

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. 9	Cross Sections

TOTAL SHEETS = 60



37

DESIGN DESIGNATION

A.A.D.T. 2025	=	1520
A.A.D.T. 2045	=	1660
D.H.V.	=	-
D.D.	=	-
T.	=	23.0%
DESIGN SPEED	=	60 MPH
ESALS	=	700,000

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	
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	

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

## PLAN OF PROPOSED IMPROVEMENT

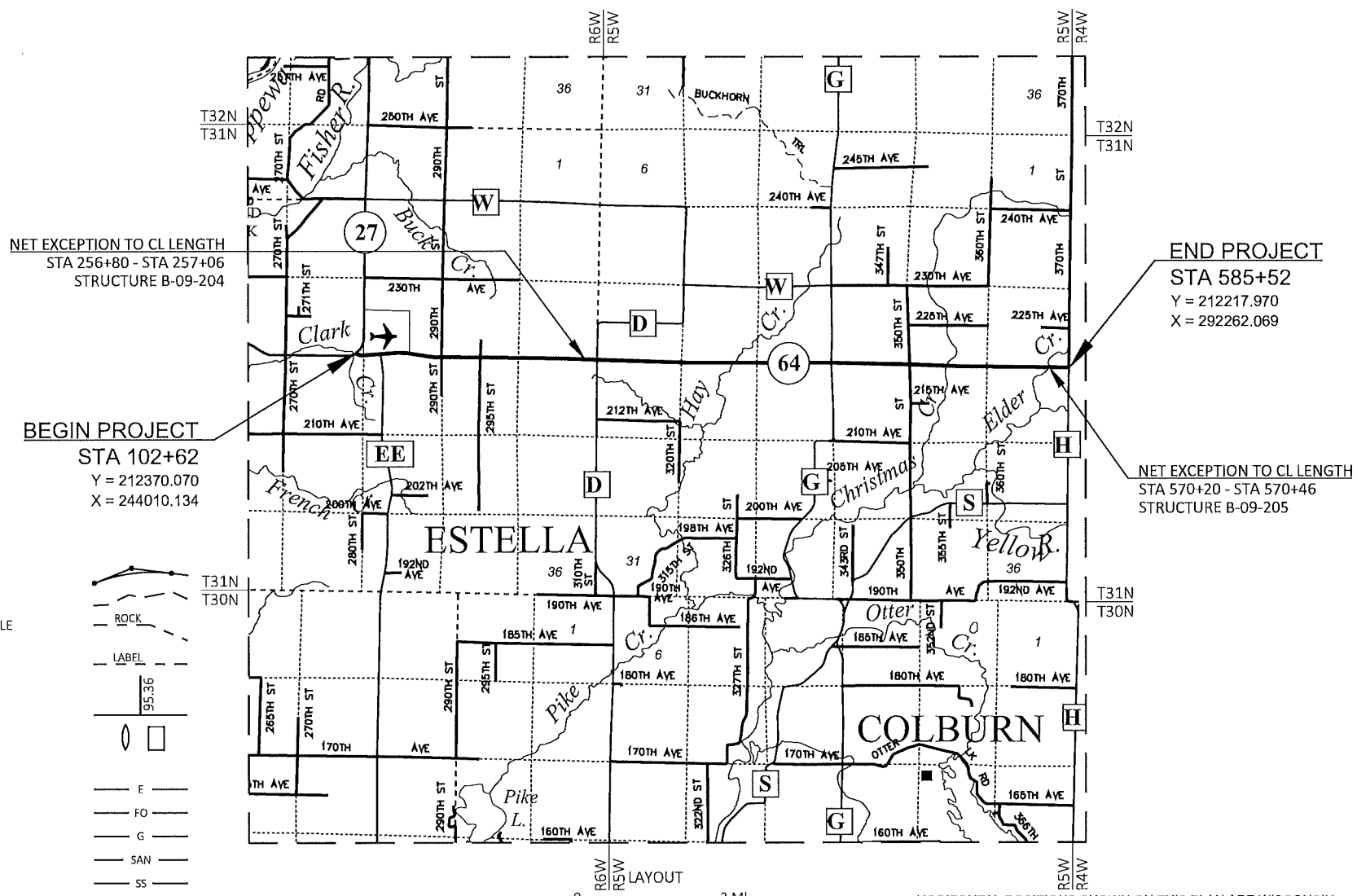
# CORNELL - GILMAN

STH 27 N TO CTH H

STH 64

CHIPPEWA

STATE PROJECT NUMBER  
8190-01-72



NET EXCEPTION TO CL LENGTH  
STA 256+80 - STA 257+06  
STRUCTURE B-09-204

BEGIN PROJECT  
STA 102+62  
Y = 212370.070  
X = 244010.134

END PROJECT  
STA 585+52  
Y = 212217.970  
X = 292262.069

NET EXCEPTION TO CL LENGTH  
STA 570+20 - STA 570+46  
STRUCTURE B-09-205

LAYOUT  
SCALE 0 2 MI  
TOTAL NET LENGTH OF CENTERLINE = 9.146 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), CHIPPEWA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8190-01-72	WISC 2024131	1

ORIGINAL PLANS PREPARED BY

**GREMMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
Stevens Point • Fond du Lac  
120 Wilshire Boulevard North • Stevens Point, WI 54481  
(715) 341-4363 • fax (715) 341-1866

**WISCONSIN**  
DEXTER D. KAETTERHENRY  
E-43966  
PLOVER  
WI  
PROFESSIONAL ENGINEER

*Dexter Kaetterhenry*

7/27/2023  
DATE DEXTER D. KAETTERHENRY, PE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor GREMMER AND ASSOCIATES, INC.  
Designer GREMMER AND ASSOCIATES, INC.  
Project Manager JESSE LARSON  
Regional Examiner TOU YANG  
Regional Supervisor NICOLE PASSUELLO

APPROVED FOR THE DEPARTMENT  
DATE: 7/27/23 *Jesse Larson* (Signature)

GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR 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 DIGGERS HOTLINE.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE IS MEASURED FOR PAYMENT BY THE TON, THE THICKNESS SHOWN ON THE PLAN IS APPROXIMATE. THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

CURVE DATA IS BASED ON ARC DEFINITION.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE INSTALLED PRIOR TO SEAL COAT AND FOG SEAL.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES

PROJECT OVERVIEW

TYPICAL SECTIONS

CONSTRUCTION DETAILS

EROSION CONTROL

PAVEMENT MARKING

WDNR CONTACT

DEPARTMENT OF NATURAL RESOURCES  
 ATTN: LEAH NICOL  
 1300 WEST CLAIREMONT AVENUE  
 EAU CLAIRE, WI 54701  
 OFFICE: 715.934.9014  
 EMAIL: leah.nicol@wisconsin.gov

UTILITIES

BRIGHTSPEED OF NORTH CENTRAL WISCONSIN LLC -  
 COMMUNICATION LINE  
 ATTN: BRIAN HUHNS  
 425 ELLINGSON AVE  
 HAWKINS, WI 54530  
 PHONE: (980) 376-1559  
 EMAIL: brian.huhn@brightspeed.com

BRIGHTSPEED OF NORTHERN WISCONSIN LLC -  
 COMMUNICATION LINE  
 ATTN: BRIAN HUHNS  
 425 ELLINGSON AVENUE  
 HAWKINS, WI 54530  
 PHONE: (980) 376-1559  
 EMAIL: brian.huhn@brightspeed.com

CHIPPEWA VALLEY ELECTRIC COOPERATIVE - ELECTRICITY  
 ATTN: NIC ALBERSON  
 317 SOUTH 8TH STREET  
 CORNELL WI, 54732  
 PHONE: (715) 239-6800  
 EMAIL: nalberson@cve.coop

DAIRYLAND POWER COOPERATIVE - ELECTRICITY  
 ATTN: MIKE LYDON  
 3200 EAST AVENUE  
 PO BOX 817  
 LA CROSSE WI, 54602-0817  
 PHONE: (608) 787-1381  
 EMAIL: michael.lydon@dairylandpower.com

JUMP RIVER ELECTRIC COOPERATIVE - ELECTRICITY  
 ATTN: JORDAN BEHREANDT  
 1102 WEST 9TH STREET NORTH  
 LADYSMITH, WI 54848  
 PHONE: (715) 532-5524  
 EMAIL: jbehreandt@jrec.com

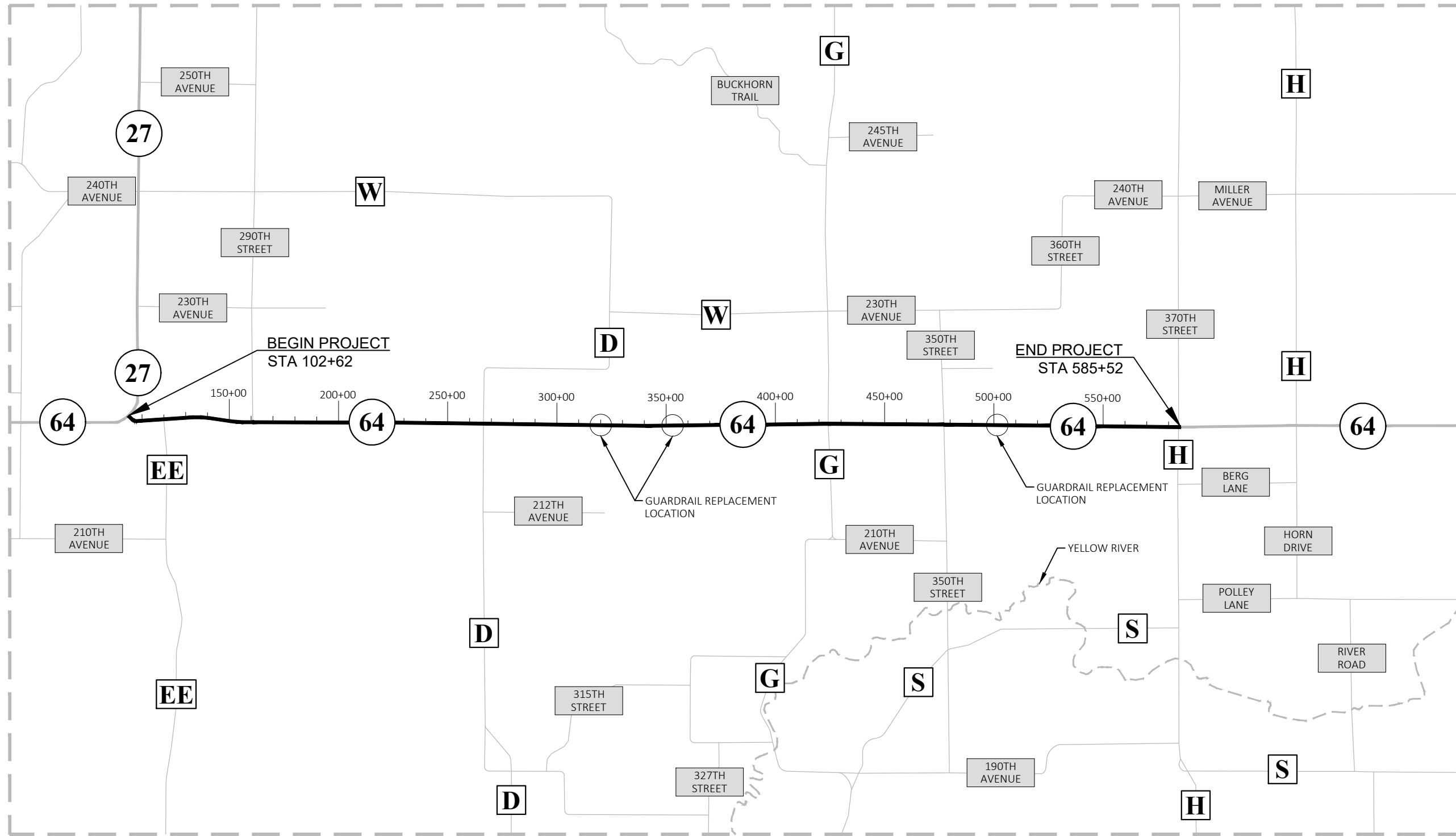
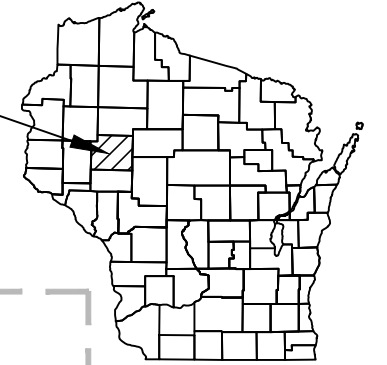
**RUNOFF COEFFICIENT TABLE**

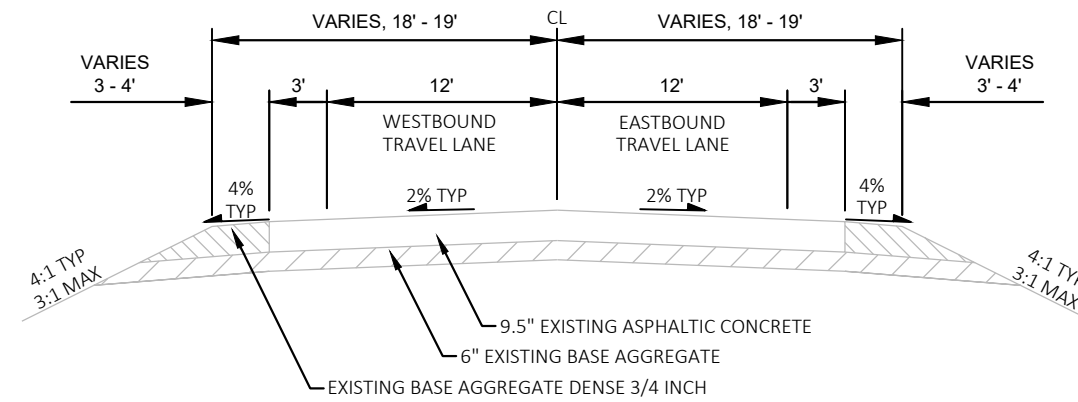
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 73.2 ACRES  
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.3 ACRES



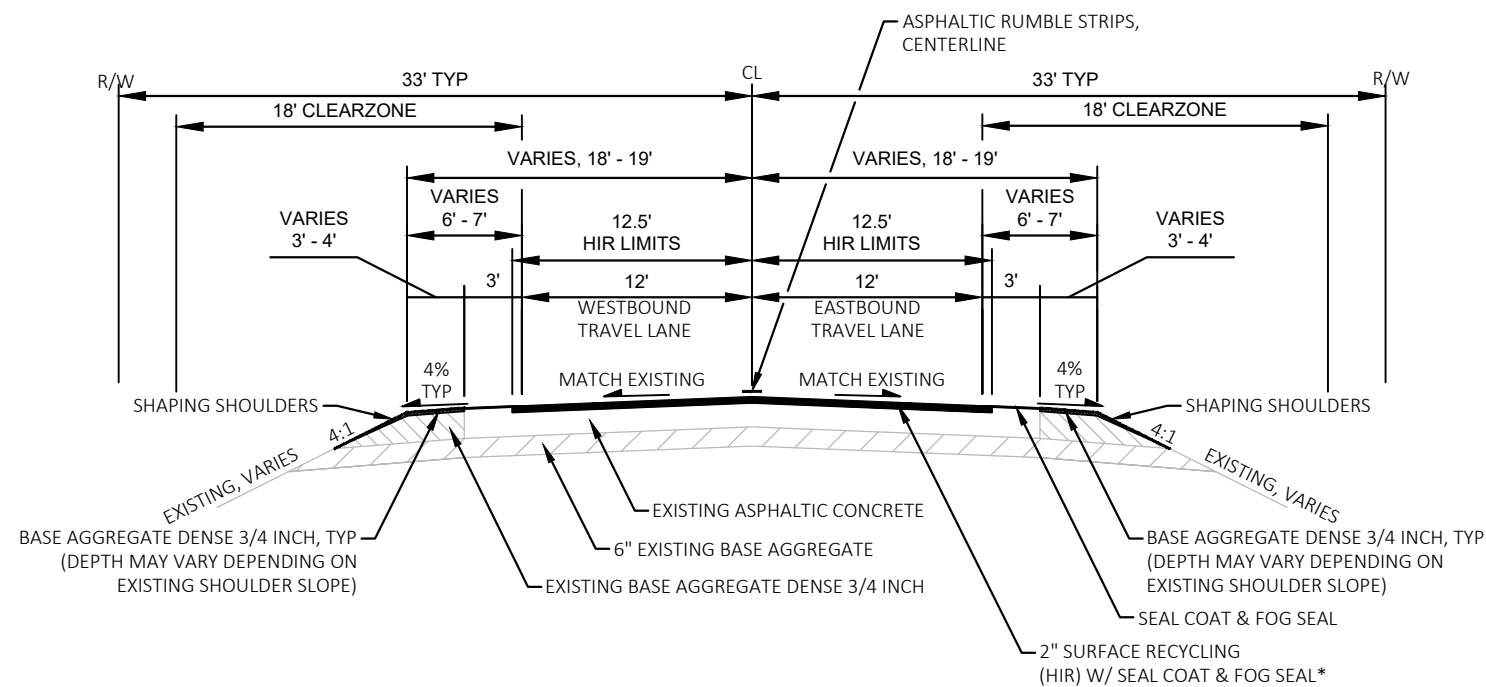
PROJECT LOCATION  
CHIPPEWA COUNTY  
NW REGION - EAU CLAIRE OFFICE





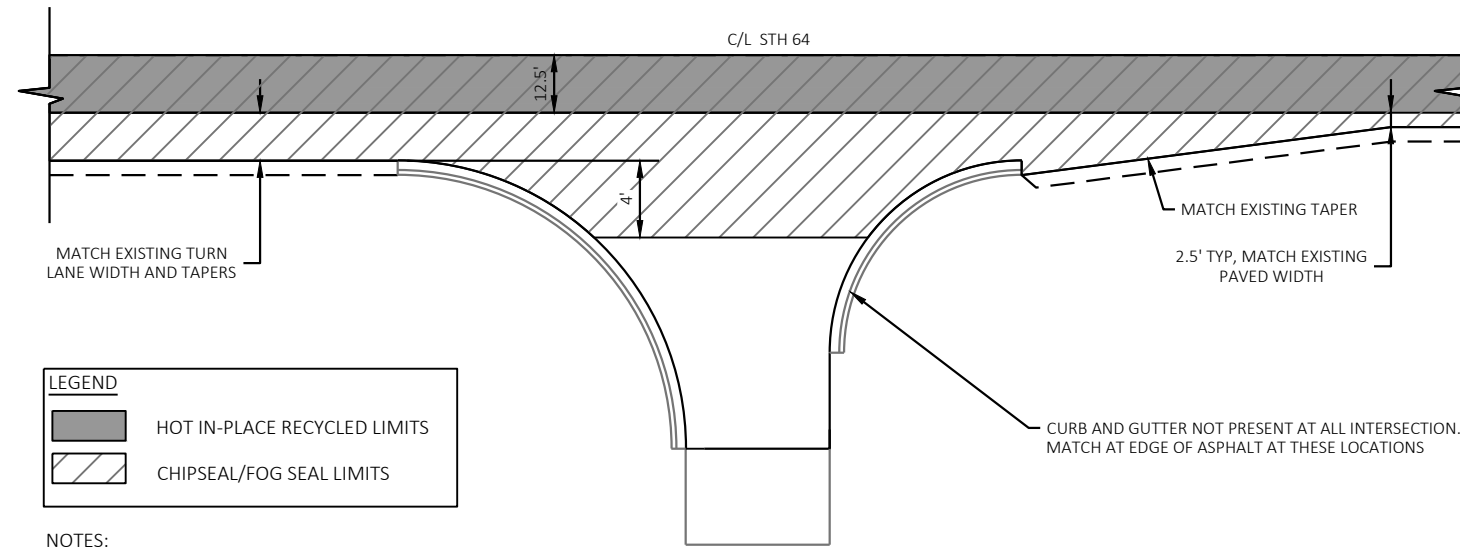
**TYPICAL EXISTING SECTION**  
STA 102+62 - STA 585+52



PAVEMENT CORE LOG					
BORING	STATION	THICKNESS	BORING	STATION	THICKNESS
C-01AL	105+02	7.00	C-47L	395+15	7.38
C-01L	111.53	7.50	C-50AL	379+03	9.75
C-03L	132+79	15.50	C-50AS	376+04	4.25
C-03S	132+80	3.38	C-50L	369+94	5.75
C-05L	153+50	14.00	C-52L	352+97	7.75
C-08L	174+90	11.25	C-52S	352+97	4.75
C-08S	174+89	5.00	C-54L	332+02	8.00
C-09L	199+98	9.50	C-56L	310+10	7.00
C-11L	216+83	11.25	C-56S	310+10	6.25
C-11S	216+83	6.50	C-58L	289+51	10.50
C-13L	238+21	7.38	C-60L	270+65	8.50
C-15L	258+07	9.50	C-60S	270+65	3.38
C-15S	258+06	10.00	C-61L	428+75	12.00
C-18L	247+54	9.75	C-61S	428+75	8.00
C-18S	247+54	4.00	C-63L	448+86	9.75
C-20L	226+63	12.00	C-64L	469+93	9.50
C-21L	205+85	7.75	C-64S	469+93	8.50
C-21S	205+85	3.50	C-65L	492+31	10.00
C-24L	182+29	10.50	C-66L	512+14	7.50
C-26L	163+59	9.75	C-66S	512+14	4.50
C-26S	163+57	5.50	C-67L	533+24	8.25
C-27L	143+06	11.00	C-68L	554+35	9.00
C-30L	120+89	10.00	C-68S	554+35	4.00
C-30S	120+90	5.25	C-69L	575+45	7.00
C-31L	280+46	11.00	C-71L	561+78	9.50
C-33L	301+78	10.38	C-71S	561+80	2.50
C-33S	301+76	9.38	C-73L	541+29	9.00
C-35L	322+03	10.38	C-77L	518+72	10.00
C-37L	343+85	10.38	C-77S	518+73	2.50
C-37S	343+84	10.75	C-78L	499+72	9.00
C-39L	364+65	10.63	C-79AL	482+12	8.50
C-41L	388+39	11.50	C-79AS	482+12	2.00
C-41S	388+38	7.00	C-79L	473+09	9.50
C-43L	107+43	9.50	C-81L	458+00	6.00
C-45L	415+98	10.50	C-81S	458+05	2.00
C-45S	415+98	5.38	C-82L	436+43	4.50



**TYPICAL FINISHED SECTION**  
STA 102+62 - STA 585+52

\* SEAL COAT AND FOG SEAL FULL WIDTH INCLUDING PAVED SHOULDERS, TURN LANES, AND SIDE ROAD TIE IN SECTIONS

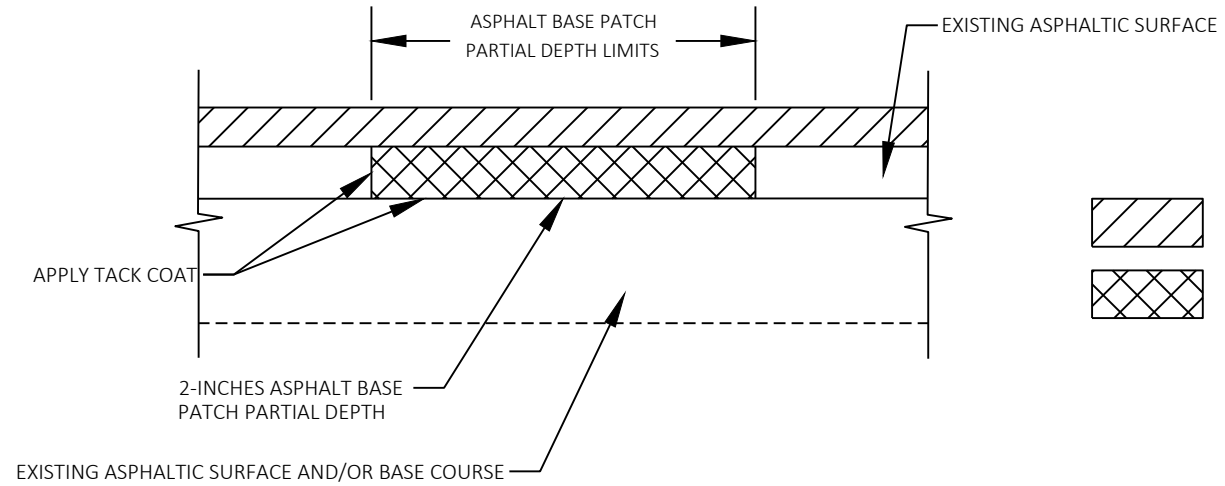


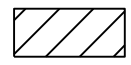
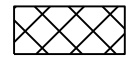
LEGEND	
	HOT IN-PLACE RECYCLED LIMITS
	CHIPSEAL/FOG SEAL LIMITS

NOTES:  
 CHIP SEAL AND FOG SEAL TURN LANES AND 4 FEET BEYOND RADIUS POINT OF ALL PAVED INTERSECTIONS.

PLAN VIEW

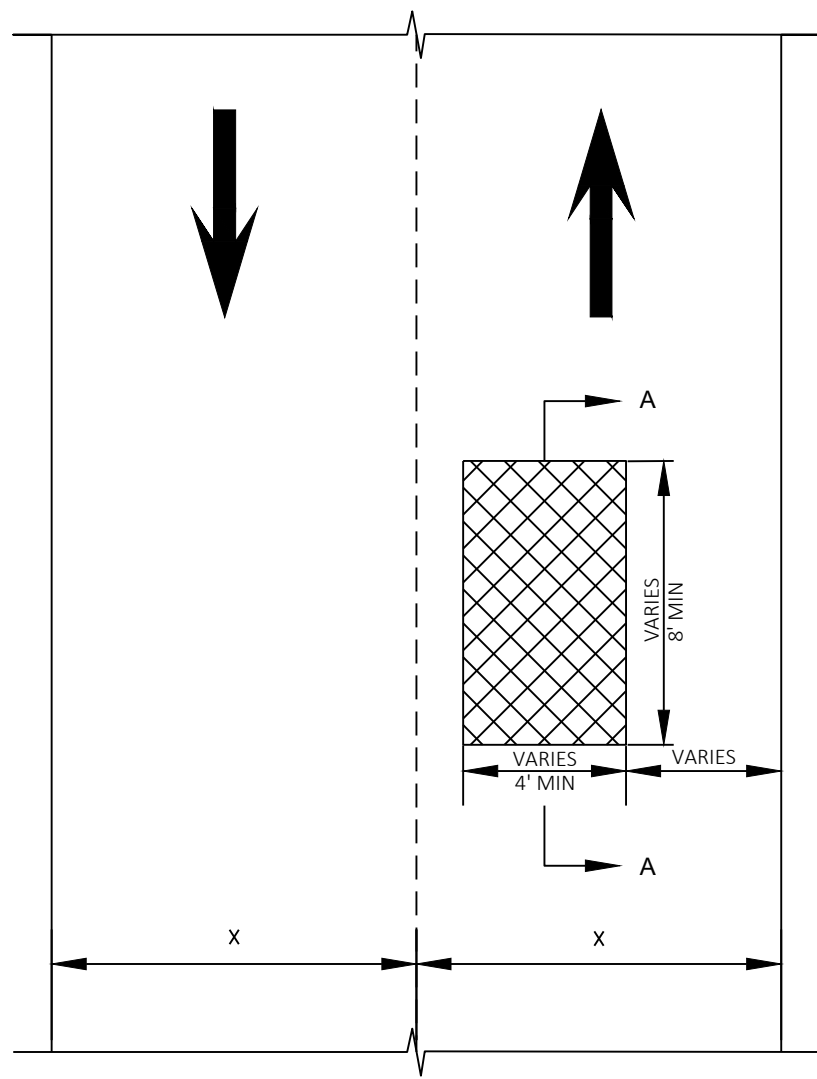
SIDE ROAD/TURN LANE/SHOULDER CHIPSEAL DETAIL

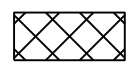



 2" HOT IN-PLACE RECYCLED ASPHALT  
 LIMITS OF DISTRESSED PAVEMENT MILLING 2", PLACE 2" ASPHALTIC SURFACE

STATION - STATION    LOCATION    L (FT)    W (FT)

ASPHALT BASE PATCH PARTIAL DEPTH  
SECTION A-A



 ASPHALT BASE PATCH PARTIAL DEPTH  
 TRAVEL DIRECTION

PLAN VIEW

EXACT LOCATION AND LIMITS OF ASPHALT BASE PATCH PARTIAL DEPTH TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

EROSION MAT URBAN CLASS 1 TYPE B, TYP

SILT FENCE, TYP

5' BEHIND FACE OF RAIL REQ'D

5' RIPRAP HEAVY BEHIND GUARDRAIL

EXISTING GUARDRAIL TO REMAIN

319

STH 64

320

EXISTING GUARDRAIL TO REMAIN

321

322

5' BEHIND FACE OF RAIL REQ'D

5' RIPRAP HEAVY BEHIND GUARDRAIL

EXISTING DRIVEWAY TO REMAIN OPEN

NOTES:  
ENGINEER IN FIELD MAY ADJUST LIMITS TO ENCOMPASS EXISTING WASHOUT AREAS.  
ALL WORK MUST OCCUR BEFORE TOE OF SLOPE TO AVOID WETLAND IMPACTS.



