

SUP

NOVEMBER 2017

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 = 76

PROJECT ID:

1610-08-72, 73, 79 & 82

COUNTY:

ASHLAND

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1610-08-72	WISC 2017519	1
1610-08-73	WISC 2017520	1
1610-08-79	WISC 2017521	1
1610-08-82	WISC 2017522	1

MELLEN - ASHLAND

MELLEN - ASHLAND

MELLEN - ASHLAND

MELLEN - ASHLAND

GOLF COURSE RD TO 900 FT S OF STH 112

GOLF COURSE RD TO 900 FT S OF STH 112

900 FT S OF STH 112 TO BUTTERWORTH RD

900 FT S OF STH 112 TO BUTTERWORTH RD

STH 13
ASHLAND

STH 13
ASHLAND

STH 13
ASHLAND

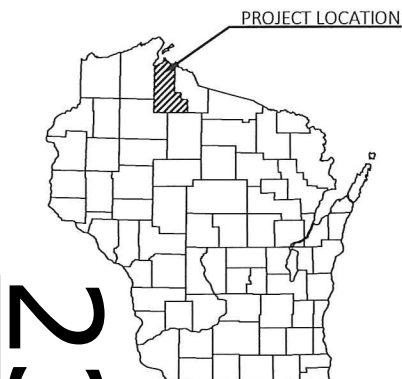
STH 13
ASHLAND

STATE PROJECT NUMBER
1610-08-73

STATE PROJECT NUMBER
1610-08-79

STATE PROJECT NUMBER
1610-08-72

STATE PROJECT NUMBER
1610-08-82



DESIGN DESIGNATION 1610-08-02, 1610-08-03

A.A.D.T. 2017	=	2700 VPD
A.A.D.T. 2037	=	3200 VPD
D.H.V.	=	----
D.D.	=	60/40
T.	=	14.3%
DESIGN SPEED	=	55 MPH
ESALS	=	1,000,000

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	----
LOT LINE	----
LIMITED HIGHWAY EASEMENT	----
EXISTING RIGHT OF WAY	----
PROPOSED OR NEW R/W LINE	----
SLOPE INTERCEPT	300' 300'
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)	ROCK
SPECIAL DITCH	----
GRADE ELEVATION	95.36
CULVERT (Profile View)	----
UTILITIES	
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	----
POWER POLE	----
TELEPHONE POLE	----

BEGIN PROJECT 1610-08-72 & 1610-08-82
END PROJECT 1610-08-73 & 1610-08-79
STA. 645+81.25
X = 513,140.09
Y = 268,566.44

END PROJECT
1610-08-72 & 1610-08-82
STA. 1035+36.00

EXCEPTION TO NET ϵ LENGTH
STA. 922+53 - 924+17
STRUCTURE B-02-059

EXCEPTION TO NET ϵ LENGTH
STA. 562+10 - 564+02
STRUCTURE B-02-012

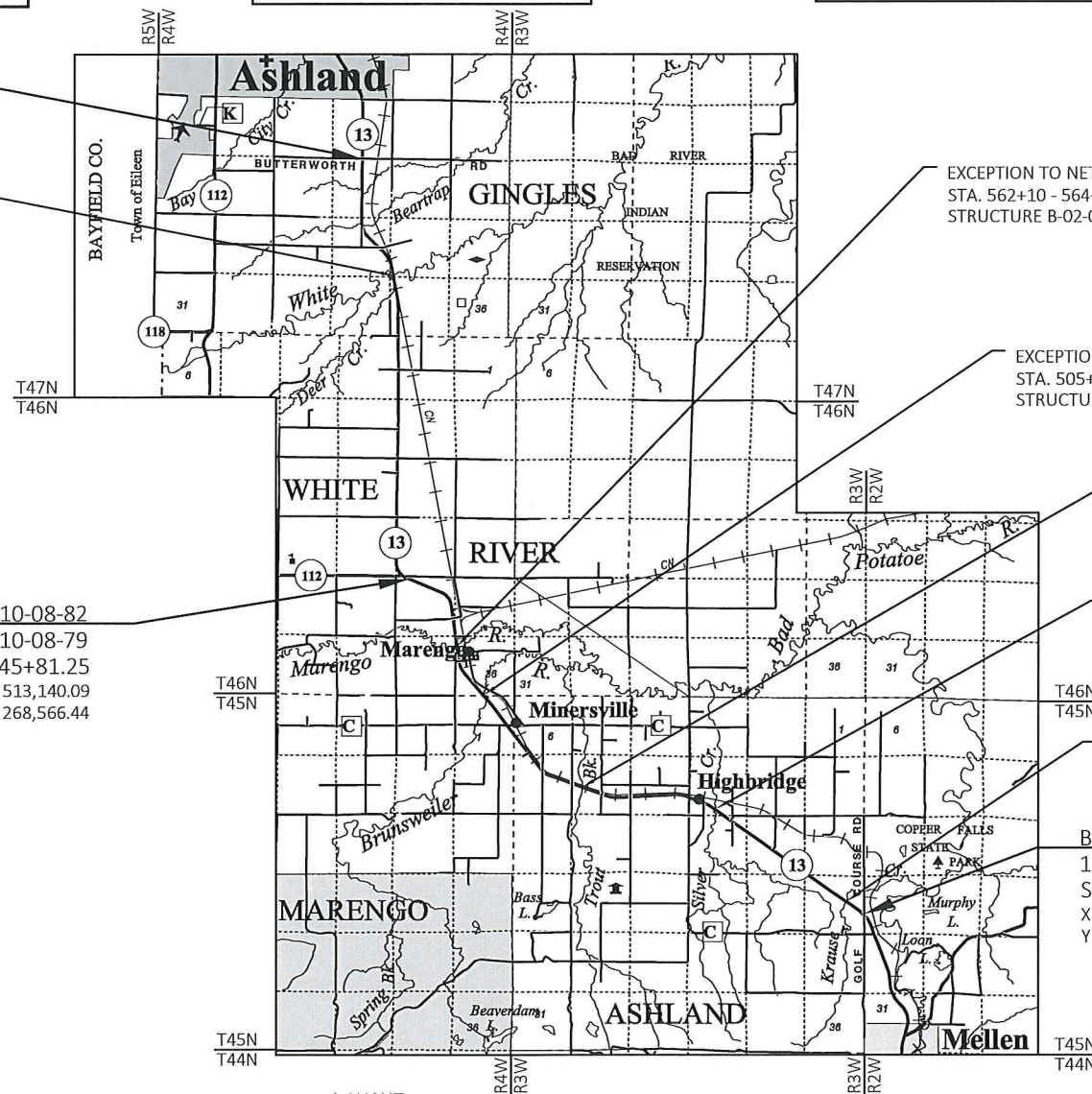
EXCEPTION TO NET ϵ LENGTH
STA. 505+56.25 - 507+06.25
STRUCTURE B-02-013

EXCEPTION TO NET ϵ LENGTH
STA. 380+50.00 - 392+50.00
STRUCTURE B-02-070

EXCEPTION TO NET ϵ LENGTH
STA. 258+00 - 270+00
STRUCTURE B-02-067

EXCEPTION TO NET ϵ LENGTH
STA. 119+00.00 - 142+00.00

BEGIN PROJECT 1610-08-73 &
1610-08-79
STA. 100+84.00
X = 553,962.65
Y = 238,880.77



LAYOUT
SCALE 0 3 MILES

TOTAL NET LENGTH OF CENTERLINE = 16.714 MI.
TOTAL NET LENGTH OF CENTERLINE = 9.367 MI. (1610-08-73,79)
TOTAL NET LENGTH OF CENTERLINE = 7.347 MI. (1610-08-72,82)

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, ASHLAND COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ORIGINAL PLANS PREPARED BY



DATE: April 25, 2017

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	NWBE, INC.
Designer	NWBE, INC.
Project Manager	MATT DICKENSON
Regional Examiner	
Regional Supervisor	DAVID OSTROWSKI

APPROVED FOR THE DEPARTMENT
DATE: Matthew J. Dickenson
04/26/2017 (Signature)

E

GENERAL NOTES

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

ACCESS TO ALL RESIDENCES SHALL BE MAINTAINED DURING CONSTRUCTION.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE.

THERE ARE 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.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD THE DEPTH OF THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

SUPERELEVATION WILL MATCH EXISTING SUPERELEVATION RATES.

CURB AND GUTTER RADII ARE SHOWN TO THE FLAG OF THE GUTTER.

CURVE DATA SHOWN IS "ARC DEFINITION".

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS

RESTORE SIDE ROAD INTERSECTIONS AND PRIVATE ENTRANCES TO EXISTING CONDITIONS UNLESS OTHERWISE SHOWN. THE EXACT CONSTRUCTION LIMITS OF SIDE ROADS AND PRIVATE ENTRANCES SHALL BE COORDINATED WITH THE ENGINEER IN THE FIELD.

THE EXACT LOCATION OF EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DESIGN CONTACT

NORTHERN WISCONSIN-BASED ENGINEERS, INC.
ATTN: GARY COLBERT, PE
P.O. BOX 328
HAYWARD, WI 54843
PHONE: (715) 634-4334
EMAIL: gcolbert@cheqnet.net

WIDOT CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
ATTN: MATT DICKENSON - PROJECT MANAGER
NW REGION
1701 N. 4TH STREET
SUPERIOR, WI 54880
PHONE: (715) 395-3022
EMAIL: matthew.dickenson@dot.wi.gov

WDNR CONTACT

WDNR - NORTHERN REGION HQ
ATTN: SHAWN HASELEU
810 WEST MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4228
EMAIL: shawn.haseleu@wisconsin.gov

RAILROAD CONTACT

WISCONSIN CENTRAL LTD (CN)
ATTN: JACKIE MACEWICZ
1625 DEPOT STREET
STEVENS POINT, WI 54481
PHONE: (715) 345-2503
EMAIL: jackie.macewicz@cn.ca

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
AADT	ANNUAL AVERAGE DAILY TRAFFIC
APPROX.	APPROXIMATE
AEW	APRON END WALL
ASPH.	ASPHALTIC
BAD	BASE AGGREGATE DENSE
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L OR C	CENTER LINE
C.E.	COMMERCIAL ENTRANCE
CONC.	CONCRETE
CONSTRUT.	CONSTRUCTION
CO.	COUNTY
CTH	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CULV.	CULVERT
DOT	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
DISCH. OR DIS.	DISCHARGE
E.	EAST
EB	EASTBOUND
EA.	EACH
ELEC.	ELECTRIC
EL. OR ELEV.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
E.B.S.	EXCAVATION BELOW SUBGRADE
EX.	EXISTING
FERT.	FERTILIZE
FE	FIELD ENTRANCE
FIN.	FINISHED
F.L. OR F	FLOW LINE
HOR.	HORIZONTAL
INL.	INLET
INTER.	INTERSECTION
INV.	INVERT
LT	LEFT
L.H.F.	LEFT-HAND FORWARD

UTILITIES

NORVADO - COMMUNICATION LINE
ATTN: GUY FOLSOM
43750 USH 63
P.O. BOX 67
CABLE, WI 54821
PHONE: (715) 580-8123
EMAIL: gfolson@norvado.com

CENTURYLINK - COMMUNICATION LINE
ATTN: BEN BAKER
425 ELLINGSON AVE
HAWKINS, WI 54530
PHONE: (715) 585-6303
EMAIL: ben.baker@centurylink.com

XCEL ENERGY - ELECTRIC
ATTN: MURRAY SMERER
65445 HUHN ROAD
ASHLAND, WI 54806
PHONE: (715) 682-6928
EMAIL: murray.j.smerer@xcelenergy.com

LF	LINEAR FOOT
LS	LUMP SUM
MAX.	MAXIMUM
MISC.	MISCELLANEOUS
N.	NORTH
NE	NORTHEAST
NW	NORTHWEST
PAVT.	PAVEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
POT	POINT ON TANGENT
PE	PRIVATE ENTRANCE
PROJ.	PROJECT
R	RANGE
REQ'D	REQUIRED
R/L	REFERENCE LINE
RT	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
RD	ROAD
SHLD	SHOULDER
S.	SOUTH
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA.	STATION
STRUCT.	STRUCTURE
TEL	TELEPHONE
TEMP.	TEMPORARY
T	TOWN
T.	TRUCKS (PERCENT OF)
TYP.	TYPICAL
UG	UNDERGROUND
VAR.	VARIABLE
V	VELOCITY OR DESIGN SPEED
VC	VERTICAL CURVE
W.	WEST
WB	WESTBOUND
WD	WORKING DAY
WZ	WORK ZONE
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE

XCEL ENERGY - TRANSMISSION
ATTN: CHARLES DIENGER
8701 MONTICELLO LANE
MAPLE GROVE, MN 55369
PHONE: (651) 955-1089
EMAIL: charles.g.dienger@xcelenergy.com

BAYFIELD ELECTRIC COOPERATIVE INC - ELECTRIC
ATTN: GARY TARASEWICZ
68460 DISTRICT STREET
IRON RIVER, WI 54847
PHONE: (715) 372-4287
EMAIL: gary.tarasewicz@bayfieldelectric.com

* WISCONSIN CENTRAL LTD (CN) IS NOT PART OF
DIGGER'S HOTLINE. CALL CN BEFORE YOU DIG
AT 1-734-783-4533.

1610-08-73 PAVEMENT CORE LOG

CORE NO.	STATION	OFFSET		PAVEMENT THICKNESS	MATERIAL BELOW CORE
				(INCH)	
C-1	114+00	9.0 RT		7 1/4	CONC.
C-4	153+60	8.5 LT		6 3/4	CONC.
C-5	166+80	5.2 RT		8 1/4	CONC.
C-6	180+00	5.7 LT		7 1/2	CONC.
C-7	193+20	8.7 RT		8 1/4	CONC.
C-8	206+40	4.4 LT		7 3/4	CONC.
C-9	219+60	2.3 RT		7 1/2	CONC.
C-10	232+80	9.1 RT		7 1/4	CONC.
C-11	246+00	5.5 RT		7 3/4	CONC.
C-13	272+40	8.7 RT		9 7/8	CONC.
C-14	285+60	3.3 LT		7 1/4	CONC.
C-15	298+80	2.4 RT		8 1/8	CONC.
C-16	312+00	10.0 LT		6 7/8	CONC.
C-17	325+20	5.3 RT		12 1/4	CONC.
C-18	338+40	7.2 LT		6 7/8	CONC.
C-19	351+60	9.5 RT		10 7/8	CONC.
C-20	364+80	3.3 LT		9 1/4	CONC.
C-21	378+00	1.7 RT		12 3/4	CONC.
C-22	391+20	10.5 LT		10 1/2	CONC.
C-23	404+40	5.0 RT		9 5/8	CONC.
C-24	417+60	5.8 LT		10 7/8	CONC.
C-25	430+80	9.1 RT		7 3/4	CONC.
C-26	444+00	3.8 LT		13 1/2	CONC.
C-27	457+20	2.1 RT		12 7/8	CONC.
C-28	470+40	8.2 LT		12	CONC.
C-29	483+60	4.5 RT		9 1/2	CONC.
C-30	496+80	6.0 LT		9 1/2	CONC.
C-31	510+00	10.2 RT		12 1/4	BAD
C-32	523+20	3.3 LT		13 1/2	CONC.
C-33	536+40	3.2 RT		11 1/8	CONC.
C-34	549+00	10.2 LT		9 1/2	CONC.
C-35	561+00	6.3 RT		9 1/2	BAD
C-36	576+00	5.0 LT		11 1/4	BAD
C-37	589+20	8.9 RT		13	BAD
C-38	602+40	2.7 LT		9 3/4	BAD
C-39	615+60	3.4 RT		8 1/2	BAD
C-40	628+80	7.3 LT		8 1/4	BAD
C-41	642+00	6.3 RT		8 1/2	BAD

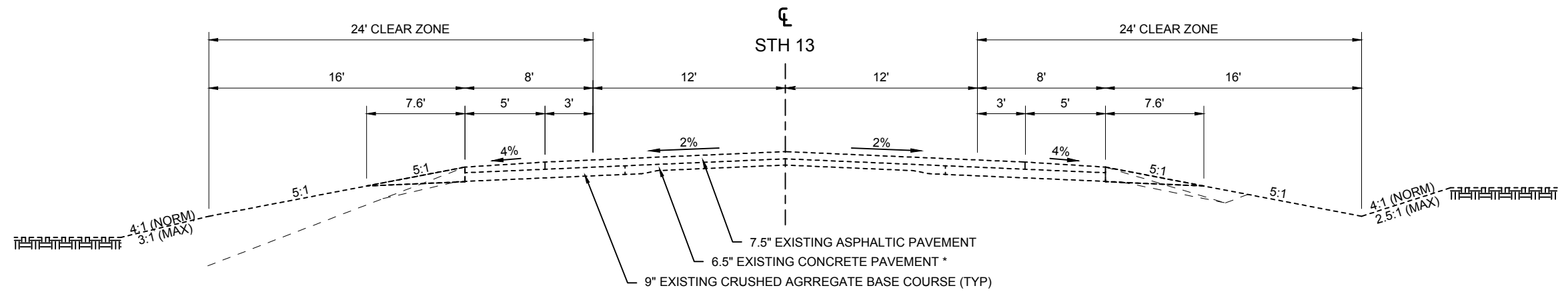
1610-08-72 PAVEMENT CORE LOG

CORE NO.	STATION	OFFSET		PAVEMENT THICKNESS	MATERIAL BELOW CORE
				(INCH)	
C-1	655+20	18.5 RT		8 1/4	BAD
C-2	668+40	4.0 LT		7	BAD
C-3	681+60	4.3 RT		6	BAD
C-4	691+80	7.7 LT		7 1/8	BAD
C-5	708+00	6.1 RT		7 1/8	BAD
C-6	721+20	5.1 LT		7 7/8	BAD
C-7	734+40	9.7 RT		8 3/8	BAD
C-8	747+60	1.8 RT		7 1/2	BAD
C-9	760+80	3.8 RT		7 1/2	BAD
C-10	774+00	10.3 LT		6 3/4	BAD
C-11	787+20	5.3 RT		7	BAD
C-12	800+40	6.0 LT		8 1/4	BAD
C-13	813+60	8.0 RT		7 1/4	BAD
C-14	826+80	2.5 LT		7 1/2	BAD
C-15	840+00	4.3 RT		7 3/4	BAD
C-16	853+20	7.8 LT		8 1/2	BAD
C-17	866+40	6.7 RT		7 1/8	BAD
C-18	879+60	5.3 LT		7 5/8	BAD
C-19	892+80	8.8 RT		6 3/4	BAD
C-20	906+00	3.8 LT		7 1/2	BAD
C-21	919+20	3.5 RT		7 1/4	BAD
C-22	932+40	8.0 LT		6 1/2	BAD
C-23	945+60	4.9 RT		8 1/4	BAD
C-24	958+80	5.8 LT		7 3/4	BAD
C-25	972+00	7.7 RT		8 1/2	BAD
C-26	985+20	3.5 LT		7	BAD
C-27	998+40	4.3 RT		7 5/8	BAD
C-28	1011+60	8.8 LT		7 1/4	BAD
C-29	1024+80	7.5 RT		6 1/4	BAD



Dial 811 or (800)242-8511

www.DiggersHotline.com



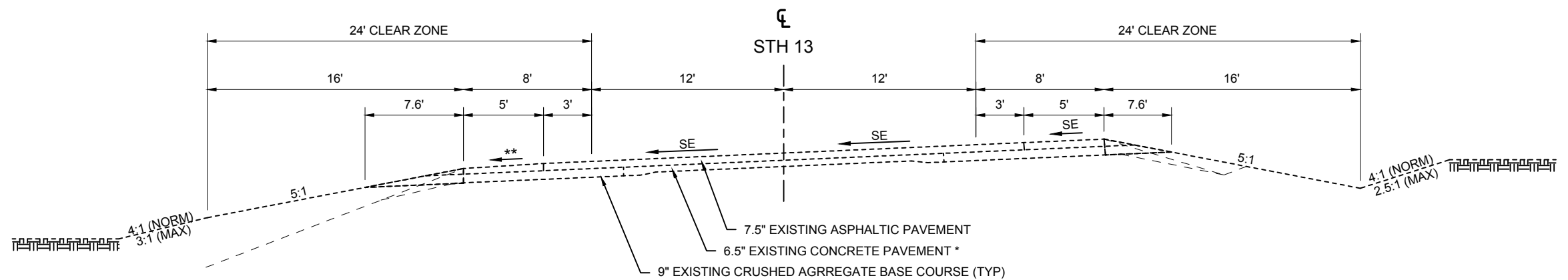
* THE EXISTING CONCRETE PAVEMENT IS 20' WIDE AND 6.5" THICK WITH A THICKENED EDGE (ASSUMED 9").

** THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTION EQUALS THE SUPERELEVATION RATE WHEN THE SUPERELEVATION RATE IS GREATER THAN 4%. IF THE SUPERELEVATION RATE IS LESS THAN OR EQUAL TO 4%. THE LOW SIDE SHOULDER SLOPE IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION RATE.

NOTE:
SEE ADDITIONAL EXISTING TYPICAL SECTIONS FOR CURB AND GUTTER/GUARDRAIL HALF SECTIONS.

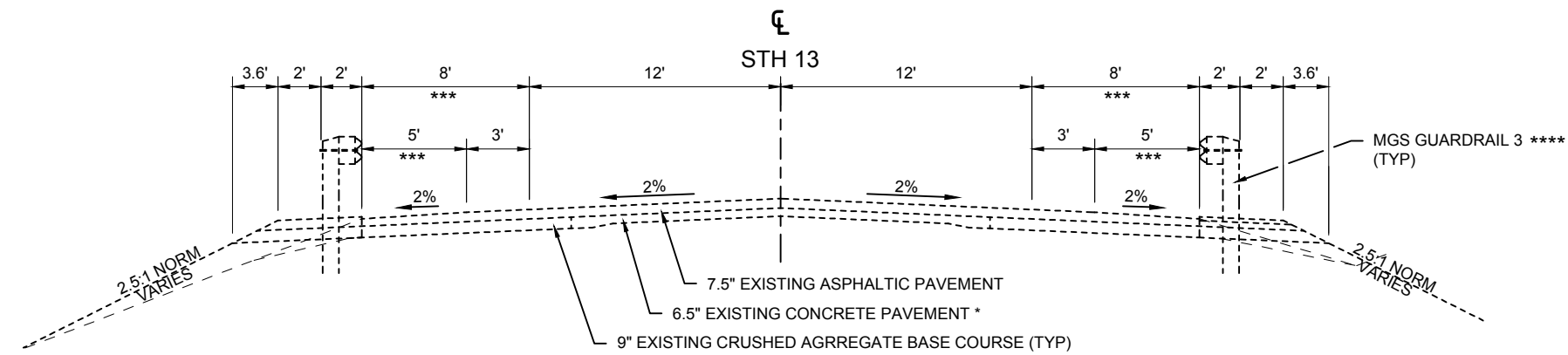
EXISTING TYPICAL SECTION

STA 111+44.71 - STA 119+00.00
STA 142+00.00 - STA 258+00.00
STA 277+98.18 - STA 291+90.25
STA 306+35.88 - STA 352+87.24
STA 367+00.94 - STA 380+50.00
STA 392+50.00 - STA 418+00.13
STA 429+49.78 - STA 499+15.79
STA 504+67.94 - STA 536+61.53
STA 550+64.24 - STA 590+00.00



EXISTING SUPERELEVATED TYPICAL SECTION

STA 100+75.00 - STA 111+44.71
STA 270+00.00 - STA 277+98.18
STA 291+90.25 - STA 306+35.88
STA 352+87.24 - STA 367+00.94
STA 418+00.13 - STA 429+49.78
STA 499+15.79 - STA 504+67.94
STA 536+61.53 - STA 550+64.24



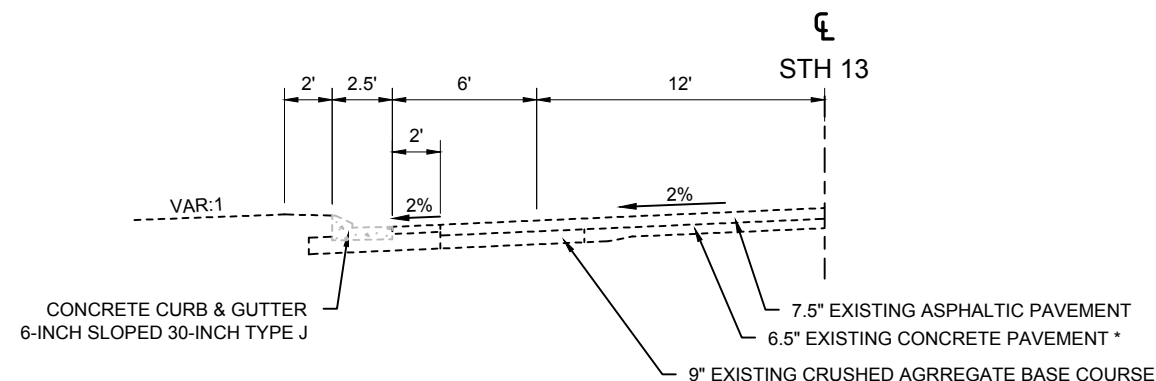
EXISTING TYPICAL SECTION W/GUARDRAIL

STA 350+53.00 - STA 353+34.00, LT
STA 349+71.00 - STA 352+53.00, RT
STA 412+00.00 - STA 419+34.00, LT
STA 411+80.00 - STA 418+06.00, RT
STA 443+75.00 - STA 446+44.00, LT
STA 444+12.00 - STA 449+56.00, RT
STA 458+17.00 - STA 464+23.00, LT
STA 458+60.00 - STA 463+86.00, RT
**** STA 504+06.00 - STA 505+02.00, RT (STEEL PLATE BEAM GUARD CLASS A) ****
**** STA 507+61.00 - STA 508+56.00, LT (STEEL PLATE BEAM GUARD CLASS A) ****
**** STA 557+72.00 - STA 561+58.00, RT (STEEL PLATE BEAM GUARD CLASS A) ****
**** STA 564+55.00 - STA 565+51.00, LT (STEEL PLATE BEAM GUARD CLASS A) ****

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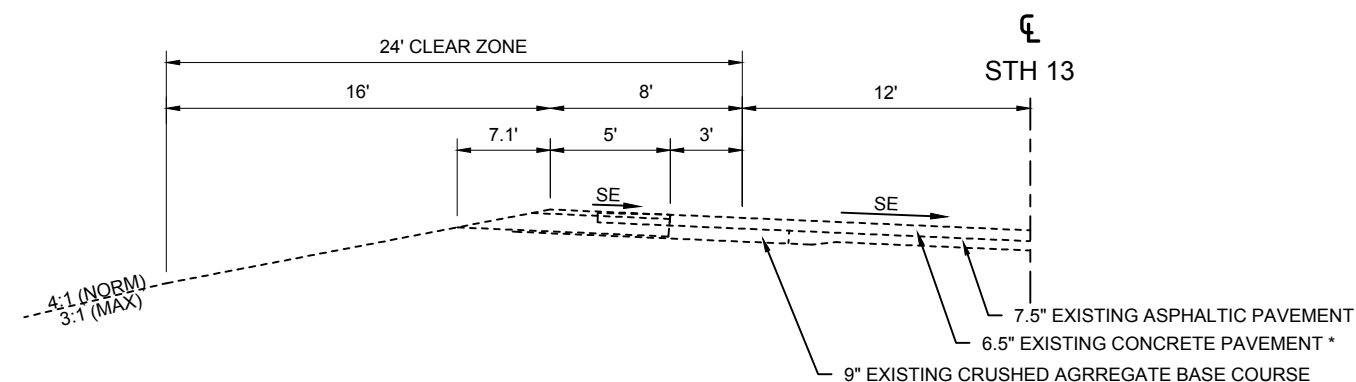
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*** 8' SHOULDERS EXCEPT LOCATIONS WHERE EXISTING SHOULDERS AND GUARDRAIL ARE ALREADY CONSTRUCTED TO 10'



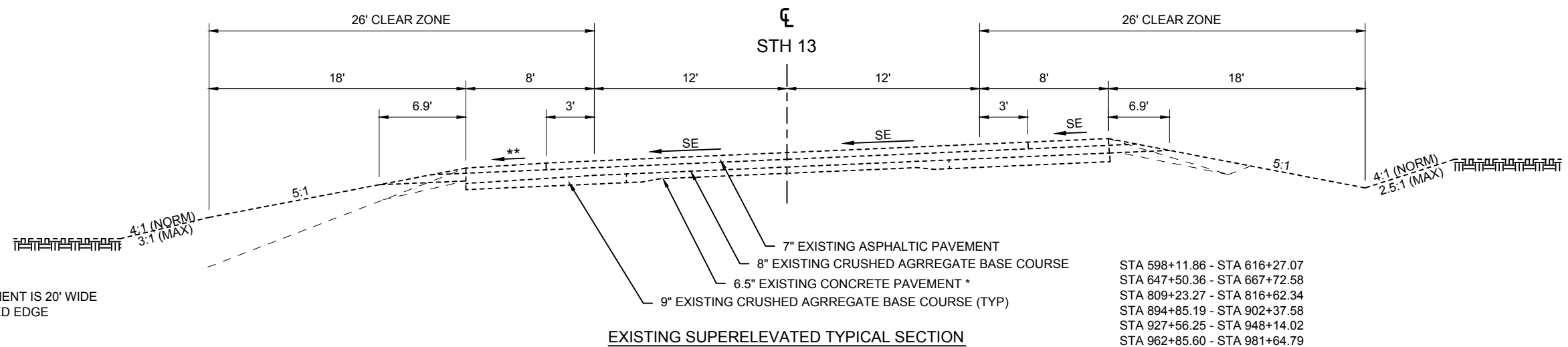
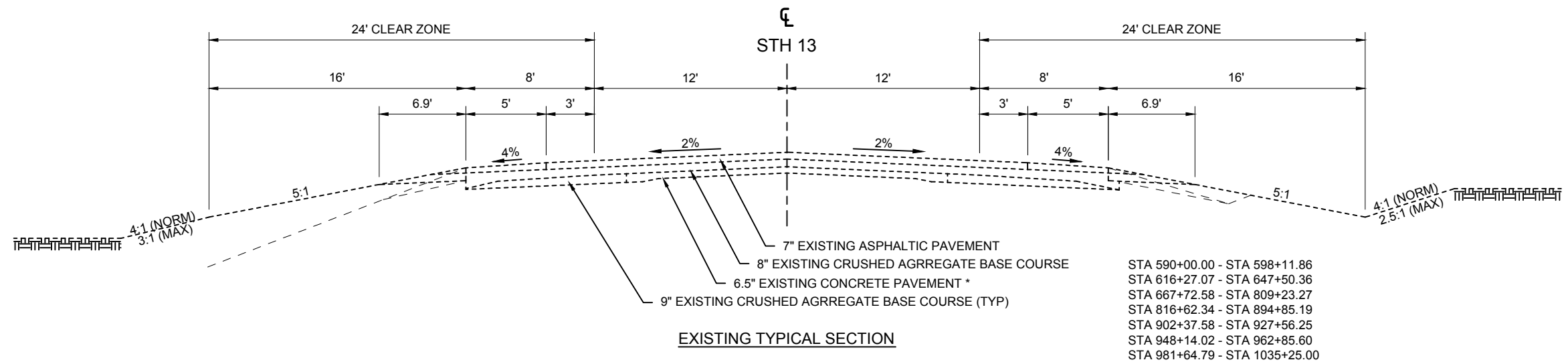
EXISTING TYPICAL SECTION W/CONCRETE CURB & GUTTER

STA 156+00.00 - STA 160+00.00, LT
STA 278+00.00 - STA 288+50.00, LT
STA 550+00.00 - STA 552+75.00, LT
STA 550+00.00 - STA 553+90.00, RT



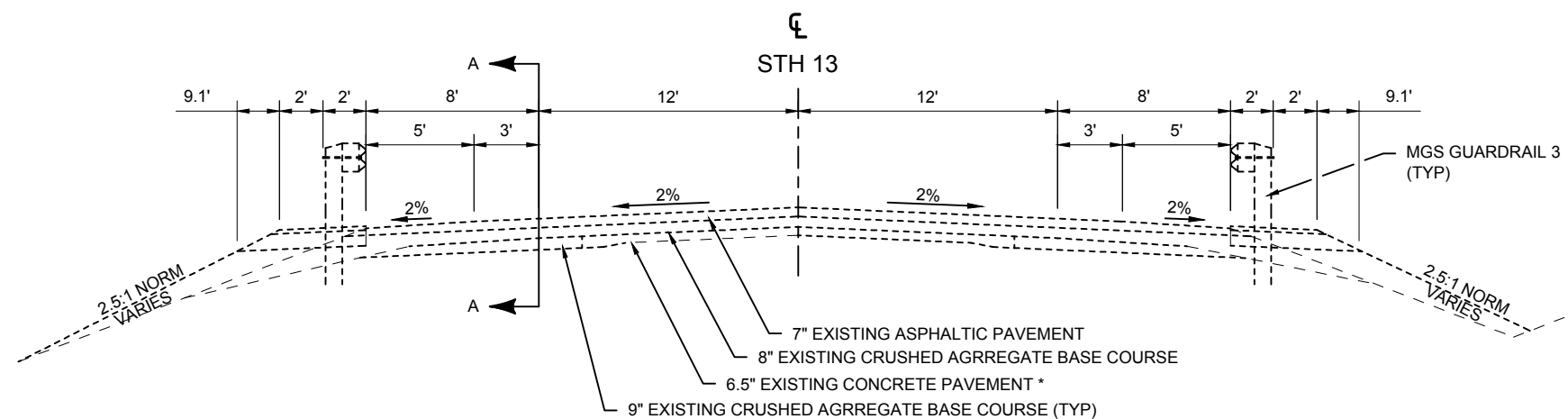
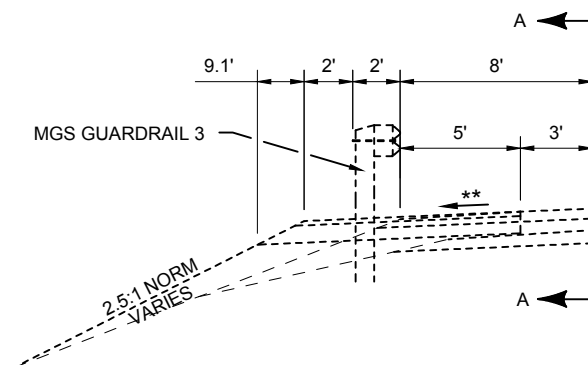
EXISTING TYPICAL SECTION (CURB & GUTTER PREVIOUSLY REMOVED BY OTHERS)

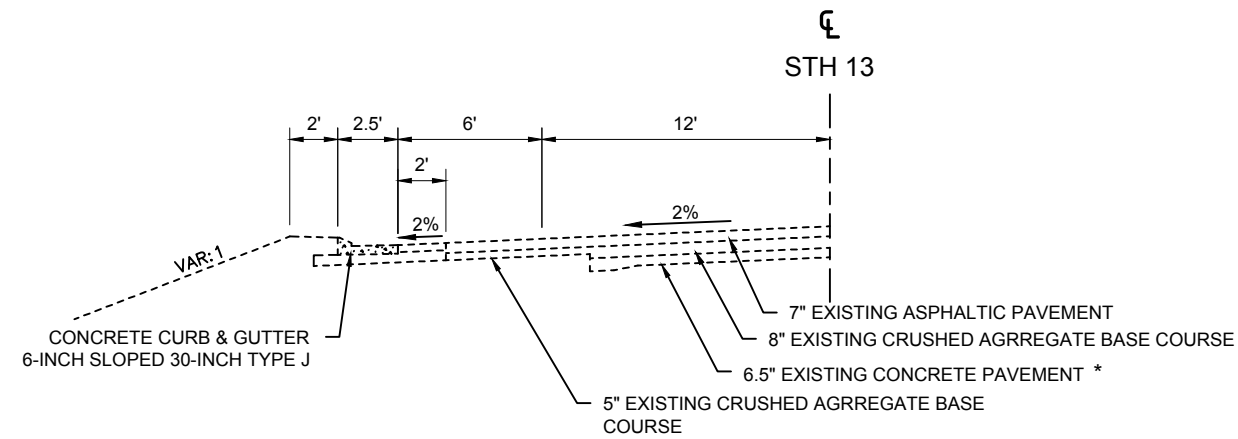
STA 544+60.00 - STA 549+13.00, LT



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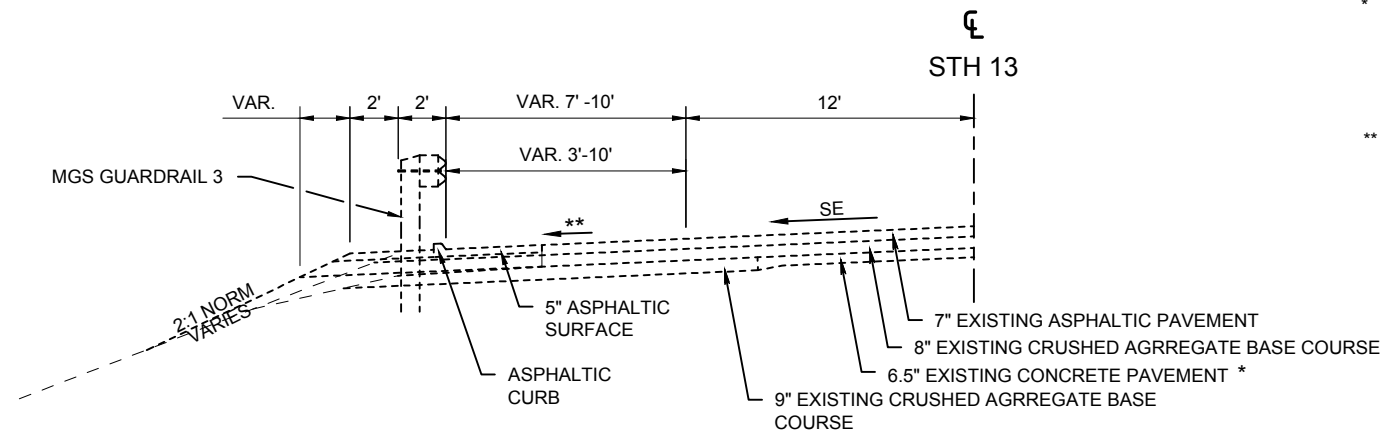




EXISTING TYPICAL SECTION W/CONCRETE CURB & GUTTER

STA 919+60.00 - STA 922+55.00, LT

NOTE: STA 922+17 TO STA 922+55
CONCRETE CURB & GUTTER 4-INCH
SLOPED 30-INCH TYPE TBT

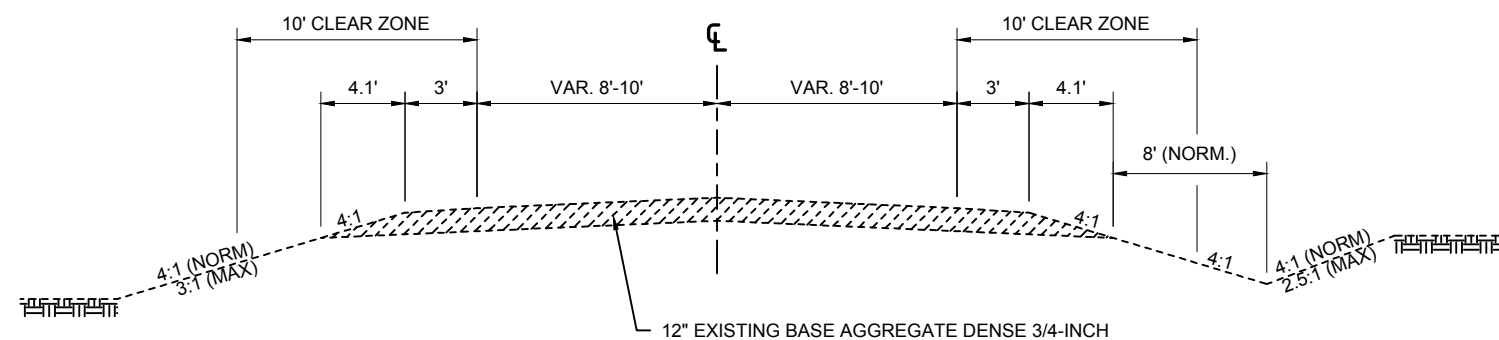


EXISTING SUPERELEVATED TYPICAL SECTION W/GUARDRAIL

STA 924+16.00 - STA 933+06.00, LT

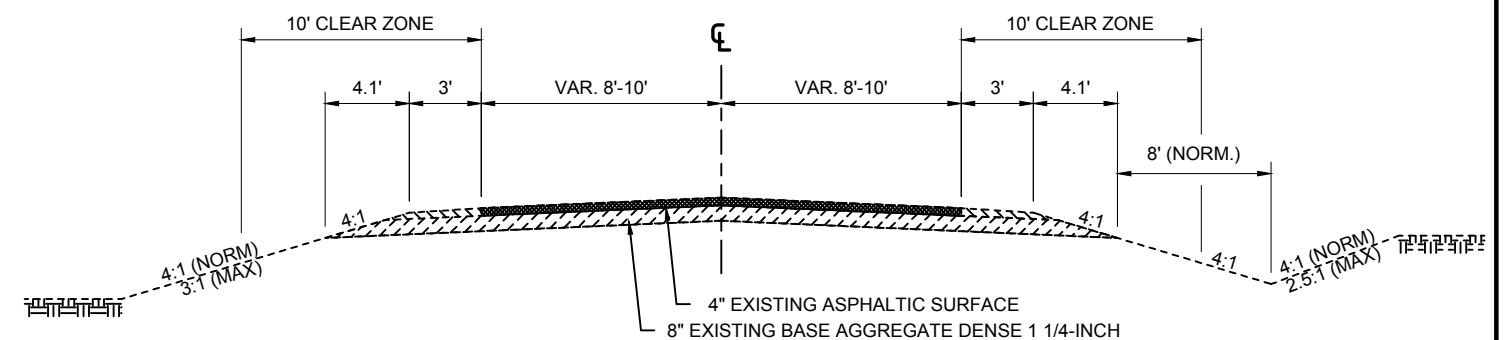
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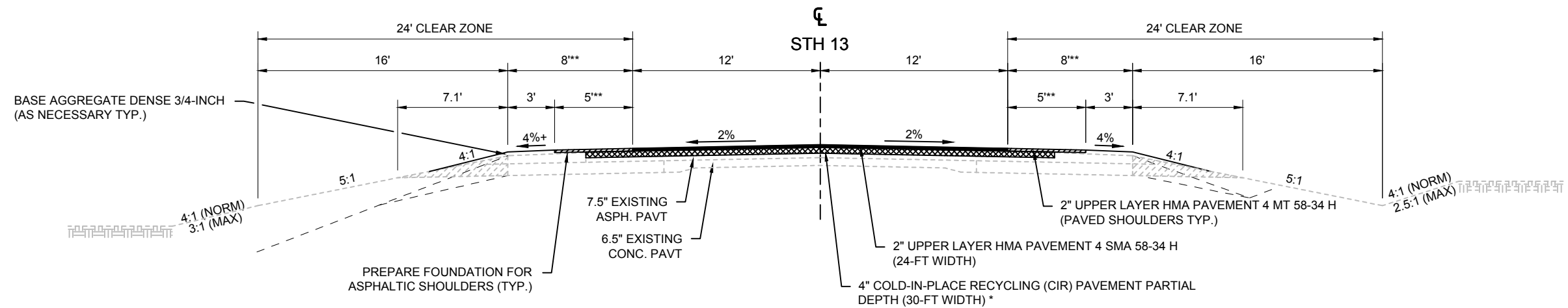
EXISTING TYPICAL SECTION SIDEROAD

TRIANGLE RD



EXISTING TYPICAL SECTION SIDEROAD

MARITA RD



* IF UNDERLYING BASE MATERIAL IS ENCOUNTERED DURING CIR PREPARATIONS, CIR DEPTH SHALL BE MODIFIED SO THAT THE UNDERLYING BASE MATERIAL DOES NOT CONTAMINATE THE CIR PAVEMENT

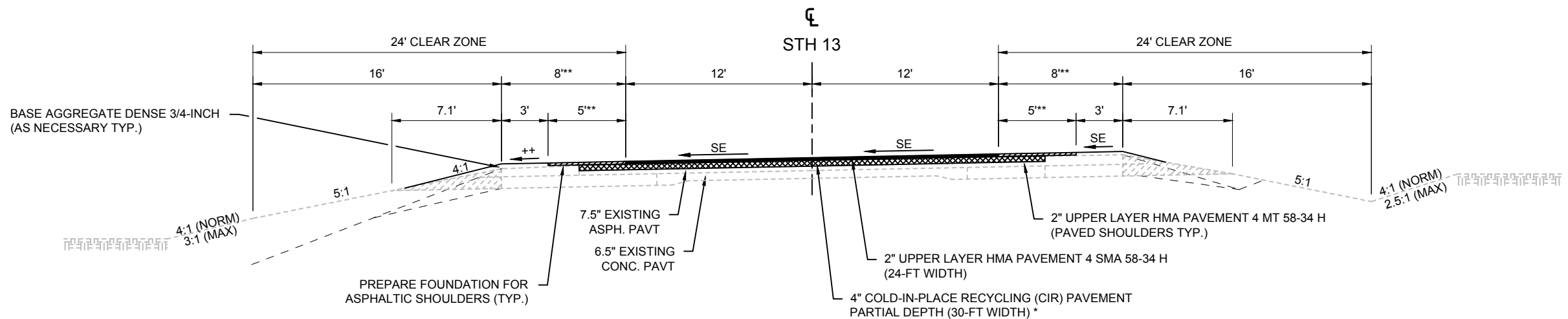
+ VARY FINISHED BASE AGGREGATE DENSE SHOULDER SLOPE AS NEEDED (6% MAX.).

** MATCH EXISTING PAVED SHOULDER WIDTH. MAINTAIN CIR PAVEMENT WIDTH. OVERLAY REMAINING EXISTING PAVED SHOULDER WIDTH.
STA. 246+30 - 292+08 LT (6' PAVED, 2' CABG)
STA. 248+46 - 292+08 RT (6' PAVED, 2' CABG)
STA. 504+53 - 508+10 LT (10' PAVED, 0' CABG) - BRUNSWEILER R. BRIDGE
STA. 504+53 - 510+61 RT (10' PAVED, 0' CABG) - BRUNSWEILER R. BRIDGE
STA. 561+20 - 565+05 LT (10' PAVED, 0' CABG) - MARENGO R. BRIDGE
STA. 561+03 - 564+93 RT (10' PAVED, 0' CABG) - MARENGO R. BRIDGE

NOTE:
SEE ADDITIONAL FINISHED TYPICAL SECTIONS FOR CURB AND GUTTER/GUARDRAIL HALF SECTIONS.

FINISHED TYPICAL SECTION

STA 111+44.7 - 191+00.0
STA 142+00.0 - 156+00.0
STA. 160+00.0 - 258+00.0
STA 277+98.2 - 278+00.0
STA. 288+50.0 - 291+90.2
STA 306+35.9 - 352+87.2
STA 367+00.9 - 380+50.0
STA 392+50.0 - 418+00.1
STA 429+49.8 - 499+15.8
STA 504+67.9 - 536+61.5
STA 552+75.0 - 590+00.0

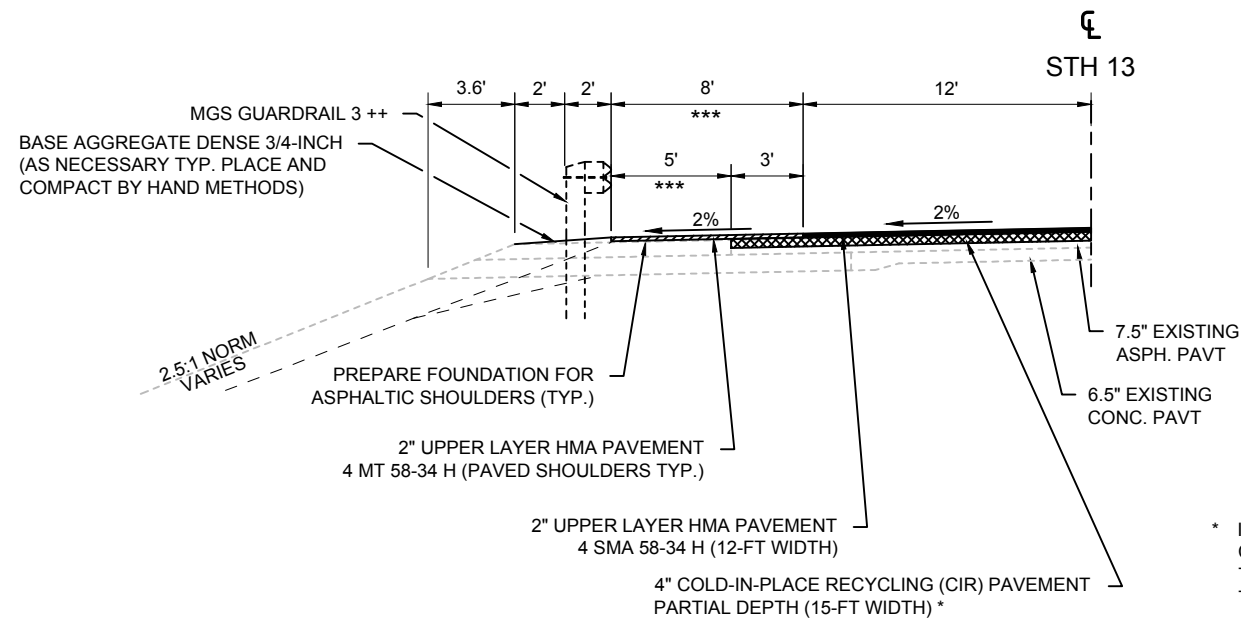


++ THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTION EQUALS THE SUPERELEVATION RATE WHEN THE SUPERELEVATION RATE IS GREATER THAN 4%. IF THE SUPERELEVATION RATE IS LESS THAN OR EQUAL TO 4%. THE LOW SIDE SHOULDER SLOPE IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION RATE.

NOTE:
SEE ADDITIONAL FINISHED TYPICAL SECTIONS FOR CURB AND GUTTER/GUARDRAIL HALF SECTIONS.

FINISHED SUPERELEVATED TYPICAL SECTION

STA 100+84.0 - 111+44.7
STA 270+00.0 - 277+98.2
STA 291+90.2 - 306+35.9
STA 352+87.2 - 367+00.9
STA 418+00.1 - 429+49.8
STA 499+15.8 - 504+67.9
STA 536+61.5 - 550+00.0



FINISHED TYPICAL 1/2 SECTION W/ MGS GUARDRAIL

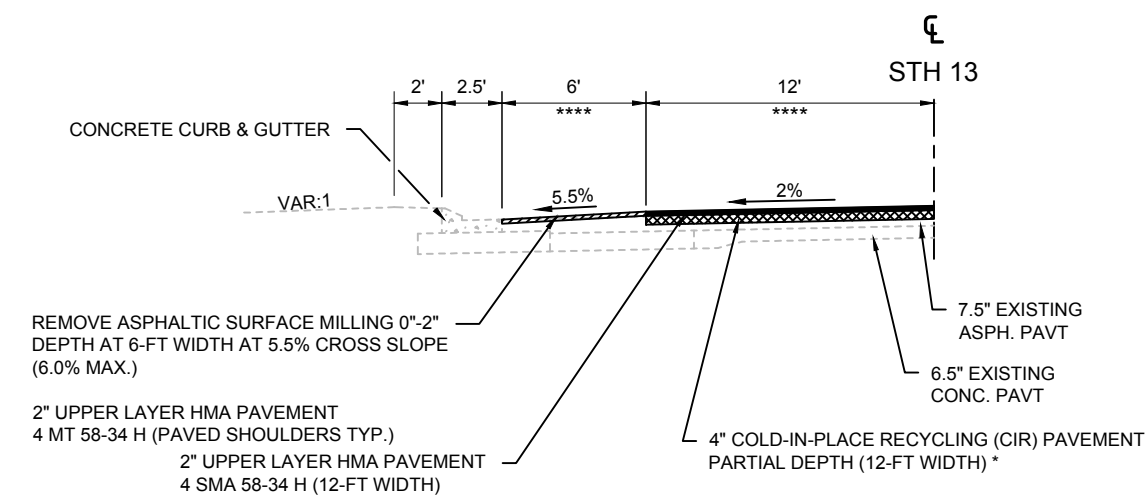
STA 350+52.6 - 353+33.8, LT
STA 349+71.3 - 352+52.6, RT
STA 413+20.5 - 418+14.3, LT
STA 413+00.2 - 418+06.4, RT
STA 443+75.0 - 446+43.8, LT
STA 444+12.5 - 449+56.2, RT
STA 458+16.6 - 464+22.9, LT
STA 455+79.8 - 463+86.1, RT

* IF UNDERLYING BASE MATERIAL IS ENCOUNTERED DURING CIR PREPARATIONS, CIR DEPTH WILL BE MODIFIED SO THAT THE UNDERLYING BASE MATERIAL DOES NOT CONTAMINATE THE CIR PAVEMENT.

*** ASPHALT SHOULDERS SHALL BE PAVED TO FACE OF RAIL. TAPER RATE FROM TYPICAL PAVED SHOULDER TO EAT POST 1 SHALL BE 15:1.

