

MAD

PROJECT ID:
WITH: N/A

1001-10-82

COUNTY:

DANE / ROCK COUNTY

APRIL 2022
ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	0	Cross Sections

TOTAL SHEETS = 34



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ILLINOIS STATE LINE - MADISON

PAVEMENT MARKINGS CORRIDOR WIDE

IH 39/90

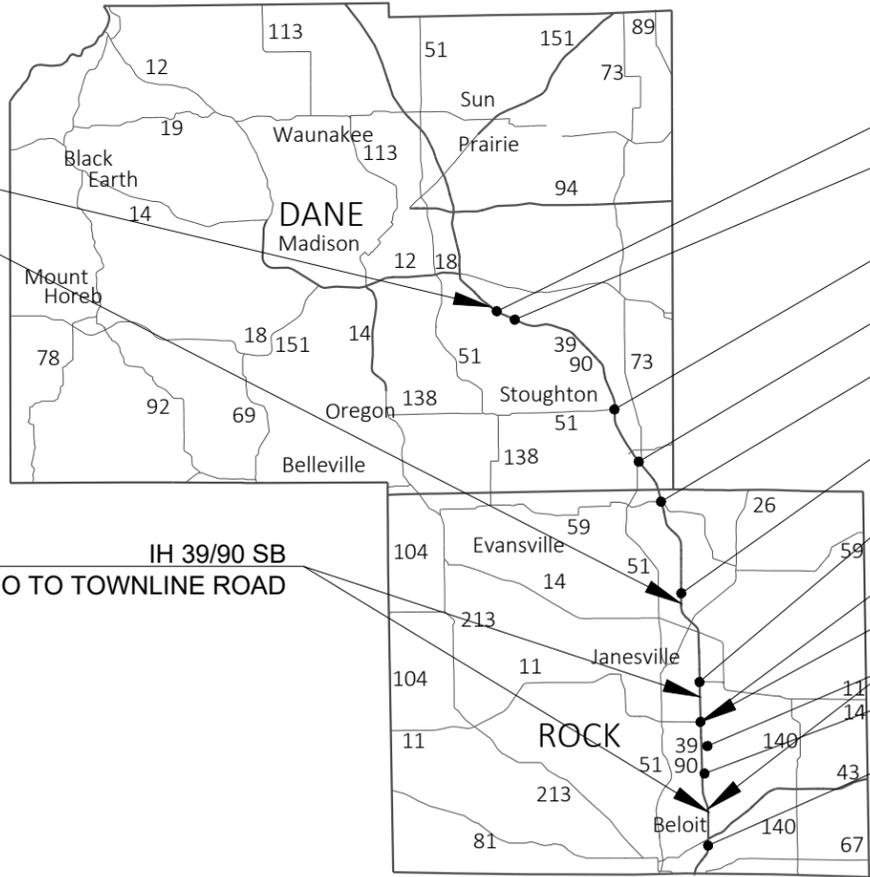
DANE / ROCK COUNTY

STATE PROJECT NUMBER
1001-10-82

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1001-10-82	WISC 2022281	1

IH 39/90 NB & SB
CTH AB TO TOWNLINE ROAD

IH 39/90 SB
CTH O TO TOWNLINE ROAD



- IH 39/90 & MADISON SWEF
- IH 39/90 & CTH N INTERCHANGE
- IH 39/90 & USH 51 NORTH INTERCHANGE
- IH 39/90 & STH 73 INTERCHANGE
- IH 39/90 & STH 59 INTERCHANGE
- IH 39/90 & REST AREA 17
- IH 39/90 & STH 11 EAST/EAST RACINE ST INTERCHANGE
- IH 39/90 & STH 11 WEST/AVALON RD INTERCHANGE
- IH 39/90 NB HART ROAD TO AVALON ROAD
- IH 39/90 & BELOIT SWEF
- IH 39/90 & CTH S INTERCHANGE
- IH 39/90 & REST AREA 22

DESIGN DESIGNATION

	IH 39 SOUTH SEGMENT	IH 39 CENTRAL SEGMENT	IH 39 NORTH SEGMENT
A.A.D.T. 2020 =	57,600	55,500	59,700
A.A.D.T. 2040 =	81,300	71,100	70,300
D.H.V. 2040 =	5,000	4,400	4,000
D.D. (%) =	58/42	58/42	60/40
T. (%) =	35	29.1	29.1
DESIGN SPEED (MPH) =	70	70	70
ESALS =	59,600,000	45,400,000	39,000,000

CONVENTIONAL SYMBOLS

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

LAYOUT
SCALE 0 NOT TO SCALE

TOTAL NET LENGTH OF CENTERLINE = 39.3 MILES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	N/A
Designer	JAROD ARENSDORF
Project Manager	JOSH KOEBERNICK
Regional Examiner	
Regional Supervisor	CHAD SCHROEDER

APPROVED FOR THE DEPARTMENT

DATE: 12/14/21

(Signature)

GENERAL NOTES

ALL EXISTING PAVEMENT MARKINGS SHALL BE CLEAN OF DEBRIS, SALT, AND DIRT PRIOR TO APPLICATION OF NEW MARKINGS

REMARK ONLY AREAS NOTED ON DETAIL SHEETS AND ON MISCELLANEOUS QUANTITY TABLES. DO NOT REMOVE/REPLACE HIGH CONTRAST TAPE 4-INCH WHITE SKIPS OR EPOXY AERIAL ENFORCEMENT BARS ON MAINLINE I-39/90.

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

REGION PAVEMENT MARKING COORDINATOR / WISCONSIN LANE CLOSURE SYSTEM CONTACT

SW REGION MADISON JEFF HALLOWAY 608-516-6437 jeffrey.halloway@dot.wi.gov



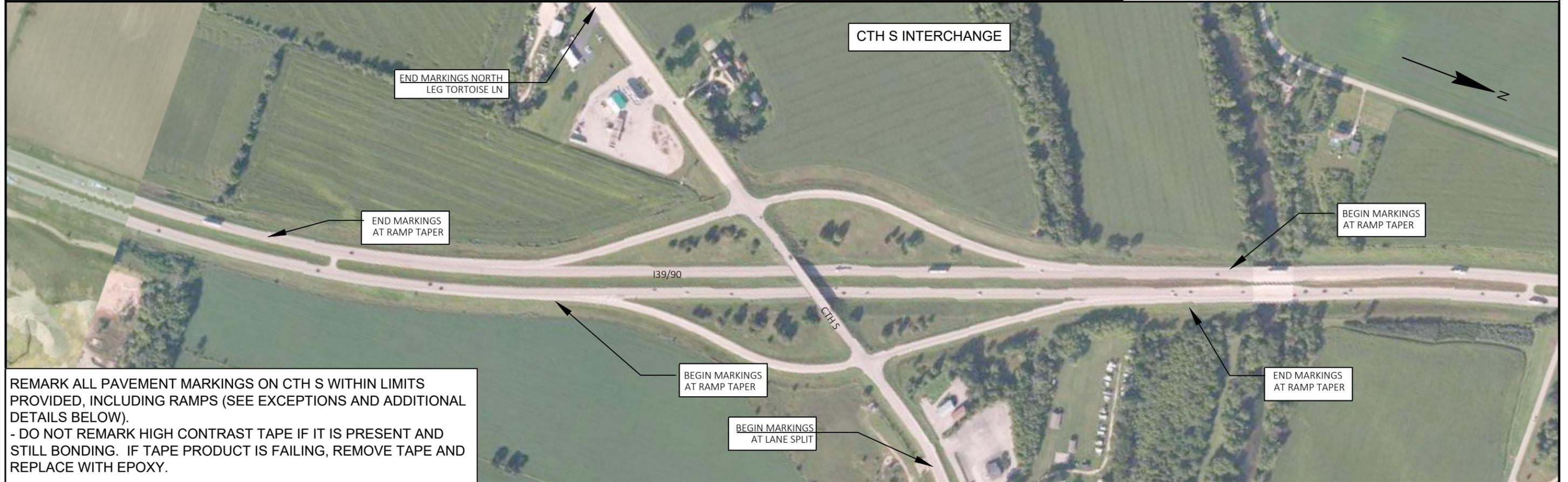
PROJECT MANAGER (WISDOT)
JOSHUA KOEBERNICK, P.E.
2101 WRIGHT ST.
MADISON, WI 53704
(608) 246-3859
joshua.koebernick@dot.wi.gov

PROJECT LEADER (WISDOT)
JAROD ARENSDORF, TRANS. SPEC.
2101 WRIGHT ST.
MADISON, WI 53704
(608) 246-3240
jarod.arendsorf@dot.wi.gov

PROJECT SUPERVISOR (WISDOT)
CHAD SCHROEDER, P.E.
2101 WRIGHT ST.
MADISON, WI 53704
(608)246-7935
chada.schroeder@dot.wi.gov

WI DNR LIASON
SHELLEY NELSON
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
(608) 444-2835
shelley.nelson@wisconsin.gov

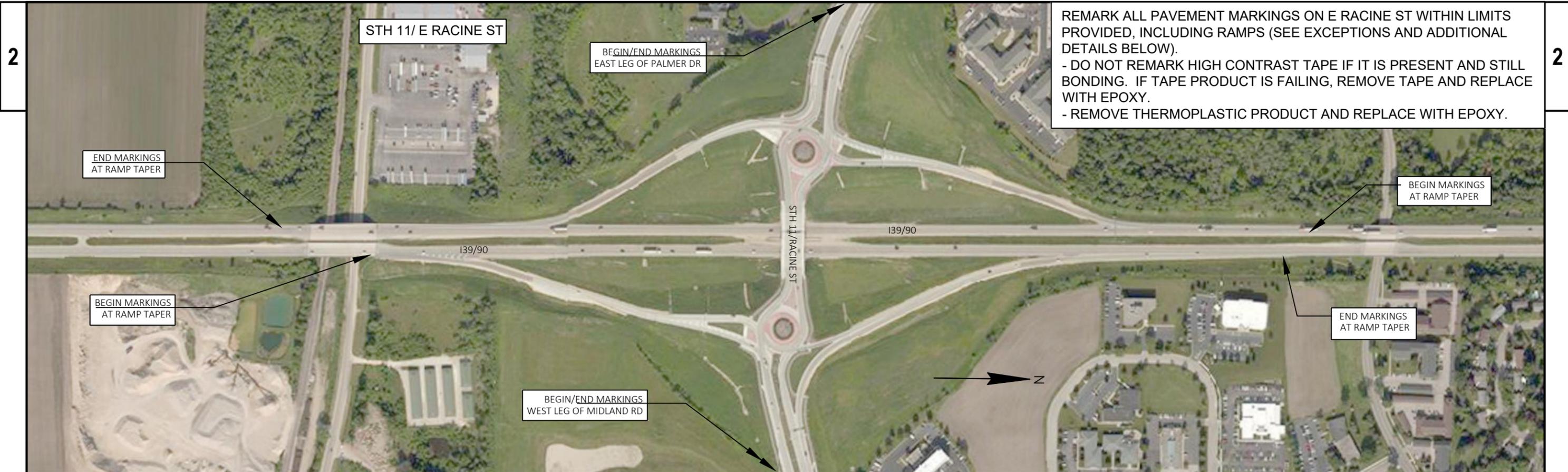
DNR SPILL HOTLINE (24 – hour)
Wisconsin Department of Natural Resources
Toll-Free: 1-800-943-0003



PROJECT NO: 1001-10-82	HWY: I39/90	COUNTY: DANE/ROCK	INTERCHANGE OVERVIEWS	SHEET	E
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PROJECT NO: 1001-10-82	HWY: 139/90	COUNTY: DANE/ROCK	INTERCHANGE OVERVIEWS	SHEET	E
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REMARK ALL PAVEMENT MARKINGS ON E RACINE ST WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).
 - DO NOT REMARK HIGH CONTRAST TAPE IF IT IS PRESENT AND STILL BONDING. IF TAPE PRODUCT IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.
 - REMOVE THERMOPLASTIC PRODUCT AND REPLACE WITH EPOXY.

REMARK ALL PAVEMENT MARKINGS IN REST AREA 17 WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).
 - DO NOT REMARK HIGH CONTRAST TAPE IF IT IS PRESENT AND STILL BONDING. IF TAPE PRODUCT IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.
 - DO NOT REMARK PARKING STALL LINES OR CURBS.



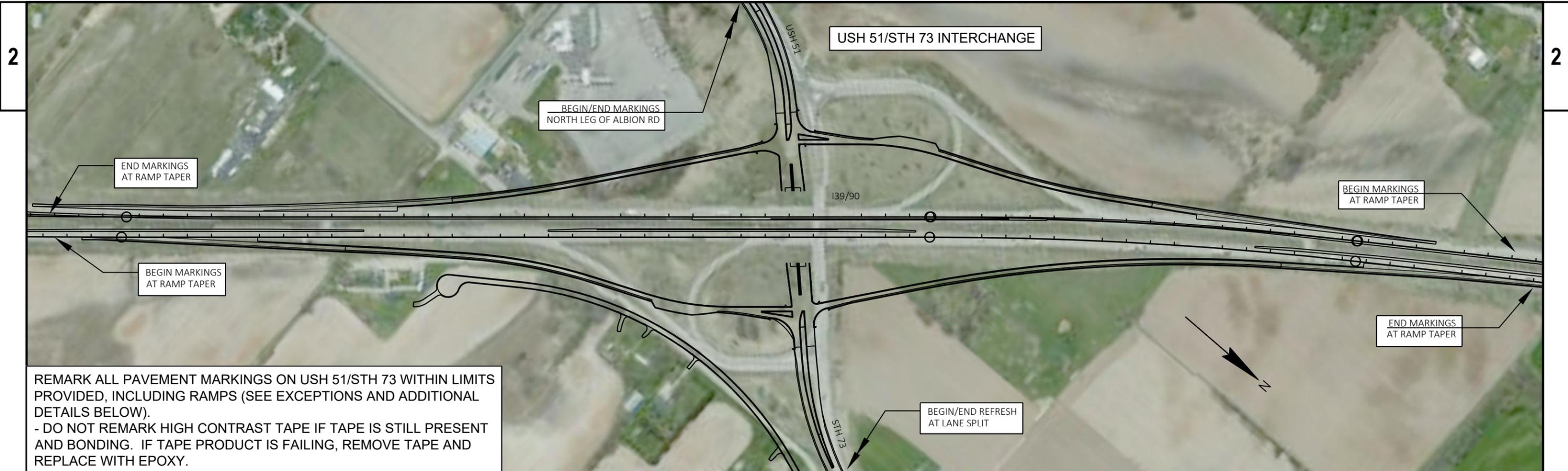
2

REMARK ALL PAVEMENT MARKINGS ON STH 59 WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).

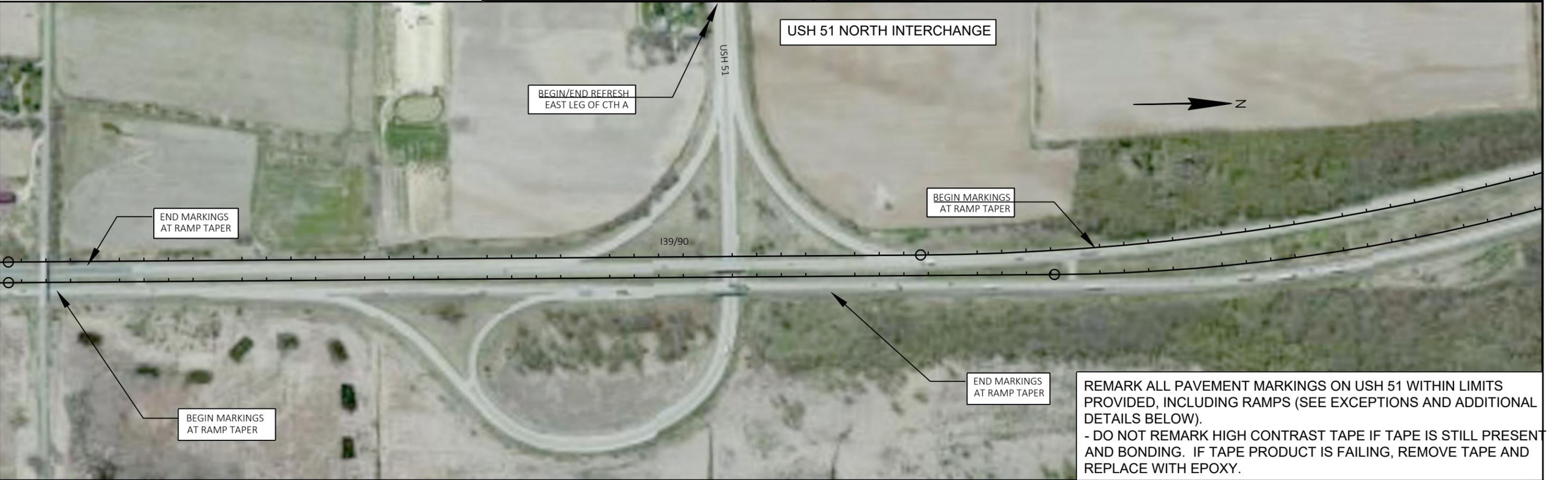
- DO NOT REMARK HIGH CONTRAST TAPE IF IT IS PRESENT AND STILL BONDING. IF TAPE PRODUCT IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.
- REMOVE THERMOPLASTIC PRODUCT AND REPLACE WITH EPOXY.
- DO NOT REMARK PARK N RIDE.



2



REMARK ALL PAVEMENT MARKINGS ON USH 51/STH 73 WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).
 - DO NOT REMARK HIGH CONTRAST TAPE IF TAPE IS STILL PRESENT AND BONDING. IF TAPE PRODUCT IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.



REMARK ALL PAVEMENT MARKINGS ON USH 51 WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).
 - DO NOT REMARK HIGH CONTRAST TAPE IF TAPE IS STILL PRESENT AND BONDING. IF TAPE PRODUCT IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.

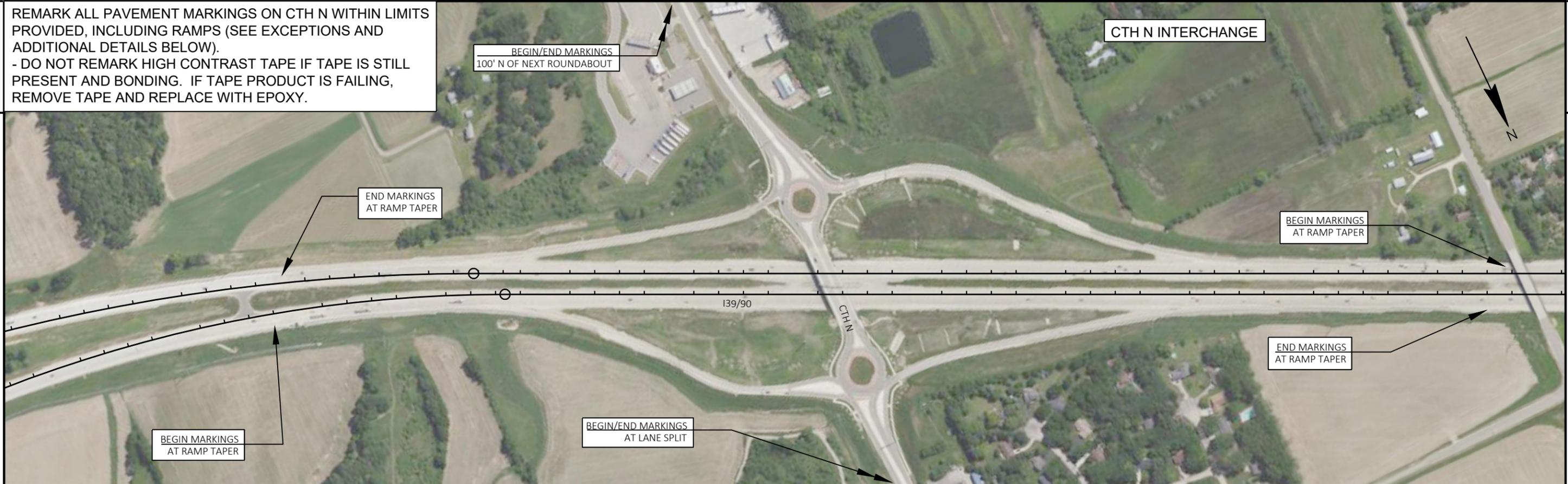
2

REMARK ALL PAVEMENT MARKINGS ON CTH N WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).
 - DO NOT REMARK HIGH CONTRAST TAPE IF TAPE IS STILL PRESENT AND BONDING. IF TAPE PRODUCT IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.