EROSION MAT URBAN CLASS 1 TYPE B, TYP

SILT FENCE, TYP

5' BEHIND FACE OF RAIL REQ'D

5' RIPRAP HEAVY BEHIND GUARDRAIL

EXISTING GUARDRAIL TO REMAIN

355

STH 64

356

EXISTING GUARDRAIL TO REMAIN

357

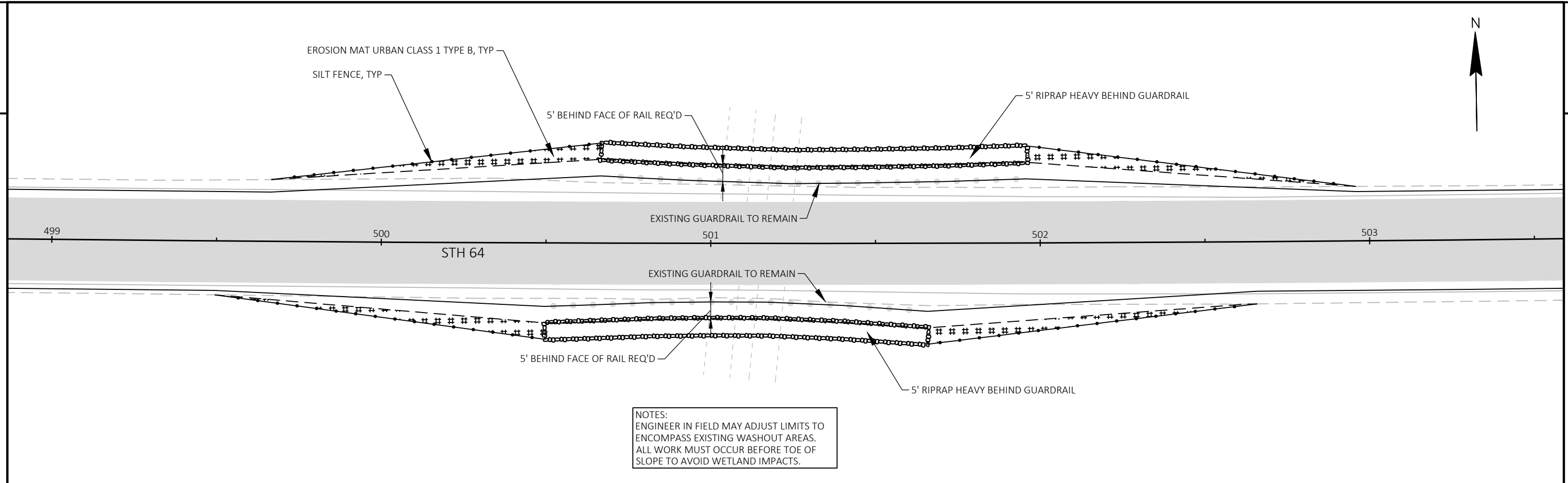
358

5' BEHIND FACE OF RAIL REQ'D

5' RIPRAP HEAVY BEHIND GUARDRAIL

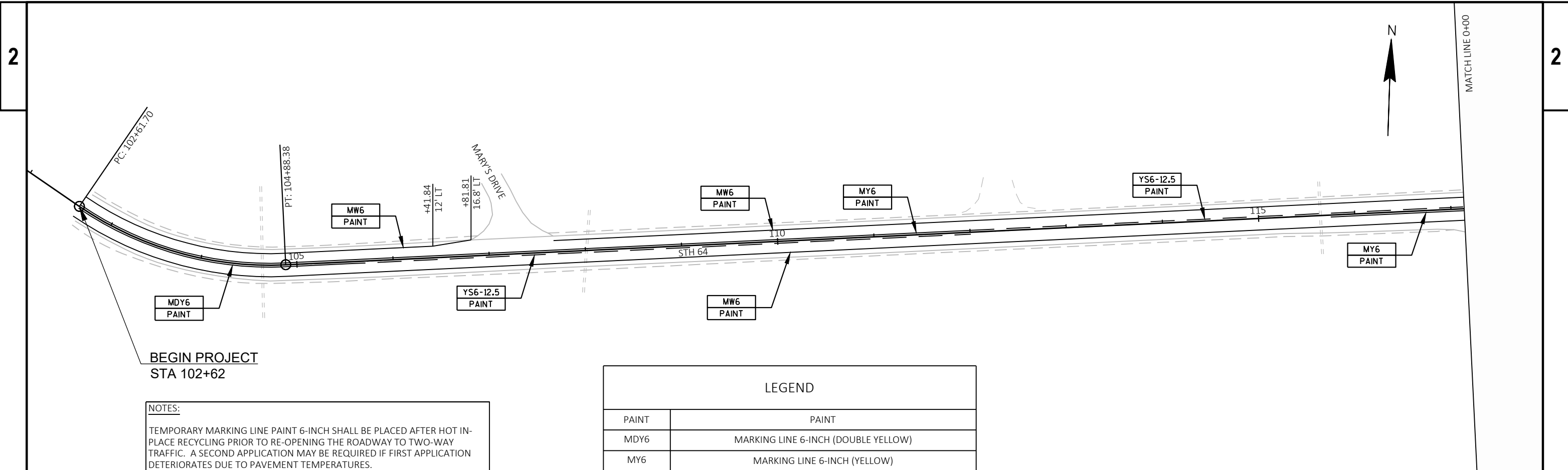
NOTES:  
ENGINEER IN FIELD MAY ADJUST LIMITS TO ENCOMPASS EXISTING WASHOUT AREAS.  
ALL WORK MUST OCCUR BEFORE TOE OF SLOPE TO AVOID WETLAND IMPACTS.





NOTES:  
 ENGINEER IN FIELD MAY ADJUST LIMITS TO  
 ENCOMPASS EXISTING WASHOUT AREAS.  
 ALL WORK MUST OCCUR BEFORE TOE OF  
 SLOPE TO AVOID WETLAND IMPACTS.

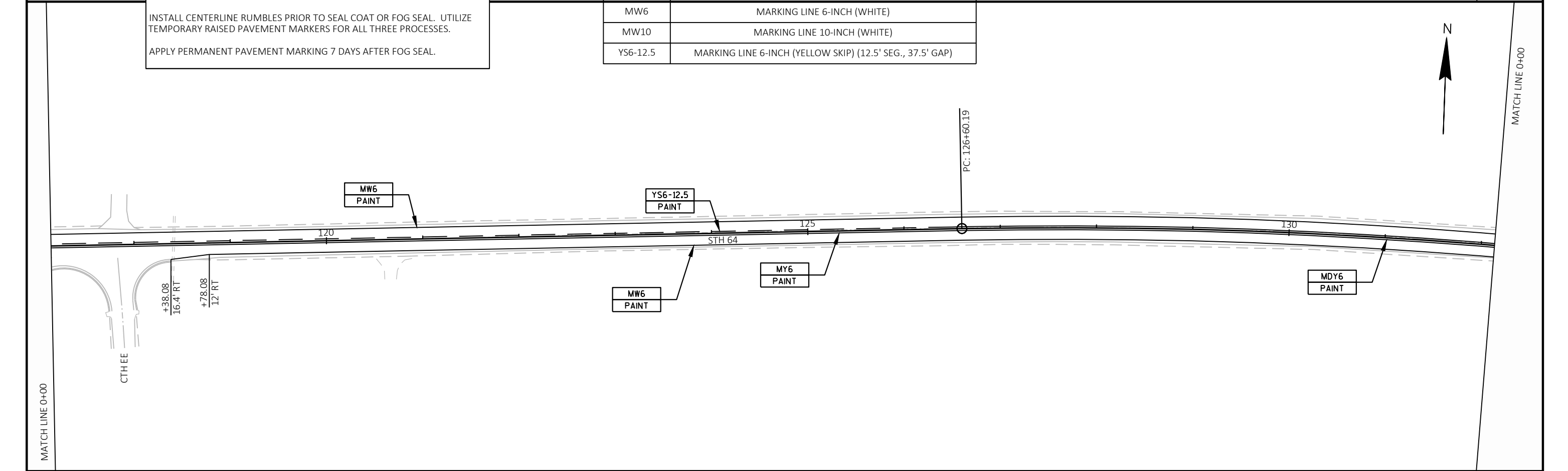


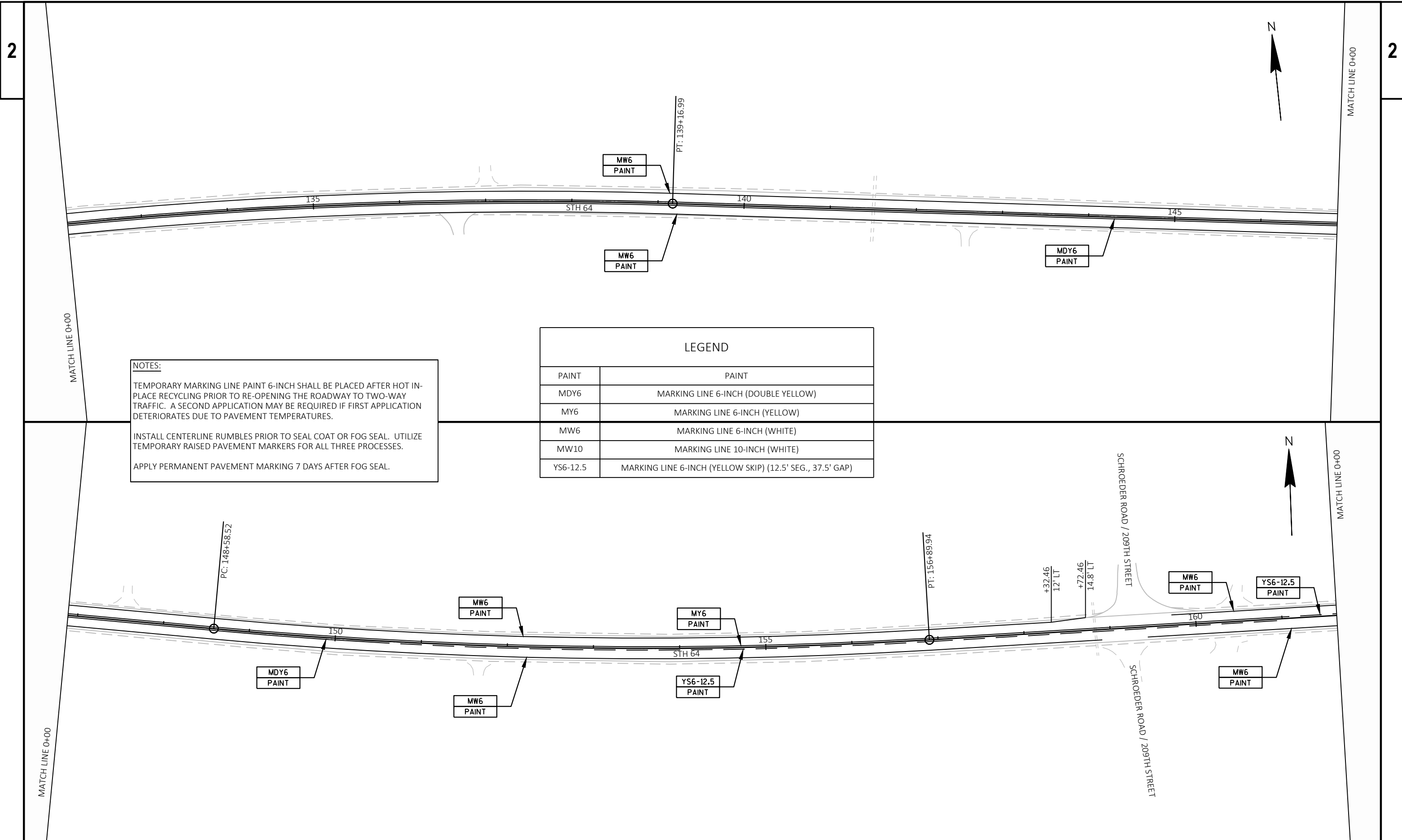


BEGIN PROJECT  
STA 102+62

NOTES:  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)





**NOTES:**

TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



MATCH LINE 0+00

MATCH LINE 0+00

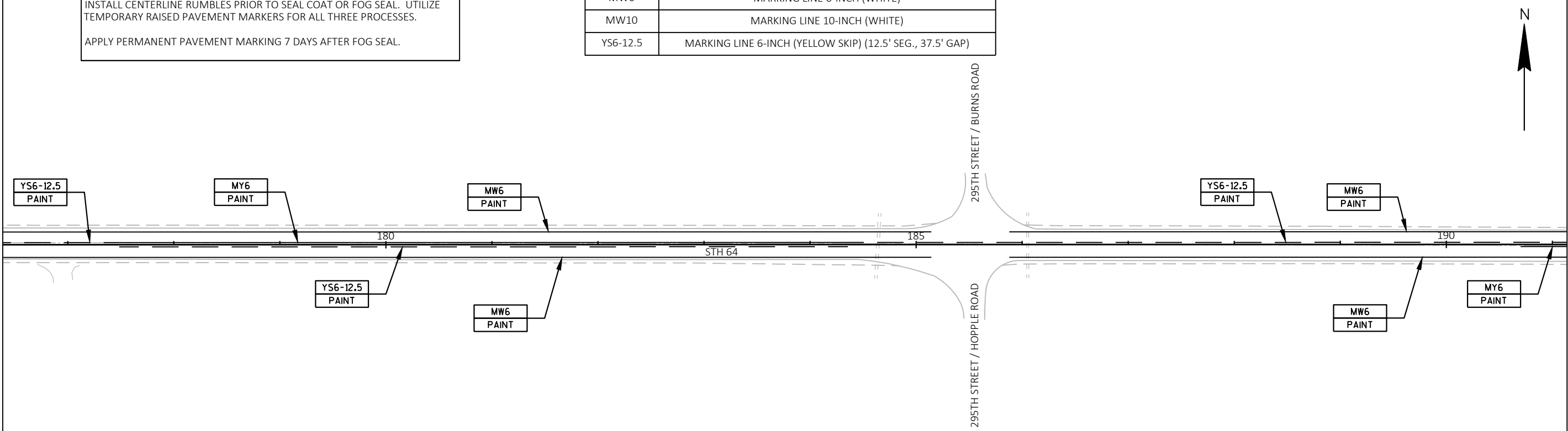
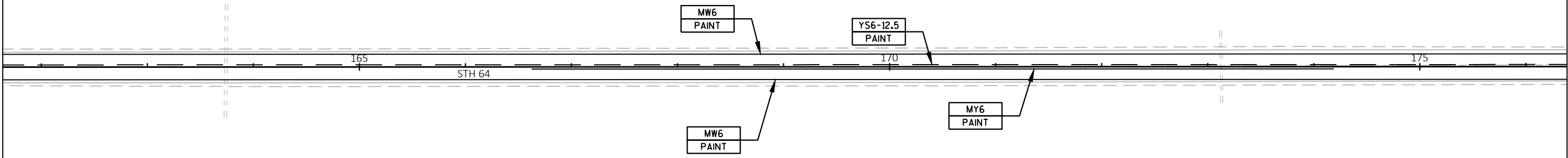
**NOTES:**

TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

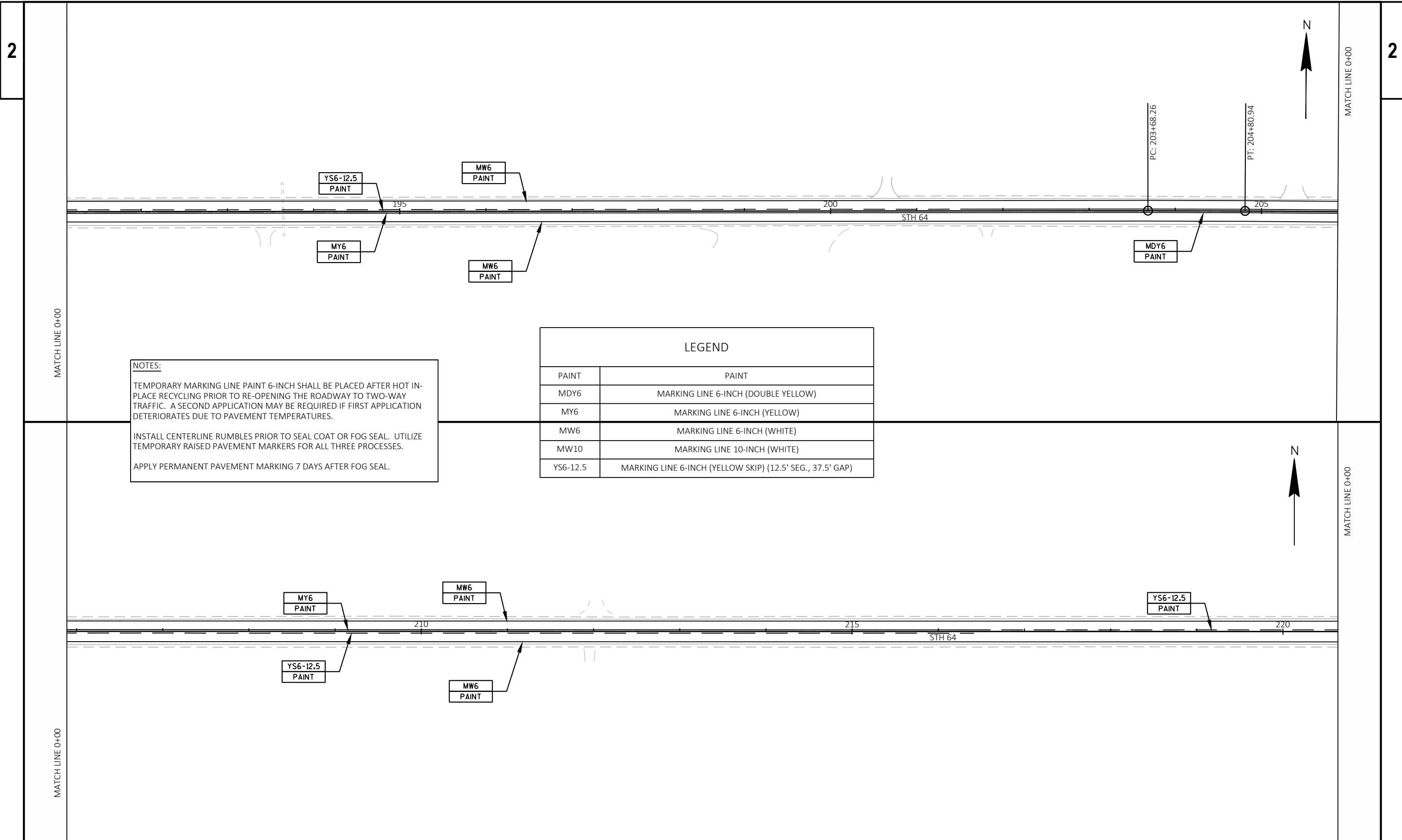
APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



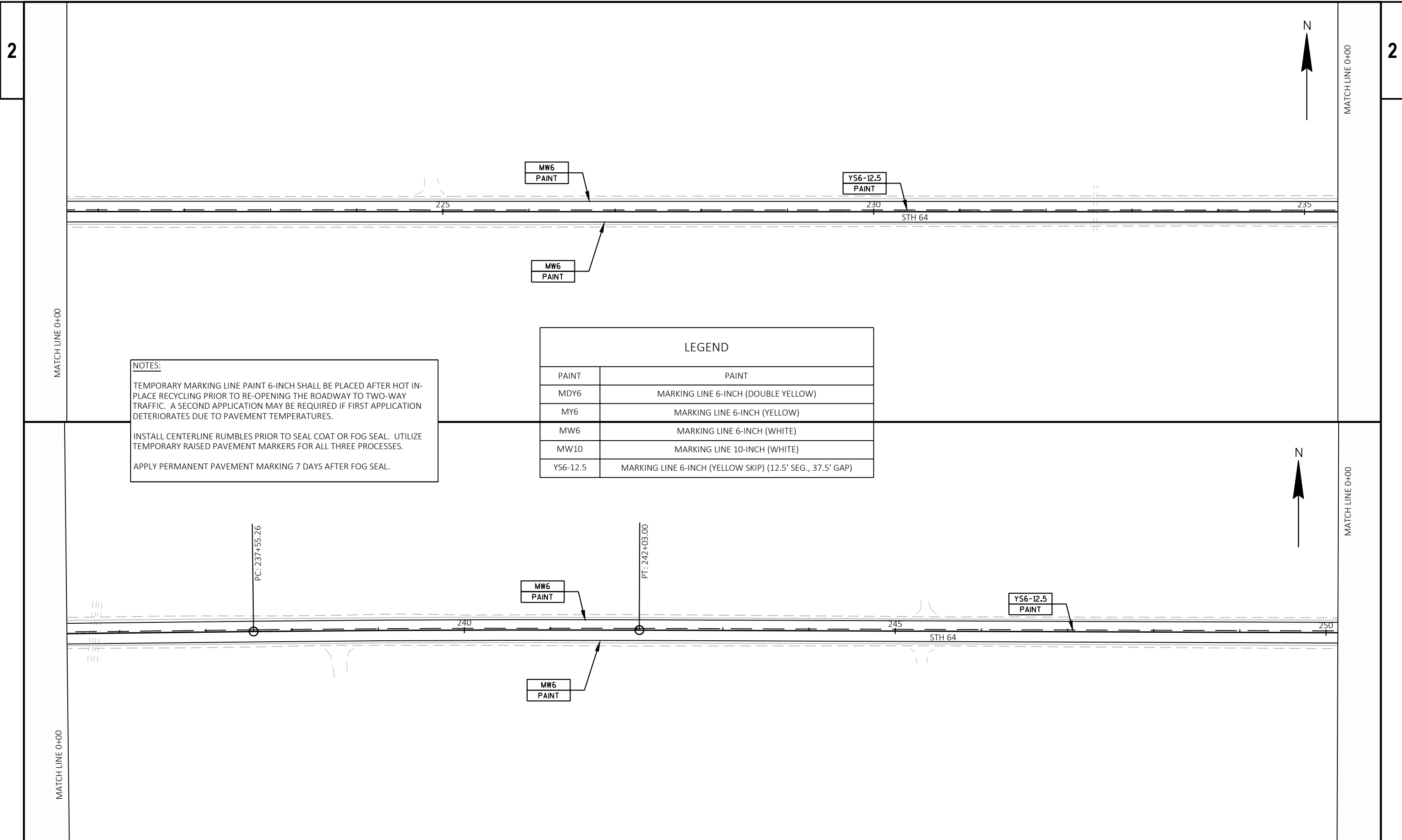
MATCH LINE 0+00

MATCH LINE 0+00



**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

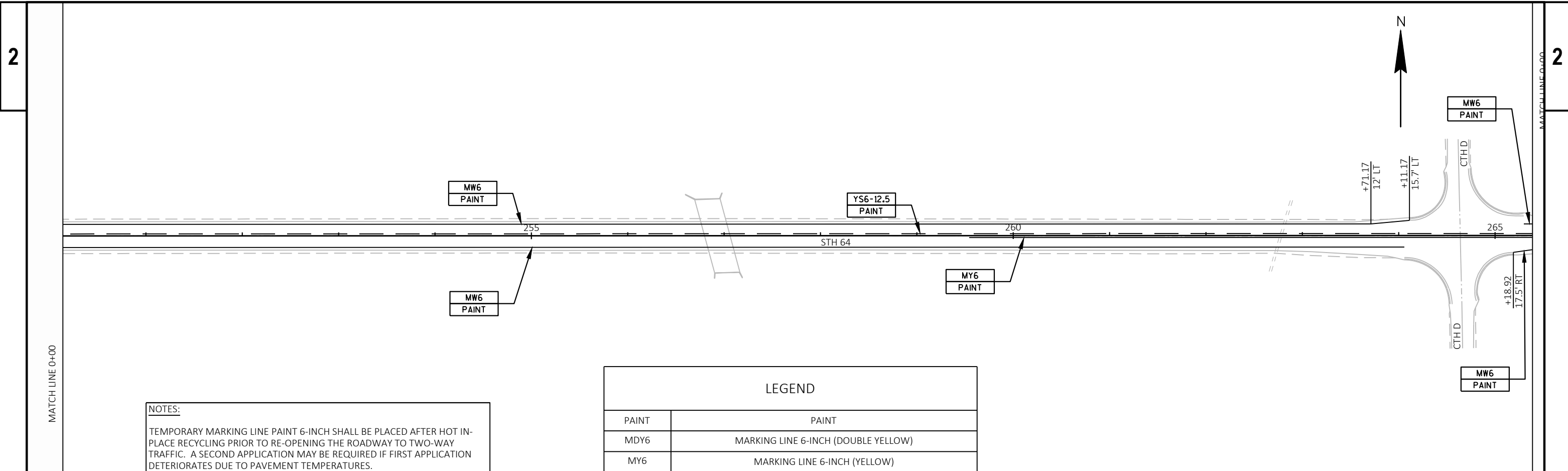
LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)

MATCH LINE 0+00

MATCH LINE 0+00

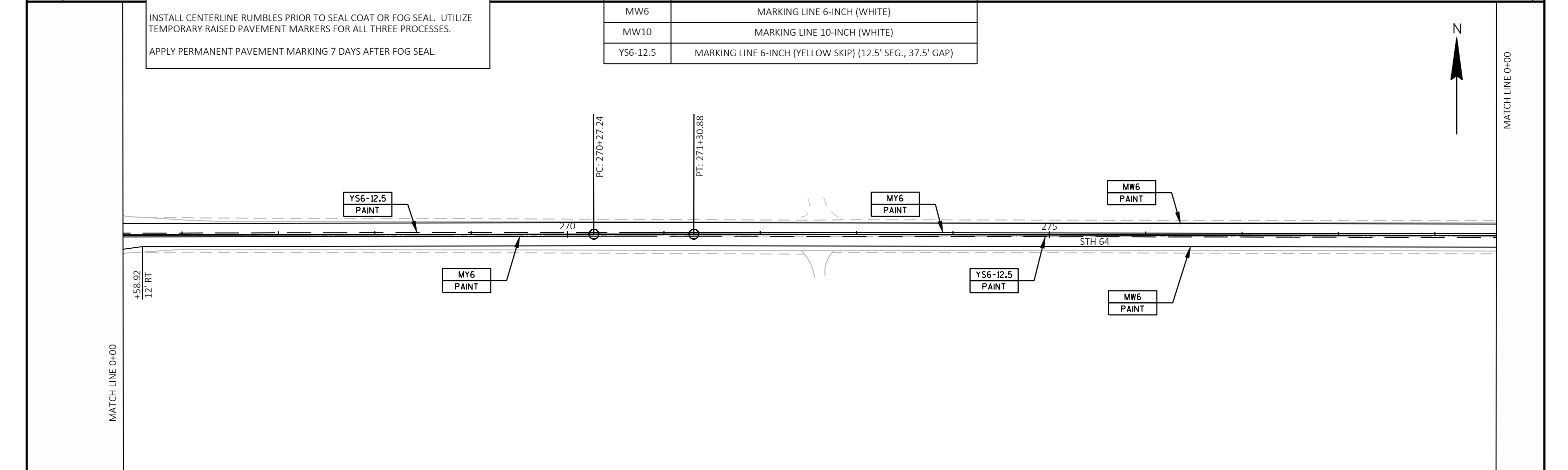
MATCH LINE 0+00

MATCH LINE 0+00



**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

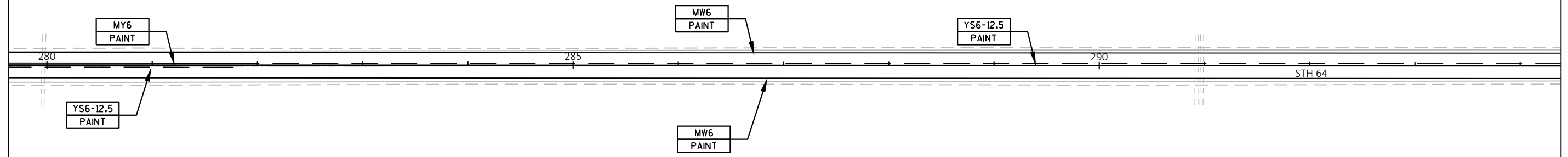
LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)





MATCH LINE 0+00

MATCH LINE 0+00



**NOTES:**

TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

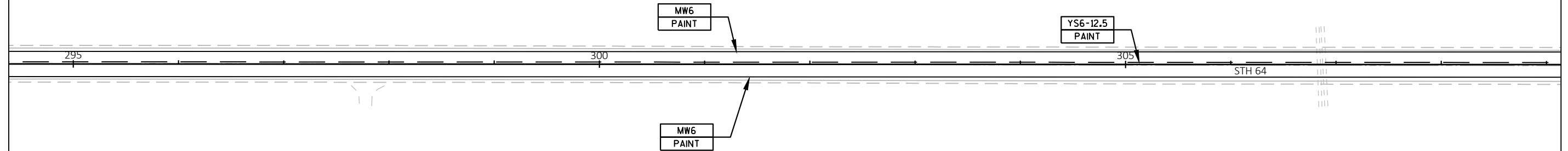
INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