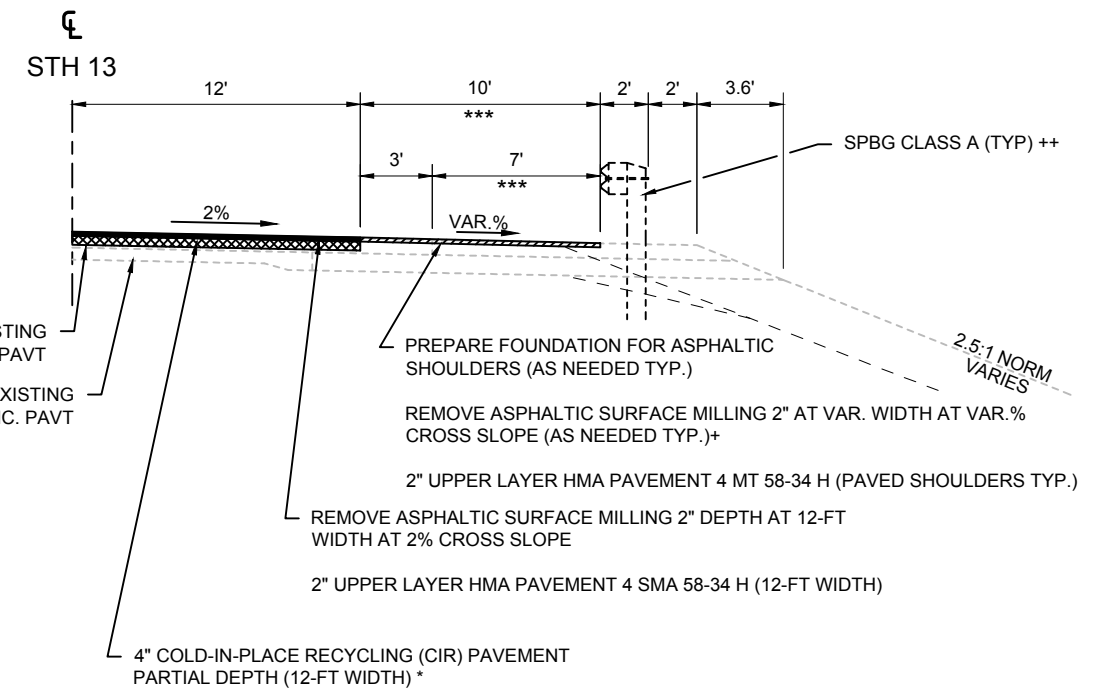
+ LOCATION AND DEPTH OF ASPHALTIC SURFACE MILLING SHALL BE AS DIRECTED BY THE ENGINEER TO MAINTAIN A MINIMUM SPBG CLASS A RAIL HEIGHT OF 27 3/4".

++ MGS GUARDRAIL 3 INSTALLED UNDER PROJECT 1610-08-77. TOP OF W-BEAM RAIL SET + 1" FROM STANDARD HEIGHT. ULTIMATE HEIGHT TO TOP OF W-BEAM AFTER RESURFACING IS 30". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM SHALL BE BETWEEN 27 3/4" TO 32"



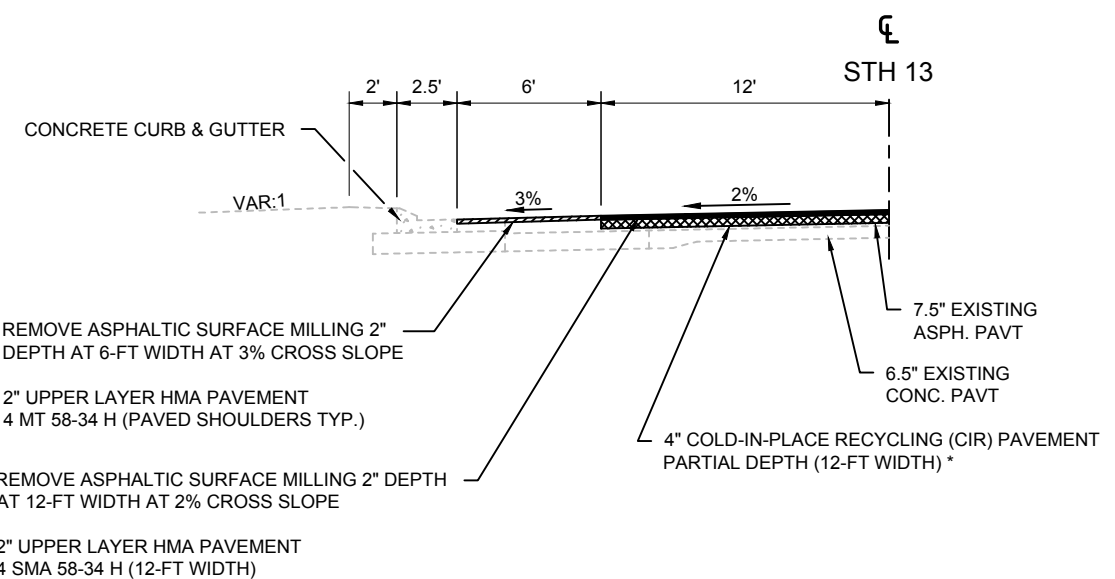
FINISHED TYPICAL SECTION W/CONCRETE CURB & GUTTER

STA 156+00.0 - 160+00.0, LT
**** STA 289+00.0 - 291+61.0, LT (15' CIR PAVT/SMA PAVT, VAR. SHLD PAVT - CTH C)
**** STA 290+31.0 - 291+58.0, RT (15' CIR PAVT/SMA PAVT, VAR. SHLD PAVT - CTH C)
**** STA 477+32.0 - 478+71.0, LT (15' CIR PAVT/SMA PAVT, VAR. SHLD PAVT - CTH C)
**** STA 476+42.0 - 477+99.0, RT (15' CIR PAVT/SMA PAVT, VAR. SHLD PAVT - CTH C)



FINISHED TYPICAL 1/2 SECTION W/ SPBG CLASS A

STA 503+56 - 505+56 (STEEL PLATE BEAM GUARD CLASS A)
STA 507+06 - 511+14 (STEEL PLATE BEAM GUARD CLASS A)
STA 557+22 - 562+10 (STEEL PLATE BEAM GUARD CLASS A)
STA 564+02 - 566+00 (STEEL PLATE BEAM GUARD CLASS A)



FINISHED TYPICAL SECTION W/CONCRETE CURB & GUTTER

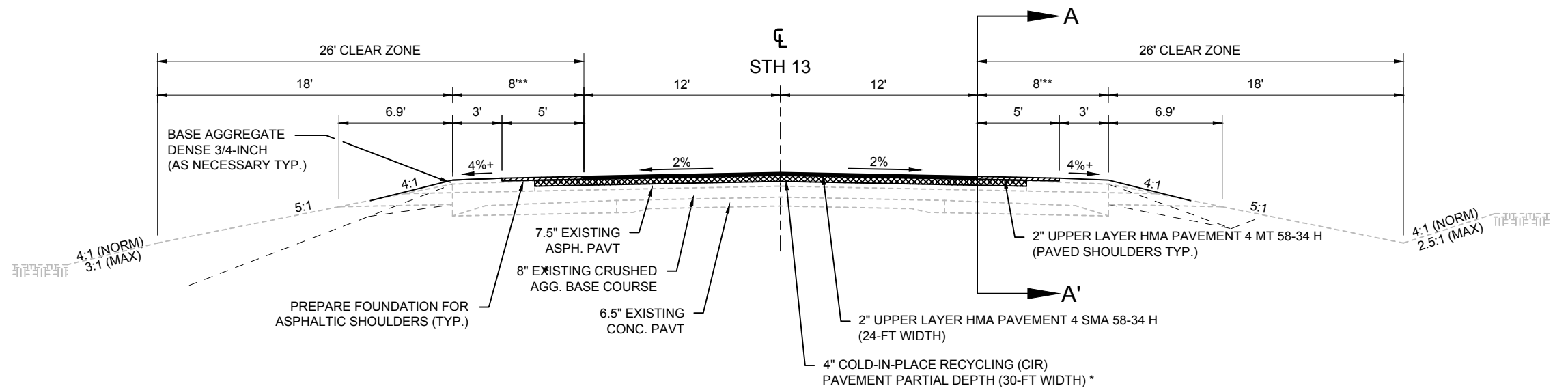
STA 278+00.0 - 288+50.0, LT
STA 549+00.0 - 556+00.0 LT
STA 549+00.0 - 556+00.0, RT

* IF UNDERLYING BASE MATERIAL IS ENCOUNTERED DURING CIR PREPARATIONS, CIR DEPTH SHALL BE MODIFIED SO THAT THE UNDERLYING BASE MATERIAL DOES NOT CONTAMINATE THE CIR PAVEMENT.

+ VARY FINISHED BASE AGGREGATE DENSE SHOULDER SLOPE AS NEEDED (6% MAX.).

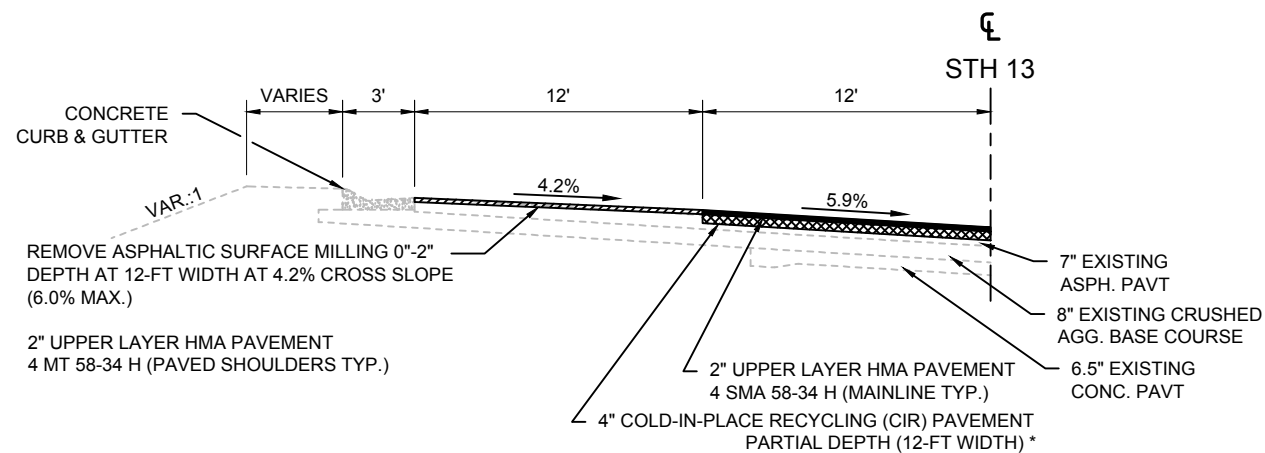
** MATCH EXISTING PAVED SHOULDER WIDTH. MAINTAIN CIR PAVEMENT WIDTH. OVERLAY REMAINING EXISTING PAVED SHOULDER WIDTH.
STA. 900+55 - 918+59 LT (8' PAVED, 0' CABG)
STA. 900+49 - 922+43 RT (8' PAVED, 0' CABG)
STA. 933+70 - 943+36 LT (8' PAVED, 0' CABG)
STA. 925+20 - 942+87 RT (8' PAVED, 0' CABG)
STA. 944+53 - 944+68 RT (8' PAVED, 0' CABG)

NOTE:
SEE ADDITIONAL FINISHED TYPICAL SECTIONS FOR CURB AND GUTTER/GUARDRAIL HALF SECTIONS.



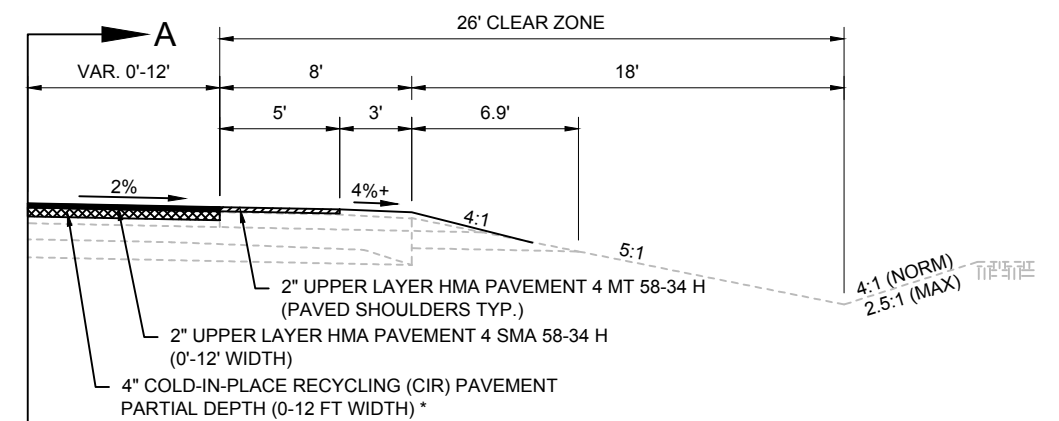
FINISHED TYPICAL SECTION

STA 590+00.0 - 598+11.9
STA 616+27.1 - 647+50.4
STA 667+72.6 - 809+23.3
STA 816+62.3 - 894+85.2
STA 902+37.6 - 927+56.2
STA 948+14.0 - 962+85.6
STA 981+64.8 - 1035+36.0



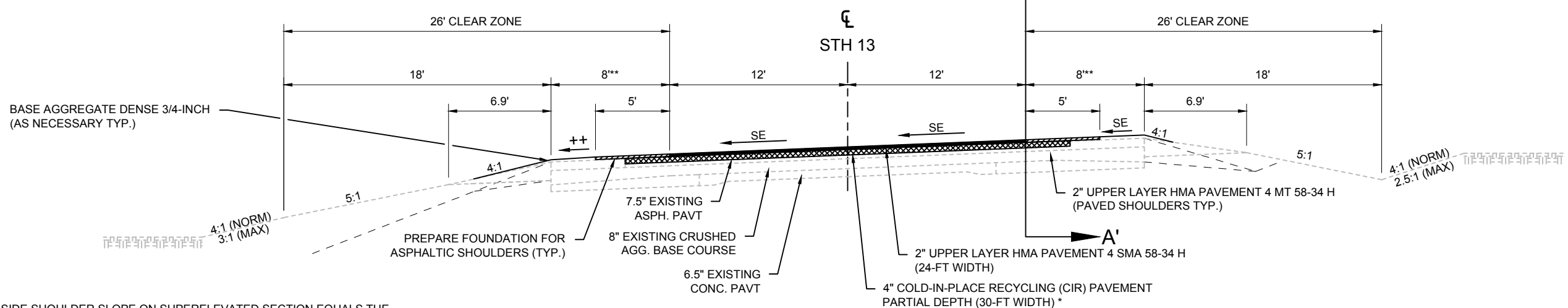
FINISHED TYPICAL SECTION W/CONCRETE CURB & GUTTER

STA 653+98.0 - 655+52.2, LT (STH 112)



SECTION A-A' - STH 112 BY-PASS LANE

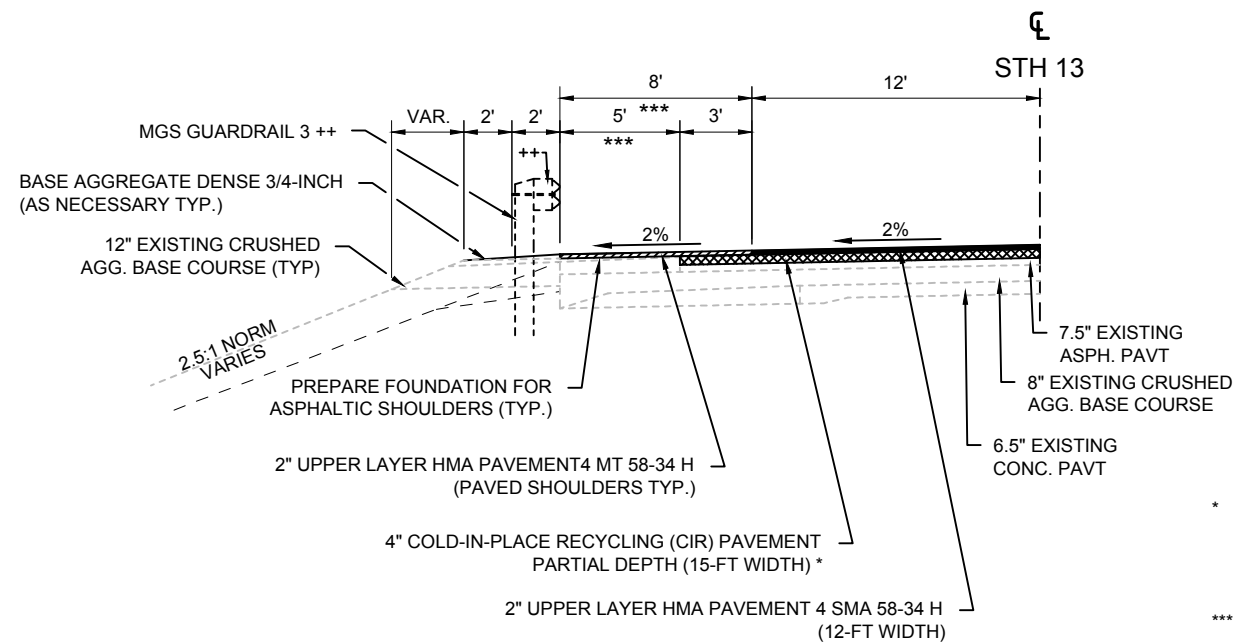
STA 643+51.8 - 650+69.6, RT (TAPER)
STA 650+69.6 - 660+00.0 RT (FULL WIDTH)
STA 660+00.0 - 665+00.0, RT (TAPER)



FINISHED SUPERELEVATED TYPICAL SECTION

STA 598+11.9 - 616+27.1
STA 647+50.4 - 667+72.6
STA 809+23.3 - 816+62.3
STA 894+85.2 - 902+37.6
STA 927+56.2 - 948+14.0
STA 962+85.6 - 981+64.8

++ THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTION EQUALS THE SUPERELEVATION RATE WHEN THE SUPERELEVATION RATE IS GREATER THAN 4%. IF THE SUPERELEVATION RATE IS LESS THAN OR EQUAL TO 4%. THE LOW SIDE SHOULDER SLOPE IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION RATE.



FINISHED TYPICAL 1/2 SECTION W/ MGS GUARDRAIL

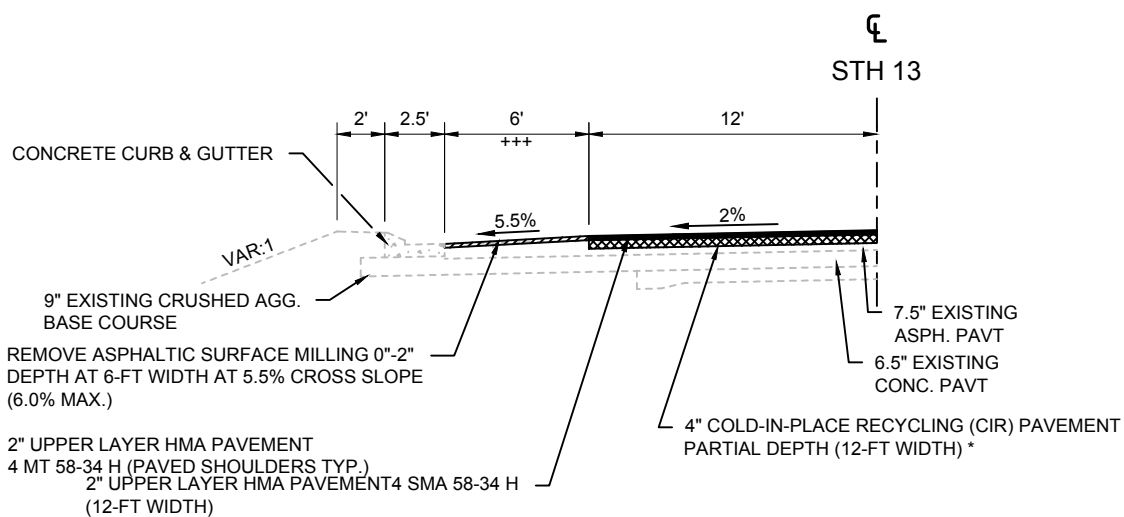
STA 976+36.3 - 979+42.5, LT
STA 975+80.1 - 978+61.4, RT
STA 1009+08.7 - 1011+52.4, LT
STA 1007+89.6 - 1010+70.9, RT
STA 948+14.0 - 962+85.6
STA 981+64.8 - 1035+36.0

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*** ASPHALT SHOULDERS SHALL BE PAVED TO FACE OF RAIL. TAPER RATE FROM TYPICAL PAVED SHOULDER TO EAT POST 1 SHALL BE 15:1.

+ LOCATION AND DEPTH OF ASPHALTIC SURFACE MILLING SHALL BE AS DIRECTED BY THE ENGINEER TO MAINTAIN A MINIMUM SPBG CLASS A RAIL HEIGHT OF 27 3/4".

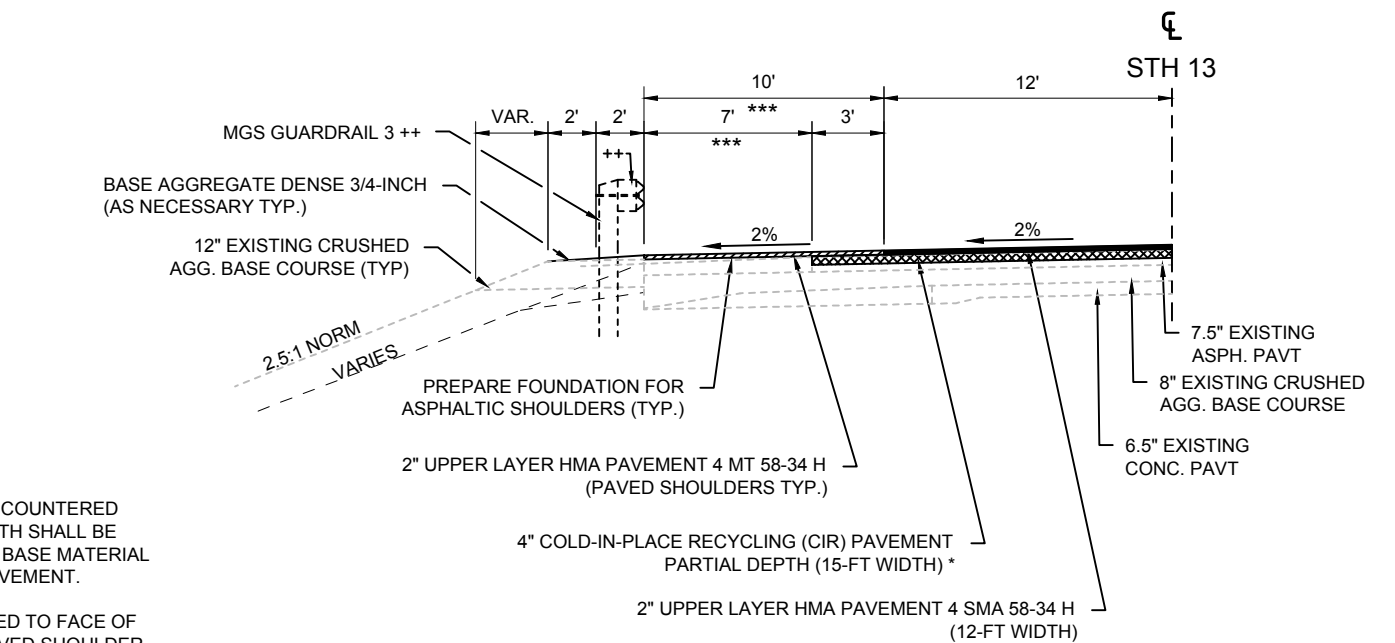
++ MGS GUARDRAIL 3 INSTALLED UNDER PROJECT NO. 1610-08-77. TOP OF W-BEAM RAIL SET + 1" FROM STANDARD HEIGHT. ULTIMATE HEIGHT TO TOP OF W-BEAM AFTER RESURFACING IS 30". FOR EXISTING MGS INSTALLATION HEIGHT TO TOP OF W-BEAM SHALL BE BETWEEN 27 3/4" AND 32"



FINISHED TYPICAL SECTION W/CONCRETE CURB & GUTTER

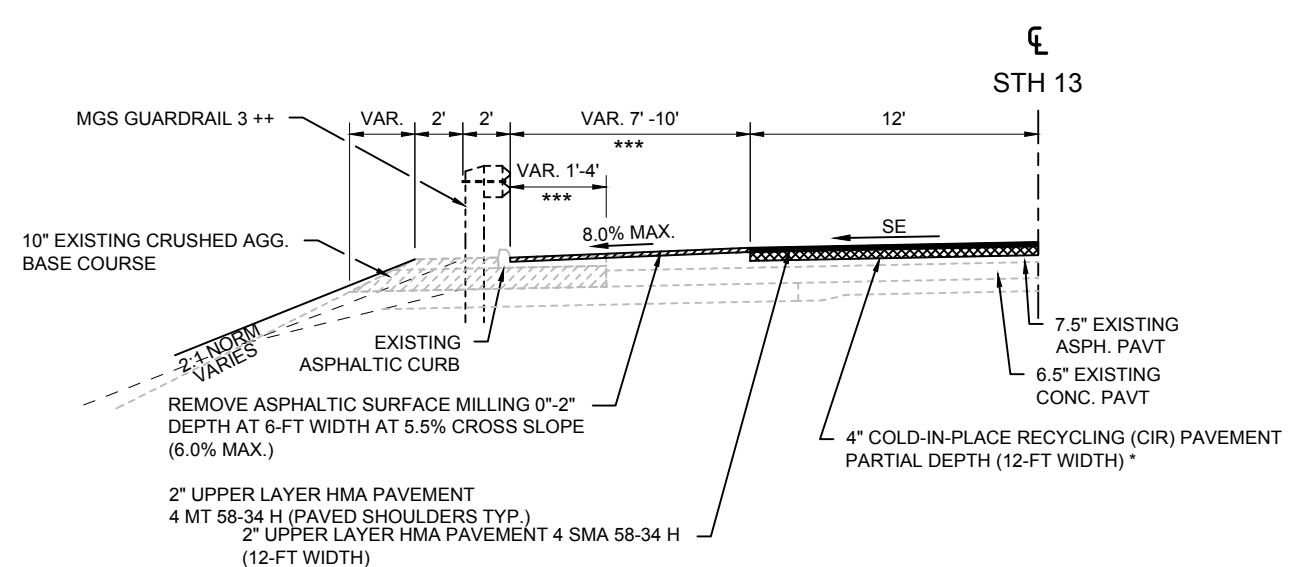
+++ 8' ASPHALT WIDTH,
4.6% CROSS SLOPE

STA 919+60.00 - STA 922+55.00, LT
STA 758+43.0 - 758+75.0, RT (+++ CHARLES JOHNSON RD)



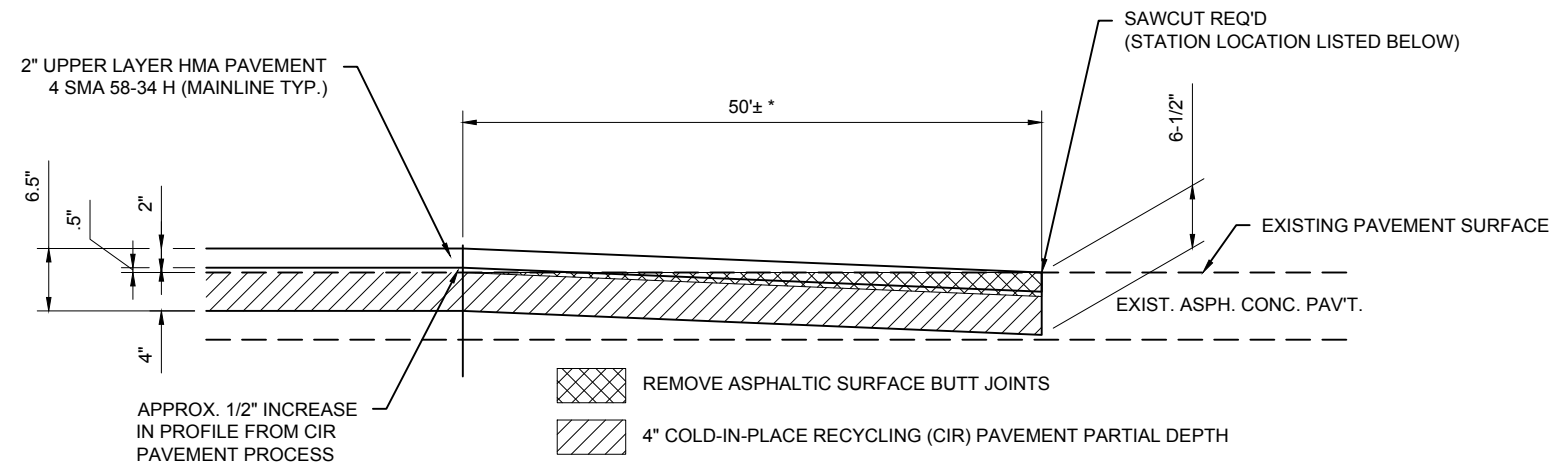
FINISHED TYPICAL 1/2 SECTION W/ MGS GUARDRAIL

STA 920+64.4 - 922+55.0, RT
STA 924+16.0 - 924+69.0, RT



FINISHED SUPERELEVATED TYPICAL SECTION W/GUARDRAIL

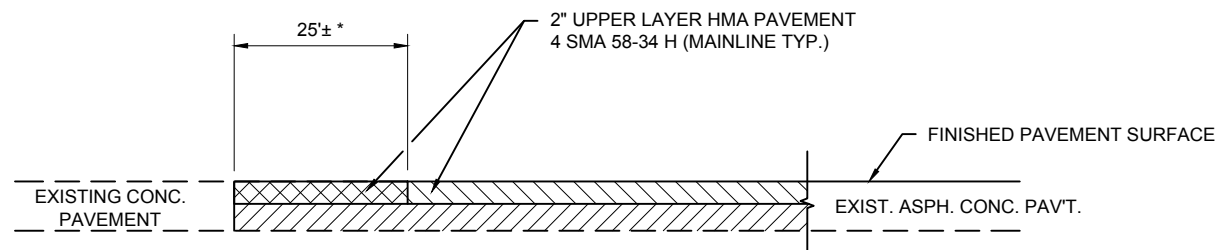
STA 924+16.00 - STA 933+06.00, LT



DETAIL OF MAINLINE BUTTED JOINT

STA 100+84 STH 13
STA 119+00 STH 13
STA 142+00 STH 13
STA 258+00 STH 13
STA 270+00 STH 13
STA 380+50 STH 13
STA 312+50 STH 13
STA 922+53 STH 13
STA 924+17 STH 13
STA 1035+36 STH 13

* EXACT DIMENSIONS TO BE DETERMINED
BY ENGINEER IN THE FIELD.

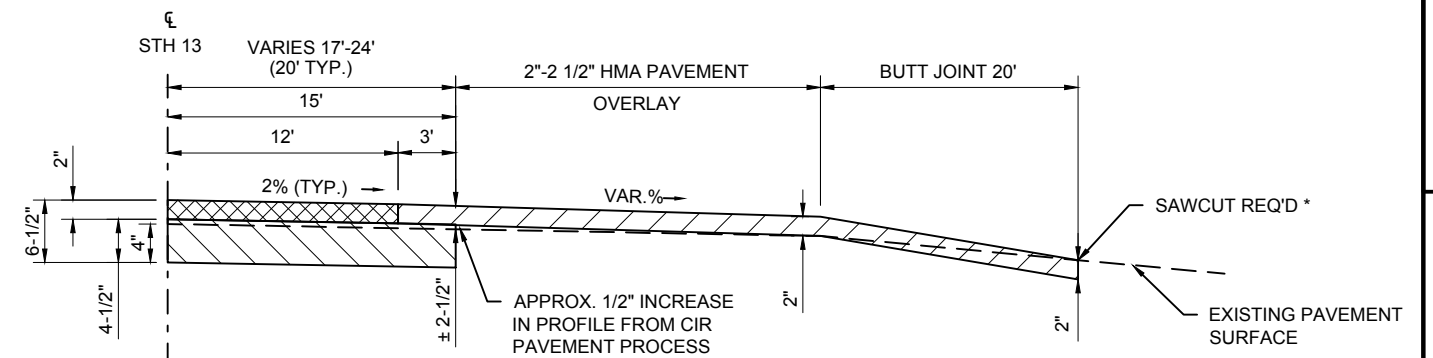


NOTES:

- 4" COLD-IN-PLACE RECYCLING (CIR) PAVEMENT PARTIAL DEPTH
- REMOVING ASPHALTIC SURFACE BUTT JOINT
- REMOVING ASPHALTIC SURFACE MILLING 2" DEPTH

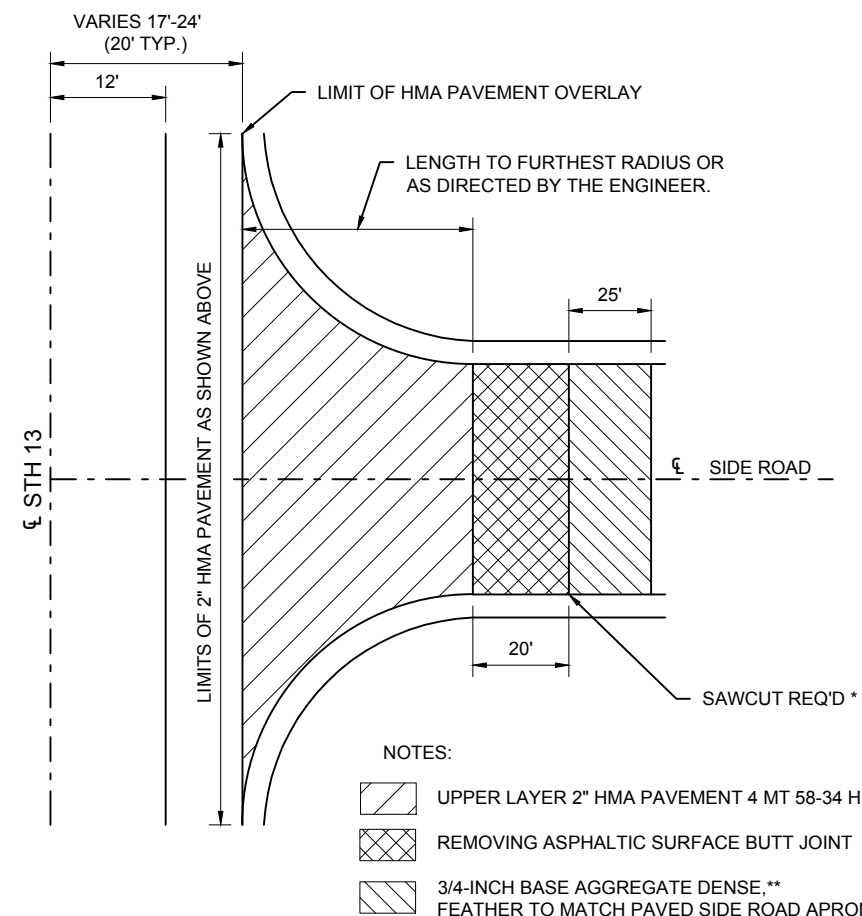
DETAIL OF MAINLINE BUTTED JOINT AT BRIDGES WITH ADJACENT SPBG, CLASS A

STA 505+56 STH 13
STA 507+06 STH 13
STA 562+10 STH 13
STA 563+81 STH 13



NOTES:

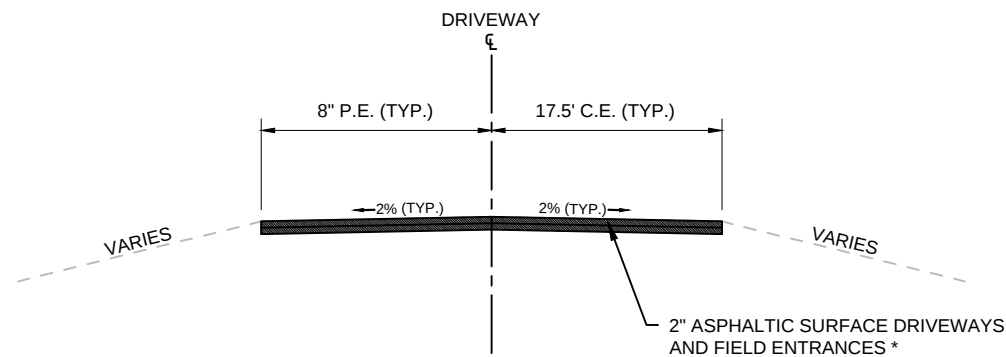
- 2" UPPER LAYER HMA PAVEMENT 4 SMA 58-34 H (MAINLINE TYP.)
- 2" UPPER LAYER HMA PAVEMENT 4 MT 58-34 H (PAVED SHOULDERS TYP.)
- 4" COLD-IN-PLACE RECYCLING (CIR) PAVEMENT PARTIAL DEPTH



MATCH EXISTING PAVED SURFACE RADII AND TAPERS.
* REQUIRED ON PAVED SIDE ROADS ONLY.
**REQUIRED ON UN-PAVED SIDE ROADS ONLY.

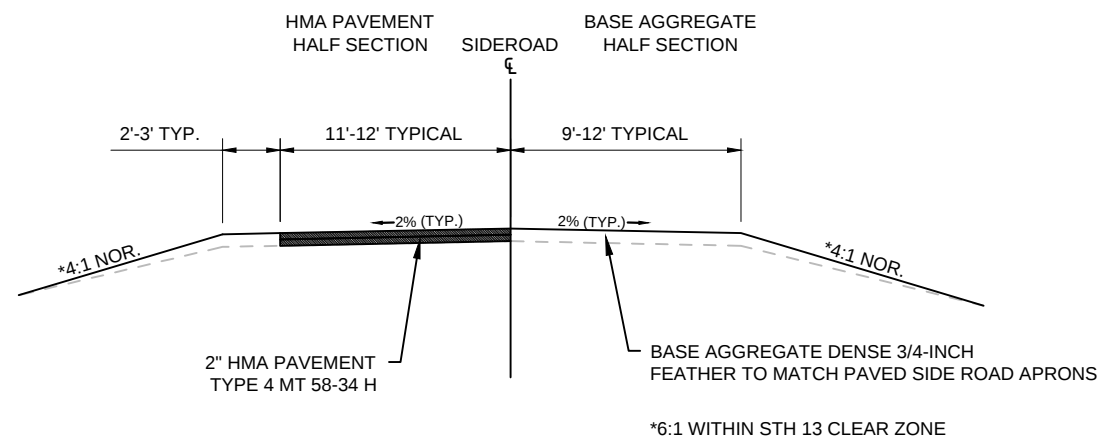
SAWCUT PAID UNDER ITEM - "SAWING ASPHALT"

PAVED AND UN-PAVED SIDE ROAD WITHOUT CURB AND GUTTER

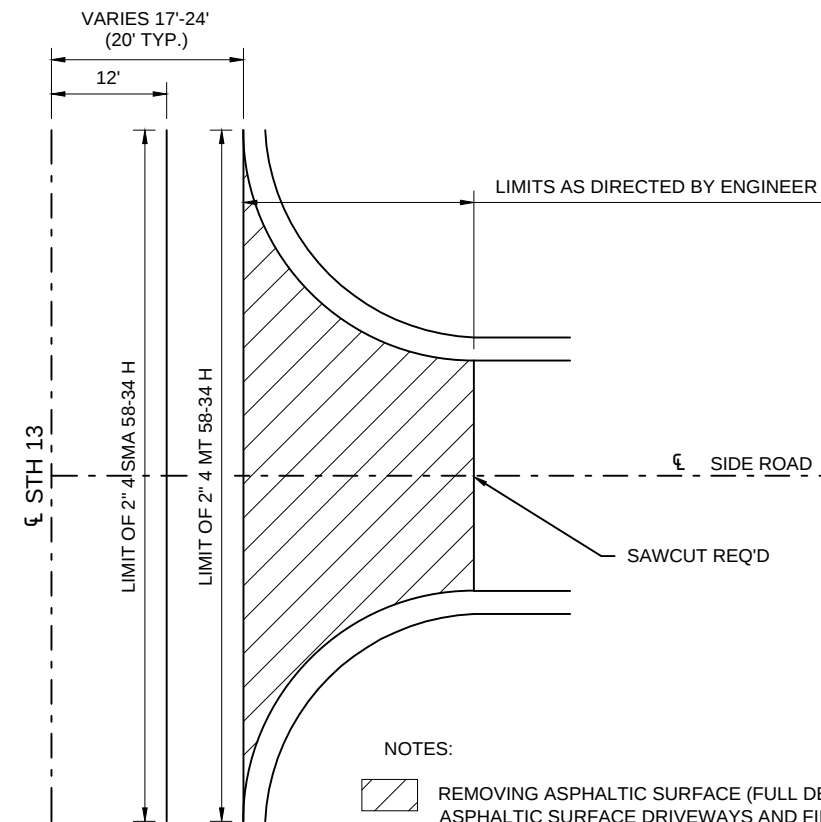


TYPICAL PAVED DRIVEWAY SECTION

* ADJUST DEPTH AS REQ'D IN FIELD TO MATCH EXISTING CONDITIONS



TYPICAL SIDE ROAD SECTION
WITHOUT CURB AND GUTTER



NOTES:

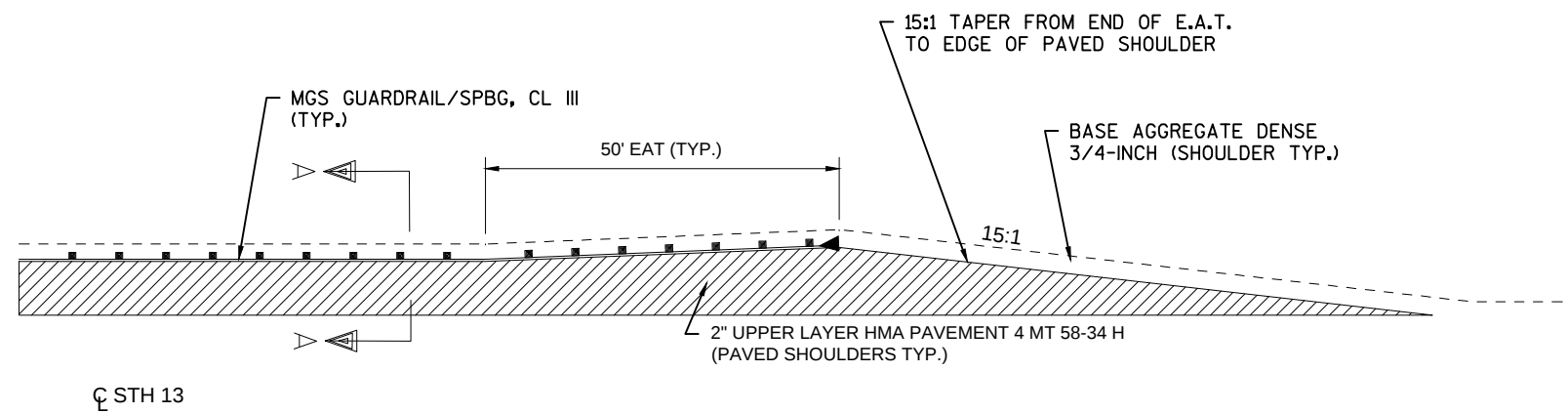
REMOVING ASPHALTIC SURFACE (FULL DEPTH).
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES.

ANY ADDITIONAL BASE AGG. DENSE REQUIRED SHALL BE PAID
UNDER ITEM - "BASE AGGREGATE DENSE 3/4-INCH"

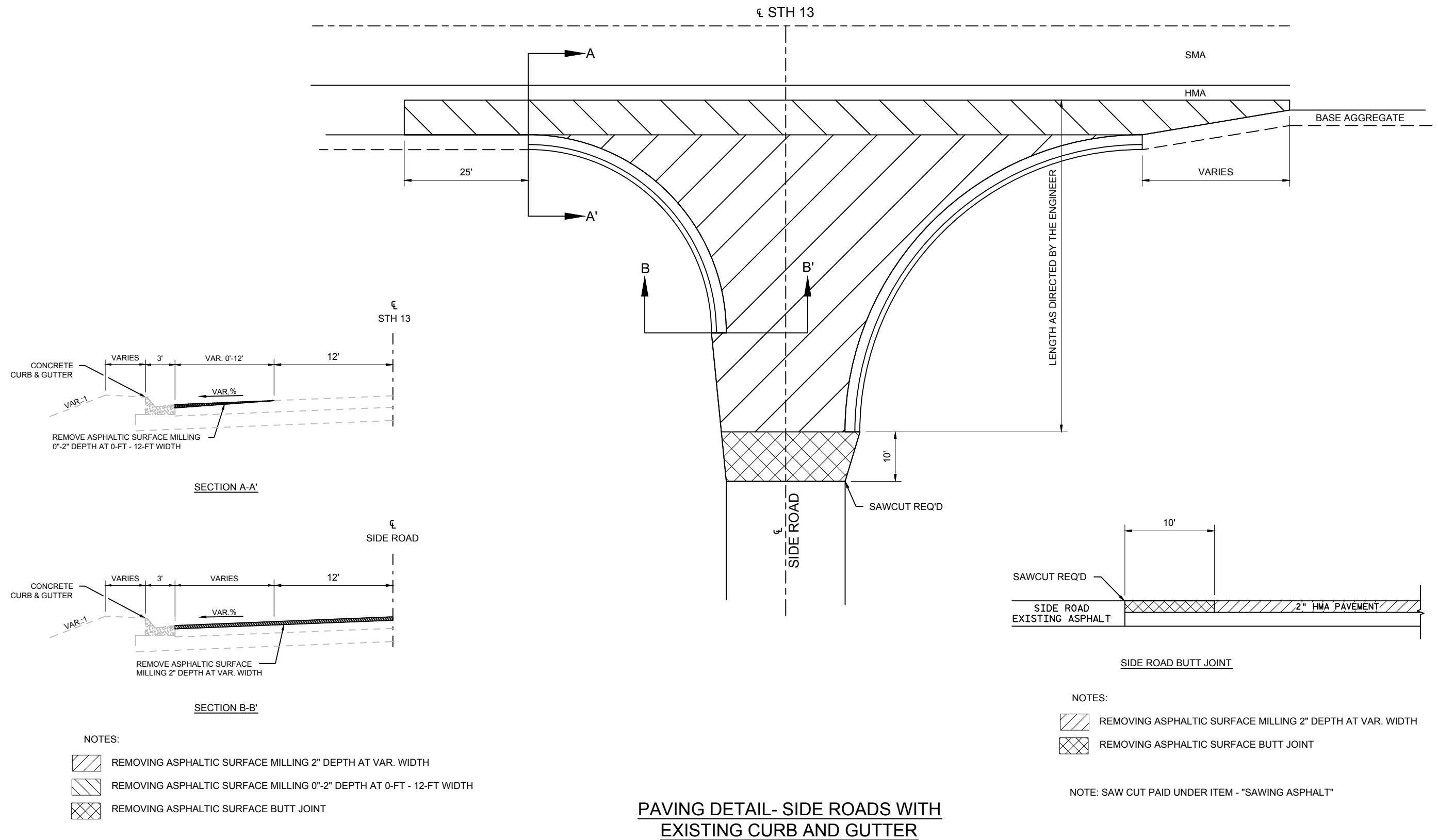
MATCH EXISTING PAVED SURFACE RADII AND TAPERS.
*MATCH EXISTING PAVEMENT THICKNESS.

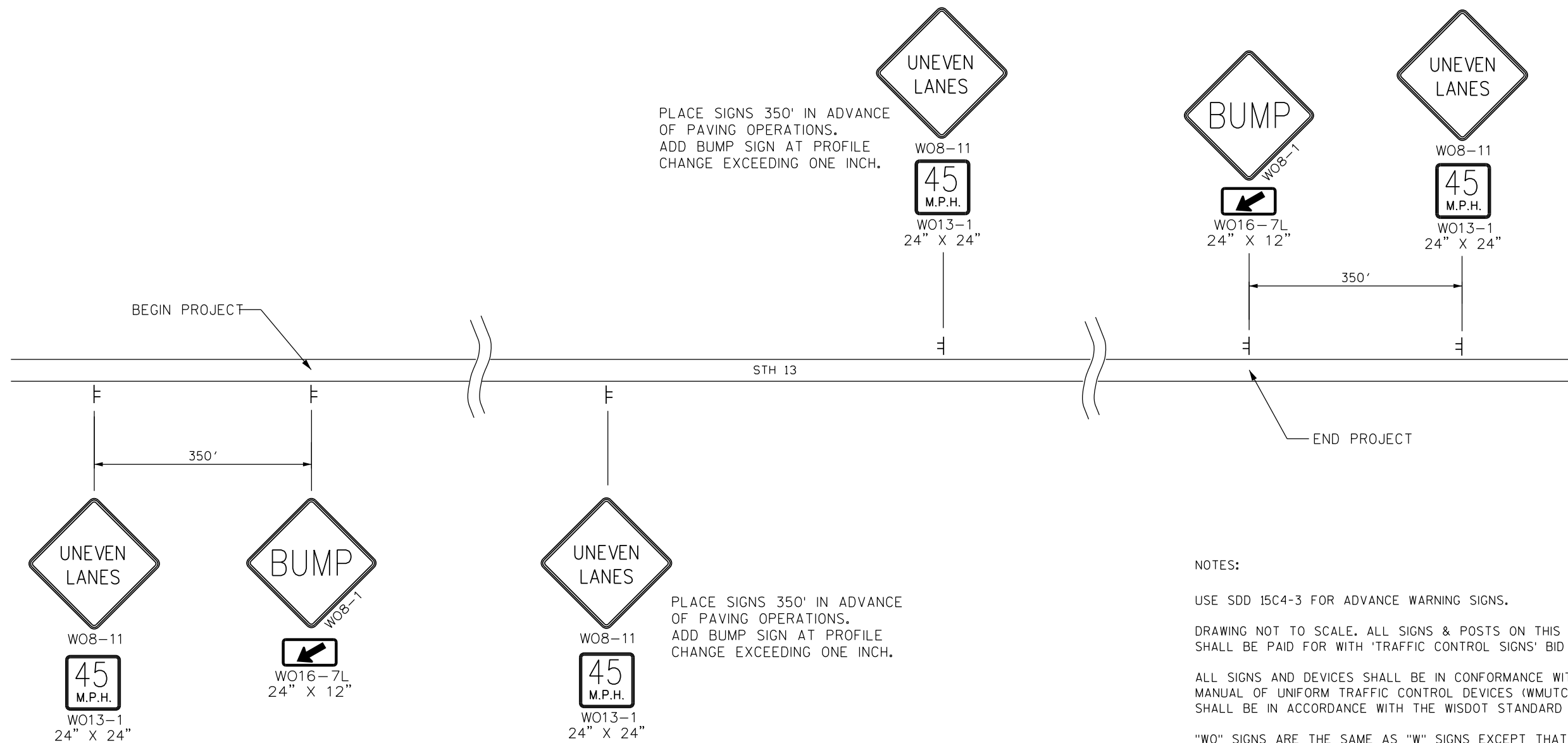
SAWCUT PAID FOR UNDER ITEM - "SAWING ASPHALT"

PAVED DRIVEWAYS



HMA PAVEMENT AT BEAM GUARD DETAIL





NOTES:

USE SDD 15C4-3 FOR ADVANCE WARNING SIGNS.

DRAWING NOT TO SCALE. ALL SIGNS & POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM.

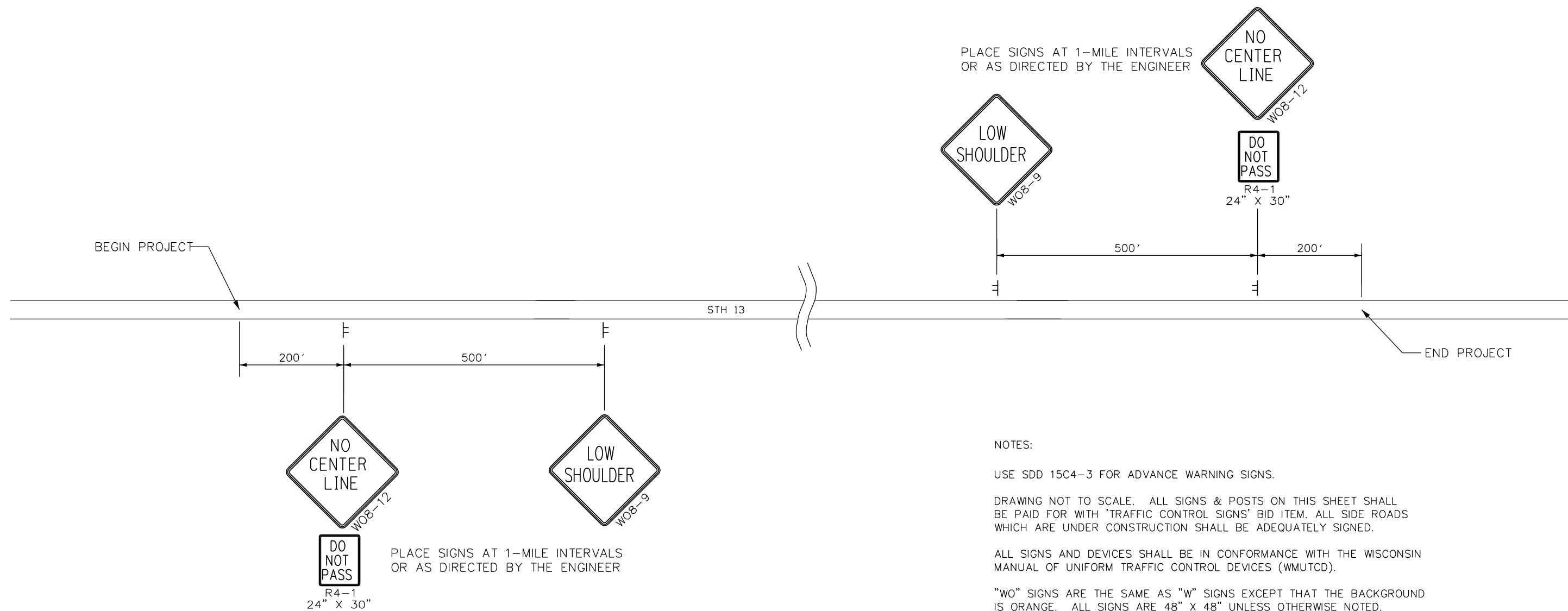
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

SEE NEXT DETAIL SHEET FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MARKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED UNTIL PAVEMENT MARKINGS ARE INPLACE.

