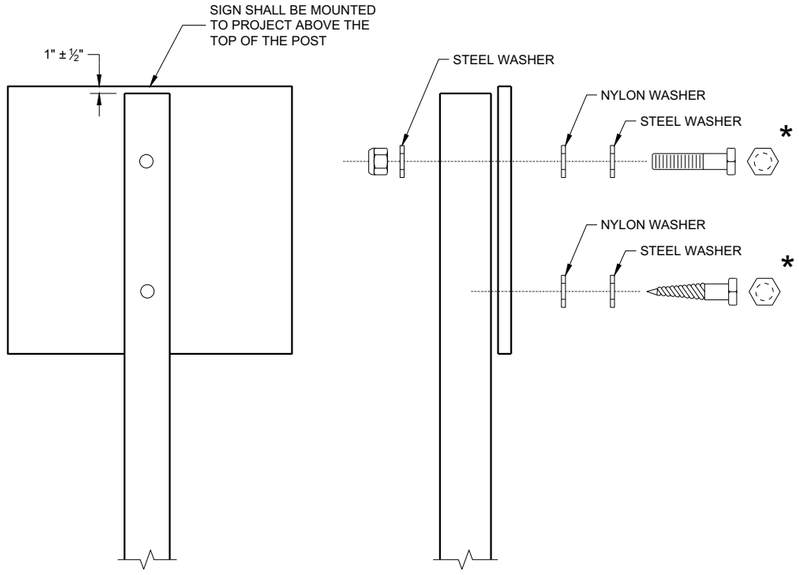
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



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 POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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SDD 15D38 - 02b

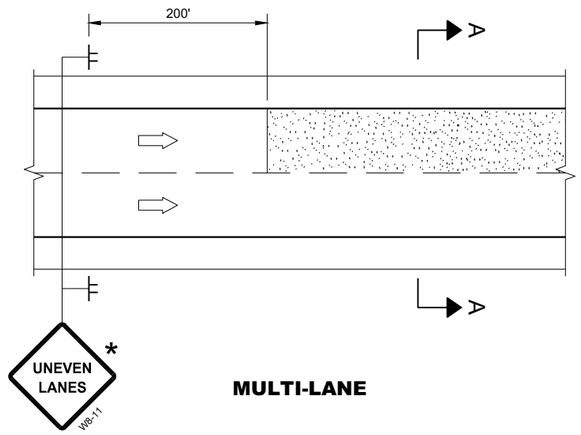
SDD 15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

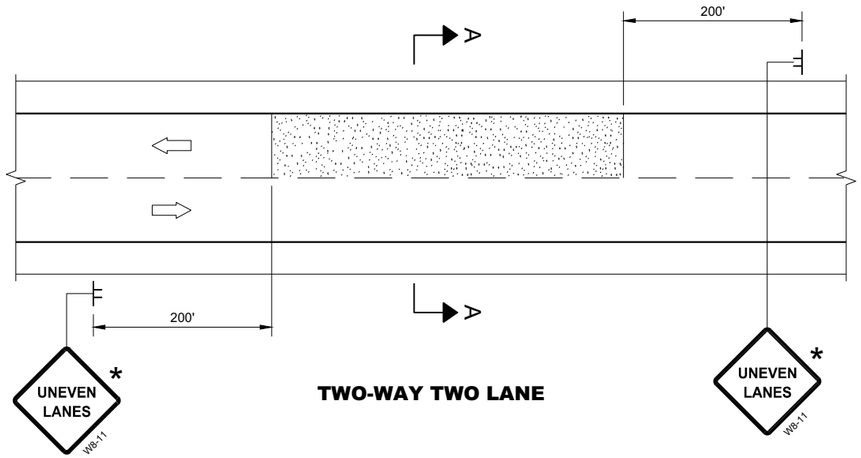
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

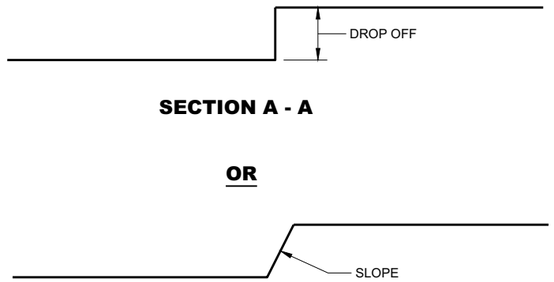
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

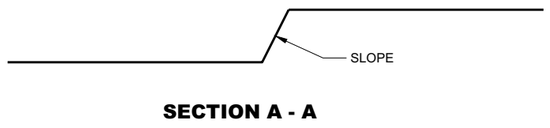
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

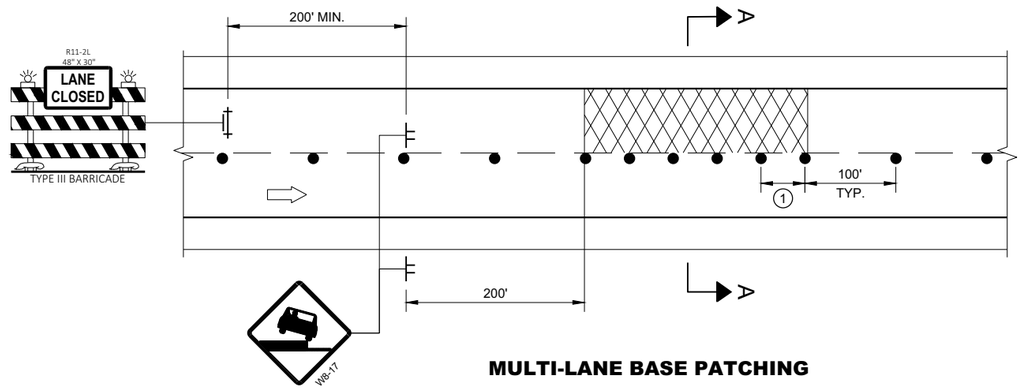


SECTION A - A

OR

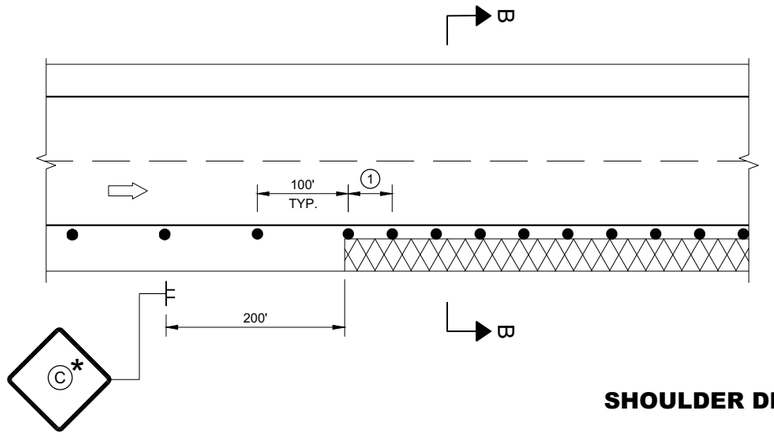


SECTION A - A

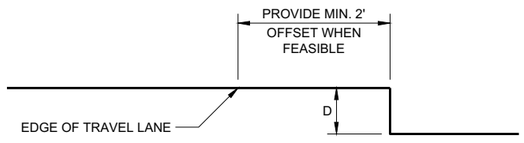


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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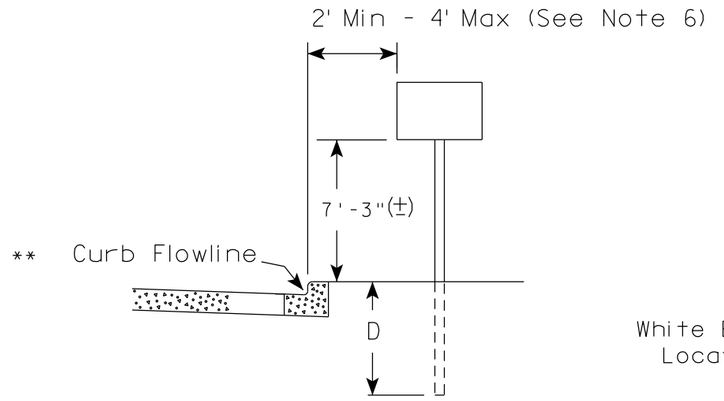
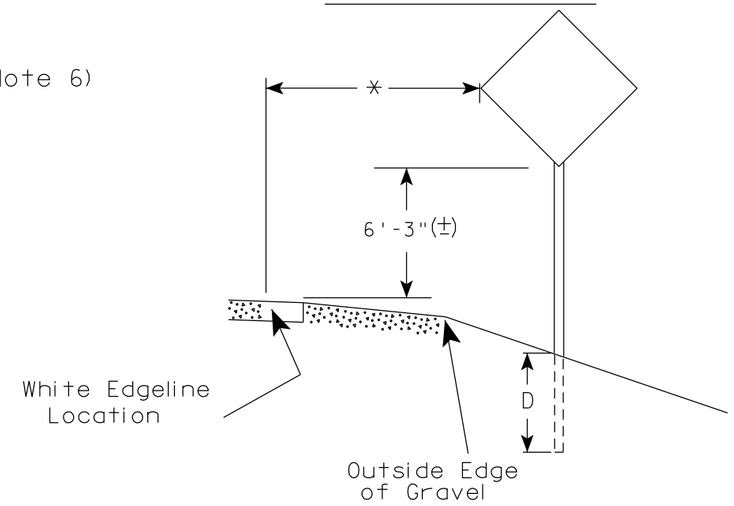
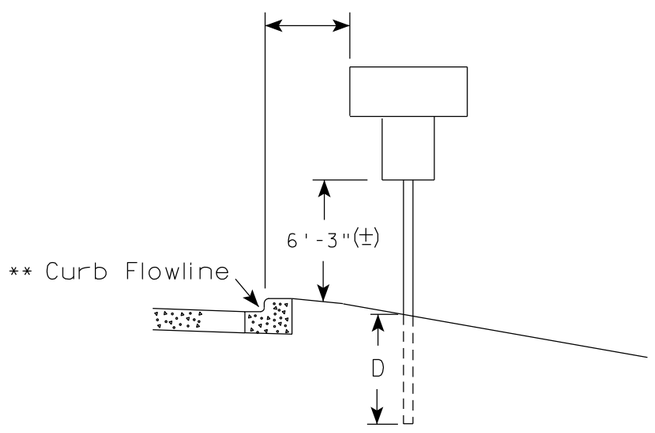
SDD 15D39 - 02

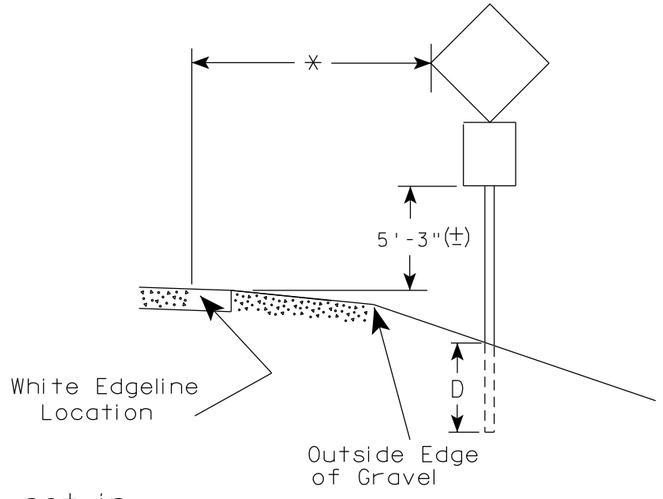
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

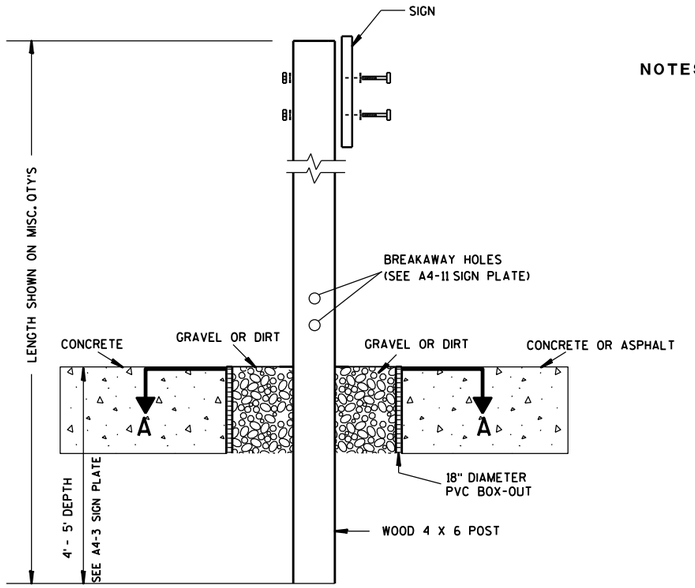
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