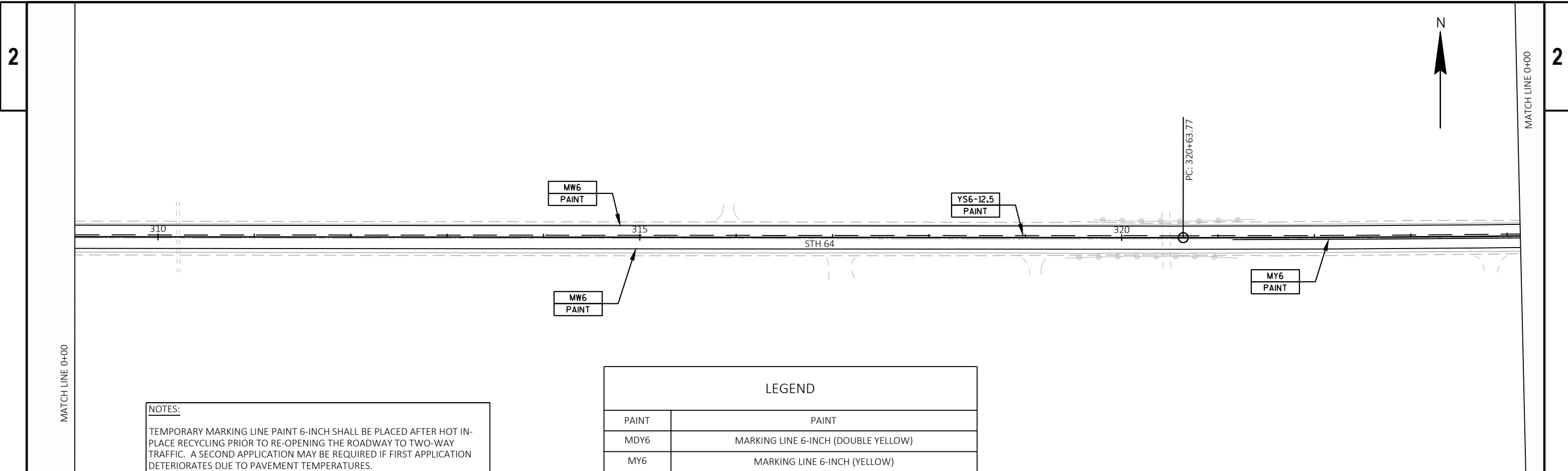
APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



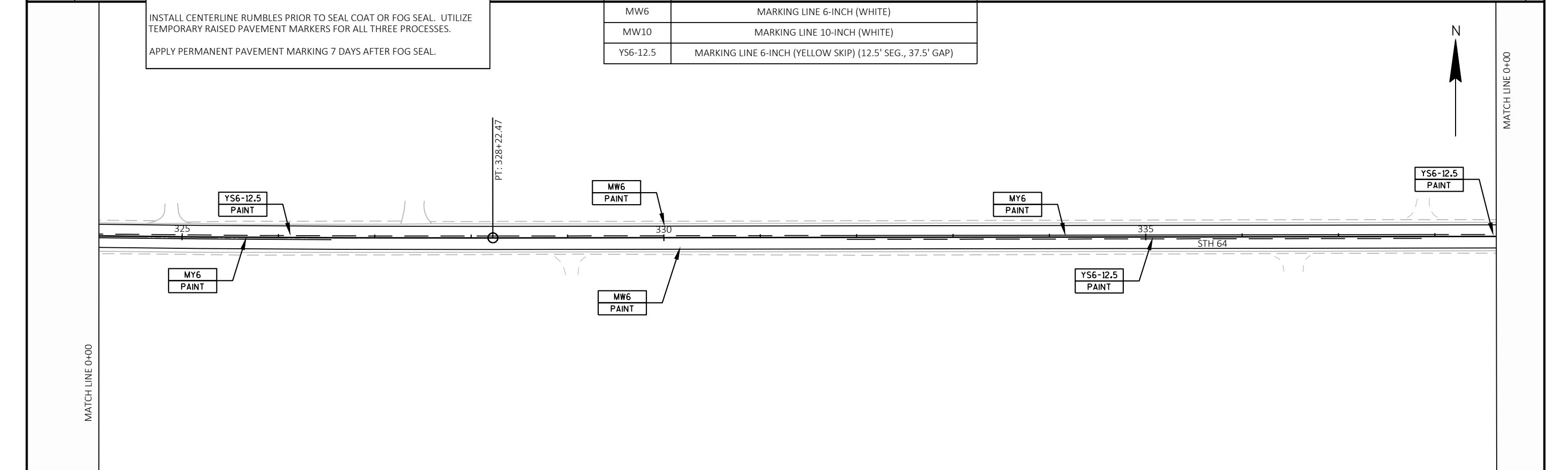
MATCH LINE 0+00





**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)

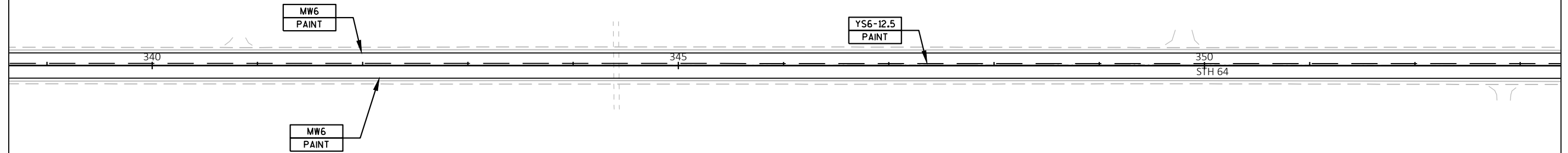






MATCH LINE 0+00

MATCH LINE 0+00



**NOTES:**

TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

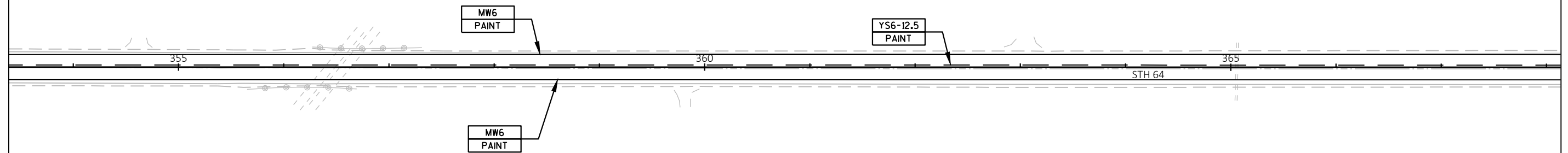
APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

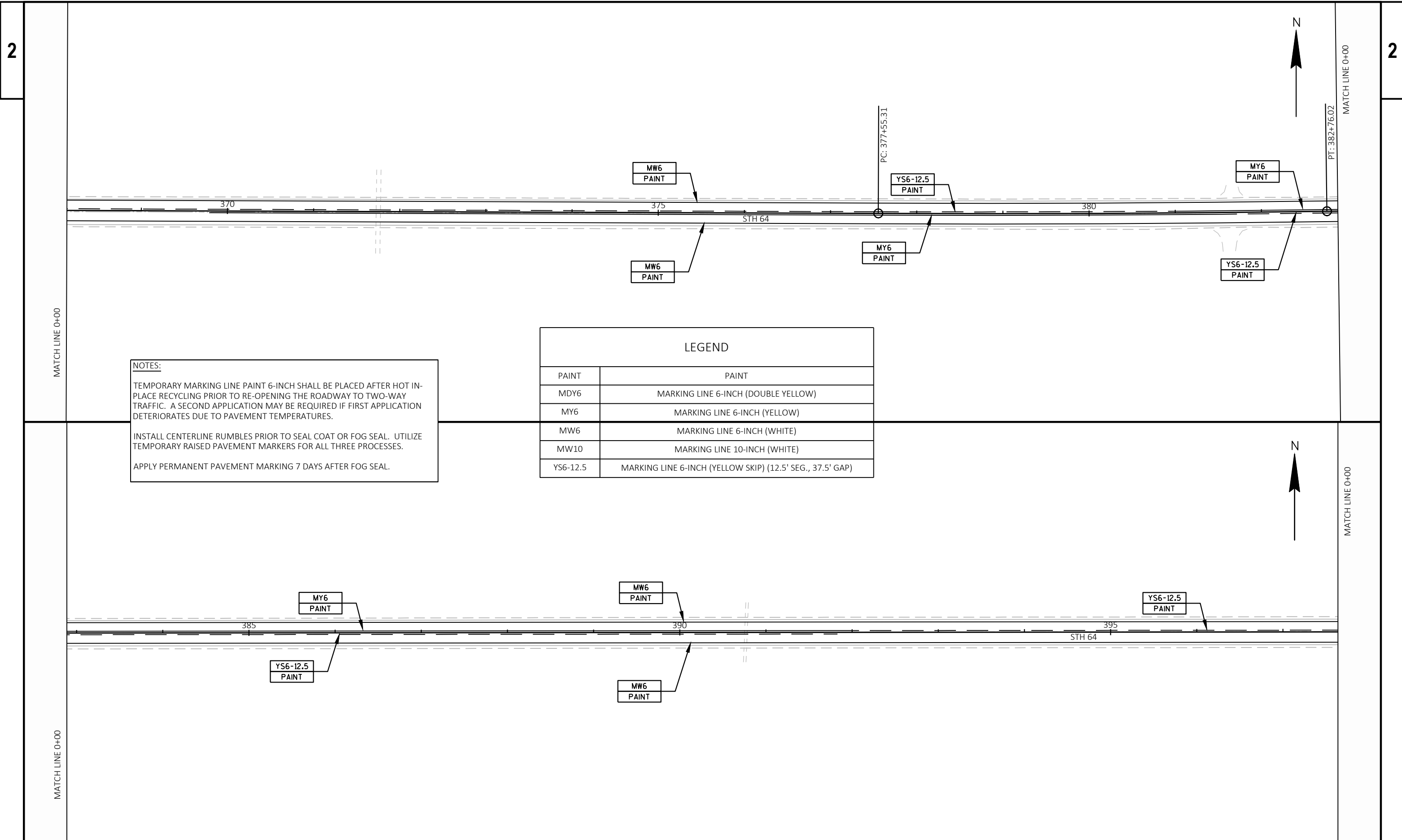
LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



MATCH LINE 0+00

MATCH LINE 0+00





**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



MATCH LINE 0+00

MATCH LINE 0+00

MATCH LINE 0+00

MATCH LINE 0+00

NOTES:

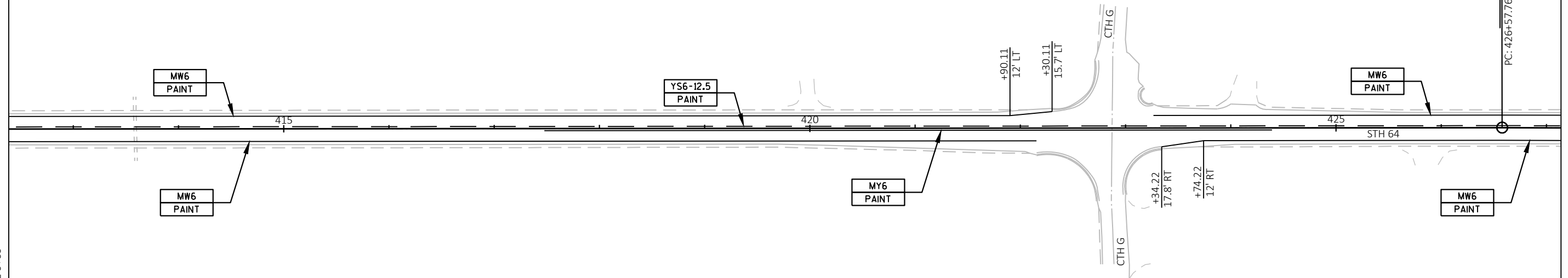
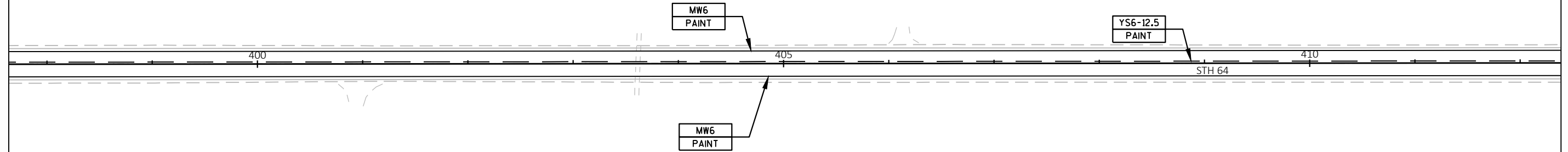
TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

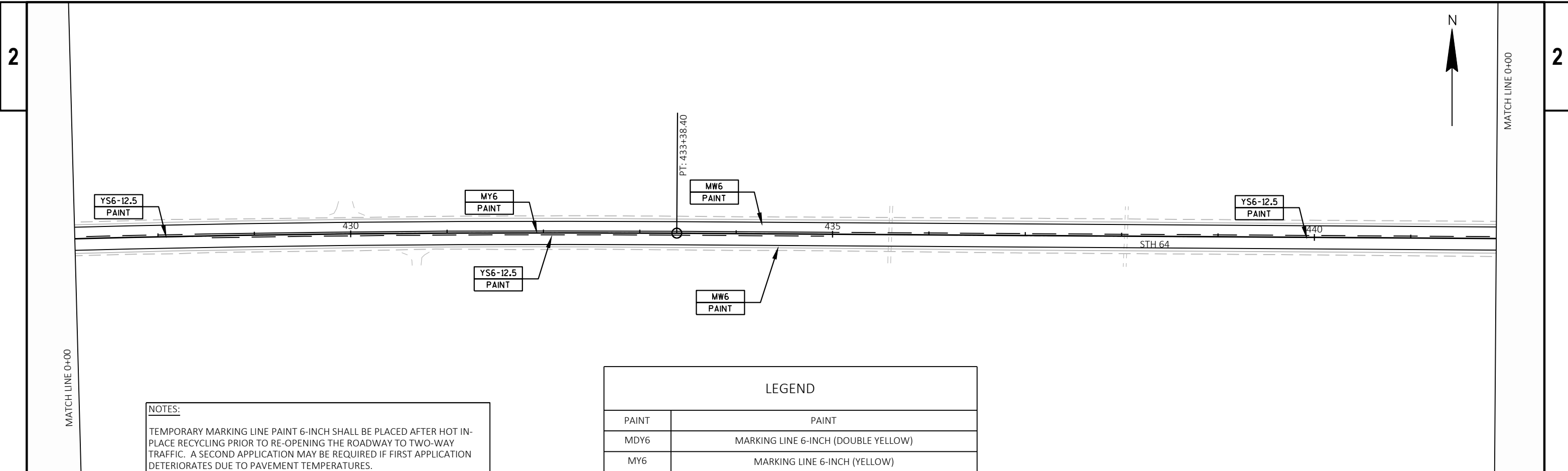
INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND

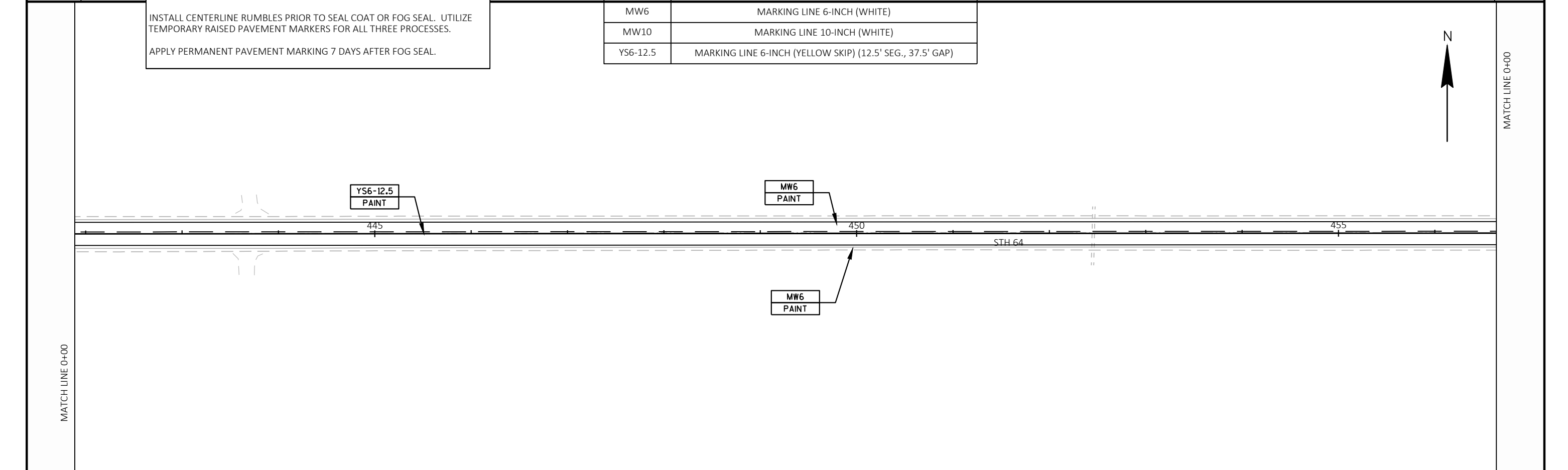
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)





**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



MATCH LINE 0+00

MATCH LINE 0+00

MATCH LINE 0+00

MATCH LINE 0+00

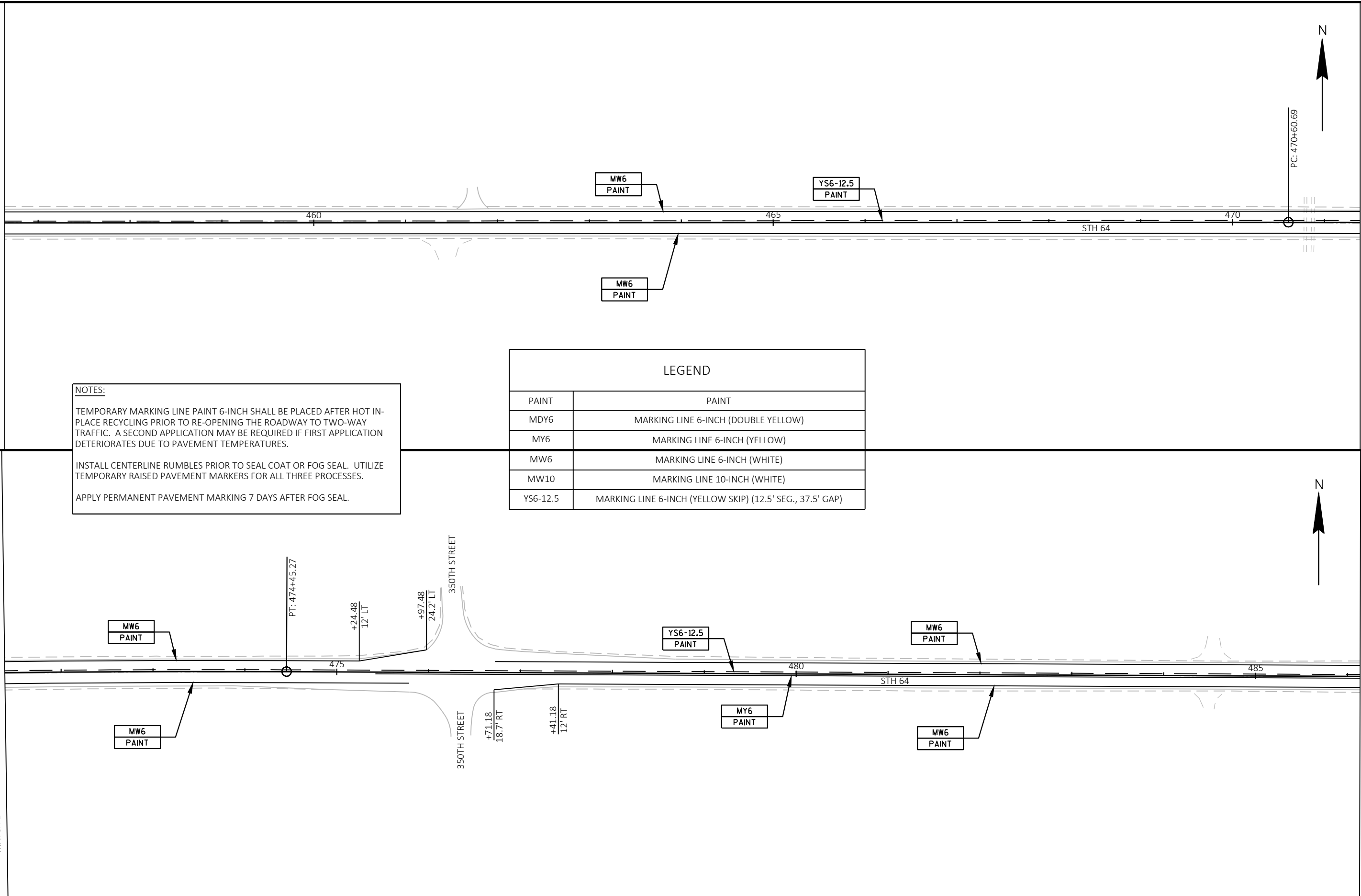
**NOTES:**

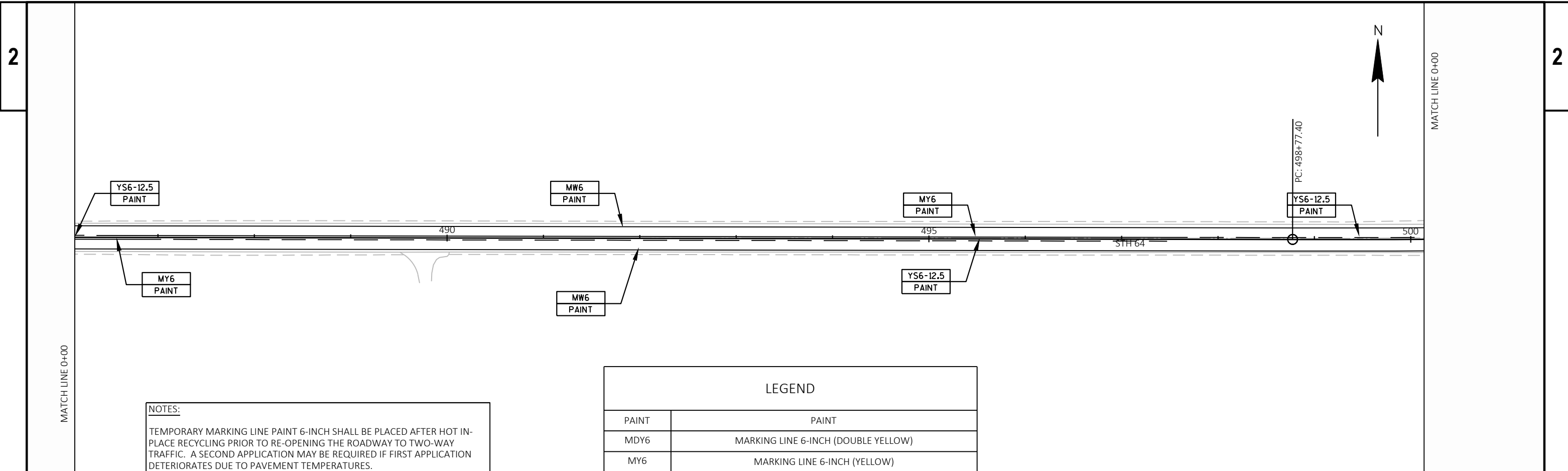
TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

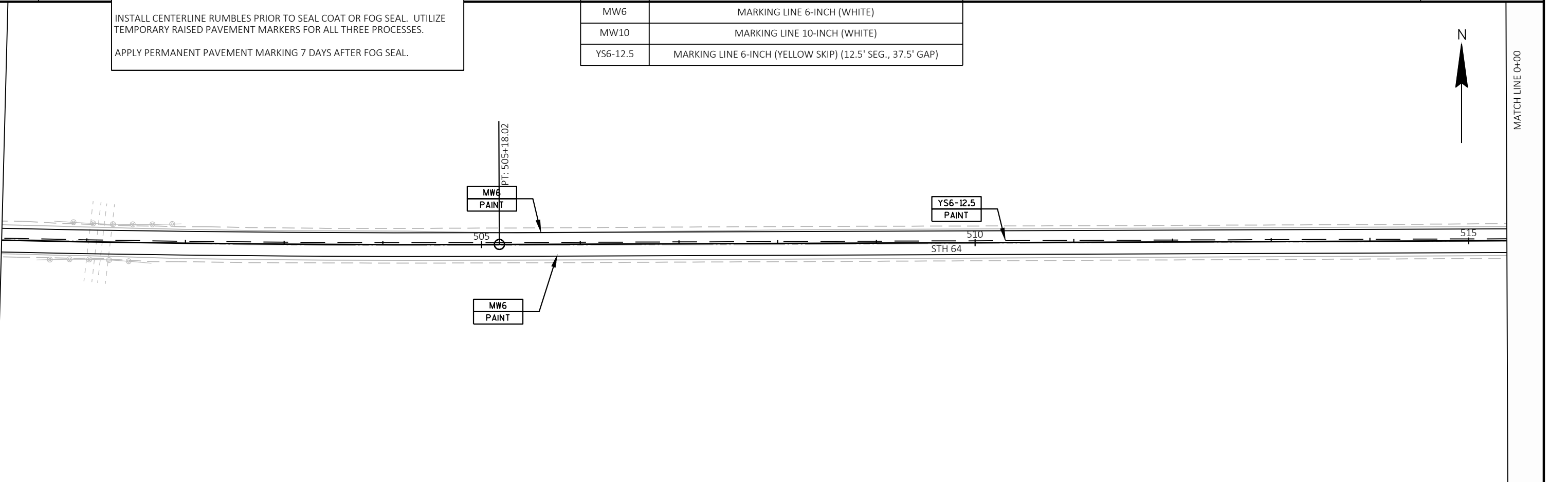
LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)





**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)





MW6  
PAINT

YS6-12.5  
PAINT

520

525

530

STH 64

MW6  
PAINT

MATCH LINE 0+00

MATCH LINE 0+00

NOTES:

TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND

PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)



MW6  
PAINT

YS6-12.5  
PAINT

535

540

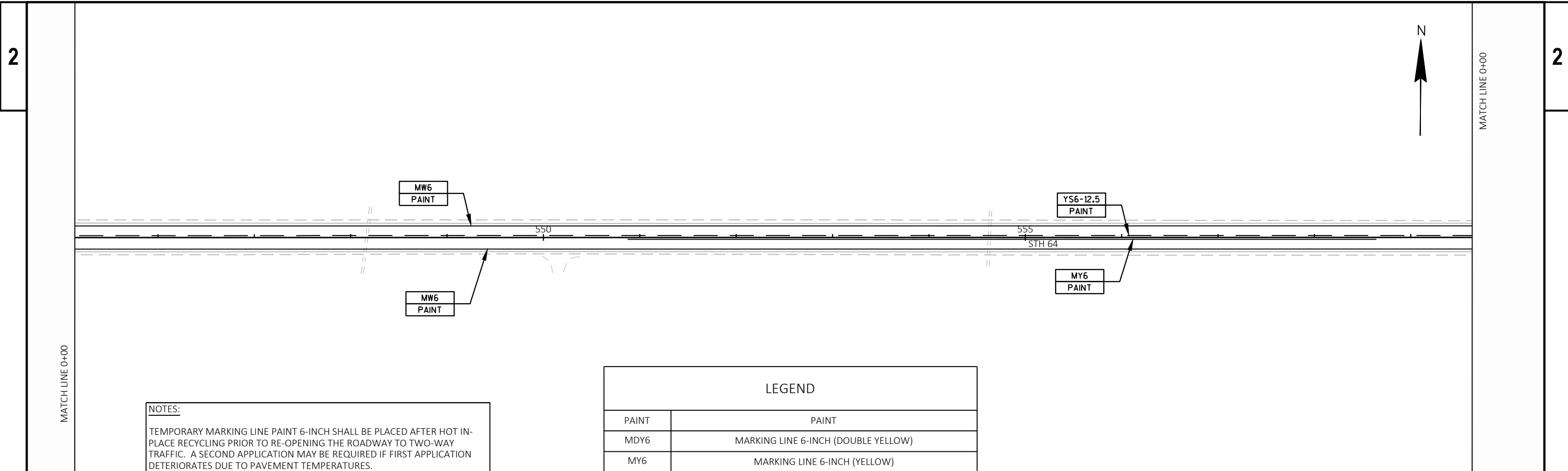
545

STH 64

MW6  
PAINT

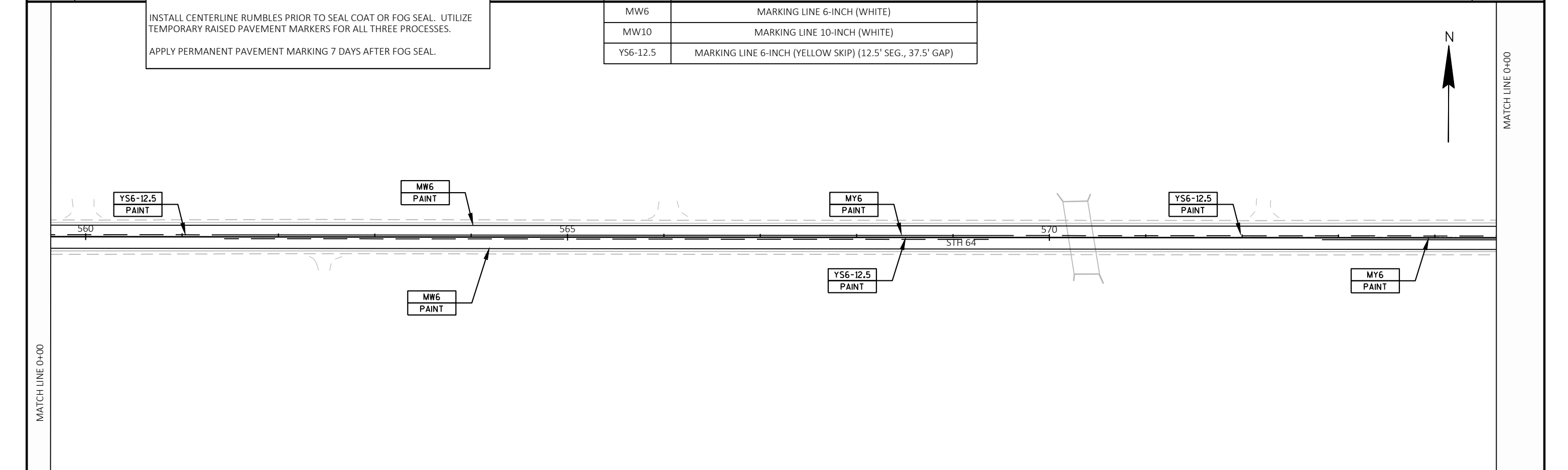
MATCH LINE 0+00

MATCH LINE 0+00

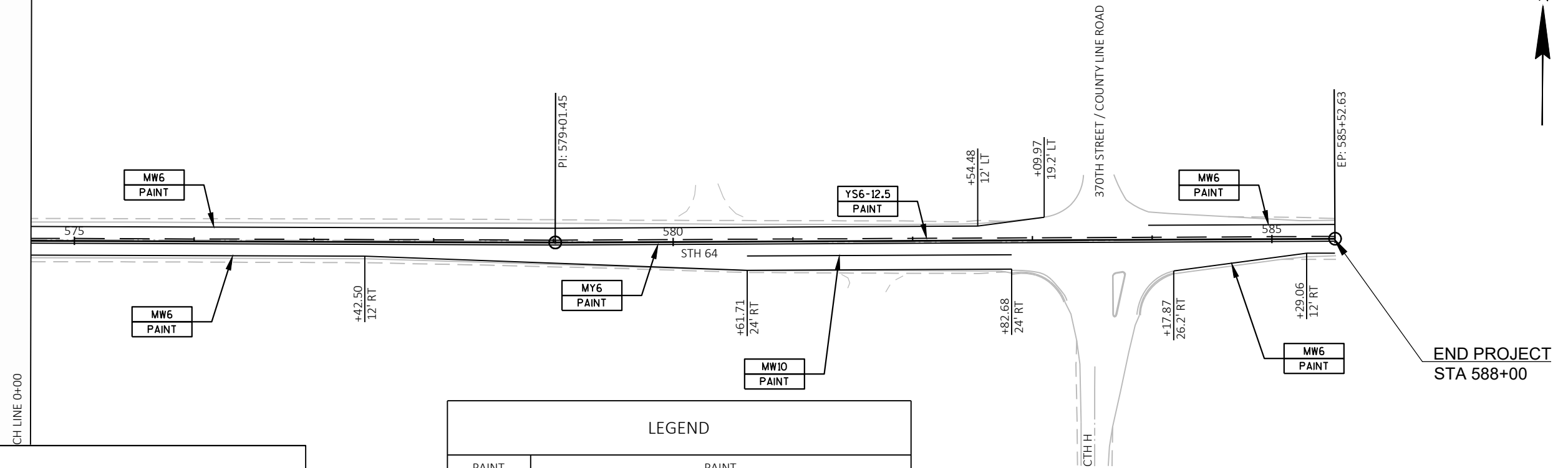


**NOTES:**  
 TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.  
 INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.  
 APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)







**NOTES:**

TEMPORARY MARKING LINE PAINT 6-INCH SHALL BE PLACED AFTER HOT IN-PLACE RECYCLING PRIOR TO RE-OPENING THE ROADWAY TO TWO-WAY TRAFFIC. A SECOND APPLICATION MAY BE REQUIRED IF FIRST APPLICATION DETERIORATES DUE TO PAVEMENT TEMPERATURES.