DETAIL FOR SIGNING ON CIR PAVEMENT SURFACES



DETAIL FOR SIGNING ON HMA PAVEMENT SURFACES

Estimate Of Quantities

					1610-08-72	1610-08-73	1610-08-79	1610-08-82
Line	Item	Item Description	Unit	Total	Qty	Qty	Qty	Qty
0002	204.0110	Removing Asphaltic Surface	SY	1,305.000	526.000	779.000		
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	3,298.000	818.000	2,480.000		
0006	204.0120	Removing Asphaltic Surface Milling	SY	11,613.000	1,637.000	9,976.000		
0008	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,571.000			887.000	684.000
0010	213.0100	Finishing Roadway (project) 01. 1610-08-73	EACH	1.000		1.000		
0012	213.0100	Finishing Roadway (project) 03. 1610-08-72	EACH	1.000	1.000			
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	9,065.000	3,952.000	5,113.000		
0016	440.4410	Incentive IRI Ride	DOL	66,300.000	29,400.000	36,900.000		
0018	455.0605	Tack Coat	GAL	19,005.000	8,475.000	10,530.000		
0020	460.2000	Incentive Density HMA Pavement	DOL	29,860.000	11,500.000	18,360.000		
0022	460.6444	HMA Pavement 4 MT 58-34 H	TON	20,049.000	3,981.000	11,125.000	2,772.000	2,171.000
0024	460.8444	HMA Pavement 4 SMA 58-34 H	TON	26,588.000	11,810.000	14,778.000		
0026	465.0105	Asphaltic Surface	TON	400.000	200.000	200.000		
0028	465.0110	Asphaltic Surface Patching	TON	200.000	100.000	100.000		
0030	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	150.000	61.000	89.000		
0032	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	158,997.000			91,397.000	67,600.000
0034	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	77,037.000	33,173.000	43,864.000		
0036	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1610-08-73	EACH	1.000		1.000		
0038	618.0100	Maintenance And Repair of Haul Roads (project) 03. 1610-08-72	EACH	1.000	1.000			
0040	619.1000	Mobilization	EACH	1.000	0.300	0.500	0.100	0.100
0042	624.0100	Water	MGAL	137.000	60.000	77.000		
0044	642.5001	Field Office Type B	EACH	1.000	0.400	0.400	0.100	0.100
0046	643.0100	Traffic Control (project) 01. 1610-08-73	EACH	1.000		1.000		
0048	643.0100	Traffic Control (project) 02. 1610-08-79	EACH	1.000			1.000	
0050	643.0100	Traffic Control (project) 03. 1610-08-72	EACH	1.000	1.000			
0052	643.0100	Traffic Control (project) 04. 1610-08-82	EACH	1.000				1.000
0054	643.0900	Traffic Control Signs	DAY	5,190.000	1,866.000	3,324.000		
0056	646.0106	Pavement Marking Epoxy 4-Inch	LF	93,606.000	25,462.000	68,144.000		
0058	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	182,825.000	76,610.000	106,215.000		
0060	646.2308.S	Pavement Marking Grooved Wet Reflective Epoxy 8-Inch	LF	670.000	670.000			
0062	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	2.000	2.000			
0064	647.0356	Pavement Marking Words Epoxy	EACH	1.000	1.000			
0066	647.0576	Pavement Marking Stop Line Epoxy 24-Inch	LF	28.000	28.000			
0068	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	680.000	680.000			
0070	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	154,632.000	39,251.000	115,381.000		
0072	650.8000	Construction Staking Resurfacing Reference	LF	88,752.000	38,955.000	49,797.000		
0074	650.9910	Construction Staking Supplemental Control (project) 01.	LS	1.000		1.000		

Estimate Of Quantities

					1610-08-72	1610-08-73	1610-08-79	1610-08-82
Line	Item	Item Description	Unit	Total	Qty	Qty	Qty	Qty
		1610-08-73						
0076	650.9910	Construction Staking Supplemental Control (project) 03. 1610-08-72	LS	1.000	1.000			
0078	690.0150	Sawing Asphalt	LF	950.000	164.000	786.000		
0080	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,500.000	1,000.000	1,500.000		
0082	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,440.000	720.000	720.000		
0084	SPV.0035	Special 01. Base Repair for CIR Pavement	CY	60.000	30.000	30.000		
0086	SPV.0105	Special 01. Material Transfer Vehicle 1610-08-72	LS	1.000	1.000			
0088	SPV.0105	Special 02. Material Transfer Vehicle 1610-08-73	LS	1.000		1.000		
0090	SPV.0105	Special 05. Prepare Foundation for HMA Upper Layer 1610-08-72	LS	1.000	1.000			
0092	SPV.0105	Special 06. Prepare Foundation for HMA Upper Layer 1610-08-73	LS	1.000		1.000		
0094	SPV.0170	Special 01. Reheating HMA Pavement Longitudinal Joints Special	STA	887.000	389.000	498.000		
0096	SPV.0180	Special 01. Cold-In-Place Recycling (CIR) Pavement Partial Depth	SY	293,209.000	130,233.000	162,976.000		
0098	SPV.0195	Special 01. Asphalt Stabilizing Agent	TON	1,173.000	521.000	652.000		
0100	SPV.0195	Special 02. SMA Pavement Compaction Acceptance	TON	26,588.000	11,810.000	14,778.000		

REMOVING ASPHALTIC SURFACE MILLING

204.0120						
REMOVING ASPHALTIC SURFACE MILLING					COMMENTS	
STATION	-	STATION	LOCATION		SY	
PROJECT 1610-08-73						
155+50	-	160+50	STH 13	LT	321	C&G LT - 0" TO 2" DEPTH
277+50	-	289+00	STH 13	LT	785	C&G LT - 2" DEPTH
289+00	-	292+11	STH 13	LT	435	CTH C LT - 0" TO 2" DEPTH
289+81	-	292+08	STH 13	RT	408	CTH C RT - 0" TO 2" DEPTH
476+82	-	479+21	STH 13	LT	382	CTH C LT - 0" TO 2" DEPTH
475+92	-	478+49	STH 13	RT	520	CTH C RT - 0" TO 2" DEPTH
503+56	-	505+31	STH 13	LT & RT	756	50' BEFORE BRUNSWEILER R. BRIDGE EAT TO BRIDGE - 2" DEPTH
507+31	-	511+14	STH 13	LT & RT	1580	BRIDGE TO 50' AFTER BRUNSWEILER R. BRDG. EAT - 2" DEPTH
548+50	-	556+00	STH 13	LT	1648	MARENGO - 2" DEPTH
548+50	-	556+00	STH 13	RT	1895	MARENGO - 2" DEPTH
560+50	-	561+85	STH 13	LT & RT	597	50' BEFORE EXISTING MARENGO R. BRDG. EAT TO BRIDGE
564+06	-	565+50	STH 13	LT & RT	649	BRIDGE TO 50' AFTER EXISTING MARENGO R. BRDG. EAT
PROJECT 1610-08-73 TOTAL					9976	
PROJECT 1680-08-72						
653+32	-	656+23	STH 13	LT	1090	STH 112 LT - 0" TO 2" DEPTH
758+43	-	759+76	STH 13	RT	242	CHARLES JOHNSON RD RT - 0" TO 2" DEPTH
919+10	-	922+69	STH 13	LT	272	C&G LT - 0" TO 2" DEPTH
922+43		922+69	STH 13	RT	17	BRIDGE ABUTMENT RT - 2" DEPTH
924+17		924+28	STH 13	LT & RT	16	BRIDGE ABUTMENT LT & RT - 2" DEPTH
PROJECT 1610-08-72 TOTAL					1637	
TOTAL					11613	

REMOVING ASPHALTIC SURFACE

			204.0110
			REMOVING ASPHALTIC
			SURFACE
STATION	LOCATION		SY
PROJECT 1610-08-73			
114+70	ENTRANCE	RT	58
115+60	ENTRANCE	LT	77
158+60	ENTRANCE	RT	30
180+25	ENTRANCE	LT	56
237+35	ENTRANCE	RT	58
241+25	ENTRANCE	RT	45
278+80	ENTRANCE	LT	56
378+45	ENTRANCE	LT	58
436+50	ENTRANCE	LT	39
446+66	ENTRANCE	LT	37
520+05	ENTRANCE	LT	82
523+40	ENTRANCE	LT	53
534+84	ENTRANCE	LT	48
534+94	ENTRANCE	RT	82
PROJECT 1610-08-73 TOTAL			779
PROJECT 1610-08-72			
789+54	ENTRANCE	RT	44
792+90	ENTRANCE	RT	58
934+42	ENTRANCE	LT	22
944+00	ENTRANCE	RT	350
985+62	ENTRANCE	LT	52
PROJECT 1610-08-72 TOTAL			526
TOTAL			1305

REMOVING BUTT JOINTS

204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS		
STATION	LOCATION	SY
PROJECT 1610-08-73		
100+84	STH13	170
101+97	GOLF COURSE RD RT	49
119+00	STH 13	167
142+00	STH 13	167
245+50	MARITA RD LT	63
248+12	CORIA RD RT	47
258+00	STH 13	167
271+00	STH 13	167
276+92	RYEFIELD RD LT	55
290+87	CTH C LT	62
290+87	CTH C RT	70
380+50	STH 13	167
392+50	STH 13	167
397+68	N. YORK RD LT	50
397+68	N. YORK RD RT	42
477+61	CTH C LT	59
477+61	CTH C RT	58
505+56	STH 13	151
507+06	STH 13	119
549+65	POYNETTE ST LT	97
549+65	POYNETTE ST RT	63
554+46	MAIN ST RT	70
562+10	STH 13	130
563+81	STH 13	123
PROJECT 1610-08-73 TOTAL		2480
PROJECT 1610-08-72		
650+21	JOIMA RD RT	71
654+76	STH 112 LT	133
922+53	STH 13	195
924+17	STH 13	181
951+99	HAGSTROM RD LT	70
1035+36	STH 13	168
PROJECT 1610-08-72 TOTAL		818
TOTAL		3298

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

(HSIP FUNDING)			
211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS			
STATION	-	STATION	LOCATION STA
PROJECT 1680-08-79			
100+84	-	101+16	LT 1
102+24	-	119+00	LT 17
142+00	-	155+80	LT 14
160+19	-	244+75	LT 85
291+91	-	343+38	LT 52
344+22	-	369+69	LT 26
370+51	-	380+50	LT 10
392+50	-	397+20	LT 5
397+98	-	425+41	LT 28
426+48	-	476+95	LT 51
478+85	-	504+53	LT 26
508+10	-	544+58	LT 37
553+19	-	555+01	LT 2
555+55	-	560+93	LT 6
565+33	-	587+67	LT 23
588+28	-	645+81	LT 58
100+84	-	101+61	RT 1
102+87	-	119+00	RT 17
142+00	-	201+19	RT 60
202+13	-	247+67	RT 46
291+95	-	343+28	RT 52
344+11	-	369+07	RT 25
370+03	-	380+50	RT 11
392+50	-	397+34	RT 5
398+29	-	426+13	RT 28
426+84	-	476+14	RT 50
478+35	-	504+34	RT 26
510+84	-	548+78	RT 38
555+22	-	560+84	RT 6
565+15	-	571+48	RT 7
571+94	-	587+60	RT 16
588+40	-	645+81	RT 58
PROJECT 1680-08-79 TOTAL			887
PROJECT 1680-08-82			
645+81	-	653+44	LT 8
659+83	-	706+47	LT 47
707+13	-	745+62	LT 39
746+19	-	758+94	LT 13
759+64	-	785+04	LT 26
785+73	-	837+90	LT 53
838+47	-	867+93	LT 30
868+64	-	900+23	LT 32
943+20	-	951+37	LT 9
952+48	-	971+79	LT 20
973+24	-	1035+36	LT 63
645+81	-	649+71	RT 4
650+61	-	706+48	RT 56
706+94	-	758+11	RT 52
759+52	-	837+74	RT 79
838+50	-	900+92	RT 63
944+71	-	950+46	RT 6
951+49	-	1035+36	RT 84
PROJECT 1680-08-82 TOTAL			684
TOTAL			1571

3

BASE AGGREGATE DENSE

305.0110					COMMENTS
BASE AGGREGATE					
DENSE 3/4-INCH					
STATION	-	STATION	LOCATION	TON	
PROJECT 1610-08-73					
100+84	-	645+81	STH 13	LT	1951
100+84	-	645+81	STH 13	RT	1982
SIDE ROADS					440
DRIVEWAYS AND FIELD ENTRANCES					740
					74 @10 TONS
PROJECT 1610-08-73 TOTAL					5113
PROJECT 1680-08-72					
645+81	-	1035+36	STH 13	LT	1539
645+81	-	1035+36	STH 13	RT	1553
SIDE ROADS					280
DRIVEWAYS AND FIELD ENTRANCES					580
					58 @ 10 TON
PROJECT 1610-08-72 TOTAL					3952
TOTALS					9065

WATER

				624.0100	
STATION	-	STATION	LOCATION	WATER MGAL	COMMENT
PROJECT 1610-08-73					
100+84	-	645+81	STH 13	77	BASE COMPACTION
PROJECT 1610-08-73 TOTAL				77	
PROJECT 1610-08-72					
645+81	-	1035+36		60	BASE COMPACTION
PROJECT 1610-08-72 TOTAL				60	
TOTAL				137	

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES		
STATION	LOCATION	TON
PROJECT 1610-08-73		
114+71	RT	7
115+58	LT	9
158+61	RT	4
180+25	LT	7
237+36	RT	7
241+25	RT	6
378+44	LT	7
436+53	LT	5
446+66	LT	5
520+00	LT	10
523+40	LT	6
534+84	LT	6
534+95	RT	10
PROJECT 1610-08-73 TOTAL		89
PROJECT 1610-08-72		
789+54	RT	5
792+92	RT	7
934+40	LT	3
944+00	RT	40
985+57	LT	6
PROJECT 1610-08-72 TOTAL		61
TOTAL		150

INCENTIVE IRI RIDE

440.4410				
INCENTIVE IRI				
		RIDE		
STATION	-	STATION	LOCATION	DOL
COMMENTS				
PROJECT 1610-08-73				
100+84		119+00	STH 13	1380
142+00		258+00	STH 13	8790
278+00		280+50	STH 13	190
292+50	-	505+56	STH 13	16150
507+06	-	562+10	STH 13	4170
563+81	-	645+81	STH 13	6220
PROJECT 1610-08-73 TOTAL				36900
PROJECT 1680-08-72				
645+81	-	922+53	STH 13	20970
924+17	-	1035+36	STH 13	8430
PROJECT 1610-08-72 TOTAL				29400
TOTAL				66300

ASPHALTIC SURFACE PATCHING

				465.0105	465.0110	COMMENTS
				ASPHALTIC	ASPHALTIC SURFACE	
STATION	-	STATION	LOCATION	SURFACE	PATCHING	
				TON	TON	
PROJECT 1610-08-73						
100+84	-	645+81	STH 13	-	100	BUTT JOINT RAMPS AND MINOR REPAIRS OF POT HOLES, POP-OUTS
UNDISTRIBUTED				200	-	PREPARE FOUNDATION FOR CIR & HMA
PROJECT 1610-08-73 TOTAL				200	100	
PROJECT 1610-08-72						
645+81	-	1035+36	STH 13	-	100	BUTT JOINT RAMPS AND MINOR REPAIRS OF POT HOLES, POP-OUTS
UNDISTRIBUTED				200	-	PREPARE FOUNDATION FOR CIR & HMA
PROJECT 1610-08-72 TOTAL				200	100	
TOTAL				400	200	

FIELD OFFICE

642.5001 FIELD OFFICE			COMMENT
LOCATION		TYPE B EACH	
PROJECT 1610-08-73		PROJECT LIMITS	0.4
PROJECT 1610-08-73 TOTAL			0.4
PROJECT 1610-08-79		PROJECT LIMITS	0.1
PROJECT 1610-08-79 TOTAL			0.1
PROJECT 1610-08-72		PROJECT LIMITS	0.4
PROJECT 1610-08-72 TOTAL			0.4
PROJECT 1610-08-82		PROJECT LIMITS	0.1
PROJECT 1610-08-82 TOTAL			0.1
TOTAL			1.0

3

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HMA PAVEMENT AND TACK COAT

			*			
			460.6444	460.8444	455.0605	
			HMA PAVEMENT	HMA PAVEMENT	TACK COAT	COMMENTS
			4 MT 58-34 H	4 SMA 58-34 H		
STATION	- STATION	LOCATION	TON	TON	GAL	
PROJECT 1610-08-73						
100+84	- 119+00	STH 13	-	542	291	24-FT WIDTH DRIVING LANES
142+00	- 258+00	STH 13	-	3465	1856	24-FT WIDTH DRIVING LANES
270+00	- 380+50	STH 13	-	3300	1768	24-FT WIDTH DRIVING LANES
392+50	- 505+57	STH 13	-	3377	1810	24-FT WIDTH DRIVING LANES
507+06	- 562+10	STH 13	-	1644	881	24-FT WIDTH DRIVING LANES
563+93	- 645+81	STH 13	-	2446	1311	24-FT WIDTH DRIVING LANES
643+52	645+81	STH 13	-	5	3	STH 112 BY-PASS LANE RT
100+84	- 119+00	STH 13	76	-	37	SHOULDER LT
142+00	- 258+00	STH 13	558	-	266	SHOULDER LT
270+00	- 380+50	STH 13	580	-	277	SHOULDER LT
392+50	- 505+72	STH 13	577	-	275	SHOULDER LT
507+08	- 562+19	STH 13	279	-	133	SHOULDER LT
563+85	- 645+81	STH 13	361	-	172	SHOULDER LT
100+84	- 119+00	STH 13	77	-	37	SHOULDER RT
142+00	- 258+00	STH 13	529	-	252	SHOULDER RT
270+00	- 380+50	STH 13	557	-	266	SHOULDER RT
392+50	- 505+72	STH 13	581	-	277	SHOULDER RT
507+08	- 562+11	STH 13	285	-	136	SHOULDER RT
563+78	- 645+81	STH 13	355	-	170	SHOULDER RT
100+97	GOLF COURSERD	LT	23	-	13	
101+97	GOLF COURSERD	RT	34	-	19	
201+67	KUNZ RD	RT	16	-	9	
246+11	MARITA RD	LT	20	-	11	
248+12	CORIA RD	RT	17	-	10	
276+92	RYEFIELD RD	LT	24	-	13	
290+87	CTH C	LT	37	-	20	
290+87	CTH C	RT	40	-	22	
343+77	POPPERD	LT	14	-	8	
343+77	LOHMAN RD	RT	13	-	7	
369+57	SECTION 5 RD	RT	15	-	9	
370+09	SECTION 5 RD	LT	17	-	10	
397+68	N. YORK RD	LT	27	-	15	
397+68	N. YORK RD	RT	20	-	11	
426+24	BASS LAKE RD	LT	23	-	13	
426+24	BASS LAKE RD	RT	12	-	7	
477+61	CTH C	LT	37	-	20	
477+61	CTH C	RT	52	-	28	
549+65	POYNETTE ST	LT	28	-	15	
549+65	POYNETTE ST	RT	25	-	14	
554+46	MAIN ST	RT	30	-	16	
555+25	VAN DEBRUGGEN RD	LT	10	-	6	
571+74	SCHIESTL RD	RT	4	-	3	
588+01	DUMP RD	LT	12	-	7	
588+01	DOROTHY RD	RT	10	-	6	
PROJECT 1610-08-73 TOTALS			5374	14778	10530	

*TONNAGE FOR THIS ITEM IS THE SAME FOR ITEM SPV.0195 02. SMA PAVEMENT COMPACTION ACCEPTANCE.

HMA PAVEMENT AND TACK COAT - CONT'D

			*			
			460.6444	460.8444	455.0605	
			HMA PAVEMENT	HMA PAVEMENT	TACK COAT	COMMENTS
			4 MT 58-34 H	4 SMA 58-34 H		
STATION	- STATION	LOCATION	TON	TON	GAL	
PROJECT 1610-08-72						
645+81	- 922+53	STH 13	-	8265	4428	24-FT WIDTH DRIVING LANES
924+17	- 1035+36	STH 13	-	3321	1780	24-FT WIDTH DRIVING LANES
645+81	665+00	STH 13	-	224	121	STH 112 BY-PASS LANE RT
645+81	- 922+43	STH 13	1446	-	689	SHOULDER LT
924+28	- 1035+36	STH 13	606	-	289	SHOULDER LT
645+81	- 922+43	STH 13	1351	-	644	SHLD RT INCLUDES STH 112 BY-PASS LANE
924+28	- 1035+36	STH 13	783	-	373	SHOULDER RT
650+21	JOLMA RD	RT	26	-	15	
654+76	STH 112	LT	85	-	46	
706+71	J POHL RD	RT	6	-	4	
706+76	SALO RD	LT	6	-	4	
745+90	HANGARD RD	LT	7	-	4	
759+16	C JOHNSON RD	RT	14	-	8	
759+26	SCHWIESOW RD	LT	10	-	6	
785+36	REDINGER RD	LT	10	-	6	
838+09	SANTAMA RD	LT	13	-	7	
838+17	TAPANI RD	RT	10	-	6	
868+31	PHILAJA RD	LT	9	-	5	
951+00	HEGSTROM RD	RT	21	-	12	
951+93	HEGSTROM RD	LT	29	-	16	
972+45	TRIANGLE RD	LT	22	-	12	
PROJECT 1610-08-72 TOTALS			4453	11810	8475	
TOTALS			9827	26588	19005	

*TONNAGE FOR THIS ITEM IS THE SAME FOR ITEM SPV.0195 02. SMA PAVEMENT COMPACTION ACCEPTANCE.

HMA PAVEMENT 4 MT 58-34 H (HSIP FUNDING)

460.6444					
HMA PAVEMENT					
4 MT 58-34 H					
STATION	-	STATION	LOCATION	TON	COMMENTS
PROJECT 1610-08-79					
100+84	-	119+00	STH 13	51	SHOULDER LT
142+00	-	258+00	STH 13	325	SHOULDER LT
270+00	-	380+50	STH 13	309	SHOULDER LT
392+50	-	505+72	STH 13	317	SHOULDER LT
507+08	-	562+19	STH 13	154	SHOULDER LT
563+85	-	645+81	STH 13	229	SHOULDER LT
100+84	-	119+00	STH 13	51	SHOULDER RT
142+00	-	258+00	STH 13	325	SHOULDER RT
270+00	-	380+50	STH 13	309	SHOULDER RT
392+50	-	505+72	STH 13	317	SHOULDER RT
507+08	-	562+11	STH 13	154	SHOULDER RT
563+78	-	645+81	STH 13	230	SHOULDER RT
PROJECT 1610-08-79 TOTAL				2772	
PROJECT 1610-08-82					
645+81	-	922+43	STH 13	775	SHOULDER LT
924+28	-	1035+36	STH 13	311	SHOULDER LT
645+81	-	922+43	STH 13	775	SHOULDER RT
924+28	-	1035+36	STH 13	311	SHOULDER RT
PROJECT 1610-08-82 TOTAL				2171	
TOTAL				4943	

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ASPHALTIC SHOULDER RUMBLE STRIP (HSIP FUNDING)

465.0425						
ASPHALTIC SHOULDER						
RUMBLE STRIP 2-LANE RURAL						
COMMENTS						
STATION	-	STATION	LOCATION		LF	
PROJECT 1610-08-79						
102+50	-	243+75	STH 13	LT	13145	TYPE 1
247+10	-	264+05	STH 13	LT	1695	TYPE 1
267+40	-	275+72	STH 13	LT	832	GRADE >4%, BUT < 500 FEET IN LENGTH. THEREFORE, DO NOT ELIMINATED RUMBLE STRIP.
277+51	-	289+37	STH 13	LT	696	
292+44	-	342+50	STH 13	LT	4656	
344+41	-	369+00	STH 13	LT	2319	
370+63	-	386+83	STH 13	LT	1550	
388+93	-	396+64	STH 13	LT	701	TYPE 1
398+15	-	424+76	STH 13	LT	2451	TYPE 1
426+67	-	476+16	STH 13	LT	4529	TYPE 1
479+18	-	505+31	STH 13	LT	2473	TYPE 1
507+31	-	541+50	STH 13	LT	3209	TYPE 1
560+13	-	561+85	STH 14	LT	172	TYPE 1
564+25	-	587+03	STH 15	LT	2138	TYPE 1
588+53	-	645+81	STH 16	LT	5729	TYPE 1
103+49	-	200+90	STH 13	RT	8861	TYPE 1
207+50	-	247+54	STH 13	RT	3374	GRADE >4%, 600 LF. STA. 201+50-207+50. THEREFORE, BEGIN RUMBLE STRIP AT 207+50. GRADE >4%, 1500 LF. STA. 247+50-262+50. THEREFORE, BEGIN RUMBLE STRIP AT 262+50.
262+50	-	264+05	STH 13	RT	155	
267+40	-	289+93	STH 13	RT	2253	
292+70	-	342+87	STH 13	RT	4877	
344+80	-	368+70	STH 13	RT	2390	
370+89	-	386+83	STH 13	RT	1594	TYPE 1
388+93	-	397+16	STH 13	RT	823	TYPE 1
399+02	-	425+80	STH 13	RT	2538	TYPE 1
427+57	-	475+78	STH 13	RT	4611	TYPE 1
479+05	-	505+31	STH 13	RT	2416	GRADE >4%, 300 LF. STA.501+00-504+00. THEREFORE,DO NOT ELIMINATED RUMBLE STRIP.
507+31	-	541+50	STH 13	RT	3209	
560+18	-	561+85	STH 13	RT	167	
564+25	-	571+14	STH 13	RT	689	
572+49	-	587+45	STH 13	RT	1496	
589+33	-	645+81	STH 13	RT	5649	TYPE 1
PROJECT 1610-08-79 TOTAL					91397	
PROJECT 1680-08-82						
645+81	-	652+82	STH 13	LT	701	TYPE 1
660+33	-	705+49	STH 13	LT	4306	TYPE 1
707+55	-	744+47	STH 13	LT	3622	TYPE 1
746+36	-	757+86	STH 13	LT	1080	TYPE 1
760+57	-	784+01	STH 13	LT	2204	TYPE 1
786+08	-	836+80	STH 13	LT	4512	TYPE 1
838+75	-	867+09	STH 13	LT	2694	TYPE 1
868+90	-	922+28	STH 13	LT	5058	TYPE 1
935+00	-	950+39	STH 13	LT	1399	GRADE >4%, 1000 LF. STA.925+00-935+00. THEREFORE, BEGIN RUMBLE STRIP AT 935+00.
952+67	-	970+77	STH 13	LT	1810	
974+09	-	1035+04	STH 13	LT	5605	TYPE 1
645+81	-	649+47	STH 13	RT	366	TYPE 1
651+14	-	706+04	STH 13	RT	5420	TYPE 1
707+95	-	757+50	STH 13	RT	4815	TYPE 1
760+78	-	837+43	STH 13	RT	7035	TYPE 1
839+30	-	901+50	STH 13	RT	6220	TYPE 1
915+00	-	922+28	STH 13	RT	728	GRADE >4%, 1350 LF. STA.901+50-915+00. THEREFORE, BEGIN RUMBLE STRIP AT 915+00.
924+42	-	950+44	STH 13	RT	2422	
952+33	-	1035+36	STH 13	RT	7603	
PROJECT 1610-08-82 TOTAL					67600	
TOTAL					158997	

NOTE: GAPS FOR DRIVEWAYS AND STRUCTURES HAVE BEEN SUBTRACTED FROM THE STATION RANGES.

ASPHALTIC CENTER LINE RUMBLE STRIP

465.0475 ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL				
STATION	-	STATION	LOCATION	LF
PROJECT 1610-08-73				
103+91	-	199+72	STH 13	9381
203+72	-	243+50	STH 13	3978
250+14	-	264+05	STH 13	1391
267+40	-	272+00	STH 13	460
293+00	-	341+77	STH 13	4877
345+77	-	367+57	STH 13	2180
372+09	-	386+83	STH 13	1474
388+93	-	395+69	STH 13	676
399+69	-	423+96	STH 13	2427
438+50	-	475+61	STH 13	3711
479+61	-	505+31	STH 13	2570
507+31	-	541+50	STH 13	3419
560+13	-	561+85	STH 13	172
564+25	-	569+73	STH 13	548
573+73	-	586+01	STH 13	1228
590+01	-	643+73	STH 13	5372
PROJECT 1610-08-73 TOTAL				43864
PROJECT 1610-08-72				
665+25	-	704+75	STH 13	3950
708+75	-	743+90	STH 13	3515
747+90	-	757+19	STH 13	929
761+24	-	783+35	STH 13	2211
787+35	-	836+09	STH 13	4874
840+17	-	866+31	STH 13	2614
870+31	-	922+28	STH 13	5197
924+42	-	949+00	STH 13	2258
953+93	-	970+47	STH 13	1654
974+47	-	1034+18	STH 13	5971
PROJECT 1610-08-72 TOTAL				33173
TOTAL				77037

NOTE: GAPS FOR COMMERCIAL DRIVEWAYS HAVE BEEN SUBTRACTED FROM THE STATION RANGES.

MOBILIZATION

619.1000 MOBILIZATION			
	LOCATION	EACH	COMMENT
PROJECT 1610-08-73	PROJECT LIMITS	0.5	
PROJECT 1610-08-73 TOTAL		0.5	
PROJECT 1610-08-79	PROJECT LIMITS	0.1	HSIP FUNDING
PROJECT 1610-08-79 TOTAL		0.1	
PROJECT 1610-08-72	PROJECT LIMITS	0.3	
PROJECT 1610-08-72 TOTAL		0.3	
PROJECT 1610-08-82	PROJECT LIMITS	0.1	HSIP FUNDING
PROJECT 1610-08-82 TOTAL		0.1	
TOTAL		1.0	

TRAFFIC CONTROL SIGNS

STATION - STATION		LOCATION	NO. OF SIGNS	DAYS	643.0900 TRAFFIC CONTROL SIGNS DAY	COMMENT
CAT. 0010						
PROJECT 1610-08-73						
100+84	-	645+81	PROJECT	10	67	670 ADVANCE WARNING
100+84	-	645+81	PROJECT	32	21	672 CIR SURFACES
100+84	-	645+81	PROJECT	24	10	240 NO CL/NO PASSING
100+84	-	645+81	PROJECT	26	67	1742 1 SIGN/SIDE ROAD
PROJECT 1610-08-73 TOTAL					3324	
PROJECT 1610-08-72						
645+81	-	1035+36	PROJECT	10	54	540 ADVANCE WARNING
645+81	-	1035+36	PROJECT	16	21	336 CIR SURFACES
645+81	-	1035+36	PROJECT	18	10	180 NO CL/NO PASSING
645+81	-	1035+36	PROJECT	15	54	810 1 SIGN/SIDE ROAD
PROJECT 1610-08-72 TOTAL					1866	
TOTAL					5190	

PAVEMENT MARKINGS

STATION - STATION		LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH LF	646.2304.S PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH LF	646.2308.S PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 8-INCH LF	647.0576 PAVEMENT MARKING STOP LINE EPOXY 24-INCH LF	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	COMMENTS
PROJECT 1610-08-73								
100+84	-	645+81	STH 13	67514	-	-	-	CENTERLINE (YELLOW)
100+84	-	645+81	STH 13	-	106215	-	-	EDGELINES (WHITE)
SIDE ROADS			-	630	-	-	-	CENTERLINE (YELLOW) & EDGELINE (WHITE)
PROJECT 1610-08-73 TOTAL				68144	106215	0	0	
PROJECT 1610-08-72								
645+81	-	1035+36	STH 13	24317	-	-	-	CENTERLINE (YELLOW)
645+81	-	1035+36	STH 13	-	76610	-	-	EDGELINES (WHITE)
SIDE ROADS			-	1145	-	-	-	CENTERLINE (YELLOW) & EDGELINE (WHITE)
646+00	-	652+00	STH 112	-	-	82	-	CHANNELIZING FOR RT TURN ISLAND
652+21	-	654+21	STH 13	-	-	-	220	ADD LANE TAPER FOR LT TURN LANE
655+52	-	659+02	STH 13	-	-	238	-	LEFT TURN LANE TO STH 112
654+51	-	654+76	STH 13	-	-	350	-	RIGHT TURN LANE TO STH 112
655+50	-	662+50	STH 13	-	-	-	-	STH 112 EACH SIDE OF ISLAND
PROJECT 1610-08-72 TOTAL				25462	76610	670	28	460 SHIFTING TAPER FOR NORMAL LANE
TOTALS				93606	182825	670	28	680

TRAFFIC CONTROL (PROJECT)

LOCATION		643.0100 TRAFFIC CONTROL (PROJECT) 01. 1610-08-73 EACH	643.0100 TRAFFIC CONTROL (PROJECT) 02. 1610-08-79 EACH	643.0100 TRAFFIC CONTROL (PROJECT) 03. 1610-08-72 EACH	643.0100 TRAFFIC CONTROL (PROJECT) 04. 1610-08-82 EACH	COMMENT
PROJECT 1610-08-73	PROJECT LIMITS	1	-	-	-	
PROJECT 1610-08-79	PROJECT LIMITS	-	1	-	-	HSIP FUNDING
PROJECT 1610-08-72	PROJECT LIMITS	-	-	1	-	
PROJECT 1610-08-82	PROJECT LIMITS	-	-	-	1	HSIP FUNDING
TOTALS		1	1	1	1	

PAVEMENT MARKING ARROWS & WORDS

STATION - LOCATION		647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	647.0356 PAVEMENT MARKING WORDS EPOXY EACH	COMMENTS
PROJECT 1610-08-72				
655+80	STH 13 LT	1	-	STH 112 RT TURN LANE
656+46	STH 13 LT	-	1	RT TURN LANE 'ONLY'
657+60	STH 13 LT	1	-	5TH 112 RT TURN LANE
PROJECT 1610-08-72 TOTAL		2	1	
TOTALS		2	1	

TEMPORARY PAVEMENT MARKING

STATION - STATION		LOCATION	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH LF	COMMENTS
PROJECT 1610-08-73				
100+84	-	645+81	STH 13	61610 CENTERLINE (YELLOW)
100+84	-	645+81	STH 13	53771 CENTERLINE (YELLOW) CIR LOWER LAYER
PROJECT 1610-08-73 TOTAL			115381	
PROJECT 1610-08-72				
645+81	-	1035+36	STH 13	22733 CENTERLINE (YELLOW)
645+81	-	1035+36	STH 13	16518 CENTERLINE (YELLOW) CIR LOWER LAYER
PROJECT 1610-08-72			39251	
TOTAL			154632	

CONSTRUCTION STAKING

650.8000				
CONSTRUCTION STAKING				
RESURFACE REFERENCE LINE				
STATION	-	STATION	LOCATION	LF
PROJECT 1610-08-73				
100+84	-	119+00	STH 13	1816
142+00	-	258+00	STH 13	11600
270+00	-	380+50	STH 13	11050
392+50	-	645+81	STH 13	25331
PROJECT 1610-08-73 TOTAL				49797
PROJECT 1610-08-72				
645+81	-	1035+36	STH 13	38955
PROJECT 1610-08-72 TOTAL				38955
TOTAL				88752

NOTE: EXCEPTIONS TO CENTERLINE LENGTH NOT INCLUDED IN QUANTITY.

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SAWING ASPHALT

			690.0150	
			SAWING ASPHALT	COMMENTS
STATION	LOCATION		LF	
PROJECT 1610-08-73				
100+84	STH 13		26	MAINLINE
101+97	STH 13	RT	22	GOLF COURSE RD
114+68	STH 13	RT	12	P.E.
115+68	STH 13	LT	28	P.E.
119+00	STH 13		24	MAINLINE
142+00	STH 13		24	MAINLINE
158+61	STH 13	RT	14	P.E.
180+25	STH 13	LT	18	P.E.
237+37	STH 13	LT	14	P.E.
241+22	STH 13	RT	10	P.E.
245+50	STH 13	LT	24	MARITA RD
248+12	STH 13	RT	22	CORIARD
258+00	STH 13		24	MAINLINE
270+00	STH 13		24	MAINLINE
276+92	STH 13	LT	26	RYEFIELD RD
290+87	STH 13	LT	26	CTH C
290+87	STH 13	RT	24	CTH C
378+47	STH 13	LT	16	P.E.
380+50	STH 13		24	MAINLINE
392+50	STH 13		24	MAINLINE
397+68	STH 13	LT	24	N. YORK RD
397+68	STH 13	RT	20	N. YORK RD
436+50	STH 13	LT	18	P.E.
446+65	STH 13	LT	18	P.E.
477+61	STH 13	RT	23	CTH C
477+61	STH 13	LT	22	CTH C
519+98	STH 13	LT	42	P.E.
523+39	STH 13	LT	15	P.E.
534+85	STH 13	LT	10	P.E.
534+95	STH 13	RT	28	P.E.
549+65	STH 13	LT	44	POYNETTE ST
549+65	STH 13	RT	32	POYNETTE ST
554+46	STH 13	RT	22	MAIN ST
588+00	STH 13	LT	17	DUMP RD
588+00	STH 13	RT	25	DOROTHY RD
PROJECT 1610-08-73 TOTAL			786	
PROJECT 1610-08-72				
654+76	STH 13	LT	28	STH 112
789+53	STH 13	RT	11	P.E.
792+89	STH 13	RT	11	P.E.
838+10	STH 13	RT	18	SANTAMA RD
838+18	STH 13	LT	18	TAPANI RD
934+41	STH 13	LT	15	P.E.
951+93	STH 13	LT	24	HEGSTROM RD
985+55	STH 13	LT	14	P.E.
1035+36	STH 13		25	MAINLINE
PROJECT 1610-08-72 TOTAL			164	
TOTAL			950	

COLD-IN-PLACE RECYCLING (CIR) PAVEMENT PARTIAL DEPTH ITEMS

					SPV.0180.01	SPV.0195.02		
					CIR PAVEMENT WIDTH (FEET)	COLD-IN-PLACE RECYCLING (CIR) PAVEMENT PARTIAL DEPTH SY	ASPHALT STABILIZING AGENT TON	COMMENTS
STATION	-	STATION	LOCATION					
PROJECT 1610-08-73								
100+84	-	119+00	STH 13	LT & RT	30	6054	24	BOP TO KRAUSE CREEK REPAIR
142+00	-	155+50	STH 13	LT & RT	30	4500	18	KRAUSE CR. REPAIR TO C&G LT
155+50	-	160+50	STH 13	LT & RT	27	1500	6	C&G LT
160+50	-	258+00	STH 13	LT & RT	30	32500	130	C&G LT TO SILVER CREEK BRIDGE
270+00	-	277+50	STH 13	LT & RT	30	2500	10	SILVER CR. BRIDGE TO C&G LT
277+50	-	289+00	STH 13	LT & RT	27	3450	14	C&G LT
289+00	-	380+50	STH 13	LT & RT	30	30500	122	C&G LT TO TROUT CREEK BRIDGE
392+50	-	503+56	STH 13	LT & RT	30	37020	148	TROUT CR. BRIDGE TO 100' BEFORE EAT
503+56	-	505+56	STH 13	LT & RT	24	534	2	50' BEFORE BRUNSWEILER R. BRDGE EAT TO BRIDGE
507+06	-	511+14	STH 13	LT & RT	24	1088	4	BRIDGE TO 50' AFTER BRUNSWEILER R. BRDG. EAT
511+14	-	548+50	STH 13	LT & RT	30	12454	50	50' AFTER BRUNSWEILER R. BRSG. EAT TO MARENGO
548+50	-	555+50	STH 13	LT & RT	24	1867	7	MARENGO
555+50	-	557+22	STH 13	LT & RT	30	574	2	MARENGO TO 50' BEFORE MARENGO R. BRDG. EAT
557+22	-	562+10	STH 13	LT & RT	24	1302	5	50' BEFORE MARENGO R. BRDG. EAT TO BRIDGE
564+02	-	566+00	STH 13	LT & RT	24	528	2	BRIDGE TO 100' AFTER MARENGO R. BRDG. EAT
566+00	-	645+81	STH 13	LT & RT	30	26605	106	100' AFTER MARENGO R. BRDG. EAT TO EOP
PROJECT 1610-08-73 TOTALS						162976	652	
PROJECT 1610-08-72								
645+81	-	653+32	STH 13	LT	15	1252	5	BOP TO STH 112 INTERSECTION
653+32	-	660+23	STH 13	LT	12	922	4	STH 112 INTERSECTION
660+23	-	665+00	STH 13	LT	15	795	3	MATCH WIDTH ON RT
645+81	-	665+00	STH 13	RT	VARIES	4831	19	BOP THRU STH 112 BY-PASS LANE
665+00	-	758+26	STH 13	LT & RT	30	31087	124	STH 112 BY-PASS LANE TO CHARLES JOHNSON ROAD
758+26	-	759+76	STH 13	LT & RT	27	450	2	CHARLES JOHNSON ROAD C&G RT
759+76	-	919+10	STH 13	LT & RT	30	53114	212	CHARLES JOHNSON RD TO 50' BEFORE WHITE R. BRDG. EAT LT
919+10	-	922+53	STH 13	LT	12	458	2	C&G LT TO WHITE RIVER BRIDGE
924+17	-	933+56	STH 13	LT	12	1252	5	BRIDGE TO 50' AFTER WHITE R. BRDG. EAT LT
919+10	-	920+14	STH 13	RT	15	174	1	MATCH WIDTH ON LT
920+14	-	922+53	STH 13	RT	15	399	2	50' BEFORE WHITE R. BRDG. EAT TO BRIDGE
924+17	-	925+19	STH 13	RT	15	170	1	BRIDGE TO 50' AFTER WHITE R. BRDG. EAT
925+19	-	933+56	STH 13	RT	15	1395	6	MATCH WIDTH ON LT
933+56	-	1035+36	STH 13	LT & RT	30	33934	136	WHITE RIVER BRIDGE TO EOP
PROJECT 1610-08-72 TOTALS						130233	521	
TOTALS						293209	1173	

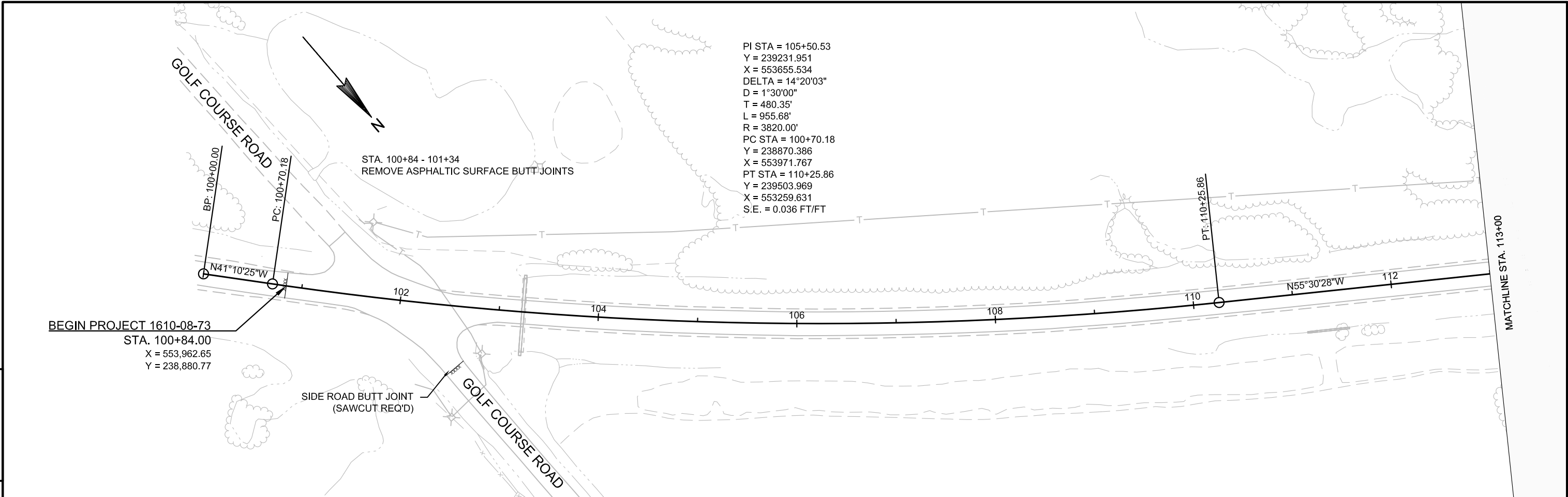
REHEATING HMA PAVMENT LONGITUDINAL JOINTS

		SPV.0170	
		01. REHEATING HMA PAVMENT	
		LONGITUDINAL JOINTS SPECIAL	
STATION	-	STATION	LOCATION
PROJECT 1610-08-73			
100+84	-	119+00	STH 13
142+00	-	258+00	STH 13
270+00	-	380+50	STH 13
392+50	-	505+56	STH 13
507+06	-	562+10	STH 13
563+93	-	645+81	STH 13
PROJECT 1610-08-73 TOTAL			498
PROJECT 1610-08-72			
645+81	-	922+53	STH 13
924+17	-	1035+36	STH 13
PROJECT 1610-08-72 TOTAL			389
TOTAL			887

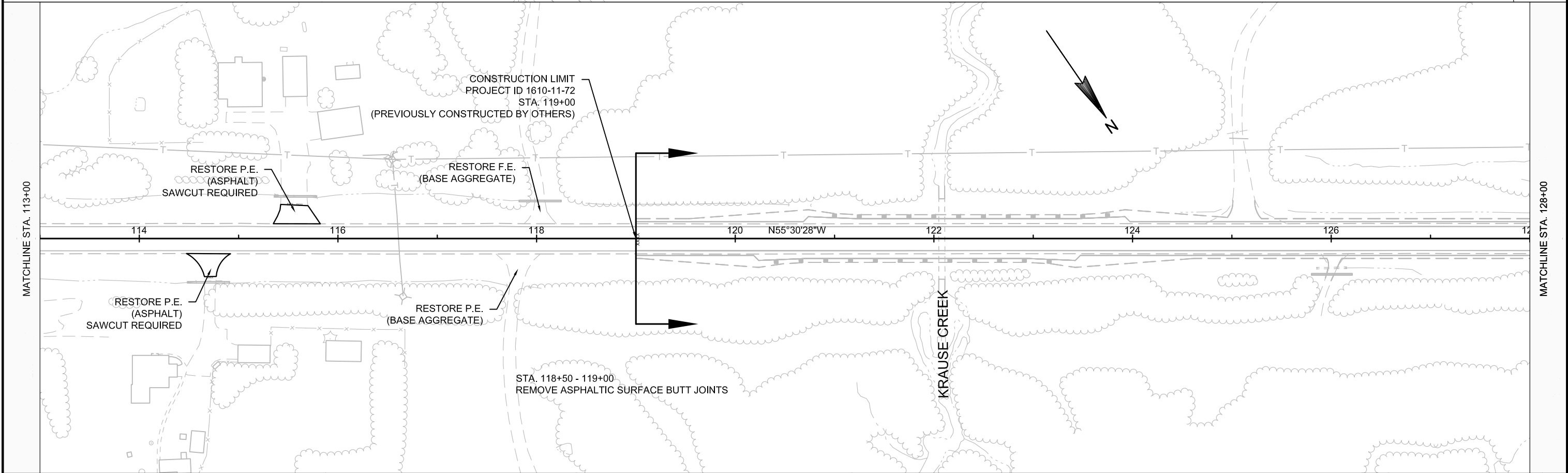
BASE REPAIR FOR CIR PAVEMENT

		SPV.0035	
		01. BASE REPAIR FOR	
		CIR PAVEMENT	
STATION	-	STATION	LOCATION
PROJECT 1610-08-73			
100+84	-	645+81	STH 13
PROJECT 1610-08-73 TOTAL			30
PROJECT 1610-08-72			
645+81	-	1035+36	STH 13
PROJECT 1610-08-72 TOTAL			30
TOTAL			60

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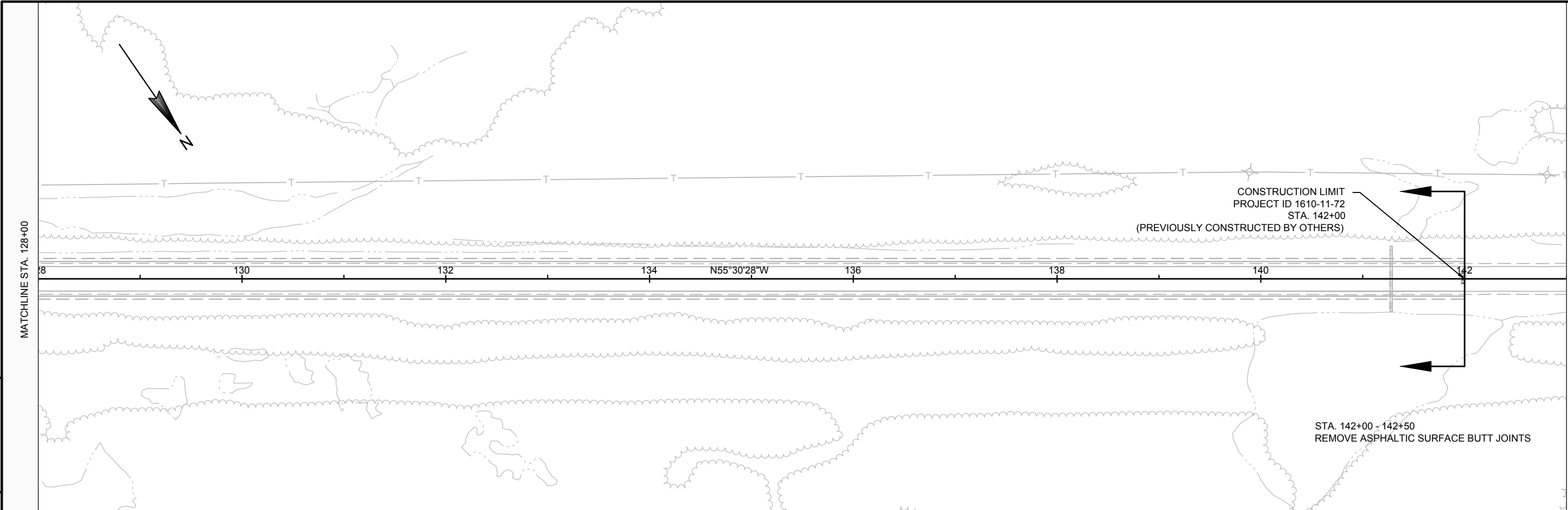


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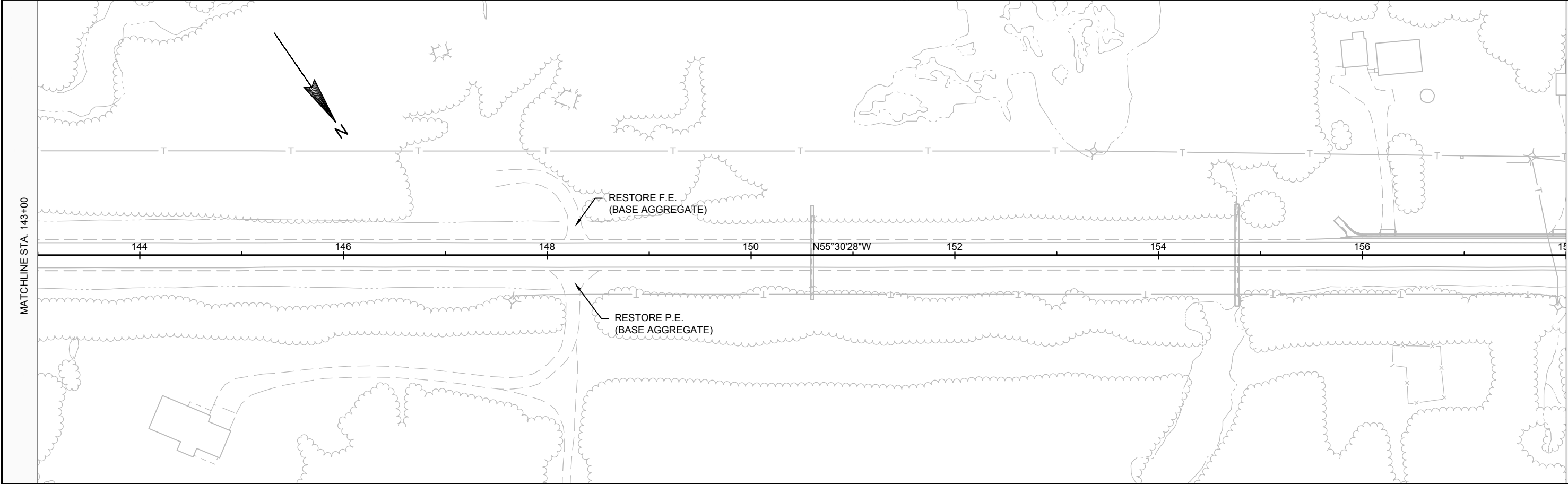


