GRE

APRIL 2020

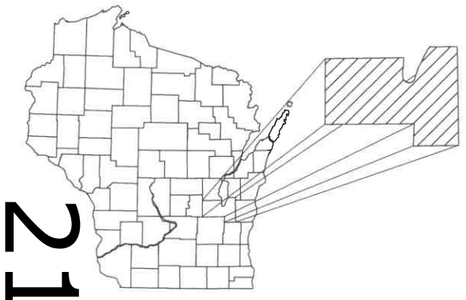
PROJECT ID: 4090-05-71

COUNTY: FOND DU LAC

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 = 174



211

DESIGN DESIGNATION

A.A.D.T. 2016 =	1,900
A.A.D.T. 2036 =	2,500
D.H.V. =	380
D.D. =	63 / 37
T. =	6.90%
DESIGN SPEED =	55 MPH
ESALS =	554,800

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ECPL CAMPBELLSPORT - USH 45

TRIPLE S ROAD - USH 45

STH 67

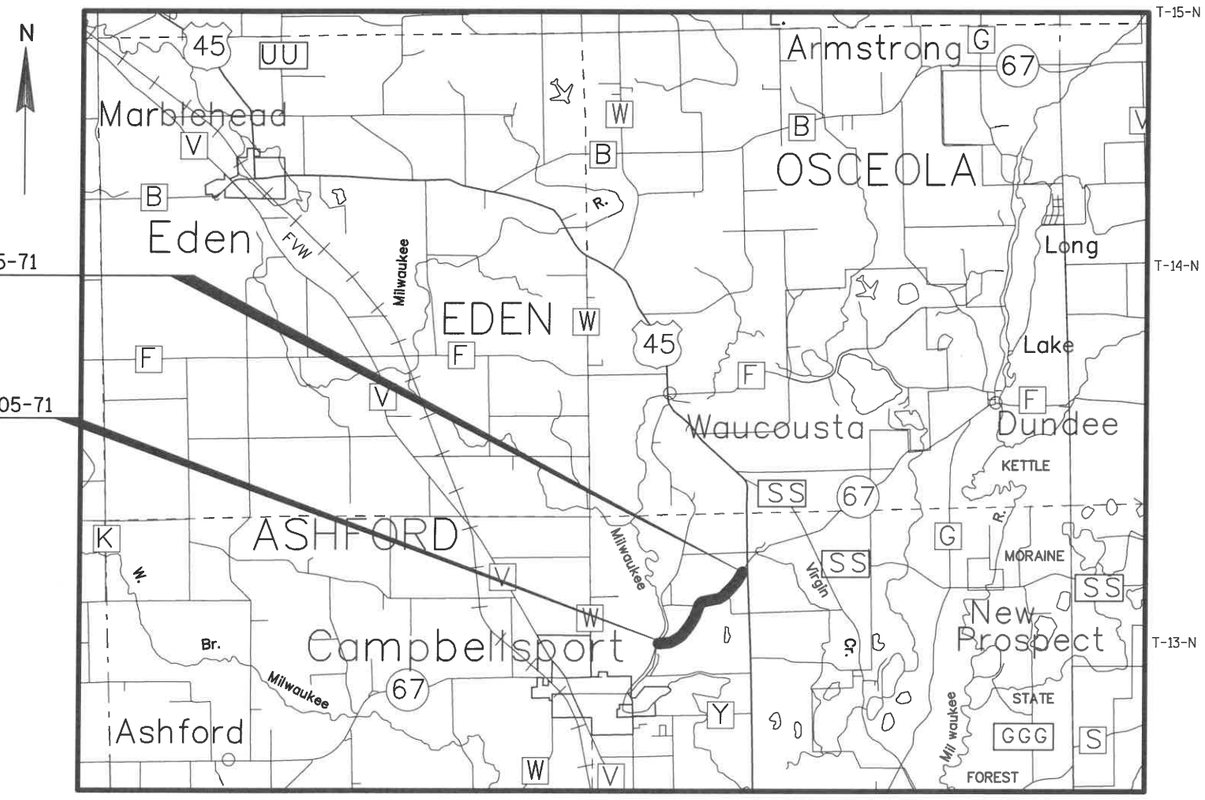
FOND DU LAC COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4090-05-71	WISC 2020145	1

STATE PROJECT NUMBER
4090-05-71

END PROJECT 4090-05-71
STA 1490+00.00

BEGIN PROJECT 4090-05-71
STA 1416+00.00
Y= 323,663.41
X= 865,996.53



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.402 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), FOND DU LAC COUNTY, NAD83 (2007).

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2007) ADJUSTMENT.

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.35
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

ENGINEERING, INC
Consultant Services

WISCONSIN
ANDREW W. BLOCK
E-41224-6
APPLETON
WI.
PROFESSIONAL ENGINEER

Andrew W. Block 10/23/19

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	MEAD & HUNT, INC.
Project Manager	BRYAN LEARST, PE
Regional Examiner	
Regional Supervisor	ROB WAGNER, PE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 10/23/19 Bryan Learst (Signature)

E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\SHEETSPLAN\4090-05-00_010101_TI.DWG PLOT DATE : 9/19/2019 9:36 AM PLOT BY : ABLOCK PLOT NAME : 4090-05-00 PLOT SCALE : 1:1

SEQUENCE OF PLANS AND DETAILS IN SECTION 2

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL PLAN
PERMANENT SIGNING PLAN
DETOUR SIGNING DETAIL PLAN

- THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- ANY LOCAL OR MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
- SUBSURFACE EXPLORATION REPORTS ARE AVAILABLE FOR REVIEW. CONTACT PROJECT MANAGER, BRYAN LEARST, P.E. AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NE REGION, PHONE NUMBER (920) 366-5639.
- ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR MATERIAL OR AS DIRECTED BY THE ENGINEER AND IS INCIDENTAL TO THE ABANDONMENT OR REMOVAL ITEM.
- STRUCTURE R-20-49 AND ADJACENT SLOPES ARE INTENDED TO BE PROTECTED BY MGS GUARDRAIL. THE WALL DESIGN SHALL ACCOMMODATE THE PROPOSED GUARDRAIL LAYOUT.
- SUPER ELEVATION TRANSITIONS ARE APPROXIMATE AND CAN BE ADJUSTED BY THE ENGINEER TO MATCH FIELD CONDITIONS.
- NOTIFY THE NORTHEAST REGION SIGNING ENGINEER AT (920) 492-4161 FIVE (5) WORKING DAYS PRIOR TO COMPLETING ALL ASPHALT PAVING SO SPECFICS FOR W13-1 SIGNS CAN BE DETERMINED.

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

2

UTILITIES

COMMUNICATION

CHARTER COMMUNICATIONS
165 KNIGHTS WAY
FOND DU LAC, WISCONSIN 54937
ATTN: MR. TODD HILDEBRANDT
PHONE: (920) 907-7724
MOBILE: (920) 794-4946
EMAIL: TODD.HILDEBRANDT@CHARTERCOM.COM

FRONTIER COMMUNICATIONS OF WI
1851 N. 14TH AVENUE
WAUSAU, WI 54401
ATTN: MR. CAL KLADE
PHONE: (715) 847-1525
MOBILE: (715) 573-2110
EMAIL: CALVIN.KLADE@FTR.COM

ELECTRICITY

WE ENERGIES
W140 N9100 LILLY ROAD
MENOMONEE FALLS, WI 53051
ATTN: MR. JAMES FRANKS
PHONE: (262) 502-6811
MOBILE: (262) 689-2693
EMAIL: JAMES.FRANKS@WE-ENERGIES.COM

GAS/PETROLEUM

ALLIANT ENERGY
883 W. SCOTT STREET
FOND DU LAC, WI 54937
ATTN: MR. JOSH COLLIEN
PHONE: (920) 322-6646
MOBILE: (920) 393-5695
EMAIL: JOSHUACOLLIEN@ALLIANTENERGY.COM

SANITARY SEWER AND WATER

VILLAGE OF CAMPBELLSPORT SEWER & WATER
470 GRANDVIEW AVENUE
P.O. BOX 709
CAMPBELLSPORT, WI 53010-0709
ATTN: MR. MARK GRUBER
PHONE: (920) 533-8321
MOBILE: (920) 960-3060
MGRUBERCPORT@YAHOO.COM

AGENCIES/PROJECT CONTACTS

TOWN OF AUBURN
BOARD CHAIRPERSON
N1727 LAKESHORE DRIVE
CAMPBELLSPORT, WI 53010
ATTN: MR. KEN DEPPERMAN
PHONE: (920) 533-5297

VILLAGE OF CAMPBELLSPORT
VILLAGE PRESIDENT
101 W. MAIN STREET
CAMPBELLSPORT, WI 53010
ATTN: MR. DAVID KREBS
PHONE: (920) 979-9713

EAST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION
400 AHNAIP STREET, SUITE 100
MENASHA, WI 54952
ATTN: MR. ERIC FOWLE, DIRECTOR
PHONE: (920) 751-4770

FOND DU LAC COUNTY
DEPARTMENT OF HIGHWAY AND PUBLIC WORKS
301 DIXIE STREET
P.O. BOX 1234
FOND DU LAC, WI 54936
ATTN: MR. TOM JANKE, COUNTY HIGHWAY ENGINEER
PHONE: (920) 929-3488

DEPARTMENT OF PARKS & TRAILS
160 SOUTH MACY STREET
FOND DU LAC, WI 54935
ATTN: MR. SAM TOBIAS, DIRECTOR
PHONE: (920) 929-3138

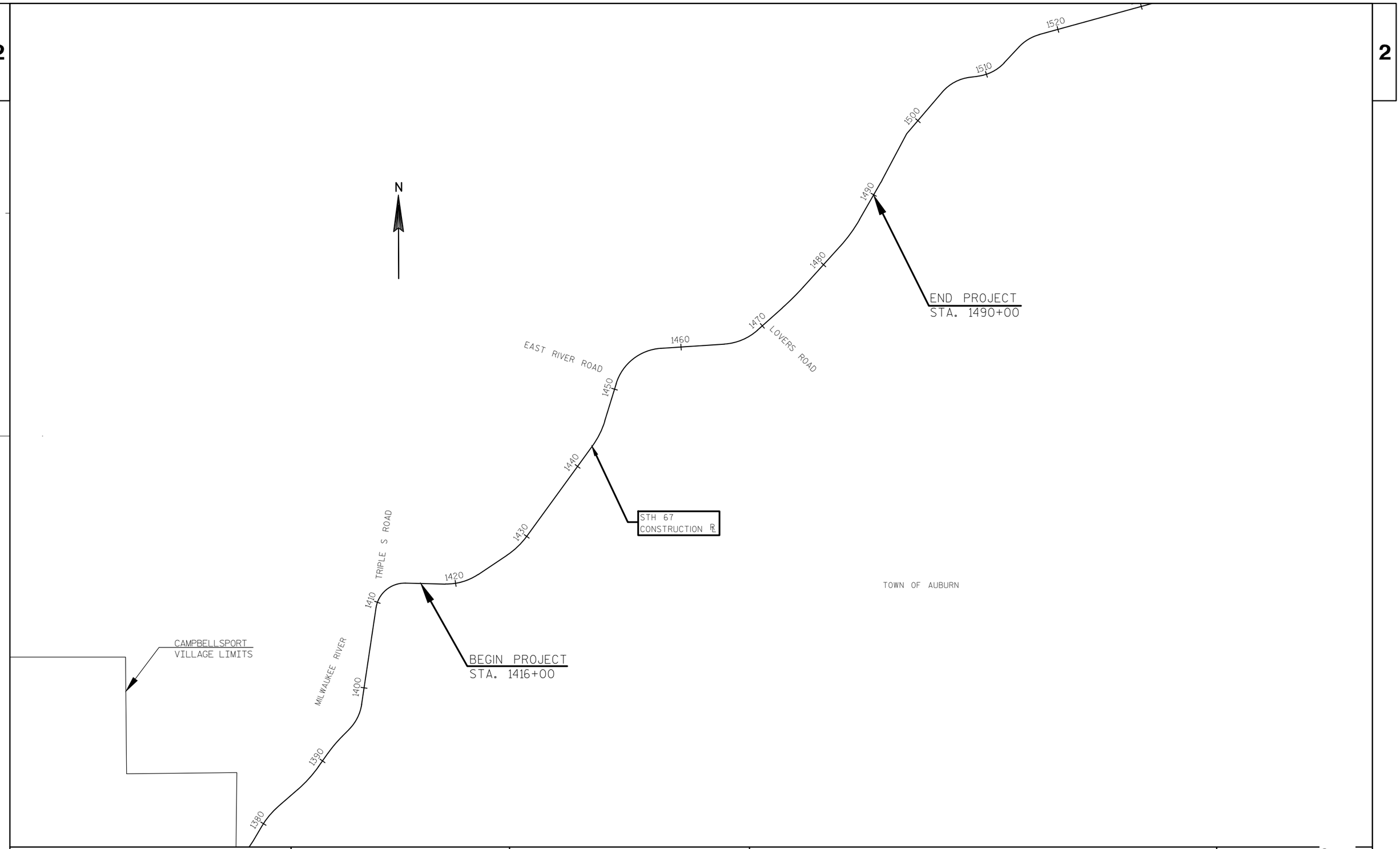
US ARMY CORPS OF ENGINEERS
ST. PAUL DISTRICT
20711 WATERTOWN ROAD #F
WAUKESHA, WI 53186
ATTN: MS. BONNIE GUNDRUM
PHONE: (651) 290-5730

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
DNR LIAISON
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
ATTN: MR. JAY SCHIEFELBEIN
PHONE: (920) 360-3784

CONSULTANT CONTACT
MEAD & HUNT, INC.
2440 DEMING WAY
MIDDLETON, WI 53562-1562
ATTN: MR. RUSTY CHESMORE, P.E.
PHONE: (608) 273-6380
RUSTY.CHESMORE@MEADHUNT.COM

JT ENGINEERING, INC.
1077 CENTENNIAL CENTRE BOULEVARD
HOBART, WI 54155
ATTN: MR. ANDREW BLOCK, P.E.
PHONE: (920) 468-4771
ANDYBLOCK@JT-ENGINEERING.COM

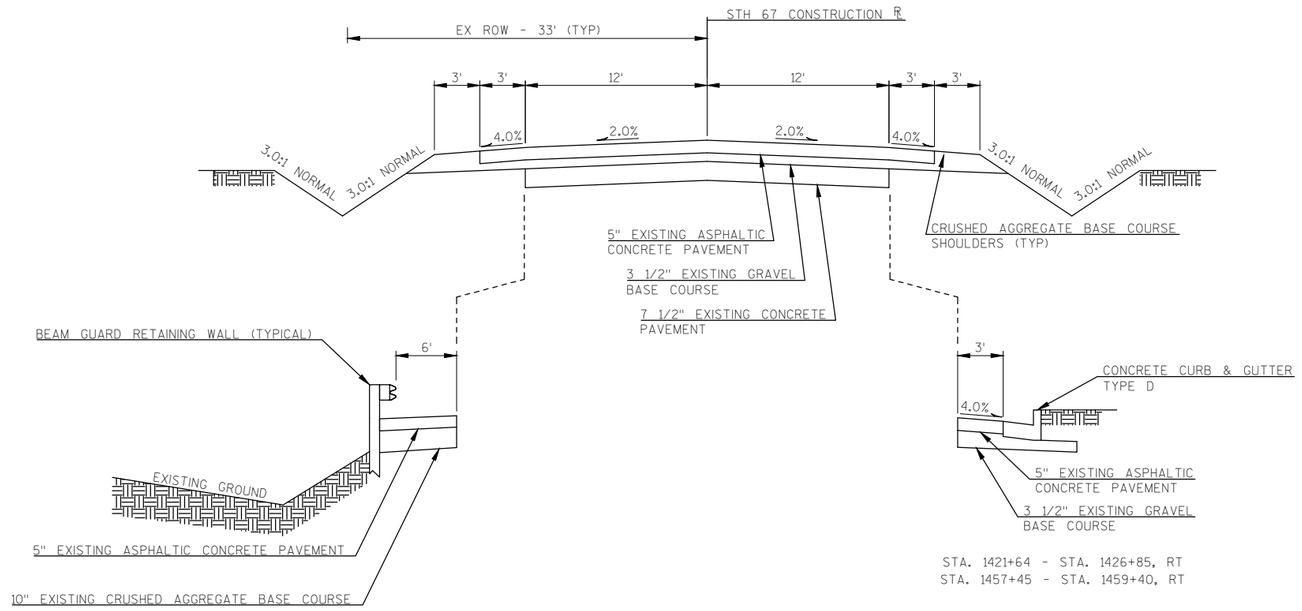
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 3 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\SHEETSOTHER\020201_PO.DWG PLOT DATE : 7/17/2019 8:20 AM PLOT BY : ANDY BLOCK PLOT NAME : ---------- PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2



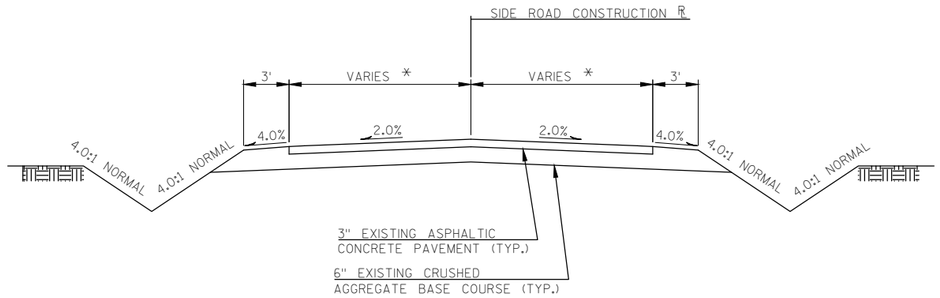
STA. 1421+64 - STA. 1426+85, RT
STA. 1457+45 - STA. 1459+40, RT

EXISTING TYPICAL SECTION WITH BEAM GUARD RETAINING WALL

STA. 1424+73 - STA. 1428+82, LT
STA. 1433+70 - STA. 1437+63, LT
STA. 1434+13 - STA. 1436+66, RT
STA. 1449+24 - STA. 1451+89, RT
STA. 1464+77 - STA. 1469+77, RT

EXISTING TYPICAL SECTION FOR STH 67

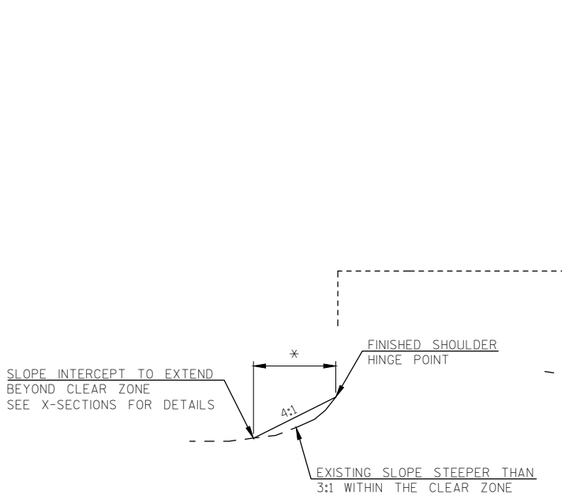
STA. 1416+00.00 - STA. 1490+00.00



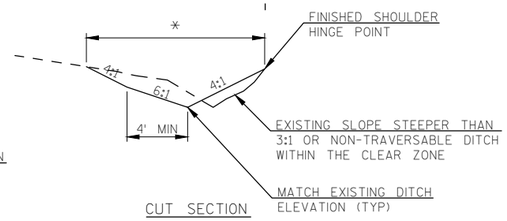
EXISTING SIDE ROAD TYPICAL SECTION

*EAST RIVER ROAD (11' LANES)
*LOVERS ROAD (10' LANES)

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4 E



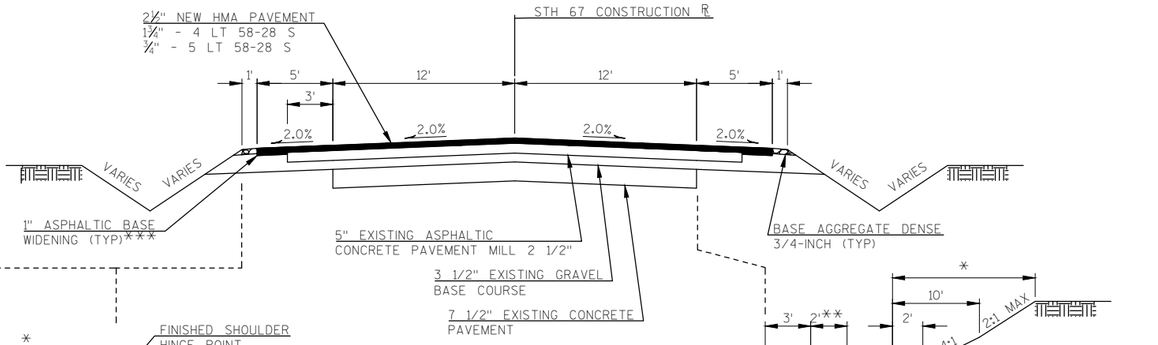
FILL SECTION

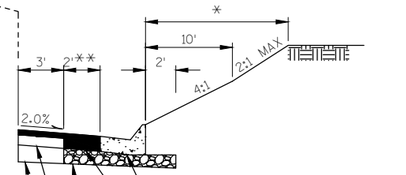


CUT SECTION

PROPOSED FINISHED TYPICAL SECTION FOR SLOPE FLATTENING

* - PLACE TOPSOIL, FERTILIZER TYPE A, SEEDING MIXTURE NO. 30, AND REFER TO EROSION CONTROL PLANS FOR FINISHING





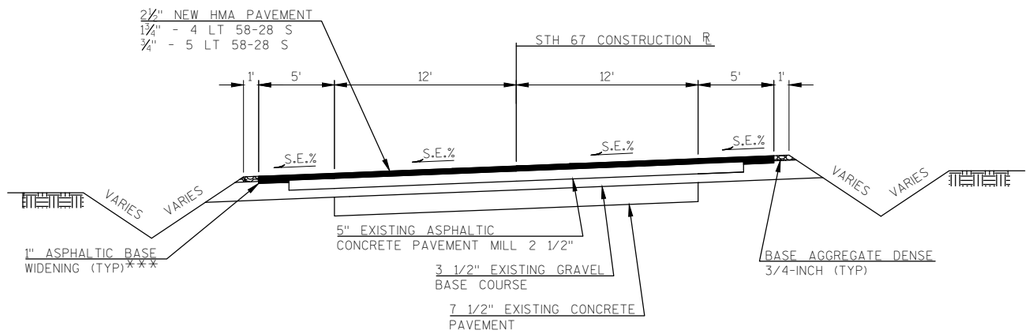
STA. 1421+64 - STA. 1426+85, RT
STA. 1457+45 - STA. 1459+40, RT

PROPOSED FINISHED TYPICAL SECTION FOR STH 67
STA. 1416+00.00 - STA. 1490+00.00

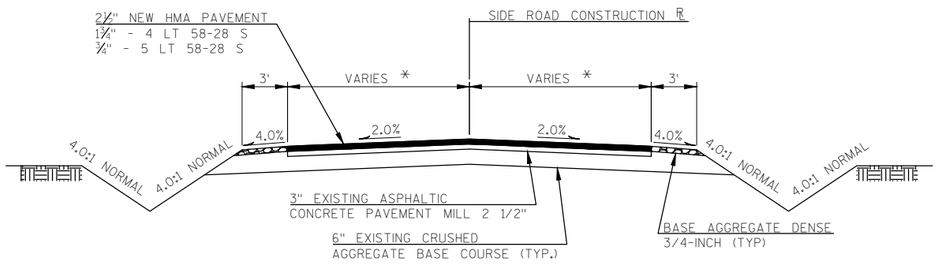
* - PLACE TOPSOIL, FERTILIZER TYPE A, SEEDING MIXTURE NO. 30, AND REFER TO EROSION CONTROL PLANS FOR FINISHING

** - VARIES 2' TO 3.5'

*** - ASPHALTIC BASE WIDENING (2' WIDTH TYPICAL) INTENDED FOR SHOULDER WIDENING AREAS BEYOND EXISTING PAVEMENT LIMITS INCLUDING EAT TERMINALS, OTHER APPURTENCES, ETC.

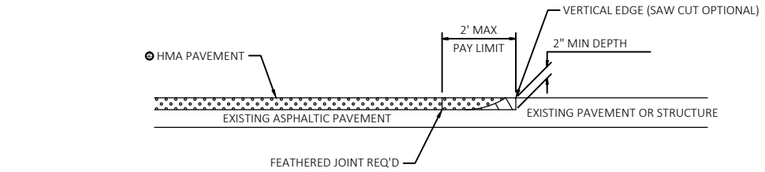


PROPOSED FINISHED TYPICAL SECTION FOR STH 67 IN SUPERELEVATION

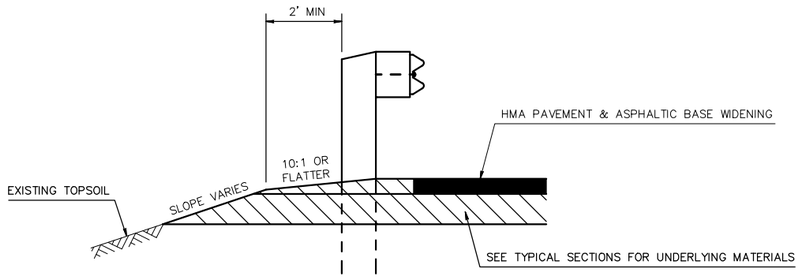


PROPOSED FINISHED SIDE ROAD TYPICAL SECTION
*EAST RIVER ROAD (11' LANES)
*LOVERS ROAD (10' LANES)

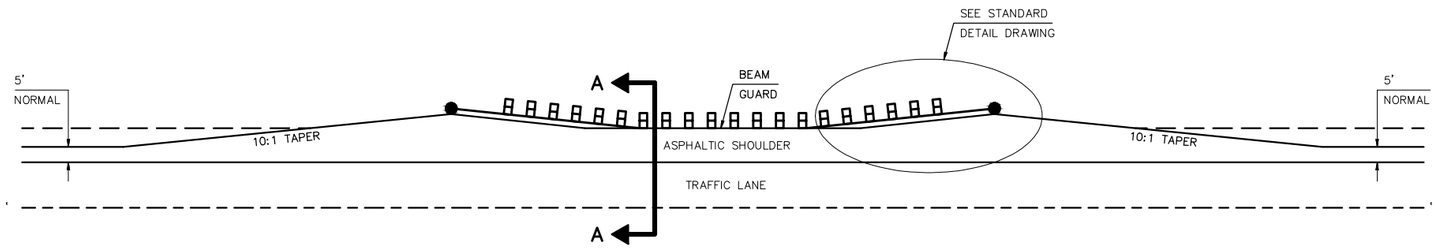
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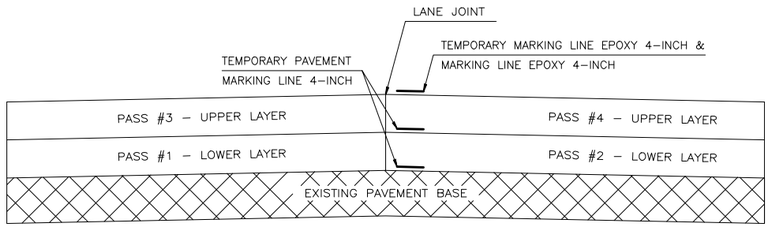
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



SECTION A–A

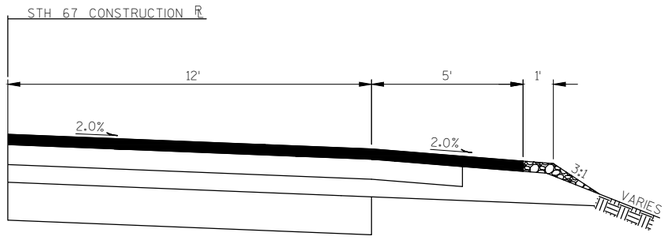


DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL



LOWER AND UPPER LAYERS

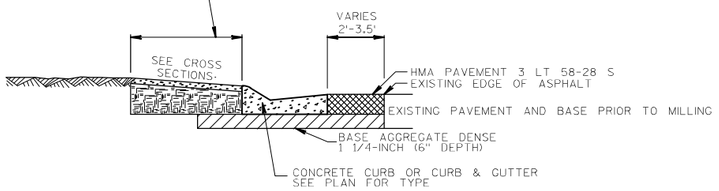
PAVEMENT MARKING DETAIL FOR ASPHALTIC PAVEMENTS



DETAIL FOR AGGREGATE SHOULDER CONSTRUCTION WITHOUT SLOPE CORRECTION

FOR LOCATIONS WHERE EXISTING SHOULDER WIDTH < 6'

PLACE TOPSOIL, FERTILIZER TYPE A, SEEDING MIXTURE NO. 30
AND REFER TO EROSION CONTROL PLANS FOR FINISHING

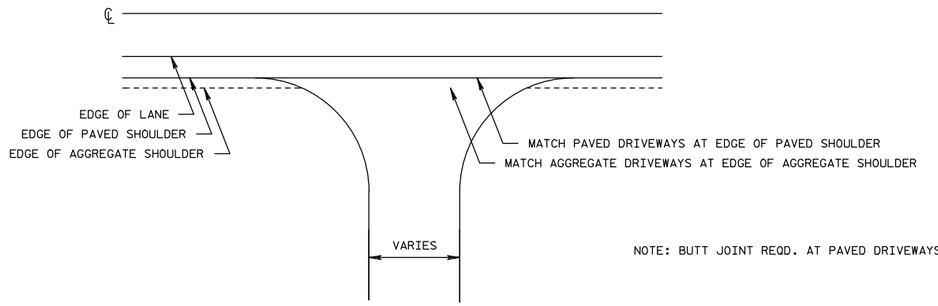


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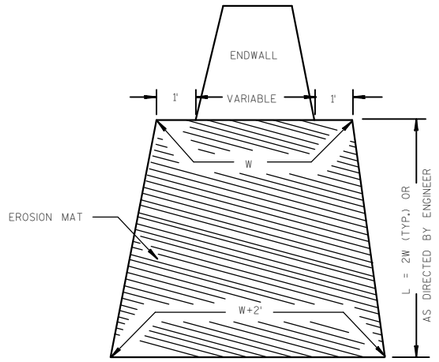
BASE COURSE BELOW PROPOSED CURB OR CURB & GUTTER SHALL BE CONSTRUCTED TO PROVIDE A SUITABLE BASE AS DETERMINED BY THE ENGINEER IN THE FIELD

SEE MISCELLANEOUS QUANTITIES FOR FINISHING AND EROSION CONTROL ITEMS

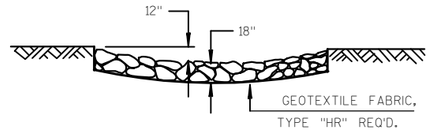
DETAIL FOR CURB & GUTTER REPLACEMENT



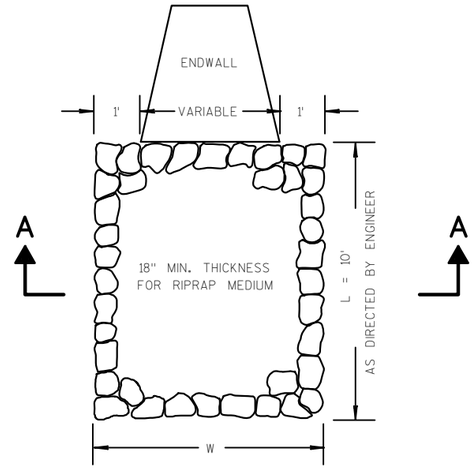
DETAIL FOR TYPICAL DRIVEWAY PAVING LIMITS



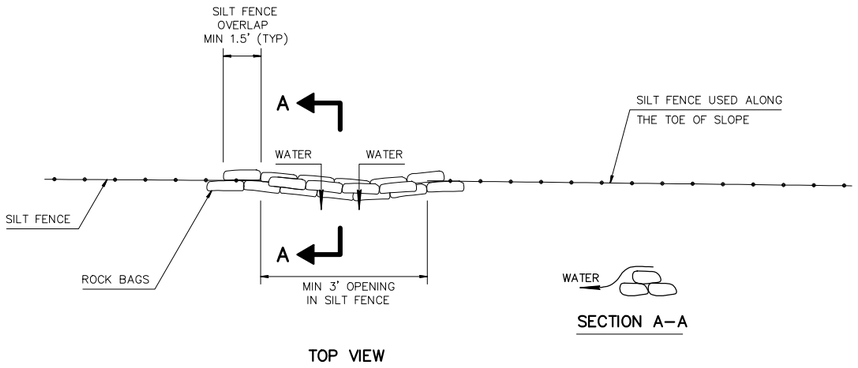
DETAIL FOR EROSION MAT TREATMENT AT CULVERTS



SECTION A-A



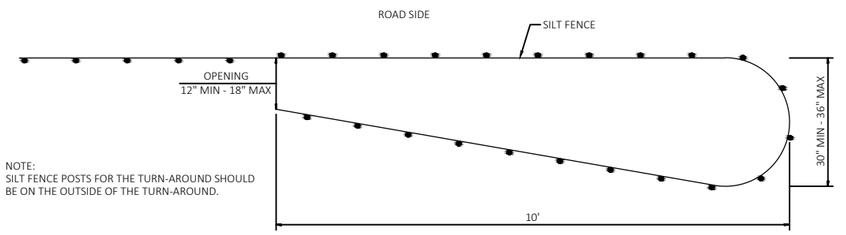
RIPRAP MEDIUM TREATMENT AT CULVERTS



TOP VIEW

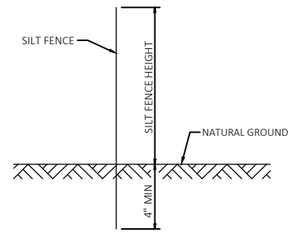
SECTION A–A

DETAIL FOR ROCK BAGS USED AS SILT FENCE RELIEF



NOTE:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.

PLAN VIEW

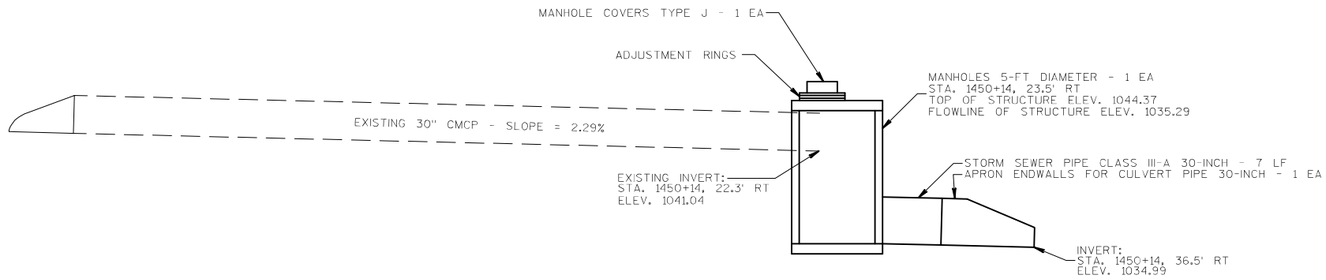


SIDE VIEW

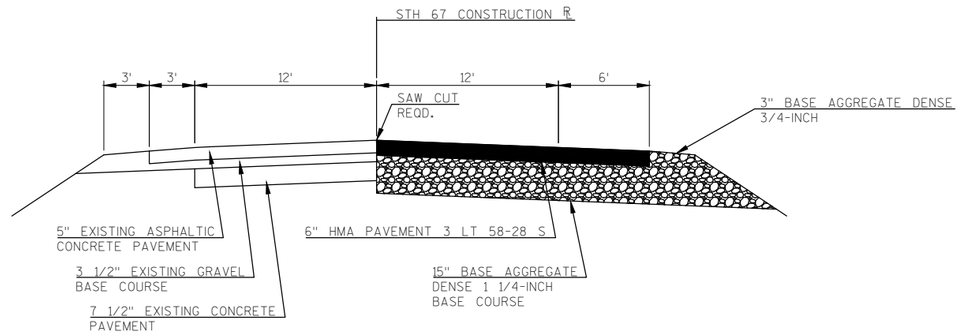
SILT FENCE TURN–AROUND DETAIL

SILT FENCE TURN-AROUND SHALL BE USED IN AREAS ADJACENT TO THE MILWAUKEE RIVER

2



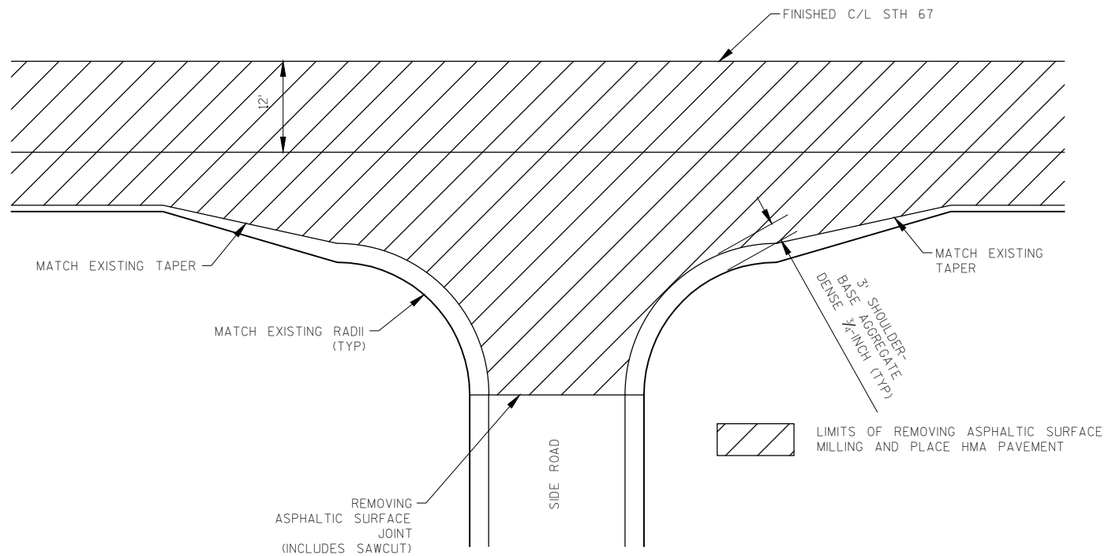
DETAIL FOR MANHOLE AND OUTLET PIPE, STA. 1450+14



NOTES:
-DETAILS FOR SIDESLOPES, GRADING AND STRUCTURES SHOWN ELSEWHERE IN THE PLANS
-PLACEMENT OF HMA PAVEMENT 3 LT 58-28 S SHALL BE COMPLETED PRIOR TO MILLING OPERATIONS

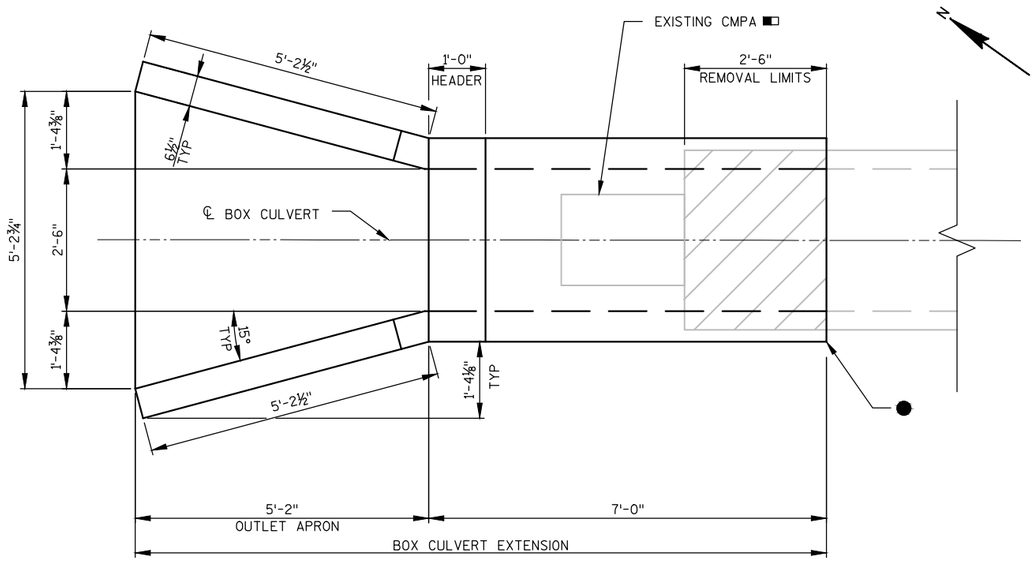
DETAIL FOR ROADWAY RECONSTRUCTION STA. 1449+35 TO STA. 1451+40

2



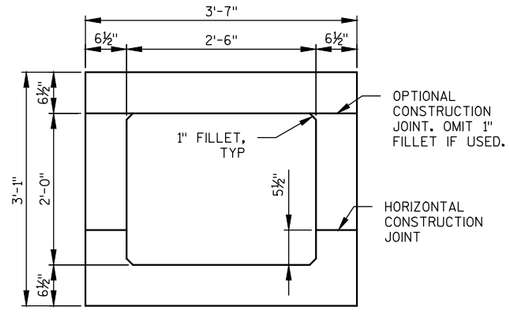
TYPICAL SIDEROAD DETAIL WITHOUT CURB & GUTTER

E. RIVER ROAD
LOVERS ROAD



STA 1427+50 PLAN VIEW

24" x 30" BOX CULVERT



TYPICAL SECTION THRU BOX

NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS STA 1427+50" SHALL BE THE EXISTING GROUND LINE.

STRUCTURE BACKFILL IS REQUIRED BEHIND ALL WINGWALLS.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE THE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING APRON WINGWALLS.

THE CONCRETE IN CUT OFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATIVE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

RUBBERIZED MEMBRANE WATERPROOFING AND FILLER TO EXTEND ALONG JOINT BETWEEN WING AND BOX FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING TO BE PLACED ALONG BF OF VERTICAL CONSTRUCTION JOINTS ALONG WALLS AND ACROSS THE TOP SLAB OF BOX CULVERT.

● THE EXISTING STRUCTURE AT STA. 1427+50 SHALL BE REMOVED TO THE LIMITS SHOWN. CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

■ REMOVAL OF EXISTING CMPA INCLUDED IN ROADWAY QUANTITIES.

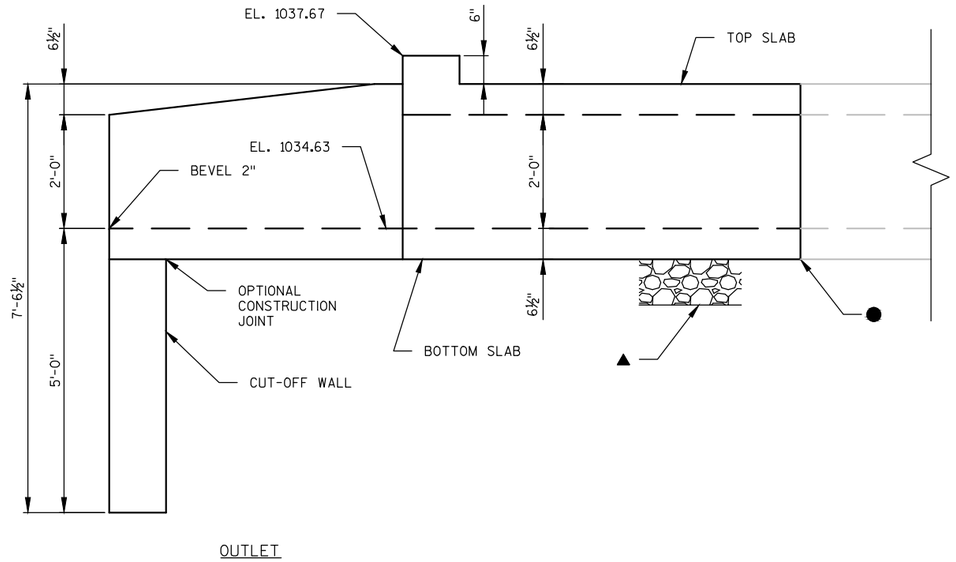
▲ UNDERCUT 1'-0". EXCAVATION SHALL BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM. THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

STEEL REINFORCEMENT SHALL BE GRADE 60 DEFORMED BARS (FY = 60,000 P.S.I.).

THE ULTIMATE COMPRESSIVE STRENGTH OF THE FIELD POURED CONCRETE SHALL BE 3,500 P.S.I.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

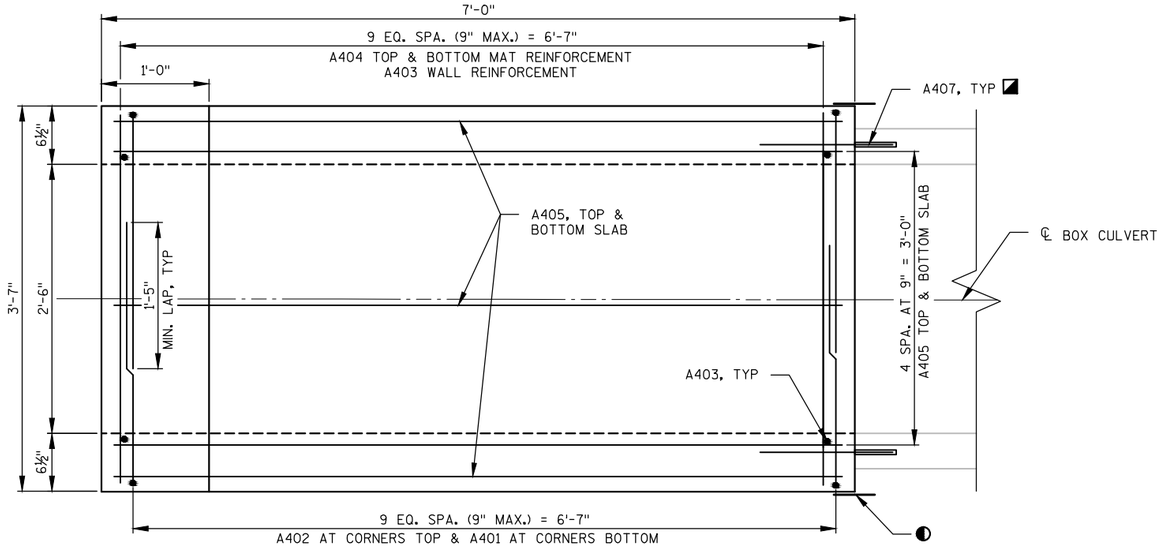


OUTLET

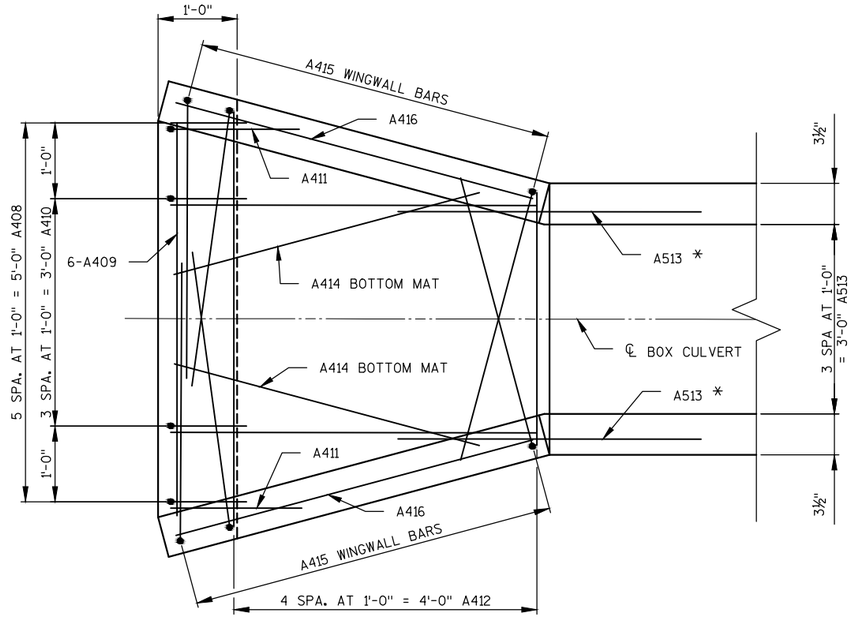
STA 1427+50 ELEVATION VIEW

STRUCTURE QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0200	REMOVING OLD STRUCTURE STATION 1427+50	LS	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS STA 1427+50	LS	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	22
311.0110	BREAKER RUN	TON	9
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	16
504.0100	CONCRETE MASONRY CULVERTS	CY	4
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	430
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	160
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	5
645.0105	GEOTEXTILE TYPE C	SY	14
	NON BID ITEMS		
	FILLER	SIZE	3/4"

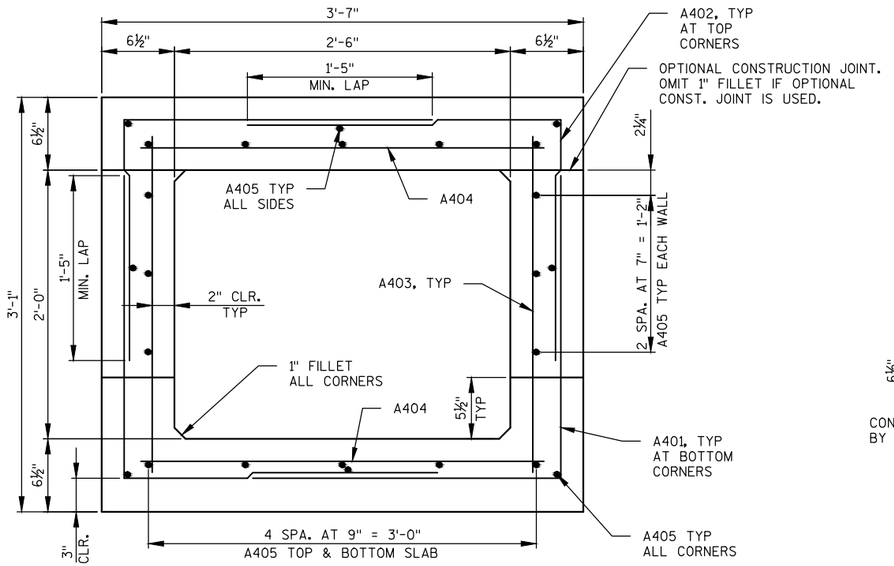


PLAN VIEW OUTLET PANEL

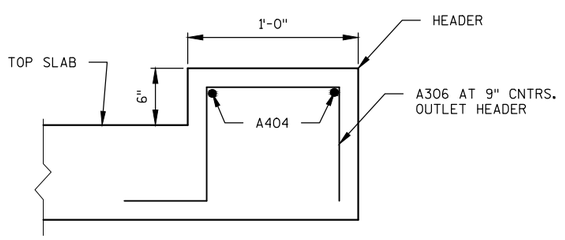


OUTLET APRON REINFORCEMENT

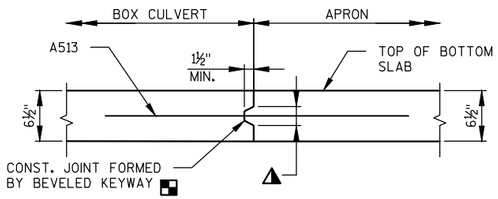
* SEE APRON CONNECTION DETAIL



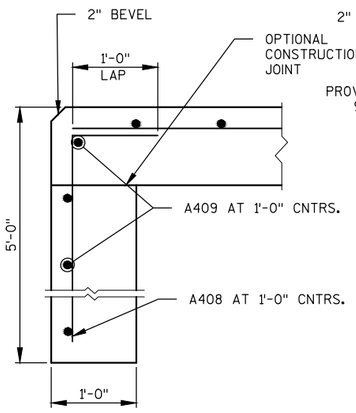
SECTION THRU BOX



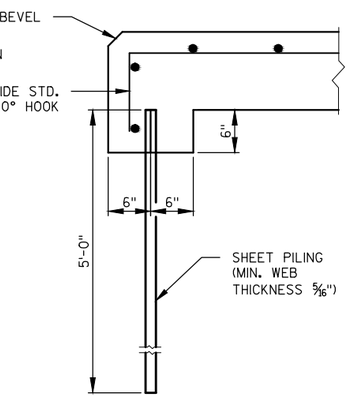
TYPICAL SECTION THRU CULVERT HEADER



APRON CONNECTION DETAIL



CUT OFF WALL



ALTERNATE CUT-OFF WALL

THE ABOVE ALTERNATE MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUT-OFF WALLS.

LEGEND

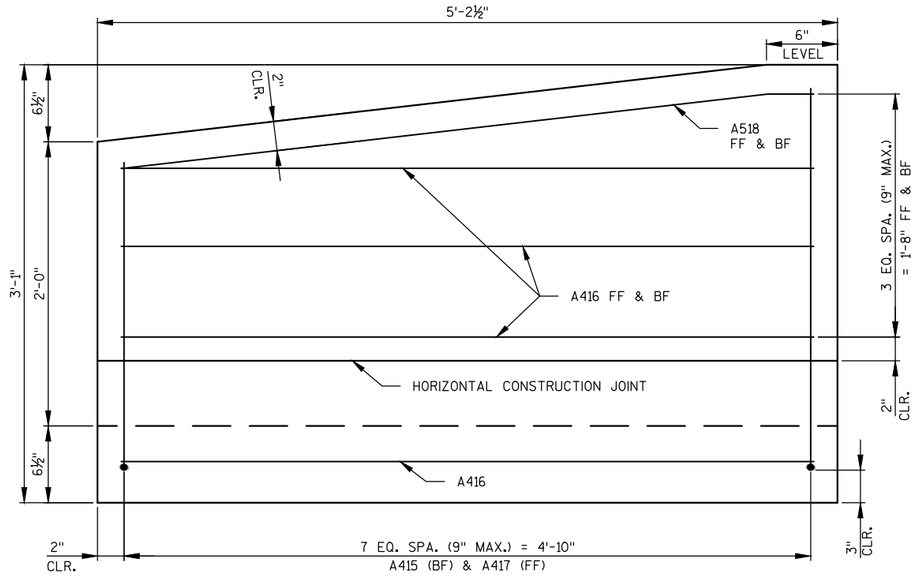
◪ ADHESIVE ANCHORS NO. 4 BAR. CENTERED IN EXISTING CULVERT WALL, TOP SLAB AND BOTTOM SLAB AT 9" MAX. SPACING. EMBED 1'-0" IN CONCRETE.

◐ RUBBERIZED MEMBRANE WATERPROOFING SHALL BE PLACED OVER THE JOINTS ON THE TOP AND SIDES OF THE BOX CULVERT.

⚠ ⅓ OF APRON THICKNESS

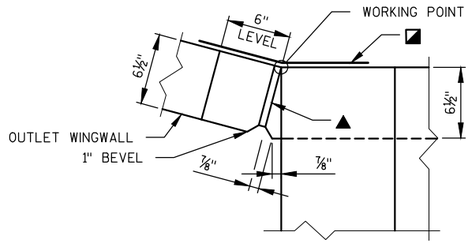
◪ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITH IN 12 HOURS AFTER POURING. A513 BARS AT 1'-0" CENTERS REQUIRED.

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN: STA 1427+50 BOX CULVERT DETAILS	SHEET 12	E



OUTLET WINGWALL ELEAVTION

BACK FACE



OUTLET CORNER DETAIL

LEGEND

FF - FRONT FACE
BF - BACK FACE

◐ 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONSTR. JT. IN WING, TYP

◪ RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL. (FLUSH WITH FACE OF CONCRETE)

▲ ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

BILL OF BARS
BOX CULVERT

COATED= 160 LBS
UNCOATED= 430 LBS

	MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH FT - IN	BENT	BAR SERIES	LOCATION	
	A 4 01		20	4 - 7	X		BOX CORNERS BOTTOM	VERT
	A 4 02		20	4 - 0	X		BOX CORNERS TOP	VERT
	A 4 03		20	2 - 8			BOX WALLS	VERT
	A 4 04		22	3 - 3			BOX HORIZONTAL & HEADER	TRANS
	A 4 05		24	6 - 8			BOX HORIZONTAL	LONG
	A 3 06		6	2 - 3	X		BOX HEADER	VERT
	A 4 07		16	2 - 0			BOX DOWELS	LONG
	A 4 08		6	5 - 6	X		CUT-OFF WALL	VERT
	A 4 09		6	5 - 1			CUT-OFF WALL	HORIZ
	A 4 10		4	4 - 10			APRON	LONG
	A 4 11		2	1 - 8			APRON	LONG
⚠	A 4 12		5	4 - 5		X	APRON	TRANS
	A 5 13		4	4 - 0			APRON DOWELS	LONG
	A 4 14		2	4 - 2			APRON BOTTOM	HORIZ
⚠	A 4 15	16		6 - 0	X	X	WINGWALLS BF	VERT
	A 4 16	14		4 - 10			WINGWALLS FF & BF	HORIZ
⚠	A 4 17	16		2 - 5		X	WINGWALLS FF	VERT
	A 5 18	4		4 - 11			WINGWALLS TOP	HORIZ

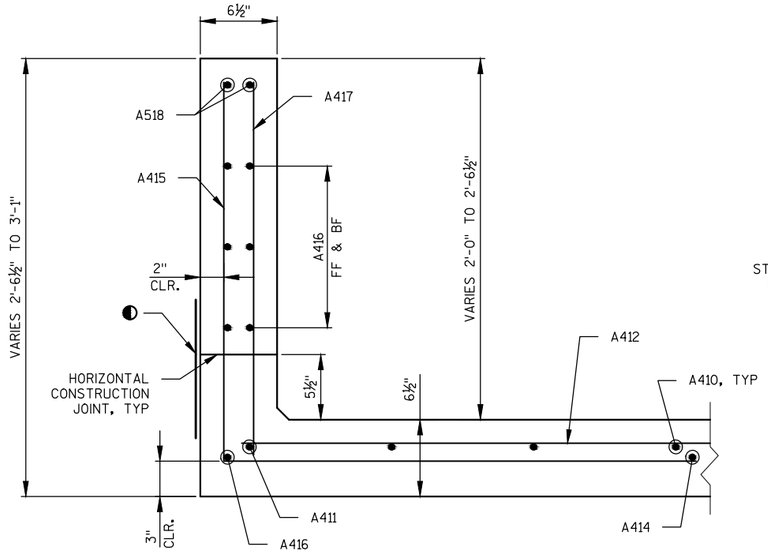
BAR DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS.

ALL REINFORCING BARS ARE ENGLISH.

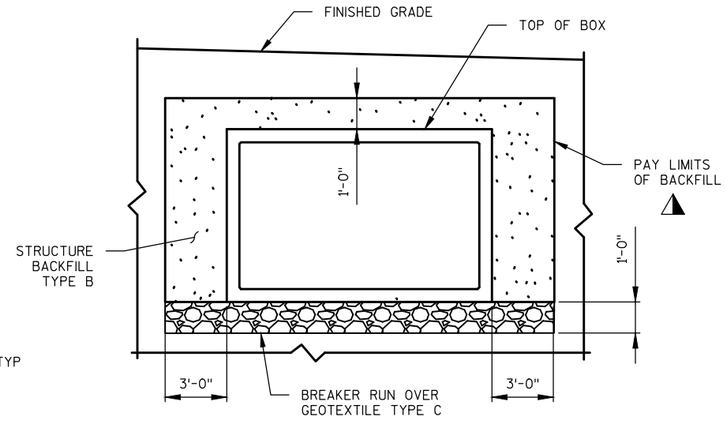
⚠ AVERAGE LENGTH OF BAR SERIES USED FOR DETERMINING BAR WEIGHT ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE ⚠

MARK	NO. REQUIRED	LENGTH
A412	1 SERIES OF 5	3'-4" TO 5'-5"
A415	2 SERIES OF 8	5'-8" TO 6'-3"
A417	2 SERIES OF 8	2'-1" TO 2-8"

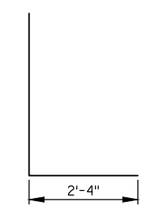


SECTION THRU WINGWALLS

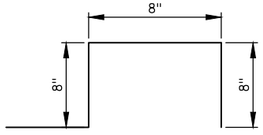


STRUCTURE BACKFILL DETAIL

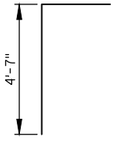
⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.



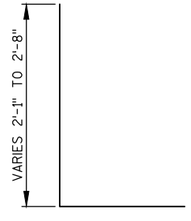
A401 & A402



A306

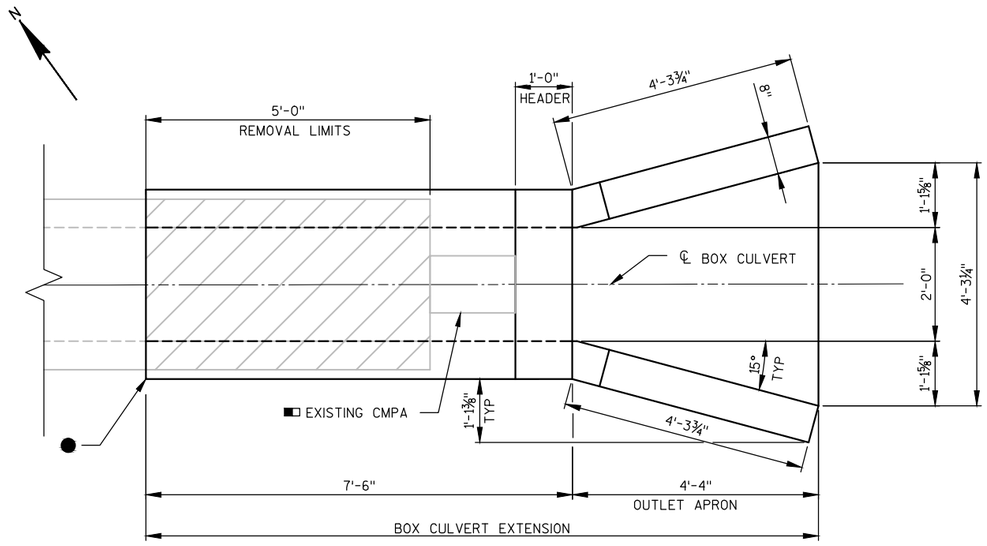


A408



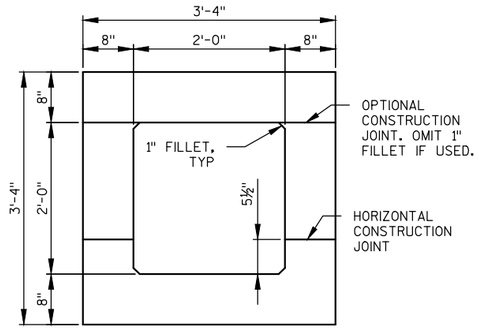
A415

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN: STA 1427+50 BOX CULVERT DETAILS	SHEET 13	E

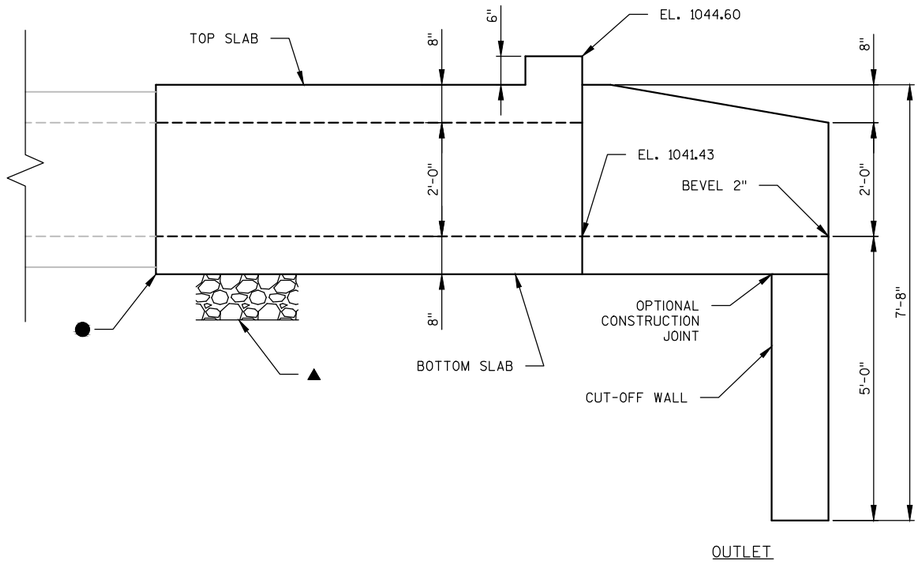


STA 1443+67 PLAN VIEW

24" x 24" BOX CULVERT



TYPICAL SECTION THRU BOX



STA 1443+67 ELEVATION VIEW

NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS STA 1443+67" SHALL BE THE EXISTING GROUND LINE.

STRUCTURE BACKFILL IS REQUIRED BEHIND ALL WINGWALLS.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE THE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING APRON WINGWALLS.

THE CONCRETE IN CUT OFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATIVE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

RUBBERIZED MEMBRANE WATERPROOFING AND FILLER TO EXTEND ALONG JOINT BETWEEN WING AND BOX FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING TO BE PLACED ALONG BF OF VERTICAL CONSTRUCTION JOINTS ALONG WALLS AND ACROSS THE TOP SLAB OF BOX CULVERT.

● THE EXISTING STRUCTURE AT STA. 1443+67 SHALL BE REMOVED TO THE LIMITS SHOWN. CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

■ REMOVAL OF EXISTING CMPA INCLUDED IN ROADWAY QUANTITIES.

▲ UNDERCUT 1'-0". EXCAVATION SHALL BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM. THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

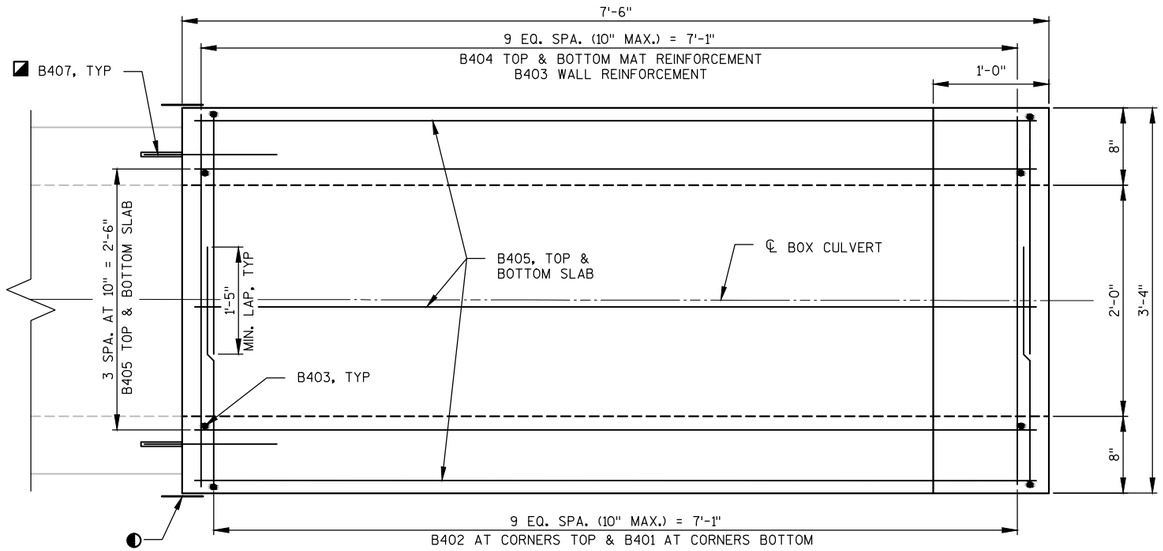
STEEL REINFORCEMENT SHALL BE GRADE 60 DEFORMED BARS (FY = 60,000 P.S.I.).

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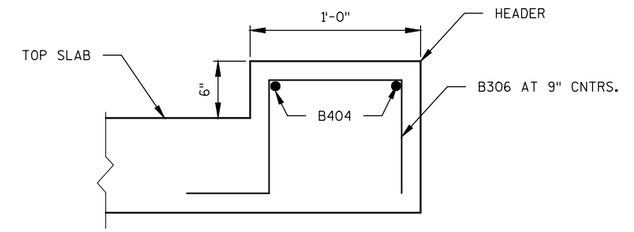
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STUCTURE QUANTITIES

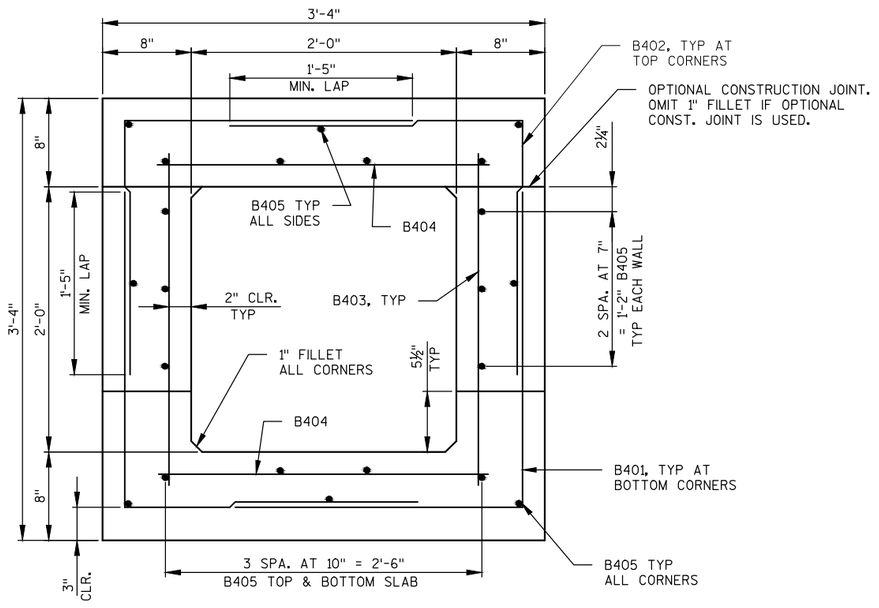
BID ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0200	REMOVING OLD STRUCTURE STATION 1443+67	LS	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS STA 1443+67	LS	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	24
311.0110	BREAKER RUN	TON	9
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	16
504.0100	CONCRETE MASONRY CULVERTS	CY	4
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	420
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	120
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	4
645.0105	GEOTEXTILE TYPE C	SY	13
	NON BID ITEMS		
	FILLER	SIZE	3/4"



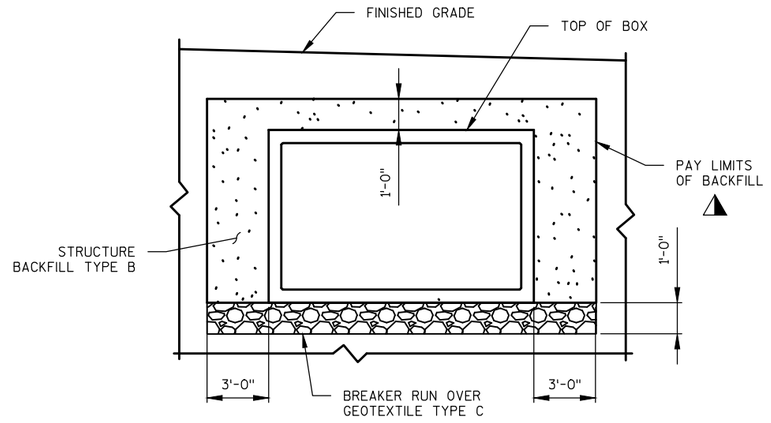
PLAN VIEW OUTLET PANEL



TYPICAL SECTION THRU CULVERT HEADERS



SECTION THRU BOX



STRUCTURE BACKFILL DETAIL

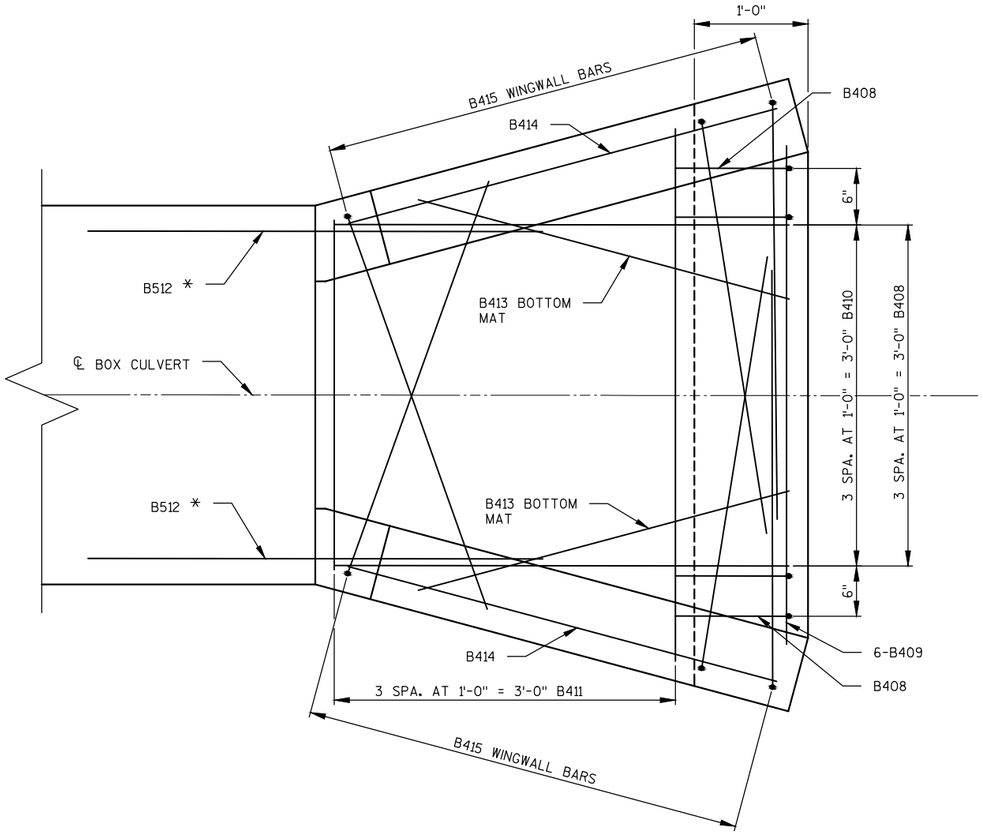
BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

LEGEND

ADHESIVE ANCHORS NO. 4 BAR. CENTERED IN WALL, TOP SLAB AND BOTTOM SLAB AT 9" MAX. SPACING. EMBED 1'-0" IN CONCRETE.

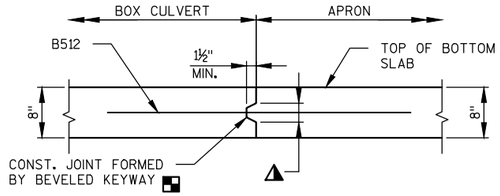
RUBBERIZED MEMBRANE WATERPROOFING SHALL BE PLACED OVER THE JOINTS ON THE TOP AND SIDES OF THE BOX CULVERT.

2



OUTLET APRON REINFORCEMENT

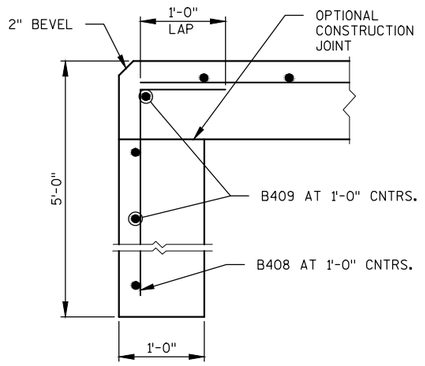
* SEE APRON CONNECTION DETAIL



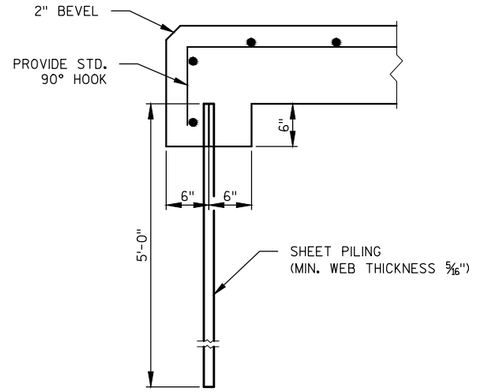
APRON CONNECTION DETAIL

⚠ ⅓ OF APRON THICKNESS

▪ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITH IN 12 HOURS AFTER POURING. B512 BARS AT 1'-0" CENTERS REQUIRED.

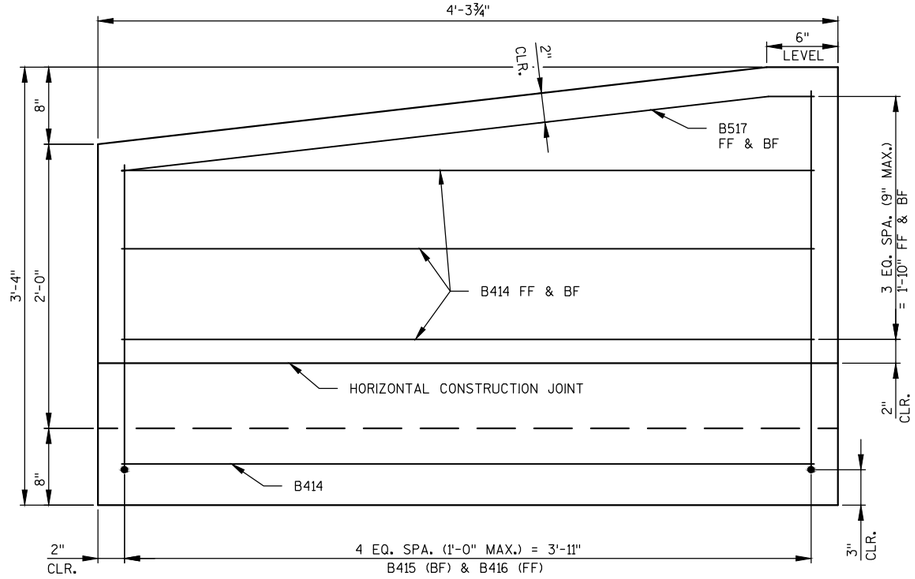


CUT OFF WALL

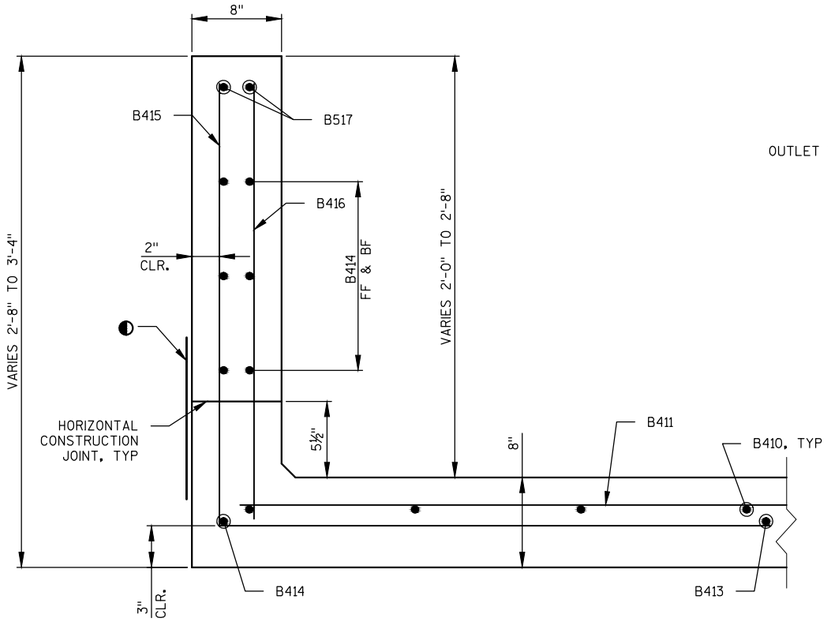


ALTERNATE CUT-OFF WALL

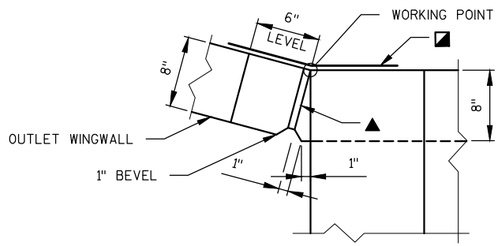
THE ABOVE ALTERNATE MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUT-OFF WALLS.



OUTLET WINGWALL ELEAVTION
BACK FACE



SECTION THRU WINGWALLS



OUTLET CORNER DETAIL

LEGEND

FF - FRONT FACE
BF - BACK FACE

◐ 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONSTR. JT. IN WING, TYP

◪ RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL. (FLUSH WITH FACE OF CONCRETE)

▲ ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

BILL OF BARS
BOX CULVERT

COATED= 120 LBS
UNCOATED= 420 LBS

	MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH FT - IN	BENT	BAR SERIES	LOCATION	
	B 4 01		20	4 - 8	X		BOX CORNERS BOTTOM	VERT
	B 4 02		20	4 - 1	X		BOX CORNERS TOP	VERT
	B 4 03		20	2 - 11			BOX WALLS	VERT
	B 4 04		22	3 - 0			BOX HORIZONTAL & HEADER	TRANS
	B 4 05		22	7 - 2			BOX HORIZONTAL	LONG
	B 3 06		5	2 - 7	X		BOX HEADER	VERT
	B 4 07		16	2 - 0			BOX DOWELS	LONG
	B 4 08		6	5 - 6	X		CUT-OFF WALL	VERT
	B 4 09		6	4 - 5			CUT-OFF WALL	HORIZ
	B 4 10		4	4 - 0			APRON	LONG
⚠	B 4 11		4	3 - 11		X	APRON	TRANS
	B 5 12		4	4 - 0			APRON DOWELS	LONG
	B 4 13		2	2 - 11			APRON BOTTOM	HORIZ
	B 4 14	14		3 - 11			WINGWALLS FF & BF	HORIZ
⚠	B 4 15	10		6 - 2	X	X	WINGWALLS BF	VERT
⚠	B 4 16	10		2 - 7		X	WINGWALLS FF	VERT
	B 5 17	4		4 - 0			WINGWALLS TOP	HORIZ

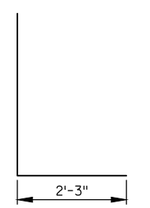
BAR DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS.

ALL REINFORCING BARS ARE ENGLISH.

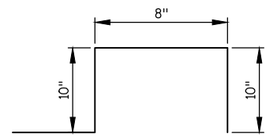
⚠ AVERAGE LENGTH OF BAR SERIES USED FOR DETERMINING BAR WEIGHT ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE ⚠

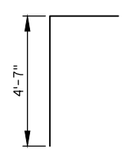
MARK	NO. REQUIRED	LENGTH
B411	1 SERIES OF 4	3'-1" TO 4'-8"
B415	2 SERIES OF 5	5'-10" TO 6'-6"
B416	2 SERIES OF 5	2'-3" TO 2-11"



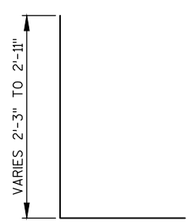
B401 & B402



B306

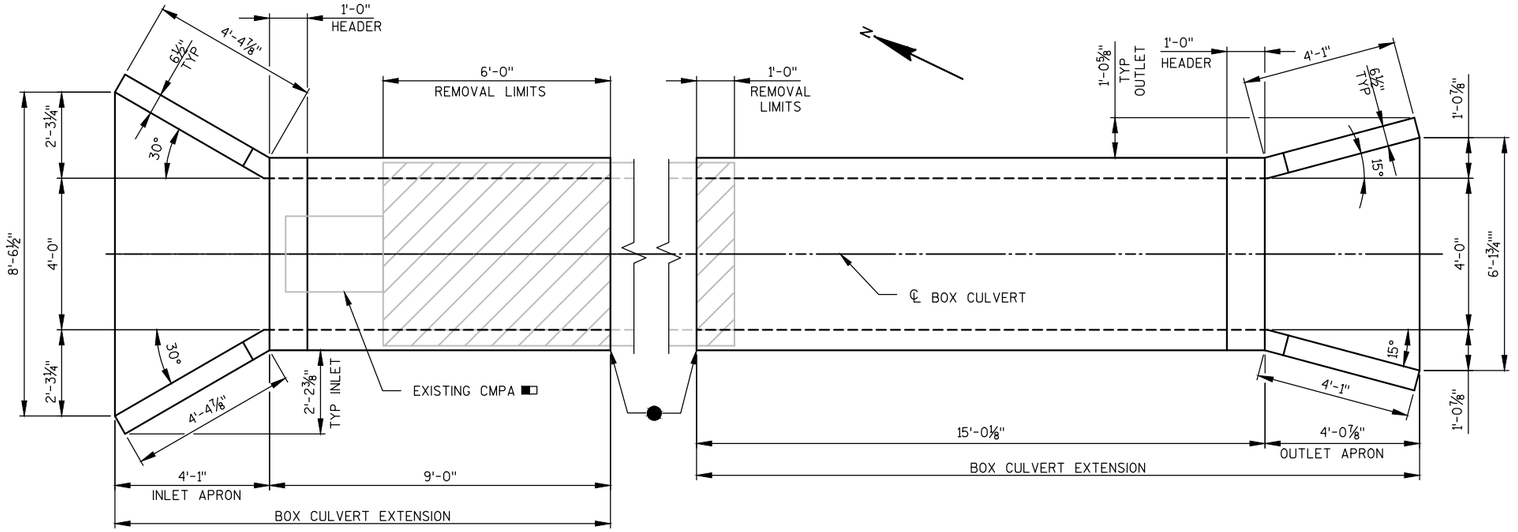


B408



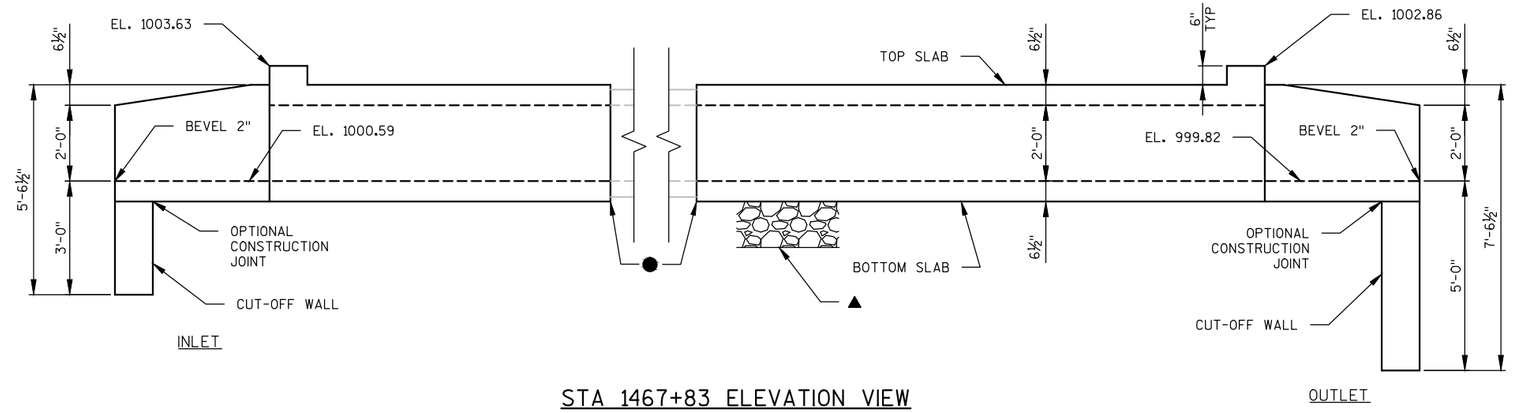
B415

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN: STA 1443+67 BOX CULVERT DETAILS	SHEET 17	E

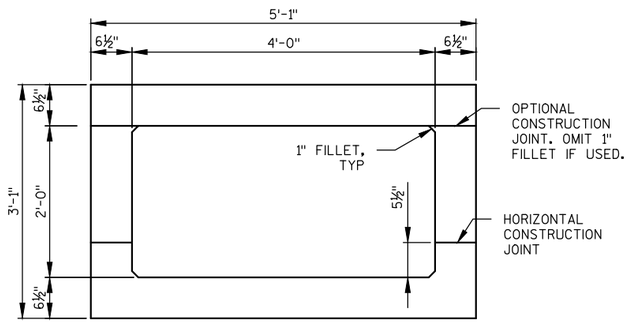


STA 1467+83 PLAN VIEW

24" x 48" BOX CULVERT



STA 1467+83 ELEVATION VIEW



TYPICAL SECTION THRU BOX

NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS STA 1467+83" SHALL BE THE EXISTING GROUND LINE.

STRUCTURE BACKFILL IS REQUIRED BEHIND ALL WINGWALLS.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE THE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING APRON WINGWALLS.

THE CONCRETE IN CUT OFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATIVE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

RUBBERIZED MEMBRANE WATERPROOFING AND FILLER TO EXTEND ALONG JOINT BETWEEN WING AND BOX FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING TO BE PLACED ALONG BF OF VERTICAL CONSTRUCTION JOINTS ALONG WALLS AND ACROSS THE TOP SLAB OF BOX CULVERT.

● THE EXISTING STRUCTURE AT STA. 1467+83 SHALL BE REMOVED TO THE LIMITS SHOWN. CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

■ REMOVAL OF EXISTING CMPA INCLUDED IN ROADWAY QUANTITIES.

▲ UNDERCUT 1'-0". EXCAVATION SHALL BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM. THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

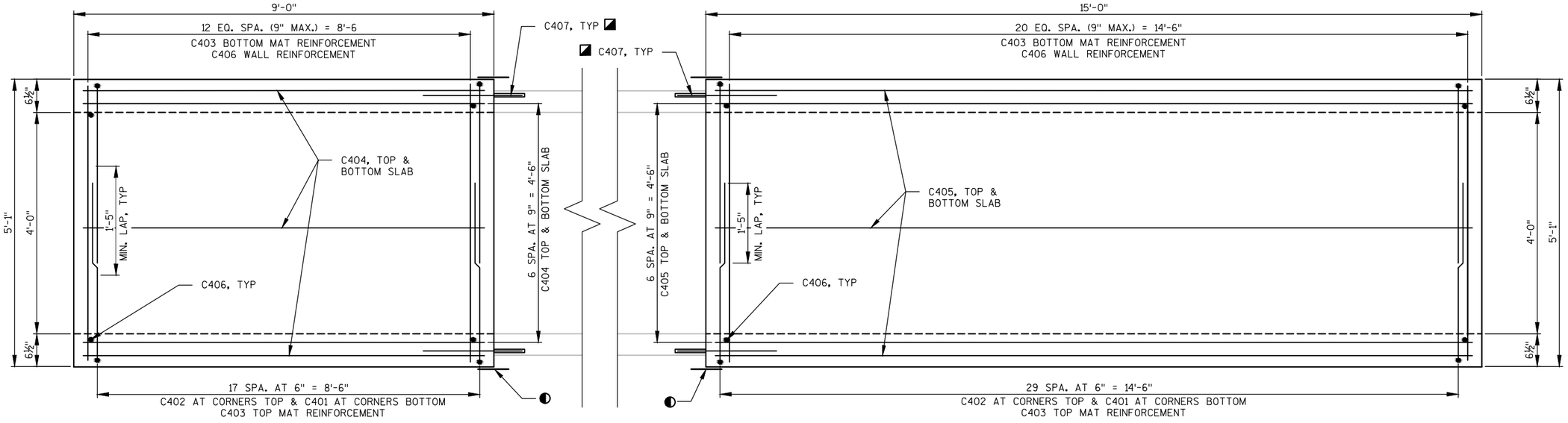
STEEL REINFORCEMENT SHALL BE GRADE 60 DEFORMED BARS (FY = 60,000 P.S.I.).

THE ULTIMATE COMPRESSIVE STRENGTH OF THE FIELD POURED CONCRETE SHALL BE 3,500 P.S.I.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

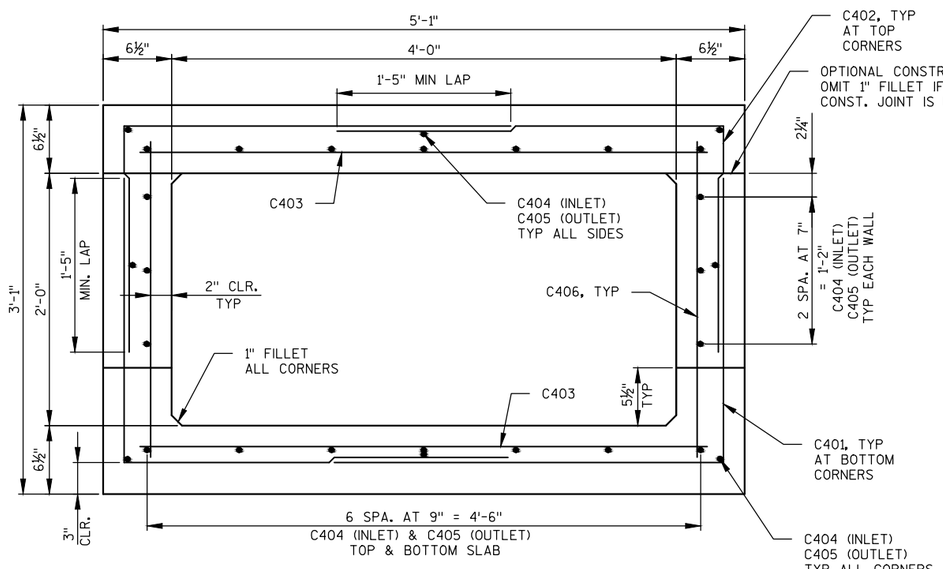
STUCTURE QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0200	REMOVING OLD STRUCTURE STATION 1467+83	LS	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS STA 1467+83	LS	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	64
311.0110	BREAKER RUN	TON	26
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	40
504.0100	CONCRETE MASONRY CULVERTS	CY	12
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1750
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	260
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9
645.0105	GEOTEXTILE TYPE C	SY	42
	NON BID ITEMS		
	FILLER	SIZE	3/4"

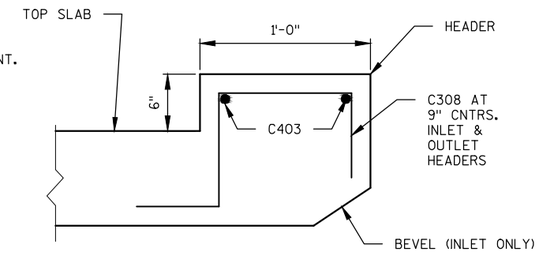


PLAN VIEW INLET PANEL

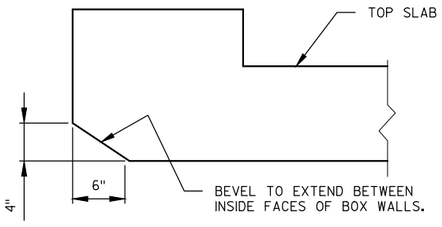
PLAN VIEW OUTLET PANEL



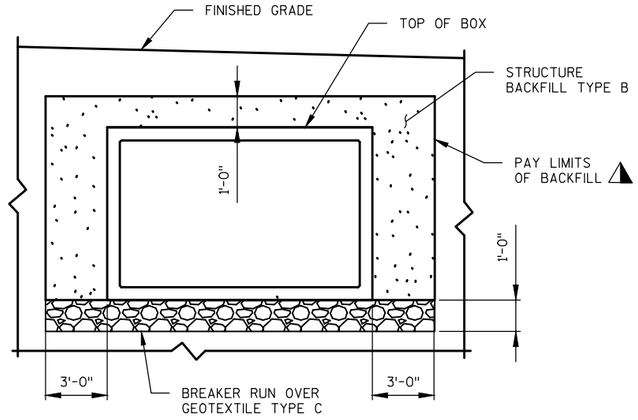
SECTION THRU BOX



TYPICAL SECTION THRU CULVERT HEADERS



TYPICAL SECTION THRU INLET HEADER



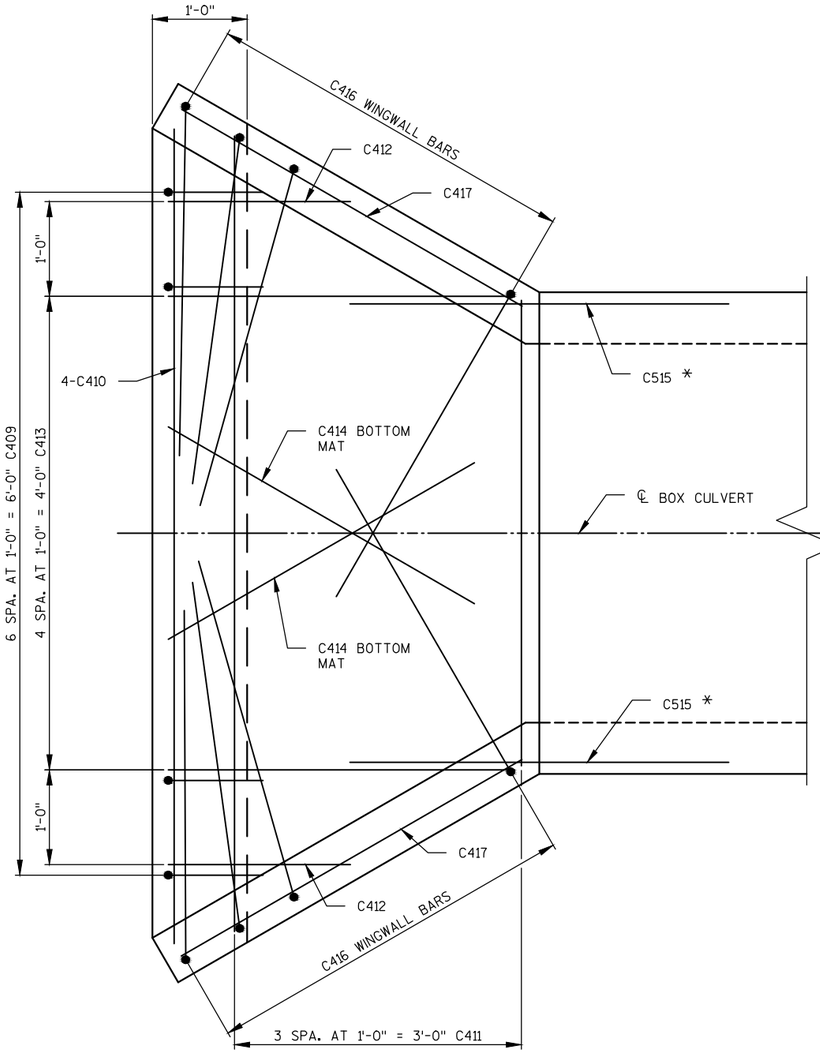
STRUCTURE BACKFILL DETAIL

BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

LEGEND

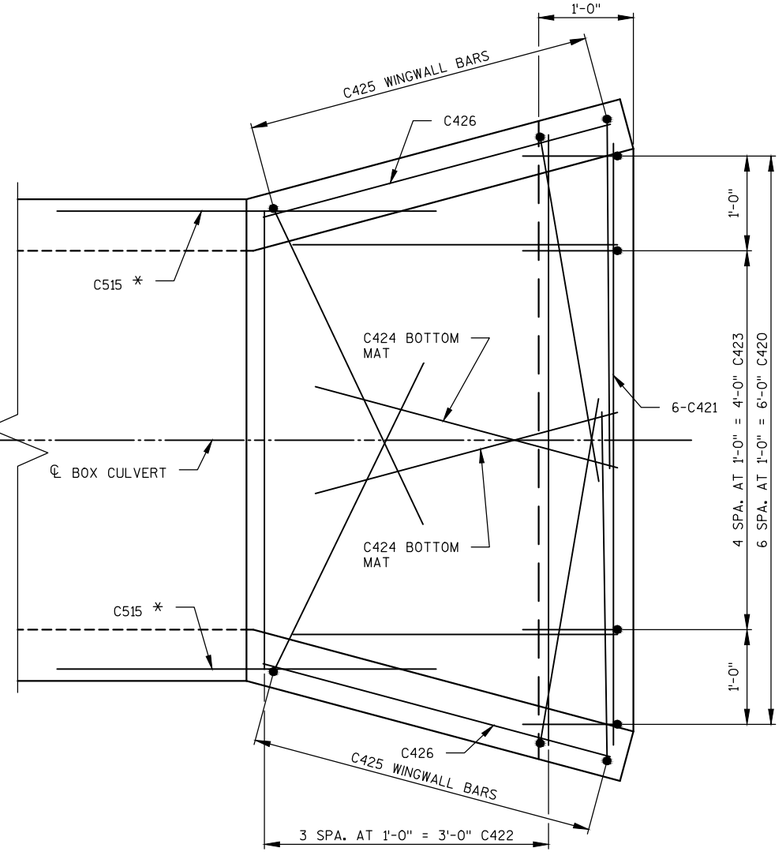
ADHESIVE ANCHORS NO. 4 BAR. CENTERED IN WALL, TOP SLAB AND BOTTOM SLAB AT 9" MAX. SPACING. EMBED 1'-0" IN CONCRETE.

RUBBERIZED MEMBRANE WATERPROOFING SHALL BE PLACED OVER THE JOINTS ON THE TOP AND SIDES OF THE BOX CULVERT.



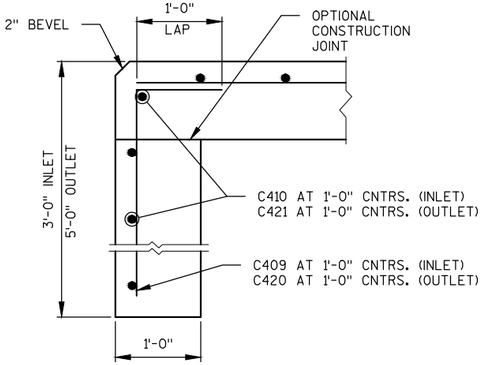
INLET APRON REINFORCEMENT

* SEE APRON CONNECTION DETAIL

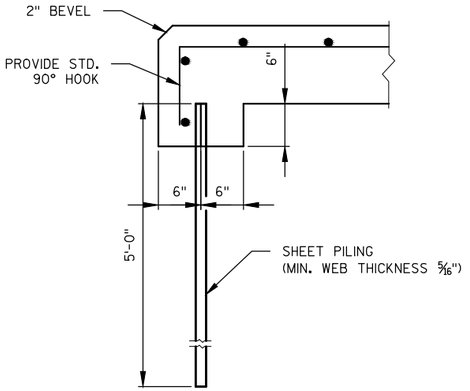


OUTLET APRON REINFORCEMENT

* SEE APRON CONNECTION DETAIL

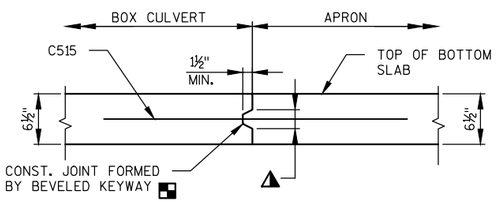


CUT OFF WALL



ALTERNATE CUT-OFF WALL

THE ABOVE ALTERNATE MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUT-OFF WALLS.

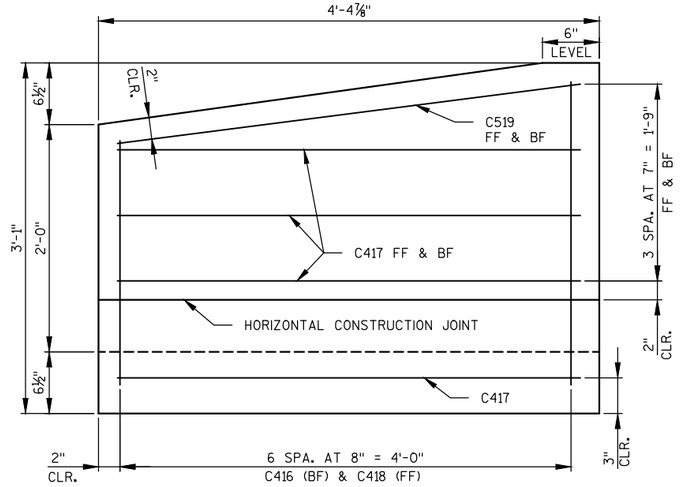


APRON CONNECTION DETAIL

LEGEND

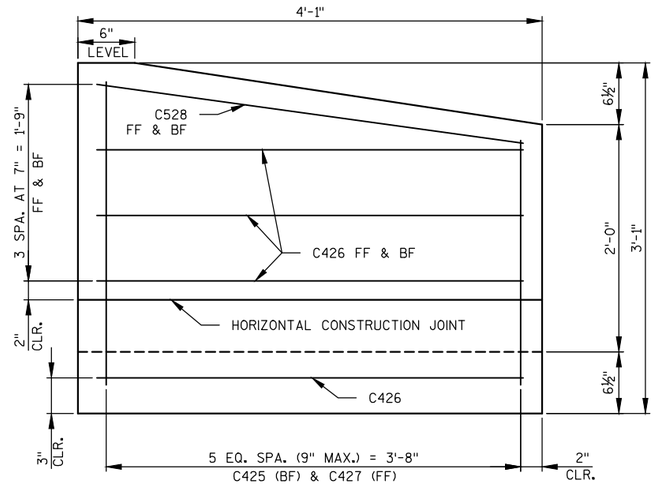
▲ ⅓ OF APRON THICKNESS

■ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITH IN 12 HOURS AFTER POURING. C515 BARS AT 1'-0" CENTERS REQUIRED.



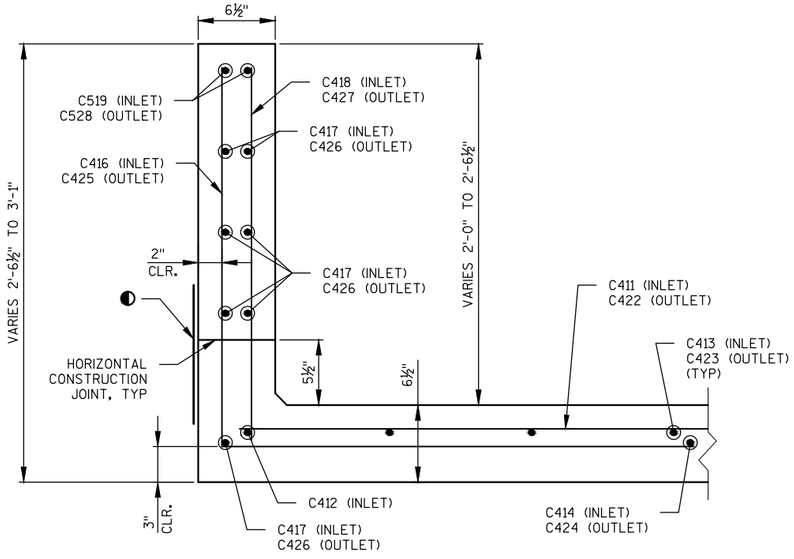
INLET WINGWALL ELEAVTION

BACK FACE

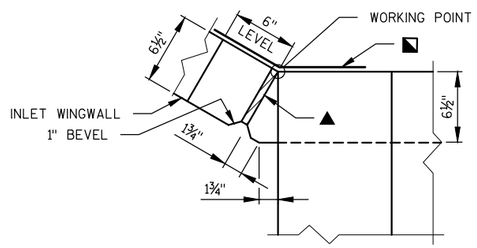


OUTLET WINGWALL ELEAVTION

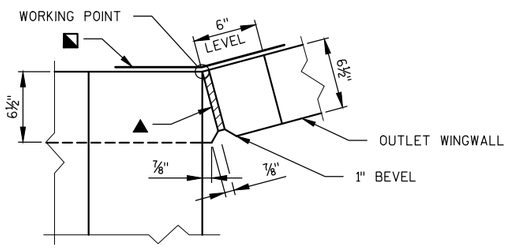
BACK FACE



SECTION THRU WINGWALLS



INLET CORNER DETAIL



OUTLET CORNER DETAIL

LEGEND

FF - FRONT FACE
BF - BACK FACE

◐ 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONSTR. JT. IN WING, TYP

◪ RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL. (FLUSH WITH FACE OF CONCRETE)

▲ ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

BILL OF BARS
BOX CULVERT

COATED= 260 LBS
UNCOATED= 1750 LBS

	MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH FT - IN	BENT	BAR SERIES	LOCATION	
	C 4 01		96	5 - 4	X		BOX CORNERS	VERT
	C 4 02		96	4 - 9	X		BOX CORNERS	VERT
	C 4 03		86	4 - 9			BOX HORIZ. - TOP & BOTTOM SLAB & HEADER	TRANS
	C 4 04		28	8 - 8			BOX - INLET	LONG
	C 4 05		28	14 - 8			BOX - OUTLET	LONG
	C 4 06		68	2 - 8			BOX - WALLS	VERT
	C 4 07		40	2 - 0			BOX ANCHORS	HORIZ
	C 3 08		16	2 - 1	X		BOX HEADER	VERT
	C 4 09		7	3 - 6	X		INLET CUT-OFF WALL	VERT
	C 4 10		4	8 - 6			INLET CUT-OFF WALL	TRANS
⚠	C 4 11		4	6 - 8		X	INLET APRON	TRANS
	C 4 12		2	2 - 9			INLET APRON	LONG
	C 4 13		5	3 - 9			INLET APRON	LONG
	C 4 14		2	4 - 1			INLET APRON BOTTOM	HORIZ
	C 5 15		10	4 - 0			APRON DOWELS	LONG
⚠	C 4 16	14		6 - 0	X	X	INLET WINGWALLS BF	VERT
	C 4 17	14		4 - 1			INLET WINGWALLS FF & BF	HORIZ
⚠	C 4 18	14		2 - 5		X	INLET WINGWALS FF	VERT
	C 5 19	4		4 - 1			INLET WINGWALLS TOP	HORIZ
	C 4 20		7	5 - 6	X		OUTLET CUT-OFF WALL	VERT
	C 4 21		6	6 - 3			OUTLET CUT-OFF WALL	HORIZ
⚠	C 4 22		4	5 - 8		X	OUTLET APRON	TRANS
	C 4 23		5	3 - 9			OUTLET APRON	LONG
	C 4 24		2	3 - 9			OUTLET APRON BOTTOM	HORIZ
⚠	C 4 25	12		6 - 0	X	X	OUTLET WINGWALLS BF	VERT
	C 4 26	14		3 - 9			OUTLET WINGWALLS FF & BF	HORIZ
⚠	C 4 27	12		2 - 5		X	OUTLET WINGWALLS FF	VERT
	C 5 28	4		3 - 9			OUTLET WINGWALLS TOP	HORIZ

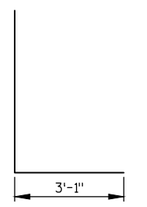
BAR DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS.

ALL REINFORCING BARS ARE ENGLISH.

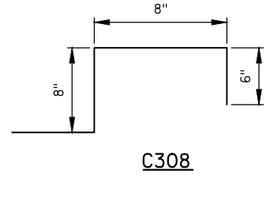
⚠ AVERAGE LENGTH OF BAR SERIES USED FOR DETERMINING BAR WEIGHT ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE ⚠

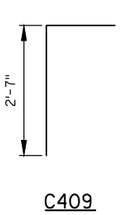
MARK	NO. REQUIRED	LENGTH
C411	1 SERIES OF 4	4'-11" TO 8'-4"
C416	2 SERIES OF 7	5'-8" TO 6'-3"
C418	2 SERIES OF 7	2'-1" TO 2'-8"
C422	1 SERIES OF 4	4'-10" TO 6'-5"
C425	2 SERIES OF 6	5'-8" TO 6'-3"
C427	2 SERIES OF 6	2'-1" TO 2'-8"



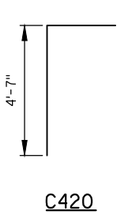
C401 & C402



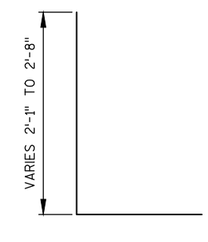
C308



C409

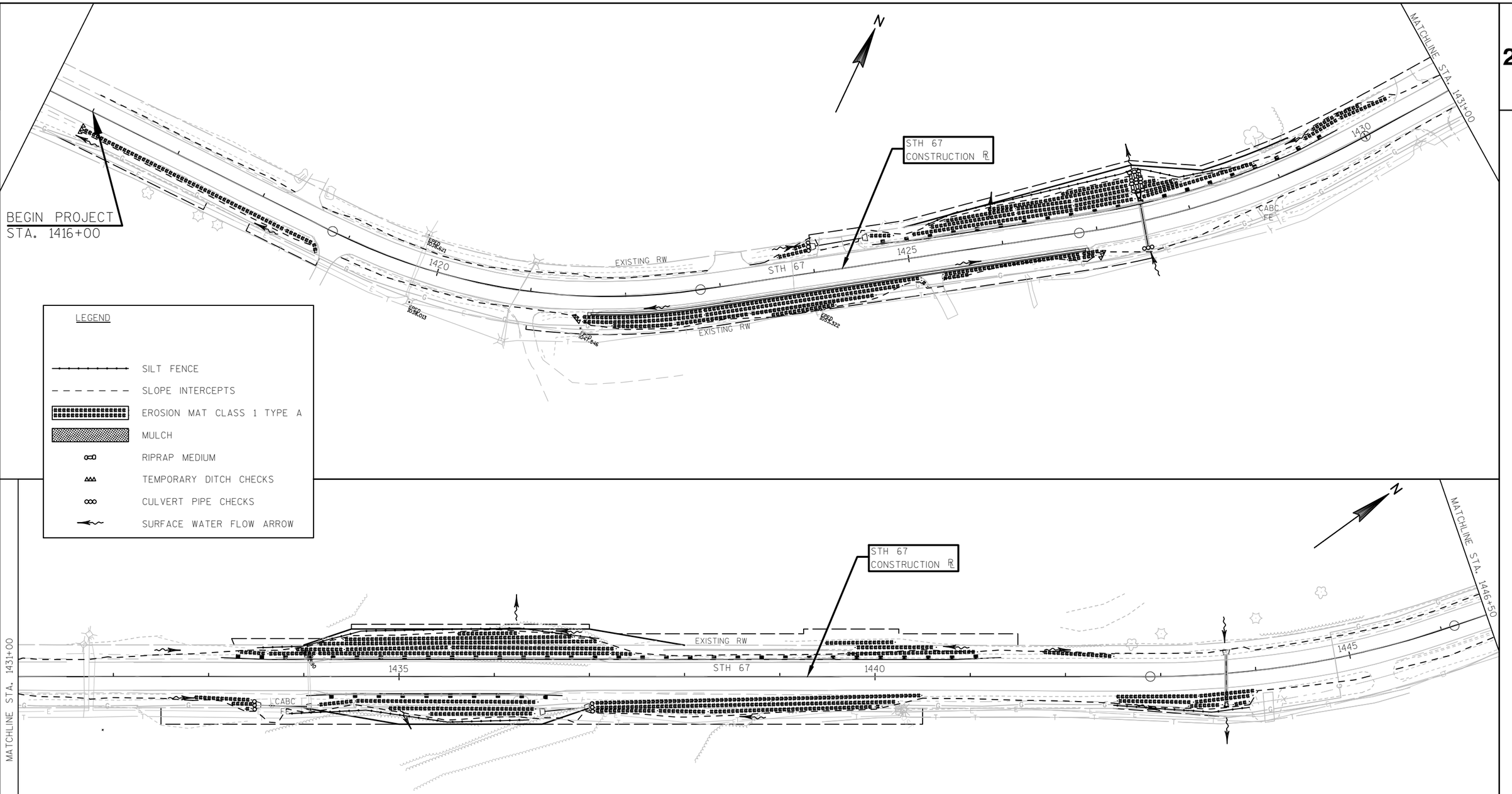


C420



C416 & C425

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN: STA 1467+83 BOX CULVERT DETAILS	SHEET 21	E



PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 22 E

2

STH 67

1455

STH 67
CONSTRUCTION

E RIVER RD

1450

SLOPE INTERCEPT (TYP)

EXISTING RW

1460

MATCHLINE STA. 1446+50

MATCHLINE STA. 1462+00

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE A
- MULCH
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW ARROW

MATCHLINE STA. 1462+00

MATCHLINE STA. 1477+50

STH 67
CONSTRUCTION

1475

1465

1470

EXISTING RW

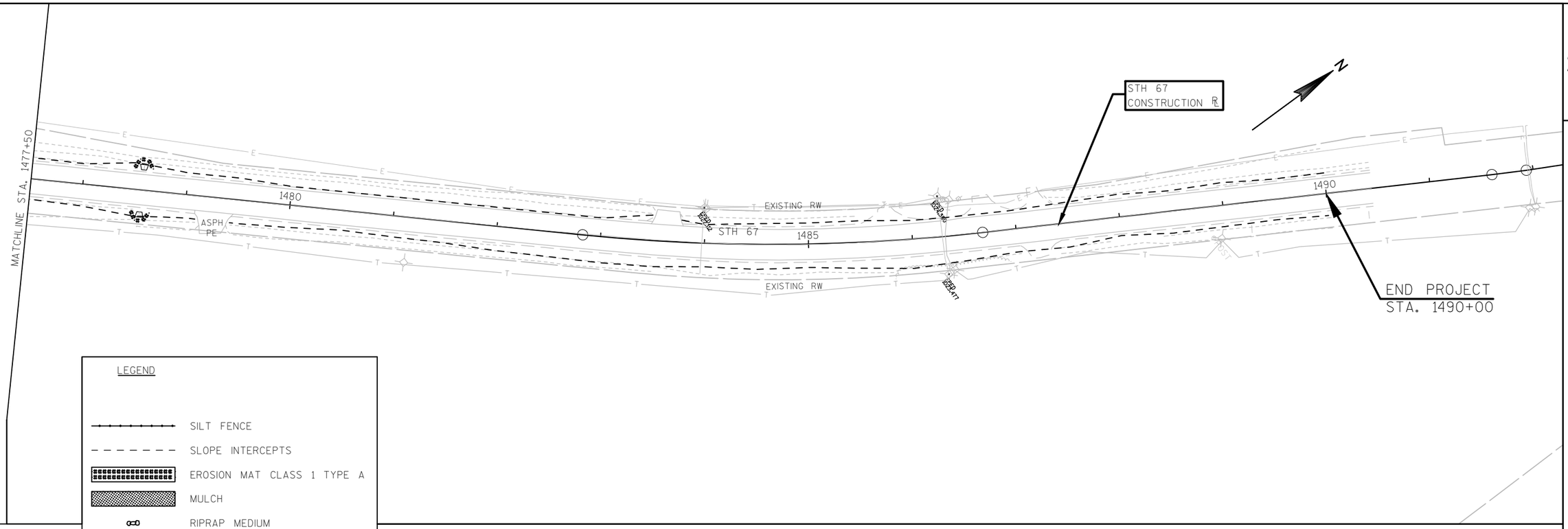
LOVERS RD

61

SLOPE INTERCEPT (TYP)

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 23 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\SHEETSPLAN\022001_EC.DWG PLOT DATE : 9/3/2008 9:36 AM PLOT BY : ANDY BLOCK PLOT NAME : _____ PLOT SCALE : ******** WISDOT/CADDS SHEET 42



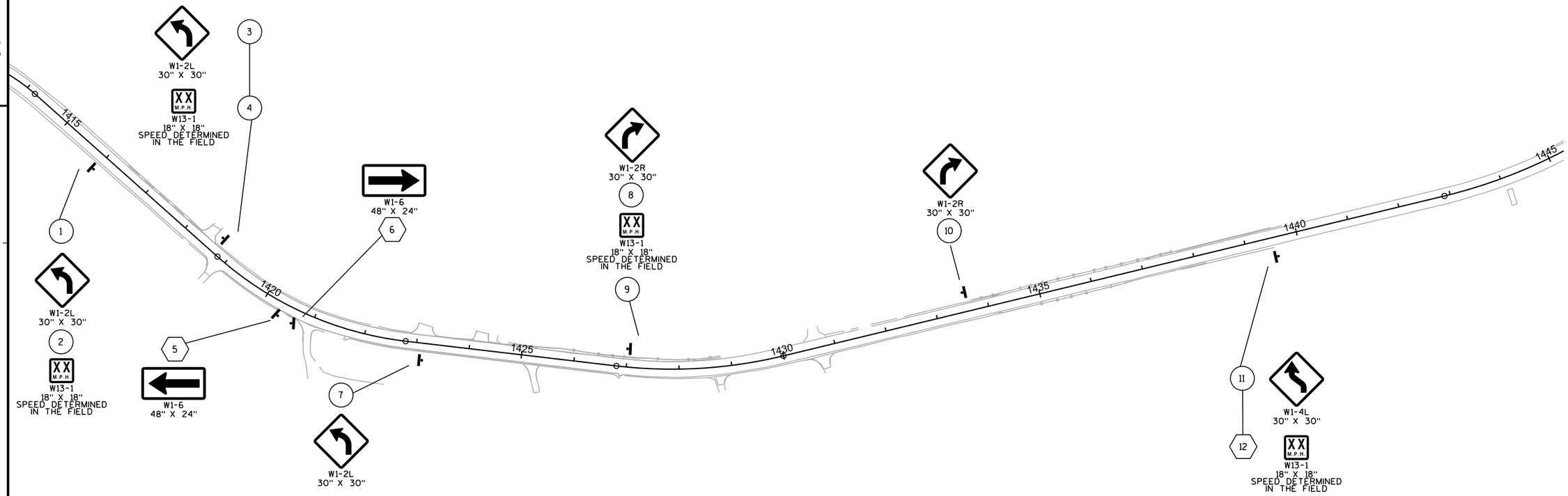
LEGEND

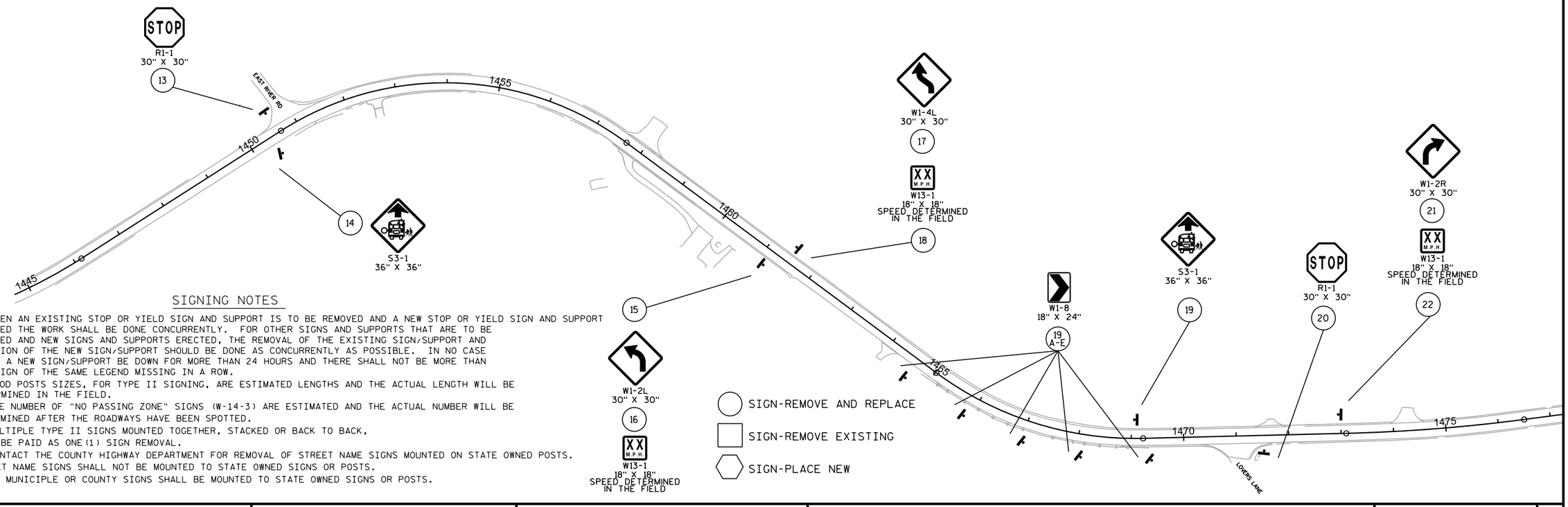
- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE A
- MULCH
- RIPRAP MEDIUM
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW ARROW

2

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 24 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\SHEETSPLAN\022001_EC.DWG PLOT DATE : 9/3/2008 9:36 AM PLOT BY : ANDY BLOCK PLOT NAME : ---------- PLOT SCALE : ******** WISDOT/CADDS SHEET 42





SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE (1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\4090-05-71 STH 67 FDL CO\40900571_signplan.dgn PLOT DATE : 30-MAR-2018 11:03 PLOT BY : dotets PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

2

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

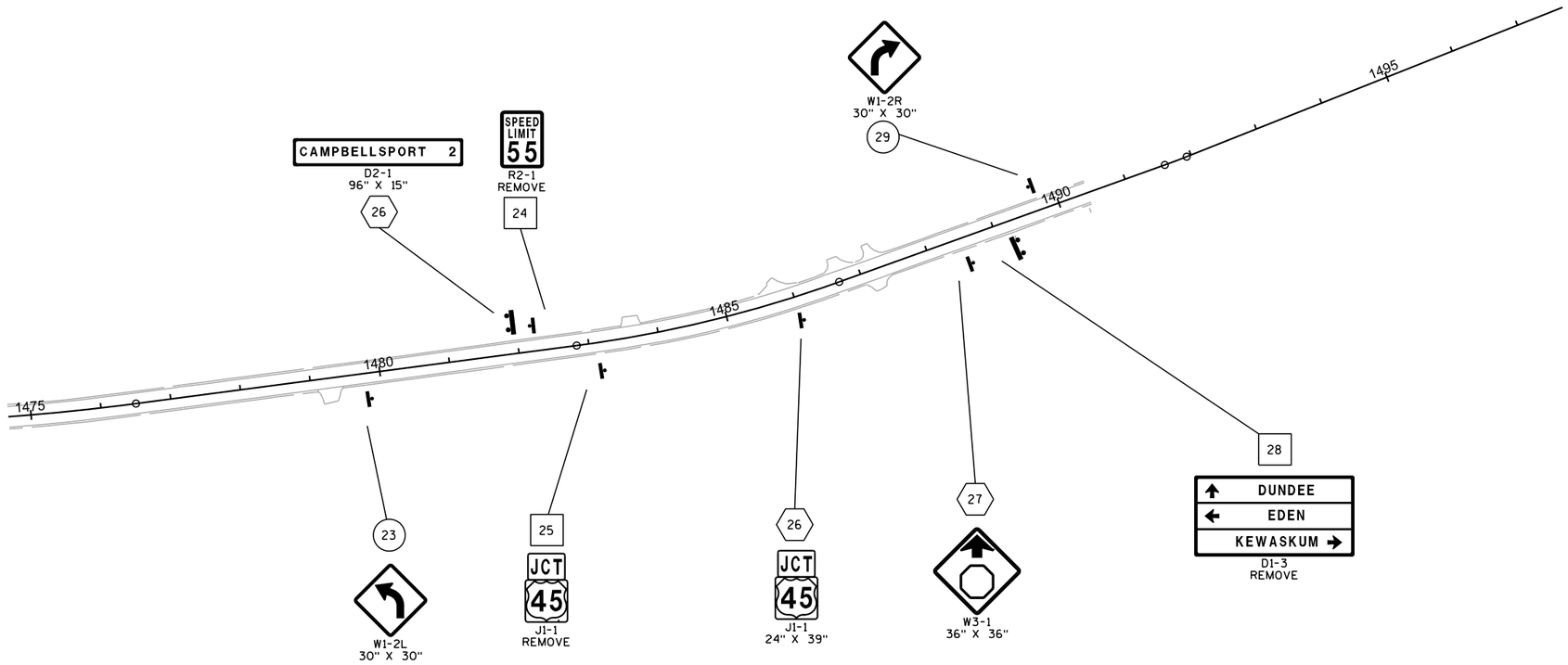
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

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NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.



SIGN-REMOVE AND REPLACE

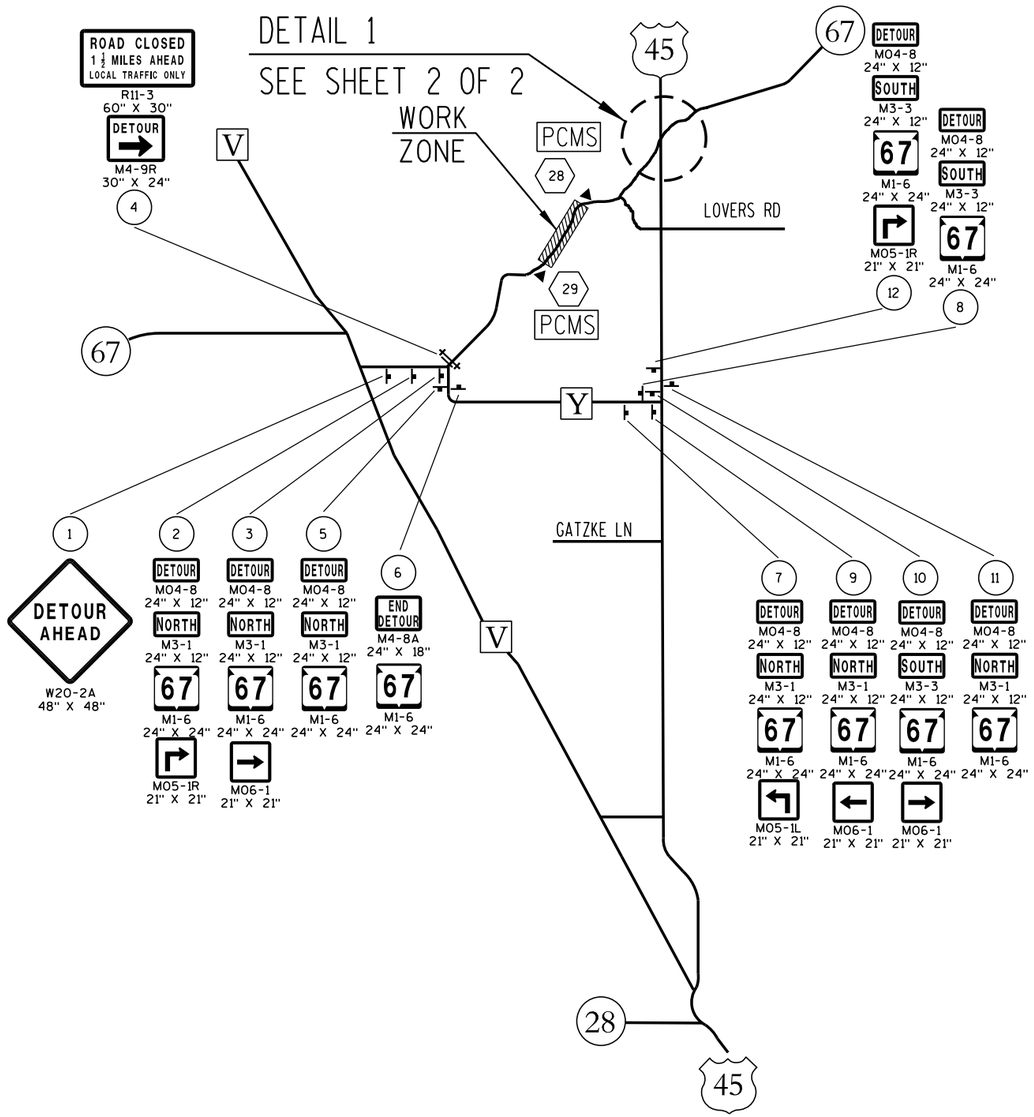
SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

2

N



LEGEND

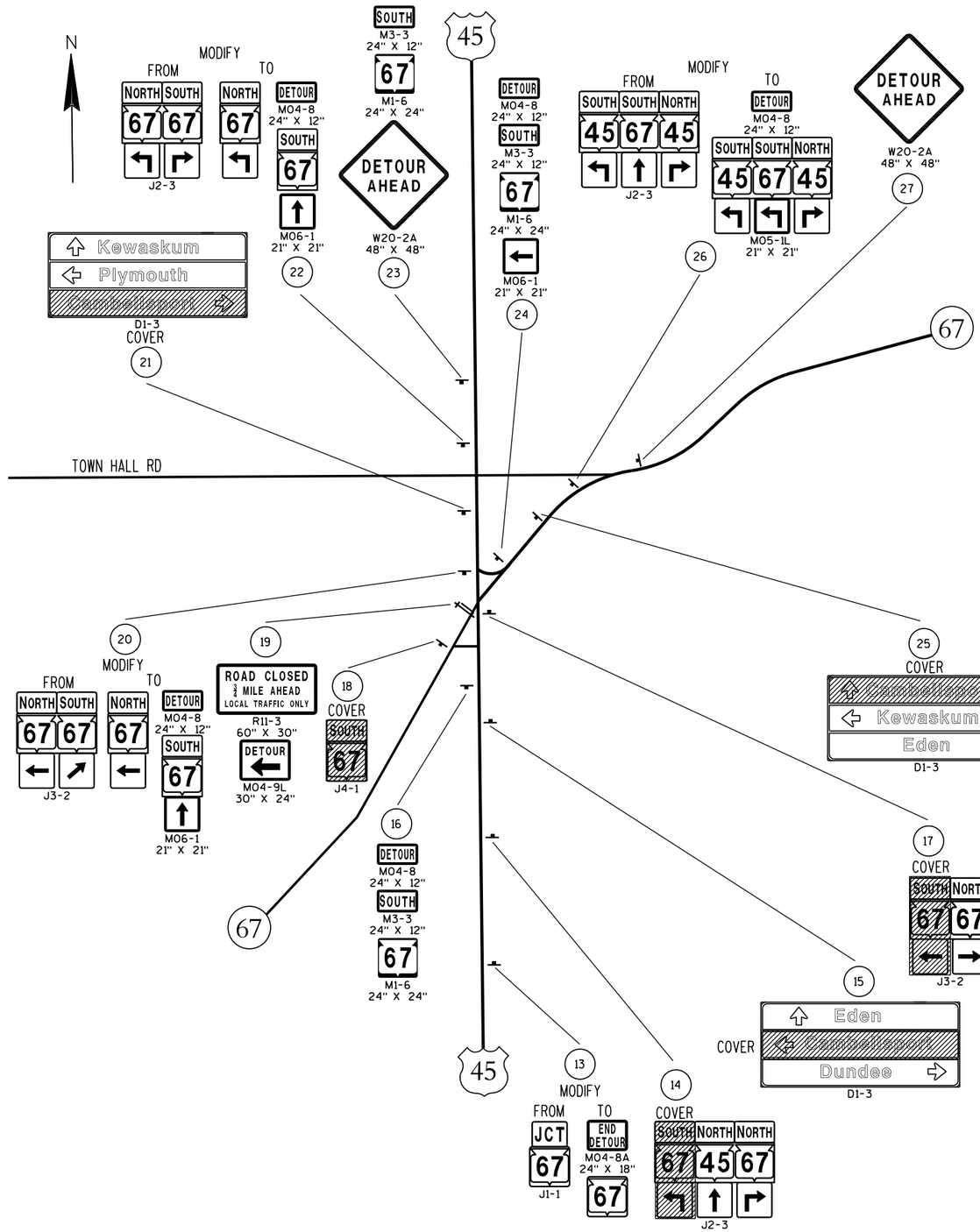
- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

SHEET 1 OF 2

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 27	E

FILE NAME : N:\spo\traffic\A Work Zone\Detours\Fond du Lac County\STH 67\CTH Y - US 45\027001_dt.dgn PLOT DATE : 11-DEC-2019 16:28 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 200:1



LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲ PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

DETAIL 1

SHEET 2 OF 2

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 28	E

FILE NAME : N:\spo\traffic\A Work Zone\Detours\Fond du Lac County\STH 67\CTH Y - US 45\027002_dt.dgn PLOT DATE : 11-DEC-2019 16:28 PLOT BY : dotjlf PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

4090-05-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	8.000	8.000
0004	201.0120	Clearing	ID	130.000	130.000
0006	201.0205	Grubbing	STA	8.000	8.000
0008	201.0220	Grubbing	ID	130.000	130.000
0010	203.0100	Removing Small Pipe Culverts	EACH	9.000	9.000
0012	203.0200	Removing Old Structure (station) 01. Station 1427+50	LS	1.000	1.000
0014	203.0200	Removing Old Structure (station) 02. Station 1443+67	LS	1.000	1.000
0016	203.0200	Removing Old Structure (station) 03. Station 1467+83	LS	1.000	1.000
0018	204.0100	Removing Pavement	SY	275.000	275.000
0020	204.0110	Removing Asphaltic Surface	SY	325.000	325.000
0022	204.0115	Removing Asphaltic Surface Butt Joints	SY	100.000	100.000
0024	204.0120	Removing Asphaltic Surface Milling	SY	25,700.000	25,700.000
0026	204.0150	Removing Curb & Gutter	LF	950.000	950.000
0028	204.0165	Removing Guardrail	LF	1,785.000	1,785.000
0042	204.9060.S	Removing (item description) 01. Retaining Wall, Sta. 1426+78, LT	EACH	1.000	1.000
0044	204.9060.S	Removing (item description) 02. Retaining Wall, Sta. 1435+40, RT	EACH	1.000	1.000
0046	204.9060.S	Removing (item description) 03. Retaining Wall, Sta. 1435+67, LT	EACH	1.000	1.000
0048	204.9060.S	Removing (item description) 04. Retaining Wall, Sta. 1450+57, RT	EACH	1.000	1.000
0052	205.0100	Excavation Common	CY	1,150.000	1,150.000
0054	206.2000	Excavation for Structures Culverts (structure) 01. Station 1427+50	LS	1.000	1.000
0056	206.2000	Excavation for Structures Culverts (structure) 02. Station 1443+67	LS	1.000	1.000
0058	206.2000	Excavation for Structures Culverts (structure) 03. Station 1467+83	LS	1.000	1.000
0060	208.0100	Borrow	CY	3,606.000	3,606.000
0062	210.2500	Backfill Structure Type B	TON	110.000	110.000
0064	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 4090-05-71	LS	1.000	1.000
0068	213.0100	Finishing Roadway (project) 01. 4090-05-71	EACH	1.000	1.000
0072	305.0110	Base Aggregate Dense 3/4-Inch	TON	540.000	540.000
0074	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	625.000	625.000
0076	311.0110	Breaker Run	TON	44.000	44.000
0078	315.0200	Asphaltic Base Widening	TON	170.000	170.000
0082	455.0605	Tack Coat	GAL	3,505.000	3,505.000
0088	460.2005	Incentive Density PWL HMA Pavement	DOL	1,943.000	1,943.000
0090	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	2,960.000	2,960.000

4090-05-71

Line	Item	Item Description	Unit	Total	Qty
0092	460.2010	Incentive Air Voids HMA Pavement	DOL	2,840.000	2,840.000
0094	460.5223	HMA Pavement 3 LT 58-28 S	TON	220.000	220.000
0096	460.5224	HMA Pavement 4 LT 58-28 S	TON	2,840.000	2,840.000
0098	460.5225	HMA Pavement 5 LT 58-28 S	TON	1,220.000	1,220.000
0100	465.0110	Asphaltic Surface Patching	TON	20.000	20.000
0106	465.0315	Asphaltic Flumes	SY	12.000	12.000
0108	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	12,215.000	12,215.000
0110	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	6,600.000	6,600.000
0112	502.4204	Adhesive Anchors No. 4 Bar	EACH	72.000	72.000
0114	504.0100	Concrete Masonry Culverts	CY	20.000	20.000
0116	505.0400	Bar Steel Reinforcement HS Structures	LB	2,600.000	2,600.000
0118	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	540.000	540.000
0120	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0126	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	6.000	6.000
0128	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	1.000	1.000
0130	520.3318	Culvert Pipe Class III-A 18-Inch	LF	140.000	140.000
0132	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0144	521.0535	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 35x24-Inch 4 to 1	EACH	1.000	1.000
0146	521.0542	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 42x29-Inch 4 to 1	EACH	2.000	2.000
0162	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	950.000	950.000
0168	606.0200	Riprap Medium	CY	15.000	15.000
0178	608.3030	Storm Sewer Pipe Class III-A 30-Inch	LF	7.000	7.000
0182	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0186	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0190	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	185.000	185.000
0192	614.2300	MGS Guardrail 3	LF	2,050.000	2,050.000
0200	614.2610	MGS Guardrail Terminal EAT	EACH	10.000	10.000
0206	616.0204	Fence Chain Link 4-FT	LF	174.000	174.000
0208	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4090-05-71	EACH	1.000	1.000
0212	619.1000	Mobilization	EACH	0.250	0.250
0214	624.0100	Water	MGAL	10.000	10.000
0216	625.0100	Topsoil	SY	8,275.000	8,275.000
0220	627.0200	Mulching	SY	170.000	170.000
0222	628.1504	Silt Fence	LF	2,150.000	2,150.000
0224	628.1520	Silt Fence Maintenance	LF	2,150.000	2,150.000
0226	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0228	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000

4090-05-71

Line	Item	Item Description	Unit	Total	Qty
0230	628.2002	Erosion Mat Class I Type A	SY	8,120.000	8,120.000
0234	628.7504	Temporary Ditch Checks	LF	70.000	70.000
0236	628.7555	Culvert Pipe Checks	EACH	15.000	15.000
0238	628.7570	Rock Bags	EACH	165.000	165.000
0240	629.0205	Fertilizer Type A	CWT	6.000	6.000
0242	630.0130	Seeding Mixture No. 30	LB	150.000	150.000
0244	630.0500	Seed Water	MGAL	300.000	300.000
0250	633.5200	Markers Culvert End	EACH	12.000	12.000
0252	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	14.000	14.000
0254	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	12.000	12.000
0258	637.2210	Signs Type II Reflective H	SF	26.860	26.860
0260	637.2230	Signs Type II Reflective F	SF	142.500	142.500
0262	638.2602	Removing Signs Type II	EACH	23.000	23.000
0264	638.3000	Removing Small Sign Supports	EACH	23.000	23.000
0266	642.5401	Field Office Type D	EACH	0.250	0.250
0268	643.0300	Traffic Control Drums	DAY	4,100.000	4,100.000
0270	643.0420	Traffic Control Barricades Type III	DAY	440.000	440.000
0276	643.0705	Traffic Control Warning Lights Type A	DAY	640.000	640.000
0278	643.0900	Traffic Control Signs	DAY	4,220.000	4,220.000
0280	643.0920	Traffic Control Covering Signs Type II	EACH	6.000	6.000
0282	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0284	643.5000	Traffic Control	EACH	0.250	0.250
0286	645.0105	Geotextile Type C	SY	69.000	69.000
0288	645.0120	Geotextile Type HR	SY	30.000	30.000
0292	646.1020	Marking Line Epoxy 4-Inch	LF	14,800.000	14,800.000
0294	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	14,585.000	14,585.000
0304	648.0100	Locating No-Passing Zones	MI	1.400	1.400
0306	649.0105	Temporary Marking Line Paint 4-Inch	LF	44,185.000	44,185.000
0308	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	14,800.000	14,800.000
0316	650.4000	Construction Staking Storm Sewer	EACH	2.000	2.000
0326	650.8000	Construction Staking Resurfacing Reference	LF	7,400.000	7,400.000
0328	650.9910	Construction Staking Supplemental Control (project) 01. 4090-05-71	LS	1.000	1.000
0332	650.9920	Construction Staking Slope Stakes	LF	5,311.000	5,311.000
0334	690.0150	Sawing Asphalt	LF	1,305.000	1,305.000
0336	690.0250	Sawing Concrete	LF	230.000	230.000
0338	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0342	740.0440	Incentive IRI Ride	DOL	11,216.000	11,216.000
0344	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0346	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,100.000	2,100.000

					4090-05-71
0352	SPV.0165	Special 01. Wall Concrete Panel Mechanically Stabilized Earth, R-20-49	SF	1,189.000	1,189.000

3

CLEARING AND GRUBBING SUMMARY

CATEGORY	STATION	LOCATION	CLEARING 201.0105 STA	CLEARING 201.0120 ID	GRUBBING 201.0205 STA.	GRUBBING 201.0220 ID	REMARKS
0010	1426+00 - 1428+00	STH 67, LT	2	---	2	---	
0010	1434+00 - 1438+00	STH 67, LT	4	---	4	---	
0010	1436+28	STH 67, RT	---	10	---	10	
0010	1451+23	STH 67, RT	---	25	---	25	
0010	1451+26	STH 67, RT	---	10	---	10	
0010	1451+72	STH 67, RT	---	25	---	25	
0010	1452+20	STH 67, RT	---	10	---	10	
0010	1458+60	STH 67, RT	---	15	---	15	
0010	1459+30 - 1460+90	STH 67, RT	2	---	2	---	
0010	1467+63	STH 67, RT	---	35	---	35	
			8	**130**	**8**	**130**	

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EA	REMARKS
0010	1424+30	STH 67, LT	1	18-INCH CMCP - 49 LF
0010	1427+50	STH 67, LT	1	42-INCH X 29-INCH CMPA - 2 LF (NORTH SIDE)
0010	1433+80	STH 67, RT	1	18-INCH CMCP - 48 LF
0010	1436+73	STH 67, RT	1	18-INCH CMCP - 42 LF
0010	1443+67	STH 67, LT & RT	2	35-INCH X 24-INCH CMPA - REMOVE APRON ENDWALL ONLY (NORTH SIDE) & CMPA EXTENSION (SOUTH SIDE)
0010	1467+83	STH 67, LT	1	49-INCH X 33-INCH CMPA - 5 LF
0010	1478+60	STH 67, LT & RT	2	42-INCH X 29-INCH CMPA - REMOVE BOTH APRON ENDWALLS
		SUBTOTAL	**9**	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	LOCATION	204.0115 SY	REMARKS
0010	STA. 1416+00, STH 67	7	
0010	STA. 1490+00, STH 67	7	
0010	EAST RIVER ROAD	6	
0010	LOVERS ROAD	5	
0010	DRIVEWAYS	75	
	TOTAL	**100**	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY				LOCATION	204.0120 SY	REMARKS
0010	1416+00	-	1420+00	STH 67	1,330	
0010	1420+00	-	1424+00	STH 67	1,420	
0010	1424+00	-	1428+00	STH 67	1,475	
0010	1428+00	-	1432+00	STH 67	1,330	
0010	1432+00	-	1436+00	STH 67	1,410	
0010	1436+00	-	1440+00	STH 67	1,355	
0010	1440+00	-	1444+00	STH 67	1,305	
0010	1444+00	-	1448+00	STH 67	1,305	
0010	1448+00	-	1452+00	STH 67	1,375	
0010	1452+00	-	1456+00	STH 67	1,330	
0010	1456+00	-	1460+00	STH 67	1,400	
0010	1460+00	-	1464+00	STH 67	1,355	
0010	1464+00	-	1468+00	STH 67	1,415	
0010	1468+00	-	1472+00	STH 67	1,365	
0010	1472+00	-	1476+00	STH 67	1,330	
0010	1476+00	-	1480+00	STH 67	1,320	
0010	1480+00	-	1484+00	STH 67	1,315	
0010	1484+00	-	1488+00	STH 67	1,310	
0010	1488+00	-	1490+00	STH 67	655	
0010	E. RIVER ROAD				300	
0010	LOVERS ROAD				300	
				TOTAL	**25,700**	

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF	REMARKS
0010	1424+73	-	1428+82	STH 67, LT	405	
0010	1433+70	-	1437+63	STH 67, LT	395	
0010	1434+13	-	1436+66	STH 67, RT	255	
0010	1449+24	-	1451+89	STH 67, RT	260	
0010	1464+77	-	1469+77	STH 67, RT	470	
				SUBTOTAL	**1,785**	

REMOVING RETAINING WALL

CATEGORY	ITEM NUMBER	DESCRIPTION	EA	REMARKS
0010	204.9060.S.01	1426+78 LT	1	GUARDRAIL RETAINING WALL
0010	204.9060.S.02	1435+40 RT	1	GUARDRAIL RETAINING WALL
0010	204.9060.S.03	1435+67 LT	1	GUARDRAIL RETAINING WALL
0010	204.9060.S.04	1450+57 RT	1	GUARDRAIL RETAINING WALL

REMOVING PAVEMENT, ASPHALTIC SURFACE, AND CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0150 REMOVING CURB & GUTTER LF	REMARKS
0010	1421+64	-	1426+85	STH 67, RT	---	28	525	REMOVING ASPHALTIC SURFACE FOR DRIVEWAY BEHIND PROPOSED CURB & GUTTER
0010	1425+25	-	14828+25	STH 67, LT	---	92	---	REMOVAL OF EXCESS SHOULDER PAVEMENT AT RETAINING WALL
0010	1434+20	-	1437+15	STH 67, LT	---	100	---	REMOVAL OF EXCESS SHOULDER PAVEMENT AT RETAINING WALL
0010	1434+20	-	1436+65	STH 67, RT	---	65	---	REMOVAL OF EXCESS SHOULDER PAVEMENT AT RETAINING WALL
0010	1449+35	-	1451+40	STH 67, RT	275	---	---	REMOVAL OF NORTHBOUND LANE FOR R-20-49 CONSTRUCTION
0010	1457+45	-	1461+67	STH 67, RT	---	40	425	REMOVING ASPHALTIC SURFACE FOR DRIVEWAY BEHIND PROPOSED CURB & GUTTER
				TOTALS	**275**	**325**	**950**	

EARTHWORK SUMMARY

STATION TO STATION			LOCATION	205.0100 EXCAVATION COMMON (1) CUT (2) CY	205.0100 EXCAVATION COMMON (1) EBS EXCAV. (3) CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL (2) CY	AVAILABLE MATERIAL (4) CY	UNEXPANDED FILL CY	EXPANDED FILL (7) FACTOR 1.33 CY	MASS ORDINATE +/- (8) CY	WASTE CY	208.0100 BORROW (9) CY	REMARKS
1416+00	-	1418+75	RT	0	0	0	0	28	37	-37	0	32	
1421+64	-	1426+85	RT	471	0	29	442	9	13	429	429	0	
1424+00	-	1430+50	LT	17	0	0	17	490	652	-635	0	549	
1431+94	-	1442+52	LT	14	0	0	14	886	1,178	-1,164	0	1006	
1432+83	-	1440+50	RT	112	0	0	112	534	710	-599	0	518	
1442+52	-	1443+90	RT	0	0	0	0	74	98	-98	0	85	
1446+87	-	1451+24	RT	139	0	0	139	7	10	129	129	0	
1451+29	-	1452+73	RT	24	0	0	24	33	44	-20	0	18	
1457+45	-	1461+67	RT	371	0	23	348	4	5	343	343	0	
1463+11	-	1470+50	RT	2	0	0	2	1,217	1,619	-1,617	0	1398	
			SUBTOTAL	1,150	0	52	1,098	3,283	4,366	-3,269	902	3,606	
			TOTAL	**1,150**			**1,098**	**3,283**	**4,366**	**-3,269**	**902**	**3,606**	

1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.

2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.

7) EXPANDED FILL: FACTOR = 1.33; EXPANDED FILL = (UNEXPANDED FILL - ROCK * ROCK FACTOR) * FILL FACTOR

8) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

9) BORROW EXPANSION: FACTOR = 1.15

PREPARE FOUNDATION FOR ASPHALTIC PAVING

CATEGORY	STATION	TO	STATION	LOCATION	211.0100 LS
0010	141600	-	149000	STH 67	1
				TOTAL	**1**

BASE AGGREGATE DENSE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	REMARKS
0010	1416+00	-	1421+64	STH 67, RT	6	---	
0010	1421+64	-	1426+85	STH 67, RT	---	80	
0010	1426+85	-	1432+82	STH 67, RT	6	---	
0010	1432+82	-	1437+91	STH 67, RT	59	---	
0010	1437+91	-	1446+87	STH 67, RT	9	---	
0010	1446+87	-	1449+35	STH 67, RT	29	---	
0010	1449+35	-	1451+40	STH 67, RT	21	490	
0010	1451+40	-	1453+41	STH 67, RT	19	---	
0010	1453+41	-	1457+45	STH 67, RT	4	---	
0010	1457+45	-	1461+67	STH 67, RT	---	55	
0010	1461+67	-	1463+10	STH 67, RT	2	---	
0010	1463+10	-	1471+70	STH 67, RT	98	---	
0010	1471+70	-	1490+00	STH 67, RT	19	---	
0010	1416+00	-	1423+44	STH 67, LT	8	---	
0010	1423+44	-	1430+97	STH 67, LT	84	---	
0010	1430+97	-	1432+06	STH 67, LT	2	---	
0010	1432+06	-	1442+52	STH 67, LT	114	---	
0010	1442+52	-	1450+26	STH 67, LT	8	---	
0010	1450+26	-	1451+61	STH 67, LT	14	---	
0010	1451+61	-	1490+00	STH 67, LT	38	---	
				TOTAL	**540**	**625**	

HMA PAVEMENT SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	315.0200 ASPHALTIC BASE WIDENING TON	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	INCENTIVE DENSITY PWL HMA PAVEMENT ELIGIBLE TONNAGE	INCENTIVE AIR VOIDS HMA PAVEMENT ELIGIBLE TONNAGE	460.5224 HMA PAVEMENT 4 LT 58-28 S (MAINLINE) TON	460.5224 HMA PAVEMENT 4 LT 58-28 S (OTHER) TON	460.5225 HMA PAVEMENT 5 LT 58-28 S TON	REMARKS
0010	1416+00	-	1420+00	STH 67	10	185	---	105	149	105	44	64	
0010	1420+00	-	1424+00	STH 67	7	180	---	105	148	105	43	64	
0010	1424+00	-	1428+00	STH 67	4	190	---	105	153	105	48	66	
0010	1428+00	-	1432+00	STH 67	12	185	---	105	152	105	47	65	
0010	1432+00	-	1436+00	STH 67	8	190	---	105	156	105	51	67	
0010	1436+00	-	1440+00	STH 67	11	190	---	105	154	105	49	66	
0010	1440+00	-	1444+00	STH 67	12	185	---	105	151	105	46	65	
0010	1444+00	-	1448+00	STH 67	11	180	---	105	149	105	44	64	
0010	1448+00	-	1452+00	STH 67	8	190	---	105	154	105	49	66	
0010	1452+00	-	1456+00	STH 67	10	185	---	105	150	105	45	64	
0010	1456+00	-	1460+00	STH 67	7	180	---	105	149	105	44	64	
0010	1460+00	-	1464+00	STH 67	8	180	---	105	148	105	43	64	
0010	1464+00	-	1468+00	STH 67	8	190	---	105	154	105	49	66	
0010	1468+00	-	1472+00	STH 67	9	185	---	105	152	105	47	65	
0010	1472+00	-	1476+00	STH 67	10	180	---	105	149	105	44	64	
0010	1476+00	-	1480+00	STH 67	10	180	---	105	149	105	44	64	
0010	1480+00	-	1484+00	STH 67	10	180	---	105	148	105	43	64	
0010	1484+00	-	1488+00	STH 67	10	180	---	105	149	105	44	64	
0010	1488+00	-	1490+00	STH 67	5	90	---	53	75	53	22	32	
0010	1421+64	-	1426+85	STH 67, RT	---	---	50	---	---	---	---	---	ADJACENT TO CURB & GUTTER
0010	1449+35	-	1451+40	STH 67, RT	---	30	140	---	---	---	---	---	PAVEMENT REPLACEMENT AT R-20-49
0010	1457+45	-	1461+67	STH 67, RT	---	---	30	---	---	---	---	---	ADJACENT TO CURB & GUTTER
0010	E. RIVER ROAD				---	35	---	0	25	0	25	11	
0010	LOVERS ROAD				---	35	---	0	26	0	26	11	
TOTALS					**170**	**3,505**	**220**	**1,943**	**2,840**		**2,840**	**1,220**	

ASPHALTIC SURFACE PATCHING

CATEGORY	STATION	TO	STATION	LOCATION	465.0110 TON	REMARKS
0010	UNDISTRIBUTED				20	
TOTALS					**20**	

ASPHALTIC FLUMES

CATEGORY	LOCATION	465.0315 SY	REMARKS
0010	STH 67, STA. 1421+64, RT	3	
0010	STH 67, STA. 1426+85, RT	3	
0010	STH 67, STA. 1457+45, RT	3	
0010	STH 67, STA. 1461+67, RT	3	
TOTAL		**12**	

ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 LF	REMARKS
0010	1416+00	-	1448+91	STH 67	3,291	
0010	1452+91	-	1469+02	STH 67	1,611	
0010	1473+02	-	1490+00	STH 67	1,698	
TOTALS					**6,600**	

ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 1)

CATEGORY	STATION	TO	STATION	LOCATION	465.0425 LF	REMARKS
0010	1416+00	-	1421+64	STH 67, RT	390	
0010	1426+85	-	1457+45	STH 67, RT	2,970	
0010	1461+67	-	1469+45	STH 67, RT	690	
0010	1471+15		1490+00	STH 67, RT	1,805	
0010	1416+00	-	1449+95	STH 67, LT	3,040	
0010	1452+00	-	1490+00	STH 67, LT	3,320	
TOTALS					**12,215**	

APRON ENDWALL SUMMARY

CAT.	STATION	LOCATION		520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EA	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EA	521.0535 APRON ENDWALLS FOR PIPE ARCH SLOPE CROSS DRAINS STEEL 35X24-INCH 4 TO 1 EA	521.0542 APRON ENDWALLS FOR PIPE ARCH SLOPE CROSS DRAINS STEEL 42X29-INCH 4 TO 1 EA	REMARKS
0010	1424+00	STH 67	LT	1	---	---	---	
0010	1424+57	STH 67	LT	1	---	---	---	
0010	1433+53	STH 67	RT	1	---	---	---	
0010	1434+05	STH 67	RT	1	---	---	---	
0010	1436+51	STH 67	RT	1	---	---	---	
0010	1436+92	STH 67	RT	1	---	---	---	
0010	1443+67	STH 67	LT	---	---	1	---	
0010	1450+14	STH 67	RT	---	1	---	---	
0010	1478+60	STH 67	LT & RT	---	---	---	2	
			TOTALS	**6**	**1**	**1**	**2**	

CULVERT PIPE SUMMARY

CAT.	STATION	LOCATION		520.3318 CULVERT PIPE CLASS III-A 18-INCH LF	MINIMUM THICKNESS CORRUGATED STEEL INCHES	REMARKS
0010	1424+30	STH 67	LT	50	0.064	
0010	1433+80	STH 67	RT	48	0.064	
0010	1436+73	STH 67	RT	42	0.064	
		TOTALS		**140**		

STORM SEWER SUMMARY

CATEGORY	STATION	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EA	608.3030 STORM SEWER PIPE REINFORCED CONCRETE CLASS III-A 30-INCH LF	611.0530 MANHOLE COVERS TYPE J EA	611.2005 MANHOLES 5-FT DIAMETER EA	650.4000 CONSTRUCTION STAKING STORM SEWER EA	REMARKS
0010	1450+14	STH 67, 23.5' RT	1	7	1	1	2	EXISTING CULVERT INVERT = 1041.04; TOP OF STRUCTURE = 1044.37; FLOWLINE OF STRUCTURE = 1035.29; OUTFALL INVERT 1034.99; STRUCTURE HEIGHT = 9.08' (SEE CONSTRUCTION DETAIL)
			1	**7**	**1**	**1**	**2**	

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0557 LF	REMARKS
0010	1421+64	-	1426+85	STH 67, RT	525	
0010	1457+45	-	1461+67	STH 67, RT	425	
				TOTALS	**950**	

GUARDRAIL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EA	REMARKS
0010	1424+65	-	1429+77	STH 67, LT	400.0	2	
0010	1434+00	-	1438+00	STH 67, LT	712.5	2	
0010	1434+03	-	1436+71	STH 67, RT	162.5	2	
0010	1448+06	-	1452+17	STH 67, RT	300.0	2	
0010	1464+30	-	1469+99	STH 67, RT	475.0	2	
				TOTALS	**2,050**	**10**	

WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	STH 67	10	FOR BASE AGGREGATE COMPACTION
TOTAL		10	

SEED WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	STH 67	300	
TOTAL		300	

FINISHING AND EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2002 EROSION MAT CLASS I TYPE A SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EA	628.7570 ROCK BAGS EA	629.0205 FERTILIZER TYPE A CWT	630.0130 SEEDING MIXTURE NO. 30 LB	645.0120 GEOTEXTILE TYPE HR SY	REMARKS
0010	1416+00	-	1418+77	STH 67, RT	---	195	---	---	---	195	10	---	---	0.12	3.5	---	
0010	1421+50	-	1427+00	STH 67, RT	---	720	---	---	---	720	25	5	---	0.45	12.9	---	
0010	1423+50	-	1430+50	STH 67, LT	11	900	---	325	325	900	---	2	30	0.57	16.2	22	
0010	1431+94	-	1442+52	STH 67, LT	---	1,240	---	360	360	1,240	---	---	30	0.78	22.3	---	
0010	1432+80	-	1440+50	STH 67, RT	---	1,440	---	255	255	1,440	---	4	---	0.90	25.8	---	
0010	1442+50	-	1444+03	STH 67, RT	---	250	---	150	150	250	---	---	30	0.16	4.5	---	
0010	1446+87	-	1452+50	STH 67, RT	---	775	---	130	130	775	---	---	30	0.49	13.9	---	
0010	1457+00	-	1461+75	STH 67, RT	4	585	---	---	---	585	25	---	---	0.37	10.5	8	
0010	1463+00	-	1470+65	STH 67, RT	---	1,360	155	730	730	1,205	---	---	30	0.85	24.4	---	
0010	1467+65	-	1468+00	STH 67, LT	---	50	---	---	---	50	---	---	---	0.03	0.9	---	
0010	1478+50	-	1478+65	STH 67, LT & RT	---	10	---	---	---	10	---	---	---	0.01	0.2	---	
0010	UNDISTRIBUTED			STH 67	---	750	15	200	200	750	10	4	15	1.27	14.9	---	
				TOTALS	15	8,275	170	2,150	2,150	8,120	70	15	165	6.00	150.0	30	

EROSION CONTROL

CATEGORY		628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010	PROJECT	3	2	
	TOTALS	3	2	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH	REMARKS
0010	1427+50	STH 67, LT & RT	2	
0010	1443+67	STH 67, LT & RT	2	
0010	1450+14	STH 67, LT & RT	2	
0010	1455+45	STH 67, LT & RT	2	
0010	1467+83	STH 67, LT & RT	2	
0010	1478+60	STH 67, LT & RT	2	
		TOTAL	12	

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ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	STH 67, S. OF EAST RIVER RD	W1-2L	30" X 30"	---	6.25	---	1	1	1	
2	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 1
3	"	W1-2L	30" X 30"	---	6.25	---	1	1	1	
4	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 3
5	"	W1-6	48" X 24"	---	8.00	1	---	---	---	
6	"	W1-6	48" X 24"	---	8.00	1	---	---	---	
7	"	W1-2L	30" X 30"	---	6.25	1	---	1	1	
8	"	W1-2R	30" X 30"	---	6.25	---	1	1	1	
9	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 8
10	"	W1-2R	30" X 30"	---	6.25	1	---	1	1	
11	"	W1-4L	30" X 30"	---	6.25	---	1	1	1	
12	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 11
13	EAST RIVER RD	R1-1	30" X 30"	5.18	---	1	---	1	1	
14	STH 67, N. OF EAST RIVER RD	S3-1	36" X 36"	---	9.00	---	1	1	1	
15	"	W1-2L	30" X 30"	---	6.25	---	1	1	1	
16	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 15
17	"	W1-4L	30" X 30"	---	6.25	---	1	1	1	
18	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 17
19	"	S3-1	36" X 36"	---	9.00	---	1	1	1	
19A	"	W1-8	18" X 24"	---	3.00	1	---	1	1	
19B	"	W1-8	18" X 24"	---	3.00	1	---	1	1	
19C	"	W1-8	18" X 24"	---	3.00	1	---	1	1	
19D	"	W1-8	18" X 24"	---	3.00	1	---	1	1	
19E	"	W1-8	18" X 24"	---	3.00	1	---	1	1	
20	LOVERS LN	R1-1	30" X 30"	5.18	---	1	---	1	1	
21	STH 67, N. OF LOVERS LN	W1-2R	30" X 30"	---	6.25	---	1	1	1	
22	"	W13-1	18" X 18"	---	2.25	---	---	---	---	MOUNT BELOW SIGN 21
23	"	W1-2L	30" X 30"	---	6.25	1	---	1	1	
24	"	R2-1	---	---	---	---	---	1	1	
25	"	J1-1	---	---	---	---	---	1	1	
26	"	D2-1	96" X 15"	10.00	---	2	---	---	---	SEE SIGN DETAILS
27	"	J1-1	24" X 39"	6.50	---	---	1	---	---	SEE PLAN SHEET
28	"	W3-1	36" X 36"	---	9.00	---	1	---	---	
29	"	W3-1	---	---	---	---	---	1	1	
29	"	W1-2R	30" X 30"	---	6.25	---	1	1	1	
	TOTALS			**26.86**	**142.50**	**14**	**12**	**23**	**23**	

TRAFFIC CONTROL SUMMARY

CAT	LOCATION	APPROX. SERVICE DAYS	643.0300 TRAFFIC CONTROL DRUMS NO IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0420* TRAFFIC CONTROL BARRICADES TYPE III NO IN SERVICE	643.0420* TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0705* TRAFFIC CONTROL WARNING LIGHTS TYPE A NO IN SERVICE	643.0705* TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0900* TRAFFIC CONTROL SIGNS NO IN SERVICE	643.0900* TRAFFIC CONTROL SIGNS DAYS	643.1050* TRAFFIC CONTROL SIGNS PCMS NO IN SERVICE	643.1050* TRAFFIC CONTROL SIGNS PCMS DAYS
0010	STH 67 ADVANCED WARNING	50	---	---	---	---	---	---	10	500	2	14
0010	SIDEROAD ADVANCED WARNING	50	---	---	---	---	---	---	34	1700	---	---
0010	DURING DETOUR	20	---	---	18	360	24	480	6	120	---	---
0010	CURB & GUTTER AND SIDEWALK REMOVAL/REPLACEMENT	10	70	700	4	40	8	80	4	40	---	---
0010	SHOULDER CLOSURES AT GUARDRAIL & BOX CULVERTS	30	100	3000	---	---	---	---	20	600	---	---
0010	UNDISTRIBUTED	20	20	400	---	---	---	---	5	100	---	---
	TOTALS			4,100		400		560		3,060		14

NOTE: INSTALL TRAFFIC CONTROL SIGNS PCMS NEAR THE PROJECT LIMITS FOR 7 DAYS IN ADVANCE OF CONSTRUCTION OPERATIONS TO NOTIFY THE TRAVELING PUBLIC

*-ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) LF	REMARKS
0010	1416+00	-	1450+91	STH 67	6,982	6,933	13,964	6,933	6,982	
0010	1450+91	-	1471+02	STH 67	4,022	3,912	8,044	3,912	4,022	
0010	1471+02	-	1490+00	STH 67	3,796	3,740	7,592	3,740	3,796	
	SUBTOTALS				**14,800**	**14,585**	**44,185**		**14,800**	

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 20 DAYS	643.0900* SIGNS DAYS	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A DAYS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
1	STH 67, W. OF CTH Y, PLACE 1500' W. OF CTH Y INTERSECTION	W 20-2A	48"X48"	1	20	20						
2	STH 67, W. OF CTH Y, PLACE 750' W. OF CTH Y INTERSECTION	MO 4-8	24"X12"	1	20	20						
	"	M 3-1	24"X24"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 5-1R	21"X21"	1	20	20						
3	STH 67, W. OF CTH Y, PLACE 750' W. OF CTH Y INTERSECTION	MO 4-8	24"X12"	1	20	20						
	"	M 3-1	24"X24"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 6-1	21"X21"	1	20	20						RIGHT
4	STH 67, AT CTH Y, PLACE ON RIGHT SHOULDER IN SE QUADRANT OF INTERSECTION	R 11-3	60"X30"	1	20	20	20	40				1 1/2 MILES AHEAD
	"	M 4-9R	30"X24"	1	20	20						
5	CTH Y, S. OF STH 67, PLACE 150' S. OF STH 67 INTERSECTION	MO 4-8	24"X12"	1	20	20						
	"	M 3-1	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
6	CTH Y, S. OF STH 67, PLACE 500' S. OF STH 67 INTERSECTION	M 4-8A	24"X18"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
7	CTH Y, W. OF US 45, PLACE 750' W. OF US 45 INTERSECTION	MO 4-8	24"X12"	1	20	20						
	"	M 3-1	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 5-1L	21"X21"	1	20	20						
8	CTH Y, W. OF US 45, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	24"X12"	1	20	20						
	"	M 3-3	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
9	CTH Y, AT US 45, PLACE RIGHT OF EXISITNG J13-1 SIGN	MO 4-8	24"X12"	1	20	20						
	"	M 3-1	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 6-1	21"X21"	1	20	20						LEFT
10	US 45, AT CTH Y, PLACE RIGHT OF EXISTING J13-1 SIGN	MO 4-8	24"X12"	1	20	20						
	"	M 3-3	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 6-1	21"X21"	1	20	20						RIGHT
11	US 45, N. OF CTH Y, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	24"X12"	1	20	20						
	"	M 3-1	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
12	US 45, N. OF CTH Y, PLACE 750' N. OF CTH Y INTERSECTION	MO 4-8	24"X12"	1	20	20						
	"	M 3-3	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 5-1R	21"X21"	1	20	20						
13	US 45, S. OF STH 67, MODIFY EXISTING J1-1 SIGN AS SHOWN	MO 4-8A	24"X18"	1	20	20						
14	US 45, S. OF STH 67, COVER EXISTING J2-3 SIGN AS SHOWN									1	1	COVER "SOUTH 67 ADV LT"
15	US 45, S. OF STH 67, COVER EXISTING D1-3 SIGN AS SHOWN									1	1	COVER "CAMPBELLSPORT"
16	US 45, S. OF STH 67, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	24"X12"	1	20	20						
	"	M 3-3	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
17	US 45, AT STH 67, COVER EXISTING J3-2 SIGN AS SHOWN									1	1	COVER "SOUTH 67 LT"
	PAGE SUBTOTALS			42		840	20	40	0		3	

3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 20 DAYS	643.0900* SIGNS DAYS	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A DAYS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
18	STH 67, S. OF US 45, COVER EXISTING J4-1 SIGN AS SHOWN									1	1	COVER "SOUTH 67"
19	STH 67, AT US 45, PLACE ON RIGHT SHOULDER IN NW QUADRANT OF INTERSECTION	R 11-3	60"X30"	1	20	20	20	40				3/4 MILES AHEAD
	"	MO 4-9L	30"X24"	1	20	20						
20	US 45, N. OF STH 67, MODIFY EXISTING J3-2 SIGN AS SHOWN	MO 4-8	24"X12"	1	20	20						
	"	MO 6-1	21"X21"	1	20	20						AHEAD
21	US 45, S. OF STH 67, COVER EXISTING D1-3 SIGN AS SHOWN									1	1	COVER "CAMPBELLSPORT"
22	US 45, N. OF STH 67, MODIFY EXISTING J2-3 SIGN AS SHOWN	MO 4-8	24"X12"	1	20	20						
	"	MO 6-1	21"X21"	1	20	20						AHEAD
23	US 45, N. OF STH 67, PLACE 1500' N. OF STH 67 INTERSECTION	M 3-3	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	W 20-2A	48"X48"	1	20	20						
24	STH 67, E. OF US 45, PLACE RIGHT OF EXISTING J13-1 SIGN	MO 4-8	24"X12"	1	20	20						
	"	M 3-3	24"X12"	1	20	20						
	"	M 1-6	24"X24"	1	20	20						67
	"	MO 6-1	21"X21"	1	20	20						LEFT
25	STH 67, E. OF US 45, COVER EXISITNG D1-3 SIGN AS SHOWN									1	1	
26	STH 67, E. OF US 45, MODIFY EXISTING J2-3 SIGN AS SHOWN	MO 4-8	24"X12"	1	20	20						
	"	MO 5-1L	21"X21"	1	20	20						
27	STH 67, E. OF US 45, PLACE 1500' E. OF US 45 INTERSECTION	W 20-2A	48"X48"	1	20	20						
28	STH 67, S. OF LOVERS LN, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1					7			PLACE IN ADVANCE OF CLOSURE
29	STH 67, S. OF RIVER RD, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1					7			PLACE IN ADVANCE OF CLOSURE
	PAGE SUBTOTALS			18		320	20	40	14		3	
	PROJECT TOTALS			**60**		**1,160**	**40**	**80**	**14**		**6**	

*-ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOCATING NO PASSING ZONES

CATEGORY	STATION	TO	STATION	LOCATION	648.0100 MI	REMARKS
0010	1416+00	-	1490+00	STH 67	1.40	
				TOTAL	**1.40**	

CONSTRUCTION STAKING SUMMARY

CATEGORY	LOCATION				650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	REMARKS
0010	STH 67				7,400	1	---	
0010	1416+00	-	1418+77	STH 67, RT	---	---	277	
0010	1421+50	-	1427+00	STH 67, RT	---	---	550	
0010	1423+50	-	1430+50	STH 67, LT	---	---	700	
0010	1431+94	-	1442+52	STH 67, LT	---	---	1058	
0010	1432+80	-	1440+50	STH 67, RT	---	---	770	
0010	1442+50	-	1444+03	STH 67, RT	---	---	153	
0010	1446+87	-	1452+50	STH 67, RT	---	---	563	
0010	1457+00	-	1461+75	STH 67, RT	---	---	475	
0010	1463+00	-	1470+65	STH 67, RT	---	---	765	
				TOTALS	**7,400**	**1**	**5,311**	

NOTE: ADDITIONAL CONSTRUCTION STAKING ITEMS SHOWN ELSEWHERE IN PLAN

SAWING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF	REMARKS
0010	1425+25	-	1428+25	STH 67, LT	300	---	REMOVAL OF EXCESS SHOULDER PAVEMENT AT RETAINING WALL
0010	1434+20	-	1437+15	STH 67, LT	295	---	REMOVAL OF EXCESS SHOULDER PAVEMENT AT RETAINING WALL
0010	1434+20	-	1436+65	STH 67, RT	245	---	REMOVAL OF EXCESS SHOULDER PAVEMENT AT RETAINING WALL
0010	1449+35	-	1451+40	STH 67, RT	10	230	REMOVAL OF NORTHBOUND LANE AND SHOULDER FOR R-20-49 CONSTRUCTION
0010	1416+00	-	1490+00	STH 67	60	---	OPTIONAL SAW CUTS FOR MAINLINE BUTT JOINTS
0010	1416+00	-	1490+00	SIDEROADS	45	---	OPTIONAL SAW CUTS FOR SIDEROAD BUTT JOINTS
0010	DRIVEWAYS				320	---	OPTIONAL SAW CUTS FOR DRIVEWAY BUTT JOINTS
0010	DRIVEWAYS				30	---	REQD. SAW CUTS AT DRIVEWAYS BEHIND PROPOSED CURB & GUTTER
				TOTALS	**1,305**	**230**	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJ NO. 4090-05-21

ECPL CAMPBELLSPORT - USH 45

TRIPLE S ROAD - USH 45

STH 67

FOND DU LAC COUNTY



FOND DU LAC COUNTY



PROJECT LOCATION

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS — CAUTION
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES — CAUTION

R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN — IP
VALVE (GAS, WATER, ETC.) — ⊘ (TYPE)
SIGN — SIGN
OFF-PREMISE SIGN — I-25 — SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	○
TELEPHONE POLE	⌀	⌀
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	⌀	⌀

ACCESS RESTRICTED (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)

BRIDGE

PARCEL NUMBER 25
UTILITY NUMBER 201

CONVENTIONAL ABBREVIATIONS

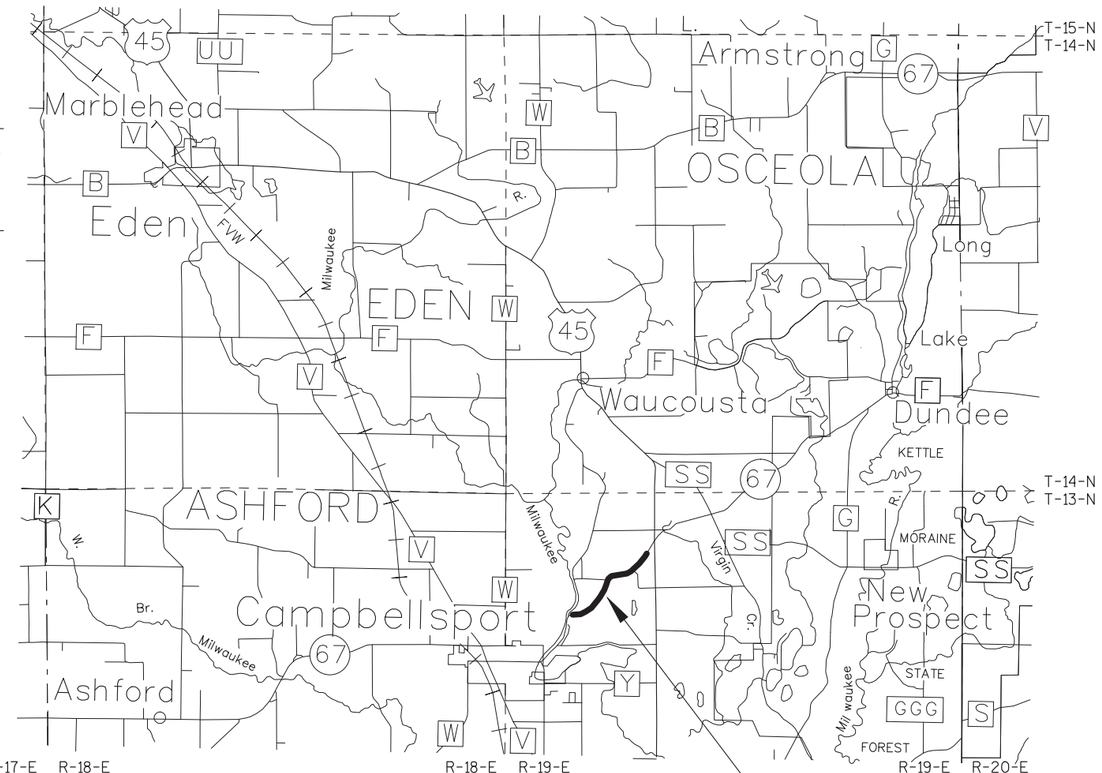
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
COUNTY	CO	SQUARE FEET	SF
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST	STATION	STA
CORNER	COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER — W
GAS — G
TELEPHONE — T
OVERHEAD TRANSMISSION LINES — OH
ELECTRIC — E
CABLE TELEVISION — TV
FIBER OPTIC — FO
SANITARY SEWER — SAN
STORM SEWER — SS



LAYOUT
SCALE 0 1 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4090-05-21

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS) FOND DU LAC COUNTY, NAD83(2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPE WITH DOT CAP), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY, WISCONSIN.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4090-05-21- 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : X:\3230500\113975.03\TECH\CAD\RW\040101_TI- TPP 4090-05-21.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 7/5/2017 2:44 PM
PLOT BY : WILLIAM KOTTLER
PLOT NAME : ----------
---------- 4090-05-21 4.01

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

TRANSPORTATION PROJECT PLAT NO: 4090-05-21 - 4.01

PART OF LOTS 1 AND 2, CSM 4932, LOCATED IN AND INCLUDING THE NW 1/4 OF THE SW 1/4, SECTION 8, TOWNSHIP 13 NORTH, RANGE 19 EAST, TOWN OF AUBURN, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
ECPL CAMPBELLSPORT - USH 45

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1087004
Recorded
July 19, 2017 1:52 PM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

Recorded this 19th day of July, 2017 at 1:52 PM in VOL. 19 Pg. 4 Doc #_1087004
James M Krebs
Register of Deeds, Fond du Lac County, WI

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4090-05-21 - 4.01
SHEET 1 OF 2
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
7	MARK A. CALVIN	TLE	0	0	0	686
8	LISA FINKE	TLE	0	0	0	1300
9	KEITH BLANCHARD AND CHRISTINE BLANCHARD	TLE	0	0	0	2441
11	CYRIL M. SERWE	FEE & TLE	4994	11768	16762	2568

NOTES:

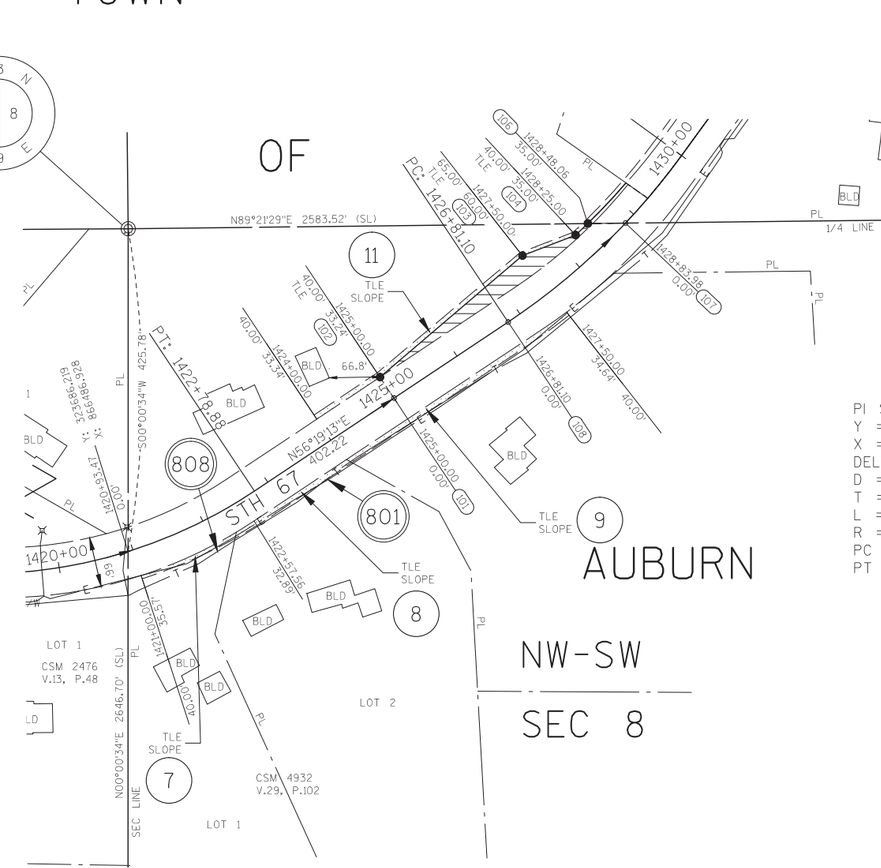
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
HIGHWAY RIGHT-OF-WAY PROJECT 4090-03-20

COORDINATES OF THE SW CORNER, SEC. 8, T13N, R19E AND OF THE WEST QUARTER CORNER OF SEC. 8, T13N, R19E WERE UPDATED FOR THE PURPOSE OF THE ADJOINING PROJECT TO THE WEST (TPP 4090-06-21) AFTER THIS PLAT WAS SUBMITTED.
THE COORDINATES FOR 4090-06-21 ON THESE CORNERS ARE AS FOLLOWS:
SW CORNER, SEC. 8: Y: 321465.190, X: 866486.560 (*10056)
W. QTR. CORNER, SEC. 8: Y: 324109.360, X: 866490.570 (*10064)

UTILITY SCHEDULE OF INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
801	WE ENERGIES (ELEC)	RELEASE OF RIGHTS
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS

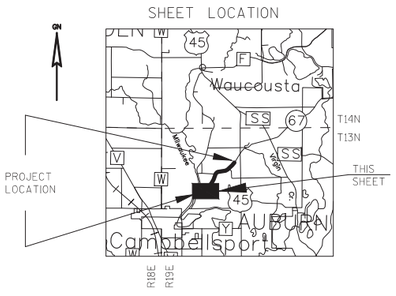
801 WE ENERGIES (ELEC)
PARCEL 7, 8 & 9
DOC. 435624
DOC. 435625

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCELS 7, 8 & 9
DOC. 435624
DOC. 435625



PI STA = 1420+86.71	PI STA = 1428+42.17
Y = 323652.11	Y = 324078.17
X = 866483.11	X = 867122.45
DELTA = 35°00'34"	DELTA = 20°17'36"
D = 8°48'53"	D = 6°21'58"
T = 205.00	T = 161.07
L = 397.17	L = 318.77
R = 650.00	R = 900.00
PC STA = 1418+81.71	PC STA = 1426+81.10
PT STA = 1422+78.88	PT STA = 1429+99.87

SHEET LOCATION



Point Table		
Point #	Northing	Easting
22786	324111.998	866486.997
101	323888.416	866837.707
102	323916.075	866819.275
103	324076.447	867007.233
104	324103.521	867077.482
106	324118.794	867093.536
107	324119.351	867143.185
108	323988.844	866988.410

RIGHT-OF-WAY LINE TABLE		
PT#-PT#	LENGTH	DIRECTION
22786-106	606.58	N89°21'29"E
106-107	49.65	N89°21'29"E
107-108	SEE CURVE TABLE	
108-101	181.10	S56°19'13"W
101-102	33.24	N33°40'47"W
102-103	247.08	N49°31'41"E
103-104	75.29	N68°55'25"E
104-106	SEE CURVE TABLE	

CURVE TABLE					
PT#-PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
107-108	202.88	900.00	12°54'57"	202.45	S49°51'45"W
104-106	22.16	865.01	1°28'04"	22.16	N46°25'32"E

GN
SCALE, FEET
0 100 200

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 IN THIS DOCUMENT, FOR ADDITIONAL INFORMATION.

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4090-05-21-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

William F. Kottler DATE 07-05-2017
WILLIAM F. KOTTLER,
RLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) Curt Van Erem DATE 07-06-2017
(PRINTED NAME) CURT VAN EREM

FILE NAME : X:\3230500\113975.03\TECH\CAD\RW\040101_RP- TPP 4090-05-21.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 7/5/2017 2:56 PM
PLOT BY : WILLIAM KOTTLER
PLOT NAME :
PLOT SCALE : 1:100

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

TRANSPORTATION PROJECT PLAT NO: 4090-05-21 - 4.02

PART OF LOT 1 CSM 2530 LOCATED IN AND INCLUDING THE SW 1/4 OF THE NW 1/4 AND PART OF LOTS 3 AND 4, AUBURN ESTATES, LOCATED IN AND INCLUDING THE SE 1/4 OF THE NW 1/4, SECTION 8, TOWNSHIP 13 NORTH, RANGE 19 EAST, TOWN OF AUBURN, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
ECPL CAMPBELLSPORT - USH 45

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1089442
Recorded
September 13, 2017 2:48 PM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4090-05-21 - 4.02
AMENDMENT NO:___

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
12	DIANE L. FUNK	TLE	0	0	0	1078
13	BVS PROPERTIES LLC	FEE & TLE	5483	13247	18730	7365
14	DUANE A. PETERSEN AND GEORGIA PETERSEN	FEE & TLE	3856	9855	13711	6720
16	ELTON KETTER	TLE	0	0	0	353
17	SHAWN SONNENTAG AND TARA SONNENTAG, AND JOSHUA J. HELMER	TLE	0	0	0	2738

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: HIGHWAY RIGHT-OF-WAY PROJECT 4090-03-20 AND AUBURN ESTATES V. 12, P. 81, DOC. 358696.

Point Table		
Point #	Northing	Easting
22786	324111.998	866486.997
106	324118.794	867093.536
107	324119.351	867143.185
201	324172.363	867143.937
202	324152.084	867172.661
203	324208.432	867217.183
204	324532.034	867452.526
206	324551.588	867425.640
207	324601.879	867441.497
208	324804.065	867588.539
209	324874.933	867661.113
211	324855.530	867687.792
212	324774.656	867628.976
213	324755.278	867655.622
214	324704.811	867640.005
216	324583.500	867551.780
217	324512.769	867479.017

RIGHT-OF-WAY LINE TABLE		
PT#-PT#	LENGTH	DIRECTION
22786-107	656.23	N89°21'29"E
107-106	49.65	S89°21'29"W
106-201	SEE CURVE TABLE	
201-202	35.16	S54°46'38"E
202-203	SEE CURVE TABLE	
203-204	400.13	N36°01'37"E
204-206	33.24	N53°58'23"W
206-207	52.73	N17°30'03"E
207-208	250.00	N36°01'37"E
208-209	101.44	N45°40'53"E
209-211	32.99	S53°58'23"E
211-212	100.00	S36°01'37"W
212-213	32.95	S53°58'23"E
213-214	52.83	S17°11'42"W
214-216	150.00	S36°01'37"W
216-217	101.48	S45°48'40"W
217-204	32.76	N53°58'23"W
204-203	400.13	S36°01'37"W
203-107	SEE CURVE TABLE	

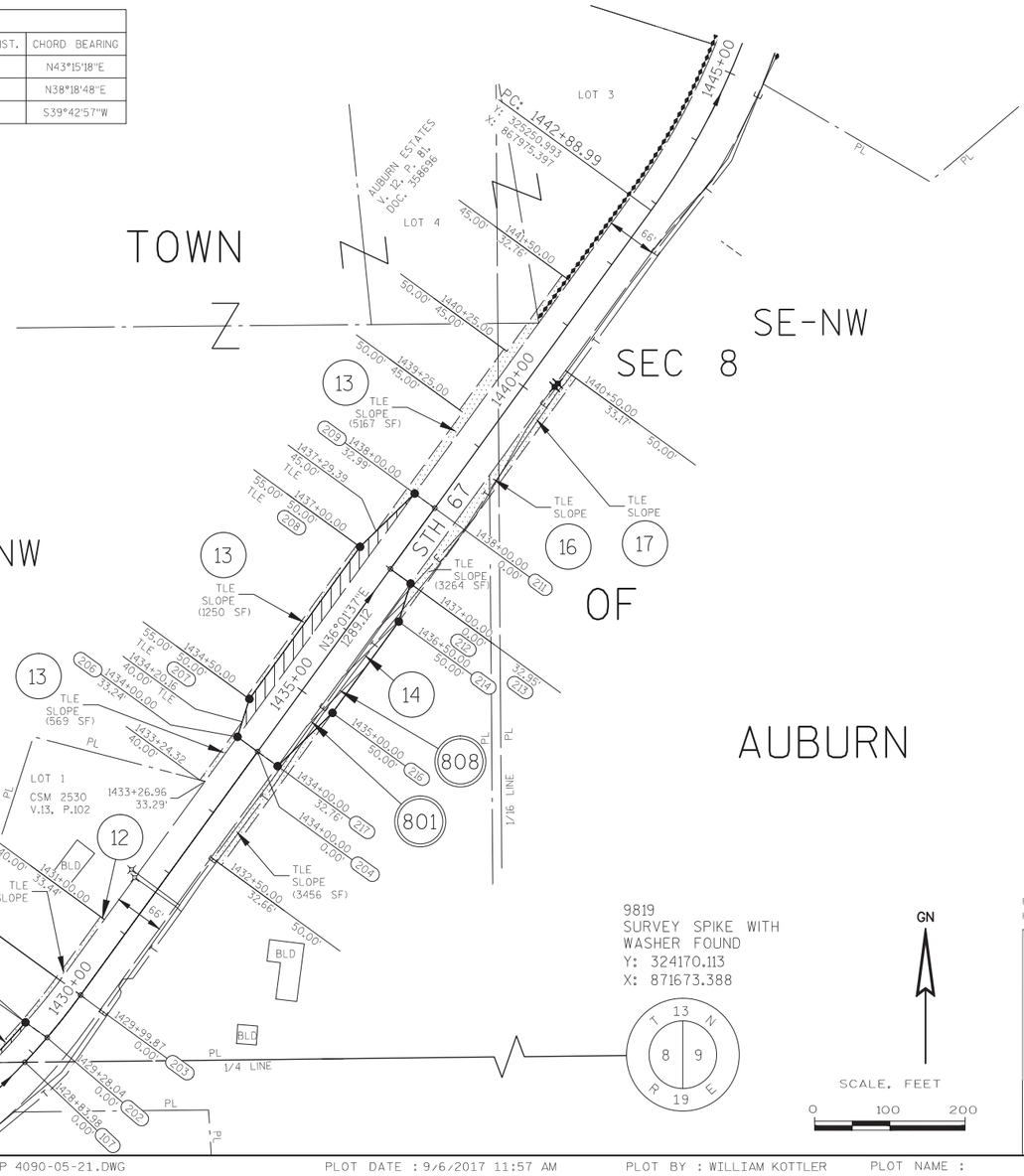
CURVE TABLE					
PT#-PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
106-201	73.57	865.00	4°52'24"	73.55	N43°15'18"E
202-203	71.83	900.00	4°34'23"	71.81	N38°18'48"E
203-107	115.89	900.00	7°22'39"	115.81	S39°42'57"W

PI STA = 1428+42.17
Y = 324078.17
X = 867122.45
DELTA = 20°17'36"
D = 6°21'58"
T = 161.07
L = 318.77
R = 900.00
PC STA = 1426+81.10
PT STA = 1429+99.87

PI STA = 1444+53.15
Y = 325383.76
X = 868071.95
DELTA = 19°01'10"
D = 5°50'47"
T = 164.17
L = 325.31
R = 980.00
PC STA = 1442+88.99
PT STA = 1446+14.30

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
801	WE ENERGIES (ELEC)	RELEASE OF RIGHTS
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS

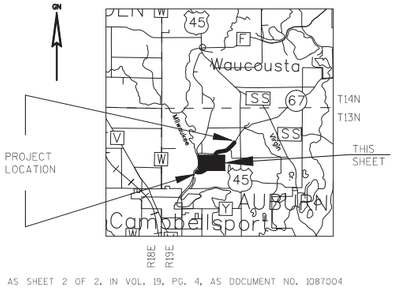


22786
BERNTSEN MONUMENT
FOUND
Y: 324111.998
X: 866486.997

9819
SURVEY SPIKE WITH
WASHER FOUND
Y: 324170.113
X: 871673.388

GN
SCALE, FEET
0 100 200

SHEET LOCATION



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOL. 19, PG. 4, AS DOCUMENT NO. 1087004 FOR ADDITIONAL INFORMATION.

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4090-05-21-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WILLIAM F. KOTTLER, RLS 2348 — DATE 09-06-2017

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE 9-06-2017
(PRINTED NAME) CURT VAN EREM

801 WE ENERGIES (ELEC)
PARCELS 14, 16 & 17
DOC. 435622, DOC. 435621

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCELS 12, 14, 16, & 17
DOC. 243253, DOC. 243256,
DOC. 435622, DOC. 403325
DOC. 435621

FILE NAME : \\CORP.MEADHUNT.COM\SHAREDFOLDERS\ENTP\3230500\113975.03\TECH\CAD\RW\040101_RP- TPP 4090-05-21.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 9/6/2017 11:57 AM
PLOT BY : WILLIAM KOTTLER
PLOT NAME :
PLOT SCALE : 1:100

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

TRANSPORTATION PROJECT PLAT NO: 4090-05-21 - 4.03

PARTS OF LOT 1 AND 2, CSM 6470 LOCATED IN AND INCLUDING THE NE 1/4 OF THE NW 1/4 AND PARTS OF LOT 1, CSM 3200 AND LOT 1, CSM 4414 LOCATED IN AND INCLUDING THE NW 1/4 OF THE NE 1/4, SECTION 8, TOWNSHIP 13 NORTH, RANGE 19 EAST, TOWN OF AUBURN, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
ECPL CAMPBELLSPORT - USH 45

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1089443
Recorded
September 13, 2017 2:54 PM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4090-05-21 - 4.03
AMENDMENT NO:___

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
18	BOYD A. STOFFEL AND VICTORIA C. STOFFEL	FEE/TLE	118	0	118	4198
19	OLGA A. ZIELIEKE AND RICHARD KROSTAG	TLE	0	0	0	1585
22	HELSEL FAM TR, ROCK; HELSEL FAM TR, DEBRA	TLE	0	0	0	2212
23	NORMAN V. EBERT AND MARY L. EBERT	FEE & TLE	3183	0	3183	2489
24	RICHARD G. THOMPSON AND DAWN M. THOMPSON	FEE & TLE	5073	14994	20067	963

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: HIGHWAY RIGHT-OF-WAY PROJECT 4090-03-20, CSM 3200, V. 17, P. 86, CSM 4414, V.25, P. 57 AND CSM 6470, V. 44, P. 66.
EXISTING SIDE ROAD RIGHT-OF-WAYS SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOC. 436610, CSM 3201, V. 17, P. 87 AND CSM 4414, V.25, P. 57.

Point Table		
Point #	Northing	Easting
22800	326797.477	869058.905
300	326400.823	869060.614
301	326416.675	869300.881
302	326429.946	869502.020
303	326590.085	869883.345
304	326653.450	869954.249
306	326638.959	869986.213
307	326637.782	869996.748
308	326540.561	869894.800
309	326448.893	869762.538
311	326395.210	869610.290
312	326371.773	869303.843
313	326384.423	869303.009
314	326381.547	868768.470
316	325972.455	868252.021
317	325923.509	868272.729
318	325921.788	868278.352
319	325902.663	868272.502
320	325904.397	868266.834

RIGHT-OF-WAY LINE TABLE		
PT#-PT#	LENGTH	DIRECTION
22800-300	396.66	S00°14'49"E
300-301	240.79	N86°13'31"E
301-302	201.58	N86°13'31"E
302-303	SEE CURVE TABLE	
303-304	95.09	N48°12'51"E
304-306	35.09	S65°36'44"E
306-307	10.60	S83°37'44"E
307-308	140.87	S46°21'35"W
308-309	160.92	S55°16'29"W
309-311	161.44	S70°34'38"W
311-312	307.34	S85°37'35"W
312-313	12.68	N3°46'29"W
313-301	32.32	N3°46'29"W
300-314	735.14	S86°13'31"W
314-316	SEE CURVE TABLE	
316-317	53.15	S22°55'56"E
317-318	5.88	S72°59'33"E
318-319	20.00	S17°00'27"W
319-320	5.93	N72°59'33"W
320-317	20.00	N17°08'28"E

CURVE TABLE					
PT#-PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
302-303	421.27	635.00	38°00'39"	413.59	N67°13'11"E
314-316	700.68	580.00	69°13'04"	658.85	S51°36'59"W

PI STA = 1444+53.15
Y = 325383.76
X = 868071.95
DELTA = 19°01'10"
D = 5°50'47"
T = 164.17
L = 325.31
R = 980.00
PC STA = 1442+88.99
PT STA = 1446+14.30

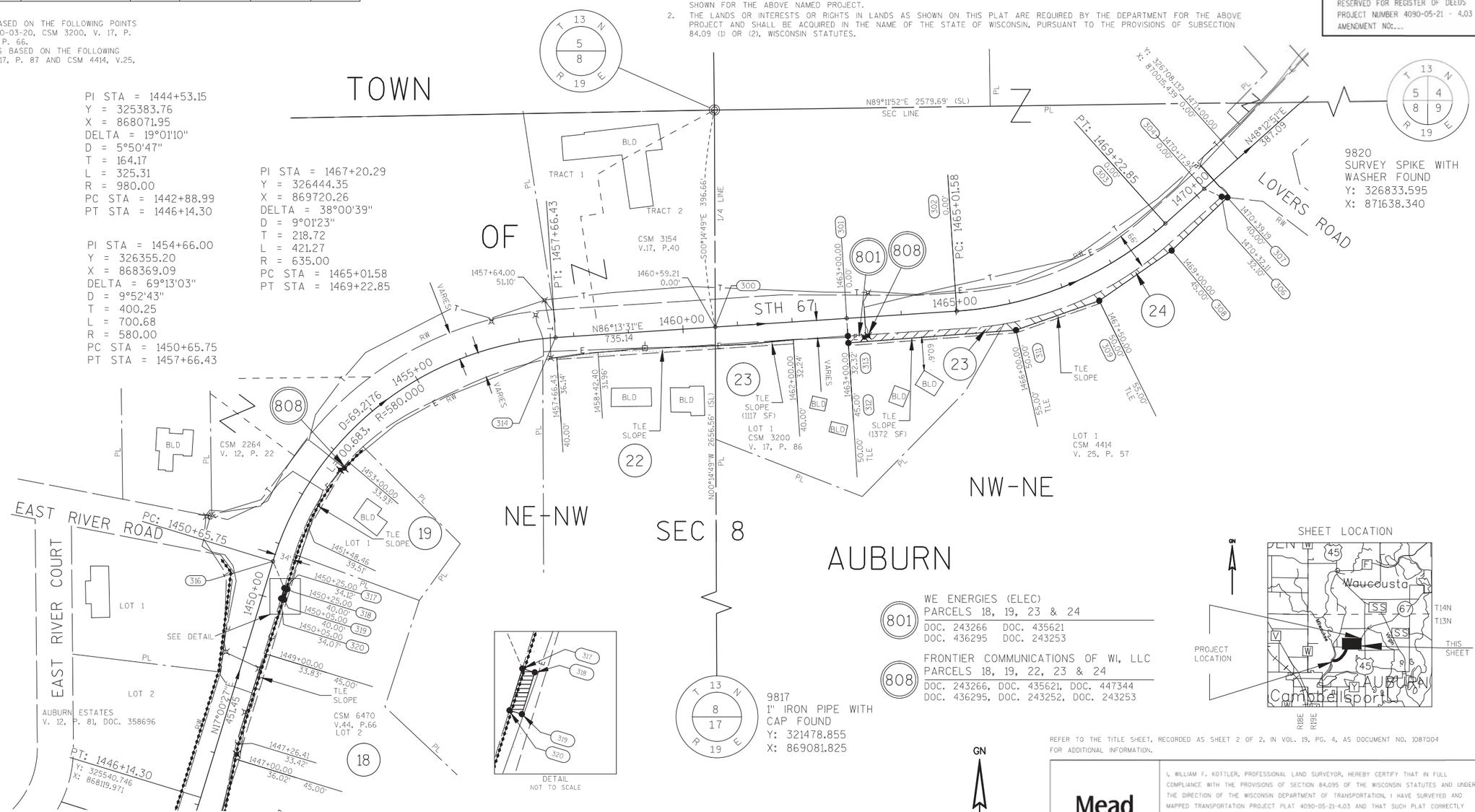
PI STA = 1454+66.00
Y = 326355.20
X = 868369.09
DELTA = 69°13'03"
D = 9°52'43"
T = 400.25
L = 700.68
R = 580.00
PC STA = 1450+65.75
PT STA = 1457+66.43

PI STA = 1467+20.29
Y = 326444.35
X = 869720.26
DELTA = 38°00'39"
D = 9°01'23"
T = 218.72
L = 421.27
R = 635.00
PC STA = 1465+01.58
PT STA = 1469+22.85

22800
1" IRON PIPE WITH CAP FOUND
Y: 326797.477
X: 869058.905

9820
SURVEY SPIKE WITH WASHER FOUND
Y: 326833.595
X: 871638.340

9817
1" IRON PIPE WITH CAP FOUND
Y: 321478.855
X: 869081.825



DETAIL
NOT TO SCALE

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
801	WE ENERGIES (ELEC)	RELEASE OF RIGHTS
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS

801 WE ENERGIES (ELEC)
PARCELS 18, 19, 23 & 24
DOC. 243266 DOC. 435621
DOC. 436295 DOC. 243253

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCELS 18, 19, 22, 23 & 24
DOC. 243266, DOC. 435621, DOC. 447344
DOC. 436295, DOC. 243252, DOC. 243253

GN
SCALE, FEET
0 100 200

SHEET LOCATION

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOL. 19, PG. 4, AS DOCUMENT NO. 1087004 FOR ADDITIONAL INFORMATION.

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

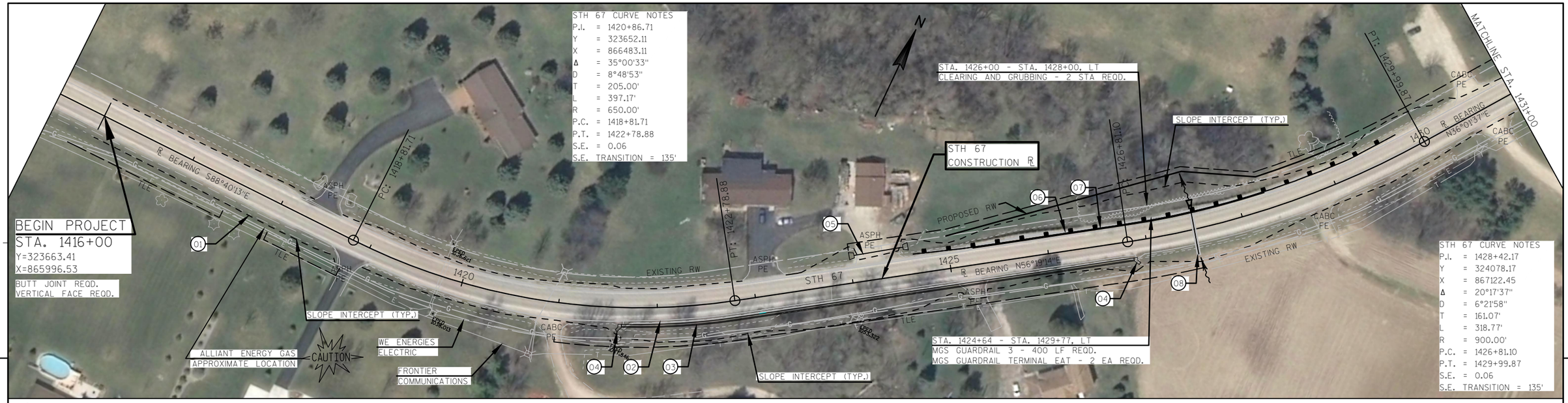
I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4090-05-21-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

09-06-2017 DATE
WILLIAM F. KOTTLER,
RLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) DATE 9-06-2017
(PRINTED NAME) CURT VAN EREM

FILE NAME : \\CORP.MEADHUNT.COM\SHAREDFOLDERS\ENTP\3230500\113975.03\TECH\CAD\RW\040101_RP- TPP 4090-05-21.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 9/6/2017 4:20 PM PLOT BY : WILLIAM KOTTLER PLOT NAME : PLOT SCALE : 1:100



STH 67 CURVE NOTES
P.I. = 1420+86.71
Y = 323652.11
X = 866483.11
Δ = 35°00'33"
D = 8°48'53"
T = 205.00'
L = 397.17'
R = 650.00'
P.C. = 1418+81.71
P.T. = 1422+78.88
S.E. = 0.06
S.E. TRANSITION = 135'

STH 67 CURVE NOTES
P.I. = 1428+42.17
Y = 324078.17
X = 867122.45
Δ = 20°17'37"
D = 6°21'58"
T = 161.07'
L = 318.77'
R = 900.00'
P.C. = 1426+81.10
P.T. = 1429+99.87
S.E. = 0.06
S.E. TRANSITION = 135'

(01) STA. 1416+00 - STA. 1418+75, RT
FLATTEN EXISTING SLOPE

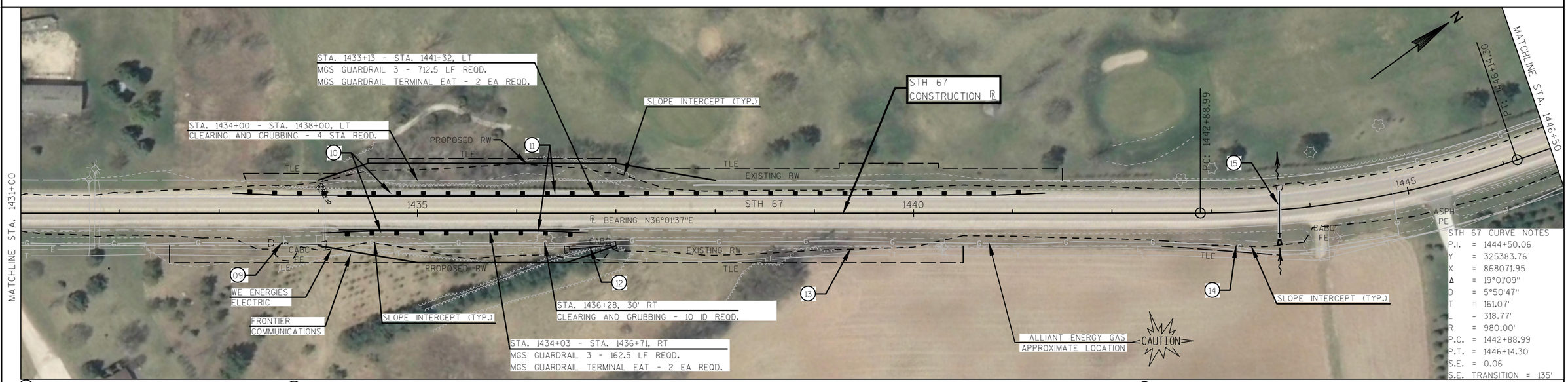
(02) REMOVING CURB AND GUTTER
STA. 1421+64 - STA. 1426+85, RT - 525 LF REQD.
(03) PLACE CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D; STA. 1421+64 - STA. 1426+85, RT
(04) ASPHALTIC FLUMES REQD AT
STA. 1421+64 AND STA. 1426+85, RT

(05) STA. 1424+30, LT
REMOVING SMALL CULVERT PIPE - 1 EA REQD.
CULVERT PIPE CLASS III-A 18-INCH - 50 LF REQD.
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.

(06) REMOVING GUARDRAIL
STA. 1424+73 - STA. 1428+82, LT - 405 LF REQD.

(07) REMOVE EXISTING RETAINING WALL STA. 1426+78, LT REQD. (STA. 1424+73 - STA. 1428+82)
STA. 1425+25 - STA. 1428+25, LT SAWCUT AND REMOVING ASPHALTIC SURFACE REQD. FOR EXCESS SHOULDER PAVEMENT

(08) STA. 1427+50
EXISTING 30-INCH X 24-INCH REINFORCED CONCRETE BOX CULVERT WITH 42-INCH X 29-INCH CMPA EXTENSIONS (NORTH AND SOUTH)
REMOVING SMALL PIPE CULVERTS - 1 EA REQD. (2 LF NORTH END)
EXTEND EXISTING BOX CULVERT (NORTH END) SEE CONSTRUCTION DETAILS



STH 67 CURVE NOTES
P.I. = 1444+50.06
Y = 325383.76
X = 868071.95
Δ = 19°01'09"
D = 5°50'47"
T = 161.07'
L = 318.77'
R = 980.00'
P.C. = 1442+88.99
P.T. = 1446+14.30
S.E. = 0.06
S.E. TRANSITION = 135'

(09) STA. 1433+80, RT
REMOVING SMALL CULVERT PIPE - 1 EA REQD.
CULVERT PIPE CLASS III-A 18-INCH - 48 LF REQD.
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.

(10) REMOVING GUARDRAIL
STA. 1433+70 - STA. 1437+63, LT - 395 LF REQD.
STA. 1434+13 - STA. 1436+66, RT - 255 LF REQD.

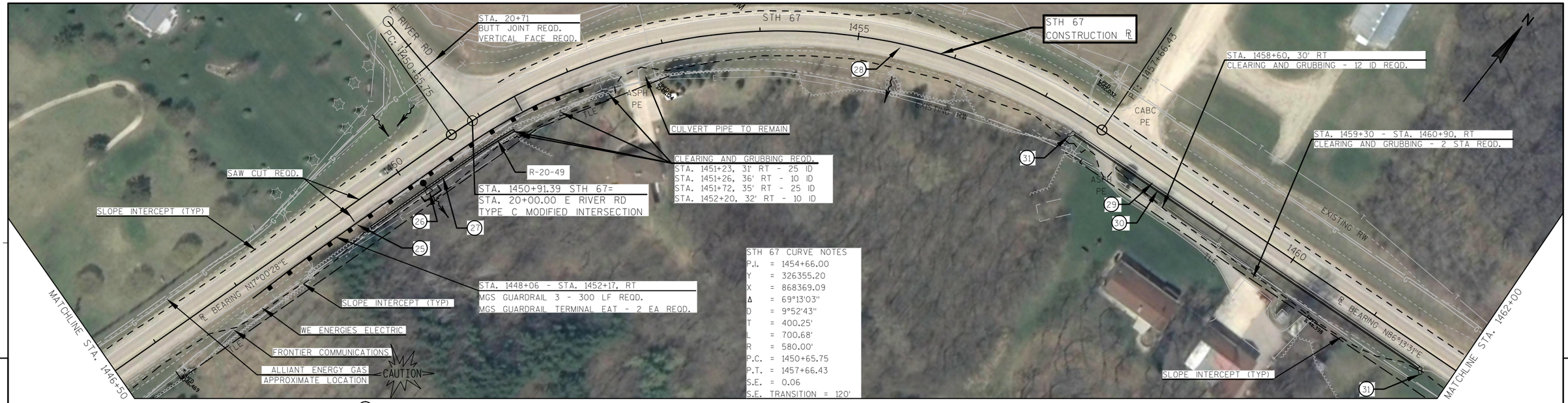
(11) REMOVE EXISTING RETAINING WALL STA. 1435+67, LT REQD. (STA. 1433+70 - STA. 1437+63)
STA. 1434+20 - STA. 1437+15, LT SAWCUT AND REMOVING ASPHALTIC SURFACE REQD. FOR EXCESS SHOULDER PAVEMENT
REMOVE EXISTING RETAINING WALL STA. 1435+40, RT REQD. (STA. 1434+13 - STA. 1436+66)
STA. 1434+20 - STA. 1436+65, RT SAWCUT AND REMOVING ASPHALTIC SURFACE REQD. FOR EXCESS SHOULDER PAVEMENT

(12) STA. 1436+73, RT
REMOVING SMALL CULVERT PIPE - 1 EA REQD.
CULVERT PIPE CLASS III-A 18-INCH - 42 LF REQD.
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.

(13) STA. 1437+90 - STA. 1440+50, RT
FLATTEN EXISTING SLOPE

(14) STA. 1442+50 - STA. 1443+90, RT
FLATTEN EXISTING SLOPE

(15) STA. 1443+67
EXISTING 24-INCH X 24-INCH REINFORCED BOX CULVERT WITH 35-INCH X 24-INCH CMPA EXTENSIONS (NORTH AND SOUTH)
REMOVING SMALL PIPE CULVERTS - 2 EA REQD. (NORTH AEW & SOUTH CMPA EXTENSION)
APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS STEEL 35X24-INCH 4 TO 1 - 1 EA REQD. (NORTH END)
EXTEND EXISTING BOX CULVERT (SOUTH END) SEE CONSTRUCTION DETAILS



(25) REMOVING GUARDRAIL
STA. 1449+24 - STA. 1451+89, RT - 260 LF REQD.
REMOVE EXISTING RETAINING WALL STA. 1450+57, RT REQD.
(STA. 1449+24 - STA. 1451+89)
STA. 1449+35 - STA. 1451+40, RT SAWCUT AND REMOVING
PAVEMENT REQD. FOR STRUCTURE R-20-49 CONSTRUCTION

(26) STA. 1450+14
23.5' RT - MANHOLES 5-FT DIAMETER - 1 EA REQD
MANHOLE COVERS TYPE J - 1 EA REQD
STORM SEWER PIPE CLASS III-A 30-INCH - 7 LF REQD
APRON ENDWALLS FOR CULVERT PIPE 30-INCH - 1 EA REQD
CONNECT EXISTING 30" CMCP TO MANHOLE
SEE CONSTRUCTION DETAIL

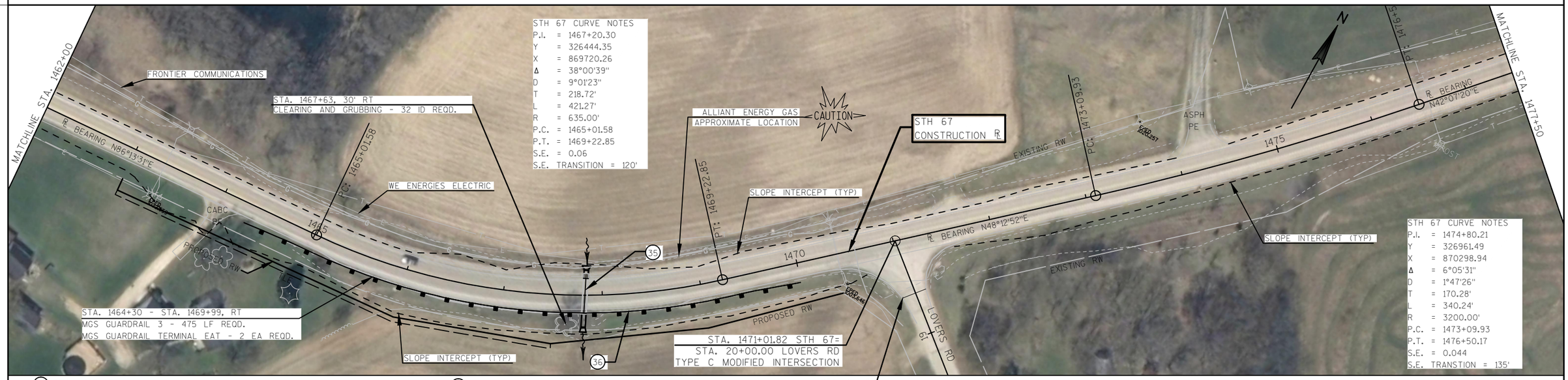
(27) CONSTRUCT R-20-49
SEE STRUCTURE PLANS

(28) STA. 1455+45
EXISTING 35-INCH X 24-INCH CMPA
TO REMAIN

(29) REMOVING CURB AND GUTTER
STA. 1457+45 - STA. 1461+67, RT - 425 LF REQD.

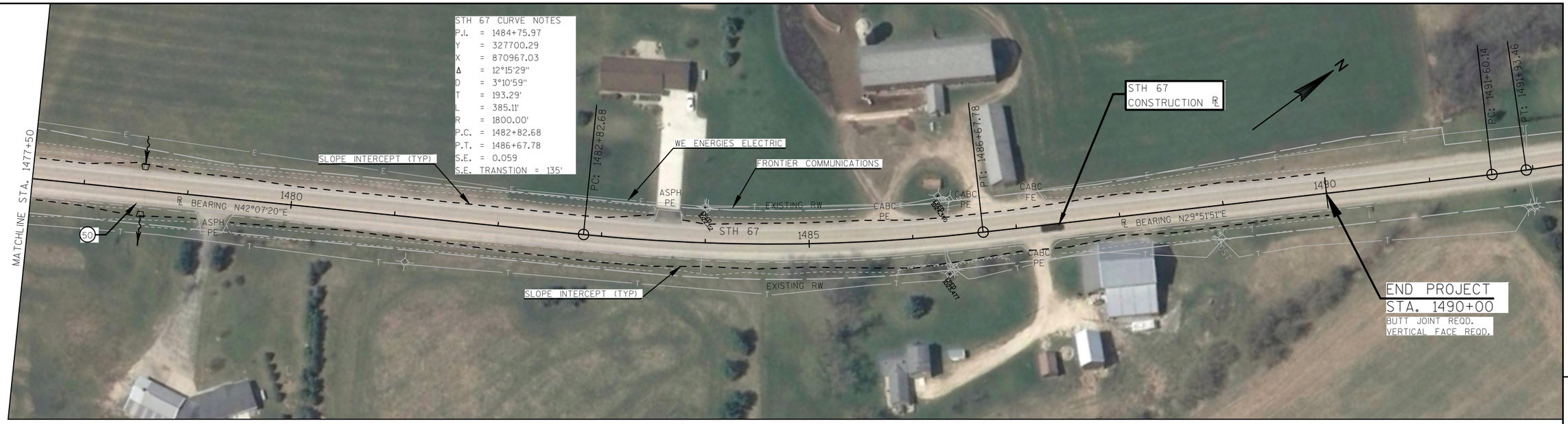
(30) PLACE CONCRETE CURB & GUTTER 6-INCH SLOPED
36-INCH TYPE D STA. 1457+45 - STA. 1461+67, RT

(31) ASPHALTIC FLUMES REQD AT
STA. 1457+45 AND STA. 1461+67, RT



(35) STA. 1467+83
EXISTING 48-INCH X 24-INCH REINFORCED CONCRETE BOX CULVERT WITH
49-INCH X 33-INCH CMPA EXTENSION (NORTH END)
REMOVING SMALL CULVERT PIPE - 1 EA REQD. (6 LF NORTH END)
EXTEND EXISTING BOX CULVERT SEE CONSTRUCTION DETAILS

(36) REMOVING GUARDRAIL
STA. 1464+77 - STA. 1469+77, RT - 470 LF REQD.

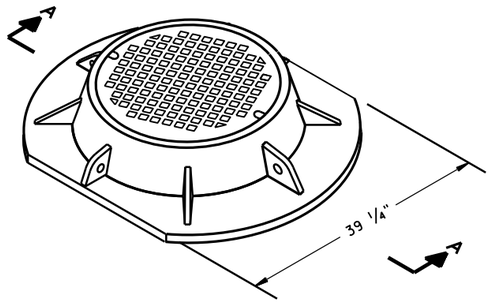


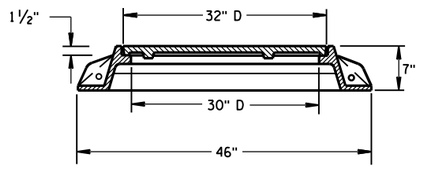
(50) STA. 1478+60
EXISTING 24-INCH X 36-INCH REINFORCED CONCRETE BOX CULVERT WITH
42-INCH X 29-INCH CMPA EXTENSIONS (NORTH AND SOUTH)
REMOVING SMALL CULVERT PIPES - 2 EA REQD. (NORTH & SOUTH AEW)
APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS STEEL 42X29-INCH 4 TO 1 - 2 EA REQD.

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN: MAINLINE	SHEET 50 E

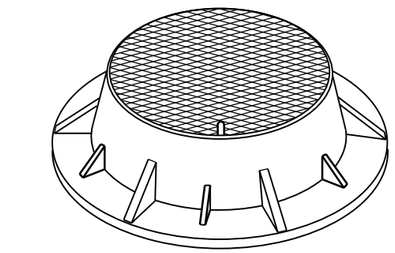
Standard Detail Drawing List

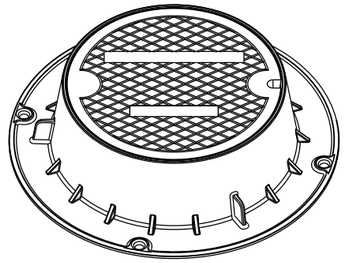
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F08-02	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-01	HMA LONGITUDINAL JOINTS
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-07C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-01	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

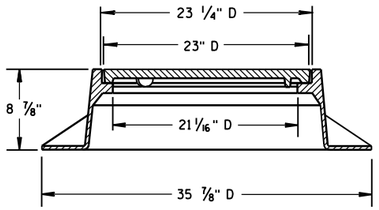


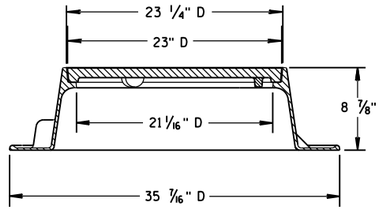


SECTION A-A
TYPE "K"









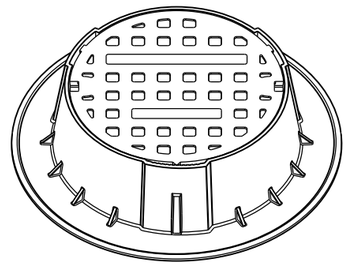
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

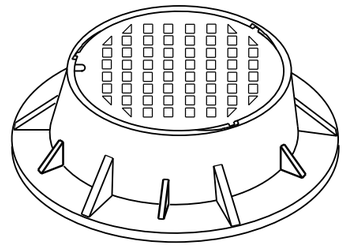
GENERAL NOTES

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

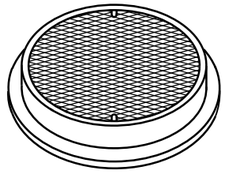
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

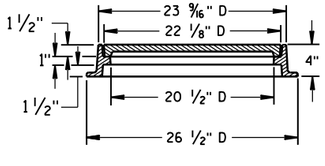
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



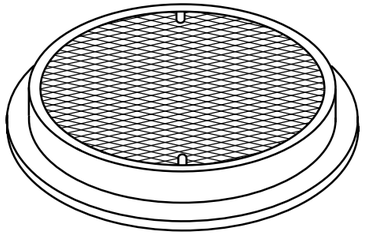


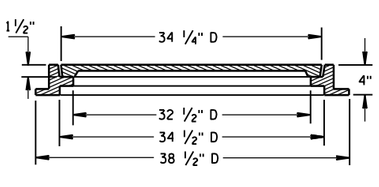
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



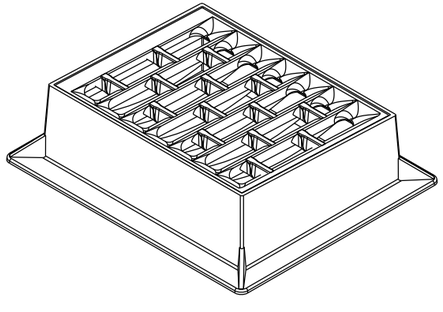


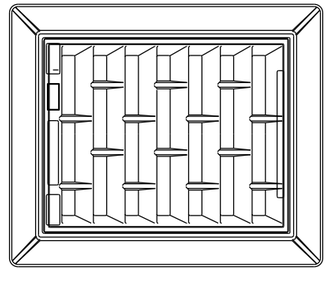
TYPE "L"

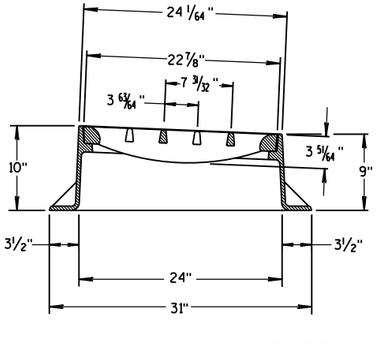


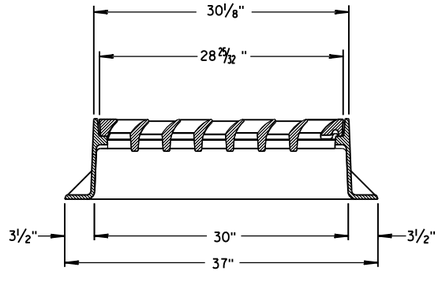


TYPE "M"









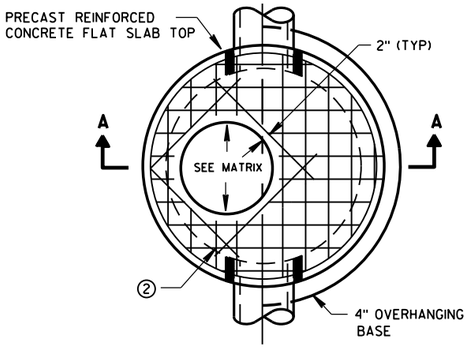
INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

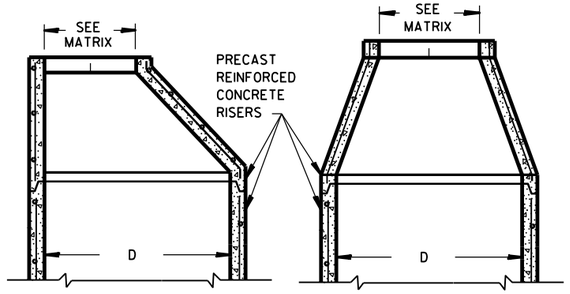
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 A 5-19d

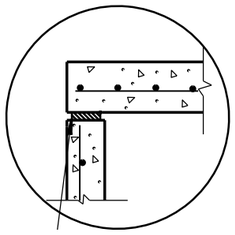


PLAN VIEW CIRCULAR OPENING

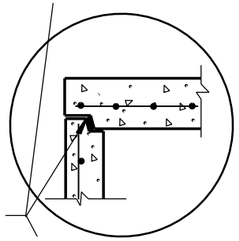


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

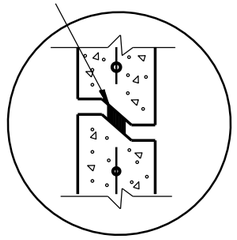


TOP WITH PLAIN END JOINT



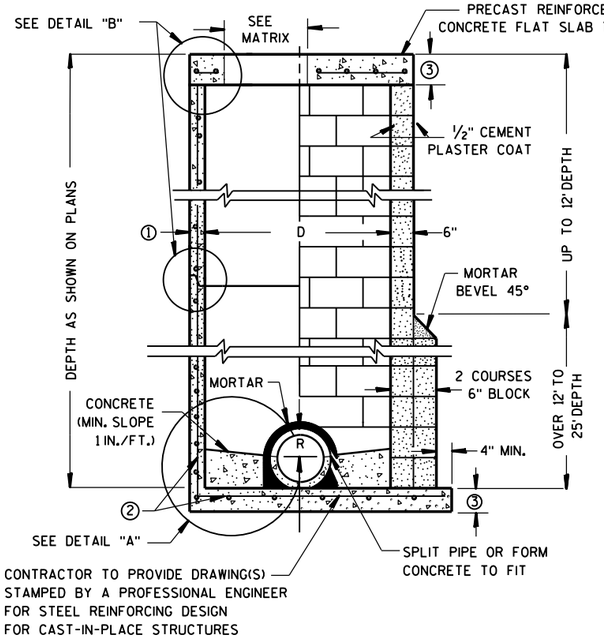
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



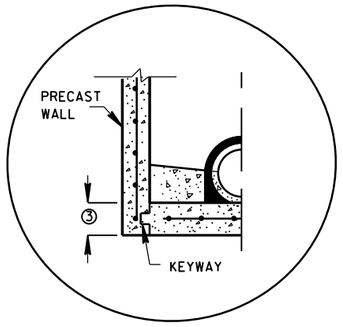
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

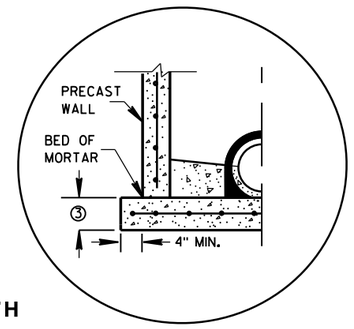


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

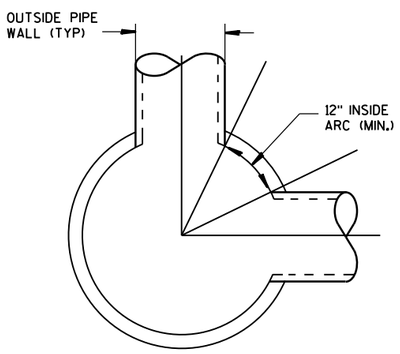


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

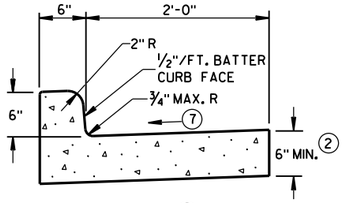
APPROVED

Sept., 2016
DATE

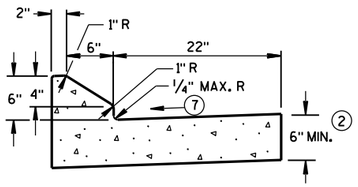
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

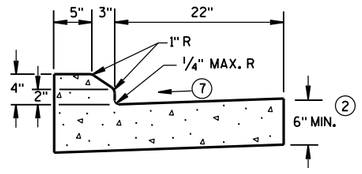
6
S.D.D. 8 B 9-2



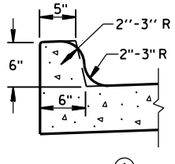
TYPES A (1) & D



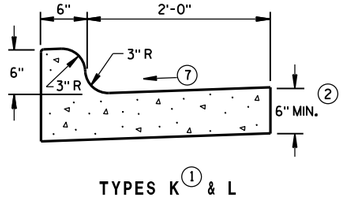
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

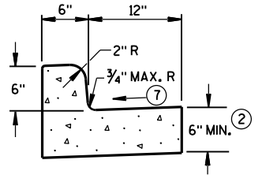


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



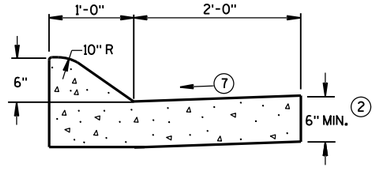
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

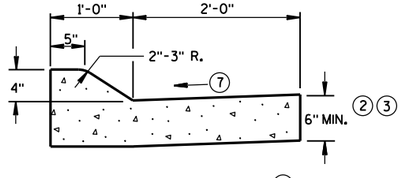


TYPES A (1) & D

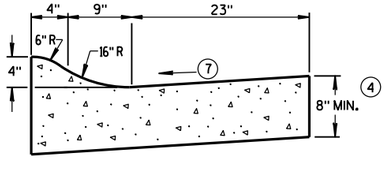
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

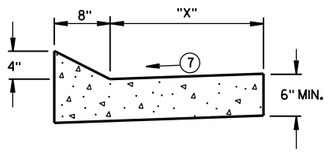


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

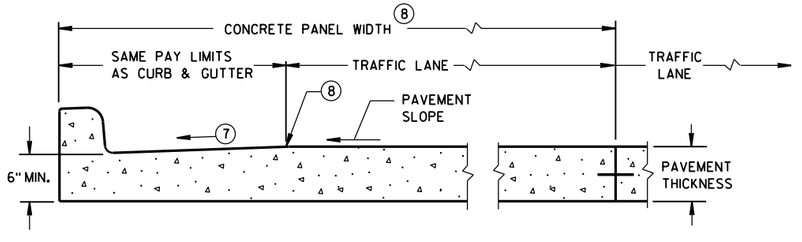
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

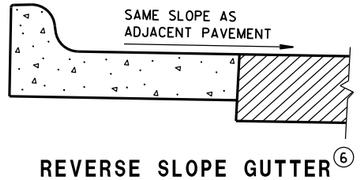
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.