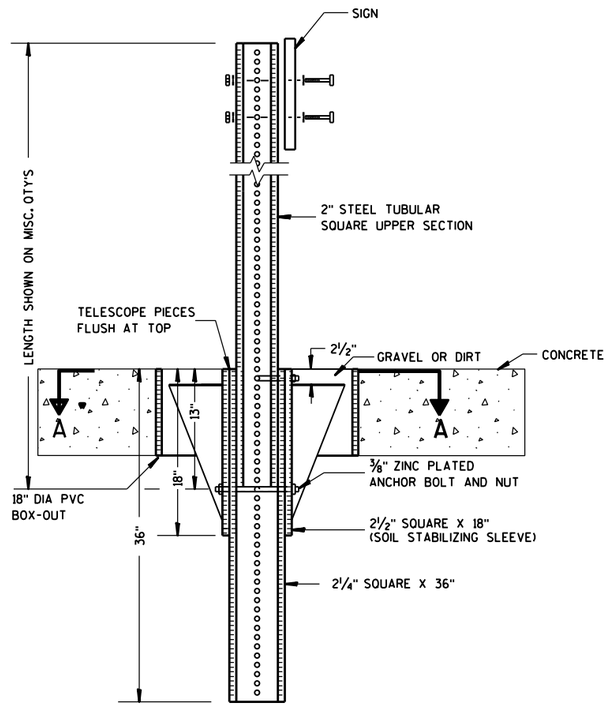
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 84	E



ELEVATION VIEW

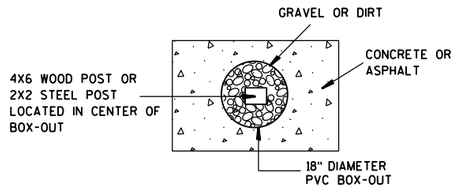
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

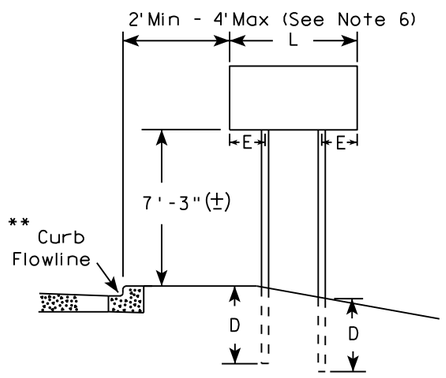
APPROVED Matthew R Rauch
for State Traffic Engineer

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

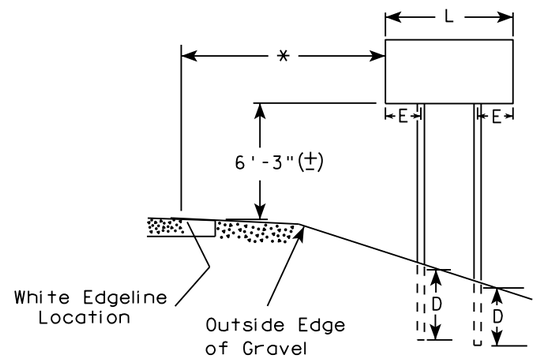
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

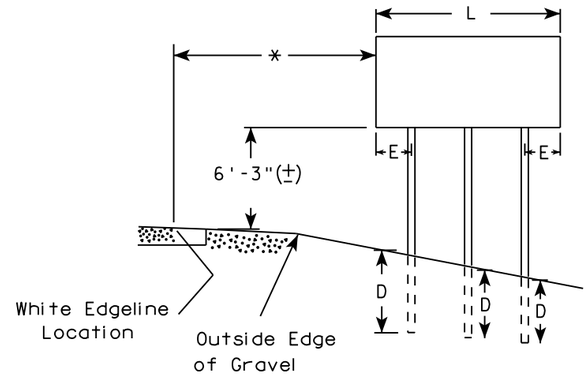
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

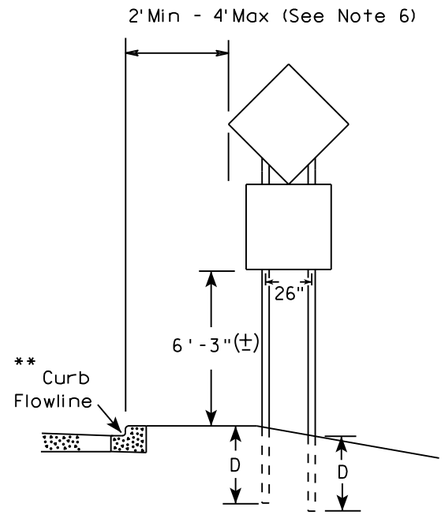
URBAN AREA



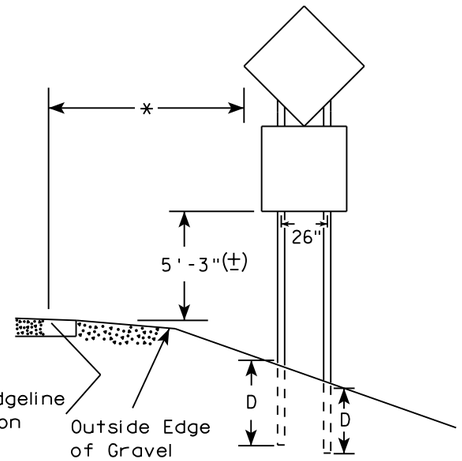
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

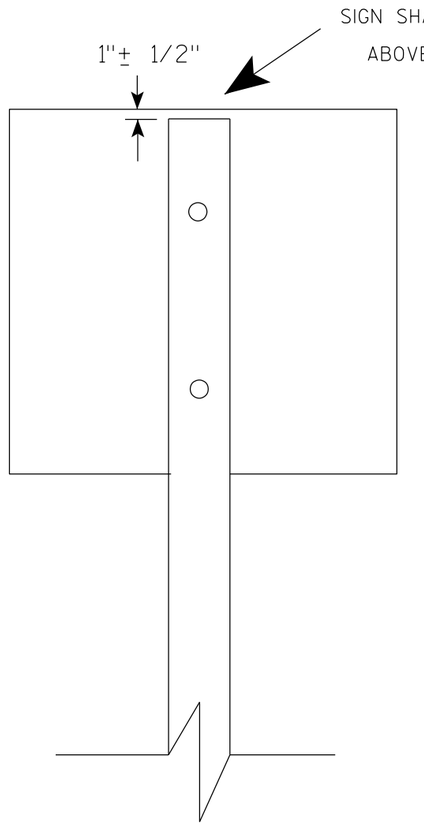
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

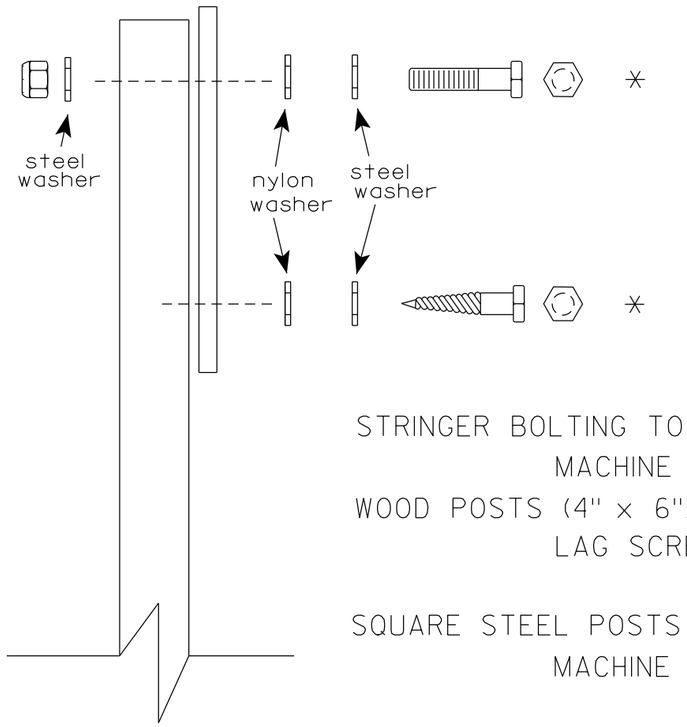
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 86	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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

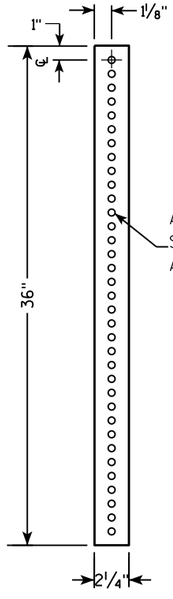
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

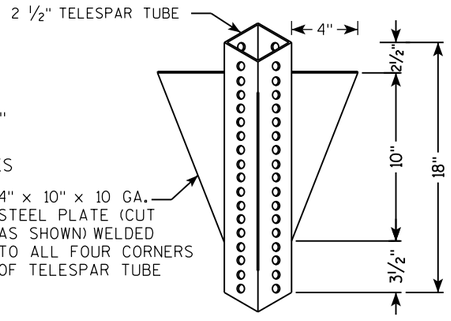
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

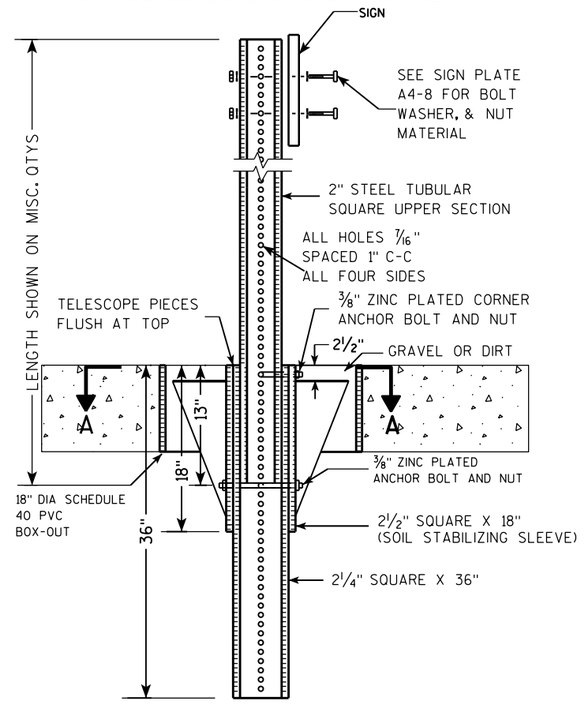
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



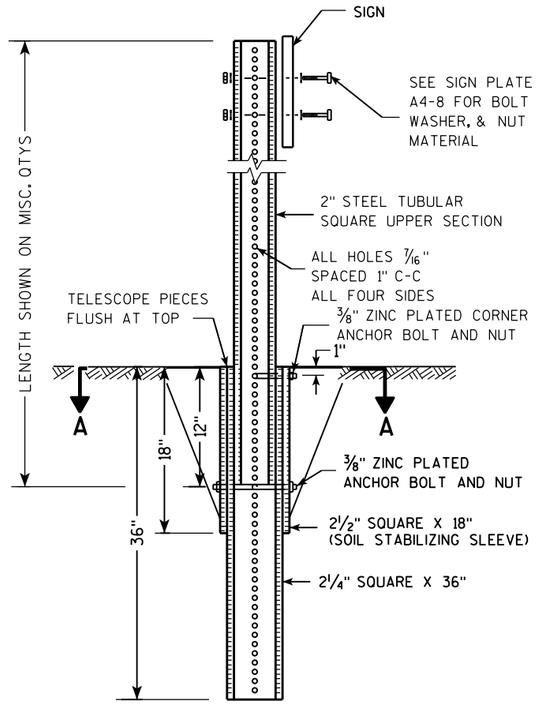
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