BEGIN/END MARKINGS
 100' N OF NEXT ROUNDABOUT

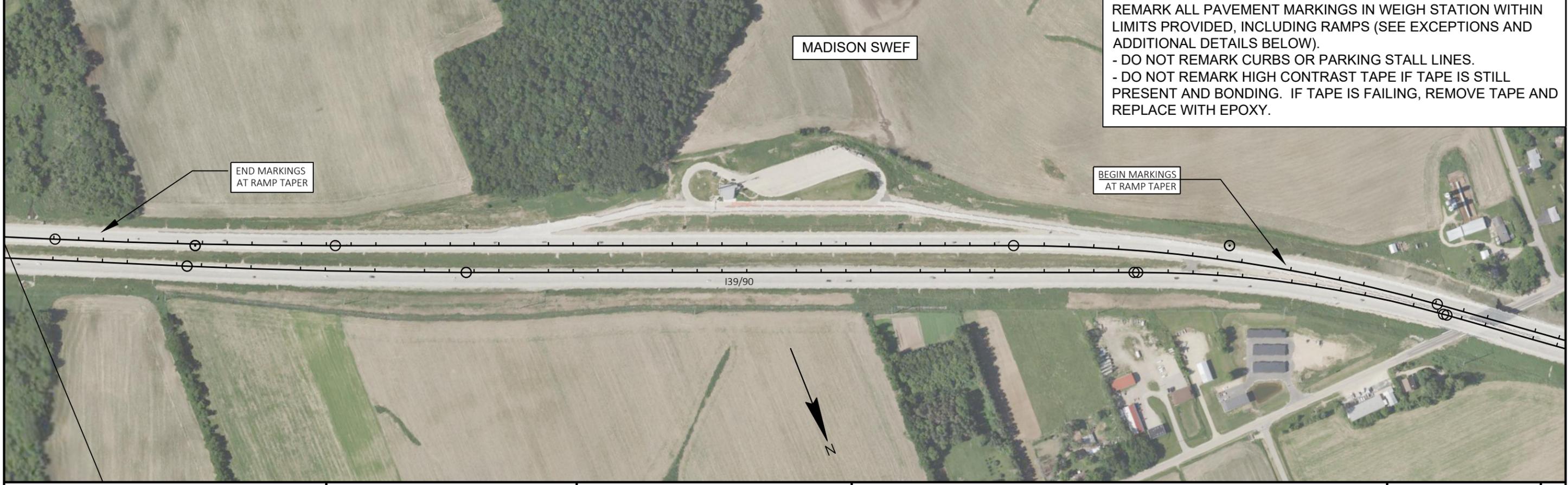
CTH N INTERCHANGE

2



REMARK ALL PAVEMENT MARKINGS IN WEIGH STATION WITHIN LIMITS PROVIDED, INCLUDING RAMPS (SEE EXCEPTIONS AND ADDITIONAL DETAILS BELOW).
 - DO NOT REMARK CURBS OR PARKING STALL LINES.
 - DO NOT REMARK HIGH CONTRAST TAPE IF TAPE IS STILL PRESENT AND BONDING. IF TAPE IS FAILING, REMOVE TAPE AND REPLACE WITH EPOXY.

MADISON SWEF



Estimate Of Quantities

1001-10-82

Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 1001-10-82	EACH	1.000	1.000
0004	619.1000	Mobilization	EACH	1.000	1.000
0006	646.1020	Marking Line Epoxy 4-Inch	LF	237,922.000	237,922.000
0008	646.1041.S	Marking Replace Line Wet Reflective Epoxy 4-Inch	LF	628,180.000	628,180.000
0010	646.3020	Marking Line Epoxy 8-Inch	LF	22,270.000	22,270.000
0012	646.5020	Marking Arrow Epoxy	EACH	166.000	166.000
0014	646.5120	Marking Word Epoxy	EACH	79.000	79.000
0016	646.6120	Marking Stop Line Epoxy 18-Inch	LF	784.000	784.000
0018	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	1,364.000	1,364.000
0020	646.7120	Marking Diagonal Epoxy 12-Inch	LF	3,487.000	3,487.000
0022	646.7220	Marking Chevron Epoxy 24-Inch	LF	1,959.000	1,959.000
0024	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	2,396.000	2,396.000
0026	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	976.000	976.000
0028	646.9110	Marking Removal Line Water Blasting 8-Inch	LF	2,395.000	2,395.000
0030	646.9155	Marking Removal Line Grooved Contrast Permanent Tape 8-Inch	LF	1,000.000	1,000.000
0032	646.9210	Marking Removal Line Water Blasting Wide	LF	916.000	916.000
0034	646.9310	Marking Removal Special Marking Water Blasting	EACH	85.000	85.000
0036	SPV.0060	Special 01. Traffic Control	EACH	1.000	1.000

646 - PAVEMENT MARKING

646.1020 646.1041.S 646.3020 646.5020

MARKING LINE MARKING REPLACE MARKING LINE MARKING ARROW EPOXY

EPOXY 4-INCH LINE WET EPOXY 8-INCH MARKING ARROW EPOXY

REFLECTIVE EPOXY 4-INCH

LOCATION (FROM)	TO	LOCATION (TO)	DIRECTION	WHITE LF	YELLOW LF	WHITE LF	YELLOW LF	WHITE LF	YELLOW LF	TYPE 1 EACH	TYPE 2 EACH	TYPE 2R EACH	TYPE 3 EACH	TYPE 3R EACH	TYPE 5 EACH	REMARKS	
HART RD MM 183.6	-	AVALON RD MM 177.4	NORTHBOUND I39/90	-	-	26,686	32,736	-	-	-	-	-	-	-	-	-	
TOWNLINE RD MM 168.4	-	CTH AB MM 144.2	NORTHBOUND I39/90	-	-	116,476	127,776	-	-	-	-	-	-	-	-	-	
REST AREA 22	-	OFFRAMP/ONRAMP	NORTHBOUND I39/90	1,320	270	-	-	-	-	-	-	-	-	-	-	NO PARKING STALLS	
EXIT 183 - CTH S/SHOPIERE RD	-	OFFRAMP	NORTHBOUND I39/90	2,650	1,400	-	-	110	-	-	-	-	-	-	-	-	
EXIT 183 - CTH S/SHOPIERE RD	-	ONRAMP	NORTHBOUND I39/90	2,300	1,100	-	-	427	-	2	-	-	-	-	-	-	
BELOIT SWEF	-	OFFRAMP/ONRAMP	NORTHBOUND I39/90	8,480	9,800	-	-	2034	1788	-	-	-	-	-	-	NO PARKING STALLS	
EXIT 177 - STH 11 W/AVALON RD	-	OFFRAMP	NORTHBOUND I39/90	2,870	1,700	-	-	200	-	4	-	-	-	-	-	-	
EXIT 177 - STH 11 W/AVALON RD	-	ONRAMP	NORTHBOUND I39/90	4,000	1,600	-	-	617	-	2	-	-	-	-	-	-	
EXIT 175 - E RACINE ST/STH 11 E	-	OFFRAMP	NORTHBOUND I39/90	1,875	1,000	-	-	-	-	2	2	2	1	-	-	-	
EXIT 175 - E RACINE ST/STH 11 E	-	ONRAMP	NORTHBOUND I39/90	2,800	1,075	-	-	-	-	2	-	-	-	-	-	-	
EXIT 163 - STH 59	-	OFFRAMP	NORTHBOUND I39/90	1,050	560	-	-	122	-	2	-	-	2	-	-	-	
EXIT 163 - STH 59	-	ONRAMP	NORTHBOUND I39/90	2,900	1,270	-	-	487	-	2	-	-	-	2	-	-	
EXIT 160 - USH 51 S/STH 73	-	OFFRAMP	NORTHBOUND I39/90	2,860	1,400	-	-	-	-	-	-	-	-	-	-	-	
EXIT 160 - USH 51 S/STH 73	-	ONRAMP	NORTHBOUND I39/90	2,875	1,450	-	-	-	-	2	-	-	-	-	-	-	
EXIT 156 - USH 51 N	-	OFFRAMP	NORTHBOUND I39/90	4,750	4,180	-	-	107	-	1	-	-	-	-	-	-	
EXIT 156 - USH 51 N	-	ONRAMP	NORTHBOUND I39/90	4,600	3,825	-	-	192	-	-	-	-	-	-	-	-	
EXIT 147 - CTH N	-	OFFRAMP	NORTHBOUND I39/90	2,240	1,200	-	-	210	-	2	-	-	1	-	-	-	
EXIT 147 - CTH N	-	ONRAMP	NORTHBOUND I39/90	2,960	1,125	-	-	50	-	1	-	-	-	-	-	-	
CTH AB MM 144.2	-	TOWNLINE RD MM 168.4	SOUTHBOUND I39/90	-	-	112,776	127,776	-	-	-	-	-	-	-	-	-	
CTH O MM 175.2	-	HART RD MM 183.6	SOUTHBOUND I39/90	-	-	39,602	44,352	-	-	-	-	-	-	-	-	-	
MADISON SWEF	-	OFFRAMP/ONRAMP	SOUTHBOUND I39/90	8,480	3,900	-	-	1,342	820	-	-	-	-	-	-	NO PARKING STALLS	
EXIT 147 - CTH N	-	OFFRAMP	SOUTHBOUND I39/90	2,400	1,250	-	-	550	-	1	2	-	-	1	-	-	
EXIT 147 - CTH N	-	ONRAMP	SOUTHBOUND I39/90	3,100	1,200	-	-	55	-	-	-	-	-	-	-	-	
EXIT 156 - USH 51 N	-	OFFRAMP	SOUTHBOUND I39/90	3,000	1,050	-	-	112	-	-	-	-	-	-	-	-	
EXIT 156 - USH 51 N	-	ONRAMP	SOUTHBOUND I39/90	3,400	950	-	-	-	-	-	-	-	-	-	-	-	
EXIT 160 - USH 51 S/STH 73	-	OFFRAMP	SOUTHBOUND I39/90	2,750	1,550	-	-	-	-	-	-	-	-	-	-	-	
EXIT 160 - USH 51 S/STH 73	-	ONRAMP	SOUTHBOUND I39/90	2,650	1,350	-	-	-	-	2	-	-	-	-	-	-	
EXIT 163 - STH 59	-	OFFRAMP	SOUTHBOUND I39/90	1,400	975	-	-	126	-	2	-	-	2	-	-	-	
EXIT 163 - STH 59	-	ONRAMP	SOUTHBOUND I39/90	2,410	1,020	-	-	20	-	-	-	-	-	-	-	-	
REST AREA 17	-	OFFRAMP/ONRAMP	SOUTHBOUND I39/90	4,800	3,300	-	-	-	-	-	-	-	-	-	-	NO PARKING STALLS	
EXIT 175 - E RACINE ST/STH 11 E	-	OFFRAMP	SOUTHBOUND I39/90	2,100	1,900	-	-	-	-	2	1	-	2	-	-	-	
EXIT 175 - E RACINE ST/STH 11 E	-	ONRAMP	SOUTHBOUND I39/90	2,150	900	-	-	-	-	1	-	-	-	-	-	-	
EXIT 177 - STH 11 W/AVALON RD	-	OFFRAMP	SOUTHBOUND I39/90	2,200	1,600	-	-	658	-	6	-	-	-	-	-	-	
EXIT 177 - STH 11 W/AVALON RD	-	ONRAMP	SOUTHBOUND I39/90	2,700	1,400	-	-	920	-	2	-	-	-	-	-	-	
EXIT 183 - CTH S/SHOPIERE RD	-	OFFRAMP	SOUTHBOUND I39/90	2,600	1,900	-	-	90	-	-	-	-	-	-	-	-	
EXIT 183 - CTH S/SHOPIERE RD	-	ONRAMP	SOUTHBOUND I39/90	2,000	800	-	-	550	-	2	-	-	-	-	-	-	
NORTH END LANE SPLIT	-	START OF 3RD RAB	CTH N OVERPASS	4,030	5,609	-	-	1,938	-	13	2	4	9	2	-	-	
NORTH END LANE SPLIT	-	ALBION RD	STH 73 OVERPASS	5,780	6,110	-	-	1,068	-	8	-	-	-	-	-	-	
KENLYN LN	-	MALLWOOD DR	STH 59 OVERPASS	3,730	9,387	-	-	1,783	-	4	5	-	4	1	-	-	
PALMER DR	-	MIDLAND RD	E RACINE ST OVERPASS	5,248	7,064	-	-	962	-	14	18	-	6	4	-	-	
START OF RIGHT TURN LANE TO I39 SB	-	CTH J	AVALON RD OVERPASS	8,698	10,205	-	-	680	-	8	-	-	-	-	-	-	
TORTOISE LN	-	EAST END LANE SPLIT	CTH S OVERPASS	7,995	7,396	-	-	3,252	-	6	-	-	-	-	-	-	
PROJECT WIDE	-	-	-	-	-	-	-	1,000	-	-	-	-	-	-	-	UNDISTRIBUTED	
SUBTOTALS				134,151	103,771	295,540	332,640	19,662	2,608	40	80	7	21	16	2		
TOTAL 0010				237,922		628,180		22,270					166				

PROJECT NO: 1001-10-82

HWY: I39/90

COUNTY: DANE/ROCK

MISCELLANEOUS QUANTITIES

SHEET

E

646 - PAVEMENT MARKING

646.5120	646.6120	646.6320	646.7120	646.7220	646.7420
MARKING WORD EPOXY	MARKING STOP LINE EPOXY 18- INCH	MARKING DOTTED EXTENSION EPOXY 18-INCH	MARKING DIAGONAL EPOXY 12-INCH	MARKING CHEVRON EPOXY 24-INCH	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

LOCATION (FROM)	TO	LOCATION (TO)	DIRECTION	EACH	LF	LF	LF	LF	LF	REMARKS
HART RD MM 183.6	-	AVALON RD MM 177.4	NORTHBOUND I39/90	-	-	-	-	-	-	-
TOWNLINE RD MM 168.4	-	CTH AB MM 144.2	NORTHBOUND I39/90	-	-	-	-	-	-	-
REST AREA 22	-	OFFRAMP/ONRAMP	NORTHBOUND I39/90	-	16	-	1080	-	490	NO PARKING STALLS
EXIT 183 - CTH S/SHOPIERE RD	-	OFFRAMP	NORTHBOUND I39/90	-	46	-	-	-	-	-
EXIT 183 - CTH S/SHOPIERE RD	-	ONRAMP	NORTHBOUND I39/90	1	-	-	-	-	-	-
BELOIT SWEF	-	OFFRAMP/ONRAMP	NORTHBOUND I39/90	-	28	-	-	341	120	NO PARKING STALLS
EXIT 177 - STH 11 W/AVALON RD	-	OFFRAMP	NORTHBOUND I39/90	2	38	-	182	-	-	-
EXIT 177 - STH 11 W/AVALON RD	-	ONRAMP	NORTHBOUND I39/90	1	-	-	-	-	-	-
EXIT 175 - E RACINE ST/STH 11 E	-	OFFRAMP	NORTHBOUND I39/90	3	-	88	-	249	108	-
EXIT 175 - E RACINE ST/STH 11 E	-	ONRAMP	NORTHBOUND I39/90	1	-	-	-	-	-	-
EXIT 163 - STH 59	-	OFFRAMP	NORTHBOUND I39/90	3	-	110	-	-	72	-
EXIT 163 - STH 59	-	ONRAMP	NORTHBOUND I39/90	-	-	-	-	-	68	-
EXIT 160 - USH 51 S/STH 73	-	OFFRAMP	NORTHBOUND I39/90	-	16	-	-	-	-	-
EXIT 160 - USH 51 S/STH 73	-	ONRAMP	NORTHBOUND I39/90	1	-	-	-	-	-	-
EXIT 156 - USH 51 N	-	OFFRAMP	NORTHBOUND I39/90	1	-	-	-	-	-	-
EXIT 156 - USH 51 N	-	ONRAMP	NORTHBOUND I39/90	-	-	-	-	-	-	-
EXIT 147 - CTH N	-	OFFRAMP	NORTHBOUND I39/90	3	-	94	-	-	72	-
EXIT 147 - CTH N	-	ONRAMP	NORTHBOUND I39/90	1	-	40	-	-	82	-
CTH AB MM 144.2	-	TOWNLINE RD MM 168.4	SOUTHBOUND I39/90	-	-	-	-	-	-	-
CTH O MM 175.2	-	HART RD MM 183.6	SOUTHBOUND I39/90	-	-	-	-	-	-	-
MADISON SWEF	-	OFFRAMP/ONRAMP	SOUTHBOUND I39/90	-	15	-	-	109	-	NO PARKING STALLS
EXIT 147 - CTH N	-	OFFRAMP	SOUTHBOUND I39/90	2	-	46	-	-	102	-
EXIT 147 - CTH N	-	ONRAMP	SOUTHBOUND I39/90	1	-	54	-	-	64	-
EXIT 156 - USH 51 N	-	OFFRAMP	SOUTHBOUND I39/90	-	-	-	-	-	-	-
EXIT 156 - USH 51 N	-	ONRAMP	SOUTHBOUND I39/90	-	-	-	-	84	-	-
EXIT 160 - USH 51 S/STH 73	-	OFFRAMP	SOUTHBOUND I39/90	-	15	-	-	-	-	-
EXIT 160 - USH 51 S/STH 73	-	ONRAMP	SOUTHBOUND I39/90	1	-	-	-	-	-	-
EXIT 163 - STH 59	-	OFFRAMP	SOUTHBOUND I39/90	3	-	110	-	-	72	-
EXIT 163 - STH 59	-	ONRAMP	SOUTHBOUND I39/90	-	-	-	-	-	36	-
REST AREA 17	-	OFFRAMP/ONRAMP	SOUTHBOUND I39/90	-	-	-	-	-	-	NO PARKING STALLS
EXIT 175 - E RACINE ST/STH 11 E	-	OFFRAMP	SOUTHBOUND I39/90	3	-	82	-	259	116	-
EXIT 175 - E RACINE ST/STH 11 E	-	ONRAMP	SOUTHBOUND I39/90	-	-	-	-	-	66	-
EXIT 177 - STH 11 W/AVALON RD	-	OFFRAMP	SOUTHBOUND I39/90	3	76	-	-	185	-	-
EXIT 177 - STH 11 W/AVALON RD	-	ONRAMP	SOUTHBOUND I39/90	1	-	-	-	-	-	-
EXIT 183 - CTH S/SHOPIERE RD	-	OFFRAMP	SOUTHBOUND I39/90	-	26	-	-	-	-	-
EXIT 183 - CTH S/SHOPIERE RD	-	ONRAMP	SOUTHBOUND I39/90	1	-	-	-	-	-	-
NORTH END LANE SPLIT	-	START OF 3RD RAB	CTH N OVERPASS	18	-	192	-	217	192	-
NORTH END LANE SPLIT	-	ALBION RD	STH 73 OVERPASS	3	184	-	228	-	-	-
KENLYN LN	-	MALLWOOD DR	STH 59 OVERPASS	8	-	374	214	-	332	-
PALMER DR	-	MIDLAND RD	E RACINE ST OVERPASS	15	108	174	198	180	404	-
START OF RIGHT TURN LANE TO I39 SB	-	CTH J	AVALON RD OVERPASS	-	216	-	1,038	-	-	-
TORTOISE LN	-	EAST END LANE SPLIT	CTH S OVERPASS	3	-	-	547	335	-	-
PROJECT WIDE	-	-	-	-	-	-	-	-	-	UNDISTRIBUTED
SUBTOTALS										
TOTAL 0010				79	784	1,364	3,487	1,959	2,396	

