










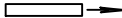



STATE OF MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	<u>SURVEYOR</u>
Designer	<u>JIM SIMPSON</u>
Project Manager	<u>MATT DAPP</u>
Regional Examiner	<u>REGIONAL EXAMINER</u>
Regional Supervisor	<u>WILLIAM STROBEL</u>
APPROVED FOR THE DEPARTMENT	
DATE: 03-25-2014	<u>William Strobel</u> (Signature)

NEW GLARUS - VERONA
CTH D TO VALLEY ROAD
STH 69
DANE COUNTY

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 8.60 MI.


DESIGN	DESIGNATION	
A.A.D.T.	(2014)	= 6,400
A.A.D.T.	(2034)	= 7,890
D.H.V.		= 4.6%
D.D.		= 60/40
T.		= 5.5%
DESIGN SPEED		= 60 MPH
ESALS		= 940,000

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

PROFILE
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)
SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)
UTILITIES
ELECTRIC
FIBER OPTIC
GAS
SANITARY SEWER
STORM SEWER
TELEPHONE
WATER
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE



 ROCK

 LABEL

 95.36

 E

 FO

 G

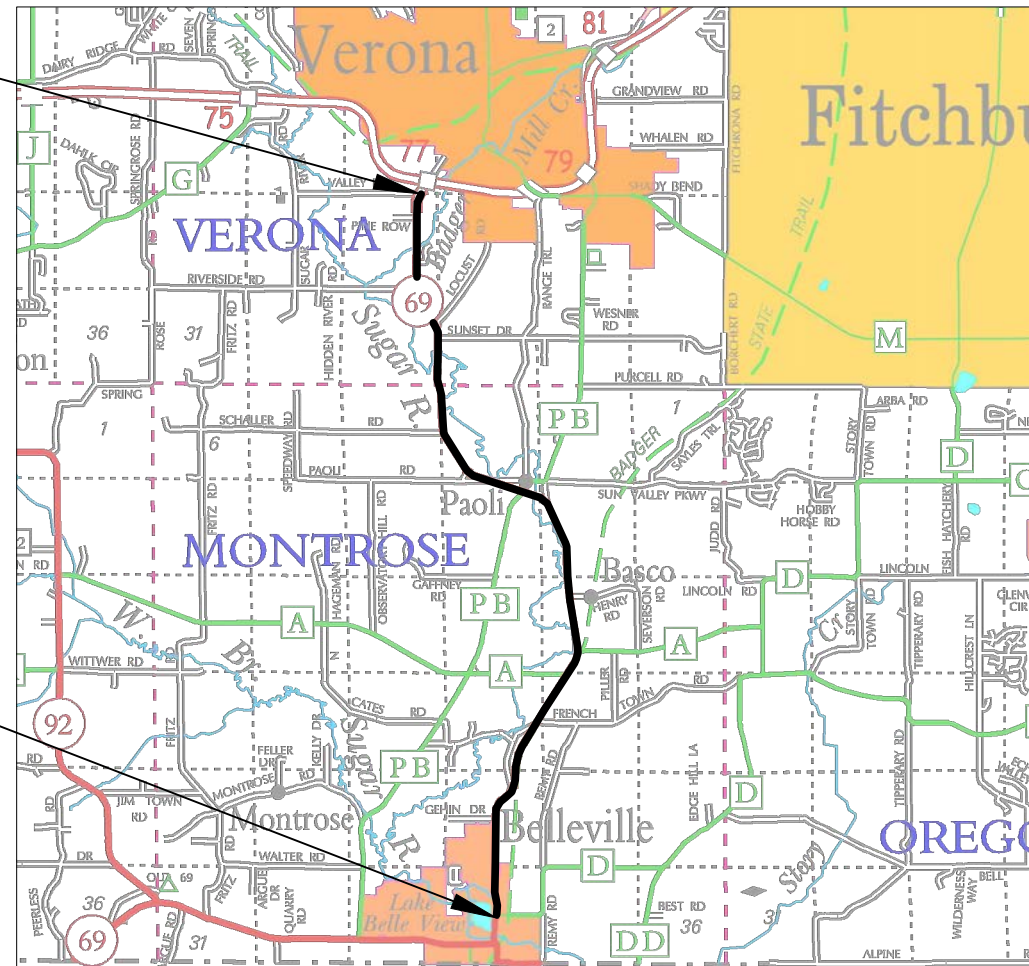
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HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

GENERAL NOTES

HMA PAVEMENT OVERLAY WILL BE PLACED IN ONE 2 1/2" SURFACE COURSE LAYER.

ASPHALTIC MATERIAL PG58-28 TO BE USED IN WEDGING AND OVERLAY SURFACES.

ASPHALTIC MATERIAL CALCULATIONS ARE BASED ON 5.5% OF THE HMA PAVEMENT TONNAGE.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

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

A 12.5 MM MIX GRADATION CAN BE USED FOR THE SURFACE LAYER AND WEDGING LAYER.

APPLY TACK COAT BEFORE PLACING WEDGING AND OVERLAY SURFACES. THE RATE OF APPLICATIONS IS 0.025 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

EXACT LOCATIONS FOR THE EXTRA DEPTH PAVEMENT REPAIR AND WEDGING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES AND FIELD ENTRANCES SHALL BE DETERMINED 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.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

EROSION CONTROL ITEMS IN THE MISC. QUAN. ARE SUGGESTED. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. MAINTAIN EROSION CONTROL ITEMS UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. PROTECT WETLANDS AND OTHER WATERWAYS THAT ARE PRESENT WITHIN THE PROJECT LIMITS.

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

IF UTILITY CONFLICTS OCCUR DURING CONSTRUCTION, ADJUSTMENTS WILL BE COORDINATED BY CONTRACTOR. IF THERE ARE CONFLICTS WITH SIGNS OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

DO NOT STORE EQUIPMENT OR MATERIAL IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

DNR Contact

Eric Heggelund
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608) 275-3301
eric.heggelund@wisconsin.gov



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

Utility Contacts

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molsen@atcllc.com

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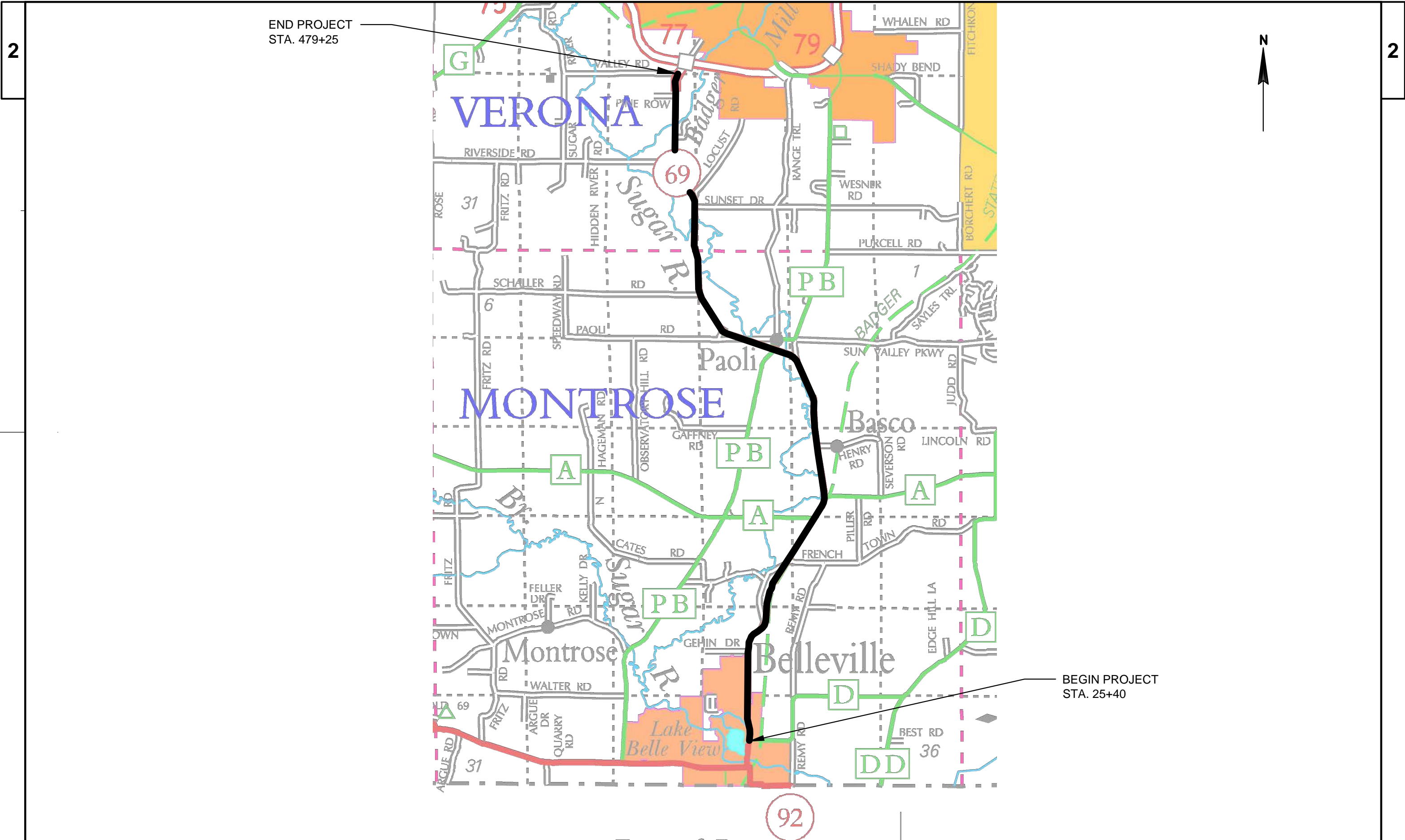
Tim Statz
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tstatz@mge.com

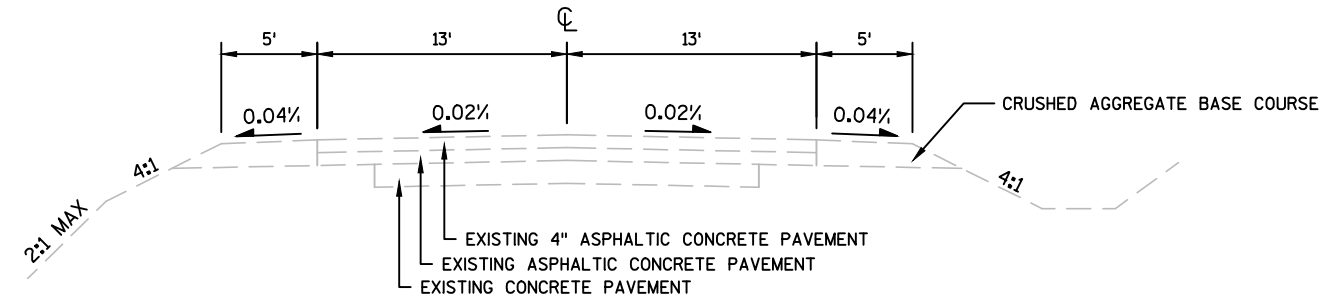
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(608) 664-4404
jerry.myers@tdstelecom.com

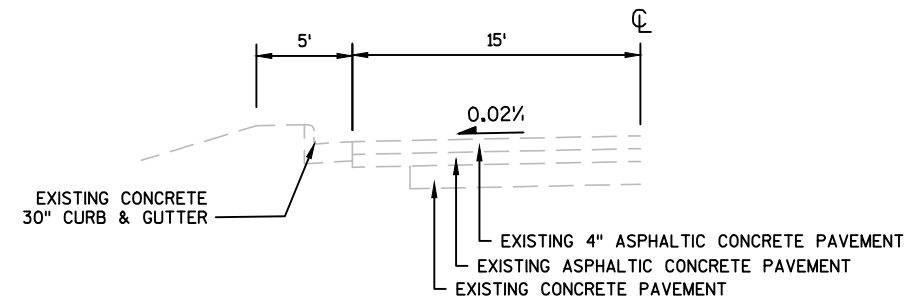
Jerry Butts
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jbuttsvob@charterinternet.com





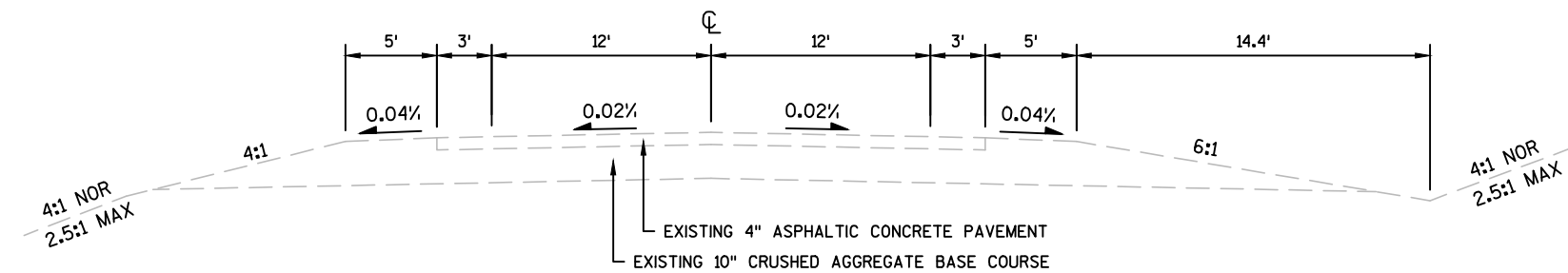
EXISTING TYPICAL SECTION

STA. 25+40 - STA. 272+37
 STA. 277+37 - STA. 382+64
 STA. 387+14 - STA. 437+00
 STA. 449+50 - STA. 456+55



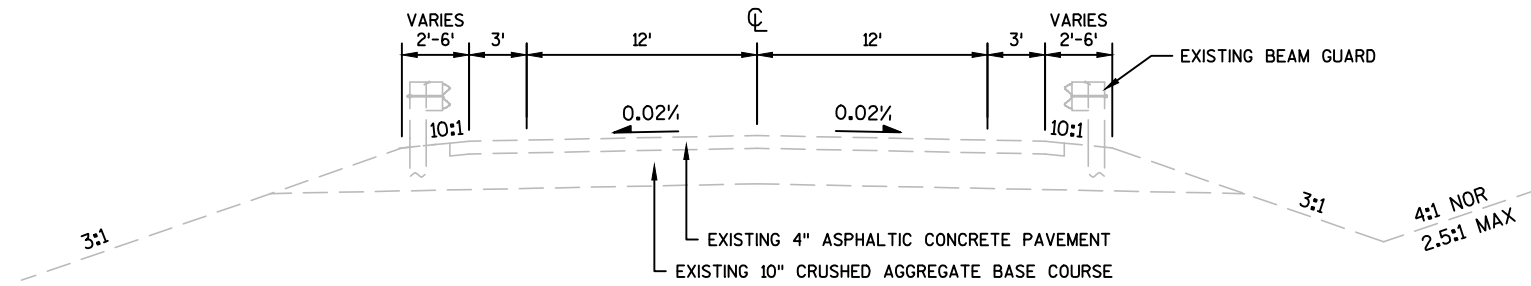
EXISTING TYPICAL HALF SECTION

STA. 25+40 - STA. 31+75



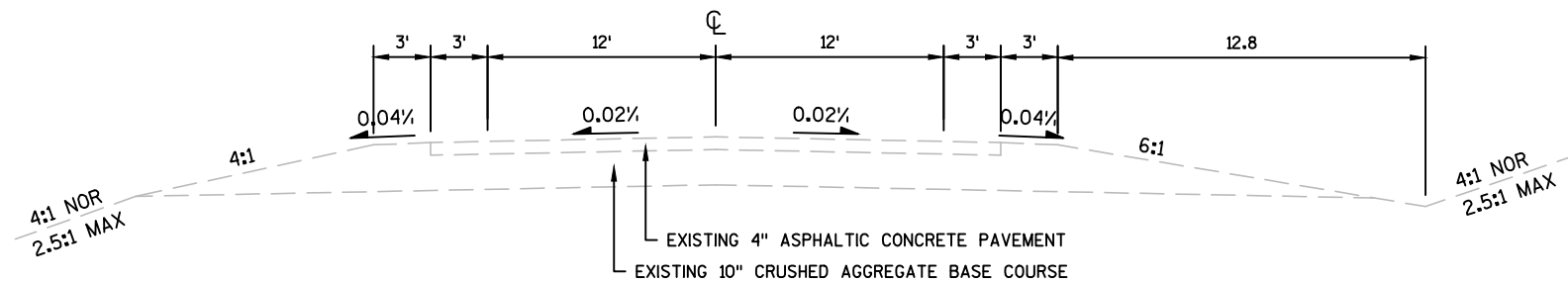
EXISTING TYPICAL SECTION

STA. 272+37 - STA. 273+22
 STA. 276+81 - STA. 277+37
 STA. 382+64 - STA. 383+10
 STA. 386+74 - STA. 387+14



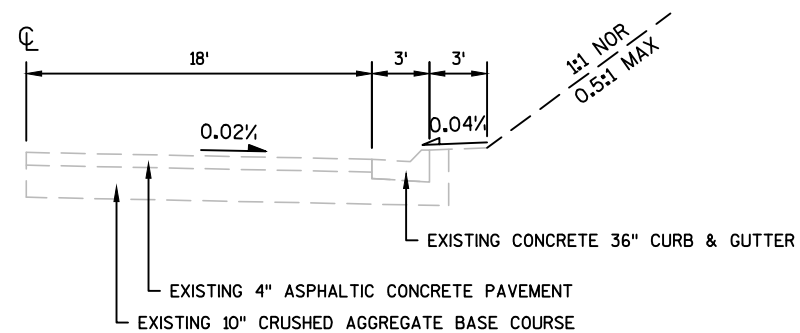
EXISTING TYPICAL SECTION

STA. 273+22 - STA. 274+54
 STA. 275+48 - STA. 276+81
 STA. 383+10 - STA. 384+37
 STA. 385+47 - STA. 386+74
 STA. 444+60 - STA. 445+58
 STA. 446+12 - STA. 447+42



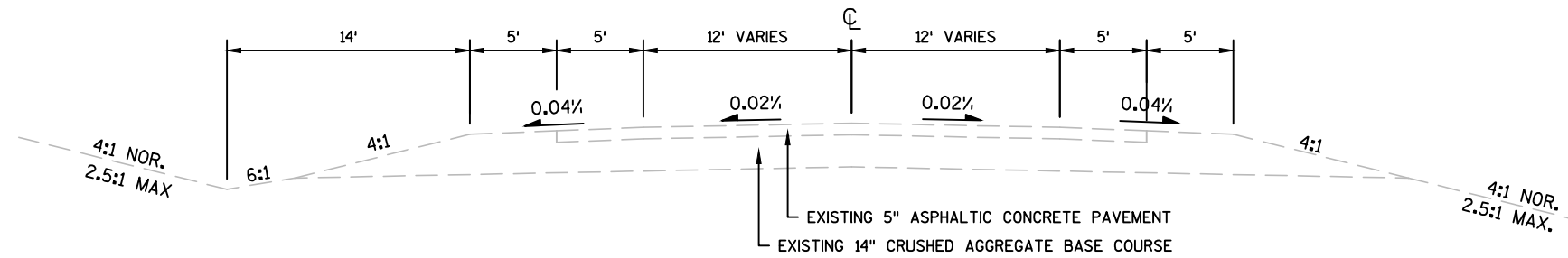
EXISTING TYPICAL SECTION

STA. 437+00 - STA. 444+60
 STA. 447+42 - STA. 449+50



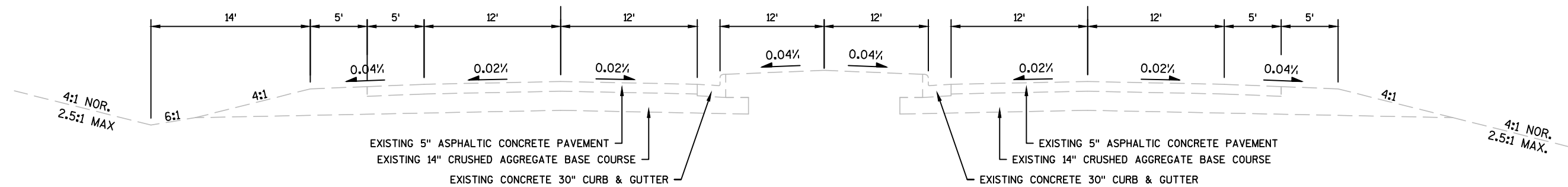
EXISTING TYPICAL HALF SECTION

STA. 441+75 - STA. 444+60



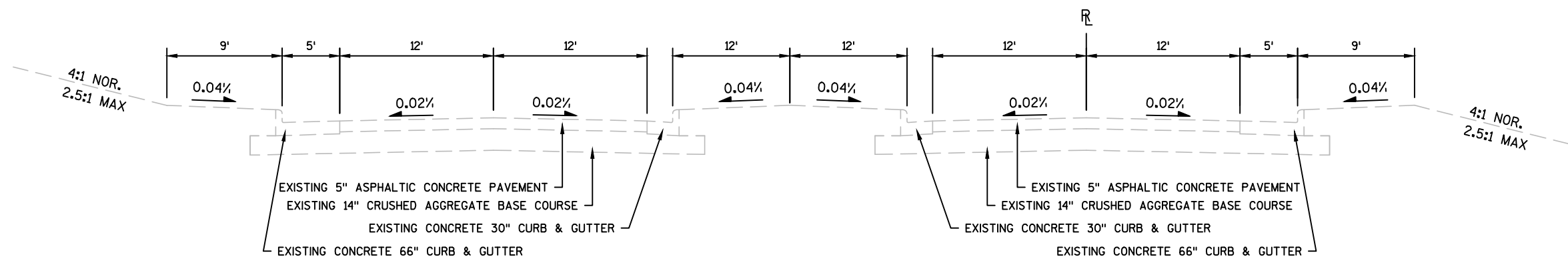
EXISTING TYPICAL SECTION

STA. 456+55 - STA. 465+63



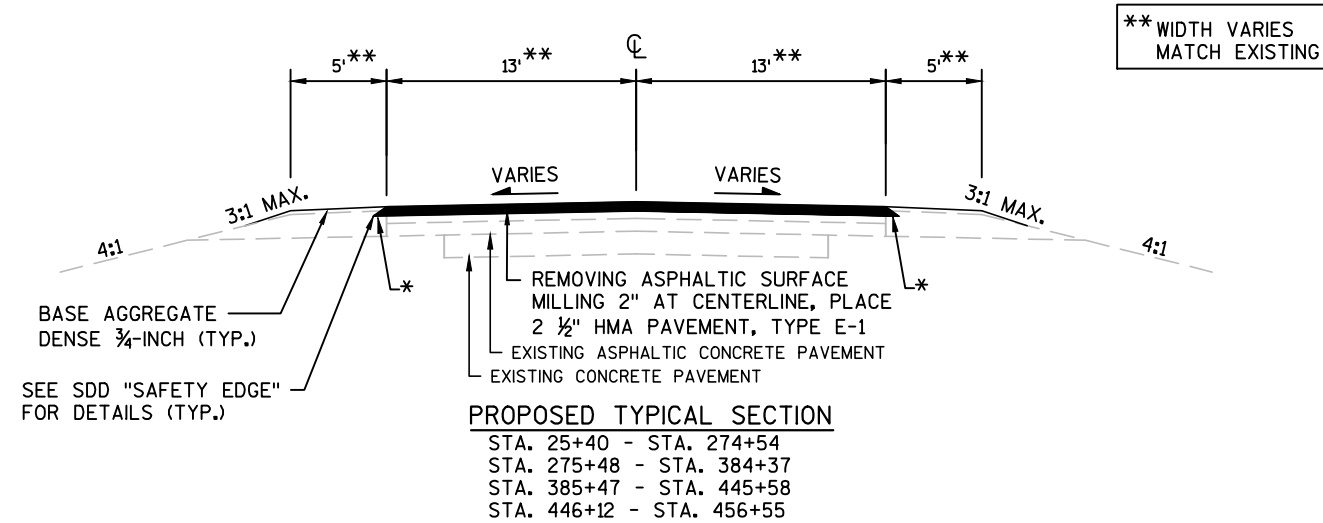
EXISTING TYPICAL SECTION

STA. 465+63 - STA. 475+98

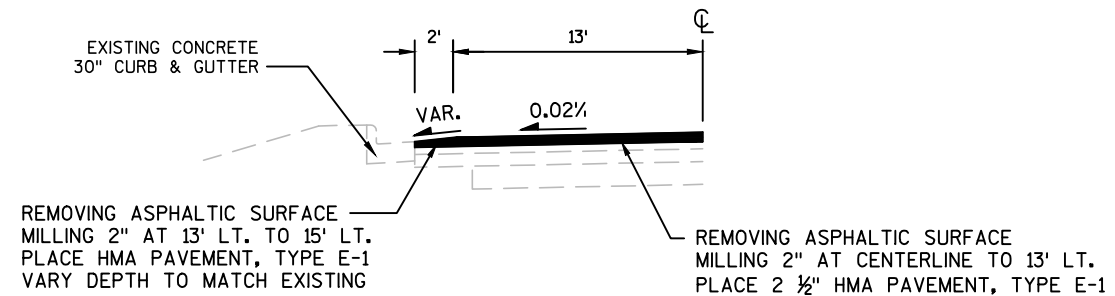


EXISTING TYPICAL SECTION

STA. 475+98 - STA. 479+25

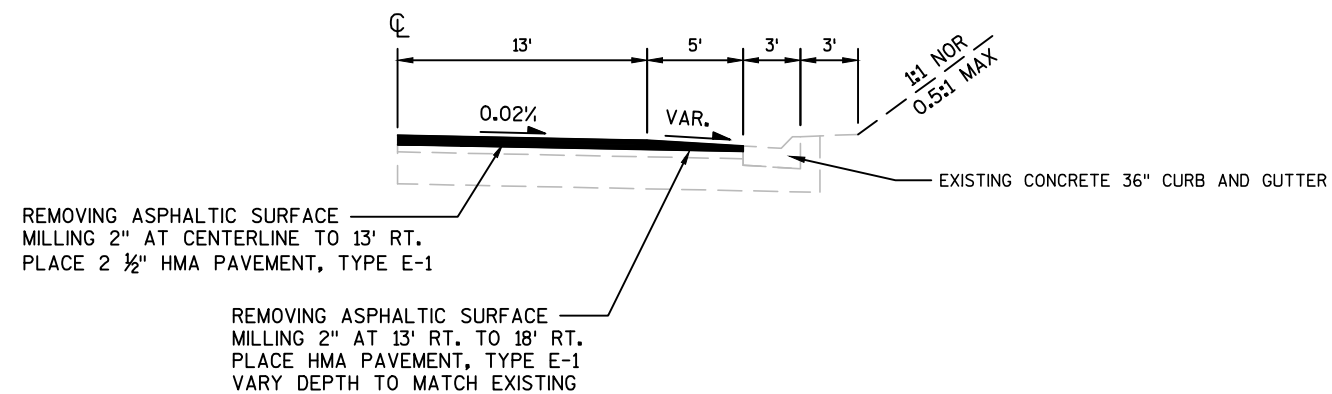


* ADDITIONAL 3-INCHES OF REMOVING ASPHALTIC SURFACE MILLING 2" REQUIRED FOR INSTALLATION OF SDD "SAFETY EDGE."