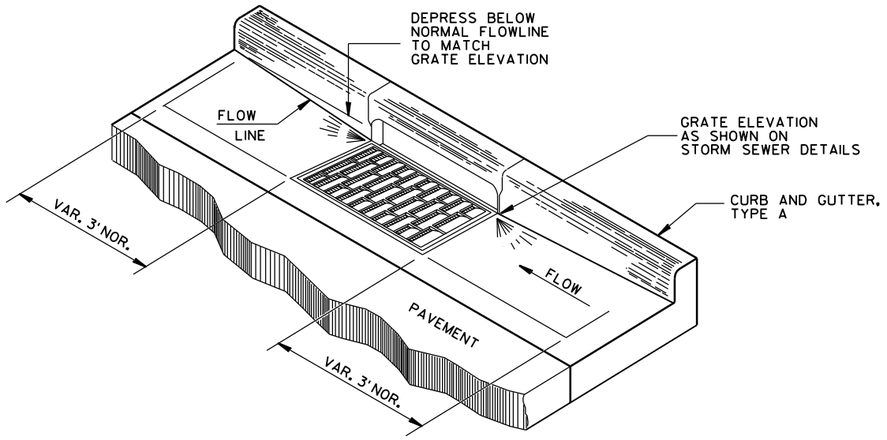


REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

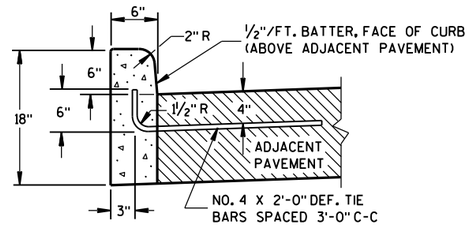
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

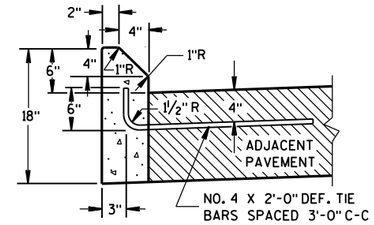
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

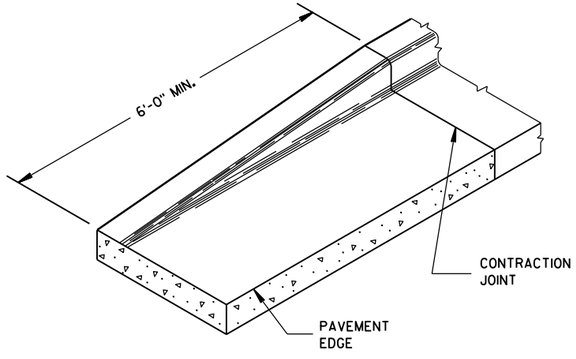


TYPES A (1) & D

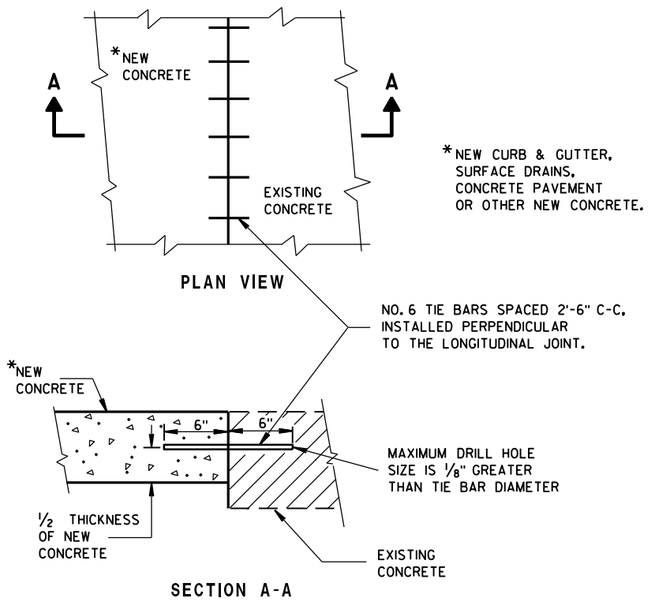


TYPES G (1) & J

CONCRETE CURB



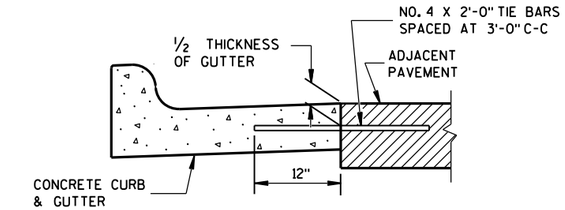
END SECTION CURB & GUTTER



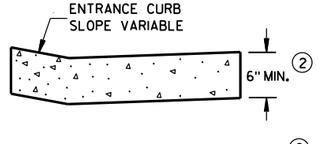
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

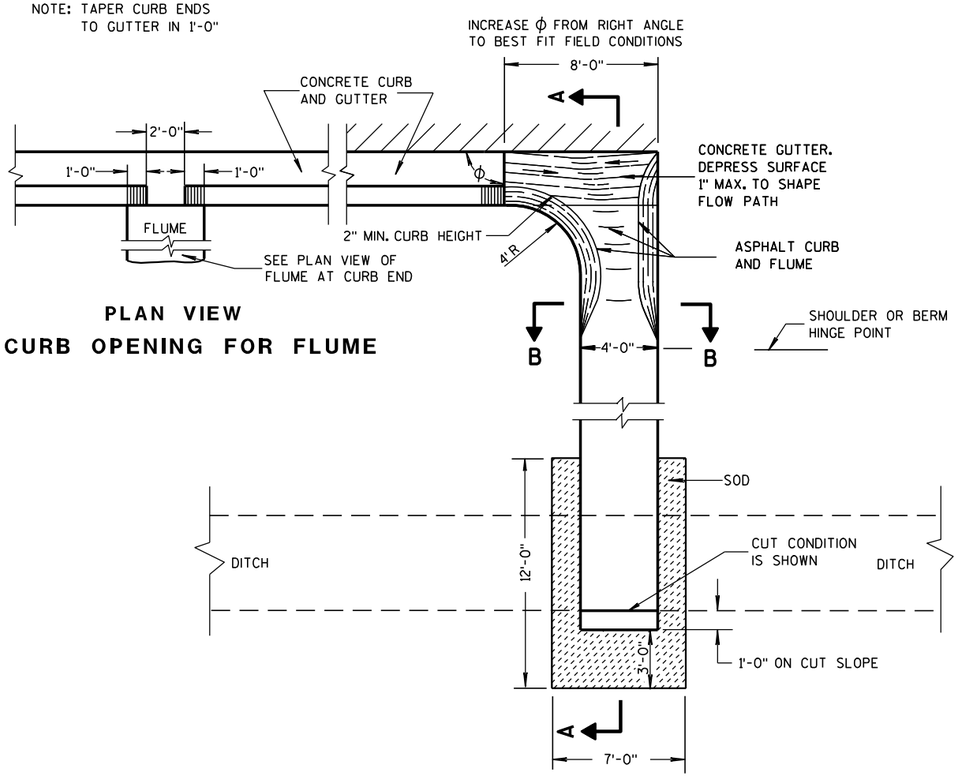
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
55 — ENT
FHWA

6

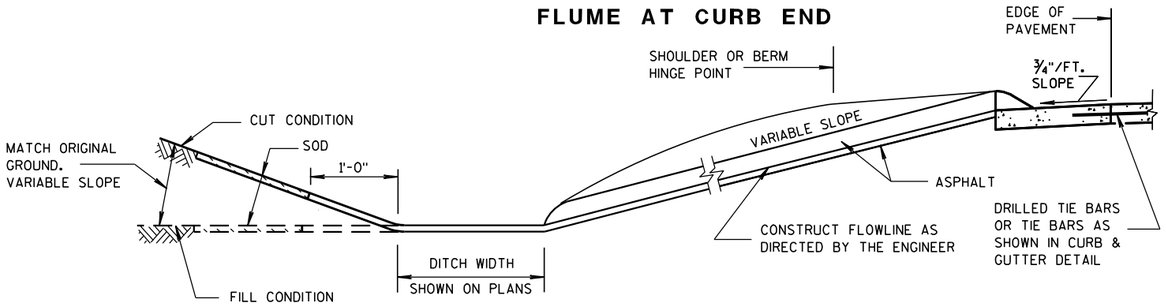
S.D.D. 8 D 1-20b

ASPHALTIC FLUME

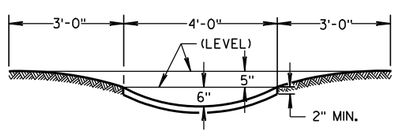


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

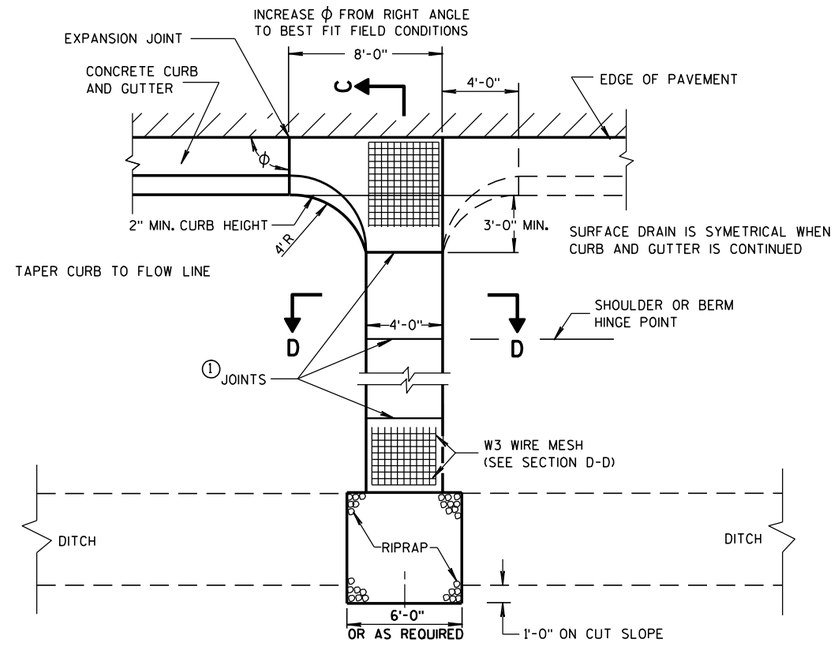
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

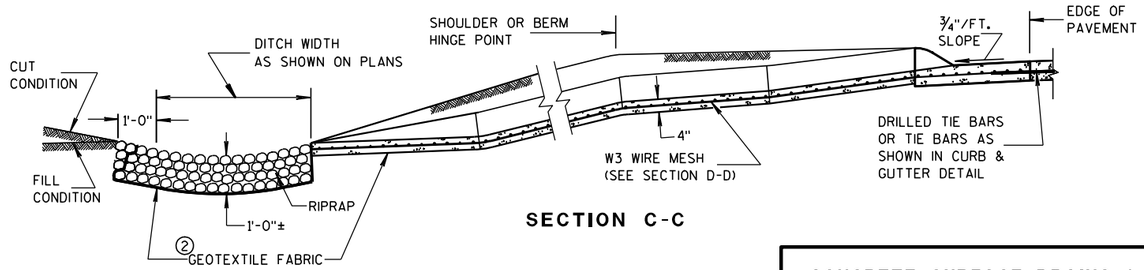
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

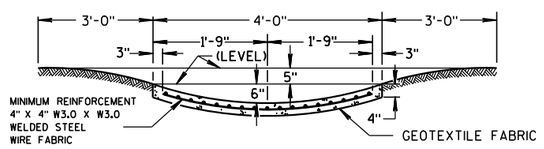
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

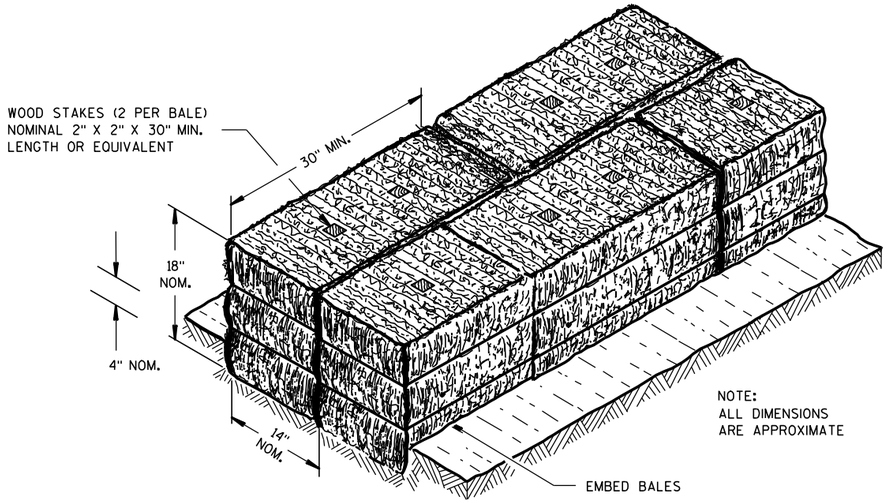
APPROVED
9-4-08 DATE
/S/ Jerry H. ... ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

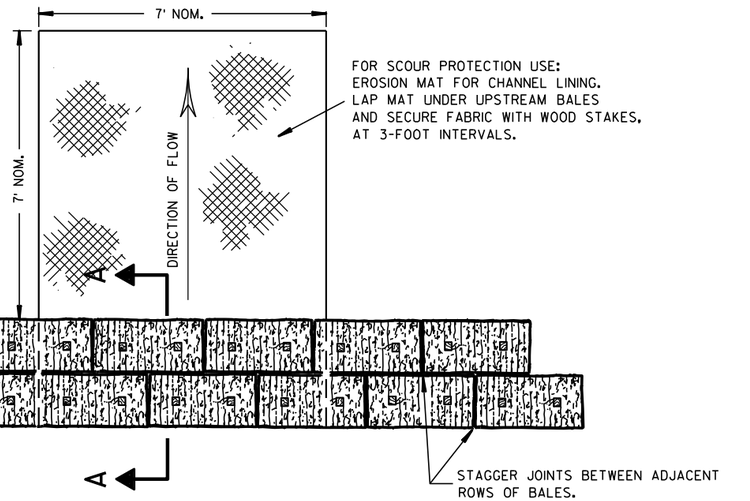
S.D.D. 8 D 4-5

6

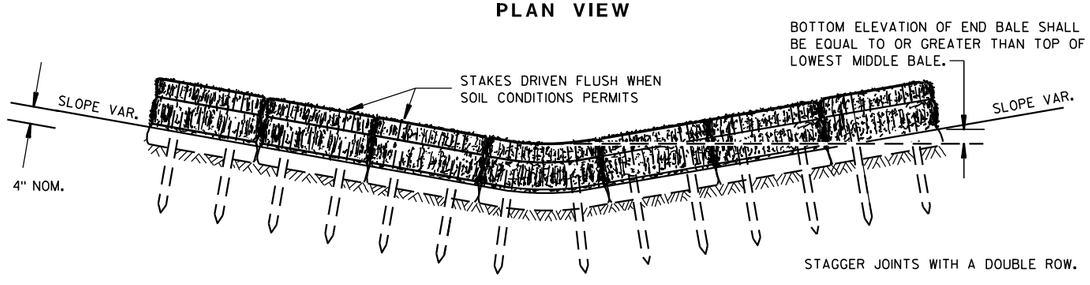
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



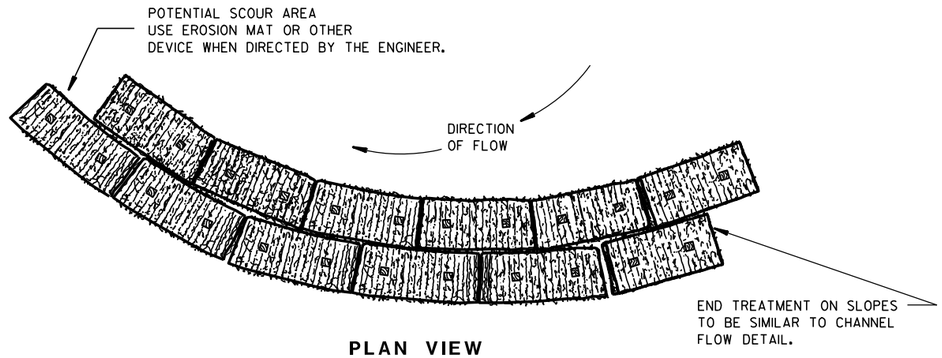
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

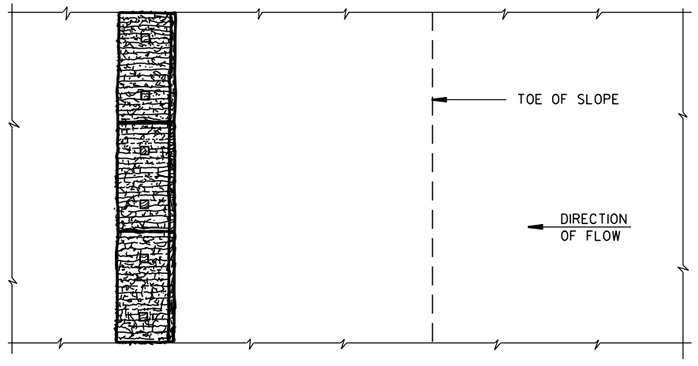
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

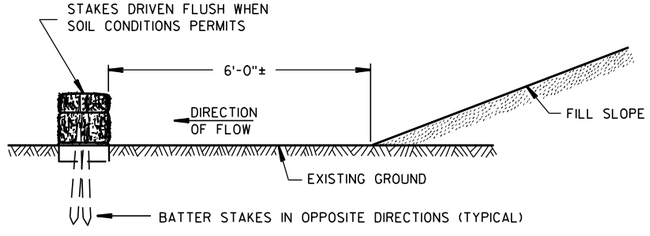


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

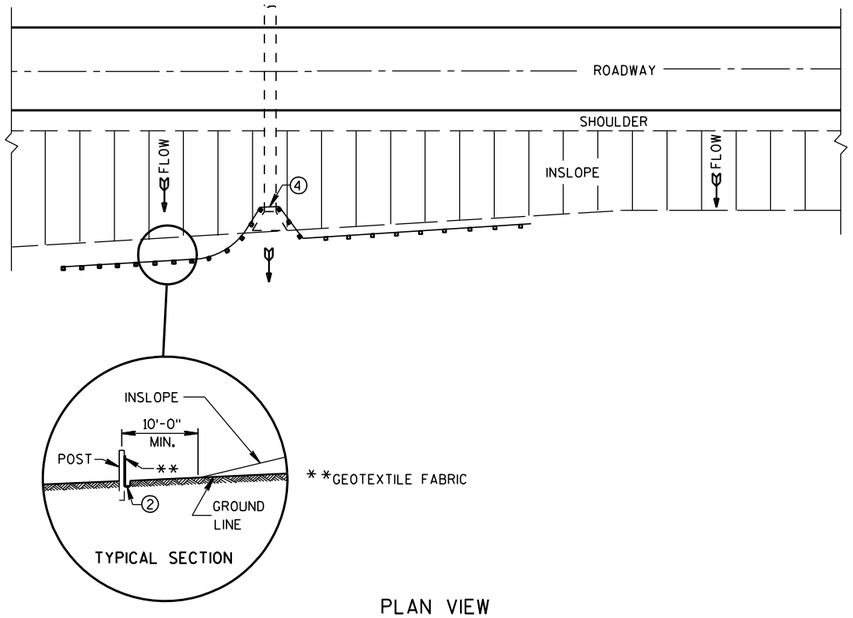
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

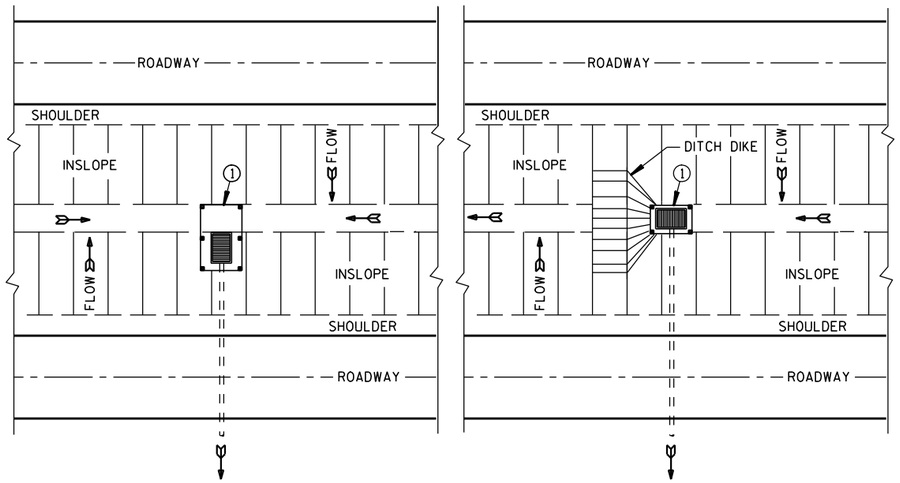
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



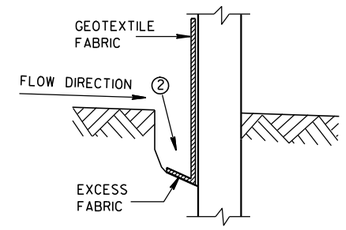
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

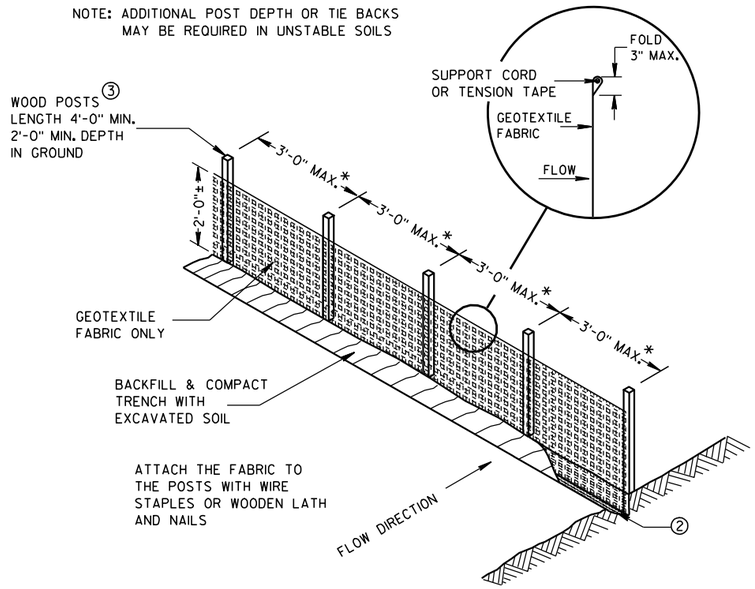
GENERAL NOTES

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

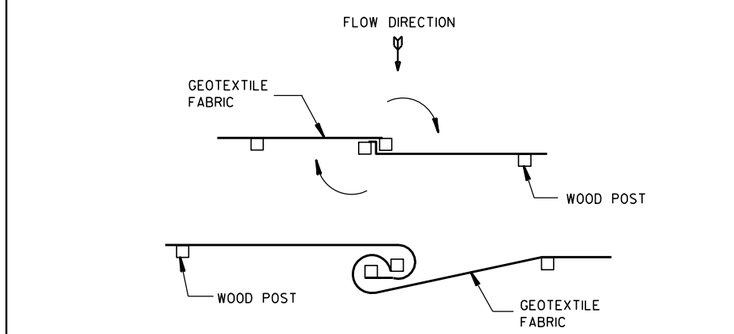
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



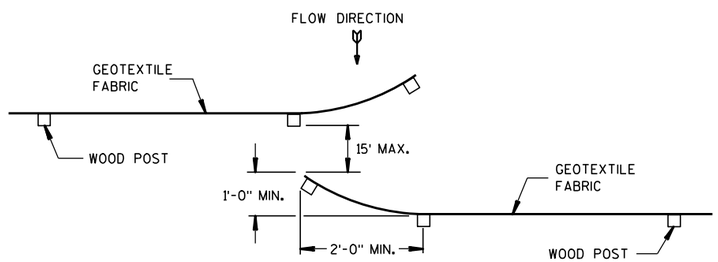
TRENCH DETAIL



SILT FENCE

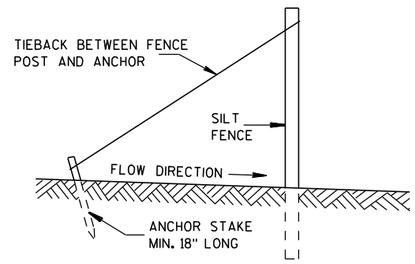


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

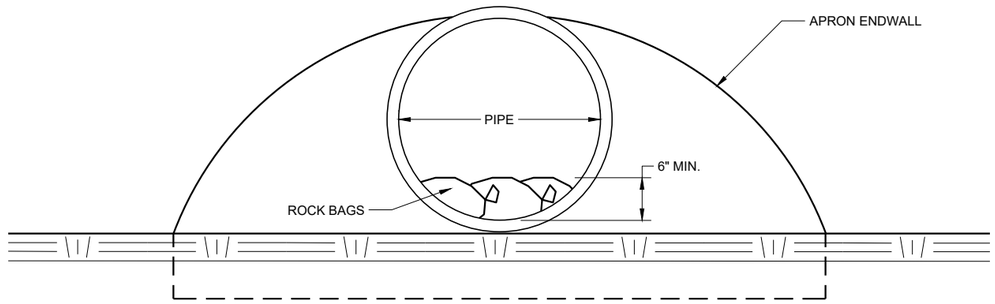
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

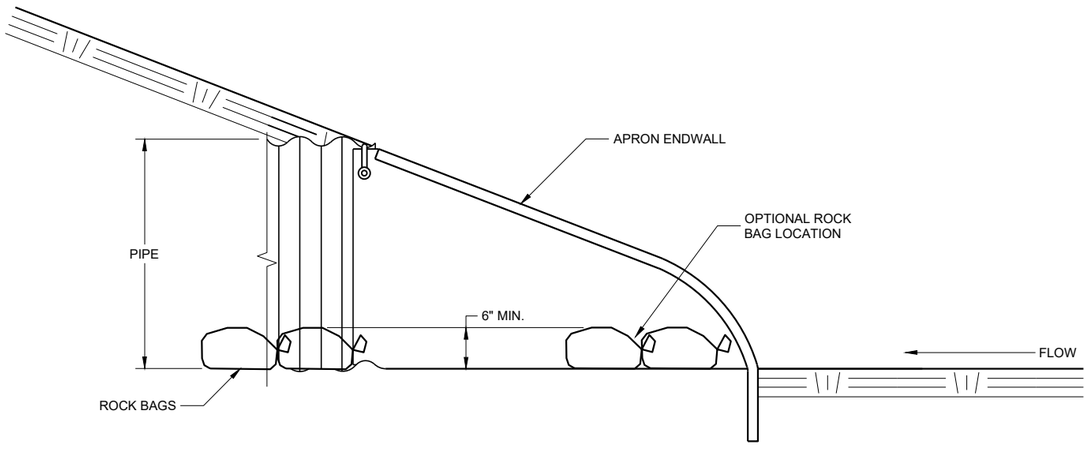
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6
SDD 08E15 - 01

METAL APRON ENDWALLS

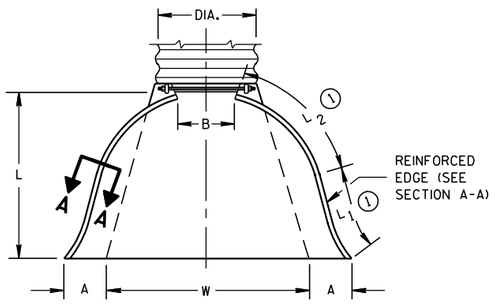
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

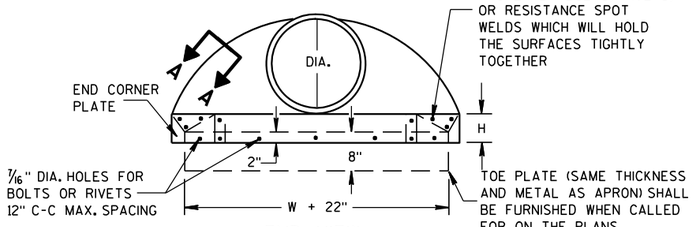
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

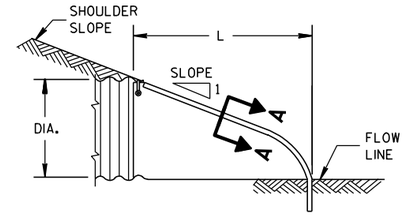
*MINIMUM
**MAXIMUM



PLAN VIEW

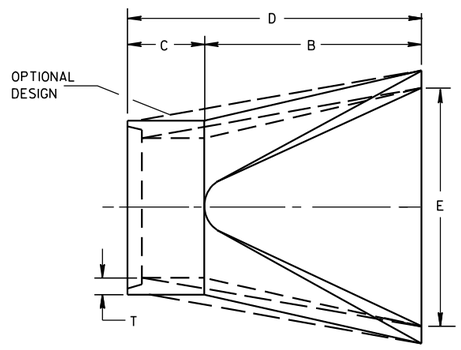


END VIEW

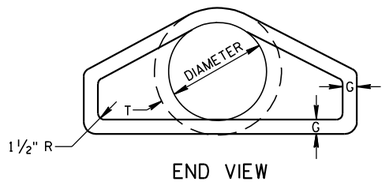


SIDE ELEVATION

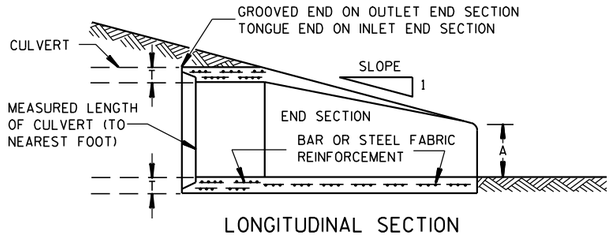
METAL ENDWALLS



PLAN

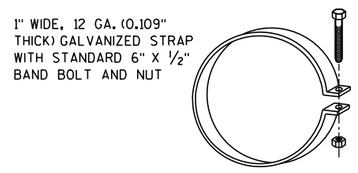


END VIEW



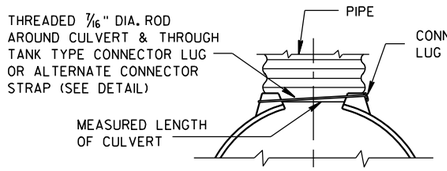
LONGITUDINAL SECTION

CONCRETE ENDWALLS

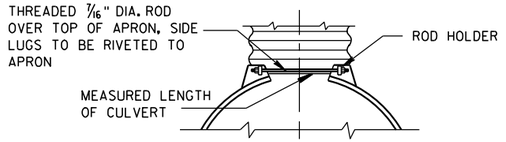


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

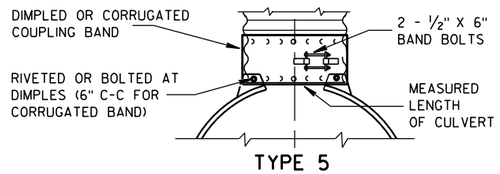


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

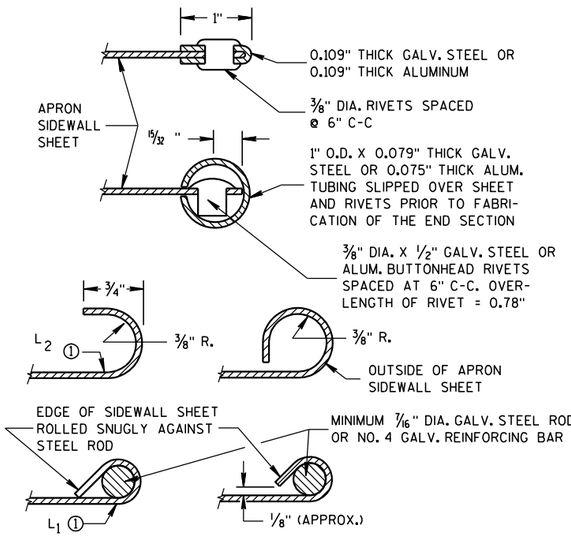
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

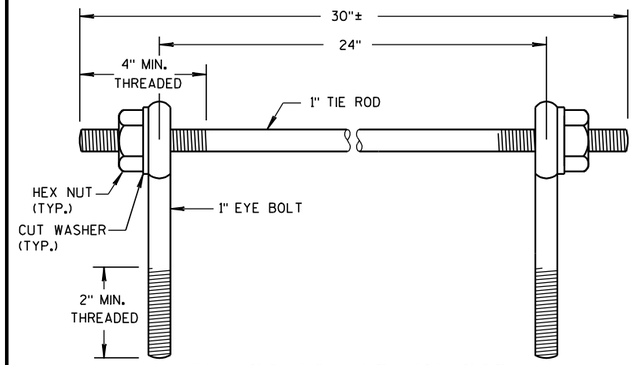
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

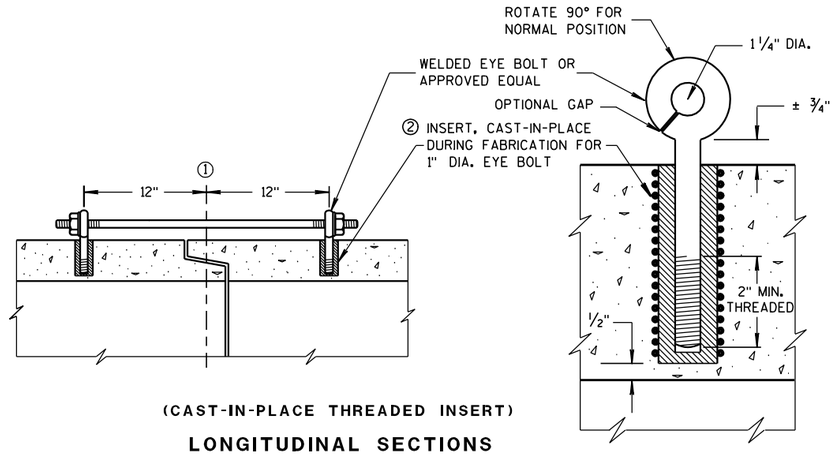
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

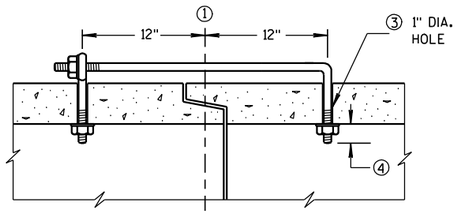
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

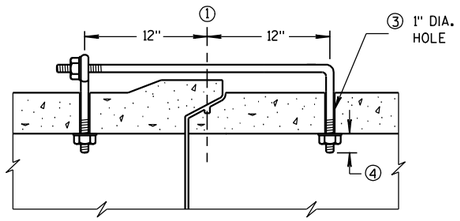
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

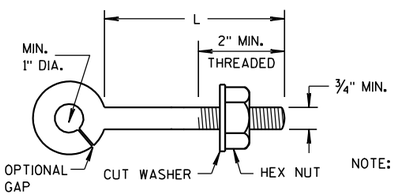


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

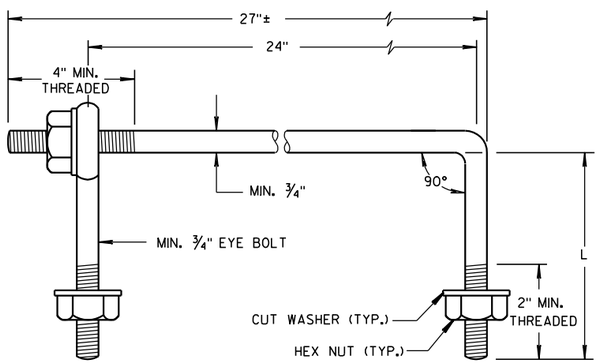
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

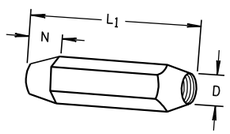
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

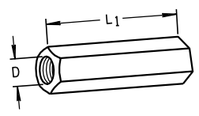
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



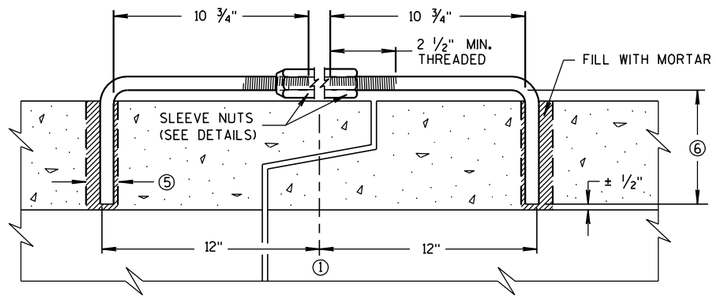
TAPERED



PLAIN

RIGHT AND LEFT THREADS

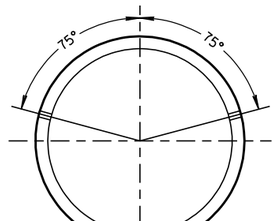
SLEEVE NUTS



LONGITUDINAL SECTION

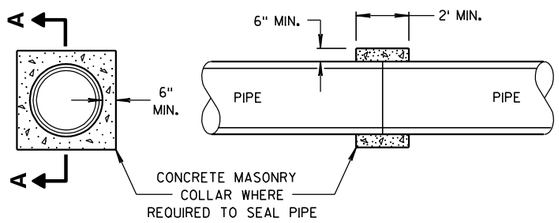
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

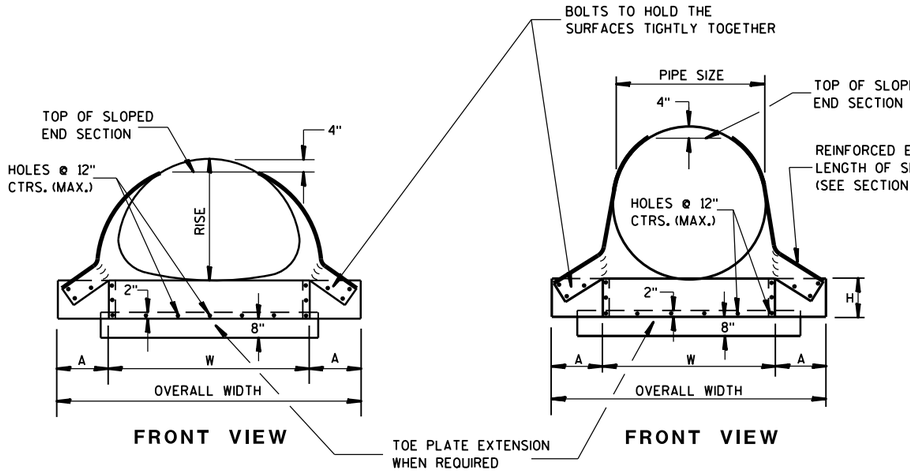
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 F 4-7

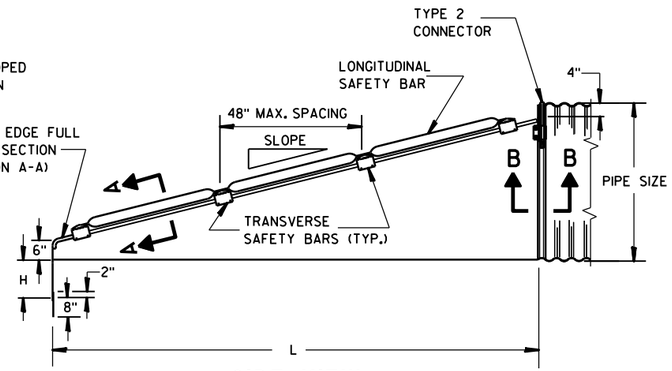
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S.D.D. 8 F 4-7



FRONT VIEW

FRONT VIEW



SIDE VIEW
(48" SIZE ILLUSTRATED)

GENERAL NOTES

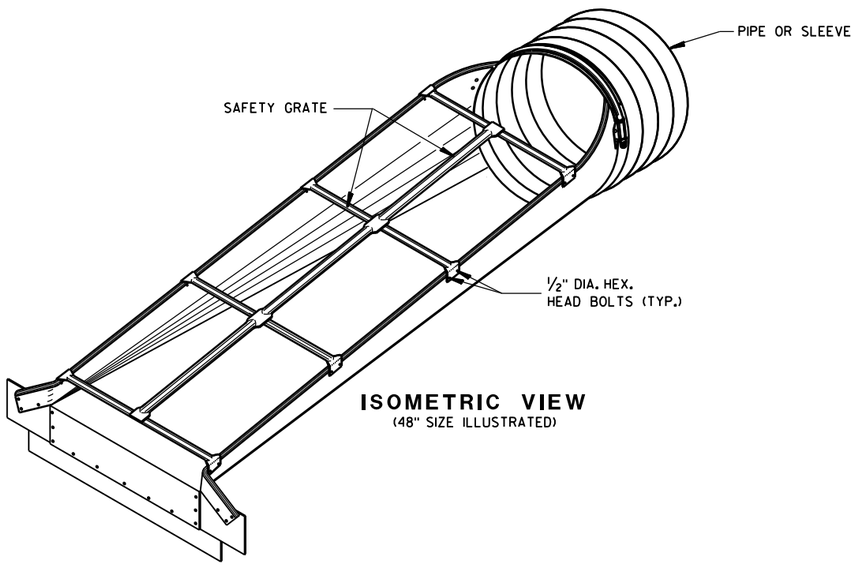
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SAFETY GRATES SHALL BE FABRICATED FROM 3-INCH DIAMETER GALVANIZED PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL. THE LONGITUDINAL BAR SHALL BE WELDED TO THE TRANSVERSE BARS WHERE THE BARS CROSS. THE NUMBER OF TRANSVERSE BARS REQUIRED WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

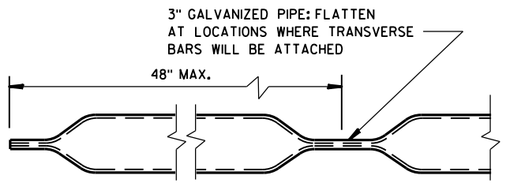
SLOPED STEEL ENDWALLS LOCATED AT THE ENDS OF CONCRETE CULVERT PIPE SHALL BE FURNISHED WITH STEEL ADAPTER SLEEVES.

STEEL APRON ENDWALLS FOR CULVERT PIPE CROSS DRAINS

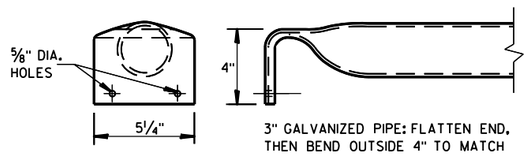
PIPE DIA. (IN.)	MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
36	.109	12	12	9	42	66	4:1	104	6:1	156
42	.109	12	16	12	48	80	4:1	128	6:1	192
48	.109	12	16	12	54	86	4:1	152	6:1	228
54	.109	12	16	12	60	92	4:1	176	6:1	264
60	.109	12	16	12	66	98	4:1	200	6:1	300



ISOMETRIC VIEW
(48" SIZE ILLUSTRATED)



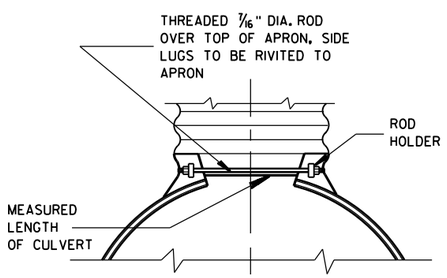
LONGITUDINAL SAFETY BAR



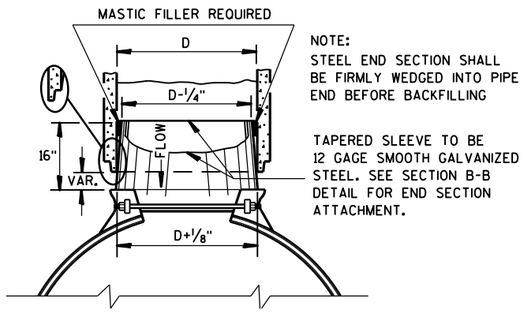
TRANSVERSE SAFETY BAR

STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS

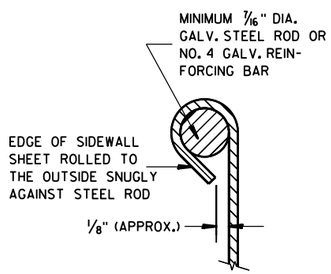
EQUIV. DIA. (IN.)	INCHES		MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
30	35	24	.079	14	12	9	41	65	4:1	56	6:1	84
36	42	29	.109	12	12	9	48	72	4:1	76	6:1	114
42	49	33	.109	12	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	12	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	12	16	12	70	102	4:1	132	6:1	198
60	71	47	.109	12	16	12	77	109	4:1	148	6:1	222



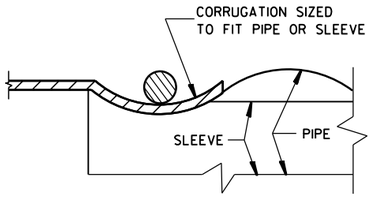
TYPE 2 CONNECTOR DETAIL



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



SECTION A-A



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

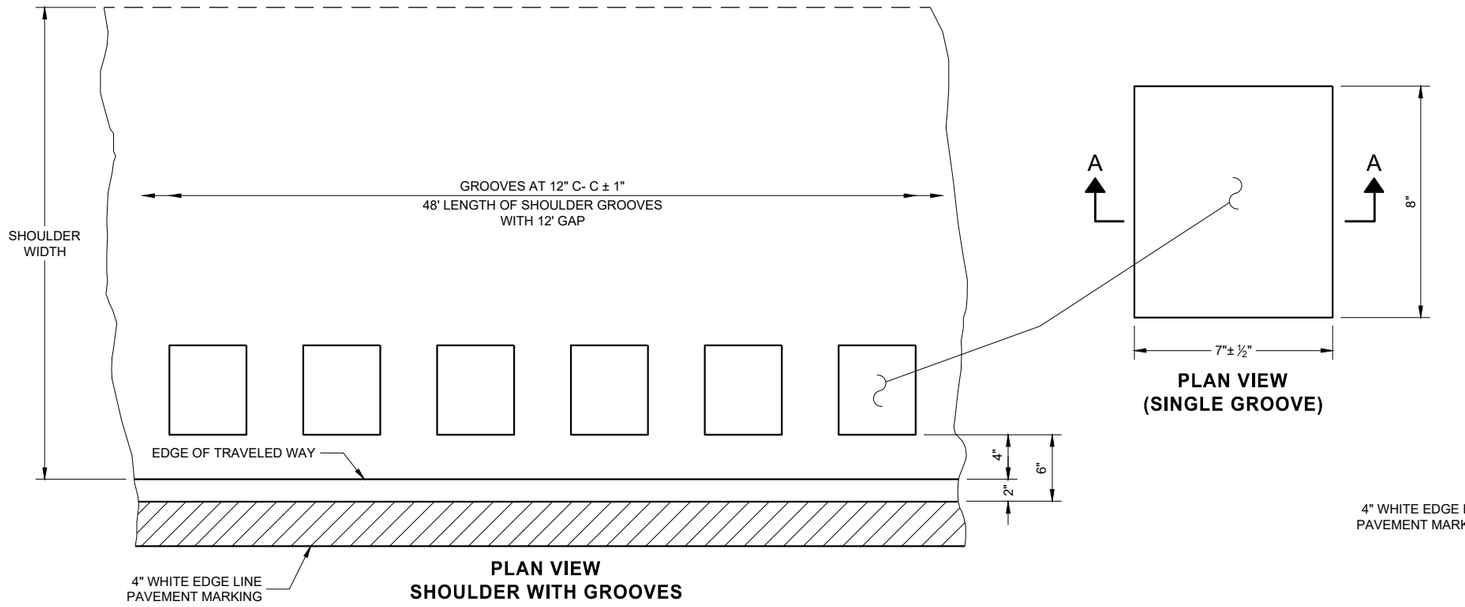
6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

6

S.D.D. 8 F 8-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

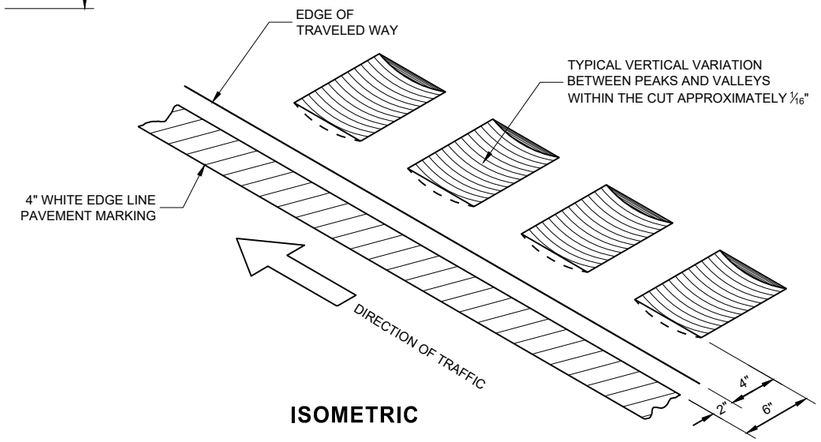
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

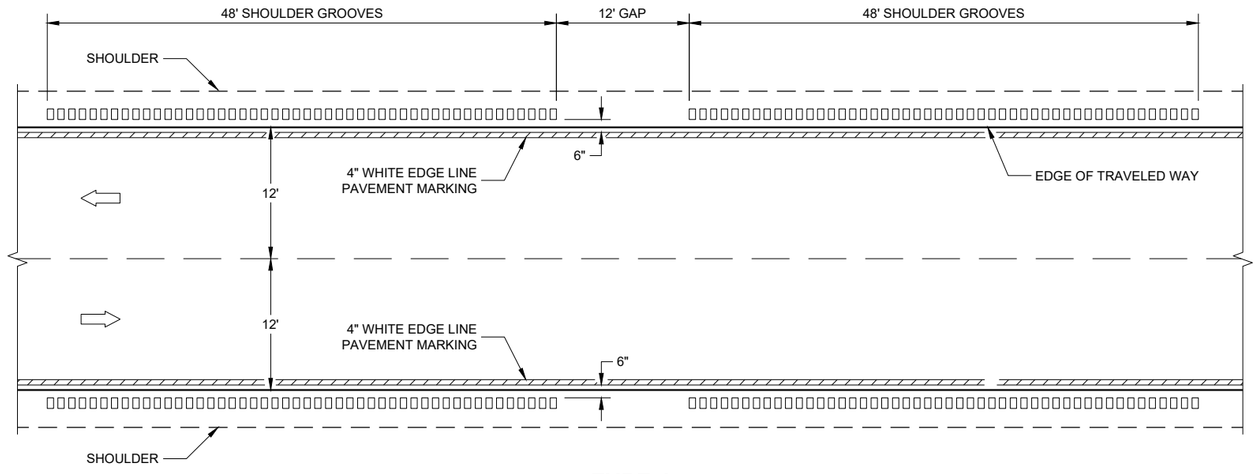
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

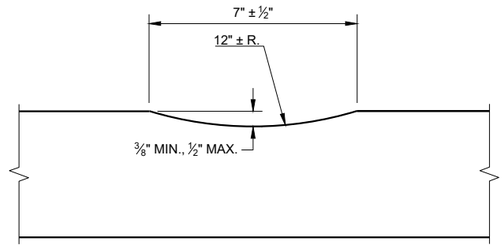
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

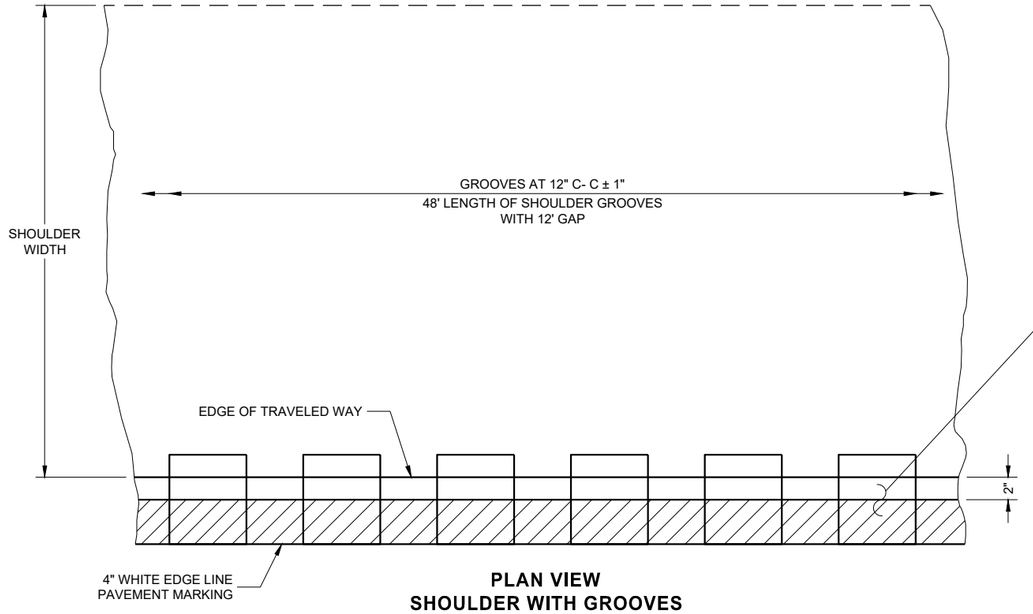
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

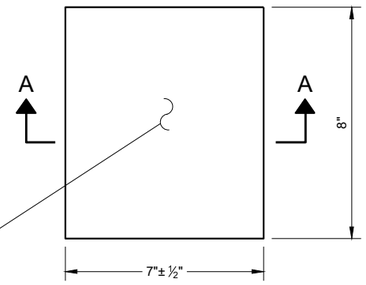
SDD 13A10 - 02a

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SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



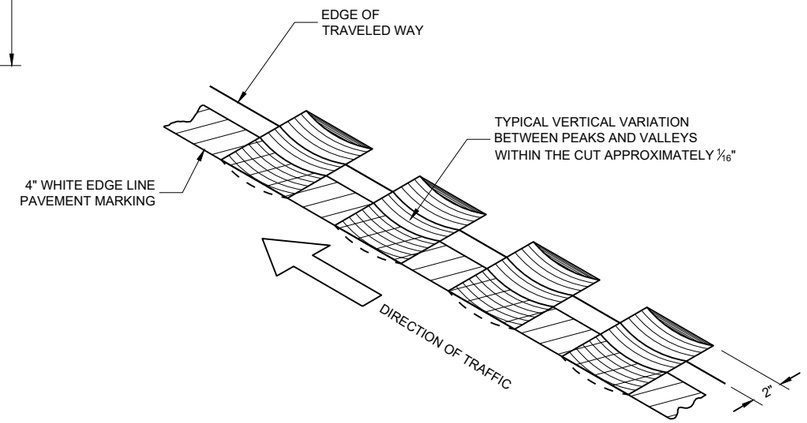
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

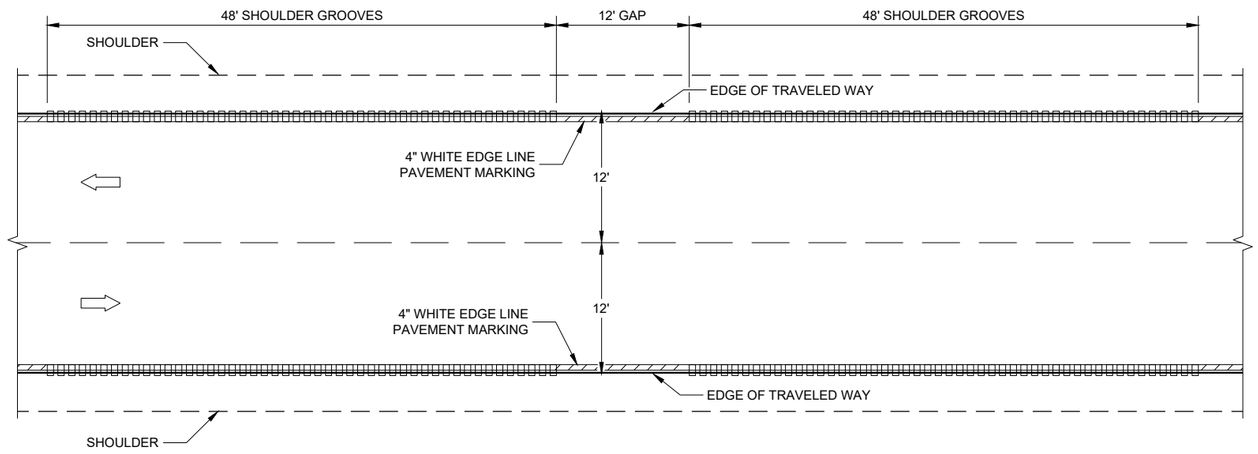
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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

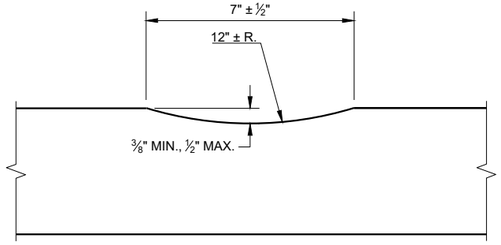


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



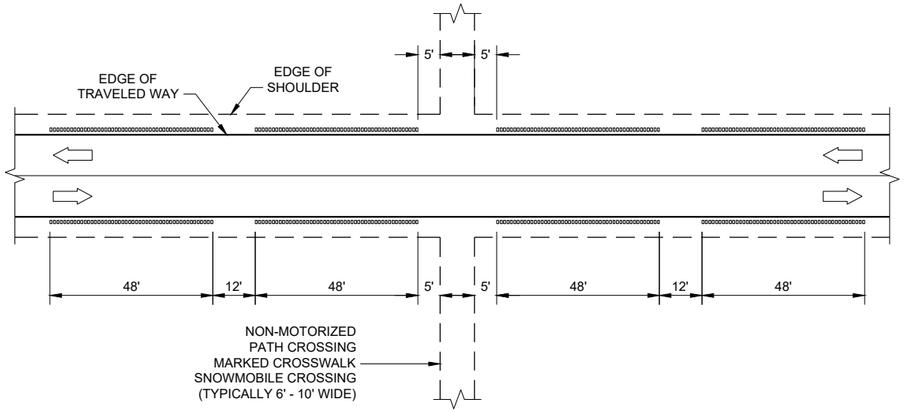
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

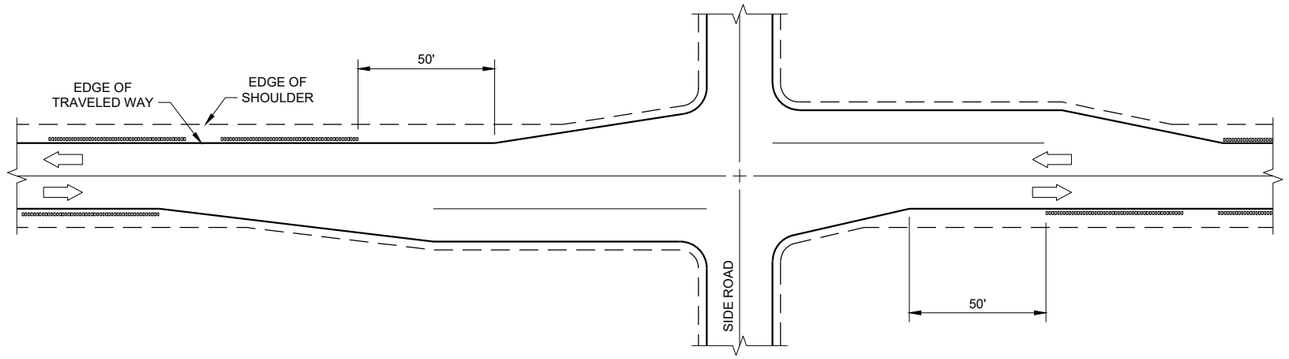
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02b

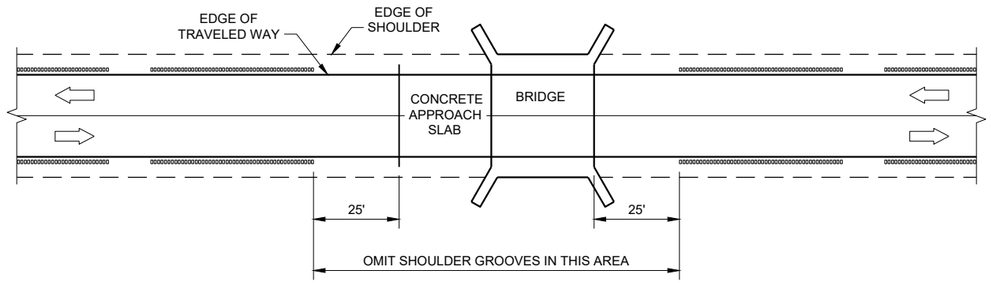
SDD 13A10 - 02b



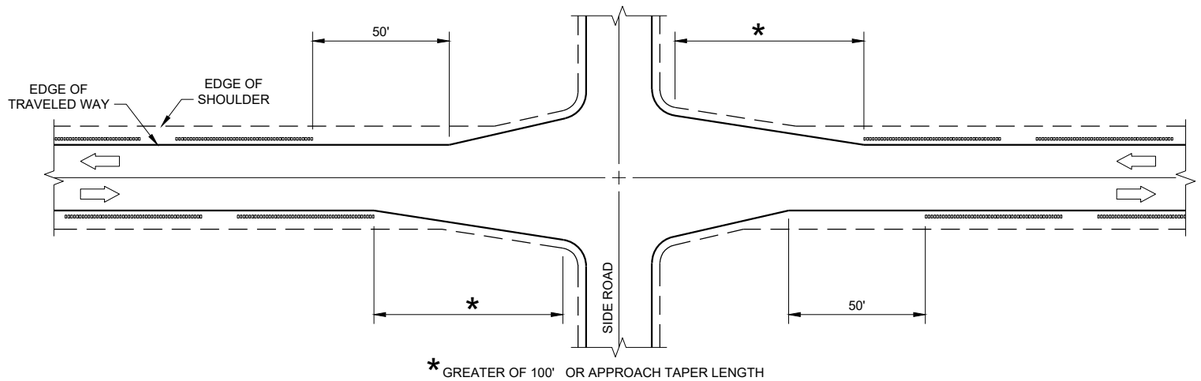
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

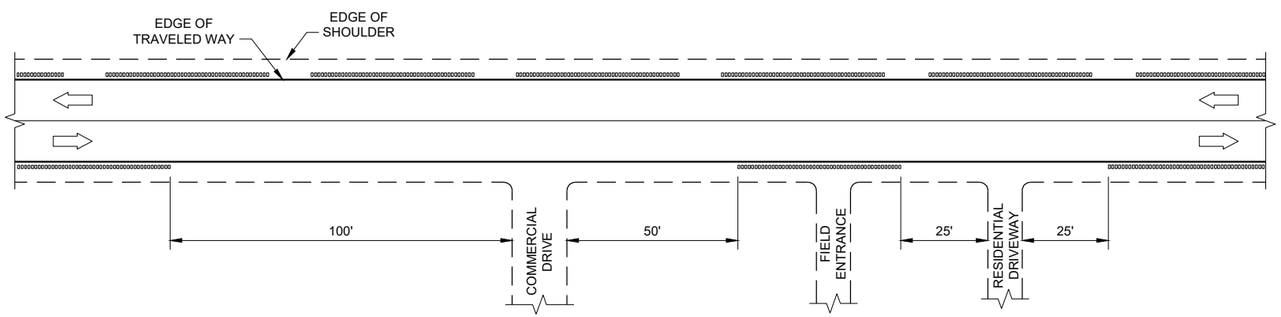


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

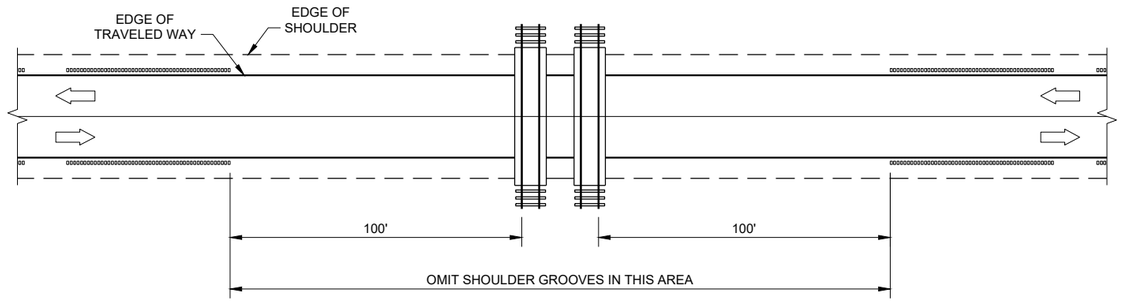
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

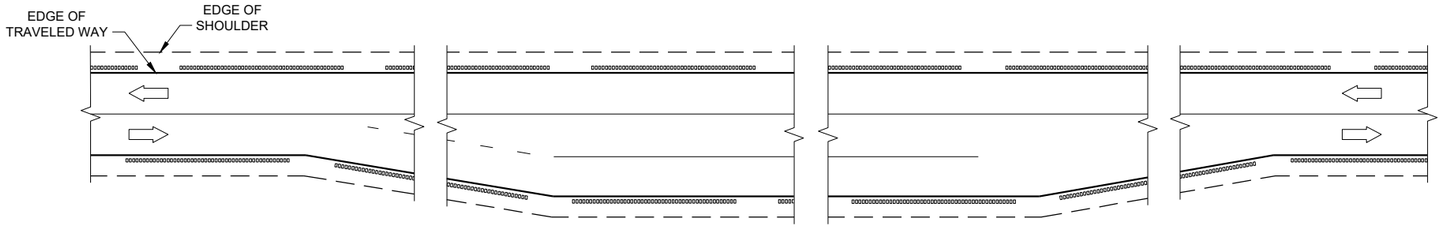
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

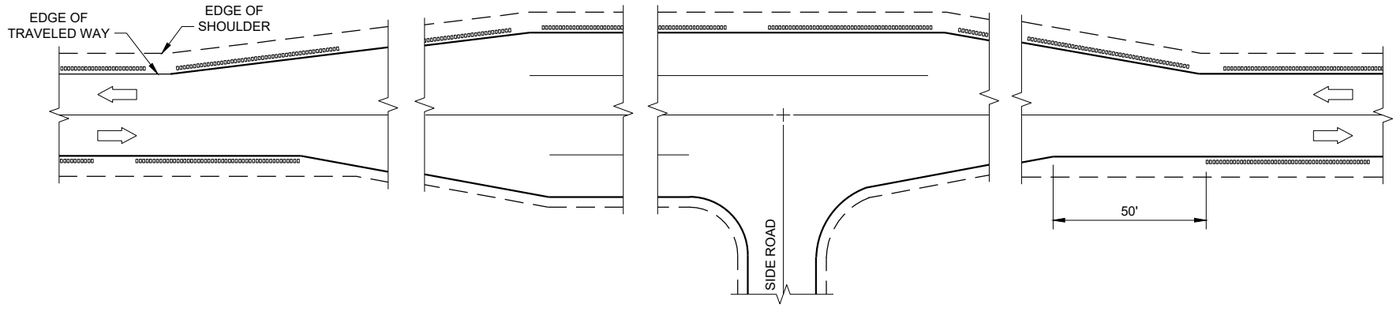
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

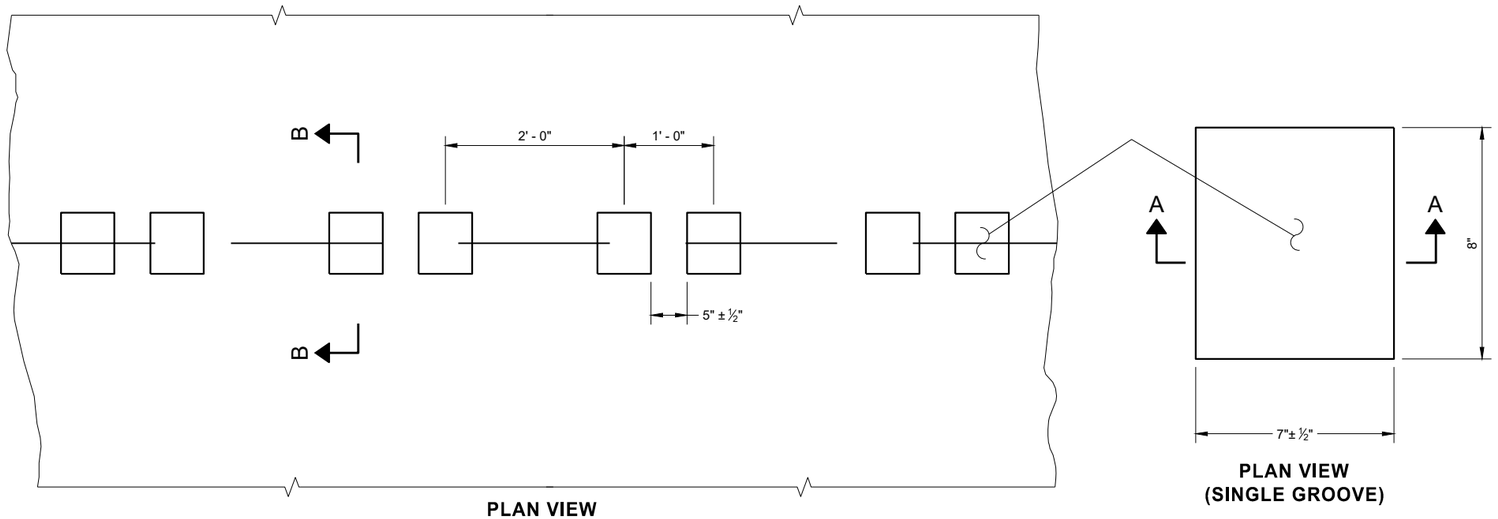
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

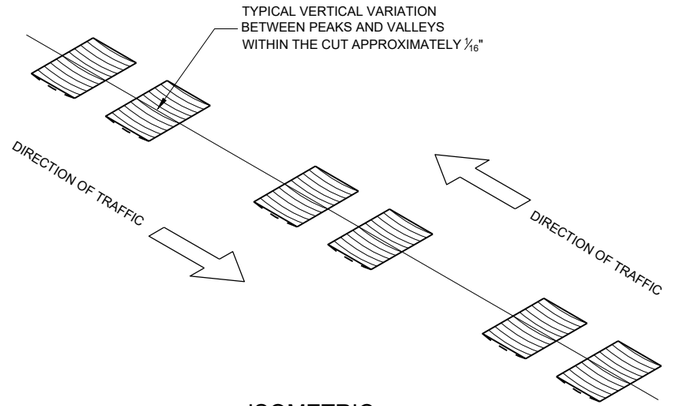
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

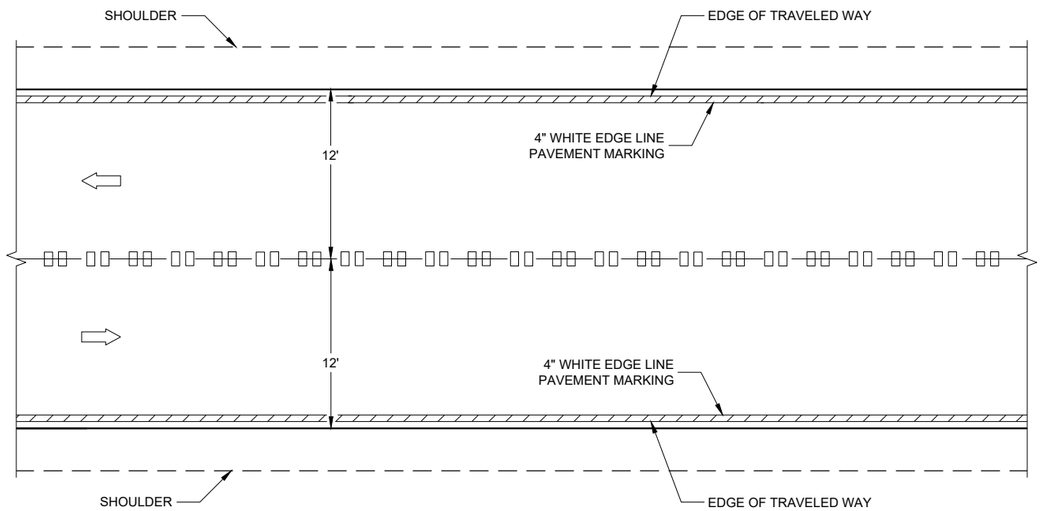
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

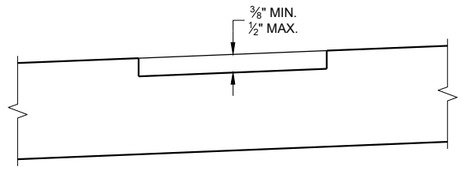
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



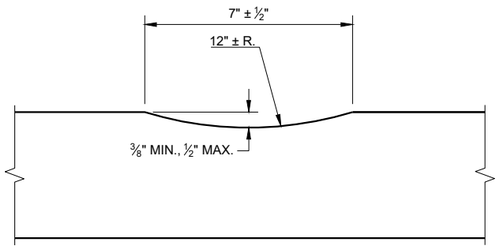
ISOMETRIC



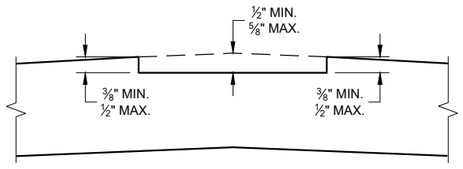
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION A - A



SECTION B - B
CROWNED ROADWAY

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

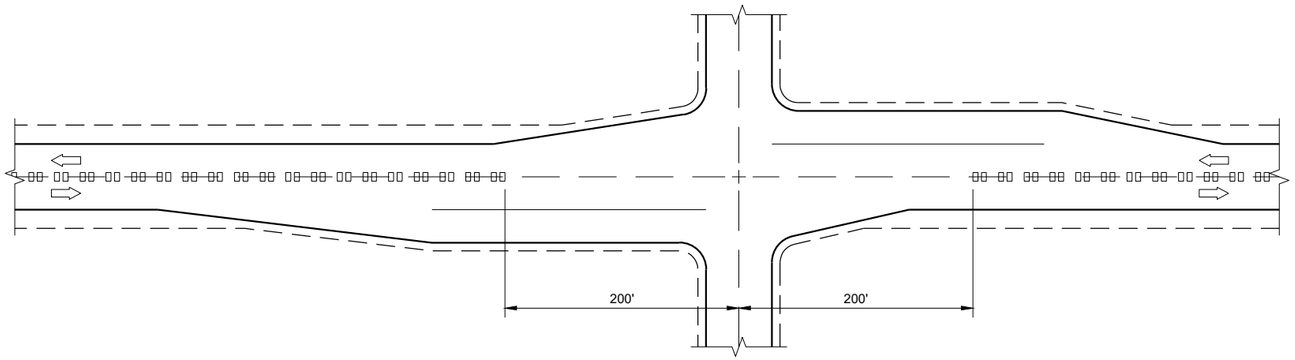
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

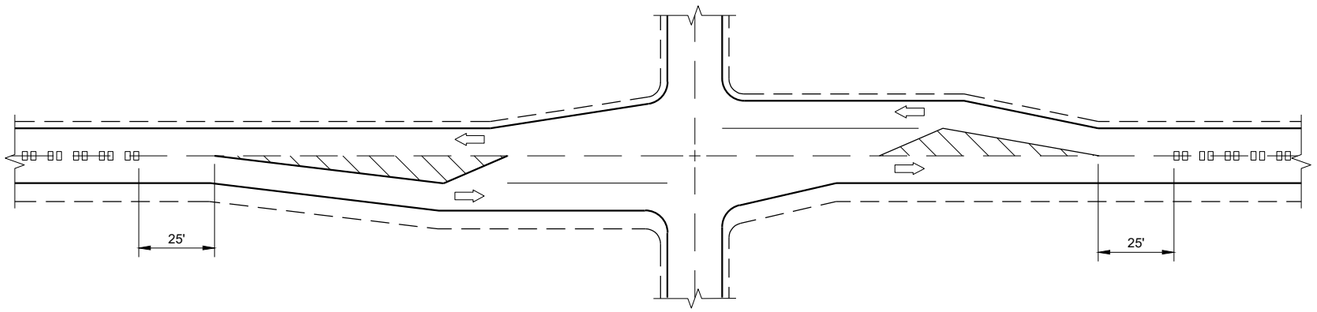
SDD 13A11 - 03a

6

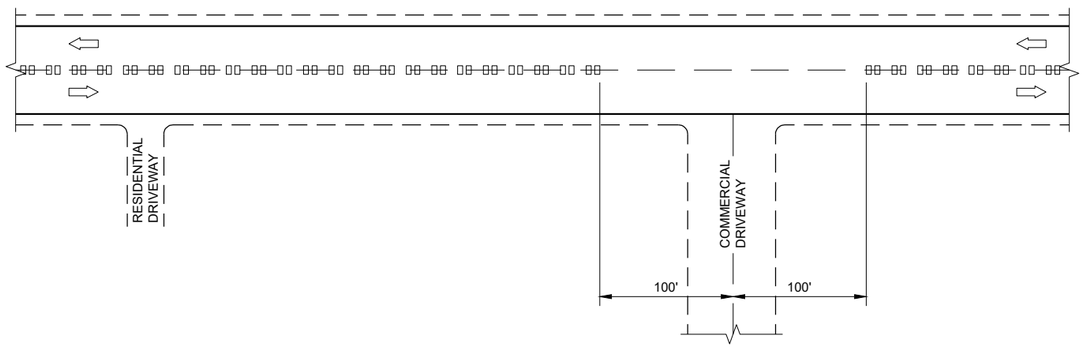
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



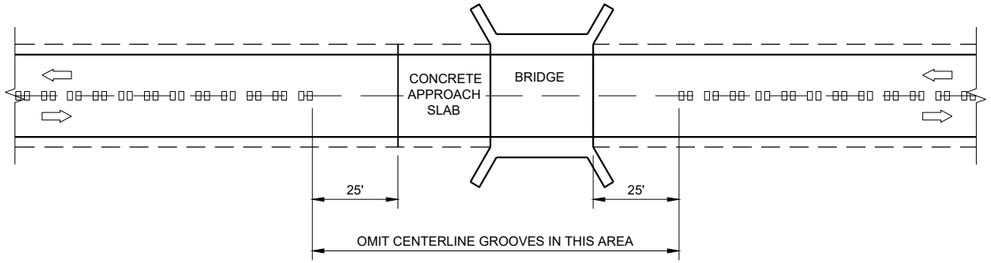
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



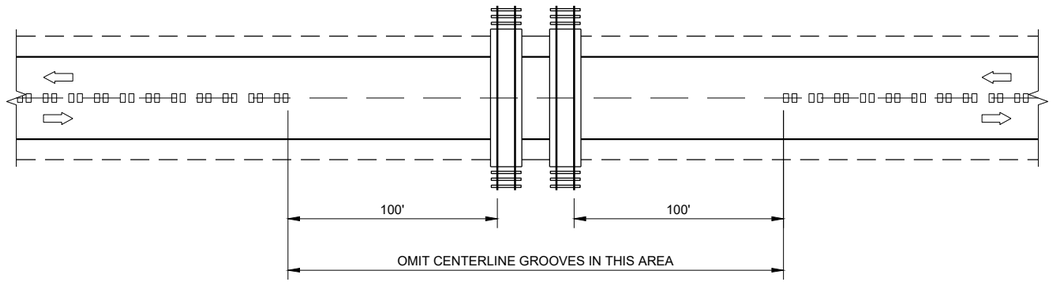
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

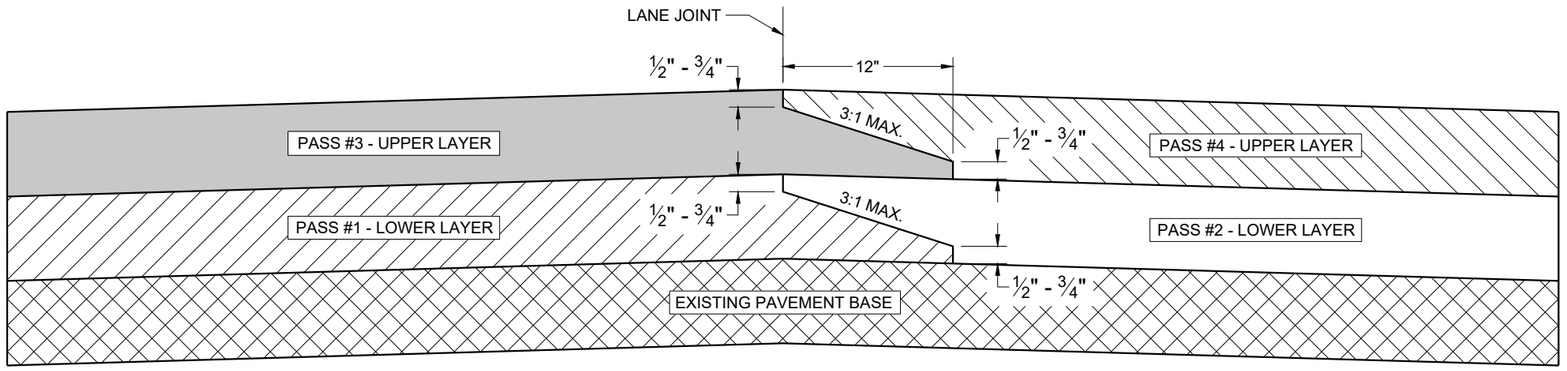
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 13A11 - 03b

GENERAL NOTES

CONFORM TO STANDARD SPECIFICATION 450.3.2.8



TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINTS

6

6

SDD 13C19 - 01

SDD 13C19 - 01

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

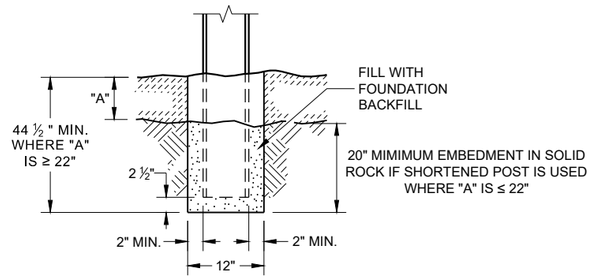
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

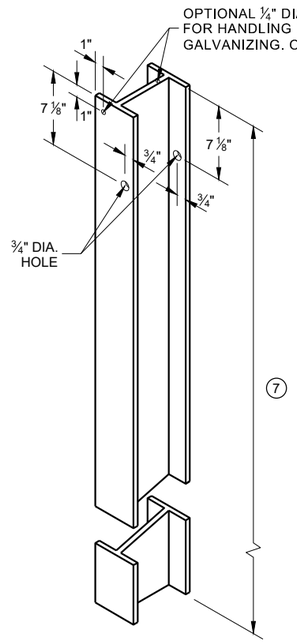
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

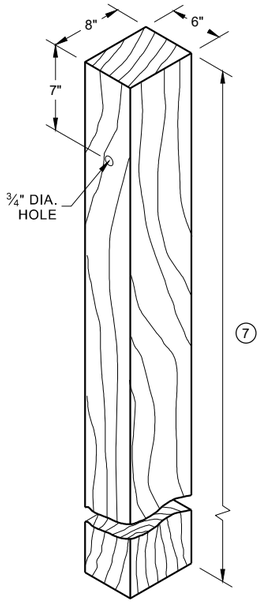
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



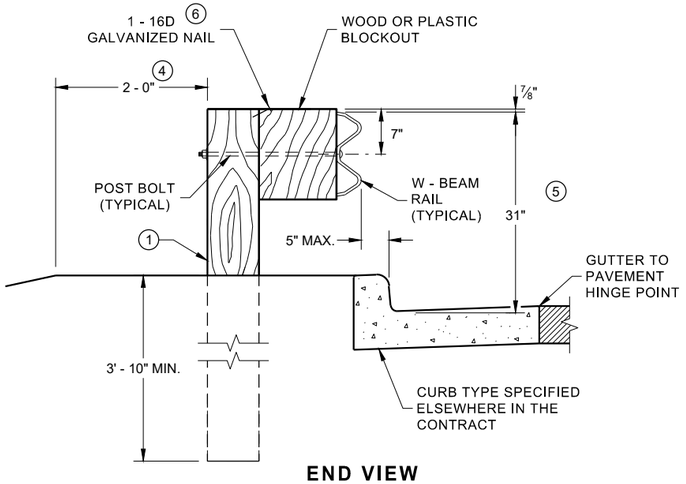
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



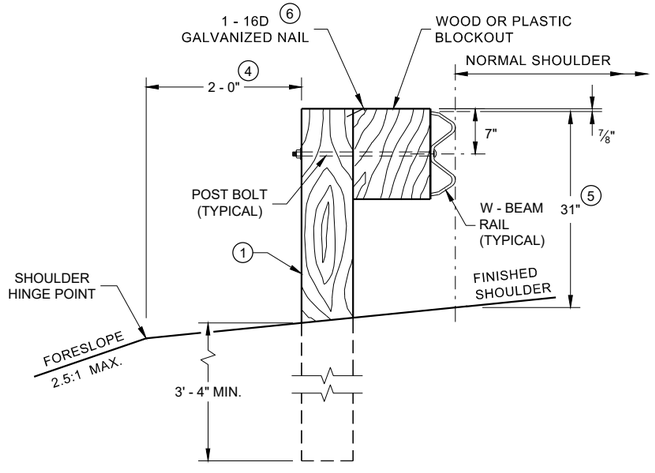
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



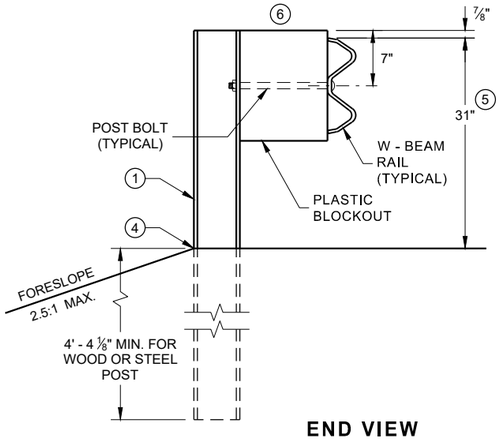
WOOD POST (6" X 8") NOMINAL (1)



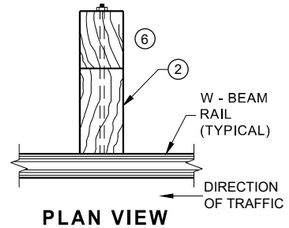
END VIEW
LOCATED ALONG A CURBED ROADWAY



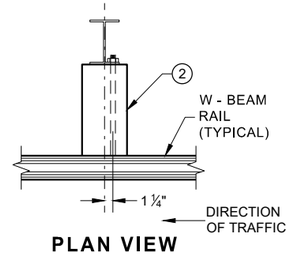
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



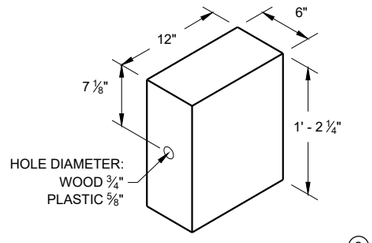
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

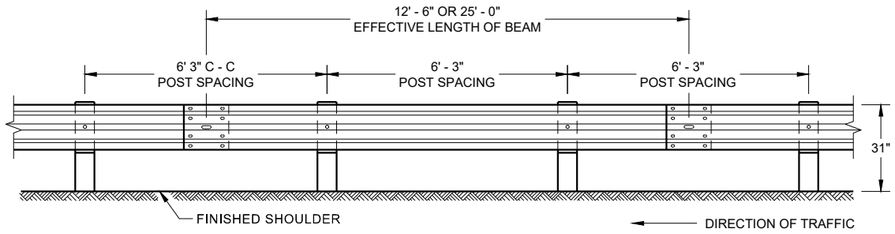
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

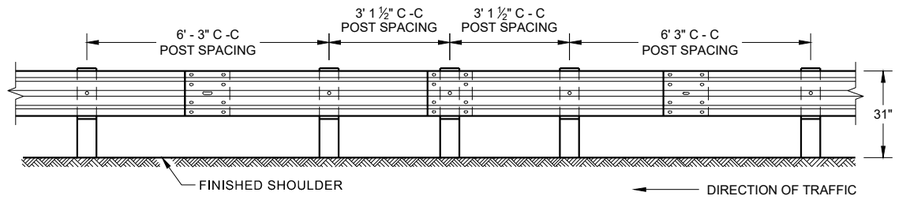
SDD 14B42 - 06a

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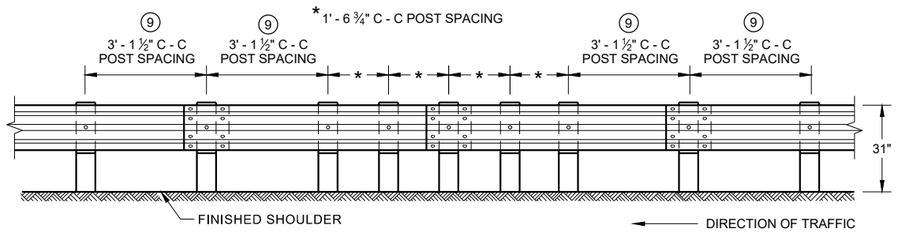
SDD 14B42 - 06a



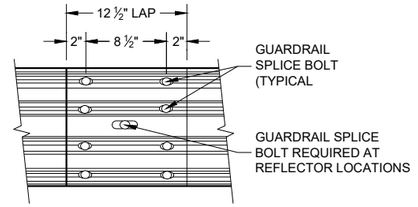
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

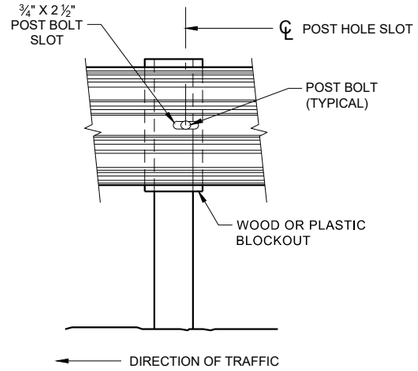
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

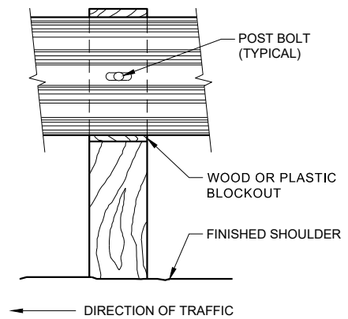
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ¾" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

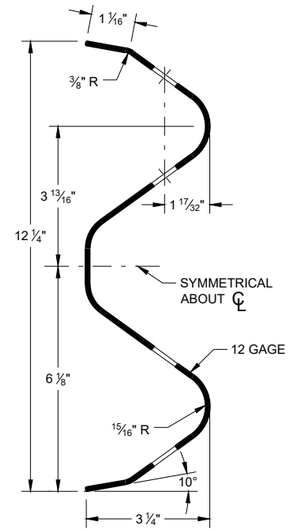
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



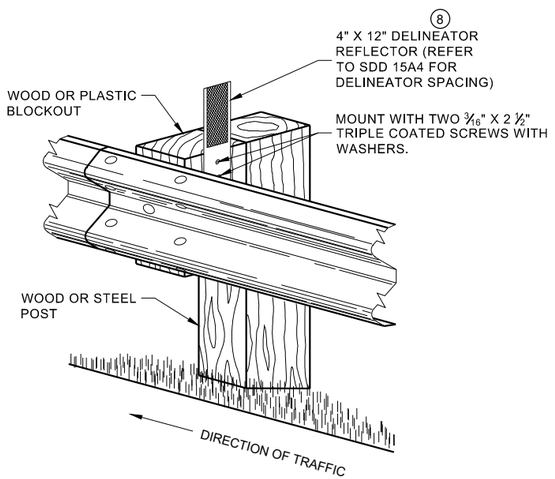
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



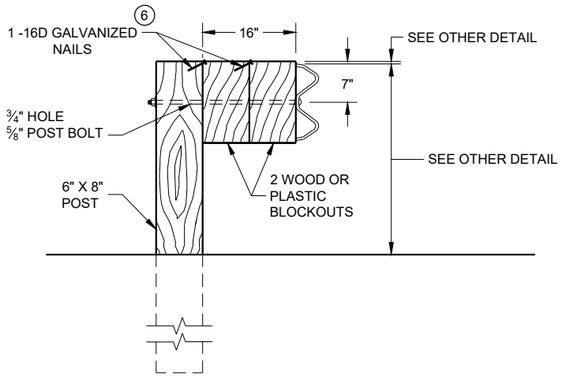
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 06b

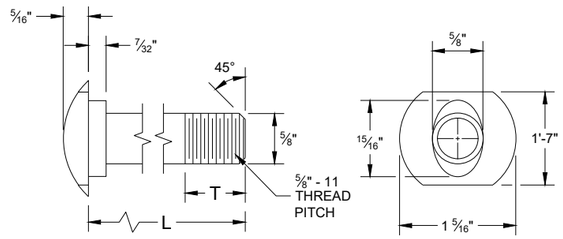


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

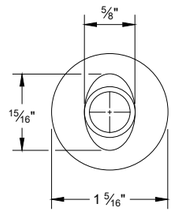
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

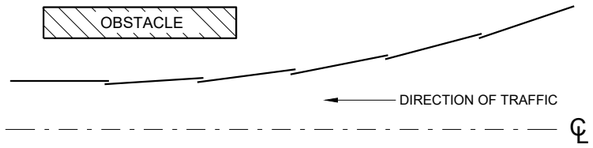


POST BOLT TABLE

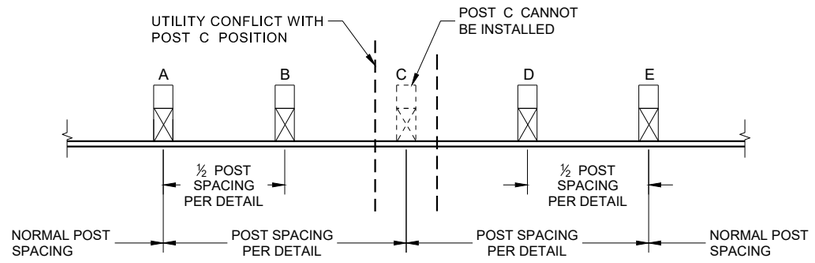
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



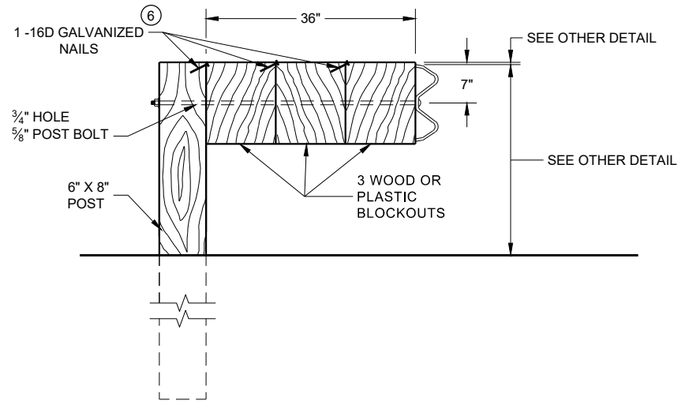
ALTERNATE BOLT HEAD



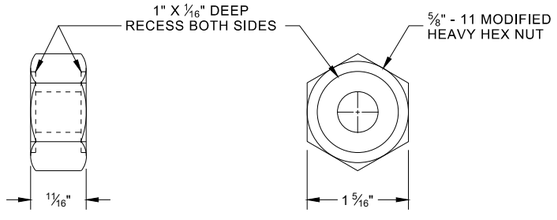
PLAN VIEW
BEAM LAPPING DETAIL



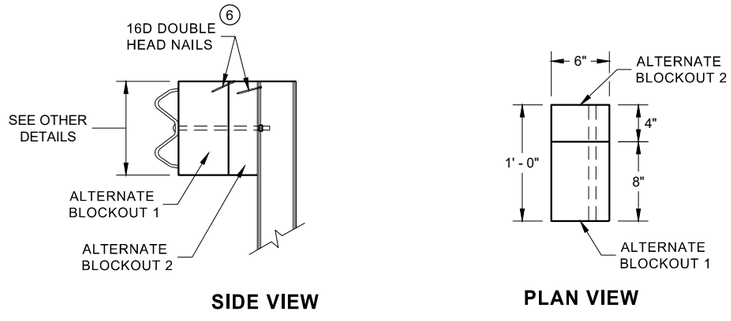
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

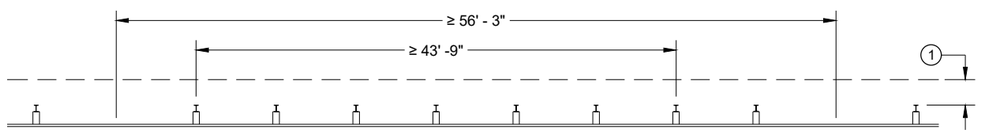
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

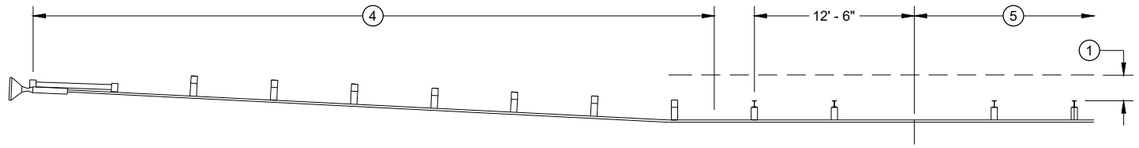
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

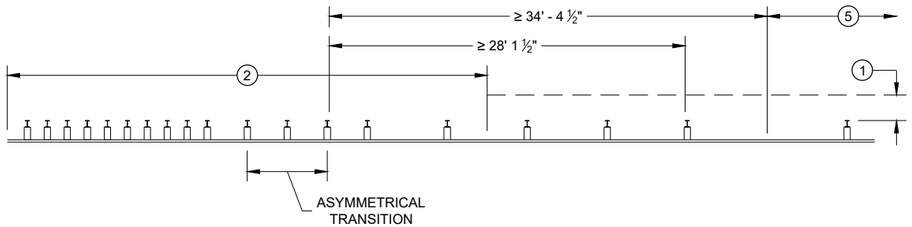
SDD 14B42 - 06c



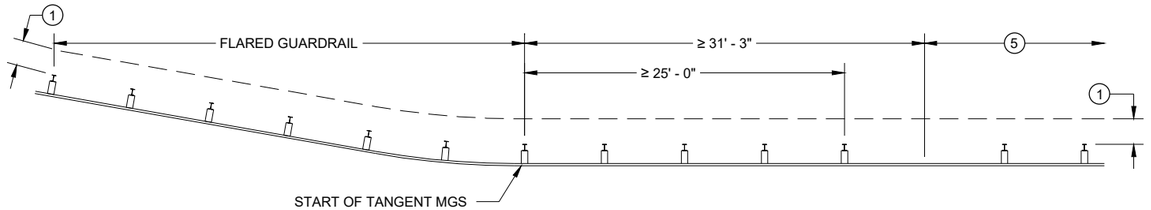
MISSING POST IN NORMAL BEAM GUARD RUN



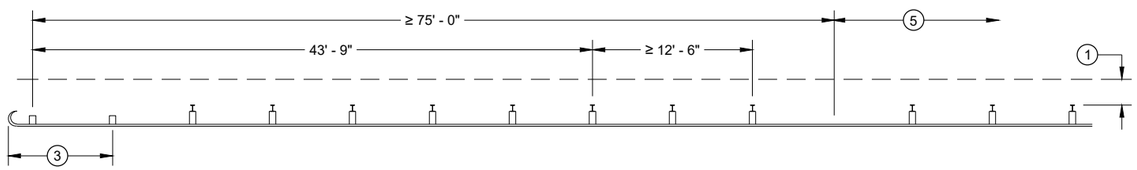
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



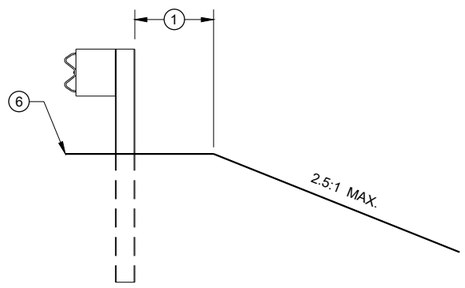
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

SDD 14B42 - 06d

SDD 14B42 - 06d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

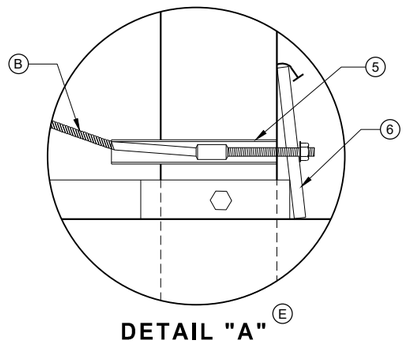
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

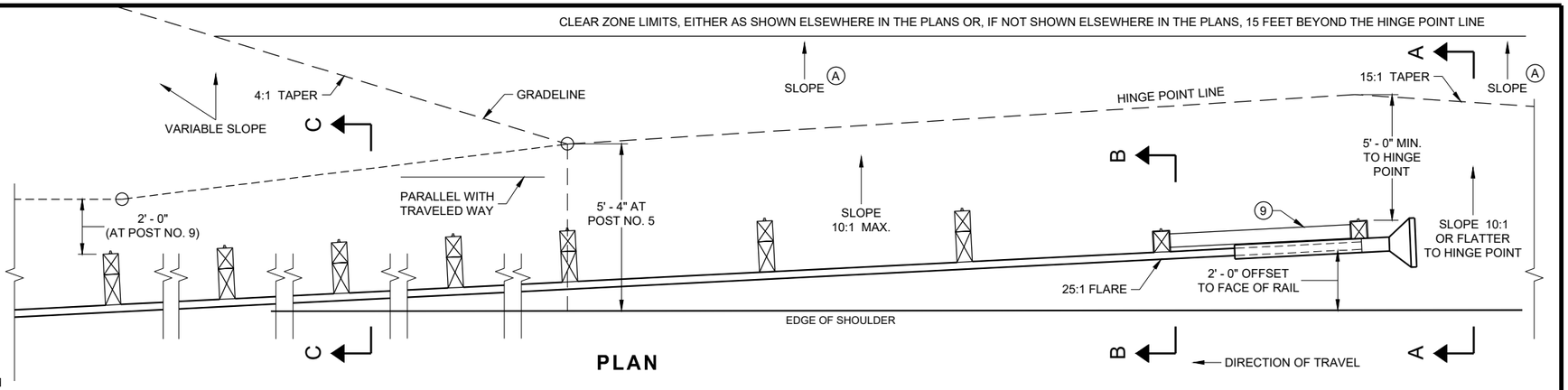
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

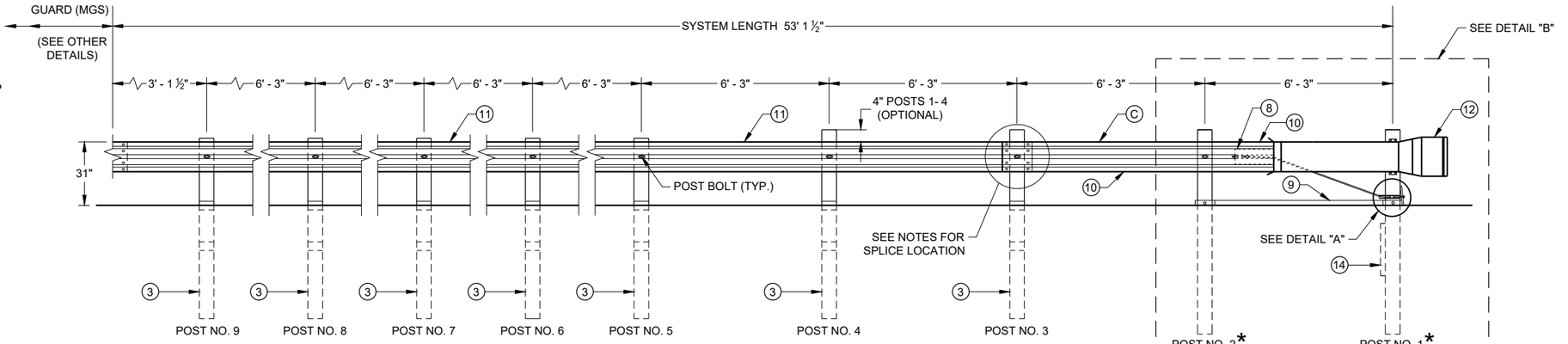
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



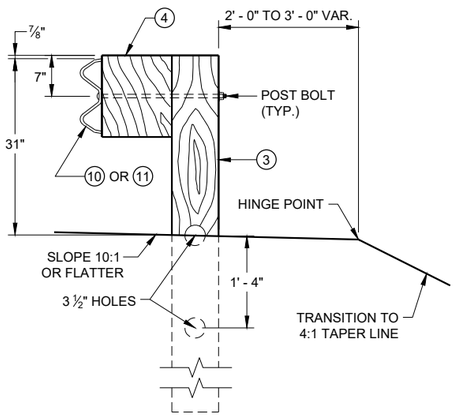
DETAIL "A" (E)



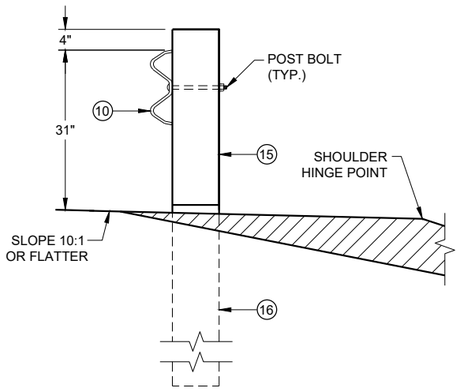
PLAN



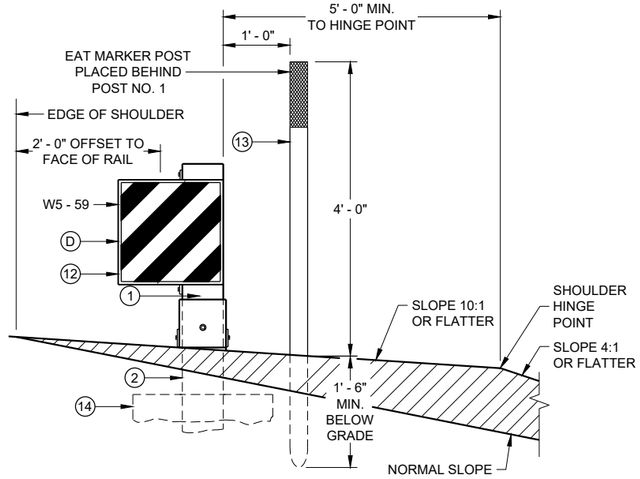
ELEVATION



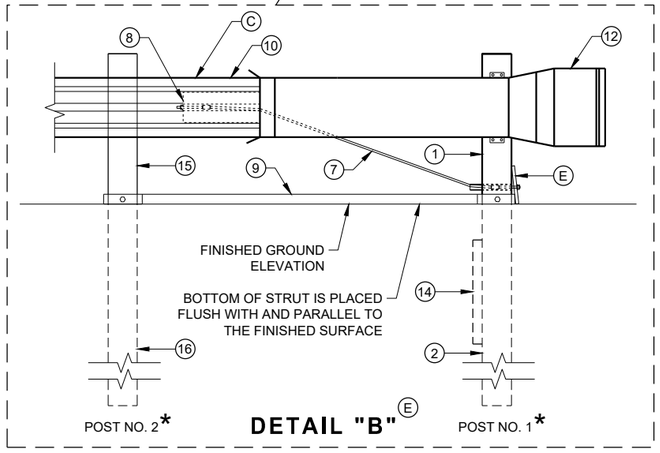
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



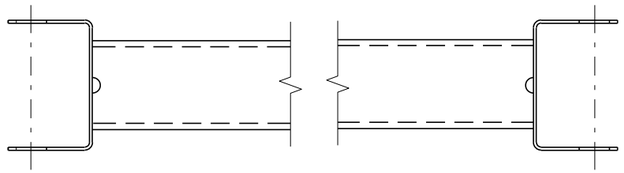
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

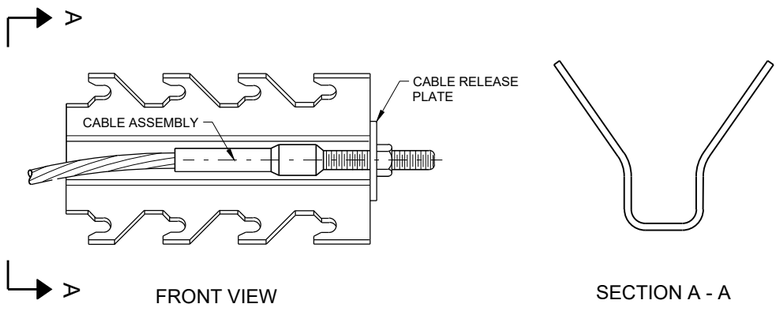
SDD 14B44 - 04a



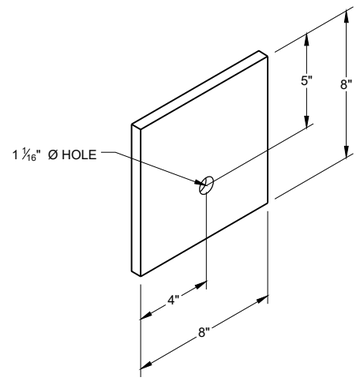
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

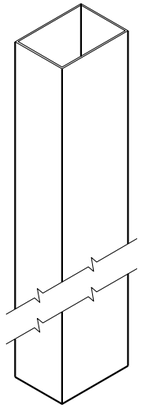
6

SDD 14B44 - 04b

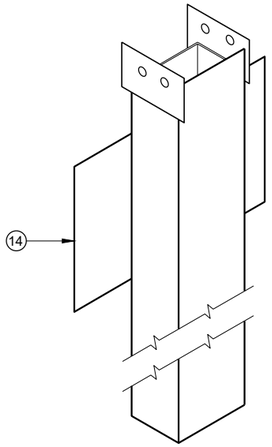
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

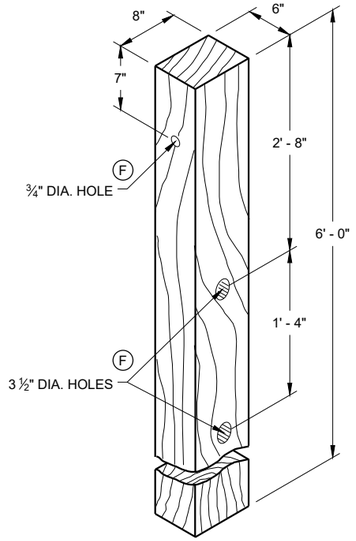
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



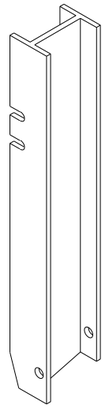
UPPER POST NO. 1 (1) (E)



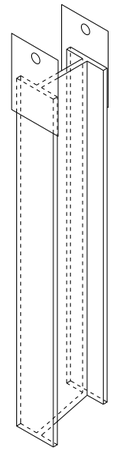
LOWER POST NO. 1 (2) (E)



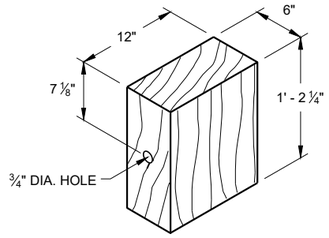
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



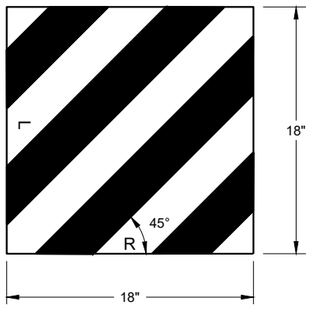
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

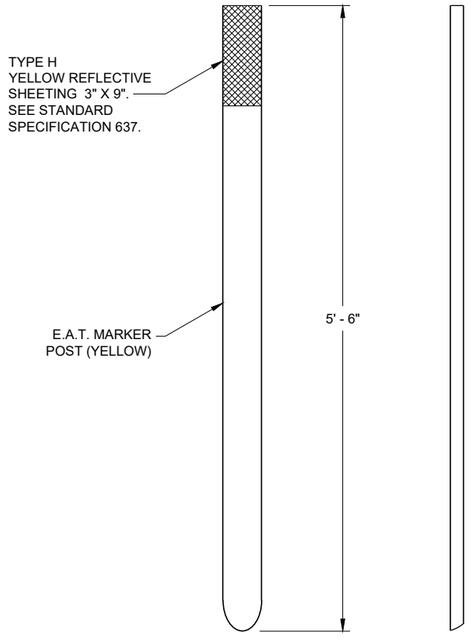


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



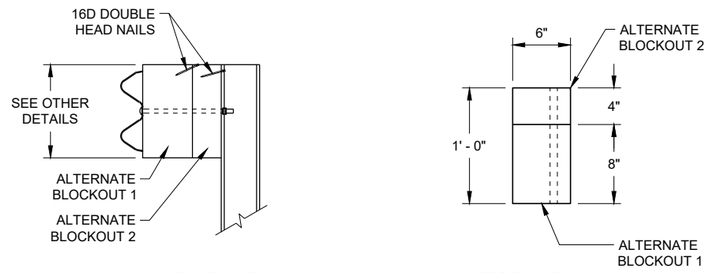
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

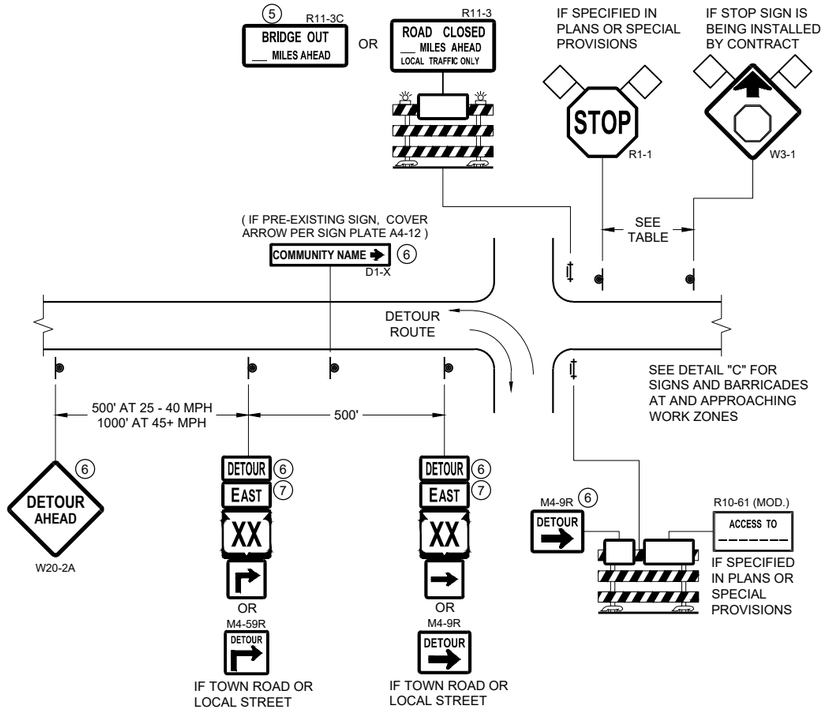
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

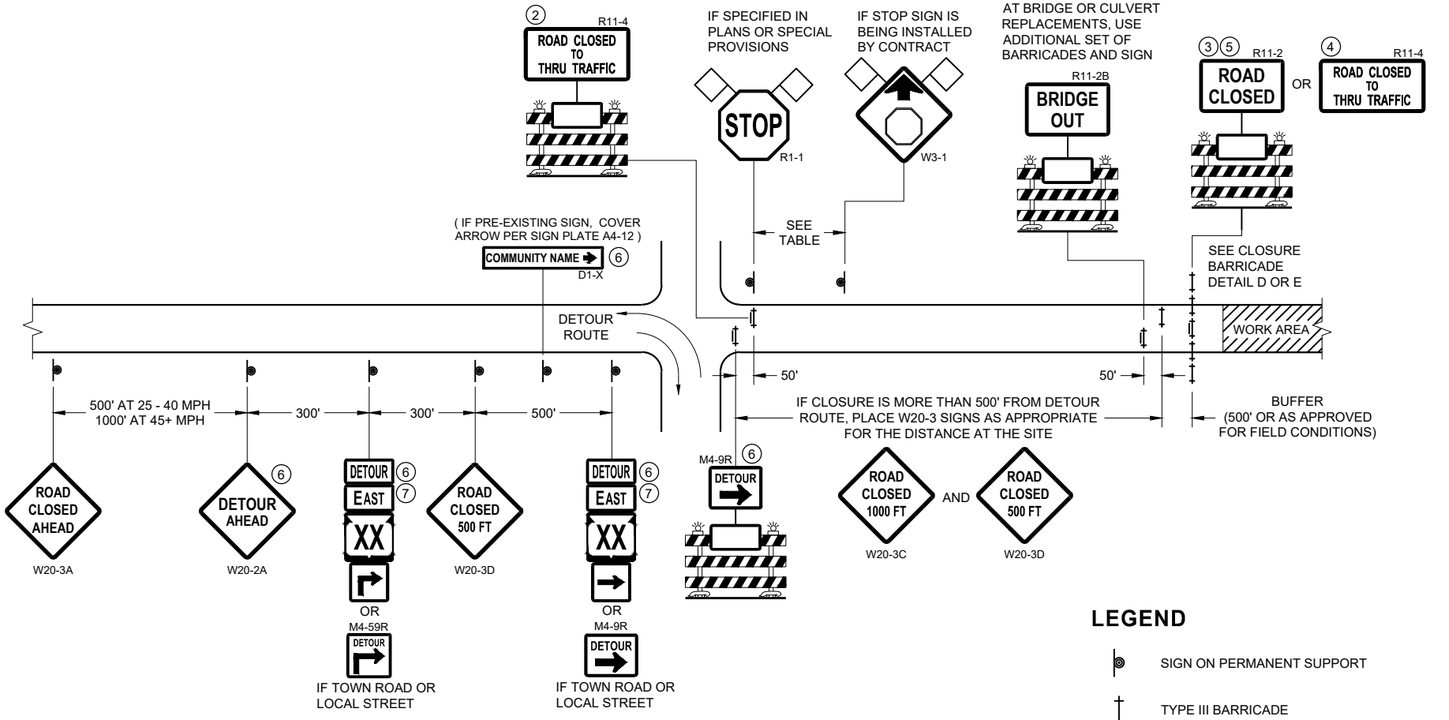
APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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SDD 14B44 - 04c



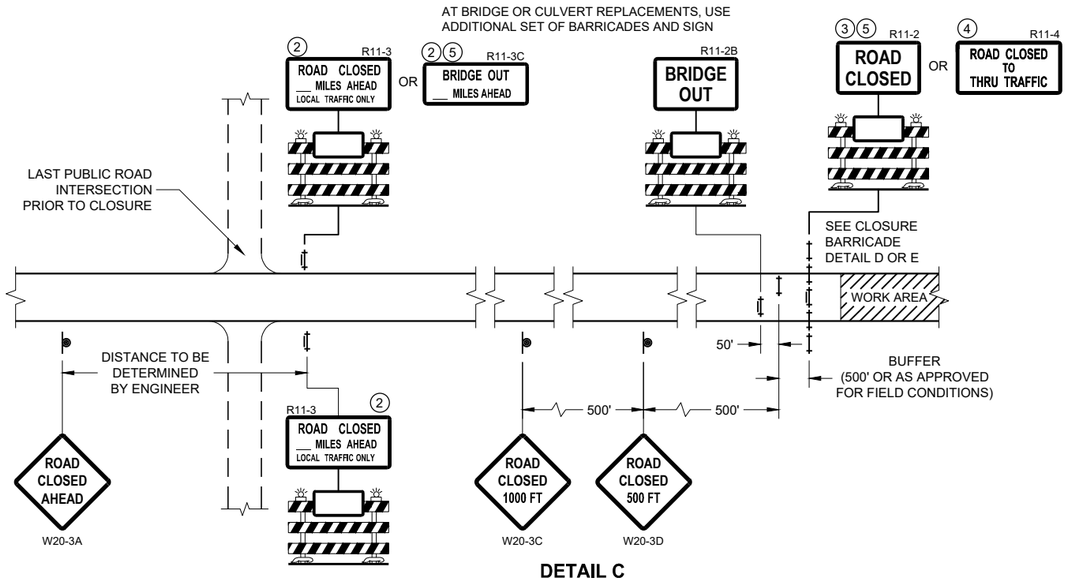


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

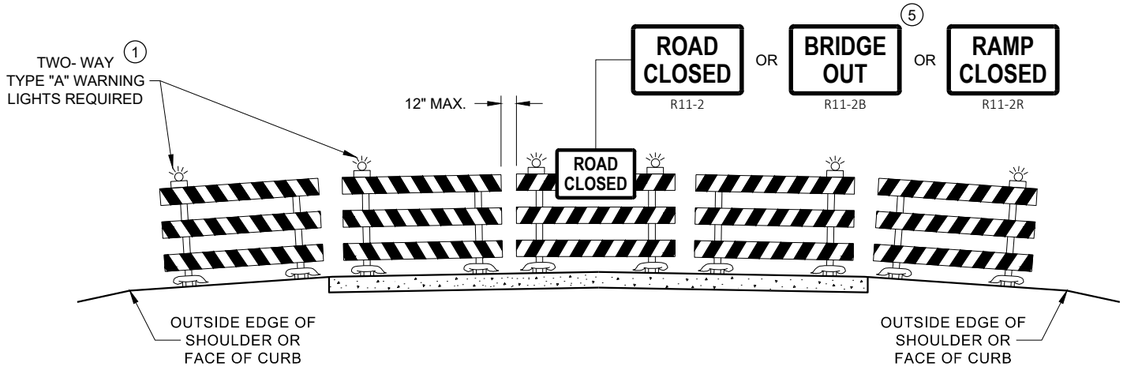
APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

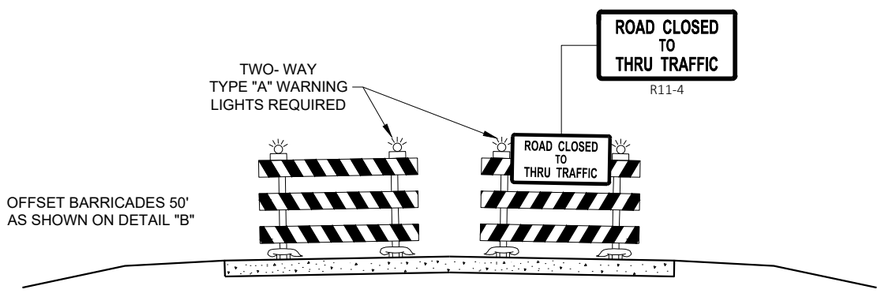
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SDD 15C02 - 07a

SDD 15C02 - 07a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

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SDD 15C02 - 07b

6

SDD 15C02 - 07b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

DETOUR EAST XX *
D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST XX *

DETOUR EAST XX / WEST XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES * G20-51

DETOUR WEST XX * OR M4-59L DETOUR ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

** M4-59L DETOUR OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

** M4-9L DETOUR OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

500'

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

500'

DETOUR EAST XX

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

EAST XX M3-X 24" X 12" M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

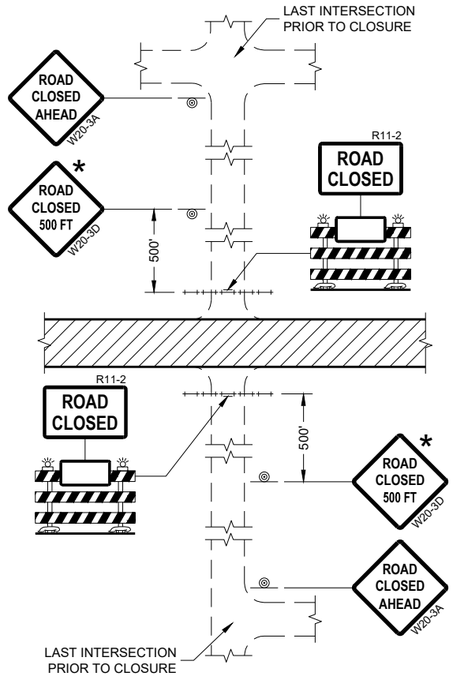
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

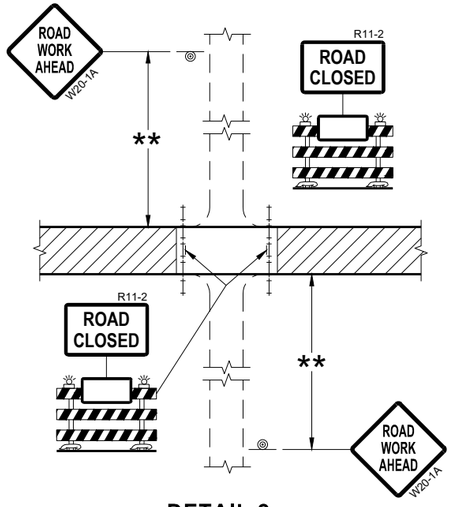
SDD 15C02 - 07c

SDD 15C02 - 07c

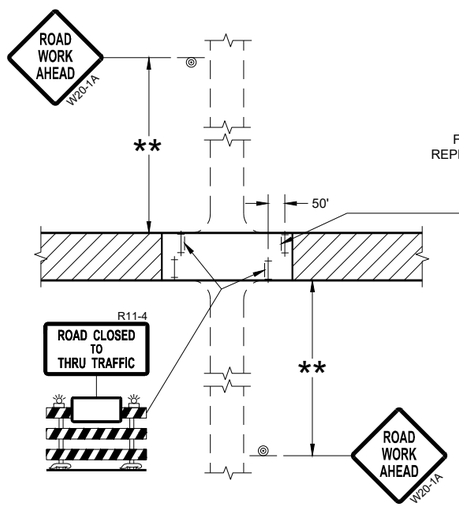
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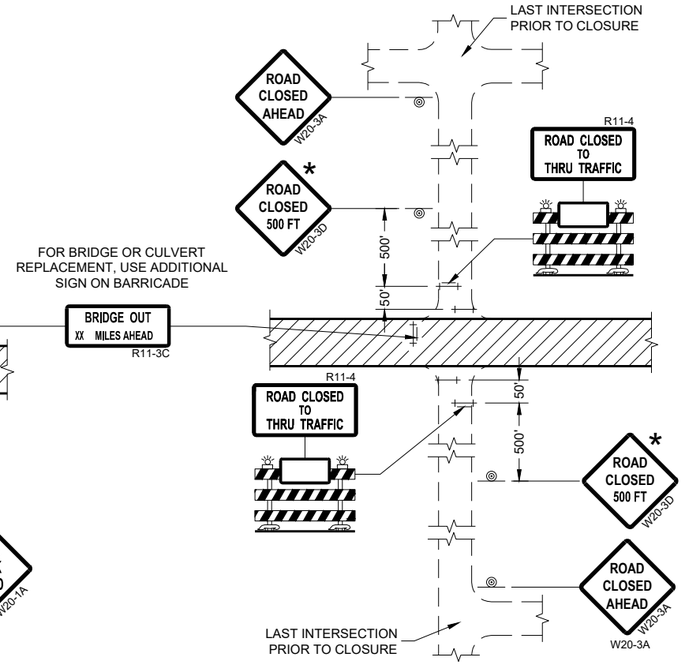
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15C03 - 05

GENERAL NOTES

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

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

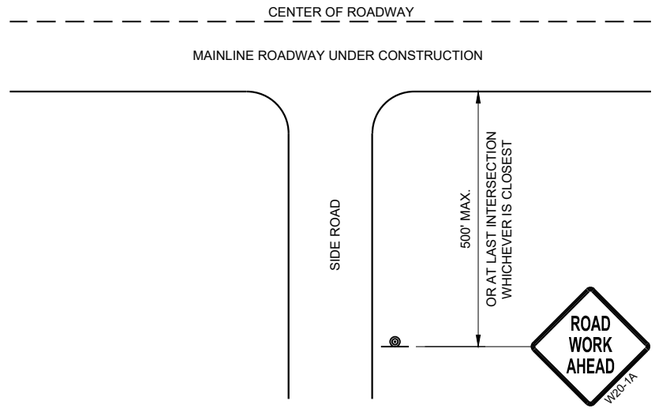
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



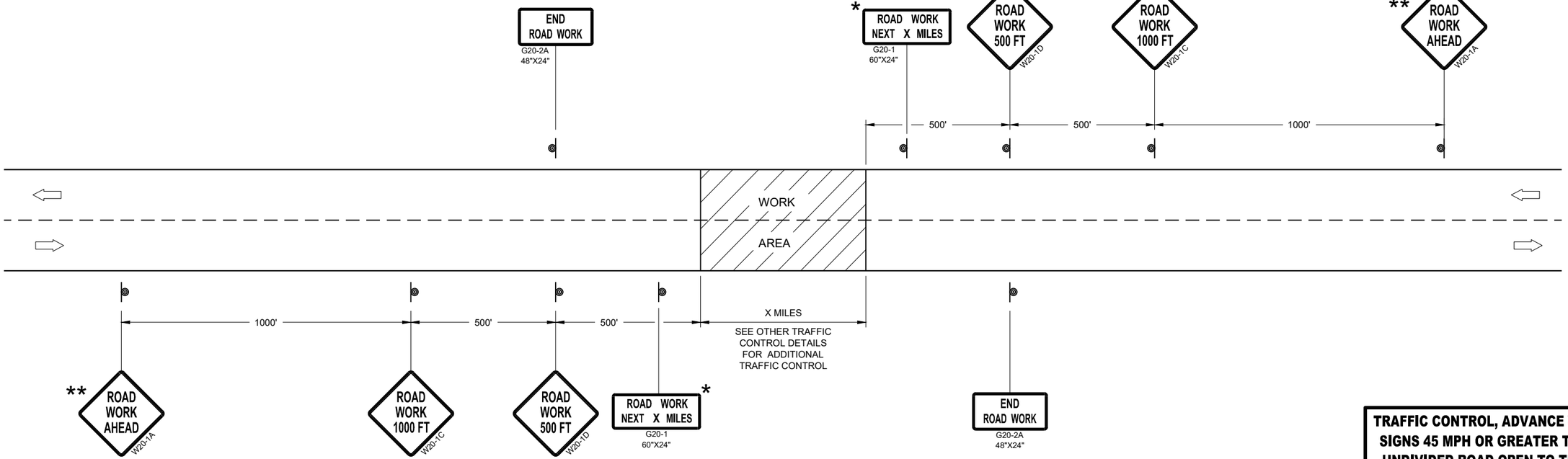
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

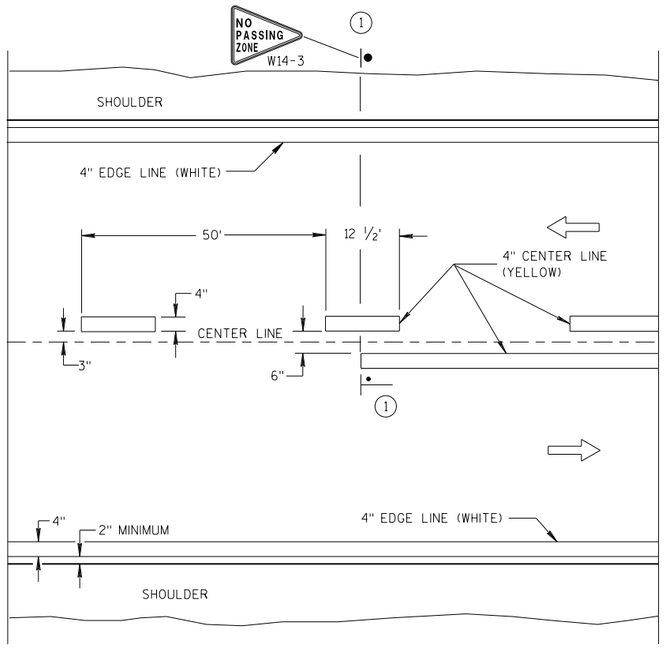
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

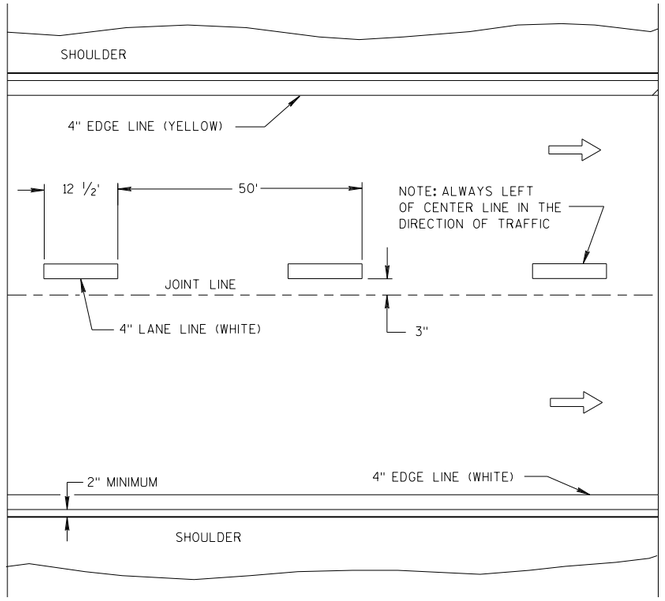
FHWA

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SDD 15C04 - 05



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

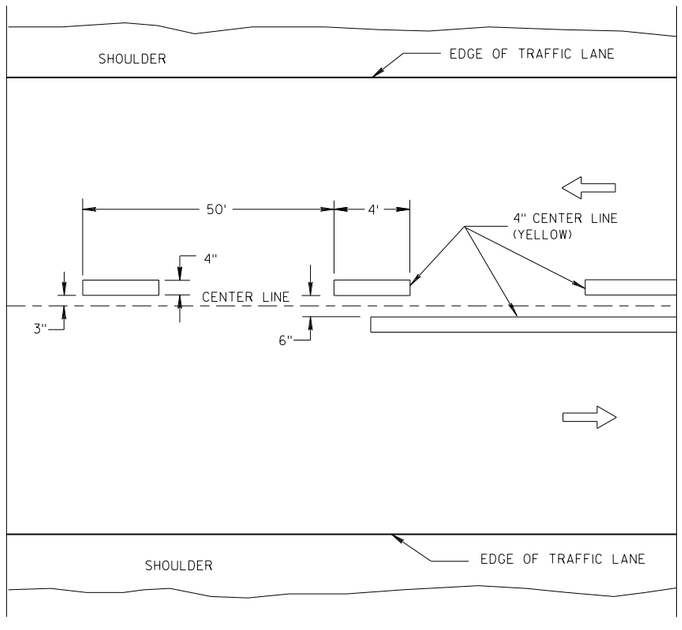
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

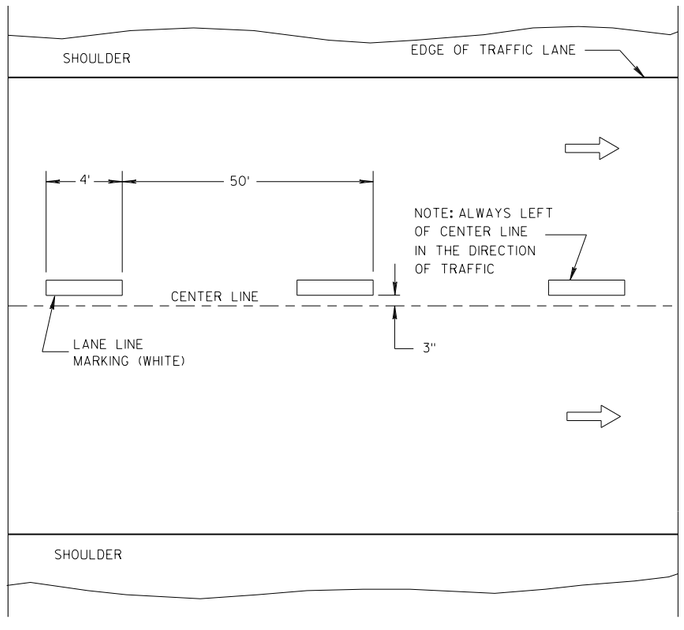
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

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

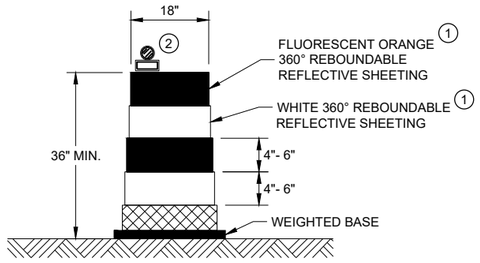
FHWA

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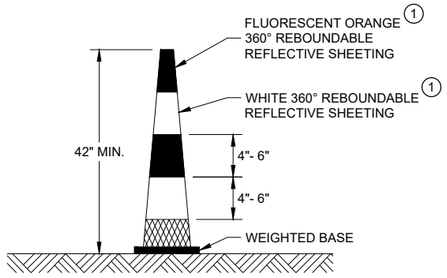
S.D.D. 15 C 8-19a

GENERAL NOTES

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

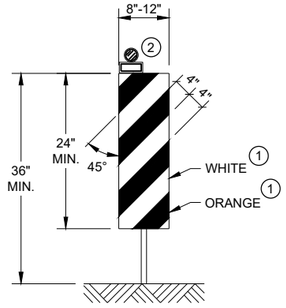


DRUM



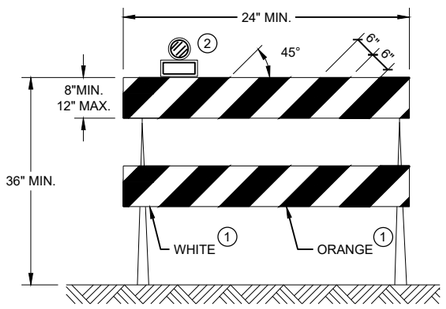
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



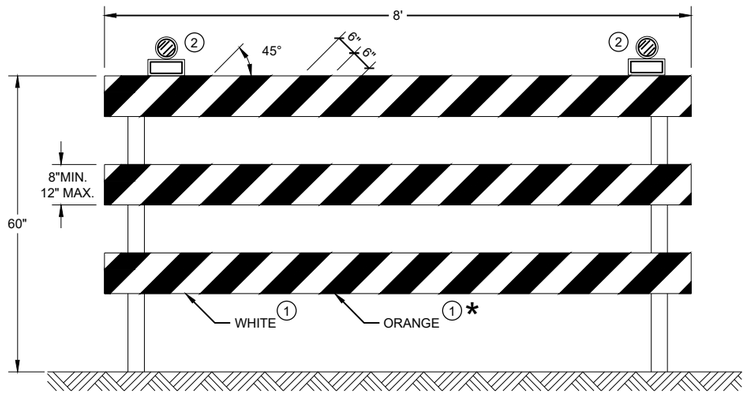
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 07b

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SDD 15C11 - 07b

LEGEND

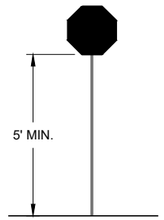
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

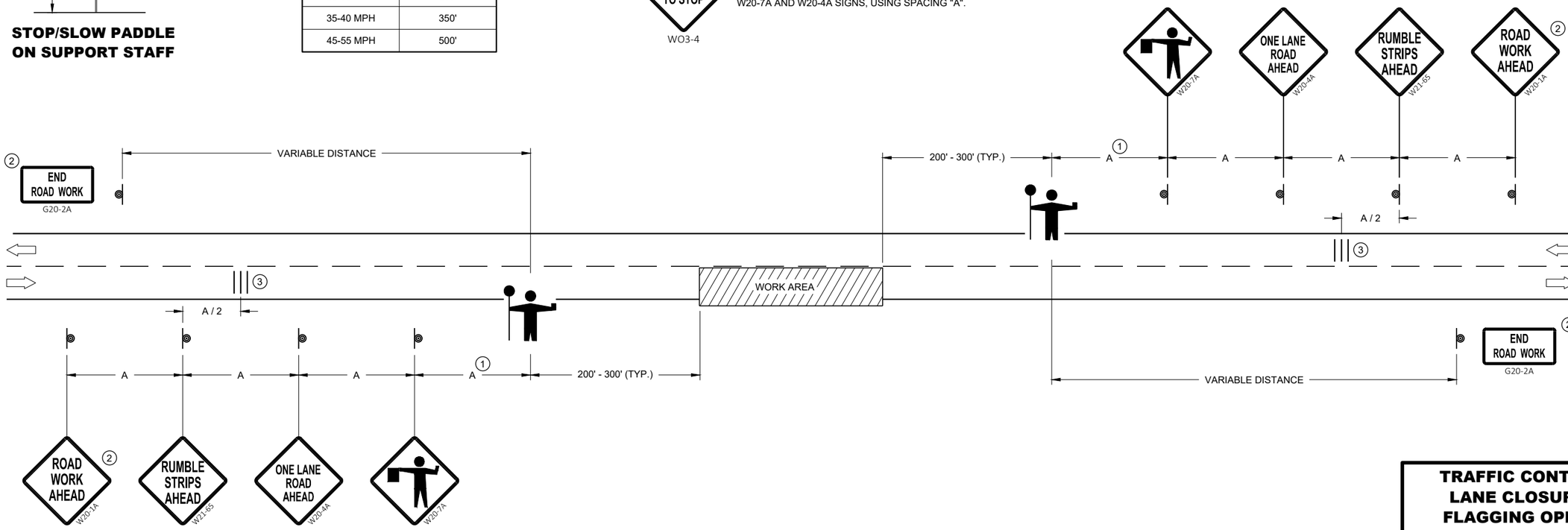
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

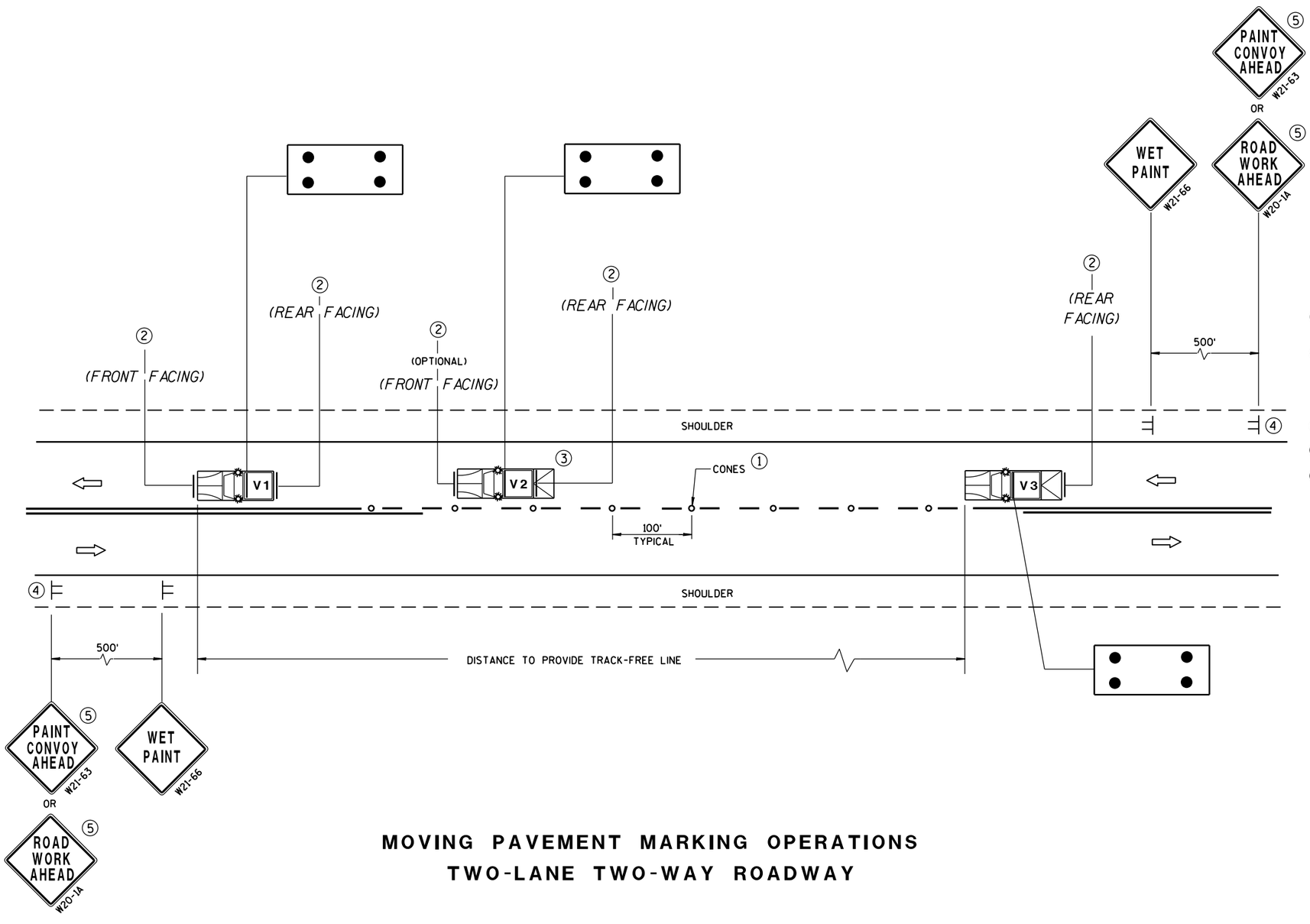
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C12 - 07

SDD 15C12 - 07



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.

WET PAINT W21-64 OR WET PAINT W21-64

(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

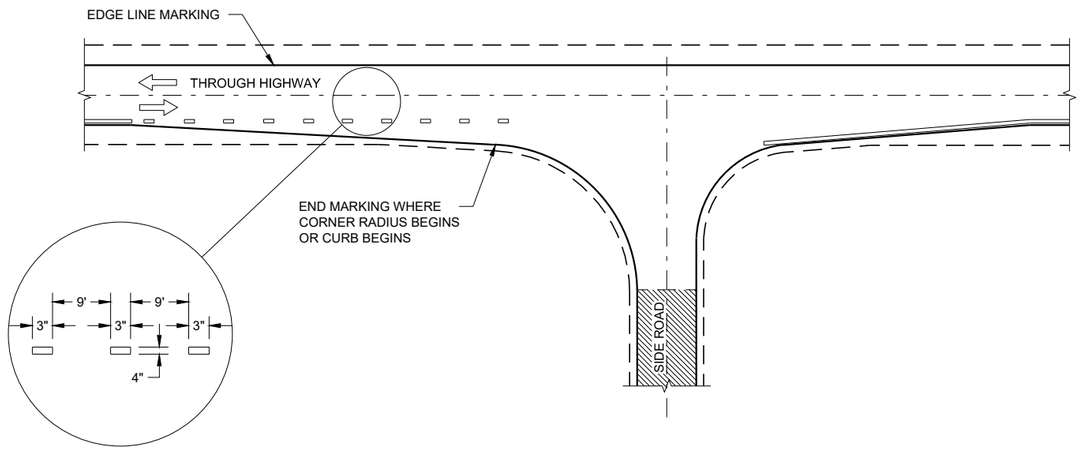
CONES

FLASHING ARROW PANEL (CAUTION)

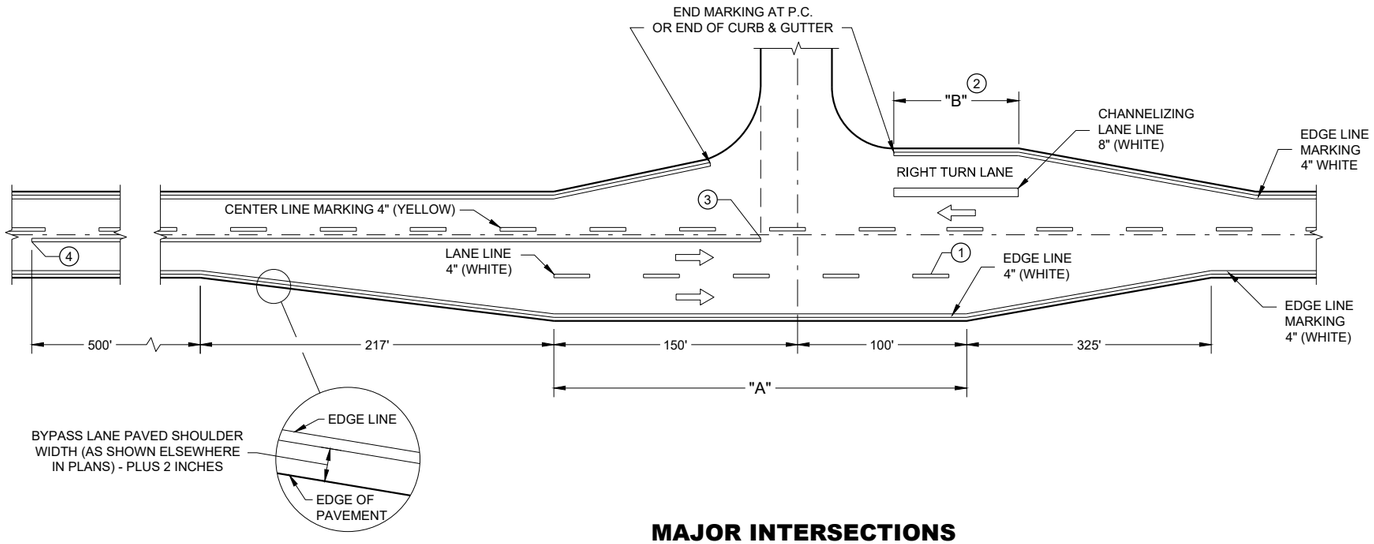
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept., 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGR
FHWA	

6

S.D.D. 15 C 19-5a



MINOR INTERSECTION



MAJOR INTERSECTIONS

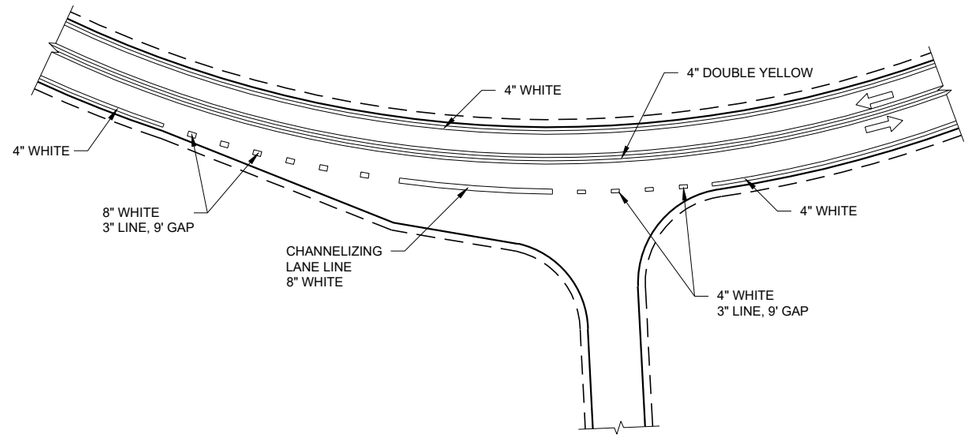
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

GENERAL NOTES

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

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

6

SDD 15C35 - 03a

PAVEMENT MARKING (INTERSECTIONS)

SDD 15C35 - 03a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
W / S	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L= WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

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

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

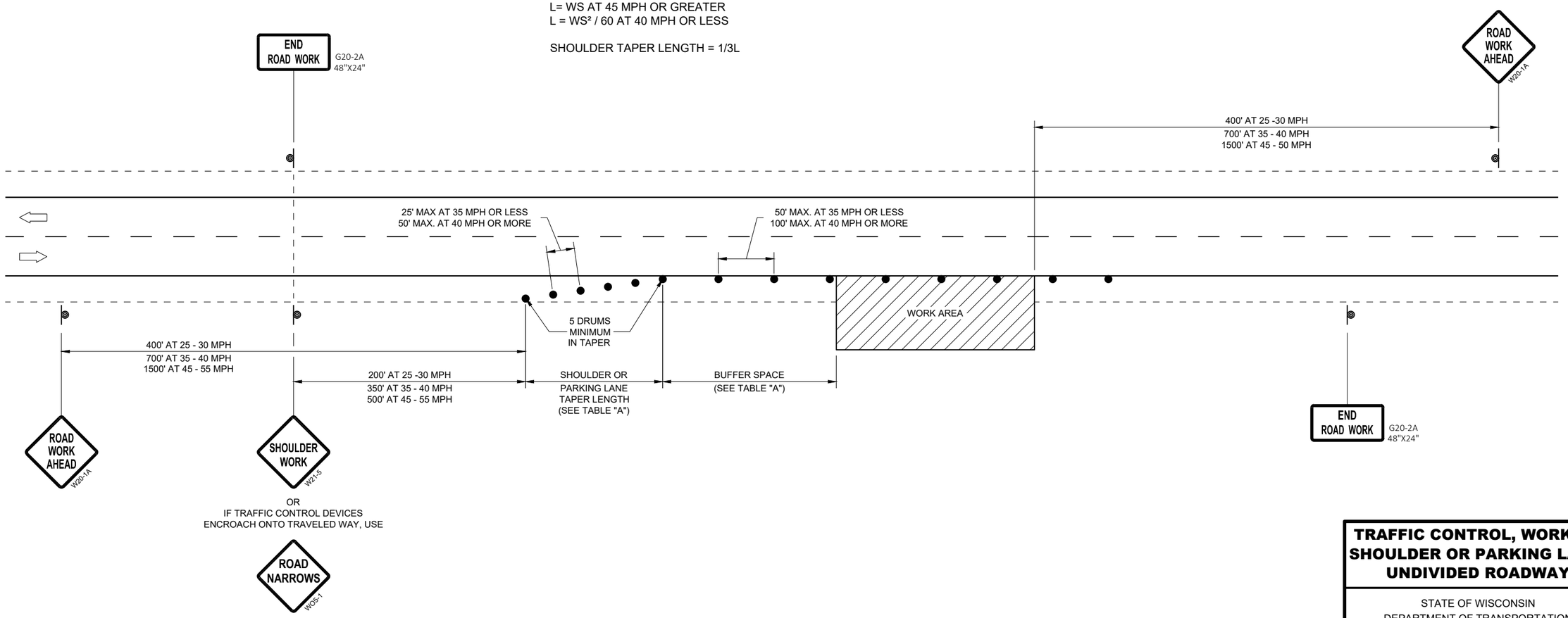
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY RESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

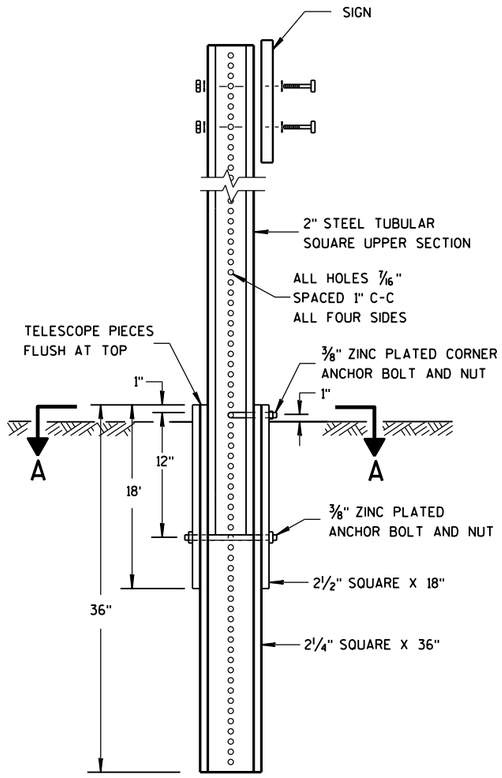
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

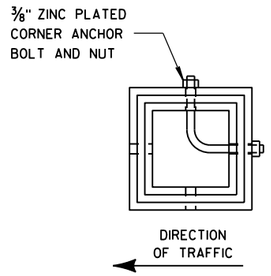
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

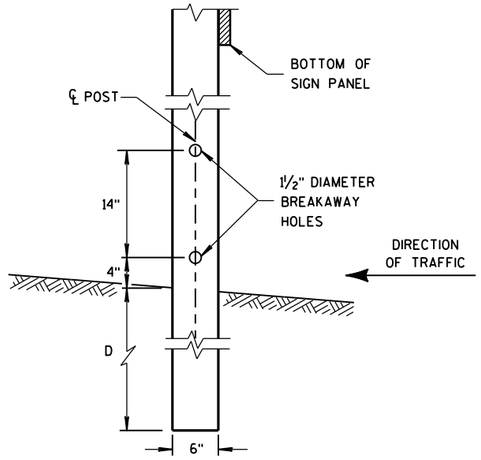
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SDD 15D28 - 03



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



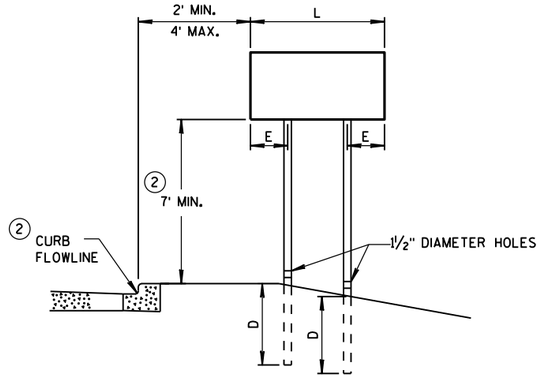
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

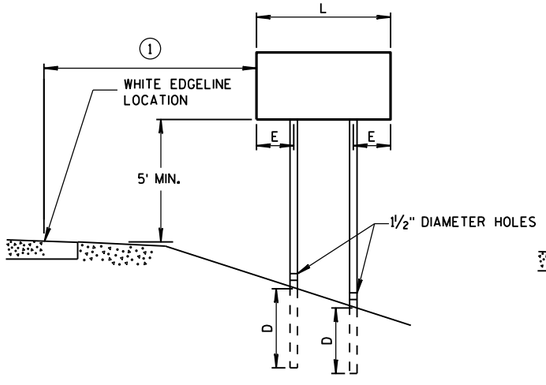
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

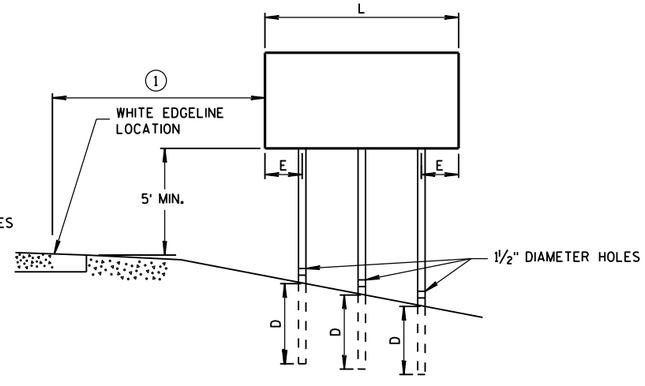
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

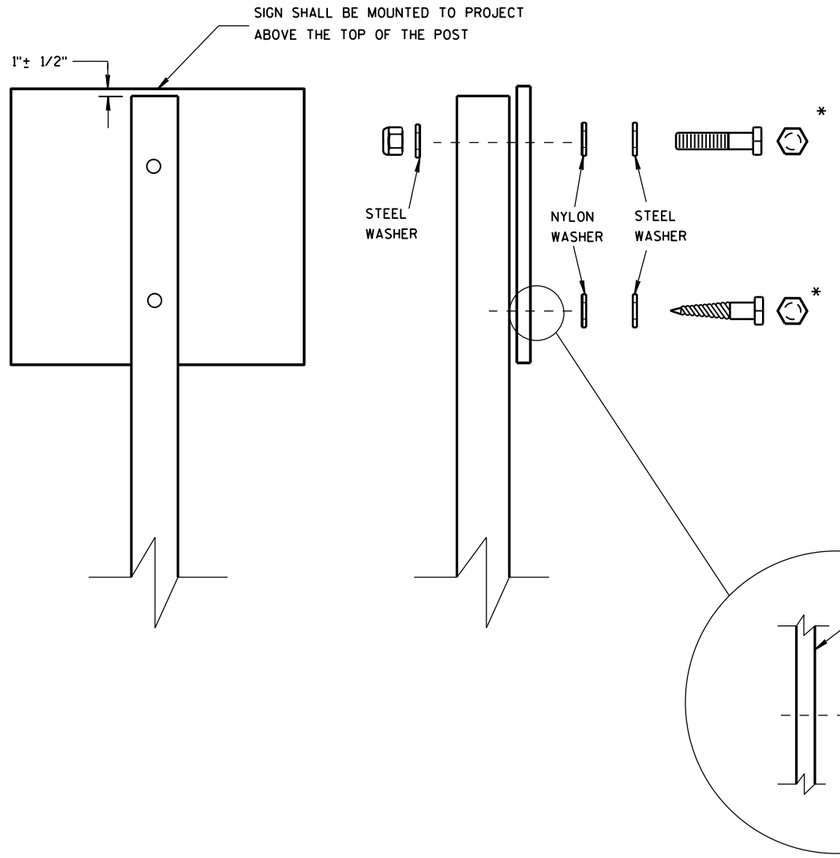
SEE NOTE (3)

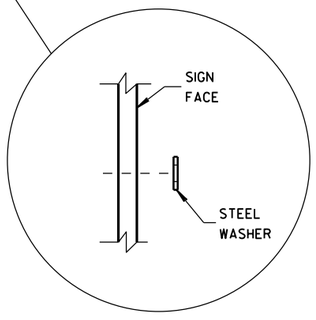
TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a





WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

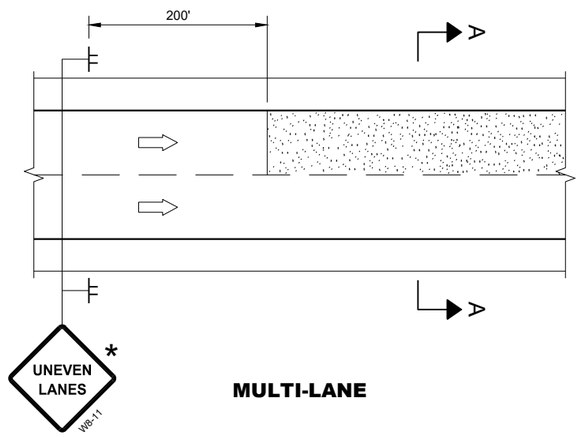
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

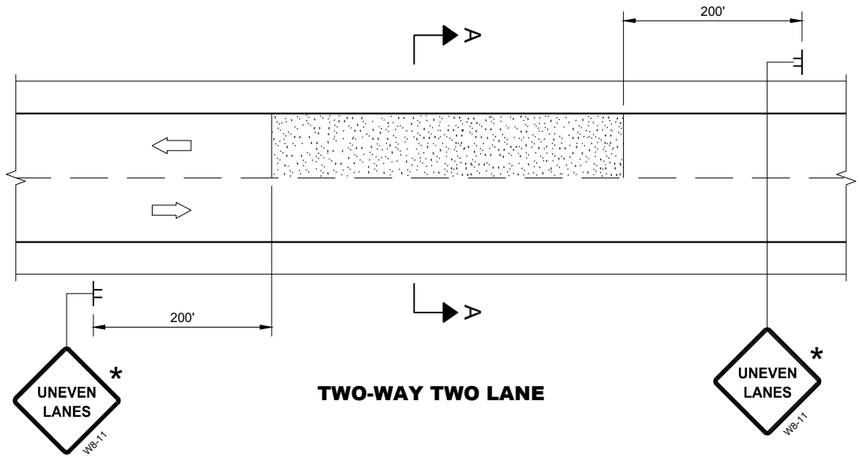
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

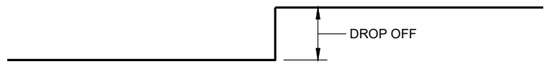
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

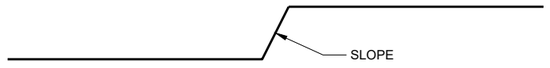
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

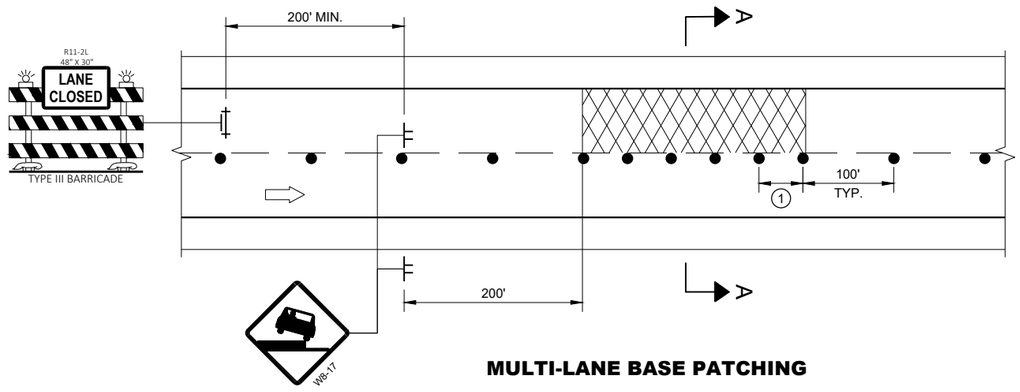


SECTION A - A

OR

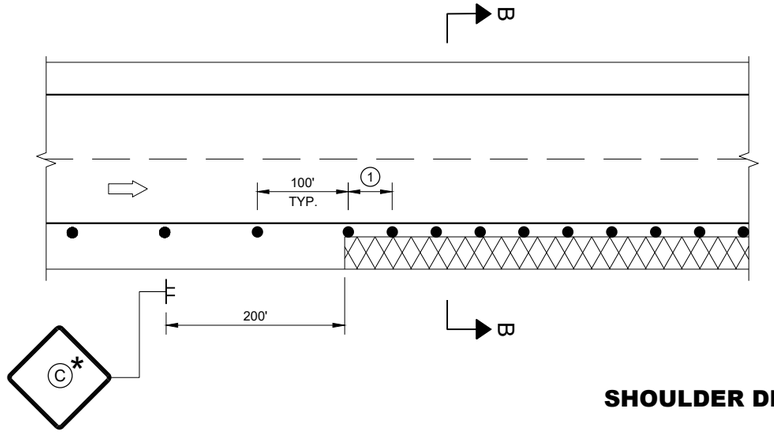


SECTION A - A

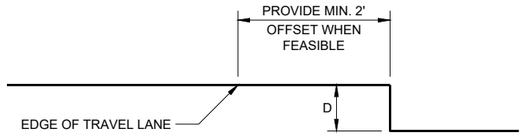


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

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.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

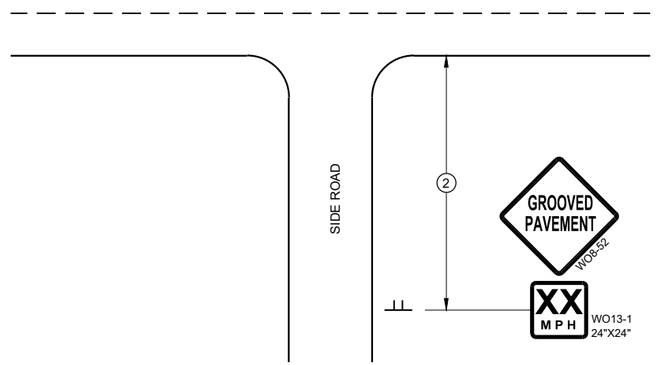
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

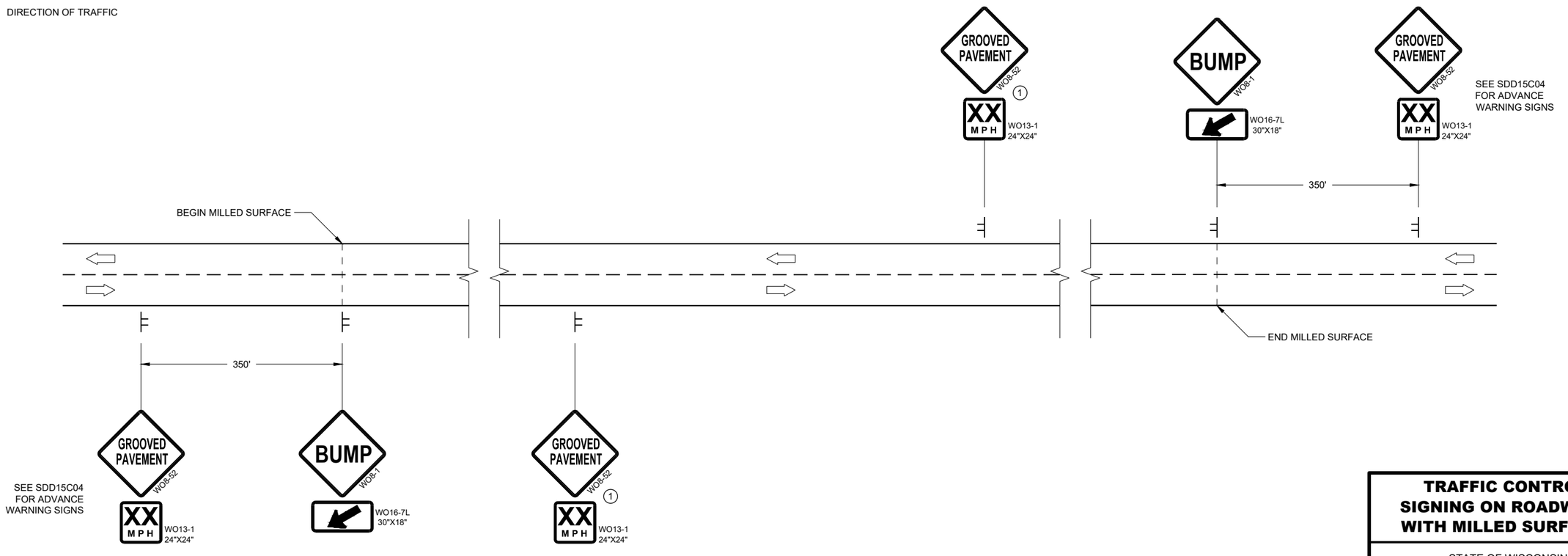
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D44 - 01

6

SDD 15D44 - 01

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



D2-1; 2.250" Radius, 0.750" Border

7

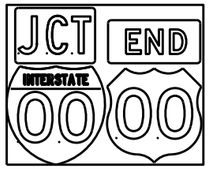
7

PROJECT NO:4090-05-71	HWY:STH 67	COUNTY:FOND DU LAC	PERMANENT SIGNING	SHEET NO: 92	E

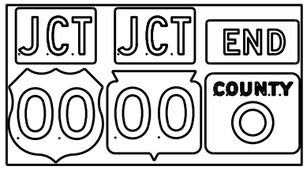
TYPICAL ASSEMBLIES



J1-1



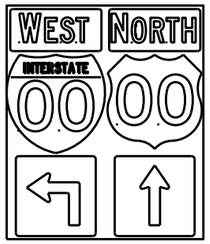
J1-2



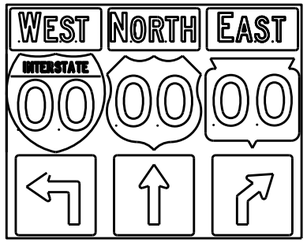
J1-3



J2-1



J2-2

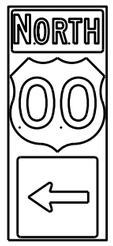


J2-3

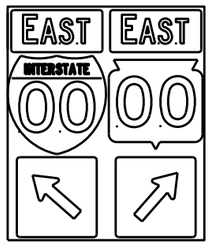


JV

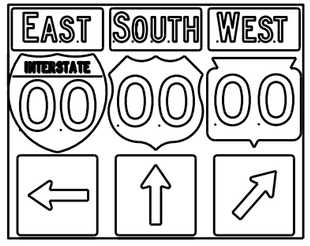
(Typical Vertical J-Assembly
See Note 10 and 11)



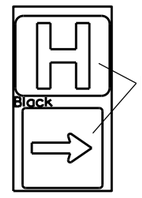
J3-1



J3-2



J3-3

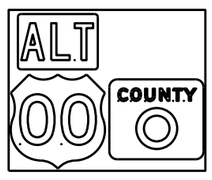


Blue Background

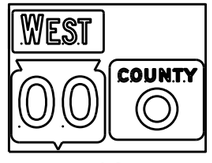
JH-1



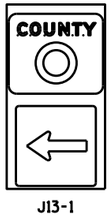
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

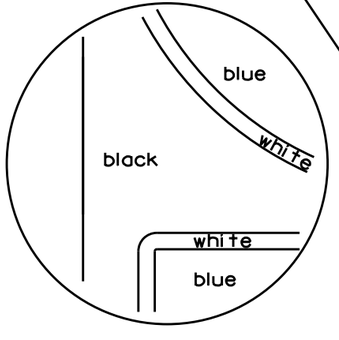


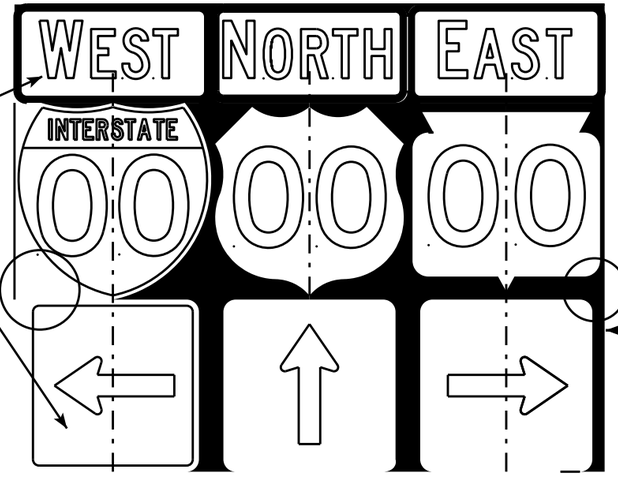
J23-1

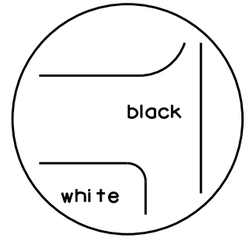


J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

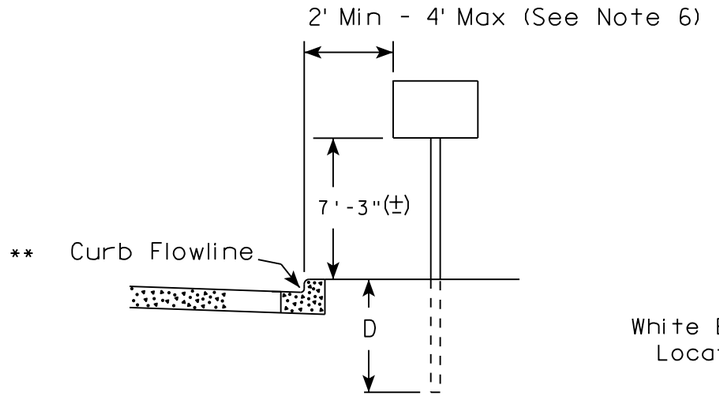
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

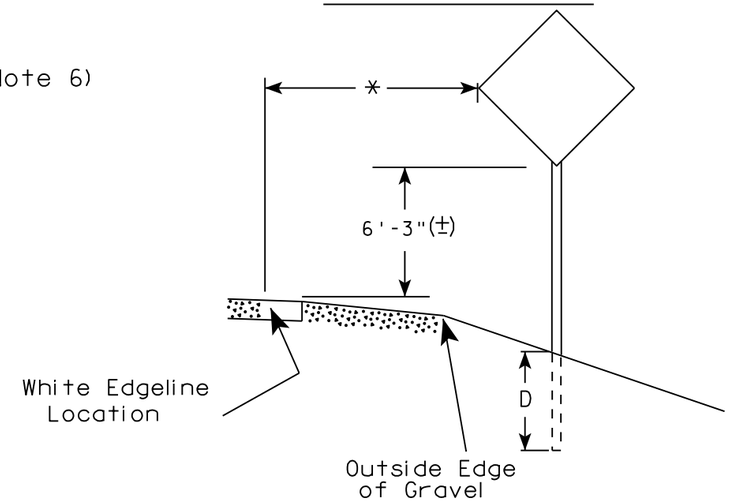
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

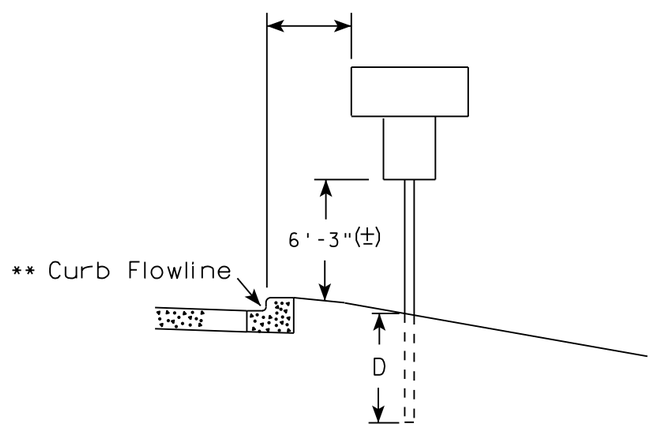
WISDOT/CADDS SHEET 42

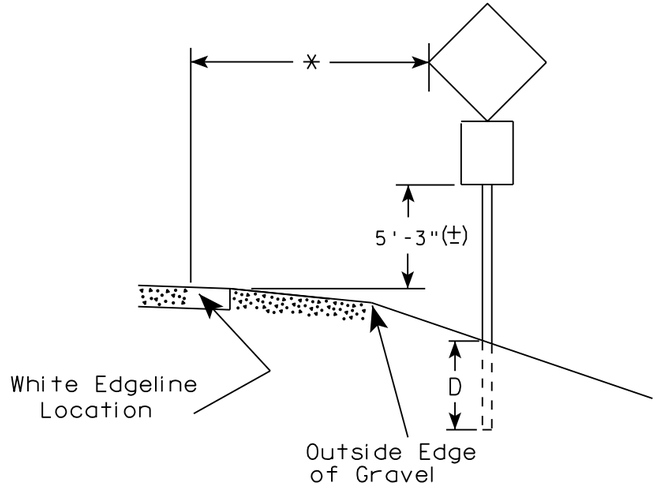
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

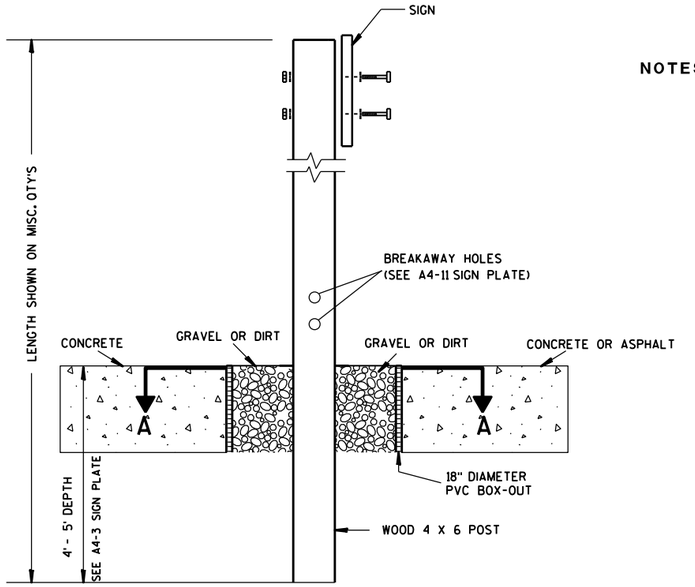
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

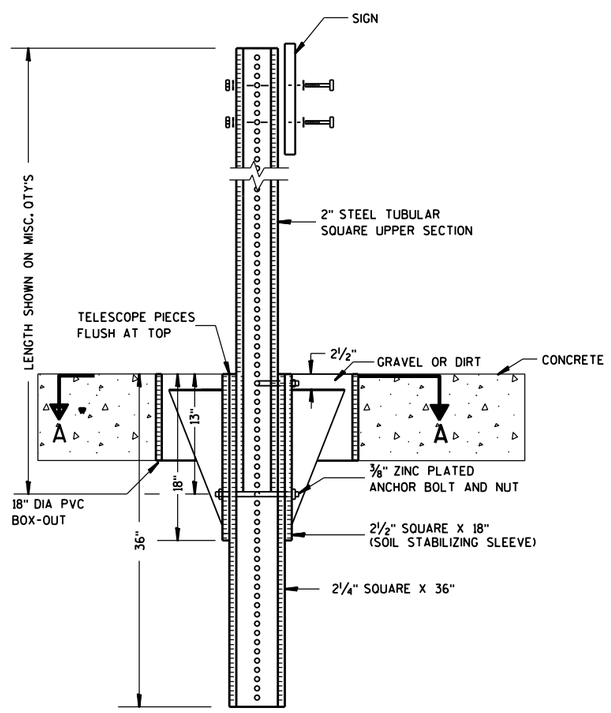
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 94	E



ELEVATION VIEW

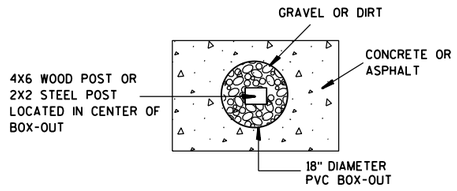
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

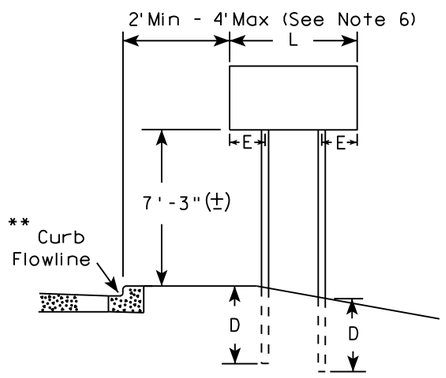
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

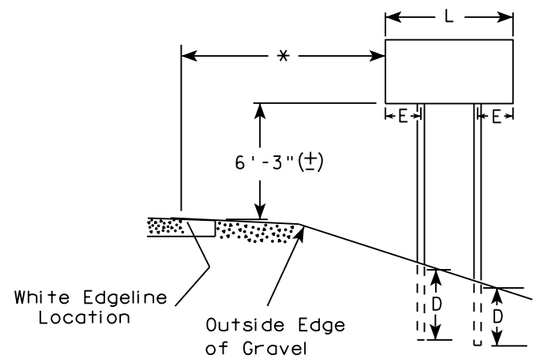
DATE 1/27/14 PLATE NO. A4-3B.1

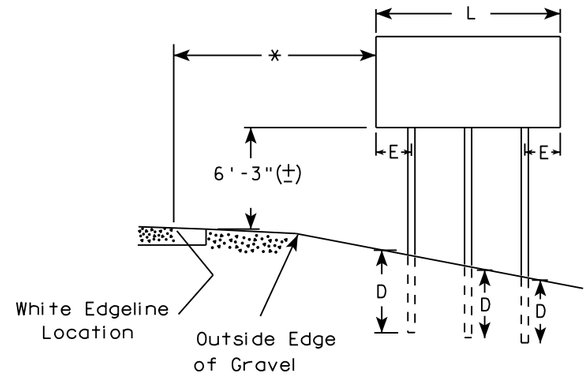
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

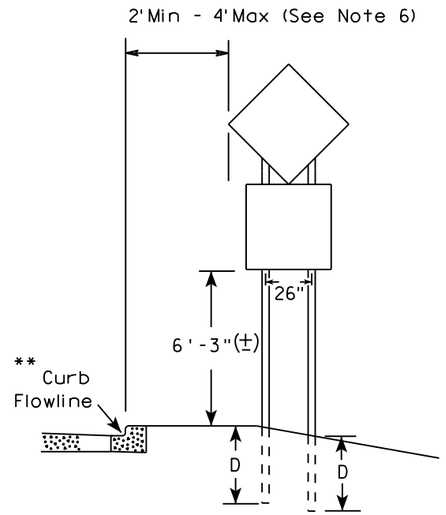
URBAN AREA



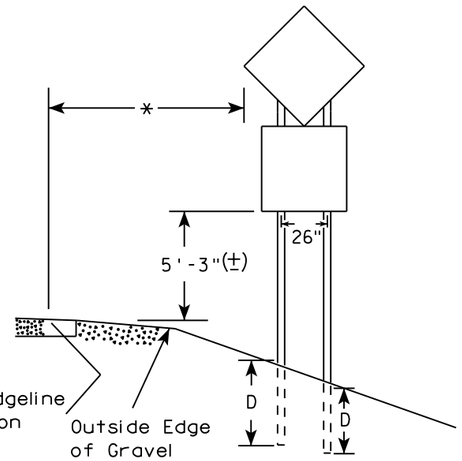
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

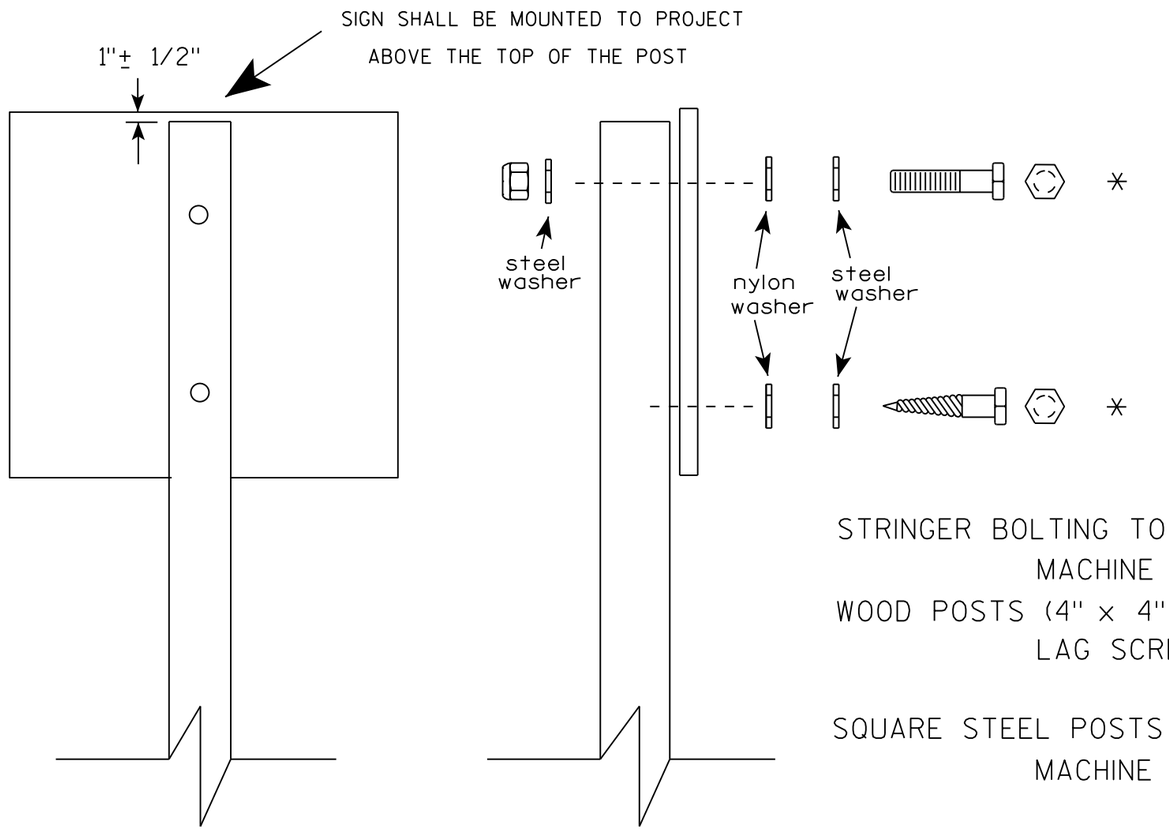
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 96	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

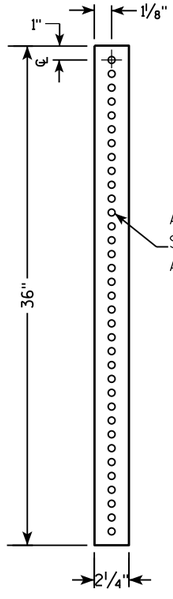
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

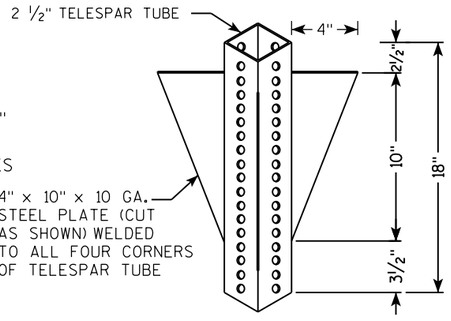
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

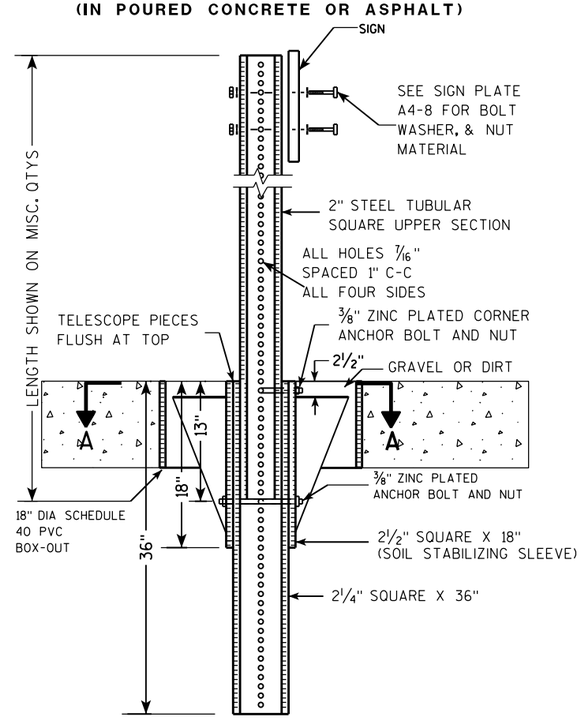
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



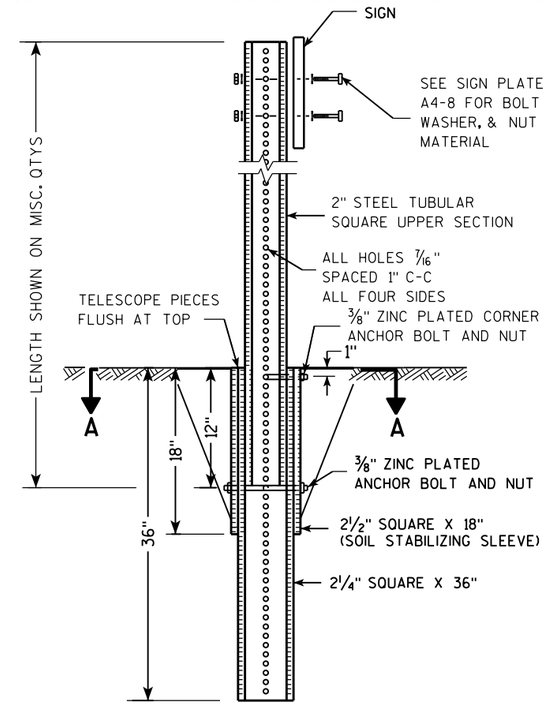
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

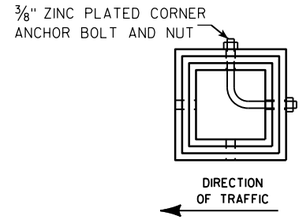


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

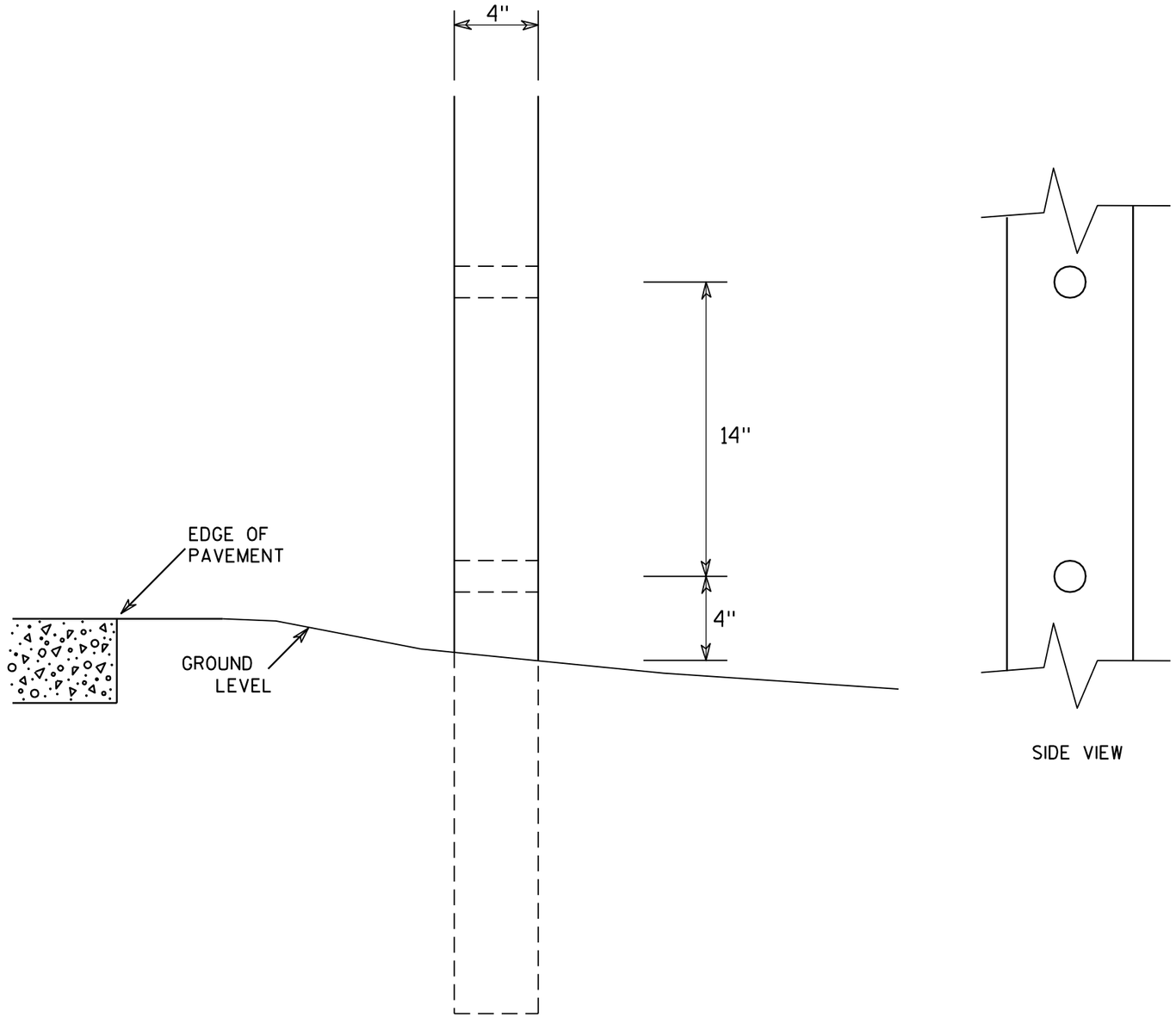
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 98 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

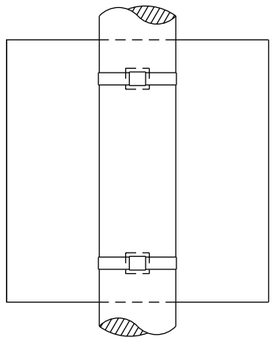
APPROVED Chester J Spang
for State Traffic Engineer

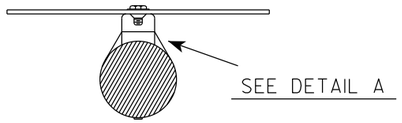
DATE 3/27/97 PLATE NO. A4-11.2

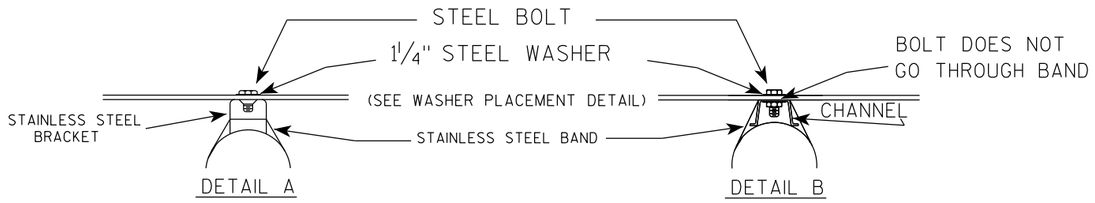
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 99	E

BANDING

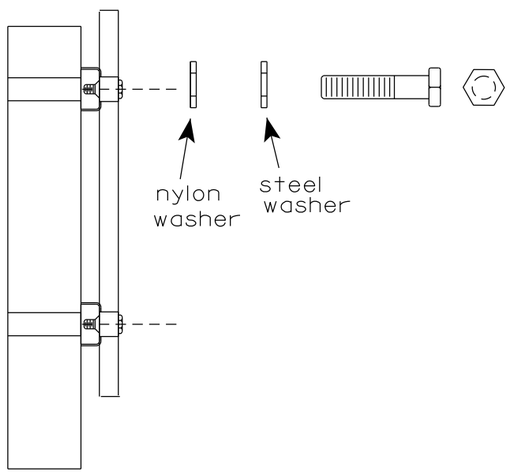
SINGLE SIGN







WASHER PLACEMENT

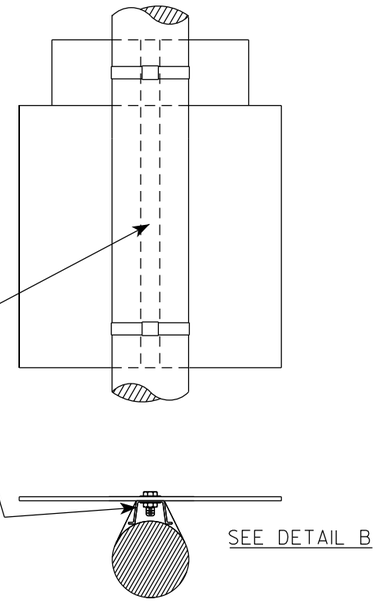


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

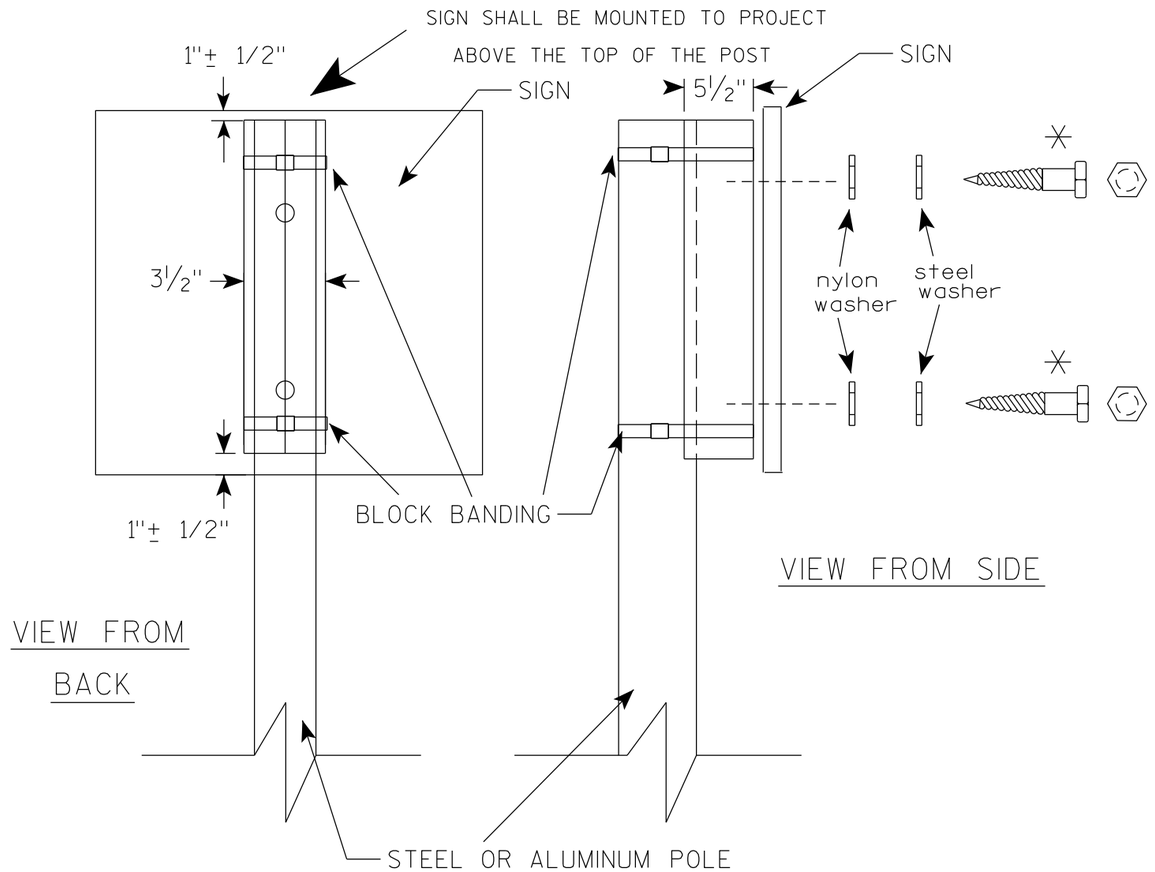
DATE 6/10/19 PLATE NO. A5-9.4

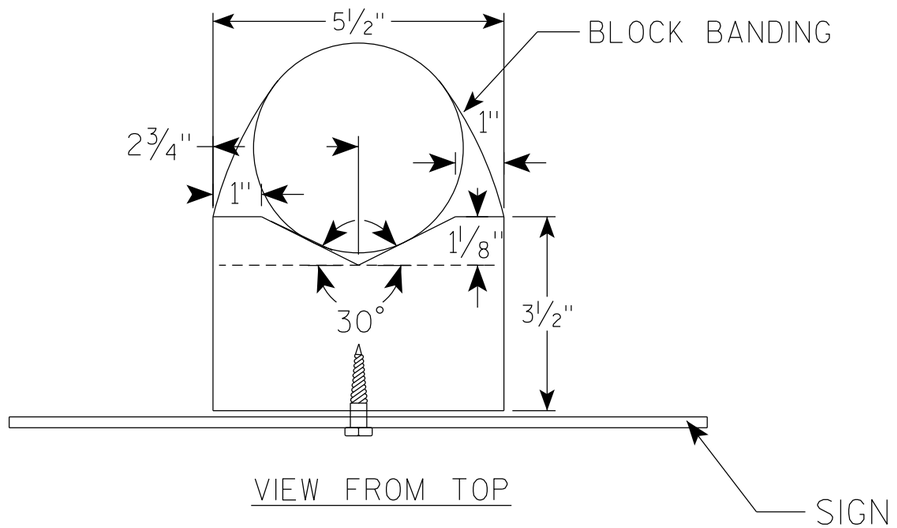
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 100	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

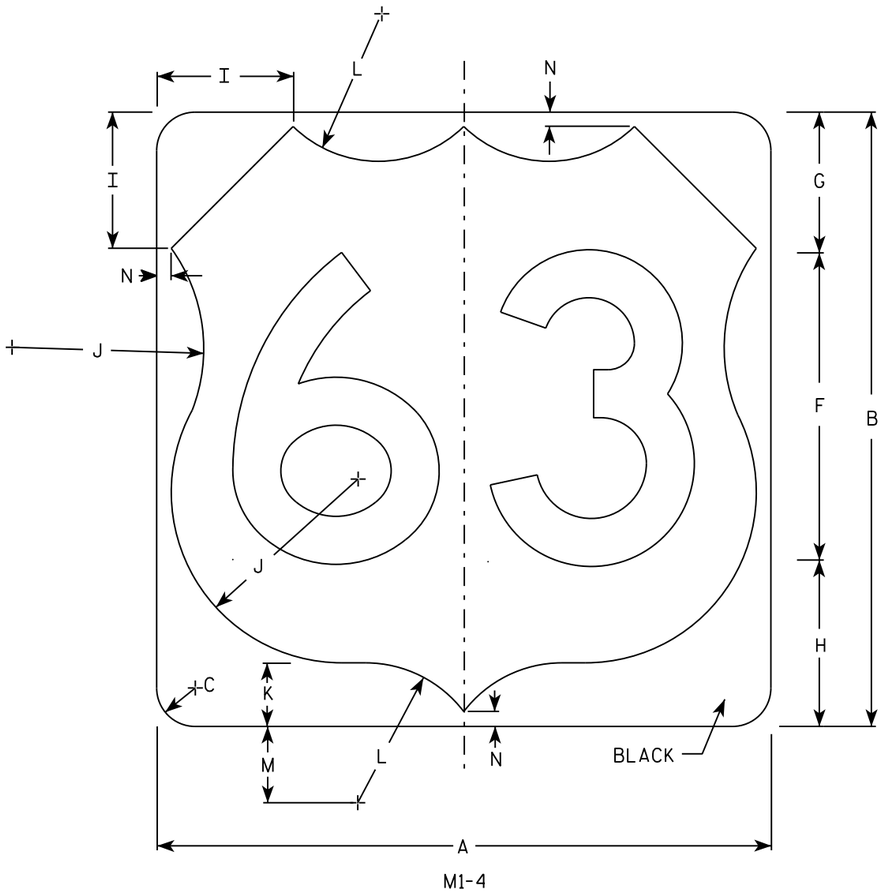
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

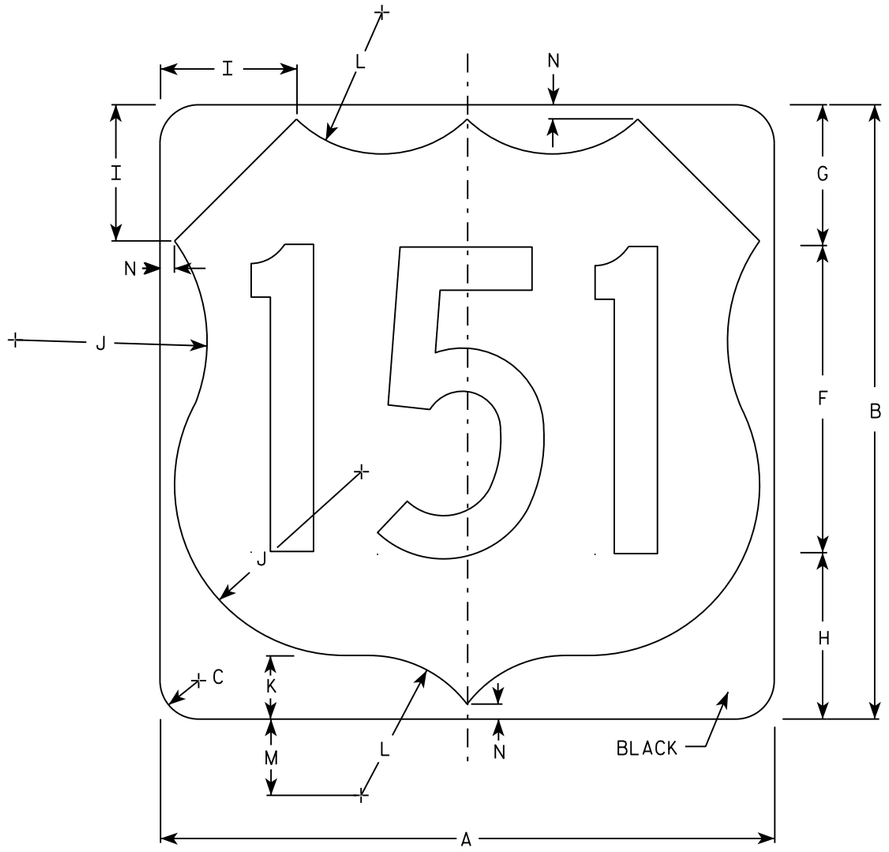
PROJECT NO: | SHEET NO: 101 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. ft.
1																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

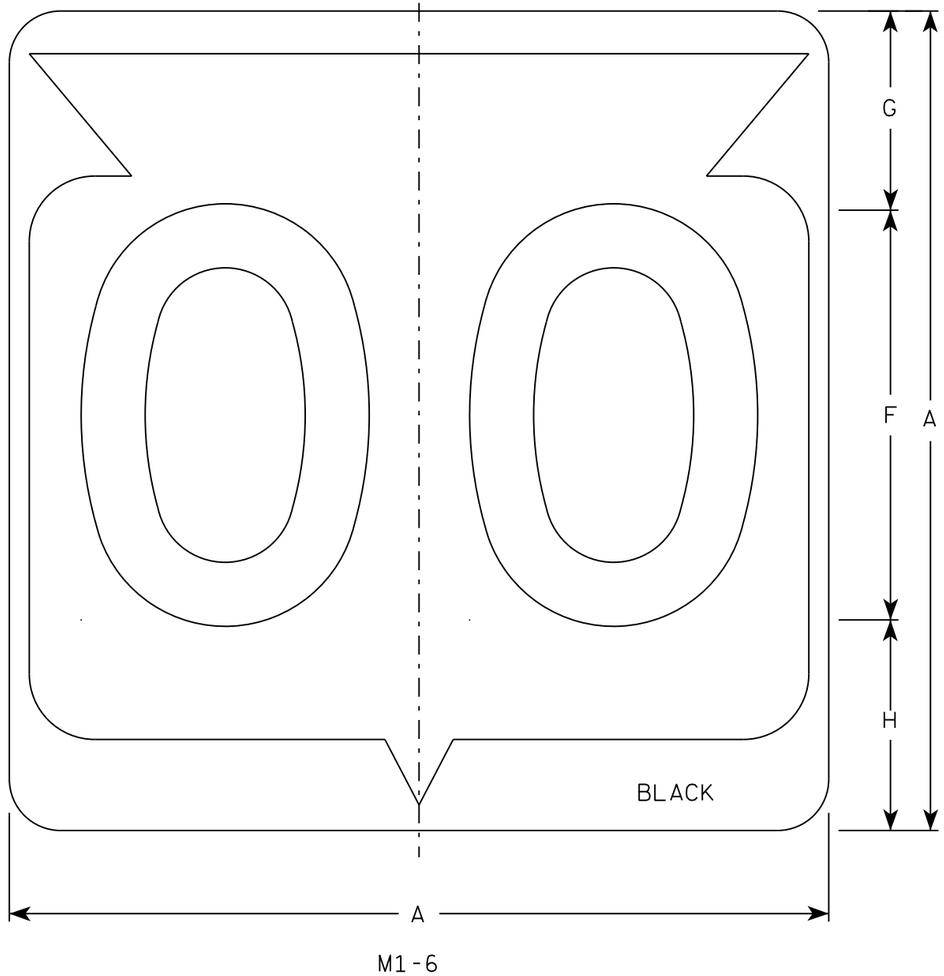
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

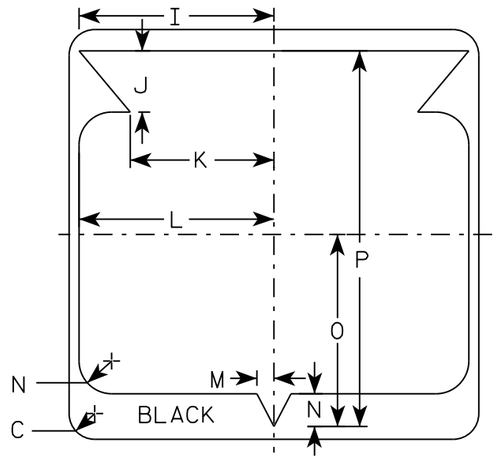
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 102 | E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

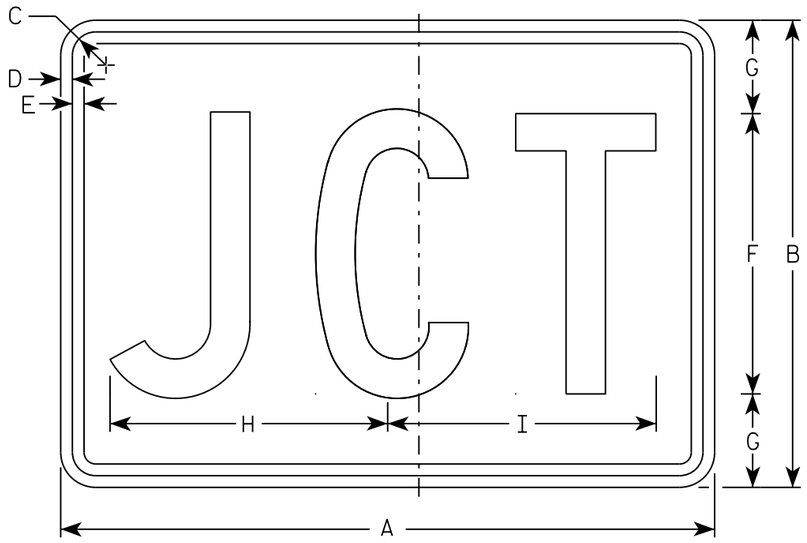
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

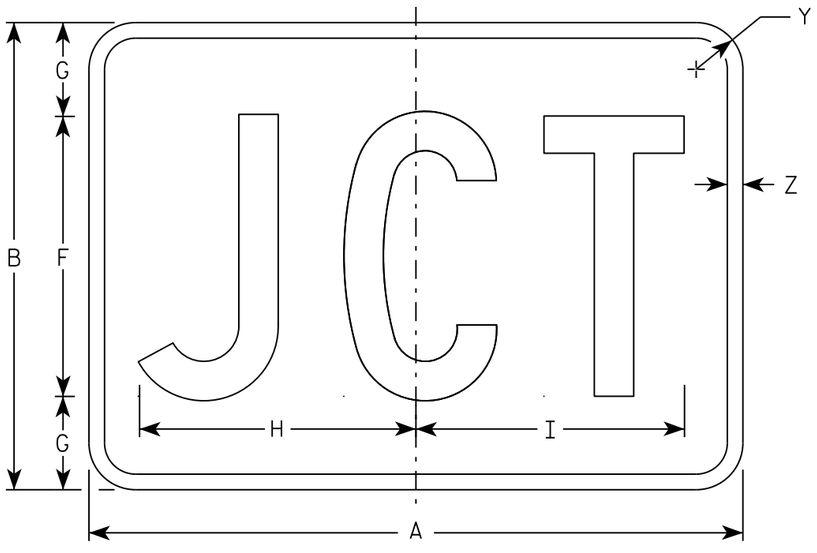
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 103	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

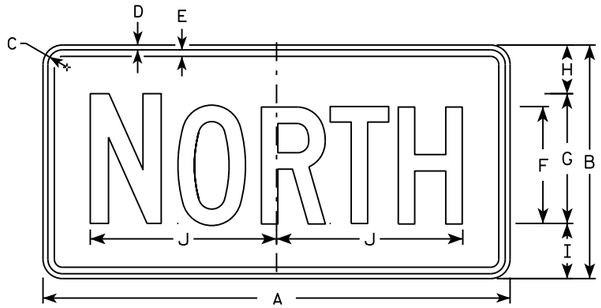
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

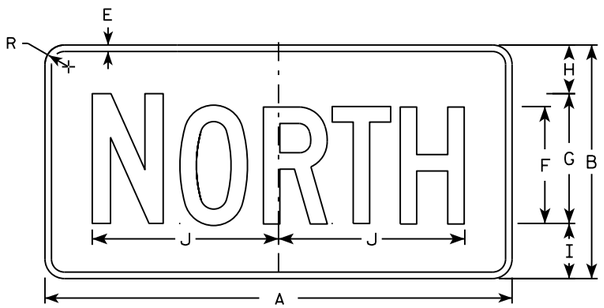
DATE 10/15/15 PLATE 104 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



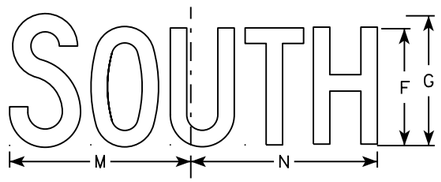
MB3-1
MK3-1
MN3-1



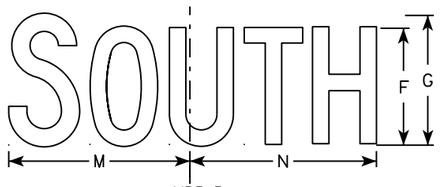
M3-2
MM3-2
MP3-2



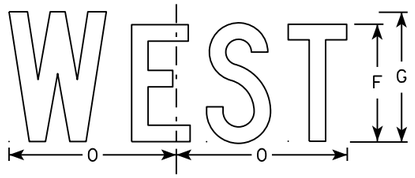
MB3-2
MK3-2
MN3-2



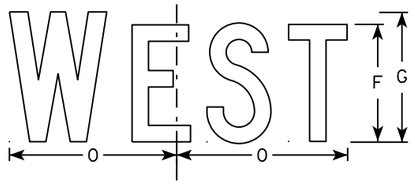
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

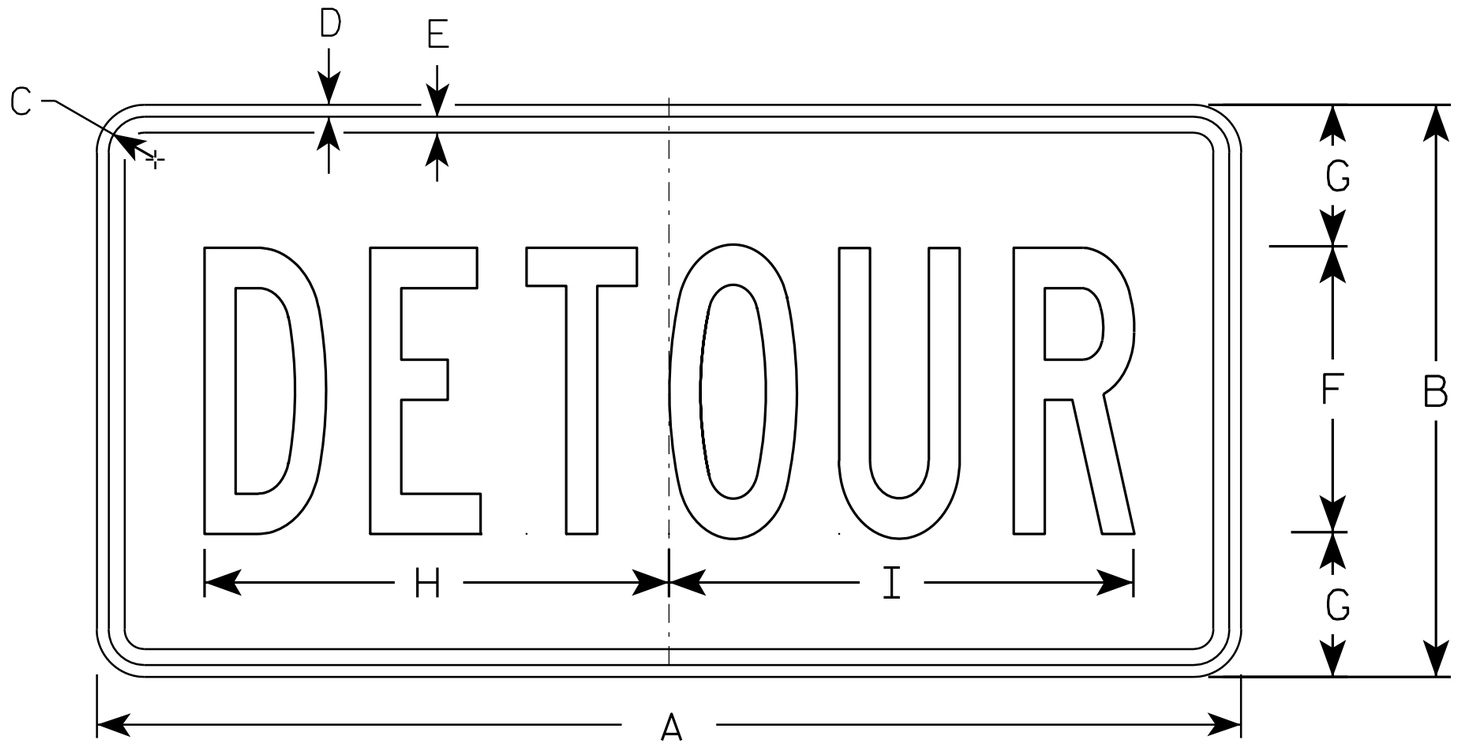
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

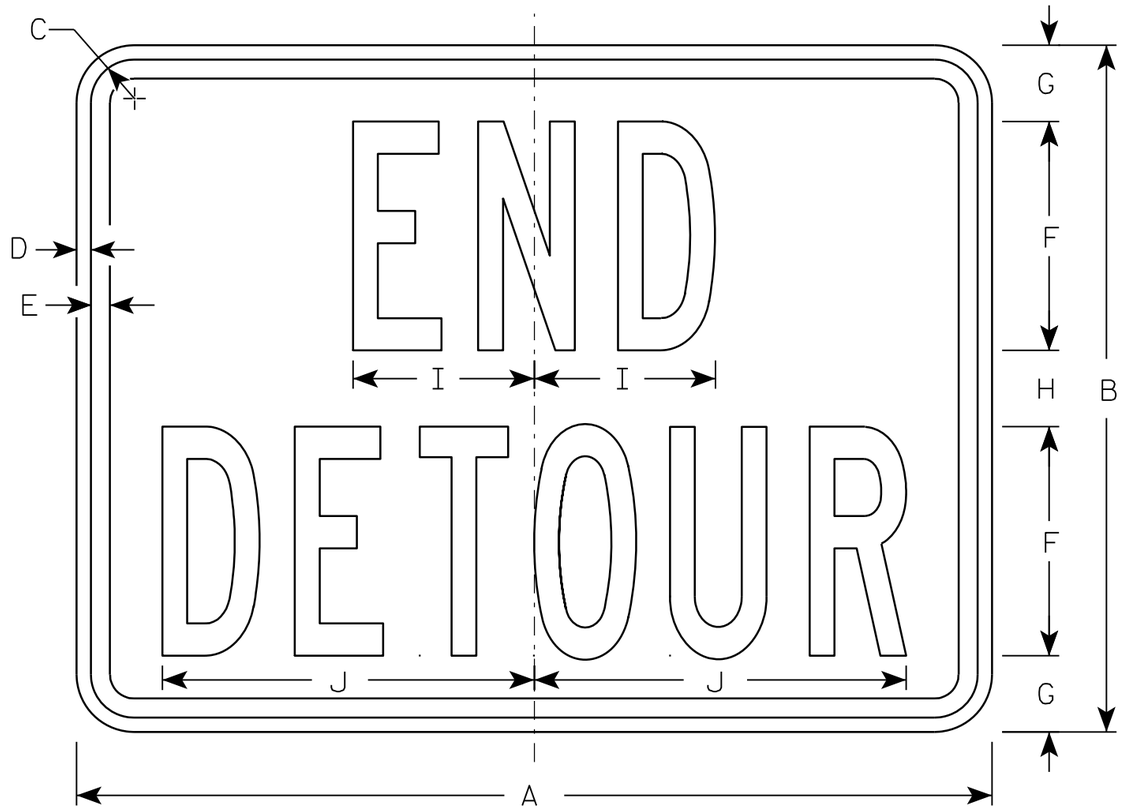
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 106	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

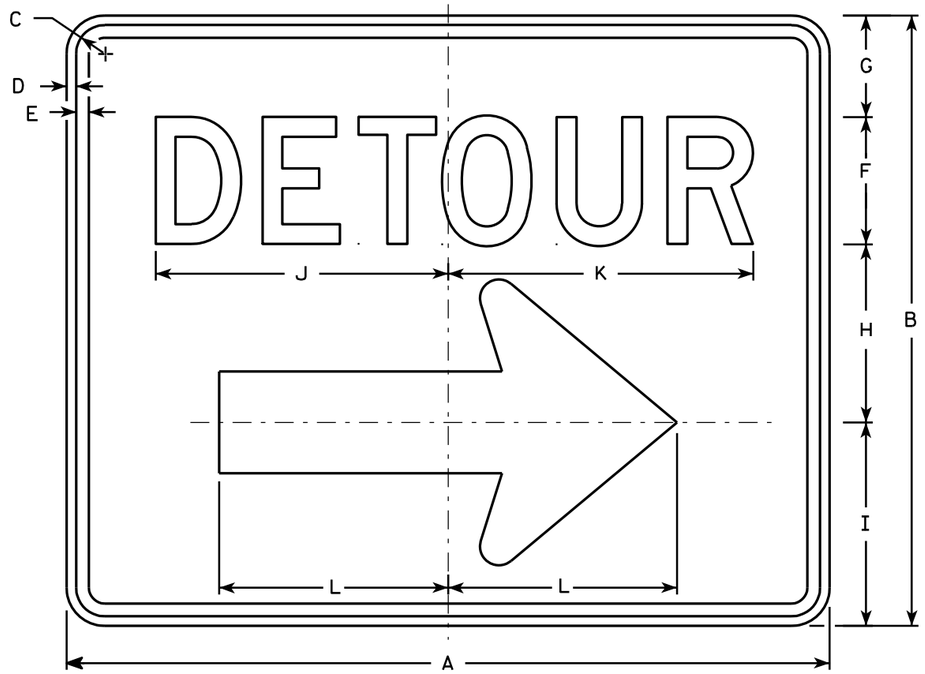
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

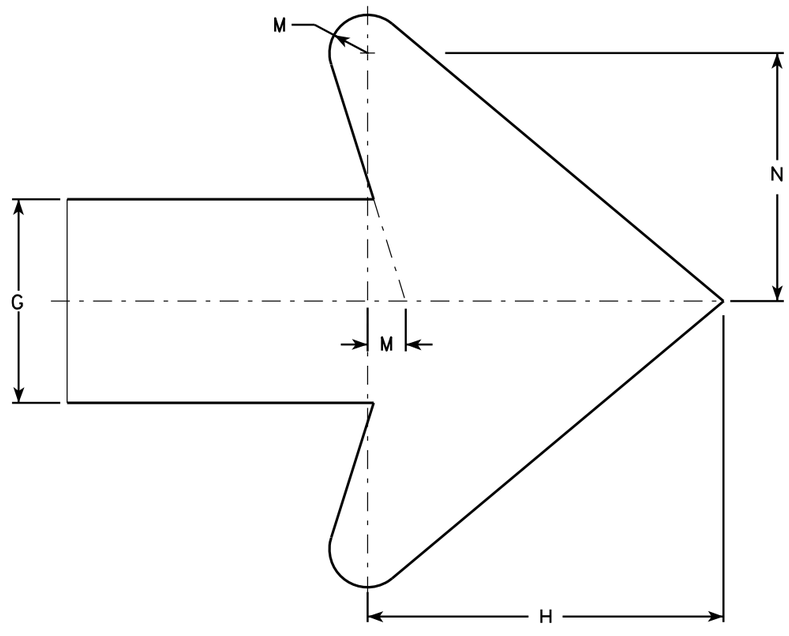
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 107	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

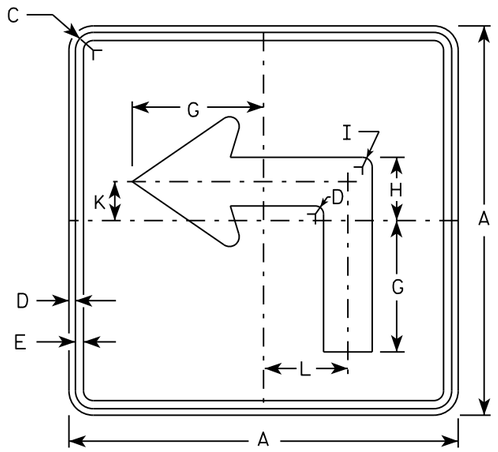
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

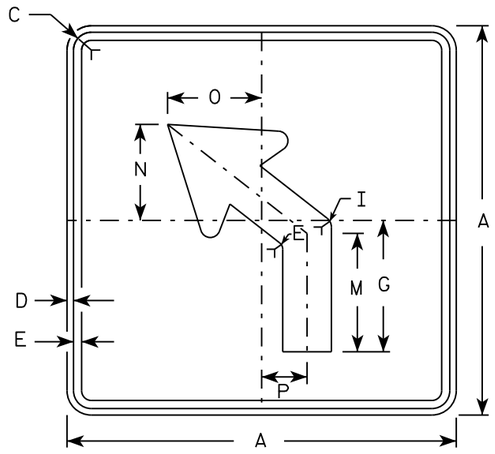
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

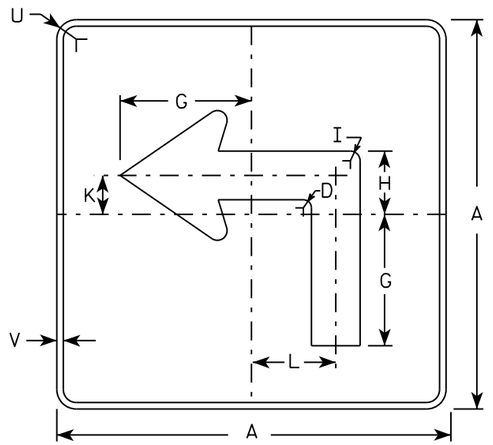
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 108 | E



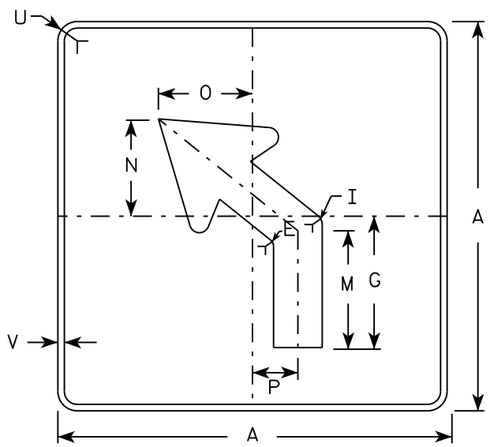
M5-1L
MM5-1L
MO5-1L
MP5-1L



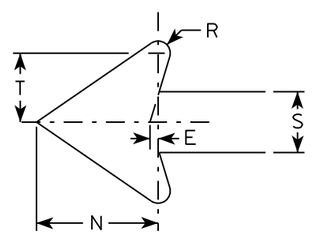
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

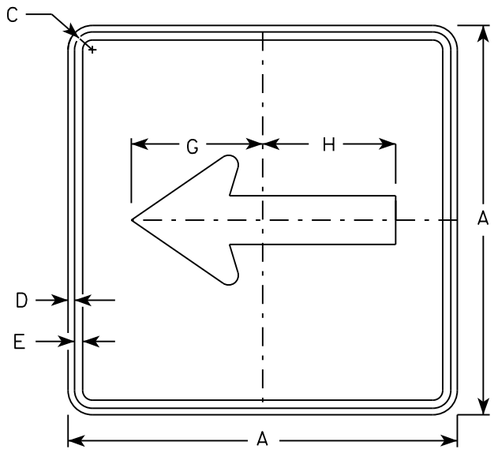
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

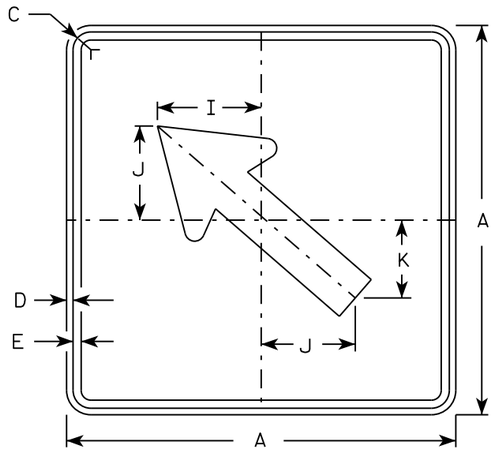
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



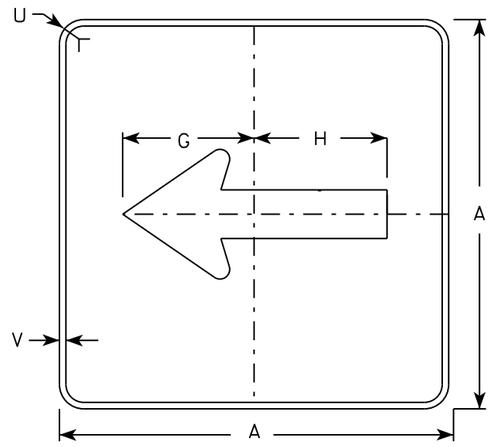
M6-1
MM6-1
MO6-1
MP6-1



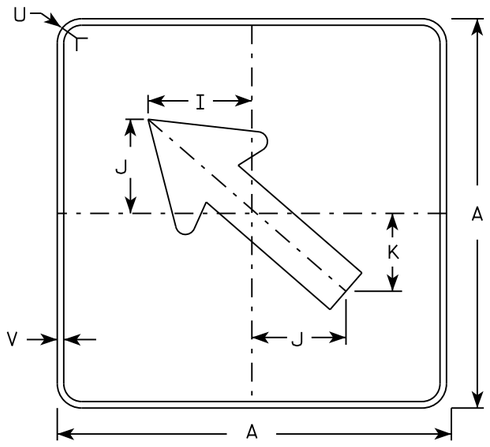
M6-2
MM6-2
MO6-2
MP6-2

NOTES

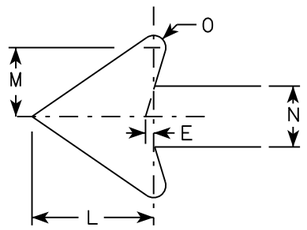
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

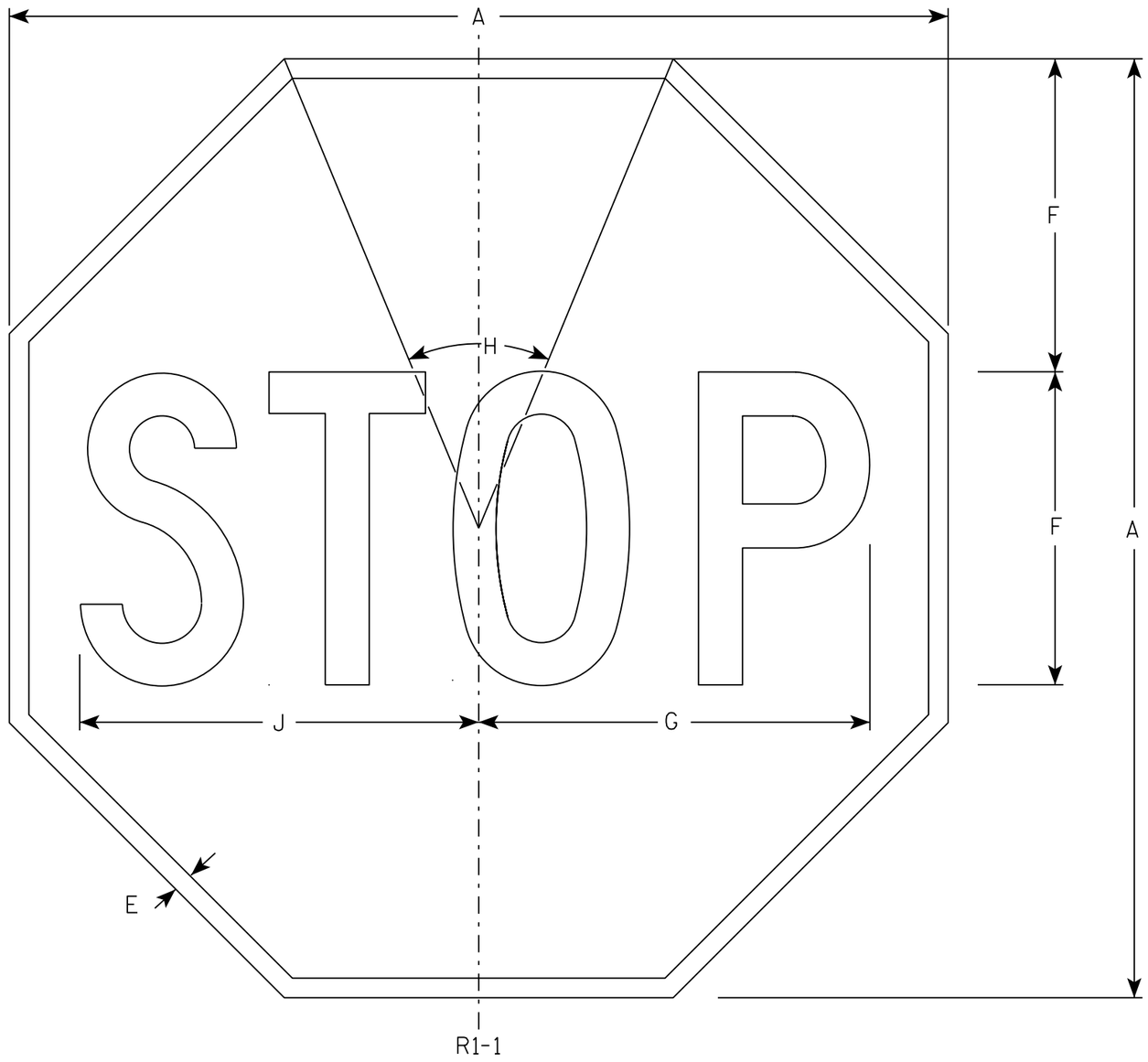
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 110 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

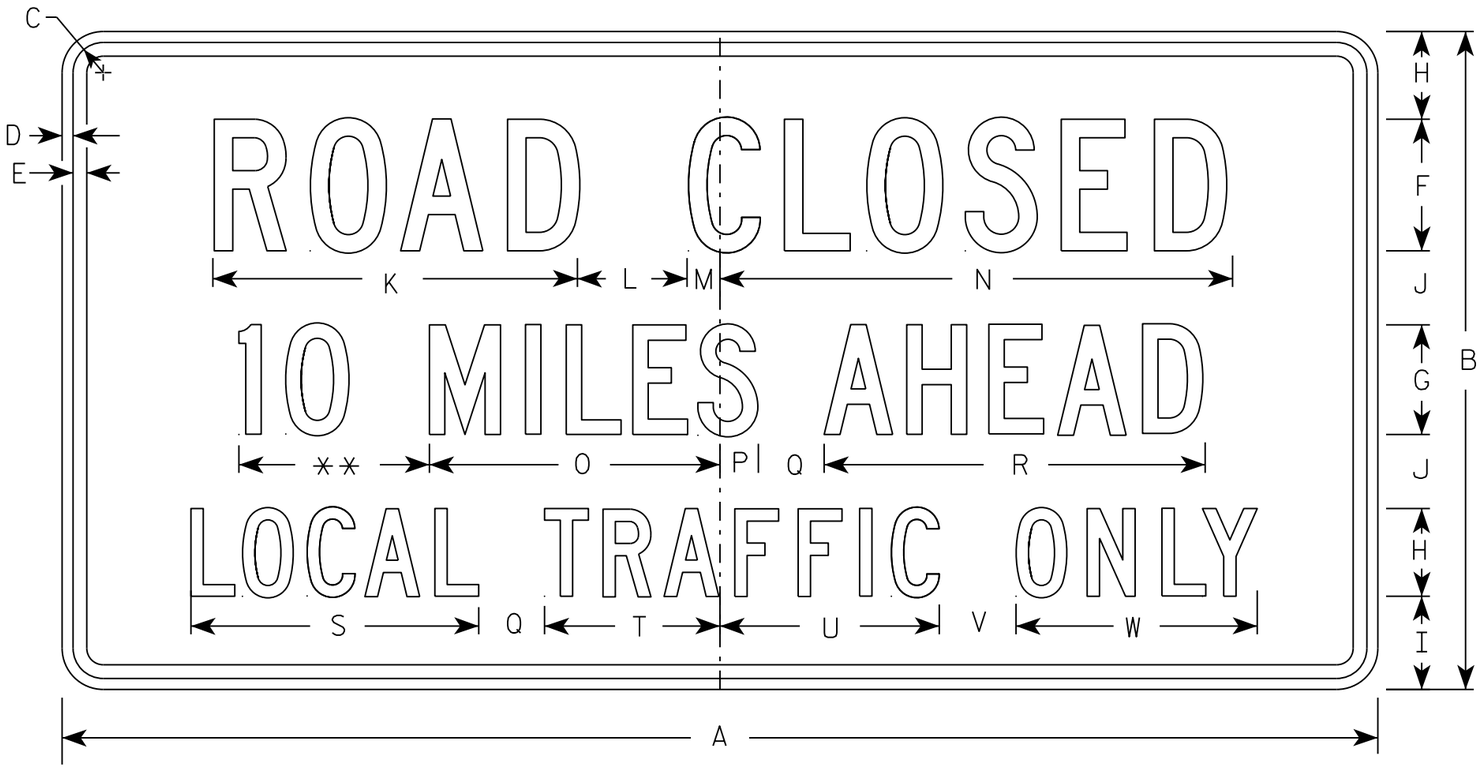
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 111	E

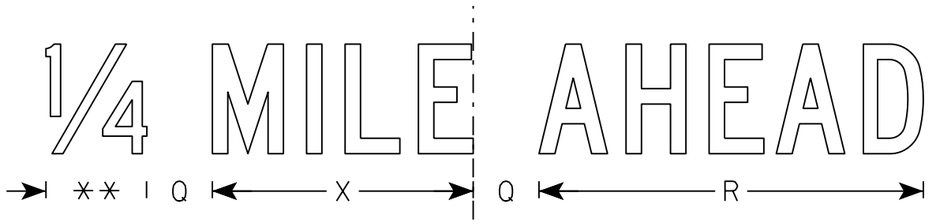
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

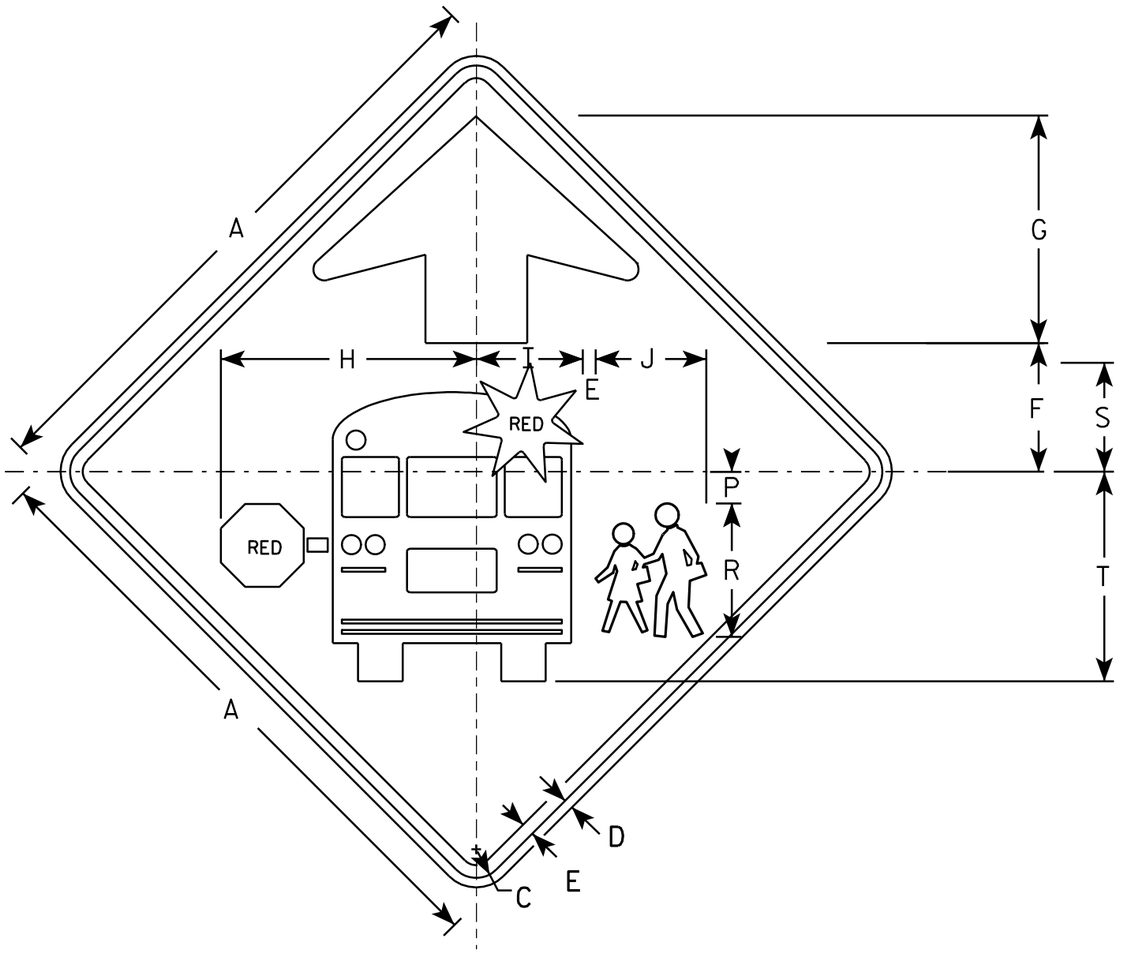
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

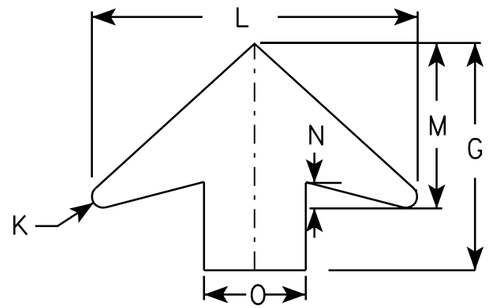
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 112	E



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

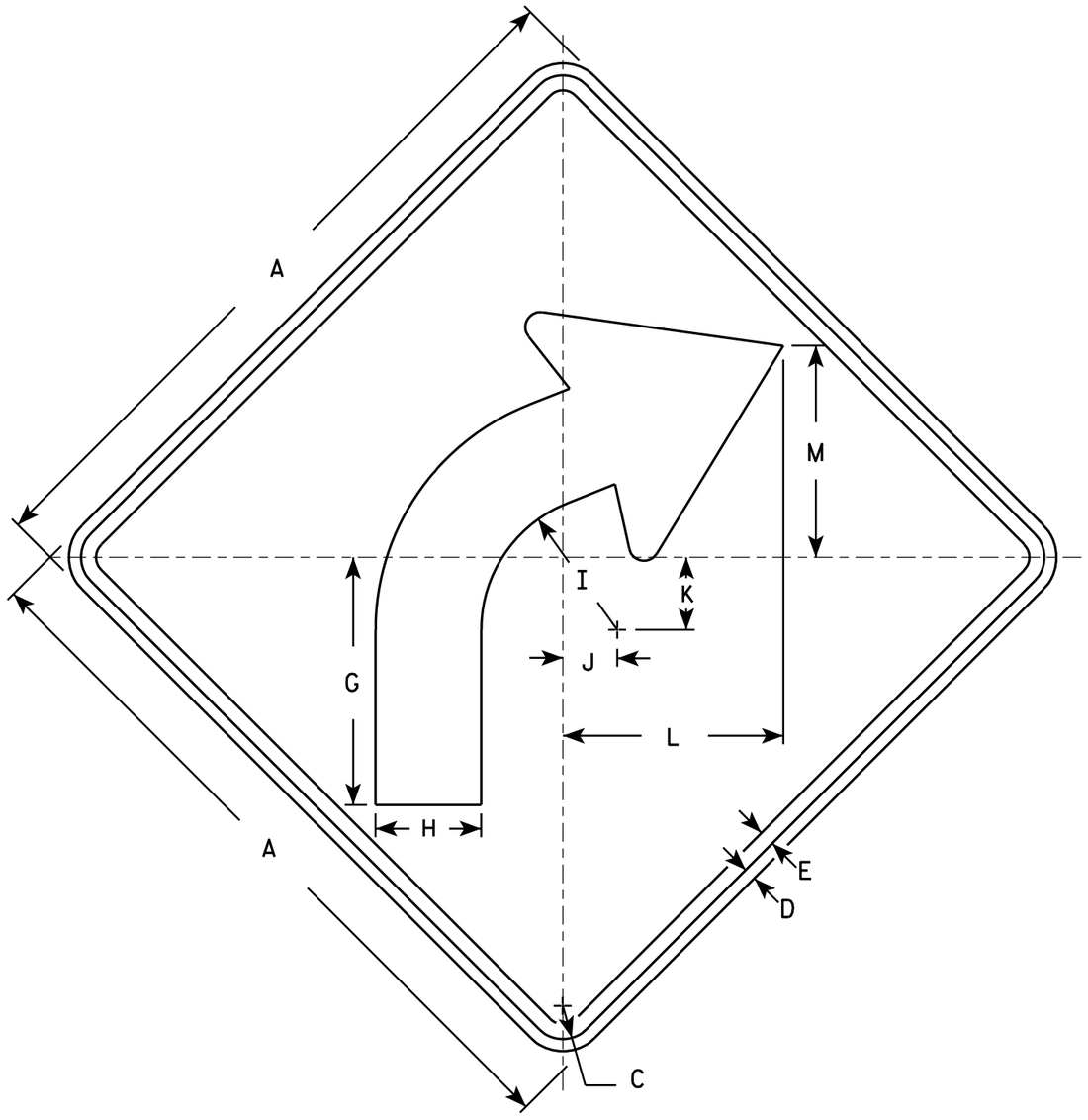
DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

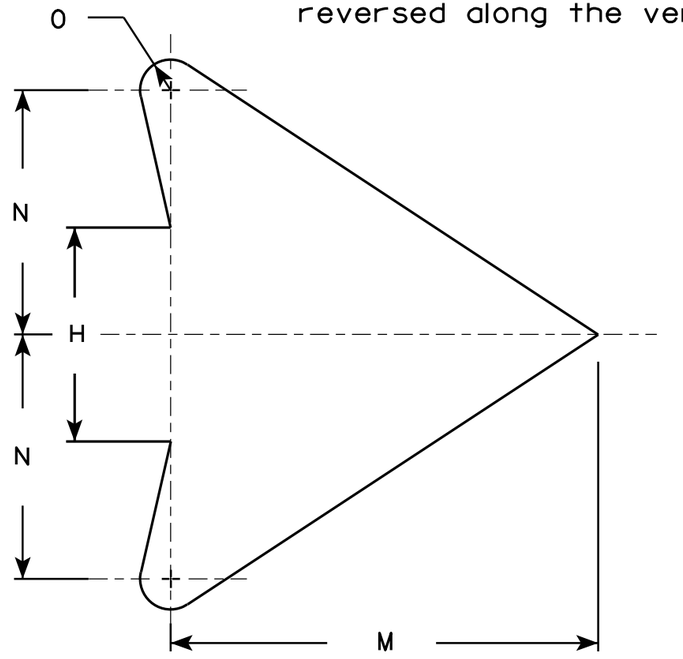
SHEET NO: 113 E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

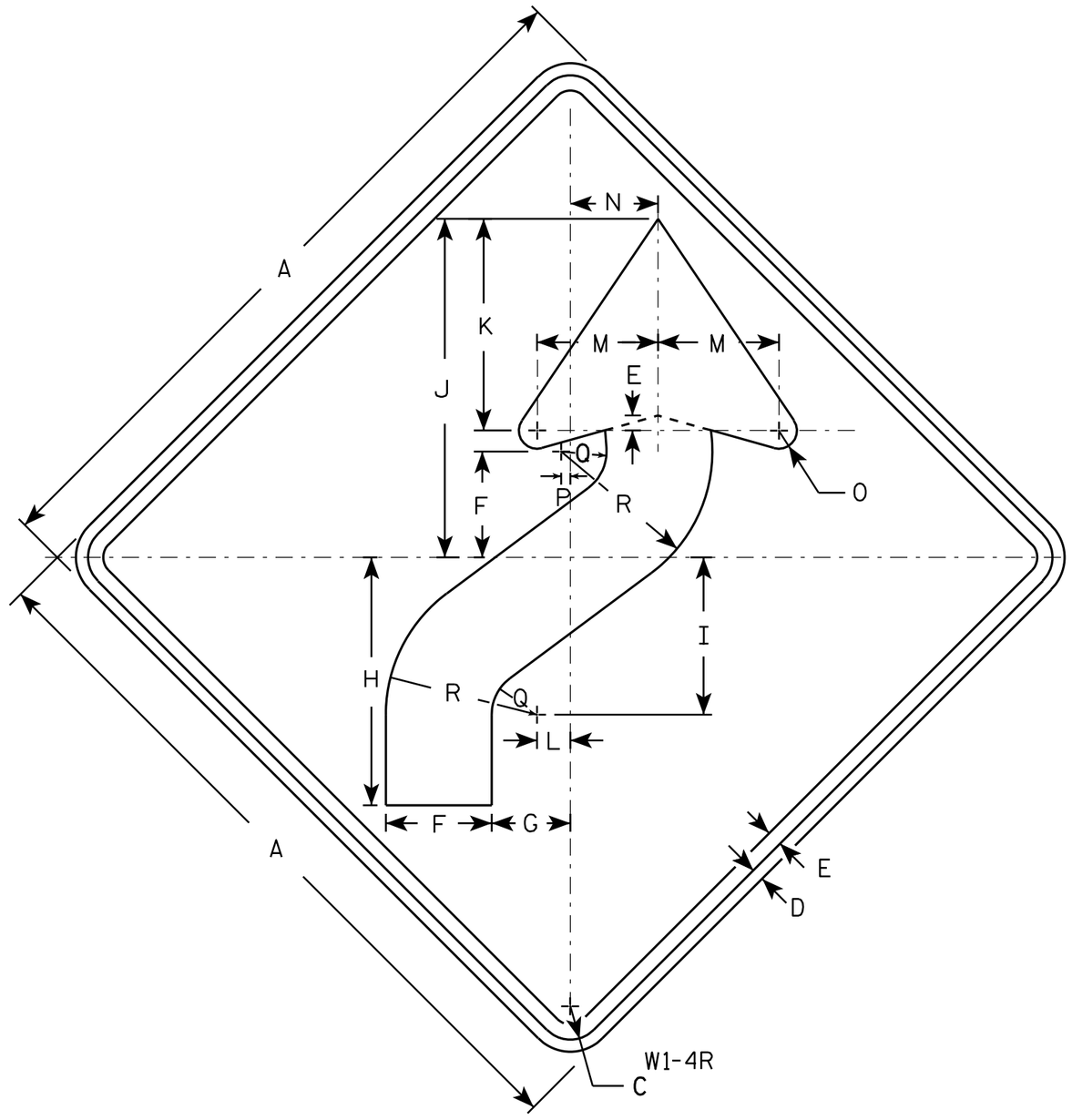
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 114	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

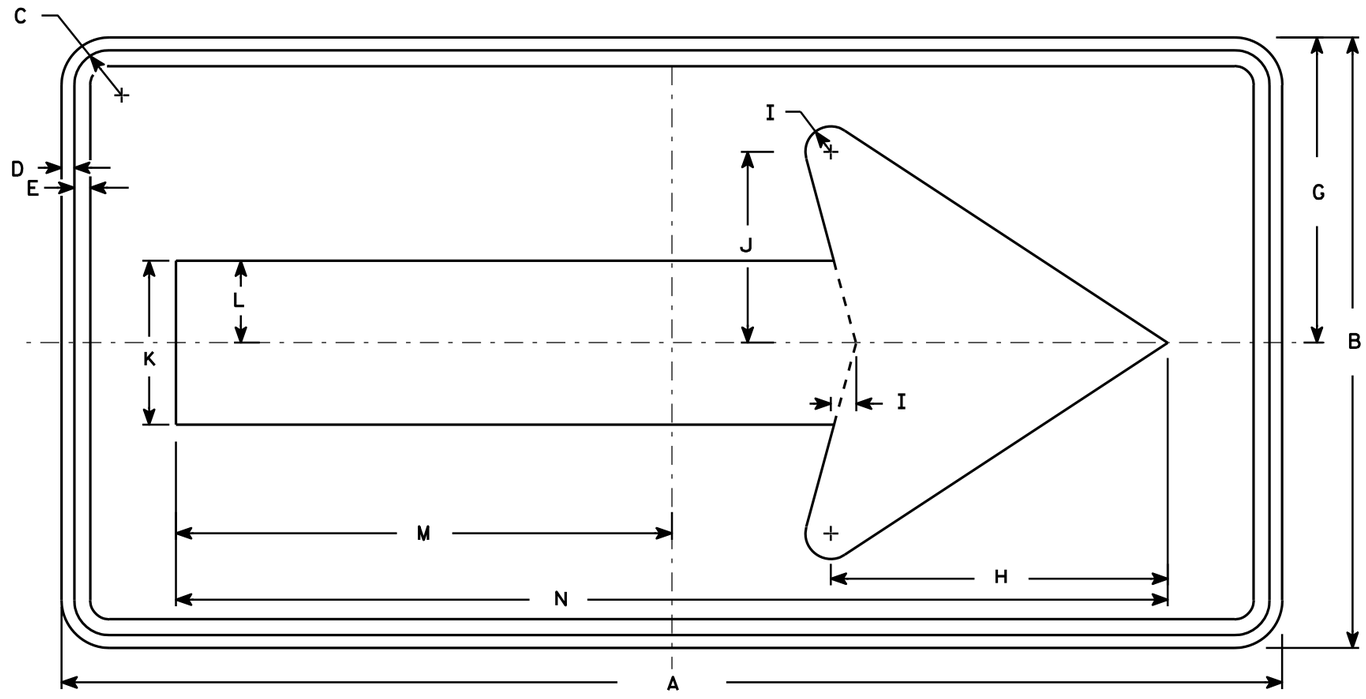
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 115 | E



W1-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

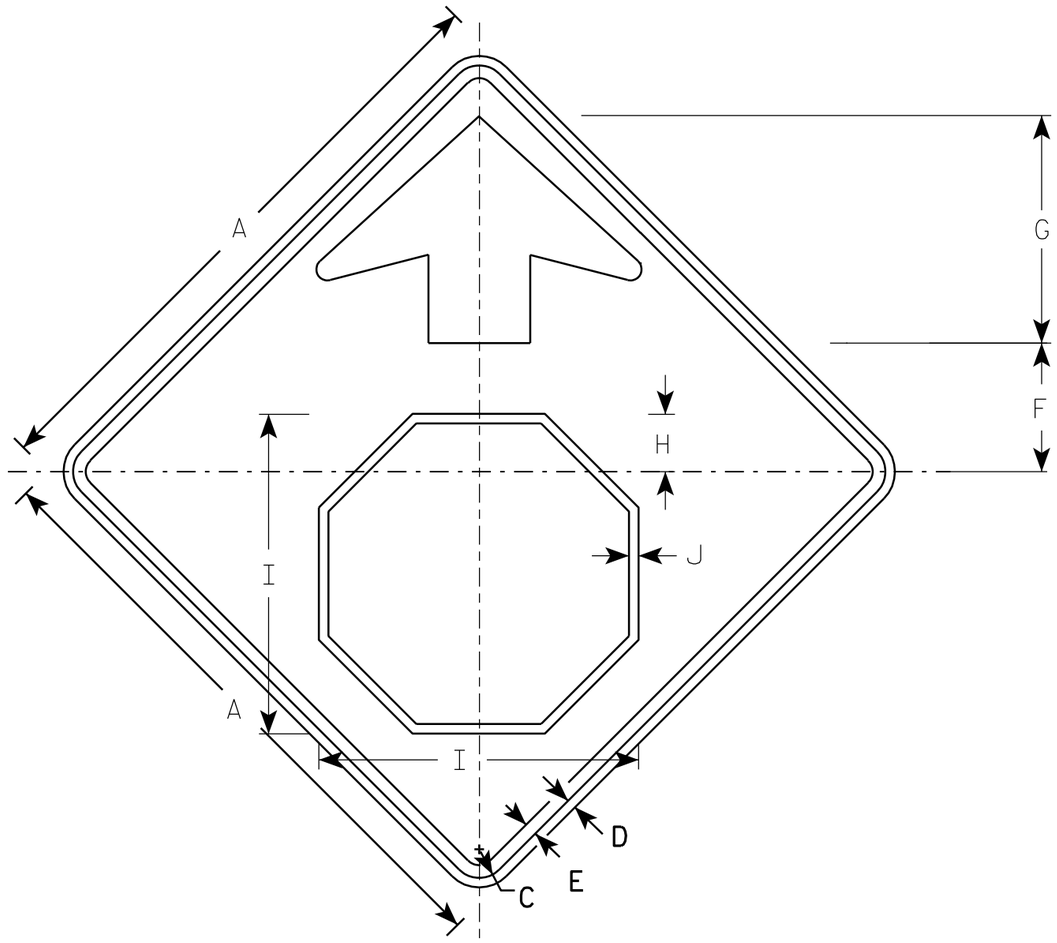
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

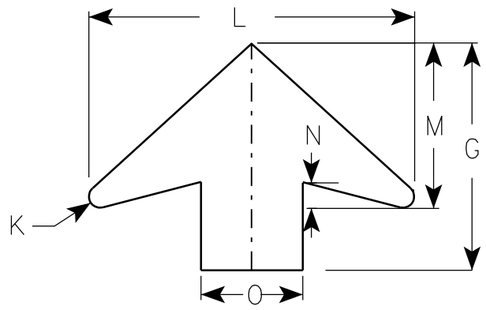
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 116



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

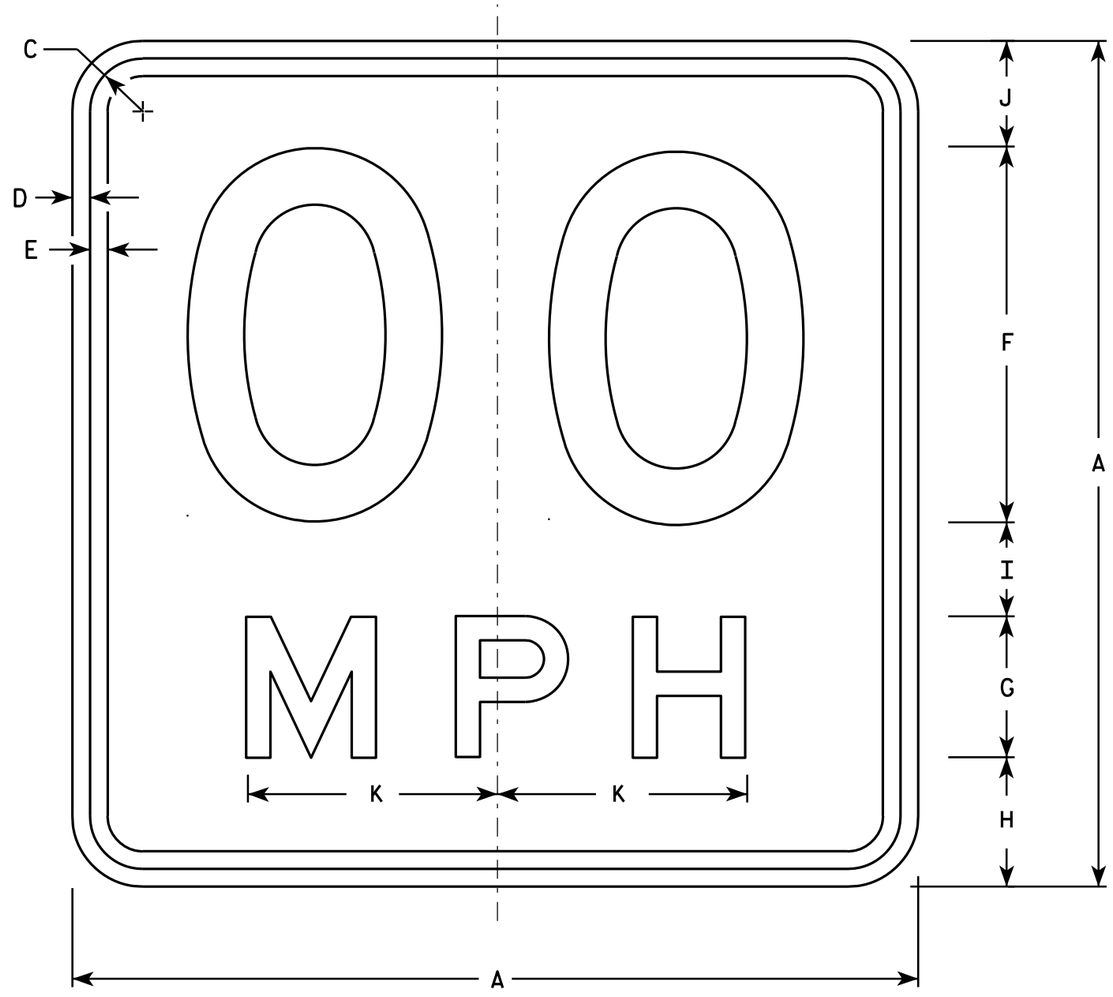
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 117 E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

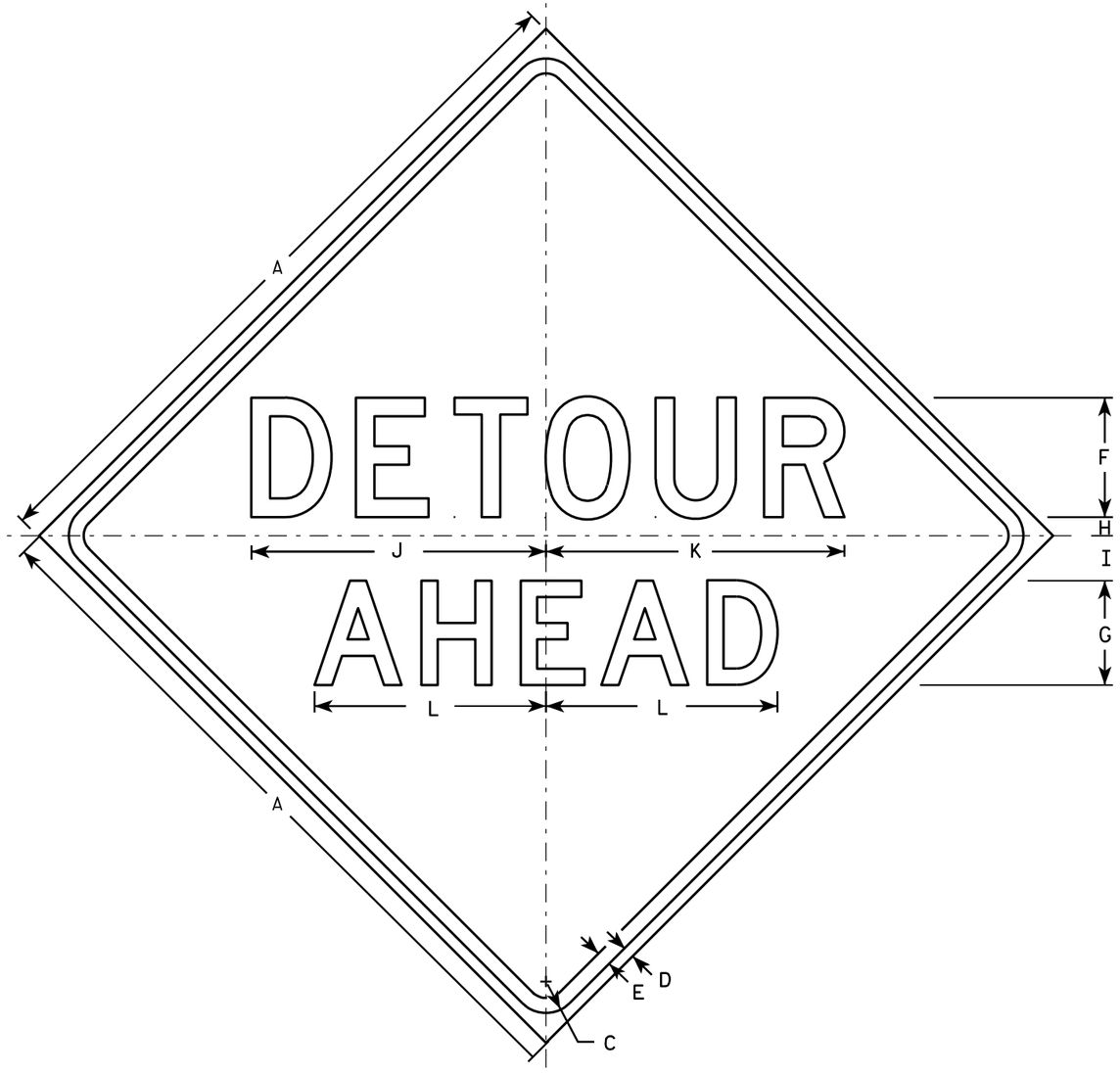
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

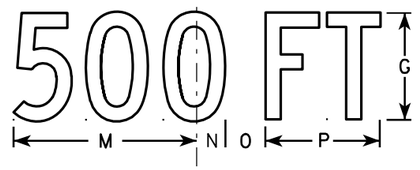
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

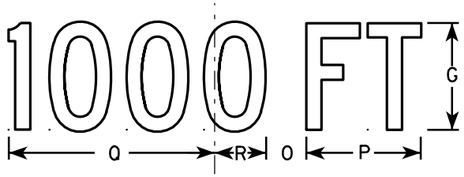
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 118 | E



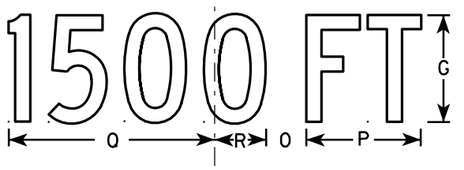
W20-2A



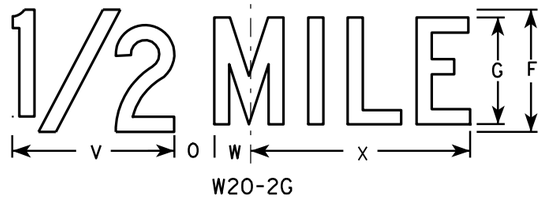
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

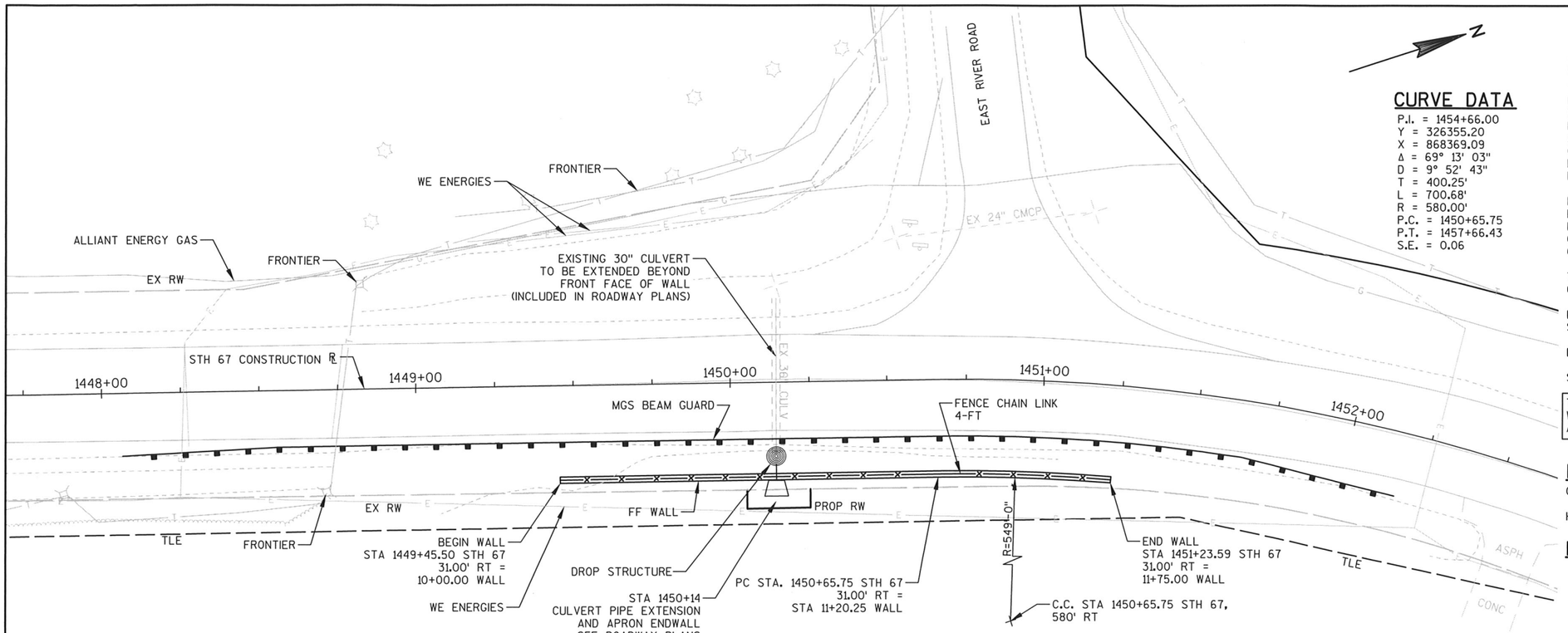
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

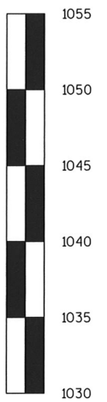
DATE 3/18/11 PLATE NO. W20-2.6

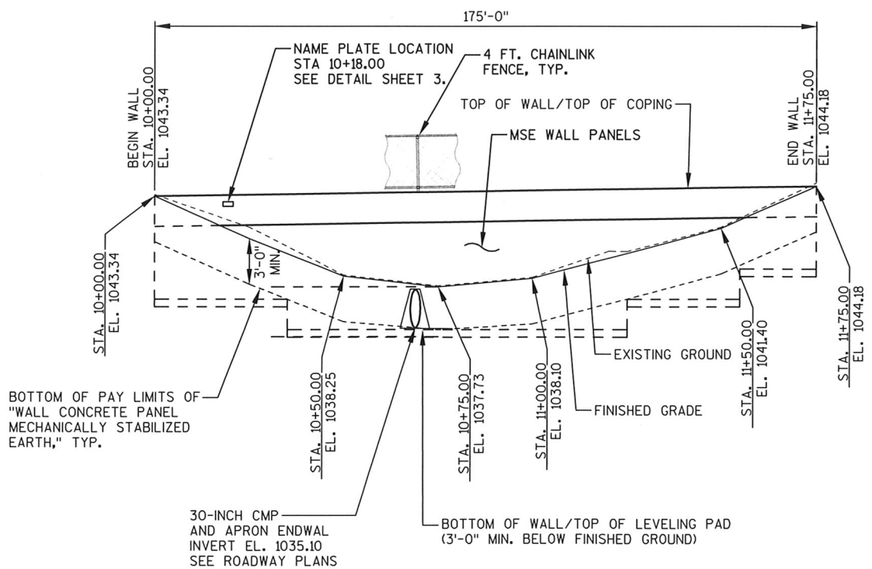
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 119	E



PLAN

(WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH)





ELEVATION

LOOKING WEST AT F.F. OF WALL
(DISTANCES AND STATIONS ARE GIVEN ALONG FRONT FACE OF WALL)

CURVE DATA

P.I. = 1454+66.00
Y = 326355.20
X = 868369.09
Δ = 69° 13' 03"
D = 9° 52' 43"
T = 400.25'
L = 700.68'
R = 580.00'
P.C. = 1450+65.75
P.T. = 1457+66.43
S.E. = 0.06

STATE PROJECT NUMBER

4090-05-71

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD."

