

WKE

JULY 2013

INDEX OF SHEETS

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Sheet No.		Typical Sections and Details
Sheet No.		Estimate of Quantities
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Sheet No.		Standard Detail Drawings
Sheet No.		Sign Plates
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Sheet No.		Computer Earthwork Data
Sheet No.		Cross Sections

TOTAL SHEETS = 30

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
VARIOUS LOCATIONS PAVEMENT REPAIRS
SOUTH RACINE COUNTY LINE TO RAWSON AVE
I.H. 94
RACINE & MILWAUKEE COUNTIES

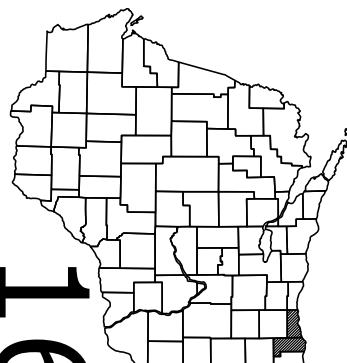
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1030-33-61		

PROJECT ID:

1030-33-61

COUNTY:

VARIOUS



DESIGN DESIGNATION

A.D.T.	2009	=	79,230
A.D.T.	2035	=	111,380
D.H.V.		=	9470
D.		=	47153
T.		=	14%
DESIGN SPEED (MPH)		=	70
ESALS		=	5,530,600

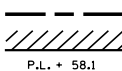
CONVENTIONAL SYMBOLS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SURVEY LINE

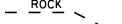
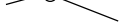
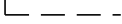
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)

MARSH AREA

WOODED OR SHRUB AREA



P.L. 58.1



COMBUSTIBLE FLUIDS

UNDERGROUND UTILITIES

GAS

ELECTRIC

TELEPHONE OR TELEGRAPH

COMMUNICATIONS LINE

SERVICE PEDESTAL

POWER POLE

TELEPHONE POLE

RAILROAD

SANITARY SEWER

STORM SEWER

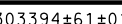
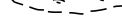
WATER

EXISTING CULVERT

PROPOSED CULVERT

(Box or Pipe)

CULVERT (Profile View)



G

E

T

C

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

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CAUTION

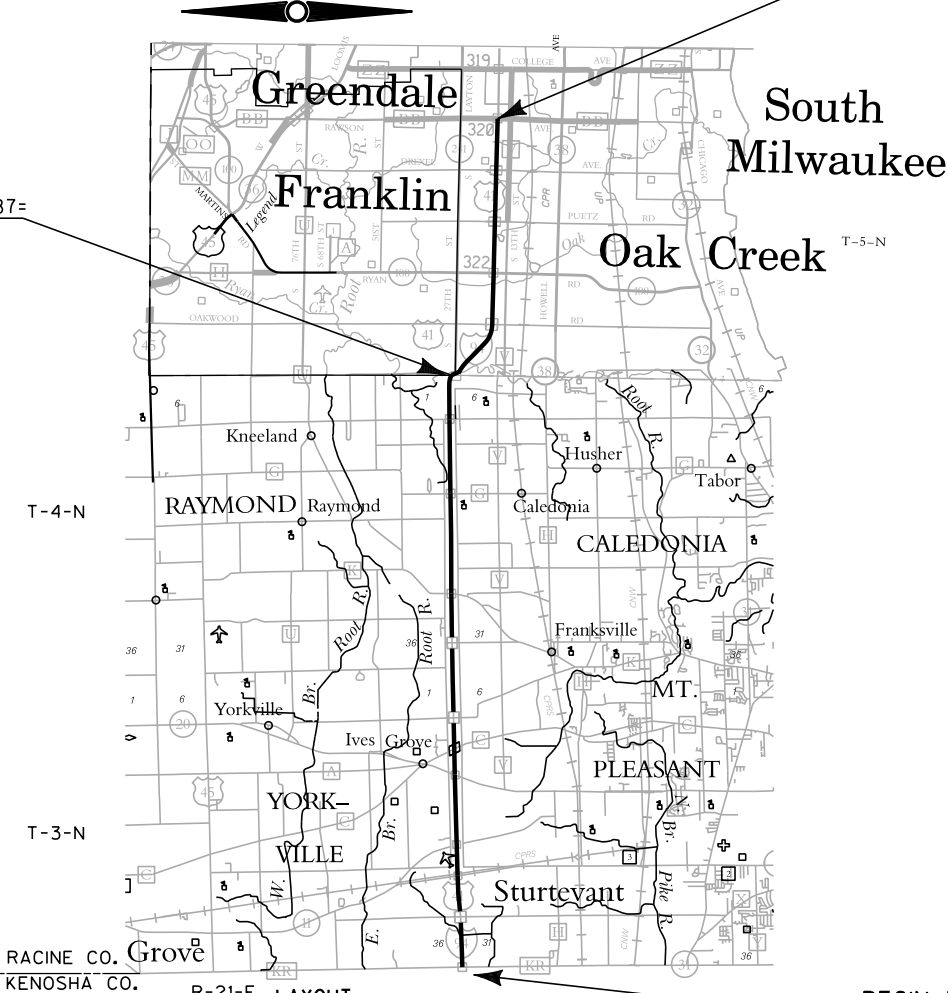
CAUTION

CAUTION

STATE PROJECT NUMBER
1030-33-61

EQUATION 1267+30.87=
105+00 S.B.
104+58.21 N.B.

END PROJECT 1030-33-61
418+00
(1000' NORTH OF RAWSON)



BEGIN PROJECT 1030-33-61

STA 658+00
X= 594287.8965
Y= 165061.3226

TOTAL NET LENGTH OF CENTERLINE = 0.0 MI.

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE NAD 83 (97) WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE & MILWAUKEE COUNTY."

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	SUZAN NAST, PE
Project Manager	JOSHUA LEVEQUE, PE
Regional Examiner	
Regional Supervisor	
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 4/12/2013 (Signature)

GENERAL NOTES

NO UTILITY FACILITIES ARE IDENTIFIED IN THE PLAN.
IDENTIFY ALL UTILITIES IN THE PROJECT AREA BY CONTACTING DIGGERS HOTLINE.

EXACT SIZE AND LOCATION OF ALL PAVEMENT REPAIRS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

PAVEMENT MARKINGS WILL BE CONTINUOUS WITHIN PROJECT LIMITS.

CALL DOT MAINTENANCE CONTACTS FOR EXACT LOCATIONS OF WORK IN EACH RESPECTIVE COUNTY.

MILL & OVERLAY DEPTH IS 2 INCHES EXCEPT AT TRANSVERSE PAVEMENT JOINTS WHERE THE DEPTH WILL BE 5 INCHES

THE FIELD ENGINEER WILL DETERMINE THE NUMBER AND PLACEMENT OF PORTABLE CHANGEABLE MESSAGE BOARDS WHEN RAMP CLOSURES ARE NECESSARY.

UTILITY CONTACTS

DOT
LAURA LONGLEY
141 NW BARSTOW ST
WAUKESHA, WI 53187
(262) 548-6425

DOT PLANNING
JIM HARRIS
141 NW BARSTOW ST
WAUKESHA, WI 53187
(262) 521-5455

STOC
ATR PULLBOXES
CLIFF SEROWSKI
935 S 60TH STREET
WEST ALLIS, WI 53214
(414) 266-1157

DEAN BEEKMAN
433 W ST PAUL AVE SUITE 300
MILWAUKEE, WI 53203
Dean.Beekman@dot.wi.gov
(414) 227-2154

JEFFREY MADSON
433 W ST PAUL AVE SUITE 300
MILWAUKEE, WI 53203
Jeffrey.Madson@dot.wi.gov
(414) 225-3723

DNR CONTACTS

RACINE COUNTY
Kristina Betzold
Wisconsin Department of Natural Resources
2300 N DR Martin Luther Jr. Drive
Milwaukee, WI 53212
PHONE: (414) 263-8517

MILWAUKEE COUNTY
MIKE THOMPSON
SOUTHEAST REGIONAL LIASON
2300 N.DR. MARTIN LUTHER KING DR.
MILWAUKEE, WI 53212
PHONE: (414) 263-8648

DOT CONTACTS

MILWAUKEE (S OF IH 94)
DAVID ZEMAN
WISDOT SE REGION - WAUKESHA
141 NW BARSTOW STREET
WAUKESHA, WI 53188
PHONE: (414) 750-1407

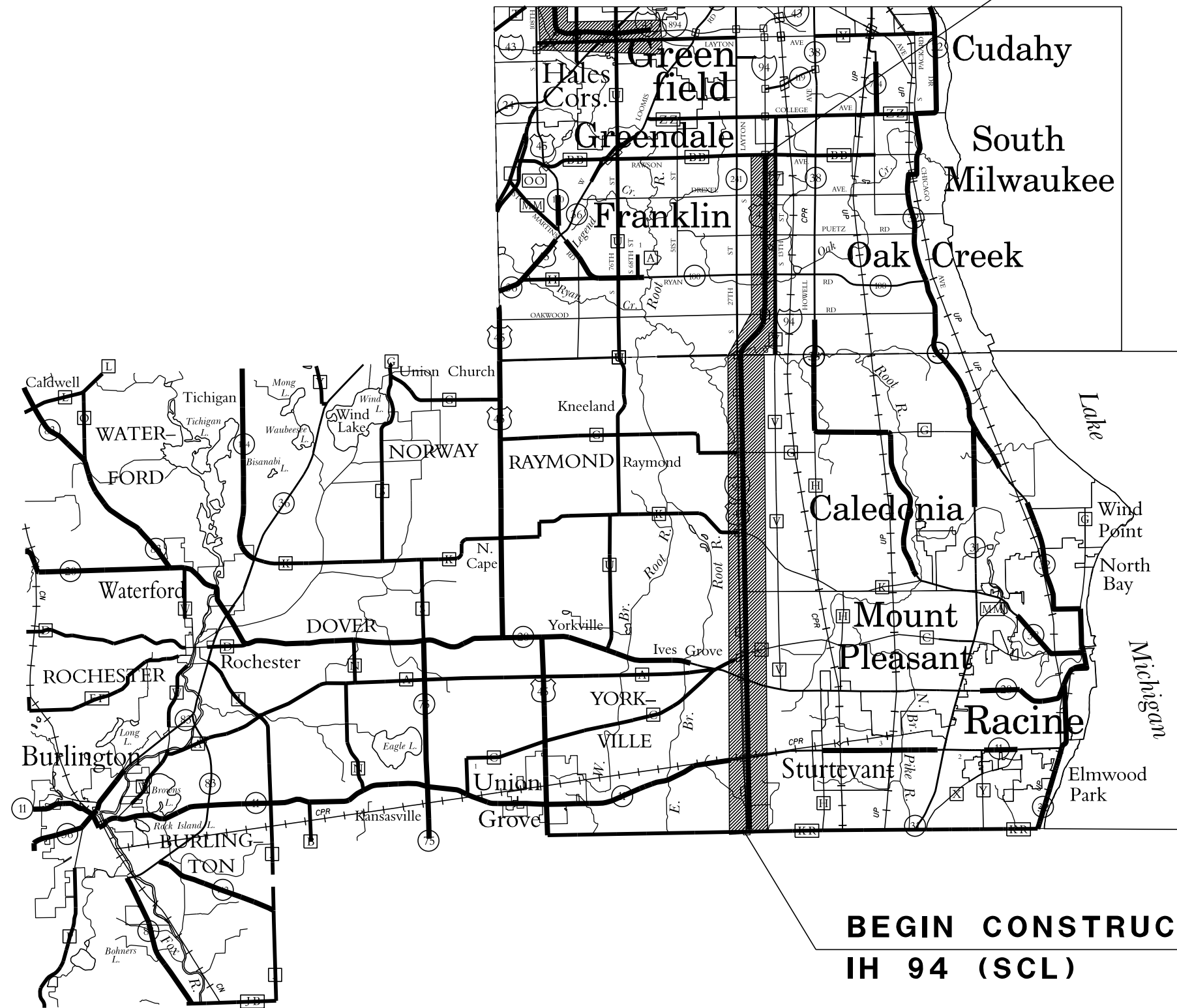
RACINE COUNTY
GAIL VUKODINOVICH
WISDOT SE REGION - WAUKESHA
141 NW BRASTOW STREET
WAUKESHA, WI 53188
PHONE (414) 750-0994



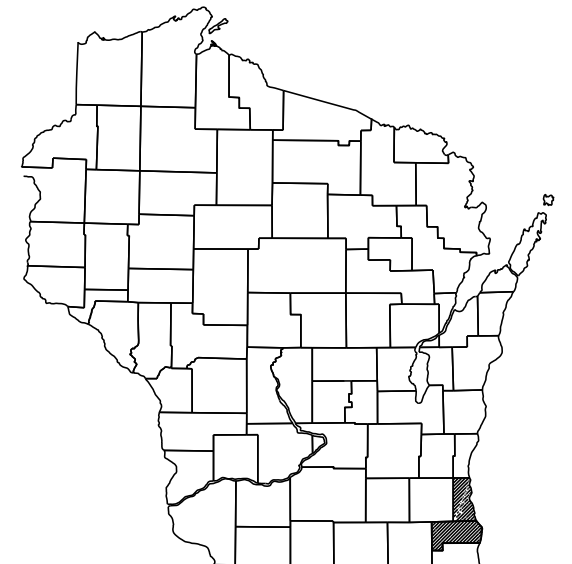
Call 811 3 Work Days Before You Dig
Or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