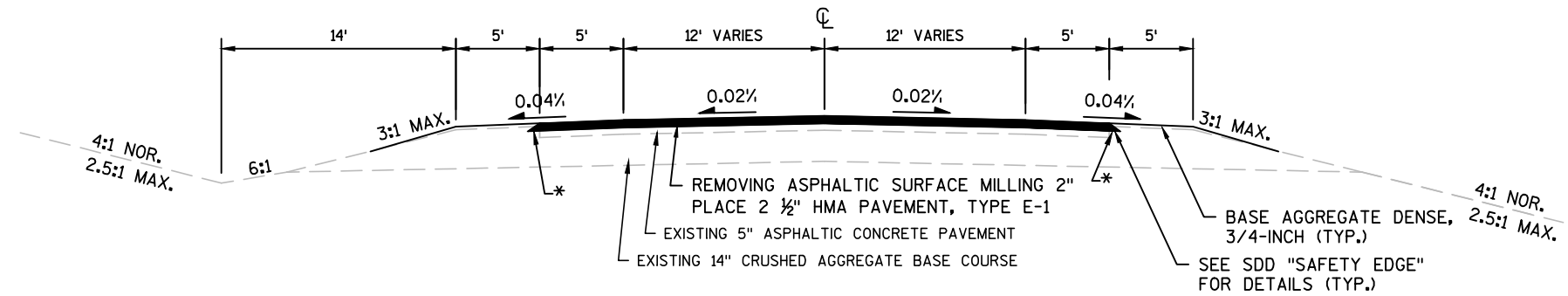
PROPOSED TYPICAL HALF SECTION

STA. 25+40 - STA. 31+75



PROPOSED TYPICAL HALF SECTION

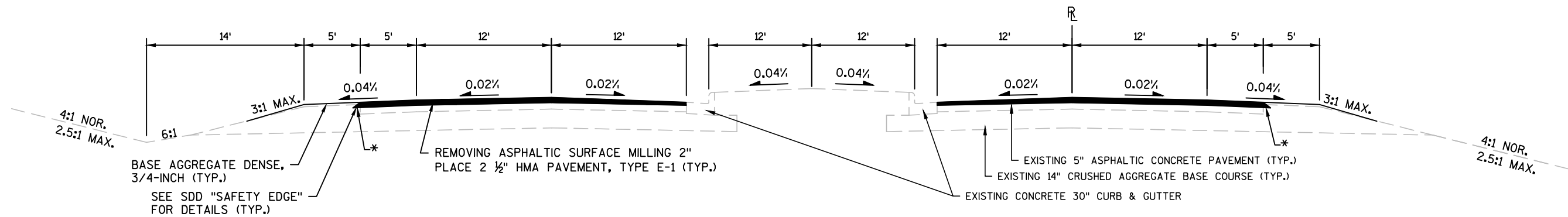
STA. 441+75 - STA. 444+60



PROPOSED TYPICAL SECTION

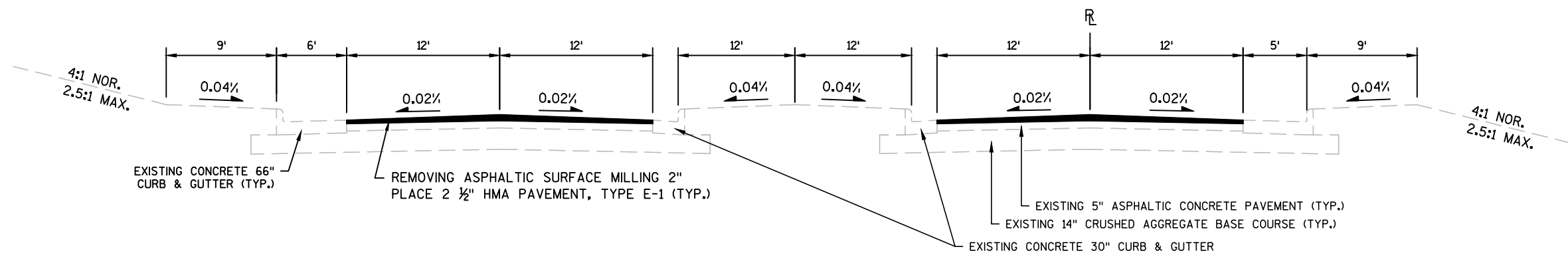
STA. 456+55 - STA. 465+63

* ADDITIONAL 3-INCHES OF REMOVING ASPHALTIC SURFACE MILLING 2" REQUIRED FOR INSTALLATION OF SDD "SAFETY EDGE."



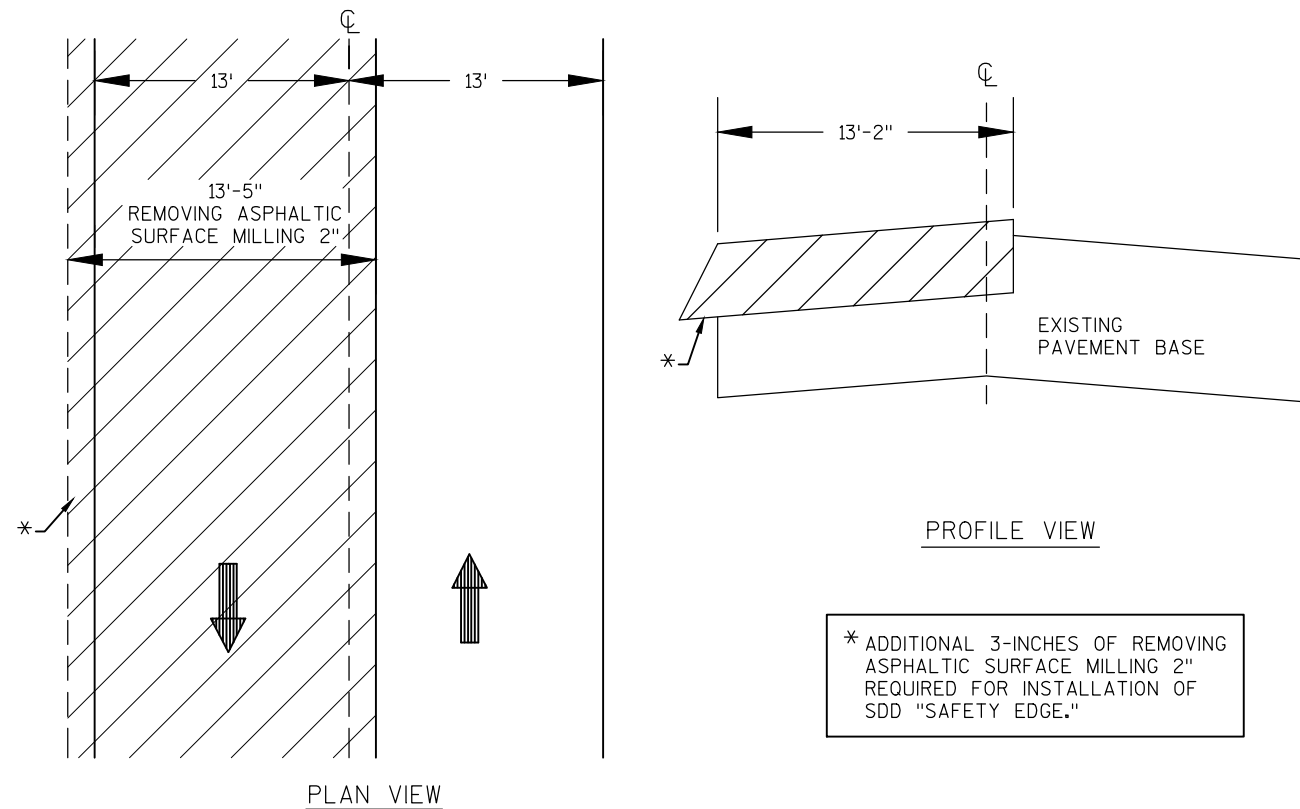
PROPOSED TYPICAL SECTION

STA. 465+63 - STA. 475+98



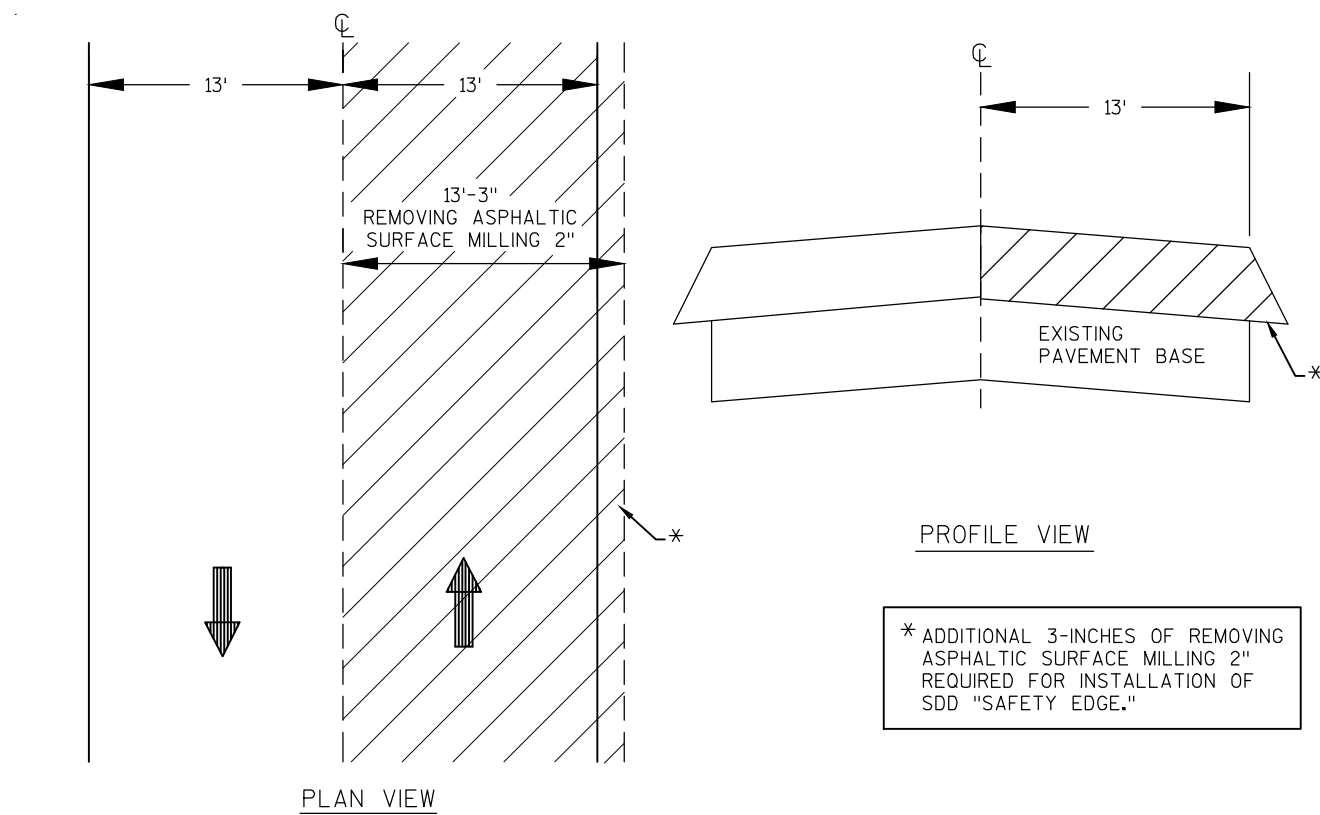
PROPOSED TYPICAL SECTION

STA. 475+98 - STA. 479+25



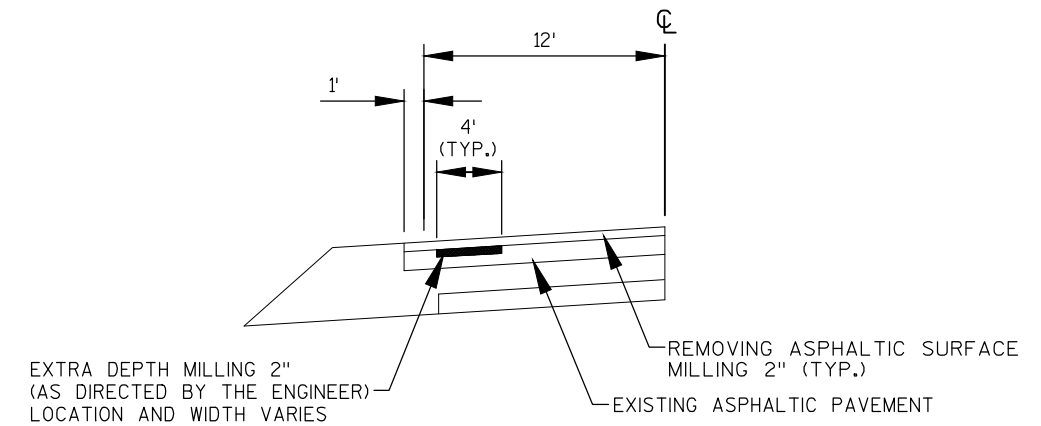
2 ½" HMA PAVEMENT, TYPE E-1

FIRST PASS DETAIL

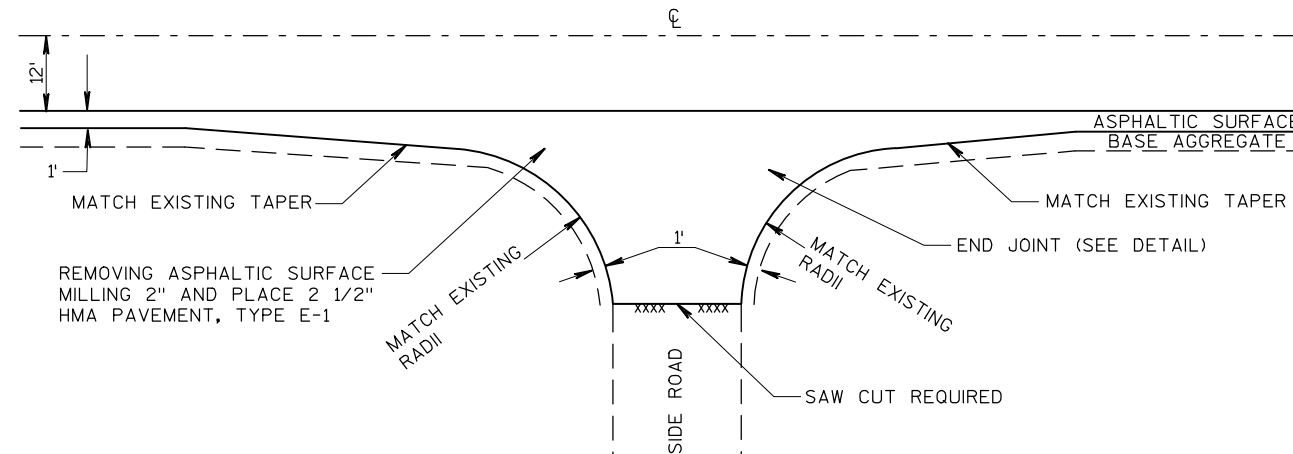


2 ½" HMA PAVEMENT, TYPE E-1

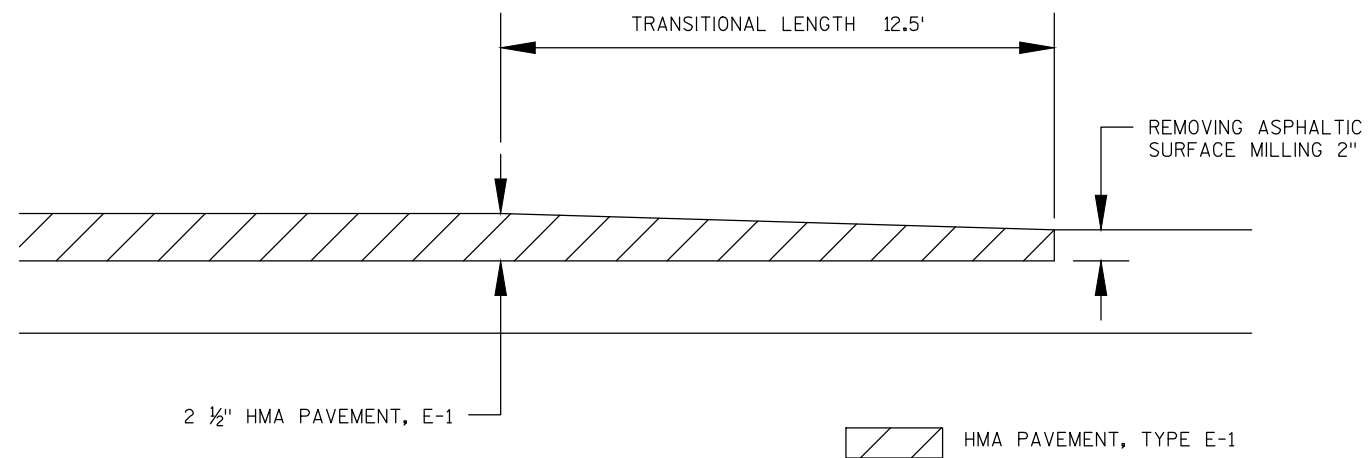
SECOND PASS DETAIL



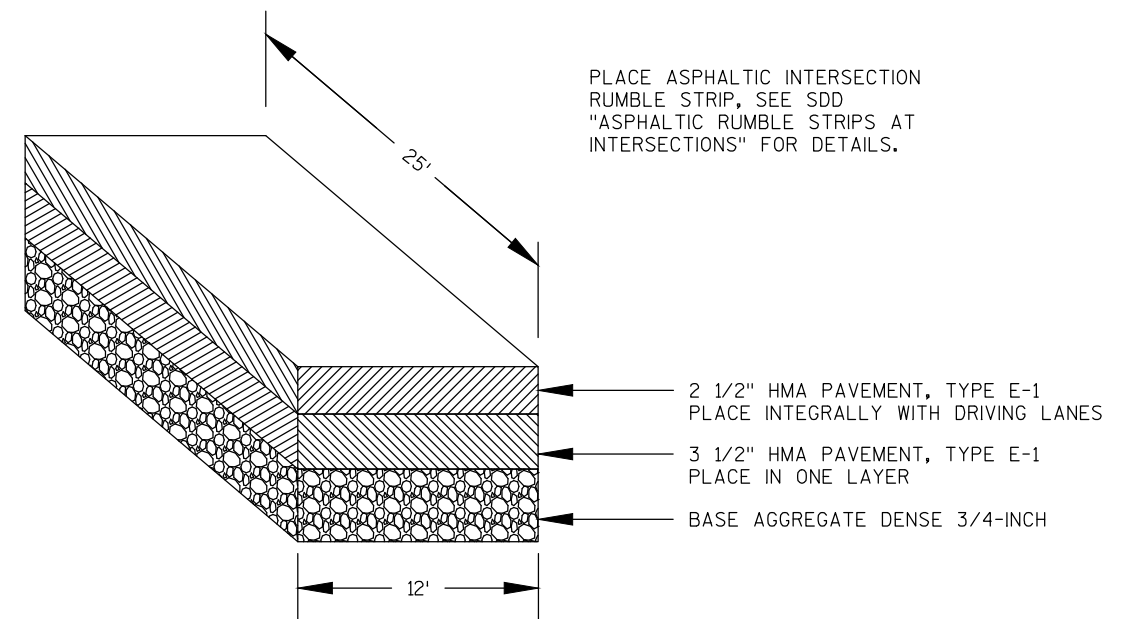
EXTRA DEPTH PAVEMENT REPAIR DISTRESSED AREAS IN SPOT LOCATIONS



TYPICAL SIDE ROAD DETAIL

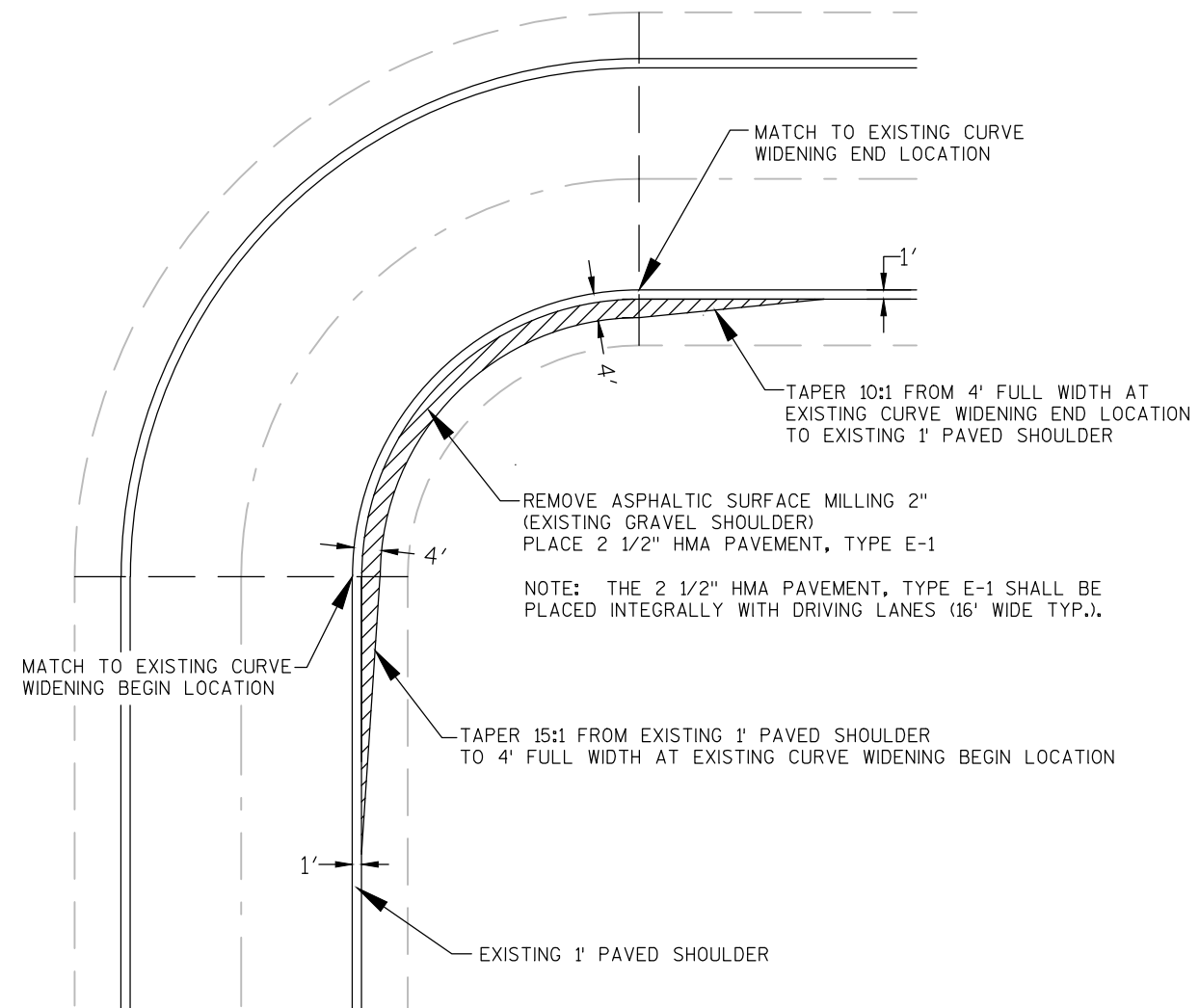


END JOINT DETAIL



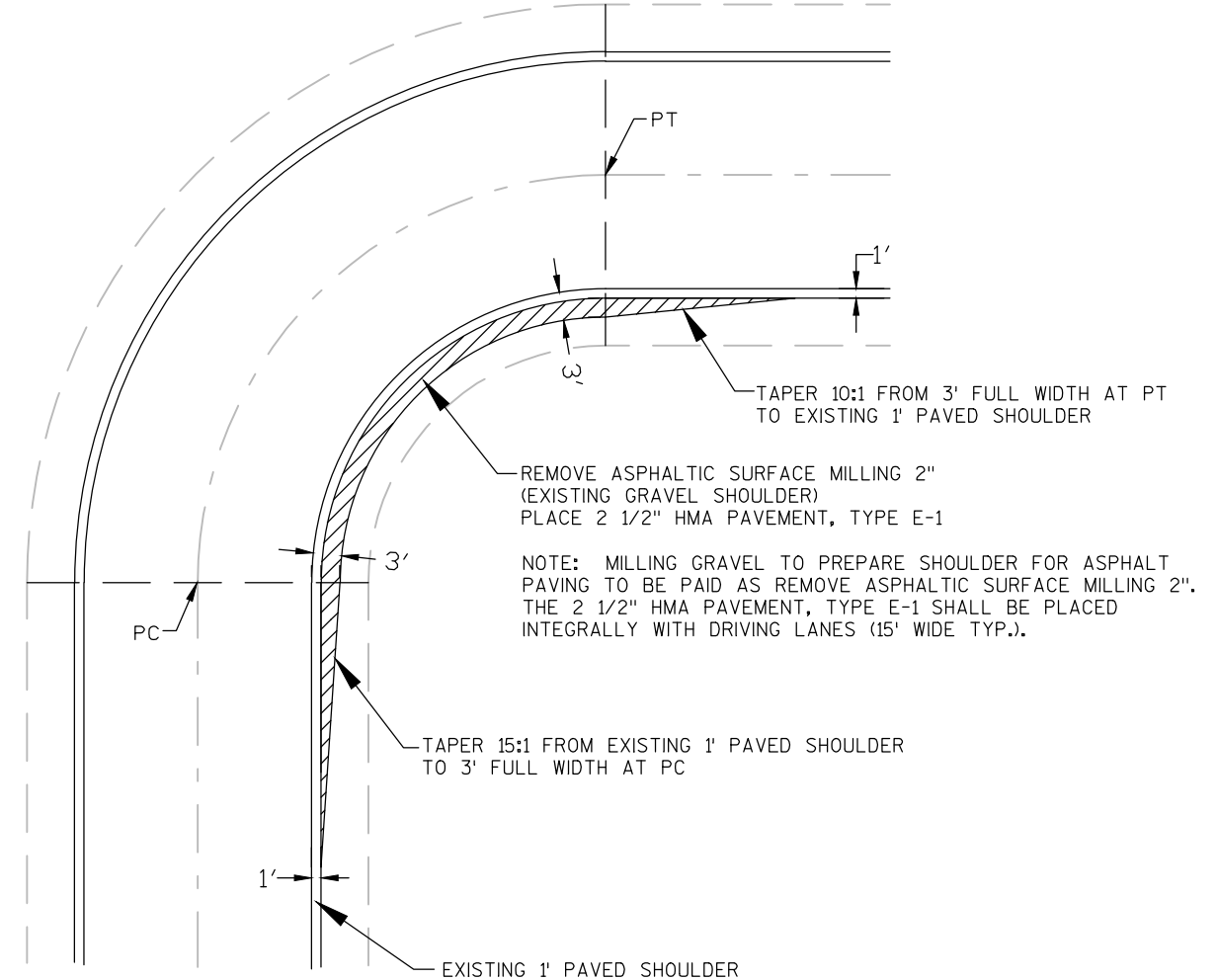
CONCRETE PAVEMENT RUMBLE STRIP REPLACEMENT DETAIL

STA. 273+00 - STA. 273+25
STA. 276+50 - STA. 276+75
STA. 278+75 - STA. 279+00
STA. 287+50 - STA. 287+75
STA. 289+75 - STA. 290+00
STA. 293+25 - STA. 293+50



CURVE WIDENING DETAIL "A"

FOR LOCATIONS WITH
EXISTING CURVE WIDENING



CURVE WIDENING DETAIL "B"

FOR LOCATIONS WITHOUT
EXISTING CURVE WIDENING

DATE 24APR14		E S T I M A T E O F Q U A N T I T I E S			
LINE				1693-05-71	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0100	REMOVING PAVEMENT	SY	200.000	200.000
0020	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	151,788.000	151,788.000
0030	211.0400	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	STA	42.000	42.000
0040	213.0100	FINISHING ROADWAY (PROJECT) 01. 1693-05-71	EACH	1.000	1.000
0050	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	6,724.000	6,724.000
0060	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,230.000	1,230.000
0070	455.0605	TACK COAT	GAL	3,795.000	3,795.000
0080	460.1101	HMA PAVEMENT TYPE E-1	TON	22,360.000	22,360.000
0090	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	172.000	172.000
0100	465.0450	ASPHALTIC INTERSECTION RUMBLE STRIP	SY	200.000	200.000
0110	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1693-05-71	EACH	1.000	1.000
0120	619.1000	MOBILIZATION	EACH	1.000	1.000
0130	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0140	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0150	628.7020	INLET PROTECTION TYPE D	EACH	17.000	17.000
0160	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	7.000	7.000
0170	637.2230	SIGNS TYPE II REFLECTIVE F	SF	101.000	101.000
0180	638.2602	REMOVING SIGNS TYPE II	EACH	10.000	10.000
0190	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0200	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1693-05-71	EACH	1.000	1.000
0210	643.0300	TRAFFIC CONTROL DRUMS	DAY	250.000	250.000
0220	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,050.000	2,050.000
0230	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	70.000	70.000
0240	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	181,540.000	181,540.000
0250	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	172.000	172.000
0260	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	190.000	190.000
0270	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	383.000	383.000
0280	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	45,385.000	45,385.000
0290	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1693-05-71	LS	1.000	1.000
0300	690.0150	SAWING ASPHALT	LF	1,074.000	1,074.000
0310	SPV.0180	SPECIAL 01. EXTRA DEPTH MILLING	SY	14,178.000	14,178.000
0320	SPV.0195	SPECIAL 01. EXTRA DEPTH HMA PAVEMENT TYPE E-1	TON	1,613.000	1,613.000
0330	SPV.0195	SPECIAL 02. EXTRA DEPTH ASPHALTIC MATERIAL PG58-28	TON	89.000	89.000

HMA ITEMS

				455.0105	455.0605	460.1101	465.0120	465.0450
				ASPHALTIC MATERIAL PG 58-28	TACK COAT	HMA PAVEMENT TYPE E-1	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASPHALTIC INTERSECTION RUMBLE STRIP
STATION	TO	STATION	LOCATION	TON	GAL	TON	TON	SY
269+90	-	270+15	MAINLINE	-	-	-	-	33
273+00	-	273+25	MAINLINE	-	-	-	-	33
278+00	-	278+25	MAINLINE	-	-	-	-	34
287+90	-	288+15	MAINLINE	-	-	-	-	33
292+60	-	292+85	MAINLINE	-	-	-	-	33
298+90	-	299+15	MAINLINE	-	-	-	-	34
25+40		479+25	2" OVERLAP AT CENTERLINE	7	22	121	-	-
25+40	-	274+54	MAINLINE	572	1856	10391	-	-
275+48	-	384+37	MAINLINE	247	802	4491	-	-
385+47	-	445+58	MAINLINE	150	488	2733	-	-
446+12	-	479+25	MAINLINE	123	399	2235	-	-
25+40	-	479+25	INTERSECTIONS	61	198	1107	-	-
25+40	-	479+25	DRIVEWAYS	-	31	-	172	-
25+40		479+25	WEDGING	70	-	1281	-	-
TOTAL:				1230	3795	22360	172	200