PROJECT NO: 1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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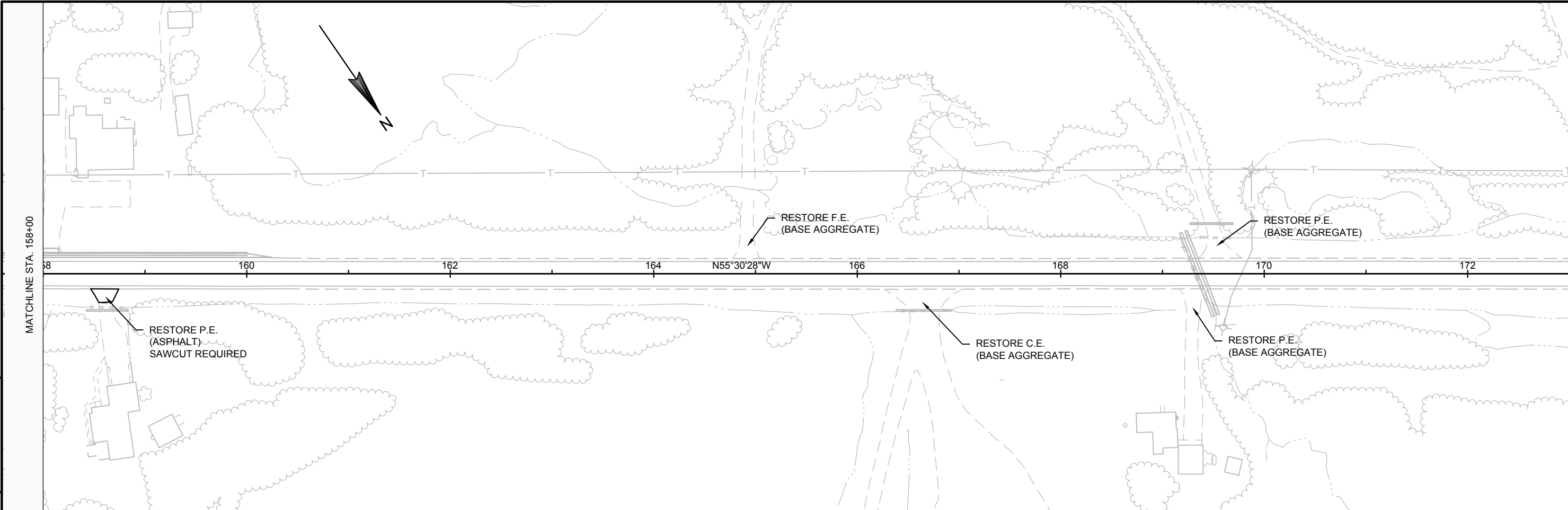


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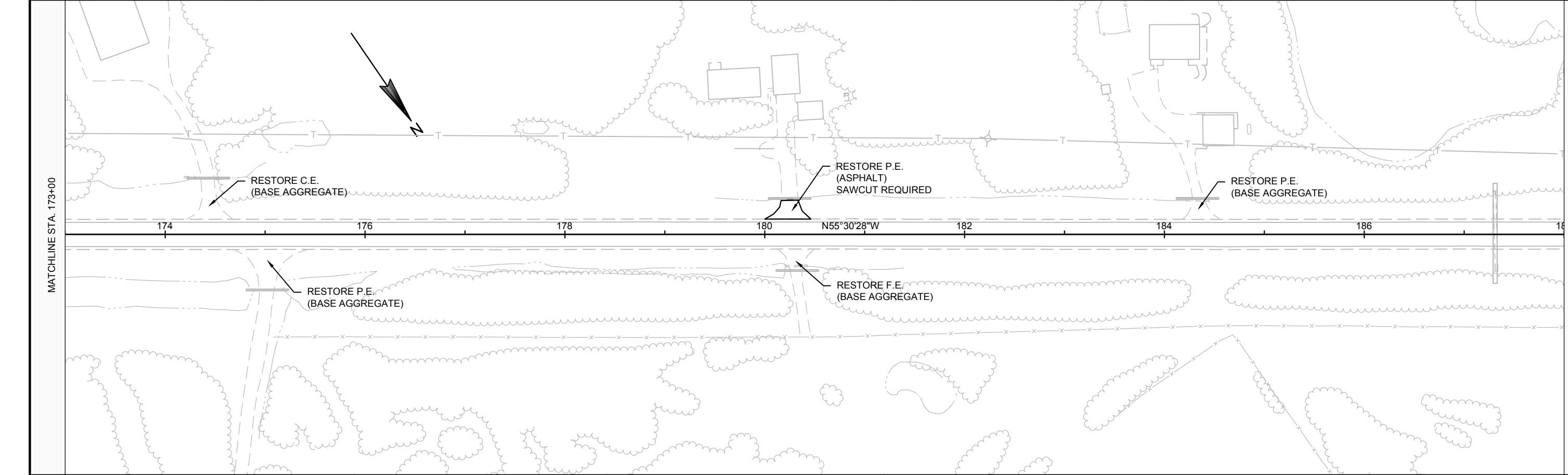


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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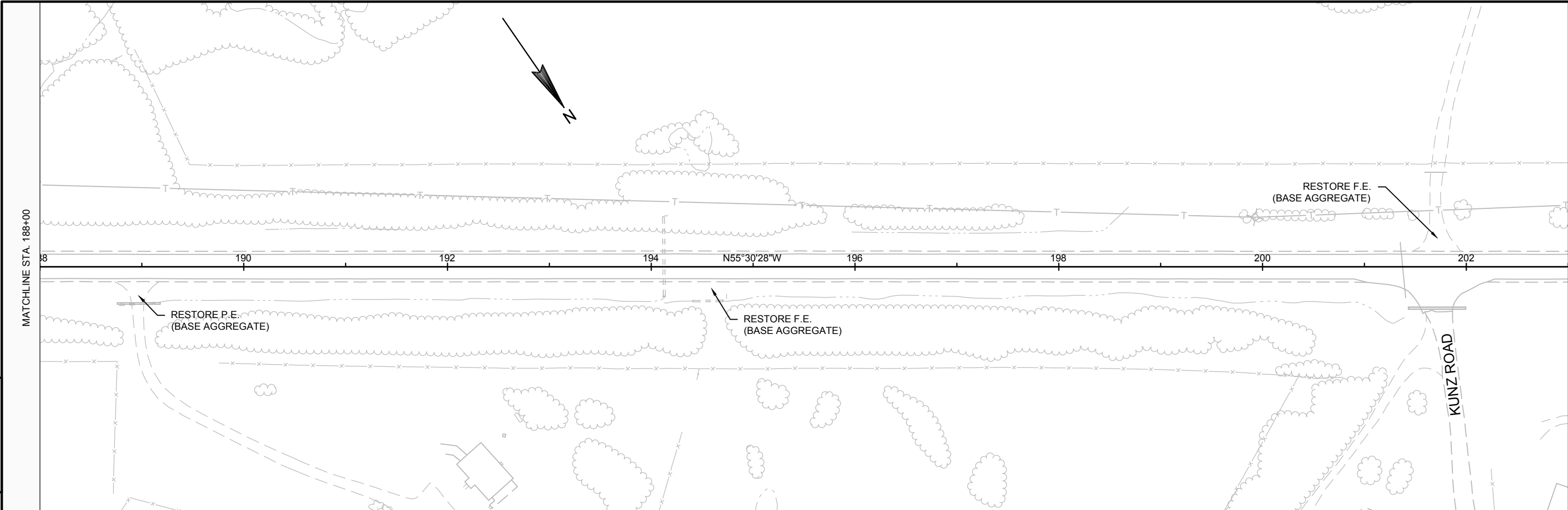


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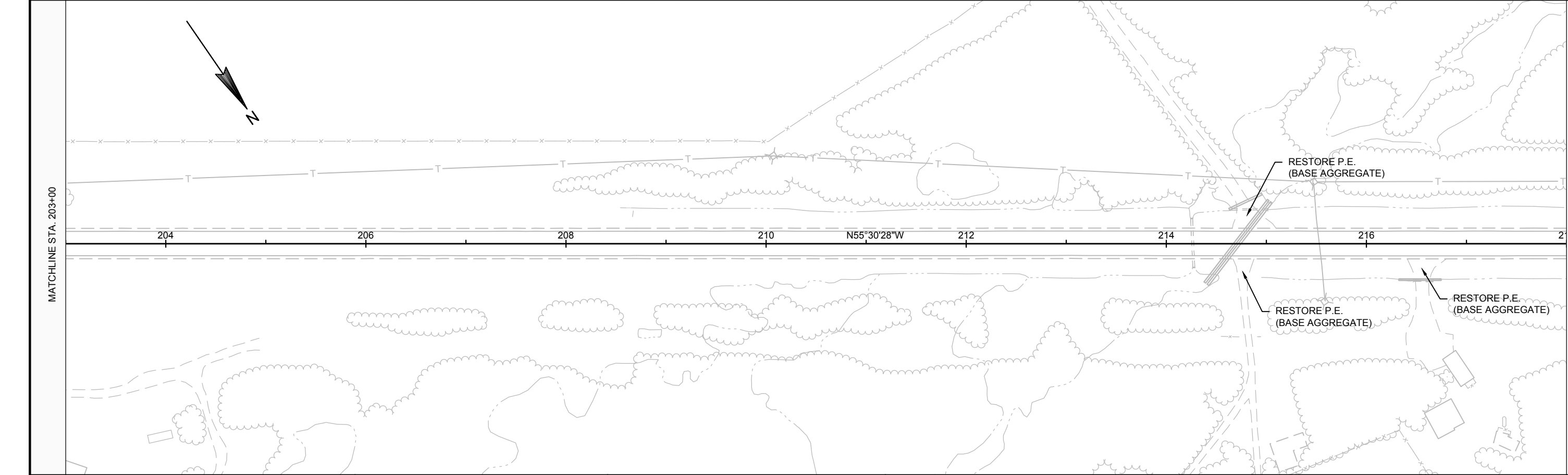


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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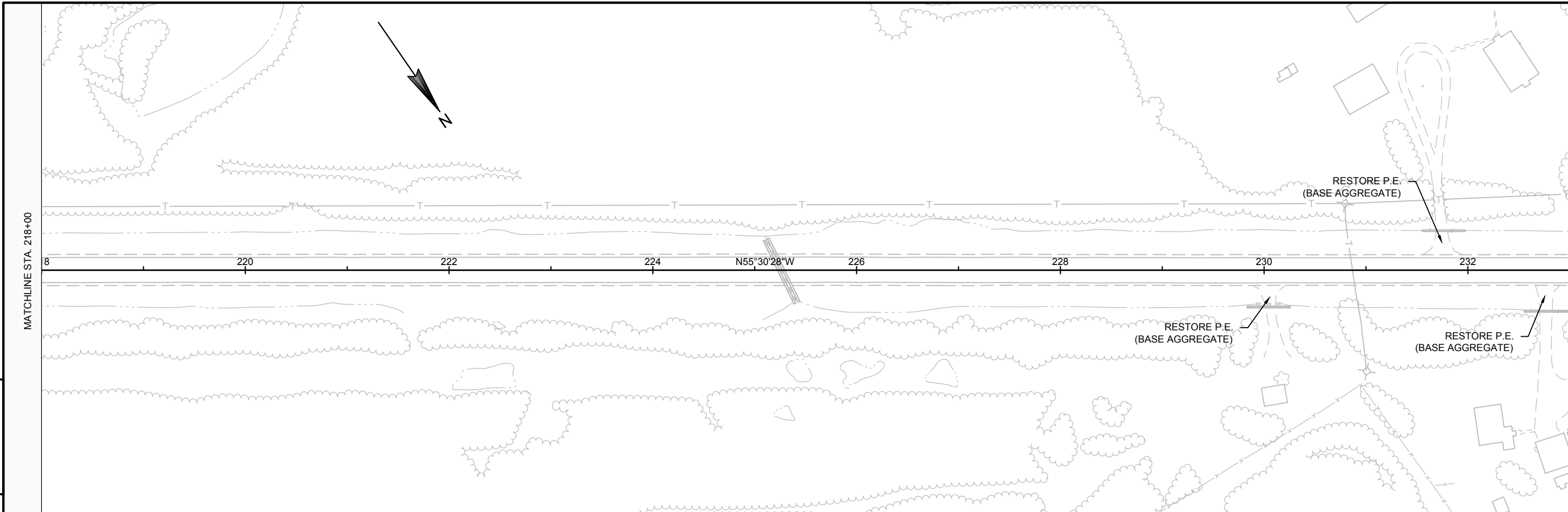


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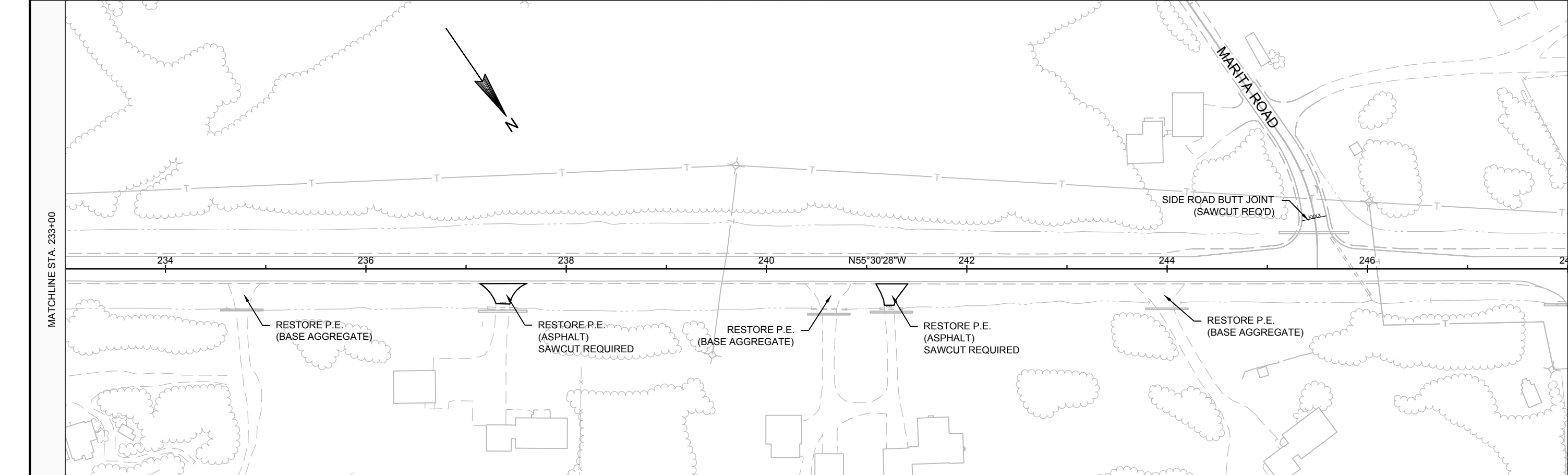


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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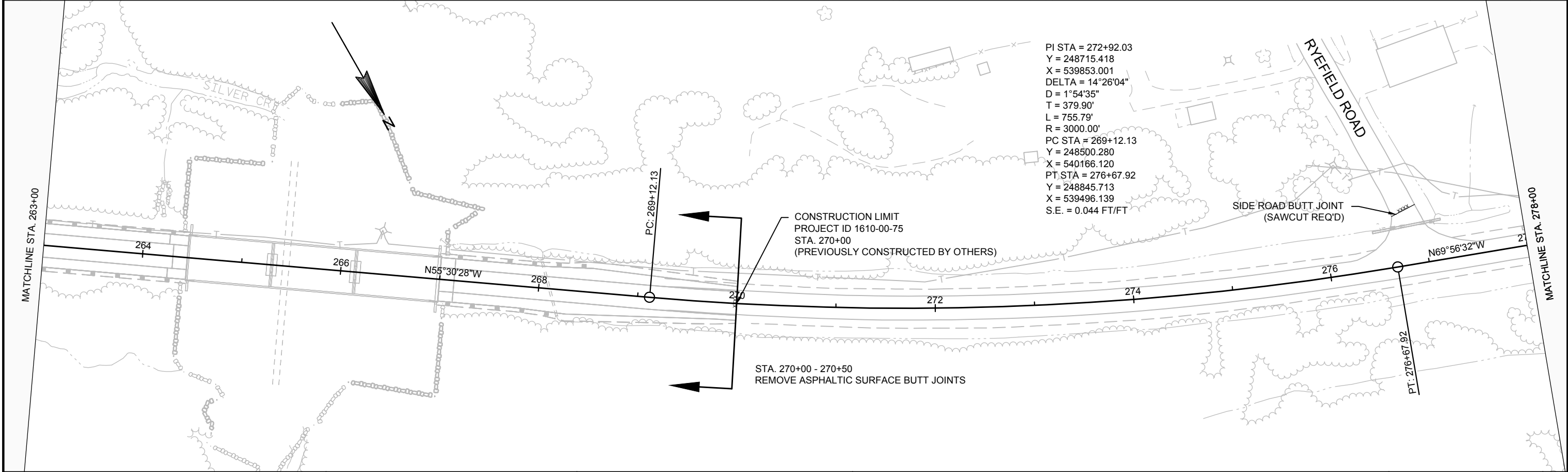
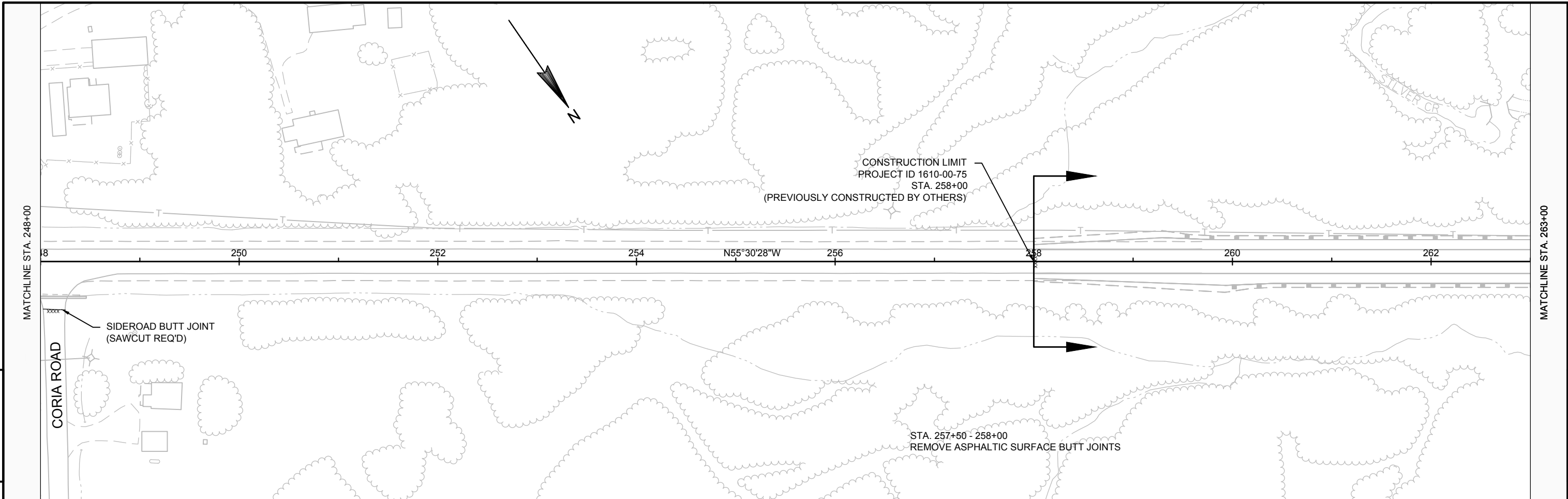
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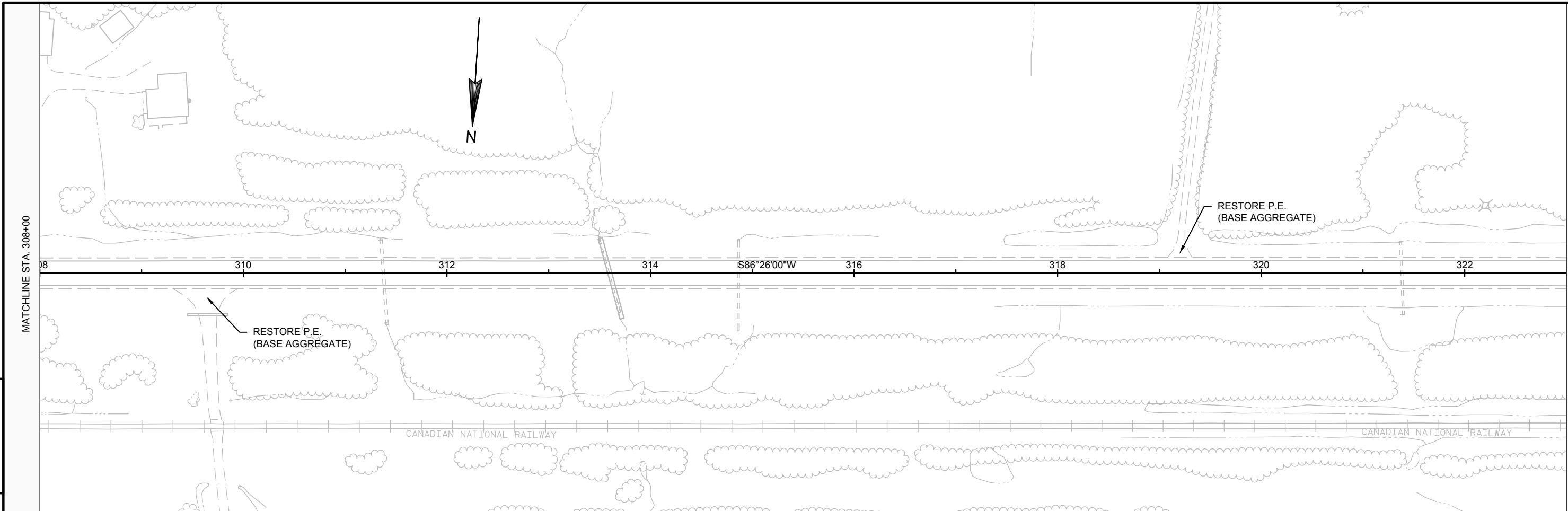


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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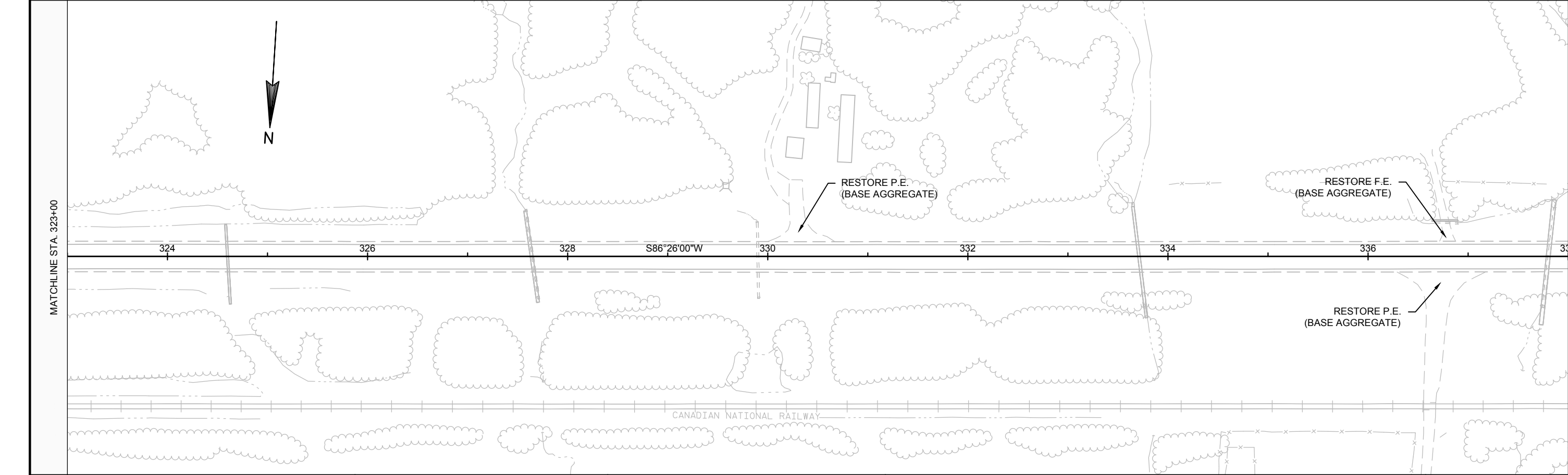


PROJECT NO: 1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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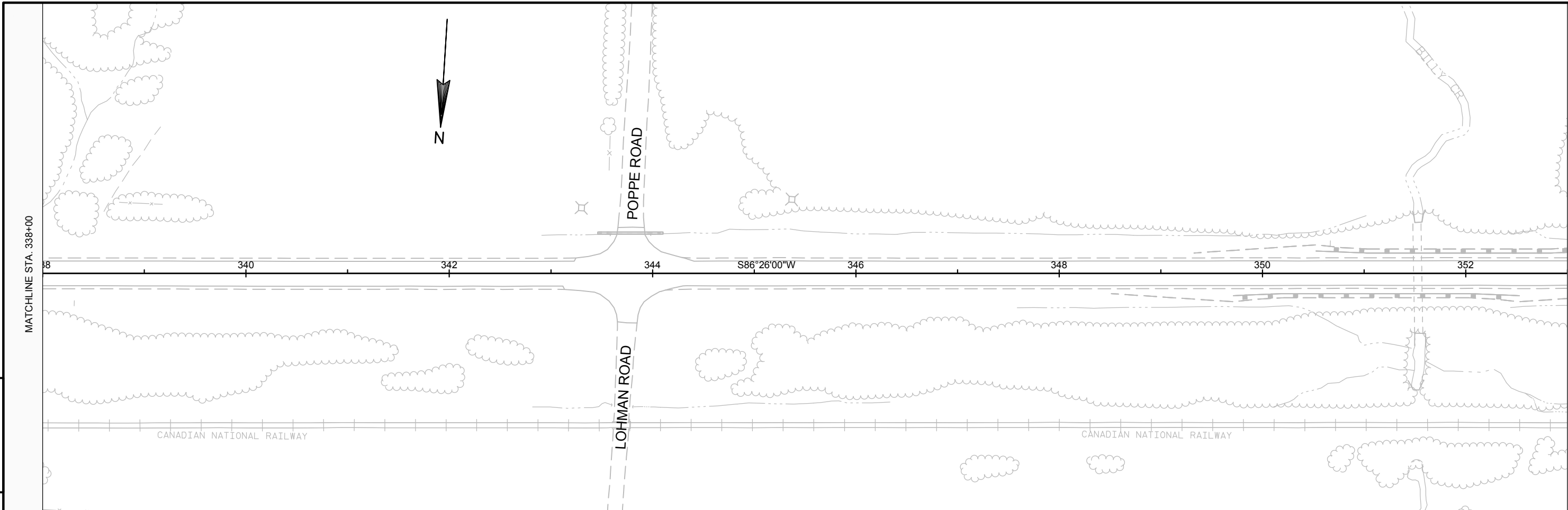


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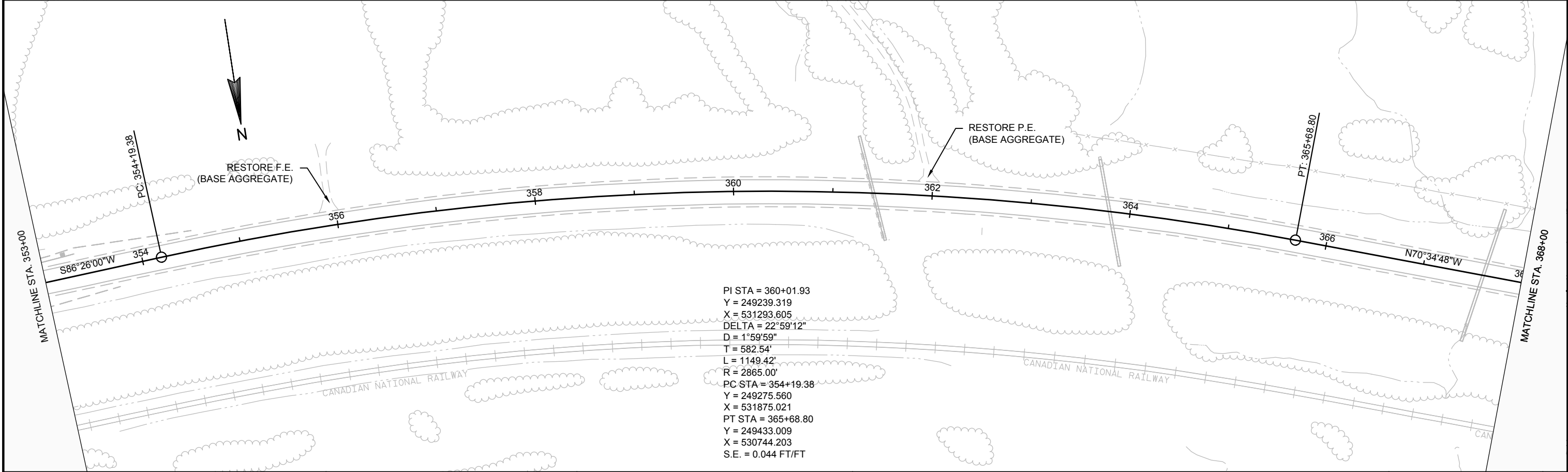


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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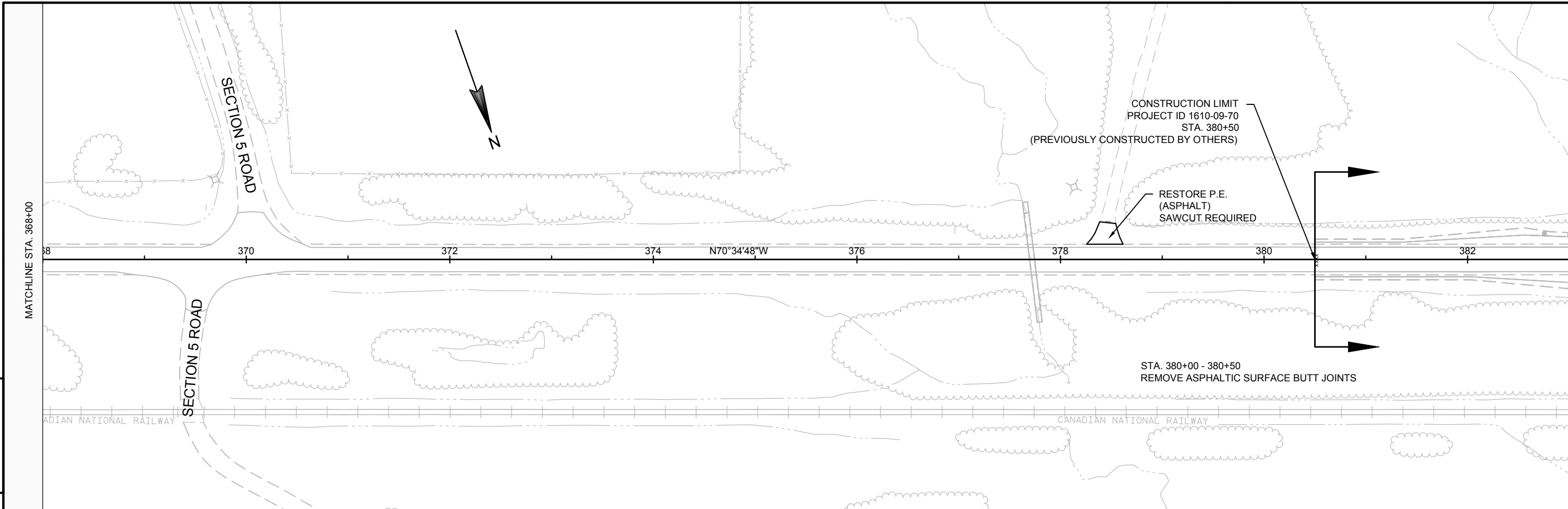
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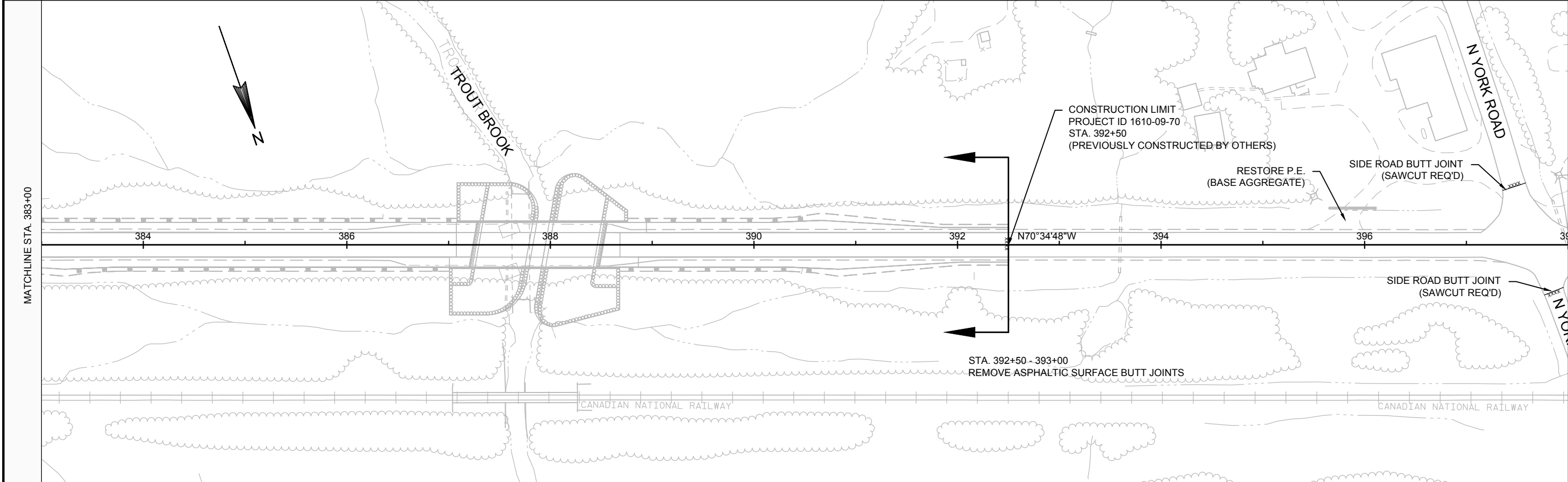
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X = 531293.605
DELTA = 22°59'12"
D = 1°59'59"
T = 582.54'
L = 1149.42'
R = 2865.00'
PC STA = 354+19.38
Y = 249275.560
X = 531875.021
PT STA = 365+68.80
Y = 249433.009
X = 530744.203
S.E. = 0.044 FT/FT

PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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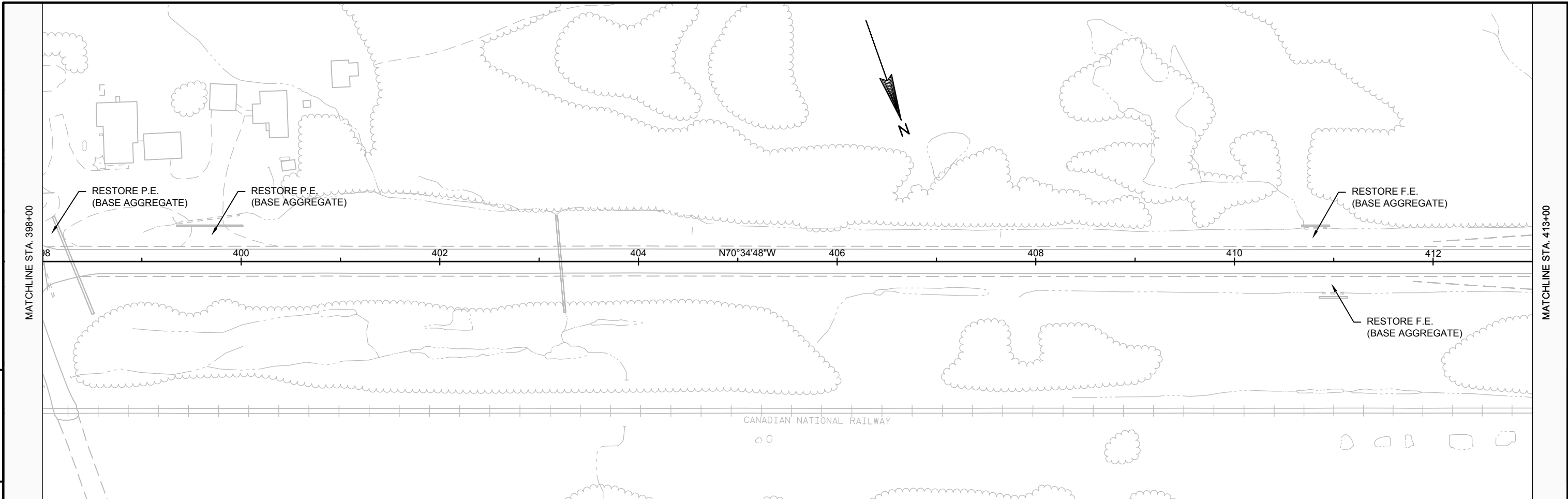


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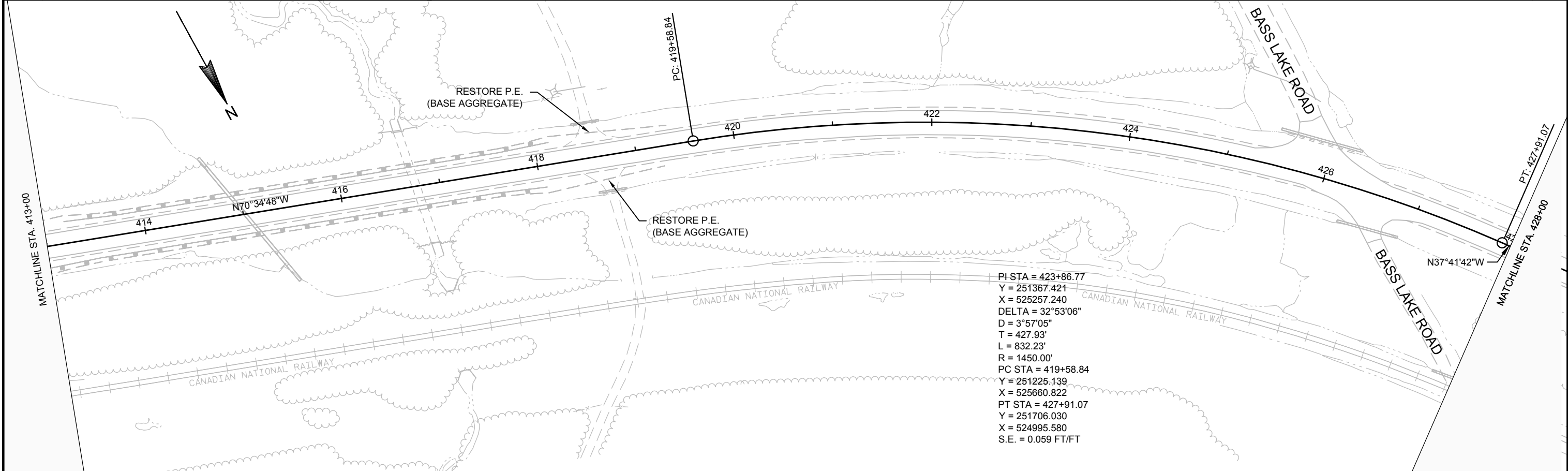


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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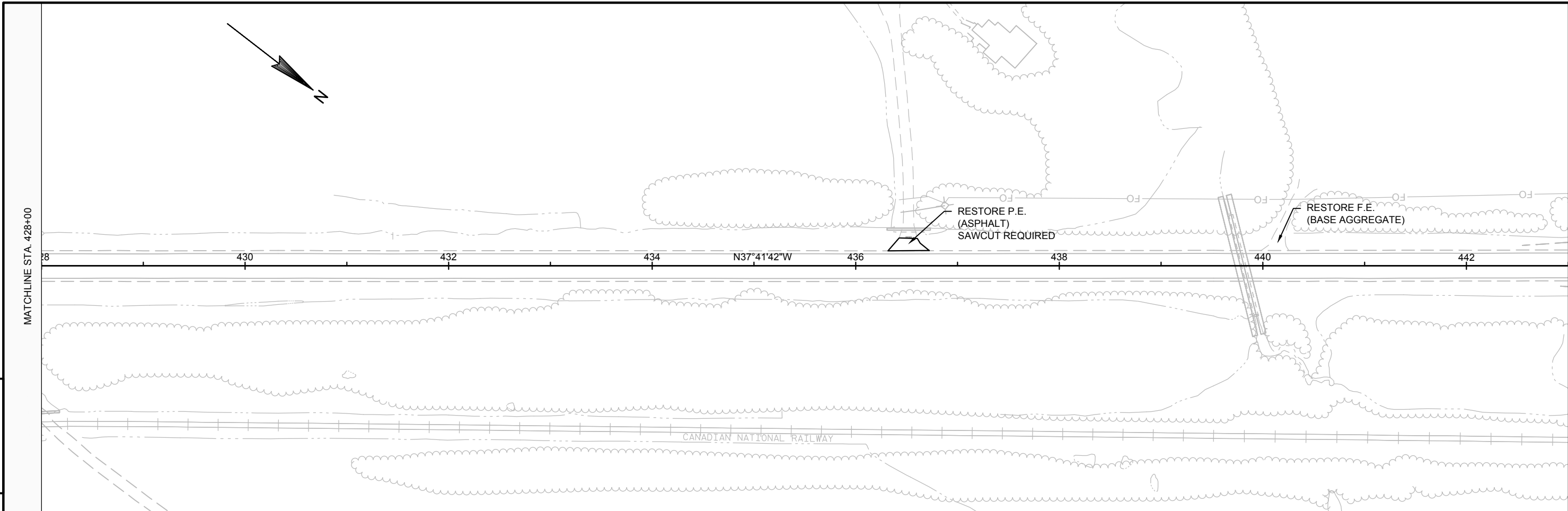


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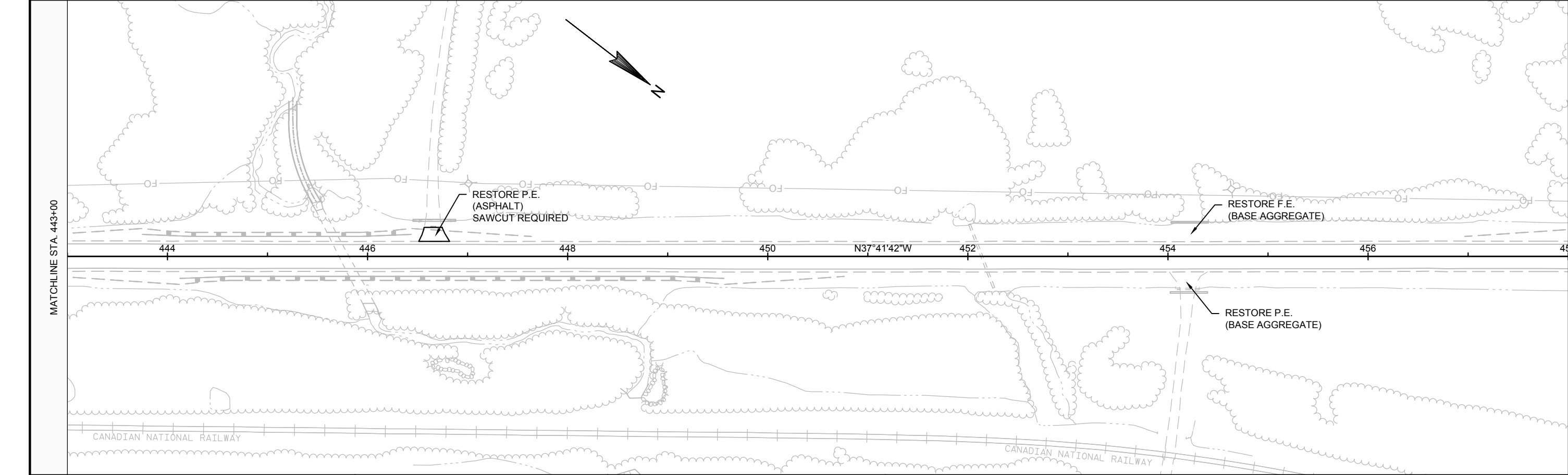


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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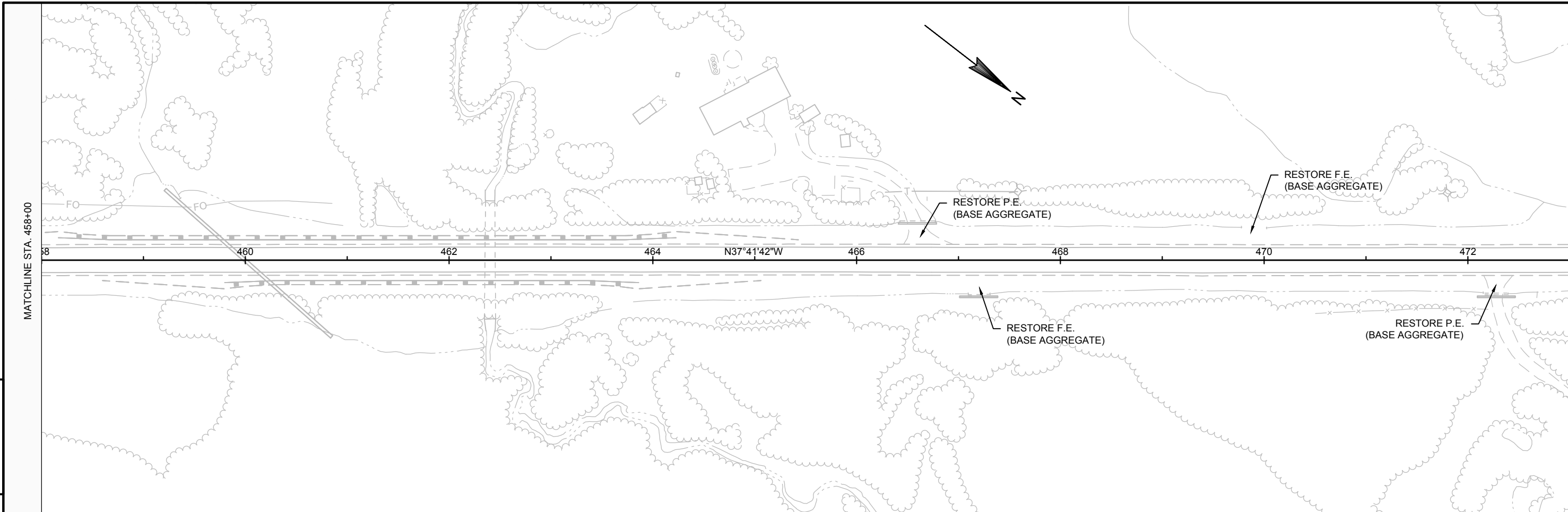


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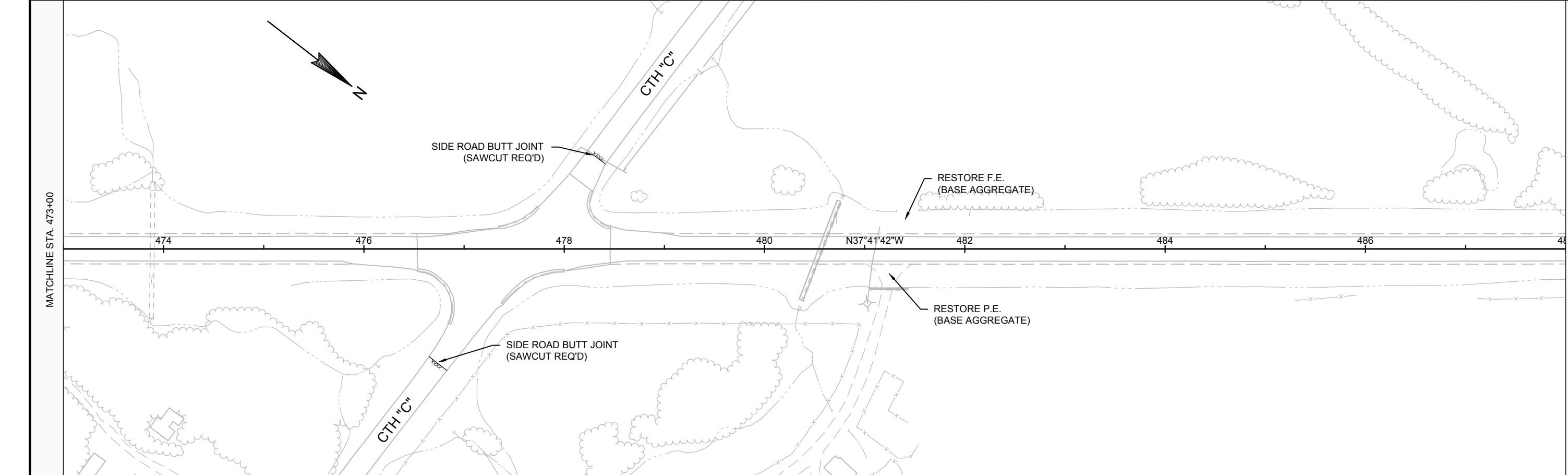


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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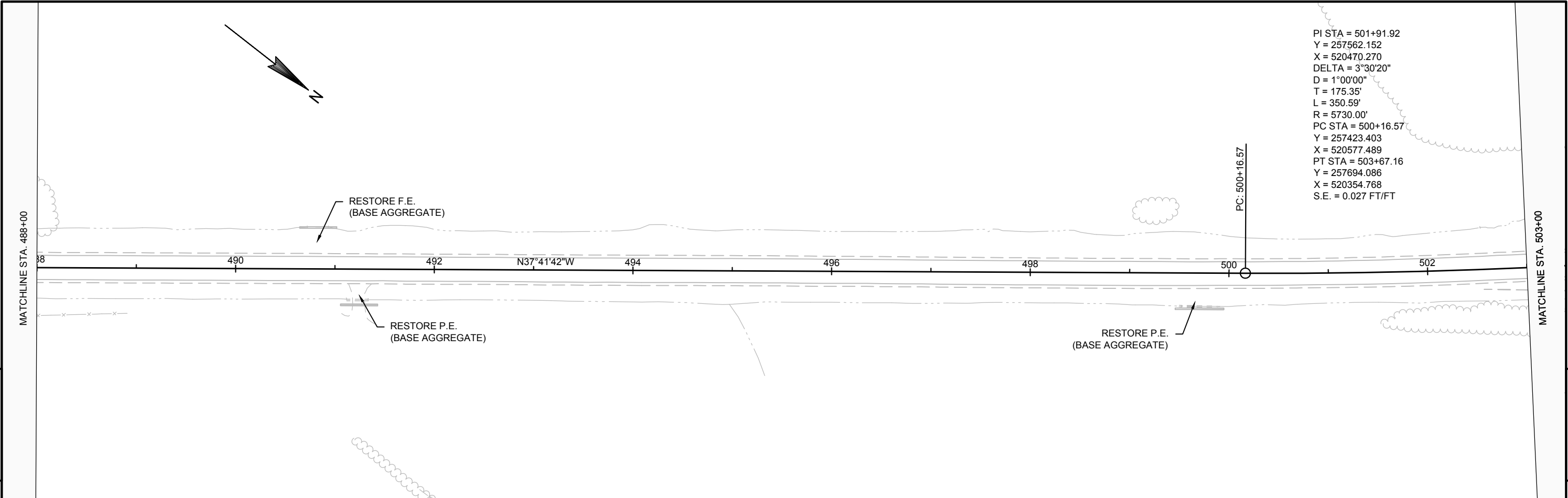


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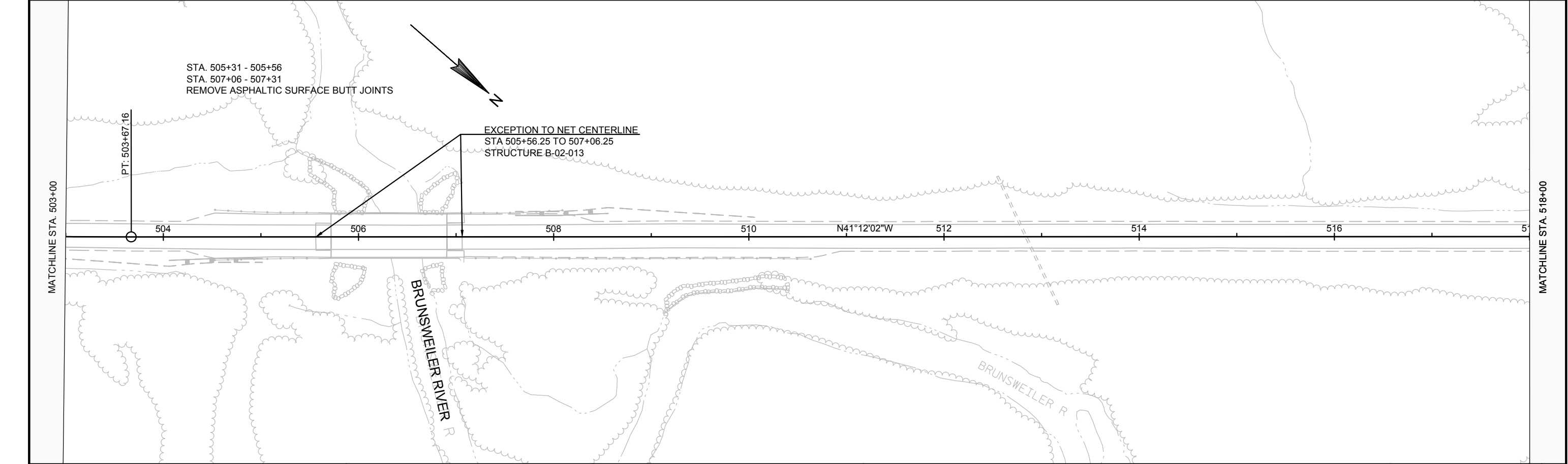


