MAD

PROJECT ID: 3576-01-64

WITH: N/A

COUNTY: JEFFERSON

JUNE 2022

ORDER OF SHEETS

TOTAL SHEETS = 50

03

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	3530
A.A.D.T.	(2042)	=	4040
D.H.V.	(2042)	=	276
D.D.		=	60/40
T.		=	9.9%
DESIGN SPEED		=	55 MPH
ESALS		=	490,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (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

FT. ATKINSON - PALMYRA

0.01 MI E OF EDGEWATER RD TO CTH CI

STH 106
JEFFERSON COUNTY

STATE PROJECT NUMBER
3576-01-64

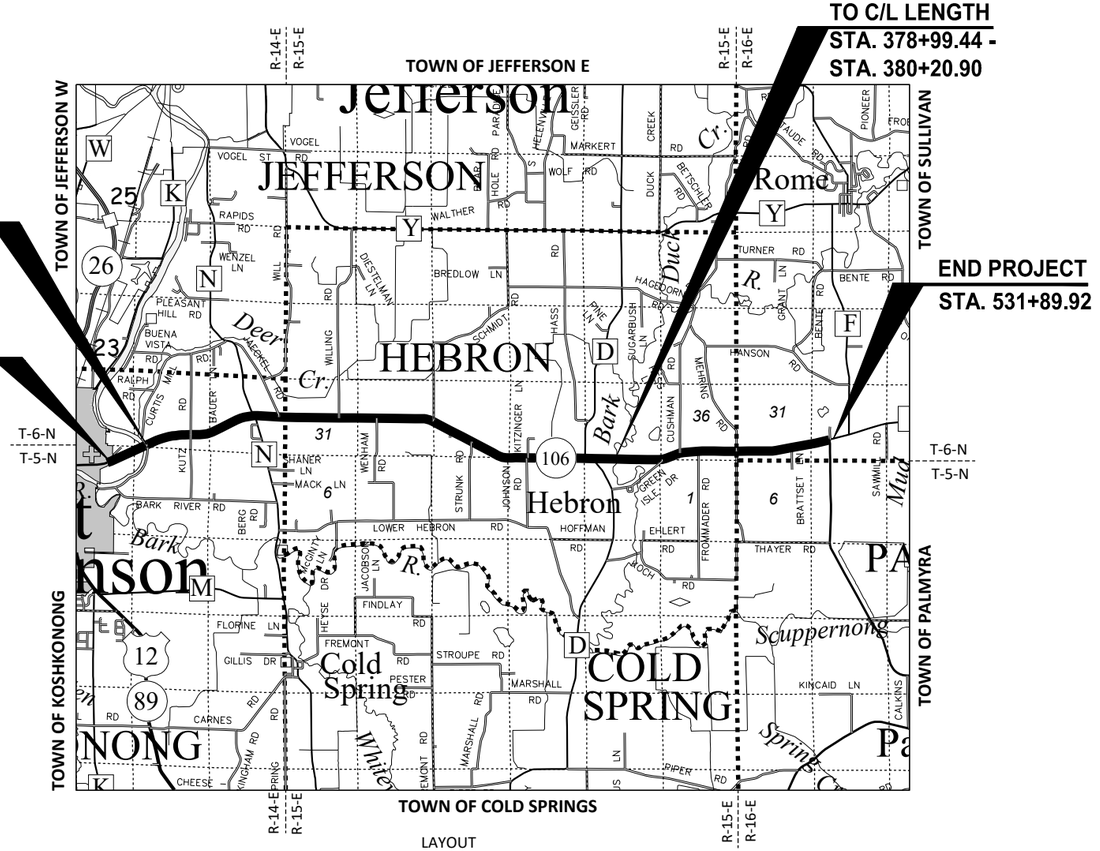
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3576-01-64	WISC 2022421	1

NET EXCEPTION TO C/L LENGTH STA. 378+99.44 - STA. 380+20.90

NET EXCPETION TO C/L LENGTH STA. 37+95.65 - STA. 41+24.19

BEGIN PROJECT STA. 12+88.07 Y=531,455.58 X=851,031.30

END PROJECT STA. 531+89.92



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 9.745 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, JEFFERSON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCE MAY BE USED AS GROUND DISTANCES.

ELEVATION SHOWN ON THIS PLAN ARE REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2012).

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc
Engineers - Architects - Surveyors

WISCONSIN
DANIEL J. TRACY
E-47578-6
MUSCODA, WI
PROFESSIONAL ENGINEER
1/26/2022

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JEWELL ASSOCIATES ENGINEERS, INC.
Designer	JEWELL ASSOCIATES ENGINEERS, INC.
Project Manager	MATTHEW LAMB, P.E.
Regional Examiner	SW REGION
Regional Supervisor	JIM OETTINGER, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 1/26/2022 (Signature)

E

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXISTING SHOULDER AGGREGATE SHALL BE INCORPORATED INTO THE NEW SHOULDERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A VERTICAL EDGE MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

HMA PAVEMENT QUANTITIES WERE CALCULATED USING 112 LB/SY/IN.

2-INCHES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH A SINGLE 2-INCH LAYER OF HMA PAVEMENT 4 LT 58-28 S.

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES, COMMERCIAL, AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

IF CONTRACTOR ELECTS TO USE SAWCUTS WHERE REMOVING ASPHALTIC SURFACE BUTT JOINTS IS REQUIRED, IT IS INCIDENTAL TO REMOVING ASPHALTIC SURFACE BUTT JOINTS ITEM.

APPLY TACK COAT TO MILLED SURFACE PRIOR TO PLACEMENT OF HMA PAVEMENT AT A RATE OF 0.07 GAL/SY.

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

THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION WHEN THE SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF THE SUPERELEVATION IS LESS THAN OR EQUALS 0.04 FT./FT., THEN THE LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. THE HIGH SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTION EQUALS THE SUPERELEVATION.

CURVE DATA IS BASED ON THE ARC DEFINITION.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATIONS.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO "DIGGERS HOTLINE" AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

JACOB ROCKWEILER, P.E., WISCONSIN HEIGHT MODERNIZATION PROGRAM MANAGER WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION WHOSE PHONE NUMBER IS (608) 516-6362 AND EMAIL IS JACOB.ROCKWEILER@DOT.WI.GOV.

MILL AND PAVE ADJACENT TO MONUMENTS WITHOUT DAMAGING THE MONUMENTS.

CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION:

WisDOT PROJECT MANAGER
2101 WRIGHT STREET
MADISON, WI 53704
ATTN: MATTHEW LAMB, P.E.
PH: (608) 246-5638
EMAIL: Matthew.Lamb@dot.wi.gov

DESIGN CONSULTANT:

JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
ATTN: DAN TRACY, P.E.
PH: (608) 459-6052
CELL: (608) 604-6905
EMAIL: dan.tracy@jewellassoc.com

WDNR LIAISON:

STATE OF WISCONSIN
DNR SOUTH CENTRAL REGION HQ
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
ATTN: SHELLEY NELSON
PH: (608) 444-2835
EMAIL: Shelley.Nelson@wisconsin.gov

UTILITIES

COMMUNICATION LINE

AT&T WISCONSIN
ATTN: CAROL ANASON
316 W WASHINGTON AVE
MADISON, WI 53703
CELL: (608) 622-2079
OFFICE: (608) 252-2385
EMAIL: ca2624@att.com

CENTURYLINK
ATTN: JAMES WINTER
224 INDUSTRIAL DRIVE
NORTH PRAIRIE, WI 53153
CELL: (262) 720-4936
OFFICE: (262) 392-5210
EMAIL: james.winter@lumen.com

SPECTRUM
ATTN: DAVID MOLDENHAUER
1348 PLAINFIELD AVENUE
JANESVILLE, WI 53545
CELL: (608) 206-0494
OFFICE: (608) 373-7538
EMAIL: david.moldenhauer@charter.com

SEWER

CITY OF FORT ATKINSON - SEWER
ATTN: ANDY SELLE
101 N MAIN STREET
FORT ATKINSON, WI 53538
OFFICE: (920) 563-7760
EMAIL: aselle@fortatkinsonwi.net

WATER

CITY OF FORT ATKINSON - WATER
ATTN: ANDY SELLE
101 N MAIN STREET
FORT ATKINSON, WI 53538
OFFICE: (920) 563-7760
EMAIL: aselle@fortatkinsonwi.net

GAS/PETROLEUM

GUARDIAN PIPELINE
ATTN: ADAM THEIS
128 M B LANE
CHILTON, WI 53014
CELL: (262) 374-2756
OFFICE: (920) 464-1200
EMAIL: Adam.Theis@oneok.com

WE ENERGIES - GAS/PETROLEUM
ATTN: SCOTT HOLSTEIN
700 S KANE STREET
BURLINGTON, WI 53105
CELL: (262) 949-0490
OFFICE: (262) 763-1084
EMAIL: scott.holstein@we-energies.com

ELECTRICITY

WE ENERGIES - ELECTRICITY
ATTN: ERIC KICKHAVER
500 S 116TH STREET
WEST ALLIS, WI 53214
CELL: (414) 588-7472
OFFICE: (414) 944-5917
EMAIL: WE-Utility_Relocations@we-energies.com

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

LIST OF STANDARD ABBREVIATIONS

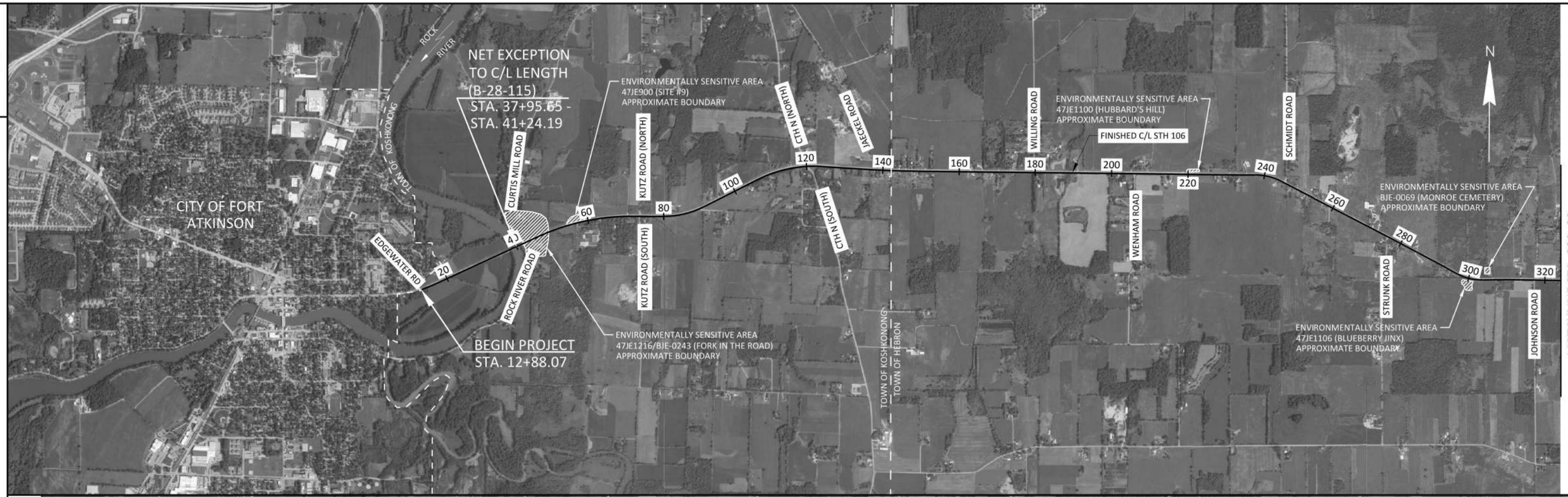
ABUT	Abutment
AC	Acre
AGG	Aggregate
AH	Ahead
<	Angle
ASPH	Asphaltic
AVG	Average
ADT	Average Daily Traffic
BAD	Base Aggregate Dense
BK	Back
BF	Back Face
BM	Bench Mark
BR	Bridge
C or C/L	Center Line
CC	Center to Center
C.E.	Commercial Entrance
CTH	County Trunk Highway
CR	Creek
CR	Crushed
CY or CU YD	Cubic Yard
CP	Culvert Pipe
C & G	Curb and Gutter
D	Degree of Curve
DHV	Design Hour Volume
DIA	Diameter
E	East
X	East Grid Coordinate
ELEC	Electric (al)
EL or ELEV	Elevation
ESALS	Equivalent Single Axle Loads
EBS	Excavation Below Subgrade
FF	Face to Face
F.E.	Field Entrance
F	Fill
FG	Finished Grade
FL or F/L	Flow Line
FT	Foot
FTG	Footing
GN	Grid North
HT	Height
CWT	Hundredweight
HYD	Hydrant
INL	Inlet
ID	Inside Diameter
INV	Invert
IP	Iron Pipe or Pin
IRS	Iron Rod Set
JT	Joint
JCT	Junction
LHF	Left-Hand Forward
L	Length of Curve
LIN FT or LF	Linear Foot
LC	Long Chord of Curve
MH	Manhole
MB	Mailbox
ML or M/L	Match Line
N	North
Y	North Grid Coordinate
OD	Outside Diameter
PLE	Permanent Limited Easement
PT	Point
PC	Point of Curvature
PI	Point of Intersection
PRC	Point of Reverse Curvature
PT	Point of Tangency
POC	Point On Curve
POT	Point on Tangent
PVC	Polyvinyl Chloride
PCC	Portland Cement Concrete
LB	Pound
PSI	Pounds Per Square Inch
P.E.	Private Entrance
R	Radius
RR	Railroad
R	Range
RL or R/L	Reference Line
RP	Reference Point
RCCP	Reinforced Concrete Culvert Pipe
REQD	Required
RES	Residence or Residential
RW	Retaining Wall
RT	Right
RHF	Right-Hand Forward
R/W	Right-of-Way
RD	Road
R	River
RDWY	Roadway
SALV	Salvaged
SAN S	Sanitary Sewer
SEC	Section
SHLDR	Shoulder
SHR	Shrinkage
SW	Sidewalk
S	South
SQ	Square
SF or SQ FT	Square Feet
SY or SQ YD	Square Yard
STD	Standard
SDD	Standard Detail Drawings
STH	State Trunk Highways
STA	Station
SS	Storm Sewer
SG	Subgrade
SE	Superelevation
SL or S/L	Survey Line
SV	Septic Vent
T	Tangent
TEL	Telephone
TEMP	Temporary
TI	Temporary Interest
TLE	Temporary Limited Easement
t	Ton
T or TN	Town
TRANS	Transition
TL or T/L	Transit Line
T	Trucks (percent of)
TYP	Typical
UNCL	Unclassified
UG	Underground Cable
USH	United States Highway
VAR	Variable
V	Velocity or Design Speed
VERT	Vertical
VC	Vertical Curve
VOL	Volume
WM	Water Main
WV	Water Valve
W	West
WB	Westbound
YD	Yard

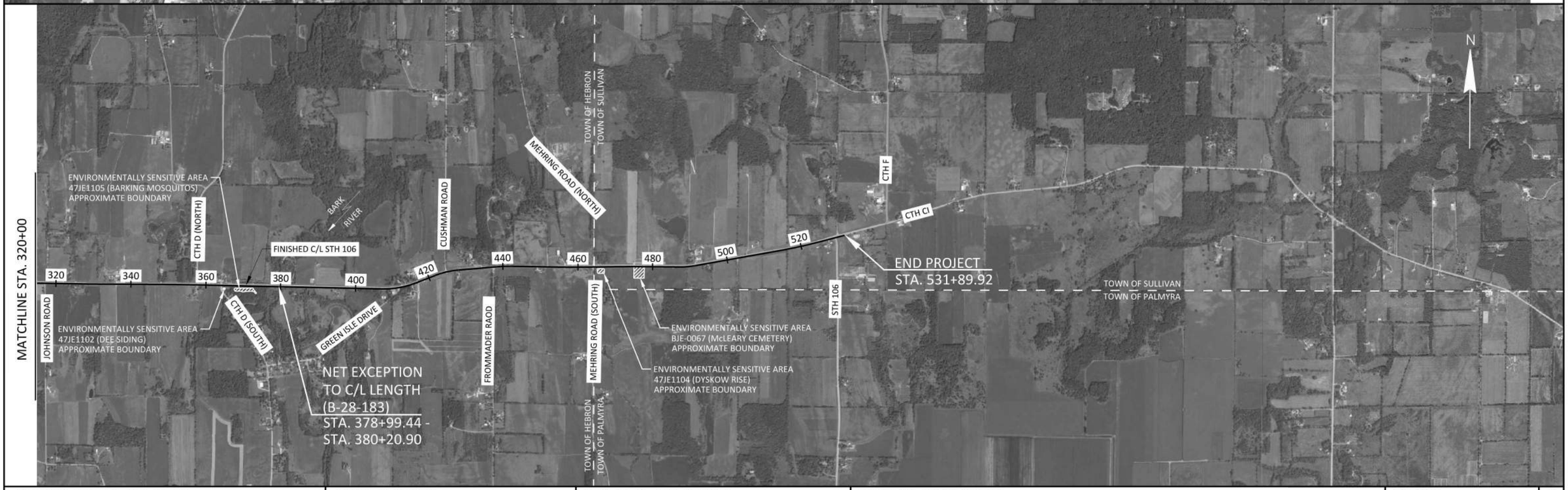
ORDER OF SECTION 2 SHEETS:

- WRITTEN MATERIAL
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS

CONTROL POINTS

NO.	STA.	DESCRIPTION	Y	X	Z
1	123+38	¾" I.R.S., 29.4' RT.	534,667.31	861,432.89	835.54
2	227+03	¾" I.R.S., 31.2' RT.	534,470.10	871,795.51	821.55
3	330+93	¾" I.R.S., 30.2' RT.	531,712.62	881,539.91	827.55
4	434+60	¾" I.R.S., 44.0' RT.	532,149.30	891,830.38	886.09
5	532+79	¾" I.R.S., 33.8' LT.	533,138.62	901,544.03	863.20

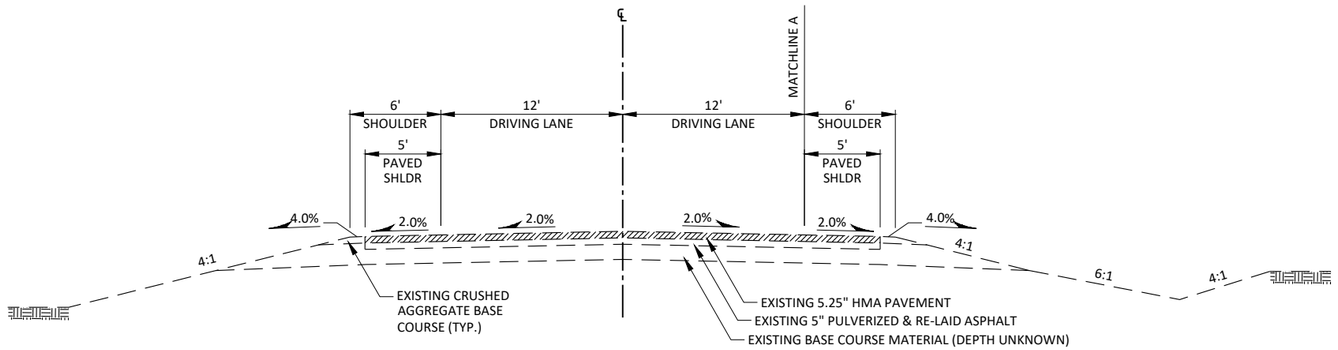




PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PROJECT OVERVIEW	SHEET	E

FILE NAME : S:\PROJECTS\W11618 WISDOT - STH 106, JEFFERSON CO (2020)\SHEETSPLAN\DETAILS\W11618_PROJECT OVERVIEW.DWG
PLOT DATE : 10/11/2021 1:14:50 PM
PLOT BY : CODY KINTZ
PLOT SCALE : 1" = 1'
LAYOUT : LAYOUT 1

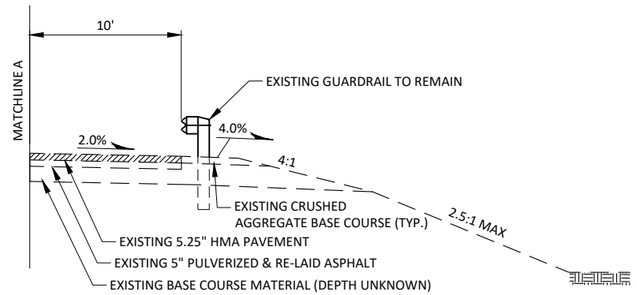
2



FILL **CUT**

TYPICAL EXISTING SECTION

STA. 12+88.07 - STA. 37+95.65



TYPICAL PARTIAL EXISTING SECTION

STA. 37+18 - STA. 37+95.65 LT. & RT.

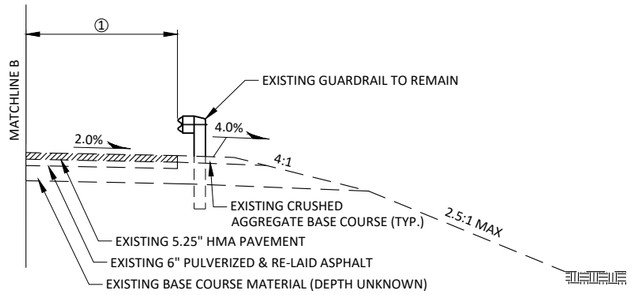
PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	TYPICAL EXISTING SECTIONS	SHEET 4	E

FILE NAME : S:\PROJECTS\W11618 WISDOT - STH 106, JEFFERSON CO (2020)\SHEETSPLAN\TYPICALS\W11618_TYPICALS.DWG PLOT DATE : 10/21/2021 9:33:23 AM PLOT BY : TRACY, DAN PLOT SCALE : 1" = 1' LAYOUT : EXISTING

2

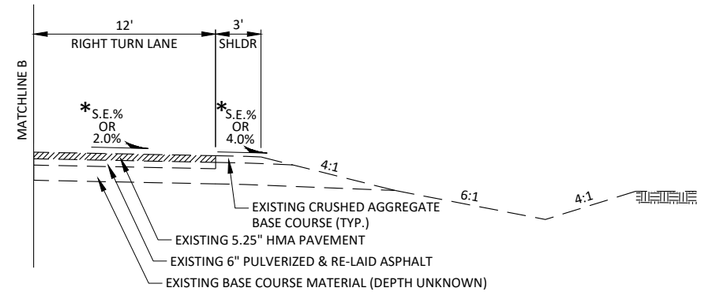
5' PAVED SHOULDER FROM STA. 374+17 - STA. 385+53

* SEE SUPERELEVATION TABLE



TYPICAL PARTIAL EXISTING SECTION

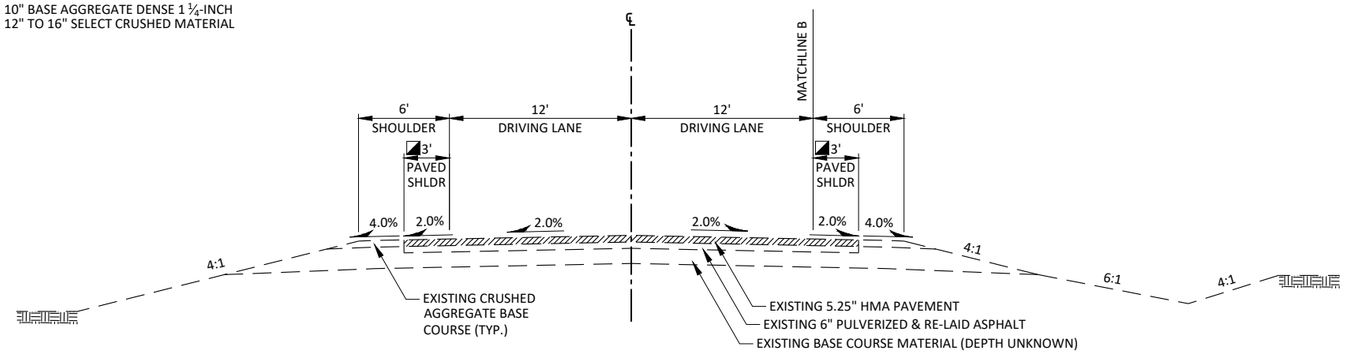
	① FT.
STA. 41+24.19 - STA. 41+61, RT.	10
STA. 41+24.19 - STA. 41+65, LT.	10
STA. 377+09 - STA. 378+99.44, RT.	6
STA. 377+59 - STA. 378+99.44, LT.	6
STA. 380+20.90 - STA. 382+61, RT.	6
STA. 380+20.90 - STA. 382+11, LT.	6



TYPICAL PARTIAL EXISTING SECTION

STA. 42+56 - STA. 45+60, LT.
* STA. 117+34 - STA. 122+24, RT.
* STA. 118+93 - STA. 123+60, LT.
STA. 359+50 - STA. 366+00, RT.
STA. 359+50 - STA. 367+97, LT.

NOTE: STA. 374+17 - STA. 385+53 PAVEMENT STRUCTURE CONSISTS OF THE FOLLOWING IN DESCENDING ORDER:
-EXISTING 4.5" HMA PAVEMENT
-EXISTING 10" BASE AGGREGATE DENSE 1 ¼-INCH
-EXISTING 12" TO 16" SELECT CRUSHED MATERIAL



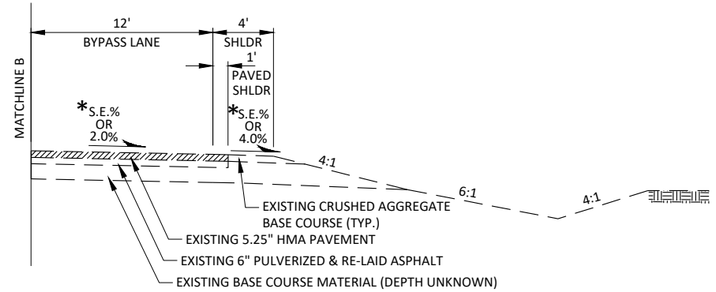
TYPICAL EXISTING SECTION

FILL

STA. 41+24.19 - STA. 45+38
STA. 72+20 - STA. 78+49
STA. 92+35 - STA. 105+42
STA. 125+26 - STA. 132+50

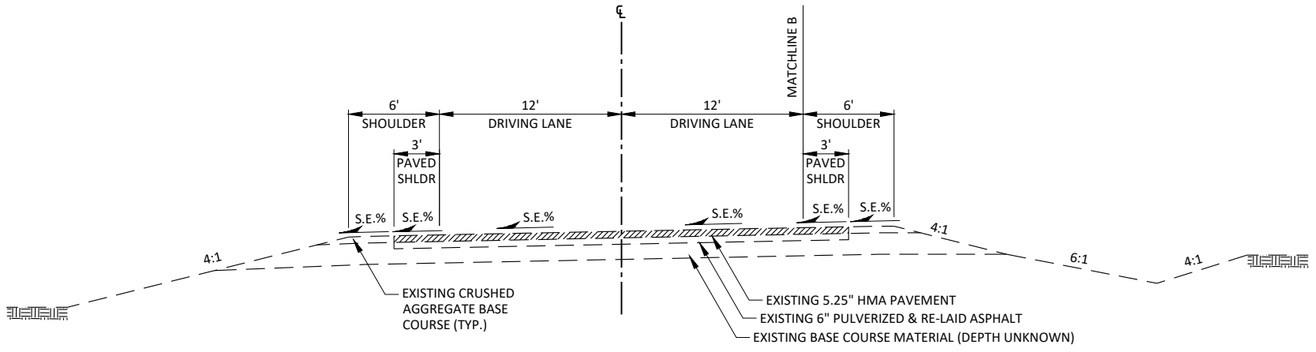
CUT

STA. 274+00 - STA. 292+50
STA. 359+50 - STA. 378+99.44
STA. 380+20.90 - STA. 399+50
STA. 499+50 - STA. 529+55



TYPICAL PARTIAL EXISTING SECTION

* STA. 53+84 - STA. 60+76, LT.
STA. 525+14 - STA. 529+55, LT.

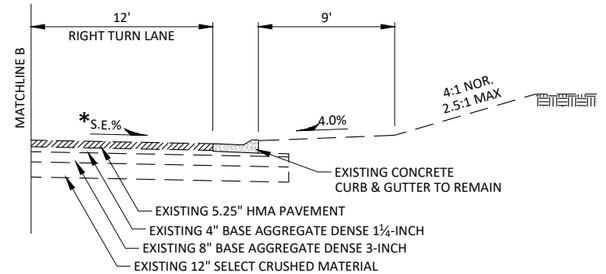


TYPICAL EXISTING SUPERELEVATED SECTION

FILL

STA. 45+38 - STA. 72+20
STA. 78+49 - STA. 92+35
STA. 105+42 - STA. 125+26

CUT

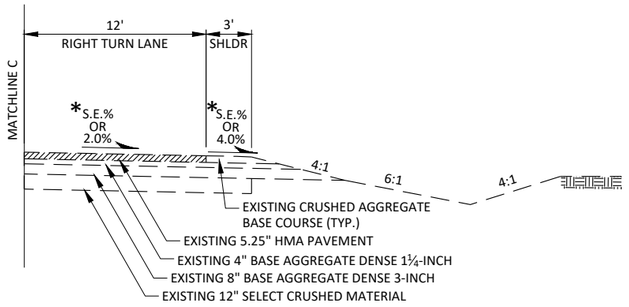


TYPICAL PARTIAL EXISTING SECTION

* STA. 55+37 - STA. 58+38, RT.

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	TYPICAL EXISTING SECTIONS	SHEET 5	E

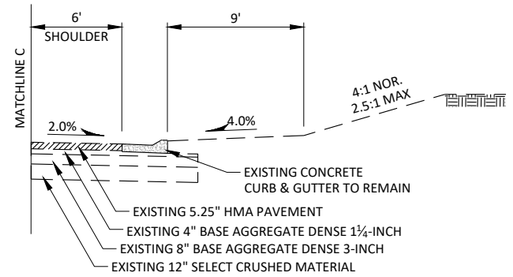
✱ SEE SUPERELEVATION TABLE



TYPICAL PARTIAL EXISTING SECTION

STA. 136+55 - STA. 140+93, LT.
STA. 354+06 - STA. 356+63, RT.
STA. 357+91 - STA. 359+50, RT.
STA. 355+91 - STA. 359+50, LT.