PAVEMENT MARKING

				646.0406	647.0566	647.0726	647.0776	
				PAVEMENT MARKING SAME DAY EPOXY 4-INCH	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	REMARKS
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	
25+40	-	479+25	MAINLINE	181540	-	-	-	MOVING PAVING OPERATION
25+40	-	479+25	SIDEROADS	-	146	-	263	
40+25	-	40+31	MAINLINE	-	-	104	60	
51+20	-	51+45	MAINLINE	-	-	86	60	
282+50	-	283+70	MAINLINE	-	26	-	-	
TOTAL:				181540	172	190	383	

PERMANENT SIGNING

SIGN NUMBER	LOCATION	SIGN CODE	SIGN W X H	MESSAGE	634.0616	637.2230	638.2602	REMARKS
					POST WOOD 4X6-INCH X 16-FT EACH	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	
R1-01	38+00 RT	W11-2	30 x 30	PEDESTRIAN	-	-	1	
R1-02	40+00 RT	W11-2	30 x 30	PEDESTRIAN	-	-	1	
R1-03	40+00 RT	W16-7L	24 x 12	ARROW	-	-	1	
R1-04	41+00 LT	W11-2	30 x 30	PEDESTRIAN	-	-	1	
R1-05	41+00 LT	W16-7L	24 x 12	ARROW	-	-	1	
1-01	38+00 RT	W11-2	30 x 30	PEDESTRIAN	-	6.25	-	MOUNT ON EXISTING POST
1-02	40+00 RT	W11-2	30 x 30	PEDESTRIAN	-	6.25	-	MOUNT ON EXISTING POST
1-03	40+00 RT	W16-7L	24 x 12	ARROW	-	2	-	MOUNT ON EXISTING POST
1-04	41+00 LT	W11-2	30 x 30	PEDESTRIAN	-	6.25	-	MOUNT ON EXISTING POST
1-05	41+00 LT	W16-7L	24 x 12	ARROW	-	2	-	MOUNT ON EXISTING POST
R2-01	51+00 RT	W11-2	30 x 30	PEDESTRIAN	-	-	1	
R2-02	51+00 RT	W16-7L	24 x 12	ARROW	-	-	1	
R2-03	52+00 LT	W11-2	30 x 30	PEDESTRIAN	-	-	1	
R2-04	52+00 LT	W16-7L	24 x 12	ARROW	-	-	1	
R2-05	56+00 FT	W11-2	30 x 30	PEDESTRIAN	-	-	1	
2-01	51+00 RT	W11-2	30 x 30	PEDESTRIAN	-	6.25	-	MOUNT ON EXISTING POST
2-02	51+00 RT	W16-7L	24 x 12	ARROW	-	2	-	MOUNT ON EXISTING POST
2-03	52+00 LT	W11-2	30 x 30	PEDESTRIAN	-	6.25	-	MOUNT ON EXISTING POST
2-04	52+00 LT	W16-7L	24 x 12	ARROW	-	2	-	MOUNT ON EXISTING POST
2-05	56+00 LT	W11-2	30 x 30	PEDESTRIAN	-	6.25	-	MOUNT ON EXISTING POST
3-01	171+00 RT	W1-1L	36 x 36	ARROW	1	9	-	
4-01	233+00 RT	W13-1	18 x 18	ADVISORY SPEED	-	2.25	-	MOUNT 45 M.P.H ON EXISTING POST
4-02	239+86 RT	W1-8	18 x 24	CHEVRON	1	3	-	
4-03	239+86 RT	W1-8	18 x 24	CHEVRON	-	3	-	
4-04	241+06 RT	W1-8	18 x 24	CHEVRON	1	3	-	
4-05	241+06 RT	W1-8	18 x 24	CHEVRON	-	3	-	
4-06	242+26 RT	W1-8	18 x 24	CHEVRON	1	3	-	
4-07	242+26 RT	W1-8	18 x 24	CHEVRON	-	3	-	
4-08	243+46 RT	W1-8	18 x 24	CHEVRON	1	3	-	
4-09	243+46 RT	W1-8	18 x 24	CHEVRON	-	3	-	
4-10	251+00 LT	W13-1	18 x 18	ADVISORY SPEED	-	2.25	-	MOUNT 45 M.P.H ON EXISTING POST
5-01	330+00 RT	W1-1R	36 x 36	ARROW	1	9	-	
5-02	350+00 LT	W1-1L	36 x 36	ARROW	1	9	-	
TOTAL:					7	101	10	

EROSION CONTROL

STATION	LOCATION	628.1905	628.1910	628.7020
		MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	INLET PROTECTION TYPE D EACH
25+40 - 479+25	UNDISTRIBUTED	2	2	-
25+40 RT	MAINLINE	-	-	1
27+38 LT	MAINLINE	-	-	1
36+18 RT	MAINLINE	-	-	1
45+84 RT	GREENWAY CROSS CT	-	-	1
46+26 RT	GREENWAY CROSS CT	-	-	1
465+70 LT	MAINLINE	-	-	2
467+72 LT	MAINLINE	-	-	2
471+50 LT	MAINLINE	-	-	1
475+17 LT	MAINLINE	-	-	1
476+58 LT/RT	MAINLINE	-	-	3
480+22 LT/RT	MAINLINE	-	-	3
TOTAL		2	2	17

CONSTRUCTION STAKING

LOCATION	650.8000	650.9910
	CONSTRUCTION STAKING RESURFACING REFERENCE LF	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1693-05-71) LS
PROJECT	45385	1

TRAFFIC CONTROL

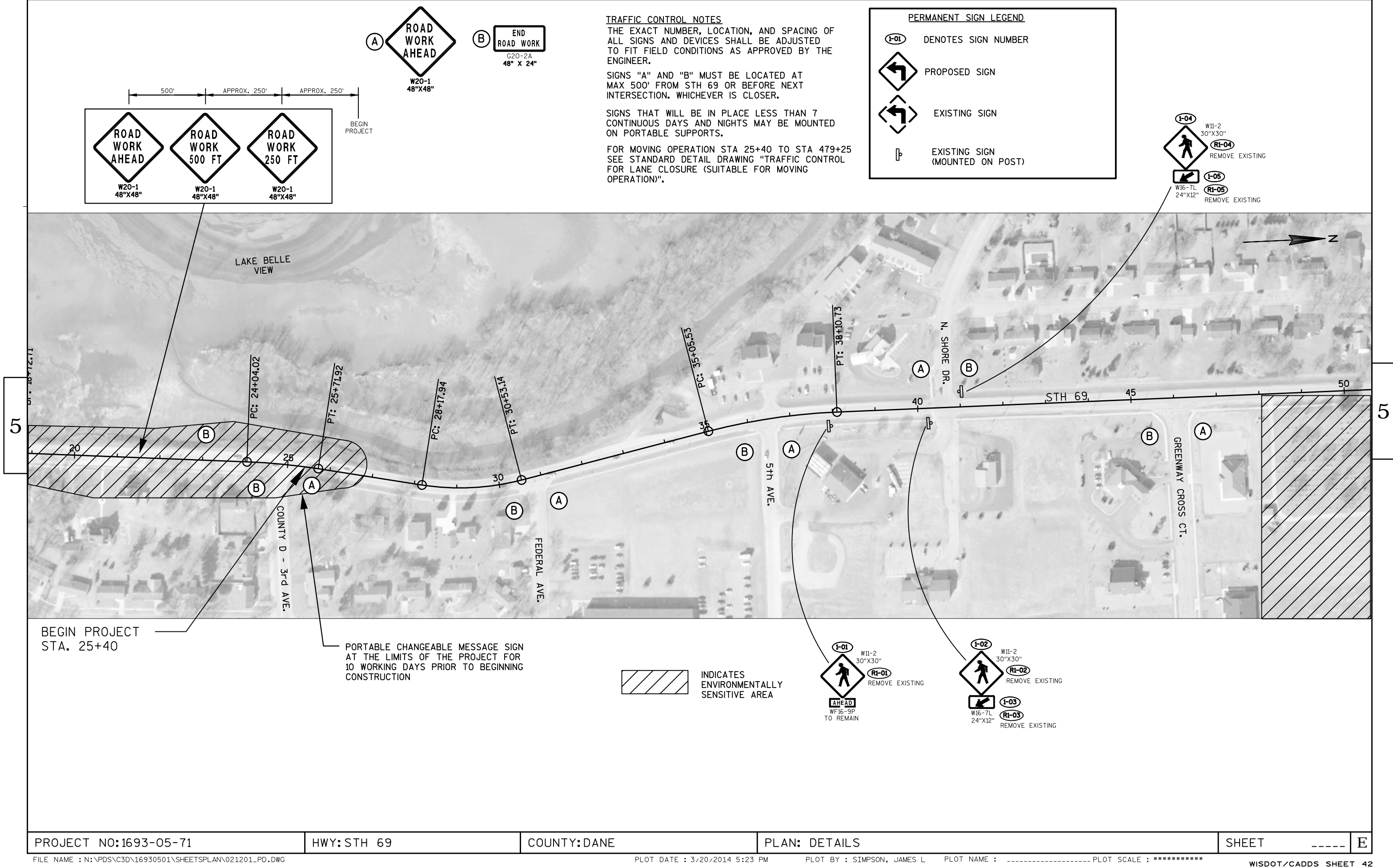
LOCATION	DAYS	643.0100	643.0300	643.0900	643.1050
		TRAFFIC CONTROL (1693-05-71) EACH	TRAFFIC CONTROL DRUMS DAY	TRAFFIC CONTROL SIGNS DAY	TRAFFIC CONTROL SIGNS PCMS DAY
PROJECT	25	1	-	2050	70
UNDISTRIBUTED	-	-	250	-	-
TOTAL:		1	250	2050	70

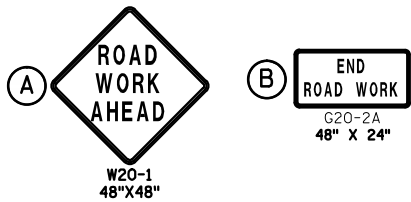
FOUNDATION PREPARATION

STATION	TO	STATION	LOCATION	211.0400
				PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA
81+33	-	89+82	MAINLINE	8
93+91	-	101+95	MAINLINE	8
176+54	-	185+50	MAINLINE	9
239+87	-	243+78	MAINLINE	4
270+00	-	272+99	MAINLINE	3
336+44	-	343+98	MAINLINE	8
400+25	-	402+77	MAINLINE	2
TOTAL:				42

EXTRA DEPTH PAVEMENT REPAIR IN DISTRESSED LOCATIONS

				SPV.0180.01	SPV.0195.01	SPV.0195.02	REMARKS
				EXTRA	EXTRA DEPTH	EXTRA DEPTH	
				DEPTH	HMA PAVEMENT	ASPHALTIC MATERIAL	
				MILLING	TYPE E-1	PG 58-28	
STATION	TO	STATION	LOCATION	SY	TON	TON	
36+00	-	40+00	NB MAINLINE - 4' SECTION	178	20	1	RIGHT WHEELPATH
78+00	-	80+00	SB MAINLINE - 4' SECTION	89	10	1	RIGHT WHEELPATH
125+00	-	127+00	NB MAINLINE - 4' SECTION	178	20	1	RIGHT WHEELPATH AND CENTER
134+00	-	137+00	SB MAINLINE - 4' SECTION	133	15	1	RIGHT WHEELPATH
123+00	-	135+00	NB MAINLINE - 4' SECTION	533	60	3	RIGHT WHEELPATH
144+00	-	163+00	NB MAINLINE - 4' SECTION	844	95	5	RIGHT WHEELPATH
144+00	-	163+00	SB MAINLINE - 4' SECTION	1689	189	10	RIGHT WHEELPATH AND CENTER
168+00	-	172+00	SB MAINLINE - 4' SECTION	178	20	1	CENTER
163+00	-	172+00	NB MAINLINE - 4' SECTION	400	45	2	RIGHT WHEELPATH
203+00	-	210+00	SB MAINLINE - 4' SECTION	311	35	2	CENTER
215+00	-	219+00	NB MAINLINE - 4' SECTION	178	20	1	CENTER
247+00	-	265+00	SB MAINLINE - 4' SECTION	800	90	5	RIGHT WHEELPATH
269+00	-	274+00	NB MAINLINE - 4' SECTION	222	25	1	RIGHT WHEELPATH
276+00	-	281+00	SB MAINLINE - 4' SECTION	222	25	1	RIGHT WHEELPATH
284+00	-	295+00	SB MAINLINE - 4' SECTION	978	110	6	RIGHT WHEELPATH AND CENTER
285+00	-	295+00	NB MAINLINE - 4' SECTION	889	100	5	RIGHT WHEELPATH AND CENTER
317+00	-	320+00	SB MAINLINE - 4' SECTION	133	15	1	RIGHT WHEELPATH
323+00	-	325+00	SB MAINLINE - 4' SECTION	89	10	1	RIGHT WHEELPATH
339+00	-	348+00	NB MAINLINE - 4' SECTION	800	90	5	LEFT AND RIGHT WHEELPATH
372+00	-	375+00	SB MAINLINE - 4' SECTION	133	15	1	RIGHT WHEELPATH
364+00	-	380+00	SB MAINLINE - 4' SECTION	711	80	4	RIGHT WHEELPATH
385+00	-	392+00	SB MAINLINE - 4' SECTION	622	70	4	LEFT AND RIGHT WHEELPATH
394+00	-	398+00	NB MAINLINE - 4' SECTION	178	20	1	LEFT WHEELPATH
403+00	-	405+00	SB MAINLINE - 4' SECTION	89	10	1	RIGHT WHEELPATH
406+00	-	409+00	NB MAINLINE - 4' SECTION	133	15	1	RIGHT WHEELPATH
418+00	-	438+00	SB MAINLINE - 4' SECTION	889	100	5	RIGHT WHEELPATH
418+00	-	438+00	NB MAINLINE - 4' SECTION	889	100	5	RIGHT WHEELPATH
450+00	-	457+00	SB MAINLINE - 4' SECTION	311	35	2	RIGHT WHEELPATH
455+00	-	457+00	SB MAINLINE - 4' SECTION	89	10	1	RIGHT WHEELPATH
25+40	-	479+25	UNDISTRIBUTED	1289	147	8	
273+00	-	273+25	MAINLINE	-	4	0.2	3.5" OF ASPHALT IN RUMBLE STRIPS
276+50	-	276+75	MAINLINE	-	4	0.2	3.5" OF ASPHALT IN RUMBLE STRIPS
278+75	-	279+00	MAINLINE	-	4	0.2	3.5" OF ASPHALT IN RUMBLE STRIPS
287+50	-	287+75	MAINLINE	-	4	0.2	3.5" OF ASPHALT IN RUMBLE STRIPS
289+75	-	290+00	MAINLINE	-	4	0.2	3.5" OF ASPHALT IN RUMBLE STRIPS
293+25	-	293+50	MAINLINE	-	4	0.2	3.5" OF ASPHALT IN RUMBLE STRIPS
TOTAL:				14178	1613	89	








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

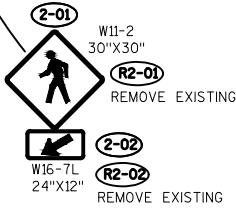
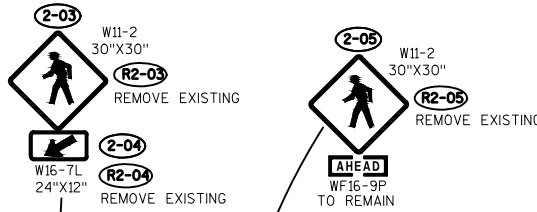
SIGNS "A" AND "B" MUST BE LOCATED AT MAX 500' FROM STH 69 OR BEFORE NEXT INTERSECTION. WHICHEVER IS CLOSER.

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

FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".

PERMANENT SIGN LEGEND

- (1-01) DENOTES SIGN NUMBER
-  PROPOSED SIGN
-  EXISTING SIGN
-  EXISTING SIGN (MOUNTED ON POST)



SECTION CORNER
N. CORN. SEC 34, T5N, R8E
DO NOT DISTURB
APPROX. STA 51+10

 INDICATES ENVIRONMENTALLY SENSITIVE AREA



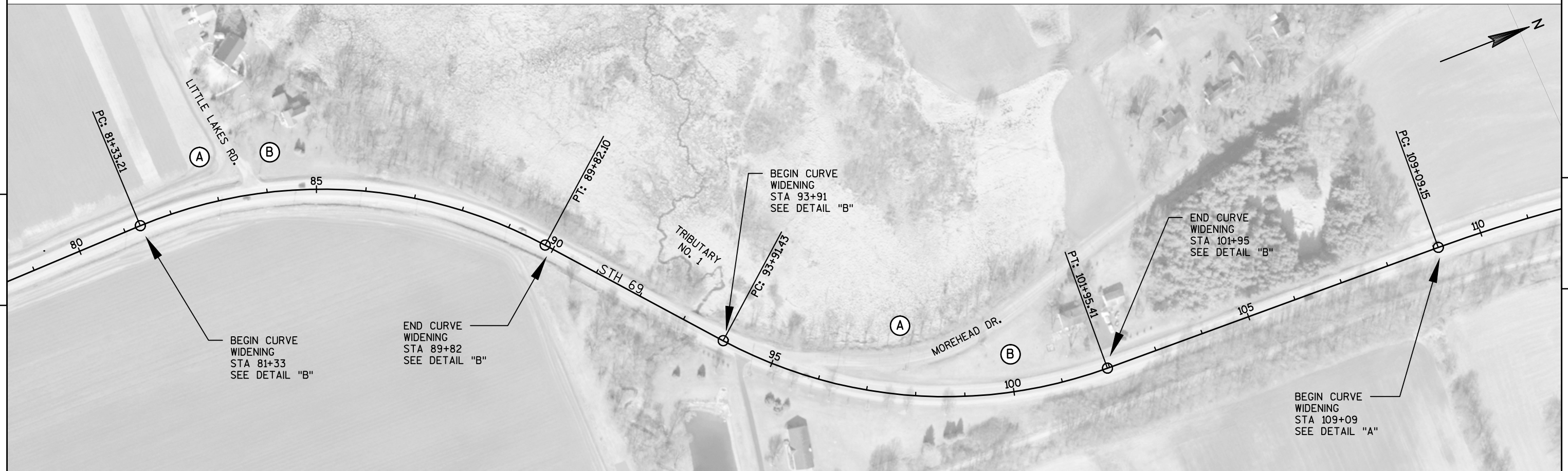
TRAFFIC CONTROL NOTES

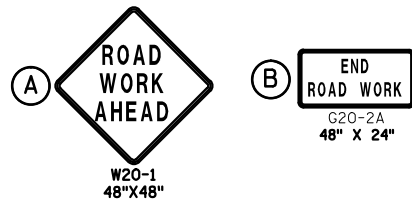
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SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".





TRAFFIC CONTROL NOTES

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

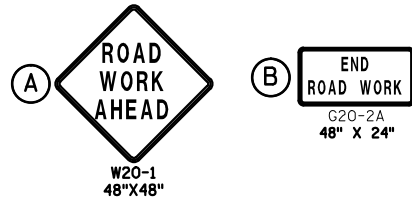
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FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



 INDICATES ENVIRONMENTALLY SENSITIVE AREA



TRAFFIC CONTROL NOTES

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FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



PROJECT NO:1693-05-71

HWY: STH 69

COUNTY: DANE

PLAN: DETAILS

SHEET ----- E

PERMANENT SIGN LEGEND

(1-01) DENOTES SIGN NUMBER

PROPOSED SIGN
(MOUNTED ON POST)

PROPOSED SIGN

EXISTING SIGN

EXISTING SIGN
(MOUNTED ON POST)

(A) ROAD WORK AHEAD
W20-1
48" X 48"

(B) END ROAD WORK
G20-2A
48" X 24"

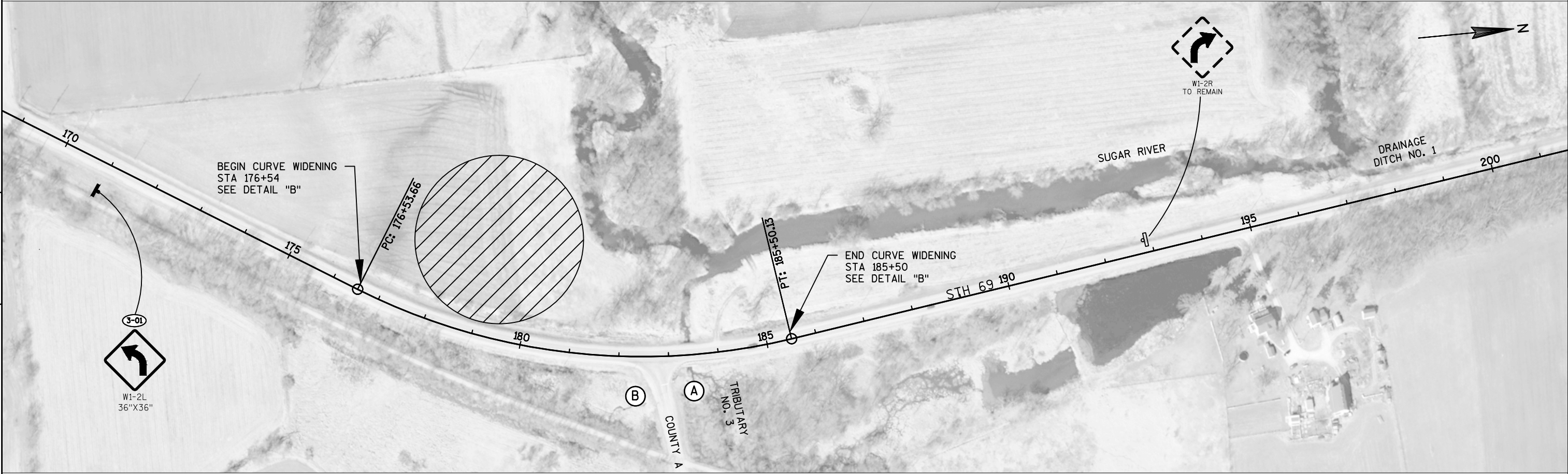
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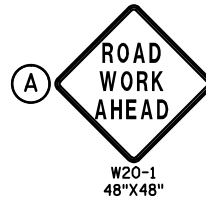
SIGNS "A" AND "B" MUST BE LOCATED AT MAX 500' FROM STH 69 OR BEFORE NEXT INTERSECTION. WHICHEVER IS CLOSER.

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

FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



INDICATES ENVIRONMENTALLY SENSITIVE AREA



TRAFFIC CONTROL NOTES

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FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".

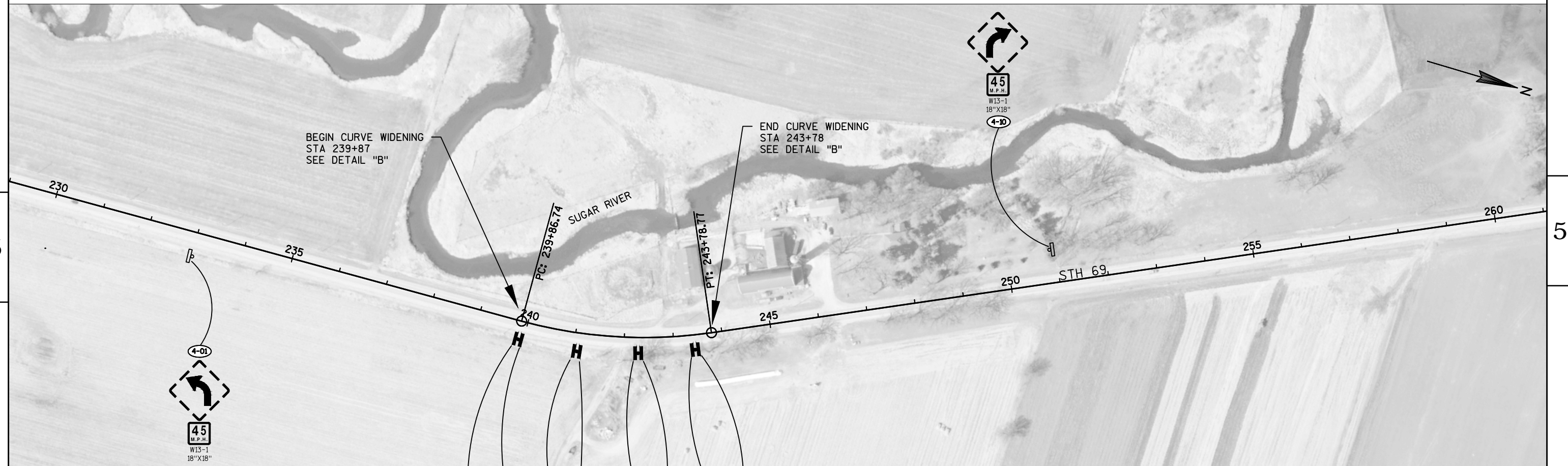


PERMANENT SIGN LEGEND

- (1-01) DENOTES SIGN NUMBER
- H PROPOSED DOUBLE SIGNS
(MOUNTED ON ONE POST)
- PROPOSED SIGN
- EXISTING SIGN
- EXISTING SIGN
(MOUNTED ON POST)

TRAFFIC CONTROL NOTES

FOR MOVING OPERATION STA 25+40 TO STA 479+25
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL
FOR LANE CLOSURE (SUITABLE FOR MOVING
OPERATION)".



- 4-02 W1-8 18"X24"
- 4-03 W1-8 18"X24"
- 4-04 W1-8 18"X24"
- 4-05 W1-8 18"X24"
- 4-06 W1-8 18"X24"
- 4-07 W1-8 18"X24"
- 4-08 W1-8 18"X24"
- 4-09 W1-8 18"X24"

PROJECT NO:1693-05-71

HWY: STH 69

COUNTY: DANE

PLAN: DETAILS

SHEET

E



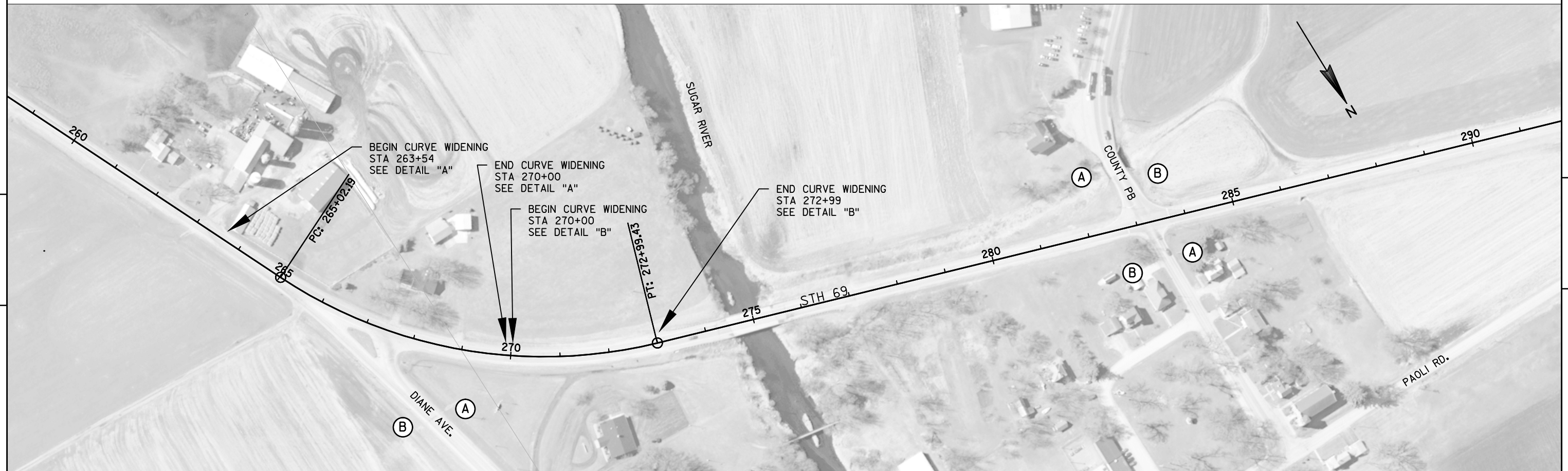
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SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".





