

MAD MAY 2016

PROJECT ID: 1066-02-61
WITH: N/A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREVENTATIVE MAINTENANCE PROJECT

MADISON - OCONOMOWOC

(CTH N TO E. JEFFERSON COUNTY LINE)

I-94

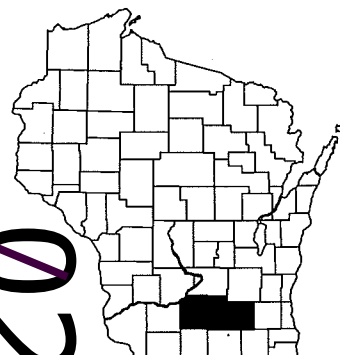
DANE / JEFFERSON COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1066-02-61	WISC 2015568	1

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Project Overview
Section No.	2	General Notes and Contacts
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	5	Plan
Section No.	5	Traffic Control & Construction Staging
Section No.	6	Standard Detail Drawings

TOTAL SHEETS = 36



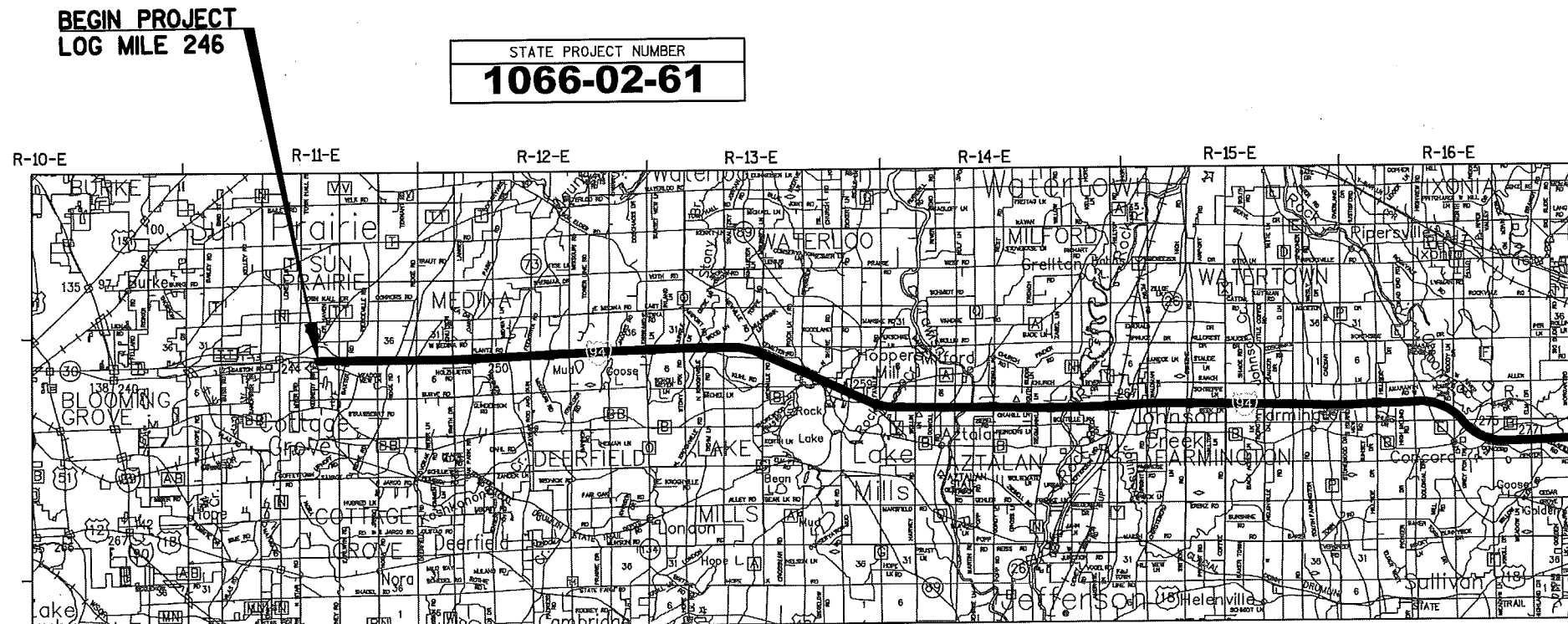
DESIGN DESIGNATION

A.A.D.T. (2013)	=	40,819
A.A.D.T.	=	N/A
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	N/A
ESALS	=	N/A

CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	---
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---



Coordinates on this plan are referenced to the Dane/Jefferson Counties Coordinate System.

LAYOUT
SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 34.030 MI.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	---
Designer	STEFAN CIOBANU
Project Manager	JEREMY HALL
Regional Examiner	---
Regional Supervisor	TODD MATHESON
C.O. Examiner	---

APPROVED FOR THE DEPARTMENT

DATE: 4/9/2015 *Todd Matheson*
(Signature)

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GENERAL NOTES

- DETAILS OF CONSTRUCTION NOT SHOWN IN THE PLAN SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ALL CLOSED LANES MUST BE SWEEP CLEAN PRIOR TO OPENING TO TRAFFIC.
- ALL WASTE MATERIAL RESULTING FROM THE VARIOUS CONSTRUCTION OPERATIONS ADJACENT TO LIVE TRAFFIC SHALL BE ENTIRELY REMOVED AND PROPERLY DISPOSED OF IMMEDIATELY OR AS DIRECTED BY THE ENGINEER.
- THE 2-INCH ASPHALTIC CONCRETE SHALL BE PAVED IN ONE LIFT.
- THE LOCATION OF THE LONGITUDINAL JOINT REPAIRS AND UNDISTRIBUTED QUANTITIES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CENTERLINE JOINT AND ANY TRANSVERSAL CRACKS FOUND IN THE MEDIAN LANE SHALL BE REPAIRED FIRST WITH TRAFFIC DIVERTED ONTO THE OUTSIDE LANE AND SHOULDER. TRAFFIC SHOULD ONLY BE SWITCHED ONTO THE MEDIAN LANE AT THE COMPLETION OF THE CENTERLINE JOINT REPAIRS FOR THE ENTIRE LENGTH OF THE PROJECT WHEN TRANSVERSAL CRACKS IN THE OUTSIDE LANE SHALL BE REPAIRED.
- TRANSVERSE CRACKS IN THE SHOULDERS AS WELL AS THE JOINTS IN-BETWEEN THE RAMPS AND MAINLINE ARE ALSO PART OF THIS CONTRACT AND SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER.
- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF THE DIGGERS HOTLINE.
- ALL OF THE CENTERLINE PAVEMENT MARKINGS WILL BE REPLACED IN THE PROJECT AREA. EDGELINES TO BE REPLACED AS NEEDED AFTER TRANSVERSE CRACKS ARE SEALED AS DIRECTED BY THE ENGINEER. AT RAMPS, REPLACE EPOXY 8-INCH PAVEMENT MARKING OF RAMP GORES AS DIRECTED BY THE ENGINEER.

DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

PROJECT MANAGER

JEREMY HALL
SW REGION - MADISON OFFICE
2101 WRIGHT ST.
MADISON, WI 53704
(608) 245-2655
JEREMY.HALL@DOT.WI.GOV

PROJECT DESIGNER

STEFAN CIOBANU
SW REGION - MADISON OFFICE
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MADISON, WI 53704
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STEFAN.CIOBANU@DOT.WI.GOV

WDNR LIASON - DANE & JEFFERSON COUNTY

ERIC HEGGELUND
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
3911 FISH HATCHERY RD.
MADISON, WI 53711
(608) 275-3301
ERIC.HEGGELUND@WISCONSIN.GOV

WISDOT MAINTENANCE - DANE COUNTY

TODD HOGAN
SW REGION - MADISON OFFICE
2101 WRIGHT ST.
MADISON, WI 53704
CELL: (608) 516-6493
TODD.HOGAN@DOT.WI.GOV

WISDOT MAINTENANCE - JEFFERSON COUNTY

TERRY L. LAMMERT
SW REGION - MADISON OFFICE
2101 WRIGHT ST.
MADISON, WI 53704
CELL: (608) 245-2660
TERRY.LAMMERT@DOT.WI.GOV

CHANGEABLE SIGN MESSAGE COORDINATOR

JEFF GUSTAFSON
SW REGION - MADISON OFFICE
2101 WRIGHT ST.
MADISON, WI 53704
CELL: (608) 884-1166
JEFFREY.GUSTAFSON@DOT.WI.GOV

UTILITY CONTACTS

AT&T LEGACY - COMMUNICATION LINE

Attn: Carl Donahue
866 Rock Creek Rd.
Piano, IL 60545
(715) 833-2054
cdonahue@att.com

ATC MANAGEMENT, INC. - ELECTRICITY

Attn: Mike Olsen
801 O'keefe Rd.
P.O. Box 6113
De Pere , WI 54115-6113
(920) 338-6582
molsen@atcillc.com

ALLIANT ENERGY - ELECTRICITY

Attn: Jason Hogan
Suite 1000
4902 N. biltmore Lane
Madison, WI 53718
(608) 458-4871
jasonhogan@alliantenergy.com

ALLIANT ENERGY - GAS/PETROLEUM

Attn: Jason Hogan
Suite 1000
4902 N. biltmore Lane
Madison, WI 53718
(608) 458-4871
jasonhogan@alliantenergy.com

CHARTER COMMUNICATIONS
COMMUNICATION LINE

Attn: Brandon Storm
2701 Daniels St.
Madison, WI 53718
(608) 274-3822
brandon.storm@charter.com

COTTAGE GROVE WATER AND SEWER UTILITY
WATER

Attn: Jim Hessling
221 E. Cottage Grove Rd.
Cottage Grove, WI 53527
(608) 839-5831
jhessling@village.cottage-grove.wi.us

ENBRIDGE ENERGY
GAS/PETROLEUM

Attn: David Schultz
466 Midland Rd.
Janesville, WI 53546
(608) 756-0071
David.Schultz@enbridge.com

FRONTIER COMMUNICATIONS OF WI LLC
COMMUNICATION LINE

Attn: Robert Church
2222 West Wisconsin Street
Portage, WI 53901
(608) 742-1817
robert.church@ftr.com

GUARDIAN PIPELINE
GAS/PETROLEUM

Attn: Denis Judy
23823 W. Amoco Rd.
Channahon, IL 60410
(217)497-6117
denis.judy@oneok.com

KOCH PIPELINE COMPANY L.P.
GAS/PETROLEUM

Attn: Rick Schlegel
PO Box 64596
St. Paul, MN 55164
(651) 480-3936 Office
(651) 304-7002 Mobile

LAKE MILLS LIGHT AND WATER DEPT.
ELECTRICITY

Attn: Paul Hermanson
307 N. Cp Avenue
Lake Mills, WI 53551
(920) 648-4026
phermanson@ci.lake-mills.wi.us

MCLEOD USA TELECOMMUNICATION SERVICES INC.
COMMUNICATION LINE

Attn: Jim Kostuch
13935 Bishops Dr.
Brookfield, WI 53005
(262) 792-7938
James.Kostuch@windstream.com

TDS TELECOM
COMMUNICATION LINE

Attn: Michael Johnson
Suite 800
20875 Crossroads Circle
Waukesha, WI 53186
(262)-754-3052
michael.johnson@tdstelecom.com

VILLAGE OF JOHNSON CREEK
WATER

Attn: Paul Moderaki
125 Depot Street
P.O. Box 238
Johnson Creek, WI 53038
(920) 699-2296
johnsoncreek@charter.net

WE ENERGIES
ELECTRICITY

Attn: LaTroy Brumfield
Room A299
333 West Everett St.
Milwaukee, WI 53203
(414) 221-5617
LaTroy.Brumfield@we-energies.com

