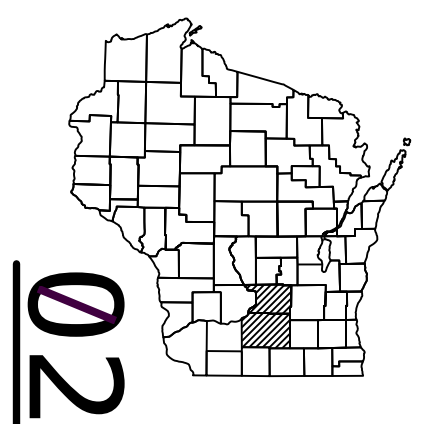


ORDER OF SHEETS

Section No.	Title
1	Title
2	Typical Sections and Details (Includes Erosion Control Plan)
3	Estimate of Quantities
3	Miscellaneous Quantities
4	Right of Way Plat
5	Plan and Profile
6	Standard Detail Drawings
7	Sign Plates
8	Structure Plans
9	Computer Earthwork Data
9	Cross Sections

TOTAL SHEETS = 50



DESIGN DESIGNATION

A.A.D.T. (2023)	=	2,440
A.A.D.T. (2043)	=	2,810
D.H.V.	=	253
D.D.	=	60/40
T.	=	22.1%
DESIGN SPEED	=	55 M.P.H.
ESALS	=	1,300,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
WOODED OR SHRUB AREA	TELEPHONE POLE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

139 - COLUMBUS

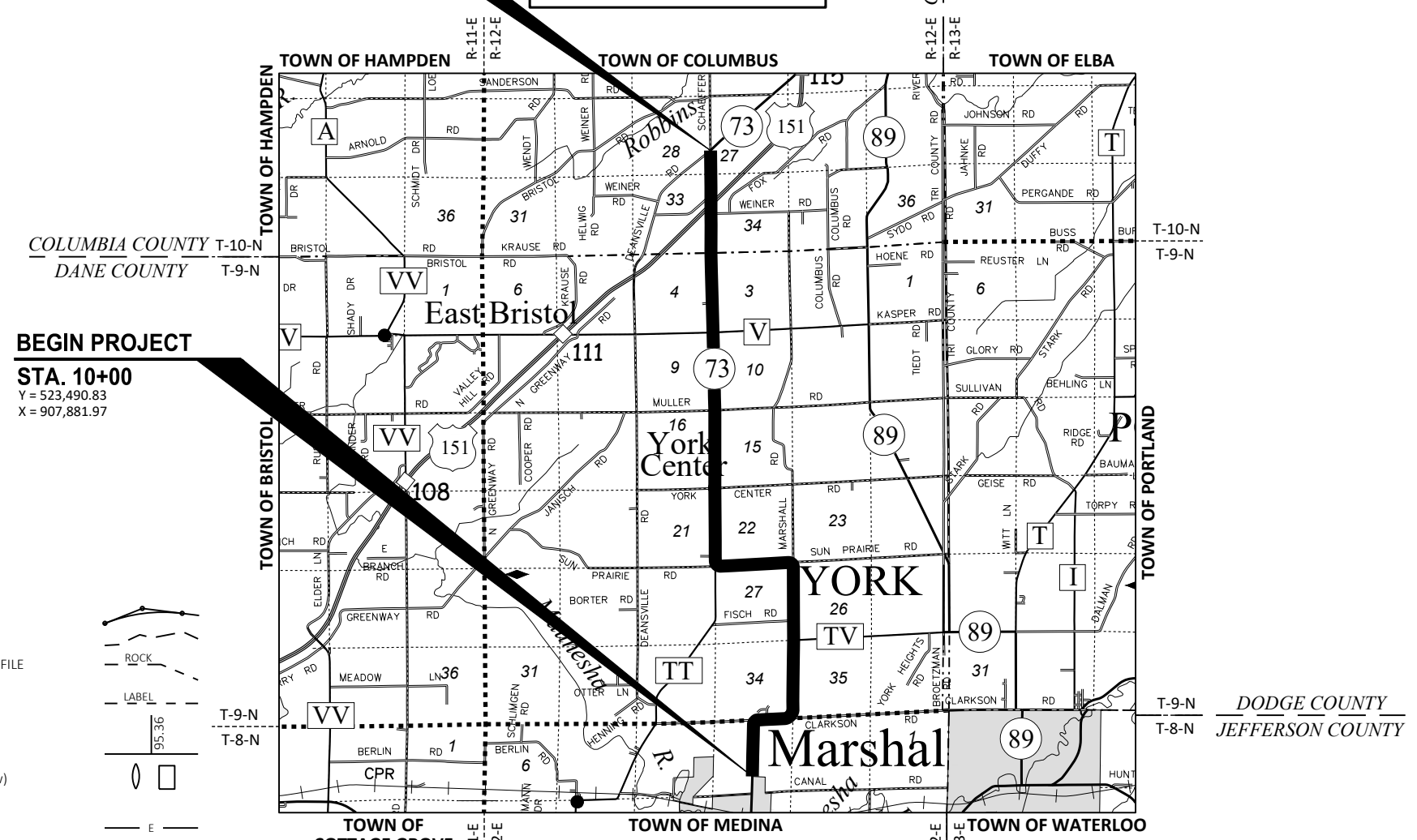
N MARSHALL V LIMIT TO DEANSVILLE RD

STH 73

DANE COUNTY

END PROJECT
STA. 507+39.81

STATE PROJECT NUMBER
3060-03-70



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DANE 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).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3060-03-70	WISC 2022507	1

ORIGINAL PLANS PREPARED BY
JEWELL
associates engineers, inc
Engineers - Architects - Surveyors



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Prepared By	JEWELL ASSOCIATES ENGINEERS, INC.
Designer	JEWELL ASSOCIATES ENGINEERS, INC.
Project Manager	AMY COUGHLIN, P.E.
Regional Examiner	SW REGION
Regional Supervisor	ALEX HAGEN, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 4/21/2022
Amy Coughlin
(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.

3.5-INCHES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 1 3/4-INCH UPPER LAYER AND A 1 3/4-INCH LOWER LAYER OF HMA PAVEMENT 4 MT 58-28S.

CONSTRUCTION SHOULD BE BASED ON TYPICAL SECTIONS AND HARD SURFACES RATHER THAN THE ALIGNMENT.

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

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

APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO THE MILLED SURFACE AND AT A RATE OF 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.

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.

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

EXACT LOCATIONS FOR THE REMOVING DISTRESSED PAVEMENT MILLING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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 IN 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.

MILL AND PAVE ADJACENT TO MONUMENTS WITHOUT DAMAGING THE MONUMENTS. AFTER MILLING AROUND MONUMENT, DELINEATE ANY EXPOSED MONUMENTS WITH A CONE OR DRUM.

JACOB ROCKWEILER, P.E., WISCONSIN HEIGHT MODERNIZATION PROGRAM MANAGER WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION WHOSE PHONE NUMBER IS (608) 526-6362 AND EMAIL IS JACOB.ROCKWEILER@DOT.WI.GOV

CONTACTS

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WDNR LIAISON:

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DNR SOUTH CENTRAL REGION HQ
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FITCHBURG, WI 53711
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UTILITIES

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WE ENERGIES
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WEST ALLIS, WI 53214
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CELL: (414) 588-7472
EMAIL: We-Utility-relocations@we-energies.com

GAS/PETROLEUM

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ATTN: TODD BRISTER
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EDEN, WI 53019
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EMAIL: todd_brister@tcenergy.com

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WAUPUN, WI 53963
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CELL: (920) 296-8899
EMAIL: tim.karow@fhr.com

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ATTN: SCOTT HOLSTEIN
700 S KANE STREET
BURLINGTON, WI 53105
PH: (262) 763-1084
CELL: (262) 949-0490
EMAIL: We-Utility-relocations@we-energies.com

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FOND DU LAC, WI 54935
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EMAIL: cb1461@att.com

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ATTN: RUSS RYAN
315 OAK STREET
OAKFIELD, WI 53065
PH: (920) 583-3275
CELL: (920) 737-9662
EMAIL: russell.w.ryan@ftr.com

PAETEC COMMUNICATIONS, LLC
ATTN: LORI KETTER
314 N DANZ AVE
GREEN BAY, WI 54302
PH: (417) 274-9215
EMAIL: Lori.Ketter@windstream.com

SPECTRUM
ATTN: EDWIN DAVY
2701 DANIELS STREET
MADISON, WI 53718
CELL: (608) 301-7713
EMAIL: edwin.davy@charter.com

SEWER

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CELL: (608) 381-9380
EMAIL: bkoll@marshall-wi.com

WATER

VILLAGE OF MARSHALL
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CELL: (608) 381-9380
EMAIL: bkoll@marshall-wi.com

LIST OF STANDARD ABBREVIATIONS

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

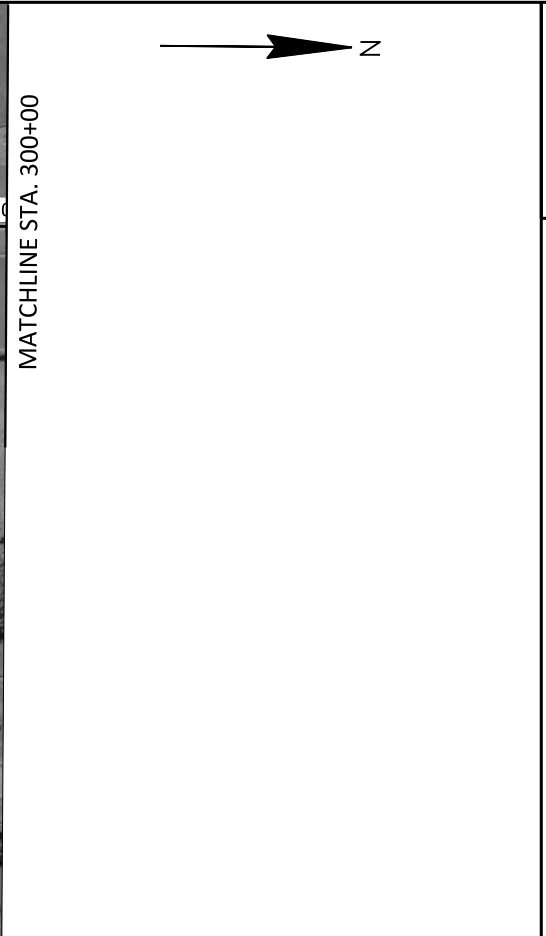
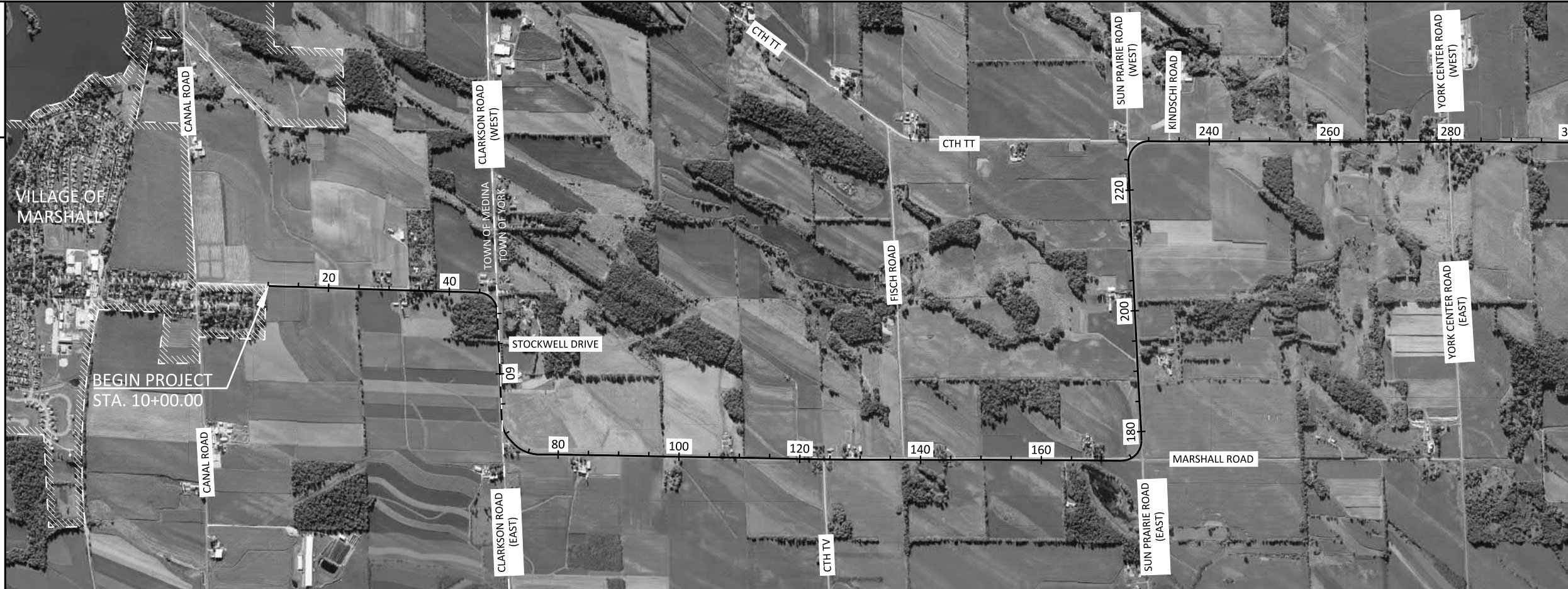
ORDER OF SECTION 2 SHEETS:

- WRITTEN MATERIAL
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS (INCLUDES EROSION CONTROL PLAN)
- TRAFFIC CONTROL
- PLAN DETAILS

CONTROL POINTS

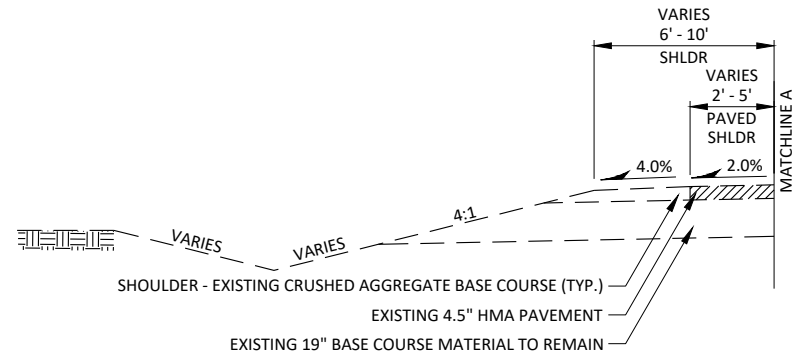
NO.	STA.	DESCRIPTION	Y	X	Z
1	60+42	3/4" I.R.S., 29.4' RT.	527,309.47	909,348.53	922.75
2	165+80	3/4" I.R.S., 26.3' LT.	536,892.01	910,636.89	928.99
3	270+73	3/4" I.R.S., 22.8 RT.	542,122.15	905,375.05	907.47
4	375+34	3/4" I.R.S., 28.8' RT.	552,582.26	905,264.50	950.82
5	466+49	3/4" I.R.S., 33.7' RT.	561,693.78	905,107.90	950.59
6	474+08	NAIL SET, 23.4' LT	562,452.70	905,057.20	928.45



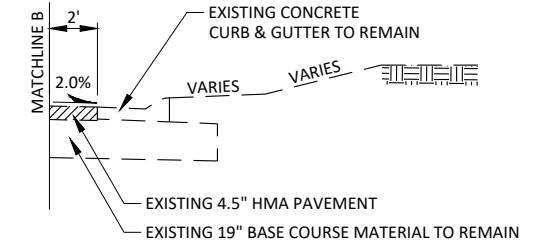


MATCHLINE STA. 300+00

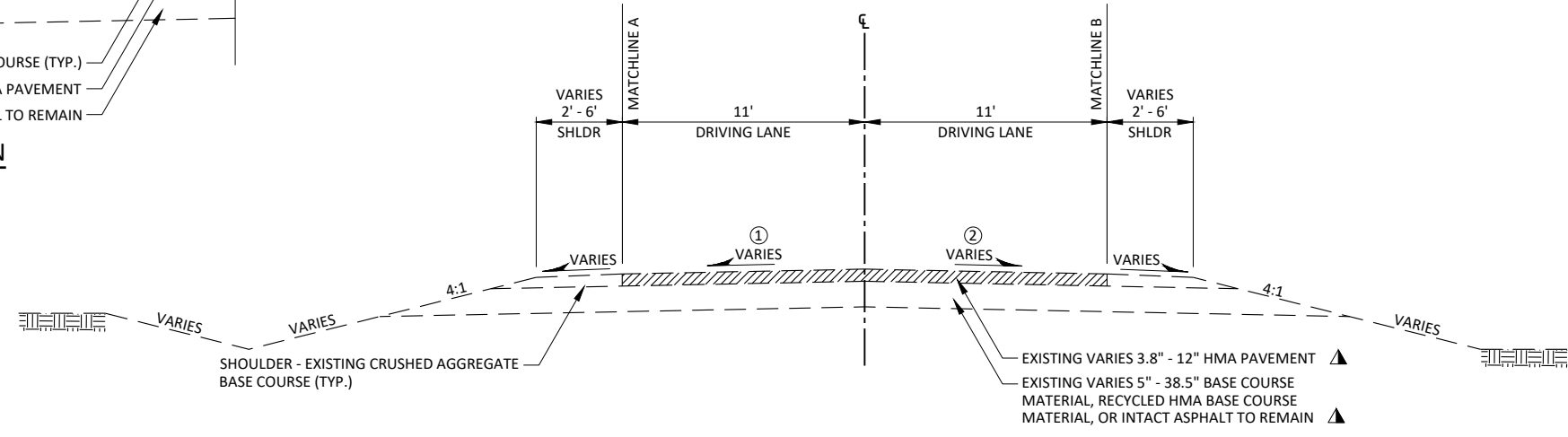
PROJECT NO: 3060-03-70	HWY: STH 73	COUNTY: DANE	PROJECT OVERVIEW	SHEET	E
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TYPICAL PARTIAL EXISTING SECTION
 STA. 10+00 - STA. 12+87, LT.



TYPICAL PARTIAL EXISTING SECTION
 STA. 10+00 - STA. 12+87, RT.



TYPICAL EXISTING SECTION

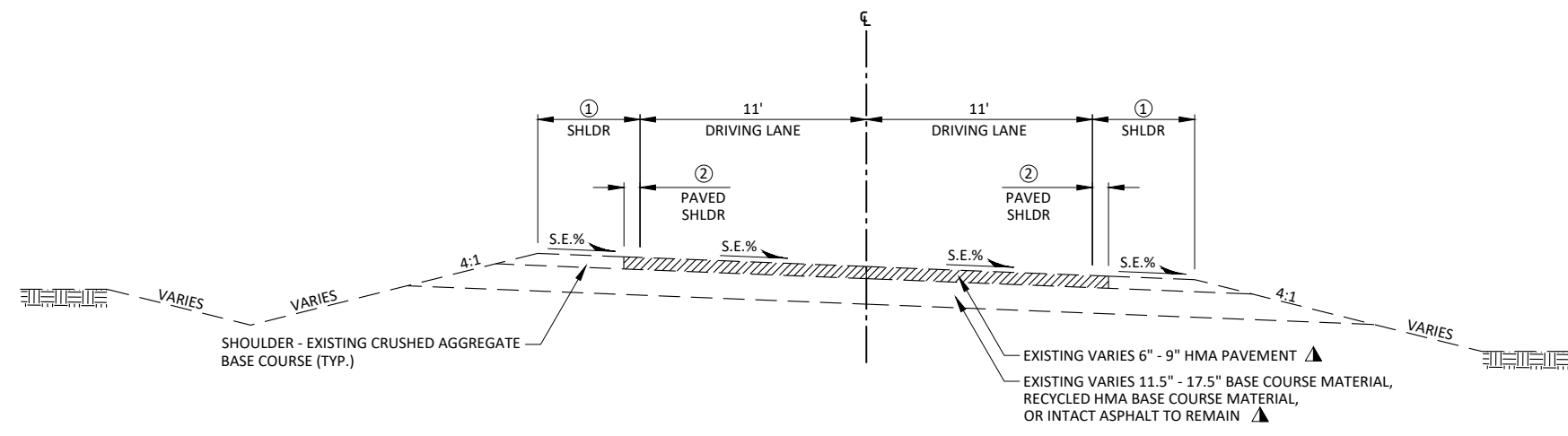
STA. 10+00 - STA. 43+31
STA. 51+30 - STA. 66+62
STA. 78+80 - STA. 171+72
STA. 180+02 - STA. 223+23
STA. 231+32 - STA. 457+38
STA. 484+05 - STA. 507+39.81

① SLOPE (%)	② SLOPE (%)
VARIES 0.0% - 3.8%	VARIES 1.2% - 6.2%
VARIES 0.5% - 3.0%	VARIES 1.6% - 4.5%
VARIES 0.0% - 4.9%	VARIES 0.0% - 4.8%
VARIES 0.0% - 4.8%	VARIES 0.0% - 4.2%
VARIES 0.0% - 4.9%	VARIES 0.0% - 5.3%
VARIES 0.0% - 3.1%	VARIES 2.1% - 6.6%

FILL

▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION

CUT



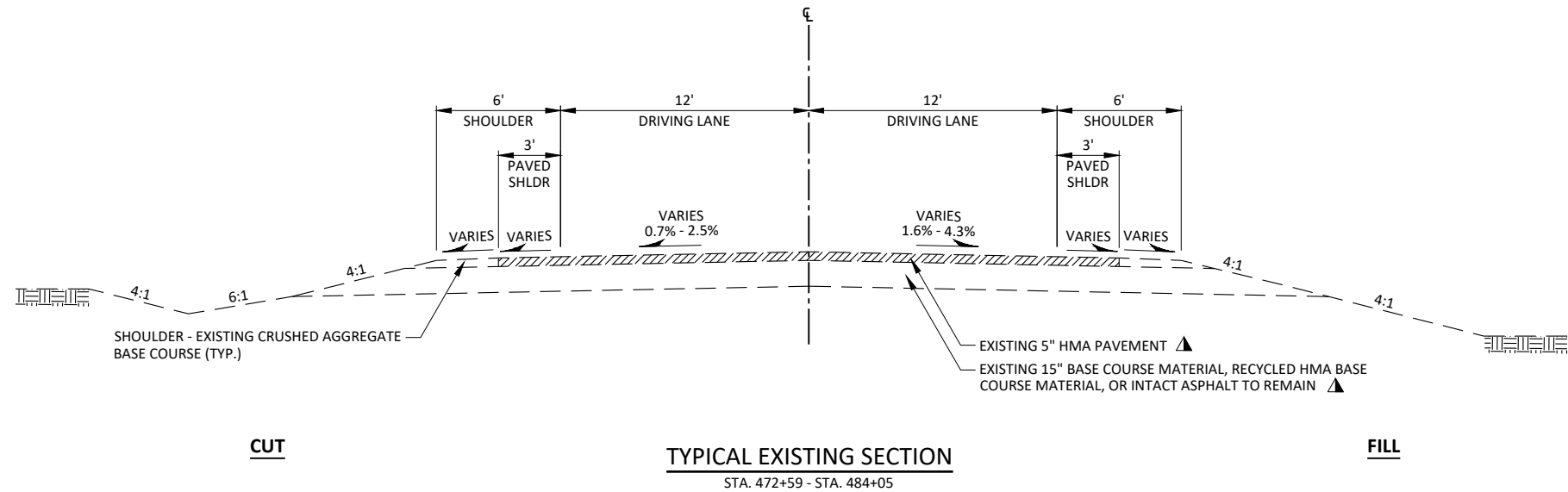
TYPICAL EXISTING SUPERELEVATED SECTION

STA. 43+31 - STA. 51+30
STA. 66+62 - STA. 78+80
STA. 171+72 - STA. 180+02
STA. 223+23 - STA. 231+32
STA. 457+38 - STA. 457+73
STA. 457+73 - STA. 457+85, RT.

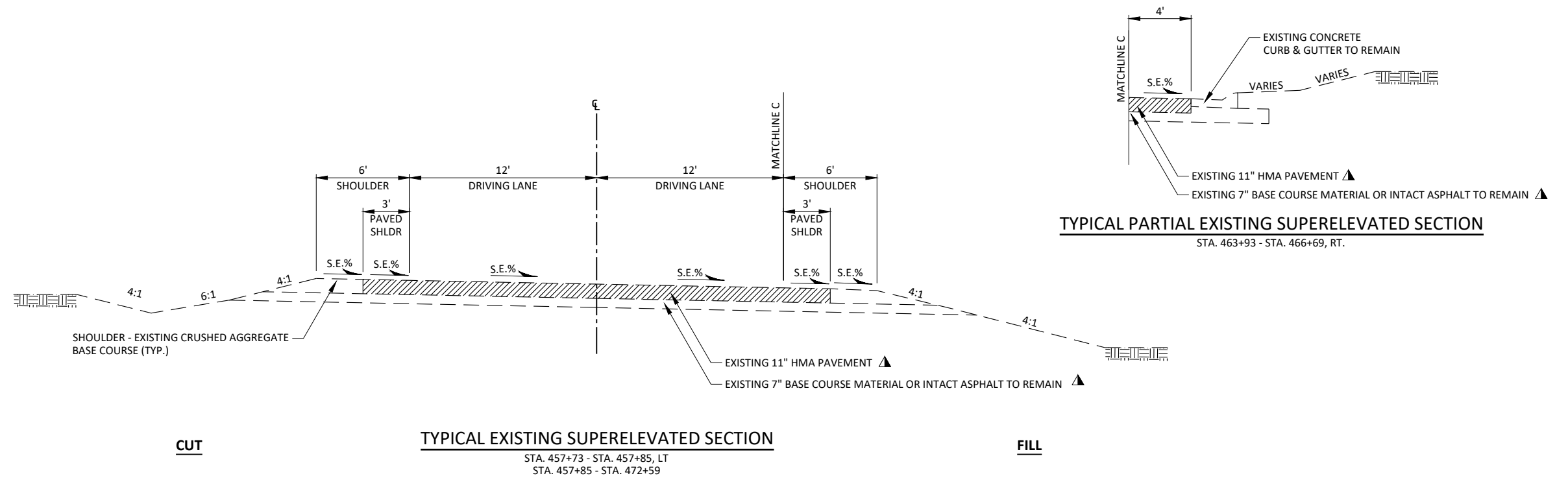
① SHLDR (FT)	② PAVED SHLDR (FT)
VARIES 4' - 5'	VARIES 1' - 5'
VARIES 3' - 6'	VARIES 0' - 3'
VARIES 5' - 8'	VARIES 0' - 4'
8'	VARIES 3' - 5'
5'	0'
5'	0'

FILL

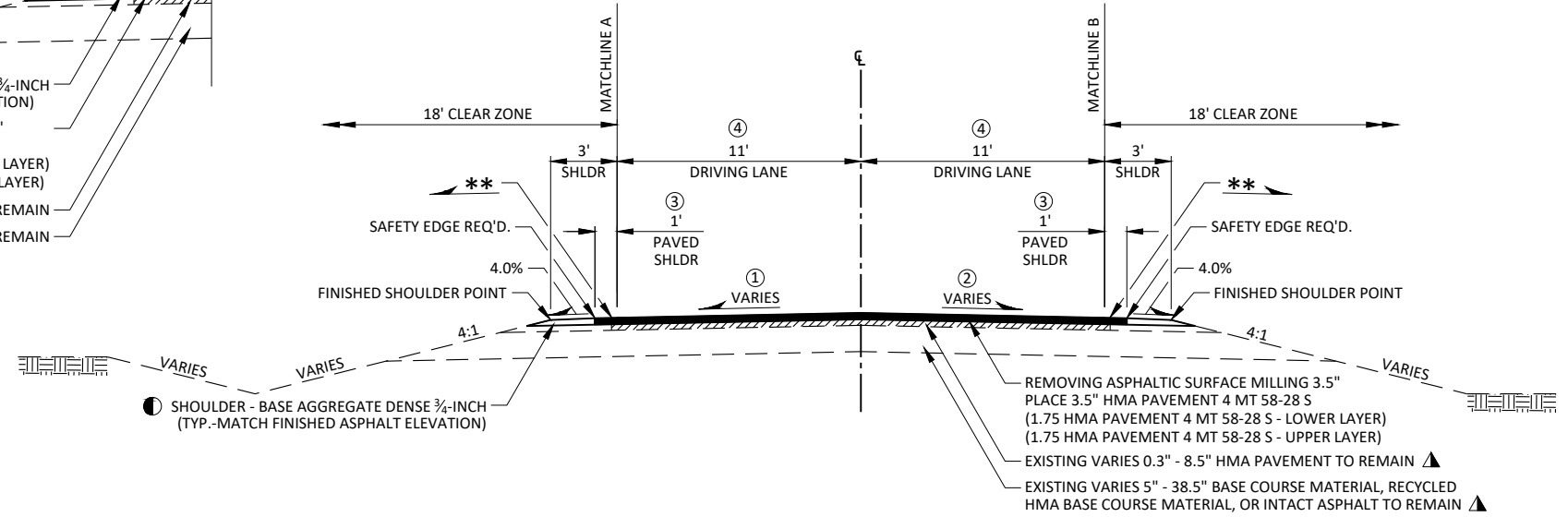
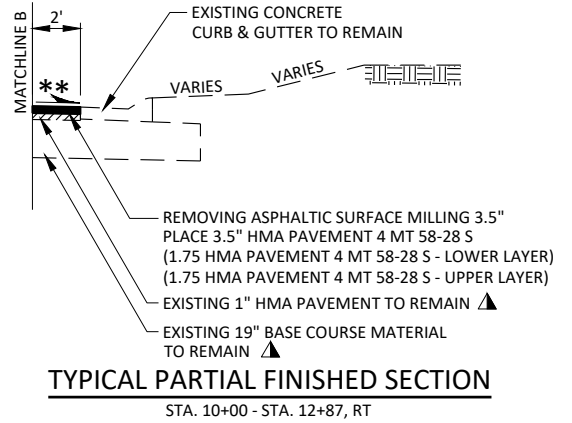
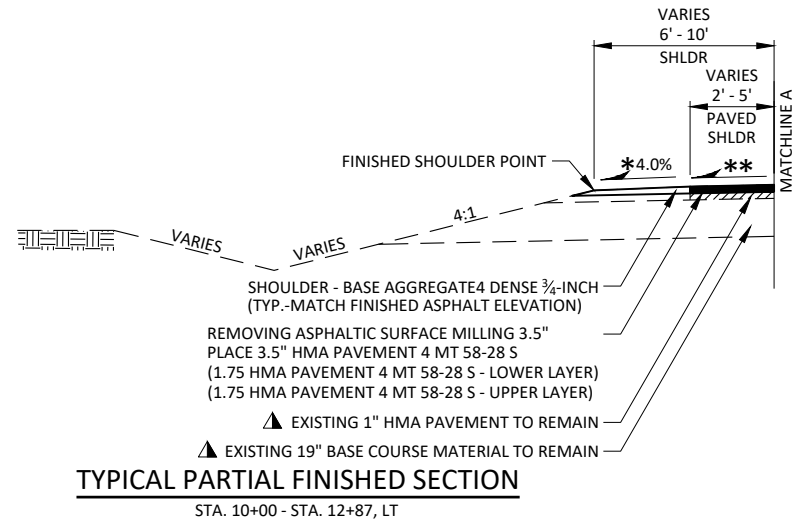
▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION



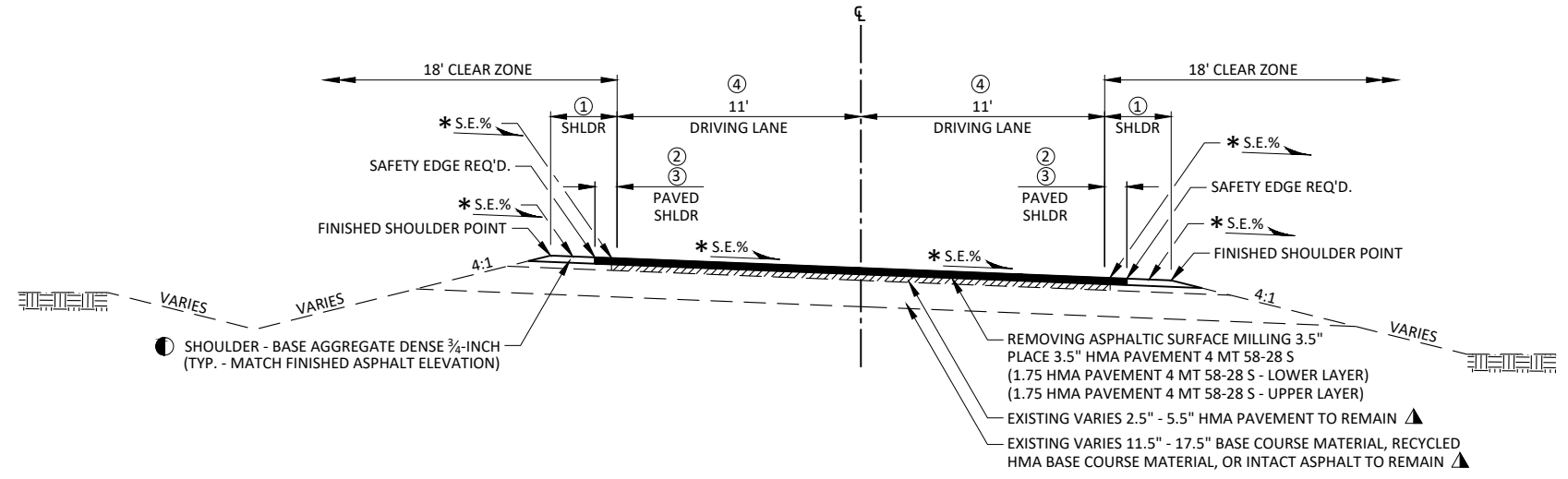
▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION



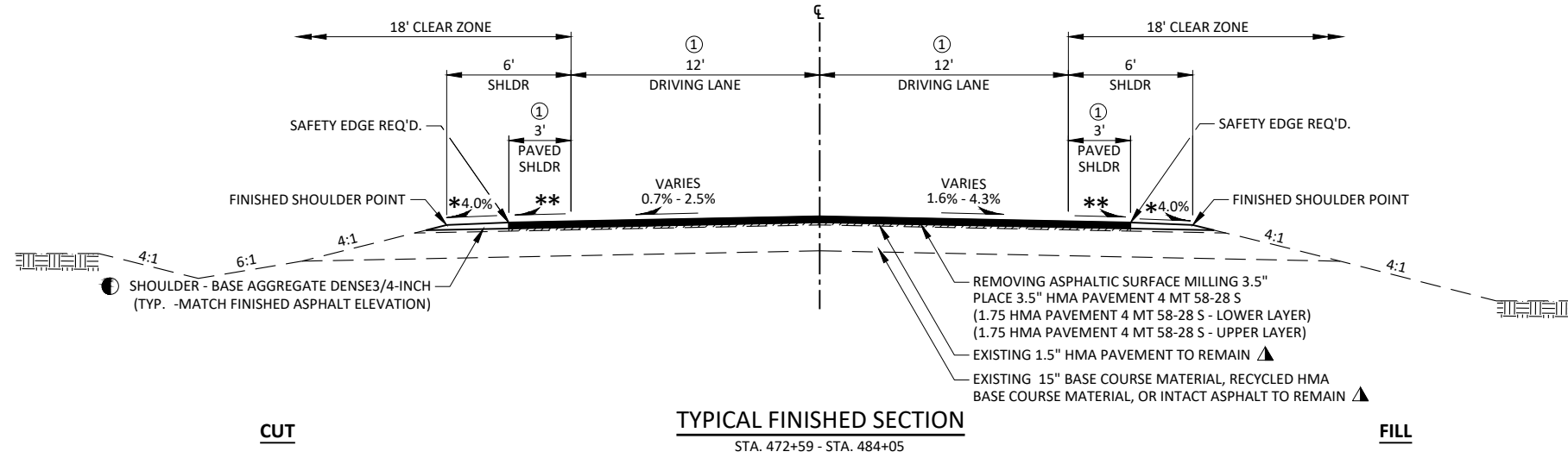
▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION



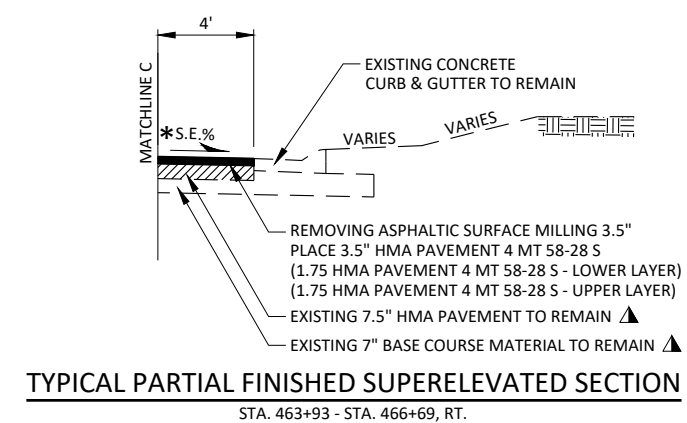
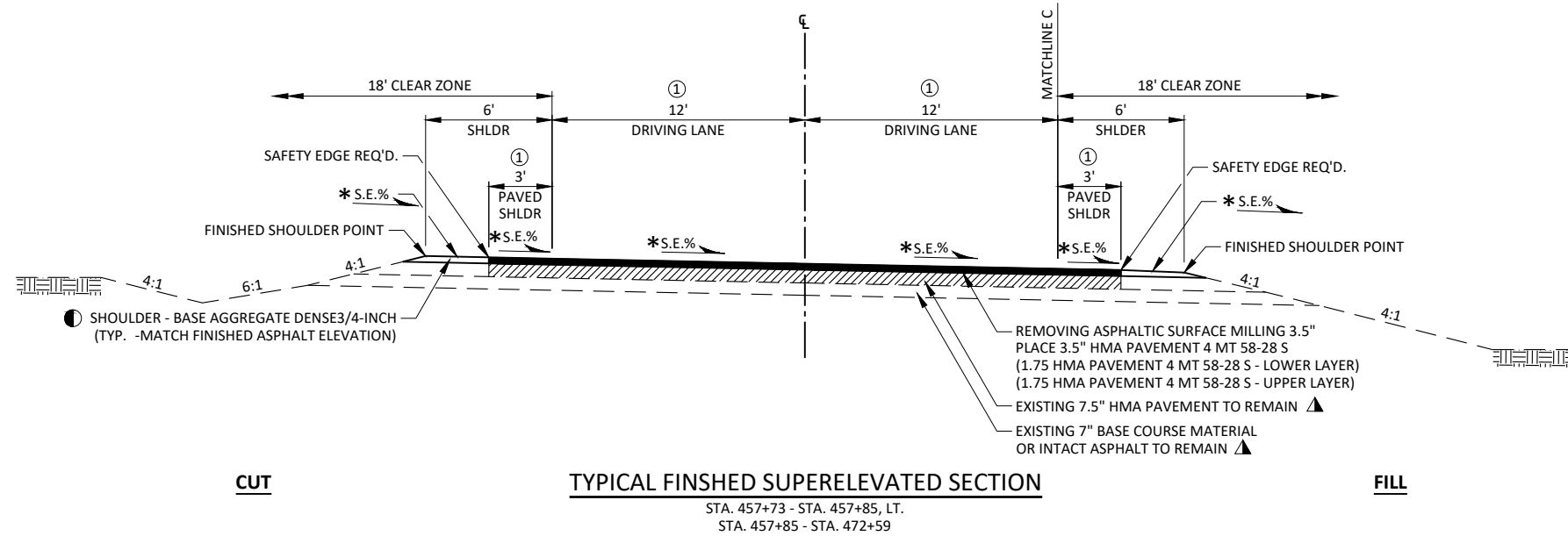
- ▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION
- ③ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
- ④ PREPARE FOUNDATION FOR ASPHALTIC PAVING
- * MATCH DRIVING LANE CROSS SLOPE WHEN CROSS SLOPE EXCEEDS 4.0 %
- ** MATCH DRIVING LANE CROSS SLOPE
- INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4 - INCH



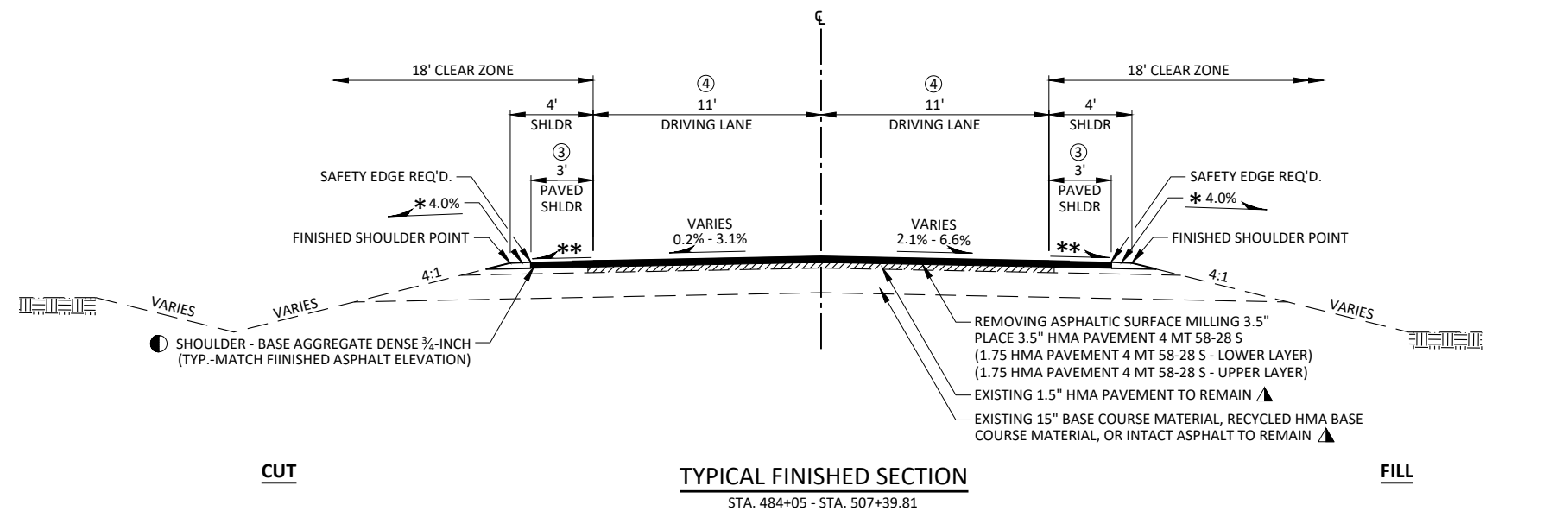
- ▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION
- ③ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
- ④ PREPARE FOUNDATION FOR ASPHALTIC PAVING
- * SEE SUPERELEVATION TABLES
- ** STA. 67+76 - STA. 76+87, RT. - FINISHED SHOULDER WIDTH VARIES 3'-4'. CONTINUE CONSISTENT 3' PAVED SHOULDER WIDTH INCLUDING AREAS WHERE SHOULDER WIDTH <4'.
- INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4 - INCH



- ▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION
- ① PREPARE FOUNDATION FOR ASPHALTIC PAVING
- * MATCH DRIVING LANE CROSS SLOPE WHEN CROSS SLOPE EXCEEDS 4.0 %
- ** MATCH DRIVING LANE CROSS SLOPE
- INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4-INCH



- ▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION
- ① PREPARE FOUNDATION FOR ASPHALTIC PAVING
- * SEE SUPERELEVATION TABLES



- ▲ SEE PAVEMENT BORING TABLE FOR ADDITIONAL INFORMATION
- ③ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
- ④ PREPARE FOUNDATION FOR ASPHALTIC PAVING
- * MATCH DRIVING LANE CROSS SLOPE WHEN CROSS SLOPE EXCEEDS 4.0 %
- ** MATCH DRIVING LANE CROSS SLOPE
- INCORPORATE EXISTING SHOULDER AGGREGATE TO GREATEST EXTENT PRACTICABLE PRIOR TO PLACEMENT OF BASE AGGREGATE DENSE 3/4-INCH

PAVEMENT BORING TABLE

Boring Number	Station	Offset	Asphalt Depth	Base Depth	Boring Number	Station	Offset	Asphalt Depth	Base Depth
B-2	10+00	12' LT	4.5"	4" BCM/ 15" BLEND	B-23	256+05	6' RT	8"	5.5" RAP/ 30" BCM
B-3	21+60	9' RT	7.5"	12.5" RAP	B-24	267+65	9' LT	5.5"	9.5 RAP/ 3" ASPHALT
B-4	36+90	6' LT	7"	10" BLEND	B-25	279+30	9' RT	9.5"	38.5" BCM
B-5	45+40	6' RT	7"	11.5" RAP	B-26	290+90	6' LT	5.5"	6" RAP/ 4" BCM/ 8.5" ASPHALT
B-6	57+00	9' RT	3.8"	4" BCM/ 16" RAP	B-27	302+50	9' RT	4"	20" BLEND
B-7	68+60	6' LT	9"	13" BLEND	B-28	314+65	6' LT	7.5"	3" RAP/ 3" BCM/ 9" ASPHALT
B-8	80+20	9' LT	8"	5" BCM/ 11" RAP	B-29	326+25	6' RT	8"	6" BLEND/ 4" ASPHALT/ 12" RAP
B-9	91+85	9' RT	6"	9.5 BCM/ 8.5" RAP	B-30	337+90	9' LT	6"	9.5" RAP/ 4" BCM/ 3" ASPHALT
B-10	104+00	6' LT	7"	4" BCM/ 8" RAP	B-31	349+50	6' RT	8.3"	14.5" BCM
B-11	115+60	9' RT	4"	4" BCM/ 12" RAP	B-32	361+10	9' LT	7"	4" RAP/ 3" BCM/ 6.5" ASPHALT
B-12	127+20	9' LT	7"	3" BCM/ 13" RAP	B-33	372+75	9' RT	6.5"	12.5" BLEND
B-13	138+85	6' RT	4"	4" BCM/ 8" RAP	B-34	384+90	6' LT	10.5"	4" BCM/ 3.5" ASPHALT
B-14	150+45	6' LT	5.25"	4" BCM/ 11" RAP	B-35	396+50	9' RT	6"	10" BLEND
B-15	162+05	6' LT	9"	4" BCM/ 6" ASPHALT	B-36	408+10	6' LT	6.5"	14" BLEND
B-16	174+20	12' LT	6"	15" BLEND	B-37	419+75	6' LT	12"	3" BCM/ 3.5" ASPHALT
B-17	185+80	9' RT	6.5"	15" BLEND	B-38	431+35	9' LT	6.5"	3" RAP/ 2" BCM/ 5" ASPHALT
B-18	197+45	9' LT	5.8"	2" BCM/ 16 25 RAP	B-39	442+95	12' LT	6.5"	5.5" BCM
B-19	209+05	9' RT	7.8"	11.5" RAP	B-40	455+10	12' RT	6.5"	2.5" RAP/ 7" BCM
B-20	220+65	6' LT	9"	13" RAP	B-41	466+70	6' RT	11"	3" BCM/ 4" ASPHALT
B-21	232+30	6' RT	8"	18" BCM/ 4" ASPHALT	B-42	478+35	9' LT	5"	6" RAP/ 3" BCM/ 6" ASPHALT
B-22	244+45	9' LT	8.5"	4" RAP/ 9" BCM					

BCM - BASE COARSE MATERIAL
BLEND - BLENDED BASE COARSE (ASPHALT & BASE)
RAP - RECYCLED ASPHALT PAVEMENT

SUPERELEVATION TABLE-CURVE 1

MAINTAIN NORMAL CROWN THROUGH CURVE 1 TO STA. 43+31. SEE SUPERELEVATION - CURVE 2 FOR FURTHER INFORMATION.

SUPERELEVATION TABLE-CURVE 2

STATION	LEFT(%)	RIGHT(%)
43+31	2.0	2.0
43+50	1.0	2.0
44+00	1.6	2.0
44+50	4.1	4.1
45+00	6.7	6.7
45+50	9.3	9.3
45+64	10.0	10.0
FULL SUPERELEVATION		
48+97	10.0	10.0
49+00	9.9	9.9
49+50	7.3	7.3
50+00	4.7	4.7
50+50	2.1	2.1
51+00	0.5	2.0
51+30	2.0	2.0

SUPERELEVATION TABLE-CURVE 3

STATION	LEFT(%)	RIGHT(%)
66+62	2.0	2.0
67+00	2.0	0.1
67+50	2.5	2.5
68+00	5.1	5.1
68+13	5.8	5.8
FULL SUPERELEVATION		
69+97	5.8	5.8

MATCH EXISTING SUPERELEVATION BETWEEN STA. 69+97 (CURVE 3) TO STA. 73+83 (CURVE 4).

SUPERELEVATION TABLE-CURVE 4

MATCH EXISTING SUPERELEVATION BETWEEN STA. 69+97 (CURVE 3) TO STA. 73+83 (CURVE 4).

STATION	LEFT(%)	RIGHT(%)
73+83	10.0	10.0
FULL SUPERELEVATION		
76+13	10.0	10.0
76+50	8.3	8.3
77+00	6.1	6.1
77+50	3.8	3.8
78+00	2.0	1.6
78+50	2.0	0.7
78+80	2.0	2.0

SUPERELEVATION TABLE-CURVE 5

STATION	LEFT(%)	RIGHT(%)
171+72	2.0	2.0
172+00	2.0	0.4
172+50	2.3	2.3
173+00	4.9	4.9
173+50	7.6	7.6
173+90	9.7	9.7
FULL SUPERELEVATION		
177+84	9.7	9.7
178+00	8.9	8.9
178+50	6.2	6.2
179+00	3.5	3.5
179+50	2.0	0.9
180+00	2.0	1.9
180+02	2.0	2.0

SUPERELEVATION TABLE-CURVE 6

SEE SUPERELEVATION - CURVE 5 FOR FURTHER INFORMATION THROUGH STA. 180+02. MAINTAIN NORMAL CROWN FROM STA. 180+02 THROUGH THE END OF CURVE 6.

SUPERELEVATION TABLE-CURVE 7

MAINTAIN NORMAL CROWN THROUGH CURVE 7.

SUPERELEVATION TABLE-CURVE 8

STATION	LEFT(%)	RIGHT(%)
223+23	2.0	2.0
223+50	0.4	2.0
224+00	2.5	2.5
224+50	5.4	5.4
225+00	8.3	8.3
225+01	8.4	8.4
FULL SUPERELEVATION		
229+54	8.4	8.4
230+00	5.7	5.7
230+50	2.8	2.8
231+00	0.1	2.0
231+32	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(%)
457+38	2.0	2.0
457+50	2.0	1.6
458+00	2.0	0.1
458+50	2.0	1.7
458+73	2.5	2.5
FULL SUPERELEVATION		
461+42	2.5	2.5
461+50	2.2	2.2
462+00	0.6	0.6
462+17	0.0	0.0

SUPERELEVATION TABLE-CURVE 12

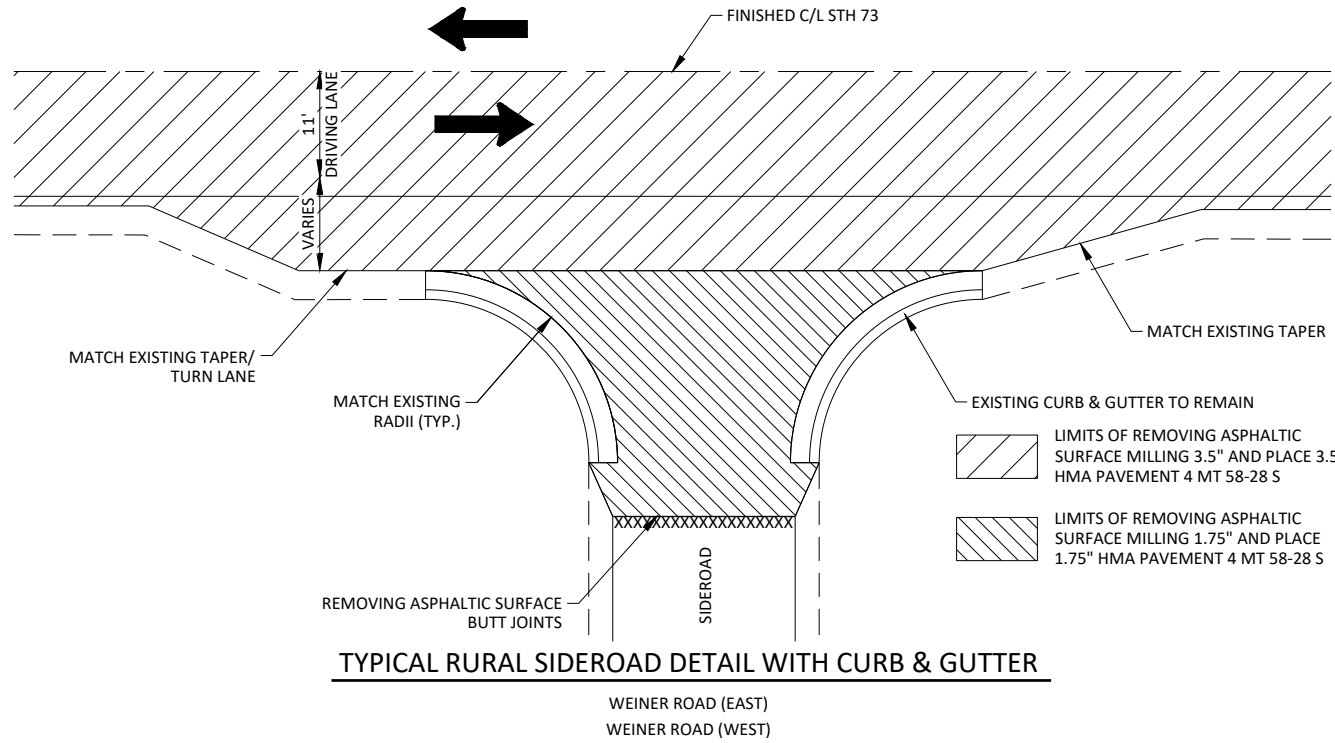
STATION	LEFT(%)	RIGHT(%)
462+17	0.0	0.0
462+50	1.1	1.1
463+00	2.8	2.8
463+04	2.9	2.9
FULL SUPERELEVATION *		
467+13	2.9	2.9
467+50	1.7	1.7
468+00	0.0	0.0

* MATCH EXISTING FLANGELINE OF EXISTING CONCRETE CURB & GUTTER STA. 463+93 - 466+69, RT.

SUPERELEVATION TABLE-CURVE 13

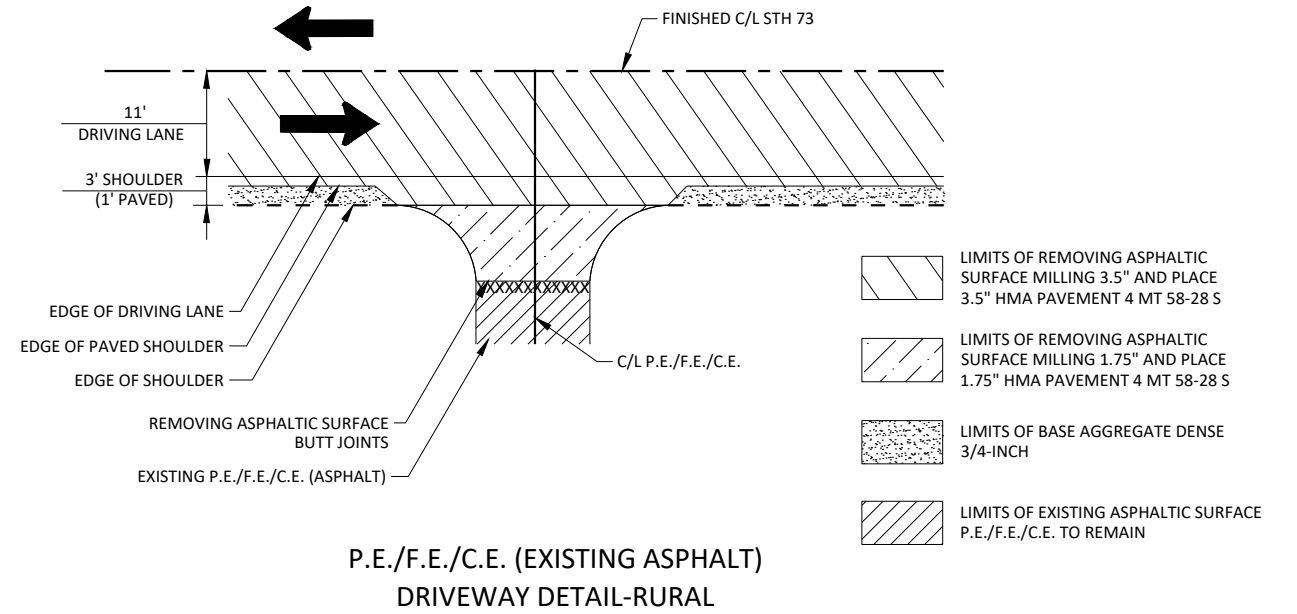
STATION	LEFT(%)	RIGHT(%)
468+00	0.0	0.0
468+50	1.7	1.7
468+69	2.3	2.3
FULL SUPERELEVATION		
471+30	2.3	2.3
471+50	2.0	1.6
472+00	2.0	0.1
472+50	2.0	1.7
472+59	2.0	2.0

NOTE: SUPERELEVATION TABLES ARE FOR INFORMATIONAL PURPOSES ONLY.

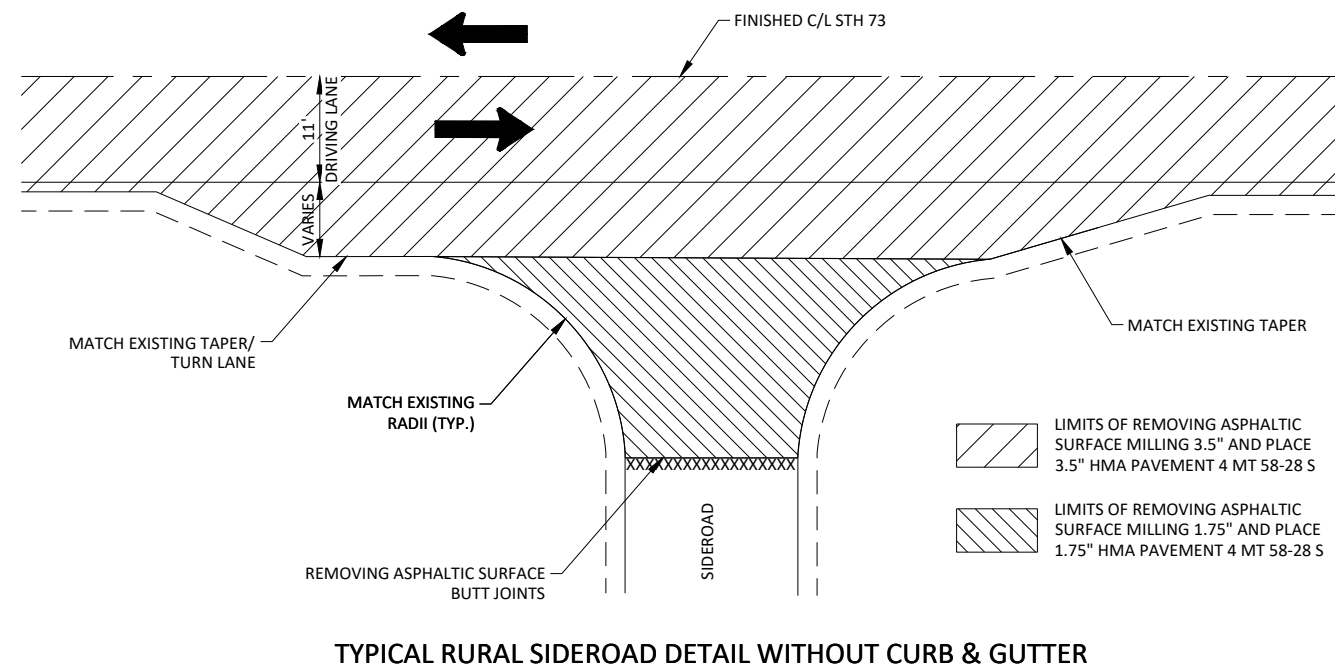


TYPICAL RURAL SIDEROAD DETAIL WITH CURB & GUTTER

WEINER ROAD (EAST)
WEINER ROAD (WEST)

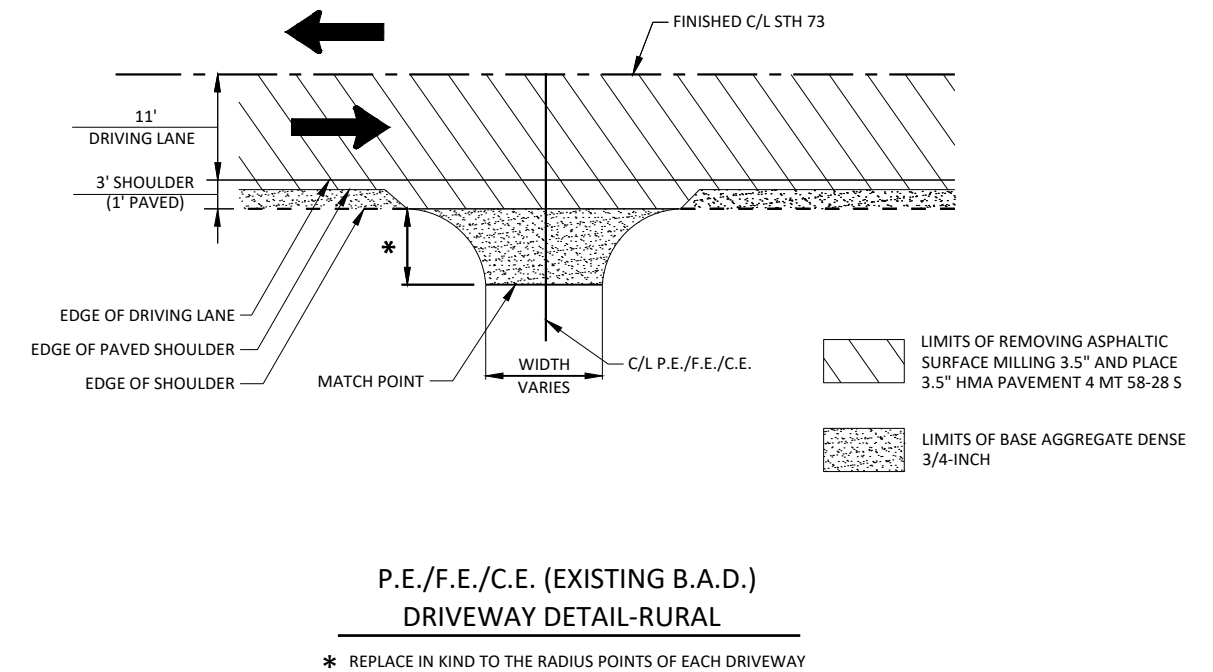


P.E./F.E./C.E. (EXISTING ASPHALT)
DRIVEWAY DETAIL-RURAL



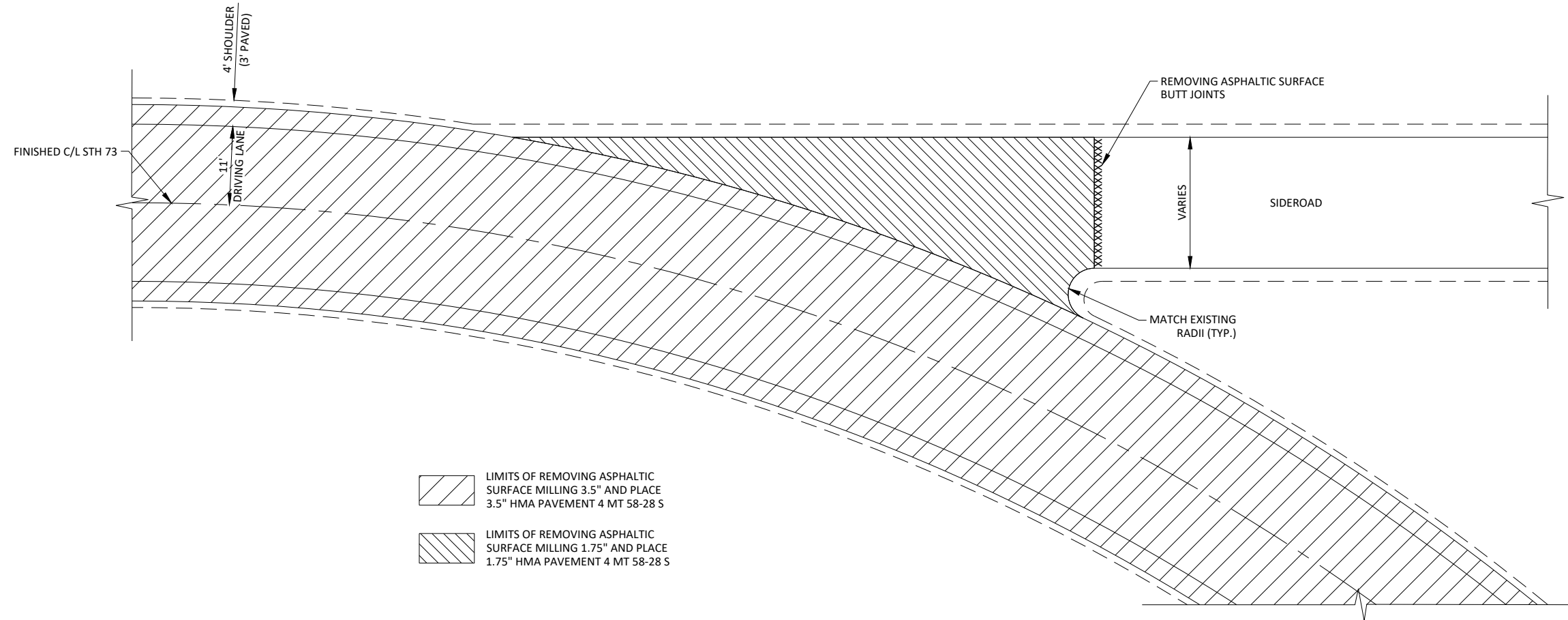
TYPICAL RURAL SIDEROAD DETAIL WITHOUT CURB & GUTTER

STOCKWELL DRIVE	MULLER ROAD (WEST)
CTH TV	MULLER ROAD (EAST)
FISCH ROAD	SPANGLER ROAD
KINDSCHI ROAD	CTH V (WEST)
YORK CENTER ROAD (WEST)	CTH V (EAST)
YORK CENTER ROAD (EAST)	STEIDTMAN ROAD



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

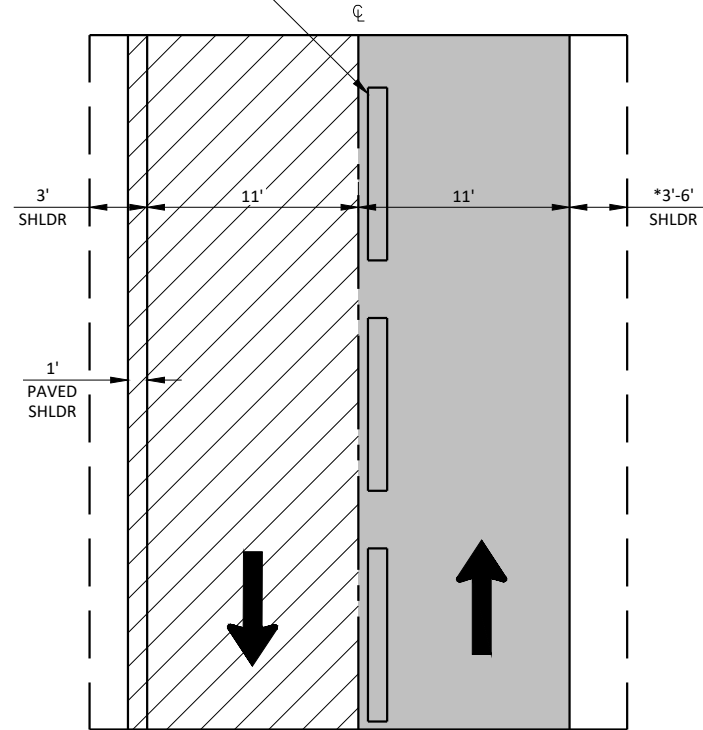
* REPLACE IN KIND TO THE RADIUS POINTS OF EACH DRIVEWAY



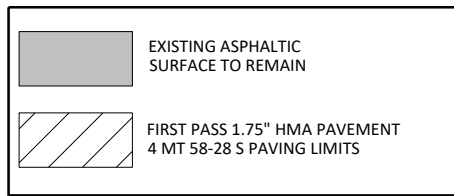
TYPICAL Y-SHAPED SIDEROAD DETAIL

- CLARKSON ROAD (WEST)
- CLARKSON ROAD (EAST)
- SUN PRAIRIE ROAD (EAST)
- MARSHALL ROAD
- CTH TT
- SUN PRAIRIE ROAD (WEST)

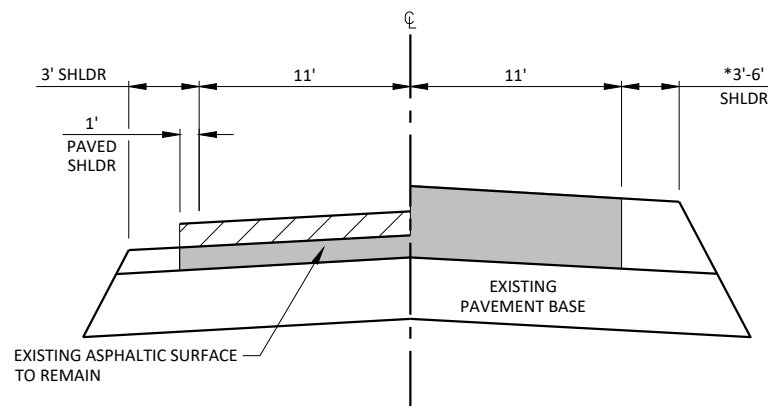
TEMPORARY MARKING LINE PAINT 4-INCH (SINGLE LINE 4' SKIPS) TO BE PLACED ON EXISTING ASPHALT SURFACE PRIOR TO MILLING FIRST LANE AND TO REMAIN FOR FIRST PASS.