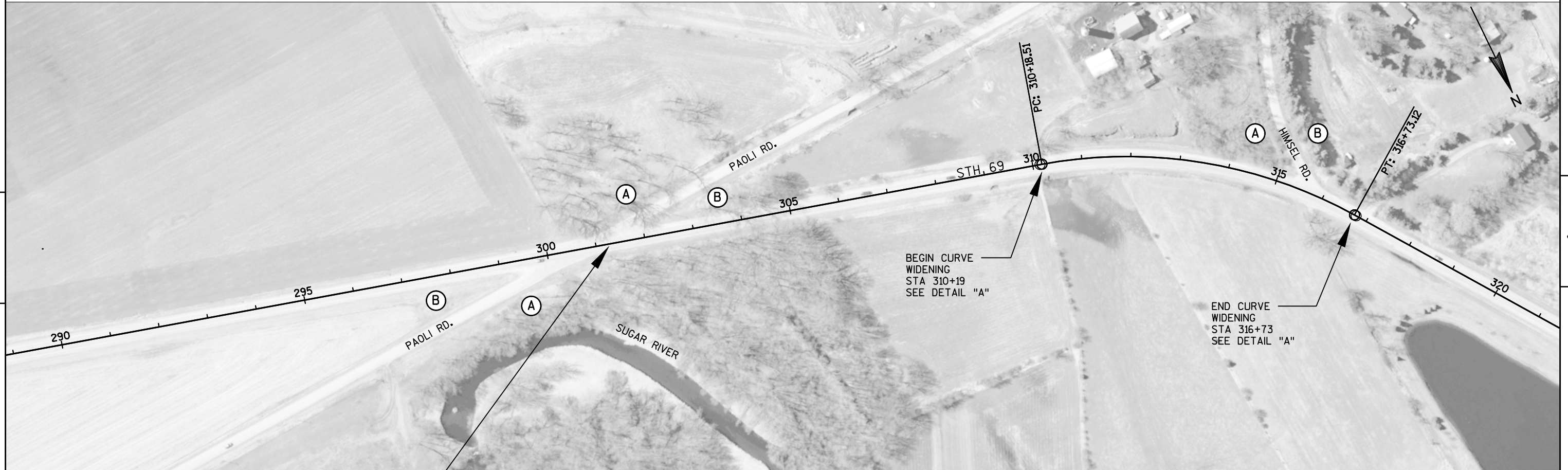
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FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



SECTION CORNER
N. COR. SEC 10, T5N, R8E
DO NOT DISTURB
APPROX. STA 301+20

PERMANENT SIGN LEGEND

(1-01) DENOTES SIGN NUMBER

PROPOSED SIGN
(MOUNTED ON POST)

PROPOSED SIGN

(A) ROAD WORK AHEAD
W20-1
48" X 48"

(B) END ROAD WORK
G20-2A
48" X 24"

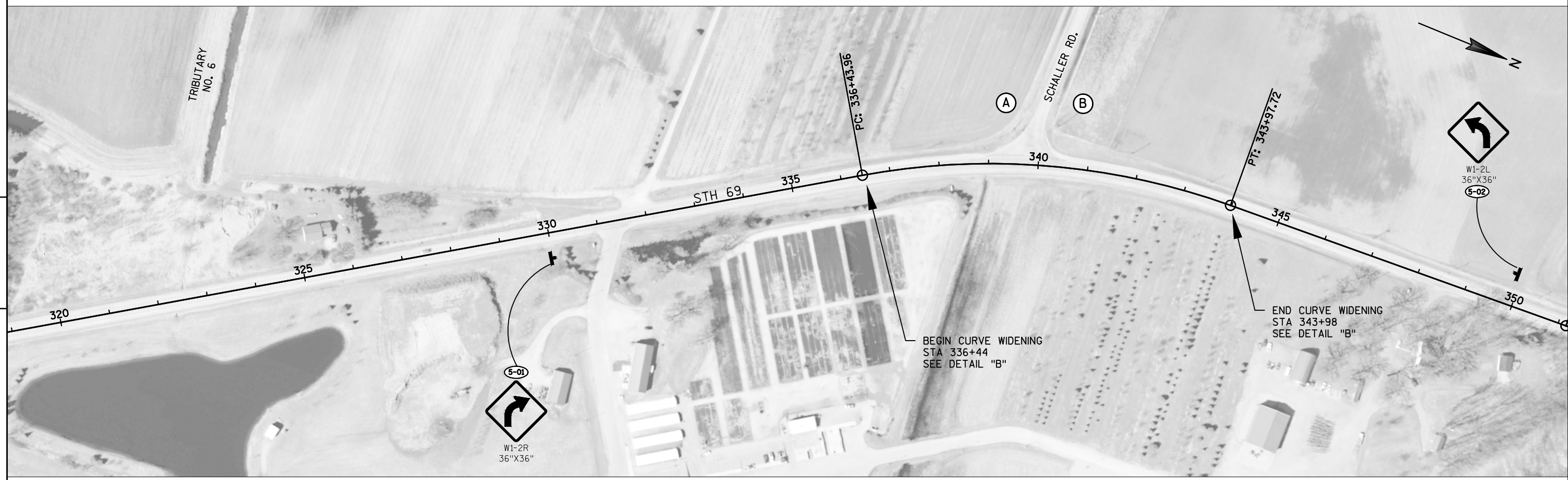
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FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



PERMANENT SIGN LEGEND

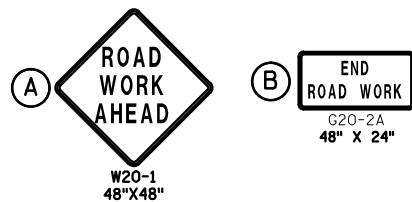
- 1-01

DENOTES SIGN NUMBER
- PROPOSED SIGN
(MOUNTED ON POST)
- PROPOSED SIGN

TRAFFIC CONTROL NOTES
FOR MOVING OPERATION STA 25+40 TO STA 479+25
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL
FOR LANE CLOSURE (SUITABLE FOR MOVING
OPERATION)".



 INDICATES ENVIRONMENTALLY SENSITIVE AREA



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

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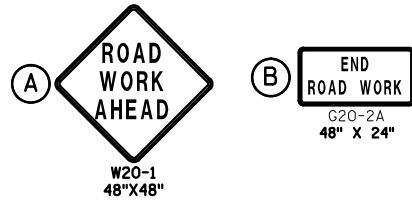
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



SECTION CORNER
W. CORN. SEC 34, T6N, R8E
DO NOT DISTURB
APPROX. STA 392+10

 INDICATES ENVIRONMENTALLY SENSITIVE AREA



TRAFFIC CONTROL NOTES

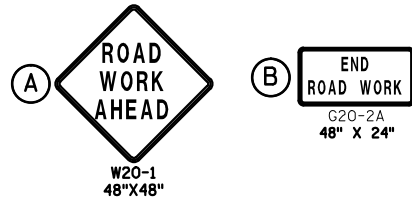
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SIGNS "A" AND "B" MUST BE LOCATED AT MAX 500' FROM STH 69 OR BEFORE NEXT INTERSECTION. WHICHEVER IS CLOSER.

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

FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".





TRAFFIC CONTROL NOTES

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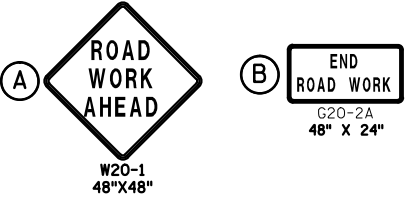
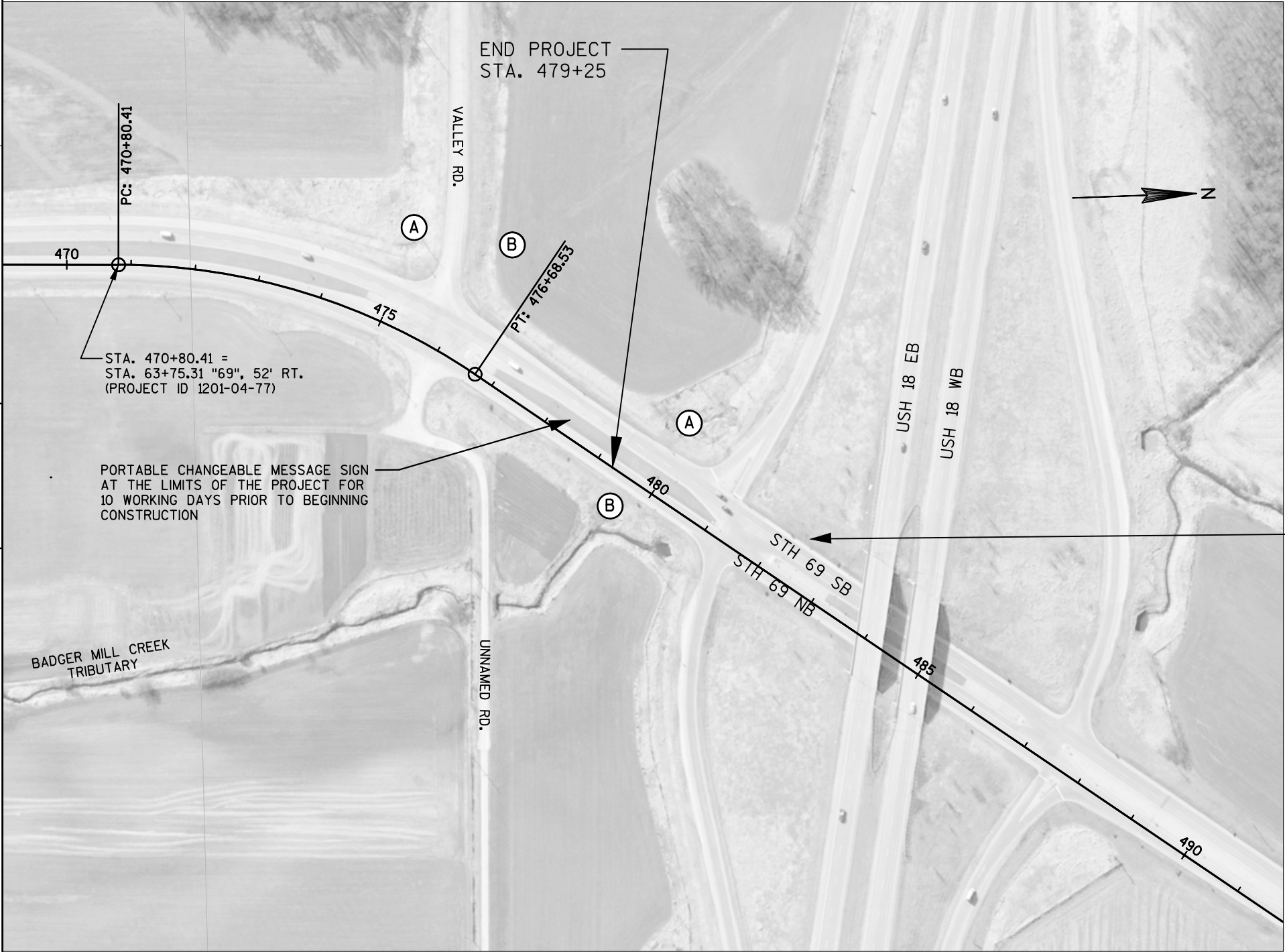
SIGNS "A" AND "B" MUST BE LOCATED AT MAX 500' FROM STH 69 OR BEFORE NEXT INTERSECTION. WHICHEVER IS CLOSER.

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

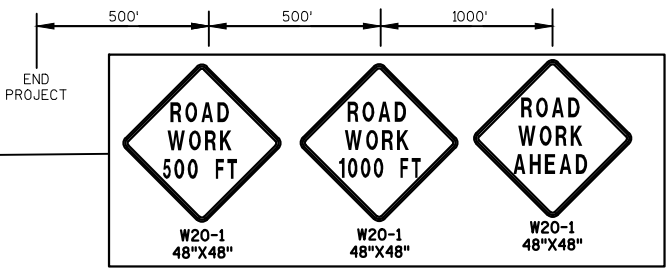
FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



 INDICATES ENVIRONMENTALLY SENSITIVE AREA

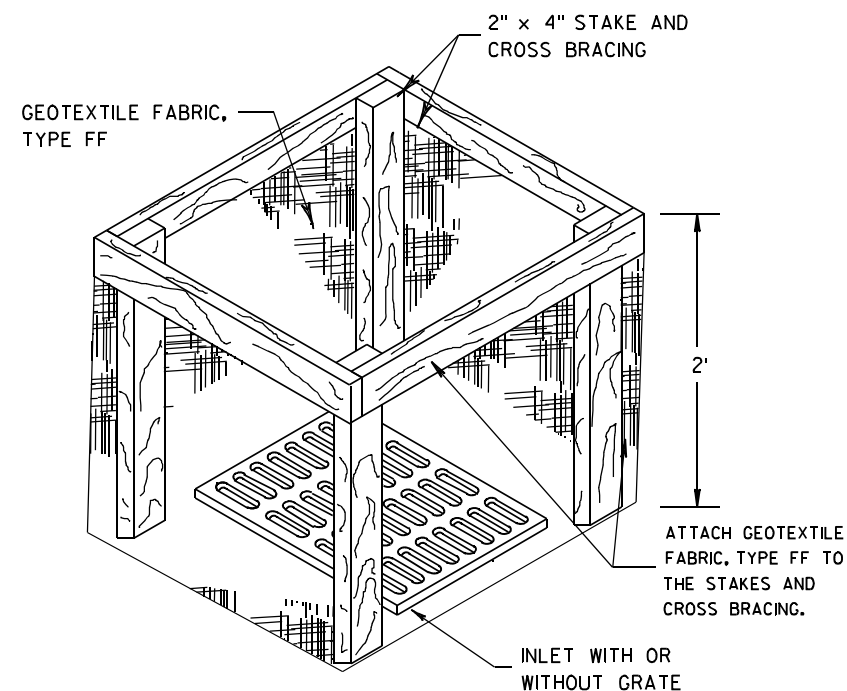
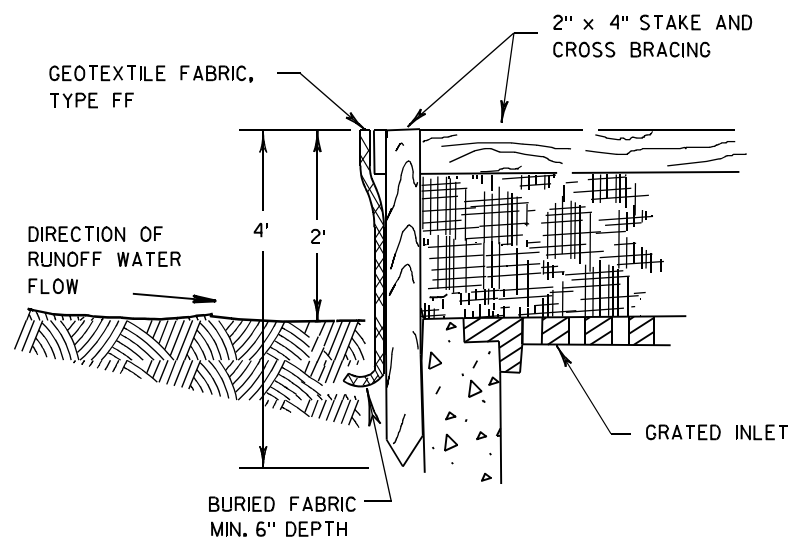


TRAFFIC CONTROL NOTES
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FOR MOVING OPERATION STA 25+40 TO STA 479+25 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
14B29-01	SAFETY EDGE
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C06-06	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-05	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



INLET PROTECTION, TYPE A

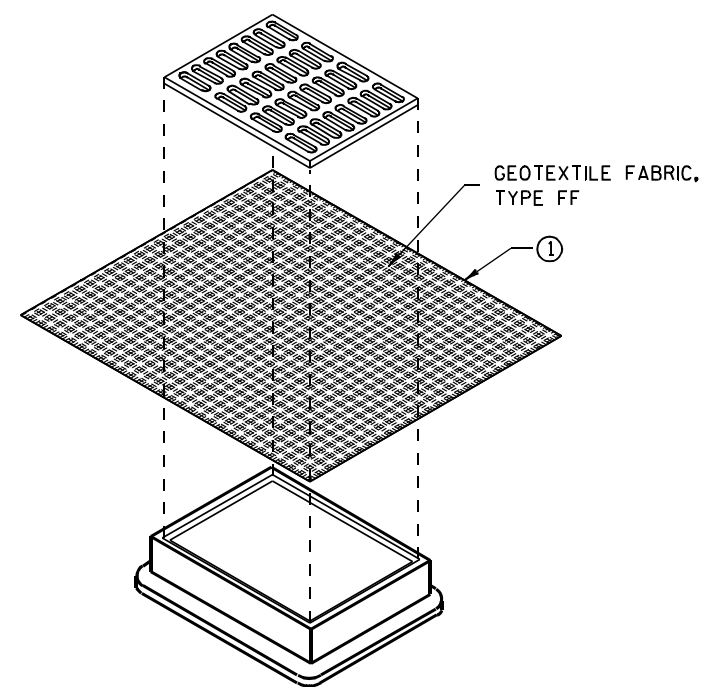
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

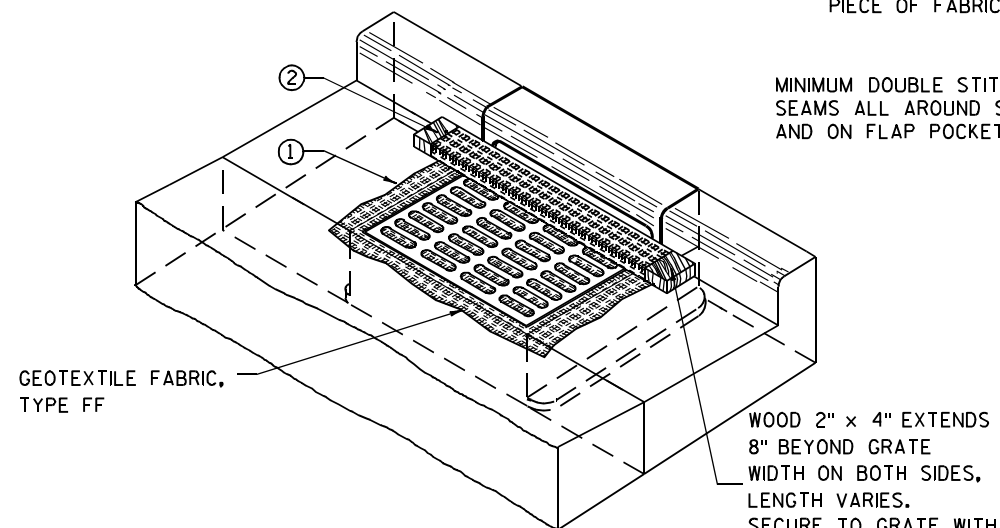
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

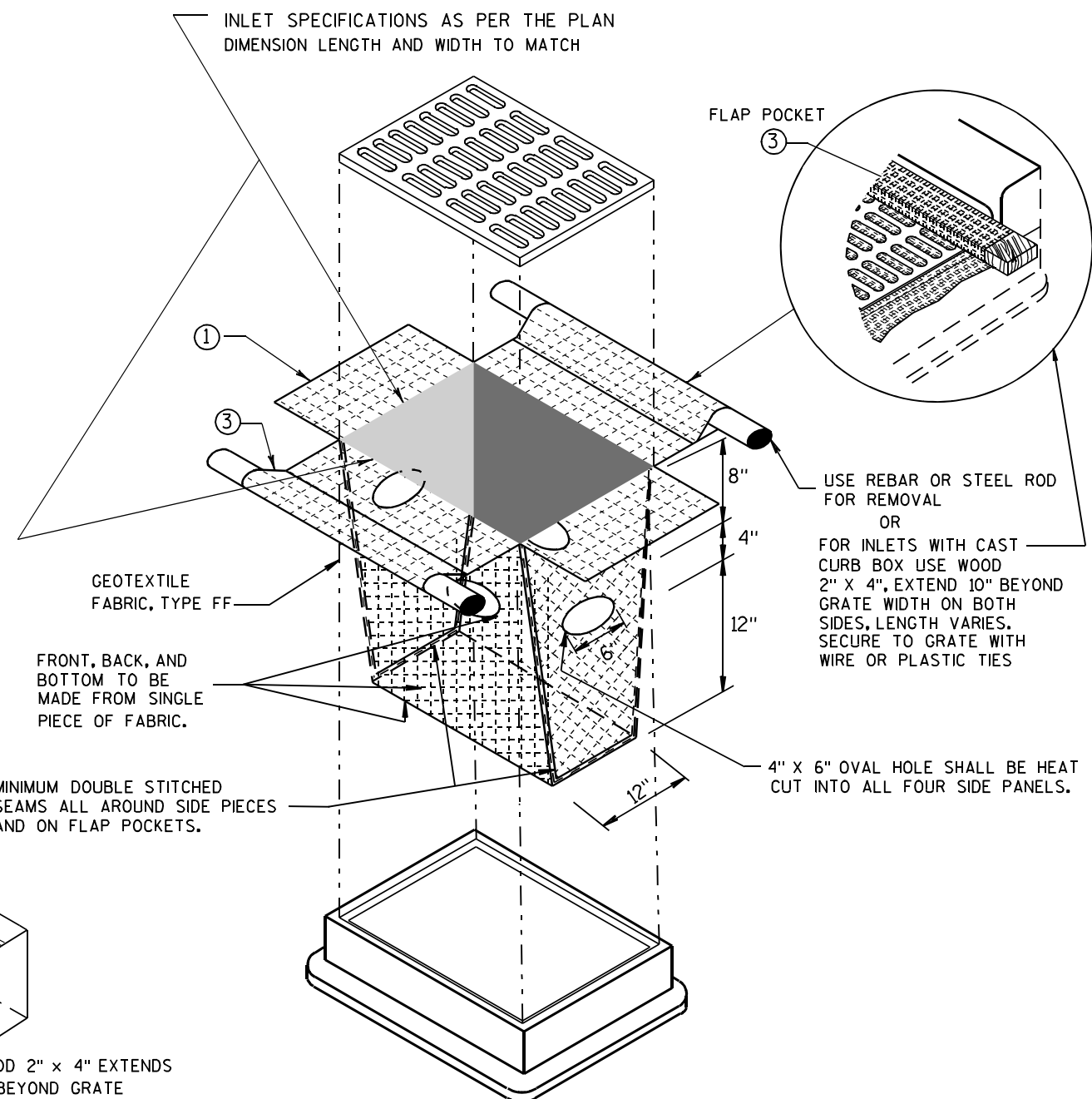
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLower THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



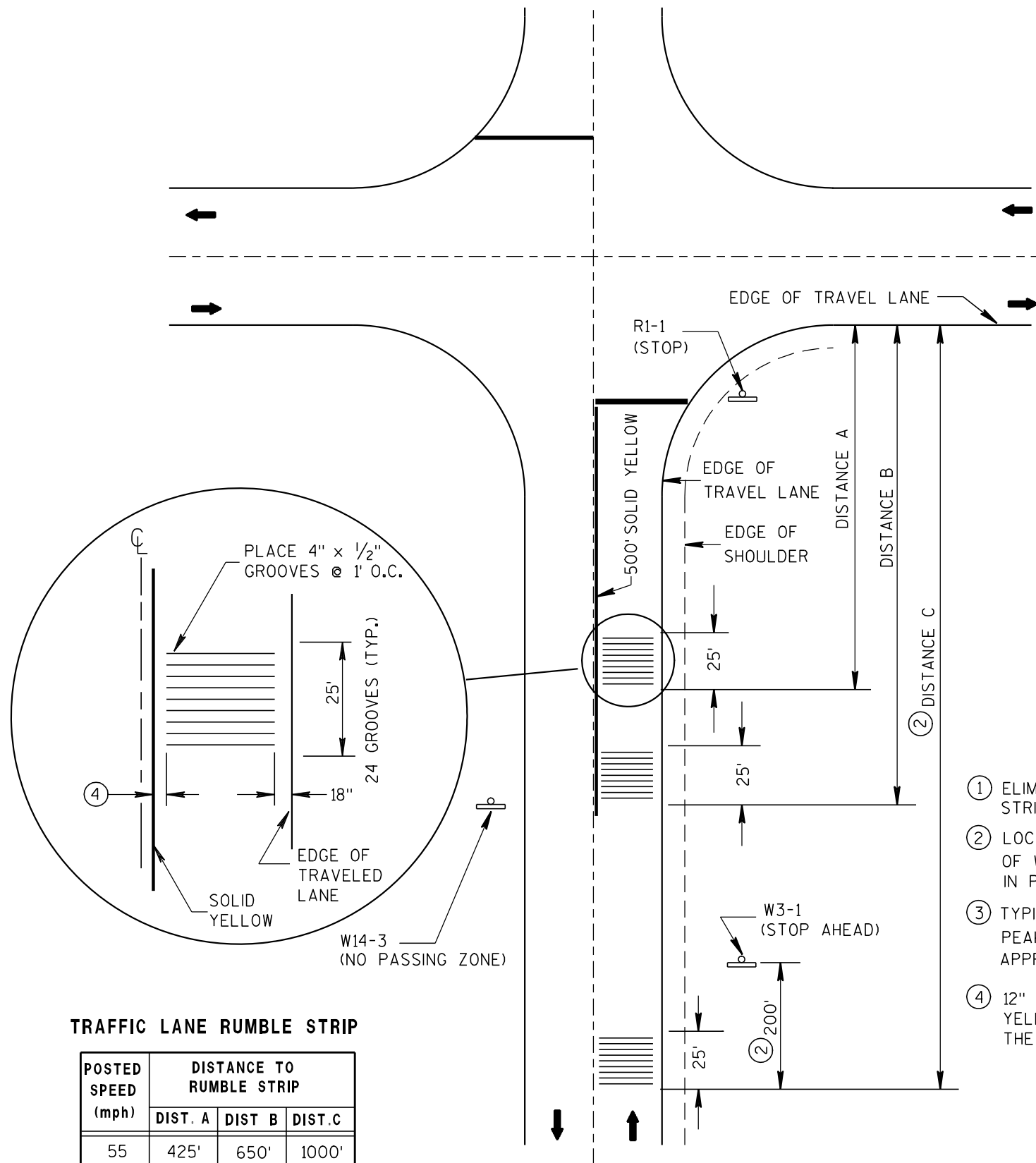
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



PLAN VIEW
RUMBLE STRIP LOCATION

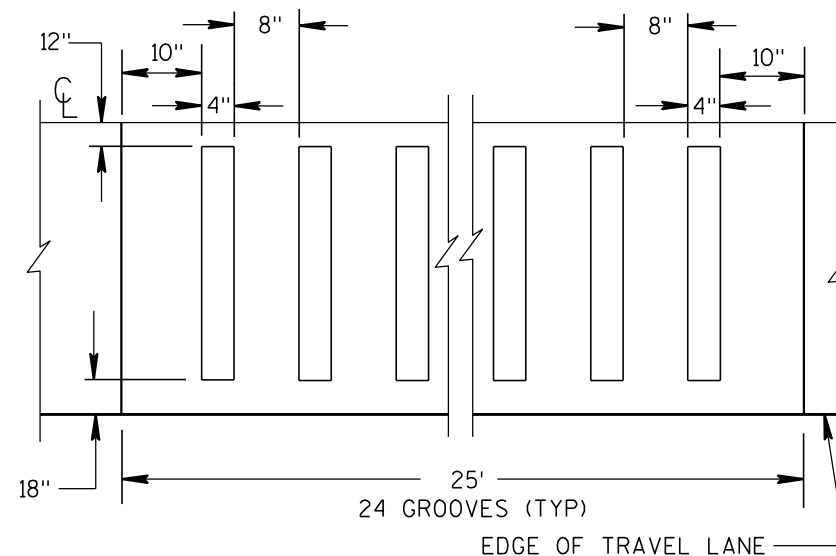
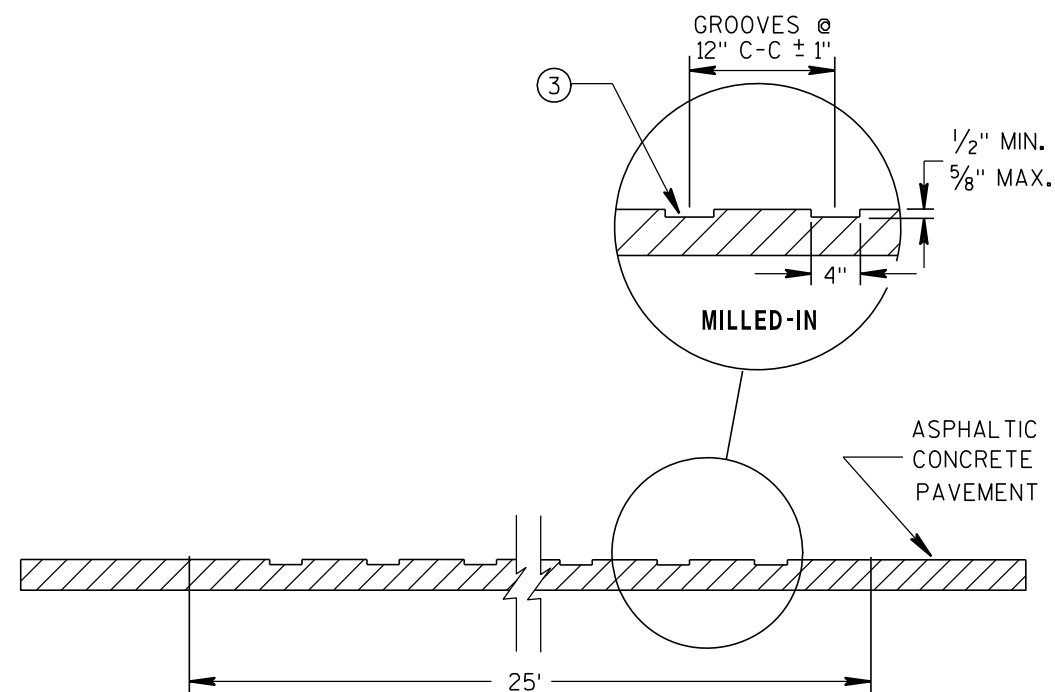
- ① ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- ② LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.
- ③ TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY $\frac{1}{16}$ "
- ④ 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