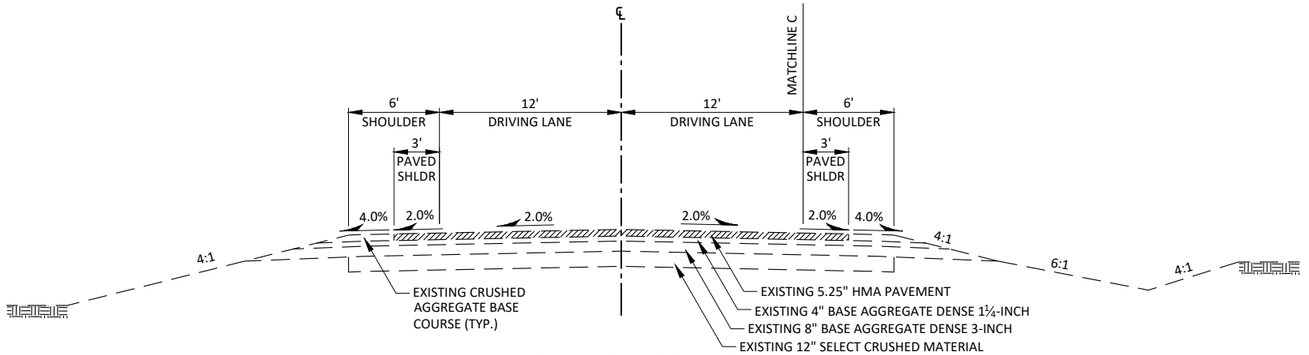
✱ STA. 407+19 - STA. 410+14, RT.
✱ STA. 410+79 - STA. 413+19, RT.
✱ STA. 423+44 - STA. 427+68, LT.
STA. 523+87 - STA. 530+96, RT.



TYPICAL PARTIAL EXISTING SECTION

STA. 140+80 - STA. 142+25, RT.
STA. 142+25 - STA. 144+71, LT. & RT.
STA. 144+71 - STA. 146+05, RT.
STA. 162+31 - STA. 166+54, LT.
STA. 172+20 - STA. 173+80, LT.
STA. 189+13 - STA. 191+92, LT.
STA. 223+84 - STA. 225+96, LT.

STA. 335+38 - STA. 337+42, LT.
STA. 430+50 - STA. 434+91, LT.
STA. 453+30 - STA. 458+32, LT.
STA. 464+92 - STA. 465+91, LT.
STA. 474+90 - STA. 477+40, RT.
STA. 477+40 - STA. 477+65, LT. & RT.
STA. 477+65 - STA. 480+35, LT.



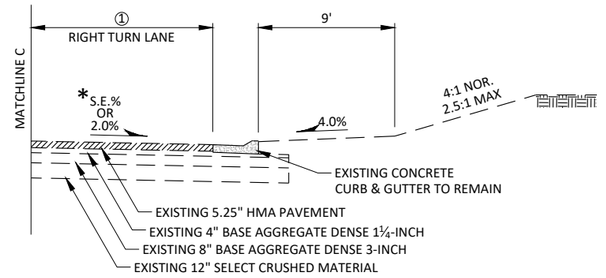
TYPICAL EXISTING SECTION

FILL

STA. 132+50 - STA. 236+16
STA. 246+08 - STA. 274+00
STA. 292+50 - STA. 294+75
STA. 305+41 - STA. 359+50
STA. 399+50 - STA. 405+66

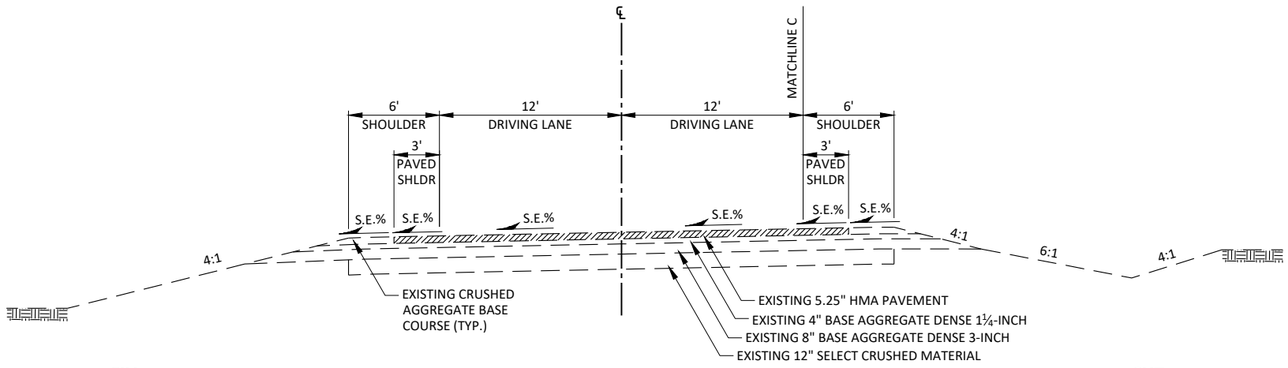
STA. 417+63 - STA. 420+29
STA. 429+49 - STA. 437+03
STA. 443+54 - STA. 486+04
STA. 492+51 - STA. 499+50
STA. 529+55 - STA. 531+89.92

CUT



TYPICAL PARTIAL EXISTING SECTION

	① FT.
STA. 356+63 - STA. 357+91, RT.	15
✱ STA. 410+14 - STA. 410+79, RT.	12

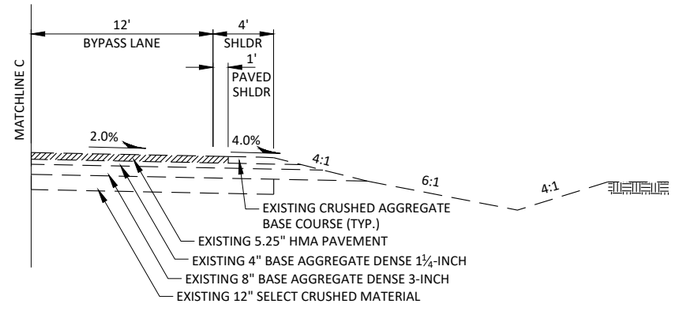


FILL

TYPICAL EXISTING SUPERELEVATED SECTION

STA. 236+16 - STA. 246+08
STA. 294+75 - STA. 305+41
STA. 405+66 - STA. 417+63
STA. 420+29 - STA. 429+49
STA. 437+03 - STA. 443+54
STA. 486+04 - STA. 492+51

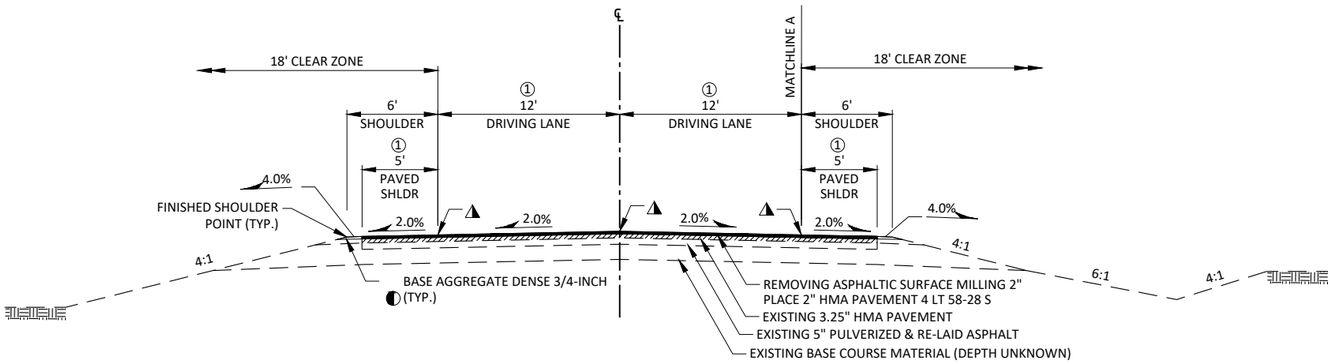
CUT



TYPICAL PARTIAL EXISTING SECTION

STA. 529+55 - STA. 531+89.92, LT.

① PREPARE FOUNDATION FOR ASPHALTIC PAVING

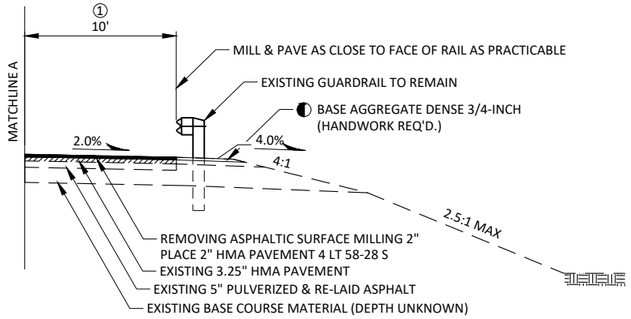


FILL

CUT

TYPICAL FINISHED SECTION

STA. 12+88.07 - STA. 37+95.65



TYPICAL PARTIAL FINISHED SECTION

STA. 37+18 - STA. 37+96 LT. & RT.

◭ ASPHALTIC CENTERLINE RUMBLE STRIPS, SINUSOIDAL, 2-LANE RURAL AND ASPHALTIC SHOULDER RUMBLE STRIPS, SINUSOIDAL, 2-LANE RURAL TYPE 1 REQ'D. SEE MISCELLANEOUS QUANTITIES AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

◐ INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4-INCH

◭ ASPHALTIC CENTERLINE RUMBLE STRIPS, SINUSOIDAL, 2-LANE RURAL AND ASPHALTIC SHOULDER RUMBLE STRIPS, SINUSOIDAL, 2-LANE RURAL TYPE 1 REQ'D. SEE MISCELLANEOUS QUANTITIES AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

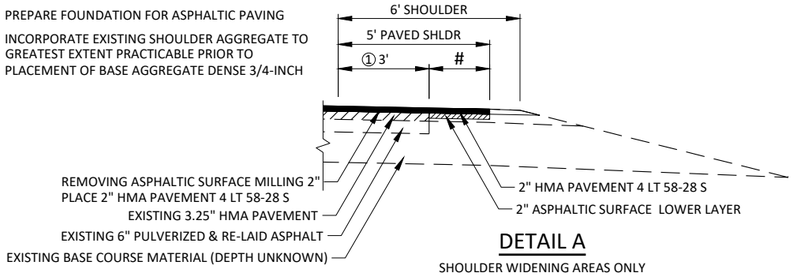
\# PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS. PLACE 2" ASPHALTIC SURFACE PRIOR TO HMA SURFACE LAYER.

✱ SEE SUPERELEVATION TABLE

◪ EXISTING 5' PAVED SHOULDER FROM STA. 374+17 - STA. 385+53

① PREPARE FOUNDATION FOR ASPHALTIC PAVING

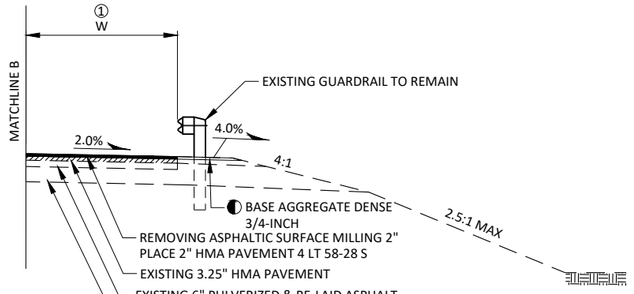
◐ INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4-INCH



DETAIL A

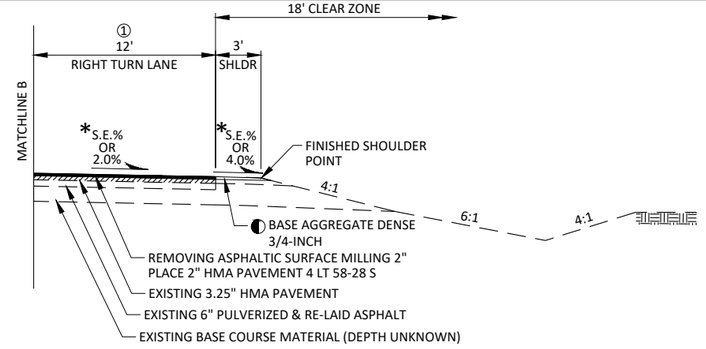
SHOULDER WIDENING AREAS ONLY

NOTE: STA. 374+17 - STA. 385+53 PAVEMENT STRUCTURE CONSISTS OF THE FOLLOWING IN DESCENDING ORDER:
-REMOVING ASPHALTIC SURFACE MILLING 2" PLACE 2" HMA PAVEMENT 4 LT 58-28 S
-EXISTING 2.5" HMA PAVEMENT
-EXISTING 10" BASE AGGREGATE DENSE 1¼-INCH
-EXISTING 12" TO 16" SELECT CRUSHED MATERIAL



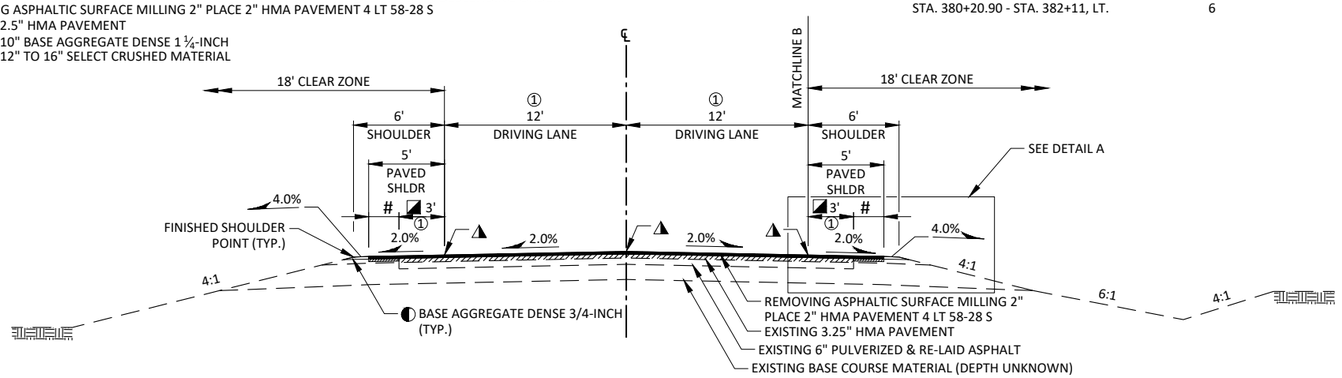
TYPICAL PARTIAL FINISHED SECTION

	W FT.
STA. 41+24.19 - STA. 41+61, RT.	10
STA. 41+24.19 - STA. 41+65, LT.	10
STA. 377+09 - STA. 378+99.44, RT.	6
STA. 377+59 - STA. 378+99.44, LT.	6
STA. 380+20.90 - STA. 382+61, RT.	6
STA. 380+20.90 - STA. 382+11, LT.	6



TYPICAL PARTIAL FINISHED SECTION

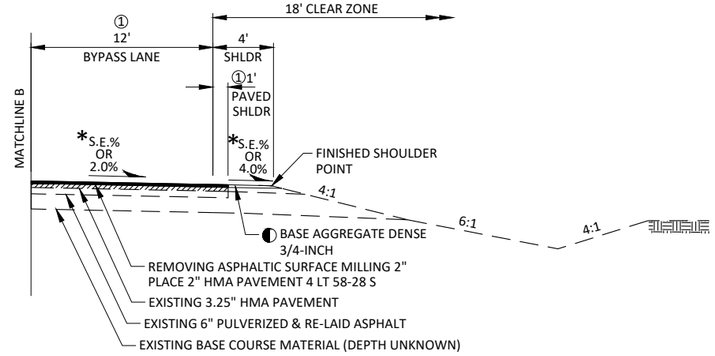
STA. 42+56 - STA. 45+60, LT.
✱ STA. 117+34 - STA. 122+24, RT.
✱ STA. 118+93 - STA. 123+60, LT.
STA. 359+50 - STA. 366+00, RT.
STA. 359+50 - STA. 367+97, LT.



FILL **CUT**

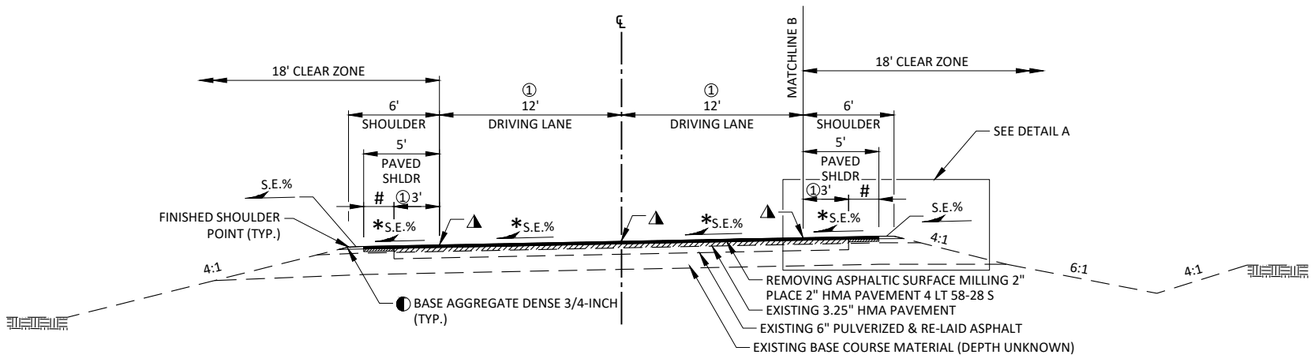
TYPICAL FINISHED SECTION

STA. 41+24.19 - STA. 45+38	STA. 274+00 - STA. 292+50
STA. 72+20 - STA. 78+49	STA. 359+50 - STA. 378+99.44
STA. 92+35 - STA. 105+42	STA. 380+20.90 - STA. 399+50
STA. 125+26 - STA. 132+50	STA. 499+50 - STA. 529+55



TYPICAL PARTIAL FINISHED SECTION

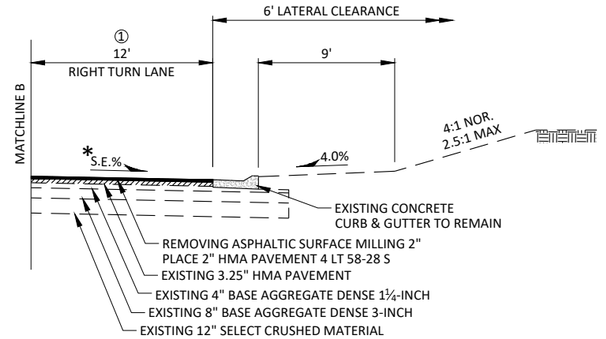
✱ STA. 53+84 - STA. 60+76, LT.
STA. 525+14 - STA. 529+55, LT.



FILL **CUT**

TYPICAL FINISHED SUPERELEVATED SECTION

STA. 45+38 - STA. 72+20
STA. 78+49 - STA. 92+35
STA. 105+42 - STA. 125+26



TYPICAL PARTIAL FINISHED SECTION

✱ STA. 55+37 - STA. 58+38, RT.

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	TYPICAL FINISHED SECTIONS	SHEET 8	E

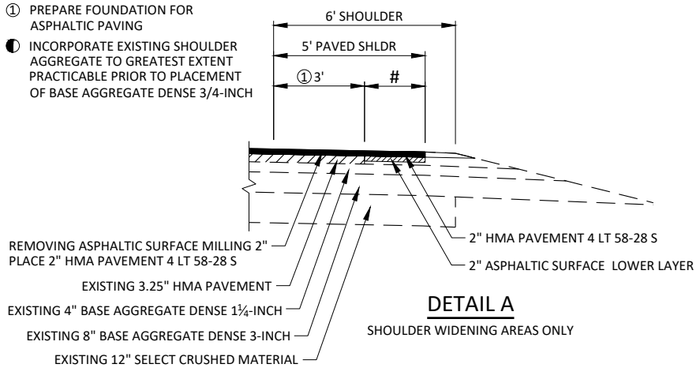
▲ ASPHALTIC CENTERLINE RUMBLE STRIPS, SINUSOIDAL, 2-LANE RURAL AND ASPHALTIC SHOULDER RUMBLE STRIPS, SINUSOIDAL, 2-LANE RURAL TYPE 1 REQ'D. SEE MISCELLANEOUS QUANTITIES AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

\# PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS. PLACE 2" ASPHALTIC SURFACE PRIOR TO HMA SURFACE LAYER.

* SEE SUPERELEVATION TABLE

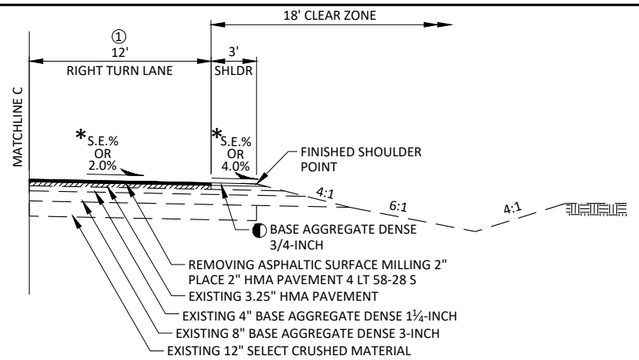
① PREPARE FOUNDATION FOR ASPHALTIC PAVING

◐ INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4-INCH



DETAIL A

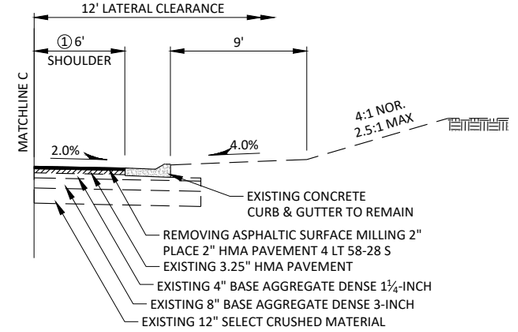
SHOULDER WIDENING AREAS ONLY



TYPICAL PARTIAL FINISHED SECTION

STA. 136+55 - STA. 140+93, LT.
STA. 354+06 - STA. 356+63, RT.
STA. 357+91 - STA. 359+50, RT.
STA. 355+91 - STA. 359+50, LT.

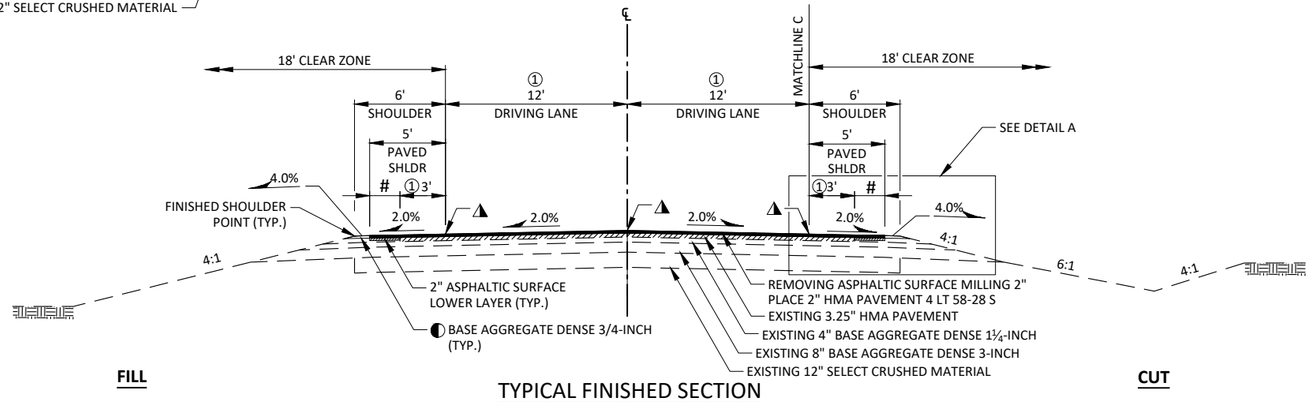
* STA. 407+19 - STA. 410+14, RT.
* STA. 410+79 - STA. 413+19, RT.
* STA. 423+44 - STA. 427+68, LT.
STA. 523+87 - STA. 530+96, RT.



TYPICAL PARTIAL FINISHED SECTION

STA. 140+80 - STA. 142+25, RT.
STA. 142+25 - STA. 144+71, LT. & RT.
STA. 144+71 - STA. 146+05, RT.
STA. 162+31 - STA. 166+54, LT.
STA. 172+20 - STA. 173+80, LT.
STA. 189+13 - STA. 191+92, LT.
STA. 223+84 - STA. 225+96, LT.

STA. 335+38 - STA. 337+42, LT.
STA. 430+50 - STA. 434+91, LT.
STA. 453+30 - STA. 458+32, LT.
STA. 464+92 - STA. 465+91, LT.
STA. 474+90 - STA. 477+40, RT.
STA. 477+40 - STA. 477+65, LT. & RT.
STA. 477+65 - STA. 480+35, LT.

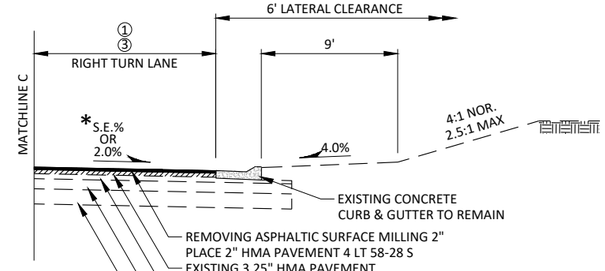


FILL **CUT**

TYPICAL FINISHED SECTION

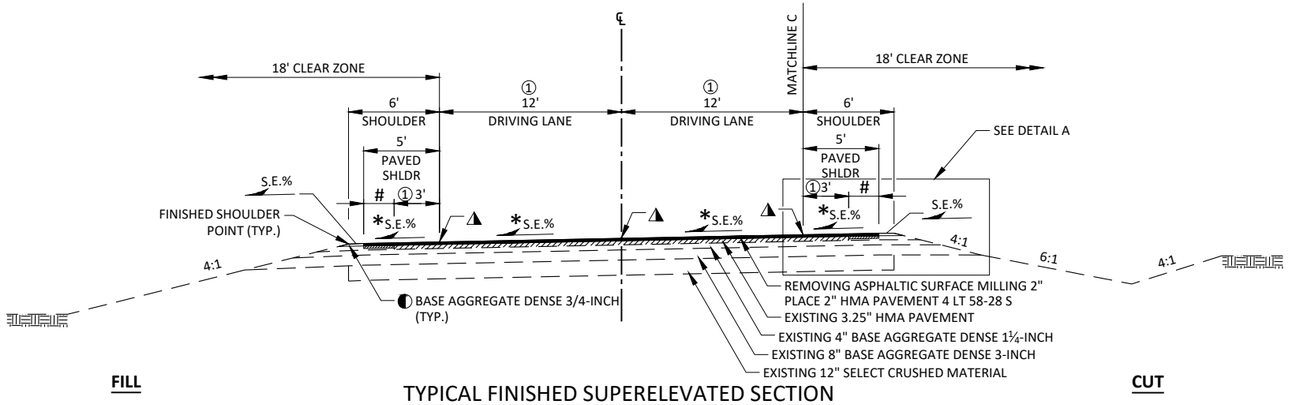
STA. 132+50 - STA. 236+16
STA. 246+08 - STA. 274+00
STA. 292+50 - STA. 294+75
STA. 305+41 - STA. 359+50
STA. 399+50 - STA. 405+66

STA. 417+63 - STA. 420+29
STA. 429+49 - STA. 437+03
STA. 443+54 - STA. 486+04
STA. 492+51 - STA. 499+50
STA. 529+55 - STA. 531+89.92



TYPICAL PARTIAL FINISHED SECTION

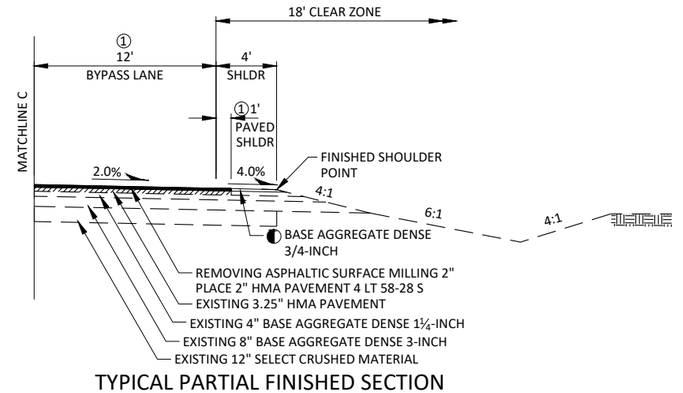
	③ FT.
STA. 356+63 - STA. 357+91, RT.	15
* STA. 410+14 - STA. 410+79, RT.	12



FILL **CUT**

TYPICAL FINISHED SUPERELEVATED SECTION

STA. 236+16 - STA. 246+08
STA. 294+75 - STA. 305+41
STA. 405+66 - STA. 417+63
STA. 420+29 - STA. 429+49
STA. 437+03 - STA. 443+54
STA. 486+04 - STA. 492+51



TYPICAL PARTIAL FINISHED SECTION

STA. 529+55 - STA. 531+89.92, LT.