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATED WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET AND IN THE GEOMETRY TABLE ON SHEET 2.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN ON THE CROSS SECTIONS.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

SEE SPECIAL PROVISIONS FOR ACCEPTABLE WALL SYSTEMS.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

MATERIAL PROPERTIES

CONCRETE MASONRY RETAINING WALL _____ f'c = 3,500 P.S.I.

HIGH STRENGTH BAR STEEL REINFORCEMENT _ fy = 60,000 P.S.I.

LEGEND

F.F. FRONT FACE

C.C. CENTER OF CURVE

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION & QUANTITIES
3. WALL DETAILS
4. FENCE CHAIN LINK DETAILS
5. SUBSURFACE EXPLORATION

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
TELEPHONE: (608) 266-8489

CONSULTANT CONTACT
MICHELLE GEHRKE, P.E.
TELEPHONE: (414) 935-4243

WISCONSIN
MICHELLE K. GEHRKE
E-39040
FT. ATKINSON
WI
PROFESSIONAL ENGINEER
10/4/2019

NO.	DATE	REVISION	BY

Mead & Hunt, Inc.
10700 West Research Drive
Wauwatosa, WI 53226
262.790.0232
www.meadhunt.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 01/29/20
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-20-49

CONCRETE PANEL MSE WALL ALONG STH 67

COUNTY	TOWN ~~CITY/VILLAGE~~
FOND DU LAC	AUBURN

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

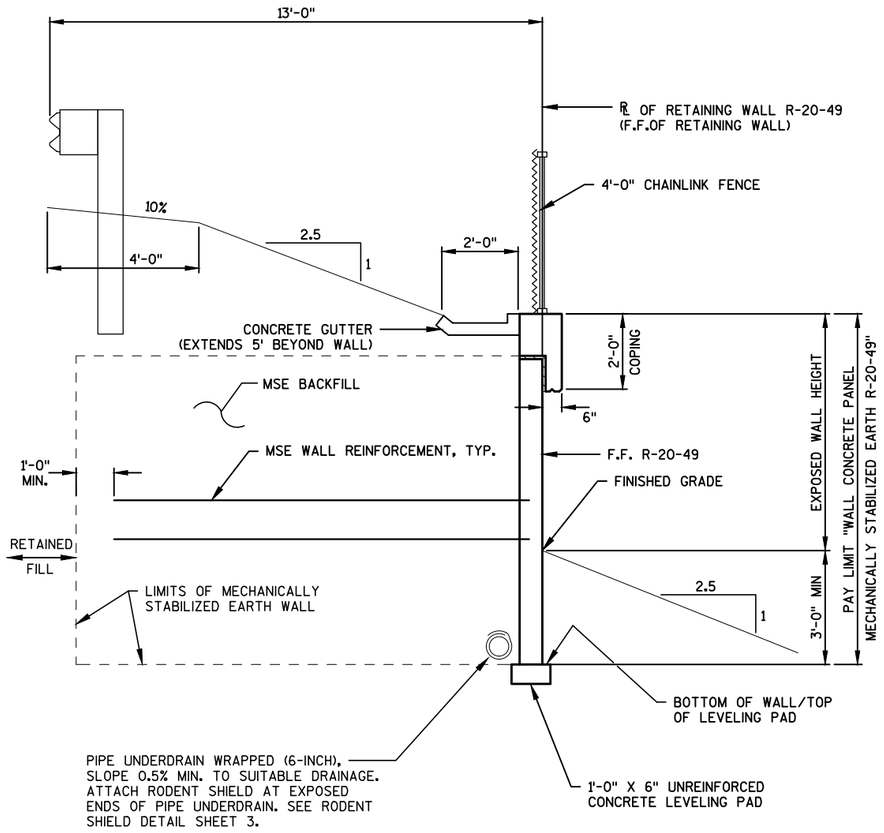
DESIGNED BY	MKG	DESIGN CK'D.	MHK	DRAWN BY	MKG	PLANS CK'D.	GAR

GENERAL PLAN & ELEVATION

SHEET 120 OF 5

8

8



TYPICAL SECTION

LOOKING NORTH

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	TOTAL
520.8000	CONCRETE COLLARS FOR PIPE	EACH	1
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	185
616.0204	FENCE CHAIN LINK 4-FT	LF	174
SPV.0165.01	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-20-49	SF	1189
	NON-BID ITEMS		
	PREFORMED JOINT FILLER	SIZE	¾", 1"
	NON-BITUMINOUS JOINT SEALER	SIZE	¾"
	EXPANDED POLYSTYRENE	SIZE	1"

BENCH MARK TABLE

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEVATION, OFFSET
74	1450+77.74	PK NAIL IN ASPHALT	1049.50, 197.67' LT
75	1450+74.10	PK NAIL IN ASPHALT	1045.95, 18.41' RT

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
GRANULAR BACKFILL (REINFORCED SOIL ZONE)	120	30	0
RETAINED SOIL (GRANULAR FILL)** EL. 1044.0 - EL. 1035.5	135	30	0
BORING 1 - SEE SHEET 5 FOR LOCATION			
SILTY GRAVEL WITH SAND EL. 1046.1 - EL. 1045.5	145	45	0
LEAN CLAY EL. 1045.5 - EL. 1045.1	125	–	1000
CLAYEY SAND EL. 1045.1 - EL. 1043.9	126	36	0
SILTY GRAVEL EL. 1043.9 - EL. 1036.9	140	45	0
POORLY GRADED SAND EL. 1036.9 AND BELOW	120	33	0
BORING 2 - SEE SHEET 5 FOR LOCATION			
SILTY GRAVEL WITH SAND EL. 1045.6 - EL. 1044.8	145	45	0
LEAN CLAY EL. 1044.8 - EL. 1040.7	129	–	600
SILTY GRAVEL EL. 1040.7 - EL. 1035.7	135	36	0
SILTY GRAVEL EL. 1035.7 - EL. 1029.2	140	42	0
POORLY GRADED SANDL EL. 1029.2 AND BELOW	115	33	0
BORING 3 - SEE SHEET 5 FOR LOCATION			
SILTY GRAVEL WITH SAND EL. 1046.3 - EL. 1045.0	145	45	0
LEAN CLAY EL. 1045.0 - EL. 1044.9	125	–	1000
LEAN CLAY EL. 1044.9 - EL. 1041.4	132	–	3400
SILTY GRAVEL EL. 1041.4 - EL. 1011.9	135	36	0
POORLY GRADED SAND EL. 1011.9 AND BELOW	120	33	0

DESIGN WALL FOR THESE VALUES **

WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS	EVALUATED LOCATION	
WALL HEIGHT (FT.) *	8.99	8.52
EXPOSED WALL HEIGHT (FT.)	5.99	5.52
MIN. LENGTH OF REINFORCEMENT (FT.)	10.5	9.0
WALL STATION	10+25.50	11+05.50
BORING USED	1	2
CAPACITY TO DEMAND RATION (CDR)		
SLIDING (CDR > 1.0)	1.2	1.1
ECCENTRICITY (CDR > 1.0)	2.6	2.0
OVERALL STABILITY (CDR > 1.0)	1.4	-
BEARING RESISTANCE (CDR > 1.0)	1.0	1.0
FACTORED BEARING RESISTANCE (PSF)	2200	5100

* INCLUDED 3'-0" EMBEDMENT DEPTH

STATE PROJECT NUMBER

4090-05-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE SHALL BE EPOXY COATED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2007 ADJUSTMENT).

ALL STATIONS AND DIMENSIONS ALONG THE WALL R/L FOR R-20-49 ARE ALONG THE FRONT FACE OF THE WALL UNLESS OTHERWISE NOTED.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ARE APPROXIMATE. THERE MAY BE UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF WALL EXCAVATION AND THE VOLUME OF EARTHWORK IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-20-49".

THE COST OF FURNISHING AND PLACING MSE BACKFILL WITHIN THE REINFORCED SOIL ZONE IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-20-49".

THE COST OF FURNISHING AND PLACING THE UNREINFORCED CONCRETE LEVELING PAD UNDER THE MSE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-20-49".

THE QUANTITY OF CONCRETE MASONRY, BAR STEEL REINFORCEMENT AND RUBBERIZED MEMBRANE WATERPROOFING FOR CAST-IN-PLACE COPING ARE INCIDENTAL TO THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-20-49".

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-20-49" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO A CONSTANT DEPTH OF 3'-0" BELOW FINISHED GRADE.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF THE EXPANSION JOINTS. SEE DETAIL ON SHEET 3.

GEOMETRY TABLE

WALL STATION	STATION STH 67	OFFSET TO F.F. WALL	TOP OF WALL EL.	FINISHED GRADE EL.	EXISTING GROUND EL.
10+00.00	1449+45.50	31.00' RT	1043.34	1043.34	1043.97
10+25.00	1449+70.50	31.00' RT	1043.46	1041.80	1041.41
10+50.00	1449+95.50	31.00' RT	1043.58	1038.25	1038.25
10+75.00	1450+20.50	31.00' RT	1043.70	1037.73	1037.55
11+00.00	1450+45.50	31.00' RT	1043.82	1038.10	1038.10
11+20.25	1450+65.75	31.00' RT	1043.92	1039.44	1039.83
11+25.00	1450+70.77	31.00' RT	1043.94	1039.75	1039.82
11+50.00	1450+97.18	31.00' RT	1044.06	1041.40	1041.41
11+75.00	1451+23.59	31.00' RT	1044.18	1044.18	1044.19

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-20-49

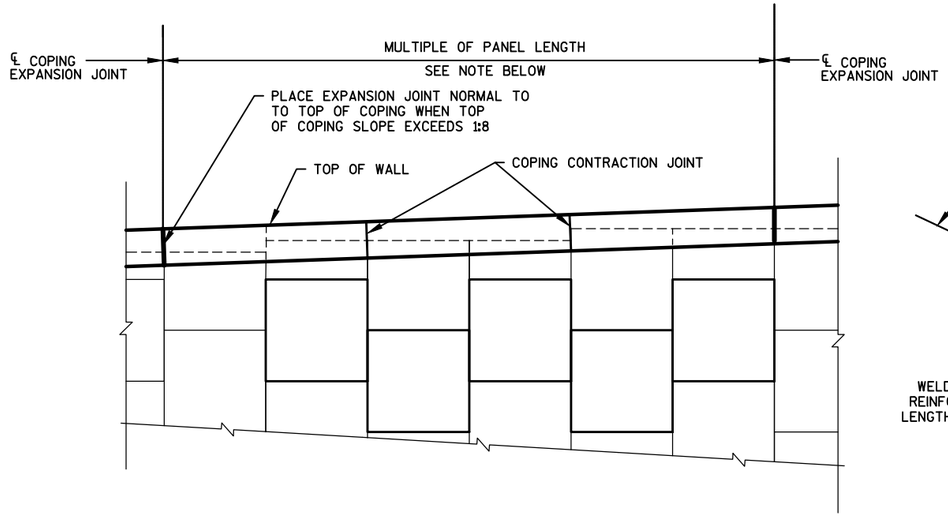
DRAWN BY JAK | PLANS CK'D. GAR

TYPICAL SECTION & QUANTITIES

SHEET 2 OF 5
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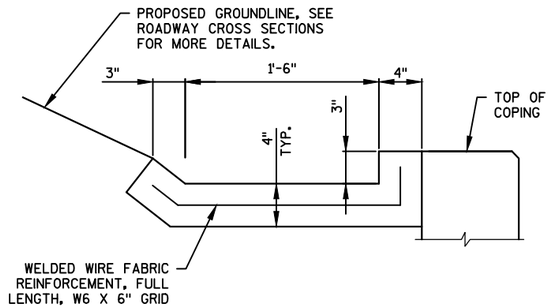
STATE PROJECT NUMBER

4090-05-71



CAST-IN-PLACE COPING PARTIAL ELEVATION

NOTE:
ALL JOINTS SHALL COINCIDE WITH PANEL JOINT ON FRONT FACE WHERE BOTTOM OF LIP INTERSECTS WITH PANEL JOINT. SEE COPING CONTRACTION JOINT DETAIL AND COPING EXPANSION JOINT DETAIL FOR MAXIMUM SPACING REQUIREMENTS.



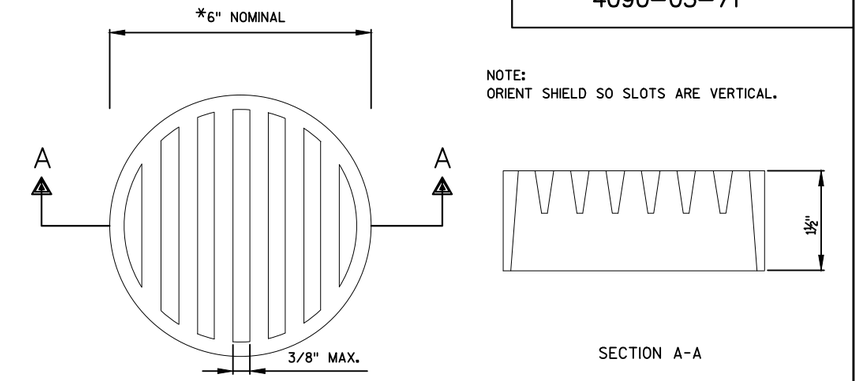
CONCRETE GUTTER DETAIL

MAX. SPACING OF CONTRACTION JOINTS = 12'

CONTRACTION JOINTS SHALL BE CONSTRUCTED AS PROVIDED UNDER SECTION 601.3.4 OF THE STANDARD SPECIFICATIONS.

DO NOT RUN BAR STEEL THRU CONSTRUCTION JOINT.

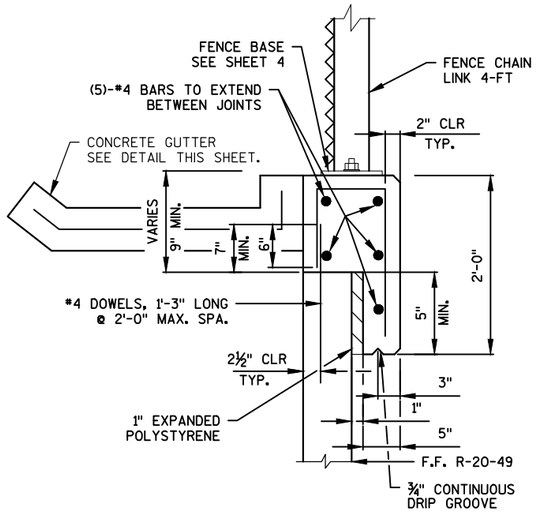
CONCRETE GUTTER AND WELDED WIRE FABRIC PAID FOR UNDER THE BID ITEM " WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH, R-20-49".



*NOTE:
DIMENSIONS ARE APPROXIMATE.
THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

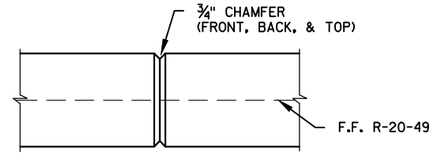
RODENT SHIELD

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS. THE RODENT SHIELD SHALL BE INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".



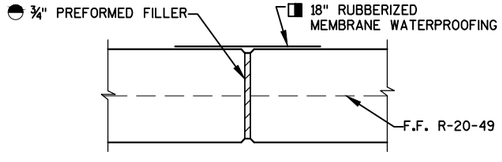
CAST-IN-PLACE CONCRETE COPING DETAIL JOINT

NOTE:
COPING CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL FOR MECHANICALLY STABILIZED EARTH LRFD R-20-49".



DO NOT RUN BAR STEEL THRU JOINT, MAX. SPACING OF JOINT = 12'

COPING CONTRACTION JOINT

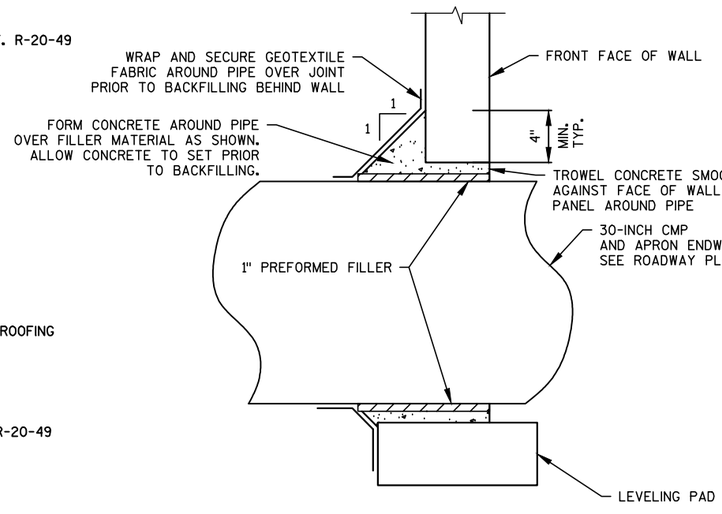


DO NOT RUN BAR STEEL THRU JOINT. MAX. SPACING OF JOINT = 50'

◓ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD, 1/8" BELOW SURFACE OF CONCRETE).

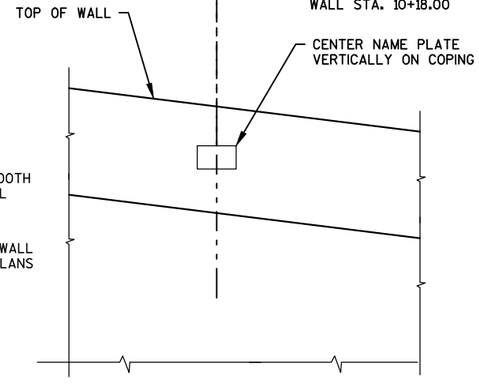
◨ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

COPING EXPANSION JOINT



PIPE PENETRATION DETAIL

* COST OF CONCRETE, PREFORMED FILLER AND GEOTEXTILE FABRIC INCIDENTAL TO THE BID ITEM "CONCRETE COLLARS FOR PIPE".



NAME PLATE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-20-49

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WALL DETAILS

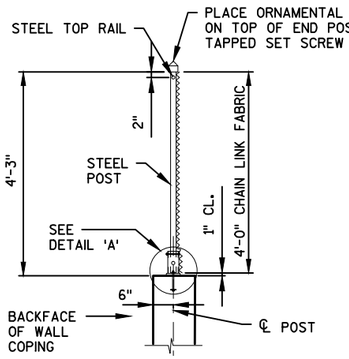
SHEET 3 OF 5
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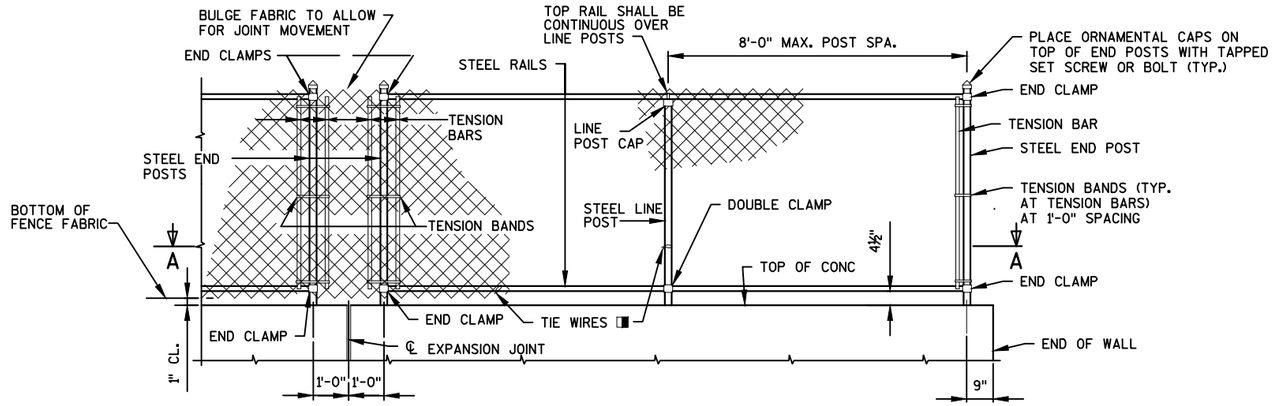
8

STATE PROJECT NUMBER

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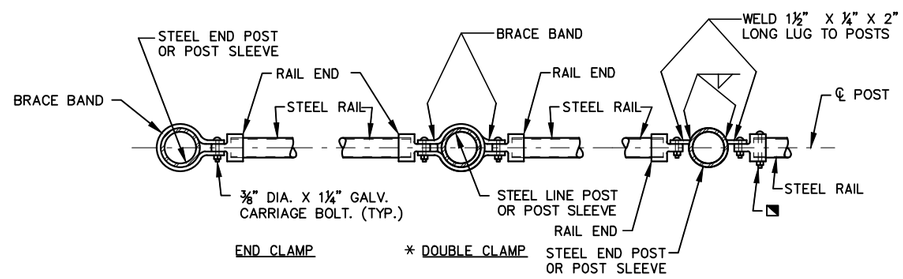


SECTION THRU FENCE ON WALL COPING



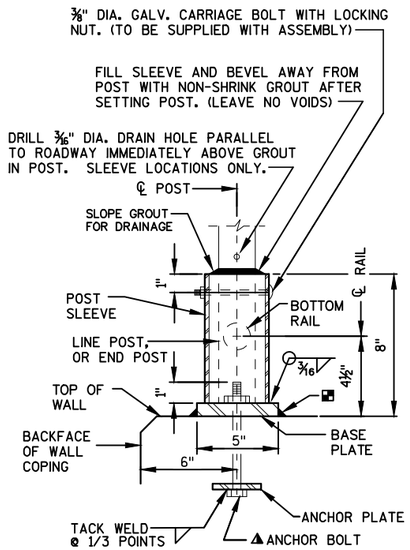
FENCE PART ELEVATION

VIEWING FABRIC SIDE



SECTION A-A

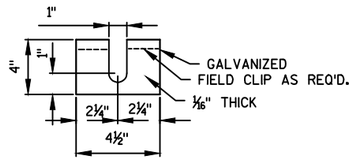
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

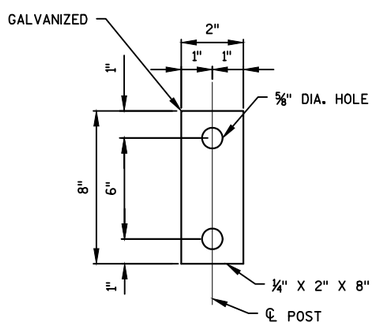


POST SHIM DETAIL

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.

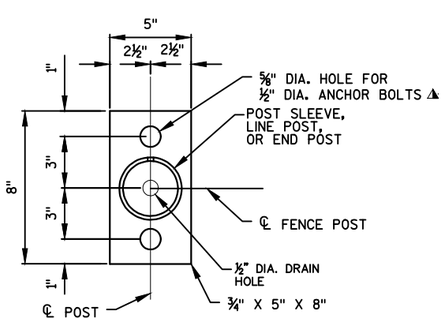
FENCE MEMBER SIZE & HEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



ANCHOR PLATE

ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



BASE PLATE

GENERAL NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT".

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

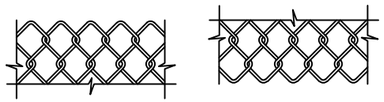
▲ ½" DIA. X 8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE "S". ½" DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR ½" DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE "S" ANCHORS ARE USED. SEE ☆

☆ MASONRY ANCHOR TYPE S ½-INCH. EMBED 6" IN CONCRETE. ANCHOR, WASHER AND NUT SHALL BE GALVANIZED.

◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◥ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.



TOP DETAIL BOTTOM DETAIL

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-20-49

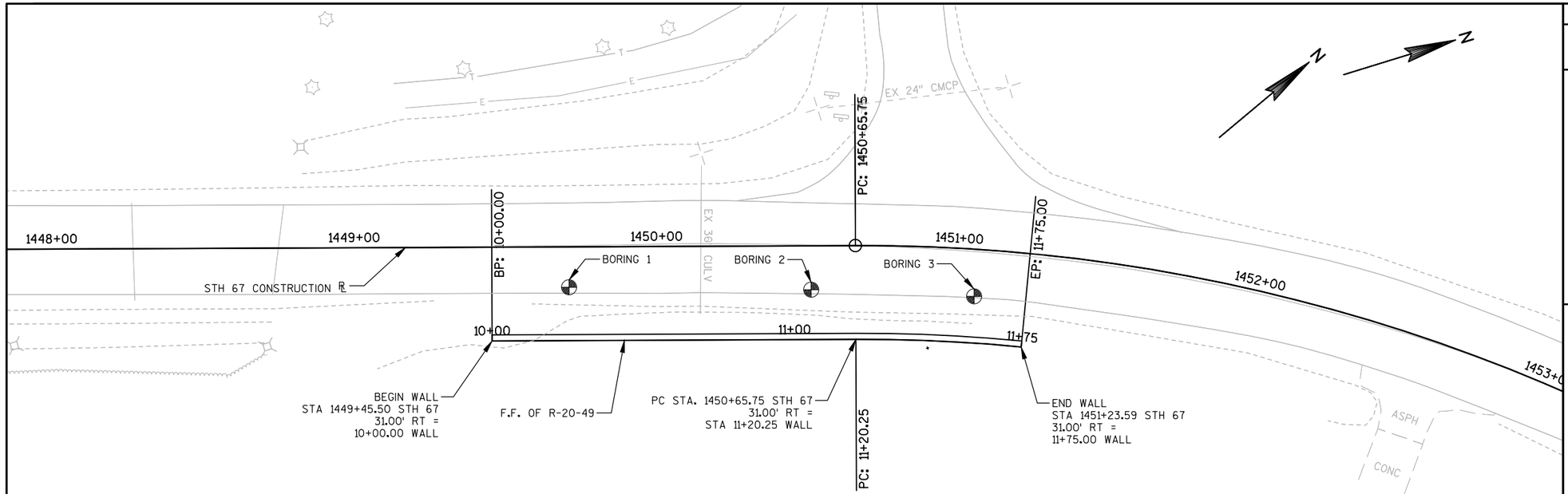
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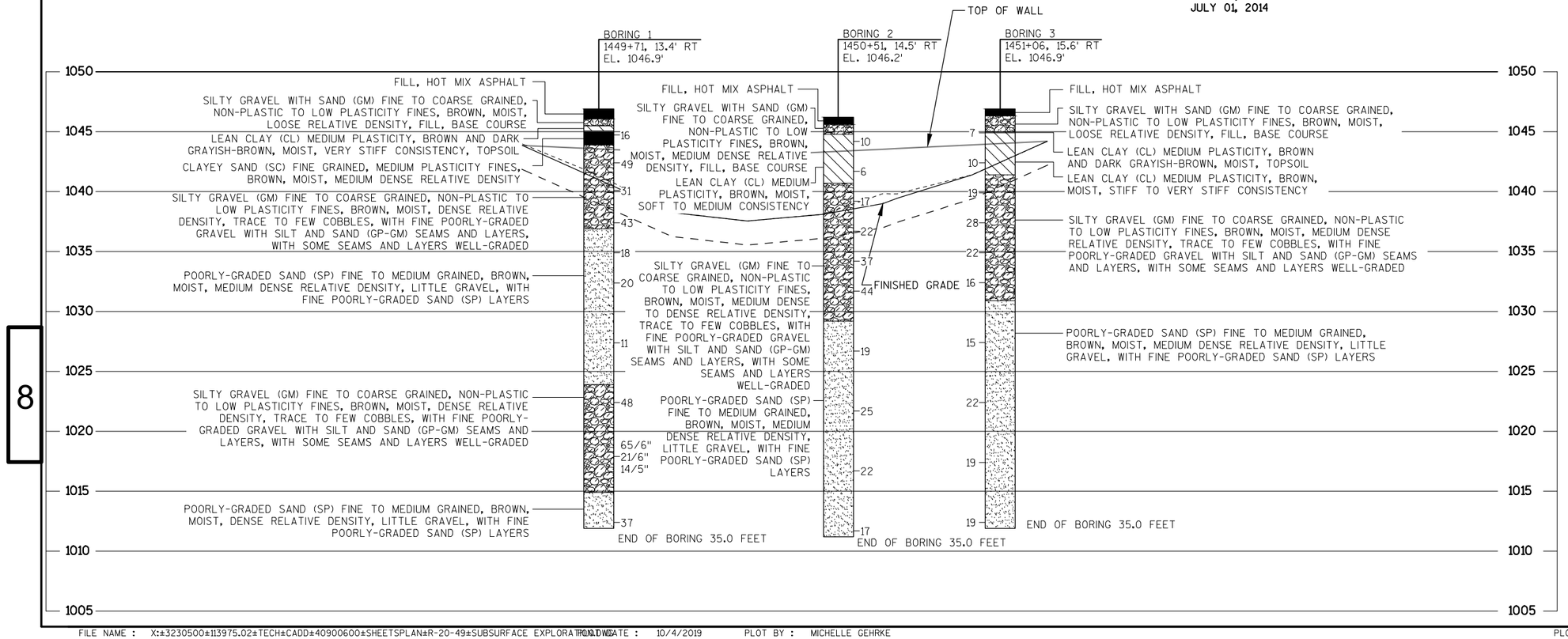
FENCE CHAIN LINK DETAILS

SHEET 4 OF 5
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BORINGS BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WI
JULY 01, 2014

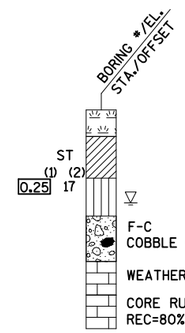
STATE PROJECT NUMBER

4090-05-71

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORING. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-20-49

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SUBSURFACE EXPLORATION

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FILE NAME : X:±3230500±113975.02±TECH±CADD±40900600±SHEETSPLAN±R-20-49±SUBSURFACE EXPLORATION.DWG
PLOT DATE : 10/4/2019
PLOT BY : MICHELLE GEHRKE
PLOT SCALE :

STH 67 EARTHWORK SUMMARY

Station	Location	Distance	Area (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut 1.00	EBS	Salvaged / Unusable Pavement Material	Expanded Fill 1.33	Mass Ordinate
1416+00	RT		0.0	0	0	0.7	0	0	0	0	0	0	0	0	0
1416+50	RT	50	0.0	0	0	1.9	0	0	0	2	0	0	0	3	-3
1417+00	RT	50	0.0	0	0	2.2	0	0	0	4	0	0	0	8	-8
1417+50	RT	50	0.0	0	0	2.4	0	0	0	4	0	0	0	14	-14
1418+00	RT	50	0.0	0	0	4.5	0	0	0	6	0	0	0	22	-22
1418+50	RT	50	0.0	0	0	5.0	0	0	0	9	0	0	0	34	-34
1418+75	RT	25	0.0	0	0	0.1	0	0	0	2	0	0	0	37	-37
1421+64	RT		7.6	0	1.5	6.6	0	0	0	0	0	0	0	0	0
1422+00	RT	36	19.7	0	1.5	0.0	18	0	2	4	18	0	2	6	10
1422+50	RT	50	26.0	0	1.5	0.0	42	0	3	0	61	0	5	6	50
1423+00	RT	50	20.8	0	1.5	0.0	43	0	3	0	104	0	8	6	91
1423+45	RT	45	46.0	0	1.5	0.0	56	0	2	0	160	0	10	6	144
1424+00	RT	55	51.8	0	1.5	0.0	100	0	3	0	259	0	13	6	240
1424+22	RT	22	51.3	0	1.5	0.0	42	0	1	0	301	0	14	6	281
1424+34	RT	12	49.0	0	1.5	0.0	22	0	1	0	324	0	15	6	303
1424+65	RT	31	25.4	0	1.5	0.0	43	0	2	0	366	0	17	6	344
1424+89	RT	24	14.4	0	1.5	0.0	18	0	1	0	384	0	18	6	360
1425+14	RT	25	14.2	0	1.5	0.0	13	0	1	0	397	0	19	6	372
1425+25	RT	11	16.2	0	1.5	0.0	6	0	1	0	403	0	20	6	378
1425+50	RT	25	14.5	0	1.5	0.0	14	0	1	0	418	0	21	6	390
1426+00	RT	50	11.1	0	1.5	0.0	24	0	3	0	441	0	24	6	411
1426+50	RT	50	10.6	0	1.5	0.0	20	0	3	0	461	0	27	6	429
1426+85	RT	35	3.8	0	1.5	7.3	9	0	2	5	471	0	29	12	430

STH 67 EARTHWORK SUMMARY CONT.

Station	Location	Distance	Area (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut 1.00	EBS	Salvaged / Unusable Pavement Material	Expanded Fill 1.33	Mass Ordinate
1424+00	LT		3.6	0	0	3.3	0	0	0	0	0	0	0	0	0
1424+22	LT	22	0.0	0	0	0.0	1	0	0	1	1	0	0	2	0
1424+34	LT	12	0.0	0	0	0.0	0	0	0	0	1	0	0	2	0
1424+65	LT	31	4.1	0	0	5.7	2	0	0	3	4	0	0	6	-2
1424+89	LT	24	0.0	0	0	5.6	2	0	0	5	6	0	0	13	-7
1425+14	LT	25	0.0	0	0	8.6	0	0	0	7	6	0	0	22	-16
1425+25	LT	11	0.0	0	0	13.0	0	0	0	4	6	0	0	27	-22
1425+50	LT	25	0.0	0	0	31.7	0	0	0	21	6	0	0	55	-49
1426+00	LT	50	0.0	0	0	55.8	0	0	0	81	6	0	0	163	-157
1426+50	LT	50	0.0	0	0	45.5	0	0	0	94	6	0	0	287	-282
1426+85	LT	35	0.2	0	0	49.1	0	0	0	61	6	0	0	369	-363
1427+00	LT	15	0.4	0	0	44.3	0	0	0	26	6	0	0	403	-397
1427+50	LT	50	0.3	0	0	61.6	1	0	0	98	7	0	0	534	-527
1428+00	LT	50	0.5	0	0	10.6	1	0	0	67	7	0	0	623	-615
1428+50	LT	50	0.0	0	0	1.9	0	0	0	12	8	0	0	638	-630
1429+00	LT	50	0.0	0	0	0.2	0	0	0	2	8	0	0	640	-633
1429+25	LT	25	0.0	0	0	0.1	0	0	0	0	8	0	0	641	-633
1429+51	LT	26	3.2	0	0	0.6	2	0	0	0	9	0	0	641	-632
1429+77	LT	26	4.4	0	0	2.1	4	0	0	1	13	0	0	643	-630
1430+10	LT	33	0.9	0	0	4.0	3	0	0	4	16	0	0	648	-632
1430+50	LT	40	0.0	0	0	0.0	1	0	0	3	17	0	0	652	-635

STH 67 EARTHWORK SUMMARY CONT.

Station	Location	Distance	Area (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut 1.00	EBS	Salvaged / Unusable Pavement Material	Expanded Fill 1.33	Mass Ordinate
1431+94	LT		0.0	0	0	0.3	0	0	0	0	0	0	0	0	0
1432+00	LT	6	0.0	0	0	0.2	0	0	0	0	0	0	0	0	0
1432+50	LT	50	0.0	0	0	0.8	0	0	0	1	0	0	0	1	-1
1432+83	LT	33	0.0	0	0	1.1	0	0	0	1	0	0	0	3	-3
1433+13	LT	30	0.0	0	0	2.7	0	0	0	2	0	0	0	6	-6
1433+38	LT	25	0.0	0	0	5.7	0	0	0	4	0	0	0	11	-11
1433+50	LT	12	0.0	0	0	5.7	0	0	0	3	0	0	0	14	-14
1433+63	LT	13	0.0	0	0	6.0	0	0	0	3	0	0	0	18	-18
1433+73	LT	10	0.0	0	0	6.8	0	0	0	2	0	0	0	21	-21
1434+03	LT	30	0.0	0	0	12.8	0	0	0	11	0	0	0	36	-36
1434+28	LT	25	0.0	0	0	32.6	0	0	0	21	0	0	0	64	-64
1434+53	LT	25	0.1	0	0	61.9	0	0	0	44	0	0	0	122	-122
1435+00	LT	47	0.1	0	0	57.4	0	0	0	104	0	0	0	260	-260
1435+50	LT	50	0.2	0	0	69.1	0	0	0	117	1	0	0	416	-415
1436+00	LT	50	0.2	0	0	115.7	0	0	0	171	1	0	0	643	-642
1436+21	LT	21	0.4	0	0	118.3	0	0	0	91	1	0	0	764	-763
1436+46	LT	25	0.4	0	0	106.9	0	0	0	104	2	0	0	903	-901
1436+71	LT	25	0.3	0	0	69.2	0	0	0	82	2	0	0	1011	-1010
1436+85	LT	14	0.2	0	0	52.2	0	0	0	31	2	0	0	1053	-1051
1437+01	LT	16	0.2	0	0	34.9	0	0	0	26	2	0	0	1088	-1085
1437+50	LT	49	0.0	0	0	1.4	0	0	0	33	2	0	0	1131	-1129
1437+90	LT	40	0.0	0	0	0.4	0	0	0	1	2	0	0	1133	-1131
1438+00	LT	10	0.0	0	0	0.5	0	0	0	0	2	0	0	1133	-1131
1438+50	LT	50	0.0	0	0	0.7	0	0	0	1	2	0	0	1135	-1133
1439+00	LT	50	0.0	0	0	0.7	0	0	0	1	2	0	0	1137	-1134
1439+50	LT	50	0.0	0	0	1.3	0	0	0	2	2	0	0	1139	-1137
1440+00	LT	50	0.8	0	0	1.7	1	0	0	3	3	0	0	1143	-1140
1440+50	LT	50	6.5	0	0	1.8	7	0	0	3	10	0	0	1147	-1137
1440+82	LT	32	0.8	0	0	2.0	4	0	0	2	14	0	0	1150	-1136
1441+07	LT	25	0.0	0	0	3.3	0	0	0	2	14	0	0	1153	-1139
1441+32	LT	25	0.0	0	0	4.6	0	0	0	4	14	0	0	1158	-1144
1441+50	LT	18	0.0	0	0	3.8	0	0	0	3	14	0	0	1162	-1147
1441+62	LT	12	0.0	0	0	3.8	0	0	0	2	14	0	0	1164	-1150
1442+00	LT	38	0.0	0	0	3.5	0	0	0	5	14	0	0	1171	-1157
1442+52	LT	52	0.0	0	0	2.2	0	0	0	5	14	0	0	1178	-1164

STH 67 EARTHWORK SUMMARY CONT.

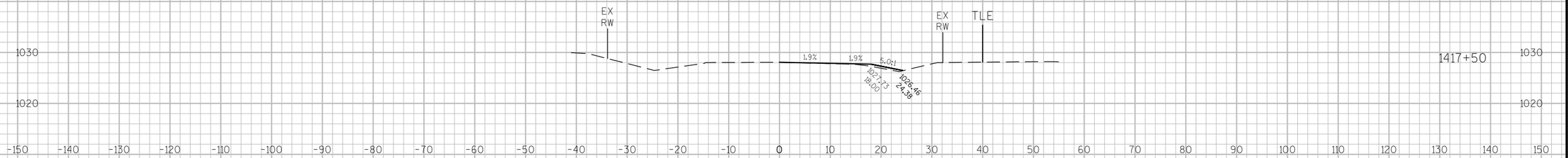
Station	Location	Distance	Area (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut 1.00	EBS	Salvaged / Unusable Pavement Material	Expanded Fill 1.33	Mass Ordinate
1432+83	RT		0.0	0	0	2.0	0	0	0	0	0	0	0	0	0
1433+13	RT	30	0.0	0	0	3.4	0	0	0	3	0	0	0	4	-4
1433+38	RT	25	6.3	0	0	3.7	3	0	0	3	3	0	0	8	-5
1433+50	RT	12	4.9	0	0	5.2	2	0	0	2	5	0	0	11	-6
1433+63	RT	13	0.0	0	0	0.0	1	0	0	1	7	0	0	13	-6
1433+73	RT	10	0.0	0	0	0.0	0	0	0	0	7	0	0	13	-6
1434+03	RT	30	6.4	0	0	2.0	4	0	0	1	10	0	0	14	-4
1434+28	RT	25	3.1	0	0	7.7	4	0	0	4	14	0	0	20	-6
1434+53	RT	25	0.2	0	0	17.1	2	0	0	11	16	0	0	35	-19
1435+00	RT	47	0.0	0	0	47.1	0	0	0	56	16	0	0	110	-93
1435+50	RT	50	0.0	0	0	90.7	0	0	0	128	16	0	0	279	-263
1436+00	RT	50	0.0	0	0	69.8	0	0	0	149	16	0	0	477	-461
1436+21	RT	21	0.0	0	0	75.0	0	0	0	56	16	0	0	552	-536
1436+46	RT	25	0.0	0	0	34.5	0	0	0	51	16	0	0	619	-603
1436+71	RT	25	0.0	0	0	20.8	0	0	0	26	16	0	0	653	-637
1436+85	RT	14	0.0	0	0	22.0	0	0	0	11	16	0	0	668	-652
1437+01	RT	16	4.8	0	0	7.5	1	0	0	9	18	0	0	680	-662
1437+50	RT	49	6.4	0	0	2.0	10	0	0	9	28	0	0	691	-664
1437+90	RT	40	14.8	0	0	0.3	16	0	0	2	43	0	0	693	-650
1438+00	RT	10	14.8	0	0	0.5	5	0	0	0	49	0	0	694	-645
1438+50	RT	50	12.5	0	0	0.0	25	0	0	0	74	0	0	694	-620
1439+00	RT	50	8.1	0	0	0.0	19	0	0	0	93	0	0	694	-601
1439+50	RT	50	3.6	0	0	2.7	11	0	0	3	104	0	0	698	-594
1440+00	RT	50	2.3	0	0	2.9	5	0	0	5	109	0	0	705	-595
1440+50	RT	50	0.0	0	0	1.6	2	0	0	4	112	0	0	710	-599
1442+52	RT		0.0	0	0	4.3	0	0	0	0	0	0	0	0	0
1443+00	RT	49	0.0	0	0	11.3	0	0	0	14	0	0	0	19	-19
1443+50	RT	50	0.0	0	0	20.0	0	0	0	29	0	0	0	57	-57
1443+67	RT	17	0.0	0	0	28.0	0	0	0	15	0	0	0	77	-77
1443+90	RT	23	0.0	0	0	9.4	0	0	0	16	0	0	0	98	-98

STH 67 EARTHWORK SUMMARY CONT.

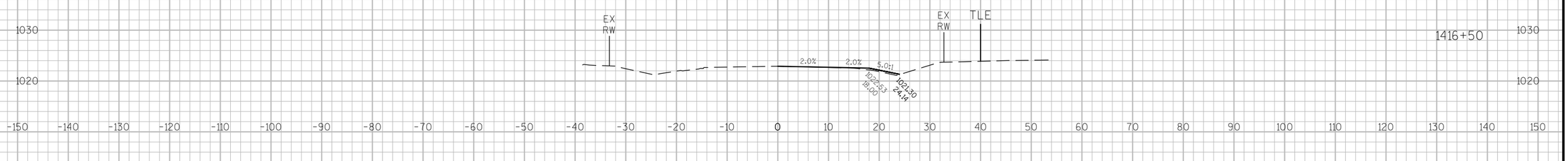
Station	Location	Distance	Area (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut 1.00	EBS	Salvaged / Unusable Pavement Material	Expanded Fill 1.33	Mass Ordinate
1446+87	RT		0.0	0	0	1.0	0	0	0	0	0	0	0	0	0
1447+00	RT	13	0.0	0	0	0.6	0	0	0	0	0	0	0	1	-1
1447+50	RT	50	0.0	0	0	0.4	0	0	0	1	0	0	0	2	-2
1447+76	RT	26	5.6	0	0	0.3	3	0	0	0	3	0	0	2	1
1448+07	RT	31	10.0	0	0	1.1	9	0	0	1	12	0	0	3	8
1448+31	RT	24	8.7	0	0	0.7	8	0	0	1	20	0	0	4	16
1448+56	RT	25	10.4	0	0	0.2	9	0	0	0	29	0	0	5	24
1449+00	RT	44	4.7	0	0	1.5	12	0	0	1	41	0	0	7	35
1449+40	RT	40	0.3	0	0	1.5	4	0	0	2	45	0	0	9	35
1449+45	RT	5	40.2	0	0	0.0	4	0	0	0	49	0	0	10	39
1450+00	RT	55	5.7	0	0	0.0	47	0	0	0	95	0	0	10	86
1450+14	RT	14	4.4	0	0	0.0	3	0	0	0	98	0	0	10	88
1450+50	RT	36	5.6	0	0	0.0	7	0	0	0	105	0	0	10	95
1451+00	RT	50	14.6	0	0	0.0	19	0	0	0	123	0	0	10	114
1451+24	RT	24	20.9	0	0	0.0	16	0	0	0	139	0	0	10	129
1451+29	RT		7.3	0	0	4.9	0	0	0	0	0	0	0	0	0
1451+50	RT	21	6.6	0	0	4.4	5	0	0	4	5	0	0	5	1
1451+66	RT	16	5.0	0	0	4.9	3	0	0	3	9	0	0	8	0
1451+92	RT	26	5.5	0	0	9.6	5	0	0	7	14	0	0	18	-4
1452+17	RT	25	6.0	0	0	12.1	5	0	0	10	19	0	0	31	-12
1452+39	RT	22	2.7	0	0	6.1	4	0	0	7	23	0	0	41	-18
1452+60	RT	21	0.0	0	0	0.0	1	0	0	2	24	0	0	44	-20
1452+73	RT	13	0.0	0	0	0.0	0	0	0	0	24	0	0	44	-20

STH 67 EARTHWORK SUMMARY CONT.

Station	Location	Distance	Area (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut	EBS	Salvaged / Unusable Pavement Material	Fill	Cut 1.00	EBS	Salvaged / Unusable Pavement Material	Expanded Fill 1.33	Mass Ordinate
1457+45	RT		4.6	0	1.5	5.0	0	0	0	0	0	0	0	0	0
1457+88	RT	42	9.5	0	1.5	0.0	11	0	2	4	11	0	2	5	3
1458+00	RT	12	10.0	0	1.5	0.0	4	0	1	0	16	0	3	5	7
1458+50	RT	50	14.0	0	1.5	0.0	22	0	3	0	38	0	6	5	27
1459+00	RT	50	20.9	0	1.5	0.0	32	0	3	0	70	0	9	5	56
1459+50	RT	50	22.3	0	1.5	0.0	40	0	3	0	110	0	11	5	93
1460+00	RT	50	25.4	0	1.5	0.0	44	0	3	0	154	0	14	5	135
1460+50	RT	50	52.8	0	1.5	0.0	72	0	3	0	227	0	17	5	204
1461+00	RT	50	44.1	0	1.5	0.0	90	0	3	0	316	0	20	5	292
1461+50	RT	50	9.9	0	1.5	0.0	50	0	3	0	366	0	22	5	339
1461+67	RT	17	6.3	0	1.5	0.0	5	0	1	0	371	0	23	5	343
1463+11	RT		0.0	0	0	4.4	0	0	0	0	0	0	0	0	0
1463+50	RT	39	0.0	0	0	22.9	0	0	0	20	0	0	0	26	-26
1464+00	RT	50	1.2	0	0	9.7	1	0	0	30	1	0	0	66	-65
1464+30	RT	30	0.0	0	0	37.0	1	0	0	26	2	0	0	101	-99
1464+55	RT	25	0.0	0	0	27.9	0	0	0	30	2	0	0	141	-139
1464+80	RT	25	0.0	0	0	30.1	0	0	0	27	2	0	0	176	-175
1465+00	RT	20	0.0	0	0	26.8	0	0	0	21	2	0	0	204	-203
1465+50	RT	50	0.0	0	0	53.5	0	0	0	74	2	0	0	303	-301
1466+00	RT	50	0.0	0	0	95.4	0	0	0	138	2	0	0	486	-485
1466+50	RT	50	0.0	0	0	85.5	0	0	0	167	2	0	0	709	-708
1467+00	RT	50	0.1	0	0	61.8	0	0	0	136	2	0	0	891	-889
1467+50	RT	50	0.0	0	0	49.4	0	0	0	103	2	0	0	1027	-1026
1467+83	RT	33	0.1	0	0	87.9	0	0	0	84	2	0	0	1138	-1137
1468+00	RT	17	0.0	0	0	58.8	0	0	0	47	2	0	0	1200	-1198
1468+50	RT	50	0.0	0	0	56.2	0	0	0	106	2	0	0	1342	-1340
1469+00	RT	50	0.0	0	0	38.5	0	0	0	88	2	0	0	1459	-1457
1469+23	RT	23	0.0	0	0	33.7	0	0	0	31	2	0	0	1499	-1497
1469+49	RT	26	0.0	0	0	23.4	0	0	0	28	2	0	0	1536	-1534
1469+74	RT	25	0.0	0	0	20.1	0	0	0	20	2	0	0	1563	-1561
1469+99	RT	25	0.0	0	0	21.3	0	0	0	19	2	0	0	1589	-1587
1470+29	RT	30	0.0	0	0	10.5	0	0	0	18	2	0	0	1612	-1610
1470+50	RT	21	0.3	0	0	3.4	0	0	0	5	2	0	0	1619	-1617







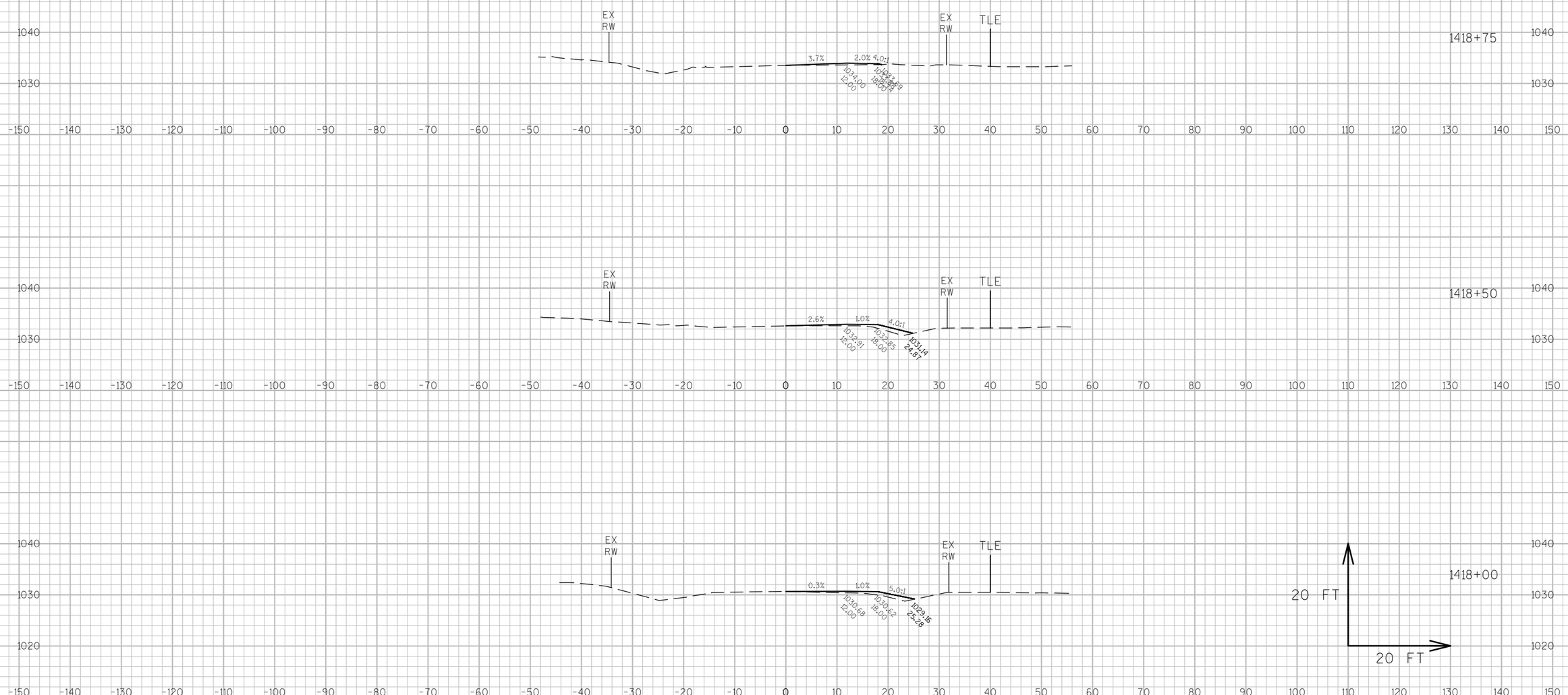


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 131 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG
LAYOUT NAME - 090201_XS
DATE : 12/12/2019 11:39 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

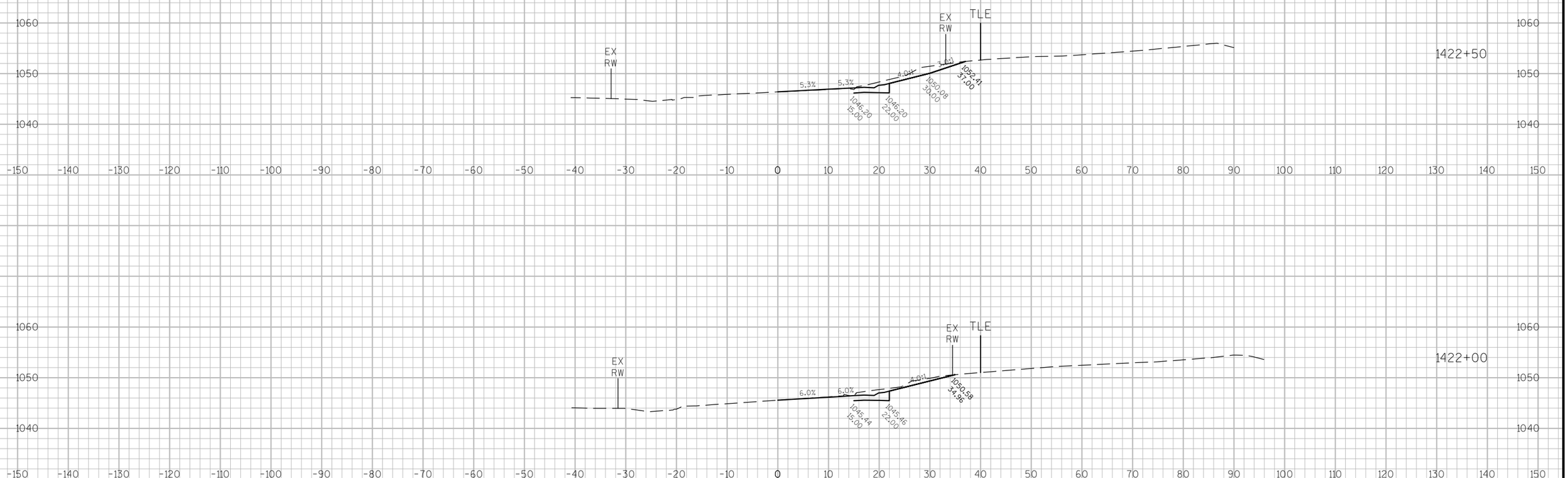


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 132 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG
LAYOUT NAME - 090202_XS
PLOTTED : 12/12/2019 11:40 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

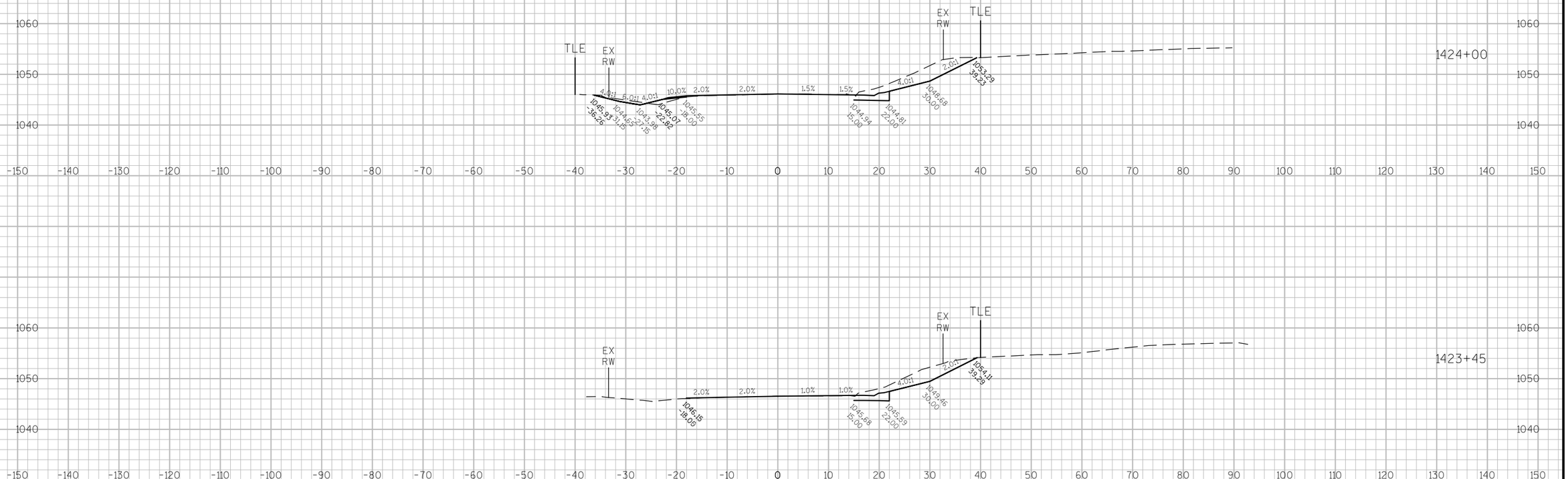


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 133 E

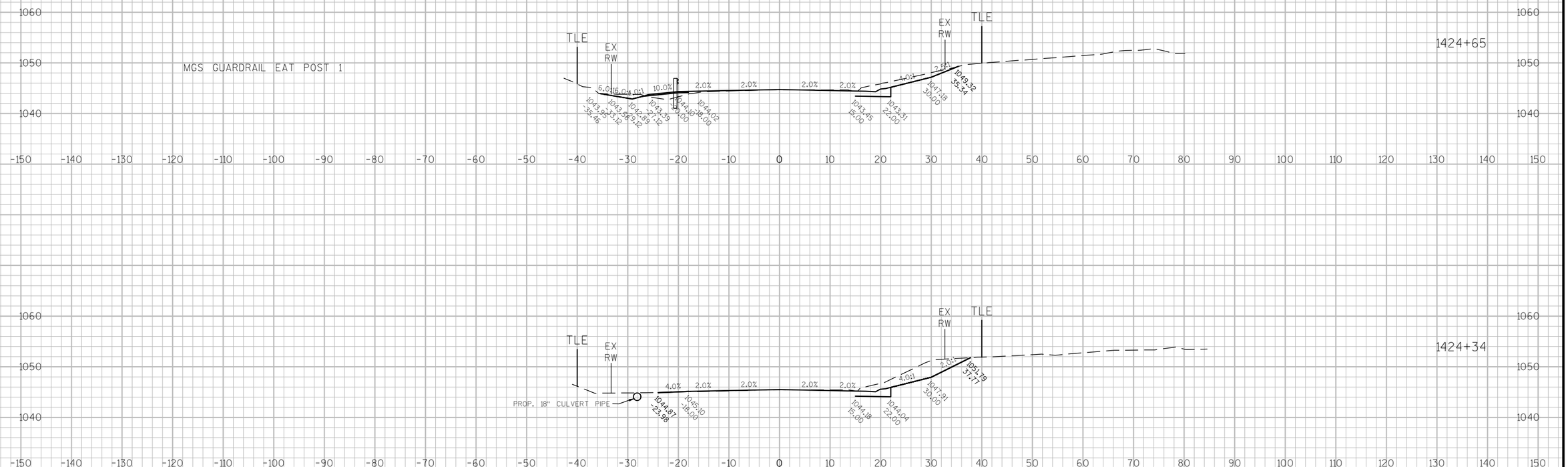
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LAYOUT NAME - 090203_XS
DATE : 12/12/2019 11:40 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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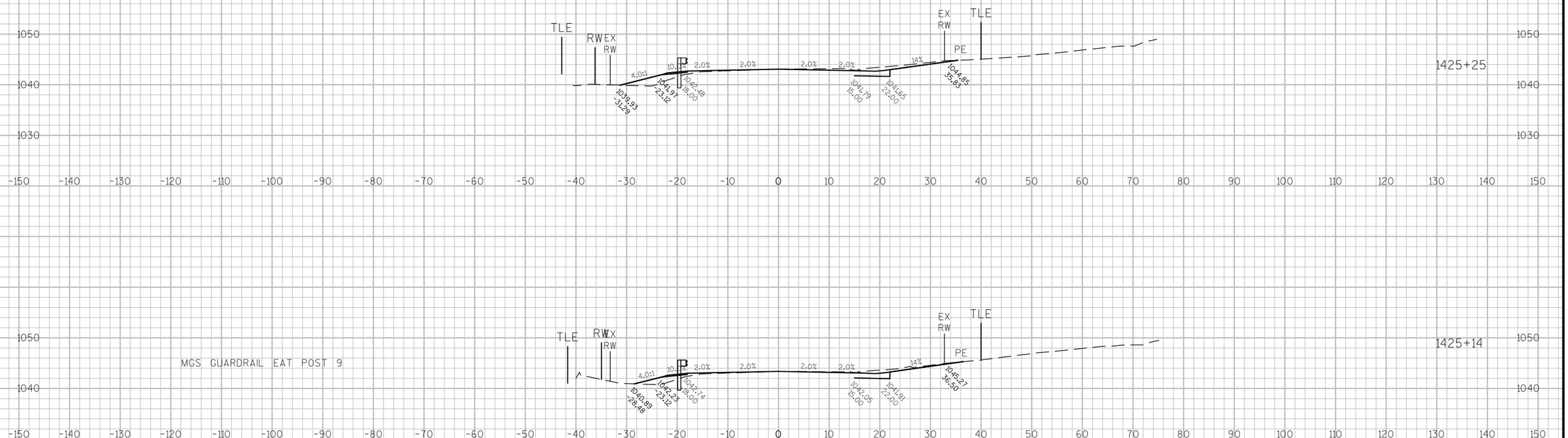
PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 134 E



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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 135 E

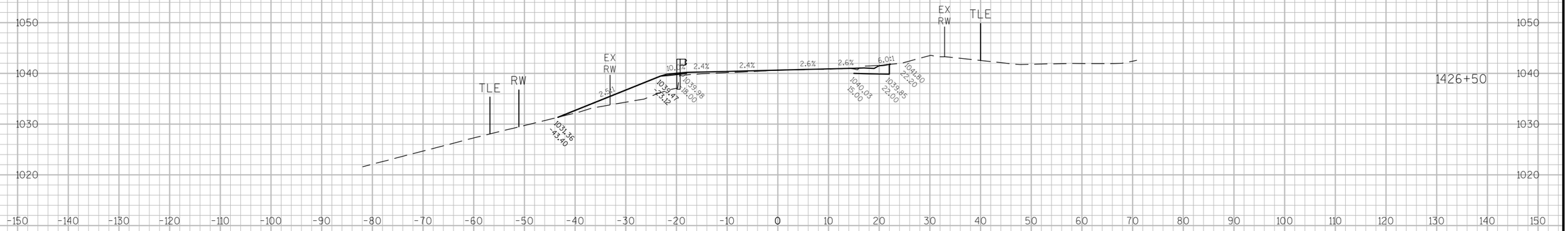


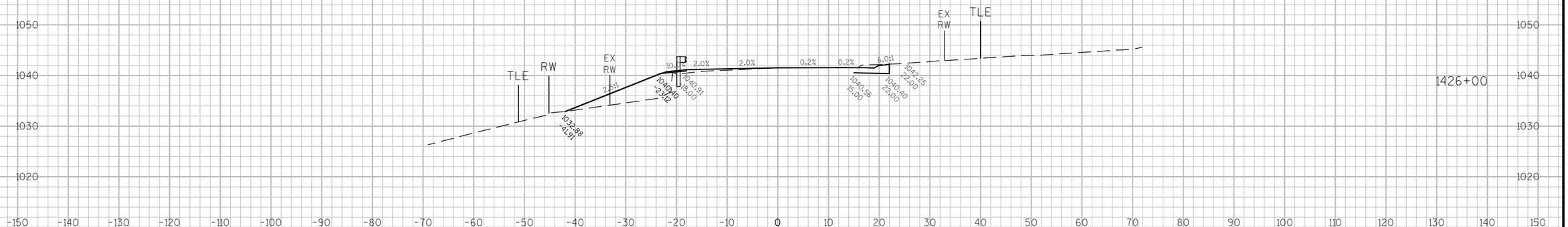
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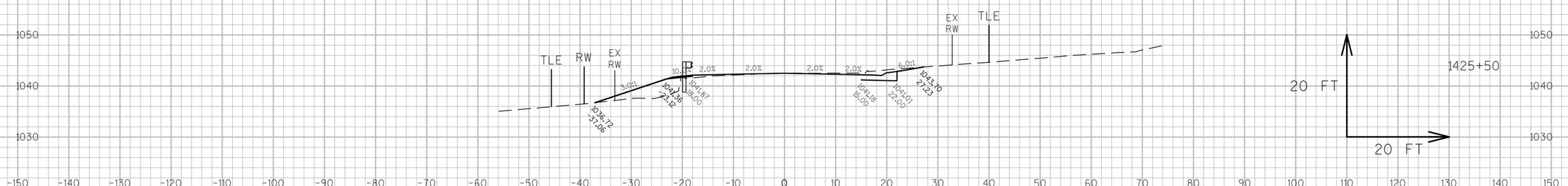
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 136 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS_PREVISED_EXP.DWG
LAYOUT NAME - 090206_XS
DATE/TIME : 12/12/2019 11:40 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



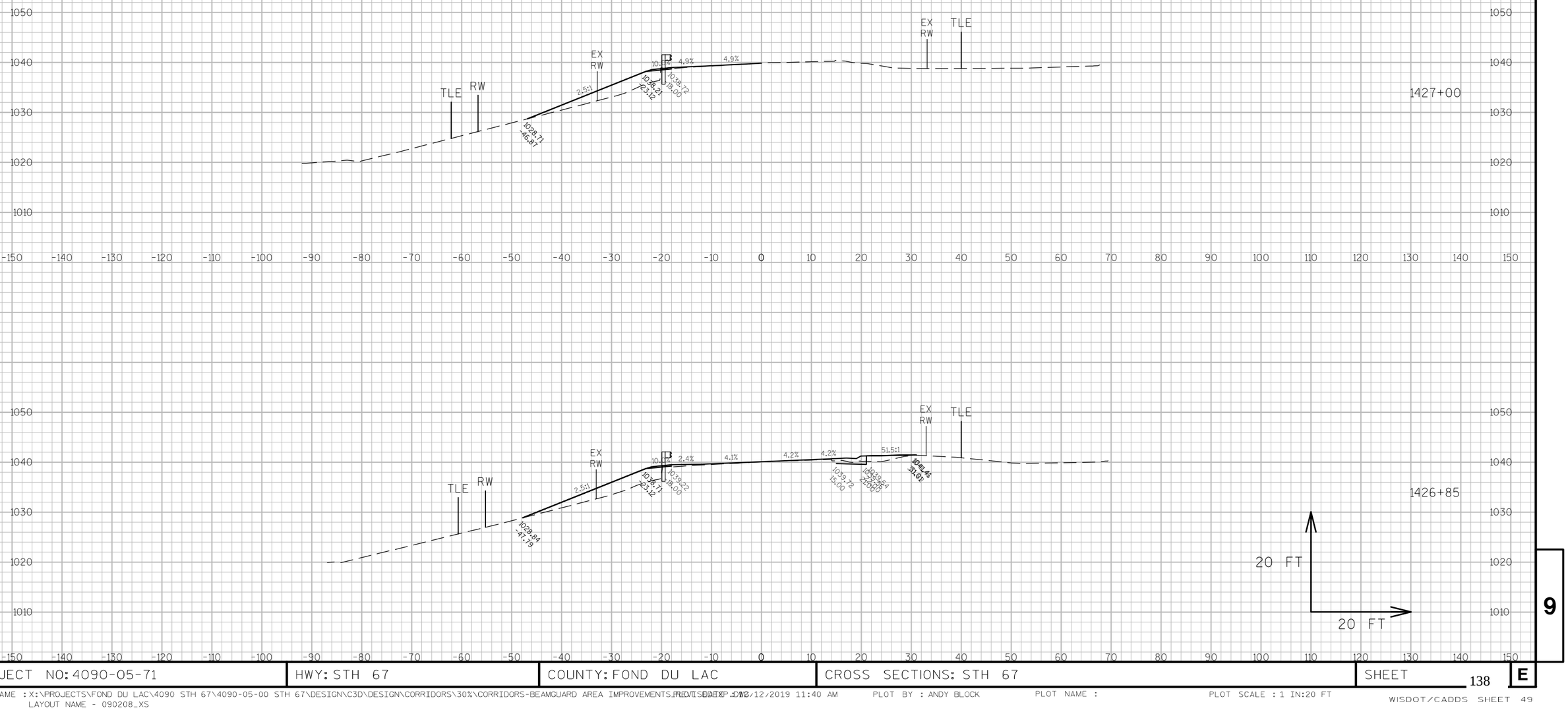




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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 137 E



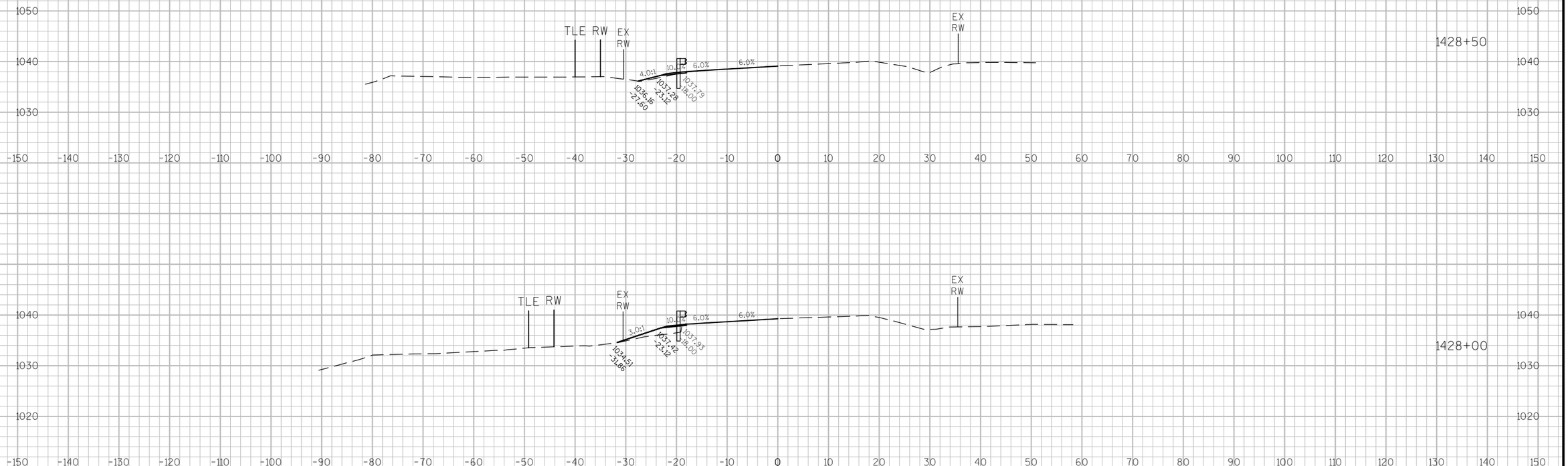
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 138 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED EXP.DWG
LAYOUT NAME - 090208_XS

DATE : 12/12/2019 11:40 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

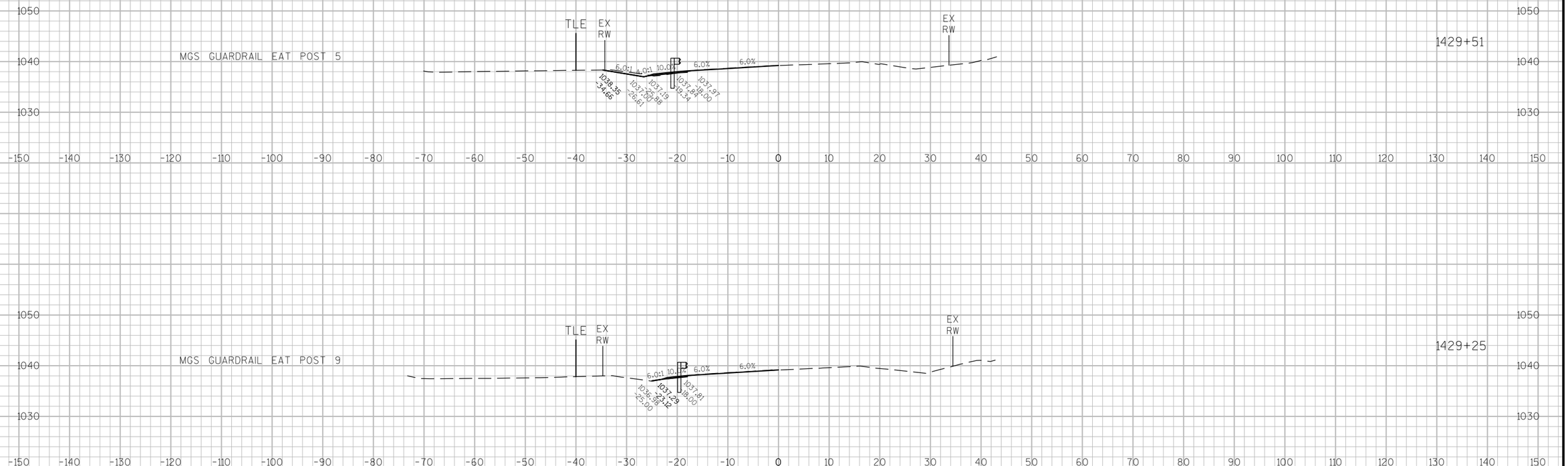


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 139 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS_REVISED.DWG LAYOUT NAME - 090209_XS
PLOTTED : 12/12/2019 11:41 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

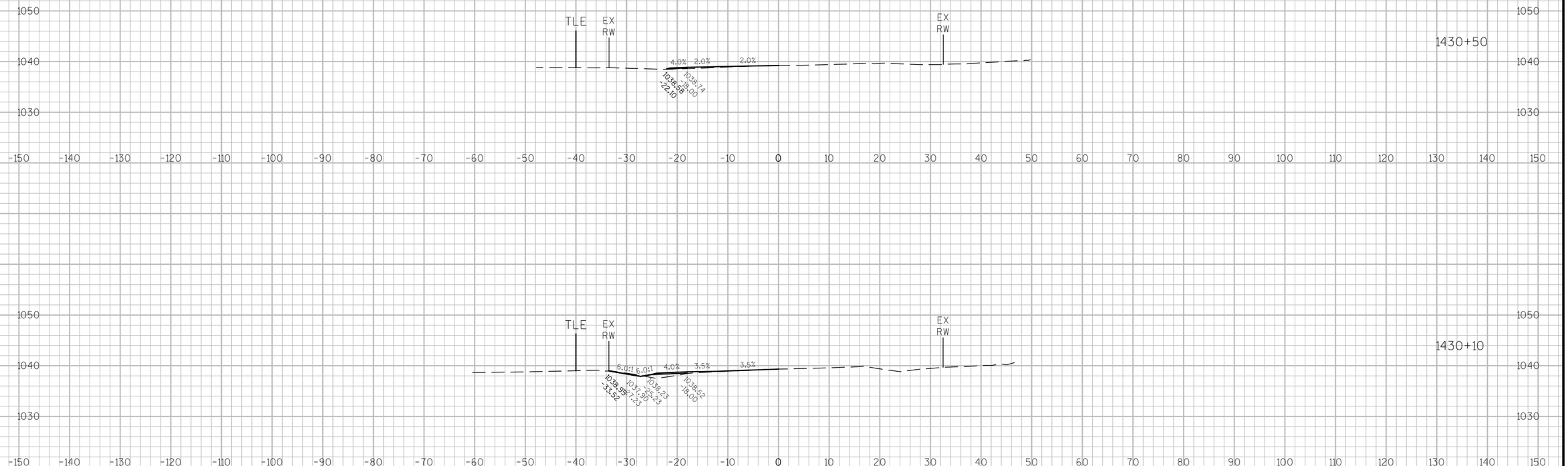
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 140	E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS_REVISED EXP.DWG
LAYOUT NAME - 090210_XS

DATE : 12/12/2019 11:41 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

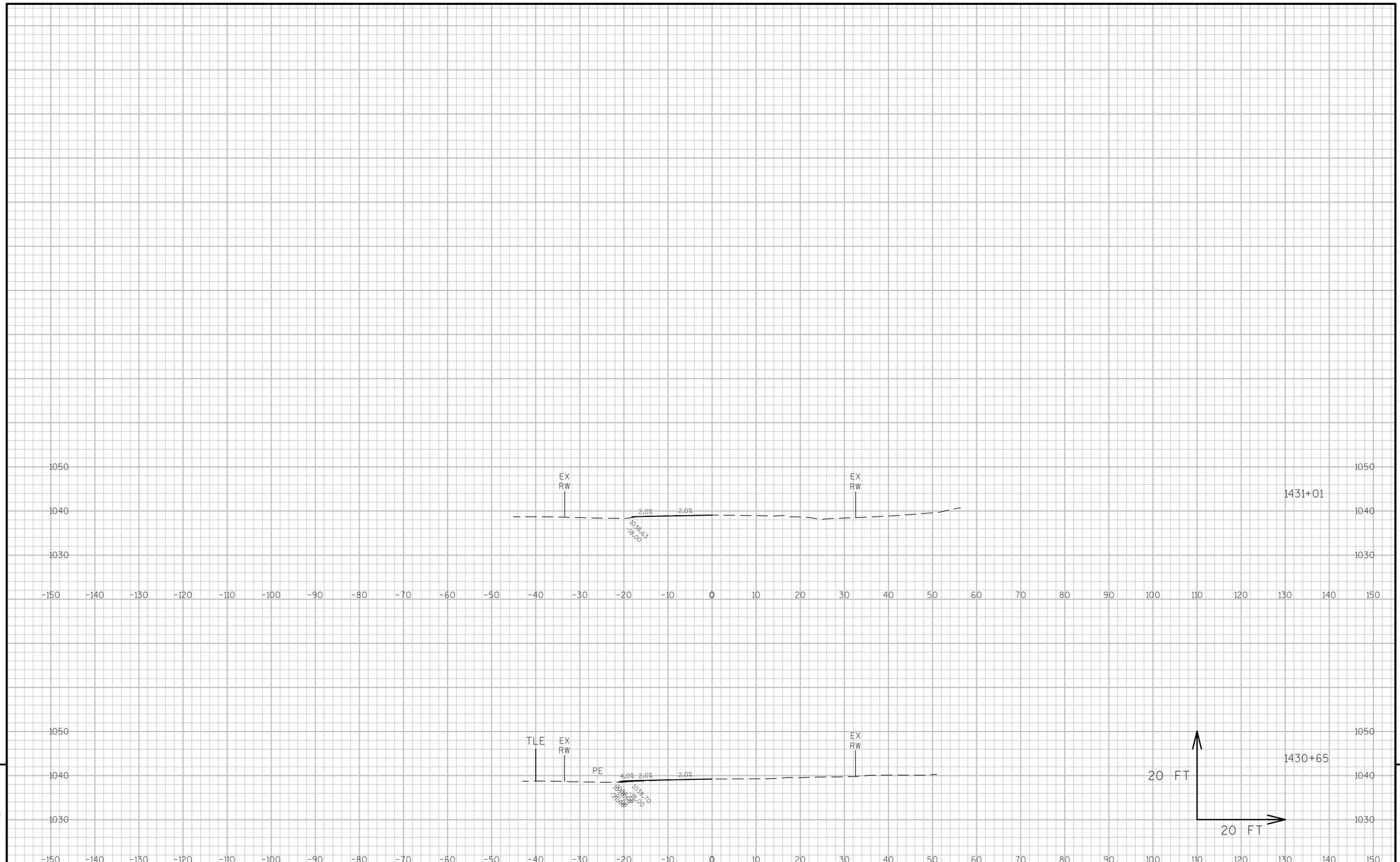


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 141 E

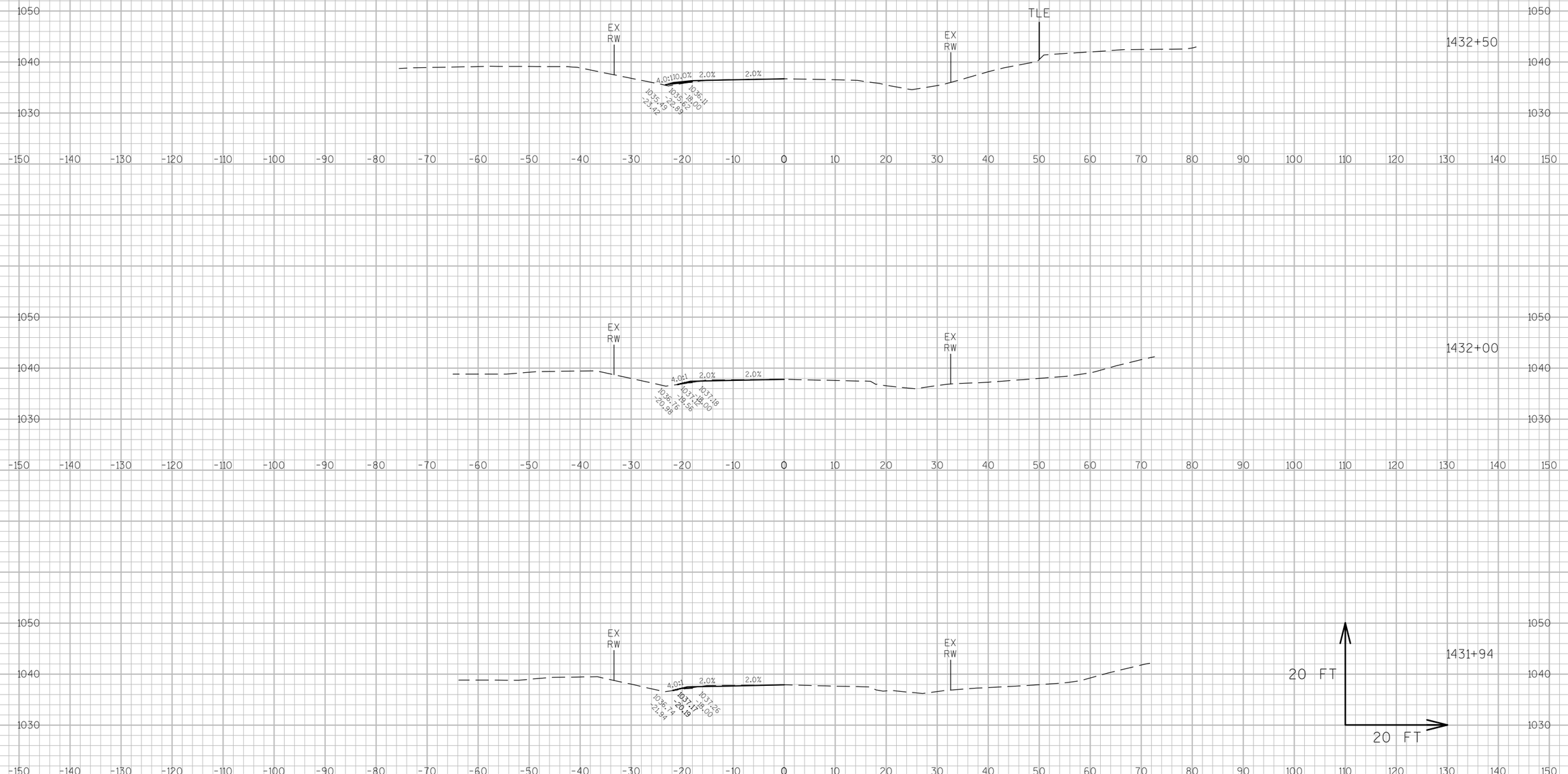
FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG LAYOUT NAME - 090211_XS
PLOT DATE : 12/12/2019 11:41 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 142	E

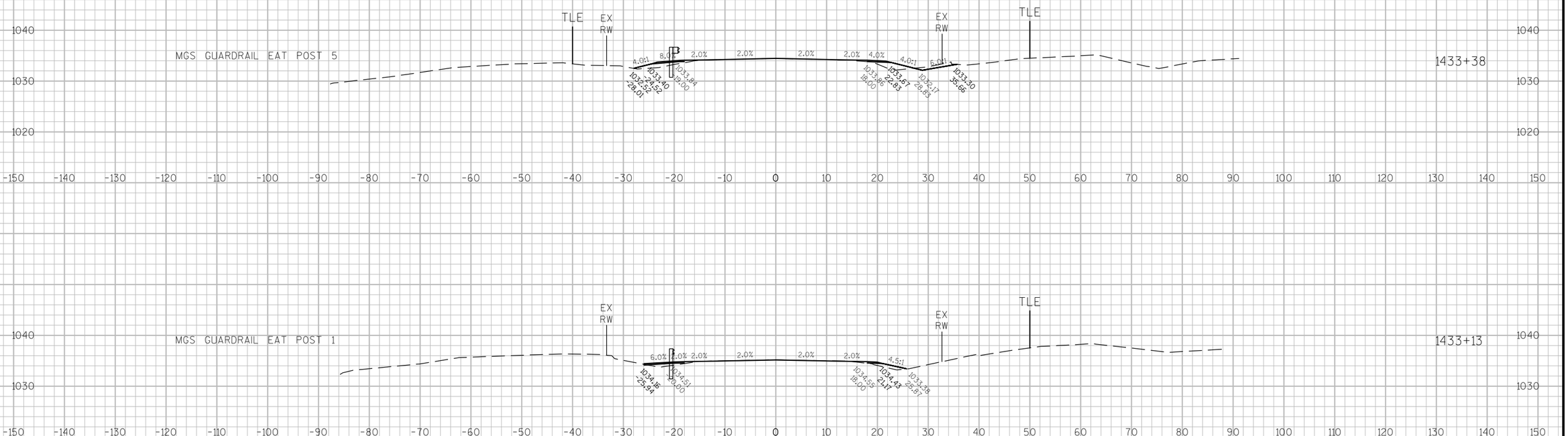


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 143 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS_REVISED.DWG
LAYOUT NAME - 090213_XS
PLOT DATE : 12/12/2019 11:41 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

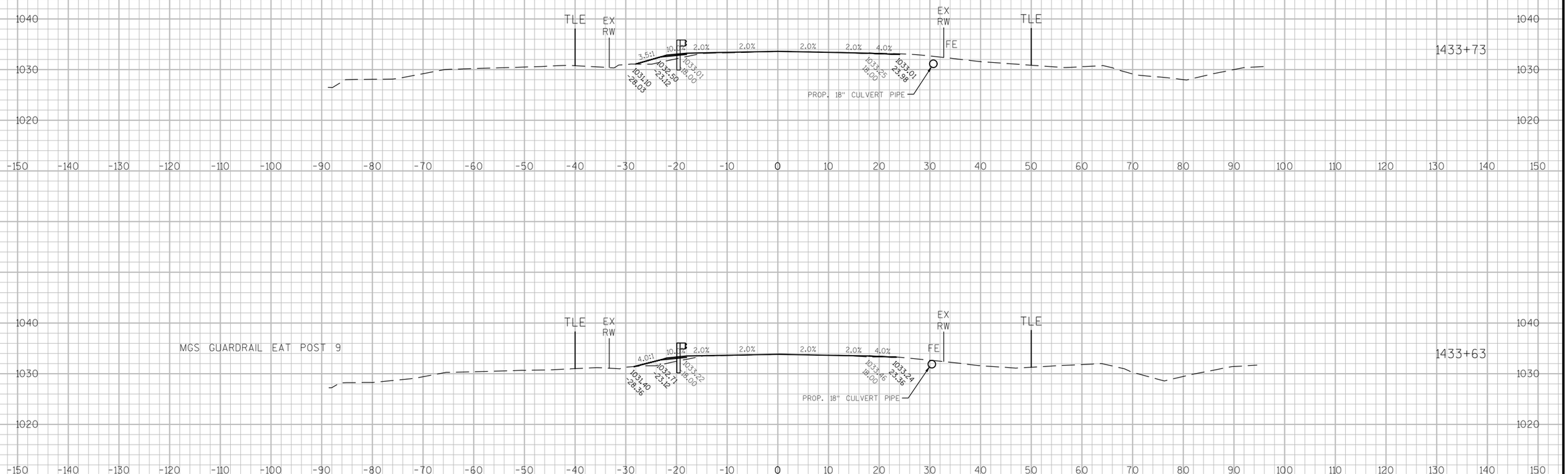


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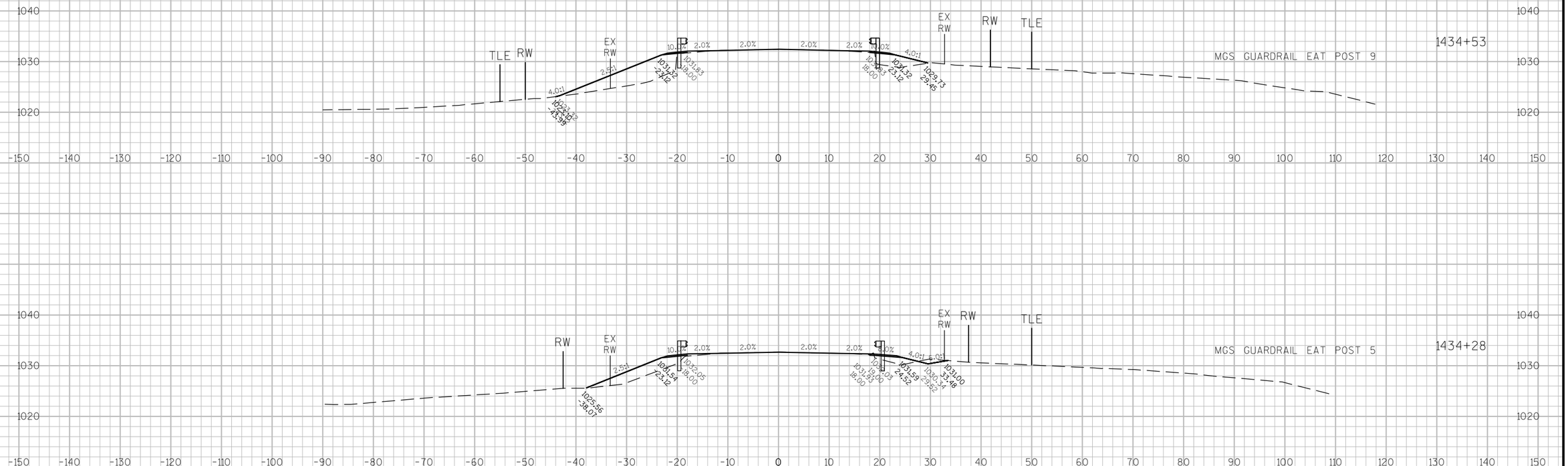
PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 144 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISE.DWG
LAYOUT NAME - 090214_XS
DATE : 12/12/2019 11:41 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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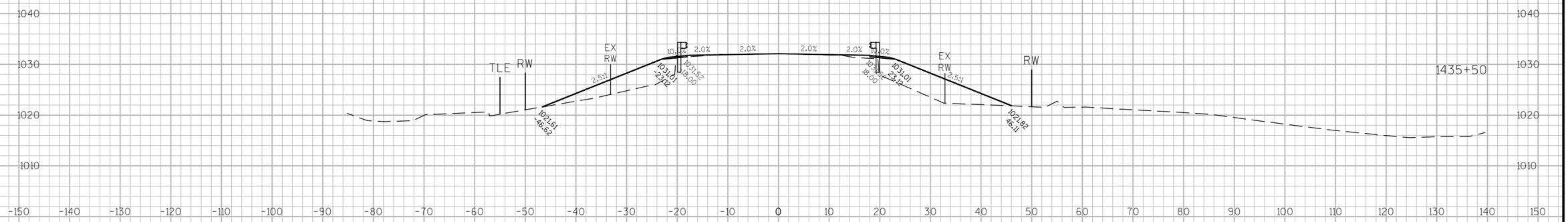
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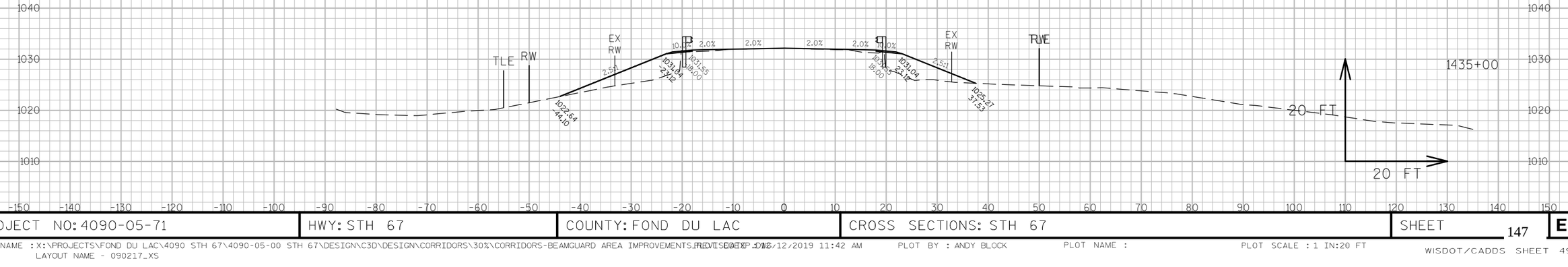


PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 146 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG LAYOUT NAME - 090216_XS
PLOTTED : 12/12/2019 11:42 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



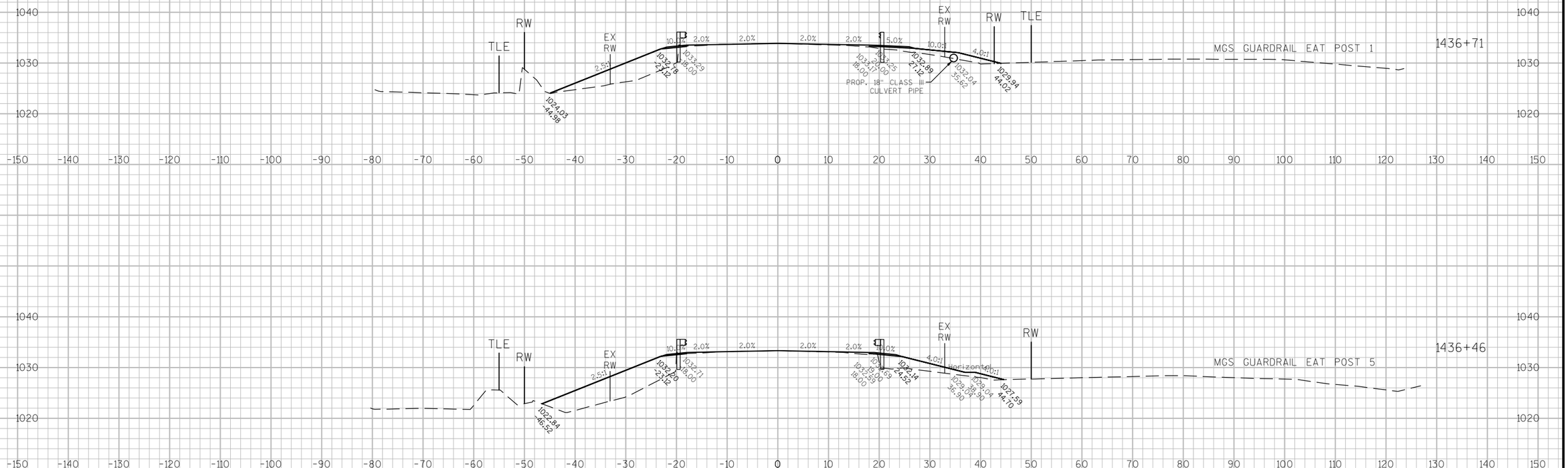




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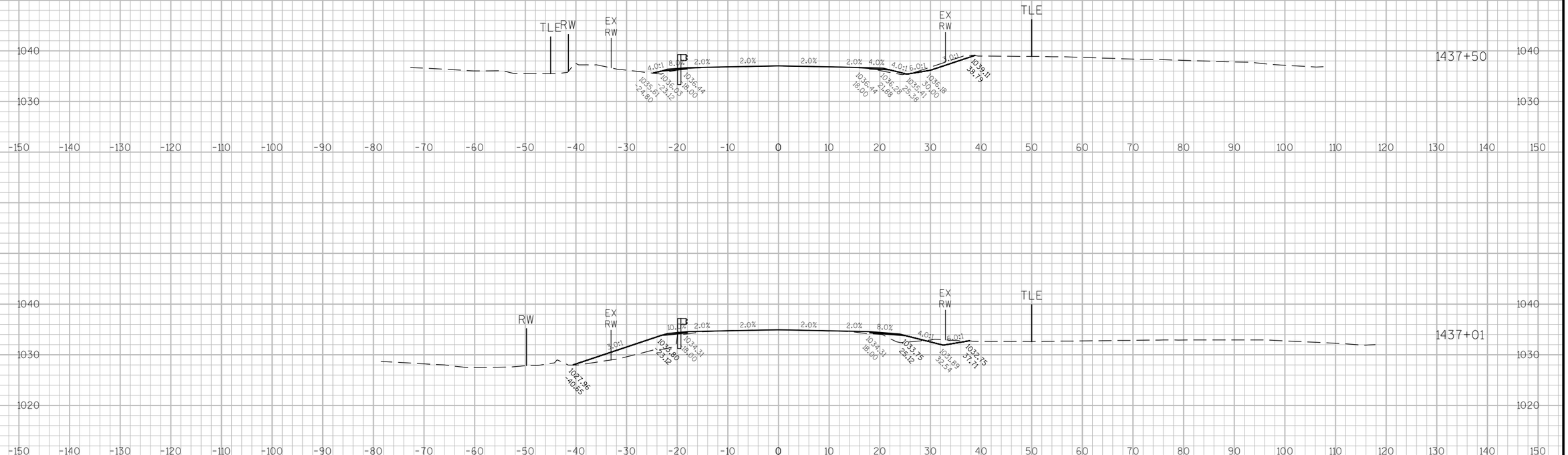
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 147	E



PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 148 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS_REVISED.DWG LAYOUT NAME - 090218_XS
TIME : 12/12/2019 11:42 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

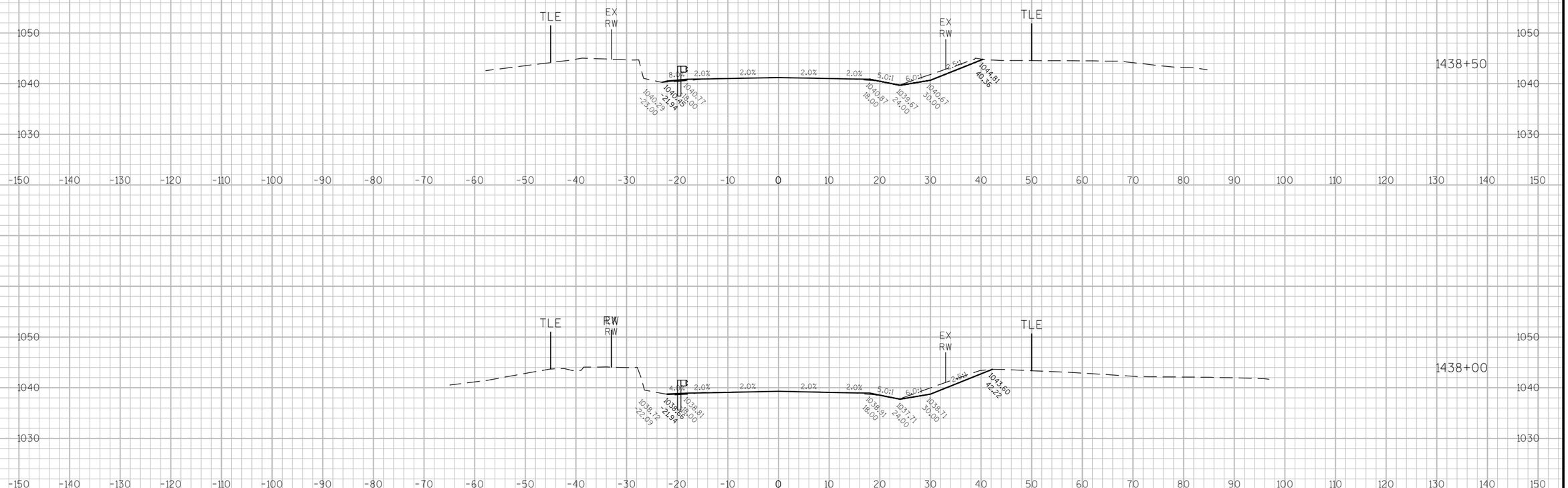


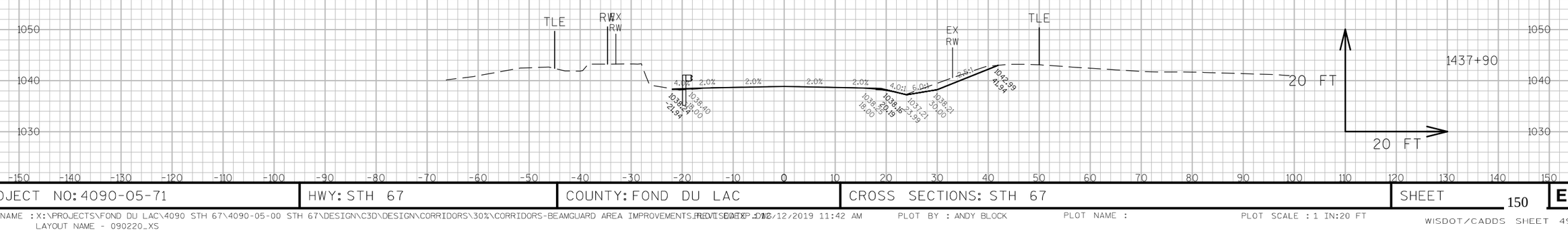
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 149 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG
LAYOUT NAME - 090219_XS
DATE/TIME : 12/12/2019 11:42 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT



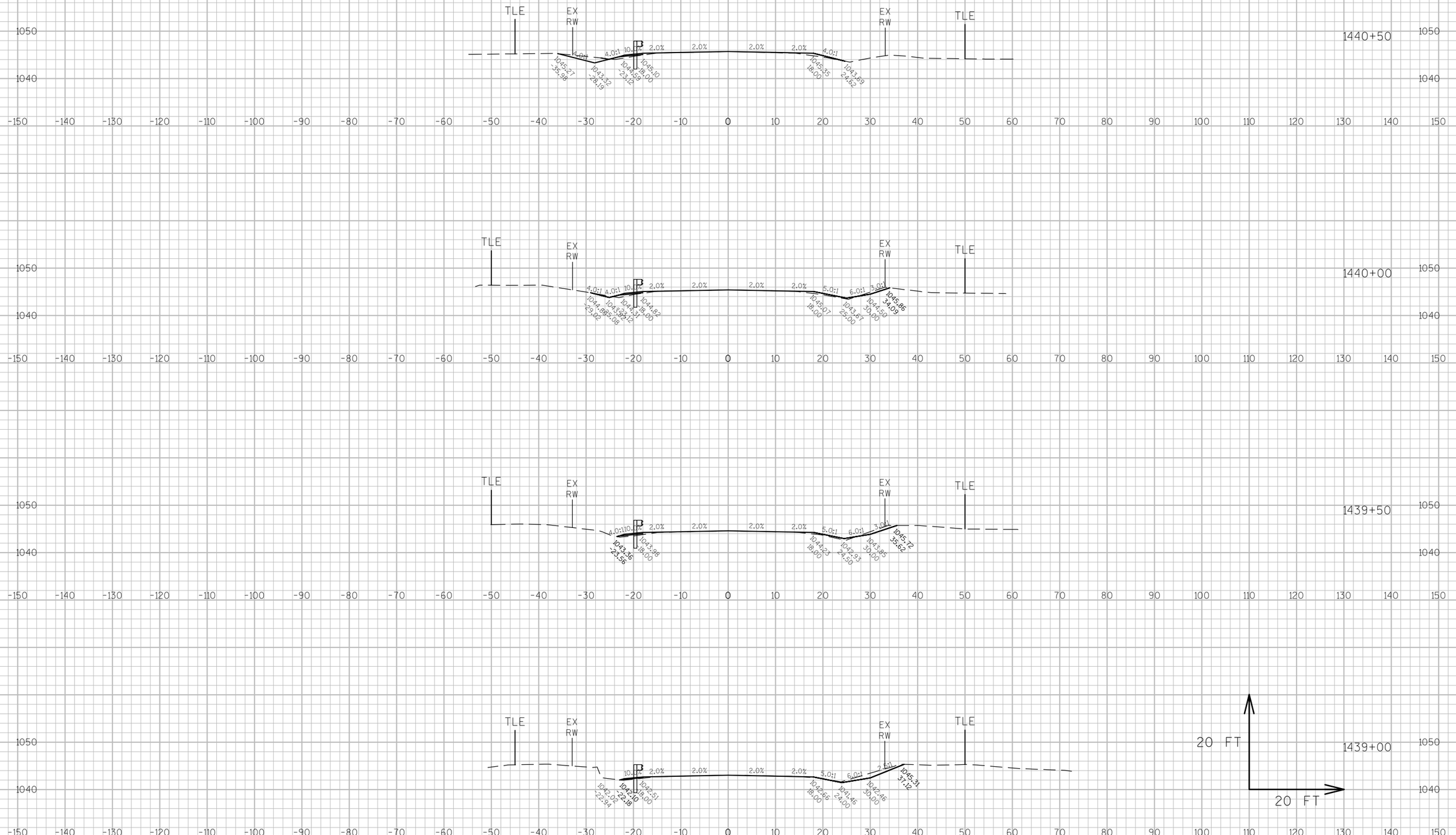


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 150 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISION.DWG
LAYOUT NAME - 090220_XS
DATE : 12/12/2019 11:42 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT



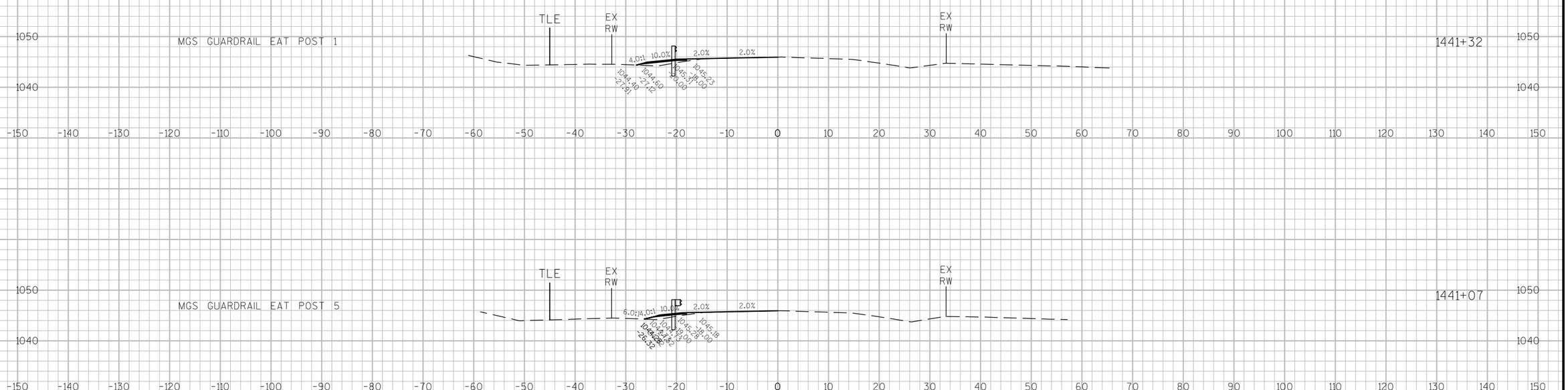
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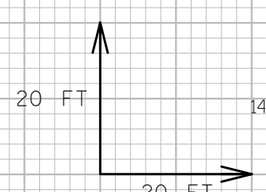
PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 151 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS_PREVISED EXP.DWG
LAYOUT NAME - 090221_XS
12/12/2019 11:42 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49





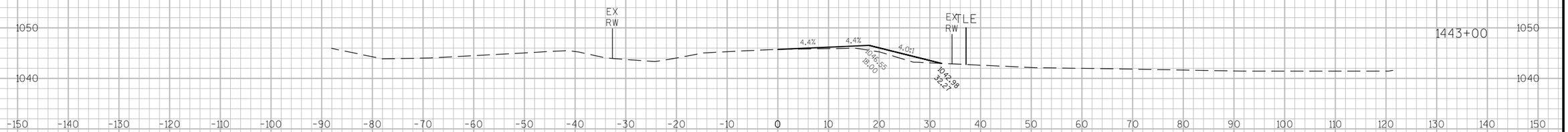


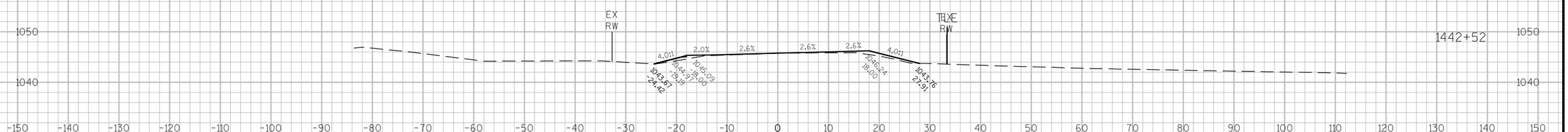


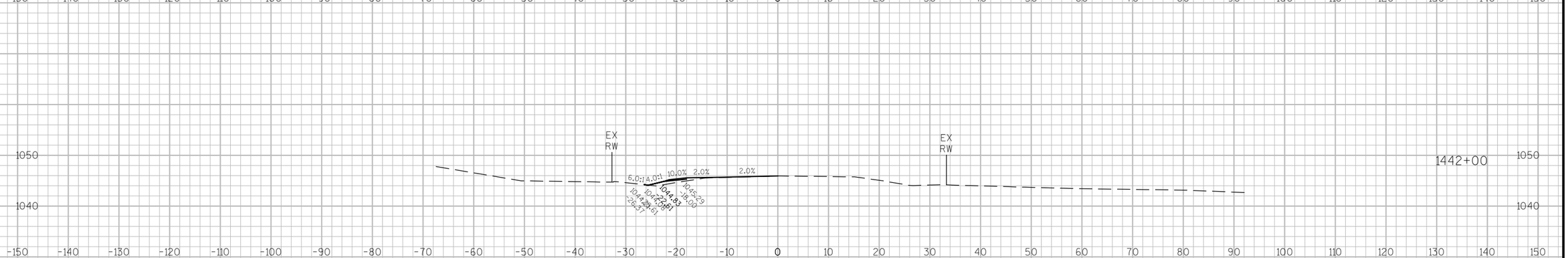
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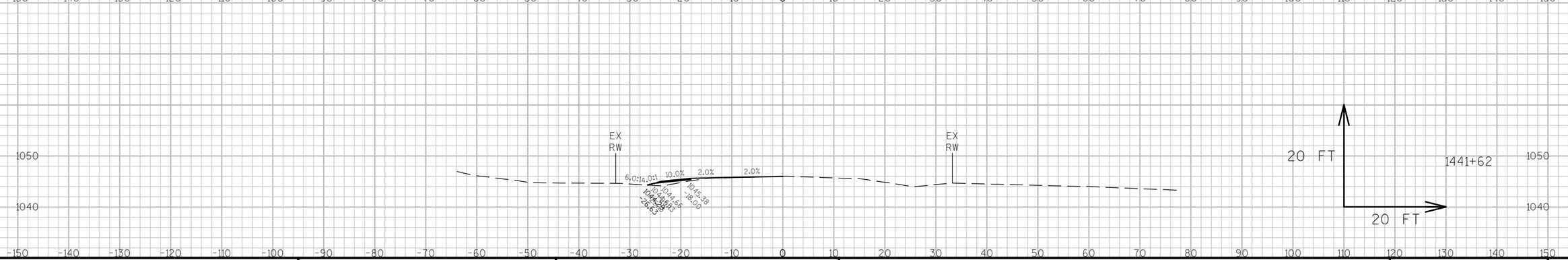
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 152 E







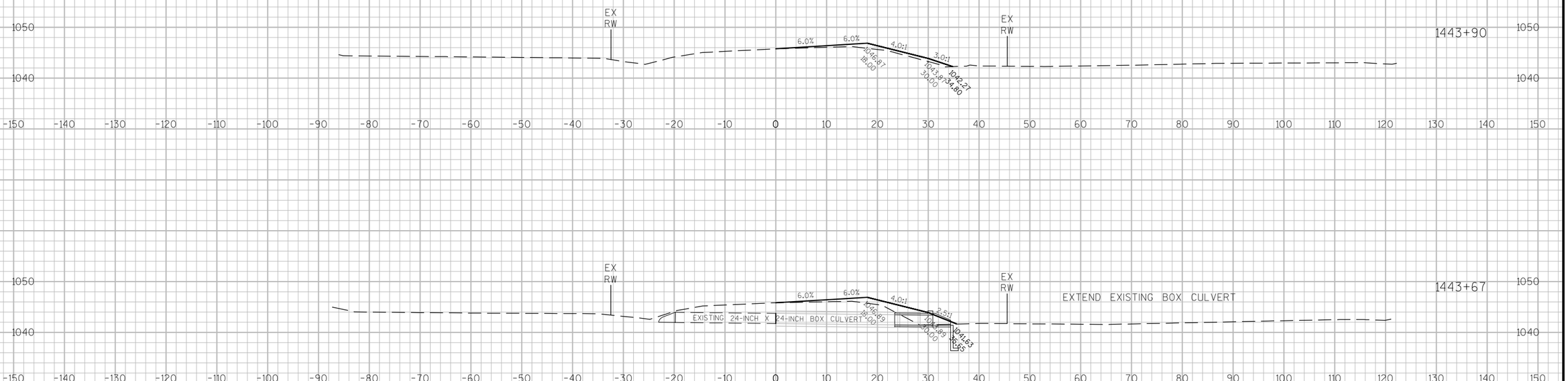


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 153 E

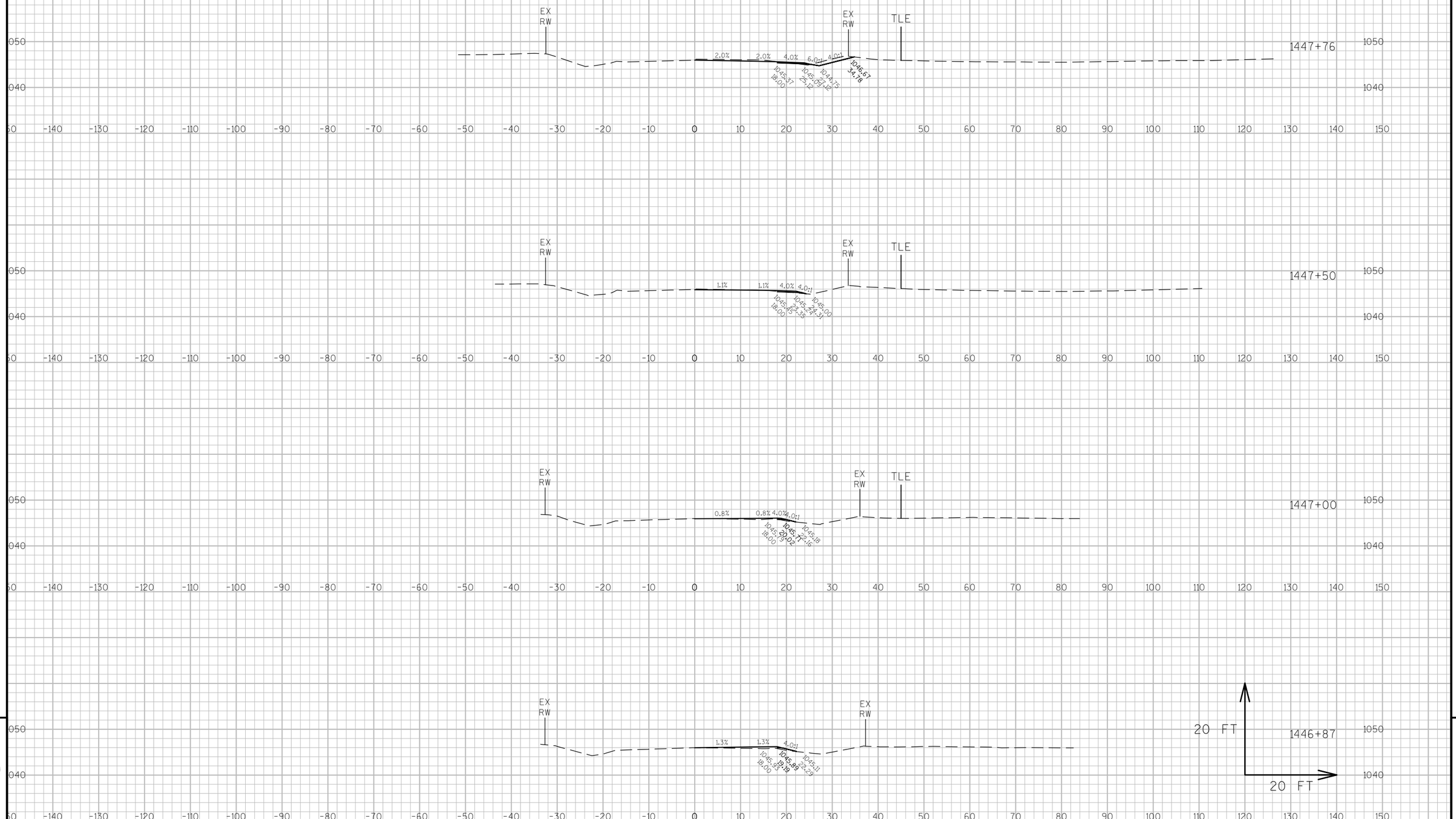
FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG LAYOUT NAME - 090223_XS
TIME : 12/12/2019 11:43 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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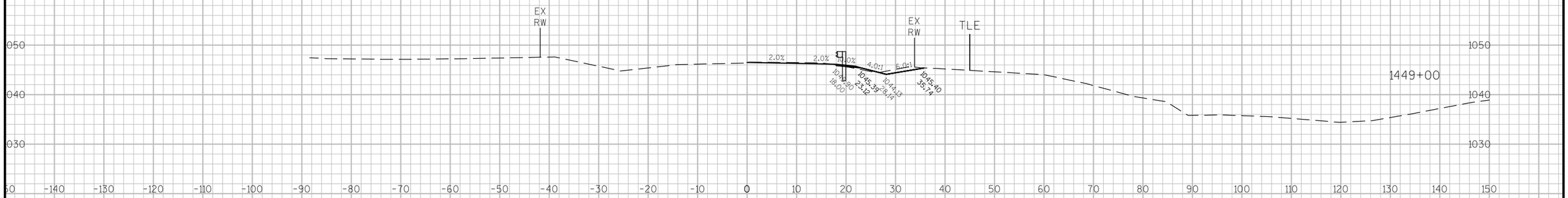
PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 154	E

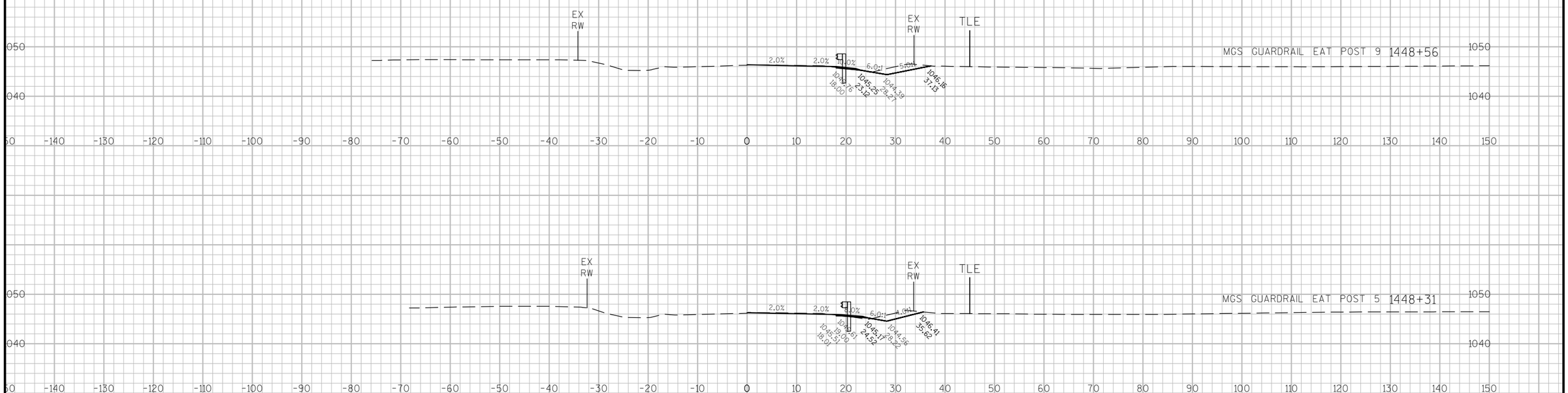


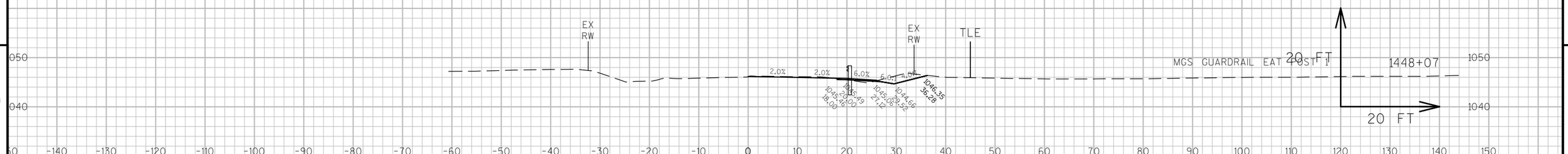
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 155	E



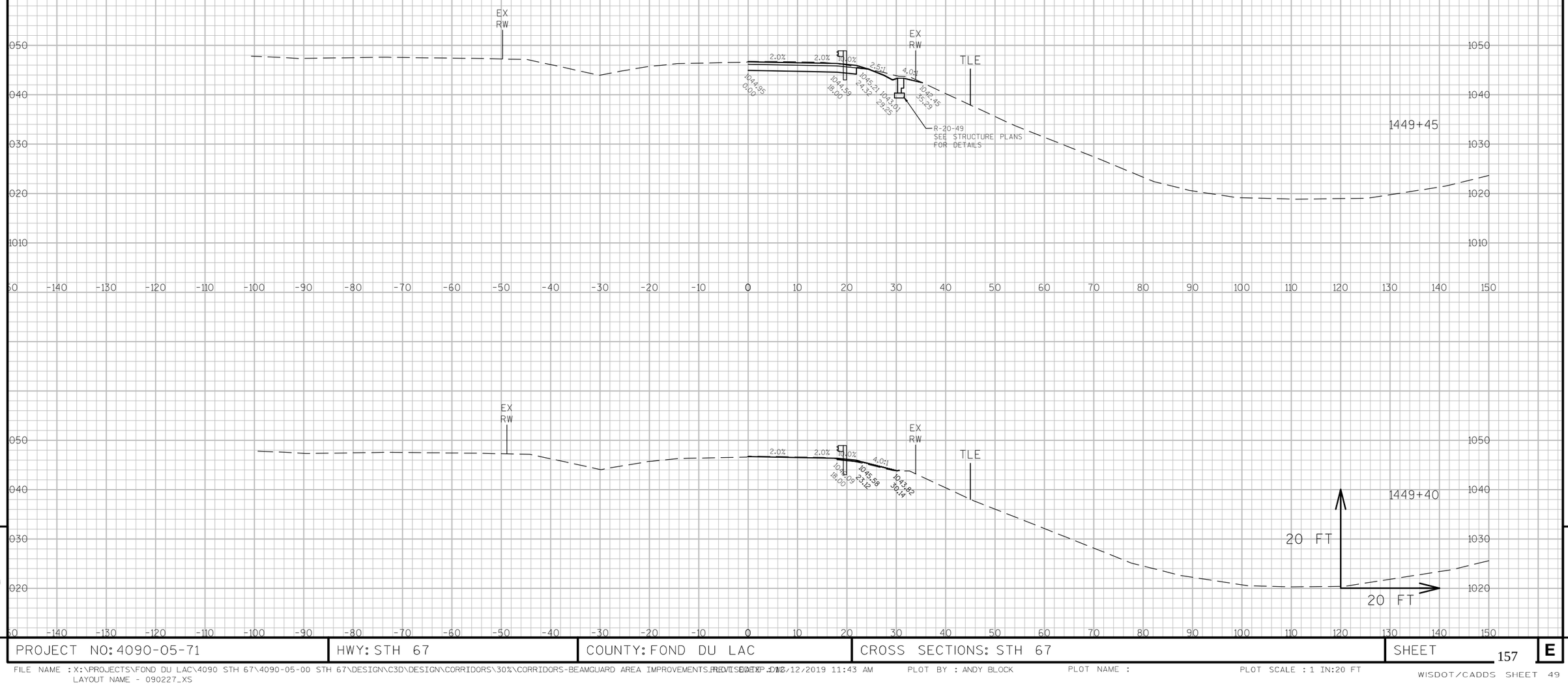




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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 156 E



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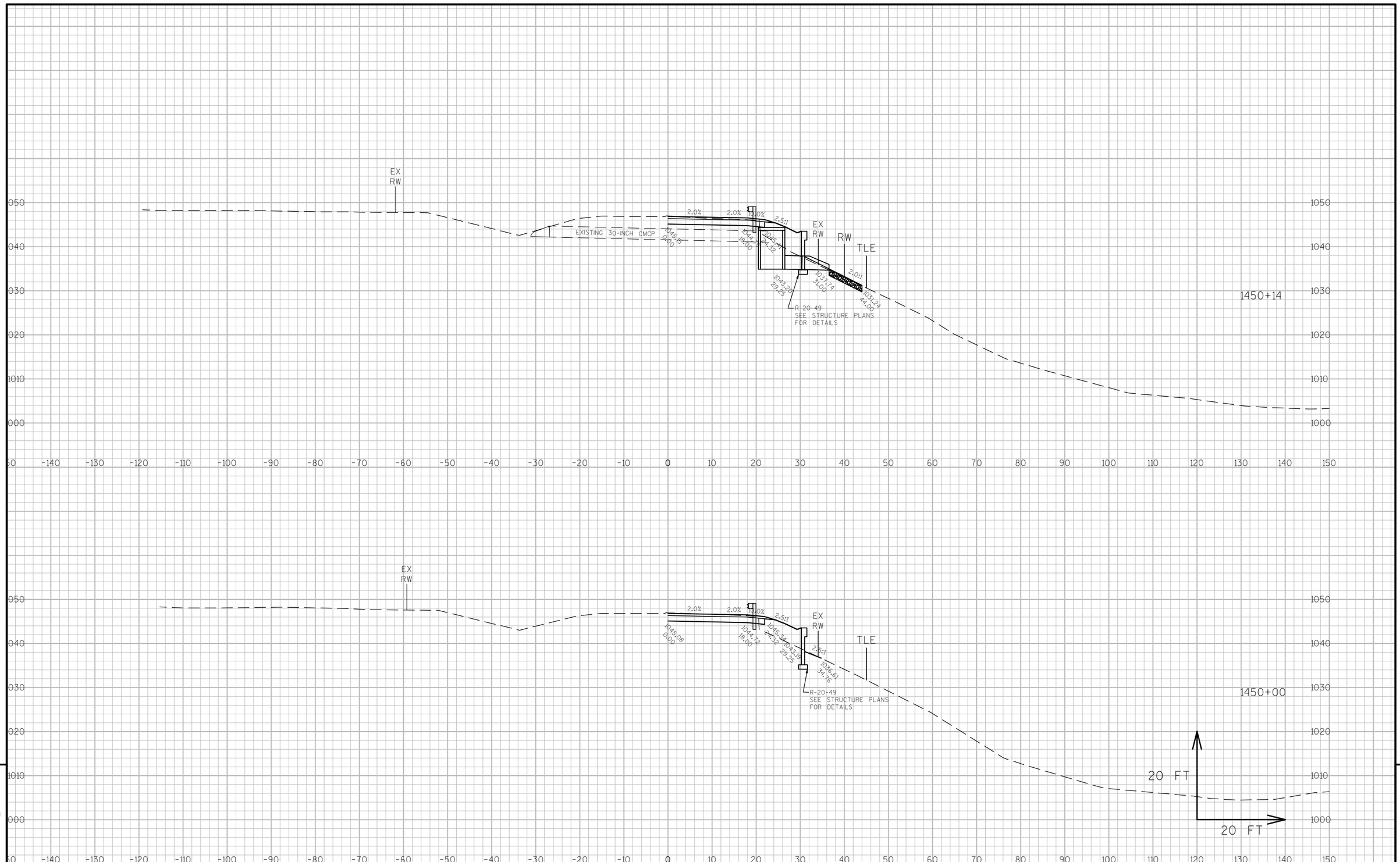
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 157	E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG
LAYOUT NAME - 090227_XS

DATE/TIME : 12/12/2019 11:43 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

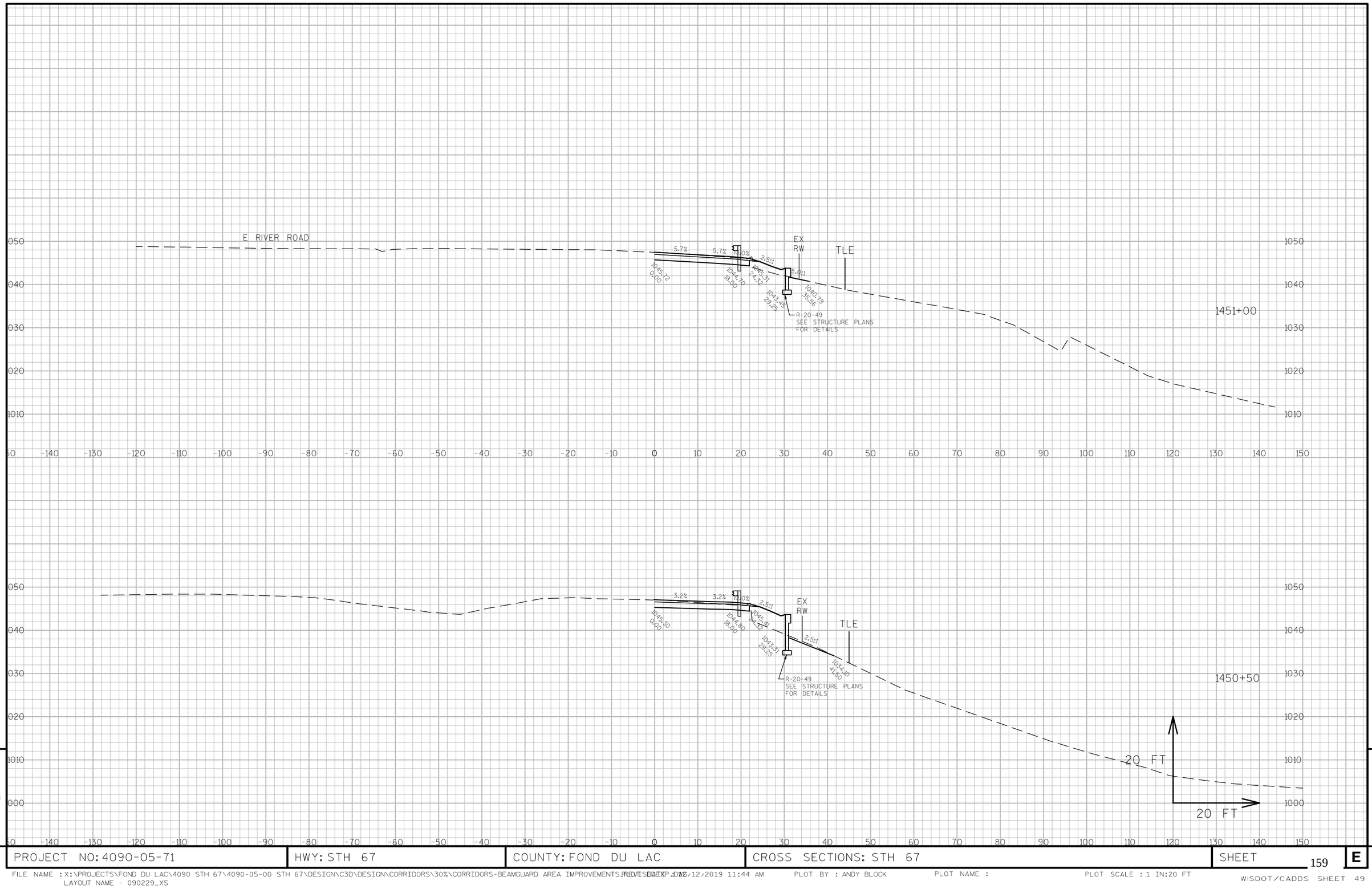


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 158 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISE.DWG LAYOUT NAME - 090228_XS
PLOT DATE : 12/12/2019 11:43 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

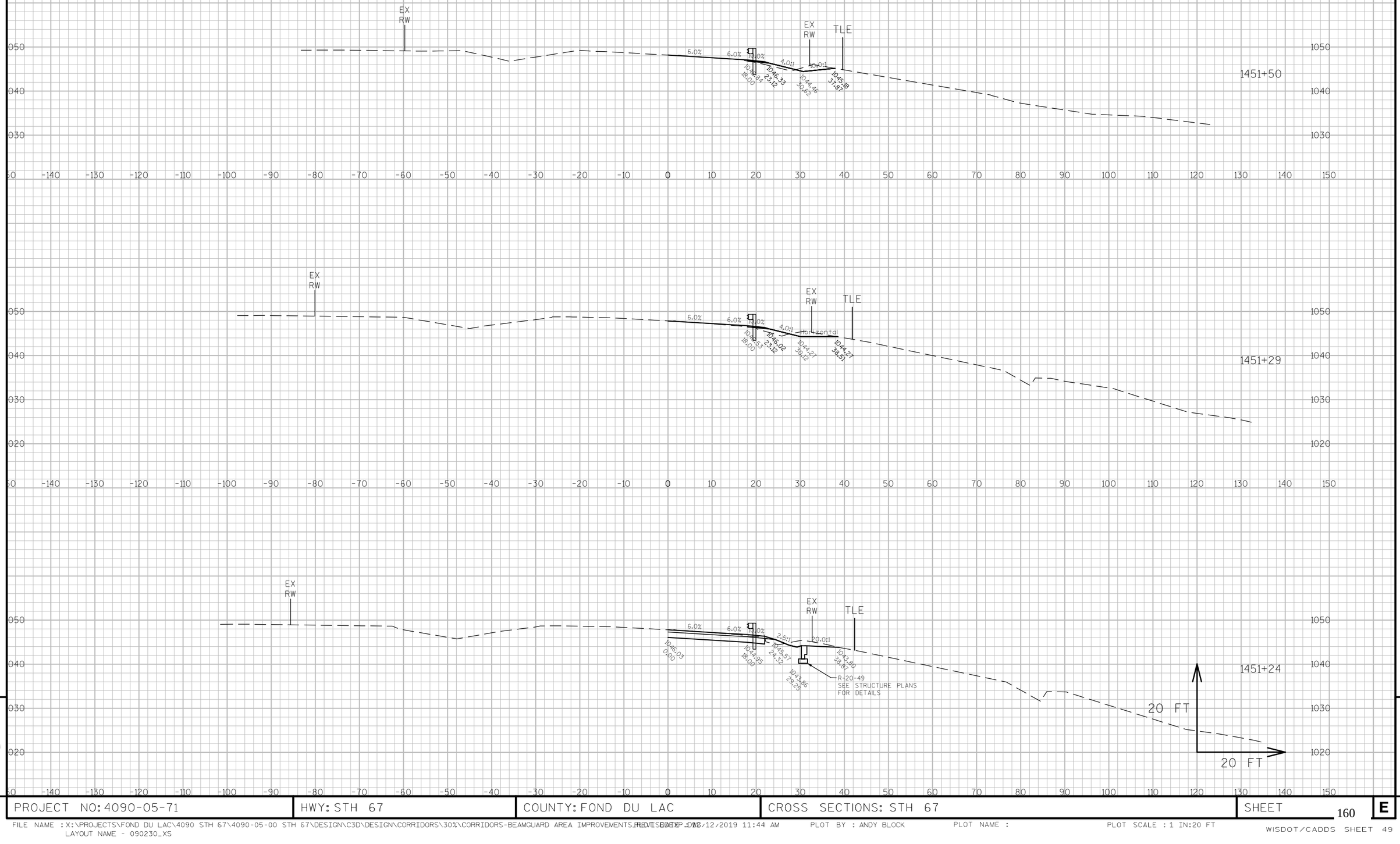


PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 159 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED EXP 2.DWG 12/12/2019 11:44 AM
LAYOUT NAME - 090229_XS

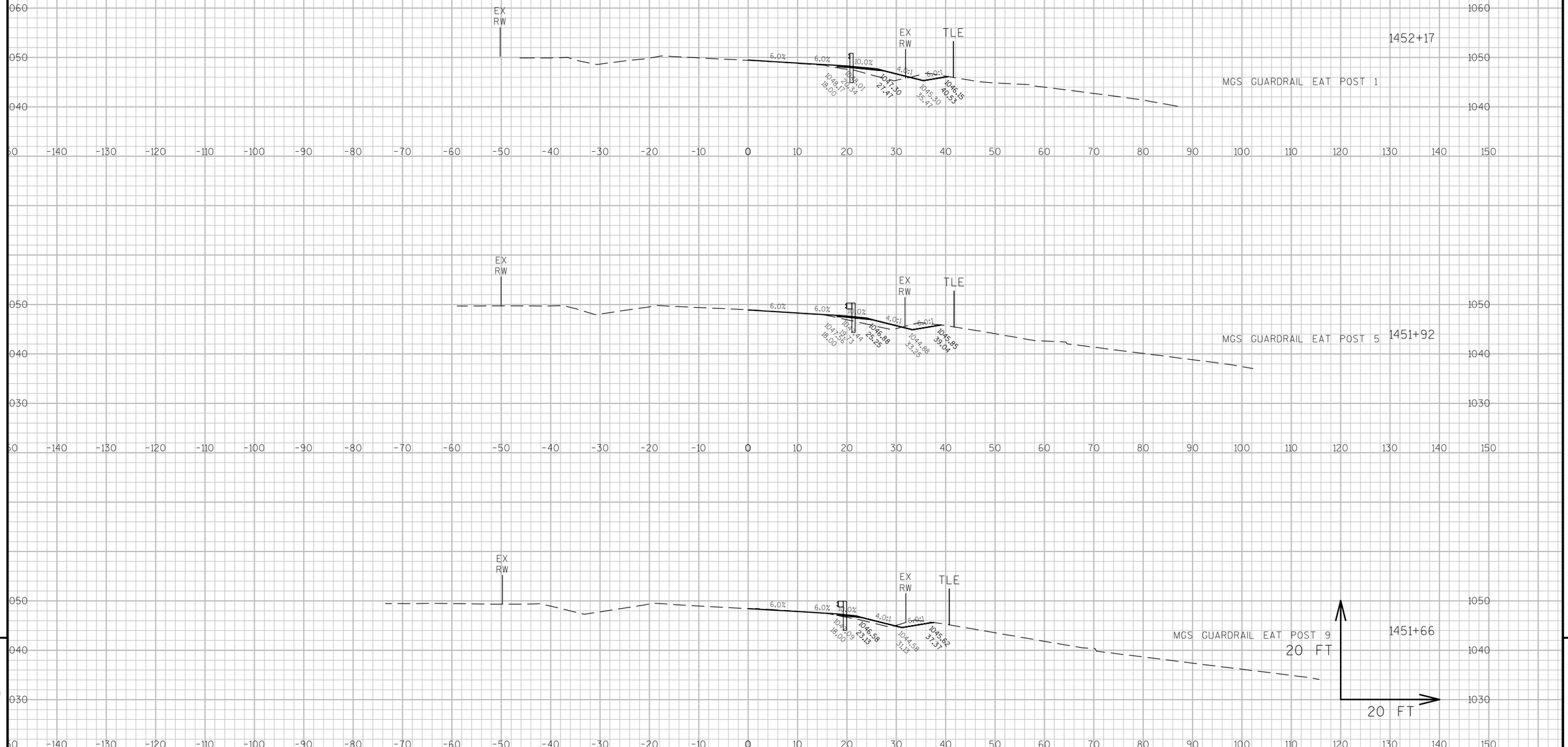
PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



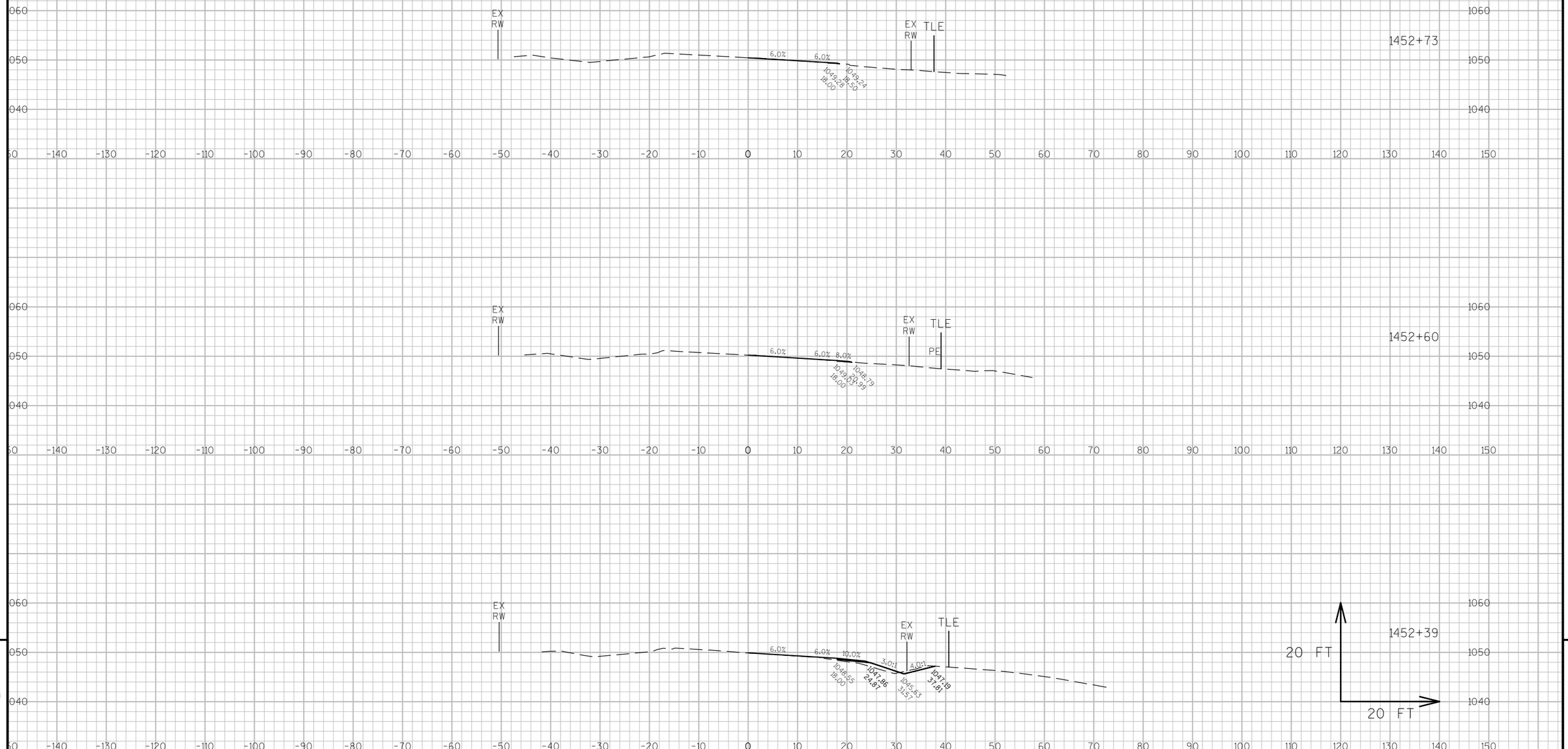
PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 160 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISED.DWG
LAYOUT NAME - 090230_XS
DATE : 12/12/2019 11:44 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 161 E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISE.DWG LAYOUT NAME - 090231_XS
PLOT DATE : 2019/12/19 11:44 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

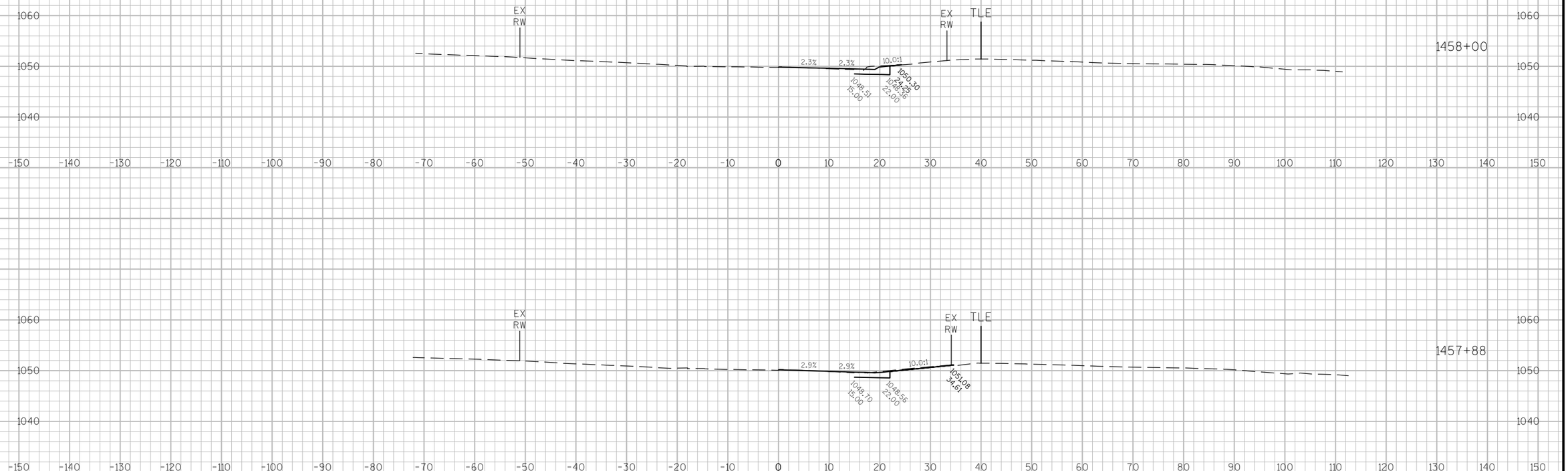


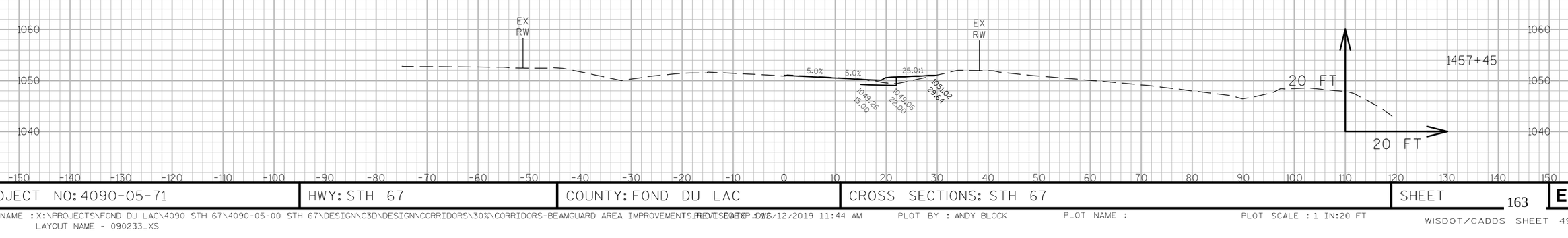
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 162	E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISE.DWG
LAYOUT NAME - 090232_XS
DATE : 12/12/2019 11:44 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT





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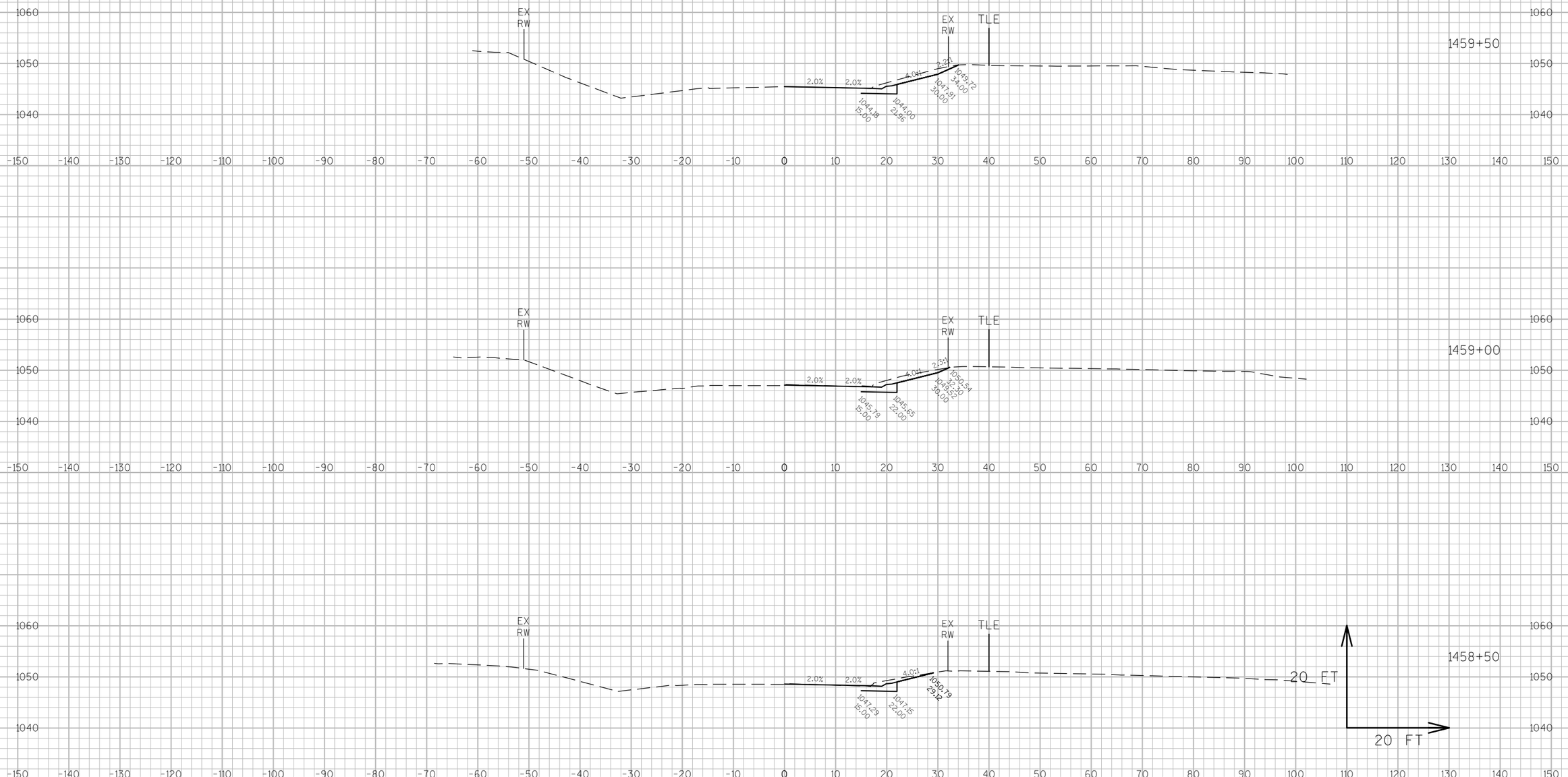
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 163	E

FILE NAME : X:\PROJECTS\FOND DU LAC\4090 STH 67\4090-05-00 STH 67\DESIGN\C3D\DESIGN\CORRIDORS\30%\CORRIDORS-BEAMGUARD AREA IMPROVEMENTS.PREVISE.DWG
LAYOUT NAME - 090233_XS

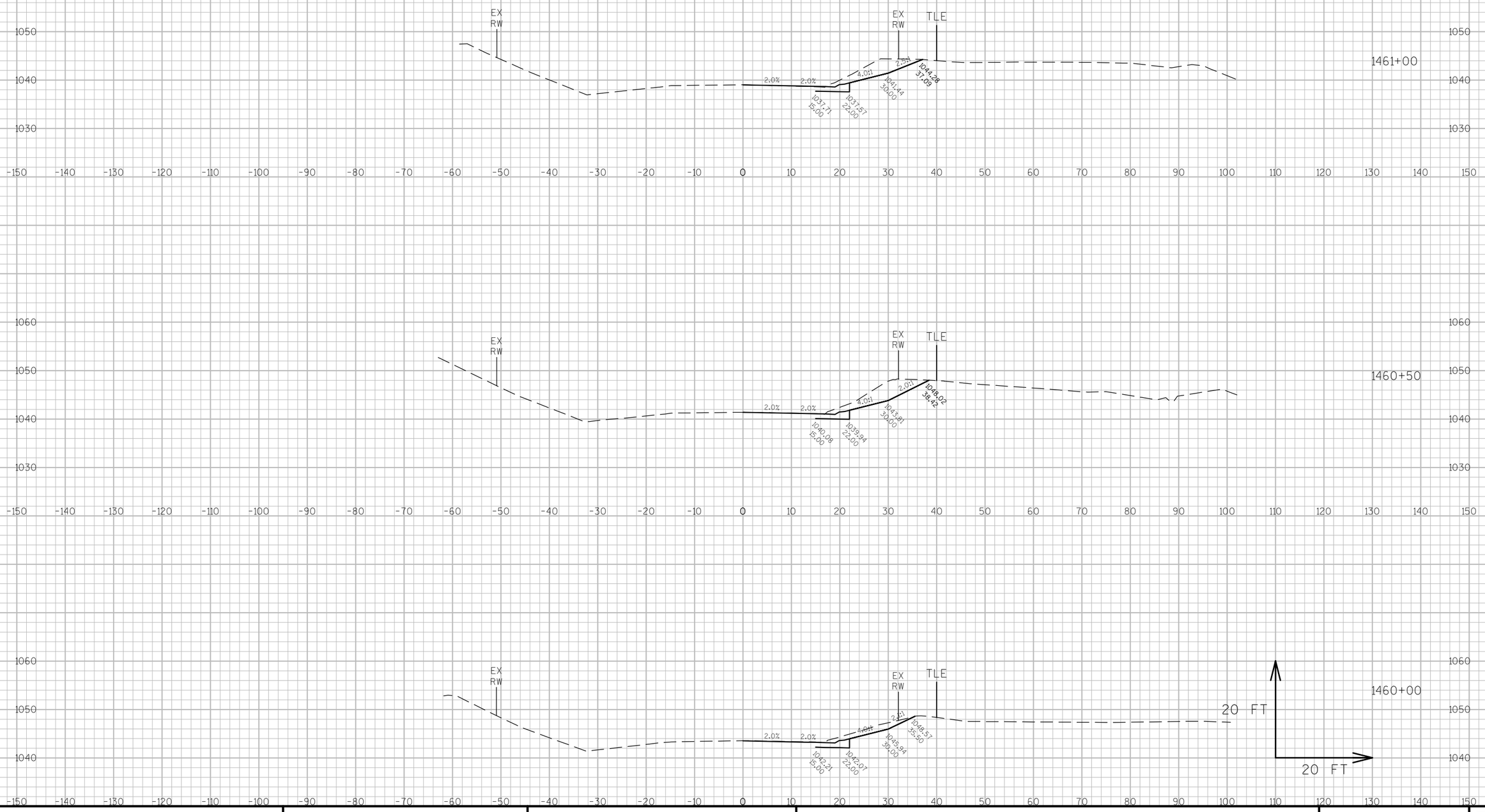
DATE : 12/12/2019 11:44 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 164 E

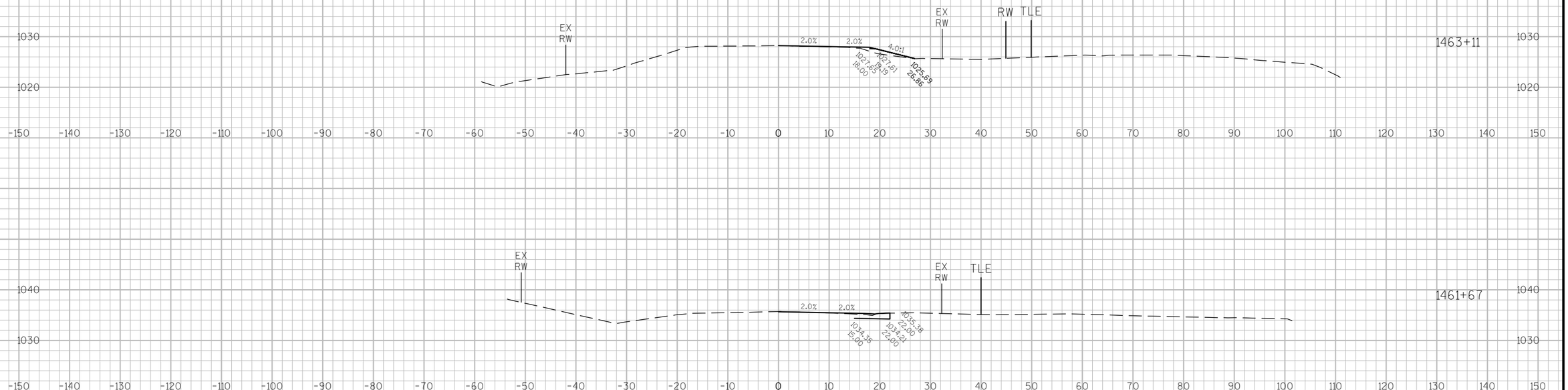
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WISDOT/CADDS SHEET 49



9

9

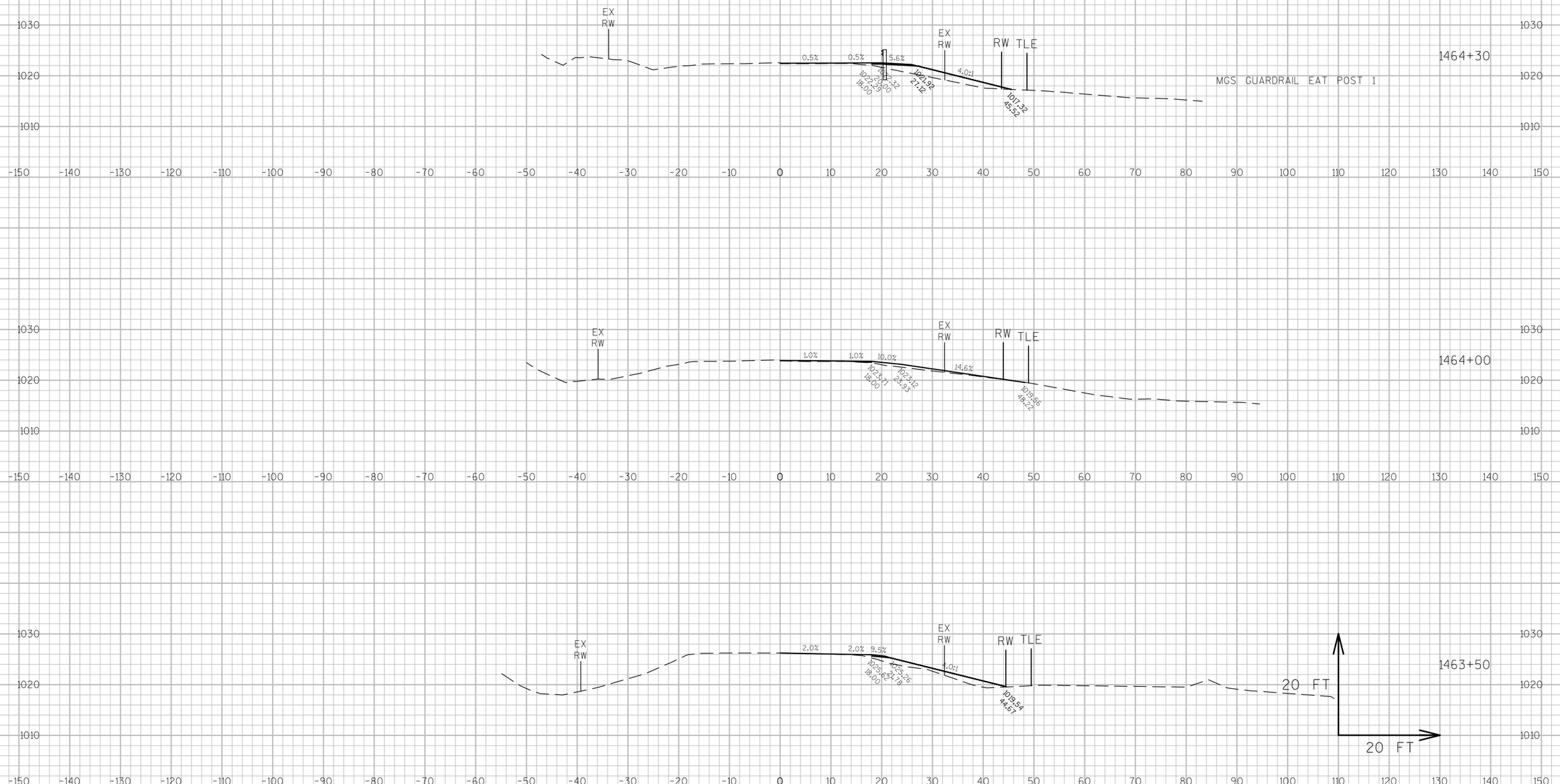
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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 166 E

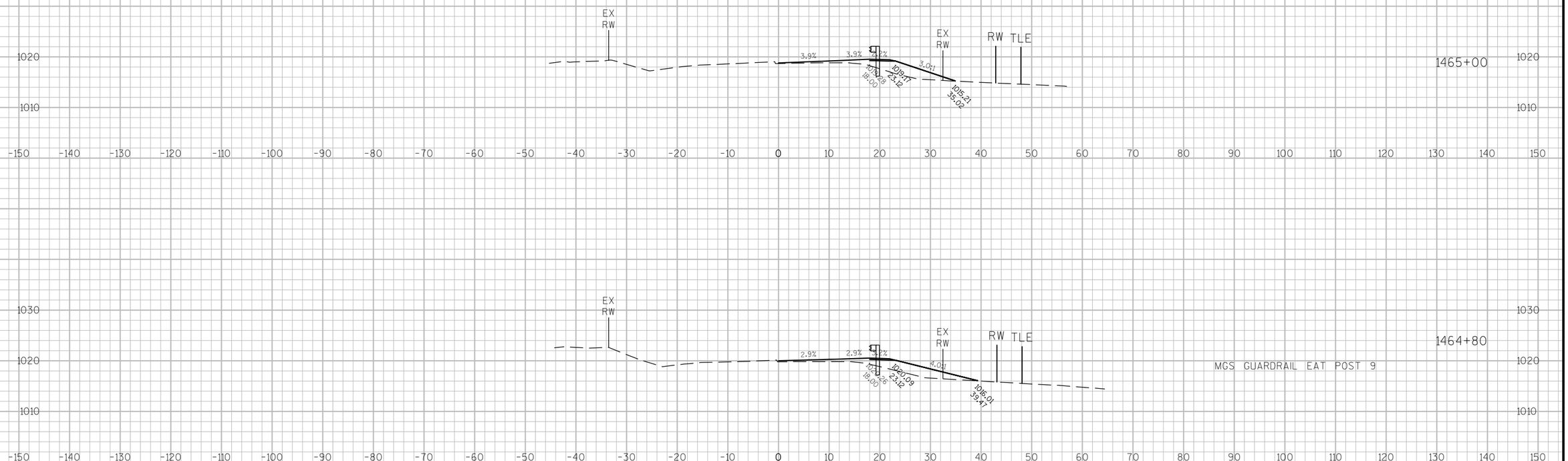
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WISDOT/CADDS SHEET 49



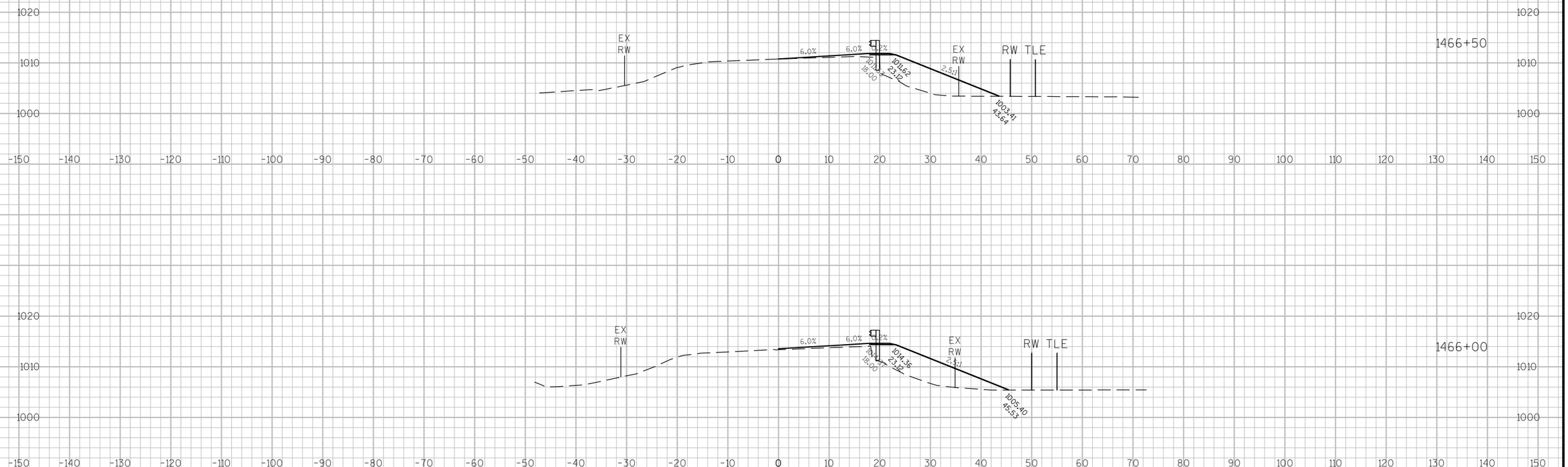
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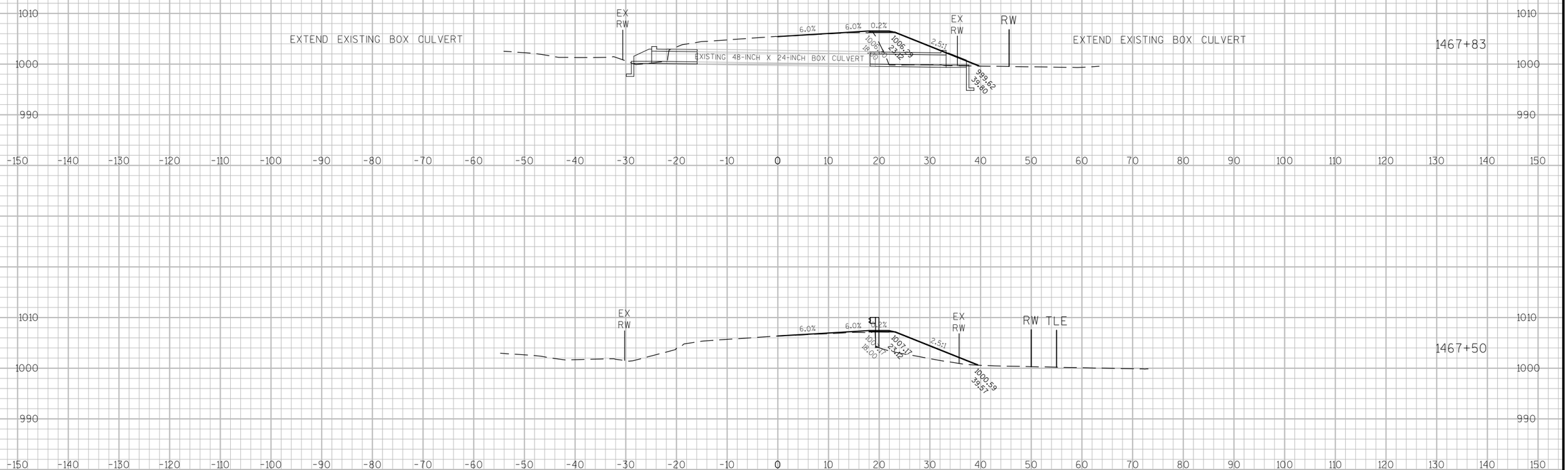
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WISDOT/CADDS SHEET 49



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WISDOT/CADDS SHEET 49

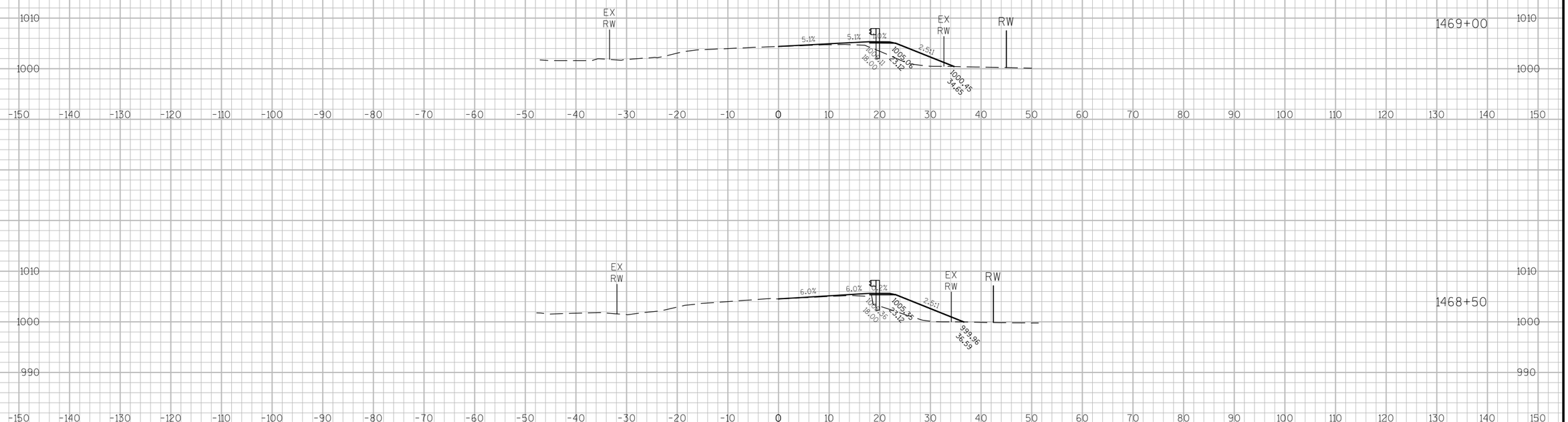


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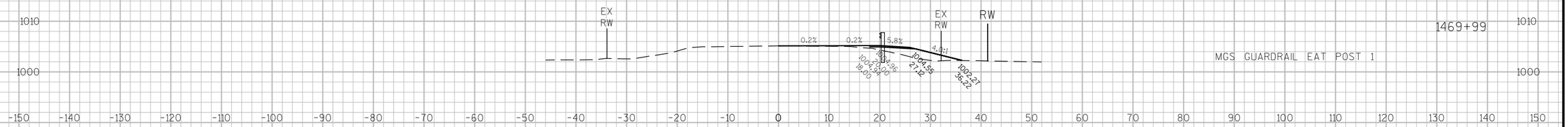
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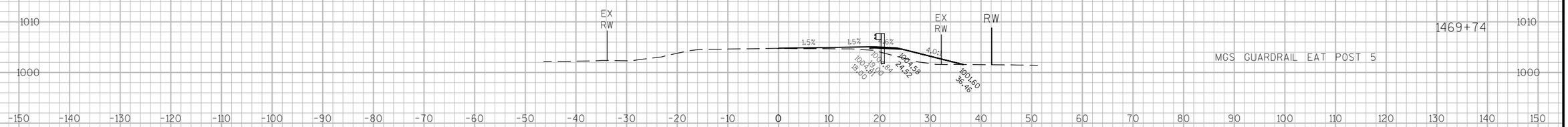
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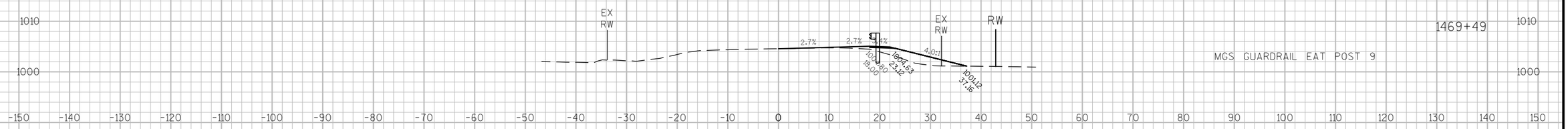
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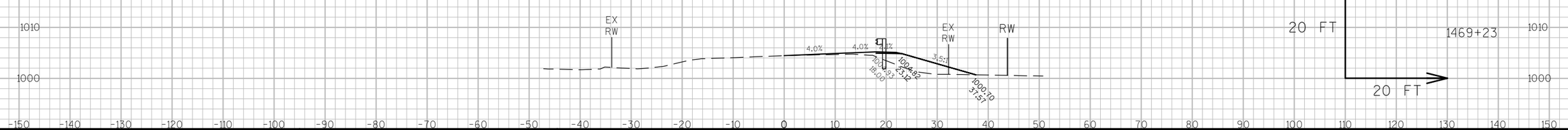
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WISDOT/CADDS SHEET 49







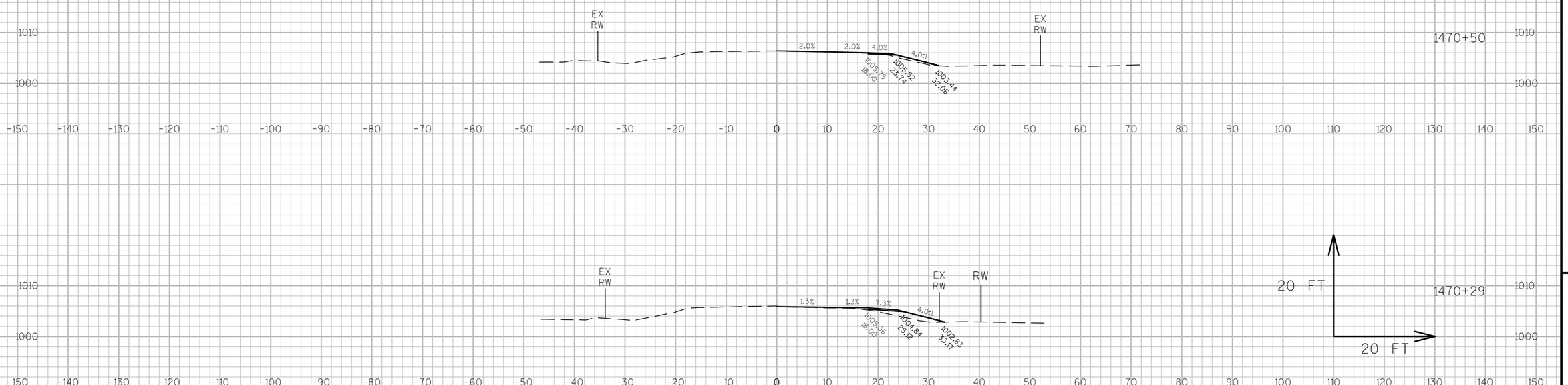


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PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 172 E

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9

PROJECT NO: 4090-05-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 67	SHEET 173 E

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PLOTTED : 12/12/2019 11:45 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

GRE APRIL 2020

PROJECT ID: 4530-06-71
WITH: 4090-05-71

COUNTY: FOND DU LAC

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 = 352

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4530-06-71	WISC 2020146	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

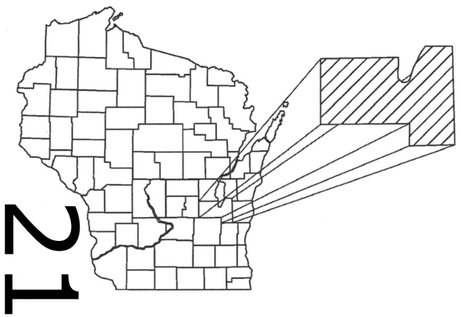
USH 45 - ECL

(USH 45 - DIVISION ROAD)

STH 67

FOND DU LAC COUNTY

STATE PROJECT NUMBER
4530-06-71



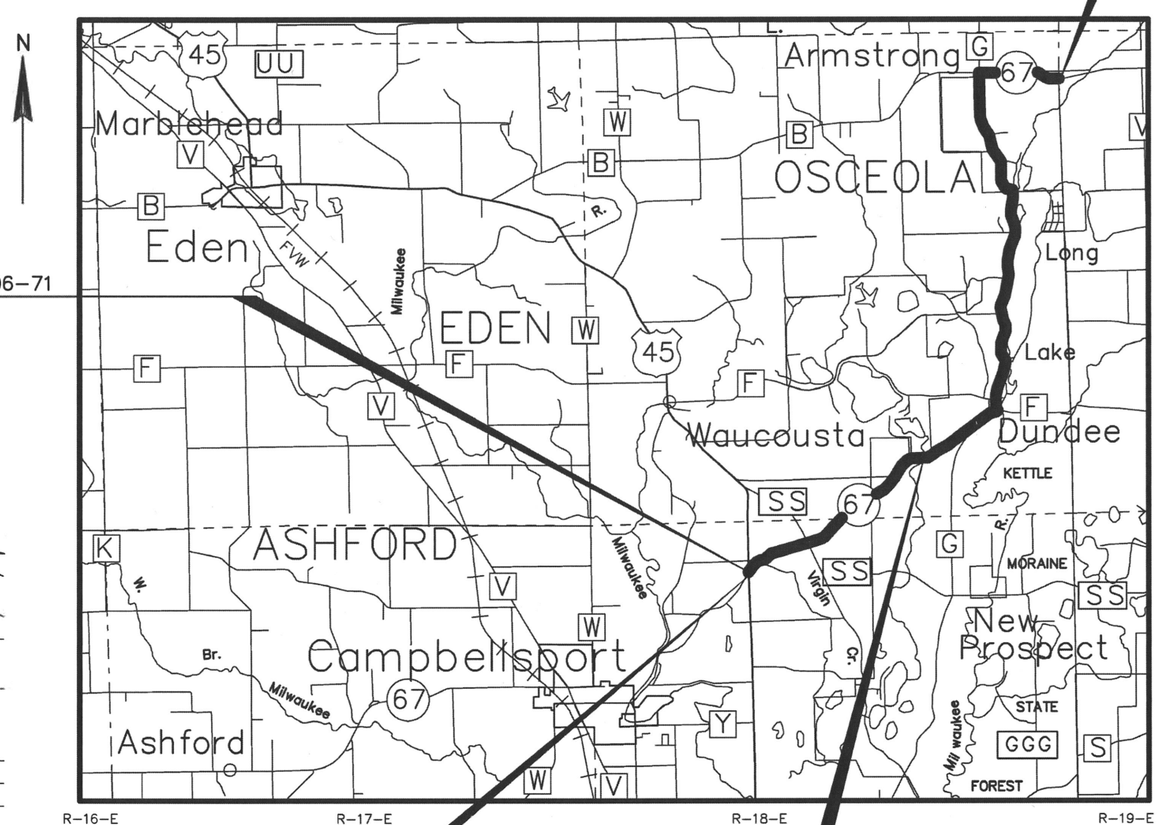
21

DESIGN DESIGNATION

A.A.D.T. 2016 =	1,600
A.A.D.T. 2036 =	2,100
D.H.V. =	8
D.D. =	63/37
T. =	12.50%
DESIGN SPEED =	60
ESALS =	492,900

BEGIN PROJECT 4530-06-71
STA 1490+00.00
Y= 328,156.02
X= 871,228.70

END PROJECT 4530-06-71
STA 1995+56.89



EXCEPTION TO NET ' LENGTH
STA. 1502+60.00 – STA. 1508+60.00
COMPLETED DOT PROJECT 4530-06-73

EXCEPTION TO NET ' LENGTH
STA. 1634+22.34 – STA. 1649+72.34
COMPLETED DOT PROJECT 4530-07-71

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 9.168 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), FOND DU LAC COUNTY, NAD83 (2007).

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2007) ADJUSTMENT.

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		**UTILITIES**	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

Mead & Hunt

Mead and Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
phone: 608-273-6380
meadhunt.com

WISCONSIN
RUSSELL A. CHESMORE
E-26272
VERONA
WI
PROFESSIONAL ENGINEER
10/29/19

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	MEAD & HUNT, INC.
Project Manager	BRYAN LEARST, PE
Regional Examiner	
Regional Supervisor	ROB WAGNER, PE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 10/23/19 (Signature)

E

2

GENERAL NOTES

THE CONTRACTOR SHALL CONTACT THE UTILITIES AND DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ANY LOCAL OR MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

THE LOCATIONS OF EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOIL, FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

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

MILL AND PAVE ADJACENT TO SECTION CORNER MONUMENTS WITHOUT DAMAGING THE MONUMENT.

PRIOR TO THE PLACEMENT OF STEEL PLATE BEAM GUARD OR MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTOR'S EXPENSE.

EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY GRUBBING OR TOPSOIL STRIPPING OPERATIONS.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

SUBSURFACE EXPLORATION REPORTS ARE AVAILABLE FOR REVIEW. CONTACT PROJECT MANAGER, BRYAN LEARST, P.E. AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NE REGION, PHONE NUMBER (920) 366-5639.

NOTIFY THE NORTHEAST REGION SIGNING ENGINEER AT (920) 492-4161 FIVE (5) WORKING DAYS PRIOR TO COMPLETING ALL ASPHALT PAVING SO SPECIFICS FOR W13-1 SIGNS CAN BE DETERMINED.

LANE AND SHOULDER SUPERELEVATION/CROSS SLOPE AND TRANSITION LENGTHS ARE FOR REFERENCE ONLY AND CAN BE ADJUSTED BY THE ENGINEER IN THE FIELD TO MATCH FIELD CONDITIONS.

MAINLINE AND SIDEROAD ALIGNMENTS ARE FOR REFERENCE ONLY. ACTUAL STATIONING AND OFFSETS MAY BE ADJUSTED TO BEST FIT THE CONDITIONS IN THE FIELD. MILLING AND PAVING WIDTHS SHALL BE BASED OFF EXISTING ROADWAY CENTERLINE LOCATION.

CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION:

WISDOT PROJECT MANAGER
NORTHEAST REGION
ATTN: BRYAN LEARST, P.E.
944 VAN DER PERREN WAY
GREEN BAY, WI 54304
OFFICE: (920)366-5639
EMAIL: bryan.learst@dot.wi.gov

WISDOT SURVEY COORD.
NORTHEAST REGION
ATTN: CORMAC MCINNIS, PLS
944 VAN DER PERREN WAY
GREEN BAY, WI 54304
OFFICE: (920)492-5638
EMAIL: cormac.mcinnis@dot.wi.gov

DESIGN CONSULTANT:

MEAD & HUNT, INC.
ATTN: RUSTY CHESMORE, P.E.
2440 DEMMING WAY
MIDDLETON, WI 53562
OFFICE: (608)273-6380
EMAIL: rusty.chesmore@meadhunt.com

DNR LIAISON:

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: JAY SCHIEFELBEIN
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
OFFICE: (920)360-3784
EMAIL: jeremiah.schiefelbein@wisconsin.gov

ORDER OF SECTION 2 SHEETS:

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTIONS DETAILS
- EROSION CONTROL PLAN
- PERMANENT SIGNING PLAN
- PERMANENT MARKING PLAN
- TRAFFIC CONTROL/STAGING
- DETOUR SIGNING DETAIL
- ALIGNMENT DETAIL

UTILITY CONTACTS

COMMUNICATION

CHARTER COMMUNICATIONS
ATTN: TODD HILDEBRANT
165 KNIGHTS WAY
FOND DU LAC, WI 54935
OFFICE: (920)794-4946
EMAIL: todd.hildebrant@charter.com

ELECTRICITY

ALLIANT ENERGY
ATTN: MICHAEL BROLIN
4902 NORTH BILTMORE LANE
MADISON, WI 53713
OFFICE: (608)458-4871
EMAIL: michaelbrolin@alliantenergy.com

GAS/PETRO

ANR PIPELINE CO
ATTN: TODD BRISTER
W 3925 PIPELINE LANE
EDEN, WI 53019
OFFICE: (920)477-2235
EMAIL: todd_brister@transcanada.com

COMMUNICATIONS

FRONTIER COMMUNICATIONS OF WI, LLC
ATTN: RUSS RYAN
107 PLEASANT VIEW DRIVE
PLYMOUTH, WI 53073
OFFICE: (920)893-7212
MOBILE: (920)737-9662
EMAIL: russel.w.ryan@ftr.com

ELECTRICITY

WE ENERGIES
ATTN: NICOLE SMULLEN
333 W EVERETT ST. A299
MILWAUKEE, WI 53203
OFFICE: (414)221-5617
EMAIL: nicole.smullen@wecenergygroup.com

GAS/PETRO

WISCONSIN PUBLIC SERVICE COOPERATION
ATTN: LORI BUTRY
700 N ADAMS ST.
P.O. BOX 19001
GREENBAY, WI 54307-9001
OFFICE: (920)433-1703
EMAIL: lori.butry@wisconsinpublicservice.com

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	GENERAL NOTES	SHEET 2	E

2

2

TOWN HALL ROAD

STH 67
CONSTRUCTION RL

HAPPY HOLLOW ROAD

MATCHLINE STA 1600

COUNTY ROAD SS

STH 67

1450 1460 1470 1480 1490 1500 1510 1520 1530 1540 1550 1560 1570 1580 1590 1600 16

EXCEPTION TO NET CENTERLINE
STA. 1502+60.00 – STA. 1508+60.00

US HWY 45

COUNTY ROAD SS

BEGIN PROJECT 4530-06-71
STA. 1490+00

N

MATCHLINE STA 1730

17

COUNTY HIGHWAY F

VISTA DRIVE

1720

STH 67

1710

DINS HILL ROAD

FIRST STREET

1700

ELM STREET

TOWN OF DUNDEE

1690

1680

BIRCHWOOD DRIVE

EXCEPTION TO NET CENTERLINE
STA. 1634+22.34 – STA. 1649+72.34

1630

1620

MATCHLINE STA 1610

10

1640 1650 1660 1670

STH 67

COUNTY ROAD G

STH 67
CONSTRUCTION RL

KETTLE MORAINE SCENIC DRIVE

N

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\020201_PO.DWG PLOT DATE : 12/16/2019 10:02 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

2

2

MATCHLINE STA 1730

1730 1740 1750 1760 1770 1780 1790 1800 1810 1820 1830 1840 1850 1860 1870 1880 1890

STH 67 (COUNTY ROAD G)

RED OAK DRIVE

HELEN LANE

STH 67
CONSTRUCTION RL

LAKEVIEW ROAD

LOG CABIN ROAD

BOY SCOUT DRIVE

MATCHLINE STA 1890+50

LONG LAKE

N

COUNTY ROAD G

COUNTY ROAD B

1930 1940 1950 1960 1970 1980 1990 1995

STH 67 (COUNTY ROAD G)

1920 1910 1900

STH 67
CONSTRUCTION RL

END PROJECT 4530-06-71
STA. 1995+56.89

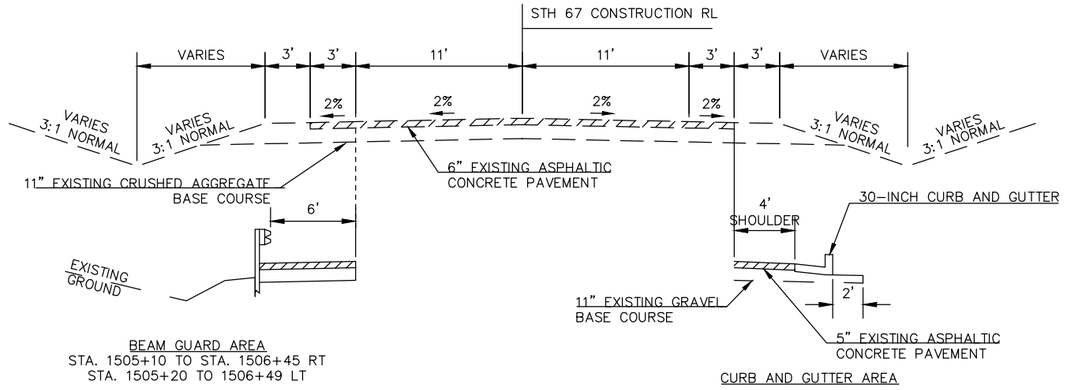
MATCHLINE STA 1890+50

N

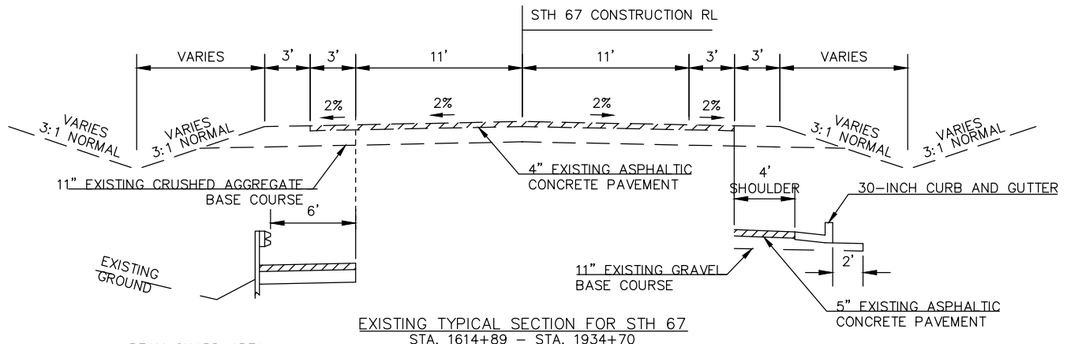
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WISDOT/CADDS SHEET 44



EXISTING TYPICAL SECTION FOR STH 67
1490+00 TO STA. 1614+89

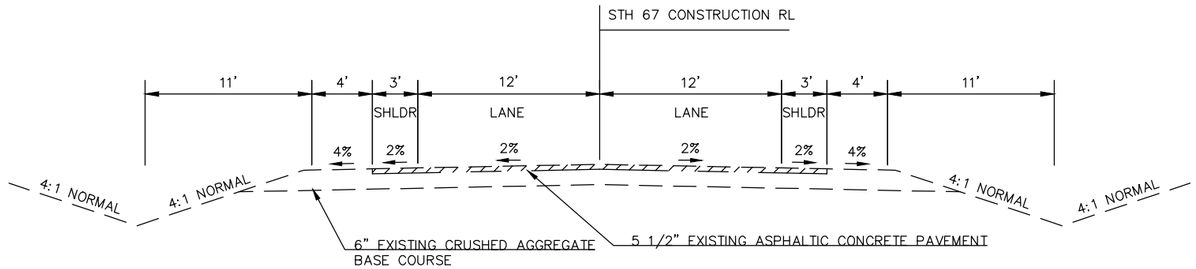


EXISTING TYPICAL SECTION FOR STH 67
STA. 1614+89 – STA. 1934+70

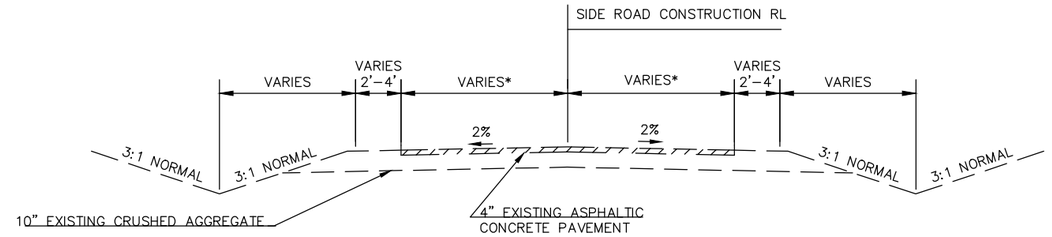
BEAM GUARD AREA
STA. 1773+43 TO STA. 1780+12 RT
STA. 1813+08 TO STA. 1814+49 LT
STA. 1813+41 TO STA . 1814+45 RT
STA. 1814+56 TO STA. 1820+21 LT
STA. 1814+61 TO STA. 1817+11 RT
STA. 1822+45 TO STA. 1825+05 RT
STA. 1830+45 TO STA. 1841+20 RT
STA. 1846+76 TO STA. 1847+09 RT
STA. 1846+92 TO STA. 1847+53 LT
STA. 1848+30 TO STA. 1849+40 RT
STA. 1850+98 TO STA. 1853+77 LT
STA. 1855+68 TO STA. 1861+90 LT
STA. 1892+02 TO STA. 1906+12 LT
STA. 1899+75 TO STA. 1902+34 RT
STA. 1918+28 TO STA. 1921+76 LT

CURB AND GUTTER AREAS
ASSORTED LOCATIONS – NO WORK EXPECTED

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 5



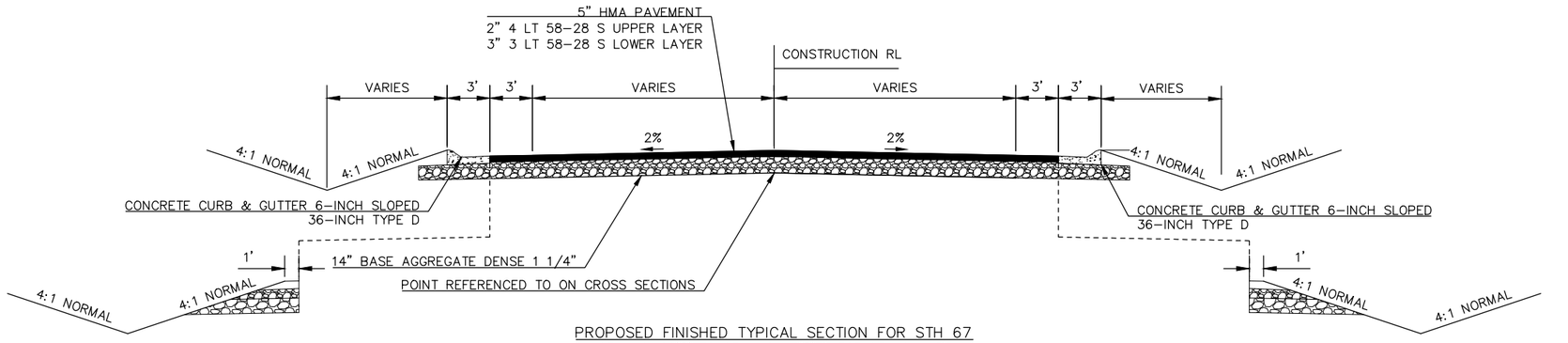
EXISTING TYPICAL SECTION FOR STH 67
STA. 1934+70 – STA. 1995+56.89



EXISTING TYPICAL SECTION
*LOG CABIN ROAD (10' LANES)
*BOY SCOUT N (12' LANES)
*BOY SCOUT DRIVE (12' LANES)
*LAVKEVIEW ROAD (11' LANES)
*CLEMENT CIRCLE (8' LANES)
*CR F (9' LANES)
*ELM STREET (10' LANES)
*1ST STREET (10' LANES)
*DINS HILLS ROAD (10' LANES)
*CR G (10' LANES)
*CR SS (11' LANES)
*HAPPY HOLLOW ROAD (10' LANES)
*BIRCHWOOD ROAD (11' LANES)

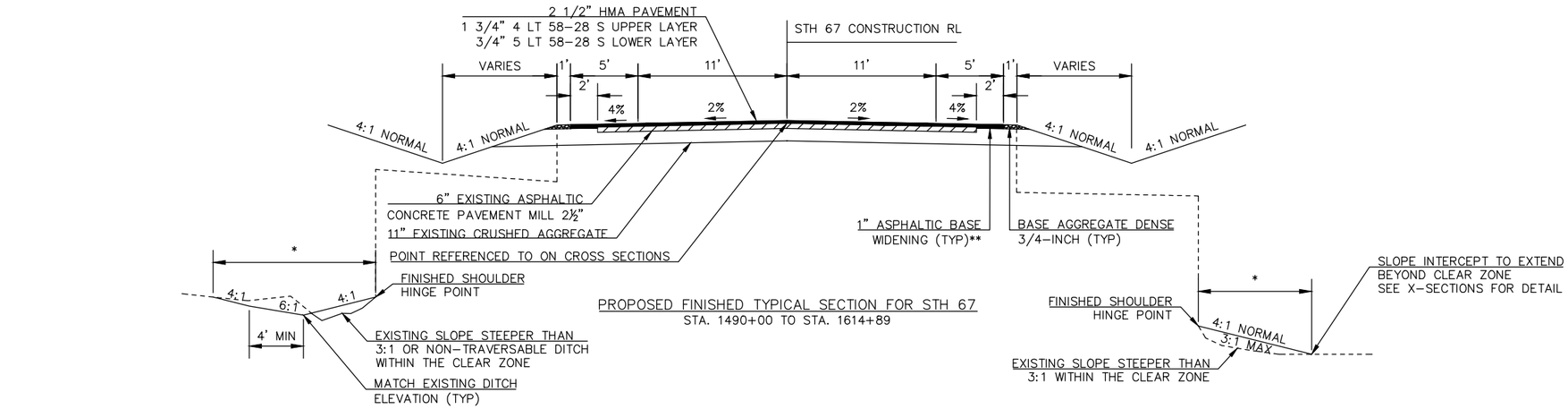
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 6

2



PROPOSED FINISHED TYPICAL SECTION FOR STH 67
STA. 10+00'S' TO STA. 12+19'S' (WEST OF USH 45)
STA. 10+21'N' TO STA. 12+26'N' (EAST OF USH 45)

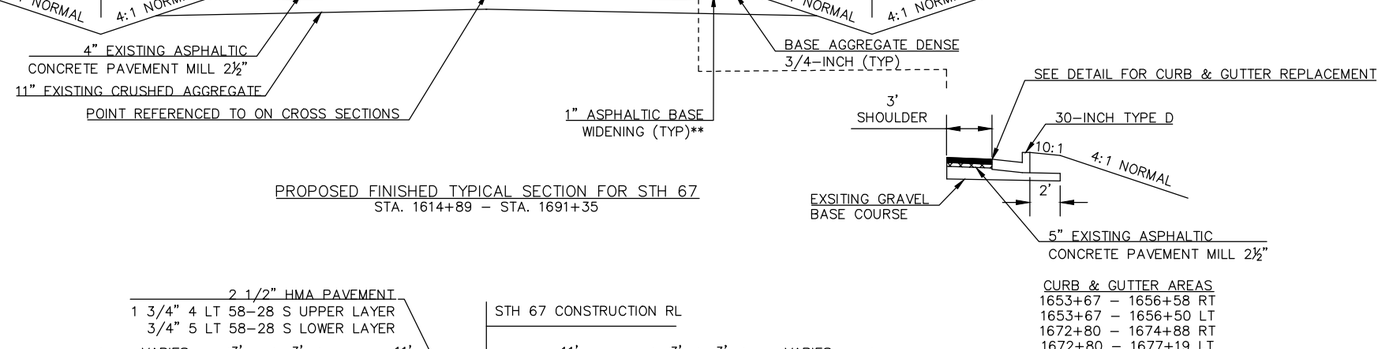
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 7



PROPOSED FINISHED TYPICAL SECTION FOR STH 67
STA. 1490+00 TO STA. 1614+89

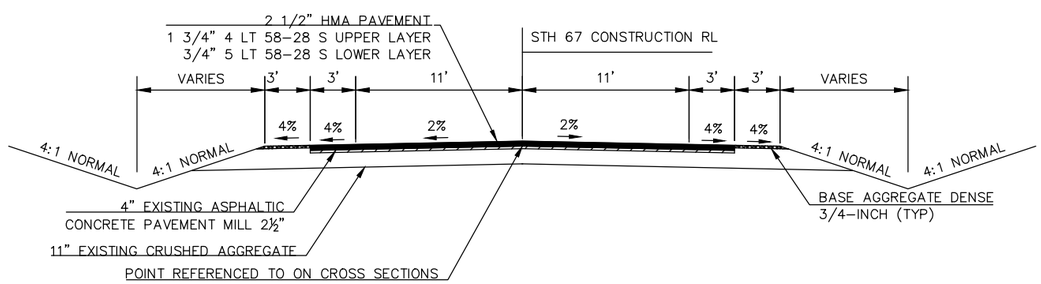
PROPOSED FINISHED TYPICAL SECTION FOR SLOPE FLATTENING – CUT SECTION

PROPOSED FINISHED TYPICAL SECTION FOR SLOPE FLATTENING – FILL SECTION



PROPOSED FINISHED TYPICAL SECTION FOR STH 67
STA. 1614+89 – STA. 1691+35

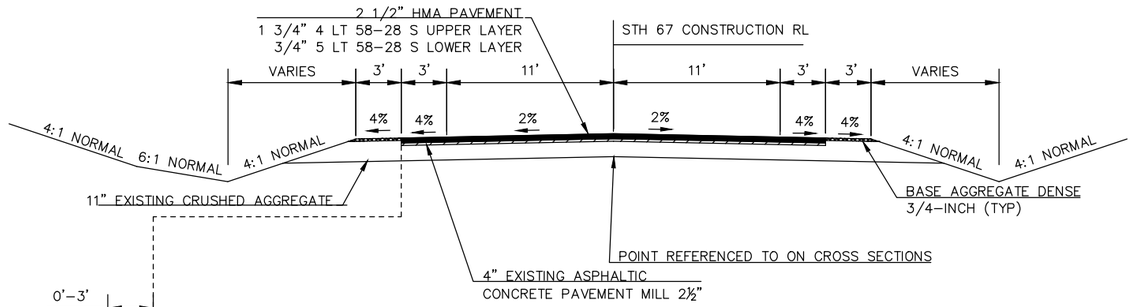
CURB & GUTTER AREAS
1653+67 – 1656+58 RT
1653+67 – 1656+50 LT
1672+80 – 1674+88 RT
1672+80 – 1677+19 LT



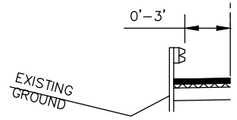
PROPOSED FINISHED TYPICAL SECTION FOR STH 67
STA. 1691+35 – STA. 1698+60

* – SEE EROSION CONTROL PLAN FOR SURFACE TREATMENTS

** – ASPHALTIC BASE WIDENING (2' WIDTH TYPICAL) INTENDED FOR SHOULDER WIDENING AREAS BEYOND EXISTING PAVEMENT LIMITS INCLUDING EAT TERMINALS, OTHER APPURTENANCES, ETC.

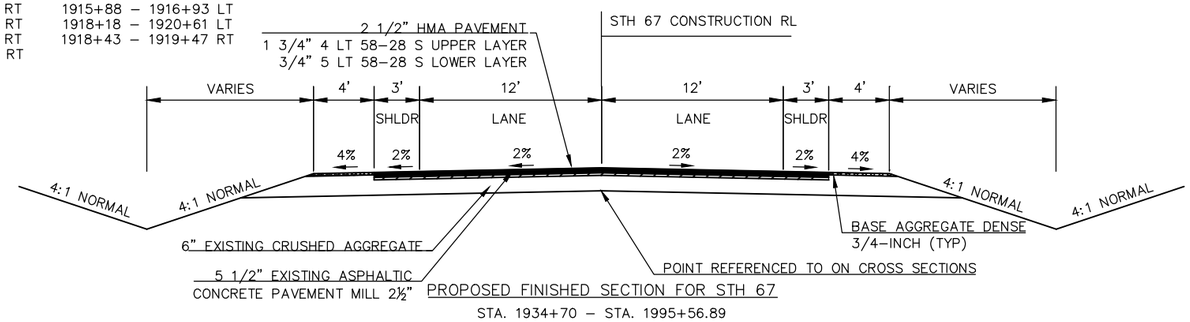


PROPOSED FINISHED TYPICAL SECTION FOR STH 67
STA. 1698+60 – STA. 1934+70

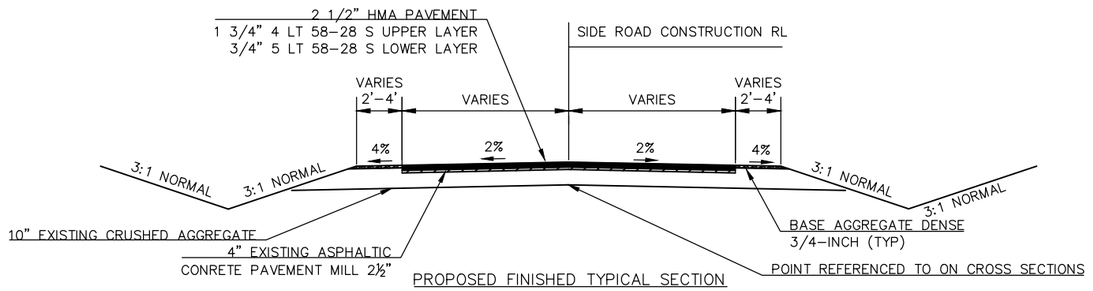


BEAM GUARD AREA

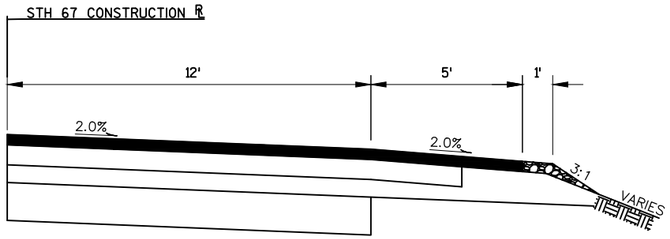
1777+35 – 1780+02 RT	1851+20 – 1861+94 LT
1813+02 – 1814+47 LT	1890+35 – 1906+13 LT
1814+53 – 1819+95 LT	1899+25 – 1902+94 RT
1813+37 – 1814+52 RT	1915+67 – 1916+73 RT
1814+58 – 1816+99 RT	1915+88 – 1916+93 LT
1822+42 – 1825+19 RT	1918+18 – 1920+61 LT
1830+35 – 1841+17 RT	1918+43 – 1919+47 RT
1848+29 – 1849+34 RT	



PROPOSED FINISHED SECTION FOR STH 67
STA. 1934+70 – STA. 1995+56.89

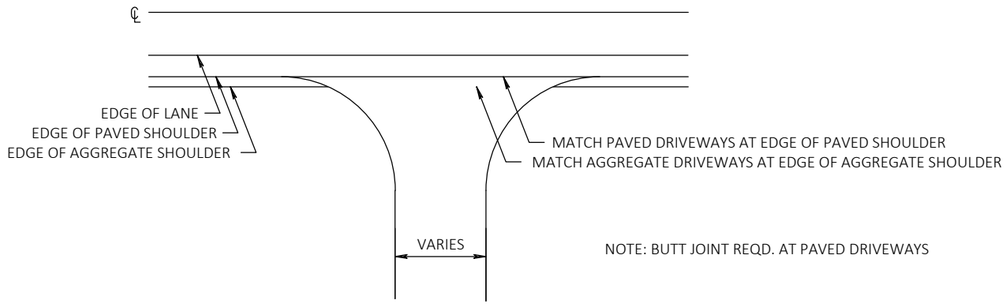


PROPOSED FINISHED TYPICAL SECTION
LOG CABIN ROAD (10' LANES)
BOY SCOUT N (6' LANES)
BOY SCOUT DRIVE (12' LANES)
LAKEVIEW ROAD (11' LANES)
CLEMENT CIRCLE (8' LANES)
CR F (9' LANES)
ELM STREET (10' LANES)
1ST STREET (10' LANES)
DINS HILLS ROAD (10' LANES)
CR G (10' LANES)
CR SS (11' LANES)
HAPPY HOLLOW ROAD (10' LANES)
BIRCHWOOD ROAD (11' LANES)



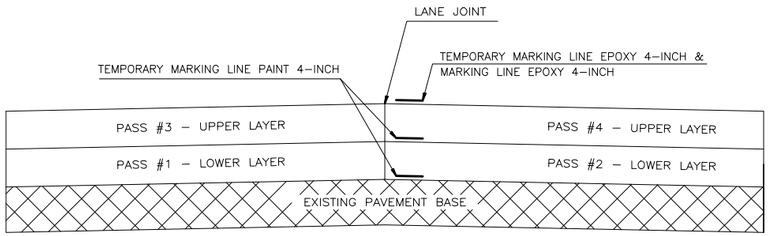
DETAIL FOR AGGREGATE SHOULDER CONSTRUCTION WITHOUT SLOPE CORRECTION

FOR LOCATIONS WHERE EXISTING SHOULDER WIDTH < 6'



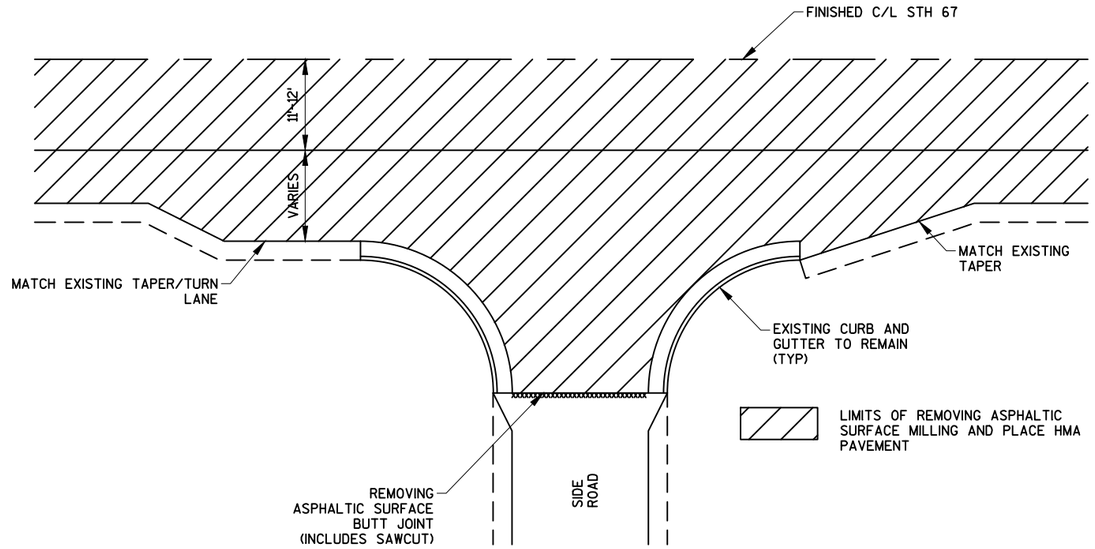
NOTE: BUTT JOINT REQD. AT PAVED DRIVEWAYS

DETAIL FOR TYPICAL DRIVEWAY PAVING LIMITS



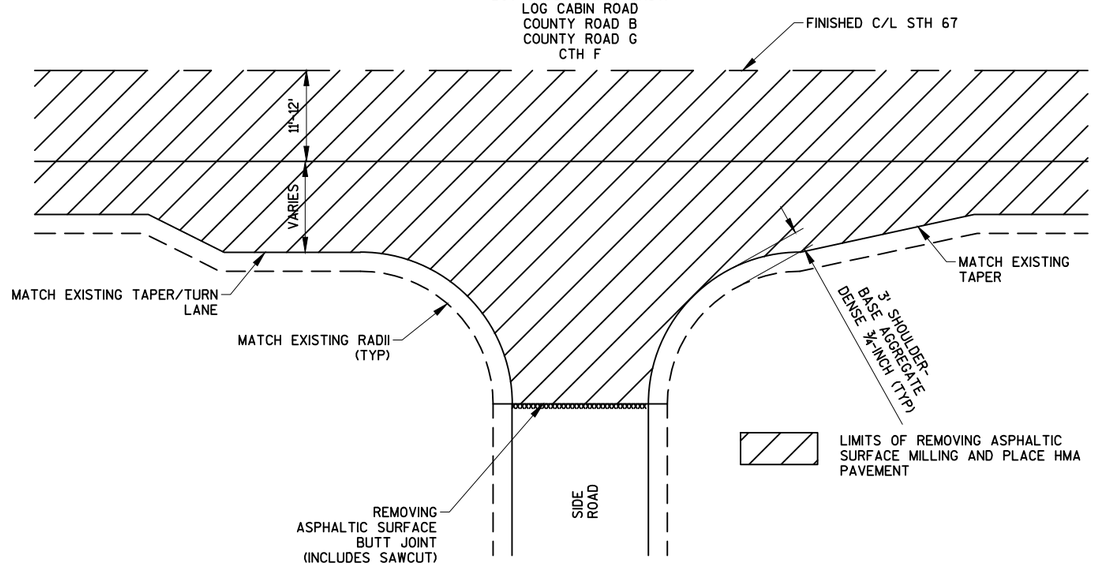
LOWER AND UPPER LAYERS

PAVEMENT MARKING DETAIL FOR ASPHALTIC PAVEMENTS



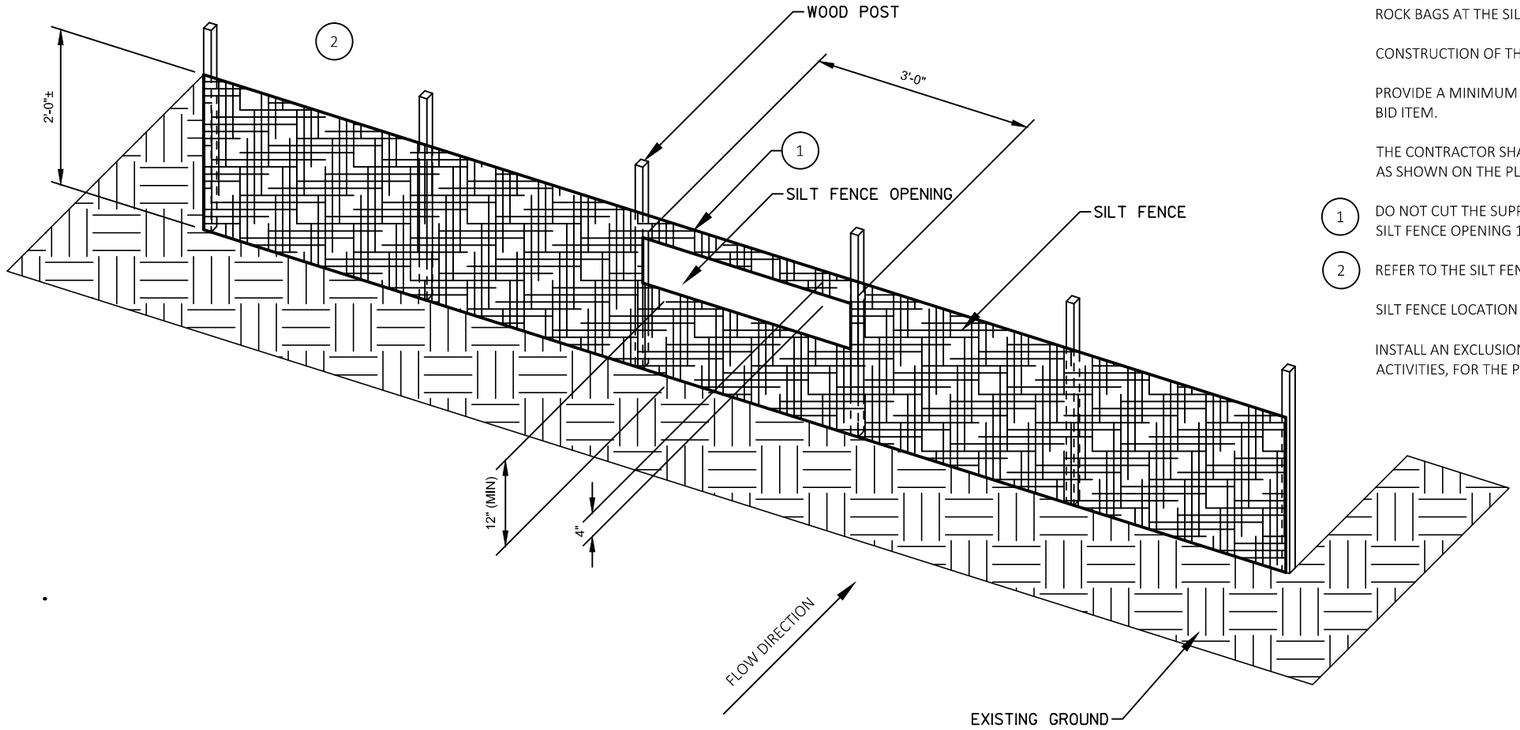
TYPICAL SIDEROAD DETAIL WITH CURB & GUTTER

HAPPY HOLLOW ROAD
BIRCHWOOD DRIVE
COUNTY ROAD G
KETTLE MORAINE SCENIC DRIVE (EAST)
CLEMENT CIRCLE
LAKE VIEW ROAD
BOY SCOUT DRIVE (NORTH)
BOY SCOUT DRIVE (EAST)
LOG CABIN ROAD
COUNTY ROAD B
COUNTY ROAD G
CTH F



TYPICAL SIDEROAD DETAIL WITHOUT CURB & GUTTER

COUNTY ROAD SS (NORTH)
COUNTY ROAD SS (SOUTH)
ICE AGE VISITOR CENTER DRIVE
DINS HILL ROAD
1ST STREET
KETTLE MORAINE SCENIC DRIVE (WEST)
ELM STREET



GENERAL NOTES

THE SILT FENCE RELIEF DETAIL IS A SUPPLEMENTAL DETAIL TO THE SILT FENCE STANDARD DETAILS AND SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

INSTALL SILT FENCE PRIOR TO CONSTRUCTING THE SILT FENCE OPENING. PRIOR TO CONSTRUCTING THE SILT FENCE OPENING, PLACE ROCK BAGS AT THE SILT FENCE OPENING AS SHOWN IN THIS DETAIL.

CONSTRUCTION OF THE SILT FENCE OPENING SHALL BE INCIDENTAL TO THE COST OF THE SILT FENCE BID ITEM.

PROVIDE A MINIMUM OF 22 ROCK BAGS MINIMUM PER 3 FOOT OPENING. ROCK BAGS SHALL BE PAID UNDER THE ROCK BAGS BID ITEM.

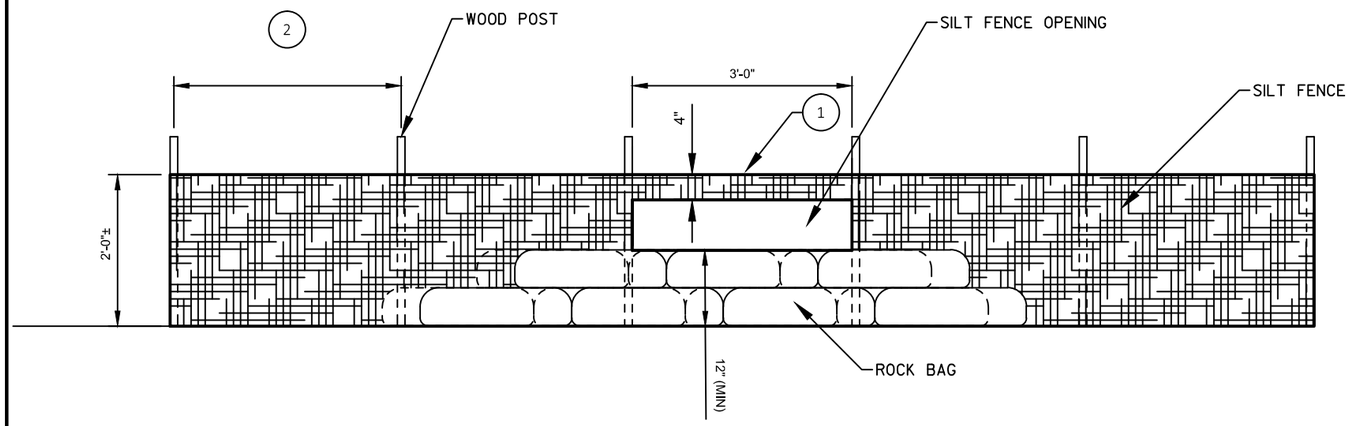
THE CONTRACTOR SHALL ADJUST THE SILT FENCE RELIEF OPENINGS WITHIN THE SILT FENCE AS NECESSARY TO PROVIDE RELIEF: AS SHOWN ON THE PLANS, TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE FIELD ENGINEER.

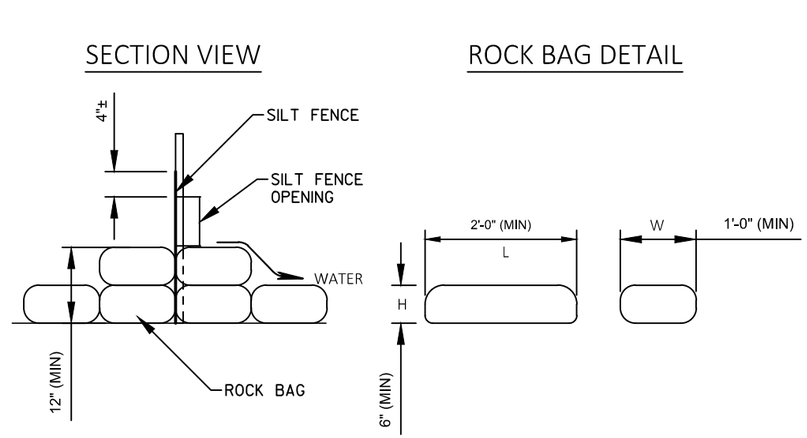
(1) DO NOT CUT THE SUPPORT CORD OR TENSION TAPE WHEN CONSTRUCTING THE SILT FENCE OPENING. KEEP THE TOP OF THE SILT FENCE OPENING 1"± BELOW THE 3" FOLD AT THE SUPPORT CORD OR TENSION TAPE.

(2) REFER TO THE SILT FENCE STANDARD DETAILS FOR ALLOWABLE ADJUSTMENTS TO POST SPACING.

SILT FENCE LOCATION IS APPROXIMATE, INSTALL PER CONSULTATION WITH THE ENGINEER.

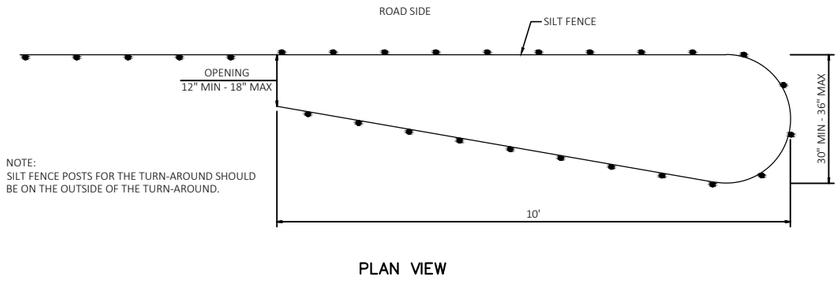
INSTALL AN EXCLUSION (SILT) FENCE NEAR ANY WETLANDS OR WATER BODIES, PRIOR TO THE START OF ANY GROUND DISTURBING ACTIVITIES, FOR THE PURPOSES OF KEEPING AMPHIBIAN AND REPTILES OUT OF THE CONSTRUCTION SITE.



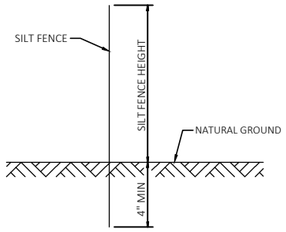


SILT FENCE RELIEF DETAIL

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 11	E



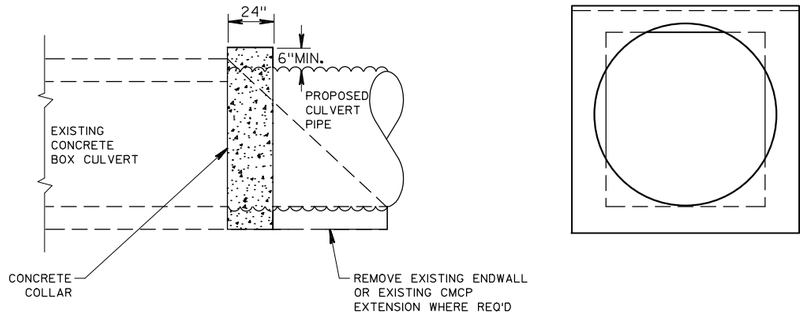
PLAN VIEW



SIDE VIEW

SILT FENCE TURN–AROUND DETAIL

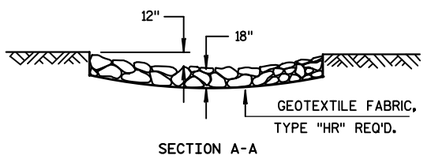
SILT FENCE TURN-AROUND SHALL BE USED IN AREAS ADJACENT TO THE MILWAUKEE RIVER



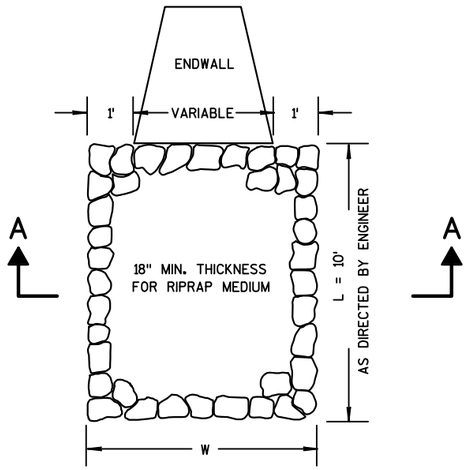
DETAILS OF CONCRETE COLLAR FOR BOX CULVERT EXTENSIONS

1525+07 LT	1583+60 LT
1558+42 LT	1608+62 LT/RT
1566+94 LT/RT	1623+80 LT/RT
1578+33 LT/RT	

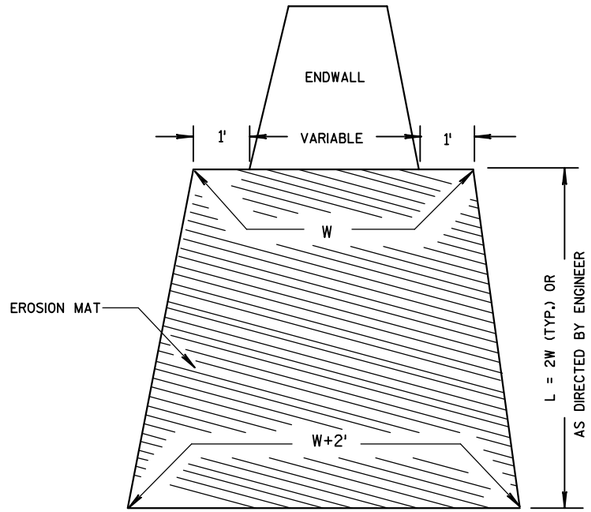
NOTE: SEE SDD "JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL" FOR COLLARS AT NON-BOX CULVERT EXTENSIONS.



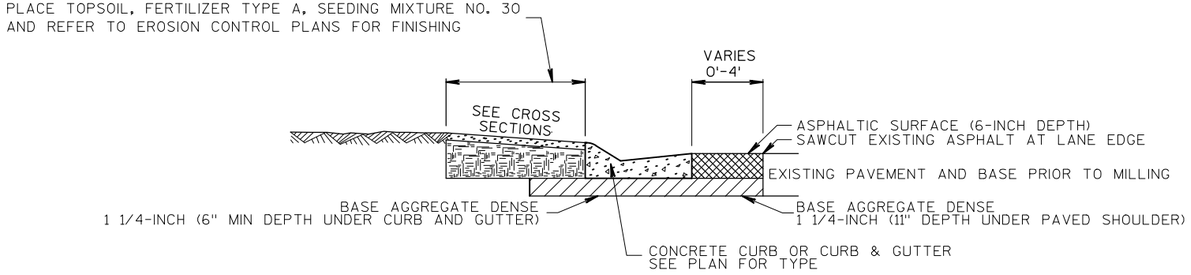
SECTION A-A



RIPRAP MEDIUM TREATMENT AT CULVERTS



EROSION MAT TREATMENT AT CULVERTS

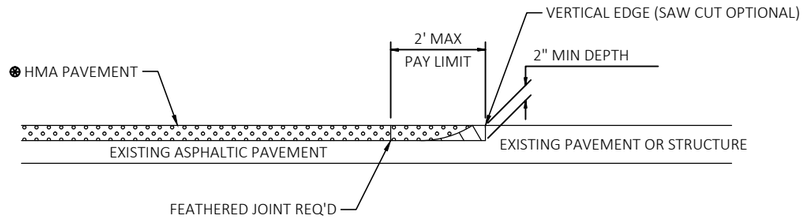


NOTES:

BASE COURSE BELOW PROPOSED CURB OR CURB & GUTTER SHALL BE CONSTRUCTED TO PROVIDE A SUITABLE BASE AS DETERMINED BY THE ENGINEER IN THE FIELD

SEE MISCELLANEOUS QUANTITIES FOR FINISHING AND EROSION CONTROL ITEMS

DETAIL FOR CURB & GUTTER REPLACEMENT

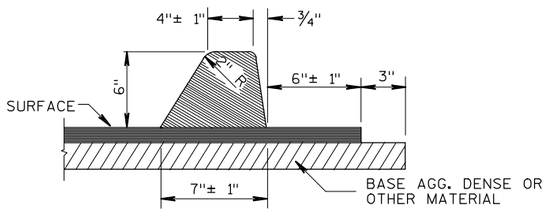


⊛ SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

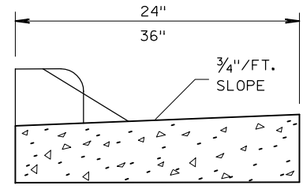
REMOVING ASPHALTIC SURFACE, MILLING

REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE (REMOVAL OF ASPHALTIC SURFACE WEDGE IS INCIDENTAL TO THE BUTT JOINT ITEM)

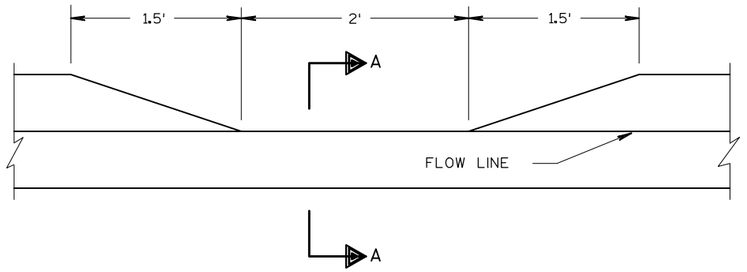
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



ASPHALTIC CURB DETAIL



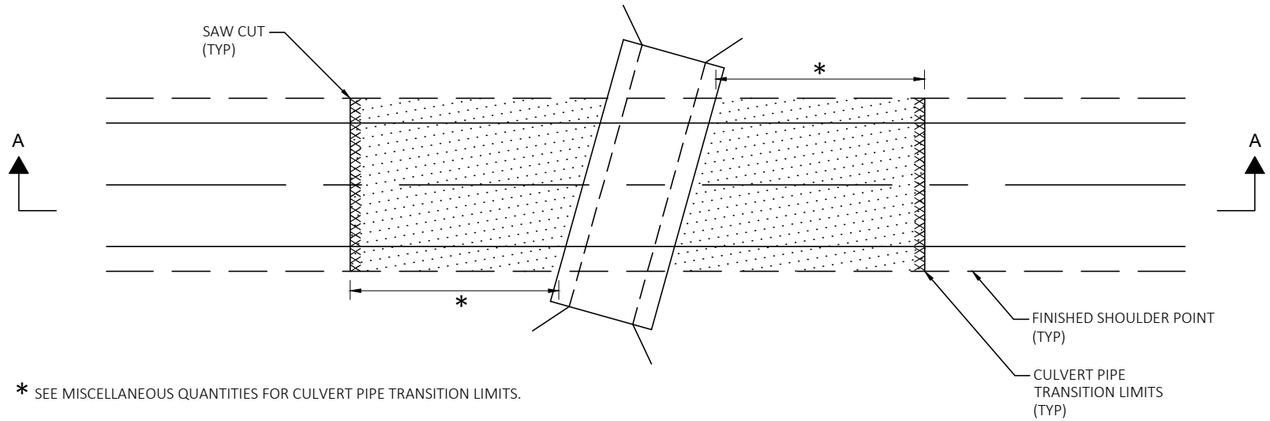
SECTION A-A



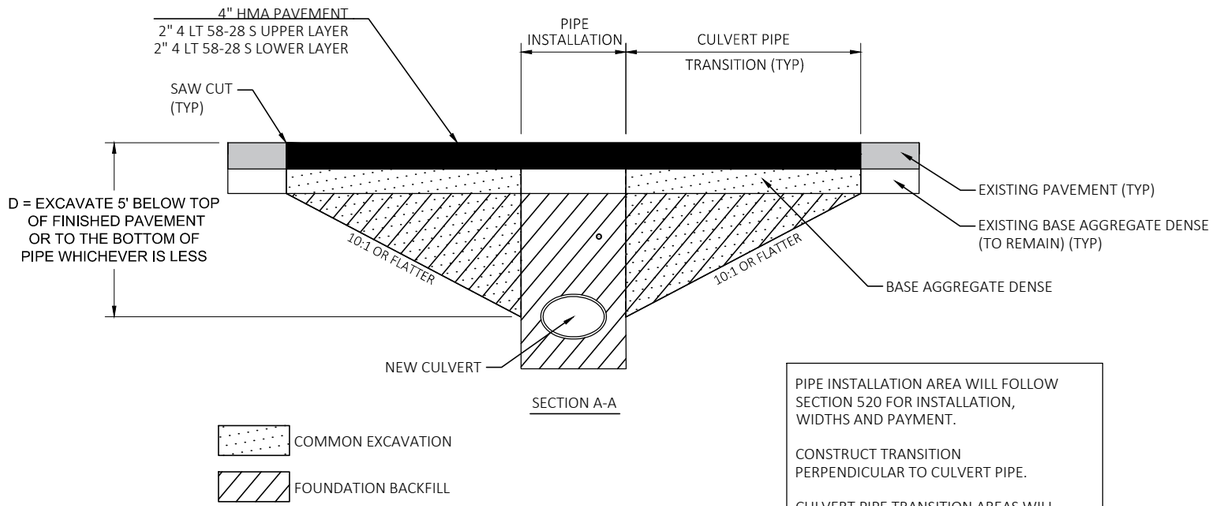
DETAIL OF CURB HEAD DEPRESSION FOR DRAINAGE AT CURB & GUTTER SECTION

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 13	E

2



* SEE MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.



PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

CULVERT PIPE TRANSITION AREAS WILL BE PAID BY SPV "FOUNDATION BACKFILL & COMMON EXCAVATION".