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



ASPHALTIC RUMBLE STRIPS AT INTERSECTION

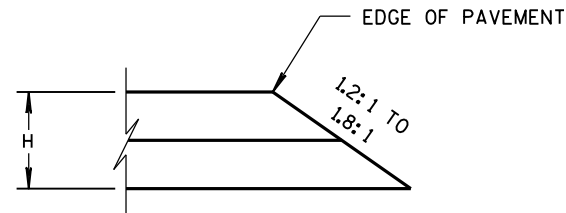
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

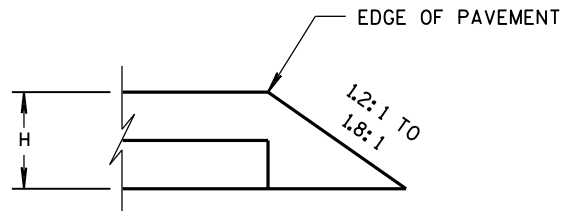
8/17/2011
DATE

FHWA

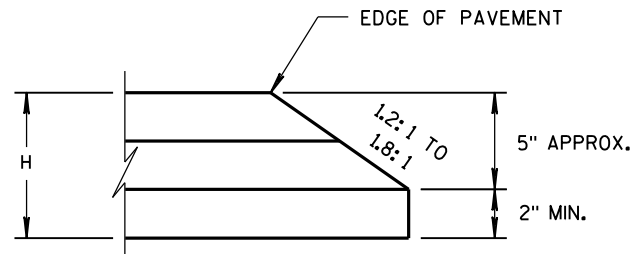
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



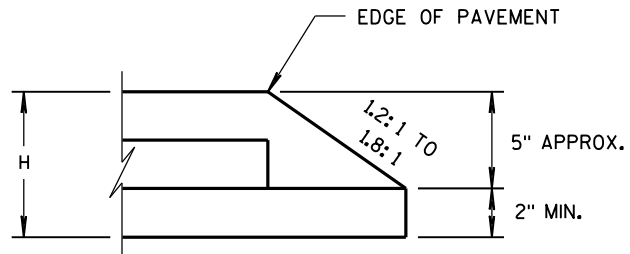
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

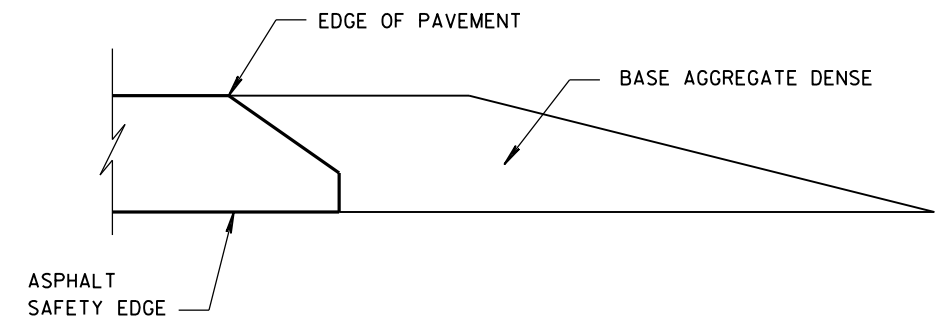


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

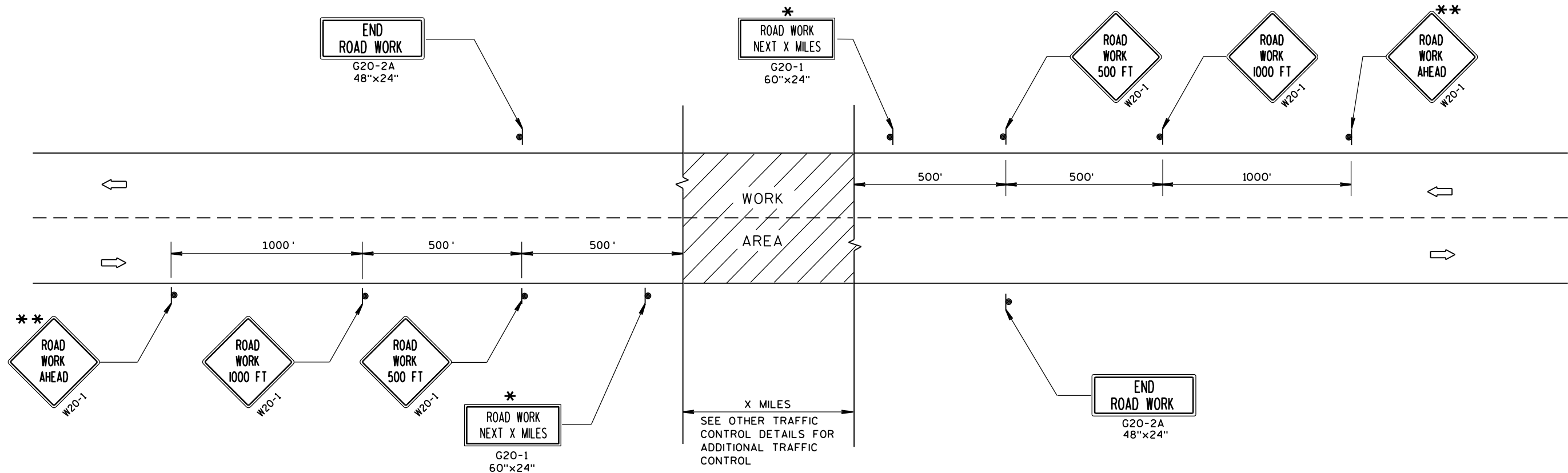
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

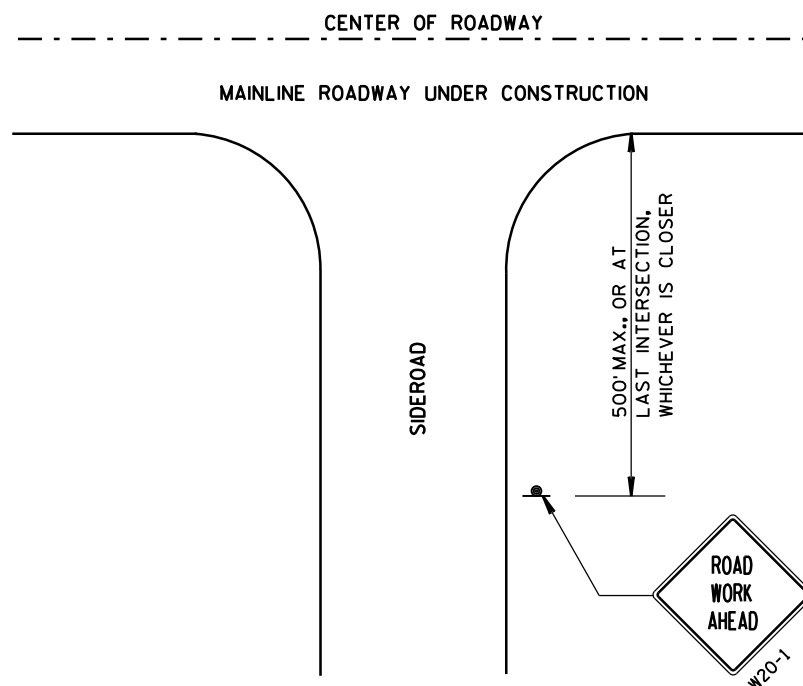
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

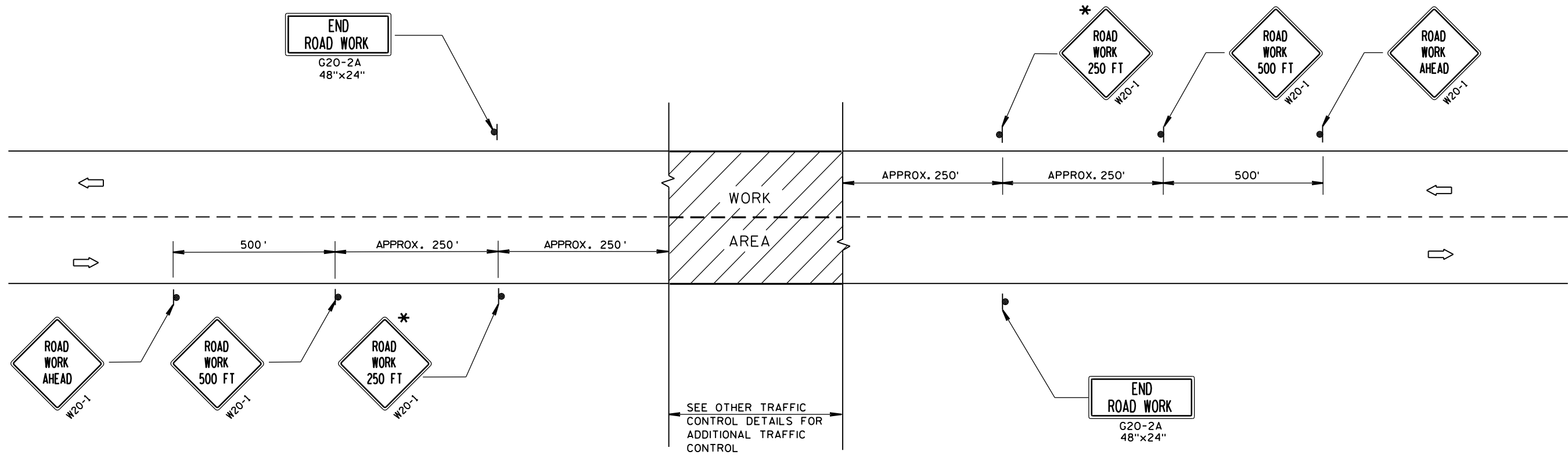
APPROVED

8/2013

DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

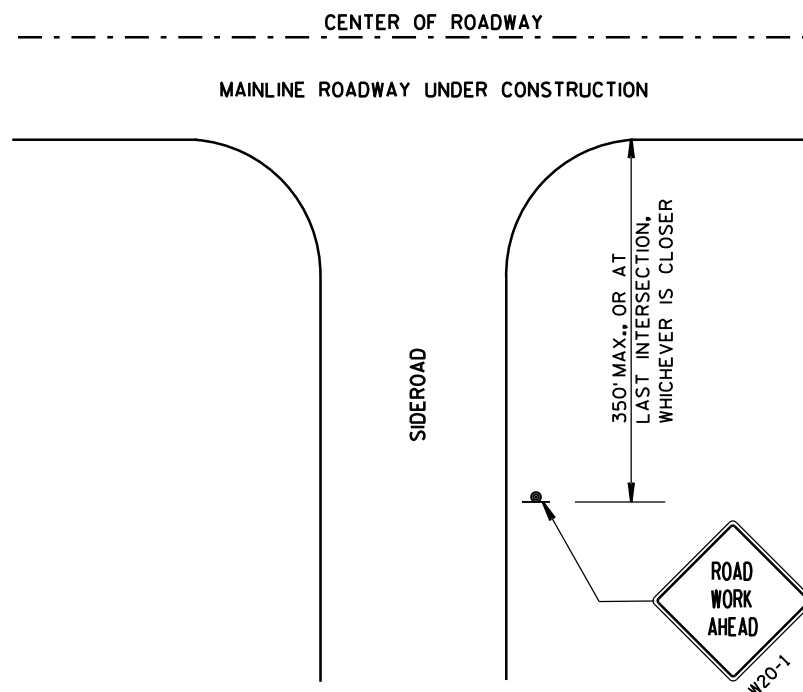
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



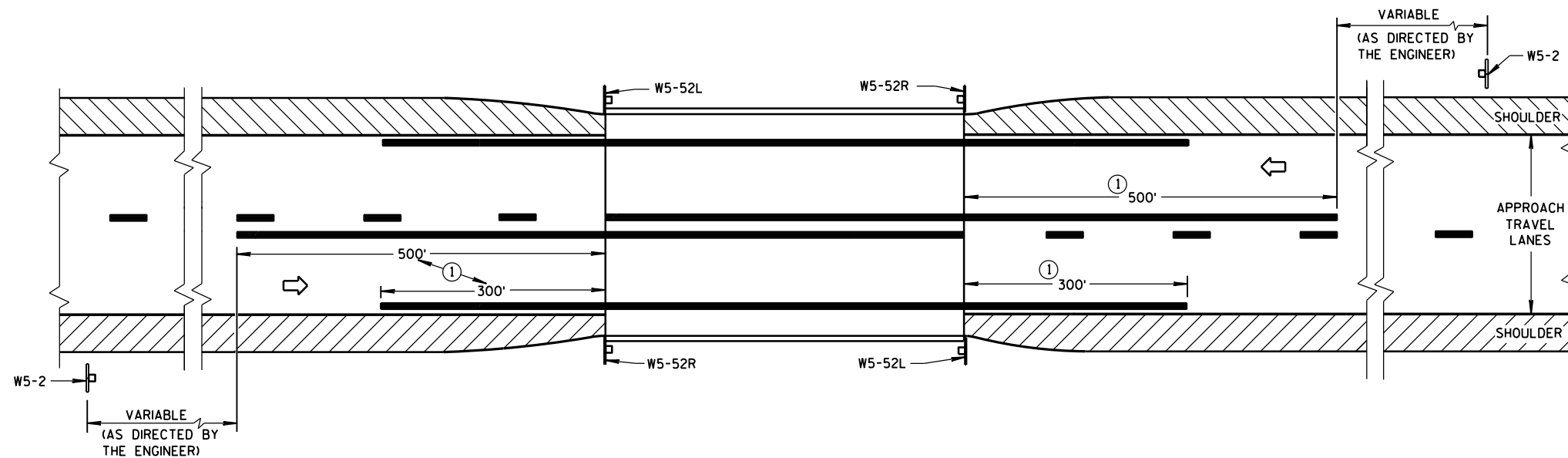
LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

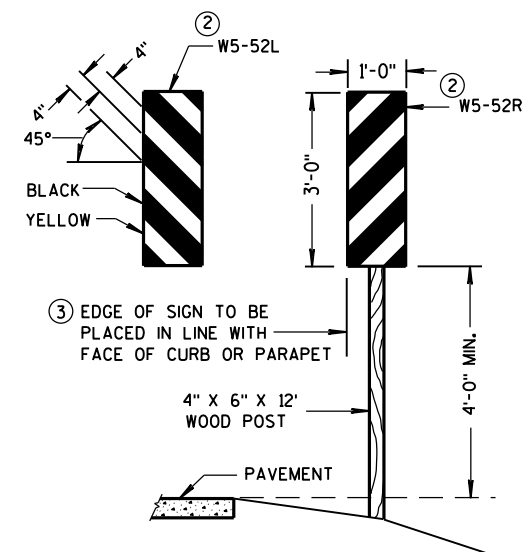
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



SITUATION 1

WARRANTING CRITERIA:

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



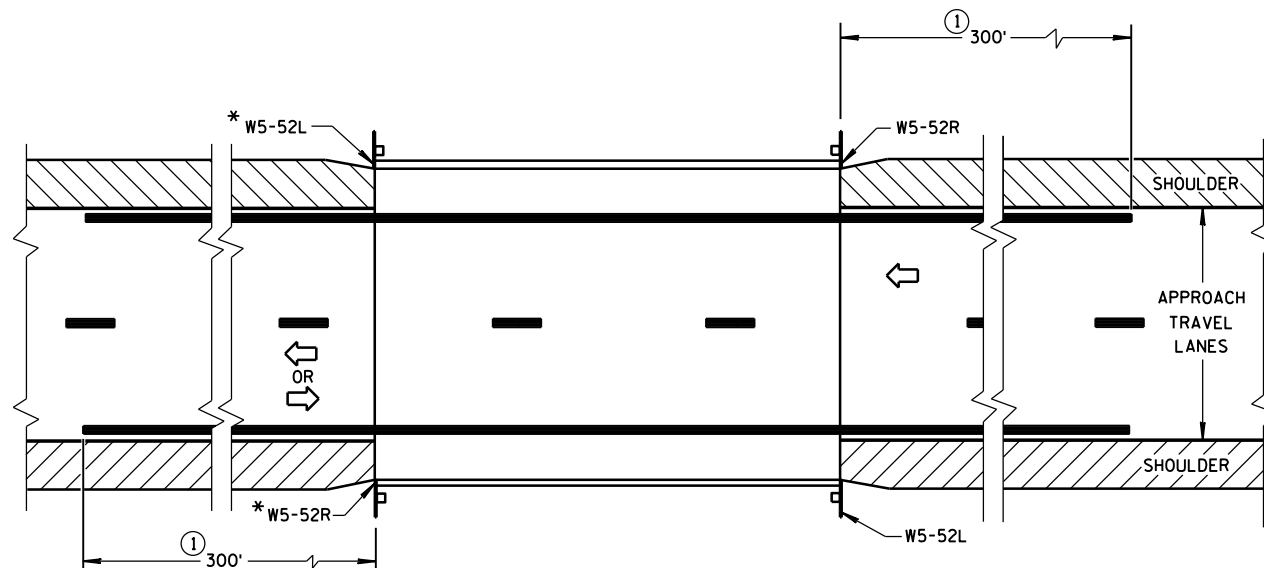
OBJECT MARKER PLACEMENT

GENERAL NOTES

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

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

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

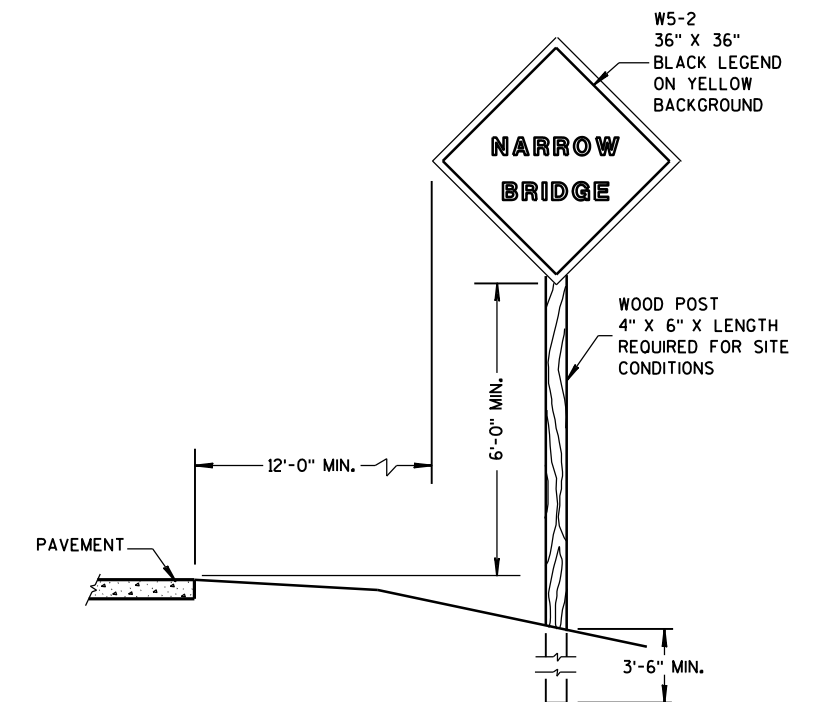


*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

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



SIGN PLACEMENT

SIGNING & MARKING FOR TWO LANE BRIDGES

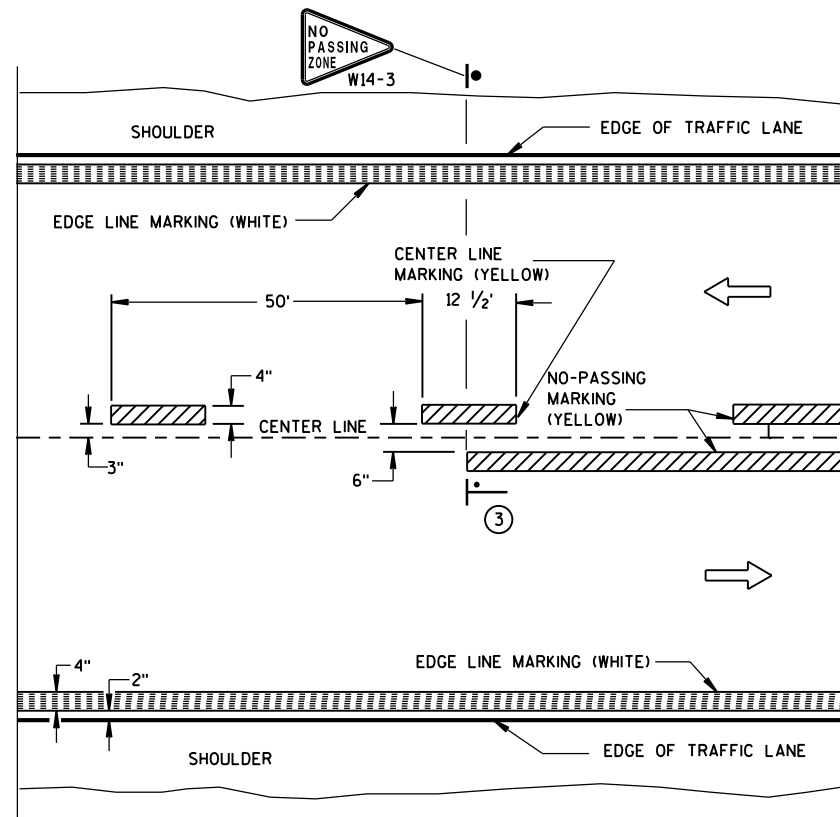
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

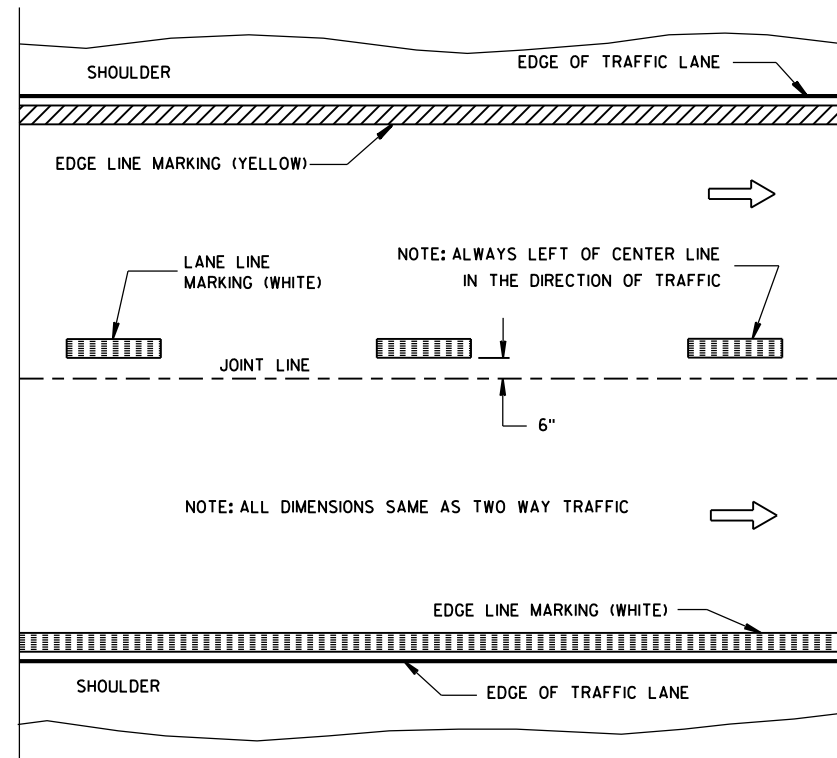
3/4/2013
DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN

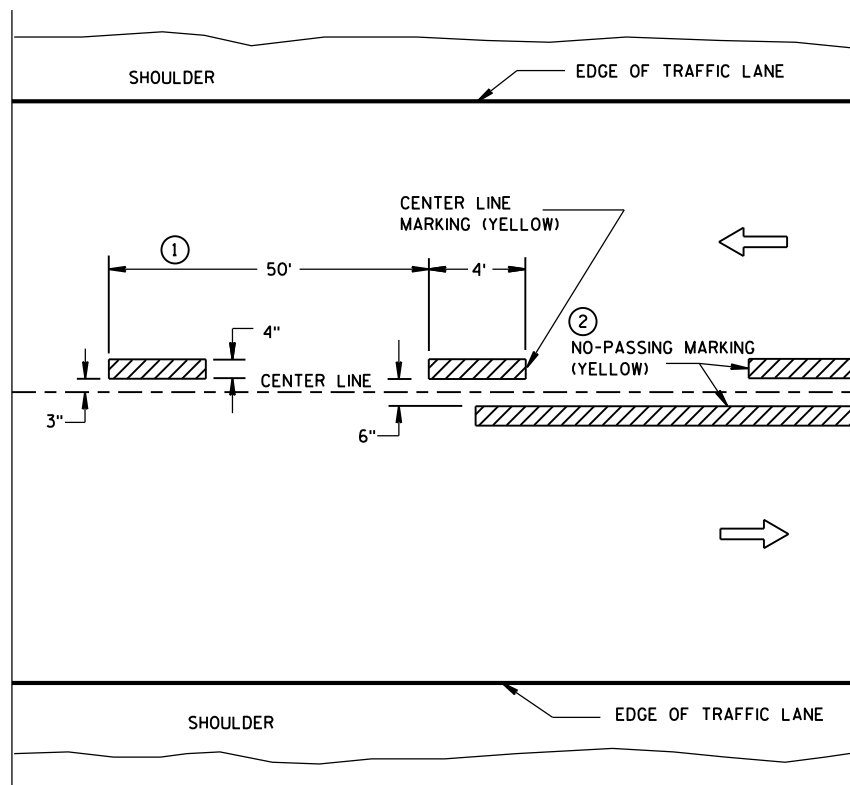


TWO WAY TRAFFIC

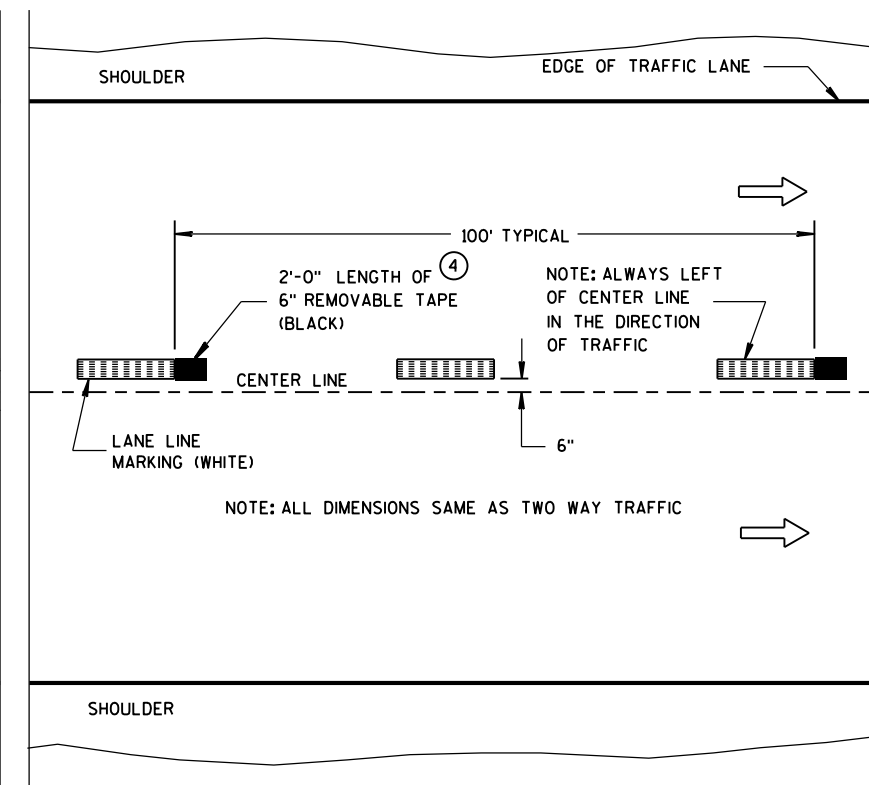


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

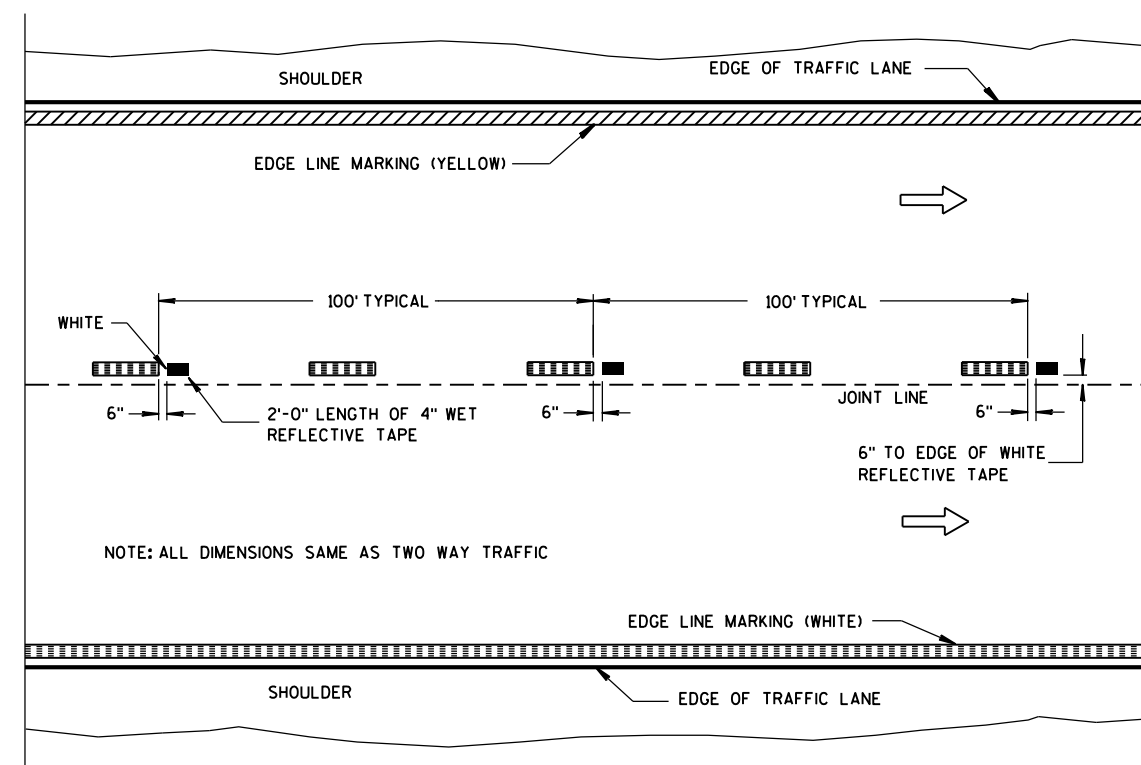
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