SUPERELEVATION TABLE-CURVE 1

MAINTAIN NORMAL CROWN THROUGH CURVE 1

SUPERELEVATION TABLE-CURVE 2

STATION	LEFT(%)	RIGHT(%)
45+38	◄ 2.0	► 2.0
45+50	◄ 1.6	► 2.0
45+92	0.0	► 2.0
46+00	► 0.3	► 2.0
46+46	► 2.0	► 2.0
46+50	► 2.2	► 2.2
46+59	► 2.5	► 2.5
FULL SUPERELEVATION		
70+99	► 2.5	► 2.5
71+13	► 2.0	► 2.0
71+50	► 0.6	► 2.0
71+66	0.0	► 2.0
72+00	◄ 1.2	► 2.0
72+20	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 3

STATION	LEFT(%)	RIGHT(%)
78+49	◄ 2.0	► 2.0
79+02	◄ 2.0	0.0
79+50	◄ 2.0	◄ 1.8
79+55	◄ 2.0	◄ 2.0
80+00	◄ 3.7	◄ 3.7
80+35	◄ 5.0	◄ 5.0
FULL SUPERELEVATION		
90+49	◄ 5.0	◄ 5.0
91+00	◄ 3.1	◄ 3.1
91+29	◄ 2.0	◄ 2.0
91+50	◄ 2.0	◄ 1.2
91+82	◄ 2.0	0.0
92+00	◄ 2.0	► 0.7
92+35	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 4

STATION	LEFT(%)	RIGHT(%)
105+42	◄ 2.0	► 2.0
105+50	◄ 1.7	► 2.0
105+97	0.0	► 2.0
106+00	► 0.1	► 2.0
106+50	► 2.0	► 2.0
107+00	► 3.9	► 3.9
107+04	► 4.0	► 4.0
FULL SUPERELEVATION		
123+65	► 4.0	► 4.0
124+00	► 2.7	► 2.7
124+19	► 2.0	► 2.0
124+50	► 0.8	► 2.0
124+72	0.0	► 2.0
125+00	◄ 1.0	► 2.0
125+26	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 5

MAINTAIN NORMAL CROWN THROUGH CURVE 5

SUPERELEVATION TABLE-CURVE 6

STATION	LEFT(%)	RIGHT(%)
236+16	◄ 2.0	► 2.0
236+50	◄ 0.7	► 2.0
236+69	0.0	► 2.0
237+00	► 1.2	► 2.0
237+22	► 2.0	► 2.0
237+50	► 3.0	► 3.0
238+00	► 4.9	► 4.9
238+16	► 5.5	► 5.5
FULL SUPERELEVATION		
244+08	► 5.5	► 5.5
244+50	► 3.9	► 3.9
245+02	► 2.0	► 2.0
245+50	► 0.2	► 2.0
245+55	0.0	► 2.0
246+00	◄ 1.7	► 2.0
246+08	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 7

MAINTAIN NORMAL CROWN THROUGH CURVE 7

SUPERELEVATION TABLE-CURVE 8

STATION	LEFT(%)	RIGHT(%)
294+75	◄ 2.0	► 2.0
295+00	◄ 2.0	► 1.0
295+28	◄ 2.0	0.0
295+50	◄ 2.0	◄ 0.8
295+81	◄ 2.0	◄ 2.0
296+00	◄ 2.7	◄ 2.7
296+50	◄ 4.6	◄ 4.6
296+88	◄ 6.0	◄ 6.0
FULL SUPERELEVATION		
303+28	◄ 6.0	◄ 6.0
303+50	◄ 5.2	◄ 5.2
304+00	◄ 3.3	◄ 3.3
304+35	◄ 2.0	◄ 2.0
304+50	◄ 2.0	◄ 1.4
304+88	◄ 2.0	0.0
305+00	◄ 2.0	► 0.5
305+41	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 9

MAINTAIN NORMAL CROWN THROUGH CURVE 9

SUPERELEVATION TABLE-CURVE 10

MAINTAIN NORMAL CROWN THROUGH CURVE 10

SUPERELEVATION TABLE-CURVE 11

STATION	LEFT(%)	RIGHT(%)
405+66	◄ 2.0	► 2.0
406+00	◄ 2.0	► 0.7
406+19	◄ 2.0	0.0
406+50	◄ 2.0	◄ 1.2
406+73	◄ 2.0	◄ 2.0
407+00	◄ 3.0	◄ 3.0
407+50	◄ 4.9	◄ 4.9
407+58	◄ 5.2	◄ 5.2
FULL SUPERELEVATION		
415+71	◄ 5.2	◄ 5.2
416+00	◄ 4.1	◄ 4.1
416+50	◄ 2.3	◄ 2.3
416+57	◄ 2.0	◄ 2.0
417+00	◄ 2.0	◄ 0.4
417+10	◄ 2.0	0.0
417+50	◄ 2.0	► 1.5
417+63	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 12

STATION	LEFT(%)	RIGHT(%)
420+29	◄ 2.0	► 2.0
420+50	◄ 1.2	► 2.0
420+82	0.0	► 2.0
421+00	► 0.7	► 2.0
421+36	► 2.0	► 2.0
421+50	► 2.5	► 2.5
422+00	► 4.4	► 4.4
422+21	► 5.2	► 5.2
FULL SUPERELEVATION		
427+57	► 5.2	► 5.2
428+00	► 3.6	► 3.6
428+43	► 2.0	► 2.0
428+50	► 1.7	► 2.0
428+96	0.0	► 2.0
429+00	◄ 0.1	► 2.0
429+49	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 13

STATION	LEFT(%)	RIGHT(%)
437+03	◄ 2.0	► 2.0
437+50	◄ 0.2	► 2.0
437+56	0.0	► 2.0
438+00	► 1.7	► 2.0
438+09	► 2.0	► 2.0
438+50	► 3.5	► 3.5
438+76	► 4.5	► 4.5
FULL SUPERELEVATION		
441+81	► 4.5	► 4.5
442+00	► 3.8	► 3.8
442+48	► 2.0	► 2.0
442+50	► 1.9	► 2.0
443+01	0.0	► 2.0
443+50	◄ 1.8	► 2.0
443+54	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 14

MAINTAIN NORMAL CROWN THROUGH CURVE 14

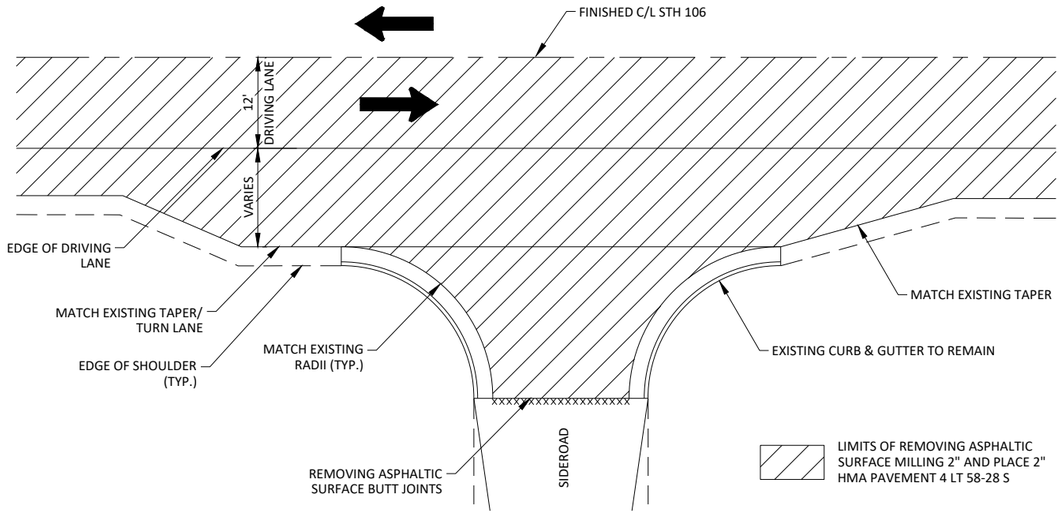
SUPERELEVATION TABLE-CURVE 15

STATION	LEFT(%)	RIGHT(%)
486+04	◄ 2.0	► 2.0
486+50	◄ 2.0	► 0.3
486+57	◄ 2.0	0.0
487+00	◄ 2.0	◄ 1.6
487+10	◄ 2.0	◄ 2.0
487+50	◄ 3.5	◄ 3.5
487+85	◄ 4.8	◄ 4.8
FULL SUPERELEVATION		
490+70	◄ 4.8	◄ 4.8
491+00	◄ 3.7	◄ 3.7
491+45	◄ 2.0	◄ 2.0
491+50	◄ 2.0	◄ 1.8
491+98	◄ 2.0	0.0
492+00	◄ 2.0	► 0.1
492+51	◄ 2.0	► 2.0

SUPERELEVATION TABLE-CURVE 16

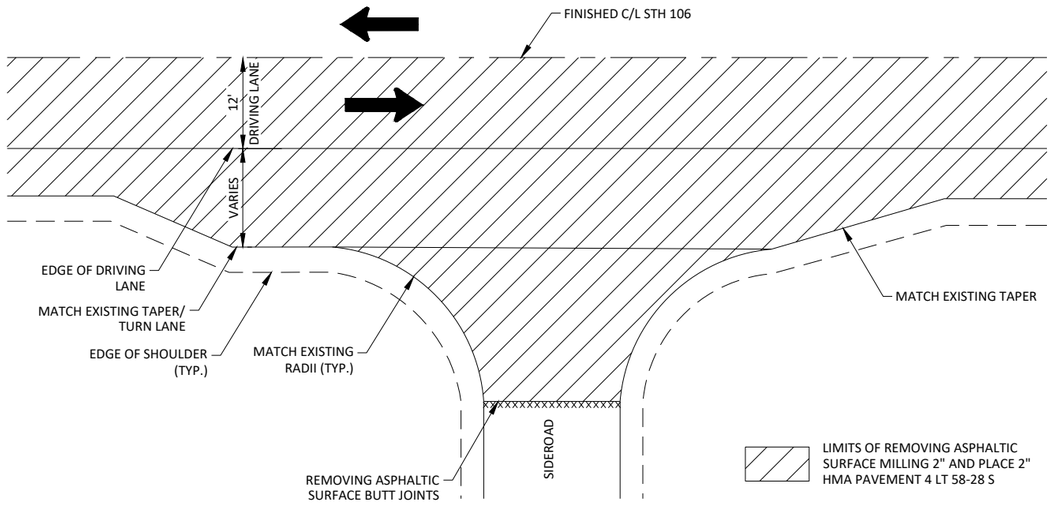
MAINTAIN NORMAL CROWN THROUGH CURVE 16

NOTE: SUPERELEVATION TABLES ARE FOR INFORMATIONAL PURPOSES ONLY.



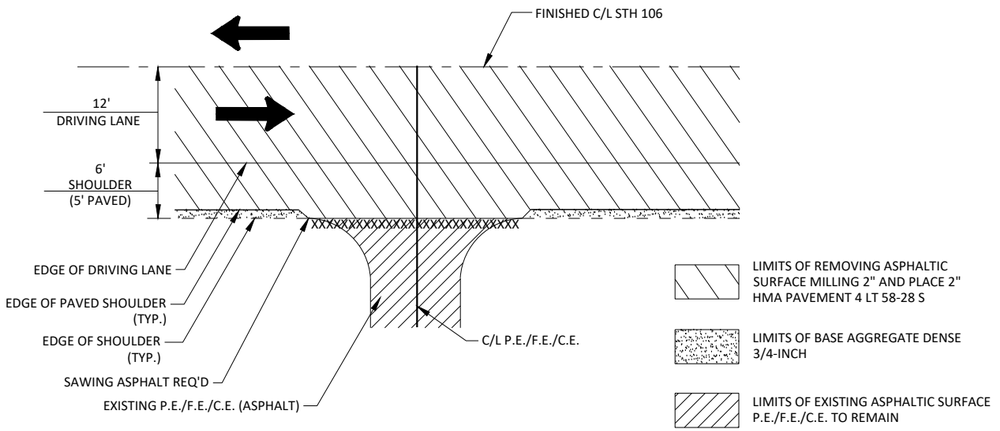
TYPICAL RURAL SIDEROAD DETAIL WITH CURB & GUTTER

CURTIS MILL ROAD	JOHNSON ROAD
ROCK RIVER ROAD	CTH D (NORTH)
KUTZ ROAD (NORTH)	CTH D (SOUTH)
KUTZ ROAD (SOUTH)	GREEN ISLE DRIVE
CTH N (NORTH)	CUSHMAN ROAD
CTH N (SOUTH)	FROMMADER ROAD
JAECKEL ROAD	MEHRING ROAD (NORTH)
WILLING ROAD	MEHRING ROAD (SOUTH)
WENHAM ROAD	STH 106
SCHMIDT ROAD	

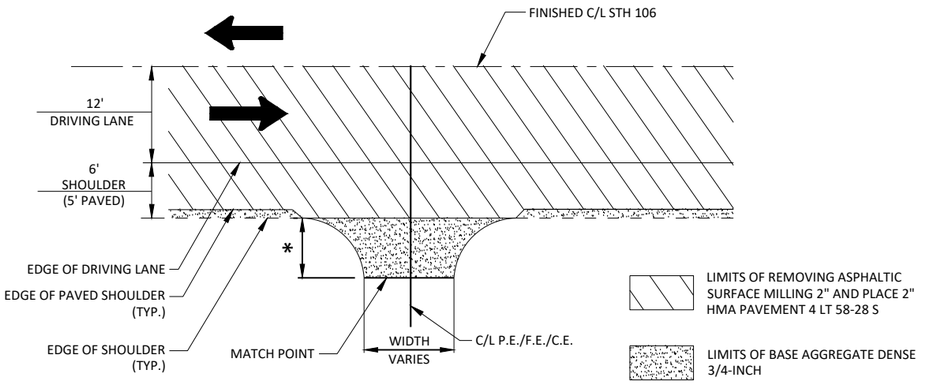


TYPICAL RURAL SIDEROAD DETAIL WITHOUT CURB & GUTTER

EDGEWATER ROAD
SMITH LANE
STRUNK ROAD
KITZINGER LANE
BRATTSET LANE
BOOS LANE



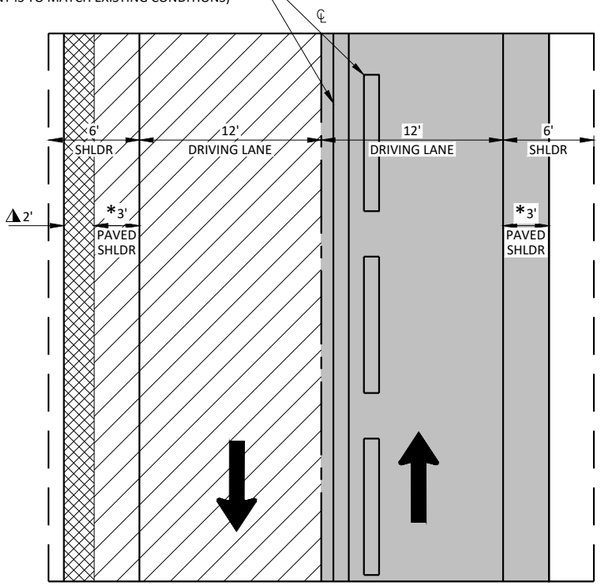
P.E./F.E./C.E. (EXISTING ASPHALT) DRIVEWAY DETAIL-RURAL



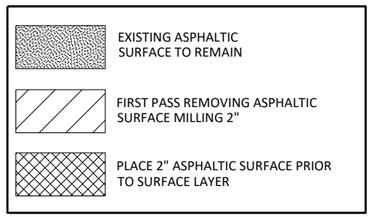
P.E./F.E./C.E. (EXISTING B.A.D.) DRIVEWAY DETAIL-RURAL

* REPLACE IN KIND TO THE RADIUS POINTS OF EACH ENTRANCE

FIRST APPLICATION TEMPORARY MARKING LINE PAINT 4-INCH TO BE PLACED ON EXISTING PAVEMENT SAME DAY AS MILLING OPERATION (ALL TEMPORARY MARKING LINE PAINT IS TO MATCH EXISTING CONDITIONS)

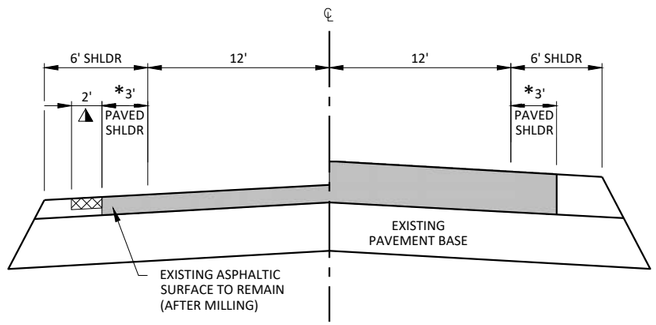


PLAN VIEW



NOTE: REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION

2' PAVED SHOULDER WIDENING. ASPHALTIC SURFACE (LOWER LIFT) TO BE PAVED THE SAME DAY AS MILLING OPERATION.

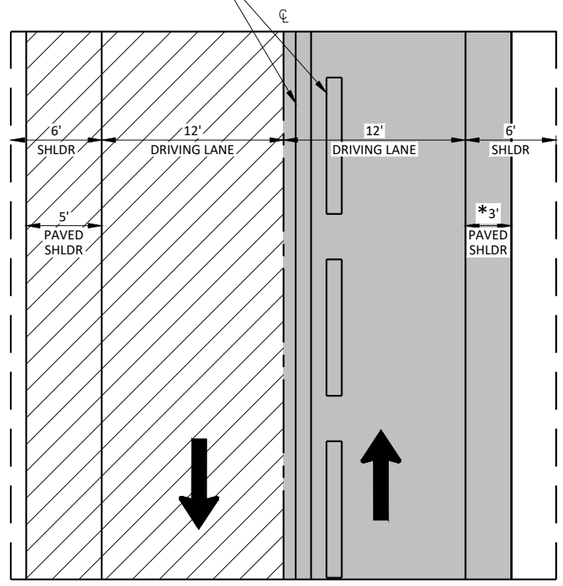


CROSS SECTION VIEW

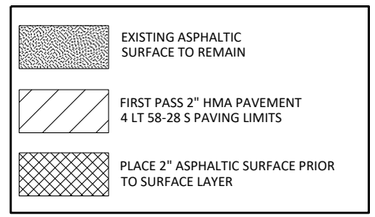
FIRST MILLING PASS DETAIL

* NOTE: EXISTING 5' PAVED SHOULDER STA. 12+88.07 - STA. 37+95.65 & STA. 374+17 - STA. 385+53

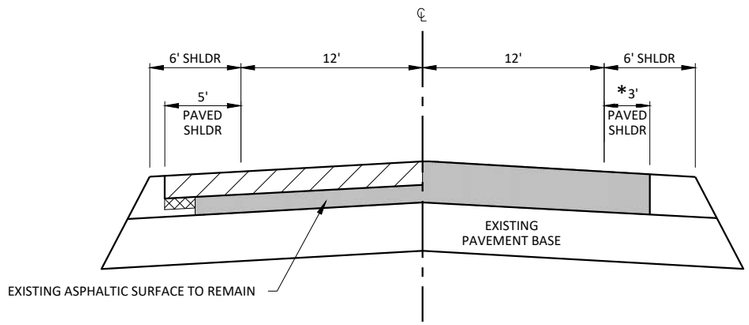
TEMPORARY MARKING LINE PAINT 4-INCH PLACED DURING FIRST MILLING PASS TO REMAIN FOR FIRST PAVING PASS



PLAN VIEW



NOTE: REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION



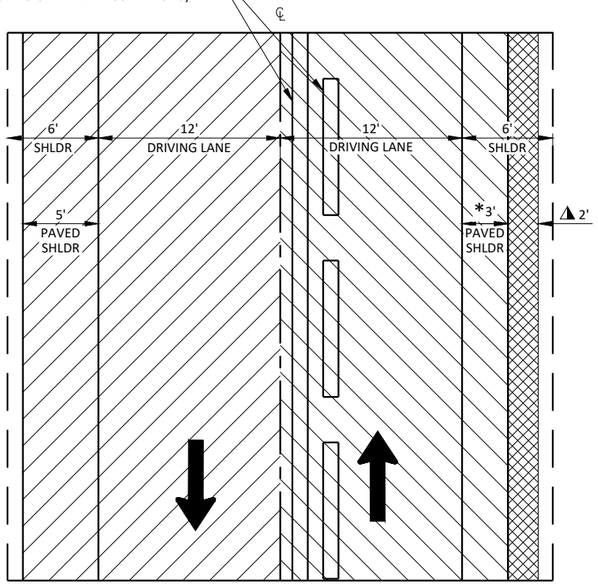
CROSS SECTION VIEW

FIRST PAVING PASS DETAIL

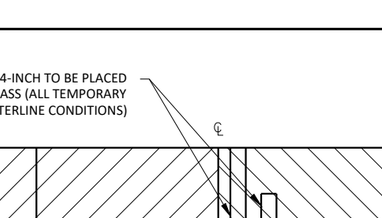
* NOTE: EXISTING 5' PAVED SHOULDER STA. 12+88.07 - STA. 37+95.65 & STA. 374+17 - STA. 385+53

2

SECOND APPLICATION TEMPORARY MARKING LINE PAINT 4-INCH TO BE PLACED ON MILLED SURFACE SAME DAY AS SECOND MILLING PASS (ALL TEMPORARY MARKING LINE PAINT IS TO MATCH EXISTING CENTERLINE CONDITIONS)

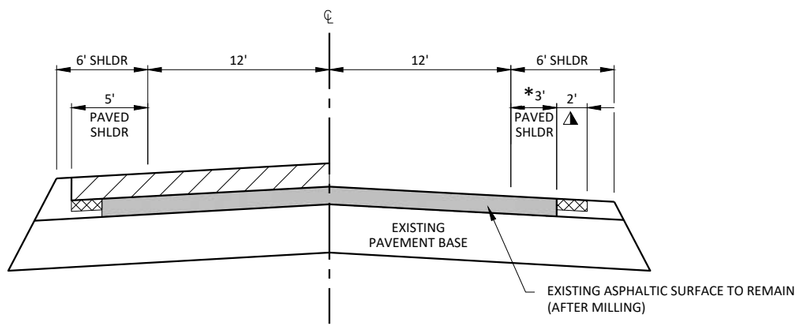


PLAN VIEW



NOTE: REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION

2' PAVED SHOULDER WIDENING. ASPHALTIC SURFACE (LOWER LIFT) TO BE PAVED THE SAME DAY AS MILLING OPERATION.

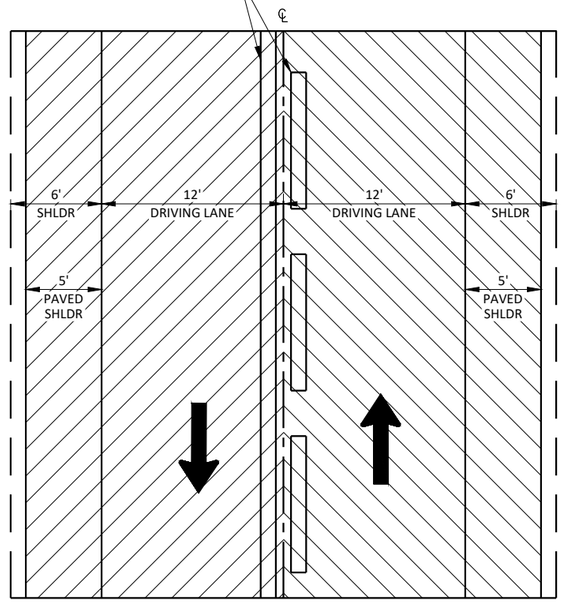


CROSS SECTION VIEW

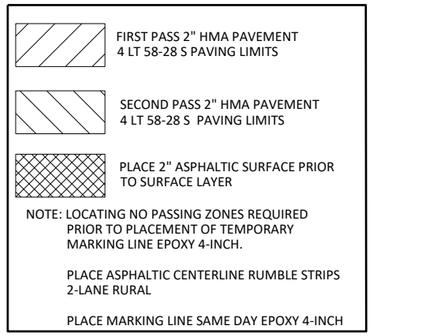
SECOND MILLING PASS DETAIL

* NOTE: EXISTING 5' PAVED SHOULDER STA. 12+88.07 - STA. 37+95.65 & STA. 374+17 - STA. 385+53

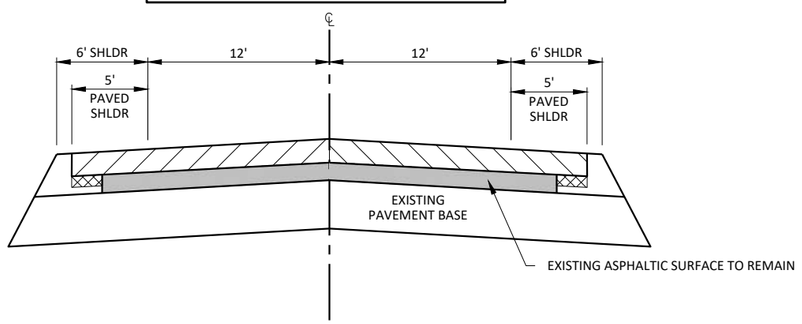
TEMPORARY MARKING LINE EPOXY 4-INCH TO BE PLACED SAME DAY AS FINAL PAVING PASS



PLAN VIEW



NOTE: REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION

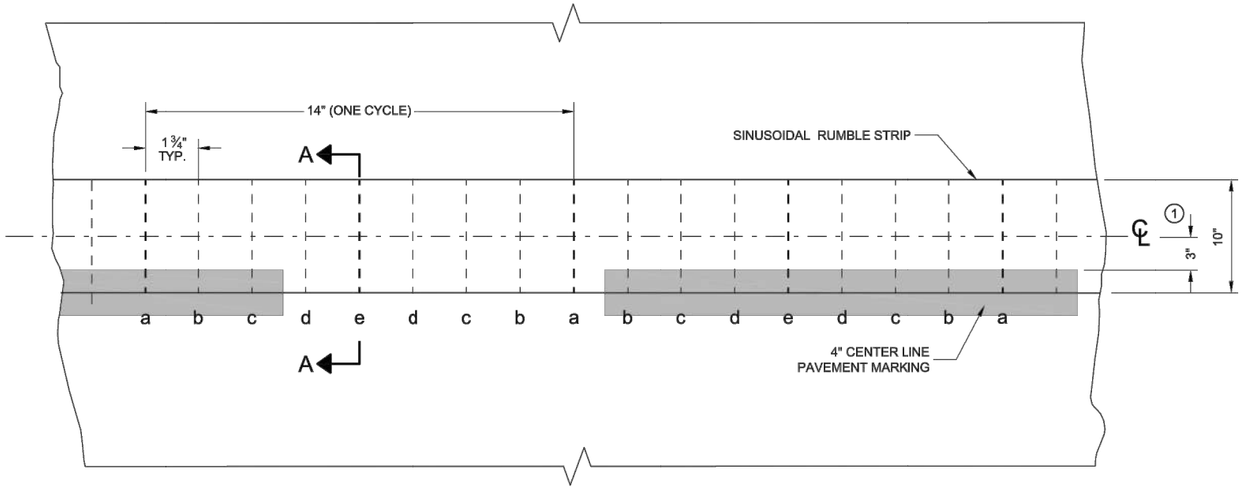


CROSS SECTION VIEW

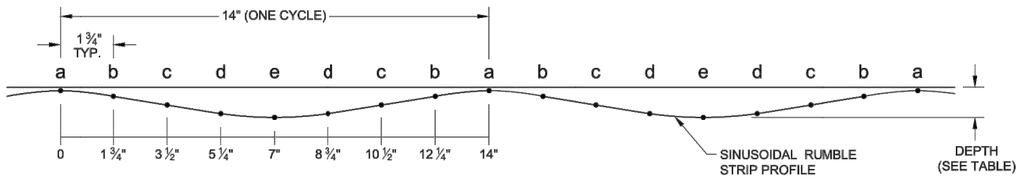
SECOND PAVING PASS DETAIL

2

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	CONSTRUCTION DETAILS: PAVING SEQUENCE OF OPERATIONS	SHEET 13	E



PLAN VIEW
SINUSOIDAL CENTER LINE RUMBLE STRIPS



PROFILE VIEW
SINUSOIDAL CENTER LINE RUMBLE STRIPS

LOCATION	DEPTH (INCHES)
a	1/16"
b	5/32"
c	9/32"
d	7/16"
e	1/2"

GENERAL NOTES

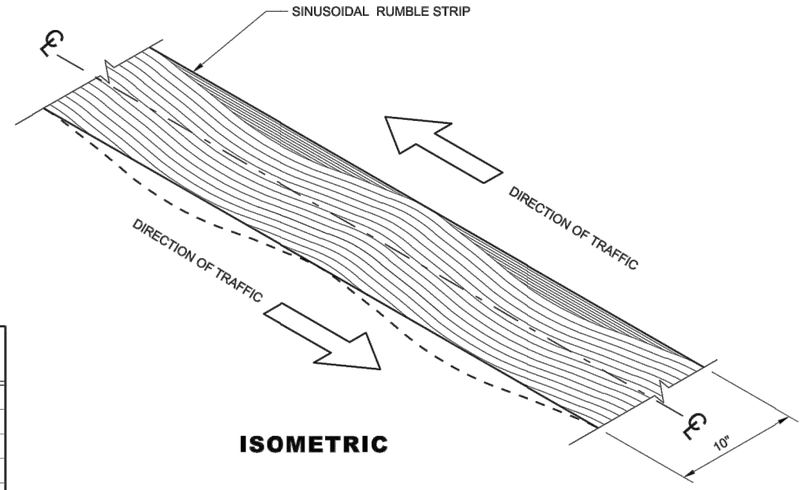
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

GAP SINUSOIDAL RUMBLE STRIPS AT INTERSECTIONS, BRIDGE AND APPROACH SLABS, RAILROADS, DRIVEWAYS, PASSING AND CLIMBING LANES, AND OTHER MISCELLANEOUS CROSSINGS

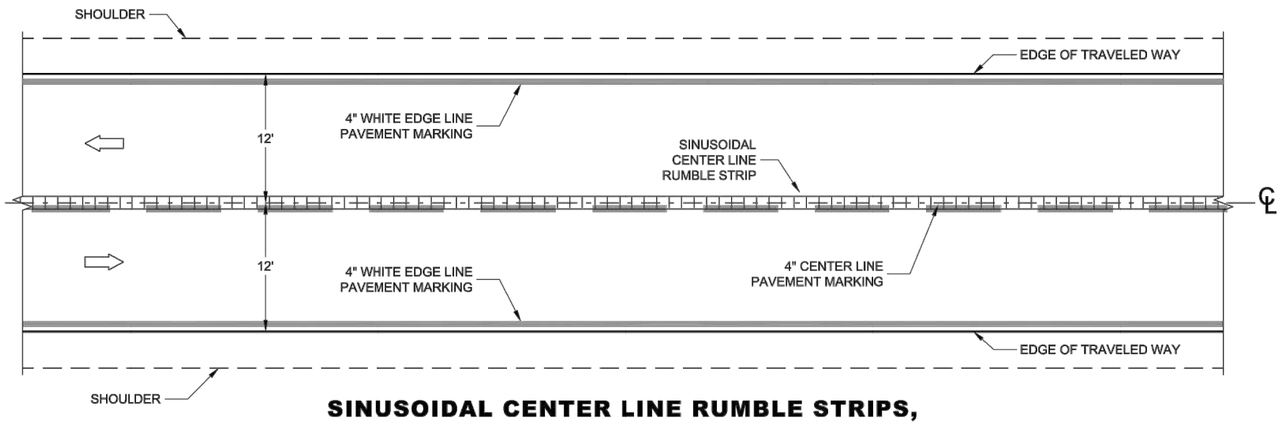
SHOULDER RUMBLE STRIPS MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

TEMPORARY PAVEMENT MARKINGS ARE TYPICALLY PLACED PRIOR TO RUMBLE STRIP INSTALLATION. PERMANENT MARKINGS ARE INSTALLED AFTER RUMBLE STRIP INSTALLATION.

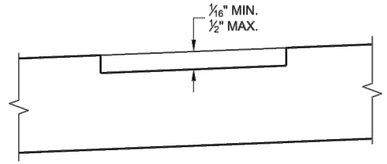
(1) REFER TO SDD 15C8 - SHEET "a" LONGITUDINAL MARKINGS (MAINLINE).