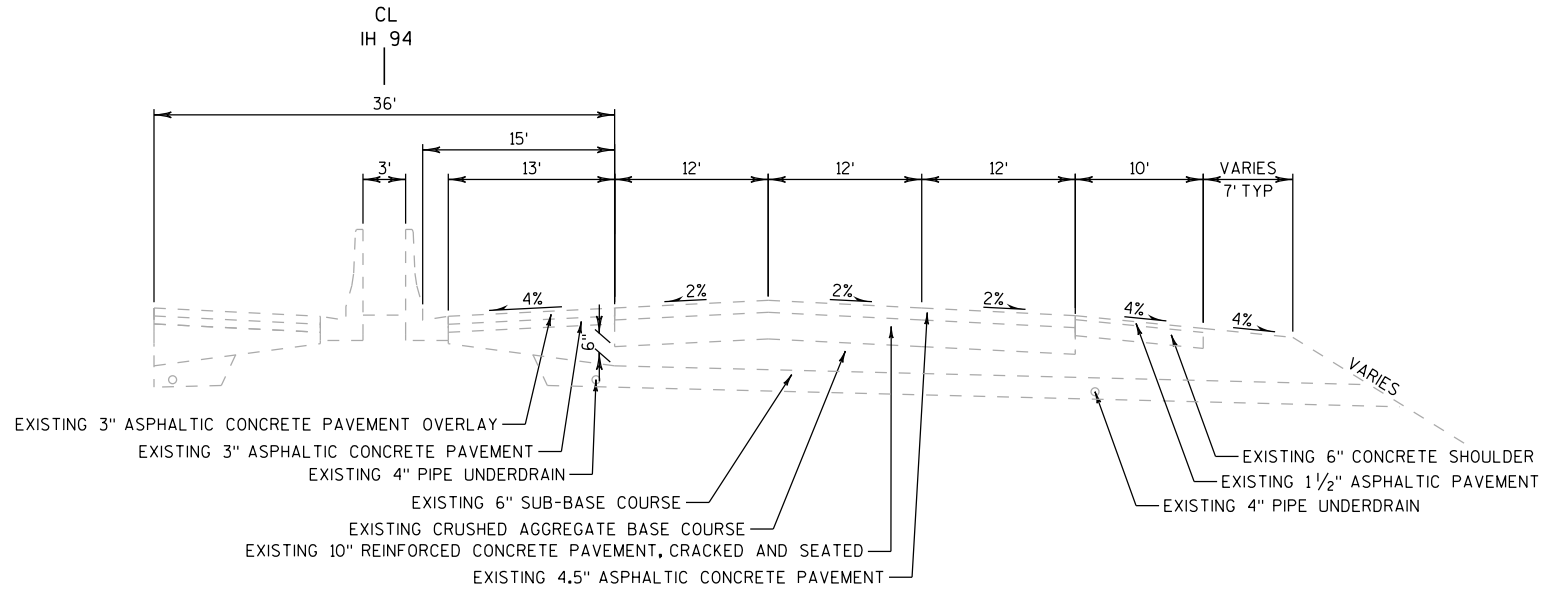
RACINE & MILWAUKEE COUNTY

END CONSTRUCTION
IH 94 (1000' NORTH OF
CTH BB RAWSON AVE)

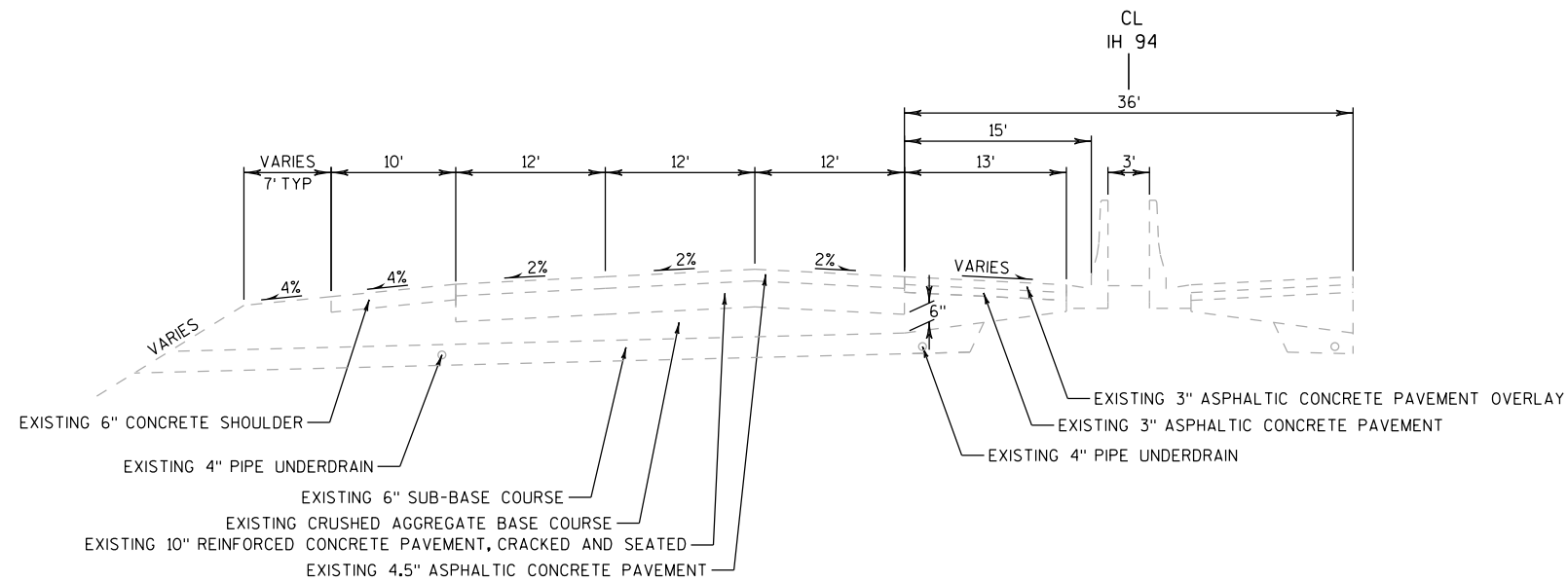


BEGIN CONSTRUCTION
IH 94 (SCL)



**TYPICAL EXISTING SECTION****NORTHBOUND IH 94**

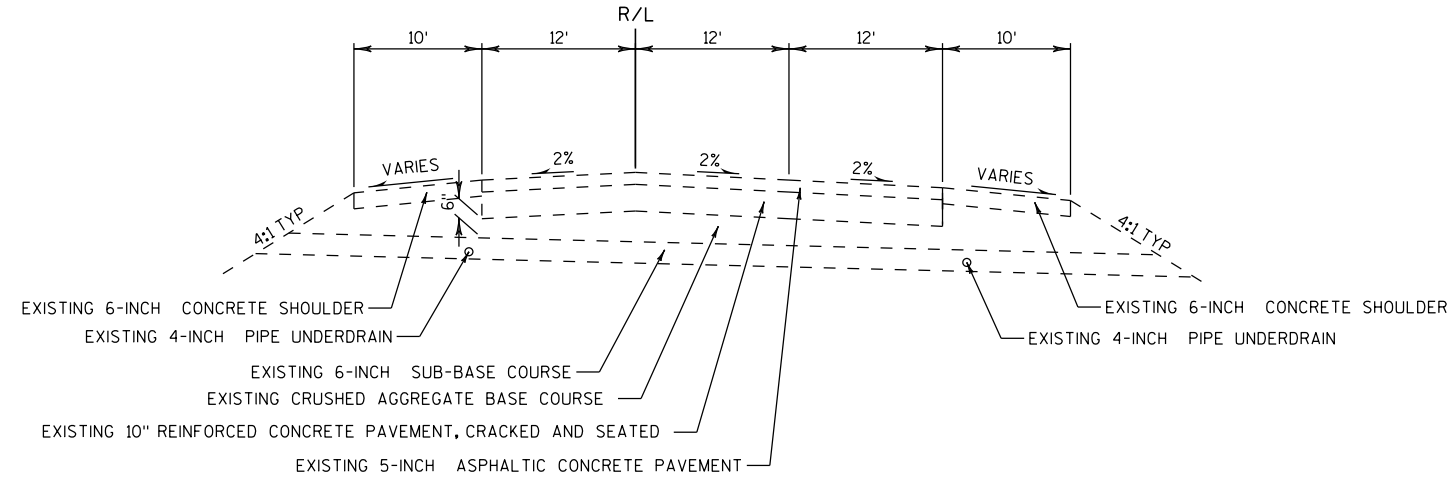
STA 1292+50 - STA 1295+00
STA 196+16 - STA 409+00

**TYPICAL EXISTING SECTION****SOUTHBOUND IH 94**

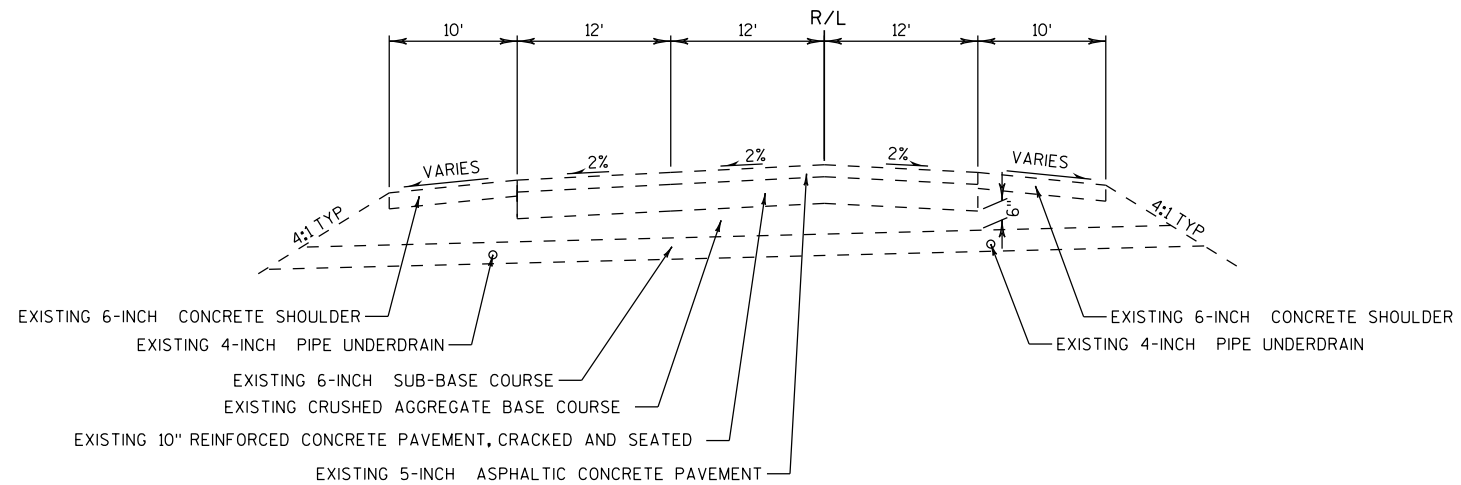
STA 1292+50 - STA 1295+00
STA 196+16 - STA 409+00

NOTES

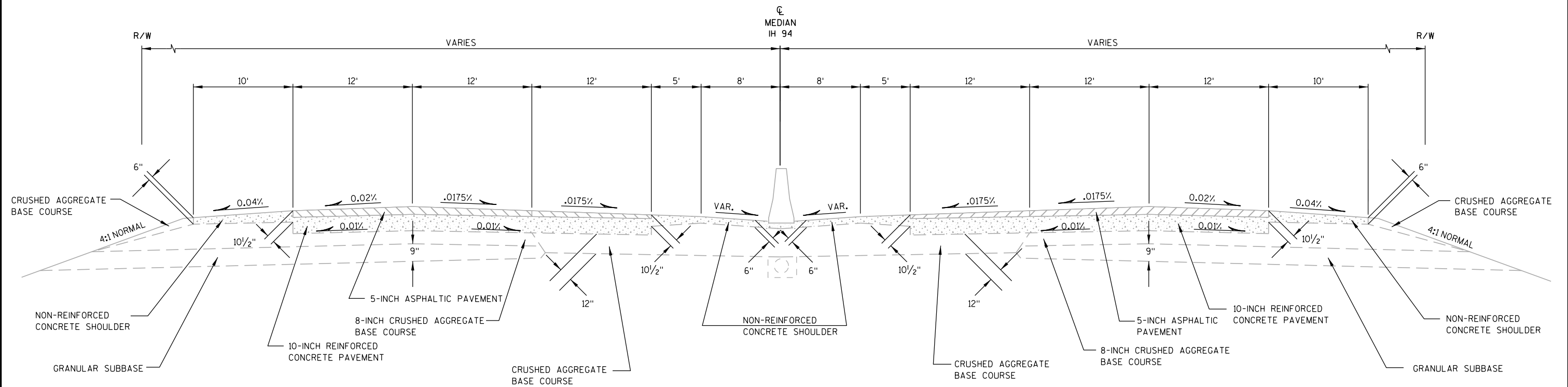
PGL = POINT REFERRED TO ON PROFILE AND
PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS-SECTION