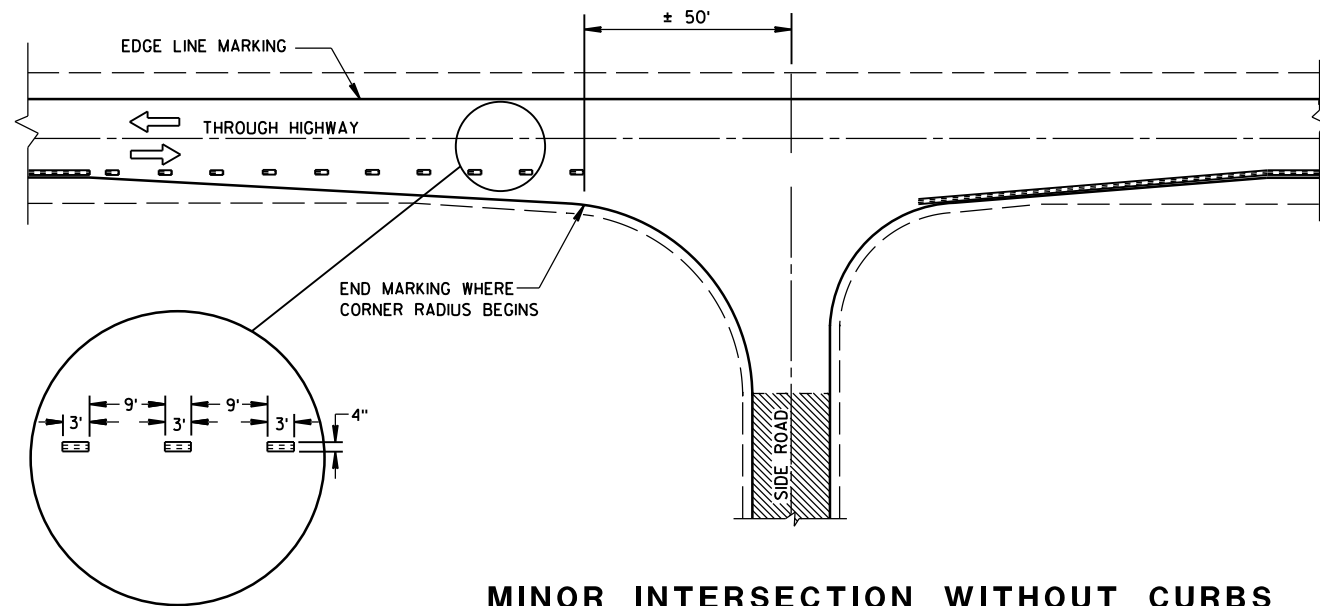
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

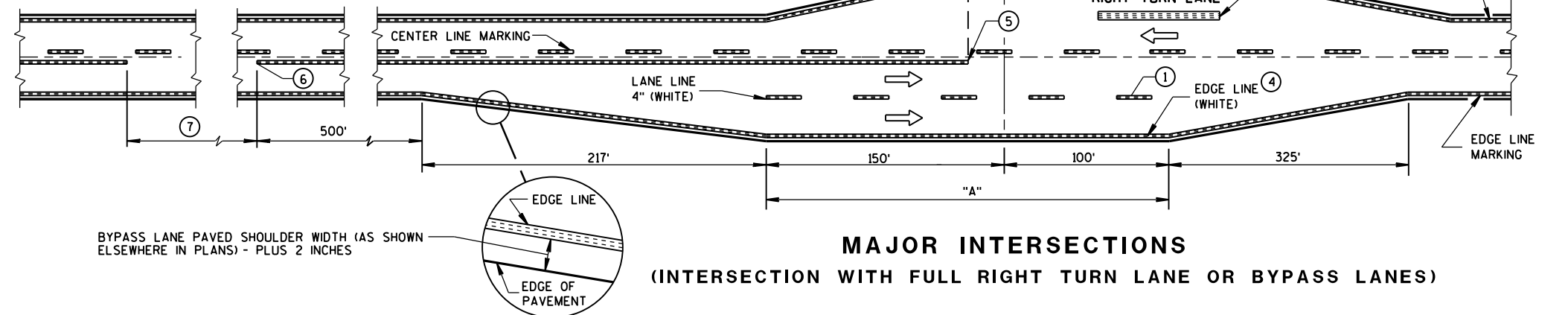
/S/ Travis Feltes
STATE TRAFFIC ENGINEER



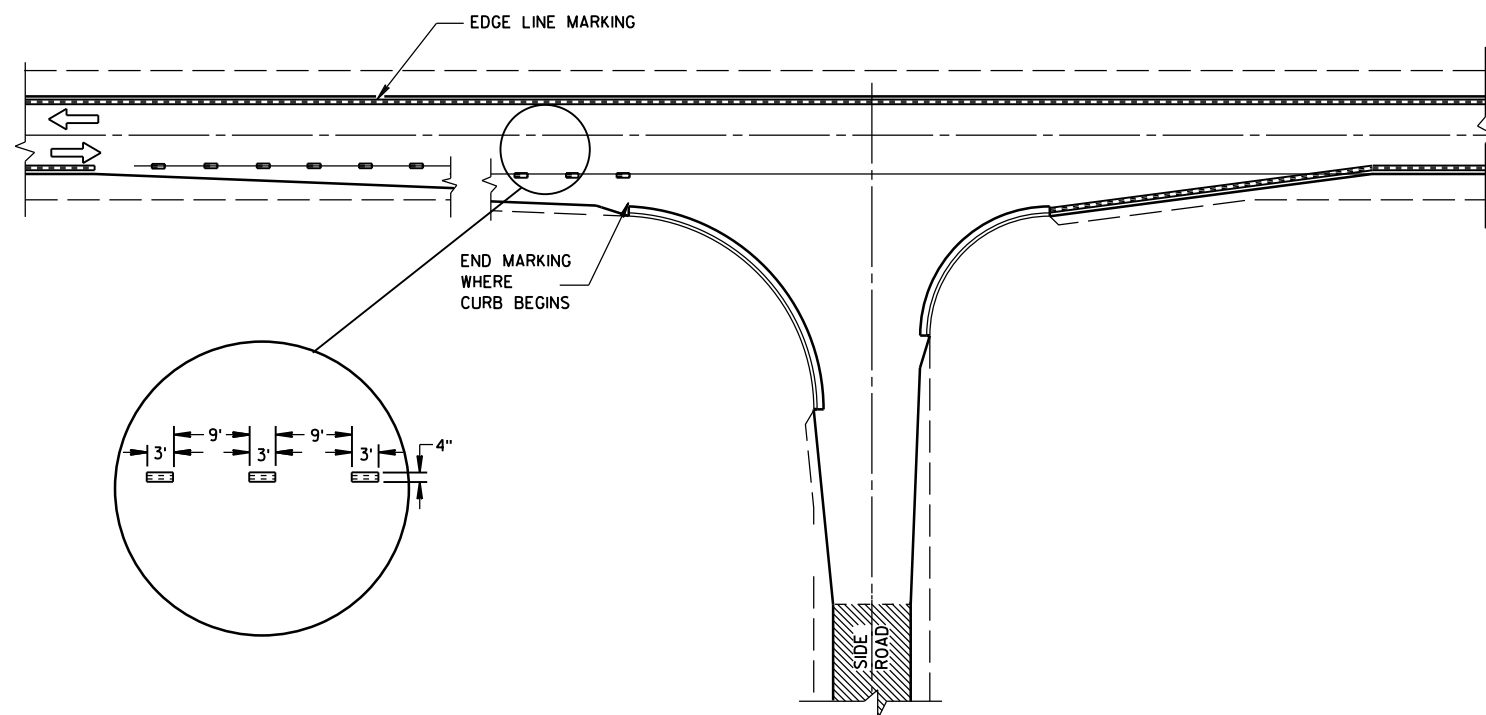
MINOR INTERSECTION WITHOUT CURBS

⑦

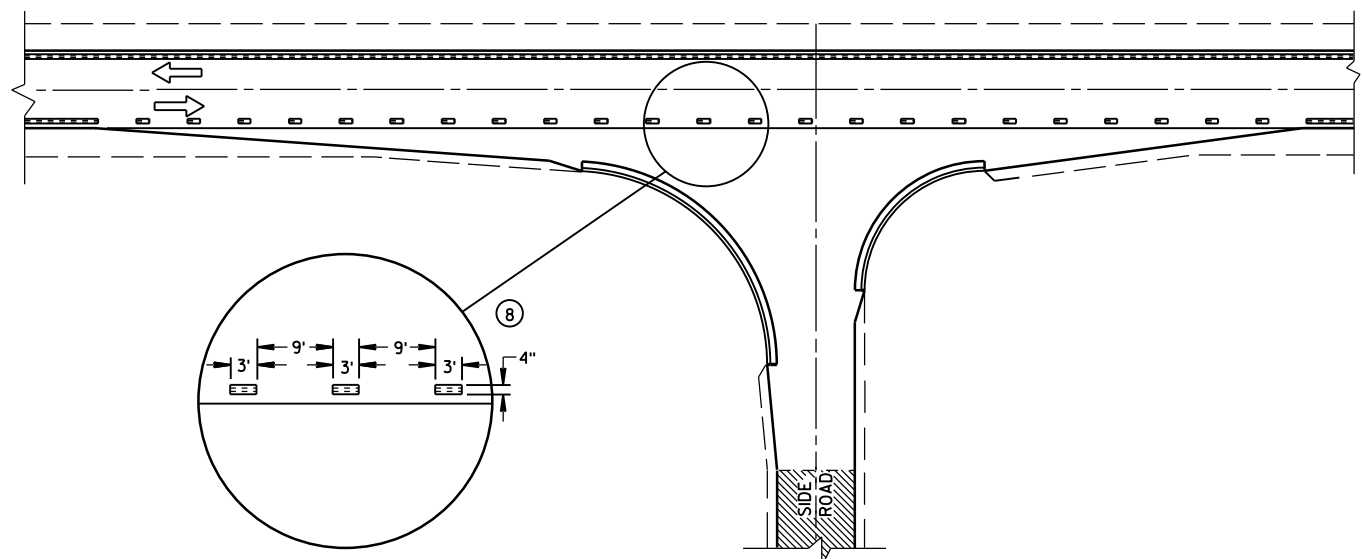
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



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

GENERAL NOTES

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

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
- ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.





- ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
- ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
- ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

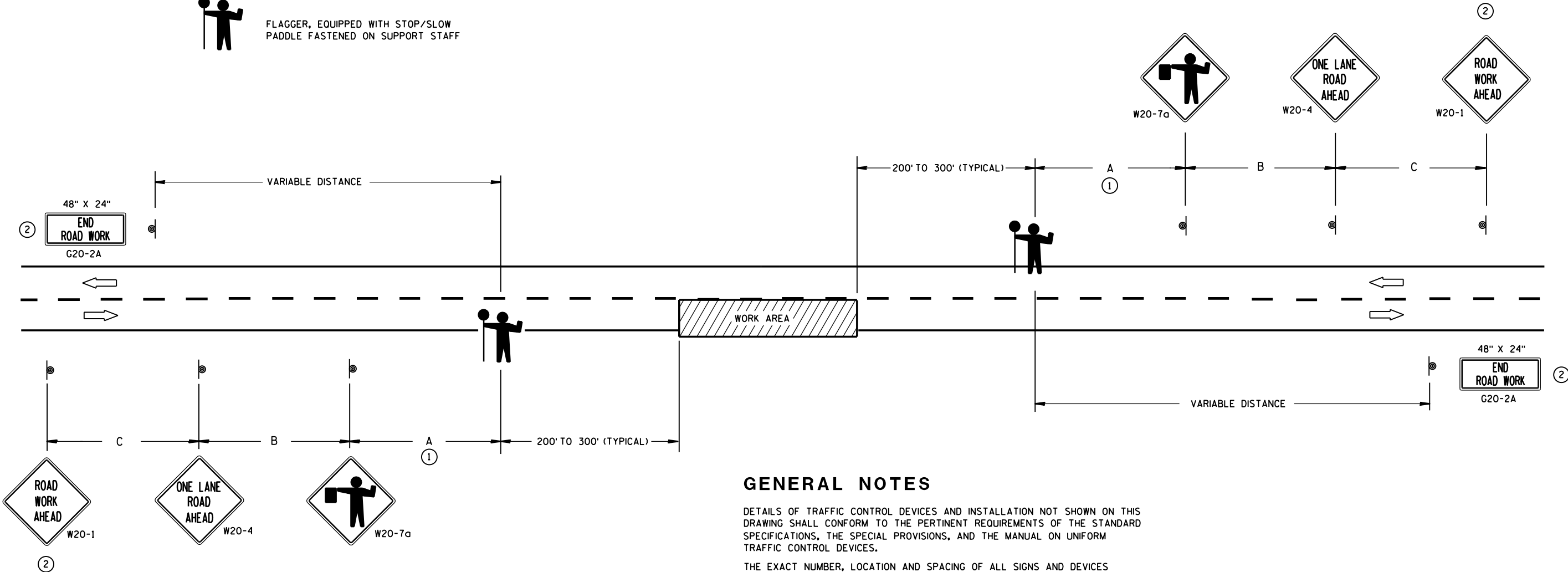
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



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



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

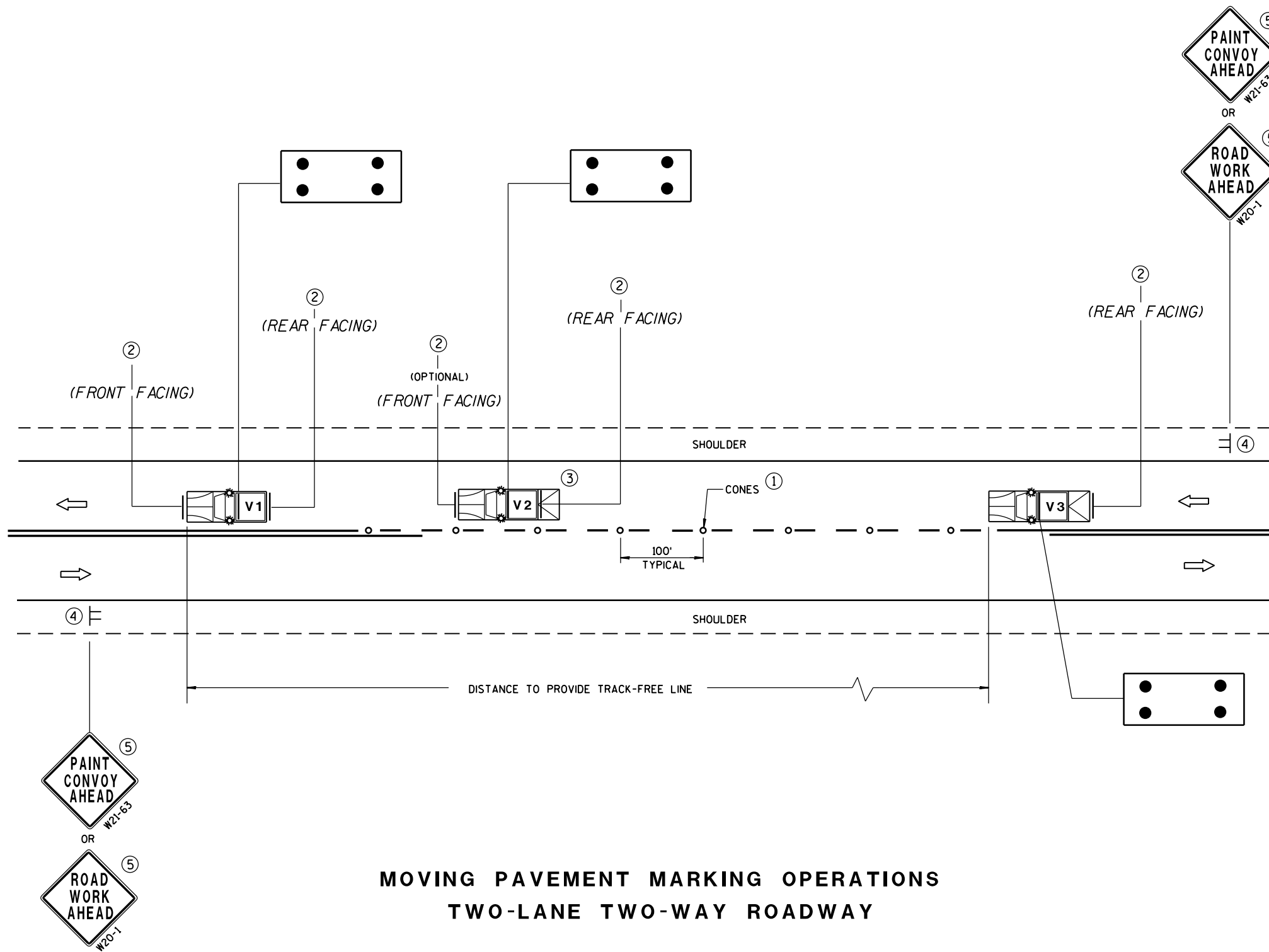
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGE LINE MARKING.

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

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

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



OR



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

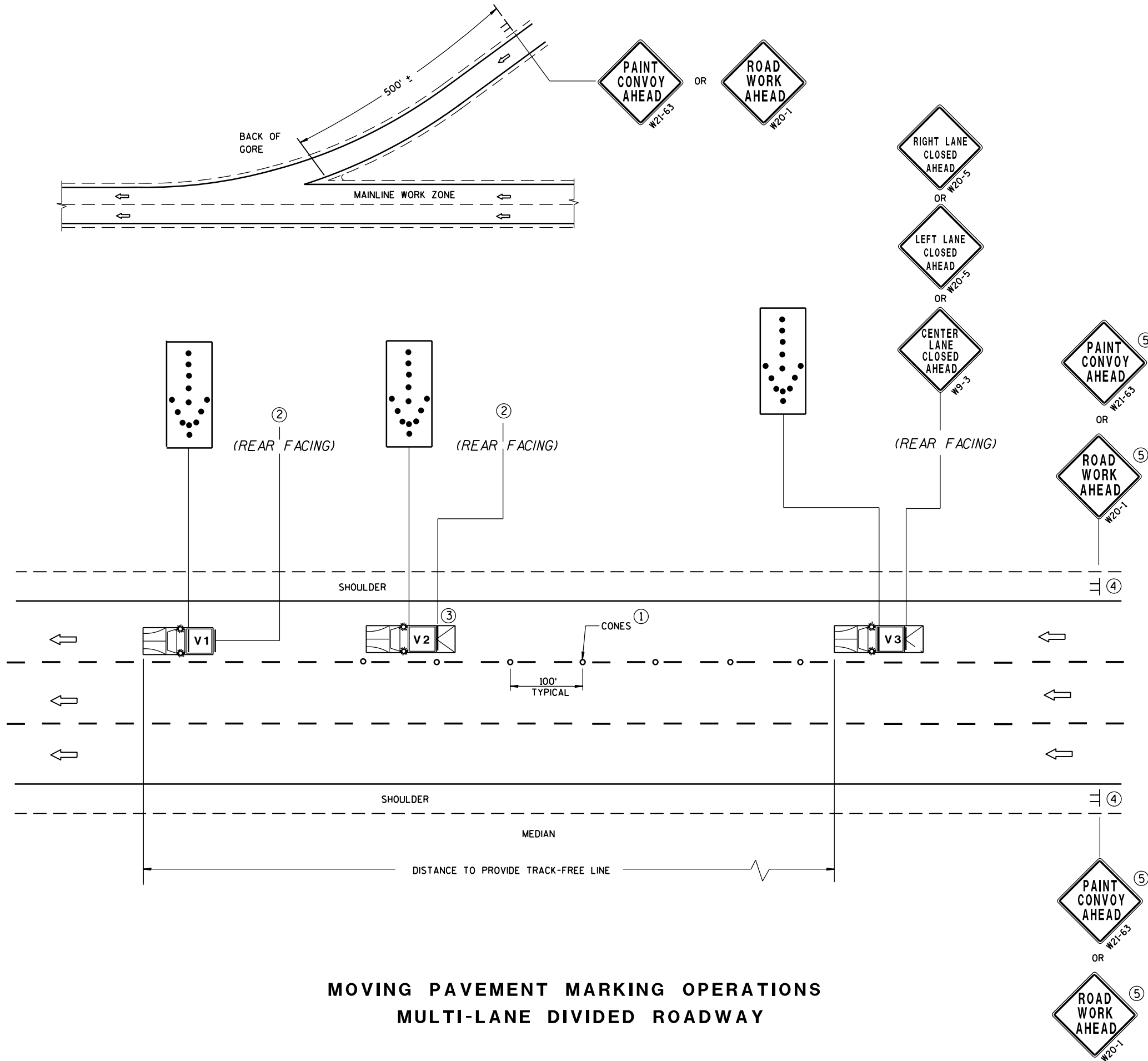
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA



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. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGE LINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

THIS DRAWING SHALL BE USED FOR EDGE LINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- V1 LEAD VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE WITH TMA
- TMA TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER
FHWA	

GENERAL NOTES

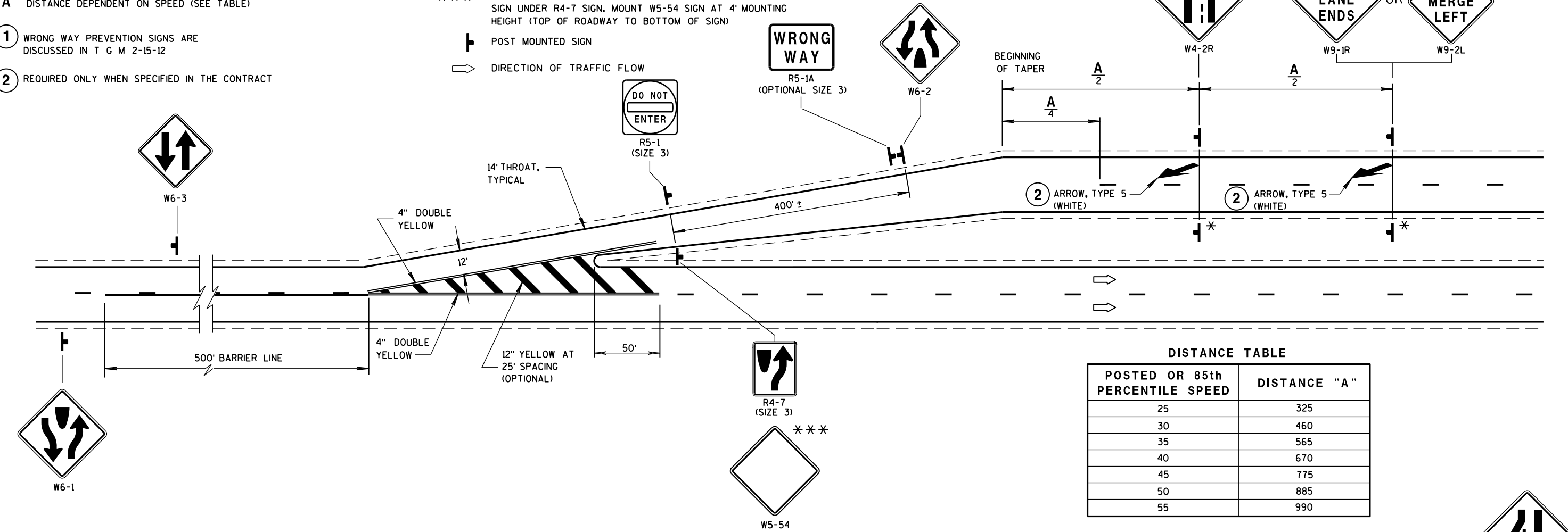
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

- 1 WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12
- 2 REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT

SYMBOLS

- * OPTIONAL SIGNS
- ** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT
- *** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

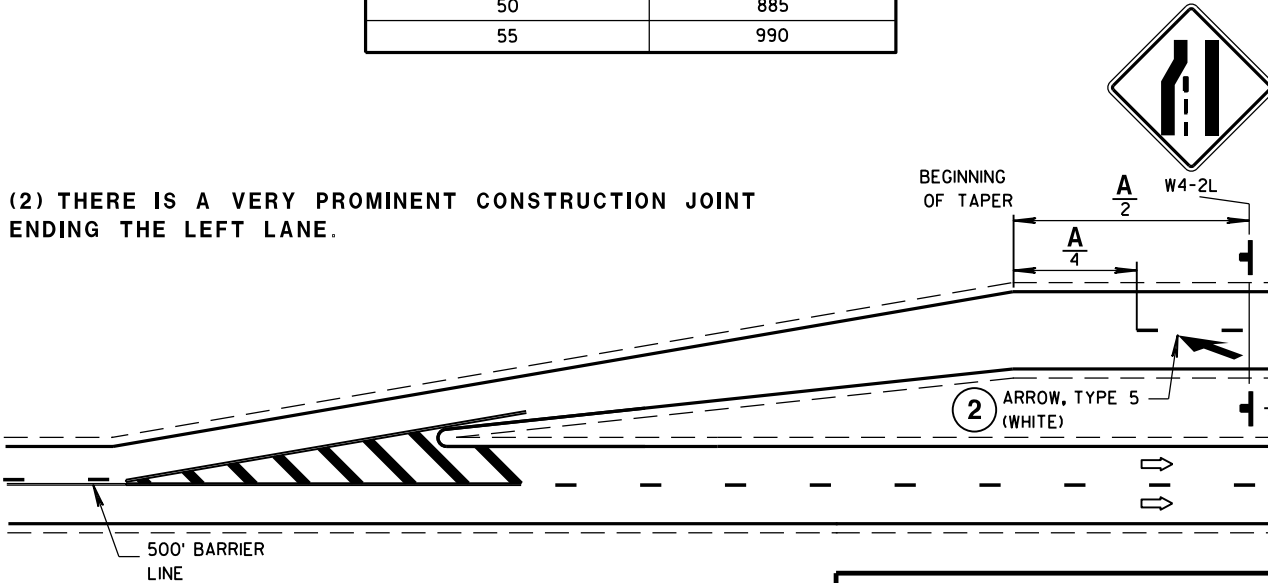
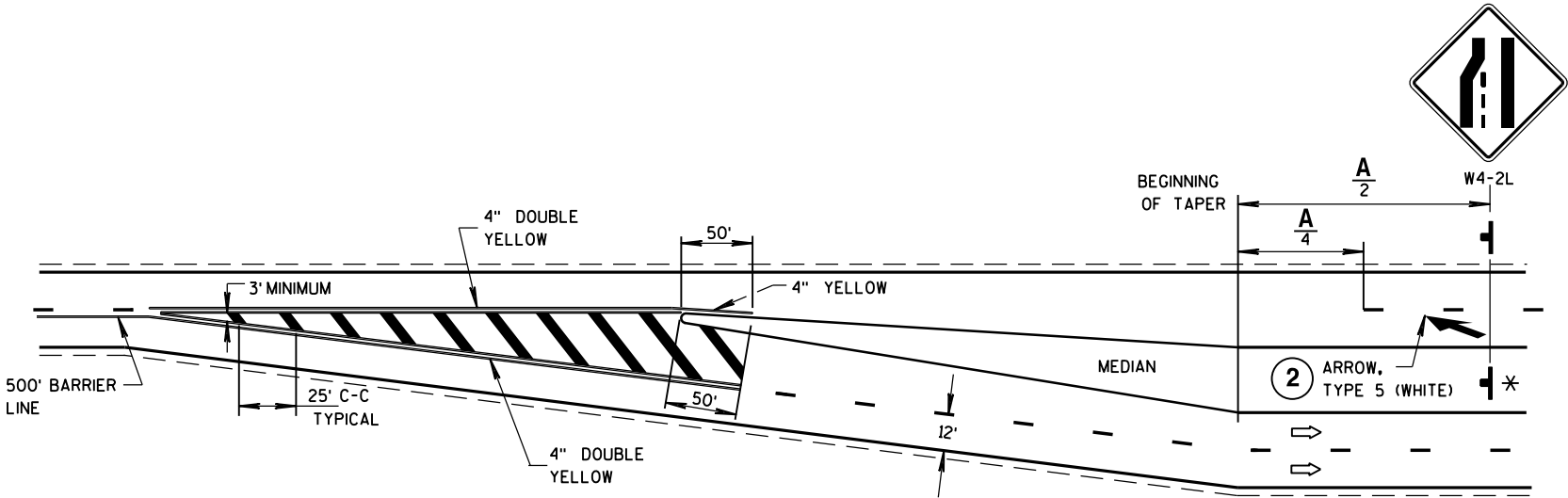


POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

USE W4-2L IF :
OR

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.