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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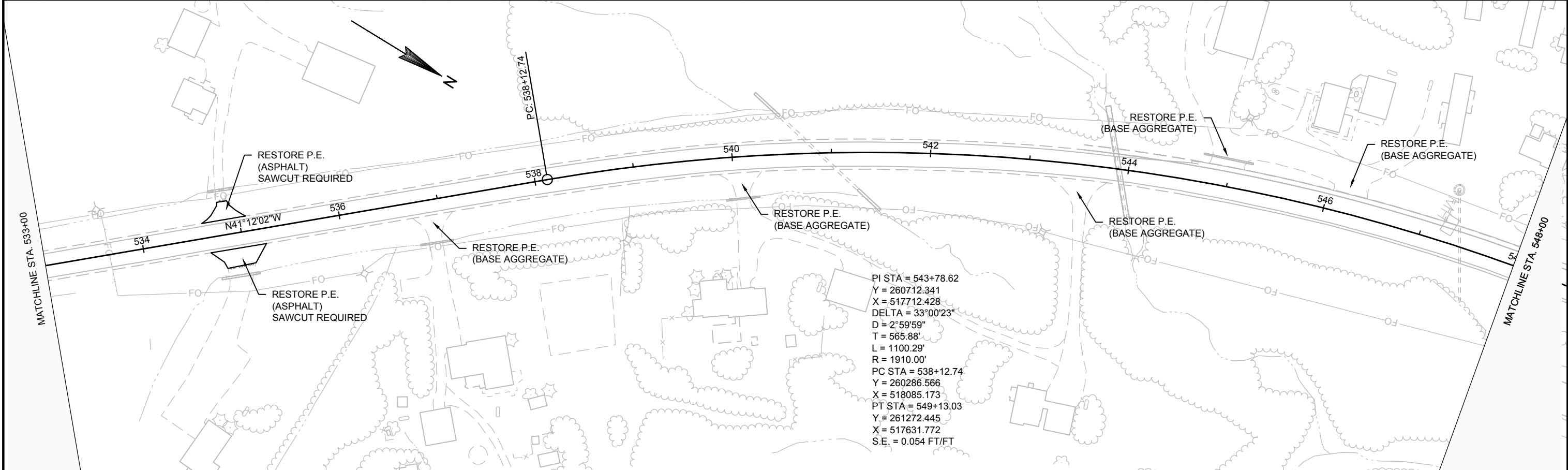
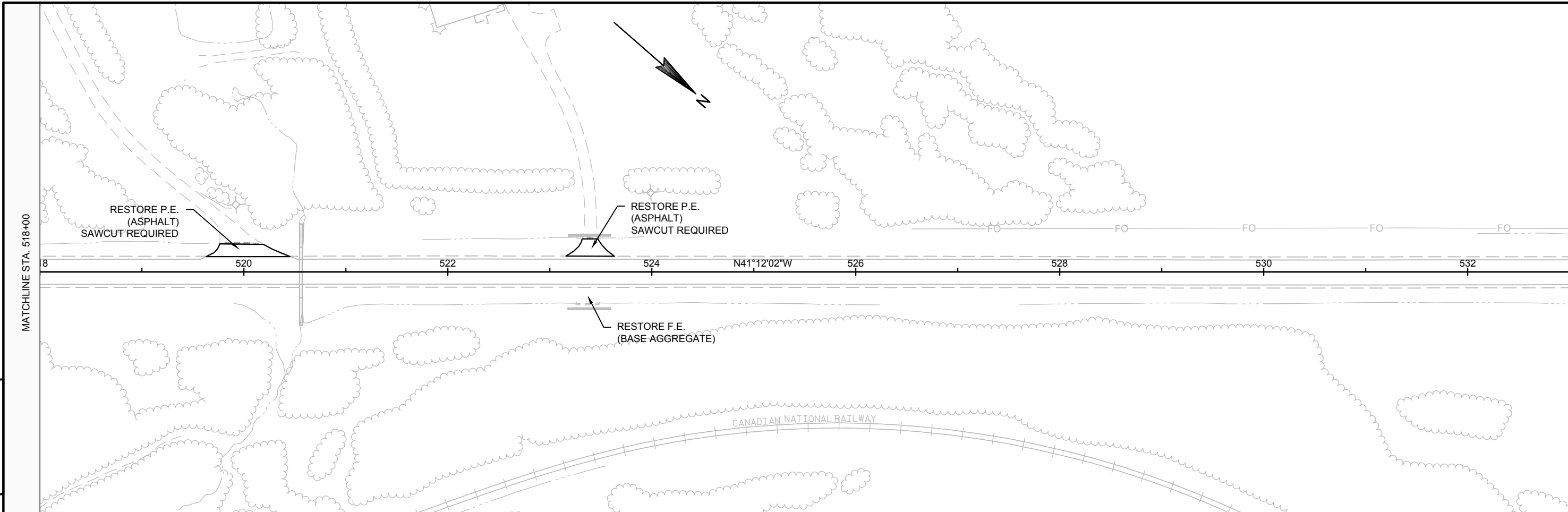
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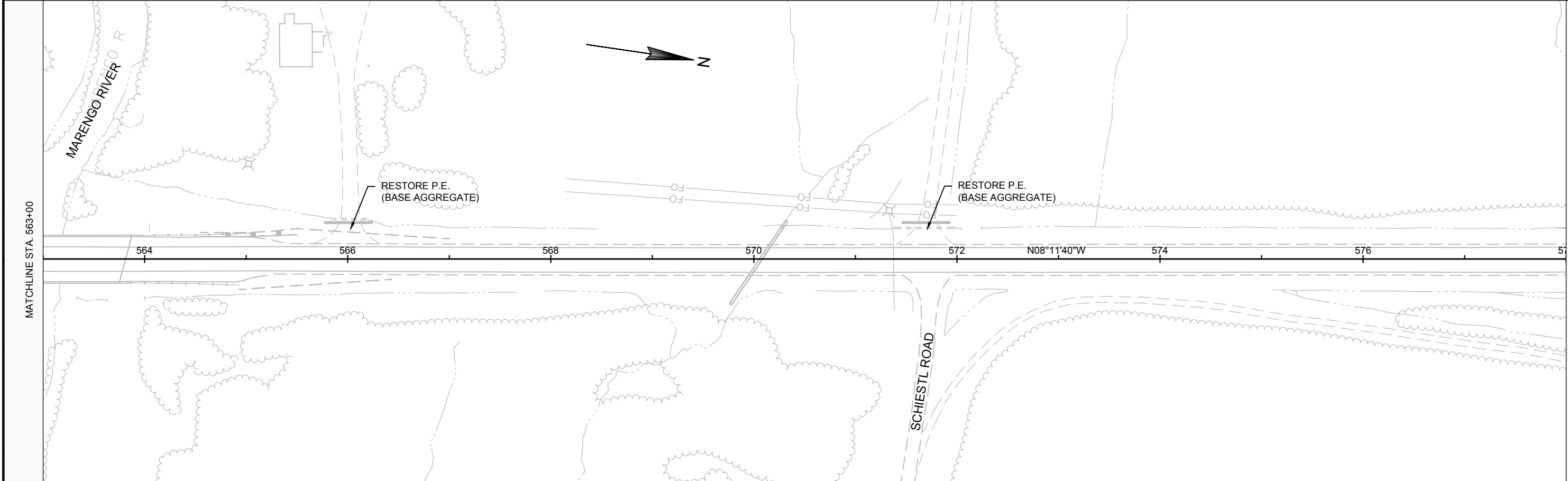
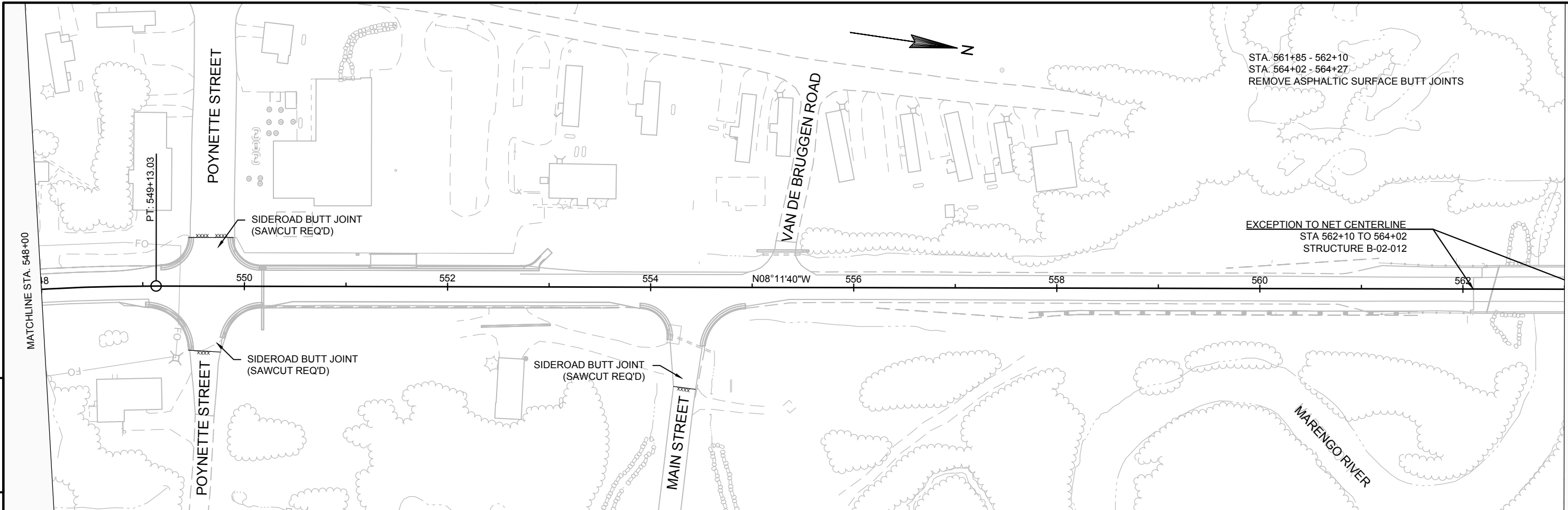


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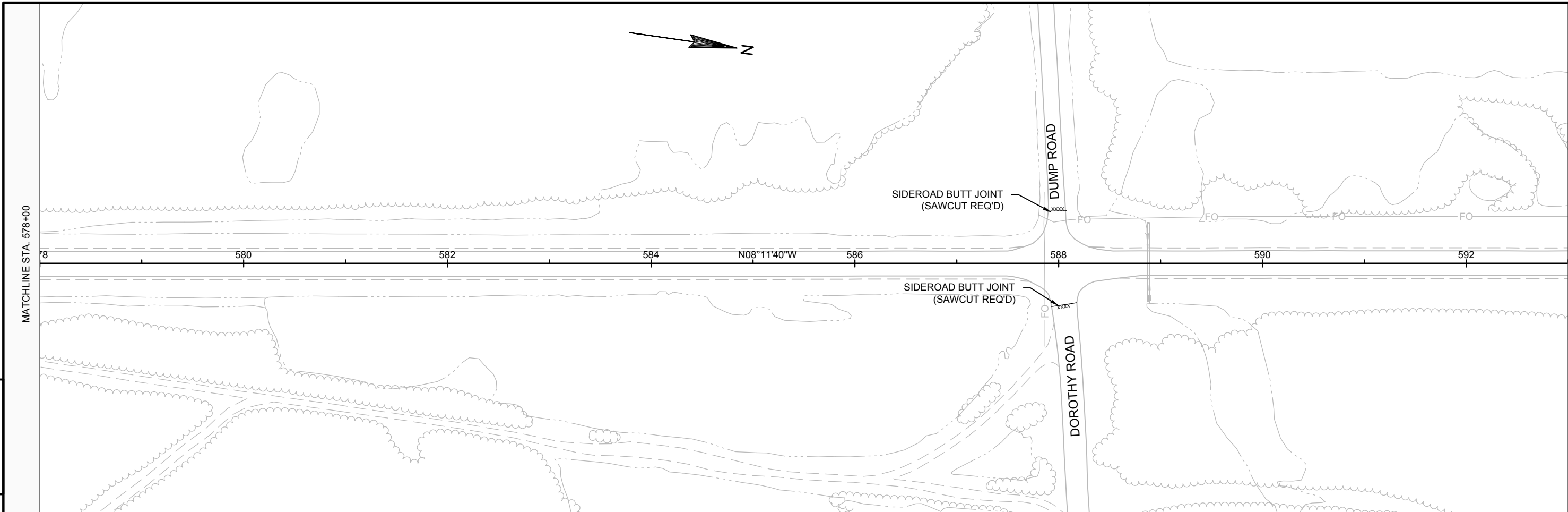
PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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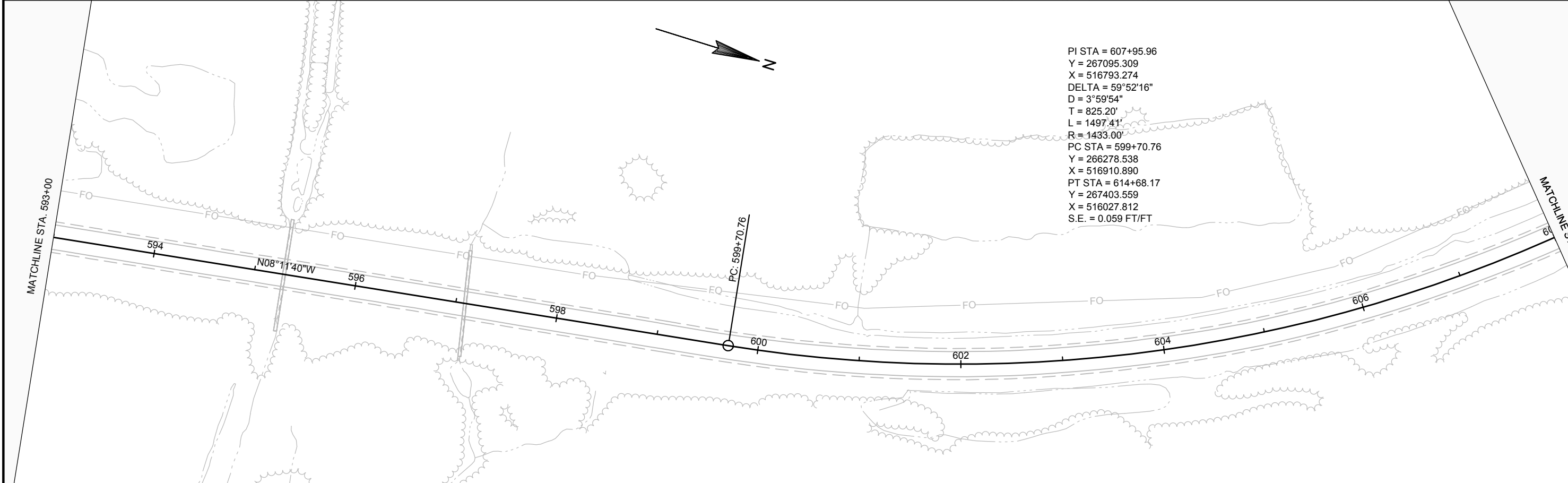


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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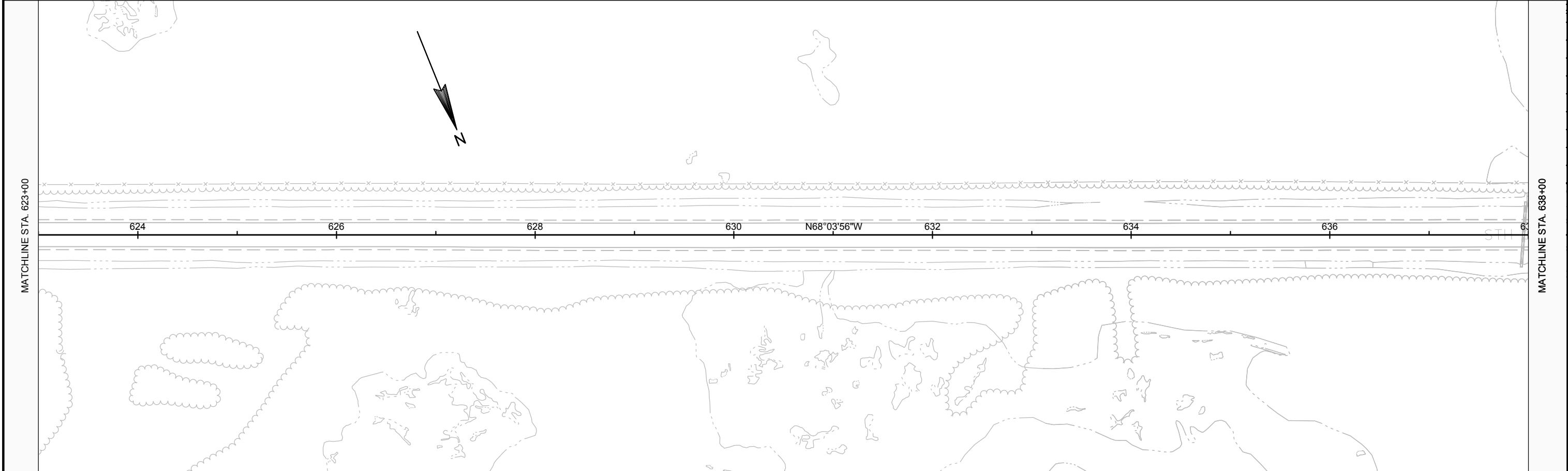
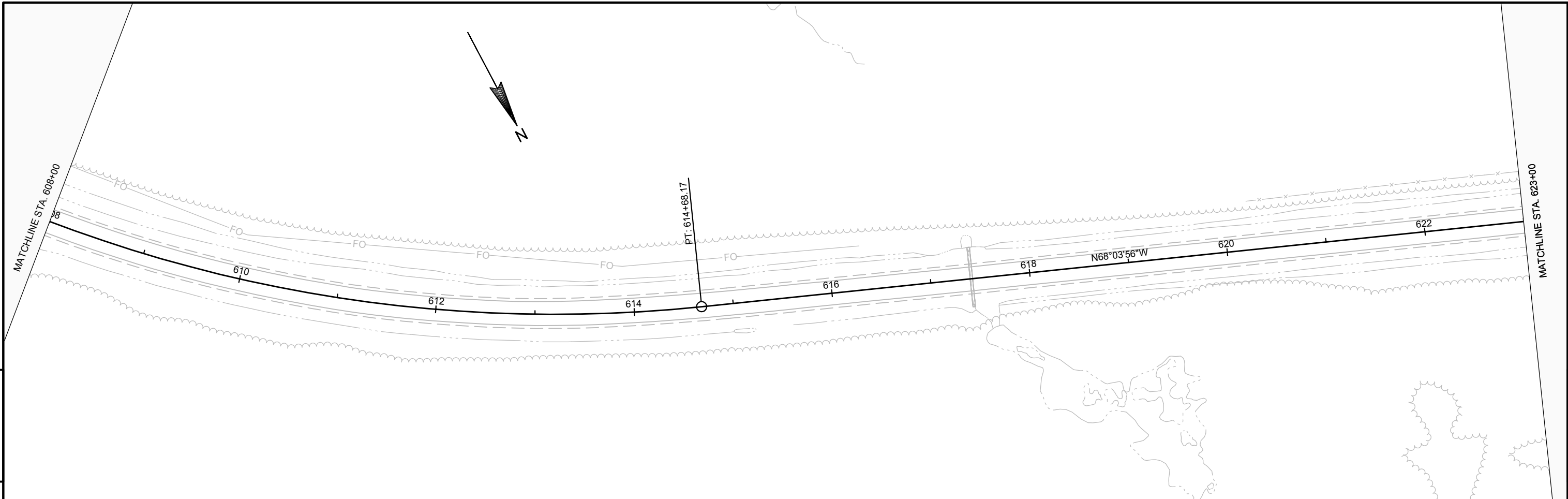
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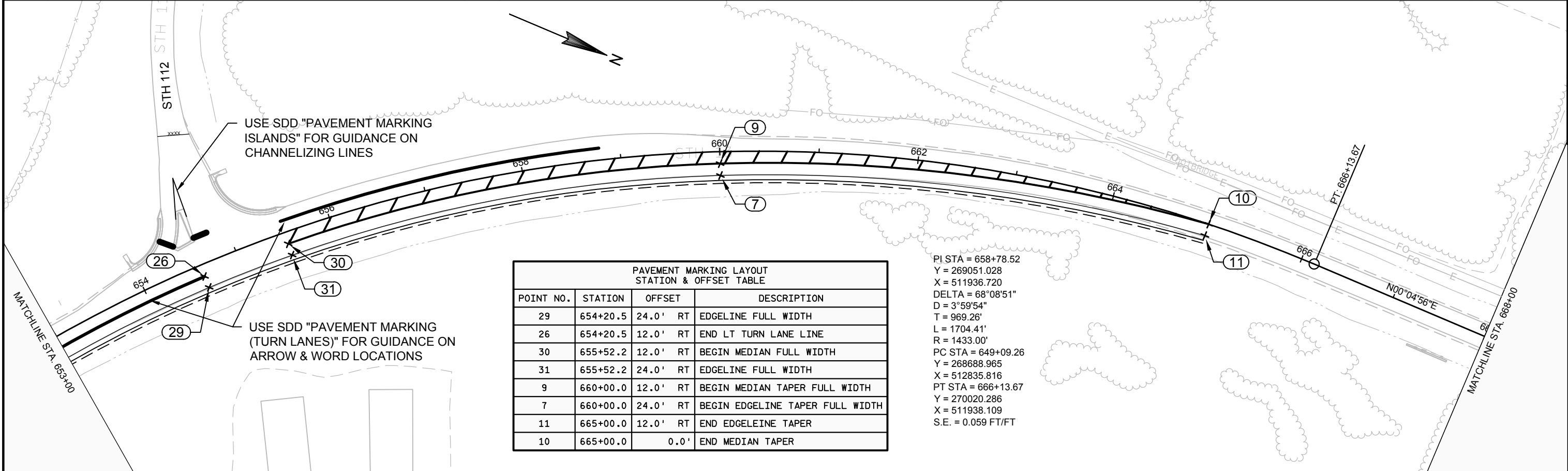
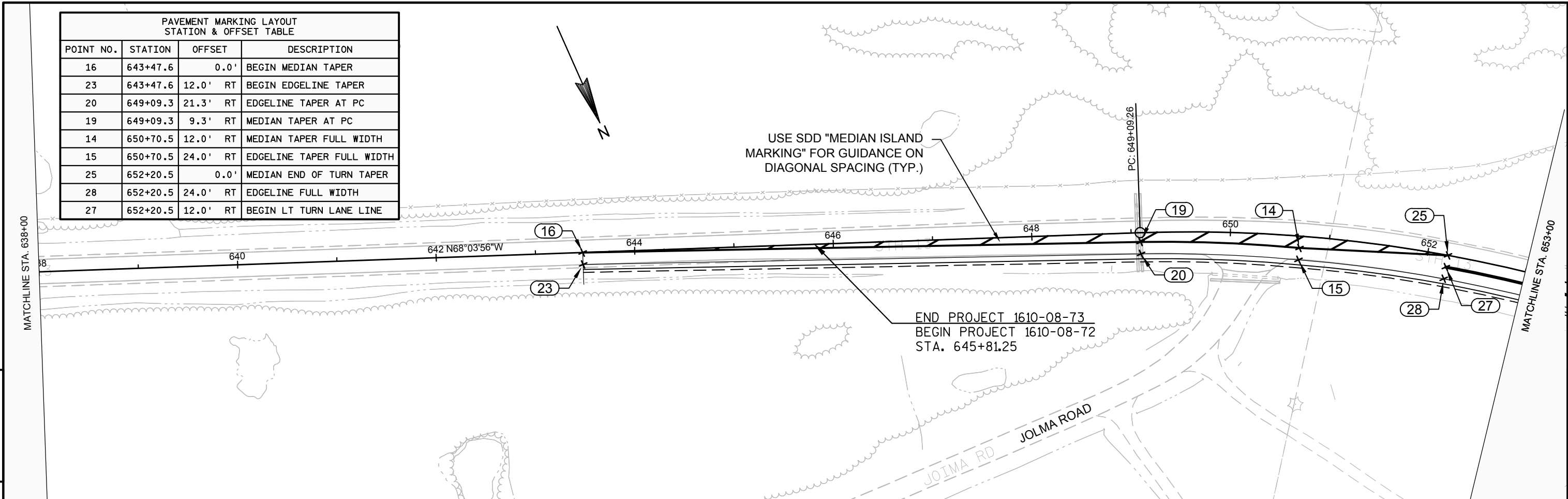
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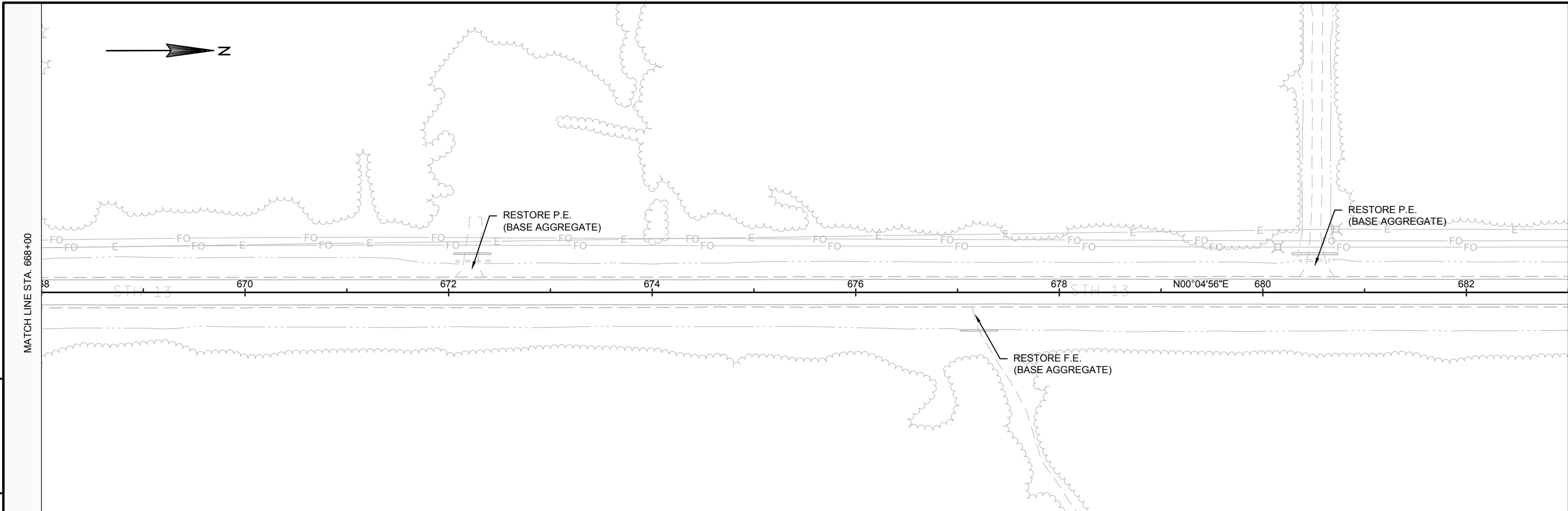
PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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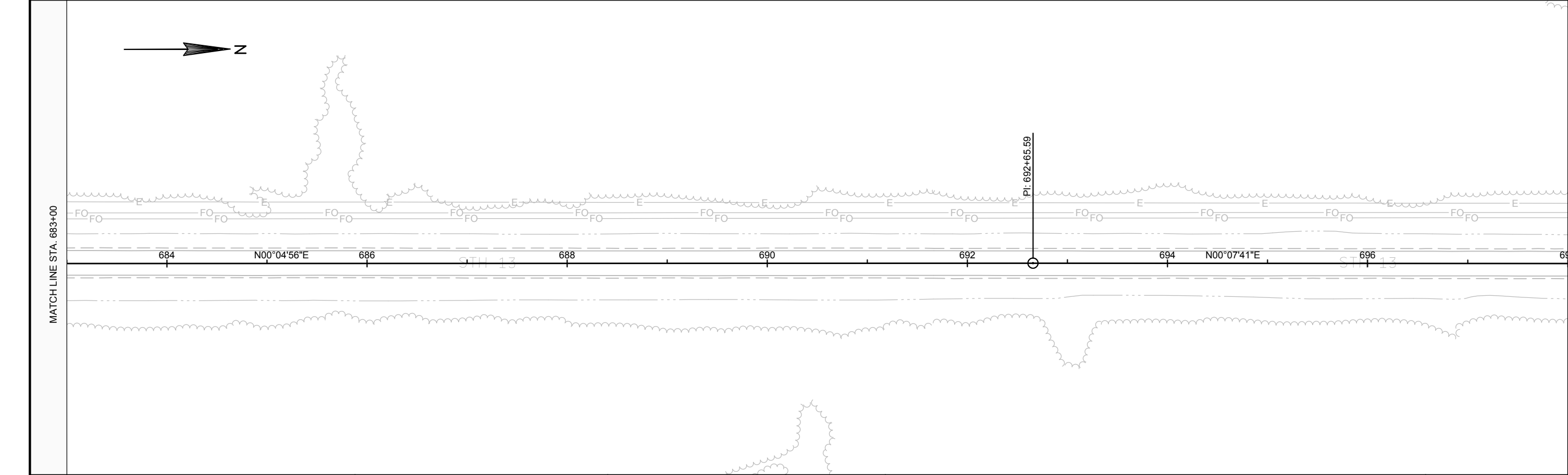
PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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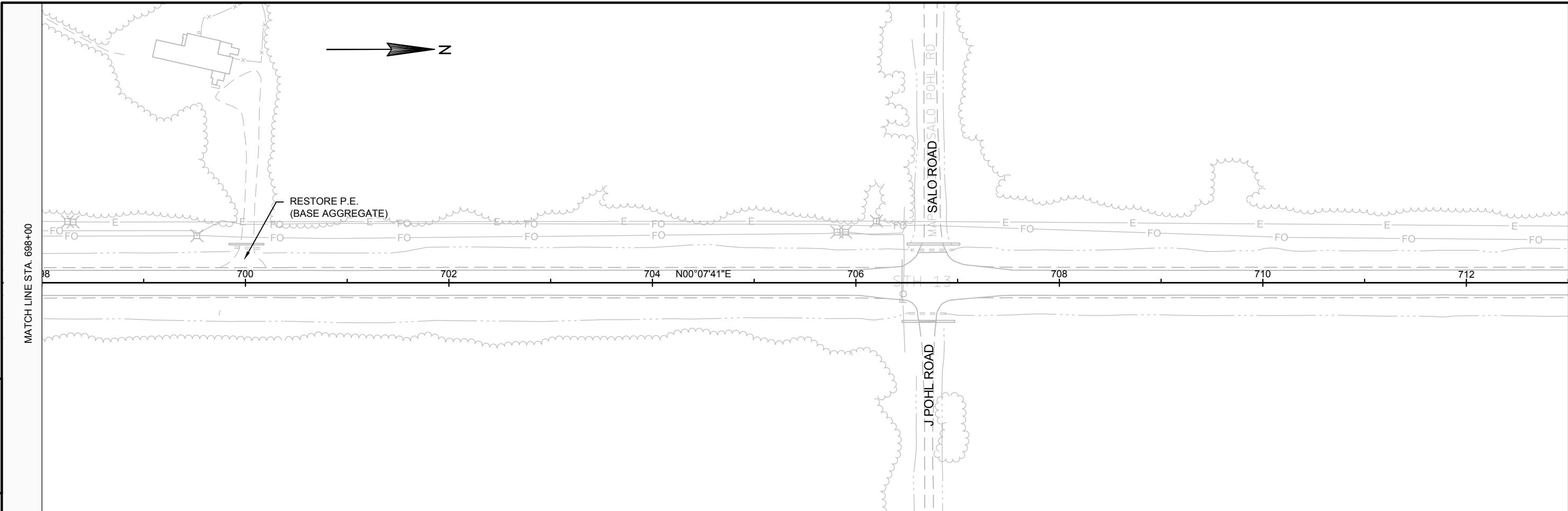


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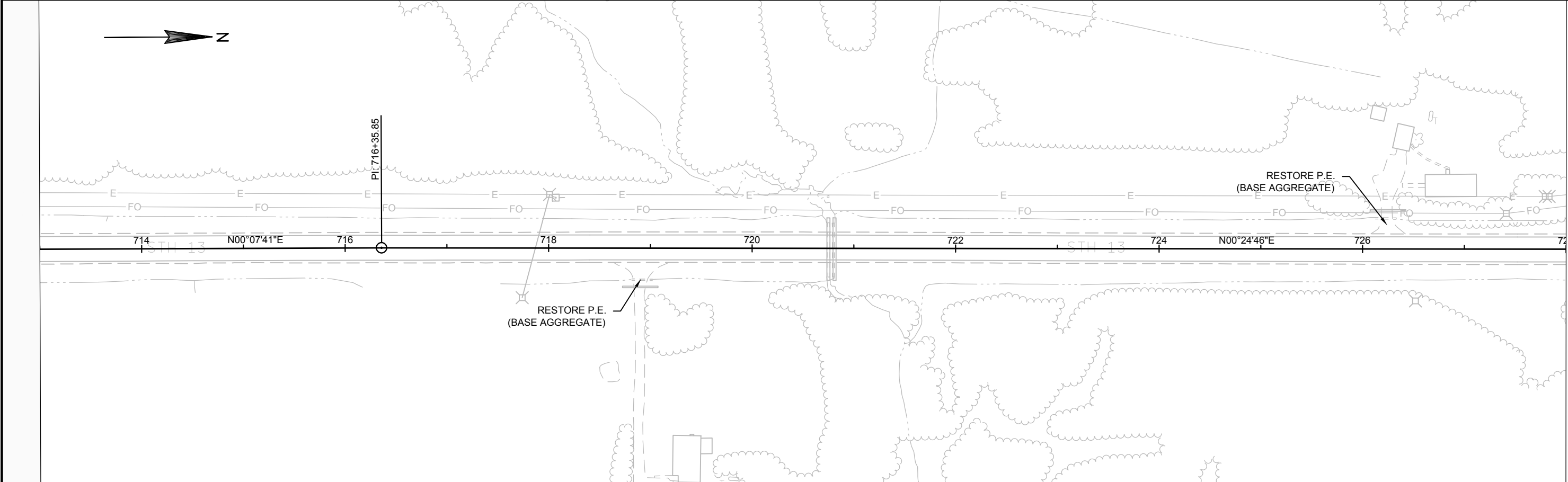


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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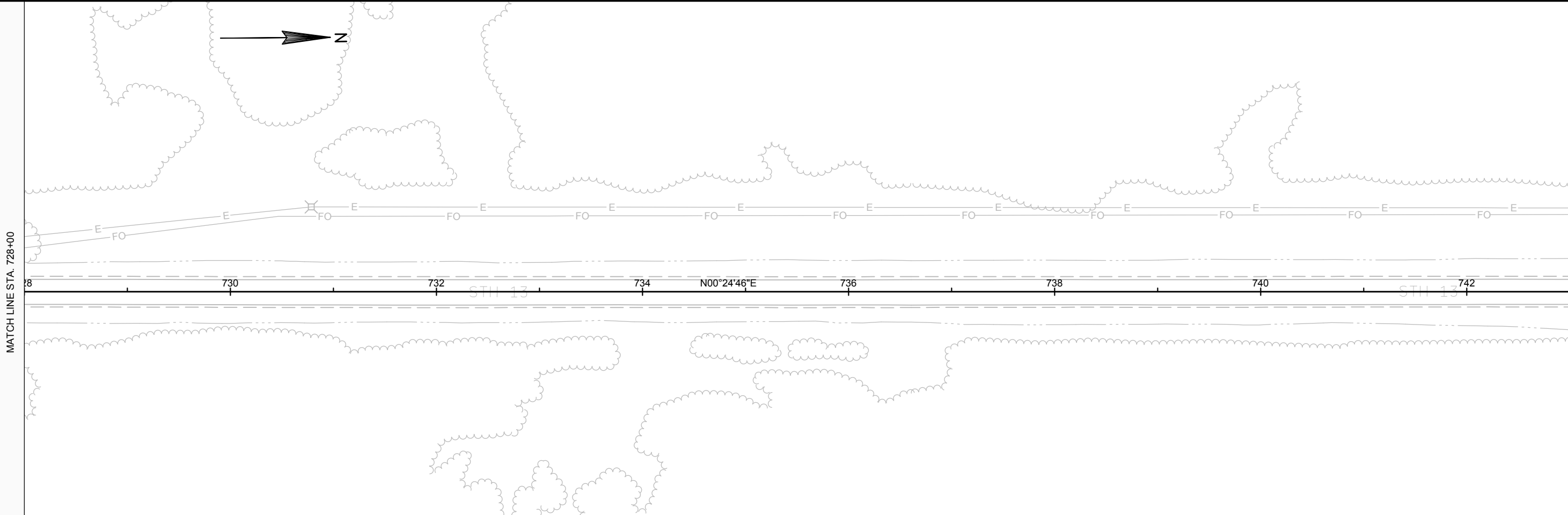


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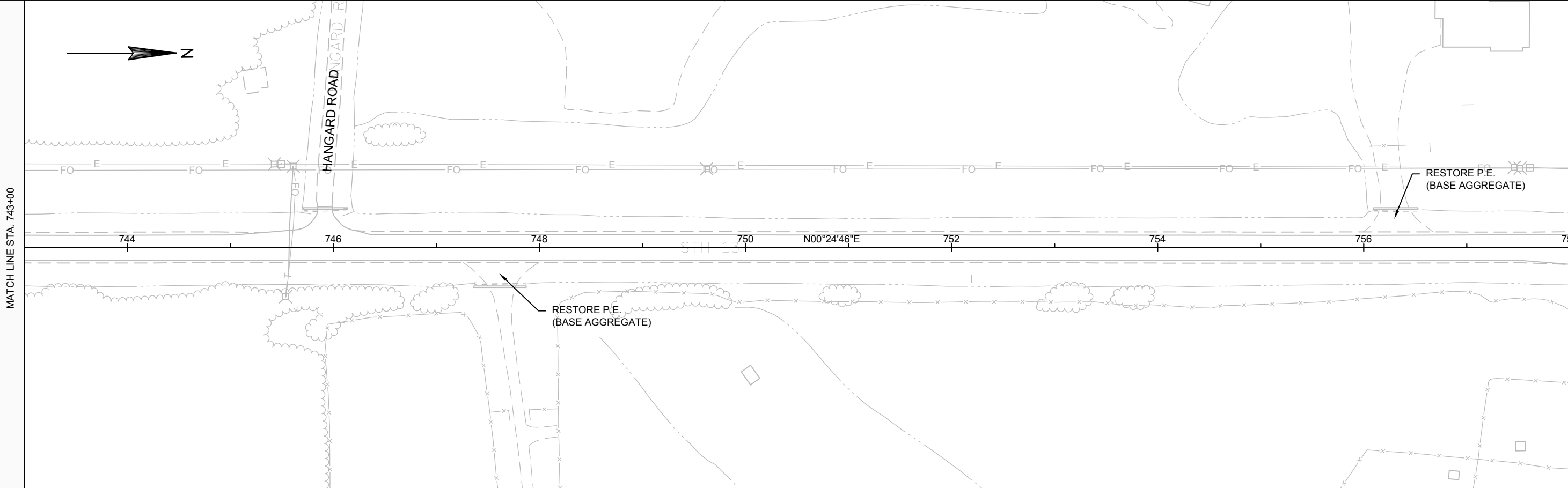


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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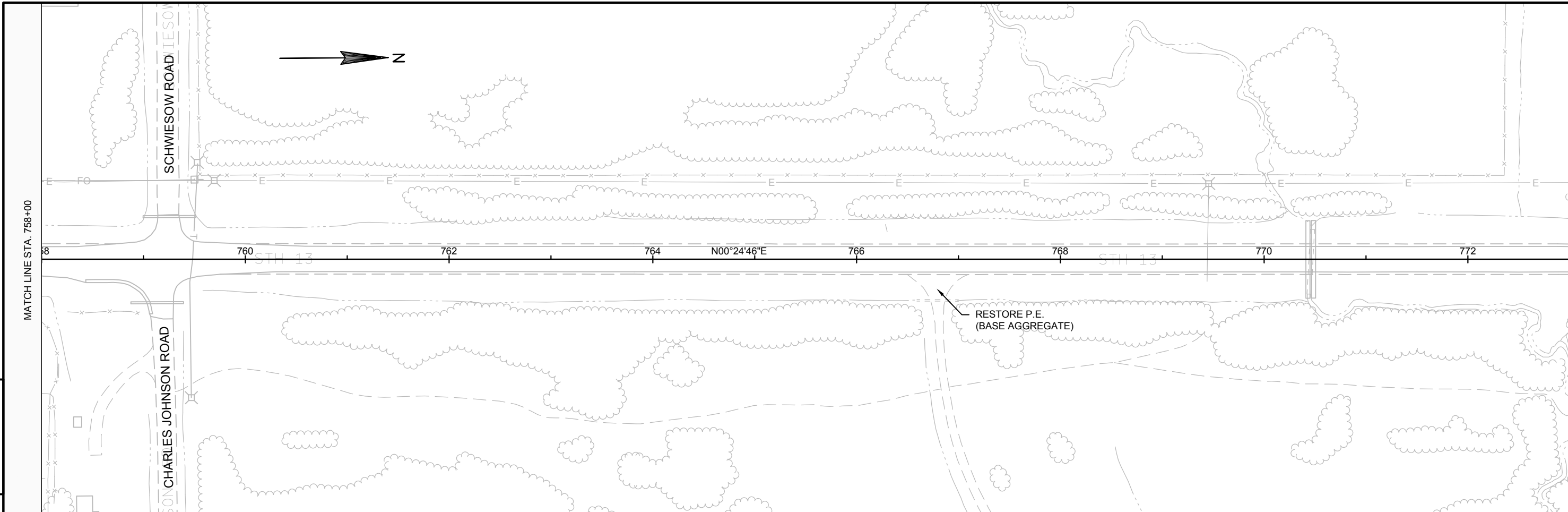
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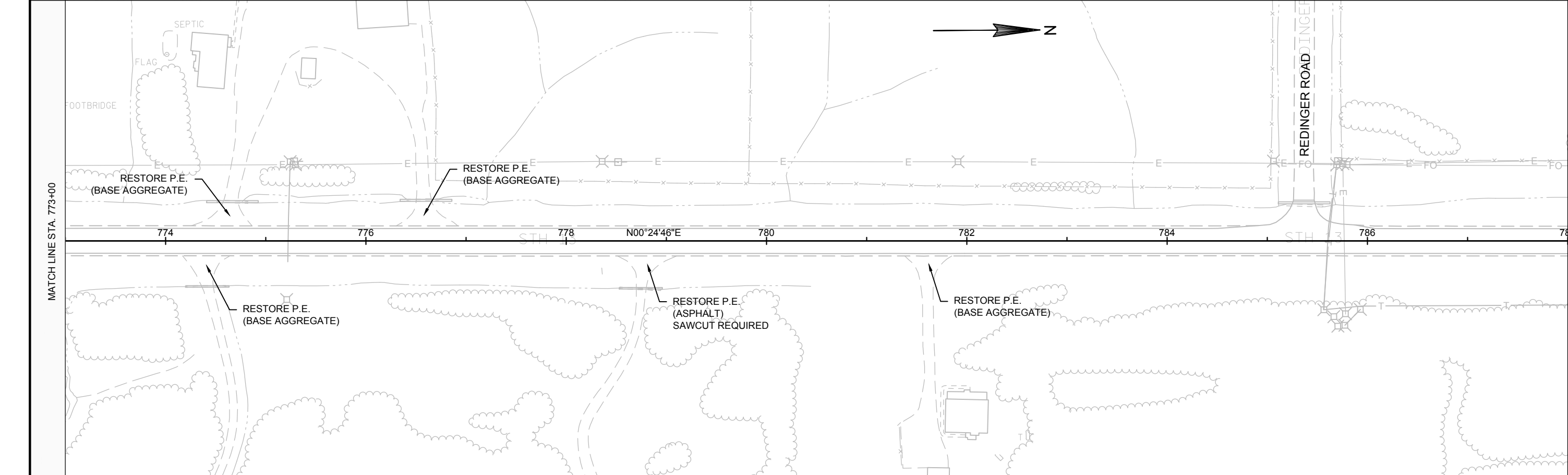
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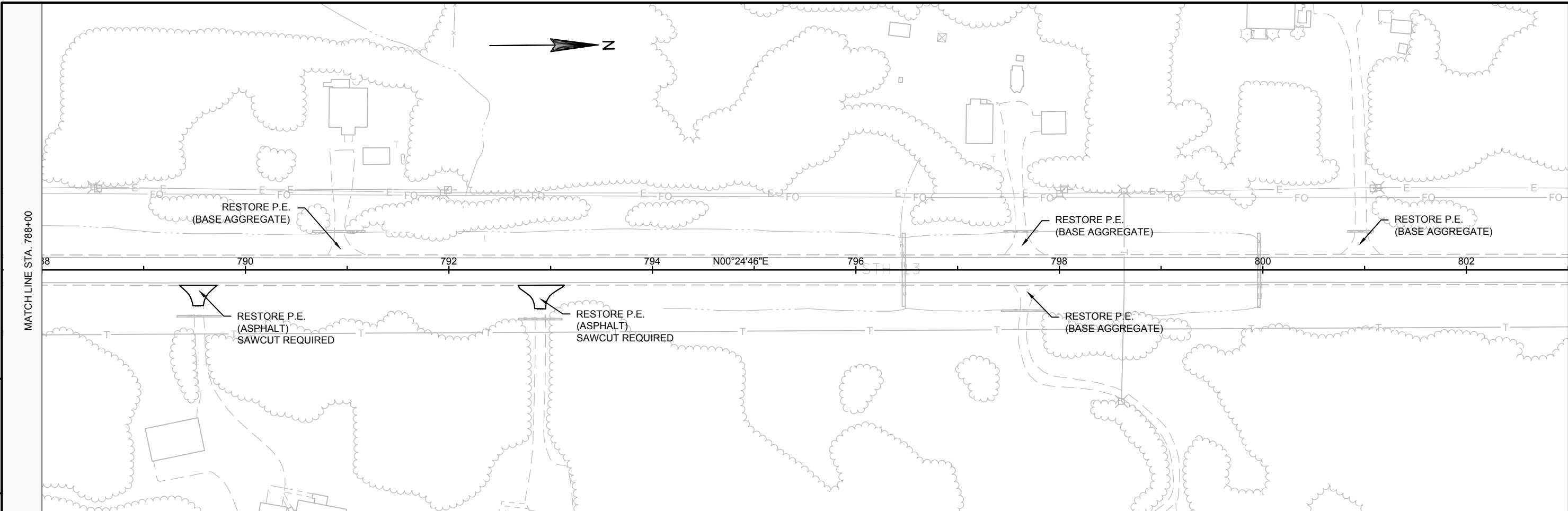


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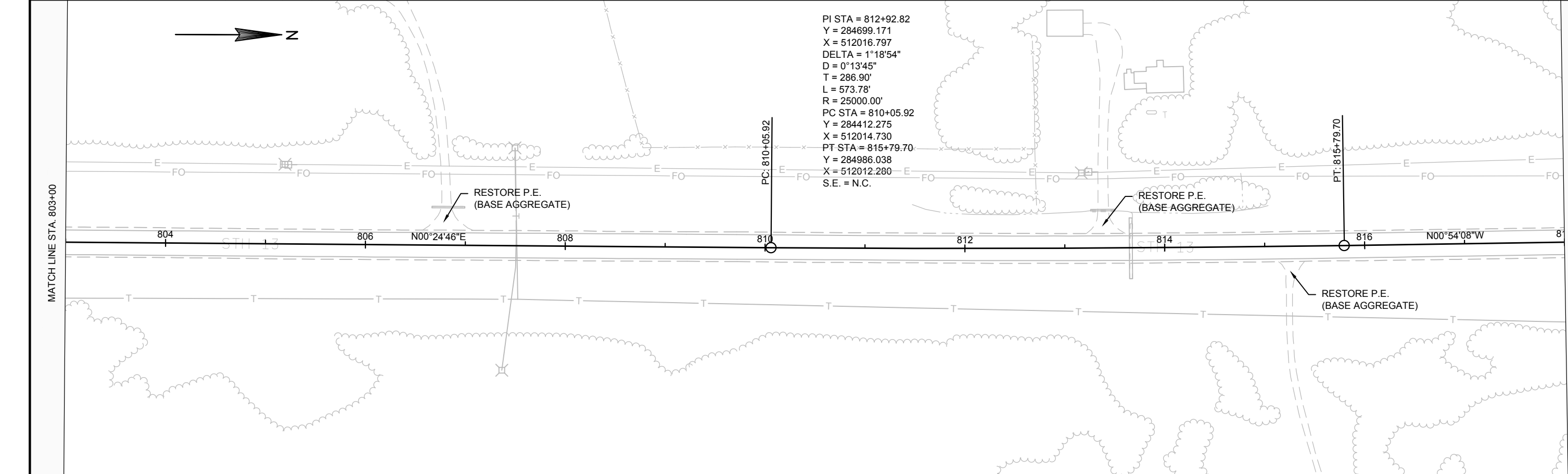


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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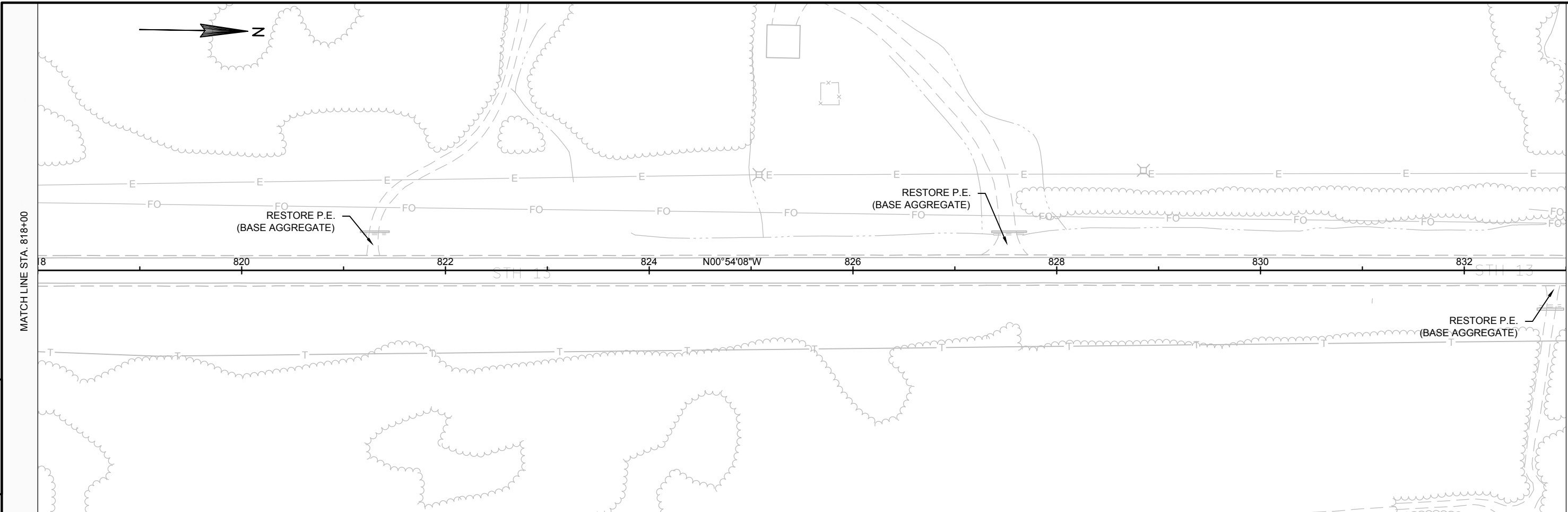


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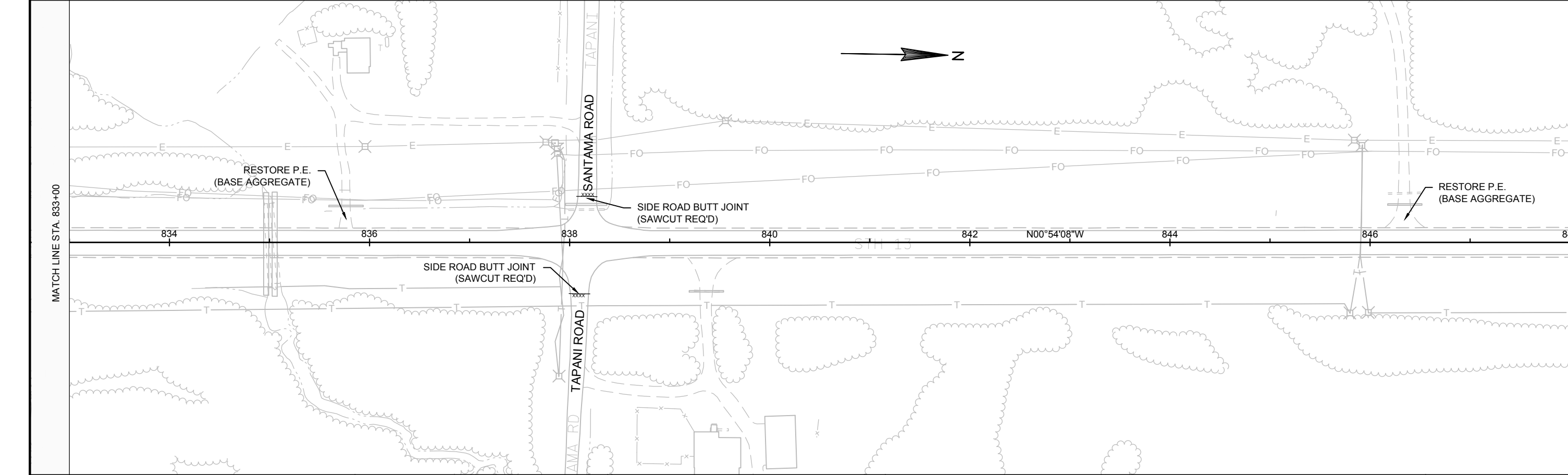