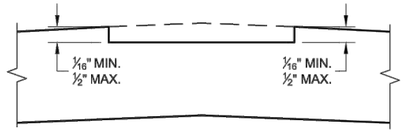
ISOMETRIC



SINUSOIDAL CENTER LINE RUMBLE STRIPS,
2-LANE ASPHALTIC ROADWAY

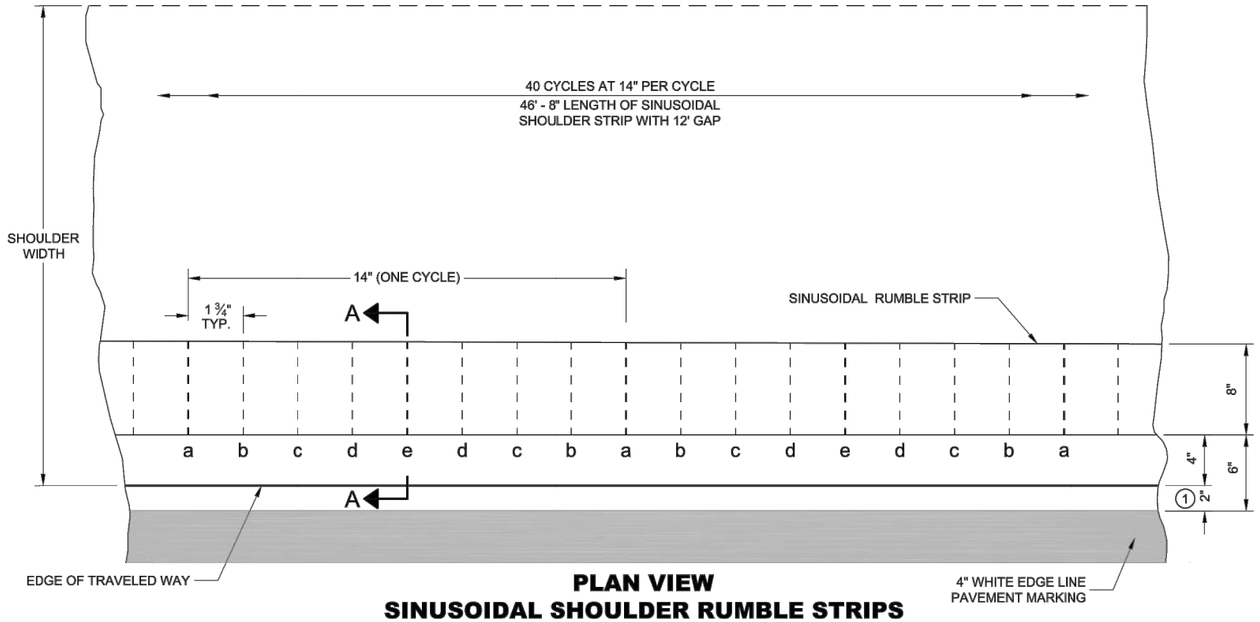


SECTION A - A
SUPERELEVATED ROADWAY

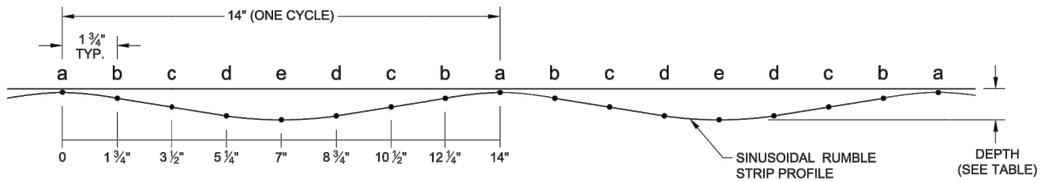


SECTION A - A
CROWNED ROADWAY

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	CONSTRUCTION DETAILS: SINUSOIDAL CENTER LINE RUMBLE STRIPS	SHEET 14	E



PLAN VIEW
SINUSOIDAL SHOULDER RUMBLE STRIPS



PROFILE VIEW
SINUSOIDAL SHOULDER RUMBLE STRIPS

LOCATION	DEPTH (INCHES)
a	1/16"
b	5/32"
c	9/32"
d	7/16"
e	1/2"

GENERAL NOTES

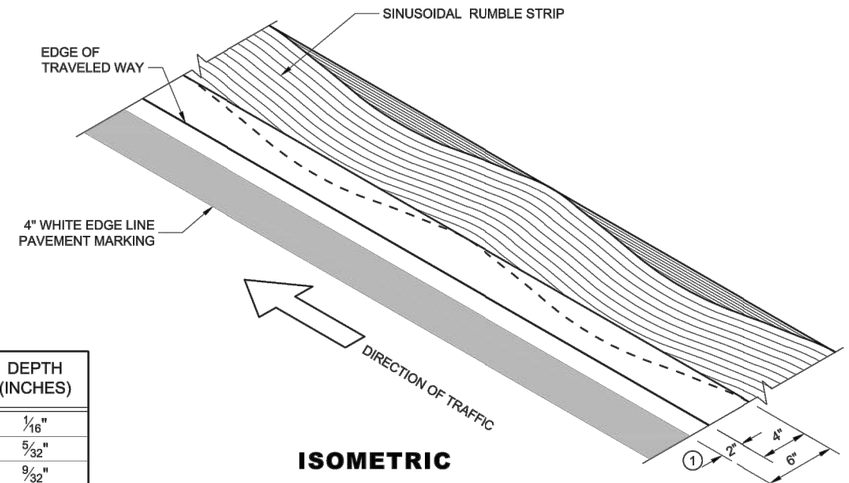
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

GAP SINUSOIDAL RUMBLE STRIPS AT INTERSECTIONS, BRIDGE AND APPROACH SLABS, RAILROADS, DRIVEWAYS, PASSING AND CLIMBING LANES, AND OTHER MISCELLANEOUS CROSSINGS

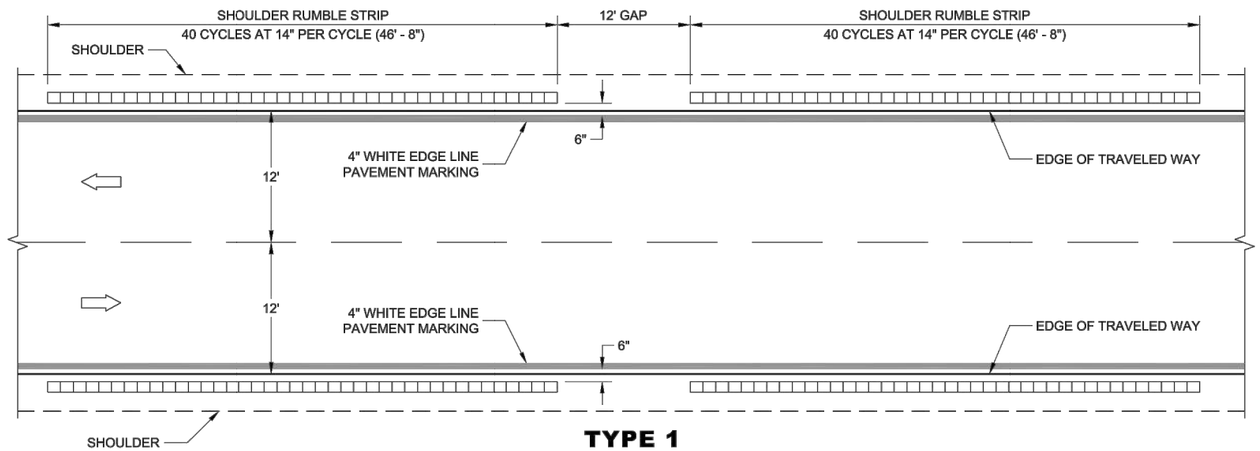
SHOULDER RUMBLE STRIPS MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

TEMPORARY PAVEMENT MARKINGS ARE TYPICALLY PLACED PRIOR TO RUMBLE STRIP INSTALLATION. PERMANENT MARKINGS ARE INSTALLED AFTER RUMBLE STRIP INSTALLATION.

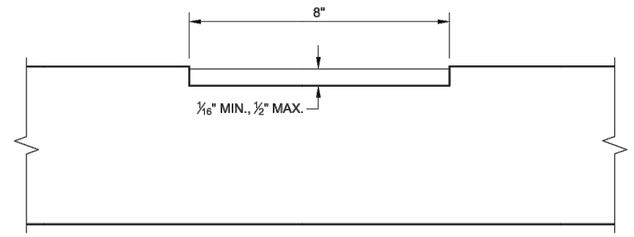
(1) REFER TO SDD 15C8 - SHEET "a" LONGITUDINAL MARKINGS (MAINLINE).



ISOMETRIC

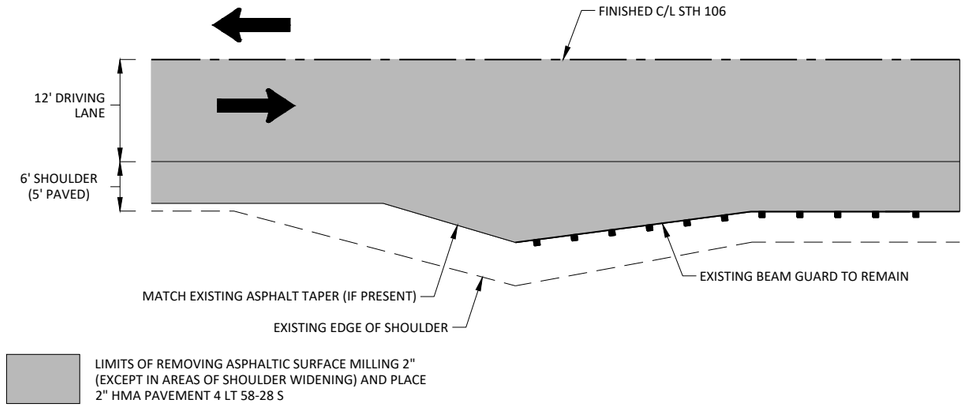


TYPE 1
SINUSOIDAL SHOULDER RUMBLE STRIPS,
2-LANE ASPHALTIC ROADWAY



SECTION A - A

2

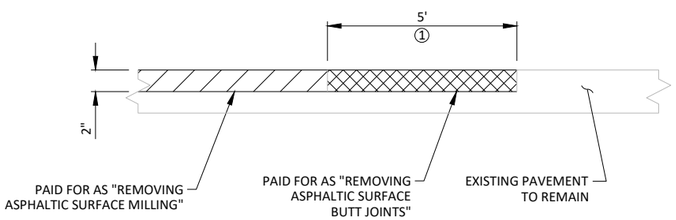


BEAM GUARD PAVING DETAIL

STATION - STATION	LOCATION	EXISTING BEAM GUARD HEIGHT PRIOR TO ADJUSTMENT IF REQ'D. (IN.)	ADJUSTMENT REQ'D. (Y/N) - HEIGHT (IN.)	* EXISTING BEAM GUARD HEIGHT AFTER ADJUSTMENT IF REQ'D. (IN.)	REMARKS
37+18 - 38+03	MAINLINE, RT.	29.4"	N	29.4"	-
37+18 - 38+03	MAINLINE, LT.	29.4"	N	29.4"	-
41+17 - 41+61	MAINLINE, RT.	32.4"	Y -LOWER 0.4"	32"	ADJUSTING STEEL PLATE BEAM GUARD REQ'D.
41+17 - 41+65	MAINLINE, LT.	33"	Y - LOWER 1"	32"	ADJUSTING STEEL PLATE BEAM GUARD REQ'D.
377+09 - 379+04	MAINLINE, RT.	31.6"	N	31.6"	-
377+59 - 379+04	MAINLINE, LT.	30.6"	N	30.6"	-
380+16 - 382+61	MAINLINE, RT.	31.8"	N	31.8"	-
380+16 - 382+11	MAINLINE, LT.	31.8"	N	31.8"	-

* ALLOWABLE GUARDRAIL HEIGHT RANGE IS 27.75" - 32". ENGINEER IN FIELD TO VERIFY EXISTING GUARDRAIL HEIGHT PRIOR TO ADJUSTING STEEL PLATE BEAM GUARD. FINAL ADJUSTMENT HEIGHT TO BE DETERMINED BY ENGINEER IN FIELD.

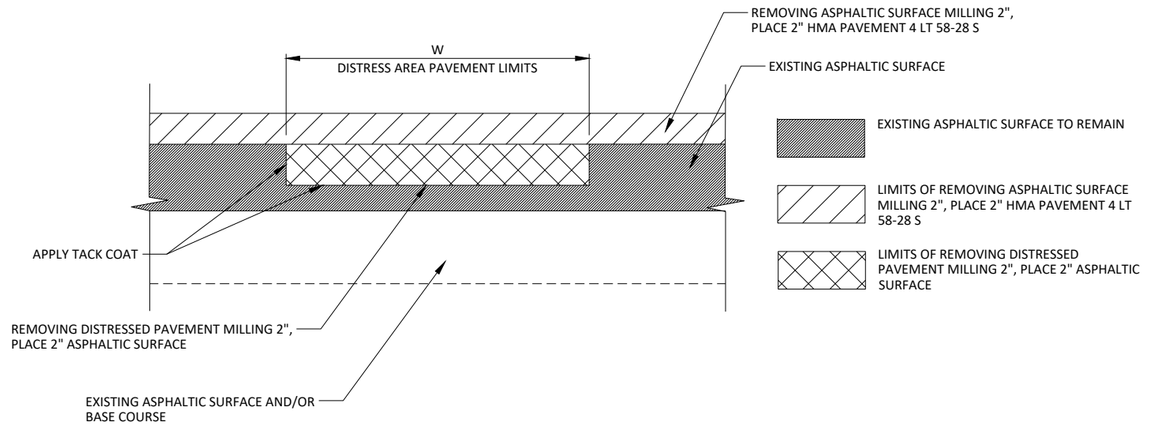
EXISTING BEAM GUARD ADJUSTMENT TABLE



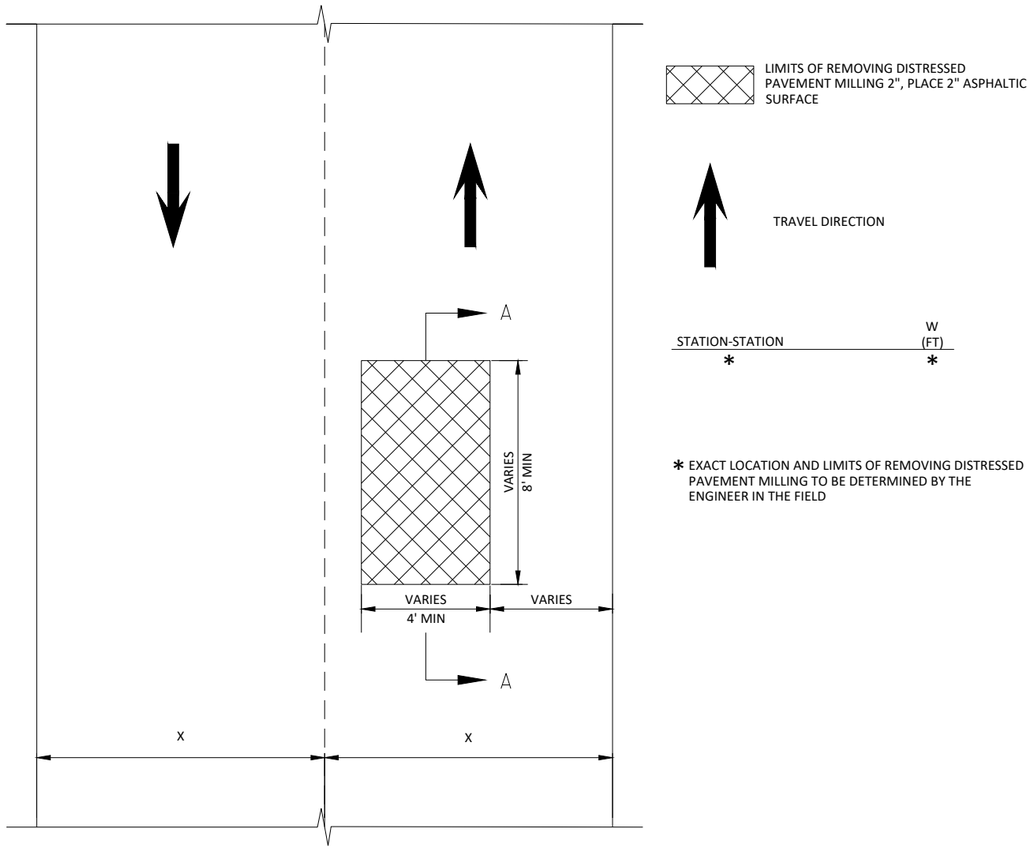
REMOVING ASPHALTIC SURFACE BUTT JOINTS DETAIL

STA. 12+88.07	WILLING RD	GREEN ISLE DR
EDGEWATER RD	WENHAM RD	CUSHMAN RD
STA. 37+95.65	SCHMIDT RD	FROMMADER RD
STA. 41+24.19	SMITH LN	MEHRING RD (SOUTH)
ROCK RIVER RD	STRUNK RD	MEHRING RD (NORTH)
CURTIS MILL RD	JOHNSON RD	BRATTSET LN
KUTZ RD (SOUTH)	KITZINGER LN	STH 106
KUTZ RD (NORTH)	CTH D (NORTH)	BOOS LN
CTH N (NORTH)	CTH D (SOUTH)	STA. 531+89.92
CTH N (SOUTH)	STA. 378+99.44	
JAECKEL RD	STA. 380+20.90	

① LIMITS OF REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D.

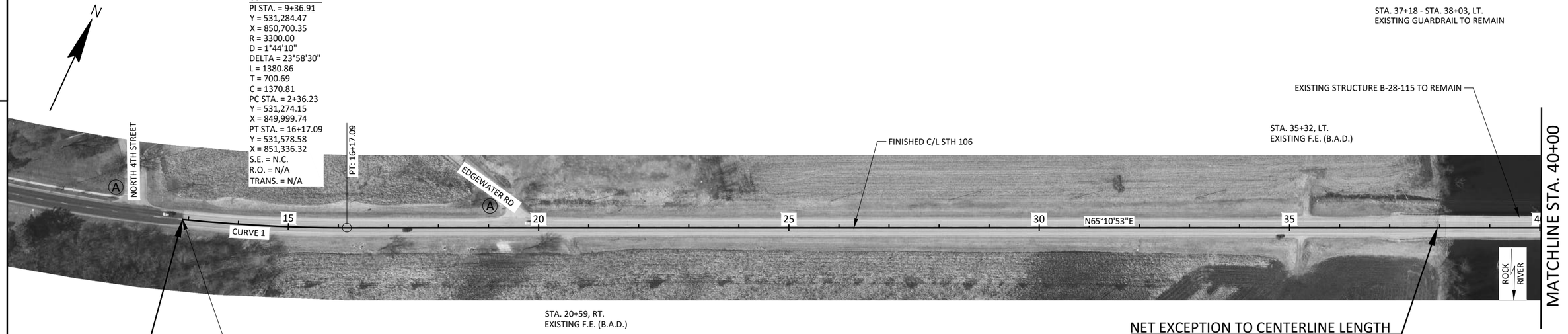


REMOVING DISTRESS PAVEMENT MILLING
SECTION A-A



* EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PLAN VIEW



TRAFFIC NOTES

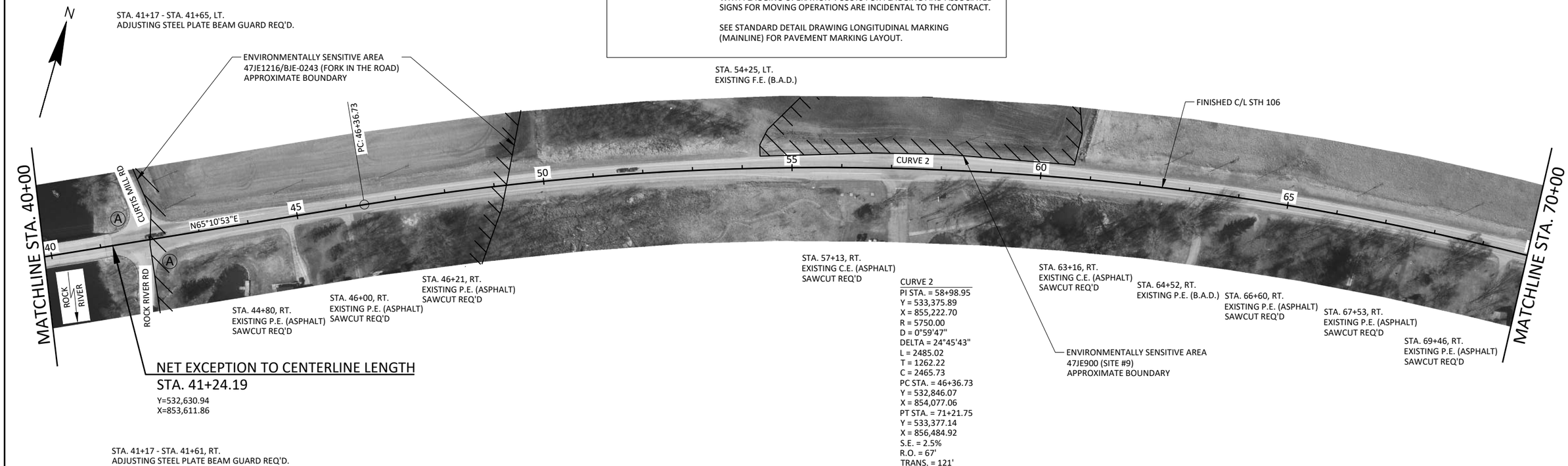
A ROAD WORK AHEAD W20-1A

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

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

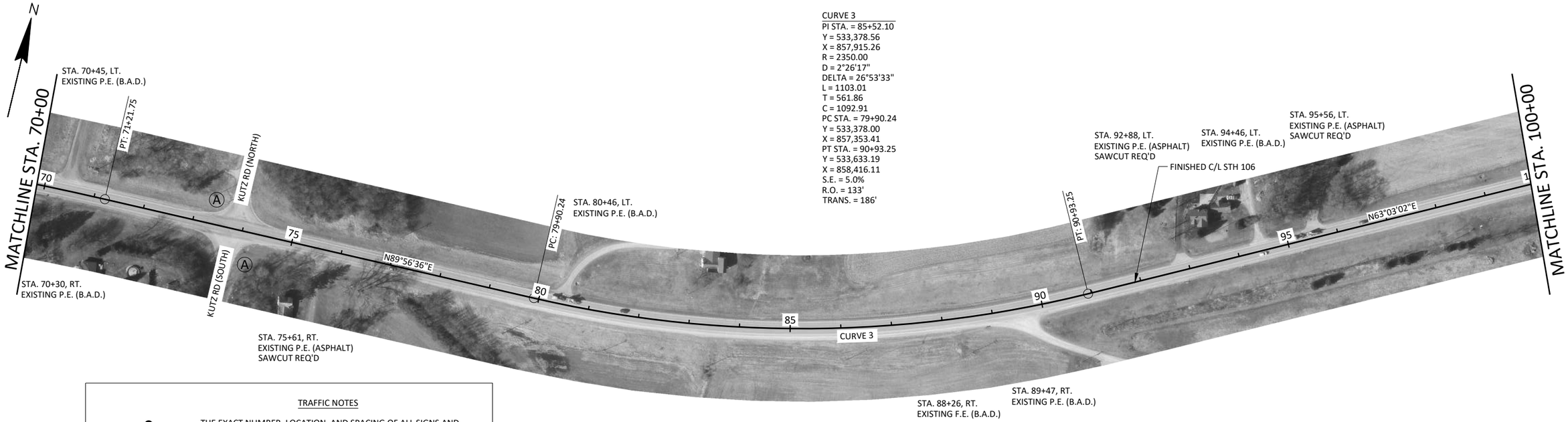
FOR MOVING OPERATION STA. 12+88.07 TO STA. 531+89.92 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION". COSTS FOR FLAGGING AND ASSOCIATED SIGNS FOR MOVING OPERATIONS ARE INCIDENTAL TO THE CONTRACT.

SEE STANDARD DETAIL DRAWING LONGITUDINAL MARKING (MAINLINE) FOR PAVEMENT MARKING LAYOUT.



CURVE 2
PI STA. = 58+98.95
Y = 533,375.89
X = 855,222.70
R = 5750.00
D = 0°59'47"
DELTA = 24°45'43"
L = 2485.02
T = 1262.22
C = 2465.73
PC STA. = 46+36.73
Y = 532,846.07
X = 854,077.06
PT STA. = 71+21.75
Y = 533,377.14
X = 856,484.92
S.E. = 2.5%
R.O. = 67'
TRANS. = 121'

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PLAN DETAILS	SHEET 17	E



CURVE 3
PI STA. = 85+52.10
Y = 533,378.56
X = 857,915.26
R = 2350.00
D = 2°26'17"
DELTA = 26°53'33"
L = 1103.01
T = 561.86
C = 1092.91
PC STA. = 79+90.24
Y = 533,378.00
X = 857,353.41
PT STA. = 90+93.25
Y = 533,633.19
X = 858,416.11
S.E. = 5.0%
R.O. = 133'
TRANS. = 186'

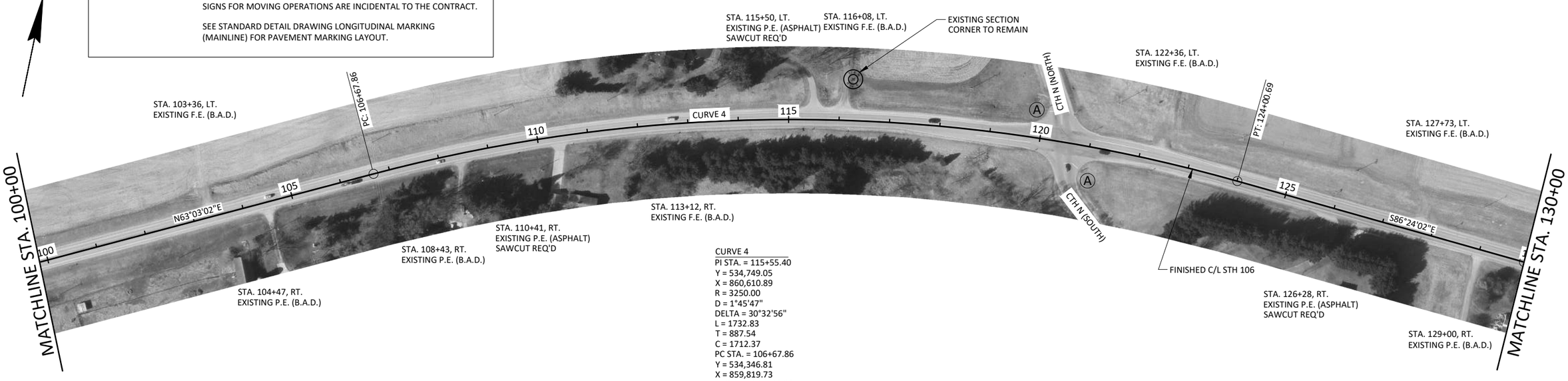
TRAFFIC NOTES

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

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

FOR MOVING OPERATION STA. 12+88.07 TO STA. 531+89.92 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION". COSTS FOR FLAGGING AND ASSOCIATED SIGNS FOR MOVING OPERATIONS ARE INCIDENTAL TO THE CONTRACT.

SEE STANDARD DETAIL DRAWING LONGITUDINAL MARKING (MAINLINE) FOR PAVEMENT MARKING LAYOUT.