INSTALL CENTERLINE RUMBLES PRIOR TO SEAL COAT OR FOG SEAL. UTILIZE TEMPORARY RAISED PAVEMENT MARKERS FOR ALL THREE PROCESSES.

APPLY PERMANENT PAVEMENT MARKING 7 DAYS AFTER FOG SEAL.

LEGEND	
PAINT	PAINT
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
YS6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)

Estimate Of Quantities

8190-01-72

Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 8190-01-72	EACH	1.000	1.000
0004	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,400.000	2,400.000
0006	305.0500	Shaping Shoulders	STA	966.000	966.000
0008	465.0560	Asphaltic Rumble Strips, Centerline	LF	48,290.000	48,290.000
0010	606.0300	Riprap Heavy	CY	240.000	240.000
0012	614.0400	Adjusting Steel Plate Beam Guard	LF	200.000	200.000
0014	614.0950	Replacing Guardrail Posts and Blocks	EACH	20.000	20.000
0016	614.0951	Replacing Guardrail Rail and Hardware	LF	200.000	200.000
0018	614.0953	Replacing EAT Reflective Panel	EACH	12.000	12.000
0020	618.0100	Maintenance and Repair of Haul Roads (project) 01. 8190-01-72	EACH	1.000	1.000
0022	619.1000	Mobilization	EACH	1.000	1.000
0024	624.0100	Water	MGAL	25.000	25.000
0026	625.0100	Topsoil	SY	385.000	385.000
0028	628.1504	Silt Fence	LF	1,200.000	1,200.000
0030	628.1520	Silt Fence Maintenance	LF	600.000	600.000
0032	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0034	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0036	628.2008	Erosion Mat Urban Class I Type B	SY	385.000	385.000
0038	629.0210	Fertilizer Type B	CWT	0.250	0.250
0040	630.0120	Seeding Mixture No. 20	LB	10.200	10.200
0042	630.0200	Seeding Temporary	LB	5.300	5.300
0044	630.0500	Seed Water	MGAL	9.600	9.600
0046	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	20.000	20.000
0048	638.2102	Moving Signs Type II	EACH	20.000	20.000
0050	642.5001	Field Office Type B	EACH	1.000	1.000
0052	643.0300	Traffic Control Drums	DAY	300.000	300.000
0054	643.0900	Traffic Control Signs	DAY	2,200.000	2,200.000
0056	643.3165	Temporary Marking Line Paint 6-Inch	LF	55,000.000	55,000.000
0058	643.3770	Temporary Marking Raised Pavement Marker Type II	EACH	2,000.000	2,000.000
0060	645.0120	Geotextile Type HR	SY	600.000	600.000
0062	646.2005	Marking Line Paint 6-Inch	LF	132,500.000	132,500.000
0064	646.4005	Marking Line Paint 10-Inch	LF	230.000	230.000
0066	650.8000	Construction Staking Resurfacing Reference	LF	48,290.000	48,290.000
0068	650.9911	Construction Staking Supplemental Control (project) 01. 8190-01-72	EACH	1.000	1.000
0070	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0072	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0074	SPV.0060	Special 01. Traffic Control Special	EACH	1.000	1.000
0076	SPV.0170	Special 01. Surface Recycling	STA	484.000	484.000
0078	SPV.0180	Special 01. Seal Coat	SY	166,789.000	166,789.000
0080	SPV.0195	Special 01. Asphalt Rejuvenating Agent	TON	200.000	200.000
0082	SPV.0195	Special 02. Bituminous Material for Seal Coat	TON	245.000	245.000
0084	SPV.0195	Special 03. Asphalt Base Patch Partial Depth	TON	190.000	190.000
0086	SPV.0195	Special 04. Fog Seal	TON	125.000	125.000

3

**BASE AGGREGATE DENSE ITEMS**

STATION - STATION CATEGORY CODE 0010	LOCATION	305.0110	305.0500	COMMENTS
		BASE AGGREGATE DENSE 3/4-INCH TON	SHAPING SHOULDERS STA	
318+41 - 322+39	LT/RT	60	--	RESHOULDERING AT GUARDRAIL
354+65 - 358+31	LT/RT	50	--	RESHOULDERING AT GUARDRAIL
499+50 - 502+96	LT/RT	60	--	RESHOULDERING AT GUARDRAIL
102+62 - 585+52	LT/RT	2,200	966	SHOULDERING MATERIAL
UNDISTRIBUTED	LT/RT	30	--	
<b>TOTALS</b>		<b>2,400</b>	<b>966</b>	

**ASPHALTIC ITEMS**

STATION - STATION CATEGORY CODE 0010	LOCATION	465.0560
		ASPHALT RUMBLE STRIPS, CENTERLINE LF
PROJECT	CL	48,290
<b>TOTALS</b>		<b>48,290</b>

**RIPRAP AND GEOTEXTILE FABRIC ITEMS**

STATION CATEGORY CODE 0010	LOCATION	606.0300	645.0120
		RIPRAP HEAVY CY	GEOTEXTILE FABRIC TYPE HR SY
319+42 - 321+39	LT/RT	80	200
355+65 - 357+32	LT/RT	50	125
500+50 - 501+96	LT/RT	60	150
UNDISTRIBUTED	LT/RT	50	125
<b>TOTALS</b>		<b>240</b>	<b>600</b>

3

**BEAMGUARD ITEMS**

STATION - STATION CATEGORY CODE 0010	LOCATION	614.0950	614.0951	614.0400	614.0953
		REPLACING GUARDRAIL POSTS AND BLOCKS EACH	REPLACING GUARDRAIL RAIL AND HARDWARE LF	ADJUSTING STEEL PLATE BEAM GUARD LF	REPLACING EAT REFLECTIVE PANEL EACH
319+42 - 321+39	LT/RT	5	50	--	4
355+65 - 357+32	LT/RT	5	50	--	4
500+50 - 501+96	LT/RT	5	50	--	4
UNDISTRIBUTED	LT/RT	5	50	200	--
<b>TOTAL</b>		<b>20</b>	<b>200</b>	<b>200</b>	<b>12</b>

**LANDSCAPING ITEMS**

STATION - STATION CATEGORY CODE 0010	LOCATION	625.0100	629.0210	630.0120	630.0200	630.0500
		TOPSOIL SY	FERTILIZER TYPE B CWT	SEED MIX NO. 20 LBS	SEEDING TEMPORARY LBS	SEED WATER MGAL
319+42 - 321+39	LT/RT	135	0.09	3.6	1.9	3.4
355+65 - 357+32	LT/RT	125	0.08	3.3	1.7	3.1
500+50 - 501+96	LT/RT	125	0.08	3.3	1.7	3.1
<b>TOTALS</b>		<b>385</b>	<b>0.25</b>	<b>10.2</b>	<b>5.3</b>	<b>9.6</b>

**EROSION CONTROL ITEMS**

STATION - STATION CATEGORY CODE 0010	LOCATION	628.1504	628.1520	628.2008	628.1905	628.1910
		SILT FENCE	SILT FENCE MAINTENANCE	EROSION MAT URBAN CLASS 1 TYPE B SY	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EROSION CONTROL EACH
PROJECT	--	--	--	--	2	1
319+42 - 321+39	LT/RT	400	200	135	--	--
355+65 - 357+32	LT/RT	400	200	125	--	--
500+50 - 501+96	LT/RT	400	200	125	--	--
<b>TOTALS</b>		<b>1,200</b>	<b>600</b>	<b>385</b>	<b>2</b>	<b>1</b>

**SIGNING ITEMS**

STATION CATEGORY CODE 0010	LOCATION	634.0612	638.2102
		POSTS WOOD 4X6X12 EACH	MOVING SIGNS TYPE II EACH
PROJECT	LT/RT	20	20
<b>TOTALS</b>		<b>20</b>	<b>20</b>

**WATER**

STATION - STATION CATEGORY CODE 0010	624.0100 WATER MGAL	
PROJECT	25	
<b>TOTALS</b>		<b>25</b>

MISC. SHEET 1

3

**TRAFFIC CONTROL ITEMS**

LOCATION	643.0300 DRUMS DAY	SPV.0060.01 TRAFFIC CONTROL SPECIAL EACH	643.0900 SIGNS DAYS
CATEGORY CODE 0010			
PROJECT	300	1	2,200
<b>TOTALS</b>	<b>300</b>	<b>1</b>	<b>2,200</b>

**PAVEMENT MARKING**

LOCATION	OFFSET	646.2005 MARKING LINE PAINT 6-INCH	646.4005 MARKING LINE PAINT 10-INCH	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH	643.3770 TEMPORARY RAISED PAVEMENT MARKER TYPE II	
		WHITE LF	YELLOW LF	WHITE LF	YELLOW LF	EACH
CATEGORY CODE 0010						
PROJECT	CL	96,000	36,500	230	55,000	2,000
<b>TOTALS</b>		<b>132,500</b>		<b>230</b>	<b>55,000</b>	<b>2,000</b>

3

**CONSTRUCTION STAKING ITEMS**

STATION - STATION	LOCATION	650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL LS
CATEGORY CODE 0010			
PROJECT	CL	48290	1
<b>TOTALS</b>		<b>48,290</b>	<b>1</b>

**SPECIALS**

STATION	LOCATION	SPV.0170.01 SURFACE RECYCLING SPV STA	SPV.0195.03 ASPHALT BASE PATCH PARTIAL DEPTH TON	SPV.0180.01 SEAL COAT SPV SY	SPV.0195.04 FOG SEAL SPV TON	SPV.0195.02 BITUMINOUS MATERIAL FOR SEAL COAT TON	SPV.0195.01 ASPHALT REJUVENATING AGENT TON
		CATEGORY CODE 0010					
PROJECT	CL	484	190	166,789	125	245	200
<b>TOTALS</b>		<b>484</b>	<b>190</b>	<b>166,789</b>	<b>125</b>	<b>245</b>	<b>200</b>

**FIELD OFFICE**

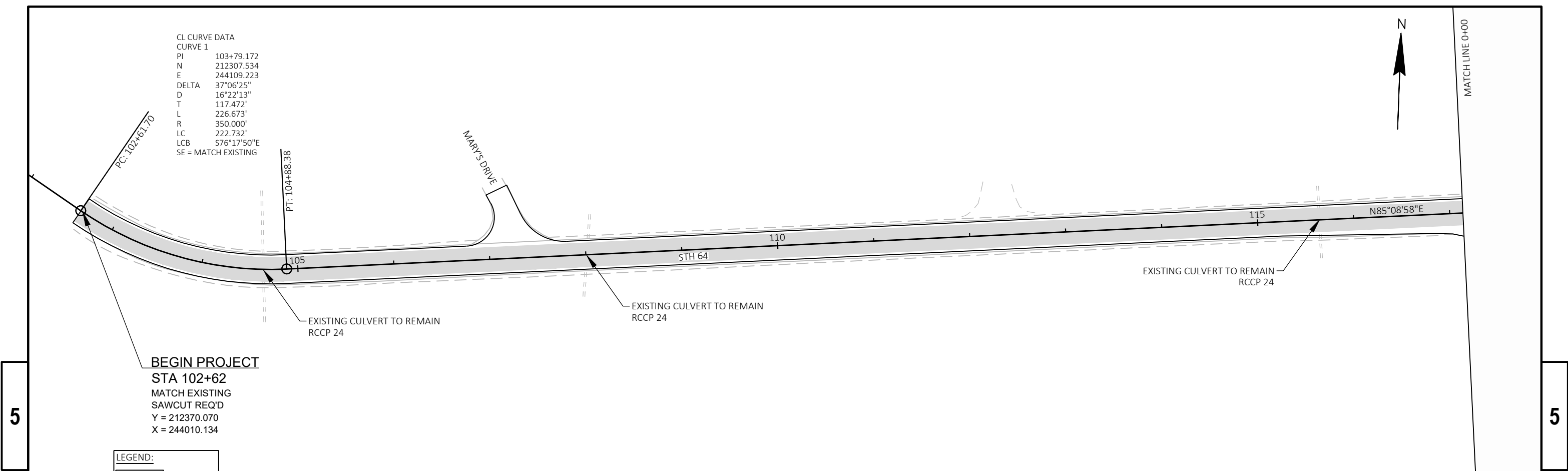
STATION - STATION	642.5001 FIELD OFFICE TYPE B EACH
CATEGORY CODE 0010	
PROJECT	1
<b>TOTALS</b>	<b>1</b>

MISC. SHEET 2


CL CURVE DATA  
 CURVE 1  
 PI 103+79.172  
 N 212307.534  
 E 244109.223  
 DELTA 37°06'25"  
 D 16°22'13"  
 T 117.472'  
 L 226.673'  
 R 350.000'  
 LC 222.732'  
 LCB S76°17'50"E  
 SE = MATCH EXISTING



MATCH LINE 0+00



**BEGIN PROJECT**  
 STA 102+62  
 MATCH EXISTING  
 SAWCUT REQ'D  
 Y = 212370.070  
 X = 244010.134

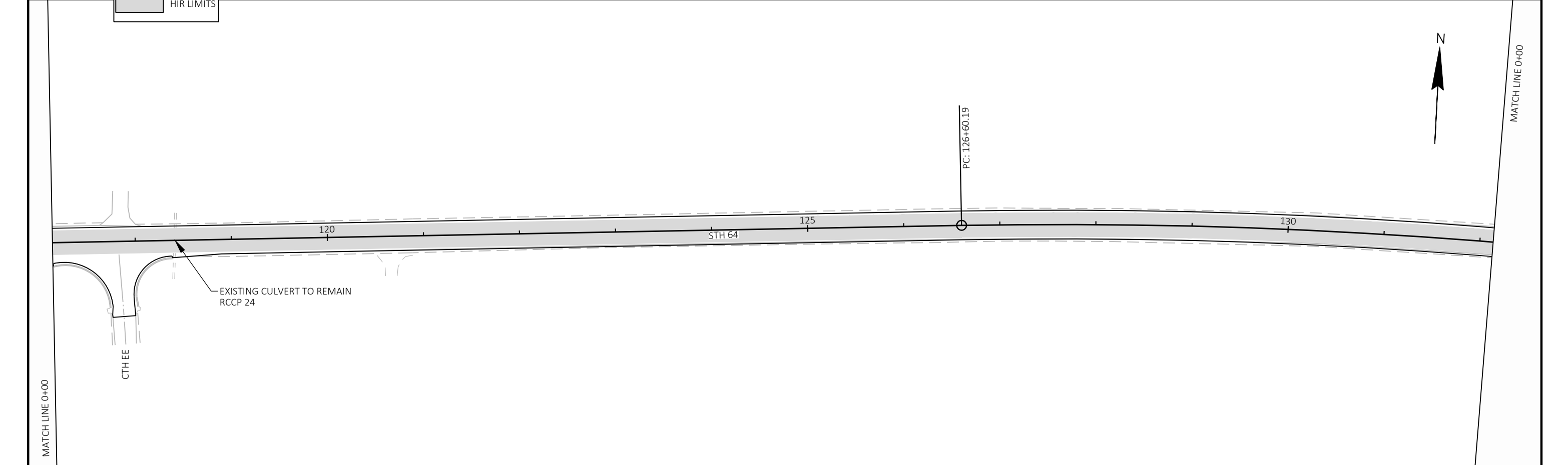
LEGEND:  
 HIR LIMITS

5

5



MATCH LINE 0+00



PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------

CL CURVE DATA  
 CURVE 2  
 PI 132+91.336  
 N 212554.481  
 E 247019.196  
 DELTA 13°05'33"  
 D 01°02'30"  
 T 631.146'  
 L 1256.794'  
 R 5500.000'  
 LC 1254.061'  
 LCB S88°18'16"E  
 SE = MATCH EXISTING




MATCH LINE 0+00

5

MATCH LINE 0+00

LEGEND:

 HIR LIMITS

CL CURVE DATA  
 CURVE 3  
 PI 152+75.022  
 N 212269.325  
 E 248987.836  
 DELTA 08°39'40"  
 D 01°02'30"  
 T 416.502'  
 L 831.417'  
 R 5500.000'  
 LC 830.626'  
 LCB S86°05'19"E  
 SE = MATCH EXISTING

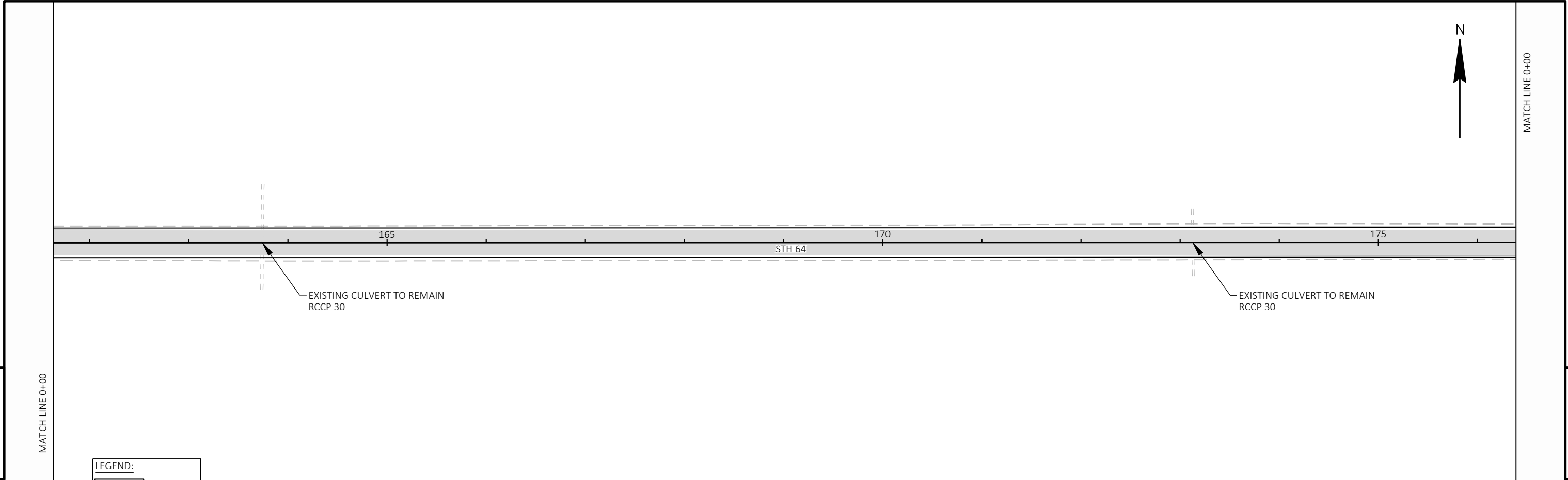


MATCH LINE 0+00

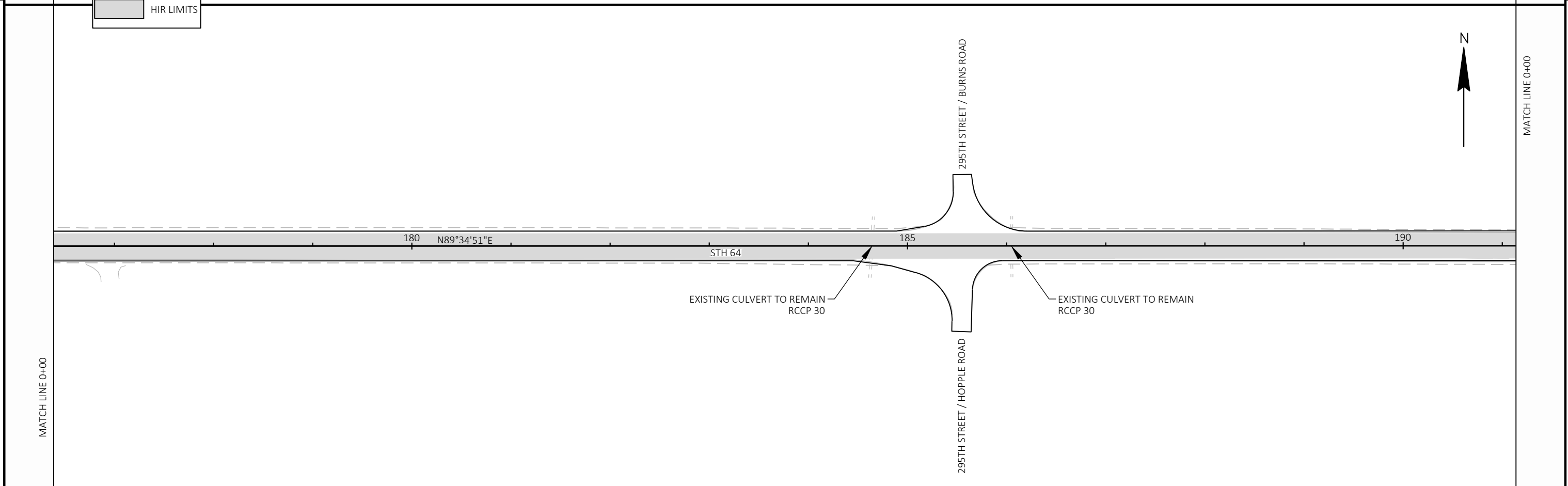
5

MATCH LINE 0+00

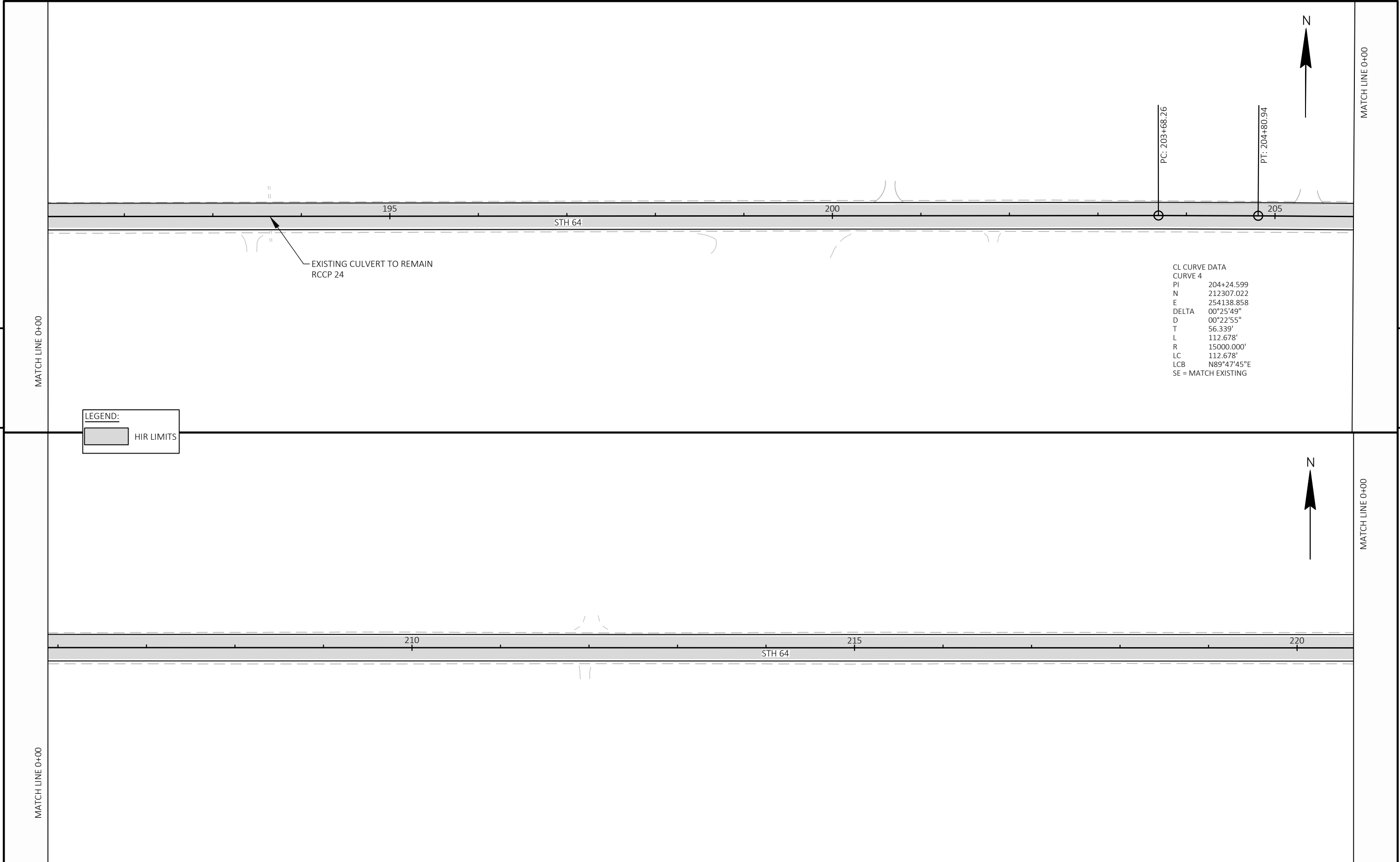
PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------



LEGEND:  
 HIR LIMITS



PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------



5

5

PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	E
------------------------	-------------	------------------	------	-------	---





MATCH LINE 0+00

S89°59'20"E

225

230

235


STH 64

EXISTING CULVERT TO REMAIN  
RCCP 48

5

MATCH LINE 0+00

LEGEND:

 HIR LIMITS

5



MATCH LINE 0+00

EXISTING CULVERT TO REMAIN  
RCCP 48

PC: 237+55.26

240

PT: 242+03.00

245

250

STH 64

EXISTING CULVERT TO REMAIN  
RCCP 48

CL CURVE DATA  
 CURVE 5  
 PI 239+79.137  
 N 212306.333  
 E 257693.392  
 DELTA 00°51'18"  
 D 00°11'28"  
 T 223.877'  
 L 447.745'  
 R 30000.000'  
 LC 447.741'  
 LCB S89°33'41"E  
 SE = MATCH EXISTING