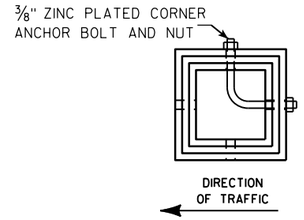


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

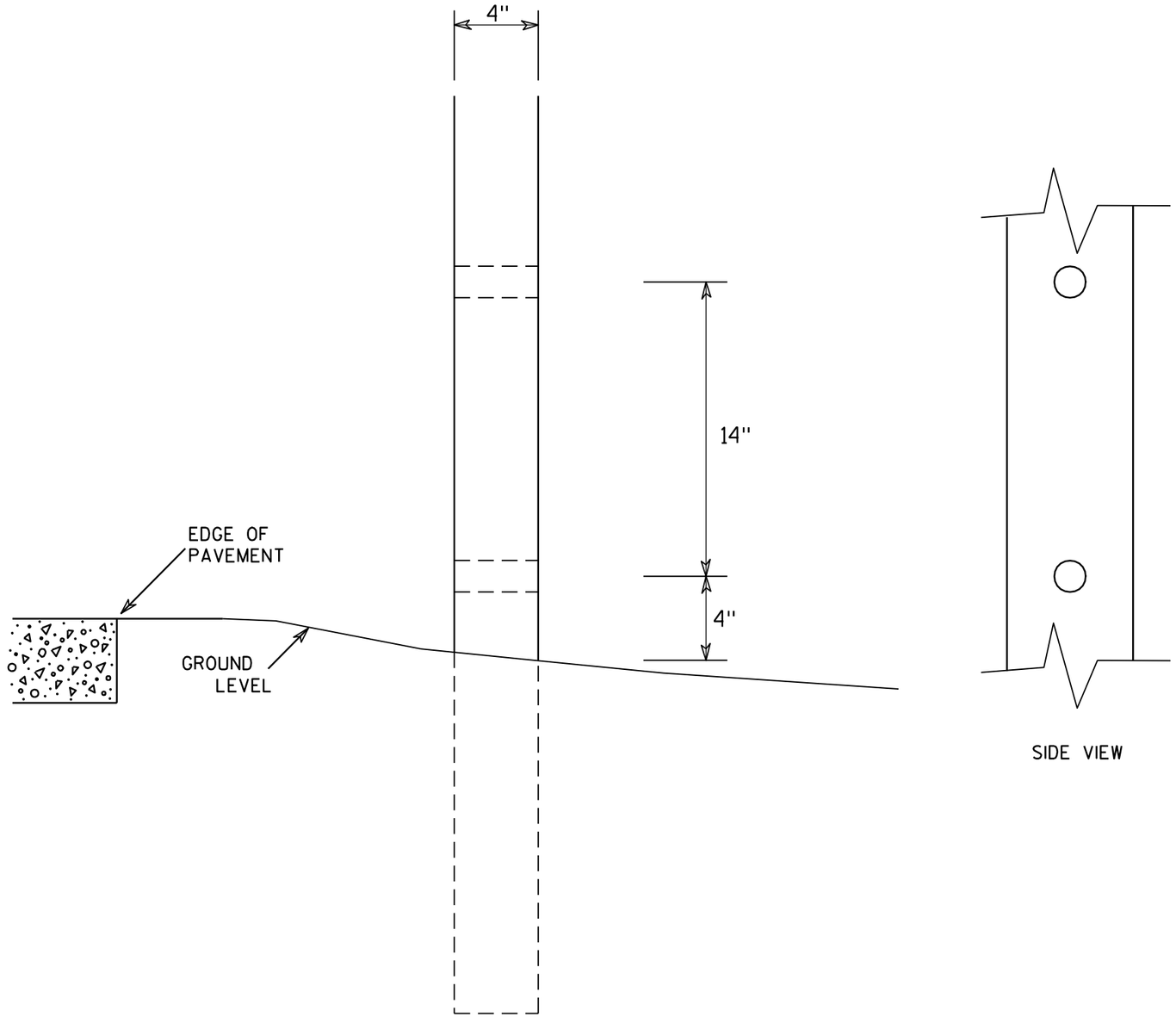
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 88 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

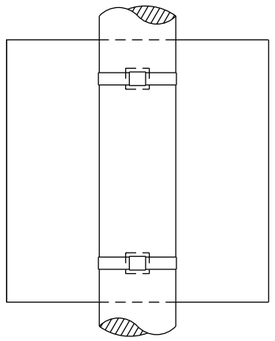
APPROVED Chester J Spang for State Traffic Engineer

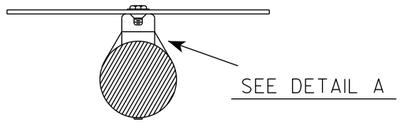
DATE 3/27/97 PLATE NO. A4-11.2

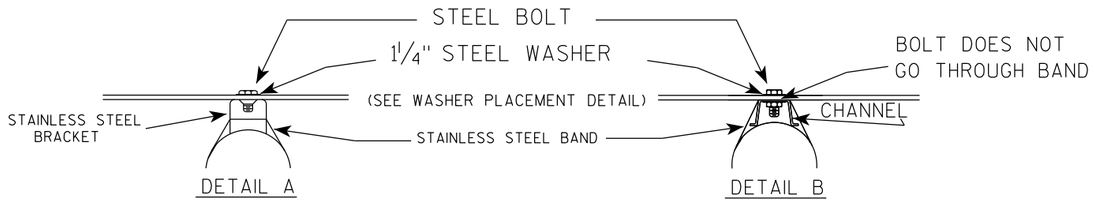
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 89	E

BANDING

SINGLE SIGN



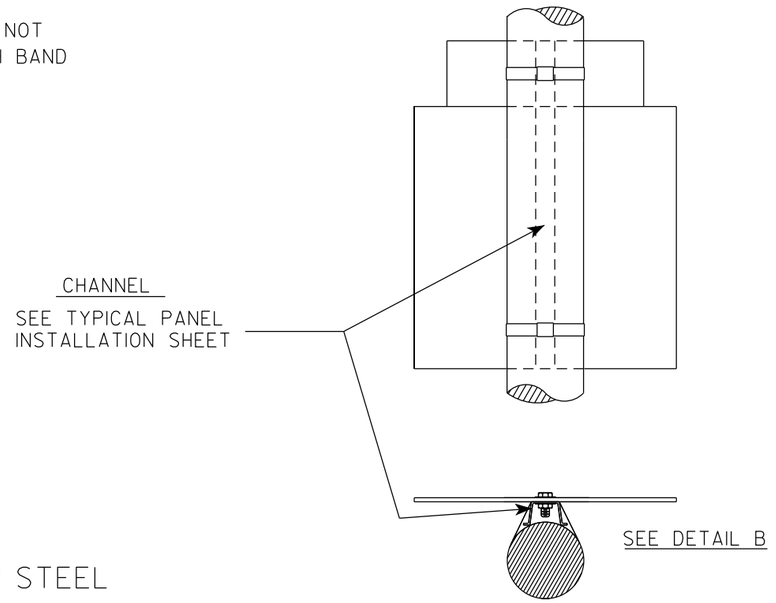




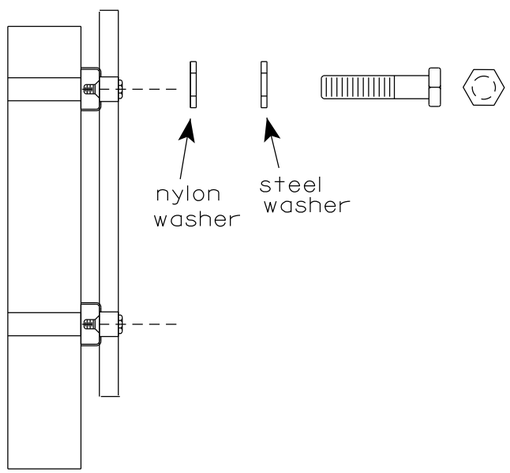
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

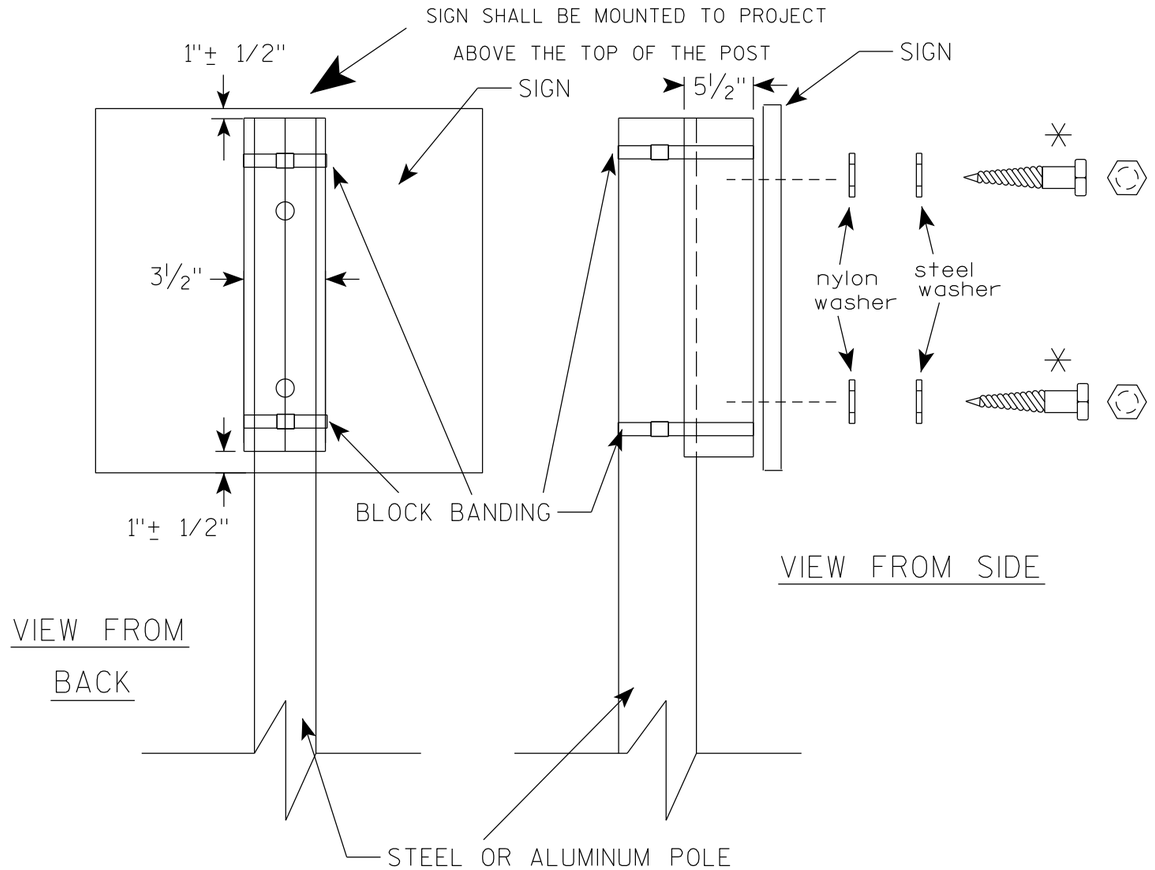
WISCONSIN DEPT OF TRANSPORTATION

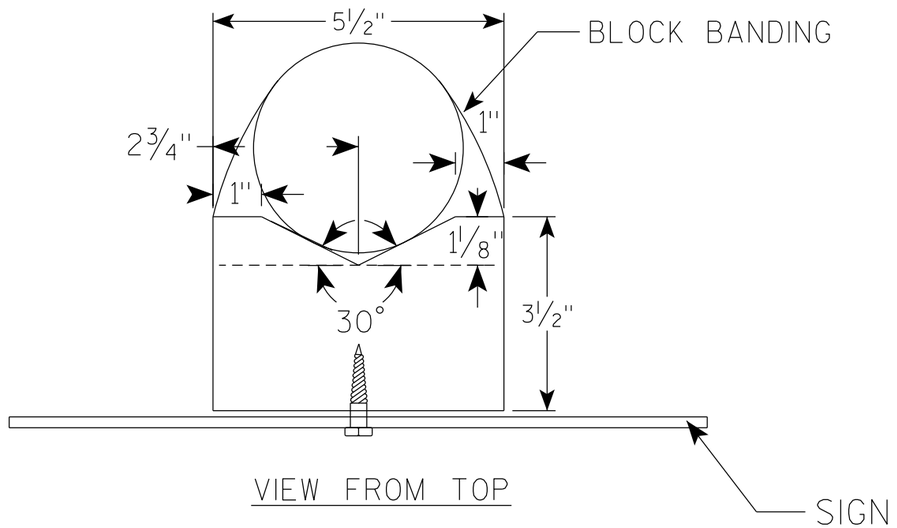
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 90	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