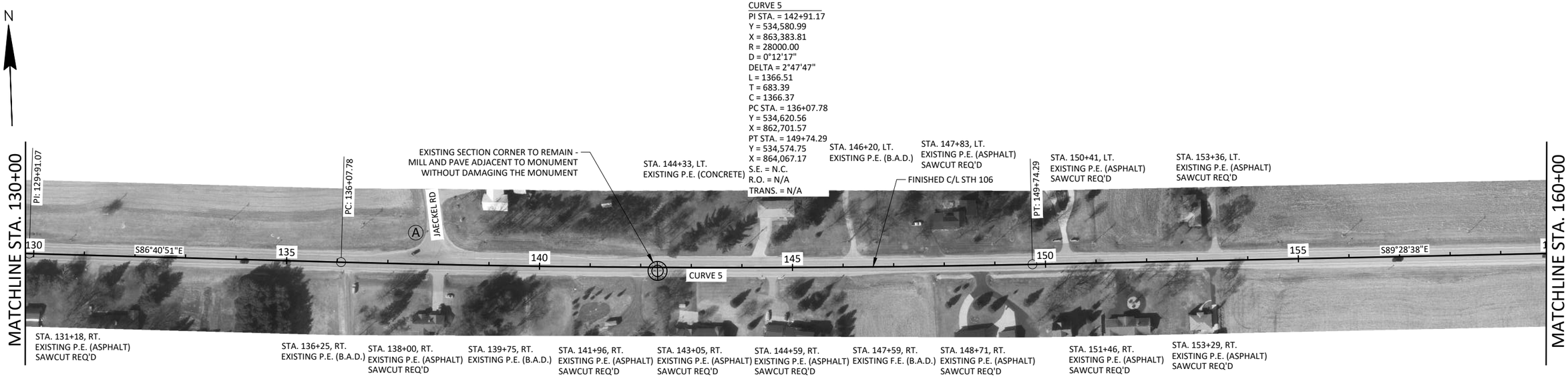


CURVE 4
PI STA. = 115+55.40
Y = 534,749.05
X = 860,610.89
R = 3250.00
D = 1°45'47"
DELTA = 30°32'56"
L = 1732.83
T = 887.54
C = 1712.37
PC STA. = 106+67.86
Y = 534,346.81
X = 859,819.73
PT STA. = 124+00.69
Y = 534,693.33
X = 861,496.68
S.E. = 4.0%
R.O. = 107'
TRANS. = 161'

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PLAN DETAILS	SHEET	E

FILE NAME : S:\PROJECTS\W11618 WISDOT - STH 106, JEFFERSON CO (2020)\SHEETSPLAN\DETAILS\W11618_PLAN DETAILS.DWG PLOT DATE : 10/21/2021 9:34:44 AM PLOT BY : TRACY, DAN PLOT SCALE : 1" = 1' LAYOUT : LAYOUT 2

2



CURVE 5
PI STA. = 142+91.17
Y = 534,580.99
X = 863,383.81
R = 28000.00
D = 0°12'17"
DELTA = 2°47'47"
L = 1366.51
T = 683.39
C = 1366.37
PC STA. = 136+07.78
Y = 534,620.56
X = 862,701.57
PT STA. = 149+74.29
Y = 534,574.75
X = 864,067.17
S.E. = N.C.
R.O. = N/A
TRANS. = N/A

TRAFFIC NOTES

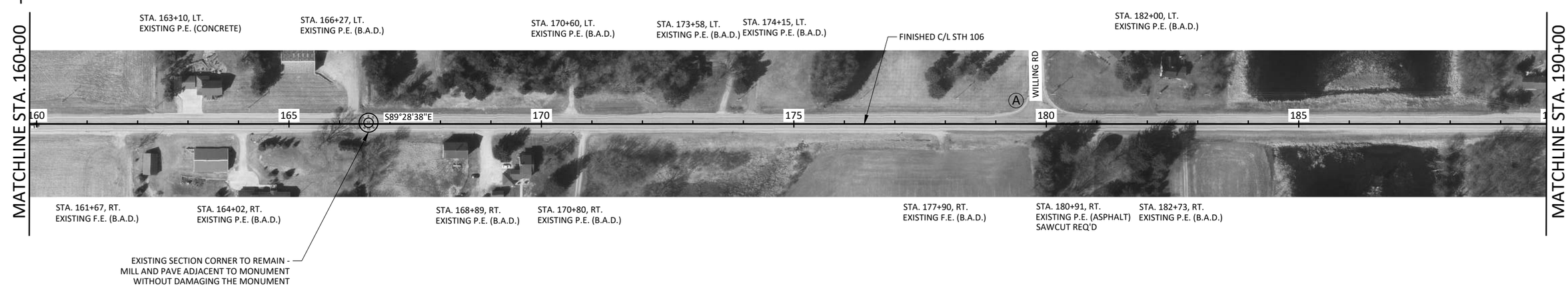
Ⓐ ROAD WORK AHEAD W20-1A

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

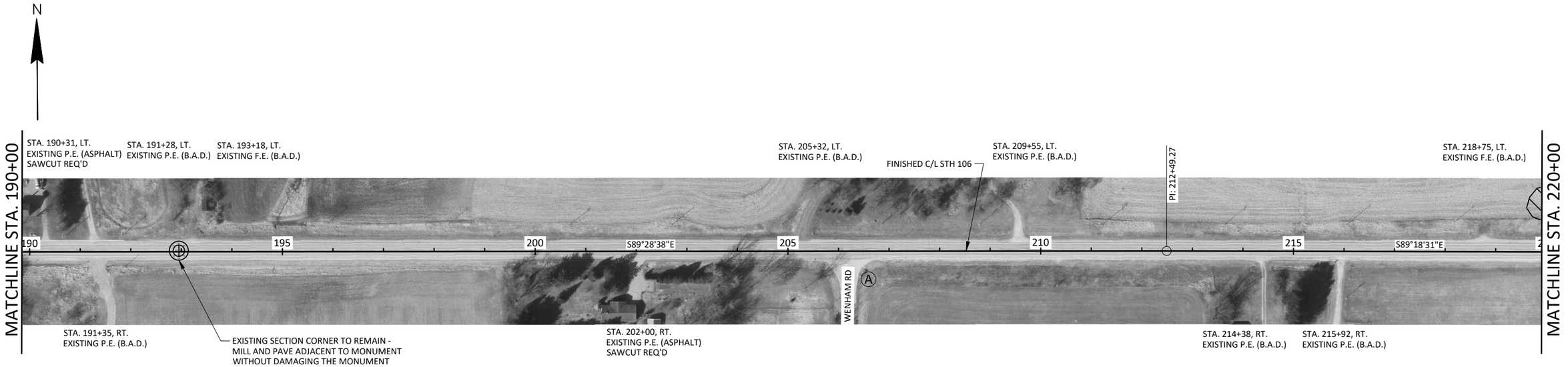
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

FOR MOVING OPERATION STA. 12+88.07 TO STA. 531+89.92 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION". COSTS FOR FLAGGING AND ASSOCIATED SIGNS FOR MOVING OPERATIONS ARE INCIDENTAL TO THE CONTRACT.

SEE STANDARD DETAIL DRAWING LONGITUDINAL MARKING (MAINLINE) FOR PAVEMENT MARKING LAYOUT.



2



TRAFFIC NOTES

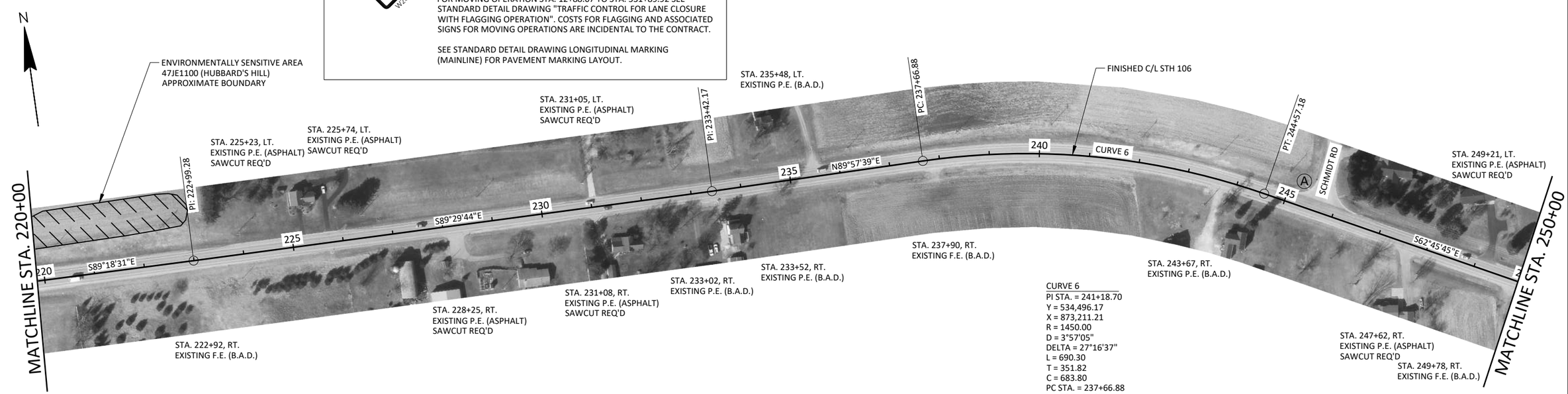
A — ROAD WORK AHEAD W20-1A

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

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

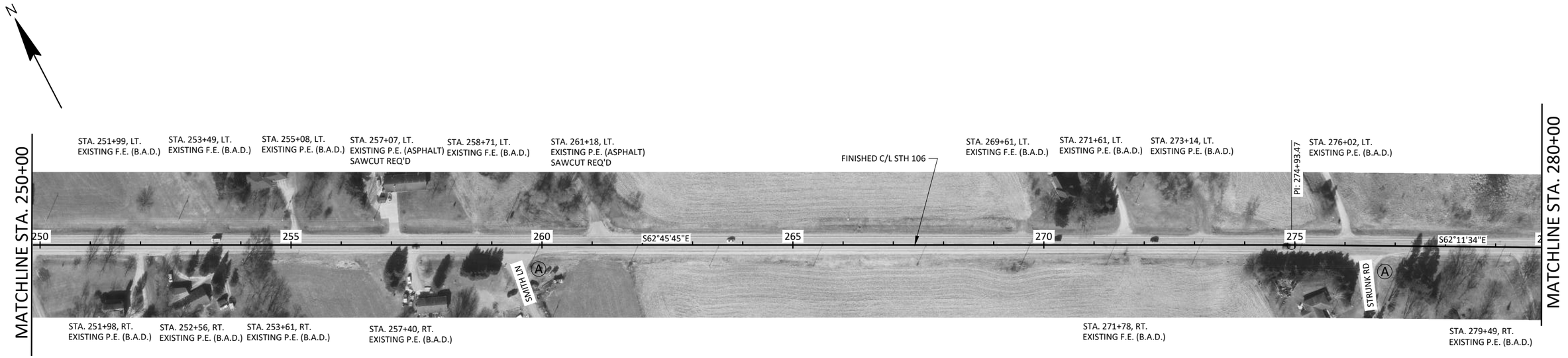
FOR MOVING OPERATION STA. 12+88.07 TO STA. 531+89.92 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION". COSTS FOR FLAGGING AND ASSOCIATED SIGNS FOR MOVING OPERATIONS ARE INCIDENTAL TO THE CONTRACT.

SEE STANDARD DETAIL DRAWING LONGITUDINAL MARKING (MAINLINE) FOR PAVEMENT MARKING LAYOUT.



CURVE 6
PI STA. = 241+18.70
Y = 534,496.17
X = 873,211.21
R = 1450.00
D = 3°57'05"
DELTA = 27°16'37"
L = 690.30
T = 351.82
C = 683.80
PC STA. = 237+66.88
Y = 534,495.93
X = 872,859.39
PT STA. = 244+57.18
Y = 534,335.14
X = 873,524.02
S.E. = 5.5%
R.O. = 147'
TRANS. = 200'

2



TRAFFIC NOTES

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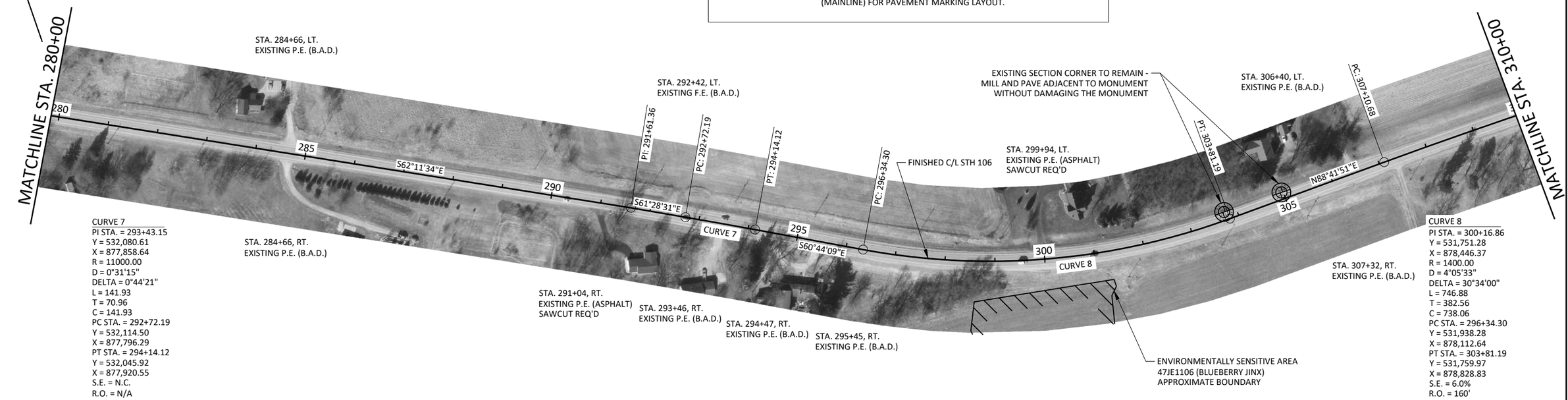
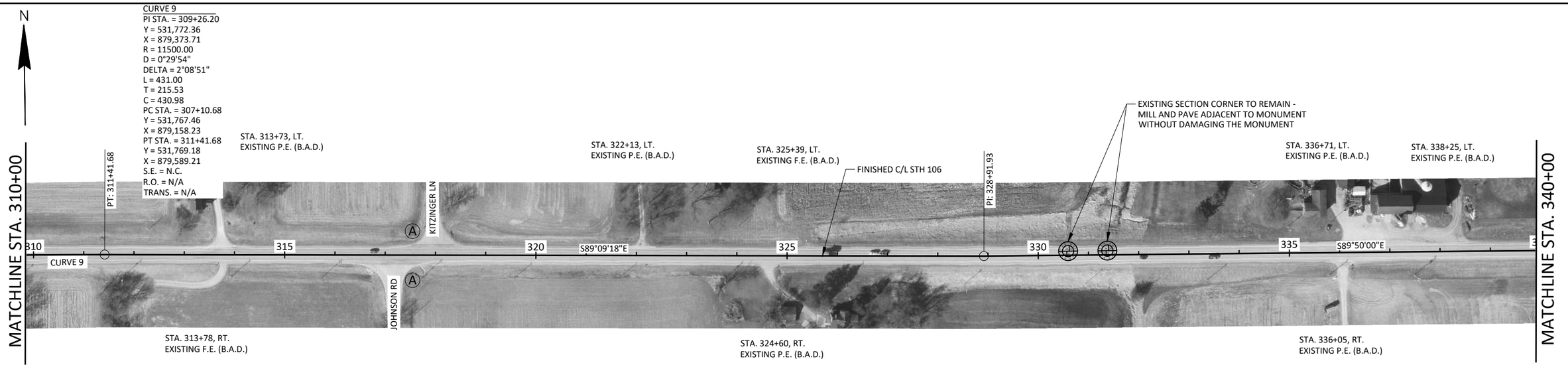


PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PLAN DETAILS	SHEET	E

FILE NAME : S:\PROJECTS\W11618 WISDOT - STH 106, JEFFERSON CO (2020)\SHEETSPLAN\DETAILS\W11618_PLAN DETAILS.DWG
PLOT DATE : 10/21/2021 9:34:58 AM
PLOT BY : TRACY, DAN
PLOT SCALE : 1" = 1'
LAYOUT : LAYOUT 5



TRAFFIC NOTES

Ⓐ ROAD WORK AHEAD W20-1A

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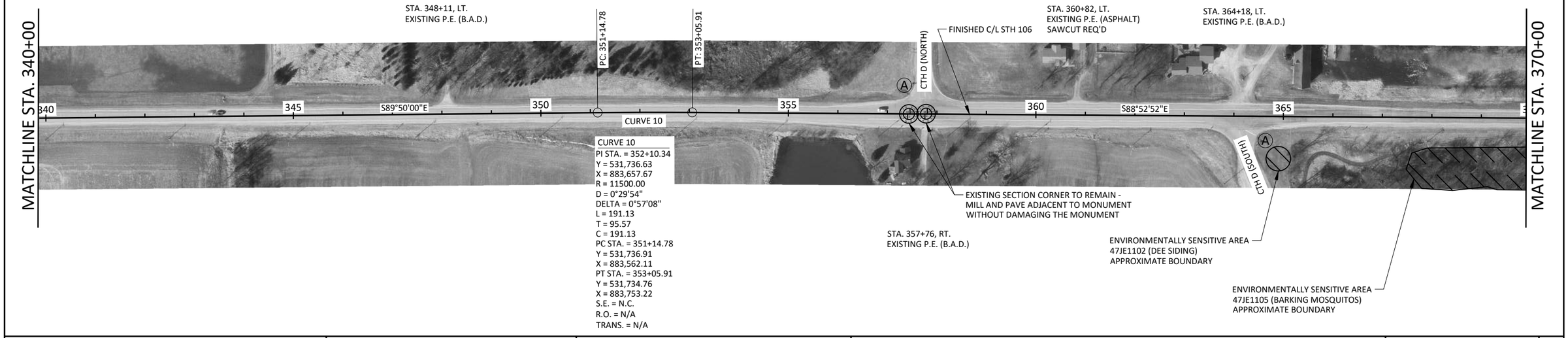
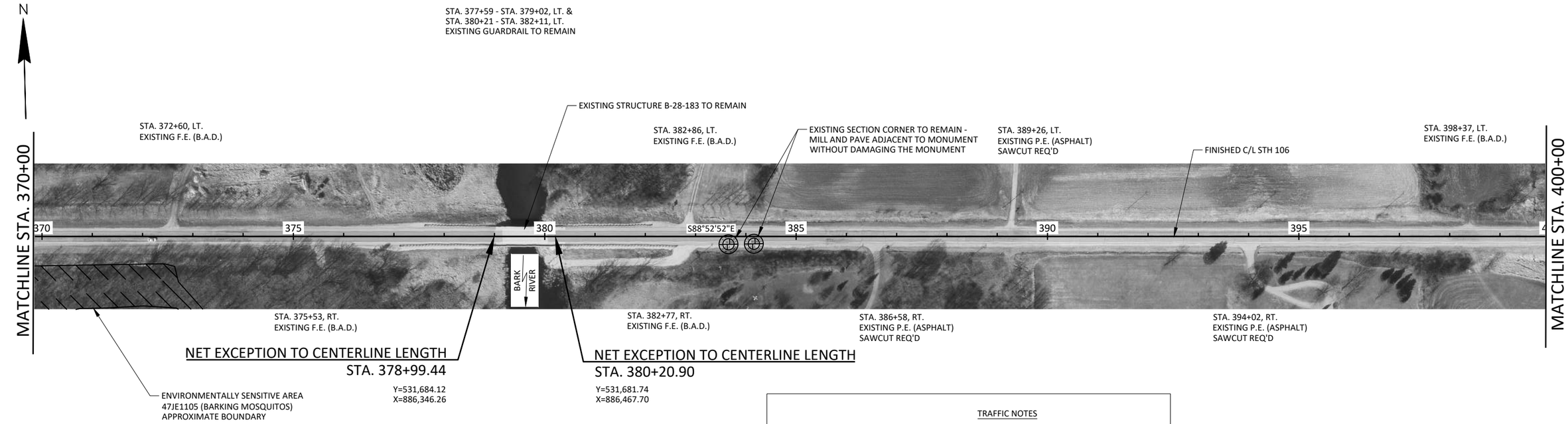


PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PLAN DETAILS	SHEET 22	E



TRAFFIC NOTES

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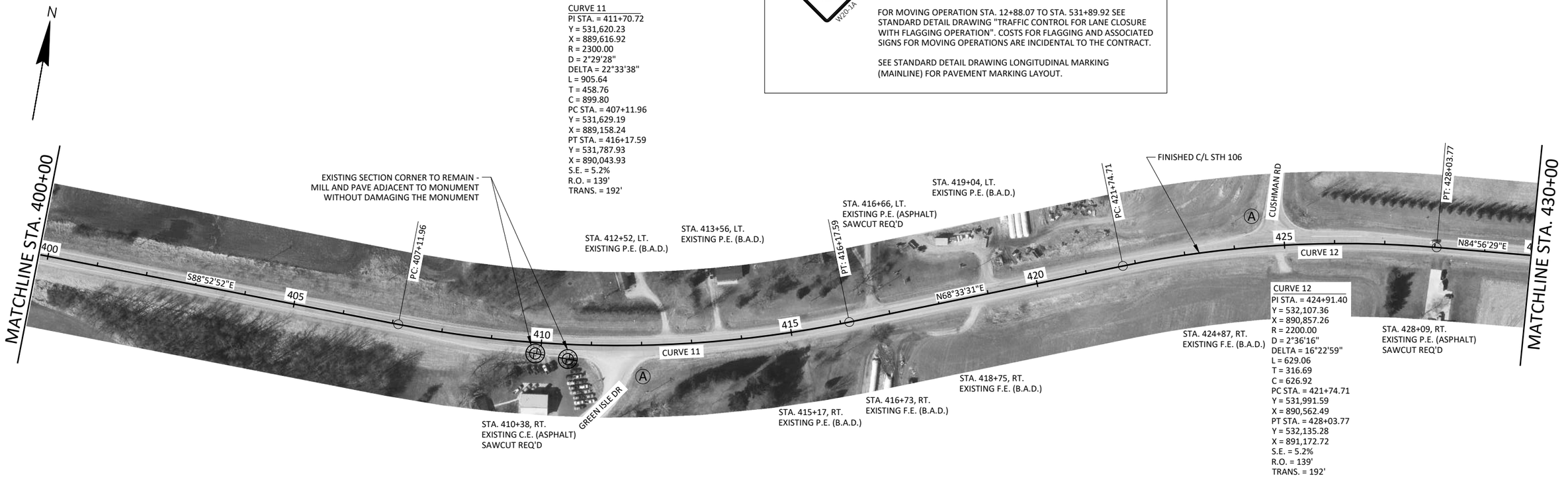
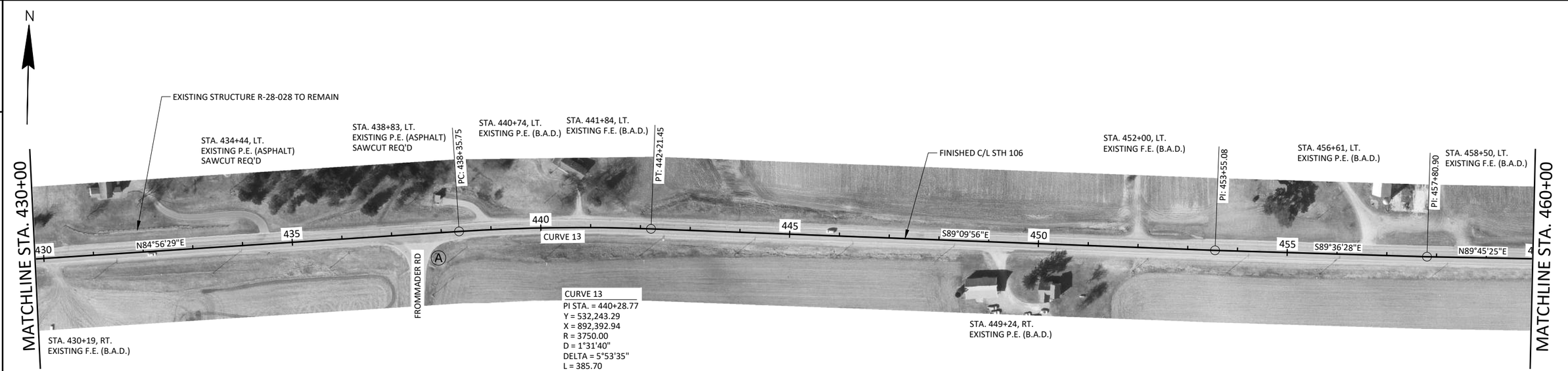


PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PLAN DETAILS	SHEET 23	E



CURVE 13
PI STA. = 440+28.77
Y = 532,243.29
X = 892,392.94
R = 3750.00
D = 1°31'40"
DELTA = 5°53'35"
L = 385.70
T = 193.02
C = 385.53
PC STA. = 438+35.75
Y = 532,226.27
X = 892,200.67
PT STA. = 442+21.45
Y = 532,240.48
X = 892,585.94
S.E. = 4.5%
R.O. = 120'
TRANS. = 173'

TRAFFIC NOTES

Ⓐ ROAD WORK AHEAD W20-1A

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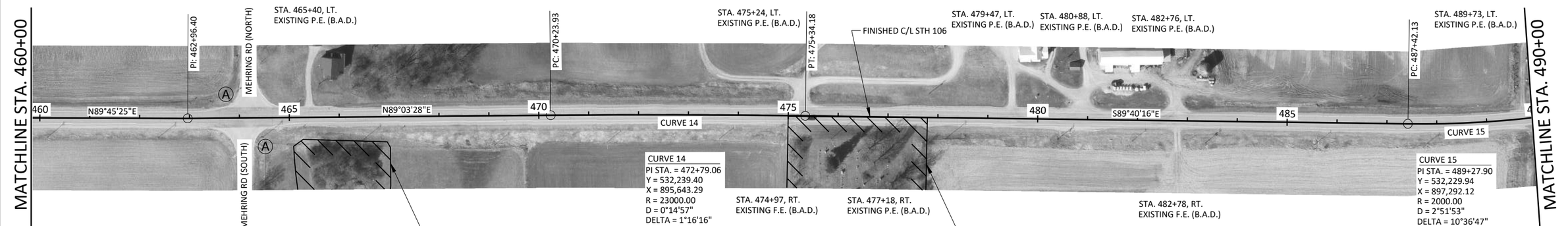
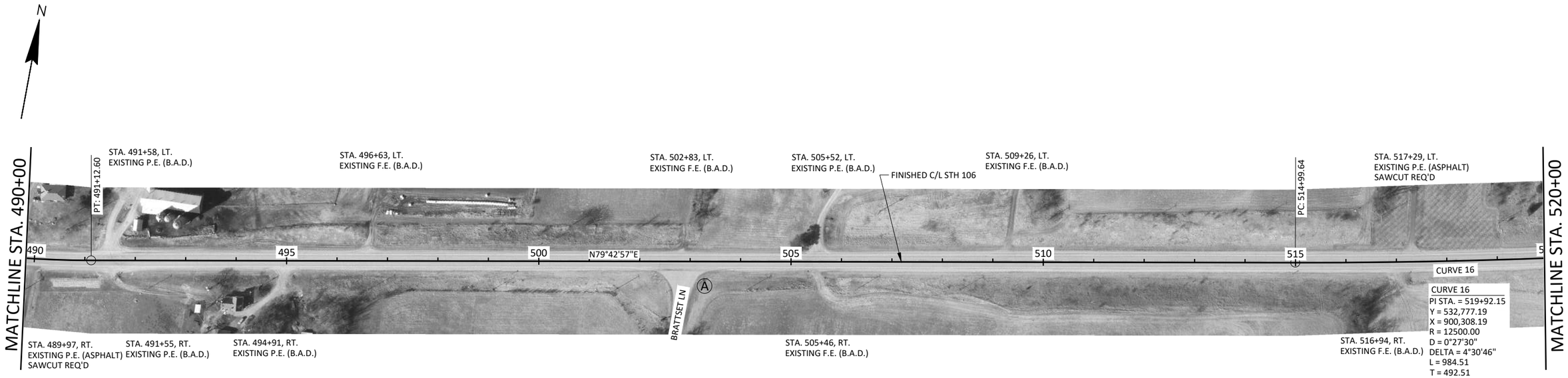


CURVE 14
PI STA. = 472+79.06
Y = 532,239.40
X = 895,643.29
R = 23000.00
D = 0°14'57"
DELTA = 1°16'16"
L = 510.25
T = 255.13
C = 510.24
PC STA. = 470+23.93
Y = 532,235.21
X = 895,388.19
PT STA. = 475+34.18
Y = 532,237.94
X = 895,898.42
S.E. = N.C.
R.O. = N/A
TRANS. = N/A

CURVE 15
PI STA. = 489+27.90
Y = 532,229.94
X = 897,292.12
R = 2000.00
D = 2°51'53"
DELTA = 10°36'47"
L = 370.47
T = 185.76
C = 369.94
PC STA. = 487+42.13
Y = 532,231.00
X = 897,106.35
PT STA. = 491+12.60
Y = 532,263.10
X = 897,474.90
S.E. = 4.8%
R.O. = 128'
TRANS. = 181'

PROJECT NO: 3576-01-64	HWY: STH 106	COUNTY: JEFFERSON	PLAN DETAILS	SHEET 24	E



CURVE 16
PI STA. = 519+92.15
Y = 532,777.19
X = 900,308.19
R = 12500.00
D = 0°27'30"
DELTA = 4°30'46"
L = 984.51
T = 492.51
C = 984.26
PC STA. = 514+99.64
Y = 532,689.26
X = 899,823.59
PT STA. = 524+84.15
Y = 532,902.97
X = 900,784.37
S.E. = N.C.
R.O. = N/A
TRANS. = N/A

TRAFFIC NOTES

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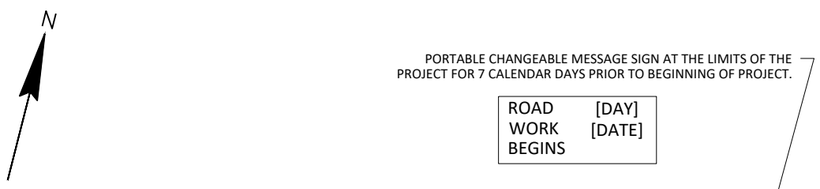
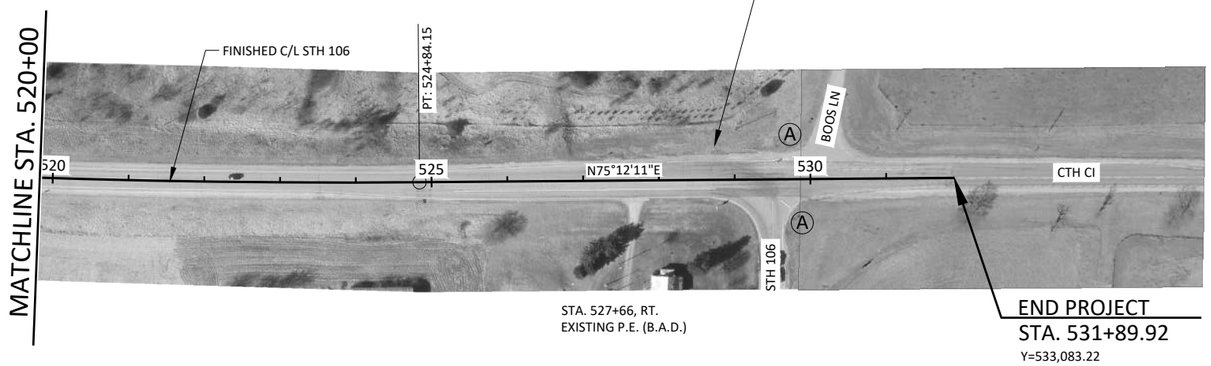


PORTABLE CHANGEABLE MESSAGE SIGN AT THE LIMITS OF THE PROJECT FOR 7 CALENDAR DAYS PRIOR TO BEGINNING OF PROJECT.