**TYPICAL EXISTING SECTION****NORTHBOUND IH 94**

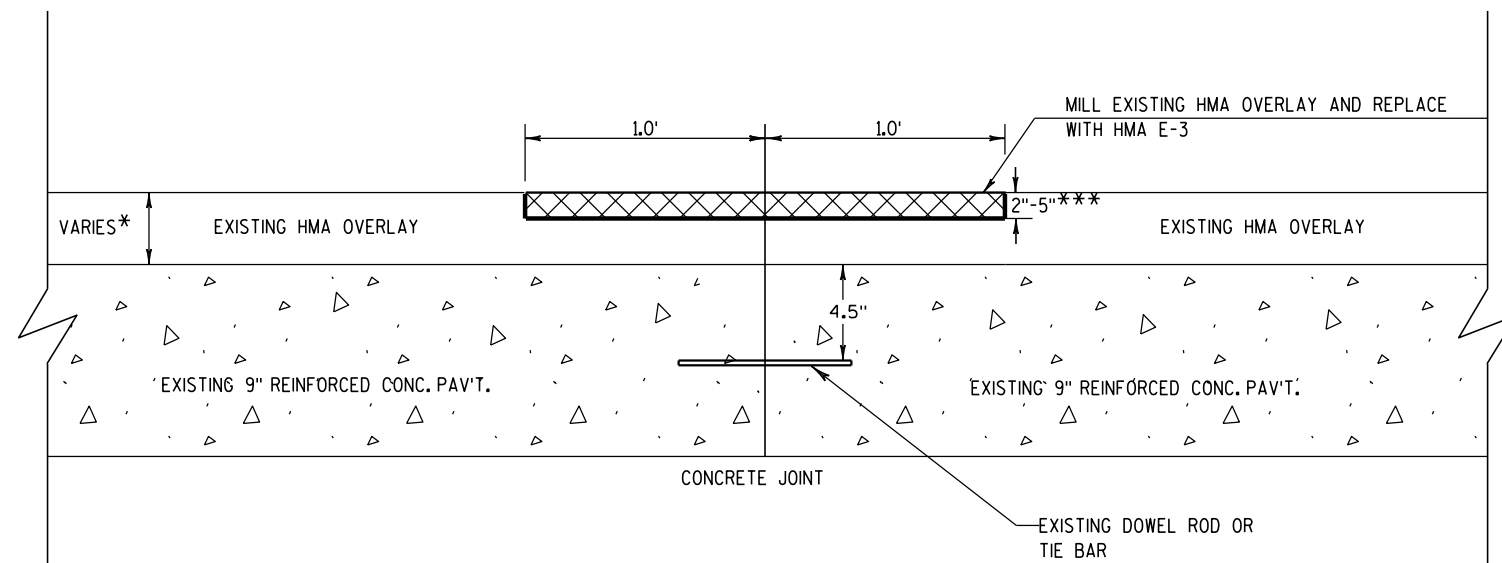
STA 132+00 - STA 196+16

**TYPICAL EXISTING SECTION****SOUTHBOUND IH 94**

STA 133+00 - STA 196+16

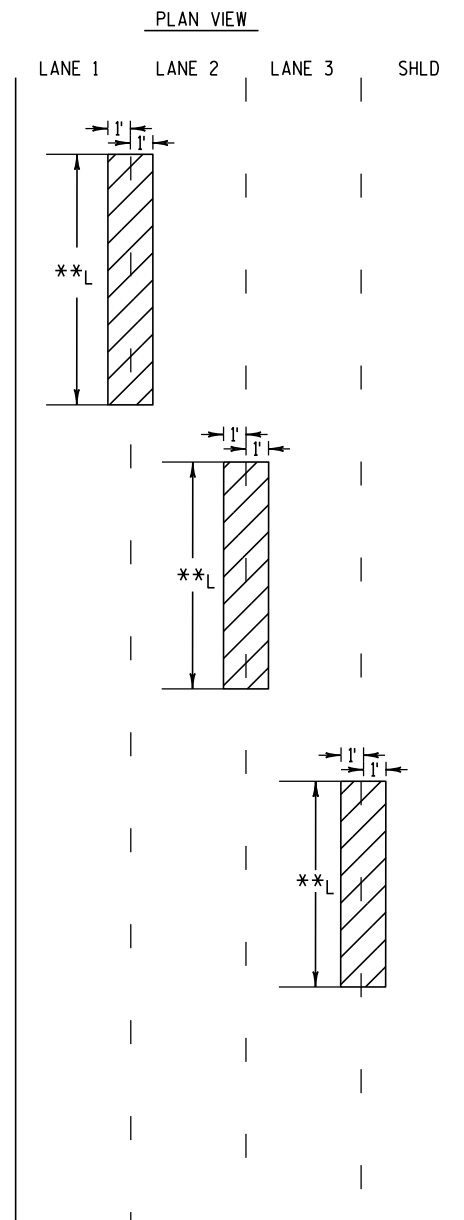
**TYPICAL EXISTING SECTION****IH 94**

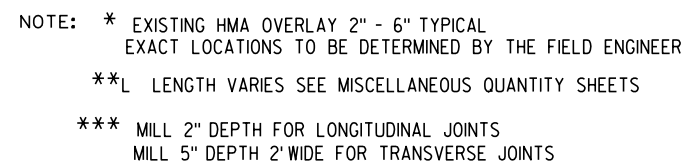
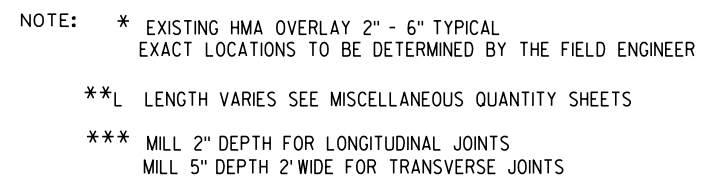
STA 657+80 - STA 1292+50

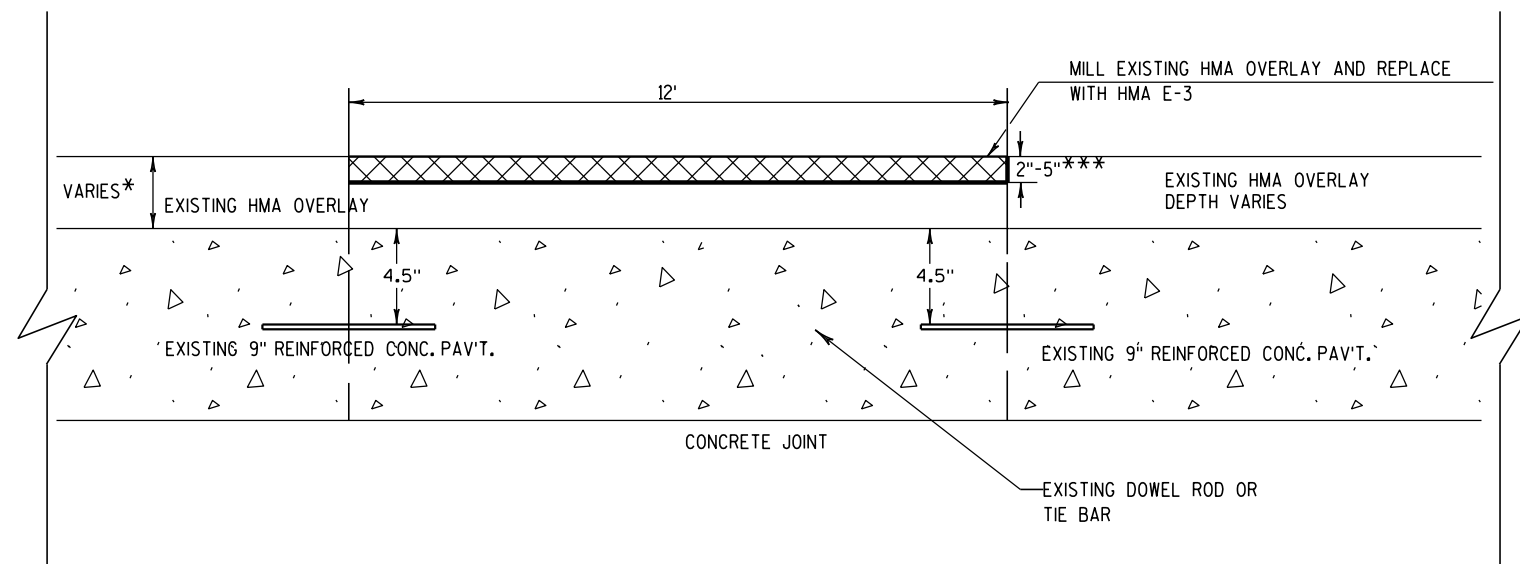


PAVEMENT REPAIR DETAIL

- NOTE: * EXISTING HMA OVERLAY 2" - 6" TYPICAL
EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER
- **L LENGTH VARIES SEE MISCELLANEOUS QUANTITY SHEETS
- *** MILL 2" DEPTH FOR LONGITUDINAL JOINTS
MILL 5" DEPTH 2' WIDE FOR TRANSVERSE JOINTS





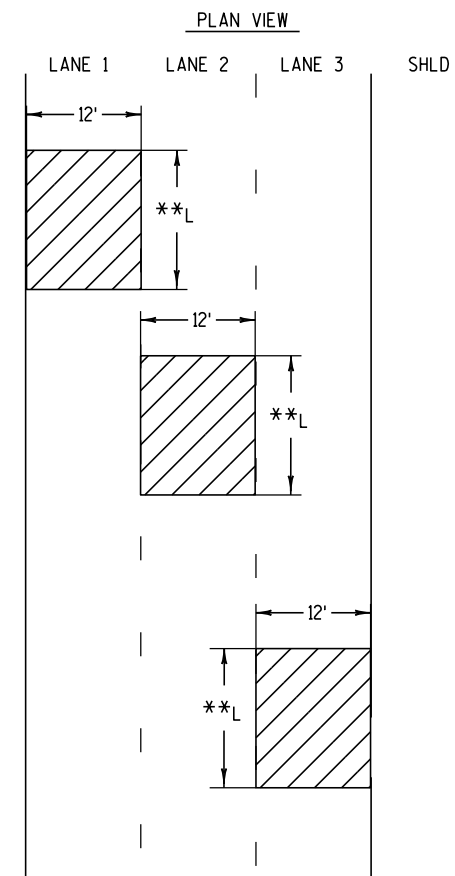


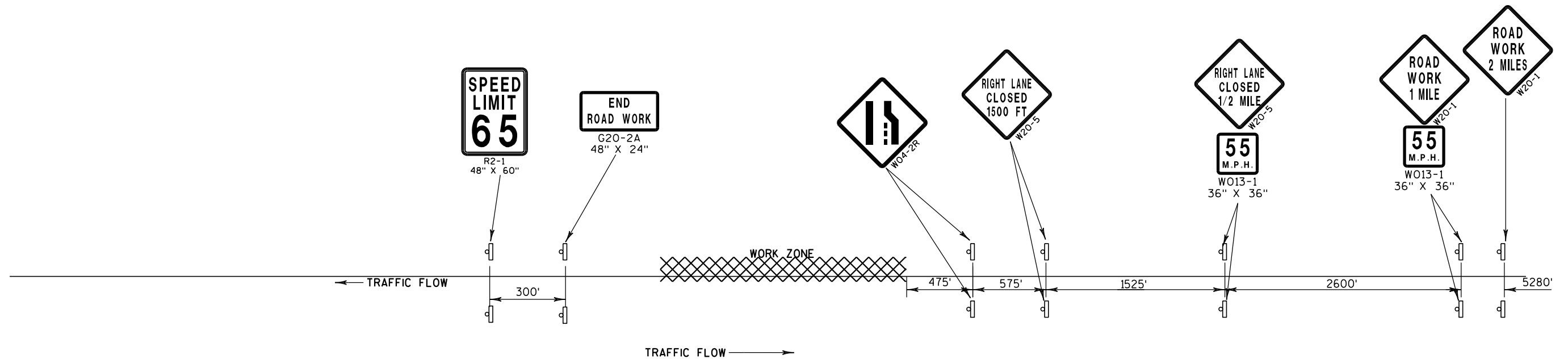
PAVMENT REPAIR DETAIL

NOTE: * EXISTING HMA OVERLAY 2" - 6" TYPICAL
EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER

**L LENGTH VARIES SEE MISCELLANEOUS QUANTITY SHEETS

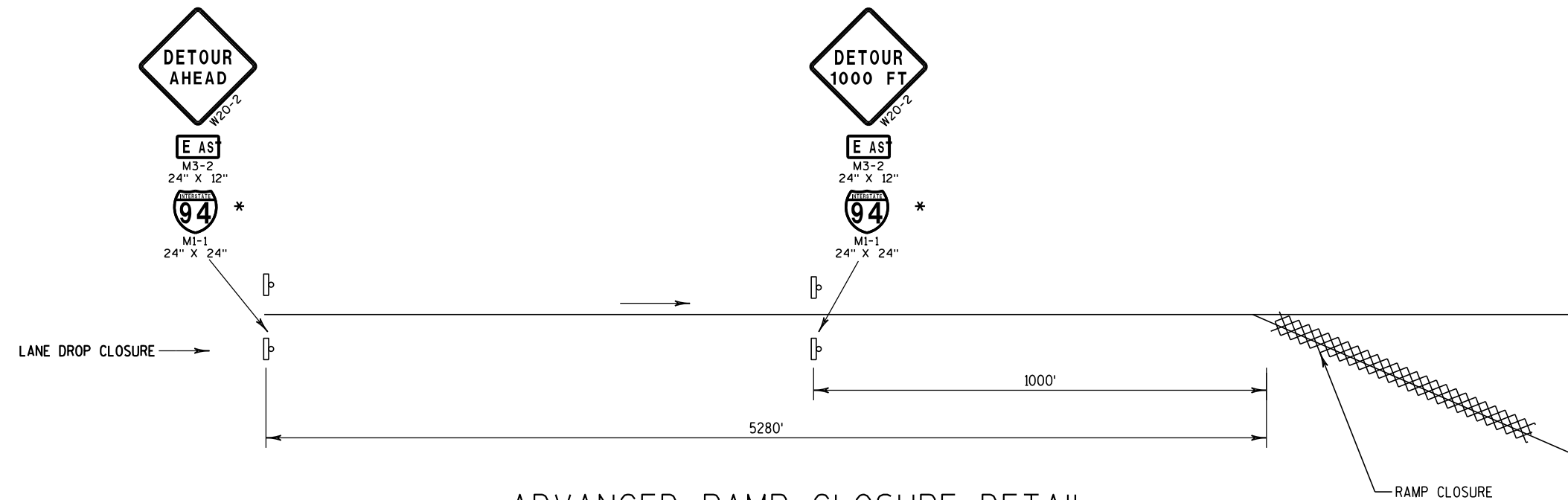
*** MILL 2" DEPTH FOR LONGITUDINAL JOINTS
MILL 5" DEPTH 2' WIDE FOR TRANSVERSE JOINTS