PROJECT NO: 8190-01-72

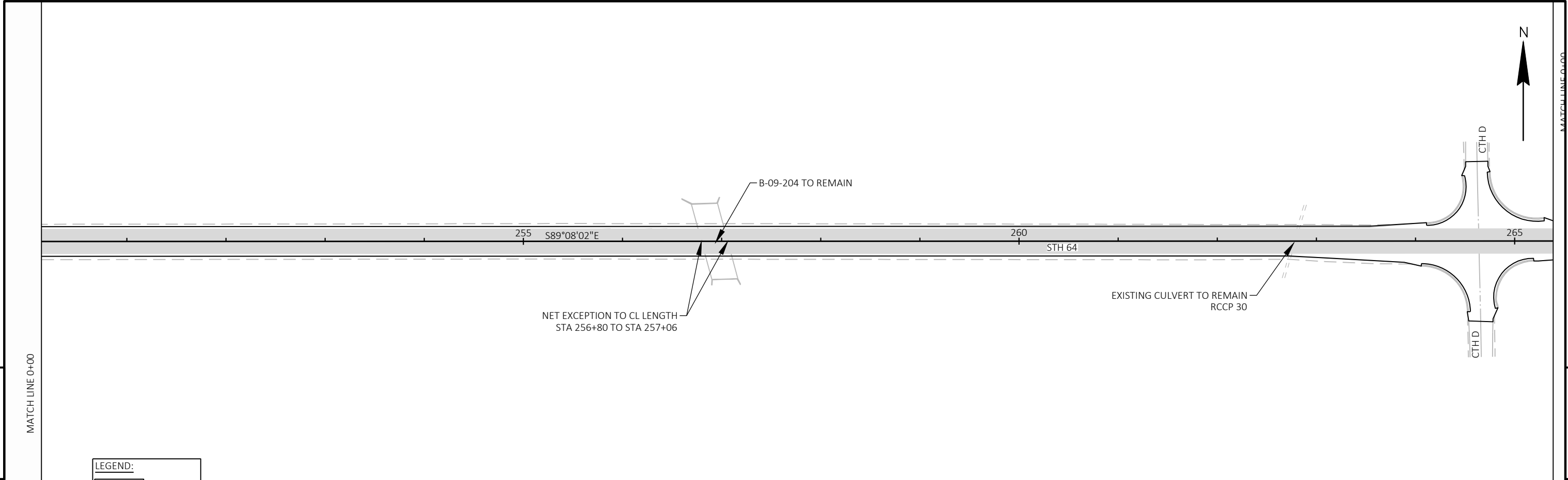
HWY: STH 64


COUNTY: CHIPPEWA

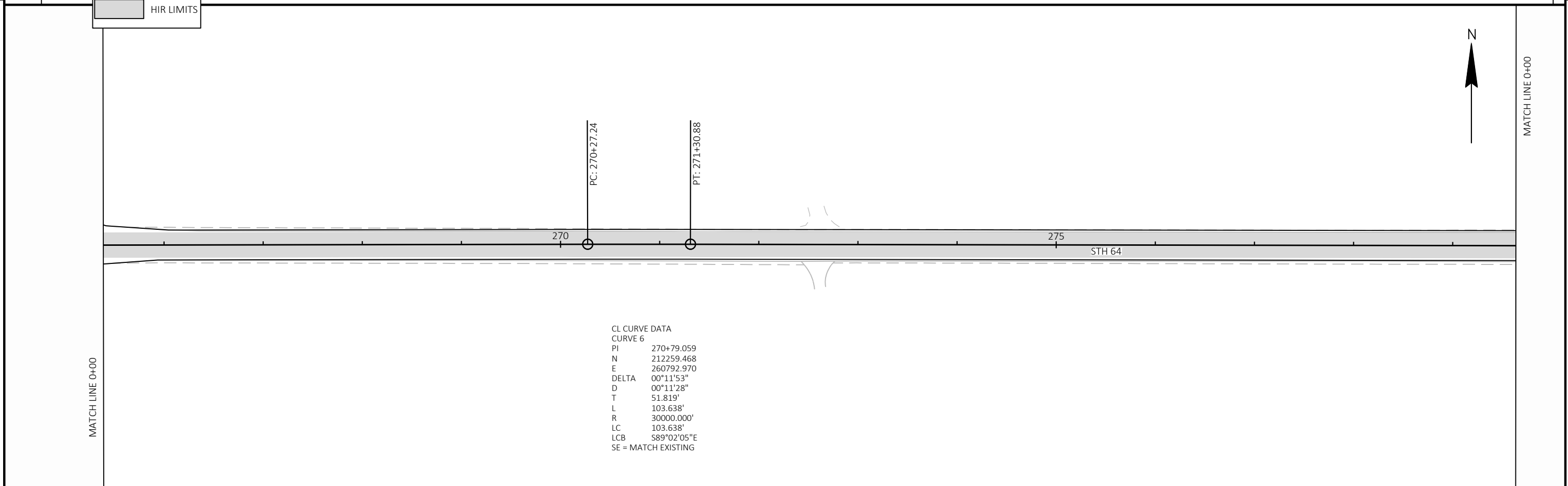
PLAN

SHEET

E

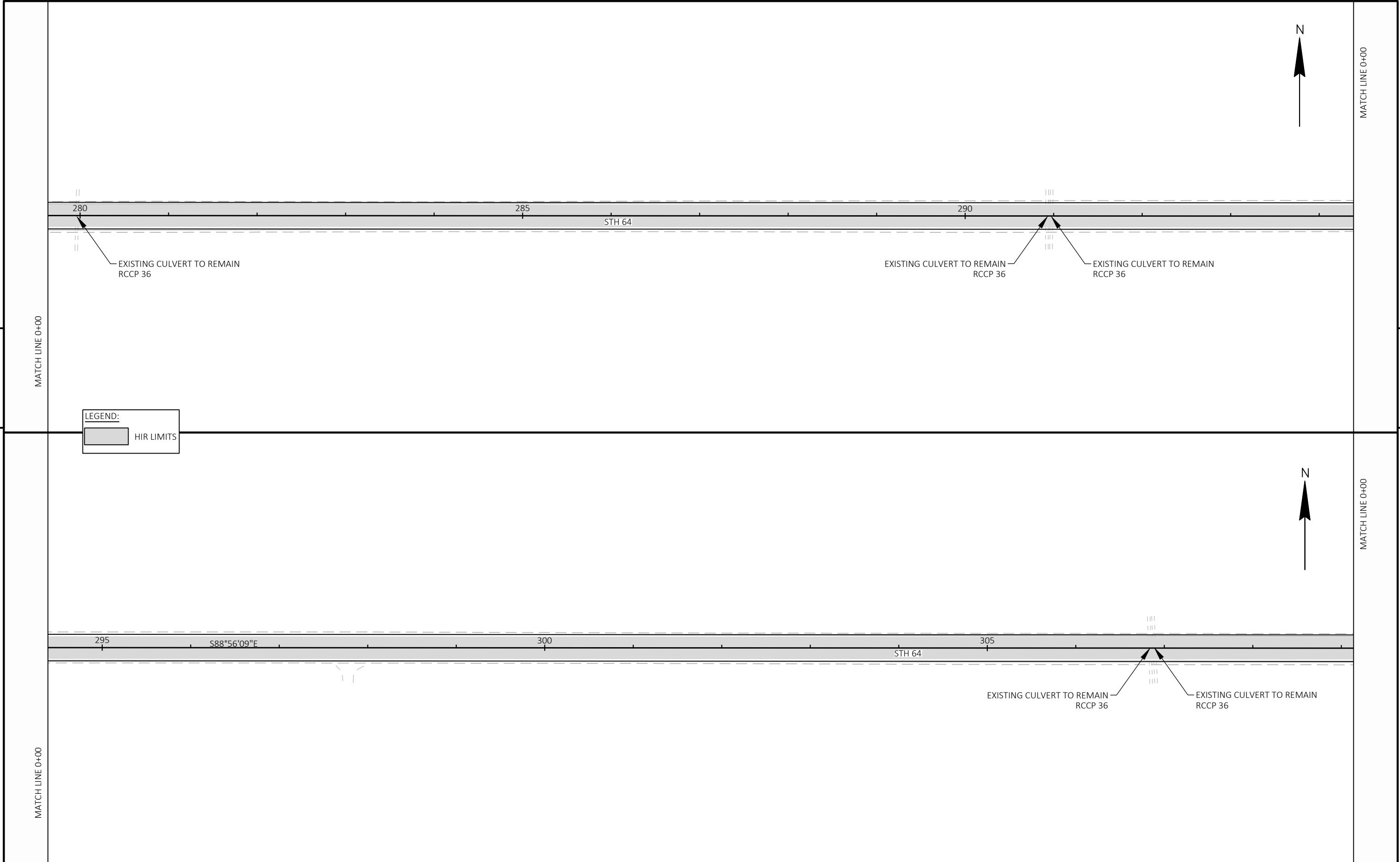


LEGEND:  
 HIR LIMITS

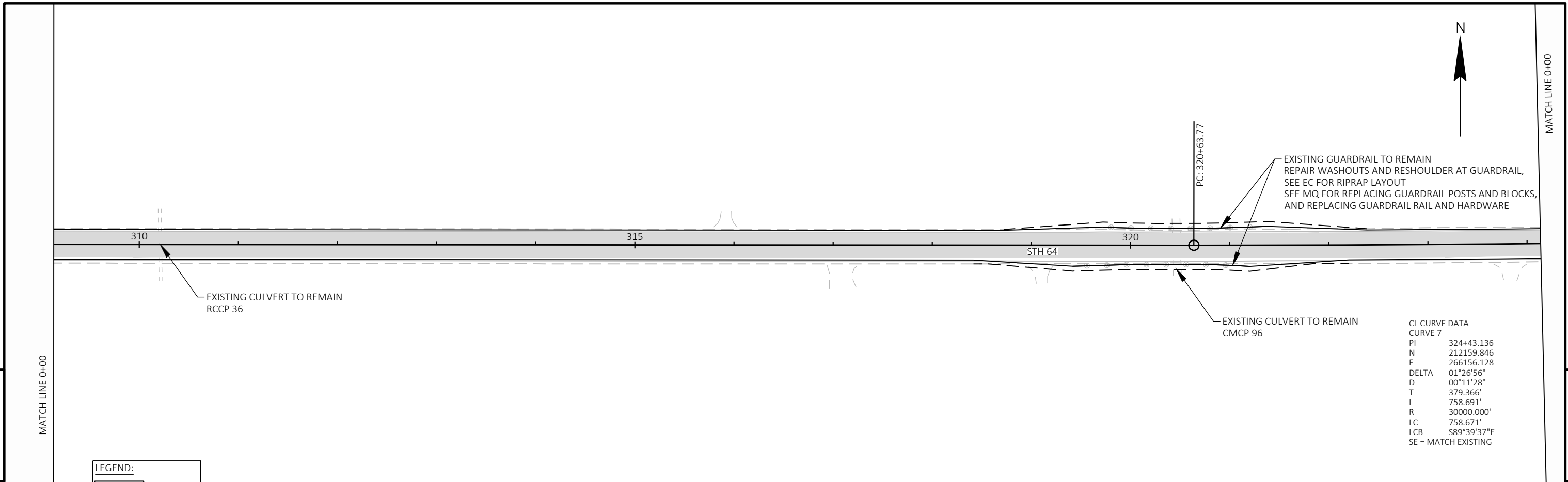


CL CURVE DATA  
 CURVE 6  
 PI 270+79.059  
 N 212259.468  
 E 260792.970  
 DELTA 00°11'53"  
 D 00°11'28"  
 T 51.819'  
 L 103.638'  
 R 30000.000'  
 LC 103.638'  
 LCB S89°02'05"E  
 SE = MATCH EXISTING

PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------




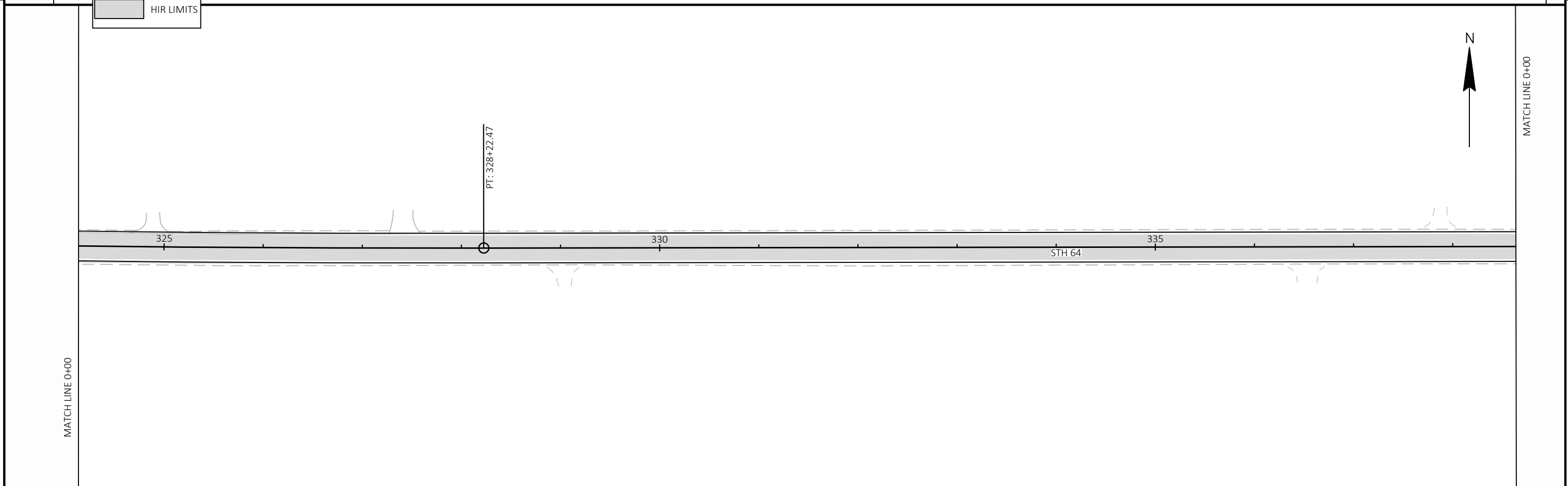
PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------



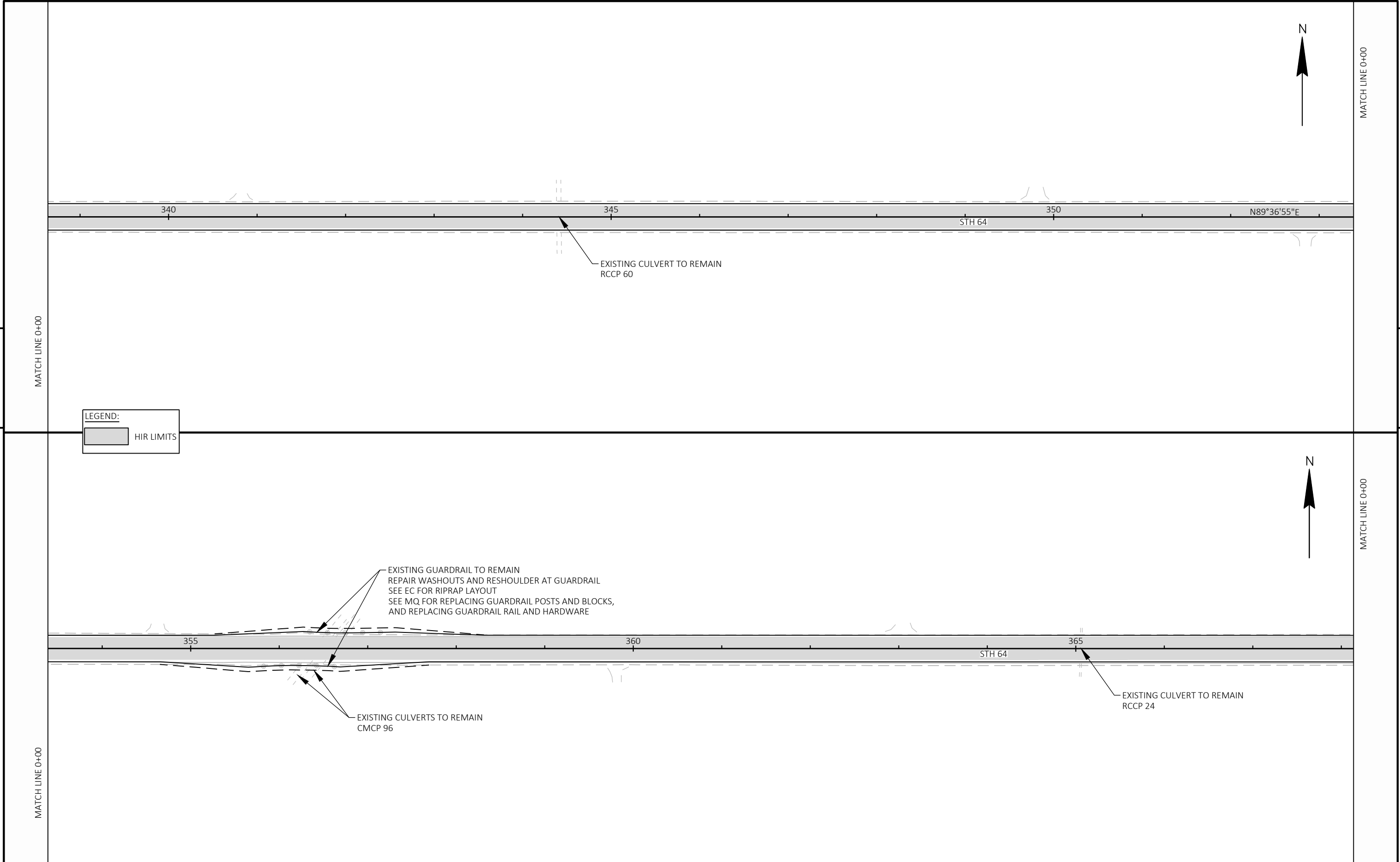
5

5

LEGEND:  
 HIR LIMITS



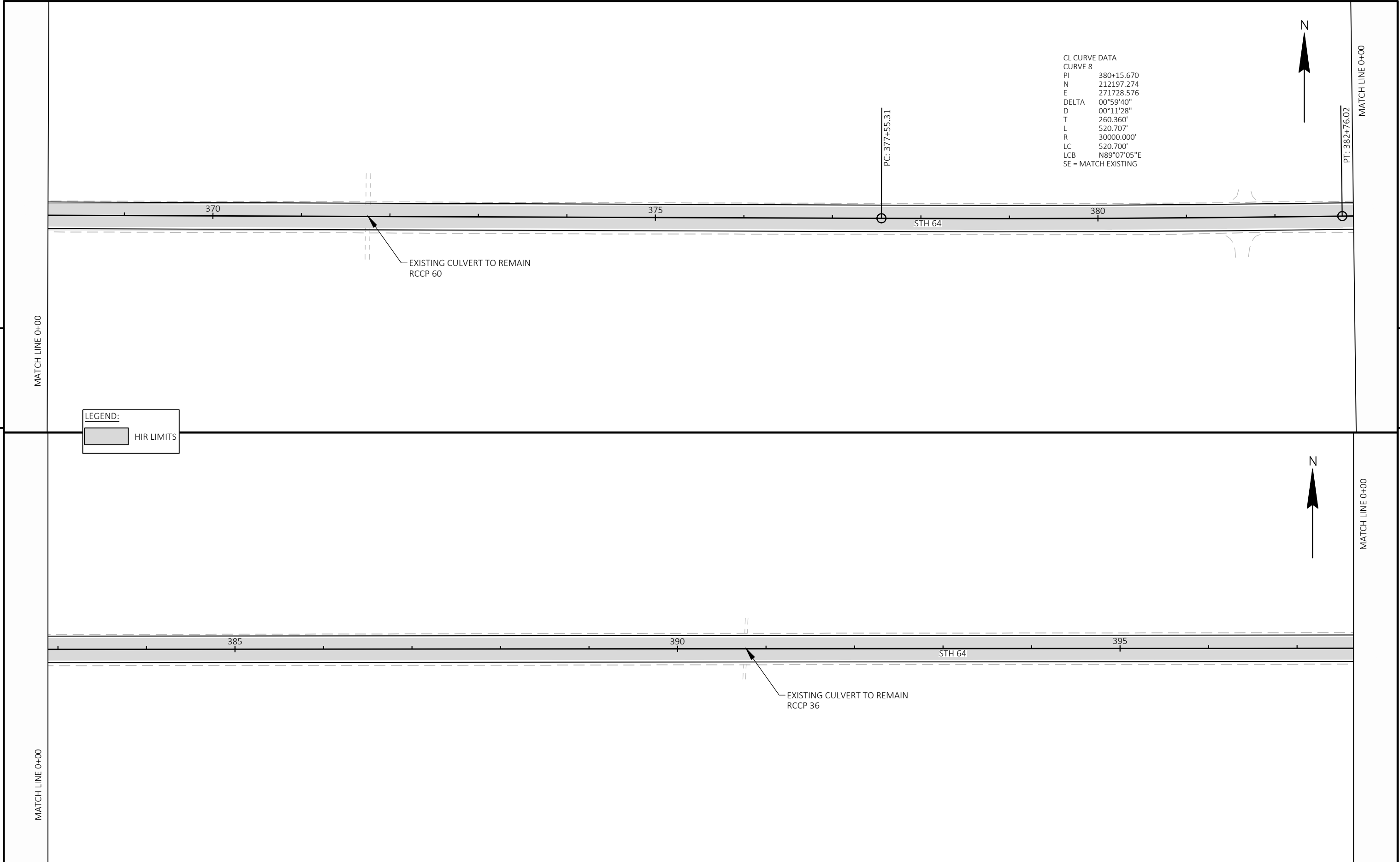
PROJECT NO: 8190-01-72      HWY: STH 64      COUNTY: CHIPPEWA      PLAN      SHEET      E



5

5

PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	E
------------------------	-------------	------------------	------	-------	---



PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	E
------------------------	-------------	------------------	------	-------	---



MATCH LINE 0+00




EXISTING CULVERT TO REMAIN  
RCCP 48

5

MATCH LINE 0+00

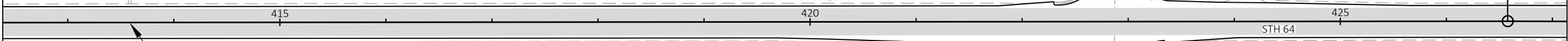
5

LEGEND:

 HIR LIMITS



MATCH LINE 0+00



EXISTING CULVERT TO REMAIN  
PCP 30

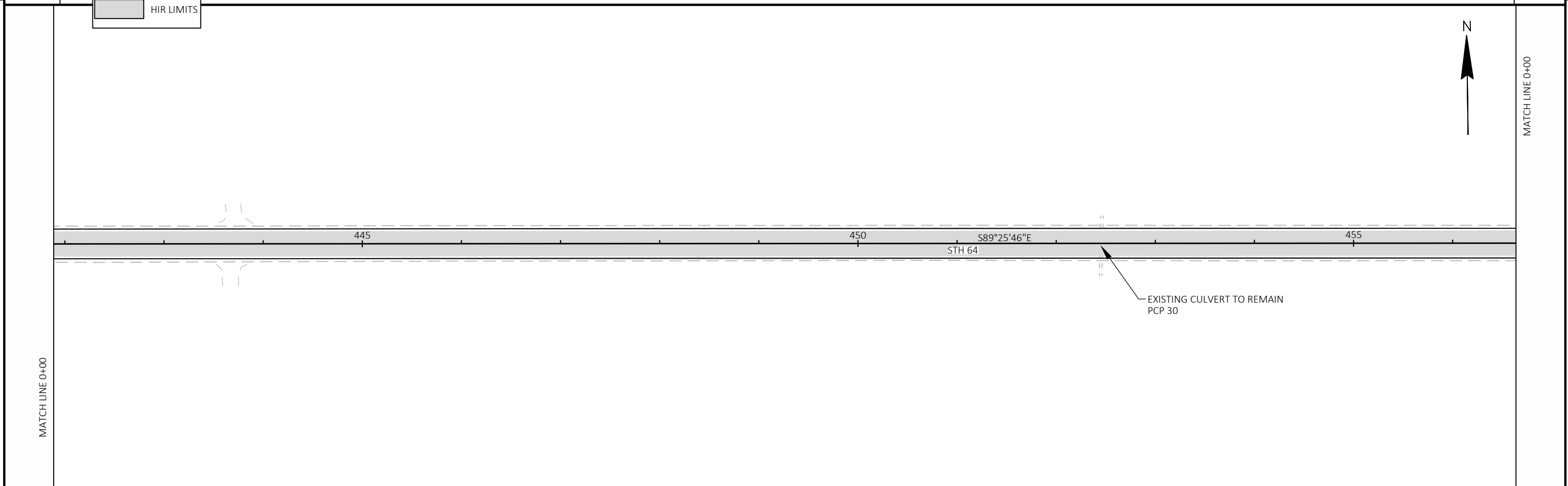
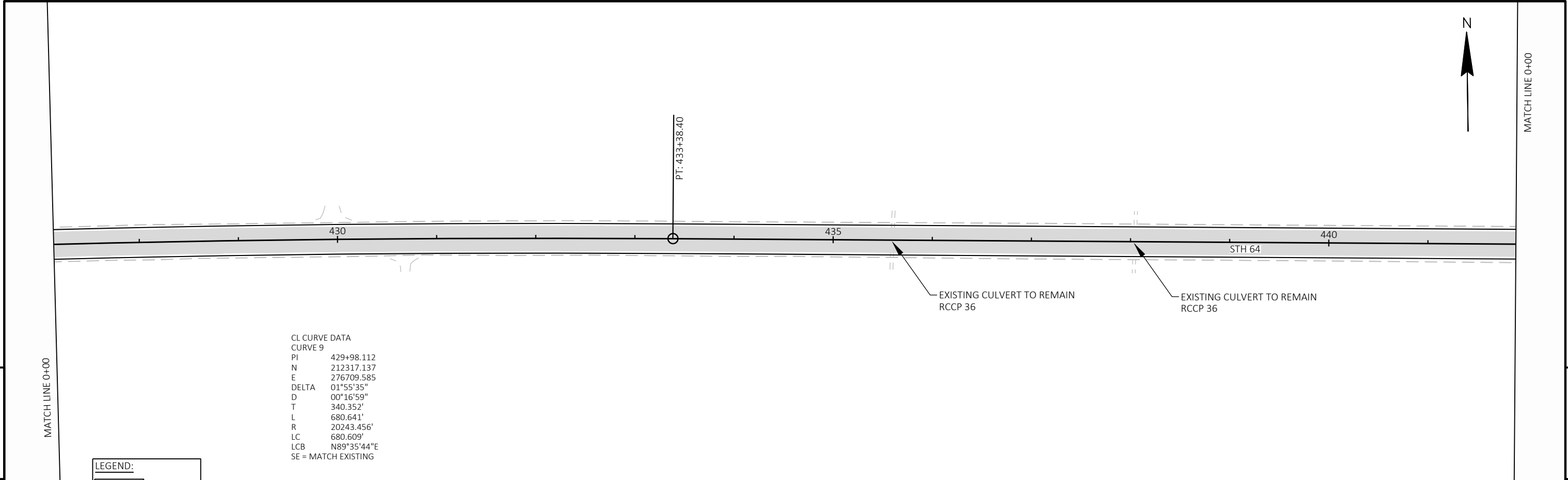
CTH G