ROAD WORK BEGINS	[DAY] [DATE]



Estimate Of Quantities

3576-01-64

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	590.000	590.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	191,500.000	191,500.000
0006	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 3576-01-64	LS	1.000	1.000
0008	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	850.000	850.000
0010	213.0100	Finishing Roadway (project) 01. 3576-01-64	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,050.000	3,050.000
0014	450.4000	HMA Cold Weather Paving	TON	6,000.000	6,000.000
0016	455.0605	Tack Coat	GAL	14,965.000	14,965.000
0018	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0020	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0022	460.2005	Incentive Density PWL HMA Pavement	DOL	15,370.000	15,370.000
0024	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	25,730.000	25,730.000
0026	460.2010	Incentive Air Voids HMA Pavement	DOL	23,590.000	23,590.000
0028	460.5224	HMA Pavement 4 LT 58-28 S	TON	23,590.000	23,590.000
0030	465.0105	Asphaltic Surface	TON	2,350.000	2,350.000
0032	614.0400	Adjusting Steel Plate Beam Guard	LF	92.000	92.000
0034	614.0950	Replacing Guardrail Posts and Blocks	EACH	17.000	17.000
0036	614.0951	Replacing Guardrail Rail and Hardware	LF	92.000	92.000
0038	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3576-01-64	EACH	1.000	1.000
0040	619.1000	Mobilization	EACH	1.000	1.000
0042	624.0100	Water	MGAL	45.000	45.000
0044	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	5.000	5.000
0046	638.2102	Moving Signs Type II	EACH	5.000	5.000
0048	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0050	642.5001	Field Office Type B	EACH	1.000	1.000
0052	643.0300	Traffic Control Drums	DAY	250.000	250.000
0054	643.0900	Traffic Control Signs	DAY	2,380.000	2,380.000
0056	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0058	643.5000	Traffic Control	EACH	1.000	1.000
0060	646.1020	Marking Line Epoxy 4-Inch	LF	3,200.000	3,200.000
0062	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	102,500.000	102,500.000
0064	646.3020	Marking Line Epoxy 8-Inch	LF	2,810.000	2,810.000
0066	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	80,200.000	80,200.000
0068	646.6120	Marking Stop Line Epoxy 18-Inch	LF	220.000	220.000
0070	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	182,700.000	182,700.000
0072	646.6468	Cold Weather Marking Epoxy 8-Inch	LF	2,810.000	2,810.000
0074	648.0100	Locating No-Passing Zones	MI	9.830	9.830
0076	649.0105	Temporary Marking Line Paint 4-Inch	LF	151,000.000	151,000.000
0078	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	75,500.000	75,500.000
0080	650.8000	Construction Staking Resurfacing Reference	LF	51,460.000	51,460.000
0082	650.9910	Construction Staking Supplemental Control (project) 01. 3576-01-64	LS	1.000	1.000
0084	690.0150	Sawing Asphalt	LF	1,830.000	1,830.000
0086	740.0440	Incentive IRI Ride	DOL	38,980.000	38,980.000
0088	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0090	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,320.000	1,320.000
0092	SPV.0060	Special 01. Landmark Reference Monuments Special	EACH	14.000	14.000
0094	SPV.0060	Special 02. Verify Landmark Reference Monuments	EACH	14.000	14.000
0096	SPV.0090	Special 01. Asphaltic Centerline Rumble Strip Sinusoidal 2-Lane Rural	LF	47,000.000	47,000.000
0098	SPV.0090	Special 02. Asphaltic Shoulder Rumble Strip Sinusoidal 2-Lane Rural	LF	86,600.000	86,600.000

Estimate Of Quantities

					3576-01-64
0100	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	1,915.000	1,915.000

ALL ITEMS 010 UNLESS OTHERWISE NOTED

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION - STATION	LOCATION	204.0115 (SY)
12+88 - 37+95	MAINLINE	60
41+24 - 378+99	MAINLINE	340
380+20 - 531+89	MAINLINE	190
	TOTAL =	590

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 (SY)
12+88 - 37+95	MAINLINE	10,000
41+24 - 378+99	MAINLINE	124,600
380+20 - 531+89	MAINLINE	56,900
	TOTAL =	191,500

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)
12+88 - 37+95	MAINLINE	280
41+24 - 378+99	MAINLINE	1,800
380+20 - 531+89	MAINLINE	820
-	DRIVEWAYS	150
	TOTAL =	3,050

HMA PAVEMENT

STATION - STATION	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (LS) CAT 010	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS (STA.) CAT 020	455.0605 TACK COAT (GAL) CAT 010	455.0605 TACK COAT (GAL) CAT 020	460.6224 HMA PAVEMENT 4 LT 58-28 S (TON) CAT 010	460.6224 HMA PAVEMENT 4 LT 58-28 S (TON) CAT 020	465.0105 ASPHALTIC SURFACE (TON) CAT 010	465.0105 ASPHALTIC SURFACE (TON) CAT 020	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING (SY) CAT 010
12+88 - 37+95	-	-	700	-	1,120	-	-	-	-
41+24 - 378+99	-	596	8,800	930	13,960	1,490	-	1,490	-
380+20 - 531+89	-	254	4,000	400	6,380	640	-	640	-
12+88 - 531+89	1	-	-	-	-	-	-	-	-
✱UNDISTRIBUTED	-	-	135	-	-	-	220	-	1915
CATEGORY 010 SUBTOTALS	-	-	13,635	-	21,460	-	220	-	1915
CATEGORY 020 SUBTOTALS	-	850	-	1,330	-	2,130	-	2,130	-
TOTALS =	1	850	14,965		23,590		2,350		1,915

✱EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

LOCATION	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 Lane	12+88.07 to 531+89.92	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	15,370	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders/ Other	12+88.07 to 531+89.92	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	8,220	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance Testing by the department; Not eligible for incentive or disincentive

ADJUSTING STEEL PLATE BEAM GUARD

STATION - STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD (LF)	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS (EACH)	614.0951 REPLACING GUARDRAIL RAIL AND HARDWARE (LF)
41+17 - 41+61	MAINLINE, RT.	44	8	44
41+17 - 41+65	MAINLINE, LT.	48	9	48
	TOTALS =	92	17	92

PAVEMENT MARKING

STATION - STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH YELLOW SOLID (LF)	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE SOLID (LF)	646.1040 WHITE 12.5' SKIPS (LF)	646.1040 WHITE 3' SKIPS (LF)	646.3020 MARKING LINE EPOXY 8-INCH WHITE SOLID (LF)	646.4520 MARKING LINE SAME DAY EPOXY 4-INCH YELLOW SOLID (LF)	646.4520 YELLOW 12.5' SKIPS (LF)	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE SOLID (LF)	646.6464 COLD WEATHER MARKING EPOXY 4-INCH WHITE SOLID (LF)	646.6464 WHITE 12.5' SKIPS (LF)	646.6464 WHITE 3' SKIPS (LF)	646.6464 YELLOW SOLID (LF)	646.6464 YELLOW 12.5' SKIPS (LF)	646.6468 COLD WEATHER MARKING EPOXY 8-INCH WHITE SOLID (LF)	✱✱649.0105 TEMPORARY MARKING LINE PAINT 4-INCH YELLOW SOLID (LF)	✱✱649.0105 YELLOW 12.5' SKIPS (LF)	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH YELLOW SOLID (LF)	649.0120 YELLOW 12.5' SKIPS (LF)
12+88 - 37+96	MAINLINE	-	4,940	-	-	-	1,000	700	-	4,940	-	-	1,000	700	-	2,000	600	1,000	300
41+24 - 379+00	MAINLINE	-	66,900	65	110	-	51,000	4,300	-	66,900	65	110	51,000	4,300	-	102,000	2,800	51,000	1,400
380+21 - 531+90	MAINLINE	-	30,460	-	25	-	21,100	2,100	-	30,460	-	25	21,100	2,100	-	42,200	1,400	21,100	700
42+55 - 44+40, LT.	CURTIS MILL RD	-	-	-	-	185	-	-	-	-	-	-	-	-	185	-	-	-	-
42+00, RT.	ROCK RIVER RD	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-
55+35 - 56+80, RT.	DRIVEWAY	-	-	-	-	145	-	-	-	-	-	-	-	-	145	-	-	-	-
118+70 - 119+80, RT.	CTH N (SOUTH)	-	-	-	-	110	-	-	35	-	-	-	-	-	110	-	-	-	-
121+05 - 122+15, LT.	CTH N (NORTH)	-	-	-	-	110	-	-	25	-	-	-	-	-	110	-	-	-	-
138+70 - 139+75, LT.	JAECKEL RD	-	-	-	-	105	-	-	-	-	-	-	-	-	105	-	-	-	-
276+53, RT.	STRUNK RD	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-
356+60 - 363+40, RT.	CTH D (SOUTH)	-	-	-	-	680	-	-	40	-	-	-	-	-	680	-	-	-	-
358+45 - 365+60, LT.	CTH D (NORTH)	-	-	-	-	715	-	-	30	-	-	-	-	-	715	-	-	-	-
408+95 - 410+95, RT.	GREEN ISLE DR	-	-	-	-	200	-	-	-	-	-	-	-	-	200	-	-	-	-
425+50 - 426+55, LT.	CUSHMAN RD	-	-	-	-	105	-	-	-	-	-	-	-	-	105	-	-	-	-
525+25 - 528+75, RT.	STH 106	-	-	-	-	350	-	-	30	-	-	-	-	-	350	-	-	-	-
530+40 - 531+45, LT.	BOOS LN	-	-	-	-	105	-	-	-	-	-	-	-	-	105	-	-	-	-
-	✱UNDISTRIBUTED	3,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SUBTOTALS =	-	102,300	65	135	-	73,100	7,100	-	102,300	65	135	73,100	7,100	-	146,200	4,800	73,100	2,400
	TOTALS =	3,200	102,500			2,810	80,200		220	182,700					2,810	151,000		75,500	

✱ ADDITIONAL QUANTITY TO ALLOW FOR PAYMENT OF LOCATING NO PASSING ZONE MARKING BEYOND PROJECT LIMITS (USE ONLY IF NEEDED)
✱✱ ITEM TO BE PLACED TWICE DURING CONSTRUCTION

ALL ITEMS 010 UNLESS OTHERWISE NOTED

3

WATER

STATION - STATION	624.0100 (MGAL)
12+88 - 37+95	5
41+24 - 378+99	28
380+20 - 531+89	12
TOTAL =	45

PERMANENT SIGNING

LOCATION	634.0618 POSTS WOOD 4X6-INCH 18 FT (EACH)	638.2102 MOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)
*UNDISTRIBUTED	5	5	5
TOTAL =	5	5	5

* ONLY USE IF NO PASSING ZONES CHANGE

TRAFFIC CONTROL

LOCATION	* 643.0300 DRUMS (DAY)	643.0900 SIGNS (DAY)	643.1050 SIGNS PCMS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
PROJECT	250	300	14	1
SIDEROADS	-	2080	-	-
TOTALS =	250	2380	14	1

* ITEM USED FOR PCMS BOARD DELINEATION. ADDITIONAL QUANTITY INCLUDED FOR ADJUSTING STEEL PLATE BEAM GUARD WORK (USE ONLY IF NEEDED)

3

LOCATING NO PASSING ZONES

PROJECT	STATION - STATION	LOCATION	648.0100 (MI)
3576-01-64	12+88 - 531+90	MAINLINE	9.83
		TOTAL =	9.83

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9910 CONSTRUCTION STAKING SUPPLEMENT CONTROL (PROJECT) (LS)
12+88 - 37+96	MAINLINE	2,510	-
41+24 - 379+00	MAINLINE	33,780	-
380+21 - 531+90	MAINLINE	15,170	-
	PROJECT	-	1
	TOTALS =	51,460	1

SAWING ASPHALT

STATION - STATION	LOCATION	690.0150 SAWING ASPHALT (LF)
41+24 - 379+00	DRIVEWAYS	1,463
380+21 - 531+90	DRIVEWAYS	367
	TOTAL=	1,830

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	SPV.0060.01 LANDMARK REFERENCE MONUMENTS SPECIAL (EACH)	SPV.0060.02 VERIFY LANDMARK REFERENCE MONUMENTS (EACH)
116+25	MAINLINE, 91.7' LT.	1	1
142+33	MAINLINE, 7.1' RT.	1	1
166+58	MAINLINE, 2.4' LT.	1	1
192+95	MAINLINE, 1.8' LT.	1	1
303+75	MAINLINE, 16.6' LT.	1	1
324+96	MAINLINE, 13.9' LT.	1	1
330+60	MAINLINE, 8.1' LT.	1	1
331+38	MAINLINE, 8.3' LT.	1	1
357+44	MAINLINE, 0.2' RT.	1	1
357+78	MAINLINE, 0.5' LT.	1	1
383+66	MAINLINE, 15.6' RT.	1	1
384+16	MAINLINE, 14.6' RT.	1	1
408+89	MAINLINE, 21.8' RT.	1	1
410+54	MAINLINE, 29.4' RT.	1	1
	TOTALS =	14	14

ASPHALTIC RUMBLE STRIPS

STATION - STATION	LOCATION	SPV.0090.01 ASPHALTIC CENTERLINE RUMBLE STRIP SINUSOIDAL 2-LANE RURAL (LF)	*SPV.0090.02 ASPHALTIC SHOULDER RUMBLE STRIP SINUSOIDAL 2-LANE RURAL (LF)
12+88 - 37+95	MAINLINE	2,200	5,000
41+24 - 378+99	MAINLINE	31,000	55,000
380+20 - 531+89	MAINLINE	13,800	26,600
	TOTAL =	47,000	86,600

* CATEGORY 020

Standard Detail Drawing List

08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
13C19-03	HMA LONGITUDINAL JOINTS
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
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-08	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

GENERAL NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

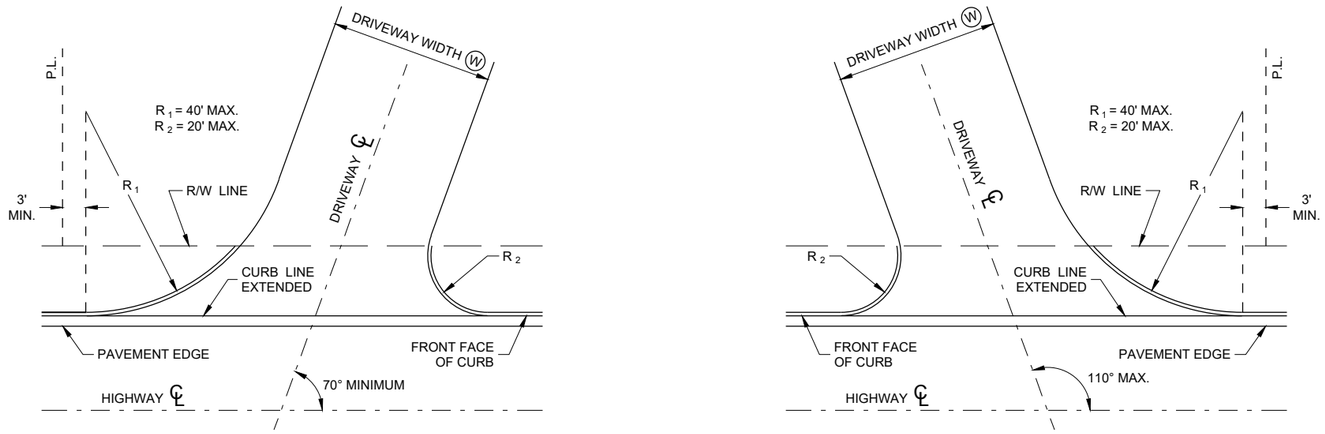
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

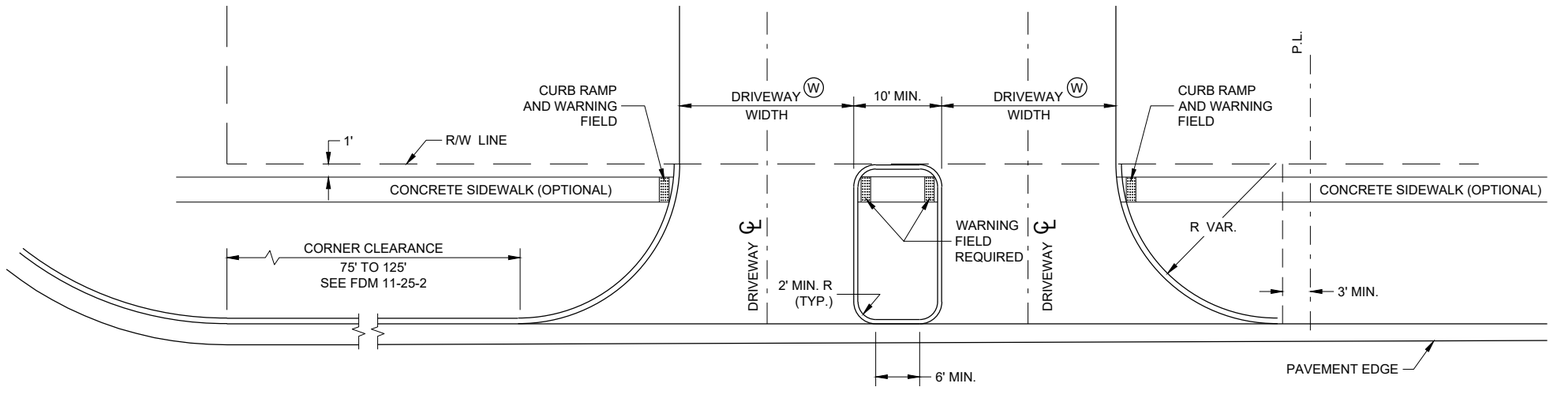
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

DRIVEWAYS WITH CURB AND GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

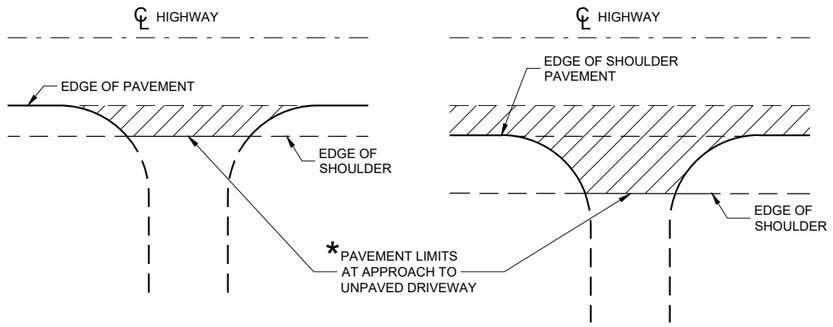
00-00-00
DATE

/S/ <AUTHOR>
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D20 - 01

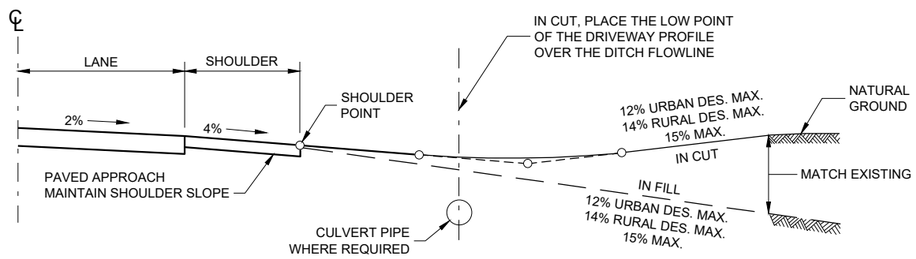
SDD 08D20 - 01



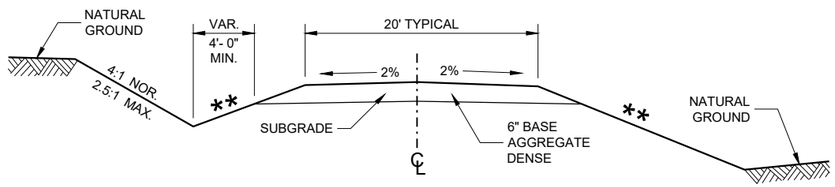
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

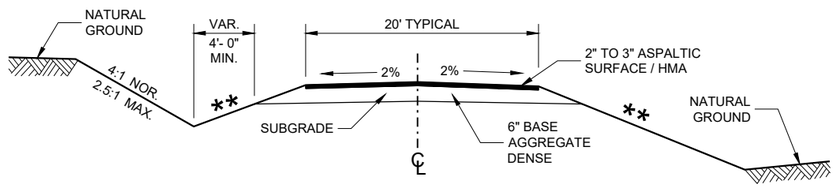


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

SDD 08D21 - 01

6

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

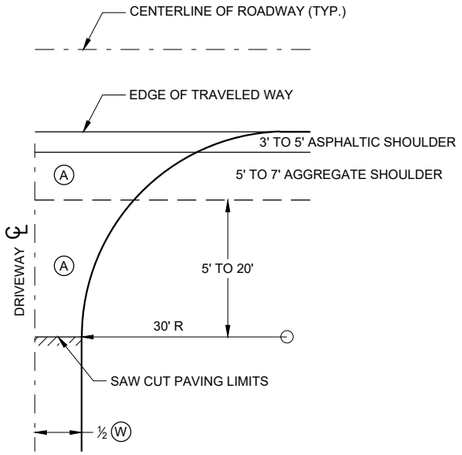
APPROVED
December 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

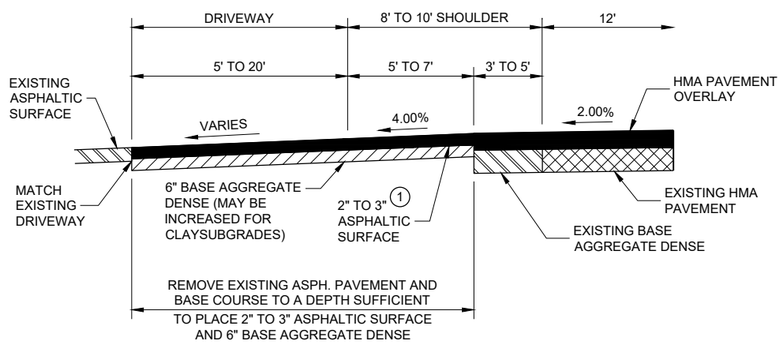
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



PROFILE VIEW

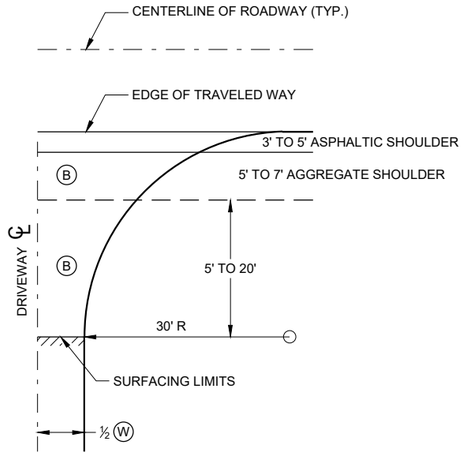
RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

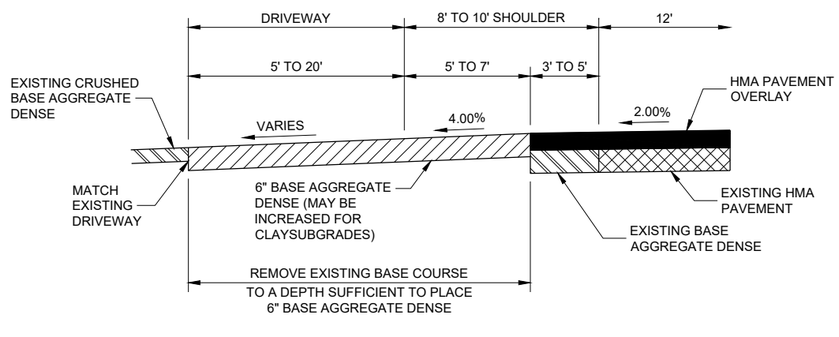
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE

RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

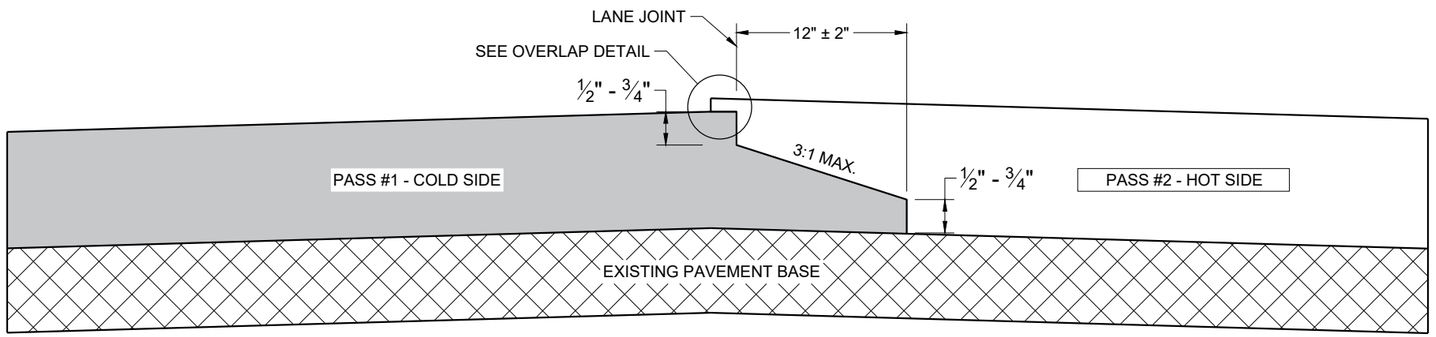
December 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

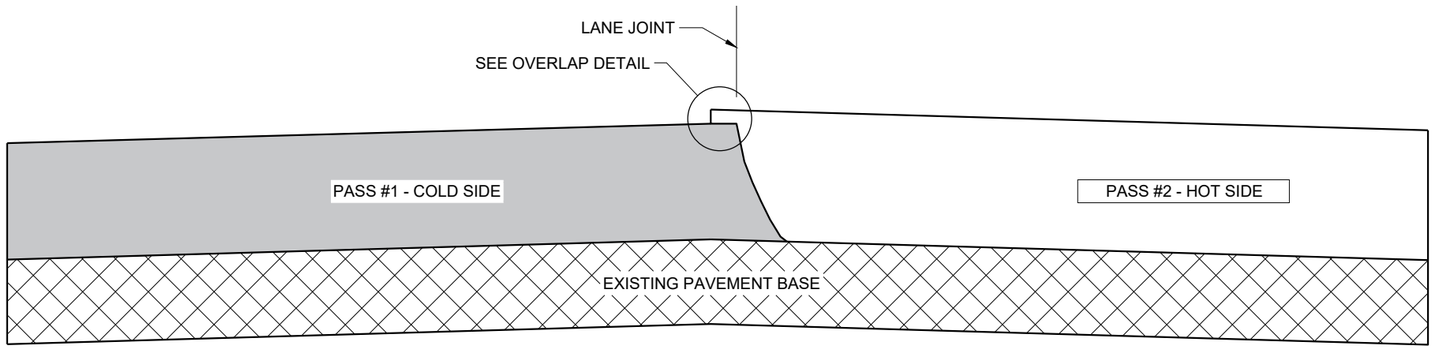
FHWA

6

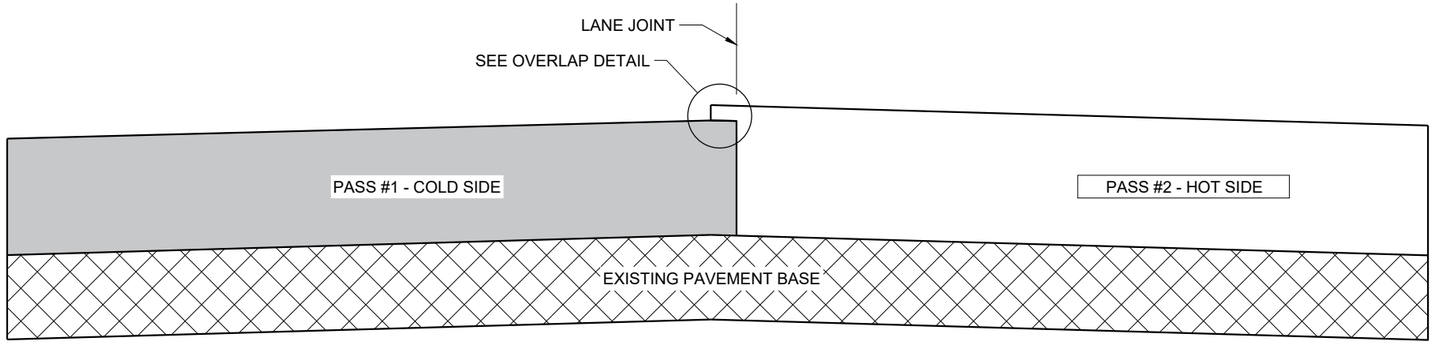
SDD 08D22 - 01



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

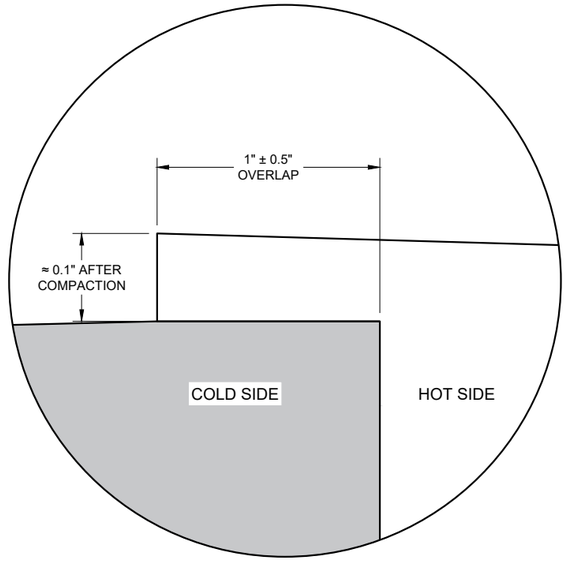
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

6

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

(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.