SPEED REDUCTION DETAIL WITH LANE CLOSURE

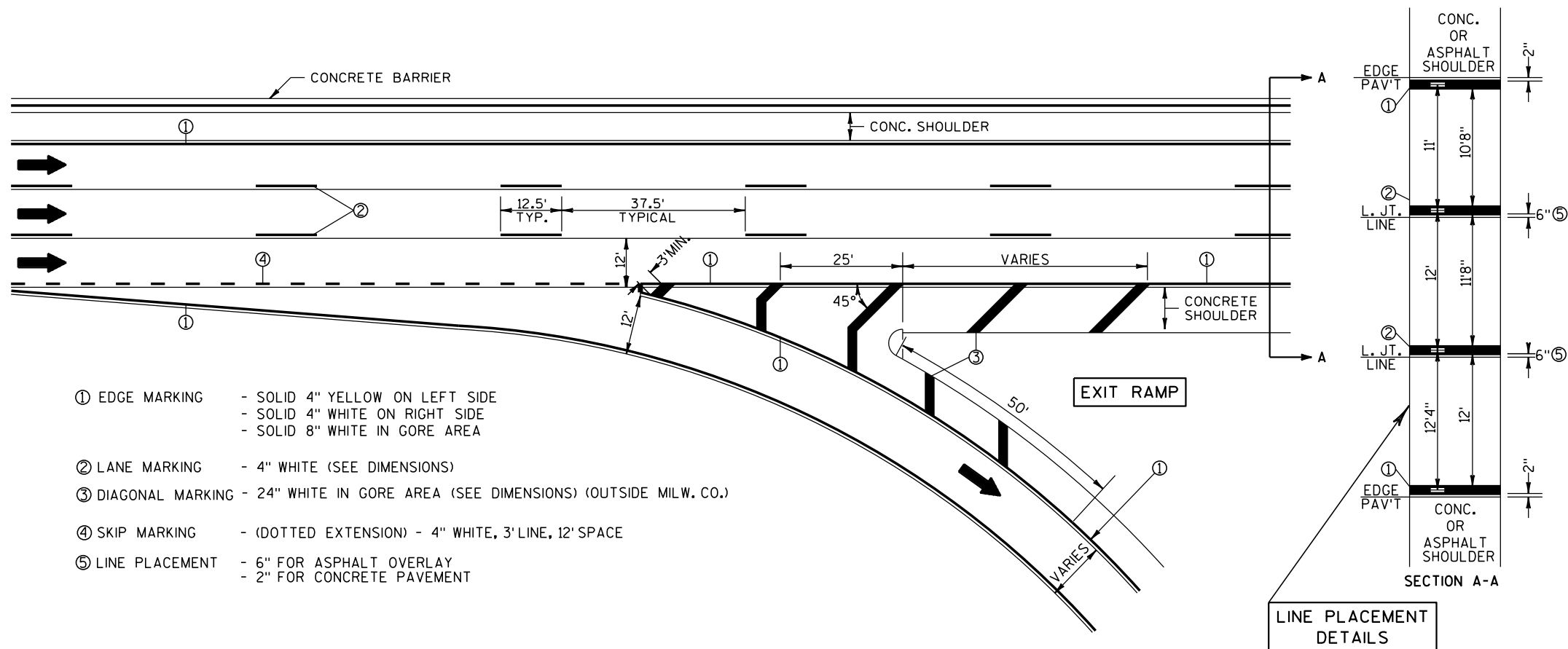
REQUIRED IN ALL WORK ZONES WITH SPEEDS OVER 55 MPH
SPEED LIMIT REDUCTION IS ONLY ALLOWED WITH LANE CLOSURE
MODIFY MESSAGE TO MATCH CURRENT TRAFFIC CONTROL CONDITIONS



ADVANCED RAMP CLOSURE DETAIL

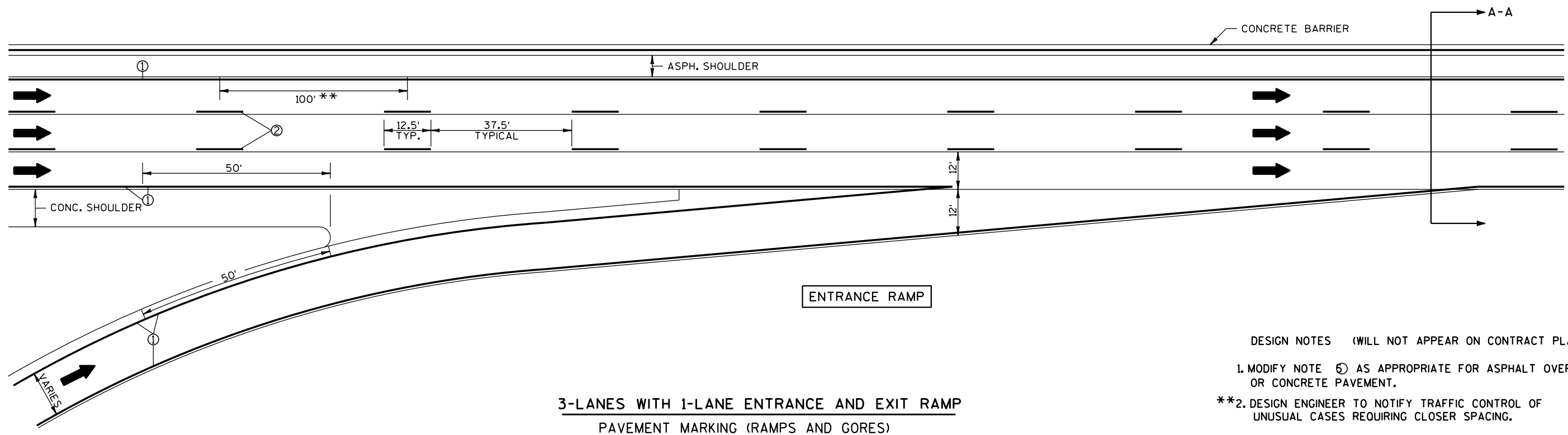
* ACTUAL CARDINAL DIRECTION AND ROUTE WILL BE DETERMINED IN THE FIELD BY THE ENGINEER

IH-894 EB - USH 45 SB
USH 45 SB - IH-94 EB
ALL SIGNS SHALL BE 48"X48" AND MOUNTED ON TEMPORARY POSTS DESIGNED TO BREAKAWAY 350 STANDARDS.



NOTES:

1. WHERE THE DOTTED EXTENSION OF THE RIGHT EDGE LINE IS SHOWN ON THE PLAN, IT SHALL BE 4" WIDE, WITH A LINE SKIP PATTERN CONSISTING OF A 3' LONG LINE AND A 12' SKIP.
2. PAVEMENT LANE MARKINGS SHALL BE LOCATED 6" OFF THE LONGITUDINAL JOINT OF THE UNDERLYING CONC. PAVEMENT.
3. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
4. SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4"x4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS, INCIDENTAL TO PAV'T MARKING.
5. SEE STANDARD DETAIL DRAWING FOR RAISED PAVEMENT MARKERS IN GORE AND LINE WIDTH TOLERANCES.



DESIGN NOTES (WILL NOT APPEAR ON CONTRACT PLANS)

1. MODIFY NOTE ⑤ AS APPROPRIATE FOR ASPHALT OVERLAY OR CONCRETE PAVEMENT.
- **2. DESIGN ENGINEER TO NOTIFY TRAFFIC CONTROL OF UNUSUAL CASES REQUIRING CLOSER SPACING.

DATE 02MAY13			E S T I M A T E O F Q U A N T I T I E S		
LINE			1030-33-61		
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0125	REMOVING ASPHALTIC SURFACE MILLING	TON	2,443.000	2,443.000
0020	213.0100	FINISHING ROADWAY (PROJECT) 0001.	EACH	1.000	1.000
1030-33-61					
0030	455.0115	ASPHALTIC MATERIAL PG64-22	TON	135.000	135.000
0040	455.0605	TACK COAT	GAL	713.000	713.000
0050	460.1103	HMA PAVEMENT TYPE E-3	TON	2,443.000	2,443.000
0060	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,564.000	1,564.000
0070	619.1000	MOBILIZATION	EACH	1.000	1.000
0080	643.0100	TRAFFIC CONTROL (PROJECT) 0001.	EACH	1.000	1.000
1030-33-61					
0090	643.0300	TRAFFIC CONTROL DRUMS	DAY	30,024.000	30,024.000
0100	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	270.000	270.000
0110	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	540.000	540.000
0120	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	576.000	576.000
0130	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	54.000	54.000
0140	643.0900	TRAFFIC CONTROL SIGNS	DAY	396.000	396.000
0150	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	8.000	8.000
0160	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	470,171.000	470,171.000
0170	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE	LF	7,005.000	7,005.000
TAPE 4-INCH					
0180	SPV.0045	SPECIAL 0001. TRUCK MOUNTED ATTENUATOR	DAY	8.000	8.000

PAVEMENT ITEMS										
CATEGORY	LOCATION	SEGMENT	MILL AND OVERLAY			204.0125	455.0115	455.0605	460.1103	460.2000
			LF X 2' WIDE			REMOVING	ASPHALTIC	ASPHALTIC	HMA	INCENTIVE
			FOR INFORMATION ONLY			SURFACE	MATERIAL	TACK	PAVEMENT	DENSITY
			LN1-LN2	LN2-LN3	LN3-RT SHLD	MILLING	PG64-22	COAT	TYPE E-3	HMA
						TON	TON	GAL	TON	PAVEMENT
										DOL
	RACINE COUNTY									
1000	I-94 SB	NCL - 7 Mile Rd	50	--	--	3	0.1	1	3	2
		7 Mile - CTH G	80	--	--	4	0.2	1	4	3
		CTH G - CTH K	230	--	--	12	0.7	4	12	8
		CTH K - Golf Rd	350	--	--	19	1.0	5	19	12
		Golf Rd - STH 20	--	100	--	5	0.3	2	5	3
		STH 20 - STH 11	--	200	--	11	0.6	3	11	7
		STH 11 - CTH KR	--	600	--	32	1.8	9	32	20
	RACINE COUNTY									
1000	I-94 NB	CTH KR - STH 11	--	--	50	3	0.1	1	3	2
		STH 11 - STH 20	100	--	--	5	0.3	2	5	3
		STH 20 - Golf Rd	--	--	--	--	--	--	--	--
		Golf Rd - CTH K	--	--	--	--	--	--	--	--
		CTH K - CTH G	--	--	--	--	--	--	--	--
		CTH G - 7 Mile Rd	--	--	--	--	--	--	--	--
		7 Mile Rd - NCL	--	200	--	11	0.6	3	11	7
		UNDISTRIBUTED				31	1.7	9	31	20
1000	MILWAUKEE COUNTY									
	I-94 SB	Rawson - Drexel	--	--	120	6	0.4	2	6	4
		Drexel - Ryan	--	--	--	--	--	--	--	--
		Ryan - Oakwood	--	--	--	--	--	--	--	--
		Oakwood - SCL	--	--	--	--	--	--	--	--
1000	MILWAUKEE COUNTY									
	I-94 SB	SCL - Oakwood	--	150	--	8	0.4	2	8	5
		Oakwood - Ryan	--	300	--	16	0.9	5	16	10
		Ryan - Drexel	--	--	--	--	--	--	--	--
		Drexel - Rawson	--	--	--	--	--	--	--	--
		UNDISTRIBUTED				9	0.5	3	9	6
SUBTOTAL						175	10	51	175	112

CONTINUED ON NEXT PAGE

PAVEMENT ITEMS (CONT.)