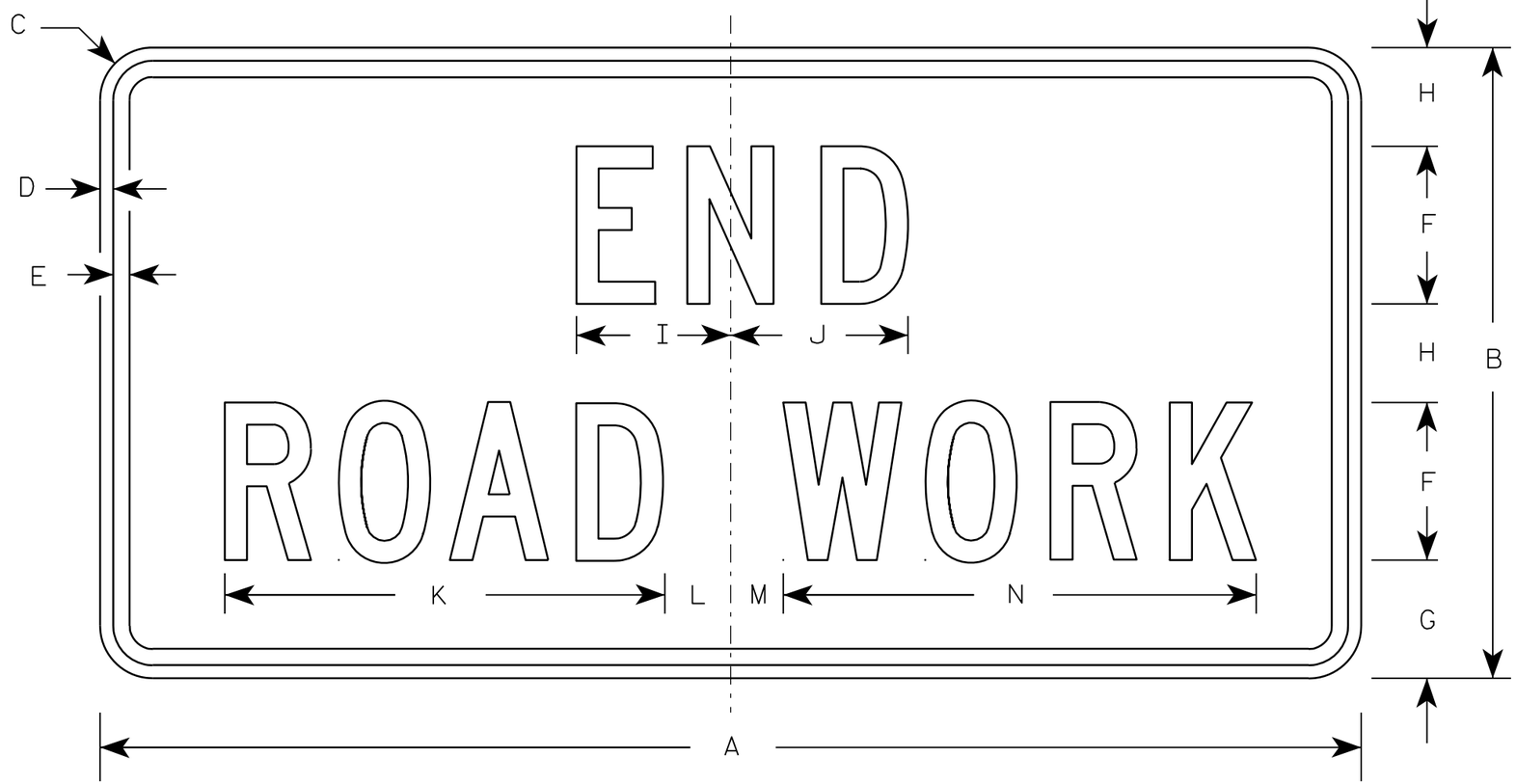
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:				SHEET NO: 91	E



G20-2A

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

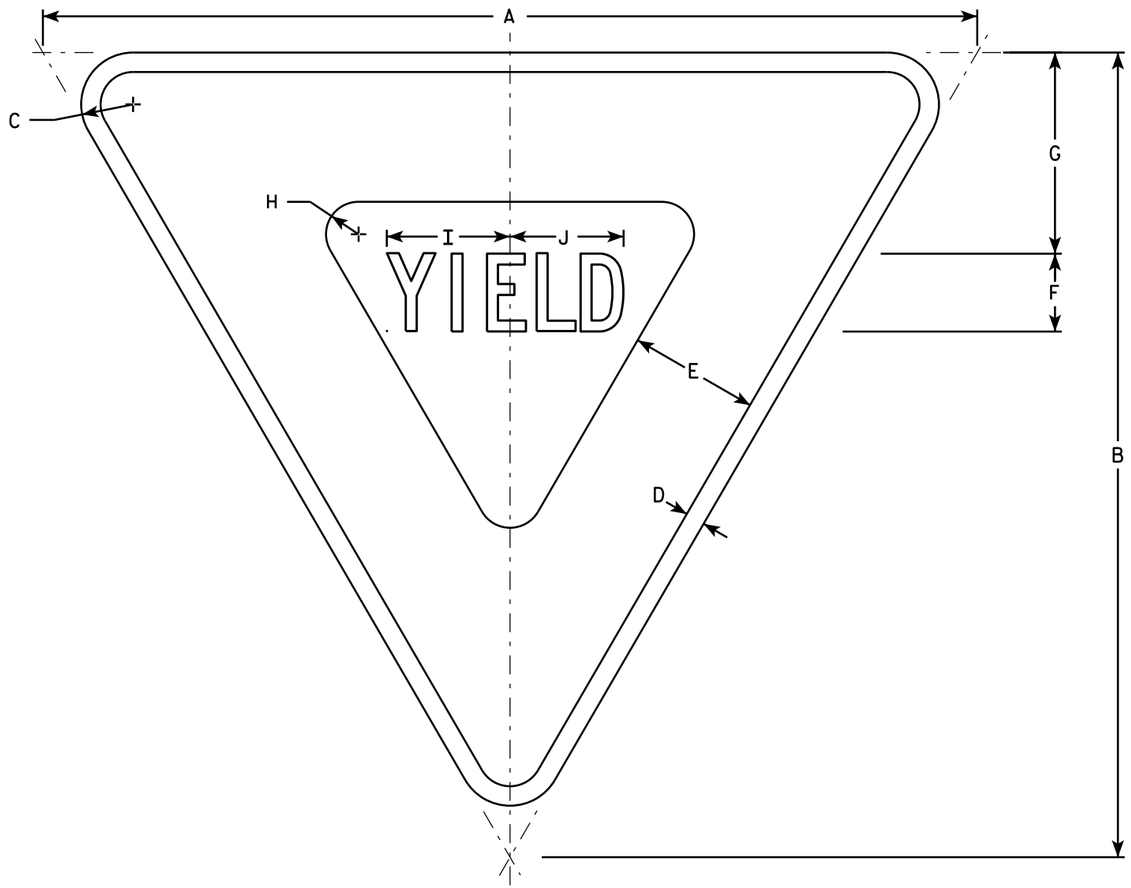
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 92	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

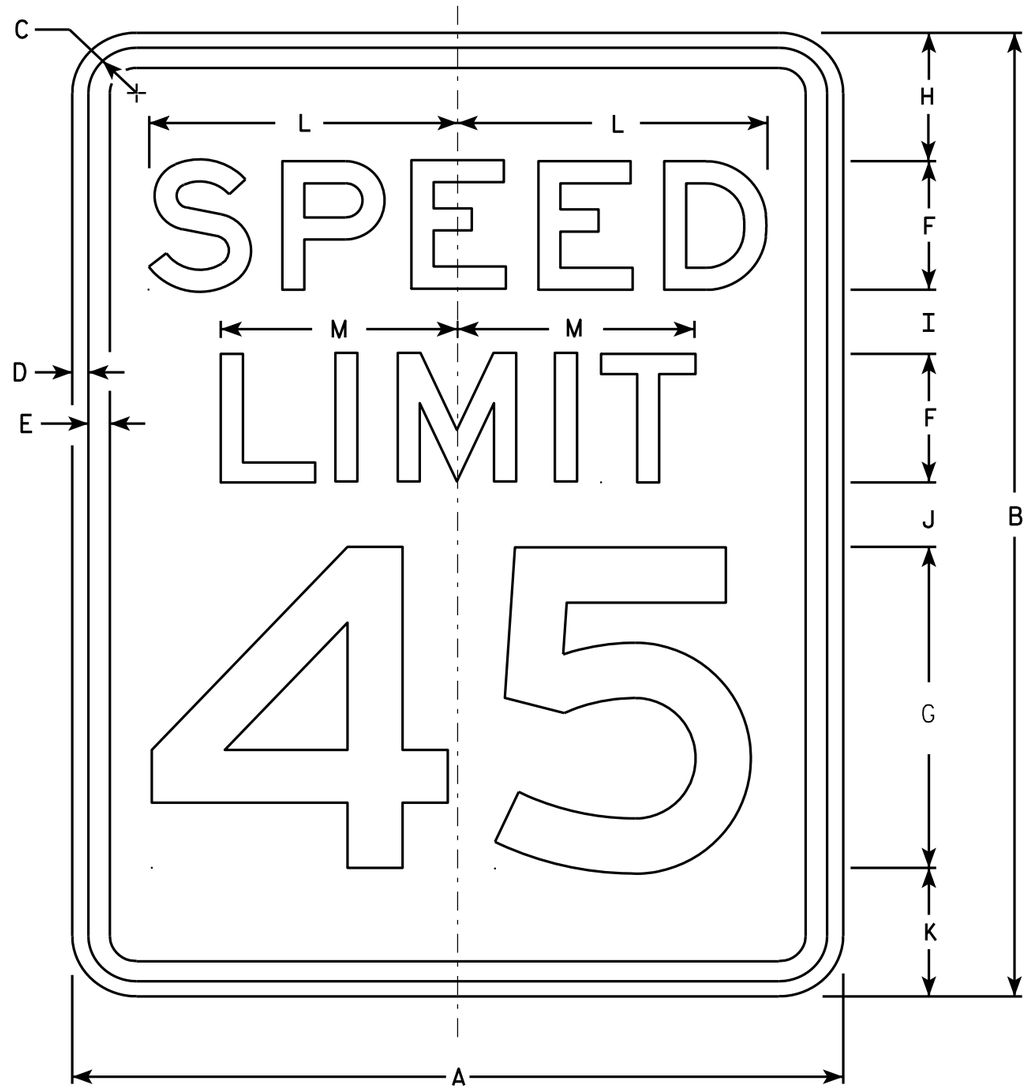
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

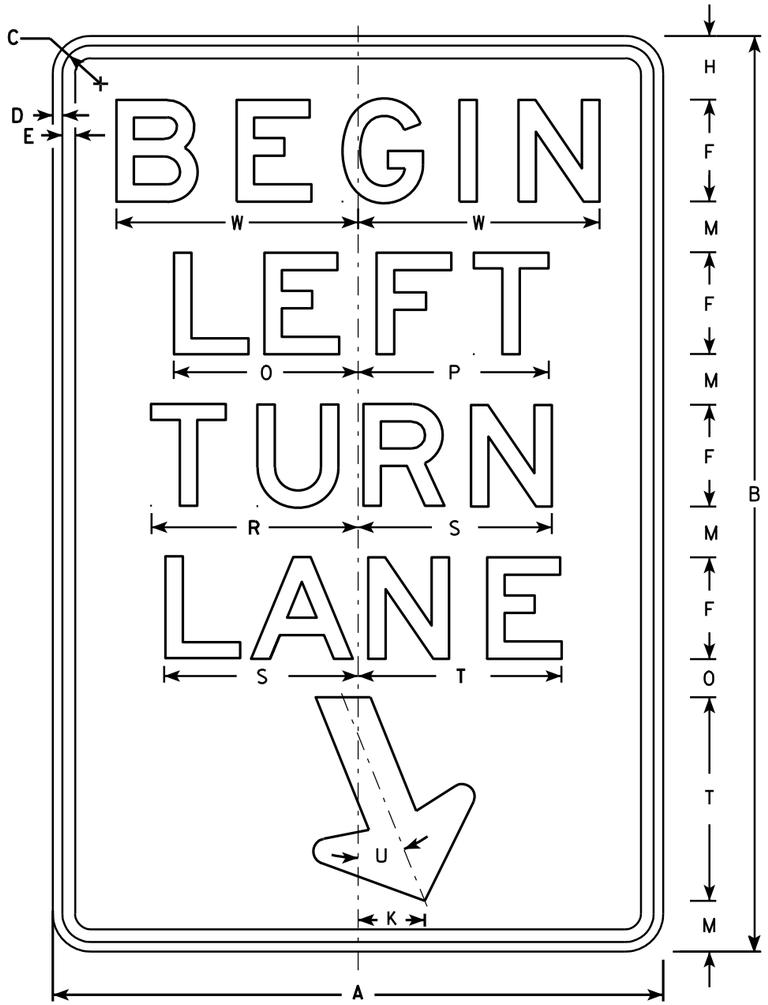
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