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

NEW CULVERT PIPES WITH TRANSITION

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 15	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:03 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



2

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 16	E

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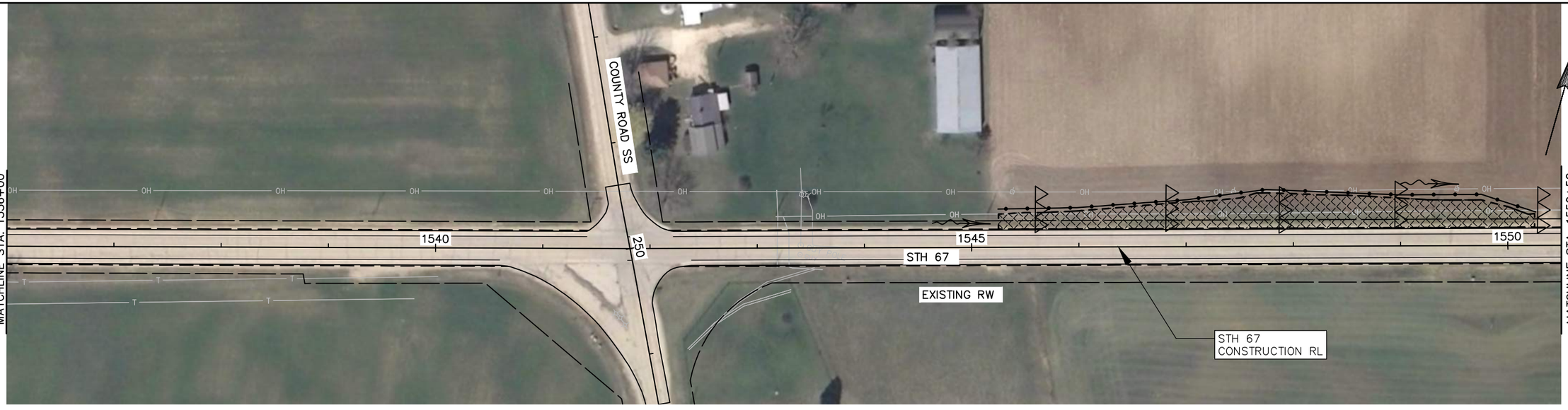
WISDOT/CADDS SHEET 44

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 17	E

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WISDOT/CADDS SHEET 44

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP





2

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 18	E

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2

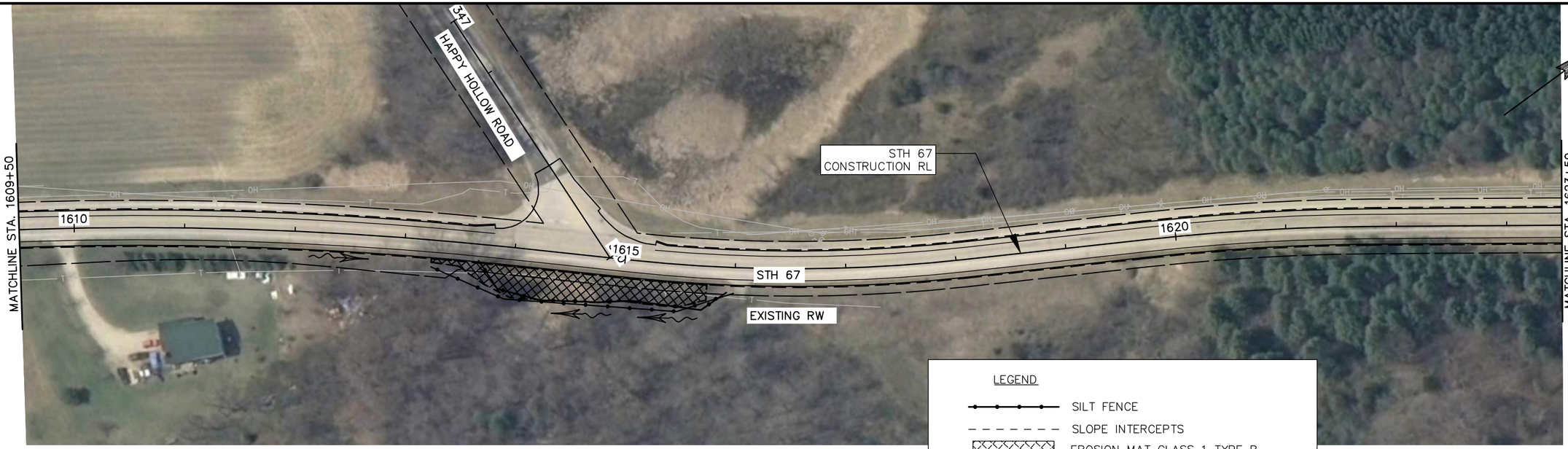


LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP

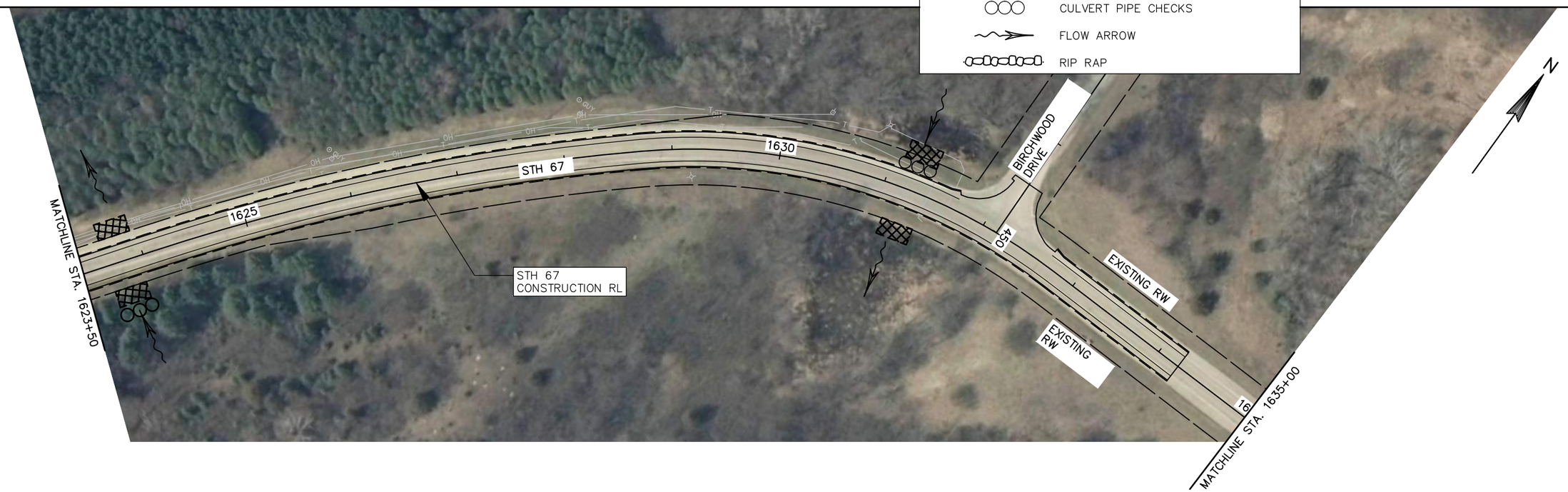


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 19	E



LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 20	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:04 AM PLOT BY : DAVID YAHNKE PLOT NAME :

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP

MATCHLINE STA. 1635+00

35

EXISTING RW

1640

STH 67

EXISTING RW

1645

MATCHLINE STA. 1650+00

16

STH 67
CONSTRUCTION RL

N

MATCHLINE STA. 1650+00

50

1655

EXISTING RW

1660

STH 67

EXISTING RW

STH 67
CONSTRUCTION RL

MATCHLINE STA. 1665+00

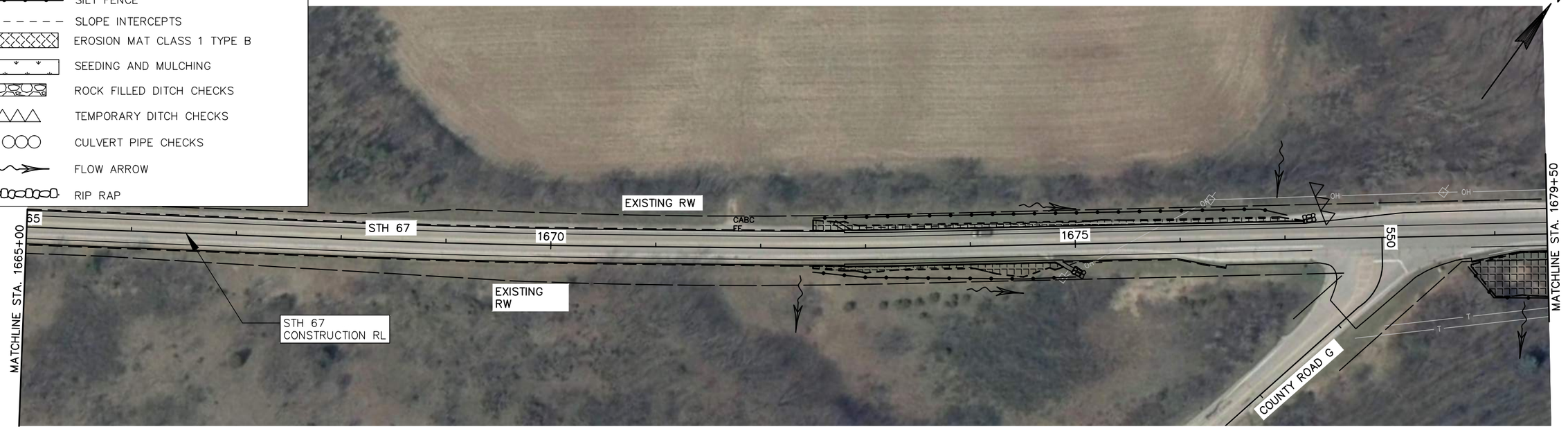
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N

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 21	E

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP





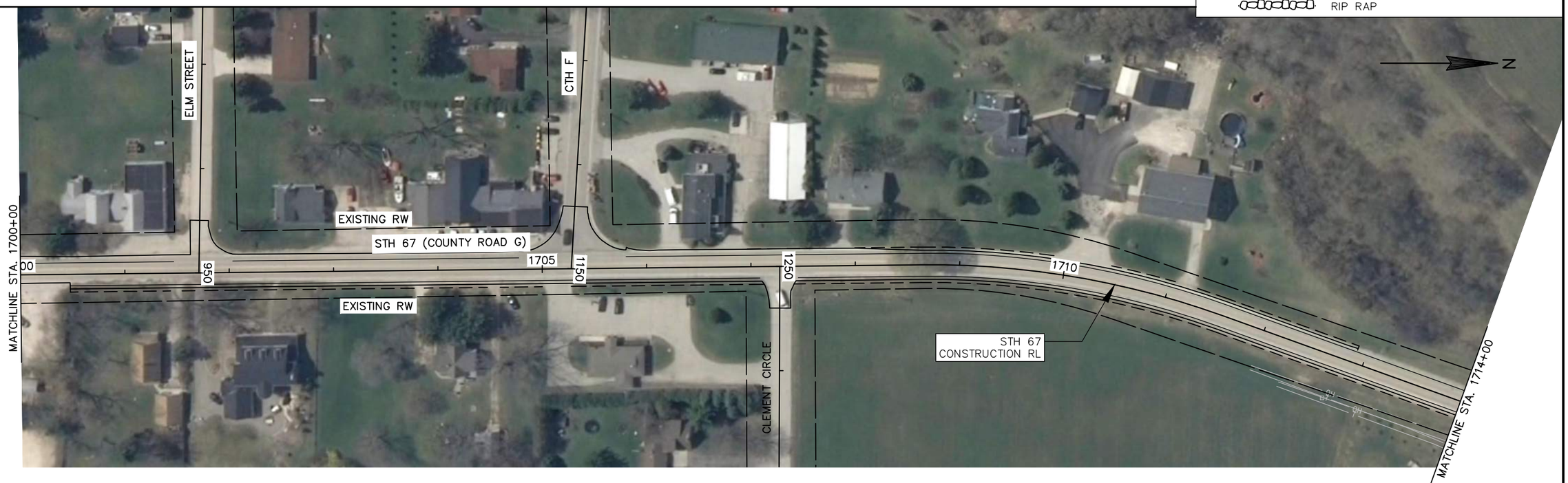
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 22	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:04 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

2





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 23	E

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 24	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:05 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

2



LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



2

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 25	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:05 AM PLOT BY : DAVID YAHNKE PLOT NAME :

2



LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 26	E

2



LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



2

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 27	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:05 AM PLOT BY : DAVID YAHNKE PLOT NAME :

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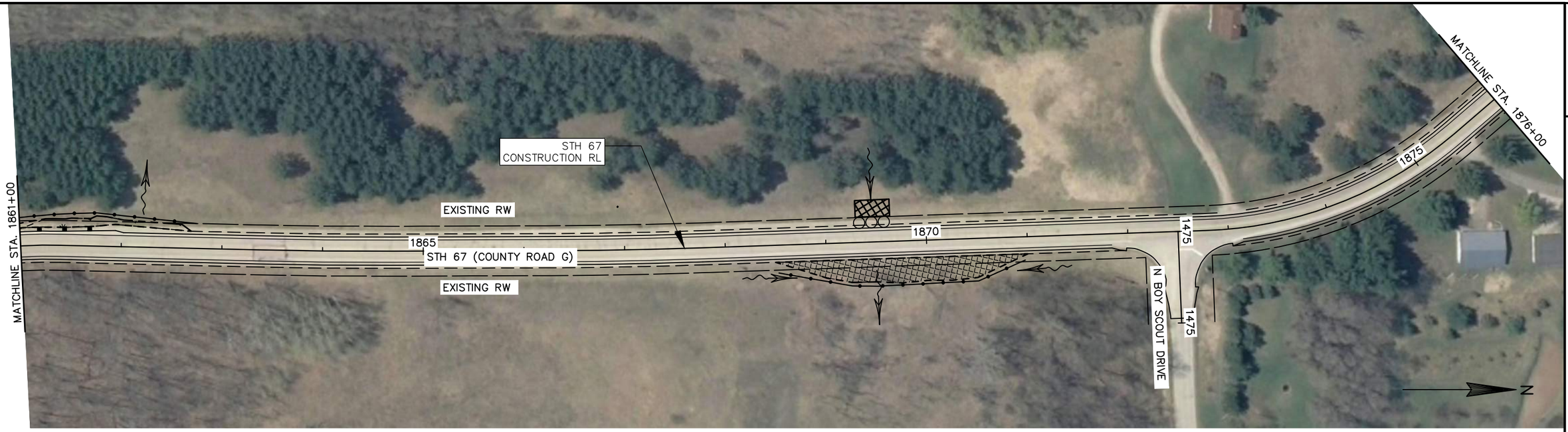


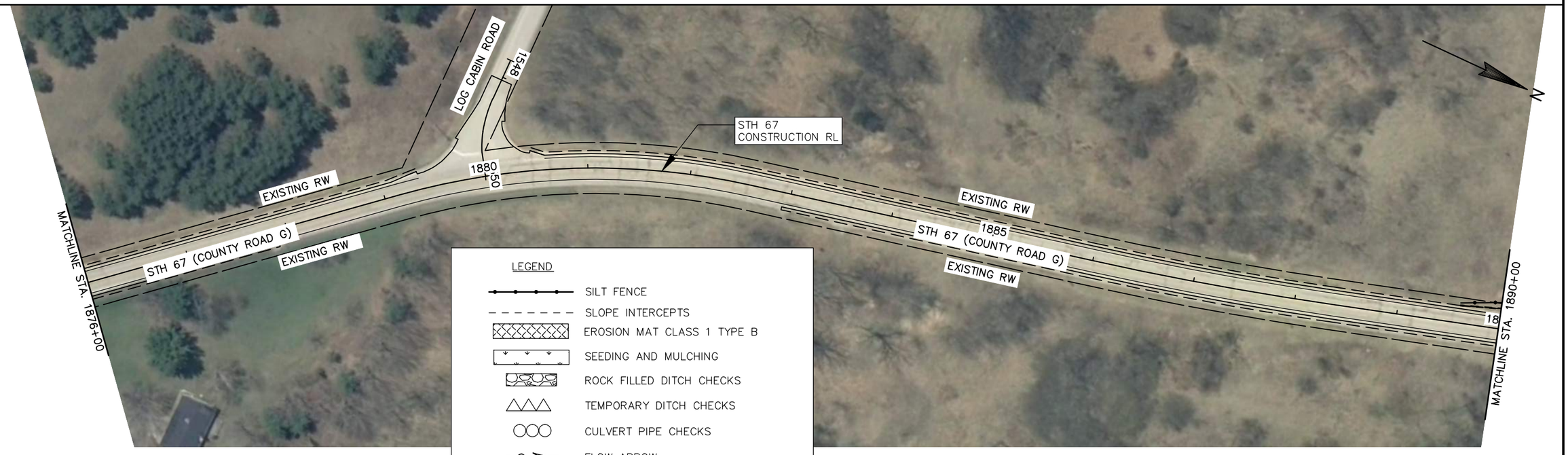
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 28	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:06 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

2





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 29	E

LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 30	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:06 AM PLOT BY : DAVID YAHNKE PLOT NAME :

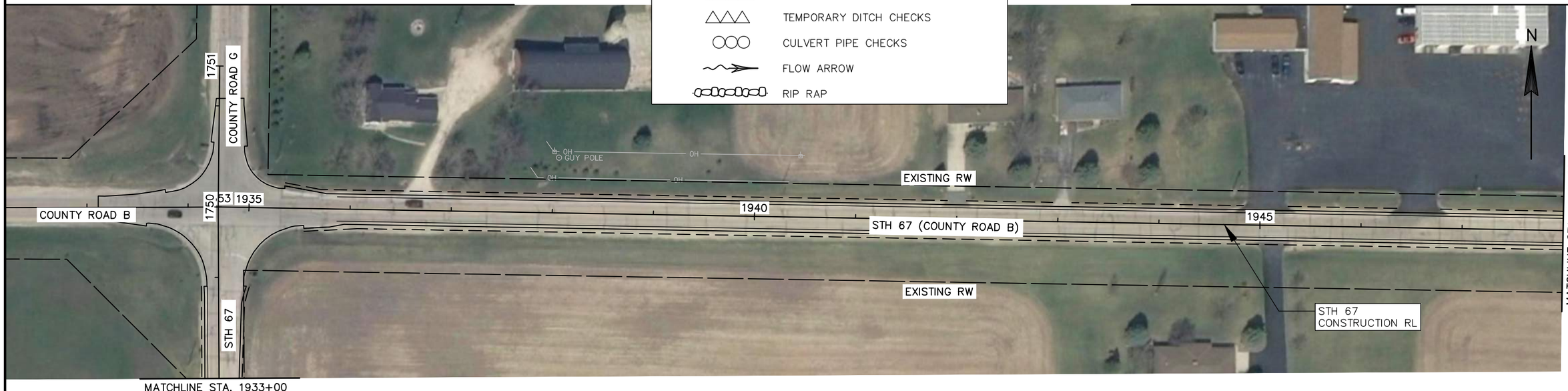
WISDOT/CADDS SHEET 44

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LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



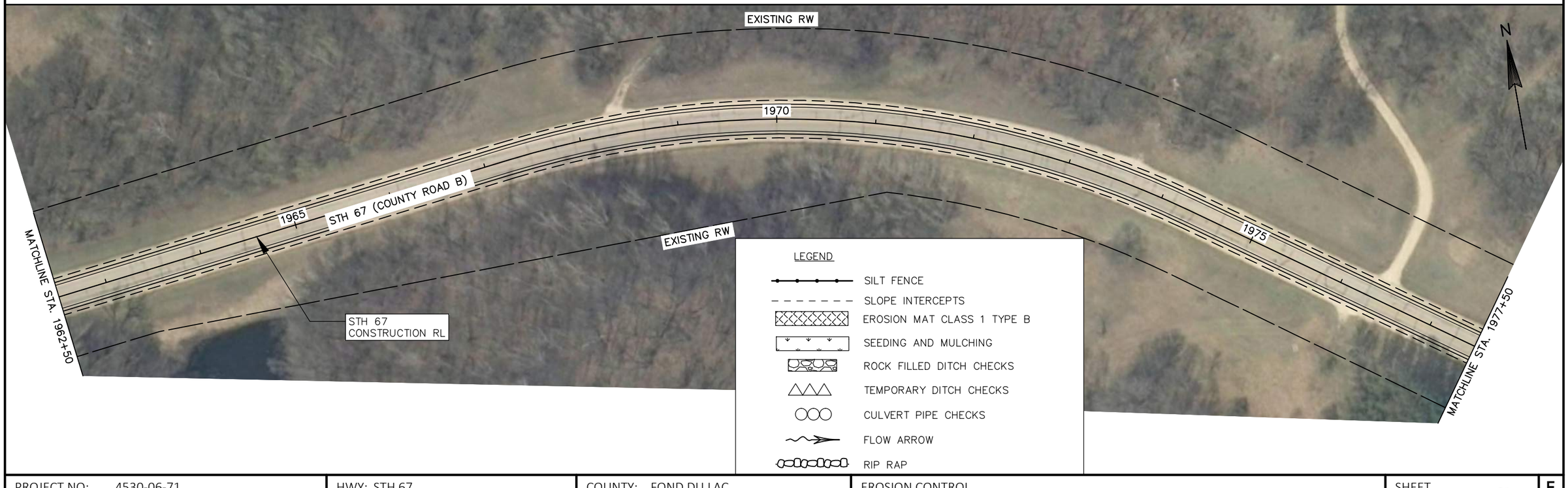
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 31	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:06 AM PLOT BY : DAVID YAHNKE PLOT NAME :

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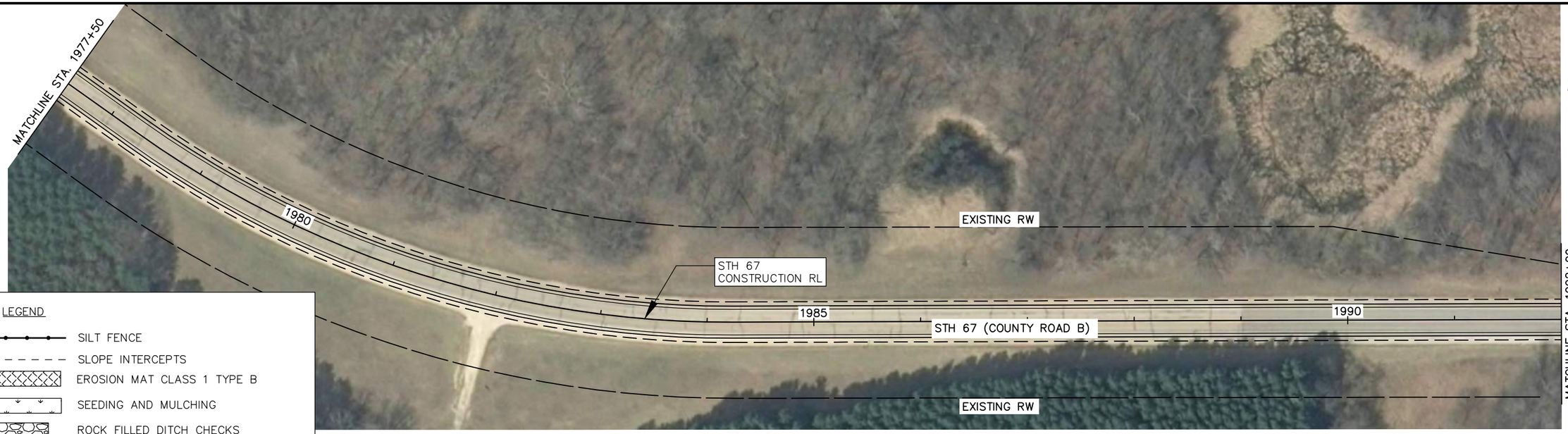




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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 32	E

2



LEGEND

- SILT FENCE
- SLOPE INTERCEPTS
- EROSION MAT CLASS 1 TYPE B
- SEEDING AND MULCHING
- ROCK FILLED DITCH CHECKS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- FLOW ARROW
- RIP RAP



2

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 33	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\022001_EC.DWG PLOT DATE : 12/16/2019 10:06 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

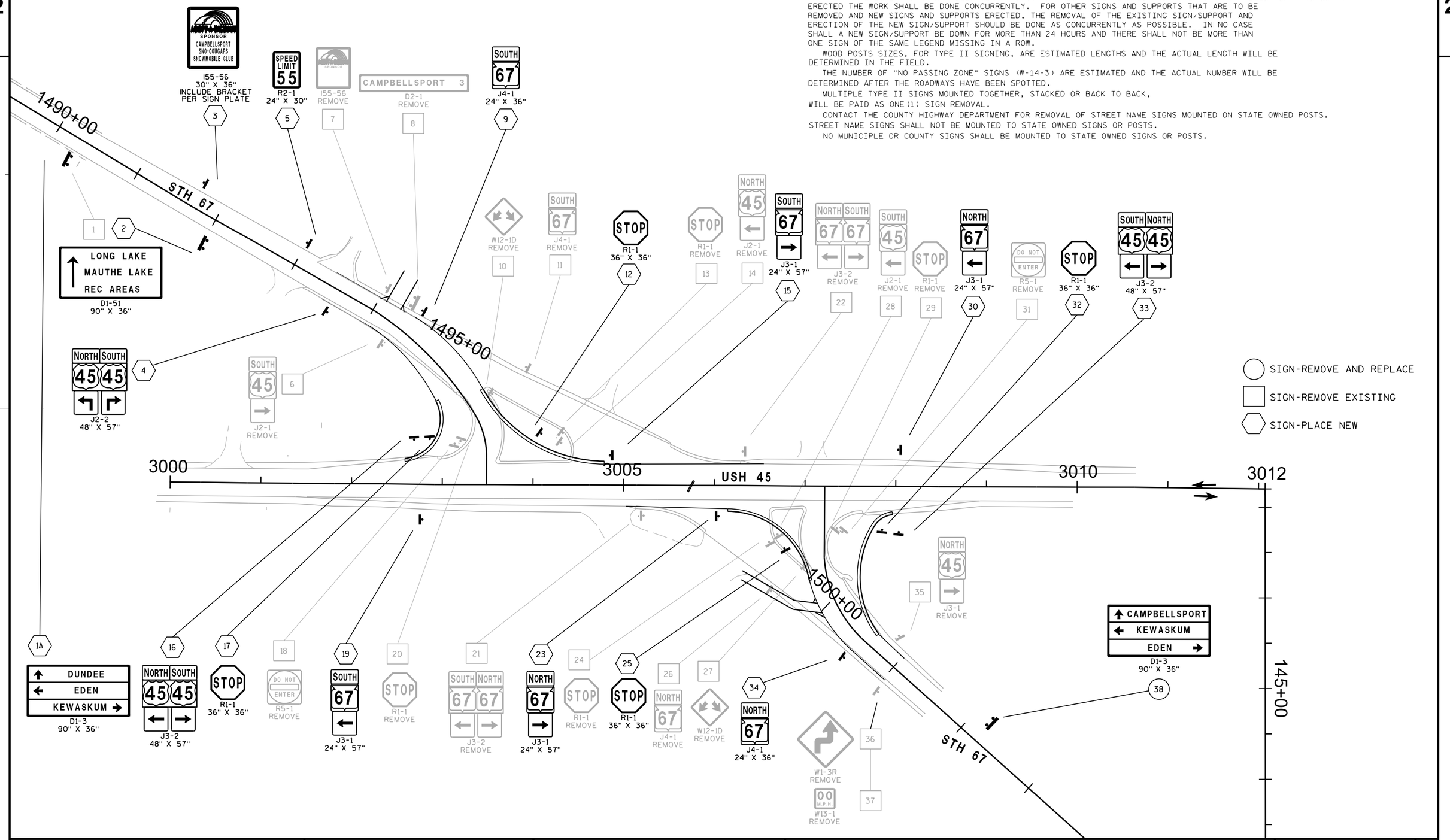
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

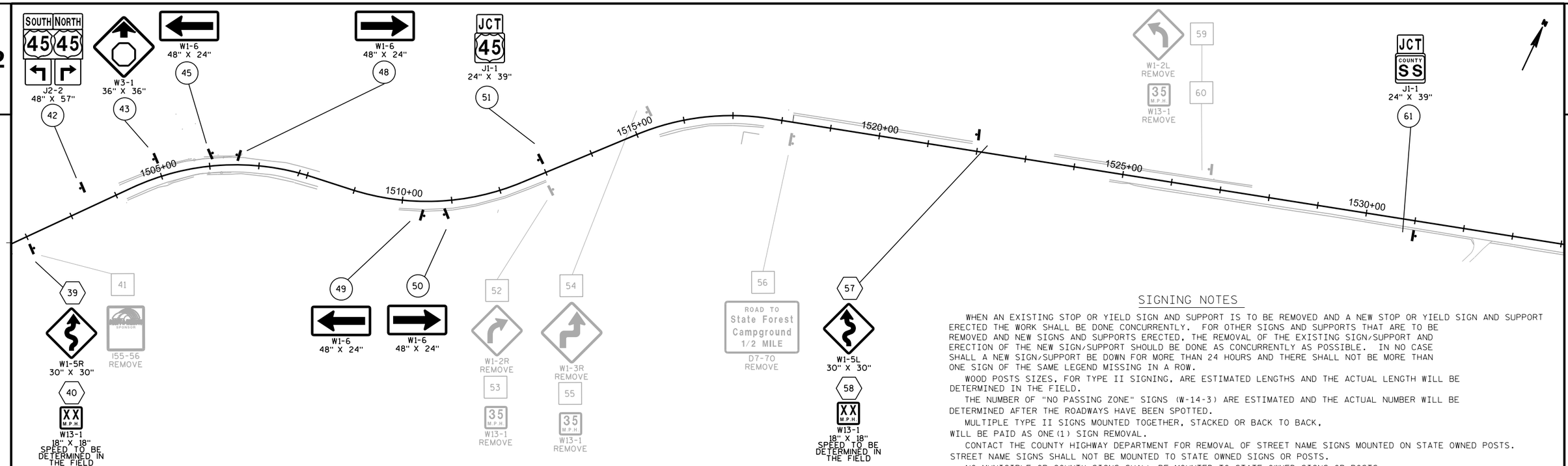
NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

FILE NAME : N:\spo\traffic\SIGNING\Projects\4530-06-71 STH 67 FDL CO\45300671_signplan.dgn PLOT DATE : 13-MAR-2018 08:55 PLOT BY : dotets PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42



SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

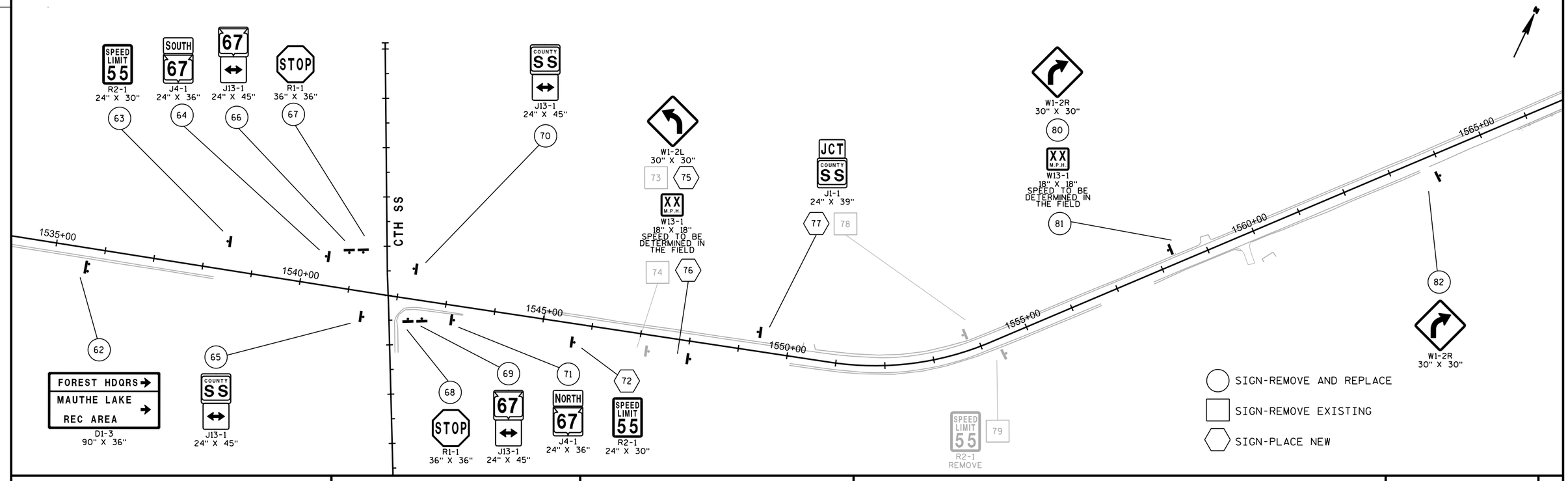
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THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE (1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

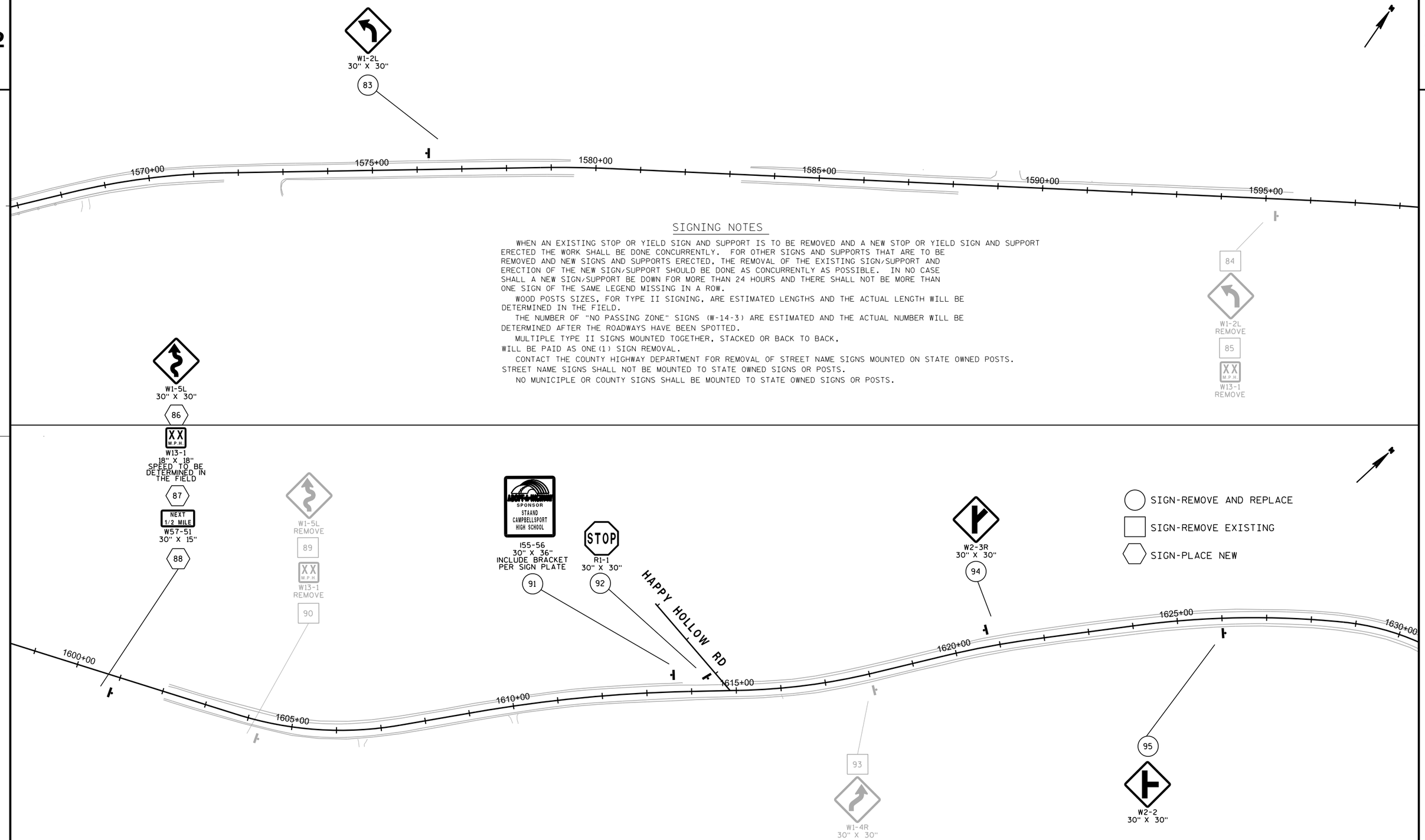
NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

FILE NAME : N:\spo\traffic\SIGNING\Projects\4530-06-71 STH 67 FDL CO\45300671_signplan.dgn PLOT DATE : 13-MAR-2018 08:56 PLOT BY : dotets PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

2



SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET	E

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

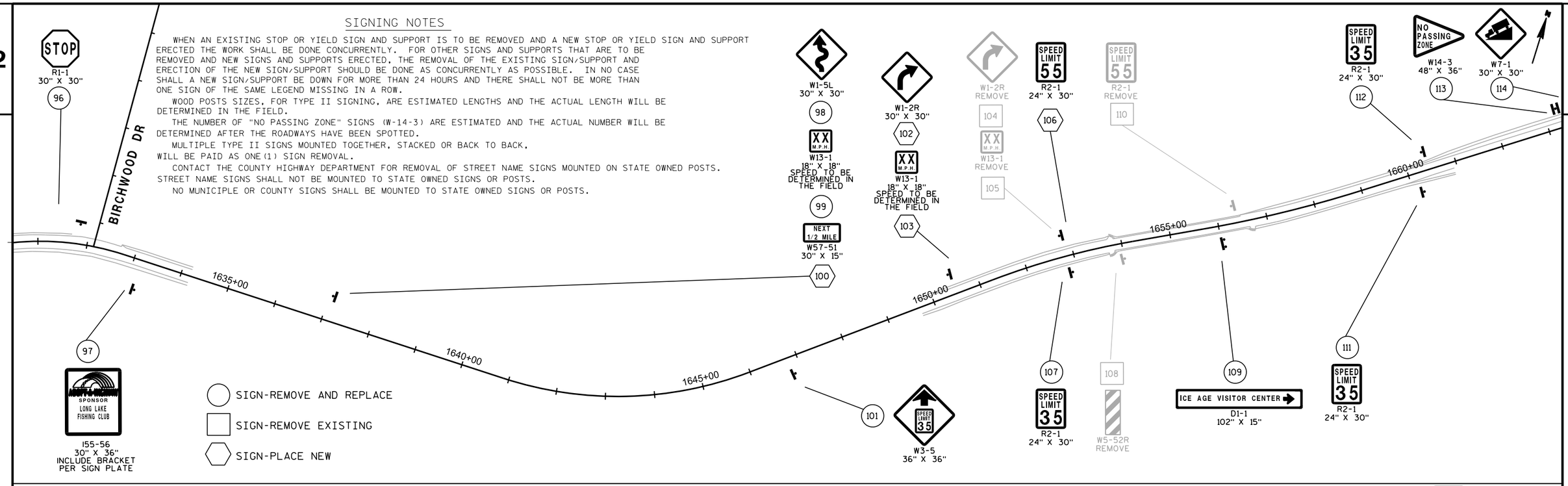
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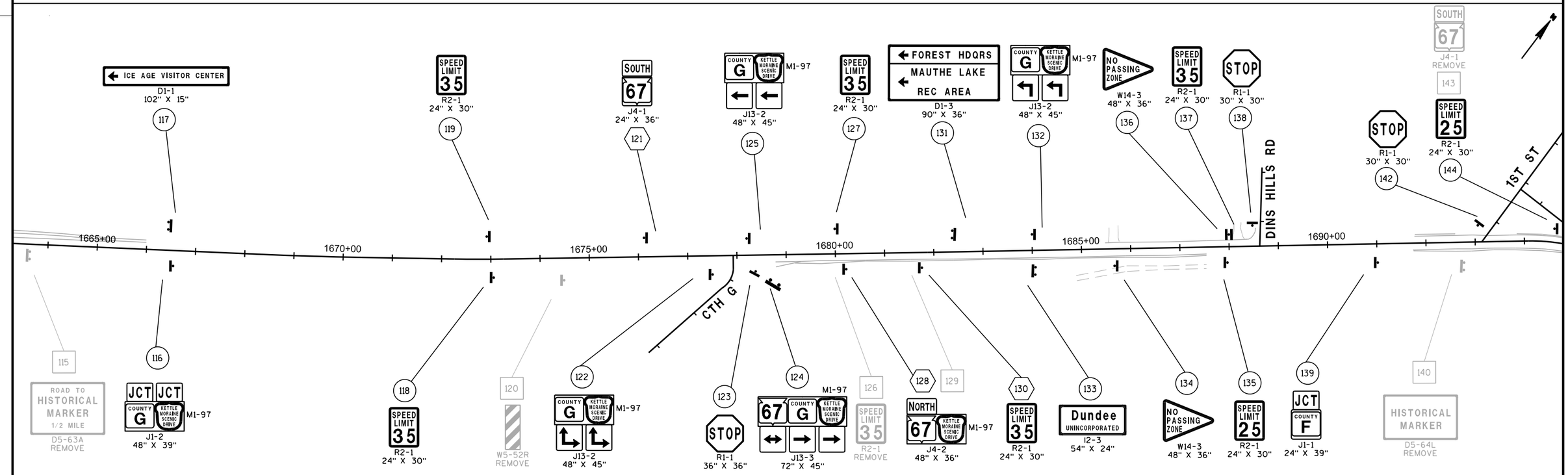
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MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

2

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

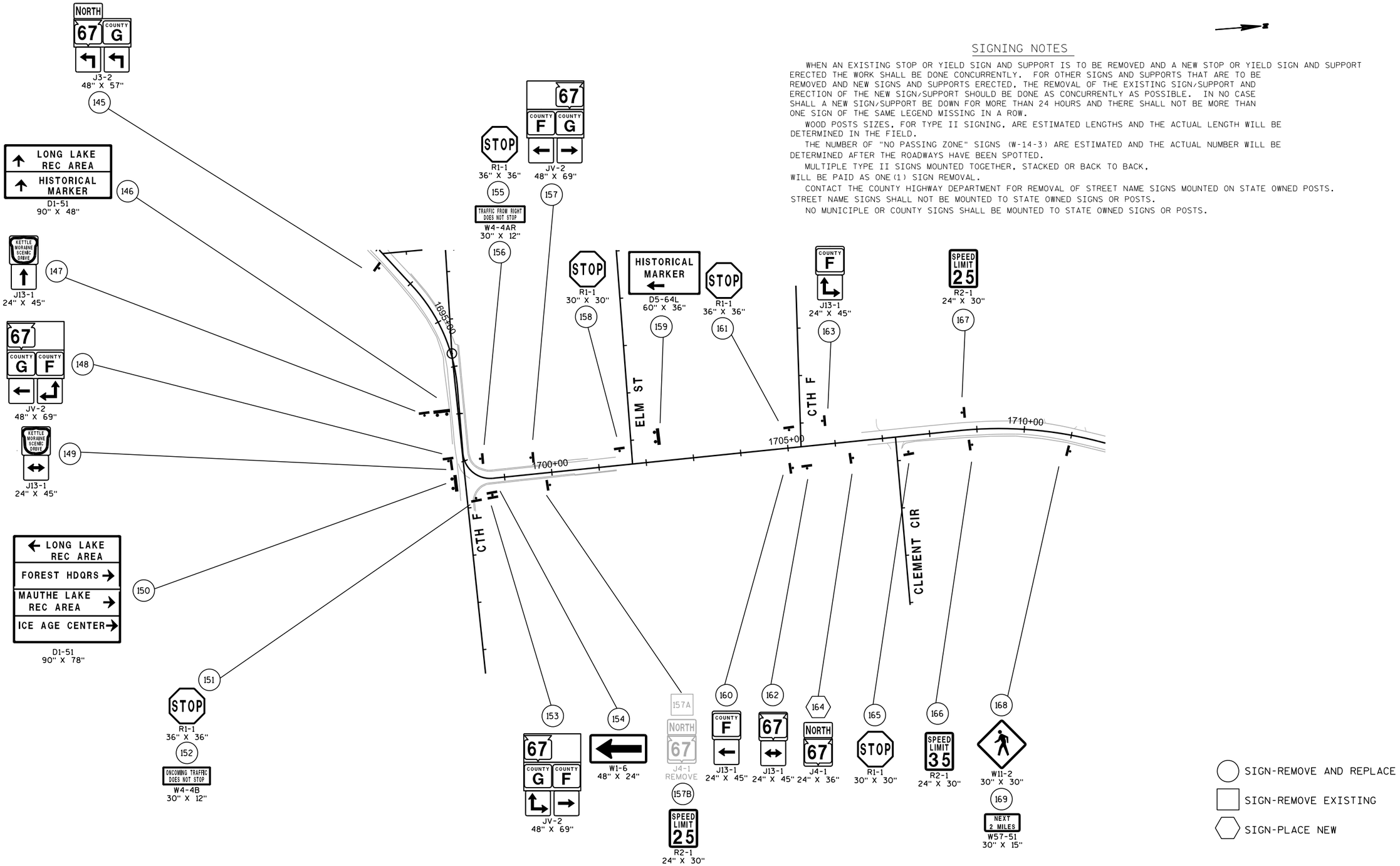
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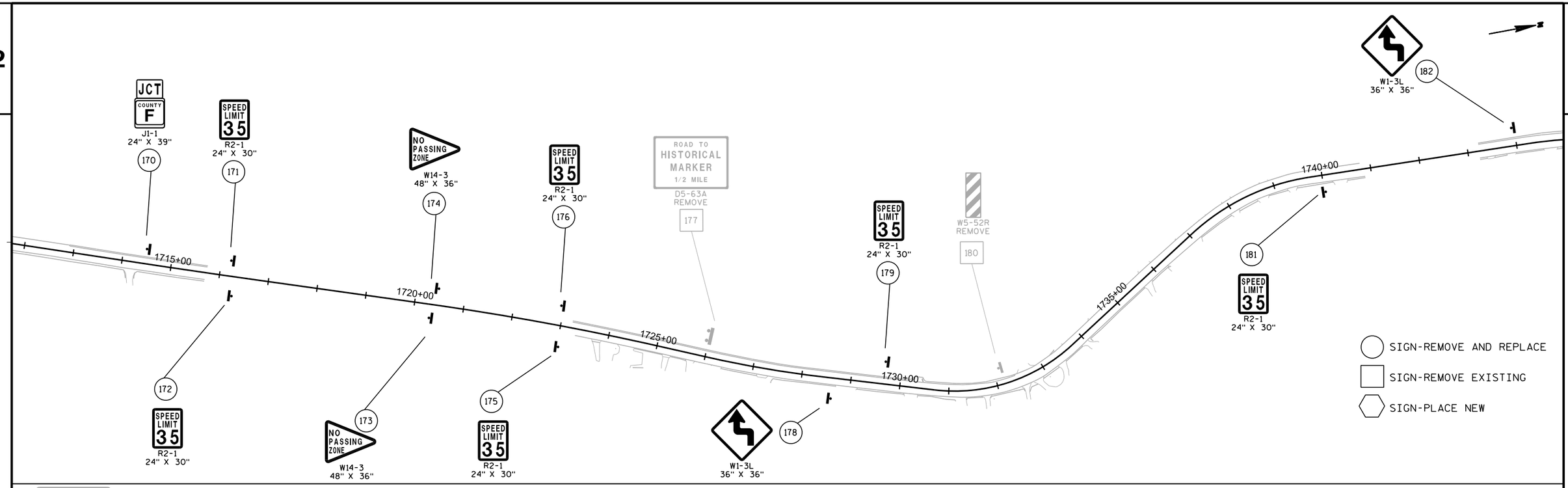
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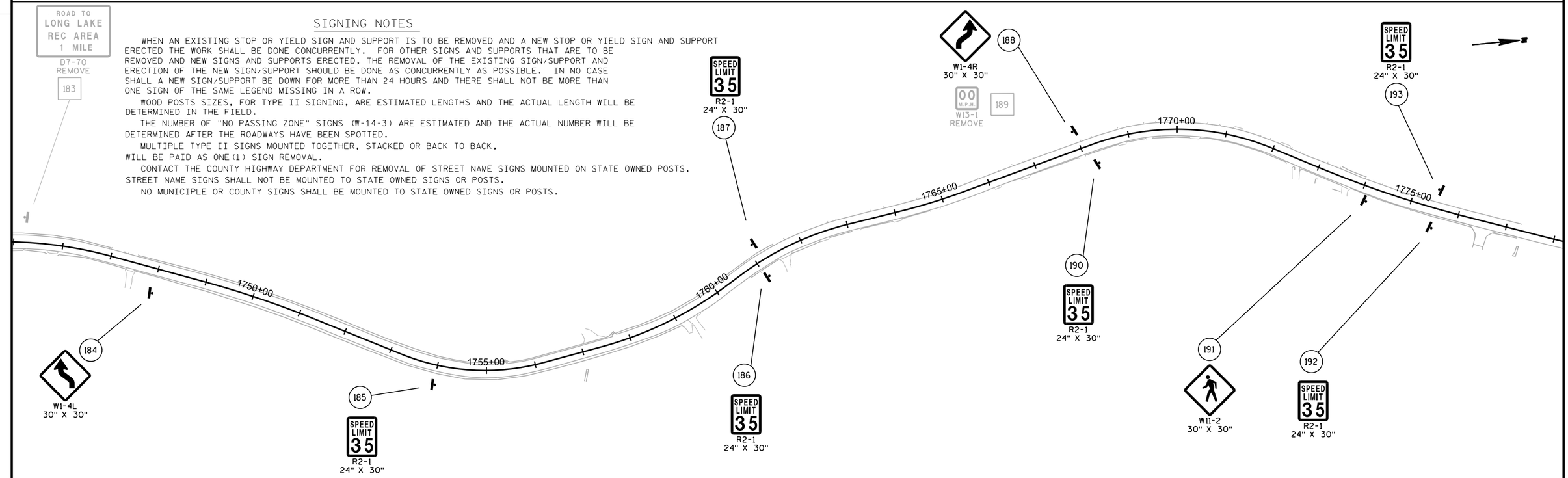
CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E





SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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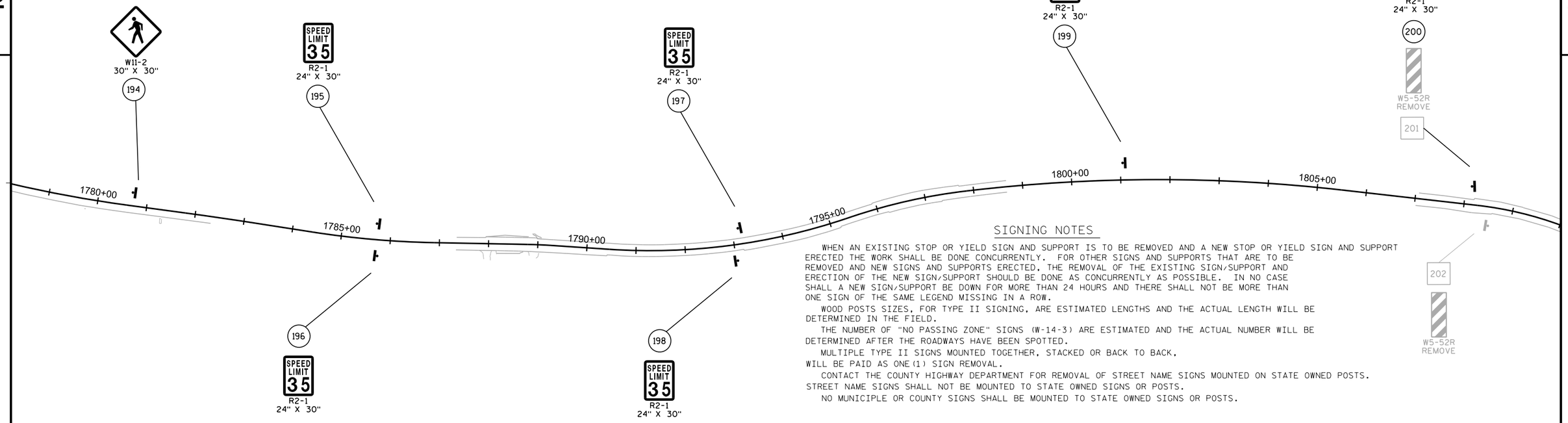
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NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET	E



SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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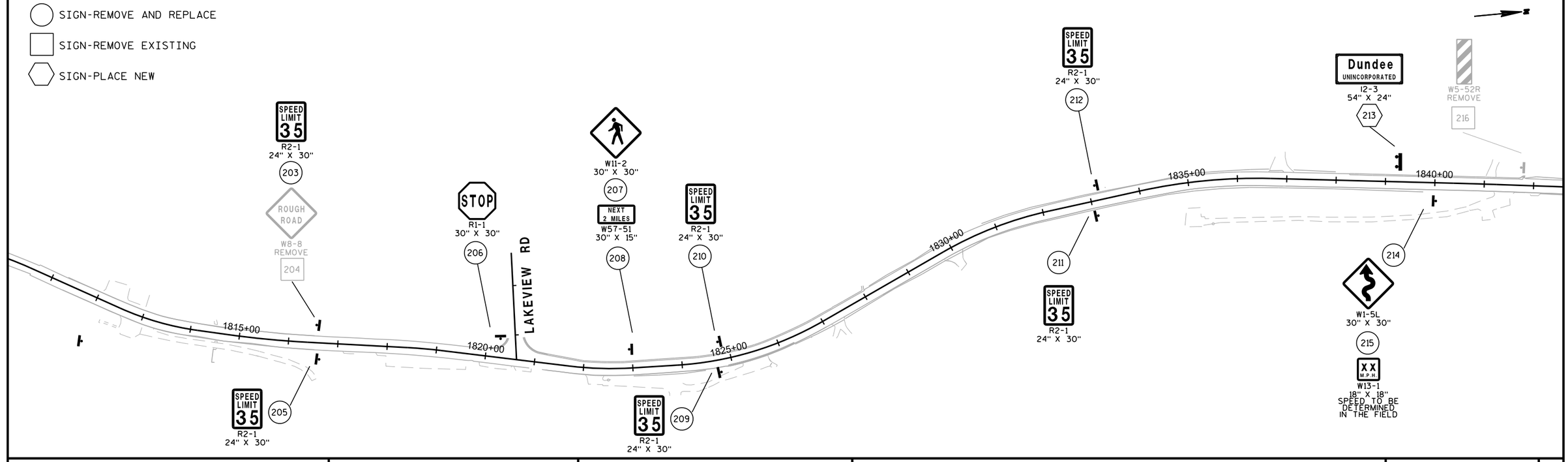
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NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

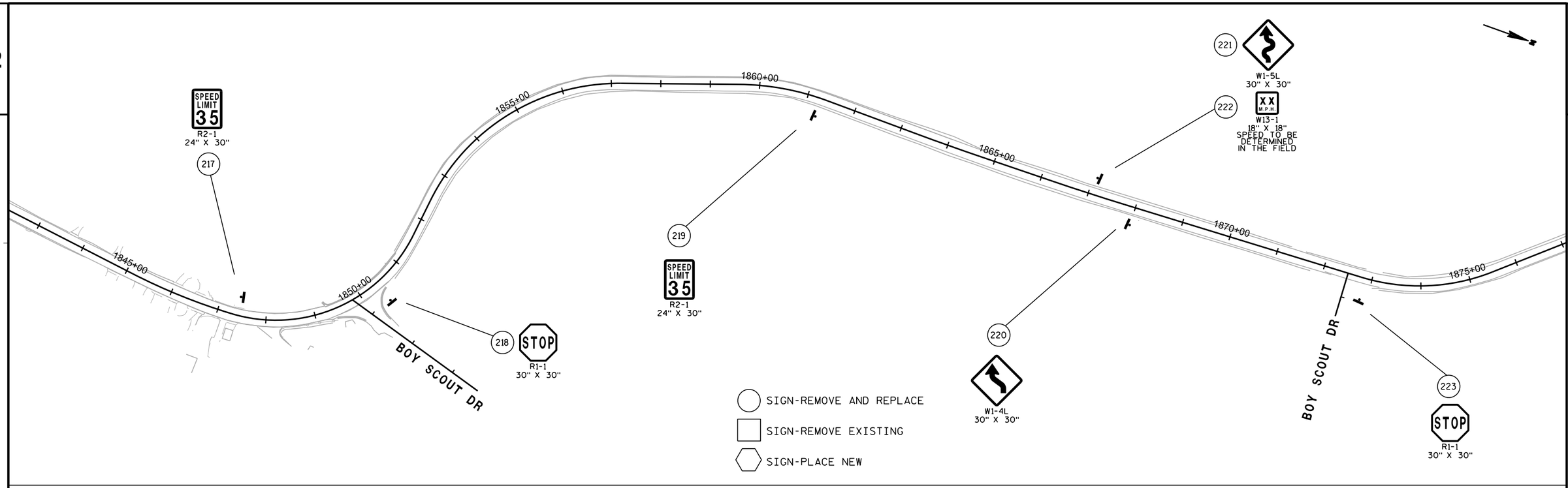
SIGN-REMOVE AND REPLACE

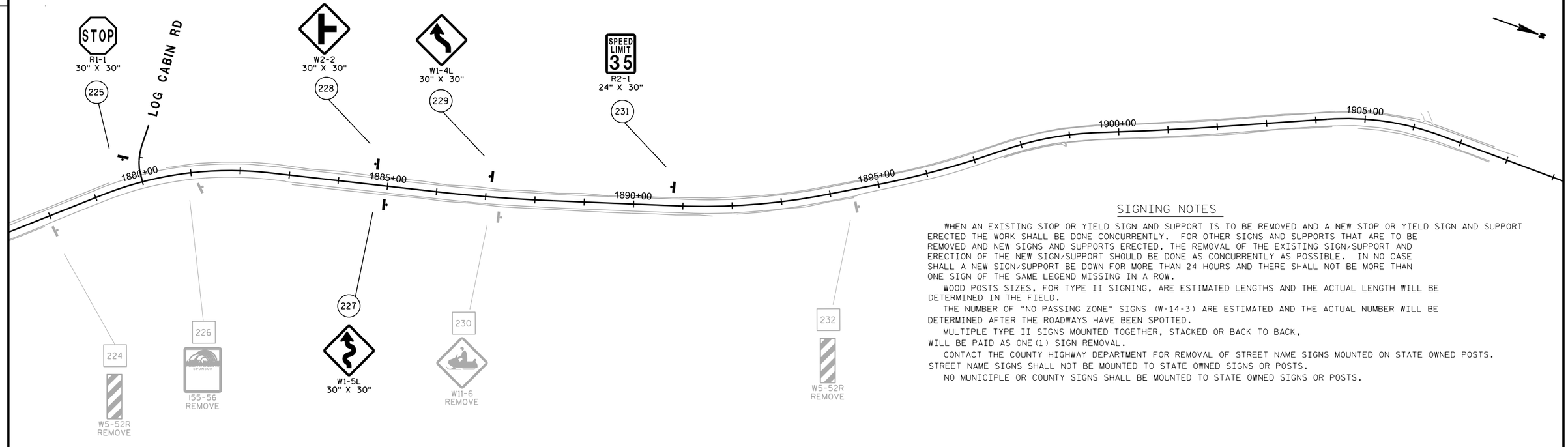
SIGN-REMOVE EXISTING

SIGN-PLACE NEW



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E





SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

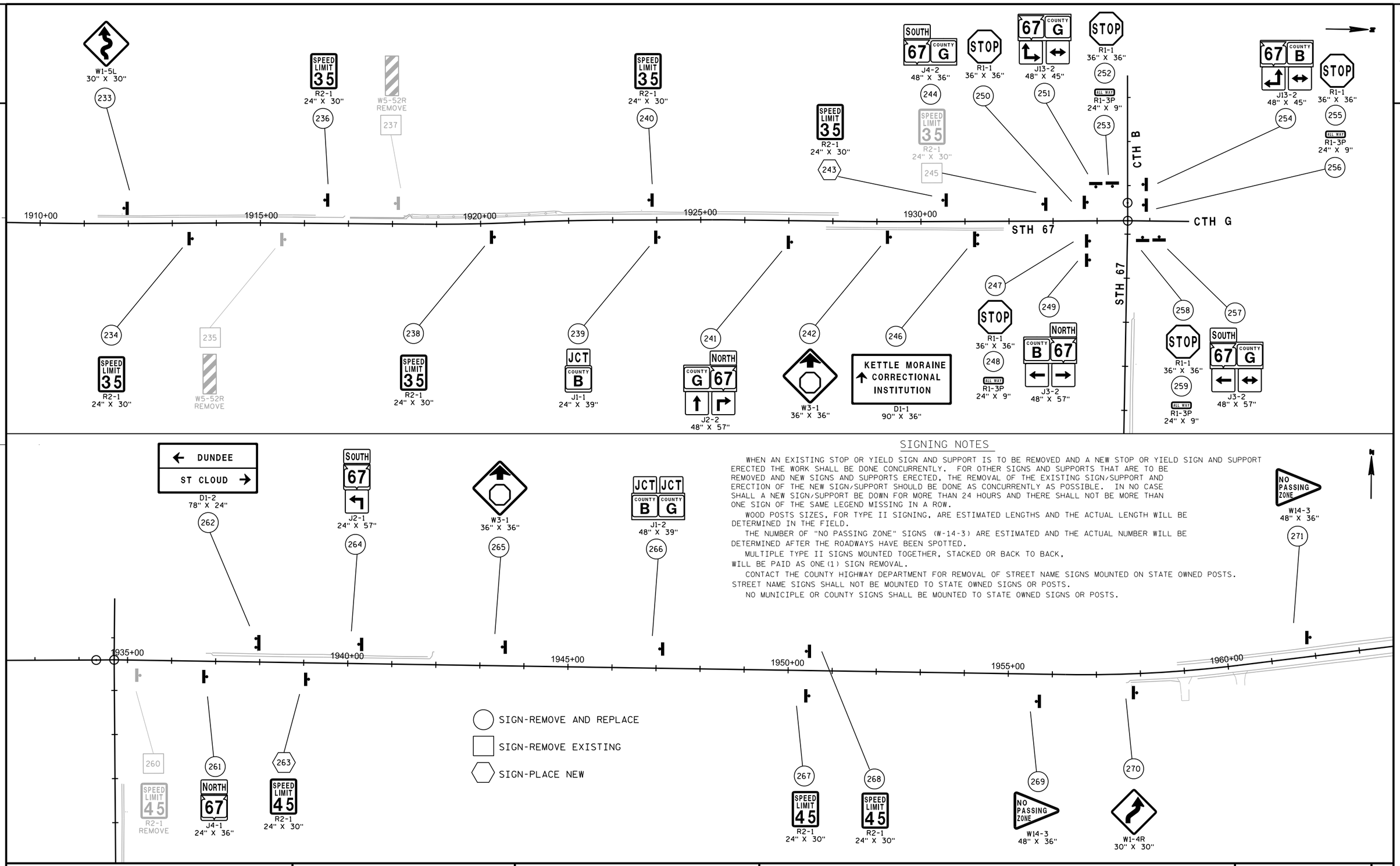
THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET	E



SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

2

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

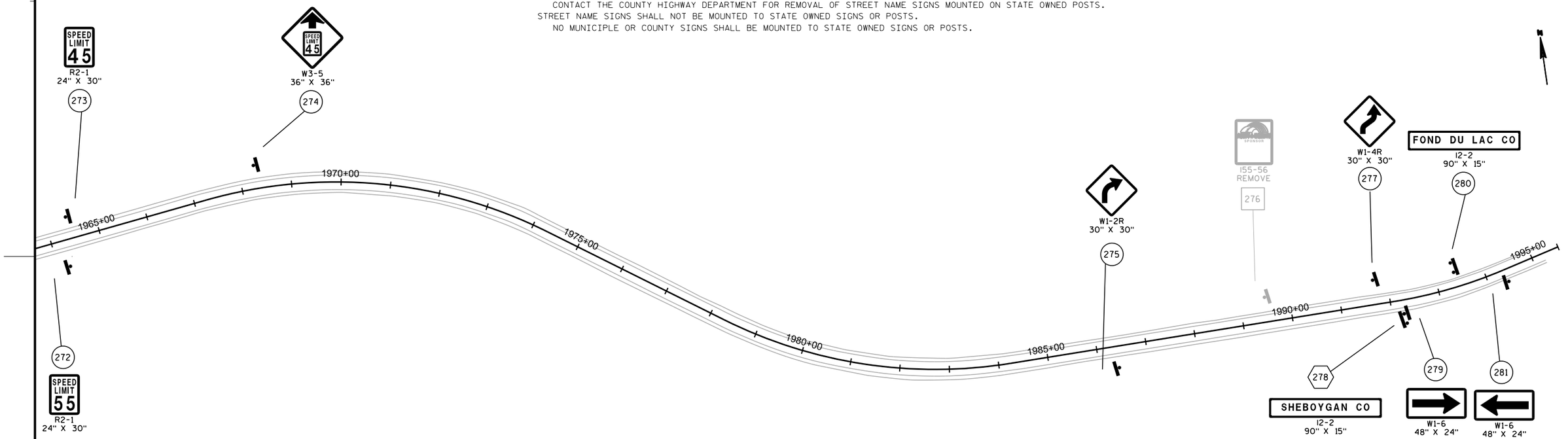
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THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.



SIGN-REMOVE AND REPLACE

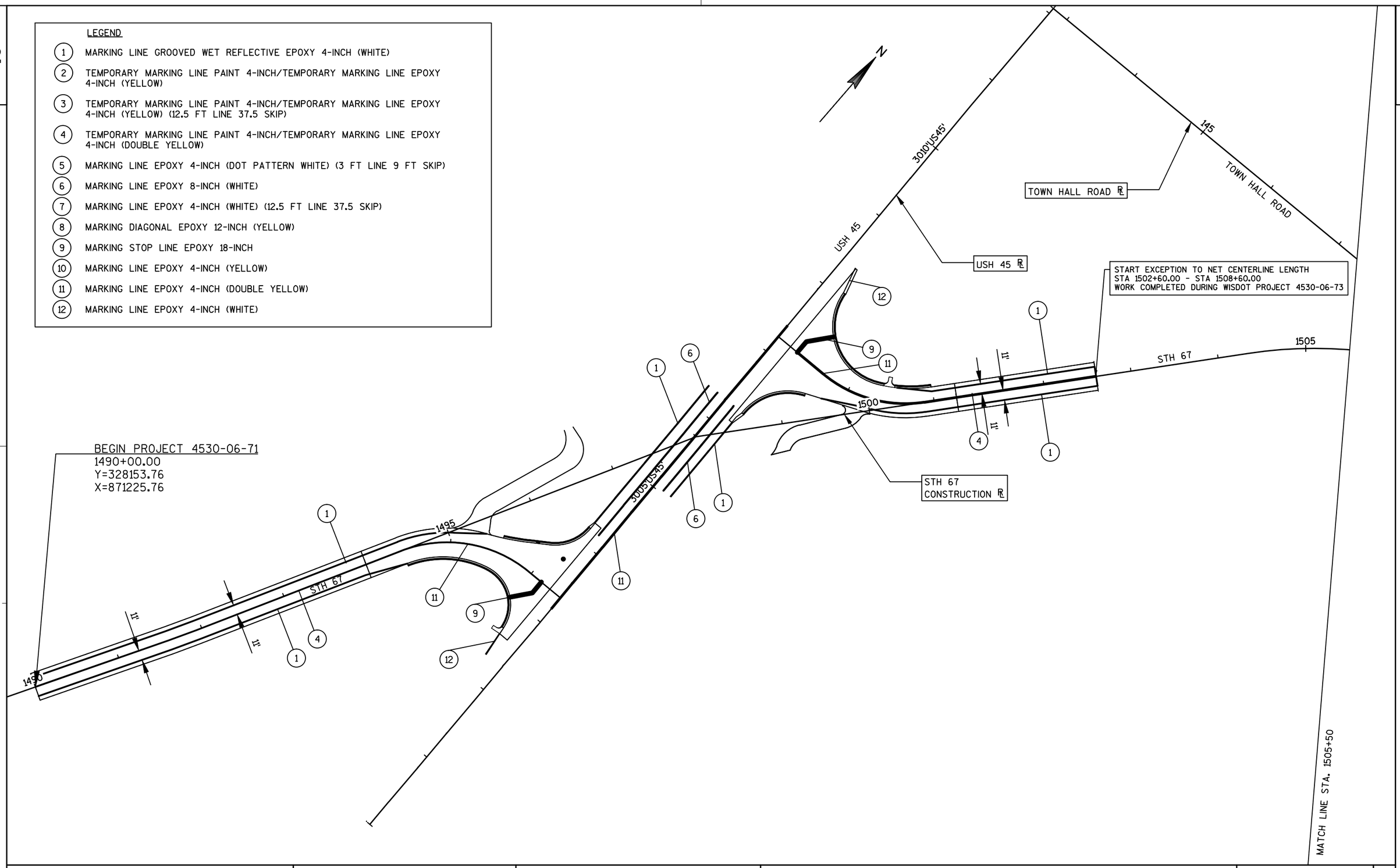
SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

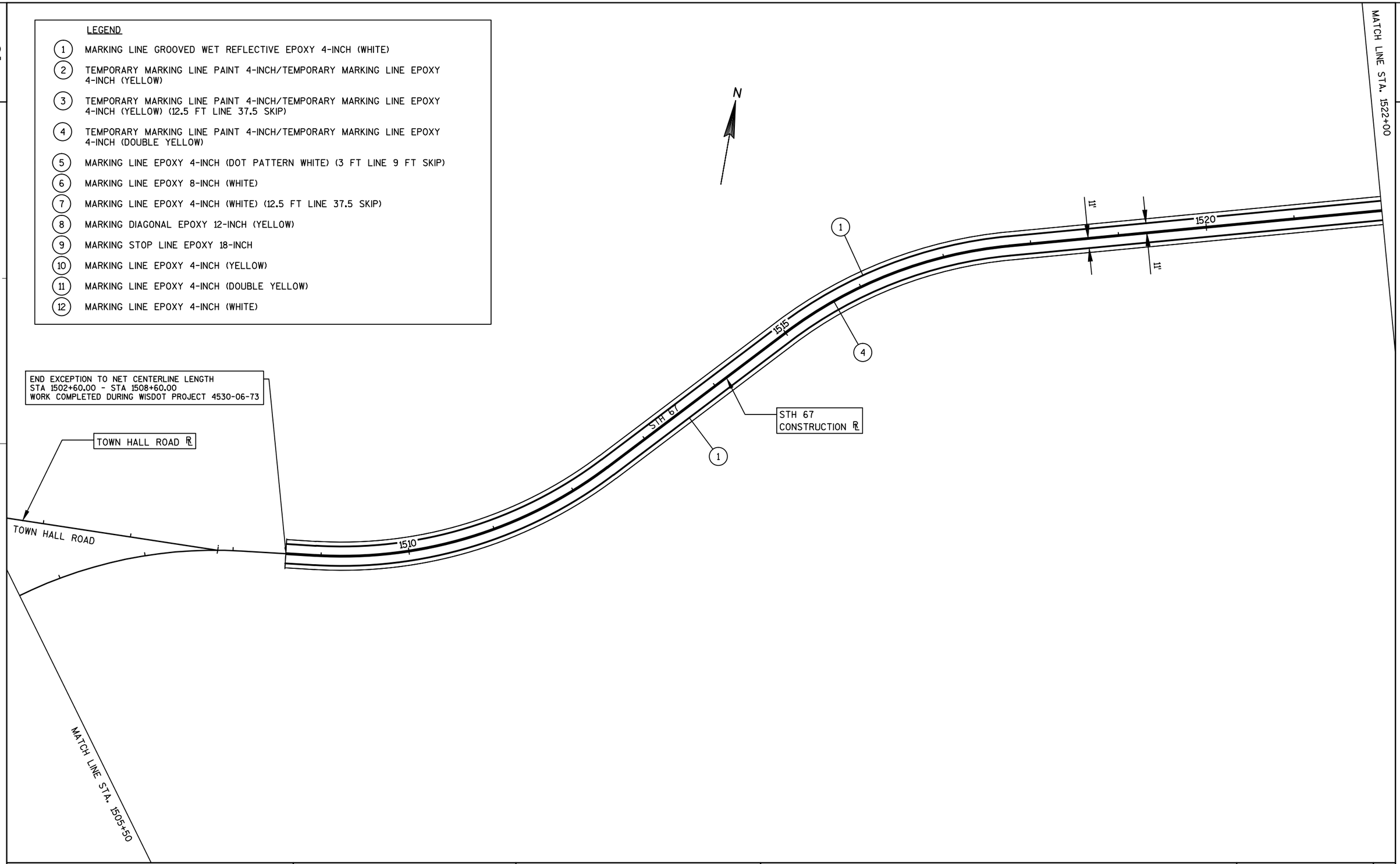


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 44	E

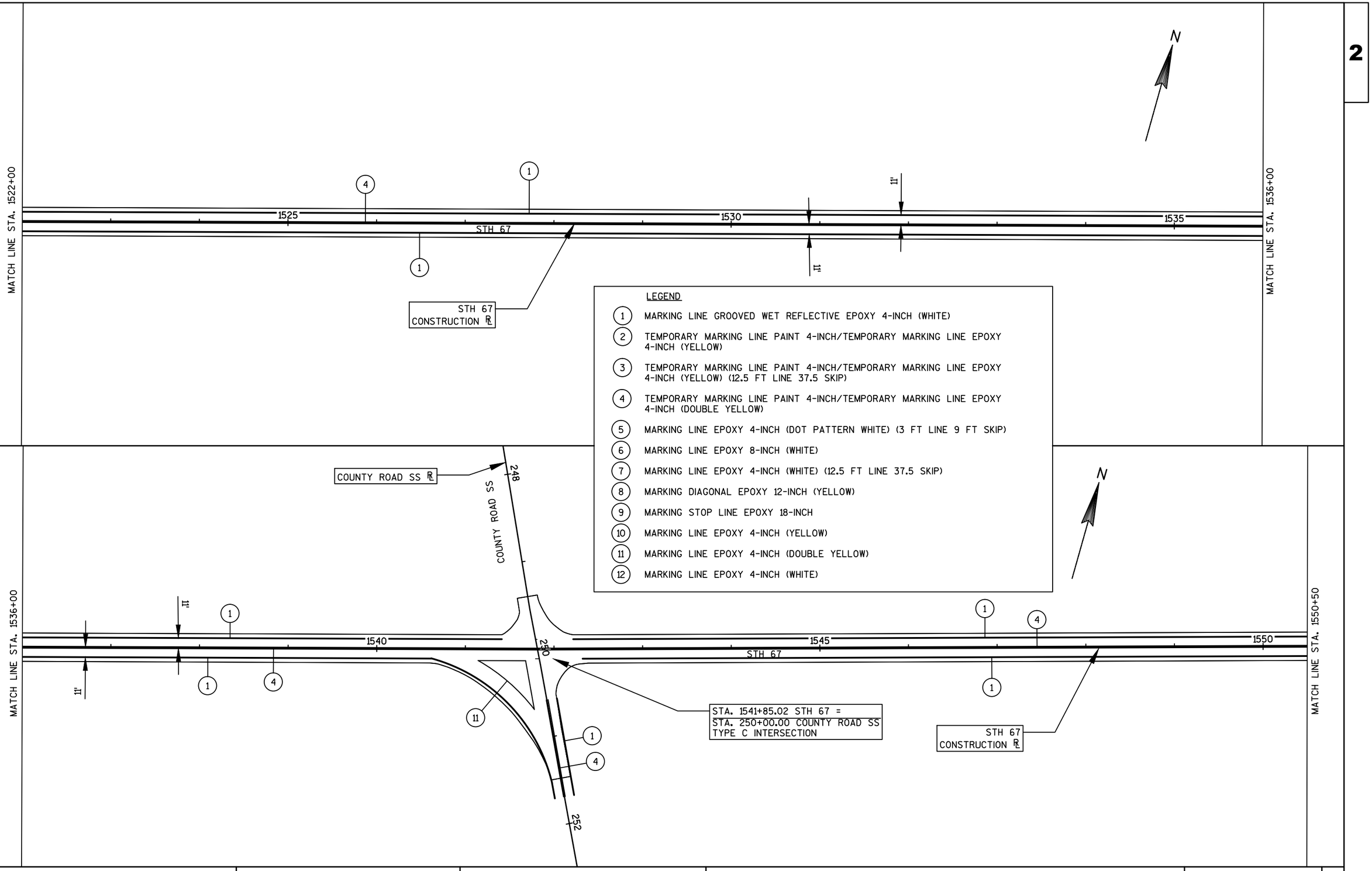
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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)



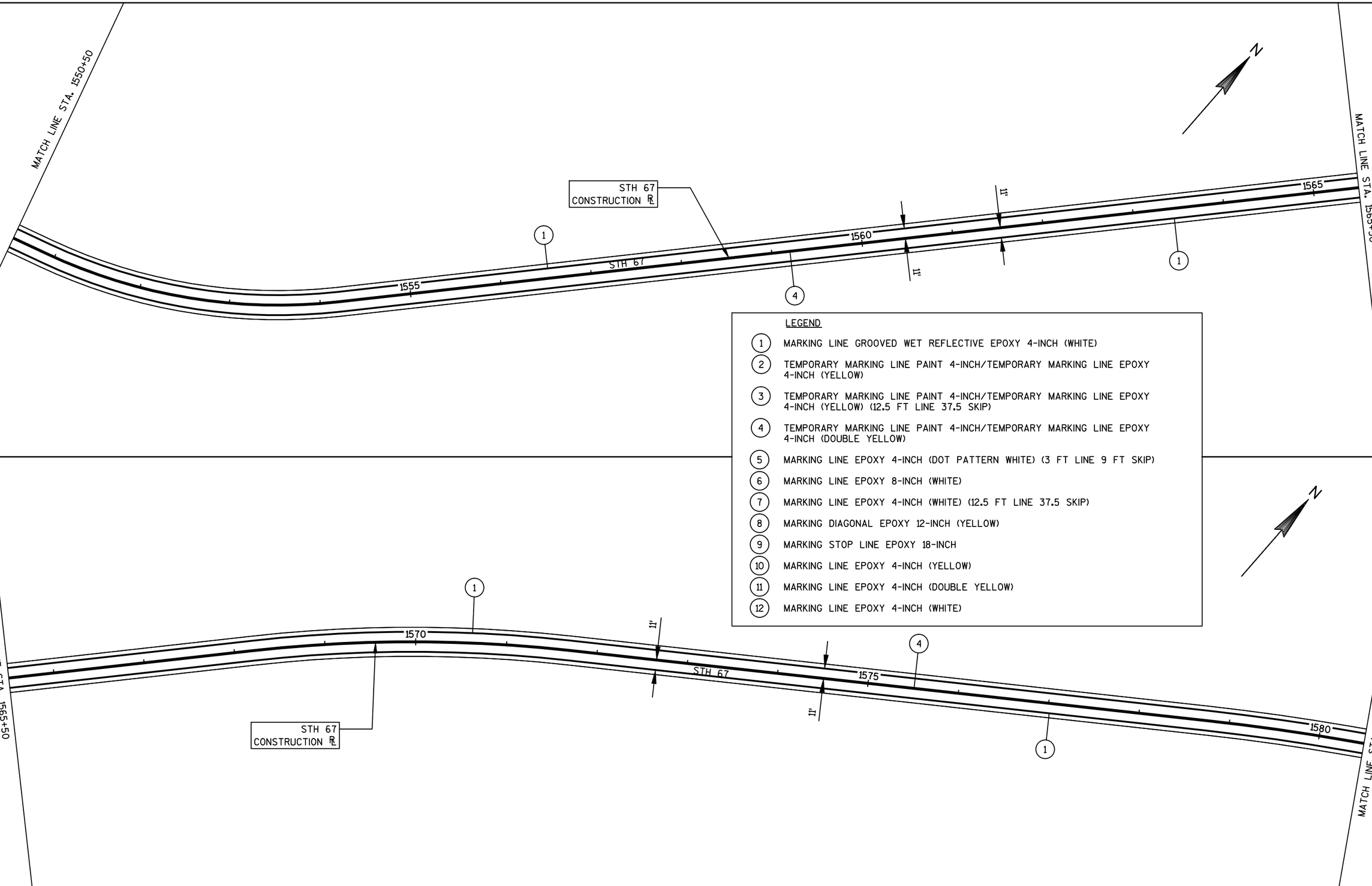
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 45	E



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 46	E

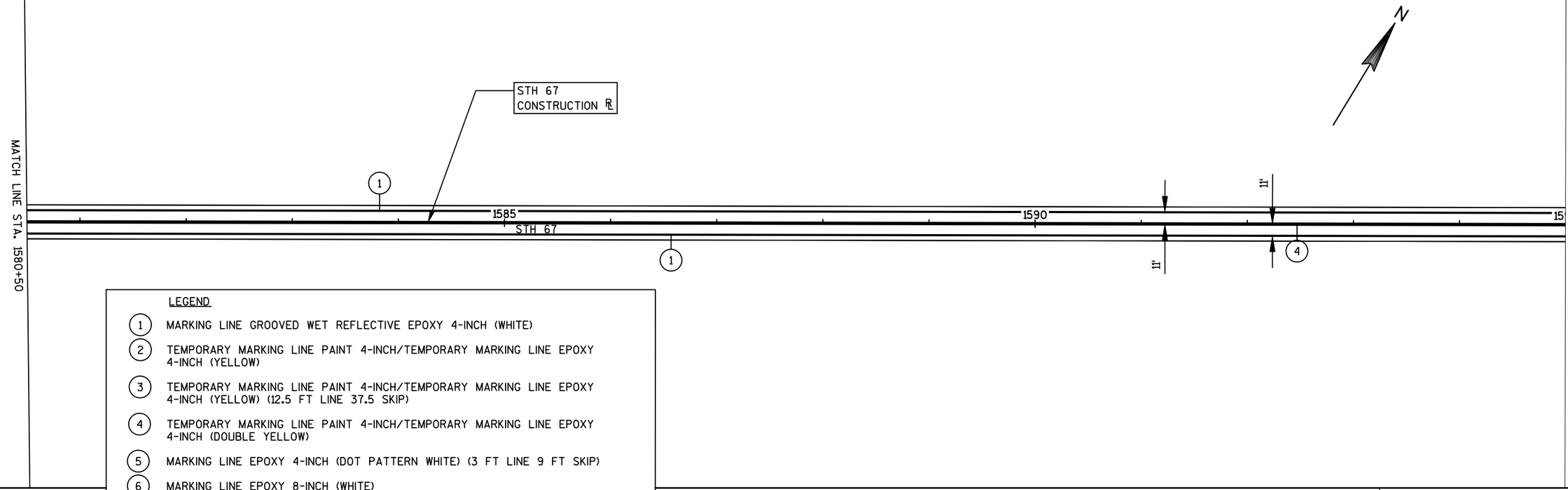


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 47	E

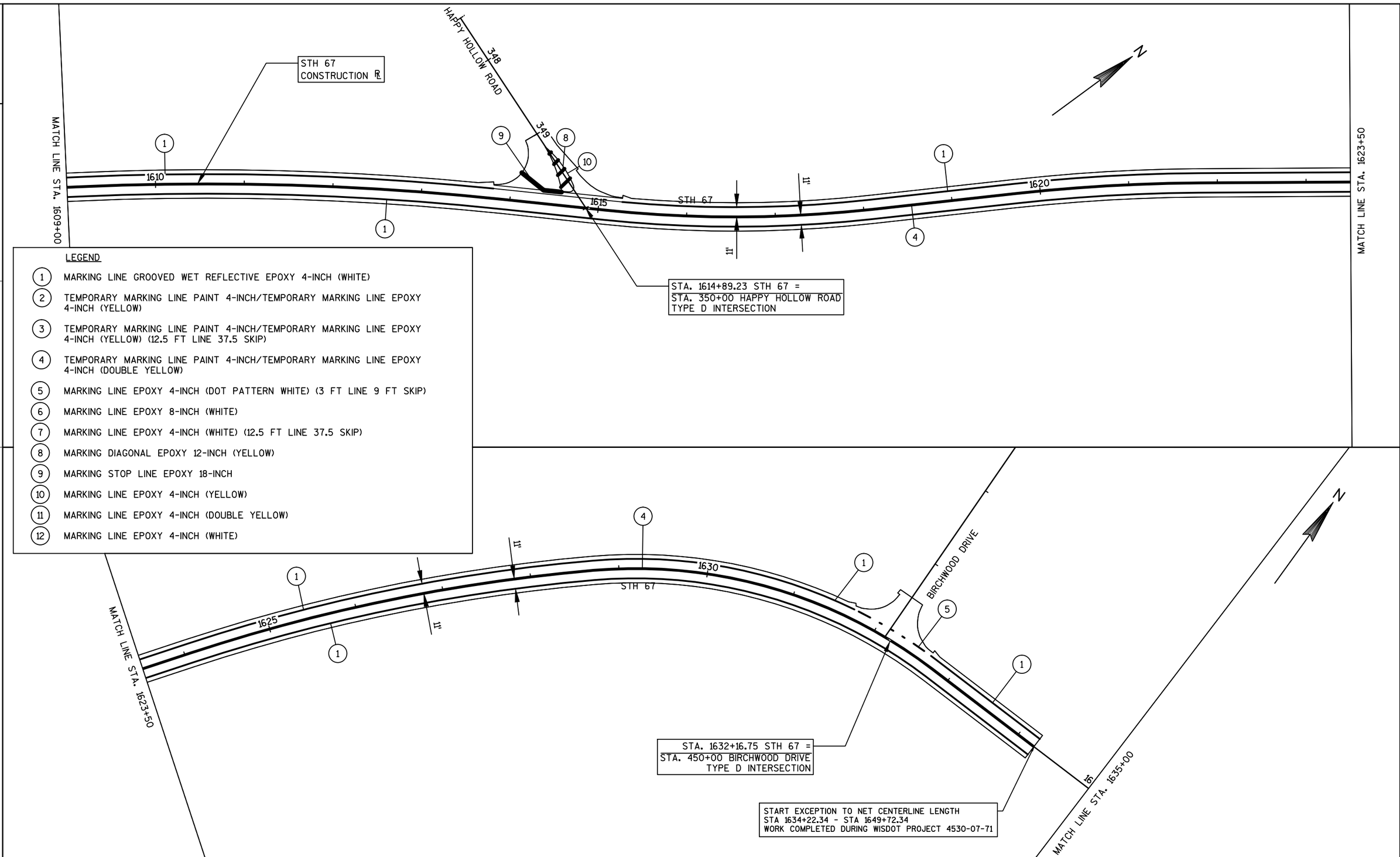
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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 48	E

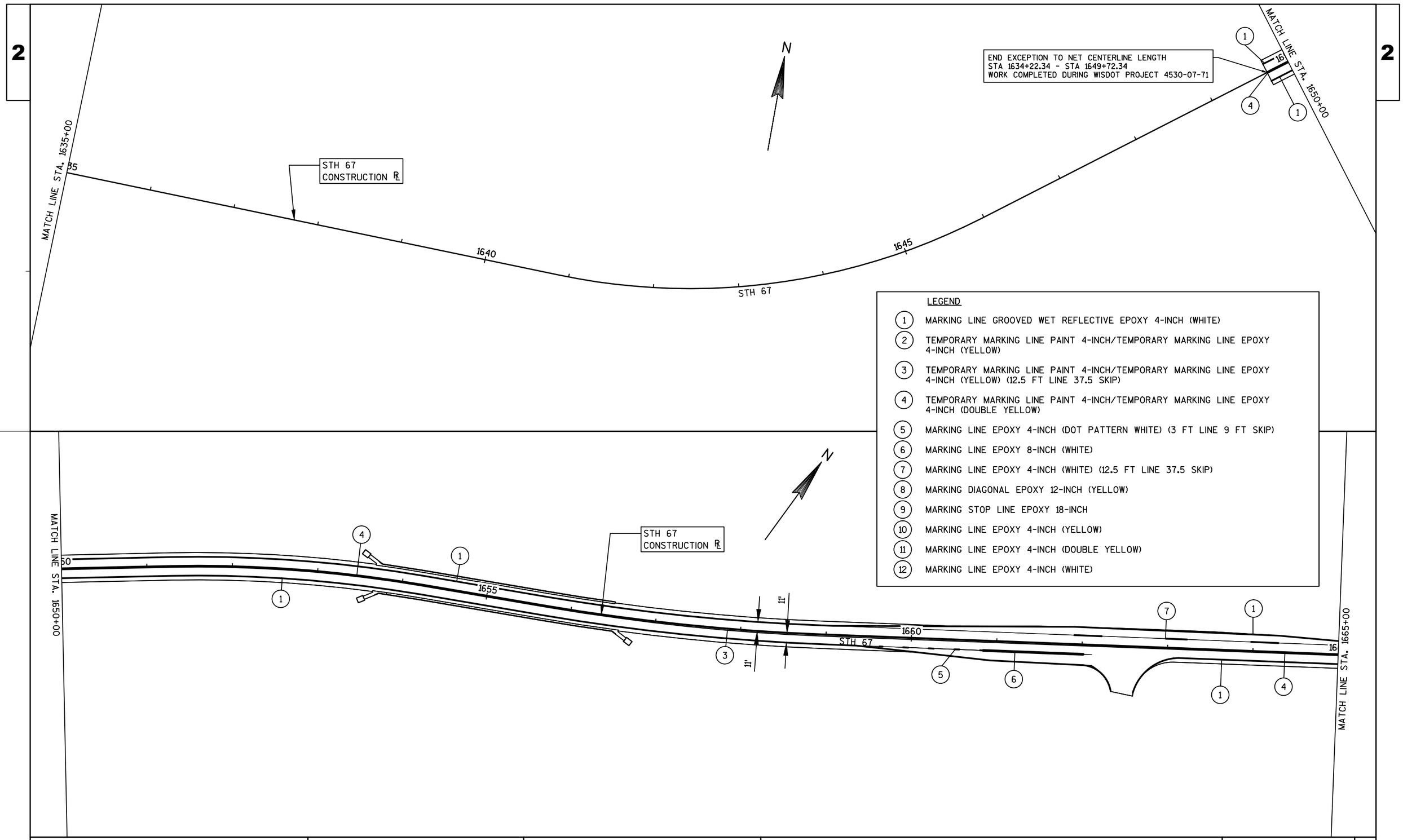


LEGEND

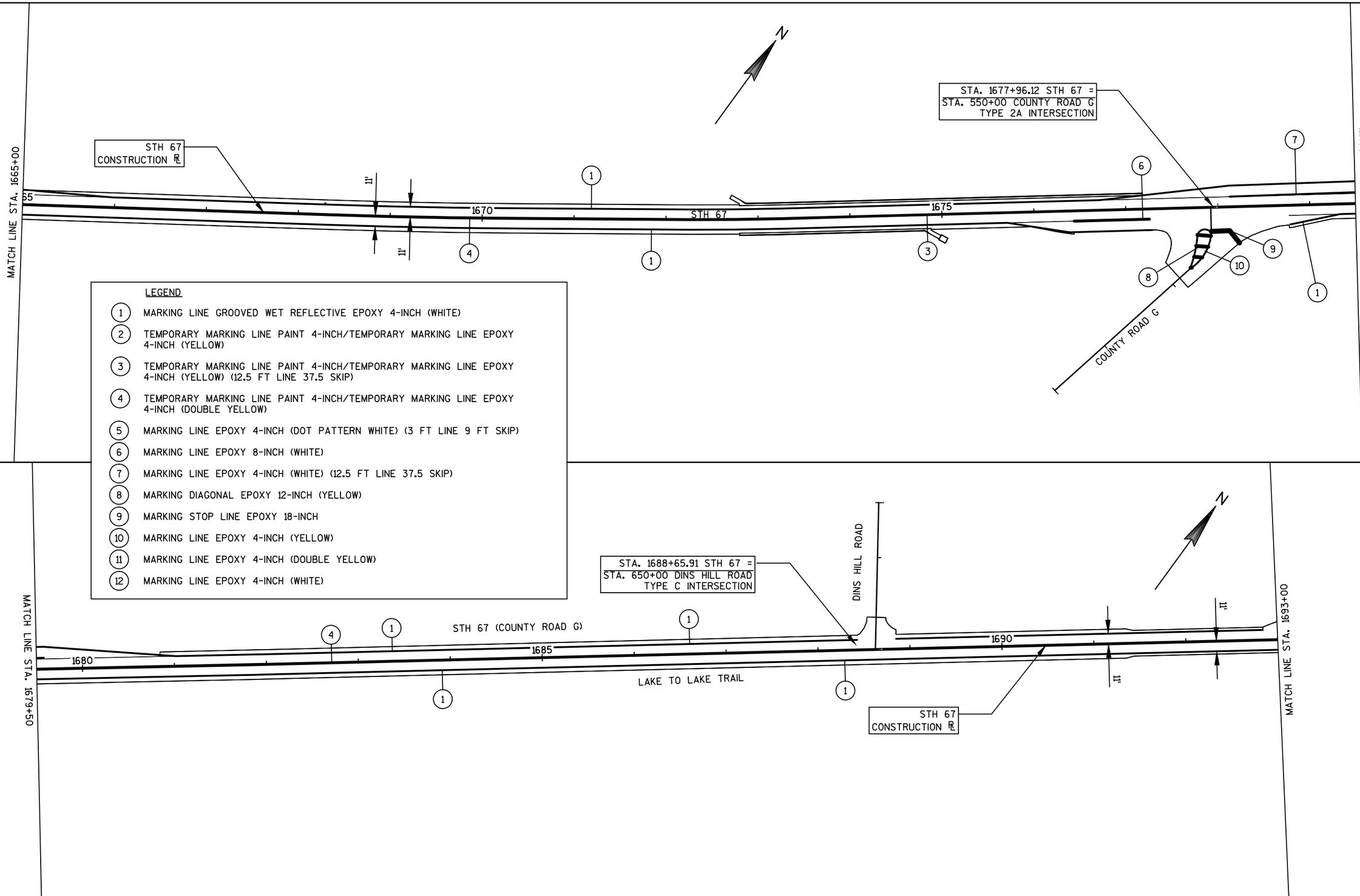
1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
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9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET	E

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WISDOT/CADDS SHEET 42



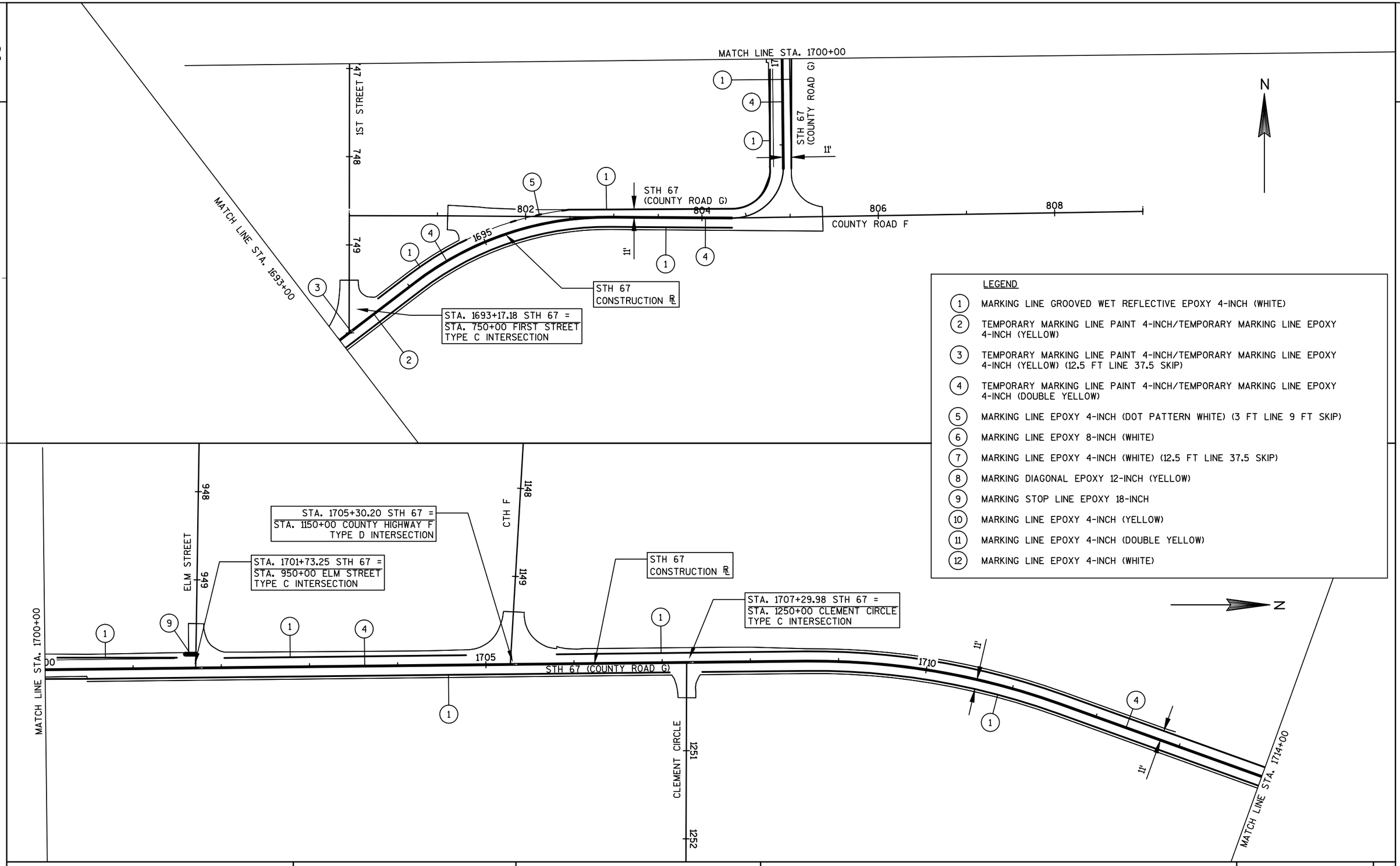
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 50	E



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
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10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

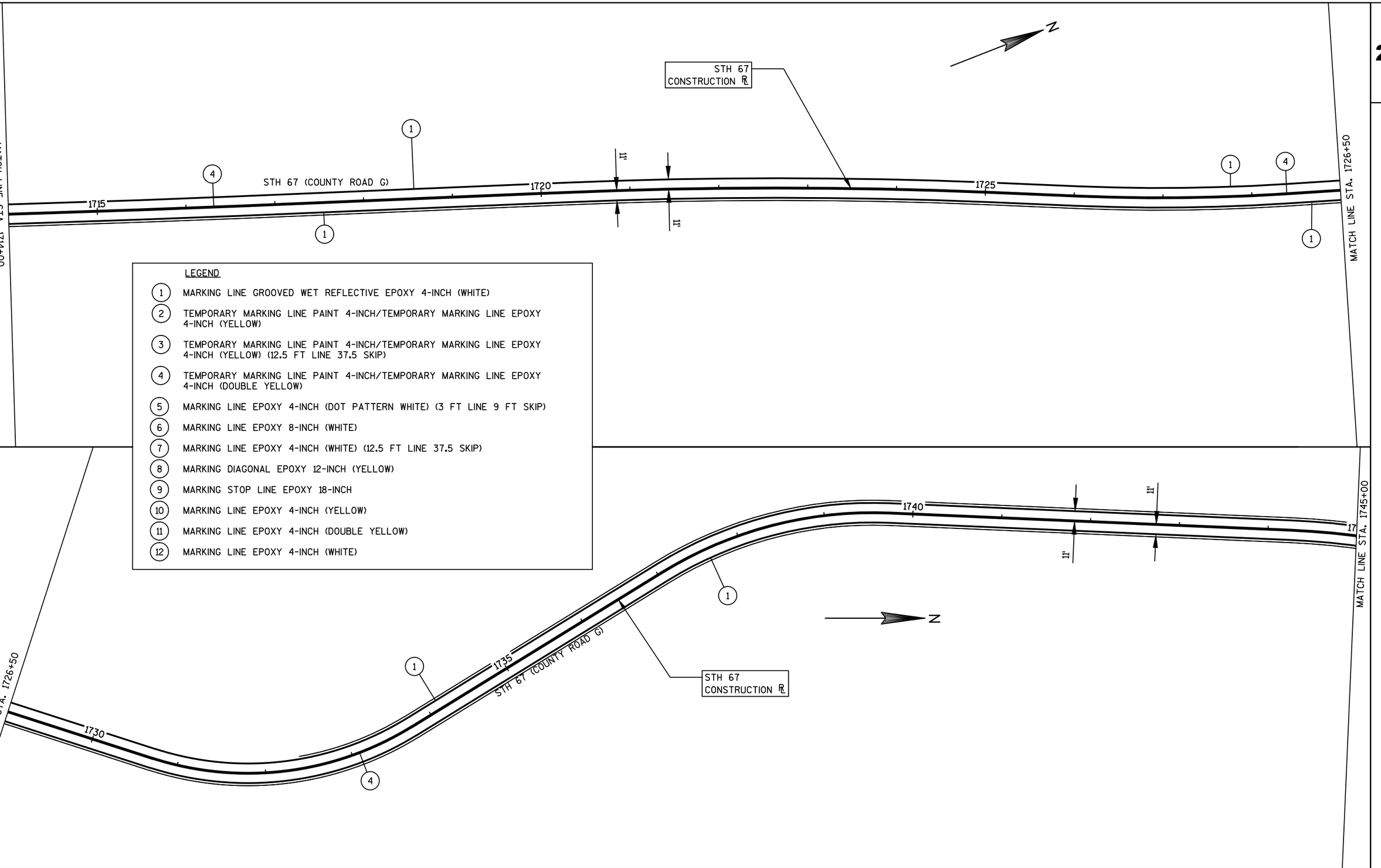
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 51	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET	E

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WISDOT/CADDS SHEET 42

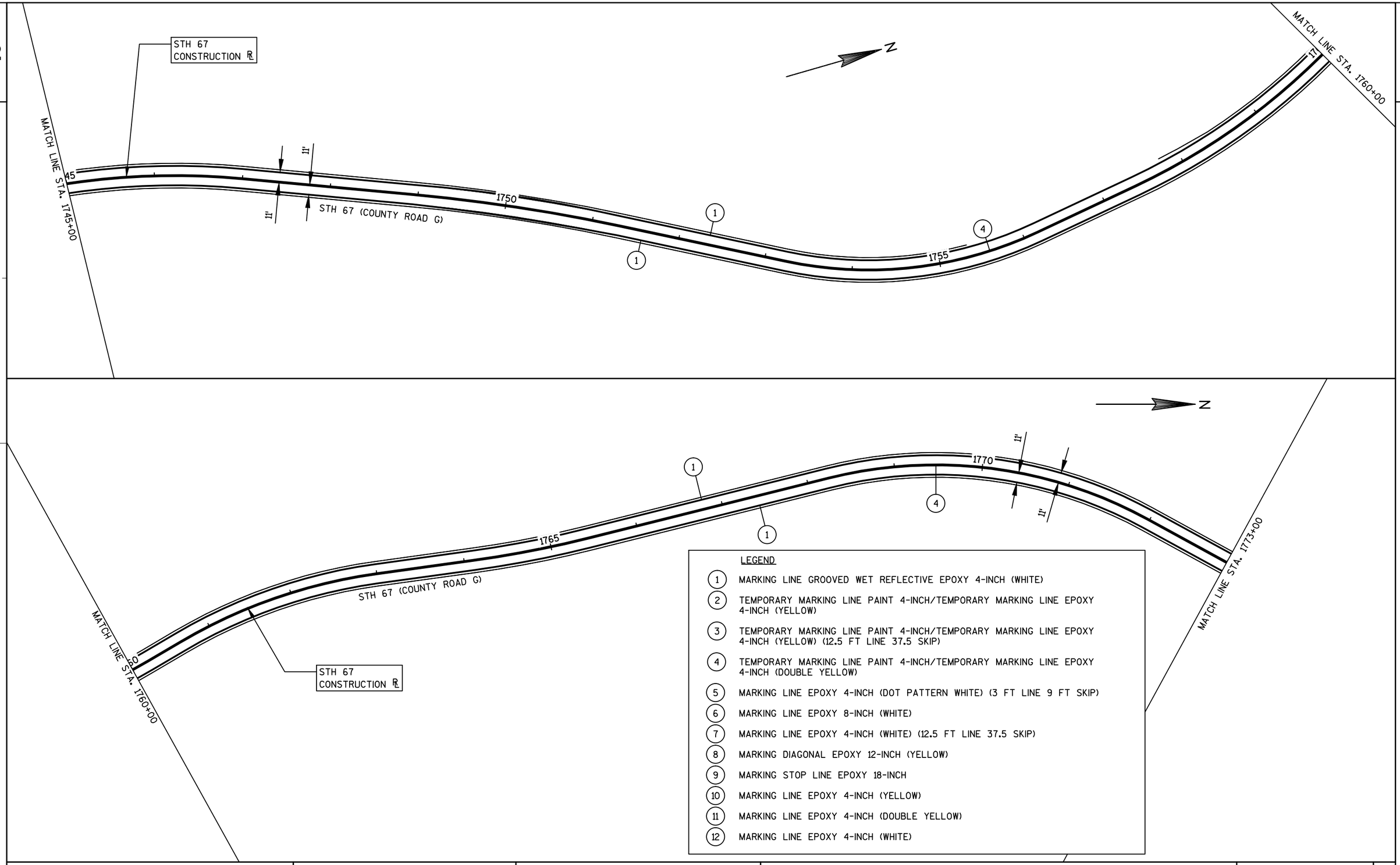
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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
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12. MARKING LINE EPOXY 4-INCH (WHITE)

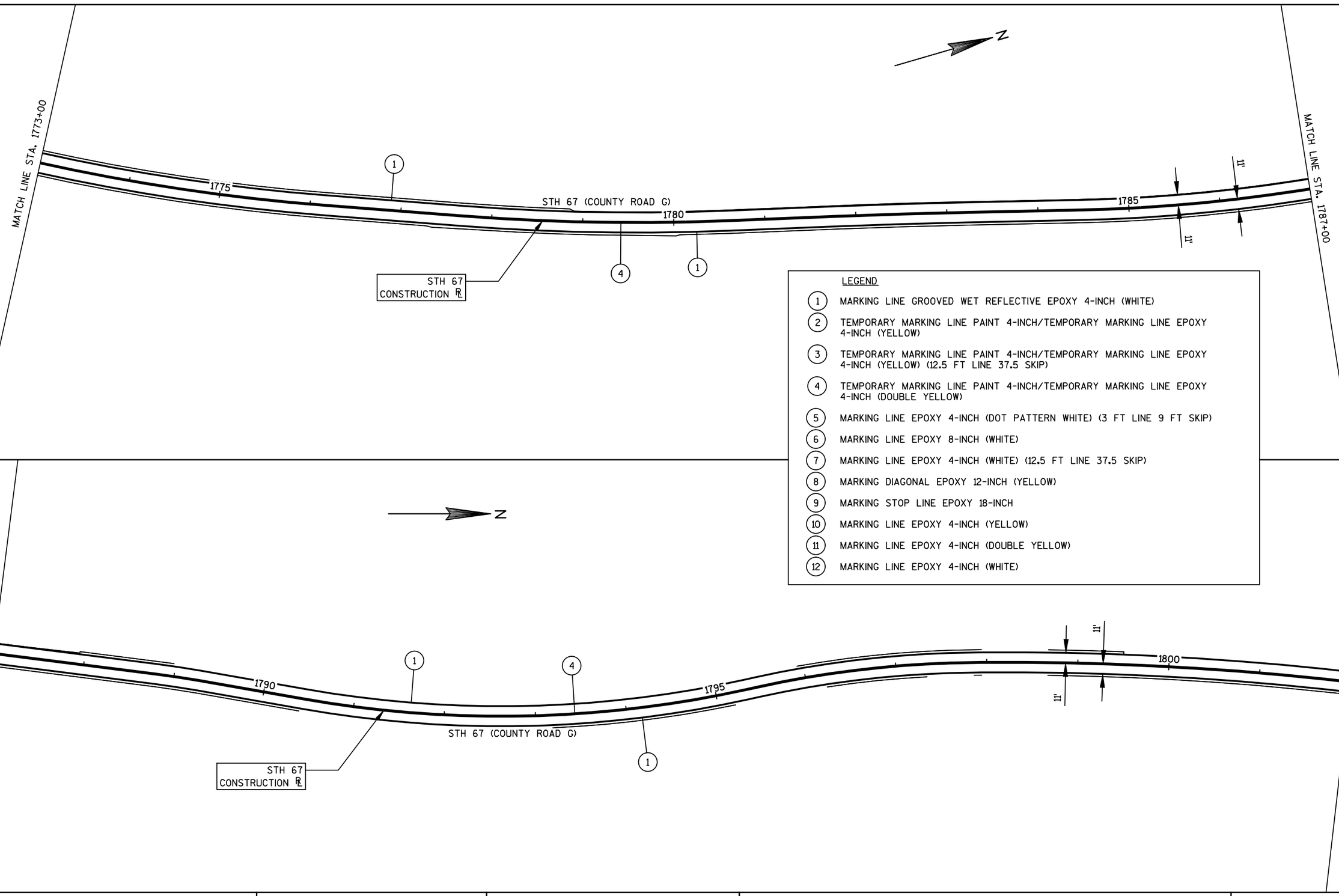
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 53	E



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2	TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3	TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4	TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5	MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6	MARKING LINE EPOXY 8-INCH (WHITE)
7	MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9	MARKING STOP LINE EPOXY 18-INCH
10	MARKING LINE EPOXY 4-INCH (YELLOW)
11	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12	MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 54 E

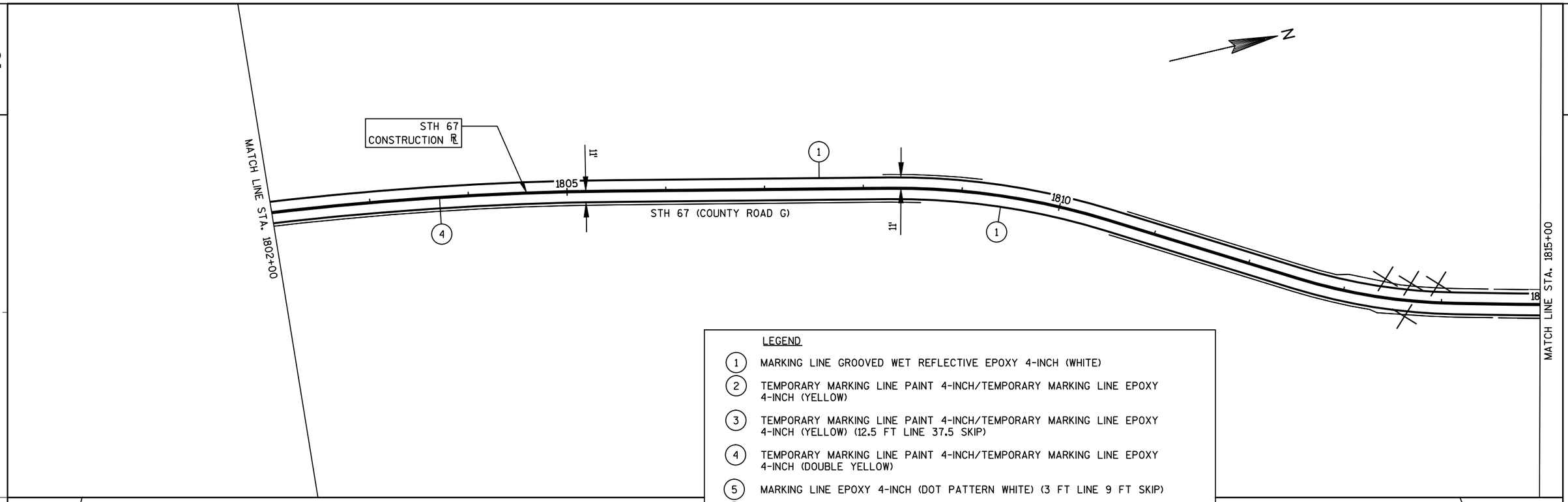


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
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5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
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9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 55	E

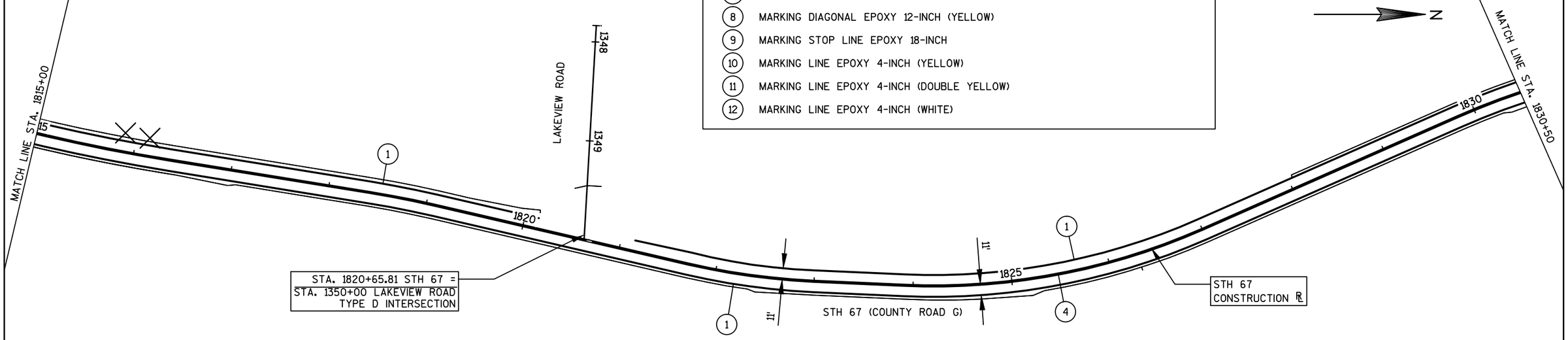
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2

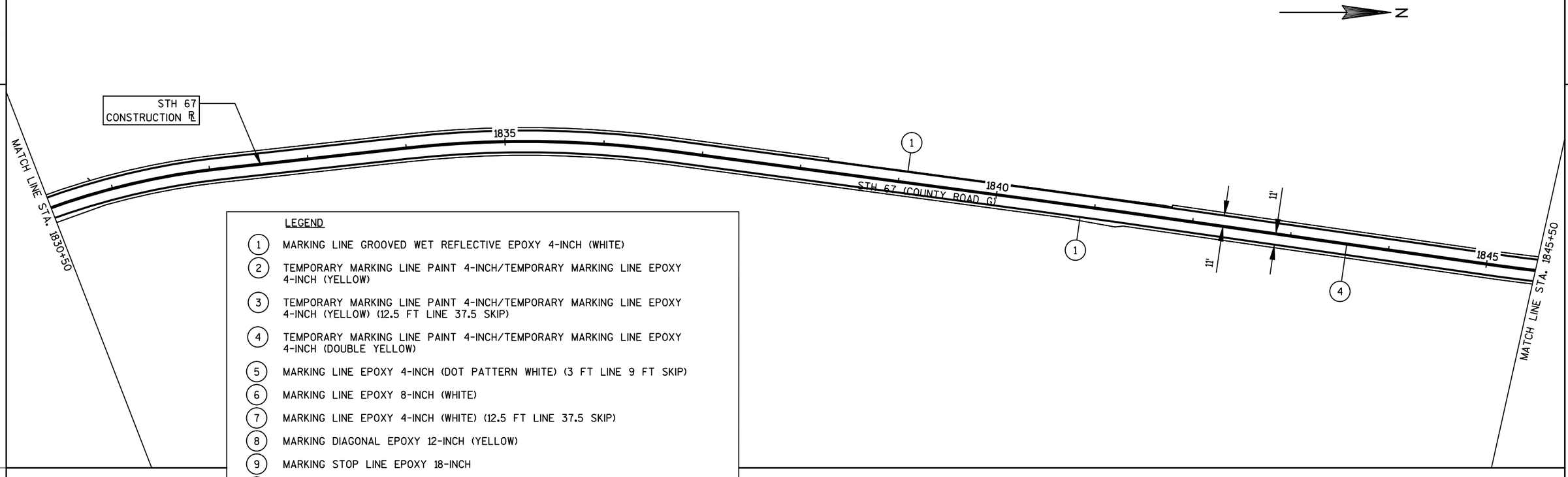
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
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10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)



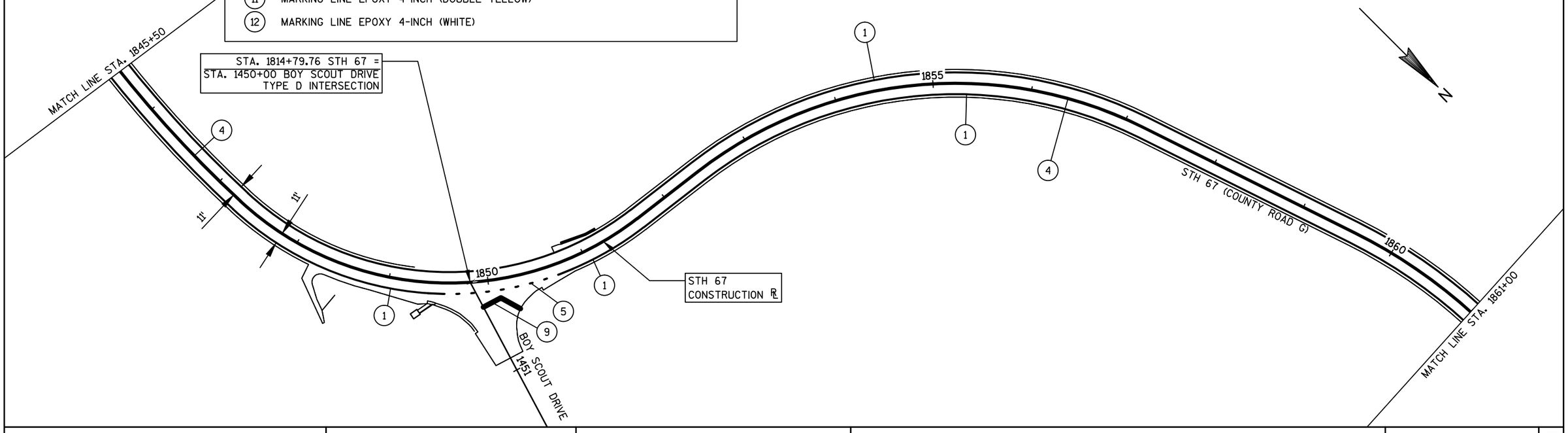
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 56	E

2

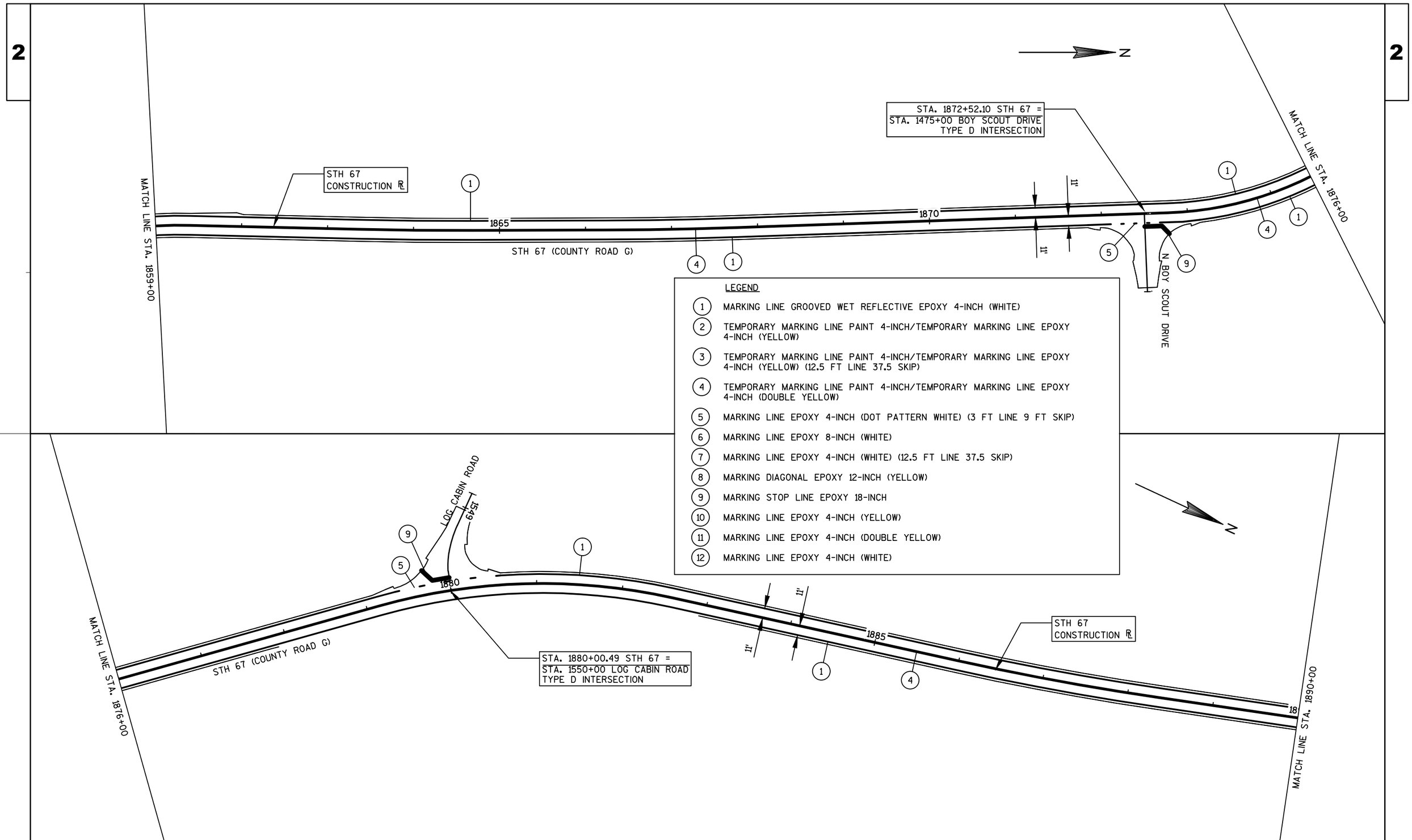


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 57	E

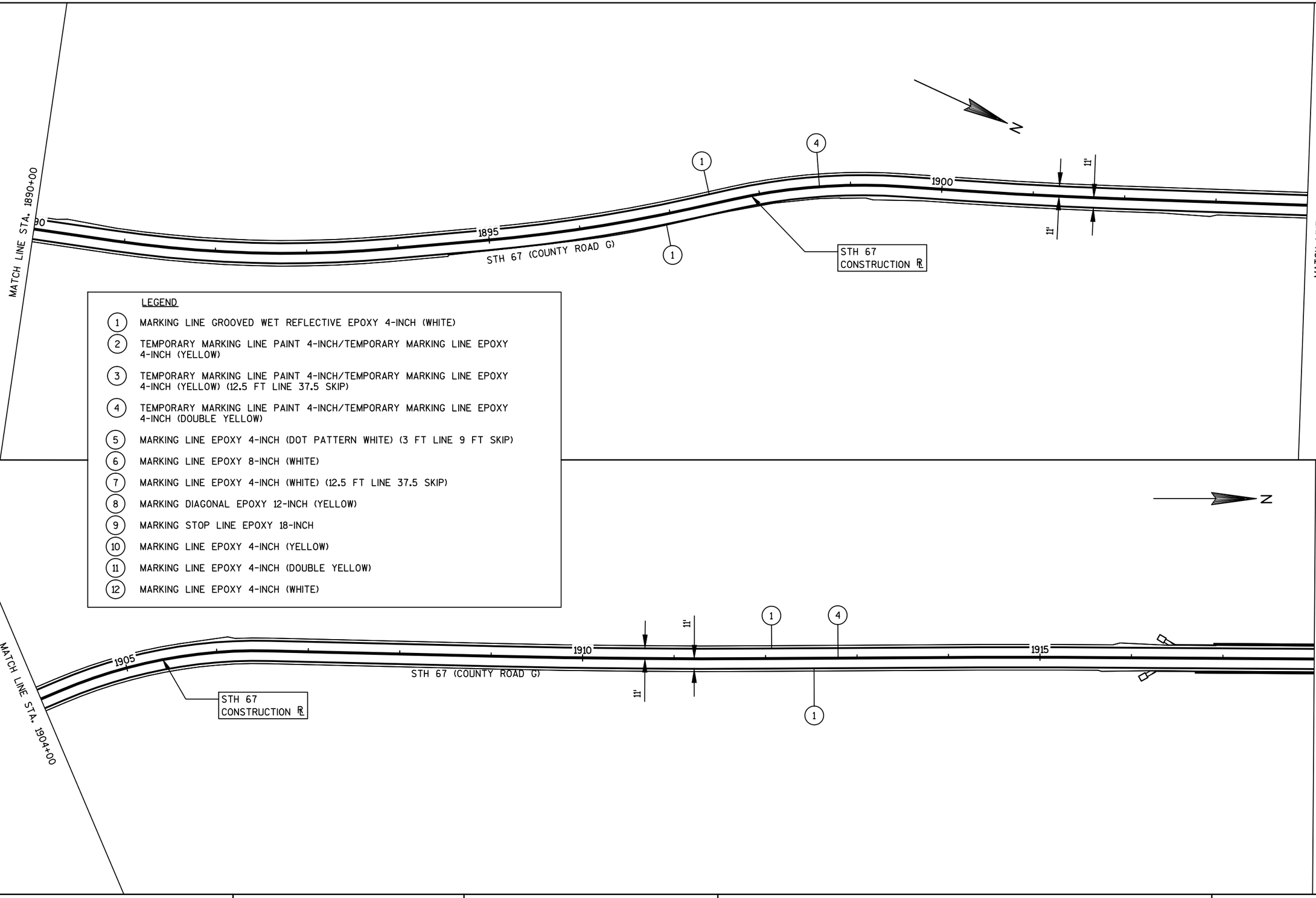


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 58	E

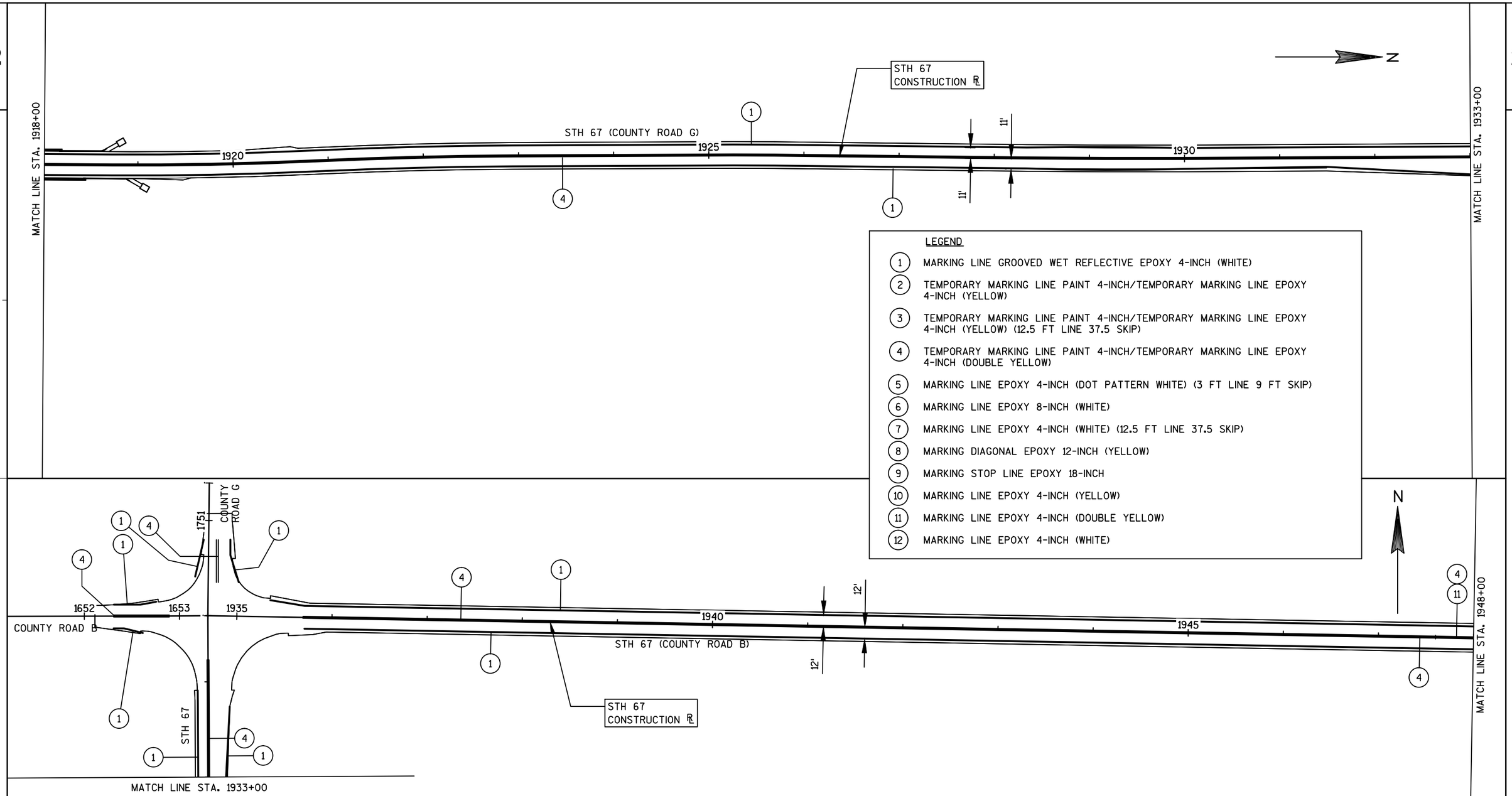
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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 59	E

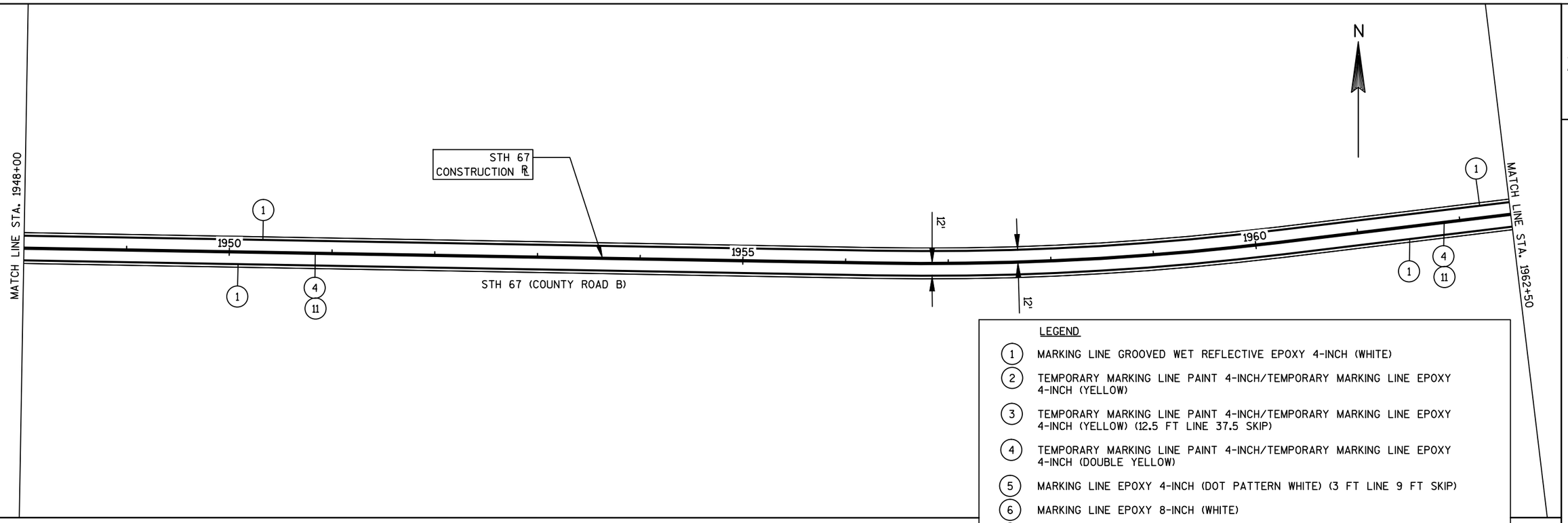


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 60	E

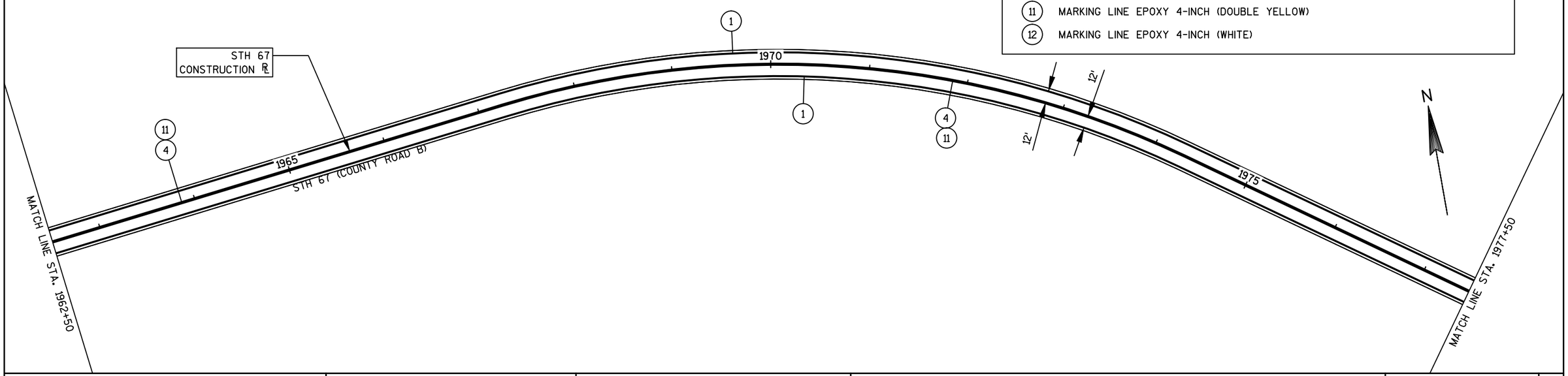
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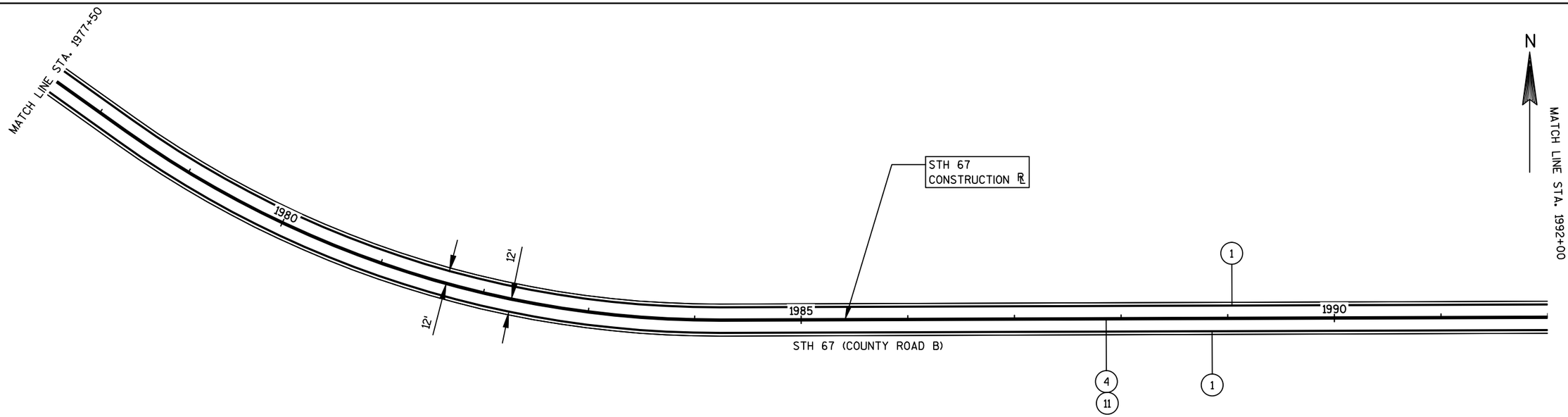
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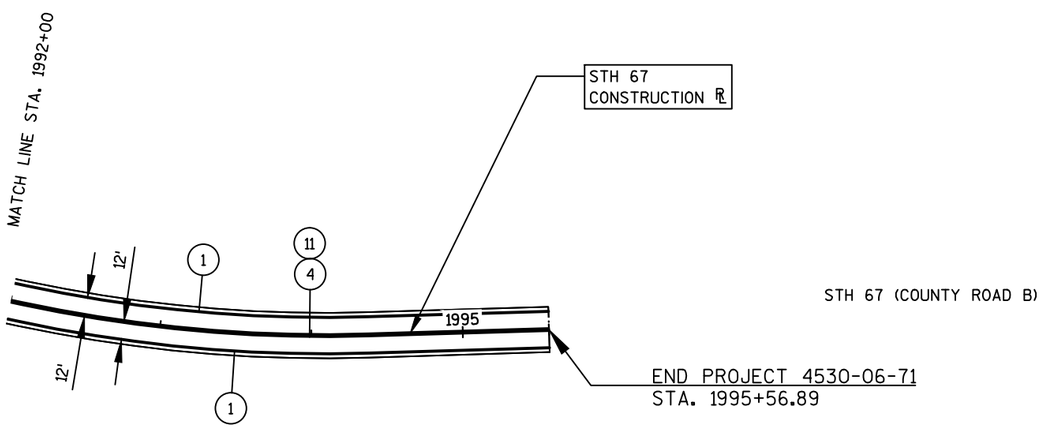
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4. TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5. MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING STOP LINE EPOXY 18-INCH
10. MARKING LINE EPOXY 4-INCH (YELLOW)
11. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12. MARKING LINE EPOXY 4-INCH (WHITE)



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 61	E





LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
2	TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
3	TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 SKIP)
4	TEMPORARY MARKING LINE PAINT 4-INCH/TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5	MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6	MARKING LINE EPOXY 8-INCH (WHITE)
7	MARKING LINE EPOXY 4-INCH (WHITE) (12.5 FT LINE 37.5 SKIP)
8	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9	MARKING STOP LINE EPOXY 18-INCH
10	MARKING LINE EPOXY 4-INCH (YELLOW)
11	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
12	MARKING LINE EPOXY 4-INCH (WHITE)

N

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PAVEMENT MARKING: STH 67	SHEET 62	E

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKERS



2

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TRAFFIC CONTROL (STAGE 1)	SHEET 63	E

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKERS



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TRAFFIC CONTROL (STAGE 1)	SHEET 64	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\025001_TC.DWG PLOT DATE : 12/17/2019 8:32 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

10'
10
STH 67
1495
END ROAD WORK
G20-2A
48" X 24"
500'±
12
USH 45
3005
10
495'± BUFFER SPACE
185'± TAPER
1500'±
500'±
R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1500
STH 67
SHOULDER WORK
W21-5
48" X 48"
ROAD WORK AHEAD
W20-1A
48" X 48"

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TRAFFIC CONTROL (STAGE 2)	SHEET 65	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\025003_TC.DWG PLOT DATE : 12/16/2019 10:09 AM PLOT BY : DAVID YAHNKE PLOT NAME :

2

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

10

STH 67

1495

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A
48" X 48"

SHOULDER WORK
W21-5
48" X 48"

USH 45

12

3005

1500'±

500'±

495'± BUFFER SPACE

185'± TAPER

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

USH 45

10

500'±

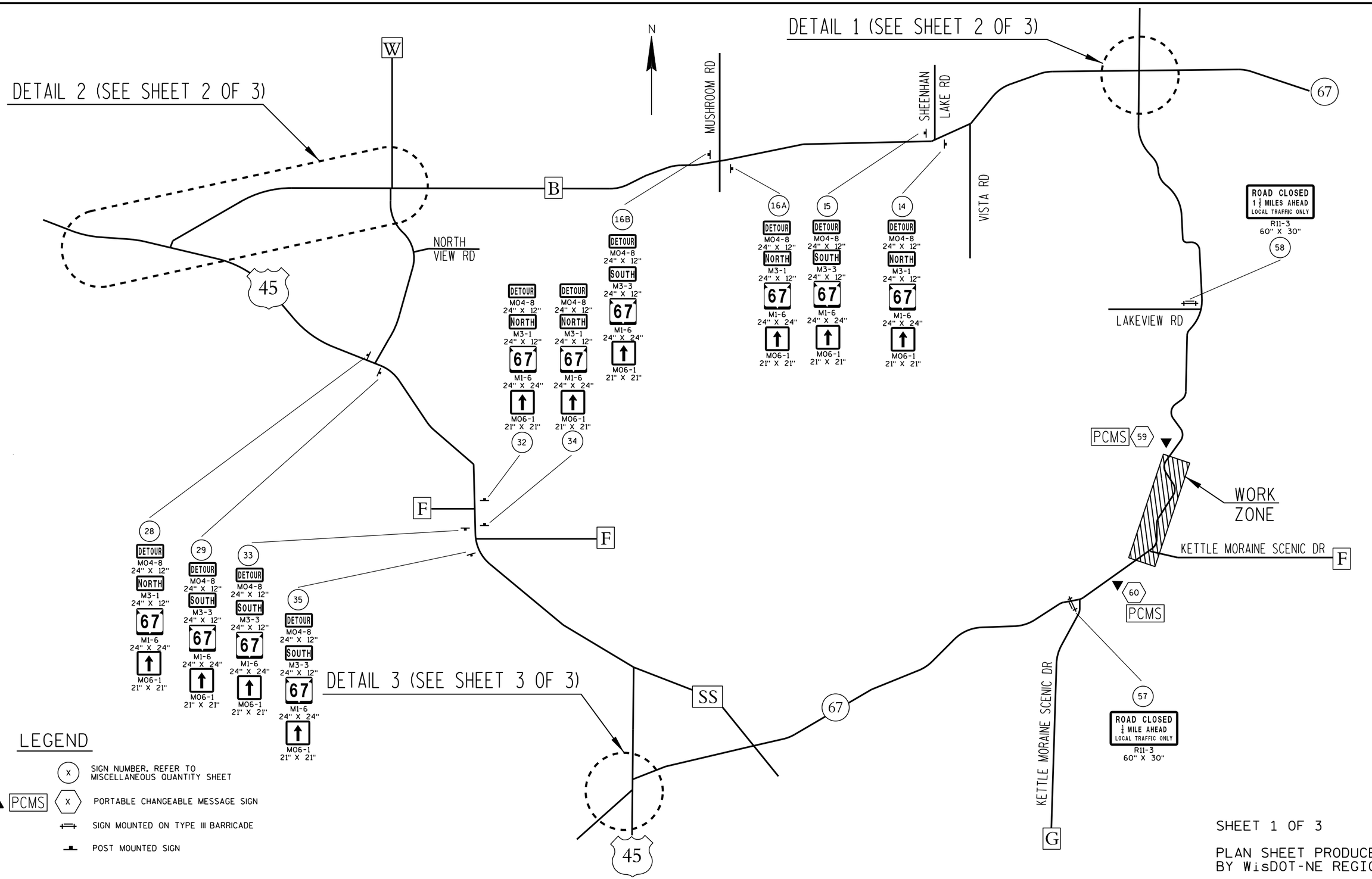
1500

STH 67

10'

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	TRAFFIC CONTROL (STAGE 2)	SHEET 66	E

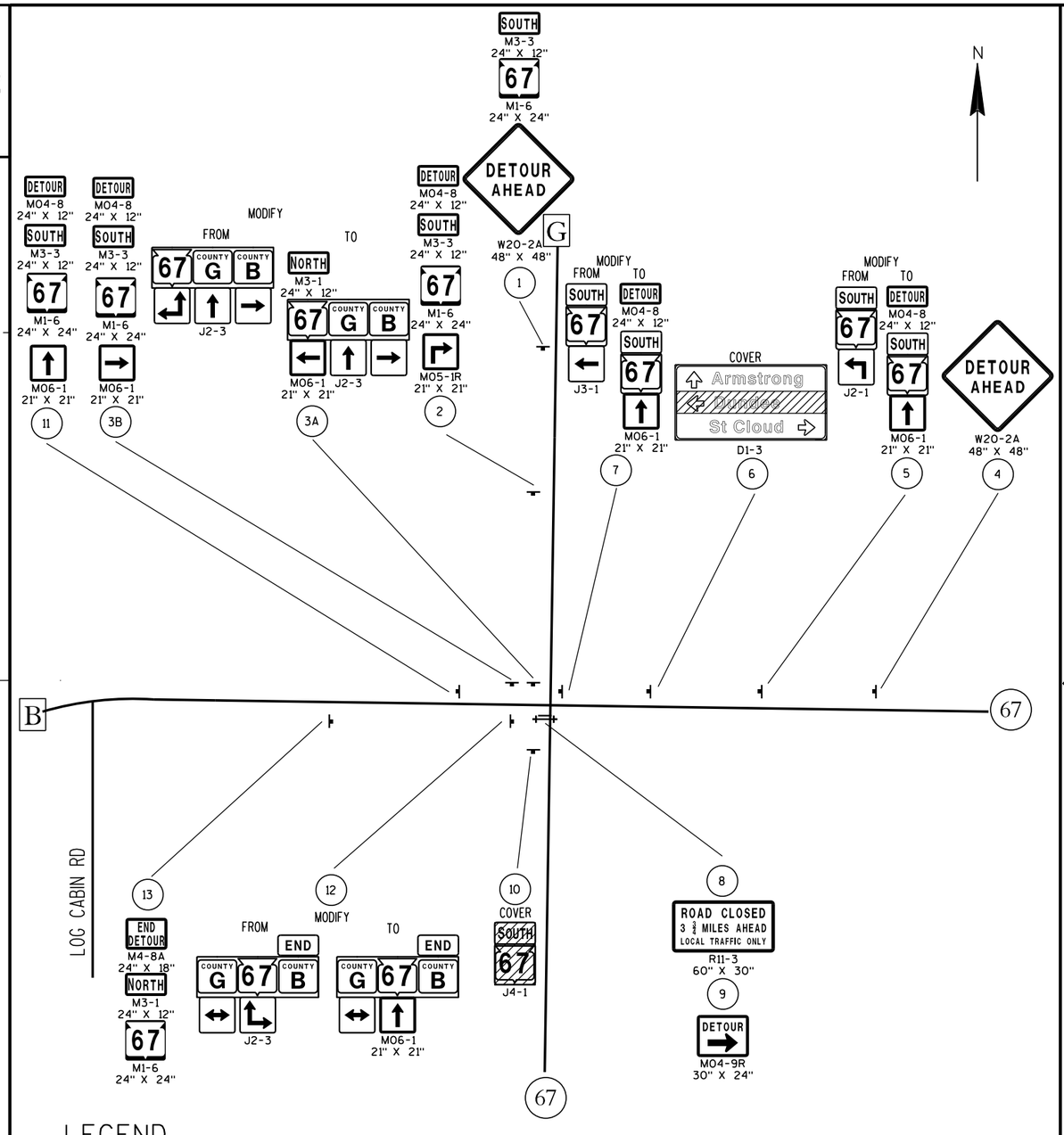
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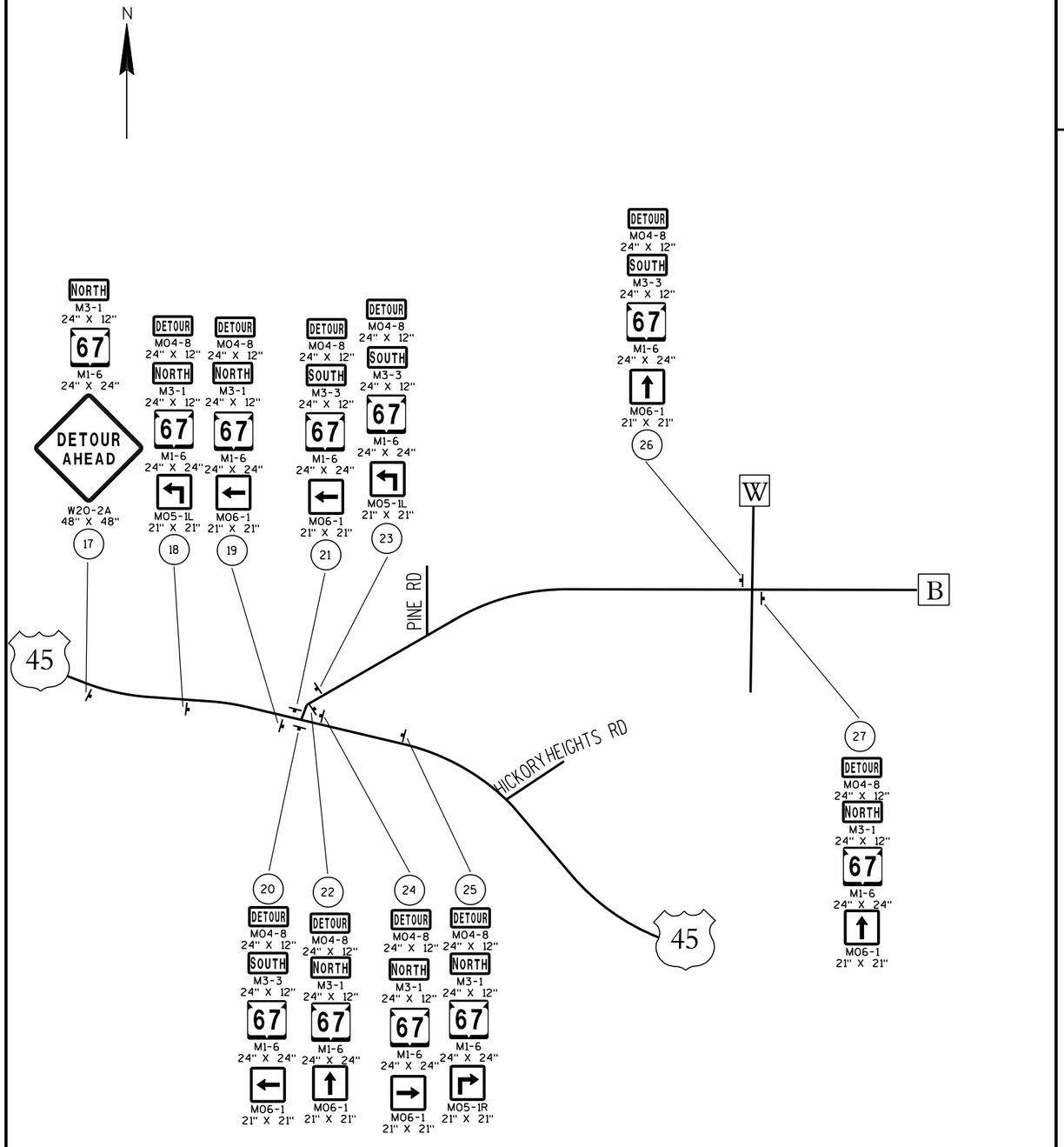


SHEET 1 OF 3

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 67	E





LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲ PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

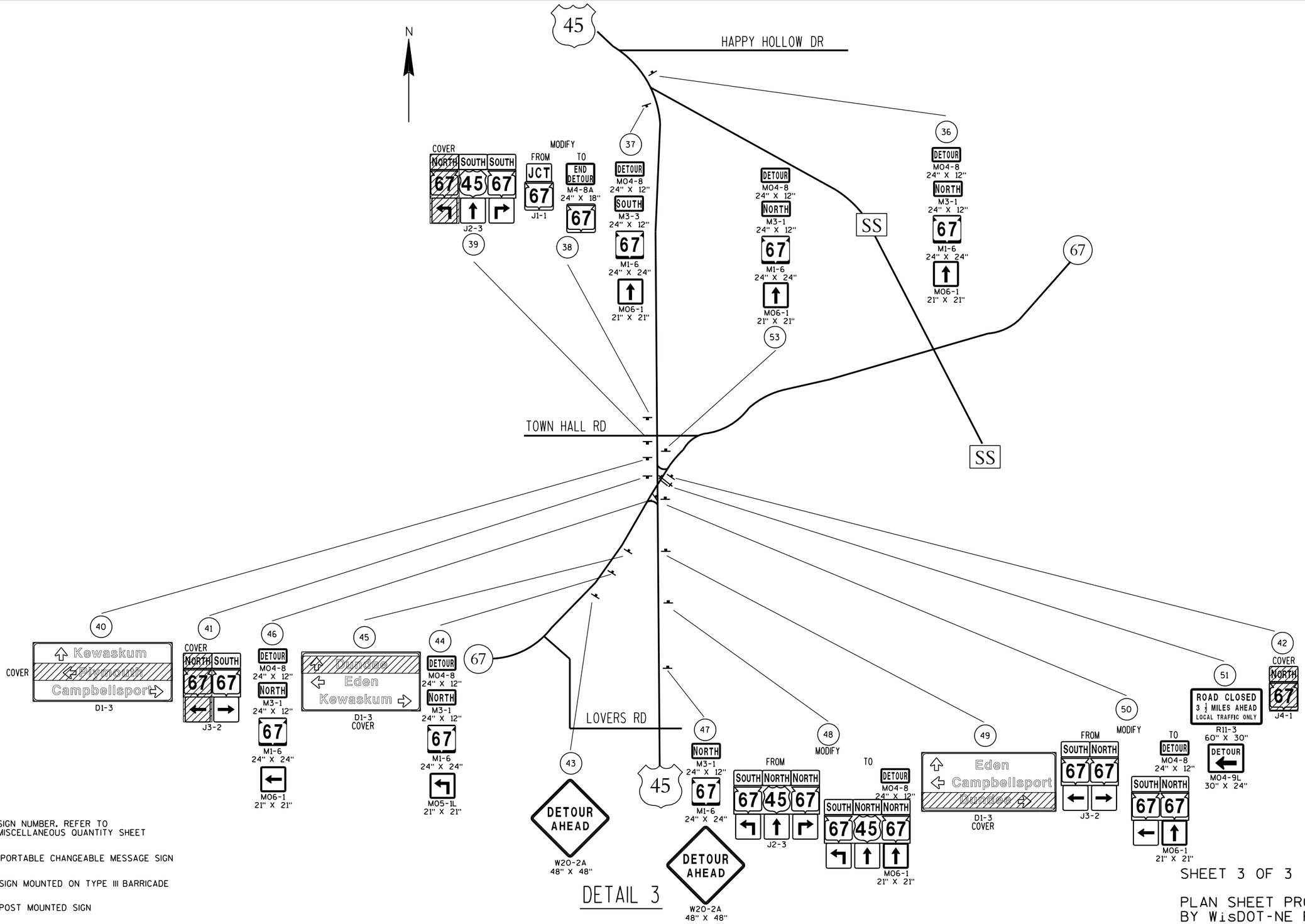
DETAIL 1

DETAIL 2

SHEET 2 OF 3

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 68 E

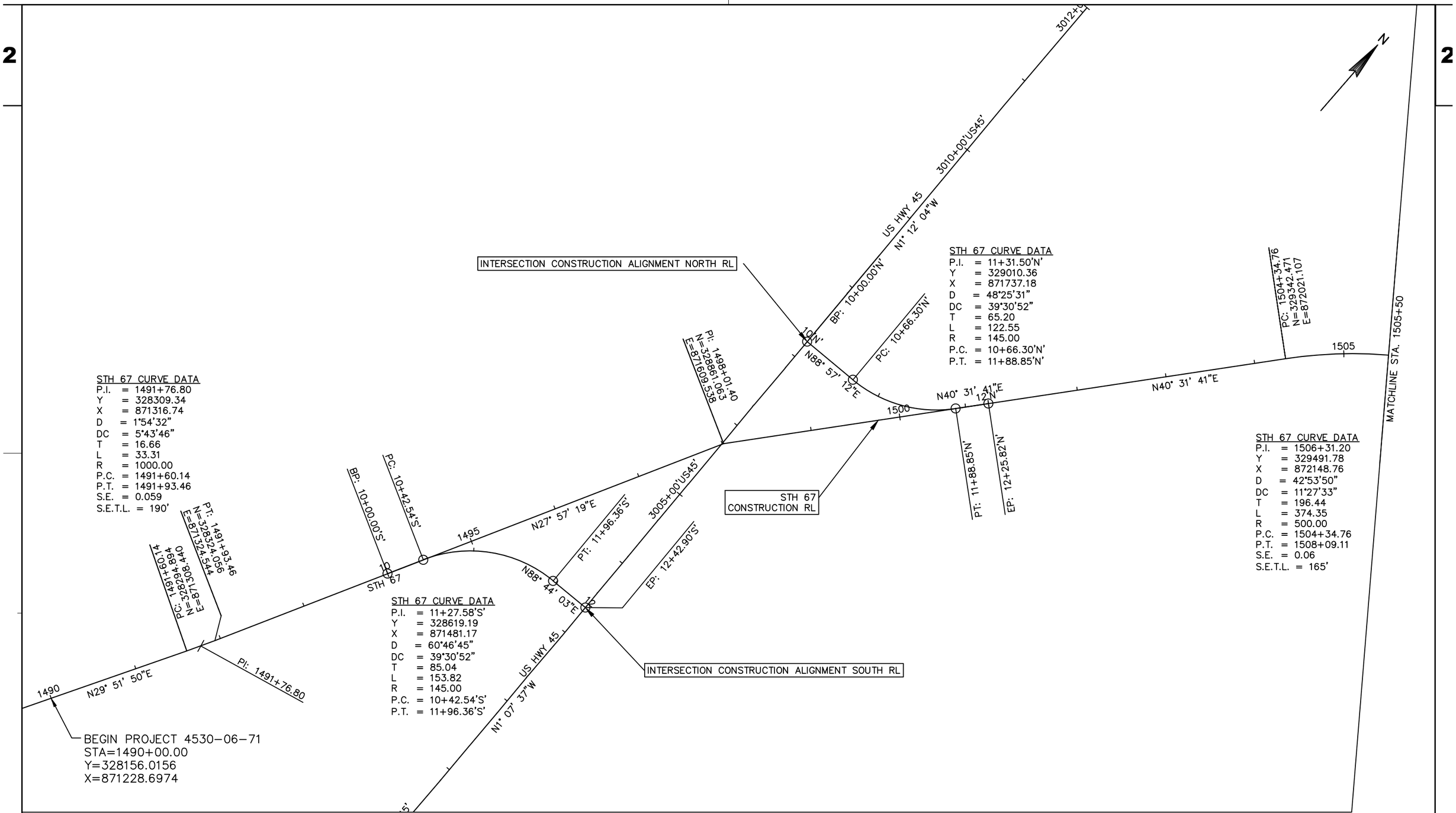


SHEET 3 OF 3

PLAN SHEET PRODUCED BY WisDOT-NE REGION

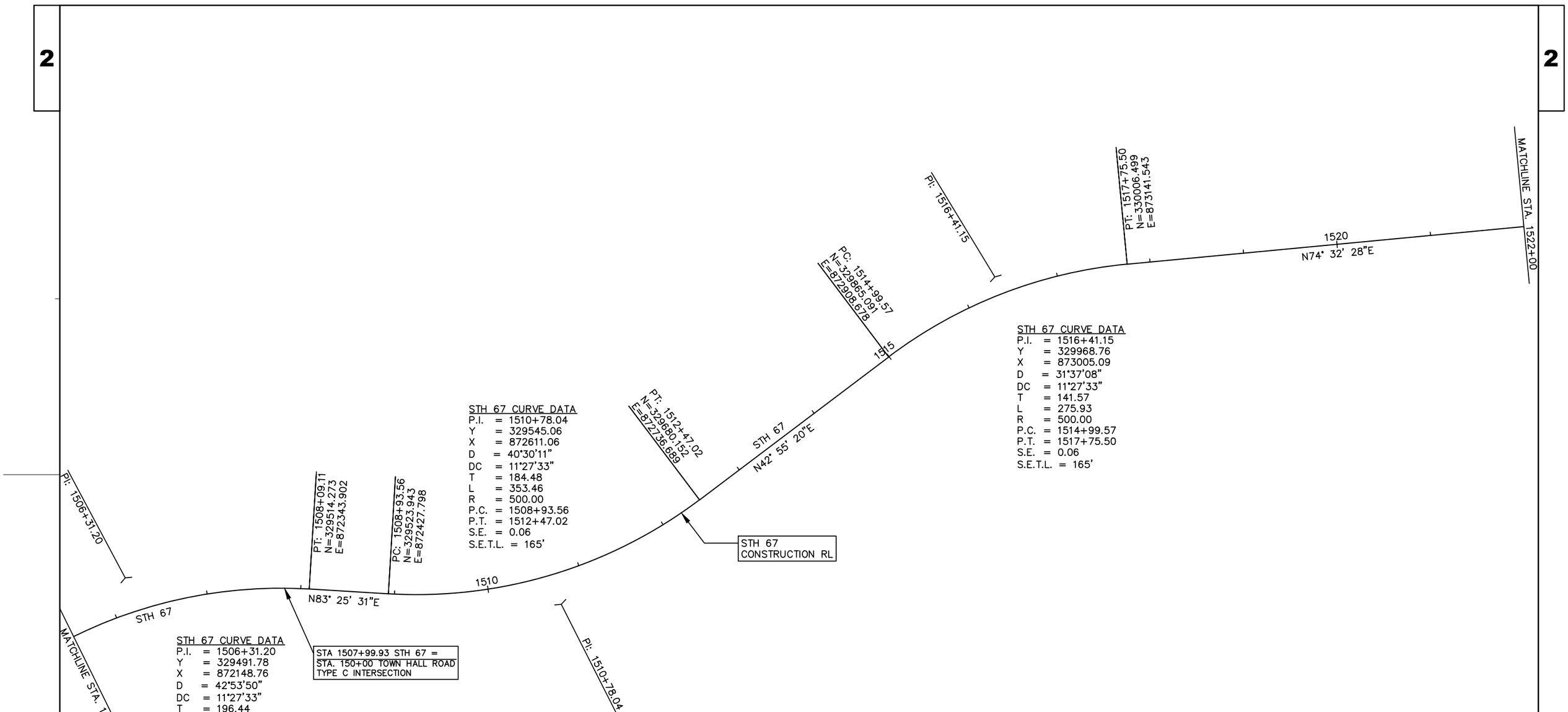
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 69	E

2



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 70	E

2



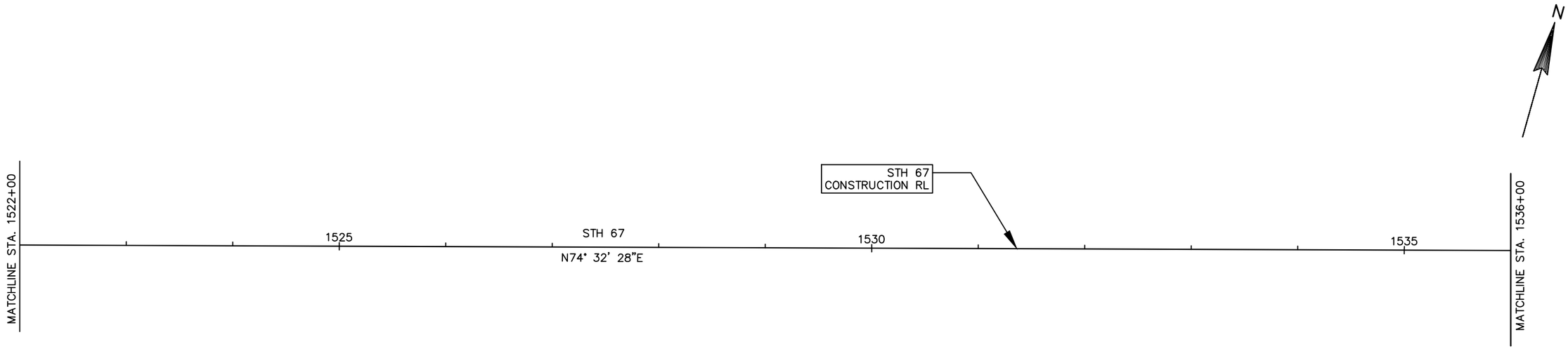
STH 67 CURVE DATA
P.I. = 1506+31.20
Y = 329491.78
X = 872148.76
D = 42°53'50"
DC = 11°27'33"
T = 196.44
L = 374.35
R = 500.00
P.C. = 1504+34.76
P.T. = 1508+09.11
S.E. = 0.06
S.E.T.L. = 165'

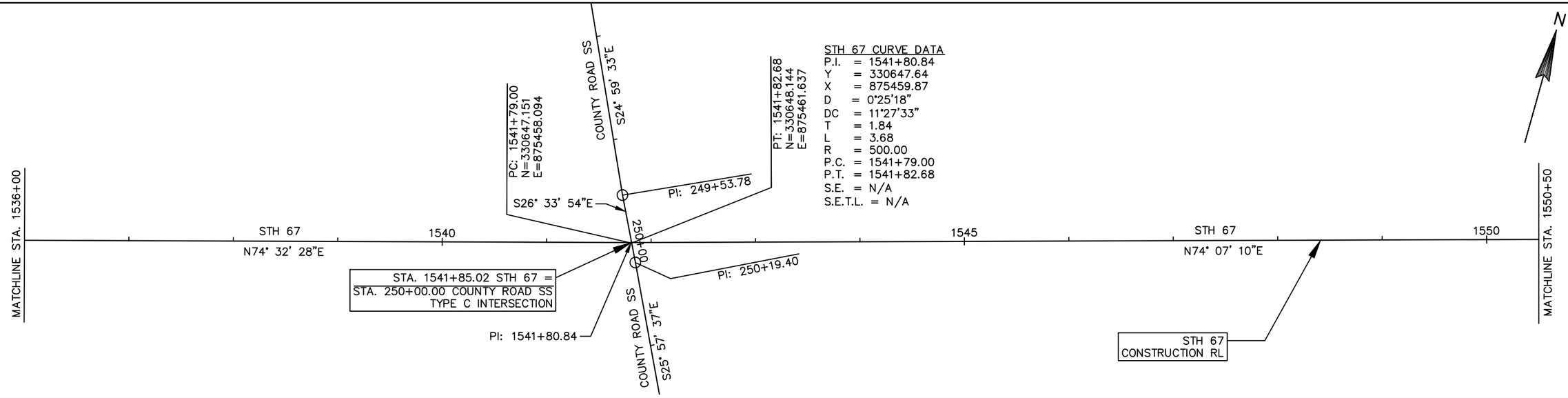
STH 67 CURVE DATA
P.I. = 1510+78.04
Y = 329545.06
X = 872611.06
D = 40°30'11"
DC = 11°27'33"
T = 184.48
L = 353.46
R = 500.00
P.C. = 1508+93.56
P.T. = 1512+47.02
S.E. = 0.06
S.E.T.L. = 165'

STH 67 CURVE DATA
P.I. = 1516+41.15
Y = 329968.76
X = 873005.09
D = 31°37'08"
DC = 11°27'33"
T = 141.57
L = 275.93
R = 500.00
P.C. = 1514+99.57
P.T. = 1517+75.50
S.E. = 0.06
S.E.T.L. = 165'

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 71	E

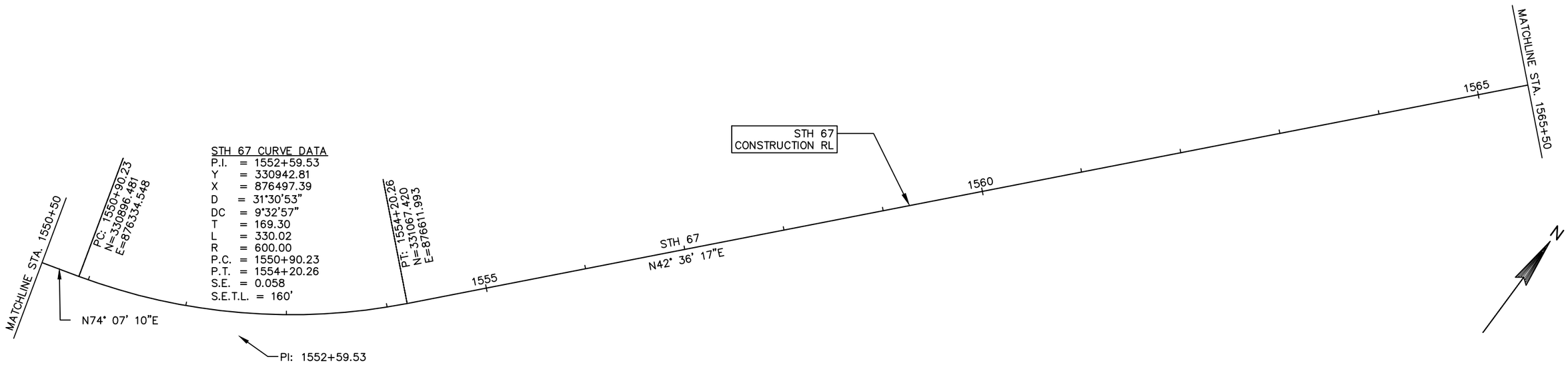
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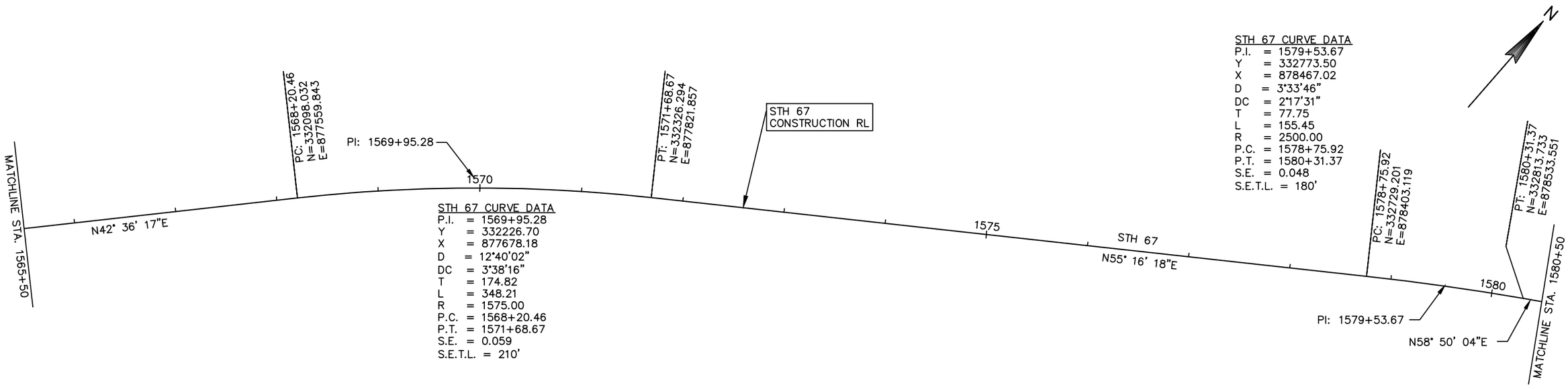




PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET	E

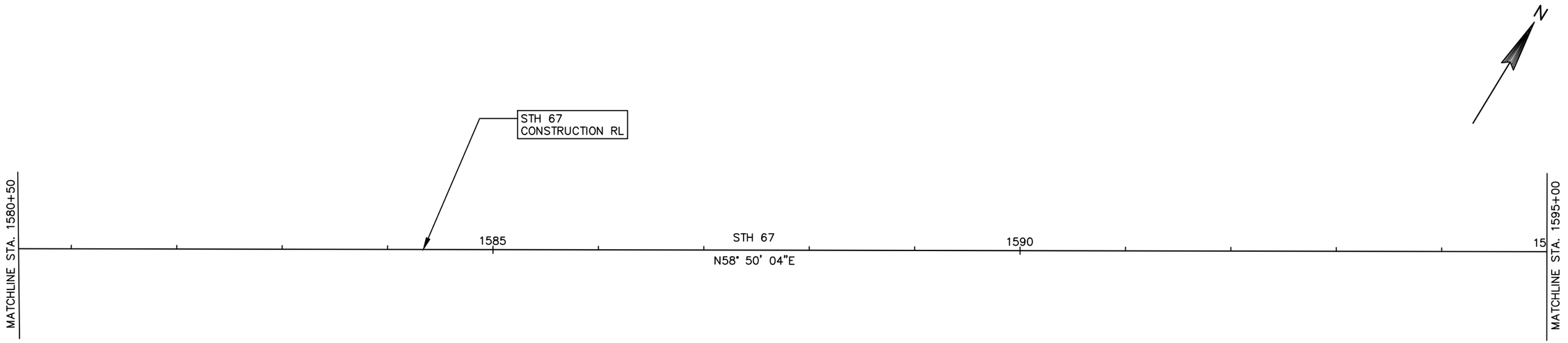
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WISDOT/CADDS SHEET 42

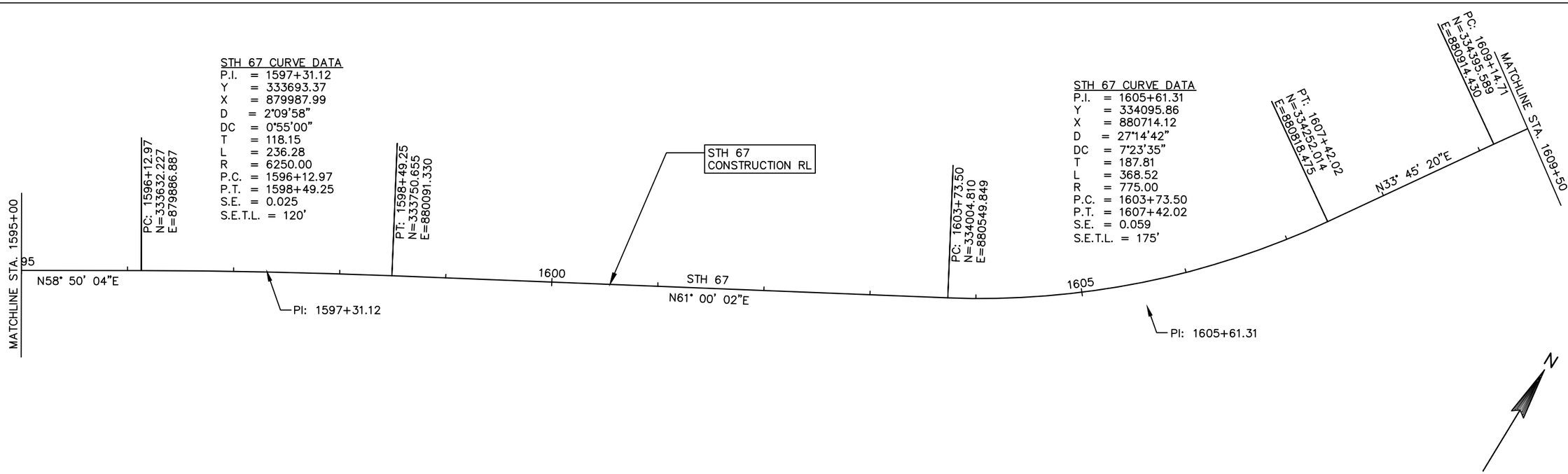




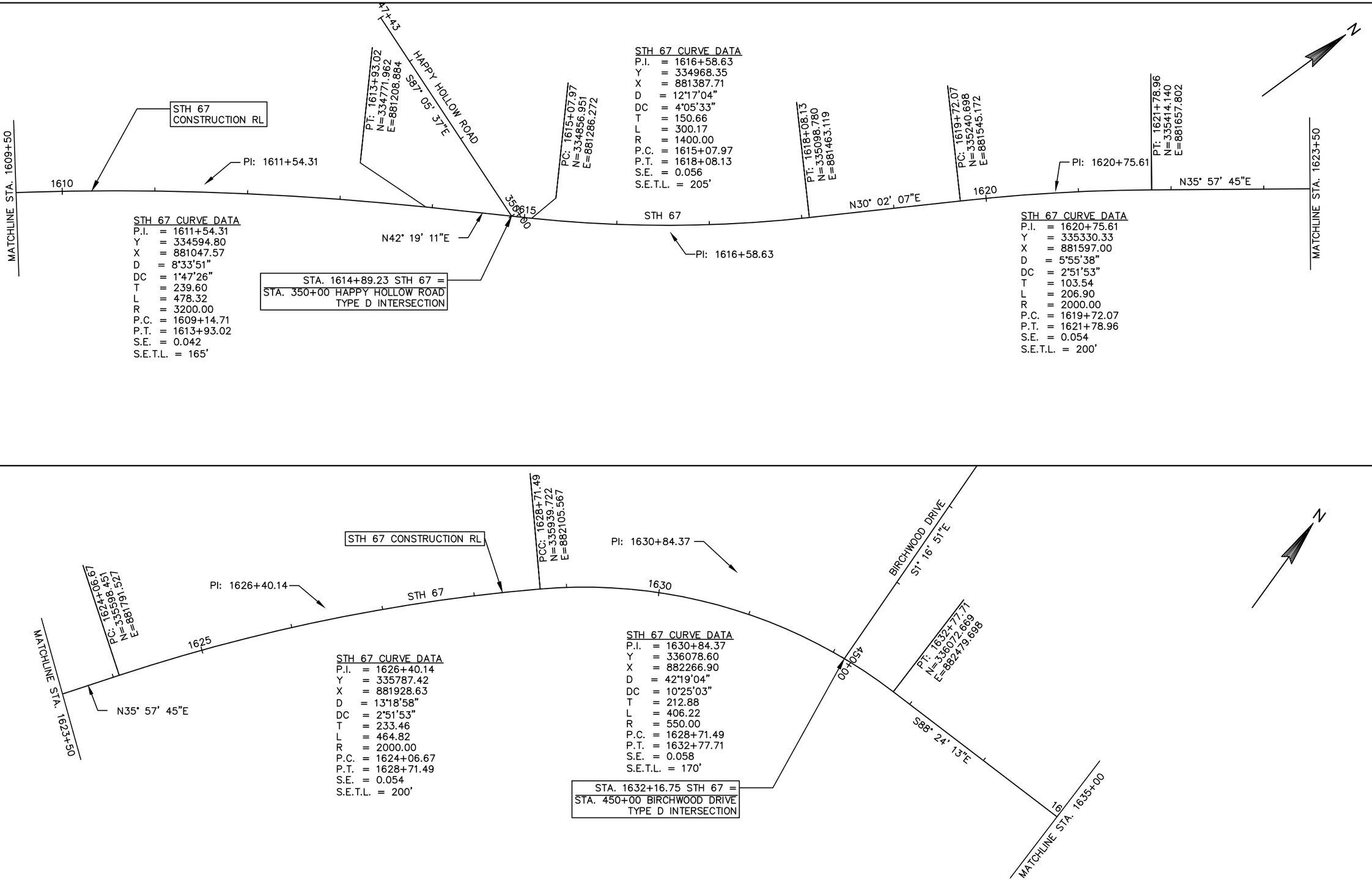
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 73	E

2



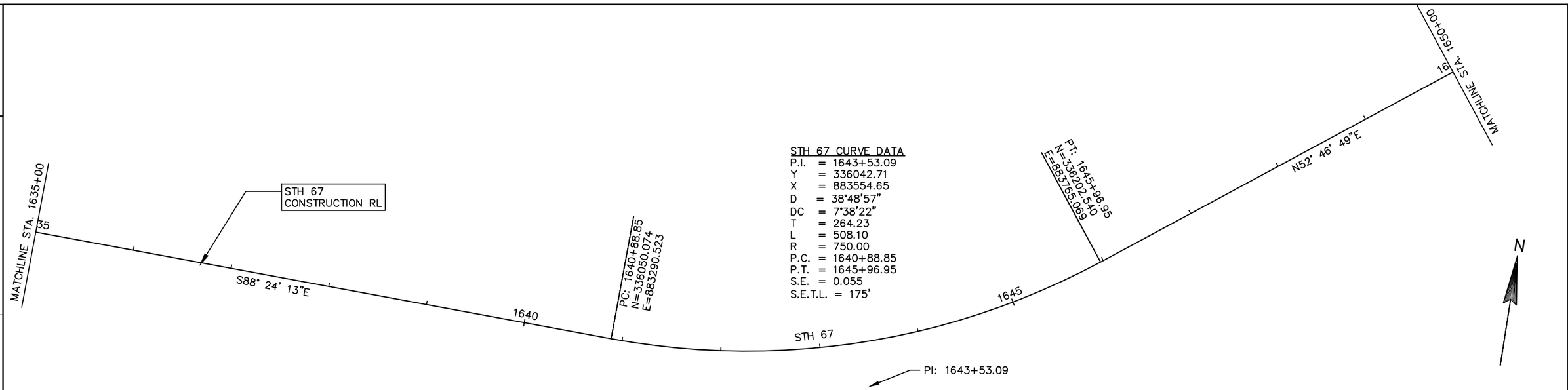


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 74	E

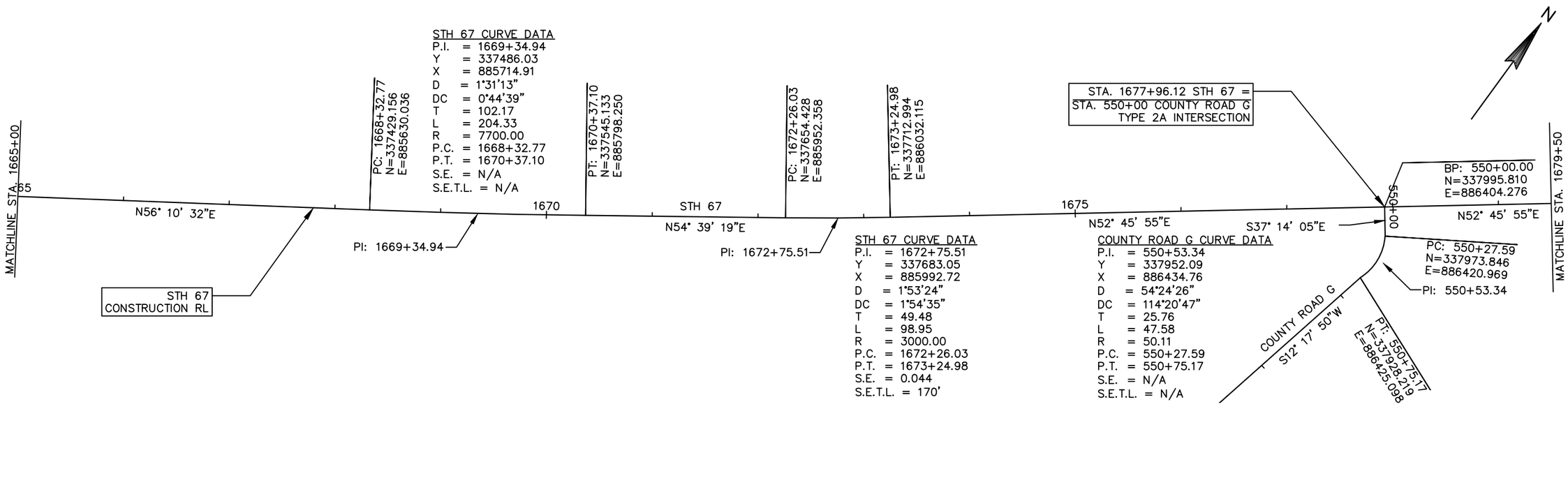


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 75	E

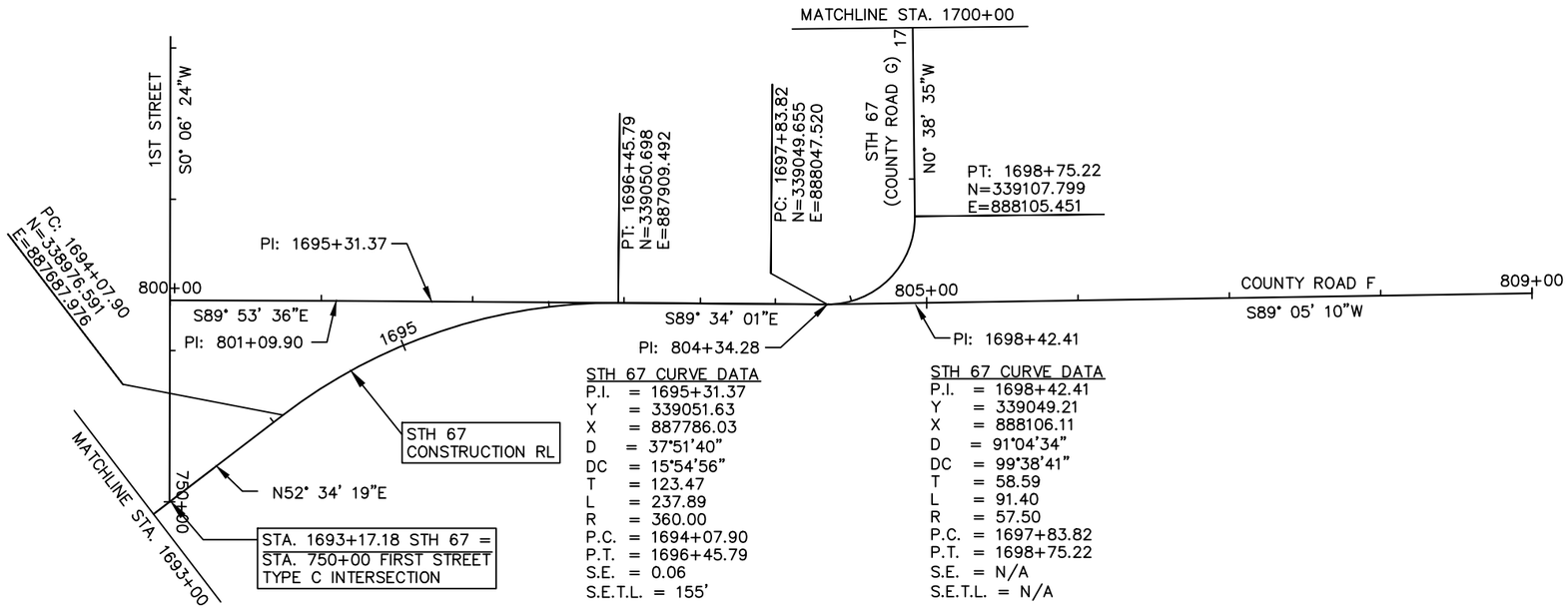
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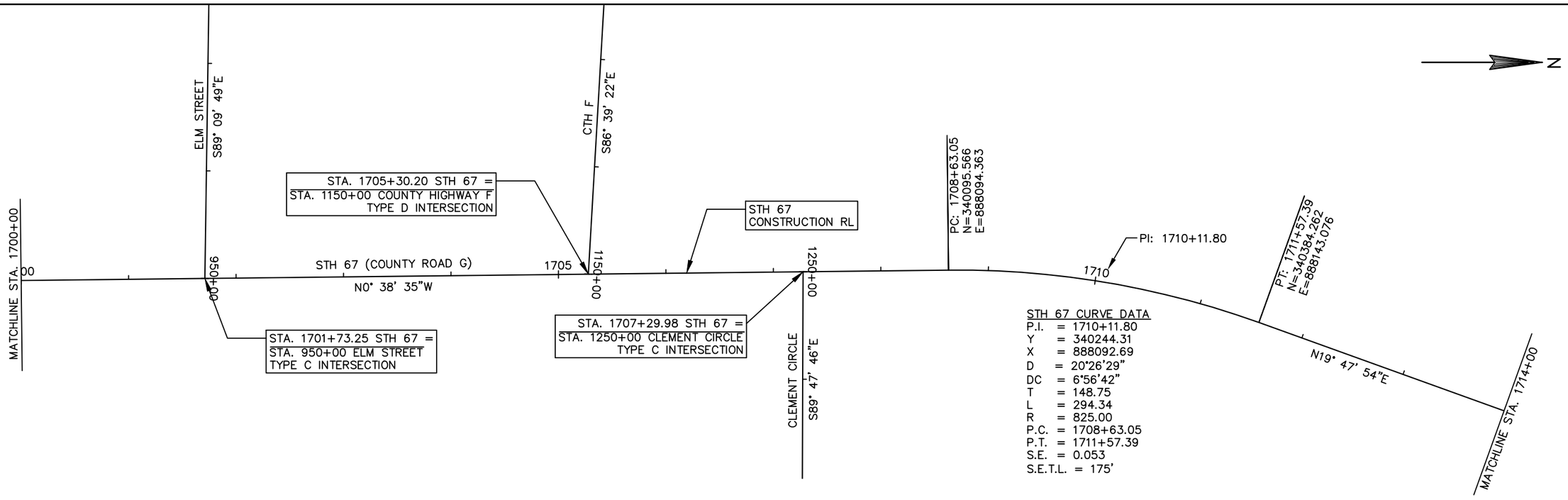


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 76	E

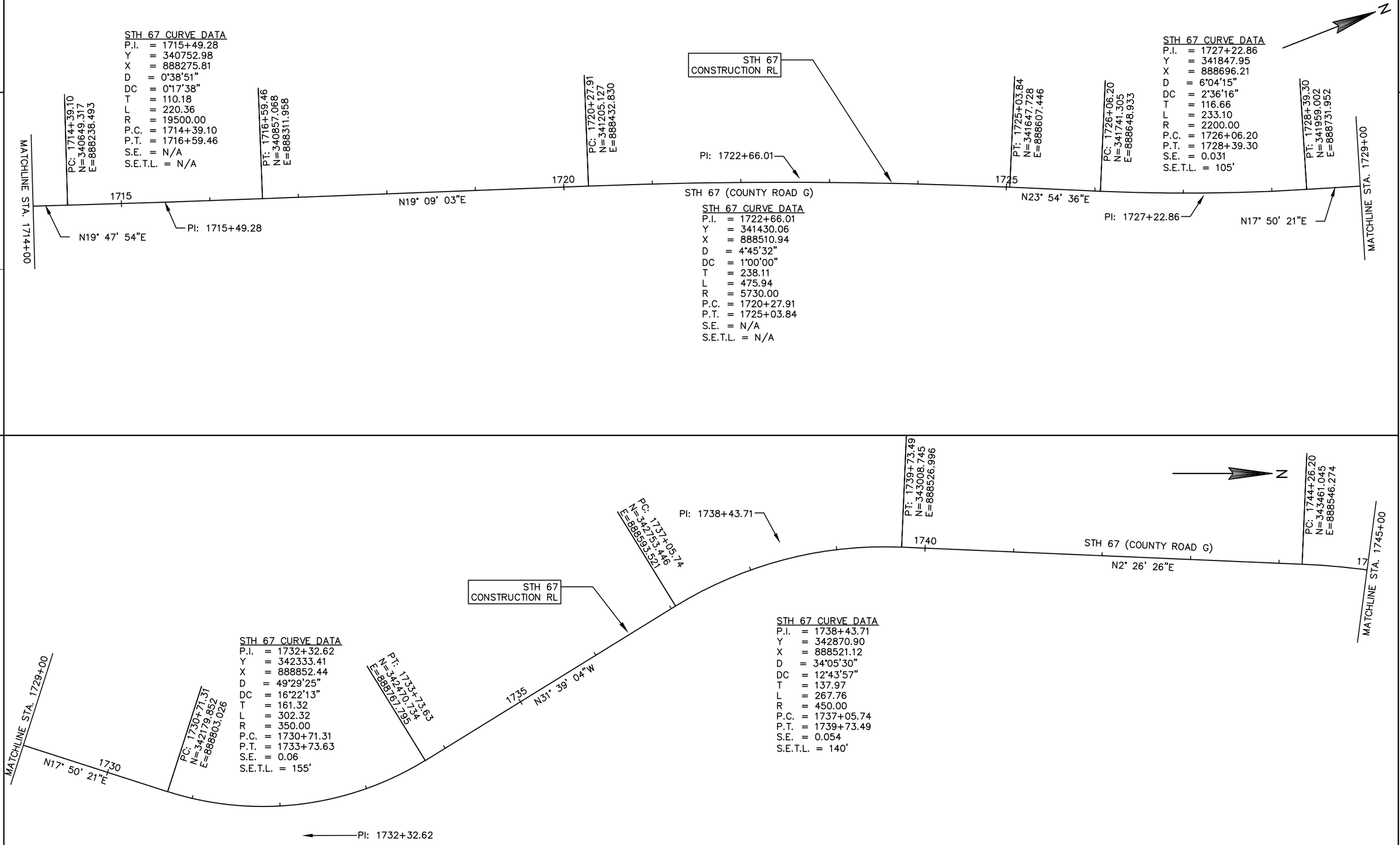


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 77	E

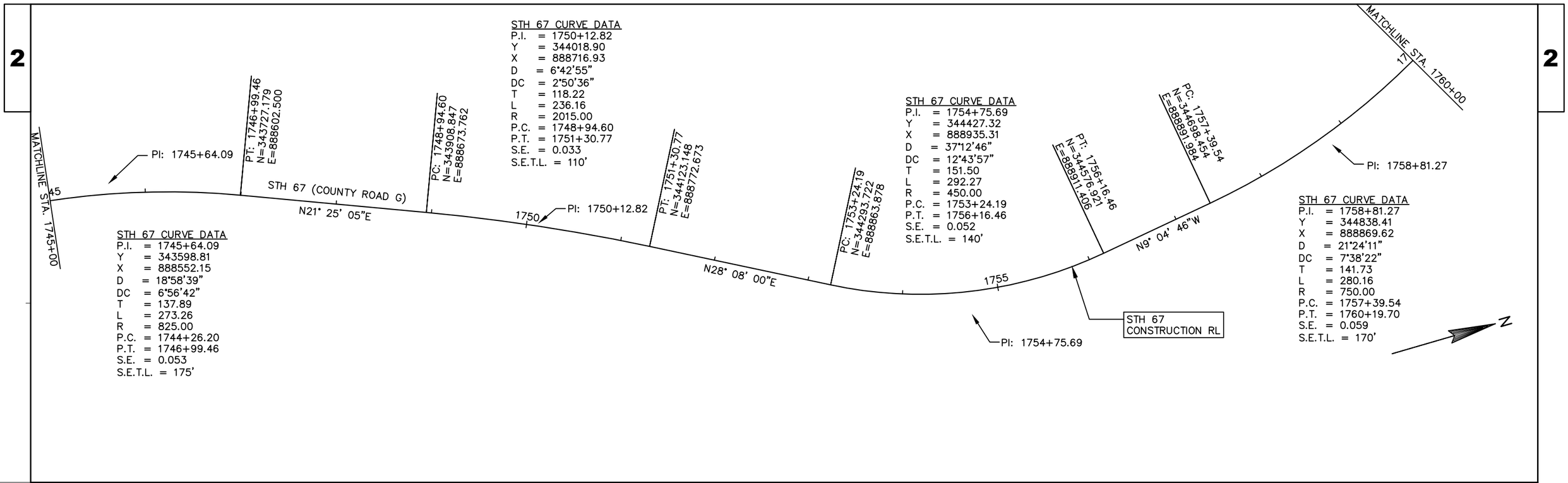


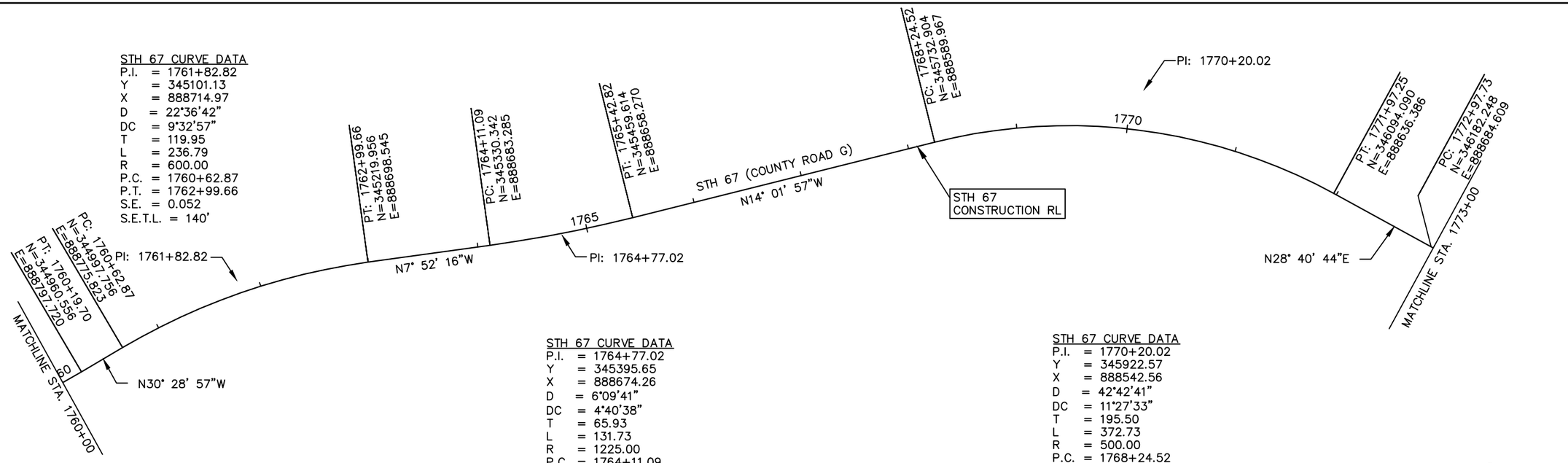


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 78	E

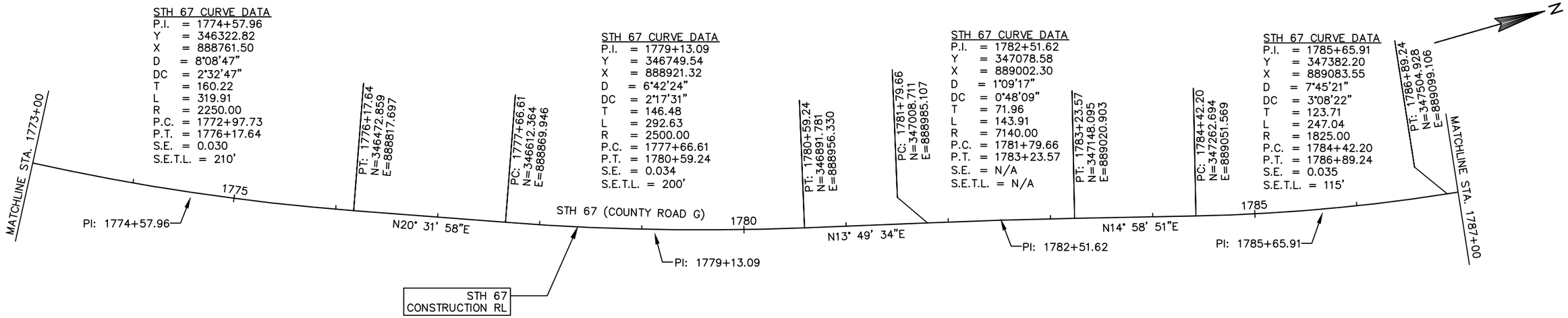


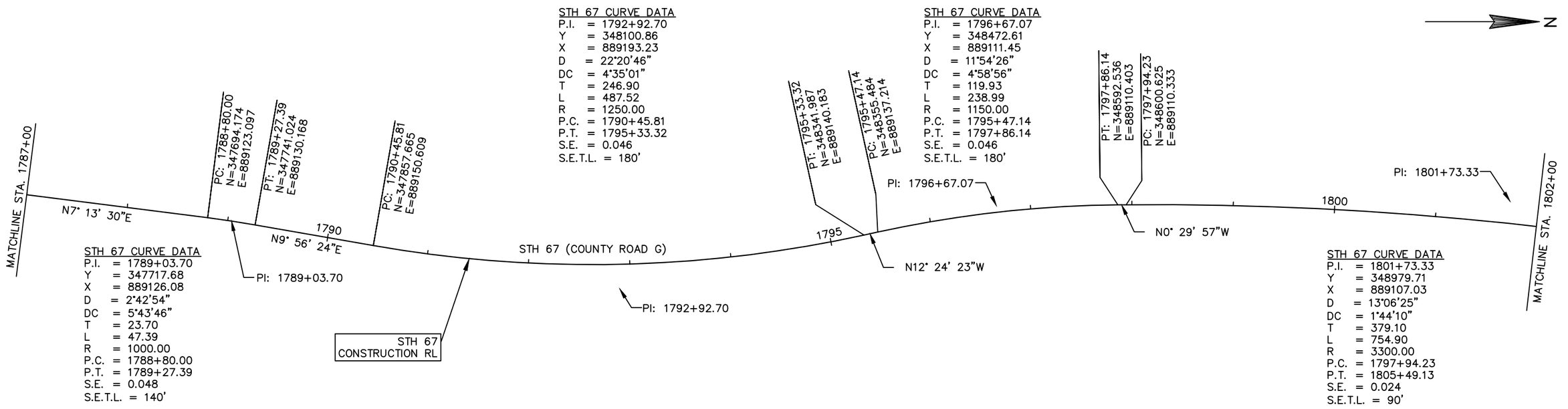
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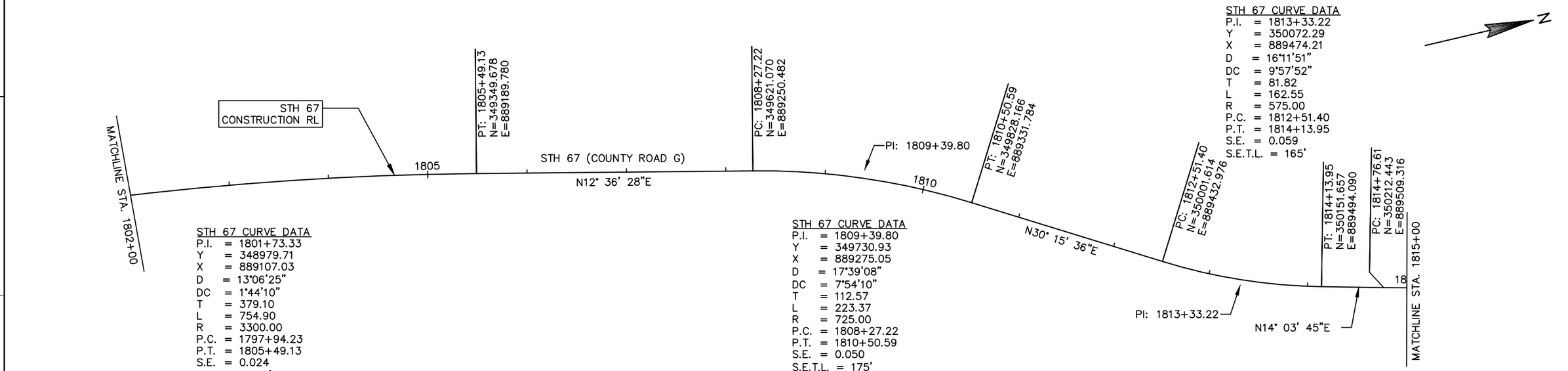


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 80	E





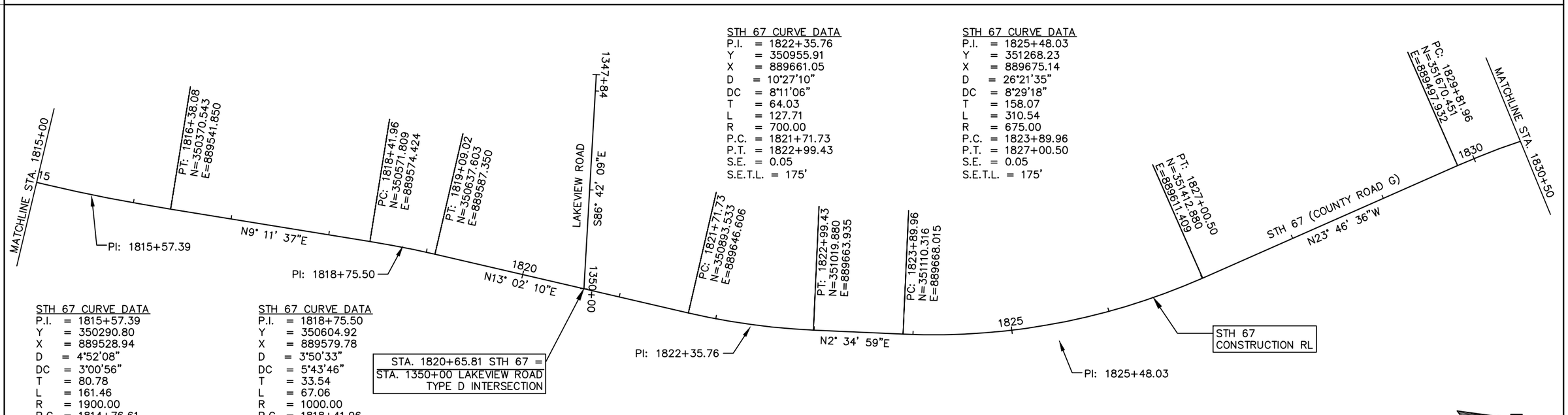
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 81	E



STH 67 CURVE DATA
P.I. = 1801+73.33
Y = 348979.71
X = 889107.03
D = 13°06'25"
DC = 1°44'10"
T = 379.10
L = 754.90
R = 3300.00
P.C. = 1797+94.23
P.T. = 1805+49.13
S.E. = 0.024
S.E.T.L. = 90'

STH 67 CURVE DATA
P.I. = 1809+39.80
Y = 349730.93
X = 889275.05
D = 17°39'08"
DC = 7°54'10"
T = 112.57
L = 223.37
R = 725.00
P.C. = 1808+27.22
P.T. = 1810+50.59
S.E. = 0.050
S.E.T.L. = 175'

STH 67 CURVE DATA
P.I. = 1813+33.22
Y = 350072.29
X = 889474.21
D = 16°11'51"
DC = 9°57'52"
T = 81.82
L = 162.55
R = 575.00
P.C. = 1812+51.40
P.T. = 1814+13.95
S.E. = 0.059
S.E.T.L. = 165'



STH 67 CURVE DATA
P.I. = 1822+35.76
Y = 350955.91
X = 889661.05
D = 10°27'10"
DC = 8°11'06"
T = 64.03
L = 127.71
R = 700.00
P.C. = 1821+71.73
P.T. = 1822+99.43
S.E. = 0.05
S.E.T.L. = 175'

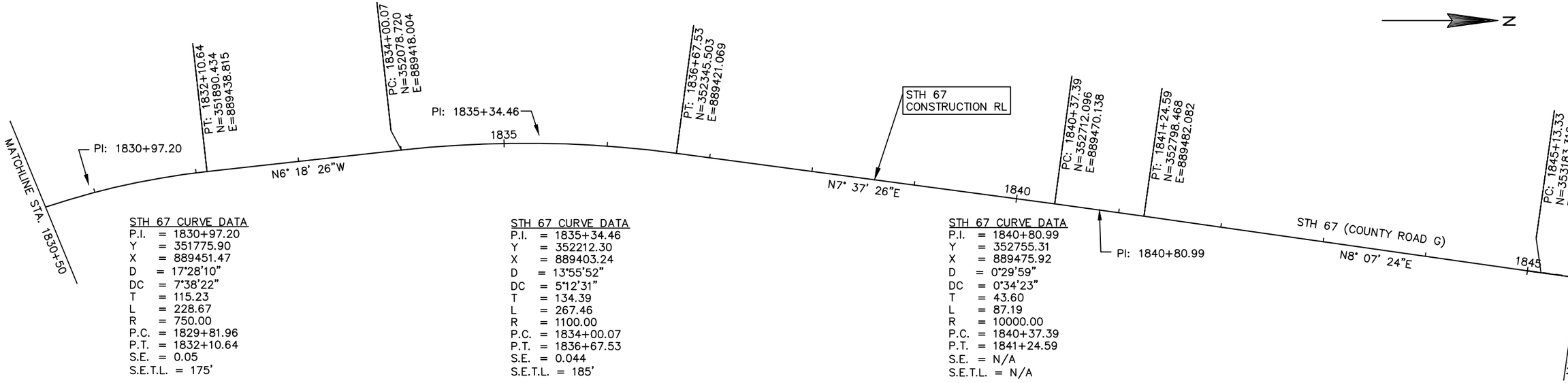
STH 67 CURVE DATA
P.I. = 1825+48.03
Y = 351268.23
X = 889675.14
D = 26°21'35"
DC = 8°29'18"
T = 158.07
L = 310.54
R = 675.00
P.C. = 1823+89.96
P.T. = 1827+00.50
S.E. = 0.05
S.E.T.L. = 175'

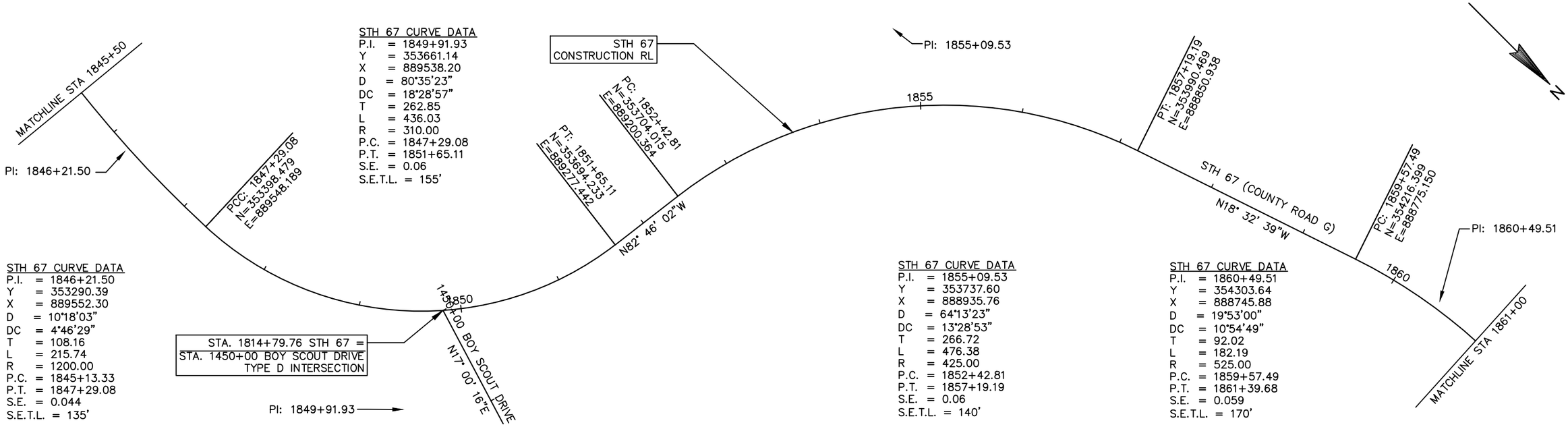
STH 67 CURVE DATA
P.I. = 1815+57.39
Y = 350290.80
X = 889528.94
D = 4°52'08"
DC = 3°00'56"
T = 80.78
L = 161.46
R = 1900.00
P.C. = 1814+76.61
P.T. = 1816+38.08
S.E. = 0.034
S.E.T.L. = 110'

STH 67 CURVE DATA
P.I. = 1818+75.50
Y = 350604.92
X = 889579.78
D = 3°50'33"
DC = 5°43'46"
T = 33.54
L = 67.06
R = 1000.00
P.C. = 1818+41.96
P.T. = 1819+09.02
S.E. = 0.048
S.E.T.L. = 140'

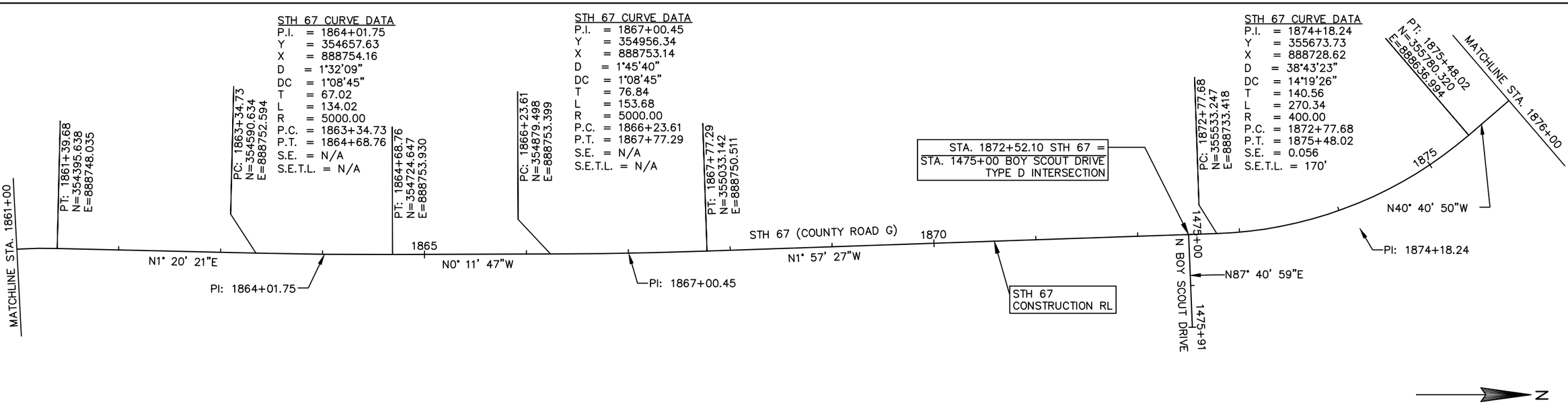
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET	E

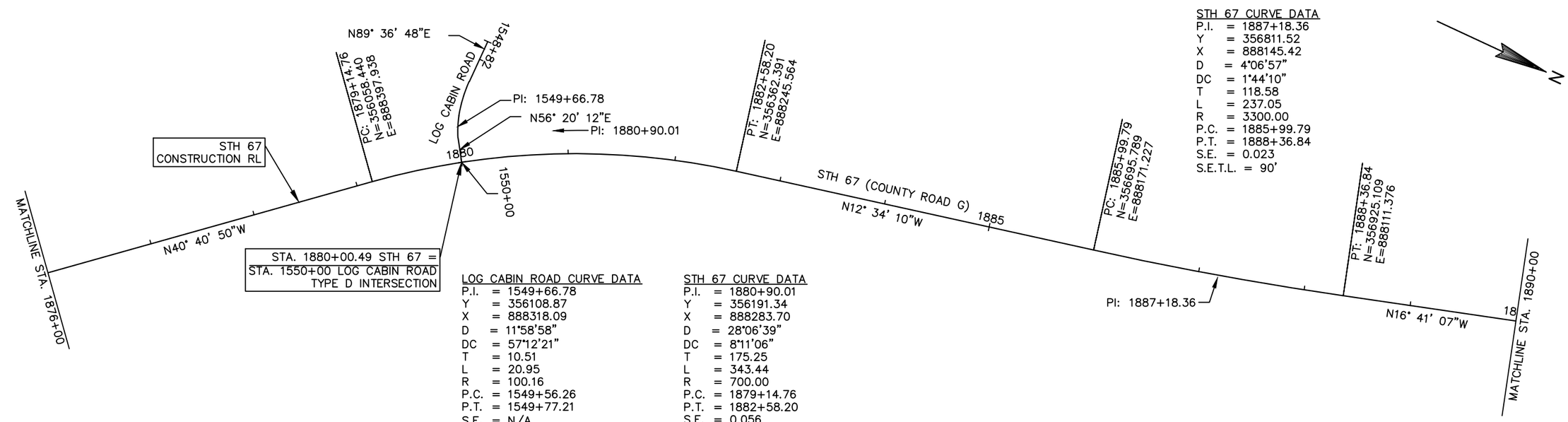
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WISDOT/CADDS SHEET 42



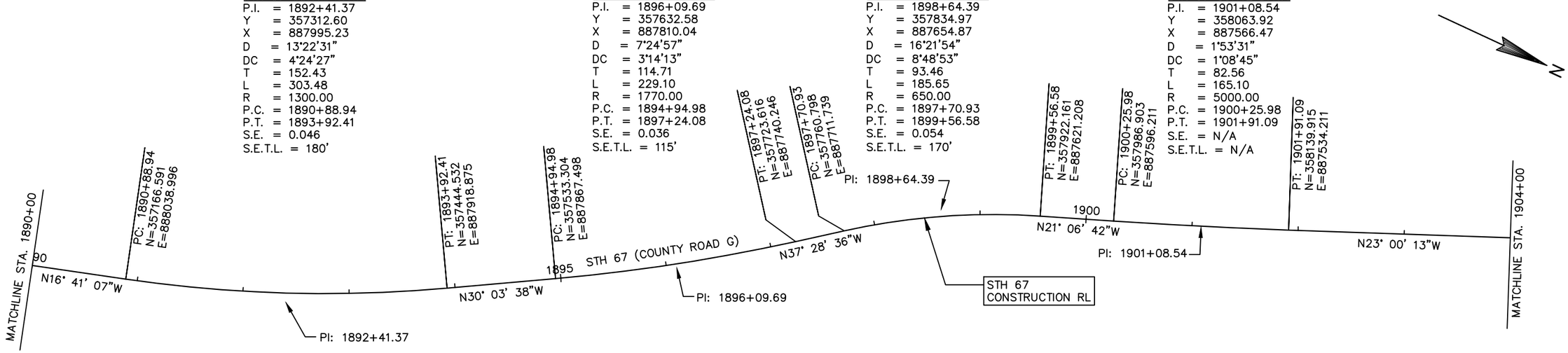


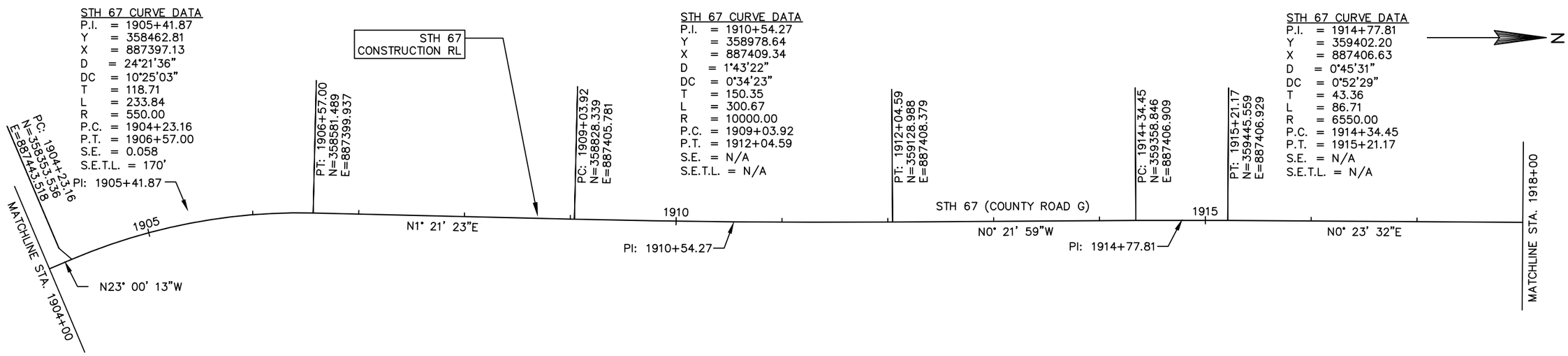
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 83	E



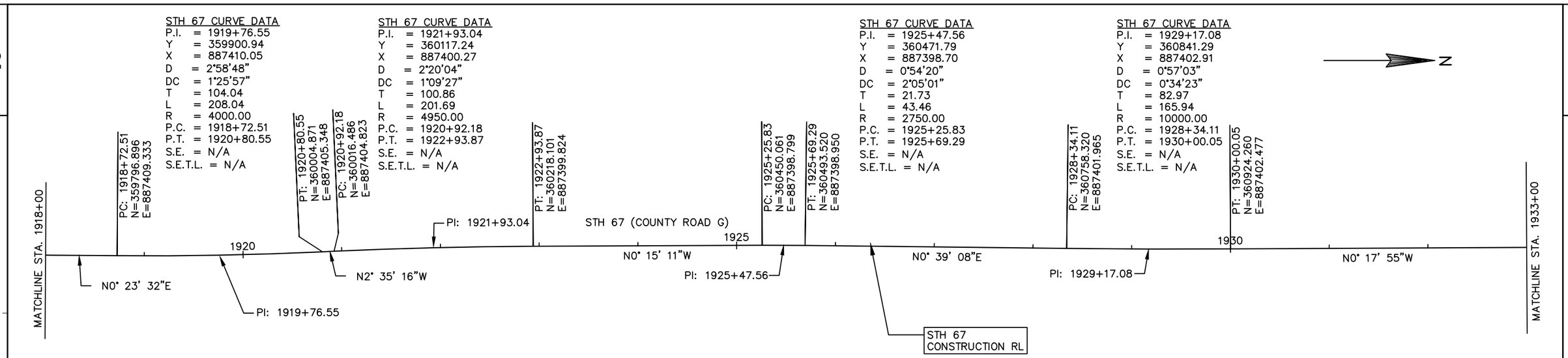


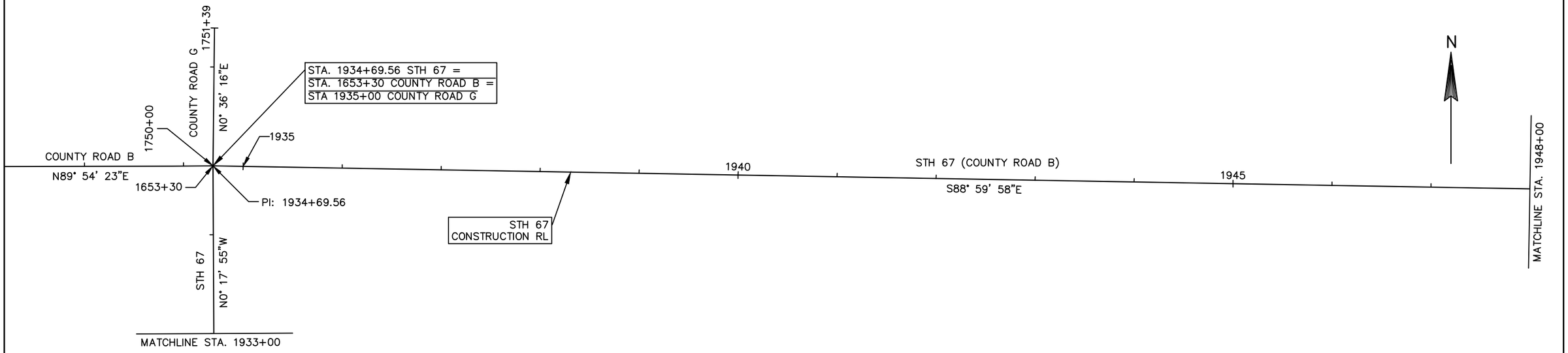
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 84	E





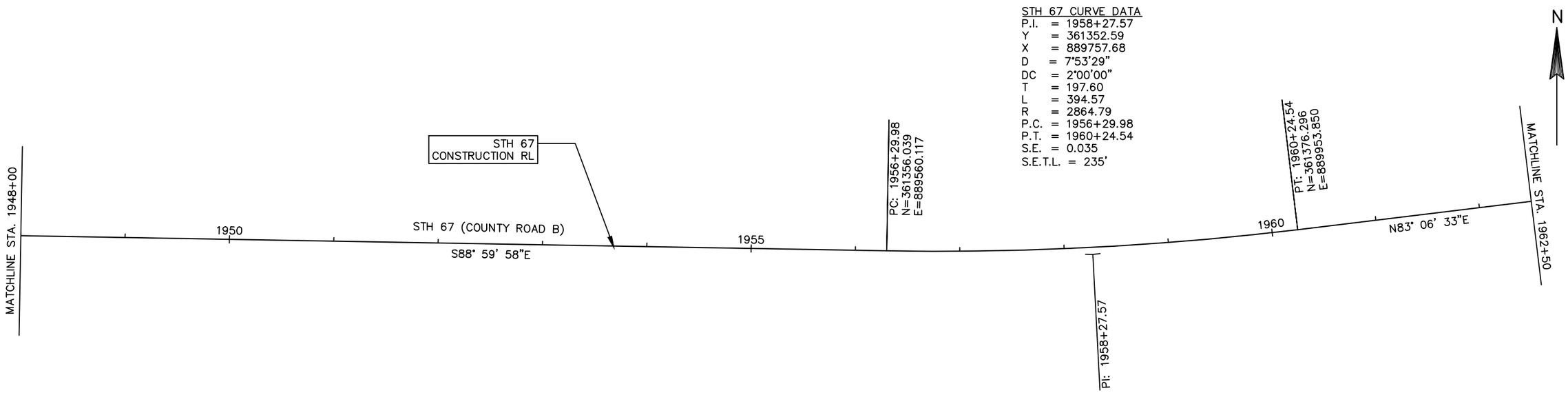
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 85	E

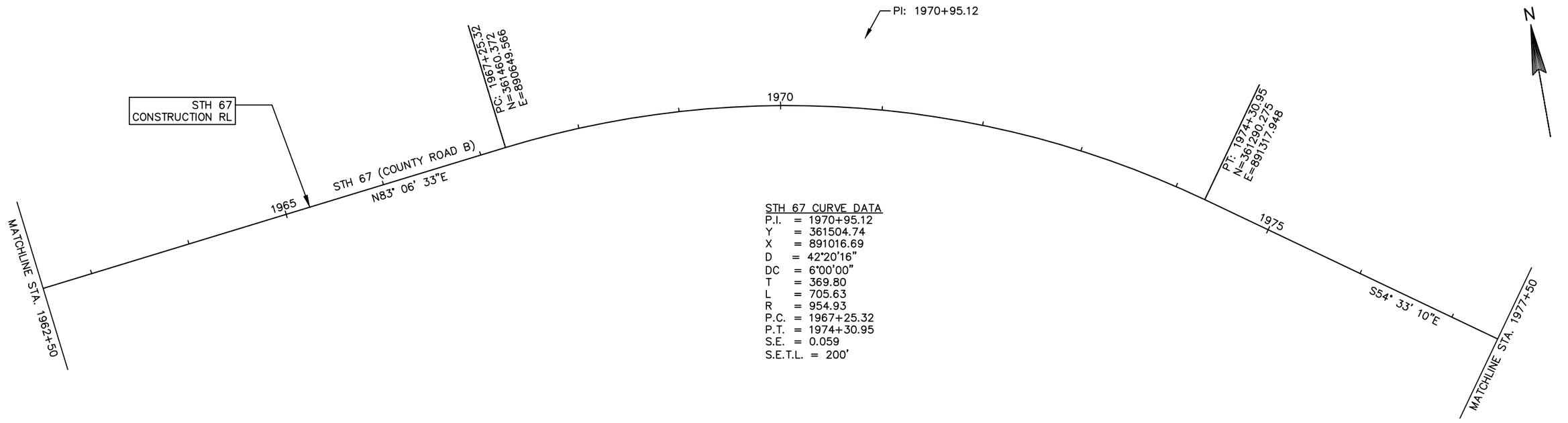




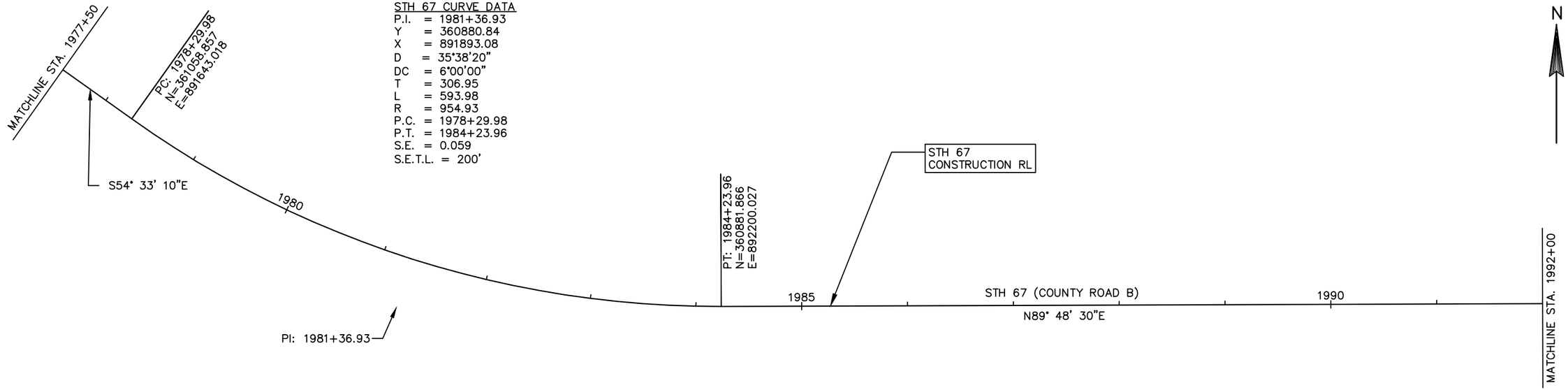
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET	E

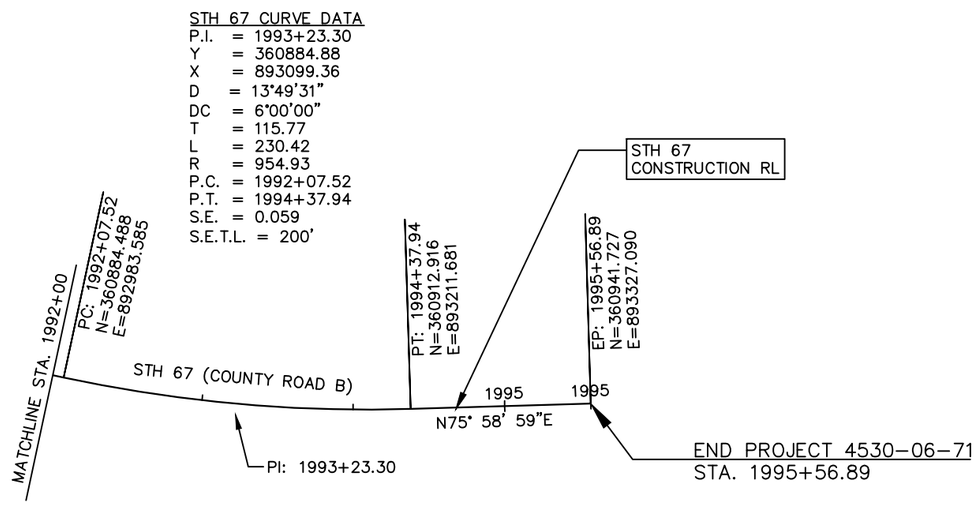
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WISDOT/CADDS SHEET 42



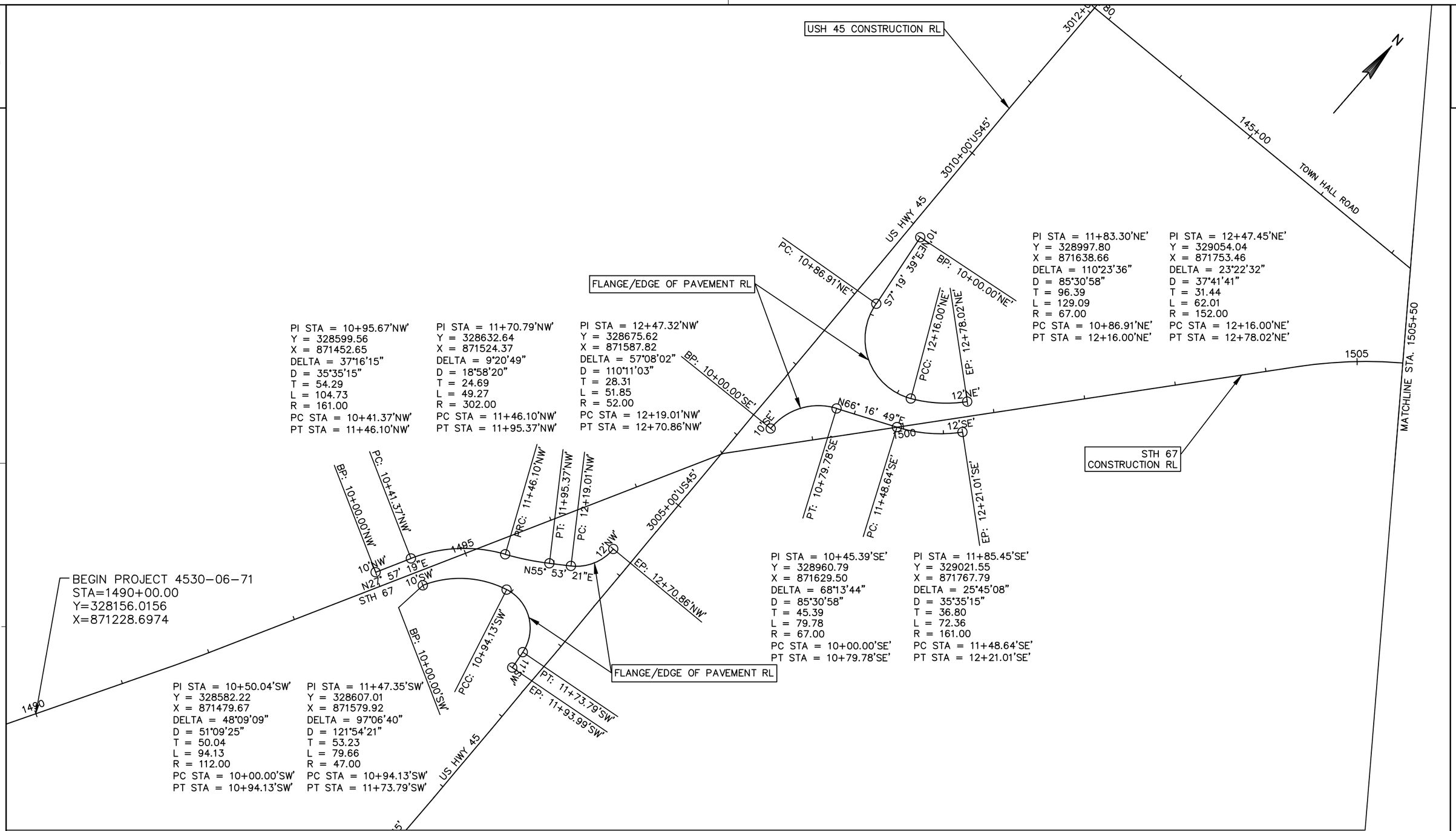


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 87	E





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67	SHEET 88	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	ALIGNMENT DETAIL: STH 67 & USH 45 CURB RETURNS	SHEET 89	E

					4090-05-71	4530-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	201.0105	Clearing	STA	10.000	8.000	2.000
0004	201.0120	Clearing	ID	352.000	130.000	222.000
0006	201.0205	Grubbing	STA	10.000	8.000	2.000
0008	201.0220	Grubbing	ID	352.000	130.000	222.000
0010	203.0100	Removing Small Pipe Culverts	EACH	10.000	9.000	1.000
0012	203.0200	Removing Old Structure (station) 01. Station 1427+50	LS	1.000	1.000	
0014	203.0200	Removing Old Structure (station) 02. Station 1443+67	LS	1.000	1.000	
0016	203.0200	Removing Old Structure (station) 03. Station 1467+83	LS	1.000	1.000	
0018	204.0100	Removing Pavement	SY	275.000	275.000	
0020	204.0110	Removing Asphaltic Surface	SY	325.000	325.000	
0022	204.0115	Removing Asphaltic Surface Butt Joints	SY	247.500	100.000	147.500
0024	204.0120	Removing Asphaltic Surface Milling	SY	191,235.000	25,700.000	165,535.000
0026	204.0150	Removing Curb & Gutter	LF	3,476.000	950.000	2,526.000
0028	204.0165	Removing Guardrail	LF	7,751.000	1,785.000	5,966.000
0030	204.0220	Removing Inlets	EACH	4.000		4.000
0032	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	36.000		36.000
0034	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	38.000		38.000
0036	204.0245	Removing Storm Sewer (size) 03. 24-Inch	LF	68.000		68.000
0038	204.0245	Removing Storm Sewer (size) 04. 30-Inch	LF	105.000		105.000
0040	204.0245	Removing Storm Sewer (size) 05. 36"X48"	LF	40.000		40.000
0042	204.9060.S	Removing (item description) 01. Retaining Wall, Sta. 1426+78, LT	EACH	1.000	1.000	
0044	204.9060.S	Removing (item description) 02. Retaining Wall, Sta. 1435+40, RT	EACH	1.000	1.000	
0046	204.9060.S	Removing (item description) 03. Retaining Wall, Sta. 1435+67, LT	EACH	1.000	1.000	
0048	204.9060.S	Removing (item description) 04. Retaining Wall, Sta. 1450+57, RT	EACH	1.000	1.000	
0050	204.9090.S	Removing (item description) 01. Corrugated Metal Culvert Pipe	LF	128.000		128.000
0052	205.0100	Excavation Common	CY	5,502.000	1,150.000	4,352.000
0054	206.2000	Excavation for Structures Culverts (structure) 01. Station 1427+50	LS	1.000	1.000	
0056	206.2000	Excavation for Structures Culverts (structure) 02. Station 1443+67	LS	1.000	1.000	
0058	206.2000	Excavation for Structures Culverts (structure) 03. Station 1467+83	LS	1.000	1.000	
0060	208.0100	Borrow	CY	3,784.000	3,606.000	178.000
0062	210.2500	Backfill Structure Type B	TON	110.000	110.000	
0064	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 4090-05-71	LS	1.000	1.000	

					4090-05-71	4530-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0066	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 4530-06-71	LS	1.000		1.000
0068	213.0100	Finishing Roadway (project) 01. 4090-05-71	EACH	1.000	1.000	
0070	213.0100	Finishing Roadway (project) 02. 4530-06-71	EACH	1.000		1.000
0072	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,441.000	540.000	1,901.000
0074	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,575.000	625.000	1,950.000
0076	311.0110	Breaker Run	TON	44.000	44.000	
0078	315.0200	Asphaltic Base Widening	TON	600.000	170.000	430.000
0080	416.1010	Concrete Surface Drains	CY	14.000		14.000
0082	455.0605	Tack Coat	GAL	27,050.000	3,505.000	23,545.000
0084	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000		1.000
0086	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000		1.000
0088	460.2005	Incentive Density PWL HMA Pavement	DOL	14,699.000	1,943.000	12,756.000
0090	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	21,820.000	2,960.000	18,860.000
0092	460.2010	Incentive Air Voids HMA Pavement	DOL	20,050.000	2,840.000	17,210.000
0094	460.5223	HMA Pavement 3 LT 58-28 S	TON	600.000	220.000	380.000
0096	460.5224	HMA Pavement 4 LT 58-28 S	TON	20,050.000	2,840.000	17,210.000
0098	460.5225	HMA Pavement 5 LT 58-28 S	TON	8,405.000	1,220.000	7,185.000
0100	465.0110	Asphaltic Surface Patching	TON	20.000	20.000	
0102	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	115.000		115.000
0104	465.0310	Asphaltic Curb	LF	164.000		164.000
0106	465.0315	Asphaltic Flumes	SY	54.500	12.000	42.500
0108	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	12,215.000	12,215.000	
0110	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	11,390.000	6,600.000	4,790.000
0112	502.4204	Adhesive Anchors No. 4 Bar	EACH	72.000	72.000	
0114	504.0100	Concrete Masonry Culverts	CY	20.000	20.000	
0116	505.0400	Bar Steel Reinforcement HS Structures	LB	2,600.000	2,600.000	
0118	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	540.000	540.000	
0120	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000	
0122	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000		1.000
0124	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	2.000		2.000
0126	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	18.000	6.000	12.000
0128	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	1.000	1.000	
0130	520.3318	Culvert Pipe Class III-A 18-Inch	LF	140.000	140.000	
0132	520.8000	Concrete Collars for Pipe	EACH	17.000	2.000	15.000
0134	520.8700	Cleaning Culvert Pipes	EACH	3.000		3.000
0136	520.9700.S	Culvert Pipe Liners (size) 01. 15-Inch	LF	50.000		50.000
0138	520.9700.S	Culvert Pipe Liners (size) 02. 18-Inch	LF	195.000		195.000
0140	520.9700.S	Culvert Pipe Liners (size) 03. 24-Inch	LF	98.000		98.000
0142	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	7.000		7.000

					4090-05-71	4530-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0144	521.0535	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 35x24-Inch 4 to 1	EACH	1.000	1.000	
0146	521.0542	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 42x29-Inch 4 to 1	EACH	2.000	2.000	
0148	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	18.000		18.000
0150	521.1705	Apron Endwalls for Pipe Arch Sloped Side Drains Steel 21x15-Inch 4 to 1	EACH	1.000		1.000
0152	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	130.000		130.000
0154	521.3721	Pipe Arch Corrugated Steel 21x15-Inch	LF	38.000		38.000
0156	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000		2.000
0158	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000		2.000
0160	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,221.000		1,221.000
0162	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,487.000	950.000	537.000
0164	603.1132	Concrete Barrier Type S32	LF	305.000		305.000
0166	603.1332	Concrete Barrier Type S32B	LF	37.000		37.000
0168	606.0200	Riprap Medium	CY	25.000	15.000	10.000
0170	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	36.000		36.000
0172	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	40.000		40.000
0174	608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	LF	40.000		40.000
0176	608.2319	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	LF	135.000		135.000
0178	608.3030	Storm Sewer Pipe Class III-A 30-Inch	LF	7.000	7.000	
0180	611.0430	Reconstructing Inlets	EACH	2.000		2.000
0182	611.0530	Manhole Covers Type J	EACH	2.000	1.000	1.000
0184	611.0615	Inlet Covers Type F	EACH	1.000		1.000
0186	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000	
0188	611.2006	Manholes 6-FT Diameter	EACH	2.000		2.000
0190	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	185.000	185.000	
0192	614.2300	MGS Guardrail 3	LF	2,840.600	2,050.000	790.600
0194	614.2330	MGS Guardrail 3 K	LF	4,350.000		4,350.000
0196	614.2350	MGS Guardrail Short Radius	LF	19.000		19.000
0198	614.2500	MGS Thrie Beam Transition	LF	197.000		197.000
0200	614.2610	MGS Guardrail Terminal EAT	EACH	30.000	10.000	20.000
0202	614.2620	MGS Guardrail Terminal Type 2	EACH	4.000		4.000
0204	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000		1.000
0206	616.0204	Fence Chain Link 4-FT	LF	174.000	174.000	

					4090-05-71	4530-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0208	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4090-05-71	EACH	1.000	1.000	
0210	618.0100	Maintenance And Repair of Haul Roads (project) 02. 4530-06-71	EACH	1.000		1.000
0212	619.1000	Mobilization	EACH	1.000	0.250	0.750
0214	624.0100	Water	MGAL	89.000	10.000	79.000
0216	625.0100	Topsoil	SY	10,460.000	8,275.000	2,185.000
0218	625.0500	Salvaged Topsoil	SY	13,835.000		13,835.000
0220	627.0200	Mulching	SY	670.000	170.000	500.000
0222	628.1504	Silt Fence	LF	6,945.000	2,150.000	4,795.000
0224	628.1520	Silt Fence Maintenance	LF	6,945.000	2,150.000	4,795.000
0226	628.1905	Mobilizations Erosion Control	EACH	9.000	3.000	6.000
0228	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	2.000	3.000
0230	628.2002	Erosion Mat Class I Type A	SY	8,120.000	8,120.000	
0232	628.2004	Erosion Mat Class I Type B	SY	19,800.000		19,800.000
0234	628.7504	Temporary Ditch Checks	LF	700.000	70.000	630.000
0236	628.7555	Culvert Pipe Checks	EACH	64.000	15.000	49.000
0238	628.7570	Rock Bags	EACH	165.000	165.000	
0240	629.0205	Fertilizer Type A	CWT	18.660	6.000	12.660
0242	630.0130	Seeding Mixture No. 30	LB	511.000	150.000	361.000
0244	630.0500	Seed Water	MGAL	760.000	300.000	460.000
0246	633.0500	Delineator Reflectors	EACH	15.000		15.000
0248	633.1000	Delineators Barrier Wall	EACH	15.000		15.000
0250	633.5200	Markers Culvert End	EACH	52.000	12.000	40.000
0252	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	95.000	14.000	81.000
0254	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	128.000	12.000	116.000
0256	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	9.000		9.000
0258	637.2210	Signs Type II Reflective H	SF	1,337.060	26.860	1,310.200
0260	637.2230	Signs Type II Reflective F	SF	500.670	142.500	358.170
0262	638.2602	Removing Signs Type II	EACH	234.000	23.000	211.000
0264	638.3000	Removing Small Sign Supports	EACH	255.000	23.000	232.000
0266	642.5401	Field Office Type D	EACH	1.000	0.250	0.750
0268	643.0300	Traffic Control Drums	DAY	6,172.000	4,100.000	2,072.000
0270	643.0420	Traffic Control Barricades Type III	DAY	1,490.000	440.000	1,050.000
0272	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	252.000		252.000
0274	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	252.000		252.000
0276	643.0705	Traffic Control Warning Lights Type A	DAY	752.000	640.000	112.000
0278	643.0900	Traffic Control Signs	DAY	9,610.000	4,220.000	5,390.000
0280	643.0920	Traffic Control Covering Signs Type II	EACH	14.000	6.000	8.000
0282	643.1050	Traffic Control Signs PCMS	DAY	42.000	28.000	14.000

					4090-05-71	4530-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0284	643.5000	Traffic Control	EACH	1.000	0.250	0.750
0286	645.0105	Geotextile Type C	SY	69.000	69.000	
0288	645.0120	Geotextile Type HR	SY	68.000	30.000	38.000
0290	645.0130	Geotextile Type R	SY	56.000		56.000
0292	646.1020	Marking Line Epoxy 4-Inch	LF	82,225.000	14,800.000	67,425.000
0294	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	55,320.000	14,585.000	40,735.000
0296	646.3020	Marking Line Epoxy 8-Inch	LF	540.000		540.000
0298	646.6120	Marking Stop Line Epoxy 18-Inch	LF	320.000		320.000
0300	646.7120	Marking Diagonal Epoxy 12-Inch	LF	74.000		74.000
0302	646.9000	Marking Removal Line 4-Inch	LF	290.000		290.000
0304	648.0100	Locating No-Passing Zones	MI	10.330	1.400	8.930
0306	649.0105	Temporary Marking Line Paint 4-Inch	LF	235,510.000	44,185.000	191,325.000
0308	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	109,850.000	14,800.000	95,050.000
0310	649.0505	Temporary Marking Arrow Paint	EACH	2.000		2.000
0312	649.0605	Temporary Marking Word Paint	EACH	1.000		1.000
0314	649.0805	Temporary Marking Stop Line Paint 18-Inch	LF	120.000		120.000
0316	650.4000	Construction Staking Storm Sewer	EACH	8.000	2.000	6.000
0318	650.4500	Construction Staking Subgrade	LF	425.000		425.000
0320	650.5000	Construction Staking Base	LF	425.000		425.000
0322	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,758.000		1,758.000
0324	650.7500	Construction Staking Concrete Barrier	LF	342.000		342.000
0326	650.8000	Construction Staking Resurfacing Reference	LF	55,557.000	7,400.000	48,157.000
0328	650.9910	Construction Staking Supplemental Control (project) 01. 4090-05-71	LS	1.000	1.000	
0330	650.9910	Construction Staking Supplemental Control (project) 02. 4530-06-71	LS	1.000		1.000
0332	650.9920	Construction Staking Slope Stakes	LF	10,234.000	5,311.000	4,923.000
0334	690.0150	Sawing Asphalt	LF	3,836.000	1,305.000	2,531.000
0336	690.0250	Sawing Concrete	LF	230.000	230.000	
0338	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000	
0340	715.0603	Incentive Strength Concrete Barrier	DOL	540.000		540.000
0342	740.0440	Incentive IRI Ride	DOL	46,936.000	11,216.000	35,720.000
0344	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000	
0346	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,100.000	2,100.000	
0348	SPV.0035	Special 01. Foundation Backfill	CY	615.000		615.000
0350	SPV.0090	Special 01. Grading And Shaping Ditch	LF	670.000		670.000
0352	SPV.0165	Special 01. Wall Concrete Panel Mechanically Stabilized Earth, R-20-49	SF	1,189.000	1,189.000	

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CLEARING AND GRUBBING

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	201.0105 CLEARING (STA)	201.0120 CLEARING (ID)	201.0205 GRUBBING (STA)	201.0220 GRUBBING (ID)
4530-06-71	0010			1519+55	RT	-	24	-	24
				1525+89	LT	-	24	-	24
				1527+47	LT	-	24	-	24
				1813+40	LT	-	18	-	18
				1813+64	RT	-	24	-	24
				1813+67	LT	-	24	-	24
				1813+96	LT	-	12	-	12
				1815+88	LT	-	24	-	24
				1816+17	LT	-	24	-	24
		1848+00	-	1850+00	RT	2	-	2	-
		UNDISTRIBUTED				-	24	-	24
					TOTAL	2	222	2	222

REMOVING SMALL CULVERT PIPES

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	203.0100 REMOVING SMALL CULVERT PIPES (EACH)
4530-06-71	0010	1496+48	-	1496+93	LT	1
					TOTAL	1

REMOVING ASPHALTIC BUTT JOINTS

PROJECT ID	CATEGORY	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)
4530-06-71	0010	1490+00	MAINLINE	7.0
		1502+60	MAINLINE	7.0
		1508+60	MAINLINE	7.0
		249+39.69	CTH SS	5.0
		251+47.94	CTH SS	5.0
		349+00	HAPPY HOLLOW	4.5
		449+46	BIRCHWOOD	5.0
		550+90	CTH G	5.0
		649+65	DINS HILL	4.5
		749+40	FIRST	4.5
		801+11.58	CTH F	4.0
		805+36.98	CTH F	7.0
		949+49.66	ELM	4.5
		1149+83.65	CTH F	22.0
		1250+40	CLEMENT	4.0
		1349+45.19	LAKEVIEW	5.0
		1450+86.35	BOY SCOUT	5.0
		1475+86.13	N BOY SCOUT	4.5
		1549+02.84	LOG CABIN	4.5
		1634+22.34	MAINLINE	7.0
		1649+72.34	MAINLINE	7.0
		1652+11.19	CTH B	7.0
		1751+07.36	CTH G	4.5
		1995+56.89	MAINLINE	7.0
			TOTAL	147.5

REMOVING ASPHALTIC SURFACE MILLING

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)
4530-06-71	0010	1490+00	-	1495+40	LT/RT	1,850
		3002+30 'US45'	-	3004+50 'US45'	LT	265
		3006+00 'US45'	-	3008+30 'US45'	RT	215
		1500+00	-	1502+60	LT/RT	865
		1508+60	-	1540+00	LT/RT	11,165
		1540+00	-	1543+00	LT/RT	2,140
		1543+00	-	1614+00	LT/RT	25,245
		1614+00	-	1616+00	LT/RT	1,155
		1616+00	-	1631+00	LT/RT	5,335
		1631+00	-	1634+22	LT/RT	1,280
		1649+72	-	1660+00	LT/RT	3,655
		1660+00	-	1663+00	LT/RT	1,500
		1663+00	-	1675+00	LT/RT	4,270
		1675+00	-	1682+00	LT/RT	3,235
		1682+00	-	1691+35	LT/RT	3,380
		1691+35	-	1693+00	LT/RT	515
		1693+00	-	1698+60	LT/RT	2,955
		1698+60	-	1700+00	LT/RT	670
		1700+00	-	1708+00	LT/RT	2,710
		1708+00	-	1934+70	LT/RT	72,840
		1934+70	-	1995+57	LT/RT	20,290
					TOTAL	165,535

REMOVING GUARDRAIL

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	204.0165 REMOVING GUARDRAIL (LF)
4530-06-71	0010	1565+73	-	1568+02	RT	229
		1777+42	-	1780+09	RT	268
		1813+05	-	1814+46	LT	139
		1813+38	-	1814+51	RT	115
		1814+53	-	1820+18	LT	565
		1814+58	-	1817+10	RT	253
		1822+42	-	1825+02	RT	265
		1830+44	-	1841+18	RT	1065
		1848+29	-	1849+40	RT	134
		1851+00	-	1853+78	LT	280
		1855+68	-	1861+88	LT	631
		1892+01	-	1906+10	LT	1414
		1899+74	-	1902+32	RT	259
		1918+26	-	1921+74	LT	349
					TOTAL	5966

REMOVING STORM SEWER

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	204.0220 REMOVING INLETS (EACH)	240.0245.01 REMOVING STORM SEWER 12-INCH (LF)	240.0245.02 REMOVING STORM SEWER 15-INCH (LF)	240.0245.03 REMOVING STORM SEWER 24-INCH (LF)	240.0245.04 REMOVING STORM SEWER 30-INCH (LF)	240.0245.05 REMOVING STORM SEWER 36"X48" (LF)
4530-06-71	010			11+44 'S'	LT	1	-	-	-	-	-
				11+75 'S'	LT	1	-	-	-	105	-
				12+17 'S'	LT	1	-	-	68	-	-
				1499+55	LT	1	-	38	-	-	-
				1686+06	LT/RT	-	-	-	-	-	40
				1737+88	LT/RT	-	36	-	-	-	-
					TOTAL	4	36	38	68	105	40

ALL ITEMS CATEGORY 0010

EARTHWORK SUMMARY

PROJECT NUMBER	CATEGORY	STATION	-	STATION	LOCATION	205.0100 EXCAVATION COMMON (2) CUT CY	EBS CY	(2) SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(4) AVAILABLE MATERIAL CY	UNEXPANDED FILL (CY)	(7) EXPANDED FILL FROM EW DATA CY	(8) MASS ORDINATE (+/-) CY	WASTE CY	208.0100 BORROW (9) BORROW CY	REMARKS
4530-06-71	0010	10+00 'S'	-	12+19 'S'	STH 67 (WEST OF USH 45)	1,400			1,400	70	91	1,309			
		10+21 'N'	-	12+26 'N'	STH 67 (EAST OF USH 45)	400			400	140	182	218			
		1510+25	-	1511+25	STH 67	56			56	5	7	49			
		1524+00	-	1530+25	STH 67	234			234	622	809	-575			
		1545+00	-	1550+00	STH 67	542			542	15	20	522			
		1559+75	-	1563+50	STH 67	97			97	69	90	7			
		1565+00	-	1571+00	STH 67	663			663	448	582	81			
		1602+00	-	1605+00	STH 67	2			2	612	796	-794			
		1607+75	-	1609+50	STH 67	44			44	19	25	19			
		1613+25	-	1615+75	STH 67					262	341	-341			
		1653+25	-	1657+00	STH 67	284			284	55	72	212			
		1672+50	-	1676+95	STH 67	247			247	7	9	238			
		1678+77	-	1681+25	STH 67	6			6	357	464	-458			
		1776+65	-	1780+17	STH 67	1			1	20	26	-25			
		1812+30	-	1820+14	STH 67	12			12	60	78	-66			
		1822+25	-	1825+72	STH 67	15			15	9	12	3			
		1830+00	-	1841+60	STH 67	7			7	62	81	-74			
		1848+37	-	1849+40	STH 67					55	71	-71			
		1850+84	-	1862+50	STH 67	41			41	57	74	-33			
		1869+00	-	1870+50	STH 67					110	143	-143			
		1889+60	-	1906+85	STH 67	6			6	225	292	-286		178	
		1914+00	-	1921+33	STH 67	295			295	143	186	109			
		1927+25	-	1929+00	STH 67					81	105	-105			
					SUBTOTAL	4,352			4,352	3,503	4,556	-204		178	
					TOTAL	4,352			4,352	3,503	4,556	-204		178	

(1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.
(2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.
(7) EXPANDED FILL: FACTOR = 1.3; EXPANDED FILL = (UNEXPANDED FILL - ROCK FILL * ROCK FACTOR) * FILL FACTOR
(8) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHING THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(9) BORROW EXPANSION: FACTOR = 1.15

ALL ITEMS CATEGORY 0010

BASE AGGREGATE DENSE

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	624.0100 WATER (MGAL)
4530-06-71	010	10+00 'S'	-	12+25 'S'	LT/RT		925	19
		10+21 'N'	-	12+26 'N'	LT/RT		975	20
		1490+00	-	1502+60	LT/RT	33		1
		1508+60	-	1634+22	LT/RT	526		11
		1649+72	-	1995+57	LT/RT	1192		24
		P.E./F.E./C.E.			LT/RT	150		3
		UNDISTRIBUTED					50	1
					TOTAL	1901	1950	79

HMA PAVEMENT

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	315.0200 ASPHALTIC BASE WIDENING (TON)	455.0605 TACK COAT (GAL)	INCENTIVE DENSITY PWL HMA PAVEMENT ELIGIBLE TONNAGE (TON)	INCENTIVE AIR VOIDS HMA PAVEMENT ELIGIBLE TONNAGE (TON)	460.5223 HMA PAVEMENT 3 LT 58-28 S (TON)	460.5224 HMA PAVEMENT 4 LT 58-28 S MAINLINE (TON)	460.5224 HMA PAVEMENT 4 LT 58-28 S OTHER (TON)	460.5225 HMA PAVEMENT 5 LT 58-28 S (TON)	465.0120 DRIVEWAYS AND FIELD ENTRANCES (TON)	REMARKS
4530-06-71	0010	10+00 'S'	-	12+20 'S'	LT/RT	-	75	62	125	185	62	63	-	-	
		10+21 'N'	-	12+26 'N'	LT/RT	-	80	58	130	195	58	72	-	-	
		1685+65	-	1686+46	LT/RT	-	20	46	66	-	46	20	-	-	
		1730+03	-	1730+82	LT/RT	-	18	46	58	-	46	12	-	-	
		1737+49	-	1738+27	LT/RT	-	17	44	56	-	44	12	-	-	
		1490+00	-	1494+00	LT/RT	10	259	98	186	-	98	88	83	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
			-	1495+40	LT	-	-	-	-	-	-	-	-	75	
			-	1499+85	RT	-	-	-	-	-	-	-	-	40	
		3002+30 'US45'	-	3004+50 'US45'	LT	-	37	-	27	-	-	27	11	-	
		3006+00 'US45'	-	3008+30 'US45'	RT	-	30	-	22	-	-	22	9	-	
		1500+00	-	1501+00	LT/RT	3	130	64	93	-	64	29	40	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1508+60	-	1540+00	LT/RT	80	1,563	772	1,123	-	772	351	481	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1540+00	-	1543+00	LT/RT	8	300	150	215	-	150	65	87	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1543+00	-	1614+00	LT/RT	182	3,684	1,825	2,648	-	1,825	823	1,135	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1614+00	-	1616+00	LT/RT	5	162	80	116	-	80	36	50	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1616+00	-	1631+00	LT/RT	38	747	370	537	-	370	167	230	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1631+00	-	1634+22	LT/RT	9	179	90	129	-	90	39	55	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1649+72	-	1660+00	LT/RT	19	512	253	368	-	253	115	158	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1660+00	-	1663+00	LT/RT	8	210	105	151	-	105	46	65	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1663+00	-	1675+00	LT/RT	26	598	296	430	-	296	134	184	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1675+00	-	1682+00	LT/RT	18	453	224	326	-	224	102	140	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1682+00	-	1691+35	LT/RT	24	473	234	340	-	234	106	146	-	*PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71)
		1691+35	-	1693+00	LT/RT	-	72	41	52	-	41	11	22	-	
		1693+00	-	1698+60	LT/RT	-	414	233	297	-	233	64	127	-	
		1698+60	-	1700+00	LT/RT	-	94	55	67	-	55	12	29	-	
		1700+00	-	1708+00	LT/RT	-	379	215	273	-	215	58	117	-	
		1708+00	-	1934+70	LT/RT	-	10,198	5,760	7,330	-	5,760	1,570	3,141	-	
		1934+70	-	1995+57	LT/RT	-	2,841	1,635	2,045	-	1,635	410	875	-	
					SUBTOTAL	430	23,545	12,756	17,210	380	12,756	4,454	7,185	115	
					TOTAL	430	23,545	12,756	17,210	380	17210		7185	115	

CONCRETE SURFACE DRAINS

PROJECT ID	CATEGORY	STATION	LOCATION	416.1010 CONCRETE SURFACE DRAINS (CY)	645.0130 GEOTEXTILE TYPE R (SY)
4530-06-71	010	3002+60 'US45'	LT	2	8
		11+46 'N'	LT	2	8
		1653+75	LT	2	8
		1653+75	RT	2	8
		1656+50	RT	2	8
		1672+85	LT	2	8
		1674+80	RT	2	8
			TOTAL	14	56

ASPHALTIC FLUMES

PROJECT ID	CATEGORY	STATION	LOCATION	465.0315 ASPHALTIC FLUMES (SY)	465.0310 ASPHALTIC CURB (LF)
4530-06-71	010	1849+25	RT	8.5	
		1916+22	RT	8.5	41
		1916+42	LT	8.5	41
		1918+66	LT	8.5	41
		1918+90	RT	8.5	41
			TOTAL	42.50	164

*STATION RANGE ALSO INCLUDES LUMP SUM ITEM: 211.0100 “PREPARE FOUNDATION FOR ASPHALTIC PAVING (4530-06-71).”.