CATEGORY	LOCATION	SEGMENT	MILL AND OVERLAY LF X 6' WIDE FOR INFORMATION ONLY			204.0125	455.0115	455.0605	460.1103	460.2000
			LN 1	LN 2	LN 3	REMOVING	ASPHALTIC		HMA	INCENTIVE
						ASPHALTIC	ASPHALTIC			
						SURFACE	MATERIAL	TACK	PAVEMENT	DENSITY
					MILLING	PG64-22	COAT	TYPE E-3	HMA	PAVEMENT
					TON	TON	GAL	TON		DOL
RACINE COUNTY										
1000	I-94 SB	NCL - 7 Mile Rd	--	750	--	60	3.3	18	60	38
		7 Mile - CTH G	--	370	--	30	1.6	9	30	19
		CTH G - CTH K	--	1,410	20	114	6.3	33	114	73
		CTH K - Golf Rd	--	1550	50	128	7.0	37	128	82
		Golf Rd - STH 20	--	700	--	56	3.1	16	56	36
		STH 20 - STH 11	--	120	90	17	0.9	5	17	11
		STH 11 - CTH KR	20	650	120	63	3.5	18	63	40
RACINE COUNTY										
1000	I-94 NB	CTH KR - STH 11	--	730	40	62	3.4	18	62	39
		STH 11 - STH 20	110	1040	20	94	5.1	27	94	60
		STH 20 - Golf Rd	170	930	90	95	5.2	28	95	61
		Golf Rd - CTH K	--	100	--	8	0.4	2	8	5
		CTH K - CTH G	--	--	--	--	--	--	--	--
		CTH G - 7 Mile Rd	20	340	20	30	1.7	9	30	19
		7 Mile Rd - NCL	--	410	--	33	1.8	10	33	21
		UNDISTRIBUTED				237	13.0	69	237	152
MILWAUKEE COUNTY										
1000	I-94 SB	Rawson - Drexel	--	50	--	4	0.2	1	4	3
		Drexel - Ryan	180	250	360	63	3.5	18	63	40
		Ryan - Oakwood	520	200	660	110	6.1	32	110	71
		Oakwood - SCL	760	320	480	125	6.9	36	125	80
MILWAUKEE COUNTY										
1000	I-94 NB	SCL - Oakwood	--	90	180	22	1.2	6	22	14
		Oakwood - Ryan	1000	450	760	177	9.7	52	177	113
		Ryan - Drexel	150	70	190	33	1.8	10	33	21
		Drexel - Rawson	130	100	170	32	1.8	9	32	20
		UNDISTRIBUTED				170	9.3	49	170	109
SUBTOTAL						1,762	97	514	1,762	1,128

CONTINUED ON NEXT PAGE

PAVEMENT ITEMS (CONT.)										
CATEGORY	LOCATION	SEGMENT	MILL AND OVERLAY LF X 12' WIDE FOR INFORMATION ONLY			204.0125 REMOVING ASPHALTIC SURFACE MILLING TON	455.0115 ASPHALTIC MATERIAL PG64-22 TON	455.0605 TACK COAT GAL	460.1103 HMA PAVEMENT TYPE E-3 TON	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL
			LN 1	LN 2	LN 3					
1000	RACINE COUNTY									
	I-94 SB	NCL - 7 Mile Rd	10	70	20	16	0.9	5	16	10
		7 Mile - CTH G	20	20	20	10	0.6	3	10	6
		CTH G - CTH K	10	10	10	5	0.3	1	5	3
		CTH K - Golf Rd	0	110	0	18	1.0	5	18	12
		Golf Rd - STH 20	10	110	0	19	1.0	6	19	12
		STH 20 - STH 11	50	10	10	11	0.6	3	11	7
		STH 11 - CTH KR	100	310	10	67	3.7	20	67	43
1000	RACINE COUNTY									
	I-94 NB	CTH KR - STH 11	10	60	50	19	1.0	6	19	12
		STH 11 - STH 20	0	170	40	34	1.9	10	34	22
		STH 20 - Golf Rd	80	40	20	22	1.2	6	22	14
		Golf Rd - CTH K	--	--	--	--	--	--	--	--
		CTH K - CTH G	--	--	--	--	--	--	--	--
		CTH G - 7 Mile Rd	--	50	--	8	0.4	2	8	5
		7 Mile Rd - NCL	--	30	--	5	0.3	1	5	3
UNDISTRIBUTED					70	3.9	20	70	45	
1000	MILWAUKEE COUNTY									
	I-94 SB	Rawson - Drexel	--	--	--	--	--	--	--	--
		Drexel - Ryan	--	--	30	5	0.3	1	5	3
		Ryan - Oakwood	50	50	100	32	1.8	9	32	20
Oakwood - SCL		50	--	70	19	1.1	6	19	12	
1000	MILWAUKEE COUNTY									
	I-94 NB	SCL - Oakwood	50	120	50	35	1.9	10	35	23
		Oakwood - Ryan	--	--	400	64	3.5	19	64	41
		Ryan - Drexel	--	--	--	--	--	--	--	--
		Drexel - Rawson	--	--	--	--	--	--	--	--
UNDISTRIBUTED					47	2.6	14	47	30	
SUBTOTAL					506	28	148	506	324	
TOTAL					2443	135	713	2443	1564	

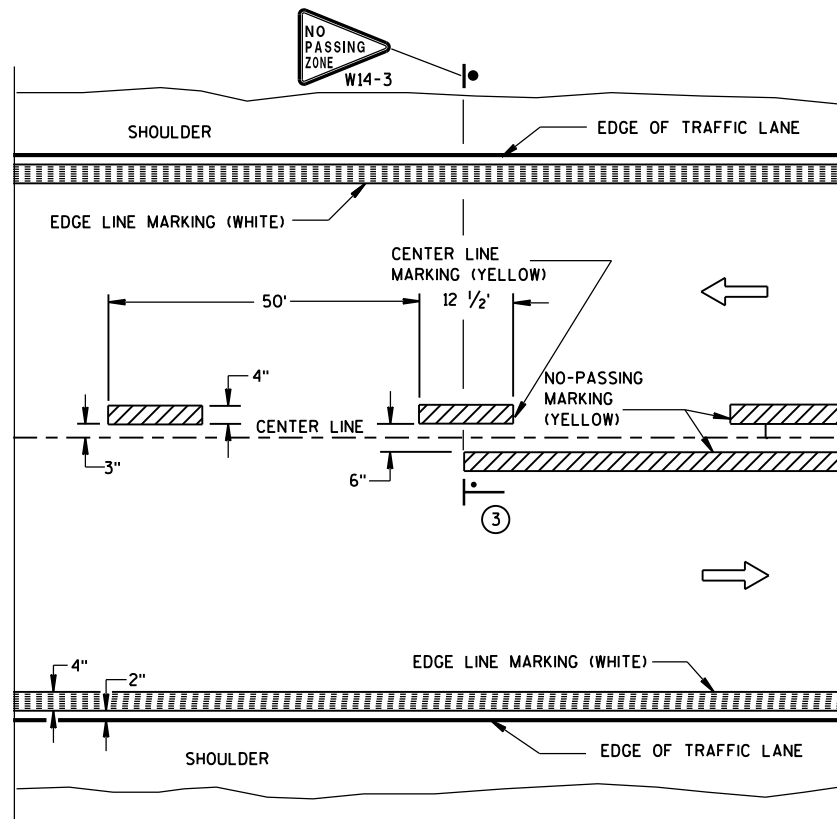
PAVEMENT MARKING												
			646.0106 PAVEMENT MARKING EPOXY 4-INCH					649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH				
			YELLOW	DASHED WHITE		WHITE						
			12.5 LINE		37.5 SKIP							
CATEGORY	LOCATION	SEGMENT	LT SHLDR	LN 1 - LN 2	LN 2 - LN 3	LN 3 - LN 4	RT SHLDR	YELLOW	WHITE	12.5 LINE 37.5 SKIP		
			LF	LF	LF	LF	LF	LF	LF	LF		
RACINE COUNTY												
1000	I-94 SB	NCL - 7 Mile Rd	4,805	1,201	1,201	--	4,805	--	--	--		
		7 Mile - CTH G	5,333	1,333	1,333	--	5,333	--	--	--		
		CTH G INT	5,500	1,375	1,375	1,375	4,522	--	--	--		
		CTH G - CTH K	8,131	2,033	2,033	--	8,131	--	--	--		
		CTH K - Golf Rd	5,280	1,320	1,320	--	5,280	--	--	--		
		Golf Rd - STH 20	14,045	3,511	3,511	--	14,045	--	--	--		
		STH 20 - STH 11	10,666	2,666	2,666	--	10,666	--	--	--		
		STH 11 - CTH KR	9,768	2,442	2,442	--	9,768	--	--	--		
		CTH KR - STH 11	9,768	2,442	2,442	--	9,768	--	--	--		
		STH 11 - STH 20	10,666	2,666	2,666	--	10,666	--	--	--		
1000	I-94 NB	STH 20 - Golf Rd	14,045	3,511	3,511	--	14,045	--	--	--		
		Golf Rd - CTH K	5,280	1,320	1,320	--	5,280	--	--	--		
		CTH K - CTH G	8,131	2,033	2,033	--	8,131	--	--	--		
		CTH G INT	5,500	1,375	1,375	1,375	4,463	--	--	--		
		CTH G - 7 Mile Rd	5,333	1,333	1,333	--	5,333	--	--	--		
		7 Mile Rd - NCL	4,805	1,201	1,201	--	4,805	--	--	--		
		Rawson - Drexel	7,498	1,874	1,874	--	7,498	--	--	--		
		Drexel - Ryan	10,718	2,680	2,680	--	10,718	--	--	--		
		Ryan - Oakwood	5,333	1,333	1,333	--	5,333	--	--	--		
		Oakwood - SCL	6,811	1,703	1,703	--	6,811	--	--	--		
MILWAUKEE COUNTY												
1000	I-94 SB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--		
		Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--		
		Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--		
		Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--		
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
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		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
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		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
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UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
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				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
UNDISTRIBUTED	--			--	--	--	--	1,520	2,170	3,315		
MILWAUKEE COUNTY												
1000	I-94 NB			SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--	5,333	--	--	--
				Ryan - Drexel	10,718	2,680	2,680	--	10,718	--	--	--
				Drexel - Rawson	7,498	1,874	1,874	--	7,498	--	--	--
		UNDISTRIBUTED	--	--	--	--	--	1,520	2,170	3,315		
		MILWAUKEE COUNTY										
		1000	I-94 NB	SCL - Oakwood	6,811	1,703	1,703	--	6,811	--	--	--
				Oakwood - Ryan	5,333	1,333	1,333	--				

NOTE: LANELINES NEAR CTH G ARE CONTRAST EPOXY ONLY MARK THE 4-INCH WHITE PORTION.

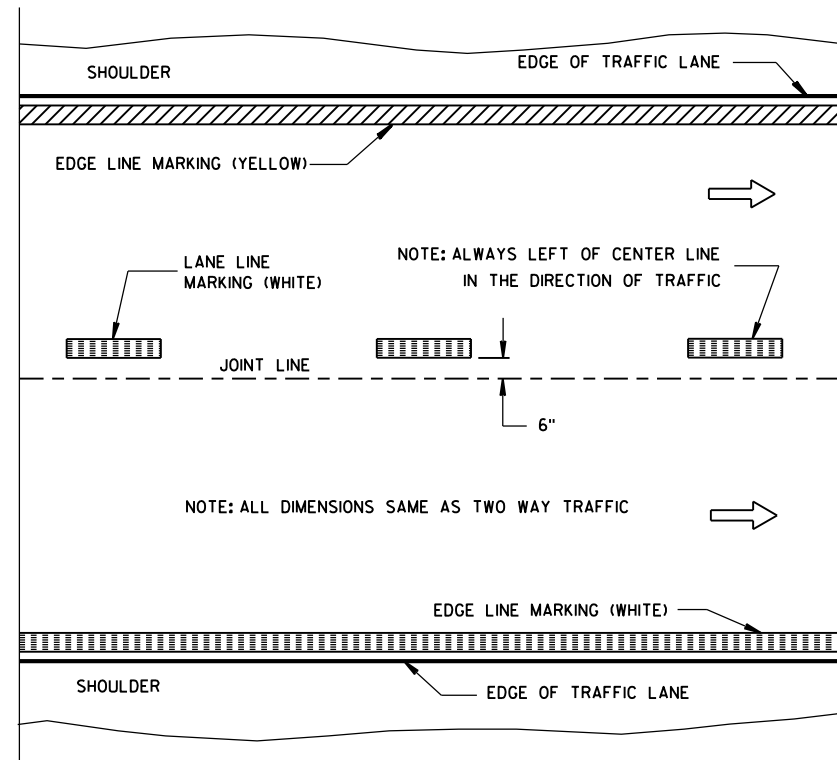
TRAFFIC CONTROL									
643.0300 643.0420 643.0705 643.0715 643.0800 643.0900 643.1050 SPV.0045.0001									
TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL TRUCK MOUNTED									
DRUMS BARRICADES WARNING LIGHTS WARNING LIGHTS ARROW CONTROL CONTROL ATTENUATOR									
CATEGORY LOCATION SEGMENT DAYS TYPE III TYPE A TYPE C DAYS DAYS DAYS									
1000	RACINE COUNTY								
	NB IH 94	SOUTH C L TO NORTH C L	11,676	105	210	224	21	154	2
	SB IH 94	NORTH C L TO SOUTH C L	11,676	105	210	224	21	154	2
1000	MILWAUKEE COUNTY								
	NB IH 94	SOUTH C L Rawson Ave	3,336	30	60	64	6	44	2
	SB IH 94	Rawson Ave TO SOUTH C L	3,336	30	60	64	6	44	2
TOTALS			30,024	270	540	576	54	396	8

Standard Detail Drawing List

15C08-15A	PAVEMENT MARKING (MAINLINE)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-01C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D09-02	TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D14-01	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-01	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-01	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