CTH G

PC: 426+57.76

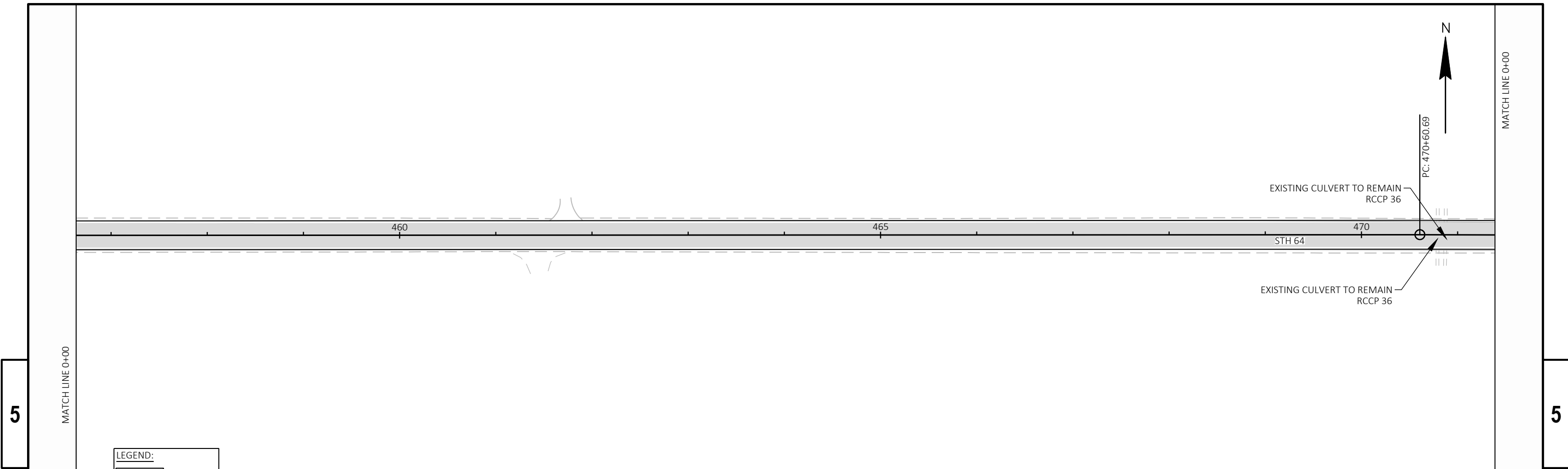
MATCH LINE 0+00

PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------




PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------

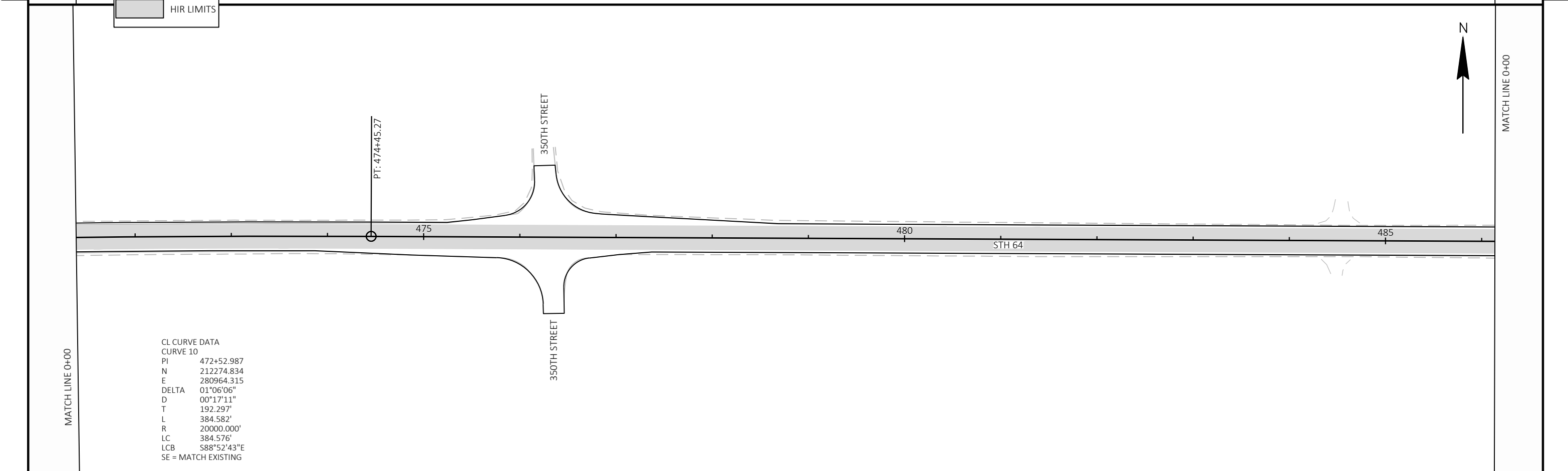




5

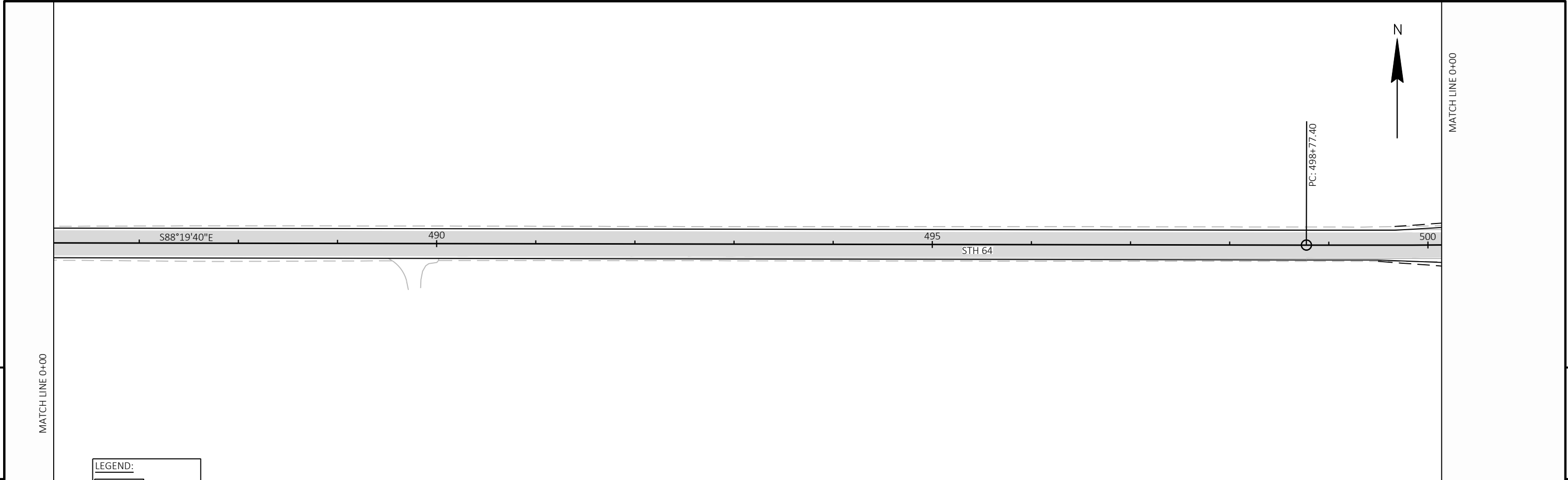
5


LEGEND:  
 HIR LIMITS

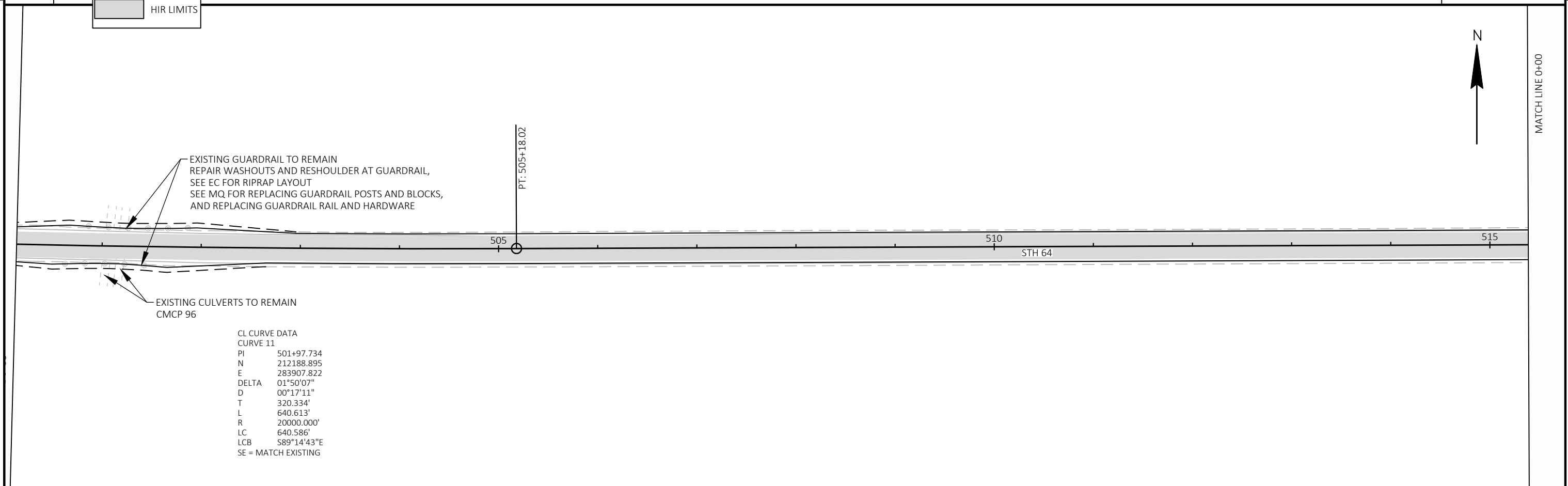


CL CURVE DATA  
 CURVE 10  
 PI 472+52.987  
 N 212274.834  
 E 280964.315  
 DELTA 01°06'06"  
 D 00°17'11"  
 T 192.297'  
 L 384.582'  
 R 20000.000'  
 LC 384.576'  
 LCB S88°52'43"E  
 SE = MATCH EXISTING

PROJECT NO: 8190-01-72      HWY: STH 64      COUNTY: CHIPPEWA      PLAN      SHEET      E



LEGEND:  
 HIR LIMITS



CL CURVE DATA  
 CURVE 11  
 PI 501+97.734  
 N 212188.895  
 E 283907.822  
 DELTA 01°50'07"  
 D 00°17'11"  
 T 320.334'  
 L 640.613'  
 R 20000.000'  
 LC 640.586'  
 LCB S89°14'43"E  
 SE = MATCH EXISTING

PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------



MATCH LINE 0+00



520

525

STH 64


530

EXISTING CULVERT TO REMAIN  
RCCP 30

5  
MATCH LINE 0+00

5  
MATCH LINE 0+00

LEGEND:

 HIR LIMITS



MATCH LINE 0+00



535

540

STH 64

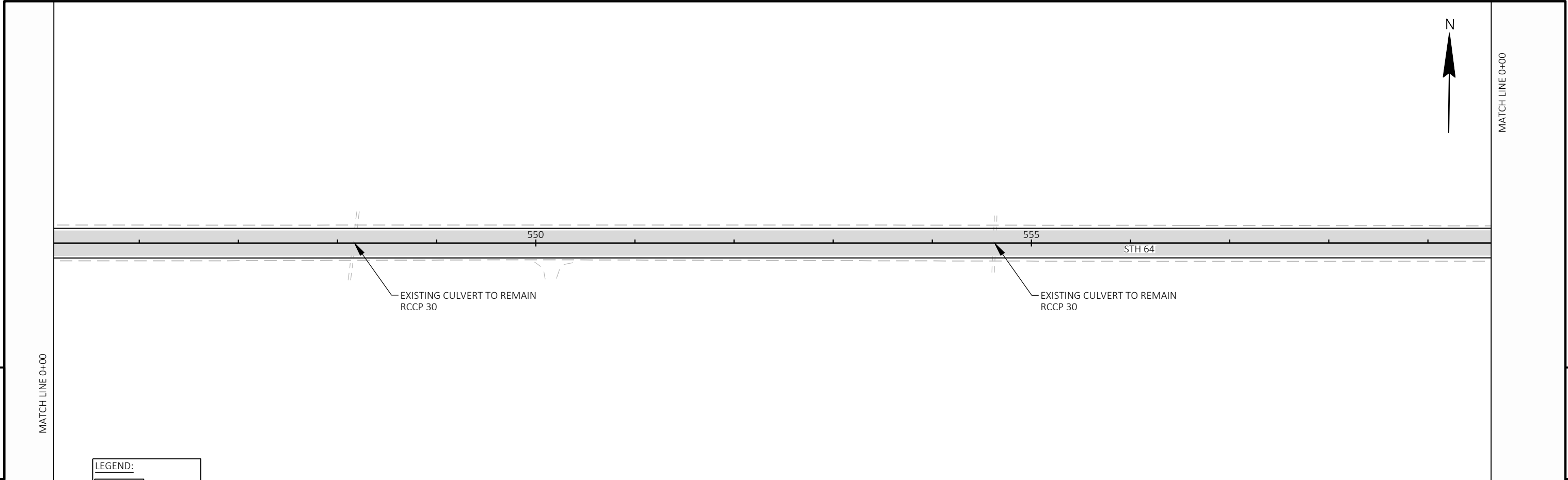
N89°50'14"E

545

EXISTING CULVERT TO REMAIN  
RCCP 30


MATCH LINE 0+00

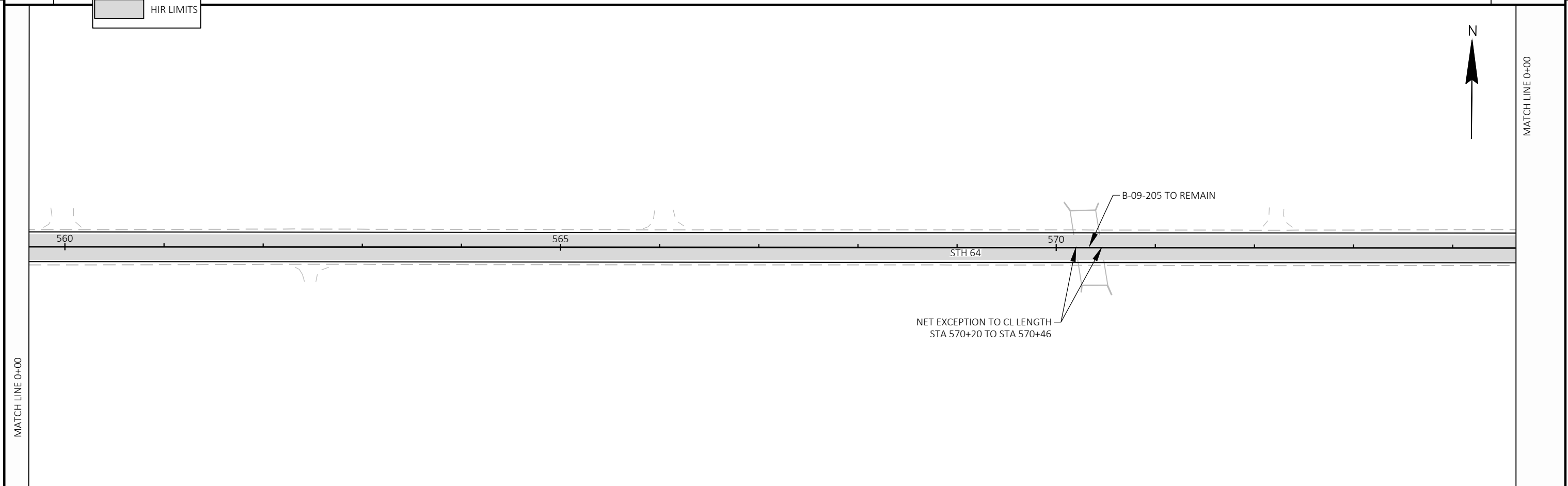
PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------



5

5

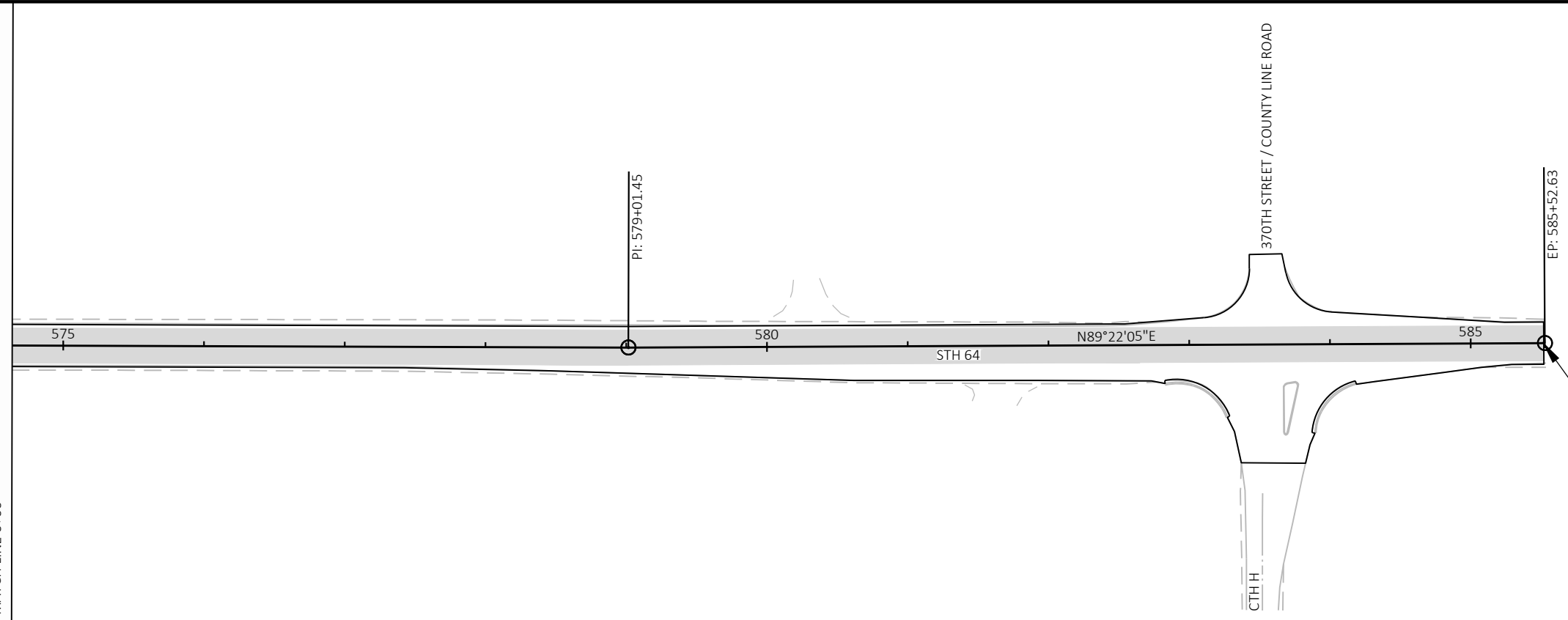
LEGEND:  
 HIR LIMITS




MATCH LINE 0+00

MATCH LINE 0+00

PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------



END PROJECT  
 STA 585+52  
 MATCH EXISTING  
 SAWCUT REQ'D  
 Y = 212217.970  
 X = 292262.069

LEGEND:  
 HIR LIMITS

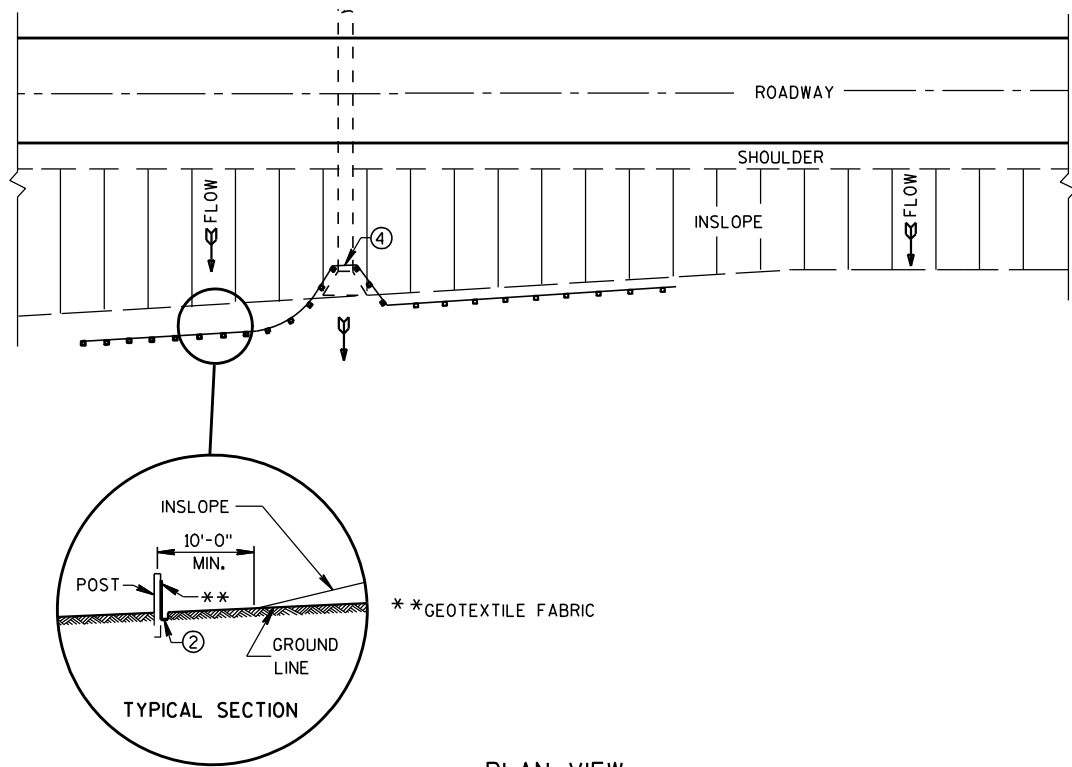
5

5

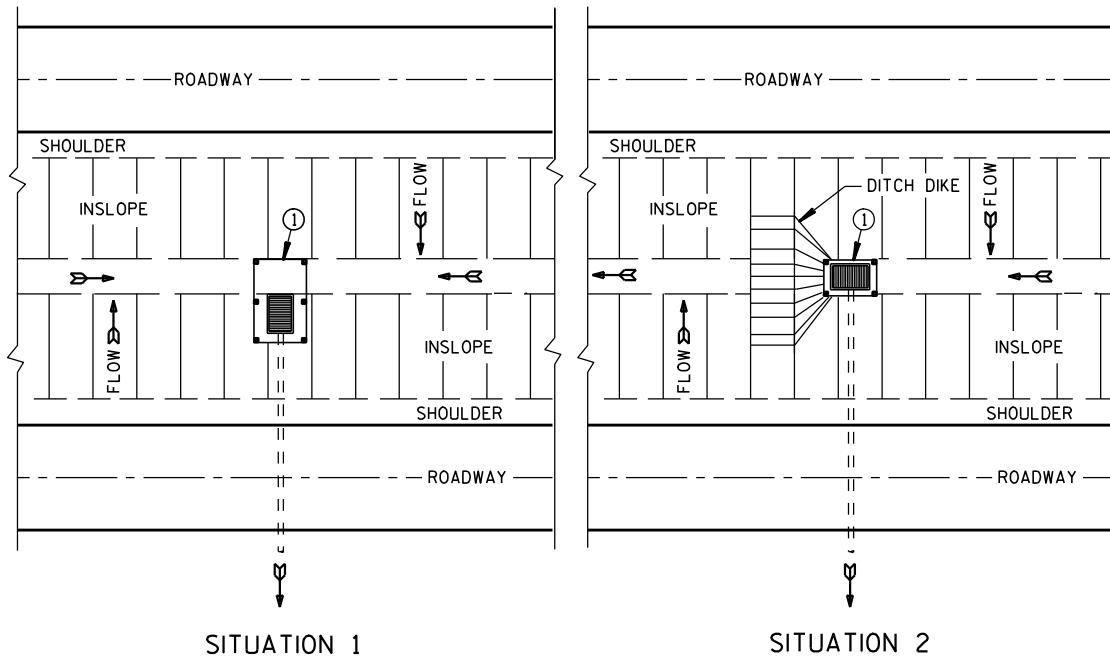
PROJECT NO: 8190-01-72	HWY: STH 64	COUNTY: CHIPPEWA	PLAN	SHEET	<b>E</b>
------------------------	-------------	------------------	------	-------	----------

## Standard Detail Drawing List

08E09-06	SILT FENCE
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04B	CENTERLINE RUMBLE STRIPS - CONCRETE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY



PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE

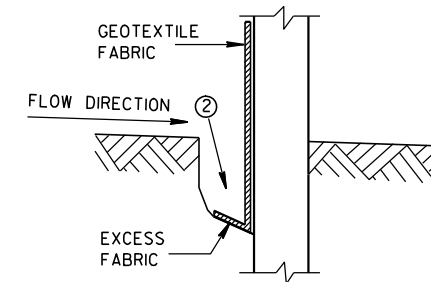


SITUATION 1 SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

**GENERAL NOTES**

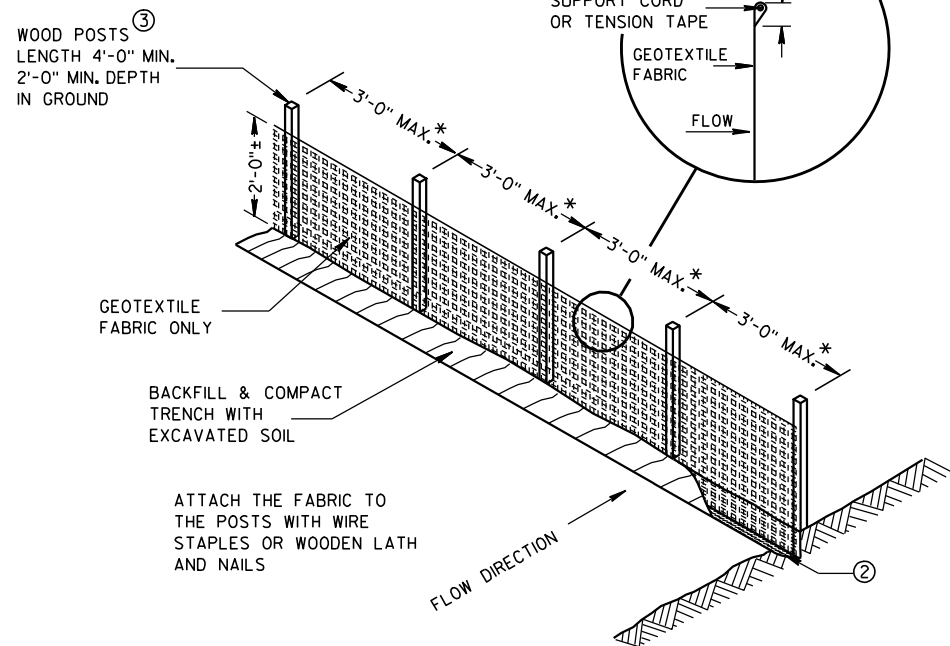
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



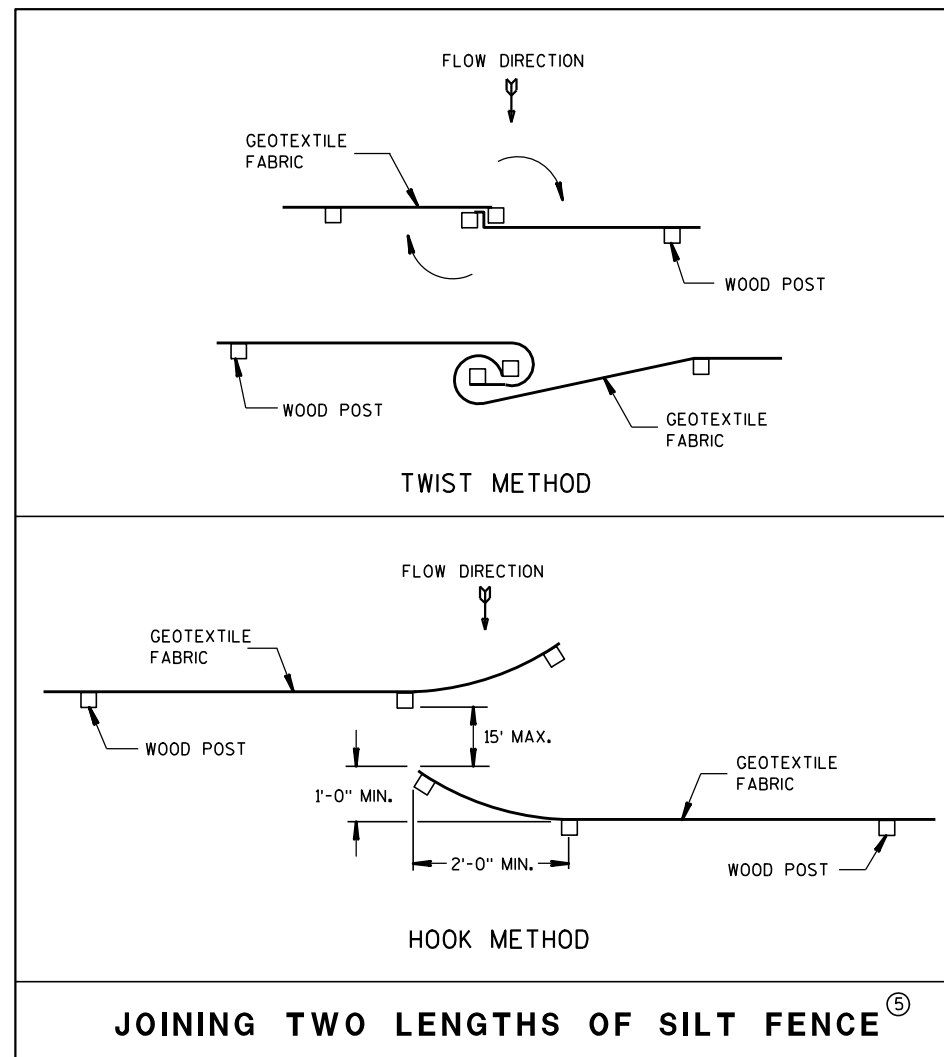
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