PROJECT NO:1610-08-72,73,79,82	HWY:STH 13	COUNTY:ASHLAND	PLAN: STH 13	SHEET	E
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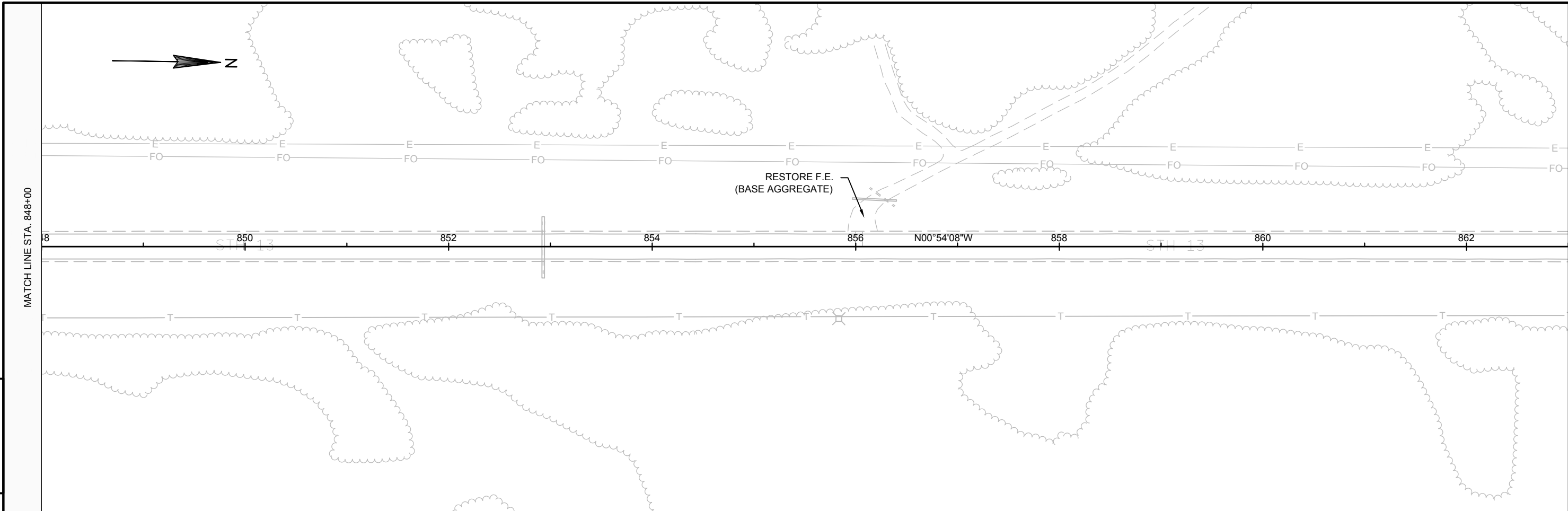


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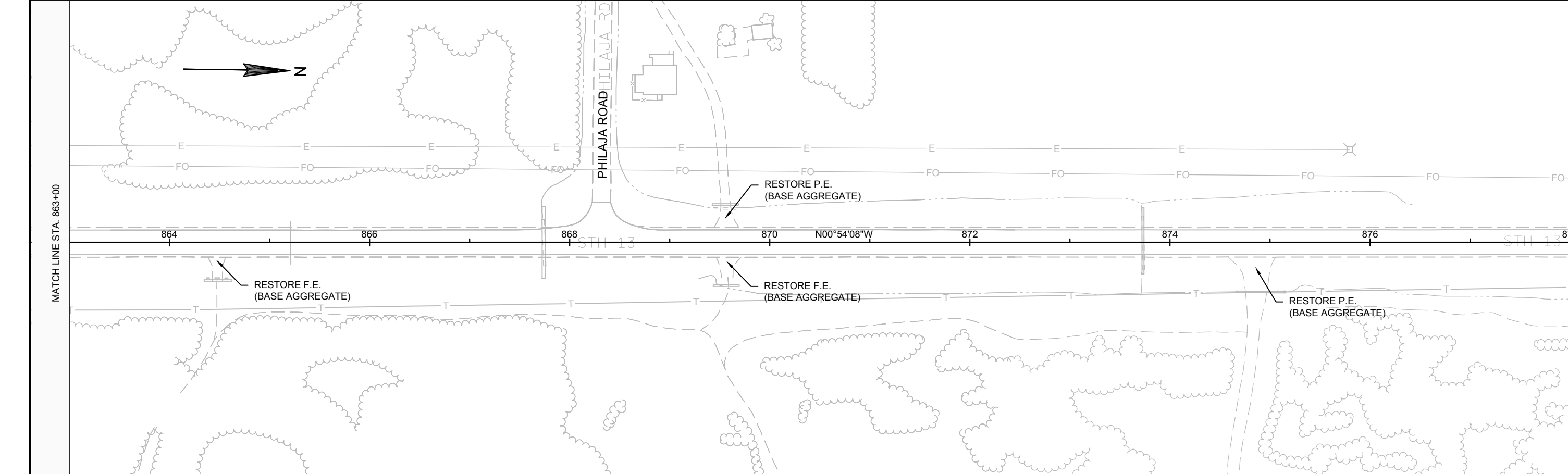


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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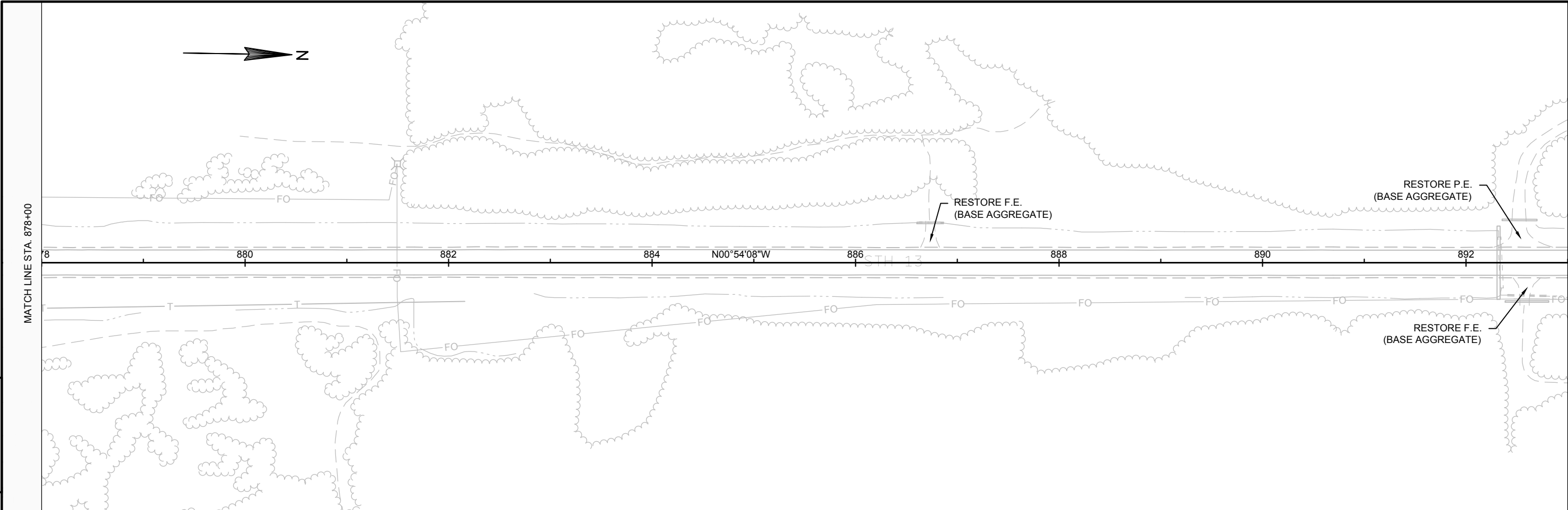


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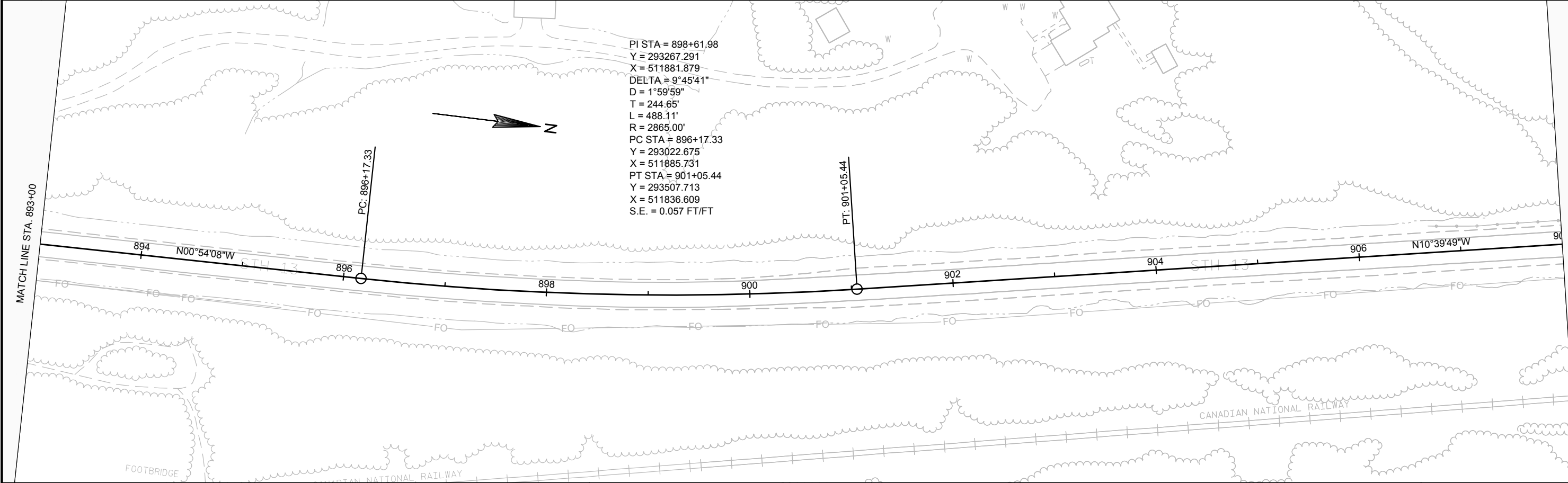


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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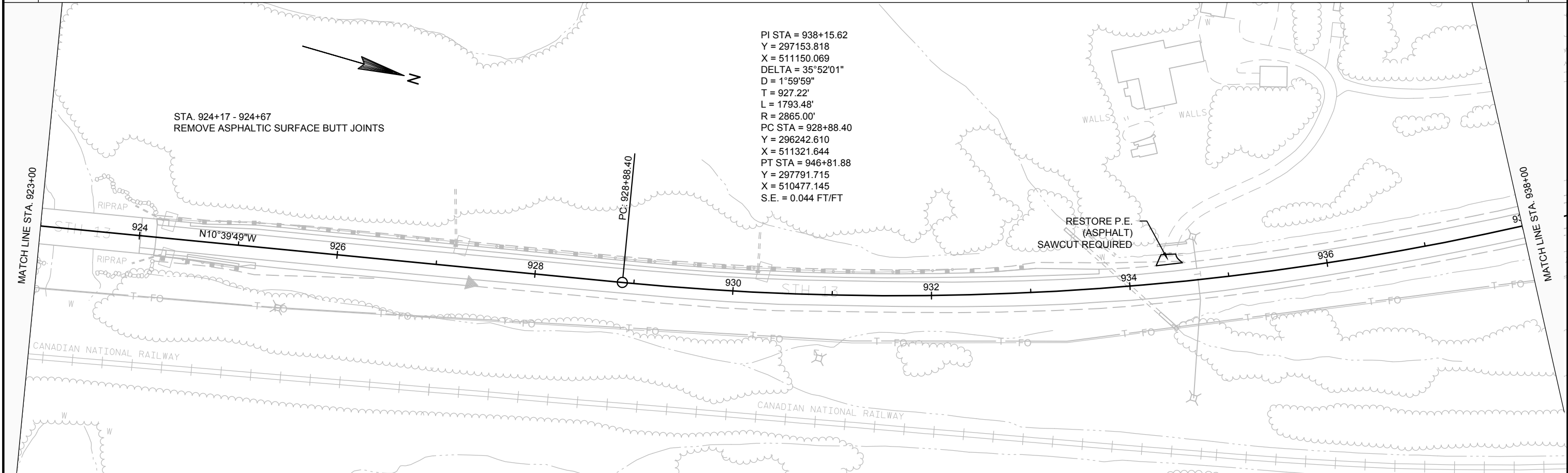
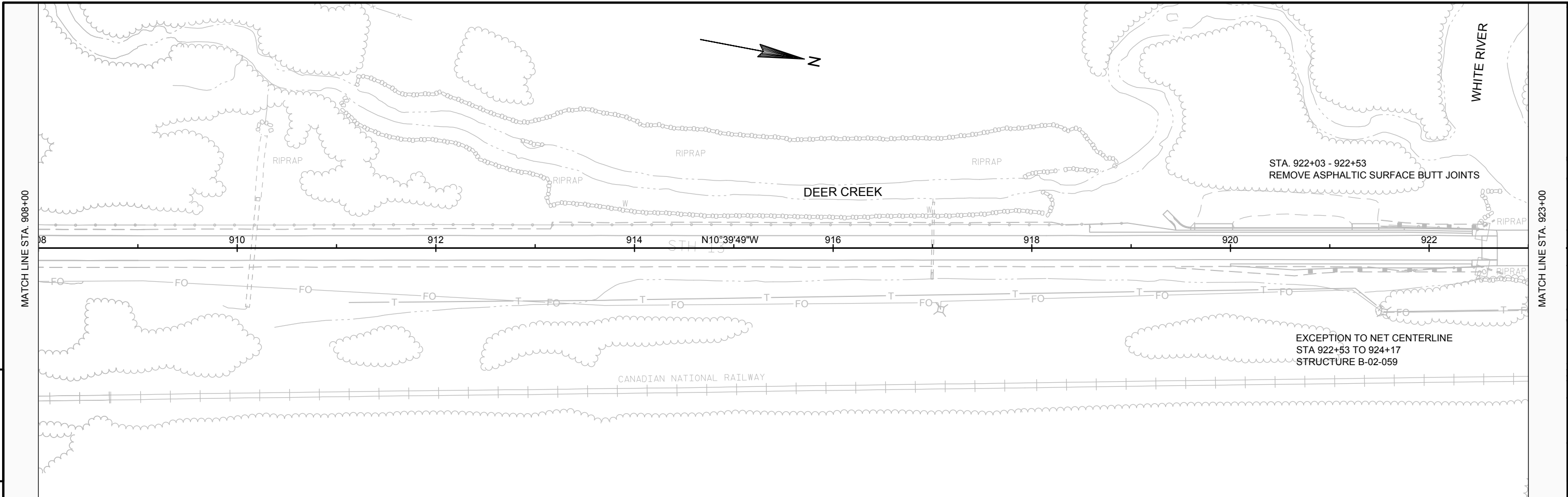
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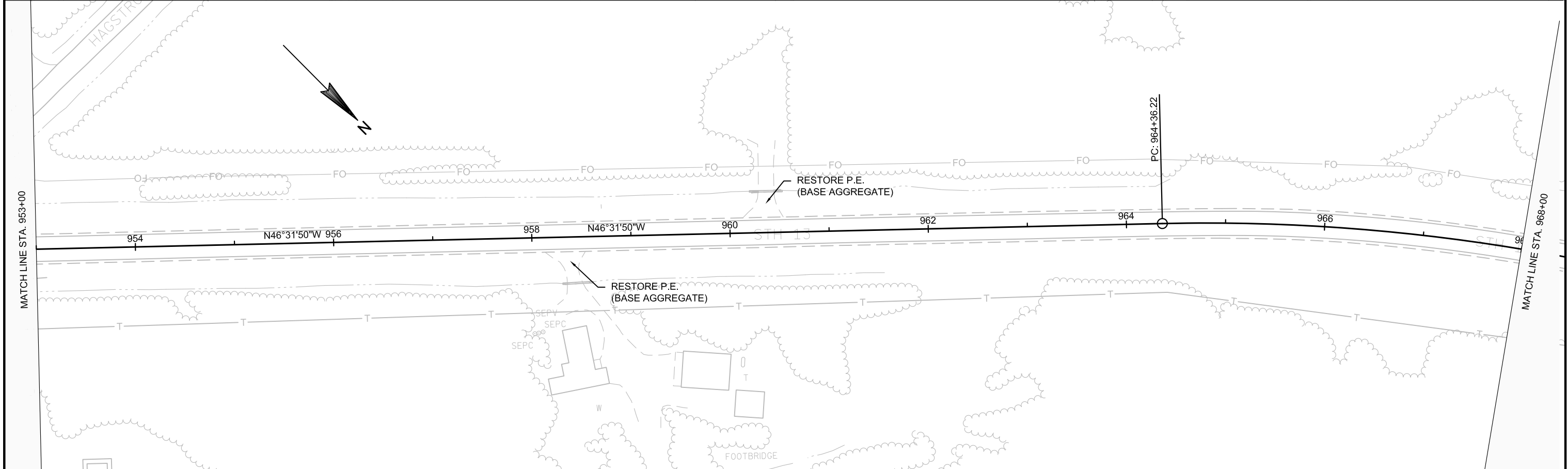
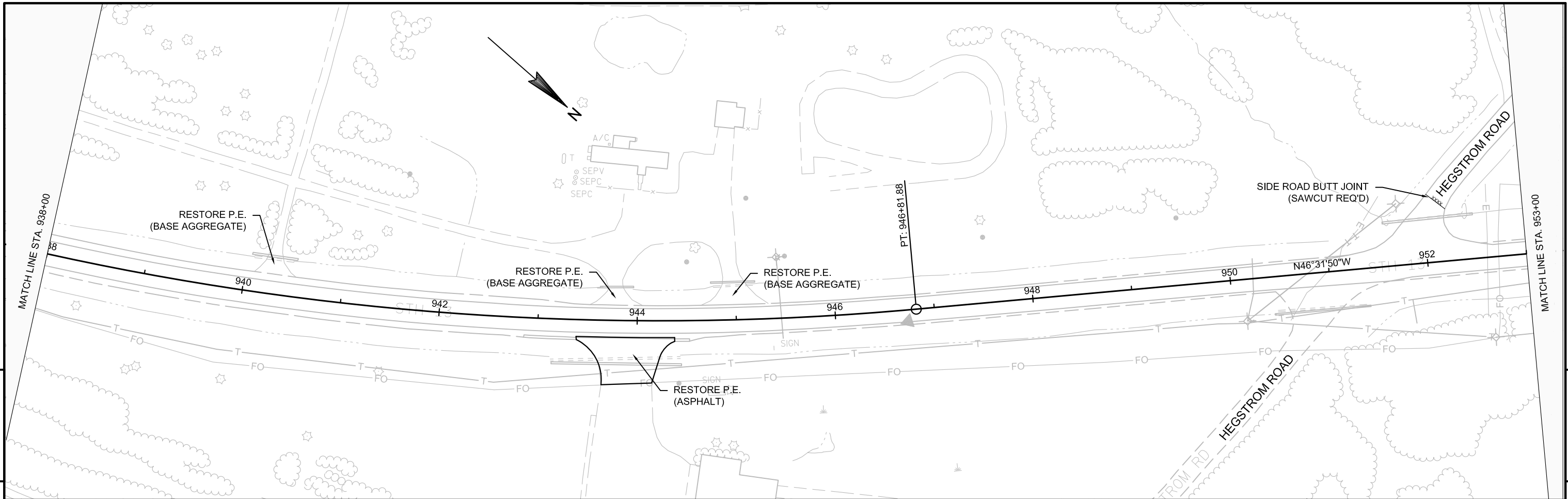
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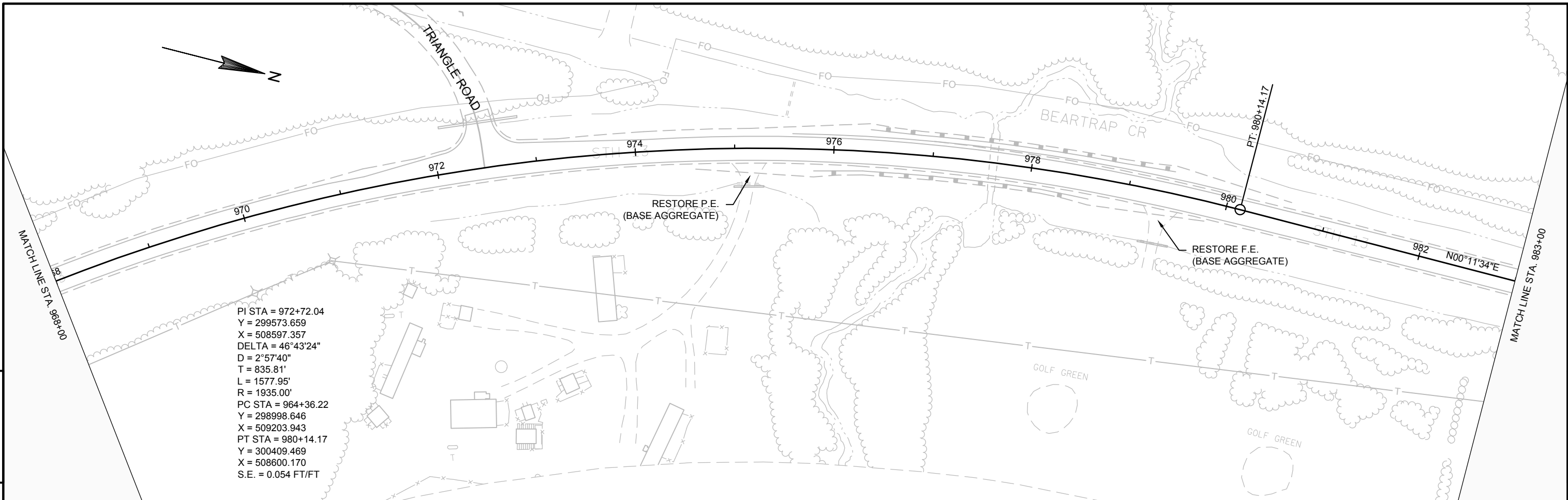
PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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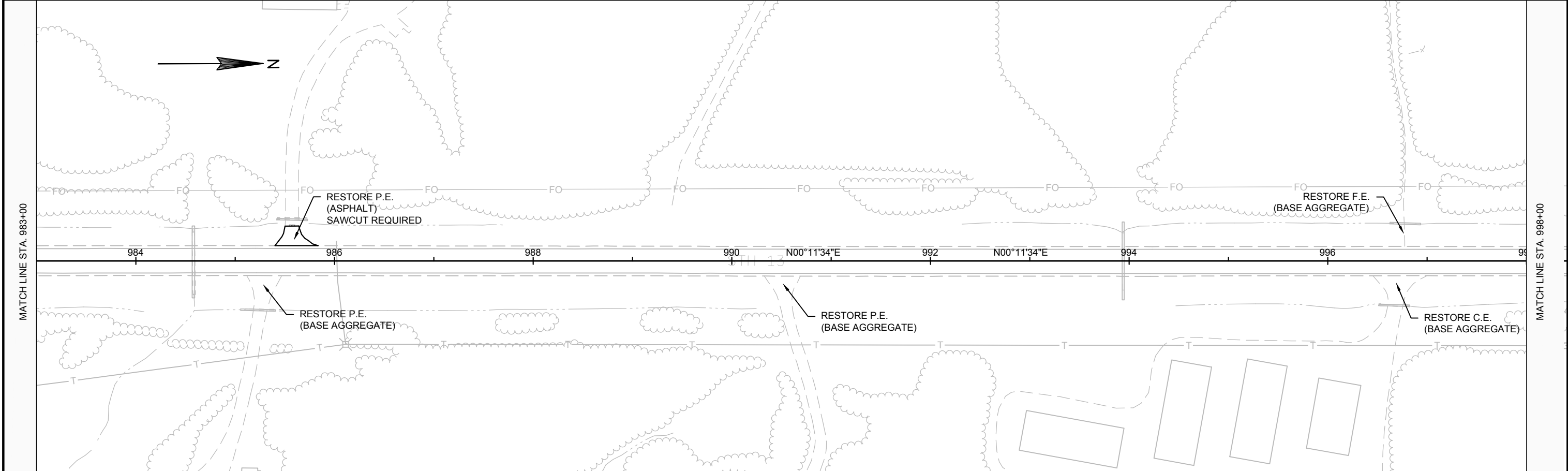


PROJECT NO: 1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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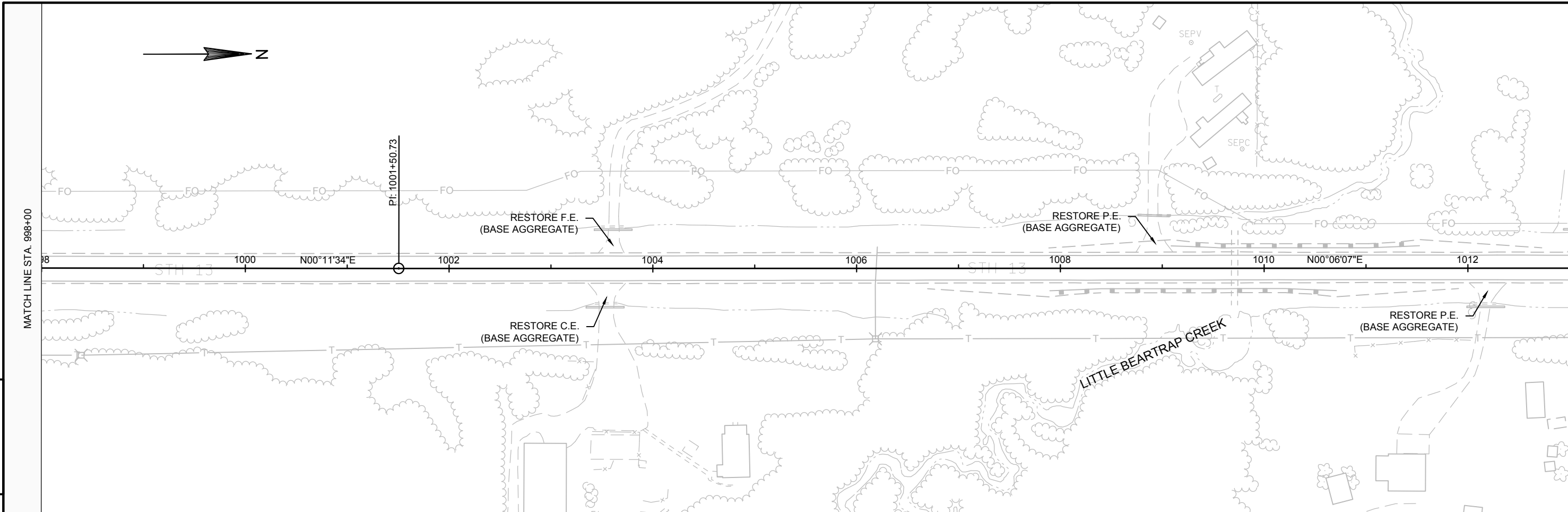


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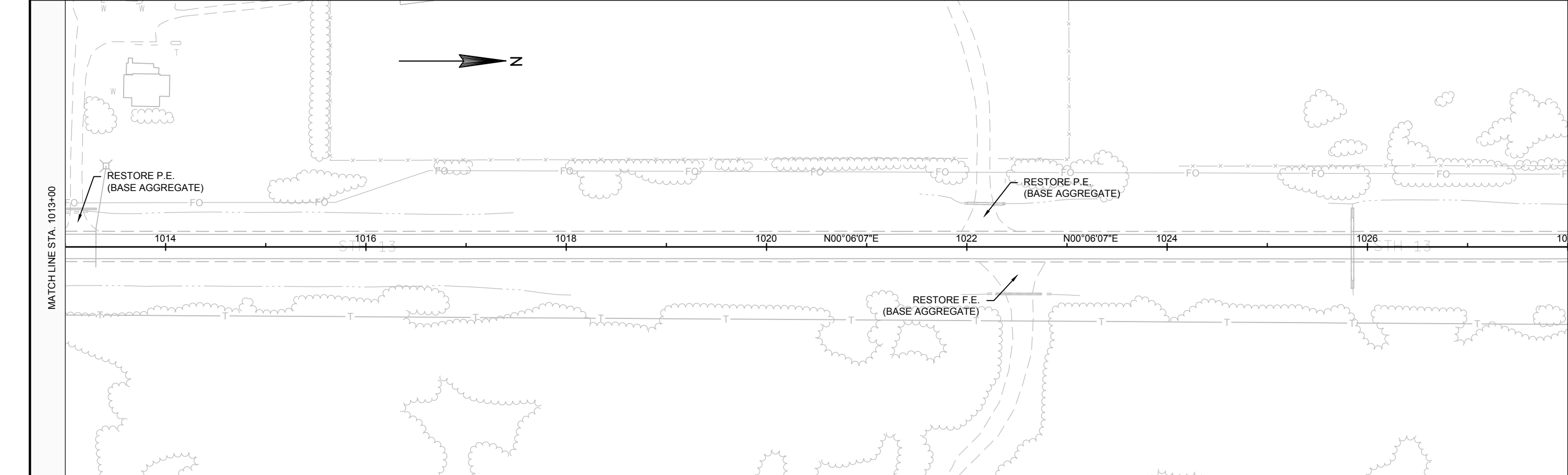
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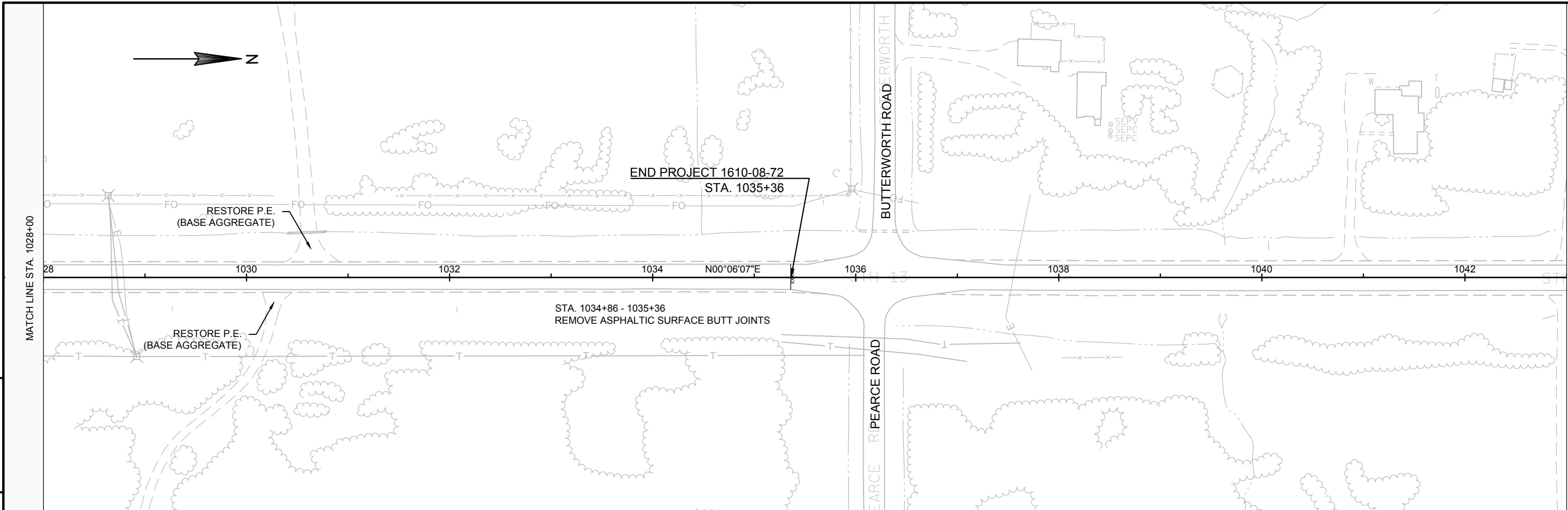


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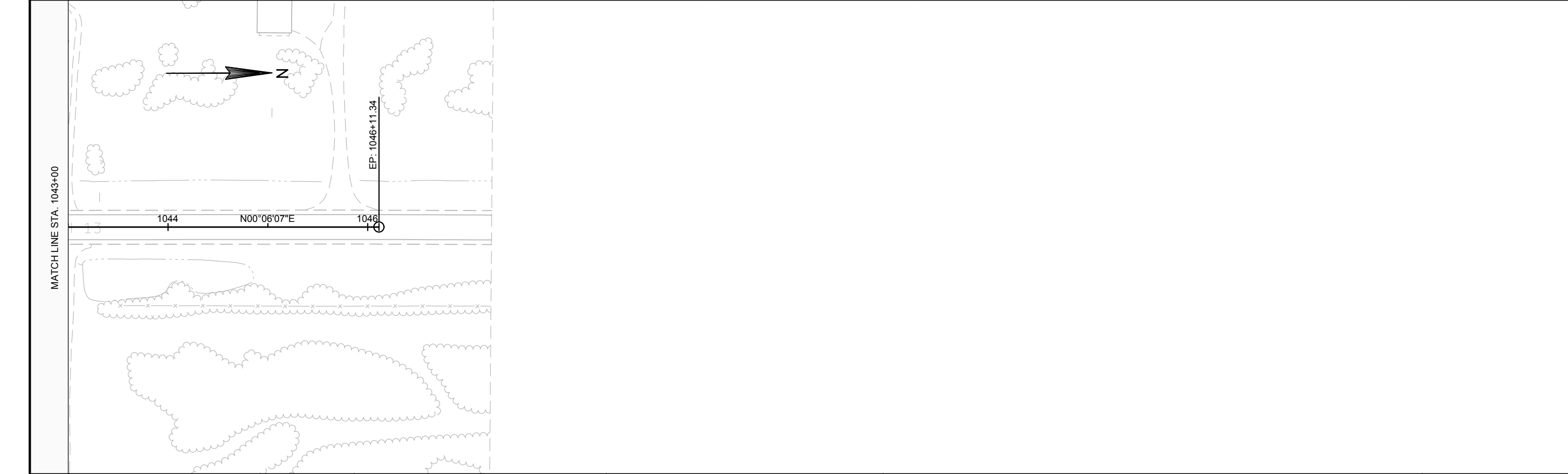


PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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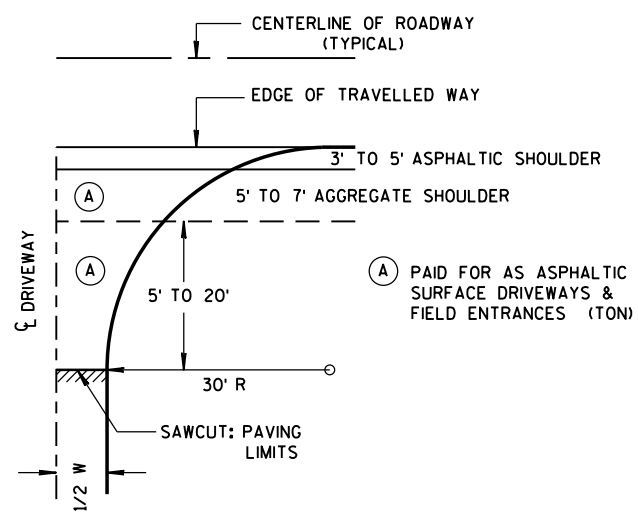
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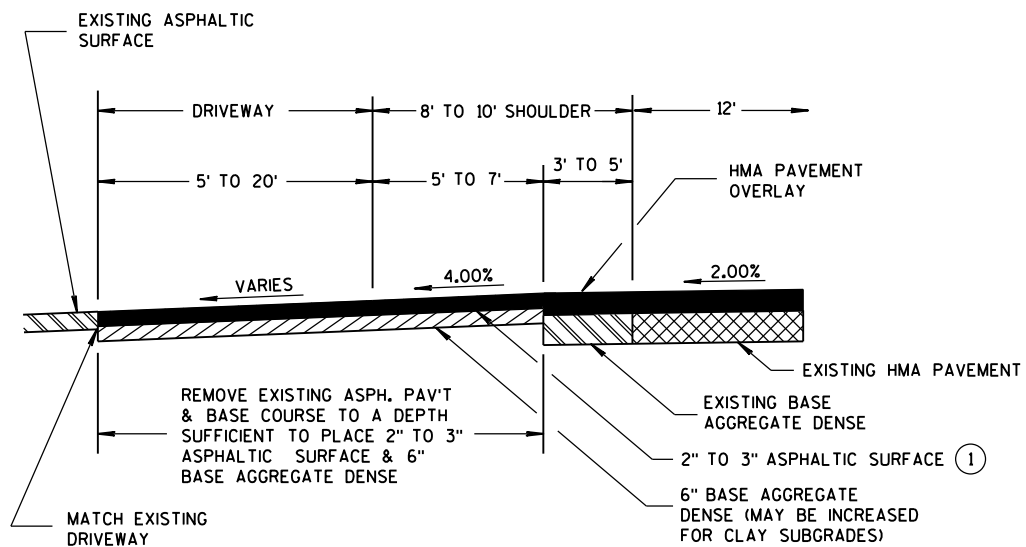
PROJECT NO:1610-08-72,73,79,82	HWY: STH 13	COUNTY: ASHLAND	PLAN: STH 13	SHEET	E
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Standard Detail Drawing List

08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C08-17C	PAVEMENT MARKING (ISLANDS)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-03	MEDIAN ISLAND MARKING
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)

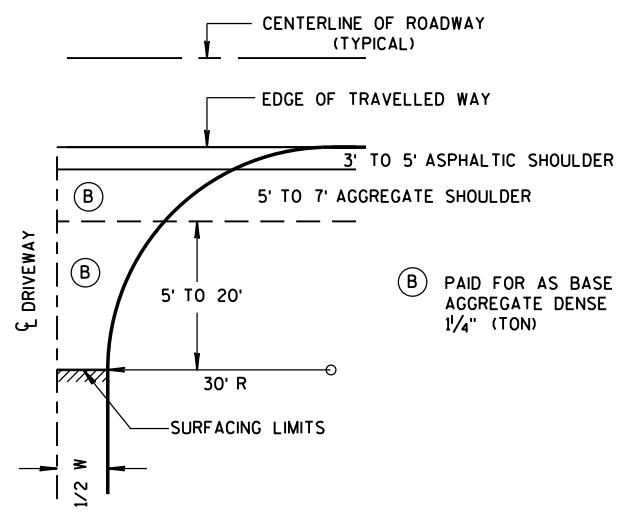


PLAN VIEW
HALF SECTION

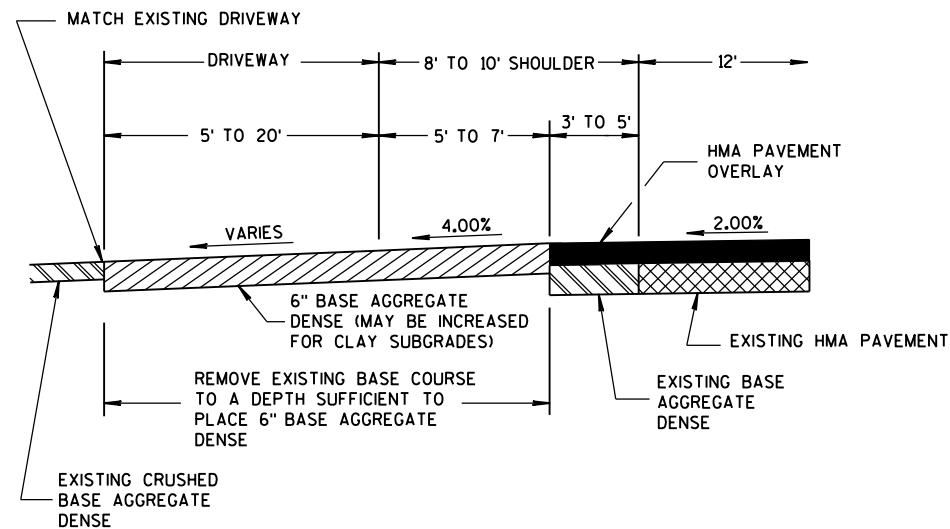


PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION



PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

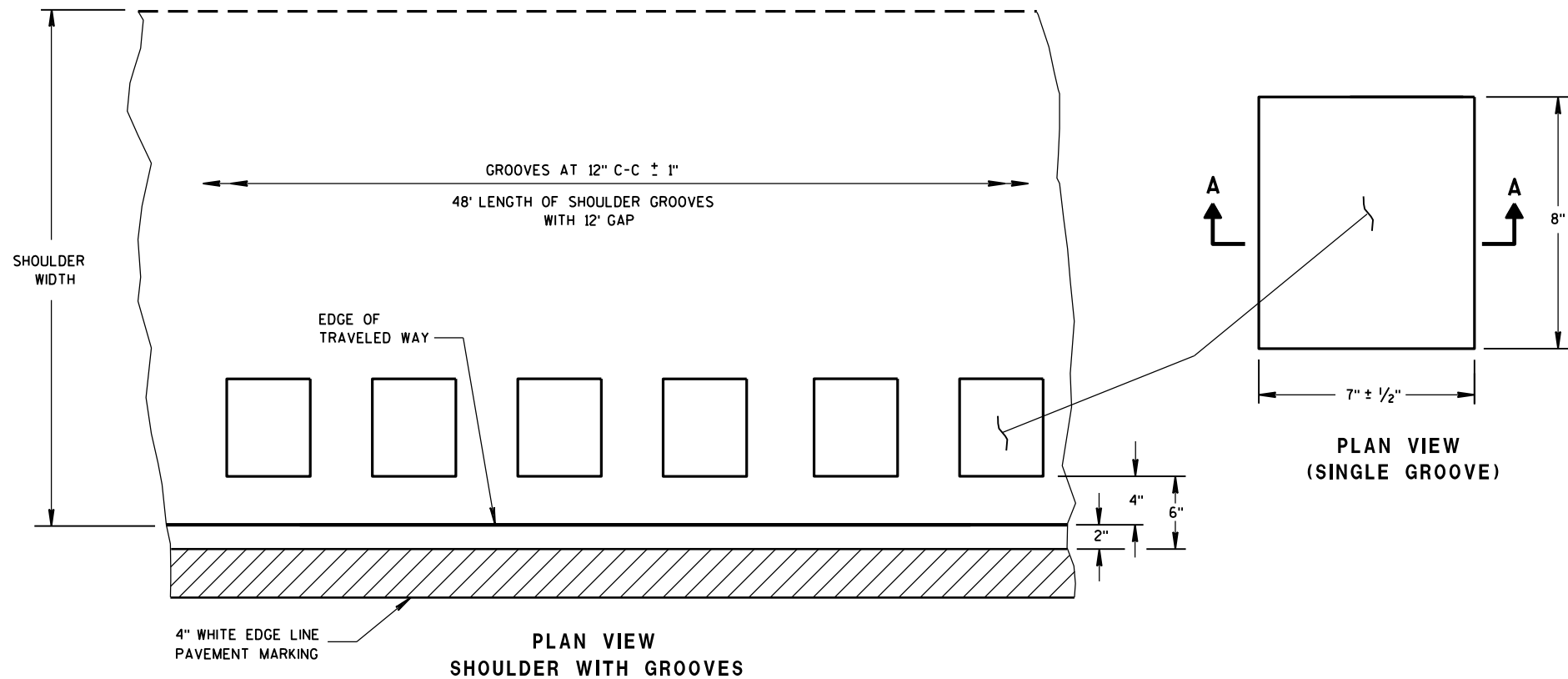
GENERAL NOTES

- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

DRIVEWAYS WITHOUT
CURB & GUTTER
RESURFACING PROJECTS RURAL

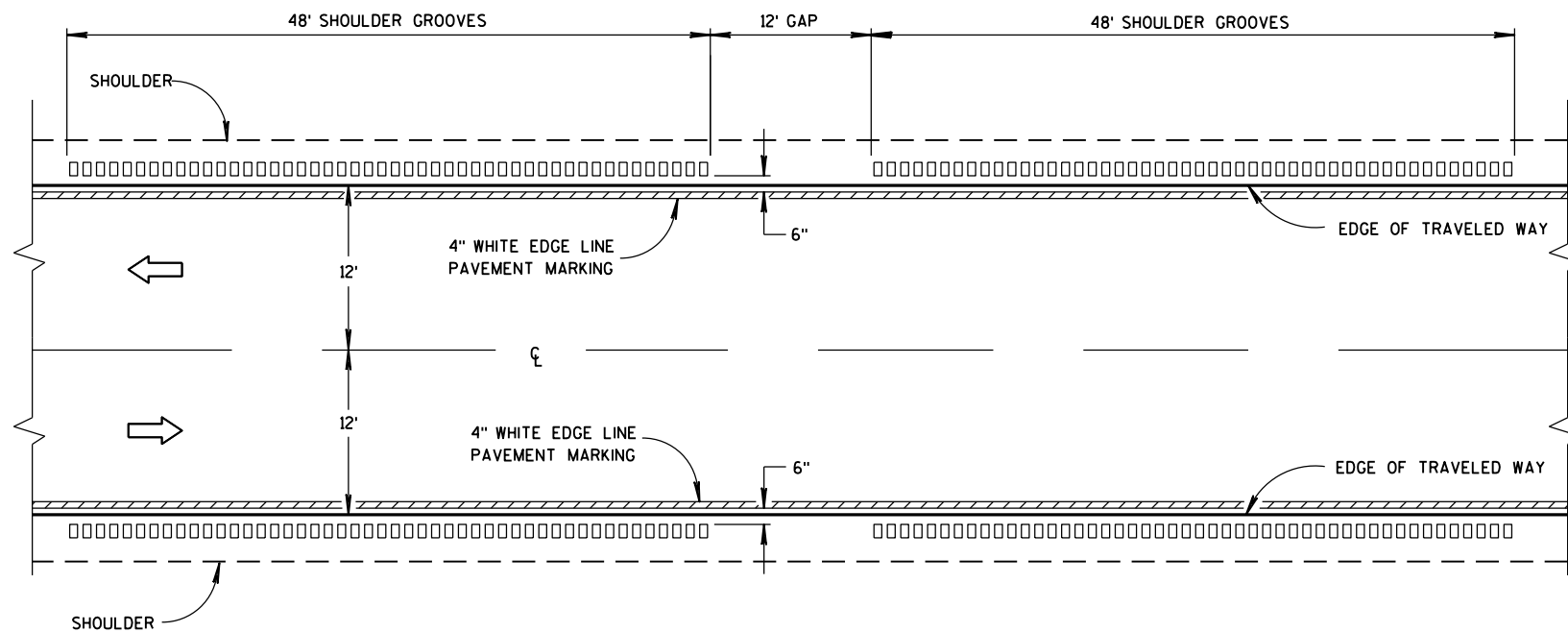
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



6

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

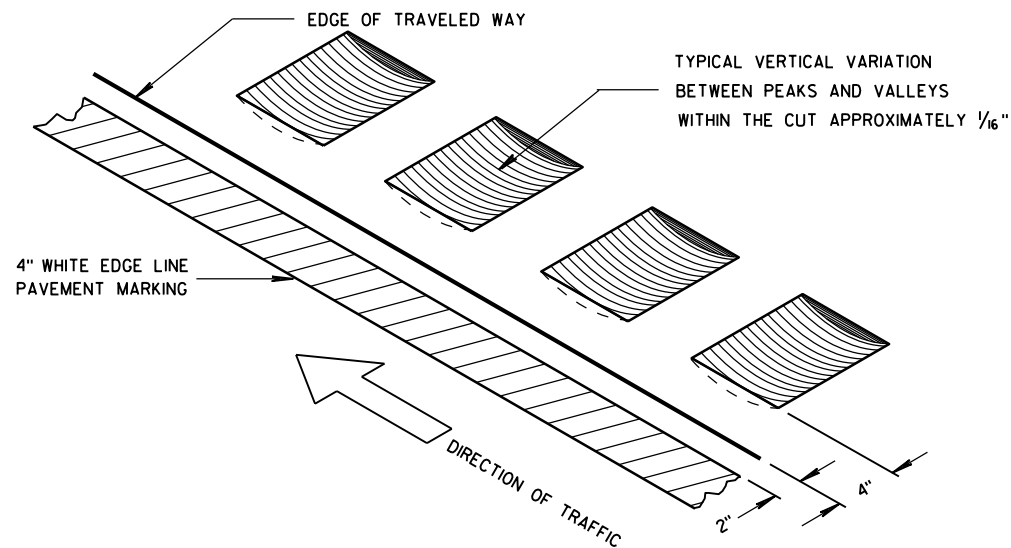


TYPE 1
2-LANE SHOULDER RUMBLE STRIP

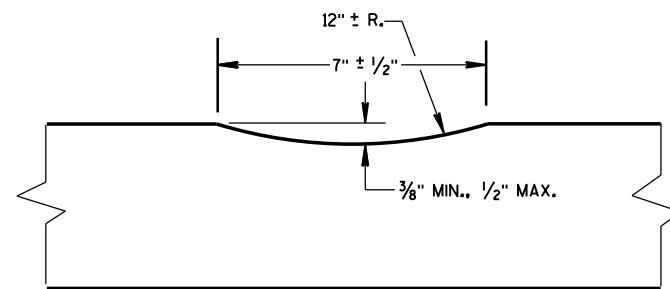
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



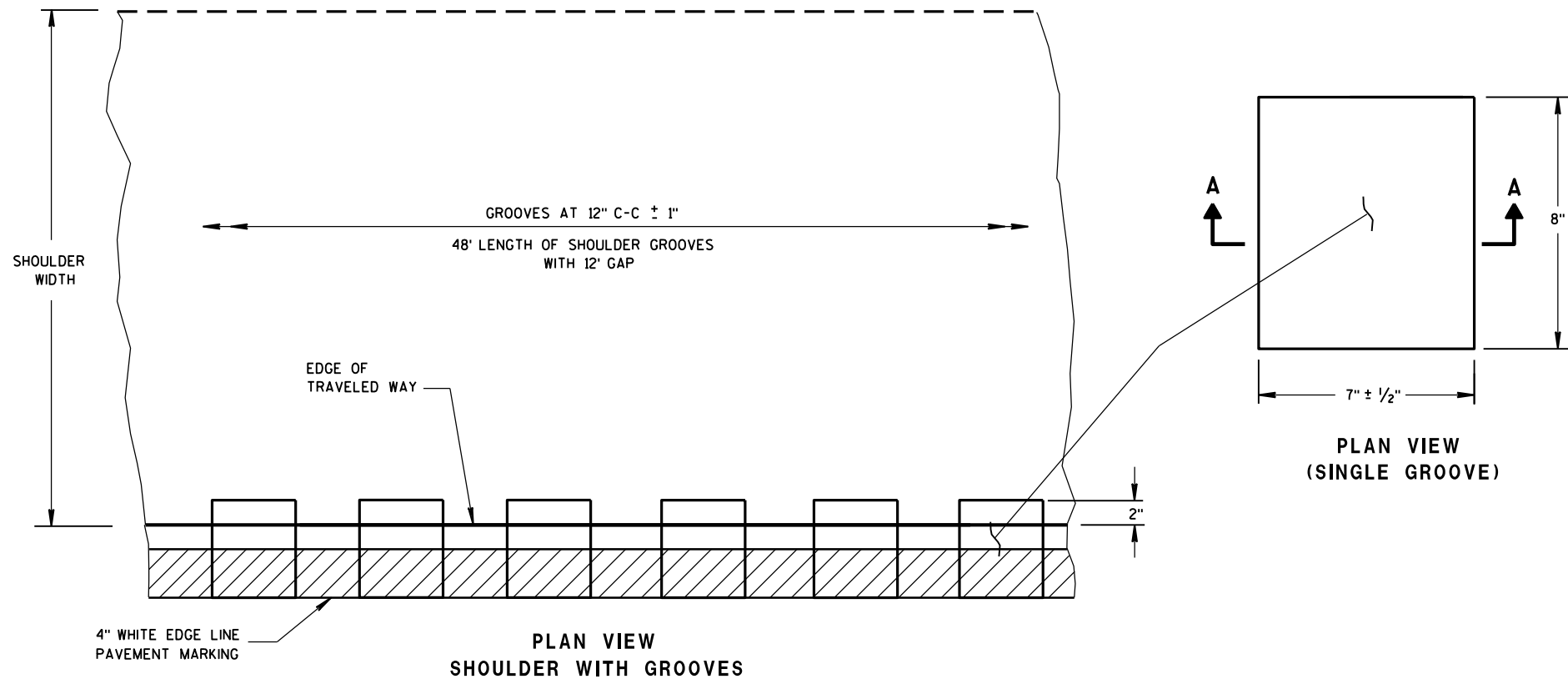
ISOMETRIC



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

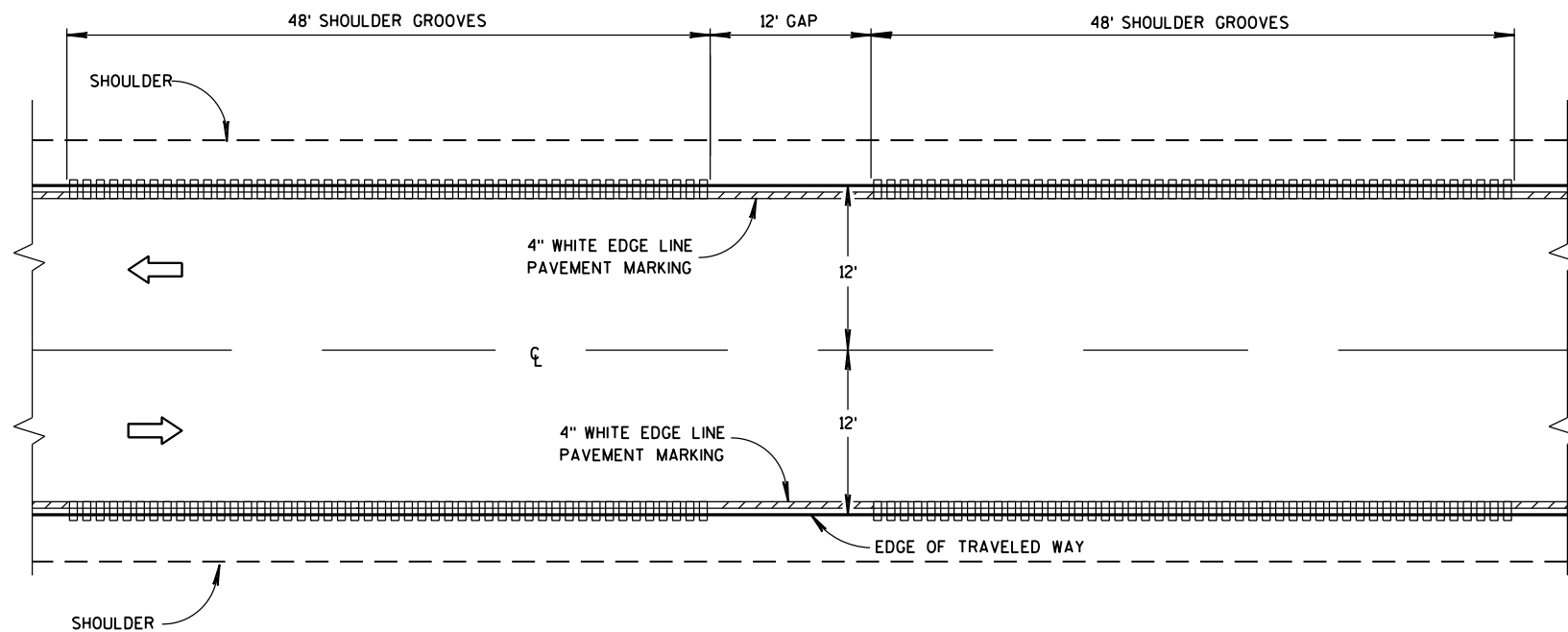
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