PROJECT NO: 1001-10-82

HWY: I39/90

COUNTY: DANE/ROCK

MISCELLANEOUS QUANTITIES

SHEET

E

646 - REMOVAL

LOCATION (FROM)	TO LOCATION (TO)	DIRECTION	646.9010	646.9110	646.9155	646.9210	646.9310						REMARKS	
			MARKING REMOVAL LINE WATER BLASTING 4-INCH	MARKING REMOVAL LINE WATER BLASTING 8-INCH	MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH	MARKING REMOVAL LINE WATER BLASTING WIDE	MARKING REMOVAL SPECIAL	MARKING	WATER	BLASTING	TYPE 1 ARROW EACH	TYPE 2 ARROW EACH		TYPE 2R ARROW EACH
EXIT 175 - E RACINE ST/STH 11 E	- OFFRAMP	NORTHBOUND I39/90	110	-	-	86	-	2	2	2	1	-	3	REMOVING THERMOPLASTIC
EXIT 175 - E RACINE ST/STH 11 E	- ONRAMP	NORTHBOUND I39/90	86	-	-	-	-	-	-	-	-	-	-	REMOVING THERMOPLASTIC
EXIT 175 - E RACINE ST/STH 11 E	- OFFRAMP	SOUTHBOUND I39/90	118	-	-	77	-	2	1	1	1	-	3	REMOVING THERMOPLASTIC
EXIT 175 - E RACINE ST/STH 11 E	- ONRAMP	SOUTHBOUND I39/90	66	-	-	-	-	-	-	-	-	-	-	REMOVING THERMOPLASTIC
PALMER DR	- MIDLAND RD	E RACINE ST OVERPASS	-	1,072	-	180	14	2	-	6	4	-	8	REMOVING THERMOPLASTIC
EXIT 163 - STH 59	- OFFRAMP	NORTHBOUND I39/90	76	-	-	110	-	2	-	-	2	-	3	REMOVING THERMOPLASTIC
EXIT 163 - STH 59	- ONRAMP	NORTHBOUND I39/90	70	-	-	-	-	1	-	-	-	2	1	REMOVING THERMOPLASTIC
EXIT 163 - STH 59	- OFFRAMP	SOUTHBOUND I39/90	76	20	-	90	-	2	-	-	2	-	3	REMOVING THERMOPLASTIC
EXIT 163 - STH 59	- ONRAMP	SOUTHBOUND I39/90	38	-	-	-	-	-	-	-	-	-	-	REMOVING THERMOPLASTIC
KENLYN LN	- MALLWOOD DR	STH 59 OVERPASS	336	1,303	-	373	3	-	-	3	2	-	7	REMOVING THERMOPLASTIC
PROJECT WIDE	-	-	-	-	1,000	-	-	-	-	-	-	-	-	UNDISTRIBUTED
SUBTOTALS							17	11	3	12	12	2	28	
TOTAL 0010			976	2,395	1,000	916	85							

Standard Detail Drawing List

15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15D	ROUNDBABOUT ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-06B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D37-03	TRAFFIC CONTROL, 2-LANE ROUNDBABOUT
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

GENERAL NOTES

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

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

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

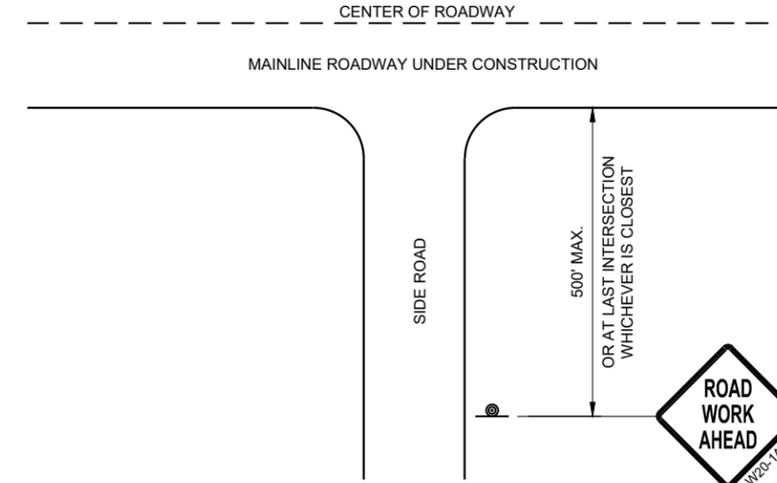
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

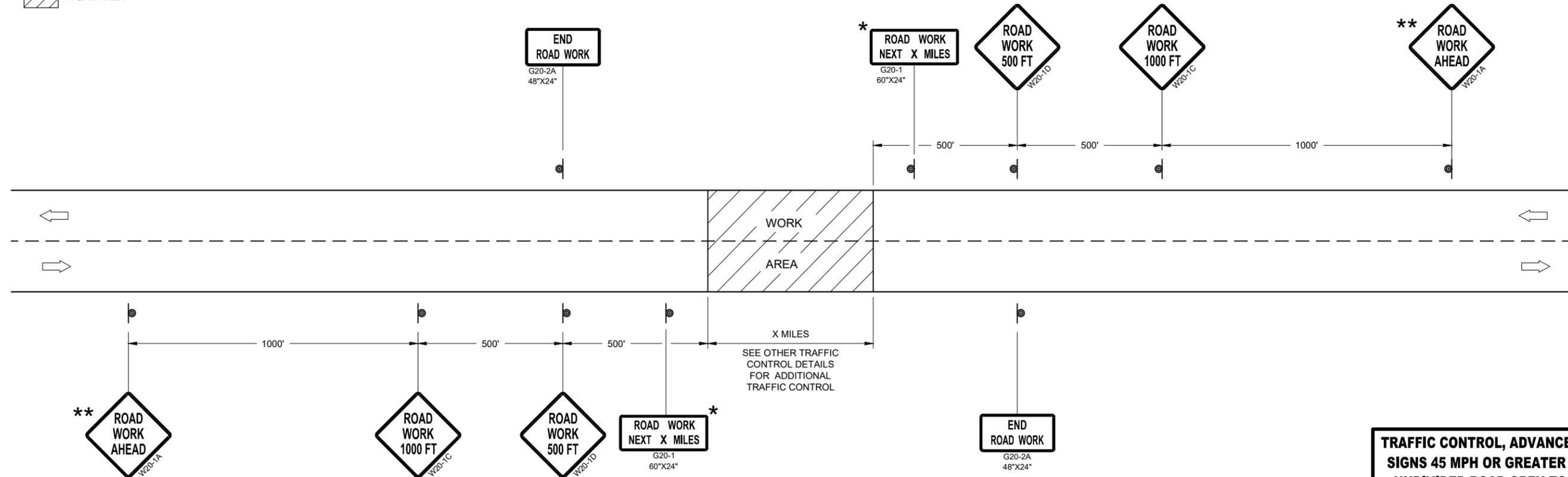
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



**TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL**



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

GENERAL NOTES

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

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

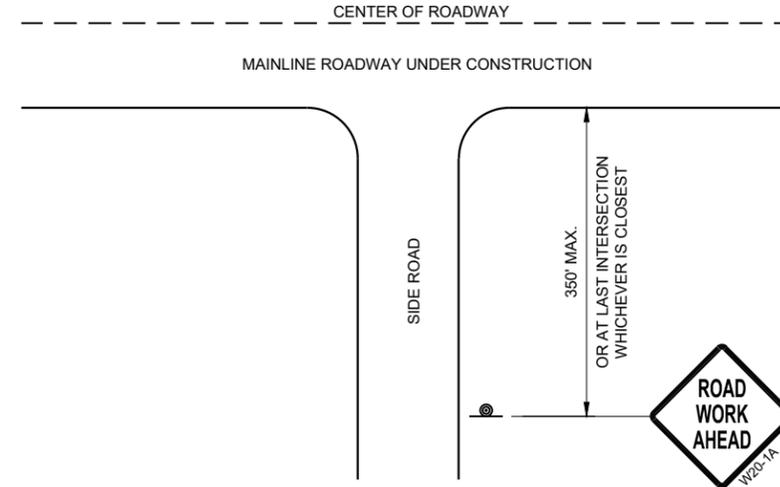
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

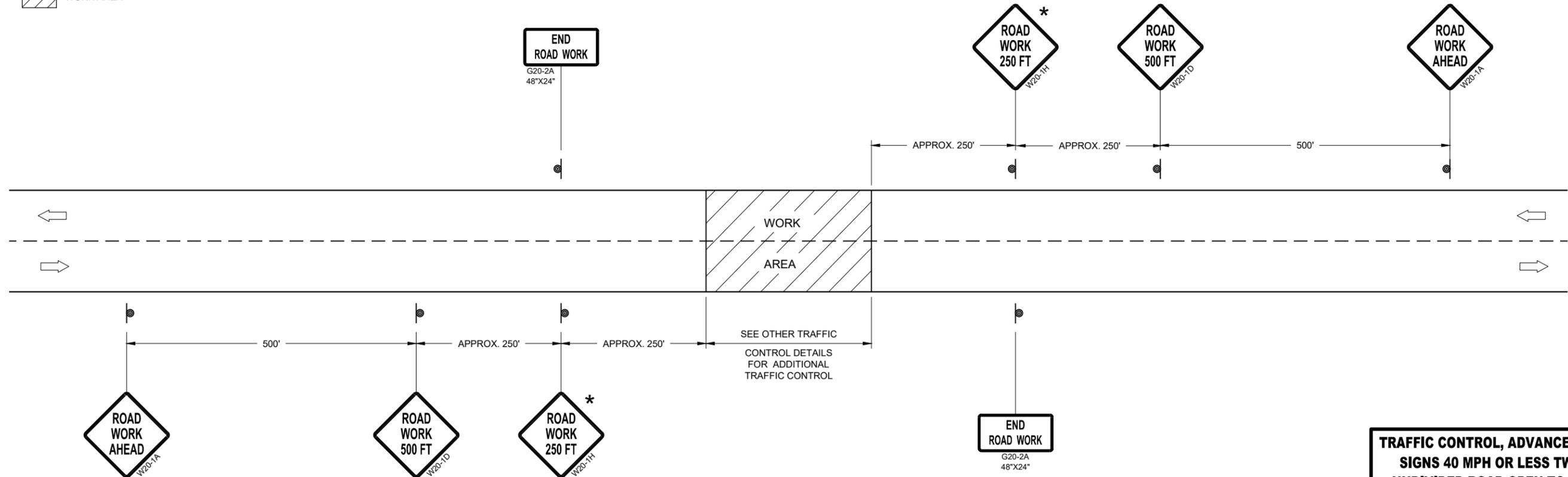
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

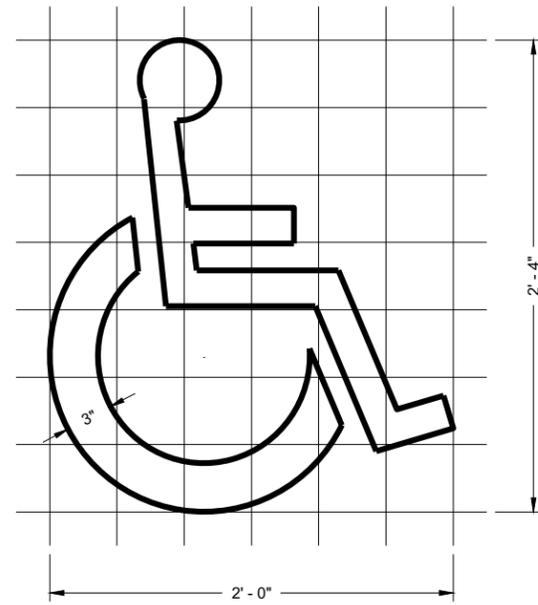
STATE OF WISCONSIN
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APPROVED
DATE July 2018 /S/ Andrew Heidtke
WORK ZONE ENGINEER

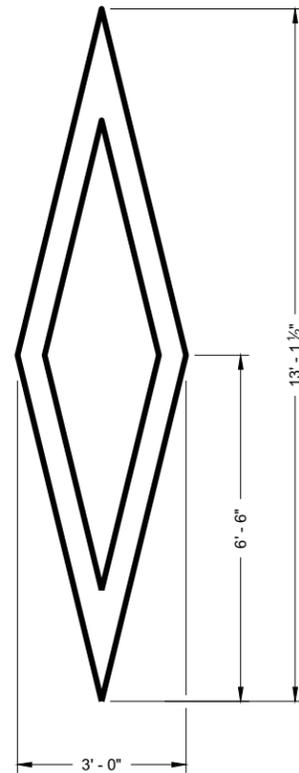
FHWA

GENERAL NOTES

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



HANDICAP SYMBOL



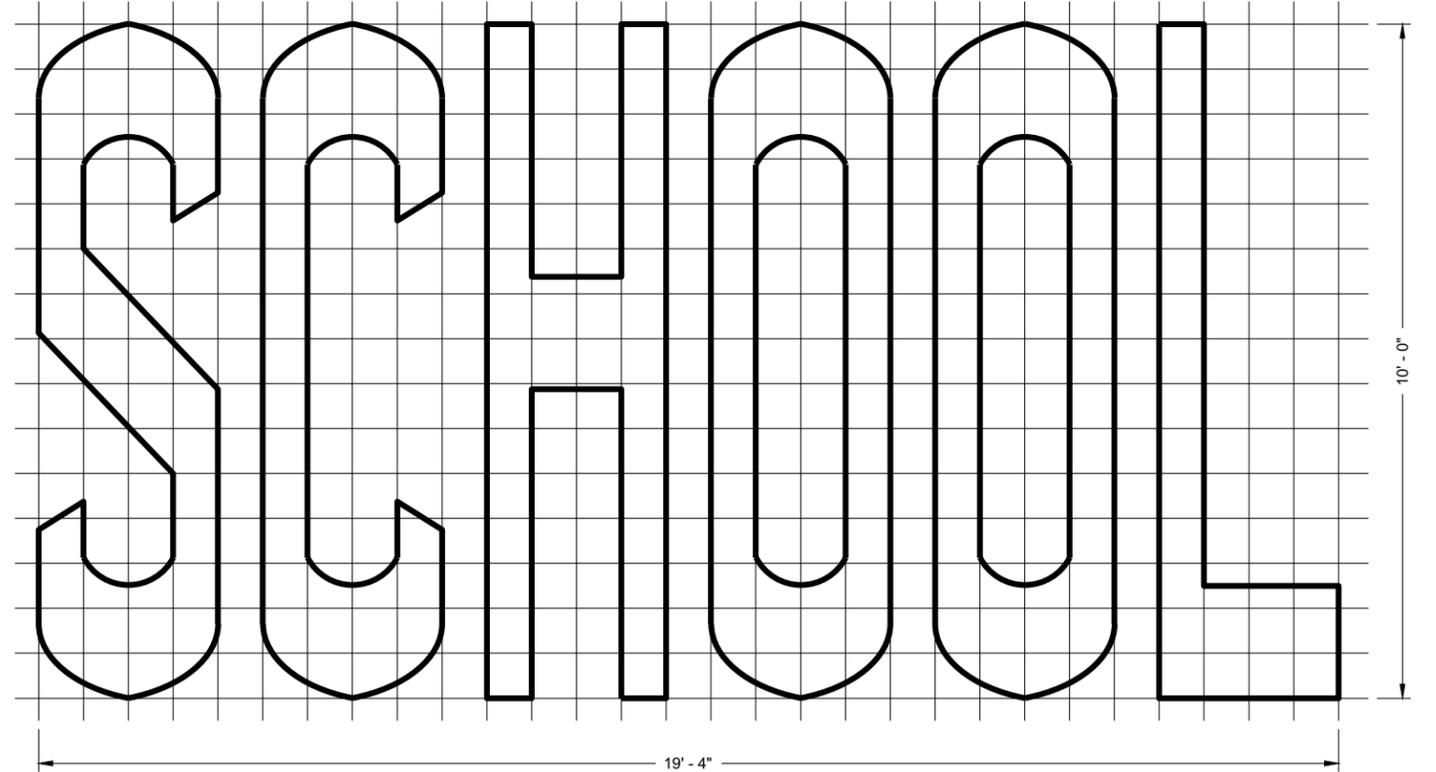
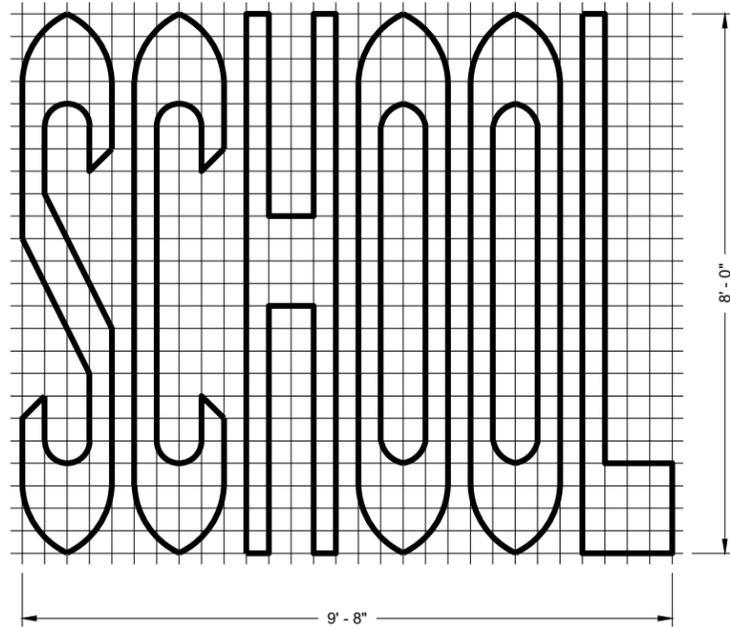
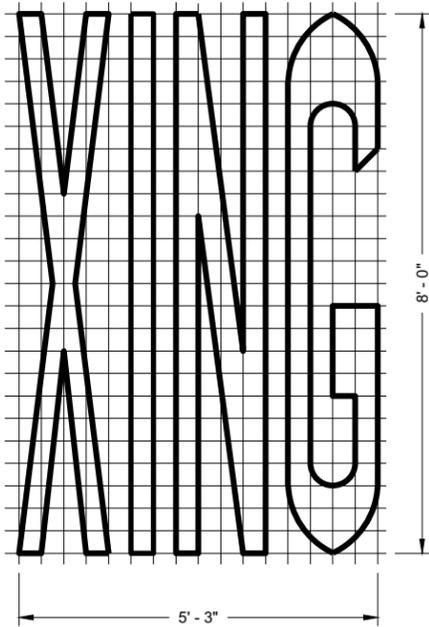
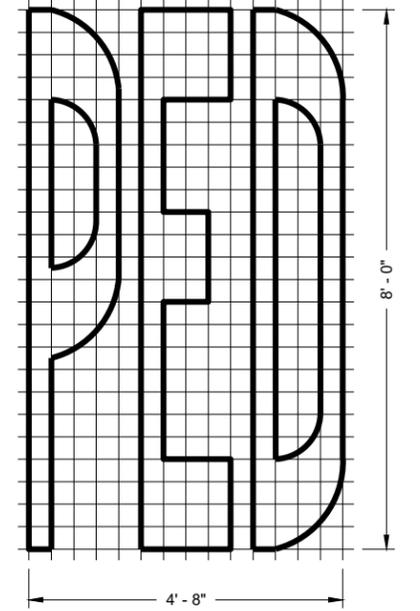
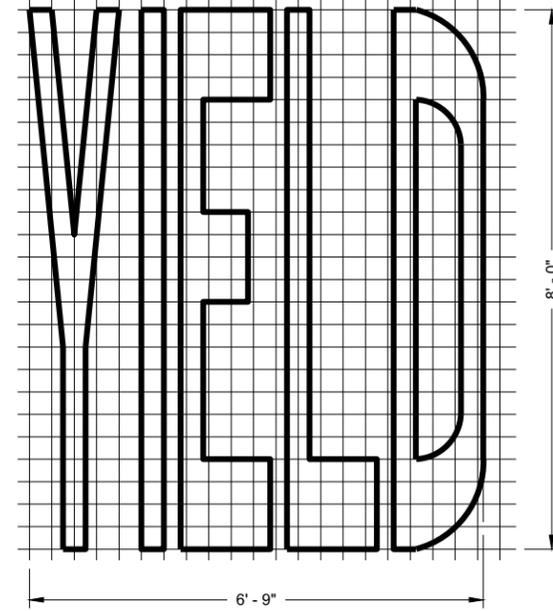
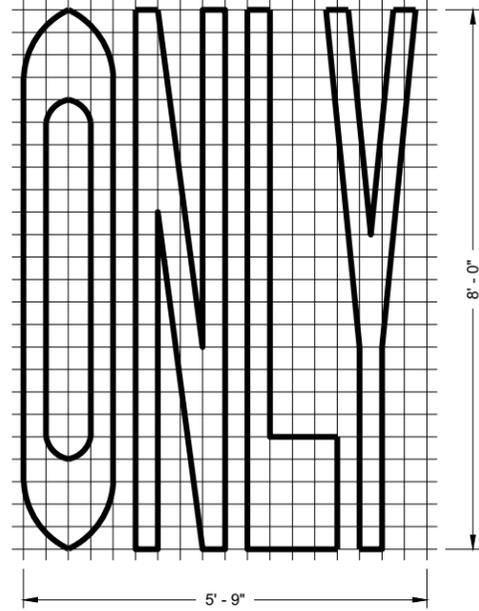
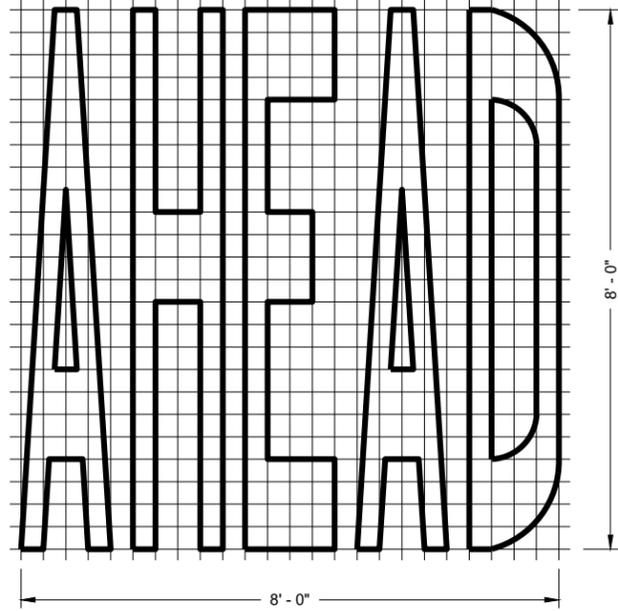
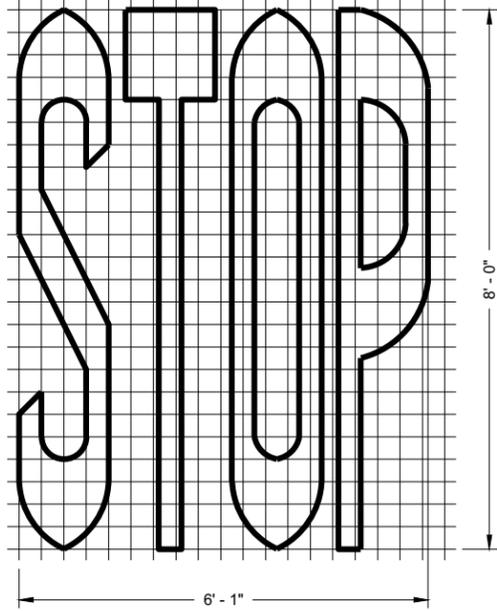
PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
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SINGLE LANE