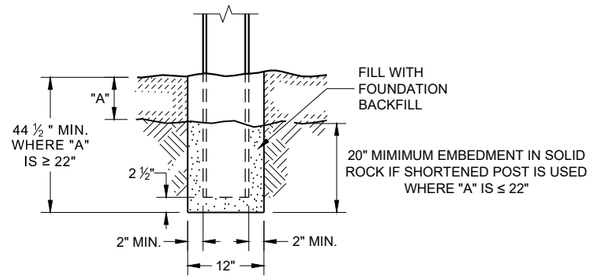
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

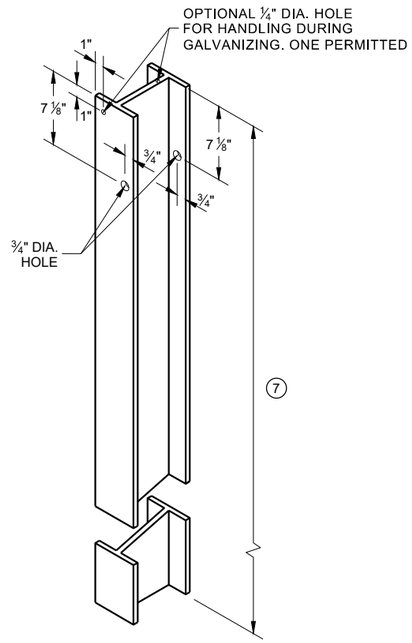
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

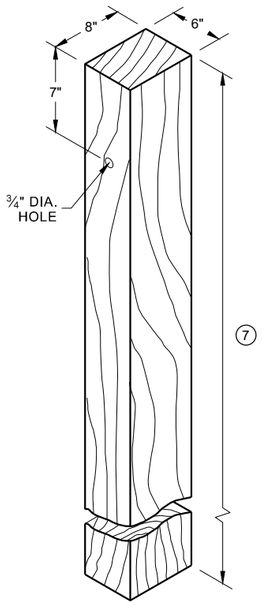
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



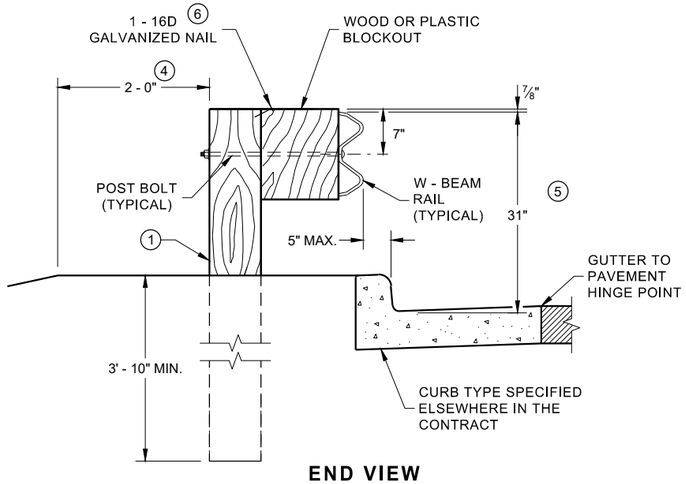
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



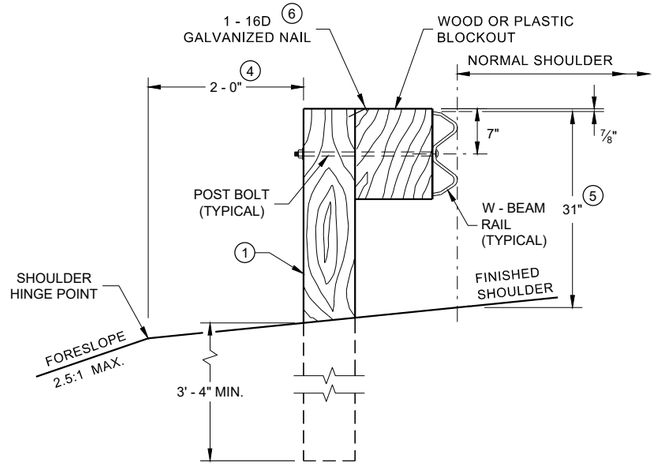
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



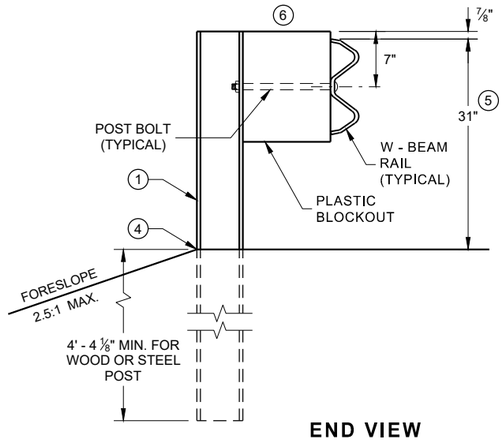
WOOD POST (6" X 8") NOMINAL (1)



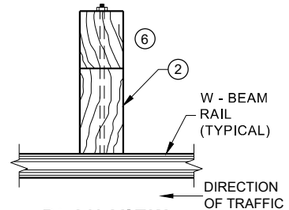
END VIEW
LOCATED ALONG A CURBED ROADWAY



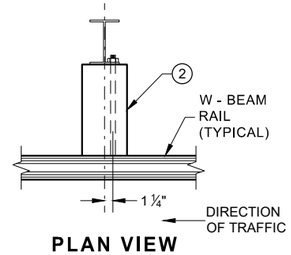
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



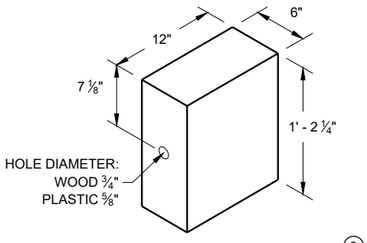
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



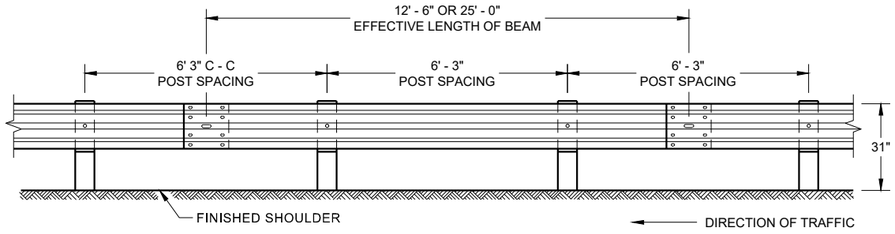
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

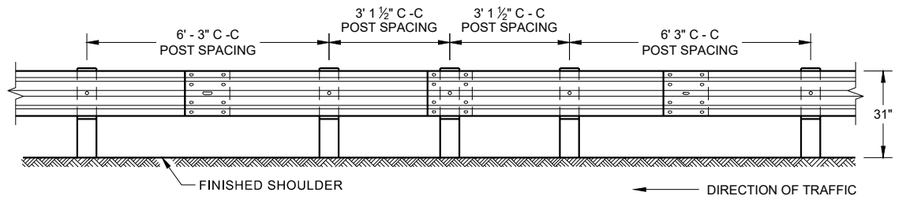
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

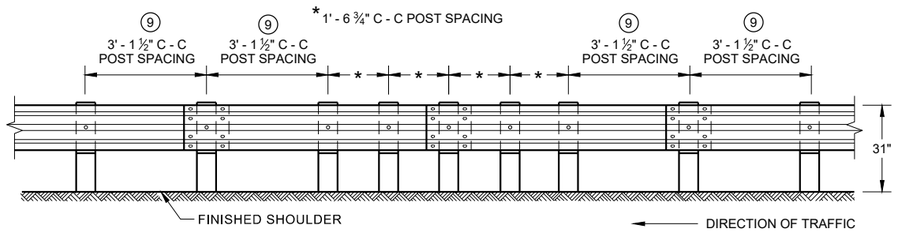
SDD 14B42 - 07a



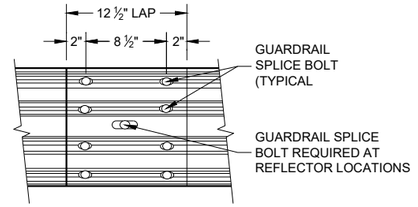
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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

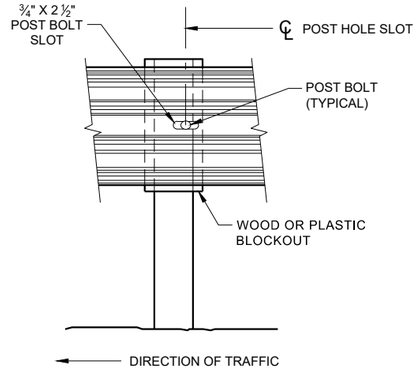
GENERAL NOTES

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

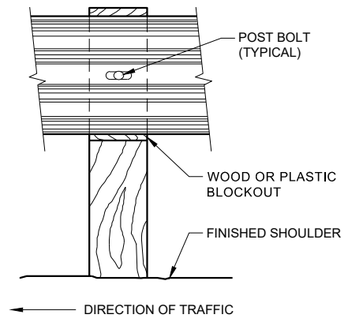
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

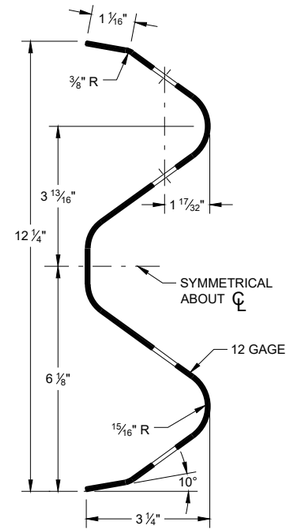
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



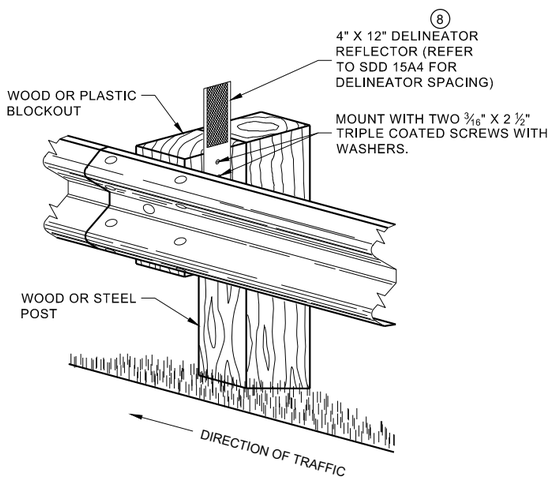
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



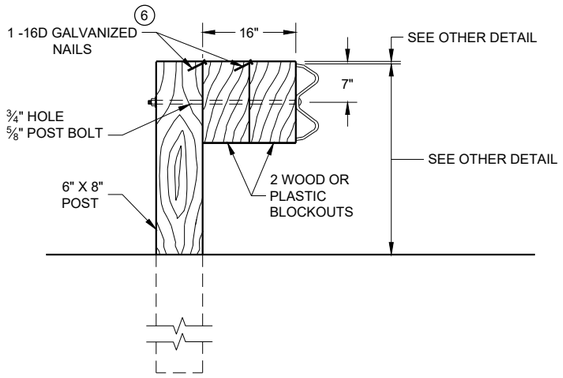
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

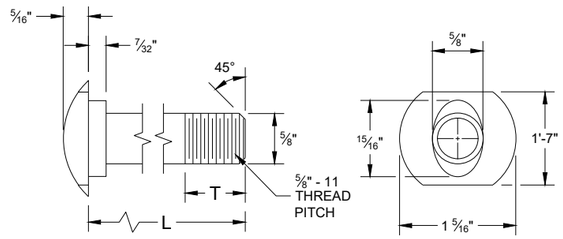


DETAIL FOR 16" BLOCKOUT DEPTH

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.

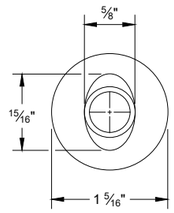
NOTE:

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.

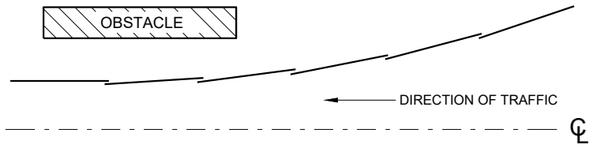


POST BOLT TABLE

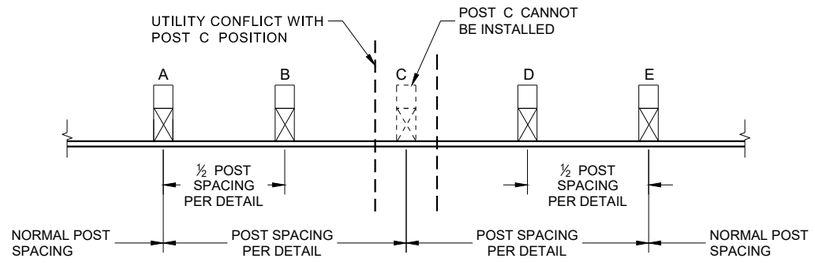
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



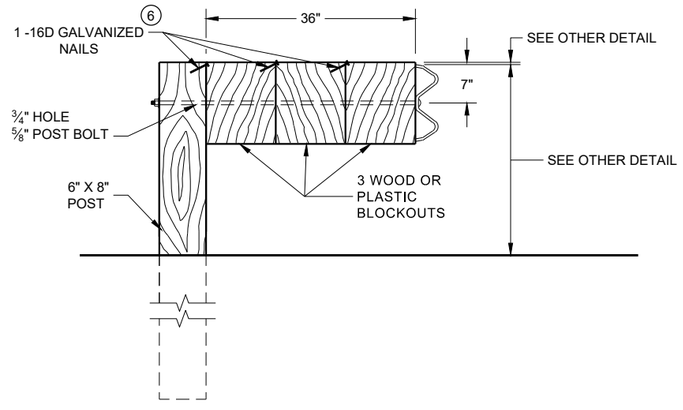
ALTERNATE BOLT HEAD



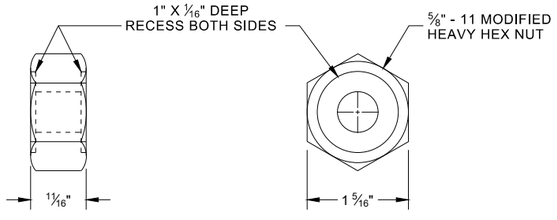
PLAN VIEW
BEAM LAPPING DETAIL



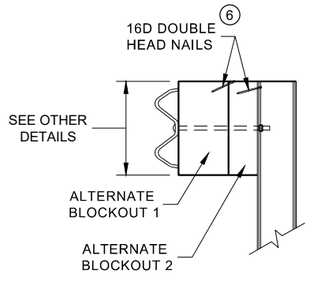
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



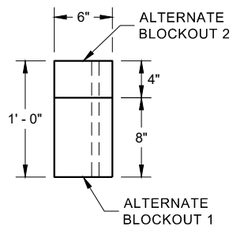
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

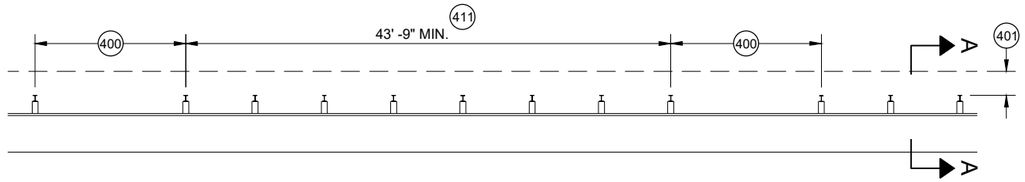
ALTERNATE WOOD BLOCKOUT DETAIL

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.

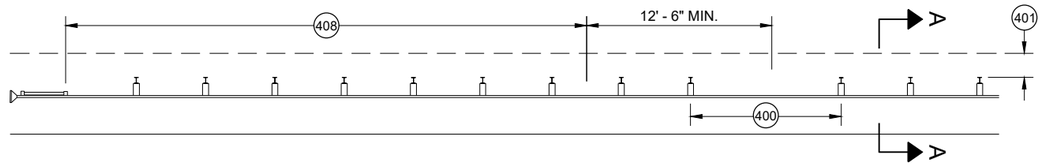
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

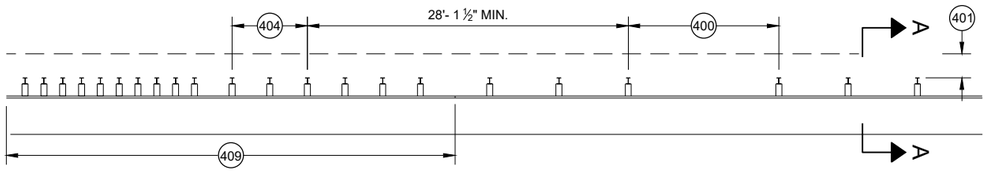
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



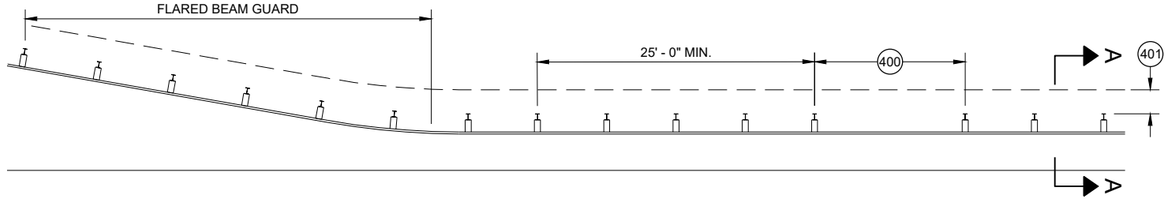
MISSING POST IN MGS GUARDRAIL



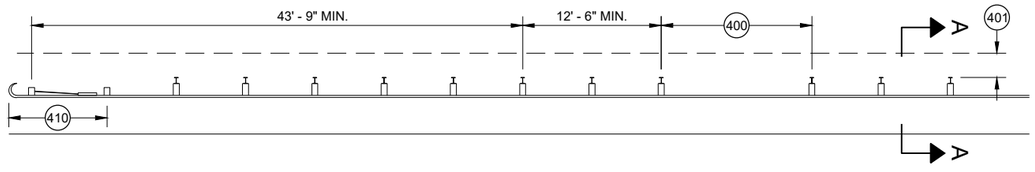
MISSING POST IN MGS GUARDRAIL NEAR EAT



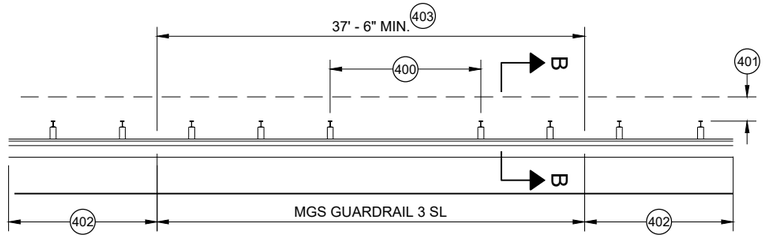
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

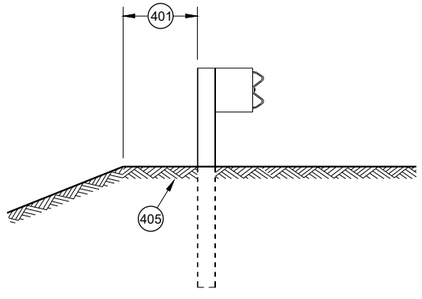


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

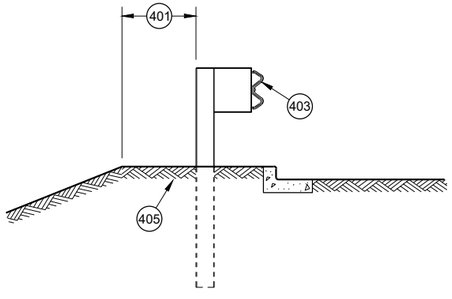


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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

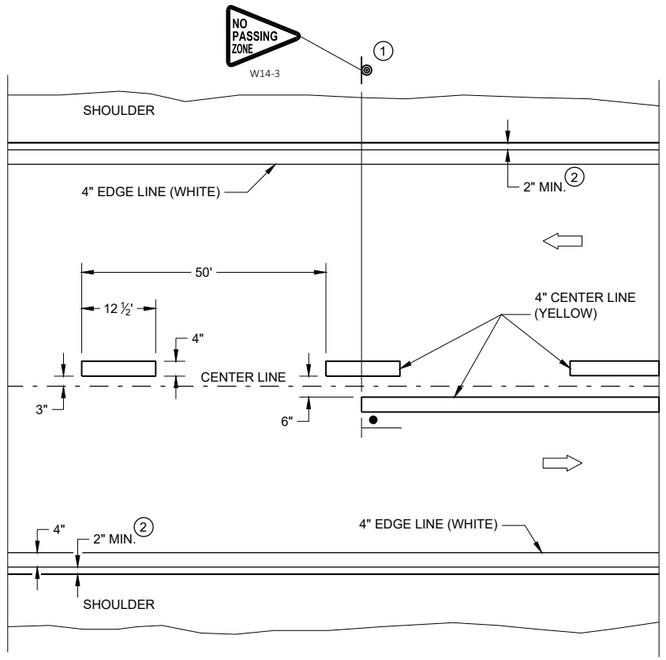
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

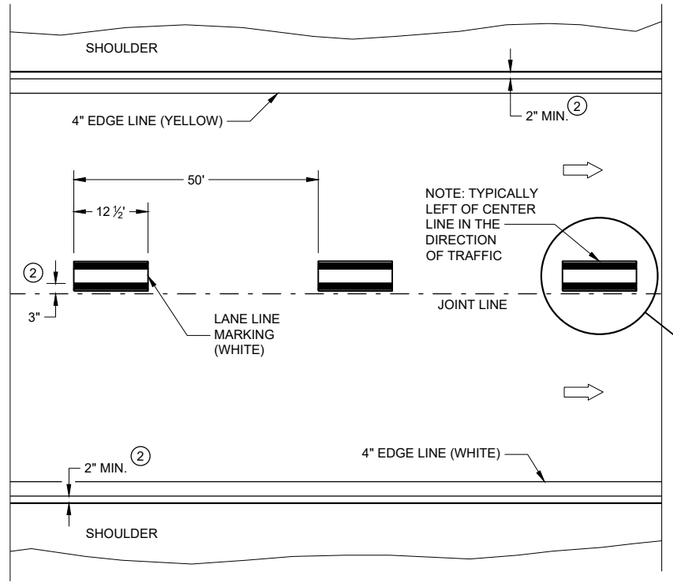
FHWA

6

SDD 14B42 - 07d

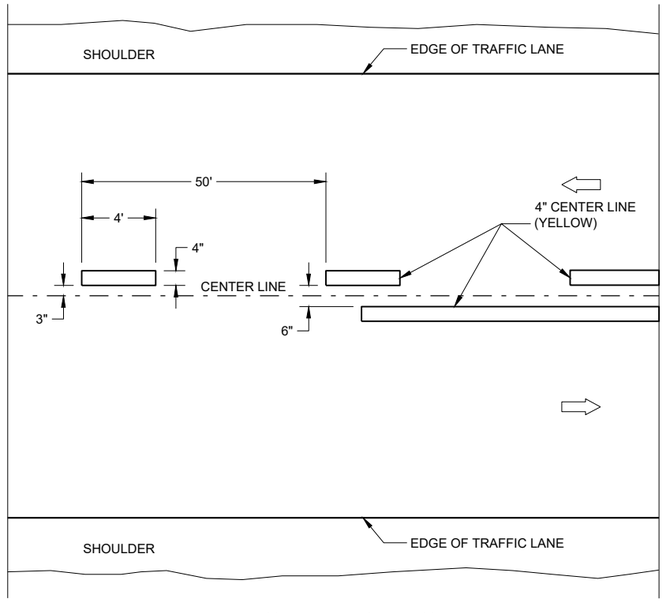


TWO WAY TRAFFIC

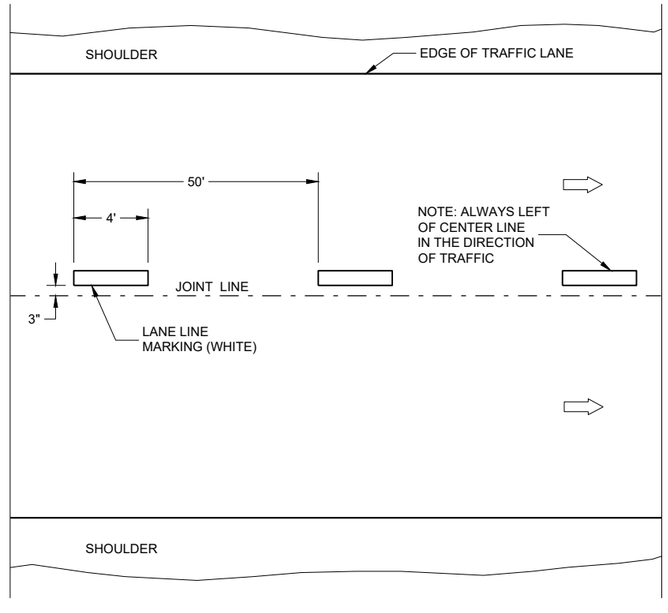


ONE WAY TRAFFIC

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.

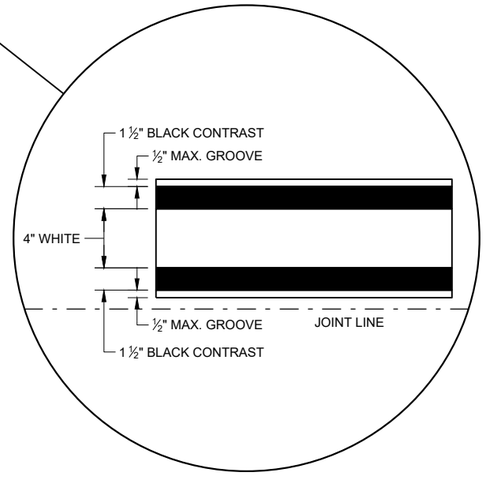
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

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

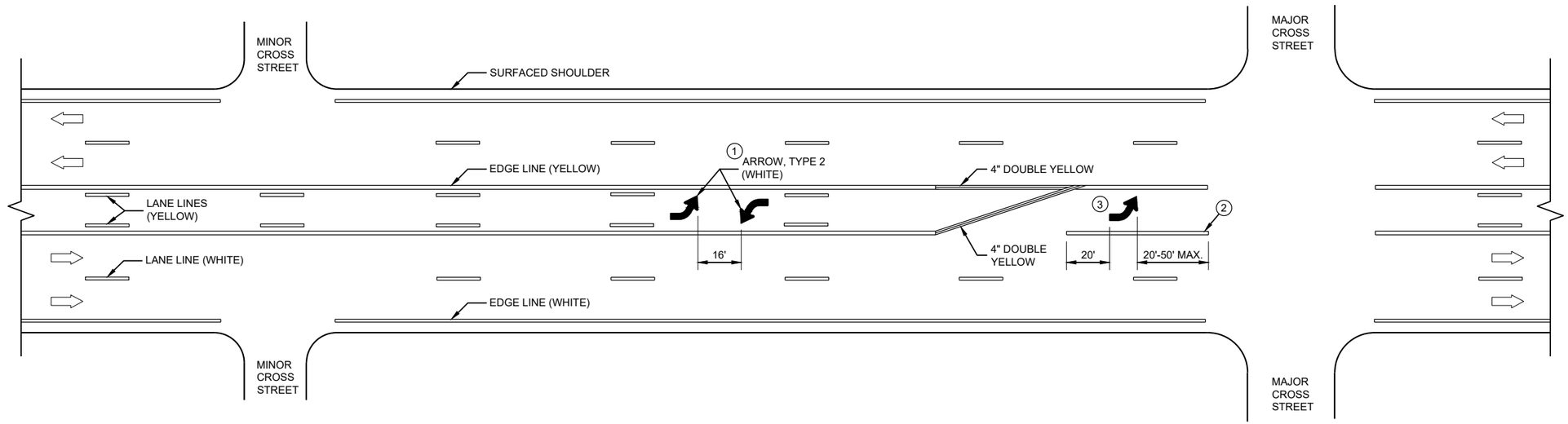
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

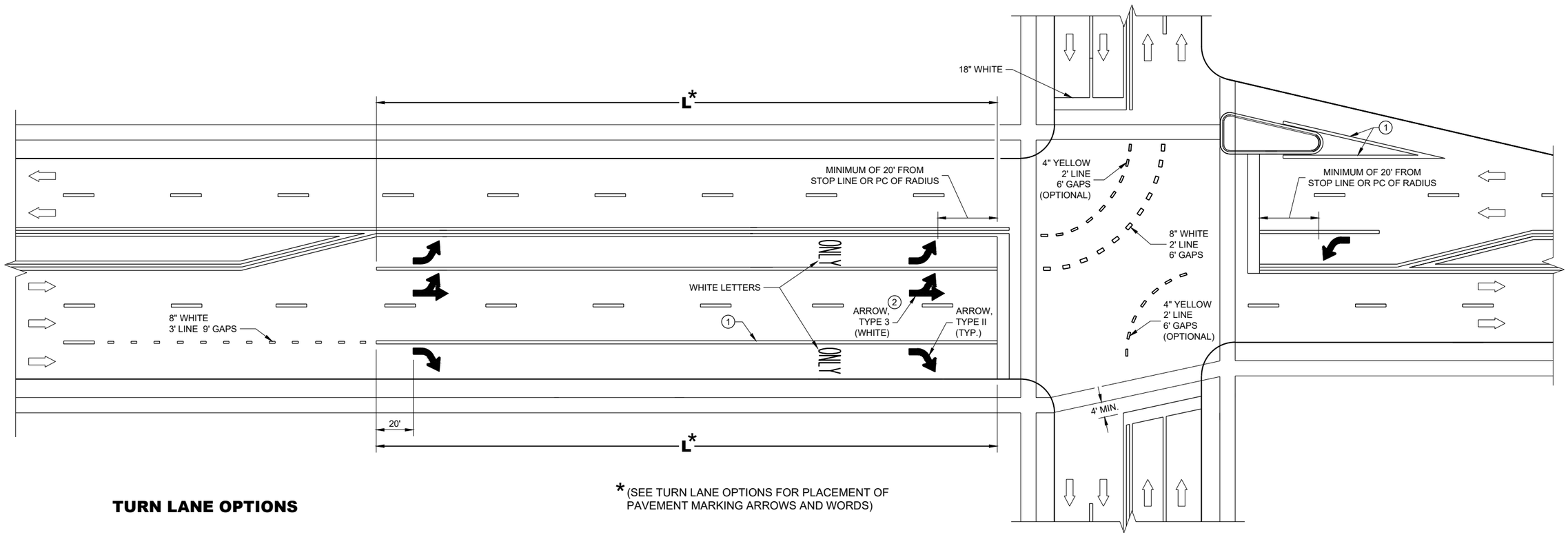
6

SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

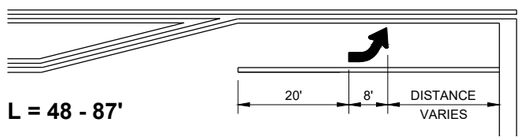
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



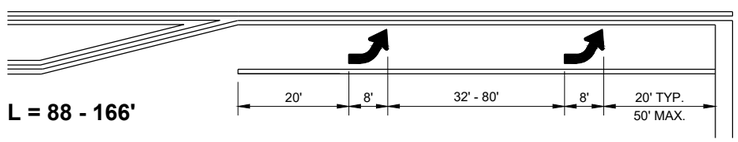
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

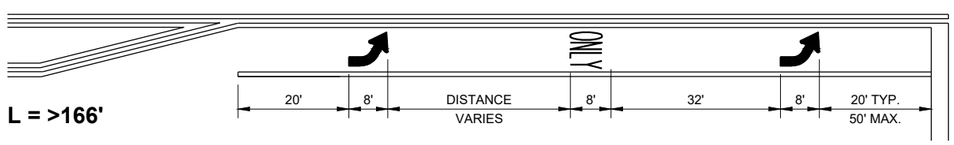
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

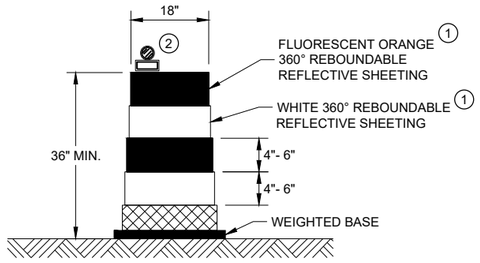
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

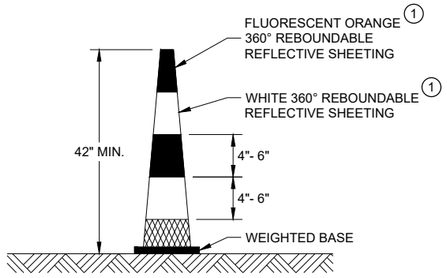
SDD 15C08 - 20c

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.