WE ENERGIES
GAS/PETROLEUM

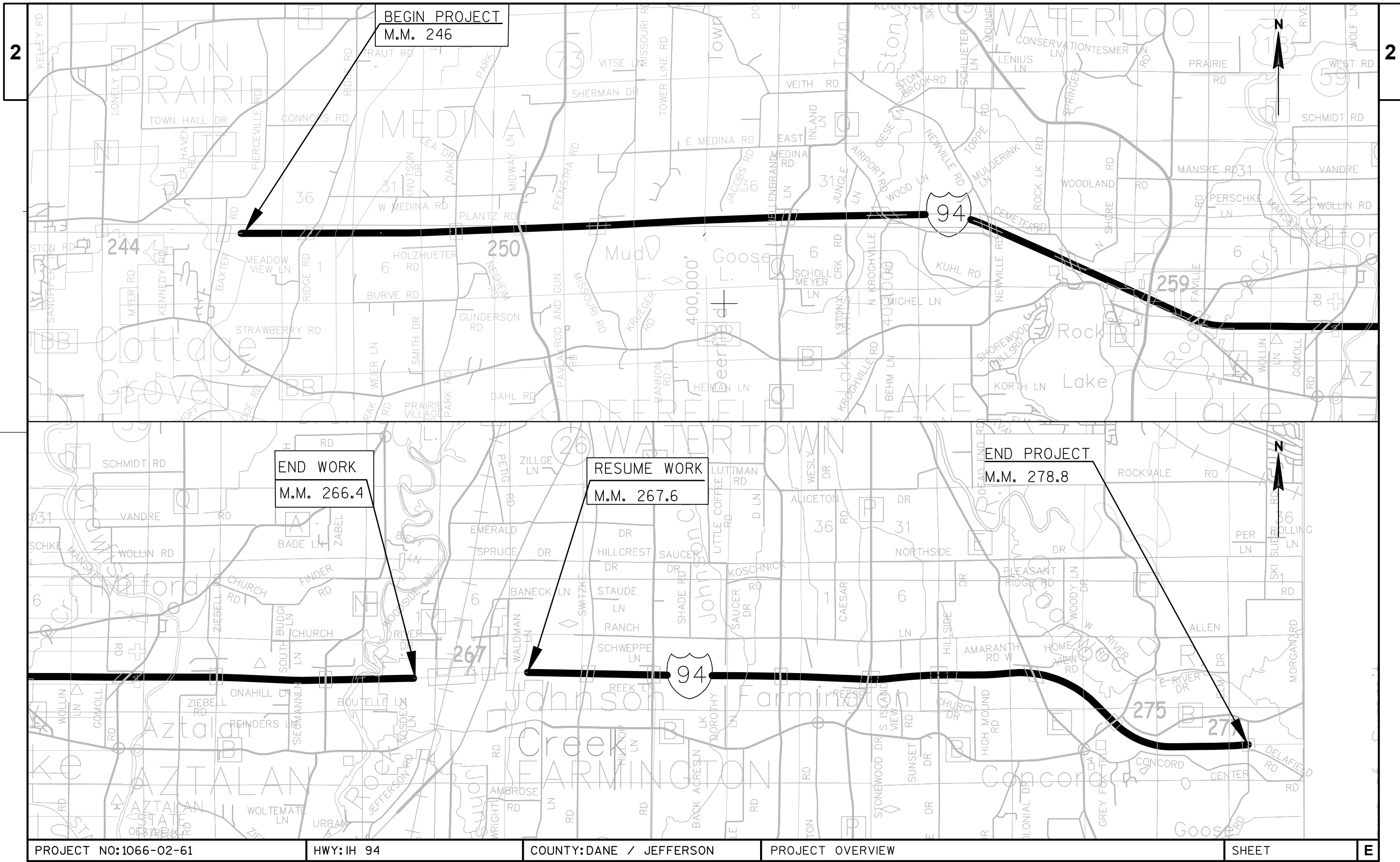
Attn: LaTroy Brumfield
Room A299
333 West Everett St.
Milwaukee, WI 53203
(414) 221-5617
LaTroy.Brumfield@we-energies.com

WISDOT
COMMUNICATION LINE

Attn: Jeff Madson
Ste.300
433 W. St. Paul Ave.
Milwaukee, WI 53203-3007
(414) 225-3723
Jeffrey.Madson@gdot.wi.gov

WISDOT RWIS PROGRAM
COMMUNICATION TOWER

Attn: Mike Adams
Rm 501
P.O. Box 7986
Madison, WI 53707-7986
(608) 266-5004
Michael.Adams@dot.wi.gov



PROJECT NO:1066-02-61

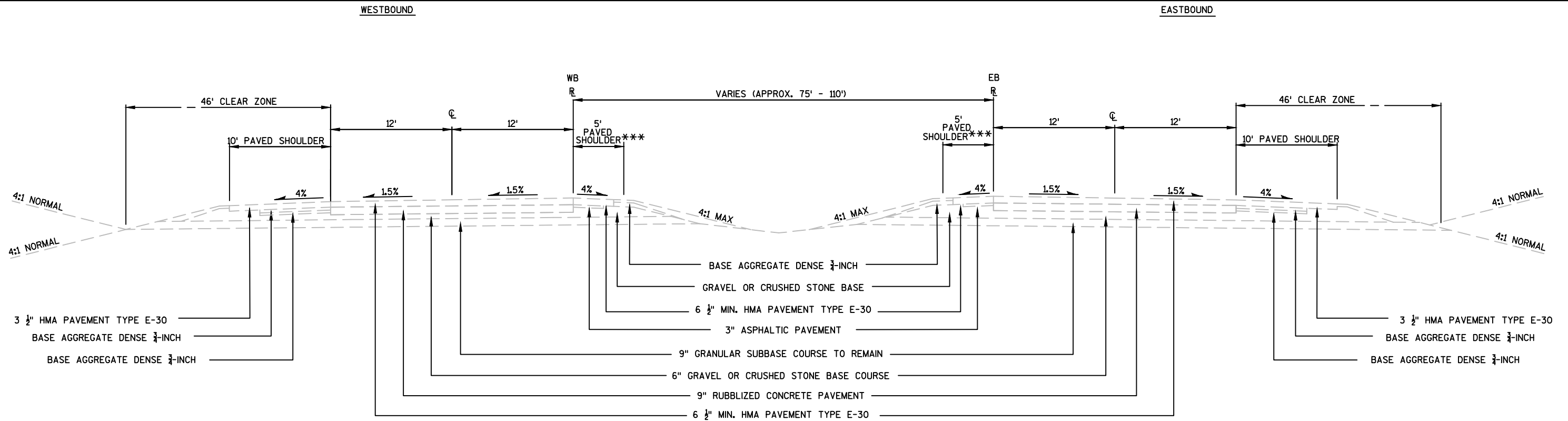
HWY: IH 94

COUNTY: DANE / JEFFERSON

PROJECT OVERVIEW

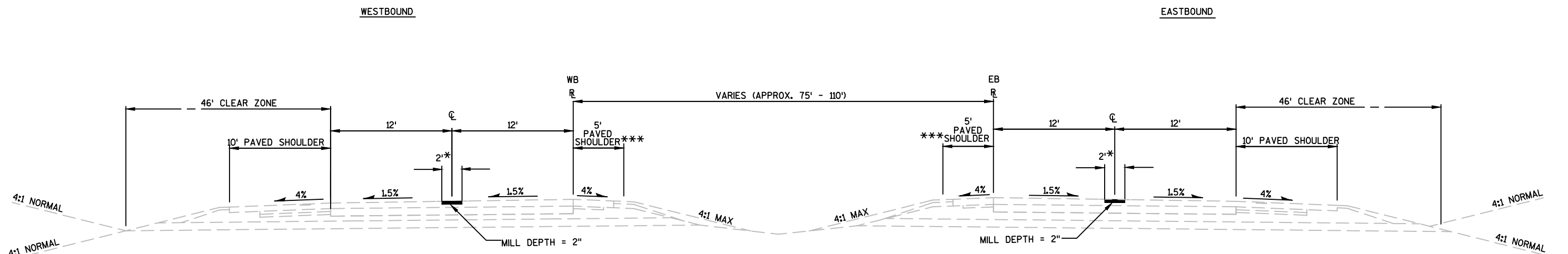
SHEET

E



TYPICAL EXISTING SECTION - I 94

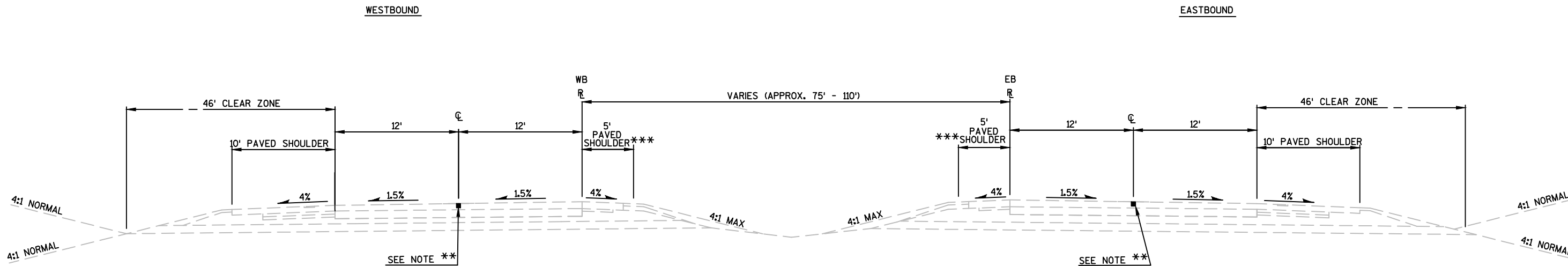
***4-FOOT WIDE PAVED SHOULDER FROM AIRPORT RD. TO CTH Y



TYPICAL PROPOSED SECTION - I 94 - MILL AND PAVE SECTION

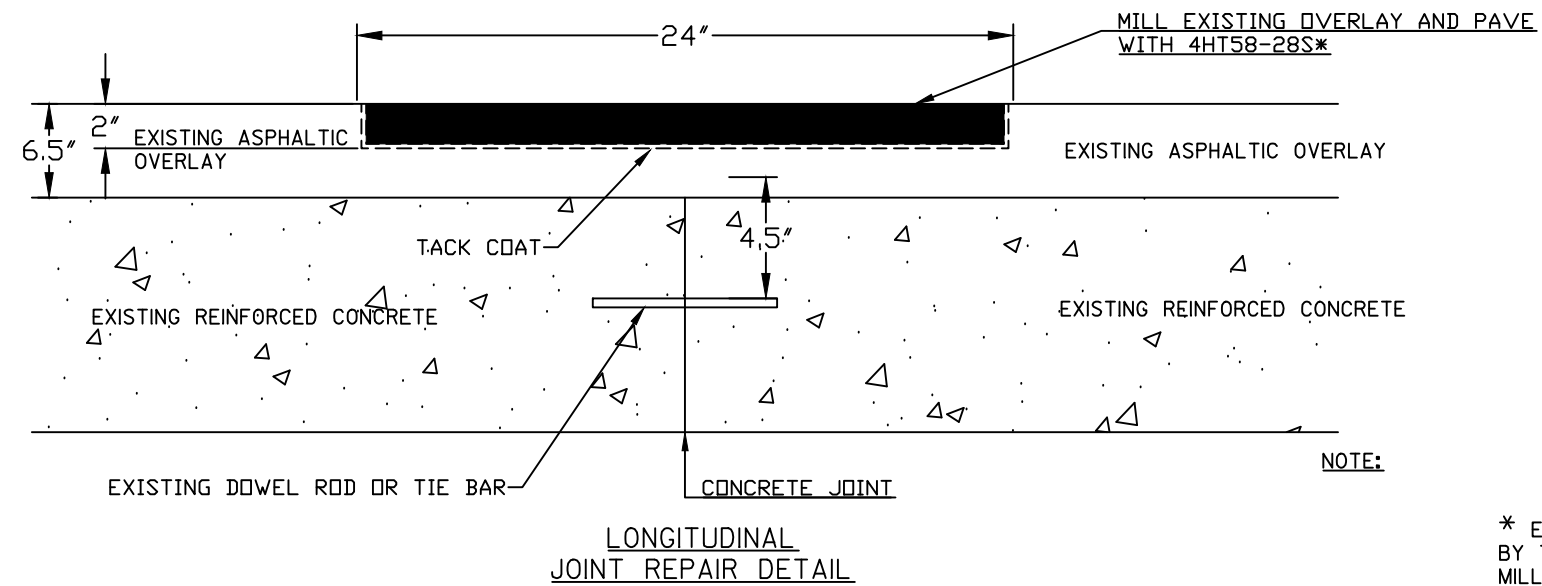
* MILL AND PAVE LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
RE-ESTABLISH THE 1.5% NORMAL CROWN OR MATCH EXISTING
SUPER-ELEVATION AND CROSS SLOPE. USE HMA E-10 TO FILL.