TWO - LANE

GENERAL NOTES

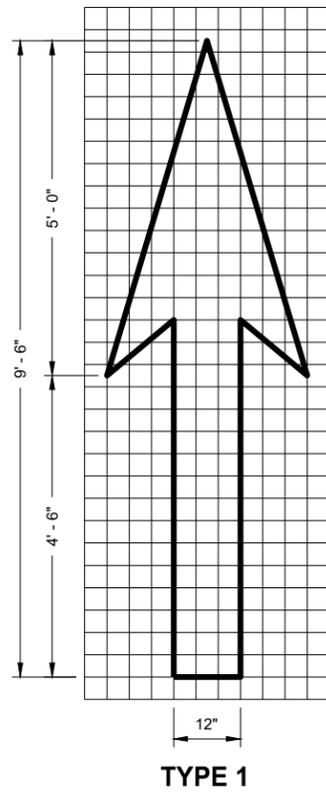
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

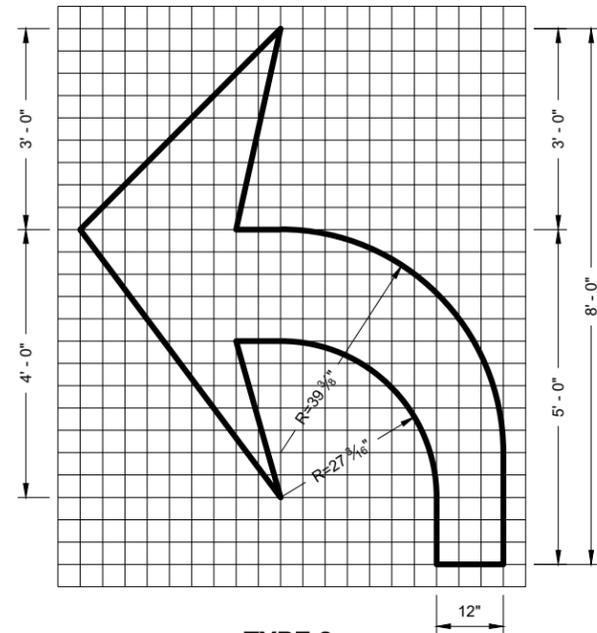
STATE OF WISCONSIN
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November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER

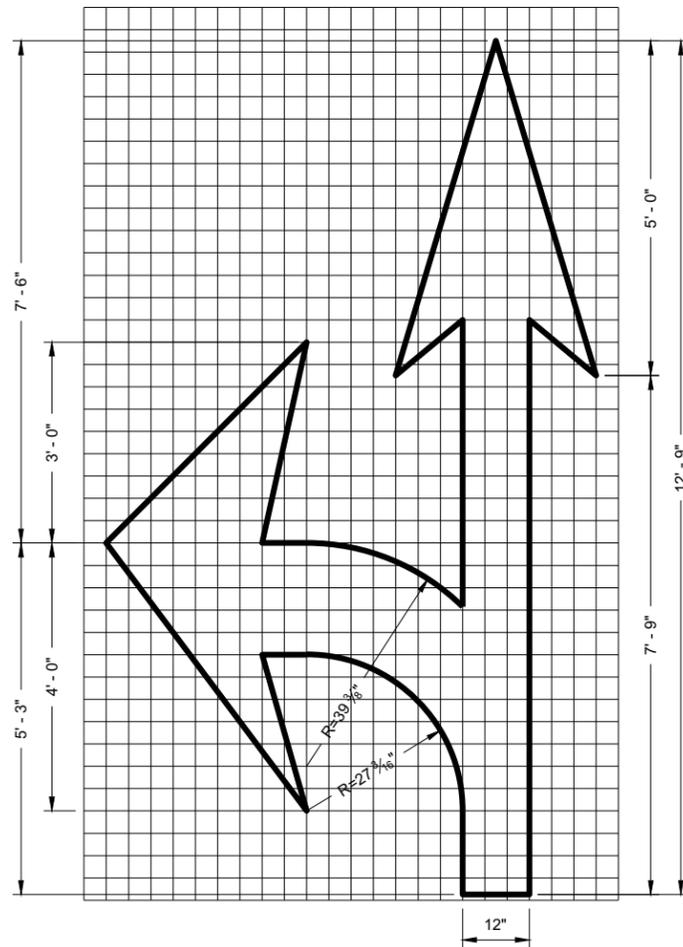
FHWA



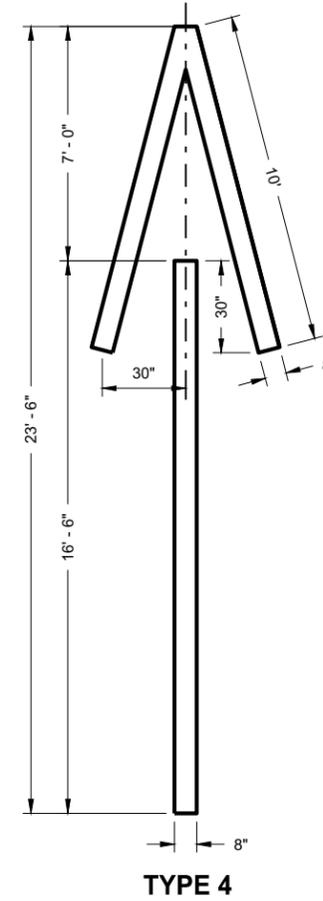
TYPE 1



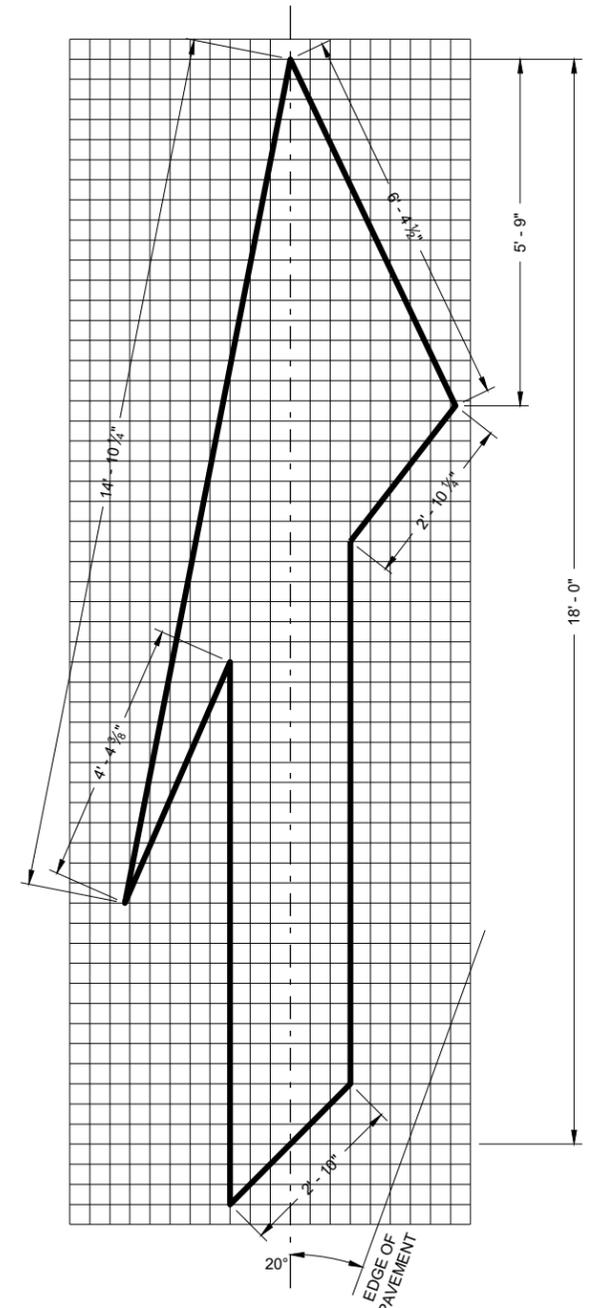
TYPE 2



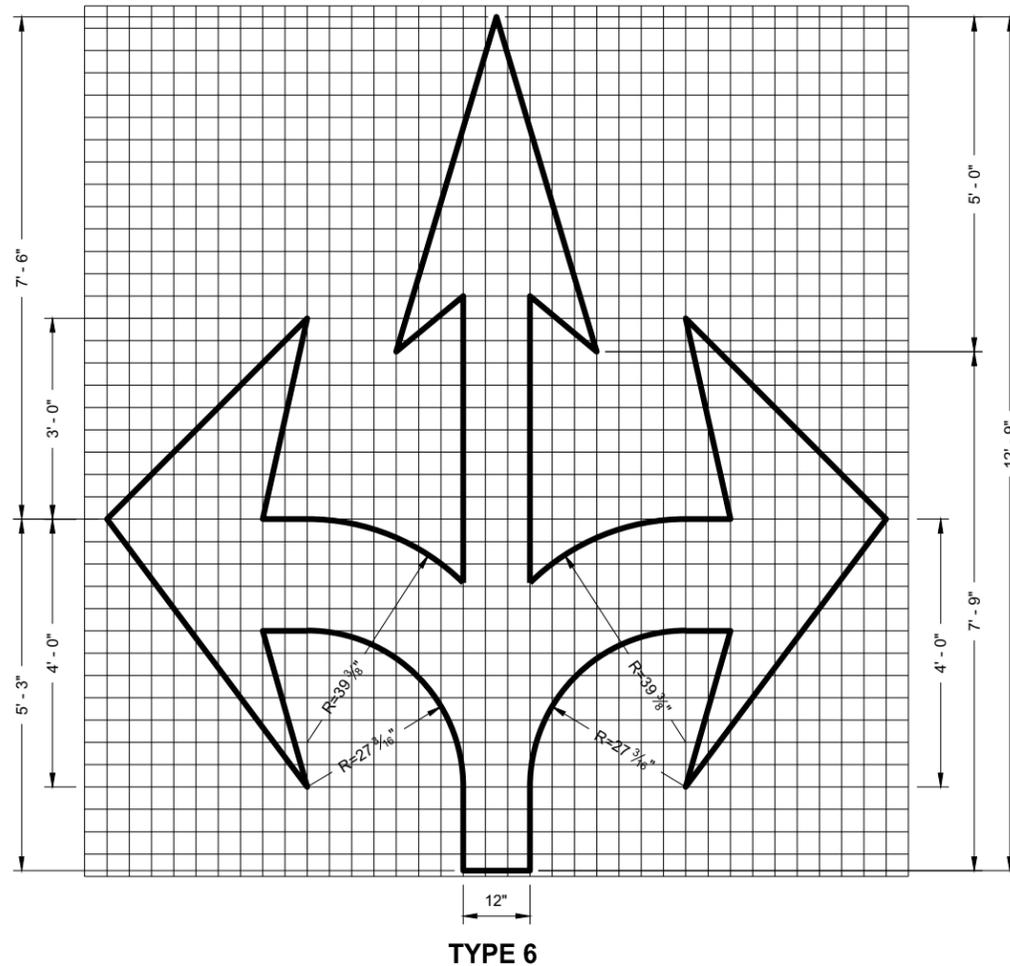
TYPE 3



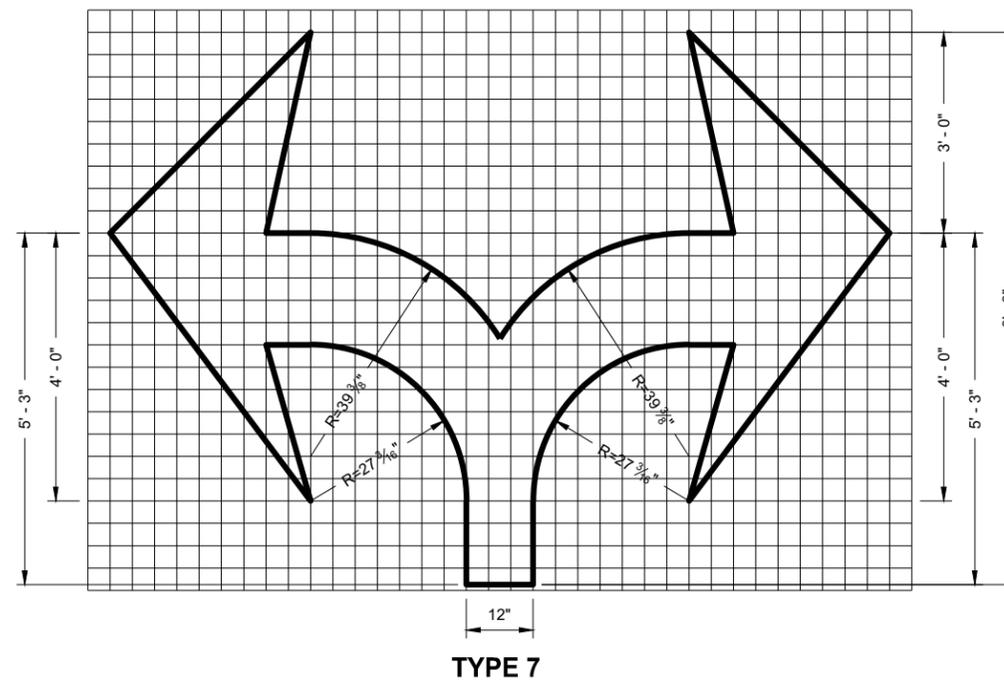
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

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

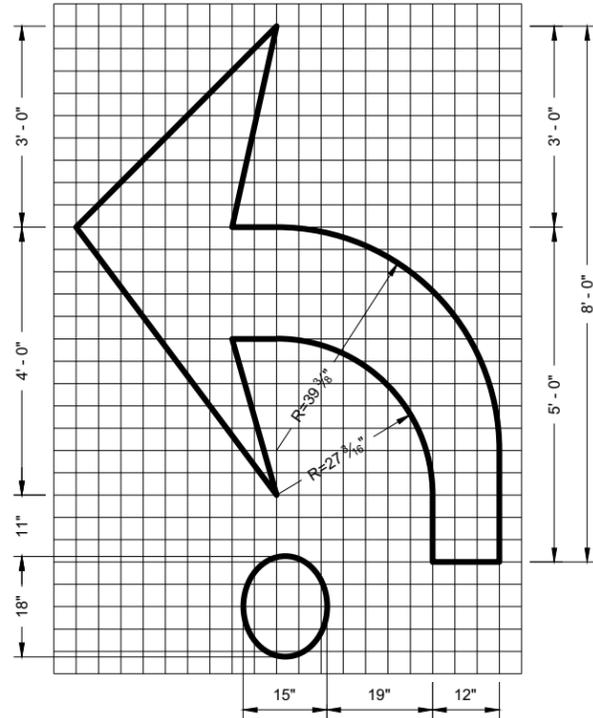
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

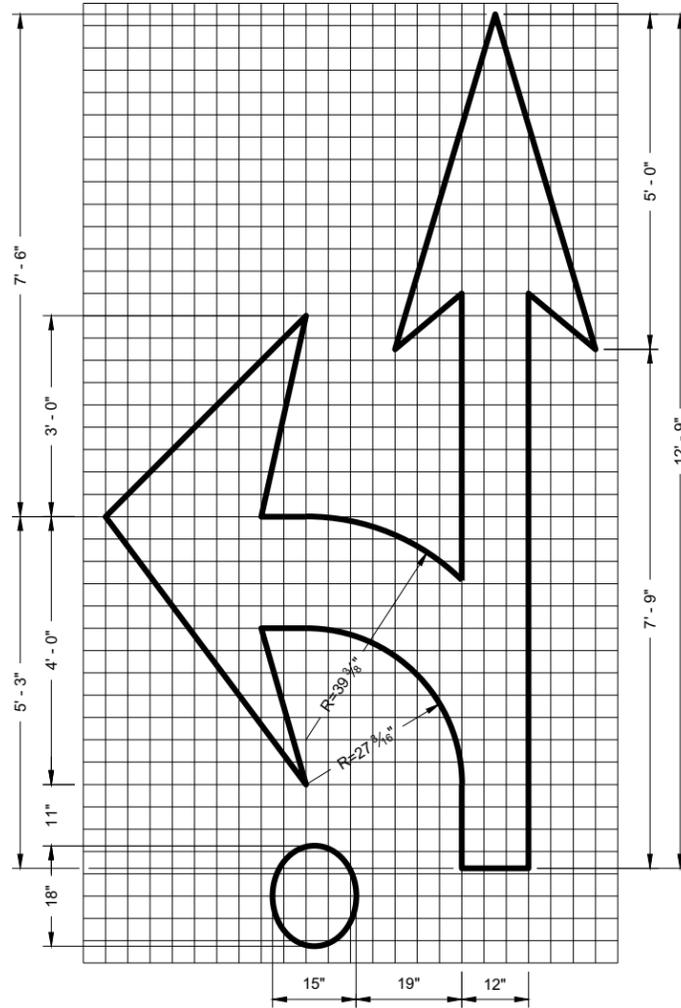
APPROVED
November 2019
DATE /S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA

GENERAL NOTES

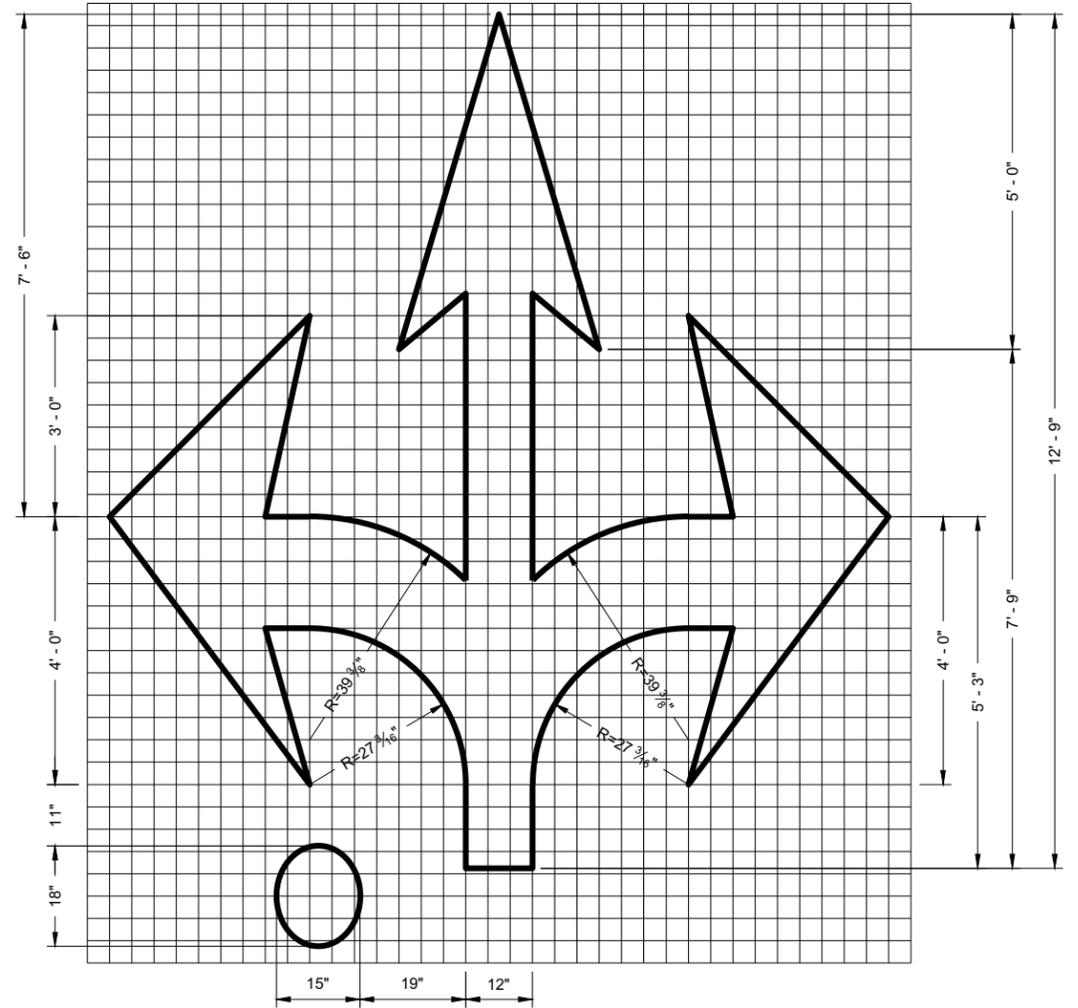
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



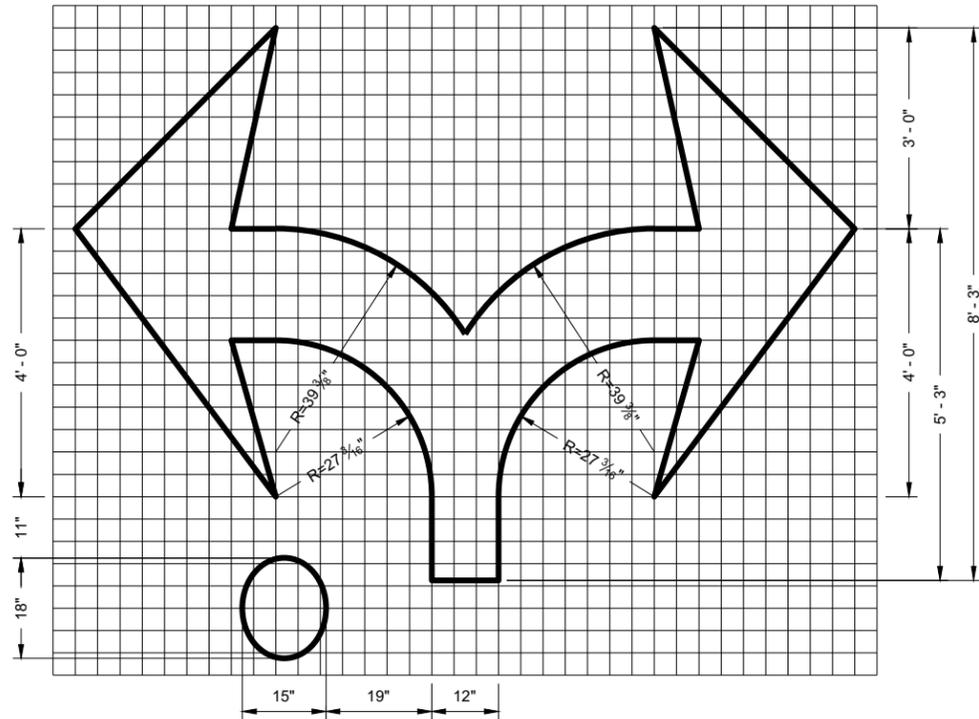
TYPE 2R



TYPE 3R



TYPE 6R



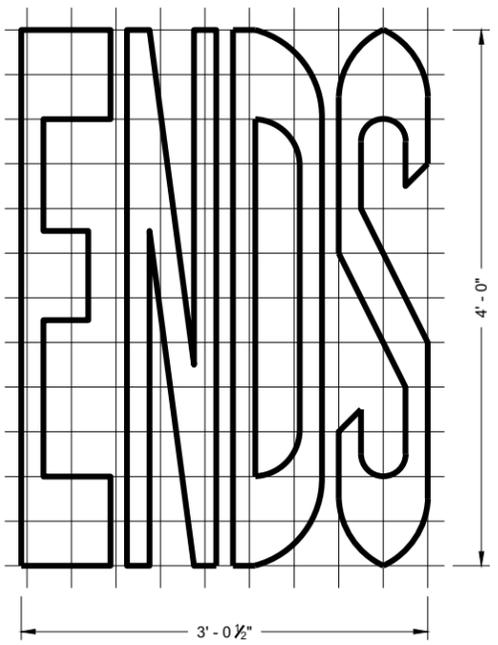
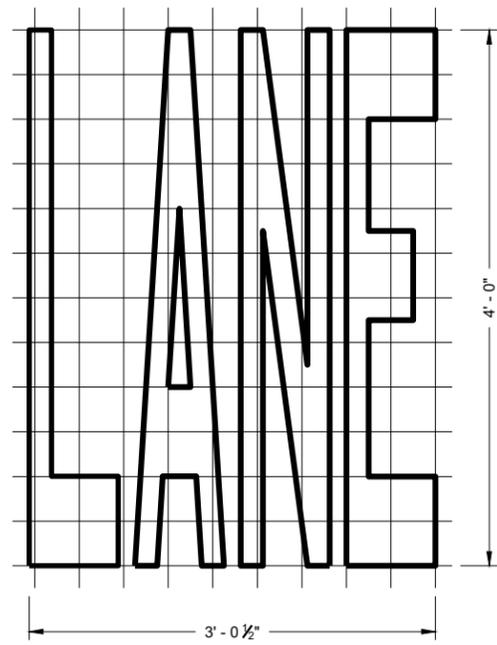
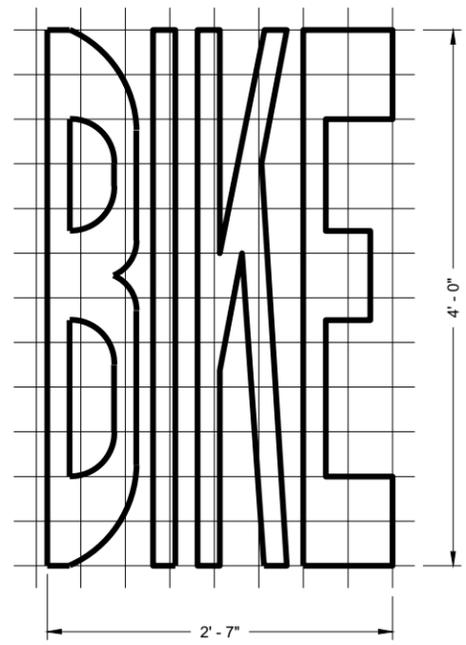
TYPE 7R

**ROUNDBOUT
MARKING ARROWS**

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DEPARTMENT OF TRANSPORTATION

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DATE STATE SIGNING AND MARKING
ENGINEER

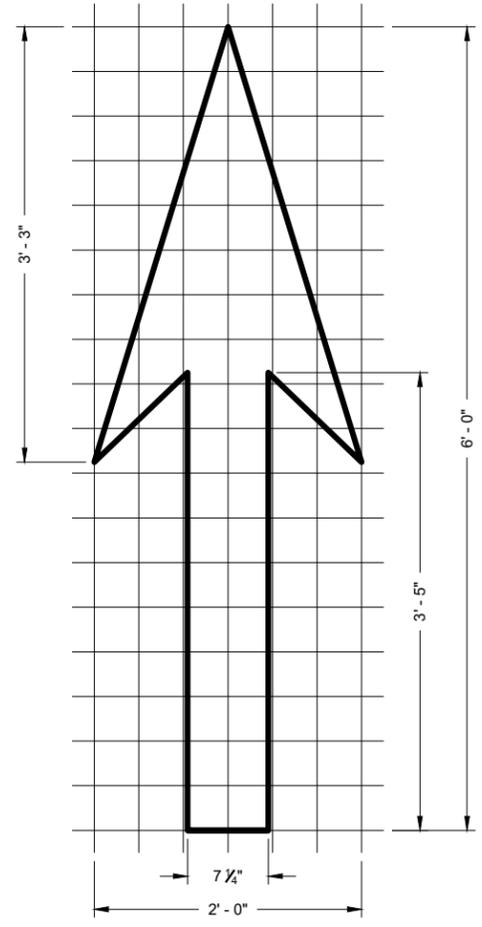
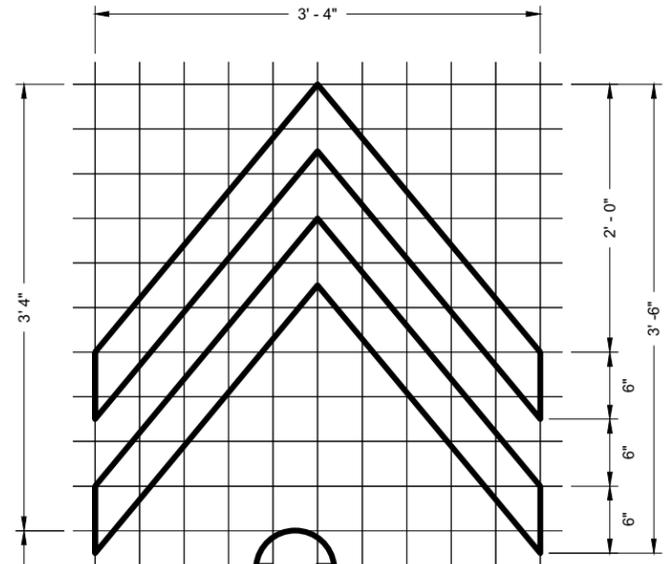
FHWA



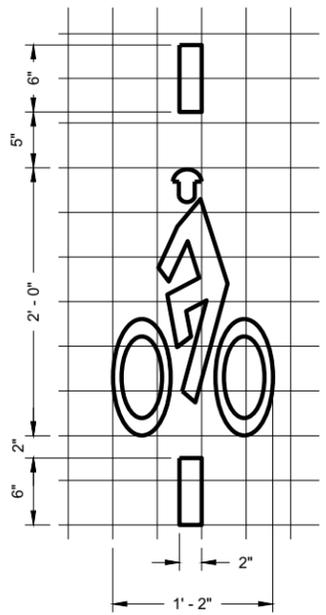
BIKE LANE WORDS

GENERAL NOTES

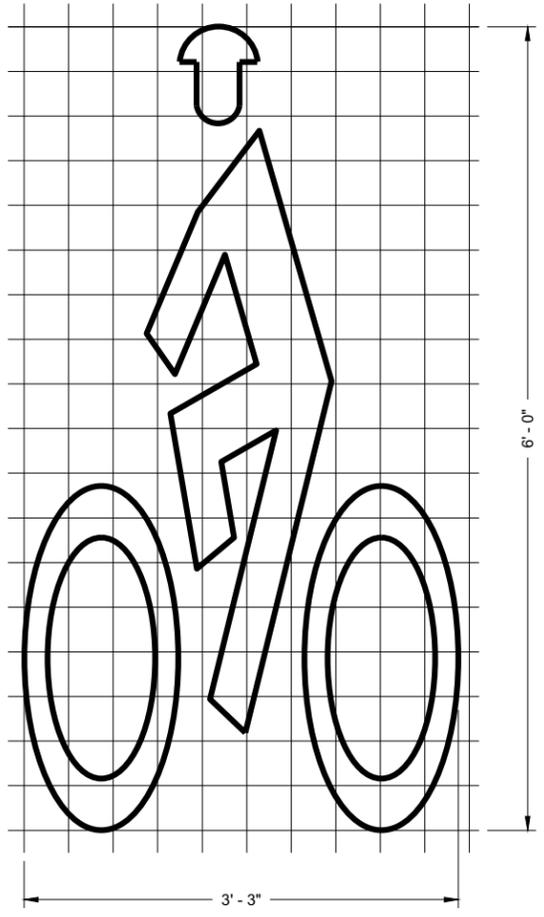
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



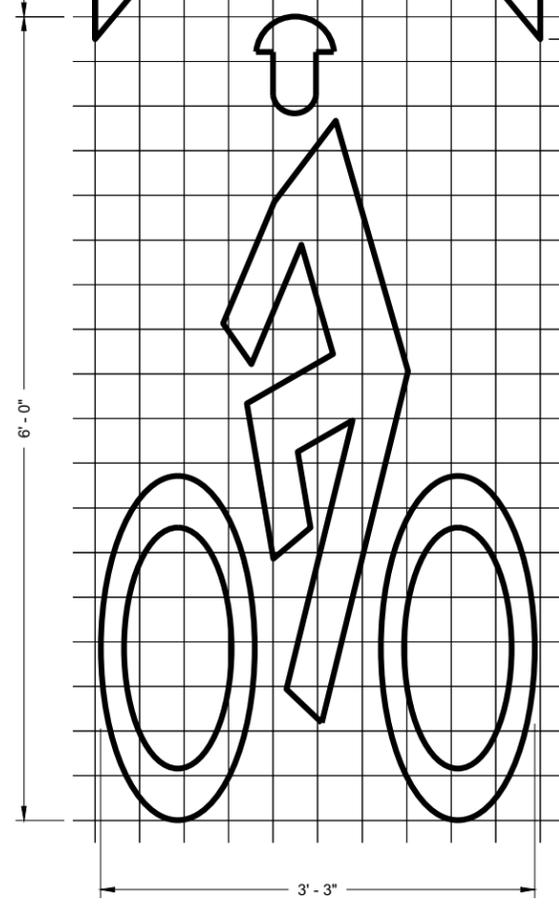
BIKE LANE ARROW



BIKE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

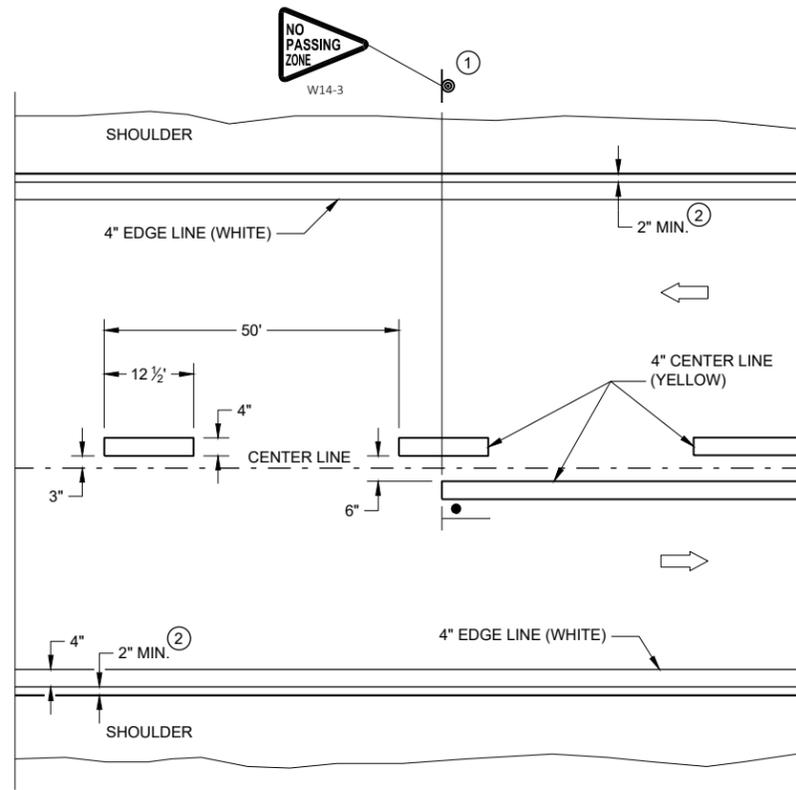


BIKE LANE SYMBOL FOR SHARED LANE

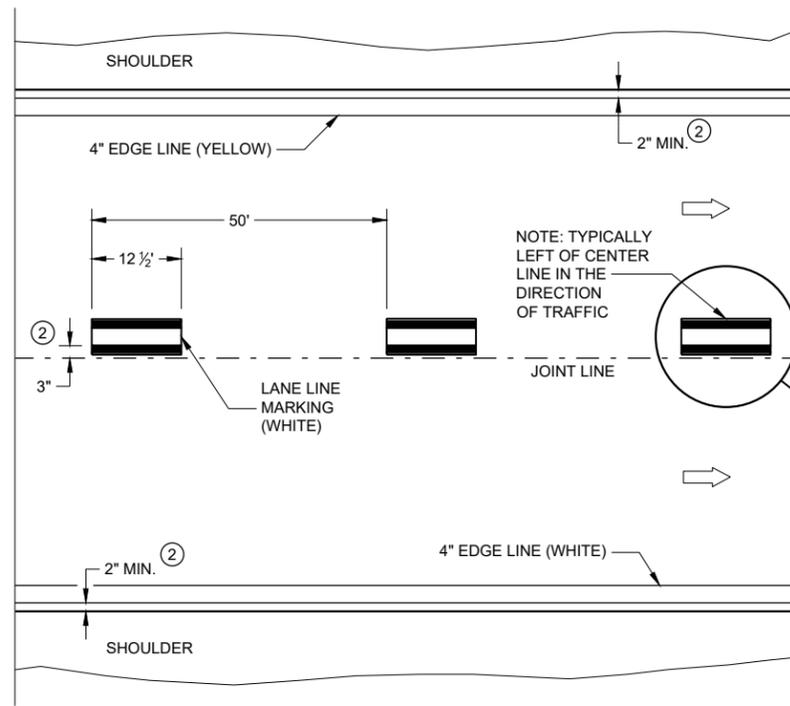
6

6

PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/s/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