CULVERT PIPE

PROJECT ID	CATEGORY	STATION	204.9090.S REMOVING CORRUGATED METAL CULVERT PIPE (LF)	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH (LF)	521.3721 PIPE ARCH CORRUGATED STEEL 21X15-INCH (LF)	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH (EACH)	520.1015 APRON ENDWALLS FOR CULVERT PIPE 15-INCH (EACH)	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH (EACH)	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH (EACH)	521.1705 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 21X15-4 TO 1 (EACH)	520.8000* CONCRETE COLLARS FOR PIPE (EACH)	520.8700 CLEANING CULVERT PIPES (EACH)	520.9700.S CULVERT PIPE LINERS 15-INCH (LF)	520.9700.S CULVERT PIPE LINERS 18-INCH (LF)	520.9700.S CULVERT PIPE LINERS 24-INCH (LF)	520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION (EACH)	633.5200* MARKERS CULVERT END (EACH)	REMARKS
4530-06-71	010	1525+07	8	16	-	-	-	-	2	-	1	-	-	-	-	-	2	**0.064"
		1558+42	8	8	-	-	-	-	2	-	1	-	-	-	-	-	2	**0.064"
		1566+94	16	32	-	-	-	-	2	-	2	-	-	-	-	-	2	**0.064"
		1578+33	16	16	-	-	-	-	2	-	2	-	-	-	-	-	2	**0.064"
		1583+60	10	10	-	-	-	-	2	-	1	-	-	-	-	-	2	**0.064"
		1608+62	16	16	-	-	-	-	2	-	2	-	-	-	-	-	2	**0.064"
		1623+80	16	32	-	-	-	-	2	-	2	-	-	-	-	-	2	**0.064"
		1631+18	-	-	-	-	-	2	-	-	-	-	-	66	-	1	2	
		1691+40	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	
		1695+72	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	
		1730+42	38	-	38	-	-	-	-	1	1	-	-	-	-	-	1	**0.064"
		1741+30	-	-	-	-	-	-	2	-	-	-	-	-	54	1	2	
		1754+32	-	-	-	-	-	2	-	-	-	-	-	54	-	1	2	
		1758+23	-	-	-	-	-	-	2	-	-	-	-	-	44	1	2	
		1761+35	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	
		1772+88	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
		1775+14	-	-	-	-	-	2	-	-	-	-	-	40	-	1	2	
		1788+23	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
		1807+51	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
		1828+09	-	-	-	-	1	-	-	-	-	-	50	-	-	1	1	
		1844+02	-	-	-	-	-	1	-	-	-	-	-	35	-	1	2	
		1908+14	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	
		1927+90	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
		TOTAL	128	130	38	1	2	12	18	1	12	3	50	195	98	7	36	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
**MINIMUM WALL THICKNESS

STORM SEWER

PROJECT ID	CATEGORY	STRUCTURE	-	STRUCTURE	LOCATION	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH (EACH)	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH (EACH)	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF)	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH (LF)	608.0348 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH (LF)	608.2319 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH (LF)	611.2006 MANHOLES 6-FT DIAMETER (EA)	611.0430 RECONSTRUCTING INLETS (EACH)	611.0530 MANHOLE COVERS TYPE J (EACH)	611.0615 INLET COVERS TYPE F (EACH)	520.8000* CONCRETE COLLARS FOR PIPE (EACH)	633.5200* MARKERS CULVERT END (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)
4530-06-71	010			MH1	12+17 'S', 36' LT	-	-	-	-	-	-	1	-	1	-	-	-	1
				MH2	11+85 'S', 33' LT	-	-	-	-	-	-	1	-	-	1	-	-	1
				AE1	11+61 'S', 47' RT	-	1	-	-	-	-	-	-	-	-	-	1	1
				AE2	11+80 'S', 47' LT	-	1	-	-	-	-	-	-	-	-	-	1	1
				AE3	11+42 'S', 85' LT	1	-	-	-	-	-	-	-	-	-	-	1	1
				AE4	11+71 'S', 55' LT	1	-	-	-	-	-	-	-	-	-	-	1	1
		MH1	-	MH2		-	-	-	-	-	35	-	-	-	-	-	-	-
		MH1	-	AE1		-	-	-	-	-	91	-	-	-	-	-	-	-
		MH2	-	AE2		-	-	-	-	-	9	-	-	-	-	-	-	-
		AE3	-	AE4		-	-	-	40	-	-	-	-	-	-	-	-	-
					1686+06 LT/RT	-	-	-	-	40	-	-	-	-	-	2	-	-
					1737+88 LT/RT	-	-	36	-	-	-	-	2	-	-	1	-	-
					TOTAL	2	2	36	40	40	135	2	2	1	1	3	4	6

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ALL ITEMS CATEGORY 0010

3

3

CURB AND GUTTER

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	**204.0150** REMOVING CURB & GUTTER (LF)	**601.0411** CONCRETE CURB & GUTTER 30-INCH TYPE D (LF)	**601.0557** CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D (LF)	**650.5500** CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)
4530-06-71	0010	11+25 'NW'	-	12+30 'NW'	LT	-	-	105	105
		10+00 'SW'	-	11+74 'SW'	RT	-	-	174	174
		10+87 'NE'	-	12+24 'NE'	LT	-	-	137	137
		12+37 'NE'	-	12+78 'NE'	LT	-	-	41	41
		10+00 'SE'		10+80 'SE'	RT	-	-	80	80
		1495+00	-	1496+75	RT	550	-	-	-
		3006+00'US45'	-	3006+25 'US45'	LT	25	-	-	-
		1498+00	-	1498+60	RT	80	-	-	-
		1498+90	-	1499+60	LT	160	-	-	-
		1499+50	-	1500+00	LT	100	-	-	-
		1653+67	-	1656+50	LT	283	283	-	283
		1653+67	-	1656+58	RT	291	291	-	291
		1672+80	-	1677+19	LT	439	439	-	439
		1672+80	-	1674+88	RT	208	208	-	208
		1917+03	-	1918+32	LT	129	-	-	-
		1915+92	-	1918+53	RT	261	-	-	-
					TOTAL	2,526	1,221	537	1,758

CONCRETE BARRIER

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	**603.1132** CONCRETE BARRIER TYPE S32 (LF)	**603.1332** CONCRETE BARRIER TYPE S32B (LF)	**633.0500** DELINEATOR REFLECTORS (WHITE) (EACH)	**633.1000** DELINEATOR BRACKETS (EACH)	**650.7500** CONSTRUCTION STAKING CONCRETE BARRIER (LF)
4530-06-71	010	1850+83	-	1851+23	LT	-	37	3	3	37
		1916+70	-	1918+45	RT	175	-	7	7	175
		1916+90	-	1918+20	LT	130	-	5	5	130
					TOTAL	305	37	15	15	342

RIP RAP MEDIUM AND GEOTEXTILE TYPE HR

PROJECT ID	CATEGORY	STATION	LOCATION	**606.0200** RIPRAP MEDIUM (CY)	**645.0120** GEOTEXTILE TYPE HR (SY)
4530-06-71	010	1583+60	RT	2	9
		1775+14	RT	2	9
		1849+25	RT	6	20
			TOTAL	10	38

CULVERT PIPE CHECKS

PROJECT ID	CATEGORY	STATION	LOCATION	PIPE SIZE INCH	**628.7555** CULVERT PIPE CHECKS (EACH)
4530-06-71	010	11+42 'S'	LT	24	5
		11+61 'S'	RT	19X30	5
		11+80 'S'	LT	19X30	3
		1525+07	RT	24	3
		1558+42	LT	24	3
		1566+94	LT	24	3
		1578+33	LT	24	3
		1583+60	LT	24	3
		1608+62	LT	24	3
		1623+80	RT	24	3
		1631+18	LT	18	2
		1691+40	LT	12	1
		1741+30	LT	24	3
		1754+32	LT	18	2
		1758+23	LT	24	3
		1761+35	LT	18	2
		1772+88	LT	18	2
		1775+14	LT	18	2
		1788+23	LT	15	2
		1828+09	LT	15	2
		1844+02	LT	18	2
		1869+50	LT	24	3
		1908+14	LT	18	2
		1927+80	LT	24	3
		TOTAL			49

ALL ITEMS CATEGORY 0010

GUARDRAIL

PROJECT ID	CATEGORY	STATION - STATION	LOCATION	614.2300 MGS GUARDRAIL 3 (LF)	614.2330 MGS GUARDRAIL 3 K (LF)	614.2350 MGS GUARDRAIL SHORT RADIUS (LF)	614.2500 MGS THRIE BEAM TRANSITION (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 (EACH)	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL (EACH)	REMARKS
4530-06-71	010	1777+35.00 - 1777+87.99	RT	-	-	-	-	1	-	-	
		1777+87.99 - 1779+49.59	RT	-	162.5	-	-	-	-	-	
		1779+49.59 - 1780+02.40	RT	-	-	-	-	1	-	-	
		1813+01.92 - 1813+56.54	LT	-	-	-	-	1	-	-	
		1813+56.54 - 1814+45.54	LT	87.5	-	-	-	-	-	-	
		1814+45.54 - 1814+47.00	LT	-	-	-	-	-	1	-	
		1814+53.00 - 1814+54.46	LT	-	-	-	-	-	1	-	
		1814+54.46 - 1819+42.23	LT	487.5	-	-	-	-	-	-	
		1819+42.23 - 1819+95.31	LT	-	-	-	-	1	-	-	
		1813+36.91 - 1813+88.66	RT	-	-	-	-	1	-	-	
		1813+88.66 - 1814+50.55	RT	-	62.5	-	-	-	-	-	
		1814+50.55 - 1814+52.00	RT	-	-	-	-	-	1	-	
		1814+58.00 - 1814+59.46	RT	-	-	-	-	-	1	-	
		1814+59.46 - 1816+45.77	RT	-	187.5	-	-	-	-	-	
		1816+45.77 - 1816+98.86	RT	-	-	-	-	1	-	-	
		1822+42.00 - 1822+93.99	RT	-	-	-	-	1	-	-	
		1822+93.99 - 1824+67.22	RT	-	175	-	-	-	-	-	
		1824+67.22 - 1825+19.09	RT	-	-	-	-	1	-	-	
		1830+35.00 - 1830+89.17	RT	-	-	-	-	1	-	-	
		1830+89.17 - 1840+69.90	RT	-	975	-	-	-	-	-	
		1840+69.90 - 1841+23.07	RT	-	-	-	-	1	-	-	
		1848+31.22 - 1848+48.11	RT	28.1	-	-	-	-	-	1	
		1848+39.35 - 1848+37.00	RT	-	-	19	-	-	-	-	RADIUS = 8'
		1848+37.00 - 1848+84.41	RT	-	50	-	-	-	-	-	
		1848+84.41 - 1849+34.26	RT	-	-	-	-	1	-	-	
		1851+19.99 - 1851+61.25	LT	-	-	-	39.4	-	-	-	
		1851+61.25 - 1861+40.96	LT	-	1000	-	-	-	-	-	
		1861+40.96 - 1861+94.04	LT	-	-	-	-	1	-	-	
		1890+35.00 - 1890+88.09	LT	-	-	-	-	1	-	-	
		1890+88.09 - 1905+61.15	LT	-	1475	-	-	-	-	-	
		1905+61.15 - 1906+12.84	LT	-	-	-	-	1	-	-	
		1899+25.00 - 1899+78.84	RT	-	-	-	-	1	-	-	
		1899+78.84 - 1902+40.88	RT	-	262.5	-	-	-	-	-	
		1902+40.88 - 1902+93.96	RT	-	-	-	-	1	-	-	
		1915+67.49 - 1916+20.60	RT	-	-	-	-	1	-	-	
		1916+20.60 - 1916+33.10	RT	12.5	-	-	-	-	-	-	
		1916+33.10 - 1916+72.50	RT	-	-	-	39.4	-	-	-	
		1915+87.52 - 1916+40.60	LT	-	-	-	-	1	-	-	
		1916+40.60 - 1916+63.10	LT	12.5	-	-	-	-	-	-	
		1916.63.10 - 1916+92.50	LT	-	-	-	39.4	-	-	-	
		1918+17.50 - 1918+56.89	LT	-	-	-	39.4	-	-	-	
		1918+56.89 - 1920+07.36	LT	150	-	-	-	-	-	-	
		1920+07.36 - 1920+60.65	LT	-	-	-	-	1	-	-	
		1918+42.50 - 1918+81.86	RT	-	-	-	39.4	-	-	-	
		1918+81.86 - 1918+94.32	RT	12.5	-	-	-	-	-	-	
		1918+94.32 - 1919+47.21	RT	-	-	-	-	1	-	-	
		TOTAL		790.6	4350	19	197.0	20	4	1	

ALL ITEMS CATEGORY 0010

TOPSOIL

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	625.0100 TOPSOIL (SY)	625.0500 SALVAGED TOPSOIL (SY)
4530-06-71	010	1494+00	-	1495+40	RT	-	640
		1494+50	-	1497+50	LT	1300	750
		1499+00	-	1600+50	LT	-	685
		1498+35	-	1600+00	RT	885	500
		1510+25	-	1511+25	RT	-	260
		1524+25	-	1527+50	LT	-	1110
		1524+50	-	1530+25	RT	-	1910
		1545+00	-	1550+25	LT	-	1780
		1559+75	-	1561+50	LT	-	135
		1561+50	-	1563+25	RT	-	635
		1565+00	-	1567+75	LT	-	835
		1566+25	-	1569+50	RT	-	650
		1569+00	-	1571+25	LT	-	765
		1602+00	-	1605+00	RT	-	1215
		1607+75	-	1609+50	LT	-	300
		1869+00	-	1870+50	RT	-	420
		1913+50	-	1916+00	LT	-	335
		1920+50	-	1921+33	LT	-	325
		1927+50	-	1929+25	RT	-	585
					TOTAL	2,185	13,835

EROSION CONTROL

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	627.0200 MULCHING (SY)	628.2004 EROSION MAT CLASS I TYPE B (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0130 SEEDING MIXTURE NO. 30 (LB)	630.0500 SEED WATER (MGAL)
4530-06-71	010	1494+00	-	1495+40	RT	-	640	0.40	12	15
		1494+50	-	1497+50	LT	-	2050	1.30	37	46
		1499+00	-	1600+50	LT	-	685	0.40	12	16
		1498+35	-	1600+00	RT	-	1385	0.90	25	31
		1510+25	-	1511+25	RT	-	260	0.20	5	6
		1524+25	-	1527+50	LT	-	1110	0.70	20	25
		1524+50	-	1530+25	RT	-	1910	1.20	34	43
		1545+00	-	1550+25	LT	-	1780	1.10	32	40
				1558+42	LT/RT	-	40	0.03	1	1
		1559+75	-	1561+50	LT	-	135	0.10	2	3
		1561+50	-	1563+25	RT	-	635	0.40	11	14
		1565+00	-	1567+75	LT	-	835	0.50	15	19
		1566+25	-	1569+50	RT	-	650	0.40	12	15
		1569+00	-	1571+25	LT	-	765	0.50	14	17
				1578+33	LT/RT	-	40	0.03	1	1
		1602+00	-	1605+00	RT	-	1215	0.80	22	27
		1607+75	-	1609+50	LT	-	300	0.20	5	7
				1631+18	LT/RT	-	40	0.03	1	1
				1695+72	LT/RT	-	40	0.03	1	1
				1741+30	LT/RT	-	40	0.03	1	1
				1754+32	LT/RT	-	40	0.03	1	1
				1758+23	LT/RT	-	40	0.03	1	1
				1761+35	LT/RT	-	40	0.03	1	1
				1772+88	LT/RT	-	40	0.03	1	1
				1788+23	LT/RT	-	40	0.03	1	1
				1828+09	LT/RT	-	40	0.03	1	1
				1844+02	LT/RT	-	40	0.03	1	1
		1869+00	-	1870+50	RT	-	420	0.30	8	10
		1913+50	-	1916+00	LT	-	335	0.20	6	8
		1920+50	-	1921+33	LT	-	325	0.20	6	7
		1927+50	-	1929+25	RT	-	585	0.40	11	13
				UNDISTIBUTED		500	3300	2.10	60	86
					TOTAL	500	19,800	12.66	361	460

ALL ITEMS CATEGORY 0010

SILT FENCE

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
4530-06-71	010	10+00 'S'	-	11+05 'S'	RT	250	250
		10+10 'S'	-	12+25 'S'	LT	215	215
		1510+25	-	1511+25	RT	100	100
		1524+25	-	1527+50	LT	325	325
		1524+50	-	1530+25	RT	575	575
		1545+00	-	1550+25	LT	525	525
		1559+75	-	1561+50	LT	175	175
		1561+50	-	1563+25	RT	175	175
		1565+00	-	1567+75	LT	275	275
		1569+00	-	1571+25	LT	225	225
		1566+25	-	1569+50	RT	325	325
		1602+70	-	1605+00	RT	330	330
		1607+75	-	1609+50	LT	175	175
		1613+25	-	1615+75	RT	250	250
		1679+00	-	1681+00	RT	200	200
		1869+00	-	1870+50	RT	150	150
		1913+50	-	1916+00	LT	250	250
		1920+50	-	1921+33	LT	100	100
		1927+50	-	1929+25	RT	175	175
					TOTAL	4795	4795

MOBILIZATIONS EROSON CONTROL

PROJECT ID	CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
4530-06-71	010	PROJECT	6	3
		TOTAL	6	3

TEMPORARY DITCH CHECKS

PROJECT ID	CATEGORY	STATION		STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS (LF)
4530-06-71	010	1494+00	-	1498+00	LT/RT	60
		1498+00	-	1502+00	LT/RT	45
				1510+00	RT	15
		1525+00	-	1530+00	RT	105
		1545+50	-	1550+40	LT	75
				1560+20	LT	15
				1561+50	RT	15
		1565+40	-	1567+00	LT	75
				1567+50	RT	15
		1569+75	-	1570+75	LT	45
				1654+40	LT/RT	30
				1677+40	LT	15
				1820+50	LT	15
				1854+00	LT	15
				1915+60	RT	15
				1920+00	RT	15
				UNDISTIBUTED		60
					TOTAL	630

TRAFFIC CONTROL

PROJECT ID	CATEGORY	LOCATION	STAGE	DAYS	643.0300 TRAFFIC CONTROL DRUMS (DAY)	643.0420* TRAFFIC CONTROL BARRICADES TYPE III (DAY)	643.0500 FLEXIBLE TUBULAR MARKER POSTS (EACH)	643.0600 FLEXIBLE TUBULAR MARKER BASES (EACH)	643.0900* TRAFFIC CONTROL SIGNS (DAY)
4530-06-71	010	STH 45 & STH 67 INTERSECTION	STAGE 1	14	1092	462	252	252	112
		STH 45 & STH 67 INTERSECTION	STAGE 2	14	980	532	-	-	196
		MAINLINE FLAGGING		70	-	-	-	-	700
		DROP-OFF SIGNING		70	-	-	-	-	420
		SIGNING FOR MILLED SURFACES		70	-	-	-	-	1960
		TOTAL			2072	994	252	252	3388

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

PROJECT ID	CATEGORY	STATION	-	STATION	SIDE	465.0475 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL (LF)	REMARKS
4530-06-71	010	1947+60	-	1995+50	CL	4790	
					TOTAL	4790	

ALL ITEMS CATEGORY 0010

PAVEMENT MARKINGS

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE (LF)	646.1020 MARKING LINE EPOXY 4-INCH YELLOW (LF)	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE (LF)	646.3020 MARKING LINE EPOXY 8-INCH WHITE (LF)	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW (LF)	649.0105* TEMPORARY MARKING LINE PAINT 4-INCH YELLOW (LF)	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH YELLOW (LF)
4530-06-71	010	10+00 'S'	-	12+15 'S'	LT/RT	-	345	-	-	-	-	-
		10+28 'N'	-	12+26 'N'	LT/RT	-	396	-	-	-	-	-
		3003+20 'US45'	-	3007+40 'US45'	LT/RT	-	840	-	-	-	-	-
		3002+32 'US45'	-	3002+68 'US45'	LT	36	-	-	-	-	-	-
		3008+07 'US45'	-	3008+37 'US45'	RT	31	-	-	-	-	-	-
		3004+20 'US45'	-	3006+30 'US45'	LT	-	-	210	-	-	-	-
		3005+05 'US45'	-	3006+30 'US45'	RT	-	-	125	-	-	-	-
		1490+00	-	1498+00	LT/RT	-	-	990	-	-	1,780	890
		1498+00	-	1502+60	LT/RT	-	-	545	-	-	640	320
		1508+60	-	1634+22	LT/RT	22	-	24,800	-	-	50,260	25,130
		1649+72	-	1660+00	LT/RT	16	-	2,055	-	-	4,120	2,060
		1660+00	-	1934+69	LT/RT	53785	-	-	-	-	109,340	54,670
		1934+69	-	1995+57	LT/RT	-	-	12,010	-	-	23,960	11,980
		1947+60	-	1995+57	LT/RT	-	9594	-	-	-	-	-
		1661+90	-	1664+30	LT	75	-	-	-	-	-	-
		1678+15	-	1679+60	LT	50	-	-	-	-	-	-
				SIDE RDS		1500	500	-	-	-	-	-
		3004+20 'US45'	-	3006+30 'US45'	LT	-	-	-	210	-	-	-
		3005+05 'US45'	-	3006+30 'US45'	RT	-	-	-	125	-	-	-
		1660+80	-	1662+00	RT	-	-	-	120	-	-	-
		1676+40	-	1677+25	RT	-	-	-	85	-	-	-
				HAPPY HOLLOW ROAD		-	130	-	-	36	-	-
				CTH G		-	105	-	-	38	-	-
					SUBTOTAL	55,515	11,910	40,735	540	74	190,100	95,050
					TOTAL	67,425		40,735	540	74	190,100	95,050

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

MARKING STOP LINE EPOXY 18-INCH

PROJECT ID	CATEGORY	STATION	LOCATION	646.6120 MARKING STOP LINE EPOXY 18-INCH (LF)
4530-06-71	010	3003+00 'US45'	LT	50
		3007+30 'US45'	RT	50
		1614+40	LT	52
		1678+00	RT	38
		1701+65	LT	16
		1850+00	RT	44
		1872+60	RT	32
		1879+80	LT	38
			TOTAL	320

LOCATING NO PASSING ZONES

PROJECT ID	CATEGORY	STATION	-	STATION	648.0100 LOCATING NO PASSING ZONES (MI)
4530-06-71	010	1508+60	-	1634+22	2.38
		1649+72	-	1995+57	6.55
				TOTAL	8.93

TEMPORARY PAVEMENT MARKING

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH (LF)	649.0105* TEMPORARY MARKING LINE PAINT 4-INCH (LF)	649.0505 TEMPORARY MARKING ARROWS PAINT (EACH)	649.0605 TEMPORARY MARKING WORDS PAINT (EACH)	649.0805 TEMPORARY MARKING STOP LINE PAINT 18-INCH (LF)	DESCRIPTION
4530-06-71	0010	1498+60	-	1500+00	CL	290		-	-	-	STAGE 1
		1498+50	-	1500+00	CL	-	300	-	-	-	STAGE 1
		1498+50	-	1499+75	CHANNEL	-	125	-	-	-	STAGE 1
		1498+50	-	1499+70	L EDGE	-	120	-	-	-	STAGE 1
		10+25 'N'	-	12+00 'N'	CL	-	350	-	-	-	STAGE 2
		10+50 'S'	-	12+15 'S'	CL	-	330	-	-	-	STAGE 2
				1498+70	LANES	-	-	2	-	-	STAGE 1
				1498+95	LANE	-	-	-	1	-	STAGE 1
				1498+50		-	-	-	-	25	STAGE 1
				10+50 'N'		-	-	-	-	50	STAGE 2
				12+15 'S'		-	-	-	-	45	STAGE 2
					TOTAL	290	1225	2	1	120	

ALL ITEMS CATEGORY 0010

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

CONSTRUCTION STAKING

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE (LF)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (LS)
4530-06-71	0010			PROJECT		-	-	-	1
		10+00 'S'	-	12+20 'S'	LT/RT	220	220	-	-
		10+21 'N'	-	12+26 'N'	LT/RT	205	205	-	-
		1490+00	-	1494+00	LT/RT	-	-	400	-
		1501+00	-	1502+60	LT/RT	-	-	160	-
		1508+60	-	1634+22	LT/RT	-	-	12,562	-
		3002+30 'US45'	-	3004+50 'US45'	LT/RT	-	-	220	-
		3006+00 'US45'	-	3008+30 'US45'	LT/RT	-	-	230	-
		1649+72	-	1995+57	LT/RT	-	-	34,585	-
					TOTAL	425	425	48,157	1

CONSTRUCTION STAKING SLOPE STAKES

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	650.9920 CONSTRUCTION STAKING SLOPE STAKES (LF)
4530-06-71	0010	10+00 'S'	-	12+15 'S'	LT/RT	215
		10+00 'N'	-	12+25 'N'	LT/RT	225
		1510+25	-	1511+25	RT	100
		1524+25	-	1527+50	LT	325
		1524+50	-	1530+25	RT	575
		1545+00	-	1550+25	LT	525
		1559+75	-	1561+50	LT	175
		1561+50	-	1563+25	RT	175
		1565+00	-	1567+75	LT	275
		1569+00	-	1571+25	LT	225
		1566+25	-	1569+50	RT	325
		1602+00	-	1605+00	RT	300
		1607+75	-	1609+50	LT	175
		1613+25	-	1615+75	RT	250
		1679+00	-	1681+00	RT	200
		1869+00	-	1870+50	RT	150
		1913+50	-	1916+00	LT	250
		1920+50	-	1923+33	LT	283
		1927+50	-	1929+25	RT	175
					TOTAL	4923

SAWING ASPHALT

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	690.0150 SAWING ASPHALT (LF)
4530-06-71	10	3002+30 'US45'	-	3006+30 'US45'	LT	400
		3005+00 'US45'	-	3008+40 'US45'	RT	340
				1494+00	LT/RT	30
				1501+00	LT/RT	30
		1653+67	-	1656+50	LT	283
		1653+67	-	1656+58	RT	291
		1672+80	-	1677+19	LT	439
		1672+80	-	1674+88	RT	208
				1685+65	LT/RT	28
				1686+46	LT/RT	28
				1730+03	LT/RT	28
				1730+82	LT/RT	28
				1737+49	LT/RT	28
				1738+27	LT/RT	28
		1850+83	-	1851+23	LT	37
		1916+70	-	1918+45	RT	175
		1916+90	-	1918+20	LT	130
					TOTAL	2531

FOUNDATION BACKFILL

PROJECT ID	CATEGORY	STATION	LOCATION	SPV.0035.01 FOUNDATION BACKFILL (CY)
4530-06-71	010	1686+06	LT/RT	220
		1730+42	LT/RT	200
		1737+88	LT/RT	195
			TOTAL	615

GRADING AND SHAPING DITCH

PROJECT ID	CATEGORY	STATION	LOCATION	SPV.0090.01 GRADING AND SHAPING DITCH (LF)
4530-06-71	010	1525+07	LT/RT	100
		1558+42	LT/RT	60
		1578+33	LT/RT	60
		1631+18	LT/RT	60
		1695+72	RT	30
		1741+30	LT/RT	60
		1754+32	LT/RT	60
		1758+23	LT/RT	60
		1761+35	LT/RT	60
		1772+88	RT	30
		1788+23	LT	30
		1828+09	RT	30
		1844+02	LT	30
			TOTAL	670

ALL ITEMS CATEGORY 0010

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1A	STH 67, S. OF USH 45	D1-3	90" X 36"	22.50	---	---	2	---	---	---	SEE SIGN DETAILS
1B	"	D1-3	---	---	---	---	---	---	1	2	
1	"	D1-51	---	---	---	---	---	---	1	2	
2	"	D1-51	90" X 36"	22.50	---	---	2	---	---	---	
3	"	I55-56	30" X 36"	7.50	---	---	1	---	---	---	SEE PLAN SHEET
4	"	J2-2	48" X 57"	19.00	---	---	1	---	---	---	SEE PLAN SHEET
5	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH
6	"	J2-1	---	---	---	---	---	---	1	1	
7	"	I55-56	---	---	---	---	---	---	1	1	
8	"	D2-1	---	---	---	---	---	---	1	2	
9	"	J4-1	24" X 36"	6.00	---	---	1	---	---	---	SEE PLAN SHEET
10	"	W12-1D	---	---	---	---	---	---	1	1	
11	"	J4-1	---	---	---	---	---	---	1	1	
12	"	R1-1	36" X 36"	7.46	---	---	1	---	---	---	
13	"	R1-1	---	---	---	---	---	---	1	1	
14	"	J2-1	---	---	---	---	---	---	1	1	
15	"	J3-1	24" X 57"	9.50	---	---	1	---	---	---	SEE PLAN SHEET
16	"	J3-2	48" X 57"	19.00	---	---	1	---	---	---	SEE PLAN SHEET
17	"	R1-1	36" X 36"	7.46	---	---	1	---	---	---	
18	"	R5-1	---	---	---	---	---	---	1	1	
19	"	J3-1	24" X 57"	9.50	---	---	1	---	---	---	SEE PLAN SHEET
20	"	R1-1	---	---	---	---	---	---	1	1	
21	STH 67, N. OF USH 45	J3-2	---	---	---	---	---	---	1	1	
22	"	J3-2	---	---	---	---	---	---	1	1	
23	"	J3-1	24" X 57"	9.50	---	---	1	---	---	---	SEE PLAN SHEET
24	"	R1-1	---	---	---	---	---	---	1	1	
25	"	R1-1	36" X 36"	7.46	---	---	1	---	---	---	
26	"	J4-1	---	---	---	---	---	---	1	1	
27	"	W12-1D	---	---	---	---	---	---	1	1	
28	"	J2-1	---	---	---	---	---	---	1	1	
29	"	R1-1	---	---	---	---	---	---	1	1	
30	"	J3-1	24" X 57"	9.50	---	---	1	---	---	---	SEE PLAN SHEET
31	"	R5-1	---	---	---	---	---	---	1	1	
32	"	R1-1	36" X 36"	7.46	---	---	1	---	---	---	
33	"	J3-2	48" X 57"	19.00	---	---	1	---	1	1	SEE PLAN SHEET
34	"	J4-1	24" X 36"	6.00	---	---	1	---	---	---	SEE PLAN SHEET
35	"	J3-1	---	---	---	---	---	---	1	1	
PAGE SUBTOTALS				171.84	0.00	1	16	0	20	22	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
36	STH 67, N. OF USH 45	W1-3R	---	---	---	---	---	---	1	1	
37	"	W13-1	---	---	---	---	---	---	---	---	
38	"	D1-3	90" X 36"	22.50	---	---	2	---	---	---	
39	"	W1-5R	30" X 30"	---	6.25	---	1	---	---	---	
40	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 39
41	"	I55-56	---	---	---	---	---	---	1	1	
42	"	J2-2	48" X 57"	19.00	---	---	1	---	1	2	SEE PLAN SHEET
43	"	W3-1	36" X 36"	---	9.00	---	1	---	1	1	
44	VACANT	---	---	---	---	---	---	---	---	---	
45	STH 67, N. OF USH 45	W1-6	48" X 24"	---	8.00	1	---	---	1	1	
46	VACANT	---	---	---	---	---	---	---	---	---	
47	VACANT	---	---	---	---	---	---	---	---	---	
48	STH 67, N. OF USH 45	W1-6	48" X 24"	---	8.00	1	---	---	1	1	
49	"	W1-6	48" X 24"	---	8.00	1	---	---	1	1	
50	"	W1-6	48" X 24"	---	8.00	1	---	---	1	1	
51	"	J1-1	24" X 39"	6.50	---	---	1	---	1	1	SEE PLAN SHEET
52	"	W1-2R	---	---	---	---	---	---	1	1	
53	"	W13-1	---	---	---	---	---	---	---	---	
54	"	W1-3R	---	---	---	---	---	---	1	1	
55	"	W13-1	---	---	---	---	---	---	---	---	
56	"	D7-70	---	---	---	---	---	---	1	2	
57	"	W1-5L	30" X 30"	---	6.25	---	1	---	---	---	
58	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 57
59	"	W1-2L	---	---	---	---	---	---	1	1	
60	"	W13-1	---	---	---	---	---	---	---	---	
61	"	J1-1	24" X 39"	6.50	---	---	1	---	1	1	SEE PLAN SHEET
62	STH 67, S. OF CTH SS	D1-3	90" X 36"	22.50	---	---	2	---	1	2	SEE SIGN DETAILS
63	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	55 MPH
64	"	J4-1	24" X 36"	6.00	---	---	1	---	1	1	SEE PLAN SHEET
65	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
66	STH 67, N. OF CTH SS	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
67	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
68	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
69	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
70	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
PAGE SUBTOTALS				132.92	58.00	5	17	0	23	26	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
71	STH 67, N. OF CTH SS	J4-1	24" X 36"	6.00	---	---	1	---	1	1	SEE PLAN SHEET
72	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH
73	"	W1-2L	---	---	---	---	---	---	1	1	
74	"	W13-1	---	---	---	---	---	---	---	---	
75	"	W1-2L	30" X 30"	---	6.25	---	1	---	---	---	
76	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 75
77	"	J1-1	24" X 39"	6.50	---	---	1	---	---	---	SEE PLAN SHEET
78	"	J1-1	---	---	---	---	---	---	1	1	
79	"	R2-1	---	---	---	---	---	---	1	1	
80	"	W1-2R	30" X 30"	---	6.25	---	1	---	---	---	
81	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 80
82	"	W1-2R	30" X 30"	---	6.25	---	1	---	1	1	
83	"	W1-2L	30" X 30"	---	6.25	---	1	---	1	1	
84	"	W1-2L	---	---	---	---	---	---	1	1	
85	"	W13-1	---	---	---	---	---	---	---	---	
86	"	W1-5L	30" X 30"	---	6.25	---	---	1	---	---	
87	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 86
88	"	W57-51	30" X 15"	---	3.13	---	---	---	---	---	1/2 MILE; MOUNT BELOW SIGN 87
89	"	W1-5L	---	---	---	---	---	---	1	1	
90	"	W13-1	---	---	---	---	---	---	---	---	
91	"	I55-56	30" X 36"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
92	HAPPY HOLLOW RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
93	STH 67, N. OF HAPPY HOLLOW RD	W1-4R	---	---	---	---	---	---	1	1	
94	"	W2-3R	30" X 30"	---	6.25	---	1	---	1	1	
95	"	W2-2	30" X 30"	---	6.25	---	1	---	1	1	
96	BIRCHWOOD DR	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
97	STH 67, N. OF BIRCHWOOD DR	I55-56	30" X 36"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
98	"	W1-5L	30" X 30"	---	6.25	---	---	1	1	1	
99	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 98
100	"	W57-51	30" X 15"	---	3.13	---	---	---	---	---	1/2 MILE; MOUNT BELOW SIGN 99
101	"	W3-5	30" X 30"	---	6.25	---	1	---	1	1	35 MPH
102	"	W1-2R	30" X 30"	---	6.25	---	---	---	---	---	
103	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 102
104	"	W1-2R	---	---	---	---	---	---	1	1	
105	"	W13-1	---	---	---	---	---	---	---	---	
PAGE SUBTOTALS				42.86	80.00	3	11	2	18	18	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
106	STH 67, N. OF BIRCHWOOD DR	R2-1	24" X 30"	5.00	---	1	---	---	---	---	55 MPH
107	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
108	"	W5-52R	---	---	---	---	---	---	1	1	
109	"	D1-1	102" X 15"	10.63	---	2	---	---	1	2	SEE SIGN DETAILS
110	"	R2-1	---	---	---	---	---	---	1	1	
111	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
112	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
113	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
114	"	W7-1	30" X 30"	---	6.25	---	1	---	1	1	
115	STH 76, S. OF CTH G	D5-63A	---	---	---	---	---	---	1	2	
116	"	J1-2	48" X 39"	13.00	---	---	1	---	1	1	SEE PLAN SHEET
117	"	D1-1	102" X 15"	10.63	---	2	---	---	1	2	SEE SIGN DETAILS
118	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
119	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
120	"	W5-52R	---	---	---	---	---	---	1	1	
121	"	J4-1	24" X 36"	6.00	---	---	1	---	---	---	SEE PLAN SHEET
122	"	J13-2	48" X 45"	15.00	---	---	1	---	1	1	SEE PLAN SHEET
123	CTH G	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
124	"	J13-3	72" X 45"	22.50	---	2	---	---	1	2	SEE PLAN SHEET
125	STH 67, N. OF CTH G	J13-2	48" X 45"	15.00	---	---	1	---	1	1	SEE PLAN SHEET
126	"	R2-1	---	---	---	---	---	---	1	1	
127	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
128	"	J4-2	48" X 36"	12.00	---	---	1	---	---	---	SEE PLAN SHEET
129	"	J4-2	---	---	---	---	---	---	1	1	
130	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	35 MPH
131	"	D1-3	90" X 36"	22.50	---	---	2	---	1	2	SEE SIGN DETAILS
132	"	J13-2	48" X 45"	15.00	---	---	1	---	1	1	SEE PLAN SHEET
133	"	I2-3	54" X 24"	9.00	---	---	2	---	1	2	SEE SIGN DETAILS
134	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
135	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	25 MPH
136	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
137	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	35 MPH; MOUNT TO BACK OF SIGN 136
138	DINS HILLS RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
139	STH 67, N. OF DINS HILLS RD	J1-1	24" X 39"	6.50	---	---	1	---	1	1	SEE PLAN SHEET
140	"	D5-64L	---	---	---	---	---	---	1	2	
	PAGE SUBTOTALS			220.39	22.93	17	16	0	30	37	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
141	VACANT	---	---	---	---	---	---	---	---	---	
142	1ST ST	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
143	STH 67, N. OF 1ST ST	J4-1	---	---	---	---	---	---	1	1	
144	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	25 MPH
145	STH 67, S. OF CTH F	J3-2	48" X 57"	19.00	---	---	1	---	1	1	SEE PLAN SHEET
146	"	D1-51	90" X 48"	30.00	---	---	---	2	1	2	SEE SIGN DETAILS
147	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
148	"	JV-2	48" X 69"	23.00	---	---	---	1	1	1	SEE PLAN SHEET
149	"	J13-1	24" X 45"	7.50	---	---	---	---	---	---	SEE PLAN SHEET; MOUNT WITH SIGN 149 FACE NORTH
150	"	D1-51	90" X 78"	48.75	---	---	---	2	1	2	SEE SIGN DETAILS
151	CTH F	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
152	"	W4-4B	30" X 12"	---	2.50	---	---	---	---	---	MOUNT BELOW SIGN 151
153	"	JV-2	48" X 69"	23.00	---	---	---	1	1	1	SEE PLAN SHEET
154	"	W1-6	48" X 24"	---	8.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 153
155	STH 67, N. OF CTH F	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
156	"	W4-4AR	30" X 12"	---	2.50	---	---	---	---	---	MOUNT BELOW SIGN 155
157	"	JV-2	48" X 69"	23.00	---	---	---	1	1	1	SEE PLAN SHEET
157A	"	J4-1	---	---	---	---	---	---	1	1	
157B		R2-1	24" X 30"	5.00	---	1	---	---	---	---	25 MPH
158	ELM ST	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
159	STH 67, N. OF ELM ST	D5-64L	60" X 36"	15.00	---	---	2	---	1	2	SEE SIGN DETAILS
160	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
161	CTH F	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
162	STH 67, N. OF CTH F	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
163	"	J13-1	24" X 45"	7.50	---	---	1	---	1	1	SEE PLAN SHEET
164	"	J4-1	24" X 36"	6.00	---	1	---	---	---	---	SEE PLAN SHEET
165	CLEMENT CIR	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
166	STH 67, N. OF CLEMENT CIR	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
167	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	25 MPH
168	"	W11-2	30" X 30"	---	6.25	---	1	---	1	1	
169	"	W57-51	30" X 15"	3.13	---	---	---	---	---	---	2 MILES; MOUNT BELOW SIGN 168
170	"	J1-1	24" X 39"	6.50	---	---	1	---	1	1	SEE PLAN SHEET
171	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
172	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
173	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
174	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
175	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
PAGE SUBTOTALS				307.80	30.37	11	14	7	28	31	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
176	STH 67, N. OF CLEMENT CIR	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
177	"	D5-63A	---	---	---	---	---	---	1	2	
178	"	W1-3L	36" X 36"	---	9.00	---	1	---	1	1	
179	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
180	"	W5-52R	---	---	---	---	---	---	1	1	
181	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
182	"	W1-3L	36" X 36"	---	9.00	---	1	---	1	1	
183	"	D7-70	---	---	---	---	---	---	1	2	
184	"	W1-4L	30" X 30"	---	6.25	---	1	---	1	1	
185	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
186	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
187	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
188	"	W1-4R	30" X 30"	---	6.25	---	1	---	1	1	
189	"	W13-1	---	---	---	---	---	---	---	---	
190	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
191	"	W11-2	30" X 30"	---	6.25	---	1	---	1	1	
192	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
193	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
194	STH 67, S. OF LAKEVIEW RD	W11-2	30" X 30"	---	6.25	---	1	---	1	1	
195	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
196	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
197	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
198	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
199	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
200	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
201	"	W5-52R	---	---	---	---	---	---	---	---	
202	"	W5-52R	---	---	---	---	---	---	1	1	
203	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
204	"	W8-8	---	---	---	---	---	---	---	---	
205	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
206	LAKEVIEW RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
207	STH 67, N. OF LAKEVIEW RD	W11-2	30" X 30"	---	6.25	---	1	---	1	1	
208	"	W57-51	30" X 15"	3.13	---	---	---	---	---	---	2 MILES; MOUNT BELOW SIGN 207
209	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
210	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
	PAGE SUBTOTALS			103.31	49.25	20	7	0	31	33	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
211	STH 67, N. OF LAKEVIEW RD	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
212	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
213	"	I2-3	54" X 24"	9.00	---	---	2	---	1	2	SEE SIGN DETAILS
214	"	W1-5L	30" X 30"	---	6.25	---	1	---	1	1	
215	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 214
216	"	W5-52R	---	---	---	---	---	---	1	1	
217	STH 67, S. OF BOY SCOUT DR	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
218	BOY SCOUT DR	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
219	STH 67, BETWEEN BOY SCOUT DR	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
220	"	W1-4L	30" X 30"	---	6.25	---	1	---	1	1	
221	"	W1-5L	30" X 30"	---	6.25	---	1	---	1	1	
222	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	SPEED TBD; MOUNT BELOW SIGN 221
223	BOY SCOUT DR	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
224	STH 67, N. OF BOY SCOUT DR	W5-52R	---	---	---	---	---	---	1	1	
225	LOG CABIN RD	R1-1	30" X 30"	5.18	---	1	---	---	1	1	
226	STH 67, N. OF LOG CABIN RD	I55-56	---	---	---	---	---	---	1	1	
227	"	W1-5L	30" X 30"	---	6.25	---	1	---	1	1	
228	"	W2-2	30" X 30"	---	6.25	---	1	---	1	1	
229	"	W1-4L	30" X 30"	---	6.25	---	1	---	1	1	
230	"	W11-6	---	---	---	---	---	---	1	1	
231	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
232	"	W5-52R	---	---	---	---	---	---	1	1	
233	STH 67, S. OF CTH B	W1-5L	30" X 30"	---	6.25	---	1	---	1	1	
234	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
235	"	W5-52R	---	---	---	---	---	---	1	1	
236	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
237	"	W5-52R	---	---	---	---	---	---	1	1	
238	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
239	"	J1-1	24" X 39"	6.50	---	---	1	---	1	1	SEE PLAN SHEET
240	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
241	"	J2-2	48" X 57"	19.00	---	---	1	---	1	1	SEE PLAN SHEET
242	"	W3-1	36" X 36"	---	9.00	---	1	---	1	1	
243	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	35 MPH
244	"	J4-2	48" X 36"	12.00	---	---	1	---	1	1	SEE PLAN SHEET
245	"	R2-1	---	---	---	---	---	---	---	---	
	PAGE SUBTOTALS			112.04	57.25	13	13	0	31	32	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
246	STH 67, S. OF CTH B	D1-1	90" X 36"	22.50	---	---	2	---	1	2	SEE SIGN DETAILS
247	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
248	"	R1-3P	24" X 9"	1.50	---	---	---	---	---	---	MOUNT BELOW SIGN 247
249	"	J3-2	48" X 57"	19.00	---	---	1	---	1	1	SEE PLAN SHEET
250	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
251	CTH B	J13-2	48" X 45"	15.00	---	---	1	---	1	1	SEE PLAN SHEET
252	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
253	"	R1-3P	24" X 9"	1.50	---	---	---	---	---	---	MOUNT BELOW SIGN 252
254	CTH G	J13-2	48" X 45"	15.00	---	---	1	---	1	1	SEE PLAN SHEET
255	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
256	"	R1-3P	24" X 9"	1.50	---	---	---	---	---	---	MOUNT BELOW SIGN 255
257	STH 67, N. OF CTH G	J3-2	48" X 57"	19.00	---	---	1	---	1	1	SEE PLAN SHEET
258	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
259	"	R1-3P	24" X 9"	1.50	---	---	---	---	---	---	MOUNT BELOW SIGN 258
260	"	R2-1	---	---	---	---	---	---	1	1	
261	"	J4-1	24" X 36"	6.00	---	---	1	---	1	1	SEE PLAN SHEET
262	"	D1-2	78" X 24"	13.00	---	2	---	---	1	2	SEE SIGN DETAILS
263	"	R2-1	24" X 30"	5.00	---	1	---	---	---	---	45 MPH
264	"	J2-1	24" X 57"	9.50	---	---	1	---	1	1	SEE PLAN SHEET
265	"	W3-1	36" X 36"	---	9.00	---	1	---	1	1	
266	"	J1-2	48" X 39"	13.00	---	---	1	---	1	1	SEE PLAN SHEET
267	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
268	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
269	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
270	"	W1-4R	30" X 30"	---	6.25	---	1	---	1	1	
271	"	W14-3	48" X 36"	---	5.56	---	1	---	1	1	
272	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	55 MPH
273	"	R2-1	24" X 30"	5.00	---	1	---	---	1	1	45 MPH
274	"	W3-5	36" X 36"	---	9.00	---	1	---	1	1	45 MPH
275	"	W1-2R	30" X 30"	---	6.25	---	1	---	1	1	
276	"	I55-56	---	---	---	---	---	---	1	1	
277	"	W1-4R	30" X 30"	---	6.25	---	1	---	1	1	
278	"	I2-2	90" X 15"	9.38	---	2	---	---	---	---	SEE SIGN DETAILS
279	"	W1-6	30" X 30"	---	6.25	---	---	---	1	1	MOUNT TO BACK OF SIGN 278
280	"	I2-2	90" X 15"	9.38	---	2	---	---	1	2	SEE SIGN DETAILS
281	"	W1-6	30" X 30"	---	6.25	---	1	---	1	1	
PAGE SUBTOTALS				219.05	60.37	11	22	0	30	33	
PROJECT TOTALS				**1310.20**	**358.17**	**81**	**116**	**9**	**211**	**232**	

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 14 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
1	CTH G, N. OF STH 67, 500' N OF J1-2 (JCT B/67) ON CTY G	M 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	W 20-2A	48"x48"	1	14	14						
2	CTH G, N. OF STH 67, 200' S OF STOP AHEAD SIGN ON CTY G @ STH 67/B	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 5-1R	21"x21"	1	14	14						
3A	CTH G, AT STH 67 INTERSECTION, MODIFY J2-3 (67-LT & AH; G-AH; B-RT)	MO 3-1	24"x12"	1	14	14						
	"	MO 6-1	21"x21"	1	14	14						LEFT
3B	CTH G, AT STH 67 INTERSECTION, RT OF J2-3 (67-LT & AH; G-AH; B-RT)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						RIGHT
4	STH 67, E. OF CTH G, 250' OF J1-2 (JCT B; JCT G) ON STH 67 WB	W 20-2A	48"x48"	1	14	14						
5	STH 67, E. OF CTH G, MODIFY J2-1 (S-67-AH LT)	MO 4-8	24"x12"	1	14	14						
	"	MO 6-1	21"x21"	1	14	14						AHEAD
6	STH 67, E. OF CTH G, D1-3 (AH-ARMSTRONG; LT-DUNDEE; ST CLOUD-RT)									1	1	LT DUNDEE
7	STH 67, AT CTH G INTERSECTION, MODIFY J3-1 (S-67-LT)	MO 4-8	24"x12"	1	14	14						
	"	MO 6-1	21"x21"	1	14	14						AHEAD
8	STH 67, AT CTH B INTERSECTION, SW QUAD OF HWY 67 & CTY B INTERSECTION	R 11-3	60"x30"	1	14	14	14	28				3 3/4 MILES AHEAD
9	STH 67, AT CTH B INTERSECTION, BELOW SIGN # 8	MO 4-9R	30"x24"	1	14	14						
10	STH 67, S. OF CTH B INTERSECTION, J4-1 (S-67)									1	1	SOUTH 67
11	CTH B, W. OF STH 67, RT OF J3-1 (W-B-AH)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
12	CTH B, W. OF STH 67, MODIFY J2-3 (G LT & RT; 67-AH & RT; END B)	MO 6-1	21"x21"	1	14	14						AHEAD
13	CTH B, W. OF STH 67, 500' W OF SIGN # 12	MO 4-8A	24"x18"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
14	CTH B, E. OF SHEENHAN LAKE RD, 200' E OF SHEEHAN LAKE RD INTERSECTION ON CTY B	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
15	CTH B, W. OF SHEENHAN LAKE RD, 200' W OF SHEEHAN LAKE RD INTERSECTION ON CTY B	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
16A	CTH B, E. OF MUSHROOM RD, 200' E OF MUSHROOM RD INTERSECTION ON CTY B	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
16B	CTH B, W. OF MUSHROOM RD, 200' W OF MUSHROOM RD INTERSECTION ON CTY B	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
	PAGE SUBTOTALS			43		602	14	28	0		2	

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 14 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
17	US 45, W. OF CTH B, 1500' W. OF CTH B INTERSECTION	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	W 20-2A	48"x48"	1	14	14						
18	US 45, W. OF CTH B, 750' W. OF CTH B INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 5-1L	21"X21"	1	14	14						
19	US 45, W. OF CTH B, LEFT OF EXISTING J13-1 SIGN AT INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						LEFT
20	US 45, AT CTH B INTERSECTION, ACROSS FROM CTH B	MO 4-8	24"X12"	1	14	14						
	"	M 3-3	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						LEFT
21	CTH B, AT US 45, RIGHT OF EXISTING J13-2 AT INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-3	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						LEFT
22	CTH B, N. OF US 45, PLACE 100' N. OF US 45	MO 4-8	24"X12"	1	14	14						
	"	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						AHEAD
23	CTH B, N. OF US 45, PLACE 500' N. OF US 45	MO 4-8	24"X12"	1	14	14						
	"	M 3-3	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 5-1L	21"X21"	1	14	14						
24	US 45, S. OF CTH B, PLACE RIGHT OF EXISTING J13-1 AT CTH B	MO 4-8	24"X12"	1	14	14						
	"	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						RIGHT
25	US 45, S. OF CTH B, 750' S. OF CTH B	MO 4-8	24"X12"	1	14	14						
	"	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 5-1R	21"X21"	1	14	14						
26	CTH B, W. OF CTH W, 100' W. OF CTH W	MO 4-8	24"X12"	1	14	14						
	"	M 3-3	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						AHEAD
27	CTH B, E. OF CTH W, 100' E. OF CTH W	MO 4-8	24"X12"	1	14	14						
	"	M 3-1	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						67
	"	MO 6-1	21"X21"	1	14	14						AHEAD
28	US 45, N. OF CTH W, ON BACKSIDE OF J13-1 (W-LT) ON HWY 45	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
	PAGE SUBTOTALS			47		658	0	0	0		0	

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

3

3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 14 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
29	US 45, S. OF CTH W, LT OF J13-1 (W-AH & RT)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
30	VACANT											
31	VACANT											
32	US 45, N. OF WEST CTH F, LT OF J4-1 (N-45) @ CTY F (WEST LEG)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
33	US 45, S. OF WEST CTH F, LT OF J13-1 (CTY F AH LT) ON HWY 45 (SB)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
34	US 45, N. OF EAST CTH F, LT OF J13-1 (CTY F-AH LT) ON HWY 45 (NB)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
35	US 45, S. OF EAST CTH F, LT OF J4-1 (S-45) @ CTY F (EAST LEG)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
36	US 45, N. OF CTH SS, 200' N OF CTY SS INTERSECTION ON HWY 45 (NB)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
37	US 45, S. OF CTH SS, 200' S OF CTY SS INTERSECTION ON HWY 45 (NB)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-3	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
38	US 45, N. OF STH 67, MODIFY EXISTING J1-1 AS SHOWN (JCT 67)	MO 4-8A	24"x18"	1	14	14						
39	US 45, N. OF STH 67, COVER EXISTING J2-3 AS SHOWN (N-67-AH RT; S-45-AH; S-67- AH RT)									1	1	N-67-AH LT
40	US 45, N. OF STH 67, COVER EXISTING D1-3 AS SHOWN (AH-KEWASKUM; LT-PLYMOUTH; CAMPBELLSPORT-RT)									1	1	LT-PLYMOTH
41	US 45, N. OF STH 67, COVER EXISTING J3-2 AS SHOWN (N-67-LT; S-67-RT)									1	1	N-67-LT
42	STH 67, N. OF US 45, COVER EXISTING J4-1 AS SHOWN (N-67)									1	1	N-67
43	STH 67, S. OF US 45, 300' W OF J1-1 (JCT 45)	W 20-2A	48"x48"	1	14	14						
44	STH 67, S. OF US 45, 300' E OF J1-1 (JCT 45)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 5-1L	21"x21"	1	14	14						
45	D1-3 (AH-DUNDEE; LT-EDEN; KEWASKUM-RT)									1	1	AH-DUNDEE
46	STH 67, AT US 45 INTERSECTION, RT OF J 3-1 (N-45-LT)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						LEFT
	PAGE SUBTOTALS			38		532	0	0	0		5	

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 14 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
47	US 45, S. OF STH 67, 300' S OF J1-1 (JCT 67)	M 3-1	24"X12"	1	14	14						
		M 1-6	24"X24"	1	14	14						67
	"	W 20-2A	48"x48"	1	14	14						
48	US 45, S. OF STH 67, MODIFY EXISTING J2-3 AS SHOWN (S-67-AH LT; N-45-AH; N-67-AH RT)	MO 4-8	24"x12"	1	14	14						
	"	MO 6-1	21"x21"	1	14	14						AHEAD
49	US 45, S. OF STH 67, COVER EXISTING D1-3 AS SHOWN (AH-EDEN; LT-CAMPBELLSPORT; DUNDEE-RT)									1	1	DUNDEE-RT
50	US 45, AT STH 67 INTERSECTION, MODIFY EXISTING J3-2 AS SHOWN (S-67-LT; N-67-RT)	MO 4-8	24"x12"	1	14	14						
	"	MO 6-1	21"x21"	1	14	14						AHEAD
51	STH 67, AT US 45 INTERSECTION, SE QUAD OF HWY 67 & HWY 45 INTERSECTION	R 11-3	60"x30"	1	14	14	14	28				3 1/2 MILES AHEAD
	"	MO 4-9L	30"x24"	1	14	14						
52	VACANT											
53	US 45, N. OF STH 67, LT OF J4-1 (N-45)	MO 4-8	24"x12"	1	14	14						
	"	MO 3-1	24"x12"	1	14	14						
	"	M 1-6	24"x24"	1	14	14						67
	"	MO 6-1	21"x21"	1	14	14						AHEAD
57	STH 67, AT CTH G INTERSECTION, SW QUAD OF HWY 67 & CTY G (SOUTH LEG) INTERSECTION	R 11-3	60"x30"	1	14	14	14	28				1/4 MILE AHEAD
58	STH 67, AT LAKEVIEW RD, PLACE IN NW QUADRANT OF INTERSECTION	R 11-3	60"x30"	1	14	14	14	28				1 1/2 MILES AHEAD
59	STH 67, S. OF CTH F, FIELD DETERMINE LOCATION ON STH 67 NB			1					7			PLACE IN ADVANCE OF CLOSURE
60	STH 67, N. OF CTH F, FIELD DETERMINE LOCATION ON STH 67 SB			1					7			PLACE IN ADVANCE OF CLOSURE
	PAGE SUBTOTALS			17		210	42	84	14	1		
	PROJECT TOTALS			**145**		**2,002**	**56**	**112**	**14**	**8**		

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJ NO. 4530-06-21

USH 45 - ECL

USH 45 - DIVISION ROAD

STH 67

FOND DU LAC COUNTY



-O D DU LAC COUNTY

PROJECT LOCATION

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LIN-
SI\TEENTH LINE
NEW REFEREN E LI E
NE P/W LINE
E/I TING R/W LIN
PERTY LI E
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND F-CILITY (COMMUNICATIONS, ELECTRIC, ETC)
F-E ACQUISITI N AREA (HATCHING VARES BY OWN-R
TEMPORARY LIMITED EASEMENT AREA
E-SEMENT AREA (HIGHWAY, PERMANENT LIMITED, R RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT

SECTION CORNER
NOTATION FOR COMBUSTABL- FLUIDS
NOTATION FOP HIGH VOLTAGE TRANS I SION LINES
R/W M NUMENT
NON-M NUMENTED R/W POI T
FOUND IRON PIN
VALVE (GAS AIER, T
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	ø	ø
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	▣	▣

ACCESS RESTRICTED (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)

BRIDGE

PARCEL NUMBER 25
UTILITY NUMBER 201

CONVENTION-L ABBREVI-TIO S

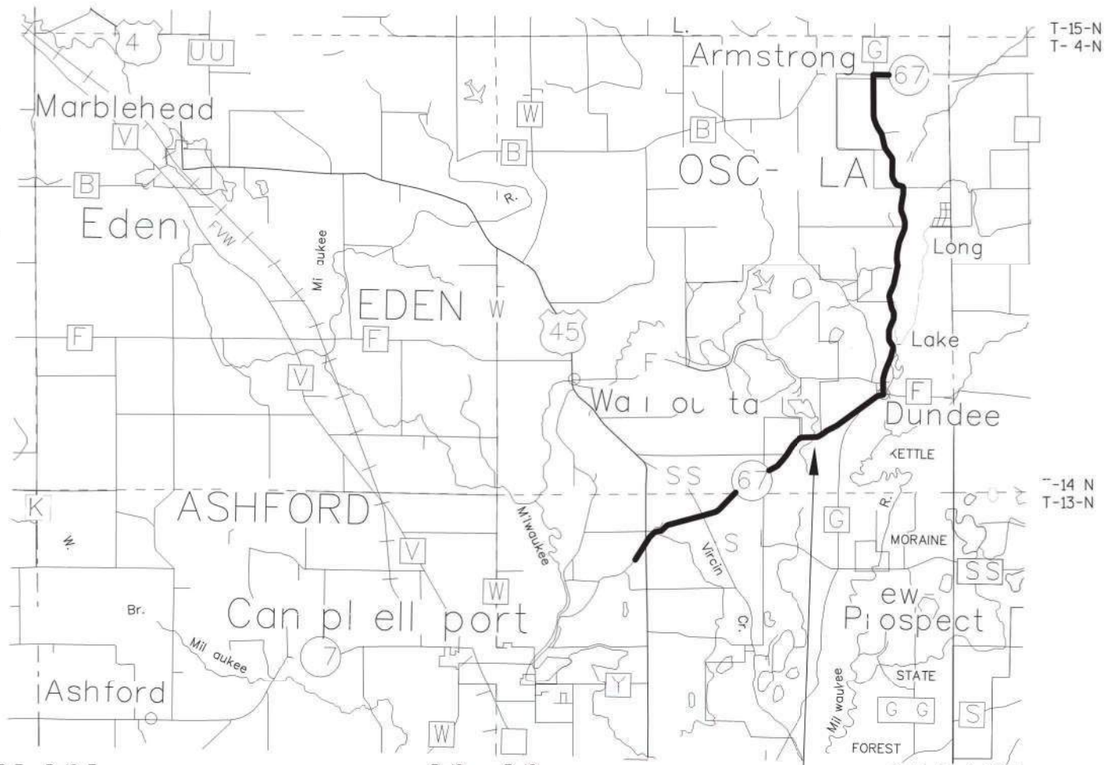
- C-SS RI HTS	AR	POINT OF OMPO ND CUPVE	PC
ACRES	AC	rOIN" OF INTERSECTION	rI
AHEAD	AH	PROPER"Y INE	n
A UMINUM	ALUM	R-CORDED AS	('00')
AND O"HE'S	E" AL	¬EFERENCE LINE	R/L
BACK	BK	R- AINING	REM
BLOCK	BLK	RIGHT	RT
C-NTERLINE	C L	RIGHT OF WAY	R/W
CERTI-IE SURVEY MAP	CSM	SECTION	EC
CONCRETE	O C	EPTIC ENT	SEPV
C UNTY	CO	SQUAP FEET	SF
COUNTY TRUNI H_G IWAY	CTII	STATE IPUNK HI HWAY	STH
DIS"ANCE	DISI	STATION	TA
CORNER	COr	SUBDIVISION	SUBD
DOCUM-NT NUMBER	OC	T- GENT	TAN
EASEMENT	EASE	TELEPH NE P-DESTAL	r
EXISTTNG	EX	IEMPO?ARY LIMTTE EASEMENT	ILE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NO-TH	GN	I NI"ED STATES IITGHW-Y	U II
HI HWA EASEMENT	H-	VOLUME	V
IDENTI-IC- ION	ID		
LAND C NTRA T	L		
LEF"	LT		
MONUMENT	MON		
N-TIONAL GEO ETIC SURVEY	NGS		
NJMBER	NO		
OUTLOT	O		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMIIED E-SC E T	rLE		
POT T OF BEGTNNING	POB		
POINT OF CI RVATURE	PC		

CURVE DA"A

LONG CHORD	LC
LO G CHORD BE PING	LCB
RADIJS	R
DEGREE OF CURVE	D
CE TRA ANGLE OR DELT-	Δ
LENGTH OF CURVE	L
TANGEN"	T
DIR-CTION AHEAD	A
DIRECTION BACK	DB

CONVE IIONAL UTILITY SYMBOLS

WATER	W
G-S	G
T-LEPHONE	T
O ERHEAD TRANSMISSI N LI S	OH
ELECIRIC	E
CAB E TELEVI _ON	TV
FIBER OPTIC	FO
ANIT RY SE ER	SAN
STORM SEWEF	SS



THE NOTES,CONVE TIONA SIGNS, AND A BR-VIATIONS ARE ASSO IATED WITH EACH TRANSPORTATION rROJEC PL-T FOP PROJECT 4530- 6-00

N TES:

POSITIONS SHOWN ON THIS PL-T ARE WISCONSIN COORDIN-TE REFERENCE SYSTEM (WISCRS), FOND I LAC COUNTY, - 83(2007), IN U.S. SUR EY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND RID ISTANCES. GRID DISTANCES M-Y BE JS D AS GROUN DISTANCES.

ALL NEW RIGHT-OF-WAY MONU ENTS WILL E TYPE 2 (TYPICALLY 1" X 24" IRON PIPE WITH DOT C P), UNLESS OIHERWTSE NOTED, AND WTLL B- PLACED rRI R TO THE COMPLETTON OF THC PROJECT.

-LL PIGHT-OF-WAY LINES DEPIC"ED IN TIC N N-ACQUIS "I N AREAS ARE INTENDED TO RE-EST-BLISH E/ISTI G RIGHT-OF-WAY LINES AS DETERMI ED FROM PREVTOUS PRO E IS O HER PECORDED D C ME "S, OR FR M CENTERLINE OF EXISIING PAVE EN"S.

RIGH -OF-WA) BOUND-RIES ARE DEFINCD WITH URSES OF THE PEPIMEIER OF THE HI HWAY LANDS REFERENCED TO THE U.S PUBLIC LAN SURVEY S'STEM OR OTH-R "SURVEYS" OF PJBLIC RECORD

DIMENSIONING FOR T-E NEW RIGHT-OF-WAY IS MEA URED ALONG ND P-RPEN ICULAR TO "HE NEW REFERENCE LI - .

A TEMPORAPY LIMITED EASEMEN (TLE) I A RIGHT FOR CONSTRUCTION PURPOSES, AS DFINED HEREIN, IN LUDING THE RIGHT I OPERATE NECES ARY QUIPMENT THEREON, IHE RIGHT OF INGRESS AND EGRESS, AS LONG -S REQUIRED FOR SUCH PUBLIC PI PPOSE, INCLUDING THE RIGHT TO PRES-RVE, PROTEC", REMOVE, OR PLANT IHEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRA LE. ALL (TLEs ON THIS rLAT EXPIR- AT IHE C PLETION OF TH- CONSTRUCTION PROJ-CT FOR WHICH THIS INSTRUMENI IS GI EN.

- P-RMANENT LIMTTED EASEMEN" (PLE) IS A RI HT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPER-TE NECE SARY EOJIPMENT H-REON - D THE RIGIT OF INGRESS AND -GRESS, AS AS REQ IPED FOP SUCH PUBLIC PURPOSE, INCLUDING IHE RIG IT TO PRESERV-, PRO"E T, R MOVE, OR PLANT "HEREON ANY VEGETATION THAI THE HIGHWAY AUTHORITIES -) DEEM DESIRABLE, BJI WITHOUT PREJUD" E TO THE OWNEP'S RIGHTS "O MAKE OR CONS"RUC" I PROVE TS ON SAID LA DS OF TO LATIEN THE SL PES, PROVIDING SAID AC I _TIES ILL NOT IM AIR O- THERWISC ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PPOPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM D TA ERIVED FROM MAPS AND DOCUMENTS O- PUBLI RECO'D AND/OR EXISIIN CCUPATIO AL INES. IHI PLAT MA) NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDI G RIGHT-OF-WAY, AND SHOULD NOT BC USED -S A SUBSTITUTE FOR AN ACCURAT- FIELD SUR EY.

FOR TIC LATEST ACCESS/DRIVE AY IN- RMATION, CONTACT THE PLANNING UNI" OF T IE WISCO SIN D-PARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY, WTSCONSIN.

PAP EL IDENTIFICATION NJMBERS MAY NOT POINT IO ALL AREAS OF A UISITION, AS NOTED ON T-E SCIEDULE O- LANDS & INTERESTS REQ IRED.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21- 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : \CORP.MEADHUNT.COM\SHAREDFO DERS\ENTP\3 30 00\113975 04\TECH\CAD\RW\040101_TI- TPP 530-06-21.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 9 13/201 :0:38 AM
PRE_87
PLOT BY : WI LEAM I OTTLER
PLOT NAME :
4530-06-21 4.01

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.01 AMENDMENT NUMBER 2. AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21 - 4.01, RECORDED AS DOCUMENT NUMBER 1090466, REVISES PARCEL 1 AND PARCEL 8, REMOVES PARCEL 2, AND REMOVES UTILITY NUMBER 801.

PART OF LOT 4 AND 8, CSM 6009 LOCATED IN AND INCLUDING THE NE 1/4 OF THE SE 1/4, SECTION 5, AND PART OF LOT 2, CSM 358 LOCATED IN AND INCLUDING THE NW 1/4 OF THE SW 1/4 SECTION 4, TOWNSHIP 13 NORTH, RANGE 19 EAST, TOWN OF AUBURN, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY, USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1098471
Recorded
May 02, 2018 1:19 PM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.01
SHEET 1 OF 1
AMENDMENT NO: 2

Recorded this 2nd day of May, 2018 at 1:19 PM in VOL. 19 Pg. 52 Doc # 1098471
Register of Deeds, Fond du Lac County, WI

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF	PLE SF
1	THE LUNCH & TACKLE BOXES, LLC	PLE	---	---	---	---	955
5	TOWN OF AUBURN	FEE	---	953	953	---	---
6	WILLIAM L. OSTRANDER AND TRACY R. OSTRANDER	TLE	---	---	---	1641	---
7	P&Q EAST OF WINNEBAGO LLC	FEE & TLE	365	---	365	6564	---
8	CARY R. RAMTHUN	PLE	---	---	---	---	1207
9	ERIC J. KLEIN AND CHARITY A. KLEIN	FEE, TLE & PLE	882	---	882	1166	4064

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOT PROJECT 4090-03-20, DOT 2646, DOT PROJECT F 027-1(15), CSM 358 AND CSM 6009. ACCESS RESTRICTED BY CSM 6009.
EXISTING SIDE ROAD RIGHT-OF-WAYS SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOT PROJECT F 027-1(15).

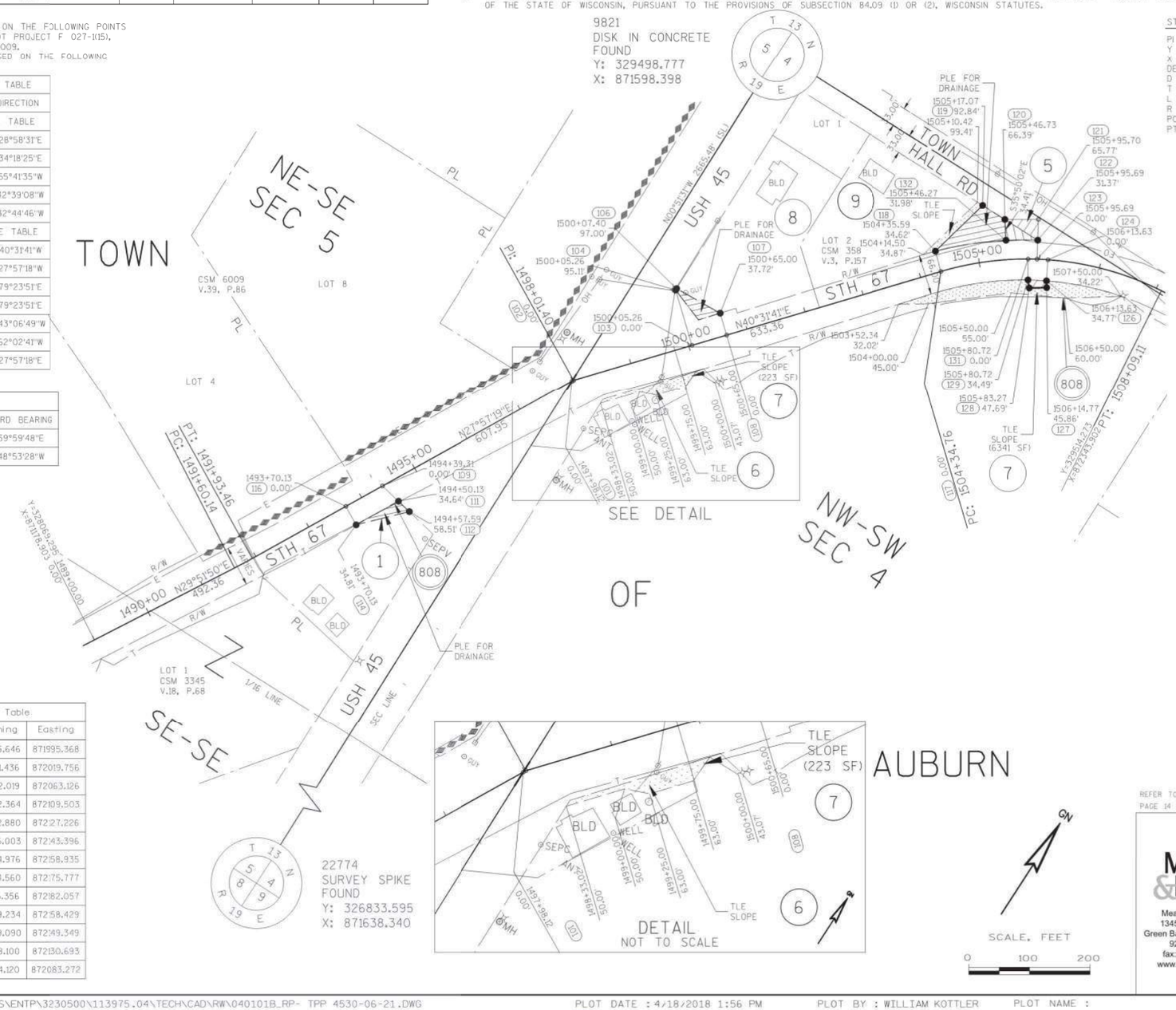
RIGHT-OF-WAY LINE TABLE		
PT*-PT*	LENGTH	DIRECTION
22774-101	2024.79	N0°51'31"W
101-102	3.28	N27°57'18"E
102-103	203.86	N40°31'41"E
103-104	95.11	N49°28'19"W
104-106	2.86	N0°51'31"W
106-107	82.66	N86°21'19"E
107-108	37.71	S49°28'19"E
108-117	369.76	N40°31'41"E
117-118	34.63	N48°00'04"W
118-119	108.57	N12°58'54"E
119-120	43.37	N89°13'48"E
120-121	55.42	N56°48'09"E
121-122	34.40	S31°00'38"E
122-123	31.37	S31°01'54"E

RIGHT-OF-WAY LINE TABLE		
PT*-PT*	LENGTH	DIRECTION
123-124	SEE CURVE TABLE	
124-126	34.77	S28°58'31"E
126-127	11.14	S34°18'25"E
127-128	28.60	S55°41'35"W
128-129	13.40	N42°39'08"W
129-131	34.49	N32°44'46"W
131-117	SEE CURVE TABLE	
117-102	633.36	S40°31'41"W
102-109	362.10	S27°57'18"W
109-111	36.30	S79°23'51"E
111-112	25.00	S79°23'51"E
112-114	90.61	S43°06'49"W
114-116	34.81	N62°02'41"W
116-101	427.99	N27°57'18"E

CURVE TABLE					
PT*-PT*	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
123-124	17.94	500.00	2°03'23"	17.94	N59°59'48"E
131-117	145.96	500.00	16°43'33"	145.44	S48°53'28"W

STH 67 CURVE DATA
PI STA = 1491+76.80
Y = 328309.34
X = 871316.74
DELTA = 1°54'32"
D = 5°43'46"
T = 16.66
L = 33.31
R = 1000.00
PC STA = 1491+60.14
PT STA = 1491+93.46

STH 67 CURVE DATA
PI STA = 1506+31.20
Y = 329491.78
X = 872148.76
DELTA = 42°53'50"
D = 11°27'33"
T = 196.44
L = 374.35
R = 500.00
PC STA = 1504+34.76
PT STA = 1508+09.11



Point Table		
Point #	Northing	Easting
101	328858.164	871607.998
102	328861.064	871609.537
103	329016.011	871742.007
104	329077.816	871669.714
106	329080.673	871669.671
107	329085.927	871752.160
108	329061.419	871780.827
109	328541.219	871439.794
111	328534.541	871475.471
112	328529.941	871500.044
114	328463.796	871438.118
116	328480.116	871407.367
117	329342.471	872021.107

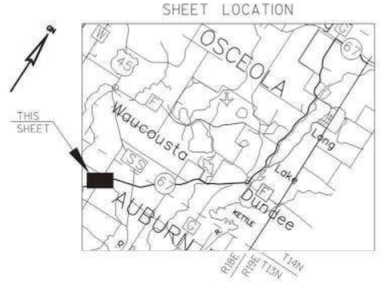
Point Table		
Point #	Northing	Easting
118	329365.646	871995.368
119	329471.436	872019.756
120	329472.019	872063.126
121	329502.364	872109.503
122	329472.880	872127.226
123	329446.003	872143.396
124	329454.976	872158.935
126	329424.560	872175.777
127	329415.356	872182.057
128	329399.234	872158.429
129	329409.090	872149.349
131	329438.100	872130.693
132	329444.120	872083.272

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCEL 1, 6, 7 & 9
DOC. 243260
DOC. 243269

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS

SHEET LOCATION



PROJECT LOCATION

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

SCALE, FEET
0 100 200

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM T. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4530-06-21-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM T. KOTTLER S-2348 CROSS PLAINS LAND SURVEYOR

DATE 04-18-2018
WILLIAM T. KOTTLER,
PLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) DATE 04-19-2018
(PRINTED NAME) CURT VAN EREM

FILE NAME : \\CORP.MEADHUNT.COM\SHAREDFOLDERS\ENTP\3230500\113975.04\TECH\CAD\RW\040101B_RP- TPP 4530-06-21.DWG
PLOT DATE : 4/18/2018 1:56 PM
PLOT BY : WILLIAM KOTTLER
PLOT NAME :
PLOT SCALE : 1:200
APPRAISAL PLAT DATE : ----------
PRE_88
---------- 4530-06-21 4.01b

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
11	MILWAUKEE BEAGLE CLUB	TLE	---	---	---	84
13	DANIEL JAMES BOWEN, EDWARD EDGAR BOWEN & DORIS ROSE BOWEN	FEE & TLE	17593	22220	39813	4034
14	JOHN J. JANZ AND JEAN M. JANTZ (F.K.A JEAN M. HOLTZ)	FEE	1639	3147	4786	---

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOT PROJECT 2644.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.02 AMENDMENT NUMBER 1. AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21-4.02, RECORDED AS DOCUMENT NUMBER 1093544, REVISES PARCEL 14.

PARTS OF THE SW 1/4 OF THE NW 1/4, SE 1/4 OF THE NW 1/4 AND THE SW 1/4 OF THE NE 1/4, SECTION 4, TOWNSHIP 13 NORTH, RANGE 19 EAST, TOWN OF AUBURN, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

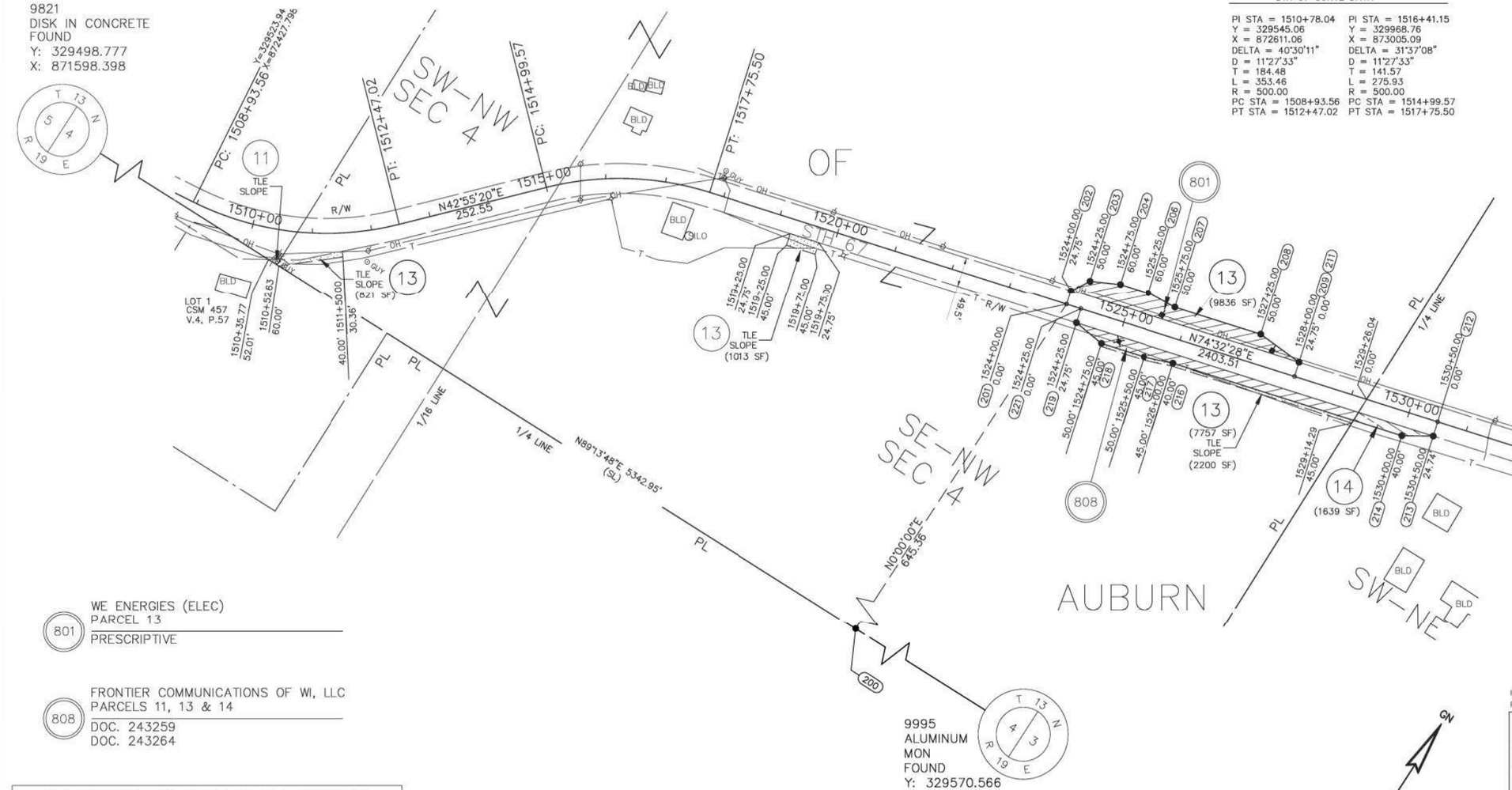
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC # 1107716
Recorded December 14, 2018 at 10:34 AM
JAMES M KREBS , REGISTER OF DEEDS
FOND DU LAC COUNTY, WI
Fee Amount: $25.00

Returned to: WisDOT - NE Region - Green Bay - PC
This document has been electronically recorded.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.02
AMENDMENT NO: 1



STH 67 CURVE DATA

PI STA = 1510+78.04	PI STA = 1516+41.15
Y = 329545.06	Y = 329968.76
X = 872611.06	X = 873005.09
DELTA = 40°30'11"	DELTA = 31°37'08"
D = 11°27'33"	D = 11°27'33"
T = 184.48	T = 141.57
L = 353.46	L = 275.93
R = 500.00	R = 500.00
PC STA = 1508+93.56	PC STA = 1514+99.57
PT STA = 1512+47.02	PT STA = 1517+75.50

RIGHT-OF-WAY LINE TABLE

PT#-PT#	LENGTH	DIRECTION
9995-200	3197.70	S89°13'48"W
200-201	645.36	N0°0'0"E
201-202	24.75	N15°27'32"W
202-203	35.53	N29°15'32"E
203-204	50.99	N63°13'52"E
204-206	50.00	N74°32'28"E
206-207	50.99	N85°51'03"E
207-208	150.00	N74°32'28"E
208-209	79.14	S86°51'19"E
209-211	24.75	S15°27'32"E
211-212	250.00	N74°32'28"E
212-213	24.74	S15°27'32"E
213-214	52.28	S57°34'26"W
214-216	400.00	S74°32'28"W
216-217	50.25	S68°49'49"W
217-218	75.00	S74°32'28"W
218-219	53.95	N83°24'30"W
219-221	24.75	N15°27'32"W
221-201	25.00	S74°32'28"W

Point Table

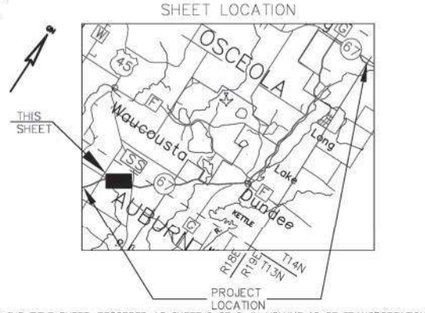
Point #	Northing	Easting
201	330172.959	873743.451
202	330196.816	873736.853
203	330227.814	873754.219
204	330250.779	873799.744
206	330264.107	873847.935
207	330267.796	873898.792
208	330307.778	874043.365
209	330303.437	874122.381
211	330279.578	874128.979
212	330346.216	874369.935
213	330322.366	874376.530
214	330294.335	874332.405
216	330187.716	873946.877
217	330169.569	873900.019
218	330149.578	873827.732
219	330155.771	873774.143
221	330179.623	873767.546

801 WE ENERGIES (ELEC)
PARCEL 13
PRESCRIPTIVE

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCELS 11, 13 & 14
DOC. 243259
DOC. 243264

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
801	WE ENERGIES (ELEC)	RELEASE OF RIGHTS
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS



GN

SCALE, FEET
0 100 200

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

I, GREGORY T. BELANGER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Gregory T. Belanger DATE: 12/12/2018
PRINT NAME: GREGORY T. BELANGER
REGISTRATION NUMBER: S-3055

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
REGIONOFFICE
SIGNATURE: Curt Van Erem DATE: 12/12/2018
PRINT NAME: CURT VAN EREM

WISCONSIN GREGORY T. BELANGER S-3055 GREEN BAY WI LAND SURVEYOR

FILE NAME : \\CORP.MEADHUNT.COM\SHAREDFOLDERS\ENTP\3230500\113975.04\TECH\CAD\RW\040102A_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 12/13/2018 9:00 AM
PLOT BY : DAVID YAHNKE
PRE_89
4530-06-21 4.02a

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 – 4.03 AMENDMENT NUMBER 2. AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21-4.03, RECORDED AS DOCUMENT NUMBER 1104583, REVISES UTILITY NUMBER 801.

DOC # 1115895
Recorded July 19, 2019 at 02:53 PM
JAMES M KREBS , REGISTER OF DEEDS
FOND DU LAC COUNTY, WI
Fee Amount: $25.00

Returned to: WisDOT - NE Region - Green Bay - PC
This document has been electronically recorded.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 – 4.03
AMENDMENT NO: 2

PART OF OUTLOT 1, CSM 5631 LOCATED IN AND INCLUDING THE NW 1/4 OF THE NW 1/4, SECTION 3, AND PARTS OF THE NE 1/4 OF THE NE 1/4 AND SE 1/4 OF THE NE 1/4, SECTION 4, TOWNSHIP 13 NORTH, RANGE 19 EAST, TOWN OF AUBURN, AND PART OF THE SW 1/4 OF THE SW 1/4, SECTION 34, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 – ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
15	CHARLES J. TUR AND ANGELINE J. TUR FAMILY TRUST	TLE	0	0	0	72
16	MARK R. SCHULTZ AND MICHAEL F. SCHULTZ	FEE & TLE	11313	0	11313	359
17	HAROLD R. SCHULTZ AND ARLEEN C. SCHULTZ AS TRUSTEES OF THE HAROLD AND ARLEEN SCHULTZ FAMILY TRUST	FEE & TLE	12190	12364	24554	789
18	ERHF TRANSITION TRUST OF MAY 7, 2009	FEE & TLE	3404	57	3461	822
19	PETER NECKUTY AND JANE M. NECKUTY	FEE & TLE	4047	5035	9082	952

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOT PROJECT 2644 AND CSM

STH 67 CURVE DATA

PI STA = 1552+59.53	PI STA = 1569+95.28
Y = 330942.81	Y = 332226.70
X = 876497.39	X = 877678.18
DELTA = 31°30'53"	DELTA = 12°40'02"
D = 9°32'57"	D = 3°38'16"
T = 169.30'	T = 174.82'
L = 330.02'	L = 348.21'
R = 600.00'	R = 1575.00'
PC STA = 1550+90.23	PC STA = 1568+20.46
PT STA = 1554+20.26	PT STA = 1571+68.67

CURVE TABLE					
PT#-PT#	LENGTH	RADIUS	DELTA	CHORD DIST	CHORD BEARING
301-302	91.06'	1575.00'	3°18'45"	91.04'	S46°14'42"W
317-318	330.02'	600.00'	31°30'53"	325.88'	S56°21'43"W
318-317	330.02'	600.00'	31°30'53"	325.88'	N59°21'43"E
347-301	148.51'	1575.00'	5°24'08"	148.45'	S50°36'08"W

RIGHT OF WAY LINE TABLE		
PT#-PT#	LENGTH	DIRECTION
9994-301	512.09'	N89°44'07"E
301-302	SEE CURVE TABLE	
302-303	24.75'	S49°24'41"E
303-304	155.58'	S28°03'11"W
304-306	50.00'	S42°36'17"W
306-307	109.76'	S66°57'05"W
307-308	24.75'	N47°23'43"W
308-309	225.00'	S42°36'17"W
309-311	24.75'	S47°23'43"E
311-312	57.43'	S13°08'18"W
312-313	100.00'	S42°36'17"W
313-314	57.43'	S72°04'18"W
314-316	24.75'	N47°23'43"W
316-317	729.74'	S42°36'17"W

317-318	SEE CURVE TABLE	
318-319	590.23'	S74°07'10"W
319-321	24.75'	N15°52'50"W
321-322	29.29'	N42°44'10"E
322-323	75.00'	N74°07'10"E
323-324	100.12'	N71°15'25"E
324-326	75.66'	N68°31'29"E
326-327	125.10'	N76°24'36"E
327-328	75.00'	N74°07'10"E
328-329	79.14'	S87°16'26"E
329-331	24.75'	S15°52'50"E
331-318	40.23'	N74°07'10"E
318-317	SEE CURVE TABLE	
317-332	1179.74'	N42°36'17"E
332-333	32.91'	N47°23'43"W
333-334	102.86'	N29°03'38"E

334-336	25.00'	N42°36'17"E
336-337	55.37'	N68°02'20"E
337-341	25.00'	N42°30'37"E
341-342	120.26'	N39°52'10"E
342-343	129.25'	N47°21'08"E
343-344	26.31'	N62°21'48"E
344-346	43.14'	N72°13'14"E
346-347	35.50'	S36°41'47"E
347-301	SEE CURVE TABLE	

Point Table		
Point #	Northing	Easting
301	332200.491	877663.211
302	332137.526	877597.449
303	332120.152	877615.075
304	331980.382	877546.744
306	331943.580	877512.897
307	331900.607	877411.898
308	331917.361	877393.681
309	331751.751	877241.370
311	331734.997	877259.587
312	331679.072	877246.534
313	331605.468	877178.840
314	331587.789	877124.200
316	331604.543	877105.983
317	331067.420	876611.993
318	330896.481	876334.548
319	330734.973	875766.841
321	330758.778	875760.069
322	330780.287	875779.942
323	330800.810	875852.079
324	330832.982	875946.894

Point Table		
Point #	Northing	Easting
326	330863.123	876016.296
327	330892.518	876137.893
328	330913.041	876210.031
329	330909.277	876289.077
331	330885.473	876295.850
332	331935.763	877410.604
333	331958.040	877386.381
334	332047.952	877436.343
336	332066.353	877453.267
337	332087.058	877504.615
341	332105.487	877521.509
342	332210.233	877597.254
343	332297.797	877692.319
344	332310.002	877715.629
346	332323.176	877756.713
347	332294.712	877777.927

9988 ALUMINUM MON FOUND
Y: 332194.639
X: 876913.300

9994 2" IP FOUND
Y: 332198.124
X: 877151.122

13664 1" IP FOUND
Y: 332209.566
X: 879806.365

13665 ALUMINUM MON FOUND
Y: 332209.850
X: 879688.035

N89°09'38"E 2378.85' (SL)
N00°36'07"W 780.62'
N74°07'10"E 907.55'
N42°36'17"E 1400.21
N89°24'41"E 2536.94' (SL)
S74°07'10"W

PT: 1571+68.67
PC: 1568+20.46
PC: 1550+90.23
PT: 1554+70.26

TOWNSHIP LINE
SEC LINE
1/16 LINE
R/W
PL
OH
UGT

TOWN OF AUBURN
TOWN OF OSCEOLA
NE-NE SEC 4
SE-NE SEC 4
NW-NW SEC 3
SW-SW SEC 34
STH 67

OUTLOT 1 CSM 5631 V.36, P.19 (2390 SF)
Parcel 18 (1014 SF)
TLE SLOPE (822 SF)
TLE SLOPE (952 SF)
TLE SLOPE (532 SF)
TLE SLOPE (257 SF)
TLE SLOPE (72 SF)
(4047 SF)
(7952 SF)
(4238 SF)

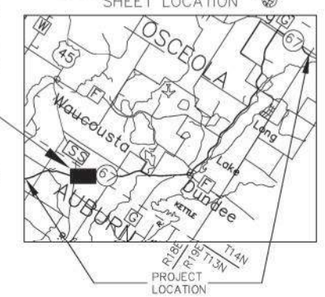
801 WE ENERGIES (ELEC)
PARCELS 16 & 19
PRESCRIPTIVE

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCEL 17
DOC. 243271

UTILITY SCHEDULE OF INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
801	WE ENERGIES (ELEC)	RELEASE OF RIGHTS
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS

SCALE, FEET
0 100 200

SHEET LOCATION



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, GREGORY T. BELANGER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Gregory T. Belanger DATE:07/18/2019
PRINT NAME: GREGORY T. BELANGER
REGISTRATION NUMBER: S-3055

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Curt Van Erem DATE:07/18/2019
PRINT NAME: CURT VAN EREM

WISCONSIN GREGORY T BELANGER S-3055 GREEN BAY WI LAND SURVEYOR

FILE NAME : X:\32.30500\113975.04\TECH\CAD\RW\040103B_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : 7-18-2019
PLOT DATE : 7/12/2019 6:21 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:200
PRE_90

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 – 4.04 AMENDMENT NUMBER 2. AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21 4.04, RECORDED AS DOCUMENT NUMBER 1104584, REMOVES UTILITY NUMBER 801 AND ADDS UTILITY NUMBER 803.

DOC # 1115896
Recorded July 19, 2019 at 02:58 PM
JAMES M KREBS , REGISTER OF DEEDS
FOND DU LAC COUNTY, WI
Fee Amount: $25.00

Returned to: WisDOT - NE Region - Green Bay - PC
This document has been electronically recorded.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 – 4.04
AMENDMENT NO: 2

PART OF LOT 1, CSM 1217 LOCATED IN AND INCLUDING PARTS OF THE NW 1/4 OF THE SE 1/4, NE 1/4 OF THE SE 1/4 AND SE 1/4 OF THE NE 1/4, SECTION 34, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 – ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF	HE SF
21	JAMES V. WALTER AND JOAN M. WALTER	FEE & TLE	4257	8348	12605	2436	---
22	BRIAN K. EBERT	FEE	2946	4953	7899	---	----
23	STATE OF WISCONSIN (CONSERVATION COMMISSION)	HIGHWAY EASEMENT & TLE	---	---	---	4994	4246
24	JOSEPH M. PISZCZEK AND KAREN L. PISZCZEK	TLE	---	---	---	194	---

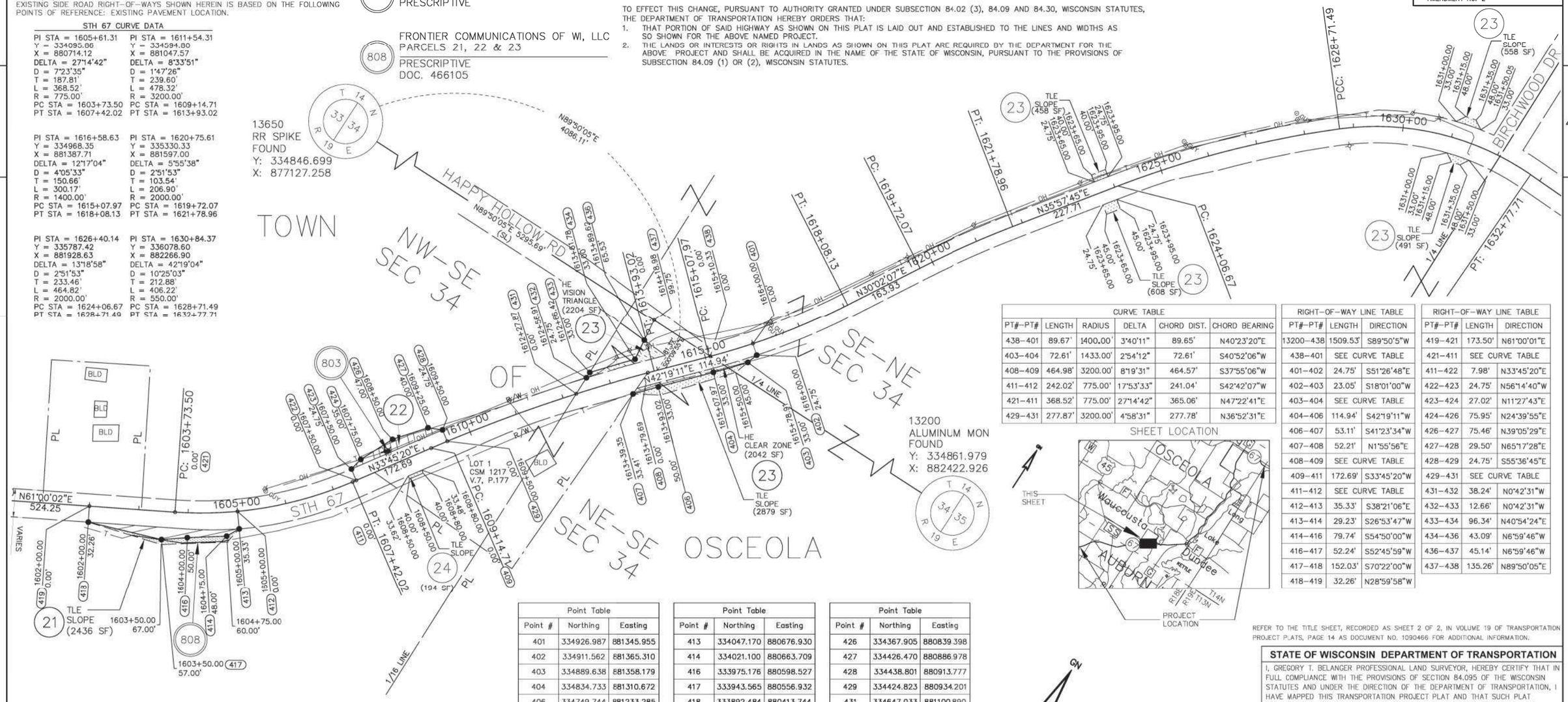
NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOT PROJECT 4090-03-20, DOT 2646 AND DOT PROJECT F 027-1(15).
EXISTING SIDE ROAD RIGHT-OF-WAYS SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT LOCATION.

STH 67 CURVE DATA

PI STA = 1605+61.31	PI STA = 1611+54.31
Y = 334095.06	Y = 334584.80
X = 880714.12	X = 881047.57
DELTA = 27°14'42"	DELTA = 8°33'51"
D = 7°23'35"	D = 1°47'26"
T = 187.81'	T = 239.60'
L = 368.52'	L = 478.32'
R = 775.00'	R = 3200.00'
PC STA = 1603+73.50	PC STA = 1609+14.71
PT STA = 1607+42.02	PT STA = 1613+93.02
PI STA = 1616+58.63	PI STA = 1620+75.61
Y = 334968.35	Y = 335330.33
X = 881387.71	X = 881597.00
DELTA = 12°17'04"	DELTA = 5°55'38"
D = 4°05'33"	D = 2°51'53"
T = 150.66'	T = 103.54'
L = 300.17'	L = 206.90'
R = 1400.00'	R = 2000.00'
PC STA = 1615+07.97	PC STA = 1619+72.07
PT STA = 1618+08.13	PT STA = 1621+78.96
PI STA = 1626+40.14	PI STA = 1630+84.37
Y = 335787.42	Y = 336078.60
X = 881928.63	X = 882266.90
DELTA = 13°18'58"	DELTA = 42°19'04"
D = 2°51'53"	D = 10°25'03"
T = 233.46'	T = 212.88'
L = 464.82'	L = 406.22'
R = 2000.00'	R = 550.00'
PC STA = 1624+06.67	PC STA = 1628+71.49
PT STA = 1628+71.49	PT STA = 1632+77.71

803 ALIANT ENERGY (ELEC)
PARCEL 22
PRESCRIPTIVE

808 FRONTIER COMMUNICATIONS OF WI, LLC
PARCELS 21, 22 & 23
PRESCRIPTIVE
DOC. 466105



UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
803	ALLIANT ENERGY (ELEC)	RELEASE OF RIGHTS
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS

Point Table

Point #	Northing	Easting
401	334926.987	881345.955
402	334911.562	881365.310
403	334889.638	881358.179
404	334834.733	881310.672
406	334749.744	881233.285
407	334709.899	881198.165
408	334762.082	881199.925
409	334395.589	880914.430
411	334252.014	880818.475
412	334074.877	880655.007

Point Table

Point #	Northing	Easting
413	334047.170	880676.930
414	334021.100	880663.709
416	333975.176	880598.527
417	333943.565	880556.932
418	333892.484	880413.744
419	333920.699	880398.105
421	334004.811	880549.849
422	334258.649	880822.909
423	334272.401	880802.332
424	334298.882	880807.701

Point Table

Point #	Northing	Easting
426	334367.905	880839.398
427	334426.470	880886.978
428	334438.801	880913.777
429	334424.823	880934.201
431	334647.033	881100.890
432	334685.269	881100.417
433	334697.926	881100.260
434	334770.738	881163.347
436	334813.511	881158.098
437	334858.314	881152.600
438	334858.704	881287.864

CURVE TABLE

PT#–PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
438–401	89.67'	1400.00'	3°40'11"	89.65'	N40°23'20"E
403–404	72.61'	1433.00'	2°54'12"	72.61'	S40°52'06"W
408–409	464.98'	3200.00'	8°19'31"	464.57'	S37°55'06"W
411–412	242.02'	775.00'	17°53'33"	241.04'	S42°42'07"W
421–411	368.52'	775.00'	27°14'42"	365.06'	N47°22'41"E
429–431	277.87'	3200.00'	4°58'31"	277.78'	N36°52'31"E

RIGHT-OF-WAY LINE TABLE

PT#–PT#	LENGTH	DIRECTION
13200–438	1509.53'	S89°50'5"W
438–401	SEE CURVE TABLE	
401–402	24.75'	S51°26'48"E
402–403	23.05'	S18°01'00"W
403–404	SEE CURVE TABLE	
404–406	114.94'	S42°19'11"W
406–407	53.11'	S41°23'34"W
407–408	52.21'	N1°55'56"E
408–409	SEE CURVE TABLE	
409–411	172.69'	S33°45'20"W
411–412	SEE CURVE TABLE	
412–413	35.33'	S38°21'06"E
413–414	29.23'	S26°53'47"W
414–416	79.74'	S54°50'00"W
416–417	52.24'	S52°45'59"W
417–418	152.03'	S70°22'00"W
418–419	32.26'	N28°59'58"W

RIGHT-OF-WAY LINE TABLE

PT#–PT#	LENGTH	DIRECTION
419–421	173.50'	N61°00'01"E
421–411	SEE CURVE TABLE	
411–422	7.98'	N33°45'20"E
422–423	24.75'	N56°14'40"W
423–424	27.02'	N11°27'43"E
424–426	75.95'	N24°39'55"E
426–427	75.46'	N39°05'29"E
427–428	29.50'	N65°17'28"E
428–429	24.75'	S55°36'45"E
429–431	SEE CURVE TABLE	
431–432	38.24'	N0°42'31"W
432–433	12.66'	N0°42'31"W
433–434	96.34'	N40°54'24"E
434–436	43.09'	N6°59'46"W
436–437	45.14'	N6°59'46"W
437–438	135.26'	N89°50'05"E

SHEET LOCATION

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

GN

SCALE, FEET
0 100 200

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, GREGORY T. BELANGER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Gregory T. Belanger DATE:07/18/2019
PRINT NAME: GREGORY T. BELANGER
REGISTRATION NUMBER: S-3055

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: Curt Van Erem DATE:07/18/2019
PRINT NAME: CURT VAN EREM

WISCONSIN GREGORY T. BELANGER S-3055 GREEN BAY WI LAND SURVEYOR

FILE NAME : X:\3230500\113975.04\TECH\CAD\RW\040104B_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : 7-18-2019
PLOT DATE : 7/12/2019 6:30 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:200
PRE_91
4530-06-21 4.04b

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.05

PART OF THE SE 1/4 OF THE SE 1/4, SECTION 26, AND PART OF THE NE 1/4 OF THE NW 1/4, SECTION 35, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1093547
Recorded
December 21, 2017 11:37 AM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.05
AMENDMENT NOs....

Recorded this 21st day of December, 2017 at 11:37 AM in VOL. 19 Pg. 22 Doc # 1093547
James M Krebs
Register of Deeds, Fond du Lac County, WI

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

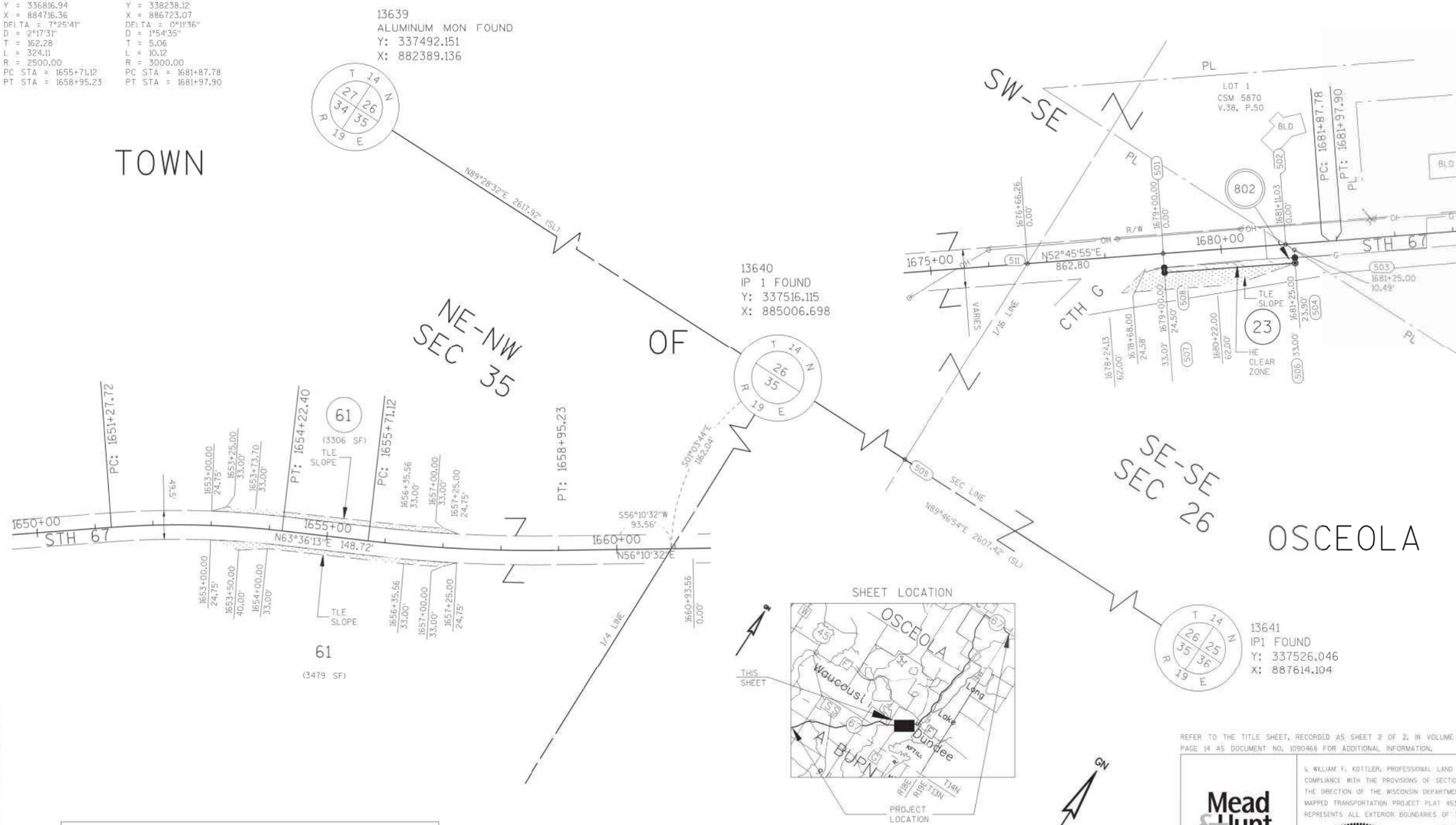
SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF	HE SF
23	STATE OF WISCONSIN (CONSERVATION COMMISSION)	HIGHWAY EASEMENT & TLE	---	---	---	7051	1980
61	STATE OF WISCONSIN (DEPARTMENT OF NATURAL RESOURCES)	TLE	---	---	---	6785	---

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DOT PROJECT 2644.

STH 67 CURVE DATA

PI STA = 1652+75.50	PI STA = 1657+33.40	PI STA = 1681+92.84
Y = 336612.97	Y = 336816.94	Y = 338238.12
X = 884305.41	X = 884716.36	X = 886723.07
DELTA = 10°49'23"	DELTA = 7°25'41"	DELTA = 0°11'36"
D = 3°40'22"	D = 2°17'31"	D = 1°54'35"
T = 147.78	T = 162.28	T = 5.06
L = 294.68	L = 324.11	L = 10.12
R = 1560.00	R = 2500.00	R = 3000.00
PC STA = 1651+27.72	PC STA = 1655+71.12	PC STA = 1681+87.78
PT STA = 1654+22.40	PT STA = 1658+95.23	PT STA = 1681+97.90



RIGHT-OF-WAY LINE TABLE

PT*-PT*	LENGTH	DIRECTION
13640-509	1303.71	N89°46'54"E
509-511	398.47	N0°56'41"W
511-501	233.74	N52°45'55"E
501-502	211.03	N52°45'55"E
502-503	17.47	N89°39'50"E
503-504	13.42	S37°14'05"E
504-506	9.10	S37°14'05"E
506-507	225.00	S52°45'55"W
507-508	8.50	N37°14'05"W
508-501	24.50	N37°14'05"W

Point Table

Point *	Northing	Easting
501	338060.927	886489.923
502	338188.619	886657.940
503	338188.722	886675.405
504	338178.039	886683.523
506	338170.797	886689.027
507	338034.653	886509.891
508	338041.424	886504.745
509	337521.080	886310.401
511	337919.497	886303.830

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
802	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS

802 WISCONSIN PUBLIC SERVICE (GAS)
PARCEL 23
PRESCRIPTIVE

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4530-06-21-4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

DATE 12-12-2017
WILLIAM F. KOTTLER,
PLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) DATE 12-12-2017
(PRINTED NAME) CURT VAN ERT

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
31	JACOBI FAMILY TRUST	TLE	---	---	---	71
32	TIMOTHY M. HARDY AND TAMARA A. HARDY	TLE	---	---	---	81
33	TIMOTHY S. MUELLER	TLE	---	---	---	1216
34	KARL R. BRATH AND MARILYN M. BRATH	TLE	---	---	---	120
36	STEVEN S. STEPANIUK	TLE	---	---	---	250

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.06

PART OF LOT 2 AND PART OF OUTLOT 2, CSM 5586, LOCATED IN AND INCLUDING PART OF GOVERNMENT LOT 5, SECTION 24, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

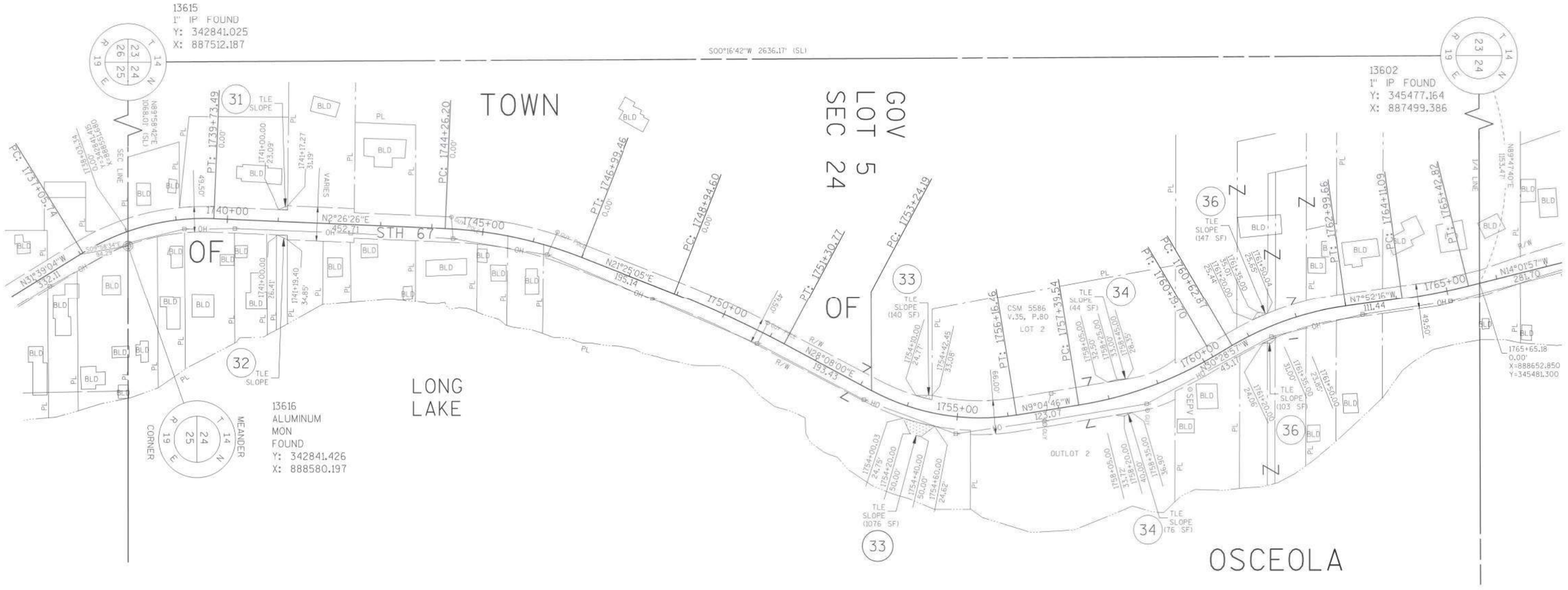
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1093548
Recorded
December 21, 2017 11:40 AM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

Volume 19, Page 23

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.06
AMENDMENT NO:...

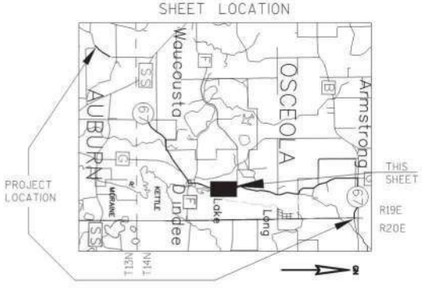


STH 67 CURVE DATA

PI STA = 1738+43.71	PI STA = 1745+64.09	PI STA = 1750+12.82	PI STA = 1754+75.69
Y = 342870.90	Y = 343598.81	Y = 344018.90	Y = 344427.32
X = 888521.12	X = 888552.15	X = 888716.93	X = 888935.31
DELTA = 34°05'30"	DELTA = 18°58'39"	DELTA = 6°42'55"	DELTA = 37°12'46"
D = 12°43'57"	D = 6°56'42"	D = 2°50'36"	D = 12°43'57"
T = 137.97	T = 137.89	T = 118.22	T = 151.50
L = 267.76	L = 273.26	L = 236.16	L = 292.27
R = 450.00	R = 825.00	R = 2015.00	R = 450.00
PC STA = 1737+05.74	PC STA = 1744+26.20	PC STA = 1748+94.60	PC STA = 1753+24.19
PT STA = 1739+73.49	PT STA = 1746+99.46	PT STA = 1751+30.77	PT STA = 1756+16.46

PI STA = 1758+81.27	PI STA = 1761+82.82	PI STA = 1764+77.02
Y = 344838.41	Y = 345101.13	Y = 345395.65
X = 888869.62	X = 888714.97	X = 888674.26
DELTA = 21°24'11"	DELTA = 22°36'42"	DELTA = 6°09'41"
D = 7°38'22"	D = 9°32'57"	D = 4°40'38"
T = 141.73	T = 119.95	T = 65.93
L = 280.16	L = 236.79	L = 131.73
R = 750.00	R = 600.00	R = 1225.00
PC STA = 1757+39.54	PC STA = 1760+62.87	PC STA = 1764+11.09
PT STA = 1760+19.70	PT STA = 1762+99.66	PT STA = 1765+42.82

SHEET LOCATION



GN
SCALE, FEET
0 100 200

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4530-06-21-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

12-12-2017 DATE
WILLIAM F. KOTTLER,
PLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) ..... DATE 12-12-2017
(PRINTED NAME) CURT VAN ERI

FILE NAME : X:\3230500\113975.04\TECH\CAD\RW\040102_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 12/12/2017 9:13 AM PLOT BY : WILLIAM KOTTLER PLOT NAME : PLOT SCALE : 1:200
PRE_93
---------- 4530-06-21 4.06

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
40	FREDRICK R. FELLENZ	TLE	---	---	---	123
41	GLENN L. KALVODA	TLE	---	---	---	23
42	TERRY J. HERING	TLE	---	---	---	135
43	DONALD R. PATCHETT AND KAREN KRUSZKA-PATCHETT	TLE	---	---	---	91
44	KAREN KRUSZKA-PATCHETT	TLE	---	---	---	1902
45	MARIEL L. DEN BOER	TLE	---	---	---	391
46	JO ANN THEUNE	TLE	---	---	---	302
47	DONN A. CHONG AND KAREN E. CHONG	TLE	---	---	---	205
48	MICAHEL J BLATTNER; JENNIFER M BLATTNER; ELIZABETH J. BLATTNER TRUST	TLE	---	---	---	128
49	JOSEPH E. SMITH AND DOROTHY S SMITH REVOCABLE TRUST	TLE	---	---	---	97

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.07 AMENDMENT NUMBER 1. AMENDS PARCELS 44, 45, AND 46 OF TRANSPORTATION PROJECT PLAT 4530-06-21 - 4.07, RECORDED AS DOCUMENT NUMBER 1093549

PART OF LOT 1, CSM 6996, AND PART OF LOTS 2, 4, 5, AND 6 OF THE PLAT OF LONG LAKE RESORT, LOCATED IN AND INCLUDING PART OF GOVERNMENT LOT 6 AND GOVERNMENT LOT 7, SECTION 24, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1096041
Recorded
March 02, 2018 3:31 PM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

Recorded this 2nd day of March, 2018 at 3:31 PM in VOL 19 Pg. 31 Doc # 1096041
James M Krebs
Register of Deeds, Fond du Lac County, WI

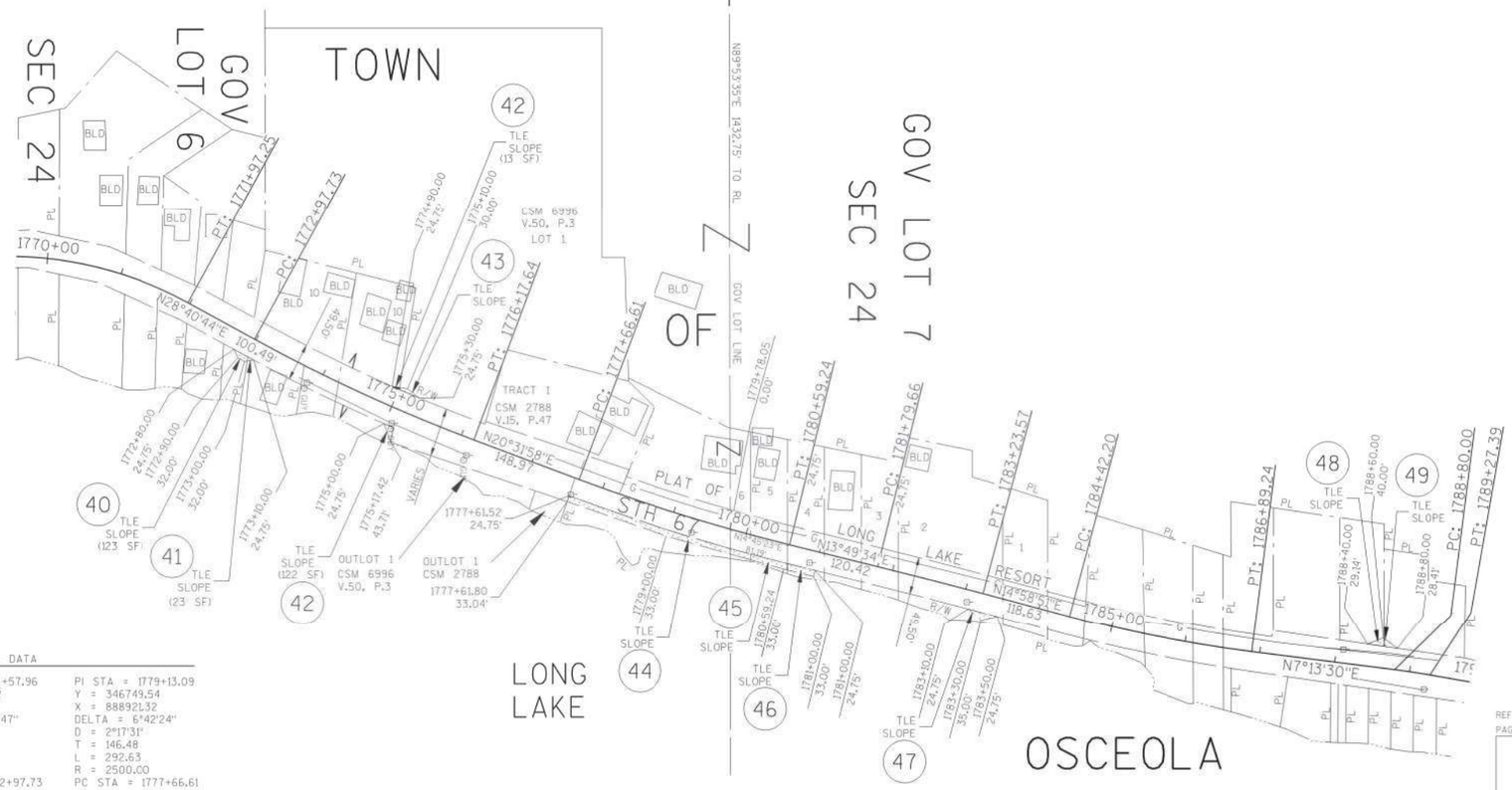
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.07
AMENDMENT NO: 1

13602
1" IP FOUND
Y: 345477.164
X: 887499.386

S00°09'05"W 2666.87' (SL)

S00°09'05"W 1333.44'

13589
BERNTSEN
MON FOUND
Y: 348144.027
X: 887506.430



RIGHT-OF-WAY LINE TABLE		
PT*-PT*	LENGTH	DIRECTION
13589-720	1333.44	S00°09'05"W
720-721	1407.01	N89°53'35"E
721-704	SEE CURVE TABLE	
704-705	40.76	N13°49'33"E
705-706	24.75	S76°10'26"E
706-707	24.75	S76°10'26"E
707-709	8.25	S76°10'26"E
709-711	40.67	S13°49'34"W
711-712	161.31	S15°39'03"W
712-713	139.94	S19°02'25"W
713-714	8.29	N71°25'06"W
714-701	24.71	N71°25'06"W
701-702	62.50	N18°34'54"E
702-703	23.35	N67°55'06"W
703-721	SEE CURVE TABLE	

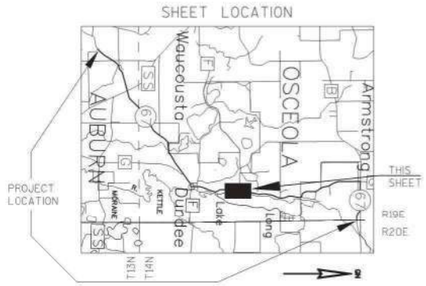
Point Table		
Point #	Northing	Easting
701	346606.794	888867.923
702	346666.036	888887.839
703	346674.813	888866.202
704	346897.696	888932.297
705	346937.275	888942.037
706	346931.361	888966.070
707	346925.446	888990.103
709	346923.474	888998.114
711	346883.895	888988.374
712	346728.562	888944.855
713	346596.278	888899.202
714	346598.921	888891.340
720	346810.595	887502.908
721	346813.224	888909.919

CURVE TABLE					
PT*-PT*	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
721-704	87.39	2475.25	2°01'22"	87.39	N14°50'15"E
703-721	145.17	2475.25	3°21'37"	145.15	N17°31'45"E

STH 67 CURVE DATA

PI STA = 1770+20.02	PI STA = 1774+57.96	PI STA = 1779+13.09
Y = 345922.57	Y = 346322.82	Y = 346749.54
X = 888542.56	X = 888761.50	X = 888921.32
DELTA = 42°42'41"	DELTA = 8°08'47"	DELTA = 5°42'24"
D = 11°27'33"	D = 2°32'47"	D = 2°17'31"
T = 195.50	T = 160.22	T = 146.48
L = 372.73	L = 319.91	L = 292.63
R = 500.00	R = 2250.00	R = 2500.00
PC STA = 1768+24.52	PC STA = 1772+97.73	PC STA = 1777+66.61
PT STA = 1771+97.25	PT STA = 1776+17.64	PT STA = 1780+59.24
PI STA = 1782+51.62	PI STA = 1785+65.91	PI STA = 1789+03.70
Y = 347078.58	Y = 347382.20	Y = 347717.68
X = 889002.30	X = 889083.55	X = 889126.08
DELTA = 1°09'17"	DELTA = 7°45'21"	DELTA = 2°42'54"
D = 0°48'09"	D = 3°08'22"	D = 5°43'46"
T = 71.96	T = 123.71	T = 23.70
L = 143.91	L = 247.04	L = 47.39
R = 7140.00	R = 1825.00	R = 1000.00
PC STA = 1781+79.66	PC STA = 1784+42.20	PC STA = 1788+80.00
PT STA = 1783+23.57	PT STA = 1786+89.24	PT STA = 1789+27.39

SHEET LOCATION



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4530-06-21-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

02-22-2018 DATE
WILLIAM F. KOTTLER,
PLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE 2-22-2018
(PRINTED NAME) CURT VAN EREM

FILE NAME : \\CORP.MEADHUNT.COM\SHAREDFOLDERS\ENTP\3230500\113975.04\TECH\CAD\RW\040102A_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 2/22/2018 5:44 PM
PRE_94
PLOT BY : WILLIAM KOTTLER
PLOT NAME :
PLOT SCALE : 1:200

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
51	LCW BENSON, LLC	TLE	---	---	---	7585
54	RICHARD C BEMIS, MARGARET A BEMIS, CHILDRENS TRUST	TLE	---	---	---	83
55	DAVID SADOFF	TLE	---	---	---	241
56	KATHLEEN M. KAU, DEAN A. VELING AND KAREN VELING, ROGER J. STERN AND ROSEMARIE T. STERN, JANICE L. NORTH AND MARVIN NORTH, ETAL	TLE	---	---	---	748

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: CSM 3539, CSM 3844 CSM 4716, AGREEMENT IN DOCUMENT 276087, V. 684, P. 117, EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850. ACCESS RESTRICTED BY CSM 3844.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 – 4.08 AMENDMENT NUMBER 2. AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21 – 4.08, RECORDED AS DOCUMENT NUMBER 1098472, REMOVES UTILITY NUMBER 801 AND ADDS UTILITY NUMBER 803.

PART OF LOT 1 AND PART OF LOT 2, CSM 3539, AND PART OF LOT 1, OF CSM 4716, LOCATED IN AND INCLUDING PART OF GOVERNMENT LOT 5, PART OF GOVERNMENT LOT 6, AND PART OF GOVERNMENT LOT 7, SECTION 13, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 – ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

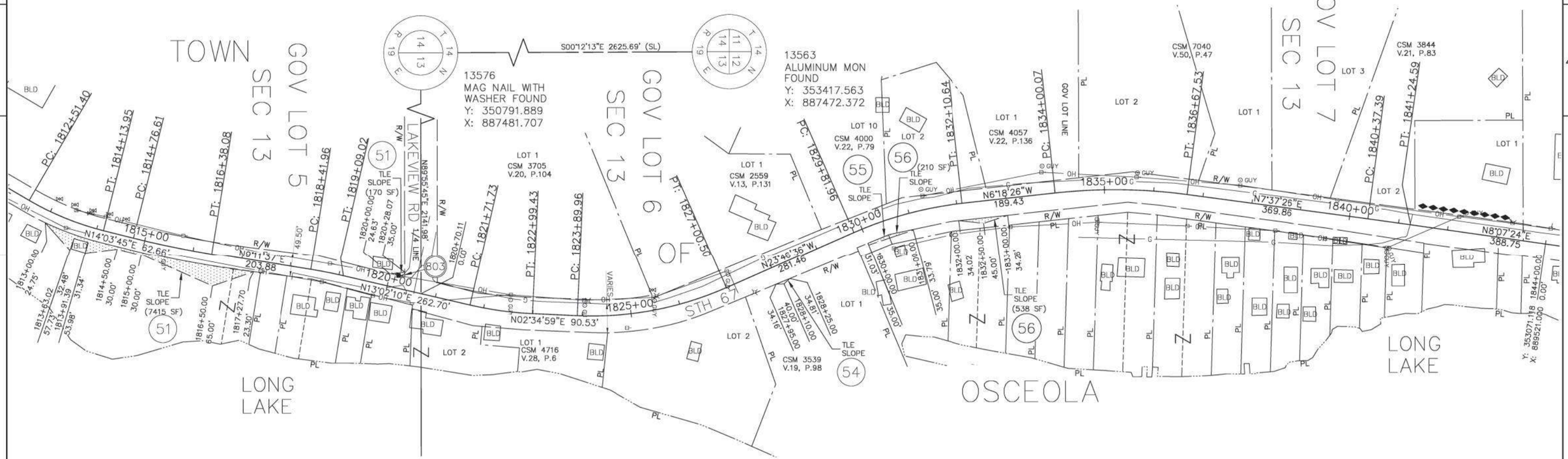
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC # 1115897
Recorded July 19, 2019 at 03:03 PM
JAMES M KREBS , REGISTER OF DEEDS
FOND DU LAC COUNTY, WI
Fee Amount: $25.00

Returned to: WisDOT - NE Region - Green Bay - PC
This document has been electronically recorded.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 – 4.08
AMENDMENT NO: 2



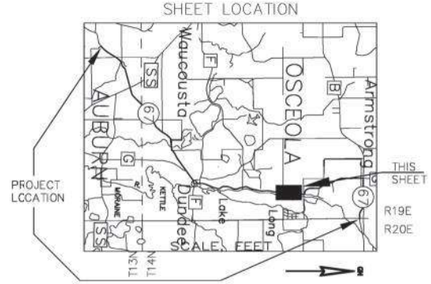
STH 67 CURVE DATA

PI STA = 1813+33.22	PI STA = 1815+57.39	PI STA = 1818+75.50	PI STA = 1822+35.76
Y = 350072.29	Y = 350290.80	Y = 350604.92	Y = 350955.91
X = 889474.21	X = 889528.94	X = 889579.78	X = 889661.05
DELTA = 16°11'51"	DELTA = 4°52'08"	DELTA = 3°50'33"	DELTA = 10°27'10"
D = 9°57'52"	D = 3°00'56"	D = 5°43'46"	D = 8°11'06"
T = 81.82'	T = 80.78'	T = 33.54'	T = 64.03'
L = 162.55'	L = 161.46'	L = 67.06'	L = 127.71'
R = 575.00'	R = 1900.00'	R = 1000.00'	R = 700.00'
PC STA = 1812+51.40	PC STA = 1814+76.61	PC STA = 1818+41.96	PC STA = 1821+71.73
PT STA = 1814+13.95	PT STA = 1816+38.08	PT STA = 1819+09.02	PT STA = 1822+99.43
PI STA = 1825+48.03	PI STA = 1830+97.20	PI STA = 1835+34.46	PI STA = 1840+80.99
Y = 351268.23	Y = 351775.90	Y = 352212.30	Y = 352755.31
X = 889675.14	X = 889451.47	X = 889403.24	X = 889475.92
DELTA = 26°21'35"	DELTA = 17°28'10"	DELTA = 13°55'52"	DELTA = 0°29'59"
D = 8°29'18"	D = 7°38'22"	D = 5°12'31"	D = 0°34'23"
T = 158.07'	T = 115.23'	T = 134.39'	T = 43.60'
L = 310.54'	L = 228.67'	L = 267.46'	L = 87.19'
R = 675.00'	R = 750.00'	R = 1100.00'	R = 10000.00'
PC STA = 1823+89.96	PC STA = 1829+81.96	PC STA = 1834+00.07	PC STA = 1840+37.39
PT STA = 1827+00.50	PT STA = 1832+10.64	PT STA = 1836+67.53	PT STA = 1841+24.59

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
803	ALLIANT ENERGY (ELEC)	RELEASE OF RIGHTS

SHEET LOCATION



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, GREGORY T. BELANGER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Gregory T. Belanger DATE:07/18/2019
PRINT NAME: GREGORY T. BELANGER
REGISTRATION NUMBER: S-3055

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Curt Van Erem DATE:07/18/2019
PRINT NAME: CURT VAN EREM

WISCONSIN GREGORY T. BELANGER S-3055 GREEN BAY WI LAND SURVEYOR

FILE NAME : X:\3230500\113975.04\TECH\CAD\RW\040108B_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : 7-18-2019
PLOT DATE : 7/12/2019 6:35 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1:200
PRE_95
4530-06-21 4.08b

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF	HE SF
23	STATE OF WISCONSIN (CONSERVATION COMMISSION)	HIGHWAY EASEMENT & TLE	---	---	---	6027	6806
61	STATE OF WISCONSIN (DEPARTMENT OF NATURAL RESOURCES)	HIGHWAY EASEMENT & TLE	---	---	---	8198	11875
62	JAMES O. KISIOLEK AND ANGELLA C. CLARKE KISIOLEK	TLE	---	---	---	1254	---
63	LORI ANNE DHEIN	TLE	---	---	---	1063	---

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21-4.09 AMENDMENT NUMBER 1, AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21-4.09, RECORDED AS DOCUMENT NUMBER 1093551, REMOVES UTILITY NUMBERS 801 AND 808 AND ADDS UTILITY NUMBER 803 AND ADDS UTILITY NUMBER 802 TO THE UTILITY SCHEDULE OF INTERESTS REQUIRED TABLE.

PARTS OF THE SE 1/4 OF THE SW 1/4, SW 1/4 OF THE SW 1/4, NW 1/4 OF THE SW 1/4, AND NE 1/4 OF THE SW 1/4, SECTION 12, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 – ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

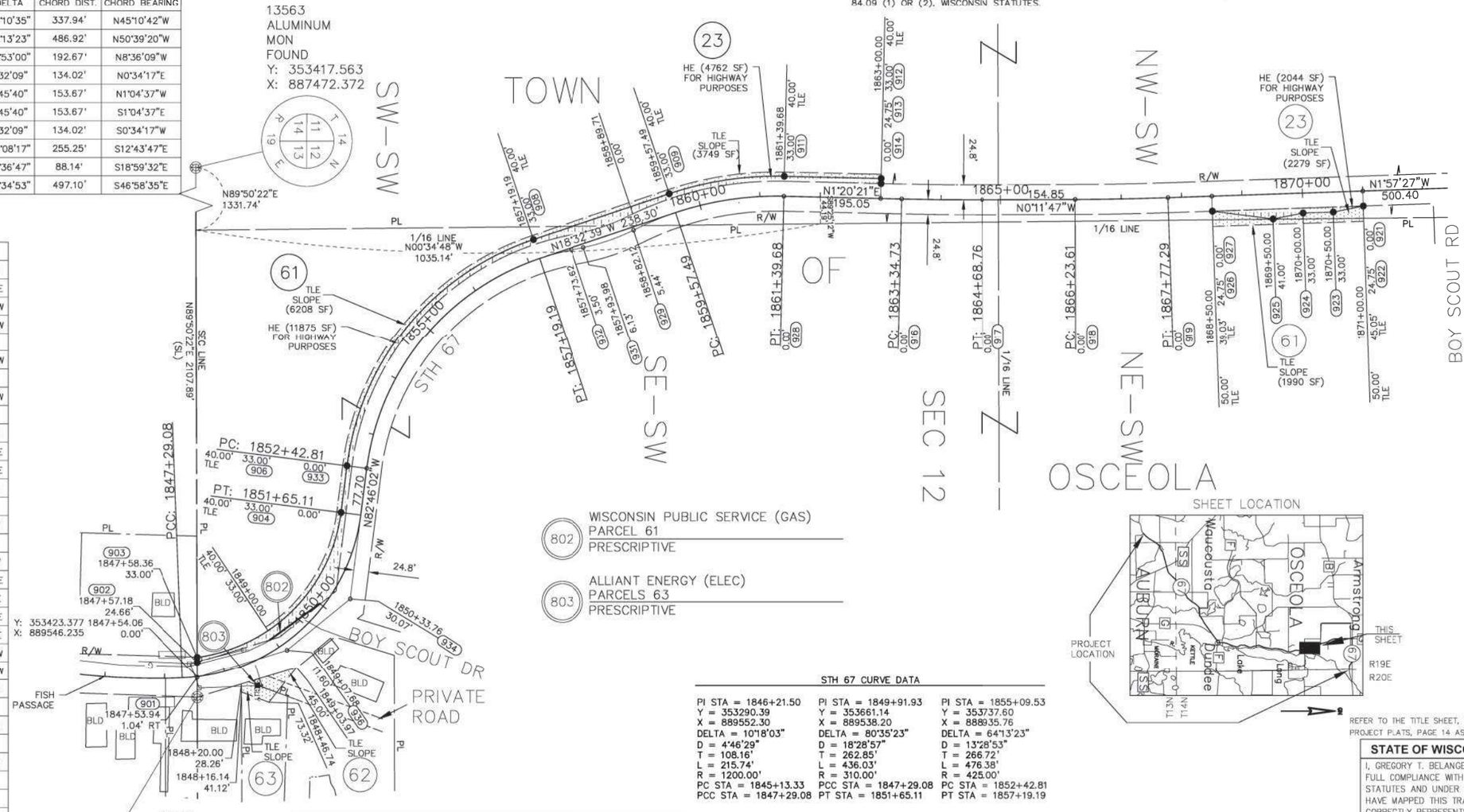
DOC # 1115980
Recorded July 23, 2019 at 08:56 AM
JAMES M KREBS , REGISTER OF DEEDS
FOND DU LAC COUNTY, WI
Fee Amount: $25.00

Returned to: WisDOT - NE Region - Green Bay - PC
This document has been electronically recorded.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 – 4.09
AMENDMENT NO:1

CURVE TABLE					
PT#–PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
903–904	363.45'	277.00'	75°10'35"	337.94'	N45°10'42"W
906–908	513.37'	458.00'	64°13'23"	486.92'	N50°39'20"W
909–911	193.64'	558.00'	19°53'00"	192.67'	N8°36'09"W
916–917	134.02'	5000.00'	1°32'09"	134.02'	N0°34'17"E
918–919	153.68'	5000.00'	1°45'40"	153.67'	N1°04'37"W
919–918	153.68'	5000.00'	1°45'40"	153.67'	S1°04'37"E
917–916	134.02'	5000.00'	1°32'09"	134.02'	S0°34'17"W
928–929	257.83'	525.00'	28°08'17"	255.25'	S12°43'47"E
929–931	88.41'	324.45'	15°36'47"	88.14'	S18°59'32"E
932–933	530.97'	425.00'	71°34'53"	497.10'	S46°58'35"E

RIGHT–OF–WAY LINE TABLE		
PT#–PT#	LENGTH	DIRECTION
13563–901	2074.92'	N89°50'22"E
901–902	25.89'	S89°50'22"W
902–903	8.41'	S89°50'22"W
903–904	SEE CURVE TABLE	
904–906	77.70'	N82°46'02"W
906–908	SEE CURVE TABLE	
908–909	238.30'	N18°32'39"W
909–911	SEE CURVE TABLE	
911–912	160.32'	N1°20'21"E
912–913	8.25'	S88°39'39"E
913–914	24.75'	S88°39'39"E
914–916	34.73'	N1°20'21"E
916–917	SEE CURVE TABLE	
917–918	154.85'	N0°11'47"W
918–919	SEE CURVE TABLE	
919–921	322.71'	N1°57'27"W
921–922	24.75'	N88°02'33"E
922–923	50.68'	S11°19'37"E
923–924	50.00'	S01°57'27"E
924–925	50.64'	S11°02'52"E
925–926	101.31'	S07°16'21"W
926–927	24.75'	S88°02'33"W
927–919	72.71'	S1°57'27"E
919–918	SEE CURVE TABLE	
918–917	154.85'	S0°11'47"E
917–916	SEE CURVE TABLE	
916–928	195.05'	S1°20'21"W
928–929	SEE CURVE TABLE	
929–931	SEE CURVE TABLE	
931–932	20.53'	S11°11'09"E
932–933	SEE CURVE TABLE	
933–934	217.51'	S82°46'02"E
934–936	134.85'	S39°07'49"E
936–901	155.61'	S17°12'35"E



Point Table		
Point #	Northing	Easting
901	353423.380	889547.287
902	353423.307	889521.399
903	353423.284	889512.986
904	353661.496	889273.287
906	353671.278	889196.209
908	353979.974	888819.651
909	354205.904	888743.863
911	354396.409	888715.044
912	354556.680	888718.791
913	354556.488	888727.039
914	354555.909	888751.782
916	354590.634	888752.594
917	354724.647	888753.930
918	354879.498	888753.399
919	355033.142	888750.511
921	355355.666	888739.487
922	355356.512	888764.223
923	355306.823	888774.176
924	355256.852	888775.884
925	355207.155	888785.587
926	355106.658	888772.762
927	355105.812	888748.027
928	354395.638	888748.035
929	354146.666	888804.279
931	354063.324	888832.963
932	354043.187	888836.945
933	353704.015	889200.364
934	353676.630	889416.145
936	353572.028	889501.245

802 WISCONSIN PUBLIC SERVICE (GAS)
PARCEL 61
PRESCRIPTIVE

803 ALLIANT ENERGY (ELEC)
PARCELS 63
PRESCRIPTIVE

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
802	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS
803	ALLIANT ENERGY (ELEC)	RELEASE OF RIGHTS

STH 67 CURVE DATA

PI STA = 1846+21.50	PI STA = 1849+91.93	PI STA = 1855+09.53
Y = 353290.39	Y = 353661.14	Y = 353737.60
X = 889552.30	X = 889538.20	X = 888935.76
DELTA = 10°18'03"	DELTA = 80°35'23"	DELTA = 64°13'23"
D = 4°46'29"	D = 18°28'57"	D = 13°28'53"
T = 108.16'	T = 262.85'	T = 266.72'
L = 215.74'	L = 436.03'	L = 476.38'
R = 1200.00'	R = 310.00'	R = 425.00'
PC STA = 1845+13.33	PCC STA = 1847+29.08	PC STA = 1852+42.81
PCC STA = 1847+29.08	PT STA = 1851+65.11	PT STA = 1857+19.19
PI STA = 1860+49.51	PI STA = 1864+01.75	PI STA = 1867+00.45
Y = 354303.64	Y = 354657.63	Y = 354956.34
X = 888745.88	X = 888754.16	X = 888753.14
DELTA = 19°53'00"	DELTA = 1°32'09"	DELTA = 1°45'40"
D = 10°54'49"	D = 1°08'45"	D = 1°08'45"
T = 92.02'	T = 67.02'	T = 76.84'
L = 182.19'	L = 134.02'	L = 153.68'
R = 525.00'	R = 5000.00'	R = 5000.00'
PC STA = 1859+57.49	PC STA = 1863+34.73	PC STA = 1866+23.61
PT STA = 1861+39.68	PT STA = 1864+68.76	PT STA = 1867+77.29

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, GREGORY T. BELANGER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Gregory T. Belanger DATE:07/18/2019
PRINT NAME: GREGORY T. BELANGER
REGISTRATION NUMBER: S-3055

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Curt Van Erem DATE:07/18/2019
PRINT NAME: CURT VAN EREM

WISCONSIN GREGORY T. BELANGER S-3055 GREEN BAY WI LAND SURVEYOR

FILE NAME : X:\3230500\113975.04\TECH\CAD\RW\040109A_RP– TPP 4530–06–21.DWG
APPRAISAL PLAT DATE : 7-18-2019
PLOT DATE : 7/12/2019 6:40 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:200
PRE_96
4530–06–21 4.09a

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.10

PART OF LOT 1 AND OUTLOT 1, CSM 8079 LOCATED IN THE NE 1/4 OF THE NE 1/4, SECTION 11, PART OF THE SW 1/4 OF THE NW 1/4 AND PART OF THE NW 1/4 OF THE NW 1/4, SECTION 12, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC# 1093552
Recorded
December 21, 2017 11:57 AM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.10
AMENDMENT NO:...

Recorded this 21st day of December, 2017 at 11:57 AM in VOL 19 Pg. 27 Doc # 1093552
James M. Krebs
Register of Deeds, Fond du Lac County, WI

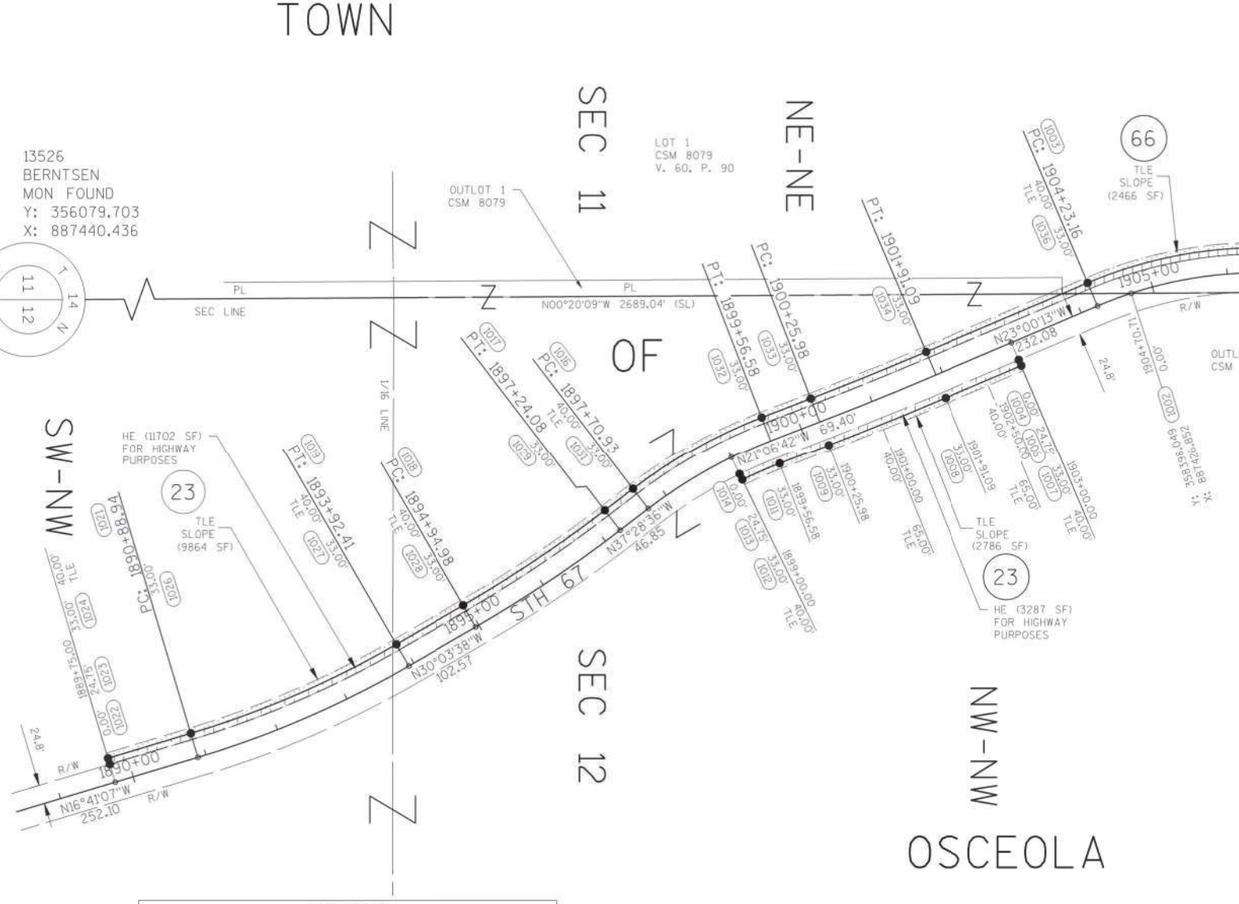
SCHEDULE OF LANDS & INTERESTS REQUIRED

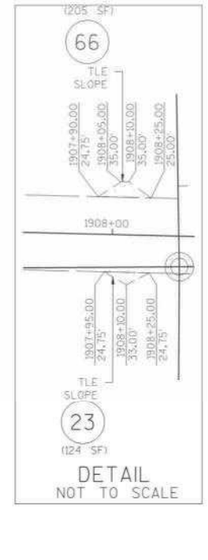
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF	HE SF
23	STATE OF WISCONSIN (CONSERVATION COMMISSION)	HIGHWAY EASEMENT & TLE	---	---	---	12774	14989
66	BURNS BROTHERS FARMS, A WISCONSIN PARTNERSHIP CONSISTING OF JOHN T. BURNS AND PATRICK G BURNS	FEE & TLE	2811	0	2811	2671	---

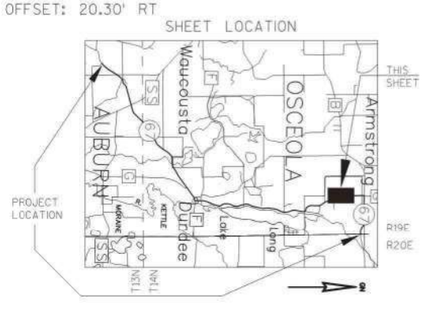
NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850; CSM 8079.

Point Table		
Point #	Northing	Easting
1001	358648.905	887425.382
1002	358398.049	887426.852
1003	358353.536	887443.518
1004	358240.168	887491.649
1006	358249.840	887514.430
1007	358253.064	887522.024
1008	358152.811	887564.587
1009	357998.789	887626.996
1011	357934.047	887651.993
1012	357884.847	887673.494
1013	357881.218	887666.085
1014	357870.330	887643.859
1016	357760.798	887711.739
1017	357723.616	887740.246
1018	357533.304	887867.498
1019	357444.532	887918.875
1021	357166.591	888038.996
1022	357057.452	888071.708
1023	357050.346	888048.001
1024	357047.977	888040.098
1026	357157.116	888007.385
1027	357428.002	887890.314
1028	357516.774	887838.936
1029	357703.538	887714.057
1031	357740.720	887685.550
1032	357910.275	887590.423
1033	357975.017	887565.426
1034	358127.018	887503.835
1036	358340.640	887413.143
1037	358582.270	887366.946
1038	358650.251	887368.555
1039	358650.055	887376.803

RIGHT-OF-WAY LINE TABLE		
PT#-PT#	LENGTH	DIRECTION
13525-1001	119.79	S0°20'09"E
1001-1002	250.86	S0°20'09"E
1002-1003	SEE CURVE TABLE	
1003-1004	123.16	S23°00'13"E
1004-1006	24.75	N66°59'47"E
1006-1007	8.25	N66°59'47"E
1007-1008	108.91	S23°00'13"E
1008-1009	SEE CURVE TABLE	
1009-1011	69.40	S21°06'42"E
1011-1012	SEE CURVE TABLE	
1012-1013	8.25	S63°54'03"W
1013-1014	24.75	S63°54'03"W
1014-1016	SEE CURVE TABLE	
1016-1017	46.85	S37°28'36"E
1017-1018	SEE CURVE TABLE	
1018-1019	102.57	S30°03'38"E
1019-1021	SEE CURVE TABLE	
1021-1022	113.94	S16°41'07"E
1022-1023	24.75	S73°18'53"W
1023-1024	8.25	S73°18'53"W
1024-1026	113.94	N16°41'07"W
1026-1027	SEE CURVE TABLE	
1027-1028	102.57	N30°03'38"W
1028-1029	SEE CURVE TABLE	
1029-1031	46.85	N37°28'36"W
1031-1032	SEE CURVE TABLE	
1032-1033	69.40	N21°06'42"W
1033-1034	SEE CURVE TABLE	
1034-1036	232.08	N23°00'13"W
1036-1037	SEE CURVE TABLE	
1037-1038	68.00	N1°21'23"E
1038-1039	8.25	S88°38'37"E
1039-1001	48.59	S88°38'37"E







REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

STH 67 CURVE DATA

PI STA = 1892+41.37
Y = 357312.60
X = 887995.23
DELTA = 13°22'31"
D = 4°24'27"
T = 152.43
L = 303.48
R = 1300.00
PC STA = 1890+88.94
PT STA = 1893+92.41

PI STA = 1896+09.69
Y = 357632.58
X = 887810.04
DELTA = 7°24'57"
D = 3°14'13"
T = 114.71
L = 229.10
R = 1770.00
PC STA = 1894+94.98
PT STA = 1897+24.08

PI STA = 1898+64.39
Y = 357834.97
X = 887654.87
DELTA = 16°21'54"
D = 8°48'53"
T = 93.46
L = 185.65
R = 650.00
PC STA = 1897+70.93
PT STA = 1899+56.58

PI STA = 1901+08.54
Y = 358063.92
X = 887566.47
DELTA = 1°53'31"
D = 1°08'45"
T = 82.56
L = 165.10
R = 5000.00
PC STA = 1900+25.98
PT STA = 1901+91.09

PI STA = 1905+41.87
Y = 358462.81
X = 887397.13
DELTA = 24°21'36"
D = 10°25'03"
T = 118.71
L = 233.84
R = 550.00
PC STA = 1904+23.16
PT STA = 1906+57.00

CURVE TABLE					
PT#-PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
1002-1003	47.55	550.00	4°57'11"	47.53	S20°31'38"E
1008-1009	166.19	5033.00	1°53'31"	166.18	S22°03'28"E
1011-1012	53.71	617.00	4°59'15"	53.69	S23°36'20"E
1014-1016	129.07	650.00	11°22'38"	128.86	S31°47'17"E
1017-1018	229.10	1770.00	7°24'57"	228.94	S33°46'07"E
1019-1021	303.48	1300.00	13°22'31"	302.79	S23°22'23"E
1026-1027	295.77	1267.00	13°22'31"	295.10	N23°22'23"W
1028-1029	224.83	1737.00	7°24'57"	224.67	N33°46'07"W
1031-1032	195.08	683.00	16°21'54"	194.42	N29°17'39"W
1033-1034	164.01	4967.00	1°53'31"	164.01	N22°03'28"W
1036-1037	247.87	583.00	24°21'36"	246.01	N10°49'25"W

GN
SCALE, FEET
0 100 200

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4530-06-21-4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN
WILLIAM F. KOTTLER
S-2348
MIDDLETON, WI
LAND SURVEYOR

12-12-2017 DATE
WILLIAM F. KOTTLER,
PLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) DATE 12-12-2017
(PRINTED NAME) CURT VAN ER

FILE NAME : X:\3230500\113975.04\TECH\CAD\RW\040102_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 12/12/2017 9:14 AM
PLOT BY : WILLIAM KOTTLER
PLOT NAME :
PLOT SCALE : 1:200
PRE_97
4530-06-21 4.10

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 – 4.11 AMENDMENT NUMBER 1.

AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21-4.11, RECORDED AS DOCUMENT NUMBER 1093553, REMOVES UTILITY NUMBERS 801 AND ADDS UTILITY NUMBER 803.

DOC # 1115898
Recorded July 19, 2019 at 03:08 PM
JAMES M KREBS , REGISTER OF DEEDS
FOND DU LAC COUNTY, WI
Fee Amount: $25.00

Returned to: WisDOT - NE Region - Green Bay - PC
This document has been electronically recorded.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 – 4.11
AMENDMENT NO:1

PART OF THE SW 1/4 OF THE SW 1/4 AND PART OF THE NW 1/4 OF THE SW 1/4, SECTION 1, AND PART OF THE NE 1/4 OF THE SE 1/4 AND PART OF THE SE 1/4 OF THE SE 1/4, SECTION 2, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 – ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

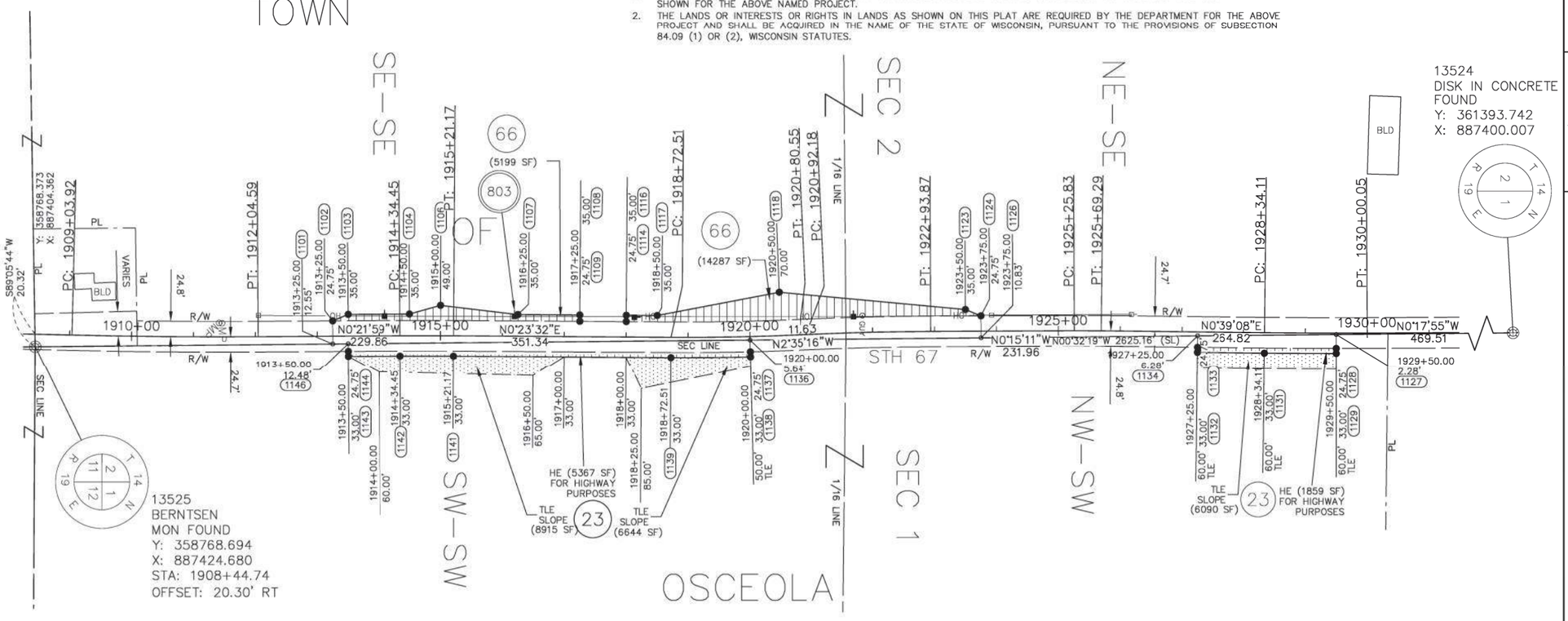
SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF	HE SF
23	STATE OF WISCONSIN (CONSERVATION COMMISSION)	HIGHWAY EASEMENT & TLE	---	---	---	21649	7226
66	BURNS BROTHERS FARMS, A WISCONSIN PARTNERSHIP CONSISTING OF JOHN T. BURNS AND PATRICK G. BURNS	FEE	19486	35657	55143	---	---

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850.

Point Table		
Point #	Northing	Easting
1101	359249.475	887420.161
1102	359249.236	887382.859
1103	359274.170	887372.450
1104	359374.251	887371.828
1106	359424.569	887357.818
1107	359549.629	887372.640
1108	359649.626	887373.324
1109	359649.556	887383.574
1114	359724.554	887384.088
1116	359724.625	887373.838
1117	359774.623	887374.180
1118	359971.722	887336.660
1123	360274.079	887364.576
1124	360299.124	887374.715
1126	360299.281	887410.294
1127	360874.212	887404.890
1128	360874.216	887427.363
1129	360874.218	887435.613
1131	360757.944	887434.963
1132	360648.845	887433.720
1133	360648.939	887425.471
1134	360649.149	887407.006
1136	359924.514	887413.817
1137	359924.992	887432.917
1138	359925.198	887441.164
1139	359796.670	887442.333
1141	359445.334	887439.928
1142	359359.057	887439.908
1143	359274.605	887440.448
1144	359274.552	887432.199
1146	359274.474	887419.926

RIGHT-OF-WAY LINE TABLE		
PT#-PT#	LENGTH	DIRECTION
13525-1101	480.80'	N0°32'19"W
1101-1102	37.30'	S89°38'01"W
1102-1103	27.02'	N22°39'36"W
1103-1104	100.08'	N0°21'21"W
1104-1106	52.23'	N15°33'33"W
1106-1107	125.94'	N06°45'33"E
1107-1108	100.00'	N00°23'32"E
1108-1109	10.25'	S89°36'28"E
1109-1114	75.00'	N00°23'32"E
1114-1116	10.25'	N89°36'28"W
1116-1117	50.00'	N00°23'32"E
1117-1118	200.64'	N10°46'41"W
1118-1123	303.64'	N05°16'30"E
1123-1124	27.02'	N22°02'26"E
1124-1126	35.58'	N89°44'49"E
1126-1127	574.96'	N0°32'19"W
1127-1128	22.47'	N89°59'18"E
1128-1129	8.25'	N89°59'18"E
1129-1131	SEE CURVE TABLE	
1131-1132	109.11'	S0°39'08"W
1132-1133	8.25'	N89°20'52"W
1133-1134	18.47'	N89°20'52"W
1134-1136	724.67'	S0°32'19"E
1136-1137	19.11'	N88°33'58"E
1137-1138	8.25'	N88°33'58"E
1138-1139	SEE CURVE TABLE	
1139-1141	351.34'	S0°23'32"W
1141-1142	SEE CURVE TABLE	
1142-1143	84.45'	S0°21'59"E
1143-1144	8.25'	S89°38'01"W
1144-1146	12.27'	S89°38'01"W
1146-1101	25.00'	S0°32'19"E



STH 67 CURVE DATA

PI STA = 1910+54.27	PI STA = 1914+77.81	PI STA = 1919+76.55
Y = 358978.64	Y = 359402.20	Y = 359900.94
X = 887409.34	X = 887406.63	X = 887410.05
DELTA = 1°43'22"	DELTA = 0°45'31"	DELTA = 2°58'48"
D = 0°34'23"	D = 0°52'29"	D = 1°25'57"
T = 150.35'	T = 43.36'	T = 104.04'
L = 300.67'	L = 86.71'	L = 208.04'
R = 10000.00'	R = 6550.00'	R = 4000.00'
PC STA = 1909+03.92	PC STA = 1914+34.45	PC STA = 1918+72.51
PT STA = 1912+04.59	PT STA = 1915+21.17	PT STA = 1920+80.55
PI STA = 1921+93.04	PI STA = 1925+47.56	PI STA = 1929+17.08
Y = 360117.24	Y = 360471.79	Y = 360841.29
X = 887400.27	X = 887398.70	X = 887402.91
DELTA = 2°20'04"	DELTA = 0°54'20"	DELTA = 0°57'03"
D = 1°09'27"	D = 2°05'01"	D = 0°34'23"
T = 100.86'	T = 21.73'	T = 82.97'
L = 201.69'	L = 43.46'	L = 165.94'
R = 4950.00'	R = 2750.00'	R = 10000.00'
PC STA = 1920+92.18	PC STA = 1925+25.83	PC STA = 1928+34.11
PT STA = 1922+93.87	PT STA = 1925+69.29	PT STA = 1930+00.05

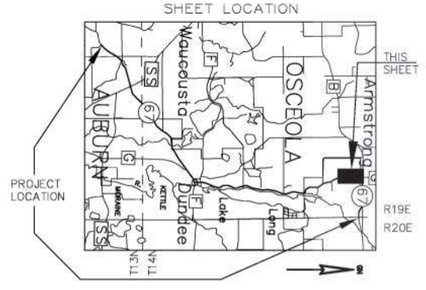
CURVE TABLE					
PT#-PT#	LENGTH	RADIUS	DELTA	CHORD DIST.	CHORD BEARING
1129-1131	116.28'	10033.00'	0°39'50"	116.28'	S0°19'13"W
1138-1139	128.54'	4033.00'	1°49'34"	128.53'	S0°31'15"E
1141-1142	86.28'	6517.00'	0°45'31"	86.28'	S0°00'46"W

803 ALLIANT ENERGY (ELEC)
PARCEL 66
PRESCRIPTIVE

UTILITY SCHEDULE OF INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
803	ALLIANT ENERGY (ELEC)	RELEASE OF RIGHTS

SHEET LOCATION



GN

SCALE, FEET
0 100 200

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, GREGORY T. BELANGER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Gregory T. Belanger DATE:07/18/2019
PRINT NAME: GREGORY T. BELANGER
REGISTRATION NUMBER: S-3055

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: Curt Van Erem DATE:07/18/2019
PRINT NAME: CURT VAN EREM

WISCONSIN GREGORY T. BELANGER S-3055 GREEN BAY WI LAND SURVEYOR

FILE NAME : X:\3230500\113975.04\TECH\CAD\RW\040111A_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : 7-18-2019
PLOT DATE : 7/12/2019 7:07 AM PLOT BY : DAVID YAHNKE PLOT NAME :
PRE_98
4530-06-21 4.11a

OWNER'S NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	TLE SF
19	PETER NECKUTY AND JANE M. NECKUTY	TLE	---	---	---	718
22	BRIAN K. EBERT	TLE	---	---	---	458
26	MARK O. OLOUGHLIN AND VALERIE F. OLOUGHLIN	TLE	---	---	---	157

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING PAVEMENT CENTERLINE, EVIDENCE OF THE CENTERLINE CHANGE FROM WIS DOT PROJECT 4530-00-70 AND TOWN ROAD RECORDS DATED MARCH 22, 1850.

TRANSPORTATION PROJECT PLAT NO: 4530-06-21 - 4.12 AMENDMENT NUMBER 1. AMENDS TRANSPORTATION PROJECT PLAT 4530-06-21 - 4.12, RECORDED AS DOCUMENT NUMBER 1093554 TO REVISE SECTION 25 REFERENCE LABELS.

PART OF OUTLOT A, CSM 1303 LOCATED IN THE NW 1/4 OF THE SW 1/4, SECTION 25, AND PART OF THE SW 1/4 OF THE SW 1/4 AND PART OF THE SE 1/4 OF THE SW 1/4, SECTION 34, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 67 FOND DU LAC COUNTY
USH 45 - ECL

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

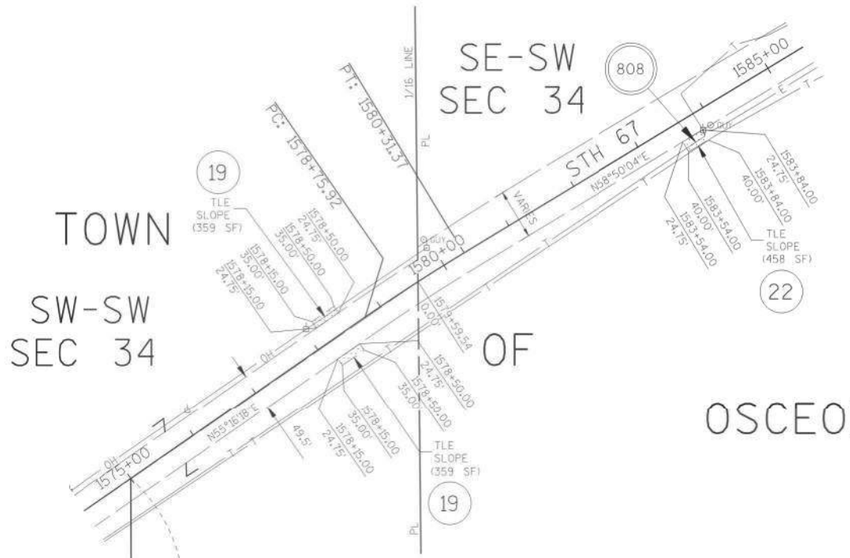
DOC# 1094416
Recorded
January 16, 2018 2:40 PM
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

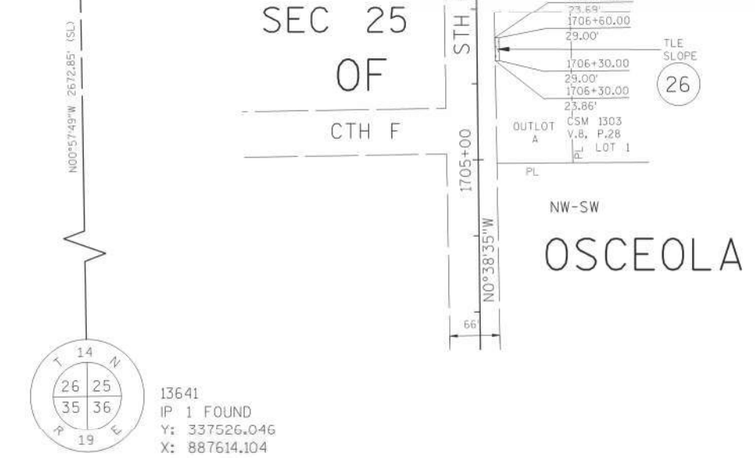
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4530-06-21 - 4.12
AMENDMENT NO: 1

Recorded this 16th day of January, 2018 at 2:40 PM in VOL 19 Pg. 30 Doc # 1094416
James M. Krebs
Register of Deeds, Fond du Lac County, WI

STH 67 CURVE DATA
PI STA = 1710+11.80
Y = 340244.31
X = 888092.69
DELTA = 20°26'29"
D = 6°56'42"
T = 148.75
L = 294.34
R = 825.00
PC STA = 1708+63.05
PT STA = 1711+57.39

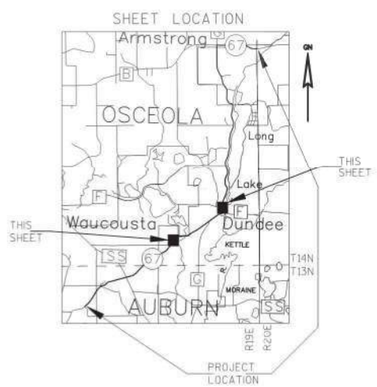
STH 67 CURVE DATA
PI STA = 1579+53.67
Y = 332773.50
X = 878467.02
DELTA = 3°33'46"
D = 2°17'31"
T = 77.75
L = 155.45
R = 2500.00
PC STA = 1578+75.92
PT STA = 1580+31.37





FRONTIER COMMUNICATIONS OF WI, LLC
808 PARCELS 22
DOC. 243257

UTILITY SCHEDULE OF INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
808	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS



SCALE, FEET
0 100 200
GN

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 19 OF TRANSPORTATION PROJECT PLATS, PAGE 14 AS DOCUMENT NO. 1090466 FOR ADDITIONAL INFORMATION.

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313-5723
920.496.0500
fax:920.496.0576
www.meadhunt.com

I, WILLIAM F. KOTTLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 4530-06-21-4.12 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WILLIAM F. KOTTLER S-2348 MIDDLETON, WI LAND SURVEYOR

William F. Kottler DATE 01-04-2018
WILLIAM F. KOTTLER,
PLS 2348

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) Curtis Van Erem DATE 01-05-2018
(PRINTED NAME) CURT VAN EREM

FILE NAME : \\CORP.MEADHUNT.COM\SHAREDFOLDERS\ENTP\3230500\113975.04\TECH\CAD\RW\040112A_RP- TPP 4530-06-21.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 1/5/2018 9:20 AM
PRE_99
PLOT BY : WILLIAM KOTTLER
PLOT NAME :
PLOT SCALE : 1:200
4530-06-21 4.12

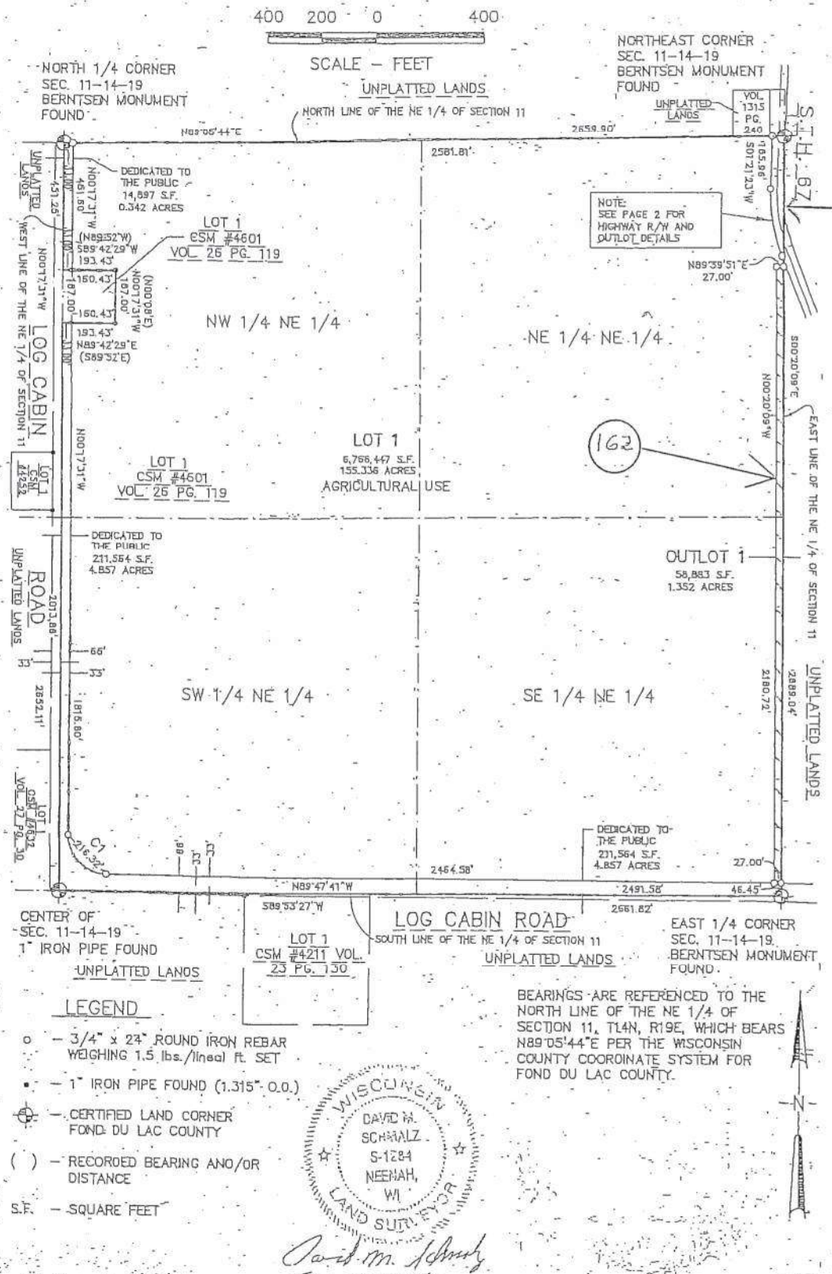
Certified Survey Map # 8079

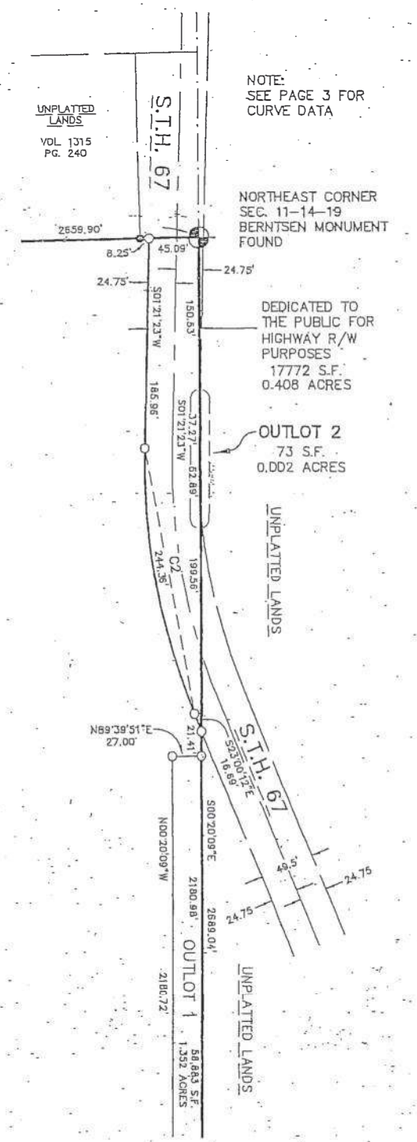
Volume 60 Page 90

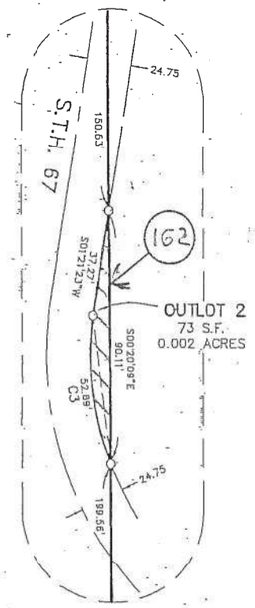
DOC# 1065369

A PART OF THE NORTHEAST 1/4 OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 19 EAST, TOWN OF OSCEOLA, FOND DU LAC COUNTY, WISCONSIN

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
4530-06-21	4.20	
FEDERAL PROJECT NUMBER		
PLAT OF RIGHT-OF-WAY REQUIRED FOR		
STH 67		
STH 67 — FOND DU LAC CO.		
CONSTRUCTION PROJECT NUMBER		

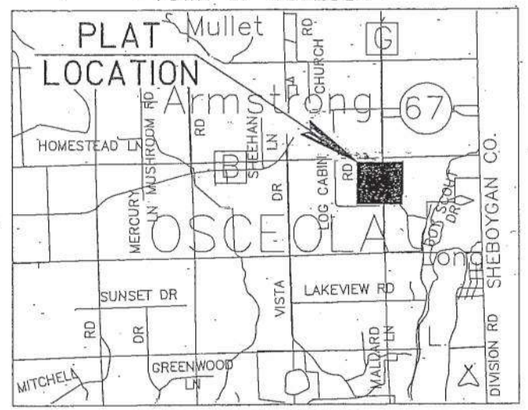








SECTION 11 T14N - R19E
TOWN OF OSCEOLA



LOCATION SKETCH
(NOT TO SCALE)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	R/W ACRES REQUIRED			P.L.E. ACRES	T.L.E. ACRES
			NEW	EXISTING	TOTAL		
162	BURNS BROTHERS FARMS	FEE	1.354	0.000	1.354		

CURVE	RADIUS	DELTA ANGLE	CHORD LENGTH	CHORD BEARING	ARC LENGTH
C1	138.48'	89°30'11"	194.99'	N 45°02'36" W	216.32'
C2	574.75'	24°21'36"	242.53'	S 10°49'25" E	244.36'
C3	525.25'	5°46'10"	52.87'	S 01°31'42" E	52.89'

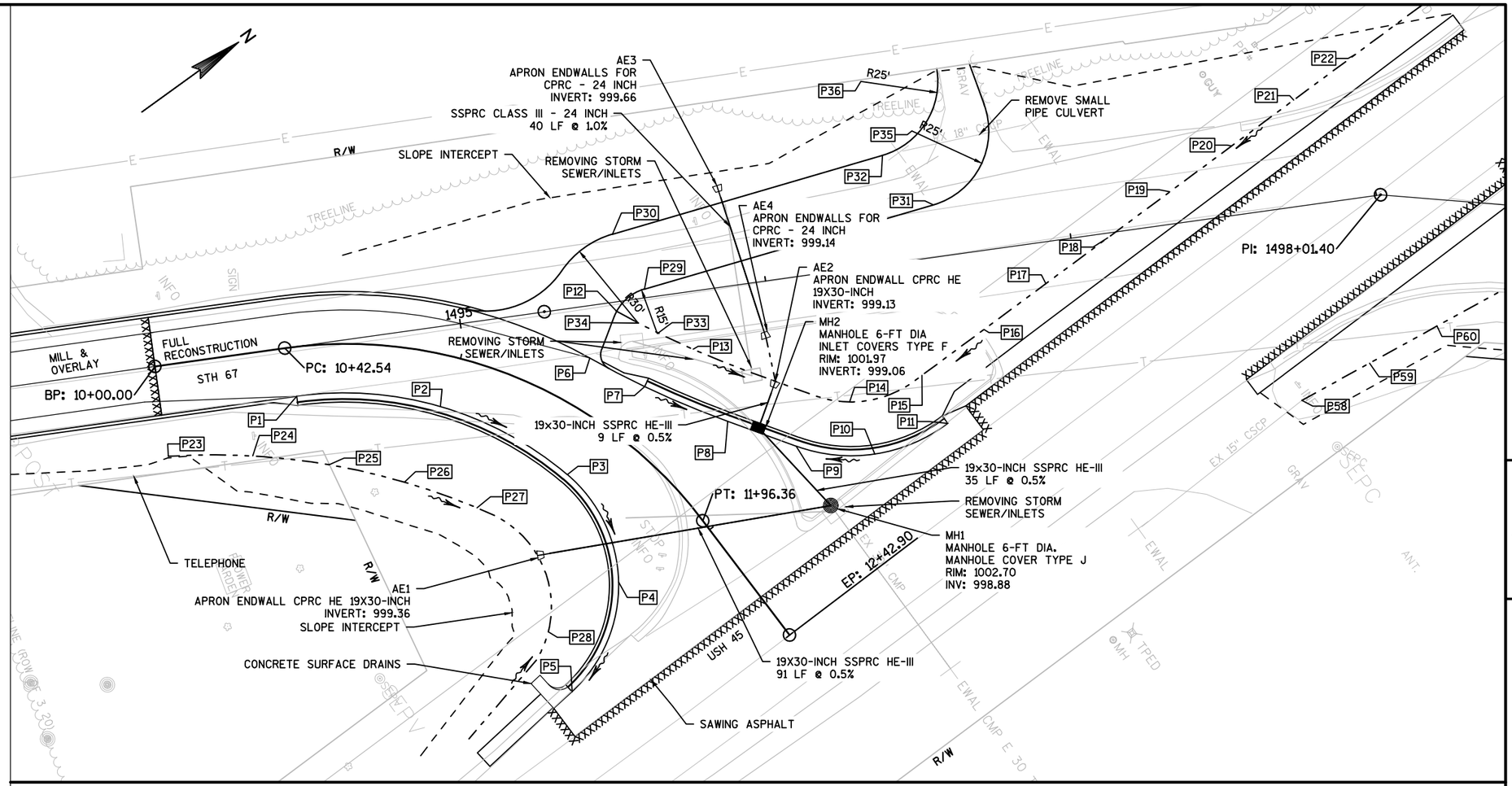
REVISION DATE

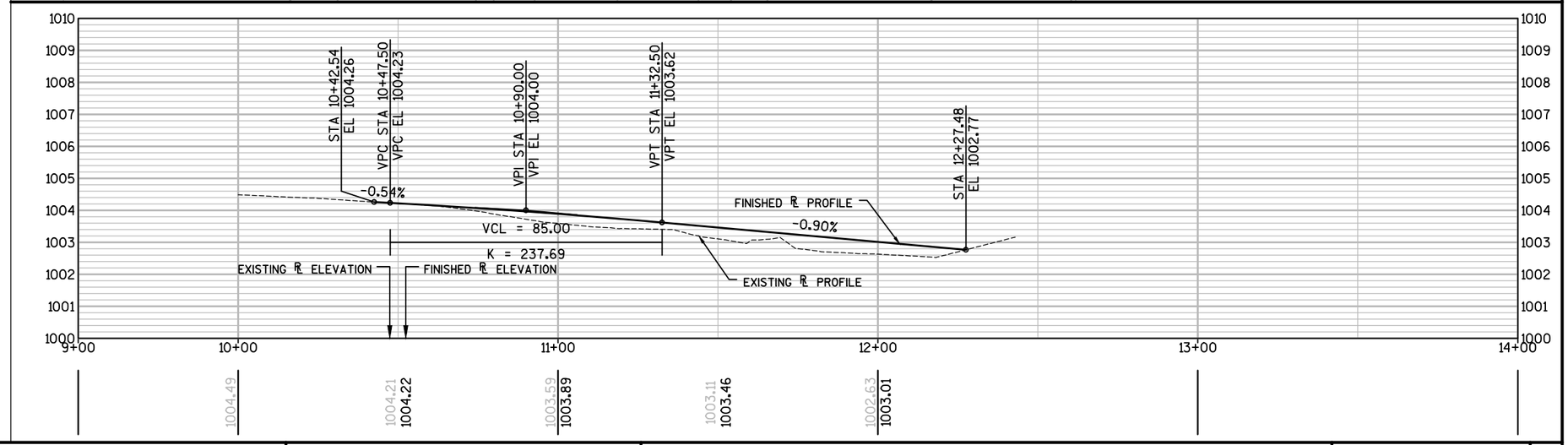
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: 4-27-16 Curt VanEss (Signature)

PONT TABLE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
P1	10+44.37	15.99'	1003.92	328,538.01	871,456.21
P2	10+97.31	16.70'	1003.61	328,573.80	871,486.23
P3	11+50.96	19.91'	1002.98	328,594.23	871,528.25
P4	11+95.48	33.79'	1002.37	328,587.27	871,566.26
P5	12+14.89	67.34'	1002.03	328,554.16	871,586.20
P6	11+36.89	-16.00'	1003.05	328,622.30	871,501.95
P7	11+54.76	-17.90'	1002.72	328,631.29	871,519.85
P8	11+78.79	-27.15'	1002.30	328,646.48	871,544.81
P9	11+95.61	-38.71'	1002.33	328,659.74	871,564.38
P10	12+12.87	-57.51'	1002.74	328,678.93	871,581.42
P11	12+19.21	-82.37'	1003.20	328,703.92	871,587.21
P12	11+37.04	-33.50'	1003.83	328,638.26	871,494.78
P13	11+59.15	-37.06'	1001.53	328,651.14	871,519.30
P14	11+95.00	-61.21'	999.63	328,682.21	871,562.91
P15	12+01.74	-85.11'	1000.03	328,706.28	871,569.68
P16	12+02.02	-110.11'	1000.46	328,731.28	871,569.42
P17	12+02.31	-135.11'	1000.89	328,756.28	871,569.15
P18	12+02.59	-160.11'	1001.33	328,781.27	871,568.88
P19	12+02.88	-185.11'	1001.76	328,806.27	871,568.62
P20	12+03.17	-210.10'	1002.19	328,831.27	871,568.35
P21	12+03.45	-235.10'	1002.63	328,856.27	871,568.09
P22	12+03.74	-260.10'	1003.06	328,881.27	871,567.82
P23	10+00.22	29.51'	1002.55	328,492.86	871,447.53
P24	10+27.36	33.17'	1001.88	328,515.12	871,463.49
P25	10+54.91	39.04'	1002.85	328,533.57	871,480.37
P26	10+89.41	43.10'	1000.63	328,549.99	871,499.22
P27	11+25.20	43.93'	1000.00	328,564.17	871,519.80
P28	11+93.57	61.72'	999.78	328,559.31	871,565.95
P29	11+40.31	-44.24'	1003.85	328,649.76	871,494.20
P30	11+27.23	-55.07'	1003.40	328,651.79	871,473.68
P31	11+76.65	-123.98'	1003.98	328,741.73	871,527.06
P32	11+64.25	-124.56'	1003.57	328,737.71	871,504.38
P33	11+49.18	-34.33'	1002.61	328,644.72	871,508.32
P34	11+43.47	-33.81'	1003.18	328,641.70	871,501.93
P35	11+65.36	-136.85'		328,750.14	871,503.52
P36	11+53.61	-139.17'		328,746.12	871,480.84





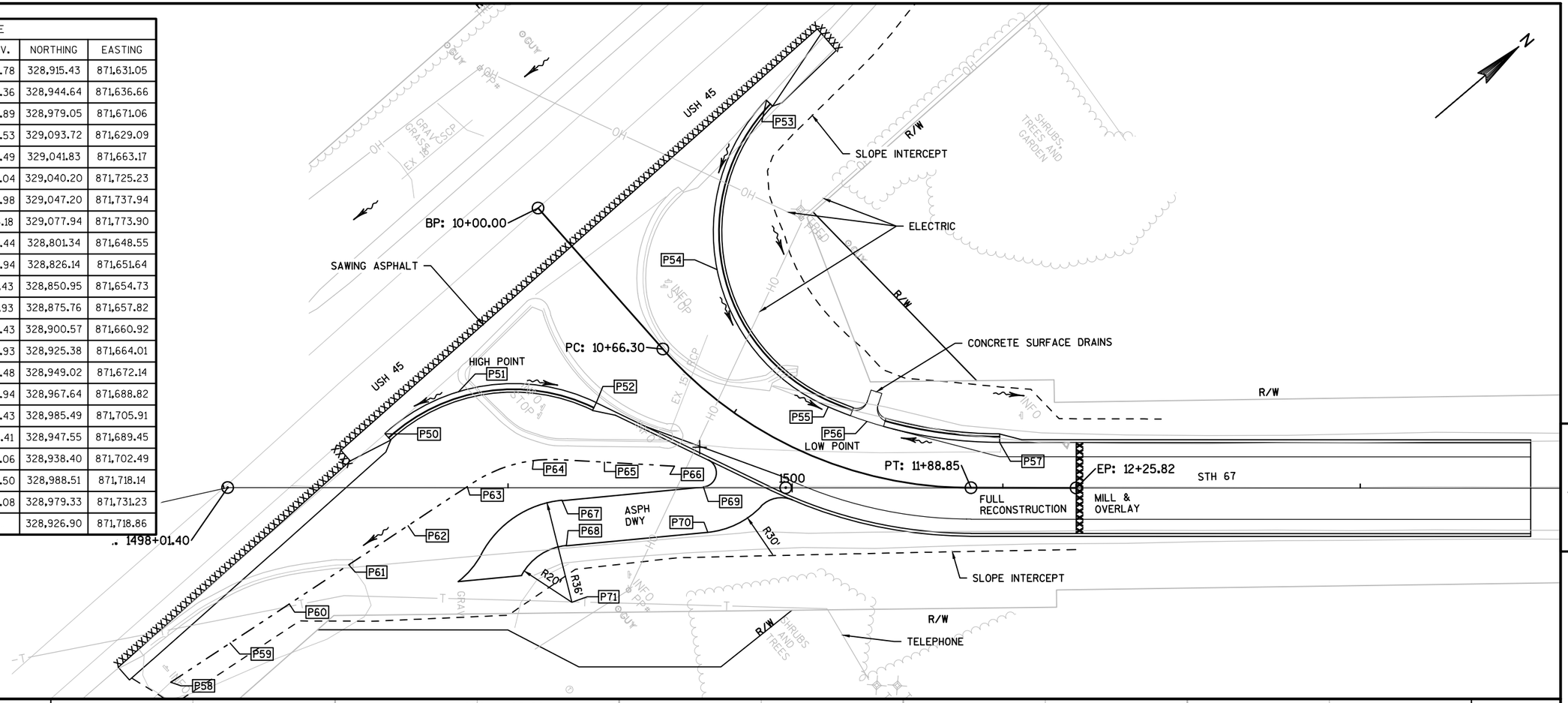
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN AND PROFILE: STH 67	SHEET 132	E

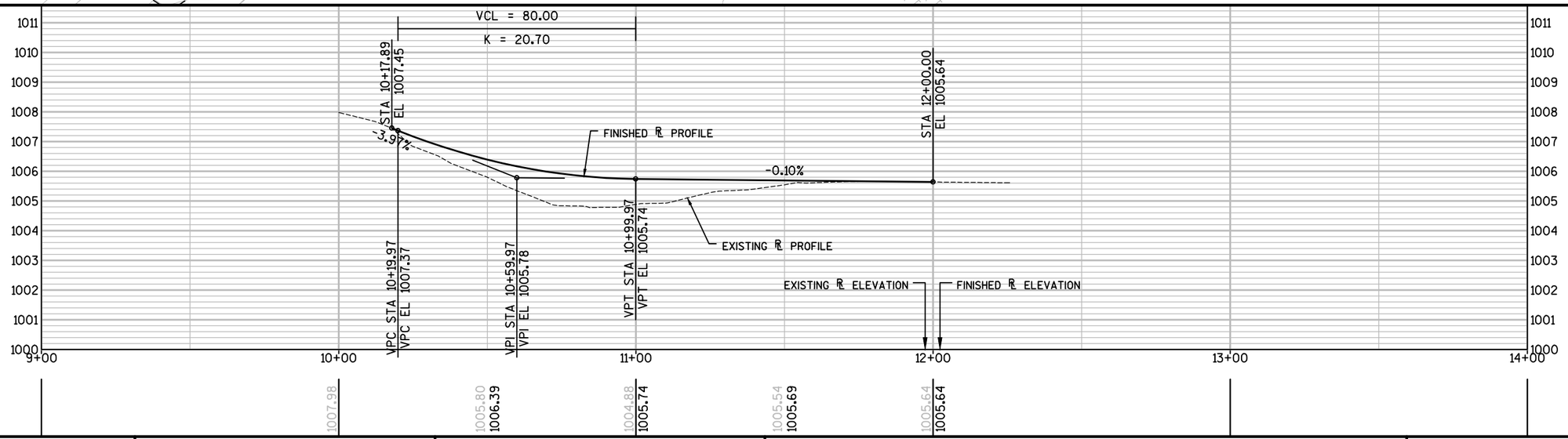
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LAYOUT NAME - 050101_PP

PLOT DATE : 12/17/2019 8:33 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

PONT TABLE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
P50	10+23.66	92.98'	1005.78	328,915.43	871,631.05
P51	10+29.81	63.87'	1006.36	328,944.64	871,636.66
P52	10+64.82	30.10'	1005.89	328,979.05	871,671.06
P53	10+24.96	-85.32'	1008.53	329,093.72	871,629.09
P54	10+58.09	-32.82'	1006.49	329,041.83	871,663.17
P55	11+29.78	-18.09'	1005.04	329,040.20	871,725.23
P56	11+46.36	-17.94'	1004.98	329,047.20	871,737.94
P57	11+98.87	-16.00'	1005.18	329,077.94	871,773.90
P58	10+39.07	207.37'	1000.44	328,801.34	871,648.55
P59	10+42.62	182.62'	1000.94	328,826.14	871,651.64
P60	10+46.16	157.88'	1001.43	328,850.95	871,654.73
P61	10+49.71	133.13'	1001.93	328,875.76	871,657.82
P62	10+53.25	108.38'	1002.43	328,900.57	871,660.92
P63	10+56.80	83.63'	1002.93	328,925.38	871,664.01
P64	10+65.36	60.14'	1003.48	328,949.02	871,672.14
P65	10+78.75	42.52'	1003.94	328,967.64	871,688.82
P66	10+94.61	27.58'	1004.43	328,985.49	871,705.91
P67	10+77.73	62.57'	1005.41	328,947.55	871,689.45
P68	10+85.76	73.28'	1005.06	328,938.40	871,702.49
P69	11+05.20	27.67'	1005.50	328,988.51	871,718.14
P70	11+12.99	40.45'	1005.08	328,979.33	871,731.23
P71	10+94.77	87.58'		328,926.90	871,718.86





PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN AND PROFILE: STH 67	SHEET 133	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050102_PP

PLOT DATE : 12/17/2019 8:34 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 134	E

END EXCEPTION TO NET CENTERLINE LENGTH
STA. 1502+60.00 - STA. 1508+60.00
WORK COMPLETED DURING WISDOT PROJECT 4530-06-73

STA. 1508+60.00
BUTT JOINT REQD.

EP: 150+00.00
PT: 1508+09.11
PC: 1508+93.56

EXISTING RW
TOWN HALL ROAD
150
1510
CABC
PE
EXISTING RW
SLOPE INTERCEPT (TYP)
WETLAND BOUNDARY
MATCH LINE STA. 1505+50

PC: 1514+99.57
PT: 1512+47.02
STH 67
STH 67
CONSTRUCTION RL
WE ENERGIES
TLE
FRONTIER COMMUNICATIONS
5

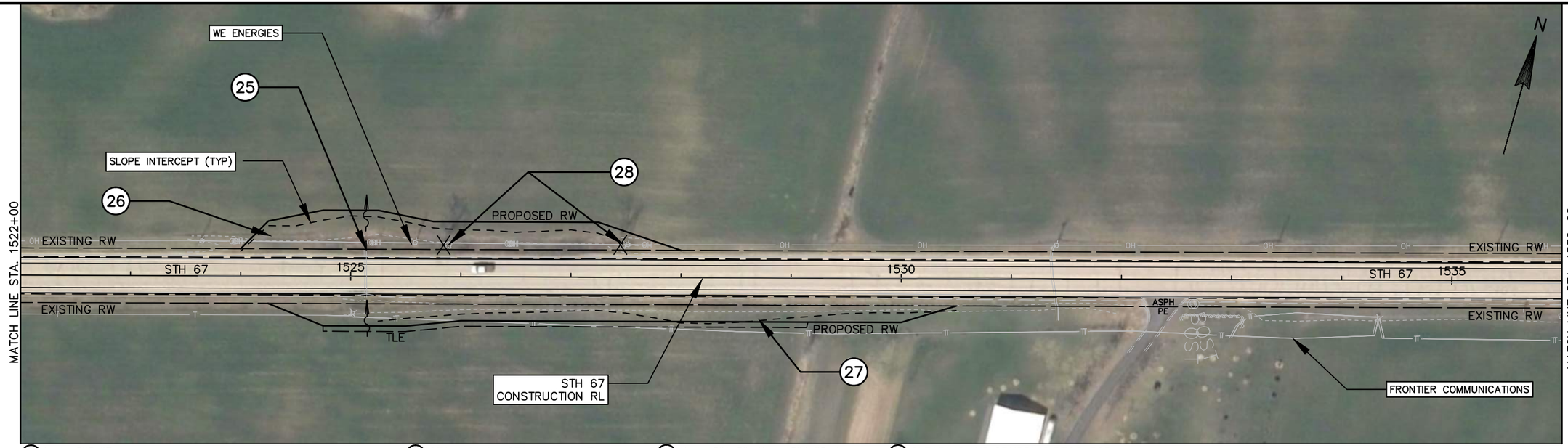
PT: 1517+75.50
GUY
CABC
PE
CABC
FE
CABC
FE
WE ENERGIES
EXISTING RW
1520
STH 67
EXISTING RW
MATCH LINE STA. 1522+00
TLE
6
FRONTIER COMMUNICATIONS

5 STA. 1510+25 - STA. 1511+25, RT
FLATTEN EXISTING SLOPE

6 CLEARING AND GRUBBING REQD. FOR
TREES WITHIN THE CLEARZONE
STA. 1519+55, RT - 24 ID

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 135	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\021201_PD.DWG
PLOT DATE : 2/5/2020 11:24 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :

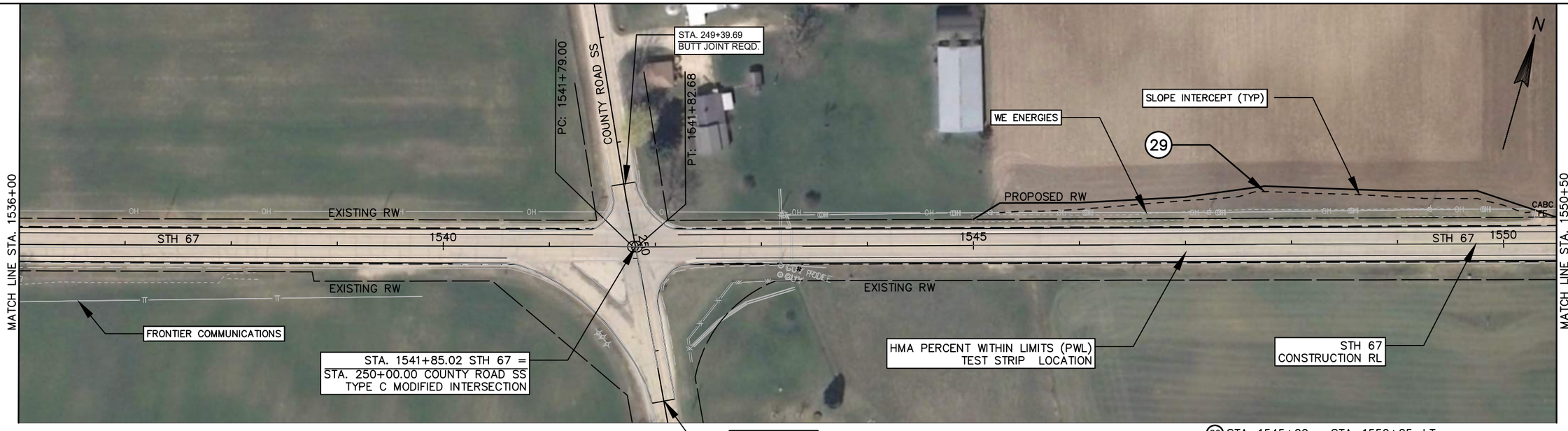


25 STA. 1525+07
EXISTING 24"x30" CONCRETE BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REMOVE EXTENSION AND EXTEND ADDITIONAL 16-LF (NORTH END)
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
CONCRETE COLLAR FOR PIPE - 1 EA REQD.
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN

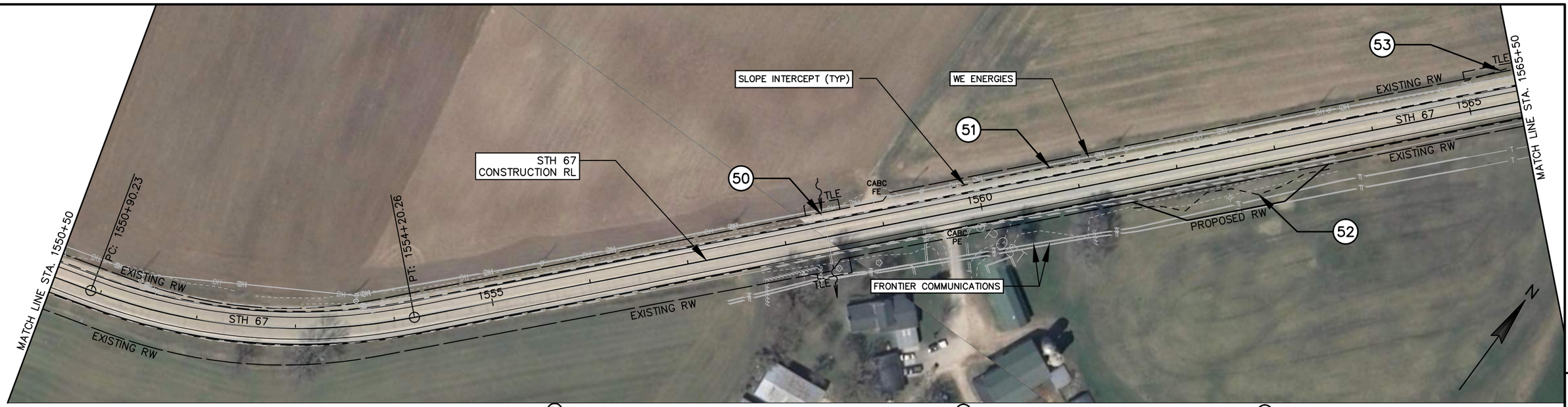
26 STA. 1524+25 - STA. 1527+50, LT
FLATTEN EXISTING SLOPES

27 STA. 1524+50 - STA. 1530+25, RT
FLATTEN EXISTING SLOPES

28 CLEARING AND GRUBBING REQD. FOR TREES WITHIN THE CLEARZONE



29 STA. 1545+00 – STA. 1550+25, LT
FLATTEN EXISTING SLOPES



50 STA. 1558+42
EXISTING 24"x30" CONCRETE BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REMOVE EXTENSION AND REPLACE (NORTH END)
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
CONCRETE COLLARS FOR PIPE - 1 EA REQD.
GRADE EXISTING NORTH DITCH ADJACENT TO APRON ENDWALLS TO DRAIN

51 STA. 1559+75 – STA. 1561+50, LT
FLATTEN EXISTING SLOPE

52 STA. 1561+50 - STA. 1563+25, RT
FLATTEN EXISTING SLOPE

53 STA. 1565+00 - STA. 1567+75, LT
FLATTEN EXISTING SLOPE



55 STA. 1566+94
EXISTING 24"X24" BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REMOVE EXISTING 24" CMCP EXTENSIONS
REPLACE 24-INCH CMCP EXTENSIONS EXTEND ADDITIONAL 8-LF (SOUTH END)
REPLACE 24-INCH CMCP EXTENSIONS EXTEND ADDITIONAL 8-LF (NORTH END)
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
CONCRETE COLLARS FOR PIPE - 2 EA REQD.

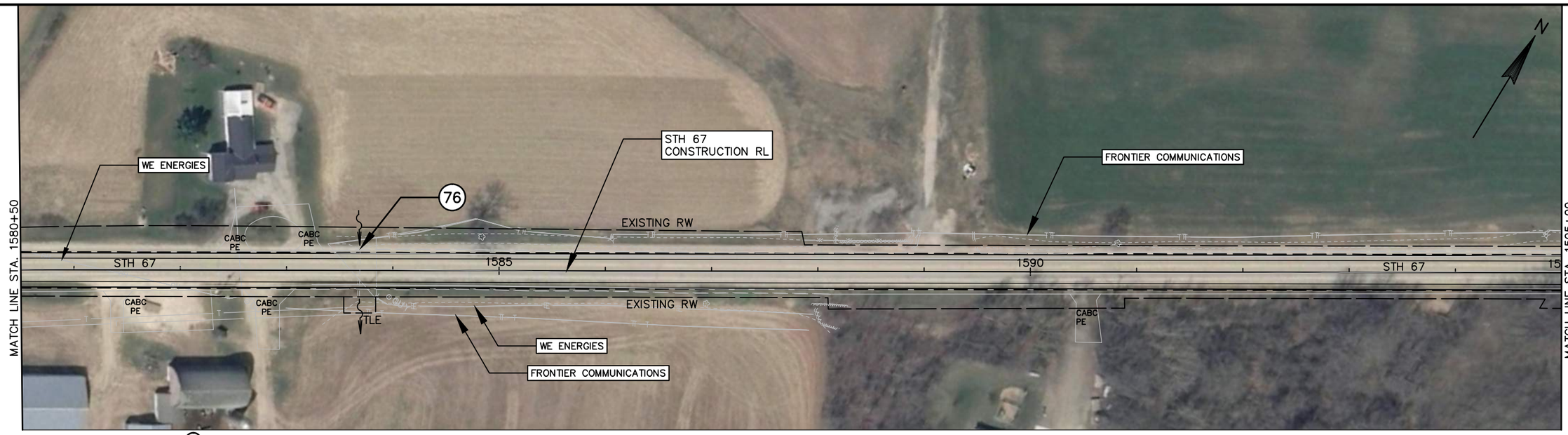
54 STA. 1569+00 - STA. 1571+25, LT
FLATTEN EXISTING SLOPE

56 REMOVING EXISTING GUARDRAIL
STA. 1565+73 - STA. 1568+02, RT - 229 LF REQD.

57 STA. 1566+25 - STA. 1569+50, RT
FLATTEN EXISTING SLOPE

58 STA. 1578+33
EXISTING 24"x36" CONCRETE BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REMOVE EXTENSION AND REPLACE (NORTH END)
REMOVE EXTENSION AND REPLACE (SOUTH END)
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
CONCRETE COLLARS FOR PIPE - 2 EA REQD.
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALLS TO DRAIN

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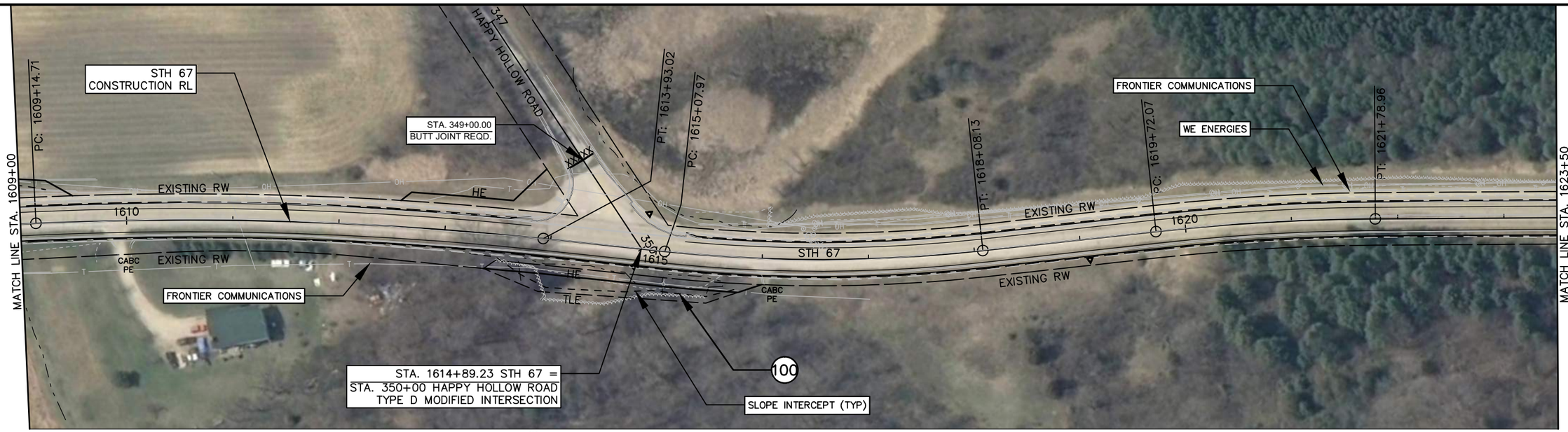
76 STA. 1583+60
EXISTING 24"x36" CONCRETE BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REPLACE DENTED SECTION OF EXISTING PIPE ON NORTH END - 10 LF REQD.
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
CONCRETE COLLARS FOR PIPE - 1 EA REQD.
RIPRAP MEDIUM AT SOUTH END



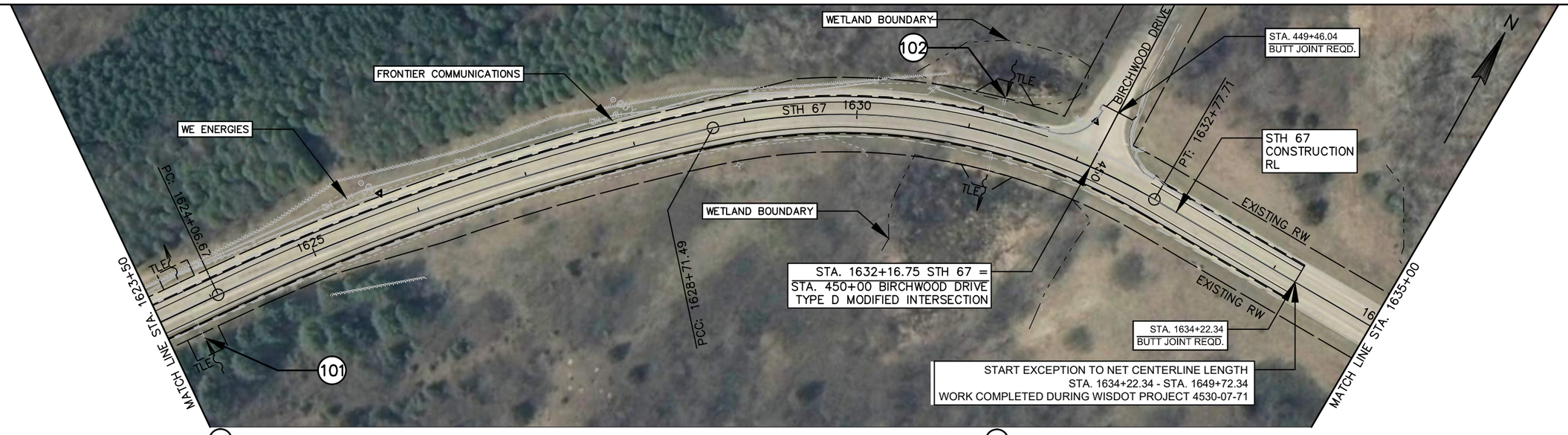
77 STA. 1602+00 - STA. 1605+00, RT
FLATTEN EXISTING SLOPE

78 STA. 1608+62
EXISTING 24"x36" CONCRETE BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REMOVE EXTENSION AND REPLACE (NORTH END)
REMOVE EXTENSION AND REPLACE (SOUTH END)
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
CONCRETE COLLARS FOR PIPE - 2 EA REQD.

79 STA. 1607+75 - STA. 1609+50, LT
FLATTEN EXISTING SLOPE
GRADE AND SHAPE EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN



100 STA. 1613+25 – STA. 1615+75, RT
FLATTEN EXISTING SLOPE



101 STA. 1623+80
EXISTING 24"x30" CONCRETE BOX CULVERT WITH 24-INCH CMCP EXTENSIONS
REMOVE EXISTING 24" CMCP EXTENSIONS
REPLACE 24-INCH CMCP EXTENSIONS EXTEND ADDITIONAL 8 LF (SOUTH END)
REPLACE 24-INCH CMCP EXTENSION EXTEND ADDITIONAL 8 LF (NORTH END)
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD
CONCRETE COLLARS FOR PIPE - 2 EA REQD

102 STA. 1631+18
EXISTING 18-INCH CMCP @ 0.01%
CULVERT PIPE LINERS 18-INCH - 66 LF REQD.
APRON ENDWALLS FOR
CULVERT PIPE 18-INCH - 2 EA REQD.
CLEAN OUT EXISTING PIPE
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALLS TO DRAIN

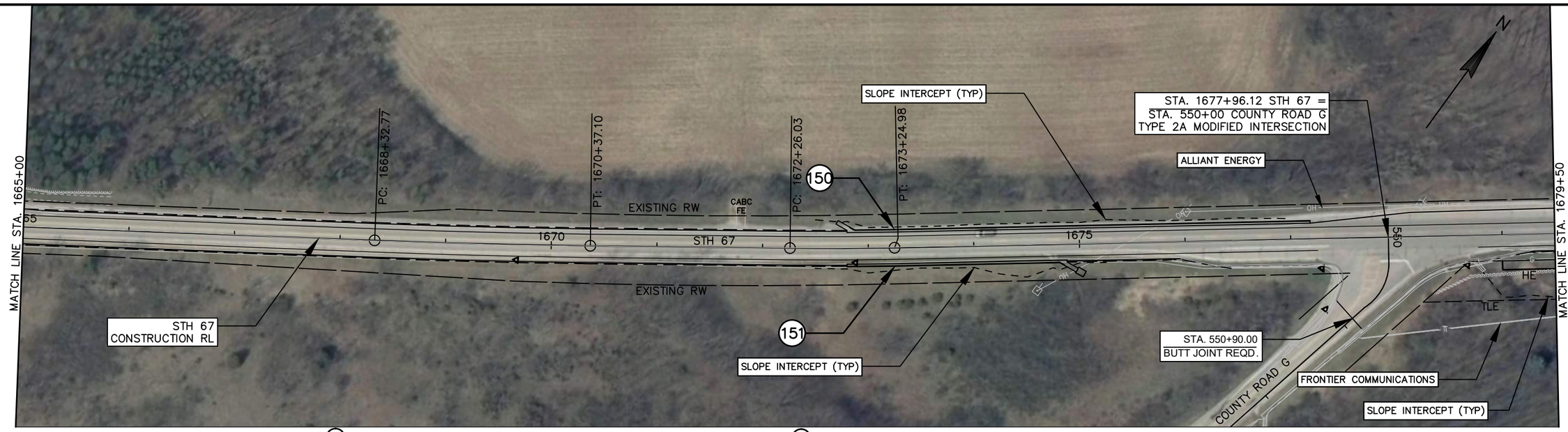




125 STA. 1653+67 - STA. 1656+50, LT
REMOVE EXISTING CURB AND GUTTER
INSTALL CONCRETE CURB AND GUTTER 30-INCH TYPE D - 283 LF REQD
INSTALL CONCRETE SURFACE DRAIN AT WEST END.

126 STA. 1653+67 - STA. 1656+58, RT
REMOVE EXISTING CURB AND GUTTER
INSTALL CONCRETE CURB AND GUTTER 30-INCH TYPE D - 291 LF REQD
INSTALL CONCRETE SURFACE DRAIN AT EAST AND WEST ENDS.

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150 STA. 1672+80 - STA. 1677+19, LT
REMOVE EXISTING CURB AND GUTTER
INSTALL CONCRETE CURB AND GUTTER 30-INCH TYPE D - 439 LF REQD.
INSTALL CONCRETE SURFACE DRAIN AT WEST END.

151 STA. 1672+80 - STA. 1674+88, RT
REMOVE EXISTING CURB AND GUTTER
INSTALL CONCRETE CURB AND GUTTER 30-INCH TYPE D - 208 LF REQD.
INSTALL CONCRETE SURAFCE DRAIN AT EAST END.



152 STA. 1679+00 - STA. 1681+00, RT
FLATTEN EXISTING SLOPE

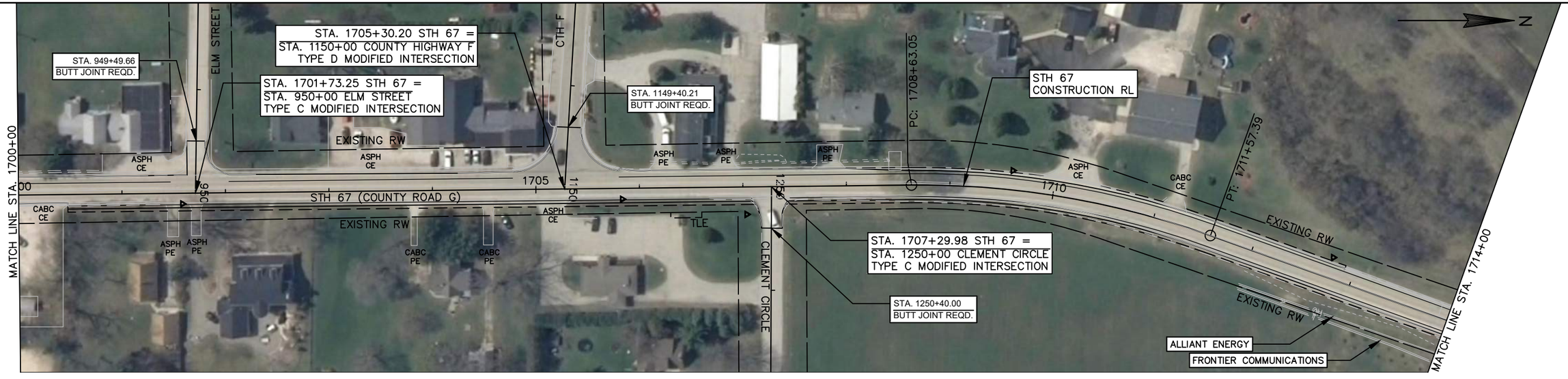
154 STA. 1686+06
EXISTING 36" X 48" BOX CULVERT TO BE REMOVED
EXISTING 48" SSPRCC EXTENSIONS TO REMAIN
REPLACE WITH 48" SSPRCC - 40 LF
2 CONCRETE COLLARS REQUIRED

154 STA. 1691+40
EXISTING 12-INCH CMCP TO REMAIN
APRON ENDWALLS FOR
CULVERT PIPE 12-INCH - 1 EA REQD. (NORTH END)

MATCH LINE STA. 1700+00



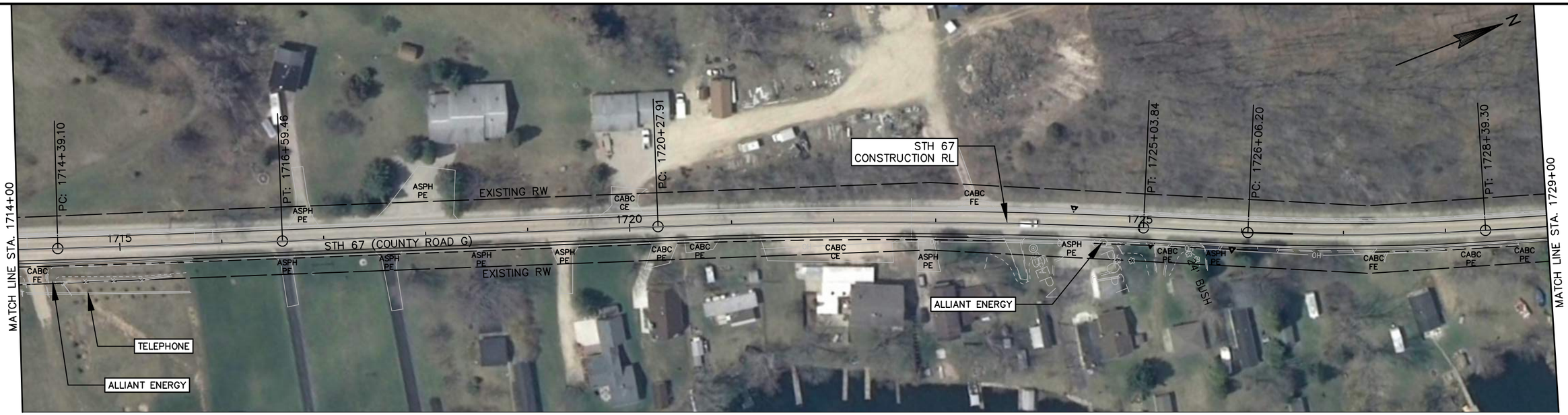
170 STA. 1695+72
EXISTING 12-INCH CMCP
CLEAN OUT EXISTING PIPE
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN

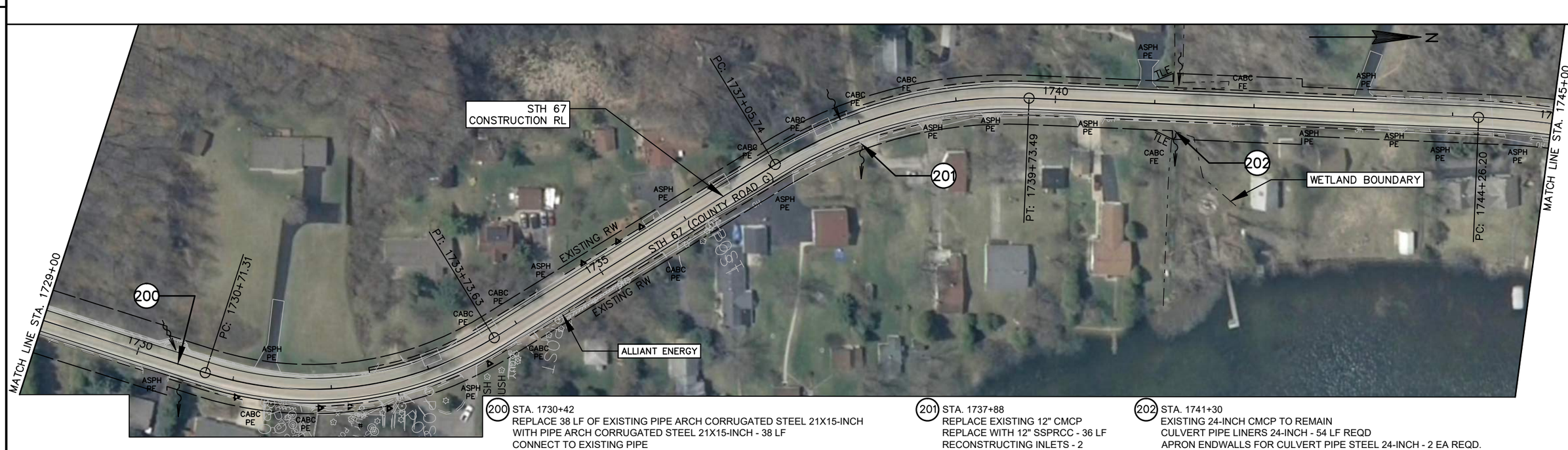


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 142	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\021201_PD.DWG PLOT DATE : 2/5/2020 11:27 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44





(200) STA. 1730+42
REPLACE 38 LF OF EXISTING PIPE ARCH CORRUGATED STEEL 21X15-INCH WITH PIPE ARCH CORRUGATED STEEL 21X15-INCH - 38 LF
CONNECT TO EXISTING PIPE
CONCRETE COLLARS FOR PIPE - 1 EA REQD.
APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 21X15-4 TO 1, 1-EA REQD. (NORTH)

(201) STA. 1737+88
REPLACE EXISTING 12" CMCP
REPLACE WITH 12" SSPRCC - 36 LF
RECONSTRUCTING INLETS - 2

(202) STA. 1741+30
EXISTING 24-INCH CMCP TO REMAIN
CULVERT PIPE LINERS 24-INCH - 54 LF REQD
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALLS TO DRAIN

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225 STA. 1754+32
EXISTING 18-INCH CMCP TO REMAIN
CULVERT PIPE LINER 18-INCH - 54 LF REQD
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALLS TO DRAIN

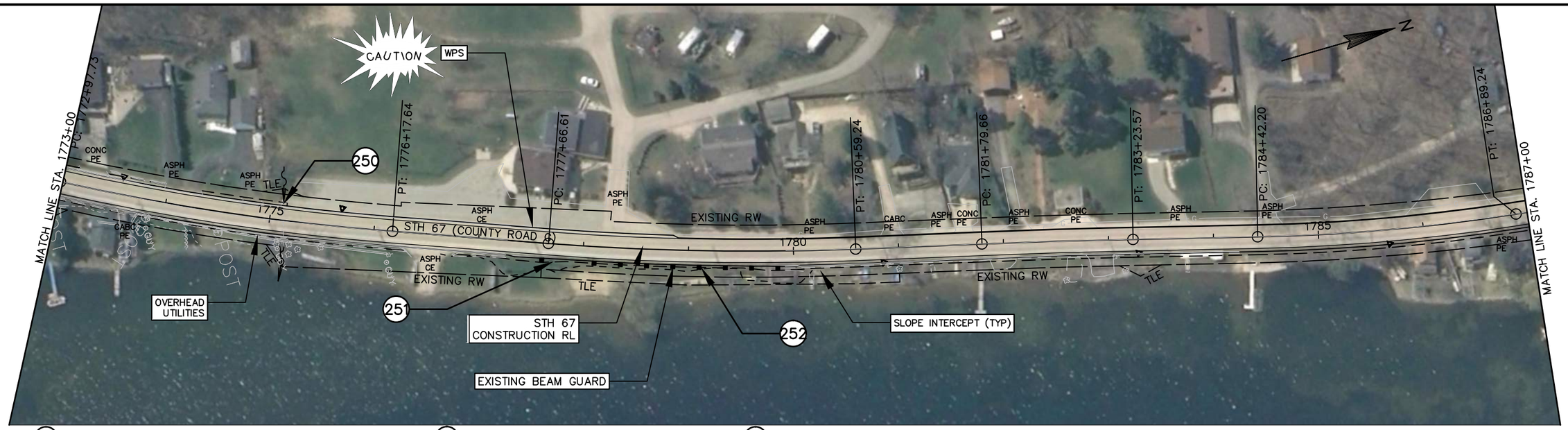
226 STA. 1758+23
EXISTING 24-INCH CMCP @ 0.70% TO REMAIN
CULVERT PIPE LINER 24-INCH - 44 LF REQD
APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH - 2 EA REQD.
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALLS TO DRAIN



227 STA. 1761+35
EXISTING 18-INCH CMCP TO REMAIN
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALLS TO DRAIN

228 STA. 1772+88
EXISTING 18-INCH CMCP TO REMAIN
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 1 EA REQD. (EAST END)
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN

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250 STA. 1775+14
EXISTING 18-INCH CMCP @ 4.32% TO REMAIN
CULVERT PIPE LINER 18-INCH - 40 LF REQD.
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.
REMOVE 2-FT OF DAMAGED PIPE AT WEST END
RIPRAP MEDIUM AT EAST END WALL

251 REMOVING GUARDRAIL
STA. 1777+42 - STA. 1780+09, RT - 268 LF REQD.

252 STA. 1777+35.00 - STA. 1780+02.40, RT
MGS GUARDRAIL 3 K - 162.5 LF REQD.
MGS GUARDRAIL TERMINAT EAT - 2 REQD.



253 STA. 1788+23
EXISTING 15-INCH CMCP TO REMAIN
APRON ENDWALLS FOR CULVERT PIPE 15-INCH - 1 EA REQD. (WEST END)
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 145	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\SHEETSPLAN\021201_PD.DWG PLOT DATE : 2/5/2020 11:29 AM PLOT BY : DAVID YAHNKE PLOT NAME :

WISDOT/CADDS SHEET 44



274 STA. 1807+51
EXISTING 12-INCH CMCP
CLEAN OUT EXISTING PIPE

275 REMOVING GUARDRAIL
STA. 1813+05 - STA. 1814+46, LT - 139 LF REQD.

276 REMOVING GUARDRAIL
STA. 1813+38 - STA. 1814+51, RT - 115 LF REQD.

277 REMOVING GUARDRAIL
STA. 1814+53 - STA. 1820+18, LT - 565 LF REQD.

278 REMOVING GUARDRAIL
STA. 1814+58 - STA. 1817+10, RT - 253 LF REQD.

279 STA. 1813+01.92 - STA. 1814+47.00, LT
STA. 1814+53.00 - STA. 1819+95.31, LT
MGS GUARDRAIL 3 - 87.5 LF & 487.5 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 2 EA REQD.
MGS GUARDRAIL TERMINAL TYPE 2 - 2 EA REQD.

280 STA. 1813+36.91 - STA. 1814+52.00, RT
STA. 1814+58.00 - STA. 1816+98.86, RT
MGS GUARDRAIL 3 K - 62.5 LF & 187.5 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 2 EA REQD.
MGS GUARDRAIL TERMINAL TYPE 2 - 2 EA REQD.

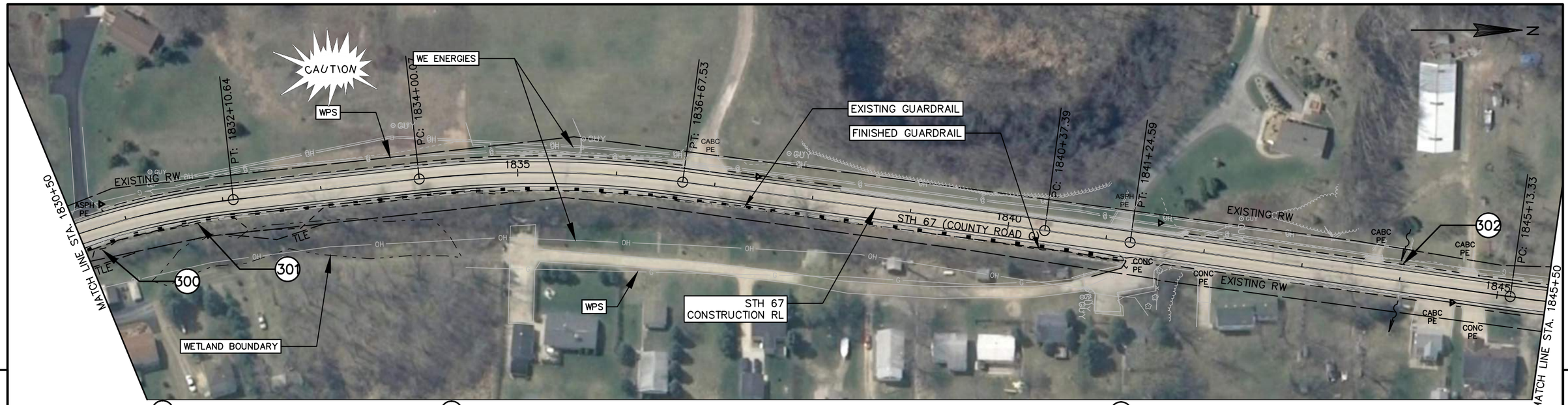
281 STA. 1813+00 - STA. 1817+00, LT
CLEARING AND GRUBBING



282 REMOVING GUARDRAIL
STA. 1822+42 - STA. 1825+02, RT - 265 LF REQD.

283 STA. 1822+42 - STA. 1825+19.09, RT
MGS GUARDRAIL 3 K - 175 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 2 EA REQD.

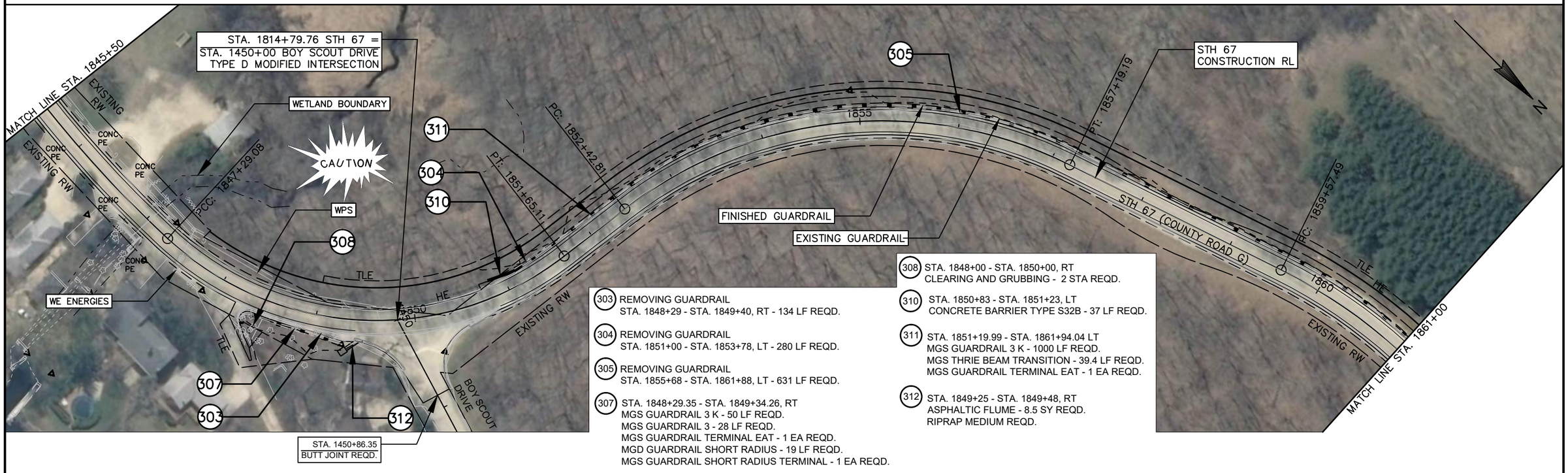
284 STA. 1828+09
EXISTING 15-INCH CMCP @ 4.95% TO REMAIN
CULVERT PIPE LINER 15-INCH - 50 LF REQD
APRON ENDWALLS FOR CULVERT PIPE 15-INCH - 1 EA REQD. (EAST END)
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN



300 STA. 1830+35.00 - STA. 1841+17.00, RT
MGS GUARDRAIL TYPE 3 K - 975 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 2 EA REQD.

301 REMOVING GUARDRAIL
STA. 1830+44 - STA. 1841+18, RT - 1065 LF REQD.

302 STA. 1844+02
EXISTING 18-INCH CMCP @ 5.47% TO REMAIN
CULVERT PIPE LINER 18-INCH - 35 LF REQD.
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 1 EA REQD. (WEST END)
GRADING AND SHAPING EXISTING DITCH ADJACENT TO APRON ENDWALL TO DRAIN



303 REMOVING GUARDRAIL
STA. 1848+29 - STA. 1849+40, RT - 134 LF REQD.

304 REMOVING GUARDRAIL
STA. 1851+00 - STA. 1853+78, LT - 280 LF REQD.

305 REMOVING GUARDRAIL
STA. 1855+68 - STA. 1861+88, LT - 631 LF REQD.

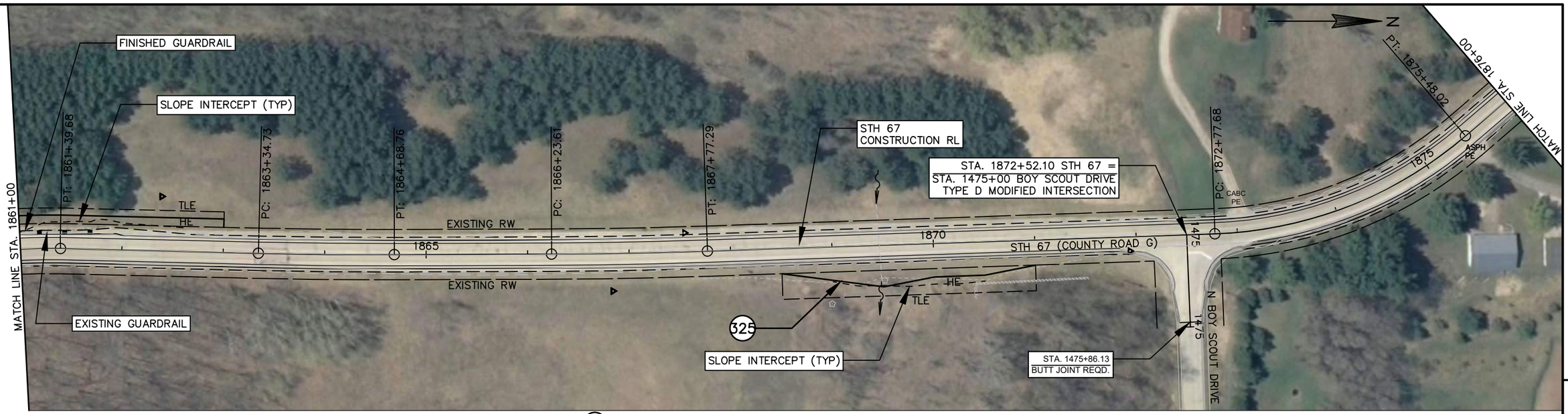
307 STA. 1848+29.35 - STA. 1849+34.26, RT
MGS GUARDRAIL 3 K - 50 LF REQD.
MGS GUARDRAIL 3 - 28 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 1 EA REQD.
MGD GUARDRAIL SHORT RADIUS - 19 LF REQD.
MGS GUARDRAIL SHORT RADIUS TERMINAL - 1 EA REQD.

308 STA. 1848+00 - STA. 1850+00, RT
CLEARING AND GRUBBING - 2 STA REQD.

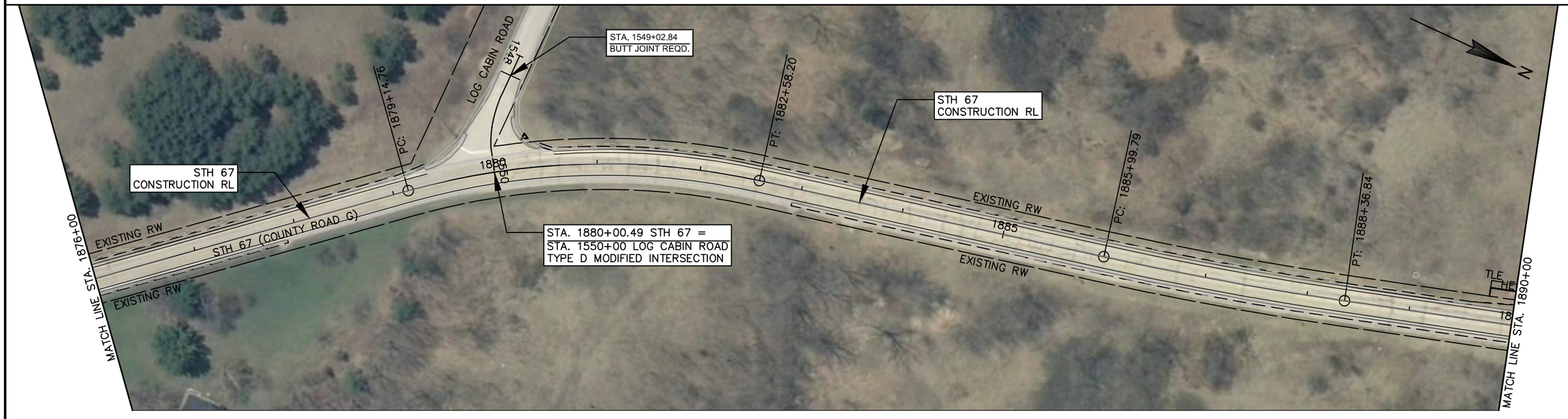
310 STA. 1850+83 - STA. 1851+23, LT
CONCRETE BARRIER TYPE S32B - 37 LF REQD.

311 STA. 1851+19.99 - STA. 1861+94.04 LT
MGS GUARDRAIL 3 K - 1000 LF REQD.
MGS THRIE BEAM TRANSITION - 39.4 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 1 EA REQD.

312 STA. 1849+25 - STA. 1849+48, RT
ASPHALTIC FLUME - 8.5 SY REQD.
RIPRAP MEDIUM REQD.



325 STA. 1869+00 – STA. 1870+50, RT
FLATTEN EXISTING SLOPE



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350 STA. 1890+35.00 - STA. 1906+12.84, LT
MGS GUARDRAIL 3 K - 1475 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 2 EA REQD.

351 REMOVING EXISTING GUARDRAIL
STA. 1892+01 - STA. 1906+10, LT - 1414 LF REQD.

352 REMOVING EXISTING GUARDRAIL
STA. 1899+74 - STA. 1902+32, RT - 259 LF REQD.

353 STA. 1899+25.00 - STA. 1902+93.96, RT
MGS GUARDRAIL 3 K - 262.5 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 2 EA REQD.



354 STA. 1908+14
EXISTING 18-INCH CMCP TO REMAIN
APRON ENDWALLS FOR CULVERT PIPE 18-INCH - 2 EA REQD.

355 STA. 1913+50 - STA. 1916+00, LT
FLATTEN EXISTING SLOPE

356 STA. 1915+67.49 - STA. 1916+72.50, RT
MGS GUARDRAIL 3 - 12.5 LF REQD.
MGS THRIE BEAM TRANSITION - 39.4 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 1 REQD. (SOUTH END)

357 STA. 1916+70 - STA. 1918+45, RT
CONCRETE BARRIER TYPE S32 - 175 LF REQD.
INSTALL ASPHALTIC FLUMES AND ASPHALTIC CURB AT NORTH AND SOUTH ENDS.

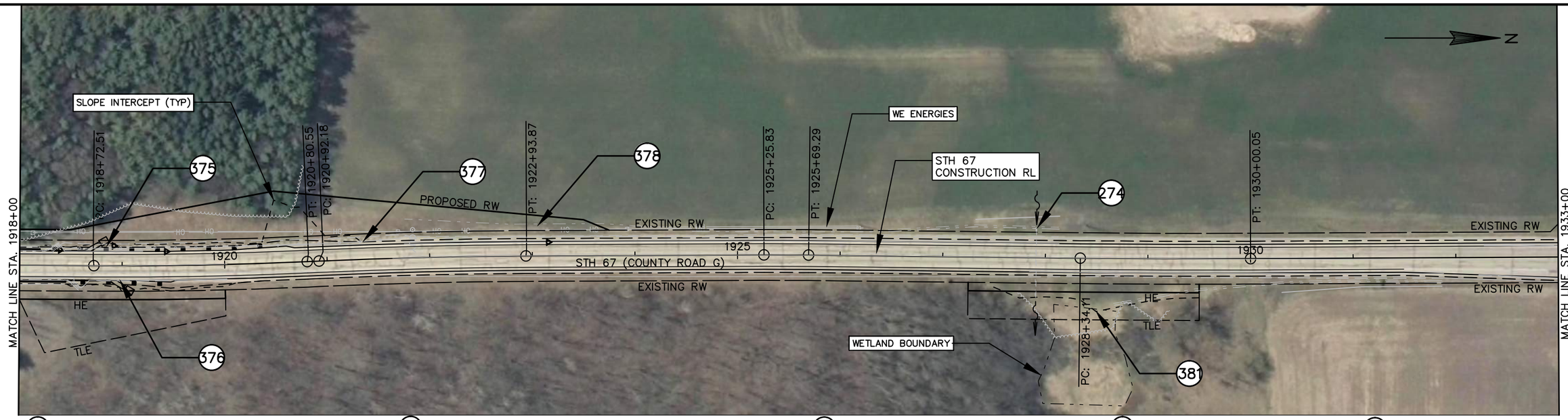
358 STA. 1915+87.52 - STA. 1916+92.50 LT
MGS GUARDRAIL 3 - 12.5 LF REQD.
MGS THRIE BEAM TRANSITION - 39.4 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 1 REQD. (SOUTH END)

359 STA. 1916+90 - STA. 1918+20, LT
CONCRETE BARRIER TYPE S32 - 130' LF REQD.
INSTALL ASPHALTIC FLUMES AND ASPHALTIC CURB AT NORTH AND SOUTH ENDS.

360 STA. 1917+03 - STA. 1918+32, LT
REMOVE CURB AND GUTTER - 129 LF REQD.

361 STA. 1915+92 - STA. 1918+53, RT
REMOVE CURB AND GUTTER - 261 LF REQD.

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375 STA. 1918+17.50 - STA. 1920+60.65, LT
MGS GURDRAIL 3 - 150 LF REQD.
MGS THRIE BEAM TRANSITION - 39.4 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 1 EA REQD. (NORTH END)

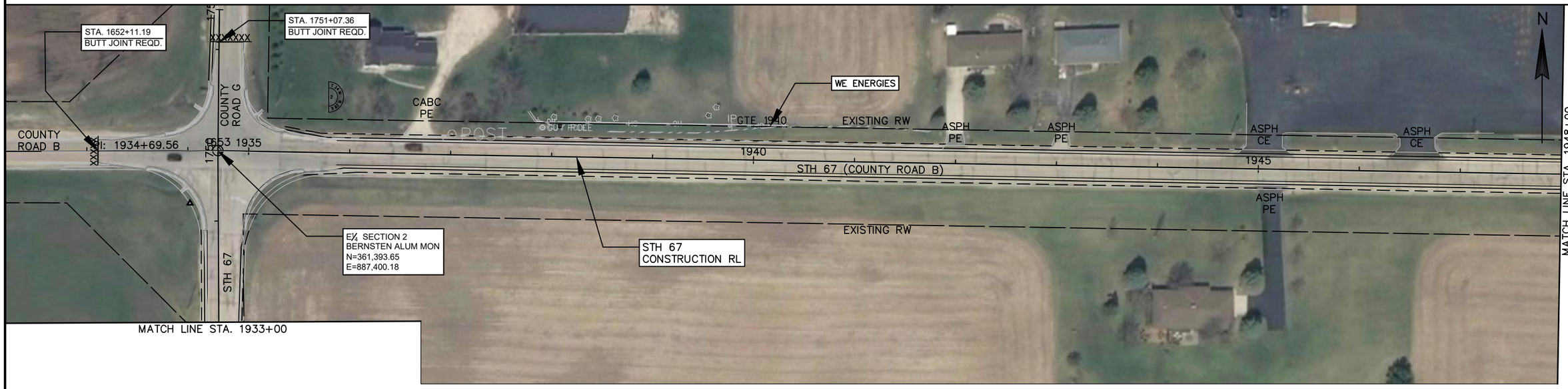
376 STA. 1918+42.50 - STA. 1919+47.21, RT
MGS GUARDRAIL 3 - 12.5 LF REQD.
MGS THRIE BEAM TRANSITION - 39.4 LF REQD.
MGS GUARDRAIL TERMINAL EAT - 1 EA REQD. (NORTH END)

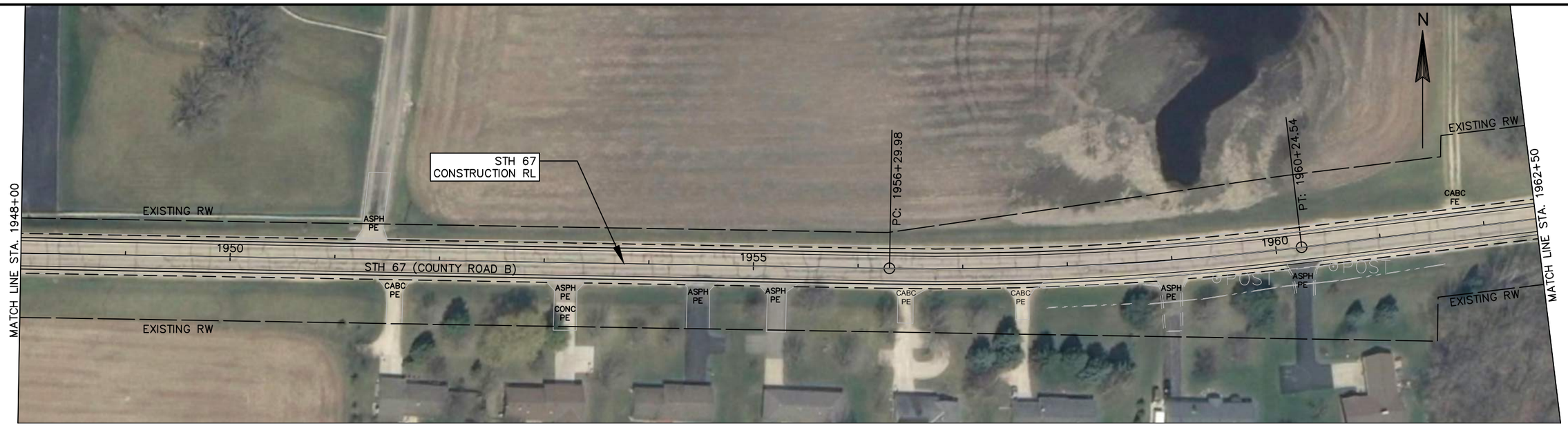
377 REMOVING EXISTING GUARDRAIL
STA. 1918+26 - STA. 1921+74, LT - 349 LF REQD.