PLAN VIEW



NOTES:
DOCUMENT AND MARK THE LOCATIONS OF EXISTING MARKING LINE PASSING ZONES PRIOR TO MILLING OPERATION.
PLACE "NO PASSING ZONE (R4-1, 24"x30")", "UNEVEN LANES" (W8-11, 36"x36")", "LOW SHOULDER" (W8-9, 36"x36")", OR "SHOULDER DROPOFF" (W8-9A, 36"x36") EVERY 2 MILES ALONG THE PROJECT LENGTH.
REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION

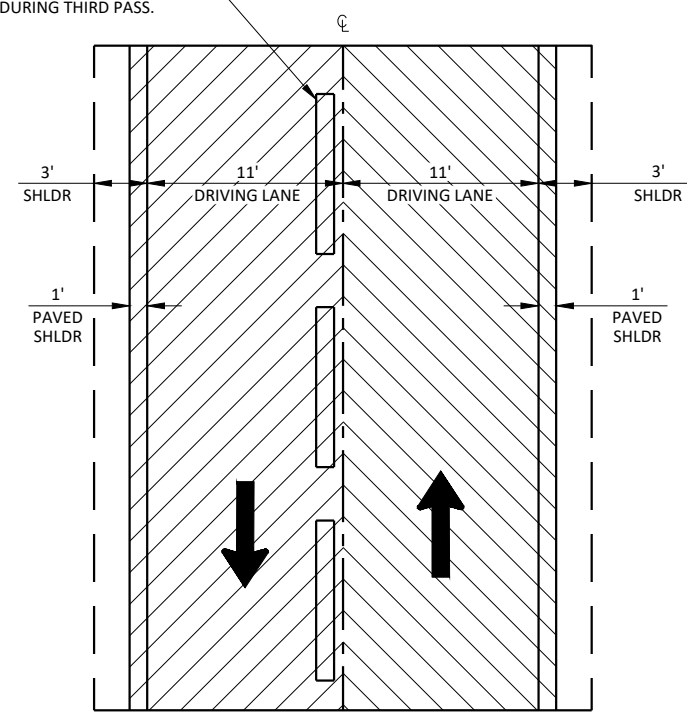


CROSS SECTION VIEW

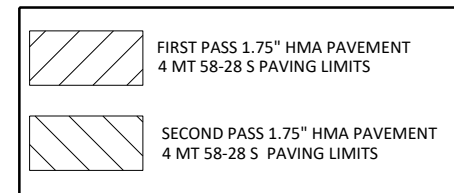
FIRST PASS DETAIL

*NOTE: 6' SHOULDER (3' PAVED)
STA. 457+73 - STA. 457+85, LT. &
STA. 457+85 - STA. 484+05

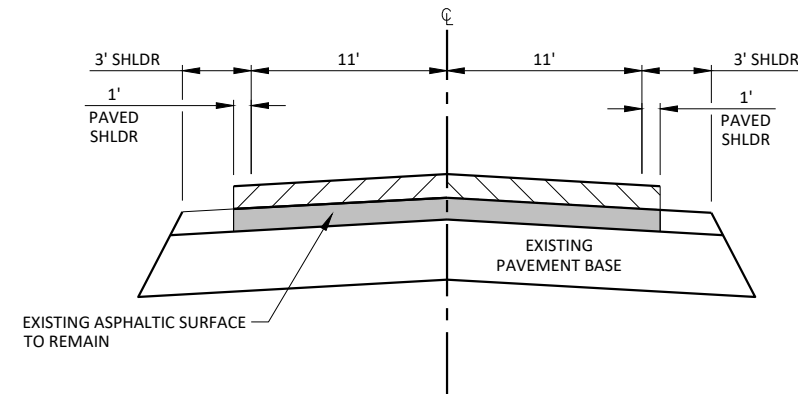
TEMPORARY MARKING LINE PAINT 4-INCH (SINGLE LINE 4' SKIPS) PLACED AFTER FIRST PASS PRIOR TO MILLING SECOND LANE AND TO REMAIN FOR SECOND AND THIRD PASS. PLACE PAINT SO AS NOT TO BE COVERED UP BY PAVING NOTCH DURING THIRD PASS.



PLAN VIEW



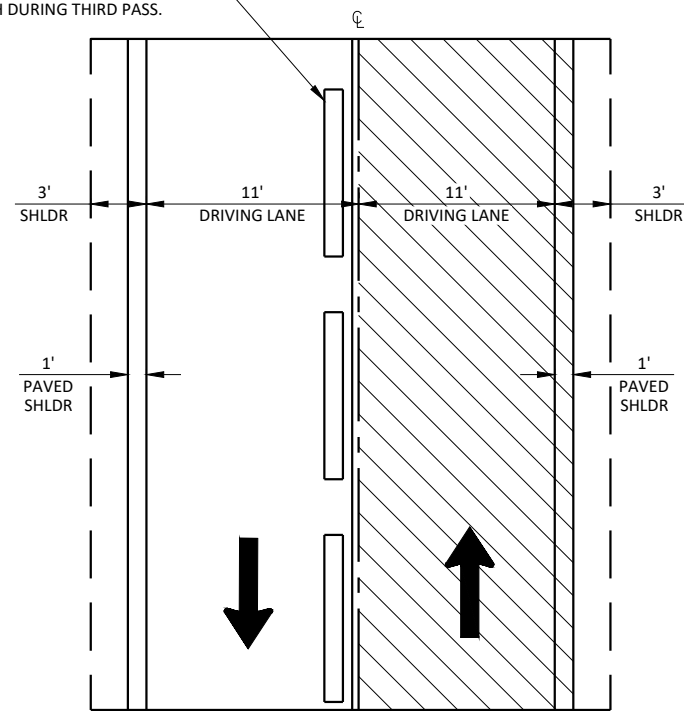
NOTES:
DOCUMENT AND MARK THE LOCATIONS OF EXISTING MARKING LINE PASSING ZONES PRIOR TO MILLING OPERATION.
PLACE "NO PASSING ZONE (R4-1, 24"x30")", "UNEVEN LANES" (W8-11, 36"x36")", "LOW SHOULDER" (W8-9, 36"x36")", OR "SHOULDER DROPOFF" (W8-9A, 36"x36") EVERY 2 MILES ALONG THE PROJECT LENGTH.
REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION



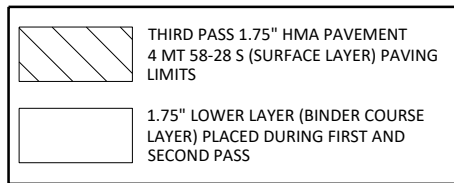
CROSS SECTION VIEW

SECOND PASS DETAIL

TEMPORARY MARKING LINE PAINT 4-INCH (SINGLE LINE 4' SKIPS) PLACED AFTER FIRST PASS PRIOR TO MILLING SECOND LANE AND TO REMAIN FOR SECOND AND THIRD PASS. PLACE PAINT SO AS NOT TO BE COVERED UP BY PAVING NOTCH DURING THIRD PASS.

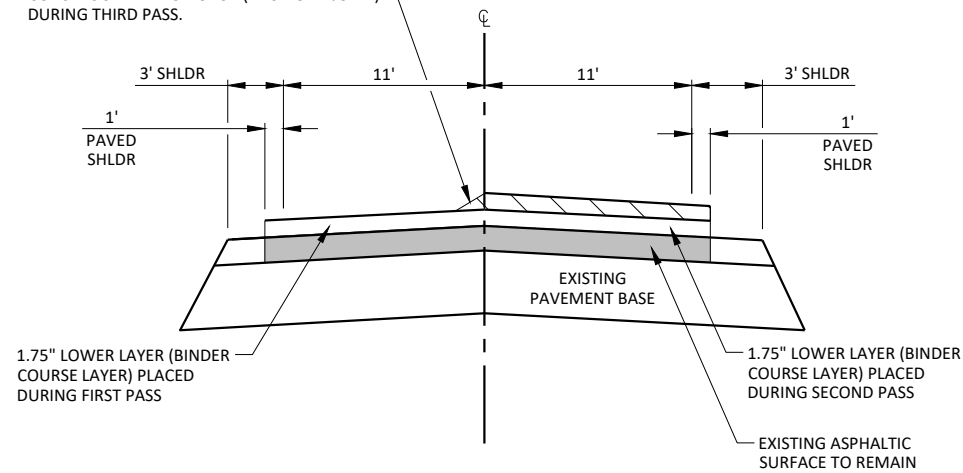


PLAN VIEW



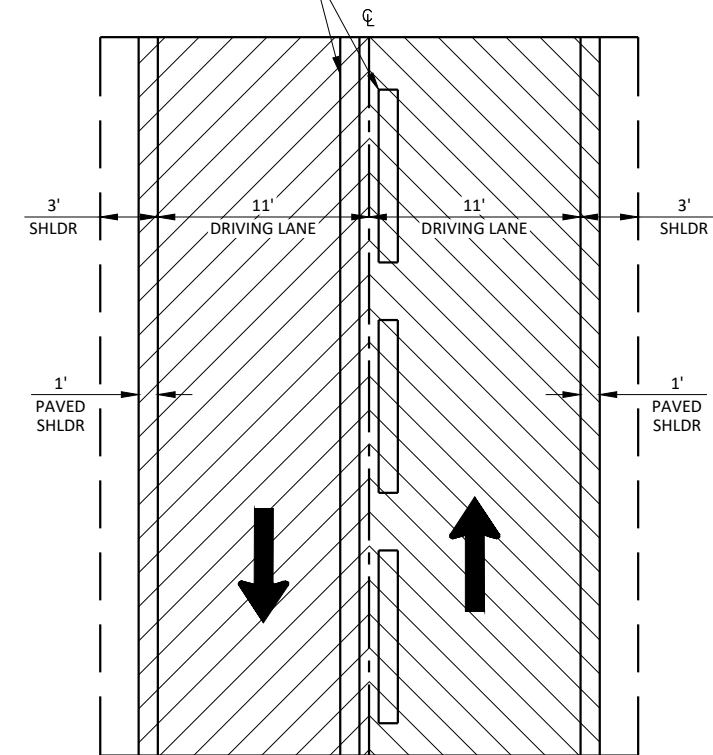
NOTES:
DOCUMENT AND MARK THE LOCATIONS OF EXISTING MARKING LINE PASSING ZONES PRIOR TO MILLING OPERATION.
PLACE "NO PASSING ZONE (R4-1, 24"x30")", "UNEVEN LANES" (W8-11, 36"x36")", "LOW SHOULDER" (W8-9, 36"x36")", OR "SHOULDER DROPOFF" (W8-9A, 36"x36") EVERY 2 MILES ALONG THE PROJECT LENGTH.
REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION

CONSTRUCT PAVING NOTCH (MICHIGAN JOINT) DURING THIRD PASS.

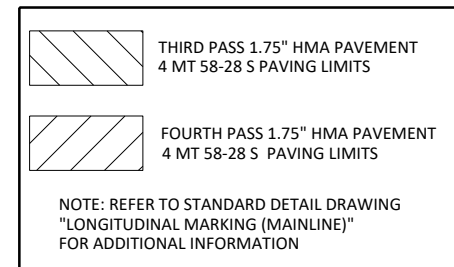


CROSS SECTION VIEW
THIRD PASS DETAIL

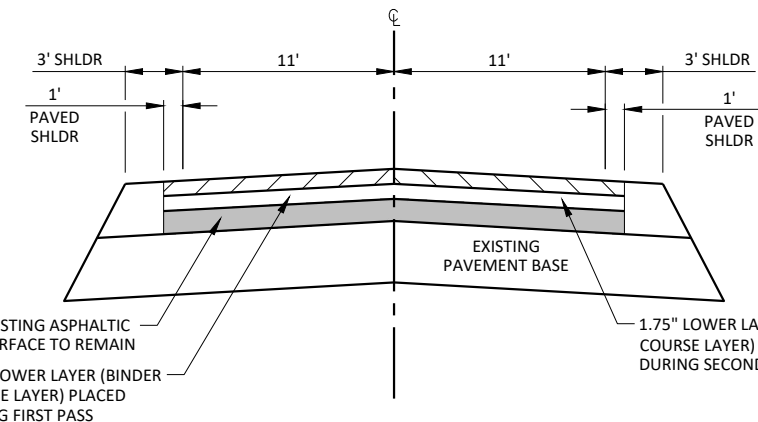
MARKING LINE SAME DAY EPOXY 4-INCH TO BE PLACED SAME DAY AS FOURTH PAVING PASS OPERATION



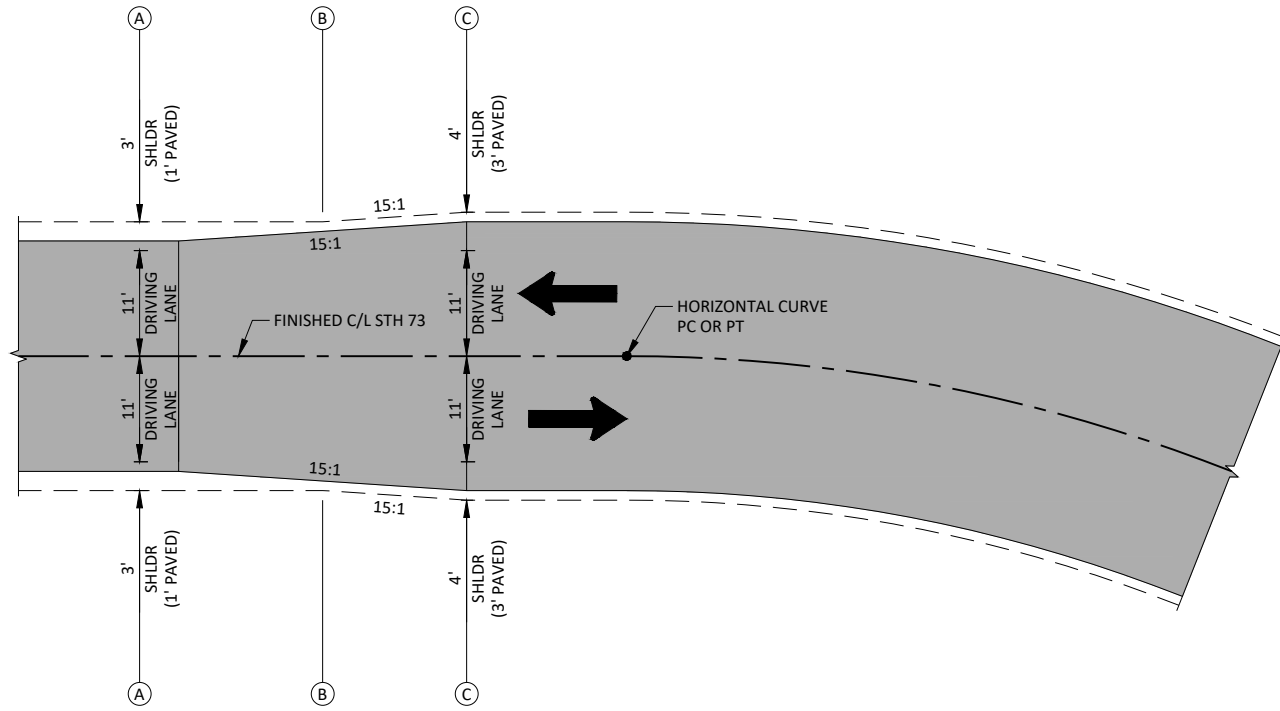
PLAN VIEW



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

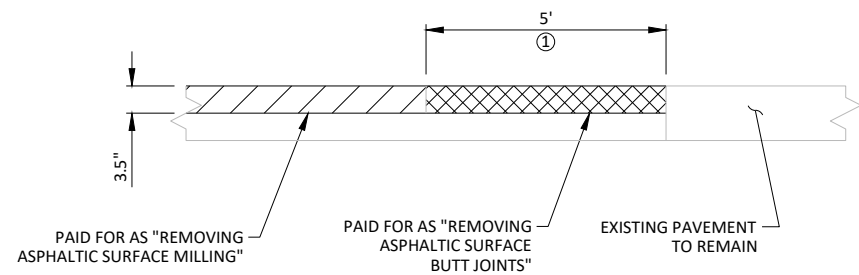


CROSS SECTION VIEW
FOURTH PASS DETAIL



**PLAN VIEW
SHOULDER WIDENING LAYOUT DETAIL**

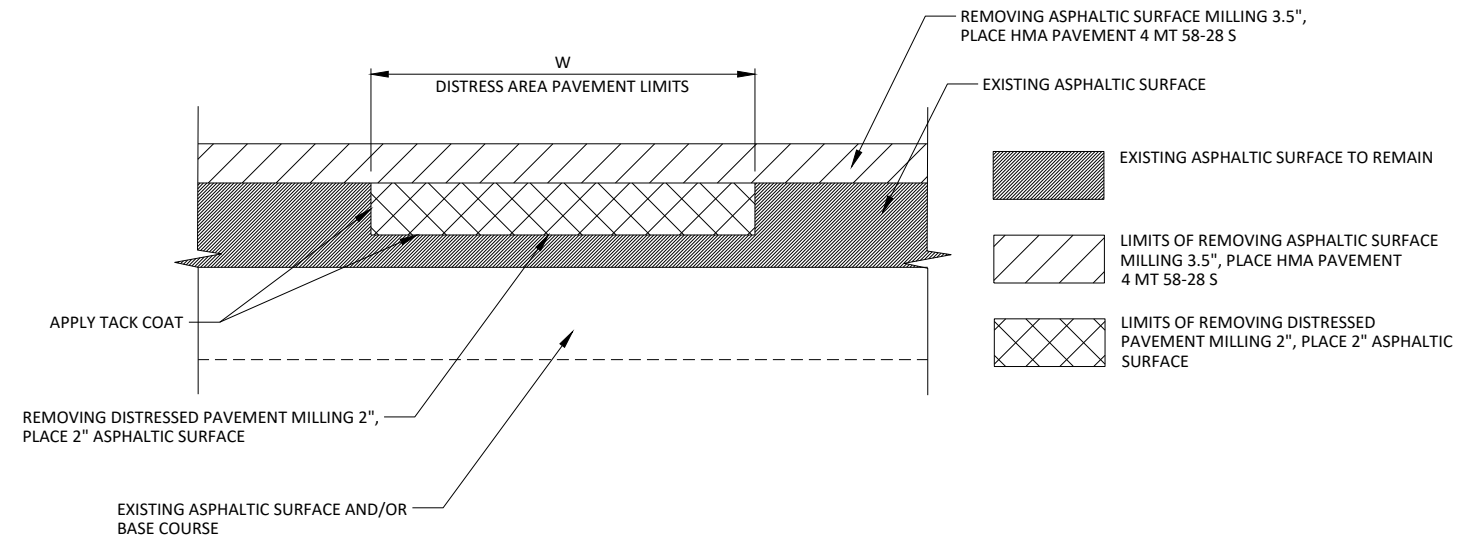
STATION		
(A)	(B)	(C)
43+01	43+16	43+31
51+60	51+45	51+30
66+32	66+47	66+62
79+10	78+95	78+80
171+42	171+57	171+72
180+32	180+17	180+02
222+93	223+08	223+23
231+62	231+47	231+32



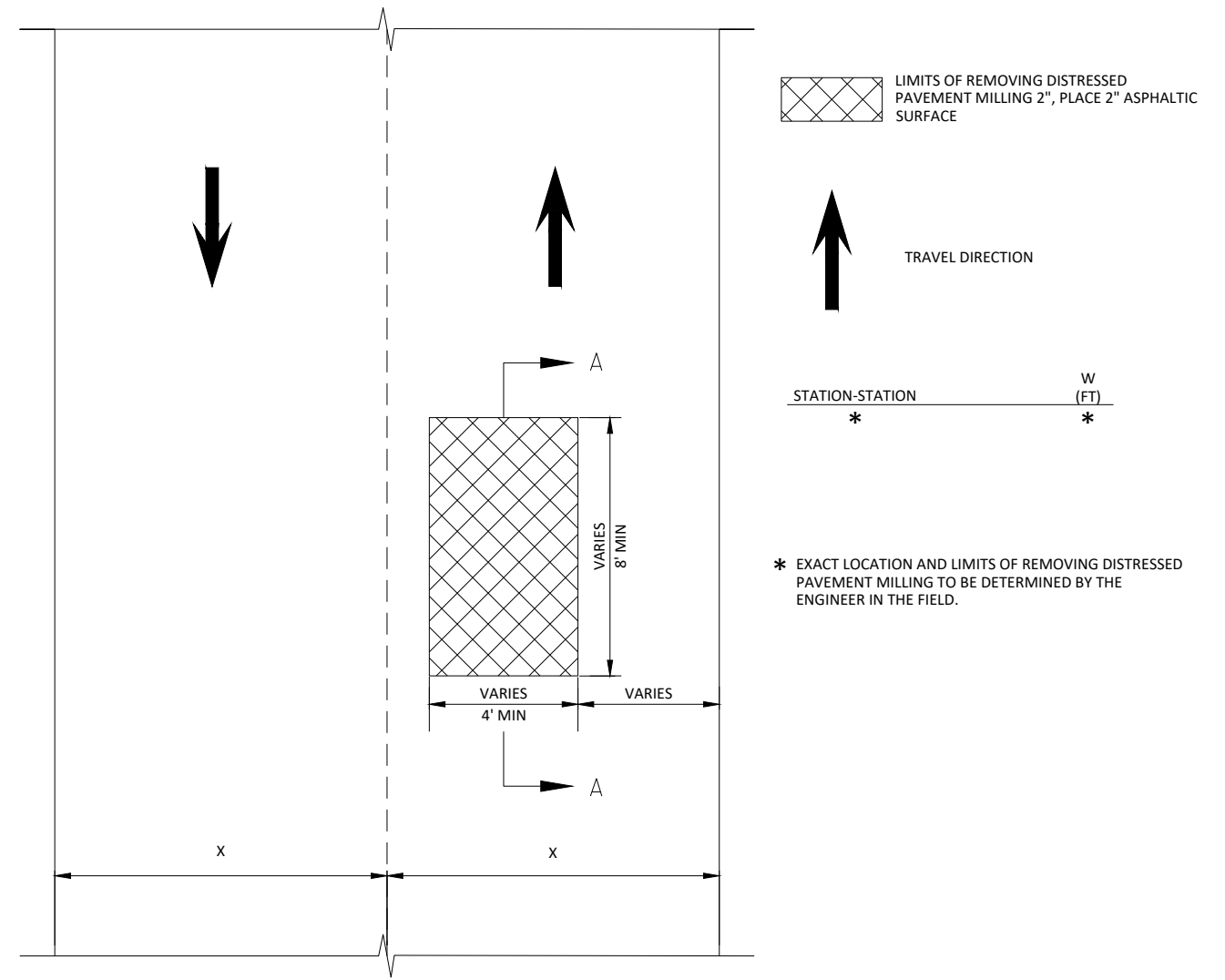
REMOVING ASPHALTIC SURFACE BUTT JOINTS DETAIL

- | | |
|-----------------------|------------------------------|
| STA. 10+00 | KINDSHI RD |
| CLARKSON RD (WEST) | YORK CENTER RD (EAST & WEST) |
| STOCKWELL DRIVE | MULLER RD (EAST & WEST) |
| CLARKSON RD (EAST) | SPANGLER LN |
| CTH TV | CTH V (EAST & WEST) |
| FISCH RD | STEIDTMAN RD |
| MARSHALL RD | WEINER RD (EAST) |
| SUN PRAIRIE RD (EAST) | WEINER RD (WEST) |
| SUN PRAIRIE RD (WEST) | STA. 507+39.81 |
| CTH TT | |

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



**REMOVING DISTRESS PAVEMENT MILLING
SECTION A-A**



PLAN VIEW

LEGEND

--- DETOUR ROUTE
 [Hatched Box] WORK ZONE
 [T Sign] SIGN ON PERMANENT SUPPORT

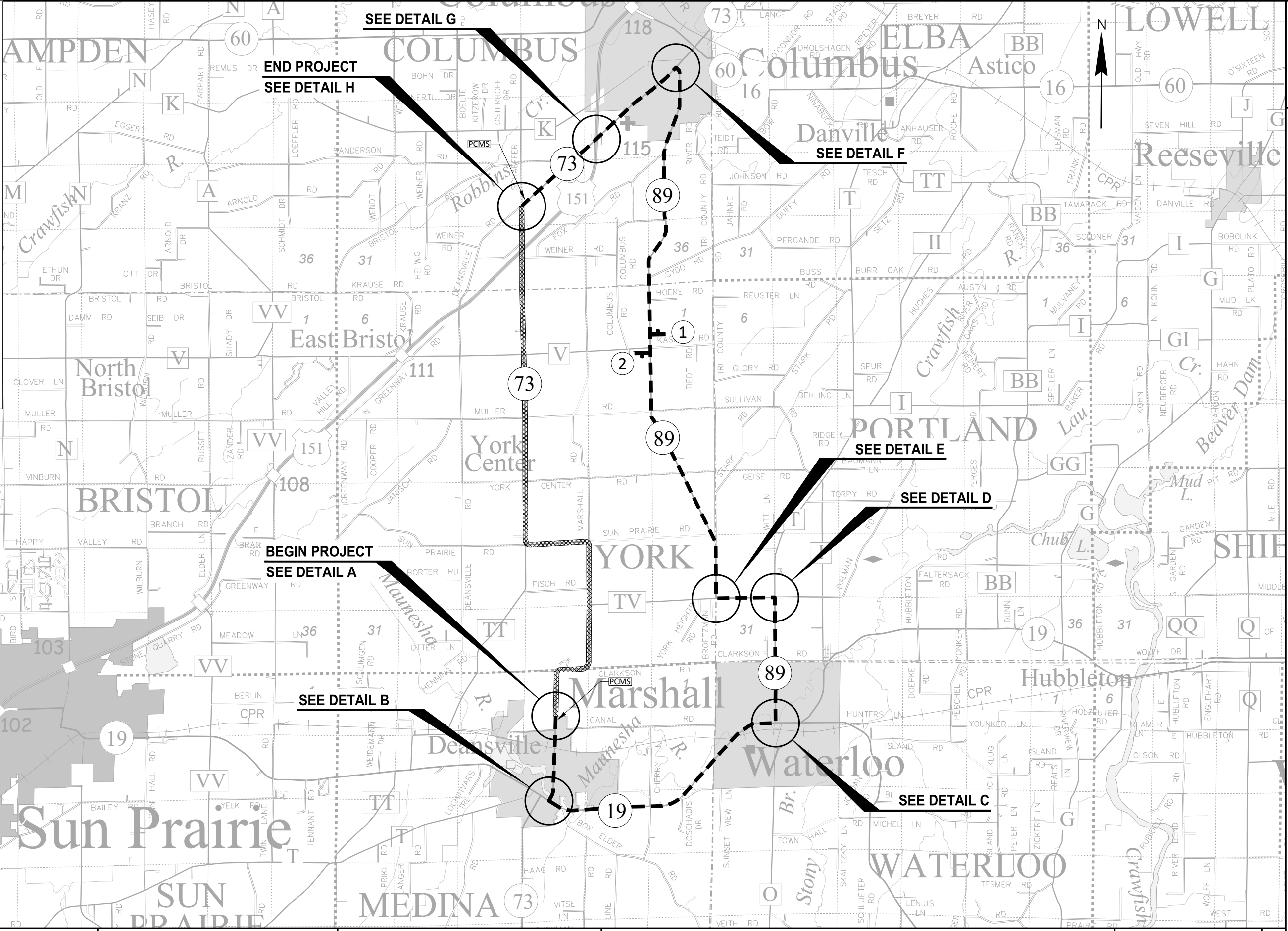
DETOUR NORTH M4-8 24"X12"	DETOUR SOUTH M4-8 24"X12"
73 M3-1 24"X12"	73 M3-3 24"X12"
73 M1-6 24"X24"	73 M1-6 24"X24"

① ②

PCMS TRAFFIC CONTROL SIGNS PCMS PLACED AT BEGIN AND END OF PROJECT FOR 7 CALENDAR DAYS PRIOR TO BEGINNING OF PROJECT

HWY 73 (DAY) CLOSED (DATE) BEGINS

NOTE: FOR SIDEROAD SIGNING WITHIN THE WORK ZONE, REFER TO SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES.



LEGEND

(A)		M1-6 24"x24"	SIGN ON PERMANENT SUPPORT	
(B)		M06-1 21"x21"	EXISTING SIGN ON SINGLE POST	
(C)		M06-1 21"x21"	EXISTING SIGN ON DOUBLE POST	
(D)		M06-1 21"x21"	TYPE III BARRICADE W/ ATTACHED SIGN AND W/ TRAFFIC CONTROL LIGHTS TYPE A	
(E)		M06-1 21"x21"	BARRICADES TYPE III	
(F)		M05-1R 21"x21"	* SIGN READS "ROAD CLOSED 1/4 MILES AHEAD"	
(G)		M05-1L 21"x21"	** SIGN READS "ROAD CLOSED 1 1/2 MILES AHEAD"	
(H)		M05-1L 21"x21"	*** SIGN READS "ROAD CLOSED 3 MILES AHEAD"	
(I)		M4-8A 24"x18"	WORK ZONE	
(J)		M4-8 24"x12"	COVER SIGN	
(K)		M4-8 24"x12"	DETOUR ROUTE	

GENERAL NOTES:

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

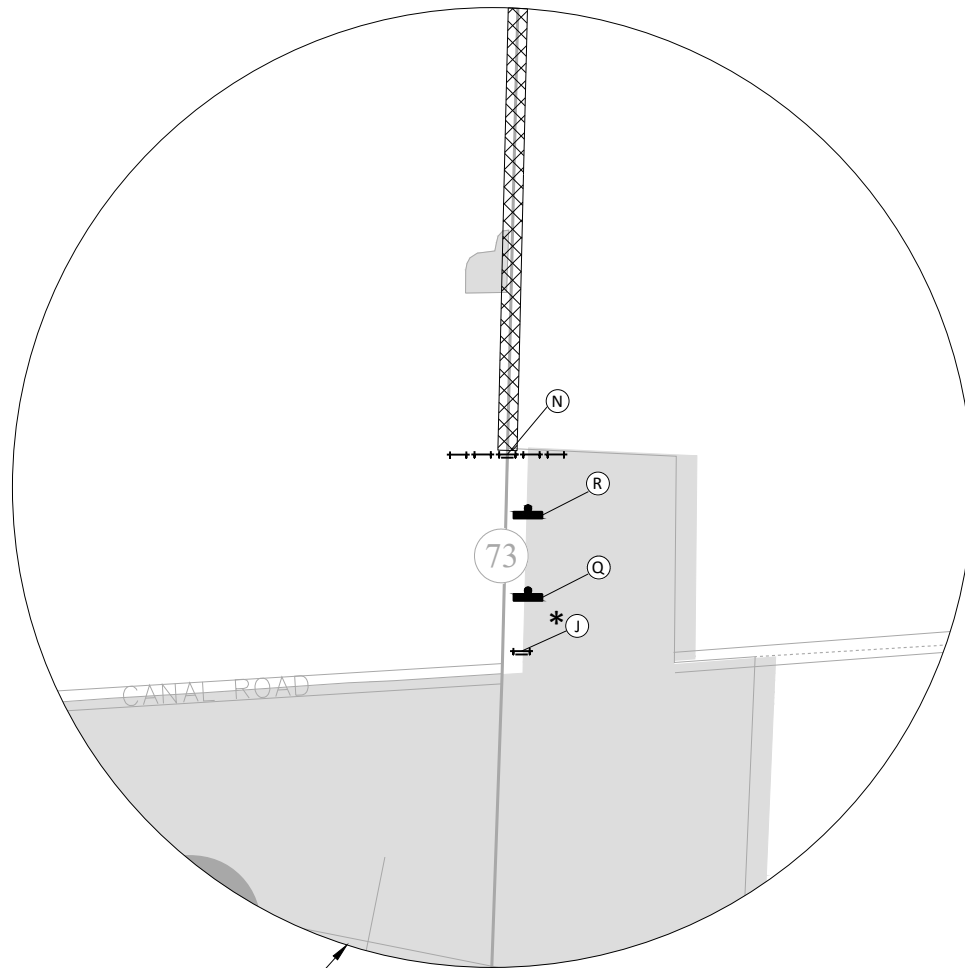
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

"WO" AND "MO" SERIES SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

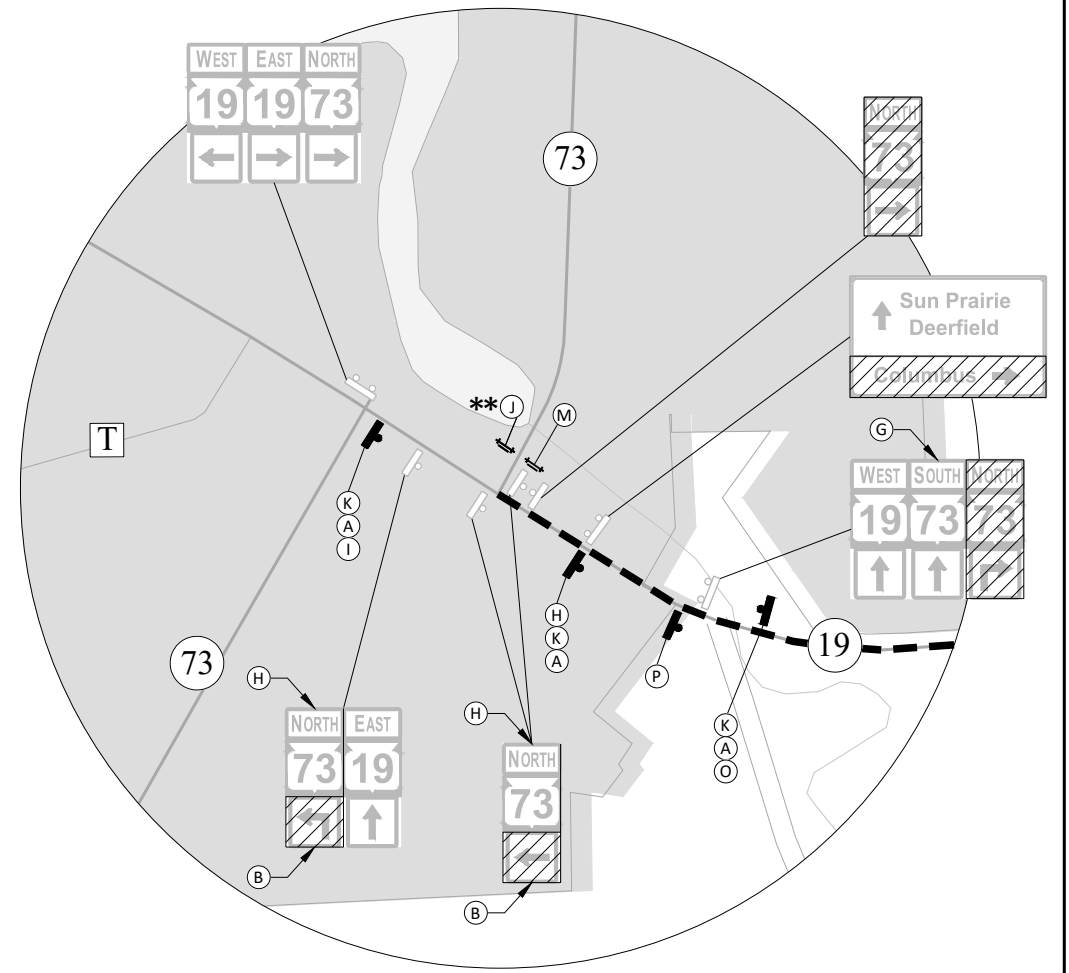
THE EXACT LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

BEGIN PROJECT



SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES
DETAIL A

MARSHALL



DETAIL B

LEGEND

(A)		SIGN ON PERMANENT SUPPORT	
(B)		EXISTING SIGN ON SINGLE POST	
(C)		EXISTING SIGN ON DOUBLE POST	
(D)		TYPE III BARRICADE W/ ATTACHED SIGN AND W/ TRAFFIC CONTROL LIGHTS TYPE A	
(E)		BARRICADES TYPE III	
(F)		* SIGN READS "ROAD CLOSED 1/4 MILES AHEAD"	
(G)		** SIGN READS "ROAD CLOSED 1 1/2 MILES AHEAD"	
(H)		*** SIGN READS "ROAD CLOSED 3 MILES AHEAD"	
(I)		WORK ZONE	
(J)		COVER SIGN	
(K)		DETOUR ROUTE	

GENERAL NOTES:

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

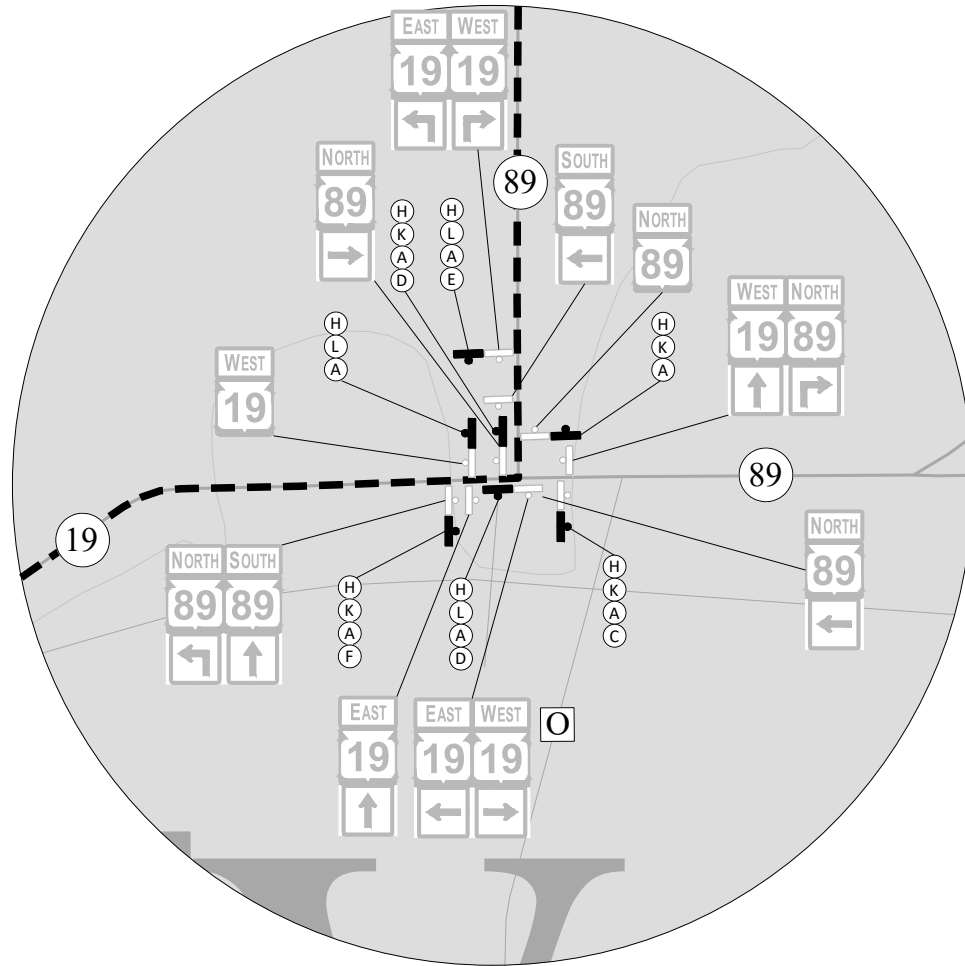
"WO" AND "MO" SERIES SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

THE EXACT LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

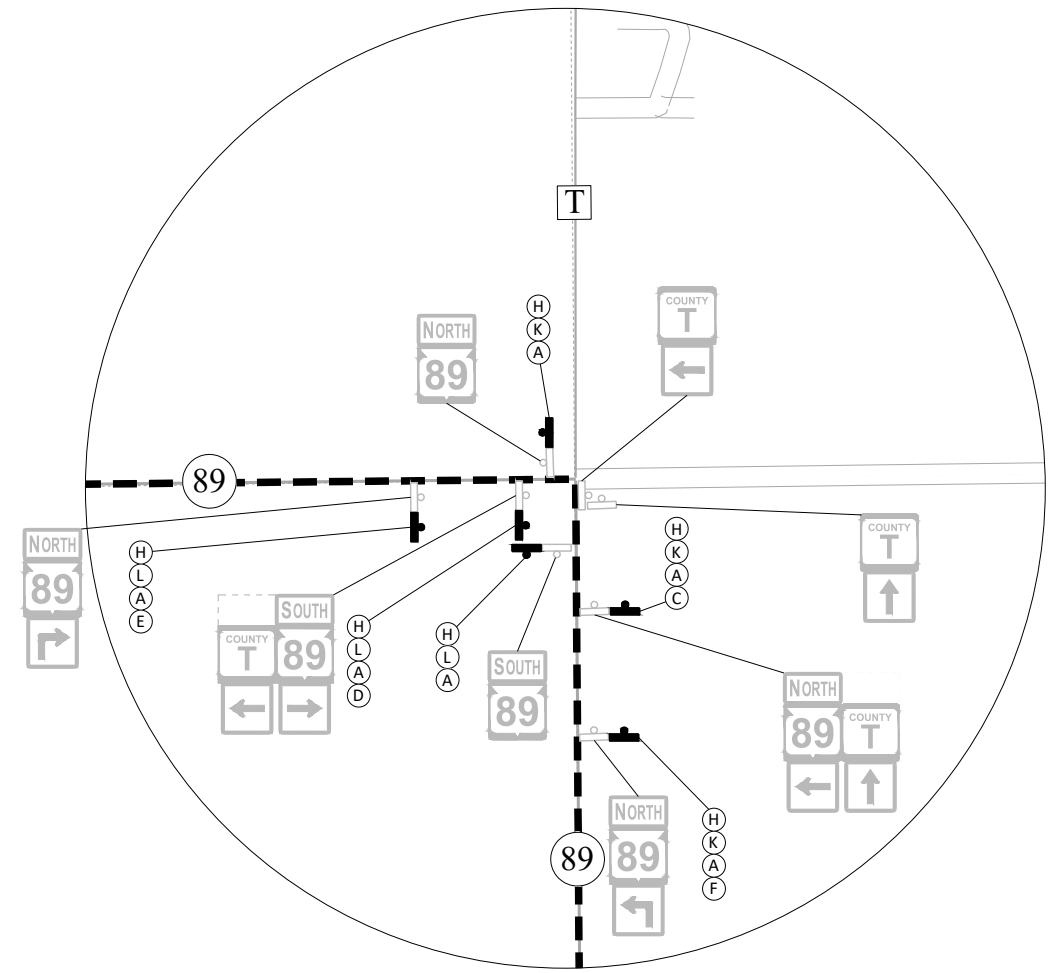
(L)		(Q)	
(M)		(R)	
(N)			
(O)			
(P)			

WATERLOO



DETAIL C

CTH T INTERSECTION



DETAIL D



LEGEND

(A)		SIGN ON PERMANENT SUPPORT	
(B)		EXISTING SIGN ON SINGLE POST	
(C)		EXISTING SIGN ON DOUBLE POST	
(D)		TYPE III BARRICADE W/ ATTACHED SIGN AND W/ TRAFFIC CONTROL LIGHTS TYPE A	
(E)		BARRICADES TYPE III	
(F)		* SIGN READS "ROAD CLOSED 1/4 MILES AHEAD"	
(G)		** SIGN READS "ROAD CLOSED 1 1/2 MILES AHEAD"	
(H)		*** SIGN READS "ROAD CLOSED 3 MILES AHEAD"	
(I)		WORK ZONE	
(J)		COVER SIGN	
(K)		DETOUR ROUTE	

GENERAL NOTES:

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

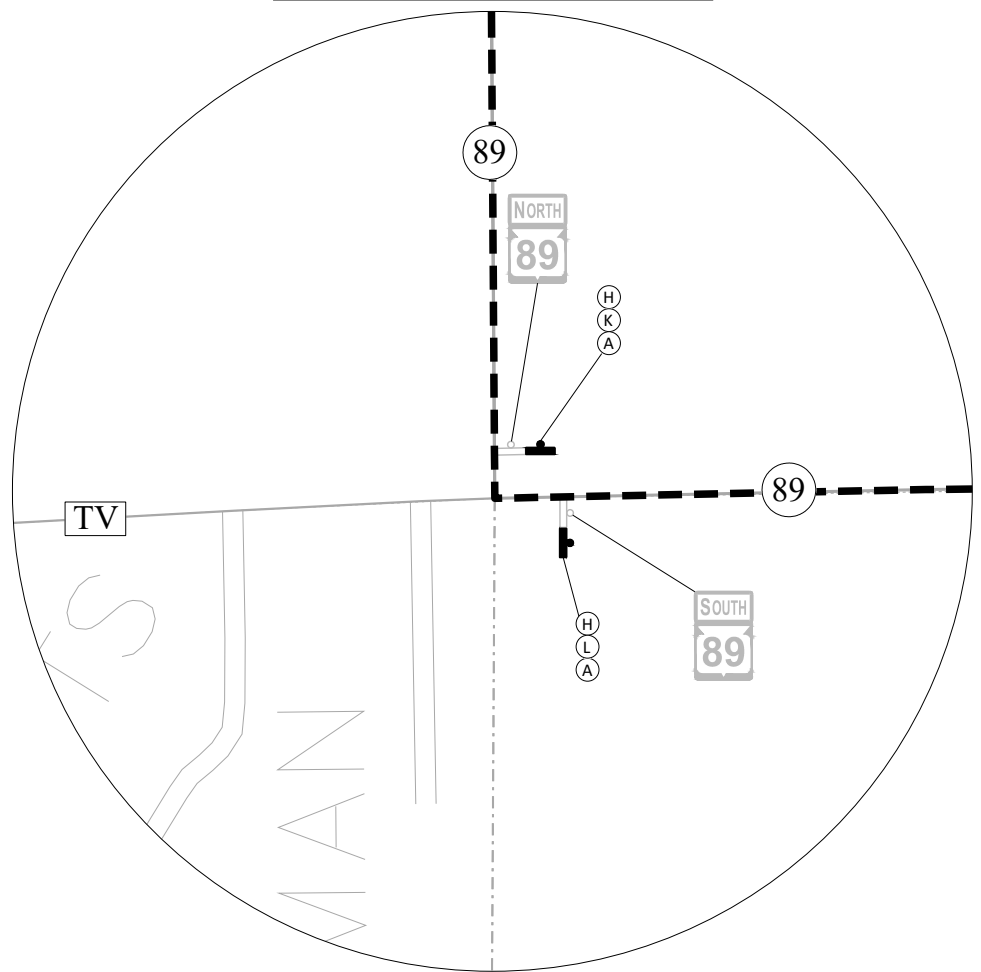
"WO" AND "MO" SERIES SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

THE EXACT LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

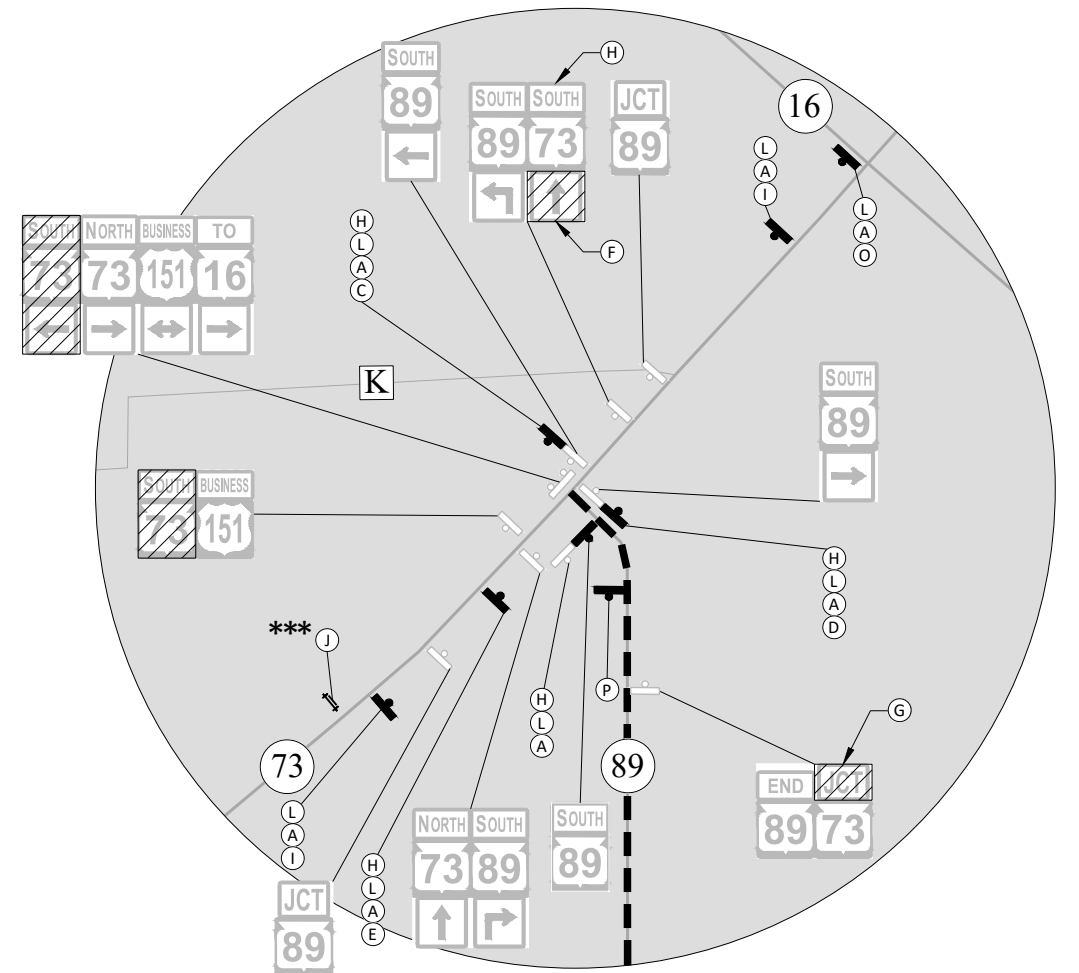
(L)		
(M)		
(N)		
(O)		
(P)		
(Q)		
(R)		

CTH TV INTERSECTION



DETAIL E

COLUMBUS



DETAIL F



LEGEND

- (A) SIGN ON PERMANENT SUPPORT
- (B) EXISTING SIGN ON SINGLE POST
- (C) EXISTING SIGN ON DOUBLE POST
- (D) TYPE III BARRICADE W/ ATTACHED SIGN AND W/ TRAFFIC CONTROL LIGHTS TYPE A
- (E) BARRICADES TYPE III
- (F) * SIGN READS "ROAD CLOSED 1/4 MILES AHEAD"
- (G) ** SIGN READS "ROAD CLOSED 1 1/2 MILES AHEAD"
- (H) *** SIGN READS "ROAD CLOSED 3 MILES AHEAD"
- (I) WORK ZONE
- (J) COVER SIGN
- (K) DETOUR ROUTE

GENERAL NOTES:

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

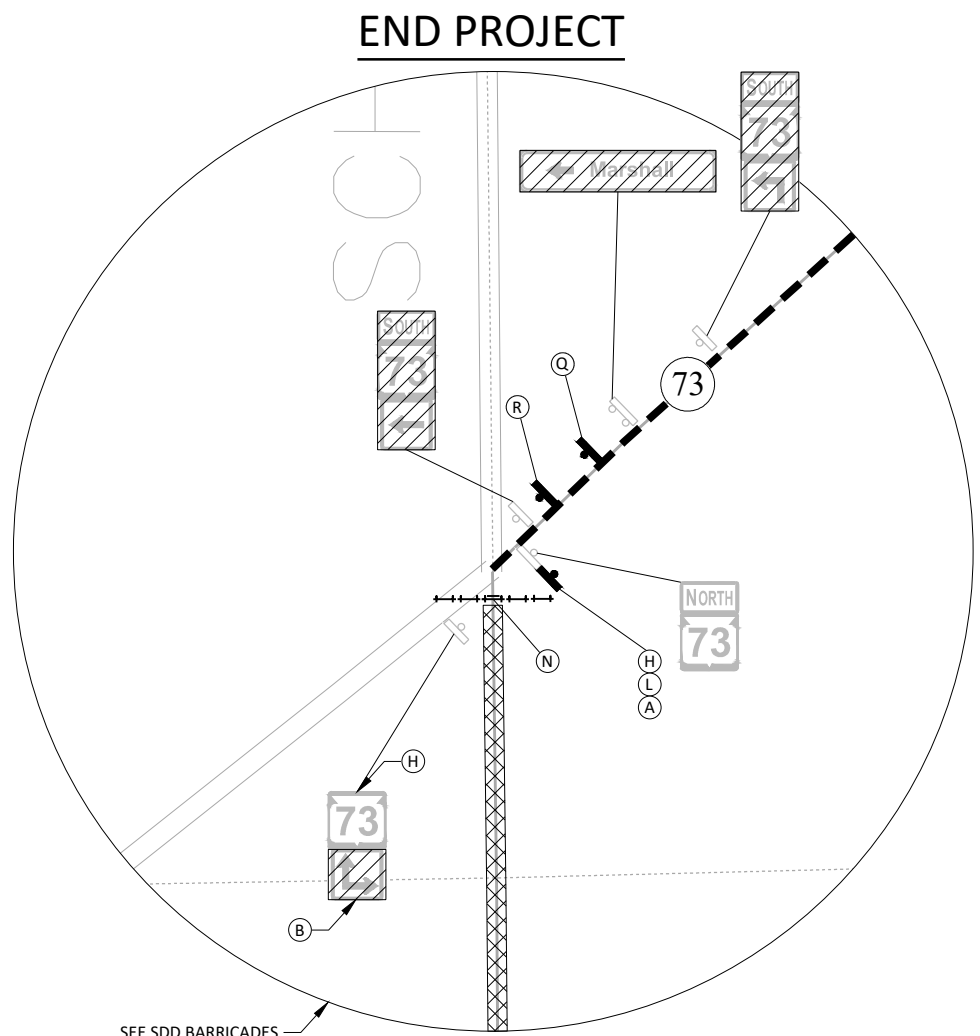
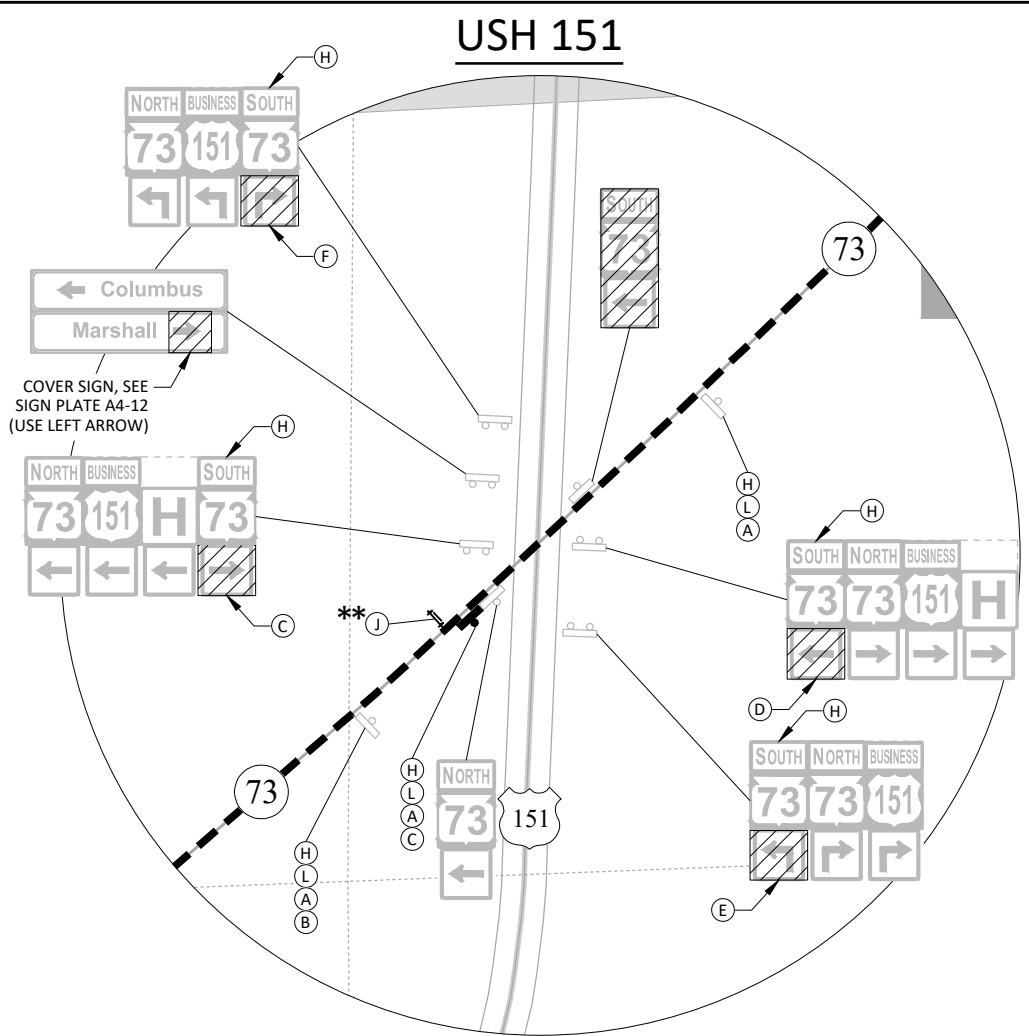
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

"WO" AND "MO" SERIES SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

THE EXACT LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

- (L) DETOUR AHEAD
- (M) ROAD CLOSED TO THRU TRAFFIC XX MILES AHEAD
- (N) NORTH
- (O) SOUTH
- (P) DETOUR
- (Q) ROAD CLOSED TO THRU TRAFFIC
- (R) ROAD CLOSED AHEAD
- (S) ROAD CLOSED 1000 FT
- (T) ROAD CLOSED 500 FT
- (U) DETOUR NEXT 16 MILES



STA. 20+32, LT.
EXISTING P.E. (ASPHALT)

STA. 28+84, LT.
EXISTING P.E. (ASPHALT)

STA. 33+11, LT.
EXISTING P.E. (B.A.D.)

STA. 33+66, LT.
EXISTING P.E. (ASPHALT)

STA. 35+14, LT.
EXISTING P.E. (B.A.D.)

STA. 37+14, LT.
EXISTING P.E. (ASPHALT)

PI STA. = 12+82.12
Y = 523,772.85
X = 907,889.52

PI STA. = 25+27.16
Y = 525,017.55
X = 907,917.84

PI STA. = 39+80.68
Y = 526,470.69
X = 907,950.97

PI STA. = 14+96.10
Y = 523,986.83
X = 907,891.41

PI STA. = 33+07.41
Y = 525,797.55
X = 907,937.63

STA. 20+75, RT.
EXISTING F.E. (B.A.D.)

STA. 32+36, RT.
EXISTING P.E. (B.A.D.)

PI STA. = 54+00.14
Y = 527,305.42
X = 908,706.22

STA. 60+98, LT.
EXISTING P.E. (ASPHALT)

PI STA. = 59+01.98
Y = 527,332.43
X = 909,207.33

PI STA. = 62+05.33
Y = 527,346.24
X = 909,510.37

STA. 66+32 - STA. 79+10
SEE SHOULDER WIDENING LAYOUT DETAIL.
SEE TYPICAL Y-SHAPED SIDEROAD DETAIL.

CURVE 1 DATA
PI STA. = 43+67.68
Y = 526,857.66
X = 907,955.04
R = 2500.00
D = 2°17'31"
DELTA = 3°44'42"
L = 163.40
T = 81.73
C = 163.37
PC STA. = 42+85.95
Y = 526,775.94
X = 907,954.18
PT STA. = 44+49.35
Y = 526,939.16
X = 907,961.24
S.E. = N.C.
R.O. = N/A
TRANS = N/A

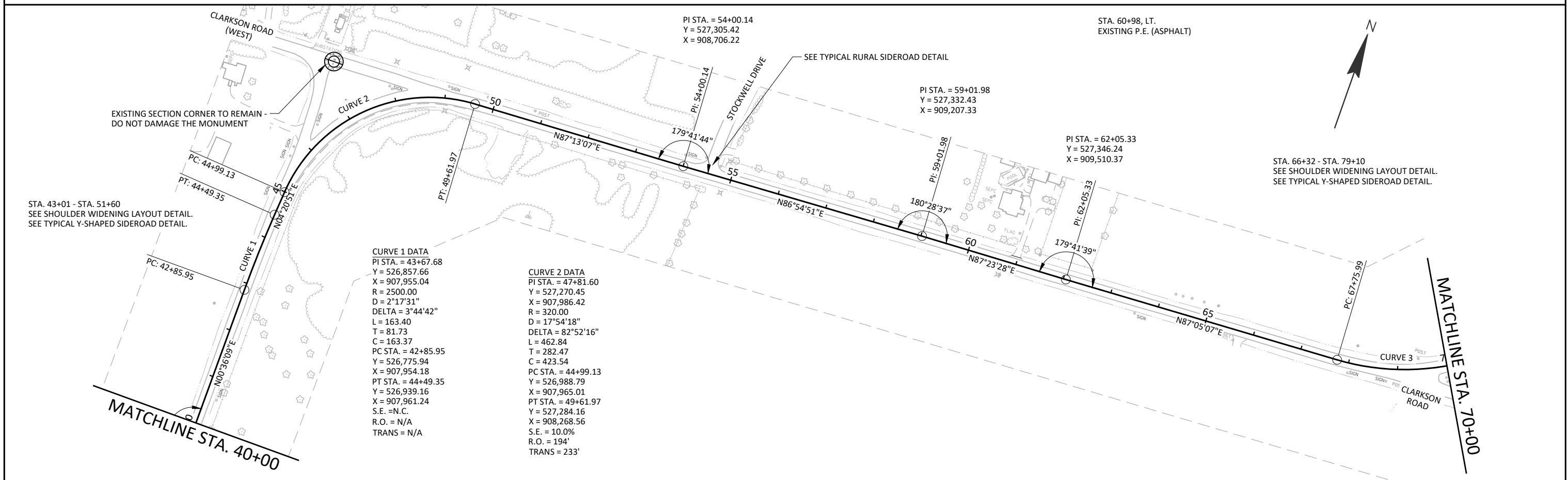
CURVE 2 DATA
PI STA. = 47+81.60
Y = 527,270.45
X = 907,986.42
R = 320.00
D = 17°54'18"
DELTA = 82°52'16"
L = 462.84
T = 282.47
C = 423.54
PC STA. = 44+99.13
Y = 526,988.79
X = 907,965.01
PT STA. = 49+61.97
Y = 527,284.16
X = 908,268.56
S.E. = 10.0%
R.O. = 194'
TRANS = 233'

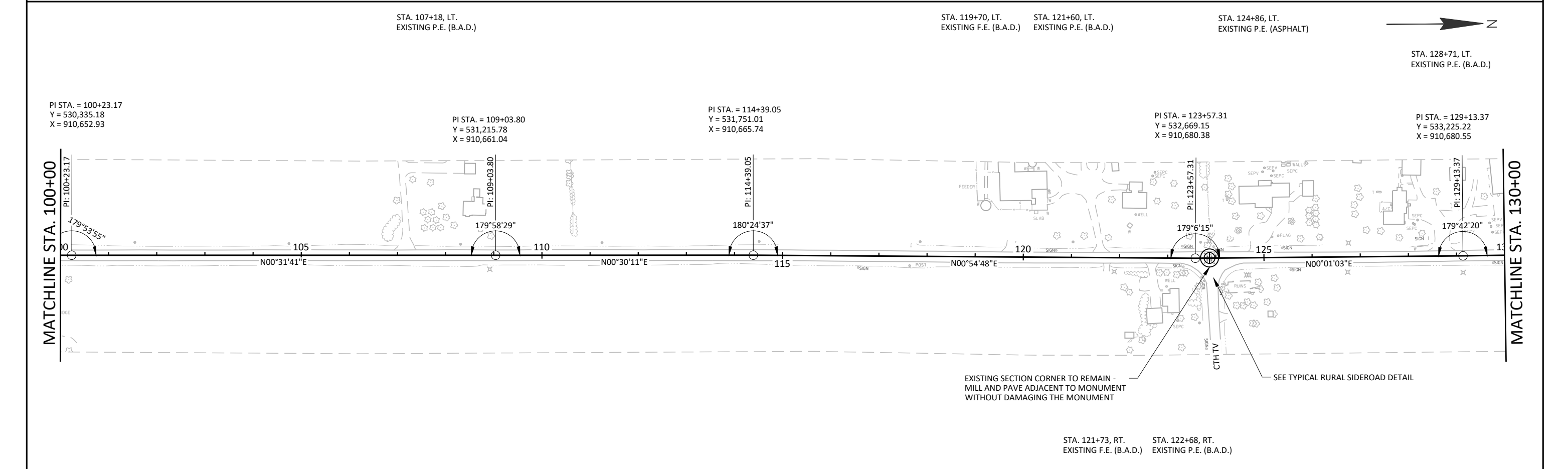
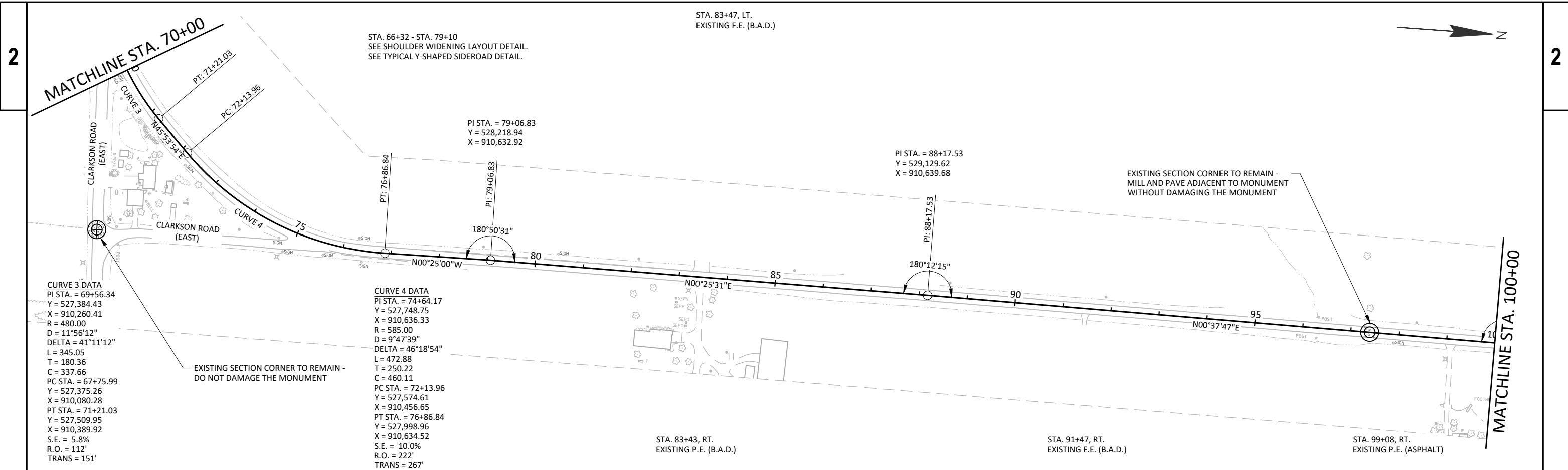
MATCHLINE STA. 40+00

MATCHLINE STA. 70+00

BEGIN PROJECT
STA. 10+00.00
Y=523,490.83
X=907,881.97

MATCHLINE STA. 40+00





PROJECT NO: 3060-03-70

HWY: STH 73

COUNTY: DANE

PLAN DETAILS

SHEET

E

STA. 145+58, LT.
EXISTING P.E. (B.A.D.)

STA. 150+32, LT.
EXISTING F.E. (B.A.D.)



PI STA. = 136+46.46
Y = 533,958.29
X = 910,677.01

PI STA. = 143+05.51
Y = 534,617.34
X = 910,673.66

PI STA. = 150+66.42
Y = 535,378.20
X = 910,665.93

PI STA. = 159+73.17
Y = 536,284.95
X = 910,664.00

SEE TYPICAL RURAL SIDEROAD DETAIL

MATCHLINE STA. 130+00

MATCHLINE STA. 160+00

EXISTING SECTION CORNER TO REMAIN -
MILL AND PAVE ADJACENT TO MONUMENT
WITHOUT DAMAGING THE MONUMENT

STA. 145+57, RT.
EXISTING F.E. (B.A.D.)

STA. 168+42, LT.
EXISTING P.E. (B.A.D.)



MATCHLINE STA. 180+00

PI STA. = 163+04.94
Y = 536,616.72
X = 910,662.50

PI STA. = 167+15.77
Y = 537,027.55
X = 910,663.57

STA. 171+42 - STA. 180+32
SEE SHOULDER WIDENING LAYOUT DETAIL.
SEE TYPICAL Y-SHAPED SIDEROAD DETAIL.