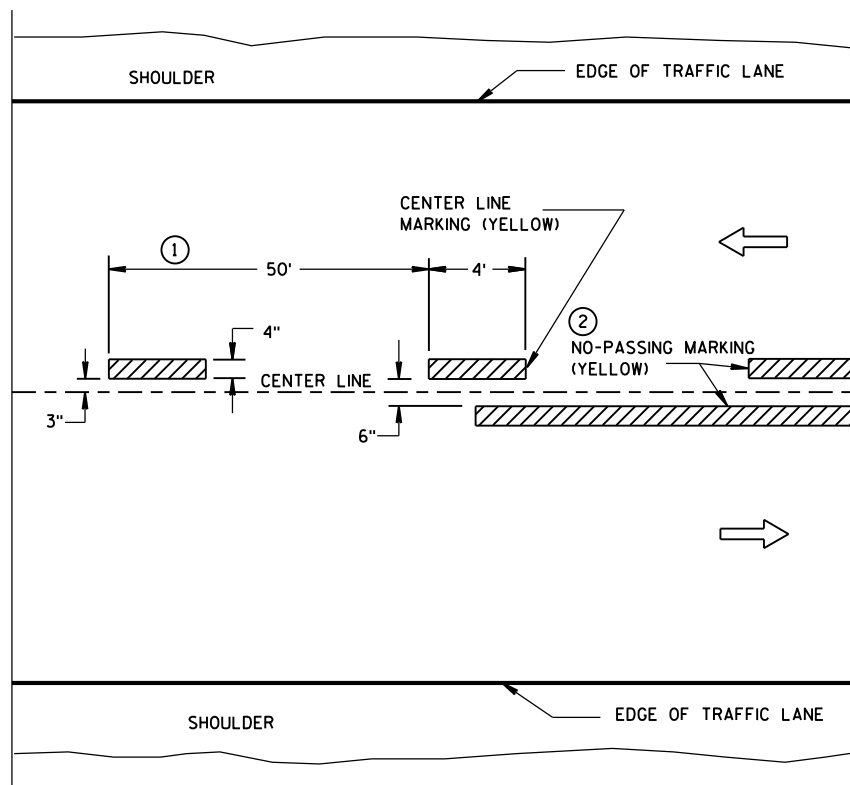


TWO WAY TRAFFIC

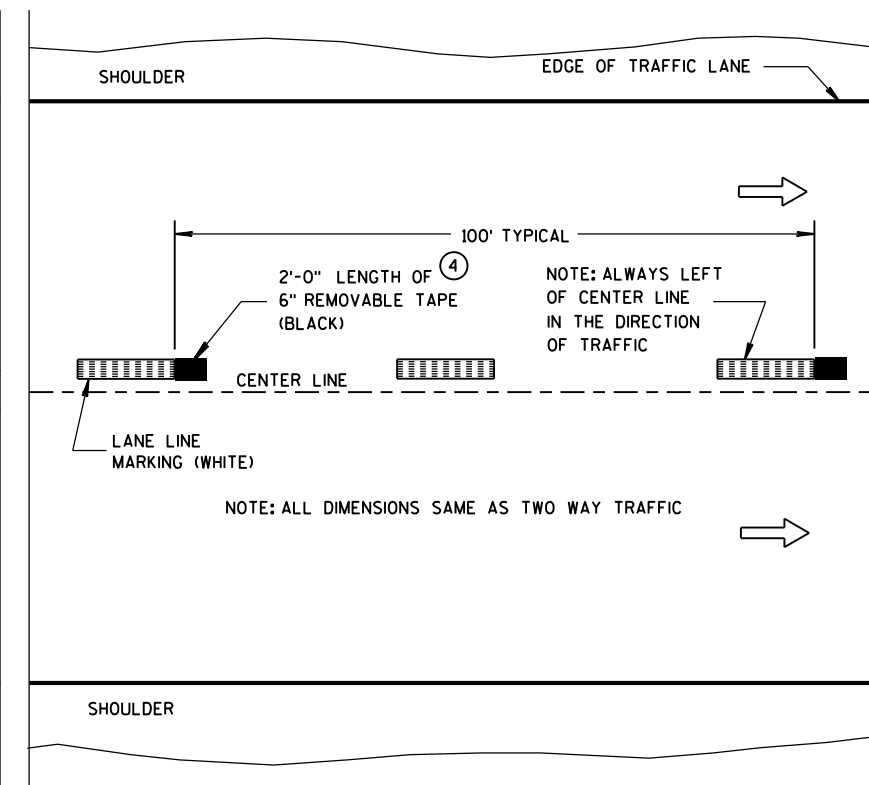


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

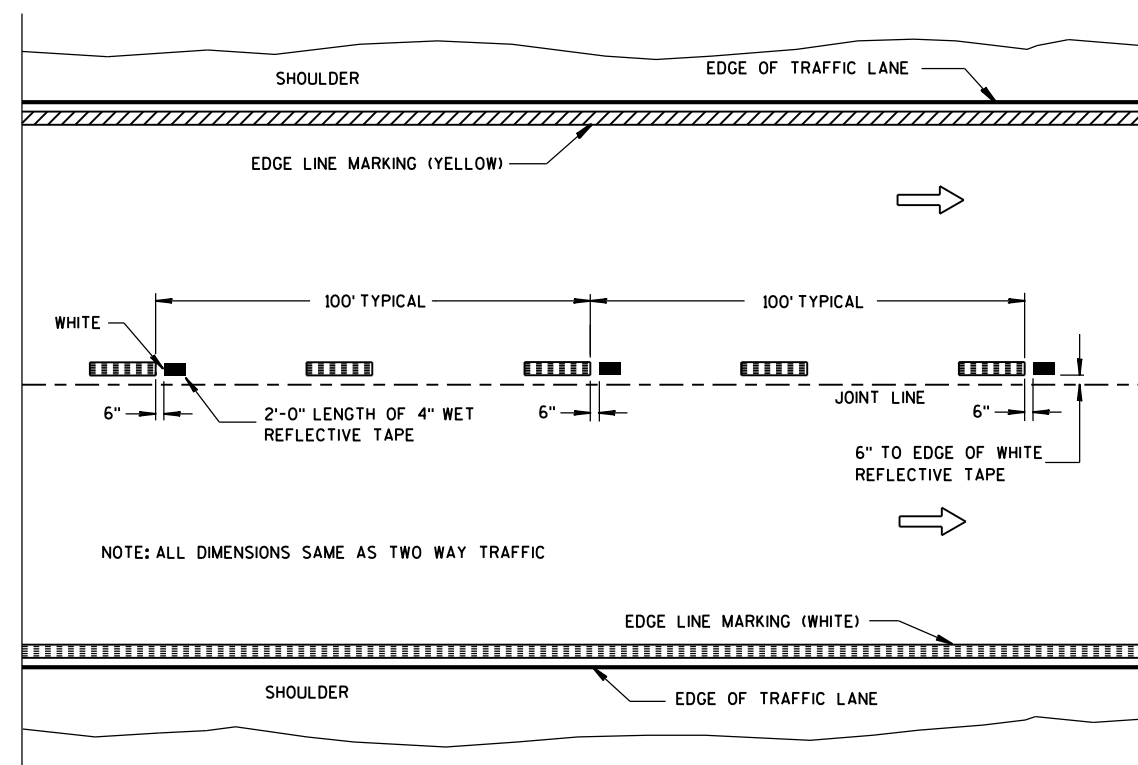
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



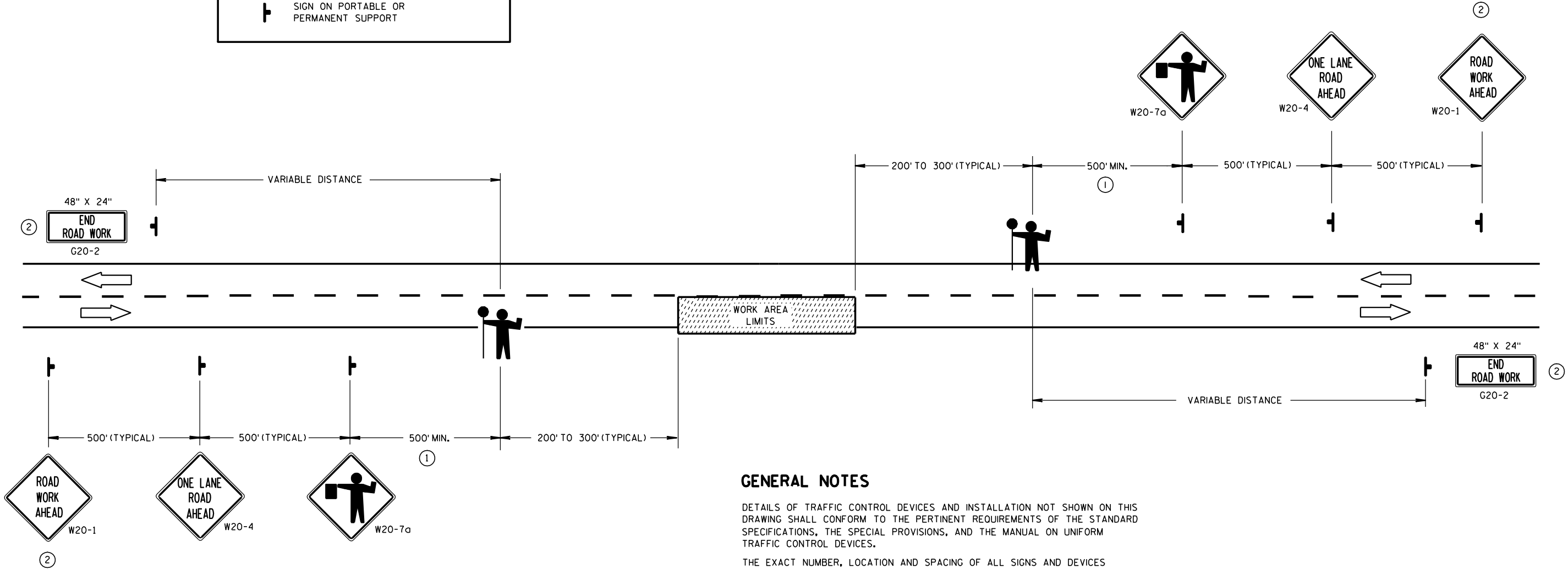
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



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



GENERAL NOTES

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

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

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

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

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

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

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

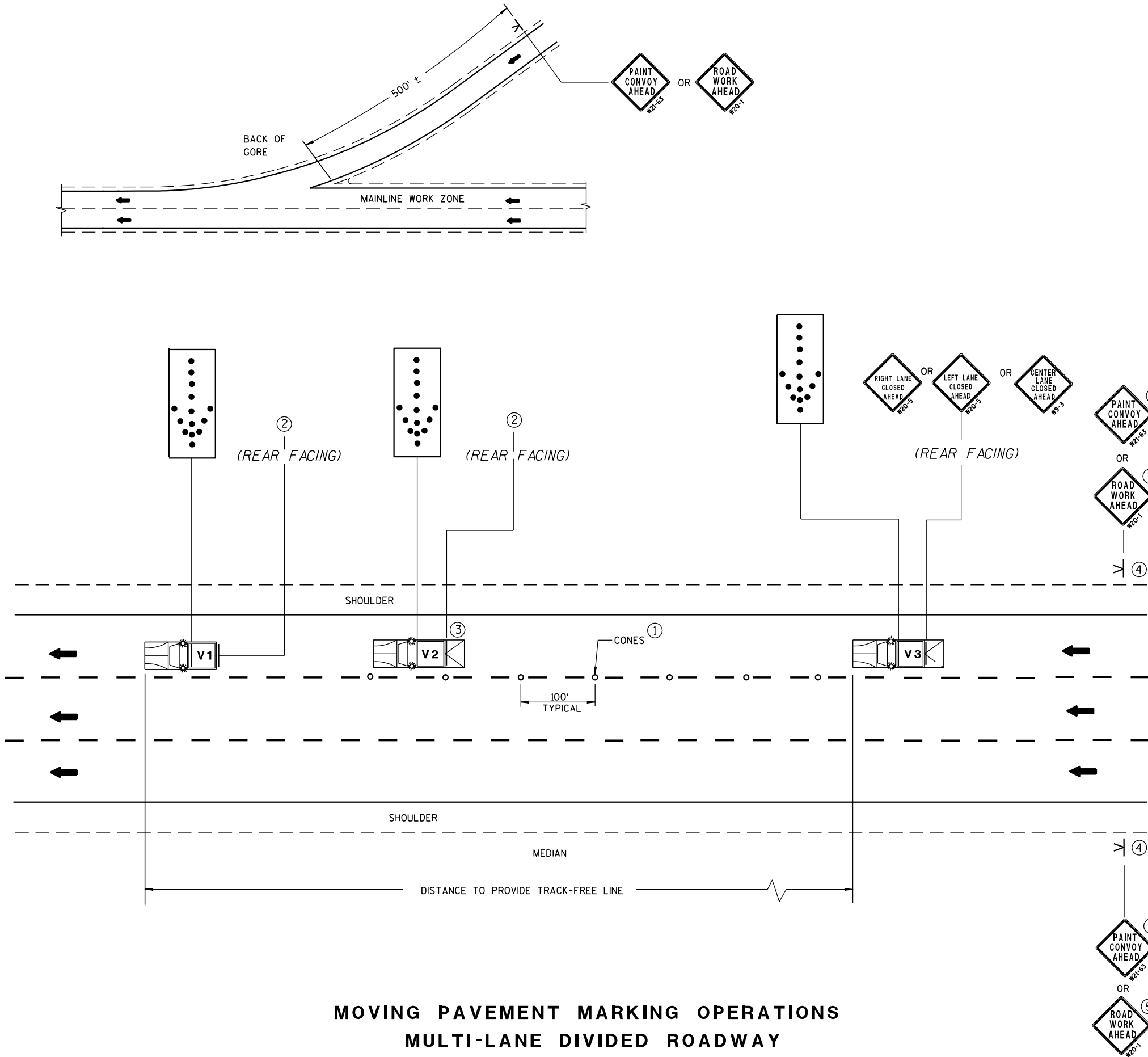
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06
DATE

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

FHWA



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED 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.

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.