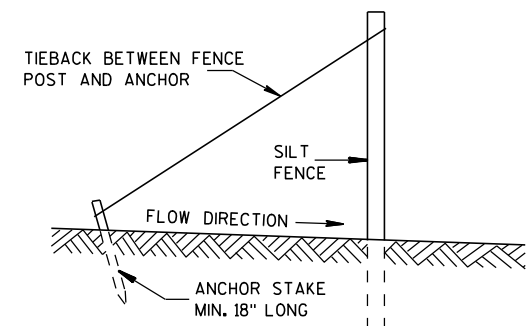


SILT FENCE

\* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05

DATE

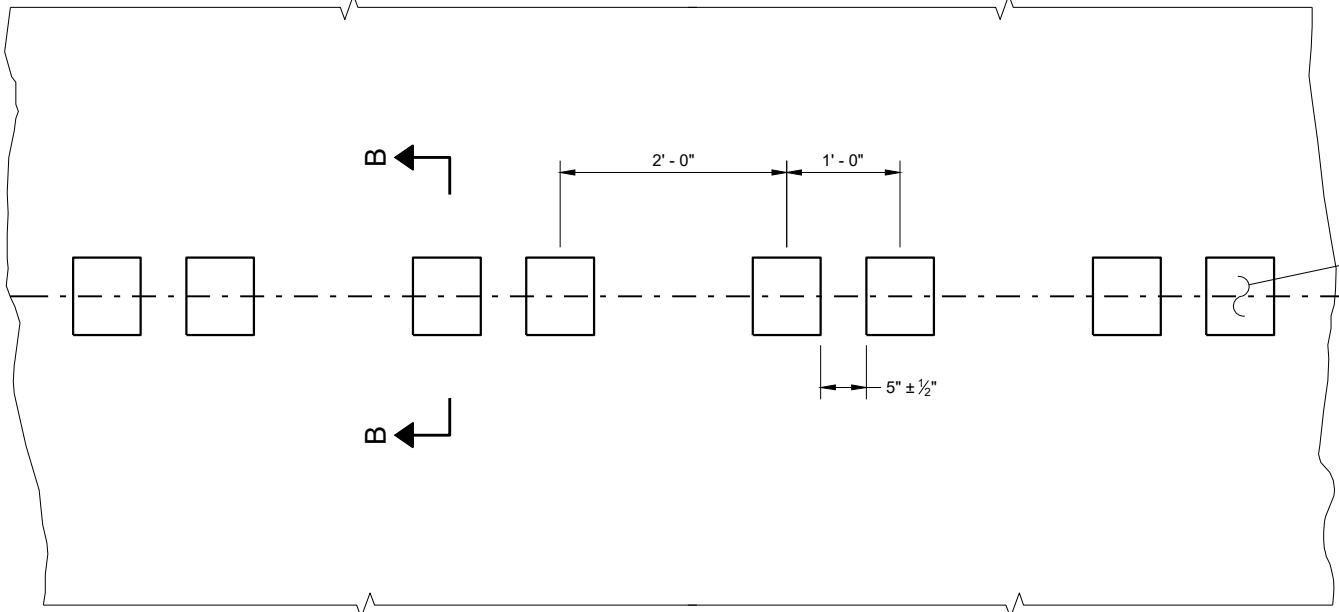
FHWA

/S/ Beth Cannestra  
CHIEF ROADWAY DEVELOPMENT ENGINEER

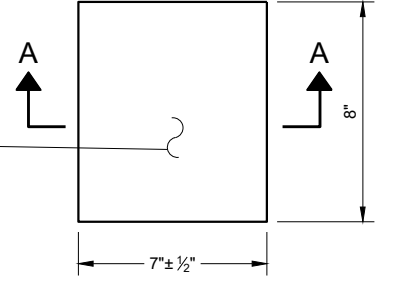
**GENERAL NOTES**

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

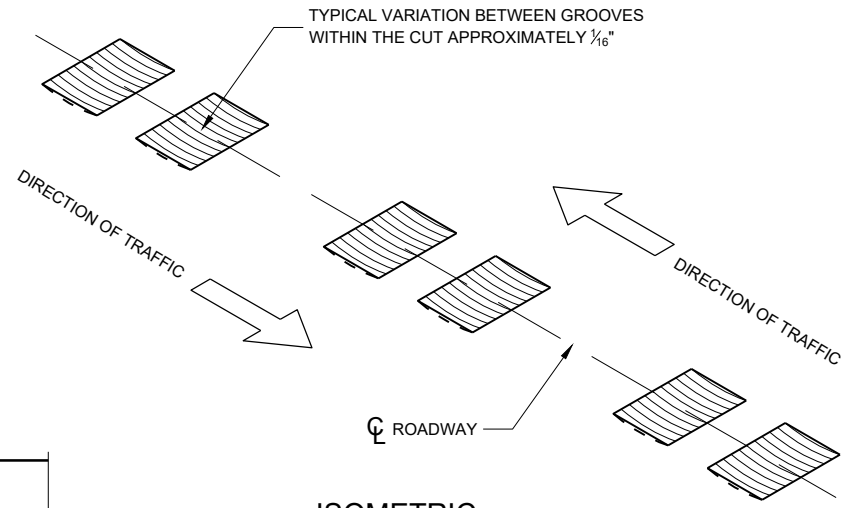
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



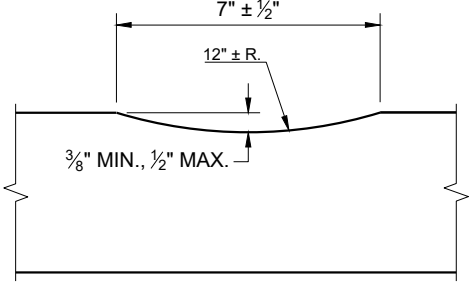
**PLAN DETAIL VIEW**



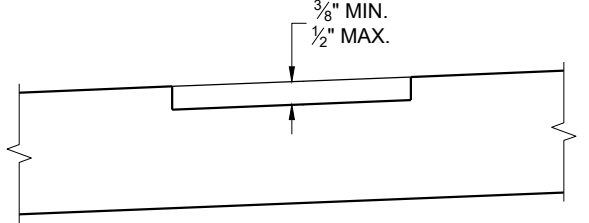
**PLAN VIEW (SINGLE GROOVE)**



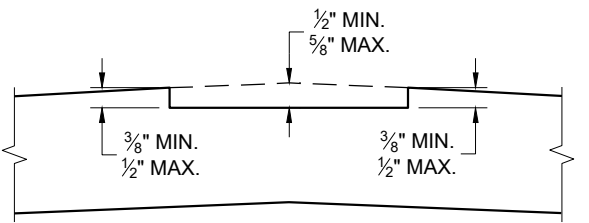
**ISOMETRIC**



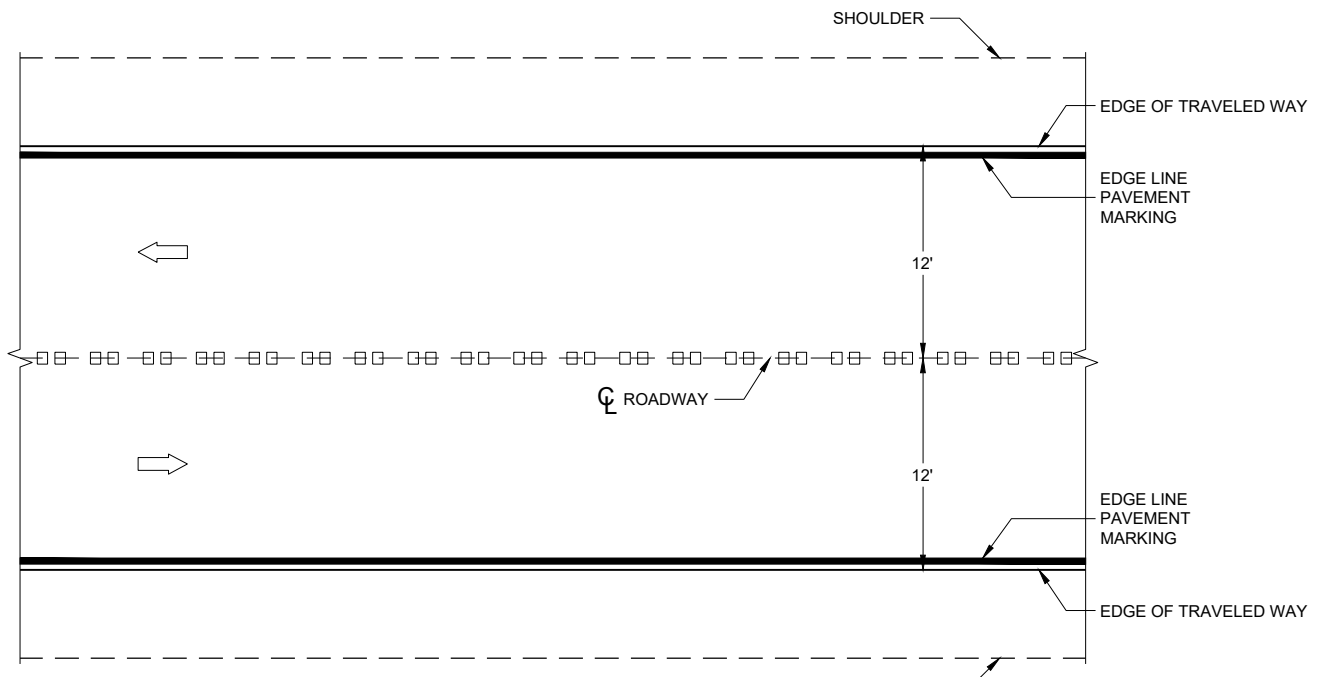
**SECTION A - A**



**SECTION B - B SUPERELEVATED ROADWAY**



**SECTION B - B CROWNED ROADWAY**



**PLAN VIEW**

**CENTERLINE RUMBLE STRIPS - ASPHALT**

<b>CENTERLINE RUMBLE STRIPS - ASPHALT</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



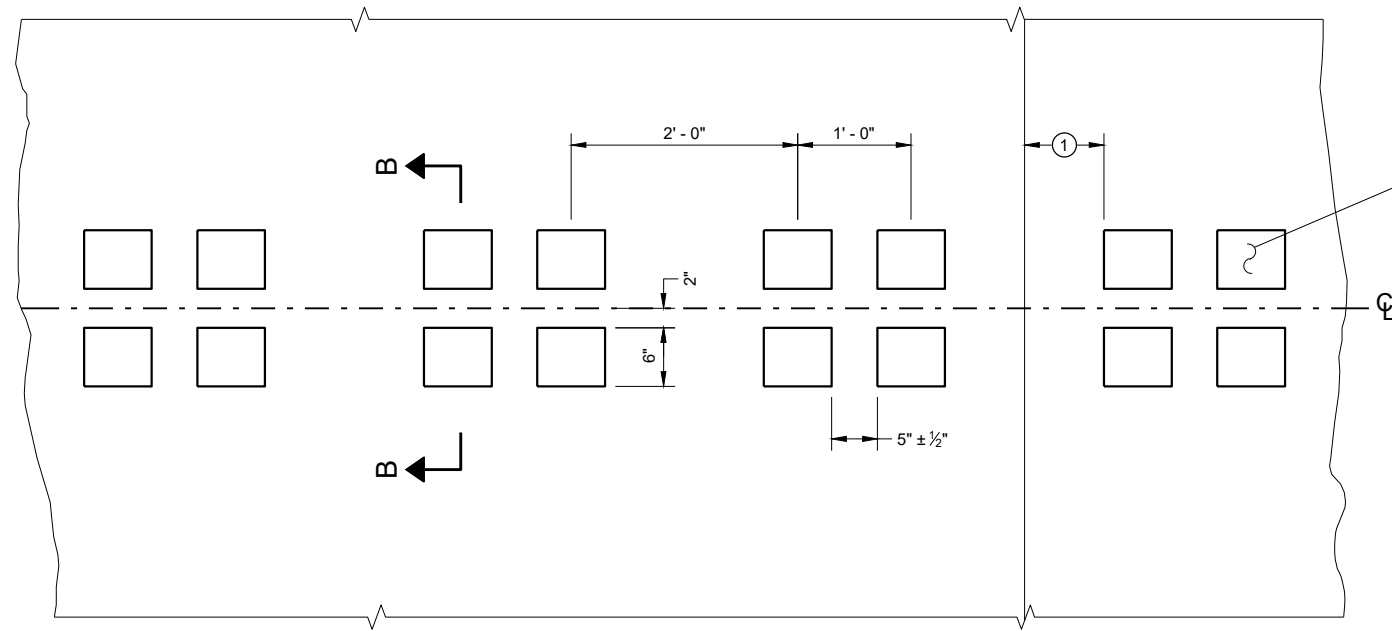
**GENERAL NOTES**

SDD 13A11, SHEET "d" SHOWS THE LOCATION OF RUMBLE STRIPS AT INTERSECTIONS, INTERSECTIONS WITH LEFT TURN LANES, BRIDGES, COMMERCIAL AND RESIDENTIAL DRIVEWAYS AND RAILROAD CROSSINGS.

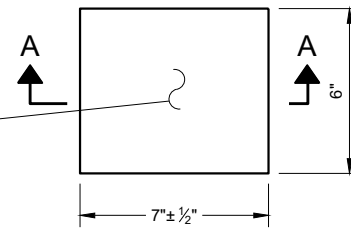
TEMPORARY PAVEMENT MARKINGS ARE TYPICALLY PLACED PRIOR TO RUMBLE STRIP INSTALLATION. PERMANENT MARKINGS ARE INSTALLED AFTER RUMBLE STRIP INSTALLATION.

CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.

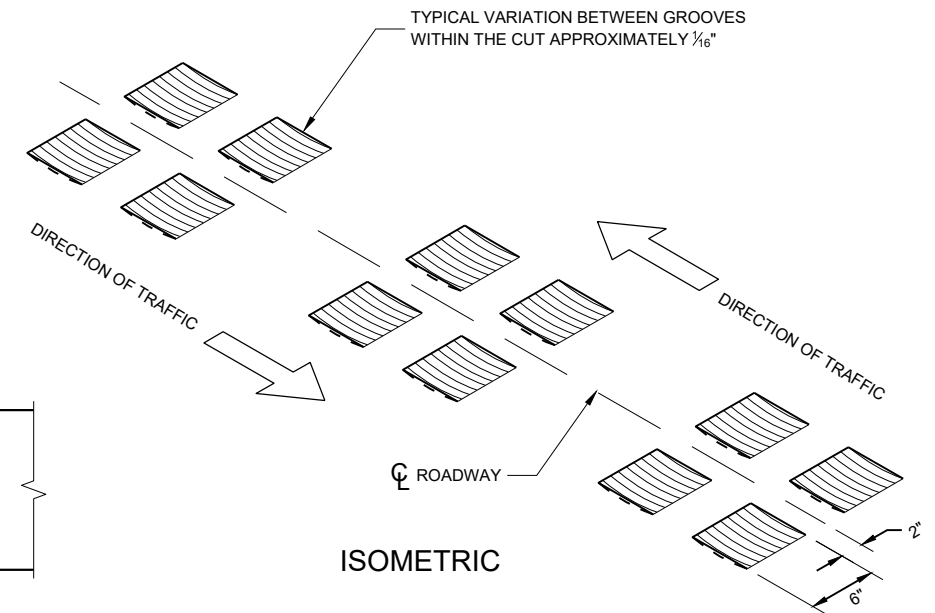
① CONCRETE PAVEMENT RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES FROM TRANSVERSE JOINTS.



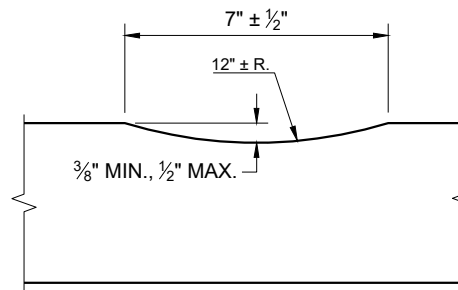
**PLAN DETAIL VIEW**



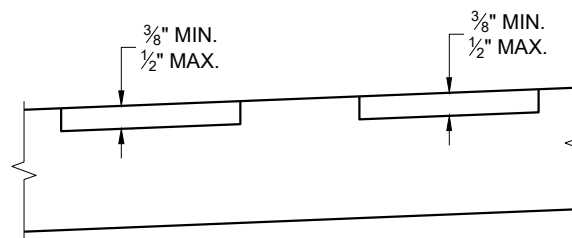
**PLAN VIEW  
(SINGLE GROOVE)**



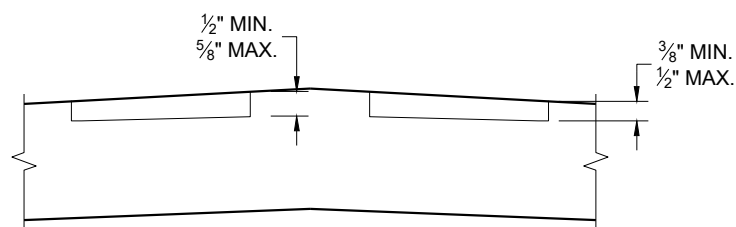
**ISOMETRIC**



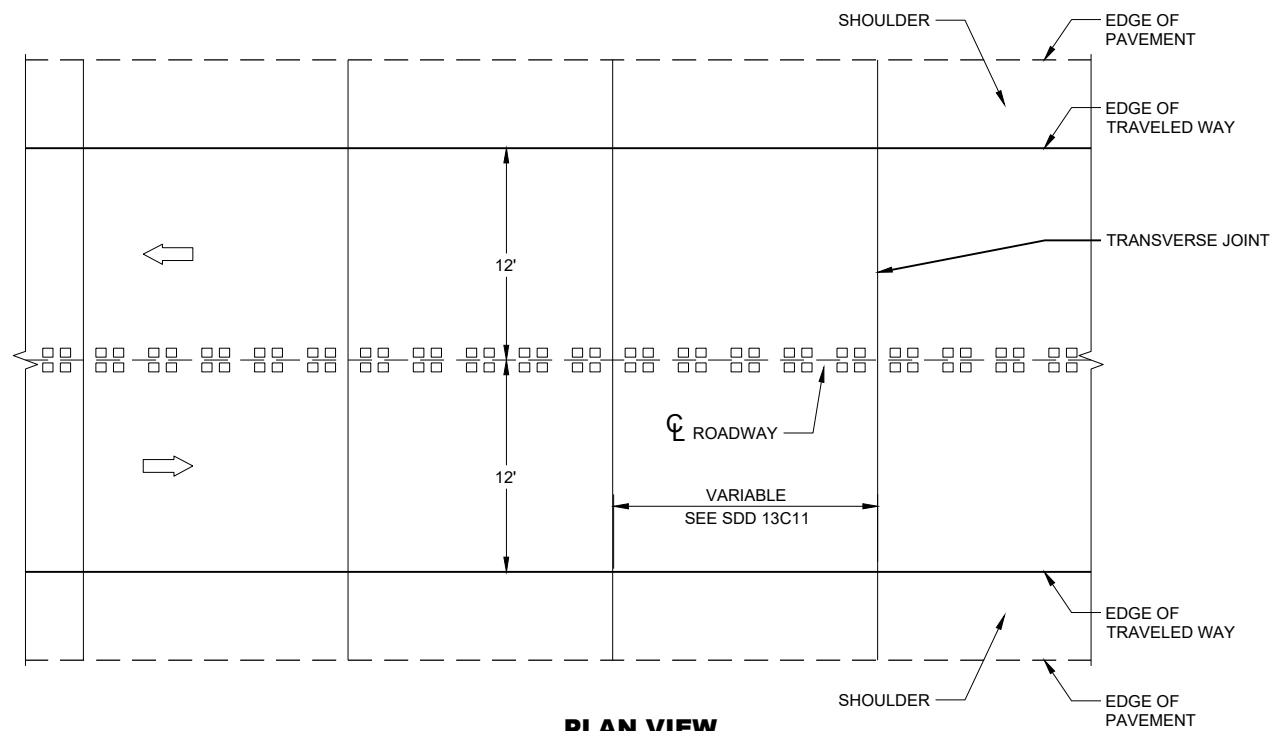
**SECTION A - A**



**SECTION B - B  
SUPERELEVATED ROADWAY**



**SECTION B - B  
CROWNED ROADWAY**



**PLAN VIEW**

**CENTERLINE RUMBLE STRIPS - CONCRETE**

**CENTERLINE RUMBLE STRIPS - CONCRETE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**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.

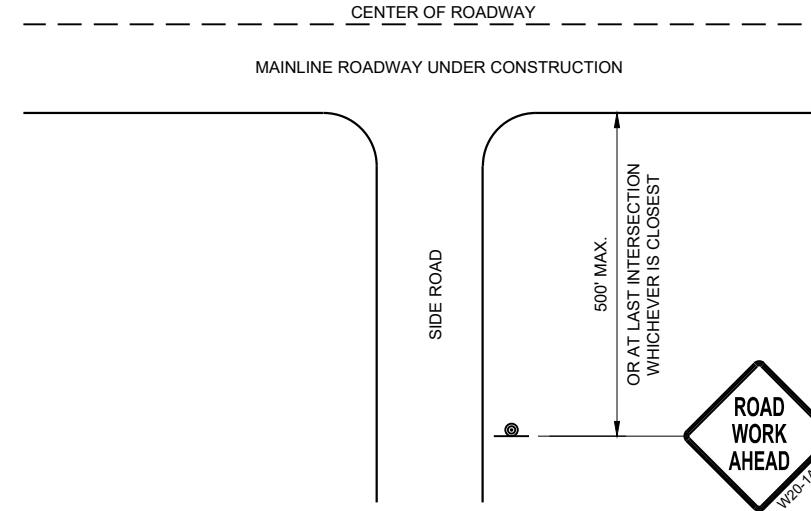
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

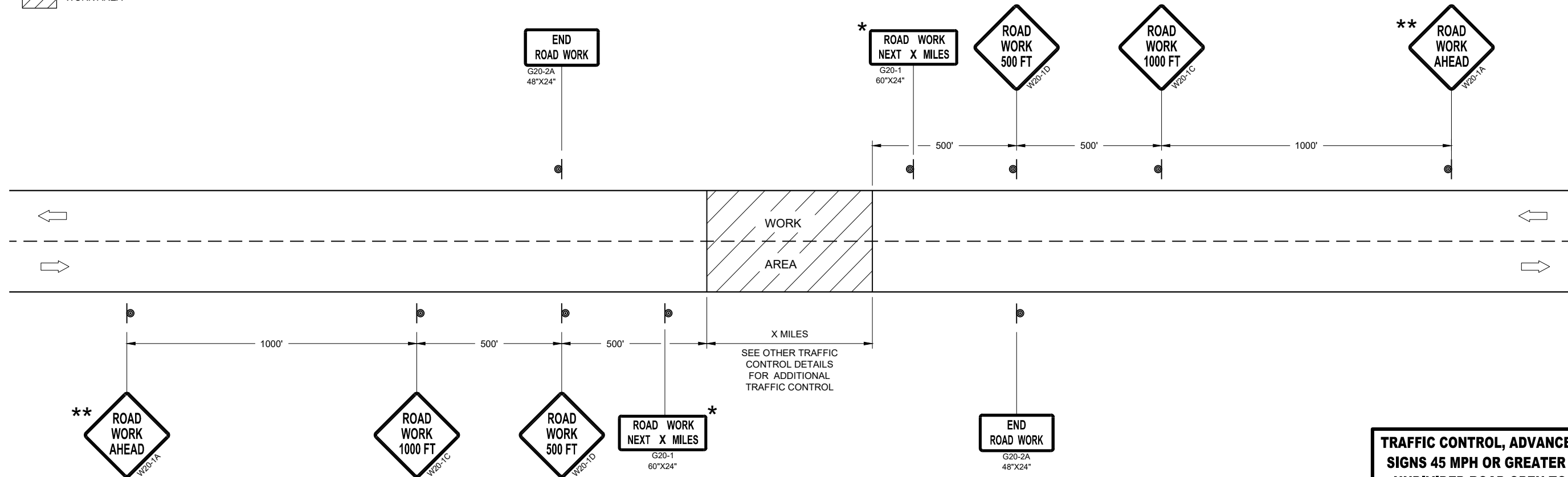
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

**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**

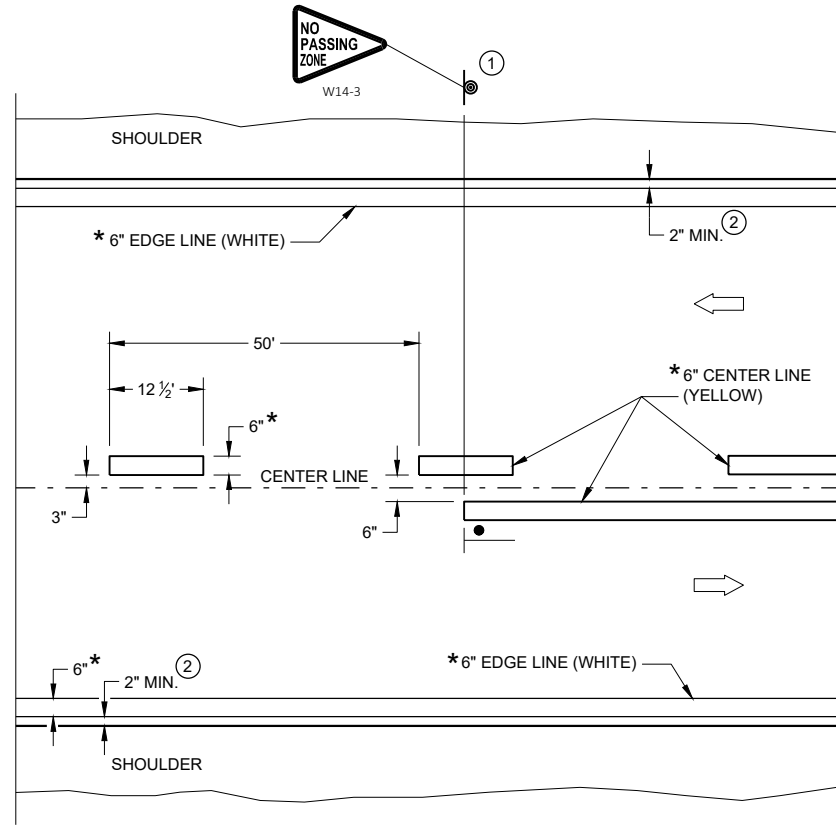
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- 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.

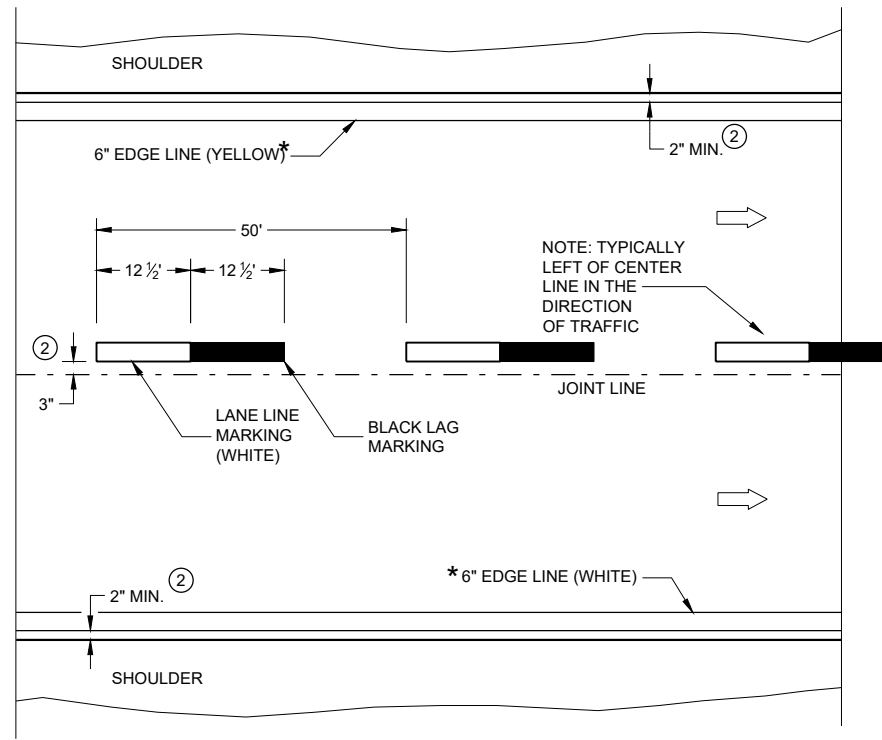
**LEGEND**

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

\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**

**PERMANENT PAVEMENT MARKING**

6

6

SDD 15C08-23a

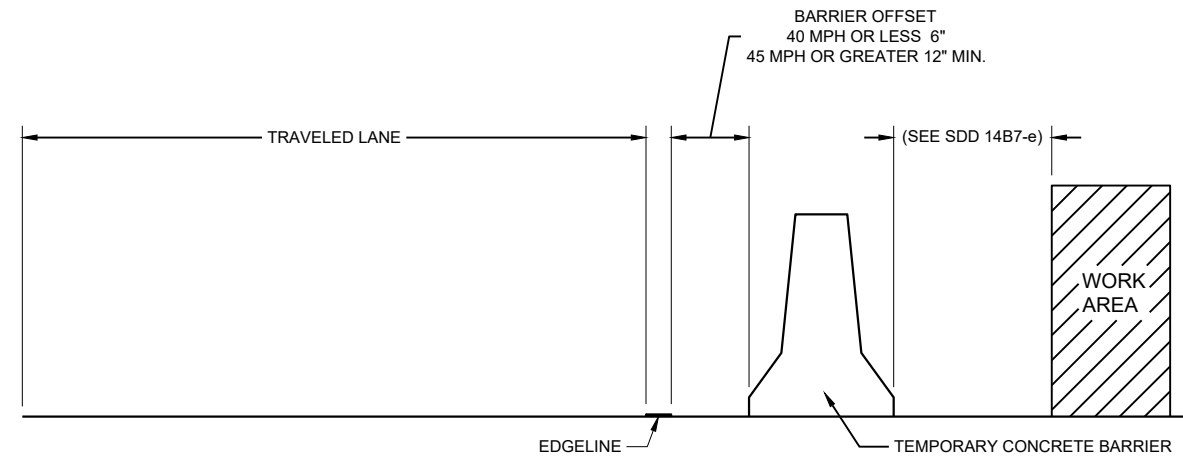
SDD 15C08-23a

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023 /S/ Jeannie Silver  
DATE STATEWIDE SIGNING AND MARKING ENGINEER