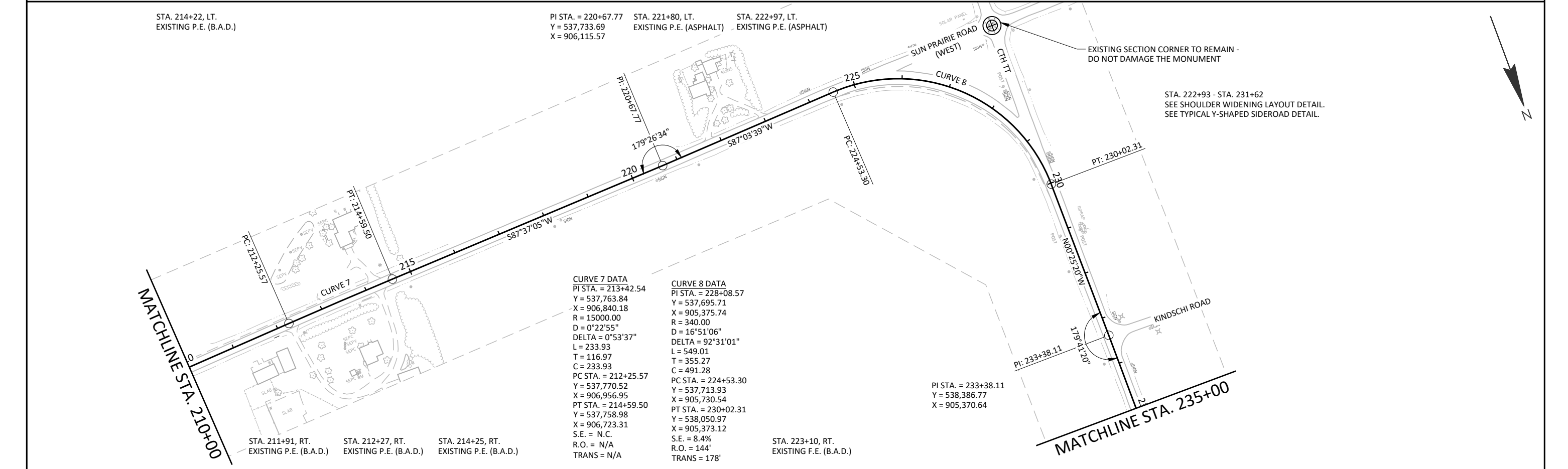
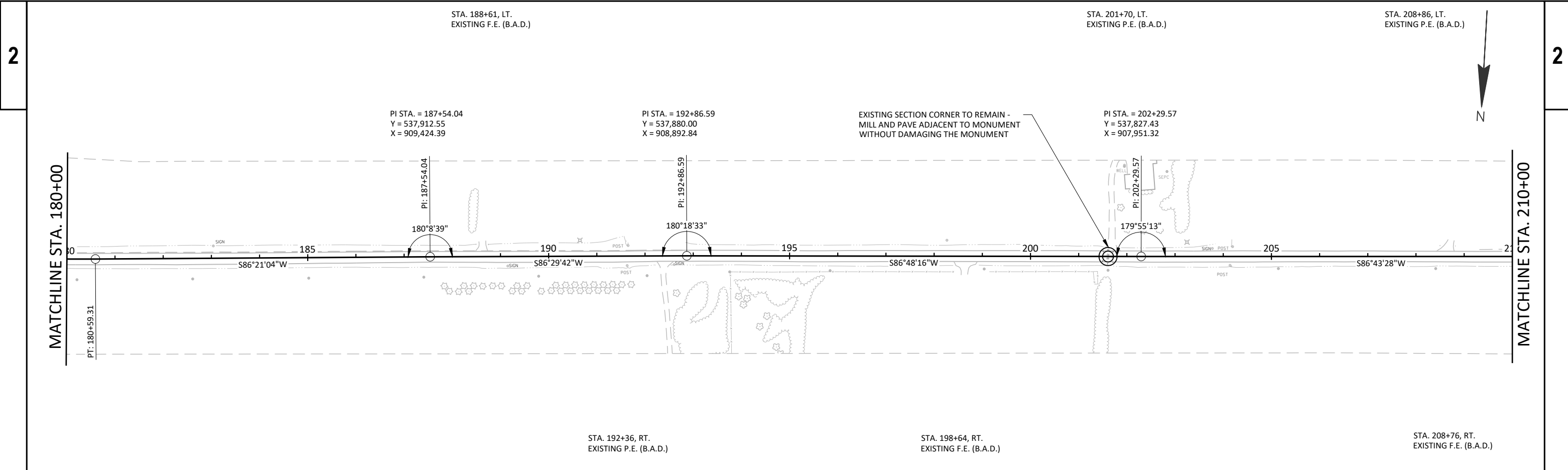
MATCHLINE STA. 160+00

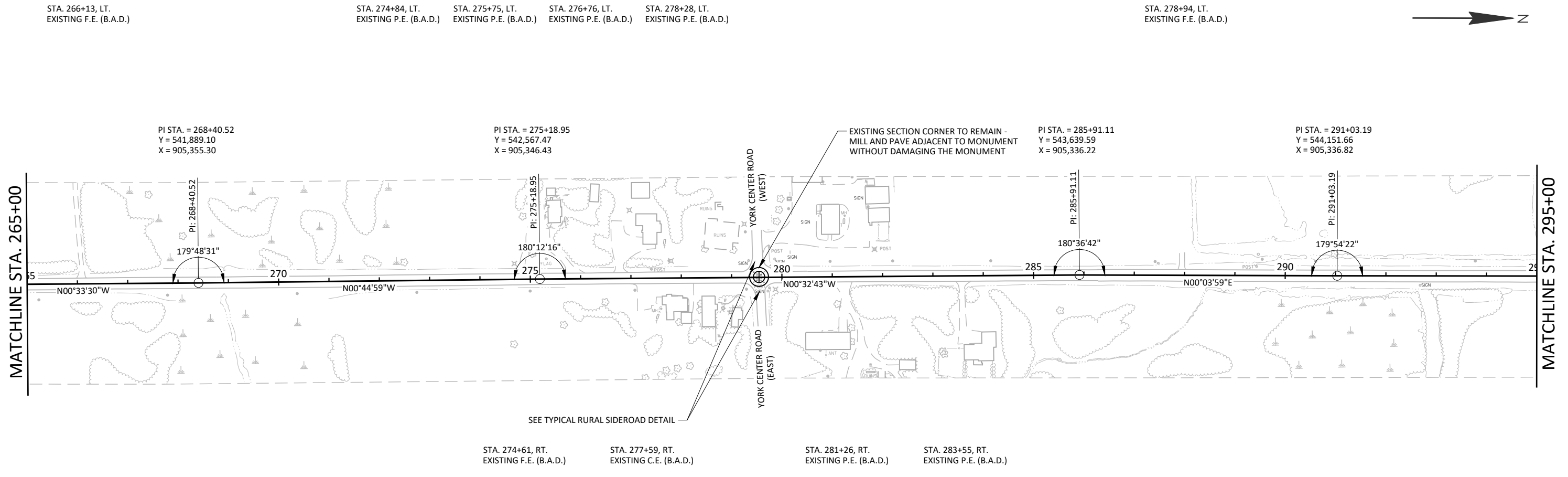
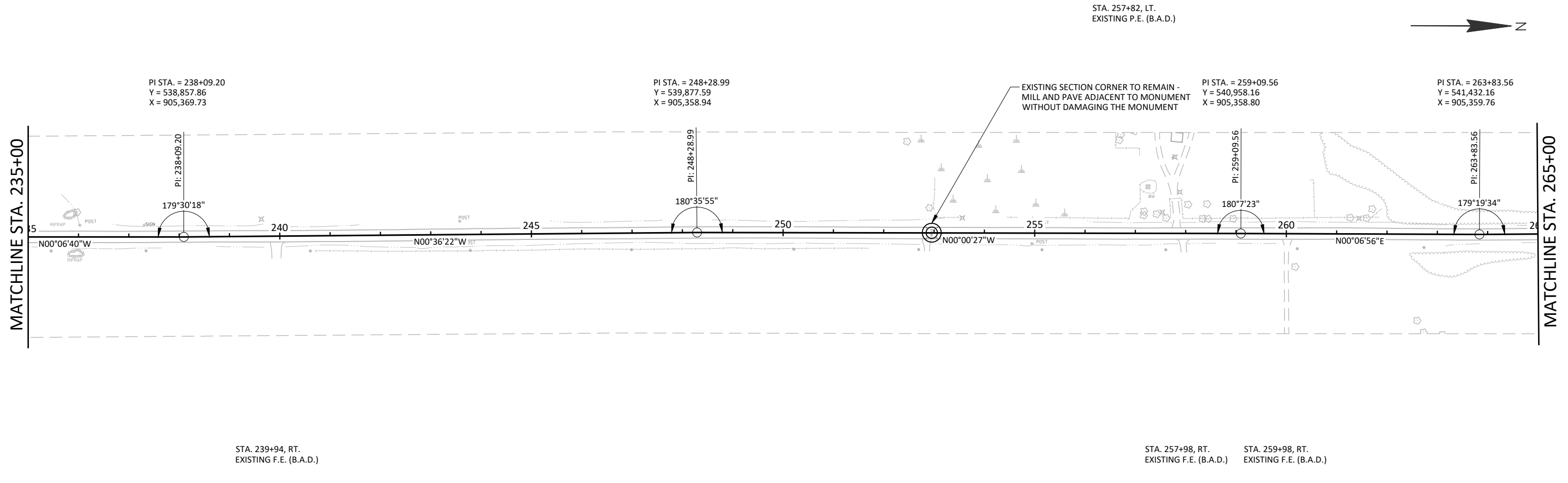
EXISTING SECTION CORNER TO REMAIN -
DO NOT DAMAGE THE MONUMENT

STA. 164+01, RT.
EXISTING P.E. (B.A.D.)

CURVE 5 DATA
 PI STA. = 176+59.21
 Y = 537,970.99
 X = 910,662.28
 R = 325.00
 D = 17°37'46"
 DELTA = 90°54'17"
 L = 515.64
 T = 330.17
 C = 463.23
 PC STA. = 173+29.03
 Y = 537,640.81
 X = 910,662.73
 PT STA. = 178+44.68
 Y = 537,965.32
 X = 910,332.16
 S.E. = 9.7%
 R.O. = 182'
 TRANS = 218'

CURVE 6 DATA
 PI STA. = 179+54.64
 Y = 537,963.43
 X = 910,222.21
 R = 4500.00
 D = 1°16'24"
 DELTA = 2°39'57"
 L = 209.38
 T = 104.71
 C = 209.36
 PC STA. = 178+49.93
 Y = 537,965.23
 X = 910,326.91
 PT STA. = 180+59.31
 Y = 537,956.77
 X = 910,117.71
 S.E. = N.C.
 R.O. = N/A
 TRANS = N/A





STA. 298+95, LT.
EXISTING F.E. (B.A.D.)

STA. 313+18, LT.
EXISTING P.E. (B.A.D.)

STA. 319+51, LT.
EXISTING F.E. (B.A.D.)

STA. 325+00, LT.
EXISTING P.E. (B.A.D.)

PI STA. = 305+89.44
Y = 545,637.91
X = 905,336.10

PI STA. = 311+31.29
Y = 546,179.76
X = 905,334.59

PI STA. = 318+45.24
Y = 546,893.71
X = 905,335.67

PI STA. = 324+86.90
Y = 547,535.37
X = 905,337.73

MATCHLINE STA. 295+00

MATCHLINE STA. 325+00

EXISTING SECTION CORNER TO REMAIN -
MILL AND PAVE ADJACENT TO MONUMENT
WITHOUT DAMAGING THE MONUMENT

STA. 308+00, RT.
EXISTING P.E. (B.A.D.)

STA. 314+92, RT.
EXISTING P.E. (B.A.D.)

MATCHLINE STA. 325+00

MATCHLINE STA. 355+00

STA. 343+27, LT.
EXISTING P.E. (B.A.D.)

STA. 348+62, LT.
EXISTING P.E. (B.A.D.)

PI STA. = 343+20.13
Y = 549,368.37
X = 905,314.33

CURVE 9 DATA
PI STA. = 332+24.78
Y = 548,273.24
X = 905,337.19
R = 15000.00
D = 0°22'55"
DELTA = 1°09'13"
L = 302.03
T = 151.02
C = 302.03
PC STA. = 330+73.75
Y = 548,122.22
X = 905,337.30
PT STA. = 333+75.79
Y = 548,424.23
X = 905,334.04
S.E. = N.C.
R.O. = N/A
TRANS = N/A

EXISTING SECTION CORNER TO REMAIN -
MILL AND PAVE ADJACENT TO MONUMENT
WITHOUT DAMAGING THE MONUMENT

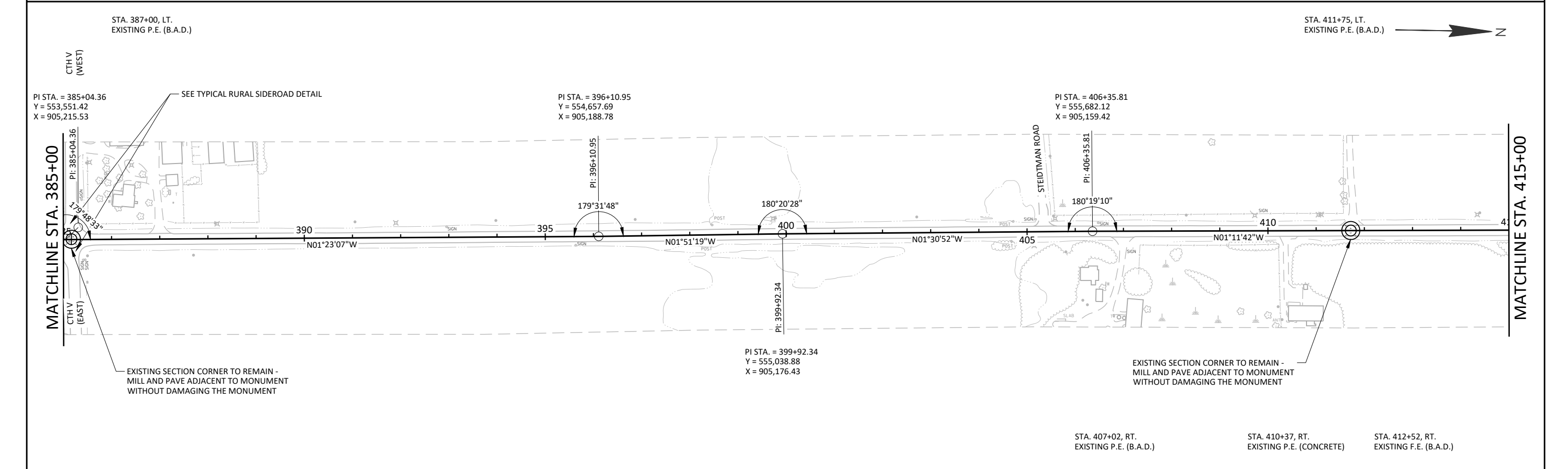
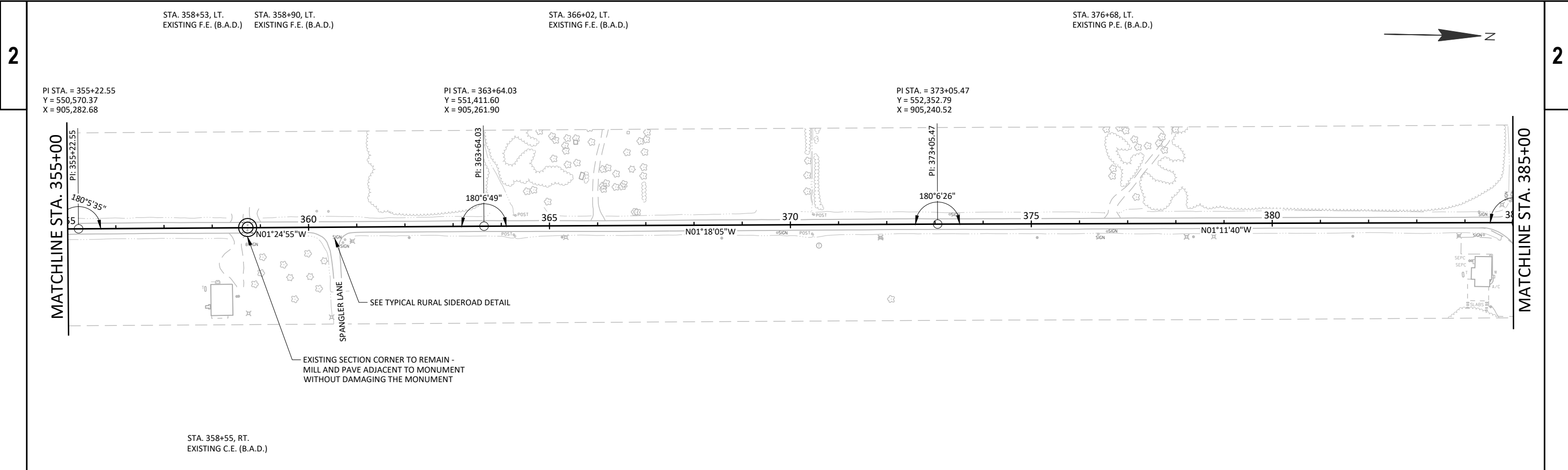
SEE TYPICAL RURAL SIDEROAD DETAIL

MULLER ROAD
(WEST)
MULLER ROAD
(EAST)

STA. 340+90, RT.
EXISTING C.E. (B.A.D.)

STA. 343+53, RT.
EXISTING C.E. (B.A.D.)

STA. 348+57, RT.
EXISTING C.E. (B.A.D.)



PROJECT NO: 3060-03-70

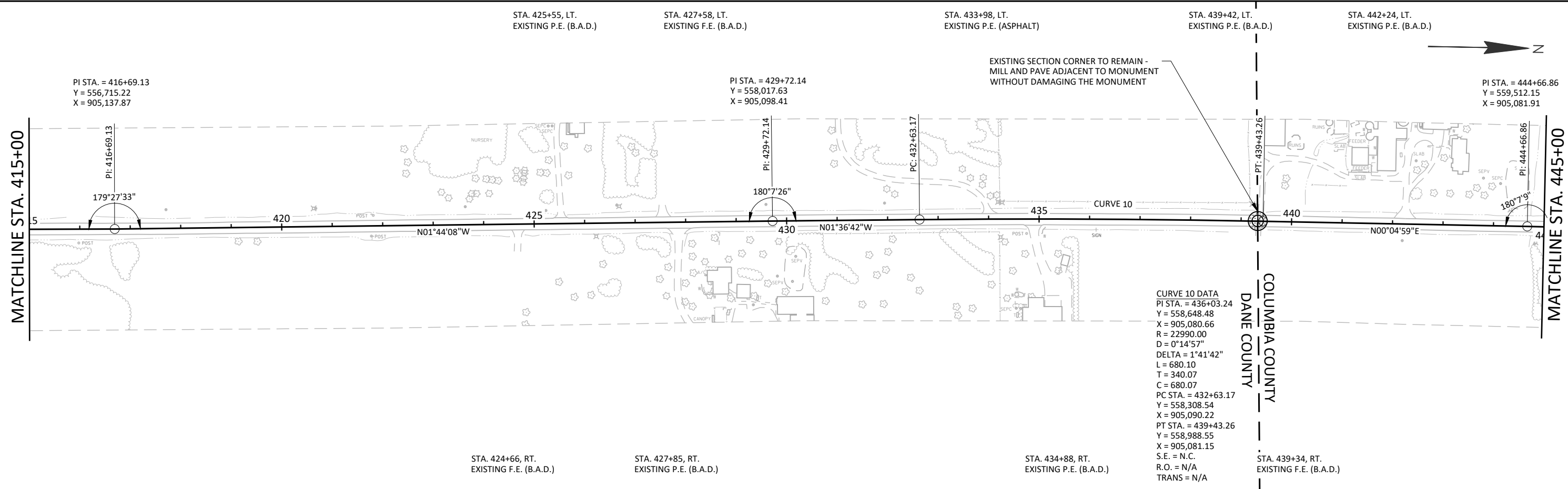
HWY: STH 73

COUNTY: DANE

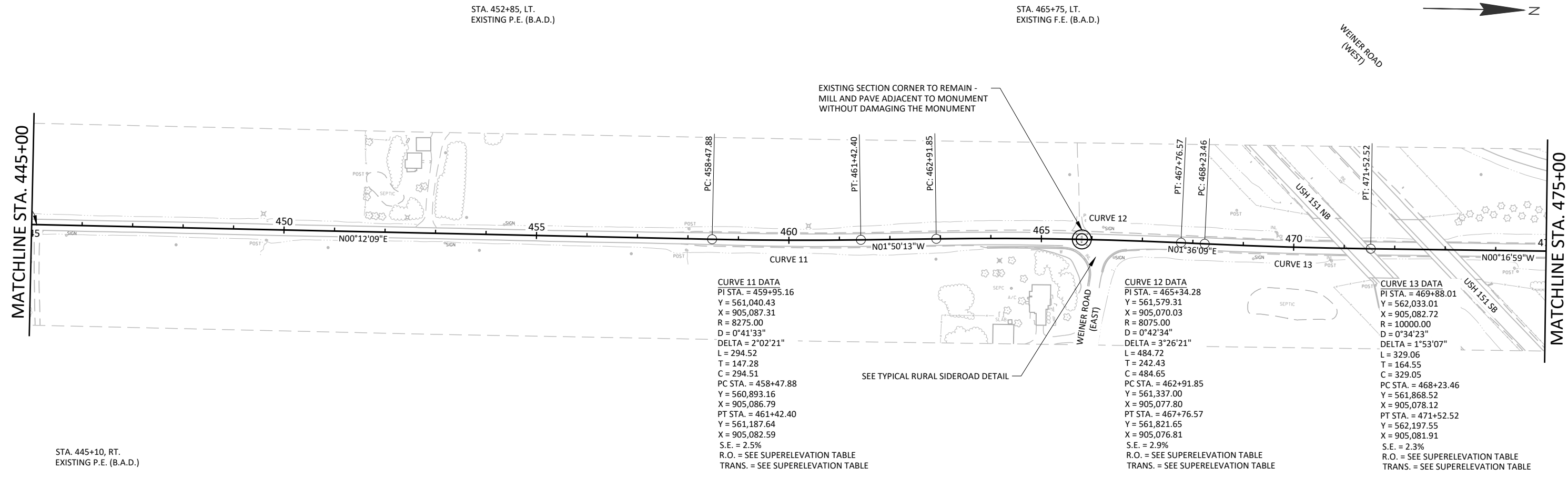
PLAN DETAILS

SHEET

E



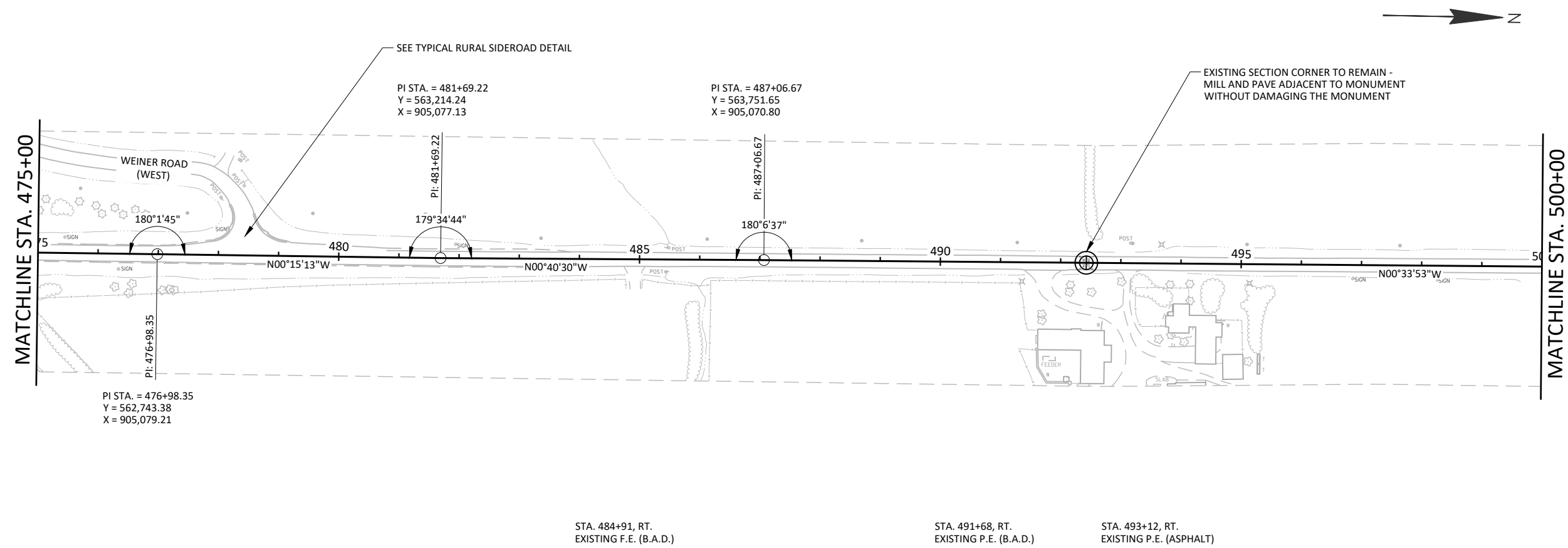
CURVE 10 DATA
 PI STA. = 436+03.24
 Y = 558,648.48
 X = 905,080.66
 R = 22990.00
 D = 0°14'57"
 DELTA = 1°41'42"
 L = 680.10
 T = 340.07
 C = 680.07
 PC STA. = 432+63.17
 Y = 558,308.54
 X = 905,090.22
 PT STA. = 439+43.26
 Y = 558,988.55
 X = 905,081.15
 S.E. = N.C.
 R.O. = N/A
 TRANS = N/A



CURVE 11 DATA
 PI STA. = 459+95.16
 Y = 561,040.43
 X = 905,087.31
 R = 8275.00
 D = 0°41'33"
 DELTA = 2°02'21"
 L = 294.52
 T = 147.28
 C = 294.51
 PC STA. = 458+47.88
 Y = 560,893.16
 X = 905,086.79
 PT STA. = 461+42.40
 Y = 561,187.64
 X = 905,082.59
 S.E. = 2.5%
 R.O. = SEE SUPERELEVATION TABLE
 TRANS. = SEE SUPERELEVATION TABLE

CURVE 12 DATA
 PI STA. = 465+34.28
 Y = 561,579.31
 X = 905,070.03
 R = 8075.00
 D = 0°42'34"
 DELTA = 3°26'21"
 L = 484.72
 T = 242.43
 C = 484.65
 PC STA. = 462+91.85
 Y = 561,337.00
 X = 905,077.80
 PT STA. = 467+76.57
 Y = 561,821.65
 X = 905,076.81
 S.E. = 2.9%
 R.O. = SEE SUPERELEVATION TABLE
 TRANS. = SEE SUPERELEVATION TABLE

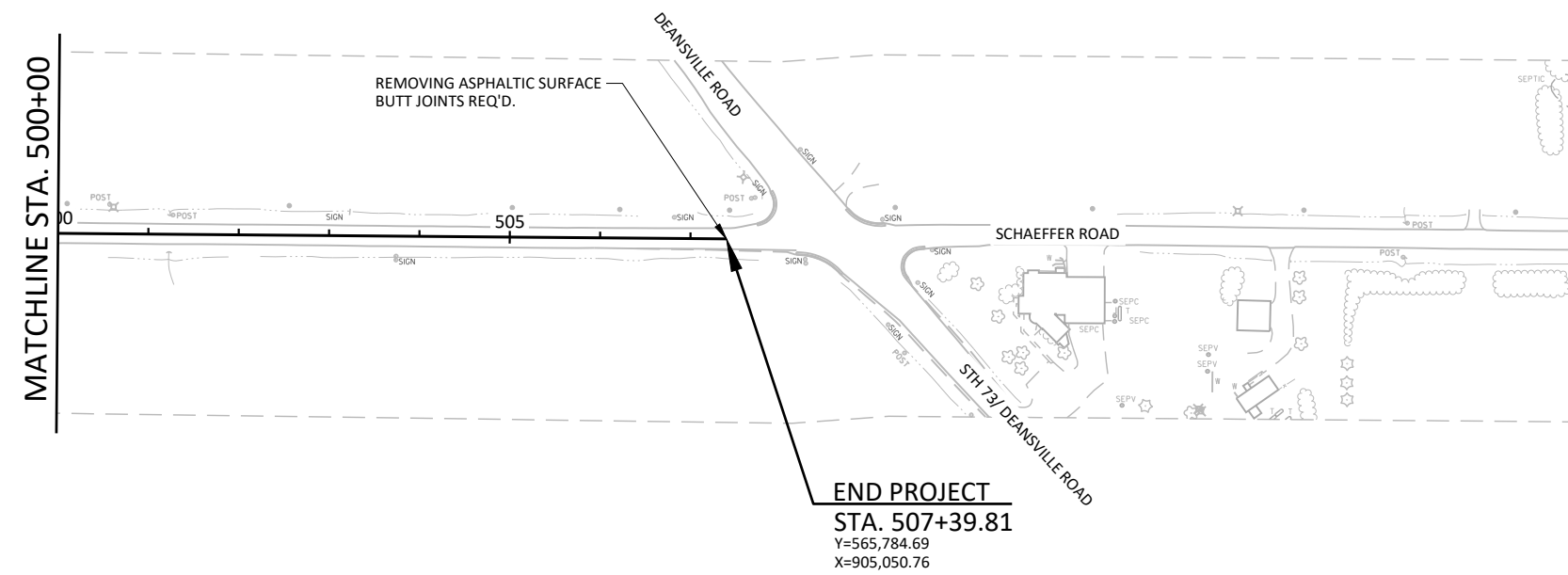
CURVE 13 DATA
 PI STA. = 469+88.01
 Y = 562,033.01
 X = 905,082.72
 R = 10000.00
 D = 0°34'23"
 DELTA = 1°53'07"
 L = 329.06
 T = 164.55
 C = 329.05
 PC STA. = 468+23.46
 Y = 561,868.52
 X = 905,078.12
 PT STA. = 471+52.52
 Y = 562,197.55
 X = 905,081.91
 S.E. = 2.3%
 R.O. = SEE SUPERELEVATION TABLE
 TRANS. = SEE SUPERELEVATION TABLE



STA. 484+91, RT.
EXISTING F.E. (B.A.D.)

STA. 491+68, RT.
EXISTING P.E. (B.A.D.)

STA. 493+12, RT.
EXISTING P.E. (ASPHALT)



Estimate Of Quantities

3060-03-70

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	480.000	480.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	133,400.000	133,400.000
0006	204.0165	Removing Guardrail	LF	110.000	110.000
0008	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 3060-03-70	LS	1.000	1.000
0010	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	995.000	995.000
0012	213.0100	Finishing Roadway (project) 01. 3060-03-70	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	5,000.000	5,000.000
0016	455.0605	Tack Coat	GAL	17,200.000	17,200.000
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	2.000	2.000
0022	460.2005	Incentive Density PWL HMA Pavement	DOL	26,900.000	26,900.000
0024	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	20,370.000	20,370.000
0026	460.2010	Incentive Air Voids HMA Pavement	DOL	29,100.000	29,100.000
0028	460.6224	HMA Pavement 4 MT 58-28 S	TON	29,100.000	29,100.000
0030	465.0105	Asphaltic Surface	TON	1,500.000	1,500.000
0032	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3060-03-70	EACH	1.000	1.000
0034	619.1000	Mobilization	EACH	1.000	1.000
0036	624.0100	Water	MGAL	75.000	75.000
0038	642.5001	Field Office Type B	EACH	1.000	1.000
0040	643.0300	Traffic Control Drums	DAY	300.000	300.000
0042	643.0420	Traffic Control Barricades Type III	DAY	4,425.000	4,425.000
0044	643.0705	Traffic Control Warning Lights Type A	DAY	8,100.000	8,100.000
0046	643.0900	Traffic Control Signs	DAY	22,350.000	22,350.000
0048	643.0920	Traffic Control Covering Signs Type II	EACH	19.000	19.000
0050	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0052	643.5000	Traffic Control	EACH	1.000	1.000
0054	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	98,200.000	98,200.000
0056	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	70,450.000	70,450.000
0058	646.6120	Marking Stop Line Epoxy 18-Inch	LF	70.000	70.000
0060	649.0105	Temporary Marking Line Paint 4-Inch	LF	7,960.000	7,960.000
0062	650.8000	Construction Staking Resurfacing Reference	LF	49,750.000	49,750.000
0064	650.9910	Construction Staking Supplemental Control (project) 01. 3060-03-70	LS	1.000	1.000
0066	740.0440	Incentive IRI Ride	DOL	37,690.000	37,690.000
0068	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,500.000	1,500.000
0070	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	990.000	990.000
0072	SPV.0060	Special 01. Landmark Reference Monuments	EACH	19.000	19.000
0074	SPV.0060	Special 02. Verify Landmark Reference Monuments	EACH	19.000	19.000
0076	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	13,340.000	13,340.000

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION - STATION	LOCATION	204.0115 (SY)
10+00 - 130+00	MAINLINE	100
130+00 - 235+00	MAINLINE	80
235+00 - 355+00	MAINLINE	60
355+00 - 507+39.81	MAINLINE DRIVEWAYS	140
TOTAL =		480

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 (SY)
10+00 - 130+00	MAINLINE	32,900
130+00 - 235+00	MAINLINE	28,500
235+00 - 355+00	MAINLINE	30,200
355+00 - 507+39.81	MAINLINE	41,800
TOTAL =		133,400

HMA PAVEMENT

STA. - STA.	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (LS)	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS (STA)	455.0605 TACK COAT (GAL)	460.6224 HMA PAVEMENT 4 MT 58-28 S (TON)	465.0105 ASPHALTIC SURFACE (TON)	*SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING (SY)
10+00 - 130+00	-	240	4,200	7,000	370	3,290
130+00 - 235+00	-	210	3,650	6,000	320	2,850
235+00 - 355+00	-	240	3,950	6,700	340	3,020
355+00 - 507+39.81	-	305	5,400	9,400	470	4,180
10+00 - 507+39.81	1	-	-	-	-	-
TOTALS =	1	995	17,200	29,100	1,500	13,340

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

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)
10+00 - 130+00	MAINLINE	1,060
130+00 - 235+00	MAINLINE	930
235+00 - 355+00	MAINLINE	1,150
355+00 - 507+39.81	MAINLINE DRIVEWAYS	400
TOTAL =		5,000

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEMS	TONS	THICKNESS	QUALITY MANAGEMENT MIXTURE ACCEPTANCE	PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12 foot Driving Lane	10+00 to 507+39.81	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	12,510	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12 foot Driving Lane	10+00 to 507+39.81	Lower Layer	Milled Existing HMA Surface	4 MT 58-28 S	12,510	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders/ Other	10+00 to 507+39.81	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	2,040	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance Testing by the department; Not eligible for incentive or disincentive
Shoulders/ Other	10+00 to 507+39.81	Lower Layer	Milled Existing HMA Surface	4 MT 58-28 S	2,040	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance Testing by the department; Not eligible for incentive or disincentive

TRAFFIC CONTROL

LOCATION	643.0300 DRUMS (DAY)	643.0420 BARRICADES TYPE III (DAY)	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0900 SIGNS (DAY)	* 643.092 COVERING SIGNS TYPE II (EACH)	643.1050 SIGNS PCMS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
SIDEROADS PROJECT	- 300	3,300 1,125	6,600 1,500	9,900 12,450	- 19	- 14	- 1
TOTALS =	300	4,425	8,100	22,350	19	14	1

* ONE CYCLE PER LOCATION

NOTE: 75 CALENDAR DAYS USED FOR BARRICADES TYPE III, WARNING LIGHTS TYPE A, & SIGNS QUANTITIES

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9910 CONSTRUCTION STAKING SUPPLEMENT CONTROL (PROJECT)
10+00 - 130+00	MAINLINE	12,000	-
130+00 - 235+00	MAINLINE	10,500	-
235+00 - 355+00	MAINLINE	12,000	-
355+00 - 507+39.81	MAINLINE PROJECT	15,250	1
TOTALS =		49,750	1

WATER

STATION - STATION	624.0100 (MGAL)
10+00 - 130+00	16
130+00 - 235+00	15
235+00 - 355+00	20
355+00 - 507+39.81	24
TOTAL =	75

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	SPV.0060.01 LANDMARK REFERENCE MONUMENTS SPECIAL (EACH)	SPV.0060.02 VERIFY LANDMARK REFERENCE MONUMENTS (EACH)
24+38	MAINLINE, 0.5' LT.	1	1
47+23	MAINLINE, 117.5' LT.	1	1
72+15	MAINLINE, 246.5' RT.	1	1
97+39	MAINLINE, C/L	1	1
123+87	MAINLINE, C/L	1	1
150+39	MAINLINE, C/L	1	1
175+93	MAINLINE, 148.0' RT.	1	1
201+61	MAINLINE, 0.5' RT.	1	1
227+31	MAINLINE, 150.5' LT.	1	1
252+95	MAINLINE, 0.5' LT.	1	1
279+54	MAINLINE, 1.0' LT.	1	1
305+89	MAINLINE, C/L	1	1
332+29	MAINLINE, 0.5 LT.	1	1
358+73	MAINLINE, 0.5' LT.	1	1
385+17	MAINLINE, 0.5' LT.	1	1
411+72	MAINLINE, C/L	1	1
439+33	MAINLINE, C/L	1	1
465+80	MAINLINE, C/L	1	1
492+43	MAINLINE, C/L	1	1
TOTALS =		19	19