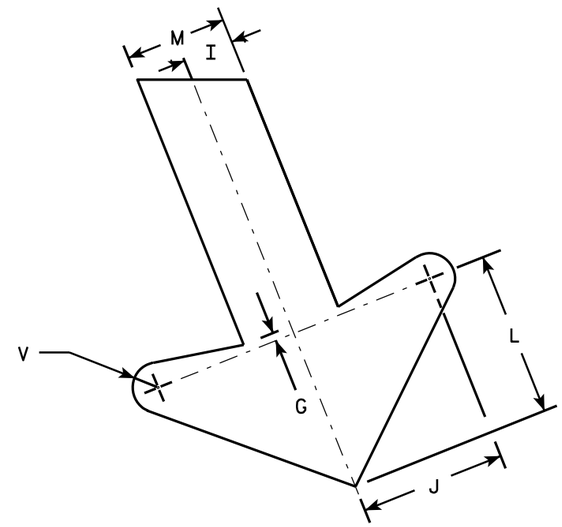
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 94 | E



R3-20L

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

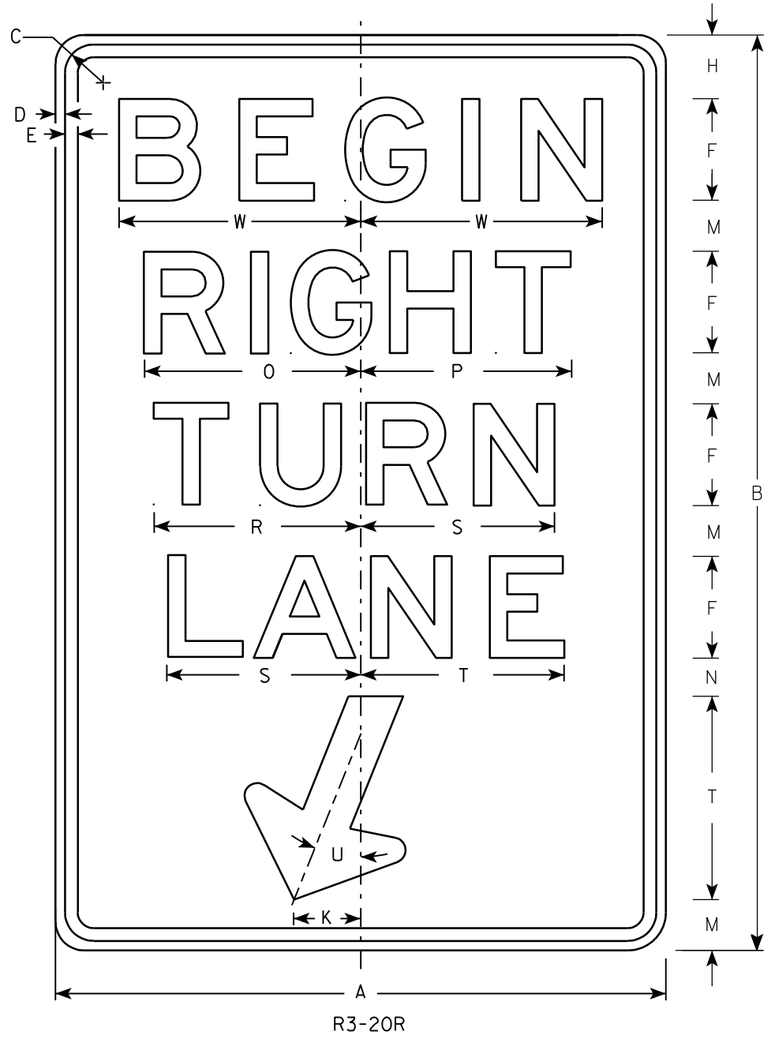
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

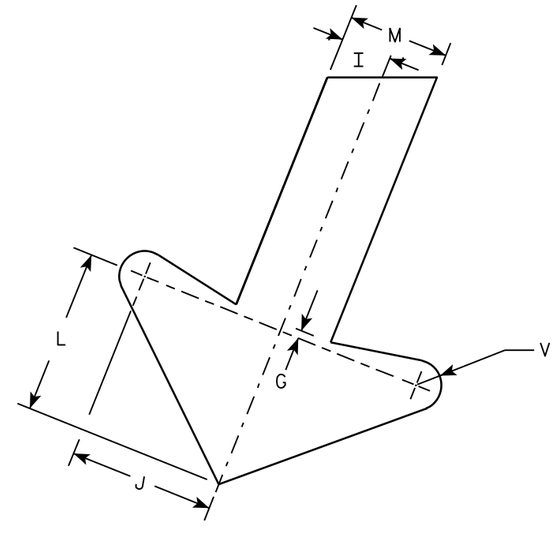
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 95 | E



R3-20R

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

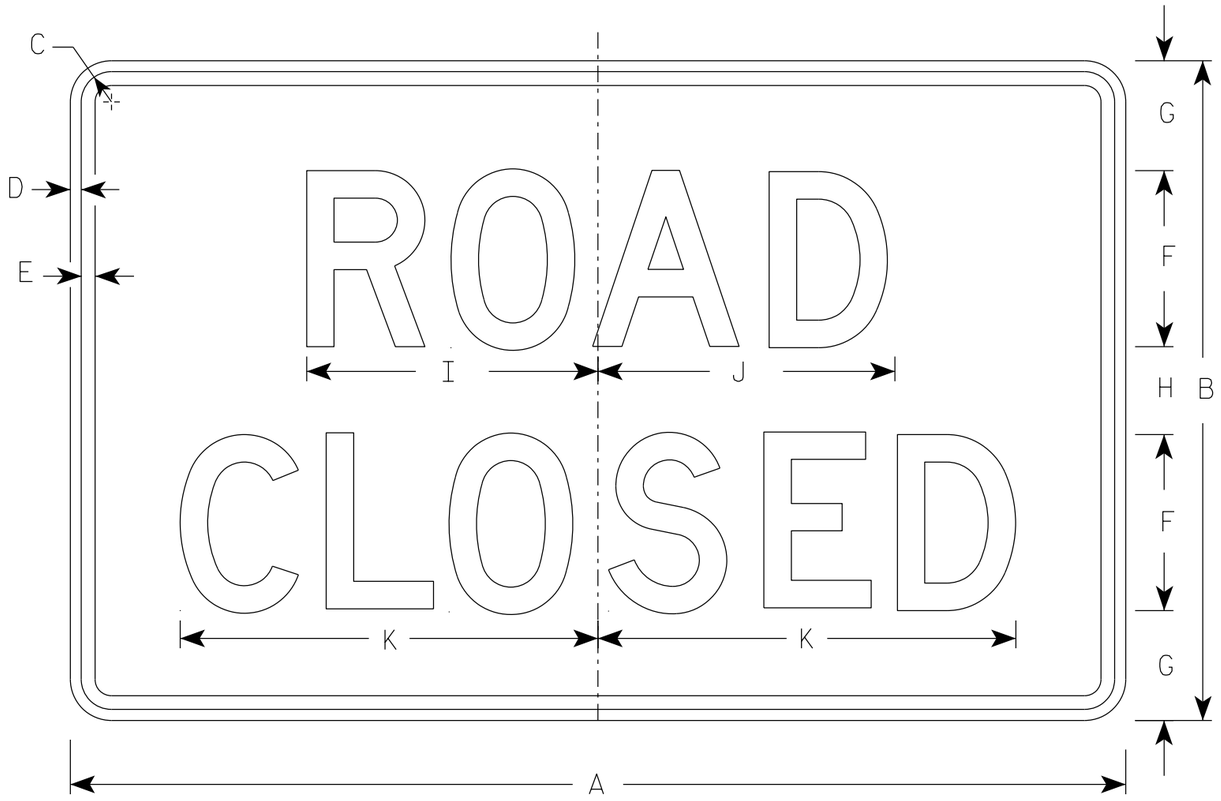
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

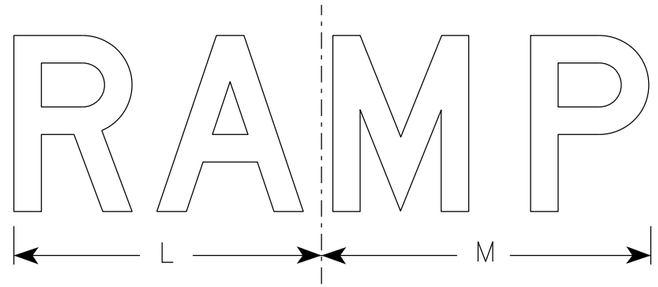
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 96 | E



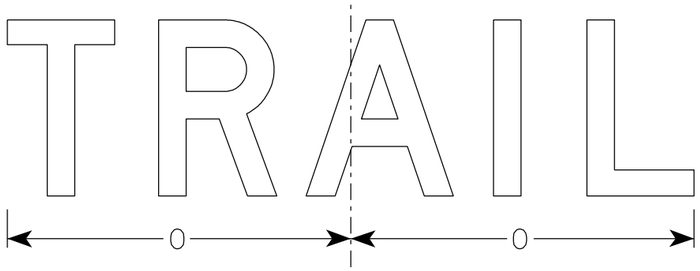
R11-2

NOTES

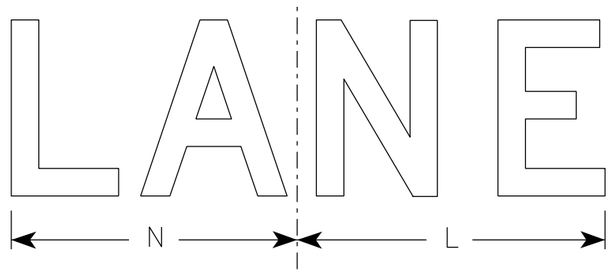
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

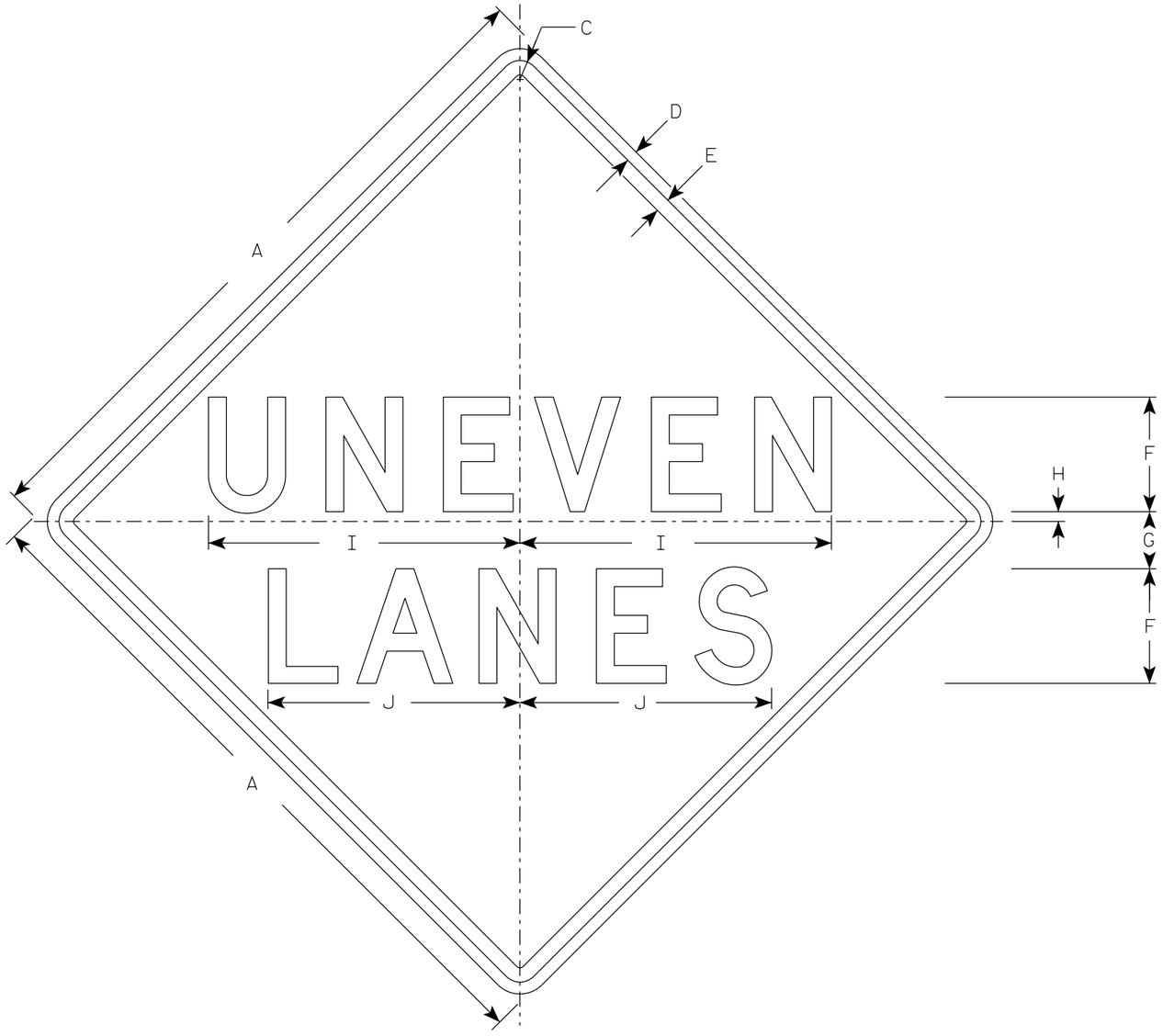
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