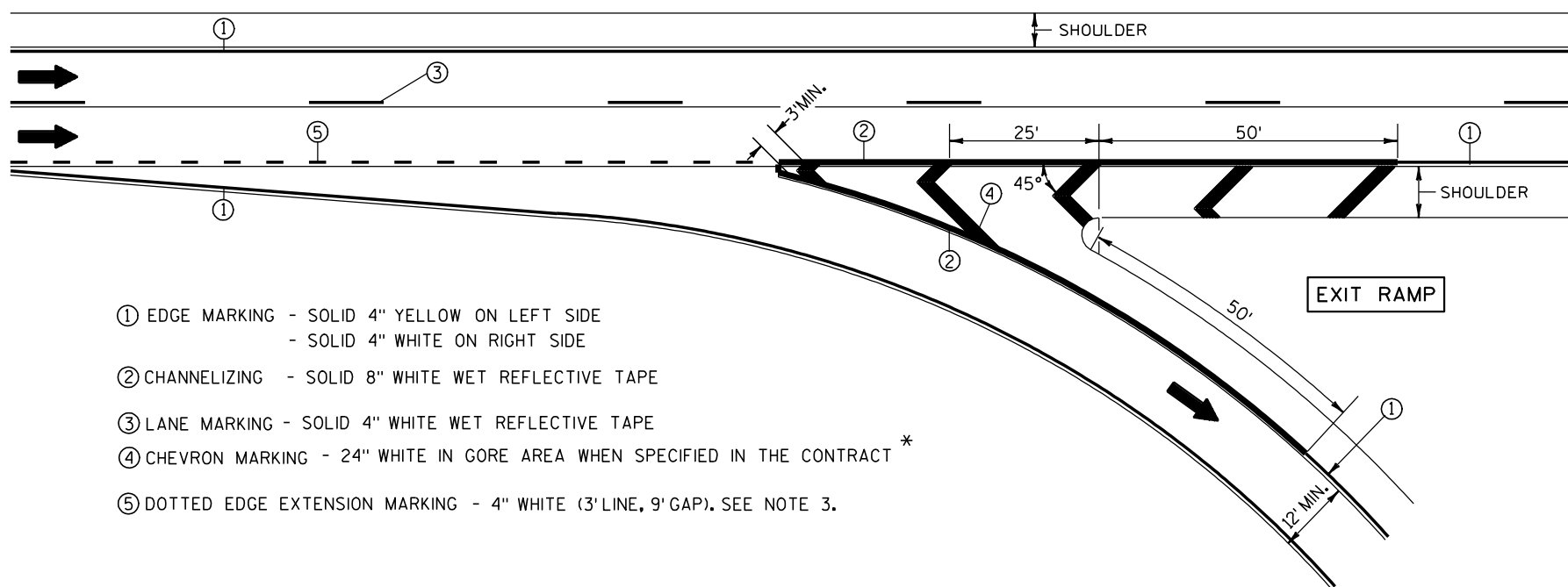
LEGEND

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

MOVING PAVEMENT MARKING
OPERATION
MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/6/2011 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

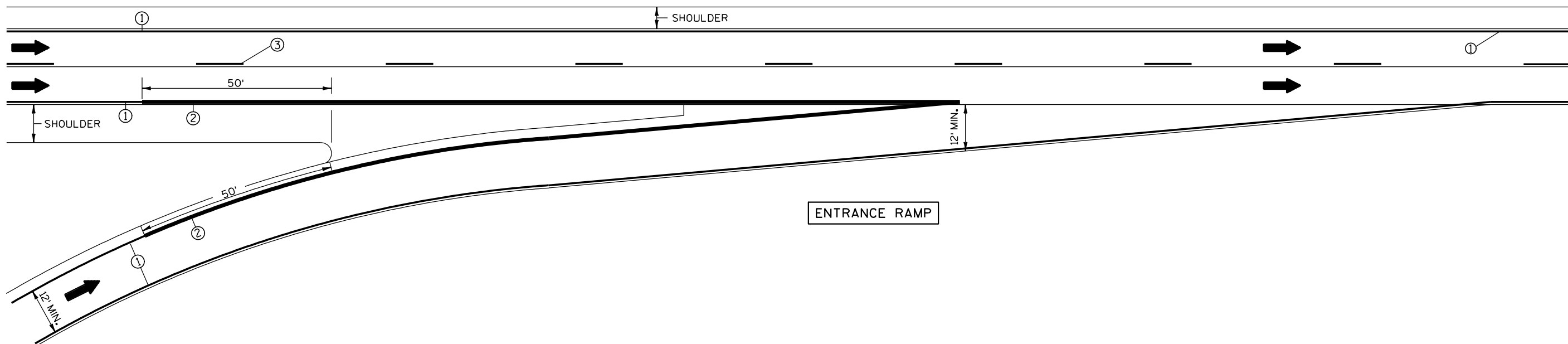


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

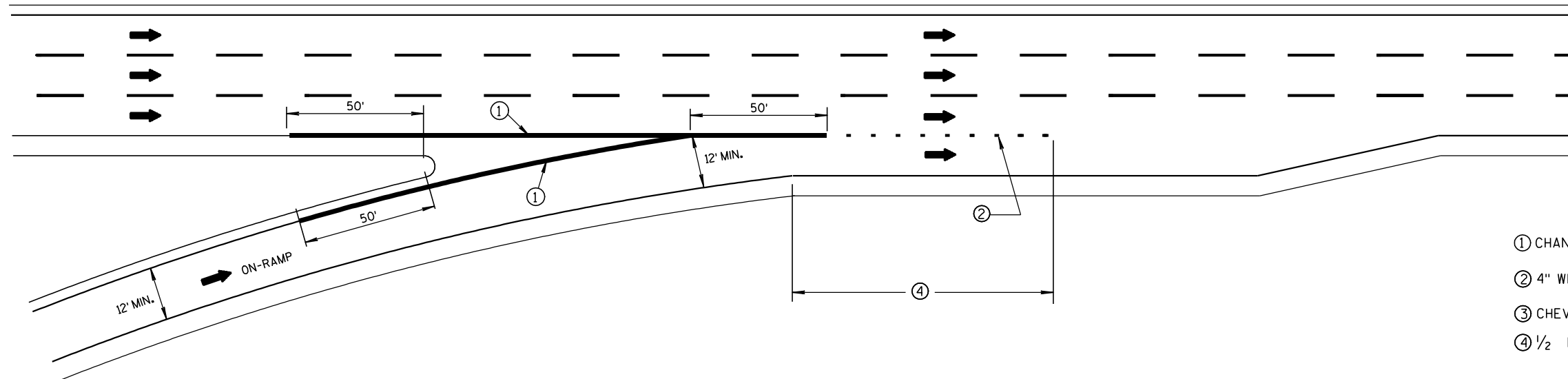
- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

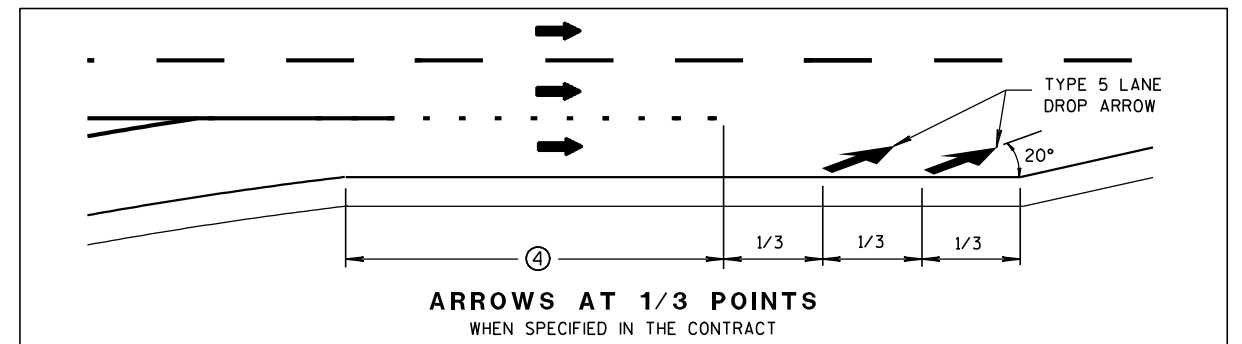
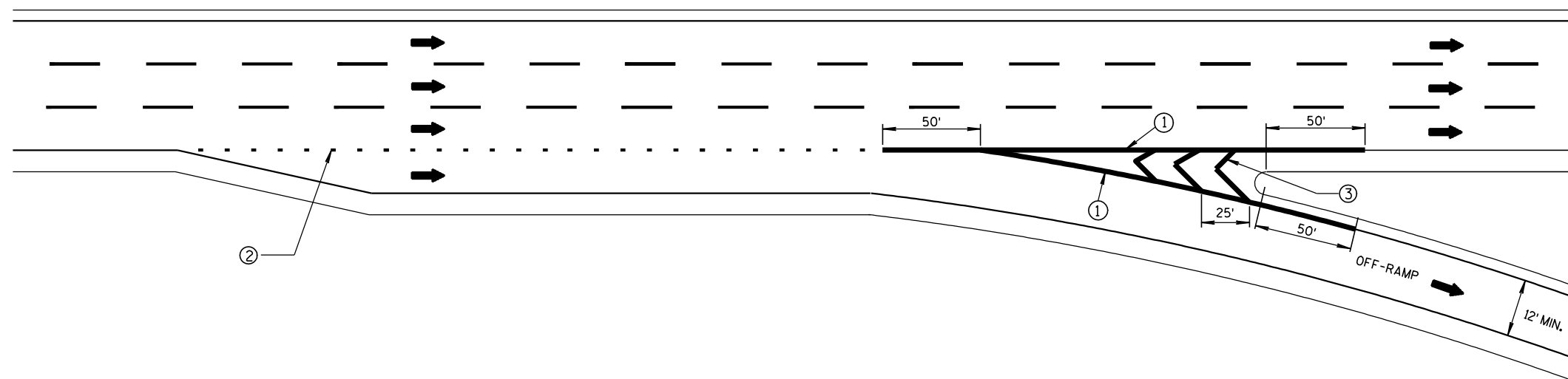


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

NOTES:

1. AHEAD ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
3. RETRACE EXISTING DIAGONAL MARKINGS.

- ① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.
- ② 4" WHITE (3' LINE, 9' GAP).
- ③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.
- ④ ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

ARROWS AT 1/3 POINTS
WHEN SPECIFIED IN THE CONTRACT

SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

PAVEMENT MARKING FOR
PARALLEL ON-RAMP AND
PARALLEL OFF-RAMPSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/23/2011

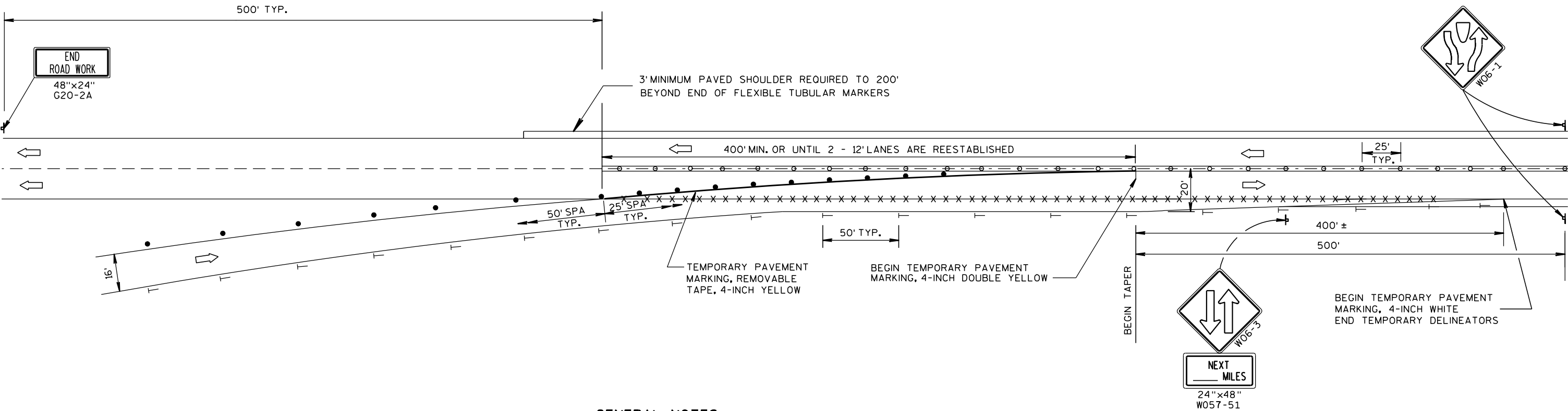
DATE

FHWA

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

LEGEND

- POST WITH ATTACHED SIGN
- DRUM
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TEMPORARY DELINEATOR
(STEEL POST W/SINGLE DELINEATOR)
COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGE LINE MARKING
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC



GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER.