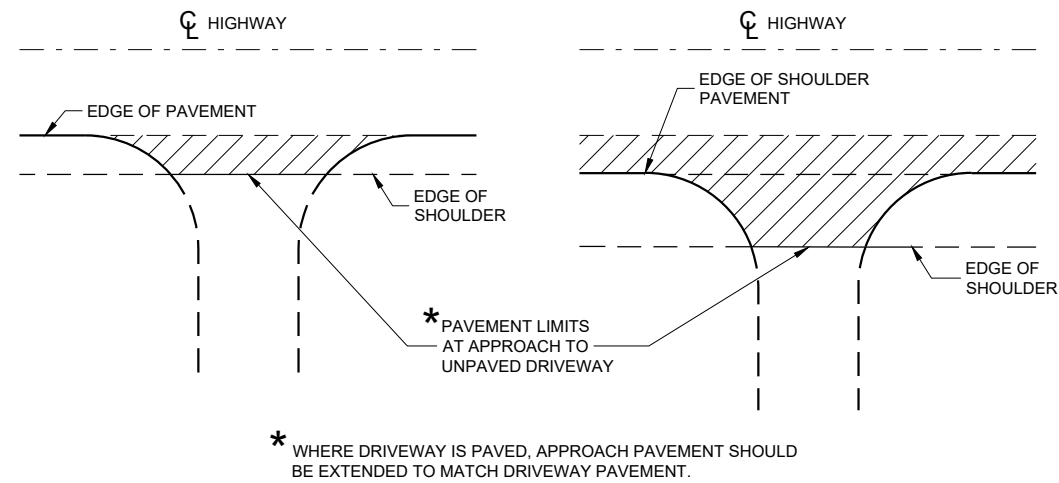
PAVEMENT MARKING

STATION - STATION	LOCATION	DESCRIPTION	646.1040	646.4520		646.6120	*649.0105
			MARKING LINE GROOVED	MARKING LINE SAME DAY		MARKING STOP LINE	TEMPORARY MARKING
			WET REF EPOXY 4-INCH	EPOXY 4-INCH		EPOXY 18-INCH	LINE PAINT 4-INCH
			WHITE SOLID (LF)	YELLOW SOLID (LF)	YELLOW 12.5' SKIPS (LF)	WHITE SOLID (LF)	YELLOW 4' SKIPS (LF)
10+00 - 14+11	MAINLINE	DOUBLE YELLOW	-	830	-	-	-
14+11 - 25+18	MAINLINE	NB PASSING	-	1,107	288	-	-
25+18 - 29+25	MAINLINE	PASSING	-	-	113	-	-
29+25 - 40+50	MAINLINE	SB PASSING	-	1,125	288	-	-
40+50 - 86+70	MAINLINE	DOUBLE YELLOW	-	9,240	-	-	-
86+70 - 97+90	MAINLINE	NB PASSING	-	1,120	288	-	-
97+90 - 99+98	MAINLINE	PASSING	-	-	208	-	-
99+98 - 111+19	MAINLINE	SB PASSING	-	1,121	288	-	-
111+19 - 178+25	MAINLINE	DOUBLE YELLOW	-	13,412	-	-	-
123+93, RT.	CTH TV	STOP LINE	-	-	-	14	-
178+25 - 189+15	MAINLINE	NB PASSING	-	1,090	275	-	-
189+15 - 203+77	MAINLINE	PASSING	-	-	375	-	-
203+77 - 215+00	MAINLINE	SB PASSING	-	1,123	288	-	-
215+00 - 281+46	MAINLINE	DOUBLE YELLOW	-	13,292	-	-	-
225+50, LT.	SUN PRAIRIE RD (WEST)	STOP LINE	-	-	-	15	-
228+50, LT.	CTH TT	STOP LINE	-	-	-	15	-
281+46 - 292+68	MAINLINE	NB PASSING	-	1,122	288	-	-
292+68 - 315+23	MAINLINE	PASSING	-	-	575	-	-
315+23 - 326+32	MAINLINE	SB PASSING	-	1,109	288	-	-
326+32 - 327+01	MAINLINE	DOUBLE YELLOW	-	138	-	-	-
327+01 - 337+98	MAINLINE	NB PASSING	-	1,097	275	-	-
337+98 - 348+20	MAINLINE	PASSING	-	-	263	-	-
348+20 - 359+02	MAINLINE	SB PASSING	-	1,082	275	-	-
359+02 - 359+63	MAINLINE	PASSING	-	-	25	-	-
359+63 - 369+73	MAINLINE	NB PASSING	-	1,010	270	-	-
369+73 - 373+30	MAINLINE	PASSING	-	-	100	-	-
373+30 - 384+40	MAINLINE	SB PASSING	-	1,110	288	-	-
384+40 - 395+63	MAINLINE	NB PASSING	-	1,123	288	-	-
385+05, LT.	CTH V	STOP LINE	-	-	-	13	-
385+21, RT.	CTH V	STOP LINE	-	-	-	13	-
395+63 - 406+47	MAINLINE	PASSING	-	-	275	-	-
406+47 - 417+80	MAINLINE	SB PASSING	-	1,133	288	-	-
417+80 - 434+80	MAINLINE	DOUBLE YELLOW	-	3,400	-	-	-
434+80 - 445+70	MAINLINE	NB PASSING	-	1,090	275	-	-
445+70 - 454+36	MAINLINE	PASSING	-	-	213	-	-
454+36 - 465+57	MAINLINE	SB PASSING	-	1,121	288	-	-
465+57 - 476+34	MAINLINE	NB PASSING	-	1,077	275	-	-
476+34 - 481+94	MAINLINE	PASSING	-	-	150	-	-
481+94 - 493+18	MAINLINE	SB PASSING	-	1,124	290	-	-
493+18 - 507+39.81	MAINLINE	DOUBLE YELLOW	-	2,854	-	-	-
10+00 - 507+37.81	MAINLINE	WHITE EDGELINES	98,200	-	-	-	-
10+00 - 507+37.82	MAINLINE	TEMPORARY C/L	-	-	-	-	7,960
SUBTOTALS =			-	63,050	7,400	-	-
TOTALS =			98,200	70,450	70	70	7,960

* ITEM TO BE PLACED TWICE DURING CONSTRUCTION

Standard Detail Drawing List

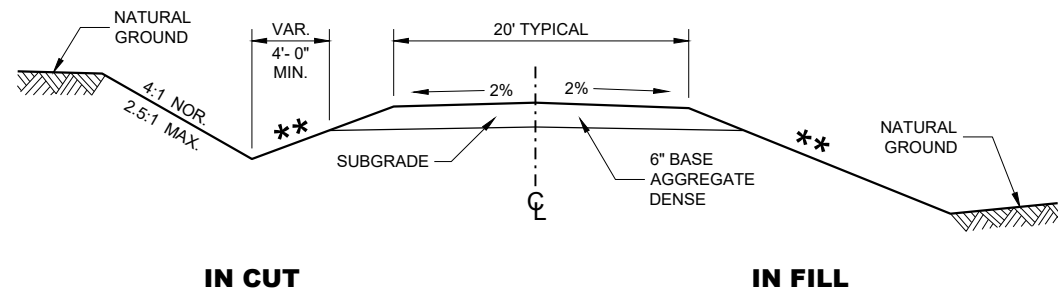
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
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
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS



PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

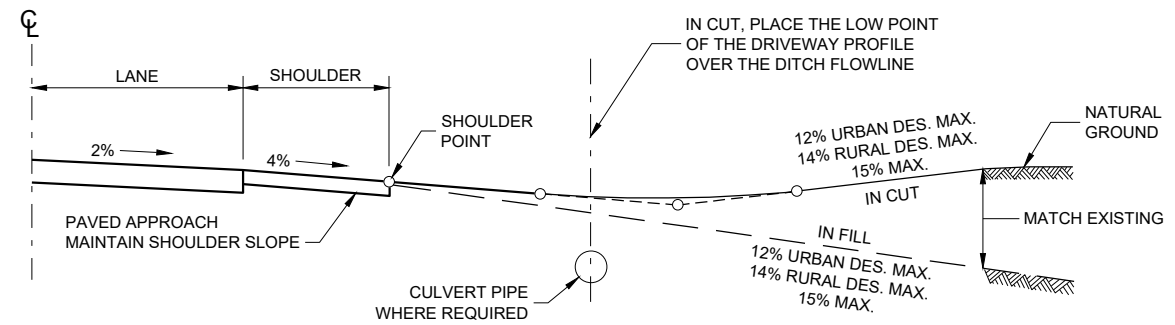
**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**



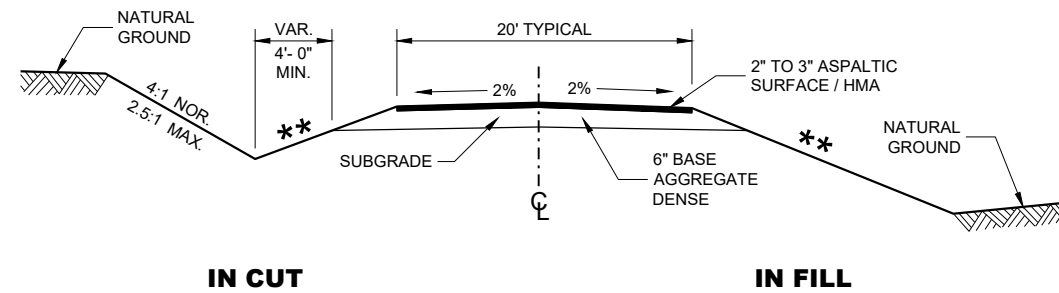
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

** 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



TYPICAL DRIVEWAY PROFILES



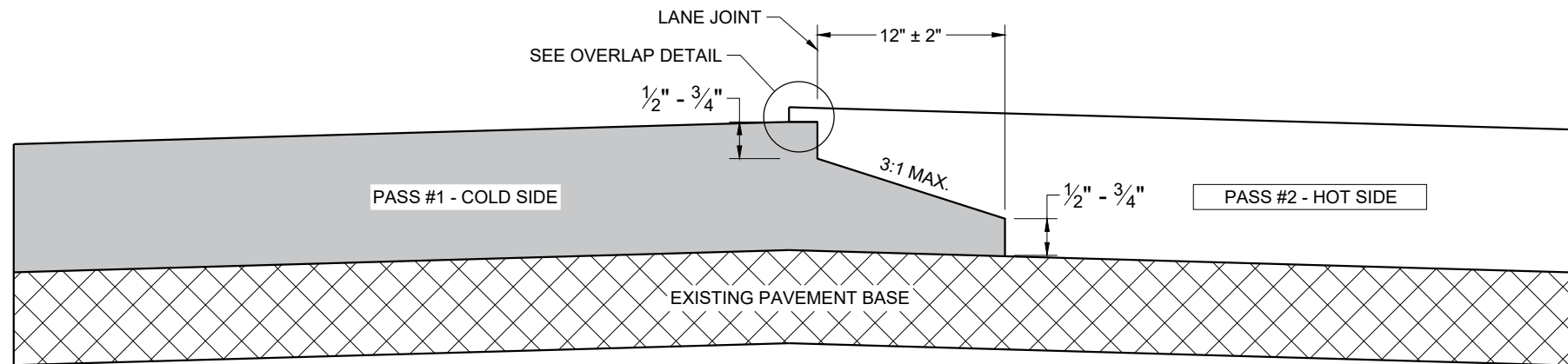
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

DRIVEWAYS WITHOUT CURB AND GUTTER

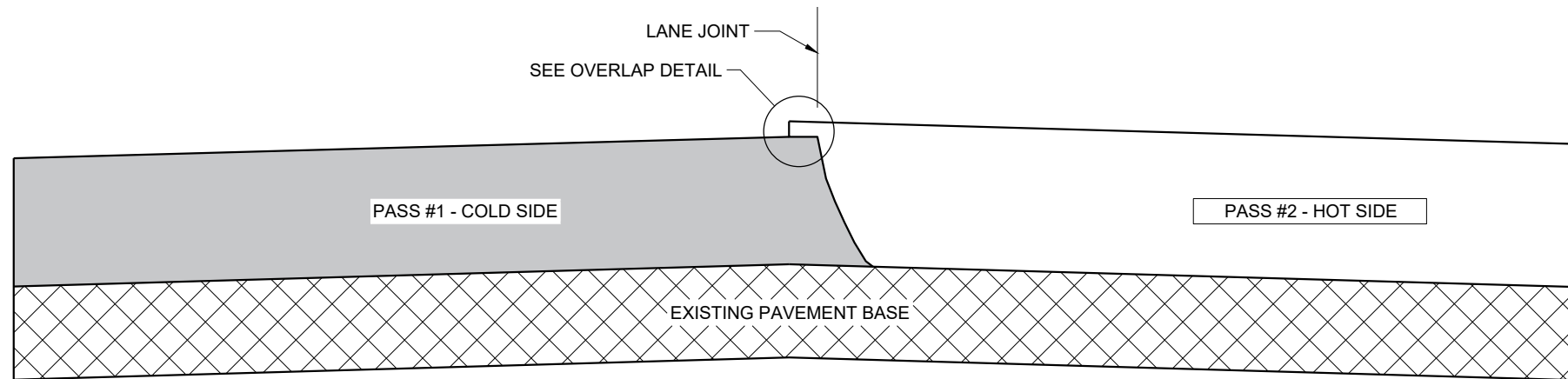
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

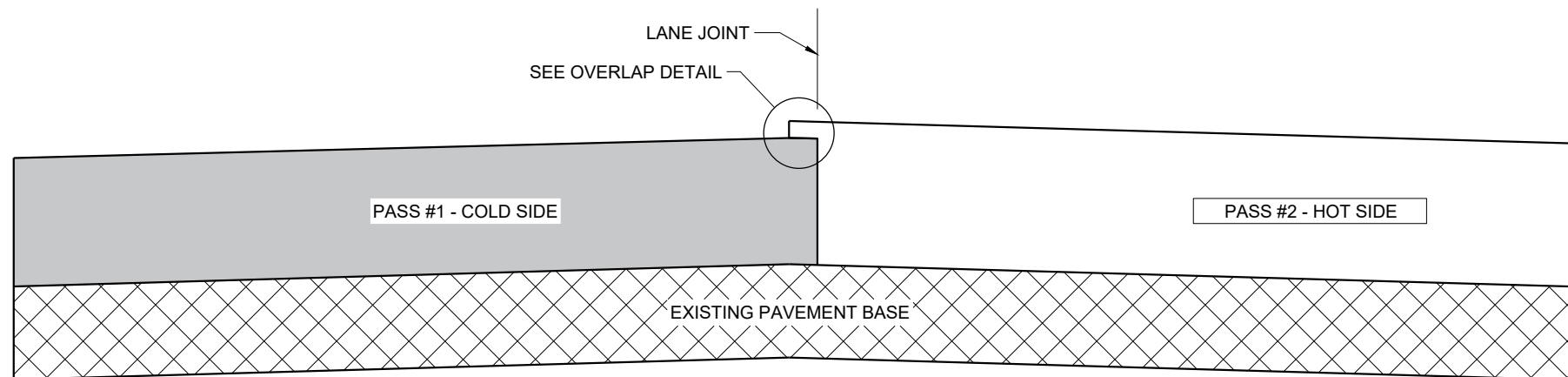
FHWA



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

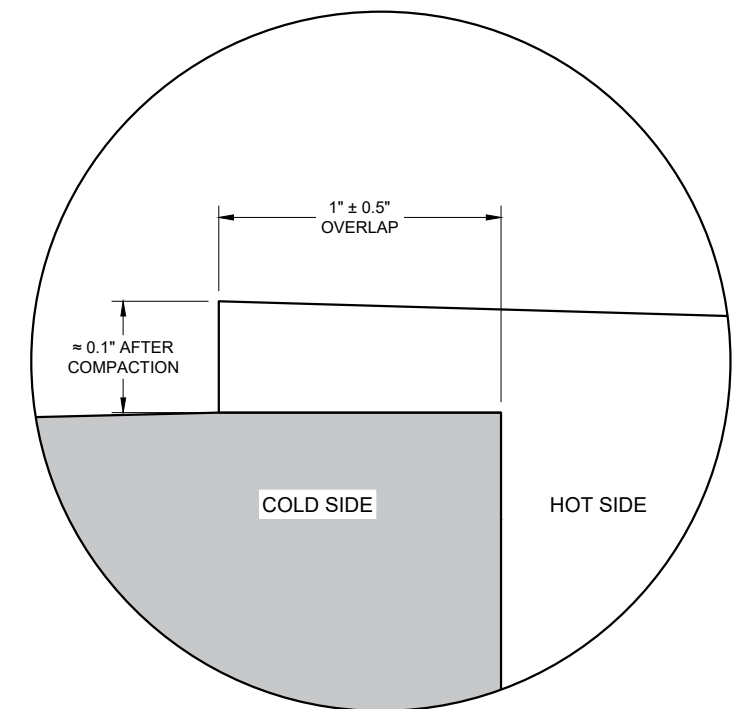
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ 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)

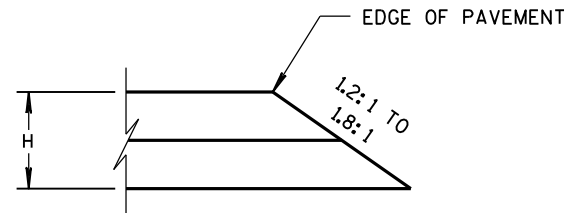
6

6

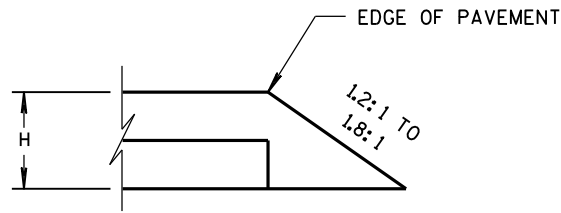
SDD 13C19 - 03

SDD 13C19 - 03

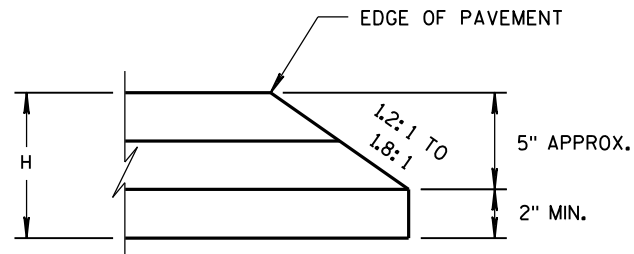
HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
FHWA	



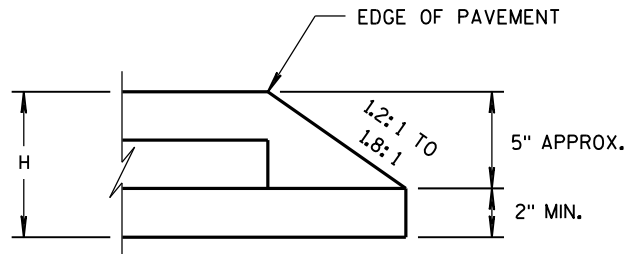
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

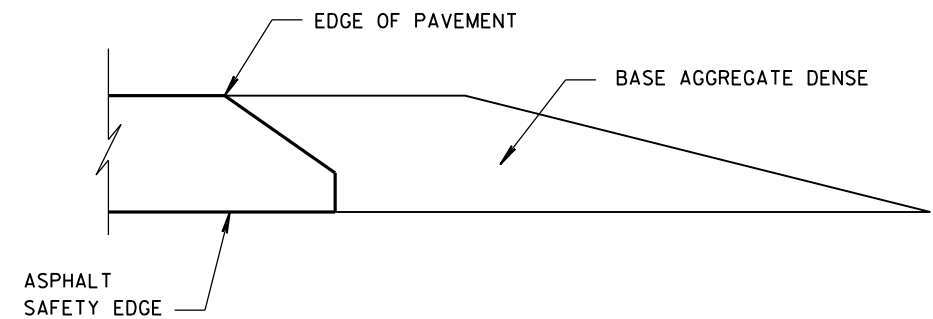


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

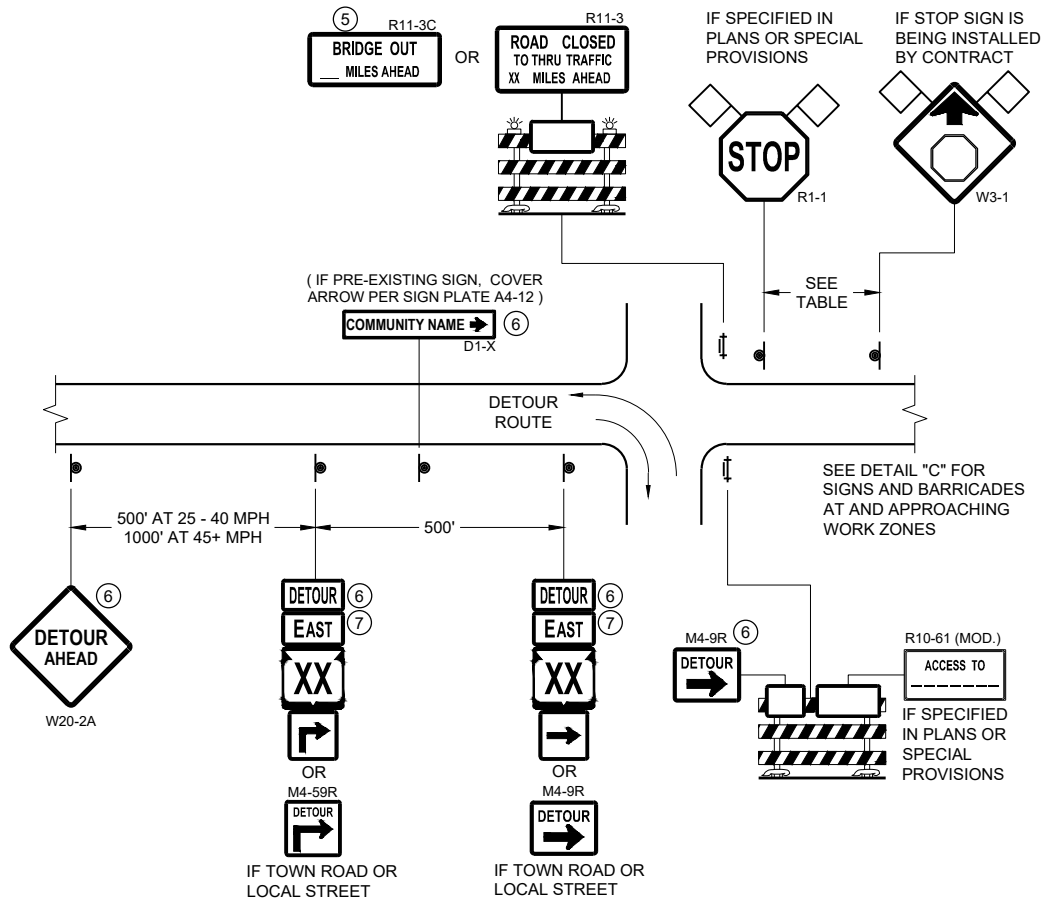
6

6

S.D.D. 14 B 29-1

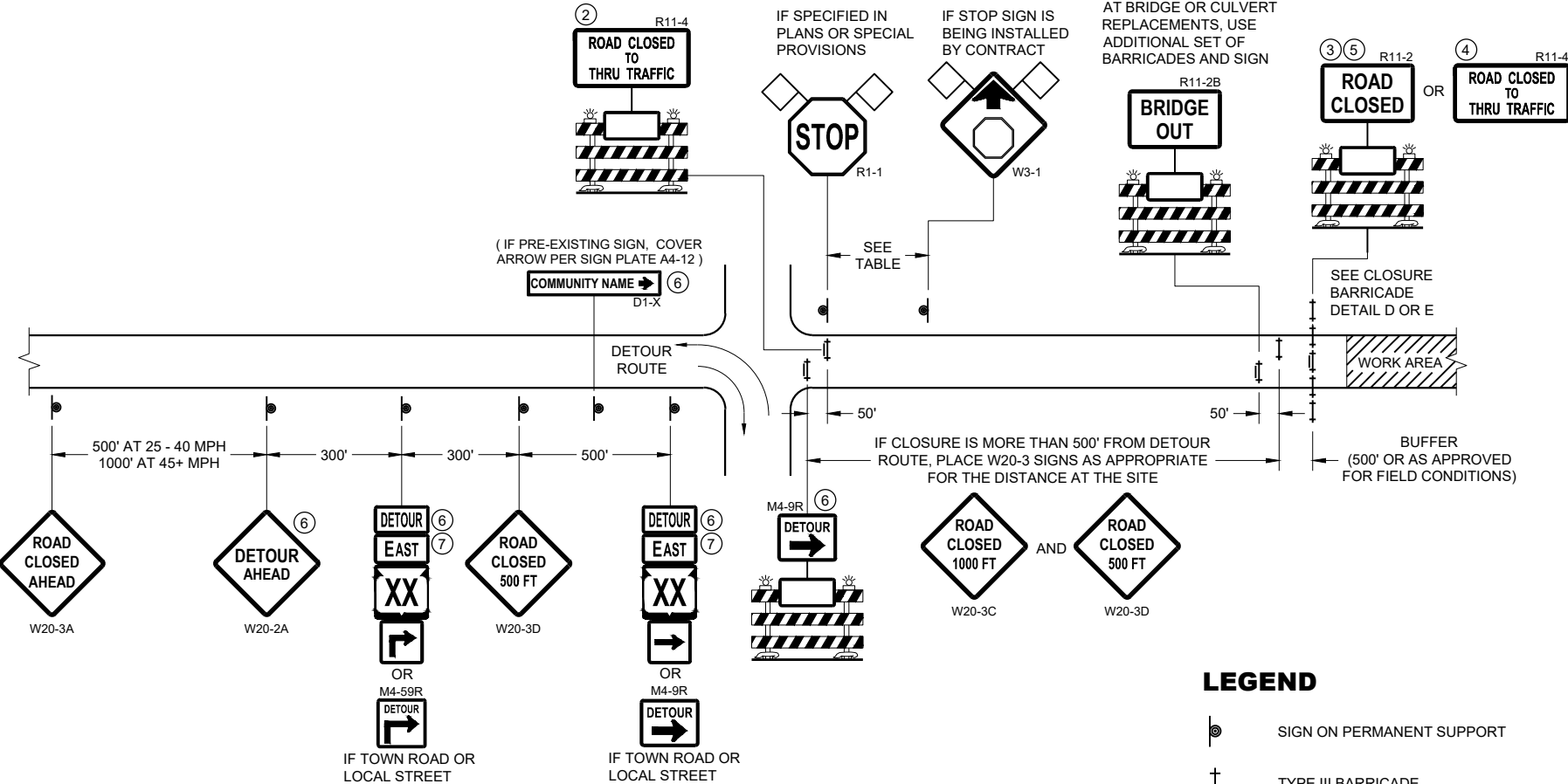
S.D.D. 14 B 29-1

SAFETY EDGE _{SM}	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



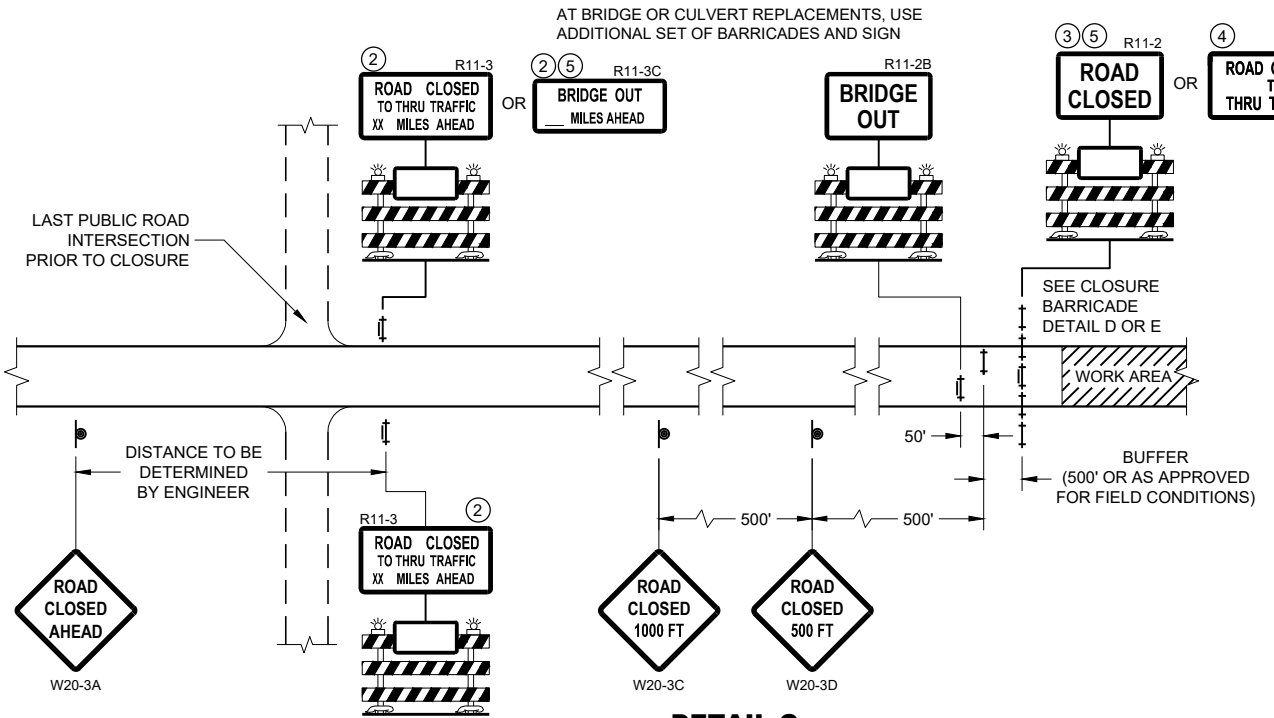
**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

	M4 - 8
	M3 - X
	M1 - 4
	M1 - 6
	M1 - 5A
	M05 - 1
	M06 - 1

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

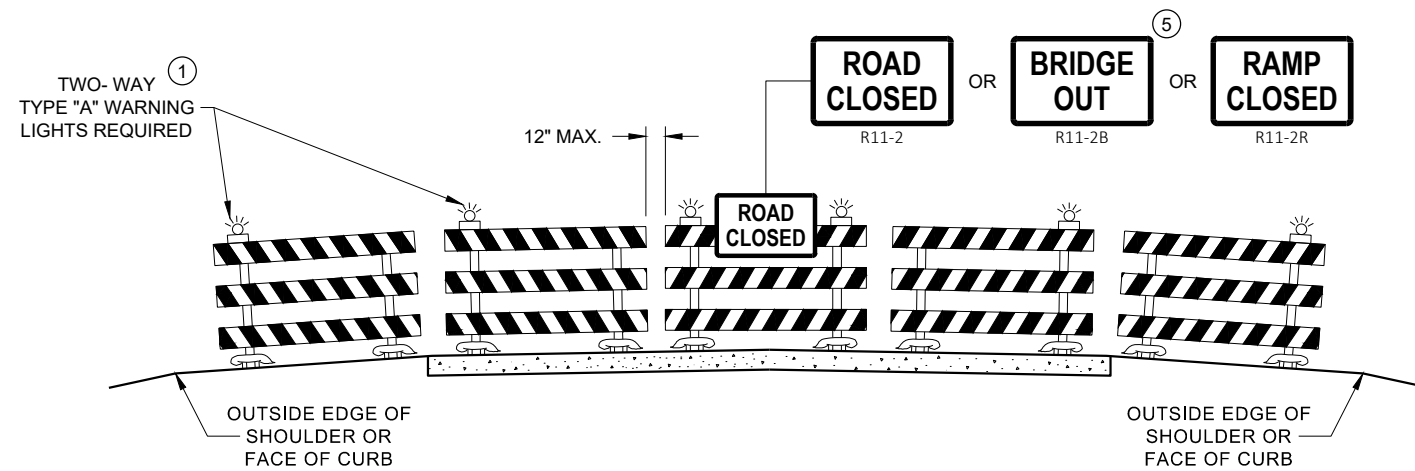
SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

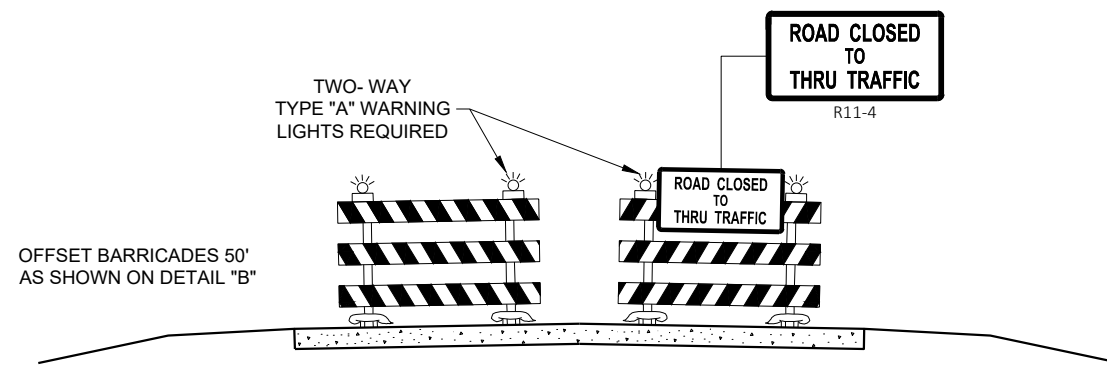
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE DATE WORK ZONE ENGINEER

FHWA



**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR M1 - 6 OR COUNTY M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

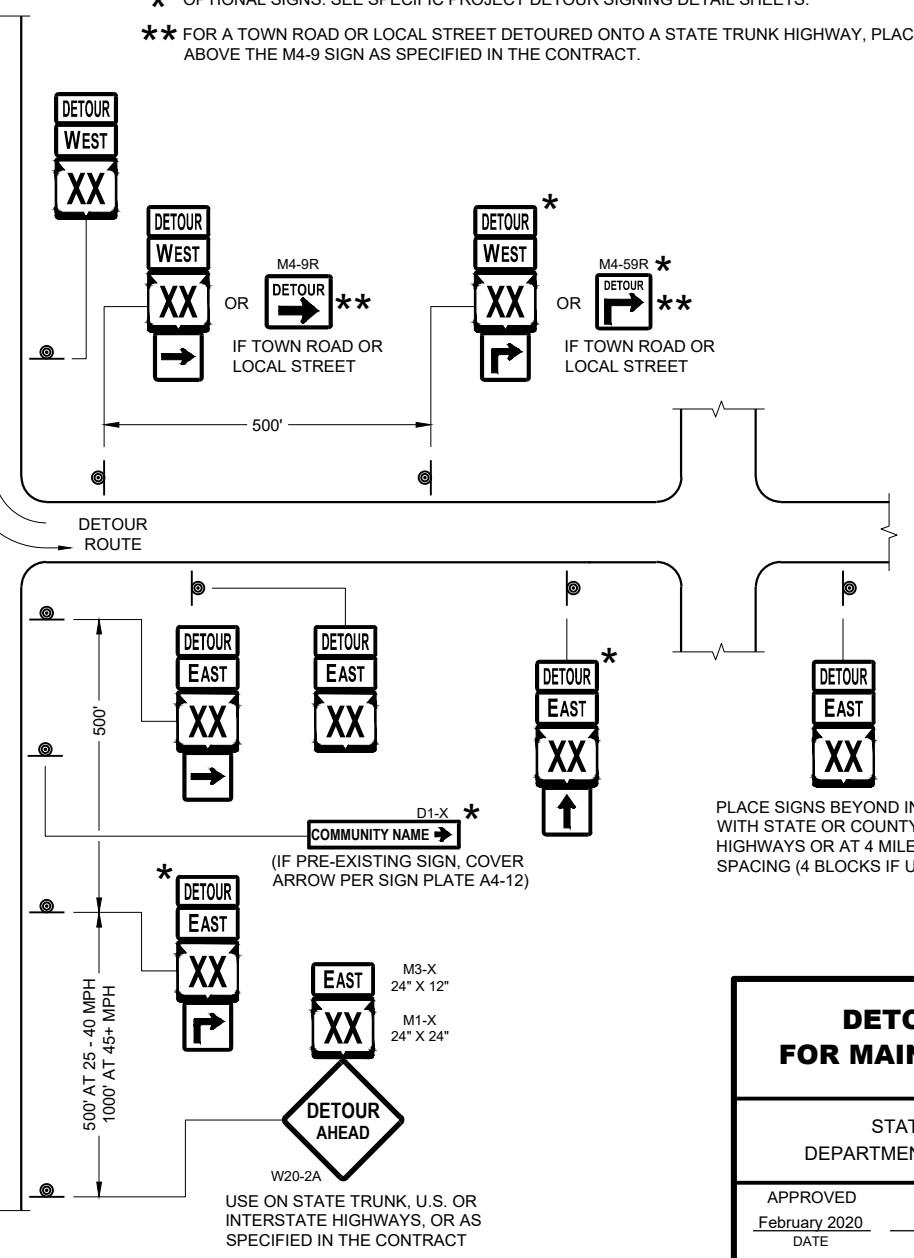
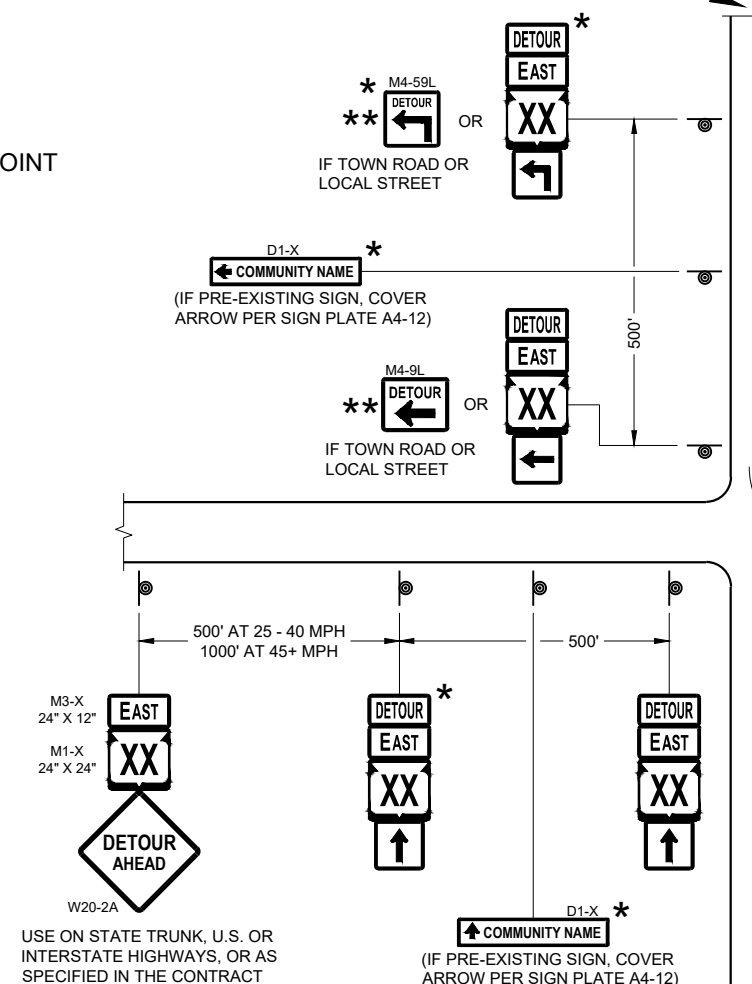
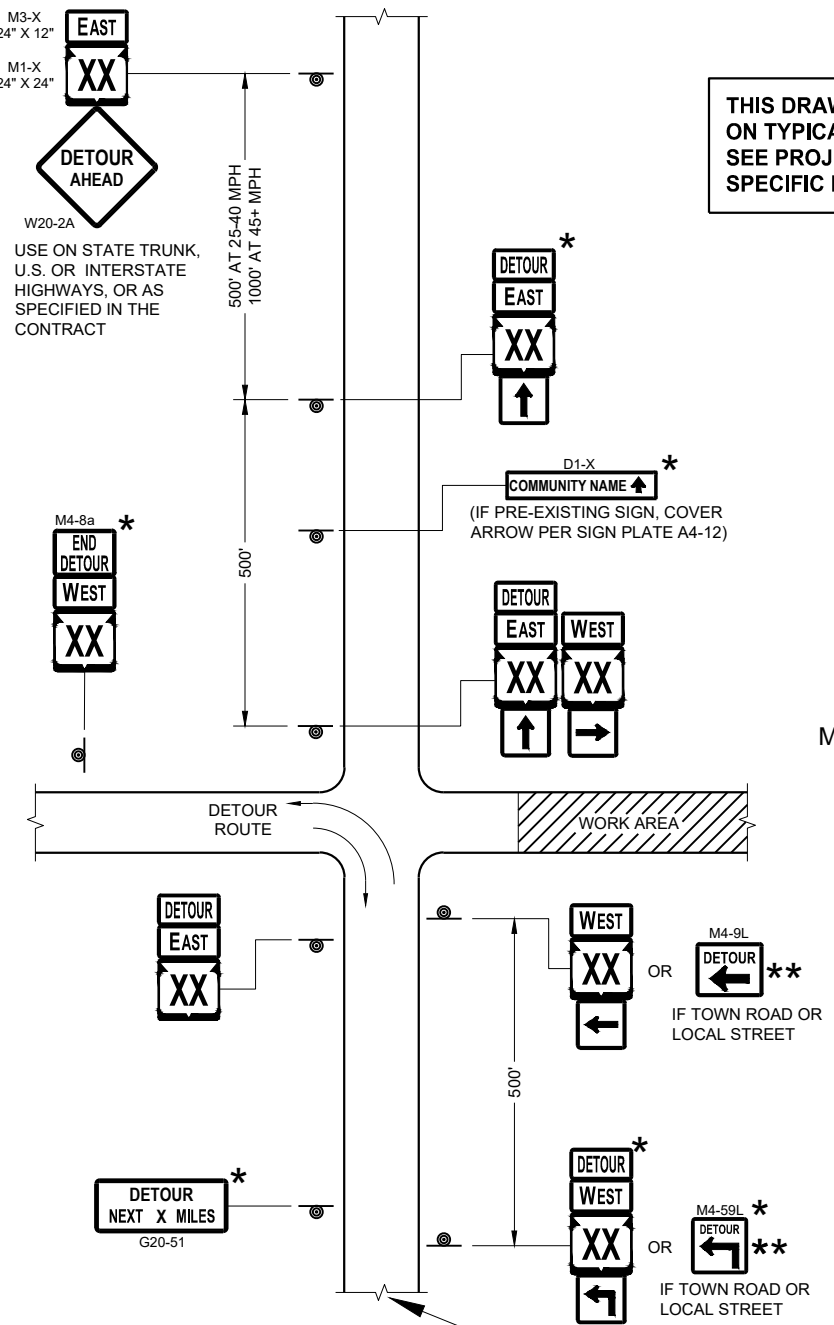
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