FHWA



**TEMPORARY BARRIER OFFSET FROM EDGELINE**

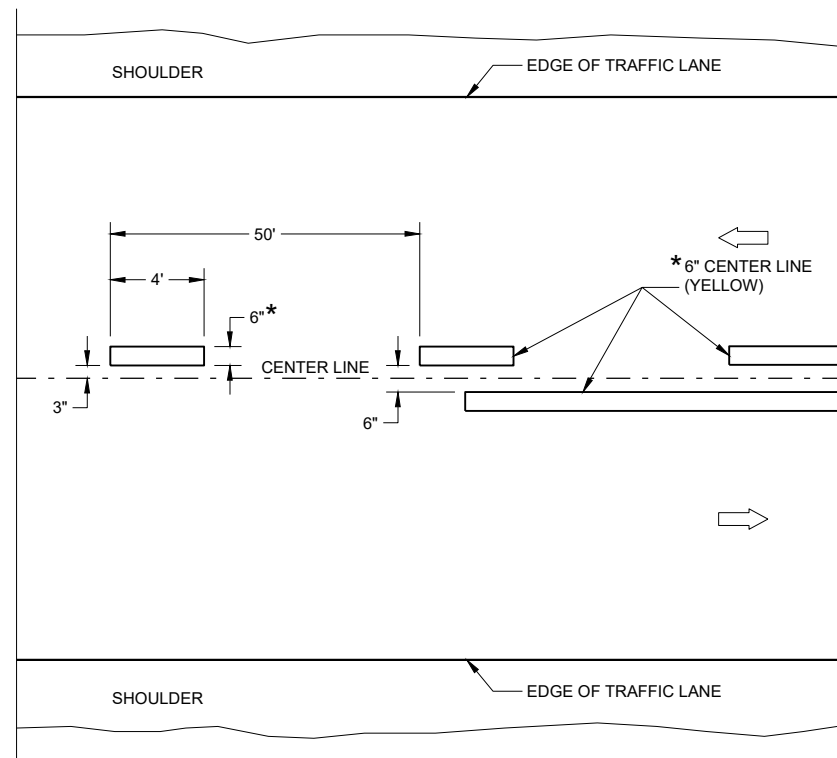
**GENERAL NOTES**

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

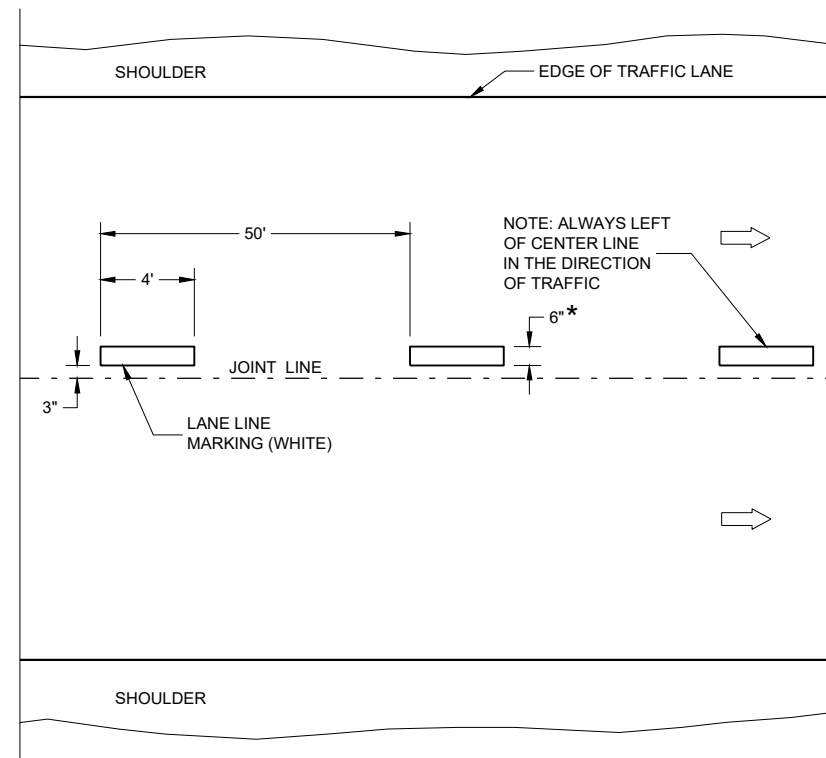
**LEGEND**

➔ DIRECTION OF TRAFFIC

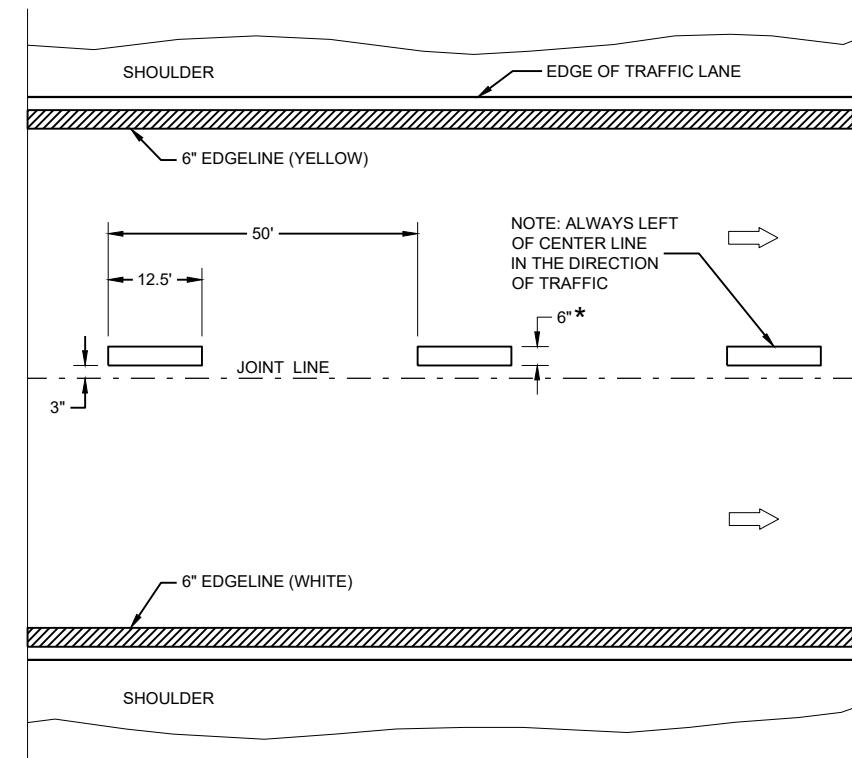
\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**



**FREEWAYS AND EXPRESSWAYS**

**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

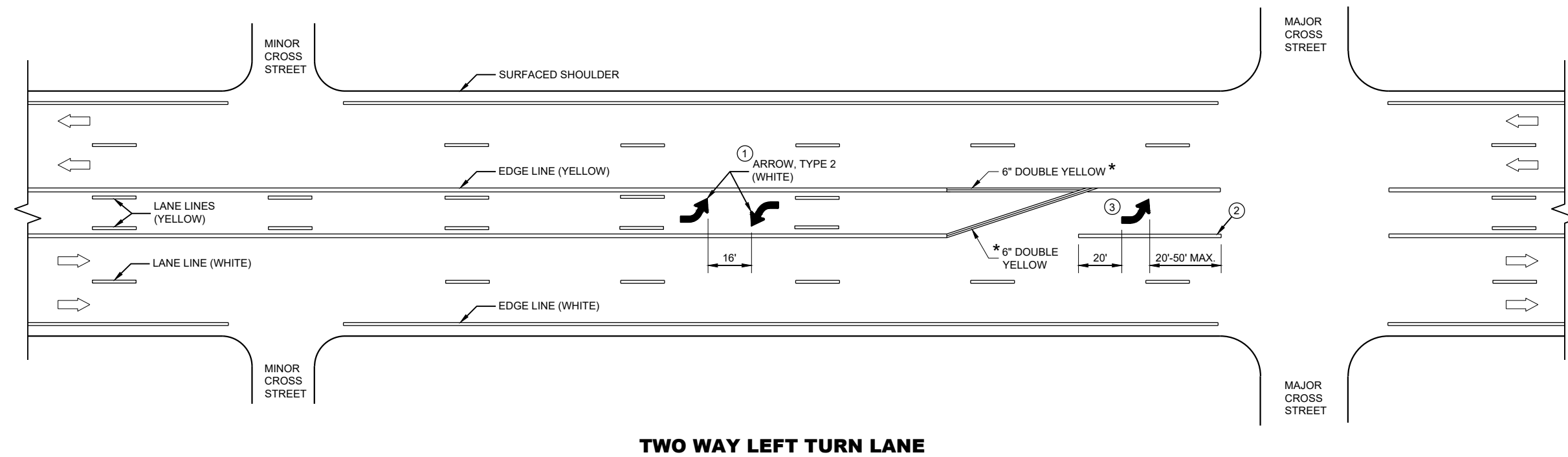
APPROVED  
DATE: May 2023 /S/ Jeannie Silver  
STATEWIDE SIGNING AND MARKING ENGINEER

**GENERAL NOTES**

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

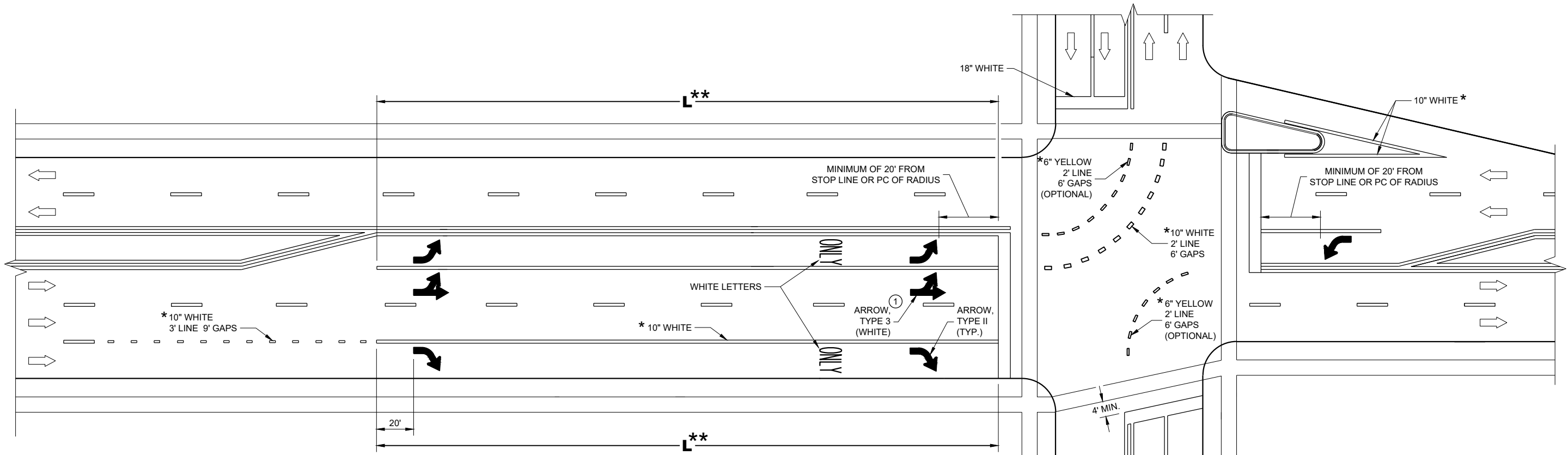
➡ DIRECTION OF TRAFFIC

\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



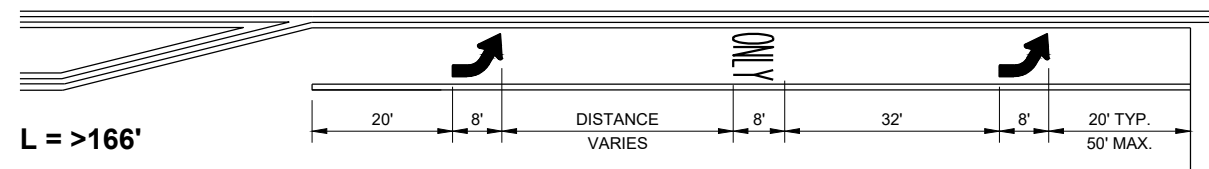
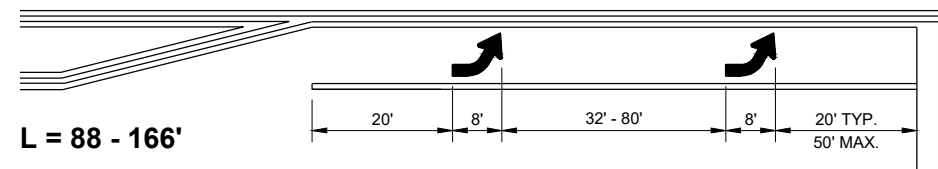
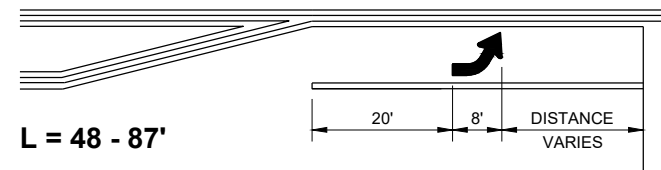
**PAVEMENT MARKING  
(TURN LANES)**

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 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.

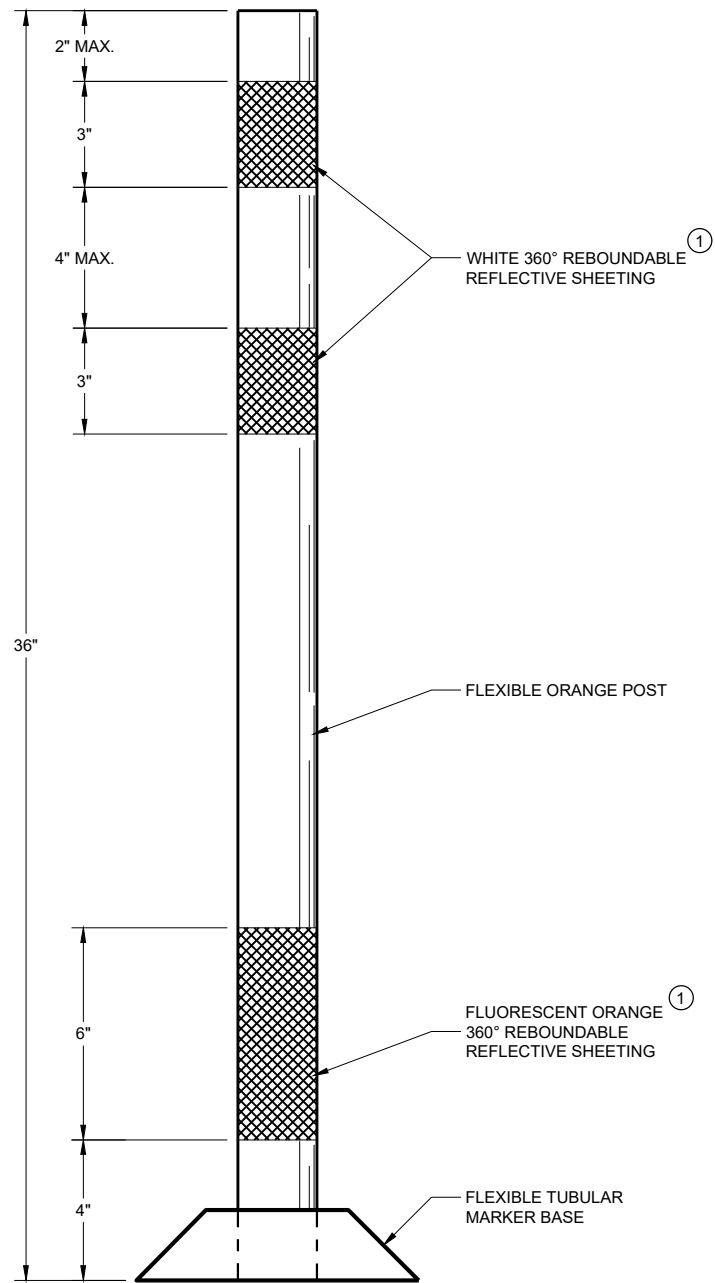
➡ DIRECTION OF TRAFFIC

**L** = LENGTH OF TURN BAY

\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



FLEXIBLE TUBULAR MARKER POST WORK ZONE

**GENERAL NOTES**

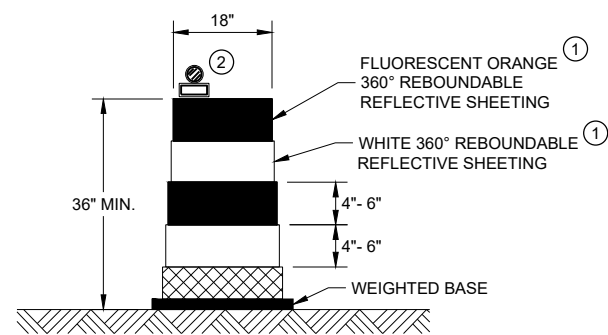
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

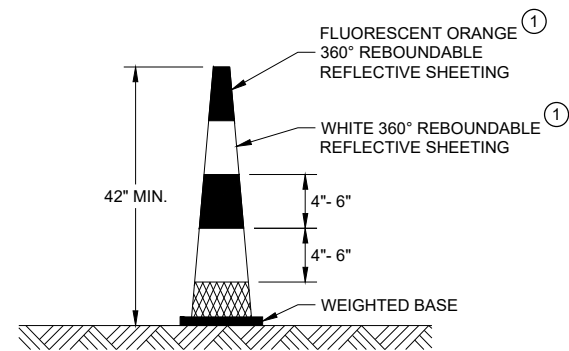
① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

<b>CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	



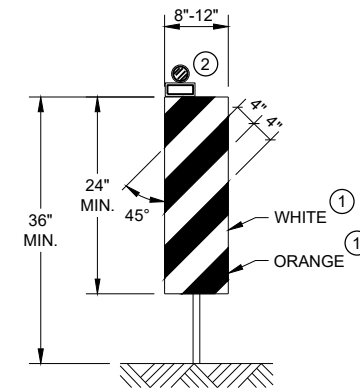
**DRUM**

BALLAST WIDTHS  
RANGE FROM 24"-36"



**42" CONE**

DO NOT USE IN TAPERS  
½ SPACING OF DRUMS  
BALLAST WIDTHS  
RANGE FROM 14"-20"

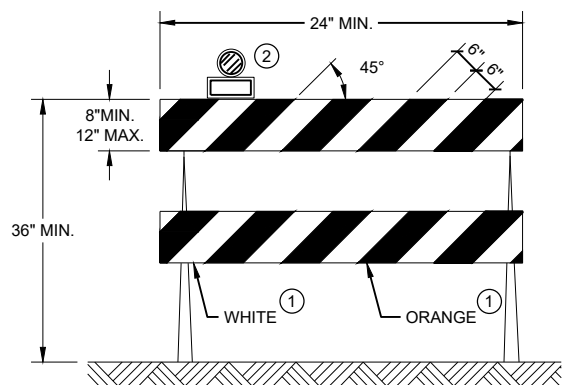


**VERTICAL PANEL**

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

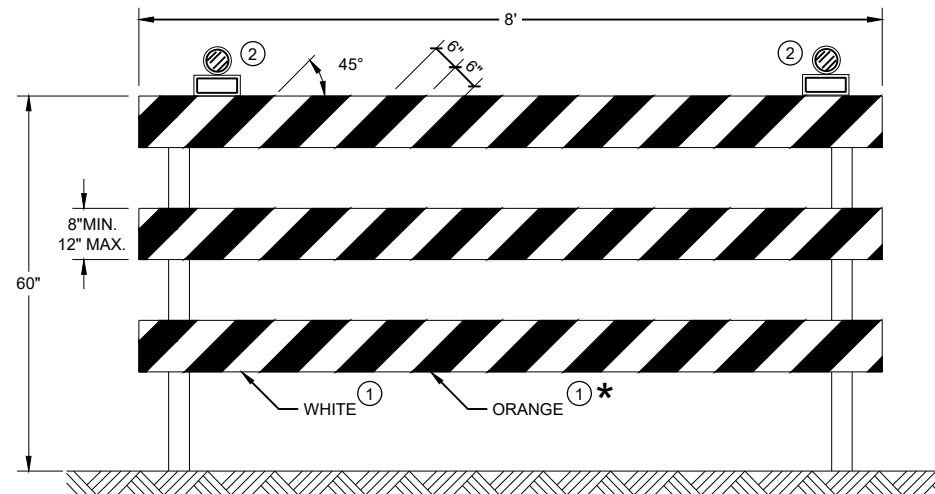
**GENERAL NOTES**

- 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  
 November 2022 /S/ Andrew Heidtke  
 DATE WORK ZONE ENGINEER  
 FHWA



**LEGEND**

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

**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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

**FLAGGING**

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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

**TEMPORARY PORTABLE RUMBLE STRIPS**

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

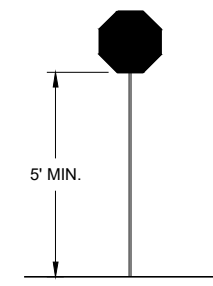
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



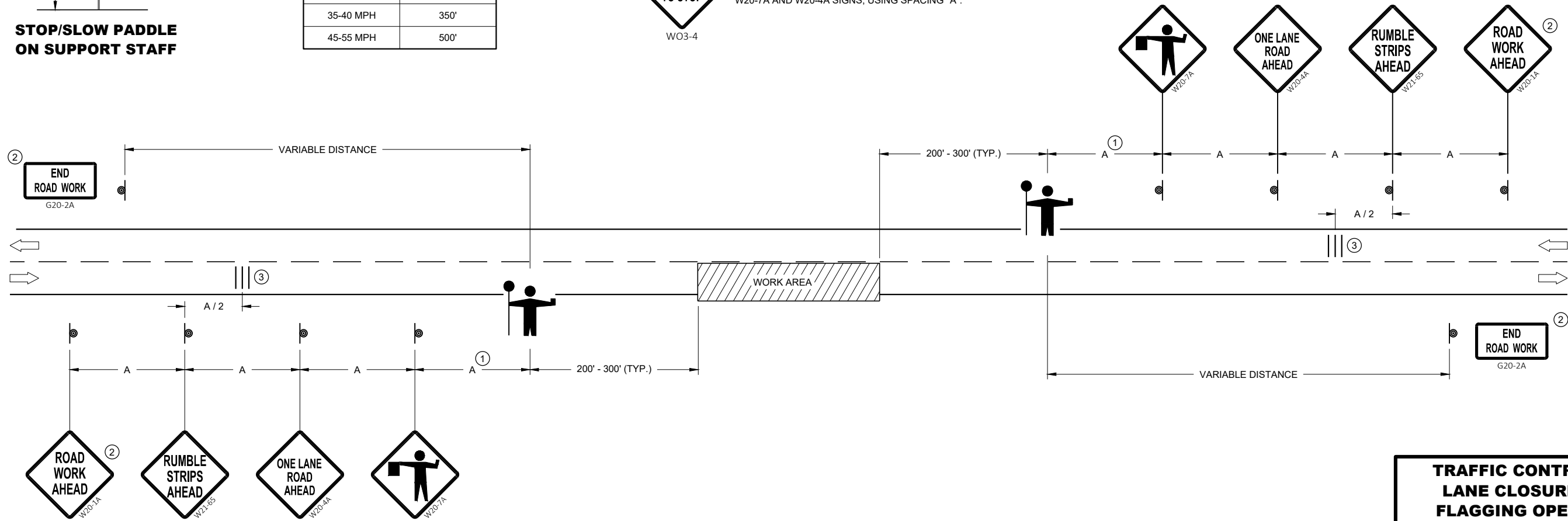
**STOP/SLOW PADDLE ON SUPPORT STAFF**

**SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE**

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".







**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE: May 2022 /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 (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.

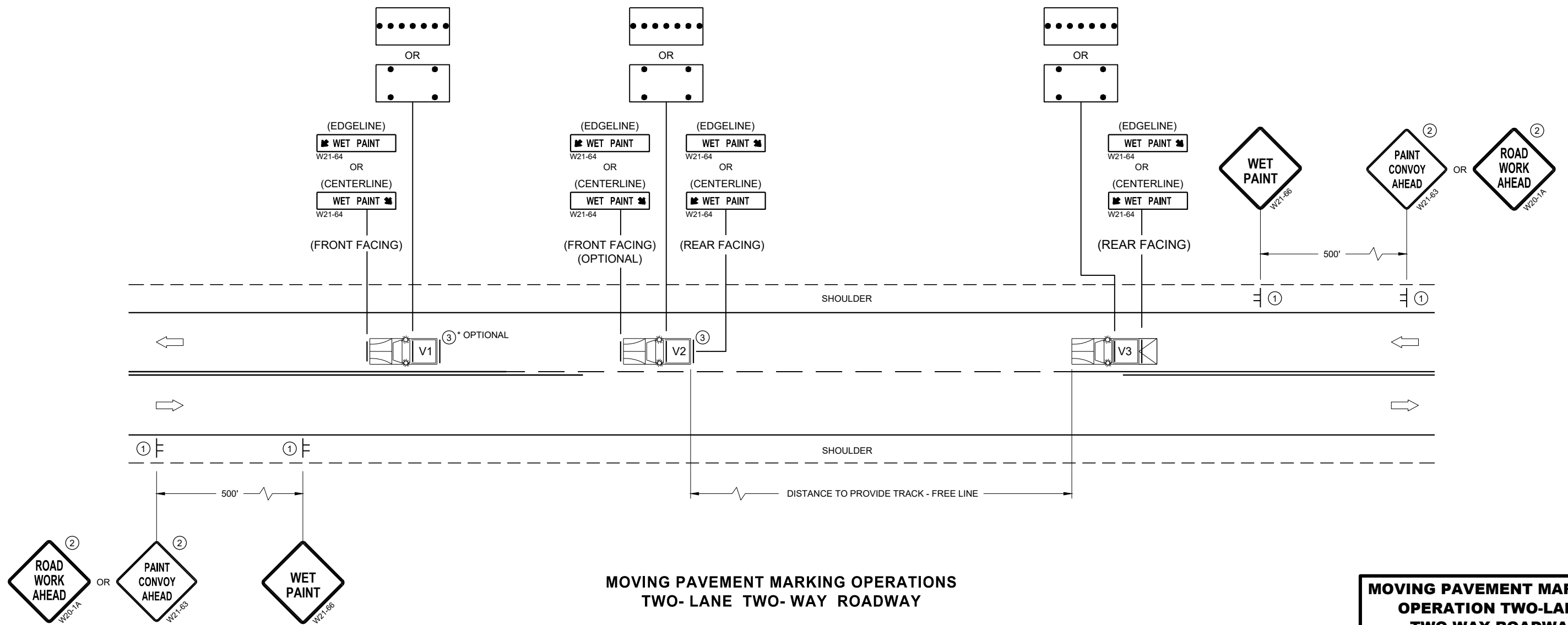
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.

6

6







SDD 15C19-08a

SDD 15C19-08a

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

<b>MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2023 DATE	/S/ Andrew Heidtke WORK ZONE 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.

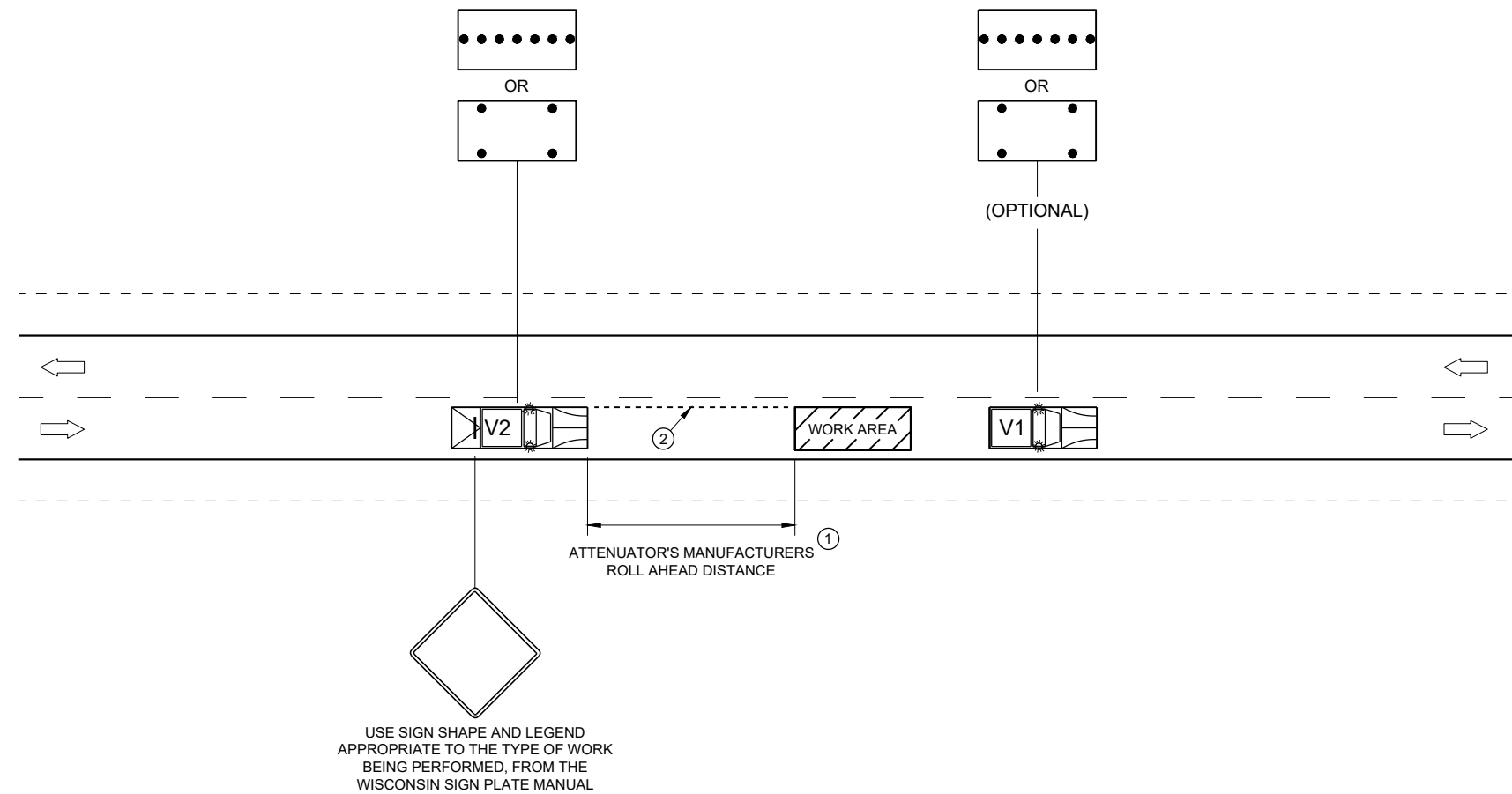
MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

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.



6

6

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***

Dedicated people creating transportation solutions through innovation and exceptional service.

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