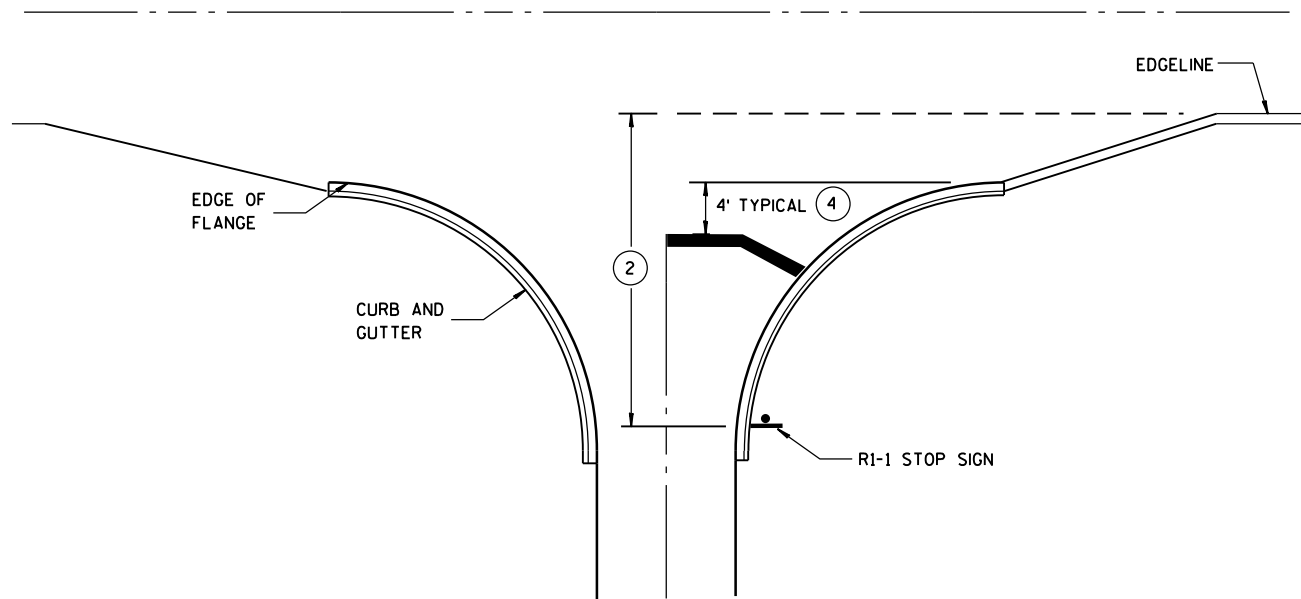
SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

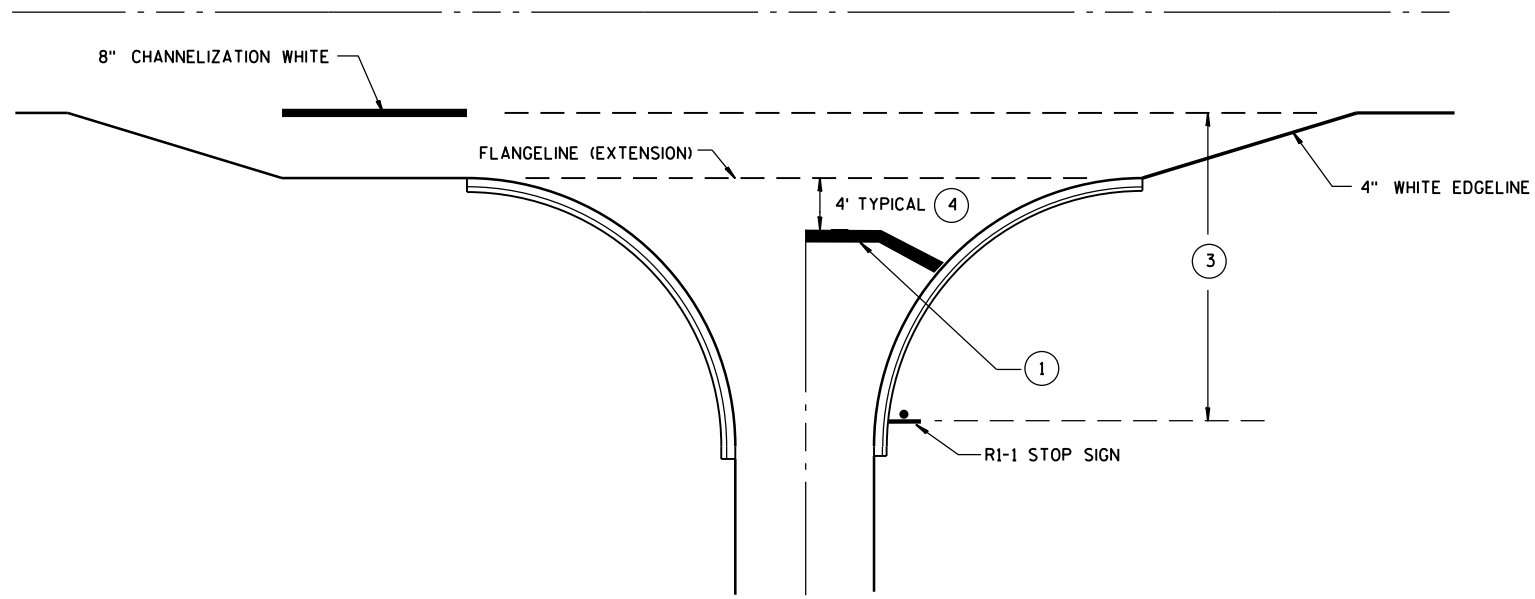
APPROVED
5/3/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

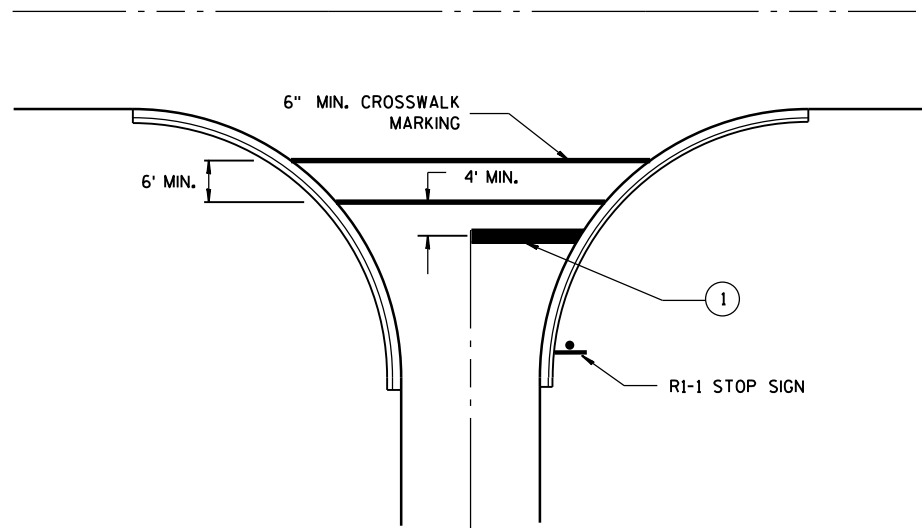
FHWA



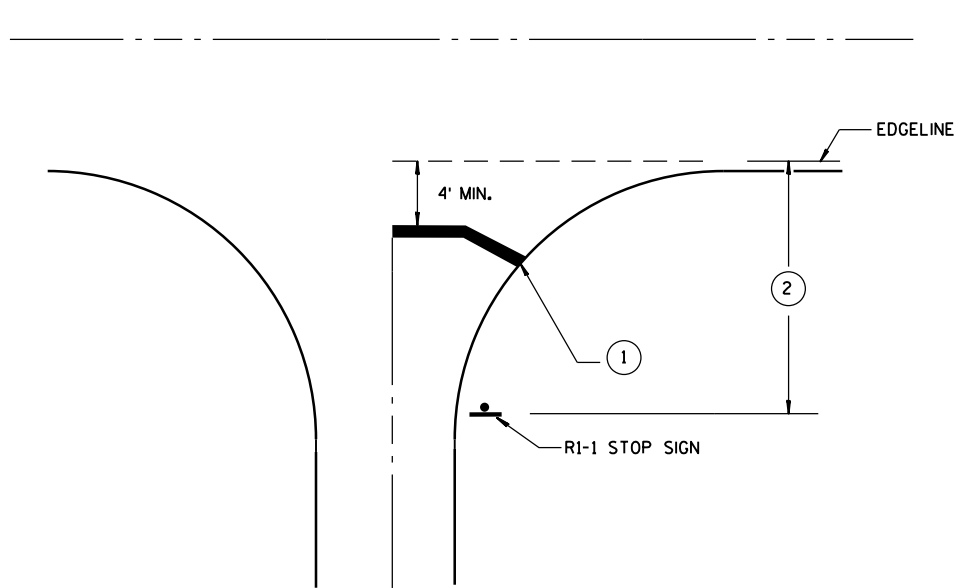
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE /S/ Travis Feltz
STATE TRAFFIC ENGINEER
FHWA

GENERAL NOTES

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

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

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

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

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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

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

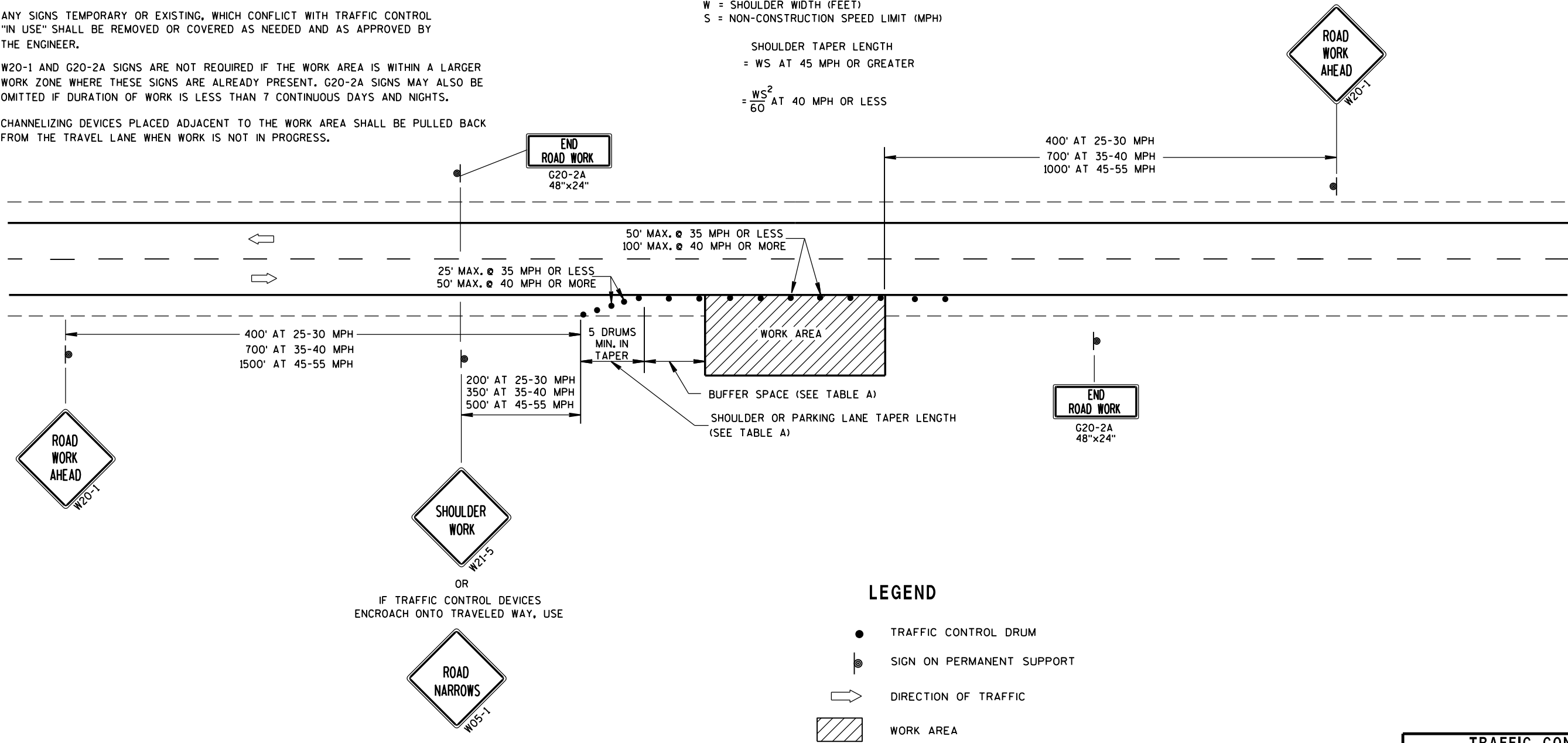
TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

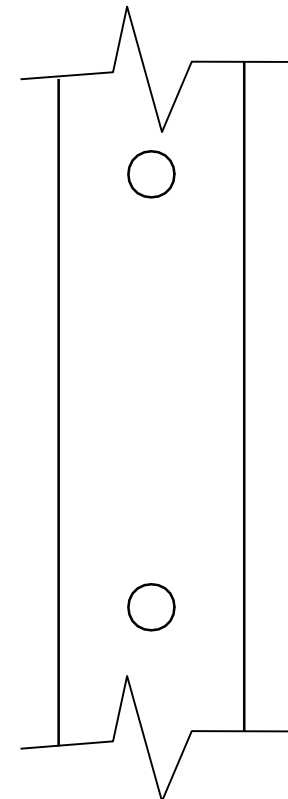
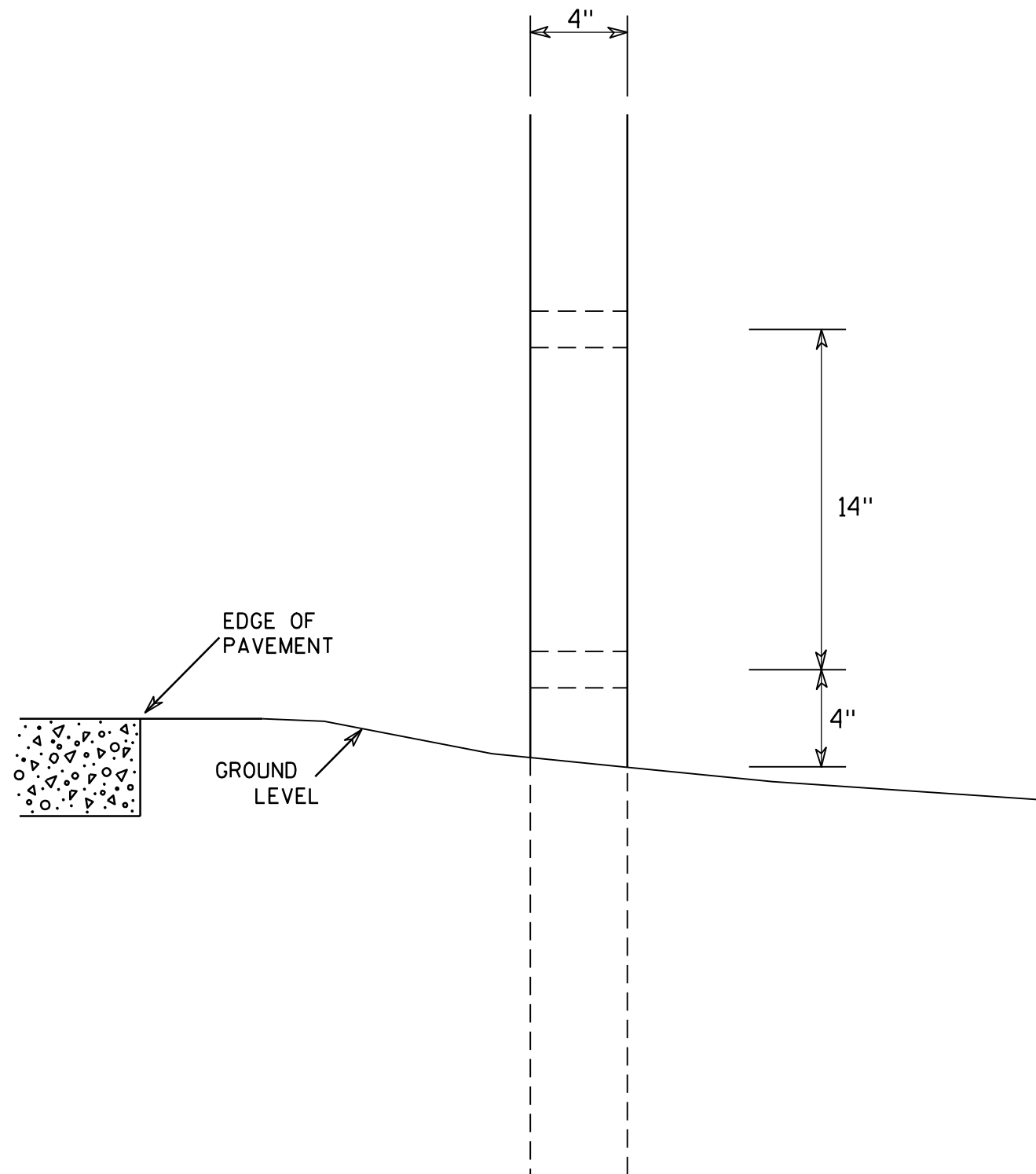
= $\frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

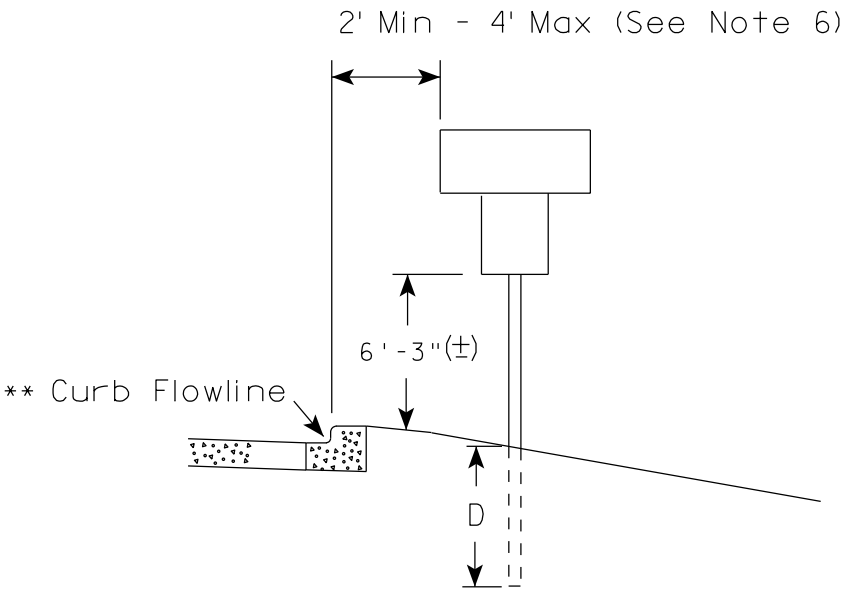
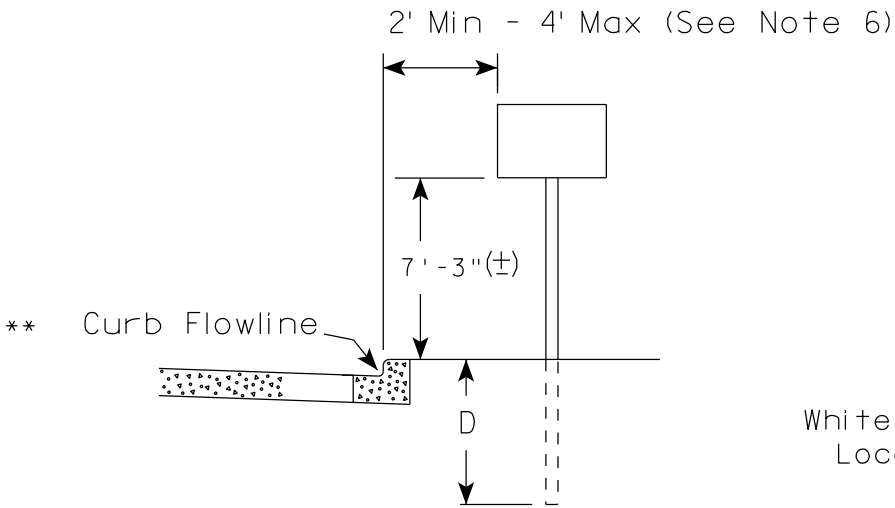
HWY:

COUNTY:

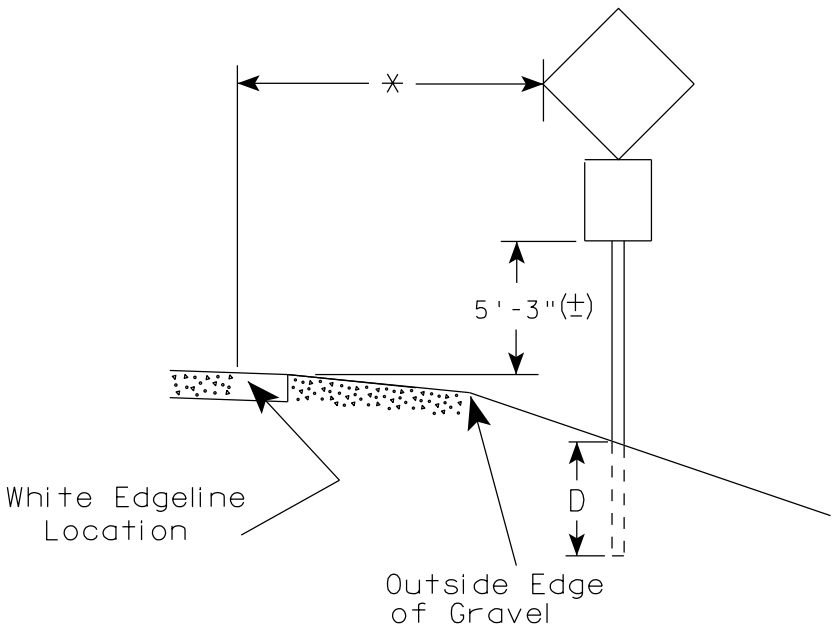
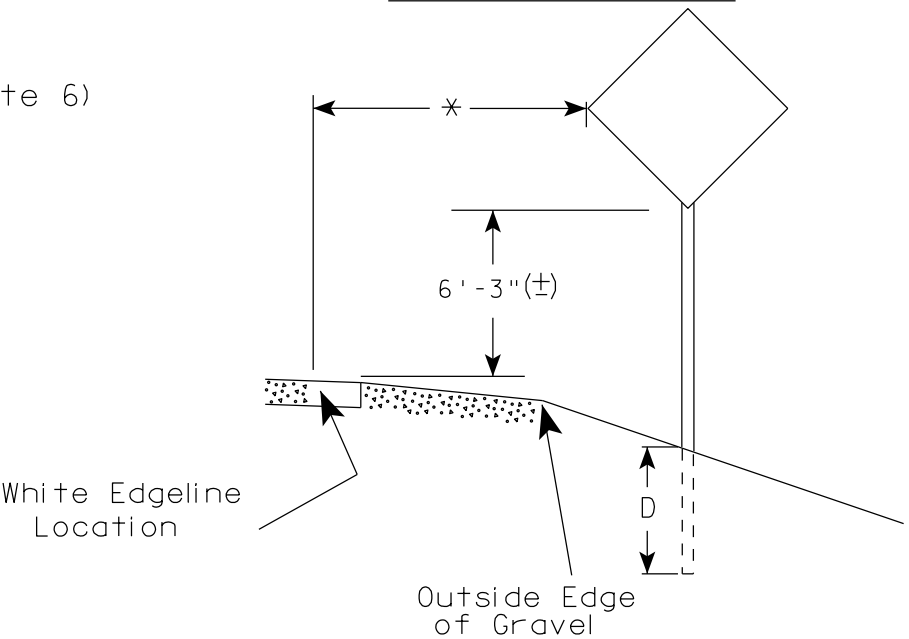
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

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

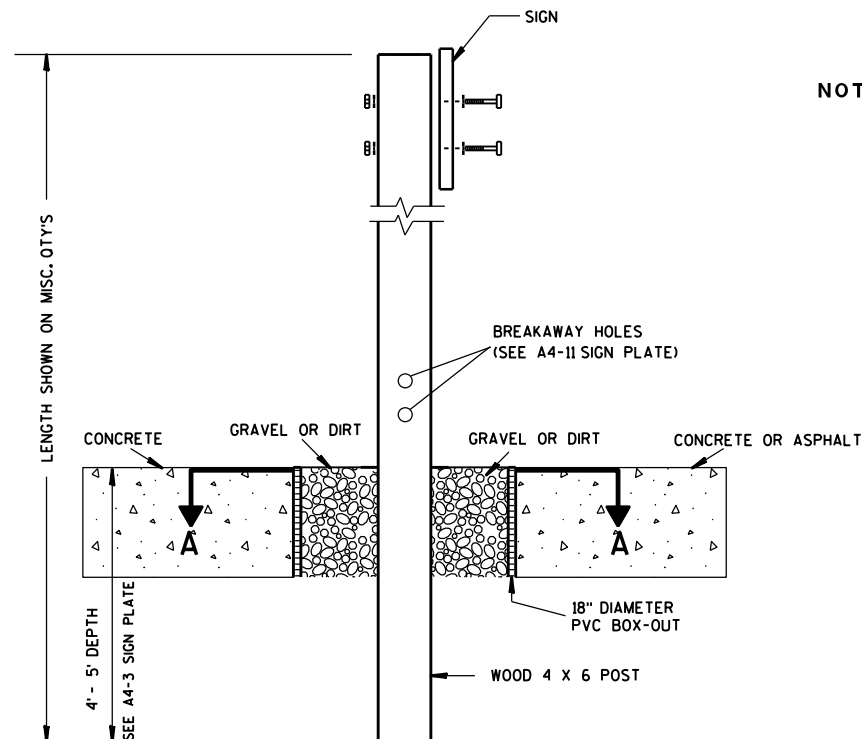
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

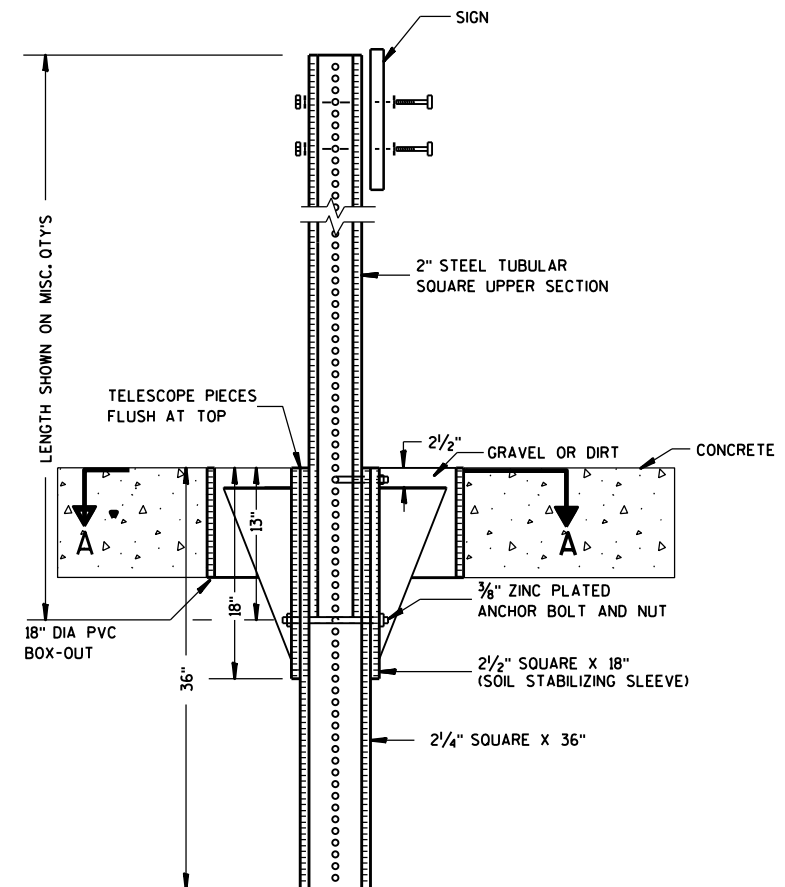
DATE 9/30/13 PLATE NO. A4-3.18



ELEVATION VIEW

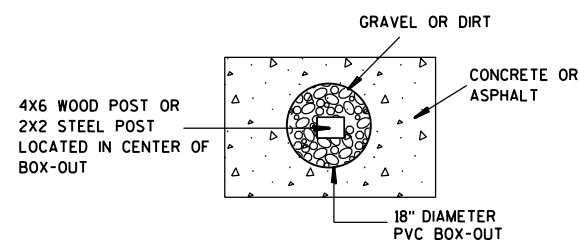
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