W8-11

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3	1/2	16 3/8	13 1/4																	9.0
2S	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
2M	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
3	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
4	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
5	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0

STANDARD SIGN
W8-11

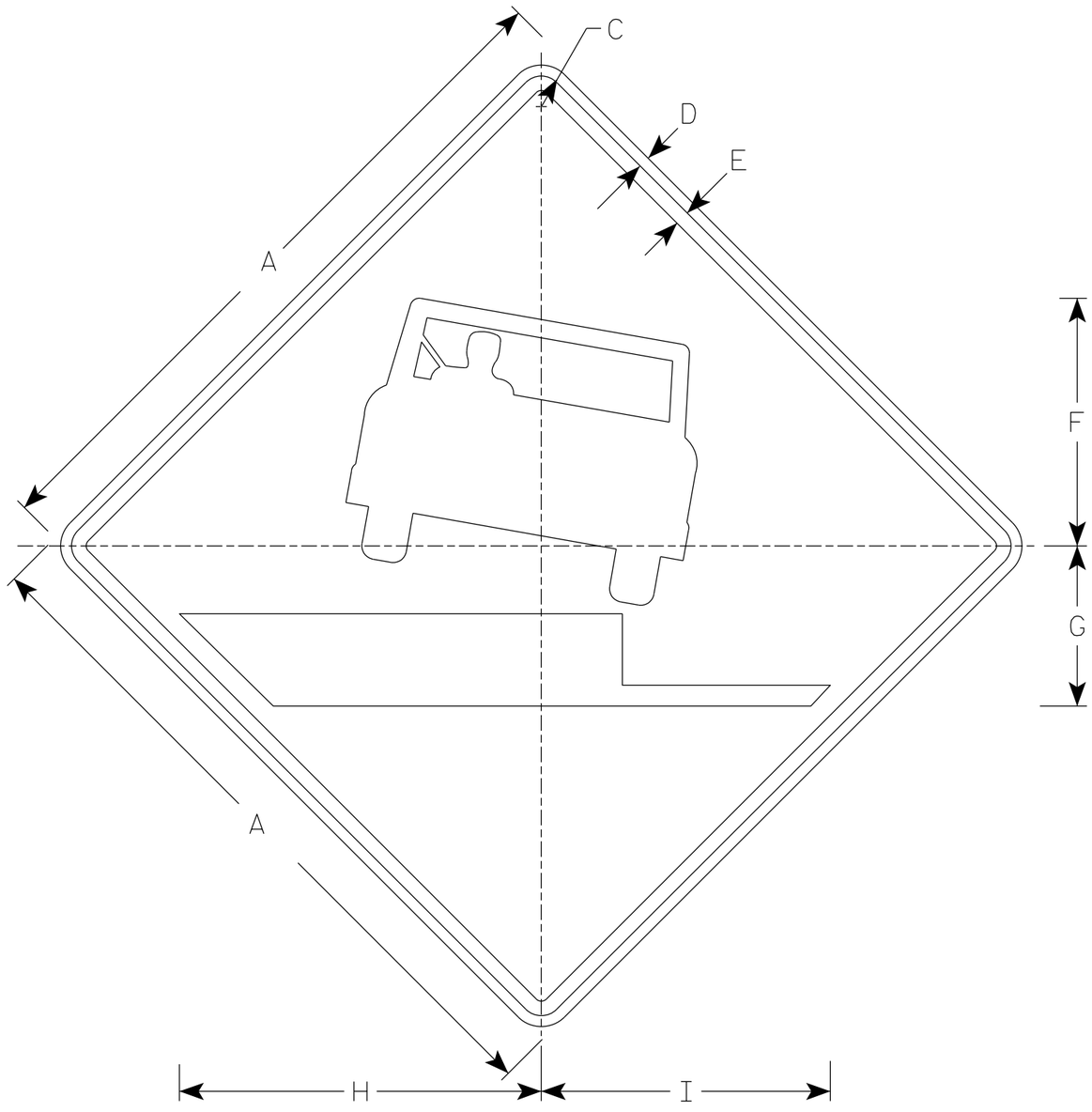
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 4/20/2020 PLATE NO. W8-11.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W811.dgn PLOT DATE : 20-APRIL 2020 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



W8-17

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12 3/4	8 1/4	18 5/8	14 7/8																		9.0
2S	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
2M	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
3	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
4	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
5	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0

STANDARD SIGN
W8-17

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/2020 PLATE NO. W8-17.2

PROJECT NO:

SHEET NO: 99 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W817.dgn PLOT DATE : 16-APRIL 2020 PLOT BY : dotc4c

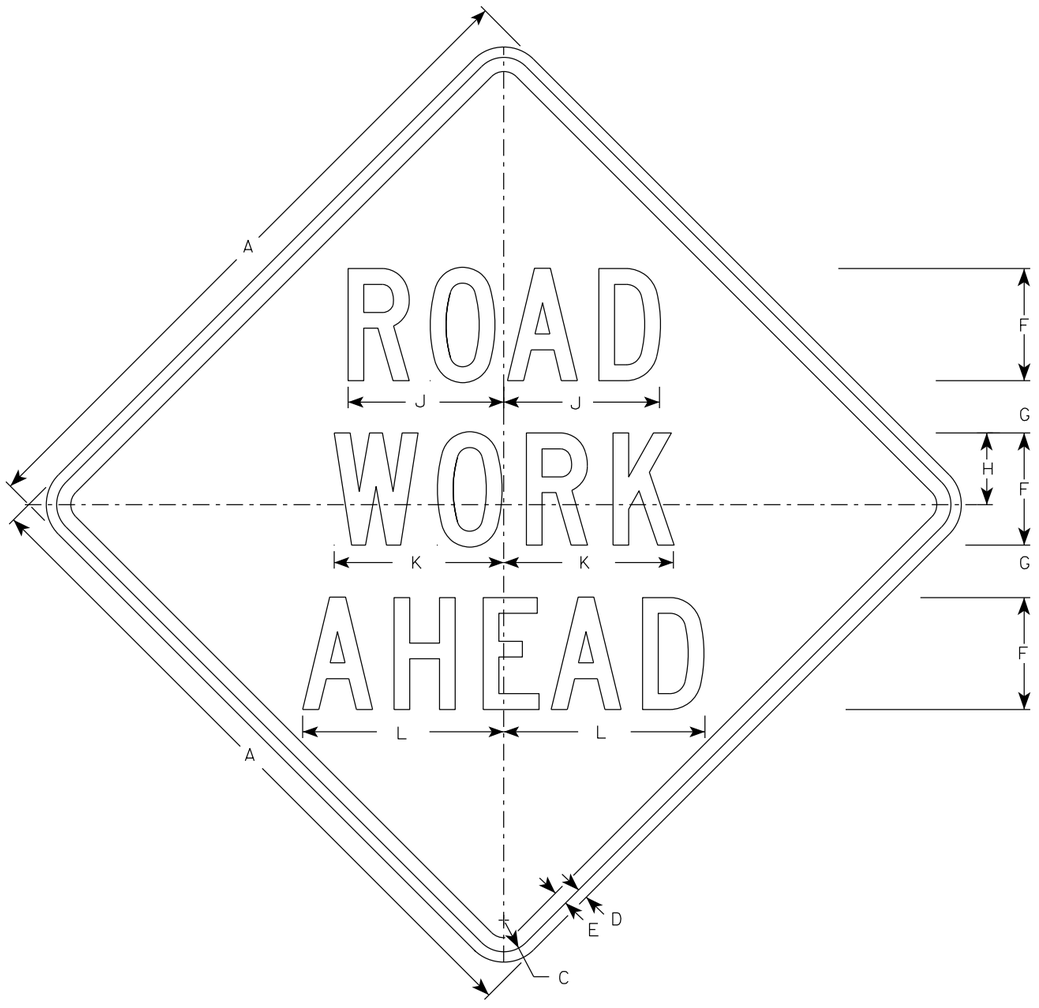
WISDOT/CADDS SHEET 42

7

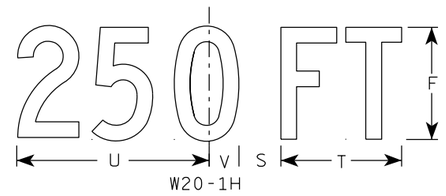
7

NOTES

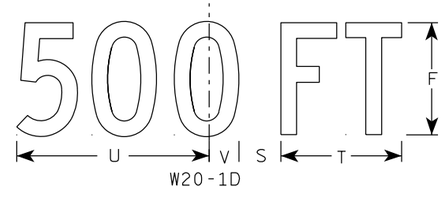
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

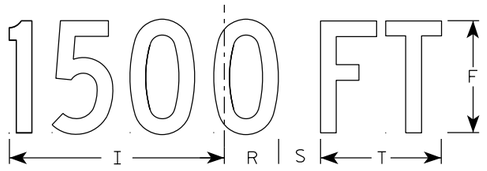


W20-1H

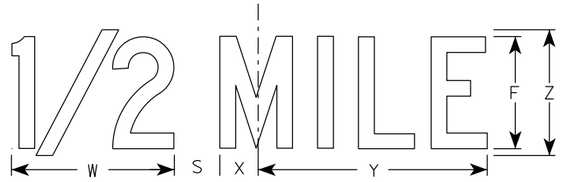


W20-1D

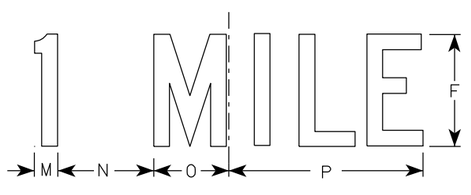
W20-1C



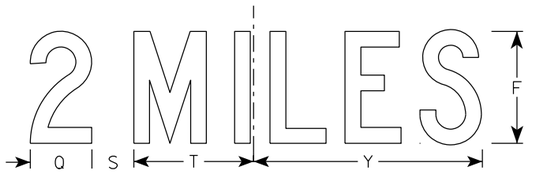
W20-1B



W20-1G



W20-1F



W20-1E

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

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E

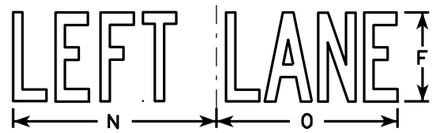
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