6

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



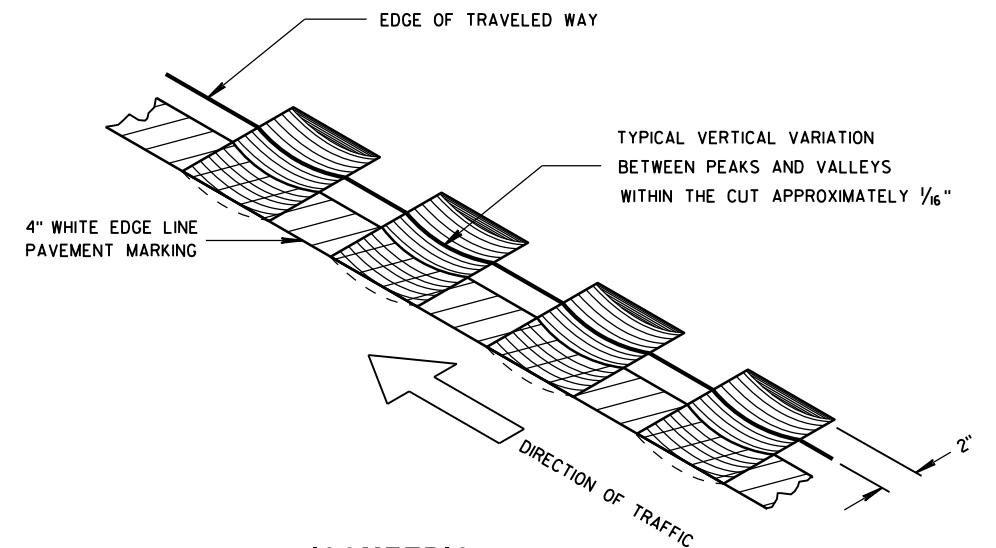
TYPE 2
2-LANE SHOULDER RUMBLE STRIP

GENERAL NOTES

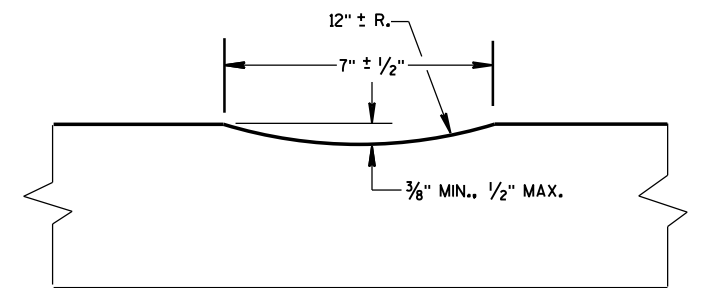
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



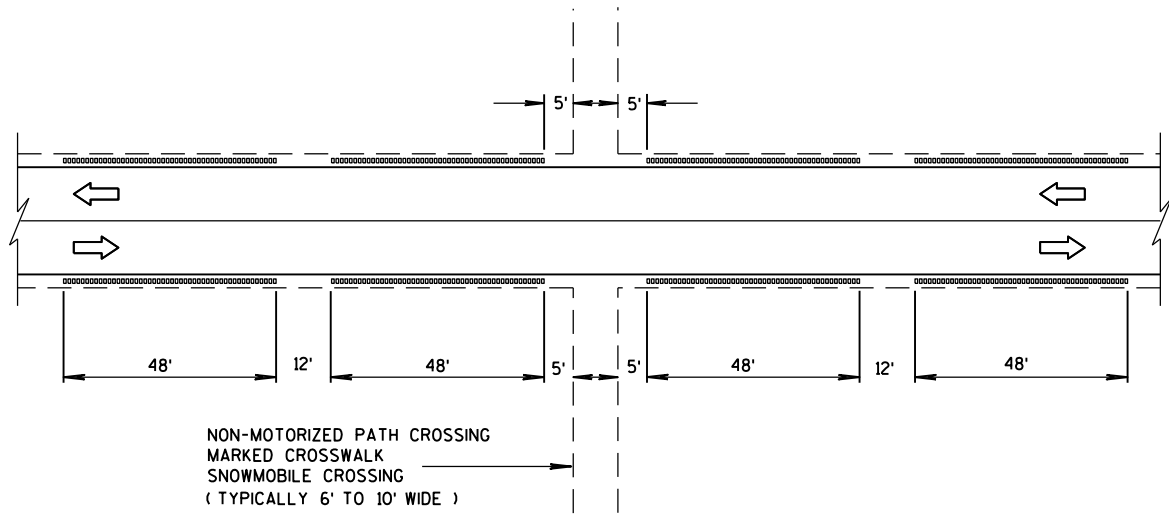
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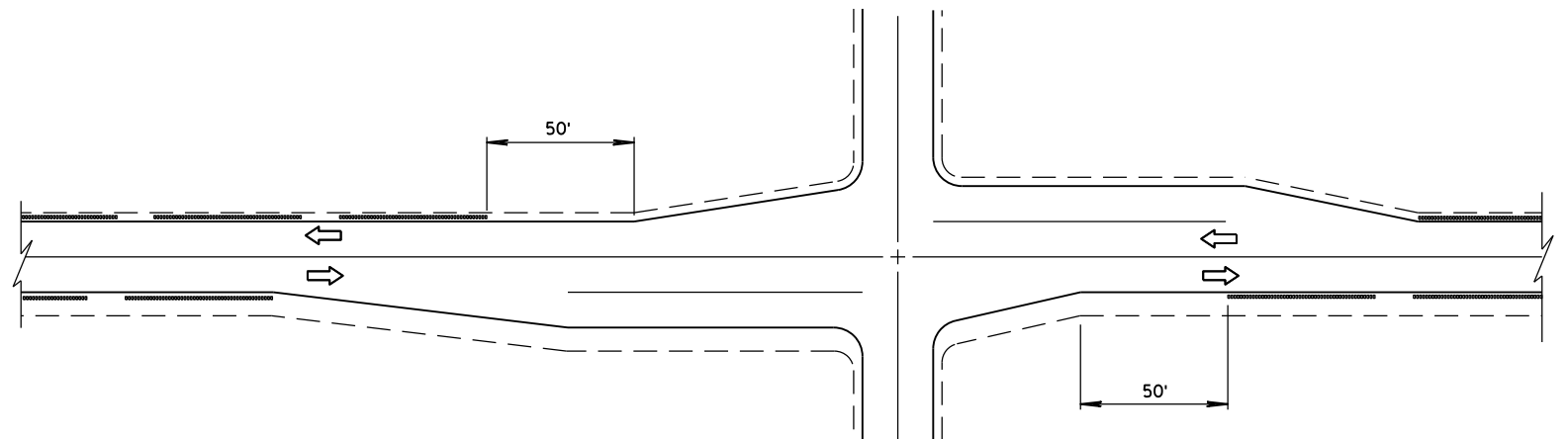
SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

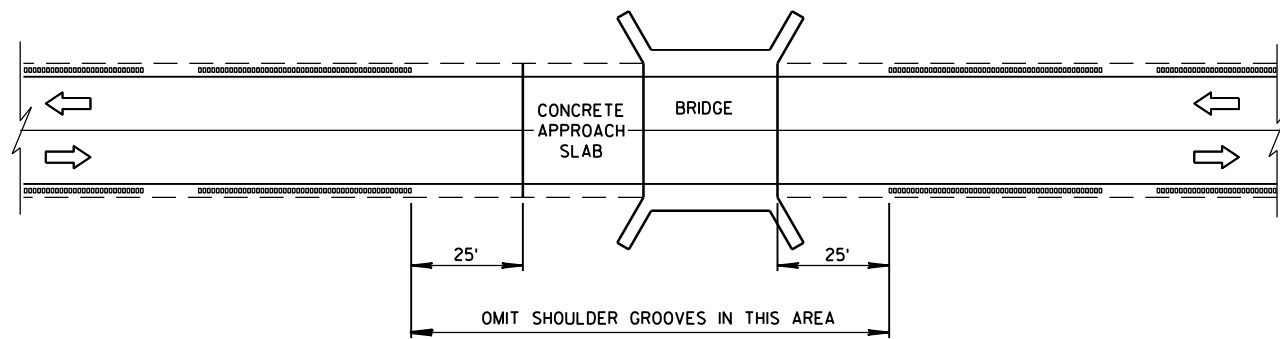
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



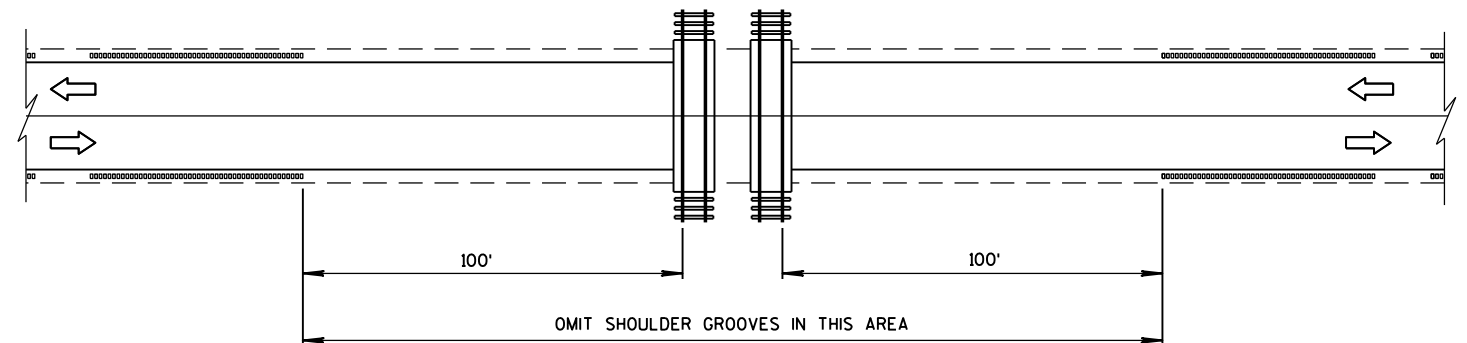
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



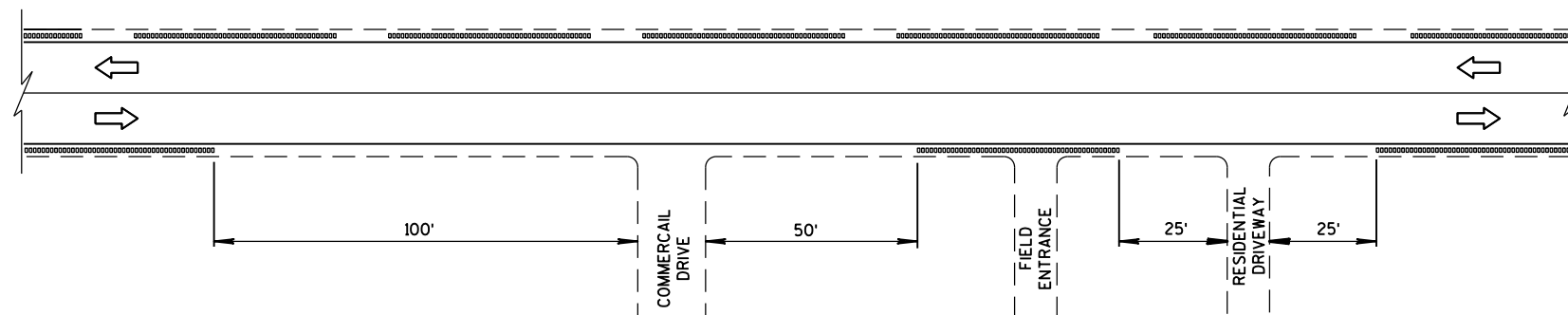
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



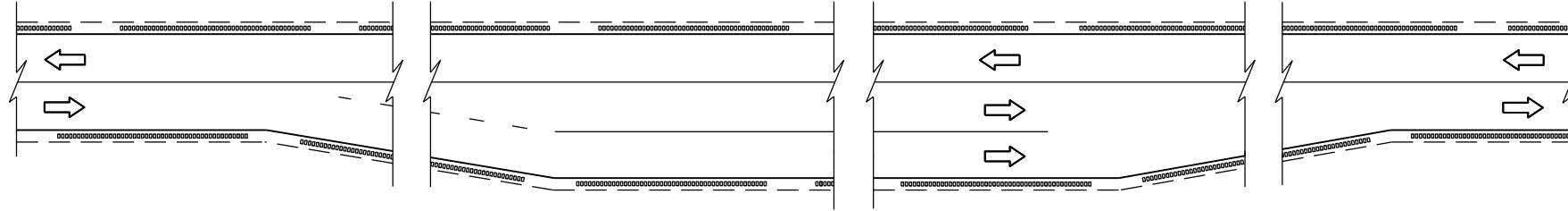
SHOULDER GROOVES AT RAILROADS



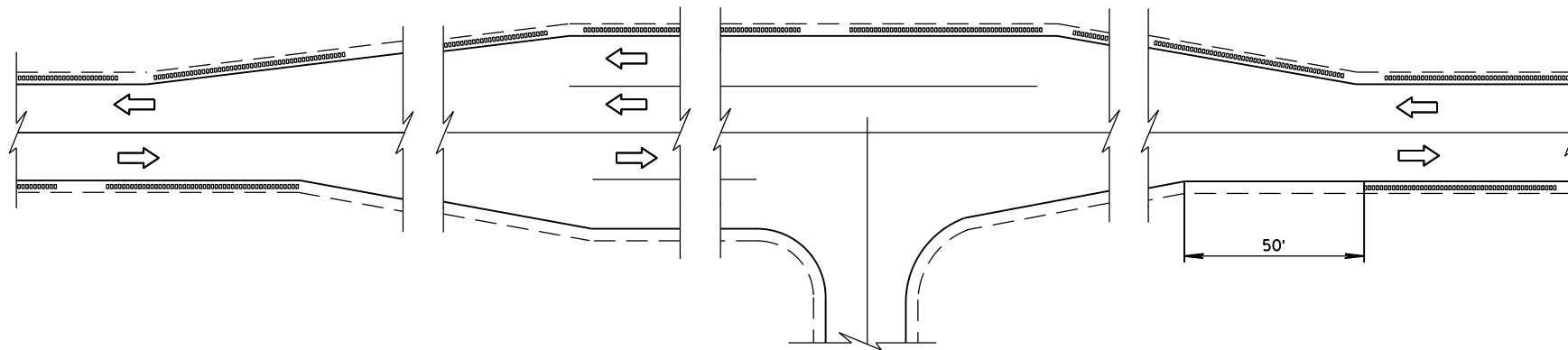
SHOULDER GROOVES AT DRIVEWAYS^①

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/17/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

GENERAL NOTES

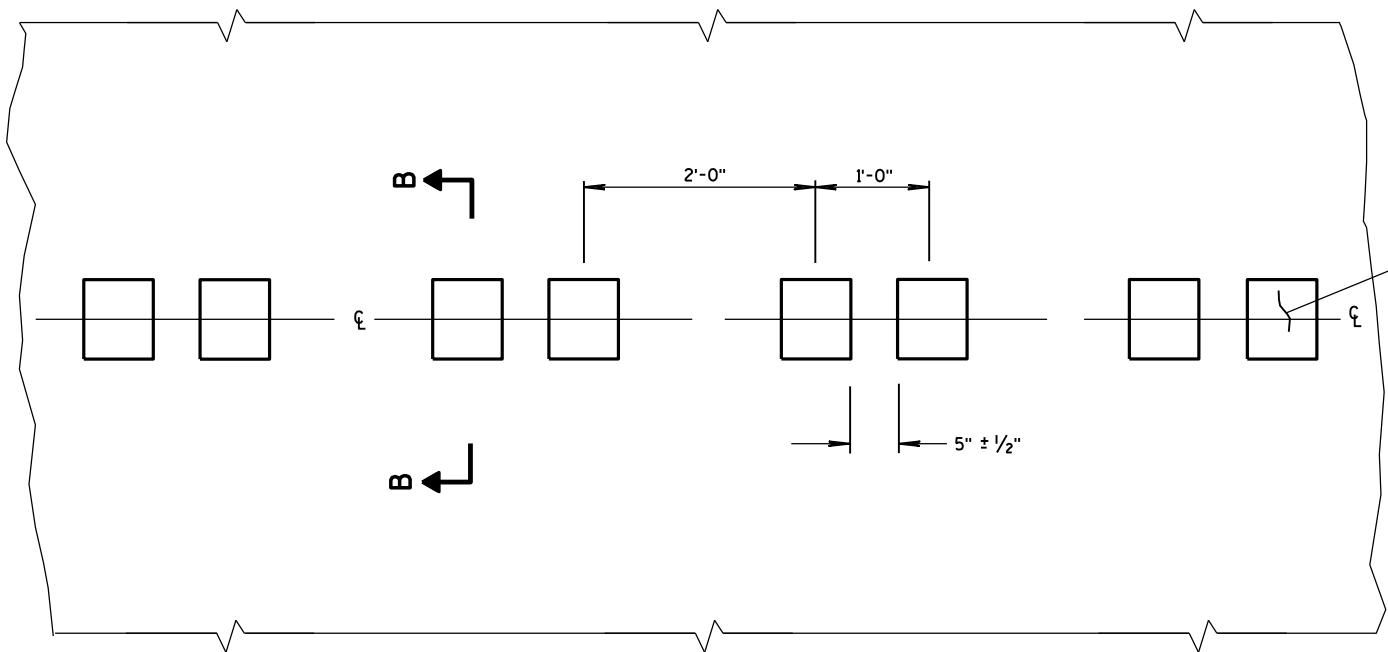
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

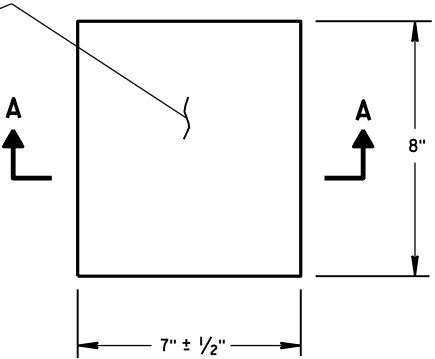
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

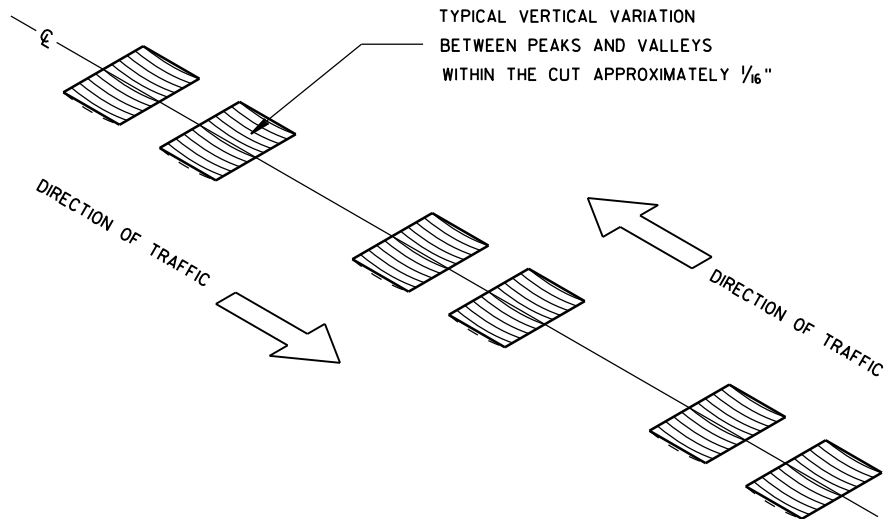
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



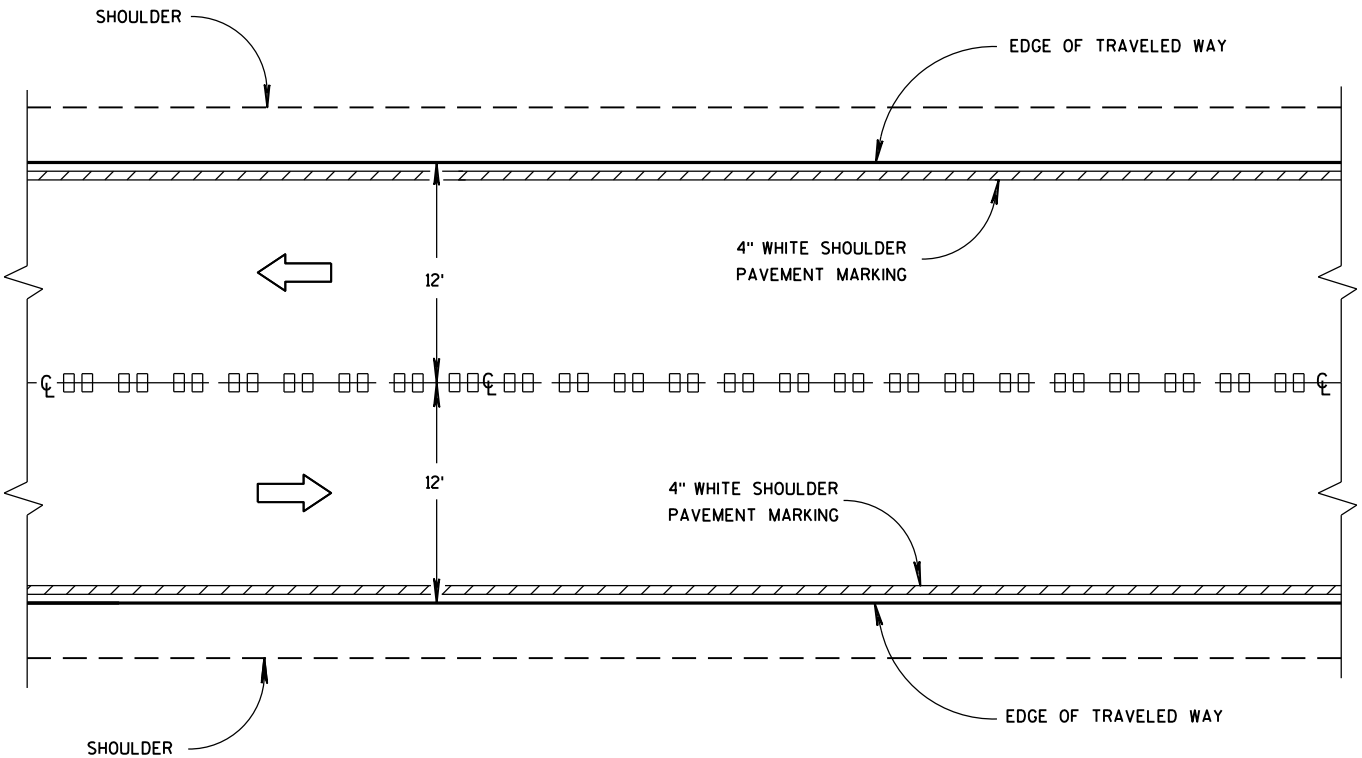
PLAN VIEW
CENTER LINE WITH GROOVES



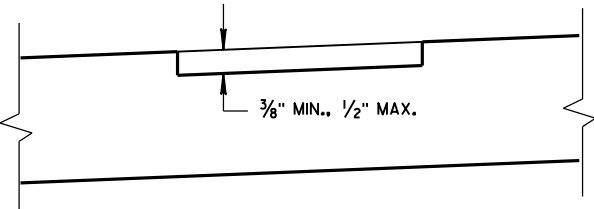
PLAN VIEW
(SINGLE GROOVE)



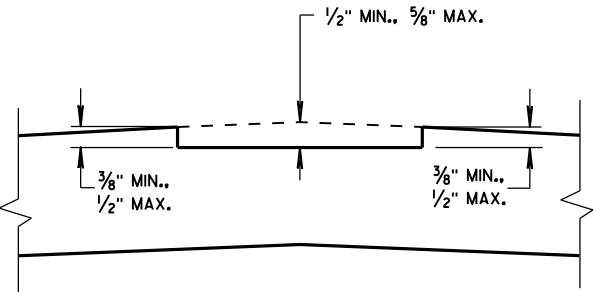
ISOMETRIC



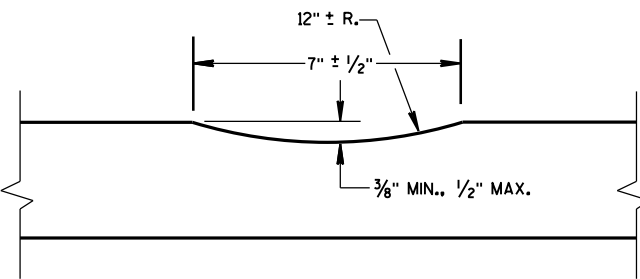
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



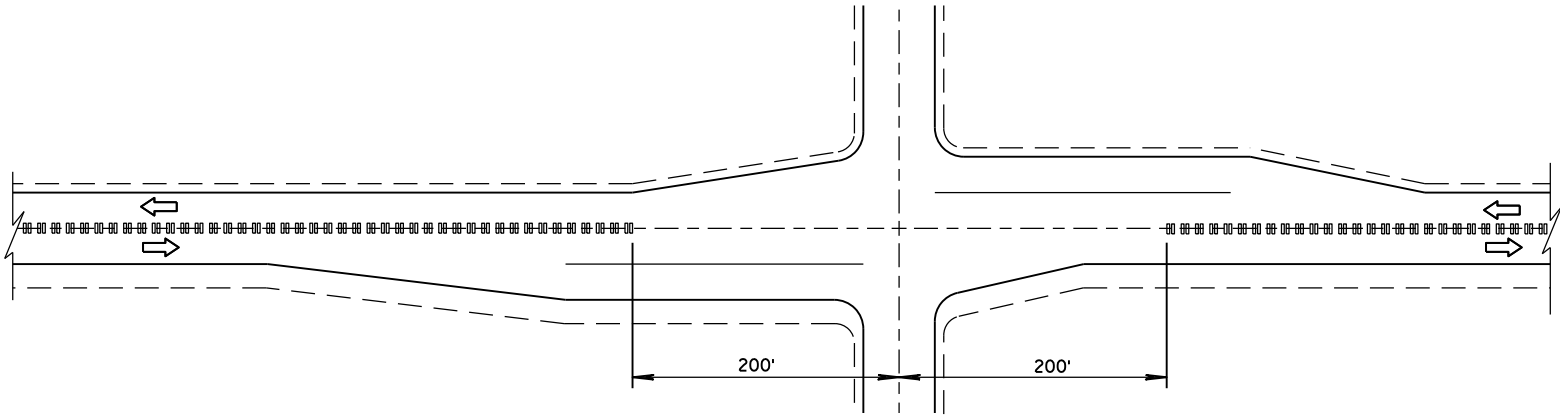
SECTION B-B
CROWNED ROADWAY



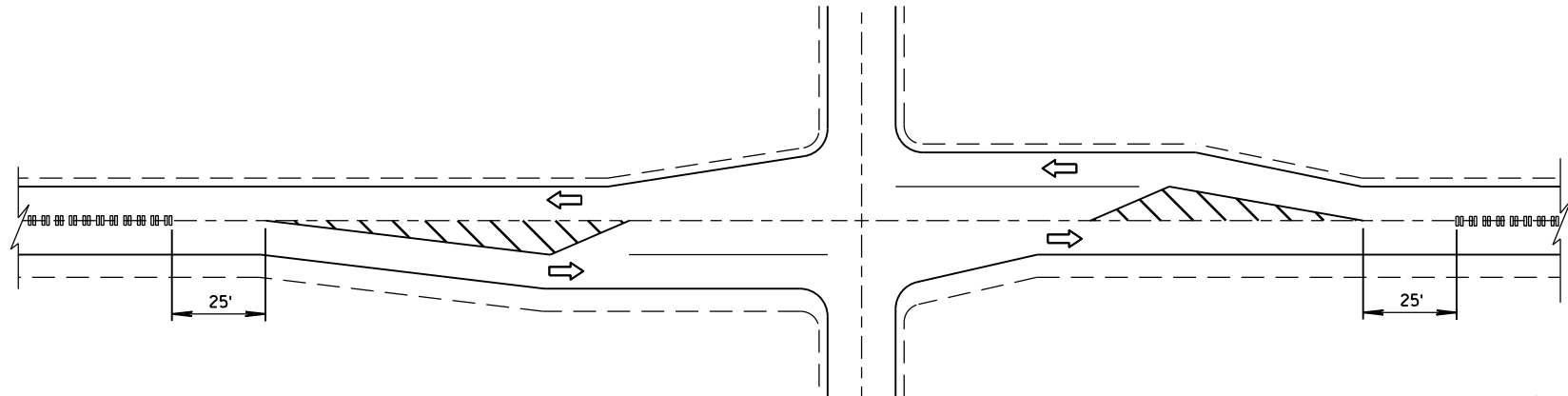
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

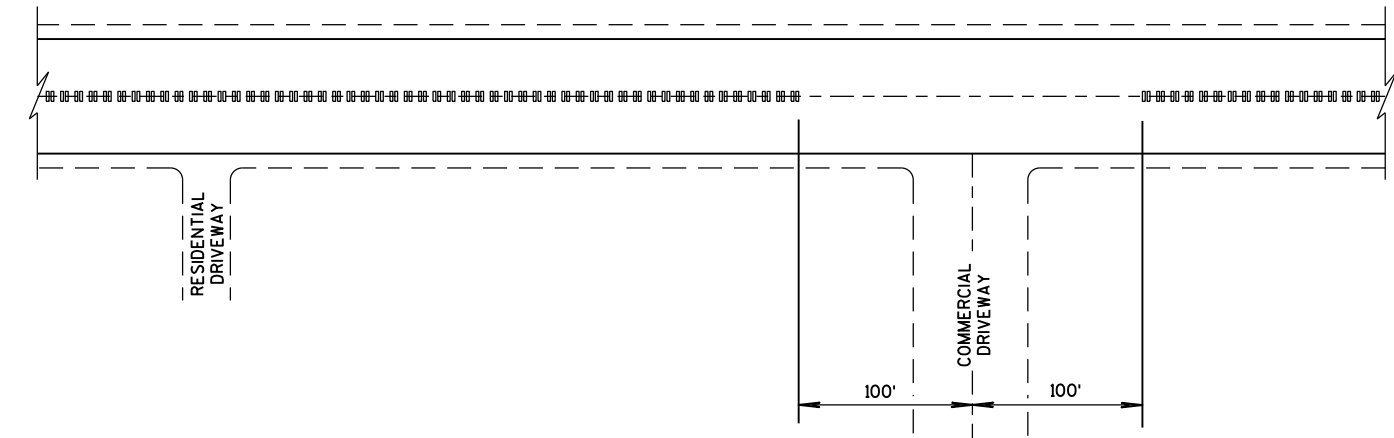
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

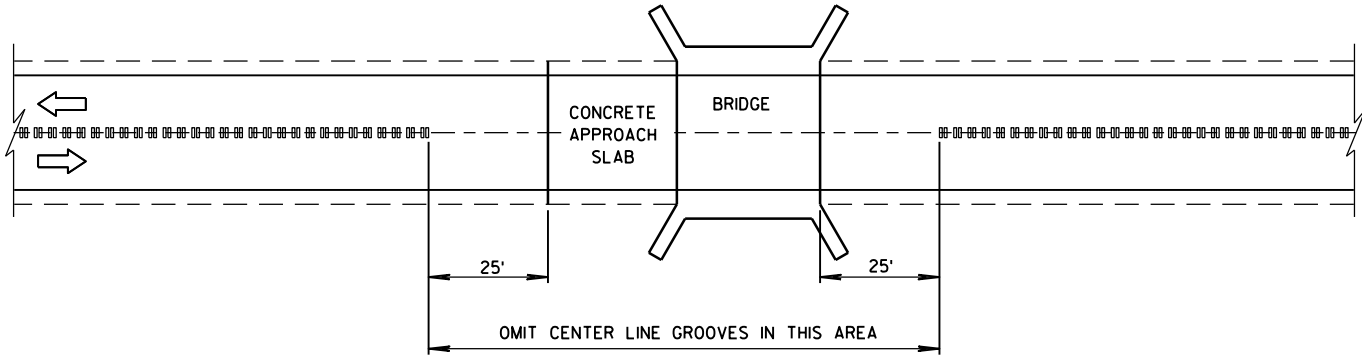


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

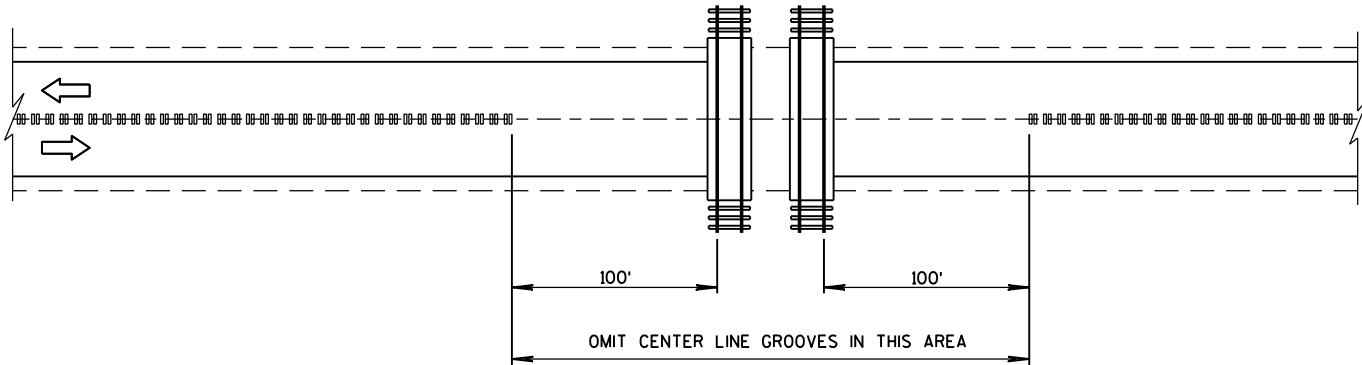


CENTER LINE GROOVES AT DRIVEWAYS^①

① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

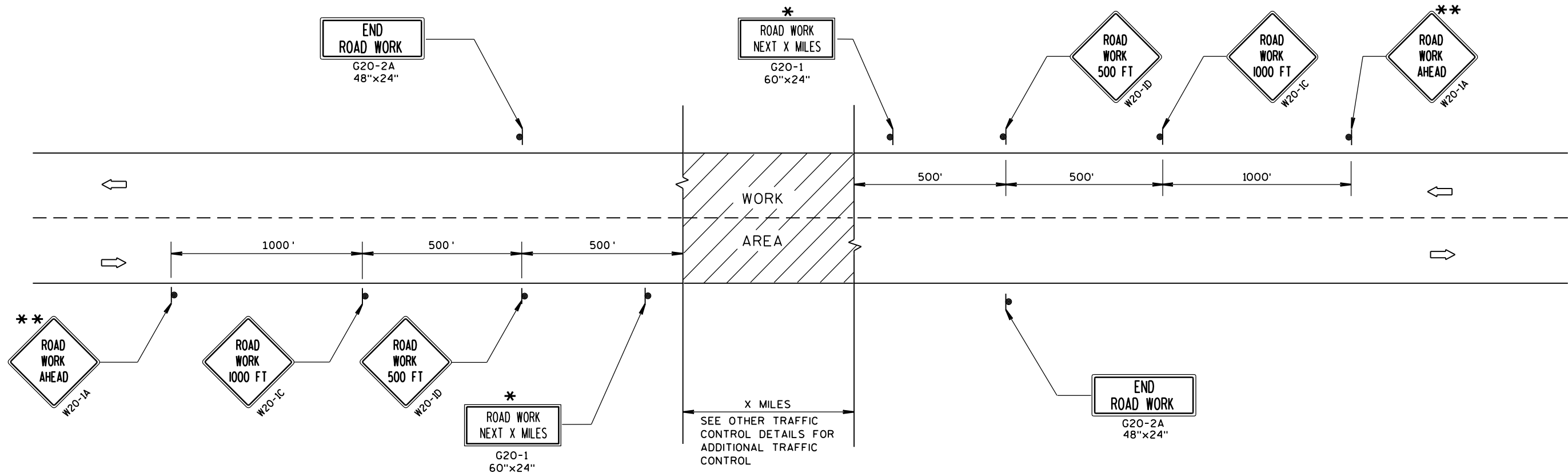


CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

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.

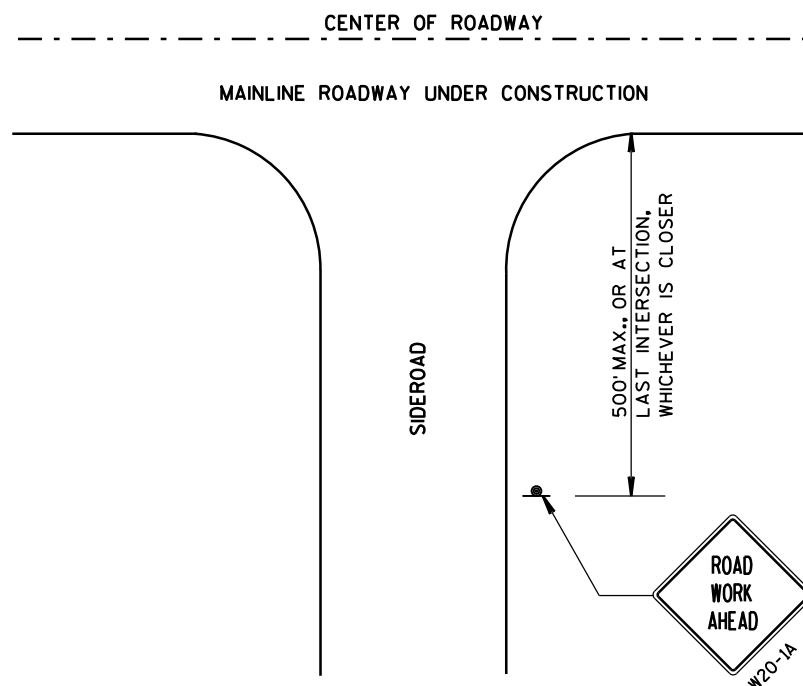
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 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 RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



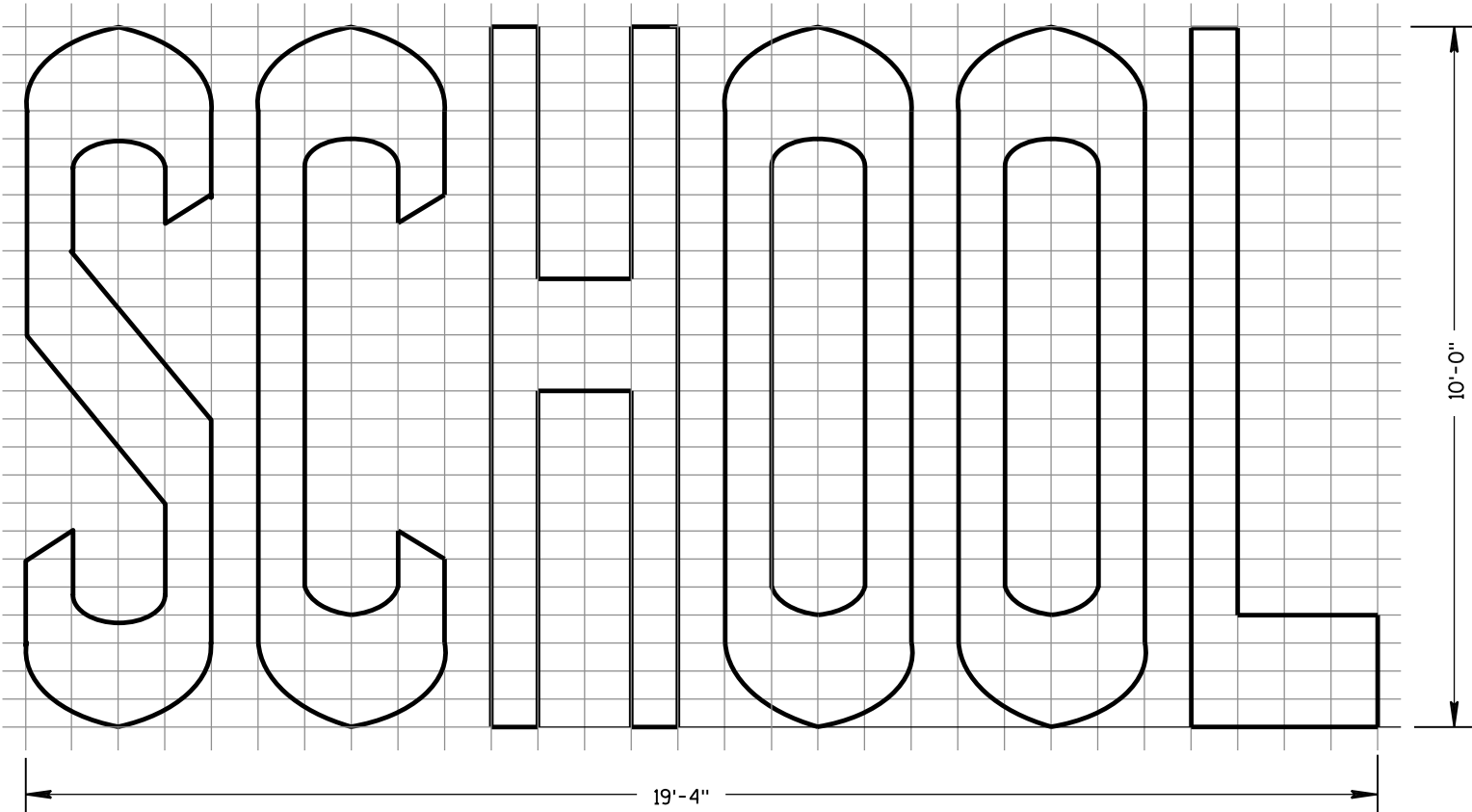
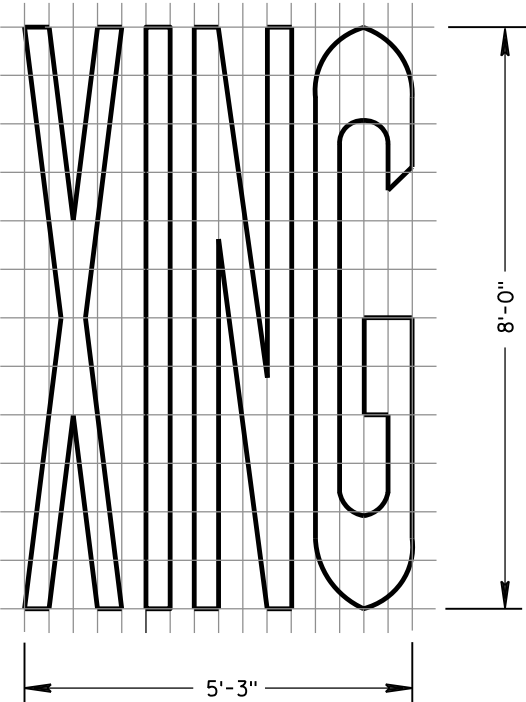
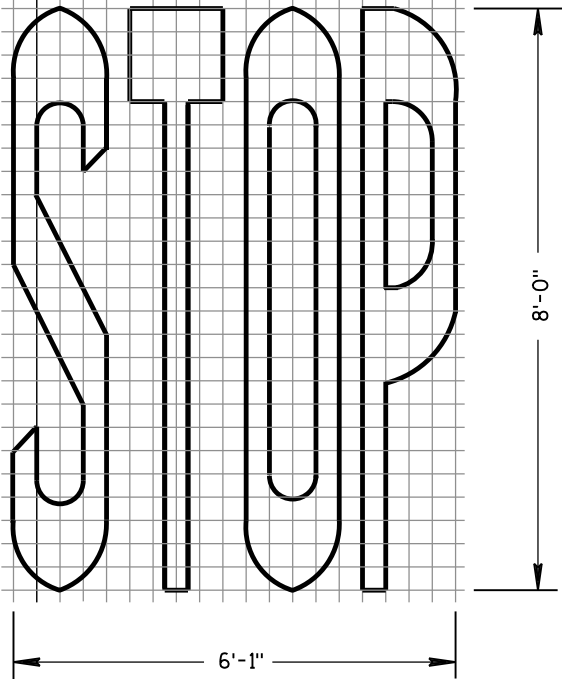
LEGEND

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

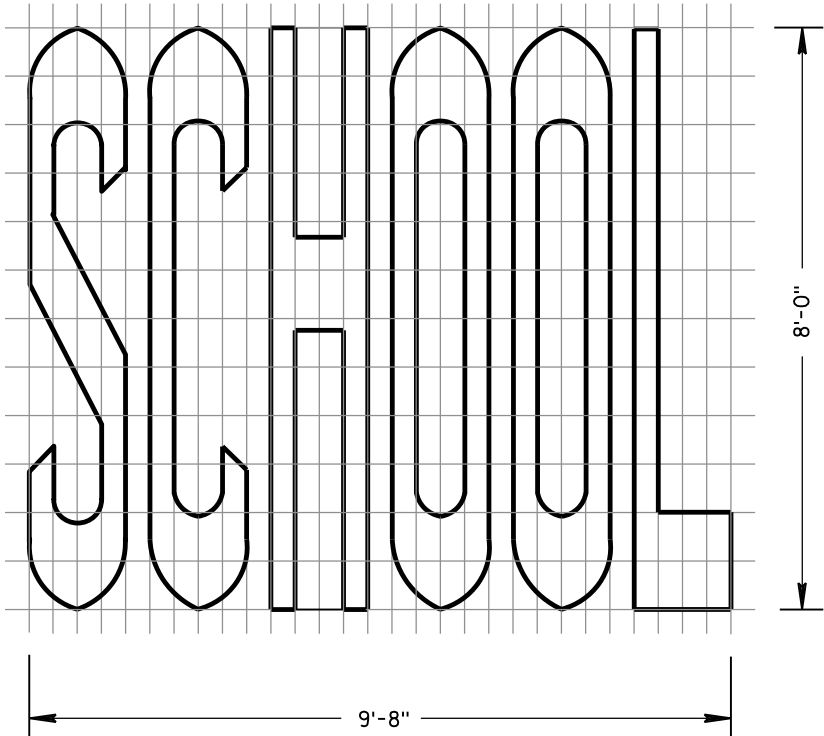
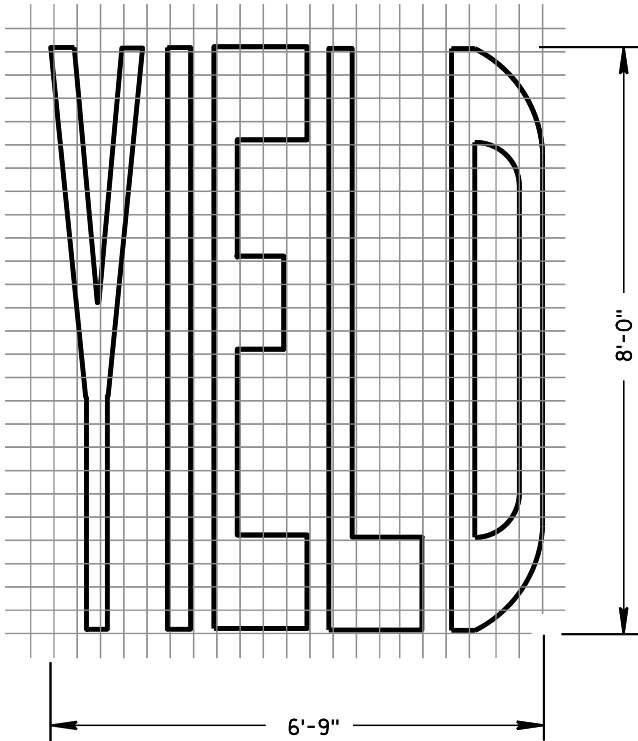
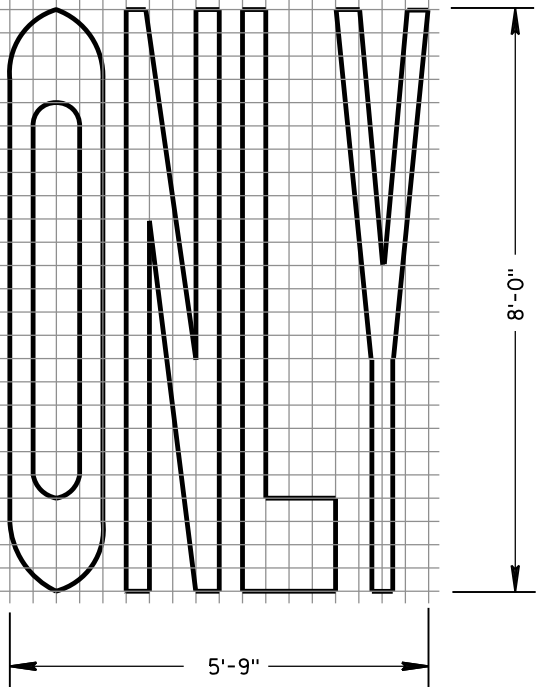
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

GENERAL NOTES

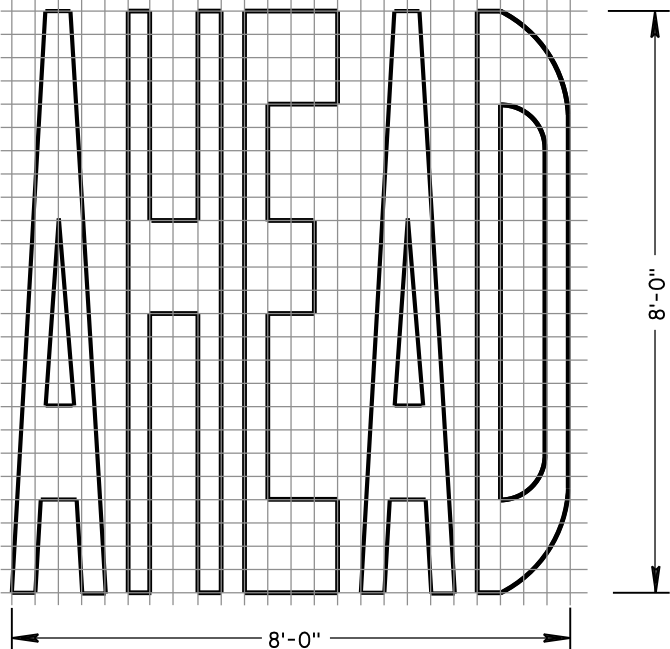
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TWO-LANE



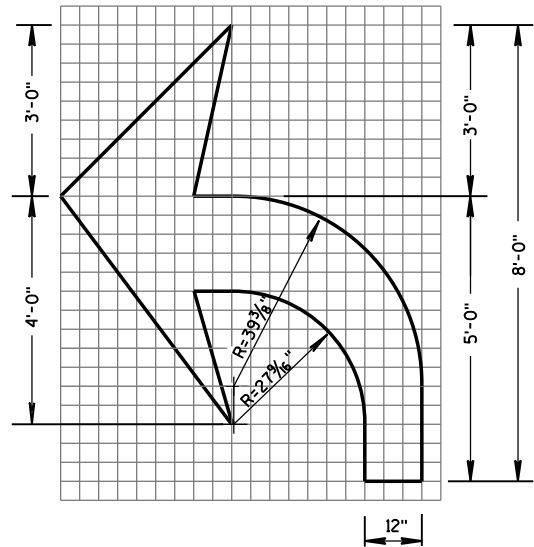
SINGLE-LANE



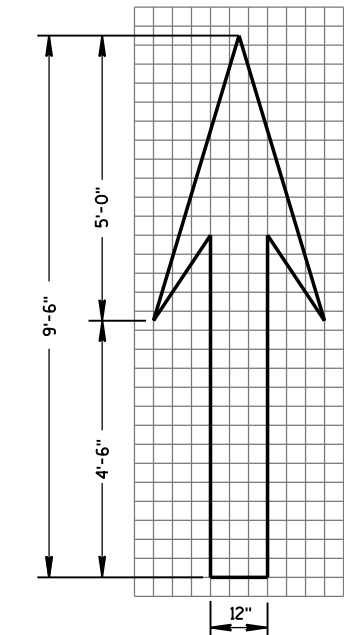
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