378 STA. 1920+50 - STA. 1921+33, LT
FLATTEN EXISTING SLOPE

381 STA. 1927+50 - STA. 1929+25, RT
FLATTEN EXISTING SLOPE

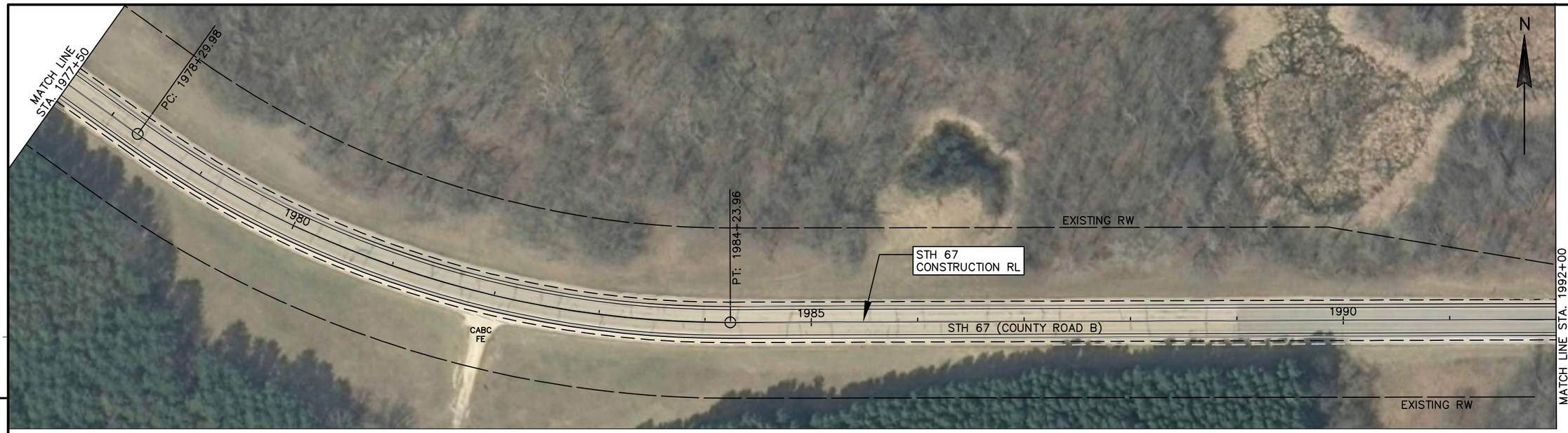
274 STA. 1927+90
EXISTING 12-INCH CMCP
CLEAN OUT EXISTING PIPE





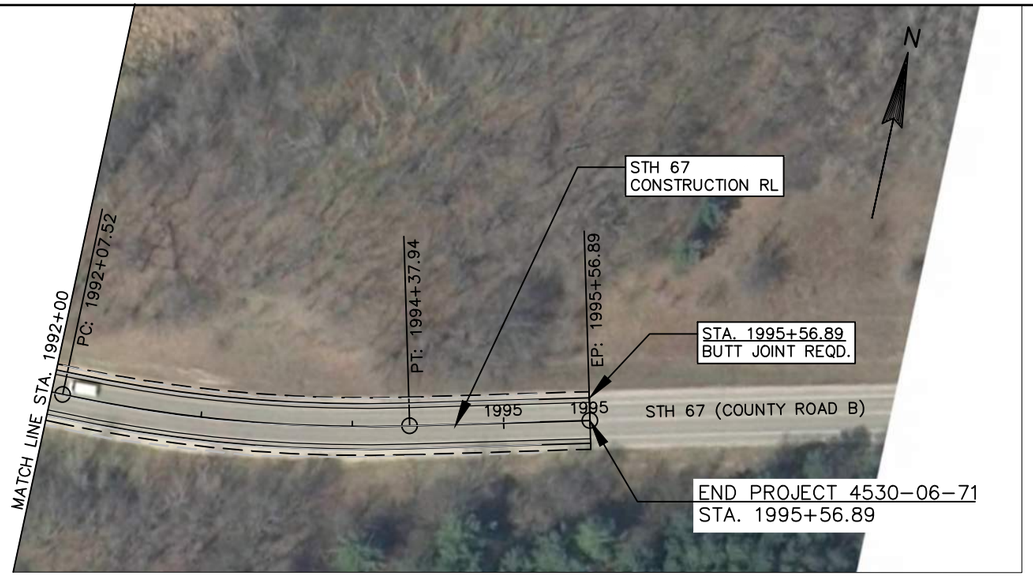


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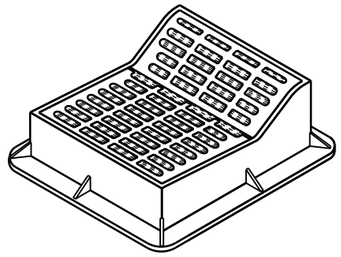


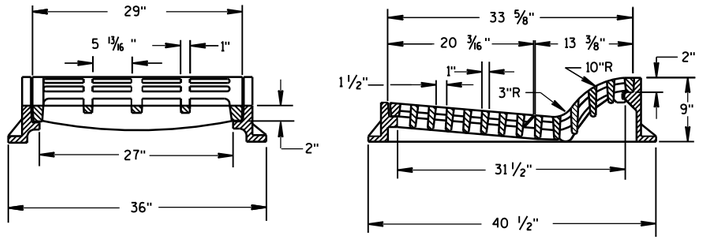
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 152	E

Standard Detail Drawing List

08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-01	HMA LONGITUDINAL JOINTS
14B32-06A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-01A	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01B	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01C	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B53-01A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-07C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-01	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

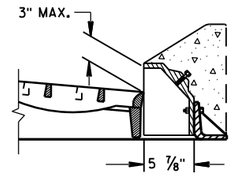
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TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

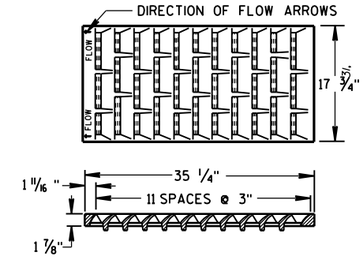
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

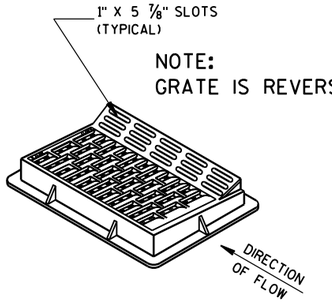
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

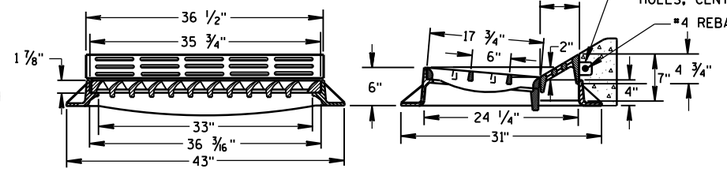
GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



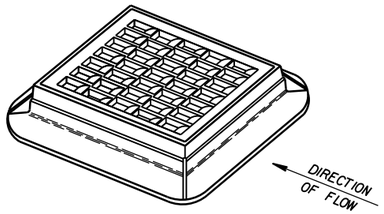


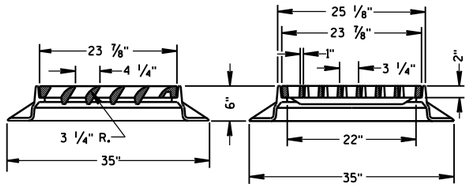


TYPE "HM"

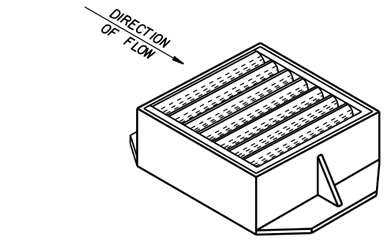
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

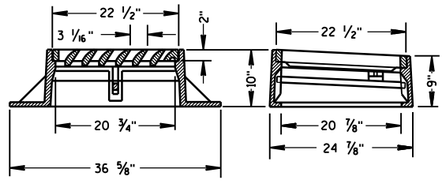
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



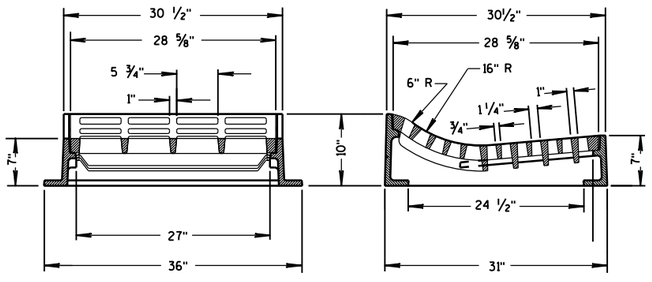


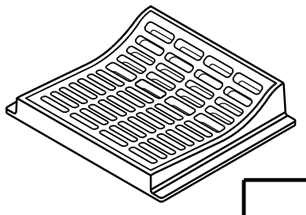
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

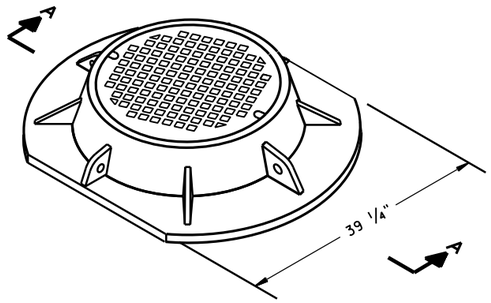
APPROVED
11/27/2013
DATE

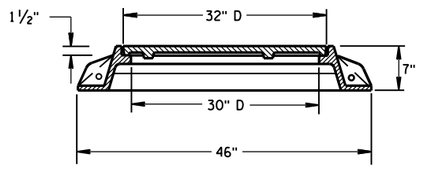
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

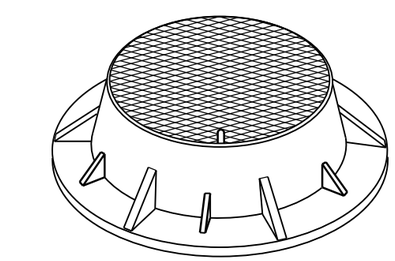
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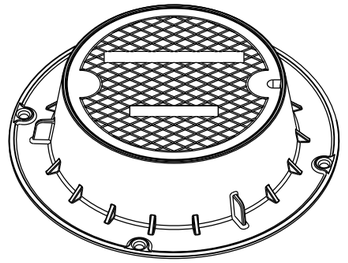
S.D.D. 8 A 5-19c

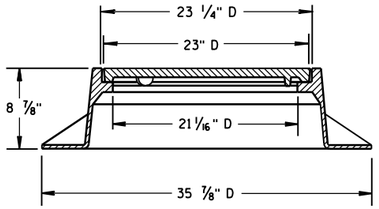


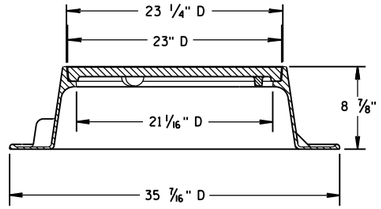


SECTION A-A
TYPE "K"









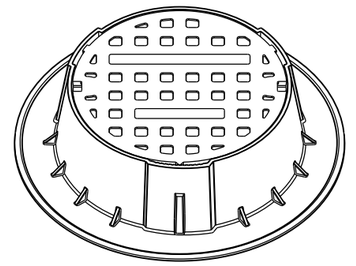
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

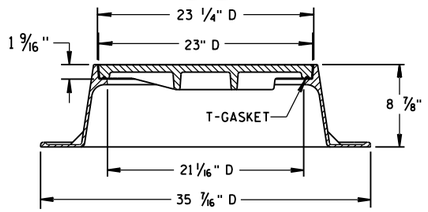
GENERAL NOTES

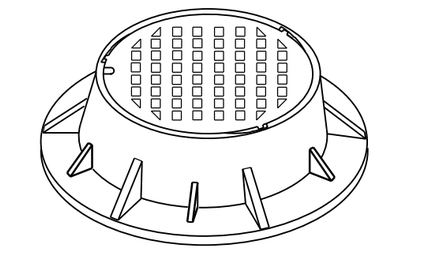
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

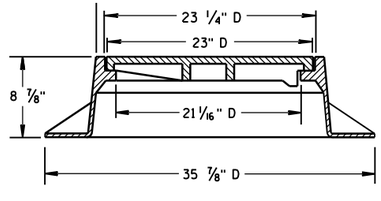
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

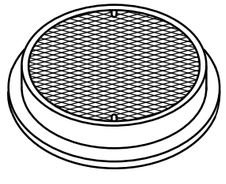


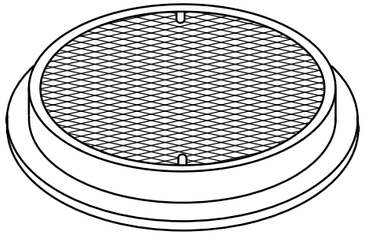


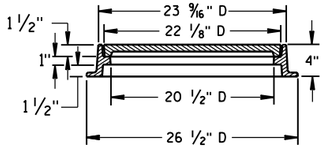




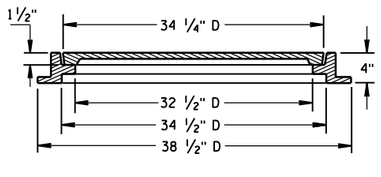
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



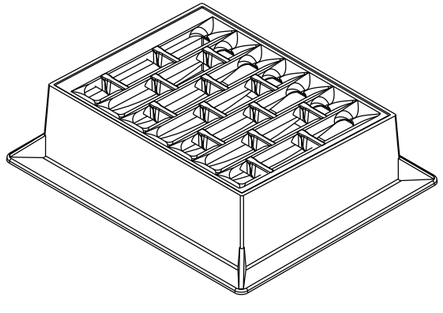


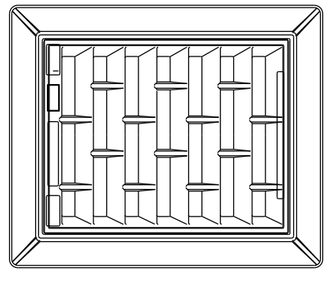


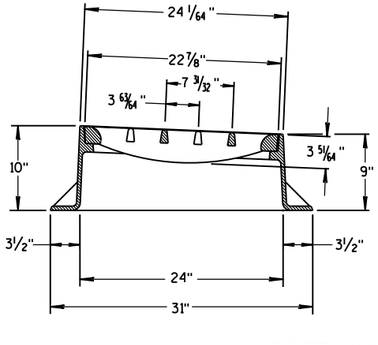
TYPE "L"

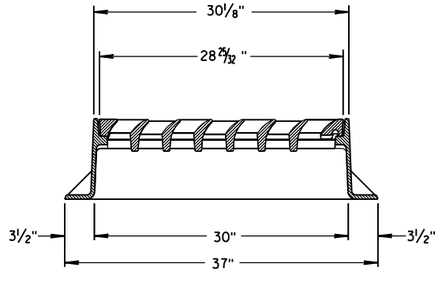


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

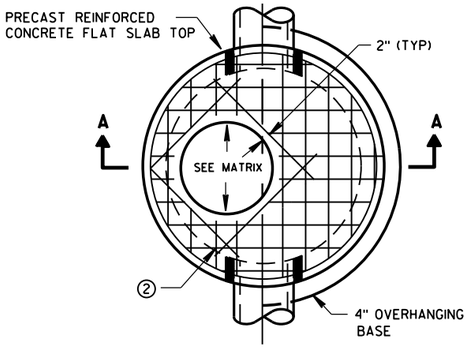
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

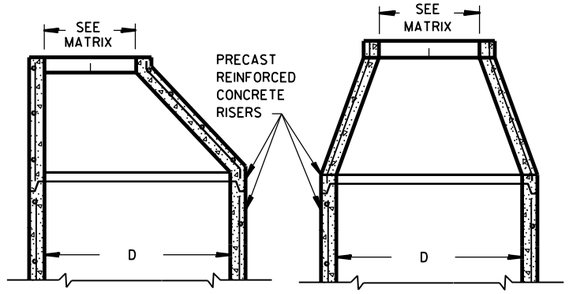
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

S.D.D. 8 A 5-19d

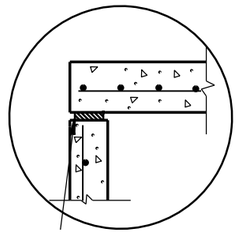


PLAN VIEW CIRCULAR OPENING

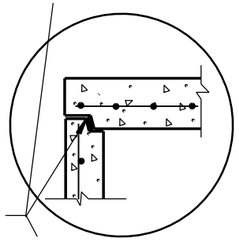


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

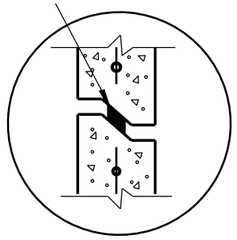


TOP WITH PLAIN END JOINT



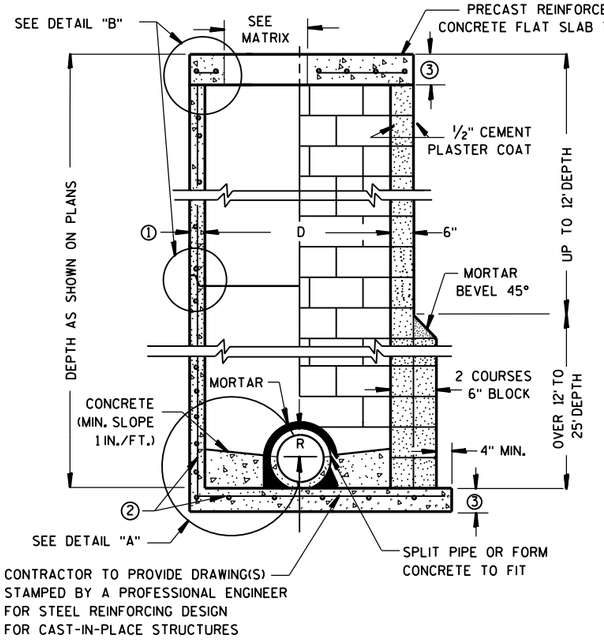
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



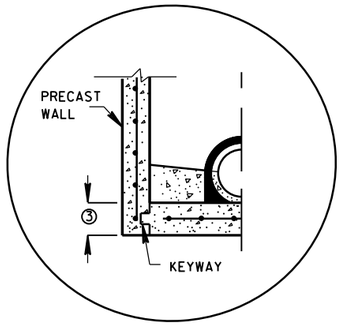
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

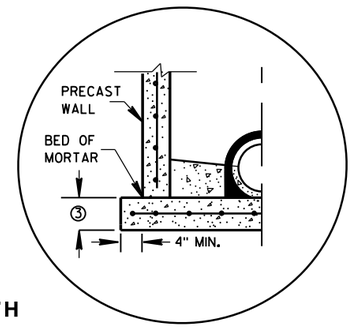


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

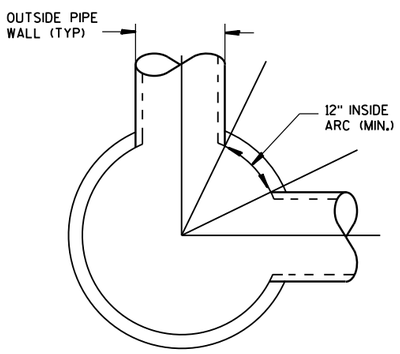


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

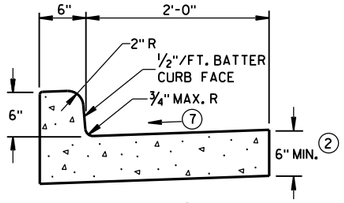
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

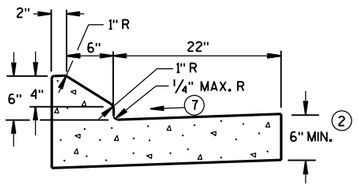
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

S.D.D. 8 B 9-2

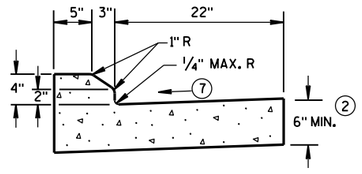
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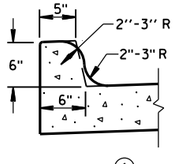
TYPES A (1) & D



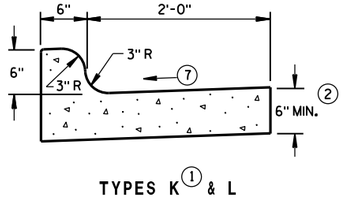
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

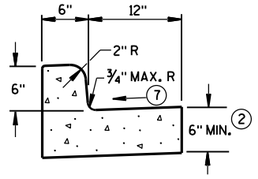


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



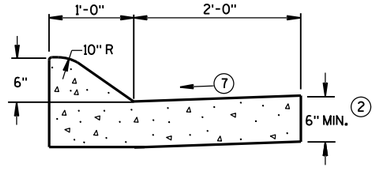
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

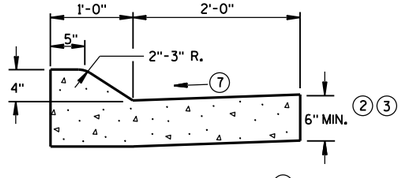


TYPES A (1) & D

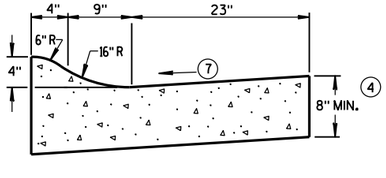
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

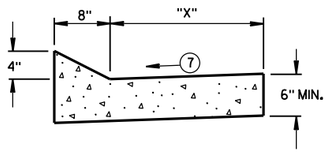


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

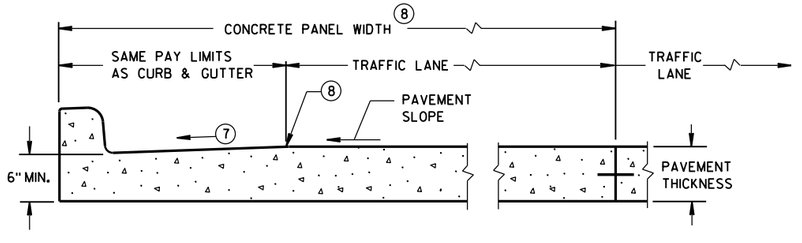
CONCRETE CURB & GUTTER 36"



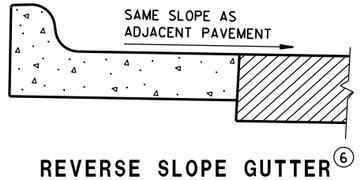
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

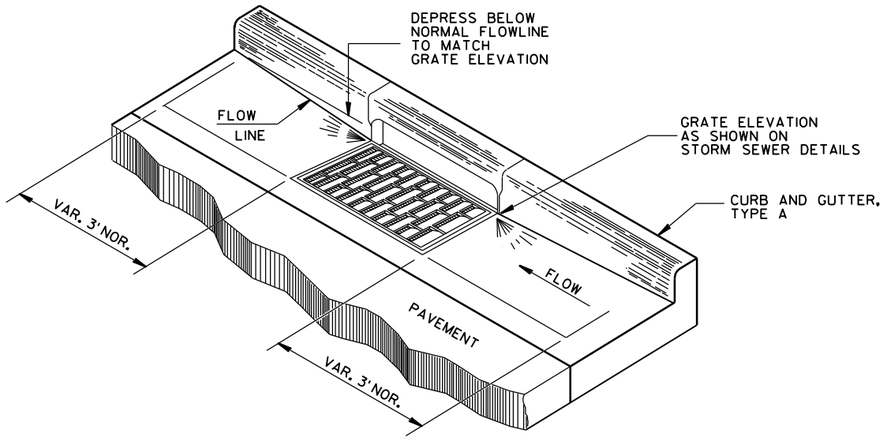
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

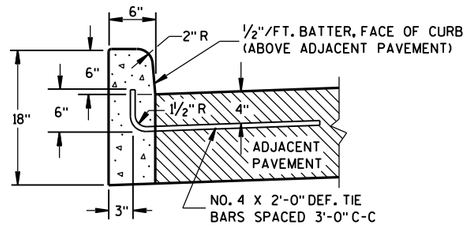
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

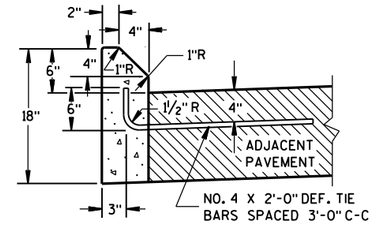
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

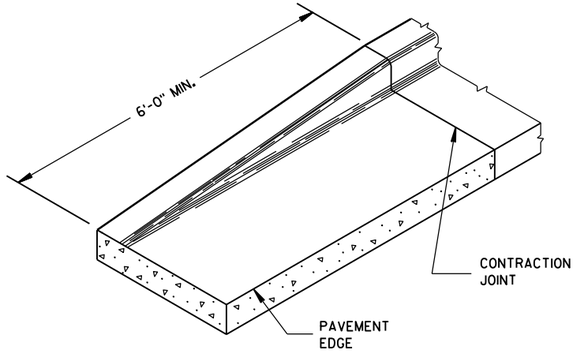


TYPES A (1) & D

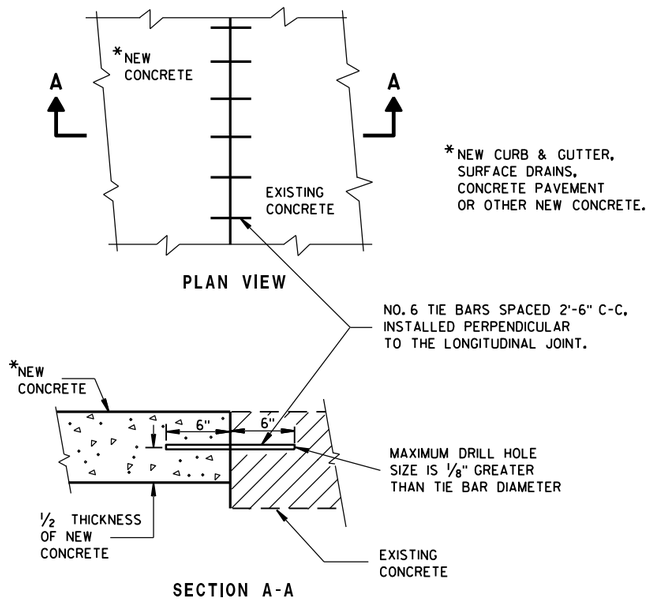


TYPES G (1) & J

CONCRETE CURB



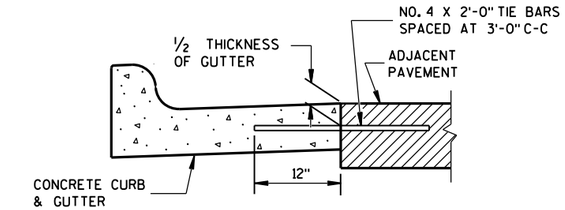
END SECTION CURB & GUTTER



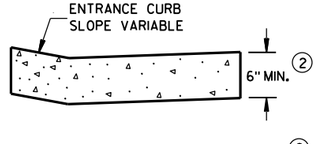
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
158 — ENT
FHWA

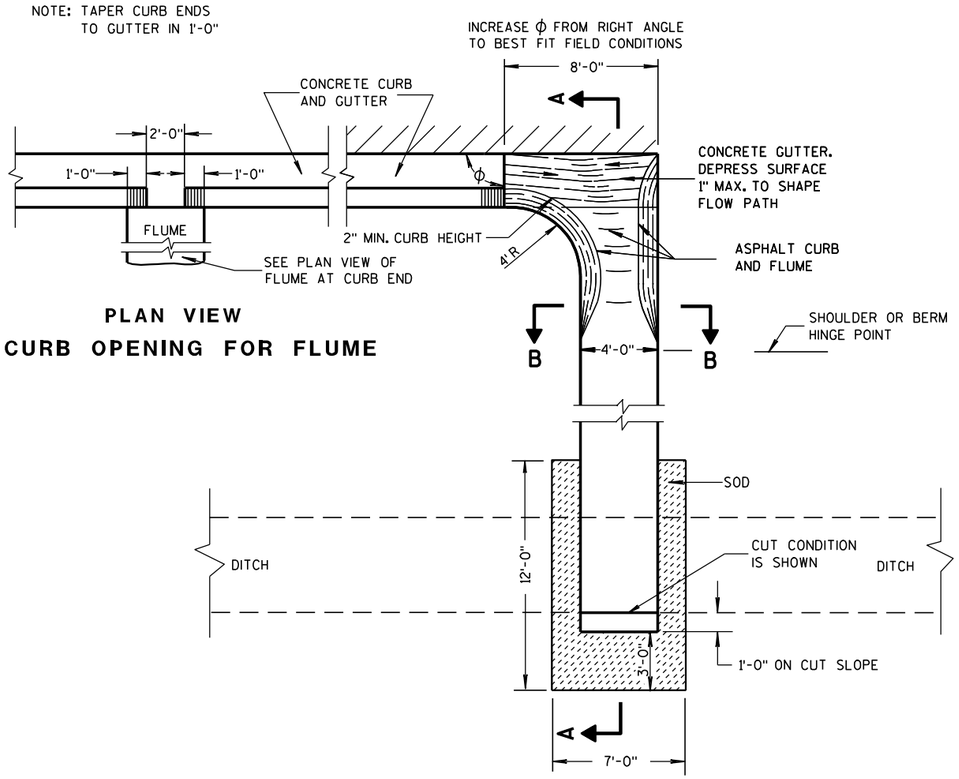
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S.D.D. 8 D 1-20b

6

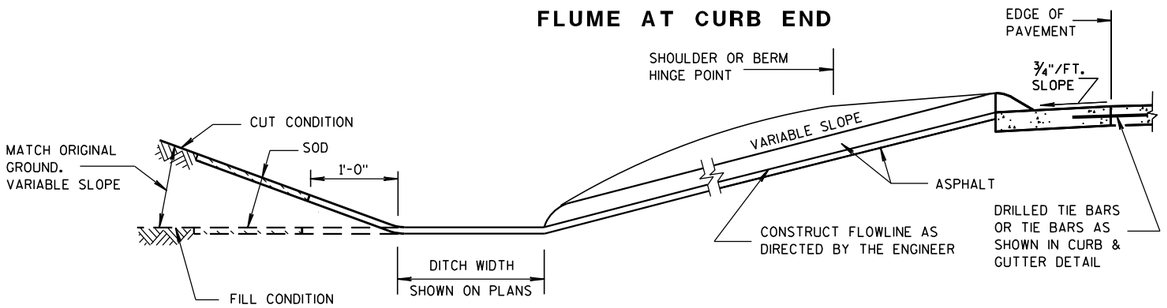
S.D.D. 8 D 1-20b

ASPHALTIC FLUME

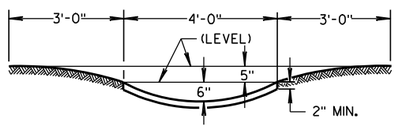


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

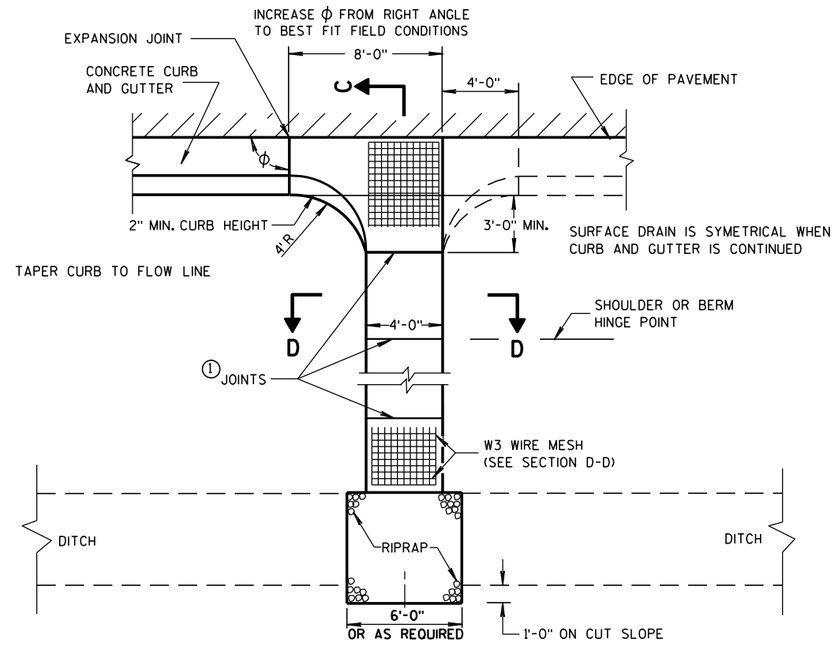
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

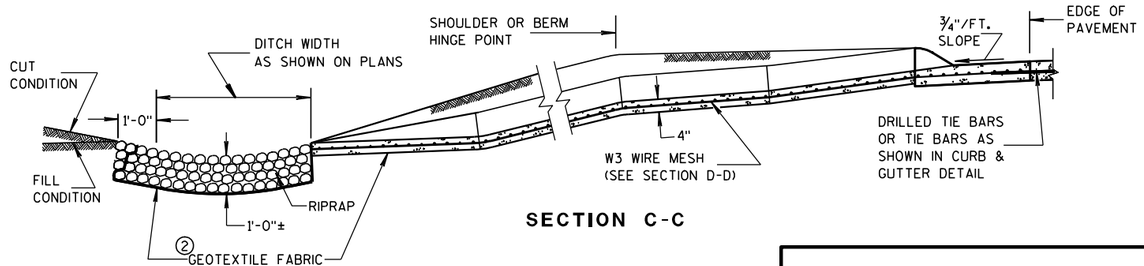
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

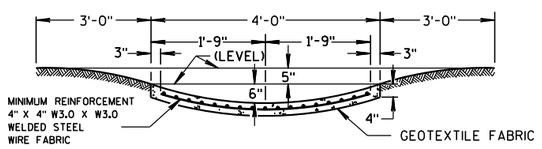
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

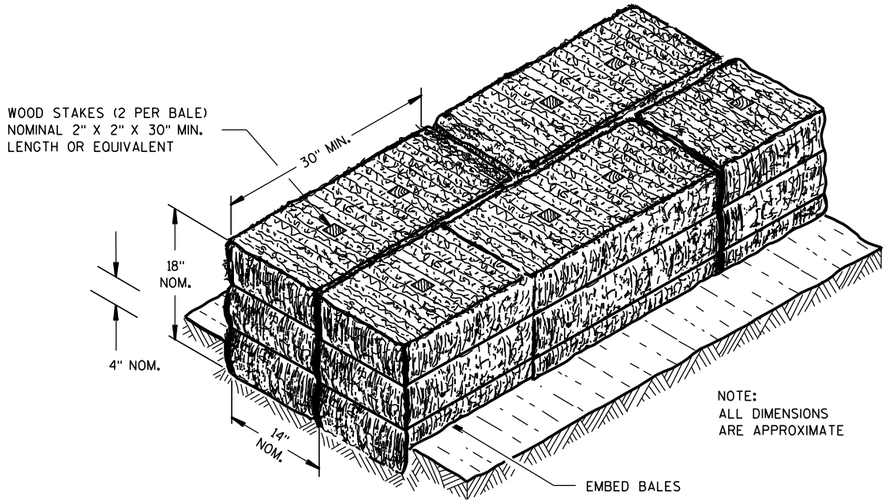
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

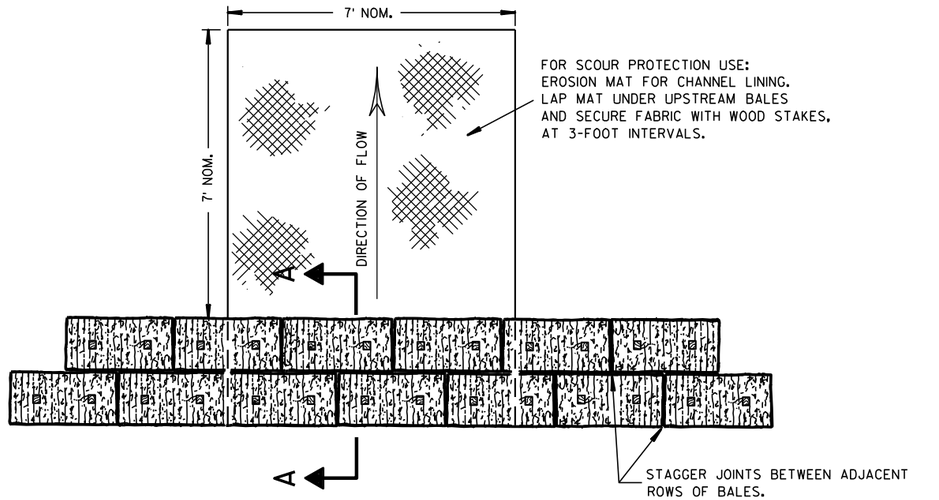
S.D.D. 8 D 4-5

6

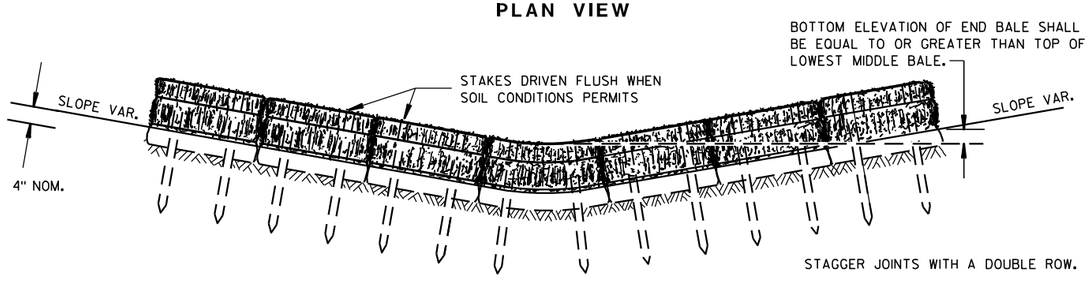
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



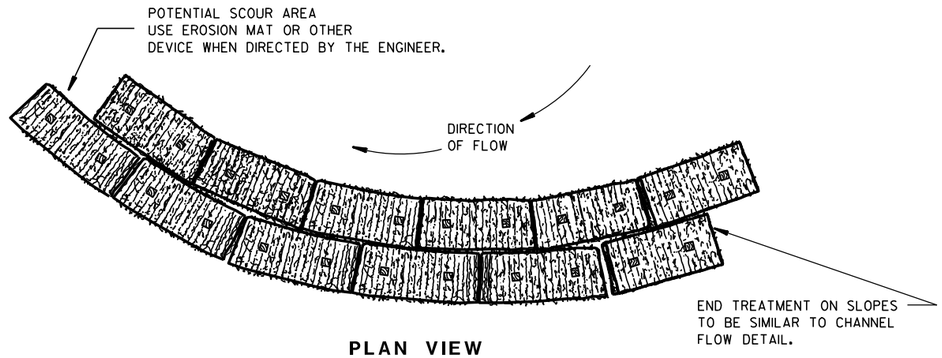
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

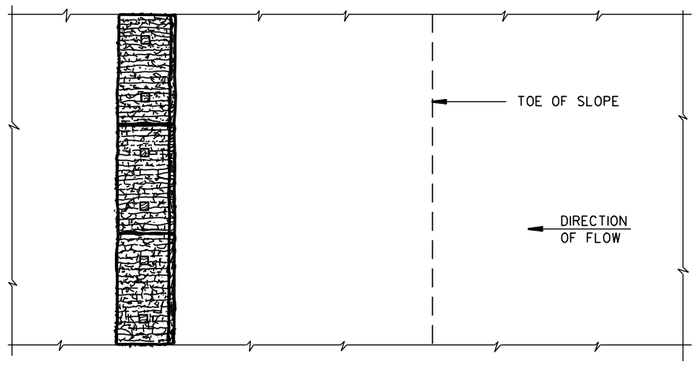
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

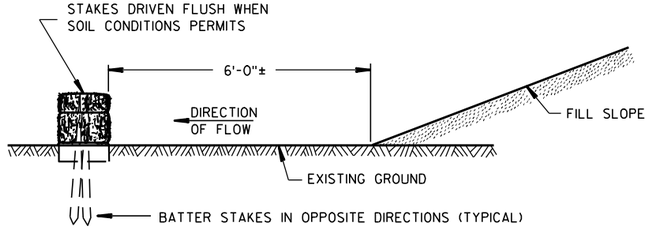


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

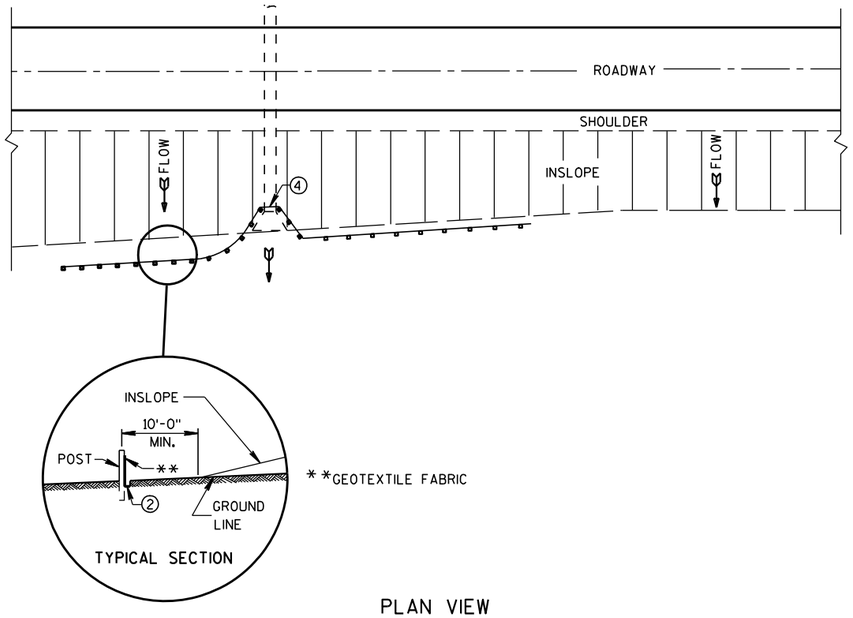
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

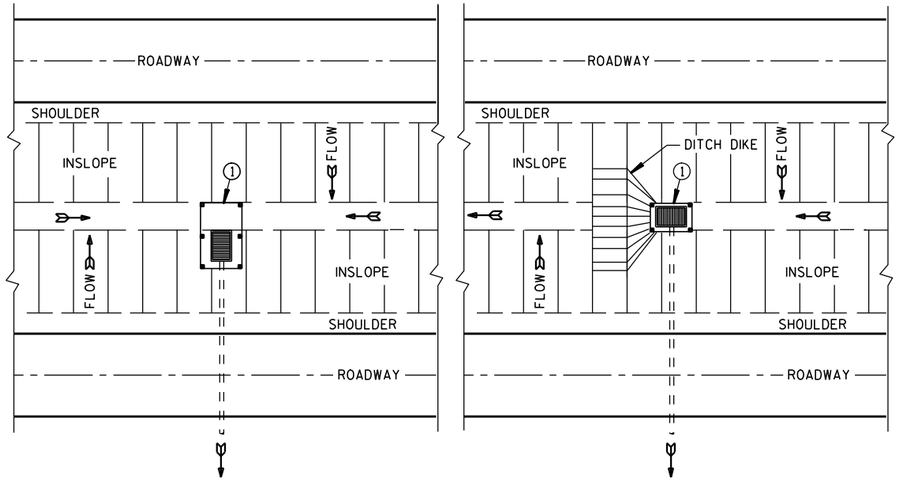
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



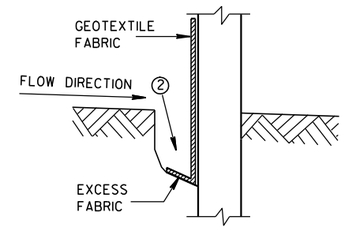
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

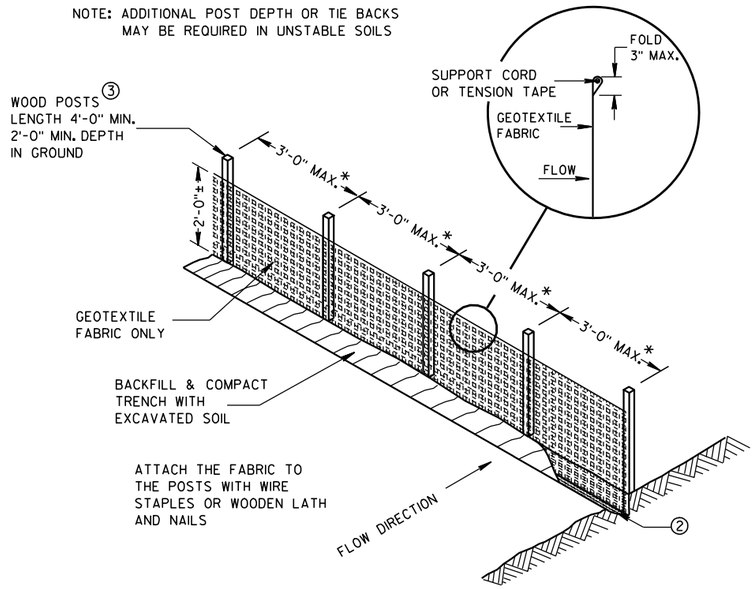
GENERAL NOTES

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

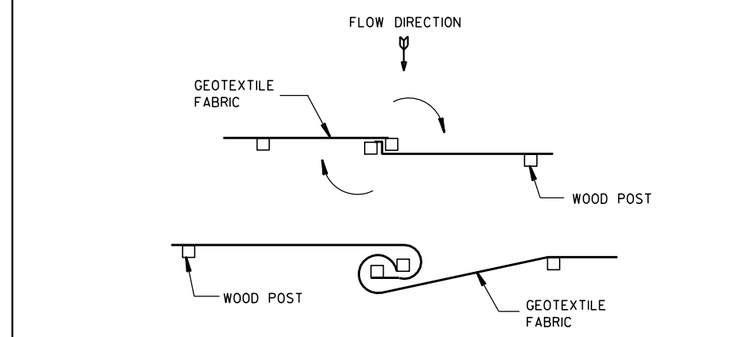
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



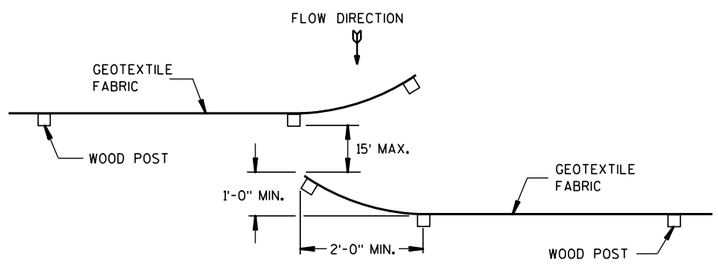
TRENCH DETAIL



SILT FENCE

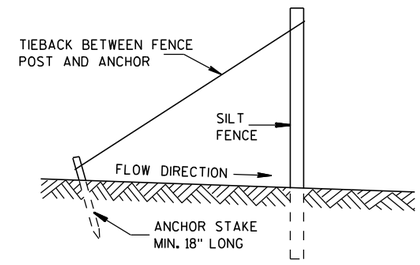


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

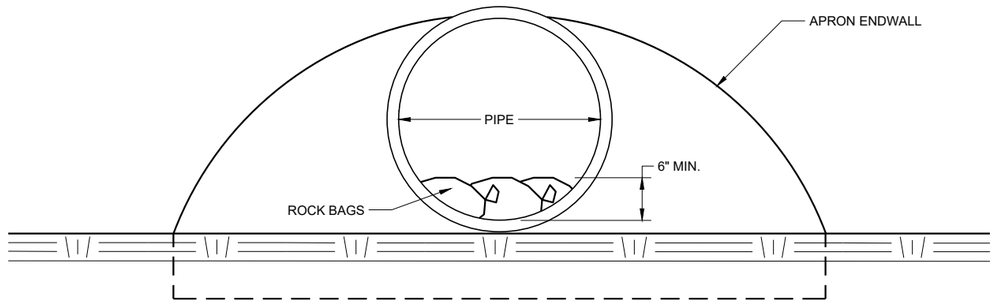
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

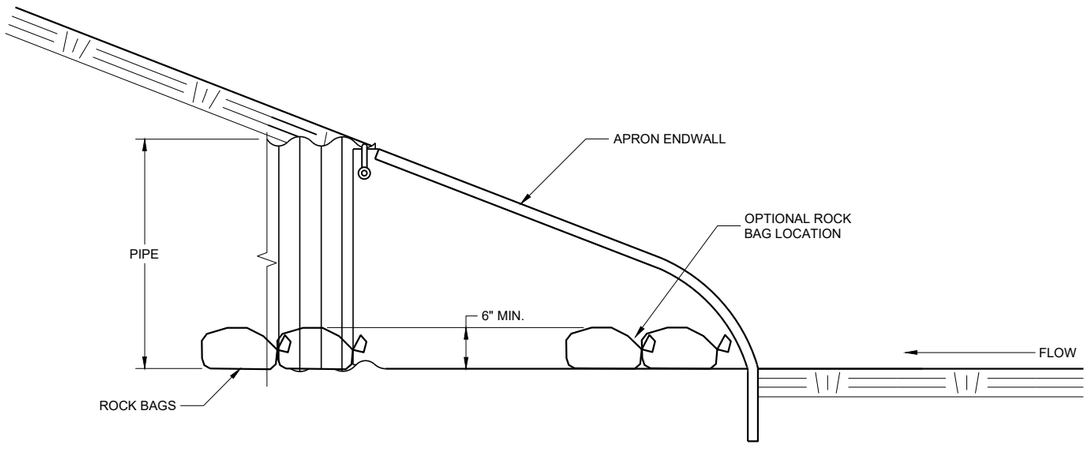
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

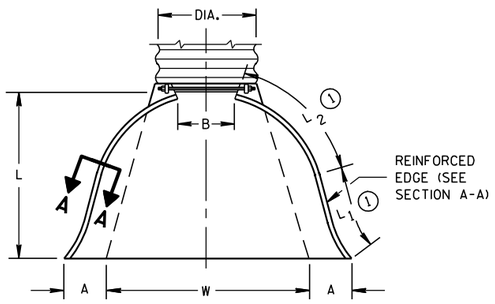
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

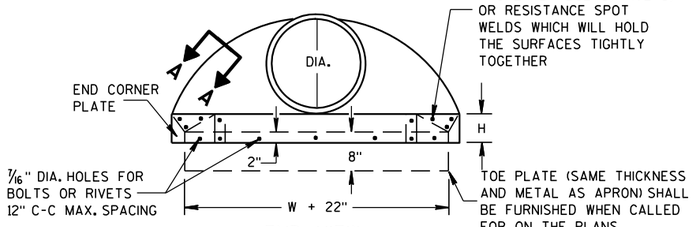
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

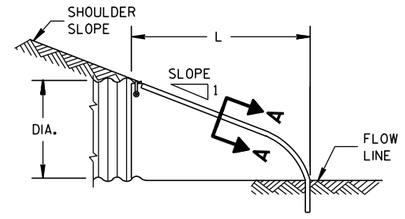
*MINIMUM
**MAXIMUM



PLAN VIEW

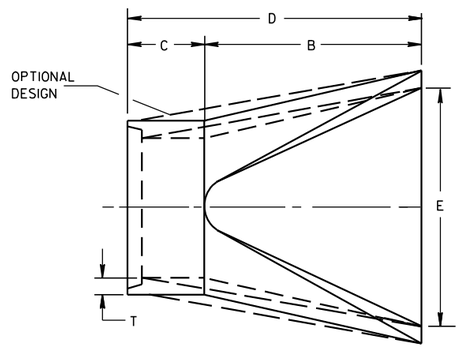


END VIEW

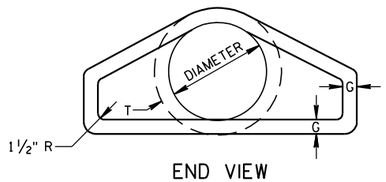


SIDE ELEVATION

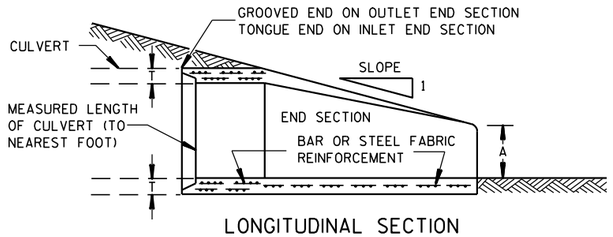
METAL ENDWALLS



PLAN

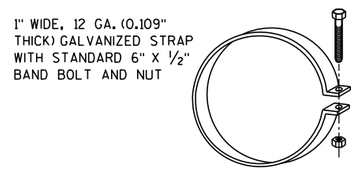


END VIEW



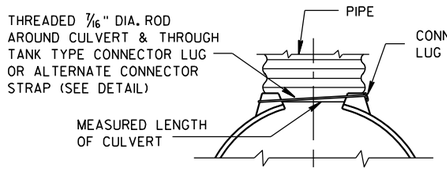
LONGITUDINAL SECTION

CONCRETE ENDWALLS

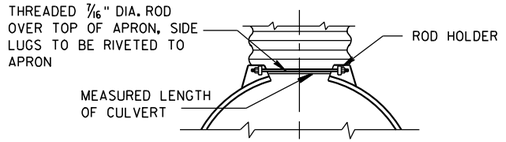


ALTERNATE FOR TYPE 1 CONNECTION

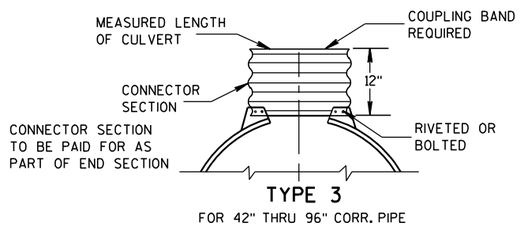
END SECTION CONNECTOR STRAP



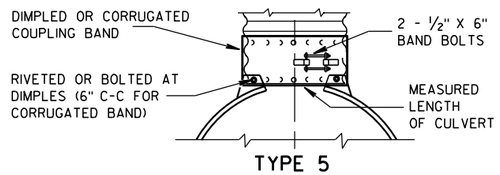
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

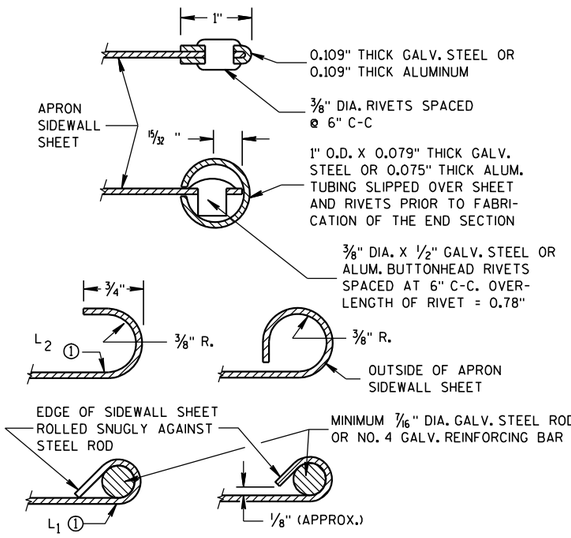
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

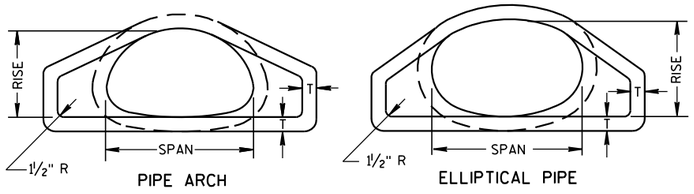
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

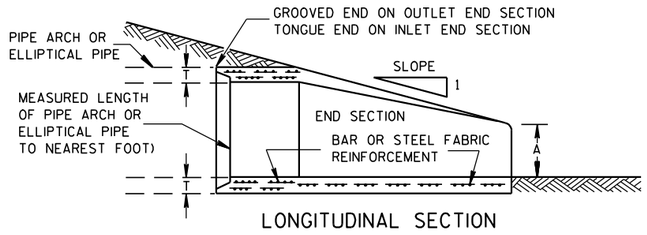
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

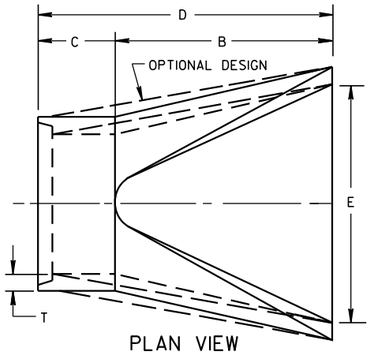
6
S.D.D. 8 F 1-11



END VIEW

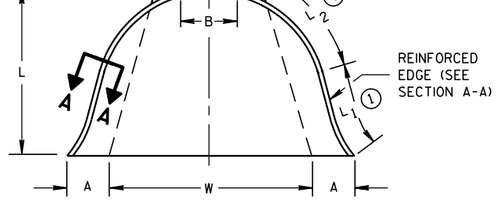


LONGITUDINAL SECTION

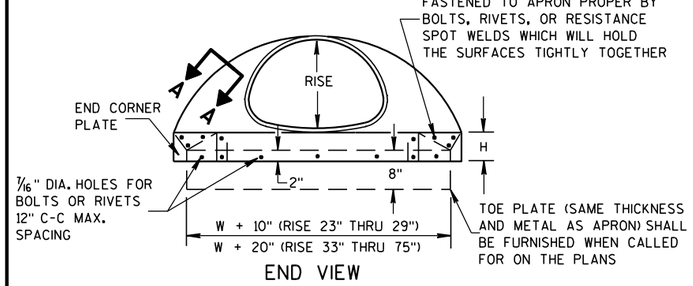


PLAN VIEW

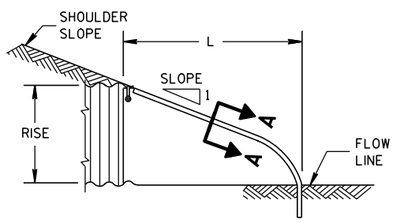
CONCRETE ENDWALLS



PLAN VIEW

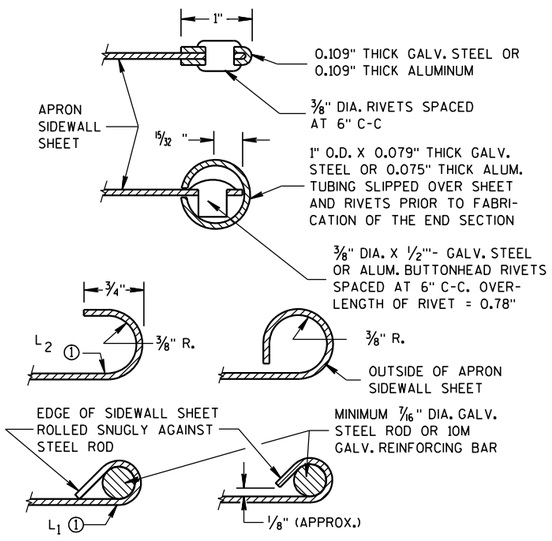


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

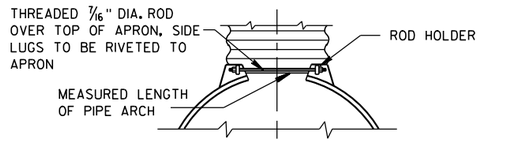
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

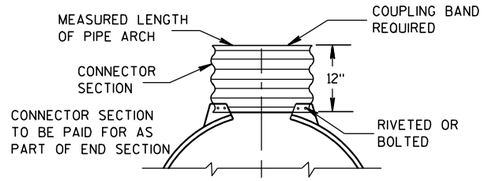
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



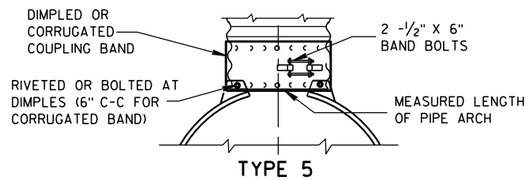
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

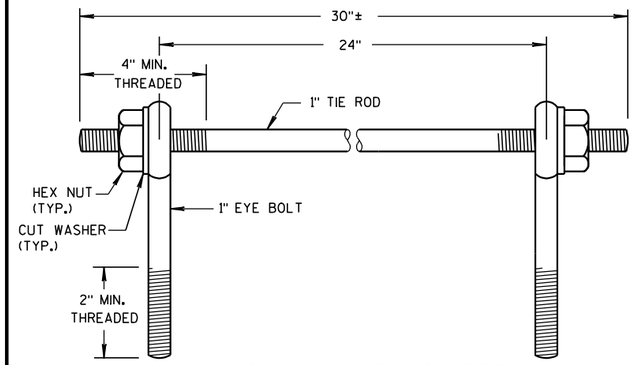
FHWA

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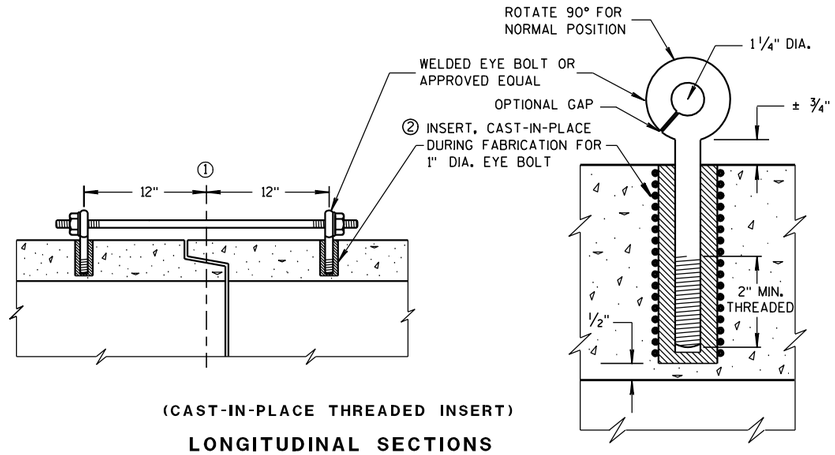
S.D.D. 8 F 2-1

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S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

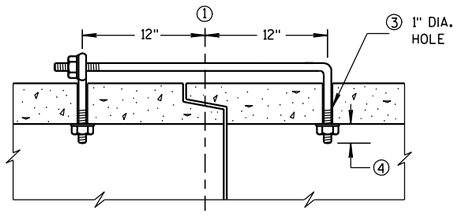
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

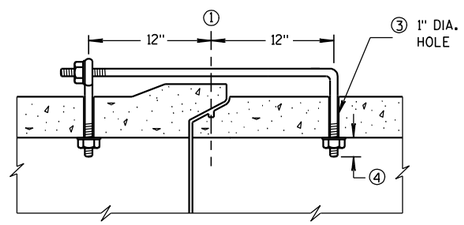
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

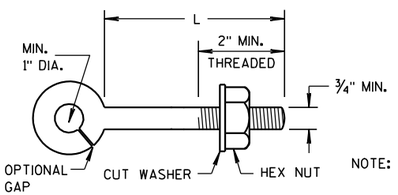


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

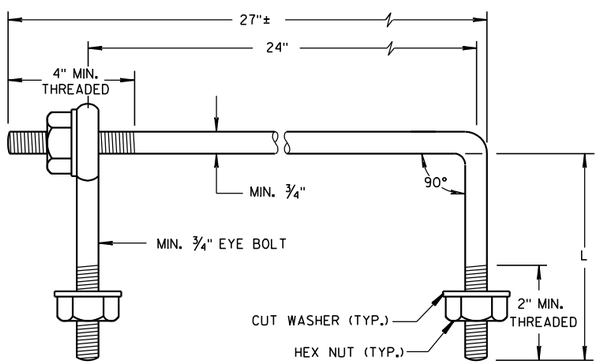
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

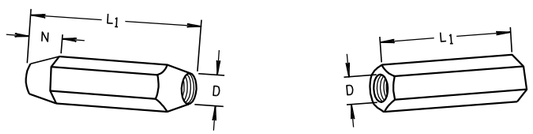
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

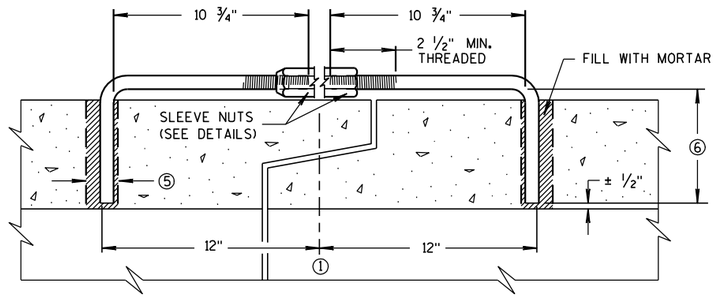
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

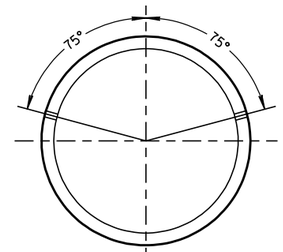
SLEEVE NUTS



LONGITUDINAL SECTION

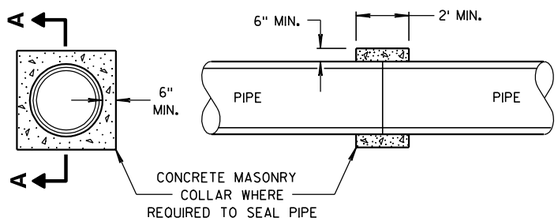
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

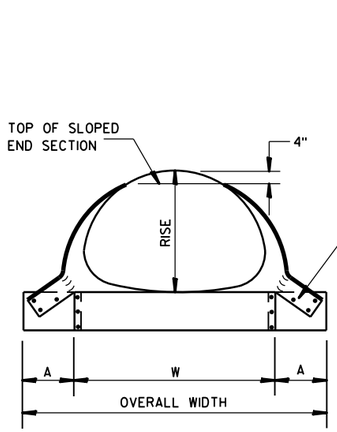
APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

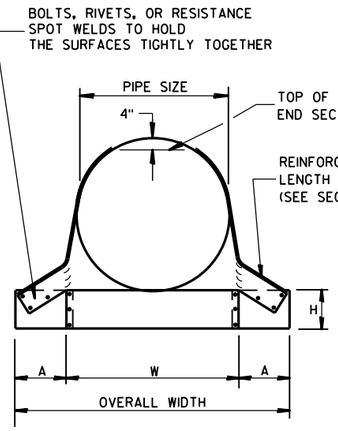
S.D.D. 8 F 4-7

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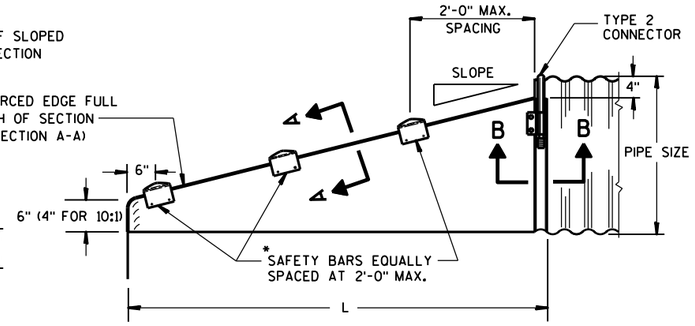
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FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

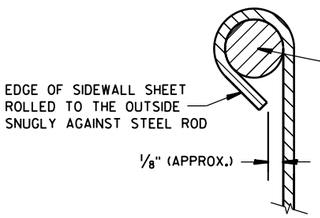
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

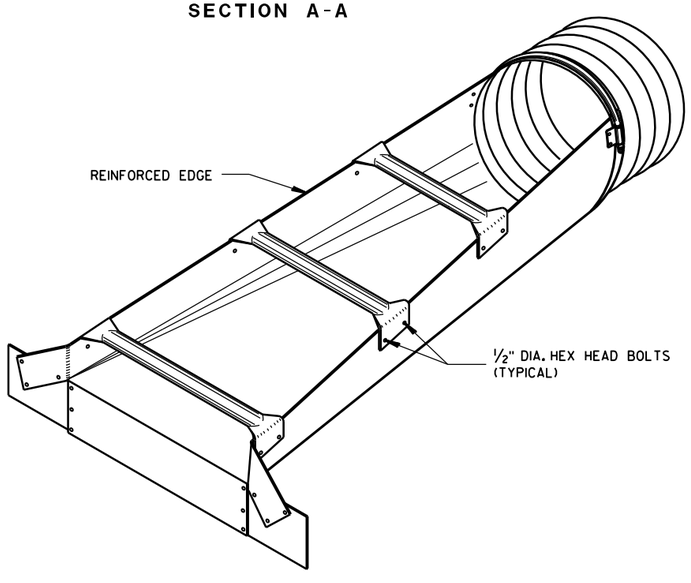
3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

DETAIL OF SAFETY BAR

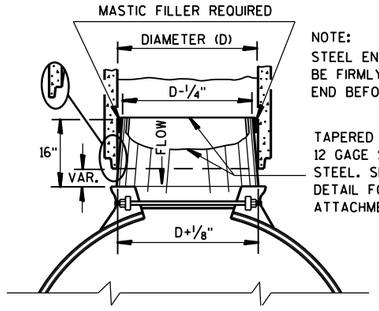
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

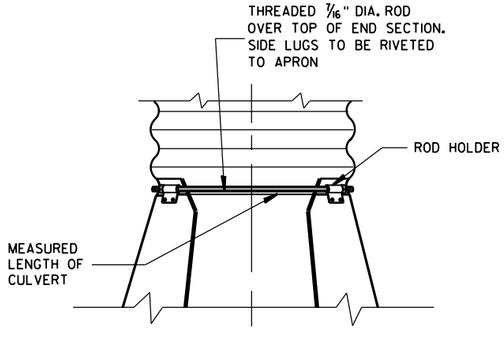
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



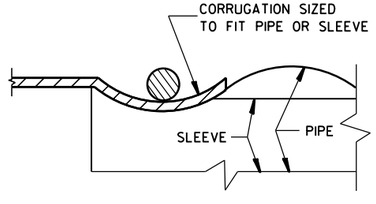
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

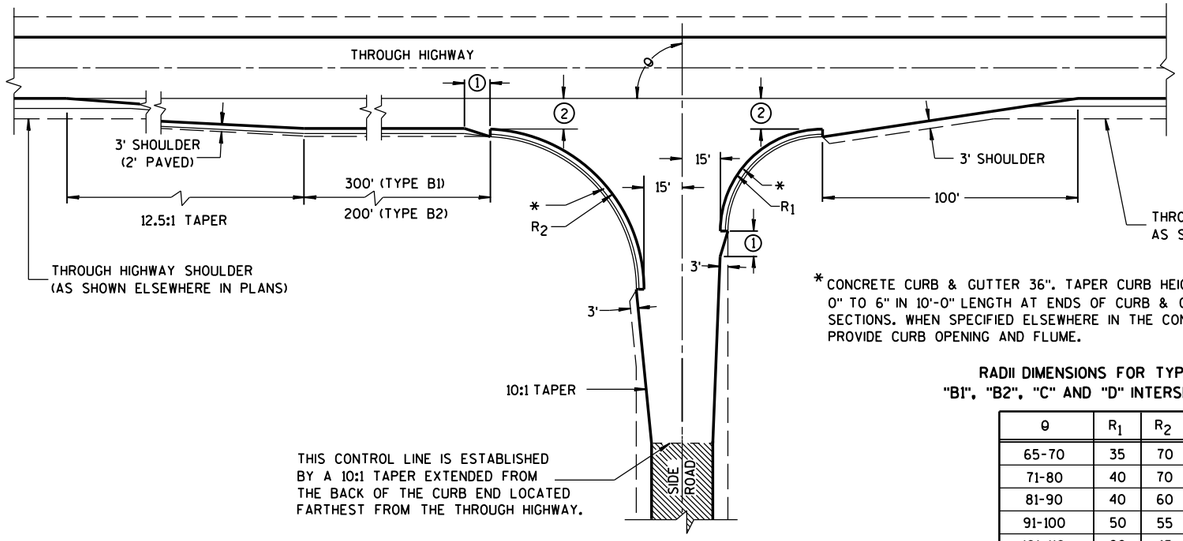
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5

6

S.D.D. 8 F 7-5

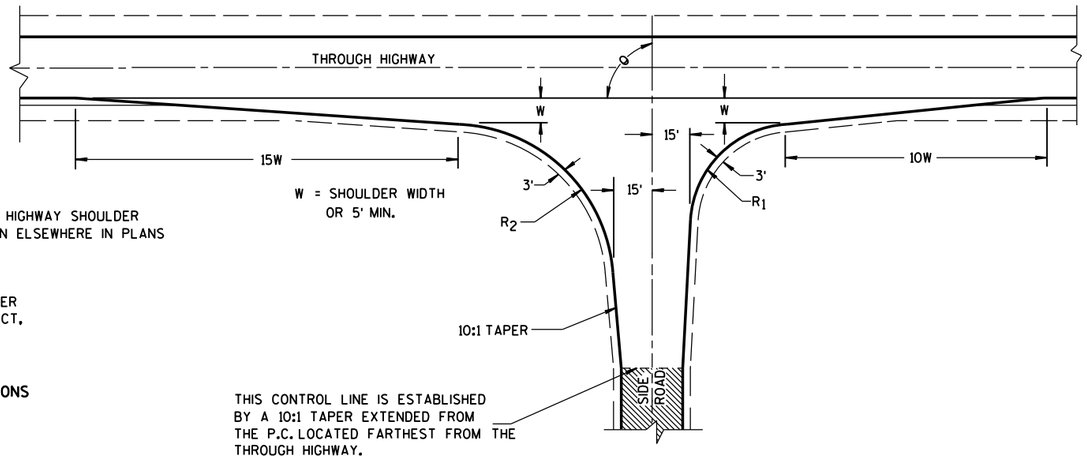


TYPE "B1" AND "B2"

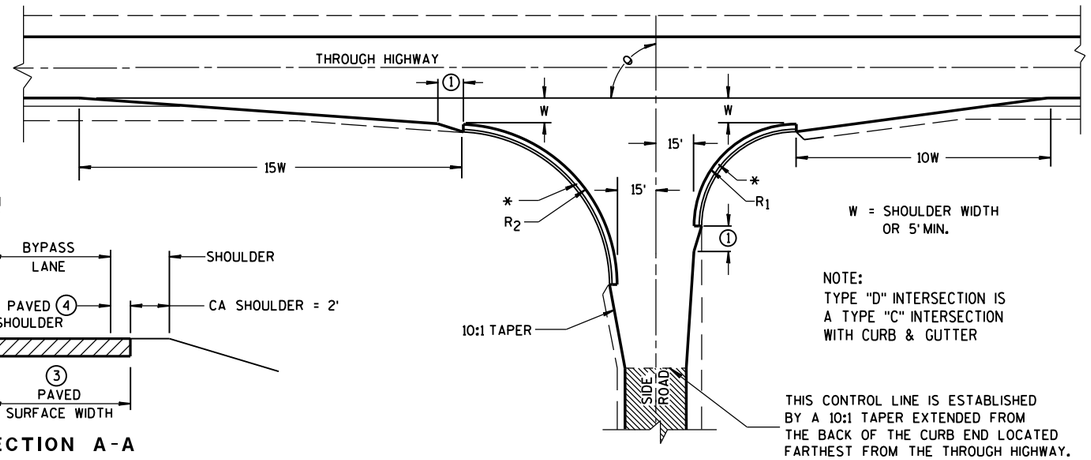
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

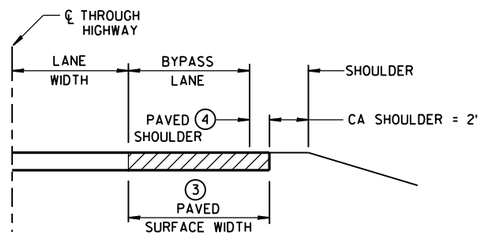
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

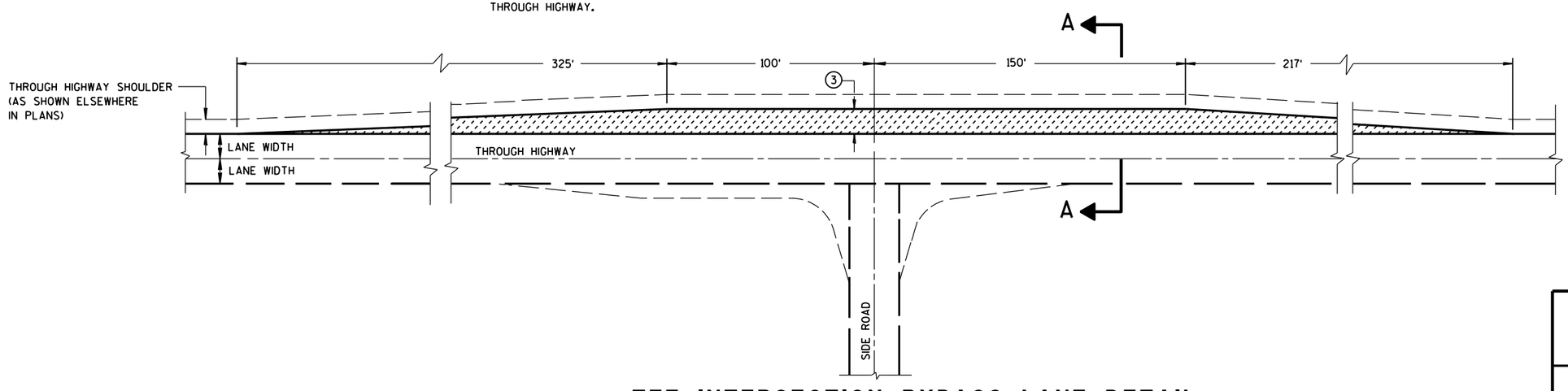
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



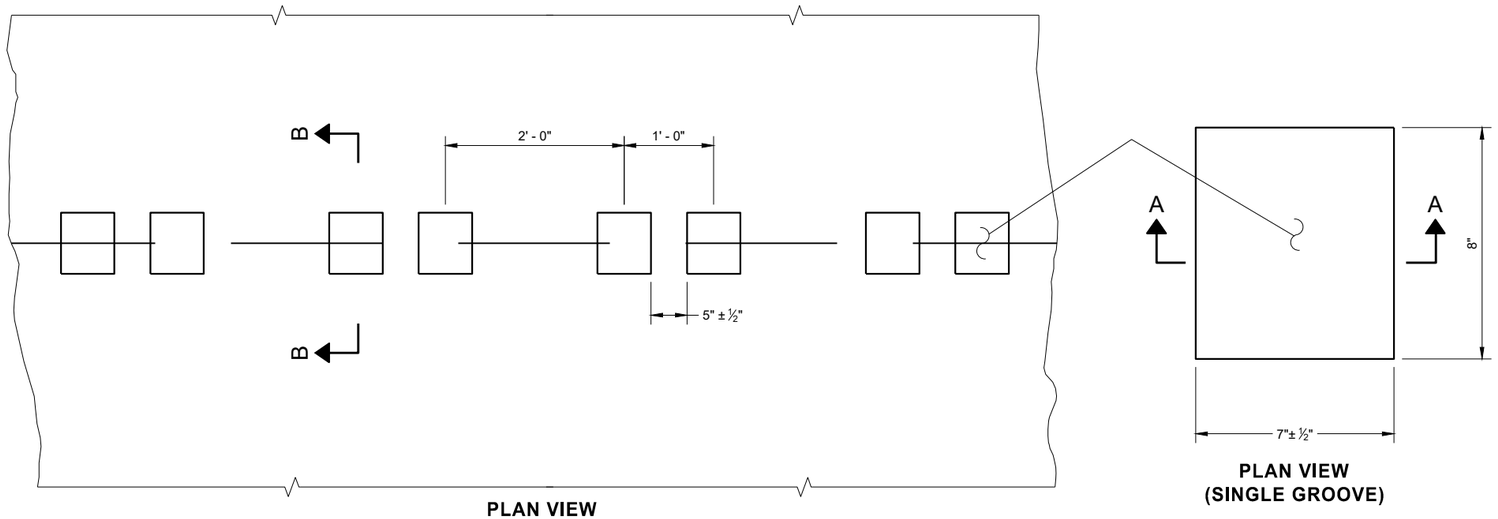
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 9 A 1-13a



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

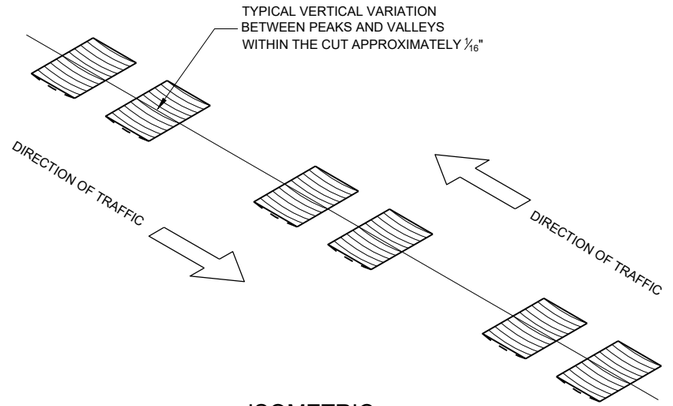
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

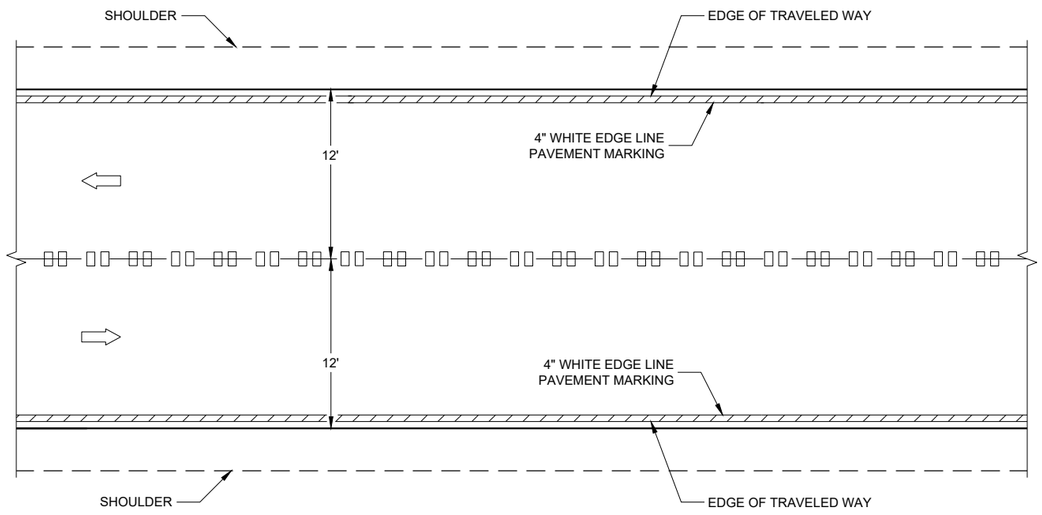
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

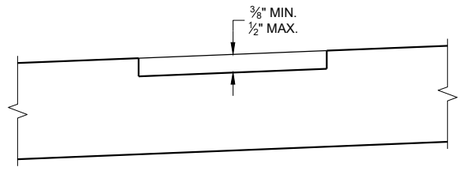
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



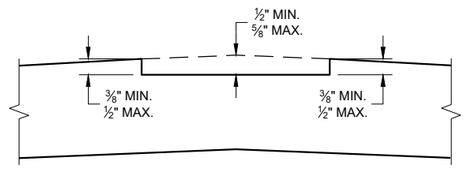
ISOMETRIC



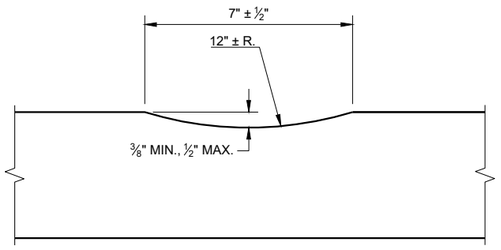
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

6

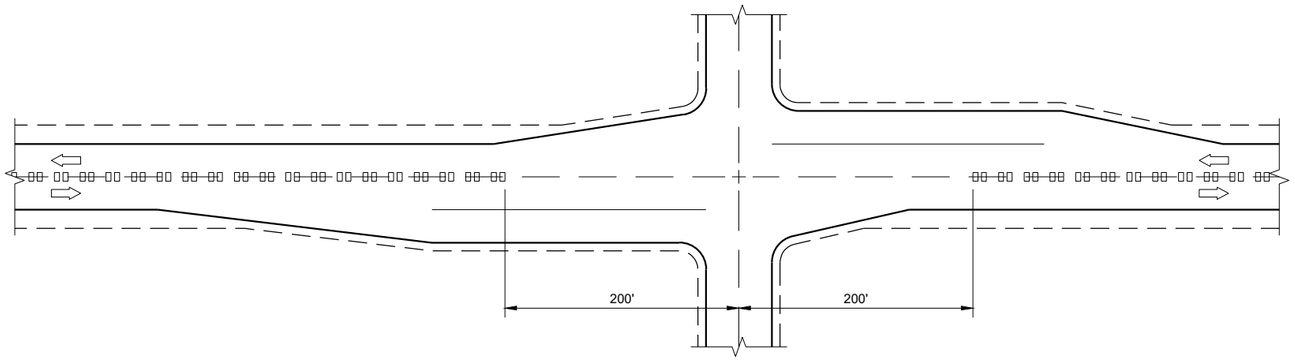
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SDD 13A11 - 03a

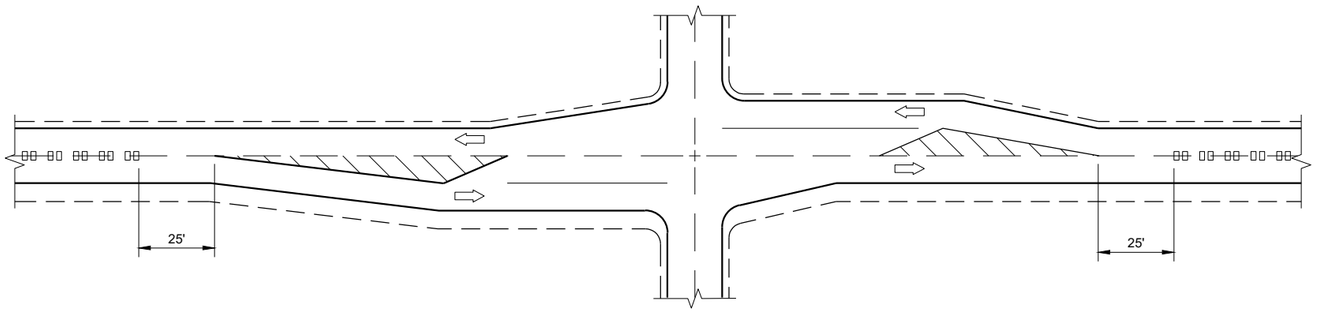
SDD 13A11 - 03a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

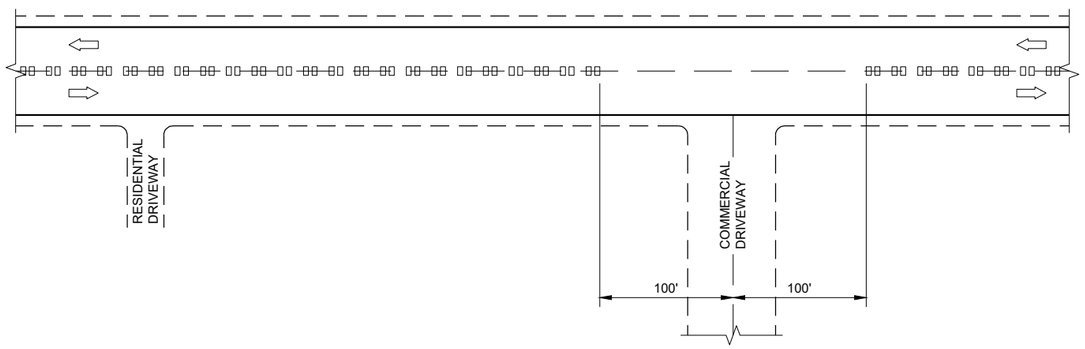
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



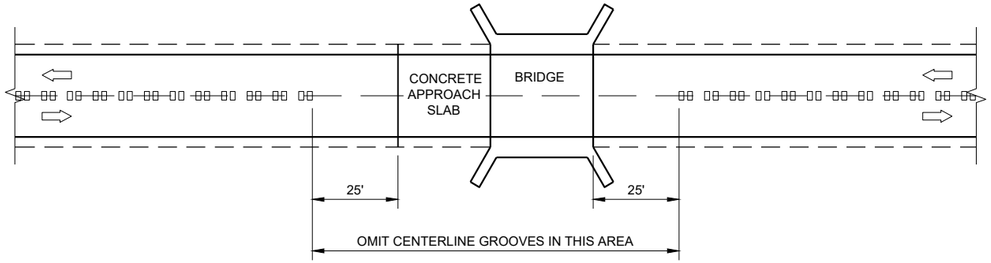
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



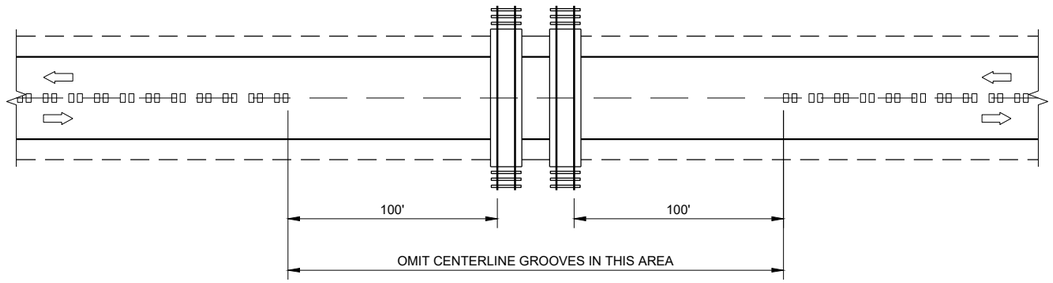
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

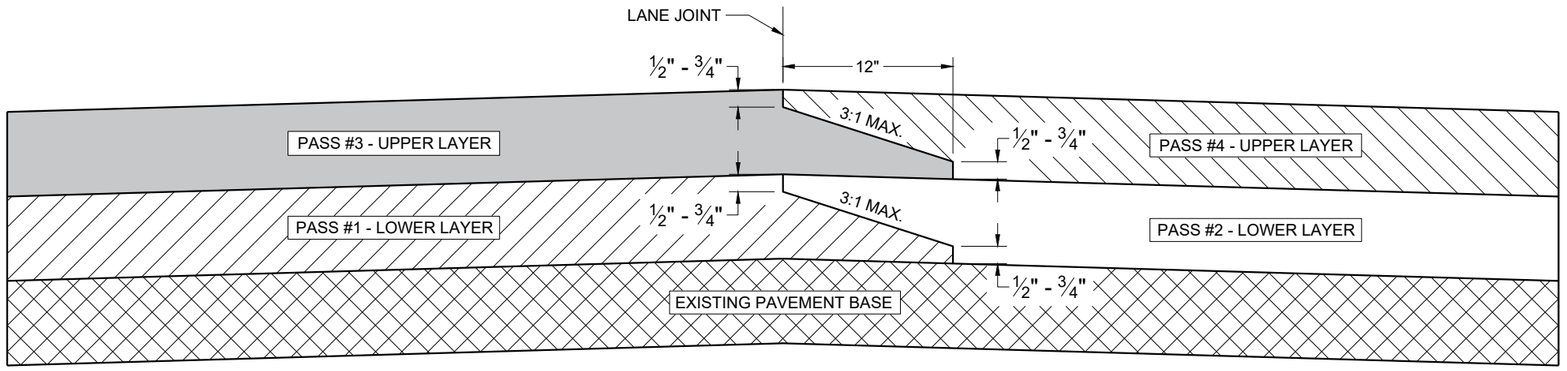
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 13A11 - 03b

GENERAL NOTES

CONFORM TO STANDARD SPECIFICATION 450.3.2.8



TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINTS

6

6

SDD 13C19 - 01

SDD 13C19 - 01

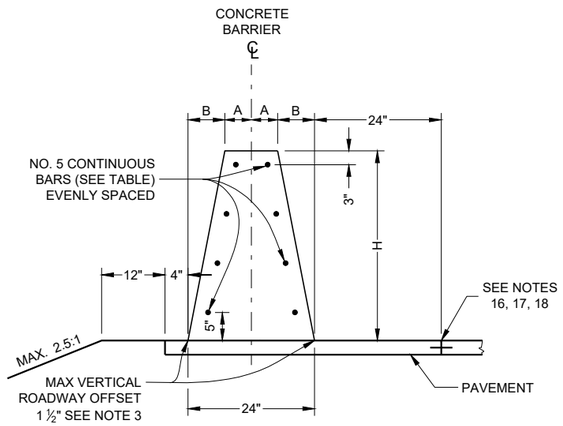
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

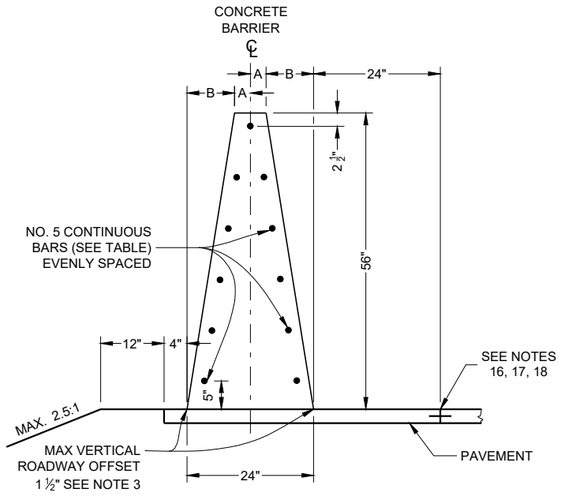
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



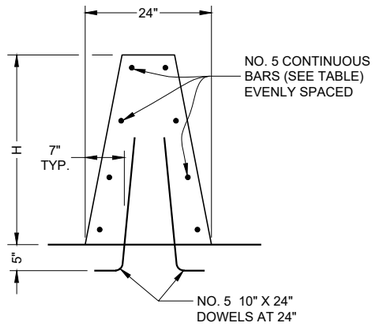
32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER

(TYPE S32, TYPE S36, TYPE S42)



56 - INCH SINGLE SLOPE CONCRETE BARRIER

(TYPE S56)

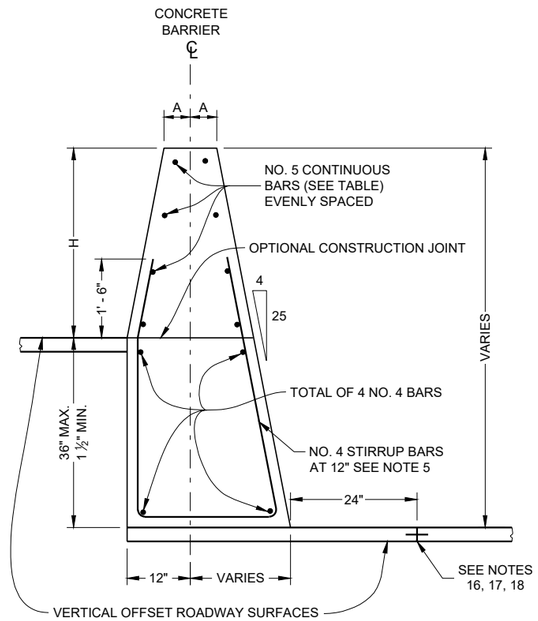


SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

(NON OUTER PARAPET APPLICATION)

GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OF ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAT 1", USE TYPE A.
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1' - 0".
6. FOR TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 MONLITHIC FOOTING OR DOWELED FOOTING 2 - #8 X 8" @ 2'- 0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST - IN - PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP FORMING CUT - OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL IS NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.
16. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
17. CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAN 10'.
18. SEE SDD 13C1 FOR DETAILS TYING BARRIER FOOTING TO ADJACENT CONCRETE.
19. PROVIDE A 1" DEEP, ," WIDE CONTRACTION JOINT IN BARRIER FOOTING AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. IF ADJACENT TO ASPHALT CONTRACTION JOINT IS REQUIRED EVERY 15'.

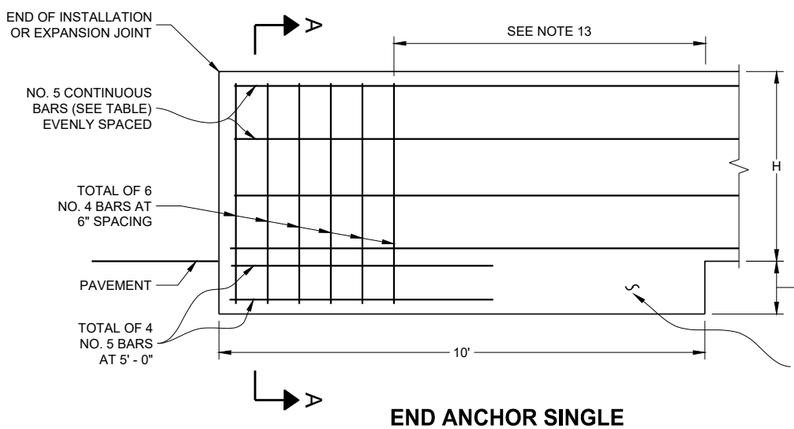


SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

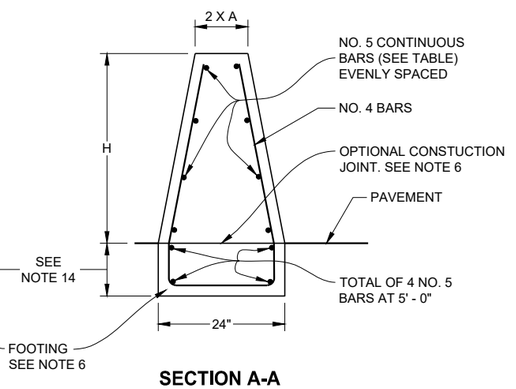
(BETWEEN ADJACENT ROADWAYS)

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11

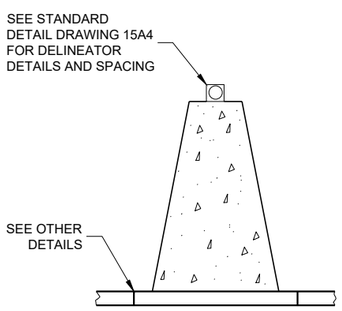


END ANCHOR SINGLE SLOPE CONCRETE BARRIER

(AT CONSTRUCTION JOINT)



SECTION A-A



DELINEATION

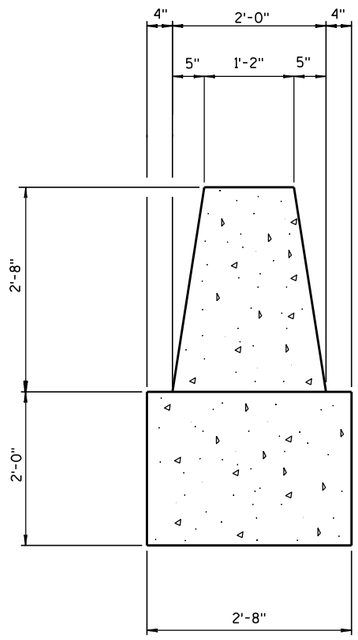
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

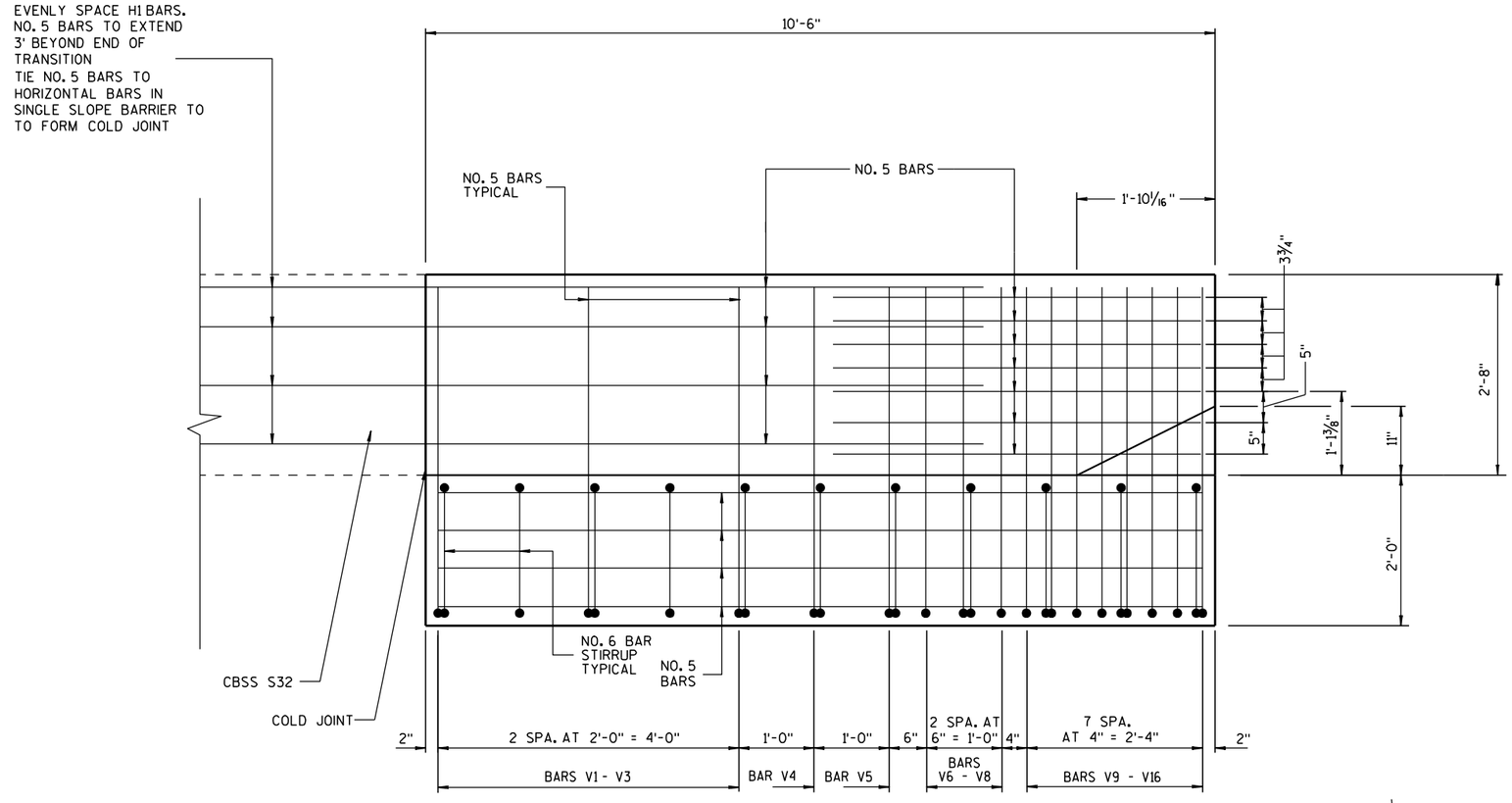
6

SDD 14B32 - 06a

SDD 14B32 - 06a

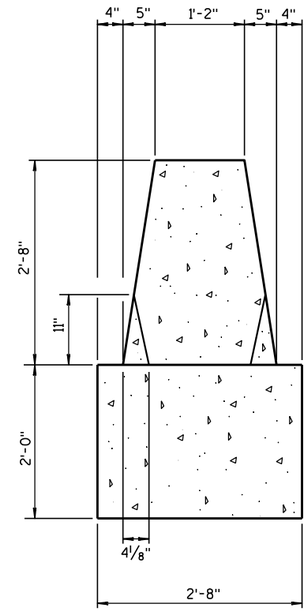


SECTION A-A

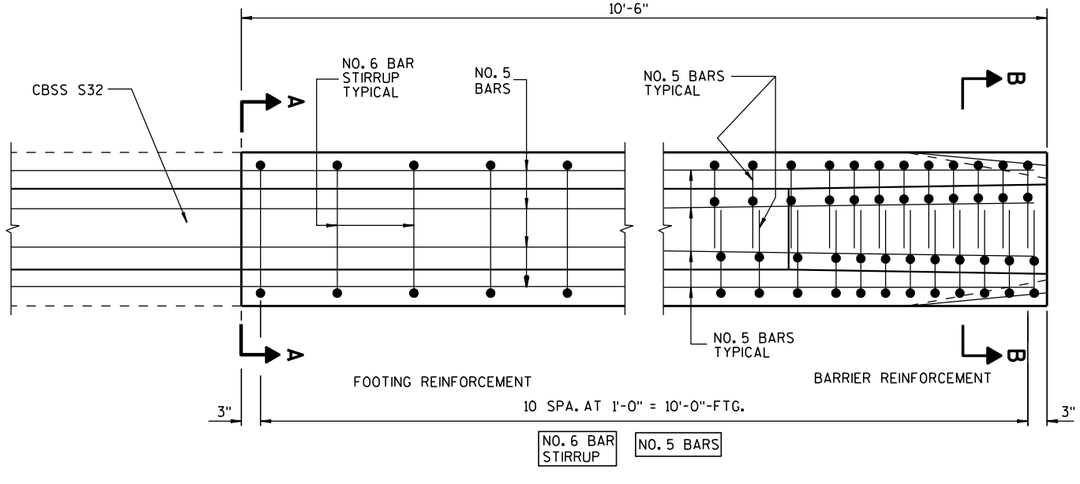


SEE SECTIONS (1) THRU (16)

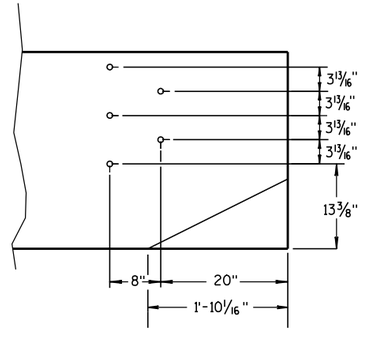
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

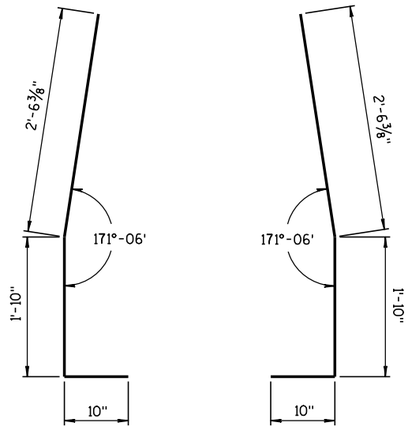
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

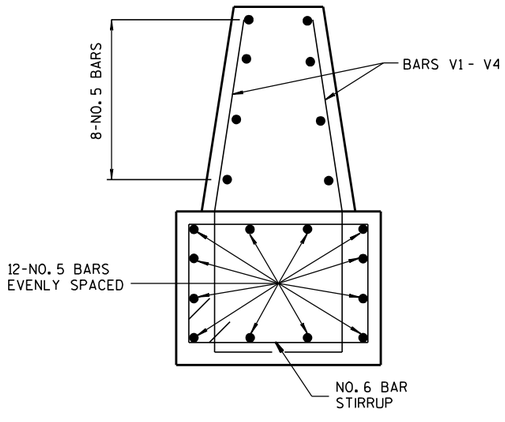
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

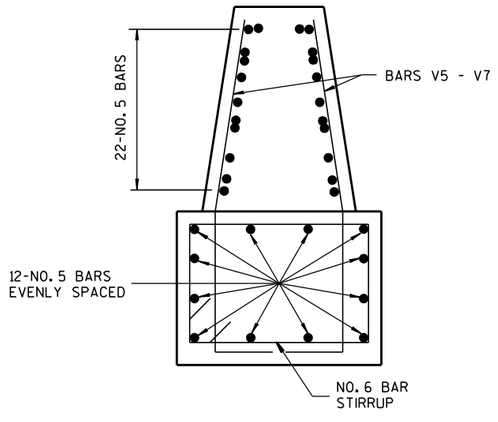
6
S.D.D. 14 B 33-1a



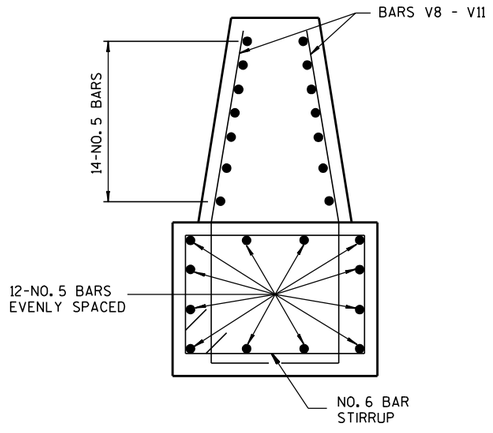
BAR BENDING DETAIL
FOR BARS V1 - V11



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

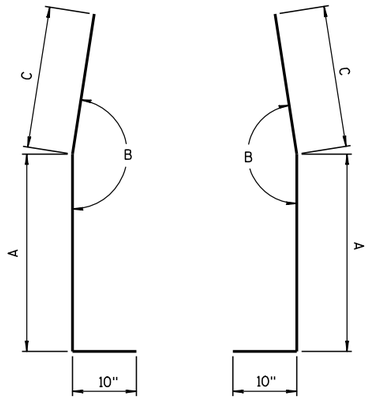
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 33-1b

BAR CHART
SECTIONS V12 - V13

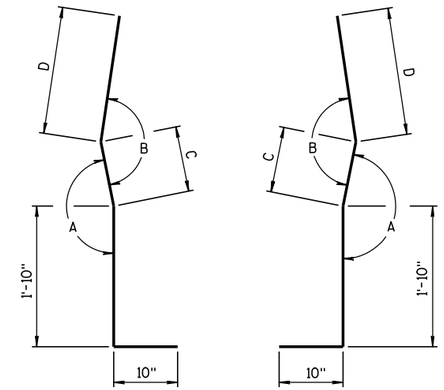
BAR	A	B	C
V12	2'-2"	171°-15'	2'-1 3/4"
V13	2'-7"	171°-05'	1'-9 3/8"



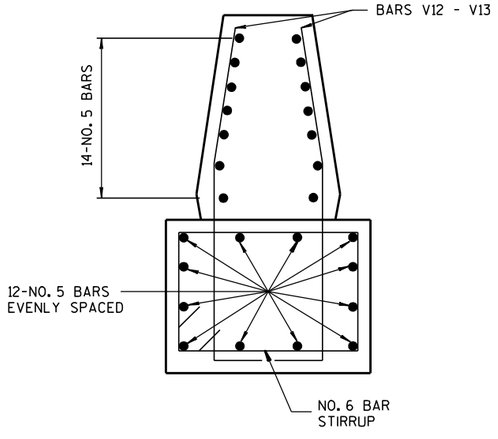
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

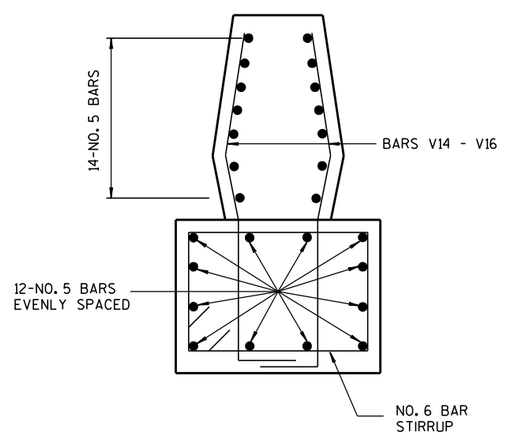
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



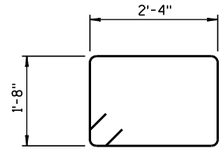
BAR BENDING DETAIL
FOR BARS V14 - V16



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Zoss
ROADWAY STANDARDS ENGINEER

FHWA

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S.D.D. 14 B 33-1c

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S.D.D. 14 B 33-1c

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

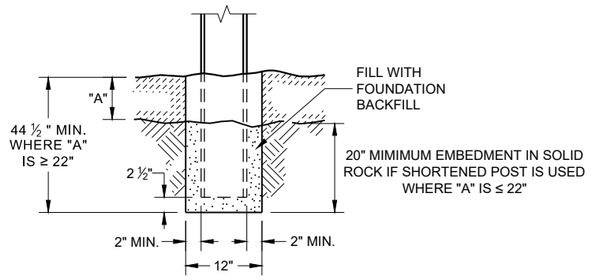
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

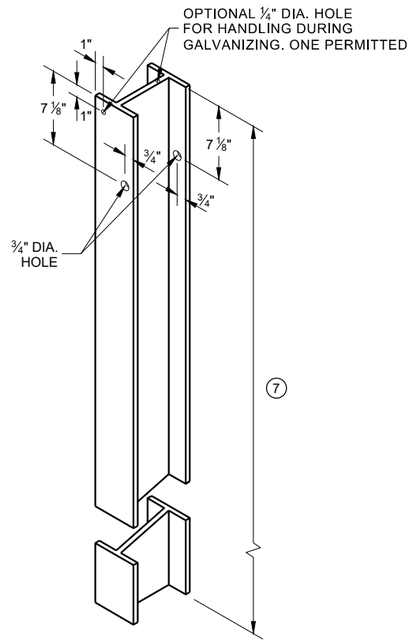
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

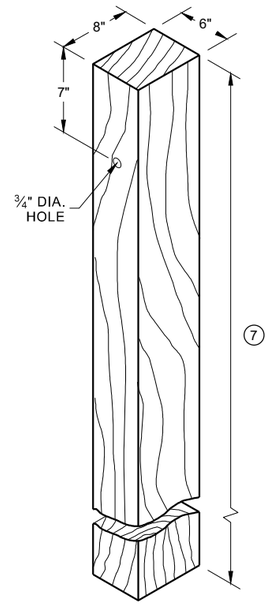
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



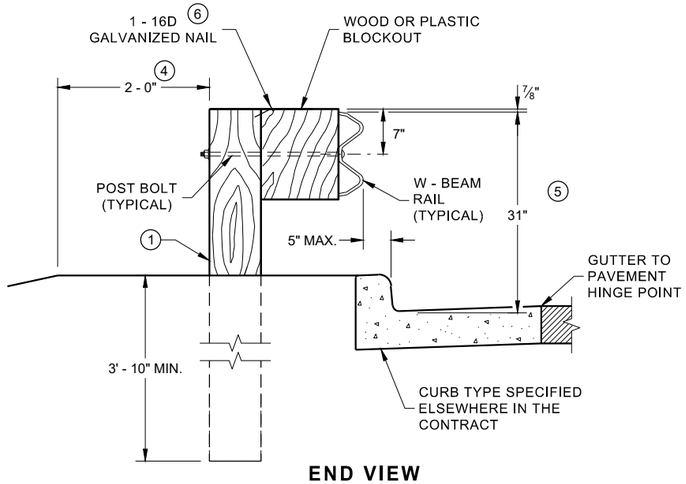
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



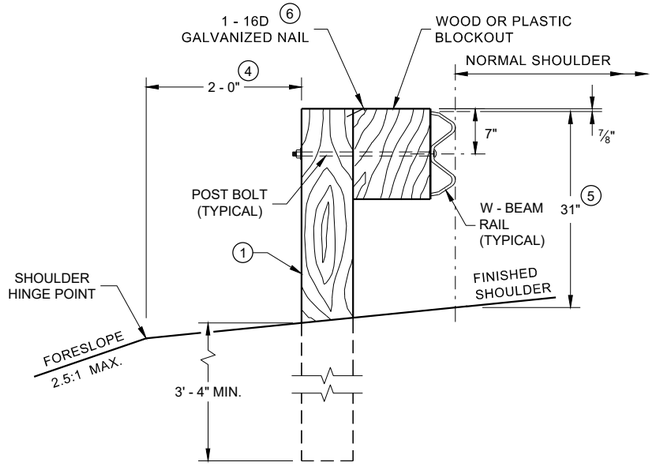
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



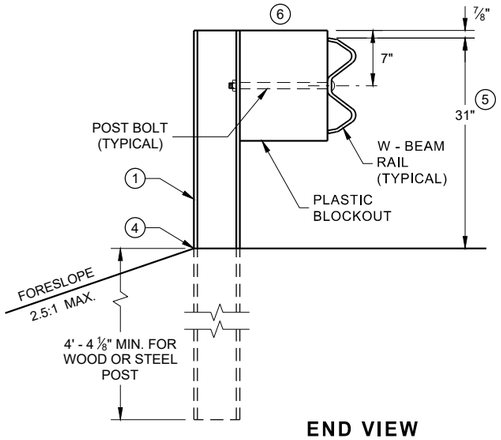
WOOD POST (6" X 8") NOMINAL (1)



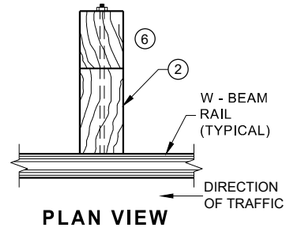
END VIEW
LOCATED ALONG A CURBED ROADWAY



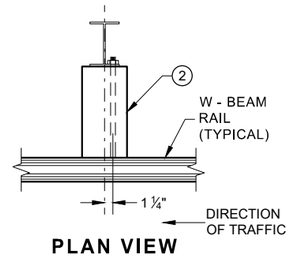
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



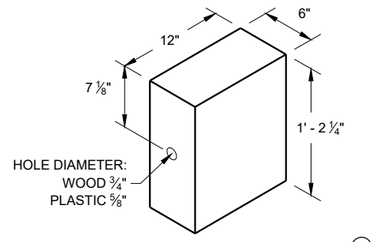
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

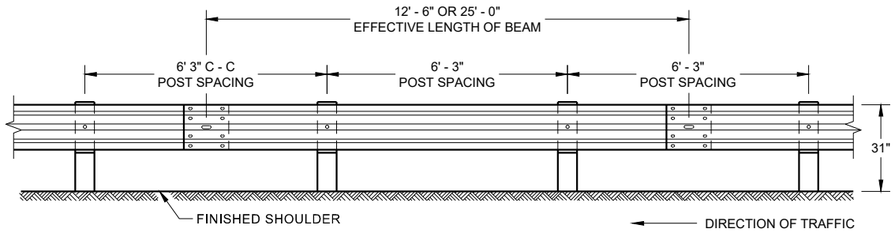
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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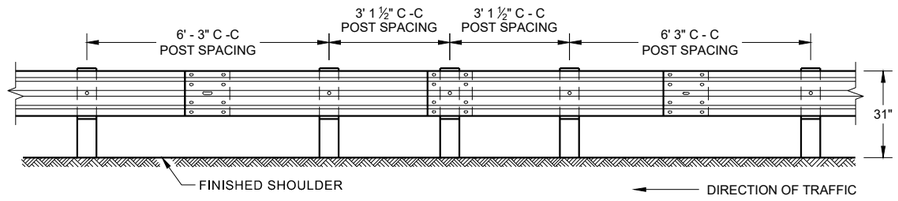
SDD 14B42 - 06a

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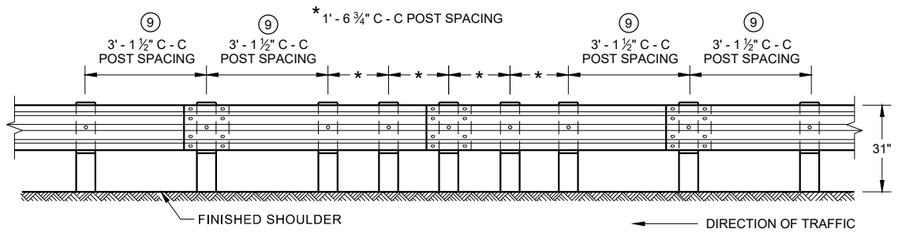
SDD 14B42 - 06a



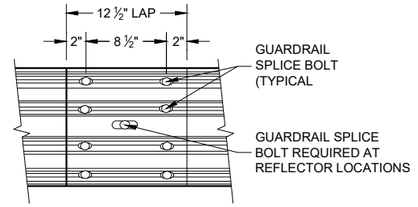
FRONT VIEW
POST SPACING STANDARD INSTALLATION



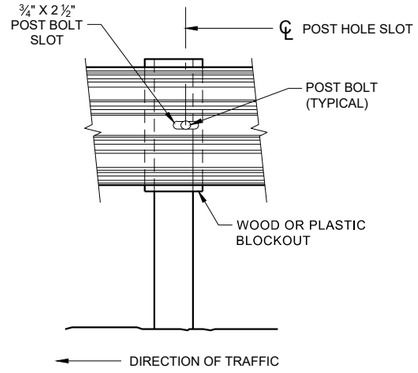
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



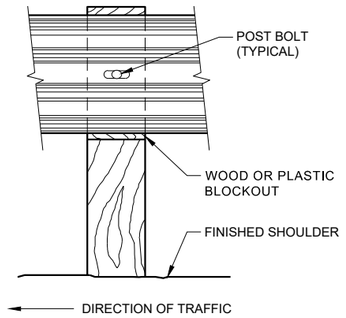
FRONT VIEW
QUARTER POST SPACING (QS)



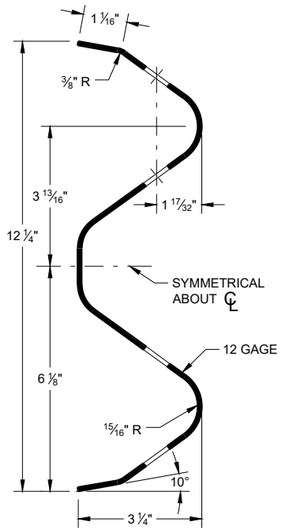
FRONT VIEW
MID-SPAN BEAM SPLICE



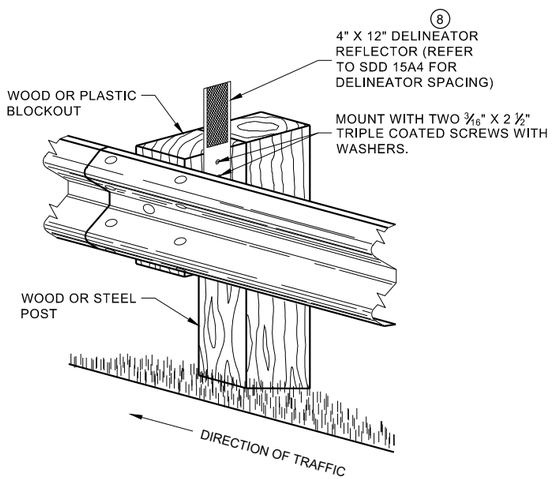
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

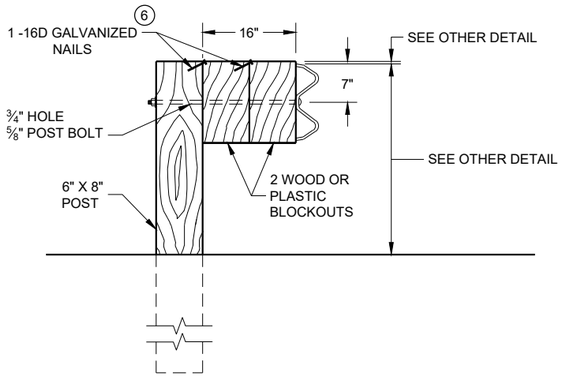
POST BOLTS ARE A ¾" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
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SDD 14B42 - 06b

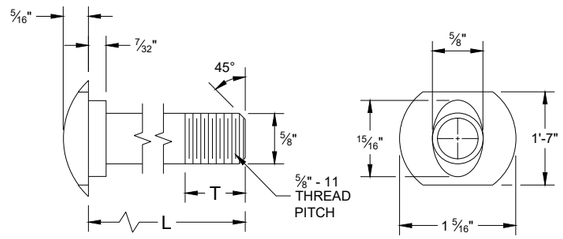


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

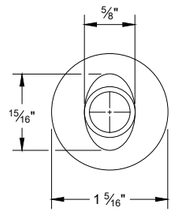
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

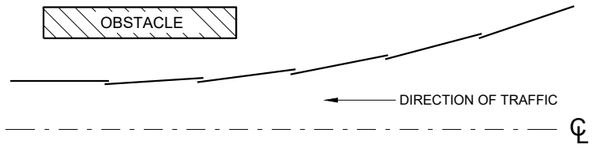


POST BOLT TABLE

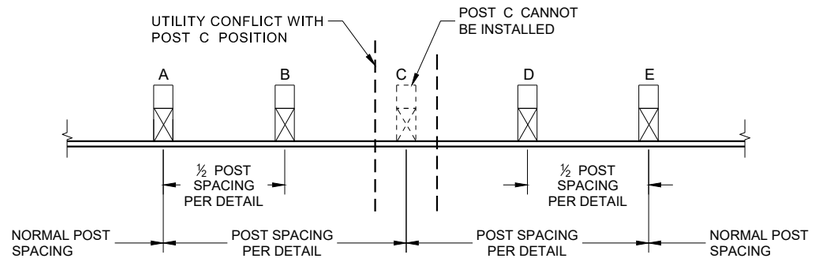
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



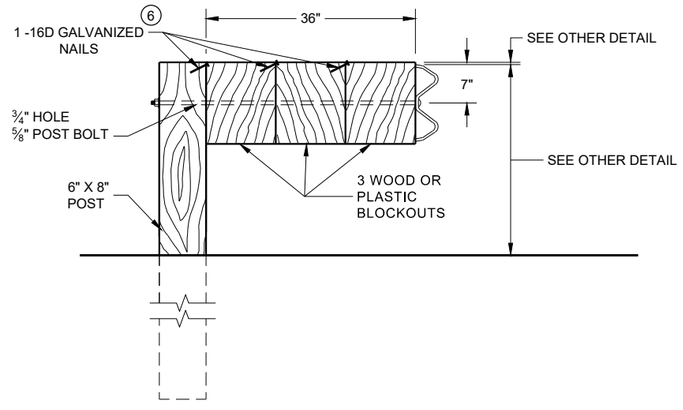
ALTERNATE BOLT HEAD



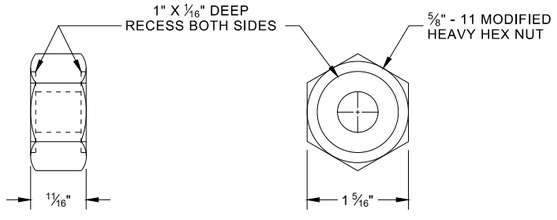
PLAN VIEW
BEAM LAPPING DETAIL



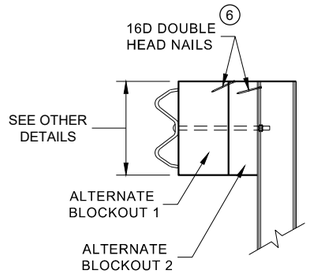
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



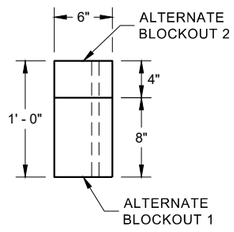
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

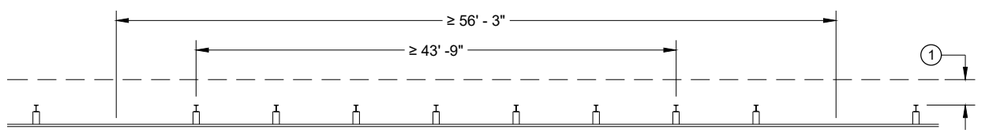
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

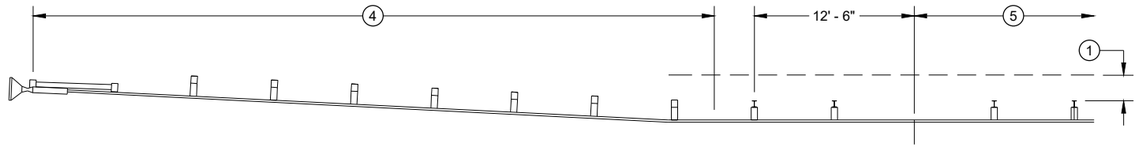
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

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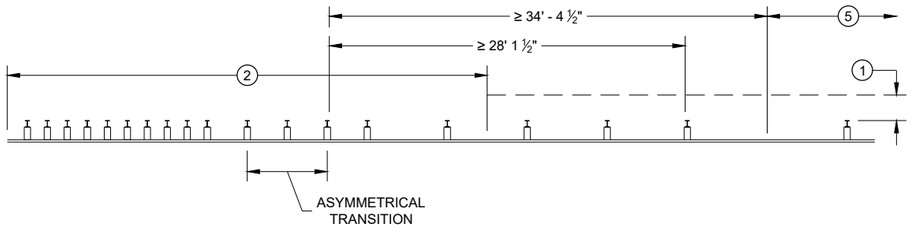
SDD 14B42 - 06c



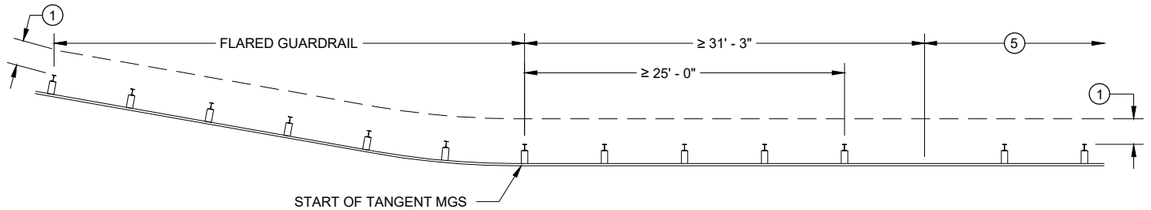
MISSING POST IN NORMAL BEAM GUARD RUN



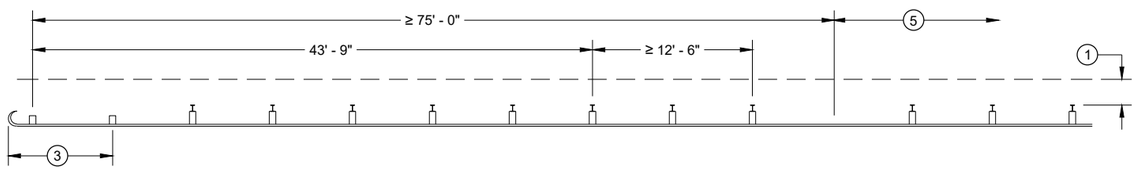
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



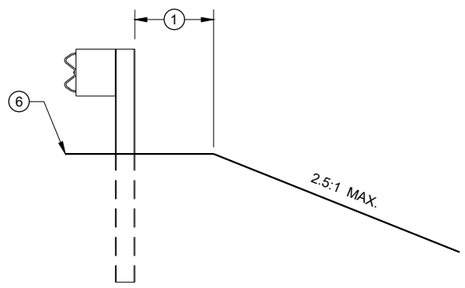
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

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SDD 14B42 - 06d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

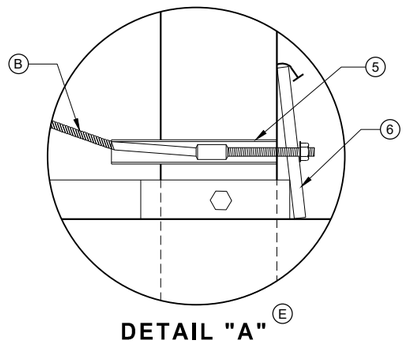
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

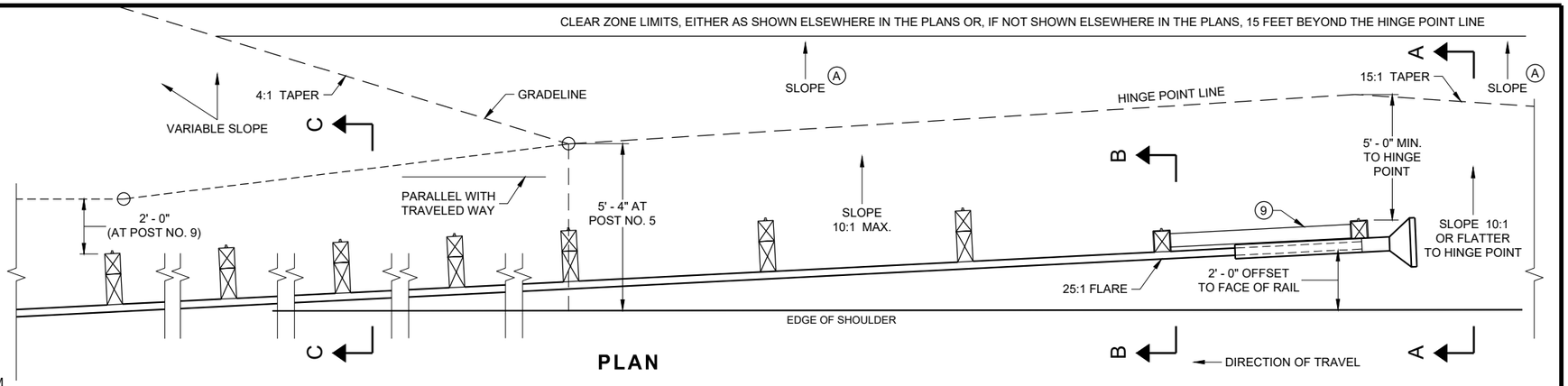
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

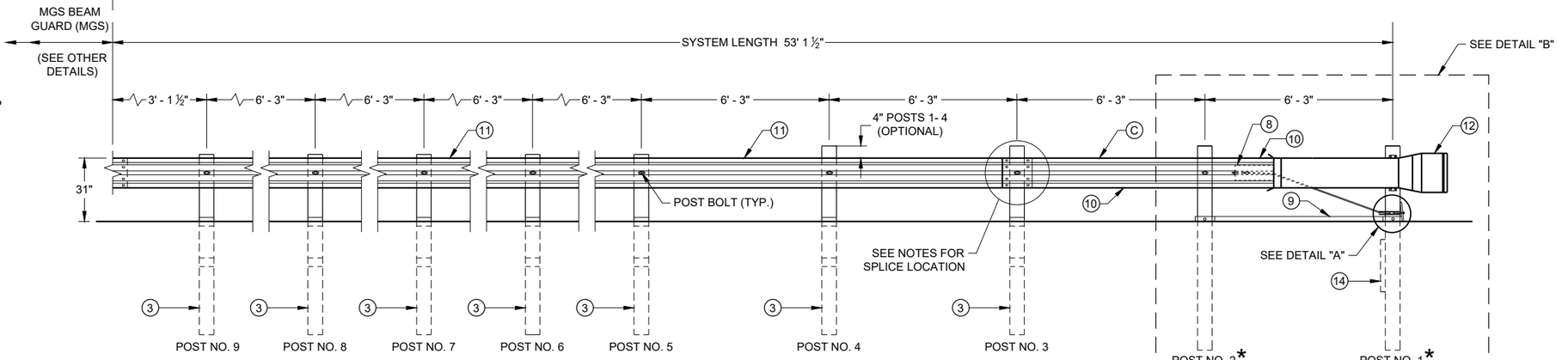
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



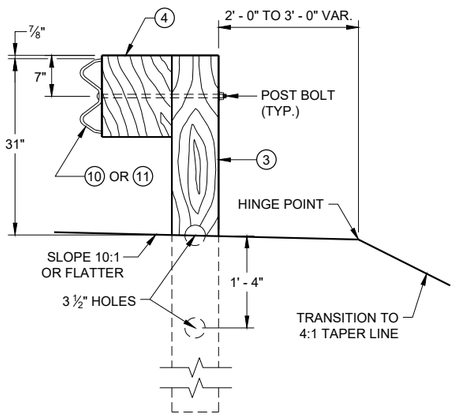
DETAIL "A" (E)



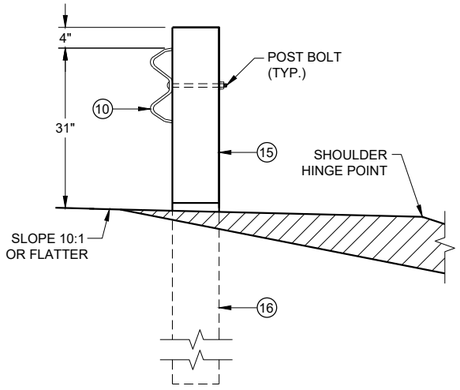
PLAN



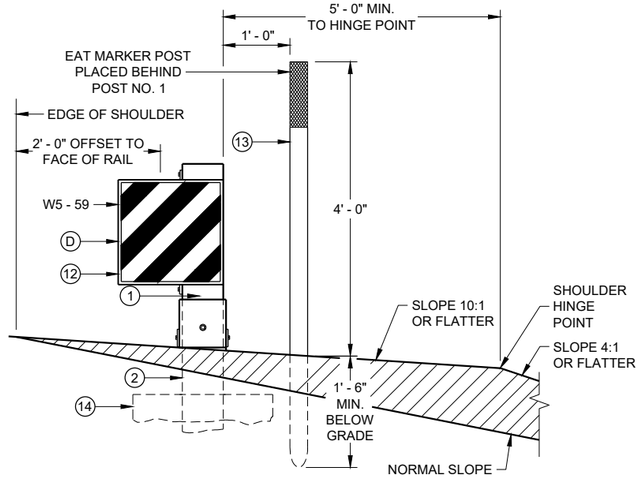
ELEVATION



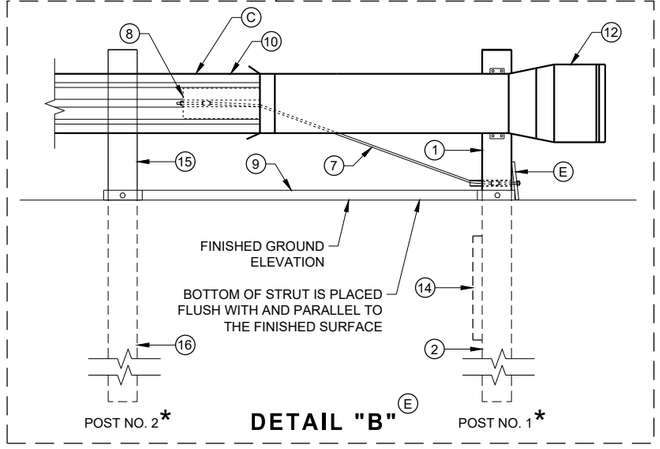
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



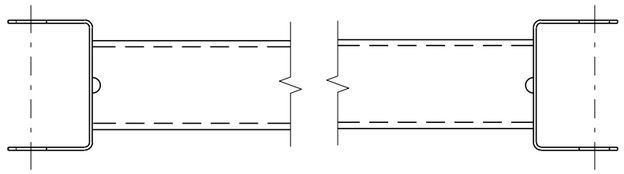
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

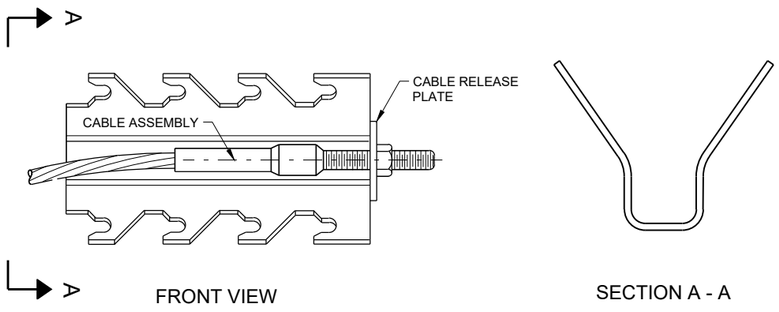
SDD 14B44 - 04a



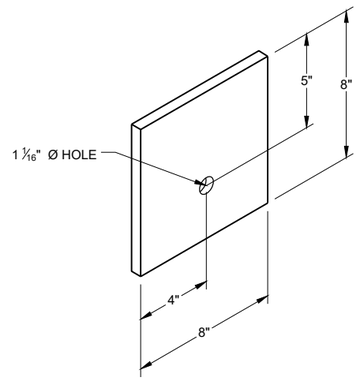
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

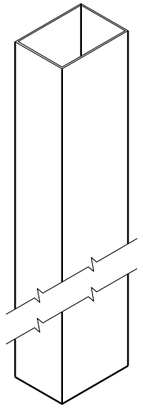
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SDD 14B44 - 04b

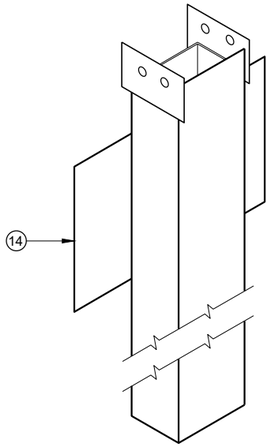
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

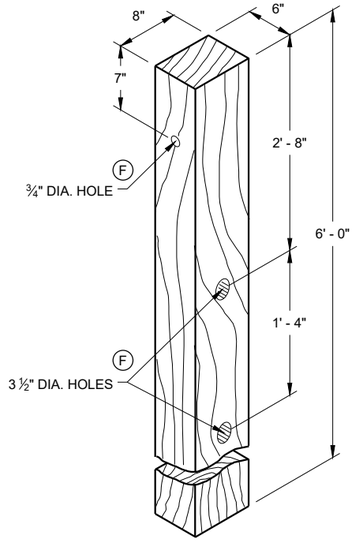
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



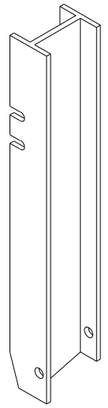
UPPER POST NO. 1 (1) (E)



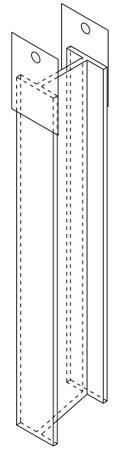
LOWER POST NO. 1 (2) (E)



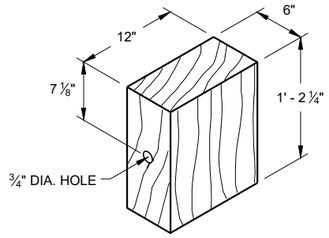
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



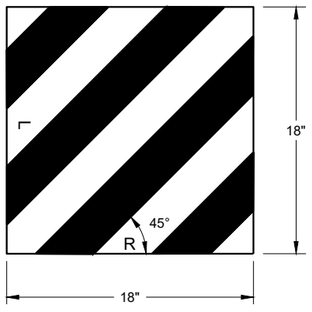
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

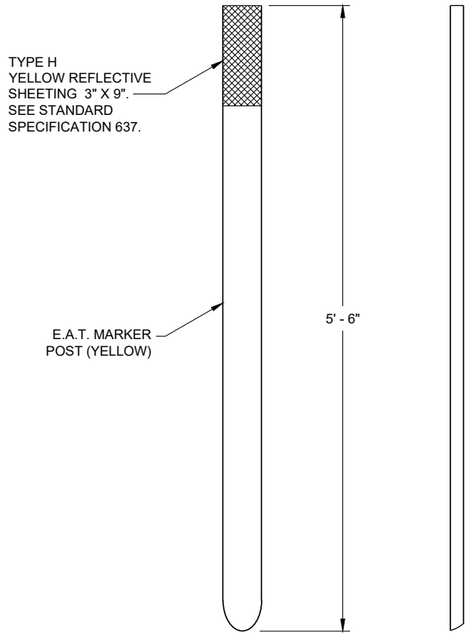


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



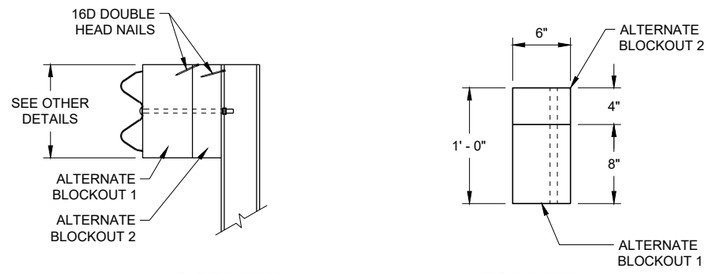
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

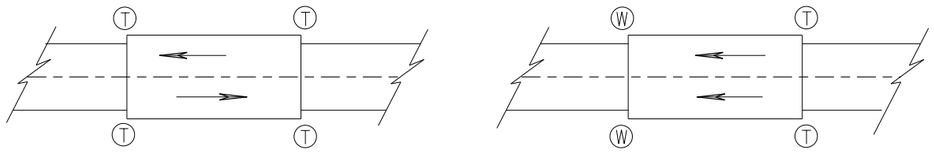
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

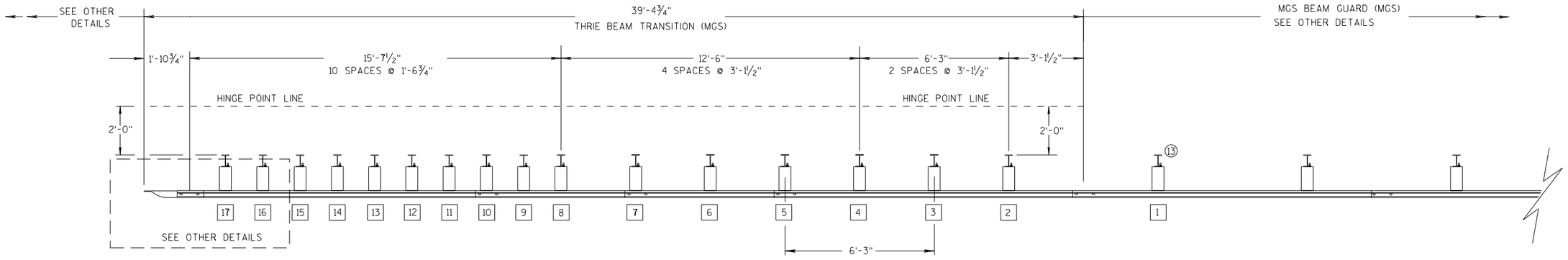
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

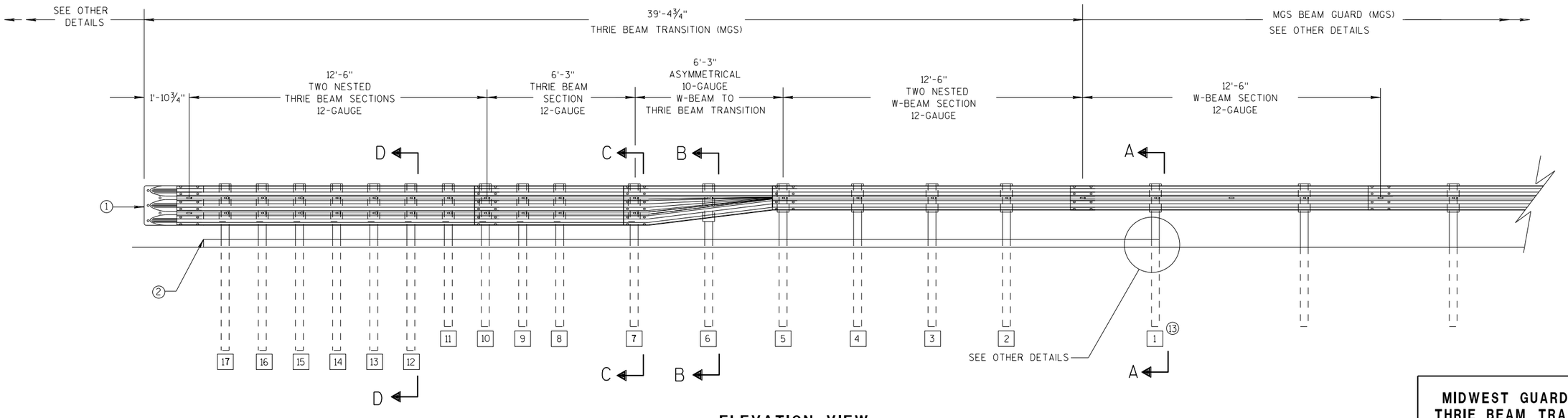
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

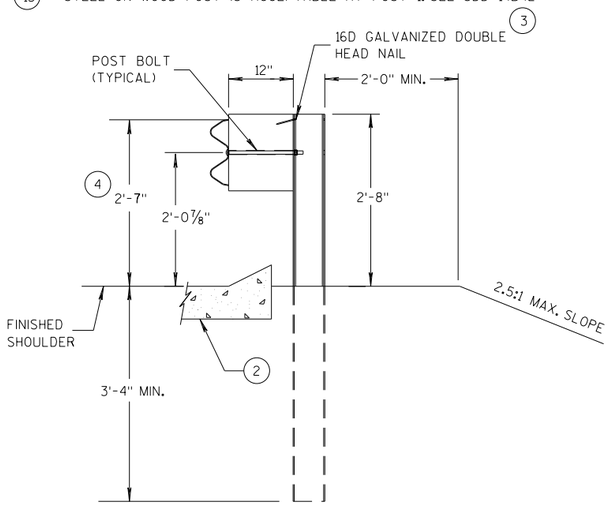
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

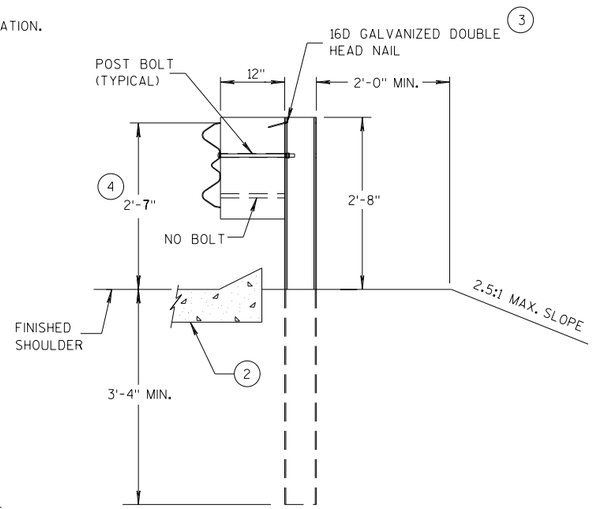
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



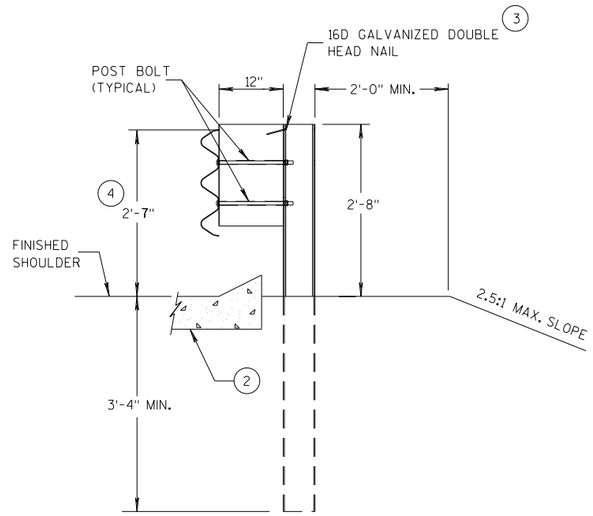
SECTION A-A (13)

POSTS 1-5



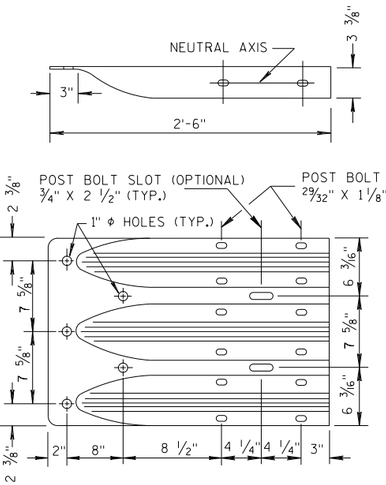
SECTION B-B

POST 6

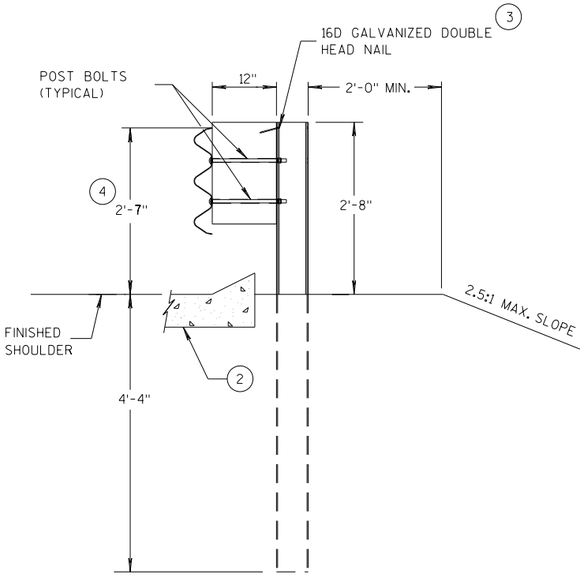


SECTION C-C

POSTS 7-11

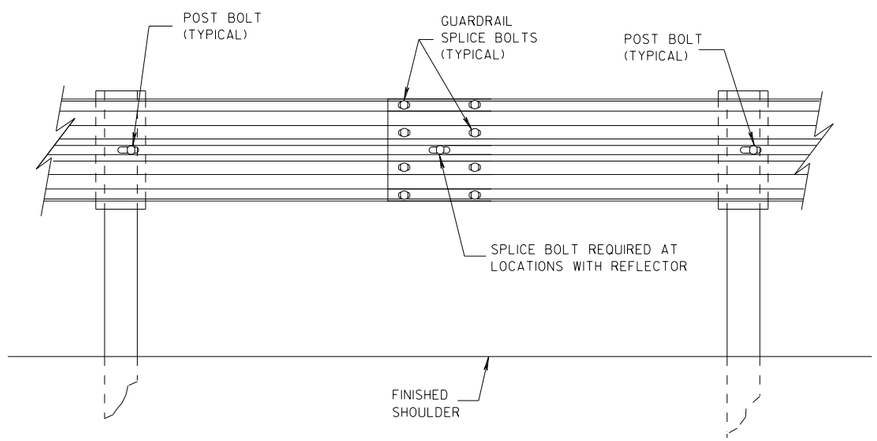


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

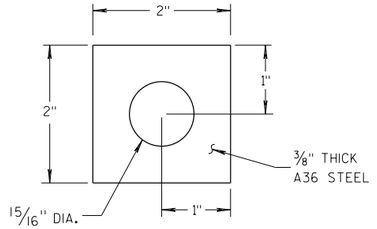
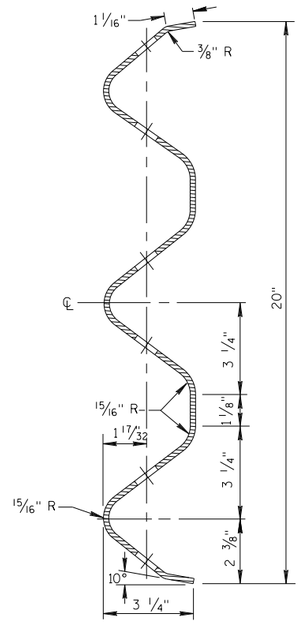


PLATE WASHER DETAIL



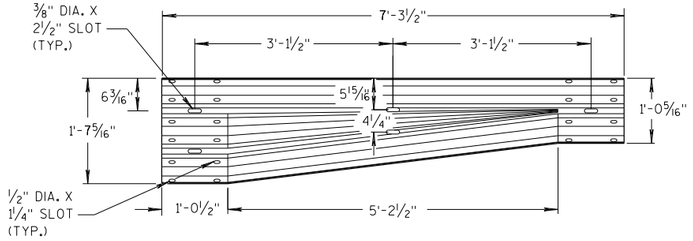
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

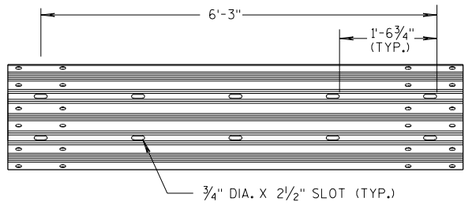
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

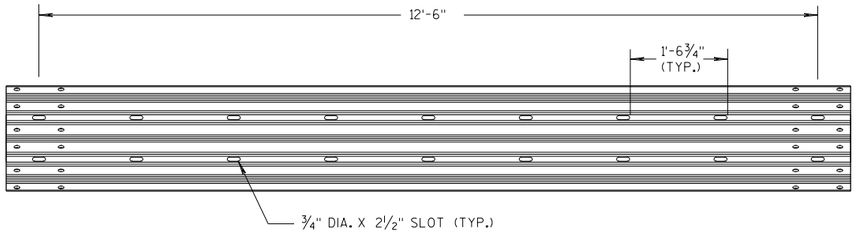
S.D.D. 14 B 45-5b



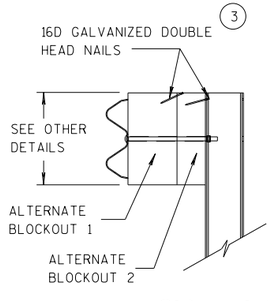
W-BEAM TO THRIE BEAM TRANSITION SECTION



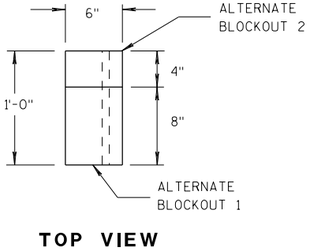
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

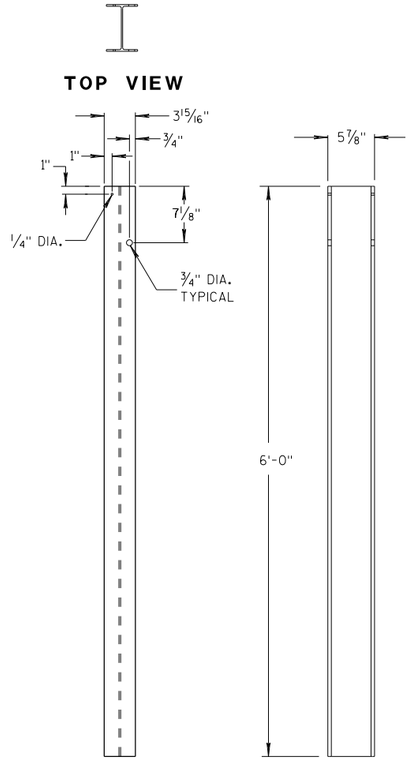


SIDE VIEW



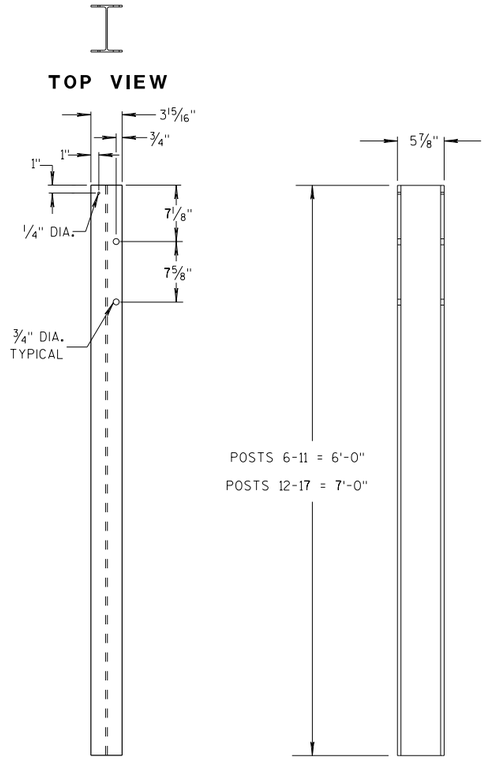
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



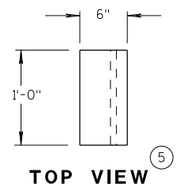
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

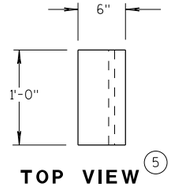


FRONT VIEW SIDE VIEW

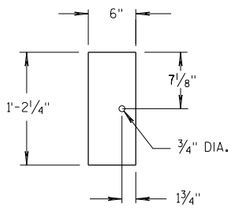
STEEL POSTS 6-17



TOP VIEW (5)

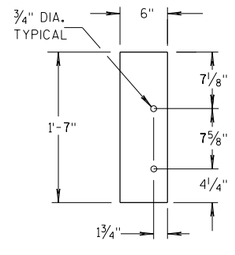


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

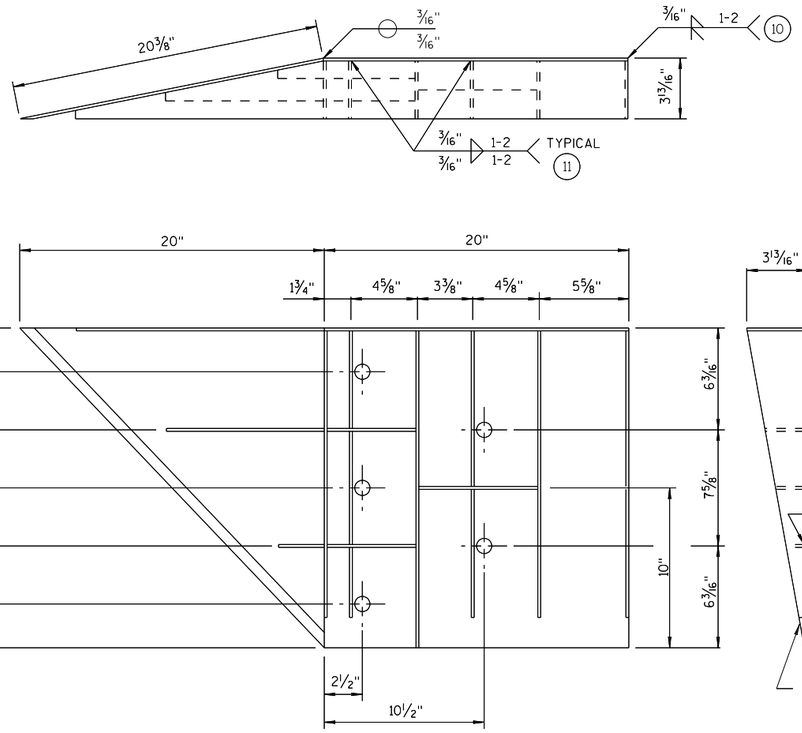
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

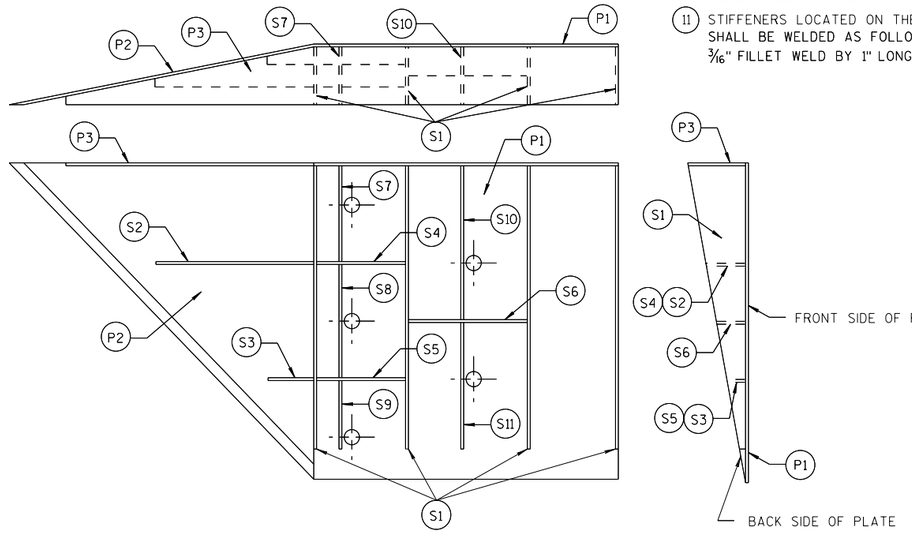


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

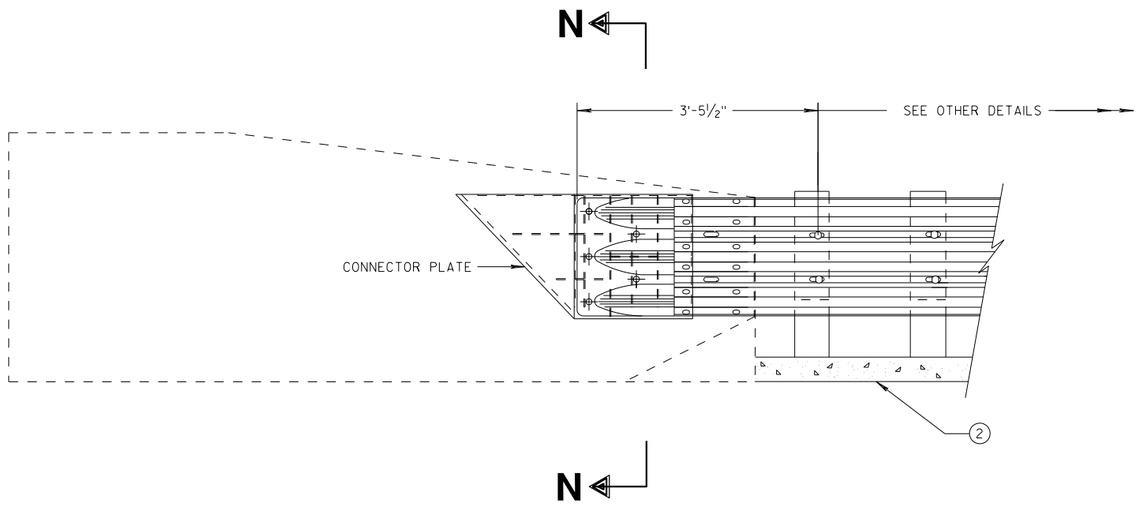
/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

6

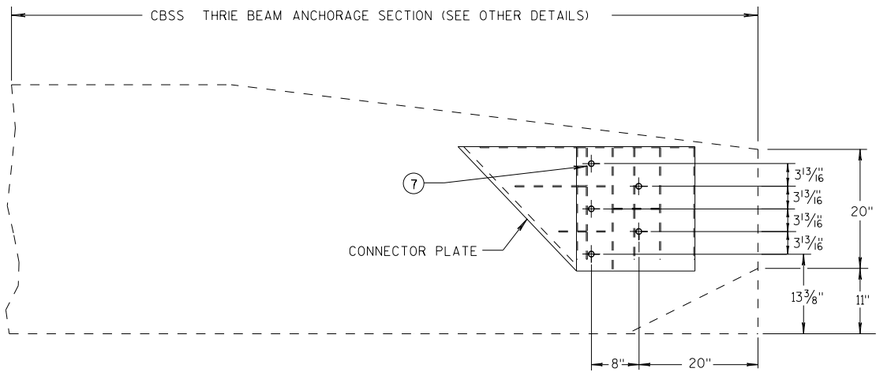
S.D.D. 14 B 45-5i

6

S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



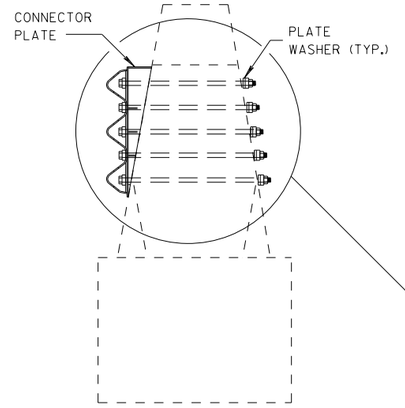
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

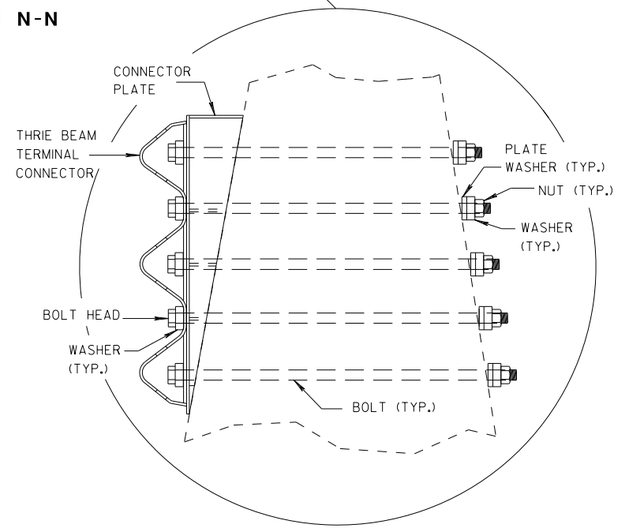
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

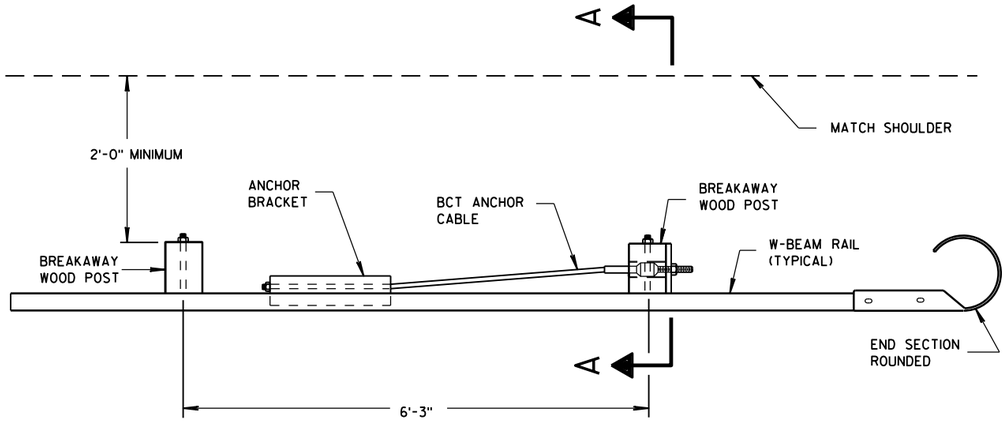
/S/ Rodney Taylor
ROADWAY STANDARDS DI
UNIT SUPERVIS

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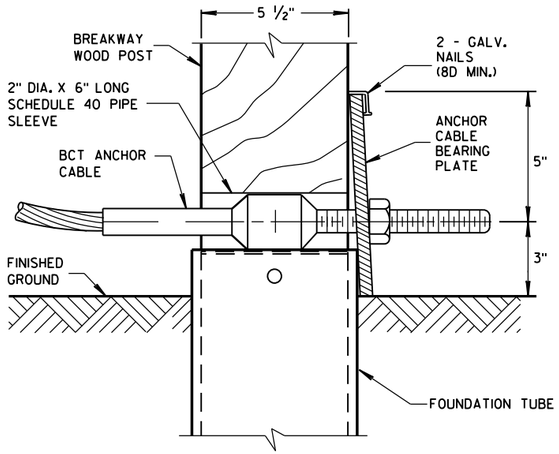
S.D.D. 14 B 45-5j

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S.D.D. 14 B 45-5j



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

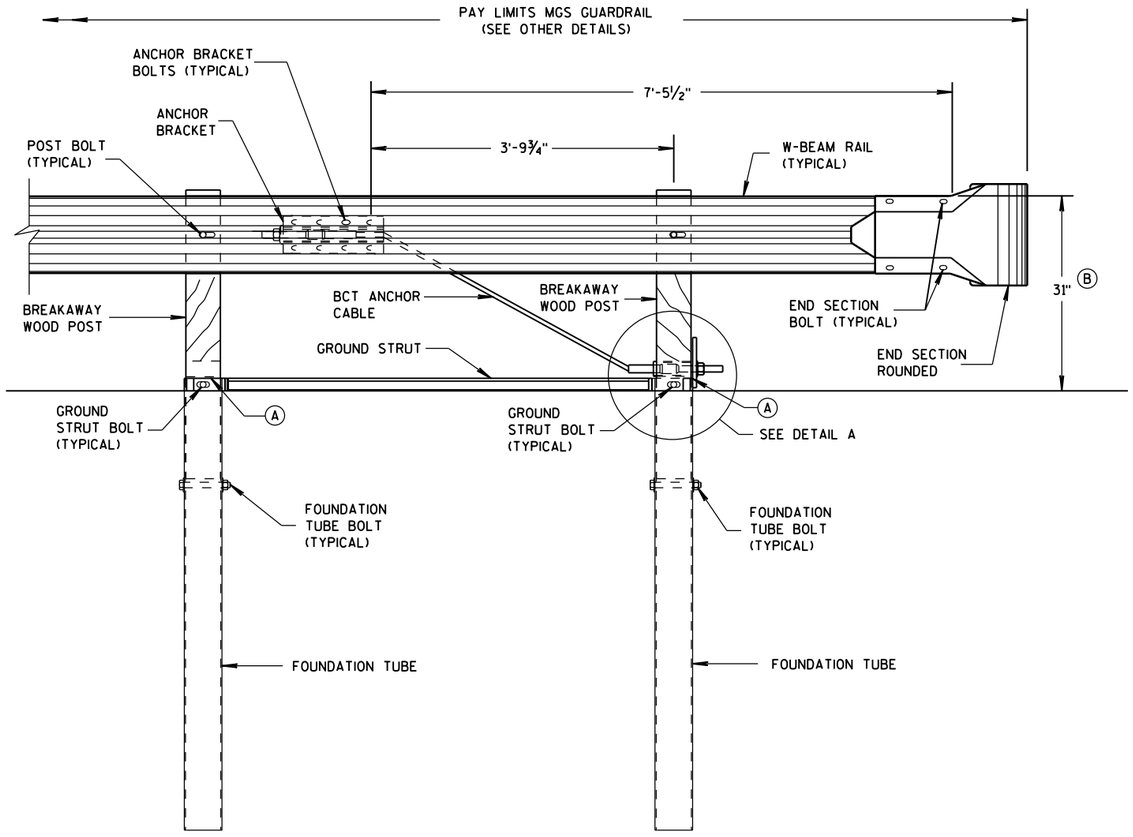
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

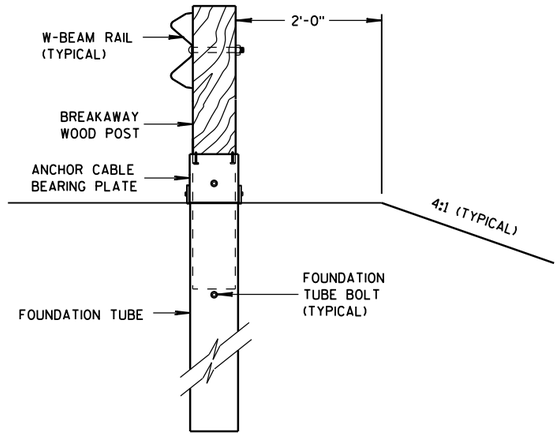
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

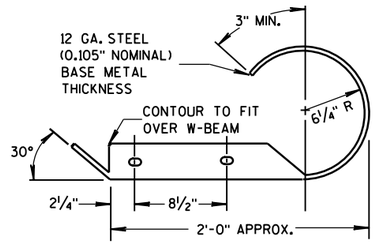


FRONT VIEW

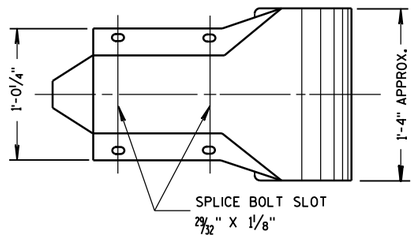
END RAIL DETAIL



SECTION A-A



PLAN VIEW



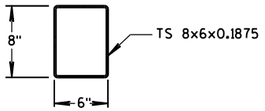
FRONT VIEW

W BEAM END SECTION ROUNDED

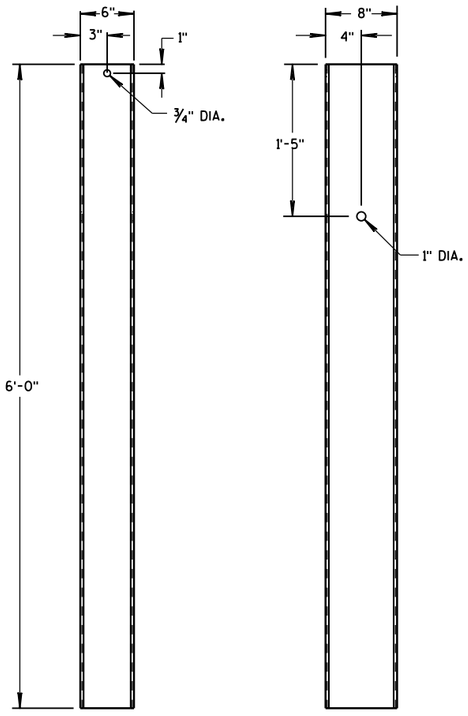
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 14 B 47-2a

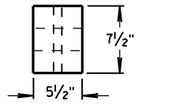


PLAN VIEW

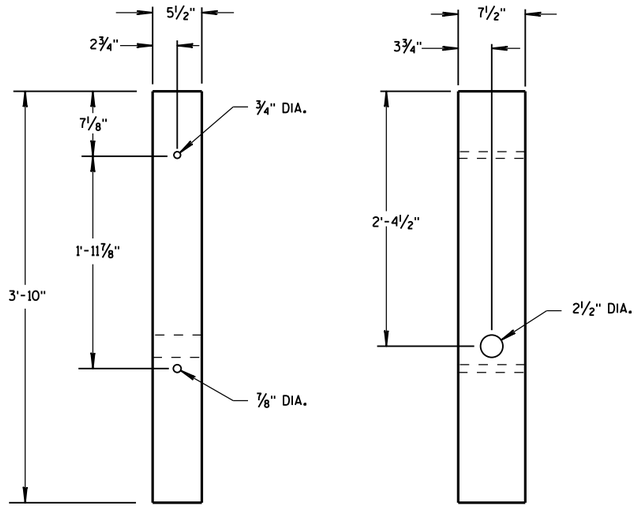


FRONT VIEW SIDE VIEW

FOUNDATION TUBE



PLAN VIEW



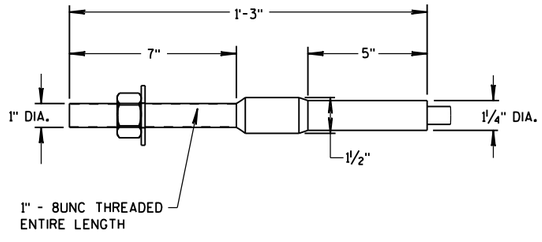
FRONT VIEW SIDE VIEW

BREAKAWAY WOOD POST

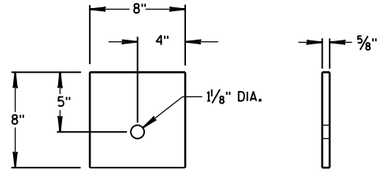
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



SIDE VIEW FRONT VIEW

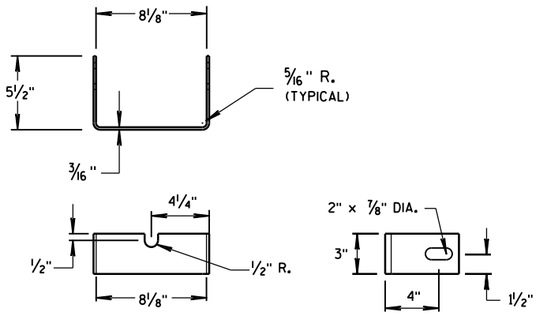
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

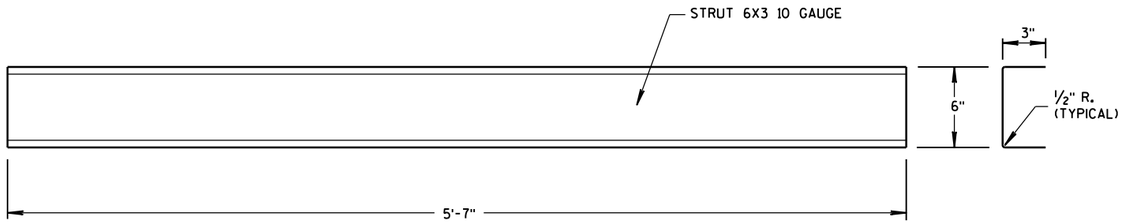
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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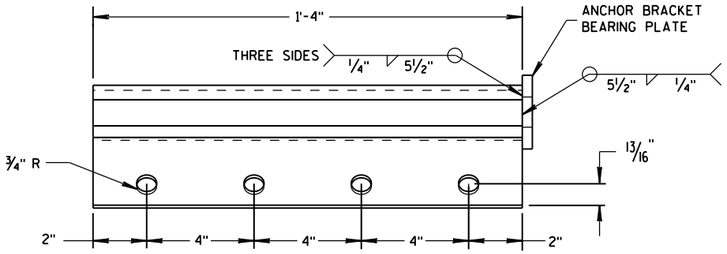
S.D.D. 14 B 47-2b

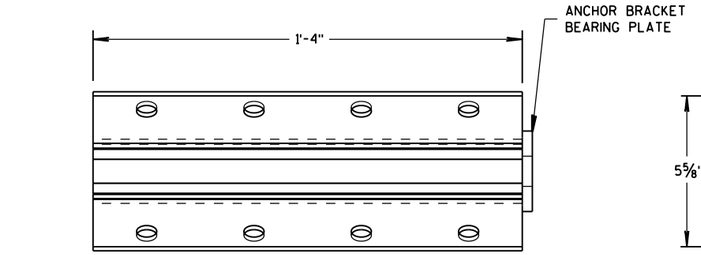


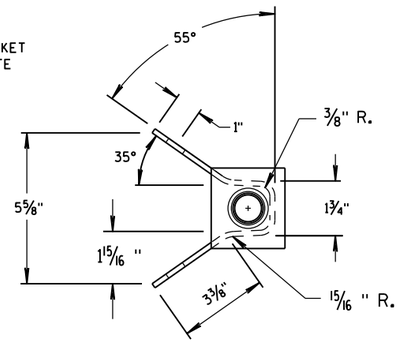
YOKE DETAIL



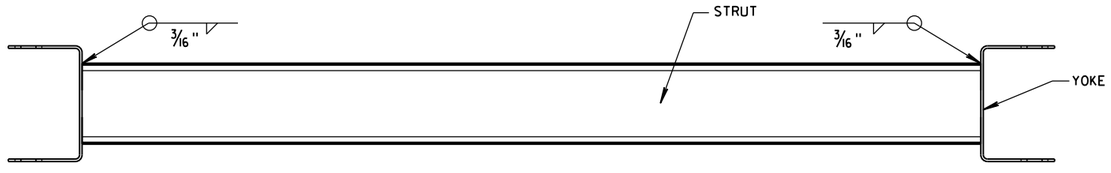
STRUT DETAIL



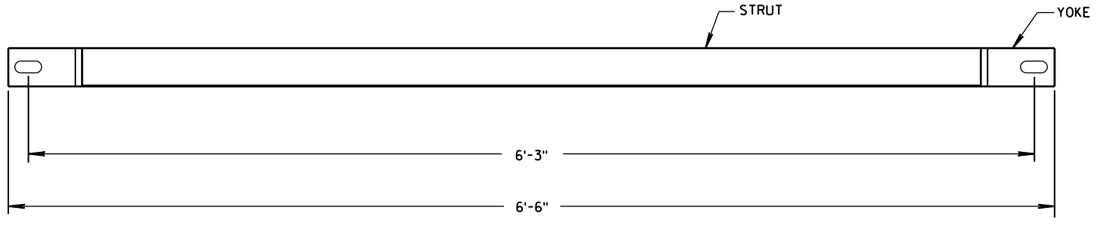




ANCHOR BRACKET

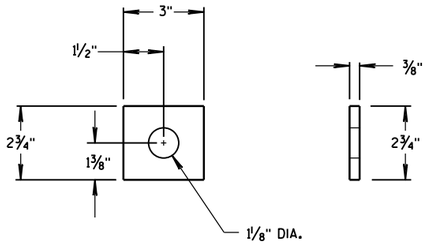


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

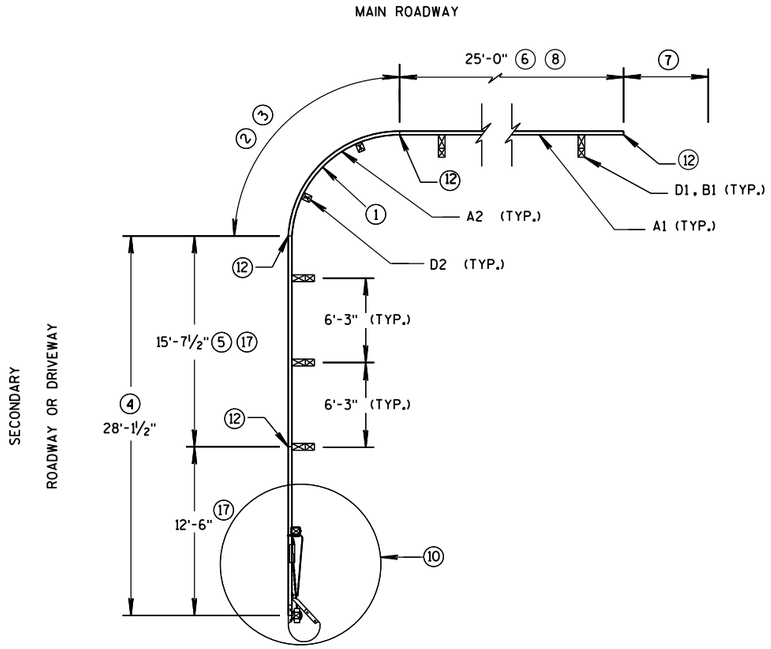
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

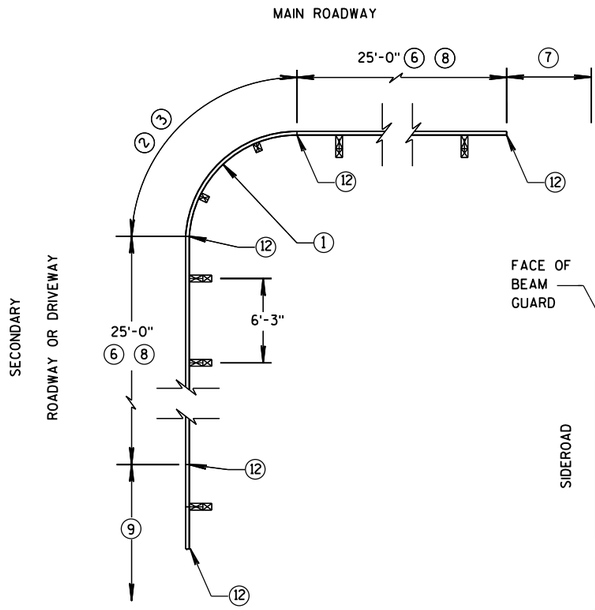
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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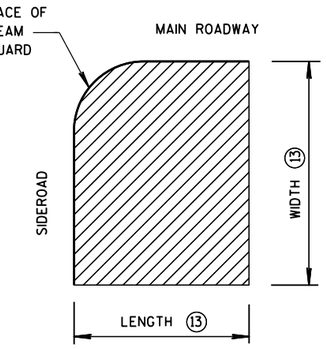
S.D.D. 14 B 47-2c



SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY PLAN VIEW



SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY PLAN VIEW



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)

TABLE FOR RADIUS OF 32' AND LESS

RADIUS FT	LENGTH FT	WIDTH FT
8	25	15
16	30	15
24	40	20
32	50	30

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING IS TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERITCAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUTS.

UNLESS NOTED OTHERWISE CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6'-3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE TERMINAL (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAILS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID FOR WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS)

(11) HEIGHT VARIES. SEE NOTE (8) AND (17).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRE PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

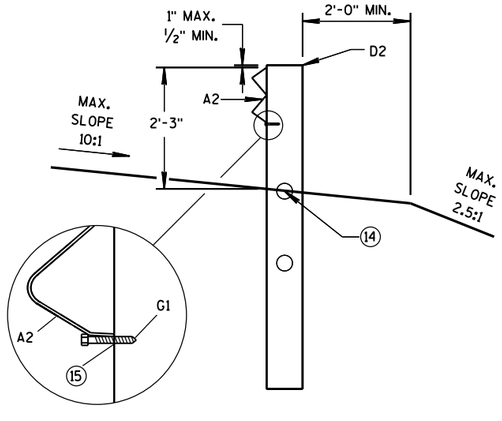
(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

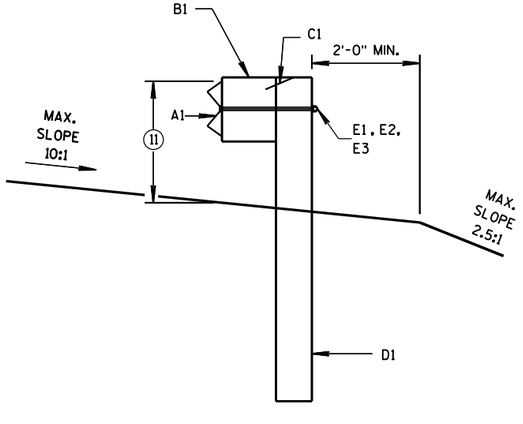
(15) DRILL 15/64" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

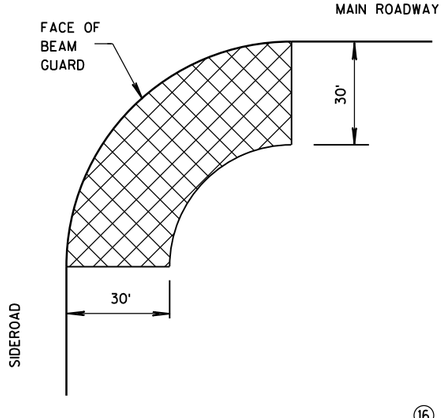
(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL.



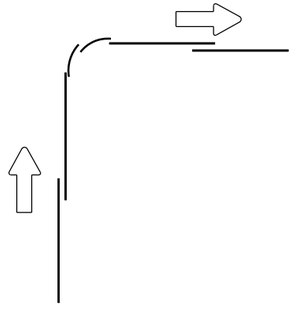
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



BEAM GUARD POSTS IN HEIGHT TRANSITION



AREA FREE OF FIXED OBJECTS (16) RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

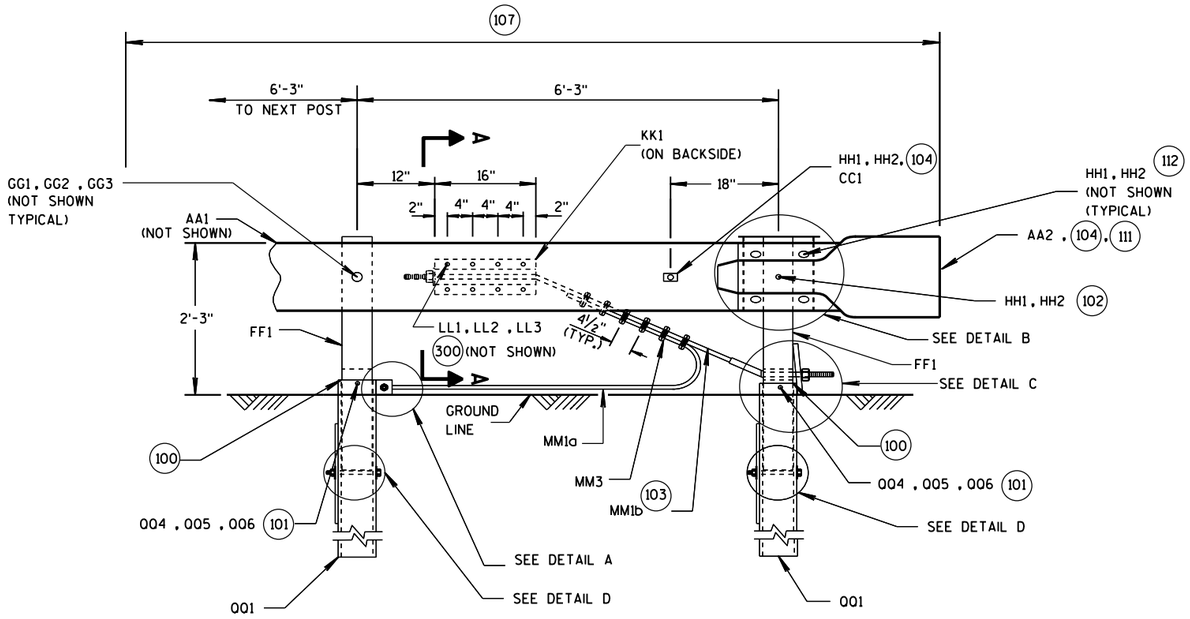
STATE OF WISCONSIN
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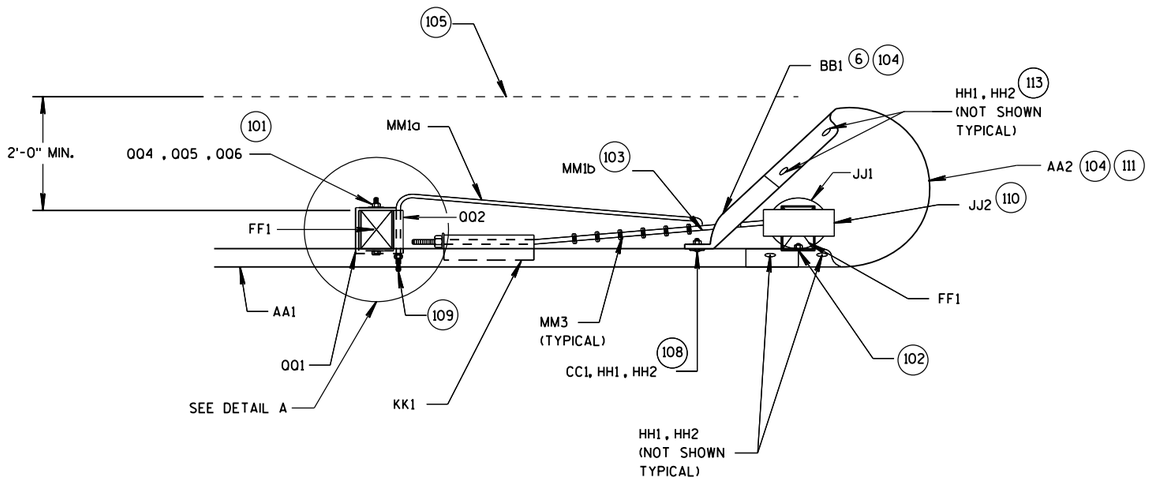
S.D.D. 14 B 53-1a

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S.D.D. 14 B 53-1a



SHORT RADIUS TERMINAL
PROFILE VIEW



SHORT RADIUS TERMINAL
TOP VIEW

(100) TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

(101) WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

(102) SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM END SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL B.

(103) CABLE IS TAUT.

(104) ADJUST AA2 AND BB1 TO FIT.

(105) BREAK POINT OF SHOULDER.

(106) TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL A PROFILE VIEW.

(107) PAY LIMIT FOR BEAM GUARD.

(108) SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

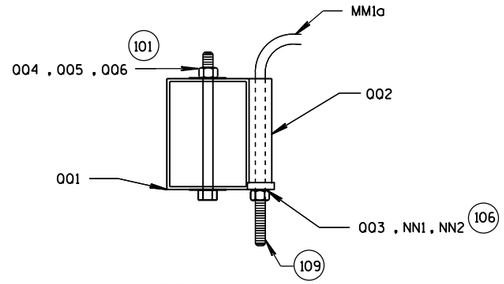
(109) CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

(110) SEE STEEL PIPE ASSEMBLY DETAILS.

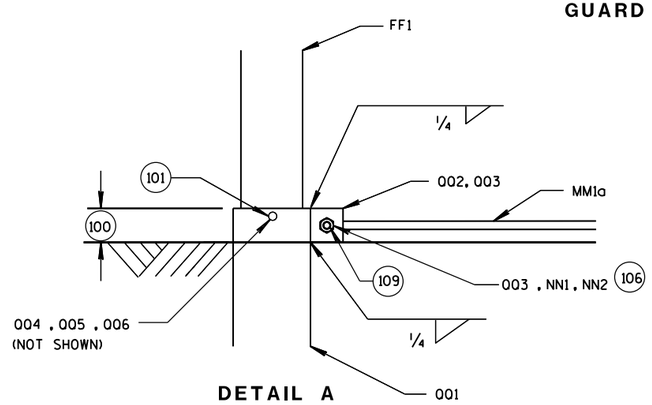
(111) ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

(112) FOUR HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

(113) FOUR HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



DETAIL A
TOP VIEW
(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)

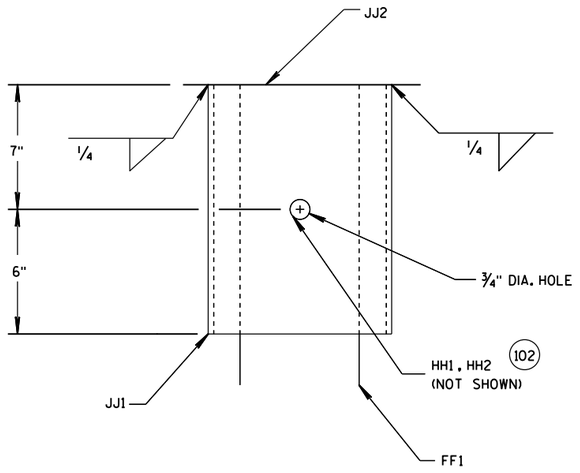


DETAIL A
PROFILE VIEW

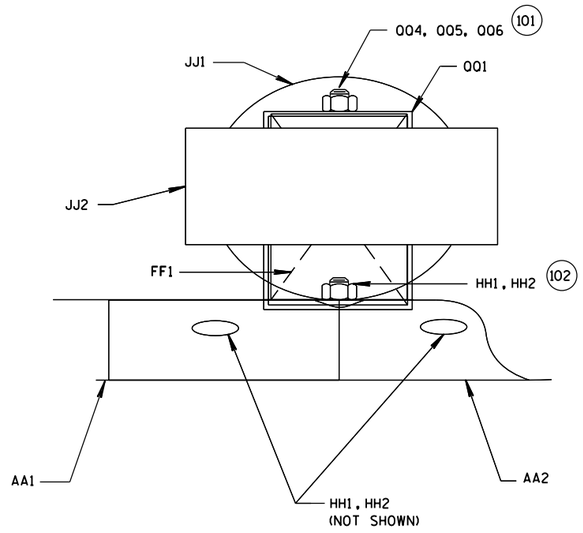
STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL
MGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 53-1b

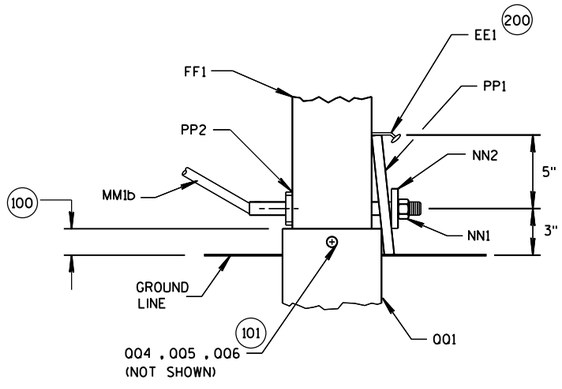


DETAIL B
PROFILE VIEW OF STEEL PIPE ASSEMBLY
(BEAM GUARD AND W-BEAM
END SECTION NOT SHOWN)

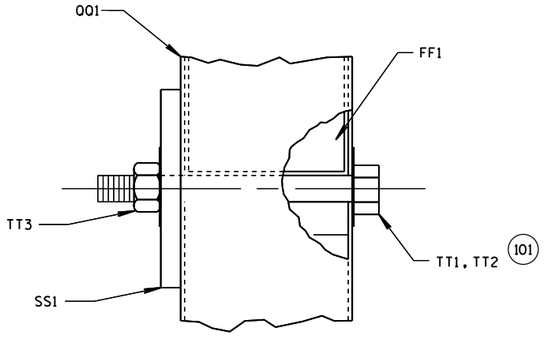


DETAIL B
PLAN VIEW OF STEEL PIPE ASSEMBLY

200 2 NAILS SPACED 4 INCHES CENTER TO CENTER.



DETAIL C
PROFILE VIEW



DETAIL D
PROFILE VIEW

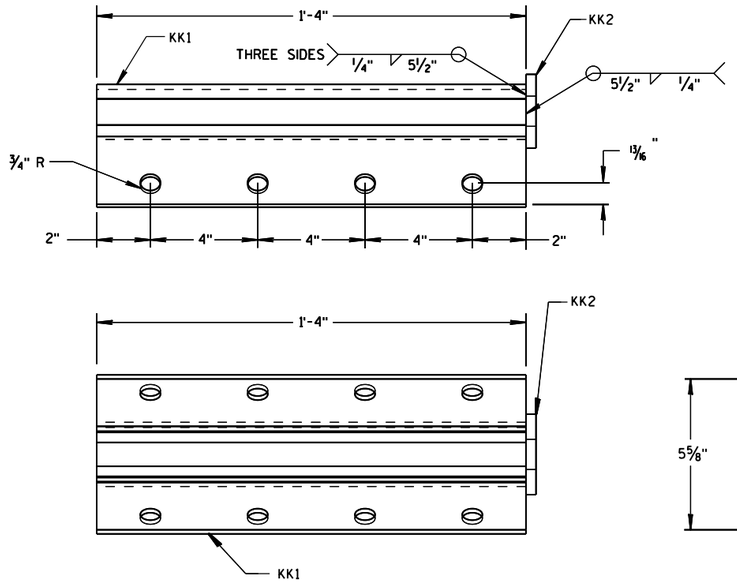
SHORT RADIUS BEAM GUARD
(MGS) SHORT RADIUS
TERMINAL (MGS)

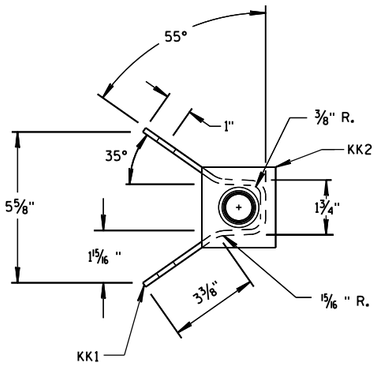
STATE OF WISCONSIN
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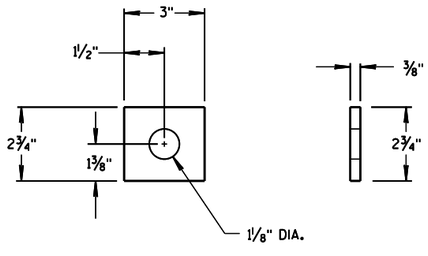
S.D.D. 14 B 53-1c

(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT LL1 AND LL3 REQUIRED. SIXTEEN LL2 REQUIRED.

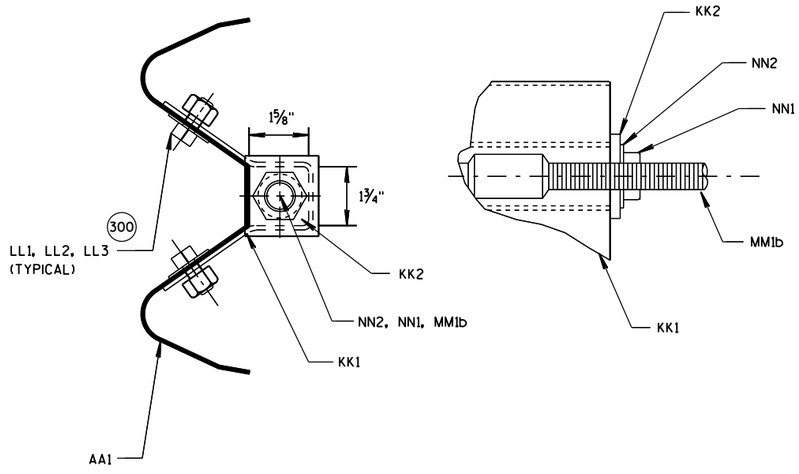




ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

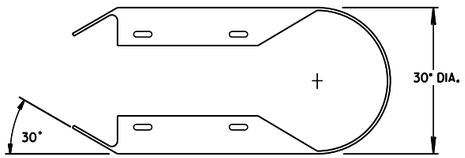


SECTION A-A

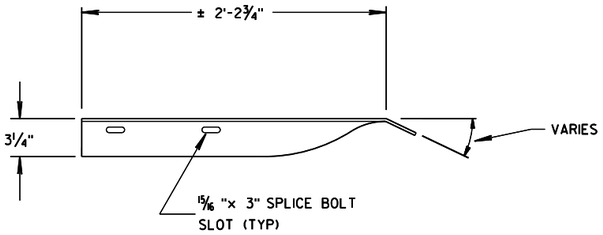
SHORT RADIUS BEAM GUARD
(MGS) SHORT RADIUS
TERMINAL (MGS)

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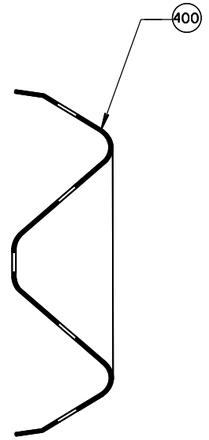
TOP VIEW



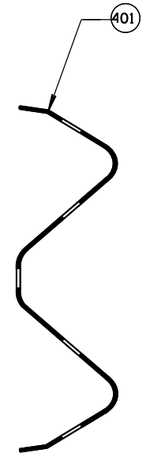
TOP VIEW

(400) CROSS SECTON OF PART IS TO FIT OVER AA1.

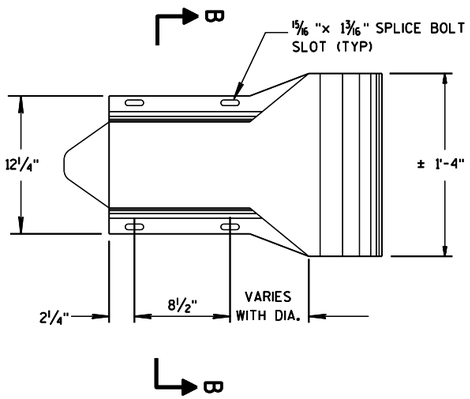
(401) CROSS SECTON OF PART IS TO FIT OVER OR UNDER AA1.



SECTION B-B

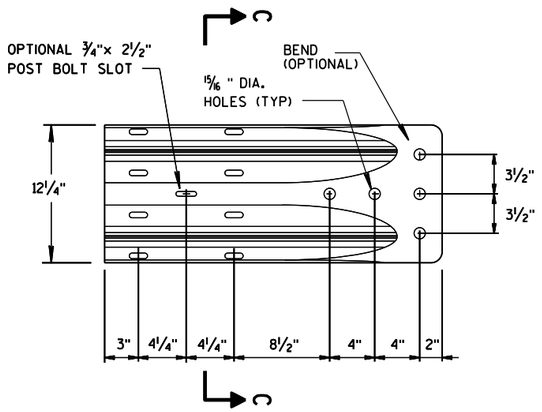


SECTION C-C



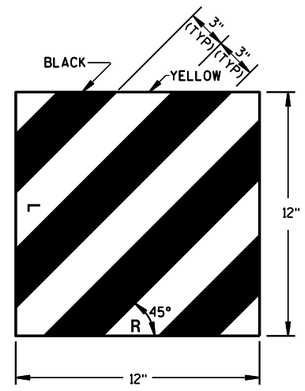
W-BEAM
END SECTION BUFFER (AA2)

PROFILE VIEW



W-BEAM
TERMINAL CONNECTOR (BB1)

PROFILE VIEW



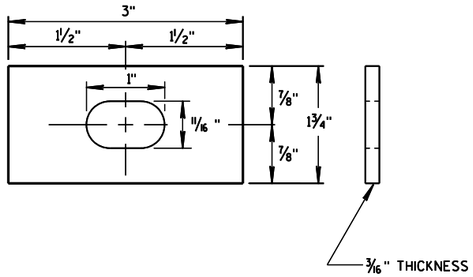
REFLECTIVE SHEETING
(UU1, UU2)

SHORT RADIUS BEAM GUARD
(MGS) SHORT RADIUS
TERMINAL (MGS)

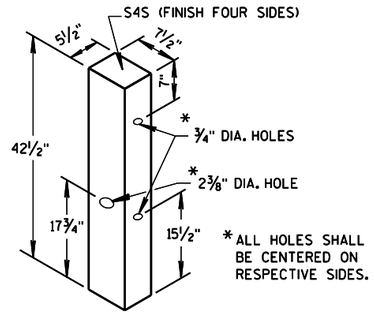
STATE OF WISCONSIN
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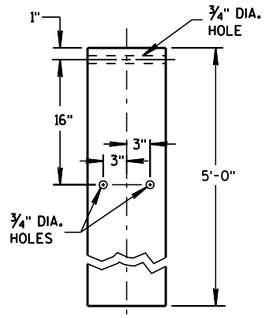
S.D.D. 14 B 53-1e



RECTANGULAR PLATE WASHER (CC1)



WOOD BREAKAWAY POST (FF1)



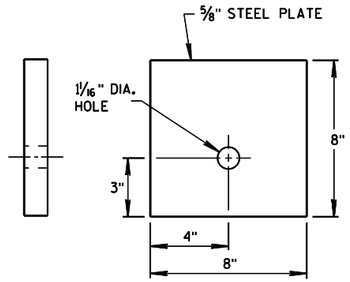
FOUNDATION TUBE (QQ1) (500)

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHING SS1.

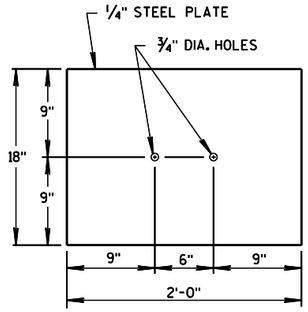
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

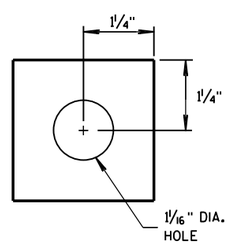
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



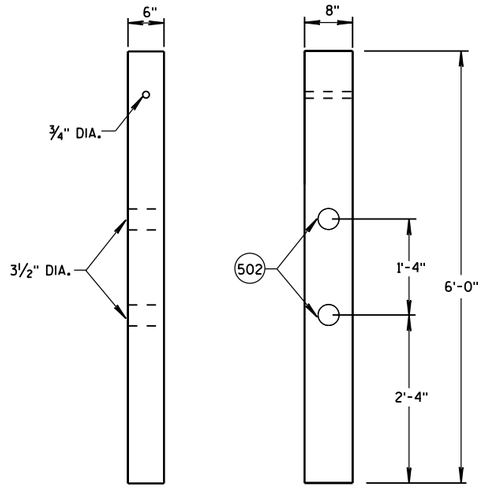
BEARING PLATE (PP1)



SOIL PLATE (SS1)

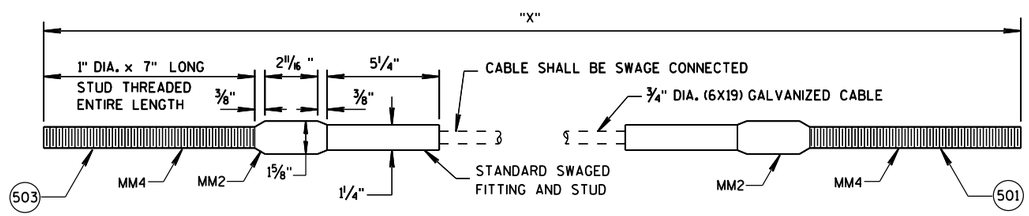


TUBE END PLATE (QQ3)



FRONT VIEW SIDE VIEW

CONTROLLED RELEASE TERMINAL POST (CRT) (D2)



"X" LENGTH	
MM1a	9'-0"
MM1b	6'-8"

CABLE ASSEMBLY (MM1a , MM1b)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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S.D.D. 14 B 53-1f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT-WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329	
E3	POST BOLT - NUT		5/8" DIA. SEE SDD 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR GEOMETRY AND OTHER INFORMATION
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	3/8" DIA. 3" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

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S.D.D. 14 B 53-1g

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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S.D.D. 14 B 53-1g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	3/8" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	SEE 14B42 FOR GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	3/8" DIA. SEE 14B42 FOR GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	3/8" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	SEE 14B42 FOR GEOMETRY
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 3/8" X 4" X 1'-0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	5/8" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A563	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	3/4"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
PP1	BEARING PLATE AT POST	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
OO1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
OO2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	

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S.D.D. 14 B 53-1h

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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S.D.D. 14 B 53-1h

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
003	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2½" X 2½" X ¼"
		GALV. AASHTO M111 / ASTM A123	
004	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅝" DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
005	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
006	GROUND STRUT AND YOKE - NUT	HEAVY HEX	⅝" DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
SS1	SOIL PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅝" DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING SHEETING TYPE FOR MARKER
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

6

S.D.D. 14 B 53-1i

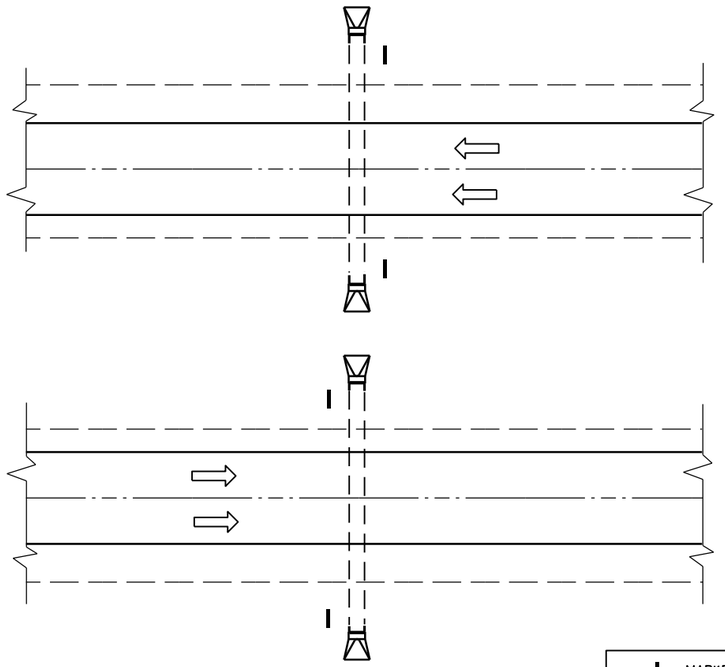
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S.D.D. 14 B 53-1i

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

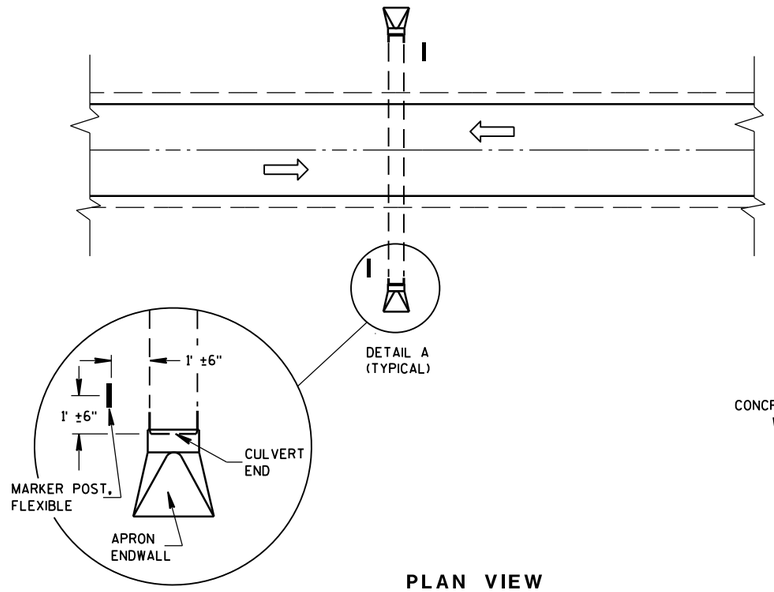
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVI
NT
FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

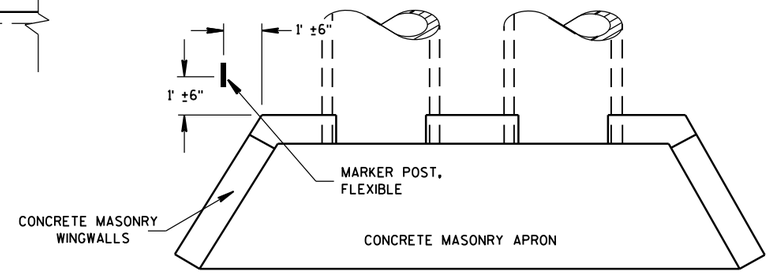
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

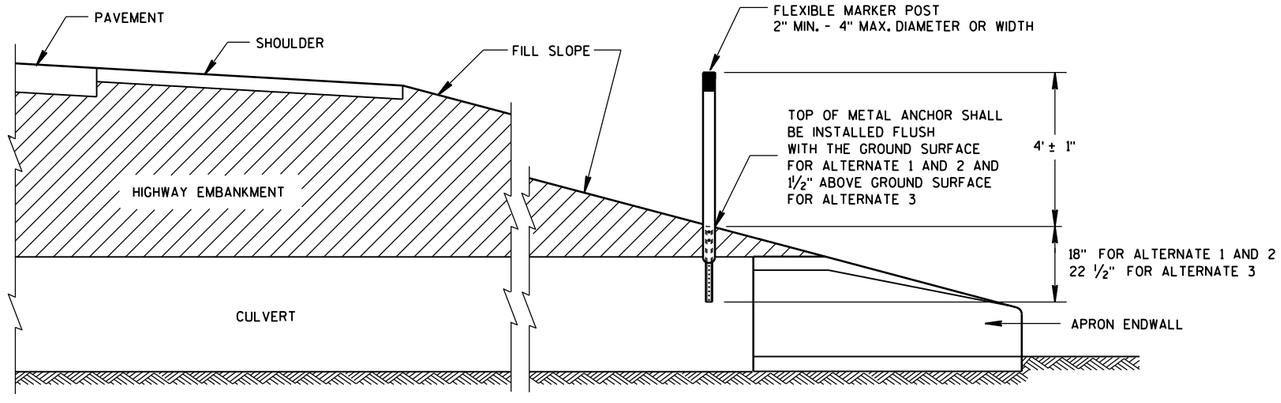
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

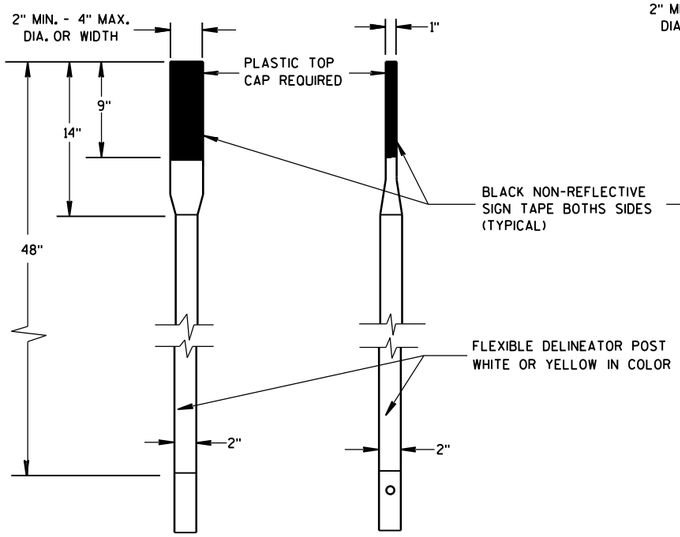
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

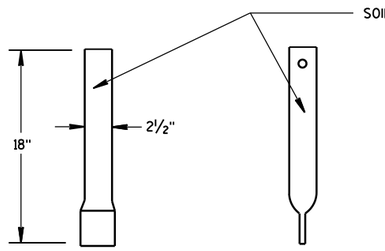
6

S.D.D. 15 A 3-2a

6

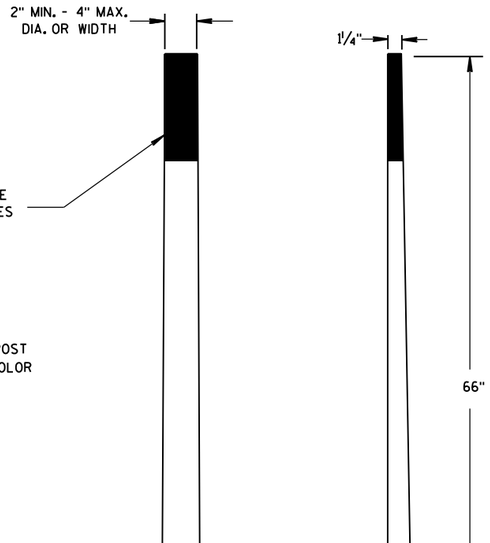
S.D.D. 15 A 3-2a





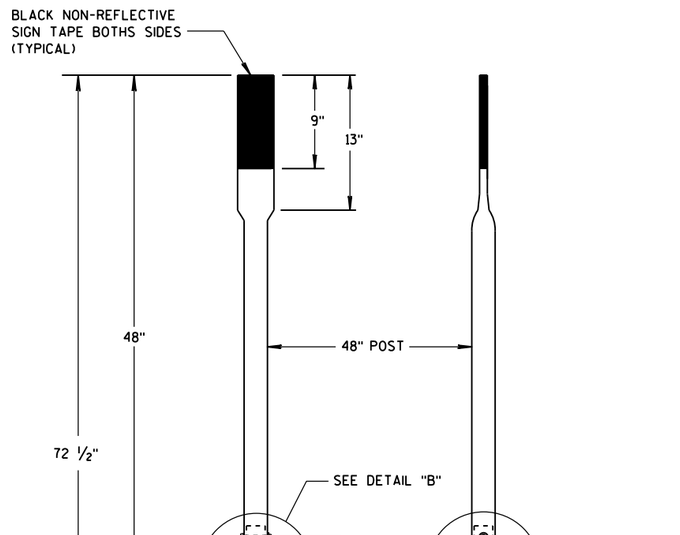
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

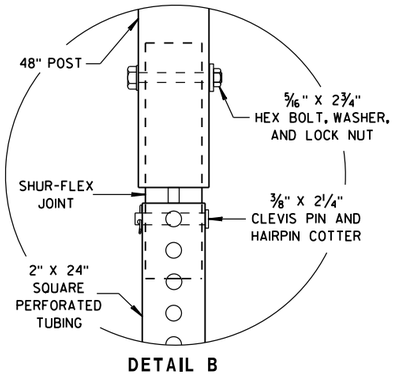
ALTERNATE 2



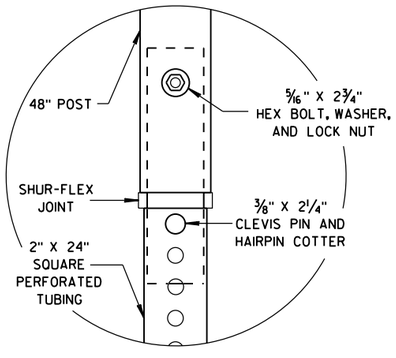
FRONT VIEW SIDE VIEW

ALTERNATE 3

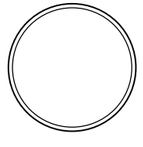
FLEXIBLE MARKER POSTS



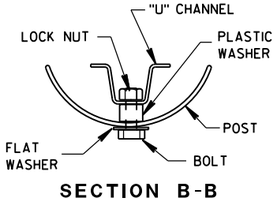
DETAIL B



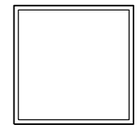
DETAIL C



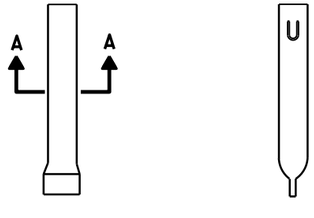
SECTION A-A



SECTION B-B

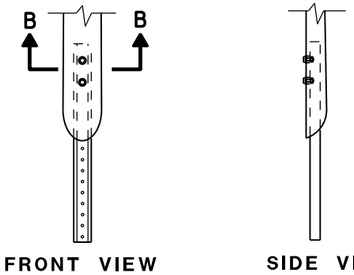


SECTION C-C



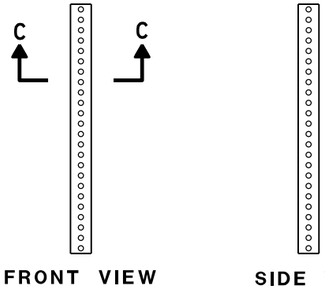
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

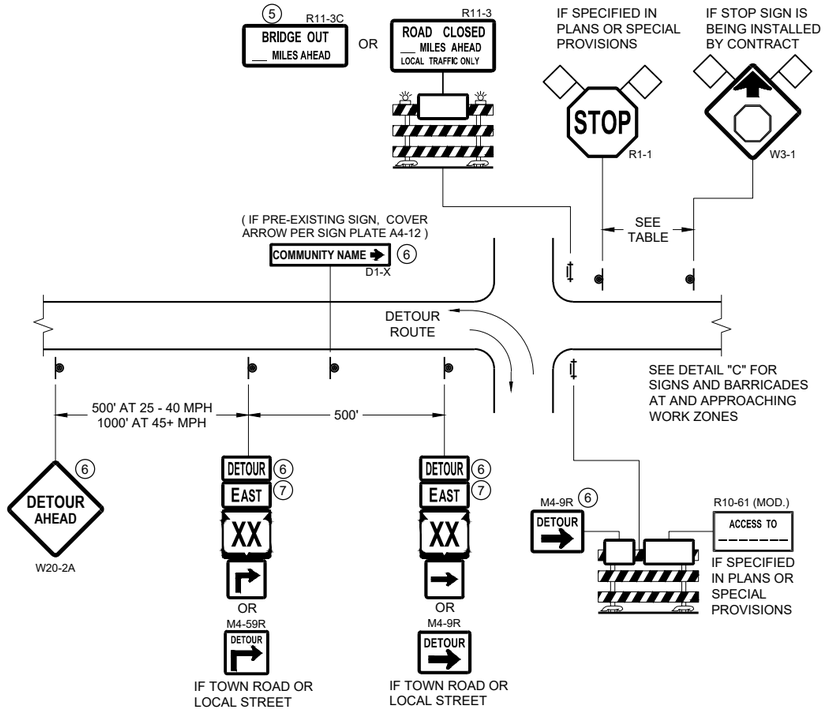
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6

S.D.D. 15 A 3-2b

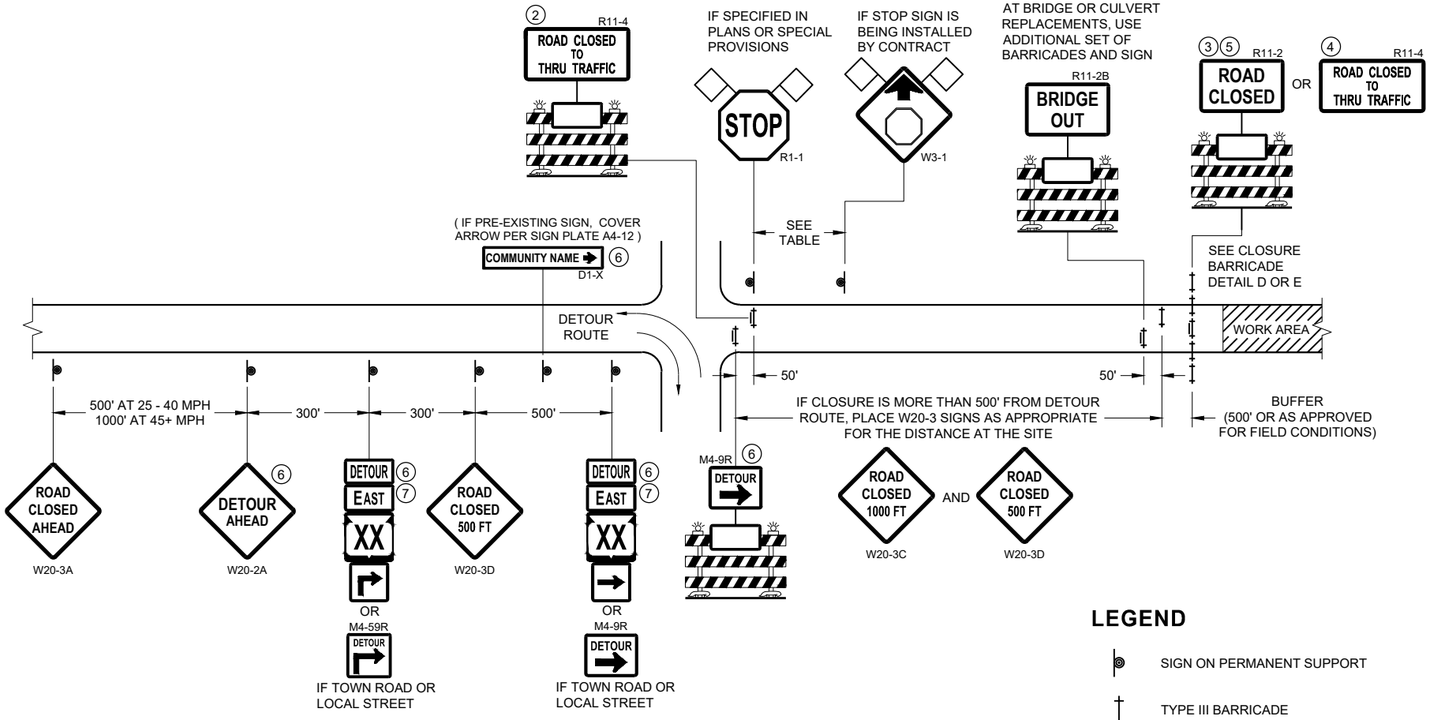
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S.D.D. 15 A 3-2b



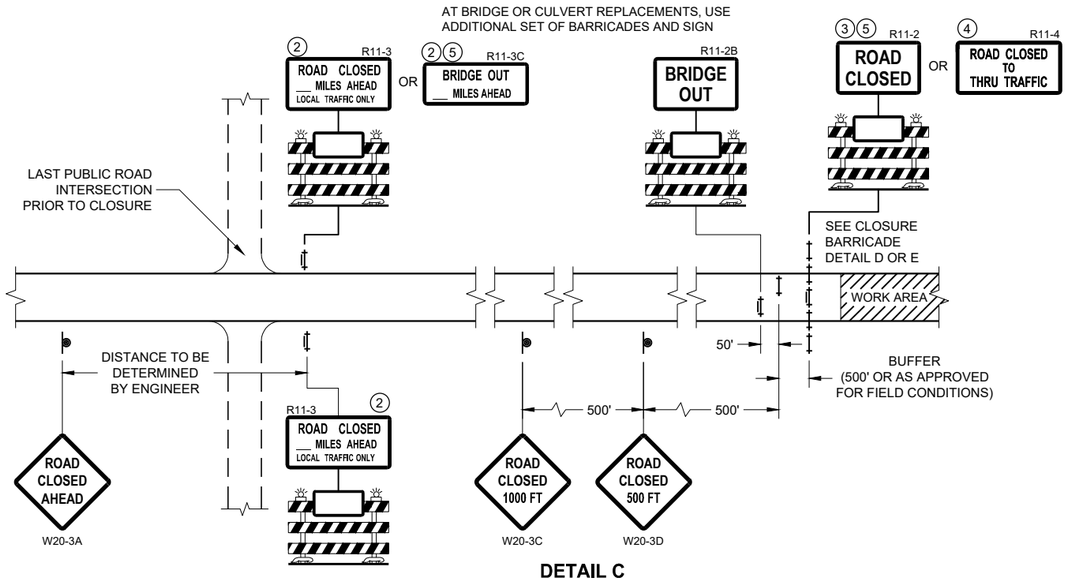
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

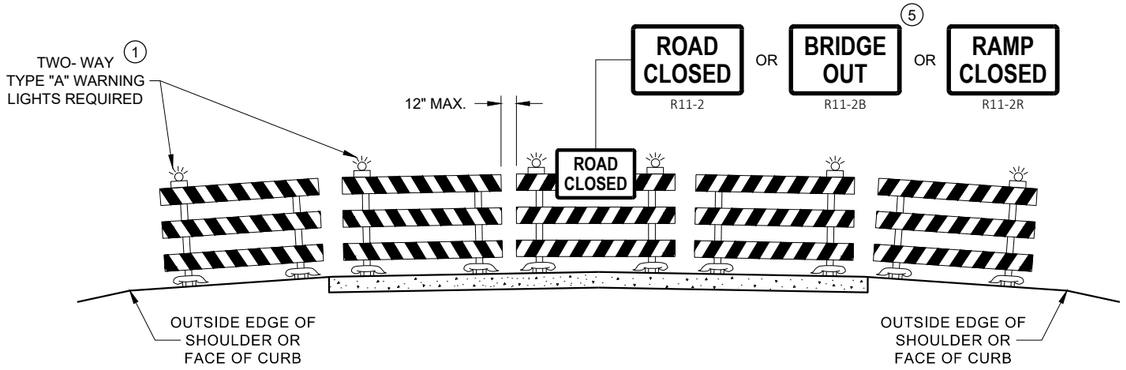
APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

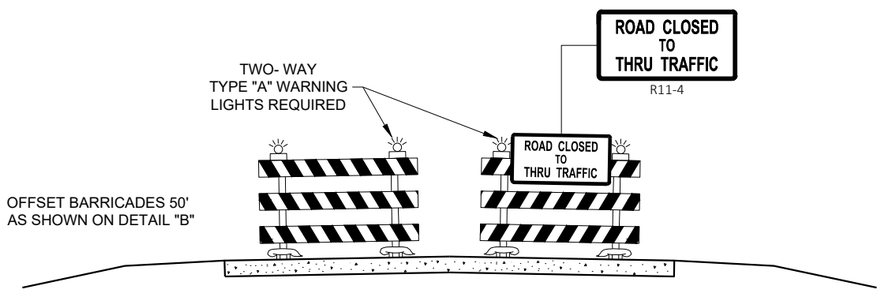
6

SDD 15C02 - 07a

SDD 15C02 - 07a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

6

SDD 15C02 - 07b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

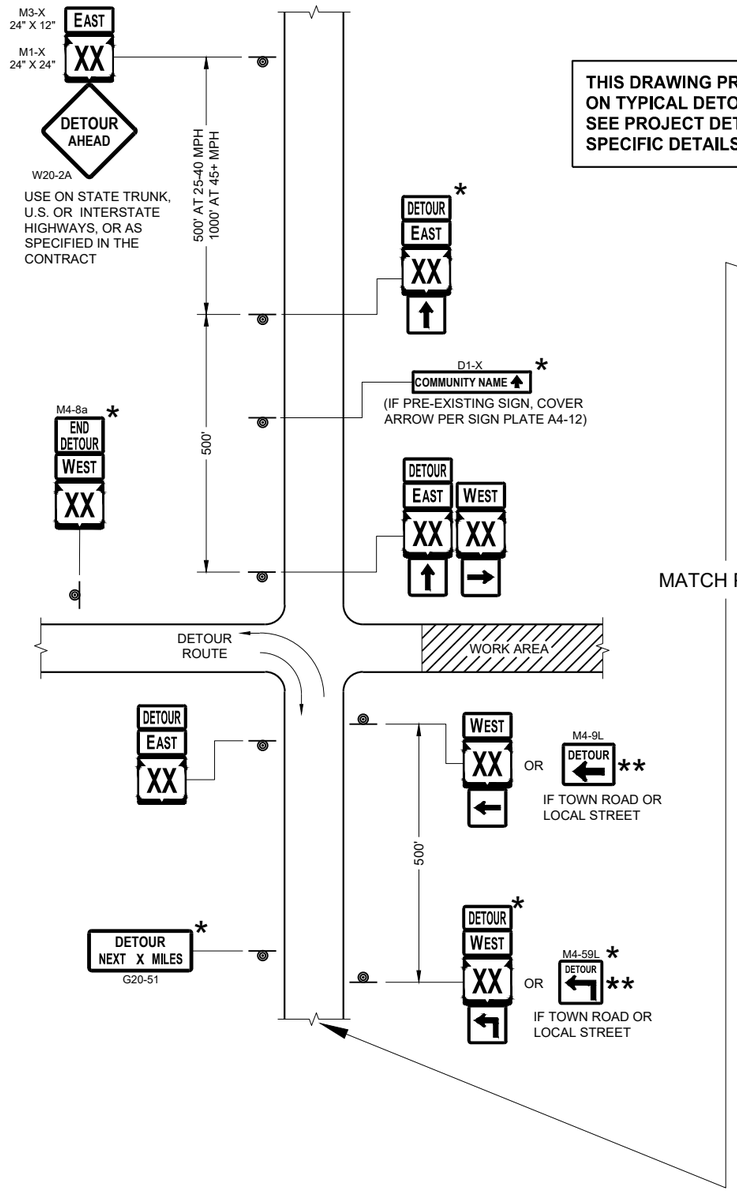
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

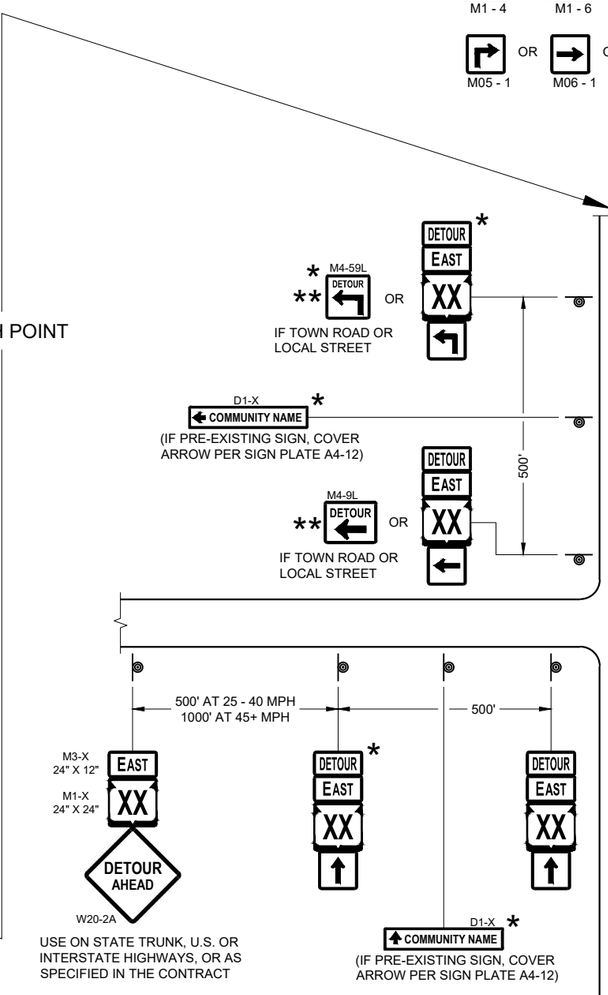
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

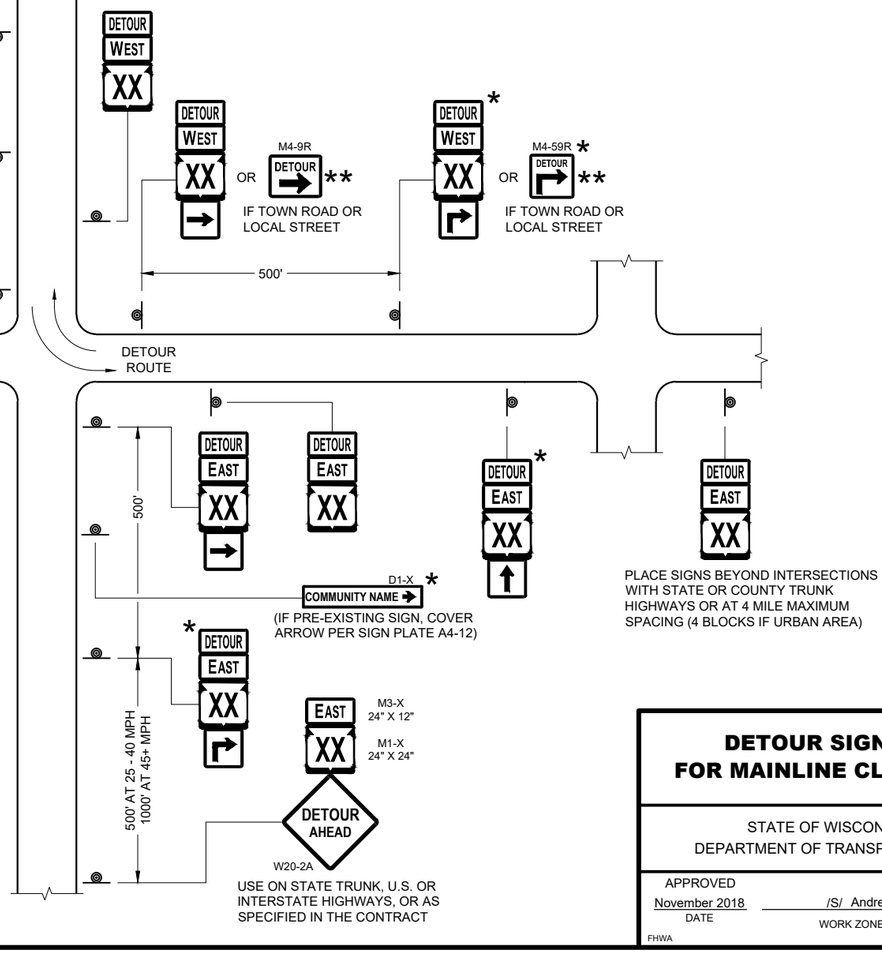
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



MATCH POINT





SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 07c

GENERAL NOTES

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

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

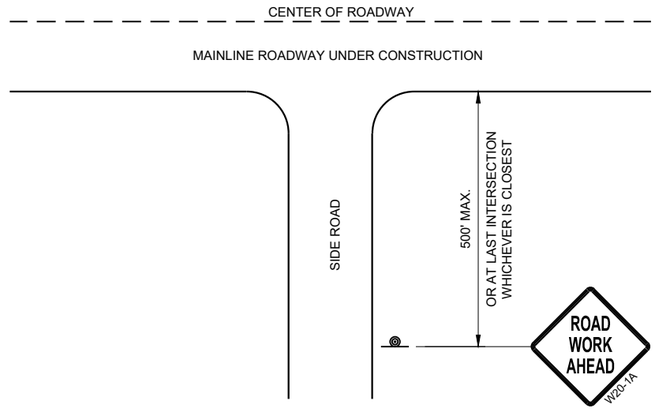
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



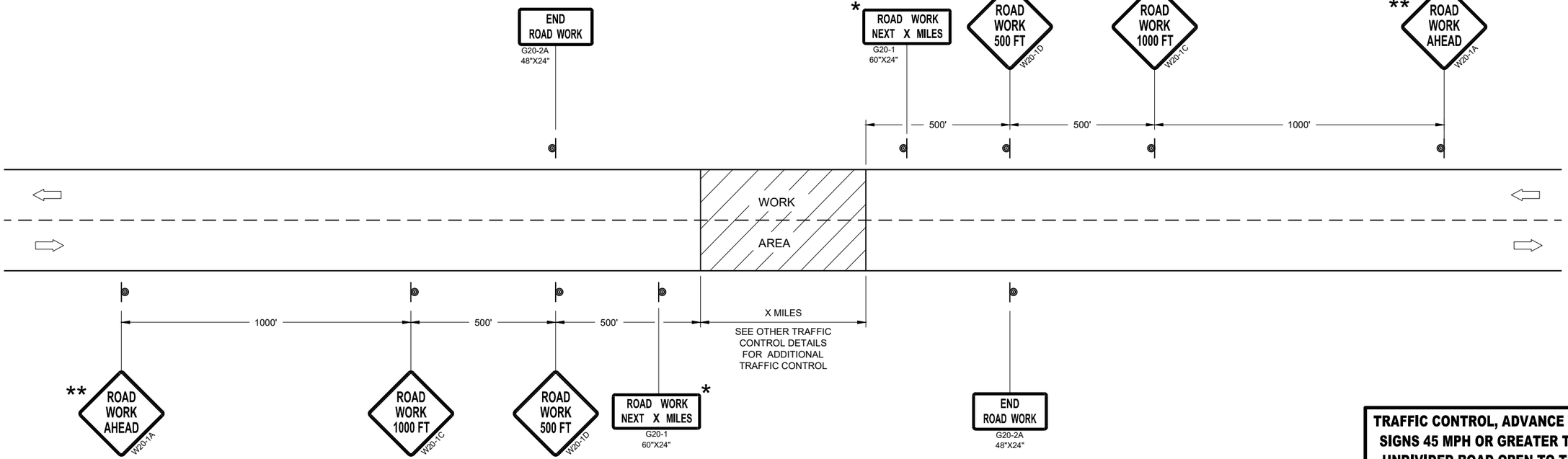
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

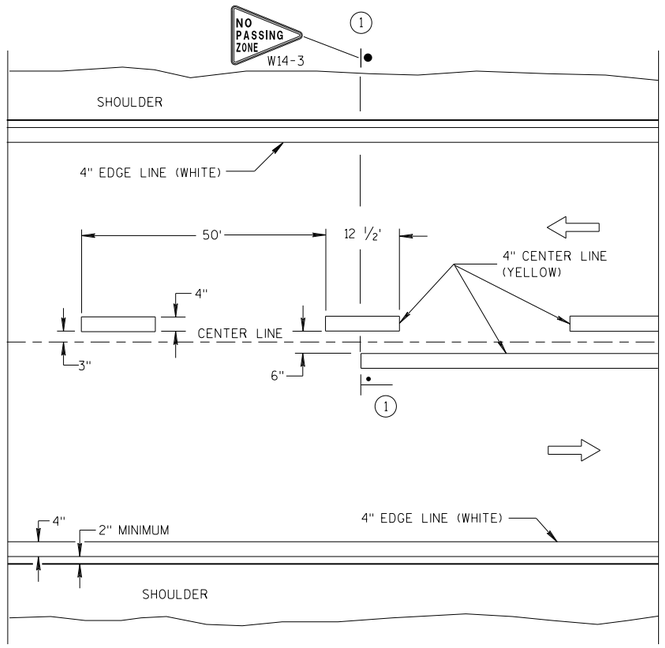
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

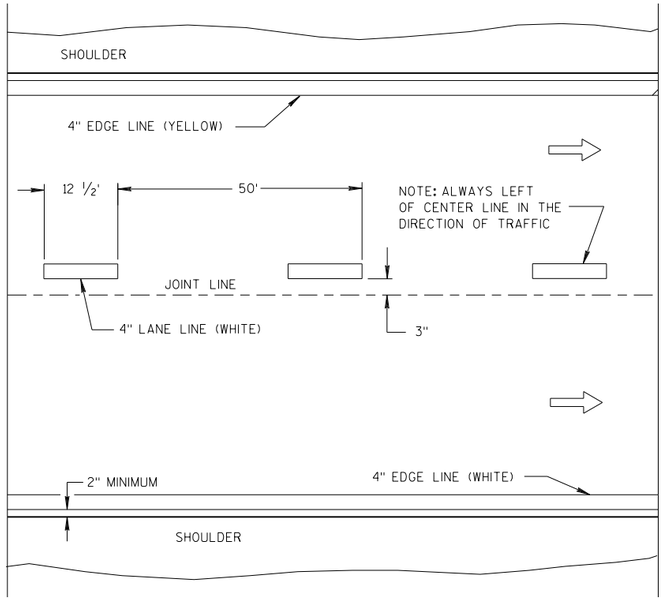
FHWA

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SDD 15C04 - 05



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

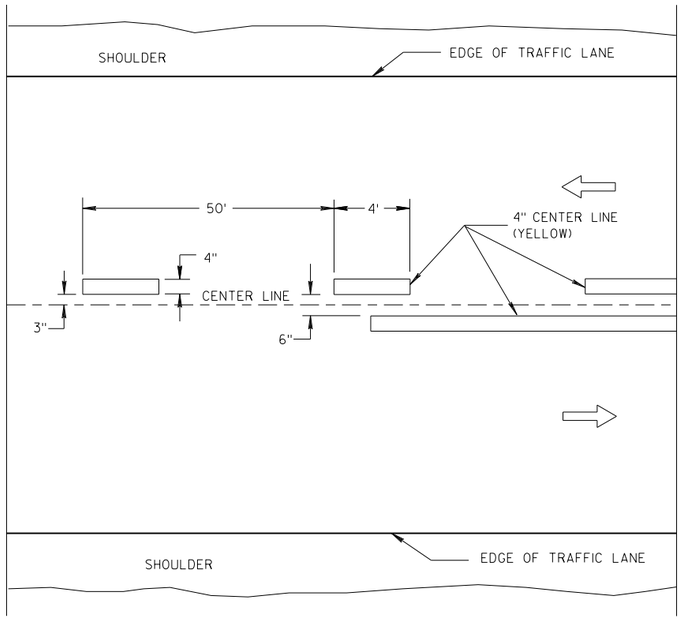
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

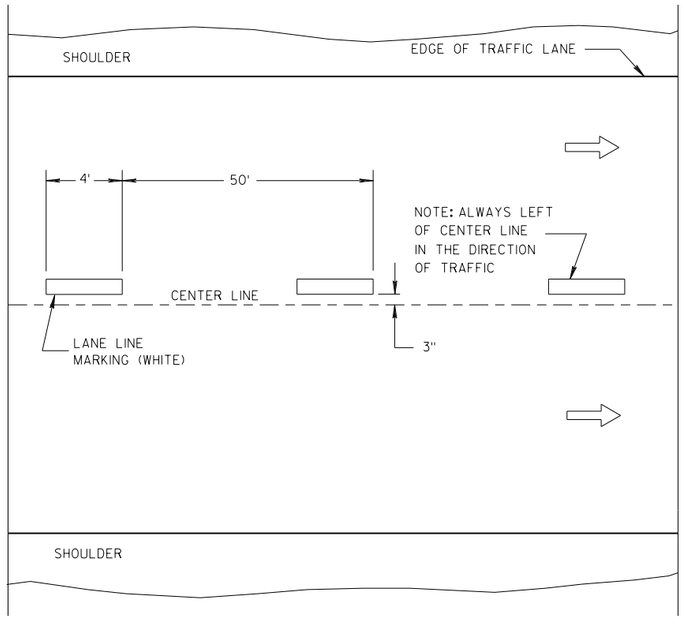
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

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

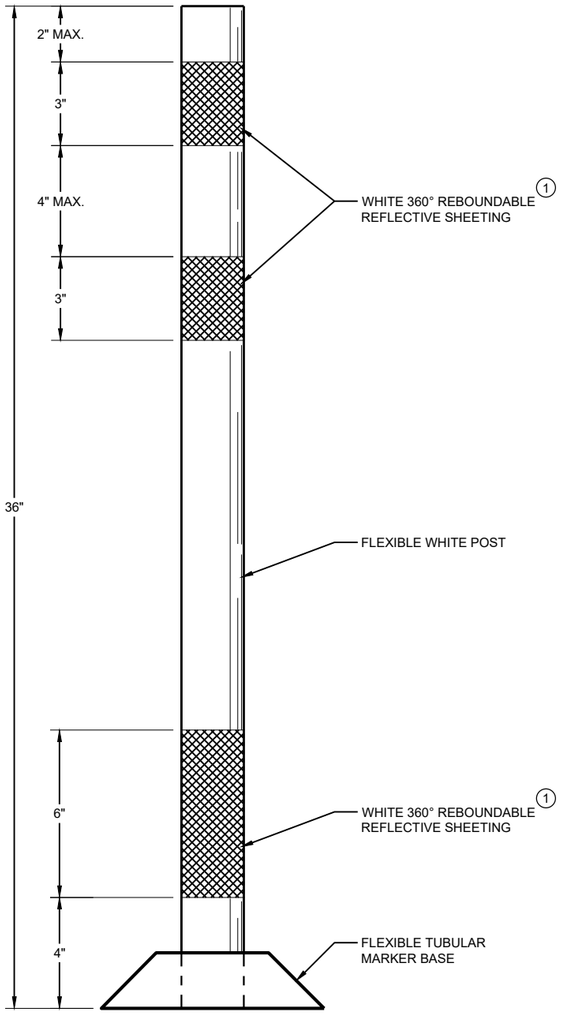
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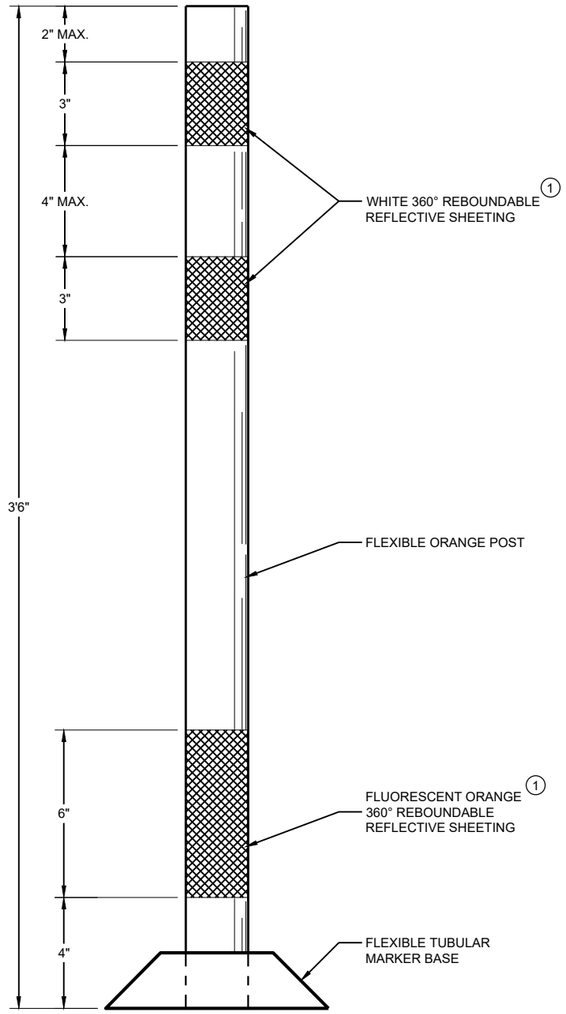
S.D.D. 15 C 8-19a

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S.D.D. 15 C 8-19a



FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

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

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

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

6

SDD 15C11 - 07a

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

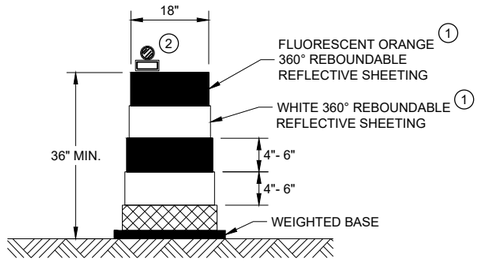
FHWA

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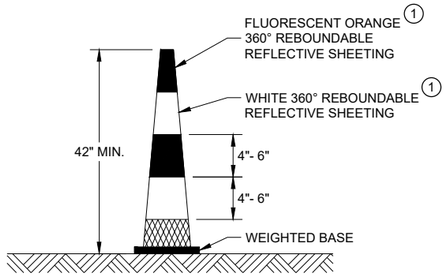
SDD 15C11 - 07a

GENERAL NOTES

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

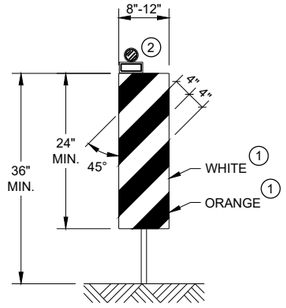


DRUM



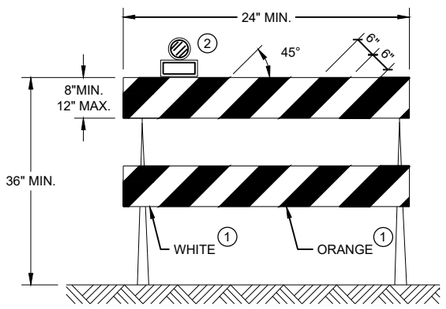
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



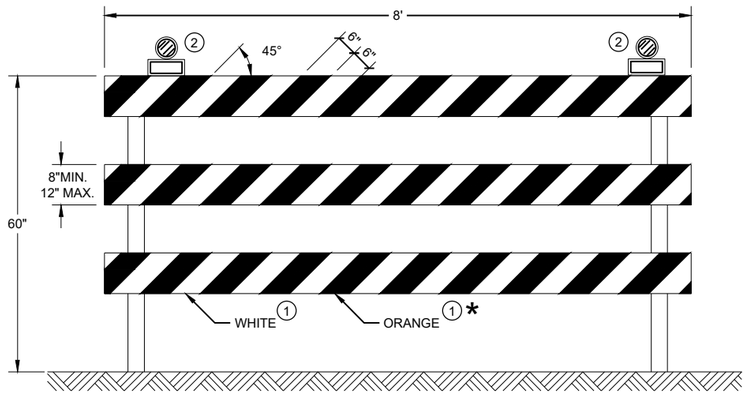
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 07b
SDD 15C11 - 07b

LEGEND

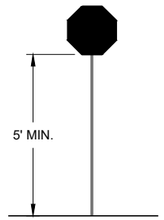
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

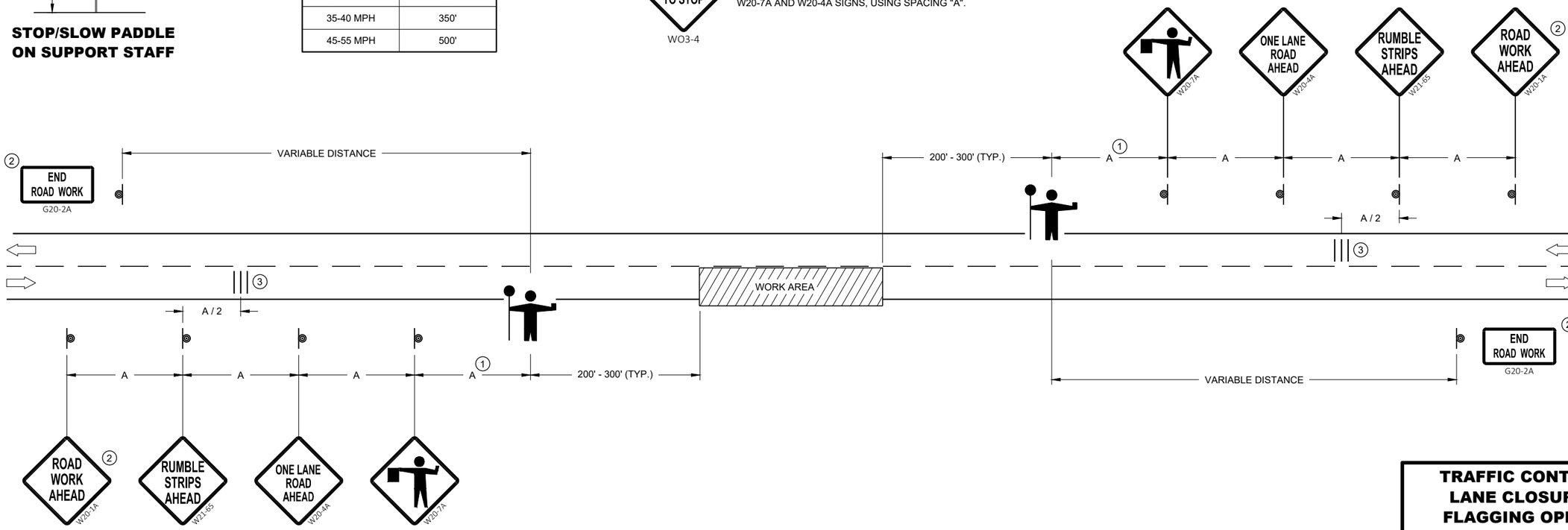
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

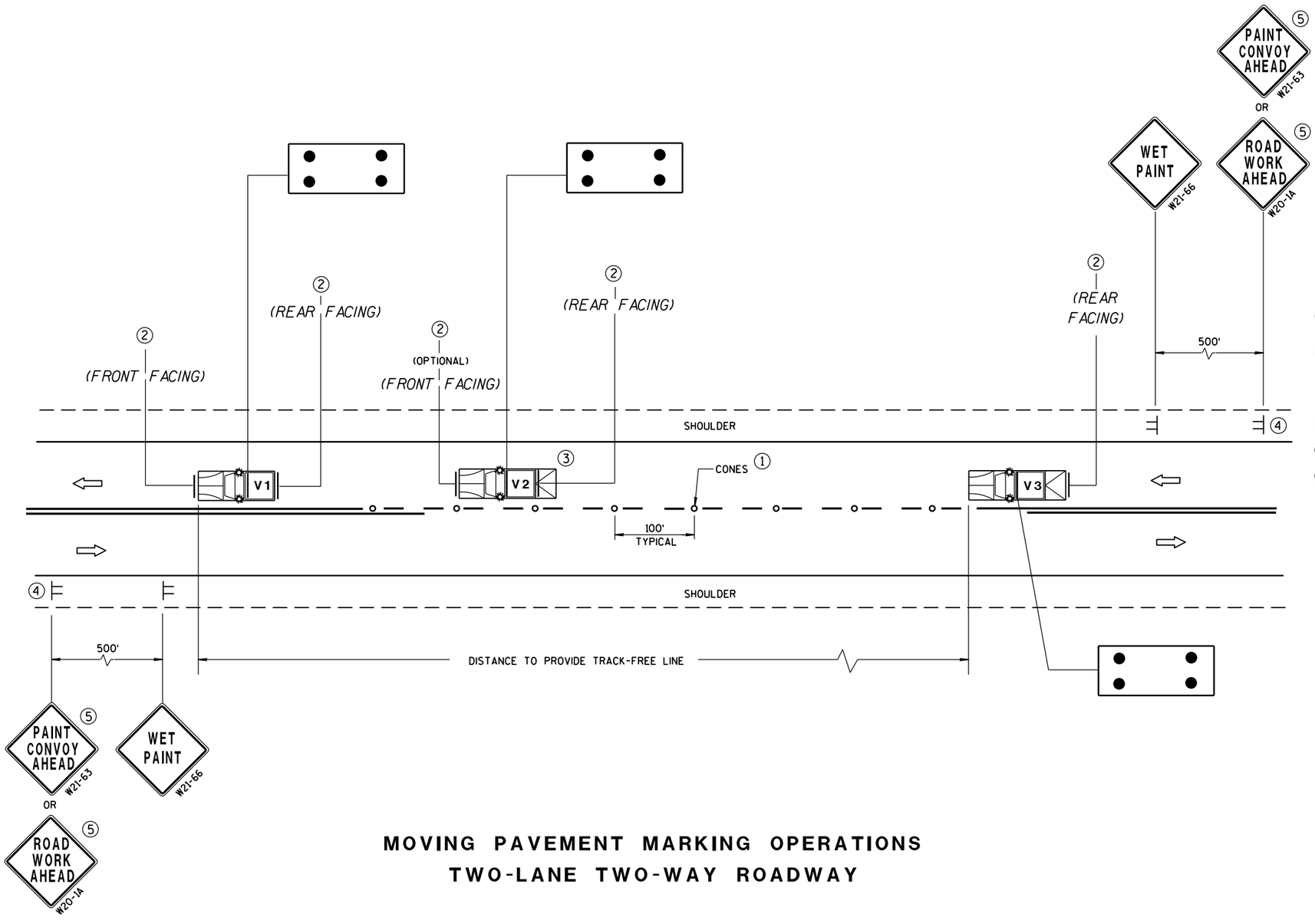
APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C12 - 07

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SDD 15C12 - 07



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.