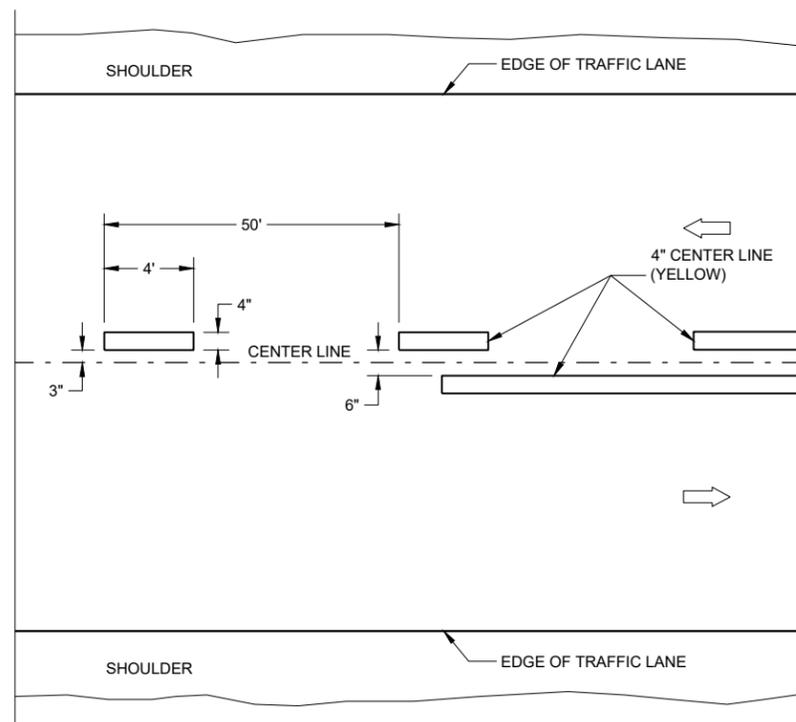


TWO WAY TRAFFIC

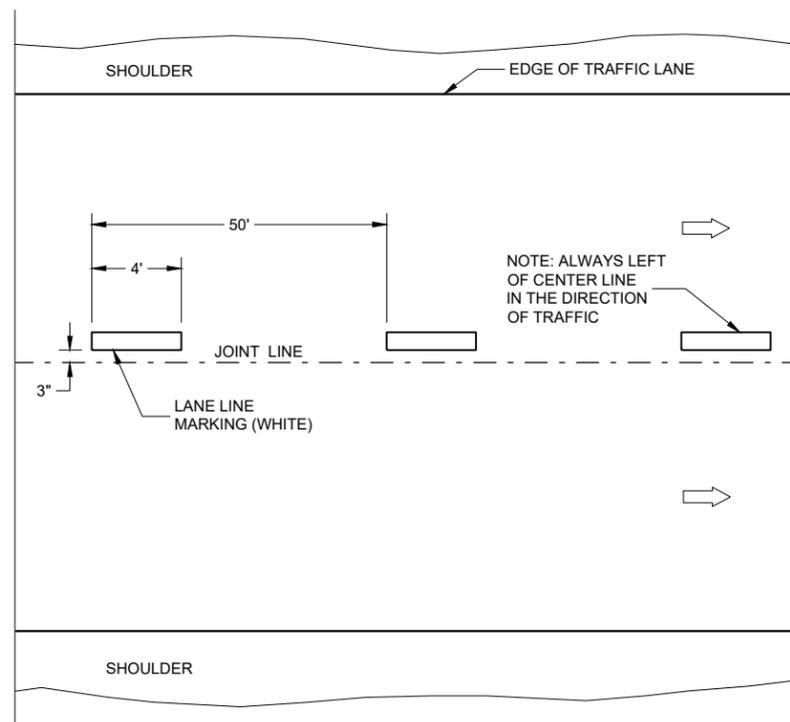


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

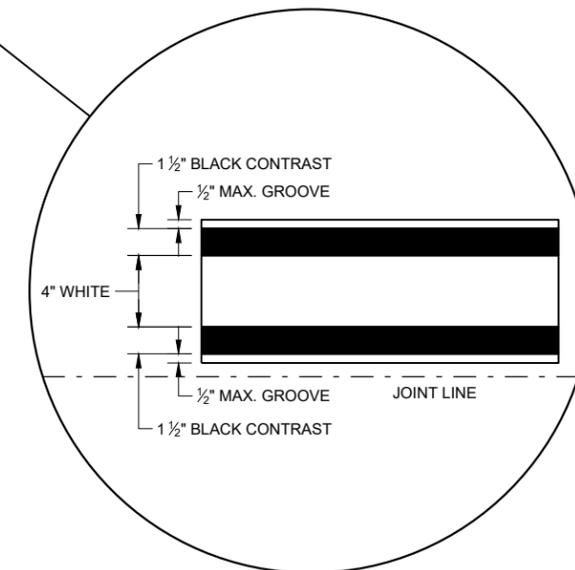
GENERAL NOTES

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

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

LEGEND

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



**LONGITUDINAL MARKING
(MAINLINE)**

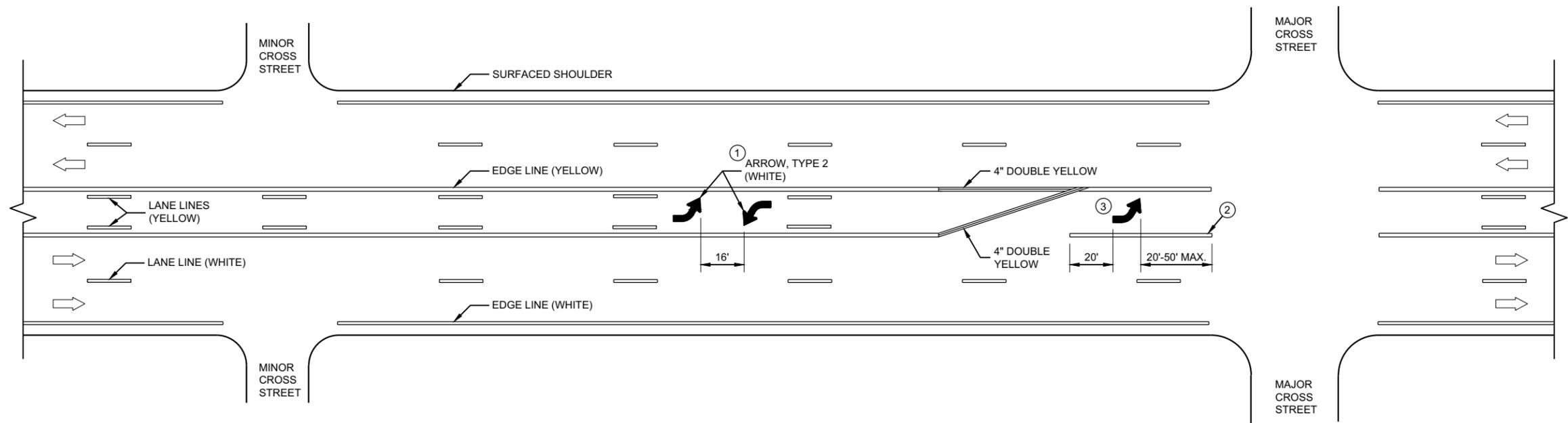
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

GENERAL NOTES

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

➡ DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

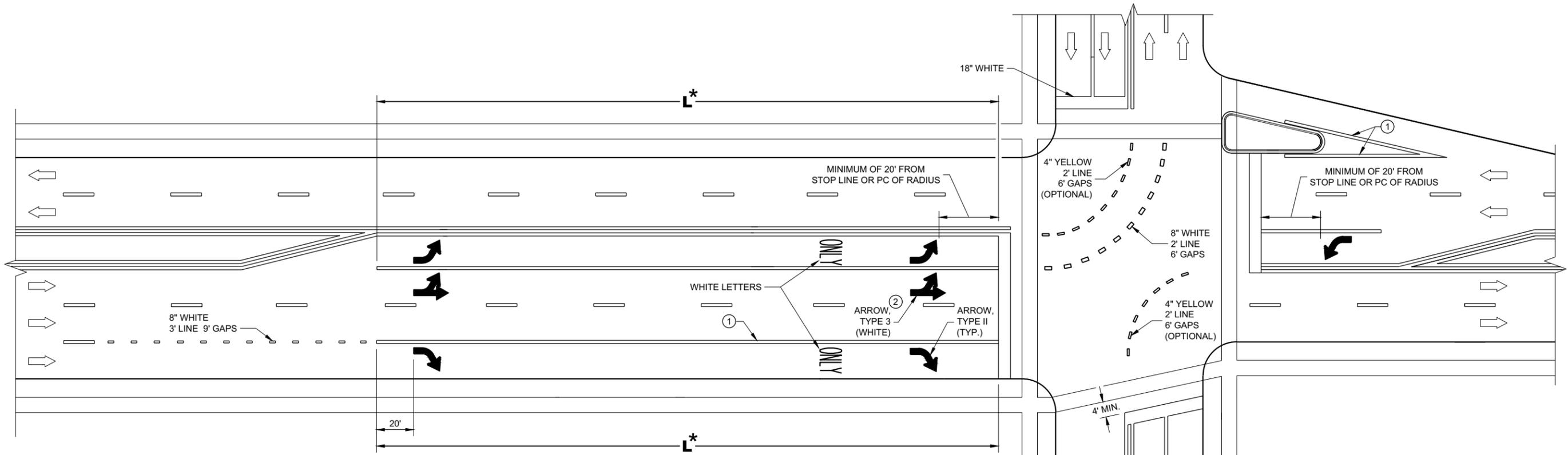
6

SDD 15C08 - 20b

SDD 15C08 - 20b

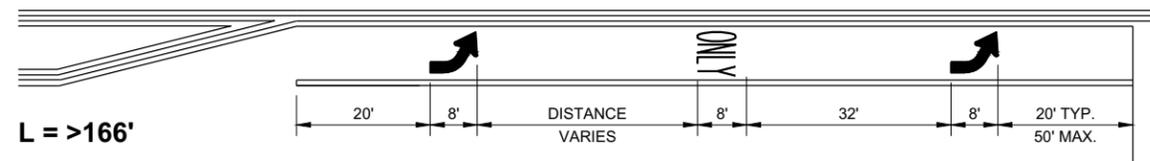
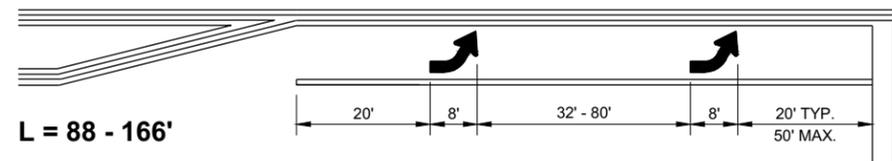
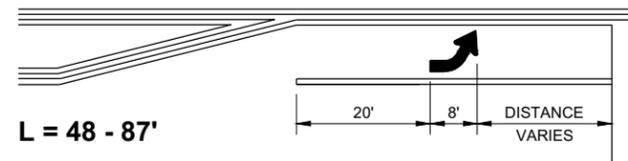
**PAVEMENT MARKING
(TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TURN LANE OPTIONS

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



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

GENERAL NOTES

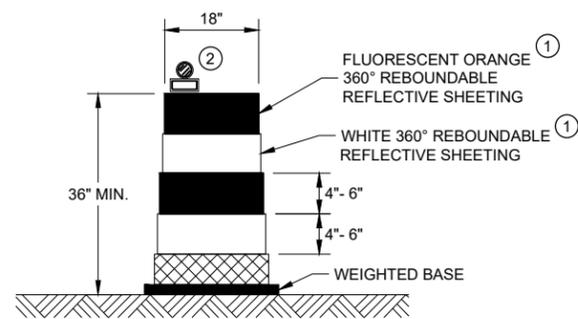
- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

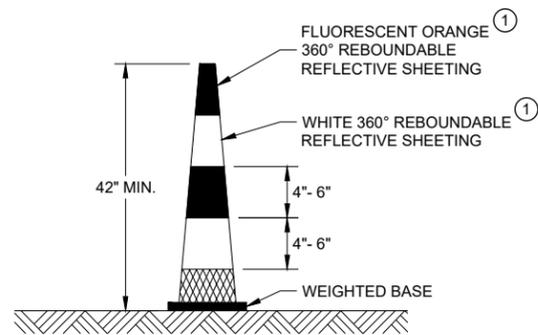
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

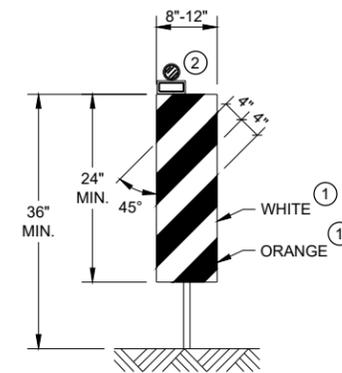


DRUM



42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

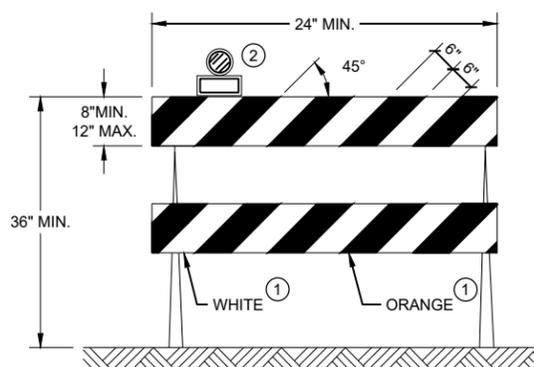


VERTICAL PANEL

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

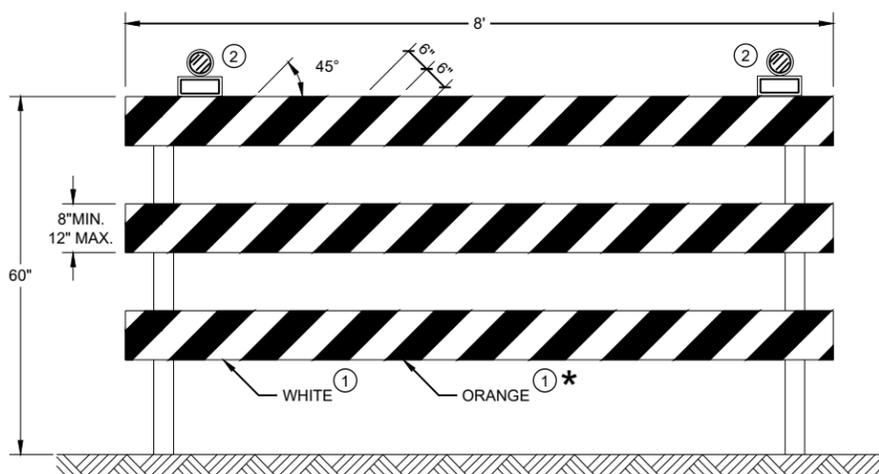
GENERAL NOTES

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

LEGEND

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

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

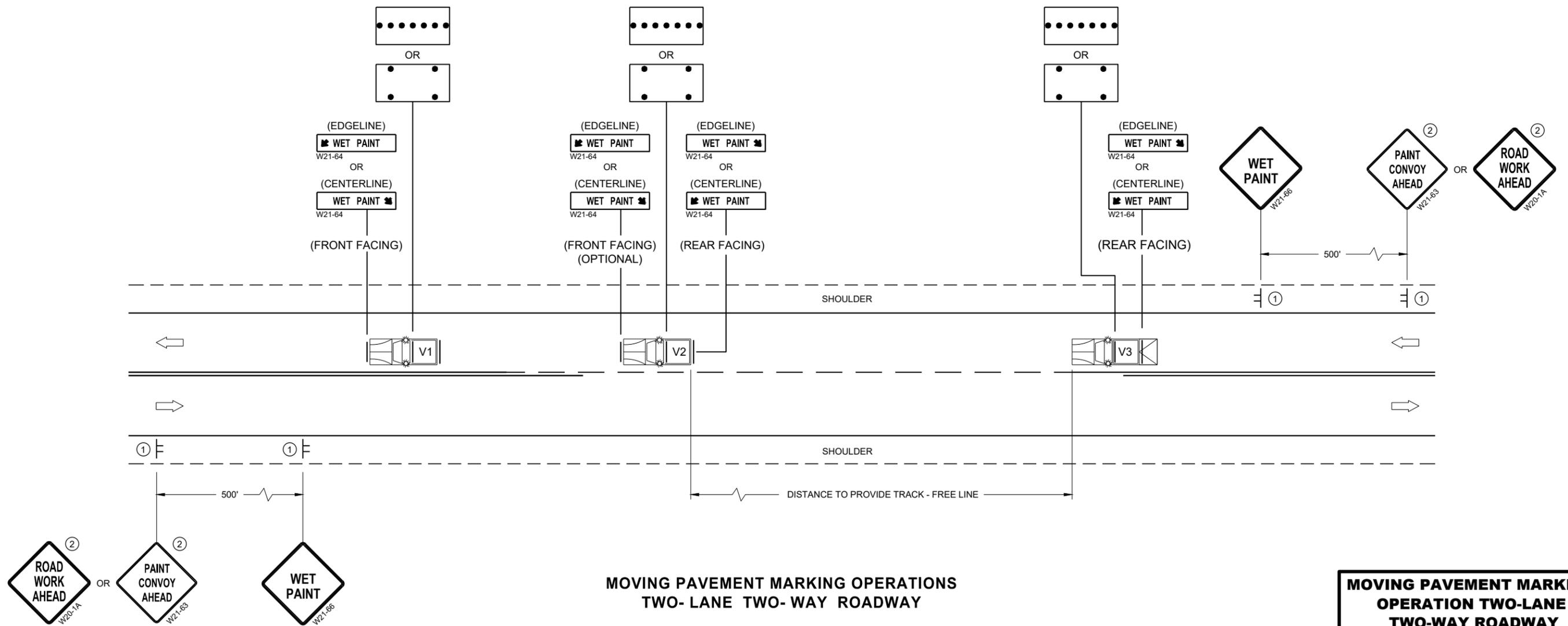
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

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

SDD 15C19 - 06a

SDD 15C19 - 06a

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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.