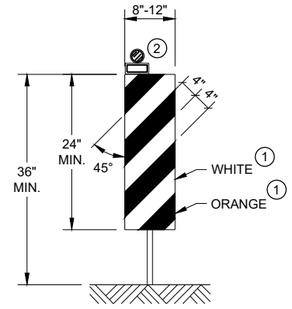


DRUM



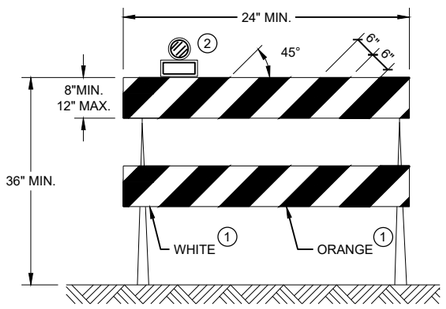
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



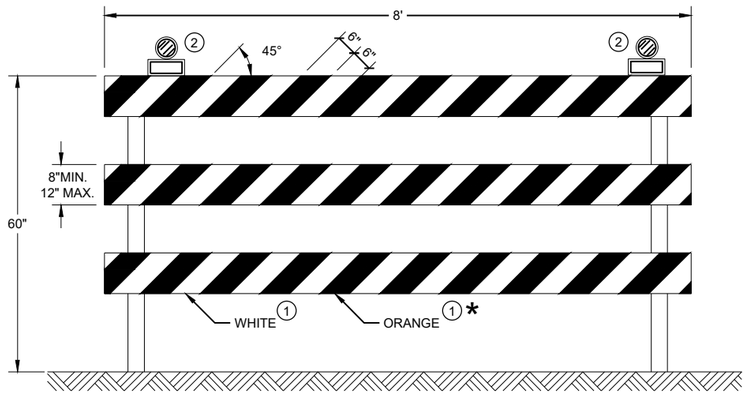
VERTICAL PANEL

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

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

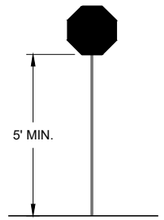
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



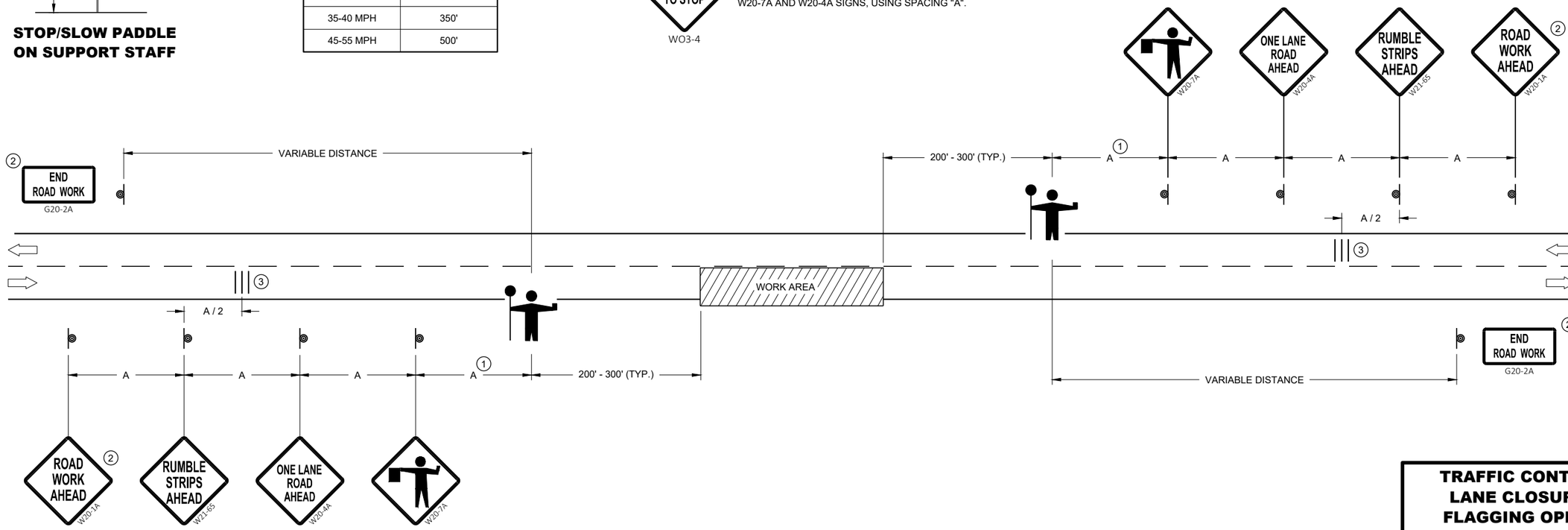
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 08

6

SDD 15C12 - 08

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

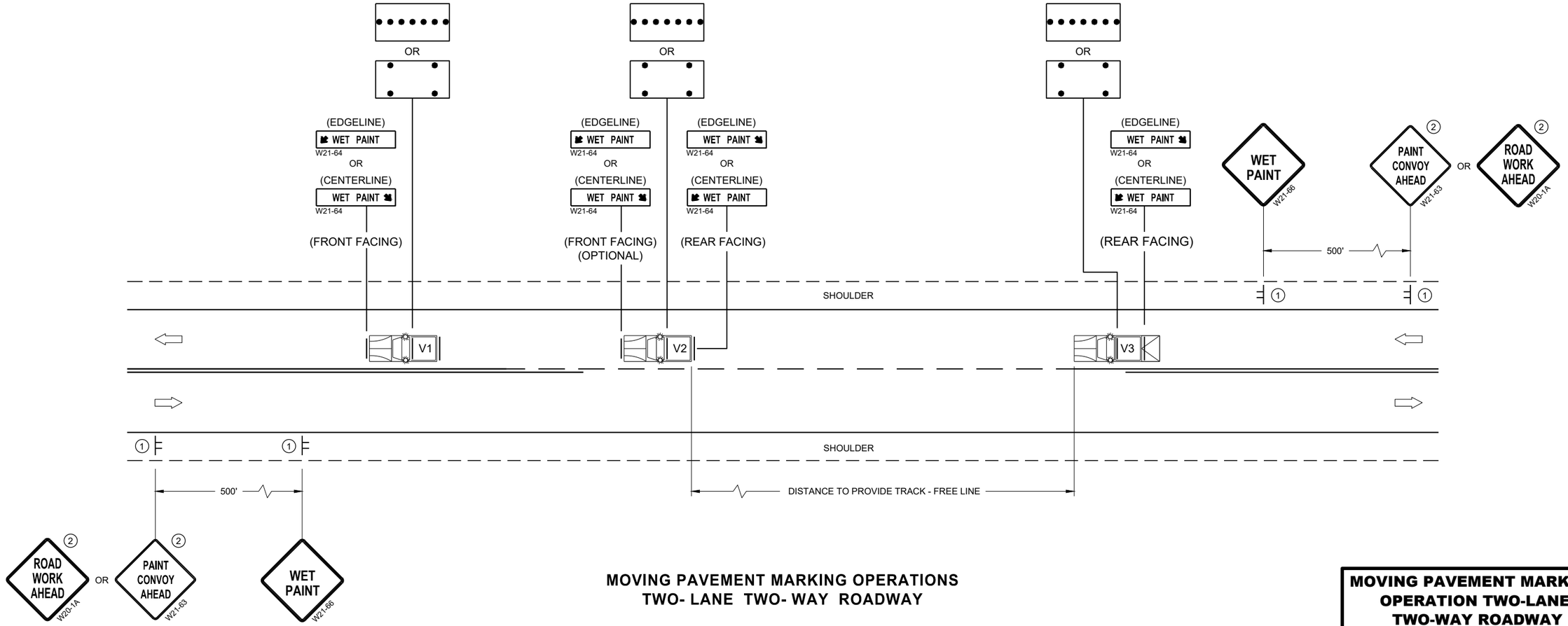
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C19 - 06a

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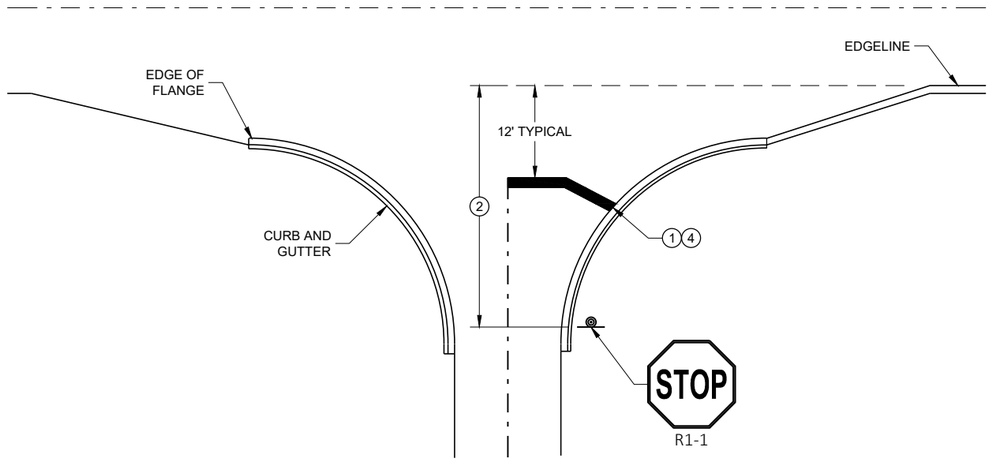
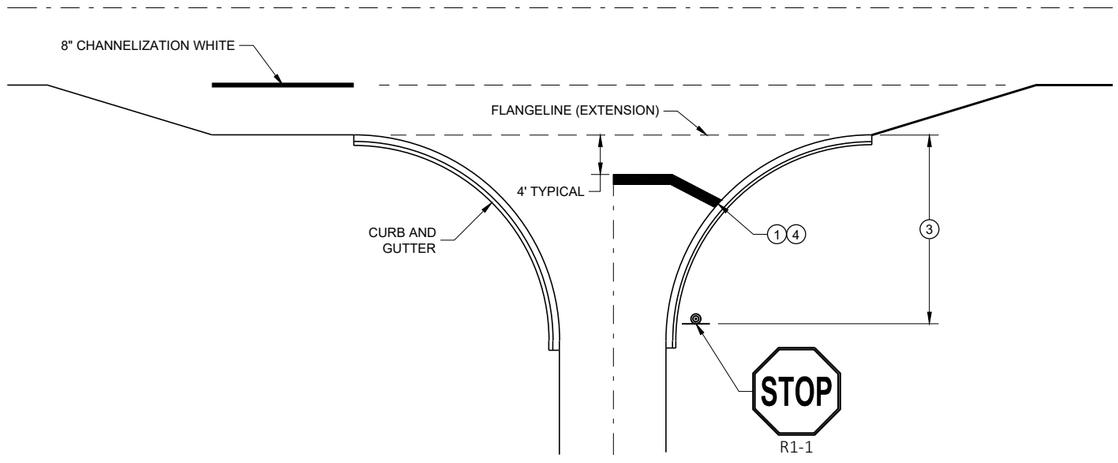
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

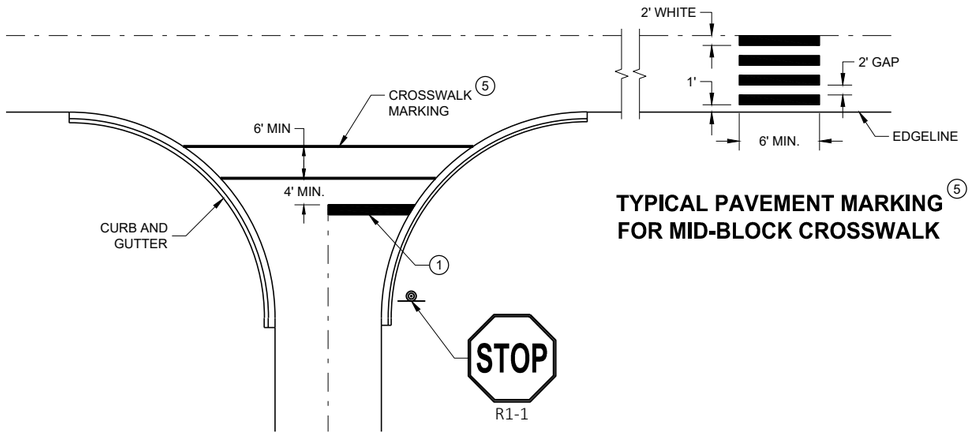
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

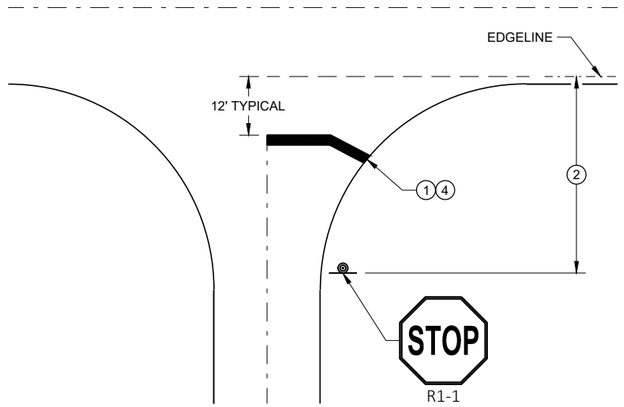


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33 - 04

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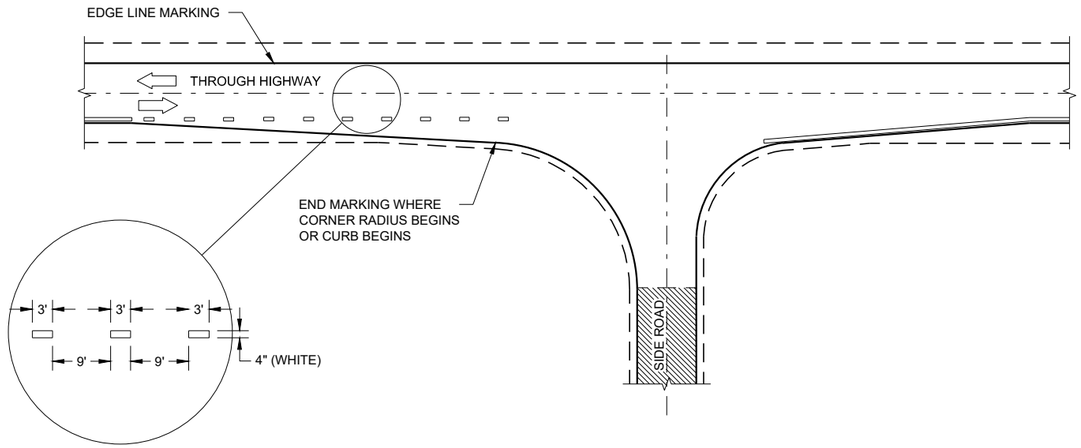
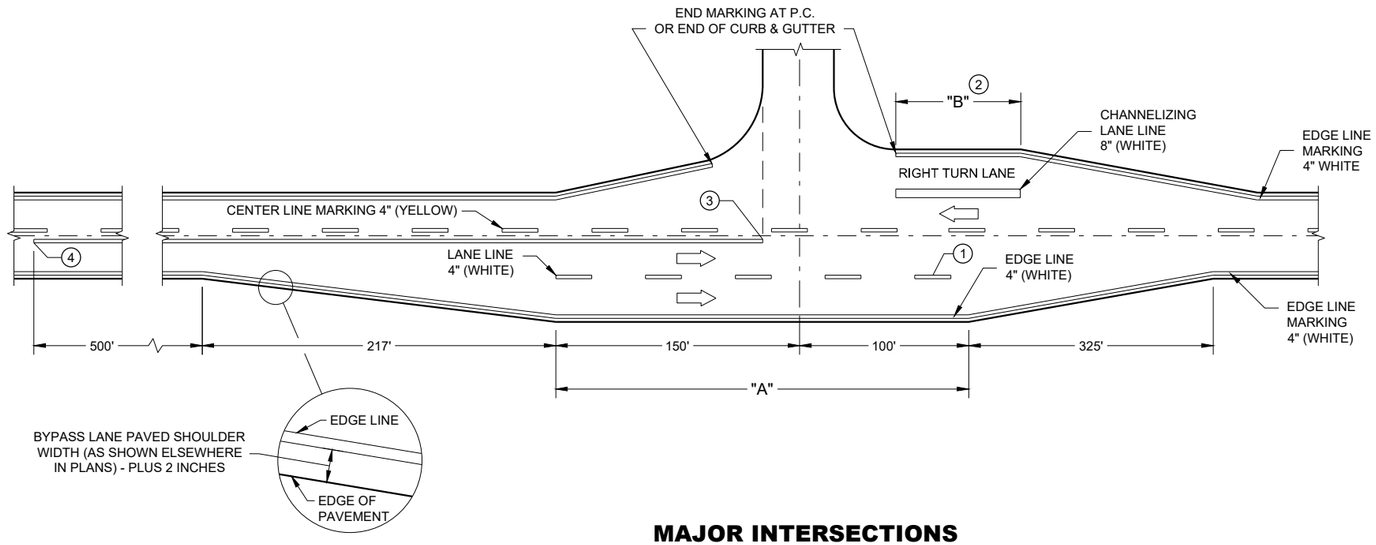
SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

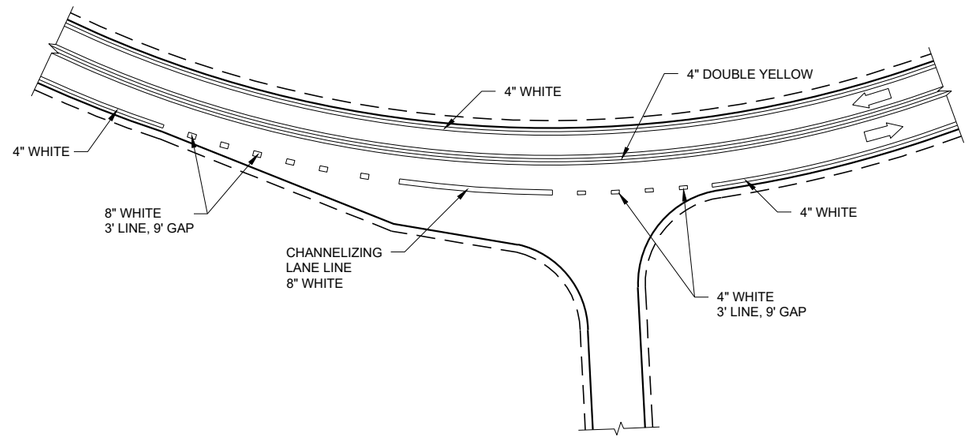
GENERAL NOTES

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

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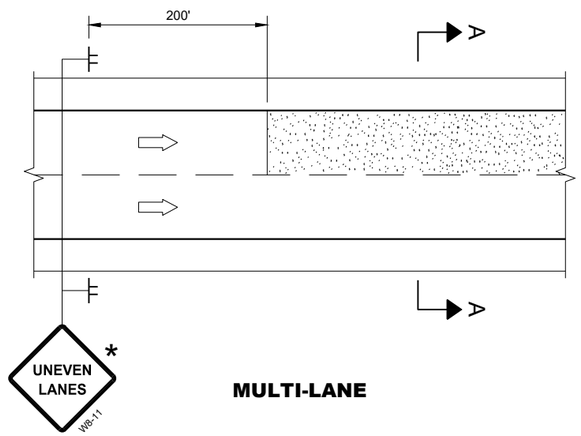
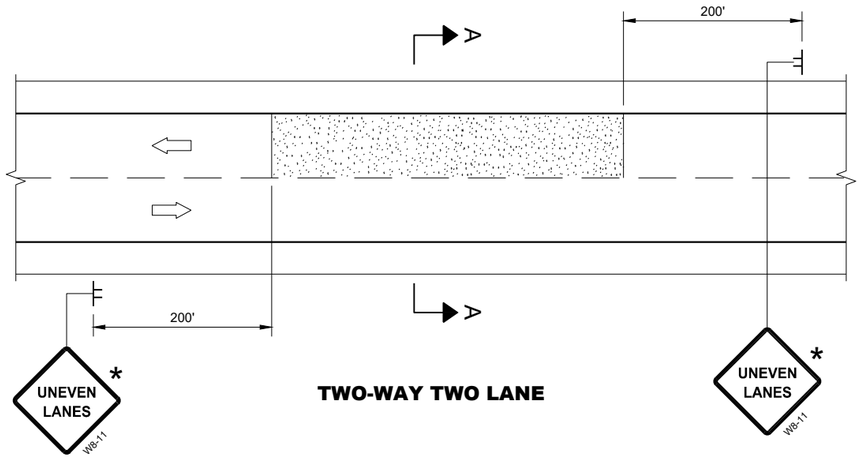
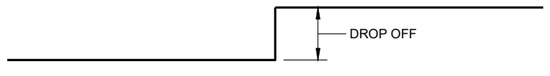
SDD 15C35 - 04a



MULTI-LANE

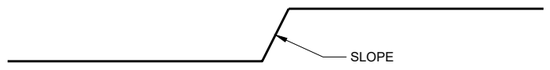


TWO-WAY TWO LANE

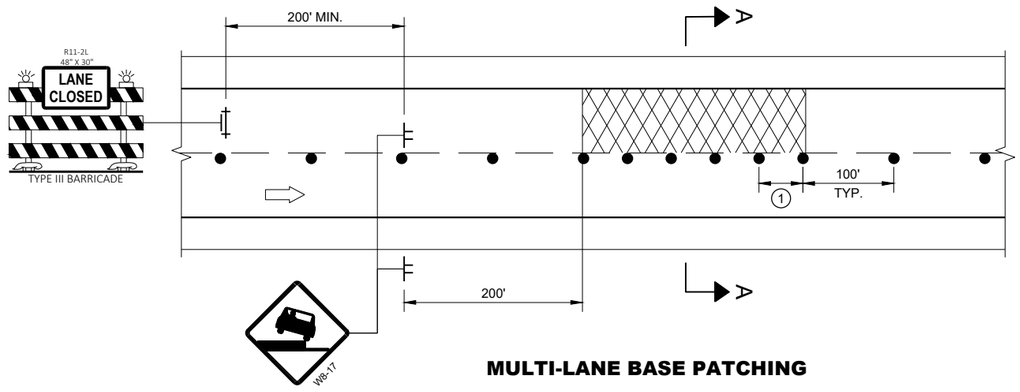


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

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.

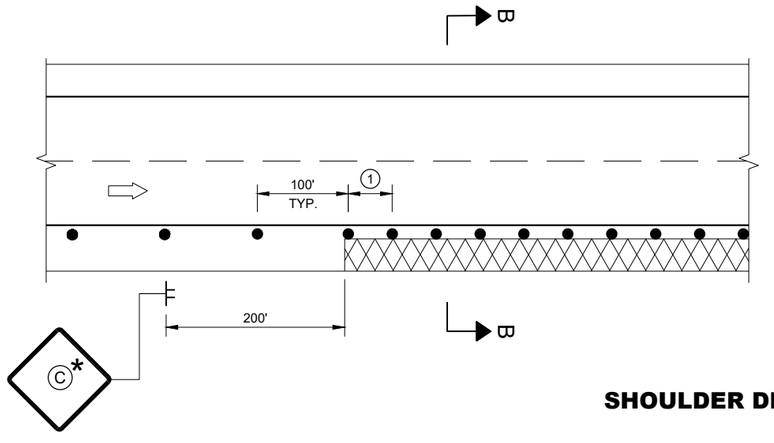
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

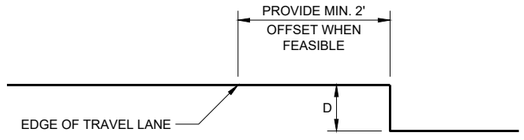
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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



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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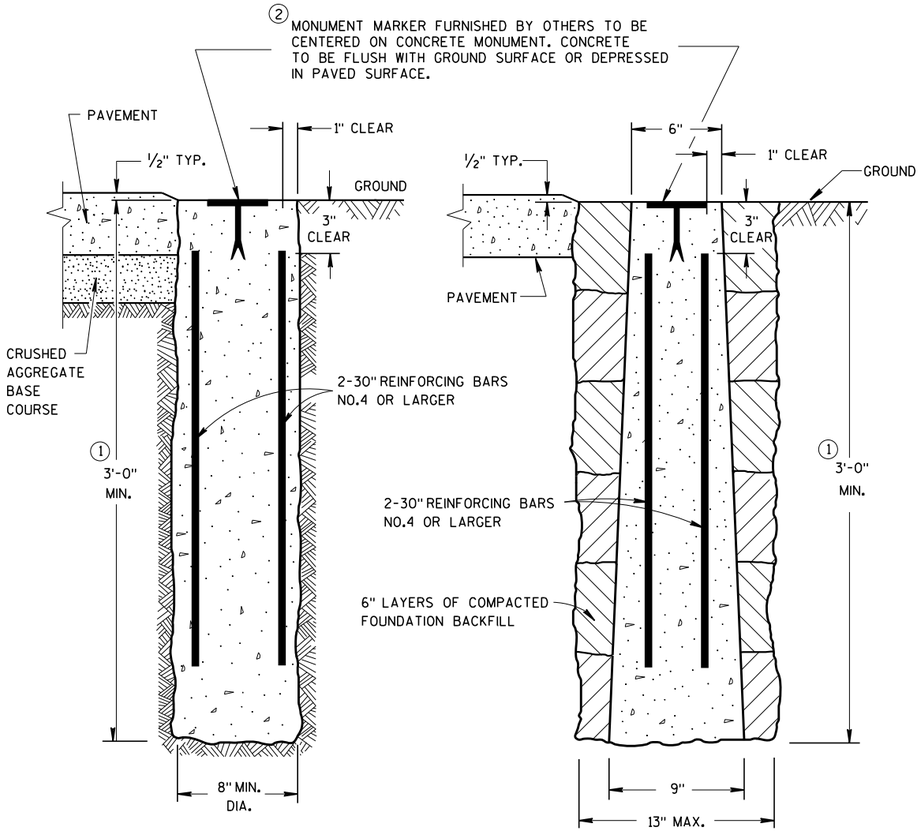
SDD 15D39 - 02

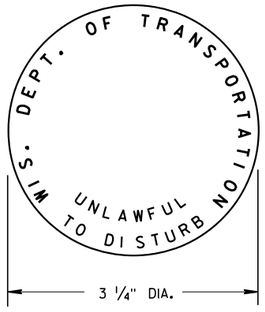


CAST-IN-PLACE

PRECAST

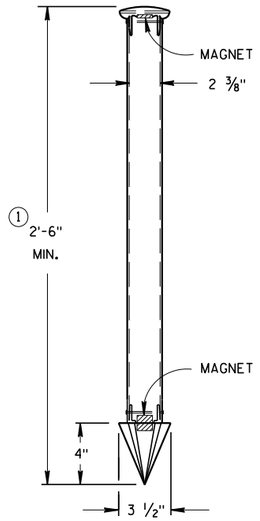
CONCRETE MONUMENTS

TYPE A



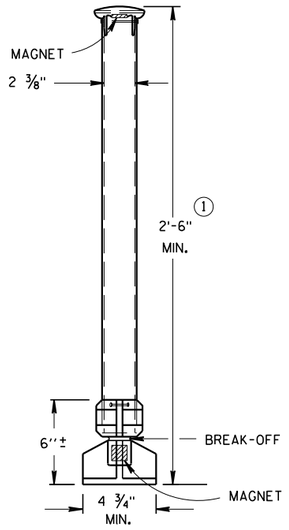
② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C", & "D"



TYPE C

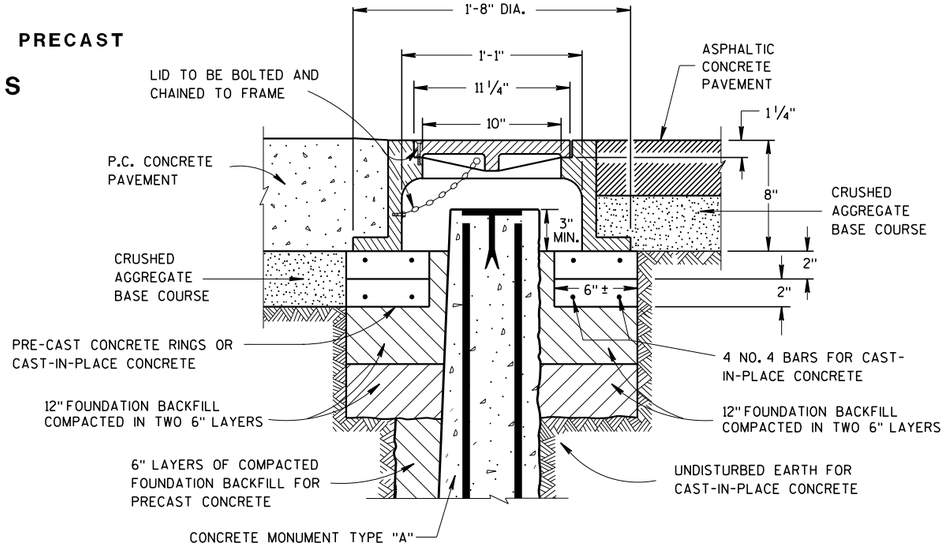
DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

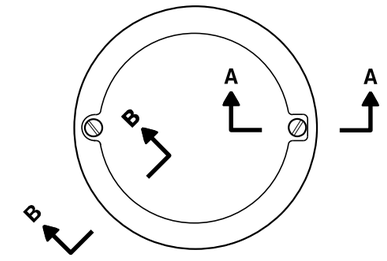
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

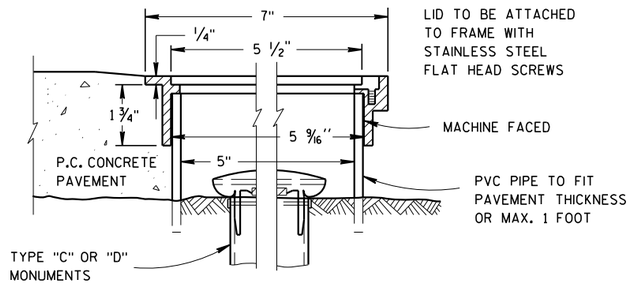
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. [illegible] — CHIEF SURVEYING AND M[illegible] ENGINEER
FHWA

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S.D.D. 16 A 1-7

Notes

Wisconsin Department of Transportation

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