WET PAINT W21-64 OR WET PAINT W21-64

(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)

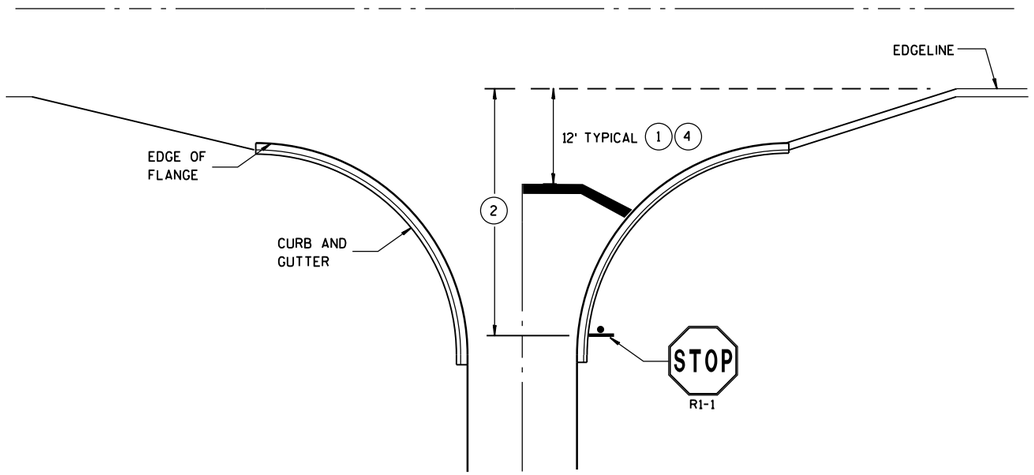
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept., 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGR
FHWA	

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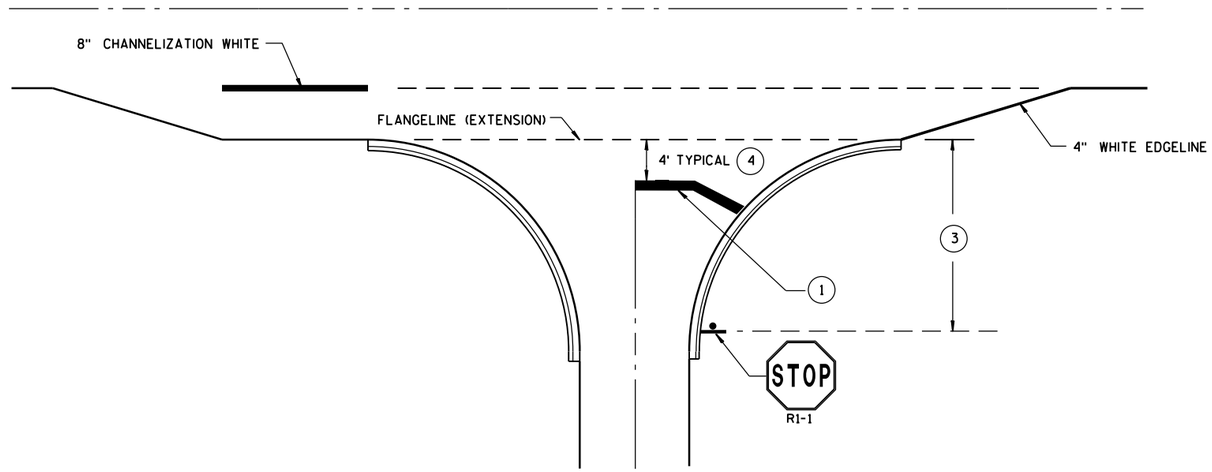
S.D.D. 15 C 19-5a

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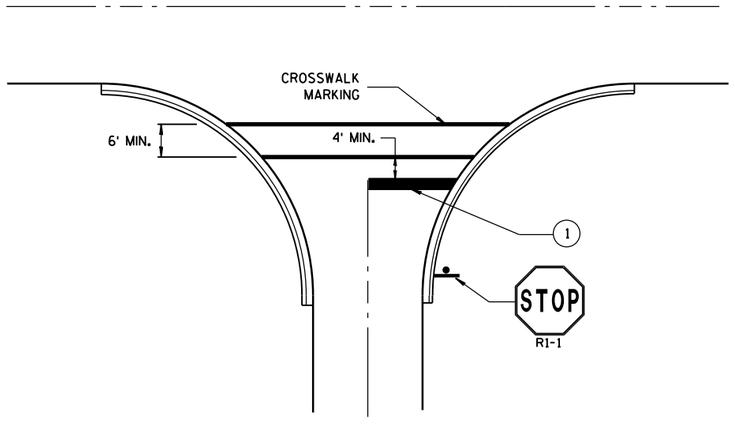
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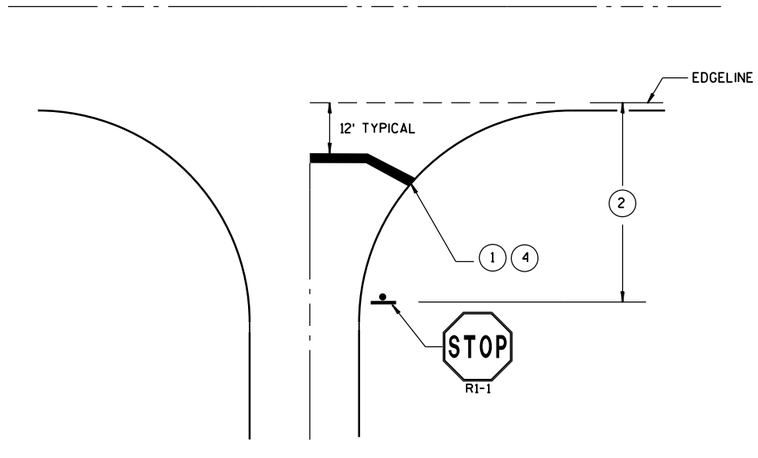
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

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

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE 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

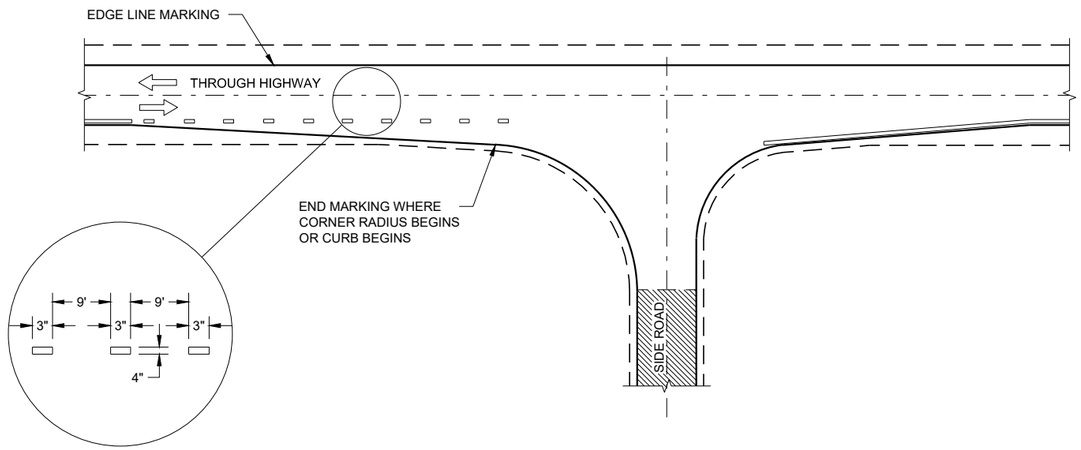
Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

FHWA

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S.D.D. 15 C 33-3



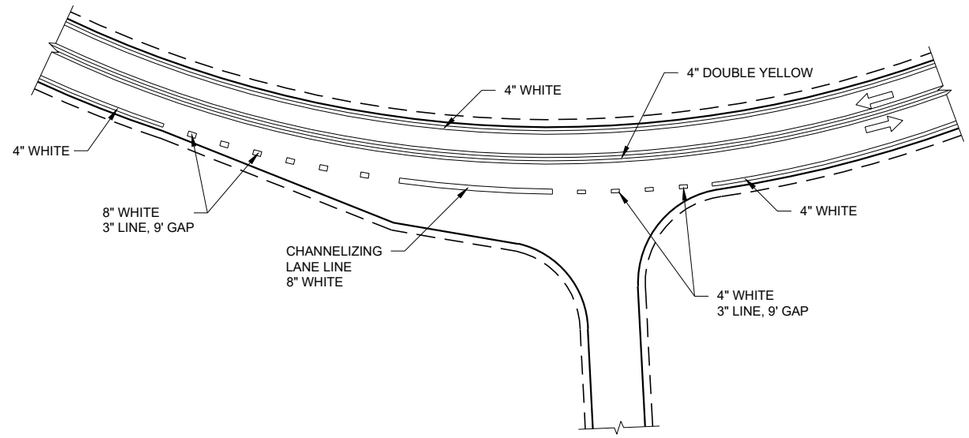
MINOR INTERSECTION

GENERAL NOTES

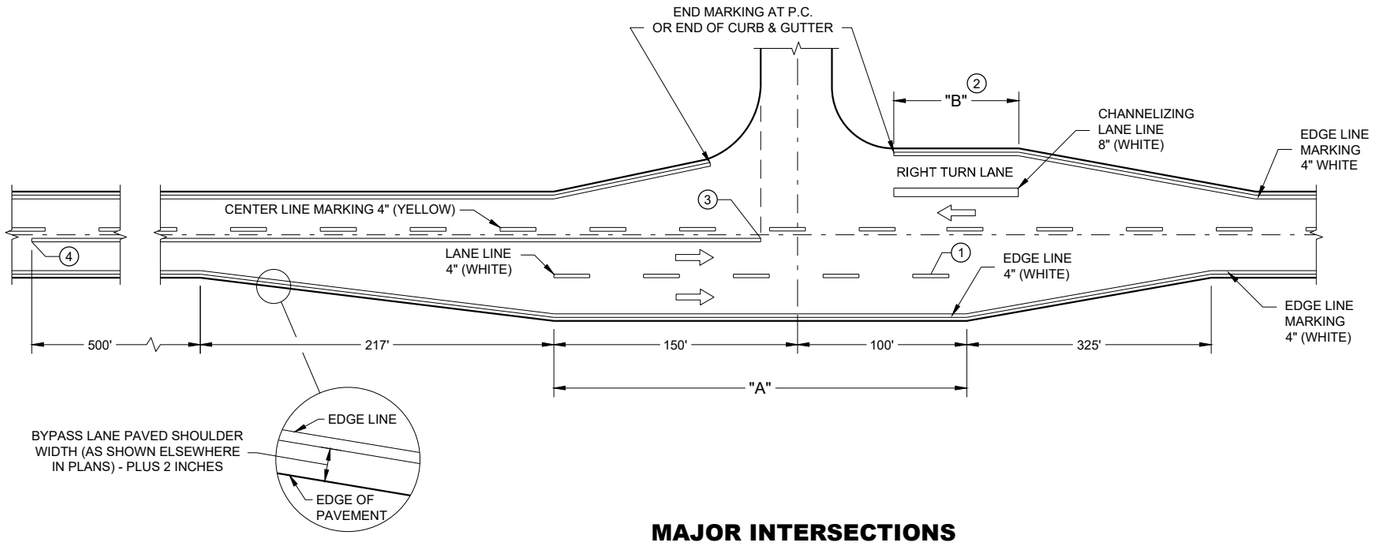
OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 03a
SDD 15C35 - 03a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
W / S	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L= WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

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

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

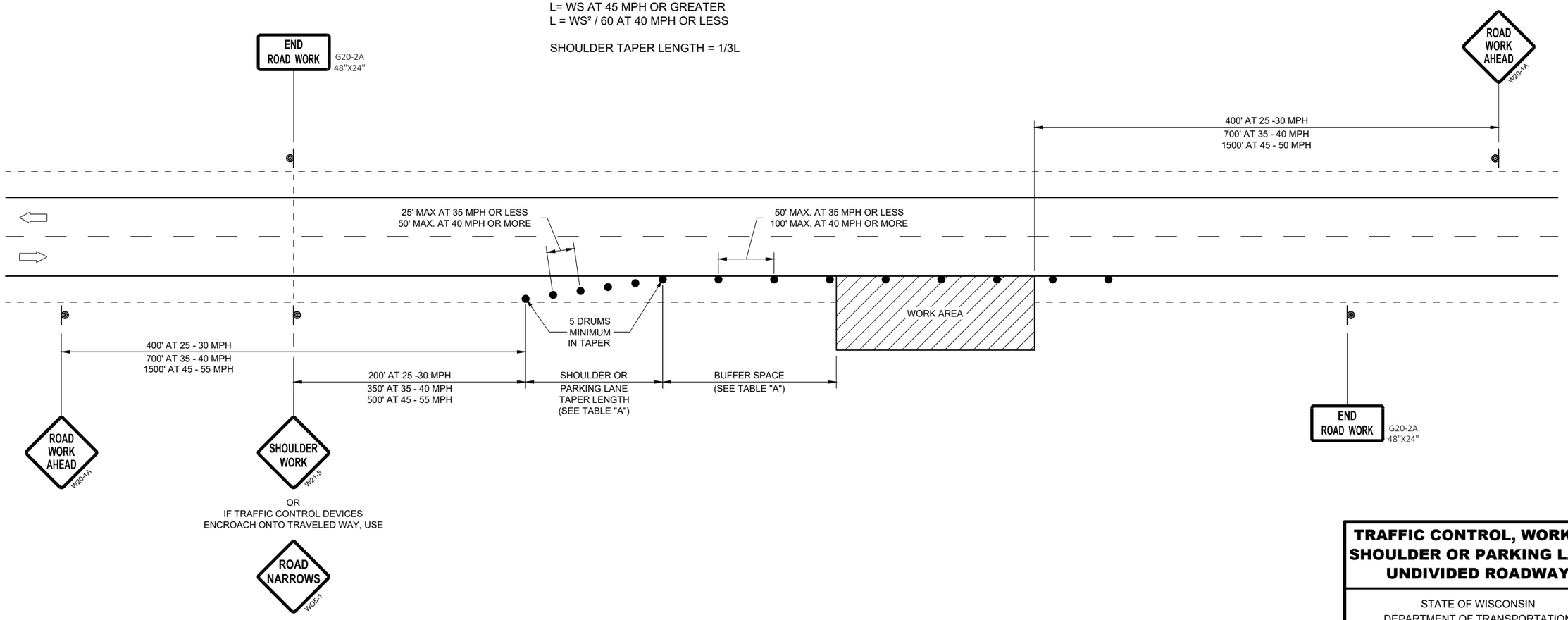
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY RESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

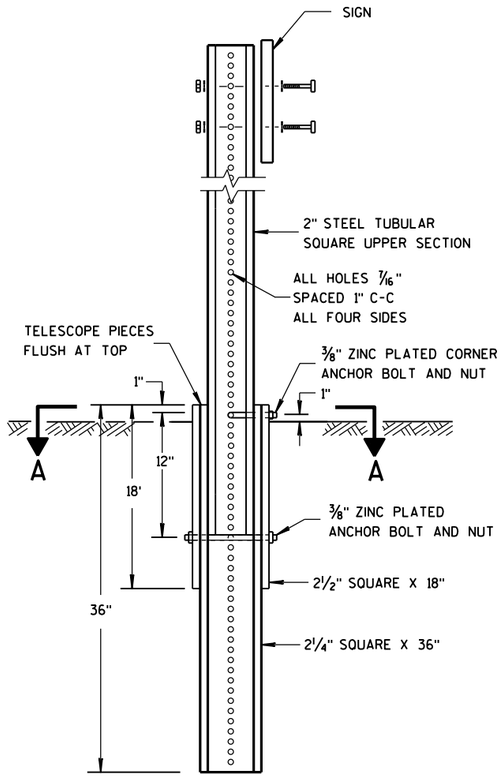
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

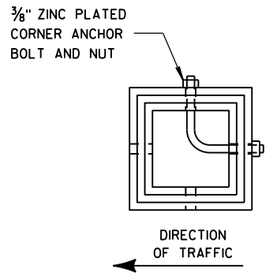
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

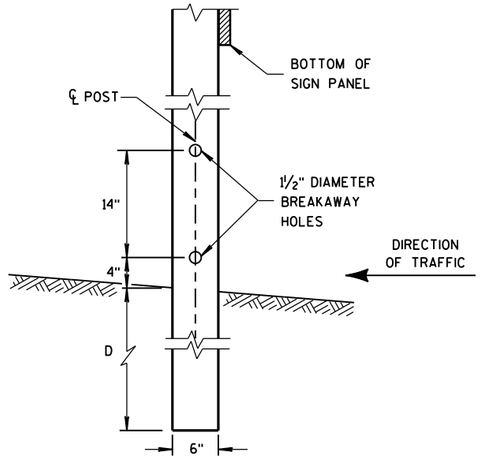
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SDD 15D28 - 03



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



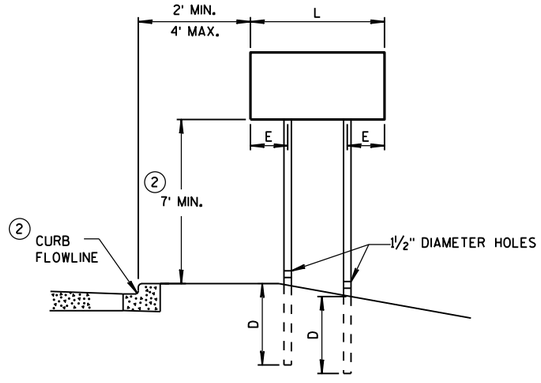
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

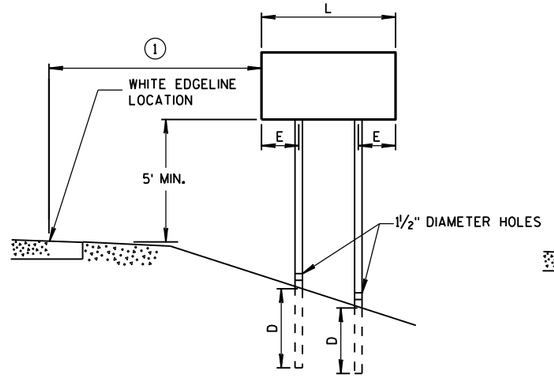
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

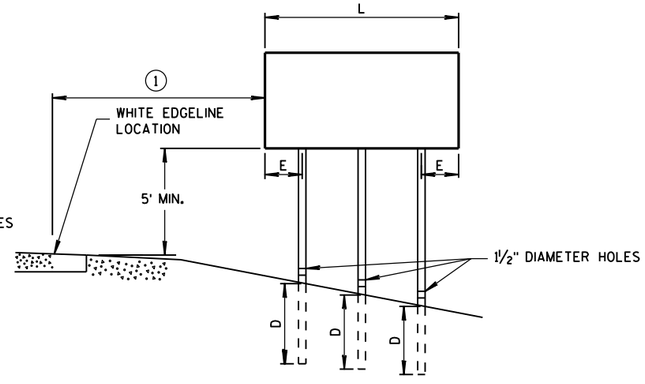
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

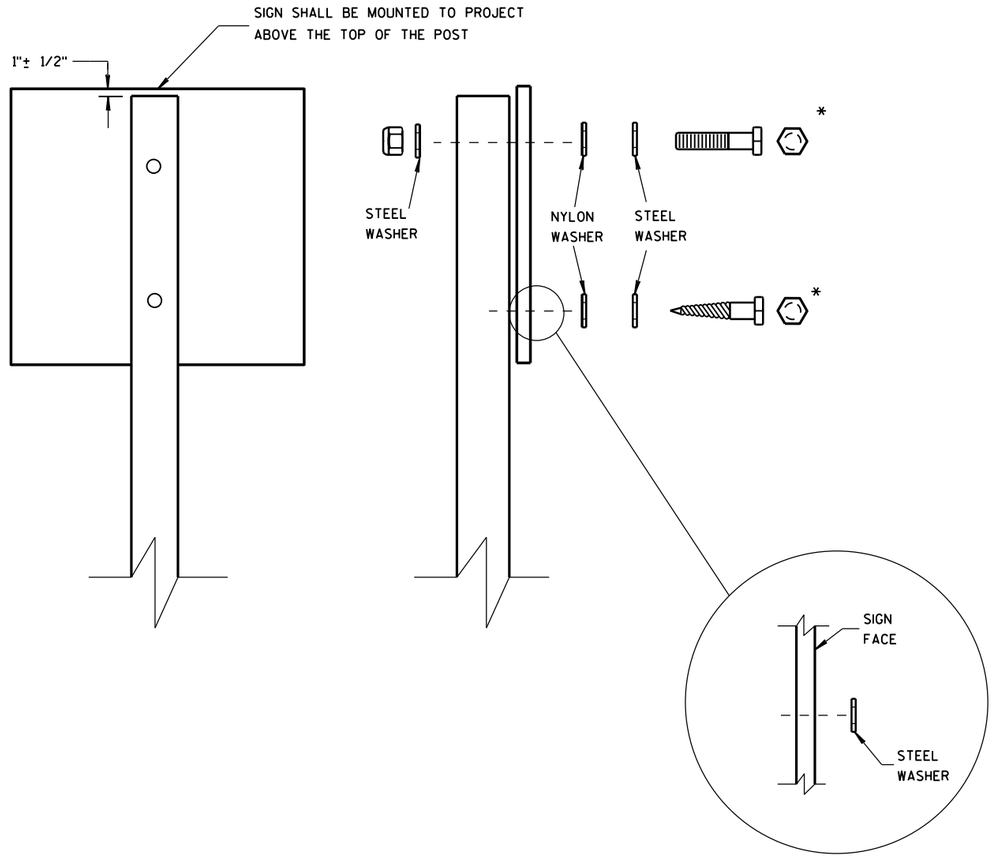
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

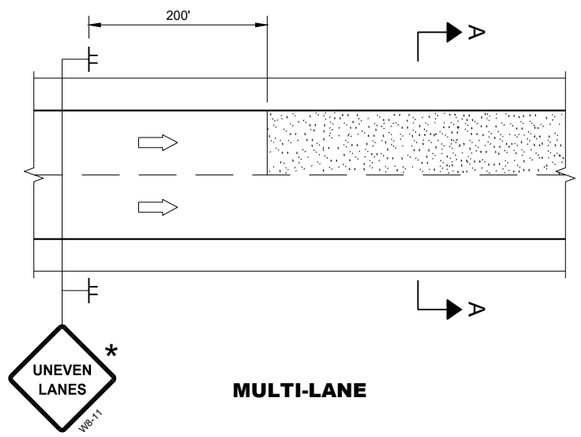
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

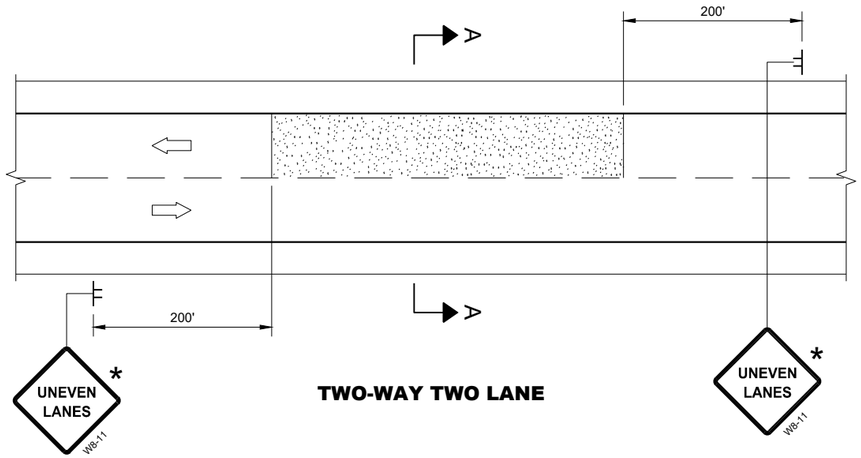
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

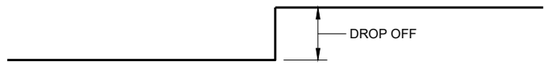
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

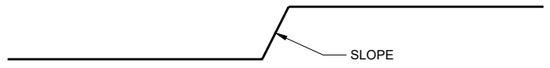
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

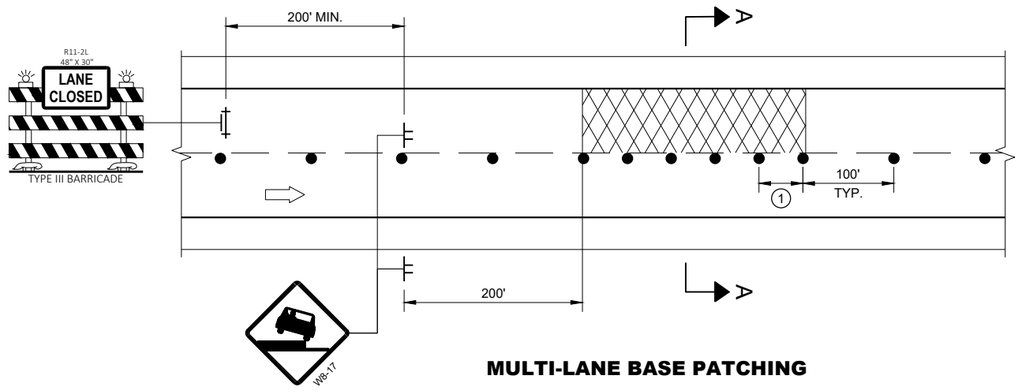


SECTION A - A

OR

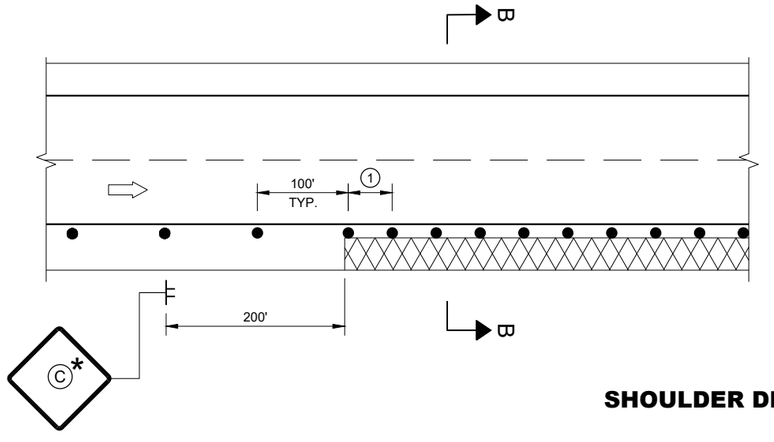


SECTION A - A

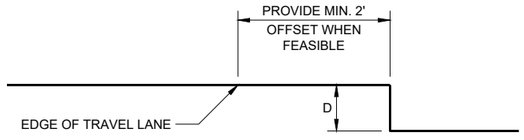


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

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.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

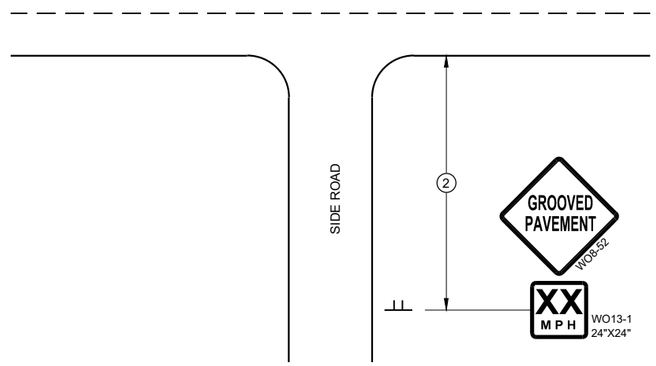
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

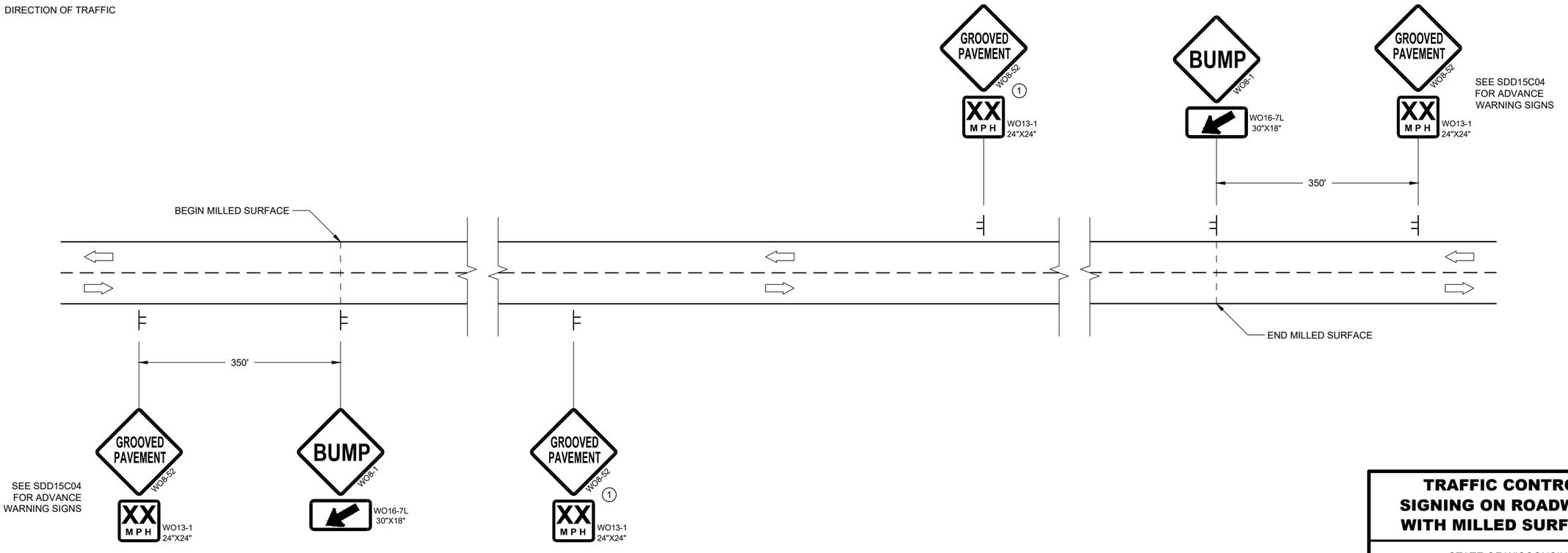
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

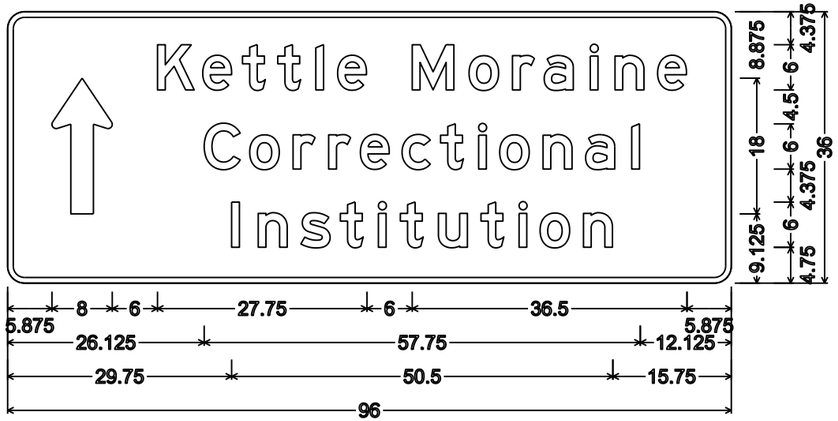
APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

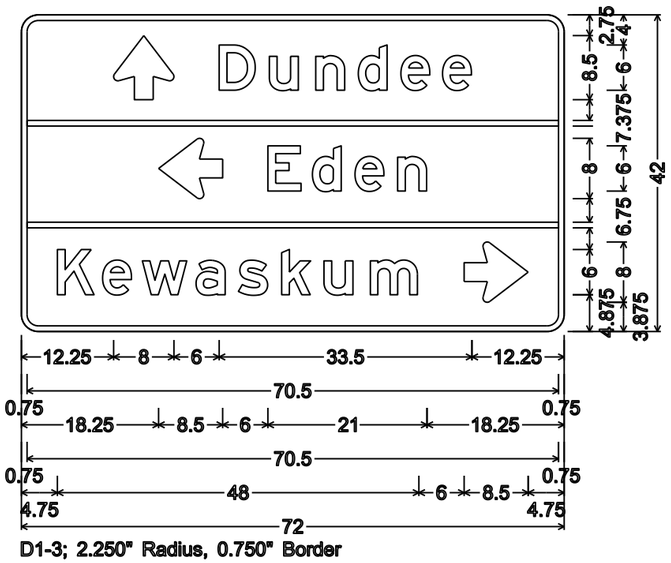
FHWA

6

SDD 15D44 - 01



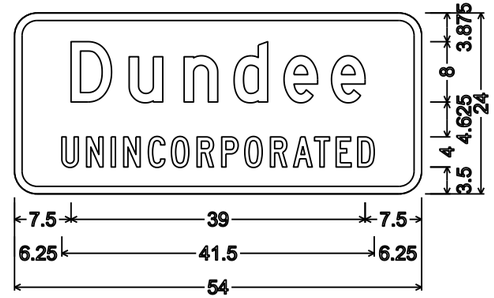
D1-3; 2.250" Radius, 0.750" Border



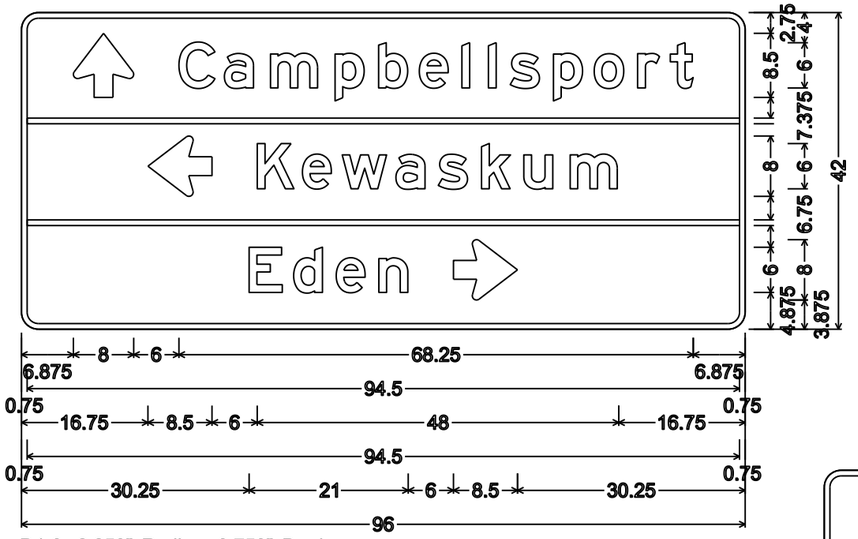
D1-3; 2.250" Radius, 0.750" Border

NOTES

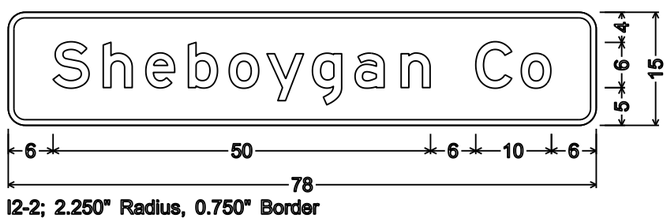
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



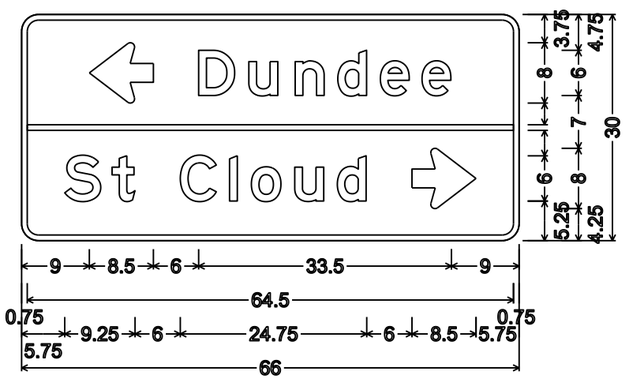
I2-3;
3.000" Radius, 1.000" Border,
"Dundee" D; "UNINCORPORATED" C



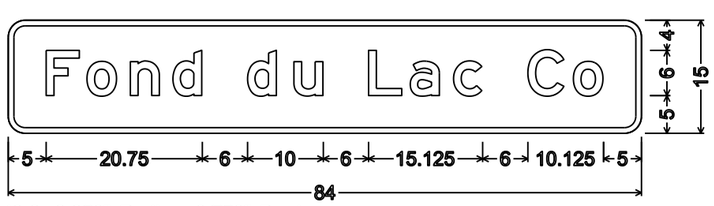
D1-3; 2.250" Radius, 0.750" Border



I2-2; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



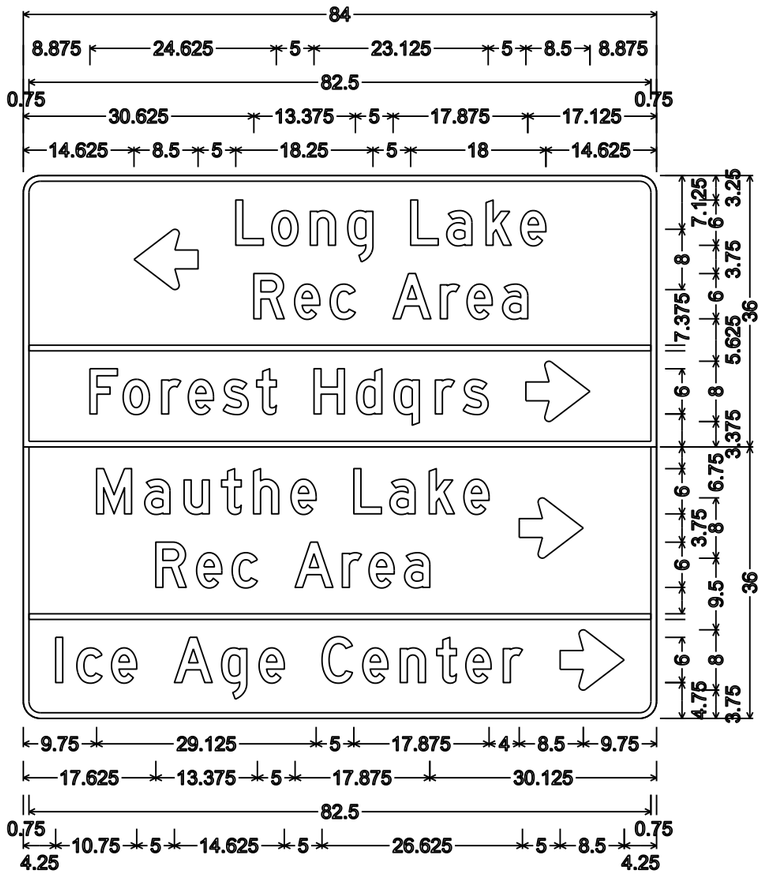
I2-2; 2.250" Radius, 0.750" Border

7

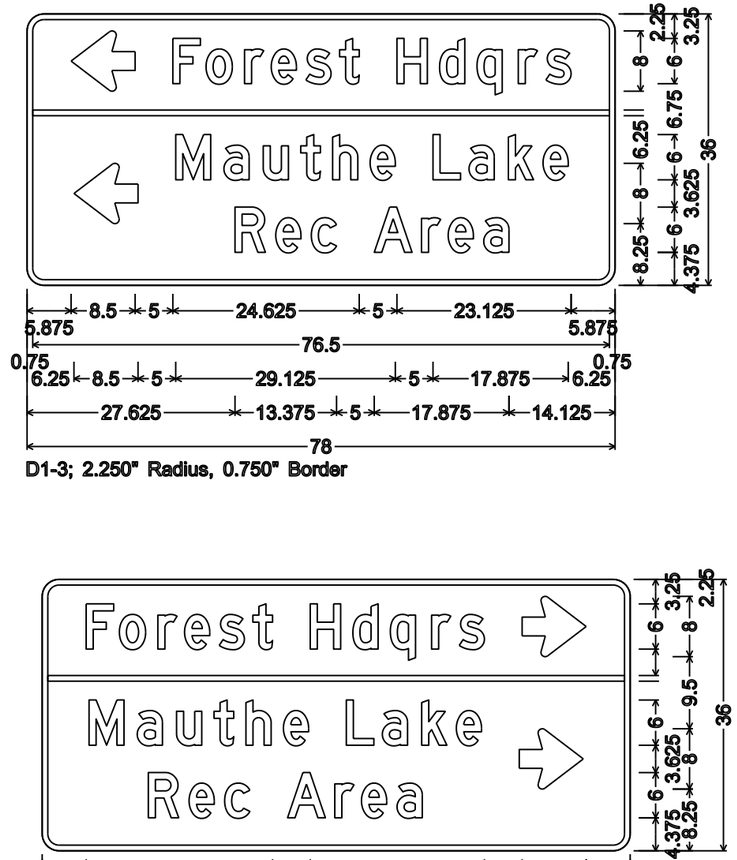
7

NOTES

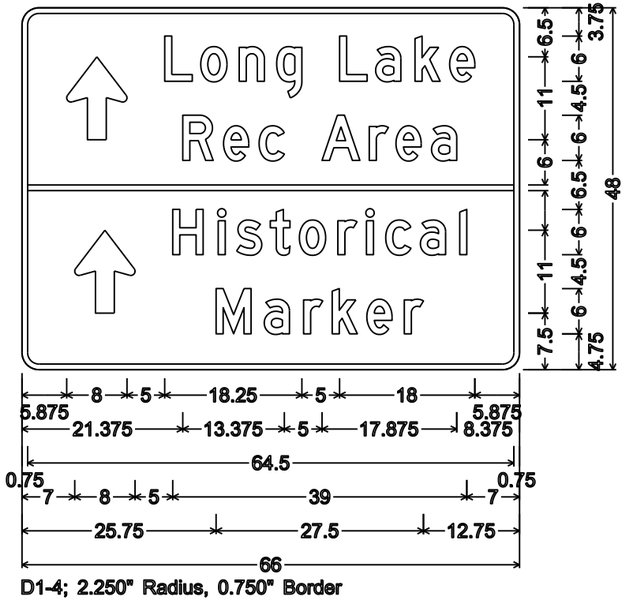
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Brown
   Message - White
3. Message Series - D



2.250" Radius, 0.750" Border

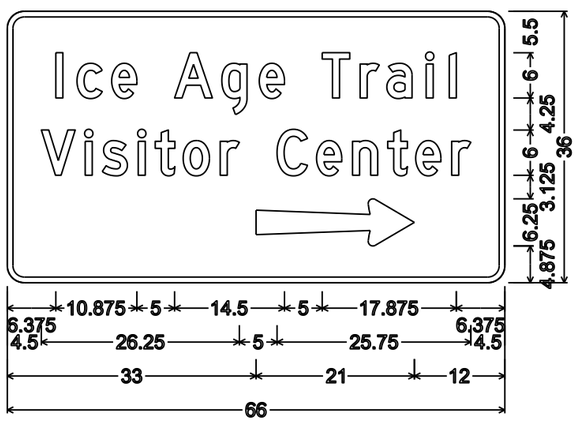


D1-3; 2.250" Radius, 0.750" Border

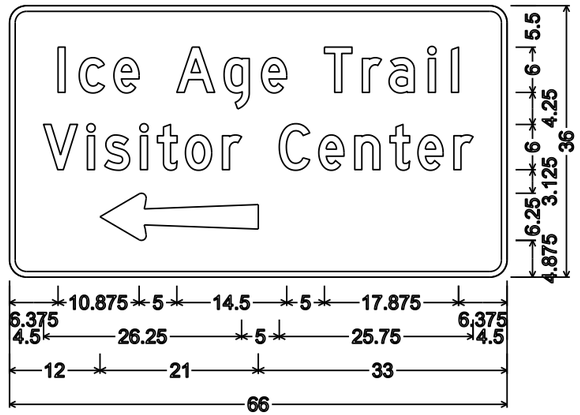


D1-4; 2.250" Radius, 0.750" Border

D1-3; 2.250" Radius, 0.750" Border



2.250" Radius, 0.750" Border



2.250" Radius, 0.750" Border

7

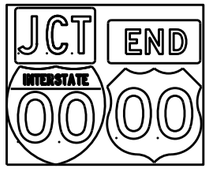
7

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 218	E

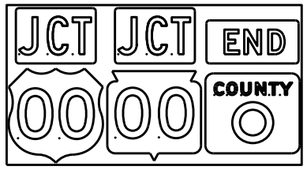
TYPICAL ASSEMBLIES



J1-1



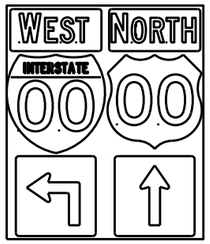
J1-2



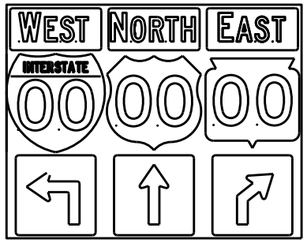
J1-3



J2-1



J2-2

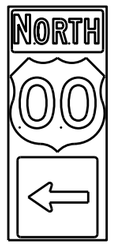


J2-3

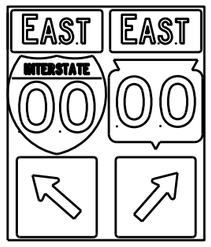


JV

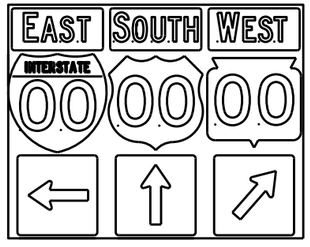
(Typical Vertical J-Assembly
See Note 10 and 11)



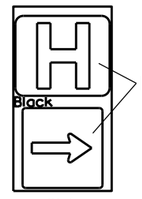
J3-1



J3-2



J3-3

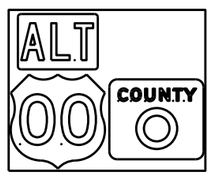


Blue Background

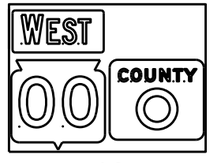
JH-1



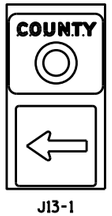
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

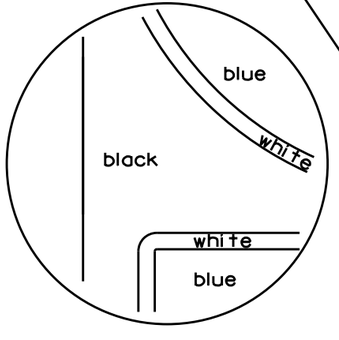


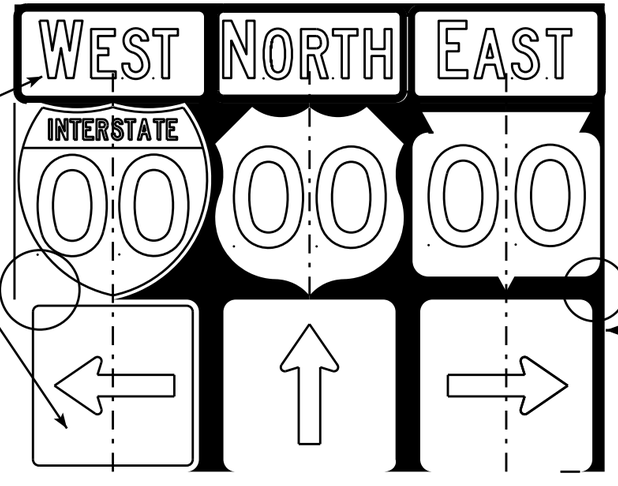
J23-1

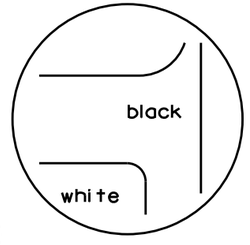


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

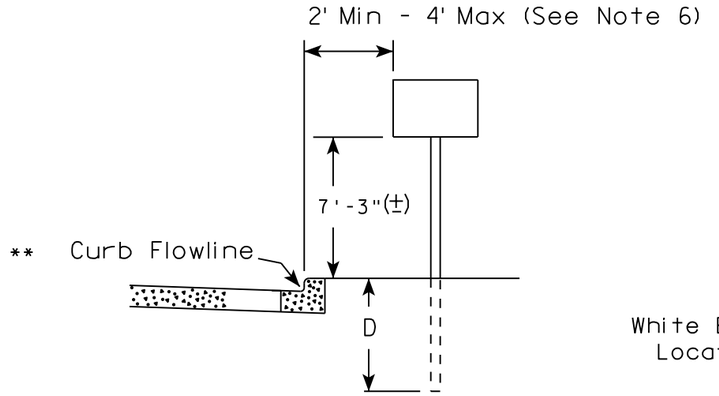
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

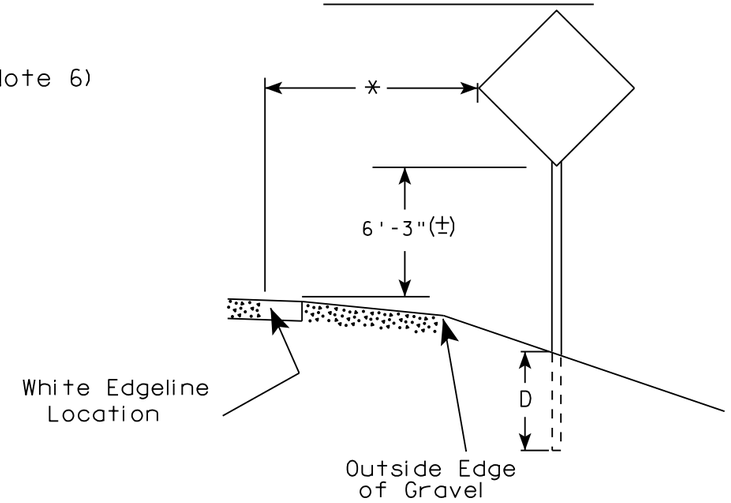
PROJECT NO: SHEET NO: E

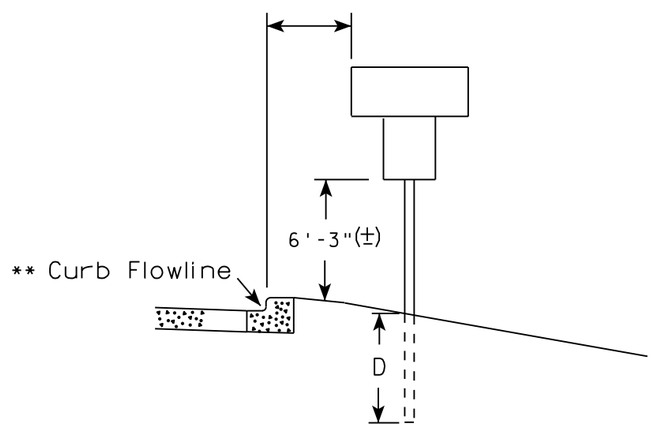
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WISDOT/CADDS SHEET 42

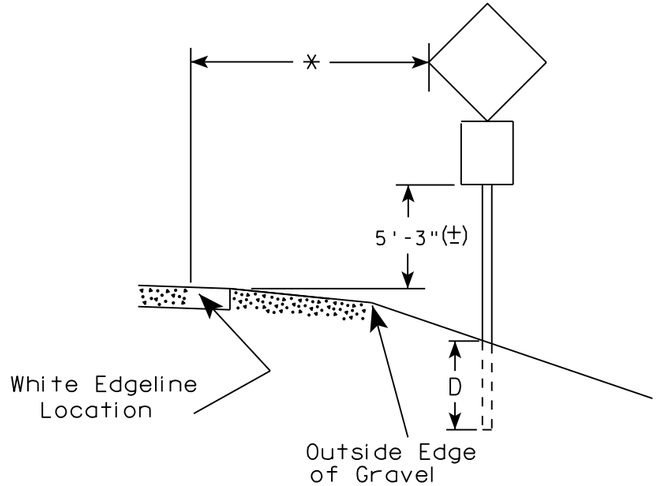
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

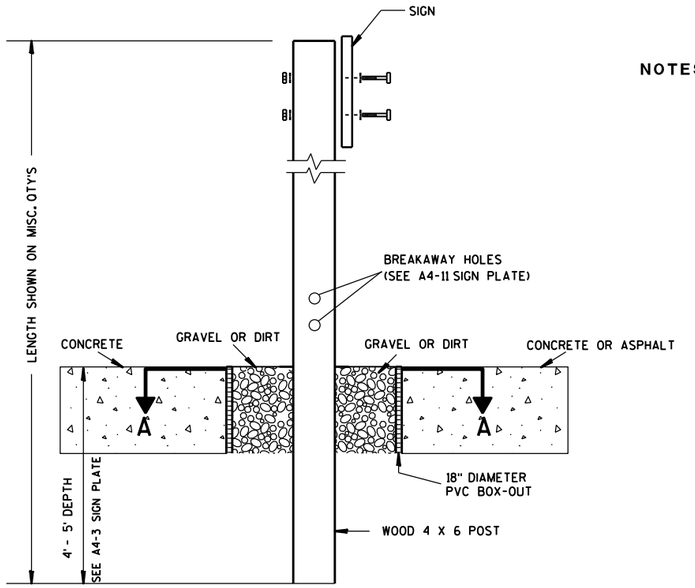
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7

7

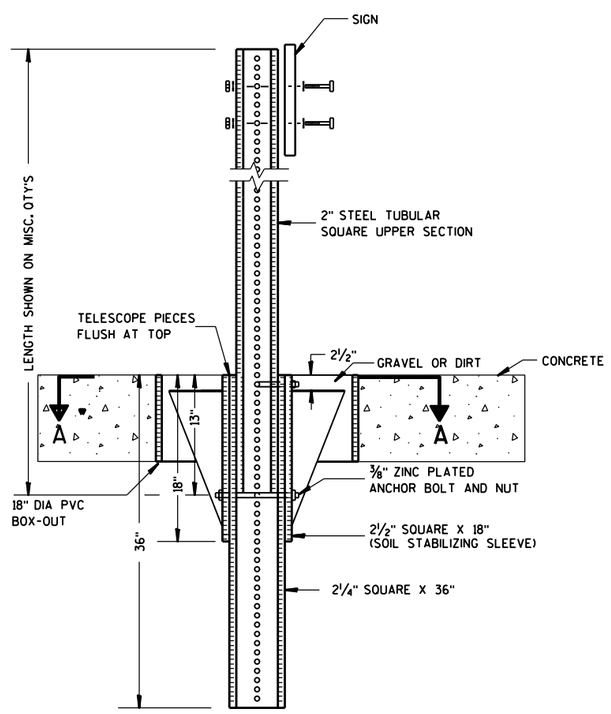
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 220	E



ELEVATION VIEW

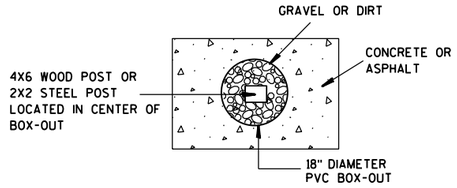
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

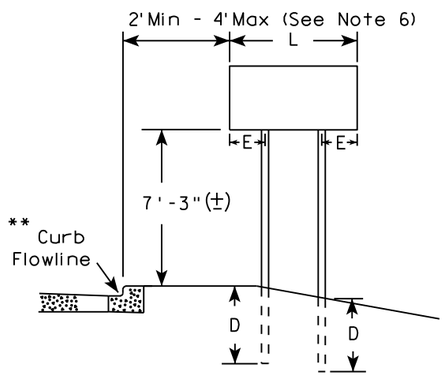
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

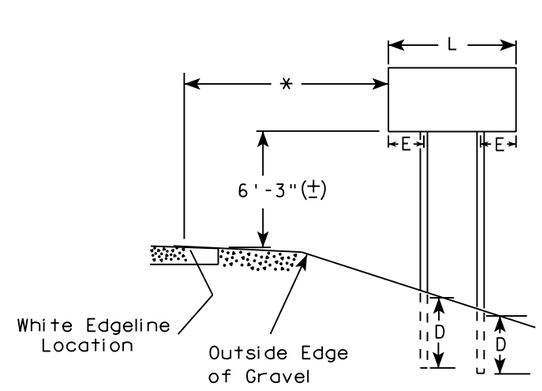
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

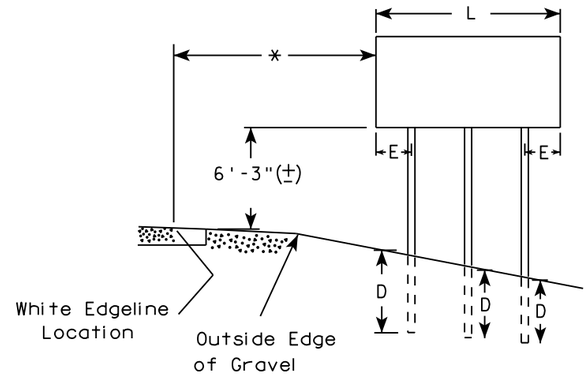
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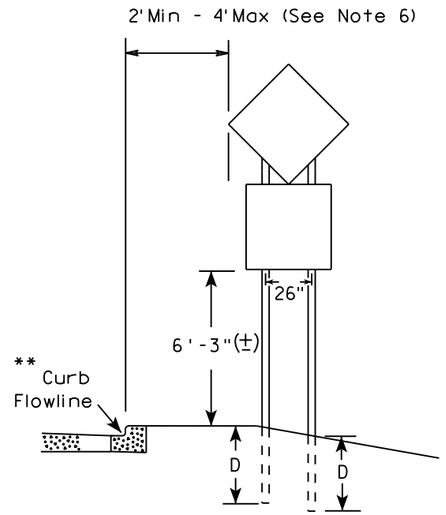
URBAN AREA



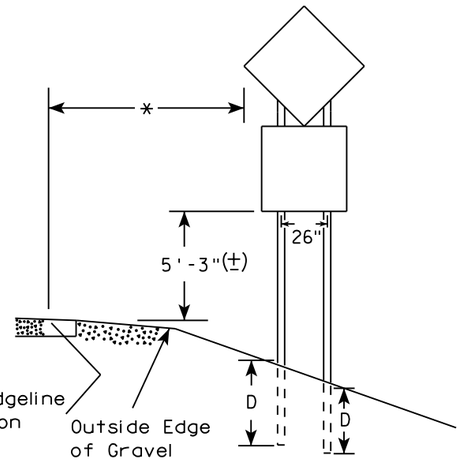
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

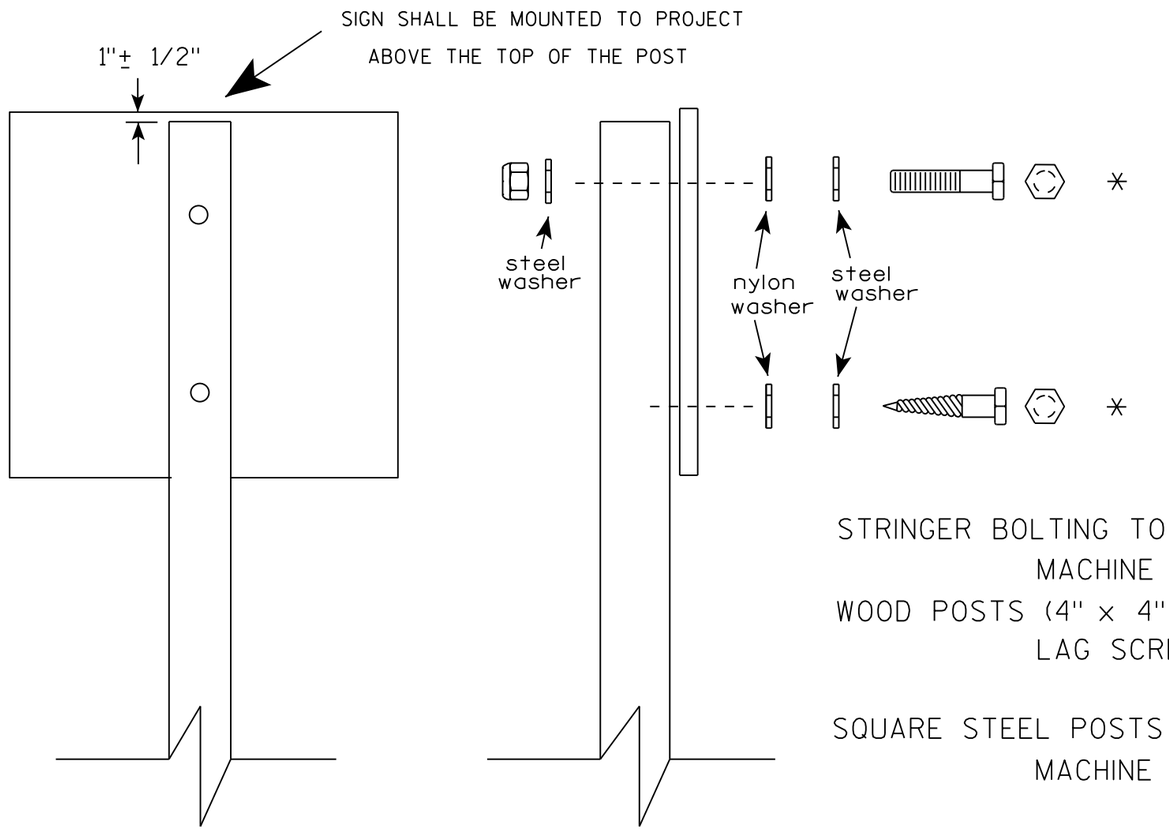
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 222	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

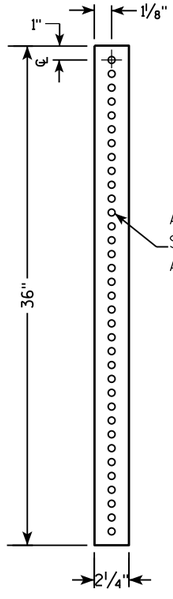
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

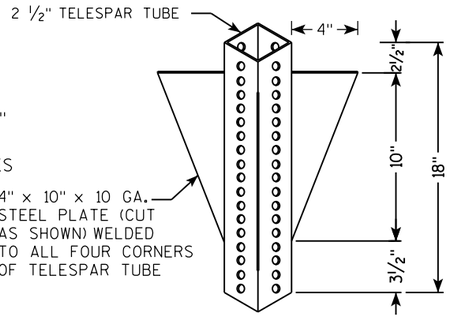
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TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

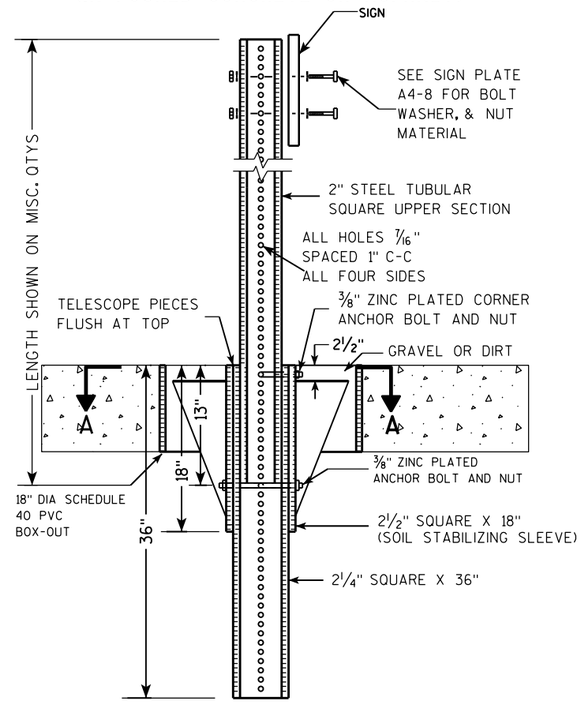
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



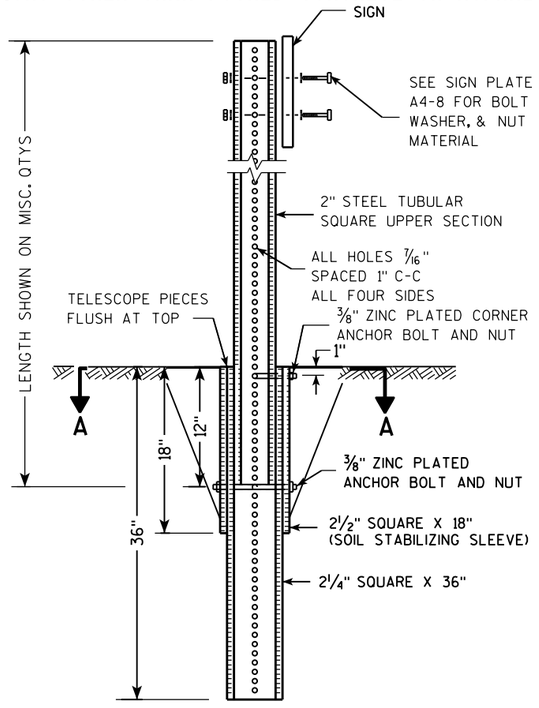
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

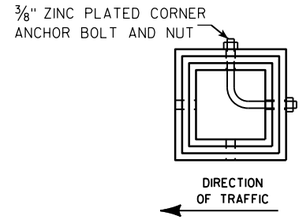


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

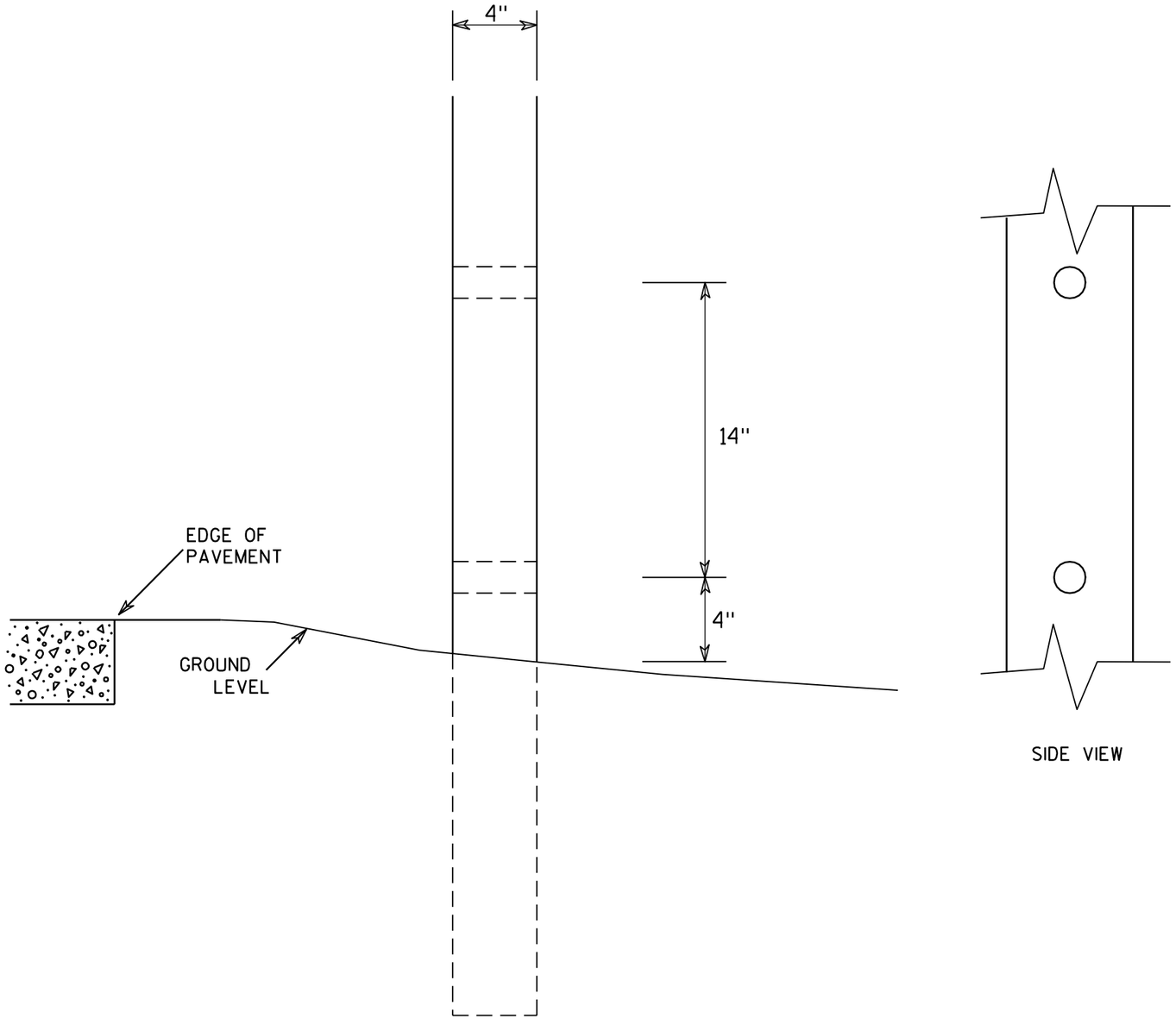
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 224 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

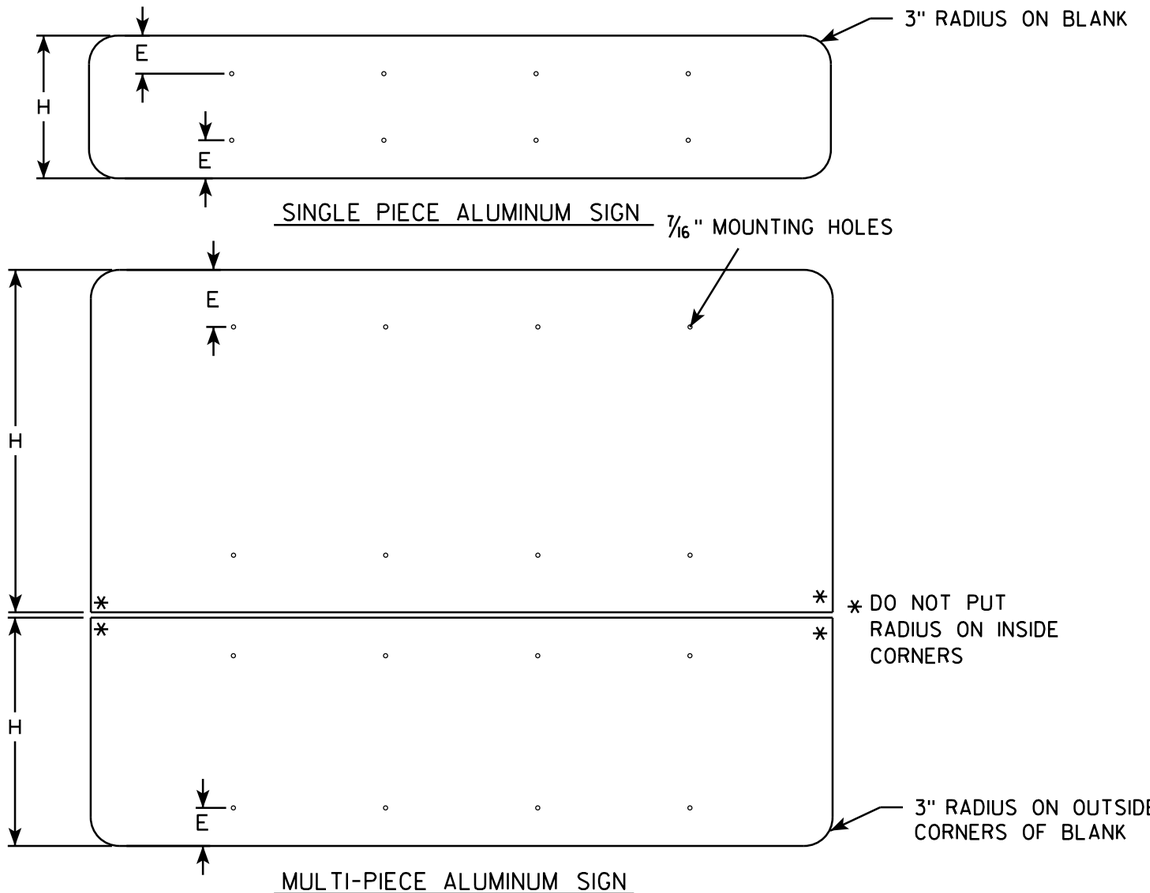
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

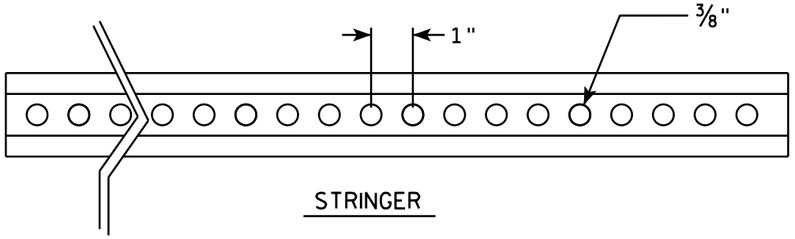
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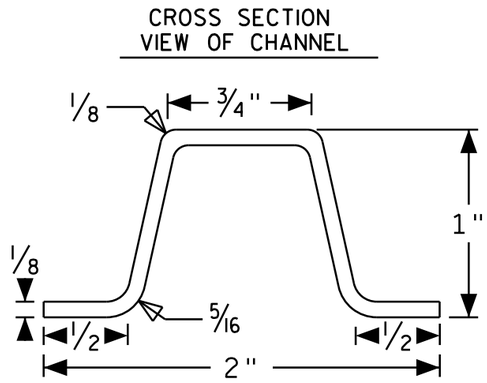


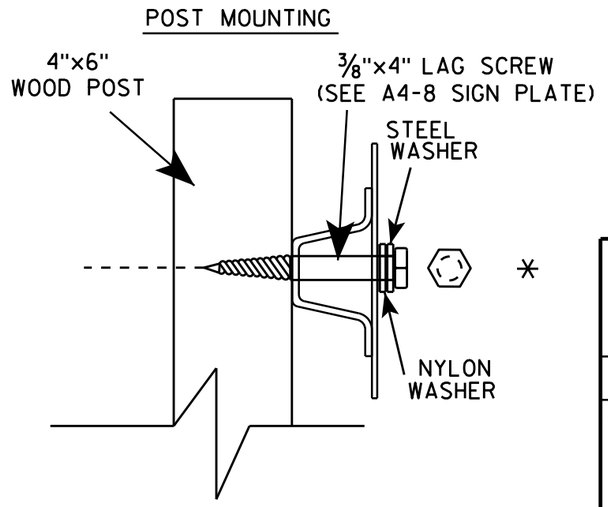
GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"







SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

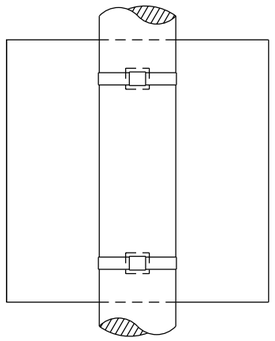
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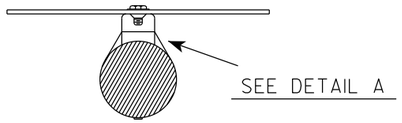
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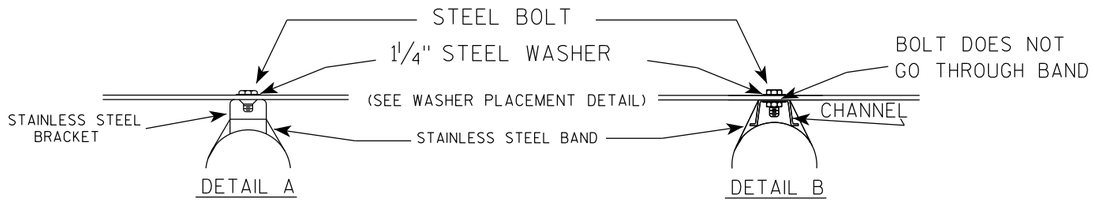
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BANDING

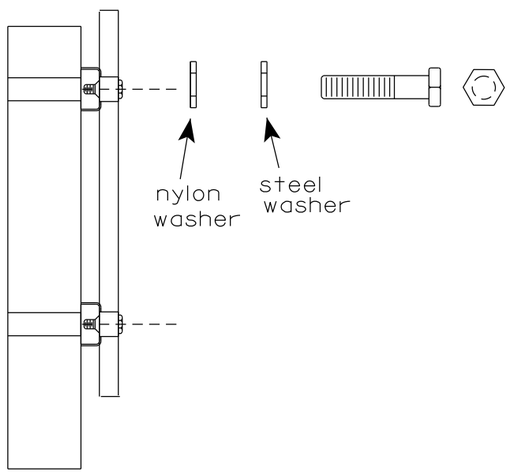
SINGLE SIGN







WASHER PLACEMENT

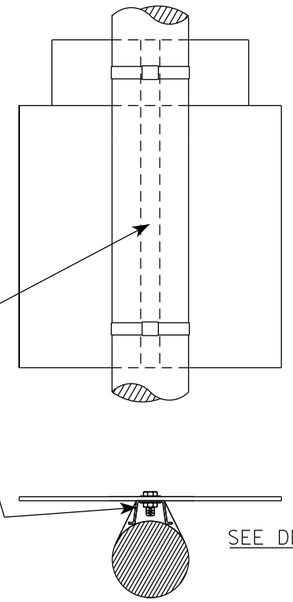


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

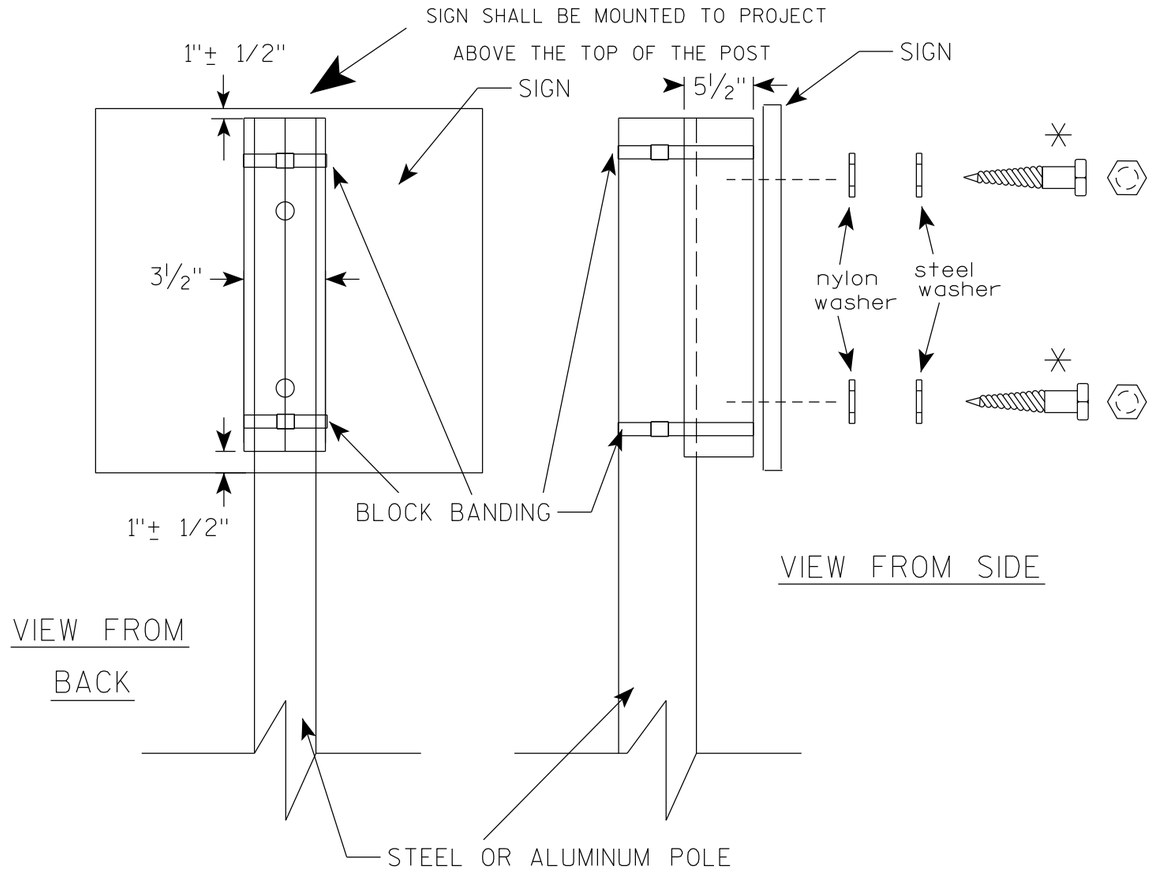
DATE 6/10/19 PLATE NO. A5-9.4

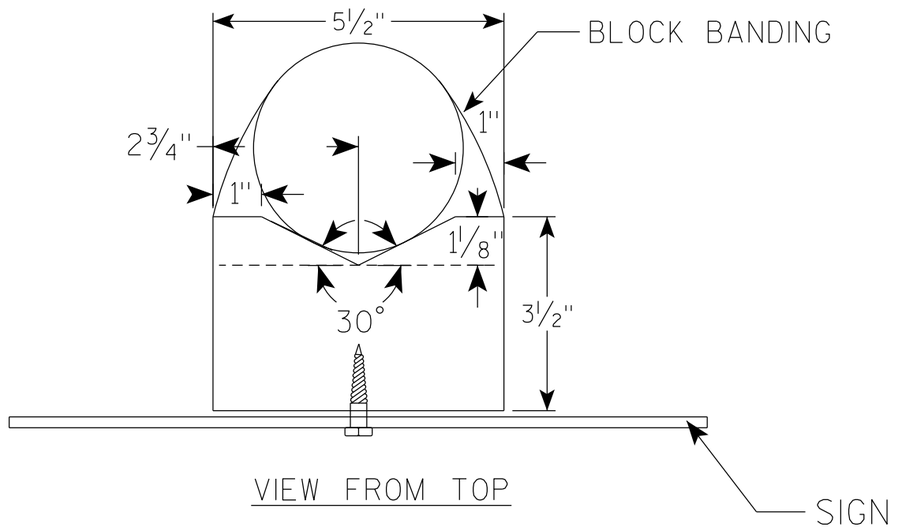
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 227	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

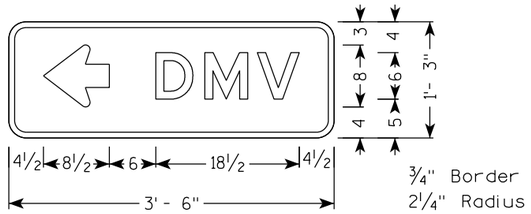
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

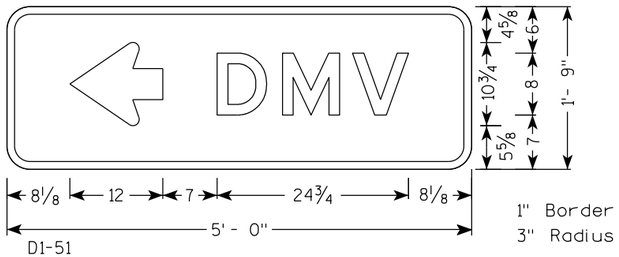
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 228 | E



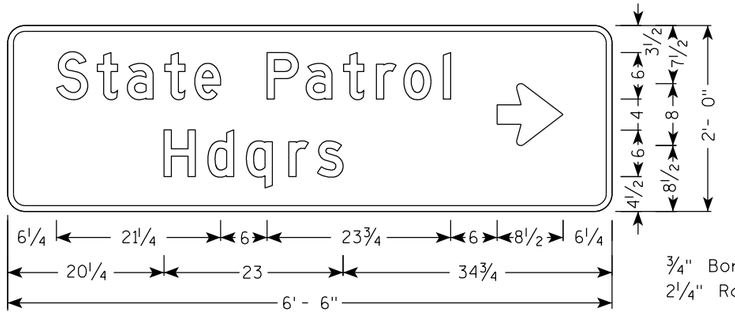
¾" Border
2¼" Radius

D1-51
SERIES E, SIZE 2



1" Border
3" Radius

D1-51
SERIES E, SIZE 3



¾" Border
2¼" Radius

D1-53
SIZE 2



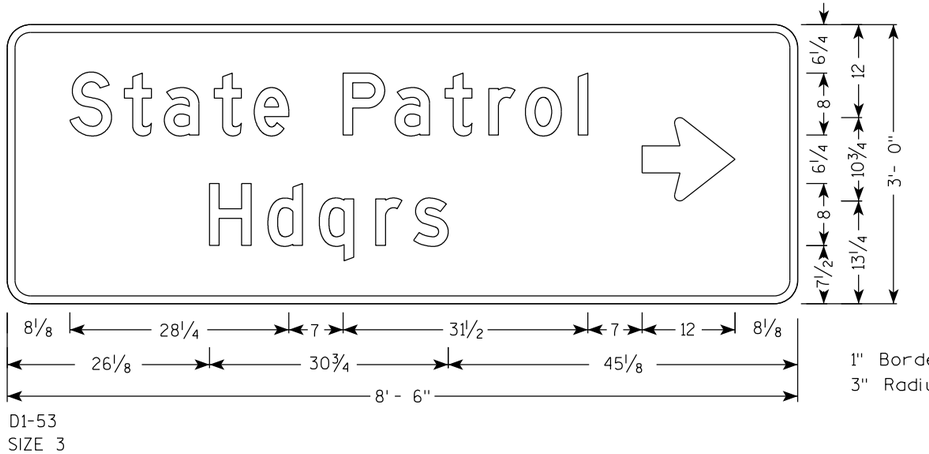
1" Border
3" Radius

*Varies

D1-54
SIZE 3

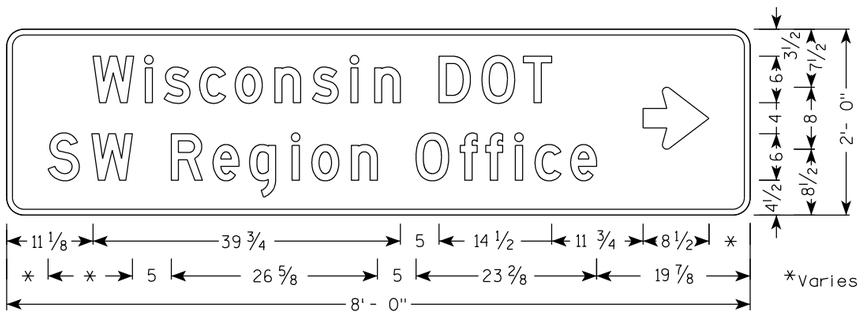
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D, except as noted.
4. For Region Offices Substitute appropriate message and adjust horizontal spacing as needed.



1" Border
3" Radius

D1-53
SIZE 3



*Varies

¾" Border
2¼" Radius

D1-54
SIZE 2

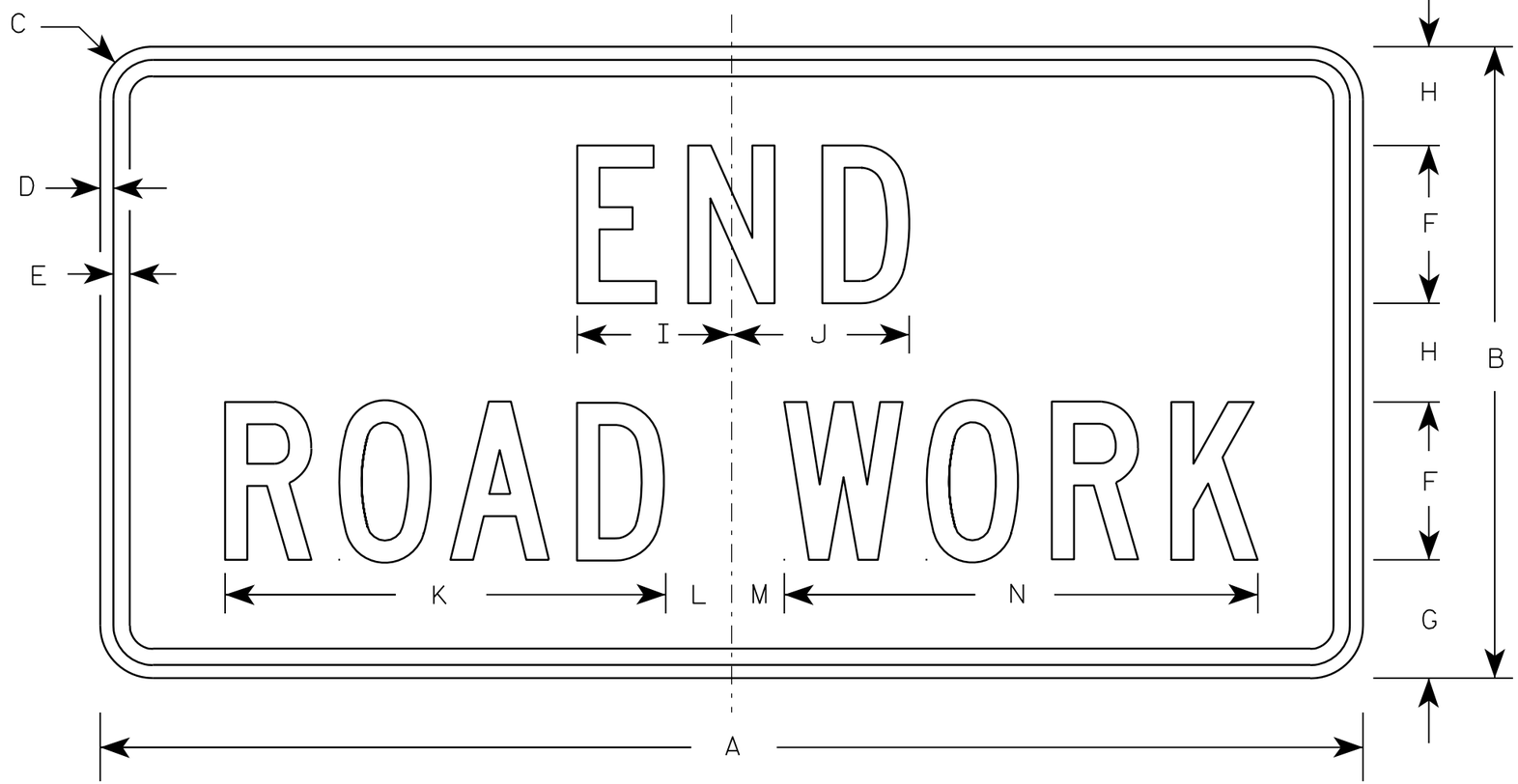
TYPICAL STANDARD
D1-51 THRU D1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/19 PLATE NO. D1-51.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 229	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

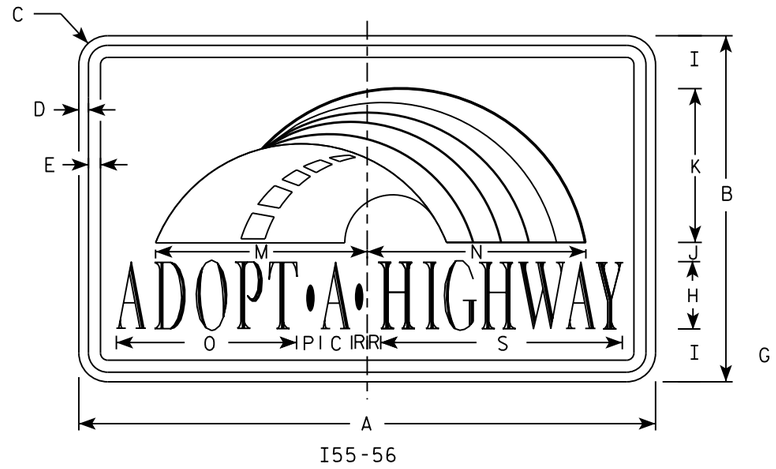
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

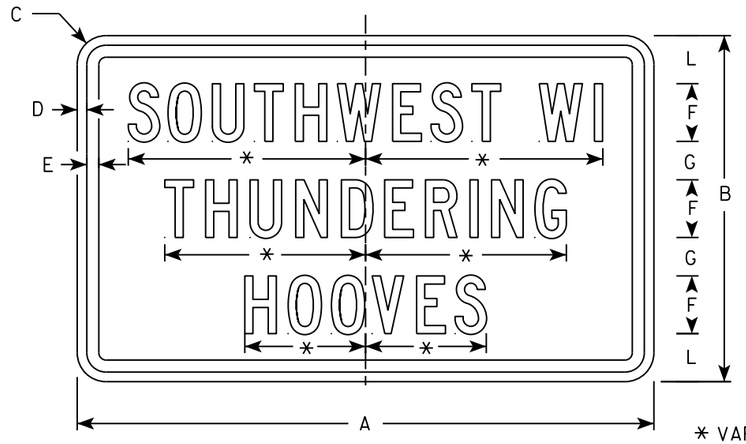
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 230	E



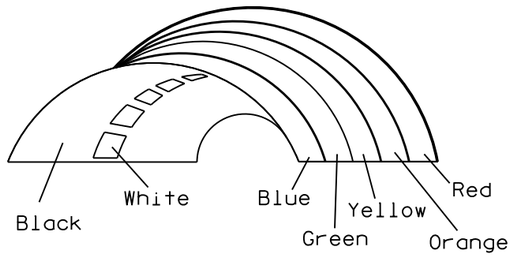
I55-56



I55-56P

* VARIES

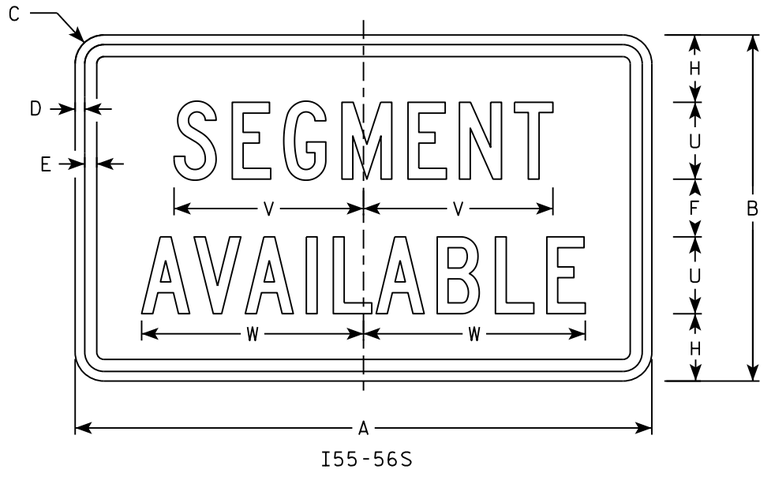
Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - (See Note 4)
3. Message Series - (See Note 5)
4. Border - Blue
   Adopt a Highway - Red
   All other Text - Blue
5. Adopt a Highway - Dutch 8011L
   All other Text - Series C
6. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.



I55-56S

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	18	1 1/2	1/2	5/8	3	2	3 1/2	2 3/4	1	8	2 1/2	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2	4	9 7/8	11 1/2				3.75
3																											
4																											
5																											

STANDARD SIGN
I55-56

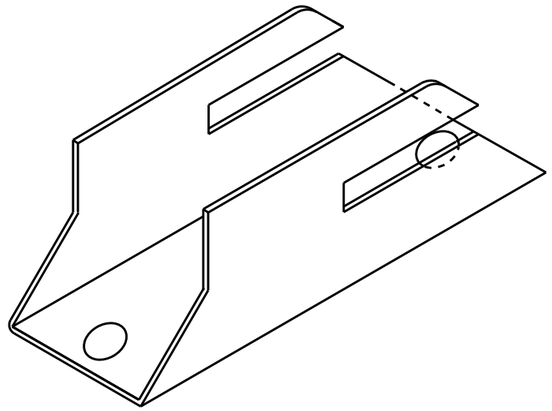
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

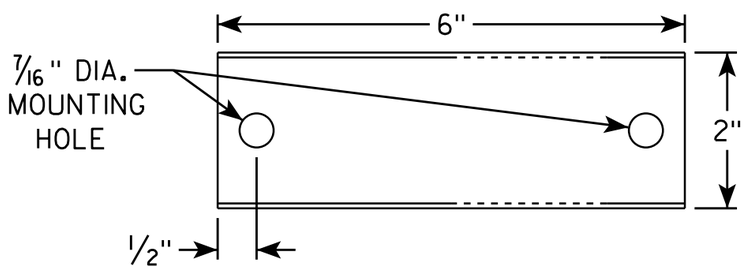
DATE 2/20/18 PLATE NO. I55-56.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 231 | E

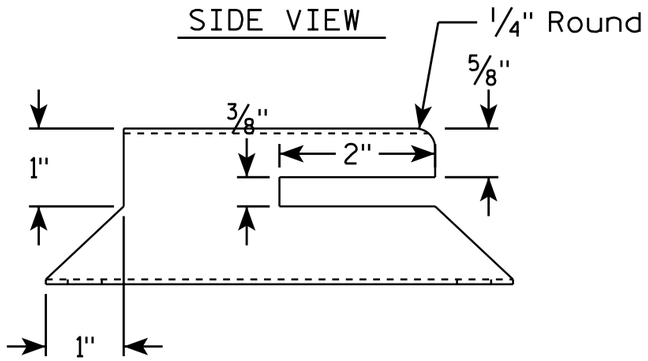
ISOMETRIC VIEW



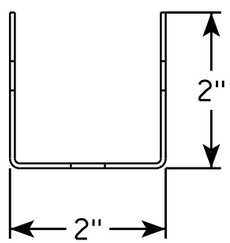
TOP VIEW



SIDE VIEW



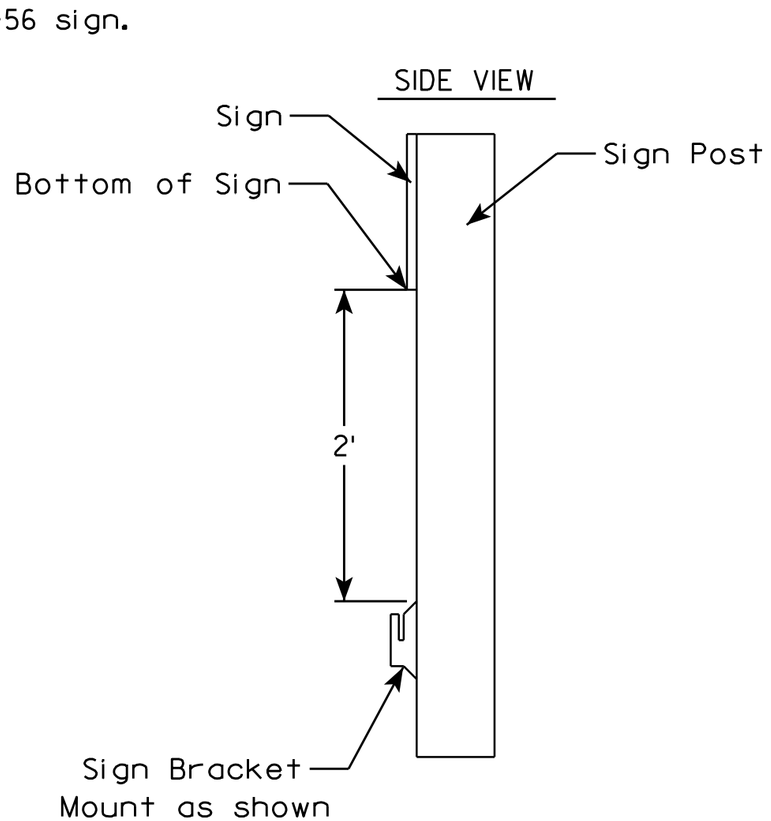
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

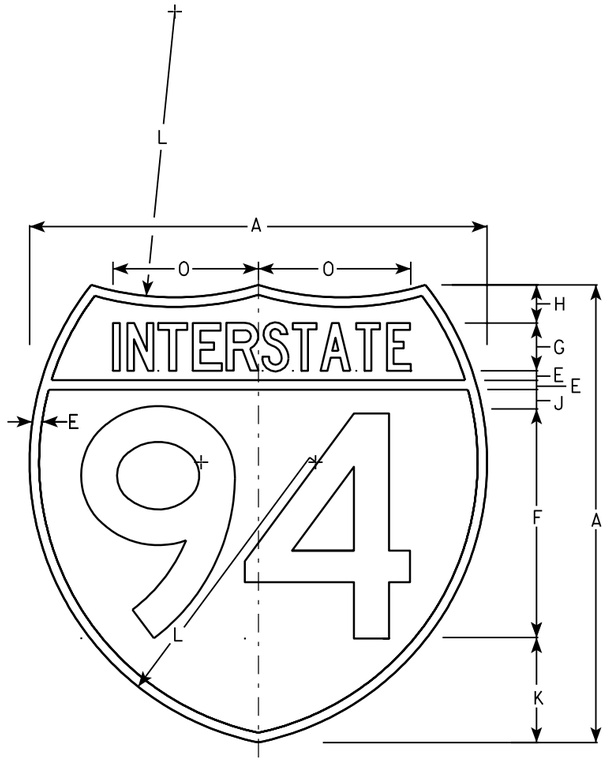
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

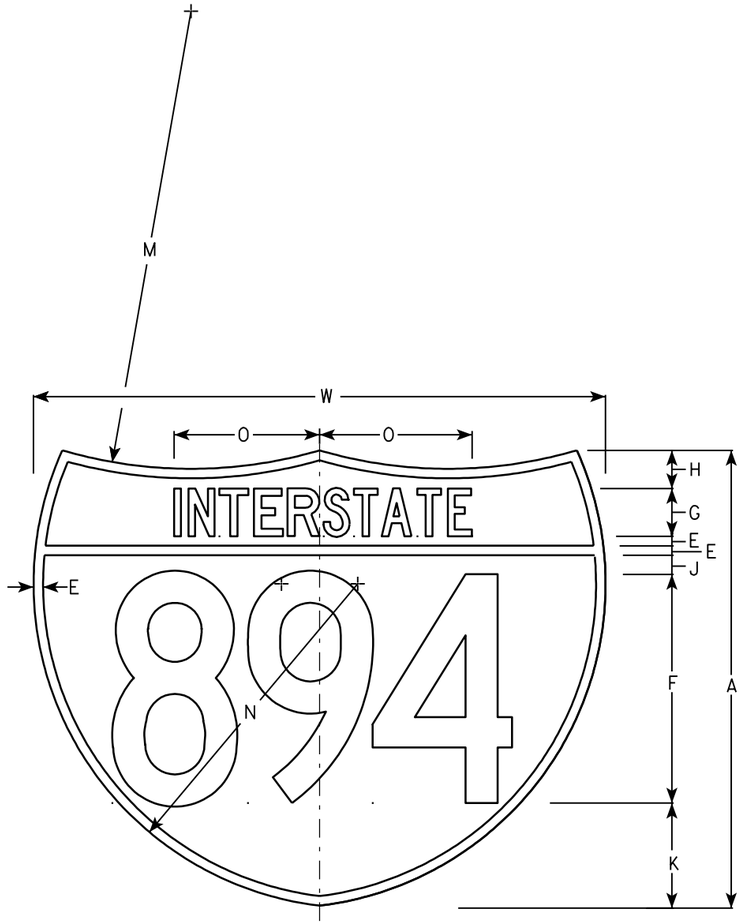
DATE 4/26/16 PLATE I55-56B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000
WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

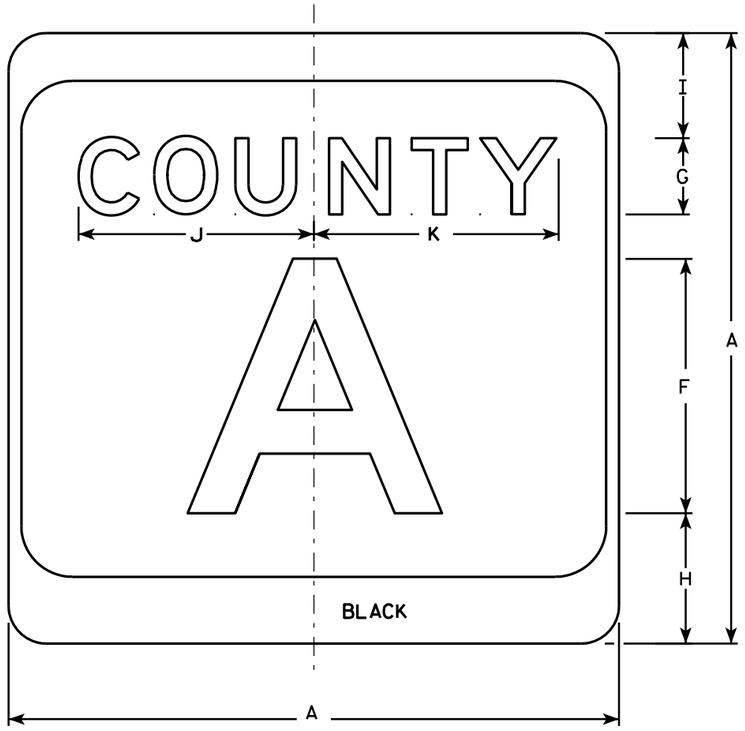
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

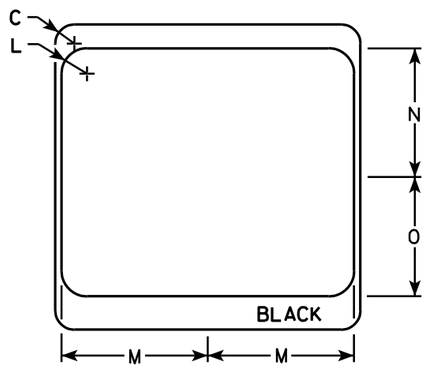
APPROVED Matthew R Rauch
for State Traffic Engineer

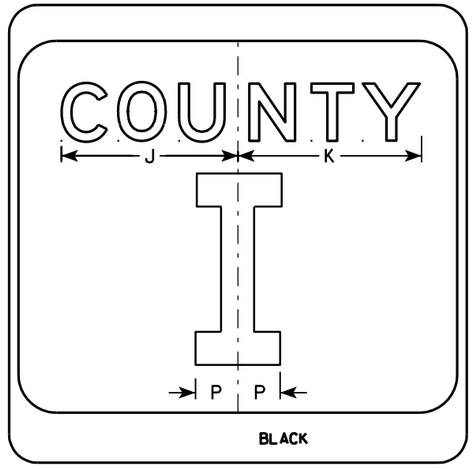
DATE 08/23/05 PLATE NO. M1-1.8

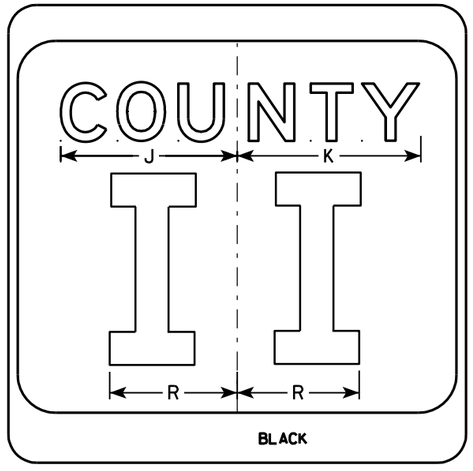
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 233	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

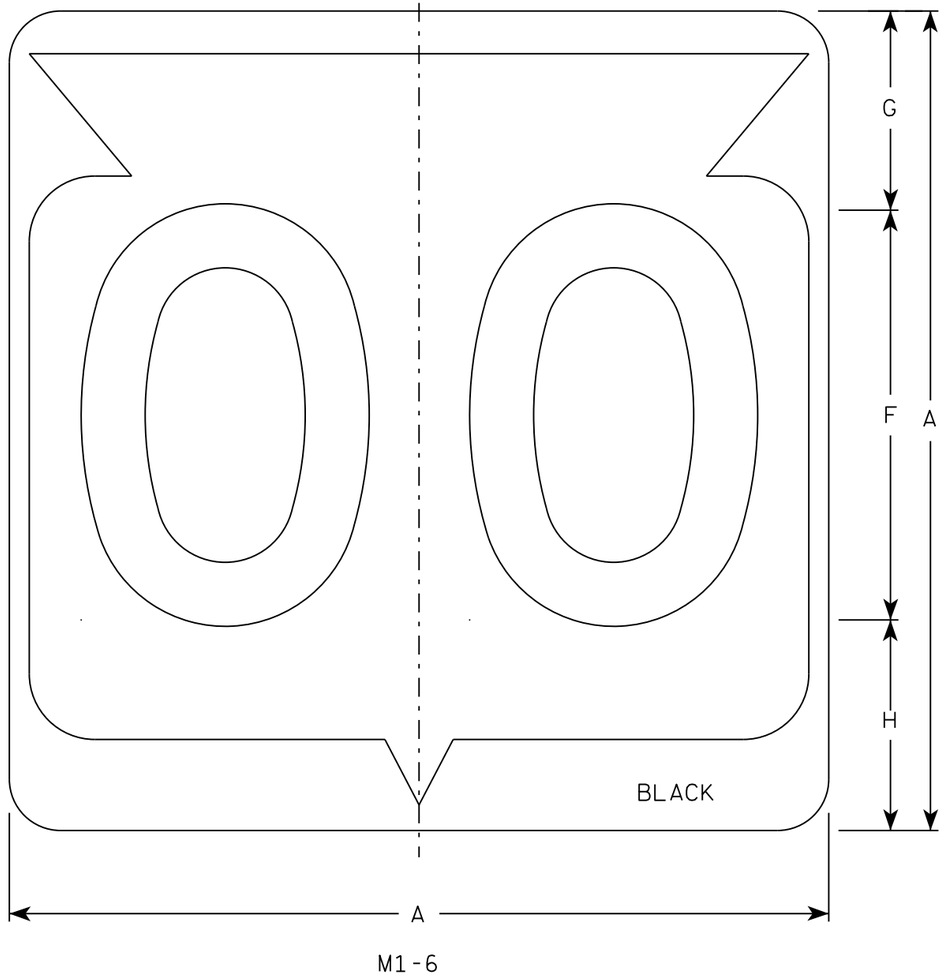
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

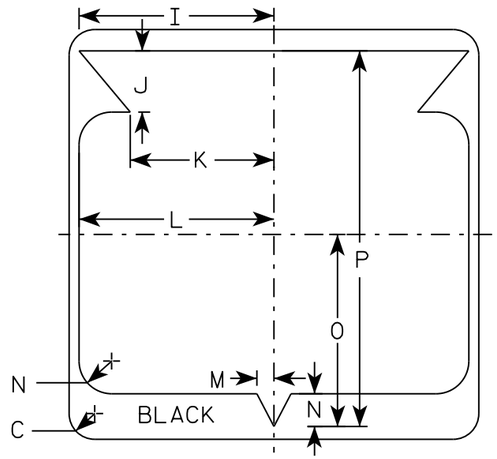
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

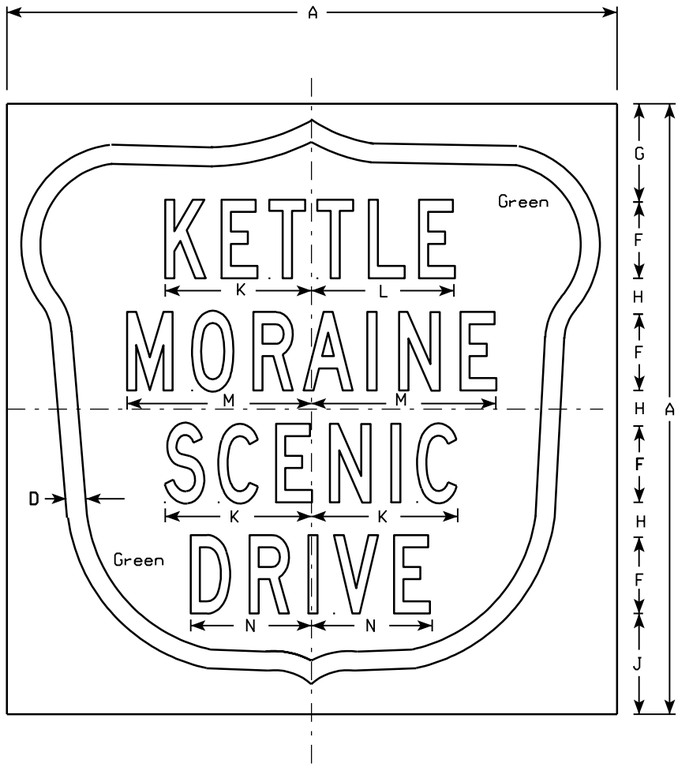
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

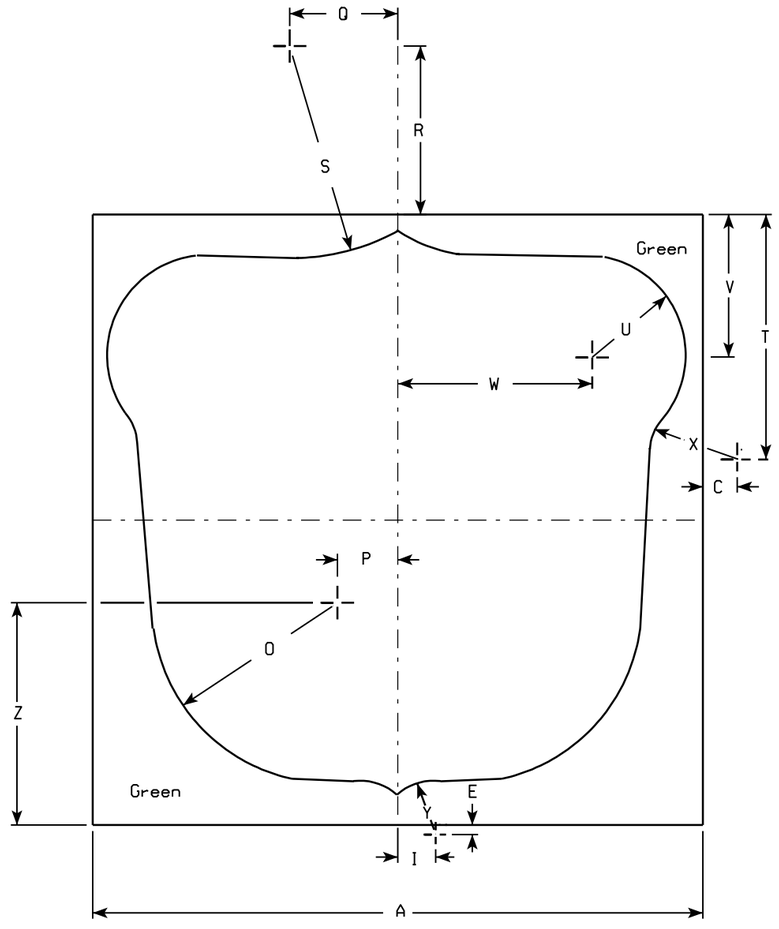
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 235 | E





NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Type H Reflective
3. Message Series - B
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	
4	900 mm X 900 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 3/8	3/4	3/8	3	3 7/8	1 3/8	1 1/2	4	5 3/4	5 5/8	7 1/4	4 3/4	7 1/4	2 3/8	4 1/4	6 5/8	8 1/2	9 5/8	3 7/8	5 5/8	7 5/8	3 1/2	2 1/8	8 3/4	4.00	0.36
3																												
4	36		1 1/2	1 1/8	3/4	5	5 1/4	1 5/8	2 1/4	5 7/8	9 1/8	9	11 3/4	7 3/8	10 3/4	3 5/8	6 3/8	9 7/8	14 1/8	14 3/8	5 3/4	8 3/8	11 3/8	5 1/8	3 1/2	13 1/8	9.00	0.81
5																												

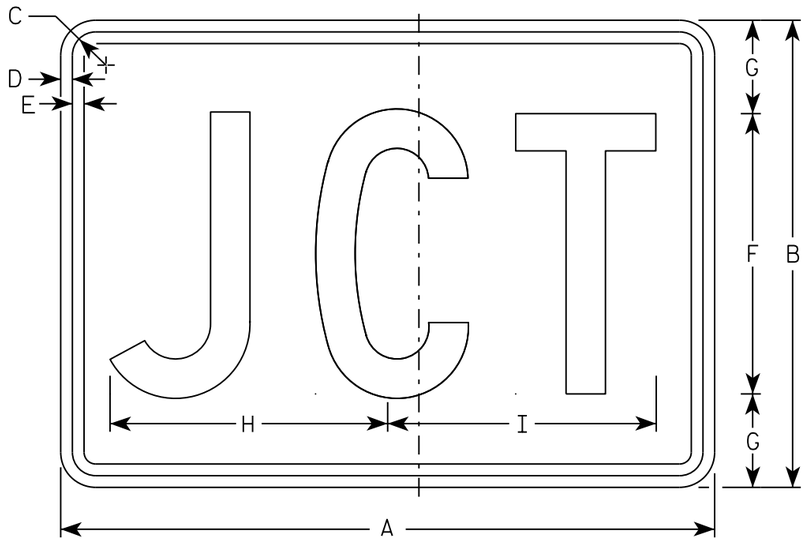
STANDARD SIGN
M1-97

WISCONSIN DEPT OF TRANSPORTATION

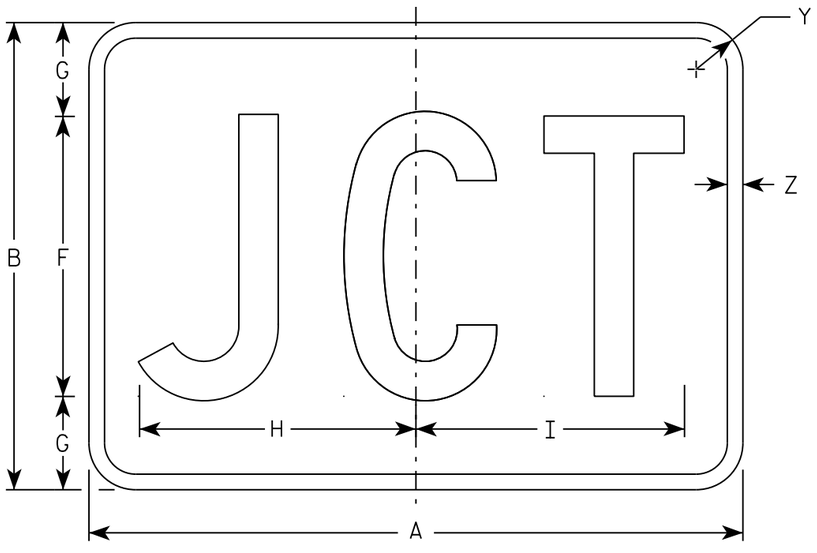
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-97.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 236	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

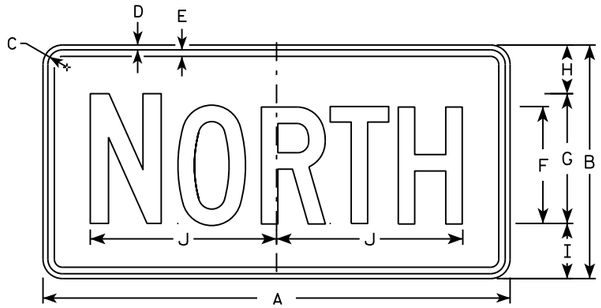
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

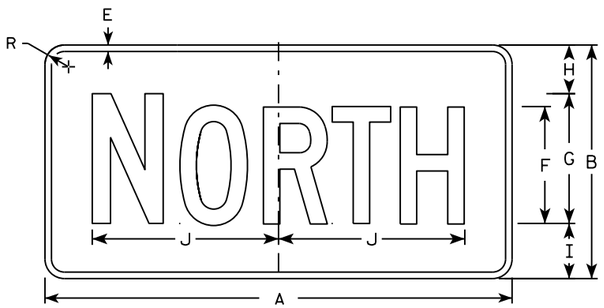
DATE 10/15/15 PLATE 237 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



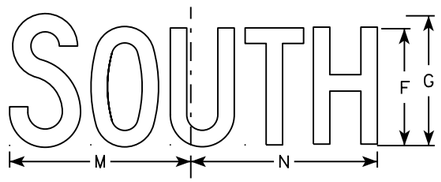
MB3-1
MK3-1
MN3-1



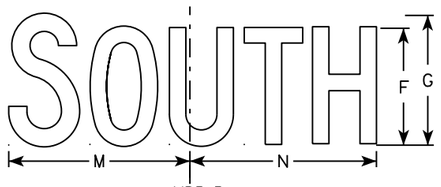
M3-2
MM3-2
MP3-2



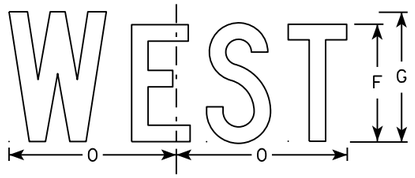
MB3-2
MK3-2
MN3-2



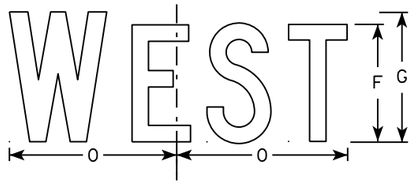
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

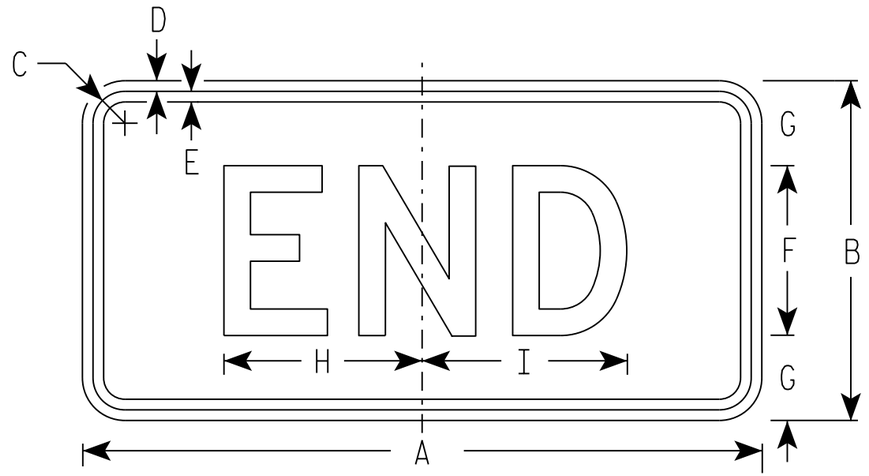
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

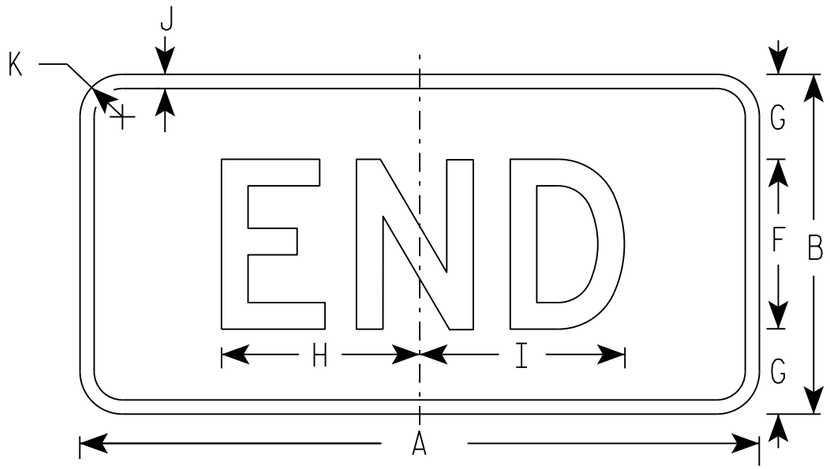
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-6
MM4-6
MP4-6



MB4-6
MK4-6
MN4-6
MR4-6

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-6

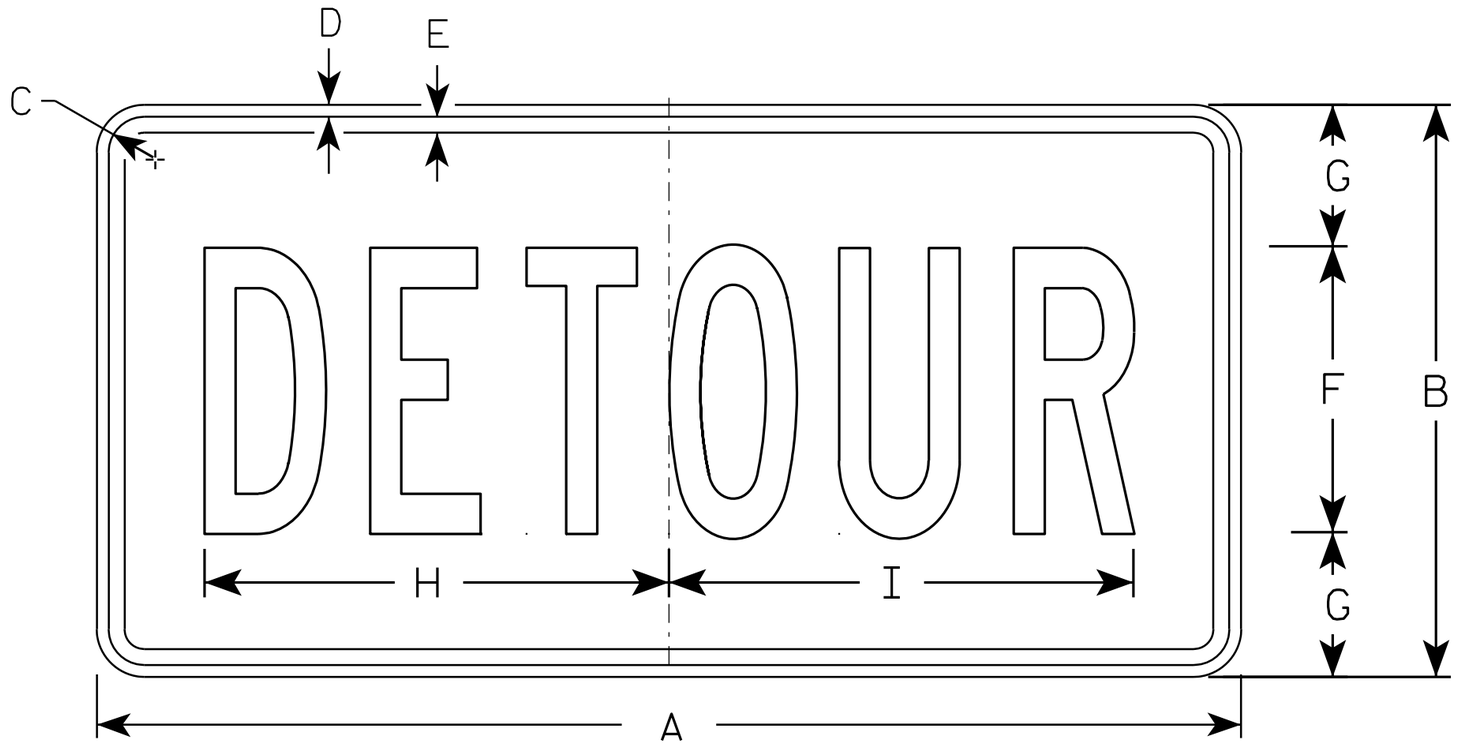
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 239 '14-7.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M46.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

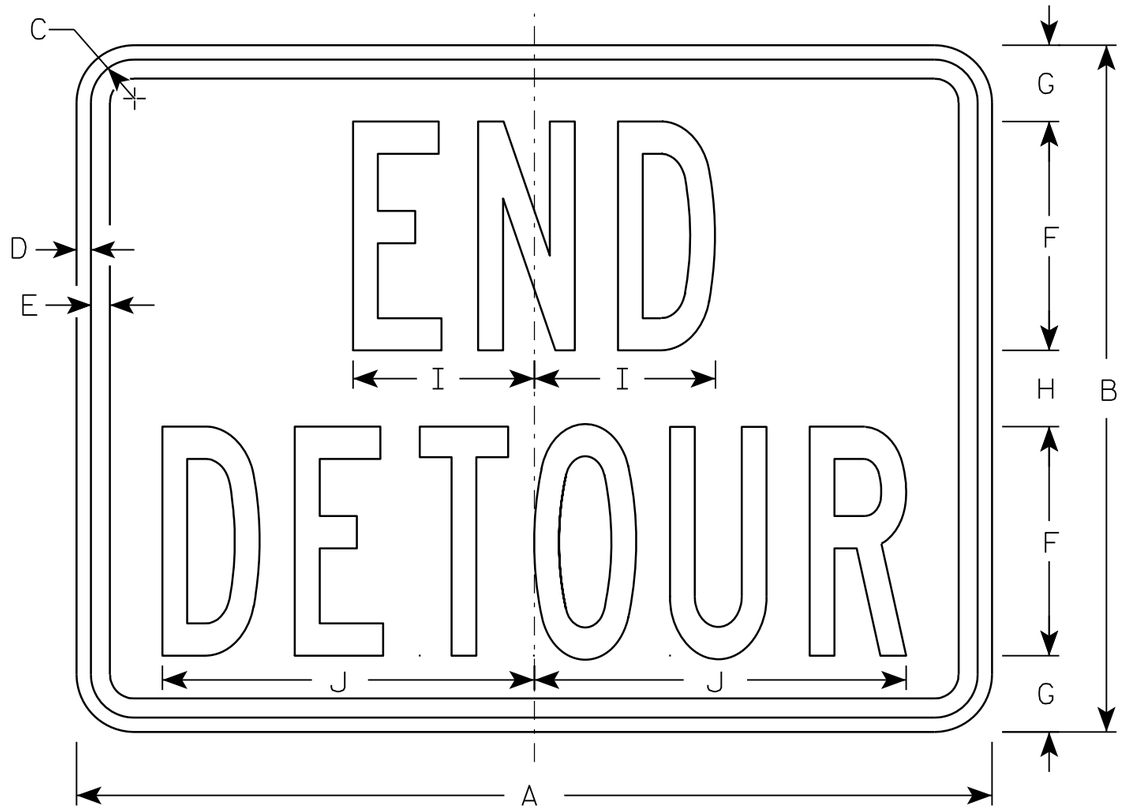
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 240	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

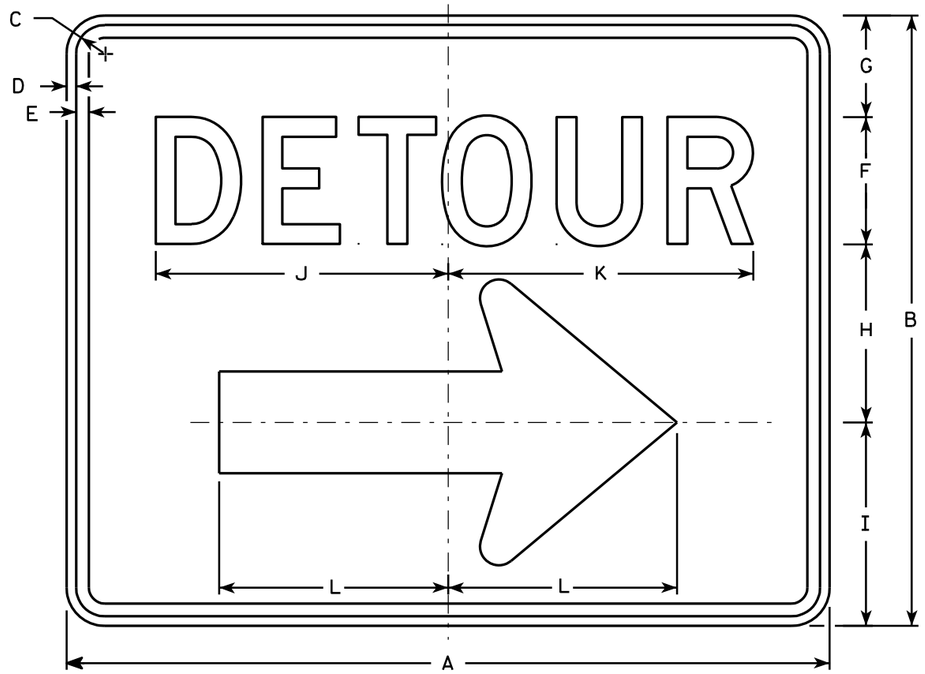
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

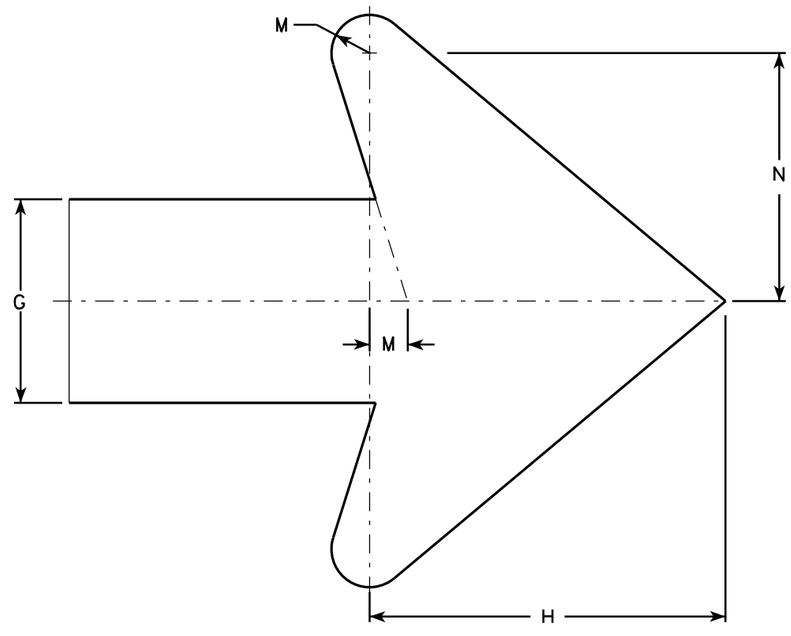
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 241	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

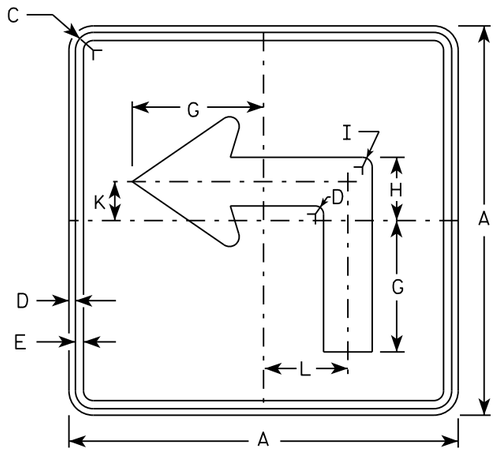
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

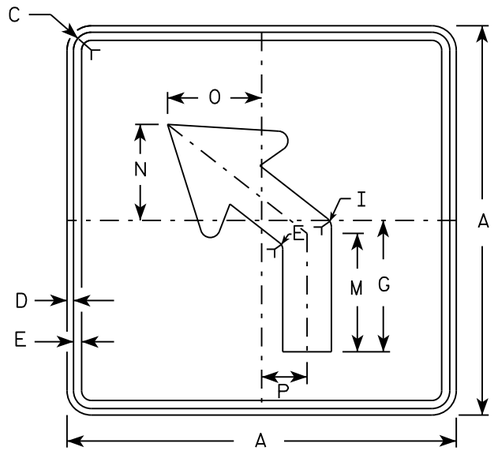
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

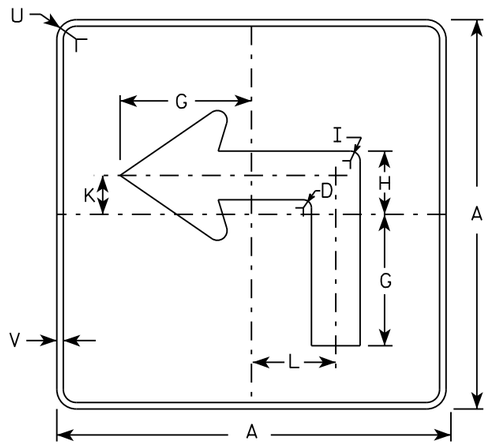
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 242	E



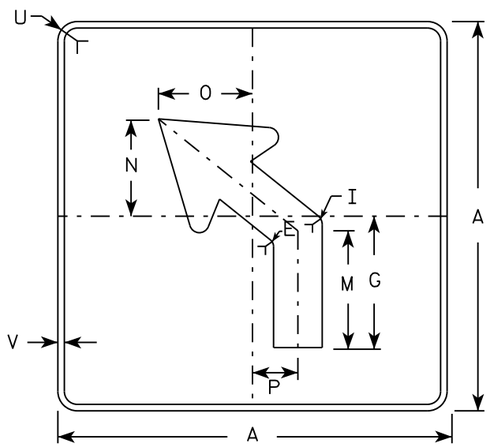
M5-1L
MM5-1L
MO5-1L
MP5-1L



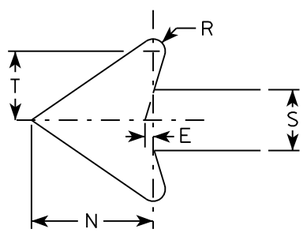
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

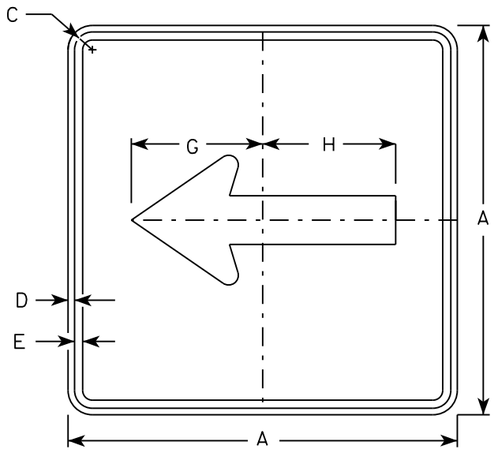
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

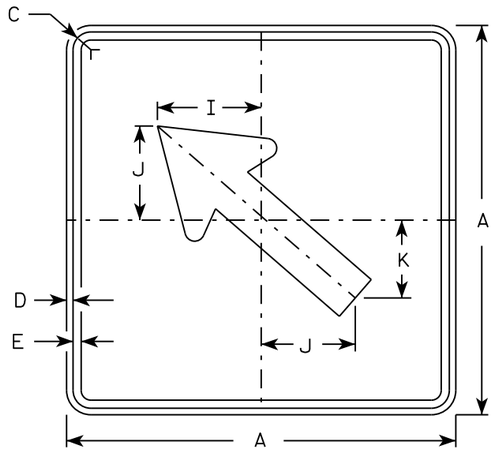
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



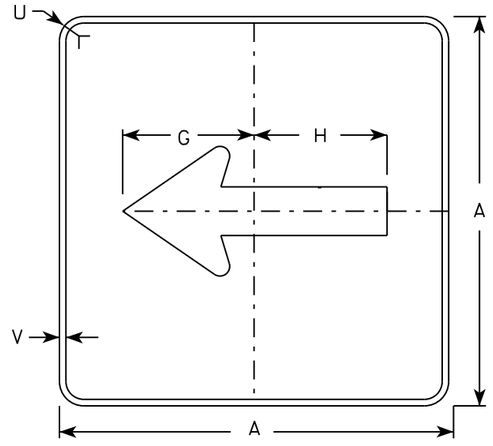
M6-1
MM6-1
MO6-1
MP6-1



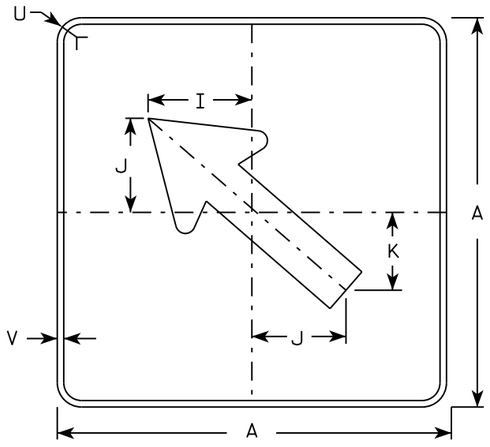
M6-2
MM6-2
MO6-2
MP6-2

NOTES

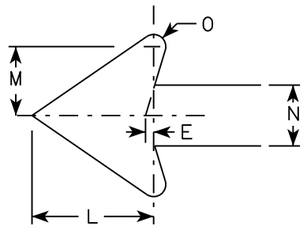
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

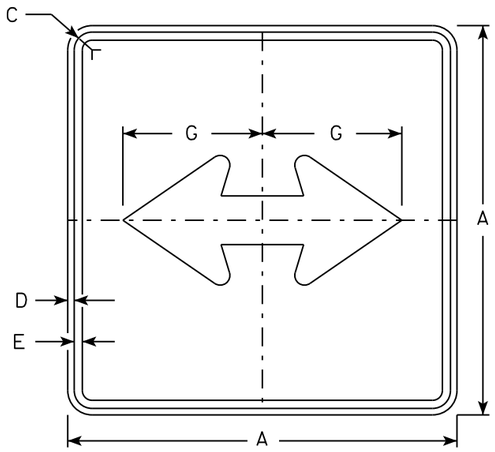
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

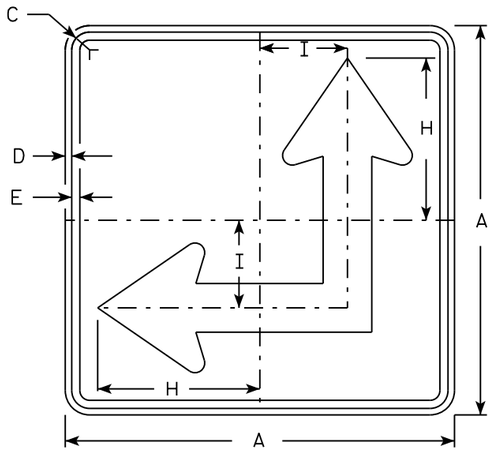
DATE 10/15/15 PLATE 244 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



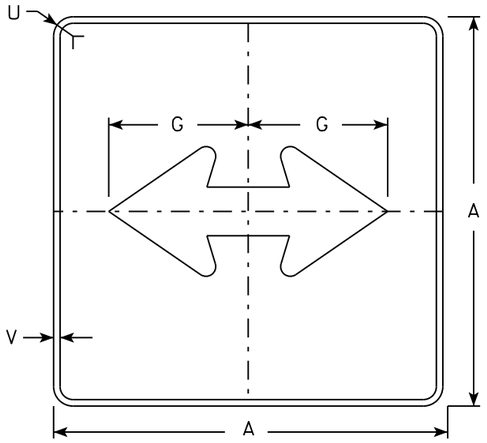
M6-4
MM6-4
MO6-4
MP6-4



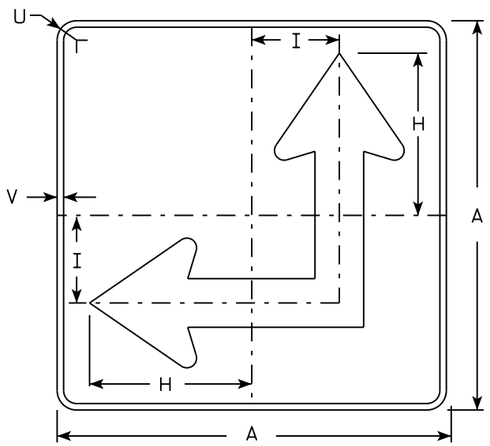
M6-6
MM6-6
MO6-6
MP6-6

NOTES

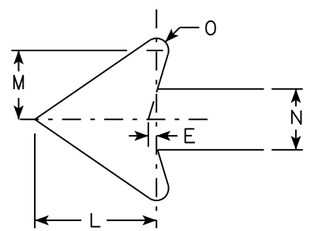
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

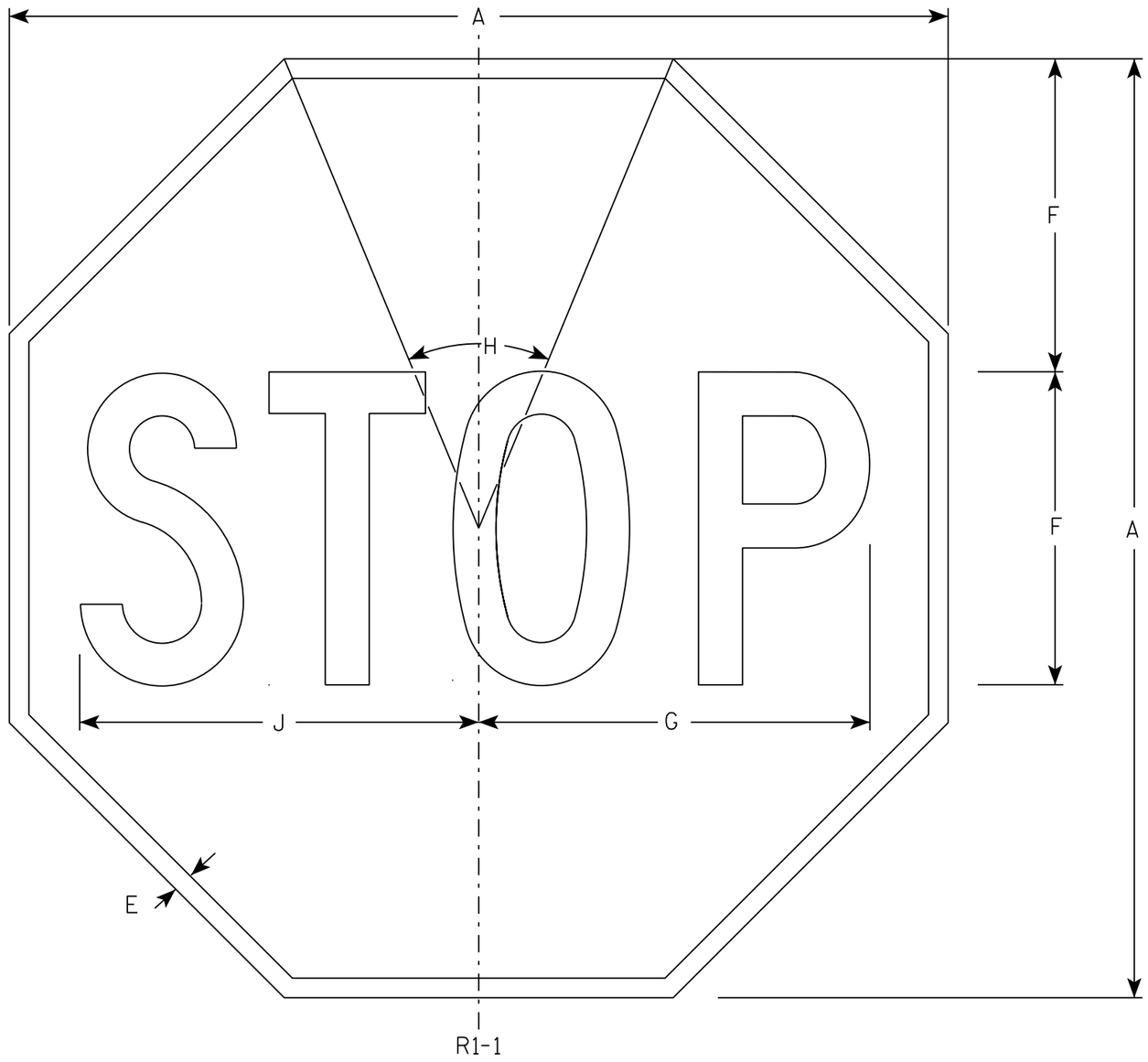
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 245 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

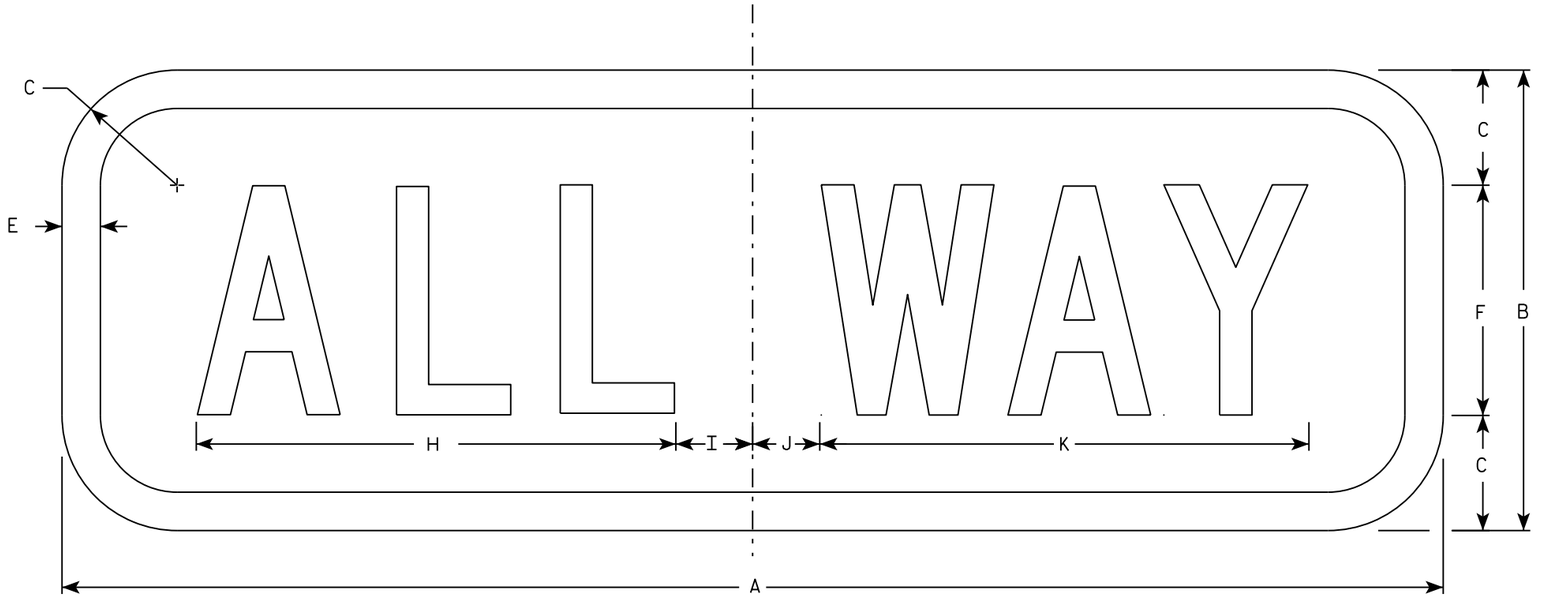
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 246	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign



R1-3P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																0.75
2S	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																1.5
2M	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
3	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
4	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5
5	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5

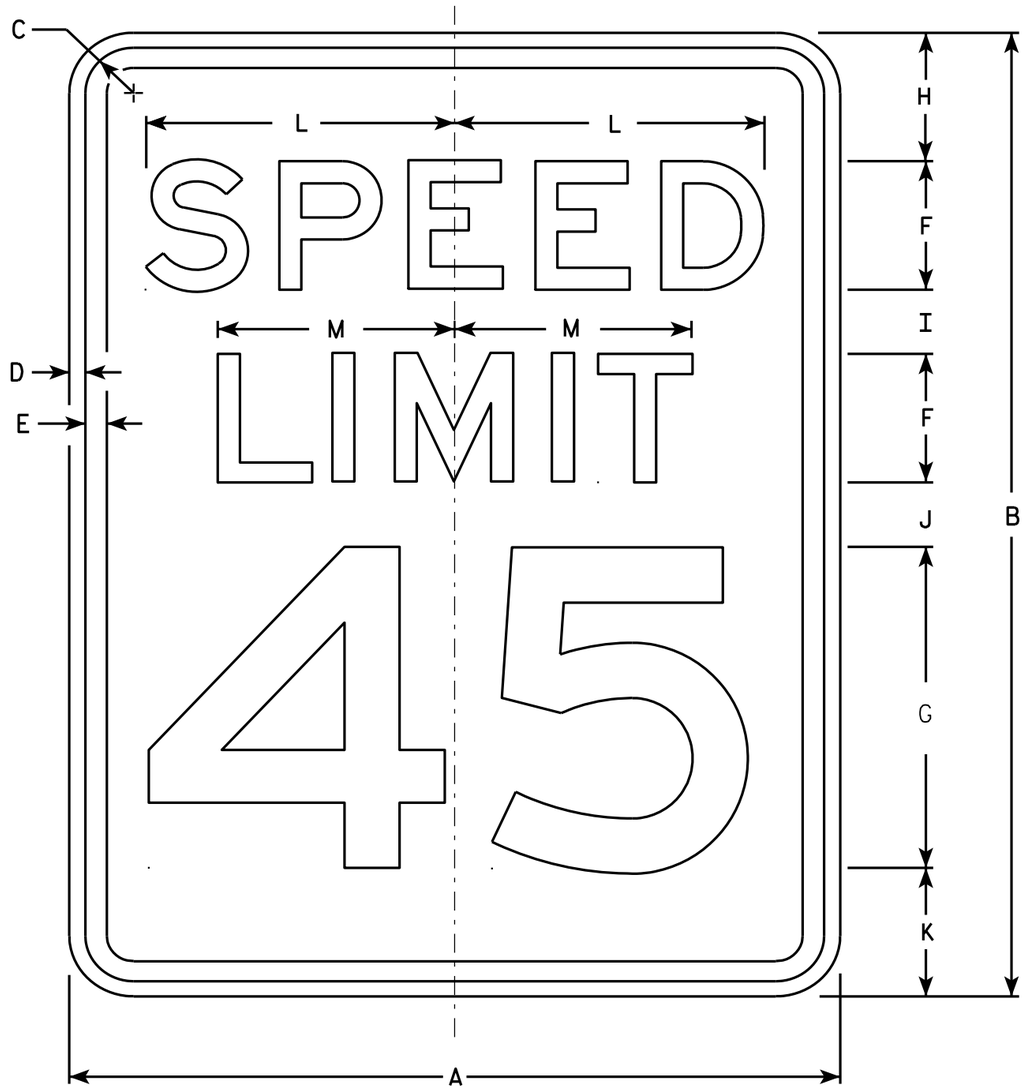
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 247 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

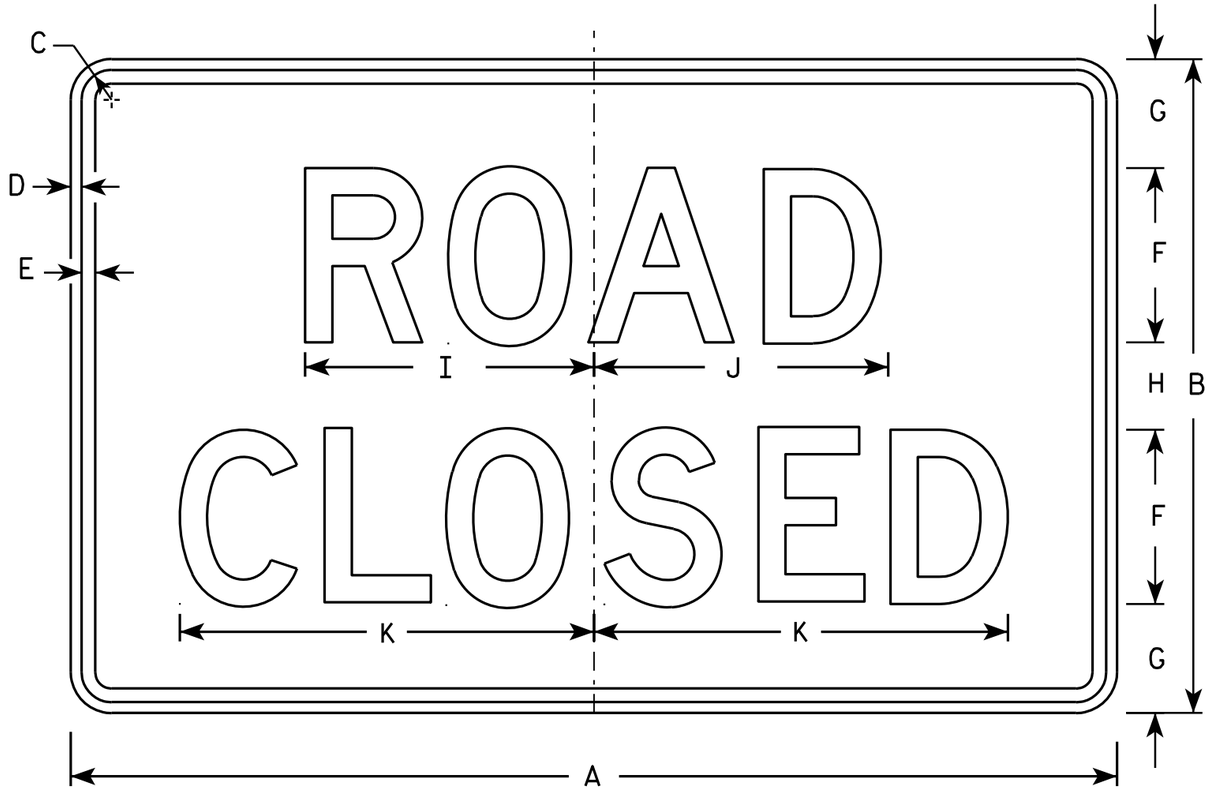
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

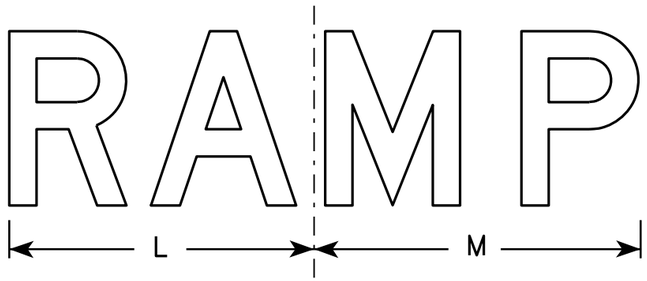
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 248	E



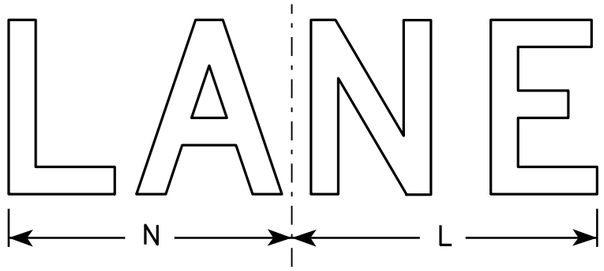
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

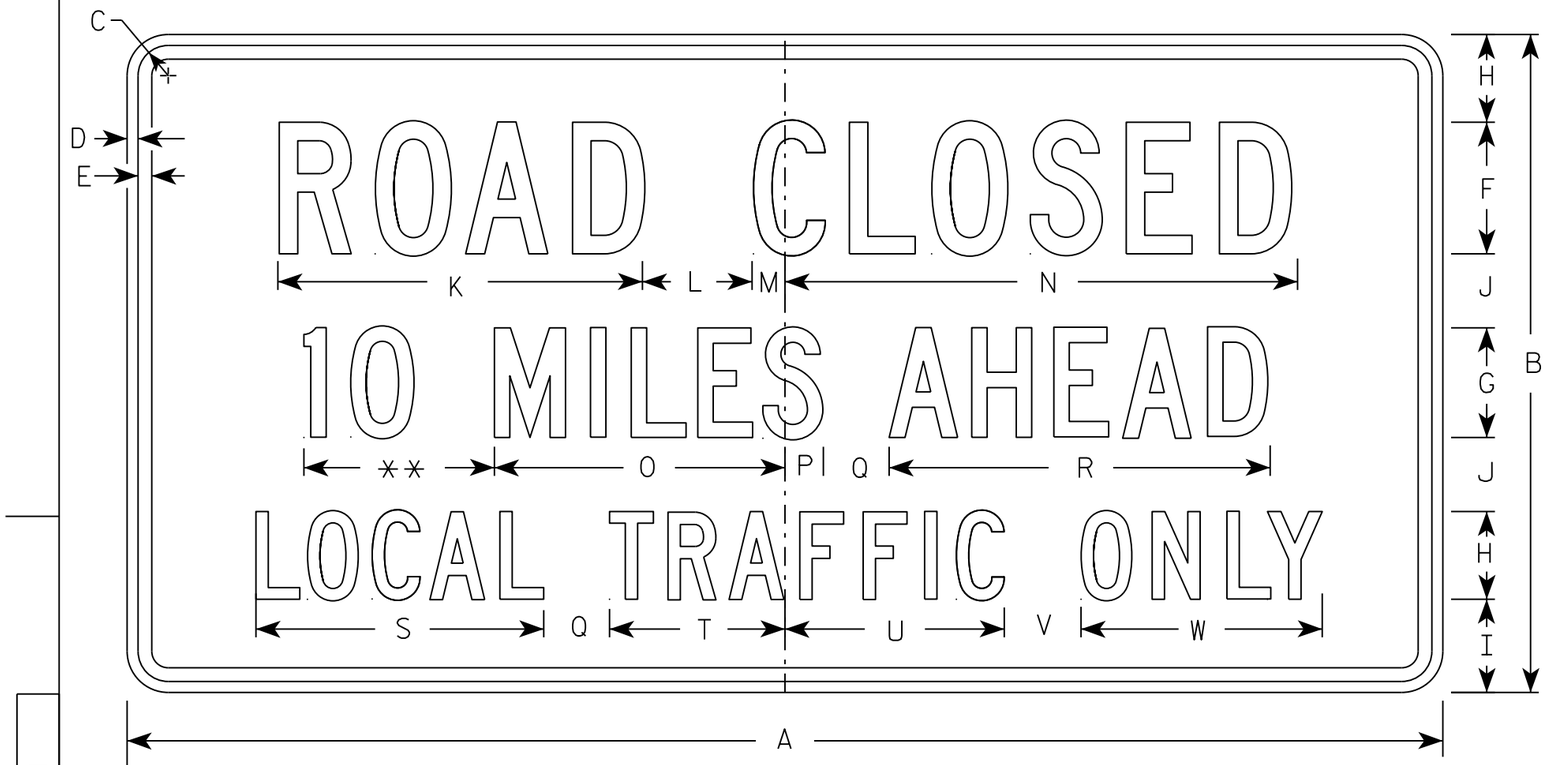
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

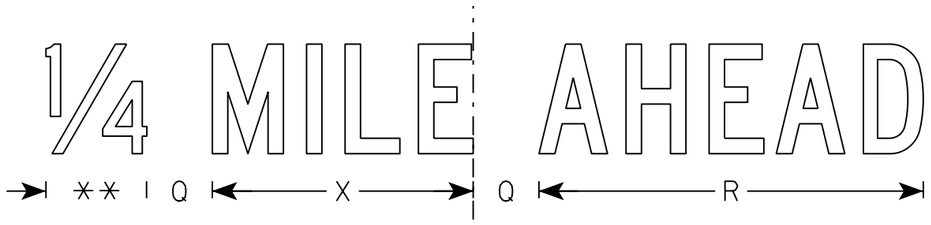
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 249	E



R11-3

** See Note 5



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

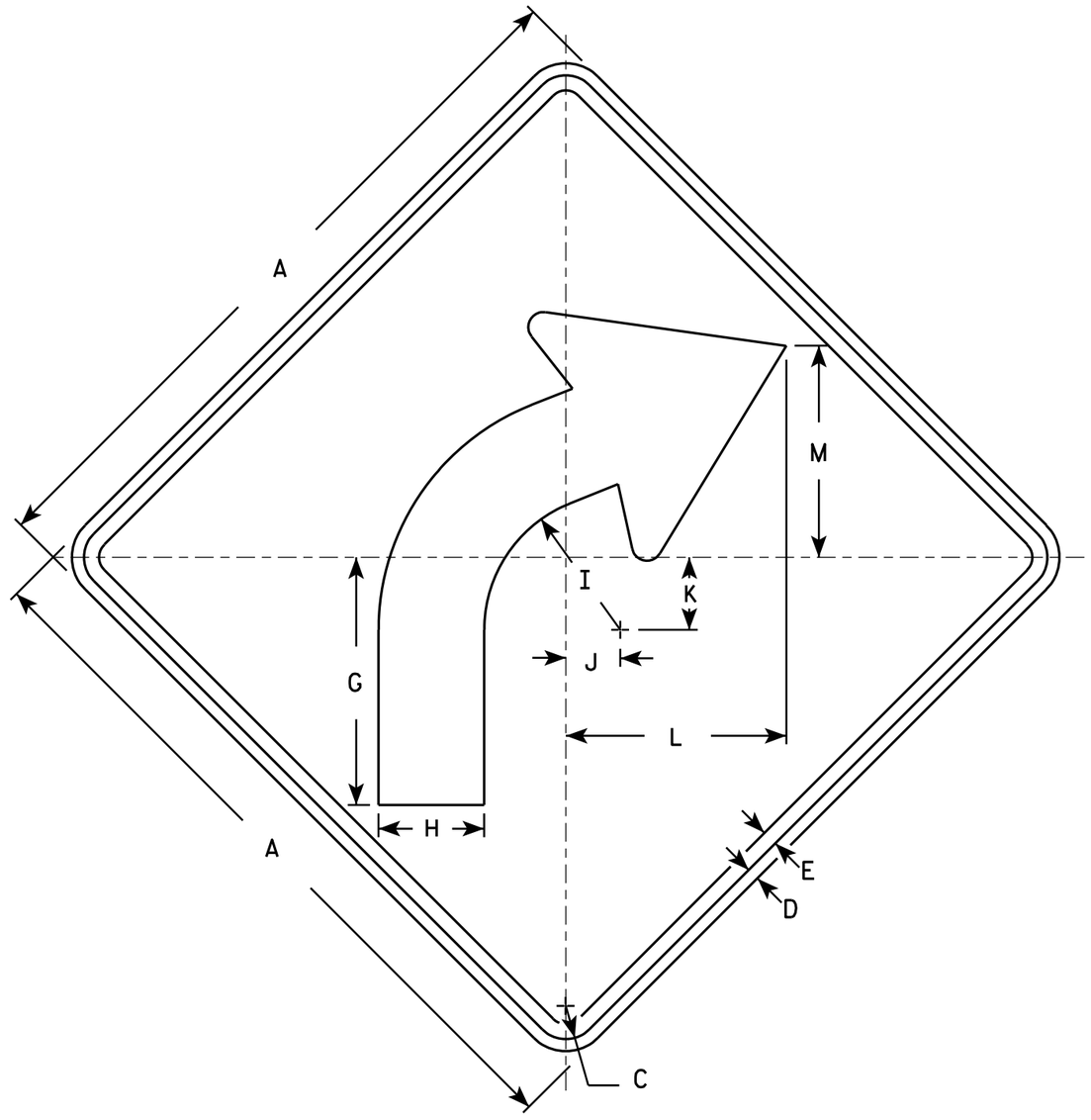
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

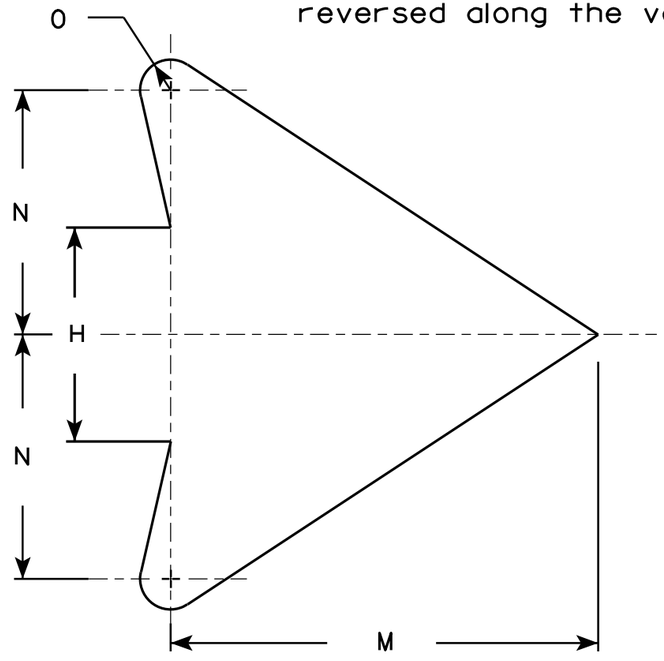
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 250	E



W1-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

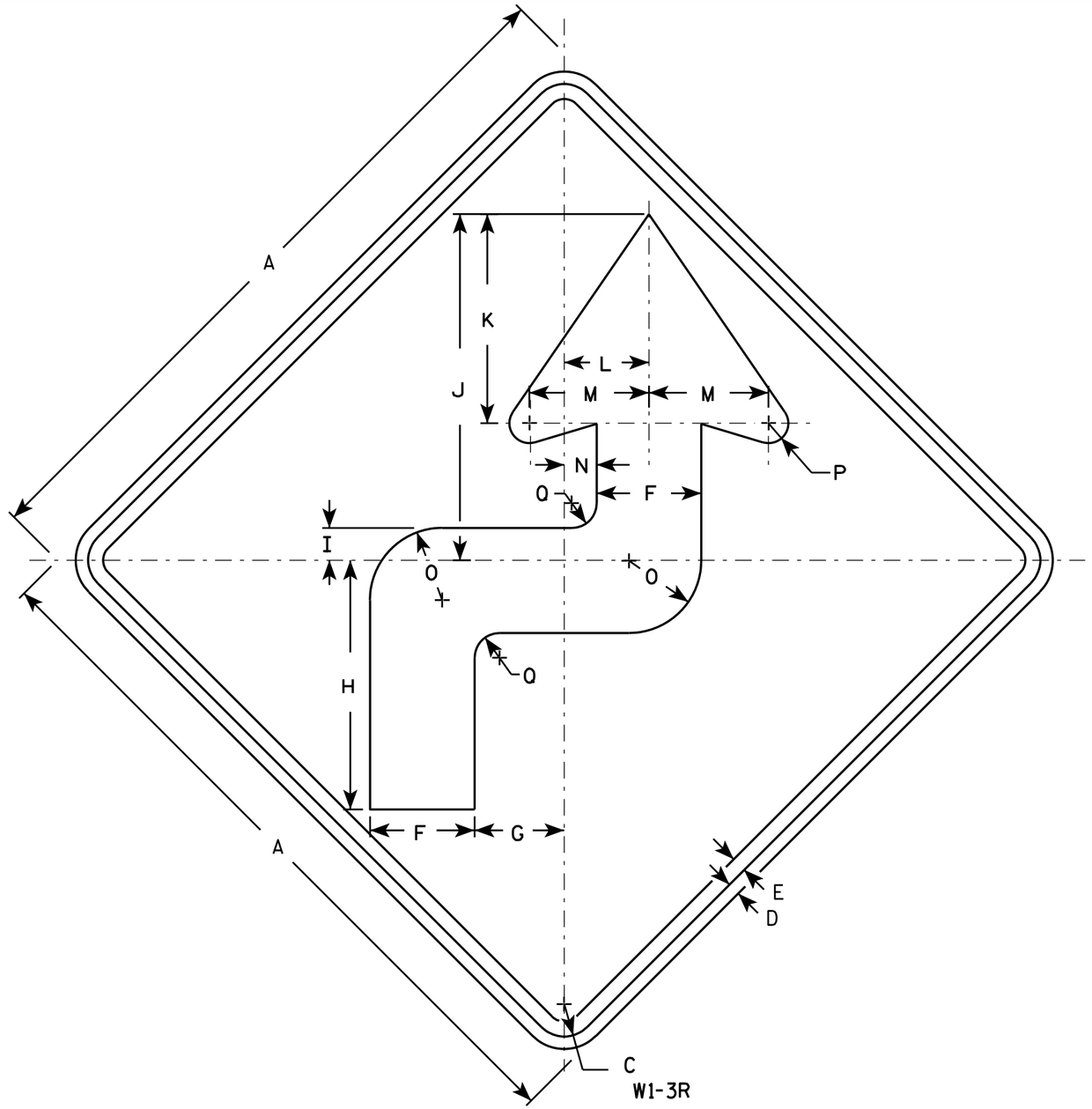
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 251	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-3L is the same as W1-3R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	3	8 3/8	1 1/8	11 5/8	7	2 3/4	4	1 1/8	2 1/2	5/8	7/8										4.0
2S	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
2M	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
3	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
4	36		1 5/8	5/8	3/4	5 1/4	6	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
5	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0

STANDARD SIGN
W1-3

WISCONSIN DEPT OF TRANSPORTATION

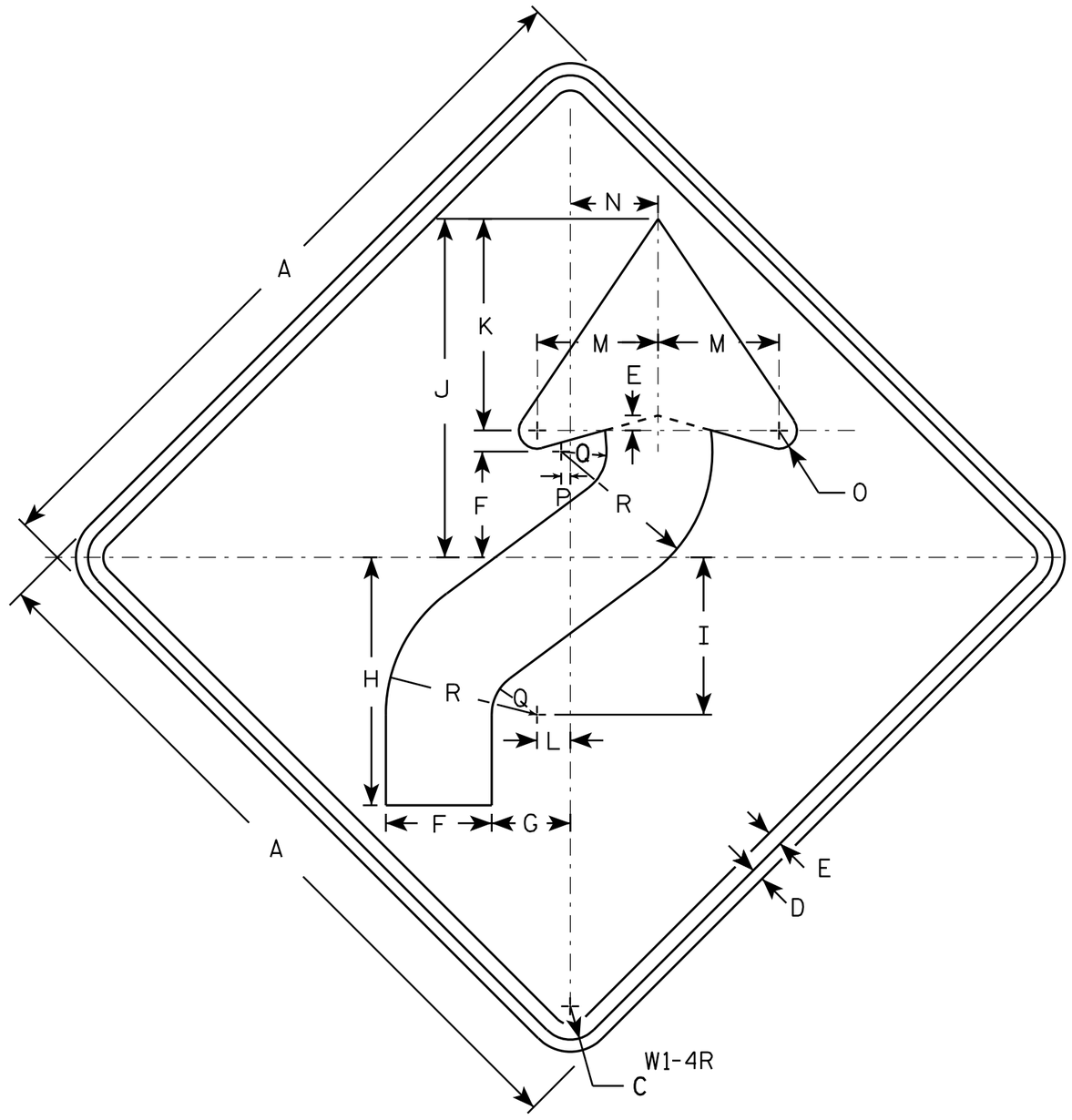
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 252 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W13.DGN PLOT DATE : 17-MAY-2012 13:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.698561:1.000000 WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

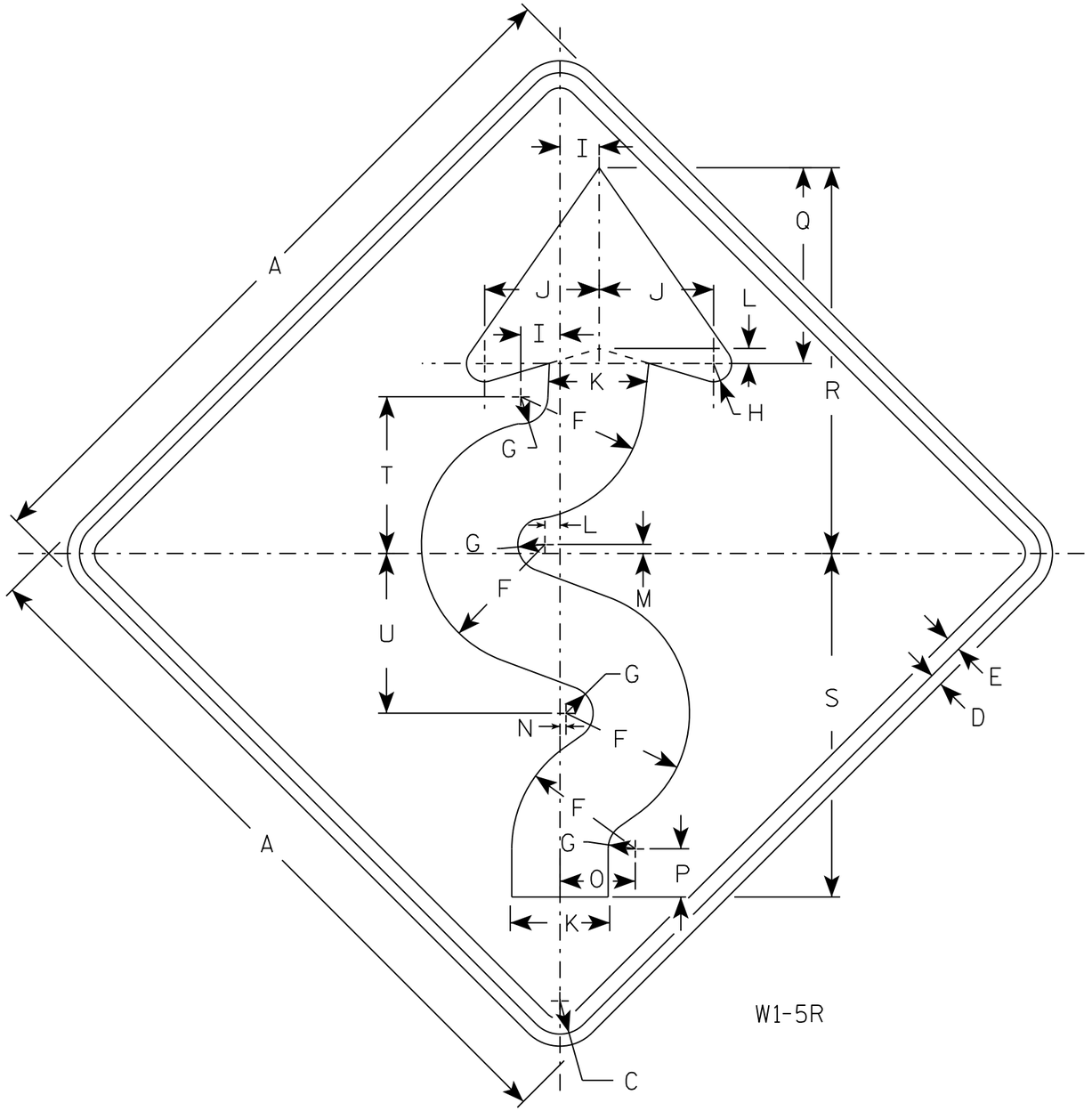
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 253 | E



W1-5R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.
4. If used with W13-1 of 30 MPH or less, use 36" sign for Size 2S.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4 1/8	7/8	5/8	1 1/4	3 3/4	3 1/4	1/2	1/4	1/8	2 1/2	1 5/8	6 1/2	12 3/4	11 3/8	5 1/4	5 1/4						4.0
2S	30		1 3/8	1/2	5/8	5 1/8	1 1/8	3/4	1 5/8	4 3/4	4 1/8	5/8	3/8	1/4	3 1/8	2	8 1/8	16	14 1/4	6 1/2	6 5/8						6.25
2M	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
3	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
4	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
5	48		2 1/4	3/4	1	8 1/4	1 3/4	1 1/4	2 1/2	7 1/2	6 1/2	1	1/2	3/8	5	3 1/4	13	25 1/2	22 3/4	10 3/8	10 1/2						16.0

STANDARD SIGN
W1-5

WISCONSIN DEPT OF TRANSPORTATION

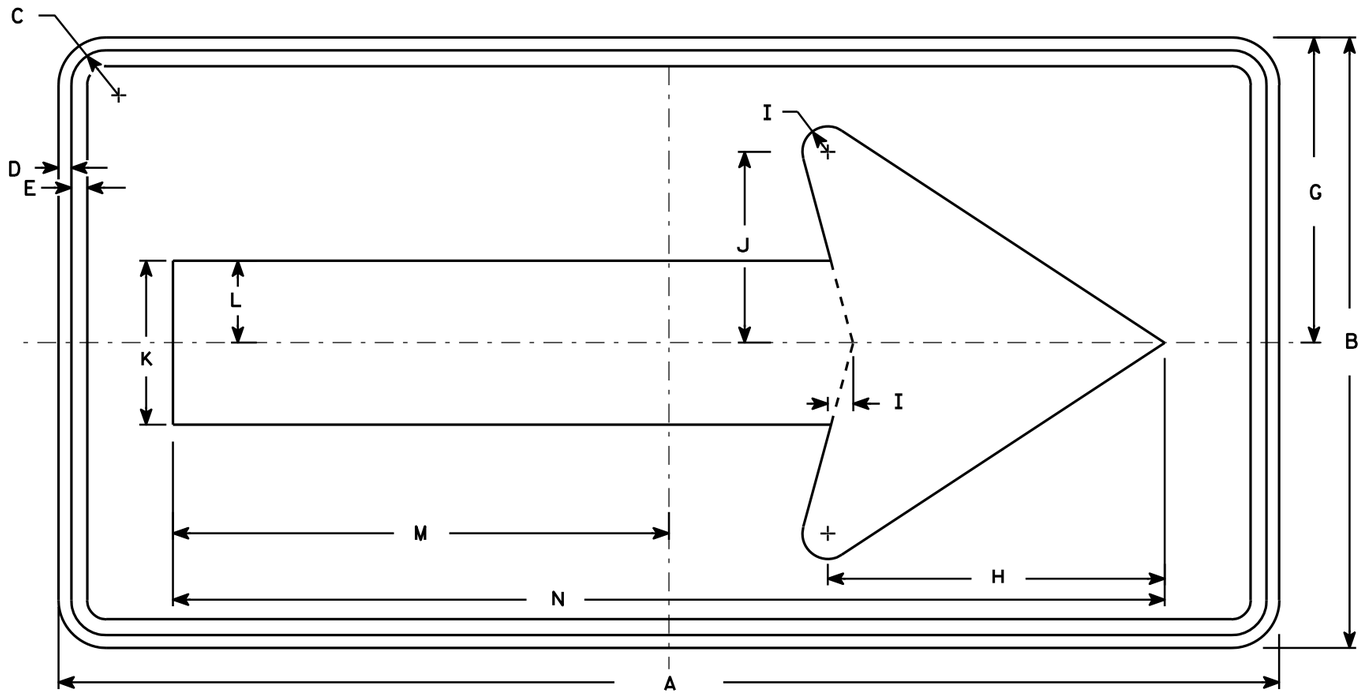
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/1/16 PLATE NO W1-5.9

254

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W15.DGN PLOT DATE : 01-AUG-2016 09:34 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.594294:1.000000



W1-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

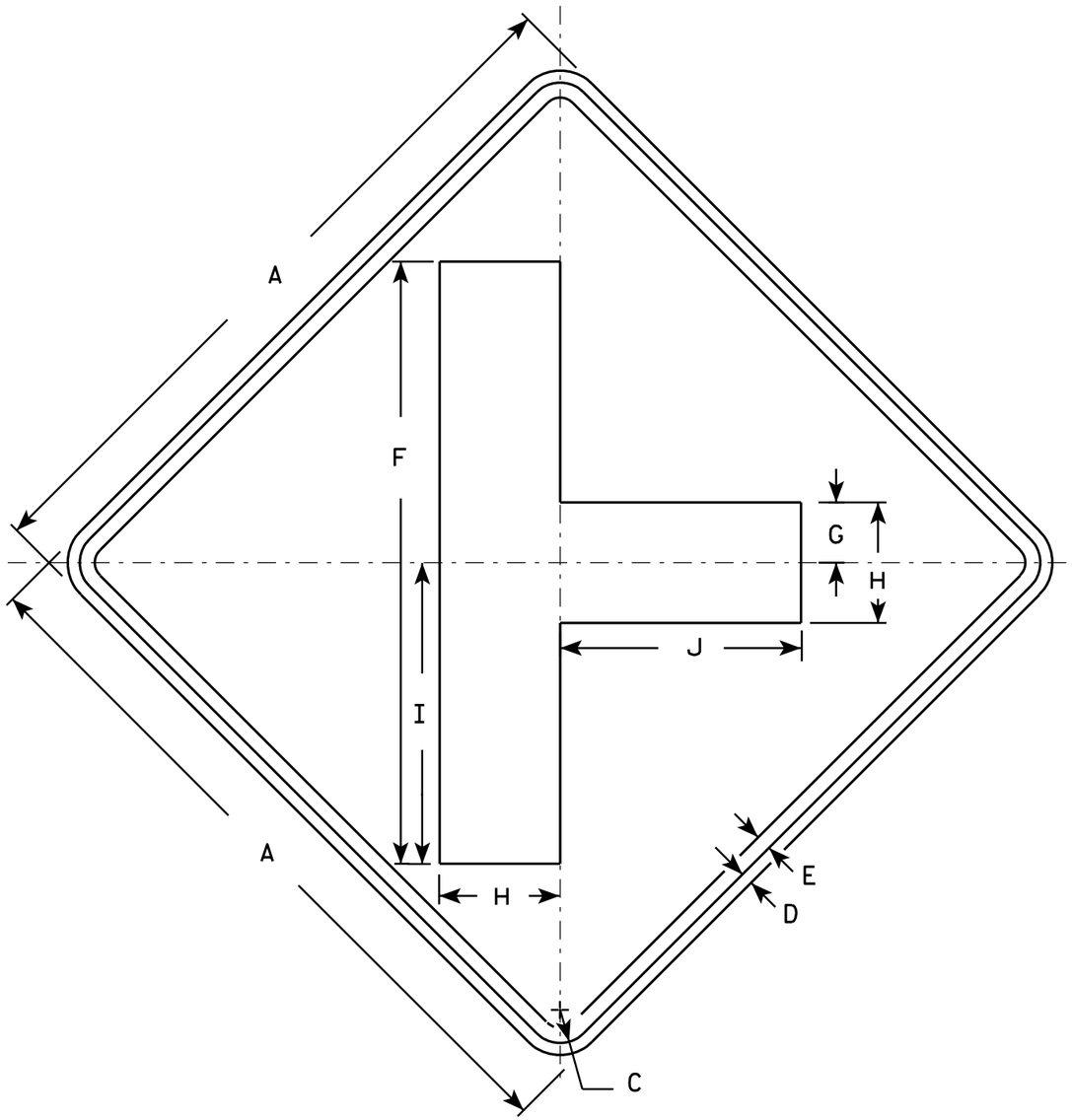
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 255



W2-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

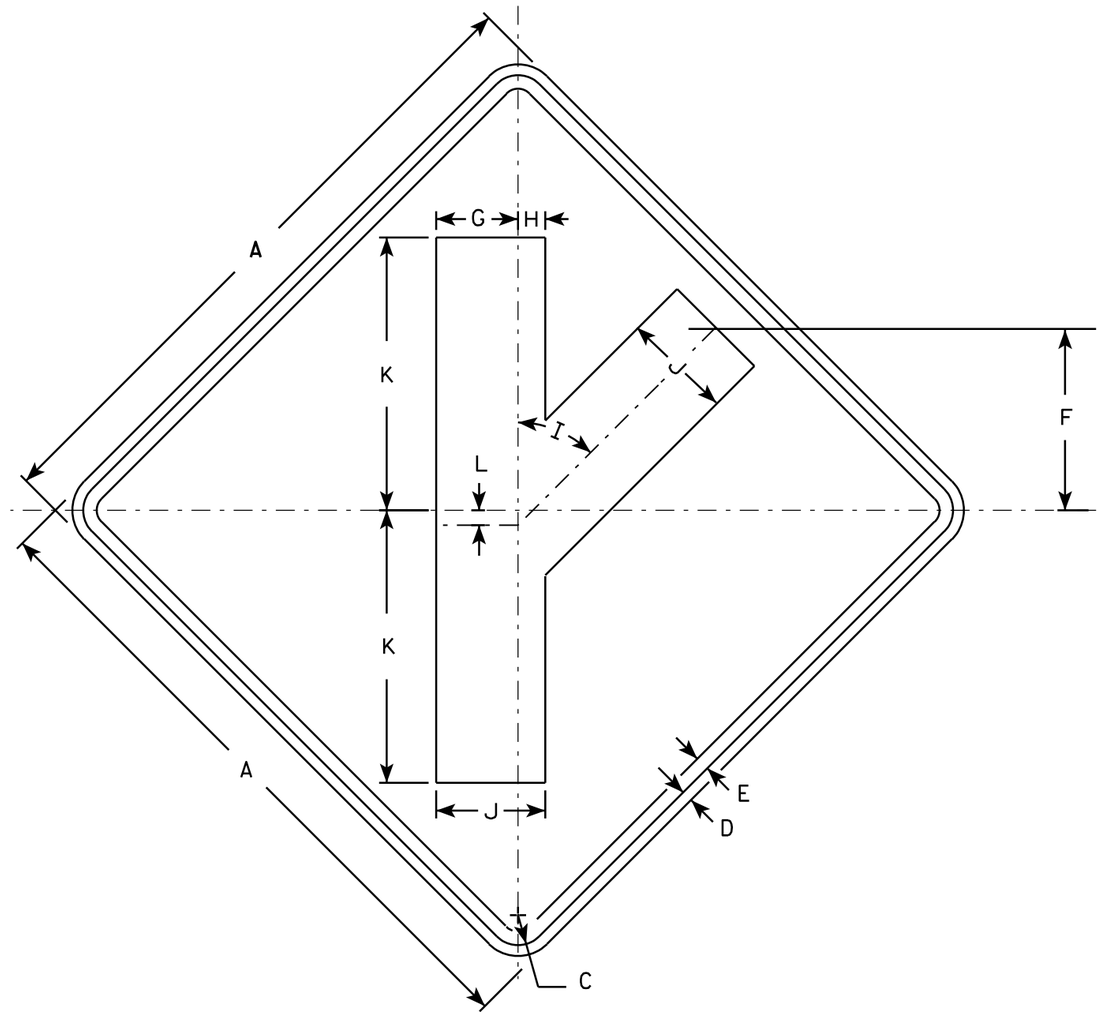
STANDARD SIGN
W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 256 | E



W2-3R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W2-3L is the same as W2-3R except the message reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	6 5/8	3	1	45°	4	10	1/2															4.0
2S	30		1 3/8	1/2	5/8	8 1/4	3 3/4	1 1/4	45°	5	12 1/2	3/4															6.25
2M	30		1 3/8	1/2	5/8	8 1/4	3 3/4	1 1/4	45°	5	12 1/2	3/4															6.25
3	36		1 5/8	5/8	3/4	10	4 1/2	1 1/2	45°	6	15	7/8															9.0
4	48		2 1/4	3/4	1	13 3/8	6	2	45°	8	20	1 1/4															16.0
5																											

STANDARD SIGN
W2-3

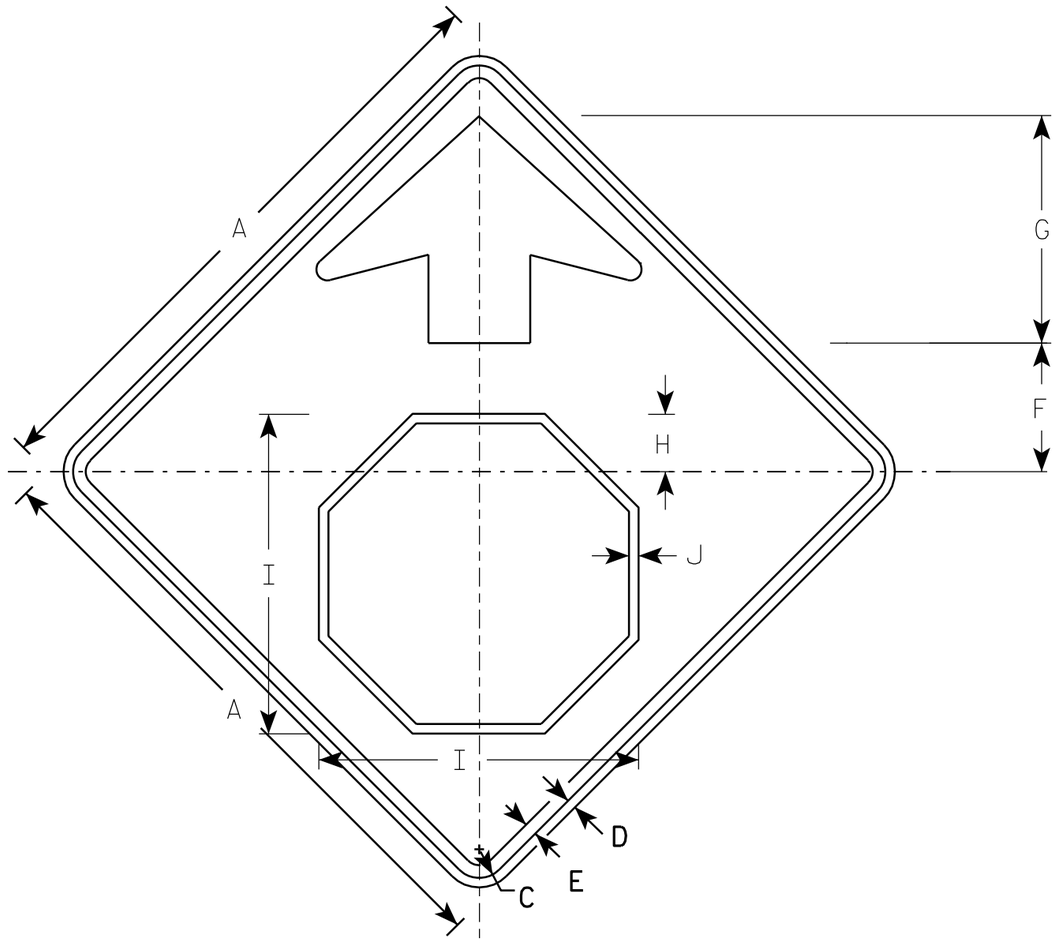
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-3.3

PROJECT NO:

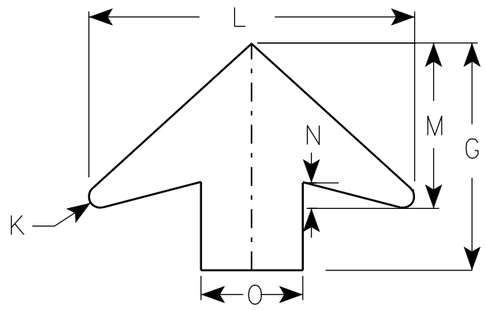
SHEET NO: 257 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

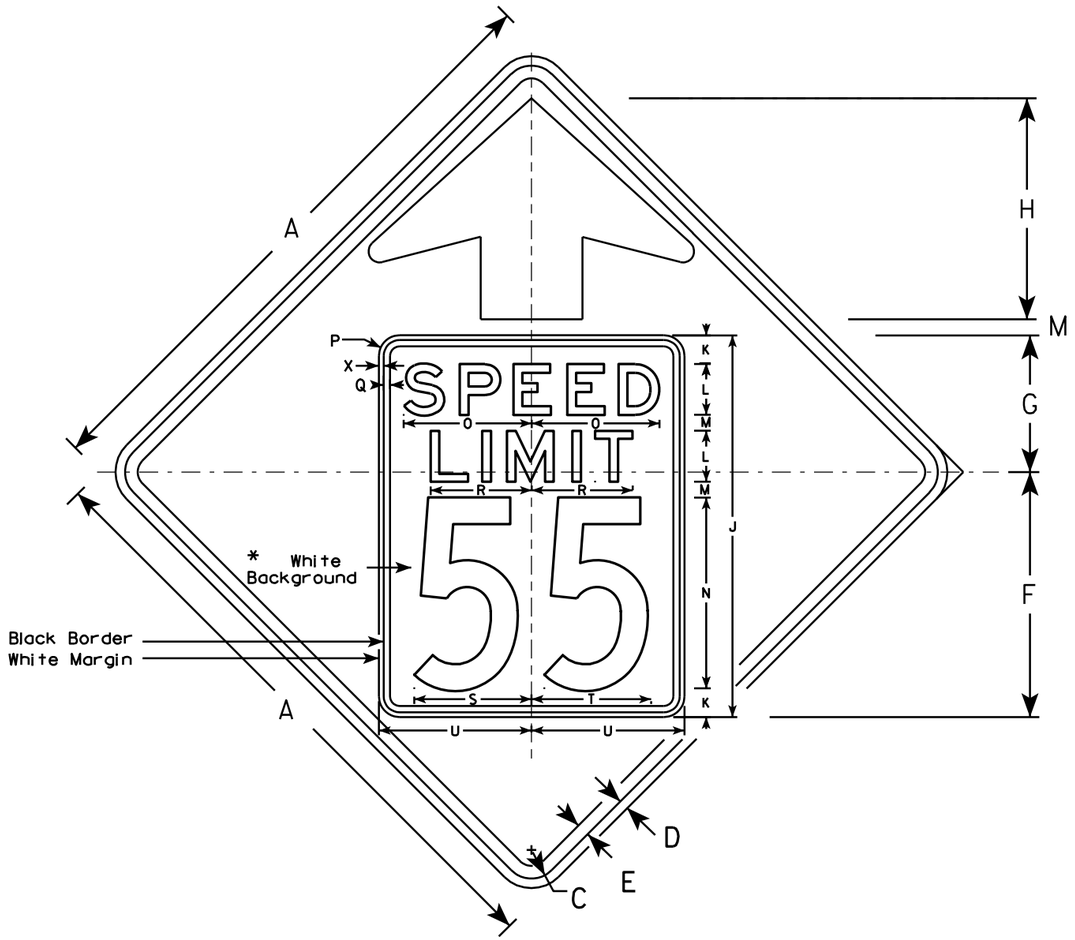
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 258 E

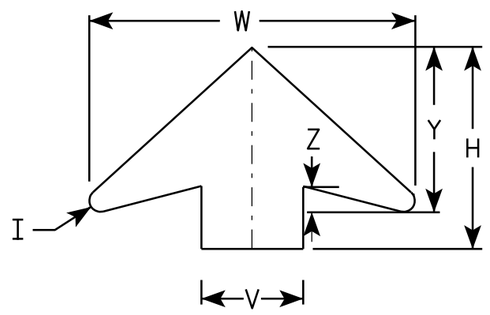


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 259 E



W4-4B

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	12	1 1/8	3/8	1/2	3	2 1/4	1 1/2	12 3/8	5/8	1 1/2	10 3/8	6 1/4	2 1/4	2 1/4	6 1/4											2.5
2M	30	12	1 1/8	3/8	1/2	3	2 1/4	1 1/2	12 3/8	5/8	1 1/2	10 3/8	6 1/4	2 1/4	2 1/4	6 1/4											2.5
3	42	15	1 1/8	3/8	1/2	4	2 5/8	1 3/4	16 7/8	5/8	2 3/8	13 7/8	8 3/8	3	3 1/8	8 3/8											4.17
4	48	18	1 1/8	3/8	1/2	5	3	2	21	5/8	3 1/8	17 1/4	10 1/2	3 5/8	3 7/8	10 3/8											6.0
5																											

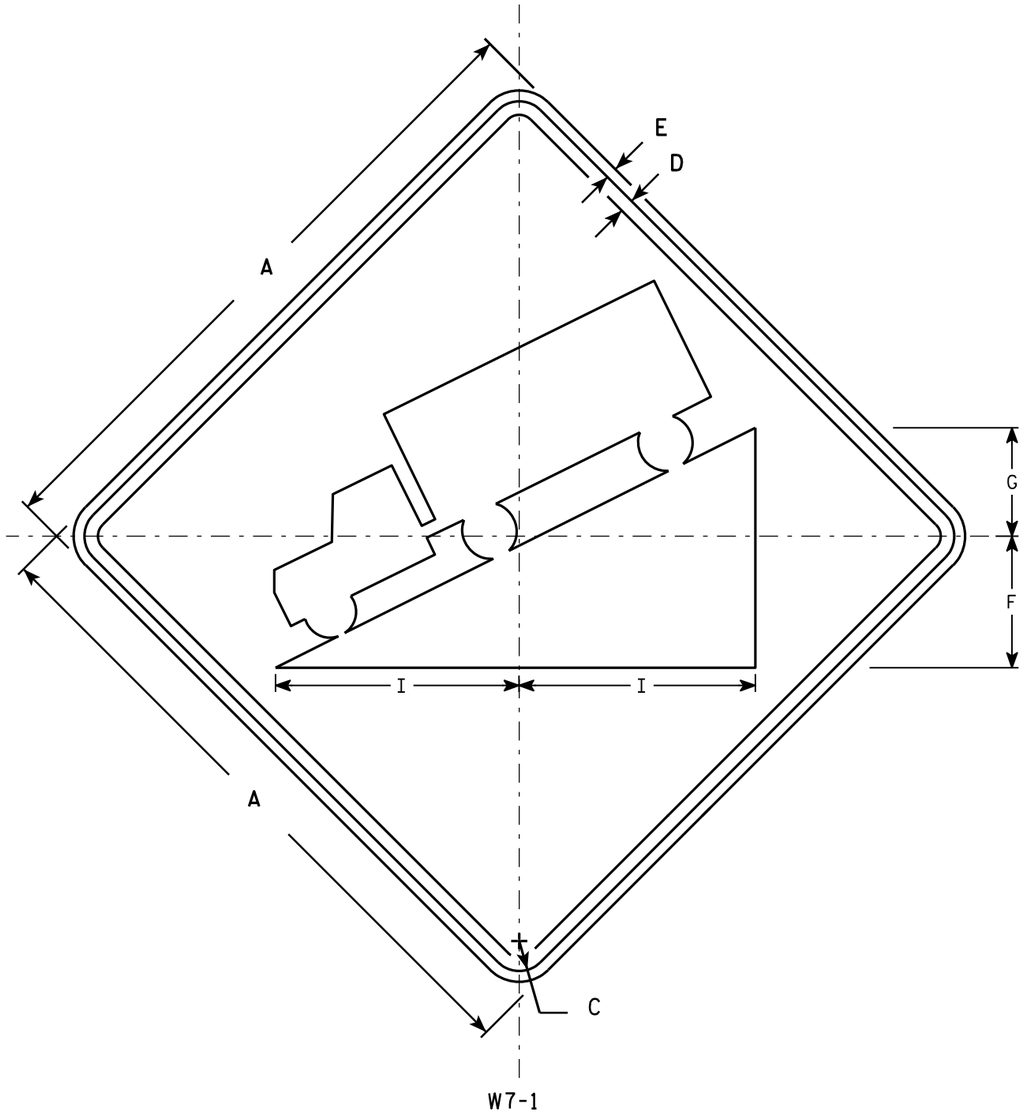
STANDARD SIGN
W4-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 260	E



W7-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	3/8	5	4		8 3/4																		4.0
2S	30		1 3/8	1/2	5/8	6	5		11																		6.25
2M	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
3	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
4	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
5	48		2 1/4	3/4	1	9 3/4	8		17 1/2																		16.0

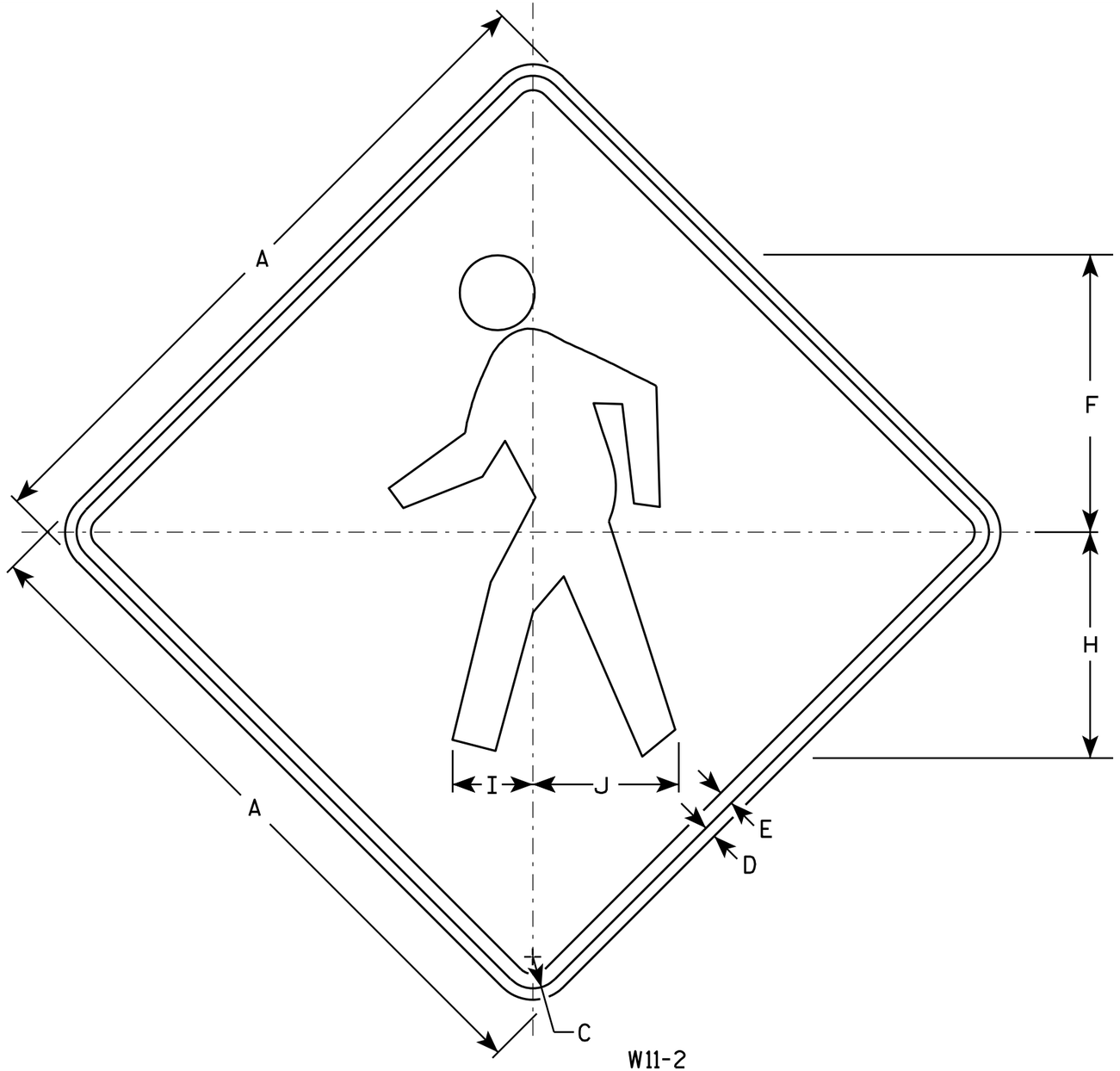
STANDARD SIGN
W7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W7-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 261	E



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

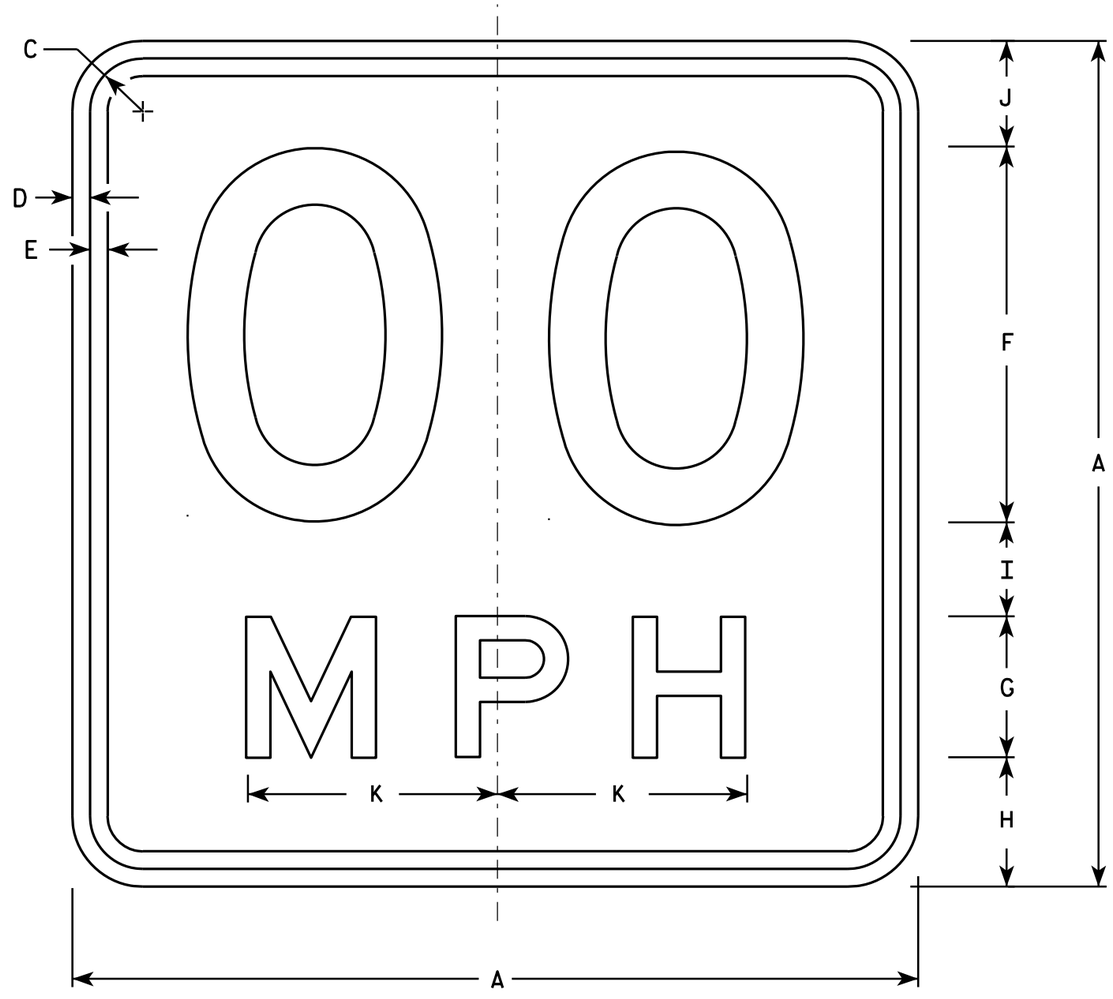
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 262	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

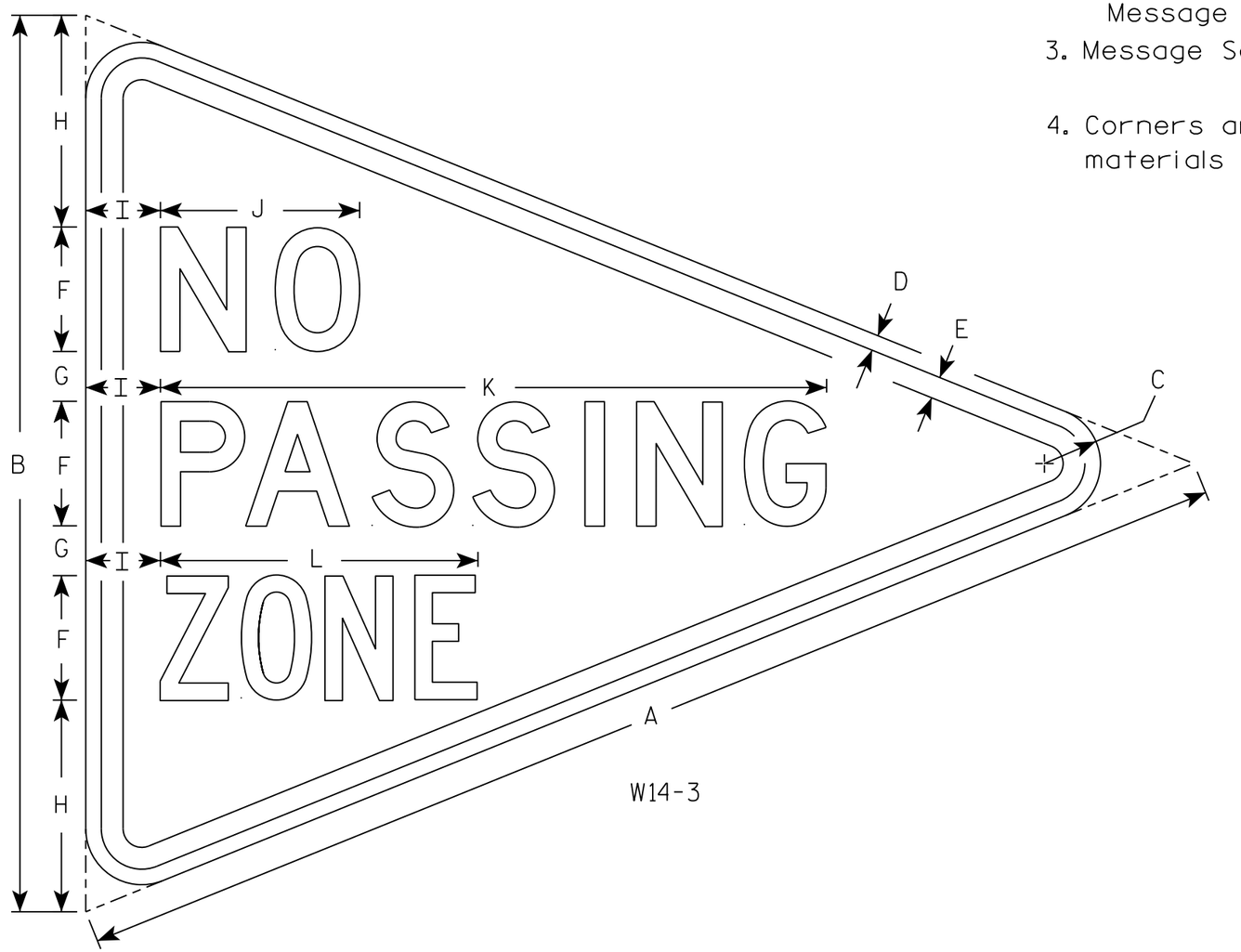
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 263	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

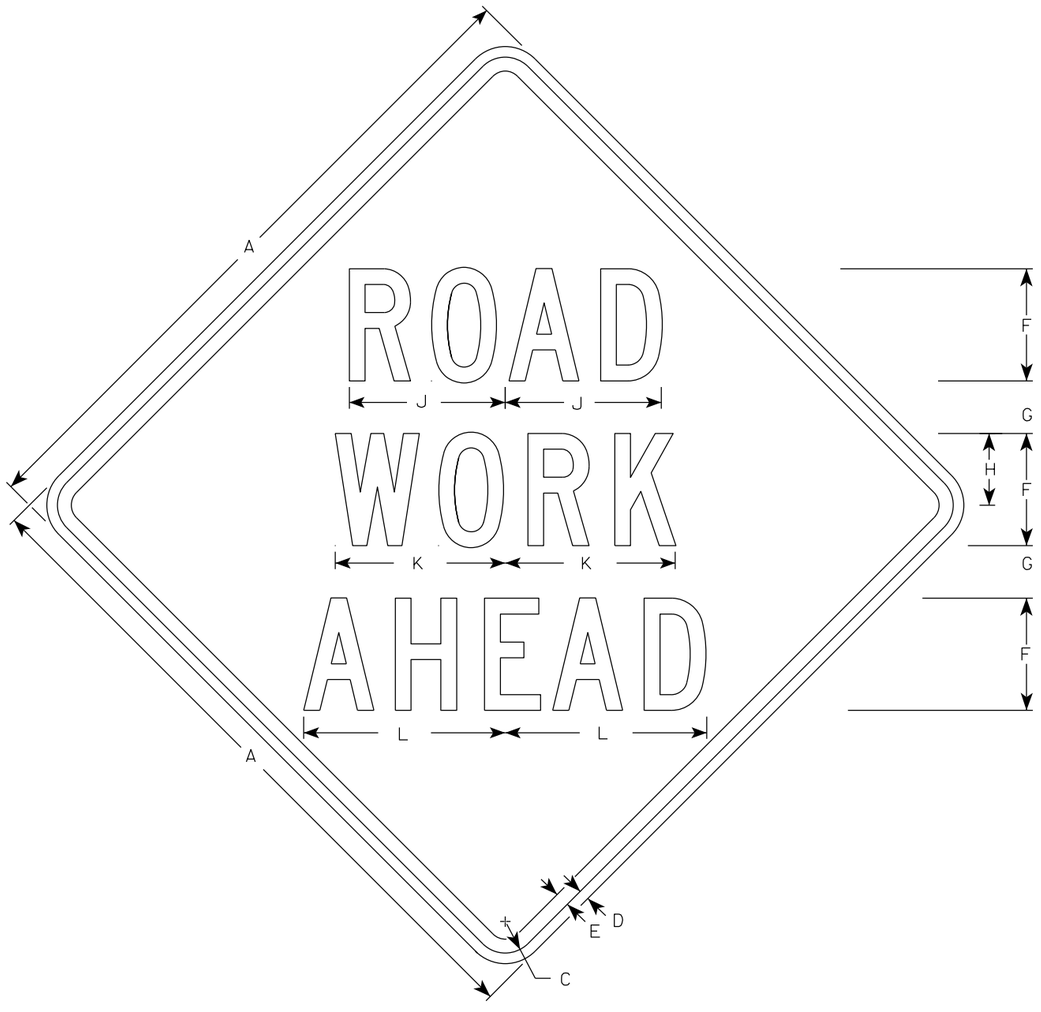
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

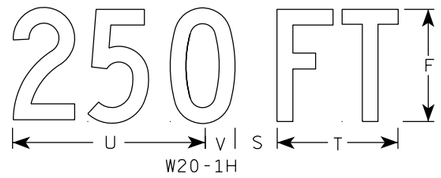
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

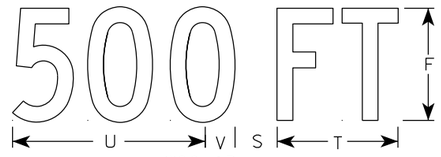
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 264 | E



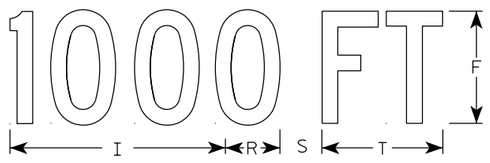
W20-1A



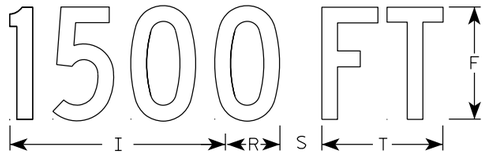
W20-1H



W20-1D



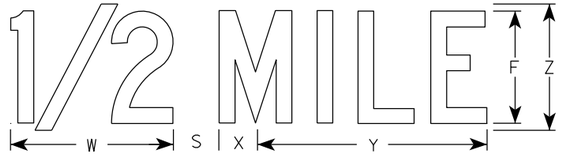
W20-1C



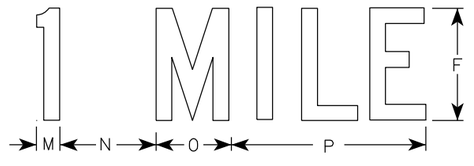
W20-1B

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

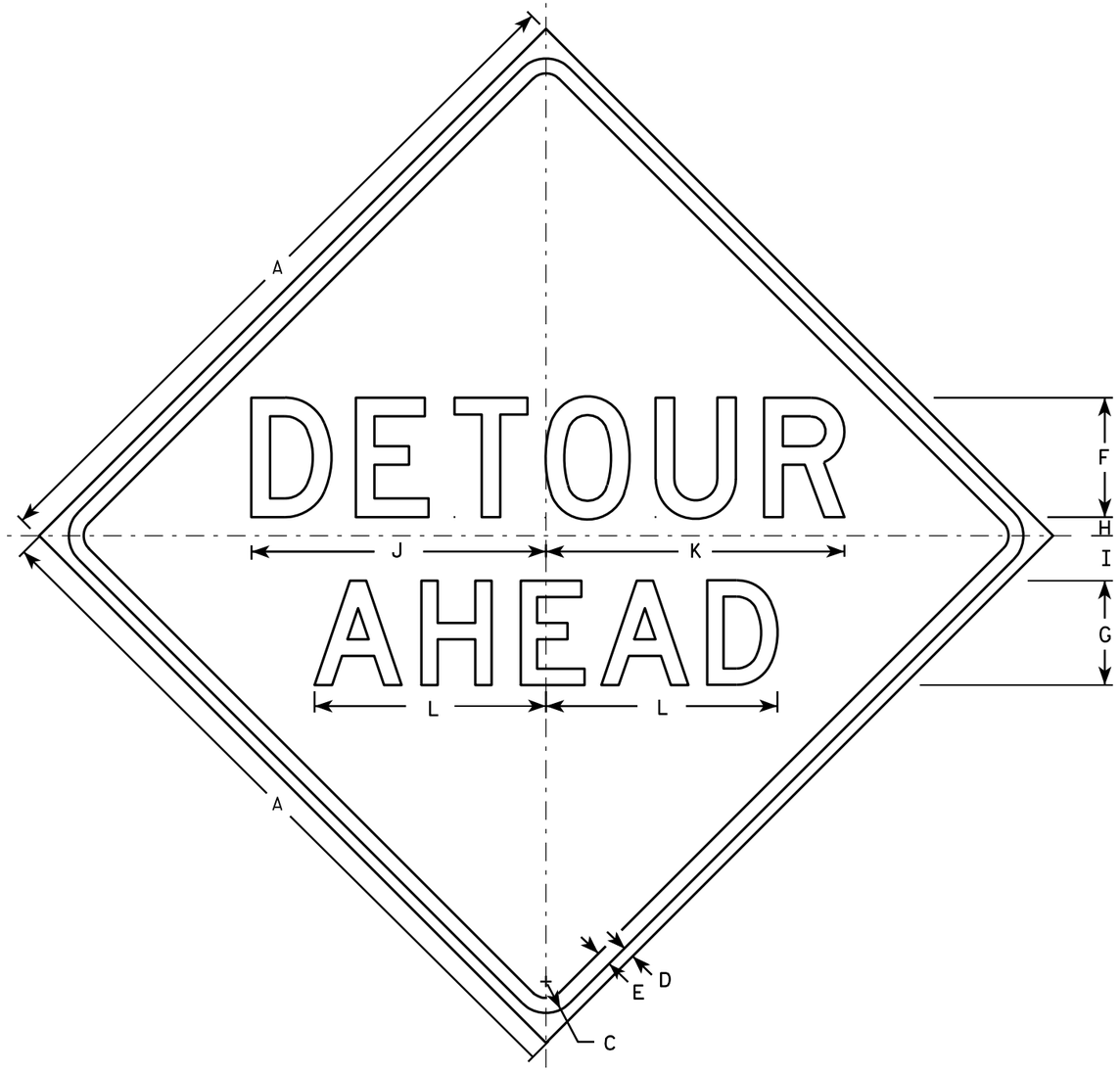
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

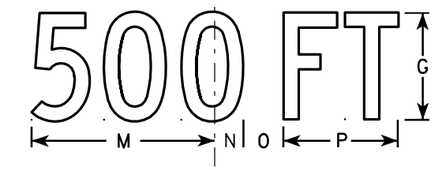
DATE 9/25/19 PLATE NO. W20-1.11

PROJECT NO:

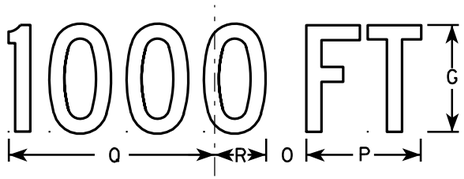
SHEET NO: 265 E



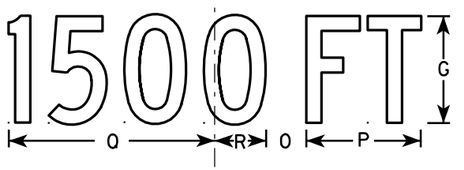
W20-2A



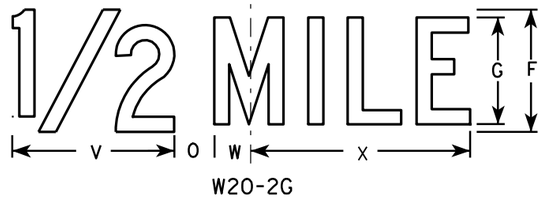
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

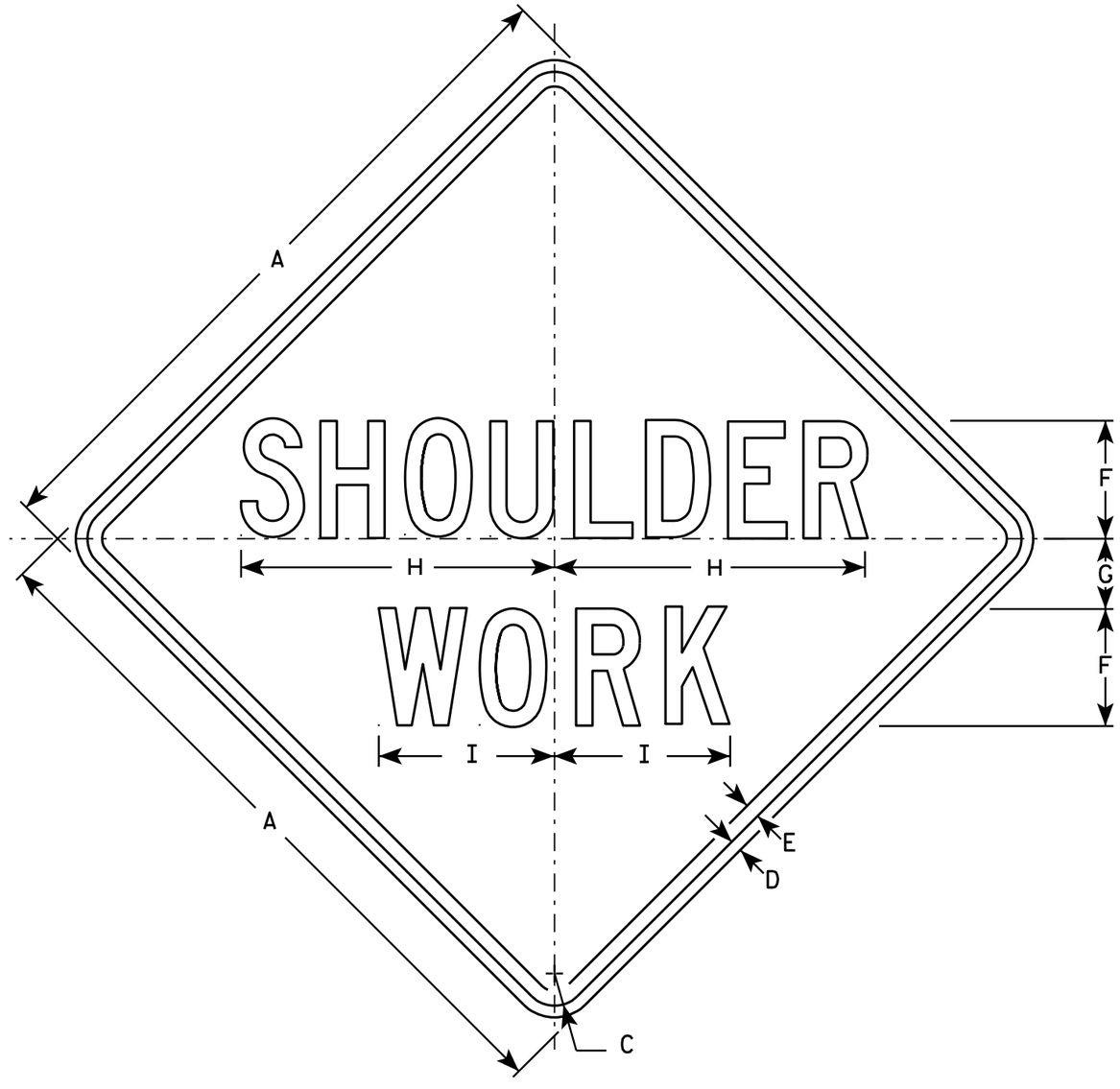
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 266	E



W21-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

STANDARD SIGN
W21-5

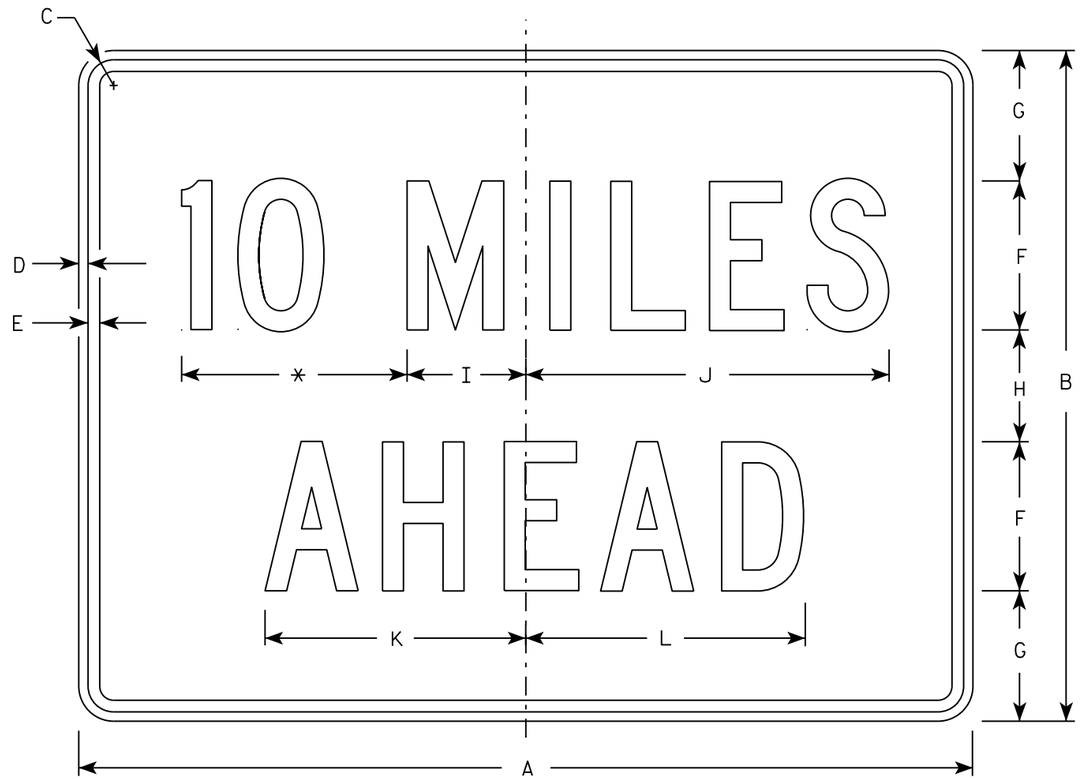
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

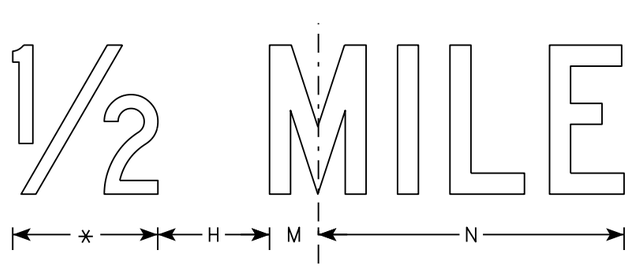
DATE 3/21/11 PLATE NO. W21-5.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 267 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W215.DGN PLOT DATE : 21-MAR-2011 08:01 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.207338:1.000000



W57-52



* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	1/2	4	3 1/2	3	3 1/8	9 3/4	7	7 1/2	1 3/8	8 1/4													3.0
2S	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2M	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
3	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W57-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/21/17 PLATE NO. W57-52.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 268 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W5752.DGN PLOT DATE : 21-MAR-2017 08:50 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 8.131582:1.000000 WISDOT/CADDS SHEET 42

EARTHWORK TABULATION - STH 67 (1510+25 - 1511+25, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1510+25	0.42	0.05	0	0	0	0	0
1510+50	24.87	1.86	12	1	12	1	11
1511+00	14.69	1.94	37	5	48	6	43
1511+25	2.03	0.87	8	2	56	7	49
		TOTAL	56	7			

EARTHWORK TABULATION - STH 67 (1524+00 - 1530+25, LT/RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1524+00	0.00	0.00	0	0	0	0	0
1524+25	0.64	15.00	0	9	0	9	-9
1524+50	3.53	38.07	2	32	2	41	-39
1525+00	17.83	94.35	20	159	22	200	-178
1525+50	14.23	67.97	30	195	52	396	-344
1526+00	6.61	41.63	19	132	71	528	-457
1526+50	4.85	32.13	11	89	82	616	-535
1527+00	0.28	45.68	5	94	86	710	-624
1527+50	2.87	10.60	3	68	89	778	-689
1528+00	29.14	1.81	30	15	119	793	-674
1528+50	27.35	0.80	52	3	171	796	-625
1529+00	15.78	0.00	40	1	211	797	-586
1529+50	2.18	2.81	17	3	228	800	-573
1530+00	3.21	2.44	5	6	233	807	-574
1530+25	0.31	1.59	2	2	234	809	-575
		TOTAL	234	809			

EARTHWORK TABULATION - STH 67 (1545+00 - 1550+00, LT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1545+00	0.06	0.76	0	0	0	0	0
1545+50	5.25	0.83	5	2	5	2	3
1546+00	9.60	1.73	14	3	19	5	14
1546+50	23.29	2.03	30	5	49	10	40
1547+00	33.47	1.64	53	4	102	14	88
1547+50	39.87	0.33	68	2	170	16	153
1548+00	62.58	0.07	95	0	264	17	248
1548+50	52.96	0.23	107	0	371	17	354
1549+00	34.93	0.07	81	0	453	18	435
1549+50	28.25	0.93	59	1	511	19	493
1550+00	5.26	0.47	31	2	542	20	522
		TOTAL	542	20			

EARTHWORK TABULATION - STH 67 (1559+75 - 1563+50, LT/RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1559+75	0.00	7.41	0	0	0	0	0
1560+00	0.00	8.30	0	9	0	9	-9
1560+50	0.00	11.14	0	23	0	33	-33
1561+00	0.00	9.30	0	25	0	57	-57
1561+50	0.00	6.81	0	19	0	77	-77
1562+00	13.24	0.16	12	8	12	85	-73
1562+50	19.62	1.71	30	2	43	87	-45
1563+00	13.99	0.00	31	2	74	90	-16
1563+50	10.82	0.00	23	0	97	90	7
		TOTAL	97	90			

EARTHWORK TABULATION - STH 67 (1565+00 - 1571+00, LT/RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1565+00	5.72	0.48	0	0	0	0	0
1565+50	17.22	1.03	21	2	21	2	19
1566+00	32.29	0.95	46	2	67	4	63
1566+50	8.27	40.45	38	50	105	54	51
1567+00	9.27	123.99	16	198	121	252	-131
1567+50	0.25	52.50	9	212	130	464	-335
1567+75	0.00	24.71	0	46	130	511	-381
1568+00	0.00	8.31	0	20	130	531	-401
1568+50	0.00	3.62	0	14	130	545	-415
1569+00	9.63	3.41	9	8	139	554	-415
1569+50	40.73	2.98	47	8	185	561	-376
1570+00	98.96	3.37	129	8	315	569	-254
1570+50	134.46	2.01	216	6	531	575	-45
1571+00	8.61	3.51	132	7	663	582	81
		TOTAL	663	582			

EARTHWORK TABULATION - STH 67 (1602+00 - 1605+00, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1602+00	0.00	9.94	0	0	0	0	0
1602+50	0.00	24.82	0	42	0	42	-42
1603+00	0.00	31.27	0	68	0	109	-109
1603+50	0.00	100.49	0	159	0	268	-268
1604+00	0.00	101.92	0	244	0	512	-512
1604+50	0.00	65.59	0	202	0	713	-713
1605+00	2.67	3.58	2	83	2	796	-794
		TOTAL	2	796			

EARTHWORK TABULATION - STH 67 (1607+75 - 1609+50, LT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1607+75	0.67	0.96	0	0	0	0	0
1608+00	3.92	1.77	2	2	2	2	0
1608+50	13.51	7.78	16	11	18	13	5
1609+00	7.11	0.52	19	10	37	23	14
1609+50	0.00	0.81	7	2	44	25	19
		TOTAL	44	25			

EARTHWORK TABULATION - STH 67 (1613+25 - 1615+75, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1613+25	0.00	0.54	0	0	0	0	0
1613+50	0.00	1.67	0	1	0	1	-1
1614+00	0.00	52.93	0	66	0	67	-67
1614+50	0.00	46.69	0	120	0	187	-187
1615+00	0.00	16.75	0	76	0	263	-263
1615+50	0.00	30.65	0	57	0	320	-320
1615+75	0.00	3.26	0	20	0	341	-341
		TOTAL	0	341			

EARTHWORK TABULATION - STH 67 (1653+25 - 1657+00, LT/RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1653+25	2.48	3.81	0	0	0	0	0
1653+50	1.58	3.58	2	4	2	4	-3
1654+00	21.97	6.78	22	12	24	17	7
1654+50	24.19	2.32	43	11	66	28	39
1655+00	25.09	0.56	46	3	112	31	81
1655+50	24.87	0.61	46	1	158	33	126
1656+00	24.55	2.07	46	3	204	36	168
1656+50	29.43	13.67	50	19	254	55	199
1657+00	3.09	0.23	30	17	284	72	212
		TOTAL	284	72			

EARTHWORK TABULATION - STH 67 (1672+50 - 1676+95, LT/RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1672+50	1.97	0.31	0	0	0	0	0
1673+00	15.31	1.92	16	3	16	3	13
1673+50	20.00	1.03	33	4	49	6	42
1674+00	21.84	0.00	39	1	87	7	80
1674+50	28.80	0.00	47	0	134	7	127
1675+00	11.55	0.13	37	0	172	8	164
1675+50	10.23	0.00	20	0	192	8	184
1676+00	10.63	0.00	19	0	211	8	203
1676+50	11.29	0.00	20	0	231	8	224
1676+95	7.08	1.22	15	1	247	9	238
		TOTAL	247	9			

EARTHWORK TABULATION - STH 67 (1678+77 - 1681+25, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1678+77	4.78	0.83	0	0	0	0	0
1679+00	1.62	29.42	3	17	3	17	-14
1679+50	0.00	45.93	2	91	4	107	-103
1680+00	0.71	65.32	1	134	5	241	-236
1680+50	0.00	50.52	1	139	6	381	-375
1681+00	0.00	10.59	0	74	6	454	-449
1681+25	0.00	4.76	0	9	6	464	-458
		TOTAL	6	464			

EARTHWORK TABULATION - STH 67 (1776+65 - 1780+17, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1776+65	0.38	0.74	0	0	0	0	0
1777+00	0.00	0.13	0	1	0	1	0
1777+35	0.18	4.04	0	4	0	4	-4
1777+50	0.13	2.24	0	2	0	7	-6
1777+60	0.11	0.64	0	1	0	7	-7
1777+85	0.19	0.19	0	0	1	8	-7
1778+00	0.28	0.11	0	0	1	8	-7
1778+50	0.05	0.20	0	0	1	8	-7
1779+00	0.03	0.45	0	1	1	9	-8
1779+50	0.02	0.67	0	1	1	10	-9
1779+53	0.08	3.16	0	0	1	11	-9
1779+78	0.02	4.99	0	5	1	16	-14
1780+00	0.00	8.25	0	7	1	23	-21
1780+02	0.06	8.04	0	1	1	23	-22
1780+17	0.45	0.21	0	3	1	26	-25
		TOTAL	1	26			

EARTHWORK TABULATION - STH 67 (1812+30 - 1820+14, LT/RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1812+30	0.00	0.31	0	0	0	0	0
1812+50	0.23	0.30	0	0	0	0	0
1812+66	1.10	3.10	0	1	0	2	-1
1813+00	0.47	1.37	1	4	1	5	-4
1813+02	0.49	1.22	0	0	2	5	-4
1813+28	0.21	2.43	0	2	2	8	-6
1813+37	1.27	1.17	0	1	2	8	-6
1813+50	0.44	1.18	0	1	3	9	-7
1813+53	0.45	1.02	0	0	3	9	-7
1813+61	0.39	0.98	0	0	3	10	-7
1813+86	0.12	1.83	0	2	3	11	-9
1814+00	0.00	2.35	0	1	3	13	-10
1814+50	0.03	1.84	0	5	3	18	-15
1815+00	0.17	1.91	0	5	3	22	-19
1815+50	0.25	0.85	0	3	4	26	-22
1816+00	1.08	5.61	1	8	5	33	-29
1816+49	0.00	0.40	1	7	6	41	-35
1816+50	0.02	0.47	0	0	6	41	-35
1816+74	0.49	23.93	0	14	6	55	-49
1816+99	0.11	4.14	0	17	6	72	-65
1817+00	0.07	3.77	0	0	6	72	-65
1817+29	0.21	1.42	0	4	6	75	-69
1817+50	0.00	0.28	0	1	7	76	-70
1818+00	0.25	0.13	0	0	7	77	-70
1818+50	0.46	0.38	1	1	7	77	-70
1819+00	0.41	0.00	1	0	8	78	-70
1819+45	0.00	0.00	0	0	9	78	-69
1819+50	-0.12	0.00	0	0	9	78	-69
1819+70	0.22	0.00	0	0	9	78	-69
1819+95	1.97	0.00	1	0	10	78	-68
1820+00	2.57	0.00	0	0	10	78	-68
1820+14	4.31	0.00	2	0	12	78	-66
		TOTAL	12	78			

EARTHWORK TABULATION - STH 67 (1822+25 - 1825+72, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1822+25	0.00	0.65	0	0	0	0	0
1822+34	0.00	0.12	0	0	0	0	0
1822+42	0.00	0.03	0	0	0	0	0
1822+50	0.00	0.6	0	0	0	0	0
1822+66	0.00	1.12	0	1	0	1	-1
1822+91	0.00	0.62	0	1	0	2	-2
1823+00	0.00	0.4	0	0	0	2	-2
1823+50	0.00	0.16	0	1	0	3	-3
1824+00	0.00	1.64	0	2	0	5	-5
1824+50	0.00	1.28	0	4	0	9	-9
1824+70	0.20	0.56	0	1	0	9	-9
1824+95	0.00	1.1	0	1	0	10	-10
1825+00	0.00	1.79	0	0	0	11	-11
1825+19	0.57	0.19	0	1	0	12	-11
1825+34	8.90	0	3	0	3	12	-9
1825+50	6.25	0	4	0	7	12	-4
1825+72	11.97	0	7	0	15	12	3
		TOTAL	15	12			

EARTHWORK TABULATION - STH 67 (1830+00 - 1841+60, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1830+00	0.00	0.81	0	0	0	0	0
1830+35	0.00	11.77	0	11	0	11	-11
1830+50	0.00	6.77	0	7	0	17	-17
1830+60	0.21	0.44	0	2	0	19	-19
1830+85	0.00	0.24	0	0	0	19	-19
1831+00	0.00	0.28	0	0	0	20	-19
1831+50	0.00	0.97	0	2	0	21	-21
1832+00	0.00	1.36	0	3	0	24	-24
1832+50	0.00	16.48	0	21	0	45	-45
1833+00	0.00	1.39	0	22	0	67	-67
1833+50	0.00	2.30	0	4	0	71	-71
1834+00	0.00	0.64	0	4	0	75	-75
1834+50	0.77	0.11	1	1	1	76	-75
1835+00	0.00	0.41	1	1	2	76	-75
1835+50	0.00	0.26	0	1	2	77	-76
1836+00	0.65	0.01	1	0	2	78	-75
1836+50	0.00	0.16	1	0	3	78	-75
1837+00	0.00	0.03	0	0	3	78	-75
1837+50	0.00	0.05	0	0	3	78	-75
1838+00	0.14	0.05	0	0	3	78	-75
1838+50	0.81	0.00	1	0	4	78	-75
1839+00	0.50	0.01	1	0	5	78	-73
1839+50	0.25	0.03	1	0	6	78	-73
1840+00	0.00	0.17	0	0	6	79	-73
1840+50	0.26	0.03	0	0	6	79	-73
1840+67	0.45	0.01	0	0	6	79	-72
1840+92	0.00	0.60	0	0	7	79	-73
1841+00	0.00	0.55	0	0	7	79	-73
1841+17	0.00	0.63	0	0	7	80	-73
1841+50	0.00	0.48	0	1	7	81	-74
1841+60	0.09	0.14	0	0	7	81	-74
		TOTAL	7	81			

EARTHWORK TABULATION - STH 67 (1848+37 - 1849+40, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1848+37	0.00	11.24	0	0	0	0	0
1848+50	0.00	15.30	0	8	0	8	-8
1848+87	0.00	28.73	0	39	0	48	-48
1849+00	0.00	13.93	0	13	0	61	-61
1849+11	0.00	7.34	0	6	0	67	-67
1849+34	0.36	0.89	0	5	0	71	-71
1849+40	0.11	0.05	0	0	0	71	-71
		TOTAL	0	71			

EARTHWORK TABULATION - STH 67 (1850+80 - 1862+50, LT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1850+84	9.64	0.00	0	0	0	0	0
1851+00	4.60	0.00	4	0	4	0	4
1851+50	0.00	0.03	4	0	8	0	8
1852+00	0.00	4.92	0	6	8	6	2
1852+50	0.14	1.25	0	7	9	13	-5
1853+00	0.00	0.45	0	2	9	15	-7
1853+50	0.13	0.61	0	1	9	17	-8
1854+00	0.00	0.70	0	2	9	18	-9
1854+50	7.30	1.50	7	3	16	21	-5
1855+00	8.63	2.23	15	4	30	25	5
1855+50	0.00	2.07	8	5	38	31	8
1856+00	0.15	0.21	0	3	39	33	5
1856+50	0.05	0.05	0	0	39	34	5
1857+00	0.00	0.48	0	1	39	34	4
1857+50	0.00	0.32	0	1	39	35	4
1858+00	1.18	0.01	1	0	40	36	4
1858+50	0.00	0.33	1	0	41	36	5
1859+00	0.00	0.79	0	1	41	37	4
1859+50	0.14	0.10	0	1	41	39	3
1860+00	0.00	0.25	0	0	41	39	2
1860+50	0.00	0.01	0	0	41	39	2
1861+00	0.00	0.13	0	0	41	39	2
1861+44	0.00	4.23	0	5	41	44	-3
1861+69	0.00	6.21	0	6	41	50	-9
1861+94	0.00	10.37	0	10	41	60	-19
1862+00	0.00	6.42	0	2	41	63	-21
1862+50	0.00	3.33	0	12	41	74	-33
		TOTAL	41	74			