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

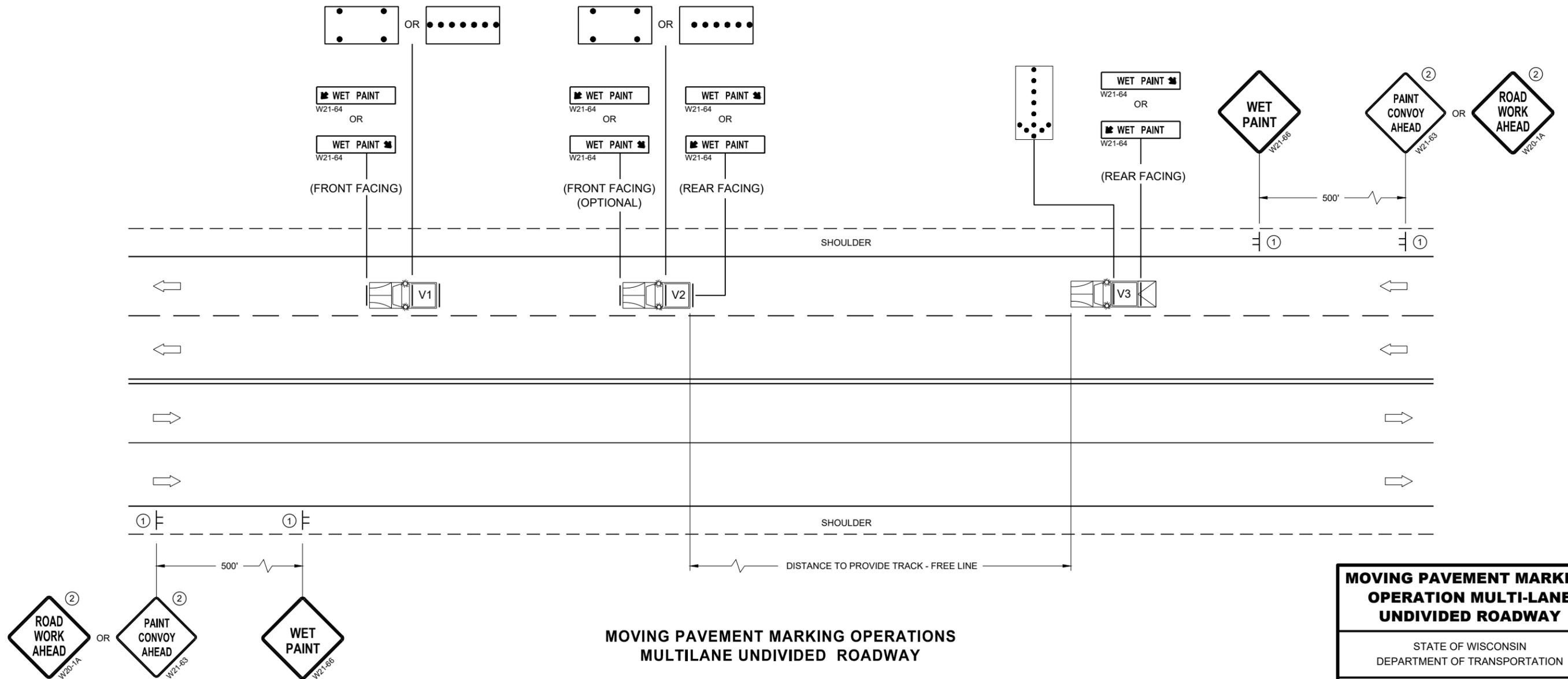
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

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**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE UNDIVIDED ROADWAY**

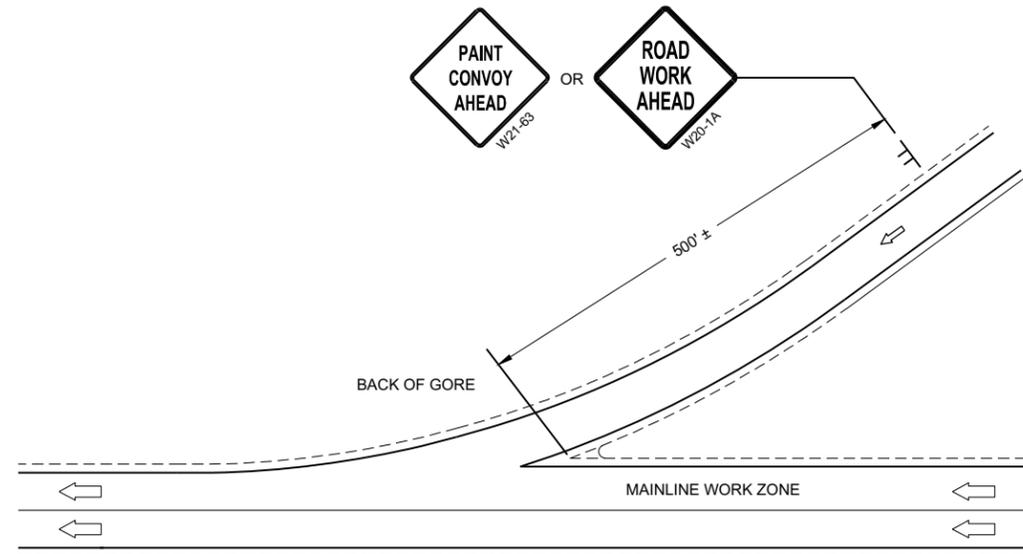
MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

SDD 15C19 - 06b

SDD 15C19 - 06b

LEGEND

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



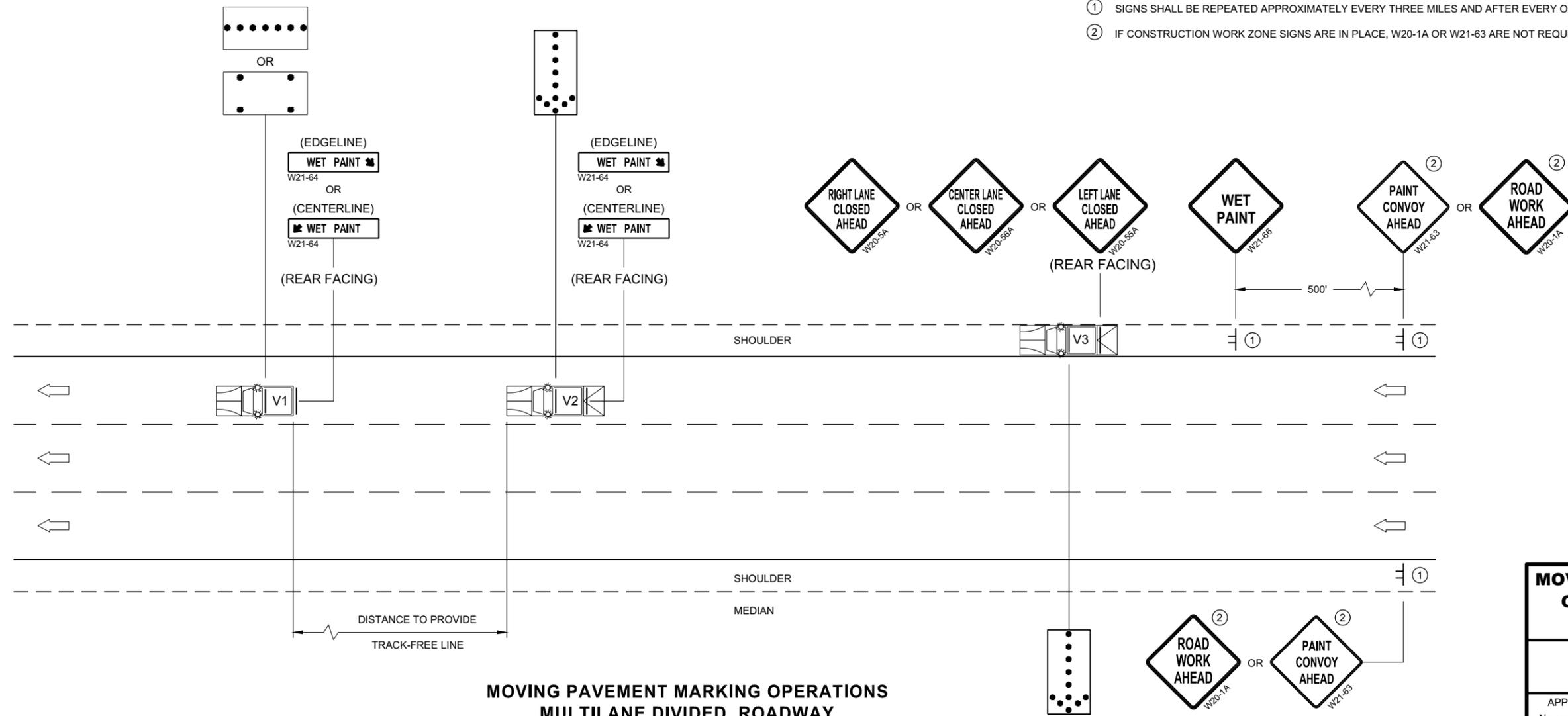
GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- 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 REAR MOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.
- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC
- CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- CONES SHALL BE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

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SDD 15C19 - 06C

SDD 15C19 - 06C

**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY**

**MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
DIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

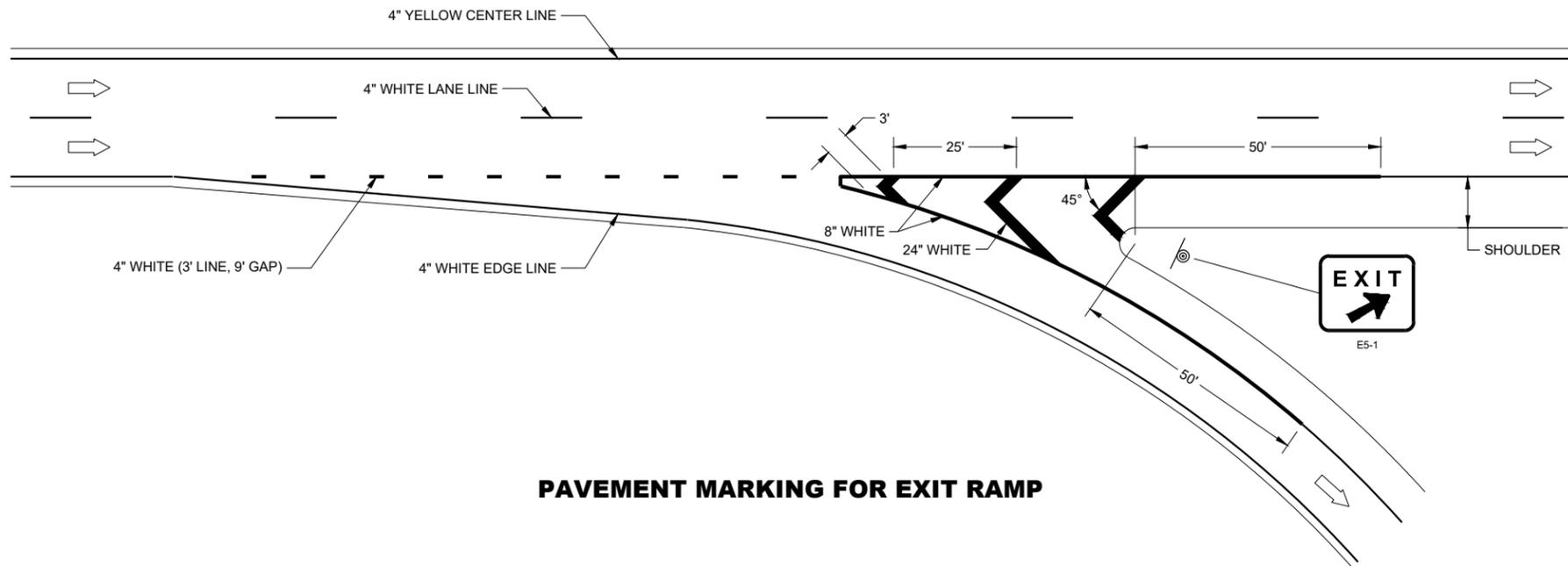
FHWA

GENERAL NOTES

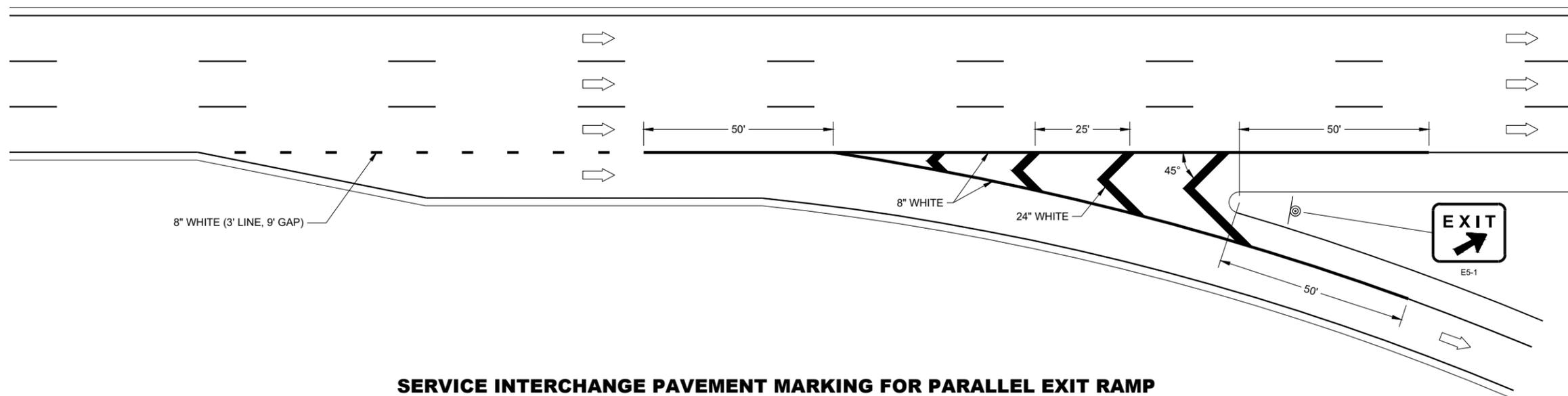
PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAVEL



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

**PAVEMENT MARKING,
EXIT RAMP AND
PARALLEL EXIT RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C31 - 04a

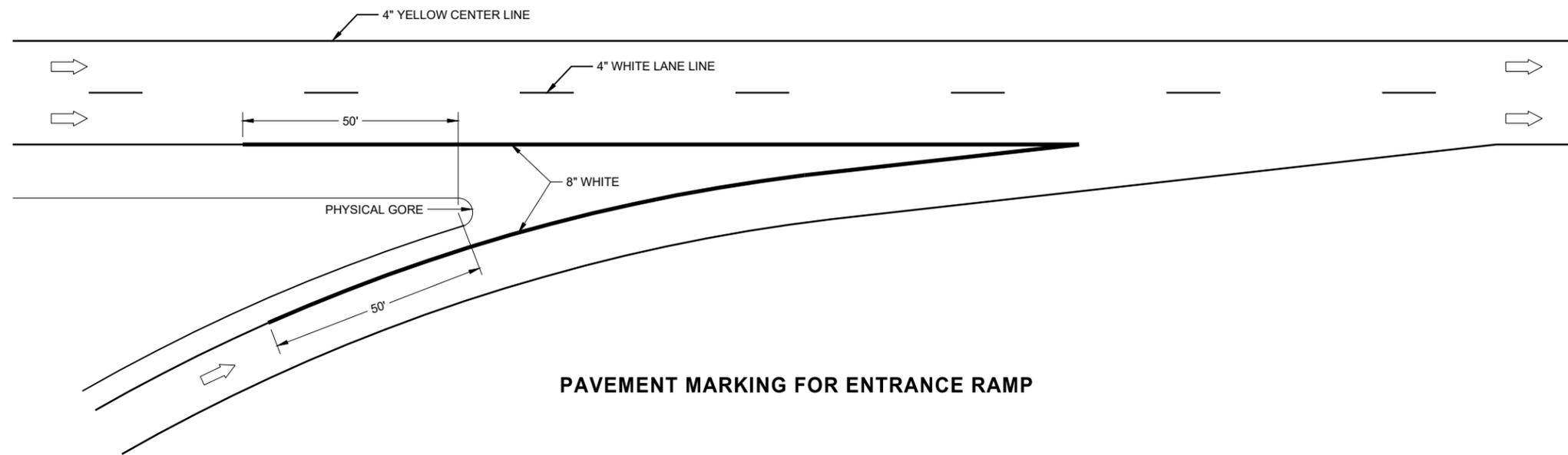
SDD 15C31 - 04a

GENERAL NOTES

- PLACE GROOVE 3 INCHES LEFT OF JOINT.
- ① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

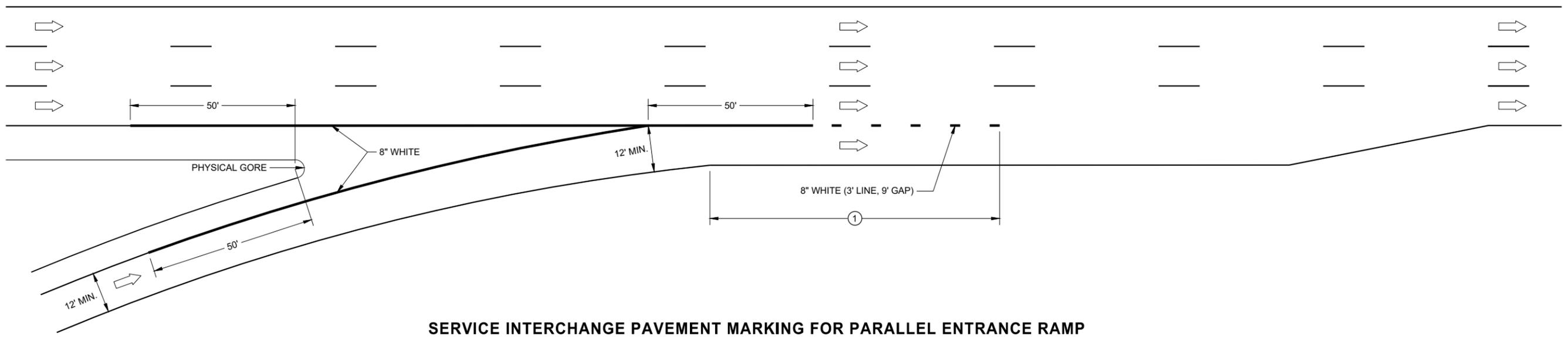
➡ DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP

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SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

SDD 14C31 - 04c

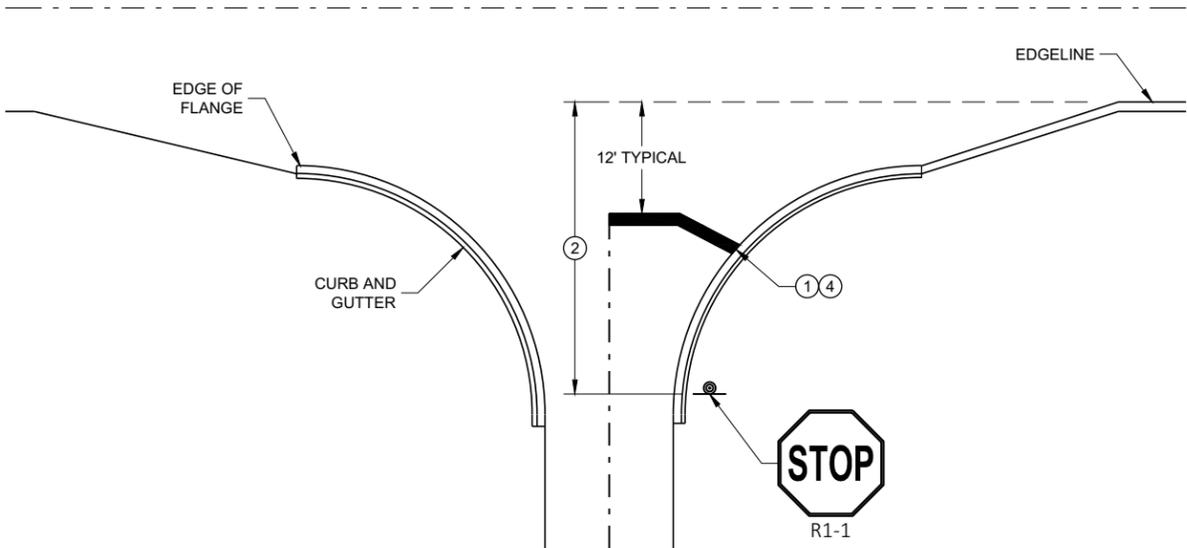
SDD 14C31 - 04c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

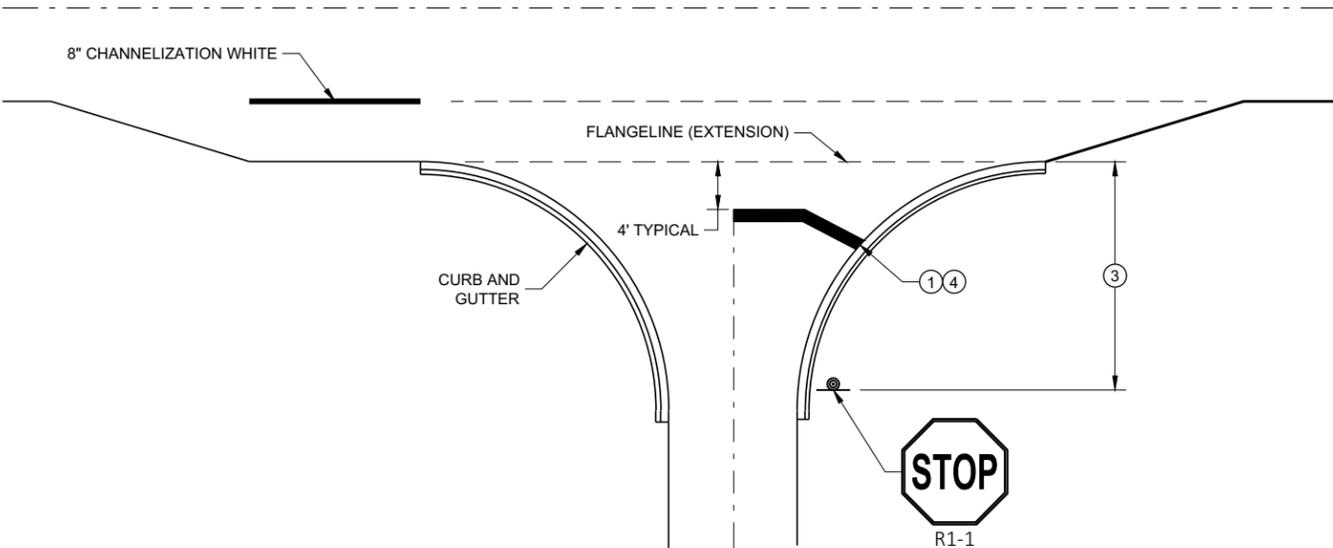
GENERAL NOTES

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

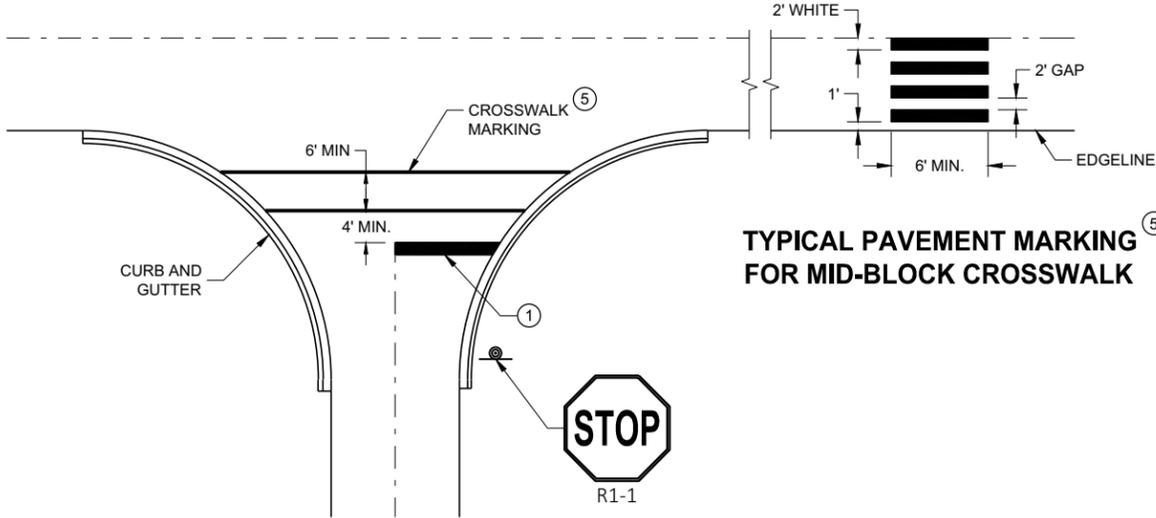
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

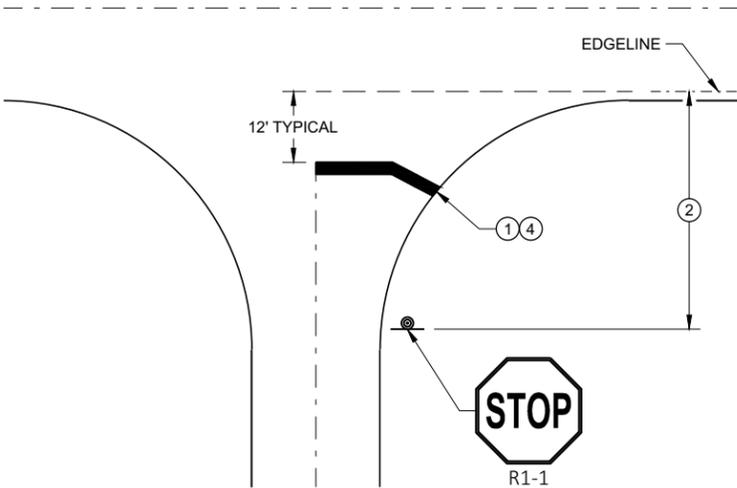


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

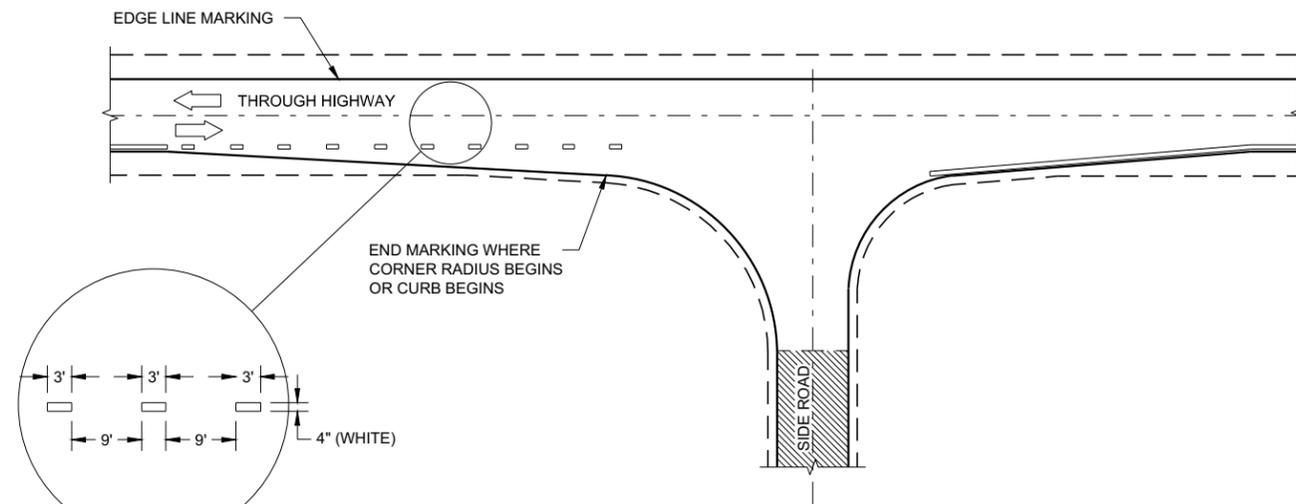
GENERAL NOTES

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

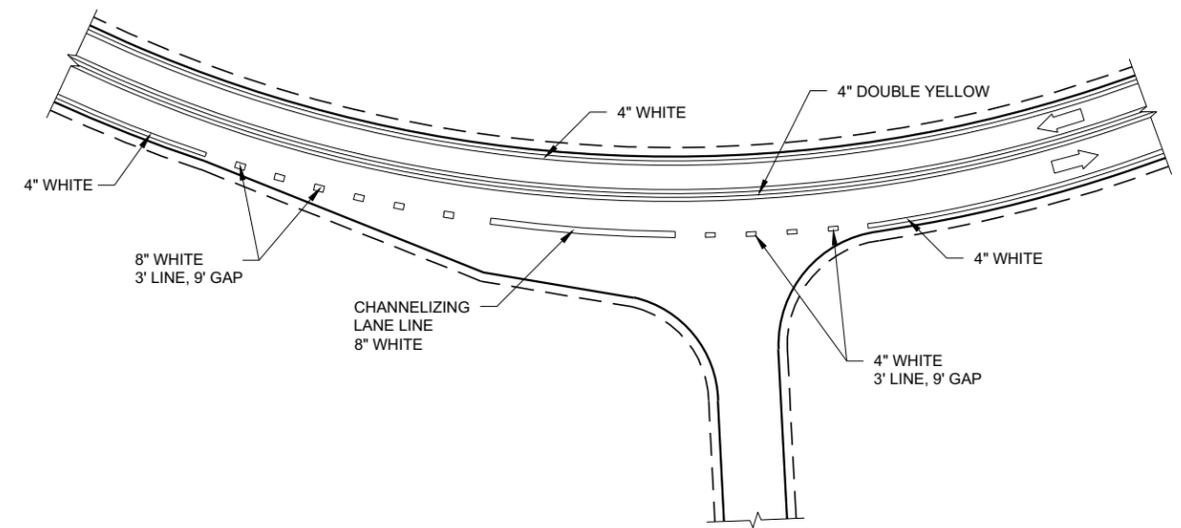
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

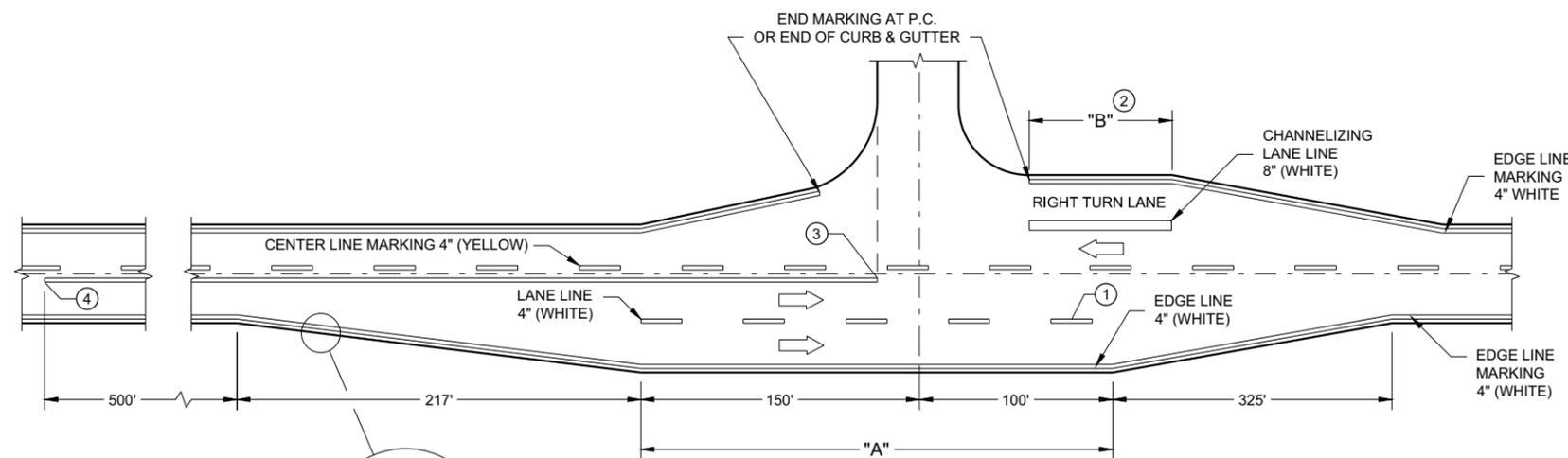
➡ DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



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

**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

ALL SIGNS ARE 48"X48" BLACK ON ORANGE UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

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

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

ONLY ONE QUADRANT OF TRAFFIC SHALL BE RELEASED AT A TIME.

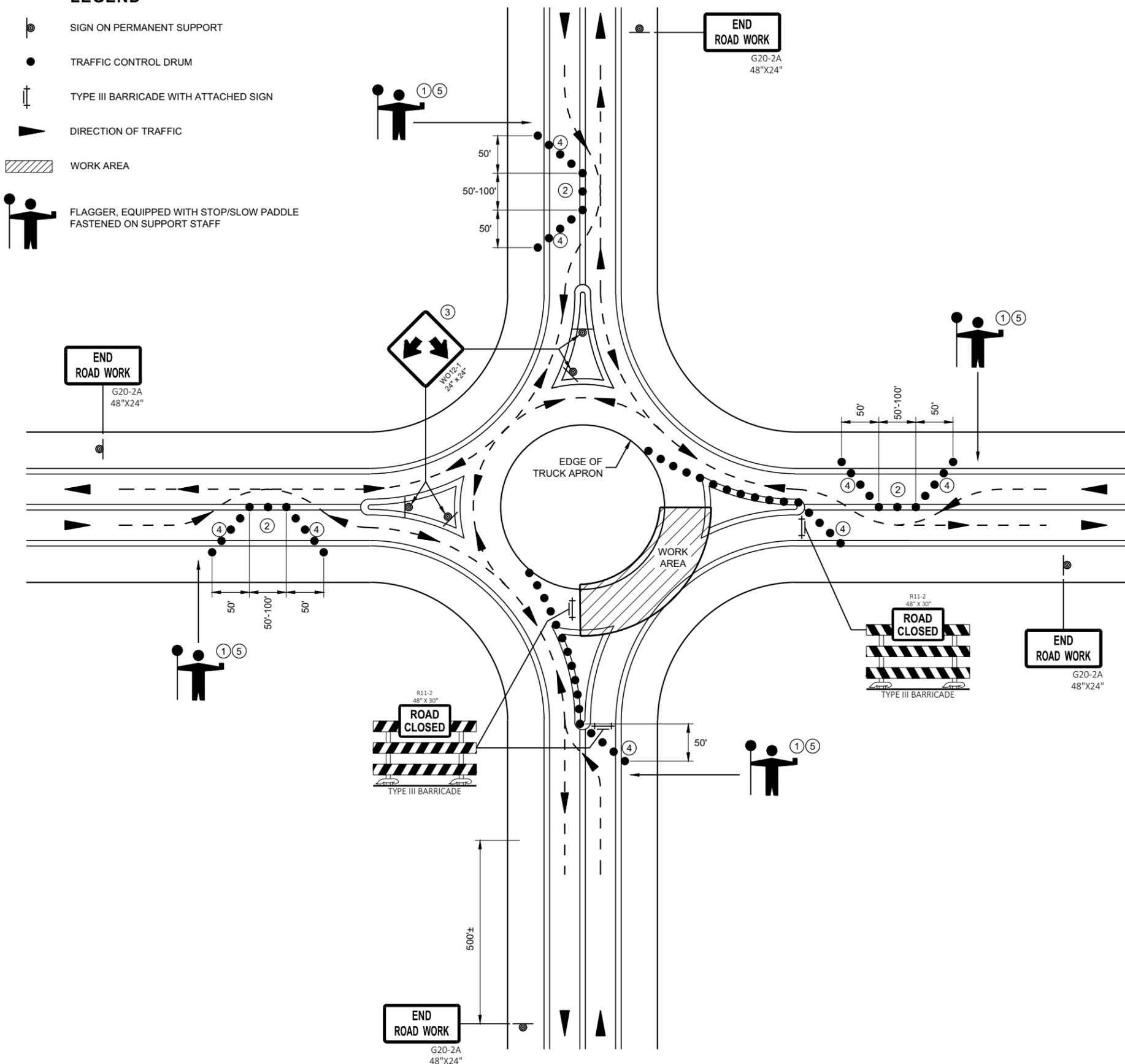
FLAGGERS SHALL CONTROL TRAFFIC ON ALL APPROACHES OF THE ONE-LANE ROUNDABOUT. ONE FLAGGER SHALL BE DESIGNATED LEAD FLAGGER.

NIGHT TIME WORK REQUIRES ADDITIONAL LIGHTING AT FLAGGER STATION(S).

- ① FLAGGERS SHALL BE IN DIRECT RADIO CONTACT AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.
- ② ADJUST CHANNELIZING DEVICES TO ACCOMMODATE FOR TURNING RADIUS OF LARGE VEHICLES AS DIRECTED BY THE ENGINEER.
- ③ GUIDE SIGN WITH ROAD NAMES MAY BE USED IN LIEU OF THE DOUBLE ARROW (WO12-1) SIGN.
- ④ THE TWO-WAY TAPER SHOULD BE 50 FEET USING 5 EQUALLY SPACED DRUMS.
- ⑤ FOLLOW SDD 15C12 FOR FLAGGING AND ADVANCE WARNING.

RECOMMENDED REDUCED DRUM SPACING WITHIN ROUNDABOUT

MPH	DRUM SPACING (FT)
0-40	25
45-55	50



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SDD 15D37 - 03

SDD 15D37 - 03

**TRAFFIC CONTROL,
FLAGGING OPERATION,
ROUNDABOUT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED _____
DATE May 2020 /S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

LEGEND

- V1 WORK VEHICLE
- V2 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  FLASHING ARROW PANEL (CAUTION)
-  WORK AREA
-  DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

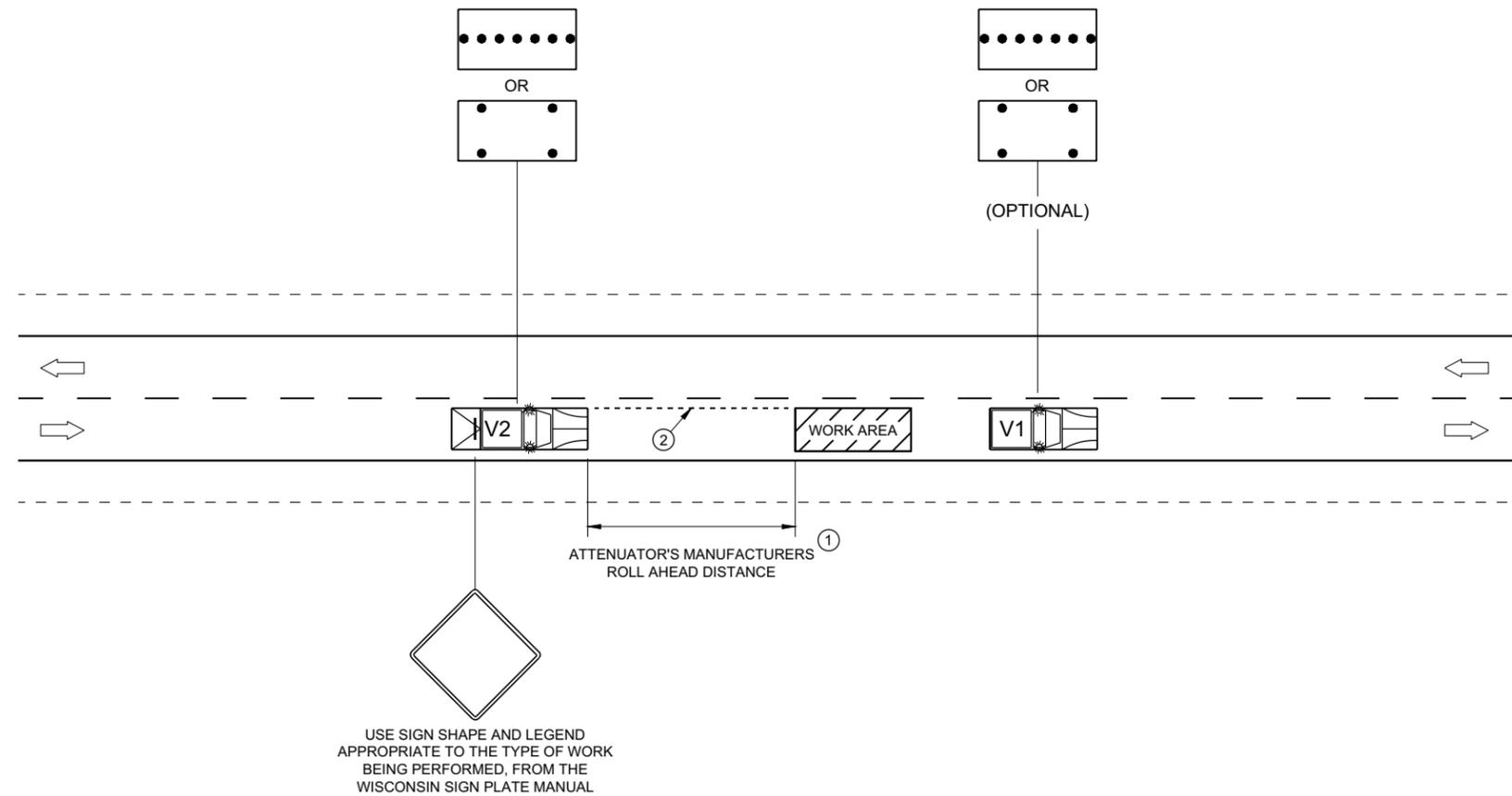
MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

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

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

- ① DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, 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.
- ② ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



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SDD 15D51 - 01

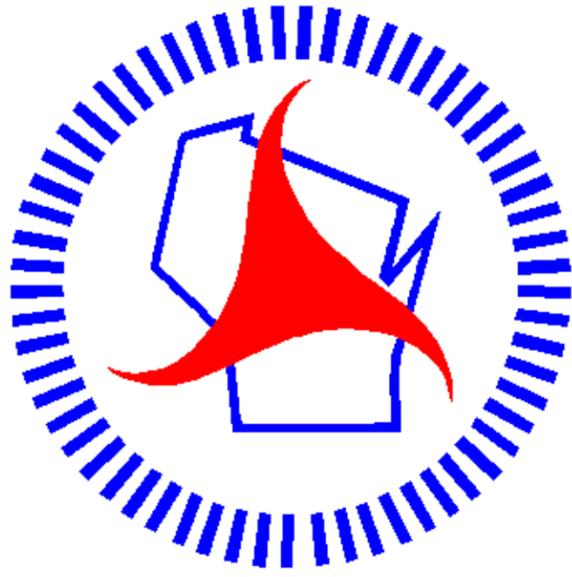
SDD 15D51 - 01

**TRAFFIC CONTROL,
MOBILE OPERATIONS ON
AN UNDIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 DATE /S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA



Wisconsin Department of Transportation

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