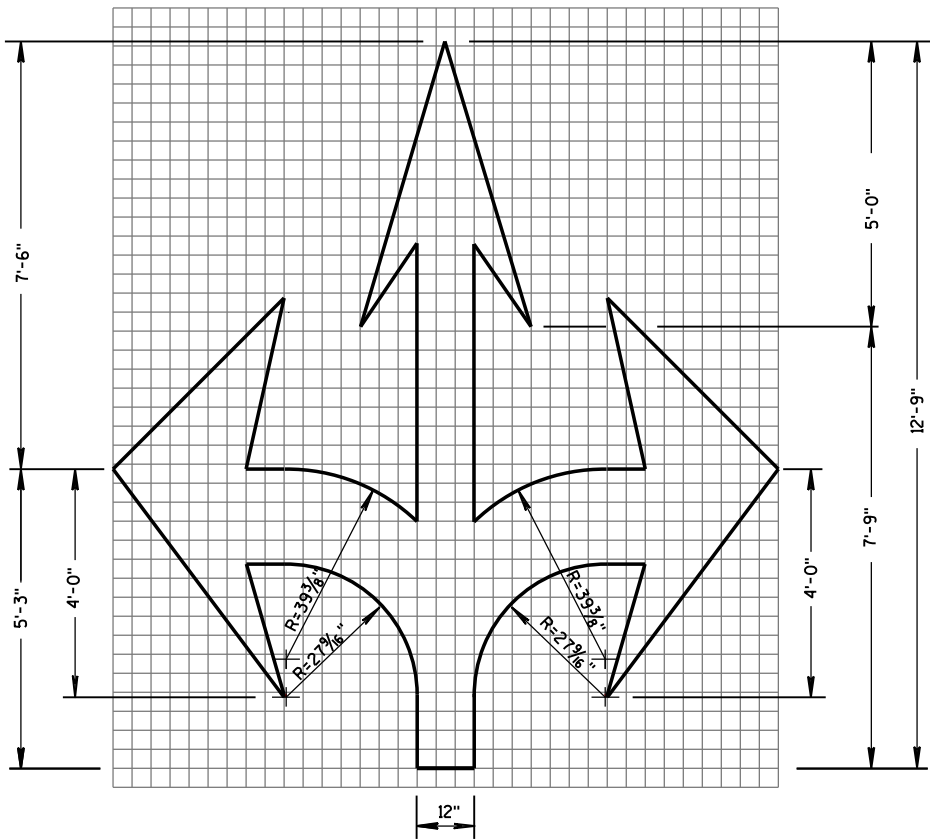
APPROVED
4-18-16 DATE /S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA



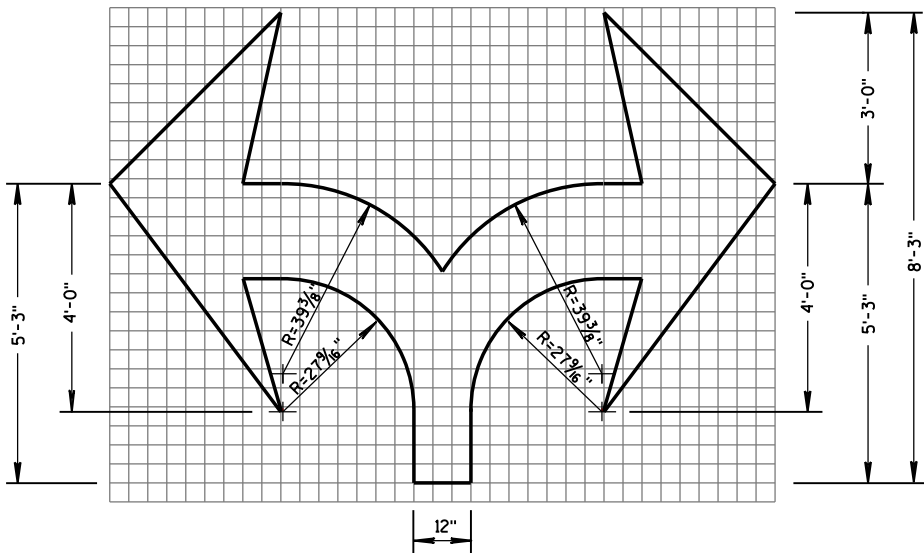
TYPE 2



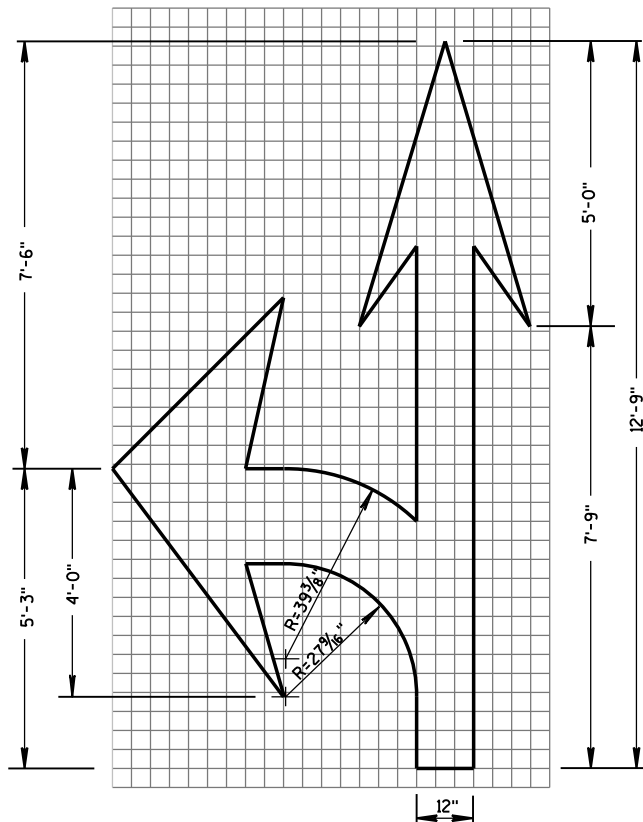
TYPE 1



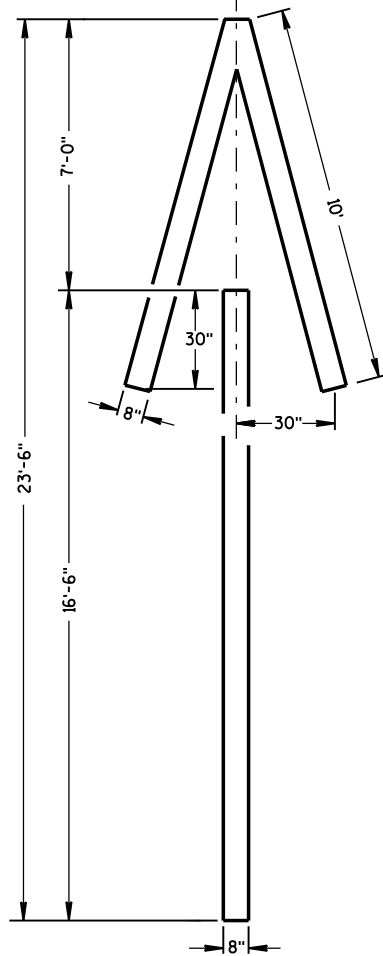
TYPE 6



TYPE 7



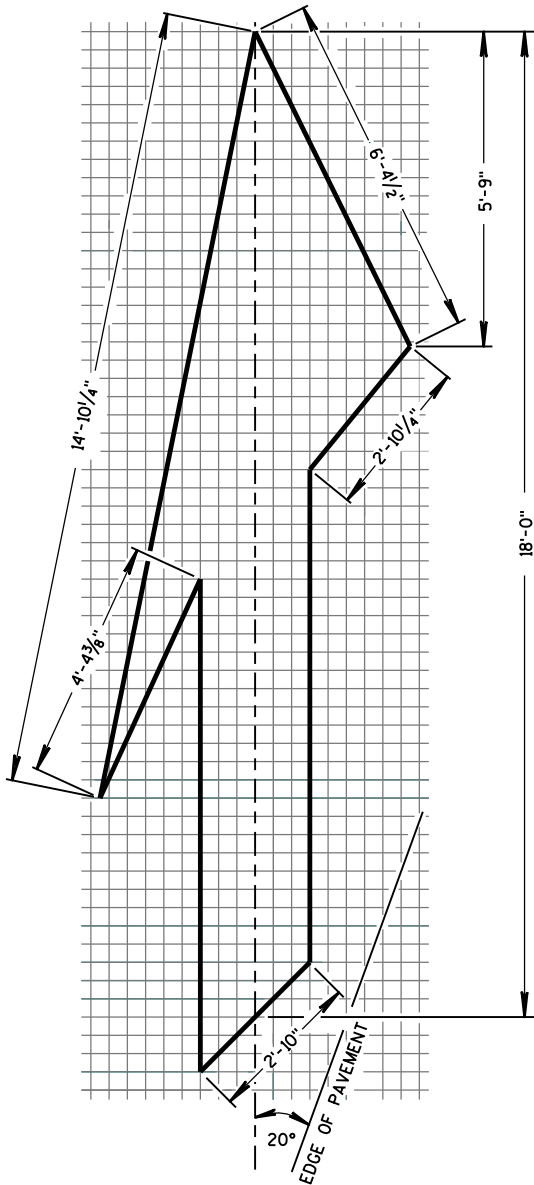
TYPE 3



TYPE 4

GENERAL NOTES

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



TYPE 5 LANE DROP ARROW

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

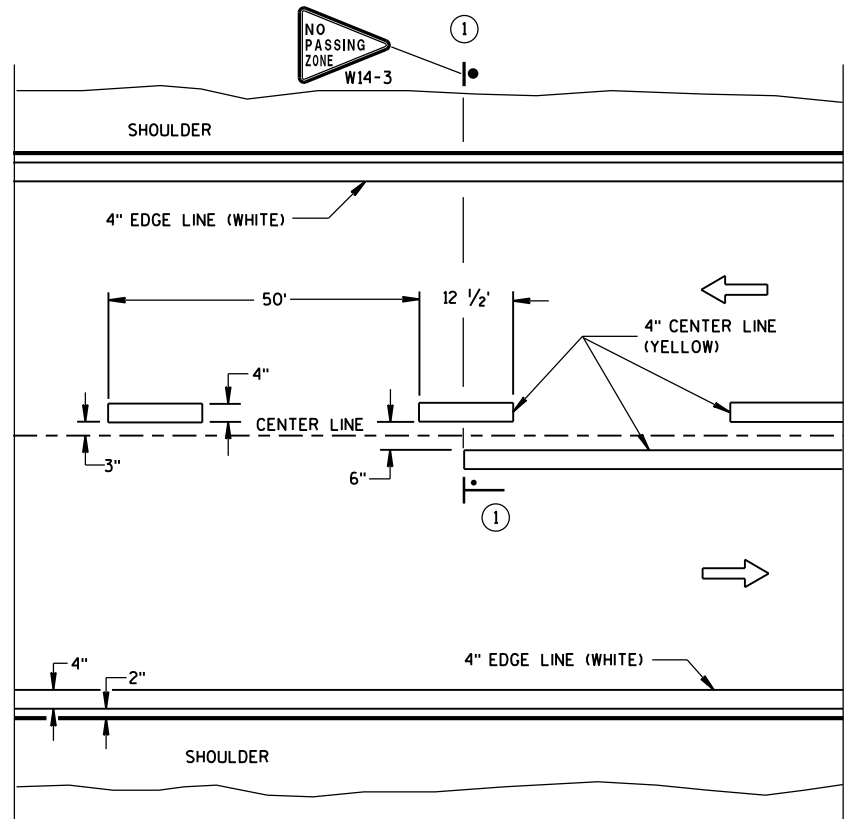
APPROVED

4-18-16

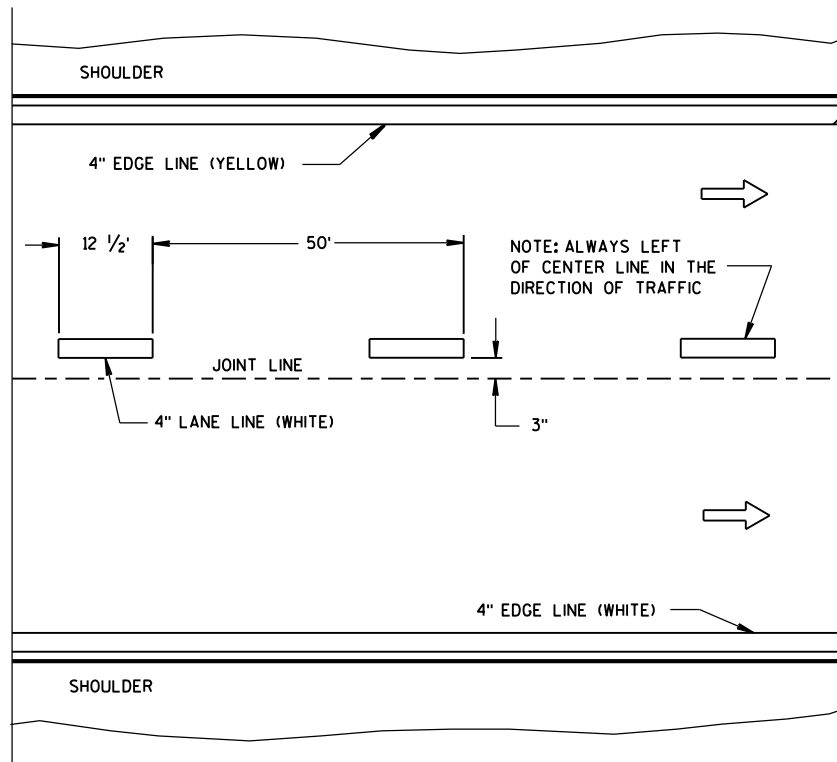
DATE

FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

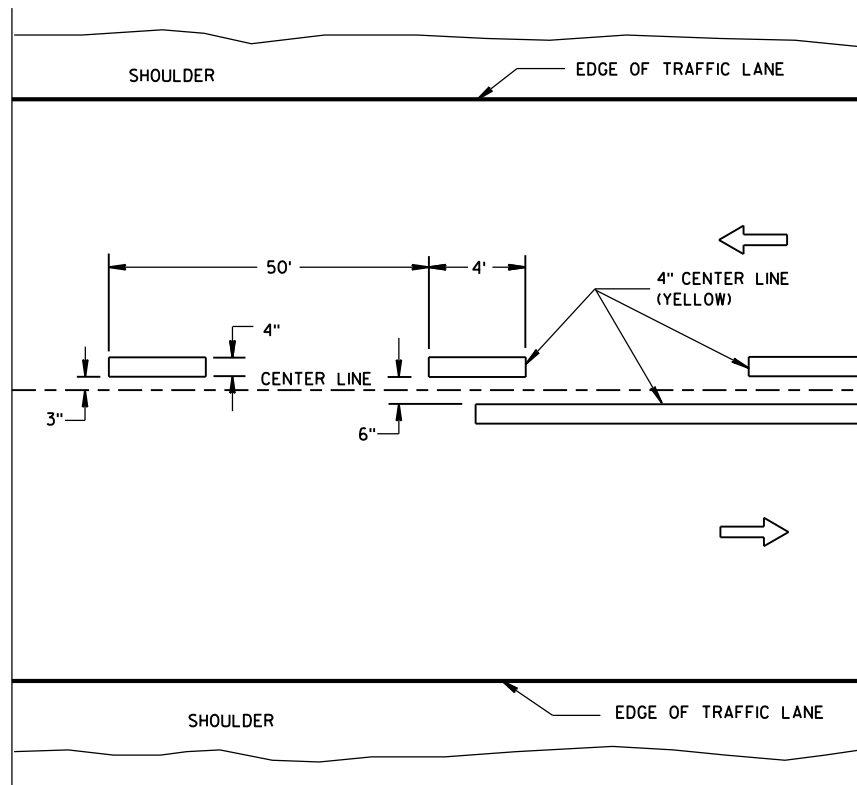


TWO WAY TRAFFIC

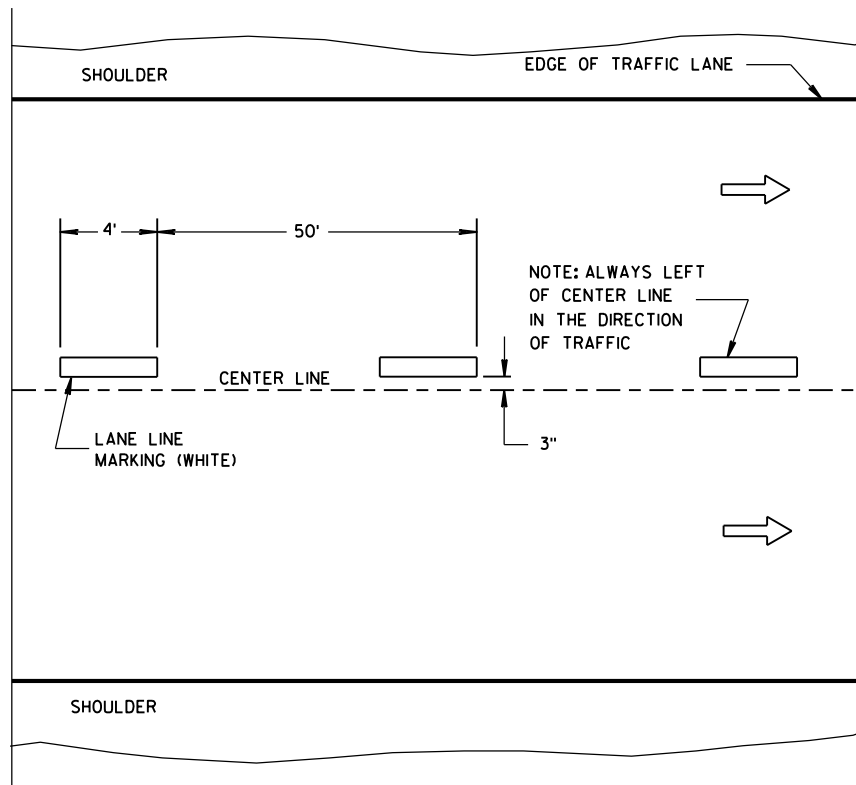


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

—●— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING
(MAINLINE)

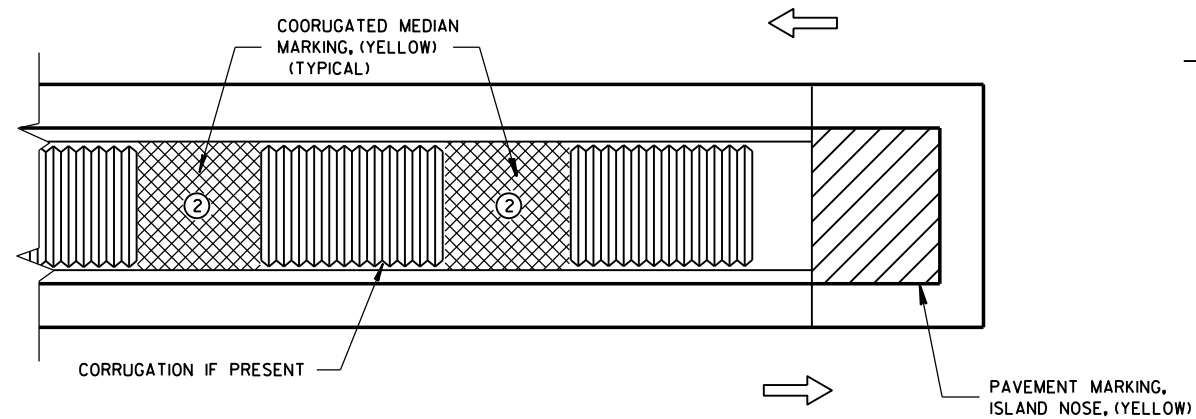
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

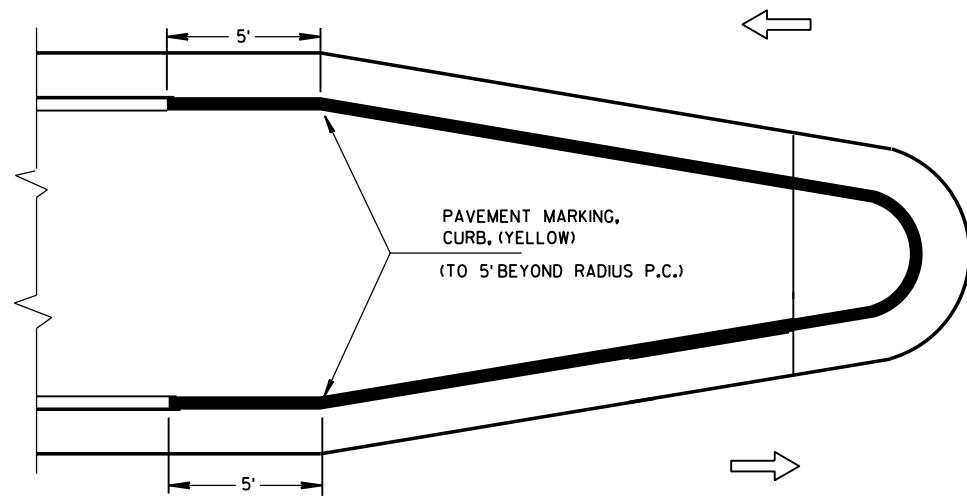


TWO WAY LEFT TURN LANE

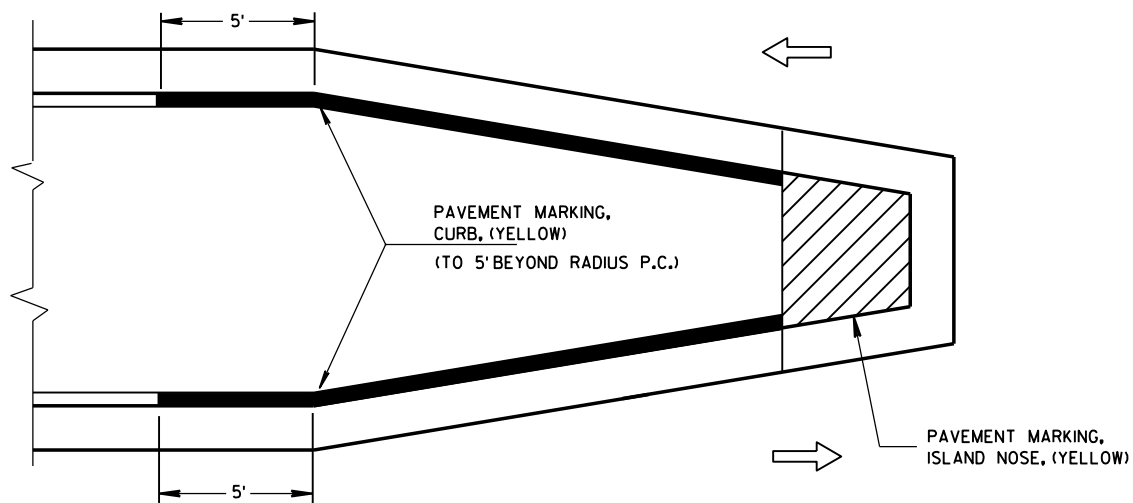
- STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

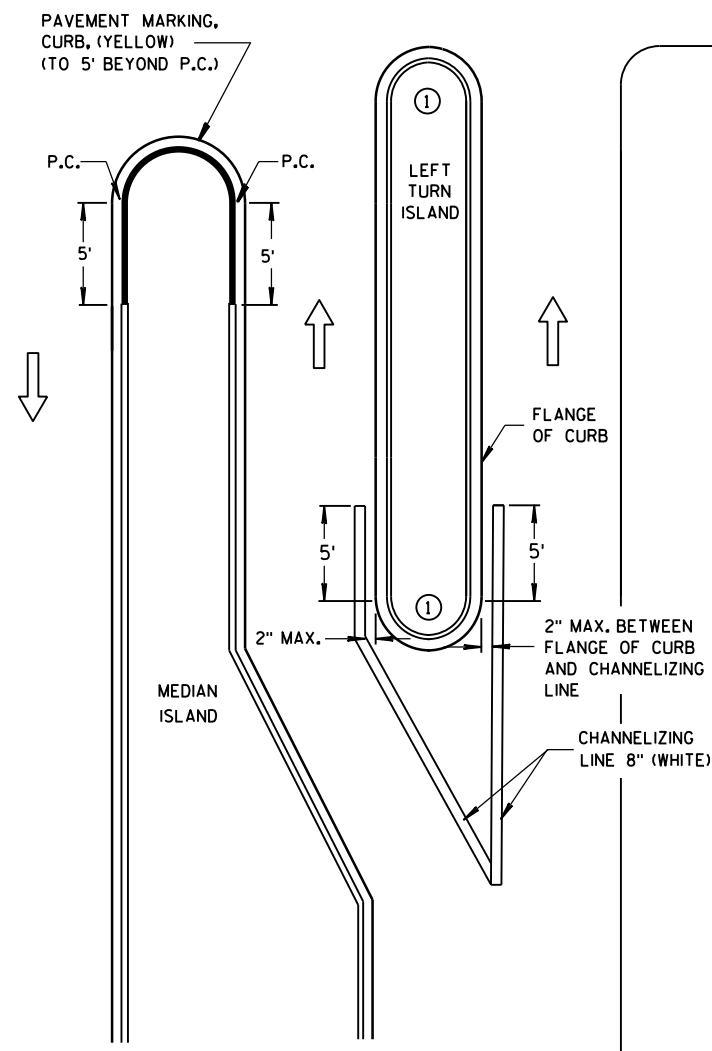


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

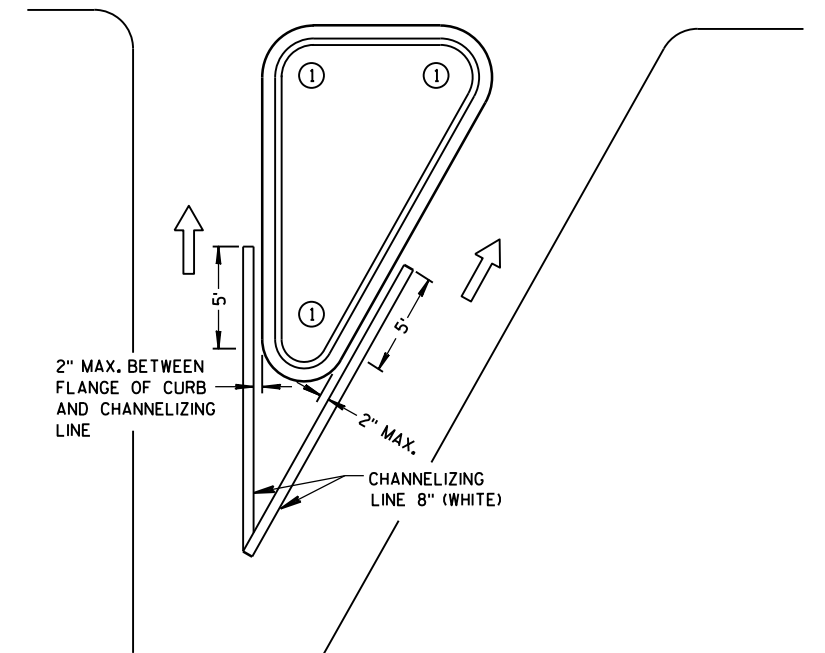
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

- 1 DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- 2 WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN, THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

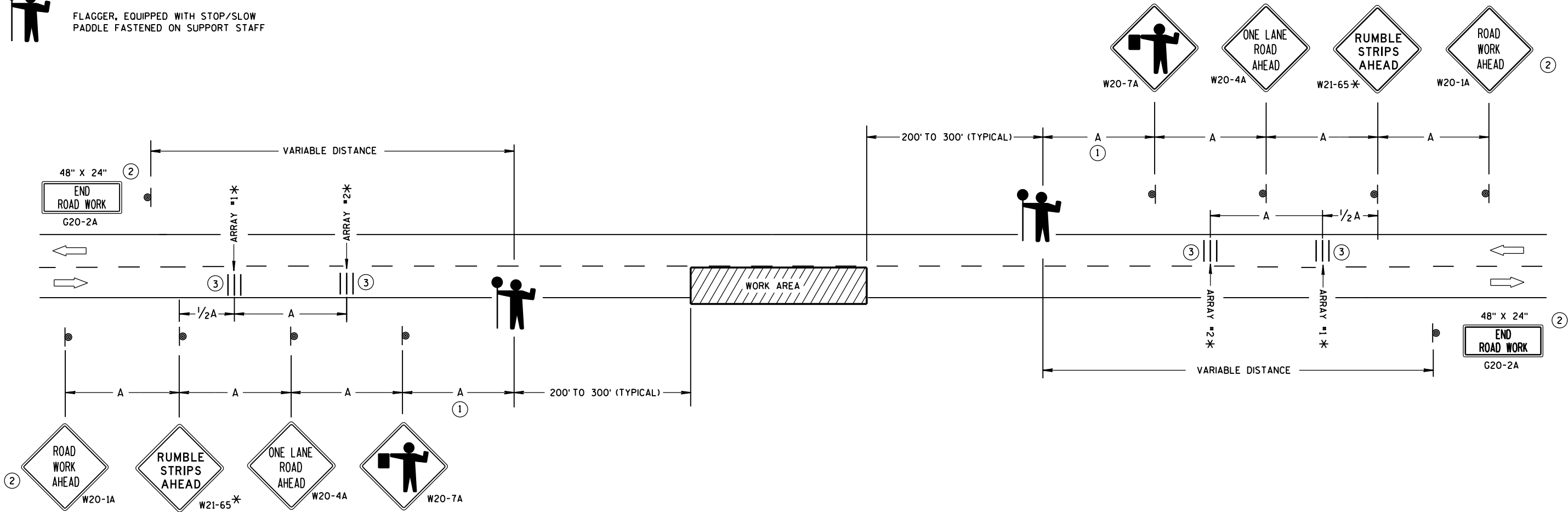
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
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 W20-4A SIGNS, USING SPACING A.



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

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.

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

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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

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 RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

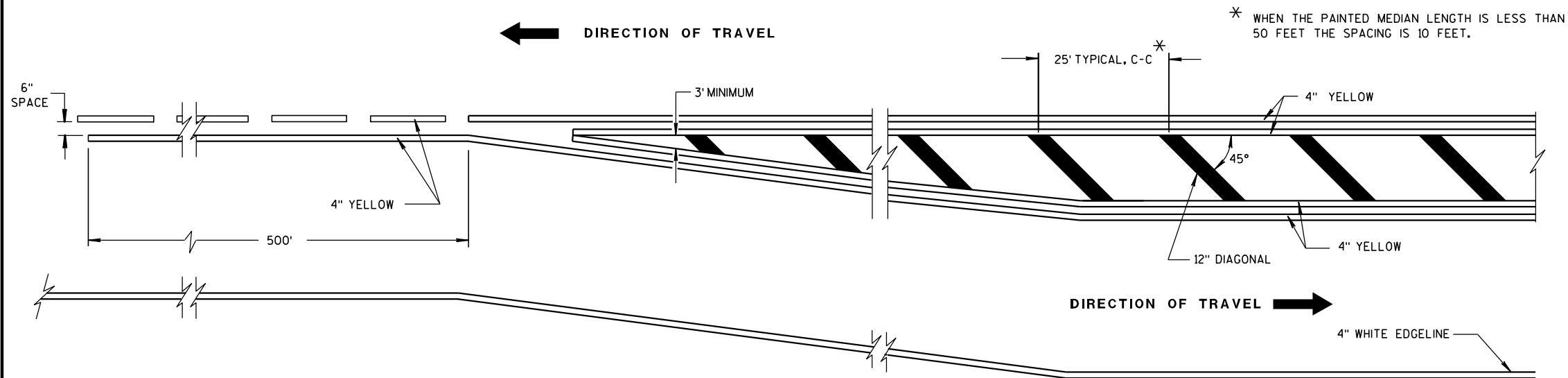
* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

- FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

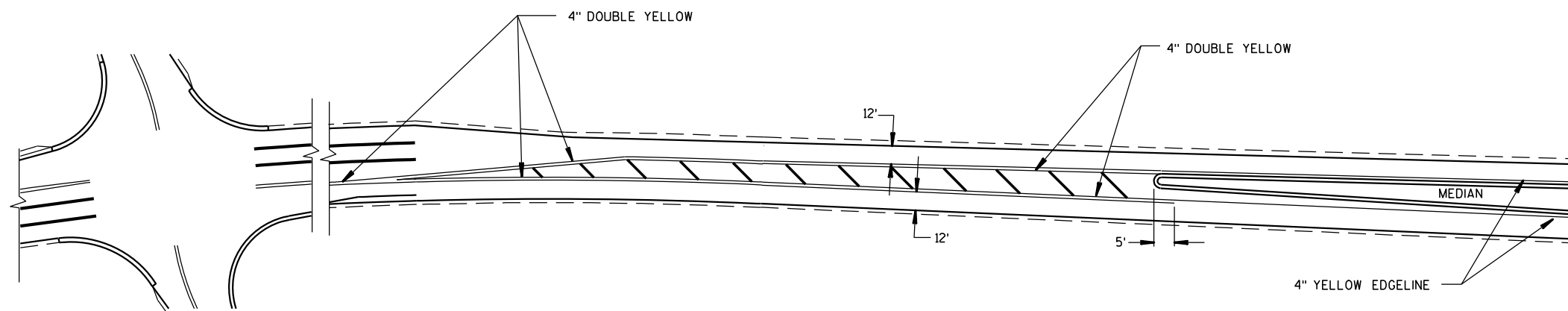
APPROVED
December, 2016 /S/ Andrew Heldtke
DATE WORK ZONE ENGINEER
FHWA



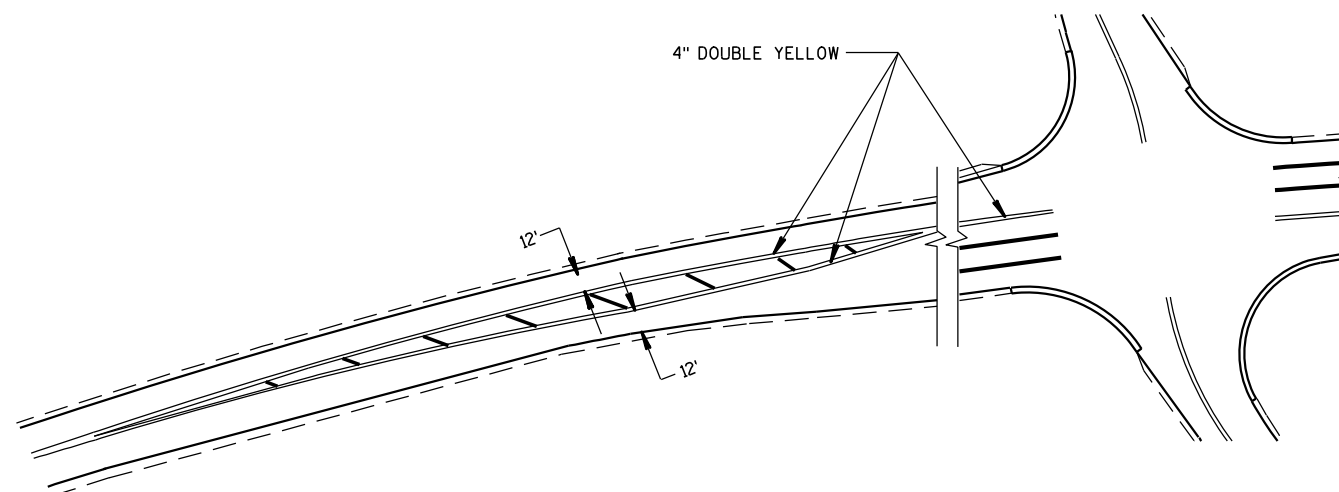
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

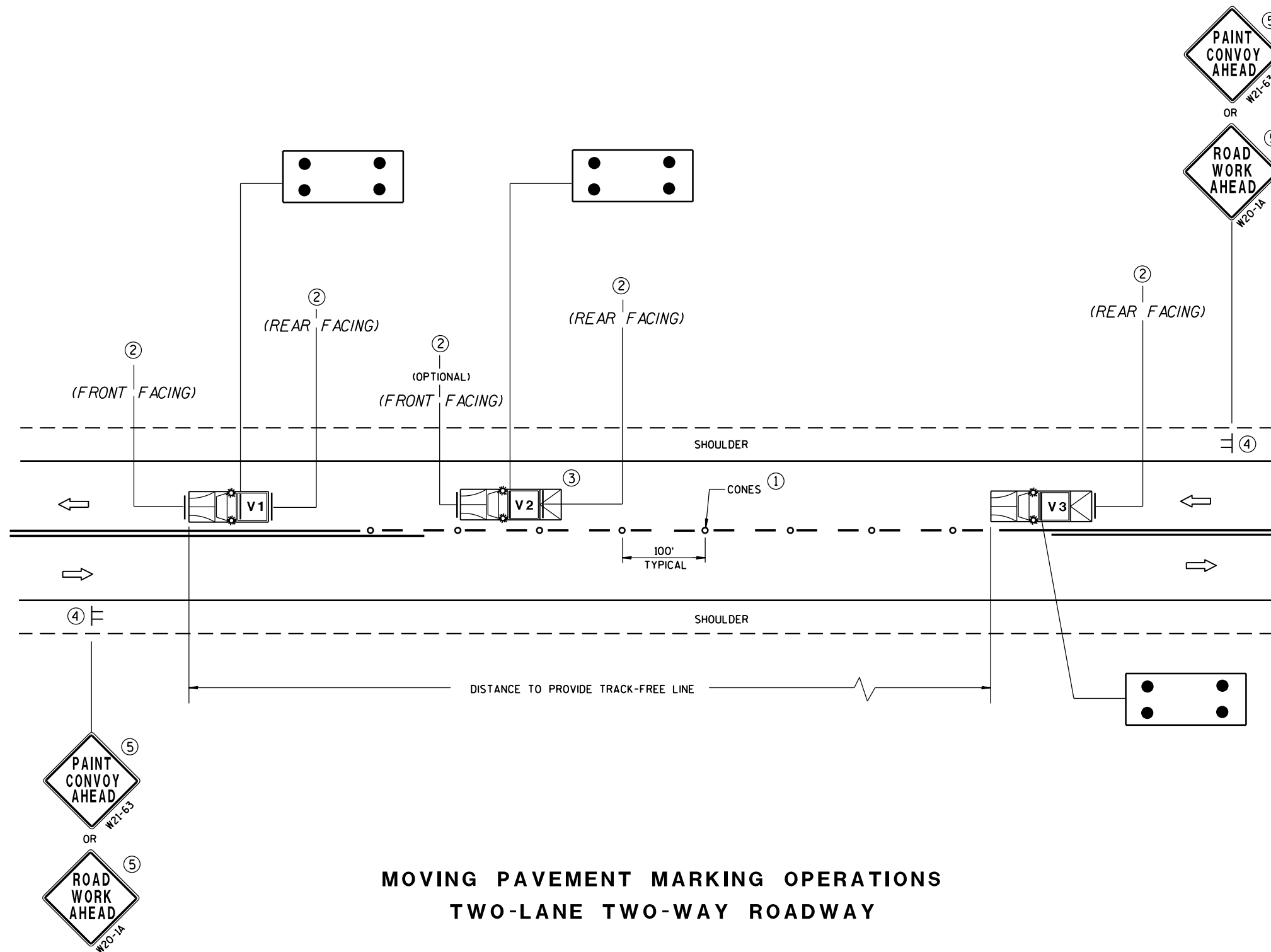


NON APPROACH MARKINGS

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-5-09 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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

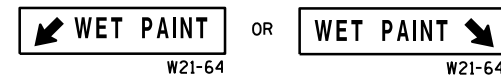
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

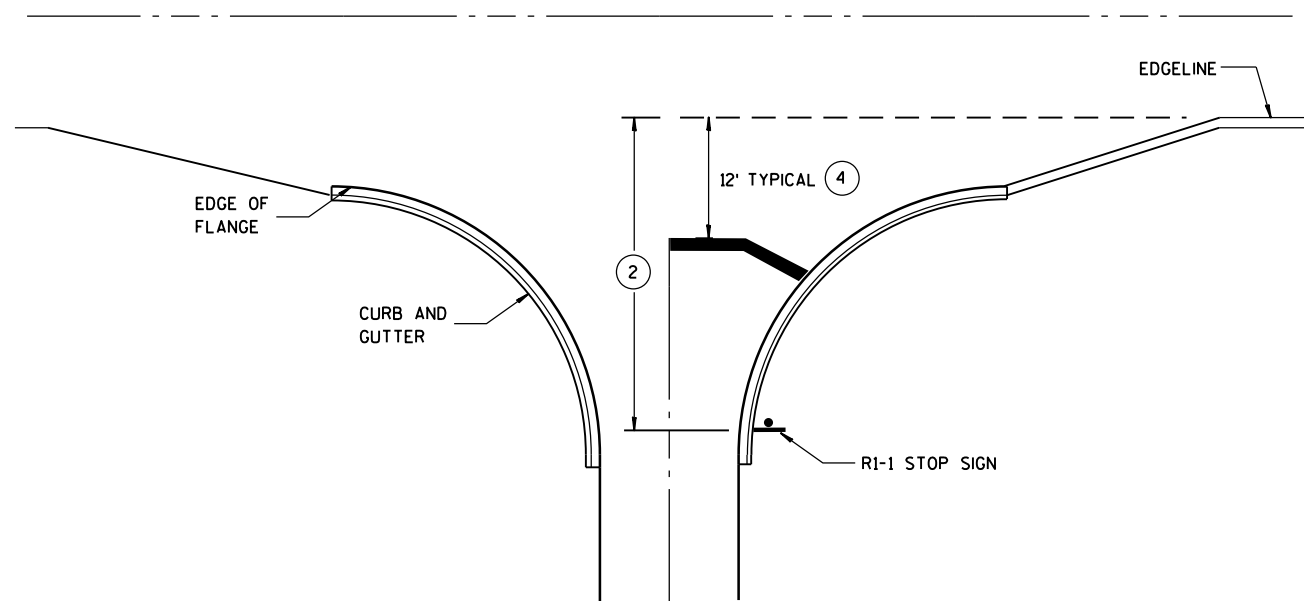
FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

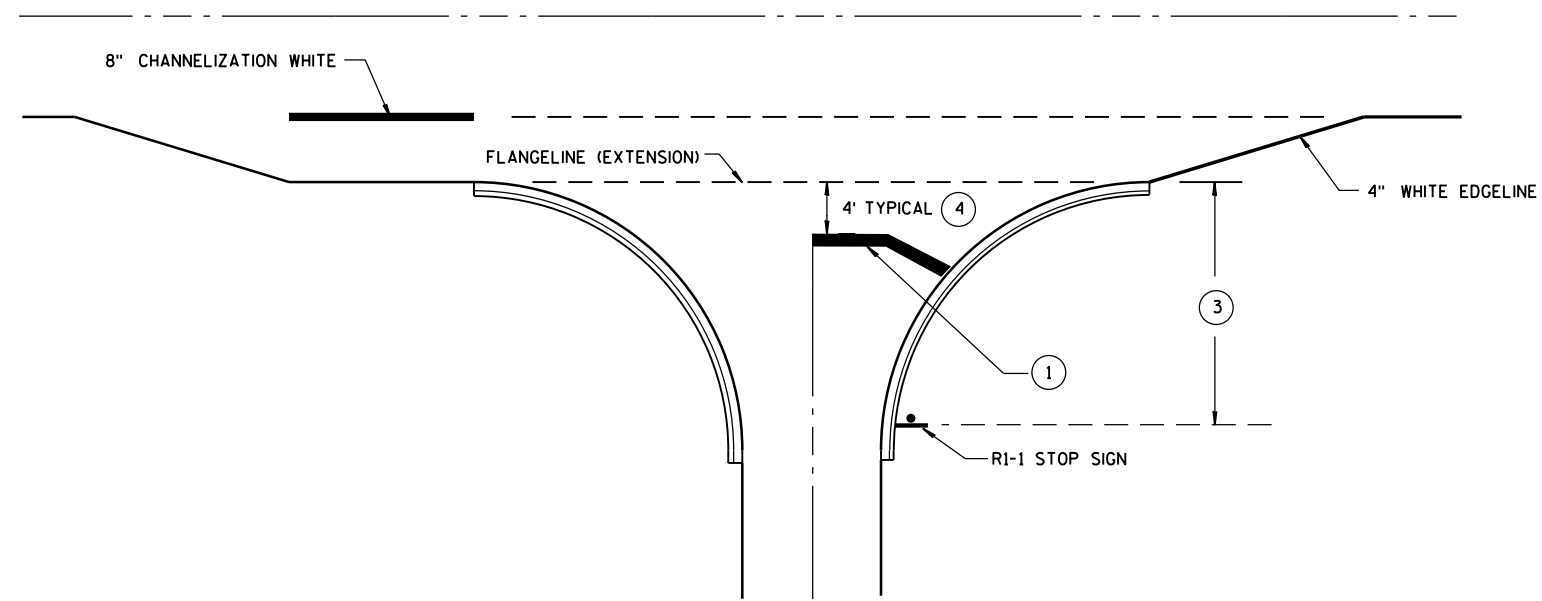
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
FHWA

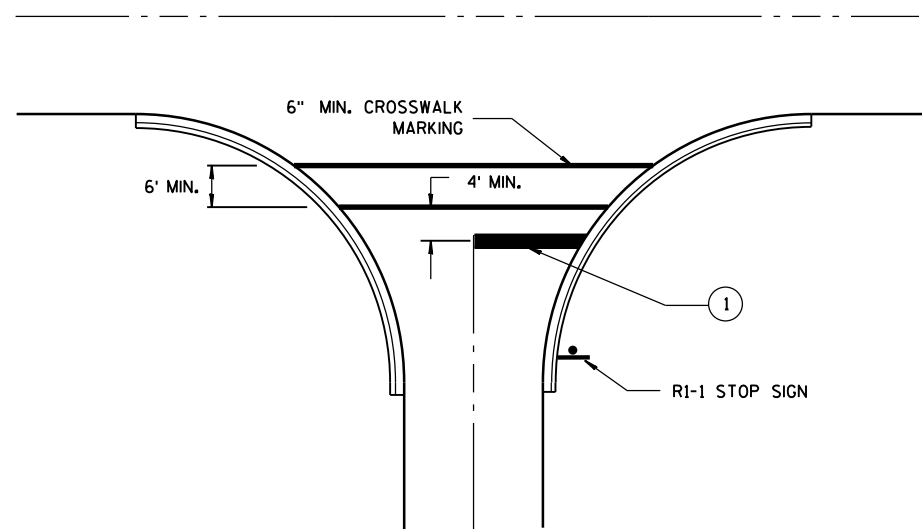
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER



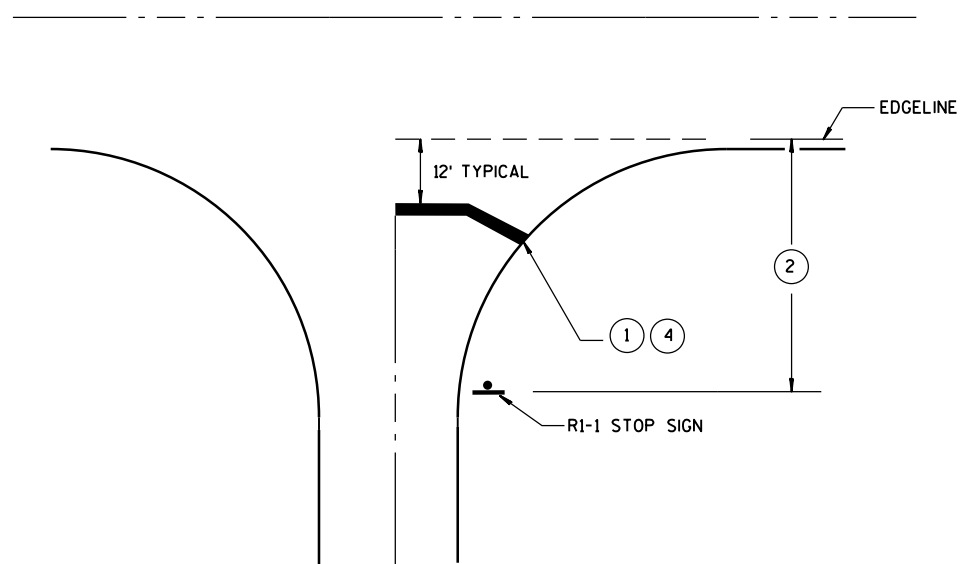
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

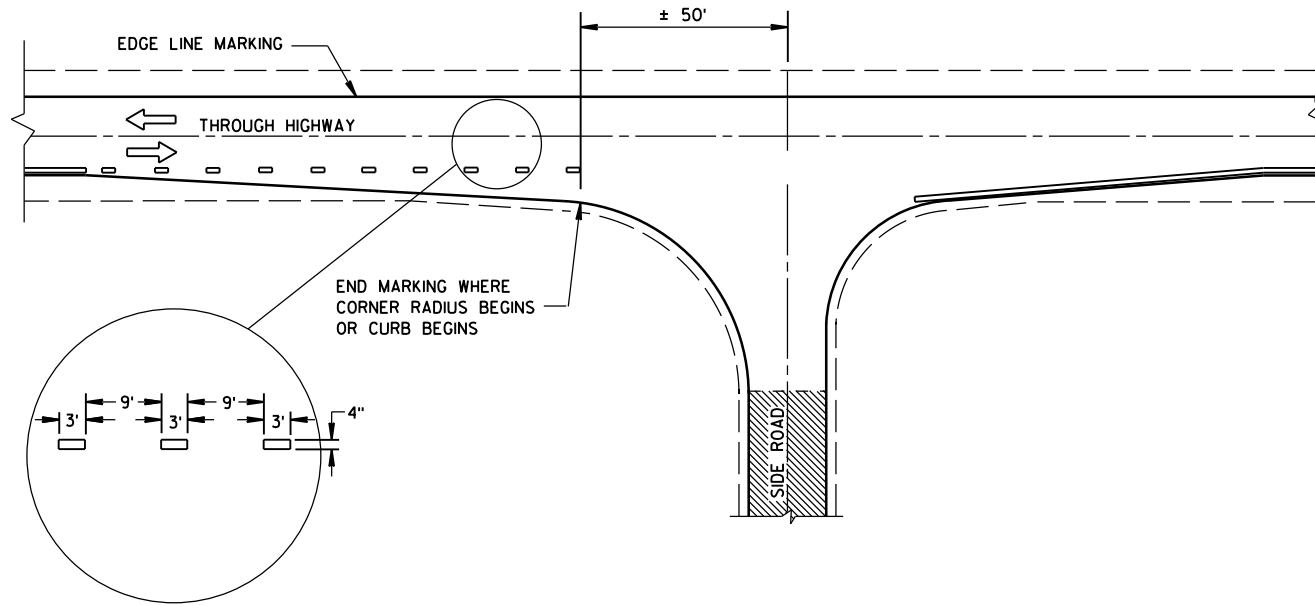
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER



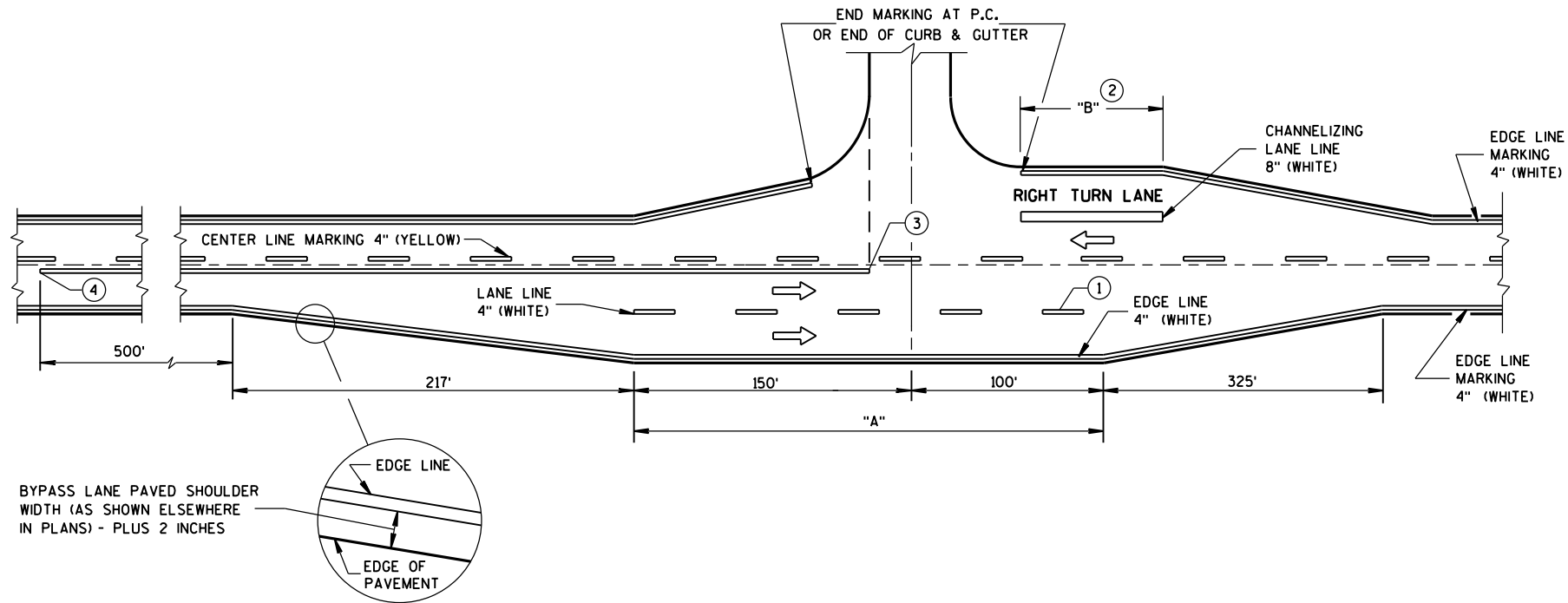
MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

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

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

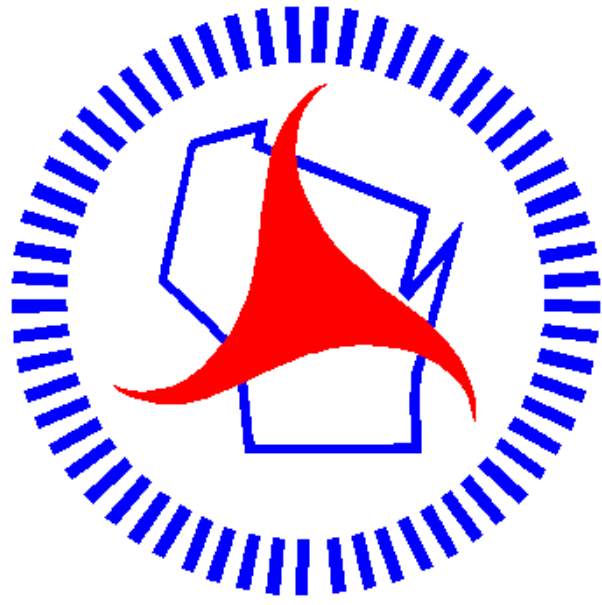


MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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