EARTHWORK TABULATION - STH 67 (1869+00 - 1870+50, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1869+00	0.00	6.24	0	0	0	0	0
1869+50	0.00	33.23	0	48	0	48	-48
1870+00	0.00	20.81	0	65	0	113	-113
1870+50	0.00	4.55	0	31	0	143	-143
		TOTAL	0	143			

EARTHWORK TABULATION - STH 67 (1889+60 - 1906+85, LT/RT) EXPANSION FACTOR = 1.3

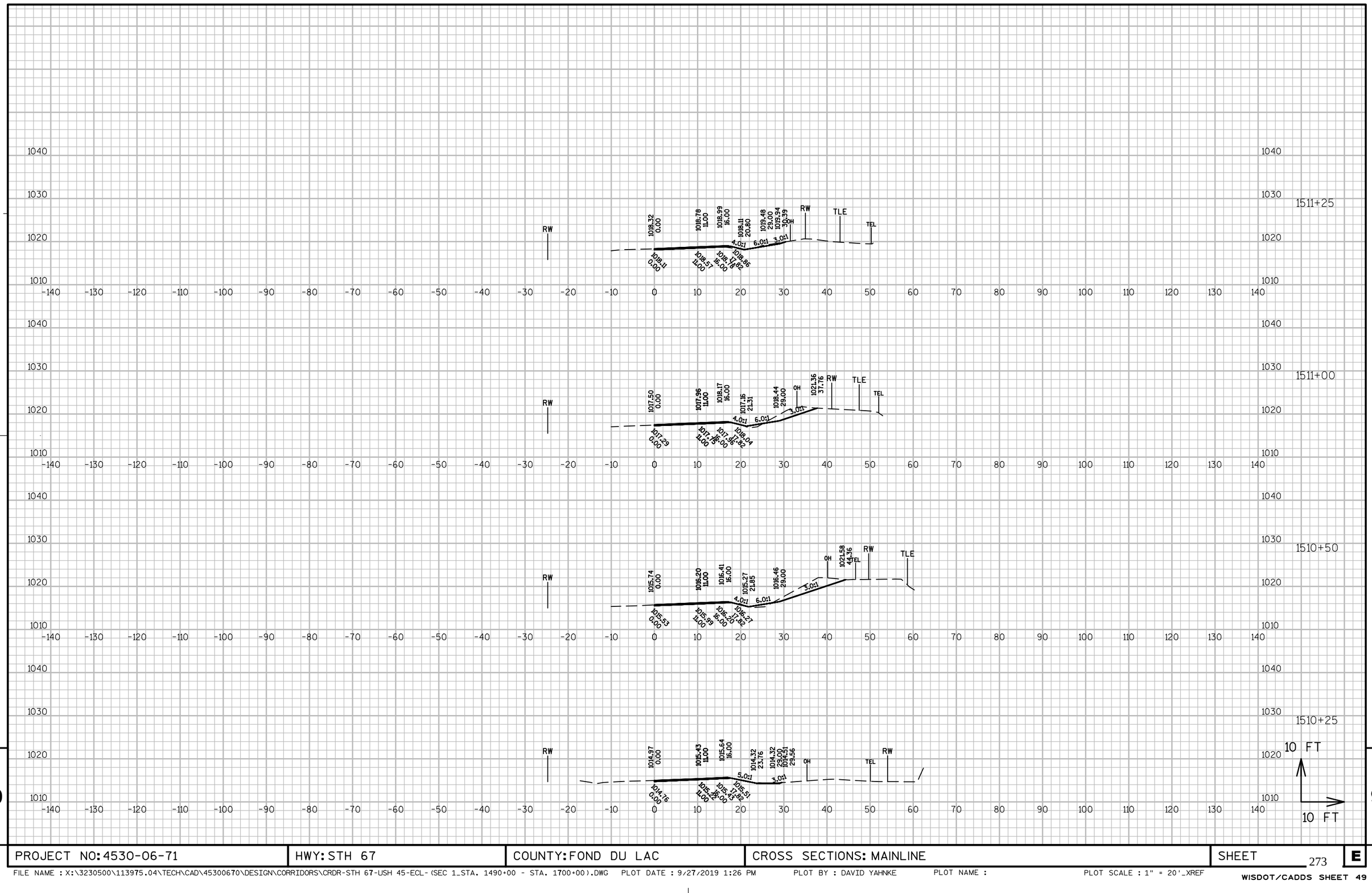
STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1889+60	0.00	0.17	0	0	0	0	0
1890+00	0.00	0.37	0	1	0	1	-1
1890+35	0.13	1.06	0	1	0	2	-2
1890+60	0.00	1.51	0	2	0	3	-3
1890+85	0.00	1.42	0	2	0	5	-5
1891+00	0.00	0.85	0	1	0	6	-6
1891+50	0.00	0.53	0	2	0	8	-7
1892+00	0.00	0.63	0	1	0	9	-9
1892+50	0.00	1.21	0	2	0	11	-11
1893+00	0.00	0.74	0	2	0	13	-13
1893+50	0.00	0.46	0	1	0	15	-15
1894+00	0.00	0.48	0	1	0	16	-16
1894+50	0.03	0.11	0	1	0	17	-17
1895+00	0.92	0.00	1	0	1	17	-16
1895+50	0.12	0.38	1	0	2	17	-15
1896+00	0.00	0.24	0	1	2	18	-16
1896+50	0.00	0.34	0	1	2	19	-17
1897+00	0.00	2.03	0	3	2	22	-20
1897+50	0.00	25.01	0	33	2	54	-52
1898+00	0.00	0.45	0	31	2	85	-83
1898+50	0.13	0.33	0	1	2	86	-84
1899+00	0.10	0.14	0	1	2	86	-84
1899+04	0.06	0.64	0	0	2	86	-84
1899+25	0.00	2.99	0	2	2	88	-86
1899+50	0.00	2.18	0	3	2	91	-89
1899+75	0.00	0.79	0	2	2	93	-91
1900+00	0.16	1.57	0	1	3	95	-92
1900+50	0.00	0.37	0	2	3	97	-94
1901+00	0.00	15.05	0	19	3	115	-113
1901+50	0.06	19.39	0	41	3	157	-154
1902+00	1.33	0.26	1	24	4	181	-177
1902+44	0.43	0.52	1	1	5	181	-176
1902+50	0.83	0.58	0	0	6	182	-176
1902+69	0.00	6.39	0	3	6	185	-179
1902+94	0.00	31.80	0	23	6	208	-202
1903+00	0.00	16.75	0	7	6	215	-209
1903+50	0.00	5.85	0	27	6	242	-236
1904+00	0.00	0.15	0	7	6	249	-243
1904+50	0.00	7.49	0	9	6	258	-252
1905+00	0.12	1.80	0	11	6	270	-264
1905+50	0.00	2.15	0	5	6	274	-268
1905+64	0.00	2.15	0	1	6	276	-270
1905+89	0.00	3.90	0	4	6	279	-273
1906+00	0.00	5.48	0	2	6	282	-276
1906+13	0.00	3.63	0	3	6	285	-279
1906+50	0.00	2.30	0	5	6	290	-284
1906+85	0.00	0.00	0	2	6	292	-286
		TOTAL	6	292			

EARTHWORK TABULATION - STH 67 (1915+12 - 1921+33, LT/RT) EXPANSION FACTOR = 1.3

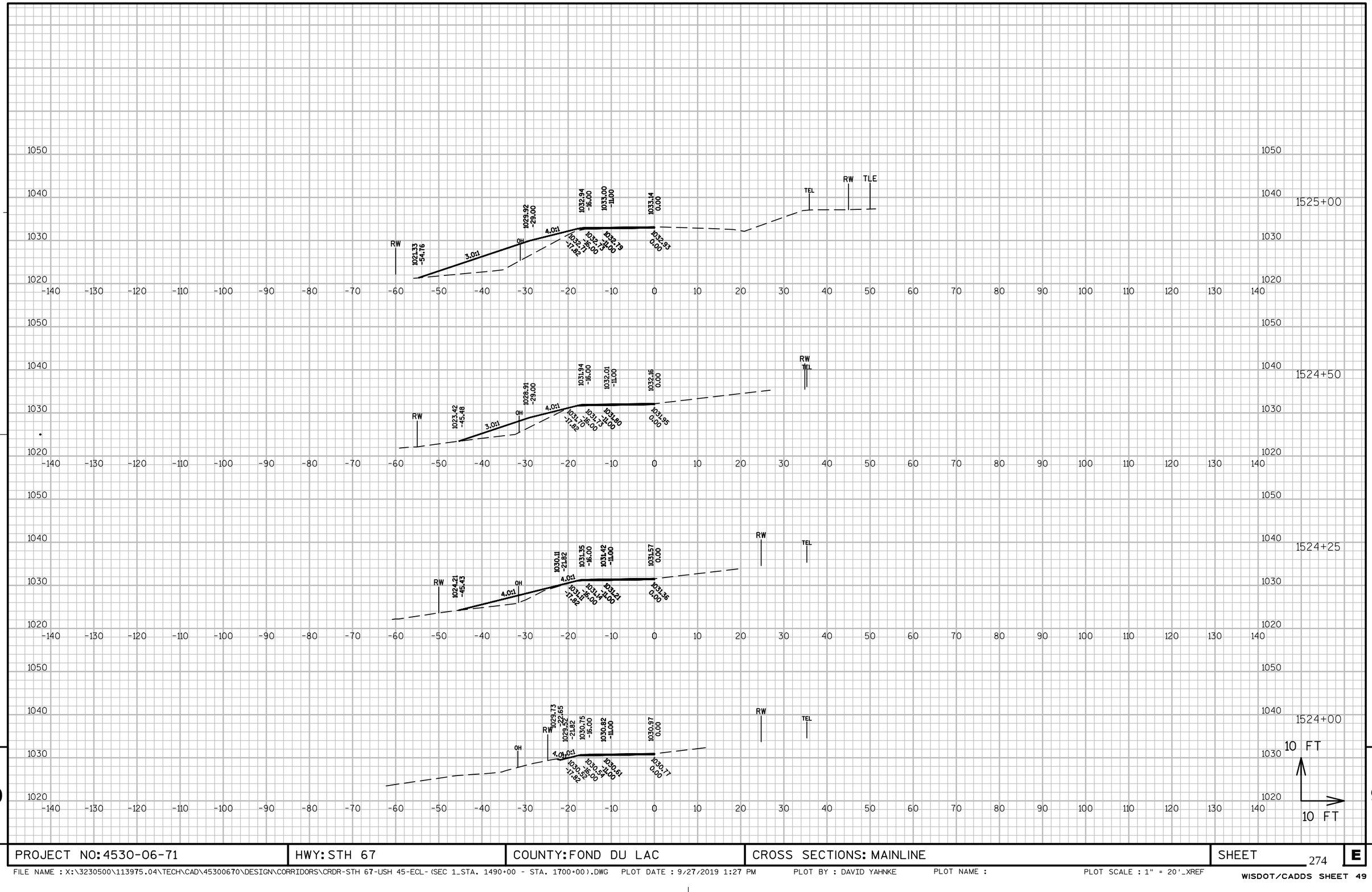
STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1914+00	0.00	7.21	0	0	0	0	0
1914+50	0.00	6.35	0	16	0	16	-16
1915+00	0.00	21.20	0	33	0	49	-49
1915+50	0.27	31.67	0	64	0	113	-113
1915+67	0.00	22.04	0	22	0	135	-135
1915+88	15.36	9.85	6	16	6	151	-145
1915+91	9.44	7.75	1	1	8	152	-145
1916+00	24.64	3.45	6	2	13	155	-142
1916+12	40.15	0.54	14	1	28	156	-128
1916+16	42.43	0.35	6	0	34	156	-122
1916+37	55.68	0.13	38	0	72	156	-84
1916+50	67.44	0.08	30	0	102	156	-55
1917+00	16.48	0.00	78	0	179	157	23
1917+50	18.01	0.00	32	0	211	157	55
1918+00	12.66	0.00	28	0	240	157	83
1918+50	5.85	0.00	17	0	257	157	100
1918+97	5.96	0.00	10	0	267	157	111
1919+00	5.68	0.68	1	0	268	157	111
1919+22	4.13	0.88	4	1	272	157	114
1919+47	4.69	3.54	4	3	276	160	116
1919+50	4.91	3.69	1	1	276	161	116
1920+00	6.35	0.96	10	6	287	166	121
1920+11	4.07	0.00	2	0	289	166	123
1920+36	0.20	0.50	2	0	291	167	124
1920+50	0.00	8.28	0	3	291	170	121
1920+61	0.27	11.40	0	5	291	175	116
1921+00	2.35	0.00	2	11	293	186	107
1921+33	0.64	0.00	2	0	295	186	109
		TOTAL	295	186			

EARTHWORK TABULATION - STH 67 (1927+75 - 1929+00, RT) EXPANSION FACTOR = 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	INCREMENTAL VOLUME CUT (CY)	INCREMENTAL VOLUME EXP FILL (CY)	CUMMULATIVE VOLUME CUT (CY)	CUMMULATIVE VOLUME EXP FILL (CY)	MASS ORDINATE (CY)
1927+75	0.00	39.56	0	0	0	0	0
1928+00	0.00	5.88	0	27	0	27	-27
1928+50	0.00	16.62	0	27	0	54	-54
1929+00	0.00	25.47	0	51	0	105	-105
		TOTAL	0	105			



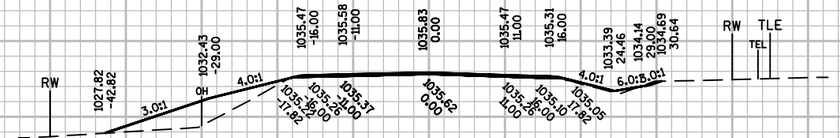
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 273	E



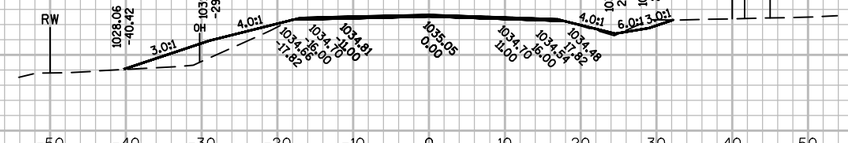
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 274	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:27 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

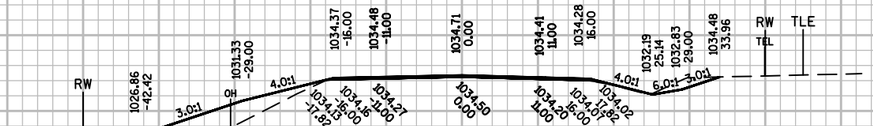
WISDOT/CADDS SHEET 49



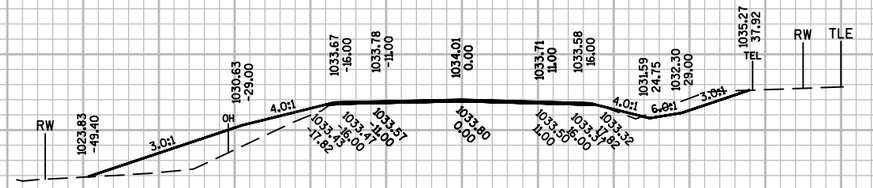
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1526+50



1526+00



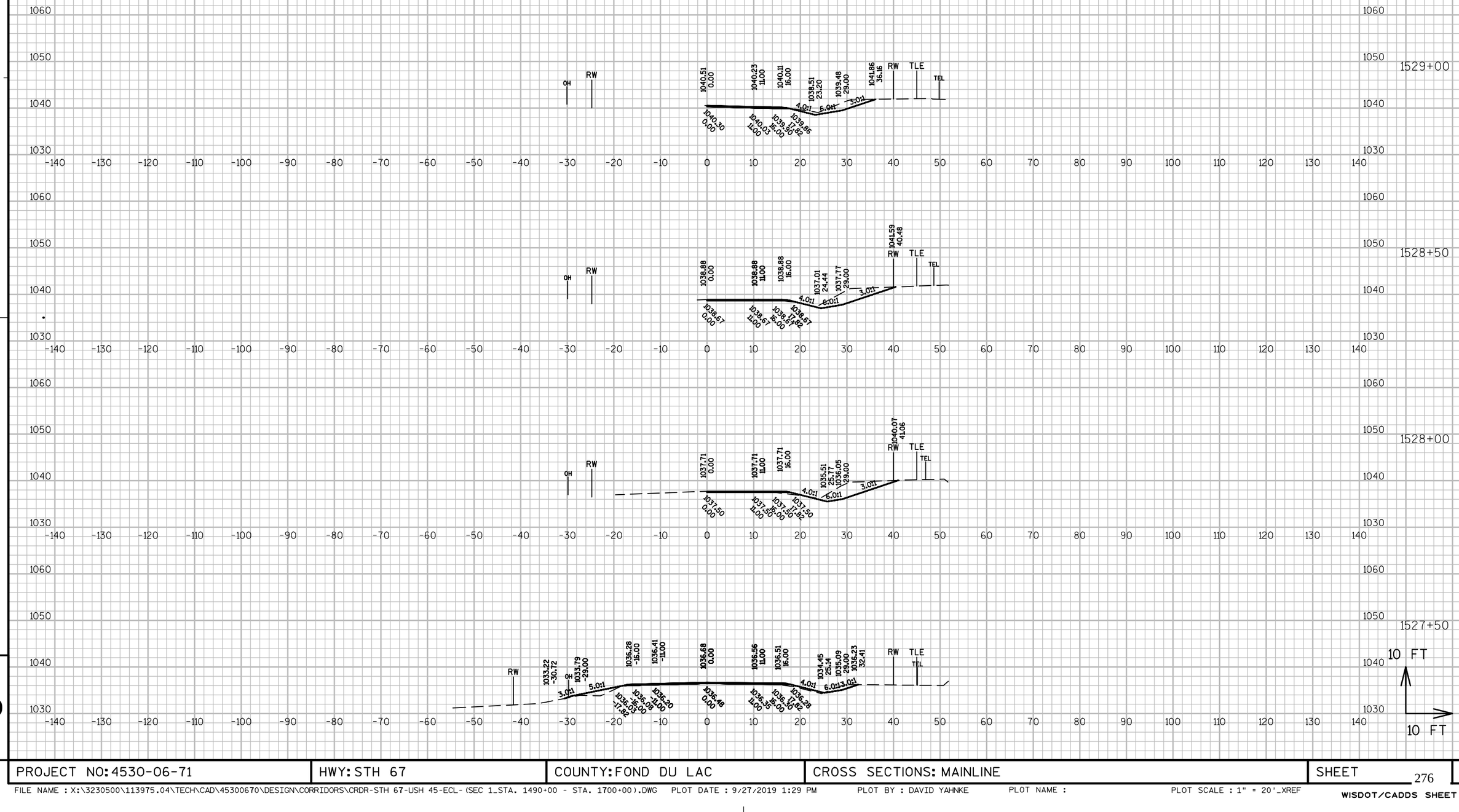
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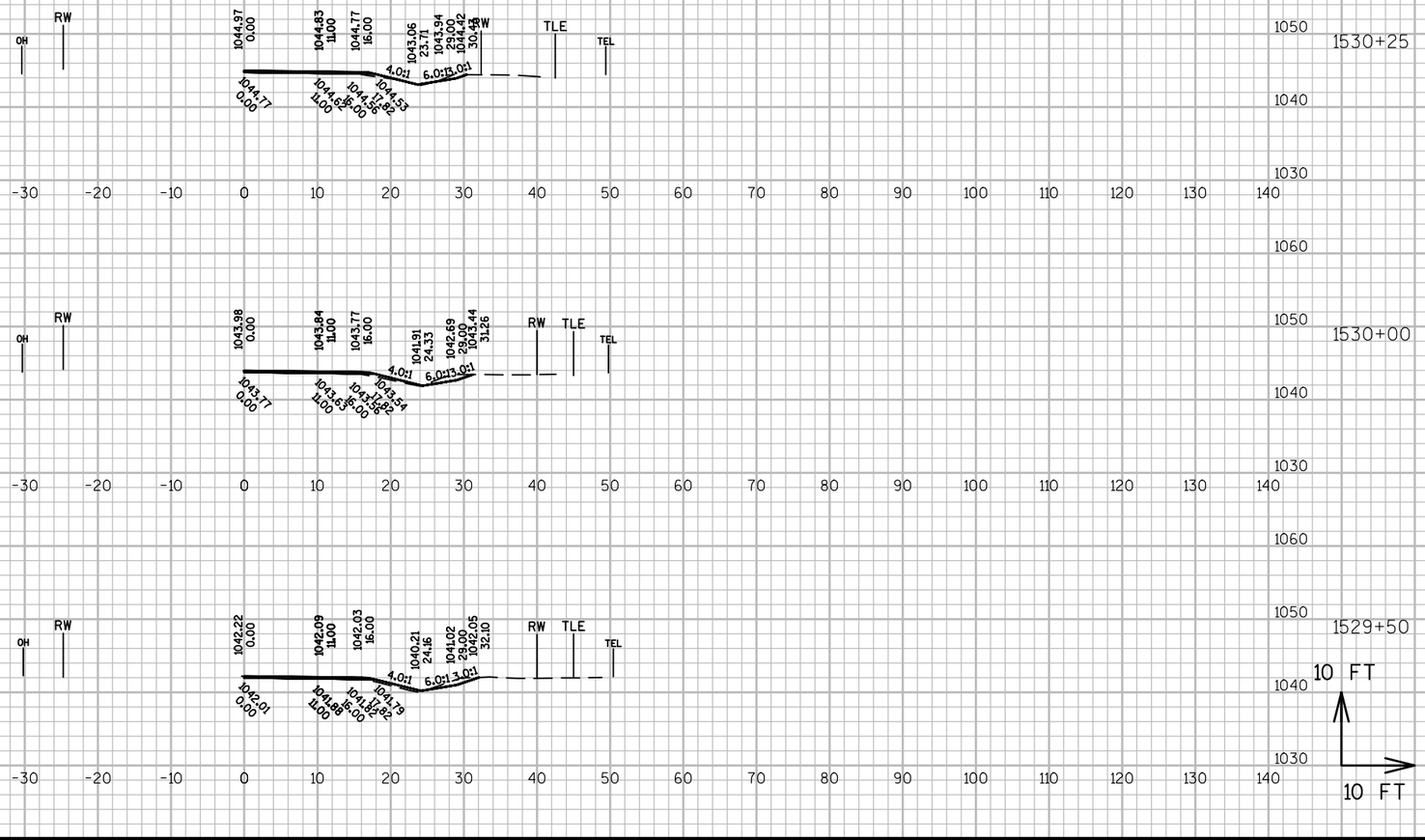
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 275	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 276	E

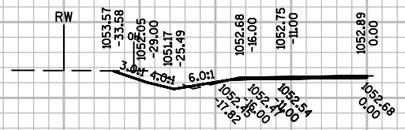


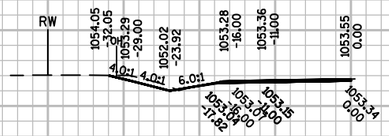
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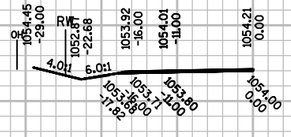
FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:30 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49









1546+50

1546+00

1545+50

1545+00

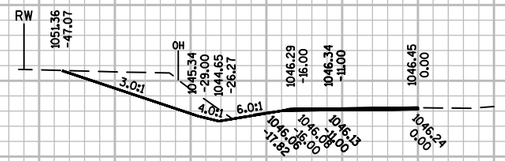
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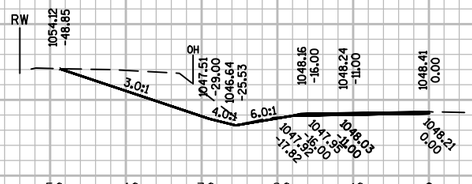
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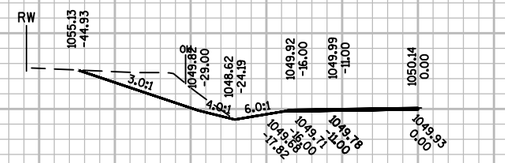
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 278	E



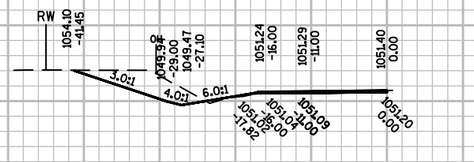
1548+50



1548+00



1547+50



1547+00

10 FT

10 FT

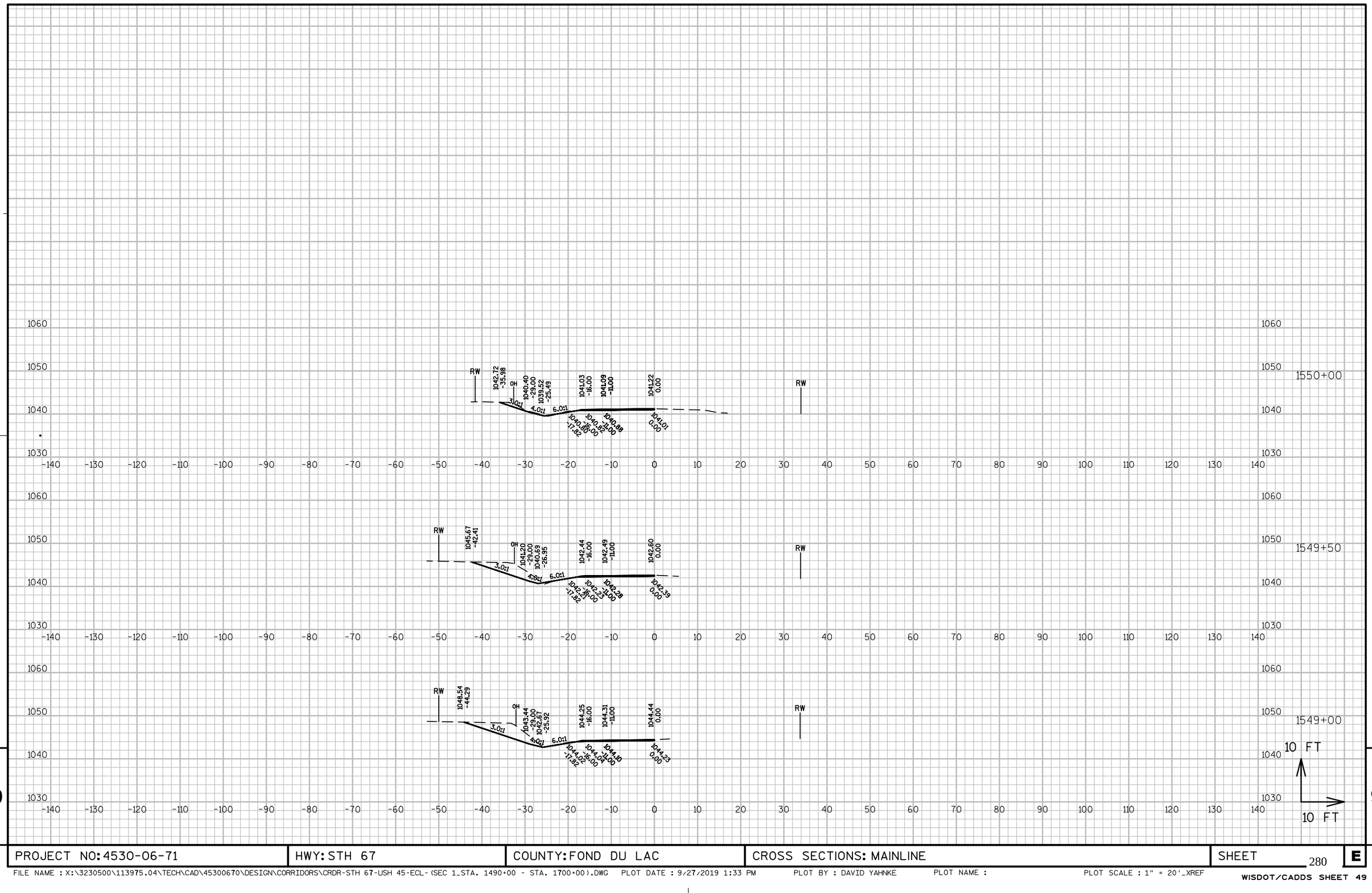
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 279	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:32 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



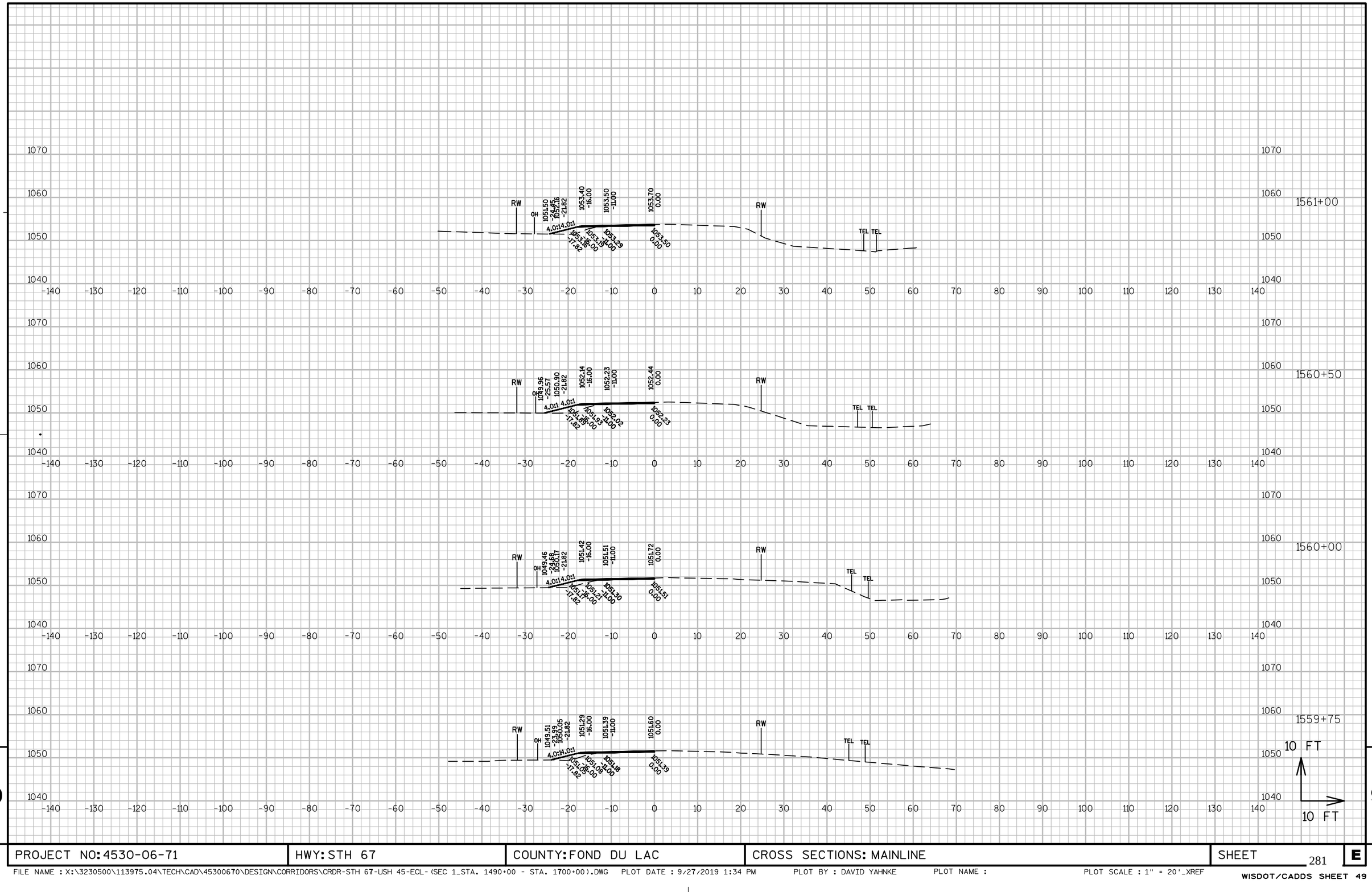
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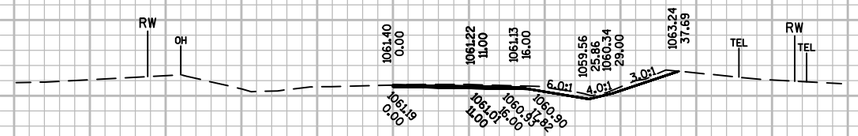
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FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:33 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

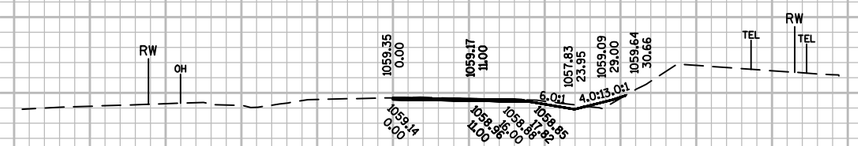
WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 281	E



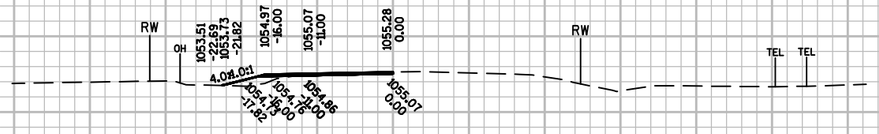
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1562+50



1562+00



1561+50

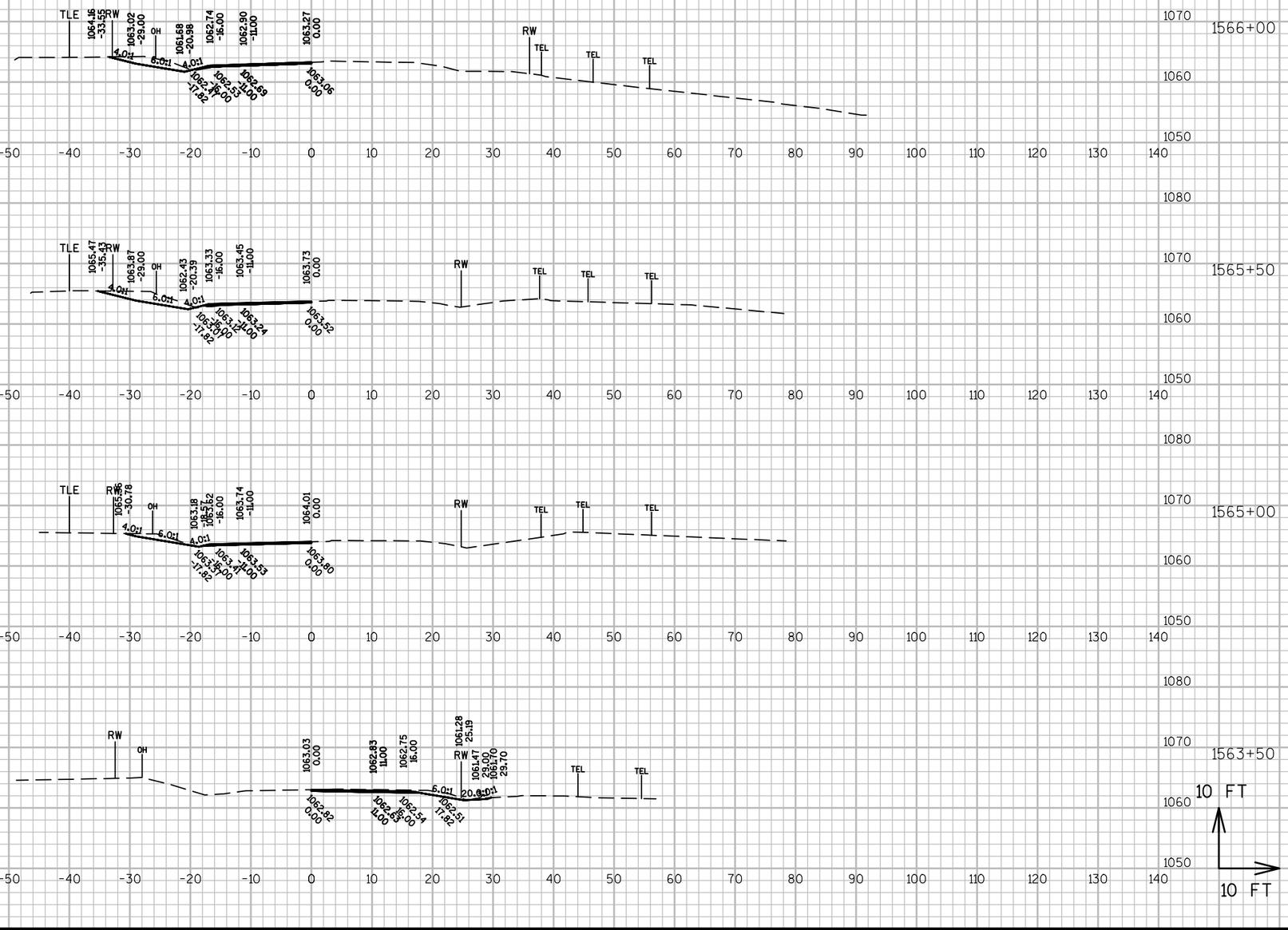
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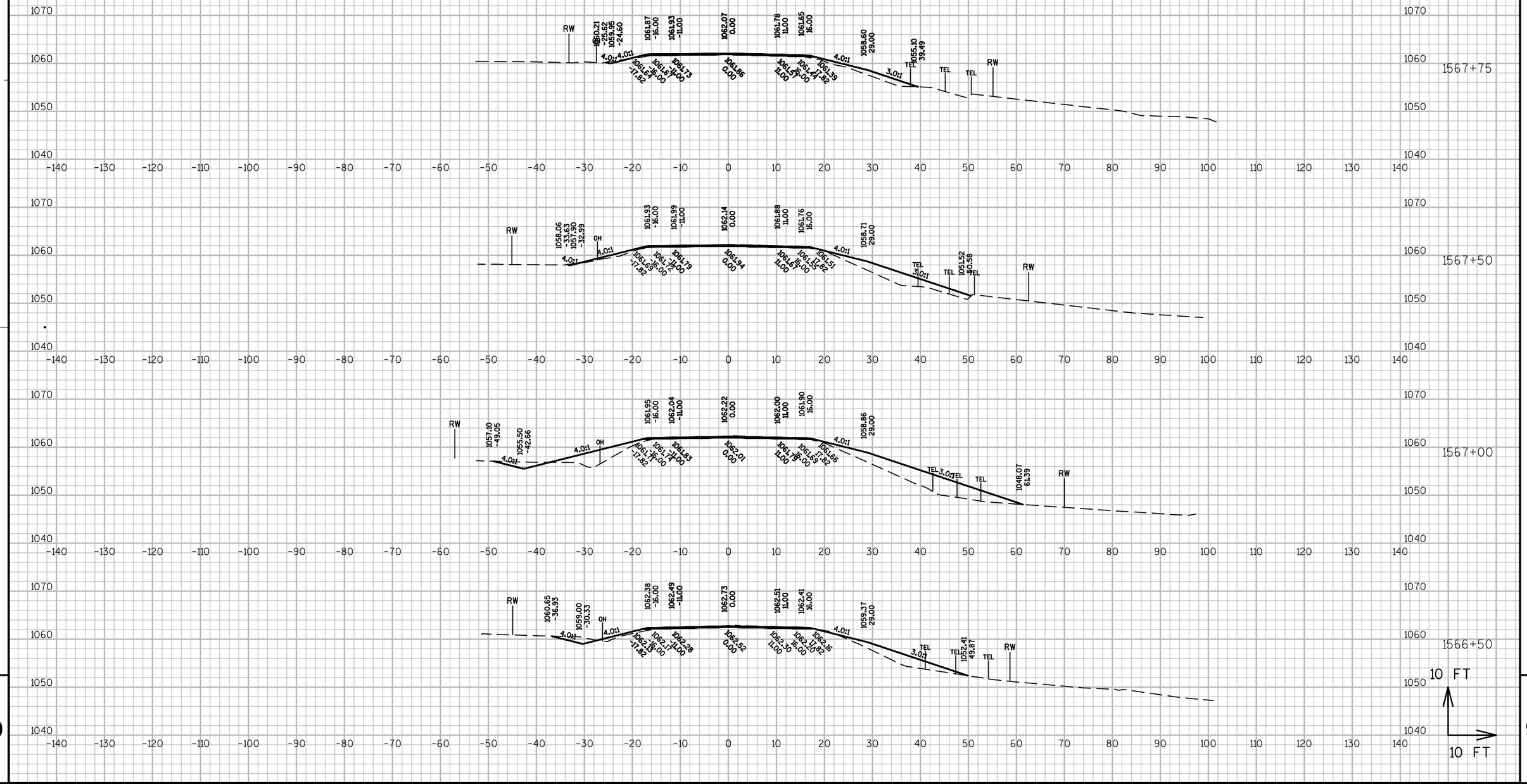
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 282	E



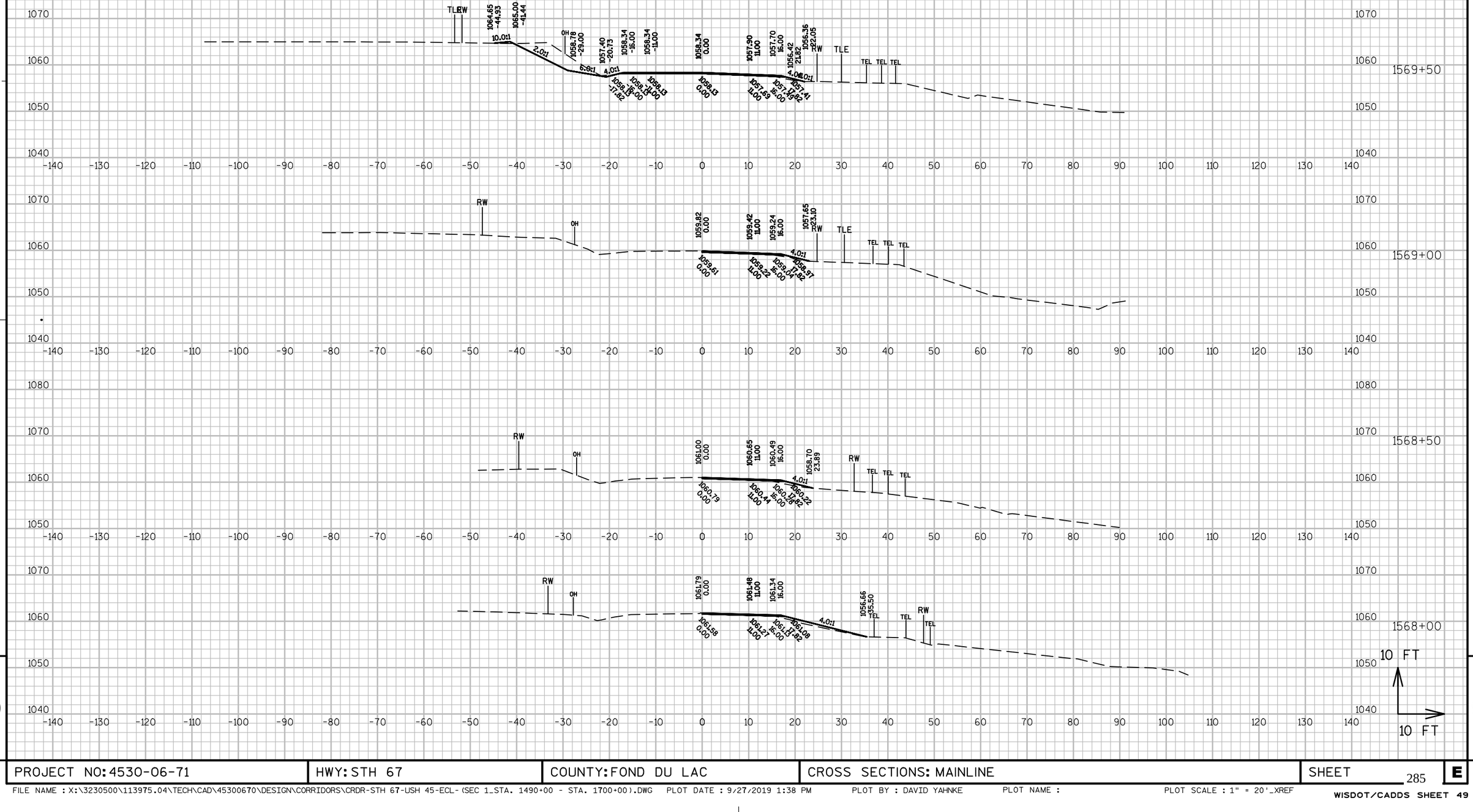
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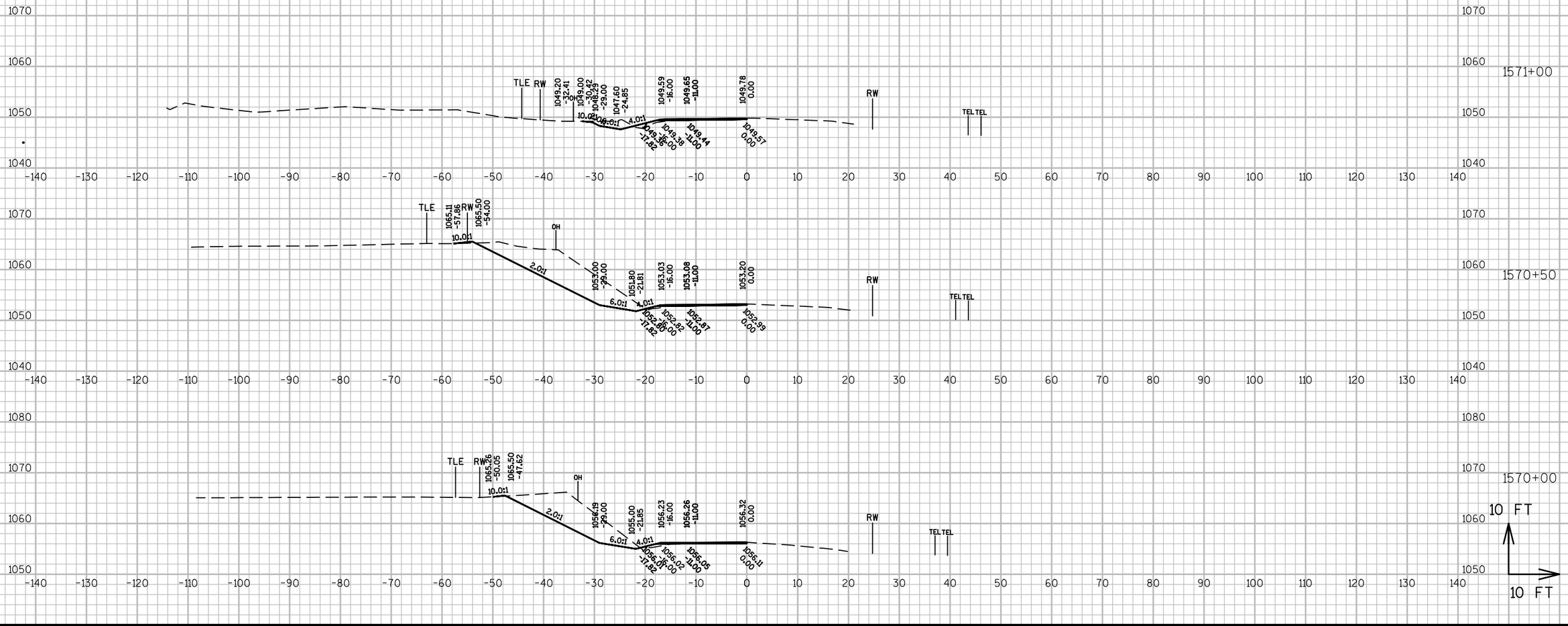
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 284	E



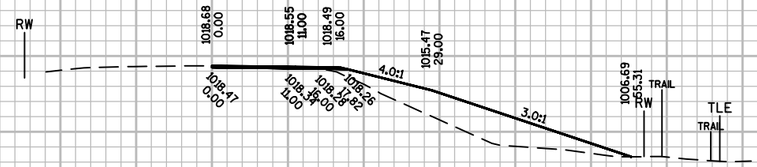
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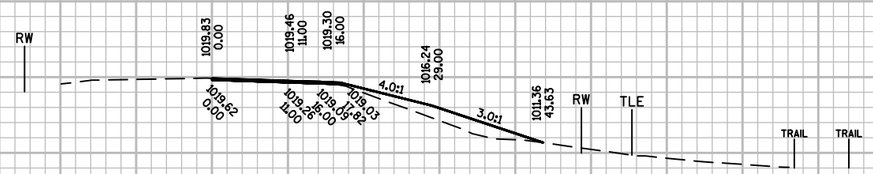


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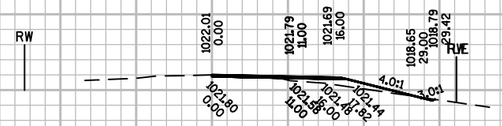
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 286	E









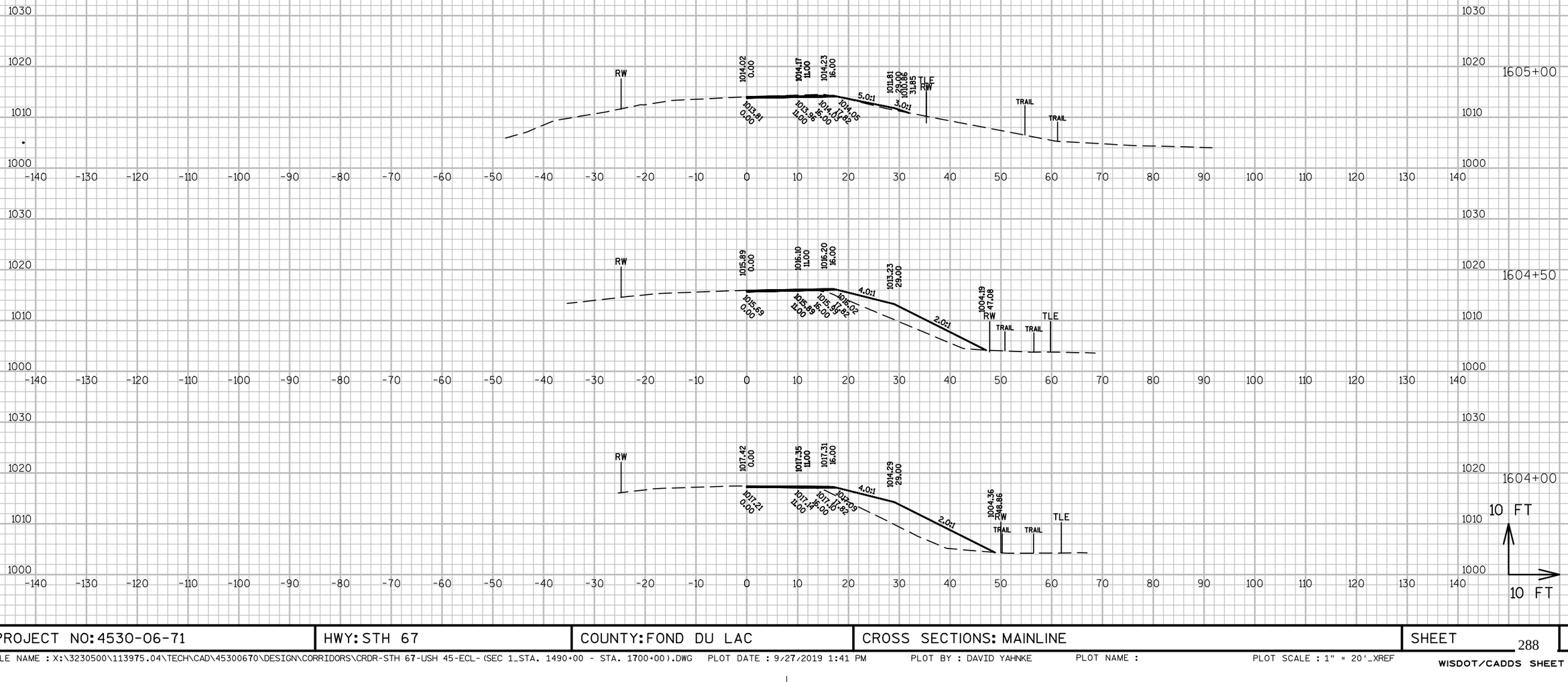
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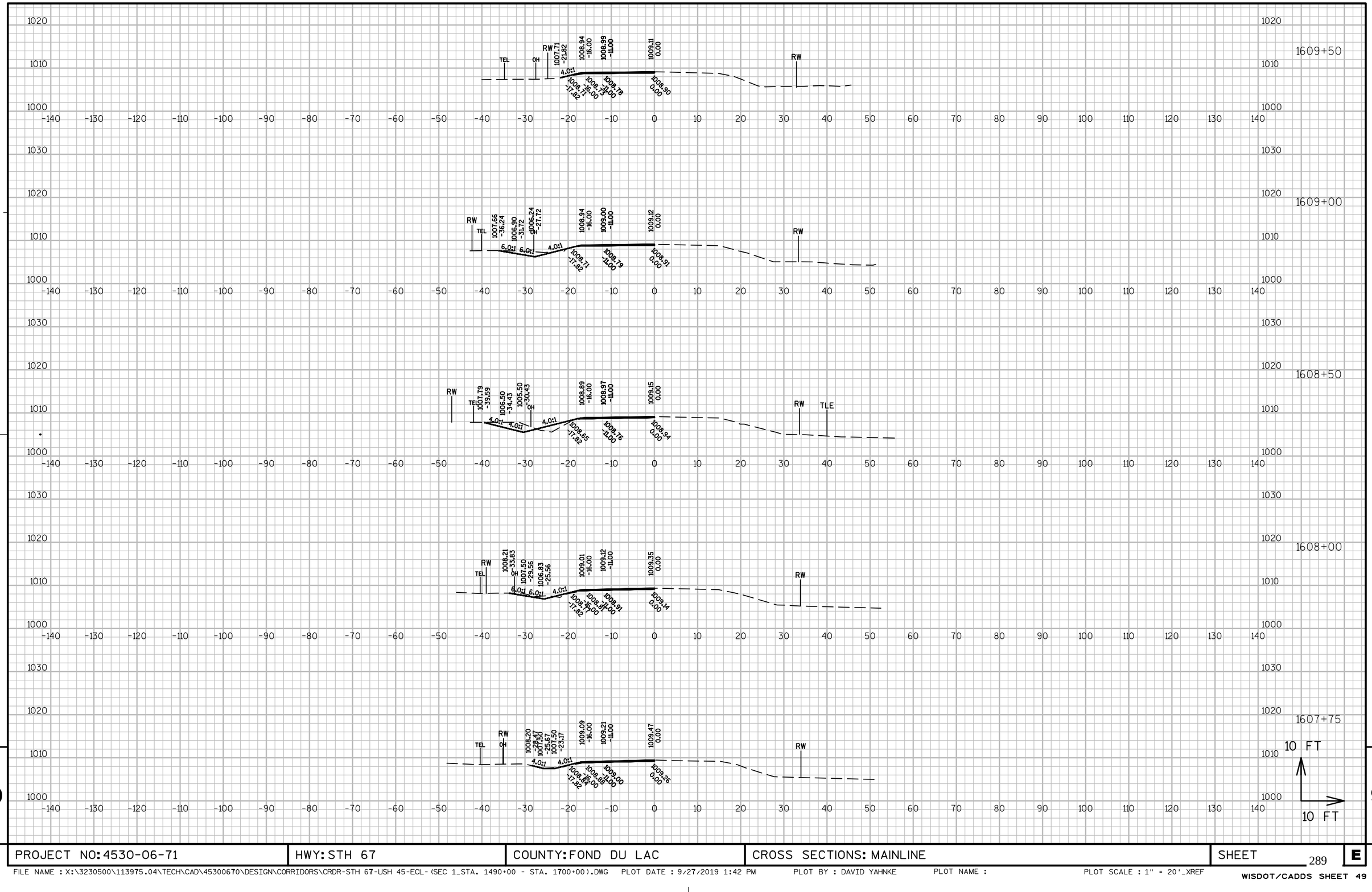
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 287	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:40 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



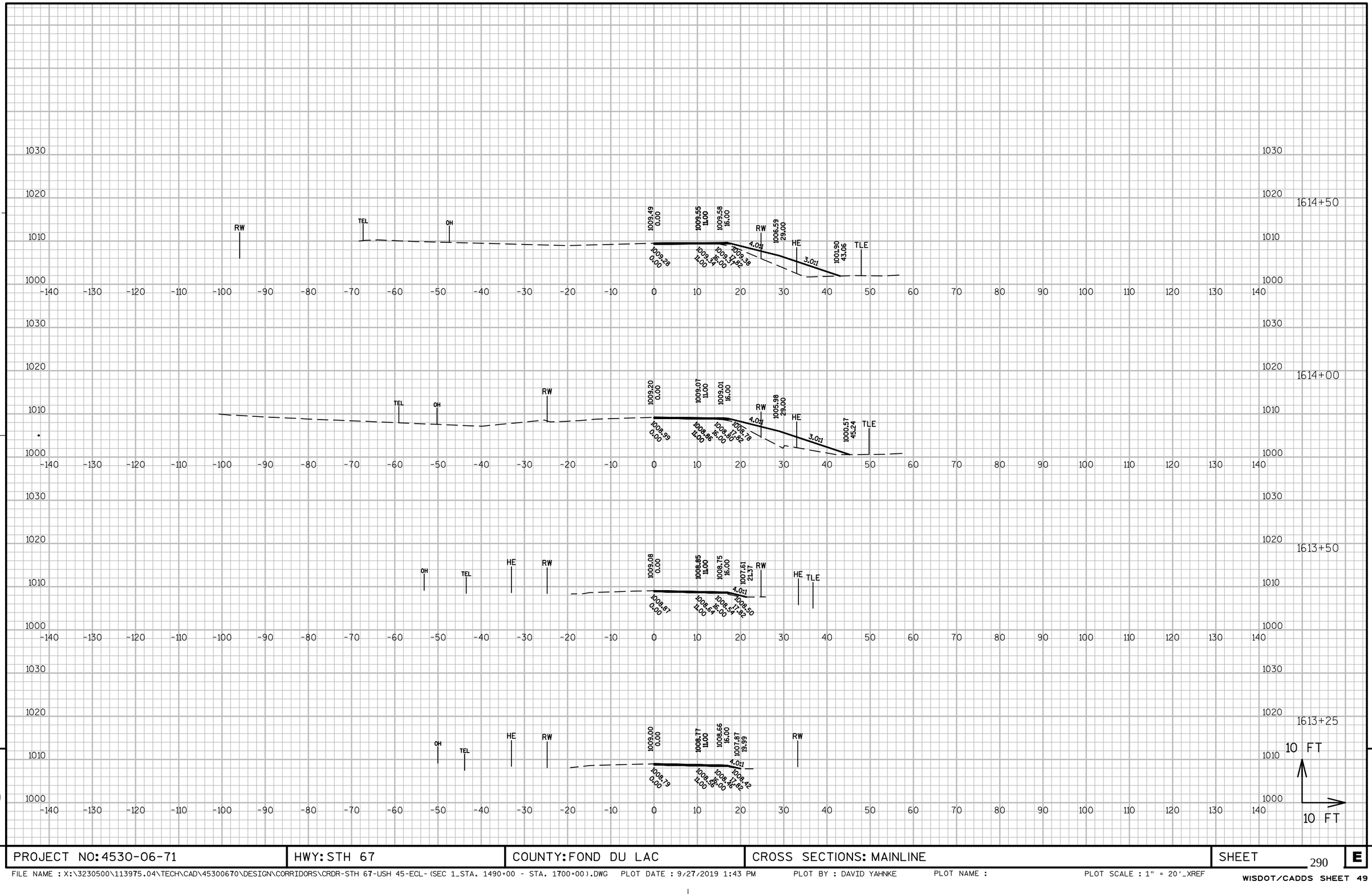
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 288	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 289	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:42 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

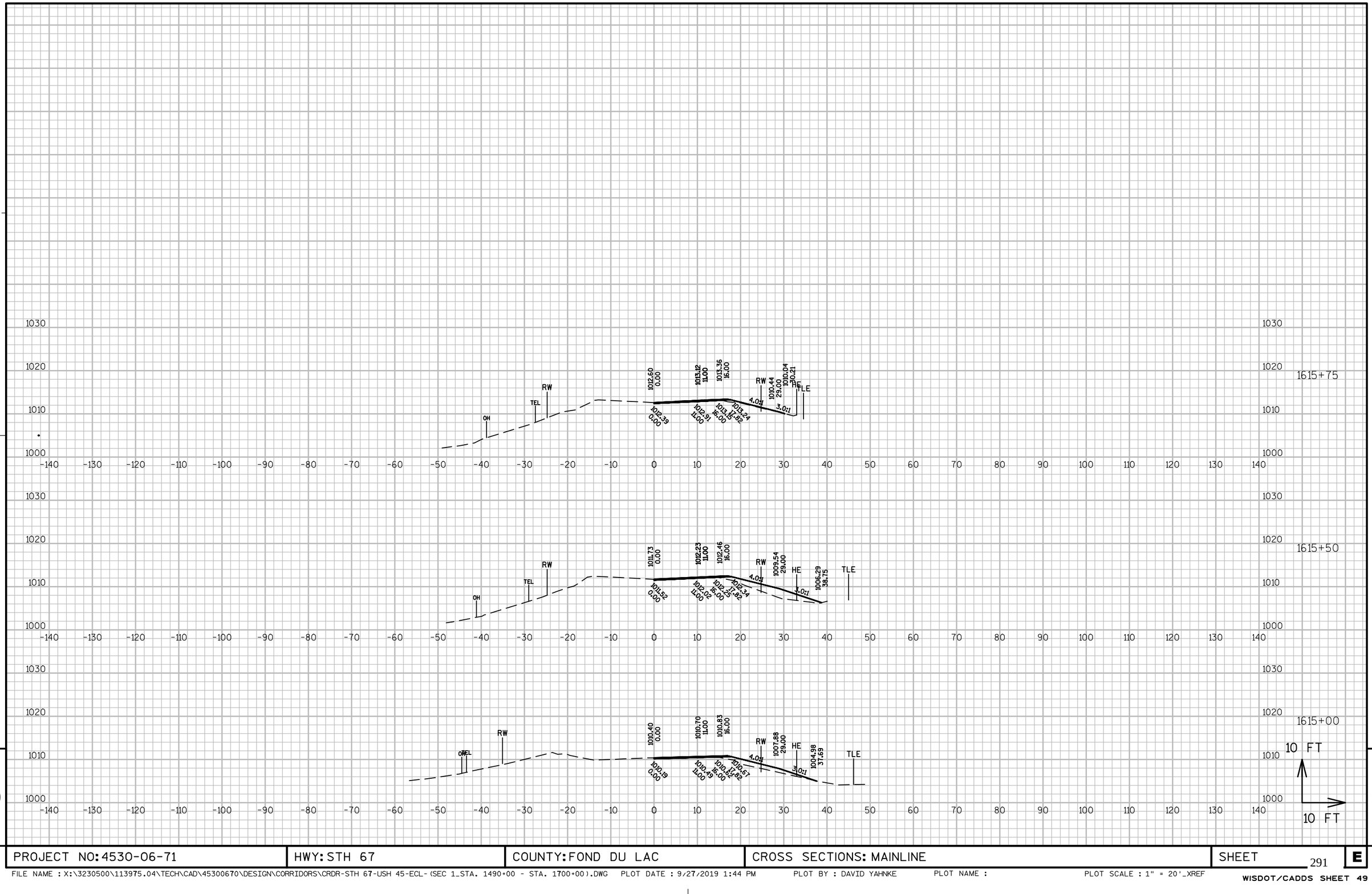
WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 290	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:43 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

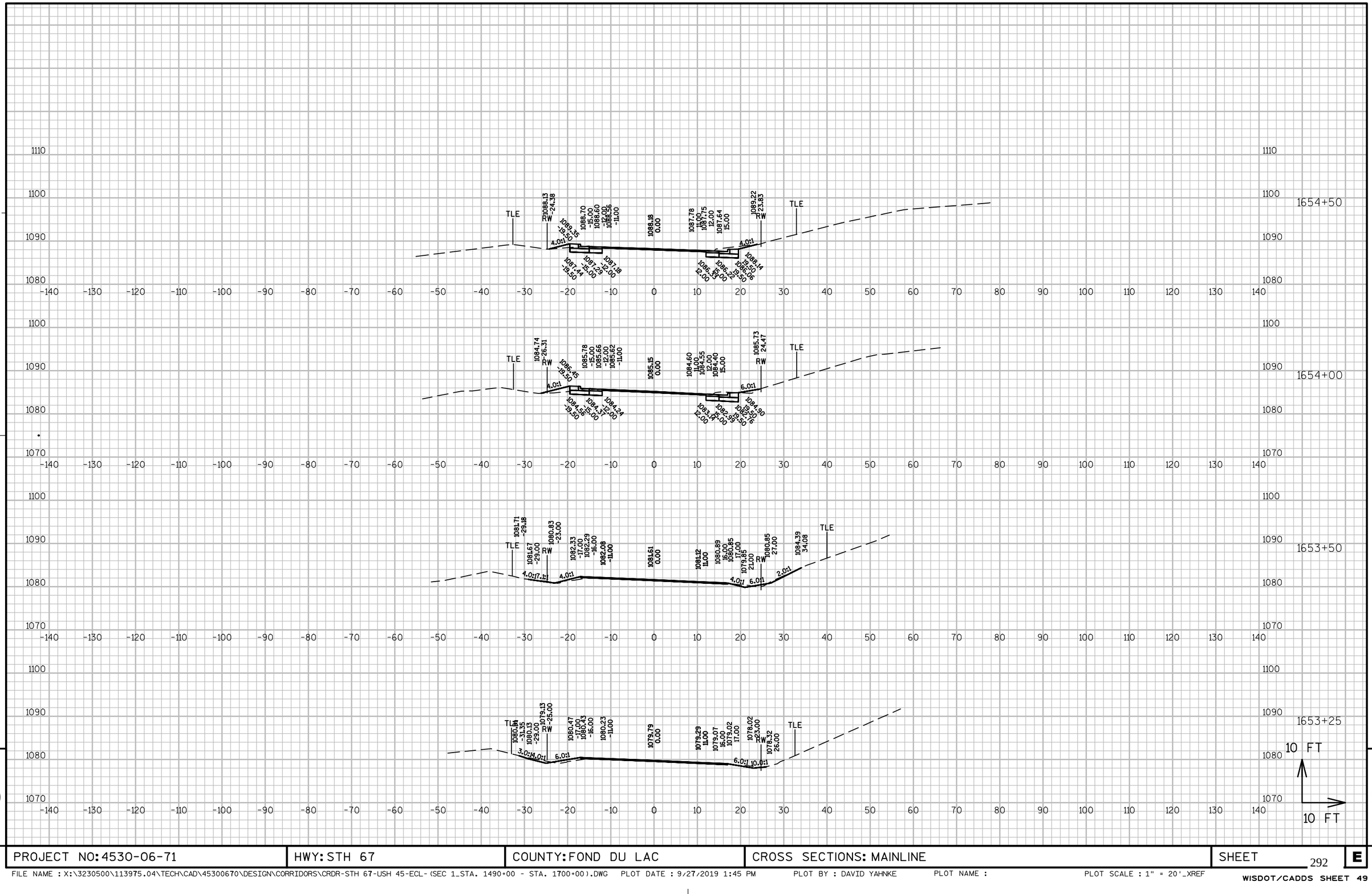
WISDOT/CADDS SHEET 49



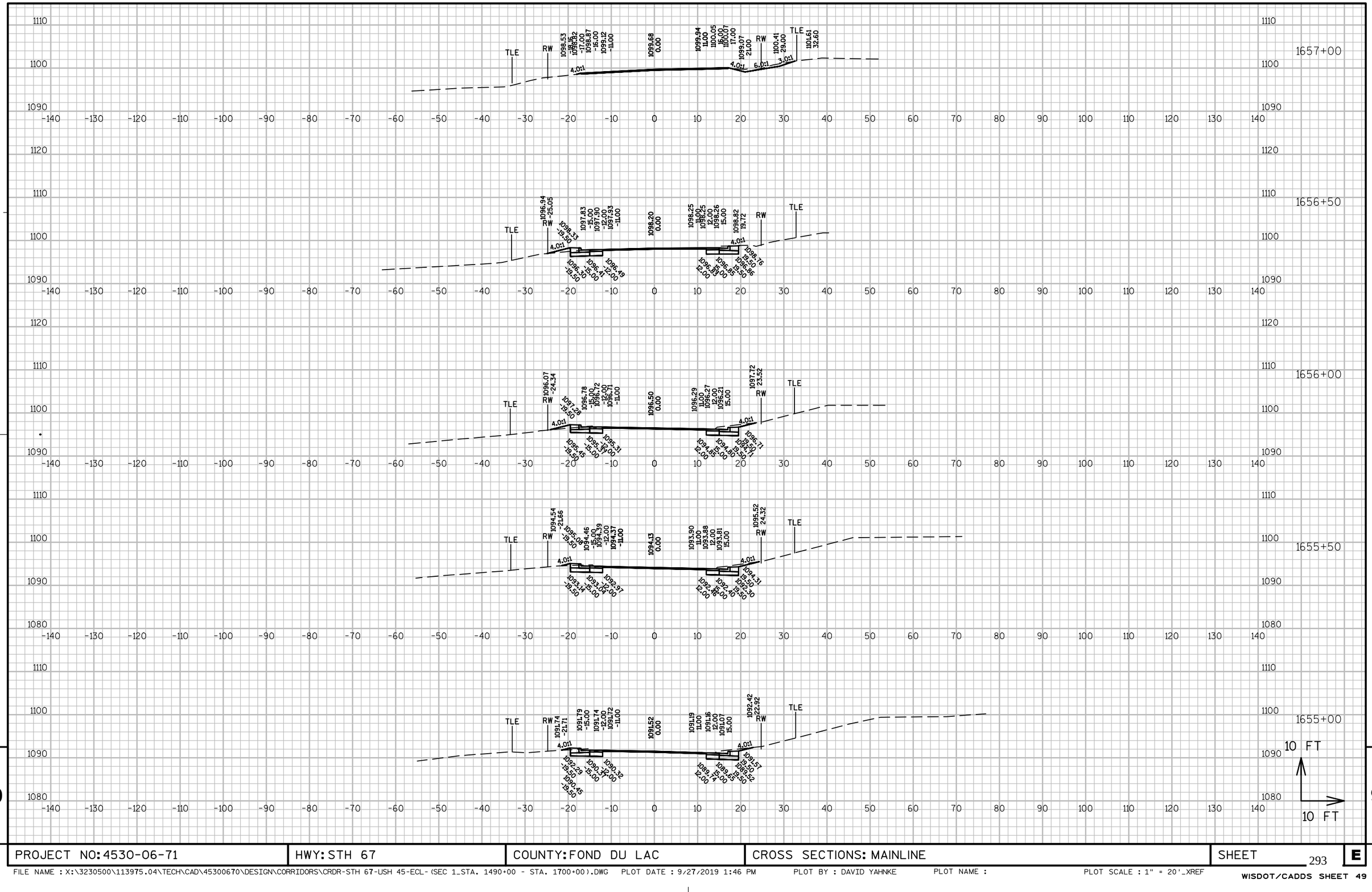
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 291	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 292	E



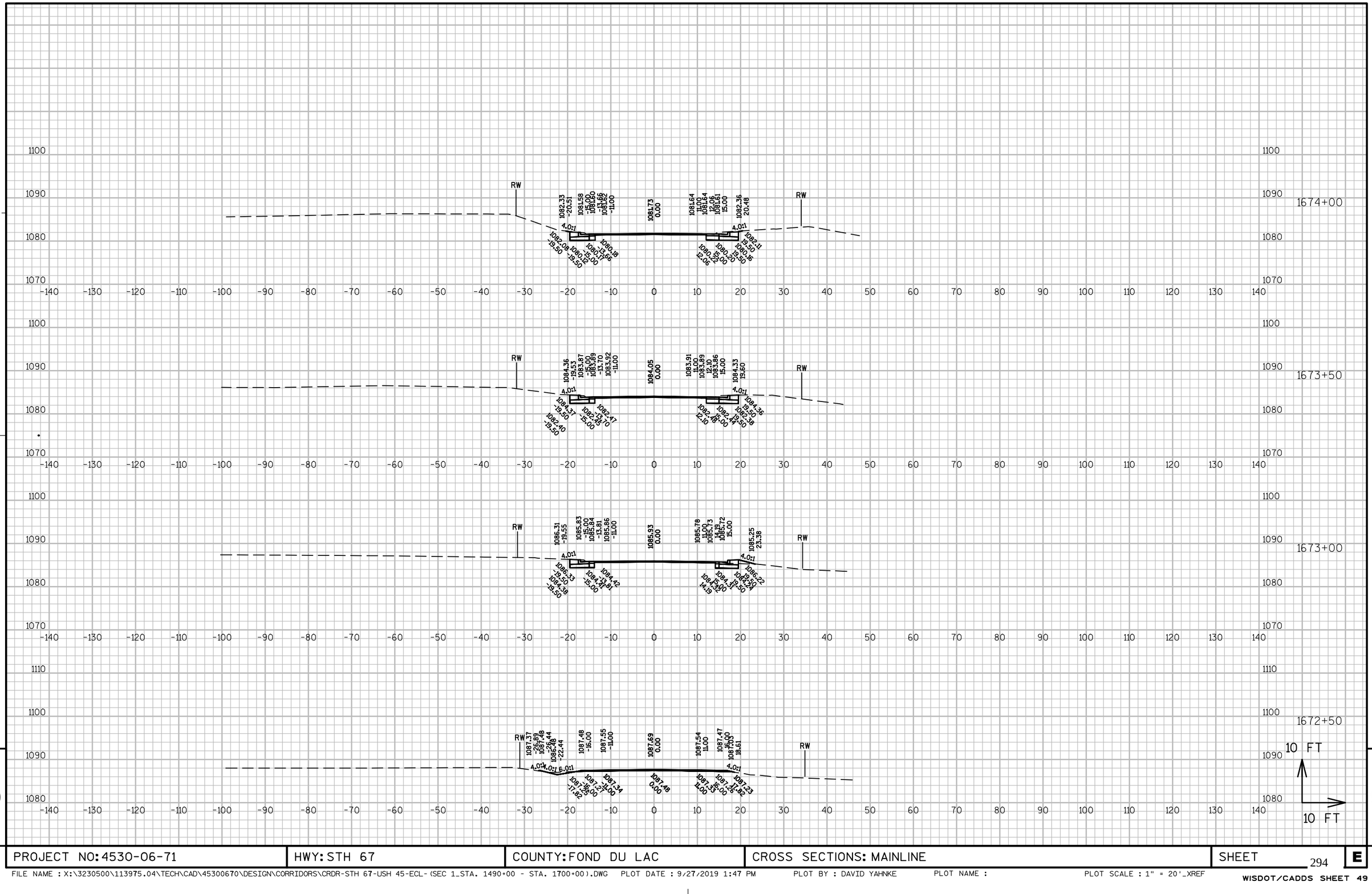
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 293	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:46 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



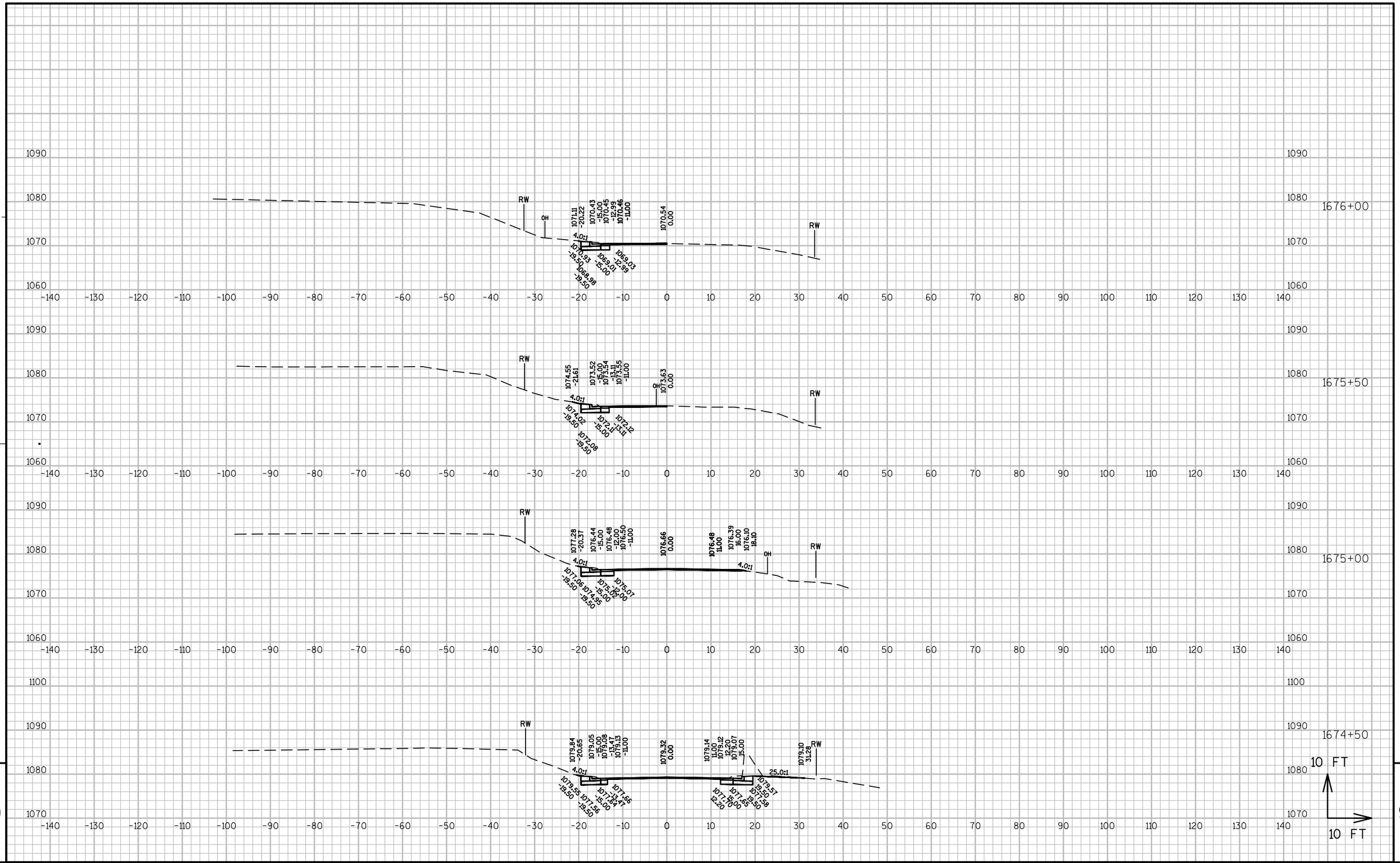
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9

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 294	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:47 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

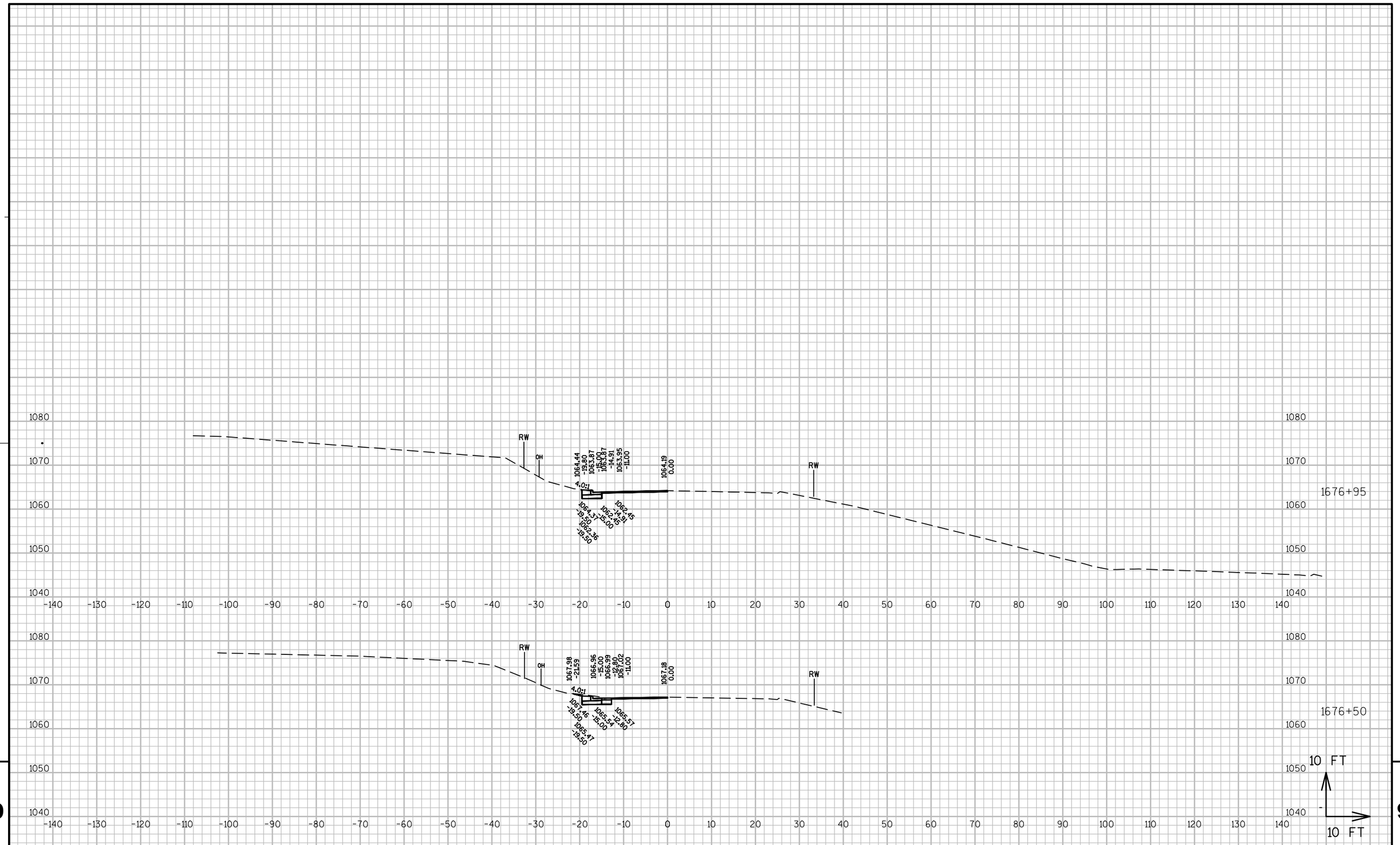
WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 295	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:49 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



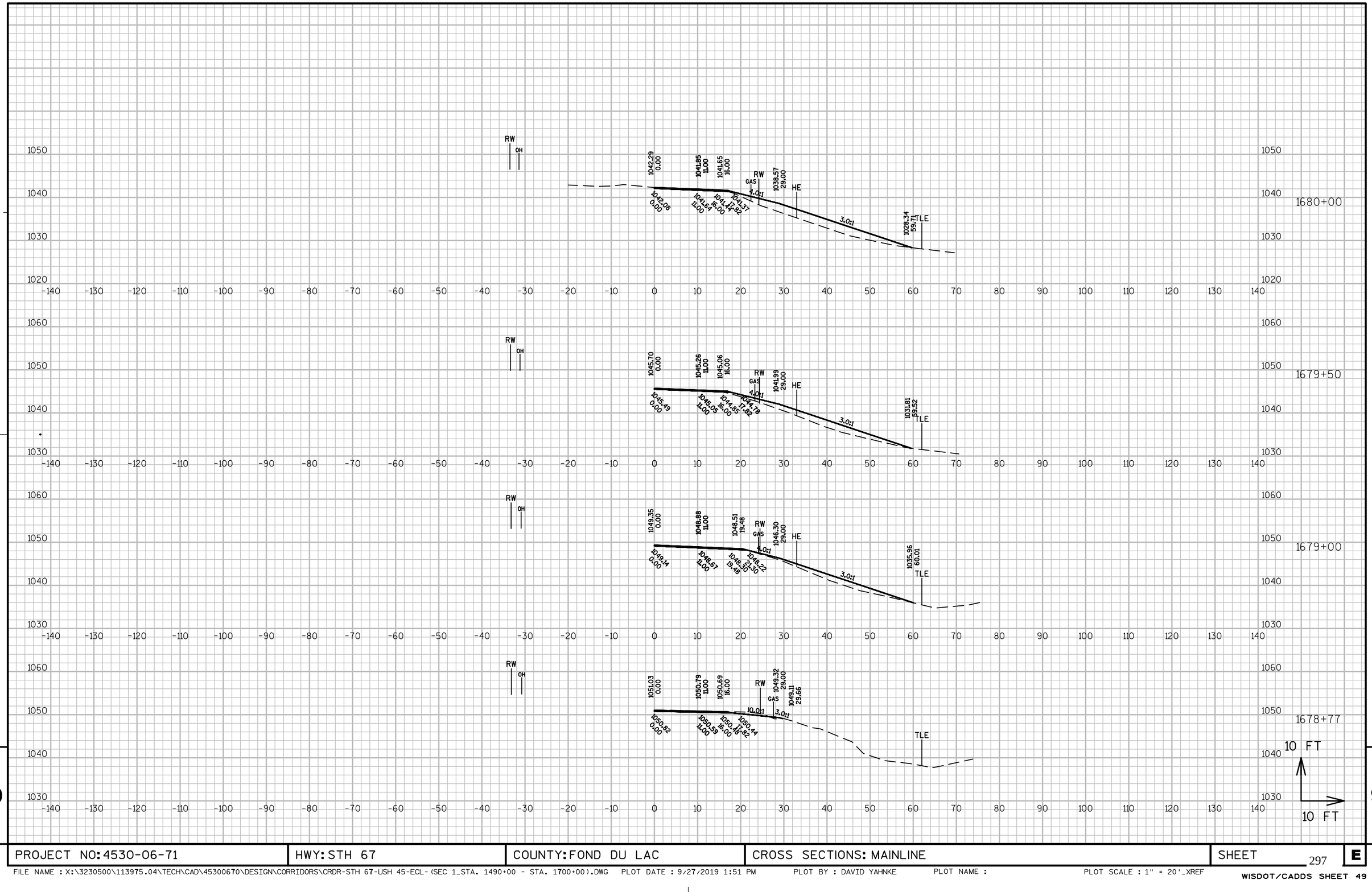
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9

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 296	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:50 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

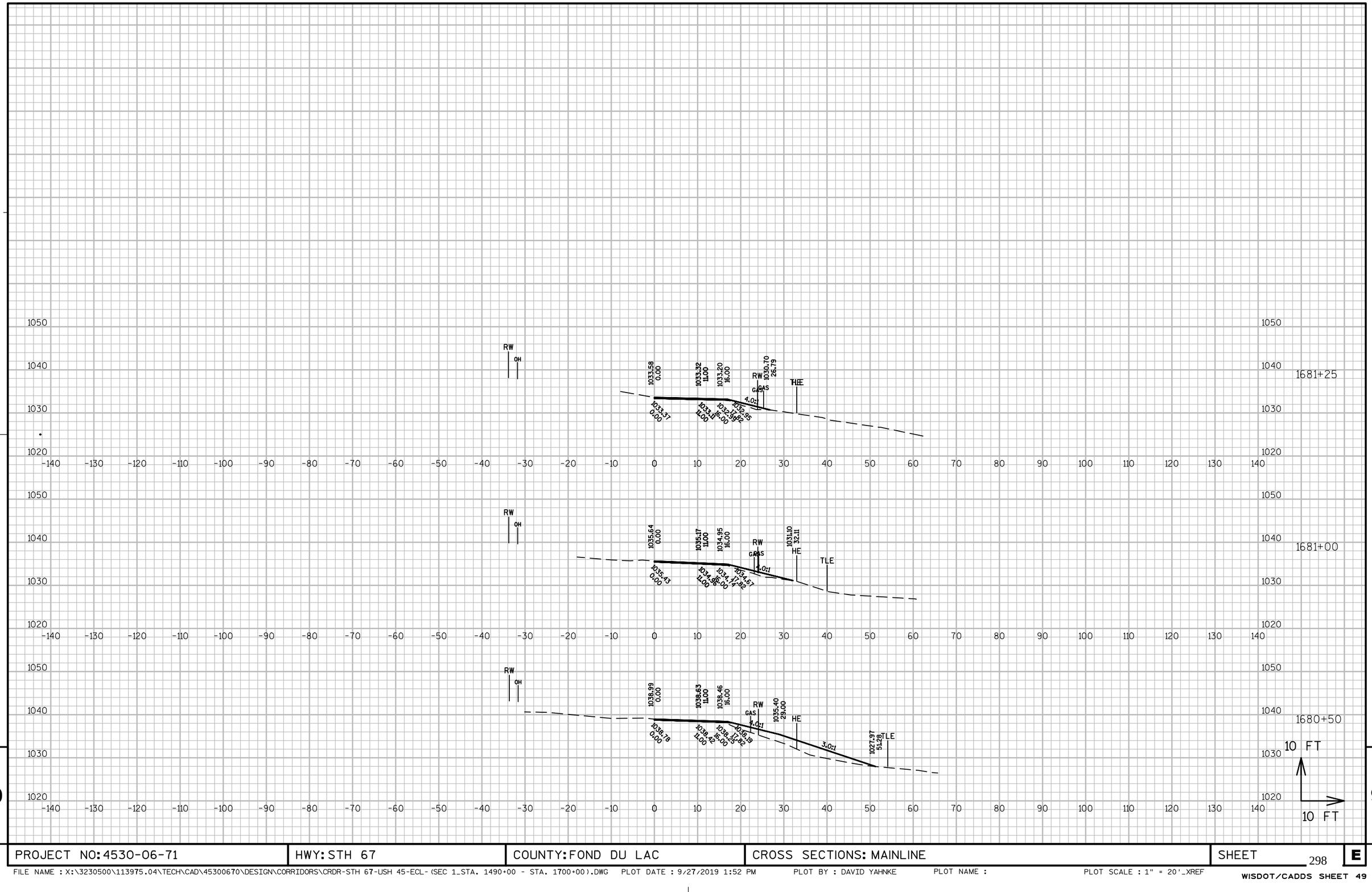
WISDOT/CADDS SHEET 49



9

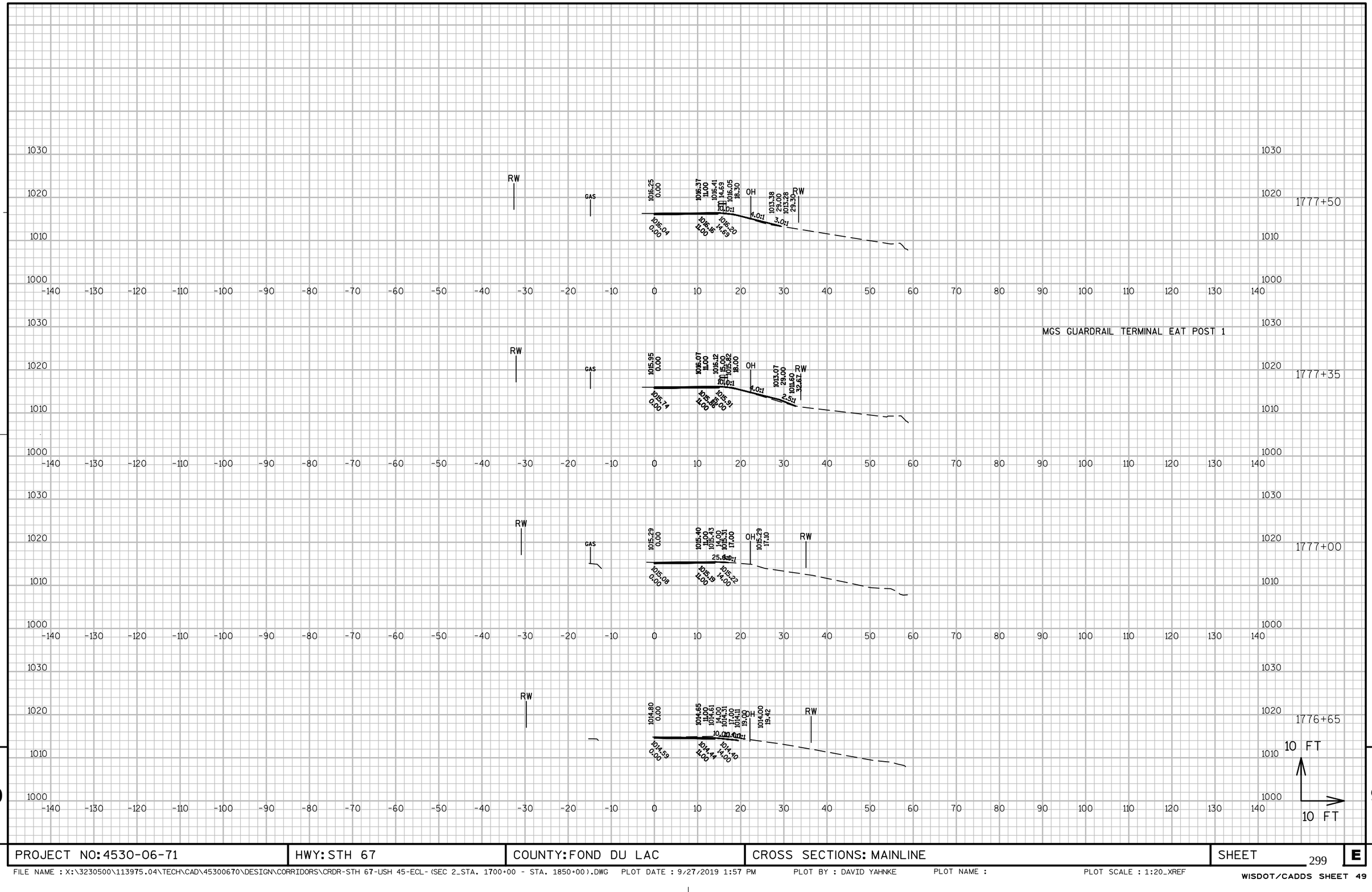
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 297	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 298	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 1_STA. 1490+00 - STA. 1700+00).DWG PLOT DATE : 9/27/2019 1:52 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF



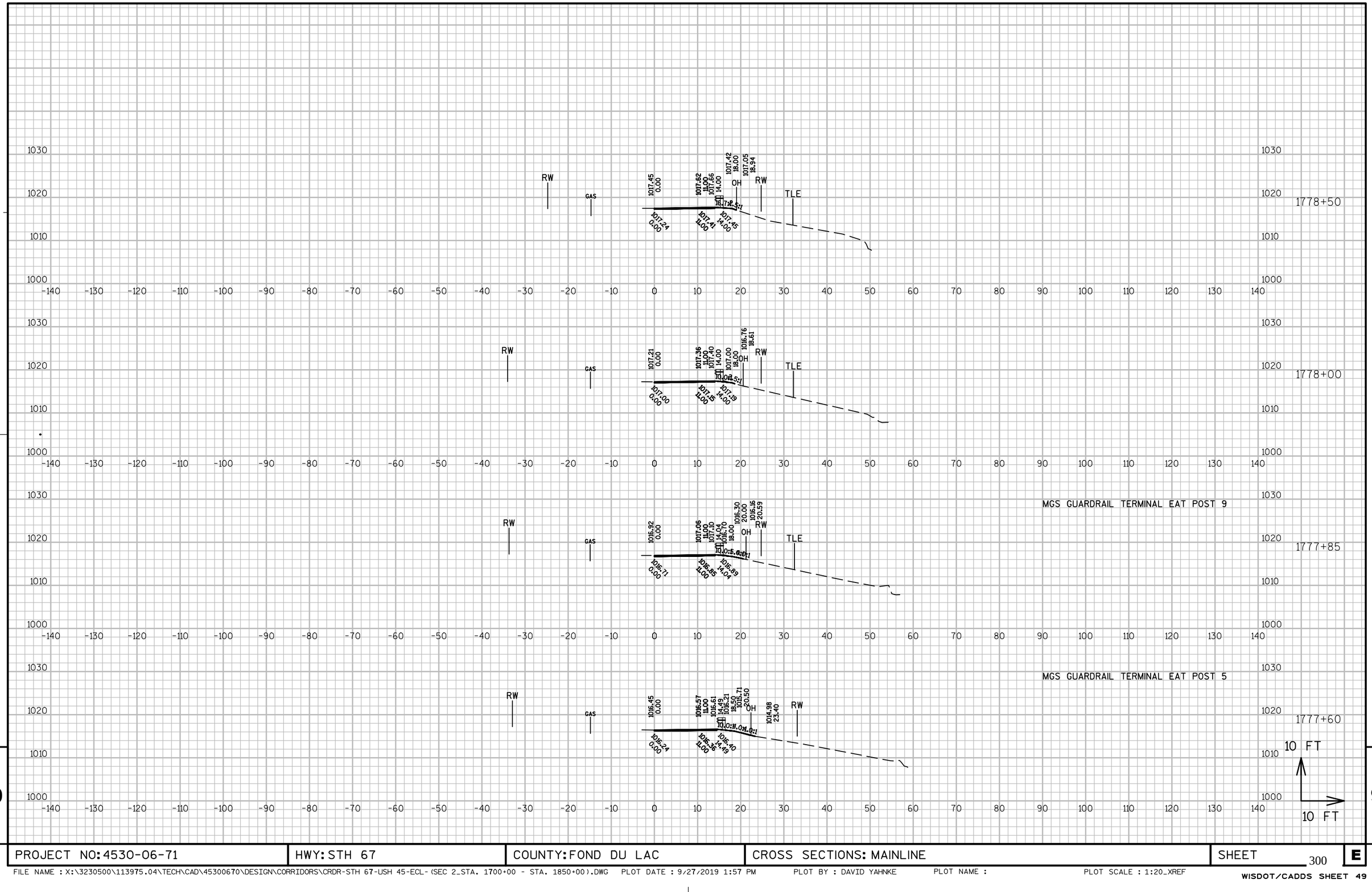
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 299	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 1:57 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

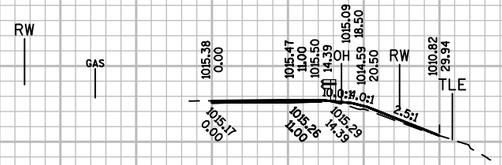


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 300	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 1:57 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

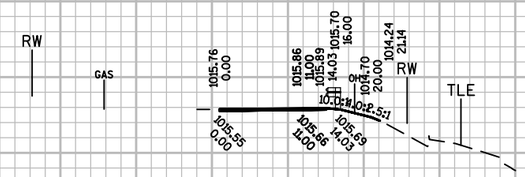
WISDOT/CADDS SHEET 49

MGS GUARDRAIL TERMINAL EAT POST 5

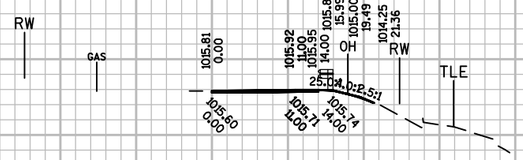


1779+78

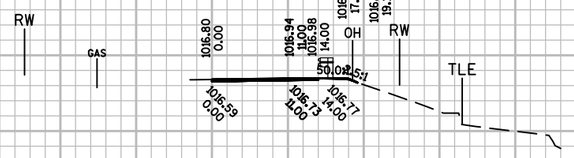
MGS GUARDRAIL TERMINAL EAT POST 9



1779+53



1779+50



1779+00

10 FT
10 FT

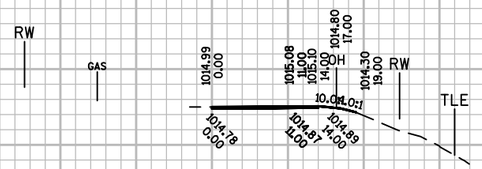
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 301	E

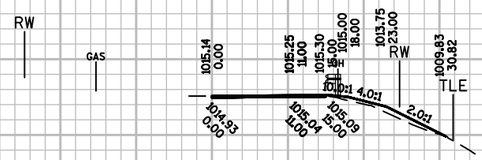
FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 1:58 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



1780+17

MGS GUARDRAIL TERMINAL EAT POST 1



1780+02



1780+00

10 FT

10 FT

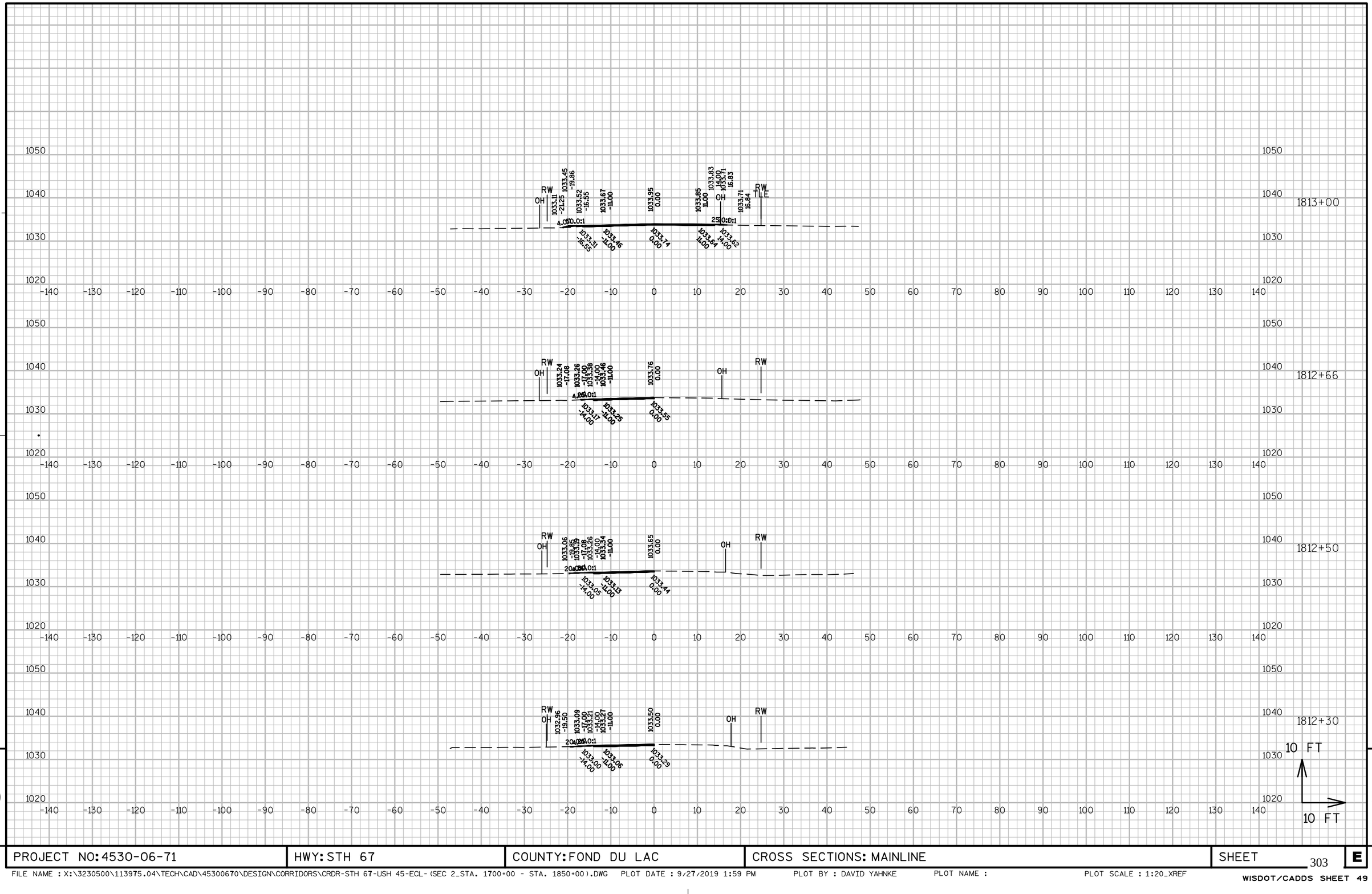
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 302	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 1:58 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



9

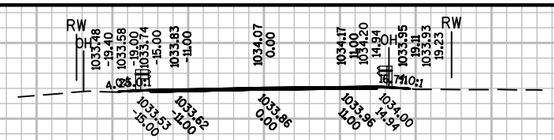
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 303	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 1:59 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

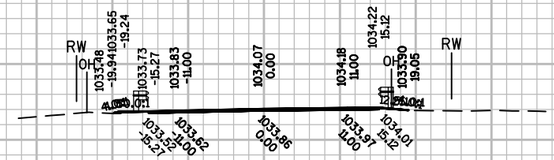
WISDOT/CADDS SHEET 49

MGS GUARDRAIL TERMINAL EAT POST 9



TLE

1813+53



TLE

1813+50

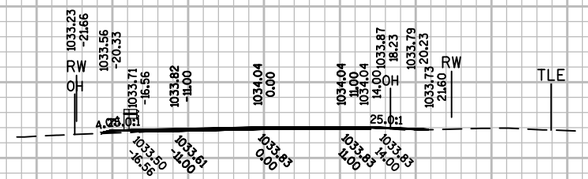
MGS GUARDRAIL TERMINAL EAT POST 1



TLE

1813+37

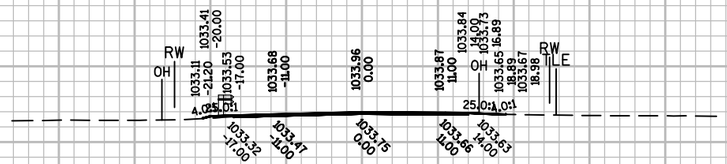
MGS GUARDRAIL TERMINAL EAT POST 5



TLE

1813+28

MGS GUARDRAIL TERMINAL EAT POST 1



TLE

1813+02

10 FT
10 FT

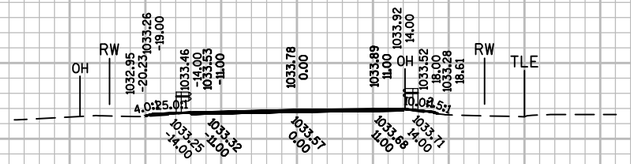
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 304	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 1:59 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

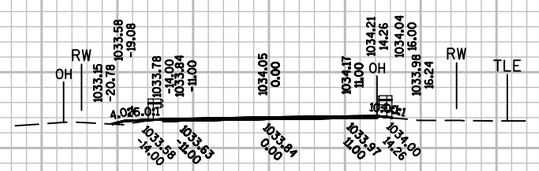
WISDOT/CADDS SHEET 49



1814+50

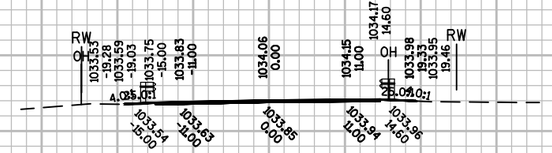


1814+00



MGS GUARDRAIL TERMINAL EAT POST 9

1813+86



MGS GUARDRAIL TERMINAL EAT POST 5

1813+61

10 FT

10 FT

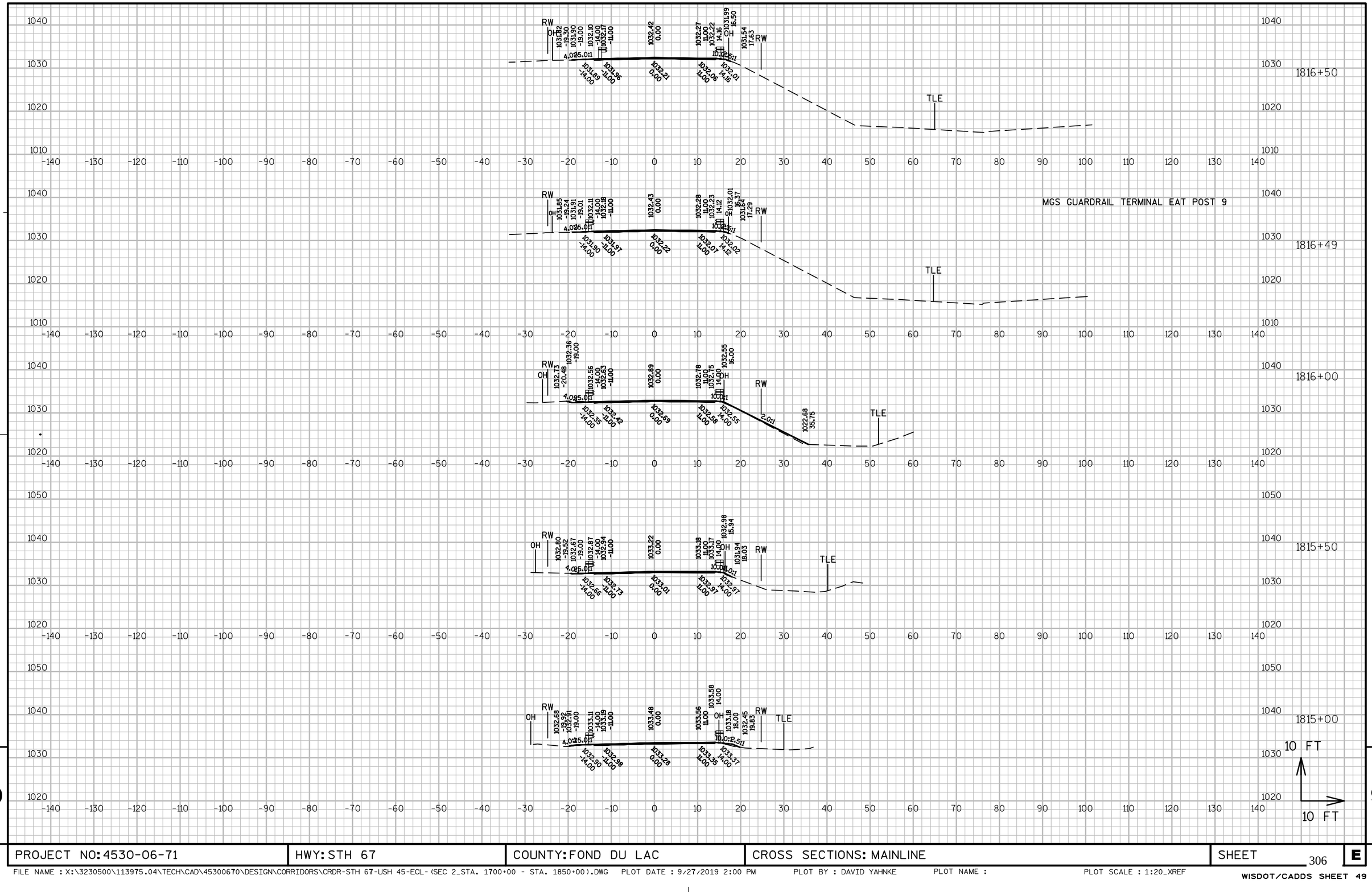
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 305	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:00 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

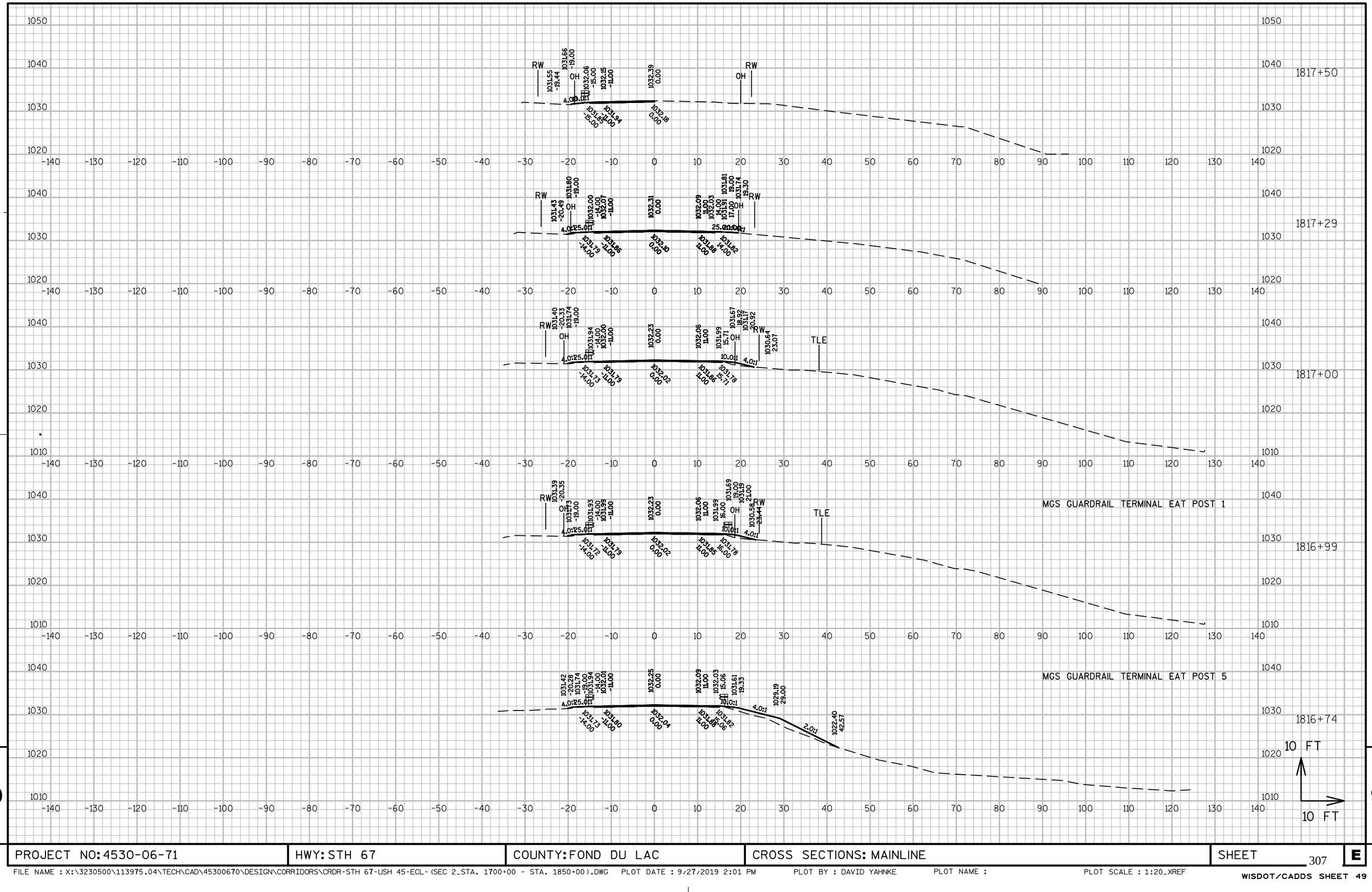
WISDOT/CADDS SHEET 49



9

9

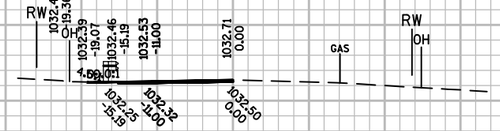
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 306	E



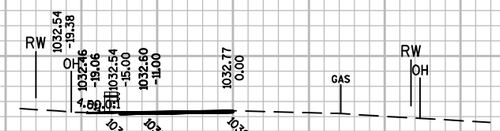
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 307	E

MGS GUARDRAIL TERMINAL EAT POST 9

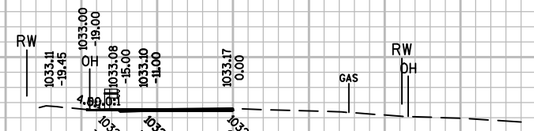
1819+50



1819+45



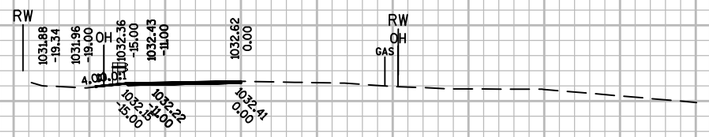
1819+00



1818+50



1818+00



10 FT
10 FT

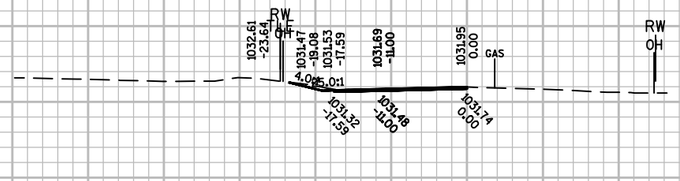
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 308	E

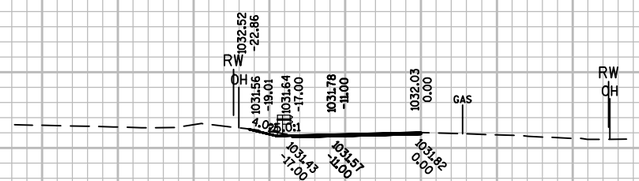


1820+14



1820+00

MGS GUARDRAIL TERMINAL EAT POST 1



1819+95

MGS GUARDRAIL TERMINAL EAT POST 5



1819+70

10 FT

10 FT

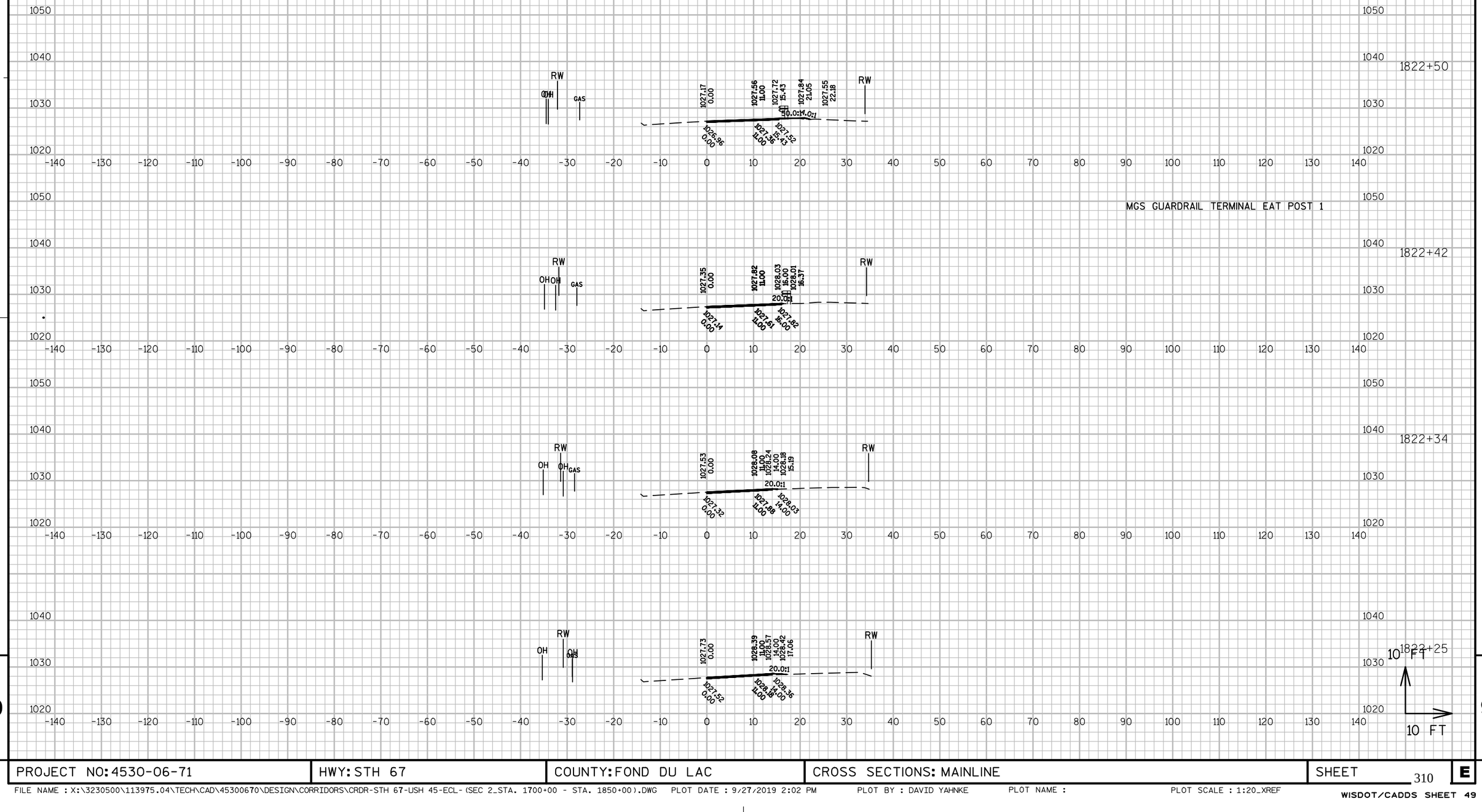
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 309	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



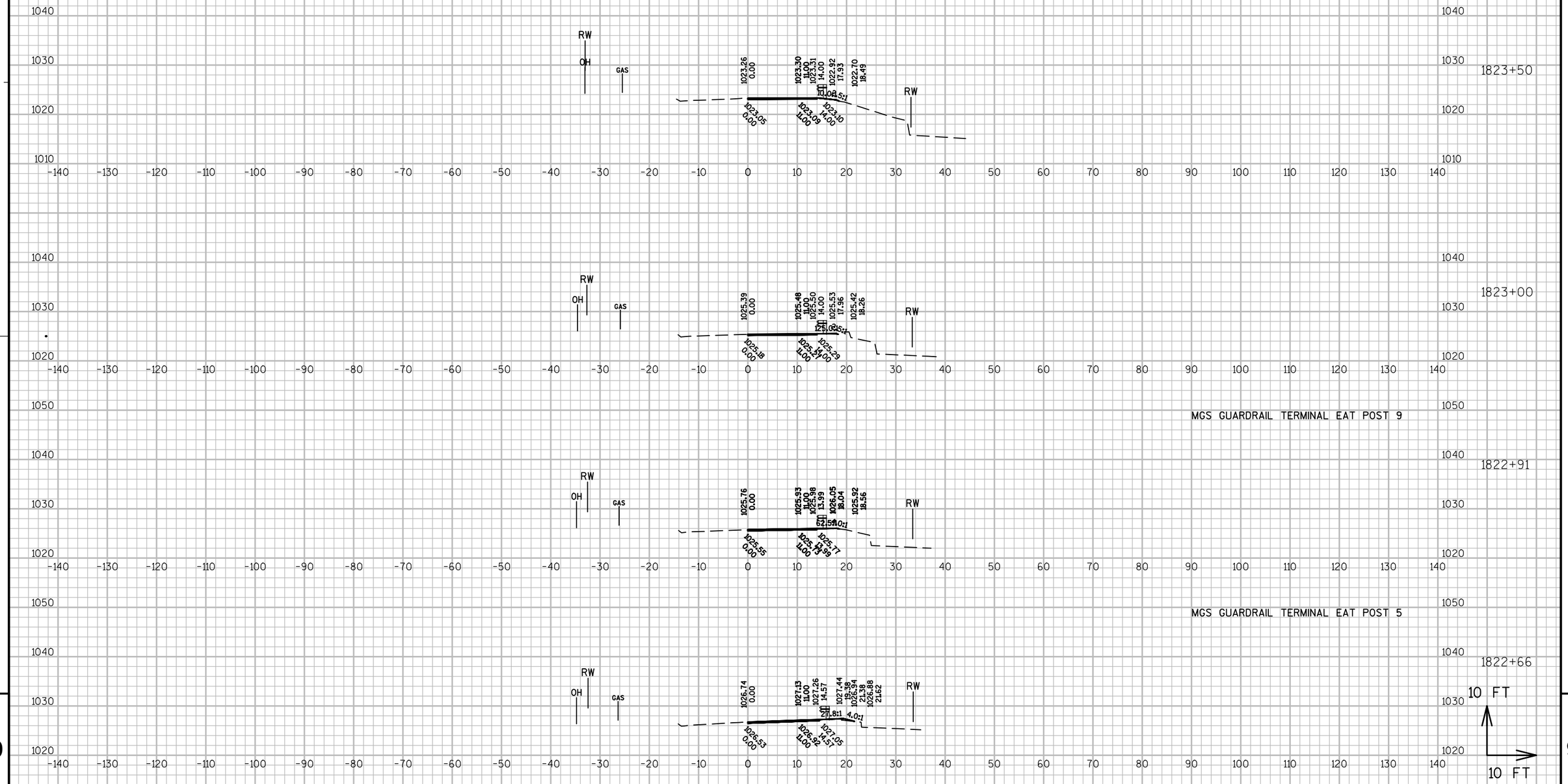
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 310	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



9

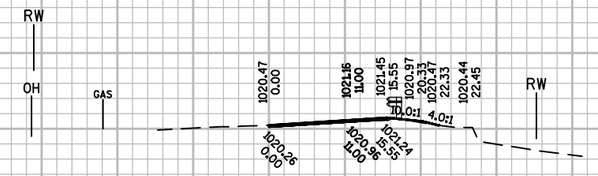
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 311	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\4530670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

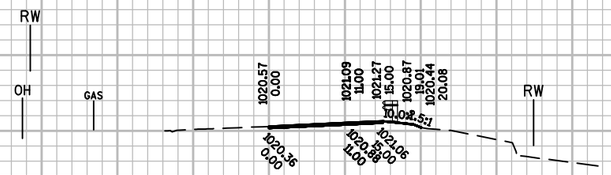
WISDOT/CADDS SHEET 49

MGS GUARDRAIL TERMINAL EAT POST 5

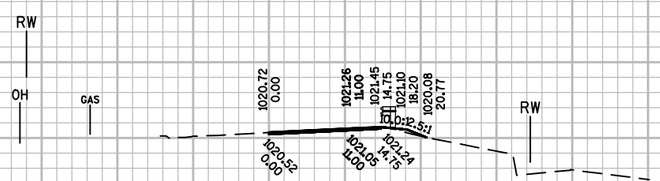


1824+95

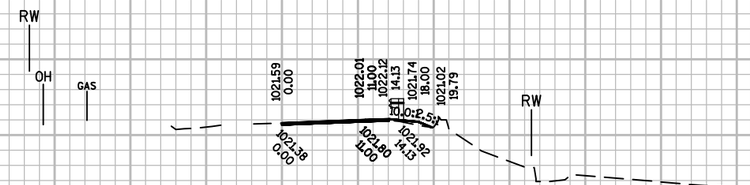
MGS GUARDRAIL TERMINAL EAT POST 9



1824+70



1824+50



1824+00

10 FT

10 FT

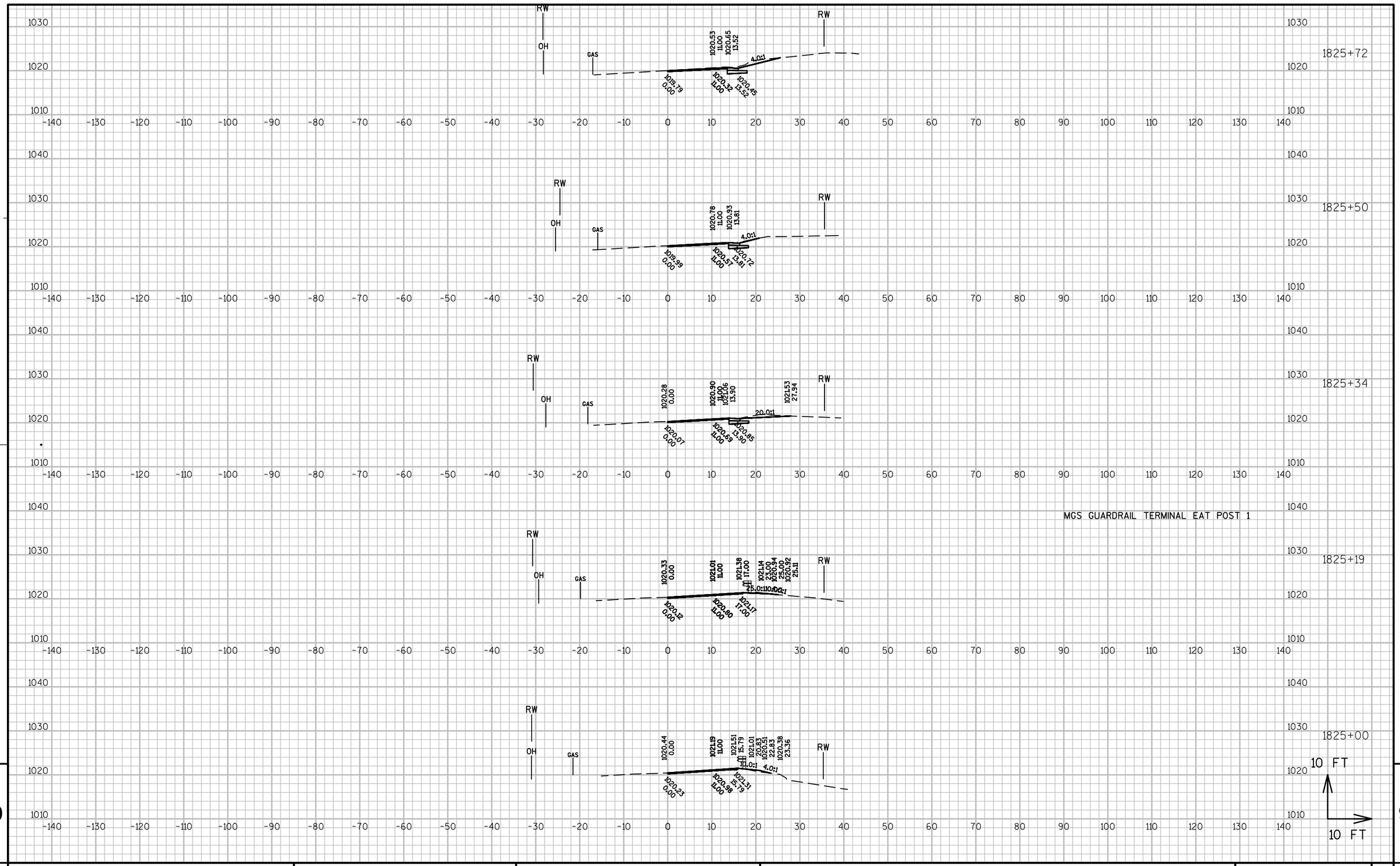
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9

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 312	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 313	E

MGS GUARDRAIL TERMINAL EAT POST 5

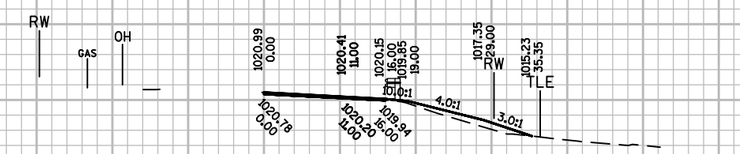


1830+60

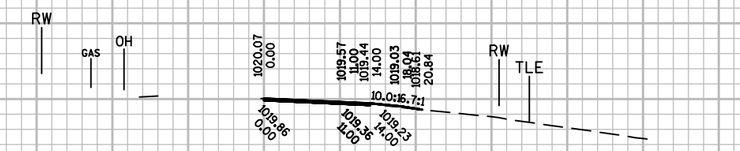


1830+50

MGS GUARDRAIL TERMINAL EAT POST 1



1830+35



1830+00

10 FT
10 FT

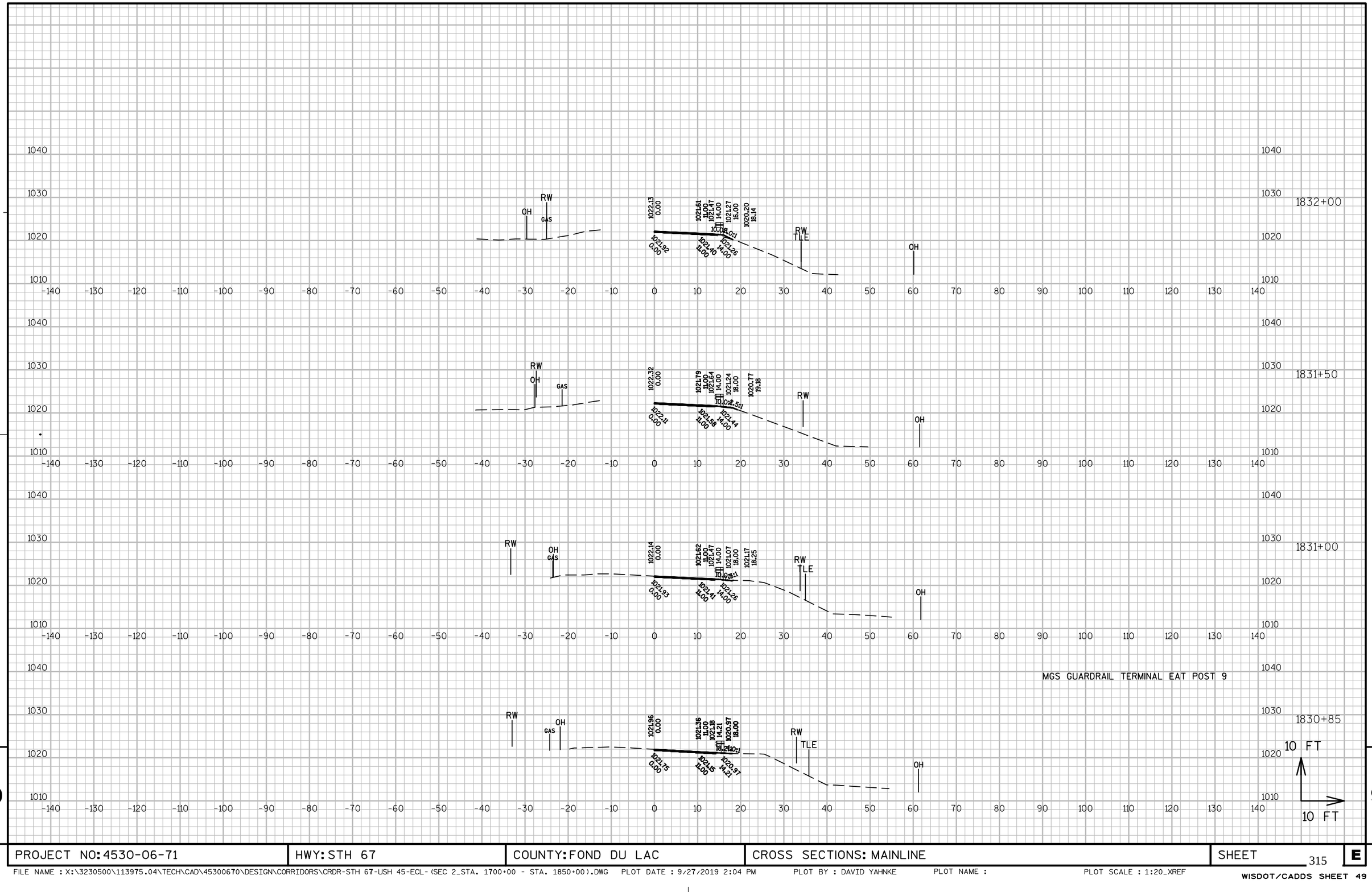
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 314	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

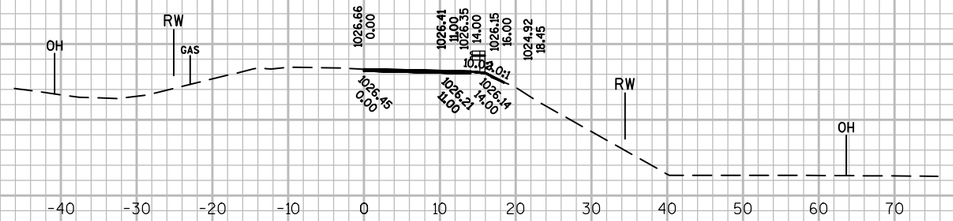
WISDOT/CADDS SHEET 49



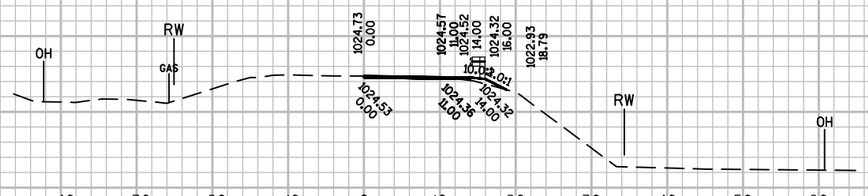
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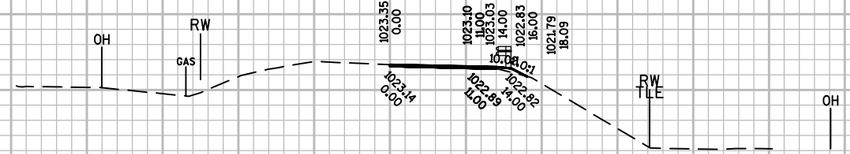
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 315	E



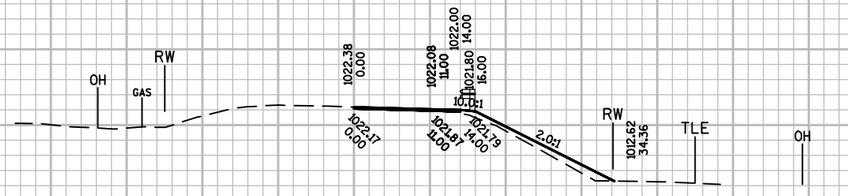
1834+00



1833+50



1833+00



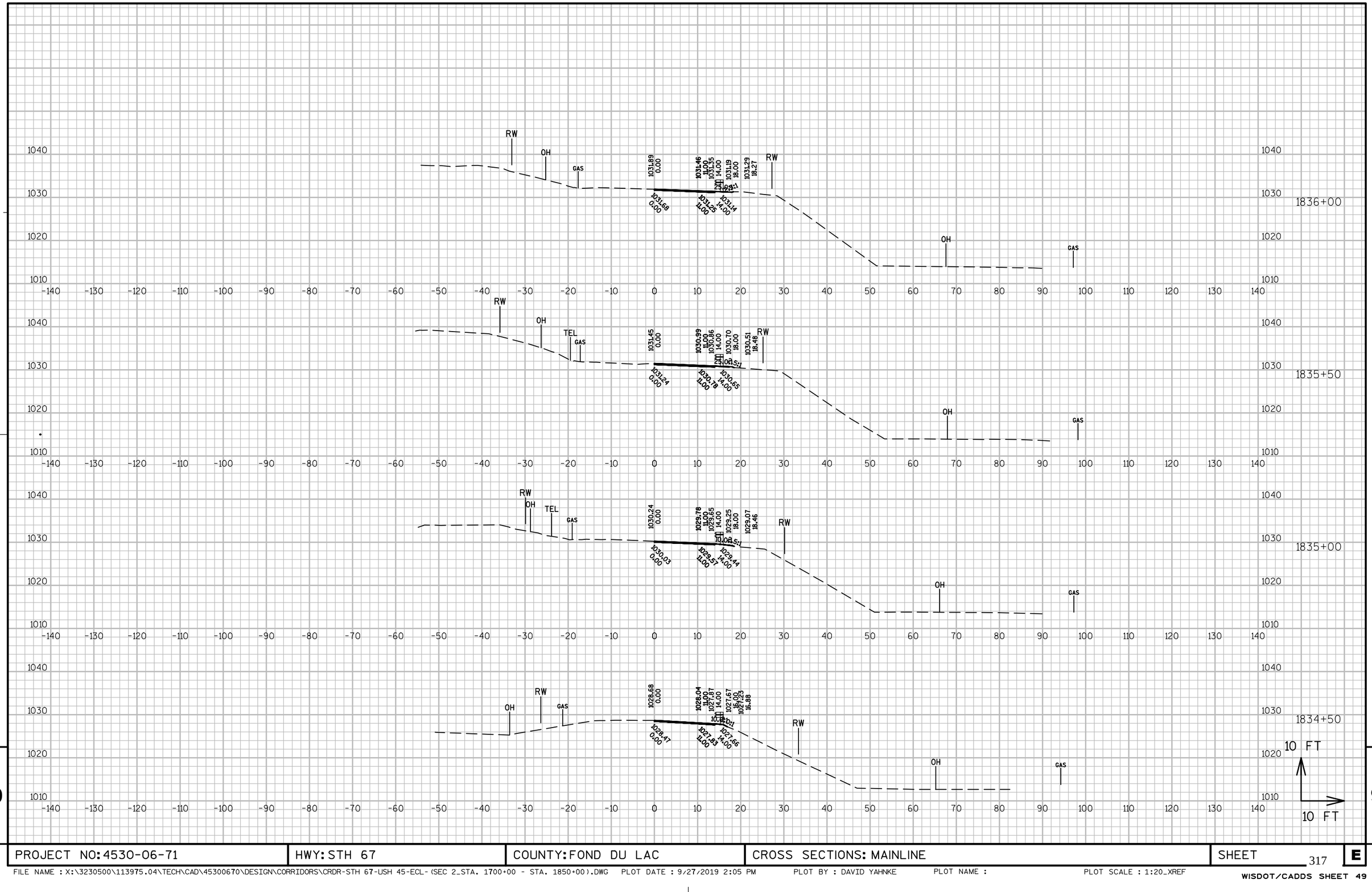
1832+50

10 FT
10 FT

9

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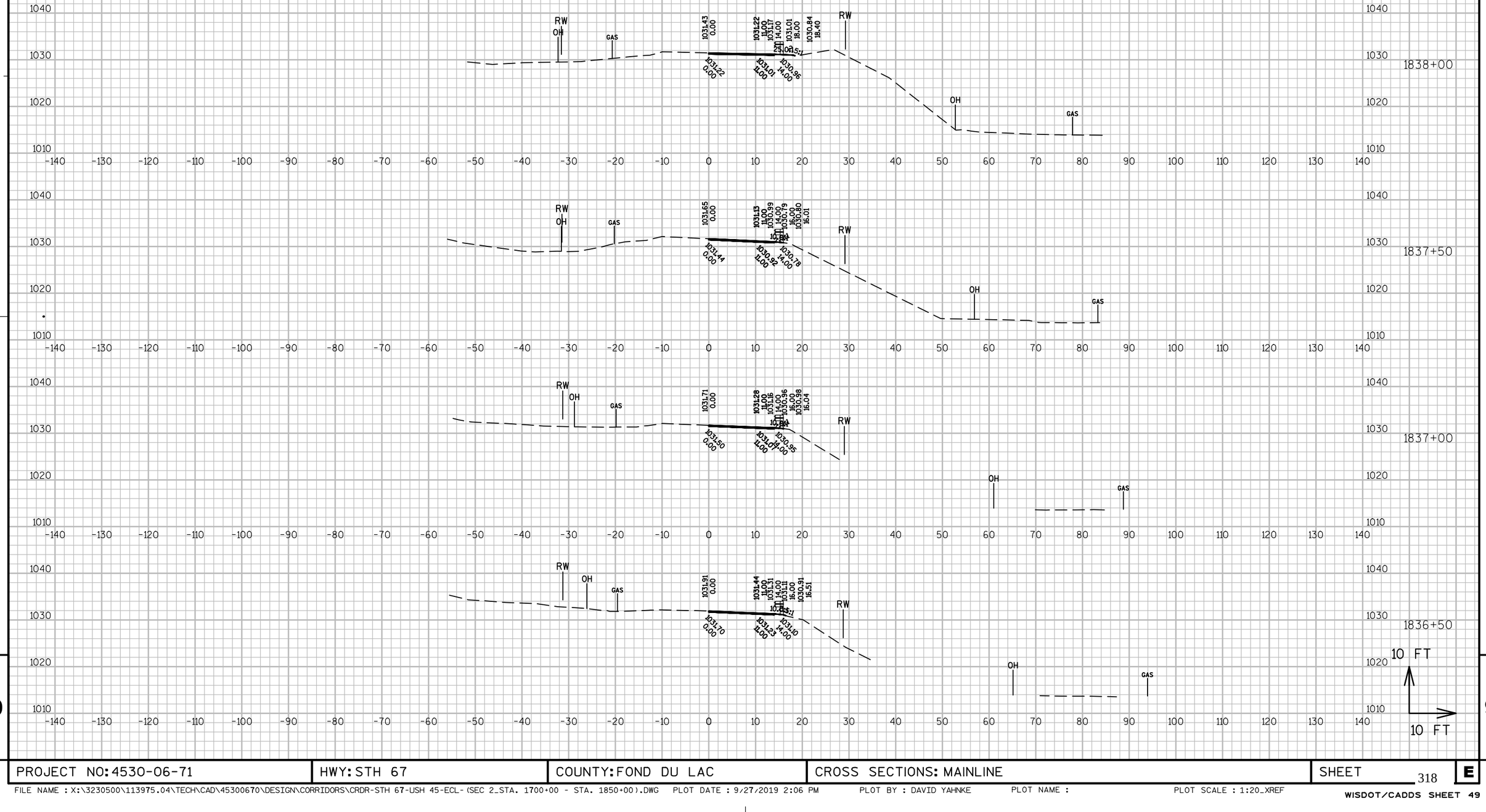
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 316	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 317	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

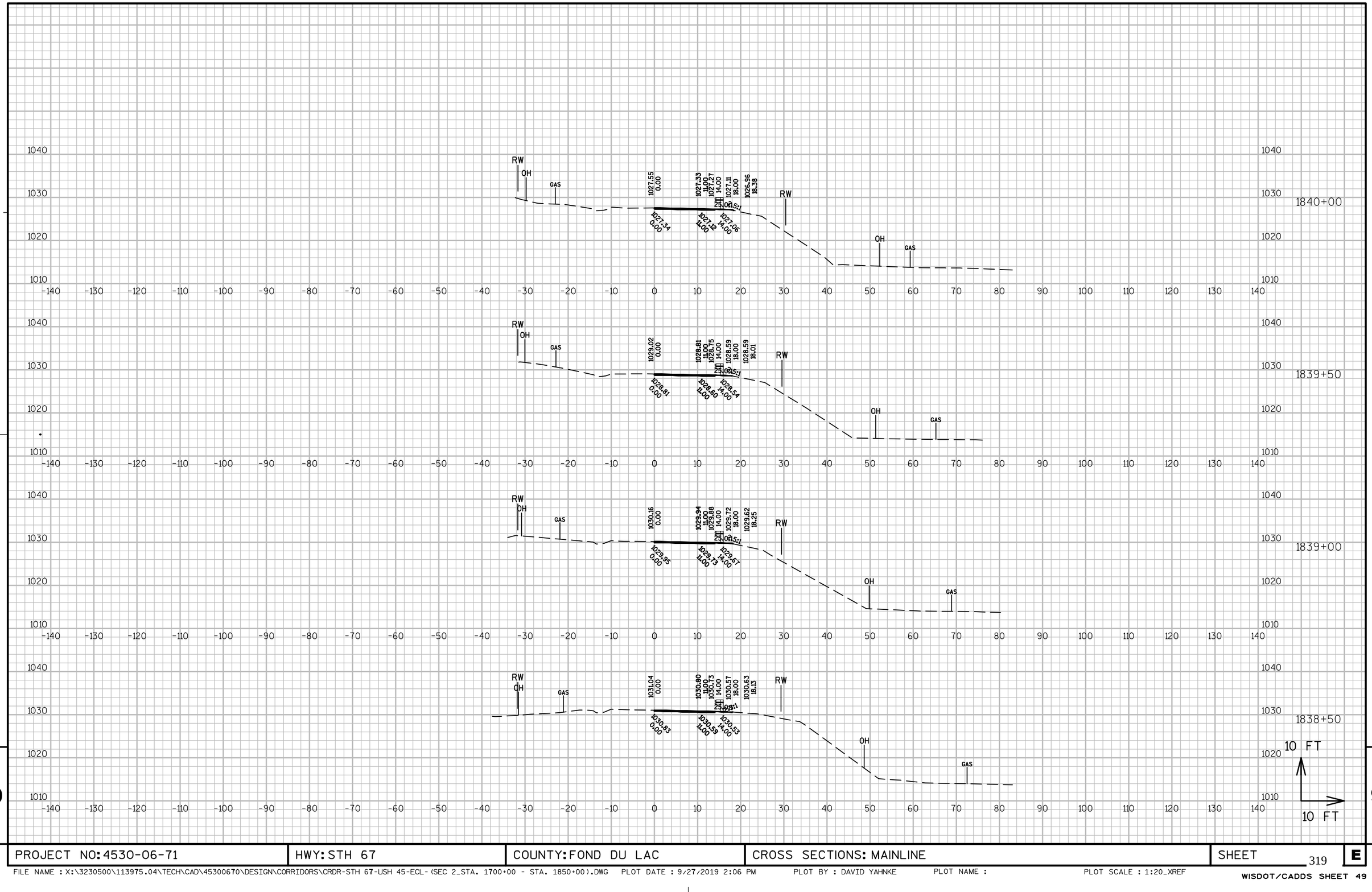
WISDOT/CADDS SHEET 49



9

9

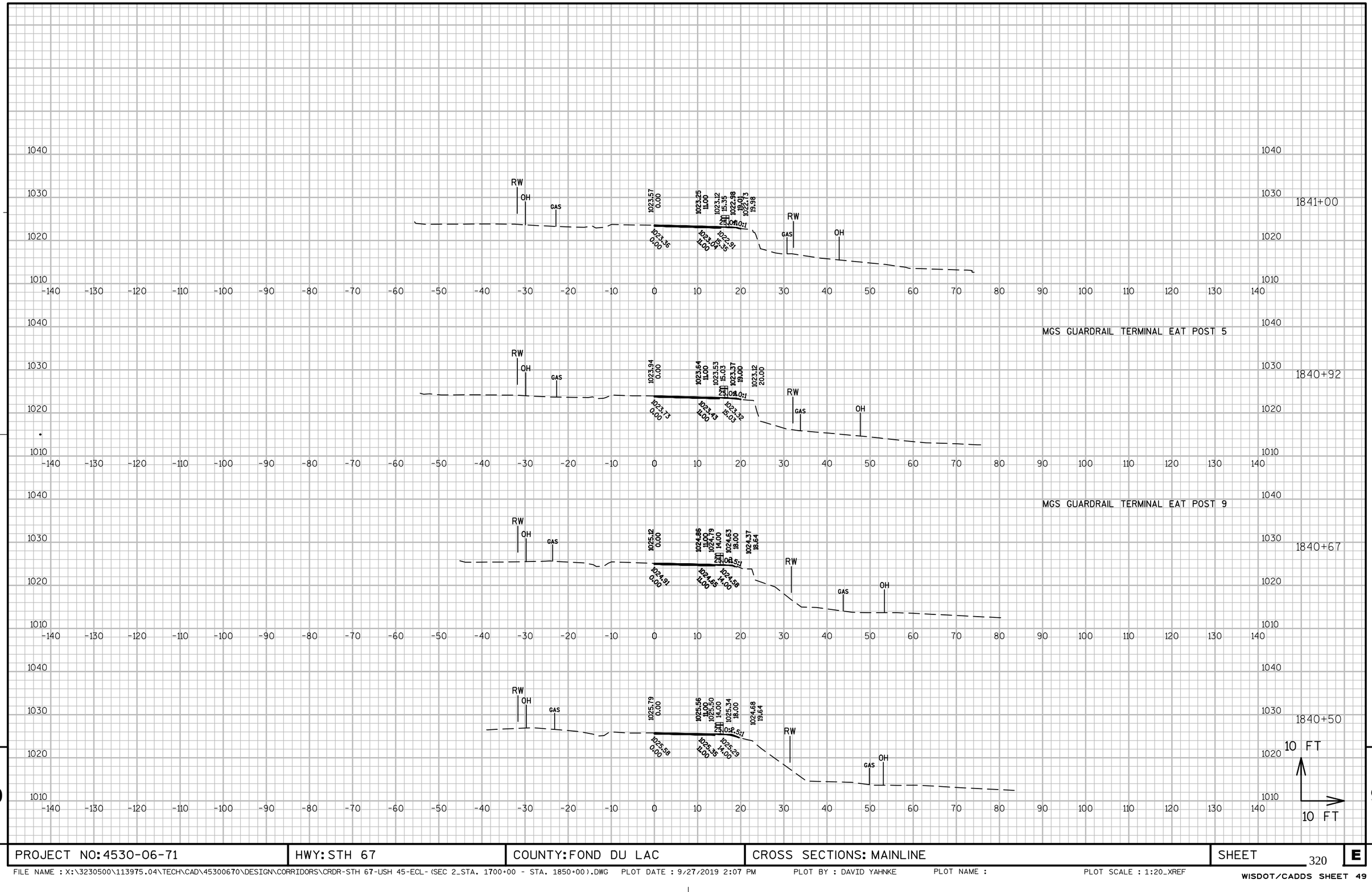
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 318	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 319	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



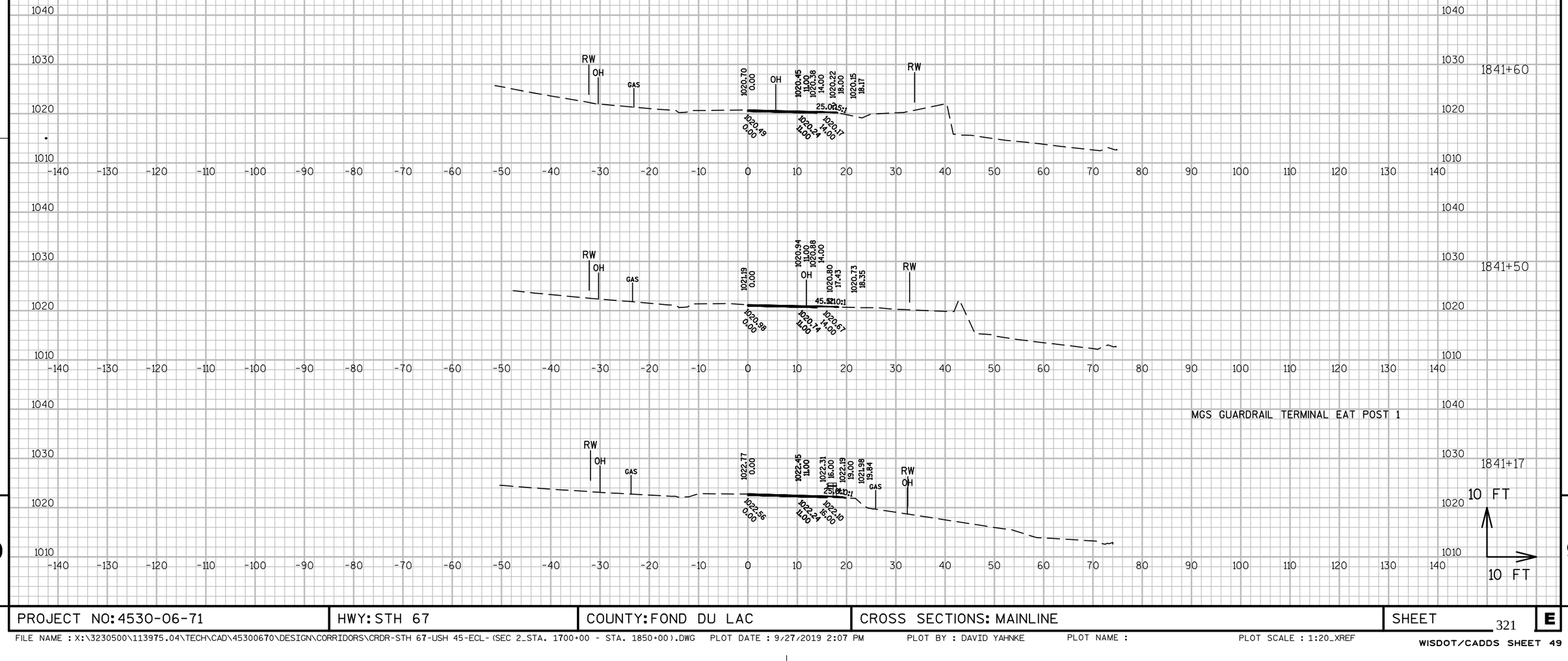
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 320	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

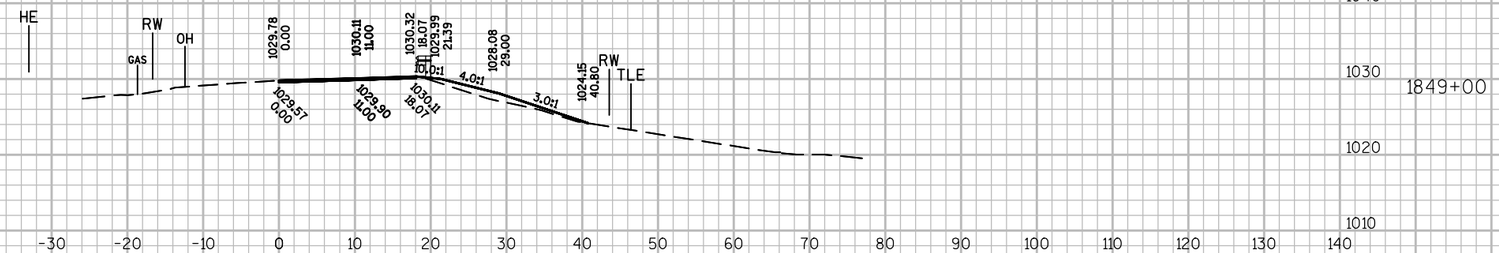
WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 321	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

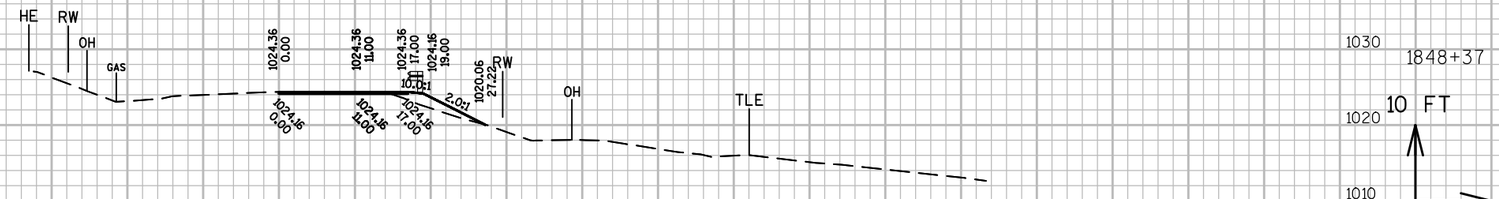
WISDOT/CADDS SHEET 49





MGS GUARDRAIL TERMINAL EAT POST 9





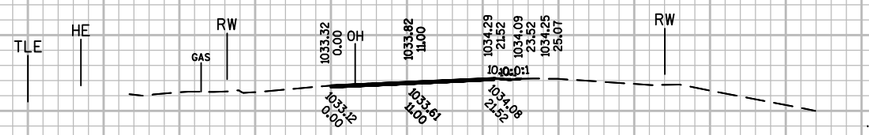
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 322	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



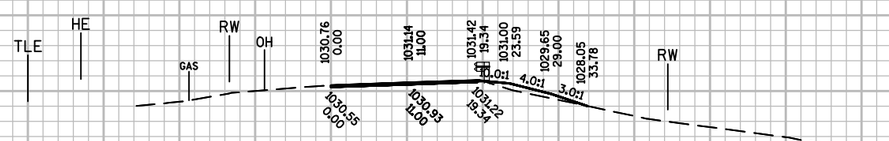
1849+40

MGS GUARDRAIL TERMINAL EAT POST 1



1849+34

MGS GUARDRAIL TERMINAL EAT POST 5



1849+11

10 FT
10 FT

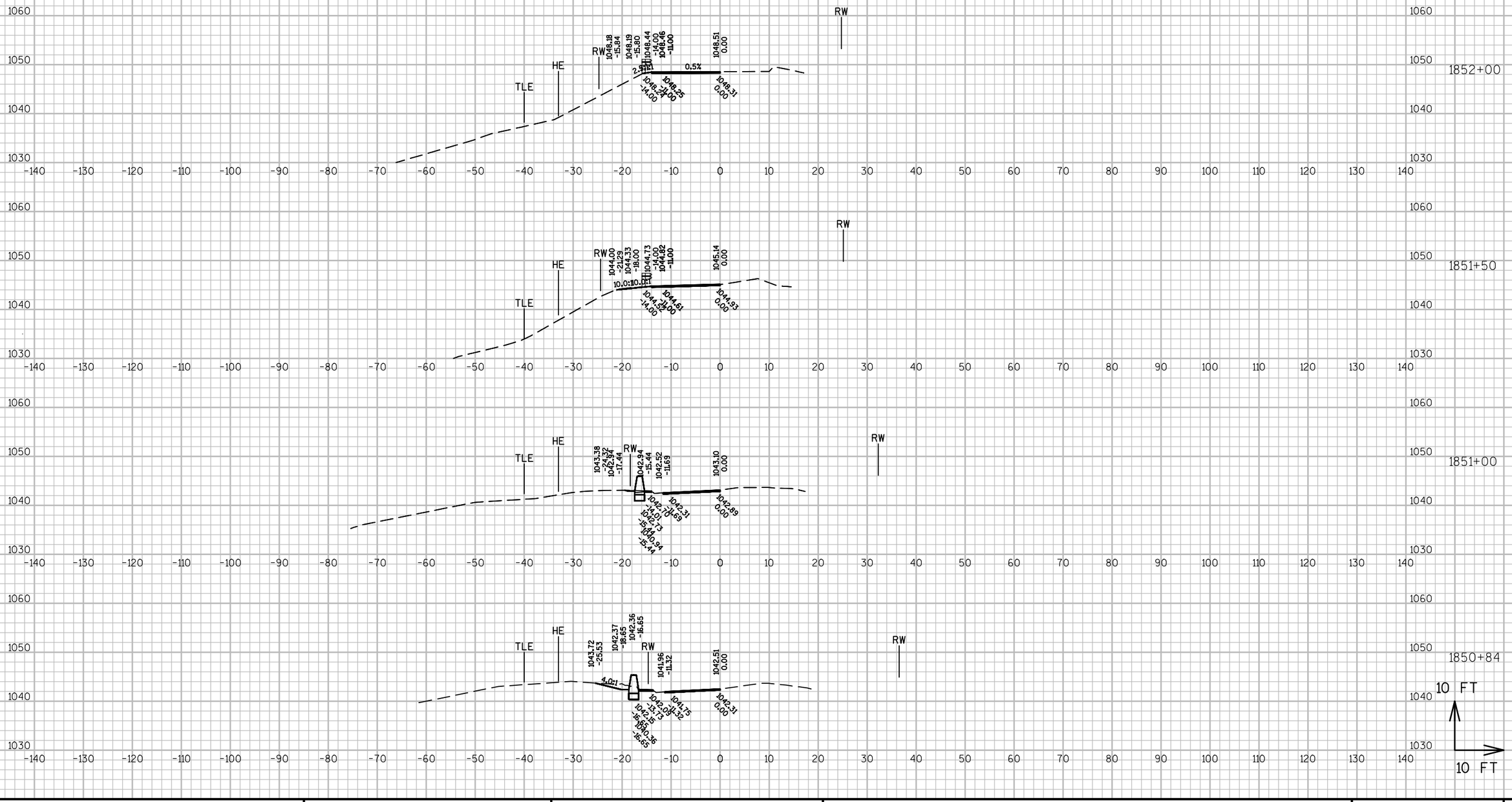
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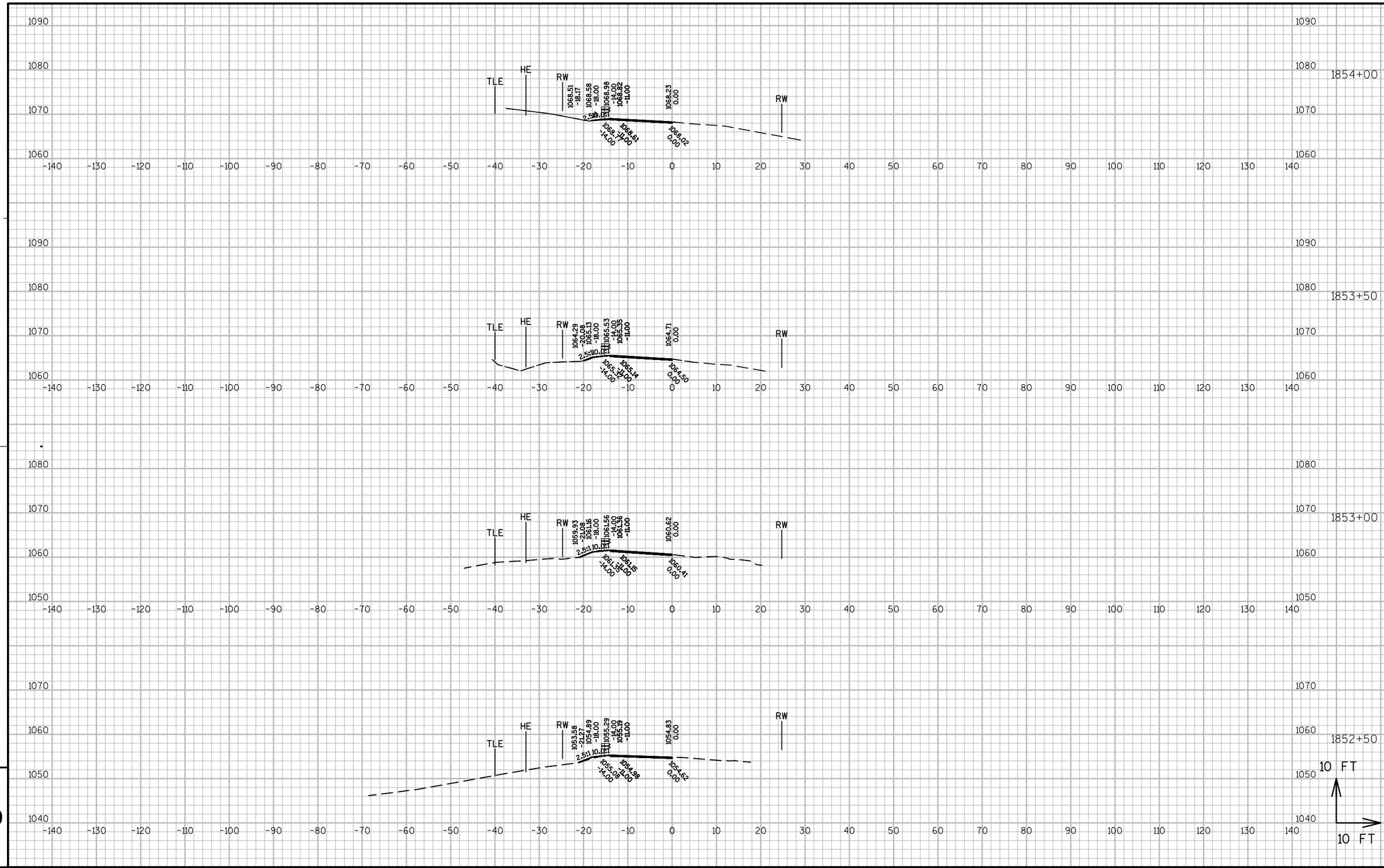
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 323	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 2_STA. 1700+00 - STA. 1850+00).DWG PLOT DATE : 9/27/2019 2:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



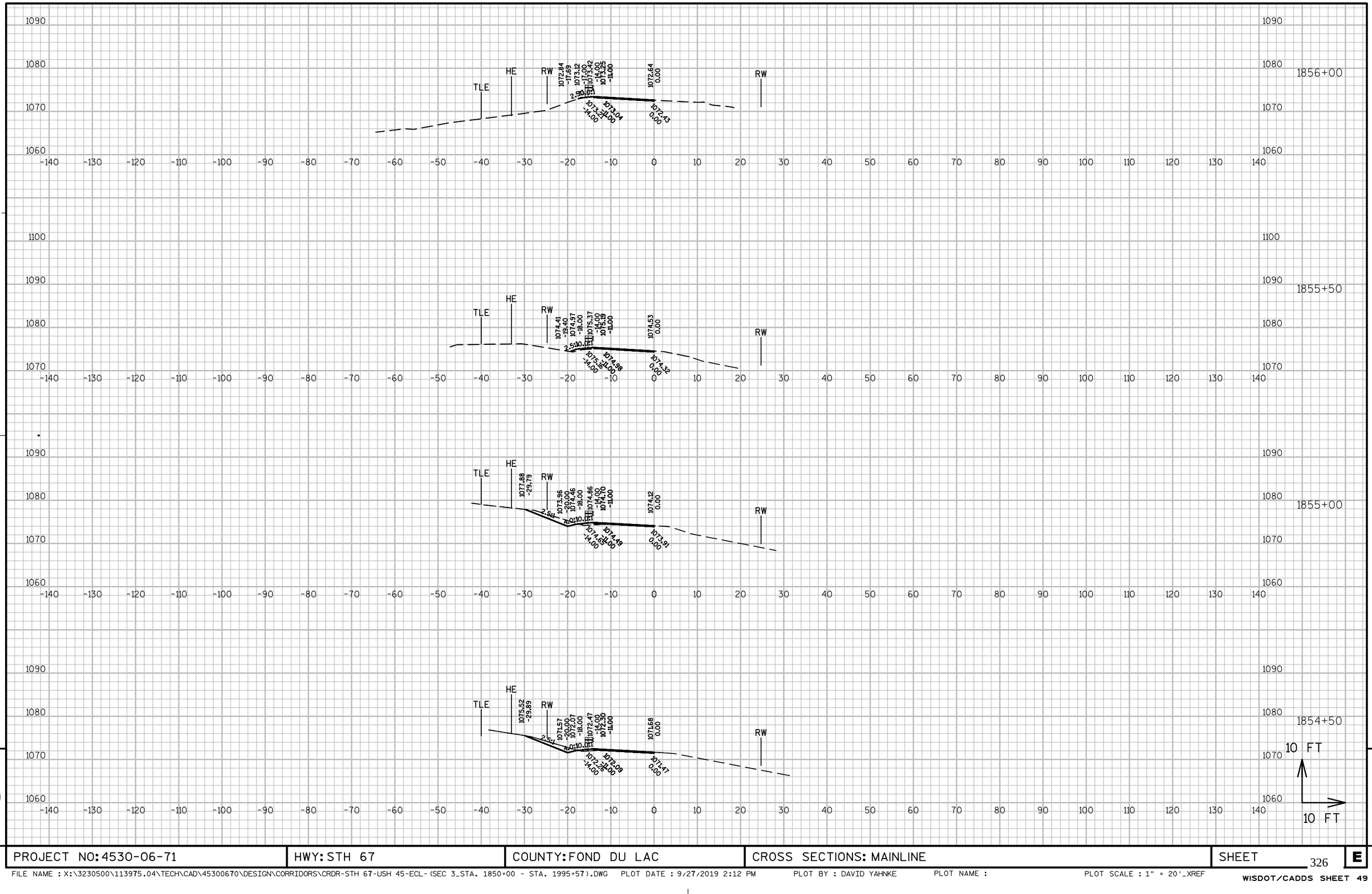
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 324	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 325	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:11 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



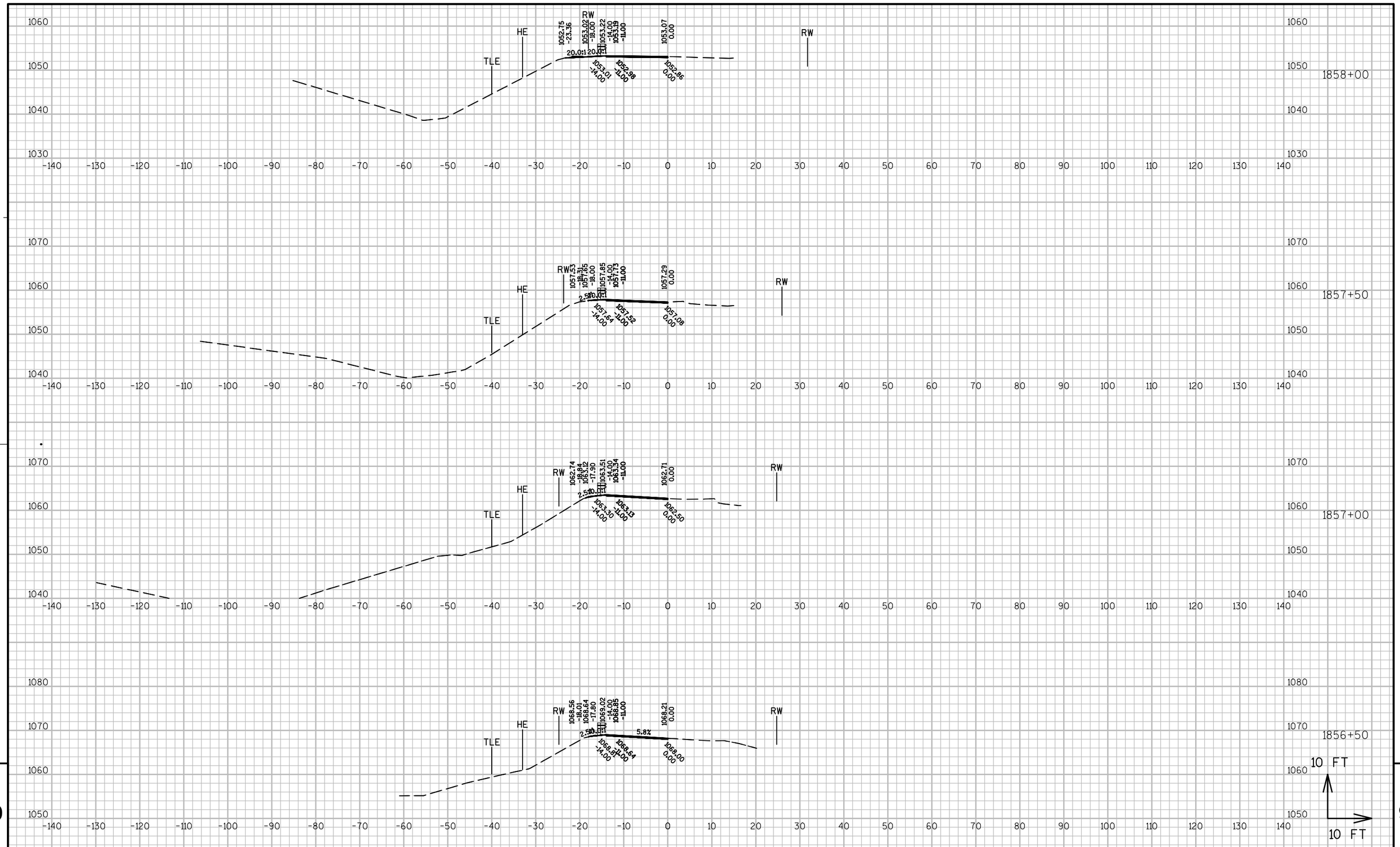
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 326	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:12 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

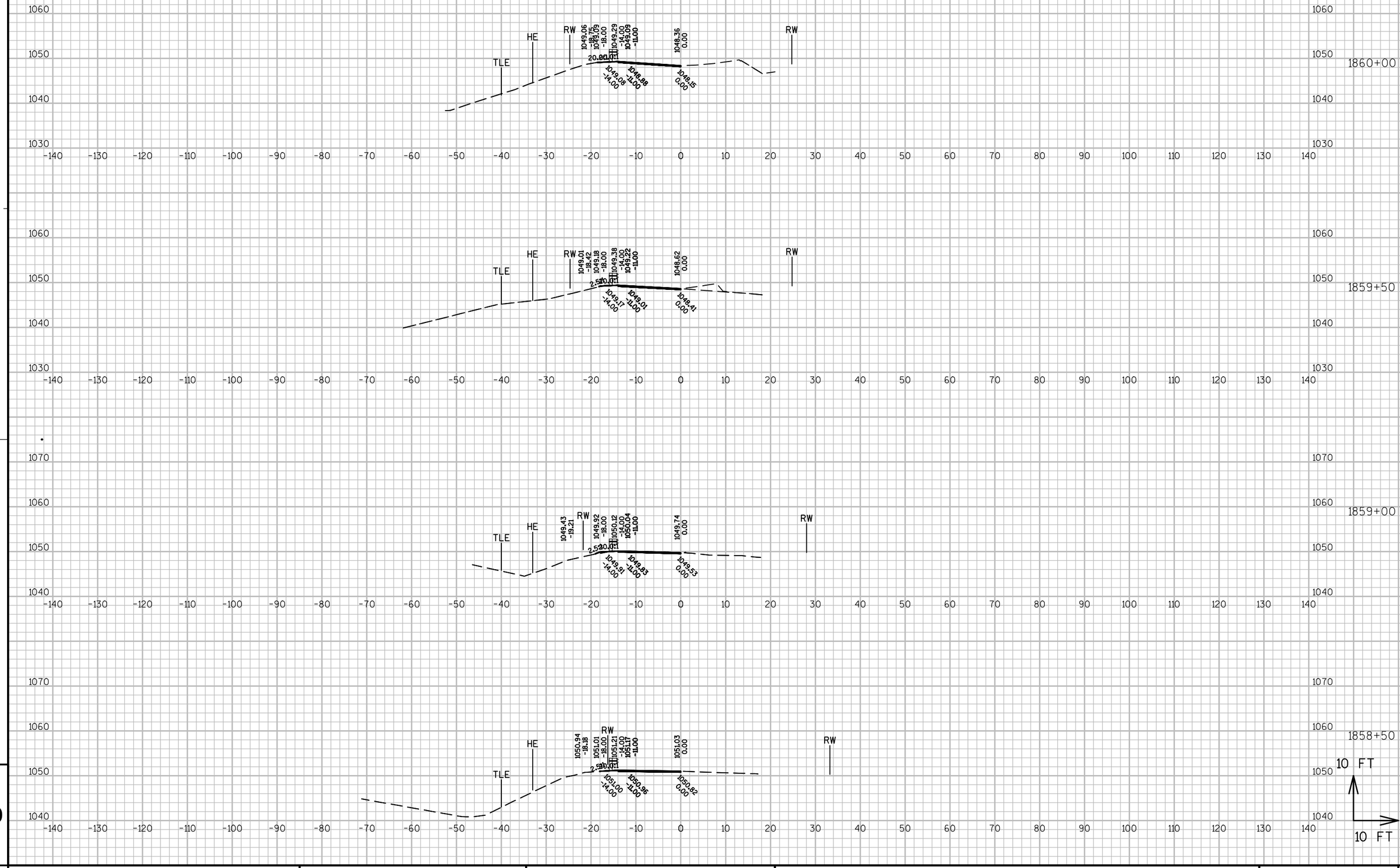
WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 327	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:13 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

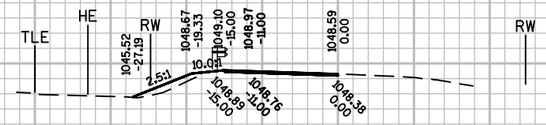


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 328	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:13 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

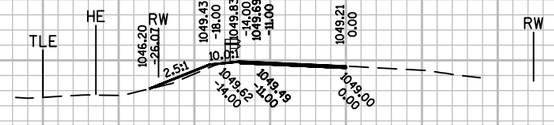
WISDOT/CADDS SHEET 49

MGS GUARDRAIL TERMINAL EAT POST 5



1861+69

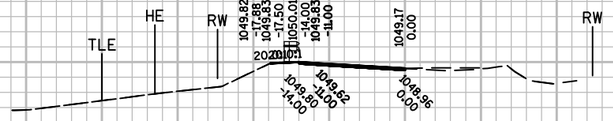
MGS GUARDRAIL TERMINAL EAT POST 9



1861+44



1861+00



1860+50

10 FT

10 FT

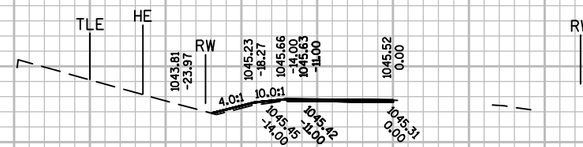
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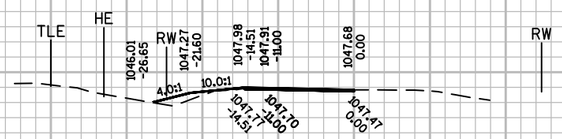
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 329	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:14 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



1862+50

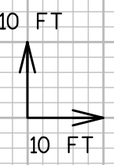


1862+00

MGS GUARDRAIL TERMINAL EAT POST 1



1861+94



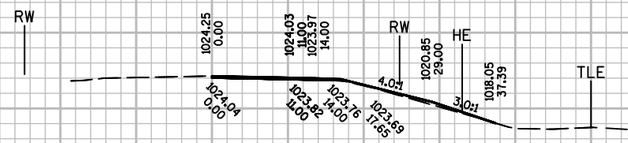
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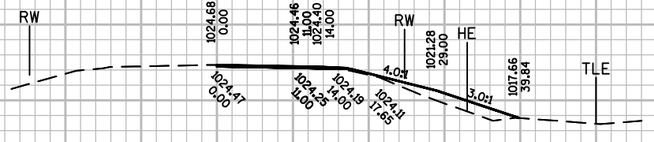
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 330	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:14 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

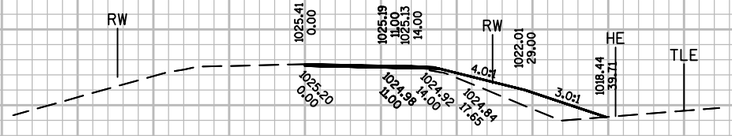
WISDOT/CADDS SHEET 49



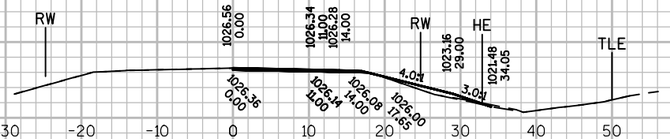
1870+50



1870+00



1869+50



1869+00

10 FT

10 FT

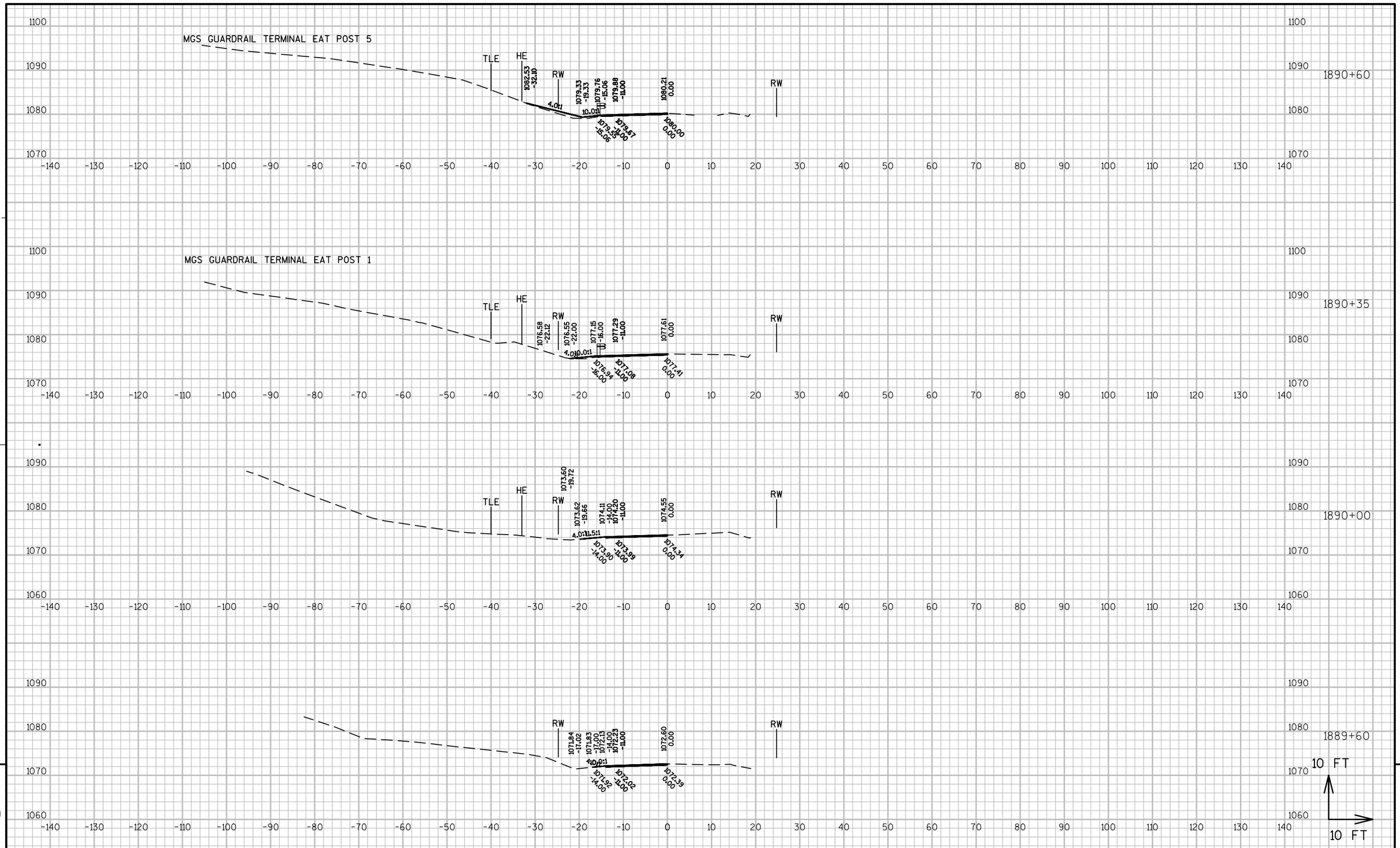
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 331	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:15 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

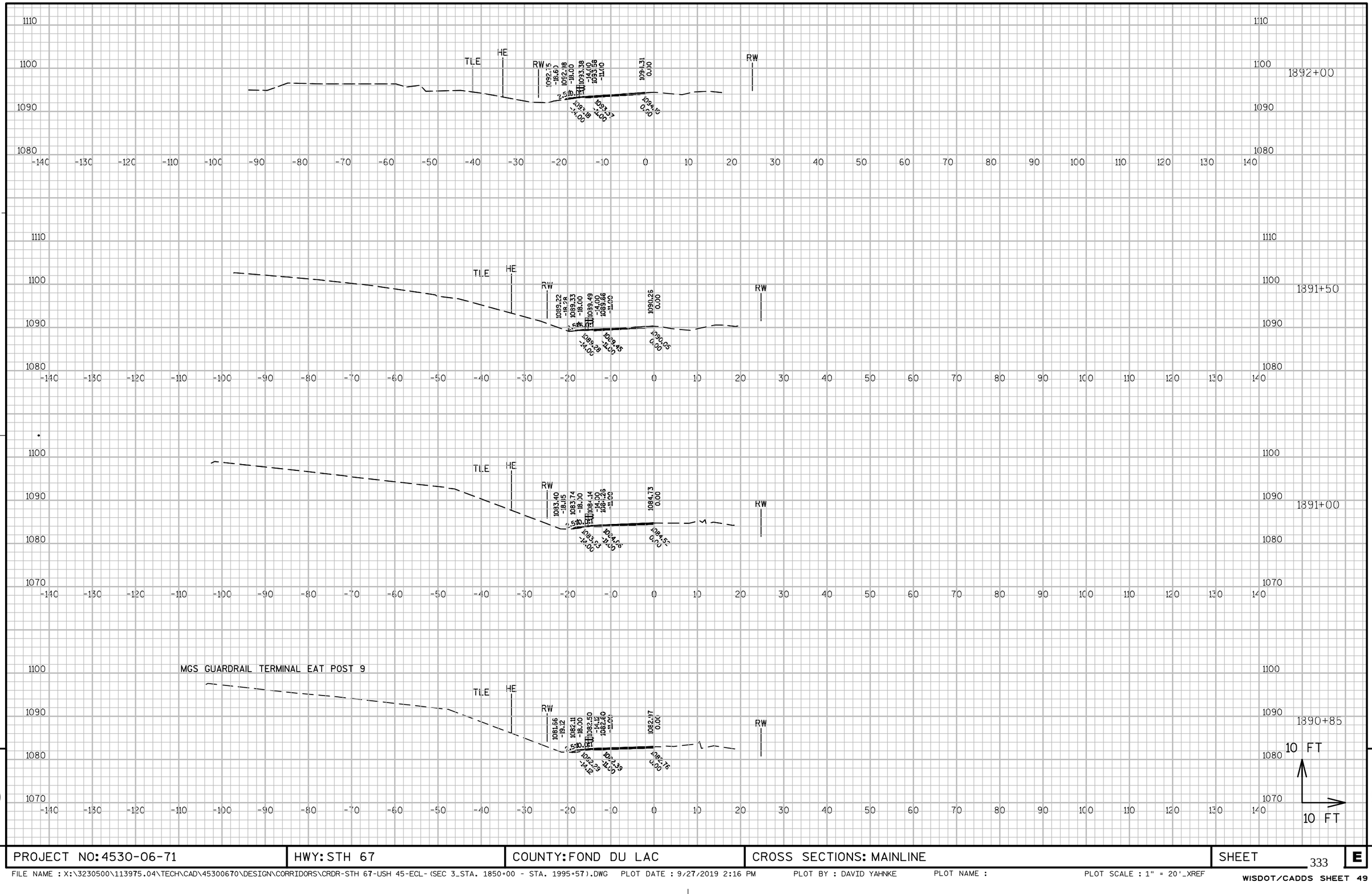
WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 332	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:15 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



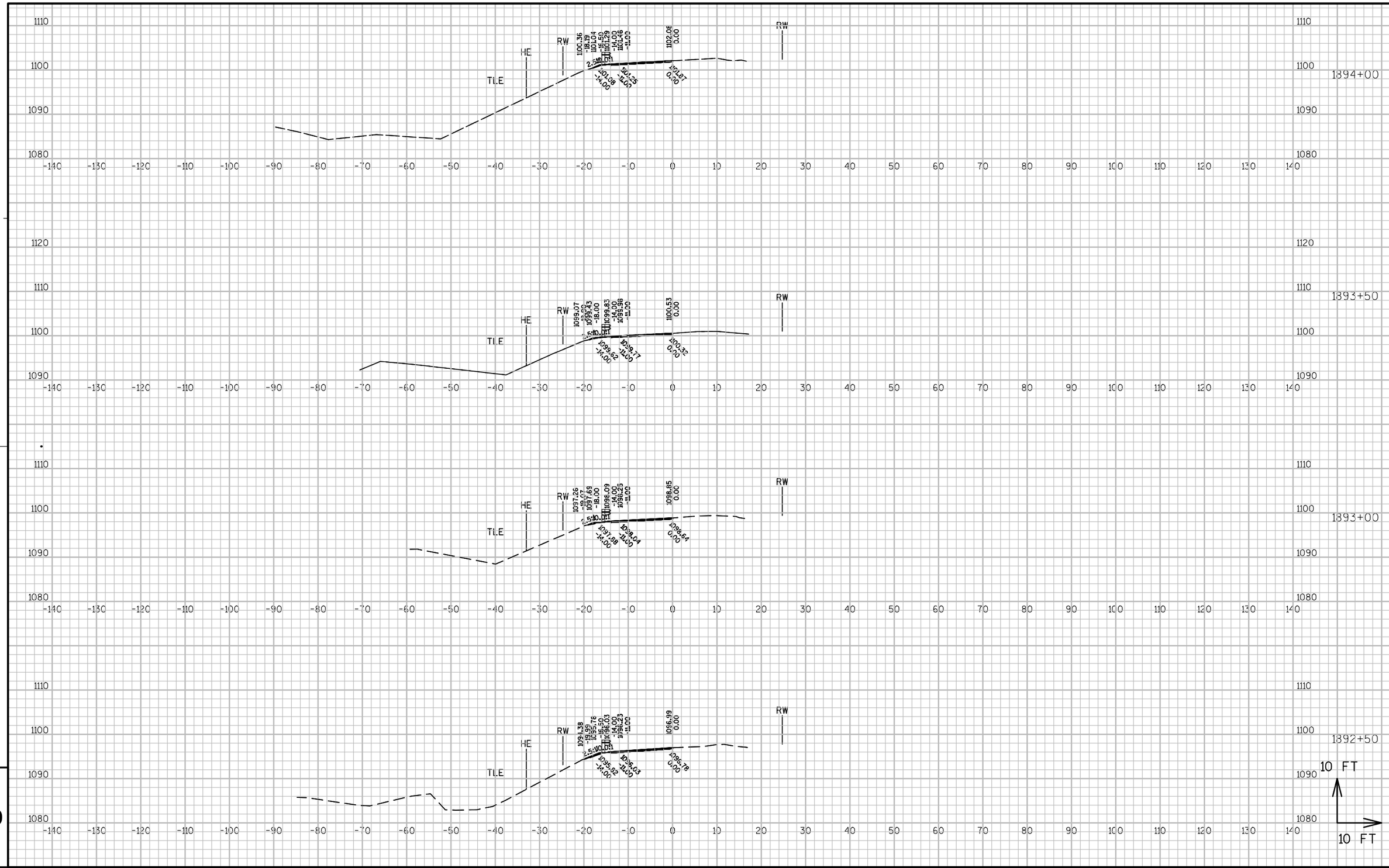
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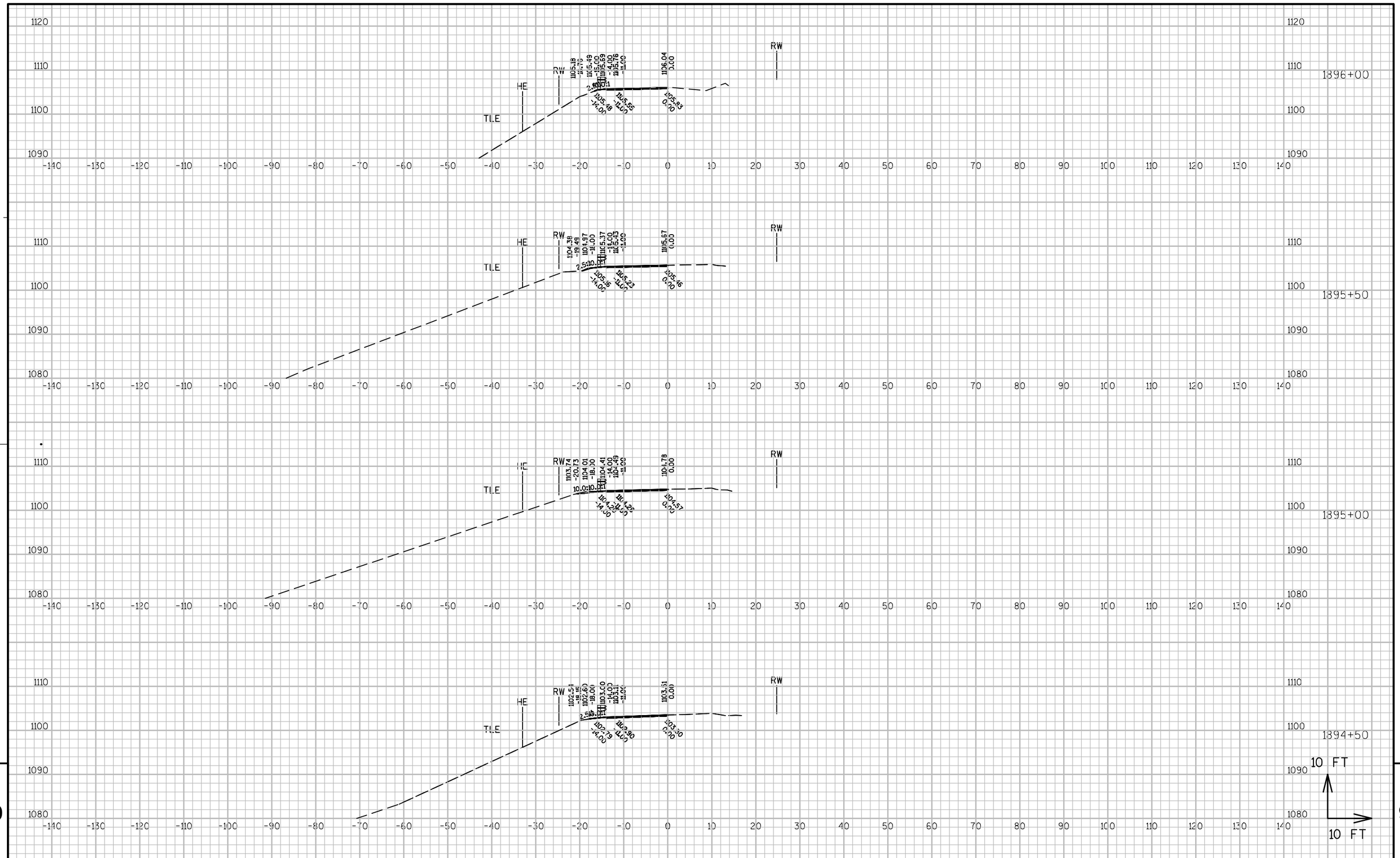
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 333	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:16 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 334	E

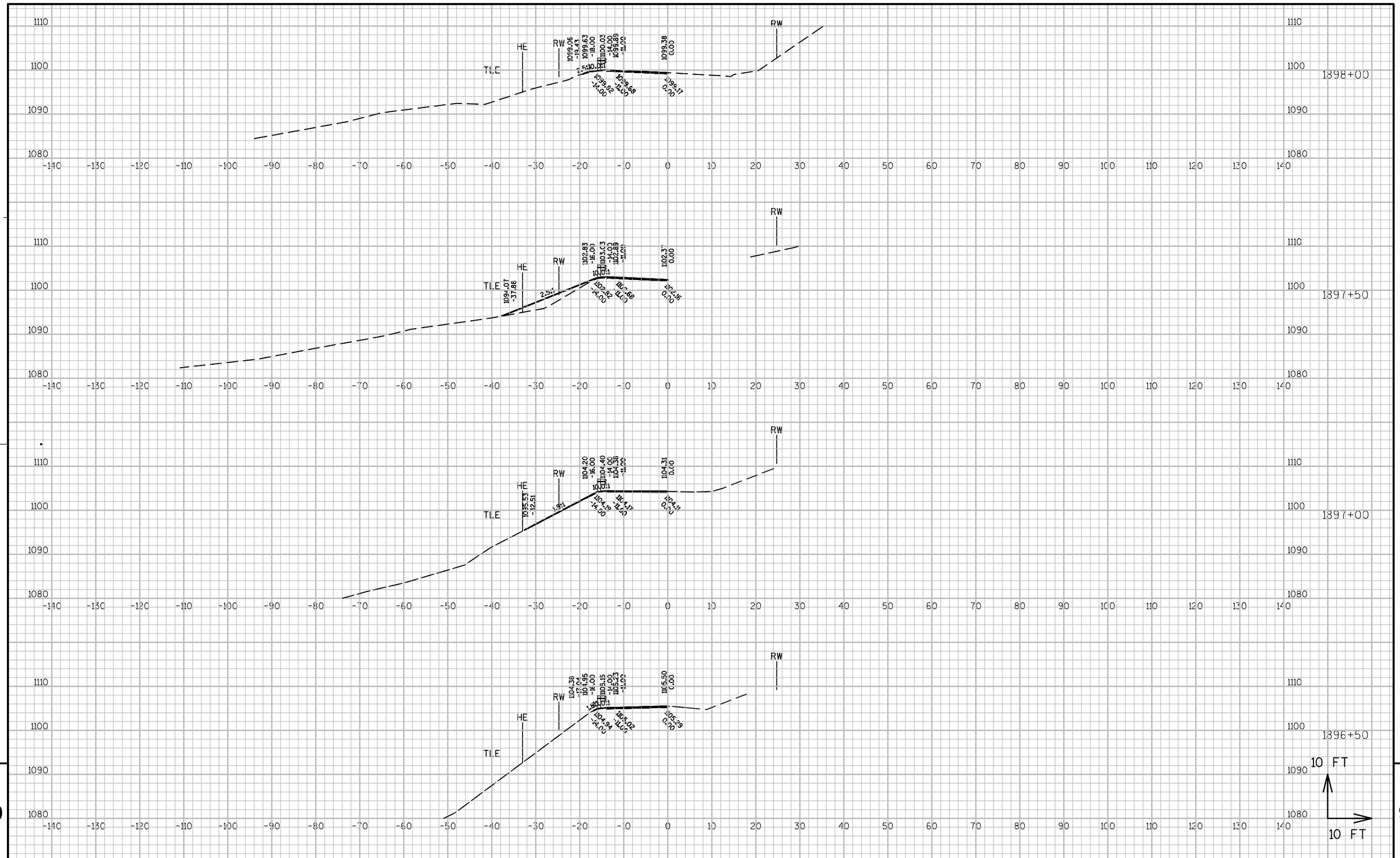


9

9

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 335	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:17 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

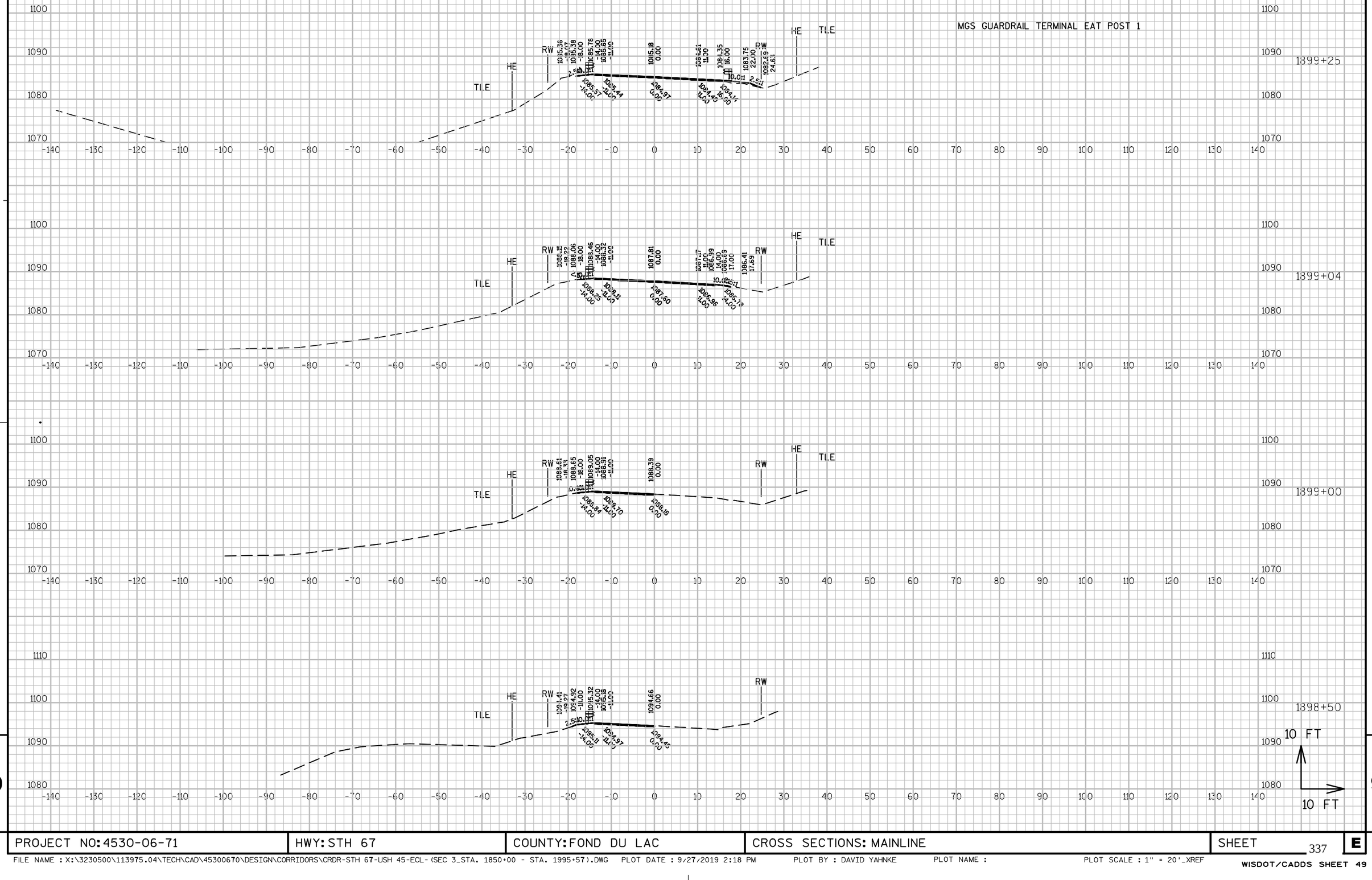


PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 336	E

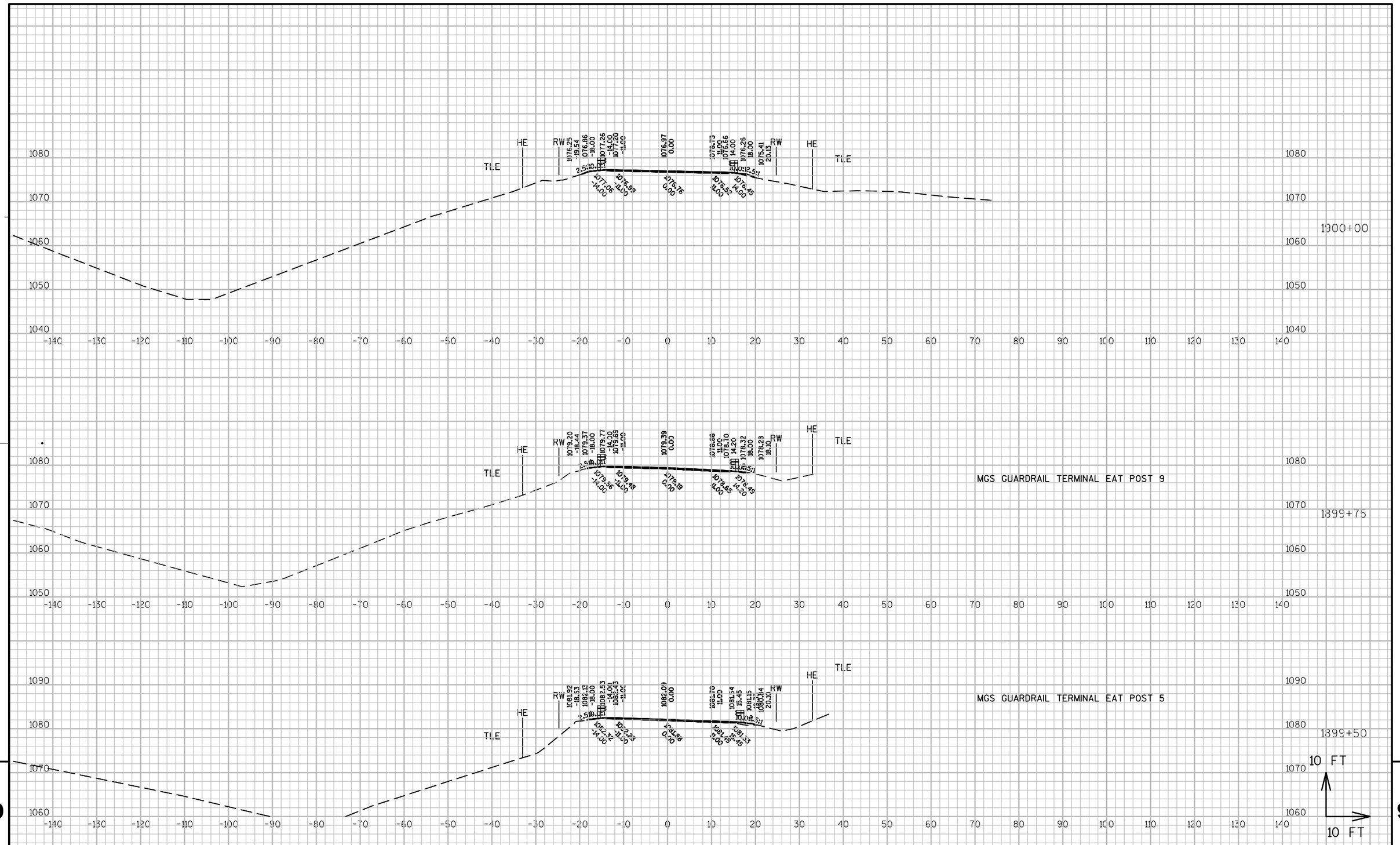
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WISDOT/CADDS SHEET 49

MGS GUARDRAIL TERMINAL EAT POST 1



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 337	E



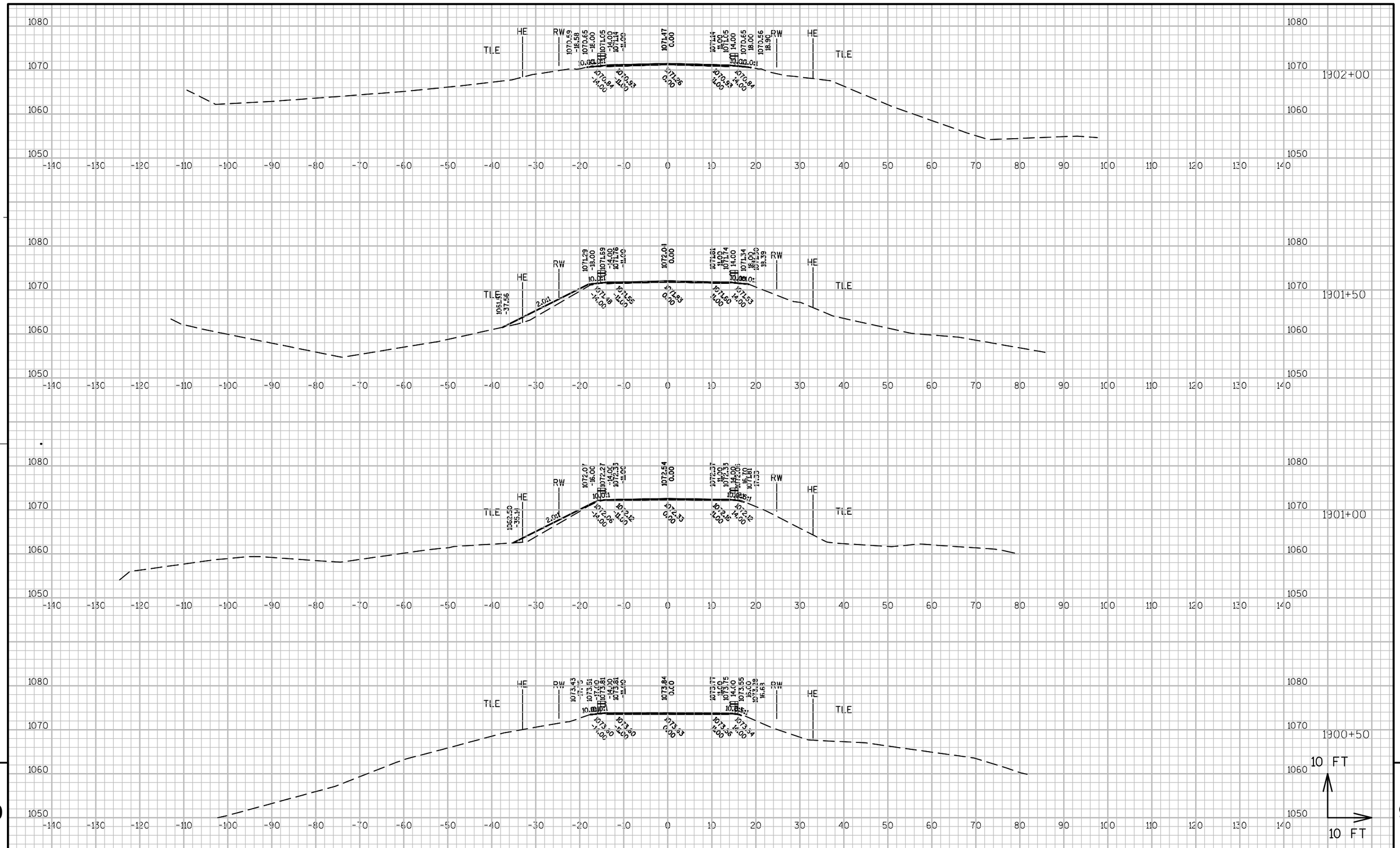
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 338	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:18 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

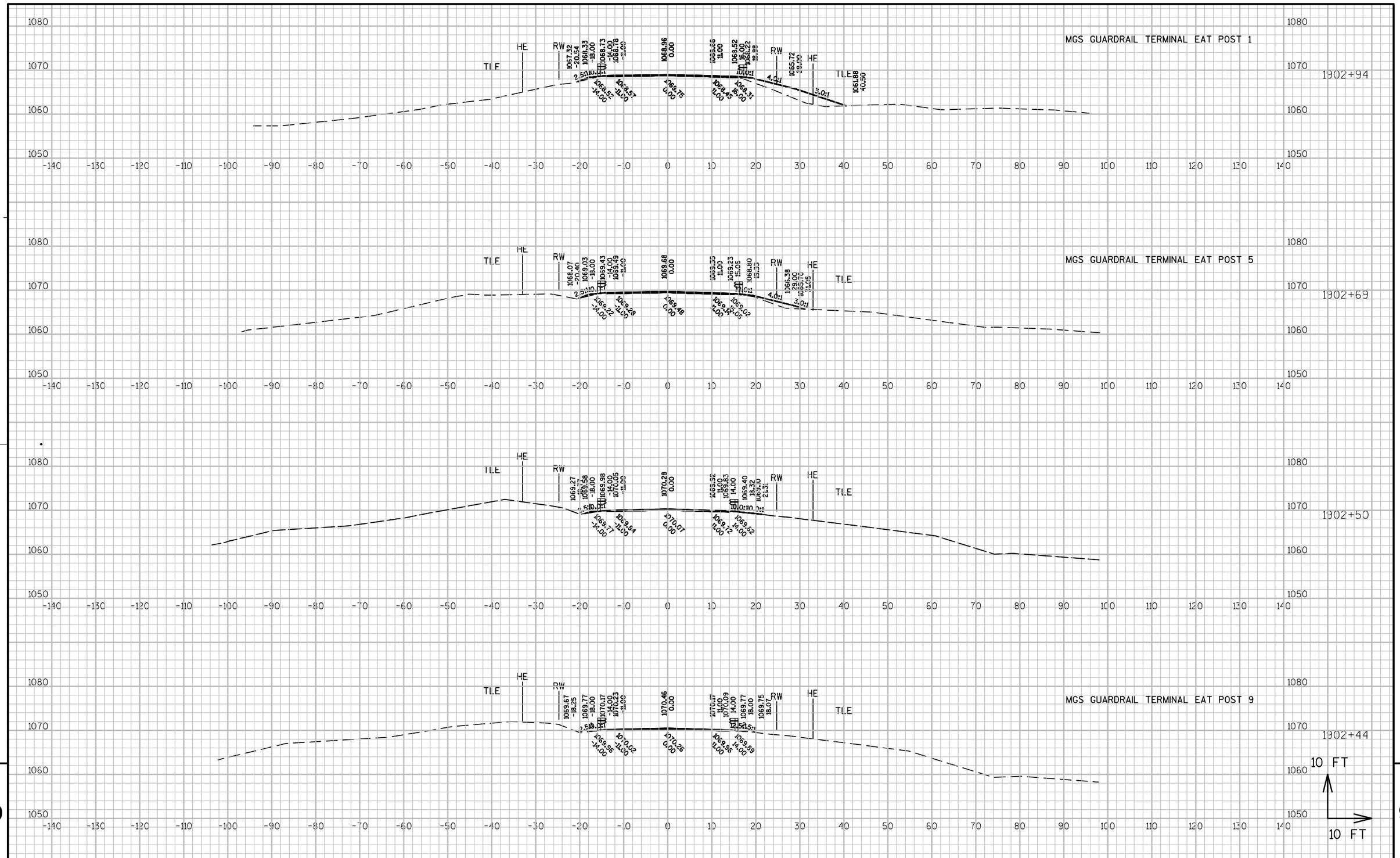
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 339	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:19 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

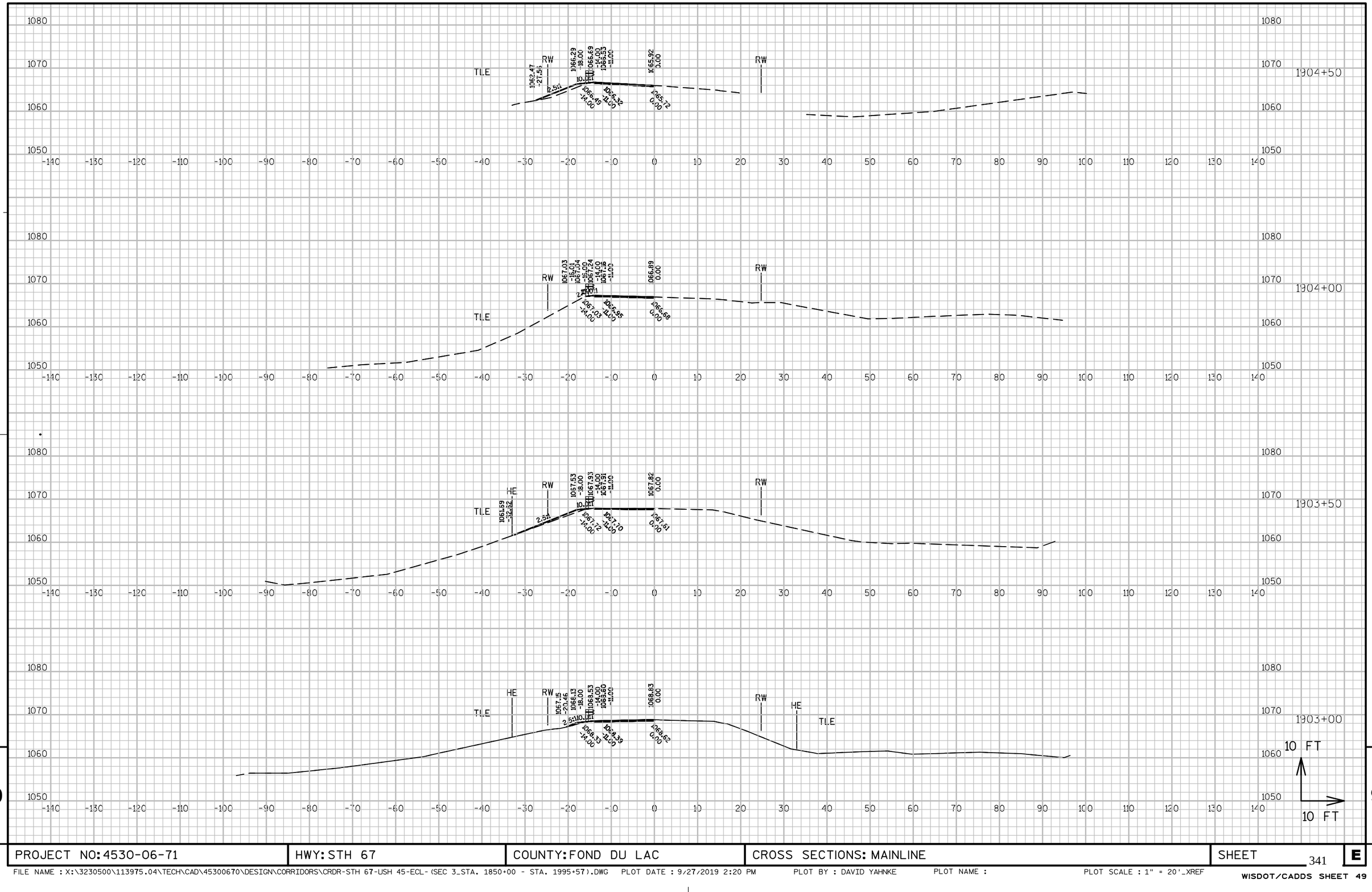


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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 340	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:19 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF



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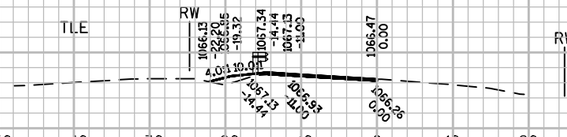
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 341	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:20 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

MGS GUARDRAIL TERMINAL EAT POST 5



1905+89

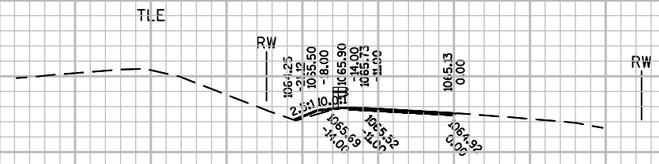
MGS GUARDRAIL TERMINAL EAT POST 9



1905+64



1905+50



1905+00

10 FT
10 FT

9

9

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 342	E

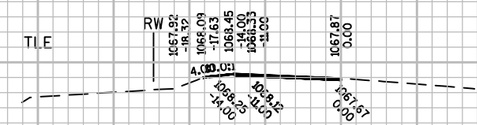
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WISDOT/CADDS SHEET 49

1906+85



1906+50



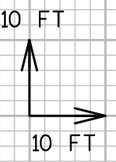
MGS GUARDRAIL TERMINAL EAT POST 1

1906+13



1906+00





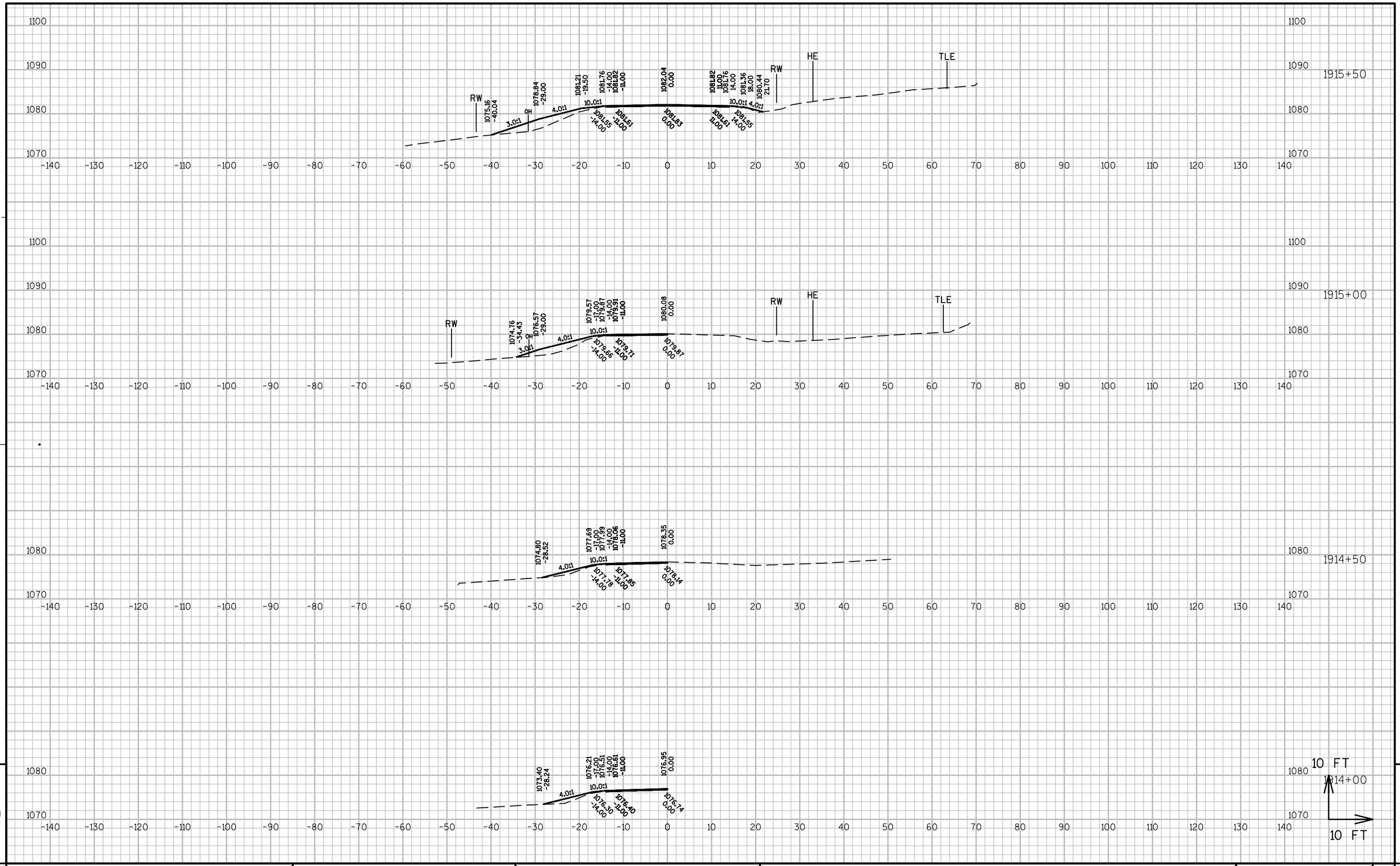
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 343	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:21 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



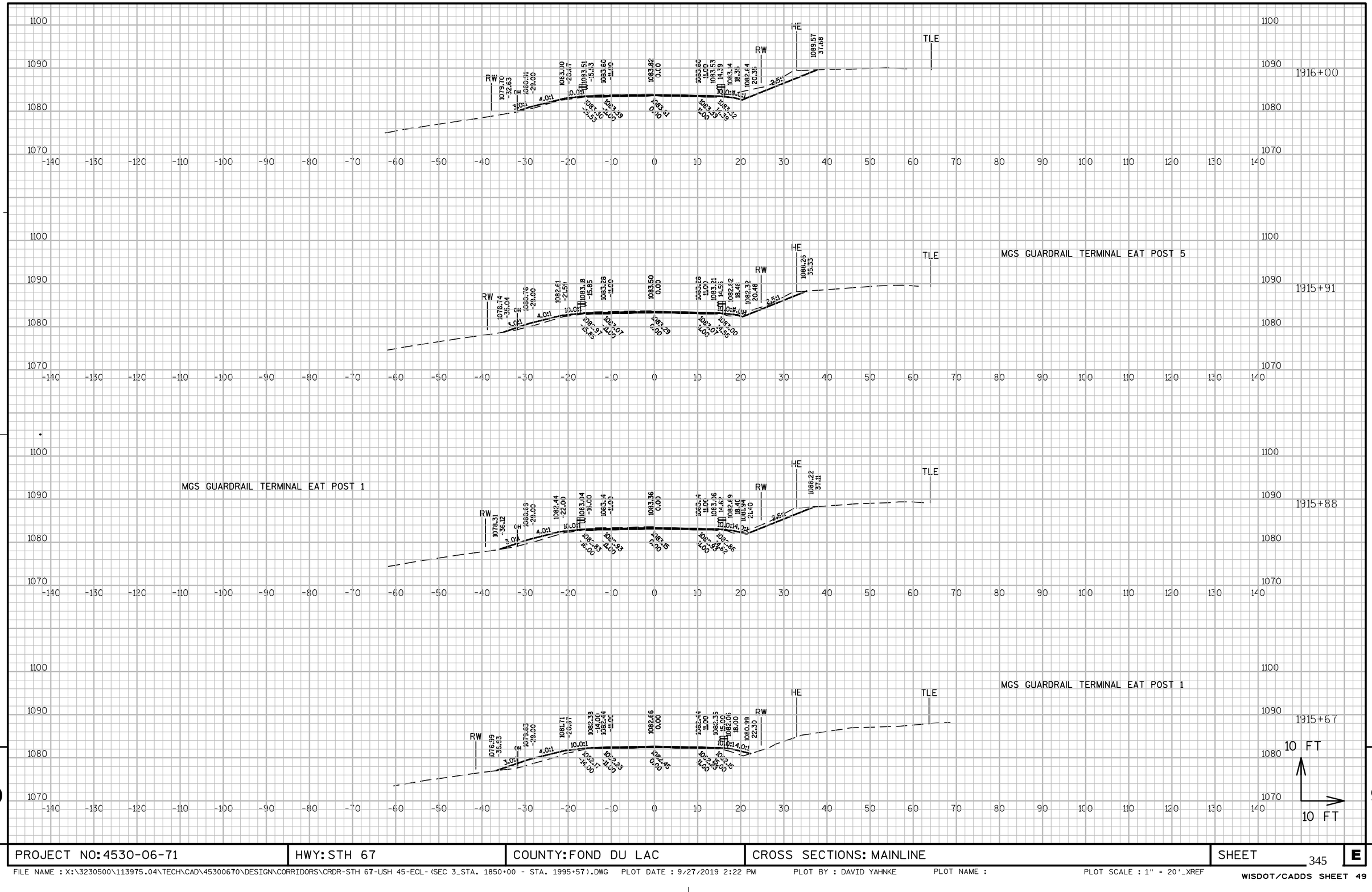
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 344	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:21 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



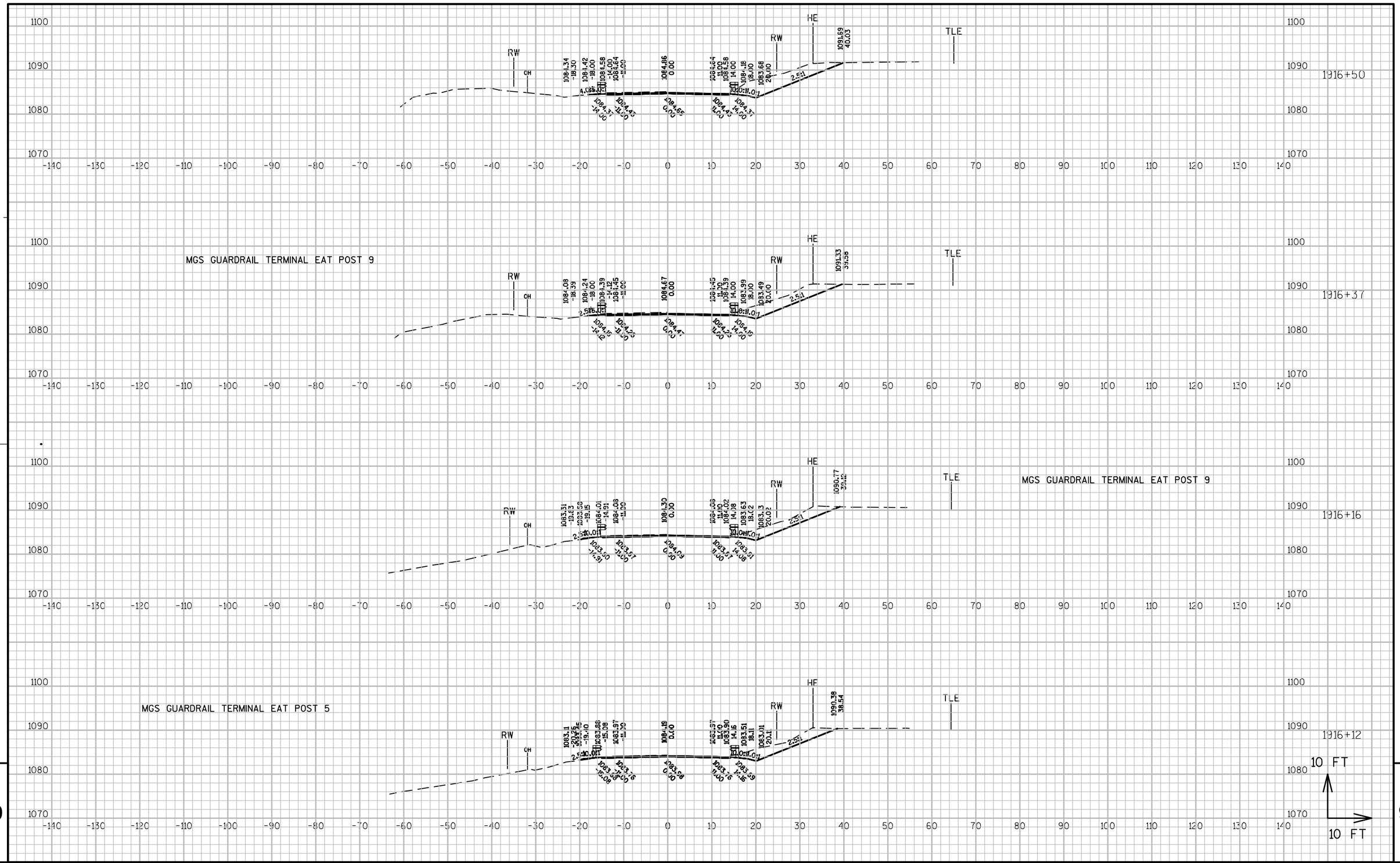
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 345	E

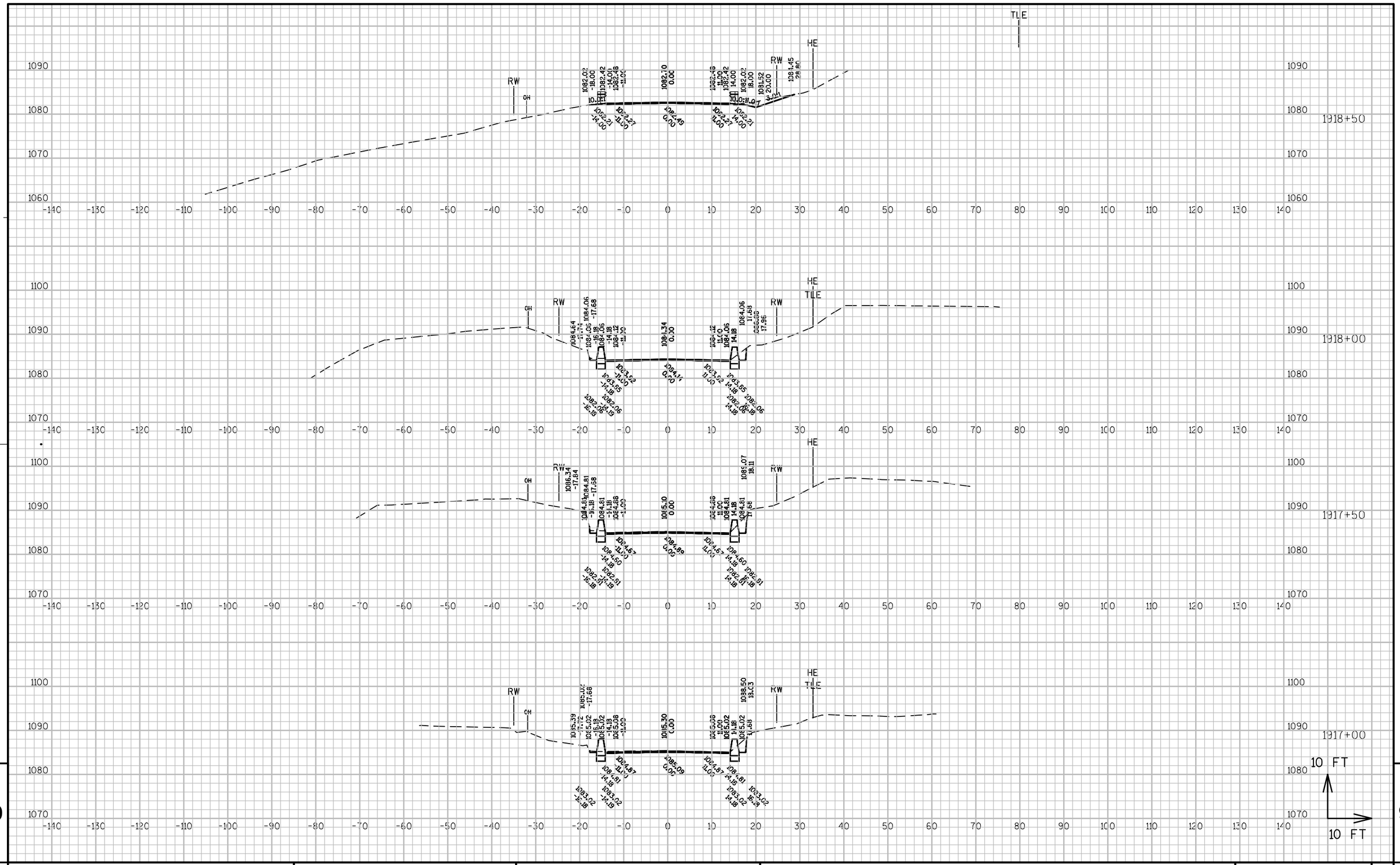
FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:22 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



9

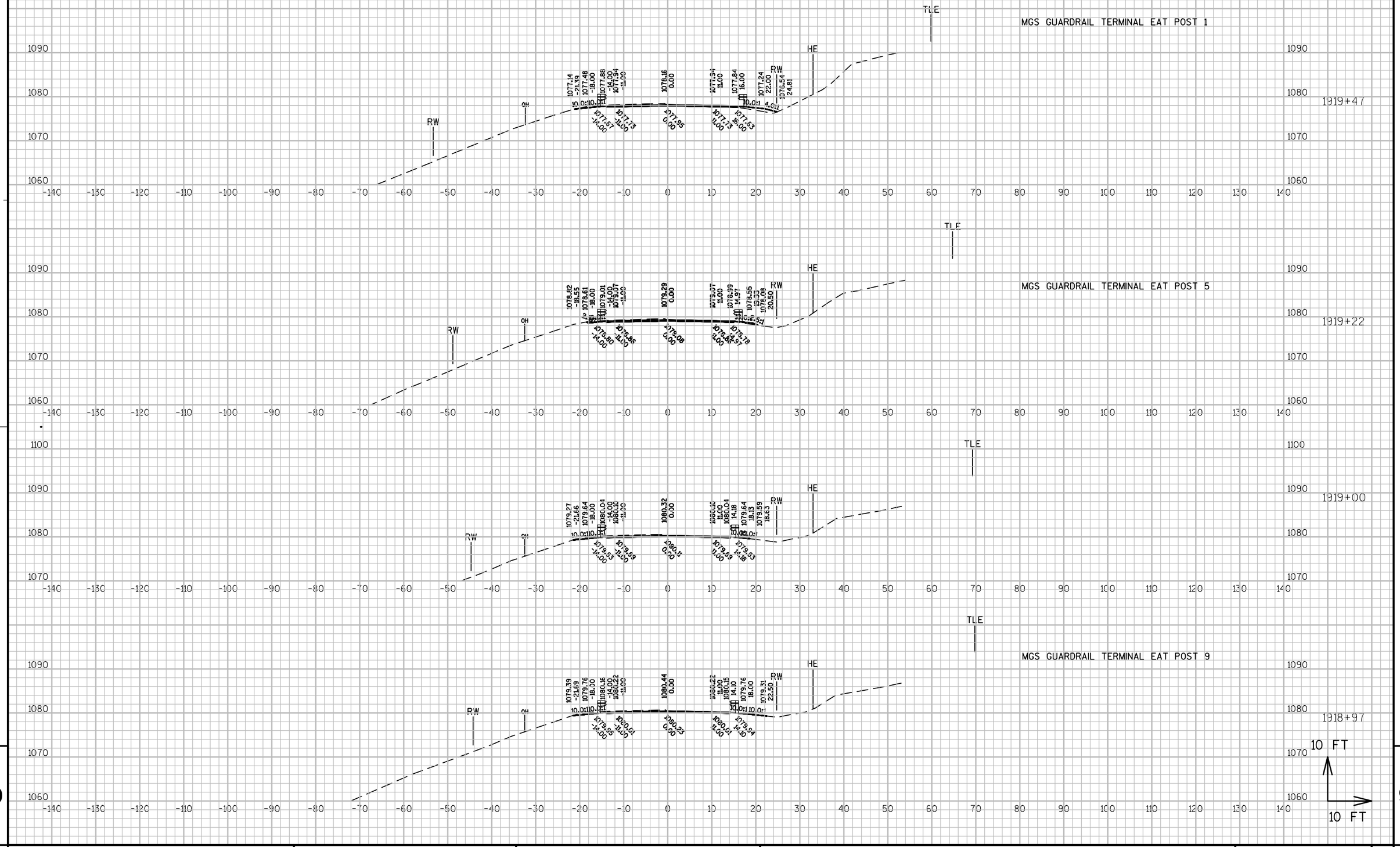
PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 346	E



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 347	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:23 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



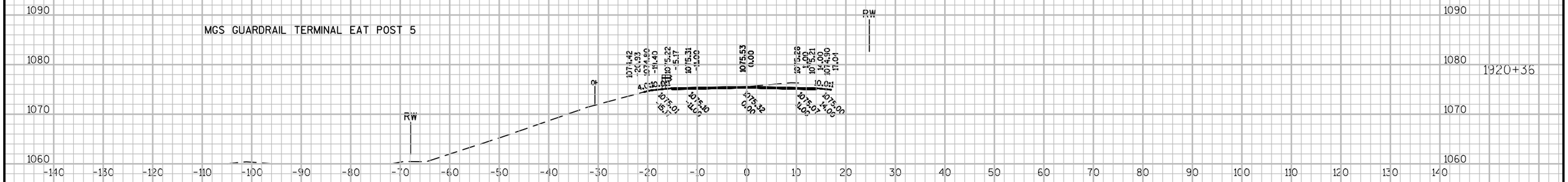
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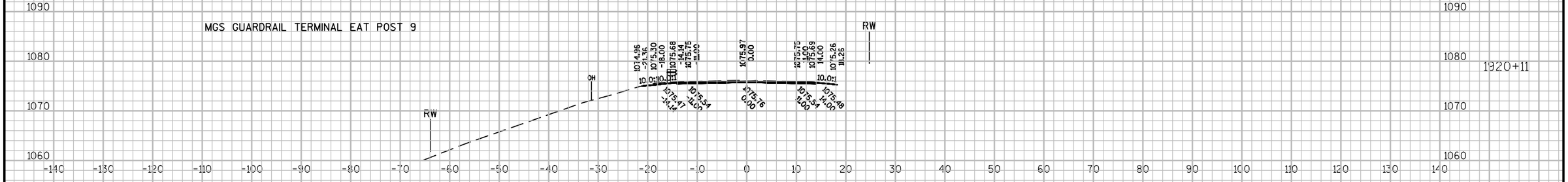
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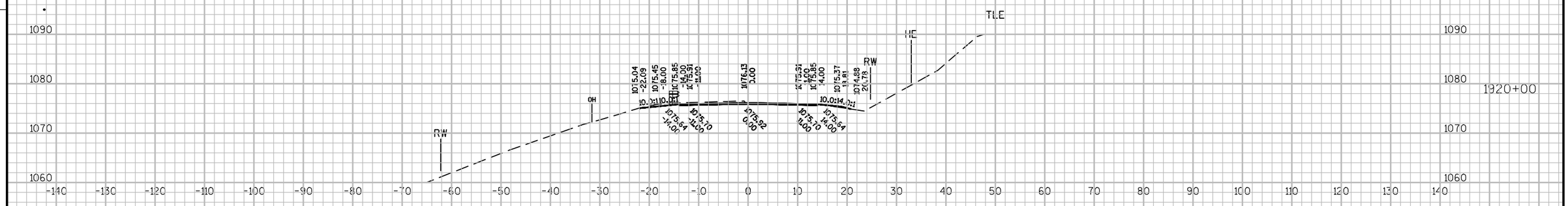
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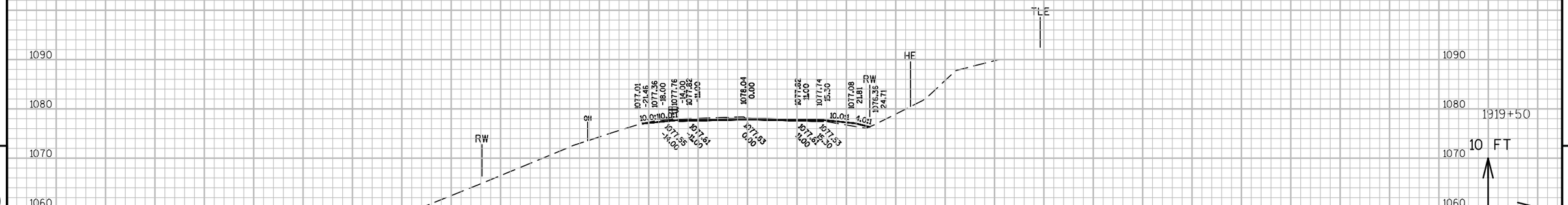
MGS GUARDRAIL TERMINAL EAT POST 5



MGS GUARDRAIL TERMINAL EAT POST 9







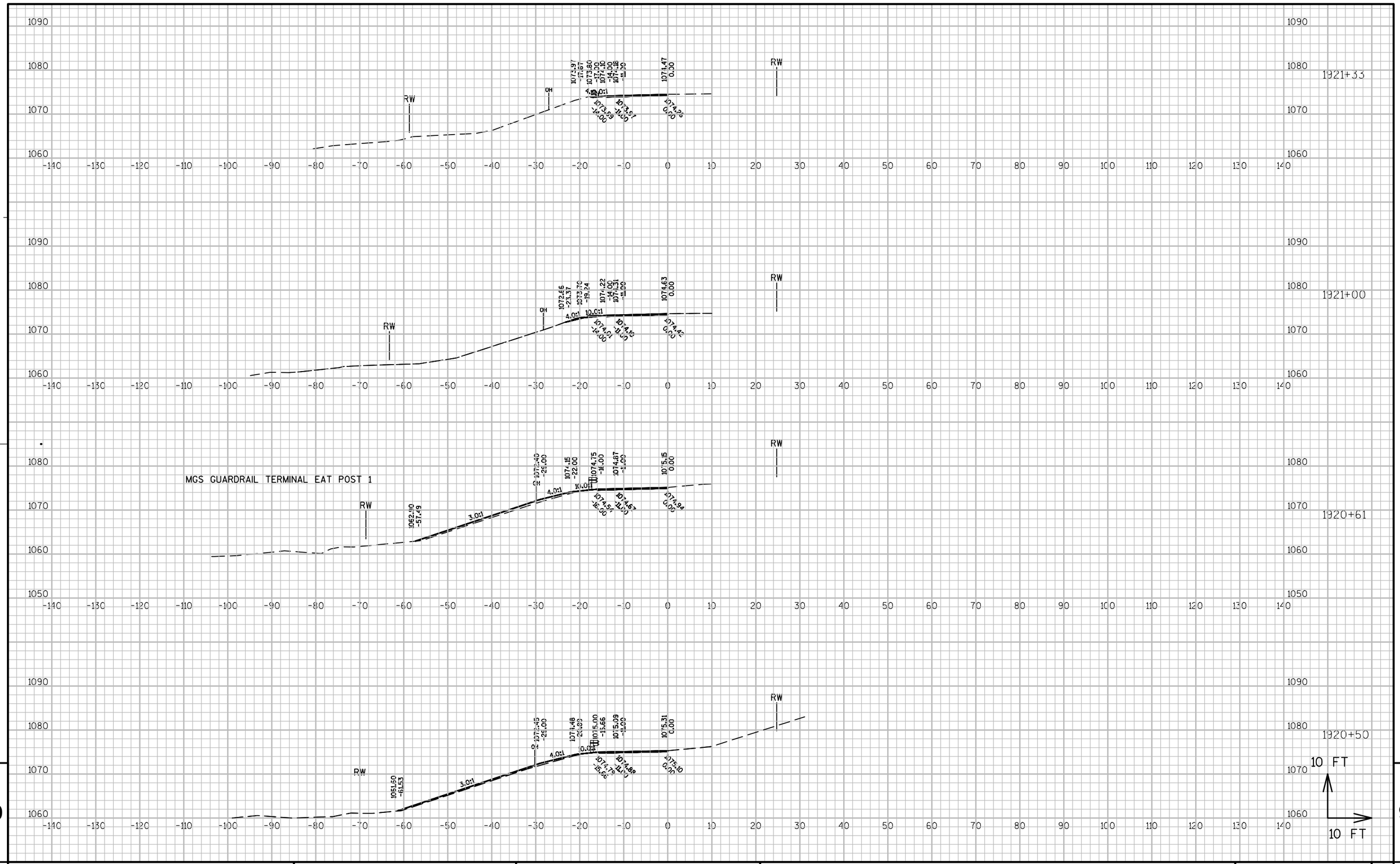
10 FT
10 FT

9 9

PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 349	E

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WISDOT/CADDS SHEET 49



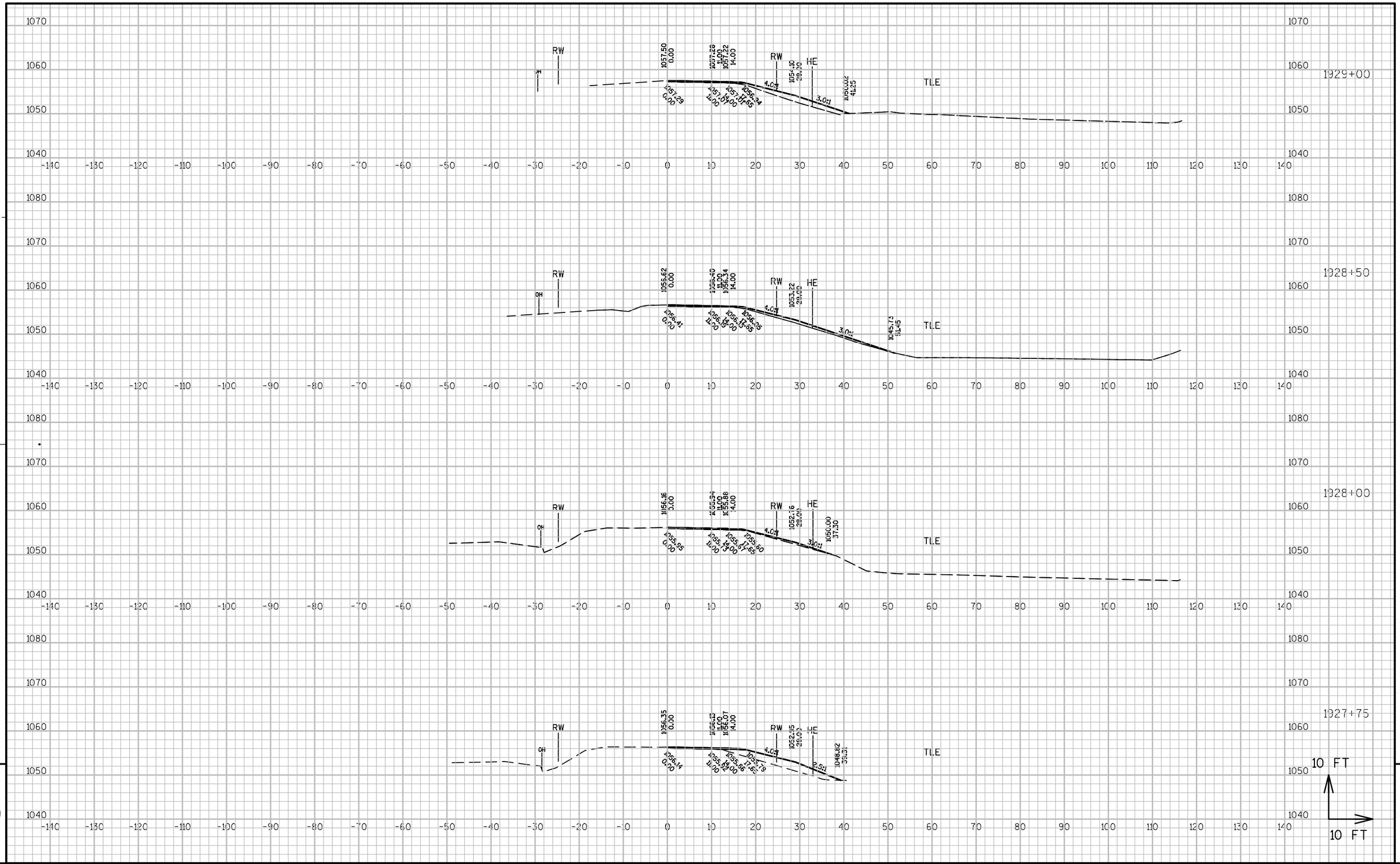
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PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 350	E

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WISDOT/CADDS SHEET 49



PROJECT NO: 4530-06-71	HWY: STH 67	COUNTY: FOND DU LAC	CROSS SECTIONS: MAINLINE	SHEET 351	E

FILE NAME : X:\3230500\113975.04\TECH\CAD\45300670\DESIGN\CORRIDORS\CRDR-STH 67-USH 45-ECL-(SEC 3_STA. 1850+00 - STA. 1995+57).DWG PLOT DATE : 9/27/2019 2:25 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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