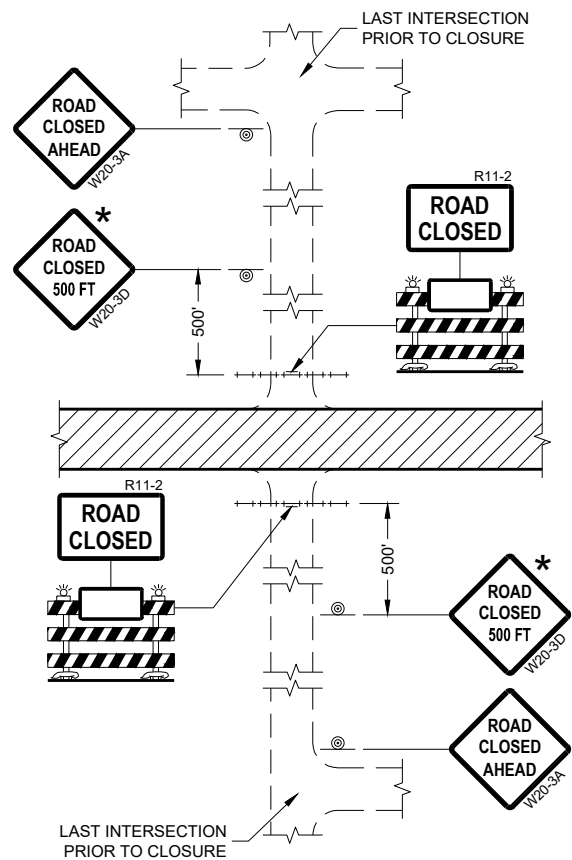
MATCH POINT

DETAIL F DETOUR SIGNING

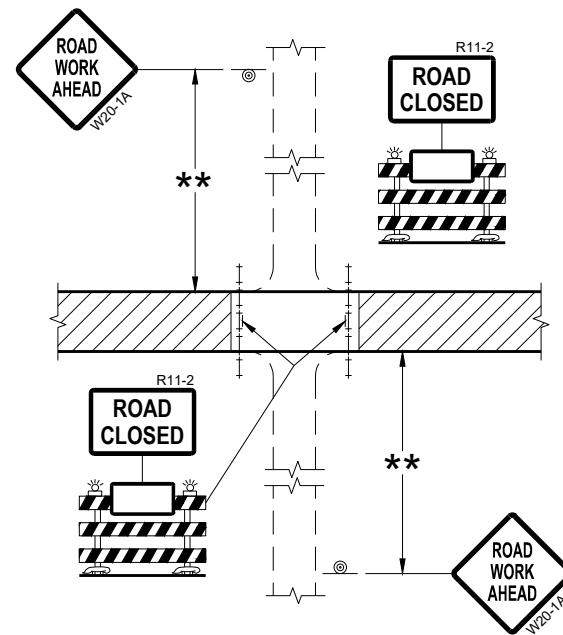


SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

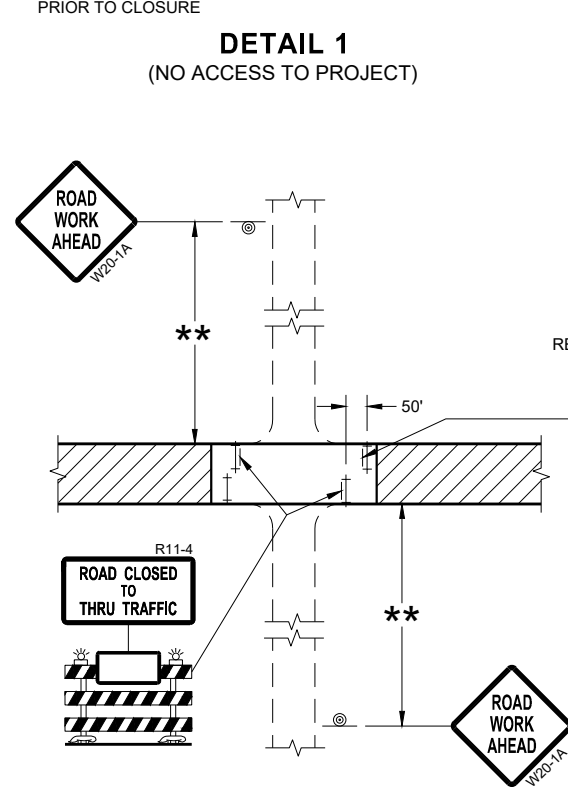
DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



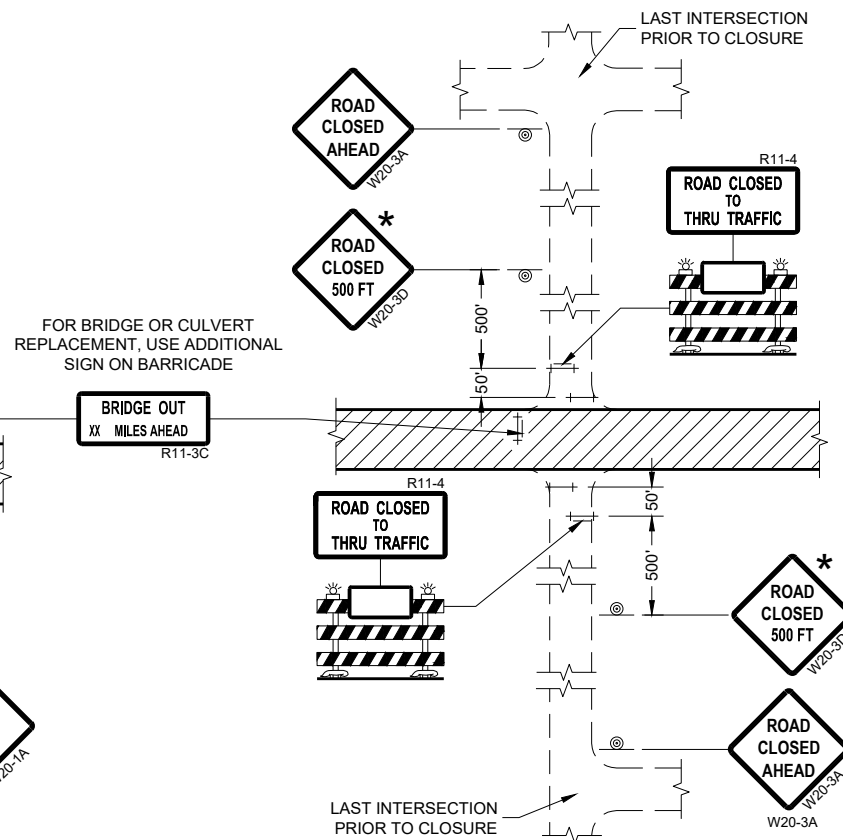
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

GENERAL NOTES

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

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




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

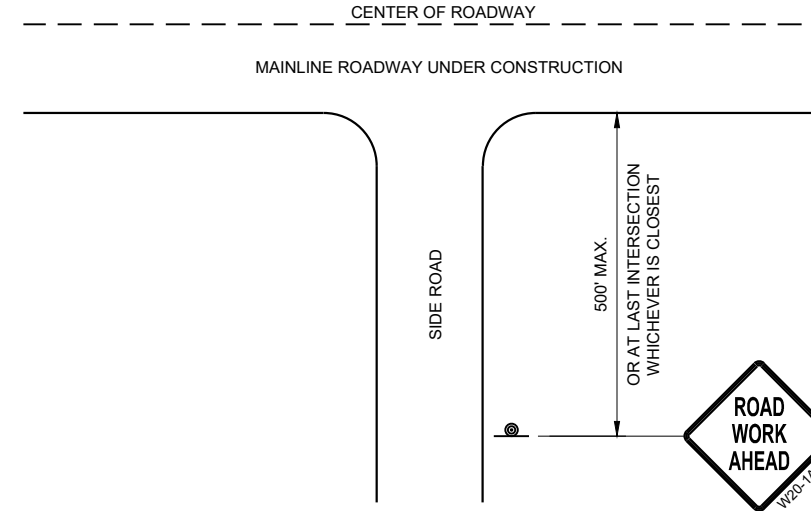
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

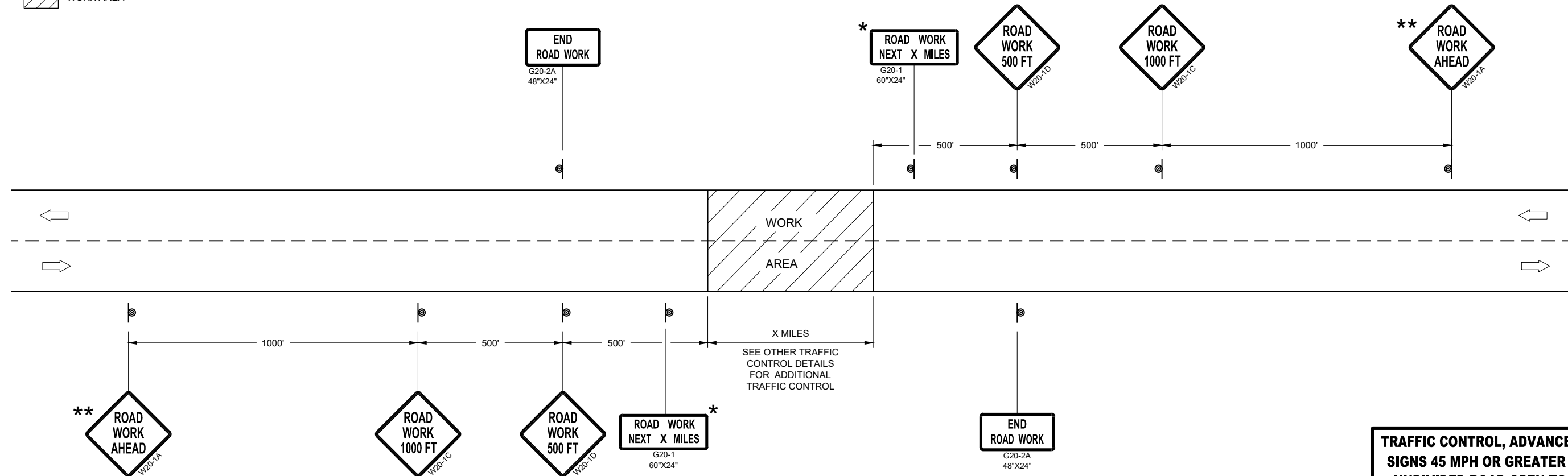
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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

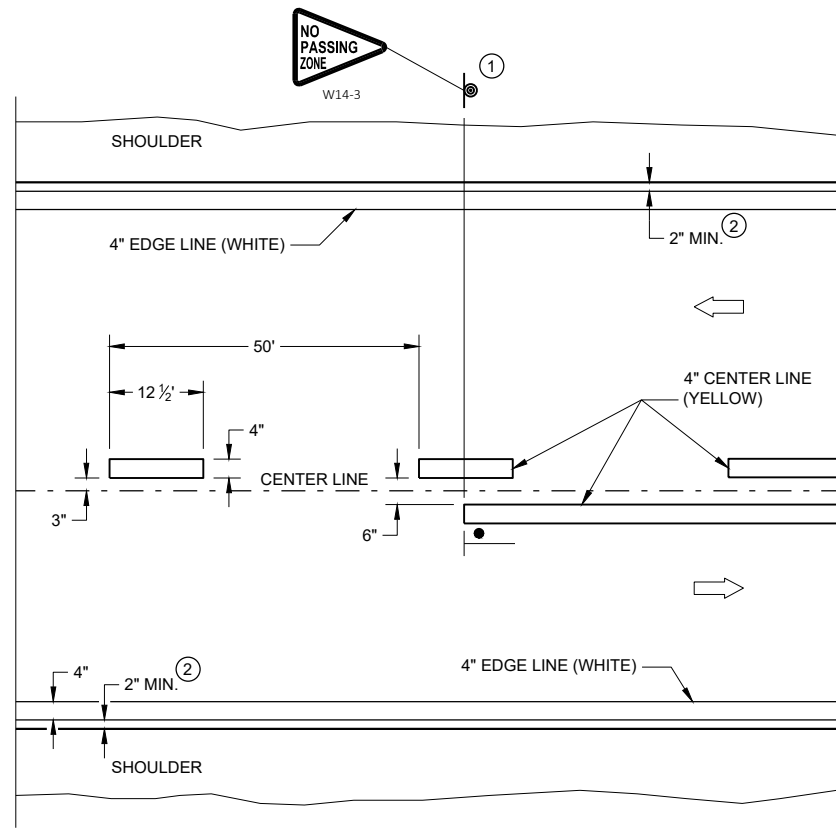


**TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL**

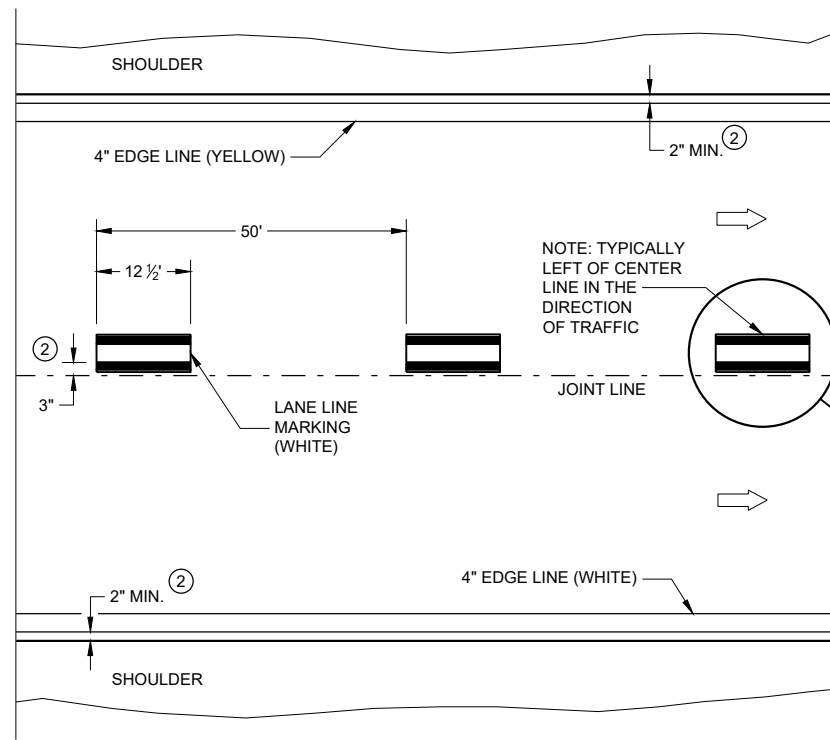


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

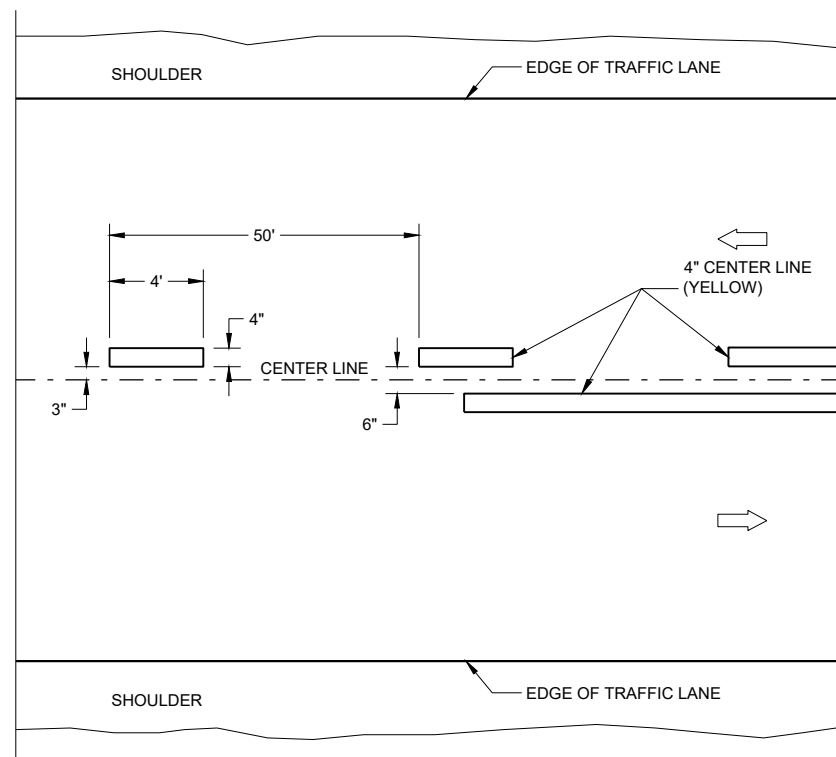


TWO WAY TRAFFIC

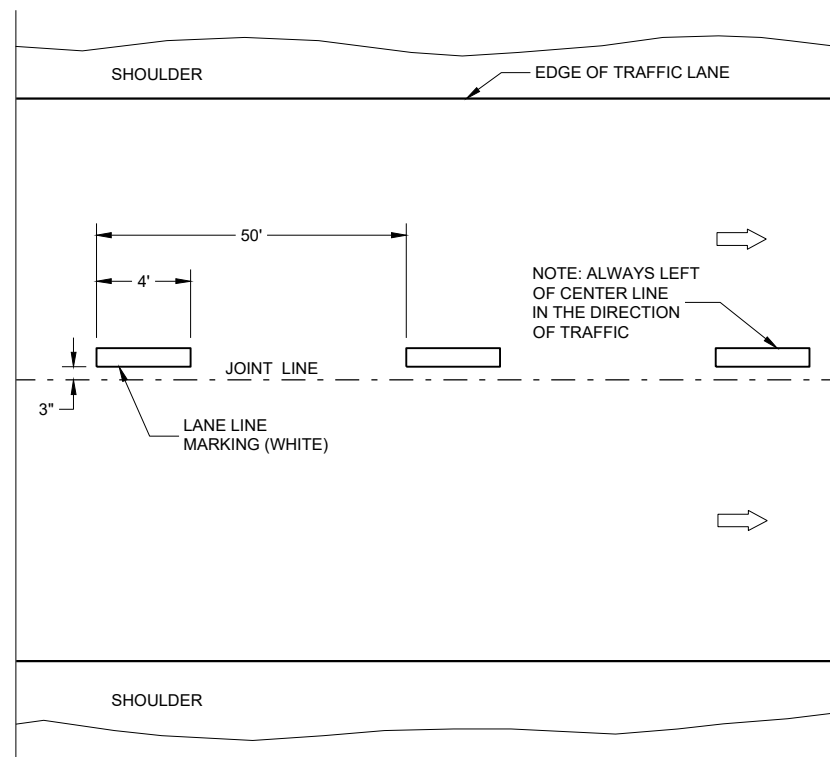


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

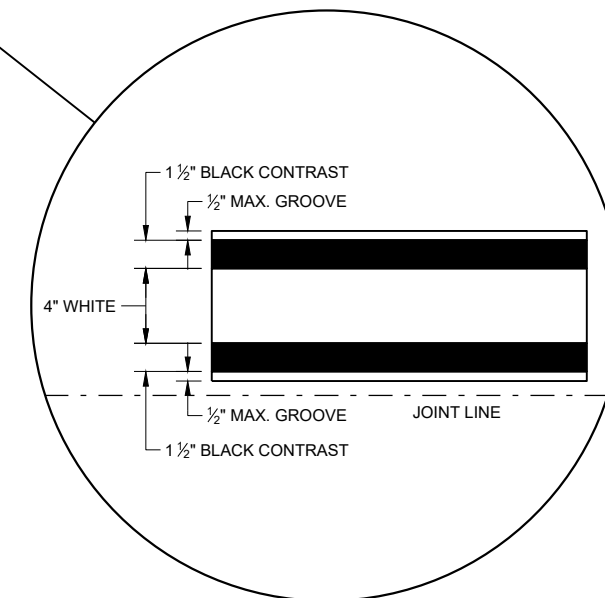
GENERAL NOTES

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

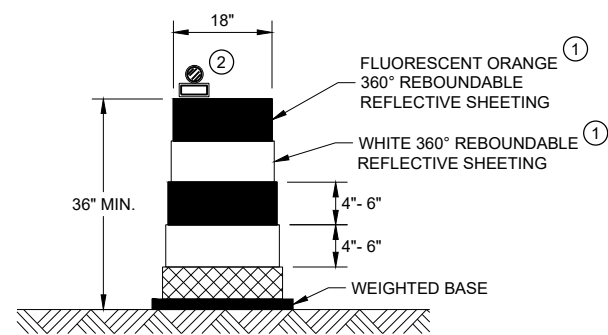
- |• "T" MARKING
- ⊙ SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



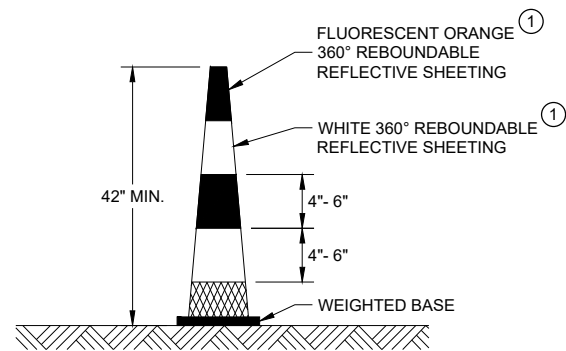
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

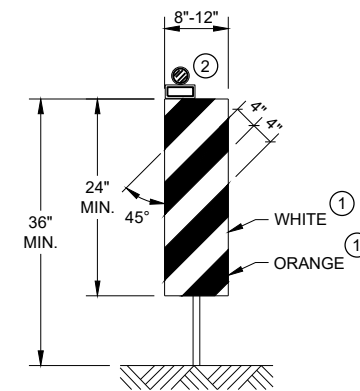


DRUM



42" CONE

DO NOT USE IN TAPERS
 1/2 SPACING OF DRUMS

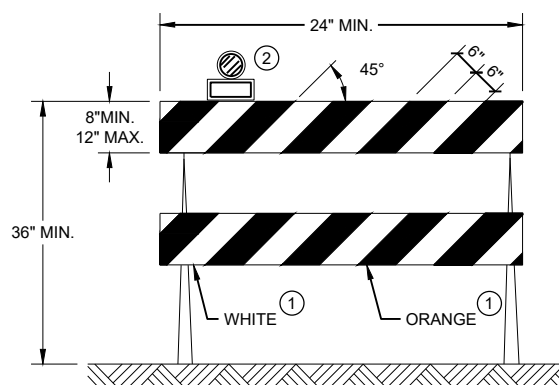


VERTICAL PANEL

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

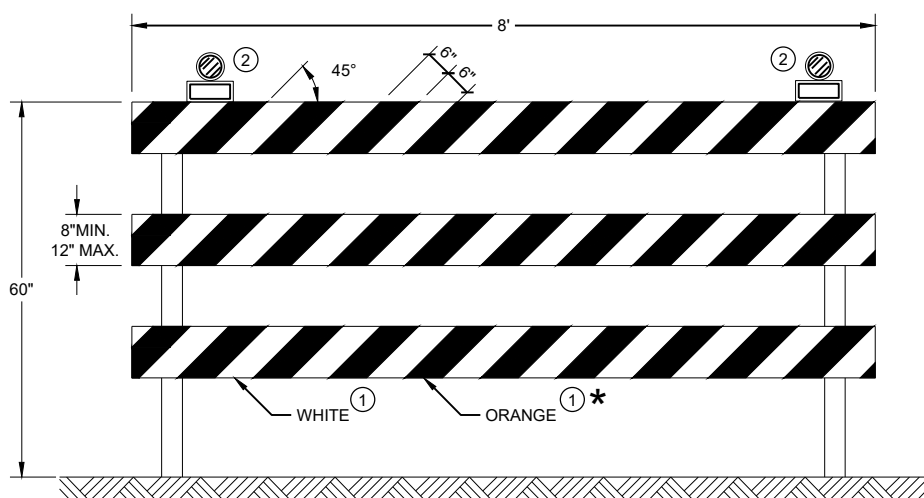
GENERAL NOTES

- 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.



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 ENGINEER
<small>FHWA</small>	

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.

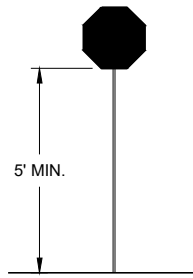
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

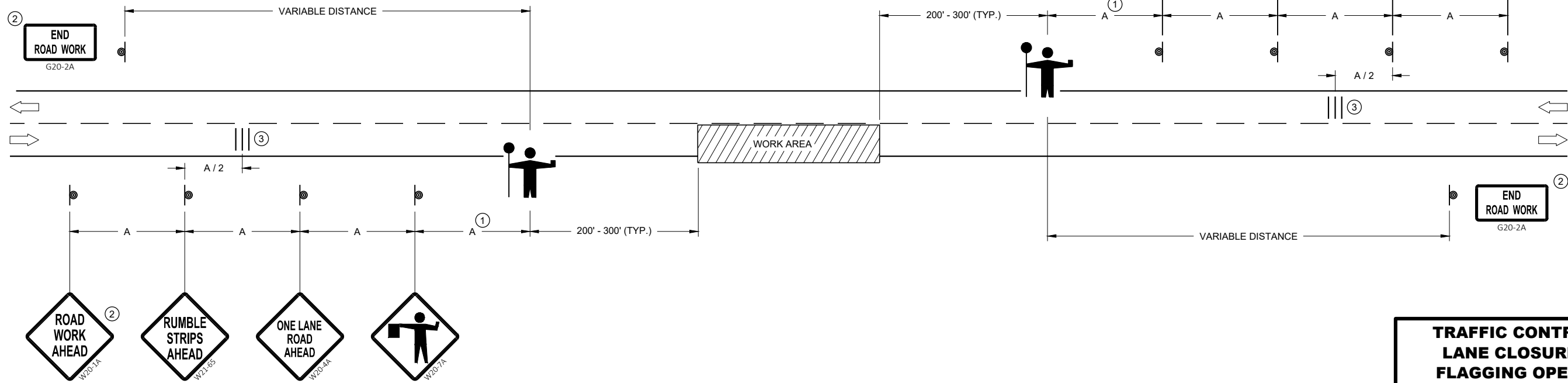
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



W03-4

USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



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SDD 15C12 - 08

SDD 15C12 - 08





TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

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.

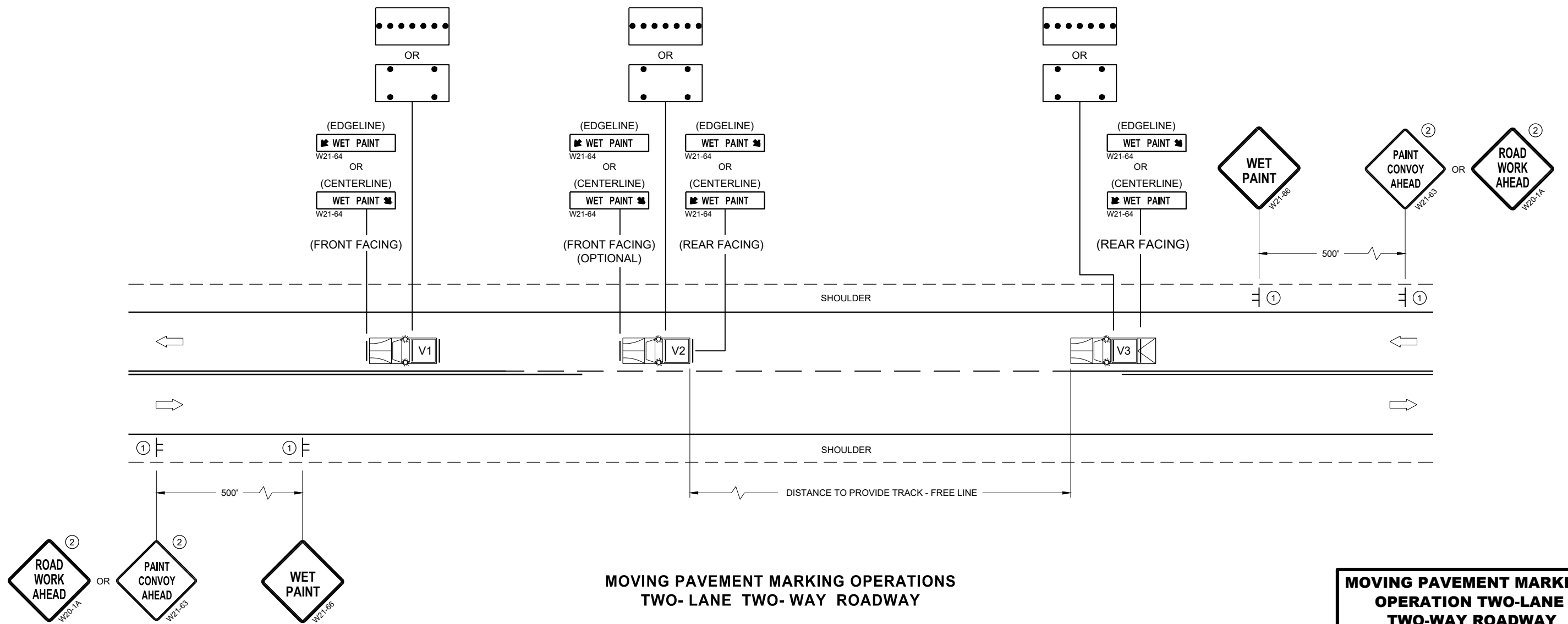
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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.