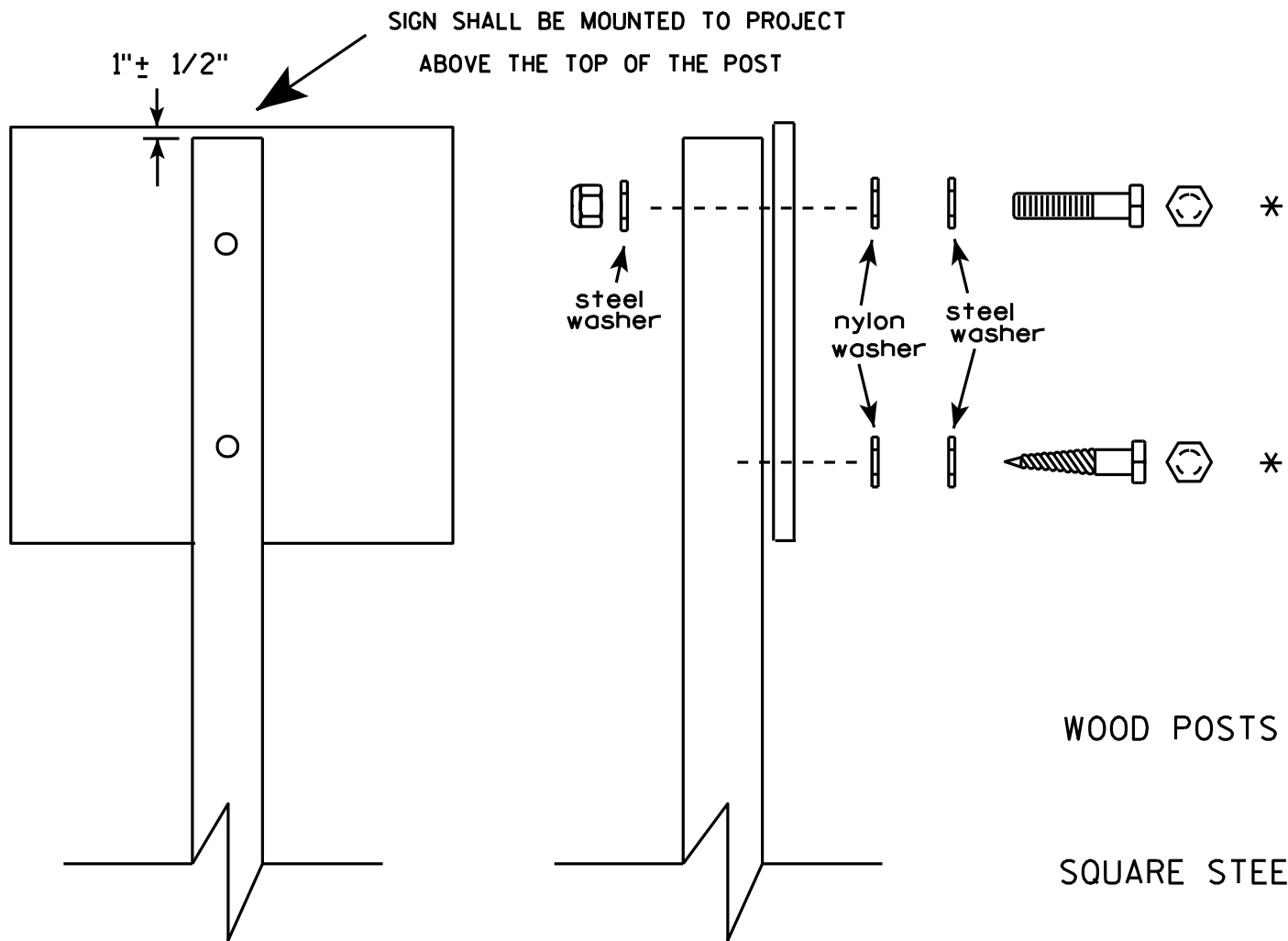
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

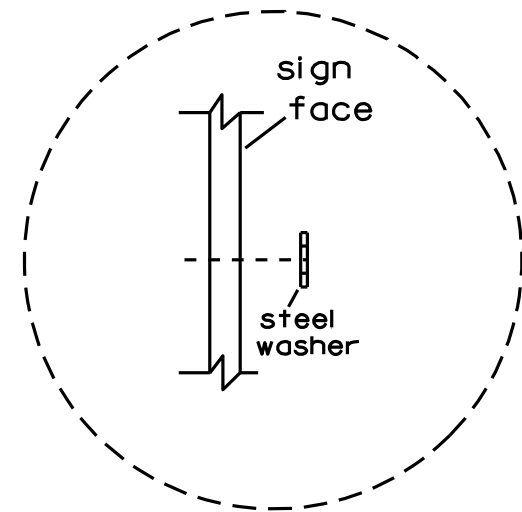


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

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



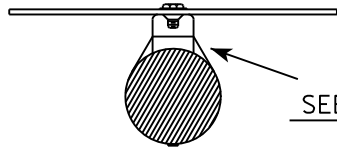
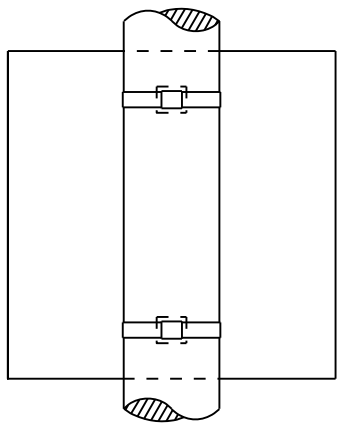
Washer Placement when Sign Has Other Than Type H or Type F Face

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

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

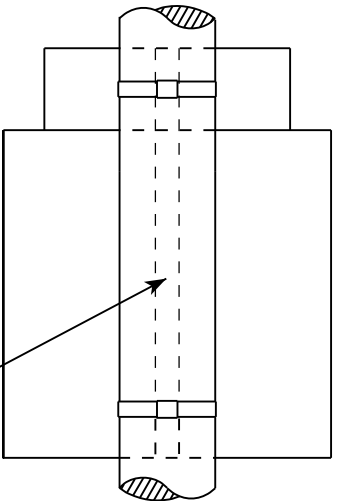
BANDING

SINGLE SIGN

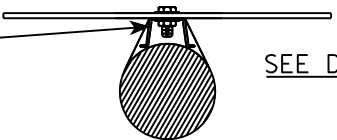


SEE DETAIL A

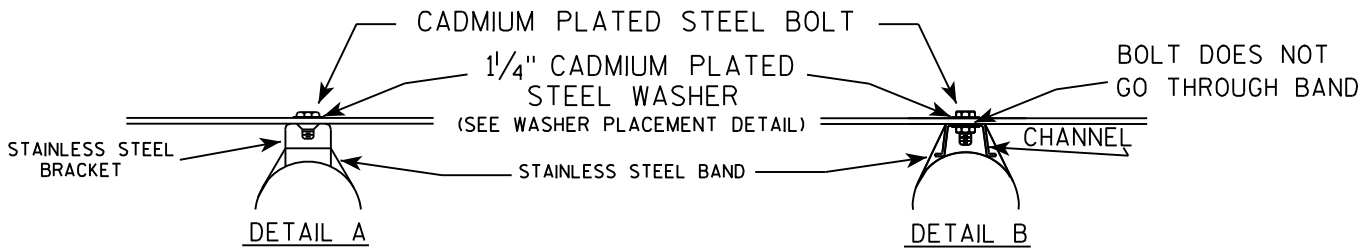
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



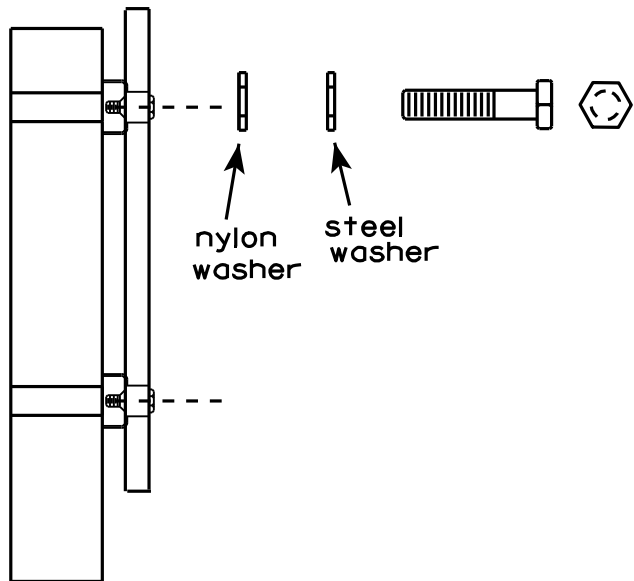
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



nylon washer

steel washer

WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 8/16/13

PLATE NO. A5-9.3

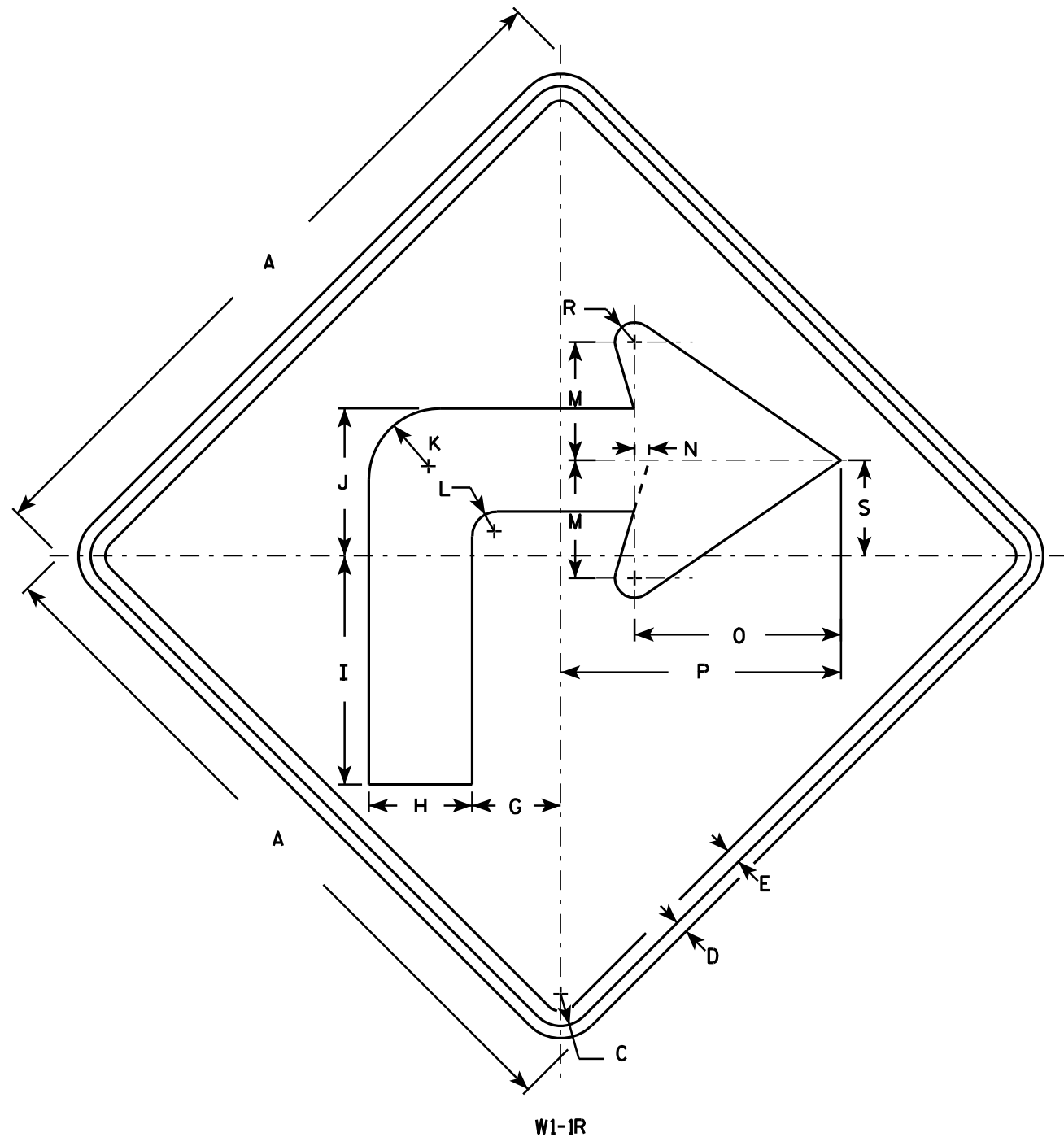
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



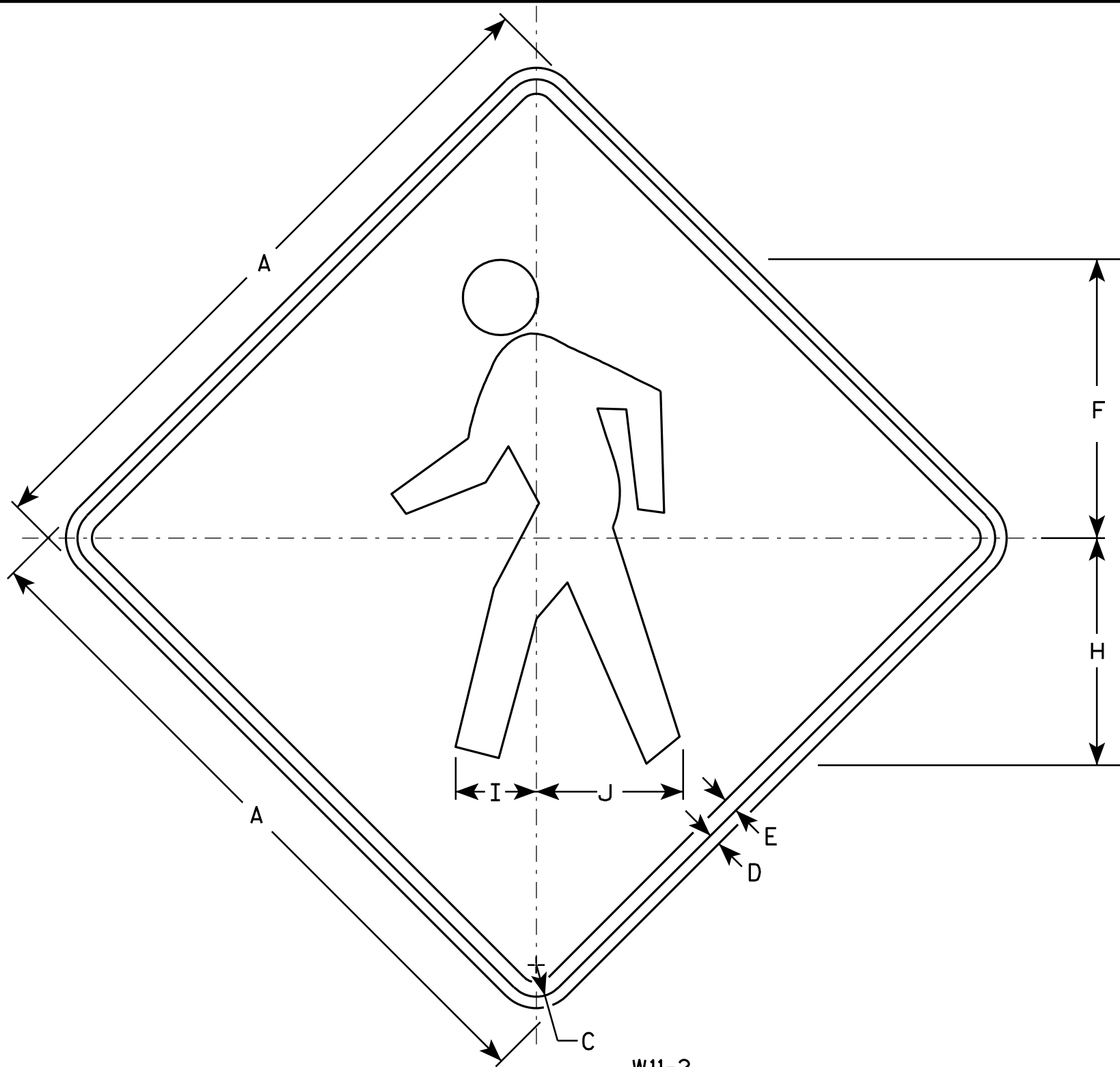
NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

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

STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/15/12 PLATE NO. W1-1.11



W11-2

NOTES

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

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

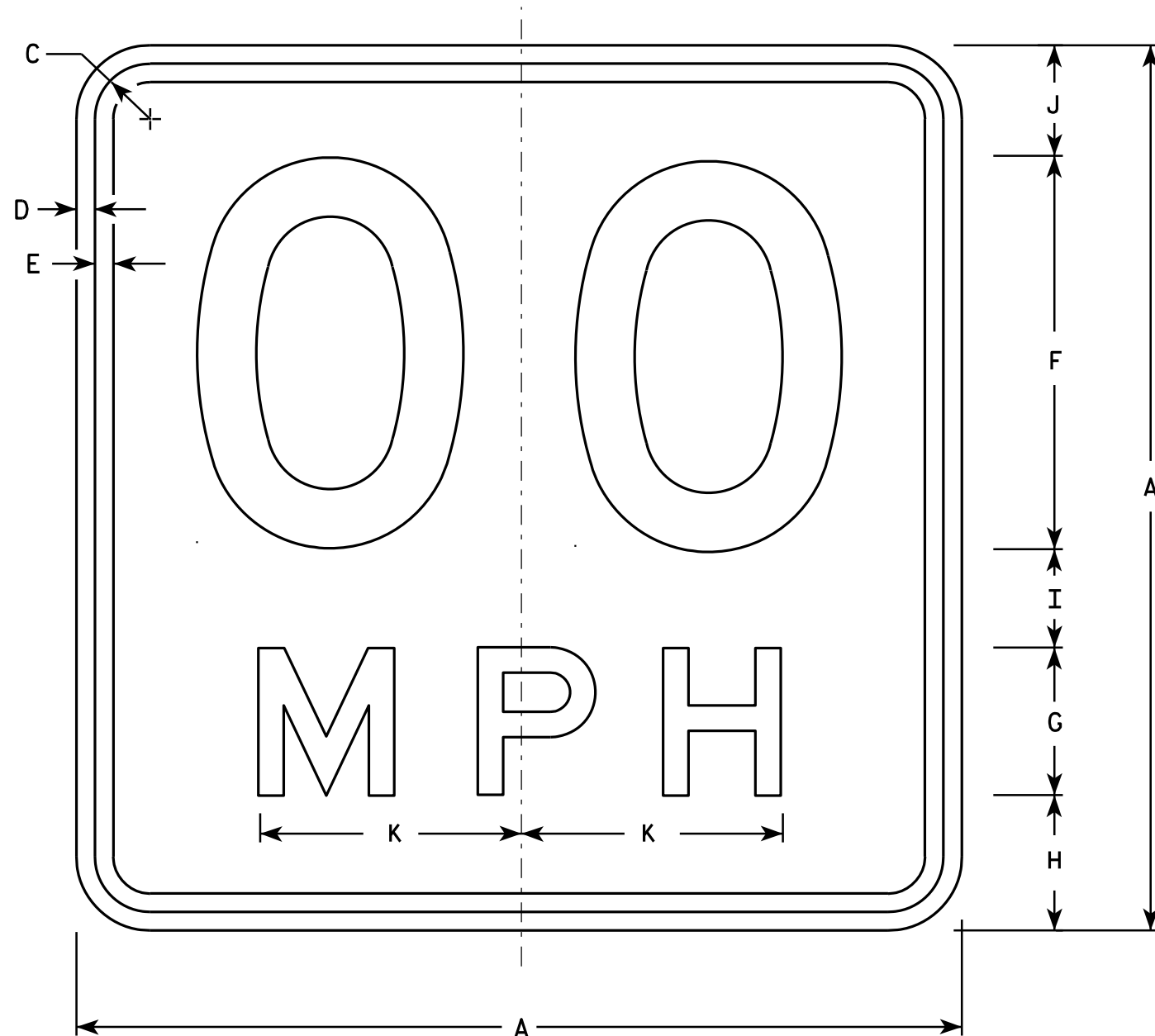
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

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

W13-1

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

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

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO:

HWY:

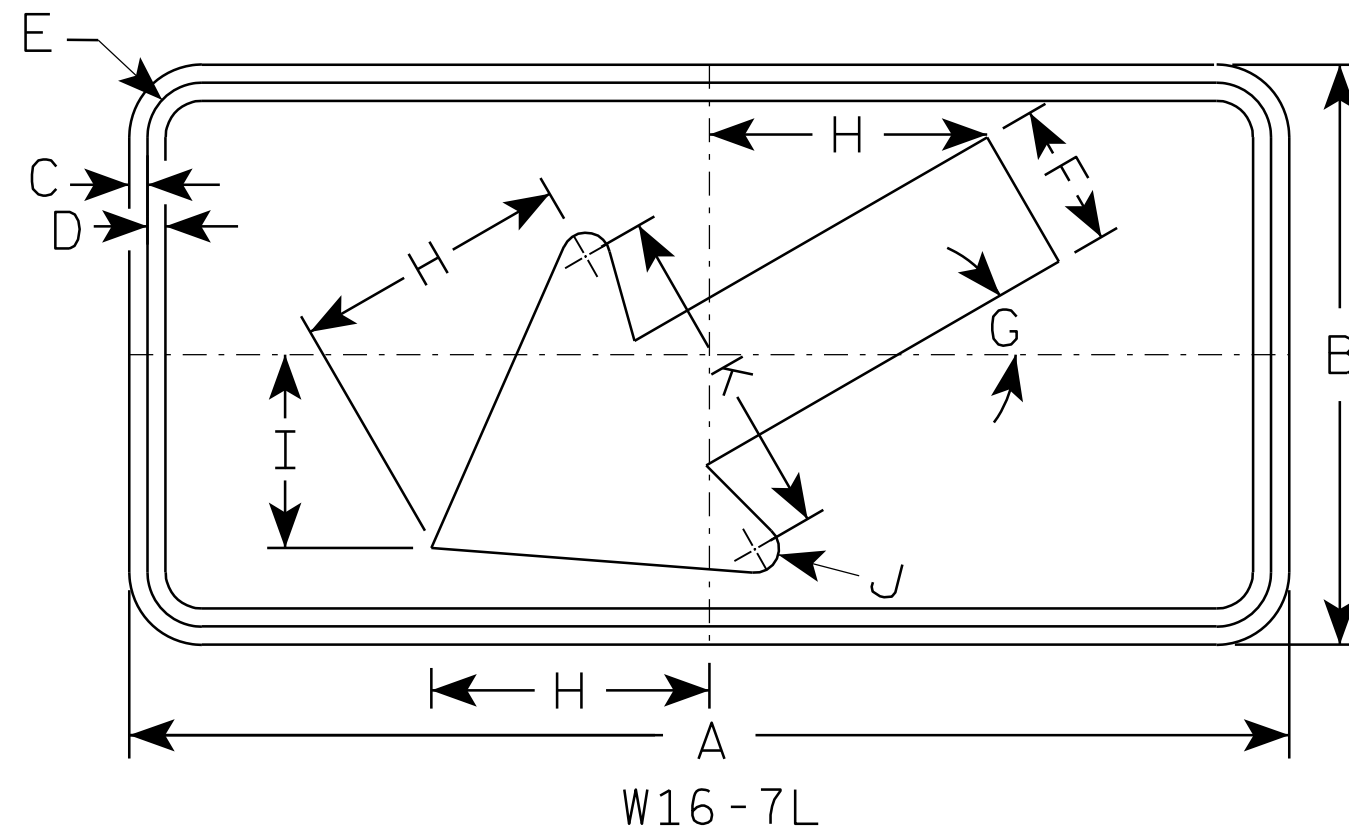
COUNTY:

SHEET NO:

E

NOTES

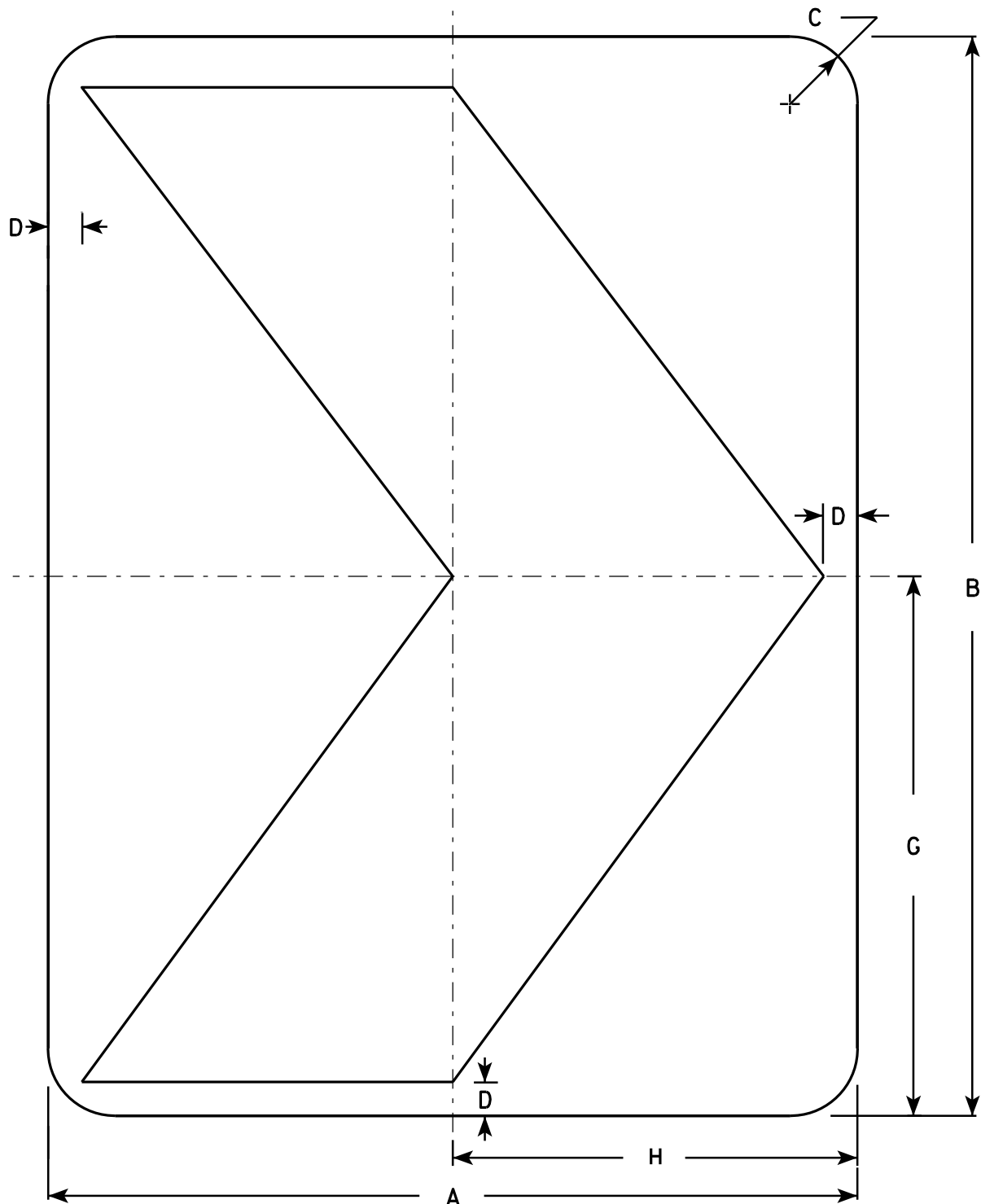
1. Sign is Type II - Type F Reflective -
reference WIS DOT Standard Specification for
HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W16-7R is the same as W16-L
except the arrow is reversed along
the vertical centerline.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

STANDARD SIGN	
W16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 11/02/10	PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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W1-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/2	1/2			9	6																			1.5
2S	18	24	1 1/2	3/4			12	9																			3.0
2M	18	24	1 1/2	3/4			12	9																			3.0
3	24	30	1 1/2	1			15	12																			5.0
4	30	36	1 7/8	1 1/4			18	15																			7.5
5	36	48	2 1/4	1 1/2			24	18																			12.0

STANDARD SIGN

W1-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E

Notes



Wisconsin Department of Transportation

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