

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
Mt. HOREB — MADISON
(STRUCTURES B-13-0052, 0383, 0404, 0407 & 0408)

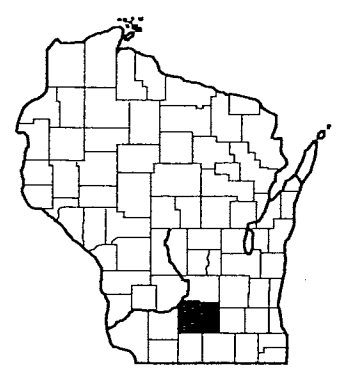
USH 18
DANE COUNTY
STATE PROJECT NUMBER
1200-03-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1200-03-74	WISC 2013332	1

ORDER OF SHEETS
JULY 2013

Section No.	Title
1	Typical Sections and General Notes
2	Traffic Control Plan
3	Estimate of Quantities
3	Miscellaneous Quantities
3	Plan and Profile
N/A	Asbuilt Plans
6	Standard Detail Drawings

TOTAL SHEETS = 12

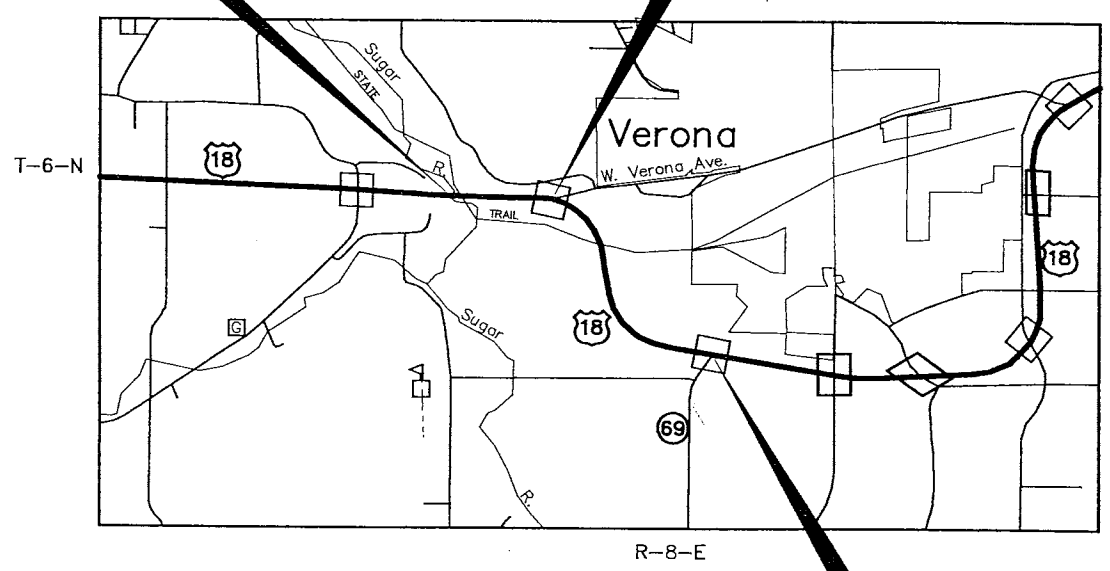


DESIGN DESIGNATION	B-13-0052 B-13-0383	B-13-0404	B-13-0407 B-13-0408
A.D.T. (2013)	21,900	2300	24,200
A.D.T. (2033)	31,900	4100	33,900
D.H.V. (2033)	4180	540	4440
D.	62/38	62/38	62/38
T.	16.4%	16.4%	16.4%
DESIGN SPEED	65 MPH	65 MPH	65 MPH
ESAL'S	N/A	N/A	N/A

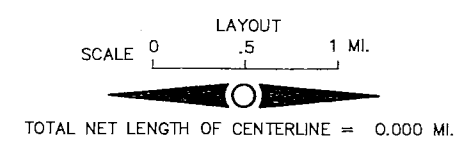
- CONVENTIONAL SYMBOLS
- COUNTY LINE
 - CORPORATE LIMITS
 - PROPERTY LINE
 - LOT LINE
 - LIMITED EASEMENT
 - EXISTING RIGHT OF WAY
 - NEW RIGHT OF WAY
 - REFERENCE LINE
 - SLOPE INTERCEPT
 - ORIGINAL GROUND
 - MARSH OR ROCK PROFILE
 - CULVERT IN PLACE
 - CULVERT REQUIRED
 - CULVERT REQUIRED (Profile)
 - COMBUSTIBLE FLUIDS (UNDER PRESSURE)
 - UNDERGROUND UTILITIES
 - GAS
 - ELECTRIC
 - TELEPHONE
 - SERVICE PEDESTAL
 - CABLE MARKER
 - POWER POLE
 - TELEPHONE POLE
 - RAILROADS
 - MARSH
 - WOODED AREA

B-13-0052 &
Y = 450 927.82
X = 770 717.68
B-13-0383
Y = 450 817.74
X = 770 559.90

B-13-0404
Y = 450 556.37
X = 773 578.06



B-13-0407 &
Y = 446 363.40
X = 777 724.79
B-13-0408
Y = 446 435.91
X = 777 988.82



NOTE:
COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN
COUNTY COORDINATE SYSTEM, DANE COUNTY.

ORIGINAL PLANS PREPARED BY
WESTBROOK ASSOCIATED
ENGINEERS, INC.
SPRING GREEN, WISCONSIN 53588

WISCONSIN
AARON B. PALMER
E-35695
RICHLAND CENTER, WI
PROFESSIONAL ENGINEER

10/02/12 (Date) *Aaron B. Palmer* (Signature)

619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

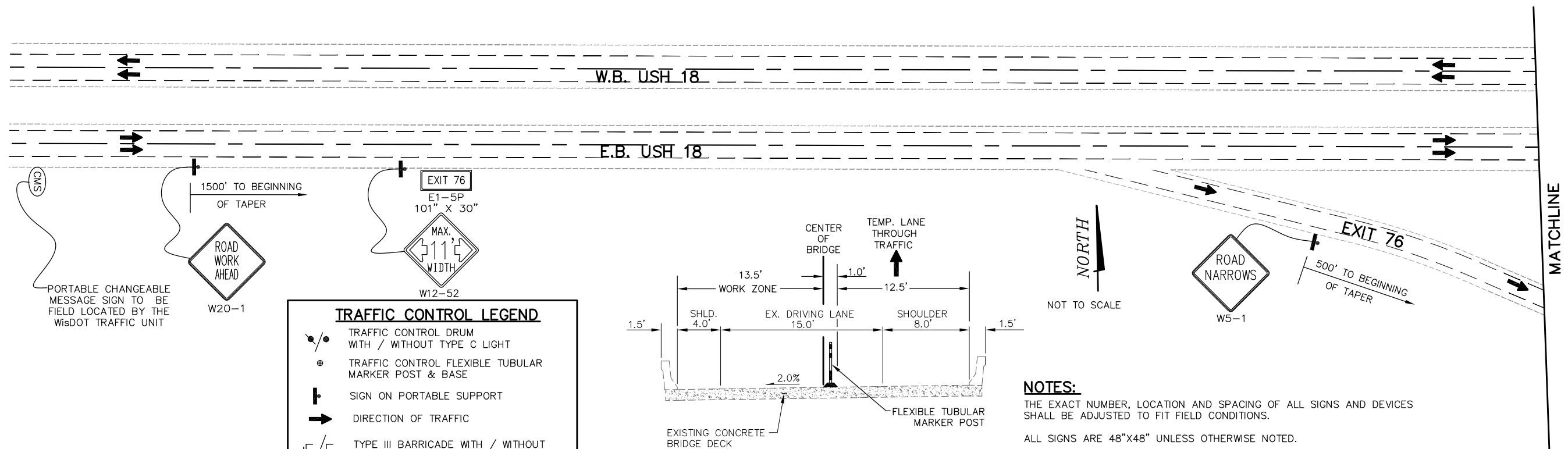
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Designer Westbrook Associated Engineers Inc.
Project Manager Kristen Sommers
Regional Examiner _____
Regional Supervisor Chris Hodges
C.O. Examiner _____

APPROVED FOR THE DEPARTMENT
DATE 9/27/12 *Chris A. Hodges* (SIGNATURE)

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STAGE 1 BRIDGE SECTION
MIRROR IMAGE FOR STAGE 2

NOTES:

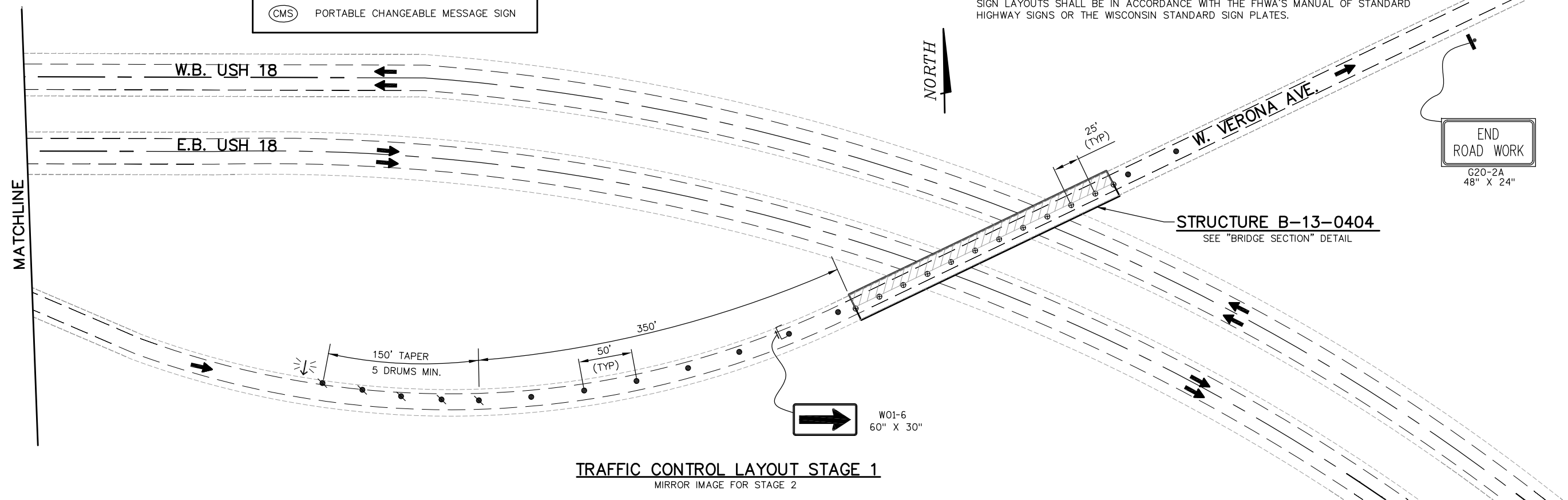
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.

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



DATE 03MAY13			E S T I M A T E O F Q U A N T I T I E S		
LINE					1200-03-74
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	213.0100	FINISHING ROADWAY (PROJECT) 01. 1200-03-74	EACH	1.000	1.000
0020	509.0301	PREPARATION DECKS TYPE 1	SY	30.000	30.000
0030	509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	2.000	2.000
0040	509.5100.S	POLYMER OVERLAY	SY	3,760.000	3,760.000
0050	619.1000	MOBI LI ZATION	EACH	1.000	1.000
0060	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1200-03-74	EACH	1.000	1.000
0070	643.0300	TRAFFIC CONTROL DRUMS	DAY	348.000	348.000
0080	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	10.000	10.000
0090	643.0500	TRAFFIC CONTROL FLEXI BLE TUBULAR MARKER POSTS	EACH	24.000	24.000
0100	643.0600	TRAFFIC CONTROL FLEXI BLE TUBULAR MARKER BASES	EACH	24.000	24.000
0110	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	20.000	20.000
0120	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	130.000	130.000
0130	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	10.000	10.000
0140	643.0900	TRAFFIC CONTROL SIGNS	DAY	76.000	76.000
0150	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	46.000	46.000
0160	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	2,160.000	2,160.000

PREPERATION DECKS TYPE 1

CATAGORY NO.	LOCATION	509.0301 (SY)
0020	UNDISTRIBUTED	30
	TOTAL	30

CONCRETE MASONRY OVERLAY DECKS

CATAGORY NO.	LOCATION	509.2500 (CY)
0020	UNDISTRIBUTED	2
	TOTAL	2

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL

		643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS (EACH)	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES (EACH)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C (DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)
LOCATION	STAGE									
B-13-0052	1	40	1	0	0	2	15	1	8	0
B-13-0383	1	40	1	0	0	2	15	1	8	0
B-13-0404	1	14	1	12	12	2	5	1	6	0
B-13-0407	1	40	1	0	0	2	15	1	8	0
B-13-0408	1	40	1	0	0	2	15	1	8	0
ADVANCED WARNING	1	0	0	0	0	0	0	0	0	23
STAGE 1 TOTALS		174	5	12	12	10	65	5	38	23
B-13-0052	2	40	1	0	0	2	15	1	8	0
B-13-0383	2	40	1	0	0	2	15	1	8	0
B-13-0404	2	14	1	12	12	2	5	1	6	0
B-13-0407	2	40	1	0	0	2	15	1	8	0
B-13-0408	2	40	1	0	0	2	15	1	8	0
ADVANCED WARNING	1	0	0	0	0	0	0	0	0	23
STAGE 2 TOTALS		174	5	12	12	10	65	5	38	23
PROJECT TOTALS		348	10	24	24	20	130	10	76	46 *

* THE PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE AT EACH END OF THE PROJECT AT LEAST ONE WEEK PRIOR TO CONSTRUCTION AND THROUGHOUT THE DURATION OF CONSTRUCTION.

PAVEMENT MARKING

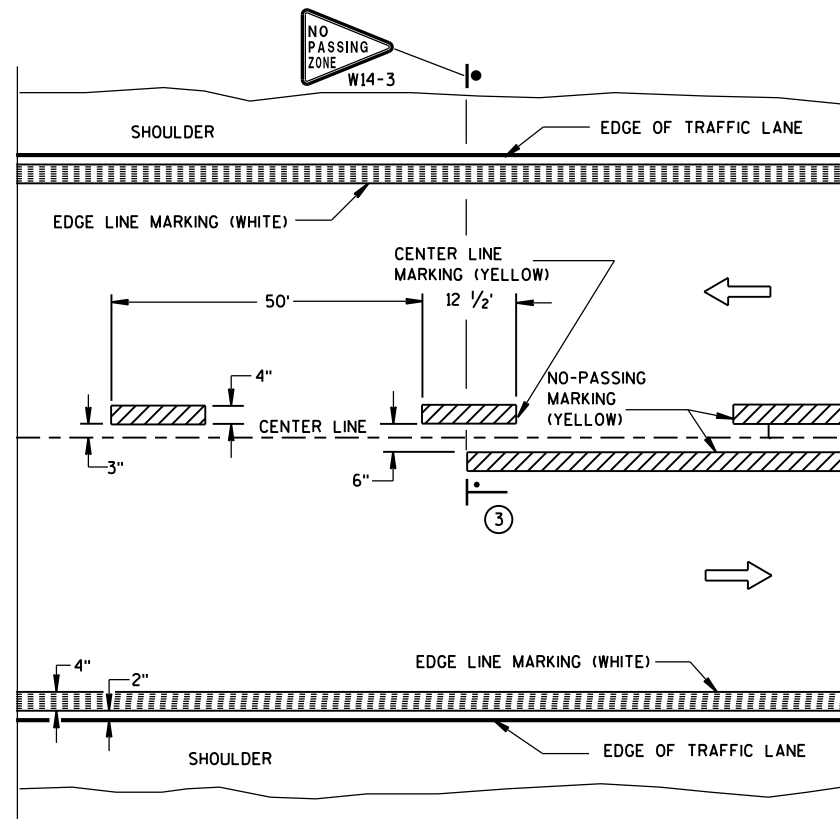
CATAGORY NO.	LOCATION	646.0406 SAME DAY EPOXY 4-INCH		
		EDGE LINE YELLOW (LF)	LANE LINE WHITE (LF)	EDGE LINE WHITE (LF)
0020	B-13-0052	164	73	164
	0020 TOTAL		379	
0030	B-13-0383	153	73	153
	0030 TOTAL		379	
0040	B-13-0404	260	0	260
	0040 TOTAL		520	
0050	B-13-0407	191	59	191
	0050 TOTAL		441	
0060	B-13-0408	191	59	191
	0060 TOTAL		441	
	PROJECT TOTAL		2160	

POLYMER OVERLAY

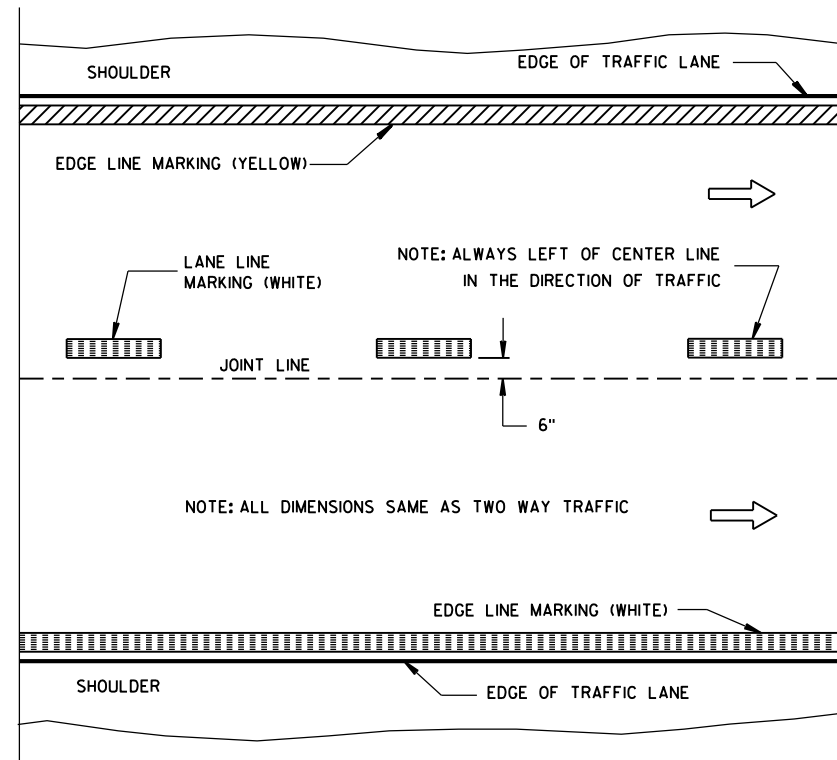
CATAGORY NO.	STAGE	LOCATION	509.5100.S POLYMER OVERLAY (SY)
0020	1	B-13-0052	353
0030	1	B-13-0383	326
0040	1	B-13-0404	379
0050	1	B-13-0407	411
0060	1	B-13-0408	411
		STAGE 1 TOTAL	1880
0020	2	B-13-0052	352
0030	2	B-13-0383	326
0040	2	B-13-0404	380
0050	2	B-13-0407	411
0060	2	B-13-0408	411
		STAGE 2 TOTAL	1880
		PROJECT TOTAL	3760

Standard Detail Drawing List

15C08-15A	PAVEMENT MARKING (MAINLINE)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

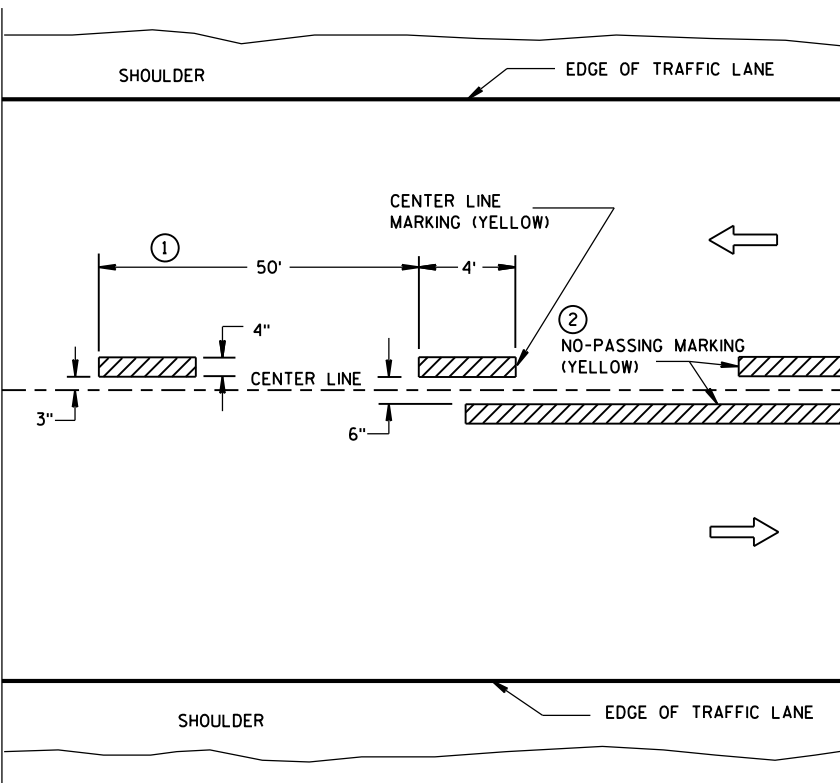


TWO WAY TRAFFIC

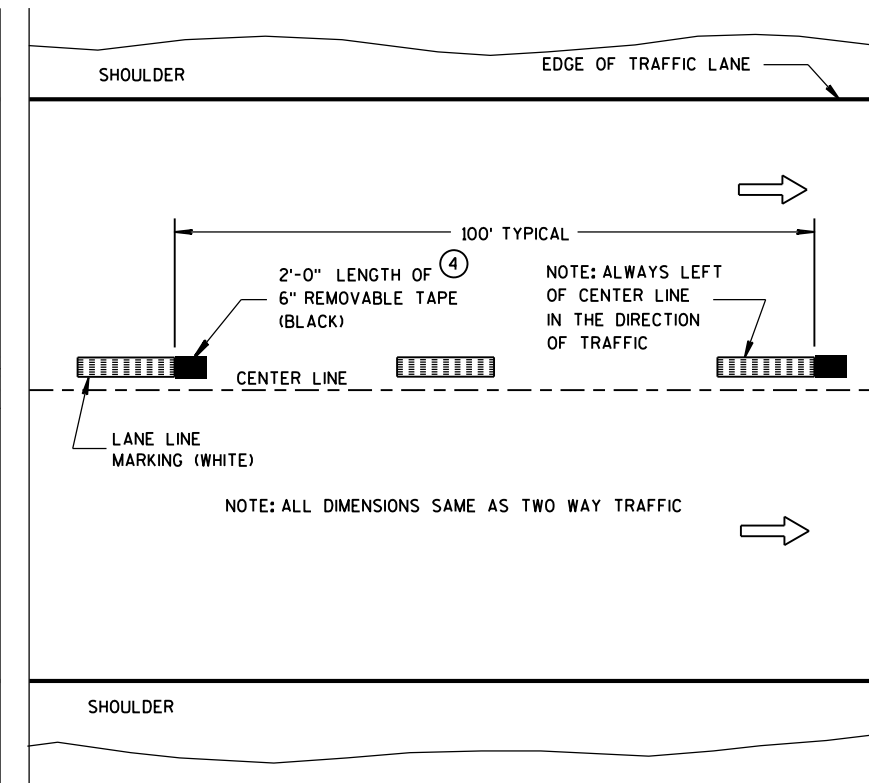


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

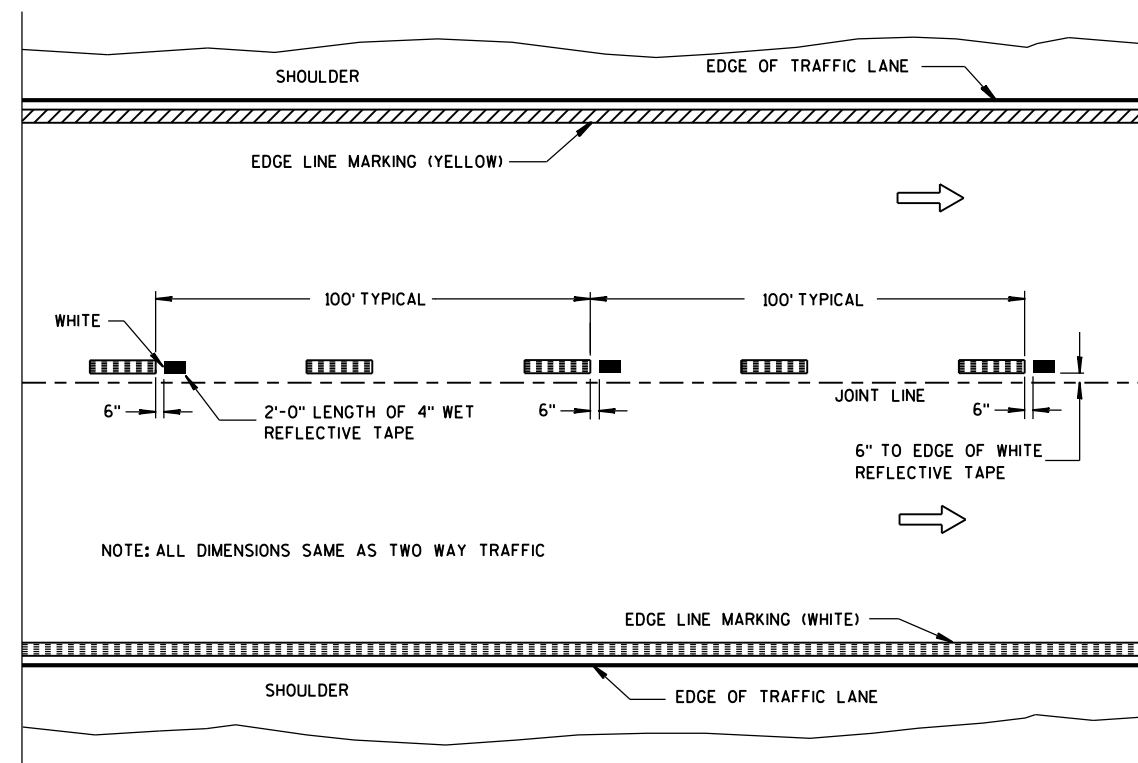
GENERAL NOTES

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

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.

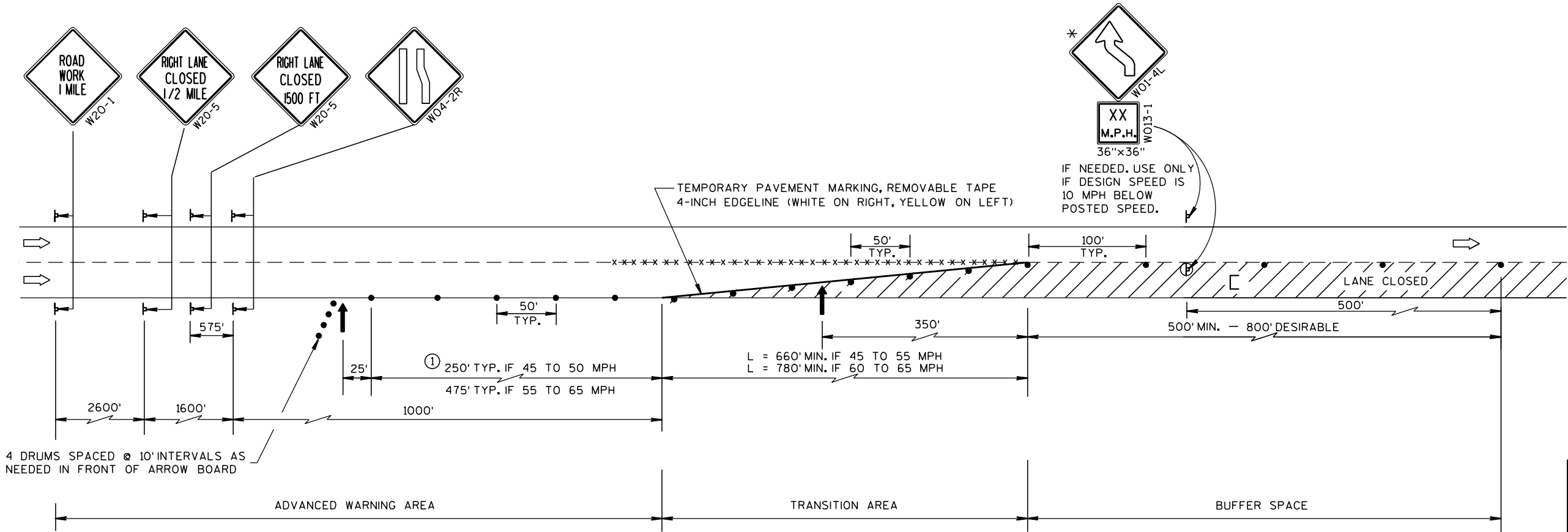
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

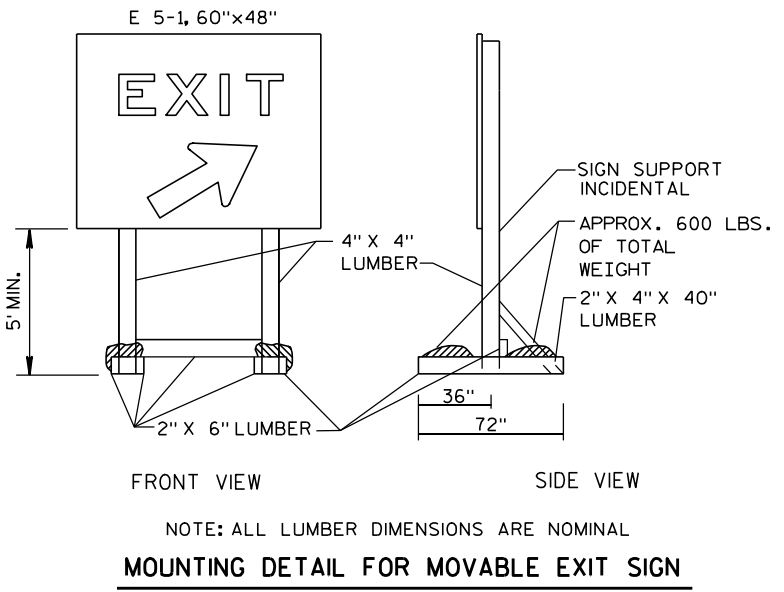
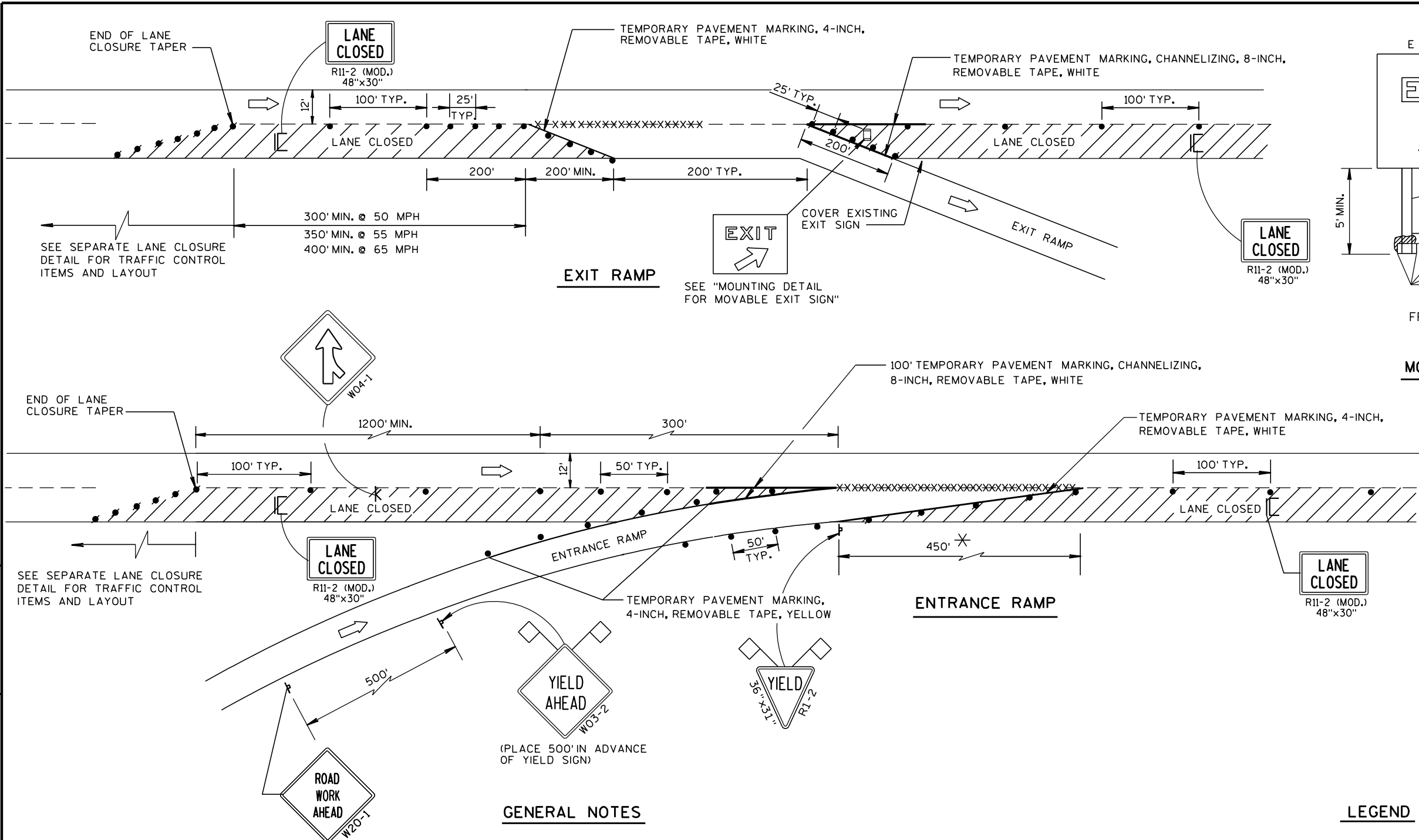
IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

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	



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	

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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