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

SDD 15C19 - 06a

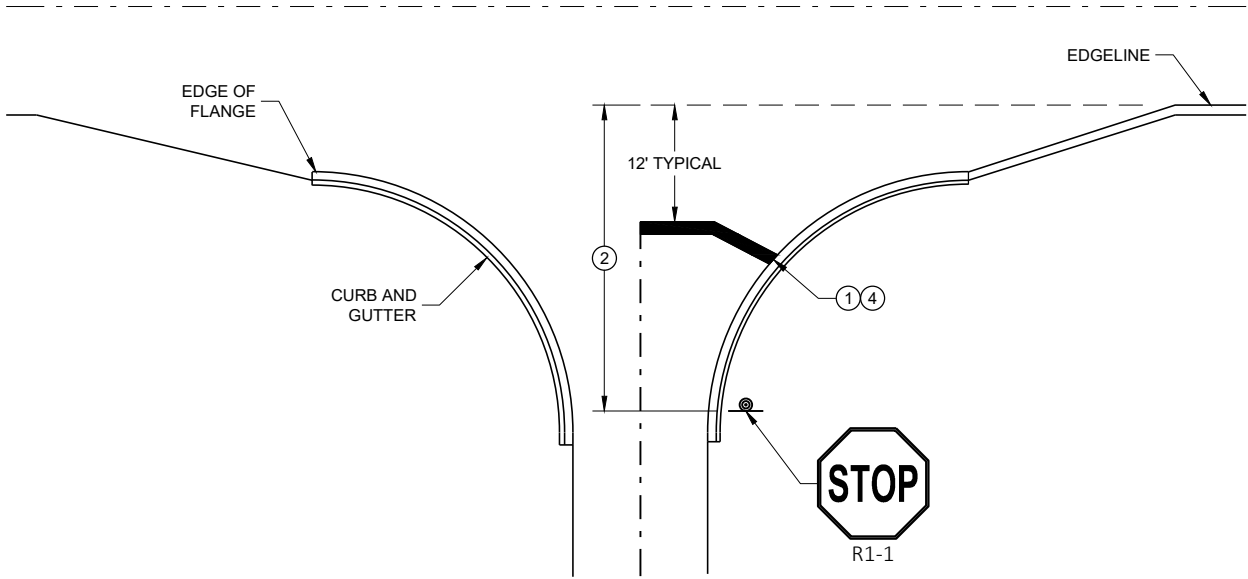
SDD 15C19 - 06a

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

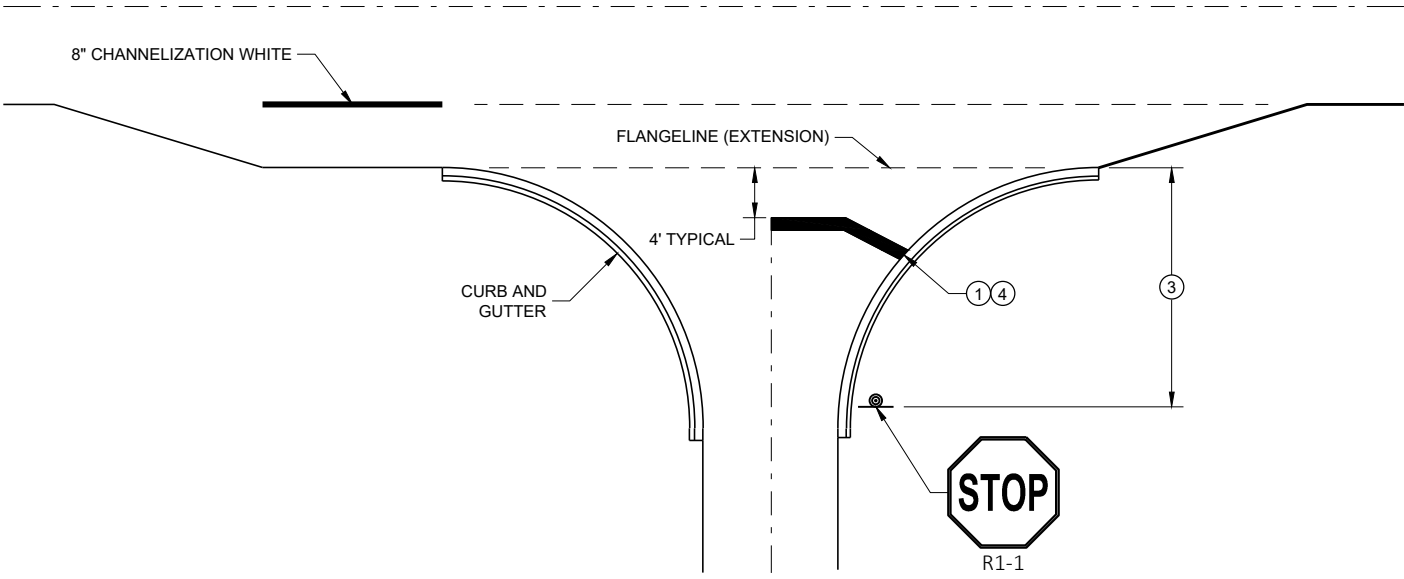
GENERAL NOTES

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

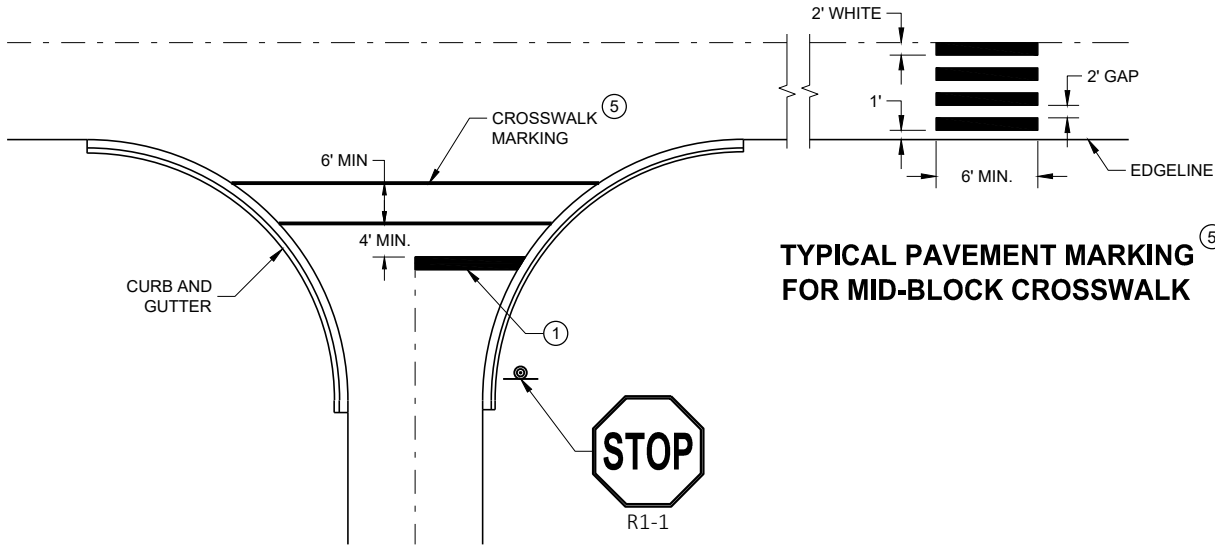
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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

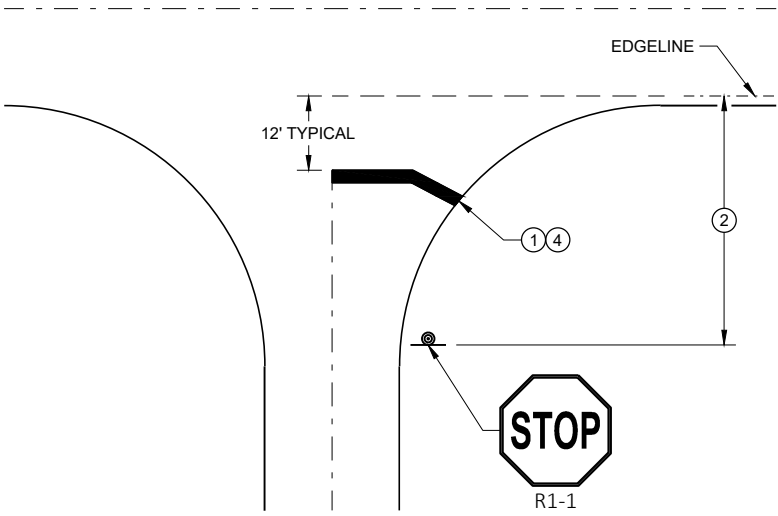


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER

FHWA

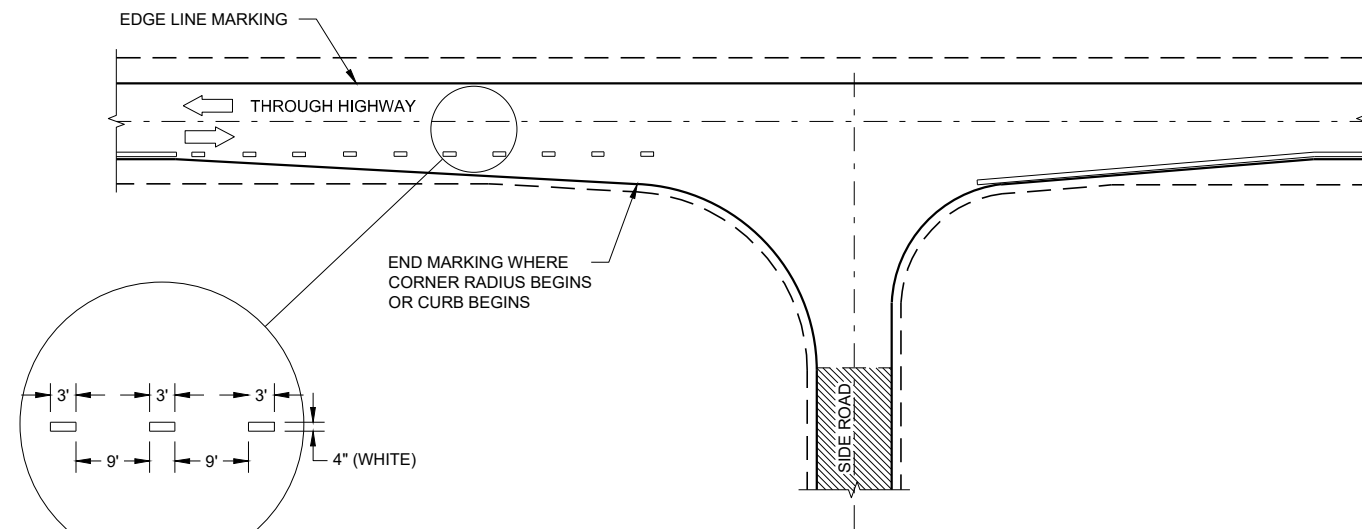
GENERAL NOTES

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

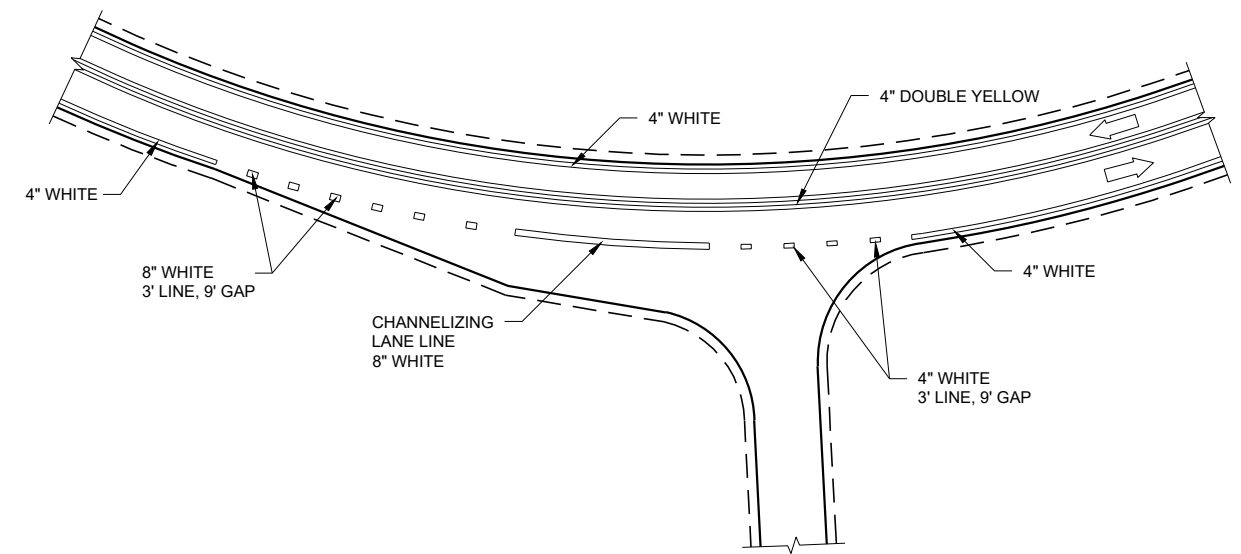
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

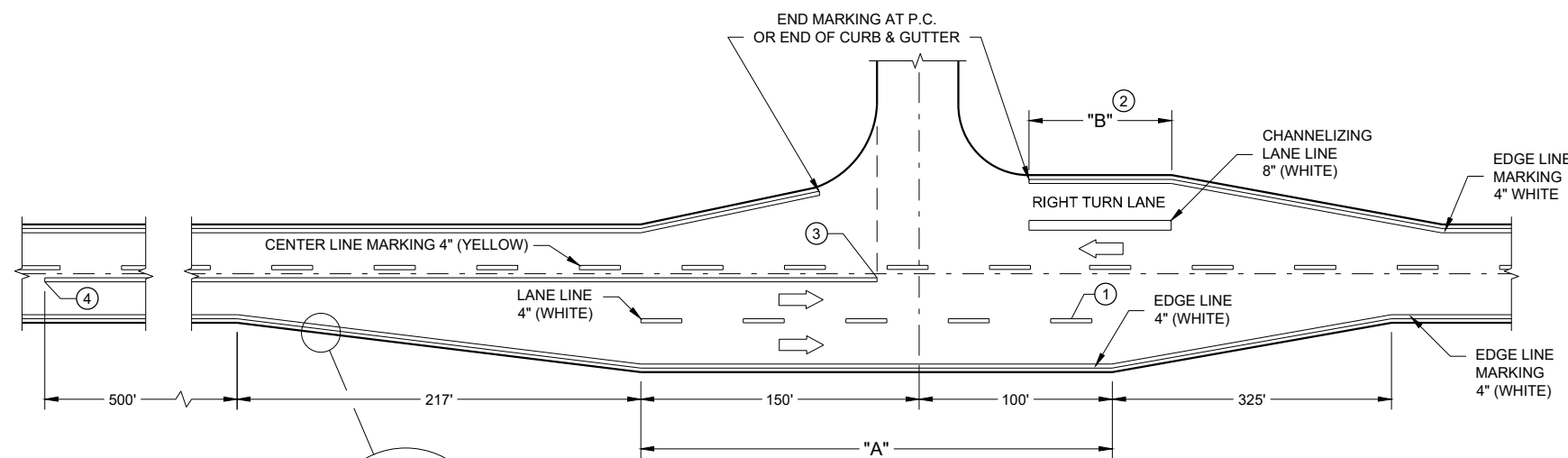
➡ DIRECTION OF TRAVEL



MINOR INTERSECTION



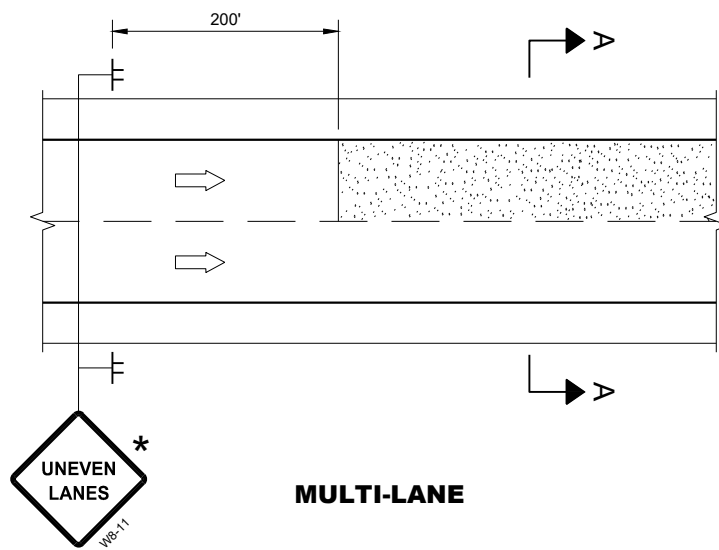
INTERSECTION ON OUTSIDE OF CURVE



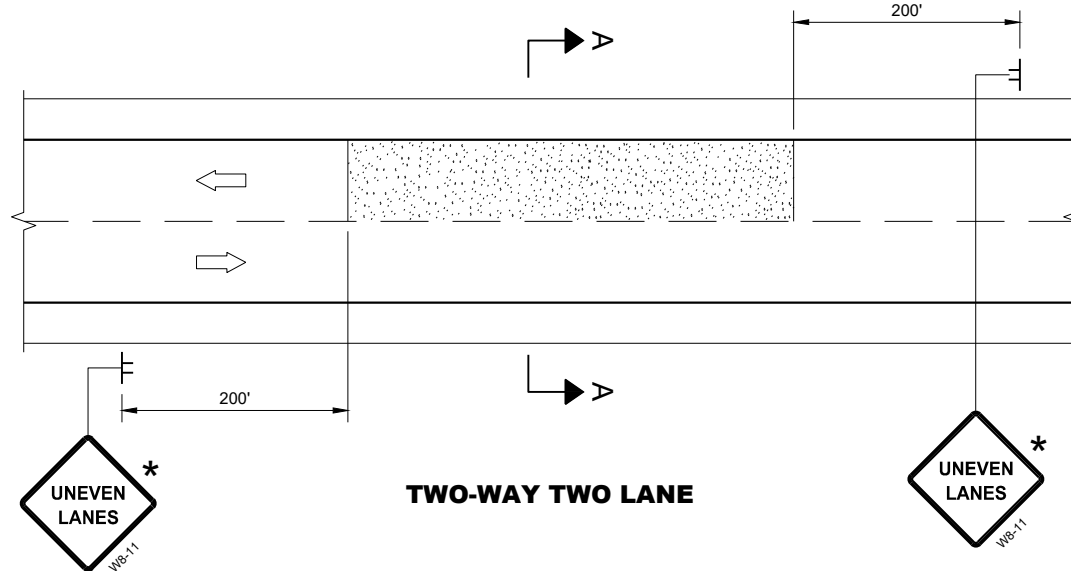
**MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**

**PAVEMENT MARKING
(INTERSECTIONS)**

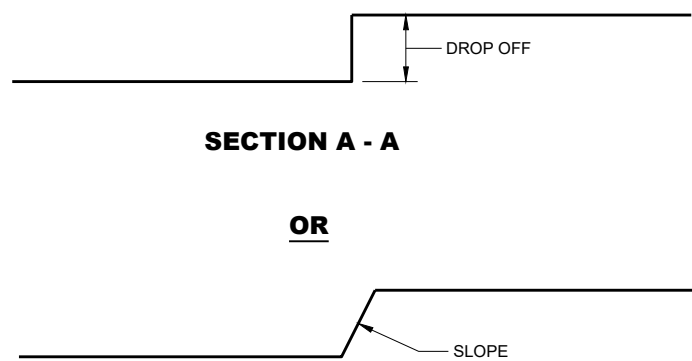
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MULTI-LANE



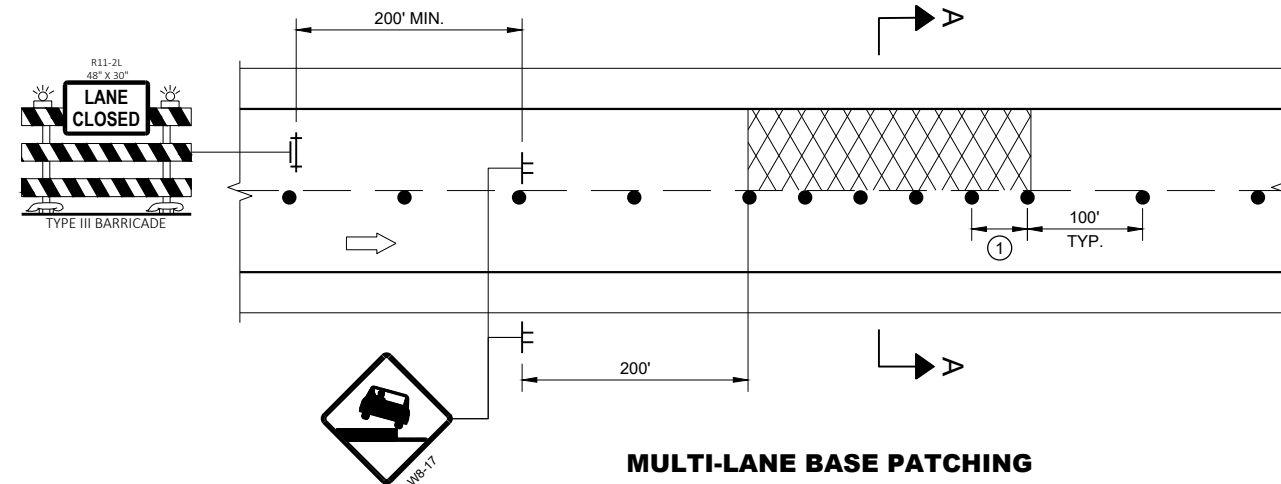
TWO-WAY TWO LANE



SECTION A - A

OR

SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

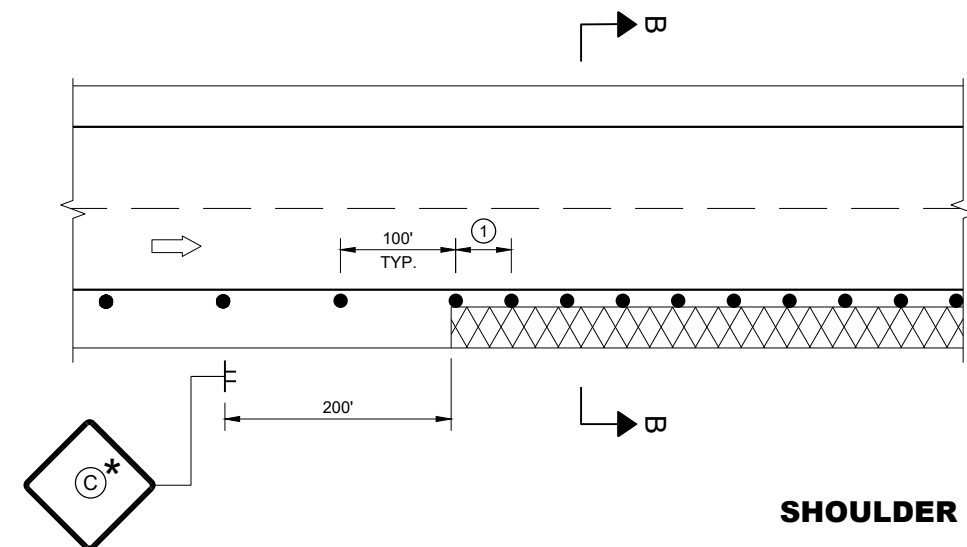
- FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- * IF THE DROP-OFF 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

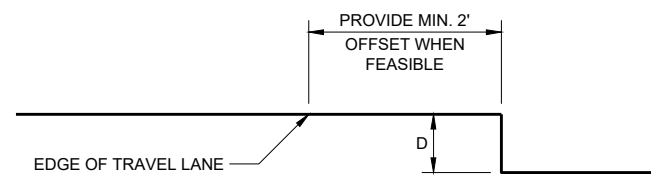
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

6

6



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

SDD 15D39 - 02

SDD 15D39 - 02

**TRAFFIC CONTROL,
DROP-OFF SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE DATE WORK ZONE ENGINEER

FHWA

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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



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

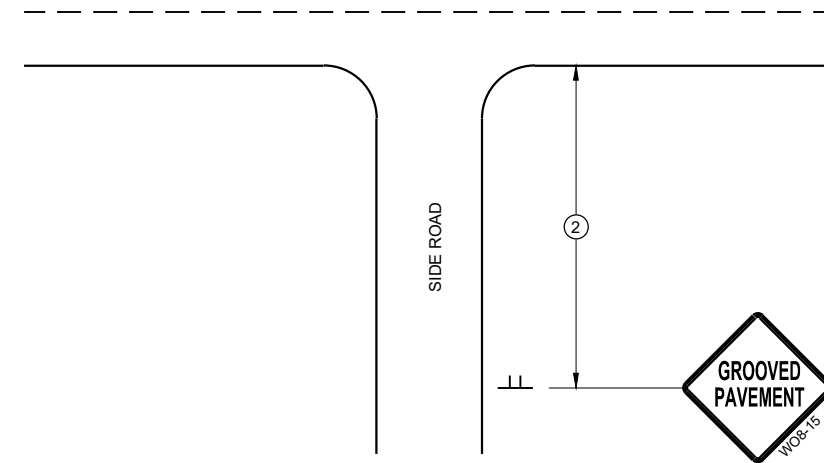
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

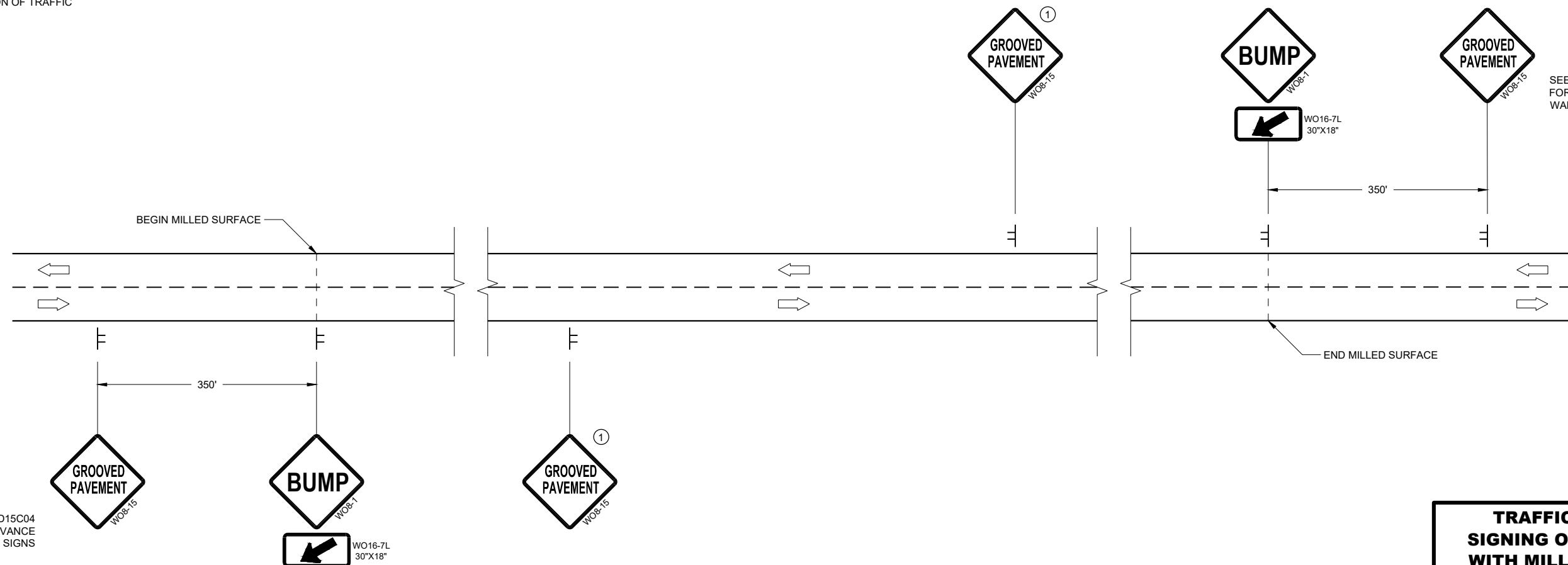
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

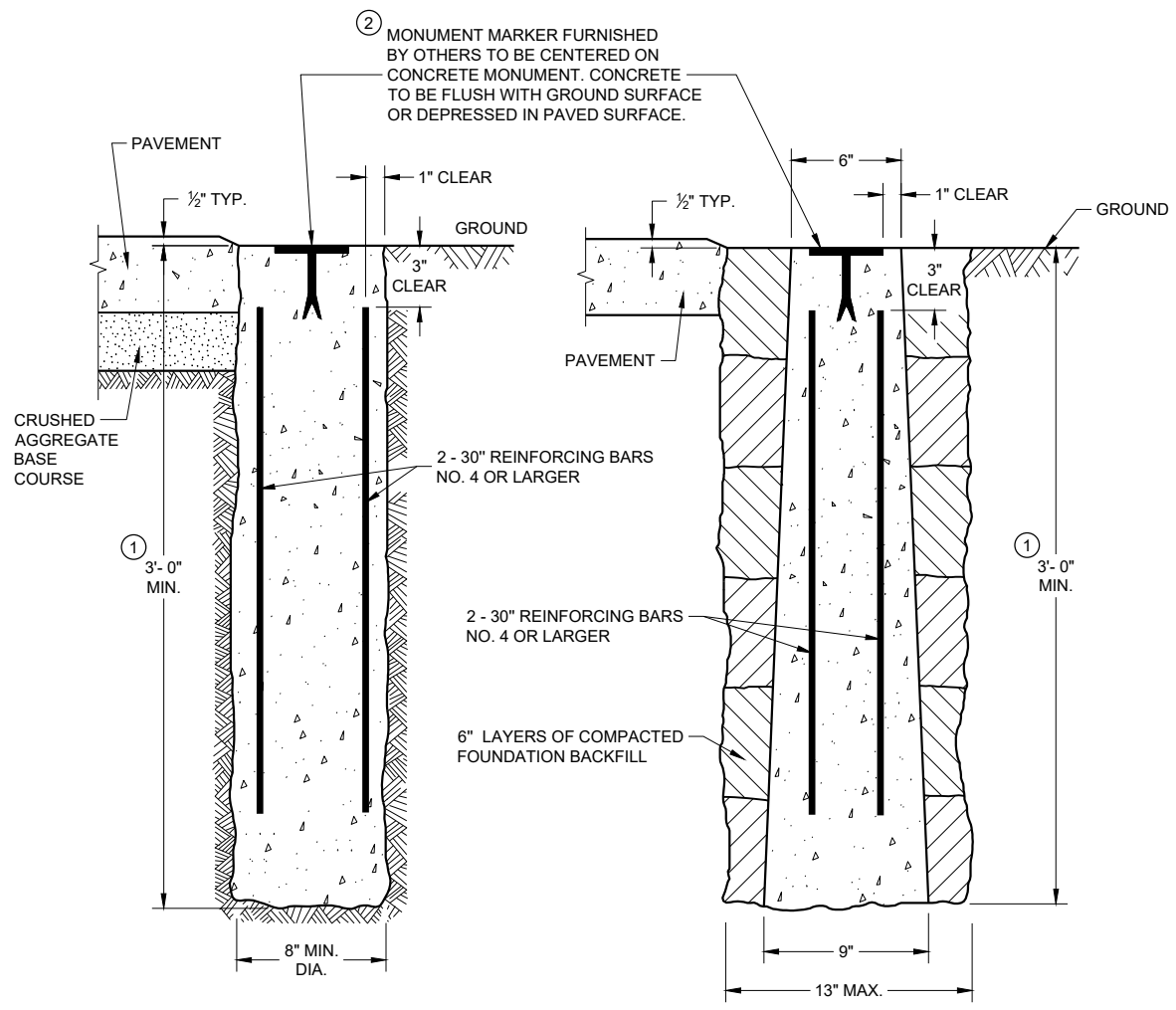
SEE SDD15C04 FOR ADVANCE WARNING SIGNS

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

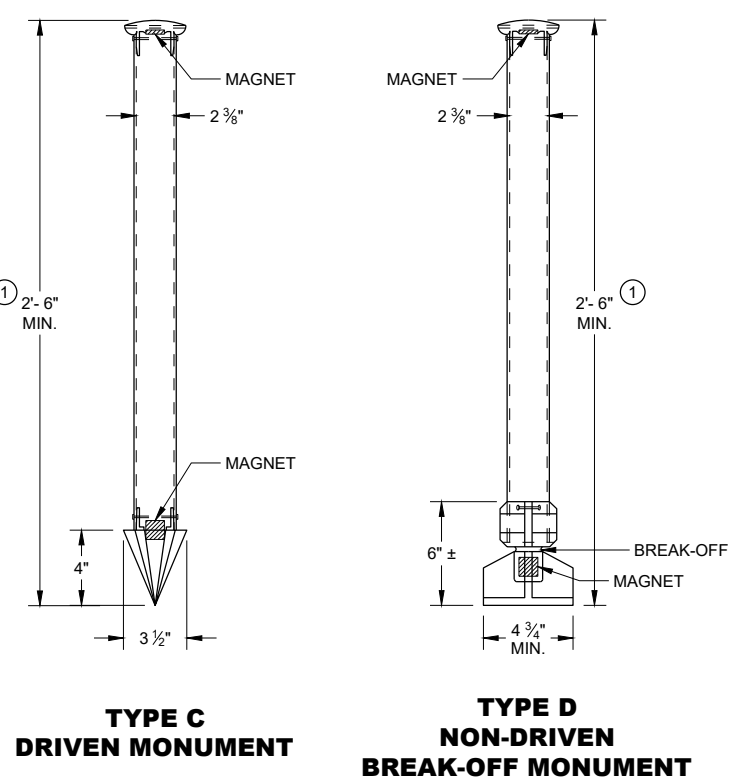
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



**CAST-IN-PLACE
CONCRETE MONUMENTS
TYPE A**



**ALUMINUM MONUMENTS
(INCLUDES MARKER)**

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.

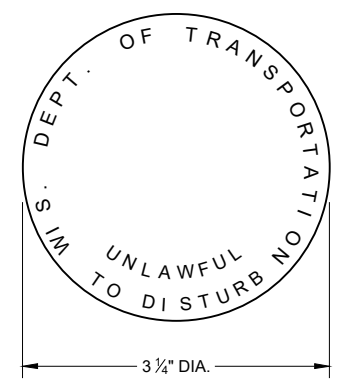
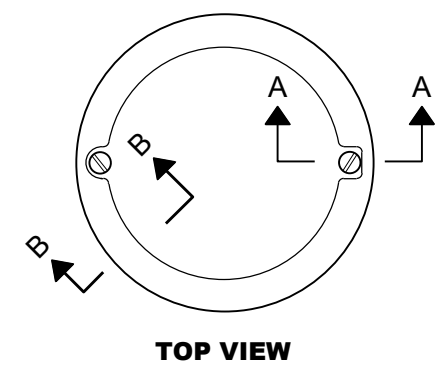
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

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

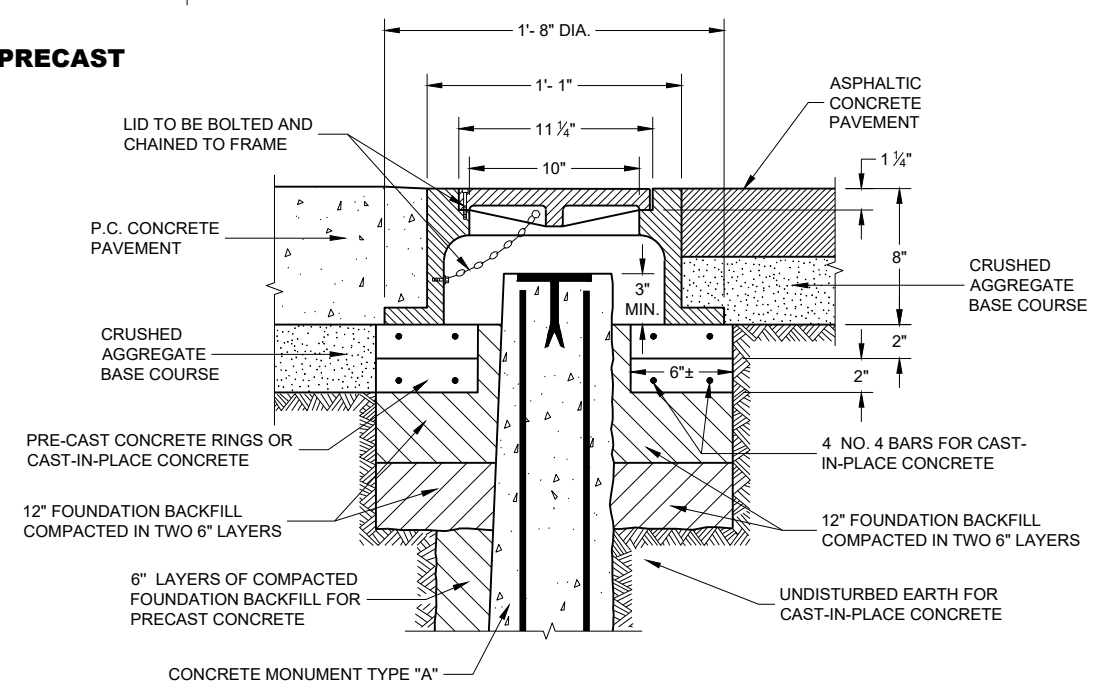
THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

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

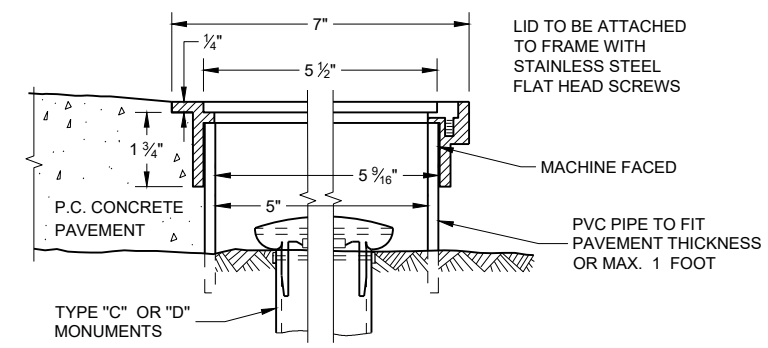
- ① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.
- ② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



② **WIS DOT MONUMENT MARKER LOGO**
FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)



**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. Kumapayii CHIEF SURVEYING AND MAPPING ENGINEER
FHWA	

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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