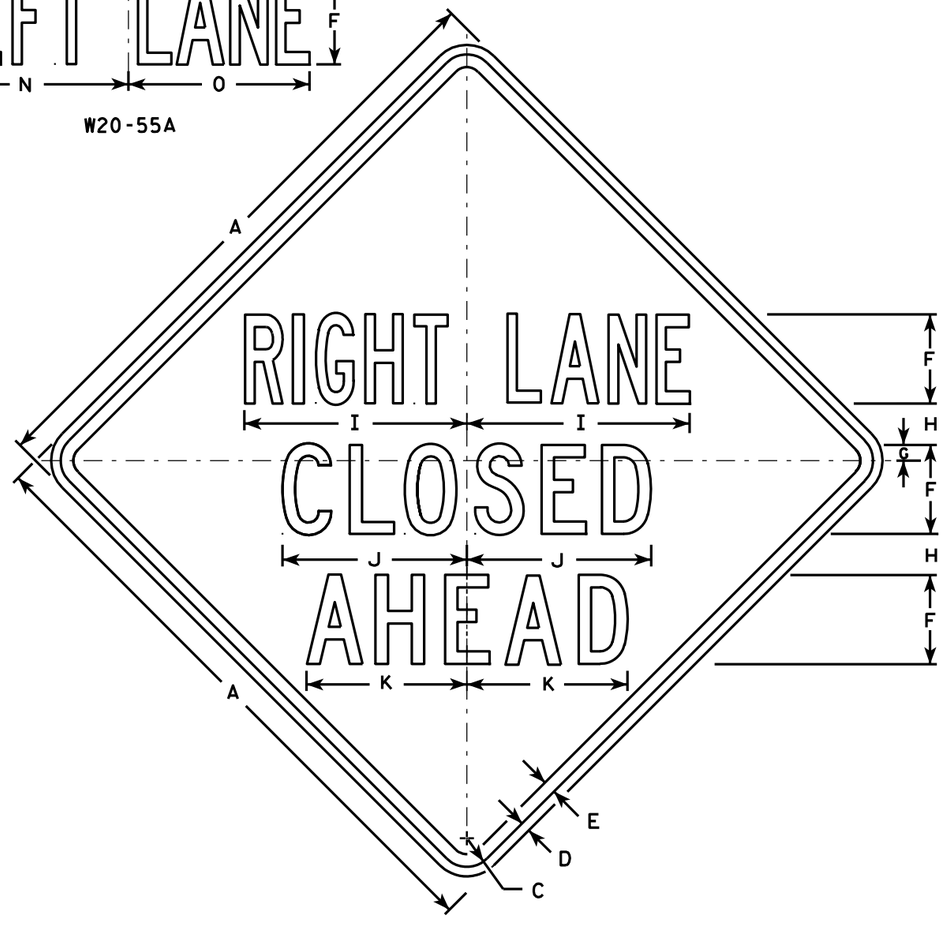
7

7

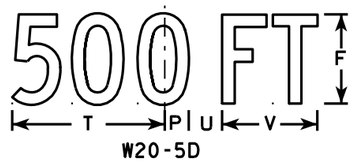
W20-56A



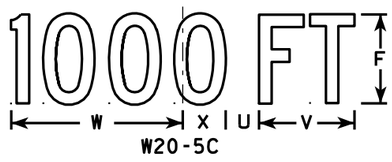
W20-55A



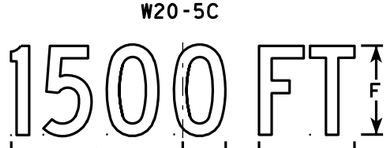
W20-5A



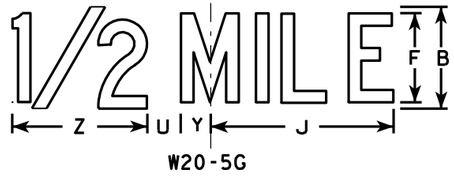
W20-5D



W20-5C



W20-5B



W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

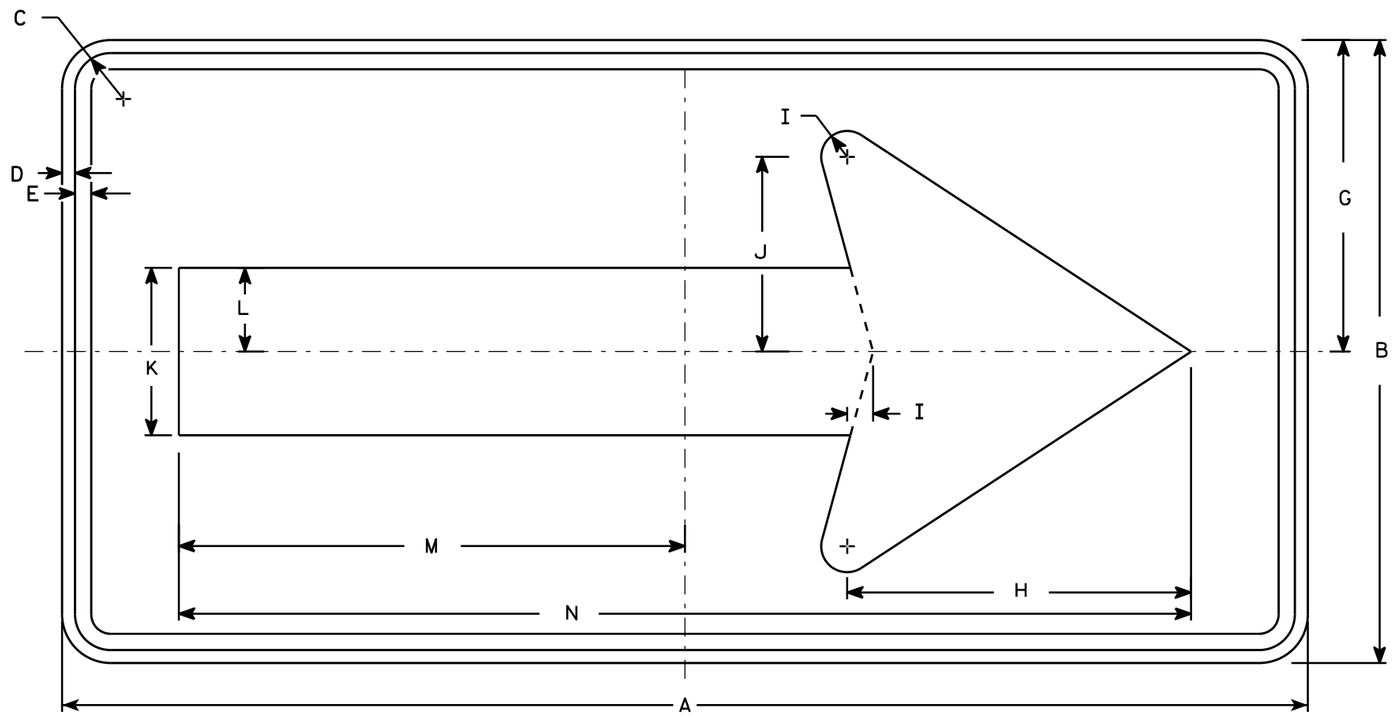
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 101	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

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

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

STANDARD SIGN
W01-6

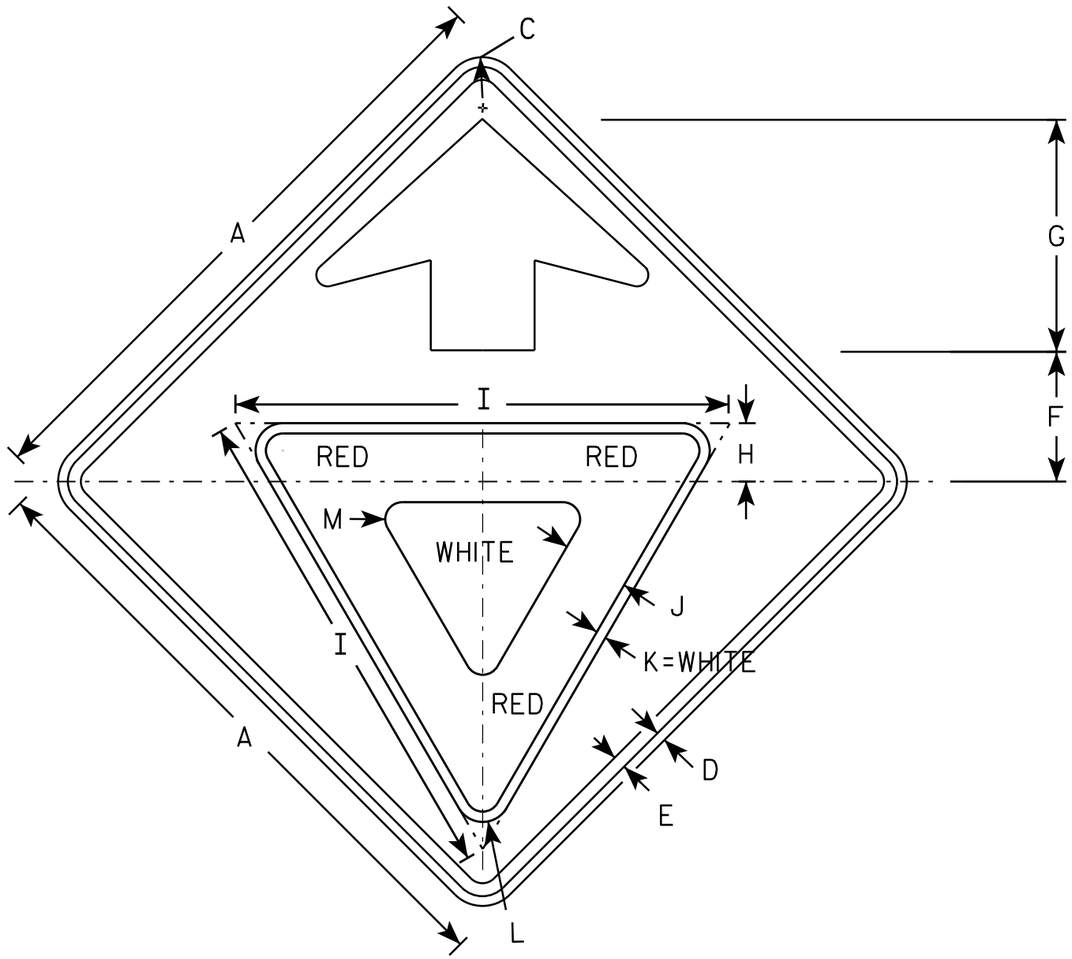
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

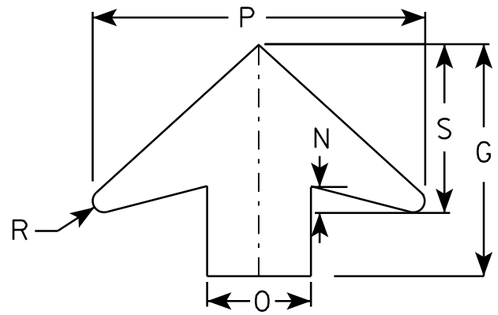
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield 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	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W03-2

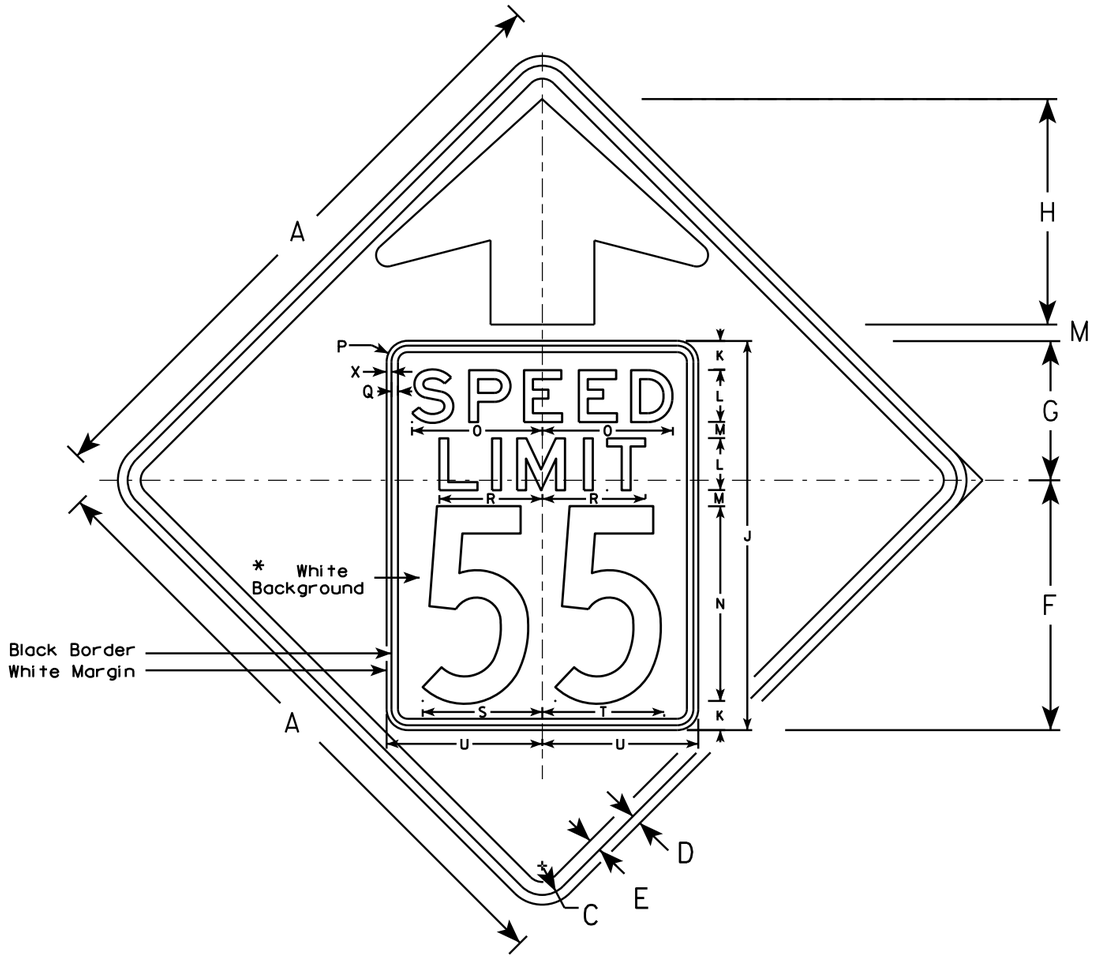
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-2.1