TRAFFIC CONTROL,
SINGLE LANE CROSSOVER EXIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE
/S/ Chester J. Spang
DIRECTOR, OFFICE OF TRAFFIC
FHWA

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- *-x-* REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES :

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

- ① CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

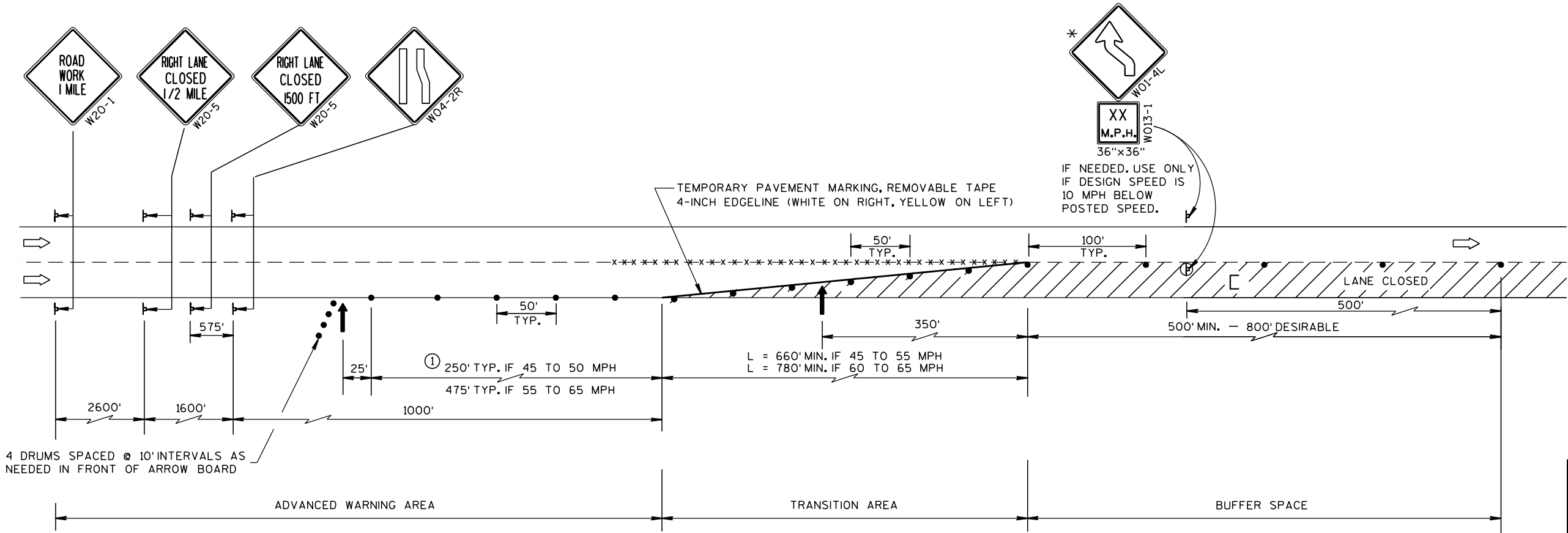
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

- * THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



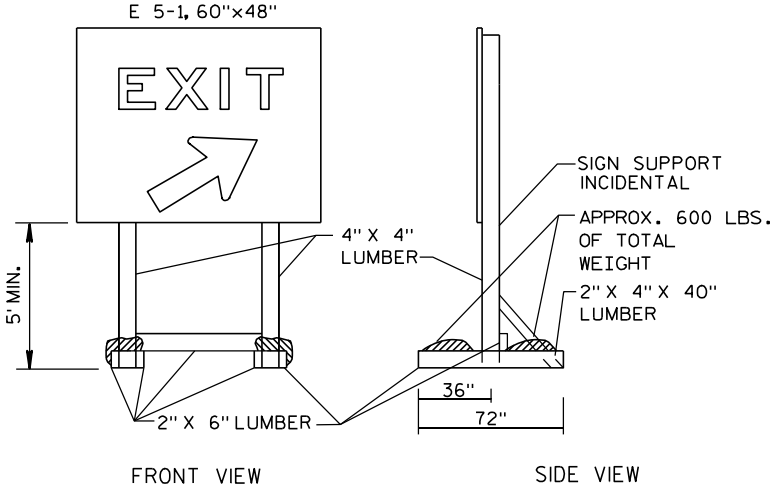
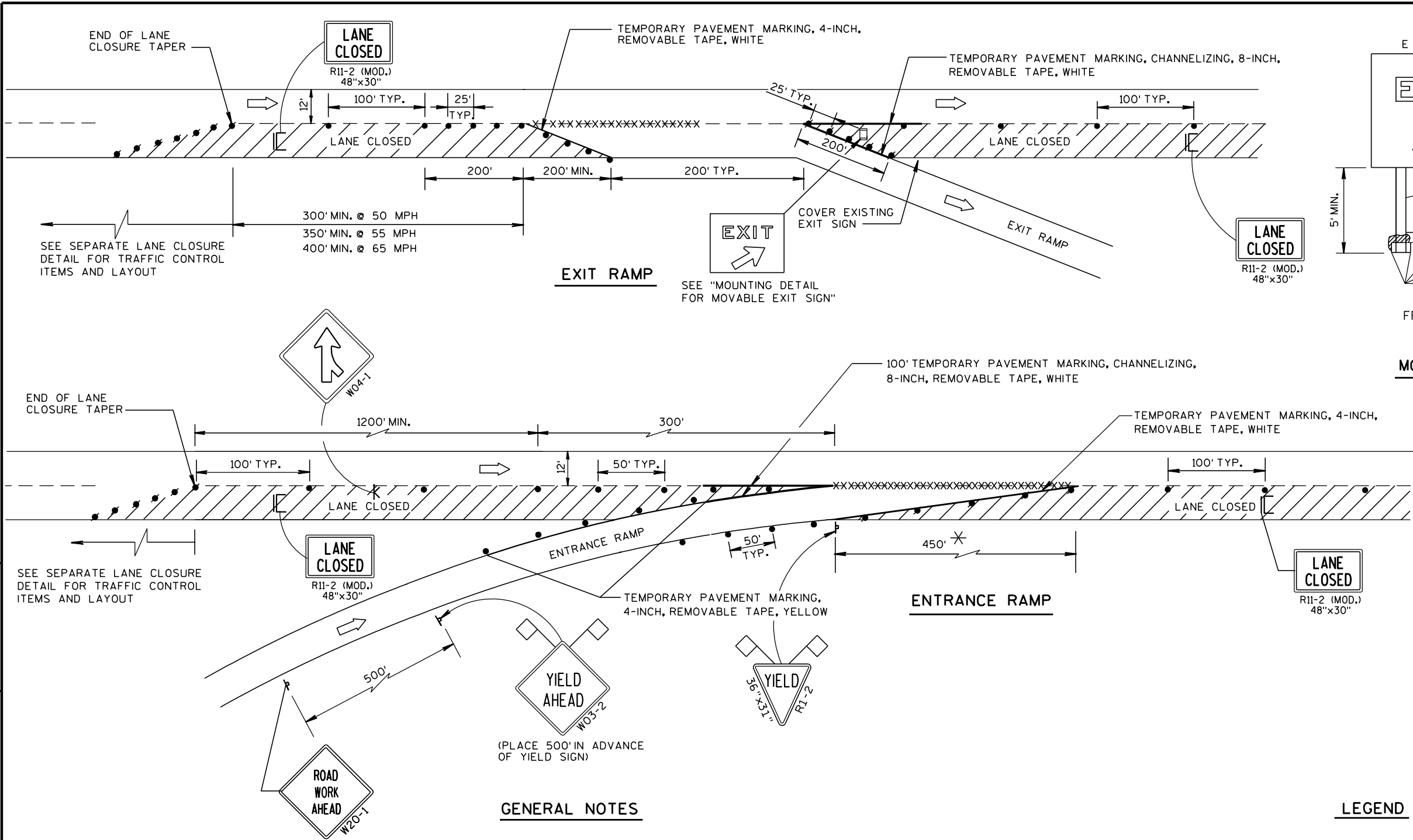
TRAFFIC CONTROL,
LANE CLOSURE, SPEEDS
GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE /S/ Chester J. Spang
DIRECTOR, OFFICE OF TRAFFIC
FHWA



APPROVED
5/23/2000 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL
MOUNTING DETAIL FOR MOVABLE EXIT SIGN

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

**TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/24/2000
DATE

/S/ Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

FHWA

SYMBOLS

-  TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
 DRUM
 POST MOUNTED SIGN
 WARNING LIGHT, TYPE A (FLASHING)
 DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

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

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

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.

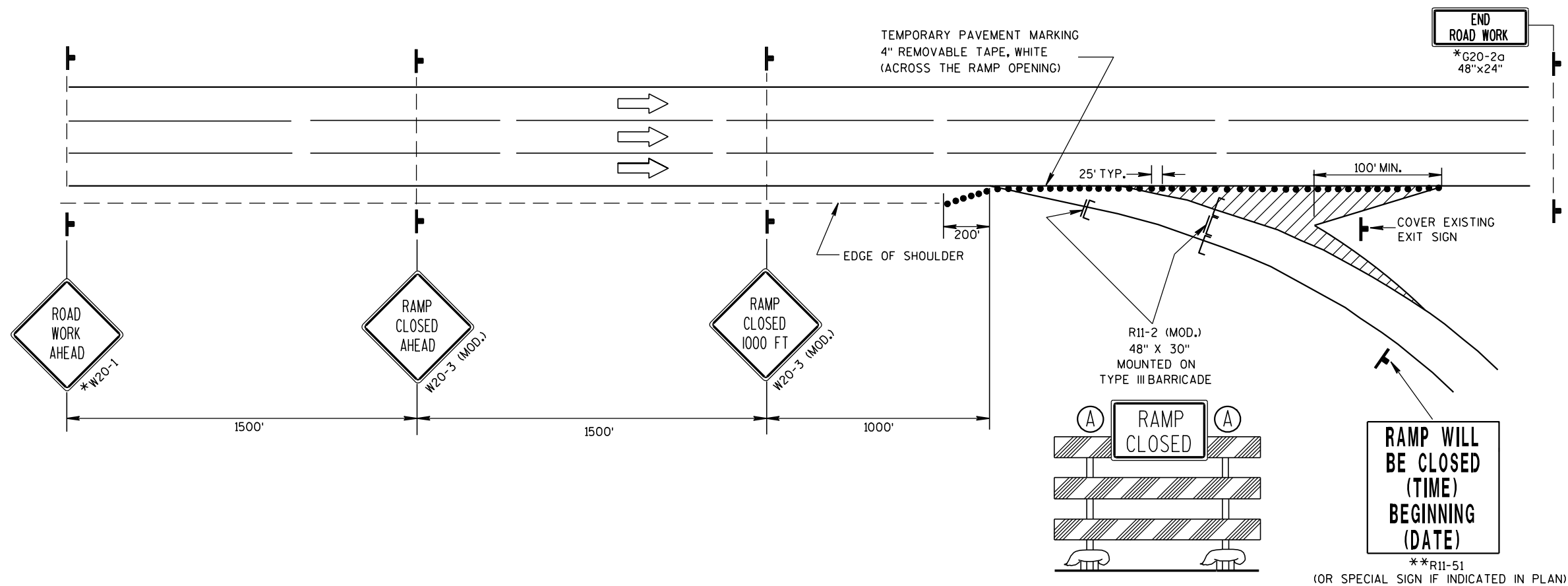
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

**USE THE "RAMP WILL BE CLOSED" SIGN IF INDICATED IN MISCELLANEOUS QUANTITIES. PLACE 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/2000

DATE

FHWA

/S/ Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

SYMBOLS

- TRAFFIC CONTROL DRUM
- ┐ POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW
- ⓧ ARROW BOARD IN CAUTION MODE

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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.

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

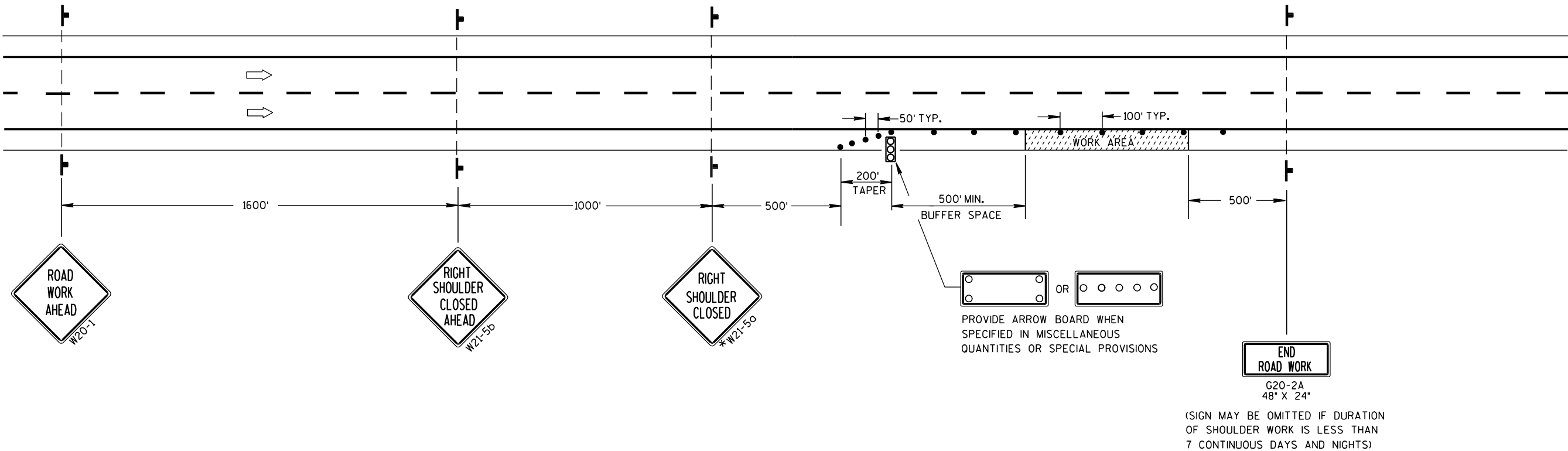
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

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

WHEN A 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.

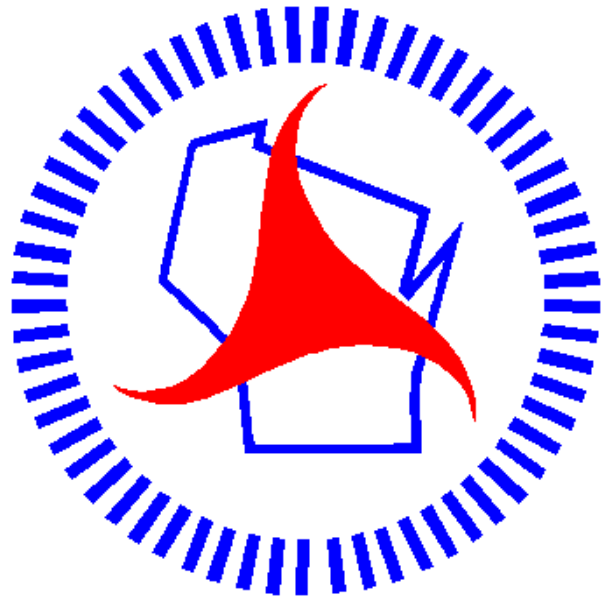
*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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