***4-FOOT WIDE PAVED SHOULDER FROM AIRPORT RD. TO CTH Y



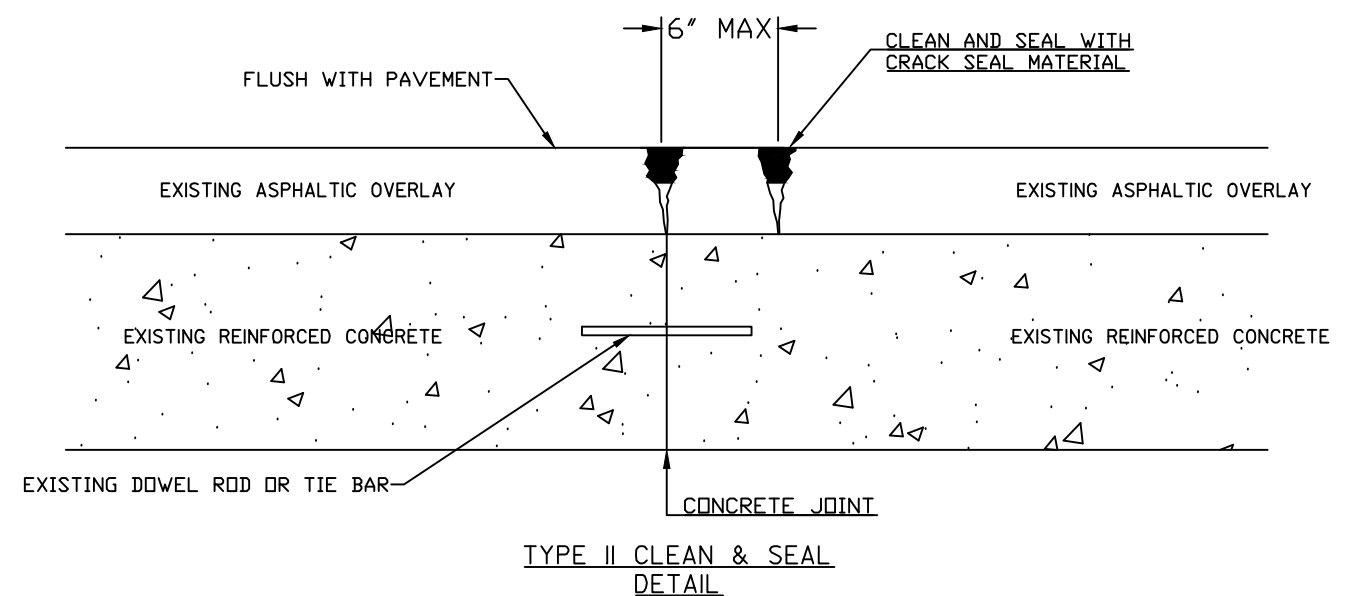
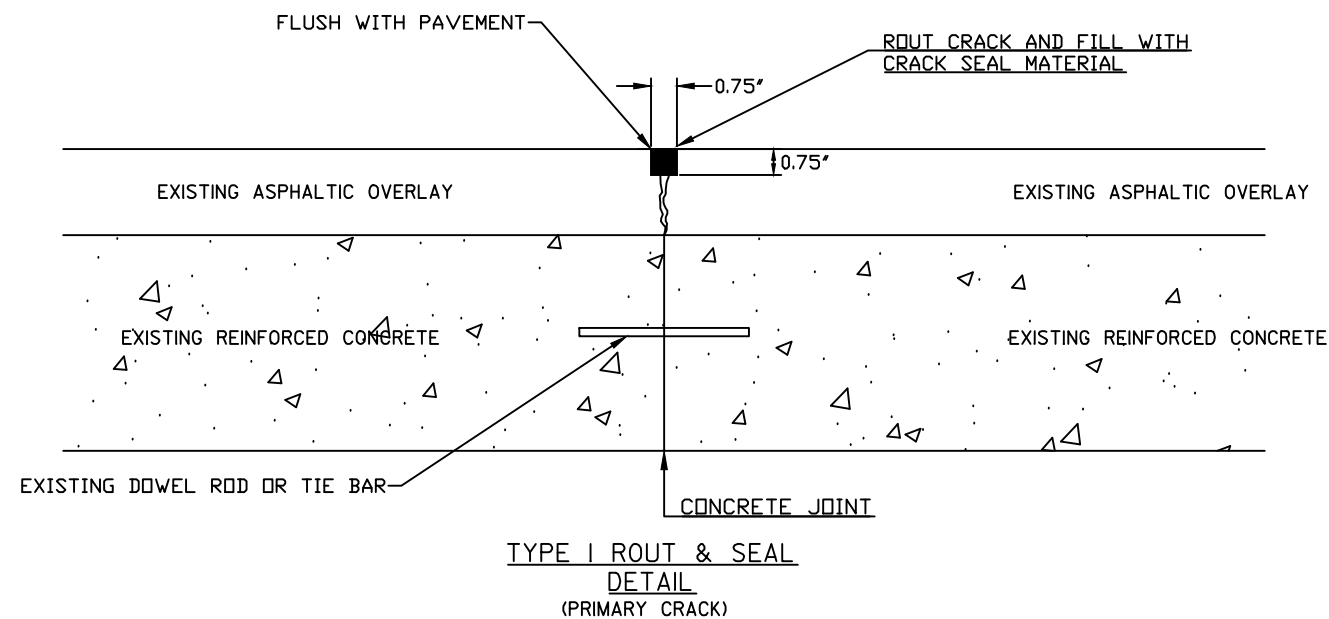
TYPICAL PROPOSED SECTION - I 94 - ROUTE AND SEAL SECTION

** ROUT AND SEAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
SEE CONSTRUCTION DETAILS FOR OTHER REQUIREMENTS.
***4-FOOT WIDE PAVED SHOULDER FROM AIRPORT RD. TO CTH Y



* EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD BEFORE MILLING BEGINS. ENGINEER MUST HAVE JOINT REPAIR AREAS MARKED FOR MILLING PRIOR TO CRACK FILLING OPERATIONS START. CONTRACTOR SHALL NOT BE PAID FOR ROUTE AND SEAL IN AREAS MARKED FOR JOINT REPAIR.

THE CONTRACTOR WILL HAVE THE OPTION TO BLADE THE MILLINGS OUT ONTO THE EXISTING GRAVEL SHOULDER OR HAUL AWAY AND DISPOSE OF AS SPECIFIED IN SECTIONS 204 & 490 OF THE STANDARD SPECIFICATIONS.



IF TWO CRACKS ARE LESS THAN 6 INCHES APART AND THE PAVEMENT BETWEEN THE CRACKS IS NOT EXHIBITING ALLIGATOR CRACKING THAT WOULD REQUIRE THE USE OF THE LONGITUDINAL JOINT REPAIR DETAIL, THEN THESE CRACKS SHALL JUST BE CLEANED AND FILLED.

DATE 01MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					1066-02-61
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	213.0100	Finishing Roadway (project) 01. 1066-02-61	EACH	1.000	1.000
0020	455.0605	Tack Coat	GAL	3,262.000	3,262.000
0030	460.7224	HMA Pavement 4 HT 58-28 S	TON	5,178.000	5,178.000
0040	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1066-02-61	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0060	642.5001	Field Office Type B	EACH	1.000	1.000
0070	643.0100	Traffic Control (project) 01. 1066-02-61	EACH	1.000	1.000
0080	643.0300	Traffic Control Drums	DAY	10,954.000	10,954.000
0090	643.0420	Traffic Control Barricades Type III	DAY	660.000	660.000
0100	643.0705	Traffic Control Warning Lights Type A	DAY	112.000	112.000
0110	643.0715	Traffic Control Warning Lights Type C	DAY	972.000	972.000
0120	643.0800	Traffic Control Arrow Boards	DAY	136.000	136.000
0130	643.0900	Traffic Control Signs	DAY	1,648.000	1,648.000
0140	643.0910	Traffic Control Covering Signs Type I	EACH	14.000	14.000
0150	643.0920	Traffic Control Covering Signs Type II	EACH	32.000	32.000
0160	643.1050	Traffic Control Signs PCMS	DAY	434.000	434.000
0170	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	70.000	70.000
0180	646.0106	Pavement Marking Epoxy 4-Inch	LF	97,000.000	97,000.000
0190	646.0126	Pavement Marking Epoxy 8-Inch	LF	5,385.000	5,385.000
0200	646.0881.S	Pavement Marking Grooved Wet Reflective Tape 4-Inch	LF	7,546.000	7,546.000
0210	SPV.0090	Special 01. Rout and Seal Special	LF	201,582.000	201,582.000
0220	SPV.0180	Special 01. Joint Repair Milling	SY	46,605.000	46,605.000

TRAFFIC CONTROL											
CATEGORY	LOCATION	TRAFFIC CONTROL (PROJECT)	DRUMS	BARRICADES TYPE III	WARNING LIGHTS TYPE A	WARNING LIGHTS TYPE C	ARROW BOARDS	SIGNS	COVERING SIGNS TYPE I	COVERING SIGNS TYPE II	TRUCK MOUNTED TRAFFIC ATTENUATOR
		643.0100	643.0300	643.0420	643.0705	643.0715	643.0800	643.0900	643.0910	643.0920	643.1050 643.1055.S
		EACH	DAY	DAY	DAY	DAY	DAY	DAY	EACH	EACH	DAY
0010	PREWARNING MAINLINE	-	-	-	-	-	-	-	-	-	56
0010	PREWARNING ON-RAMPS	-	-	-	-	-	-	-	-	-	98
0010	MAINLINE	1	9860	544	112	884	136	1428	14	32	280
0010	RAMPS	-	98	56	-	-	-	70	-	-	-
0010	UNDISTRIBUTED	-	996	60	-	88	-	150	-	-	-
TOTAL		1	10954	660	112	972	136	1648	14	32	434

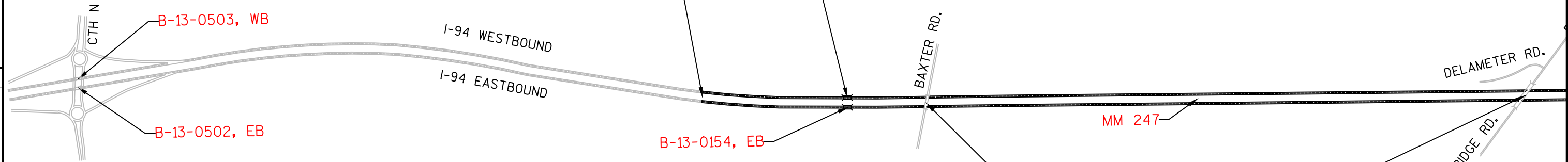
PERMANENT PAVEMENT MARKING						
CATEGORY	LOCATION	PAVEMENT MARKING		PAVEMENT MARKING	PAVEMENT MARKING	
		EPOXY 4-INCH (w hite) (yellow)		EPOXY 8-INCH (w hite)	GROOVED WET REFLECTIVE TAPE 4-INCH (w hite)	
		646.0106		646.0126	646.0881.S	
		LF		LF	LF	
0010	MAINLINE	93400	3600	-	-	LANELINE AND EDGELINE
0010	RAMPS	-	-	5385	-	AT RAMP GORES
0010	MAINLINE	-	-	-	7546	LANE LINE SKIPS
TOTAL		97000		5385	7546	

PAVEMENT REPAIRS									
CATEGORY	DIRECTION	LOCATION			ROUTE AND SEAL	TACK	HMA PAVEMENT	JOINT	REMARKS
					SPECIAL	COAT	4HT58-28S	REPAIR	
		M.M.	-	M.M.	SPV.0090.01	455.0605	460.7224	MILLING	
					LF	GAL	TON	SPV.0180.01	
0010	EB	246.00	-	247.00	0	82	130	1173	
0010	EB	247.00	-	248.00	0	82	130	1173	
0010	EB	248.00	-	249.00	0	82	130	1173	
0010	EB	249.00	-	250.00	0	82	130	1173	
0010	EB	250.00	-	251.00	1580	58	91	822	
0010	EB	251.00	-	252.00	2180	48	77	689	
0010	EB	252.00	-	253.00	3430	29	46	411	
0010	EB	253.00	-	254.00	4280	16	25	222	
0010	EB	254.00	-	255.00	2880	37	59	533	
0010	EB	255.00	-	256.00	3980	20	32	289	
0010	EB	256.00	-	257.00	2280	47	74	667	
0010	EB	257.00	-	258.00	4080	19	30	267	
0010	EB	258.00	-	259.00	3280	31	49	444	
0010	EB	259.00	-	260.00	1780	54	86	778	
0010	EB	260.00	-	261.00	1980	51	81	733	
0010	EB	261.00	-	262.00	1780	54	86	778	
0010	EB	262.00	-	263.00	1980	51	81	733	
0010	EB	263.00	-	264.00	2780	39	62	556	
0010	EB	264.00	-	265.00	2780	39	62	556	
0010	EB	265.00	-	266.00	3680	25	40	356	
0010	EB	266.00	-	267.00	2280	47	74	667	
0010	EB	267.00	-	268.00	3680	25	40	356	
0010	EB	268.00	-	269.00	3680	25	40	356	
0010	EB	269.00	-	270.00	2980	36	57	511	
0010	EB	270.00	-	271.00	2780	39	62	556	
0010	EB	271.00	-	272.00	4280	16	25	222	
0010	EB	272.00	-	273.00	4680	9	15	133	
0010	EB	273.00	-	274.00	3180	33	52	467	
0010	EB	274.00	-	275.00	3880	22	35	311	
0010	EB	275.00	-	276.00	3880	22	35	311	
0010	EB	276.00	-	277.00	2580	42	67	600	
0010	EB	277.00	-	278.00	3580	26	42	378	
0010	EB	278.00	-	278.80	2324	30	47	422	
TOTAL					88514	1317	2091	18815	

PAVEMENT REPAIRS (continued)									
CATEGORY	DIRECTION	LOCATION			ROUTE AND SEAL	TACK	HMA PAVEMENT	JOINT	REMARKS
		M.M.	-	M.M.	SPECIAL	COAT	4HT58-28S	REPAIR	
					SPV.0090.01	455.0605	460.7224	MILLING	
					LF	GAL	TON	SPV.0180.01	
0010	WB	245.90	-	246.00	248	4	7	62	
0010	WB	246.00	-	247.00	2480	44	69	622	
0010	WB	247.00	-	248.00	1000	67	106	951	
0010	WB	248.00	-	249.00	1000	67	106	951	
0010	WB	249.00	-	250.00	2180	48	77	689	
0010	WB	250.00	-	251.00	3780	23	37	333	
0010	WB	251.00	-	252.00	3180	33	52	467	
0010	WB	252.00	-	253.00	3480	28	44	400	
0010	WB	253.00	-	254.00	3980	20	32	289	
0010	WB	254.00	-	255.00	2380	45	72	644	
0010	WB	255.00	-	256.00	3380	30	47	422	
0010	WB	256.00	-	257.00	3680	25	40	356	
0010	WB	257.00	-	258.00	3780	23	37	333	
0010	WB	258.00	-	259.00	3080	34	54	489	
0010	WB	259.00	-	260.00	2380	45	72	644	
0010	WB	260.00	-	261.00	0	82	130	1173	
0010	WB	261.00	-	262.00	2080	50	79	711	
0010	WB	262.00	-	263.00	3880	22	35	311	
0010	WB	263.00	-	264.00	4030	19	31	278	
0010	WB	264.00	-	265.00	3830	23	36	322	
0010	WB	265.00	-	266.00	1680	56	89	800	
0010	WB	266.00	-	267.00	2580	42	67	600	
0010	WB	267.00	-	268.00	3680	25	40	356	
0010	WB	268.00	-	269.00	2280	47	74	667	
0010	WB	269.00	-	270.00	3480	28	44	400	
0010	WB	270.00	-	271.00	3480	28	44	400	
0010	WB	271.00	-	272.00	3780	23	37	333	
0010	WB	272.00	-	273.00	2280	47	74	667	
0010	WB	273.00	-	274.00	0	82	130	1173	
0010	WB	274.00	-	275.00	0	82	130	1173	
0010	WB	275.00	-	276.00	0	82	130	1173	
0010	WB	276.00	-	277.00	0	82	130	1173	
0010	WB	277.00	-	278.00	0	82	130	1173	
0010	WB	278.00	-	278.80	0	82	130	1173	
TOTAL					77068	1520	2412	21711	
0010	WB/EB	UNDISTRIBUTED			36000	426	675	6079	For EB and WB Transverse Joints & Longitudinal Joints
TOTAL					201582	3262	5178	46605	

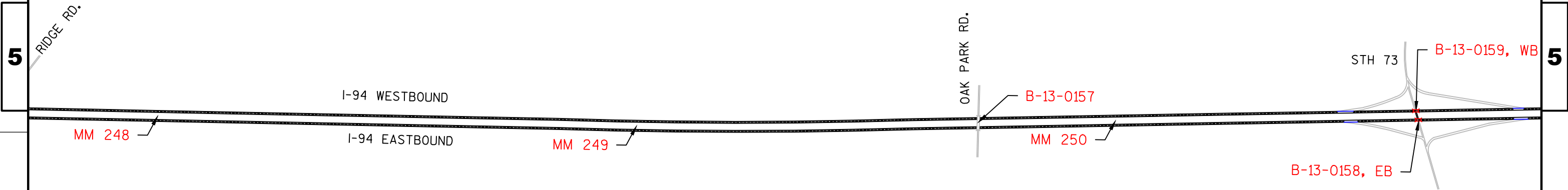


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NOTES:
-LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET



NOTES:

- LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
- DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET



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MM 251

MISSOURI RD.

B-13-0163, WB

MM 252

B-13-0162, EB

I-94 WESTBOUND

I-94 EASTBOUND

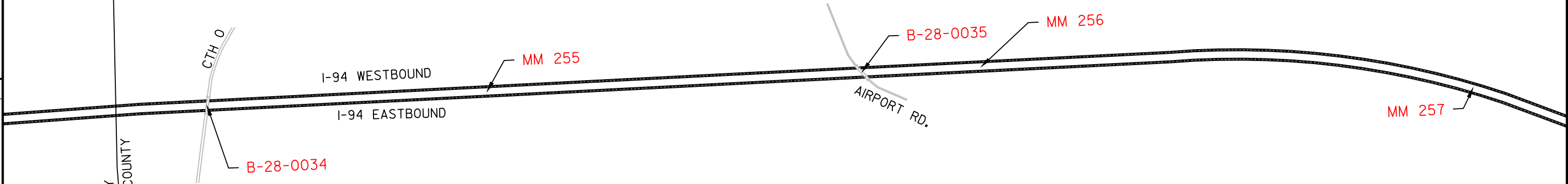
MM 253

MM 254

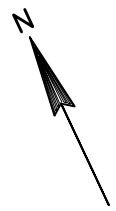
NOTES:
-LOG MILE DISTANCES ARE REFERENCED
TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE
MARKERS IS NOT EXACTLY 5280 FEET

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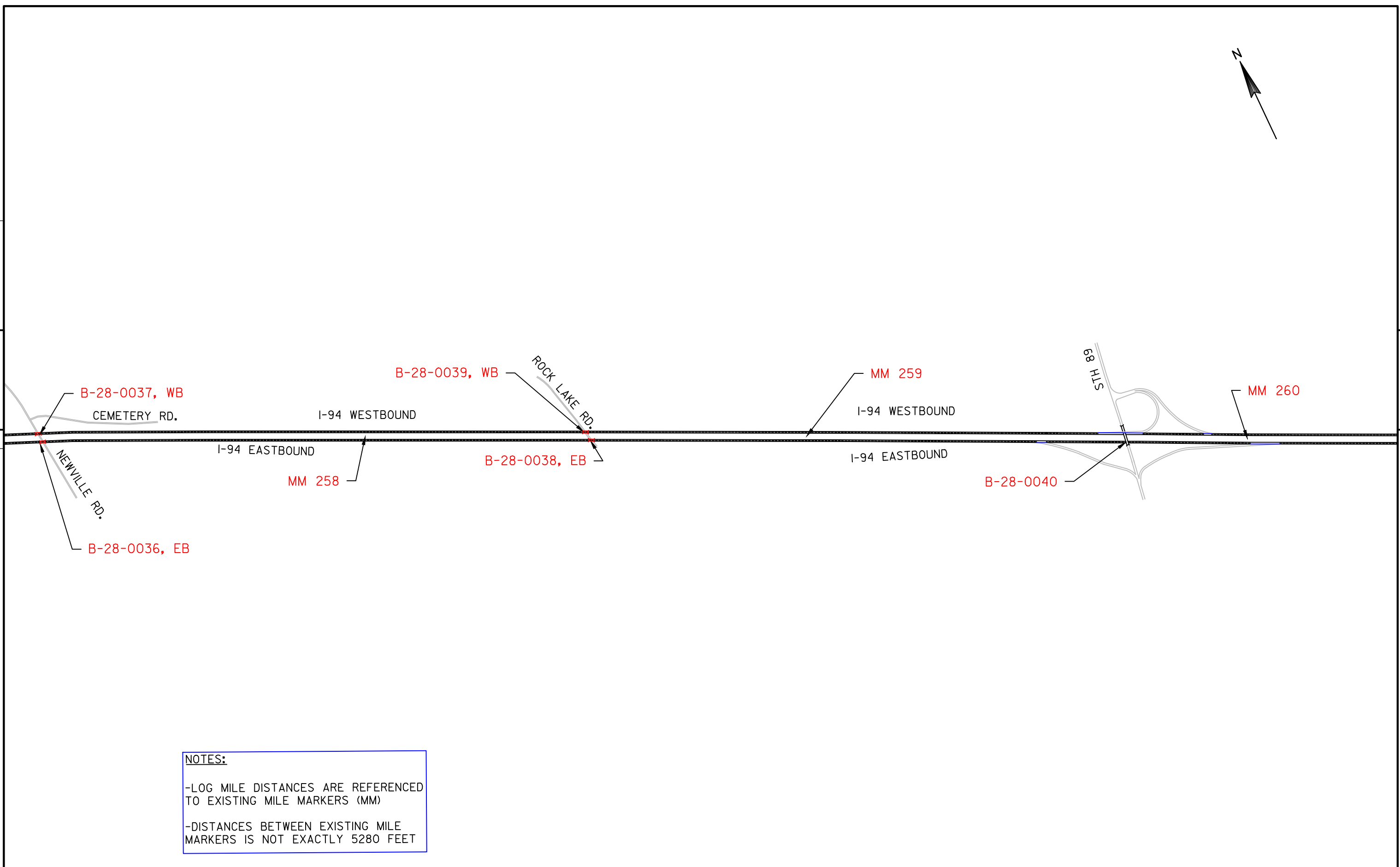


NOTES:
-LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET



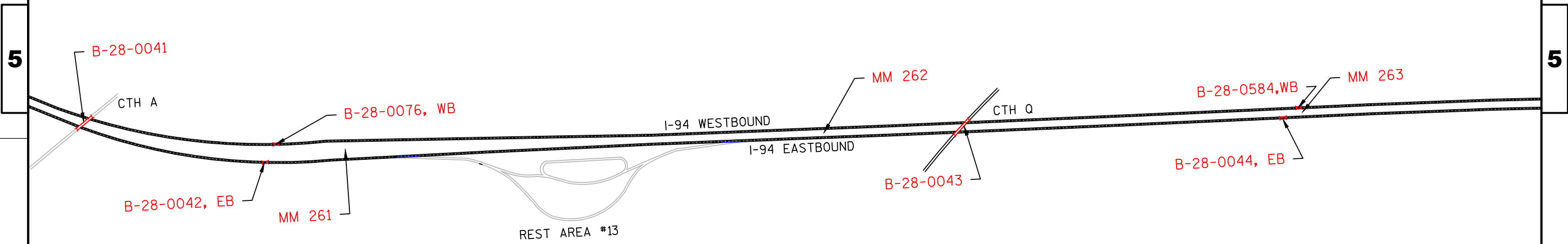
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NOTES:

- LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
- DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET

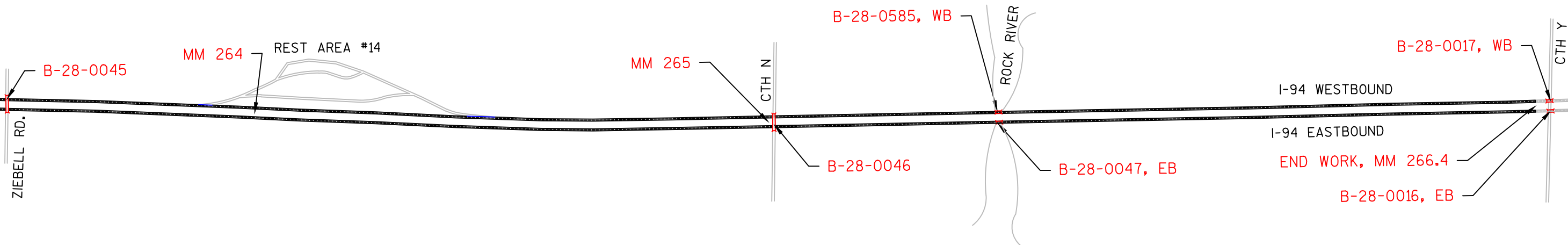


NOTES:

- LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
- DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET



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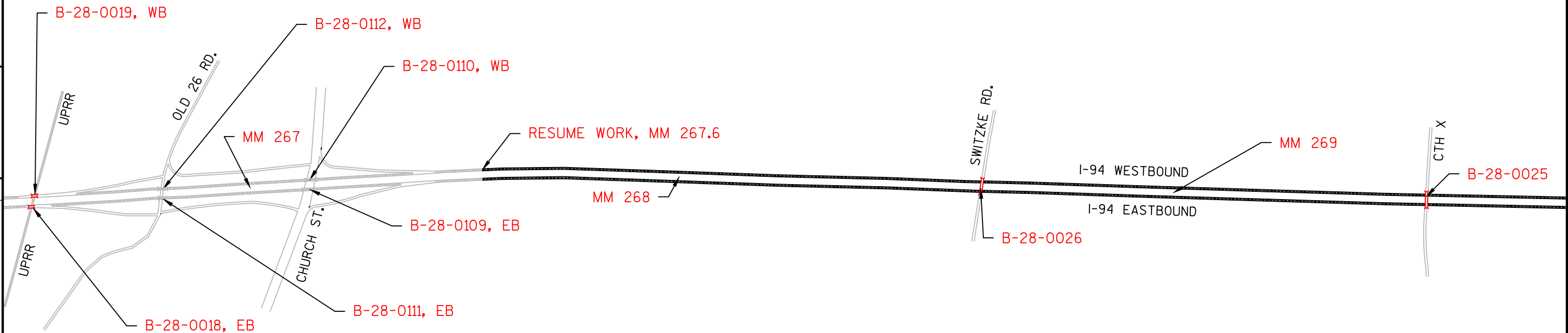
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NOTES:
-LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET



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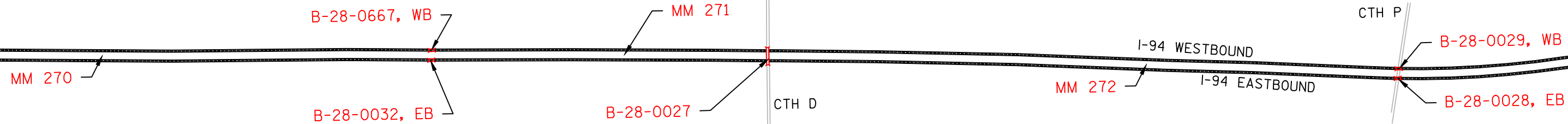


NOTES:
-LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET

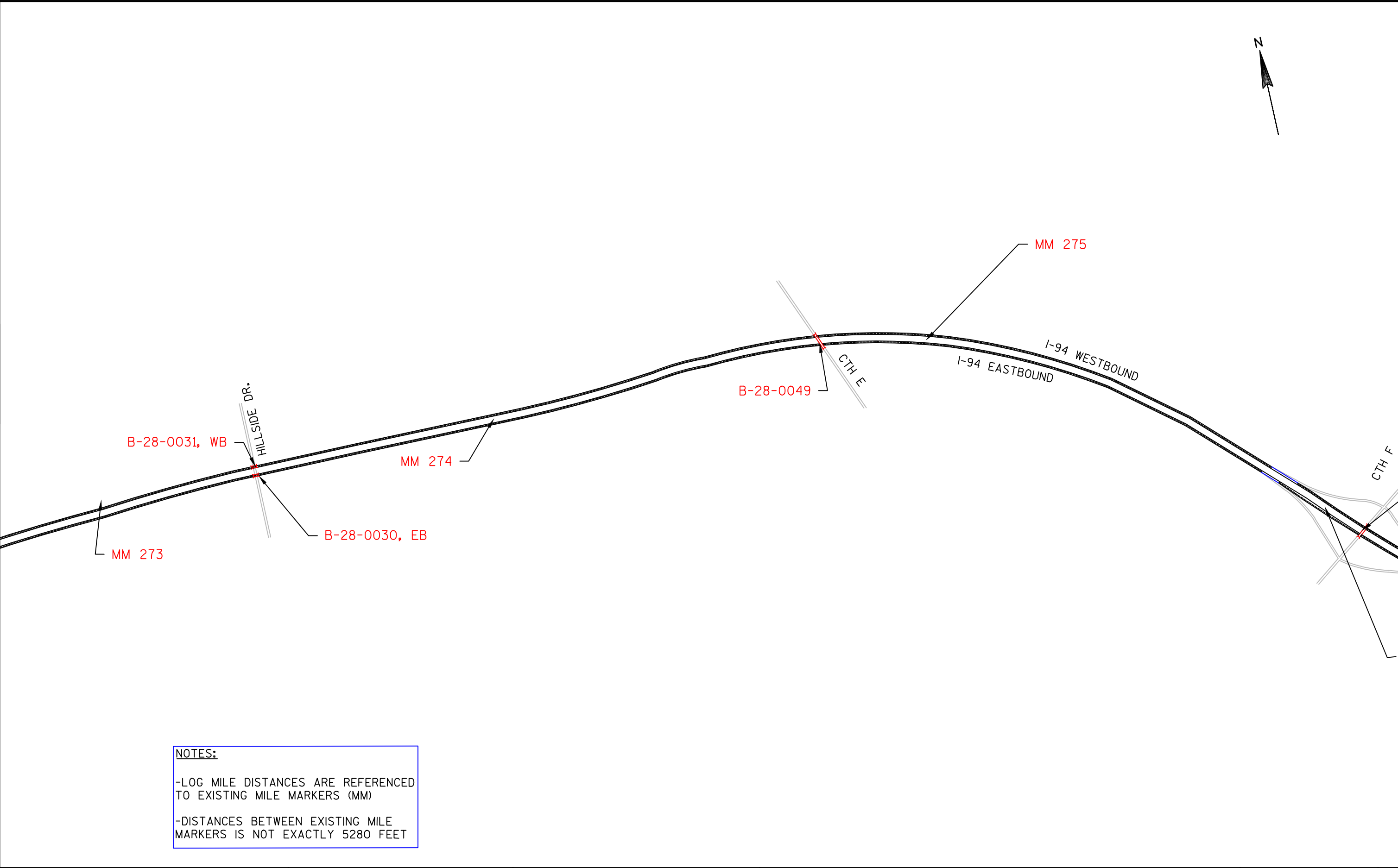


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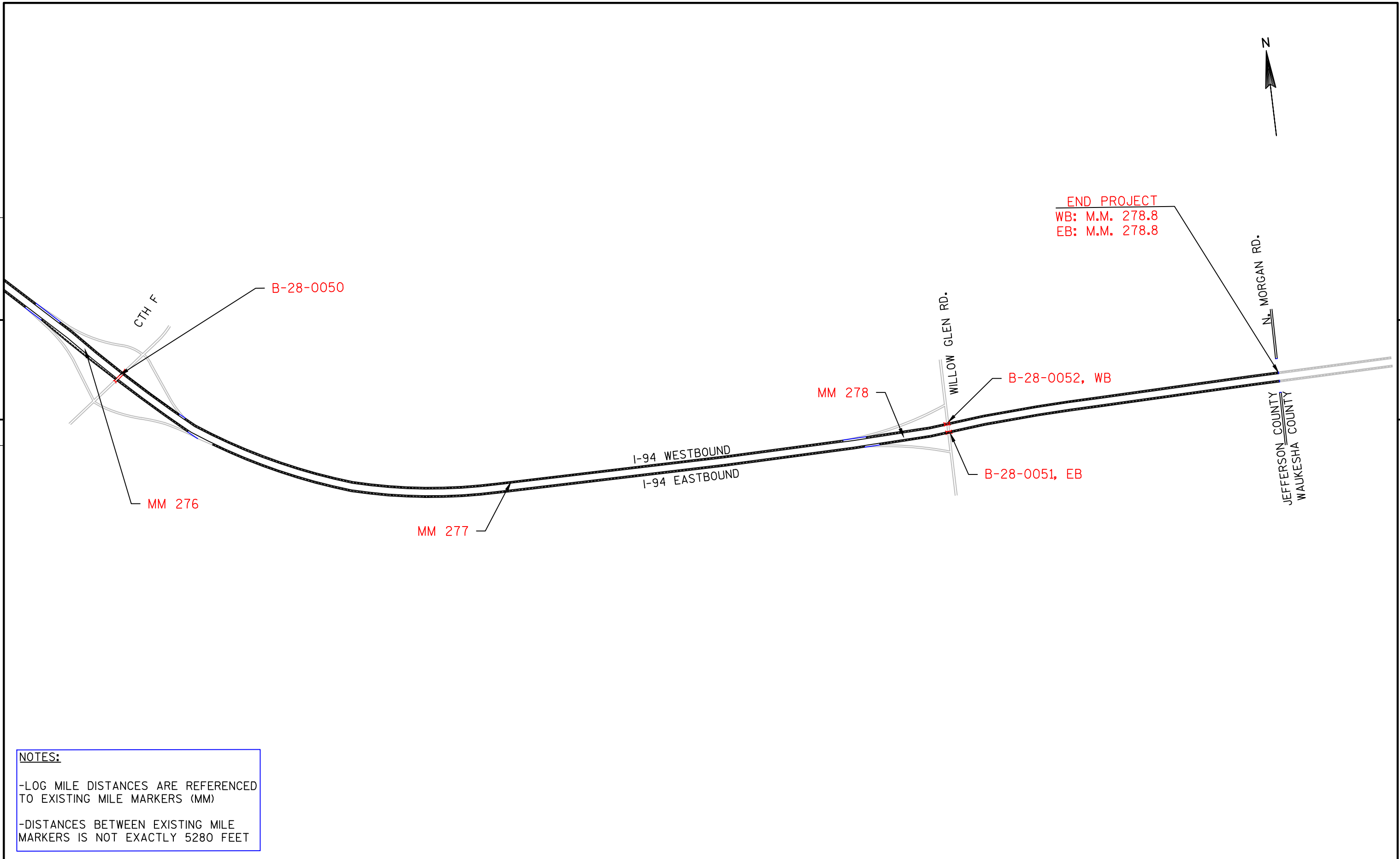
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NOTES:
-LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET

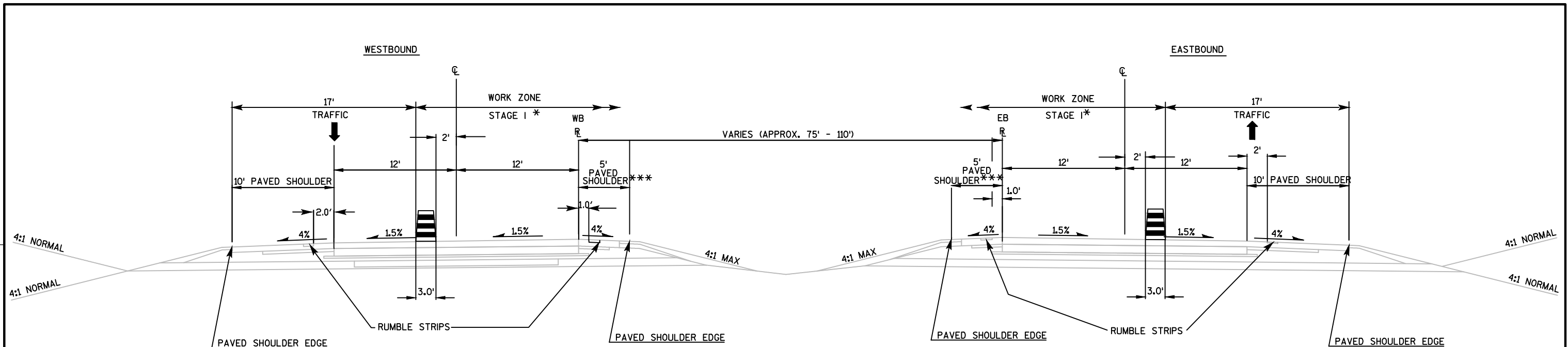


NOTES:
-LOG MILE DISTANCES ARE REFERENCED
TO EXISTING MILE MARKERS (MM)
-DISTANCES BETWEEN EXISTING MILE
MARKERS IS NOT EXACTLY 5280 FEET



NOTES:

- LOG MILE DISTANCES ARE REFERENCED TO EXISTING MILE MARKERS (MM)
- DISTANCES BETWEEN EXISTING MILE MARKERS IS NOT EXACTLY 5280 FEET



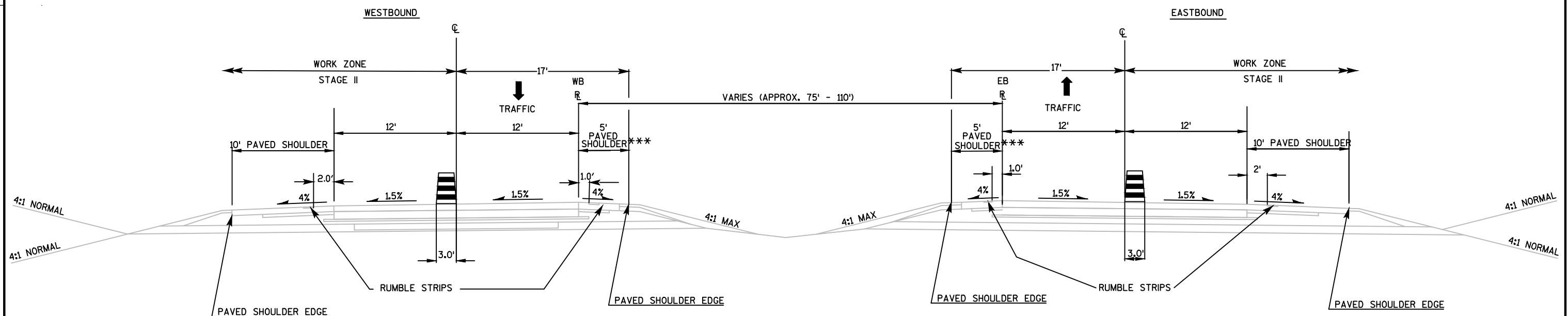
SINGLE LANE CLOSURE STAGING

INSIDE LANE & SHOULDER WORK ZONE AREA
STAGE I*

***4-FOOT WIDE PAVED SHOULDER FROM AIRPORT RD. TO CTH Y

*NOTE:

REPAIR LONGITUDINAL CENTERLINE JOINT AT THIS STAGE.
ALL TRANSVERSAL CRACKS LOCATED IN THE PASSING LANE
SHOULD ALSO BE REPAIRED AT THIS STAGE.



SINGLE LINE CLOSURE STAGING

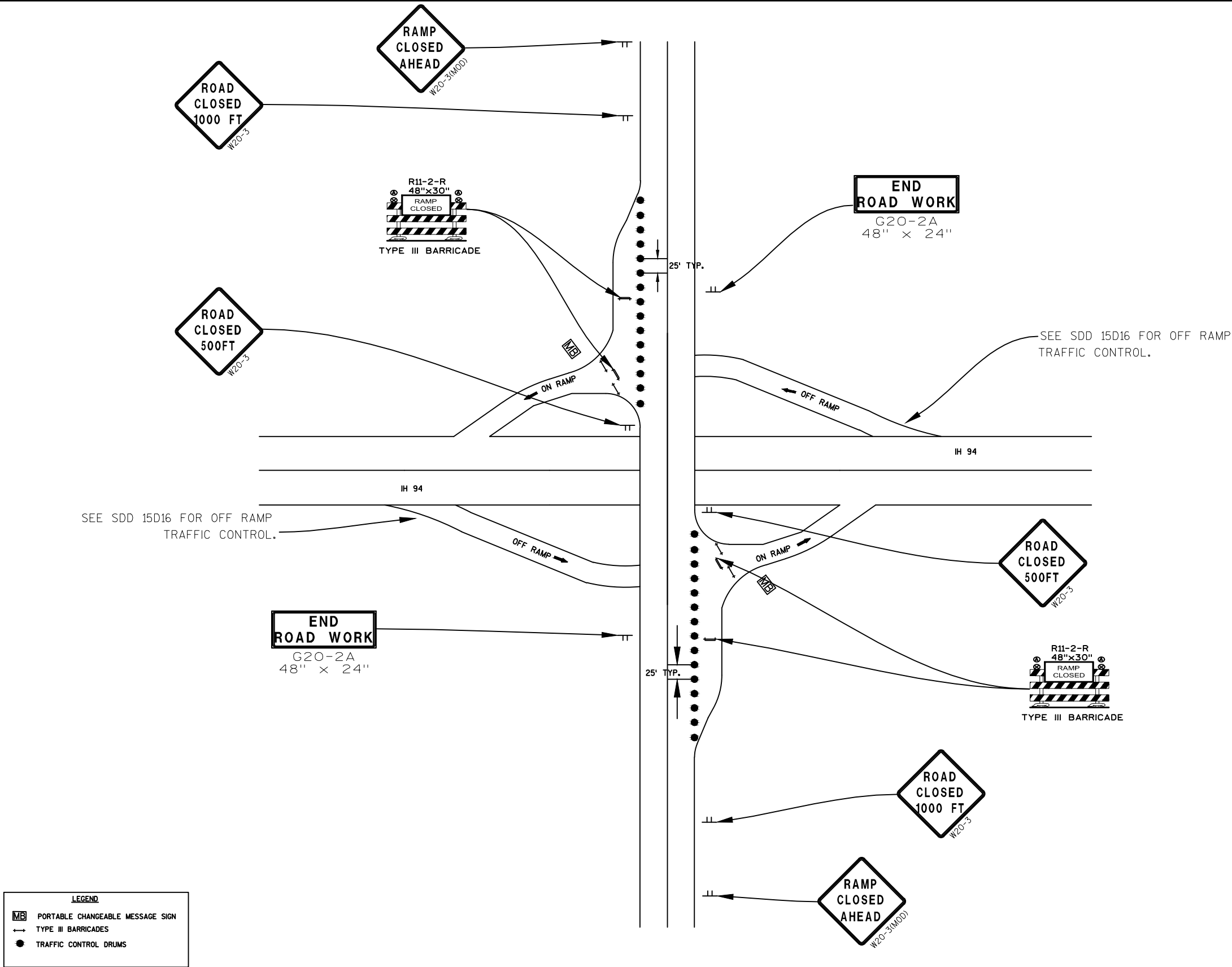
OUTSIDE LANE & SHOULDER WORK ZONE AREA
STAGE II**

***4-FOOT WIDE PAVED SHOULDER FROM AIRPORT RD. TO CTH Y

**NOTE:

REPAIR ALL THE TRANSVERSAL CRACKS AND
THE RAMP-MAINLINE JOINT AT THIS STAGE

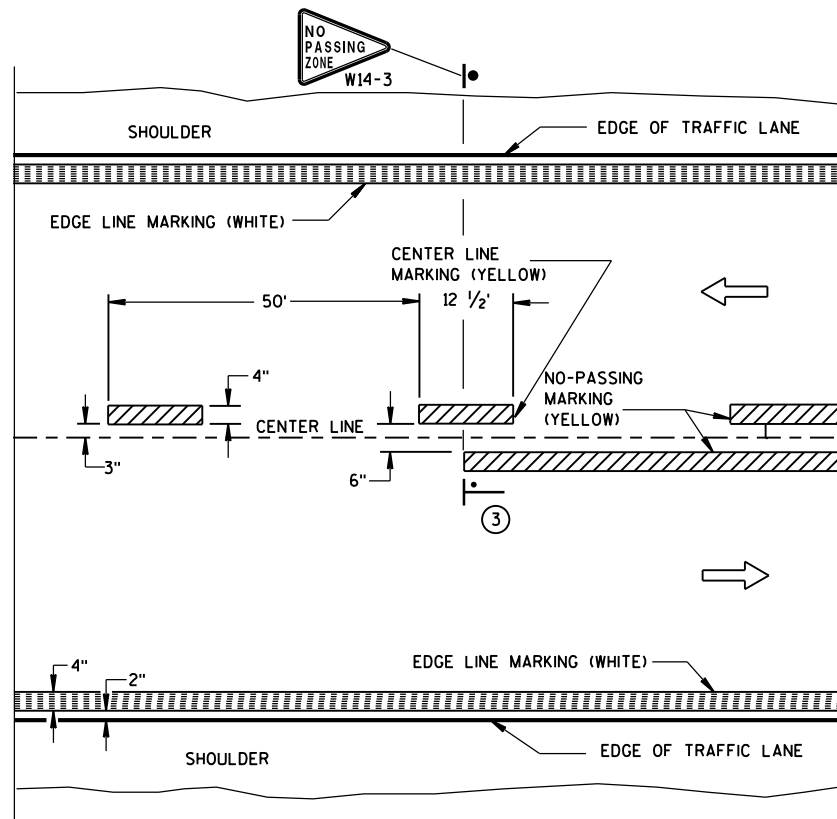
-FOR EXIT RAMP CLOSURE DETAILS SEE S.D.D. "TRAFFIC CONTROL EXIT RAMP CLOSURE"
-FOR ENTRANCE RAMP CLOSURE ADDITIONAL INFORMATION SEE DETAIL "TRAFFIC CONTROL FOR FREEWAY SERVICE RAMP"
-FOR MAINLINE TRAFFIC CONTROL WORK ZONES SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION".



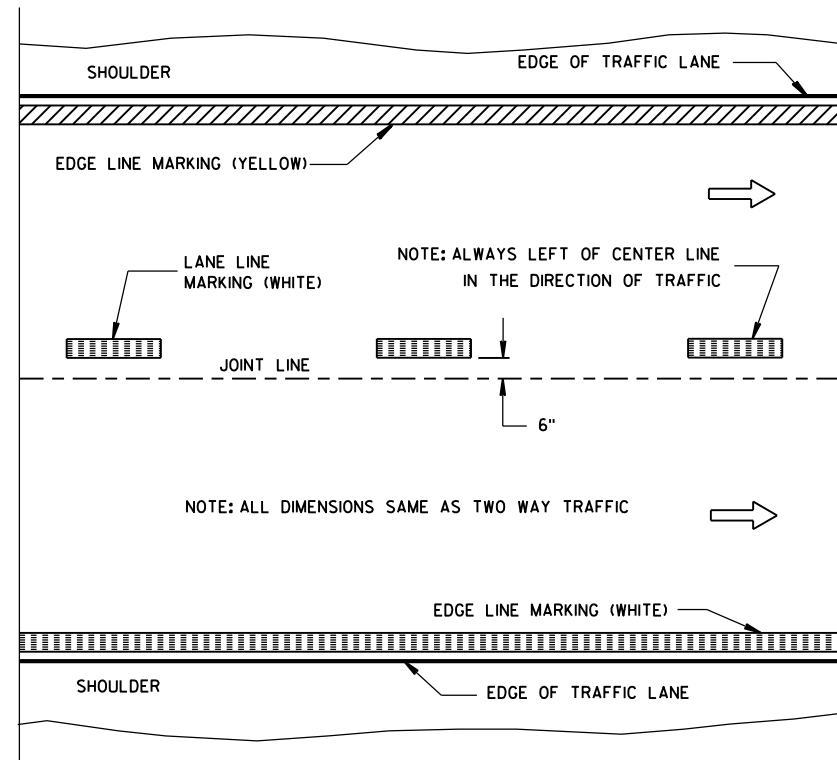
TRAFFIC CONTROL FOR FREEWAY SERVICE RAMPS

Standard Detail Drawing List

15C08-16A	PAVEMENT MARKING (MAINLINE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-03C	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
15D12-05B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-02	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

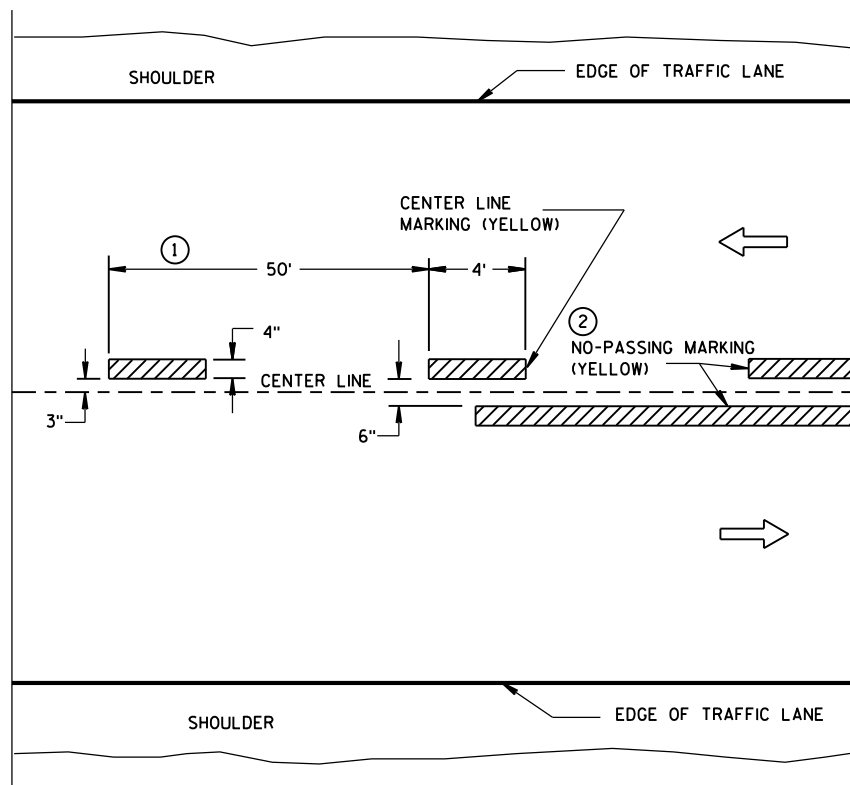


TWO WAY TRAFFIC

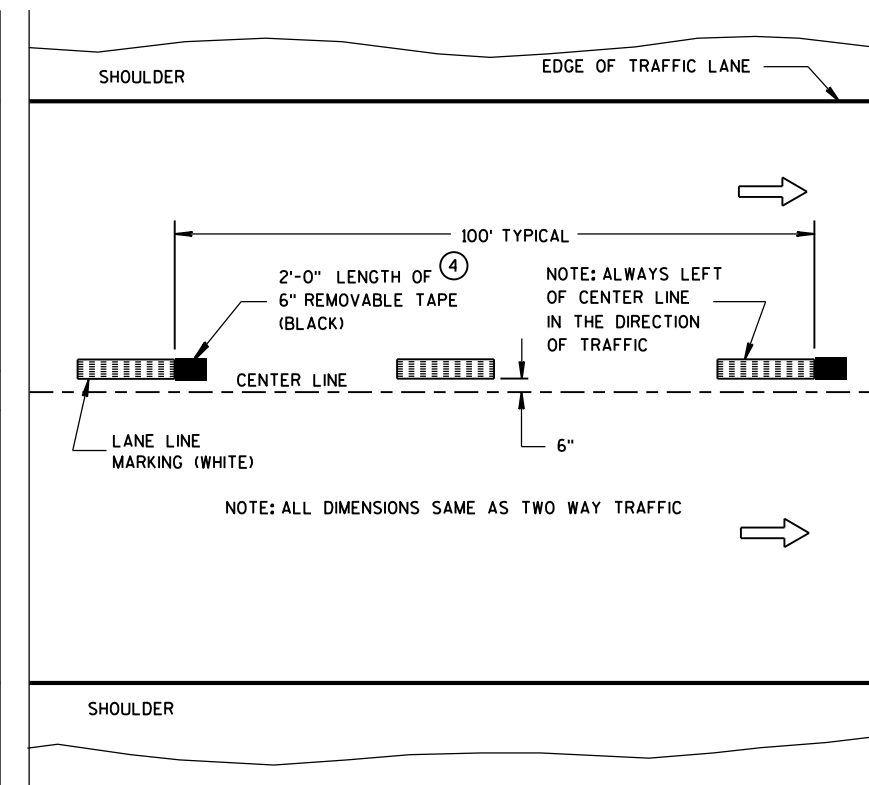


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

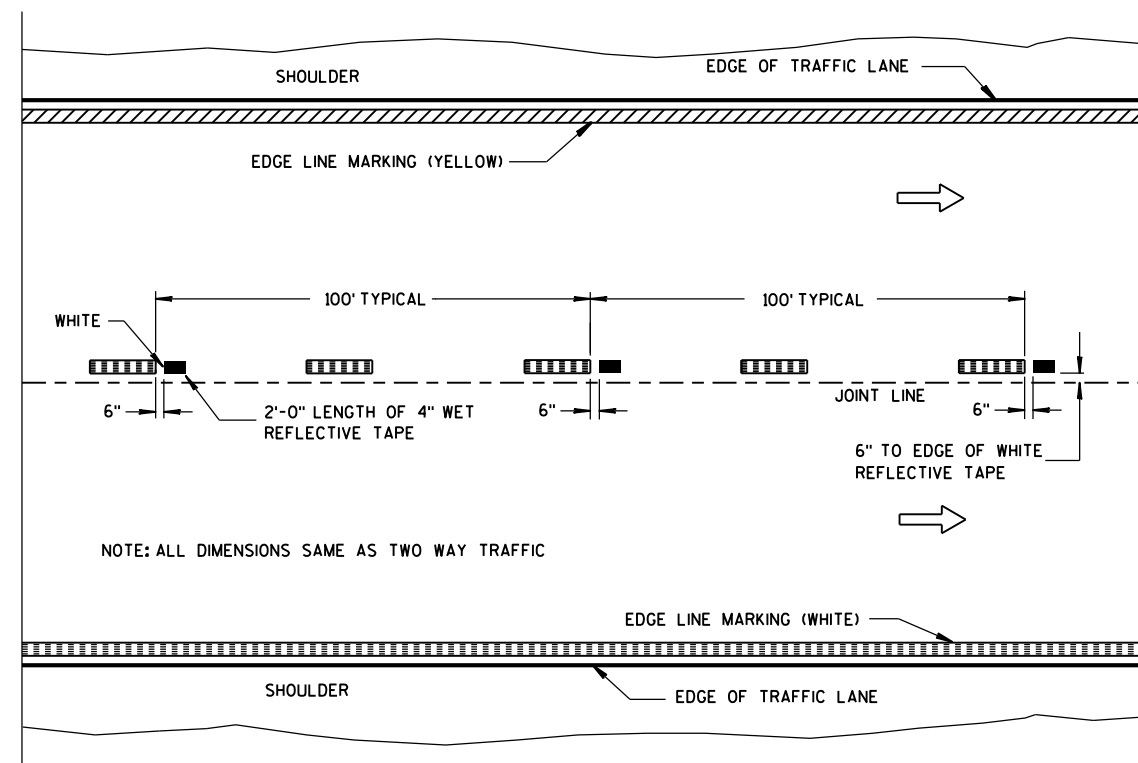
GENERAL NOTES

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
5-13-2013
DATE
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

LEGEND

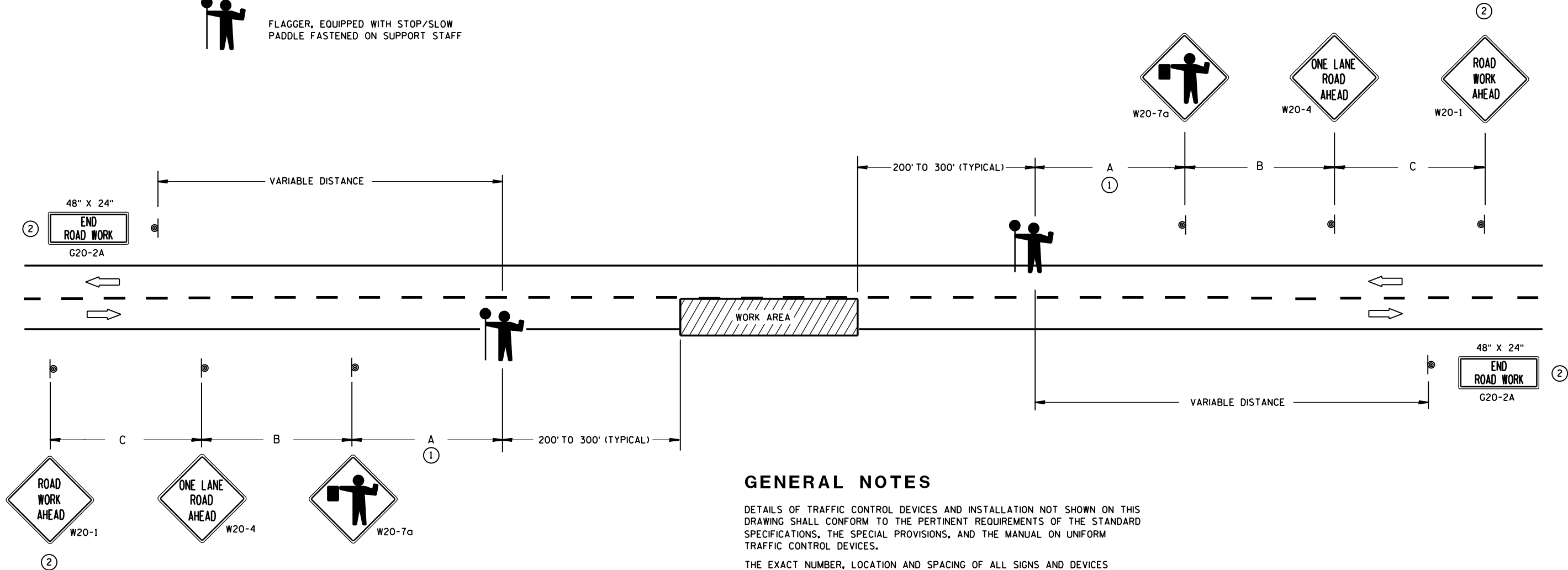
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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



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



GENERAL NOTES

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

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

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

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

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

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

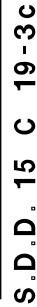
① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

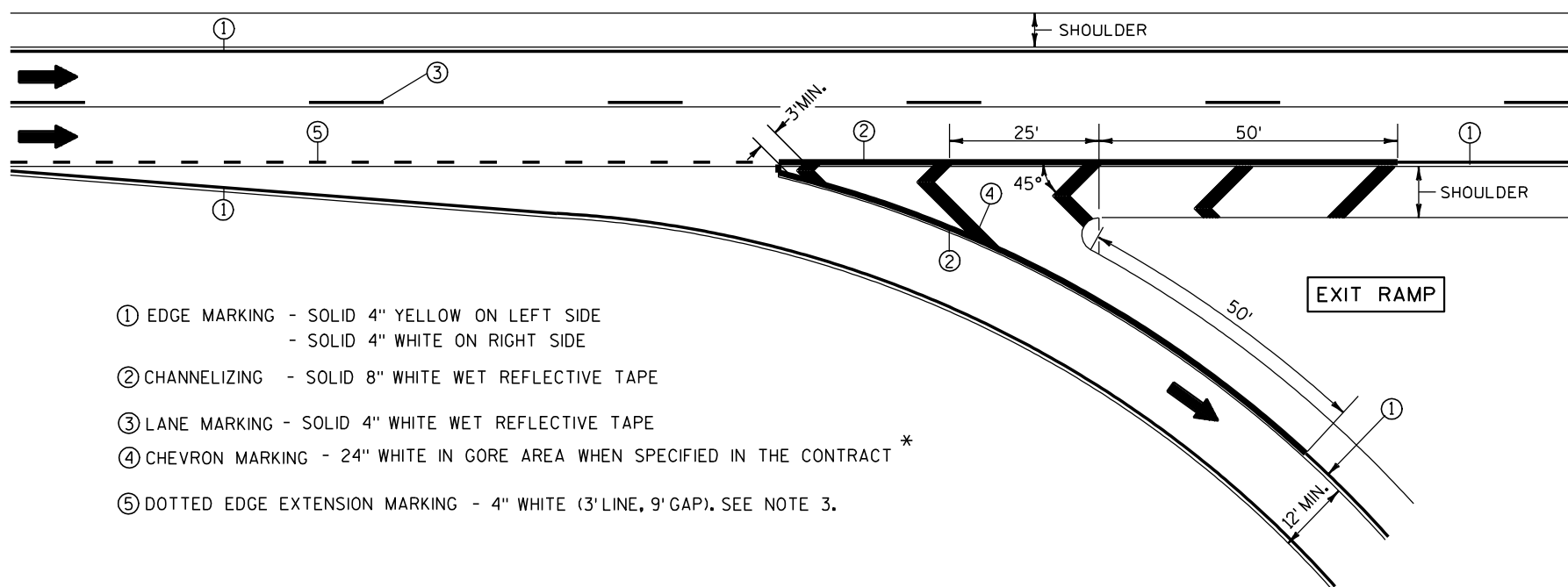
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



APPROVED	
Sept. 2015	/S/ Peter Amakobe Atepe
DATE	STATEWIDE WORK ZONE TRAFFIC
	SAFETY ENGINEER
FHWA	

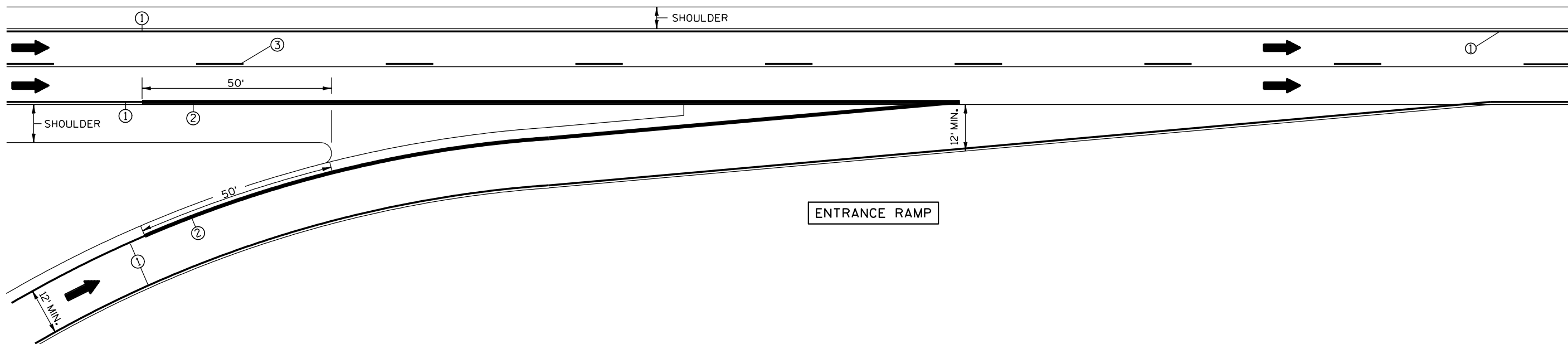


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING -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

NOTES:

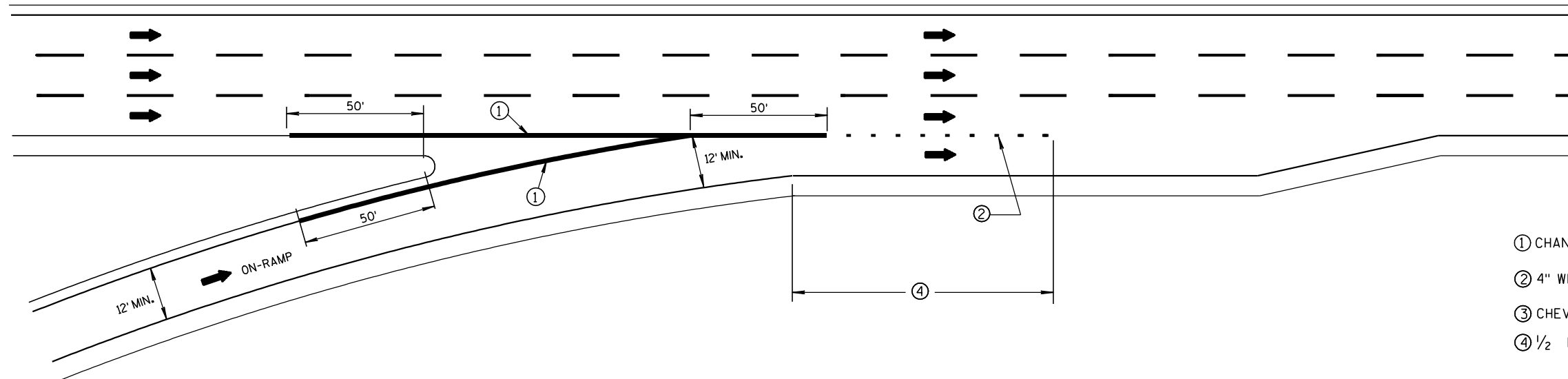
- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL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

* REFER TO DESIGN NOTES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

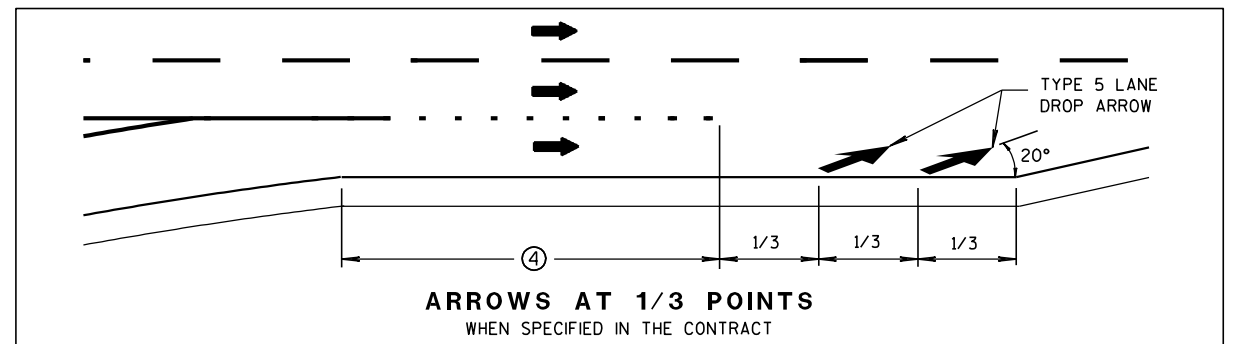
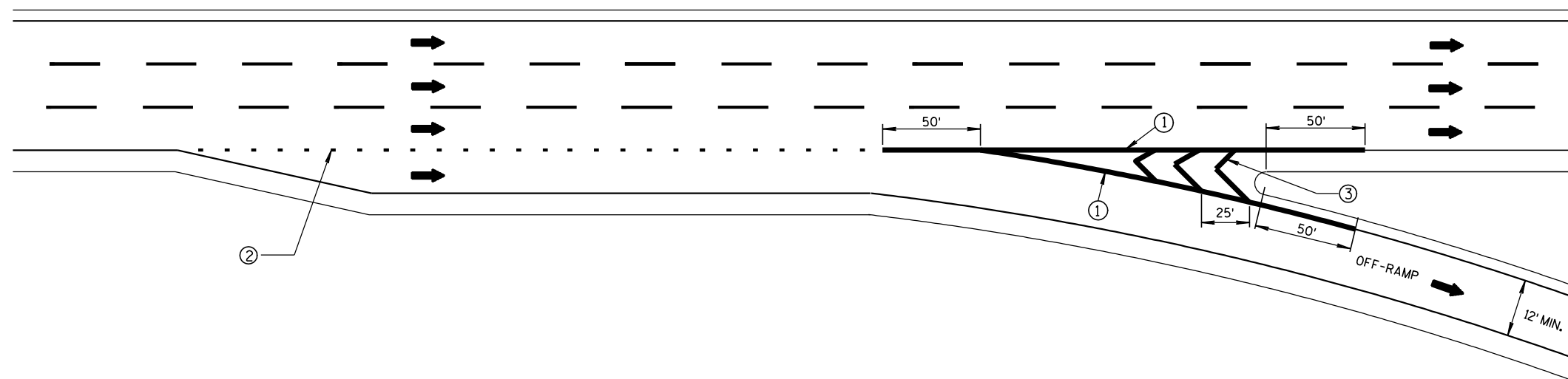


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

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

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

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.

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.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

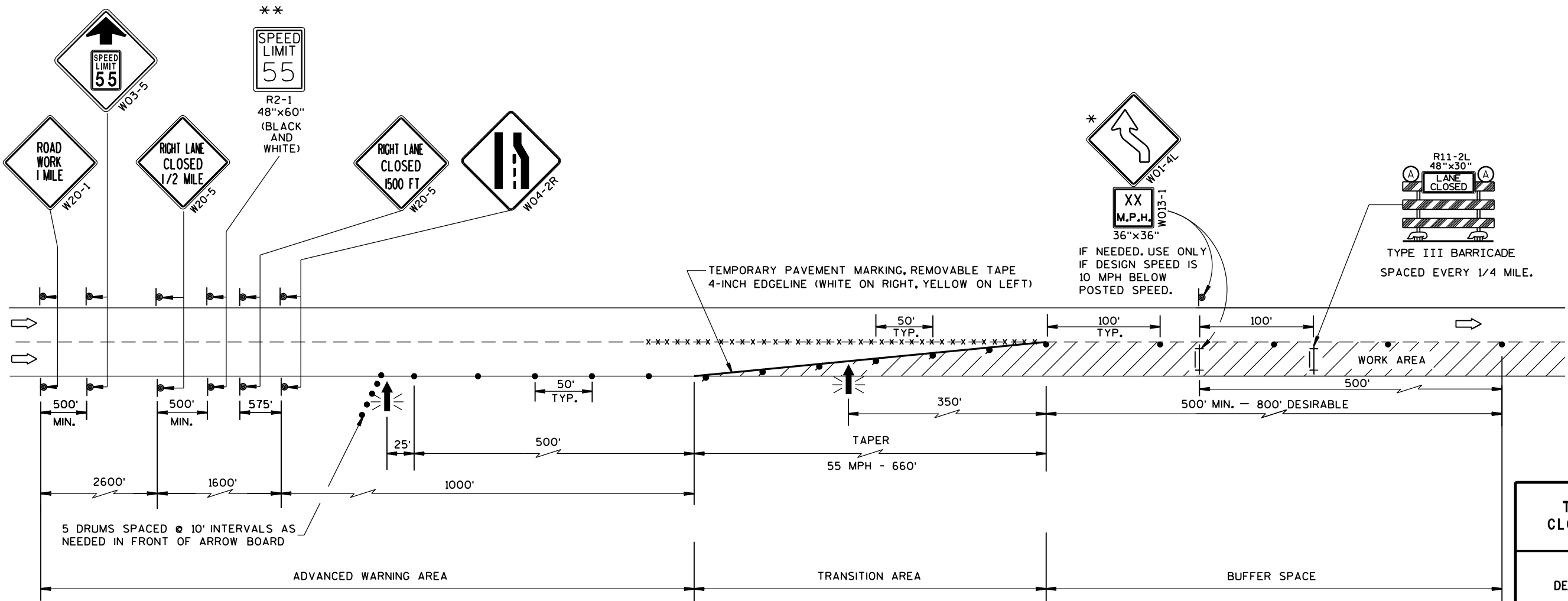
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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 (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.

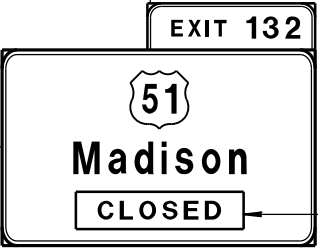


TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Feb. 2015 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



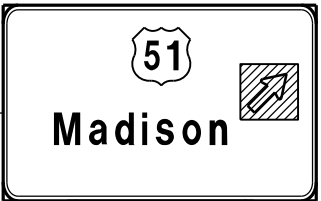
G20-60
108"x24"

OR



G20-60
108"x24"

PLACE SIGN G20-60 OVER MILEAGE
ON EXISTING E1-1A SIGN



COVER ARROW ON
EXISTING E4-1A
SIGN (COVERING
SIGNS TYPE I)

G20-61
120"x30"

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 4 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.

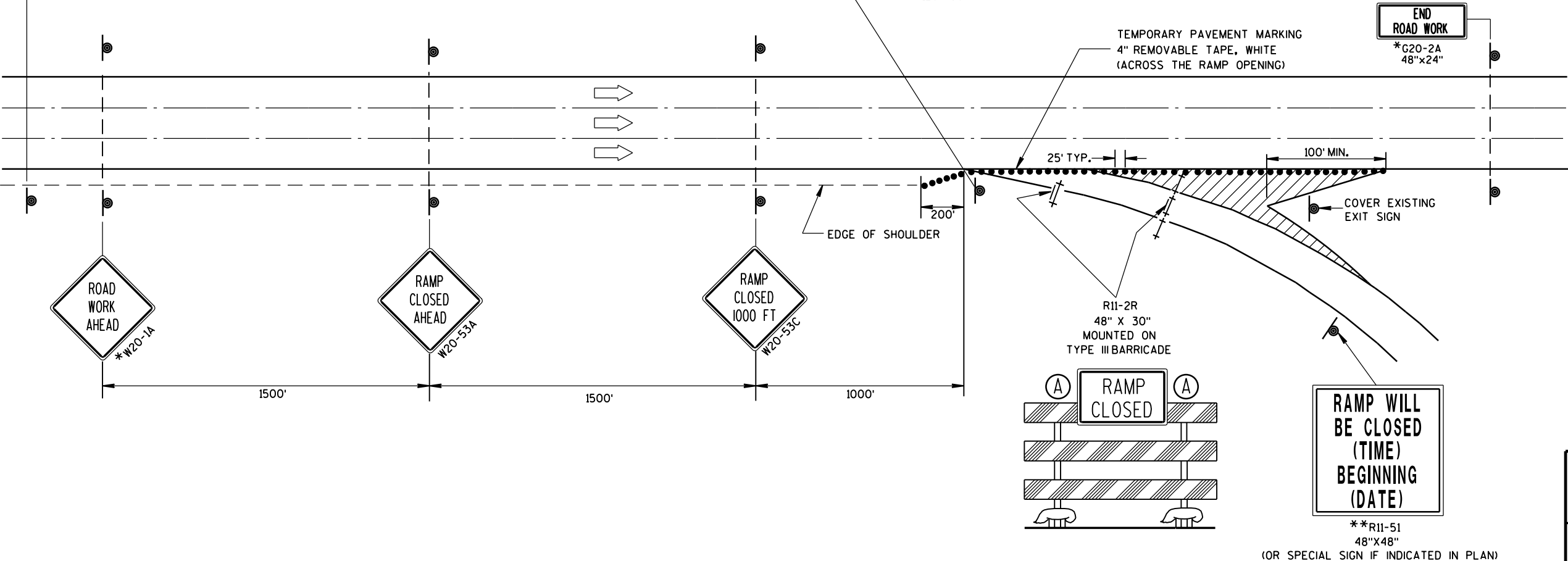
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

* 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.

** PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

6

6



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

S.D.D. 15 D 16-3

S.D.D. 15 D 16-3

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

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.

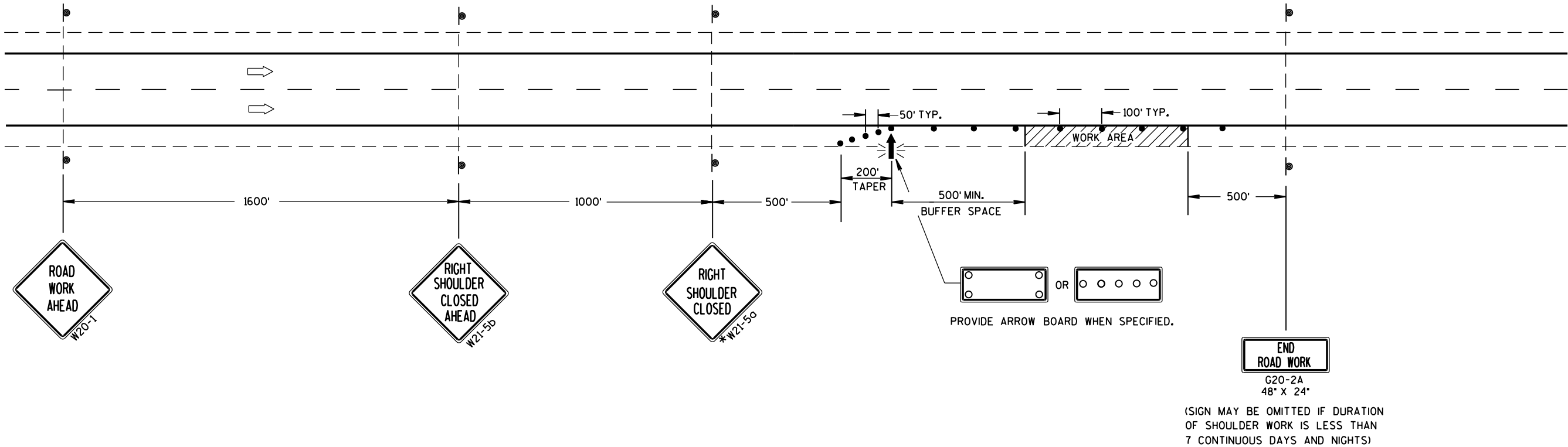
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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