PROJECT NO:

SHEET NO: E

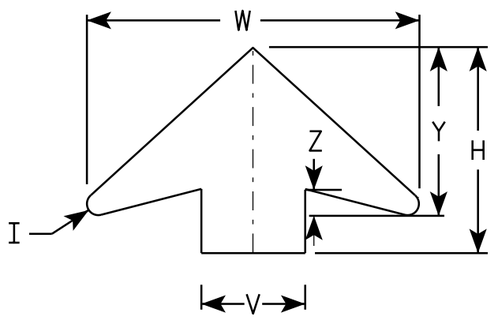


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   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	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
2S	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
2M	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
3	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
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
W03-5

WISCONSIN DEPT OF TRANSPORTATION

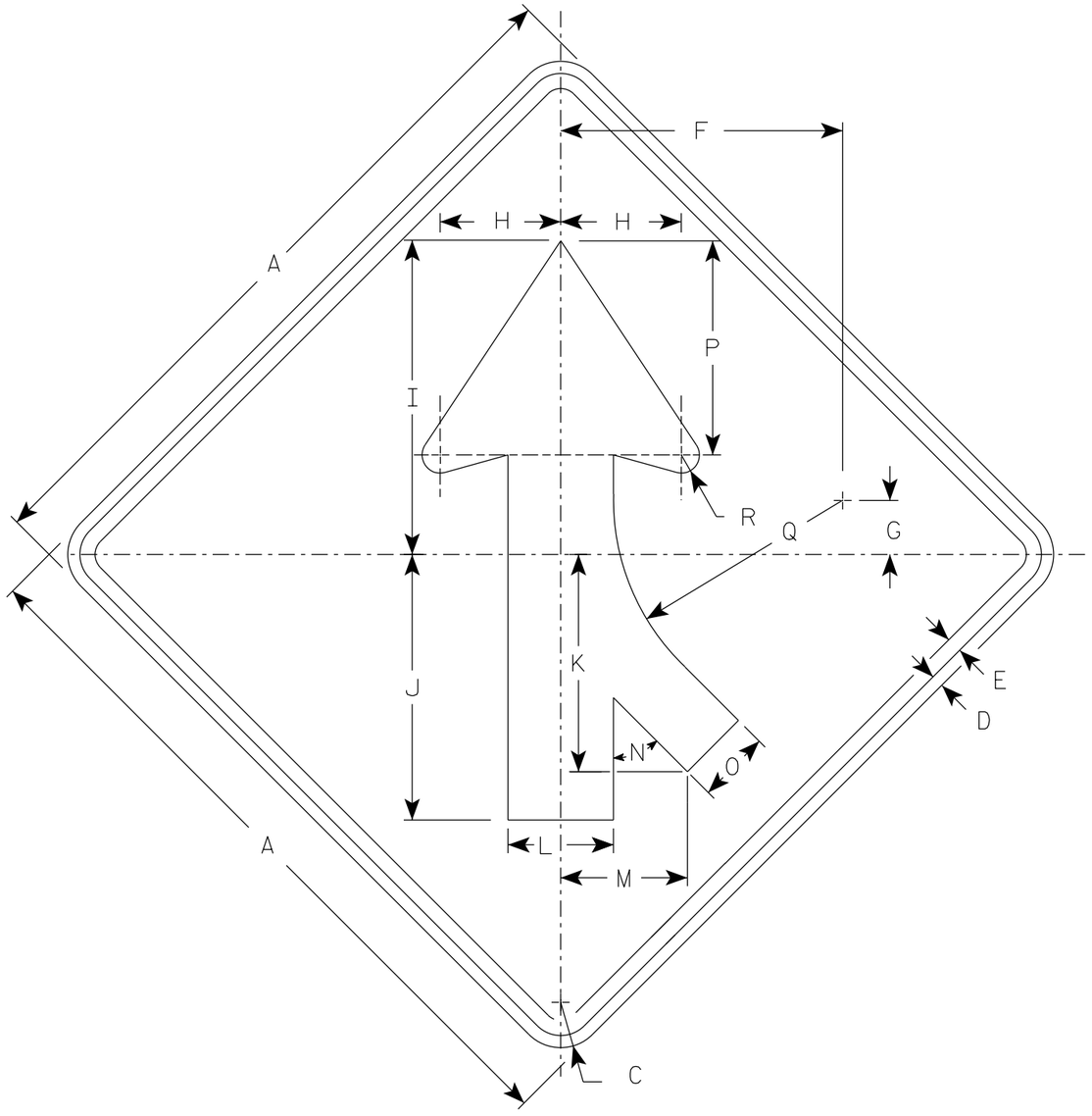
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-1L is the same as W04-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. W04-1.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W041.dgn PLOT DATE : 30-MAR 2021 8:25 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

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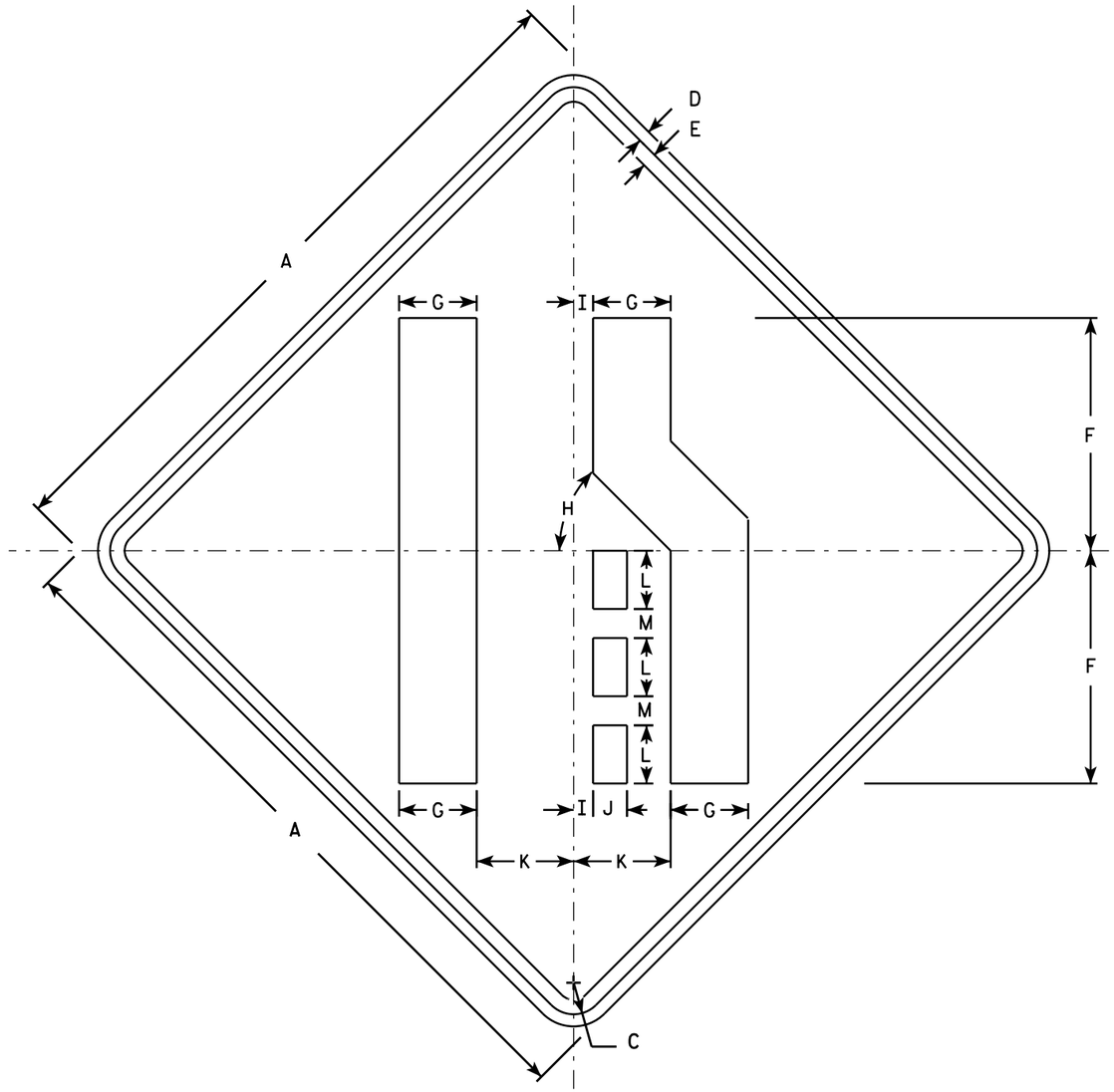


W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

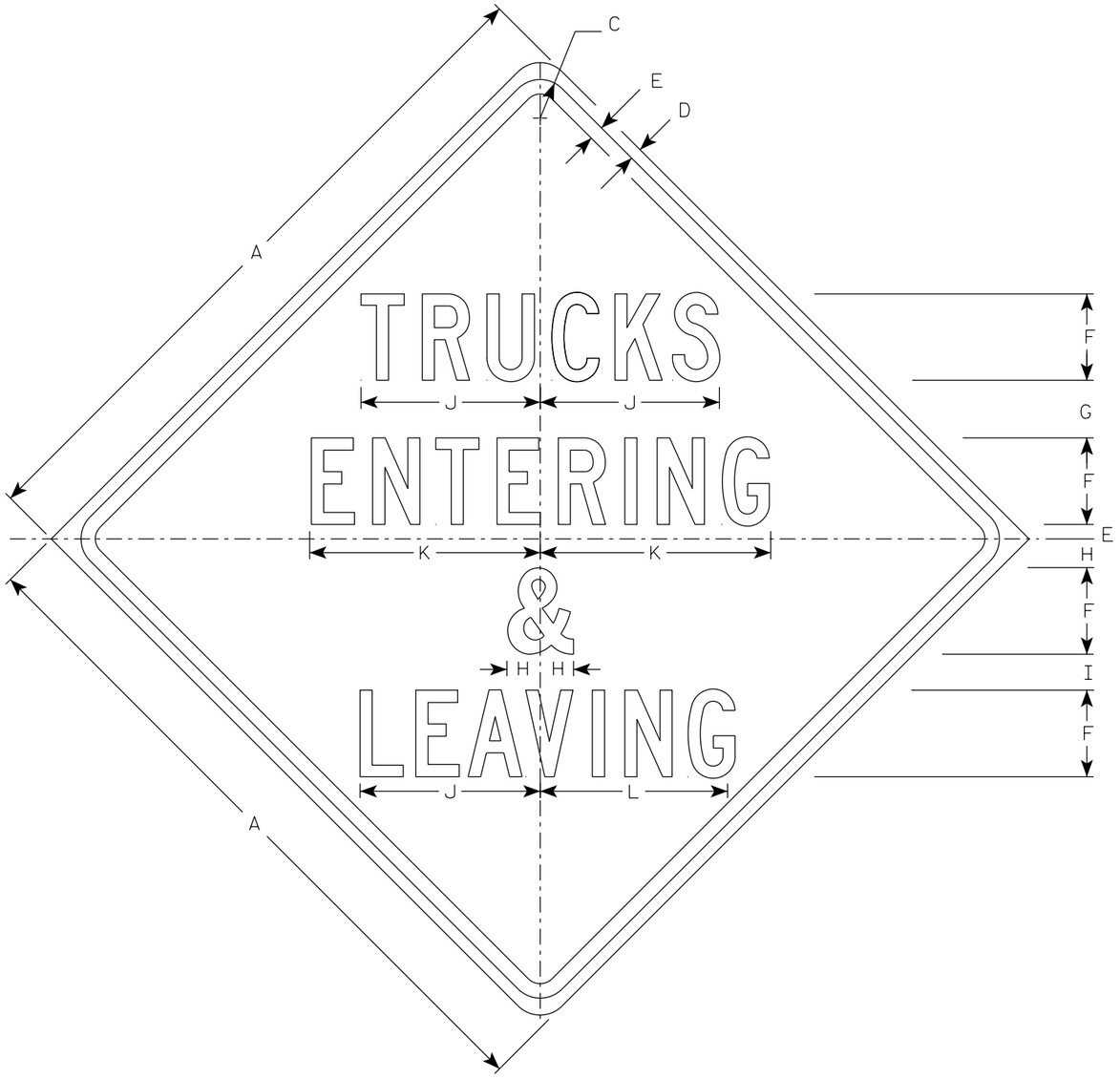
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W04-2.1

PROJECT NO: | SHEET NO: E



W08-6A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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

STANDARD SIGN
W08-6A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/15/2020 PLATE NO. W08-6A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W086A.dgn PLOT DATE : 15-APRIL 2020 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

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Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov