WIS

PROJECT ID: 9030-07-82

COUNTY: LINCOLN

DECEMBER 2025

ORDER OF SHEETS

TOTAL SHEETS = 78

34

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MERRILL - RHINELANDER

BARNES CREEK BRIDGE B-35-0163

STH 17

LINCOLN COUNTY

STATE PROJECT NUMBER
9030-07-82

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9030-07-82	WISC 2026110	1

DESIGN DESIGNATION

A.A.D.T.	(2026)	=	2,600
A.A.D.T.	(2046)	=	2,600
D.H.V.		=	380
D.D.		=	61/39
T.		=	17.5%
DESIGN SPEED		=	55 MPH
ESALS		=	880,000

CONVENTIONAL SYMBOLS

PLAN

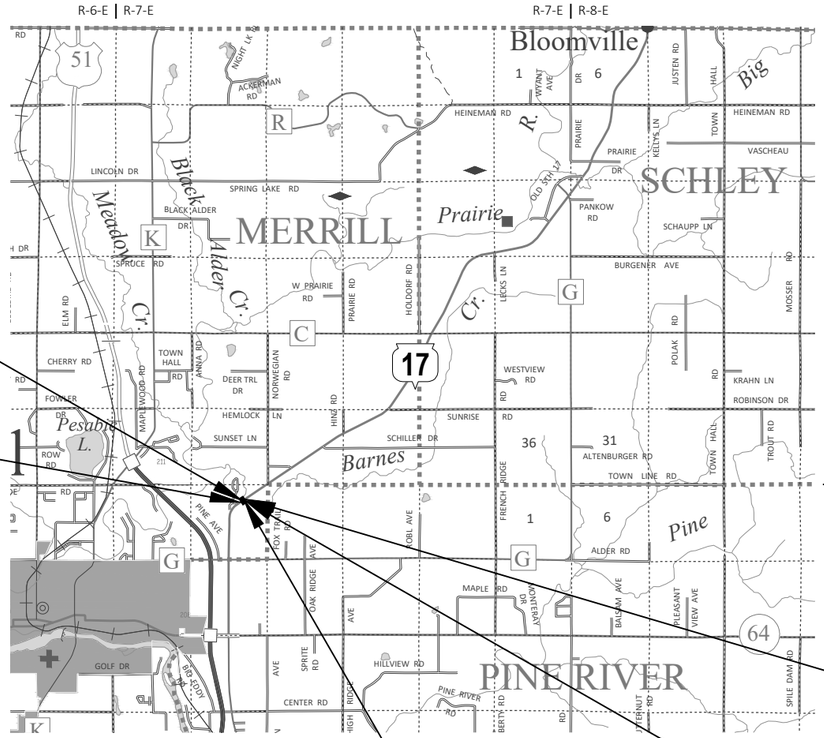
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE



BEGIN PROJECT 9030-07-82
STA 116+25.00
X = 405,630.684
Y = 130,955.656

BEGIN CONSTRUCTION 9030-07-82
STA 114+75.00

END CONSTRUCTION 9030-07-82
STA 118+64.00

END PROJECT 9030-07-82
STA 117+75.00

EXISTING STRUCTURE B-35-0074
PROPOSED STRUCTURE B-35-0163

LAYOUT SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.028 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), LINCOLN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY

AECOM

WISCONSIN
ANDREW J CZECH
E-45342
MADISON
WISCONSIN
PROFESSIONAL ENGINEER

Andrew Czech 7/30/2025

DATE: _____ (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Project Manager	ANDREW CASPER
Regional Examiner	FRED SCHUNKE
Regional Supervisor	KAI KILEN

APPROVED FOR THE DEPARTMENT

DATE: 7/31/2025 Andrew Casper (Signature)

E

UTILITIES CONTACTS

FRONTIER COMMUNICATIONS OF WI LLC
COMMUNICATIONS
CHRIS POLLACK
521 4TH ST
WAUSAU, WI 54403
PHONE: 715-847-1240
EMAIL: CHRISTOPER.POLLACK@FTR.COM

NSIGHT TELESERVICES
COMMUNICATIONS
RICK VINCENT
470 SECURITY BLVD, P.O. BOX 19079
GREEN BAY, WI 54307
PHONE: 920-617-7316
EMAIL: RICK.VINCENT@NSIGHT.COM

WISCONSIN PUBLIC SERVICE CORPORATION
ELECTRICITY
WISCONSIN PUBLIC SERVICE UTILITY COORDINATOR
P.O. BOX 19001
GREEN BAY, WI 54307
PHONE: 920-433-1513
EMAIL: UTILITIESRELOCATION@WISCONSINPUBLICSERVICE.COM

WISCONSIN PUBLIC SERVICE CORPORATION
GAS/PETROLEUM
WISCONSIN PUBLIC SERVICE UTILITY COORDINATOR
P.O. BOX 19001
GREEN BAY, WI 54307
PHONE: 920-433-1513
EMAIL: UTILITIESRELOCATION@WISCONSINPUBLICSERVICE.COM

WISCONSIN DNR LIAISON

WENDY HENNIGES
NORTH CENTRAL REGION, RHINELANDER OFFICE
107 SUTLIFF AVE
RHINELANDER, WI 54501
PHONE: 715-365-8916
EMAIL: WENDY.HENNIGES@WISCONSIN.GOV

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES

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.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

BASE AGGREGATE DENSE 3/4-INCH CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 2.1 TONS/CY.

BASE AGGREGATE DENSE 1 1/4-INCH CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 2.0 TONS/CY.

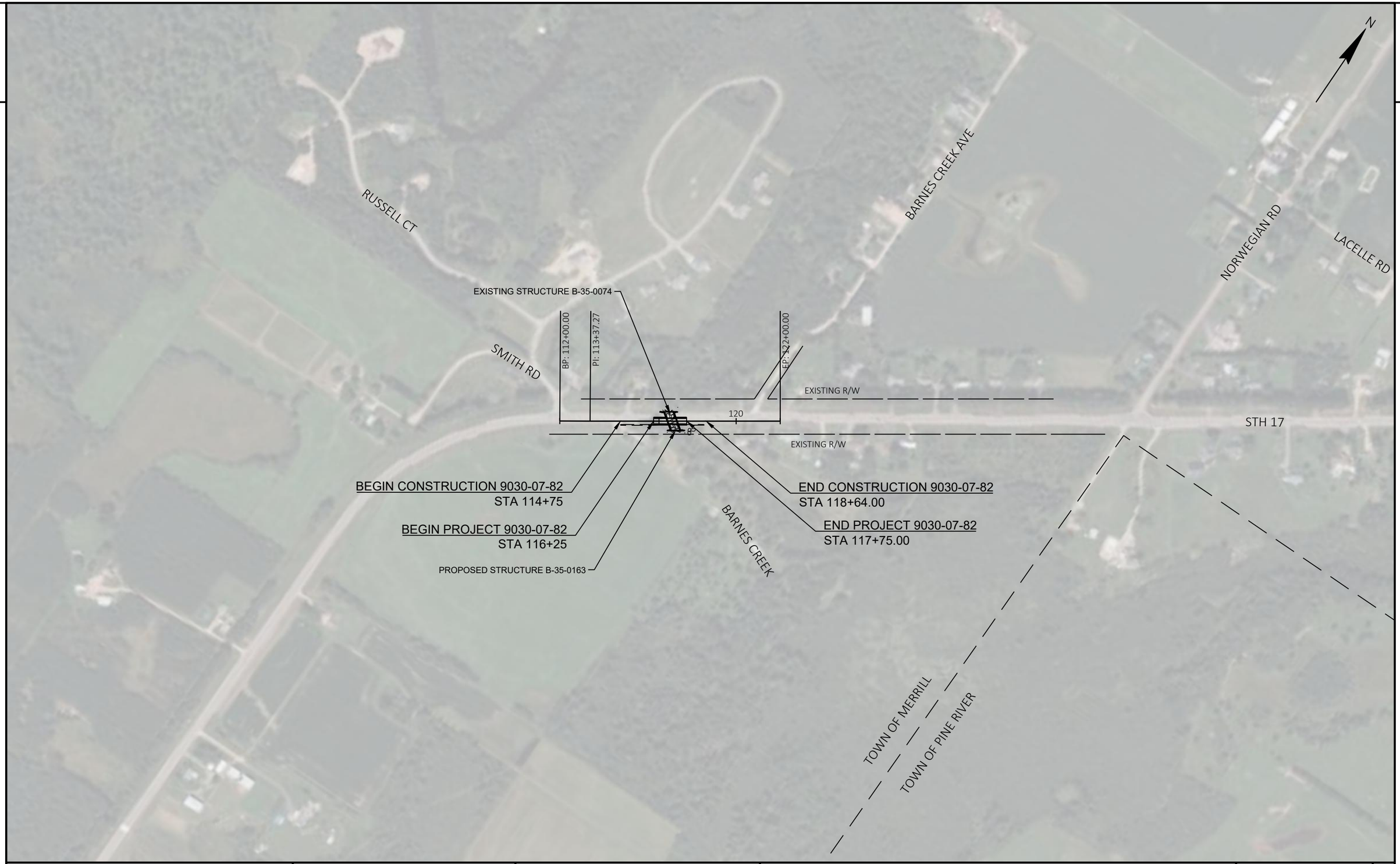
RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

2

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 1.429 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.438 ACRES



PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\020201-PO.DWG
LAYOUT NAME - 1

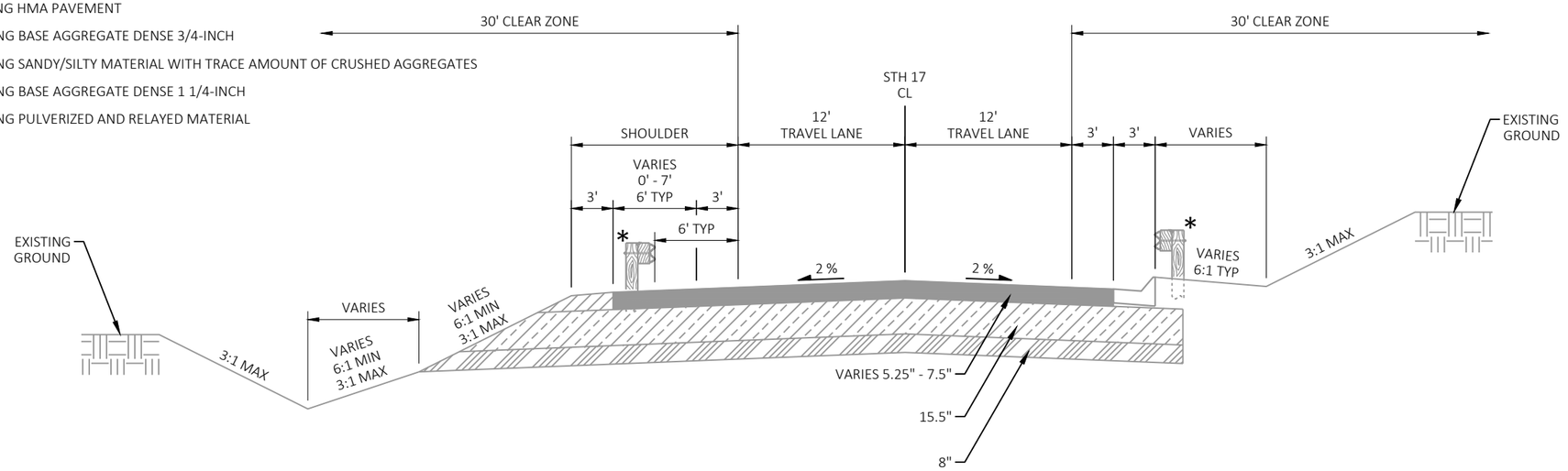
PLOT DATE : 5/23/2025 1:12 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

LEGEND

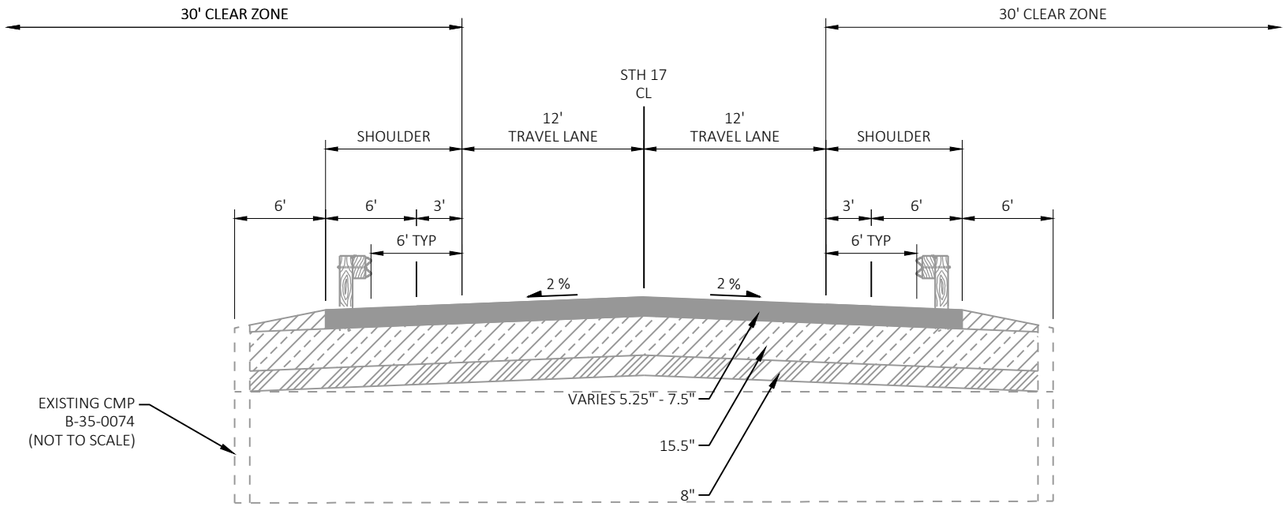
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING SANDY/SILTY MATERIAL WITH TRACE AMOUNT OF CRUSHED AGGREGATES
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING PULVERIZED AND RELAYED MATERIAL



TYPICAL EXISTING SECTION - STH 17

STA 114+75 - STA 116+87

* EXISTING GUARDRAIL LIMITS:
STA 115+71 - STA 119+00, LT
STA 115+26 - STA 118+55, RT



TYPICAL EXISTING SECTION - STH 17

STA 116+87 - STA 117+38

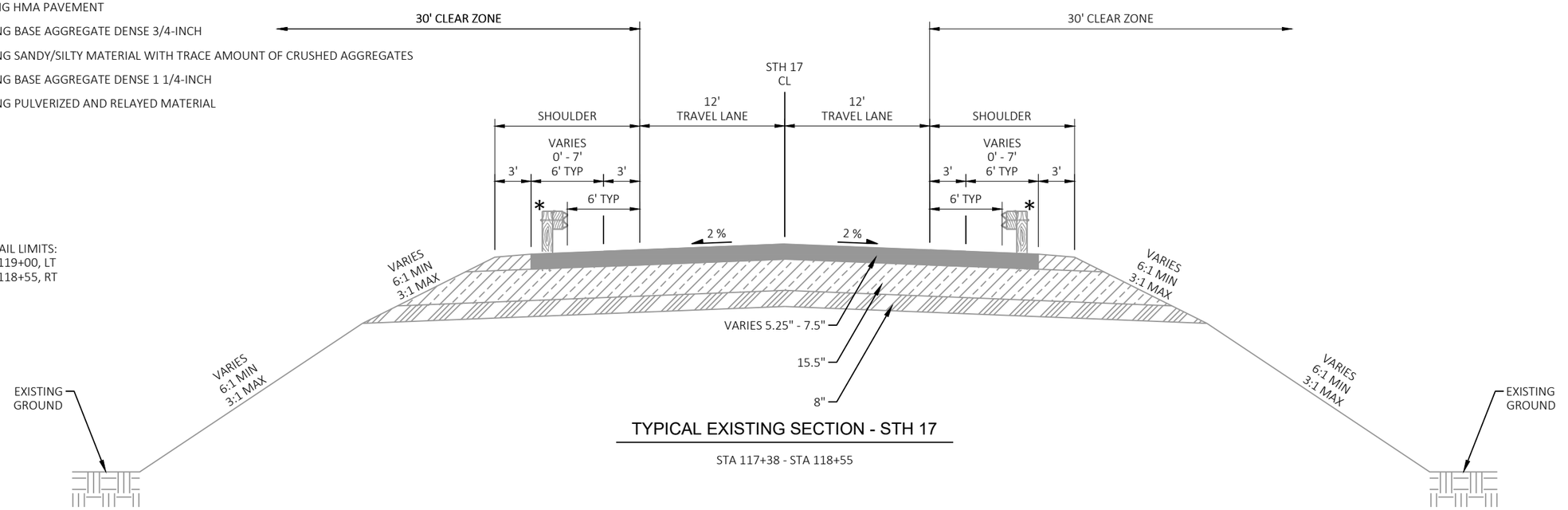
PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 4	E

2

LEGEND

- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING SANDY/SILTY MATERIAL WITH TRACE AMOUNT OF CRUSHED AGGREGATES
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING PULVERIZED AND RELAYED MATERIAL

* EXISTING GUARDRAIL LIMITS:
STA 115+71 - STA 119+00, LT
STA 115+26 - STA 118+55, RT



TYPICAL EXISTING SECTION - STH 17

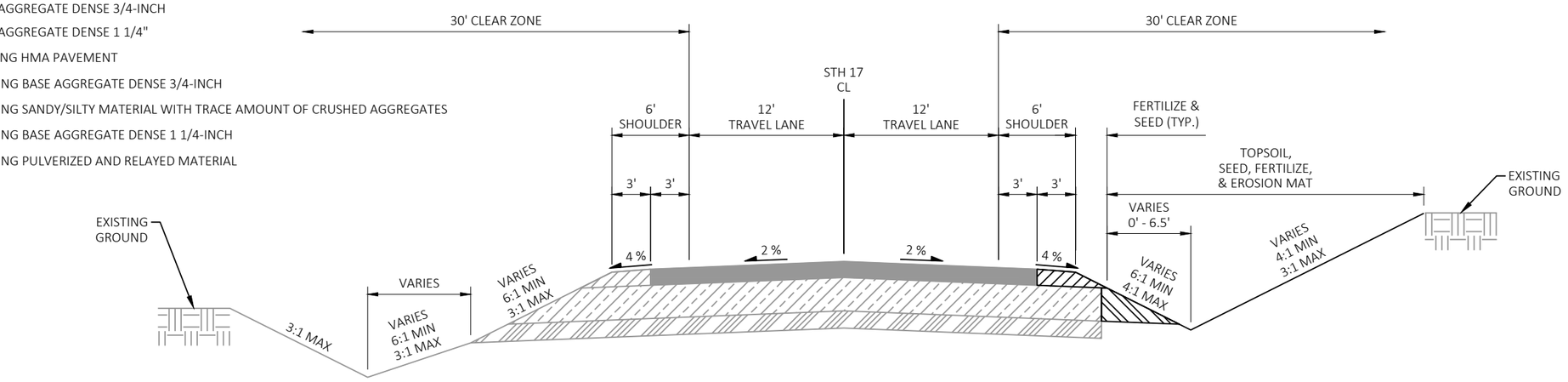
STA 117+38 - STA 118+55

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\020301-TS.DWG
LAYOUT NAME - 2
PLOT DATE : 10/22/2025 2:51 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

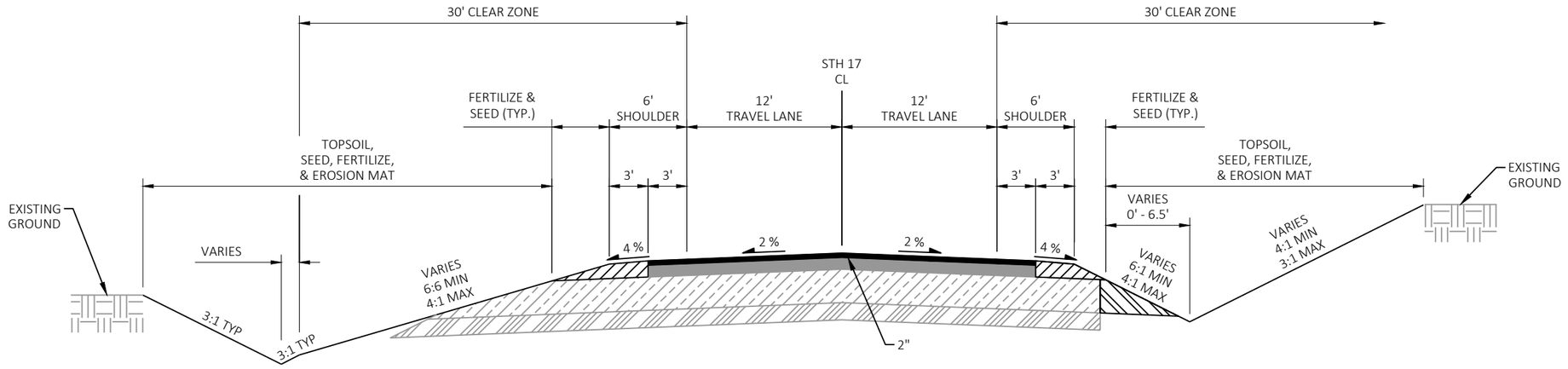
LEGEND

- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 3/4-INCH
- BASE AGGREGATE DENSE 1 1/4"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING SANDY/SILTY MATERIAL WITH TRACE AMOUNT OF CRUSHED AGGREGATES
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING PULVERIZED AND RELAYED MATERIAL



TYPICAL FINISHED SECTION - STH 17

STA 114+75 - STA 116+25, RT



TYPICAL FINISHED SECTION - STH 17

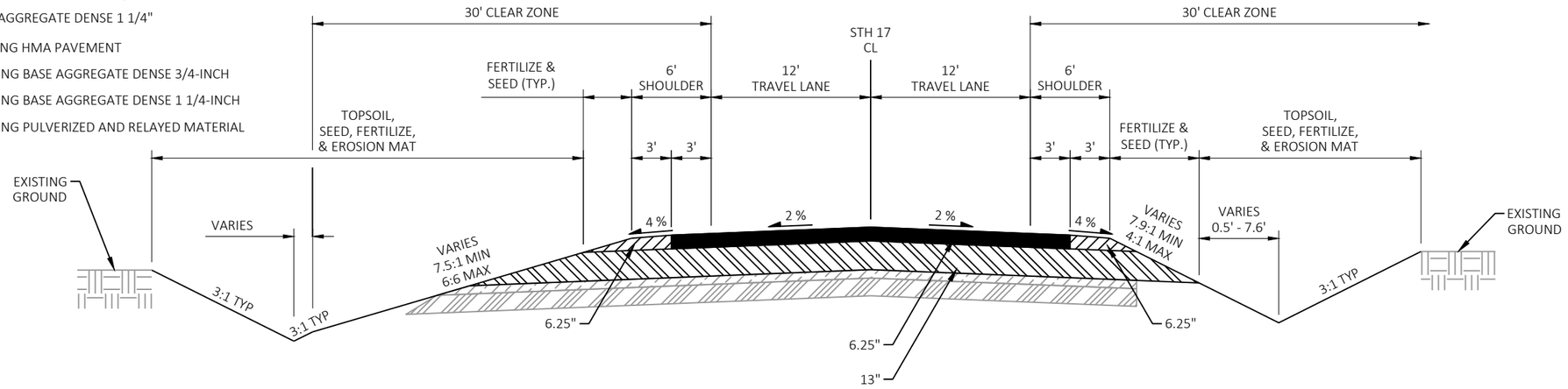
STA 116+25 - STA 116+50, RT

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 6	E

2

LEGEND

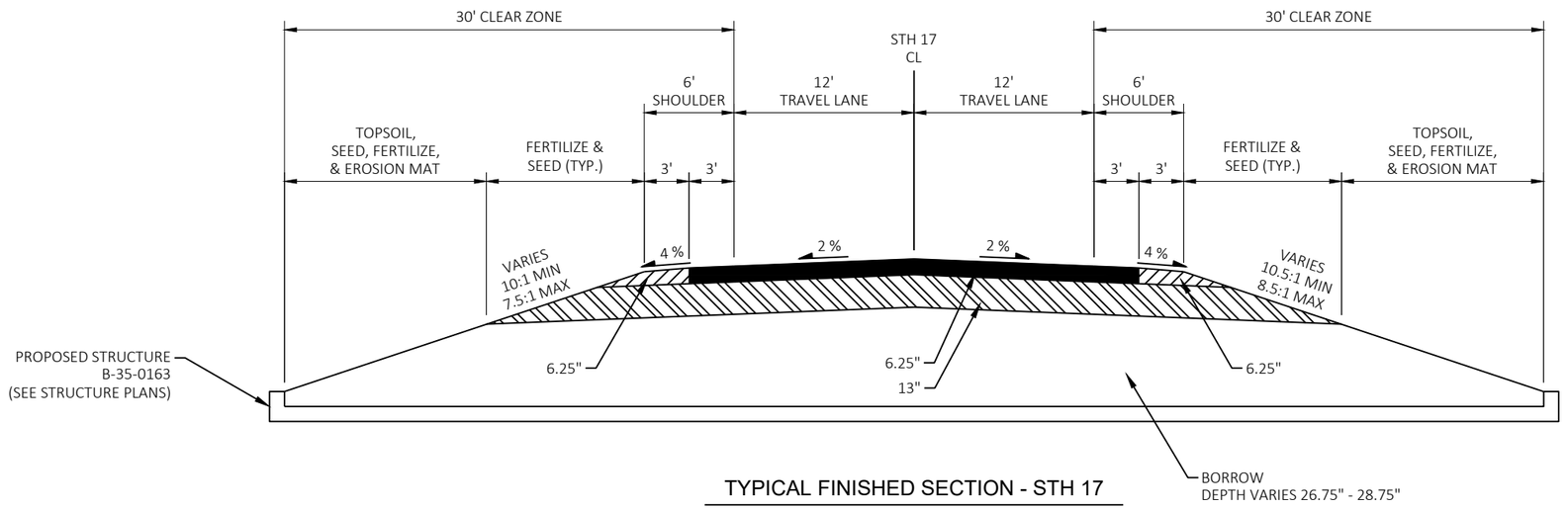
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 3/4-INCH
- BASE AGGREGATE DENSE 1 1/4"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING PULVERIZED AND RELAYED MATERIAL



TYPICAL FINISHED SECTION - STH 17

STA 116+50 - STA 116+57, LT

STA 116+50 - STA 116+89, RT



TYPICAL FINISHED SECTION - STH 17

STA 116+57 - STA 117+36, LT

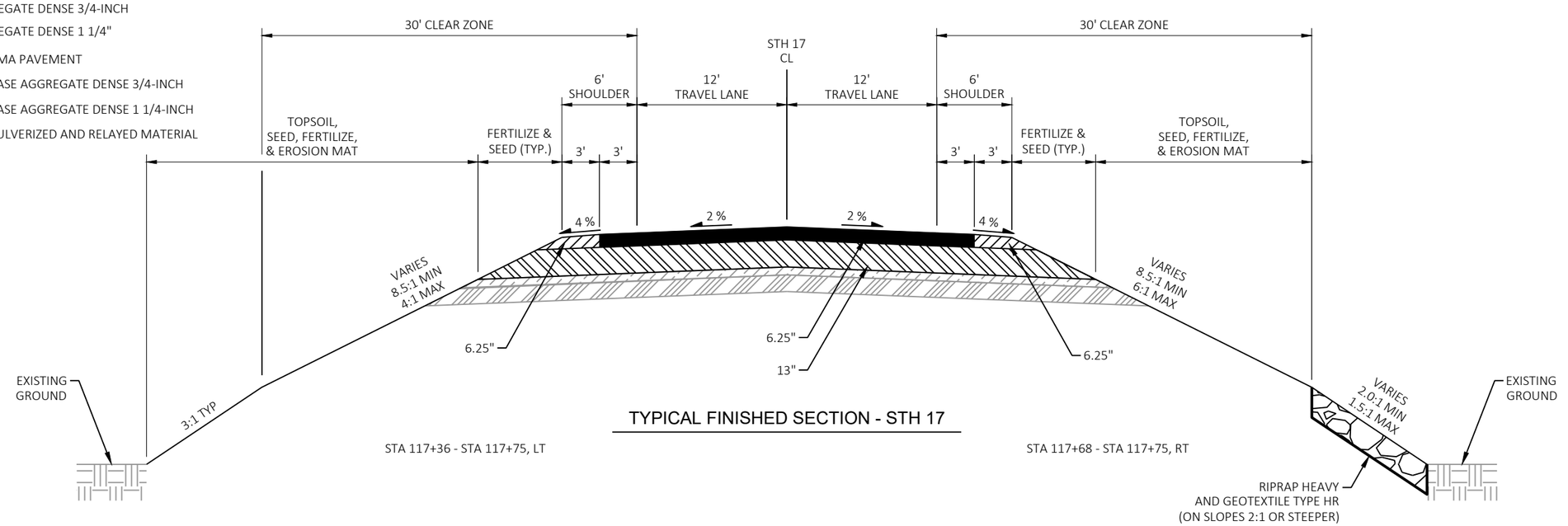
STA 116+89 - STA 117+68, RT

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 7	E

2

LEGEND

- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 3/4-INCH
- BASE AGGREGATE DENSE 1 1/4"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING PULVERIZED AND RELAYED MATERIAL



TYPICAL FINISHED SECTION - STH 17

STA 117+36 - STA 117+75, LT

STA 117+68 - STA 117+75, RT

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 8	E

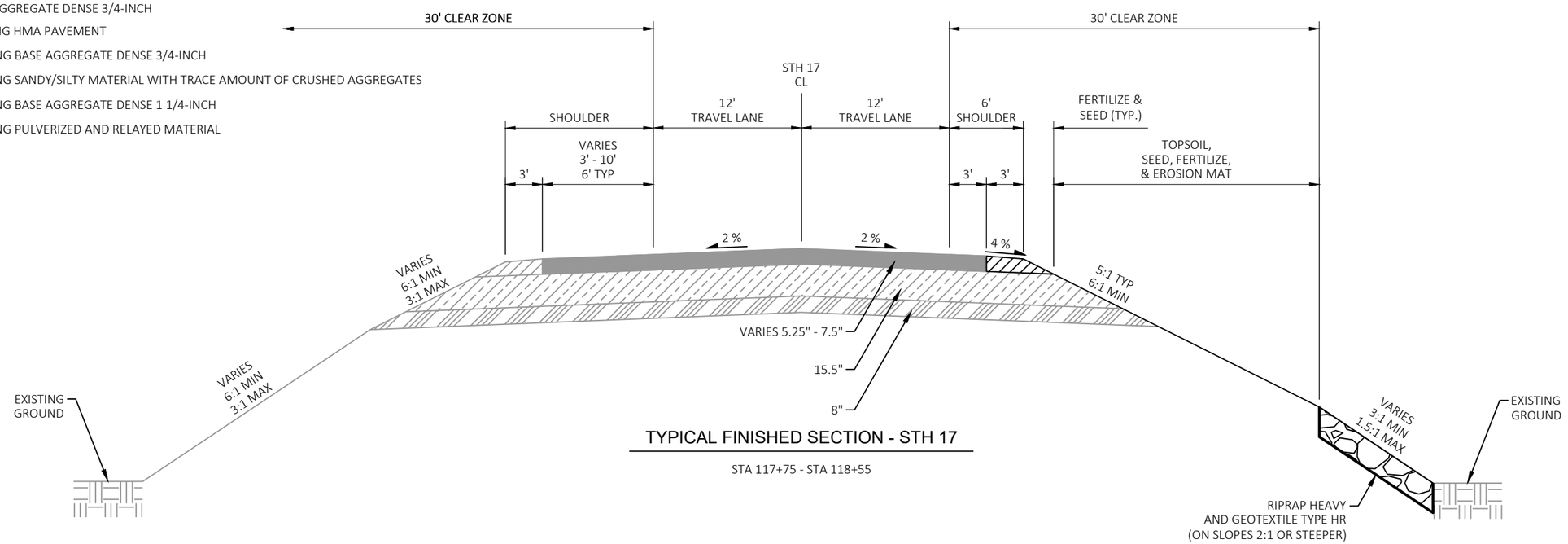
FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\020301-TS.DWG
LAYOUT NAME - 5
PLOT DATE : 10/22/2025 2:51 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- BASE AGGREGATE DENSE 3/4-INCH
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING SANDY/SILTY MATERIAL WITH TRACE AMOUNT OF CRUSHED AGGREGATES
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING PULVERIZED AND RELAYED MATERIAL



TYPICAL FINISHED SECTION - STH 17

STA 117+75 - STA 118+55

STA 117+75 - STA 117+90

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 9	E

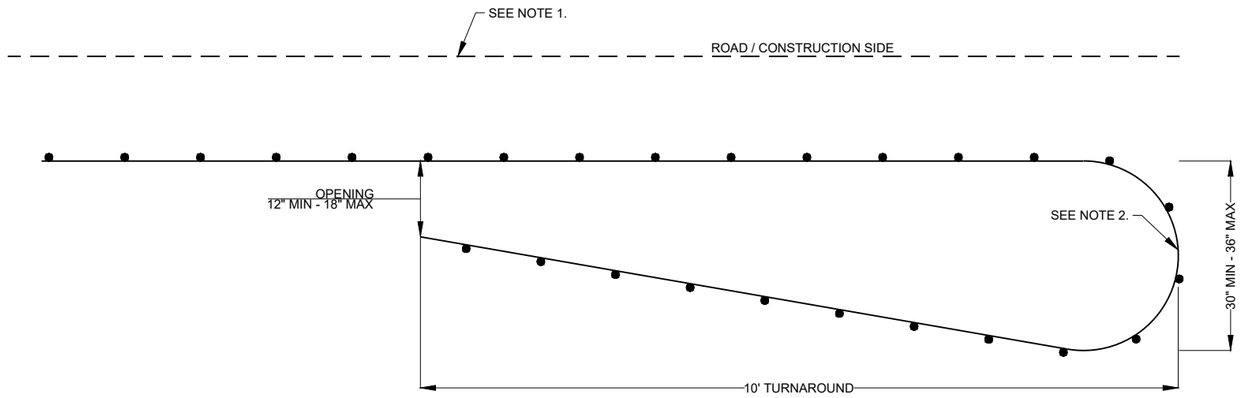
FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\020301-TS.DWG
LAYOUT NAME - 6
PLOT DATE : 10/22/2025 2:51 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES:

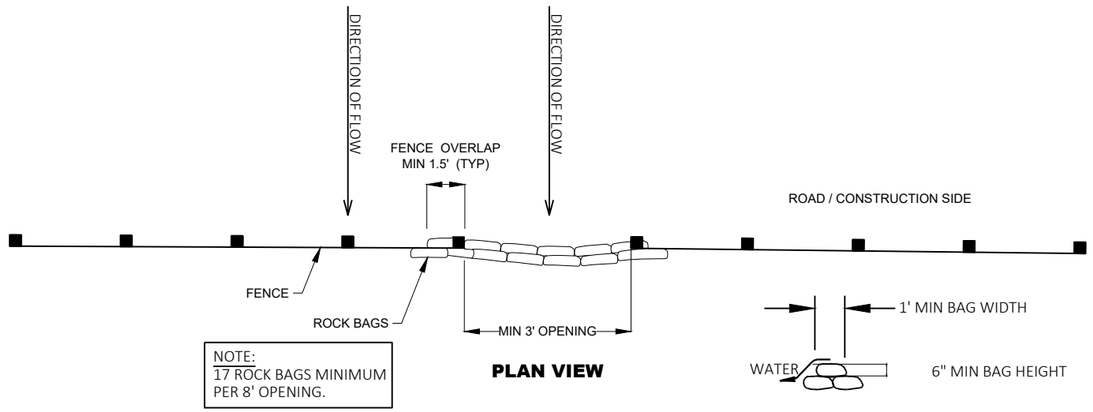
1. WHERE SILT FENCE IS REQUIRED, IT SHALL BE PLACED ON THE CONSTRUCTION SIDE OF THE EXCLUSION FENCING, OR COMBINED WITH THE EXCLUSION FENCING AS ALLOWED IN THE SPECIFICATIONS. STAKES ON THIS DETAIL ARE OPPOSITE OF STANDARD SILT FENCE FOR SEDIMENT CONTROL.
2. PLACE TURNAROUNDS AT ALL TERMINI ENDS OF THE EXCLUSION FENCING.
3. IF TEMPORARY ACCESS POINTS ARE NEEDED DURING CONSTRUCTION THAT REQUIRE OPENINGS IN THE EXCLUSION FENCING, ACCESS OPENINGS SHOULD BE TIGHTLY SECURED WITH BALES OF HAY OR STRAW WHENEVER CONSTRUCTION RELATED ACTIVITIES ARE NOT OCCURRING. REINSTALL EXCLUSION FENCING WHEN THE WORK REQUIRING THE TEMPORARY ACCESS OPENING IS COMPLETED.
4. THE FENCE CAP MAY BE A 6" UNDER DRAIN PIPE, SLIT DOWN THE CENTER AND PLACED OVER THE FENCE. COMMERCIALLY AVAILABLE SAFETY CAPS WITH A LIP MAY BE USED. OTHER DNR APPROVED METHODS TO PREVENT TURTLES FROM PASSING OVER THE TOP OF THE FENCE MAY BE USED.

   SECURELY FASTEN THE CAP TO PREVENT IT FROM BEING DISLODGED.

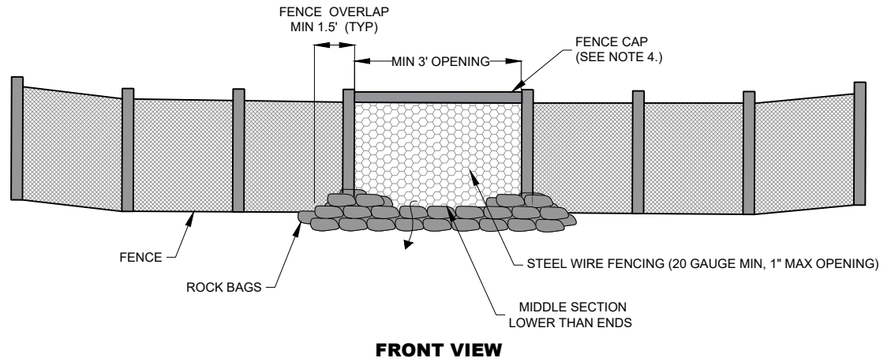


PLAN VIEW

CLIMBING TURTLE EXCLUSION FENCE DETAIL

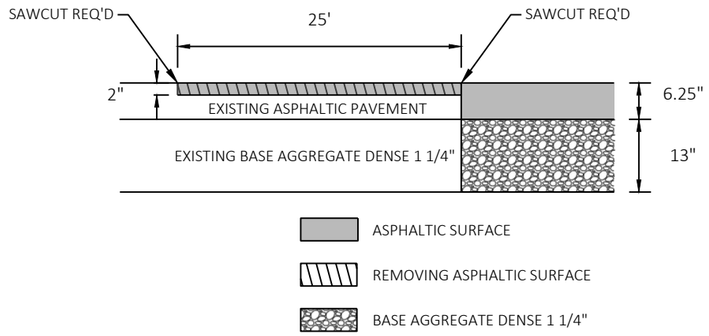


PLAN VIEW



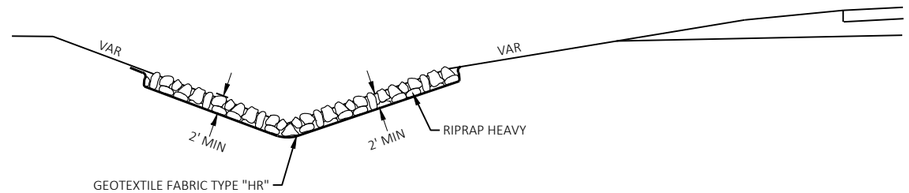
FRONT VIEW

CLIMBING TURTLE FENCE RELIEF DETAIL



ASPHALT JOINT AT PROJECT LIMIT

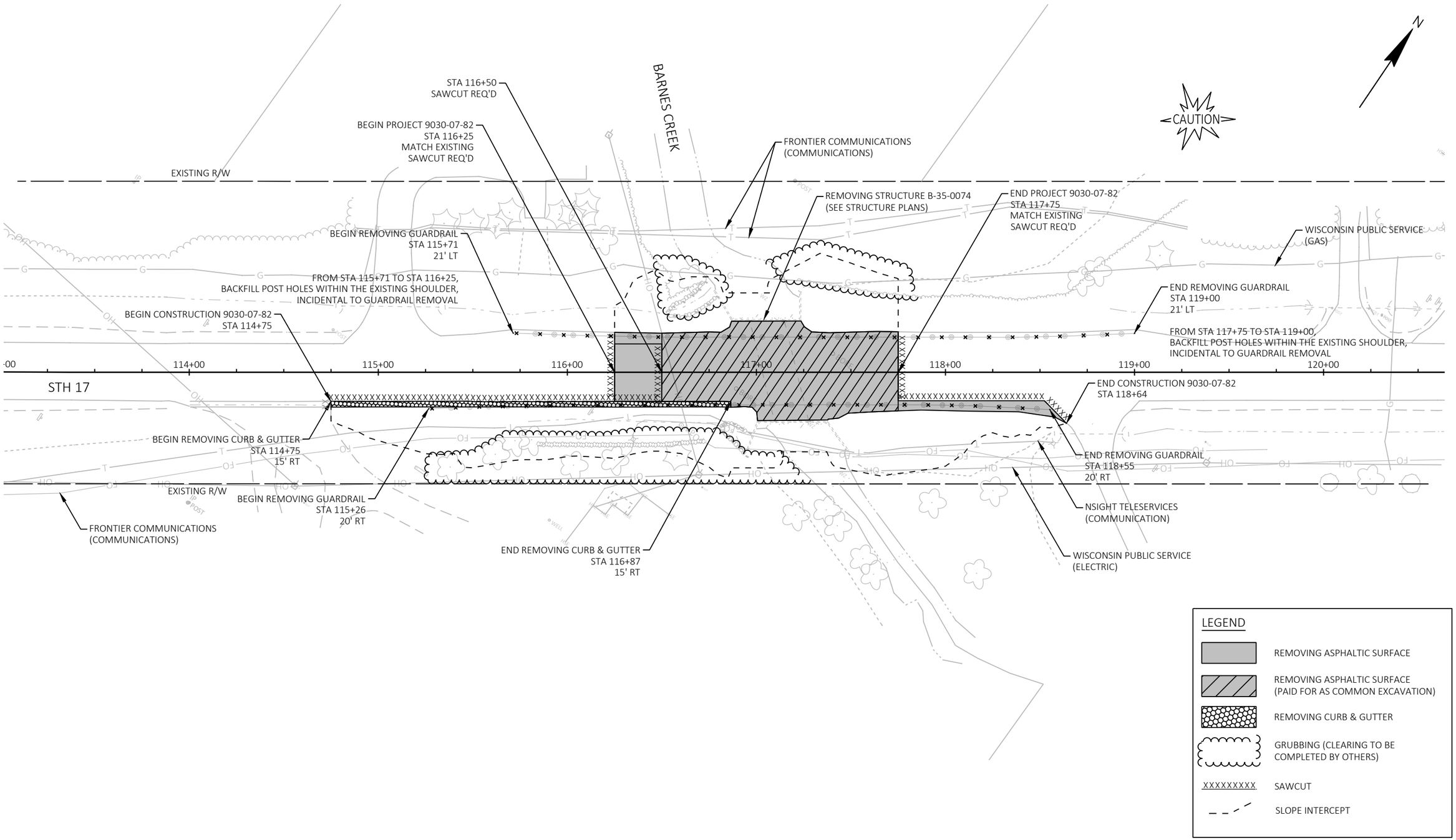
STA 116+25 - STA 116+50



DETAIL OF RIPRAP HEAVY DITCH

FROM STA 116+45 TO STA 116+55,
INSTALL RIPRAP DITCH OUTSIDE OF CLEARZONE,
LEADING INTO WING WALL LOCATION,
PROVIDING DRAINAGE AWAY FROM WING WALL.

2



PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	REMOVAL DETAILS	SHEET 12	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\021101-RM.DWG
LAYOUT NAME - 1
PLOT DATE : 10/21/2025 4:00 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

114+50

114+75

115+00

STH 17

1311.0

1310.9

1310.8

1310.7

1310.6

1310.5

1310.4

1310.3

1310.2

1310.1

1310.0

1309.9

1309.8

1309.7

1309.6

1309.5

1309.4

1309.3

STA 114+75
21.74' RT
EL 1311.18

8.25%

STA 114+90
23.56' RT
EL 1309.93

INSTALL ASPHALTIC FLUME AT DRIVEWAY EDGE
PROVIDE DRAINAGE FROM
EXISTING DRIVEWAY ELEVATION
INTO PROPOSED DITCH SECTION

EXISTING
GRAVEL
DRIVEWAY

1311.5 1311.4 1311.3 1311.2 1311.1 1311.0 1310.9 1310.8 1310.7 1310.6 1310.5 1310.4 1310.3 1310.2 1310.1 1310.0

PROPOSED
SURFACE
CONTOURS

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	PLAN DETAIL - DRIVEWAY ASPHALTIC FLUME	SHEET 13	E

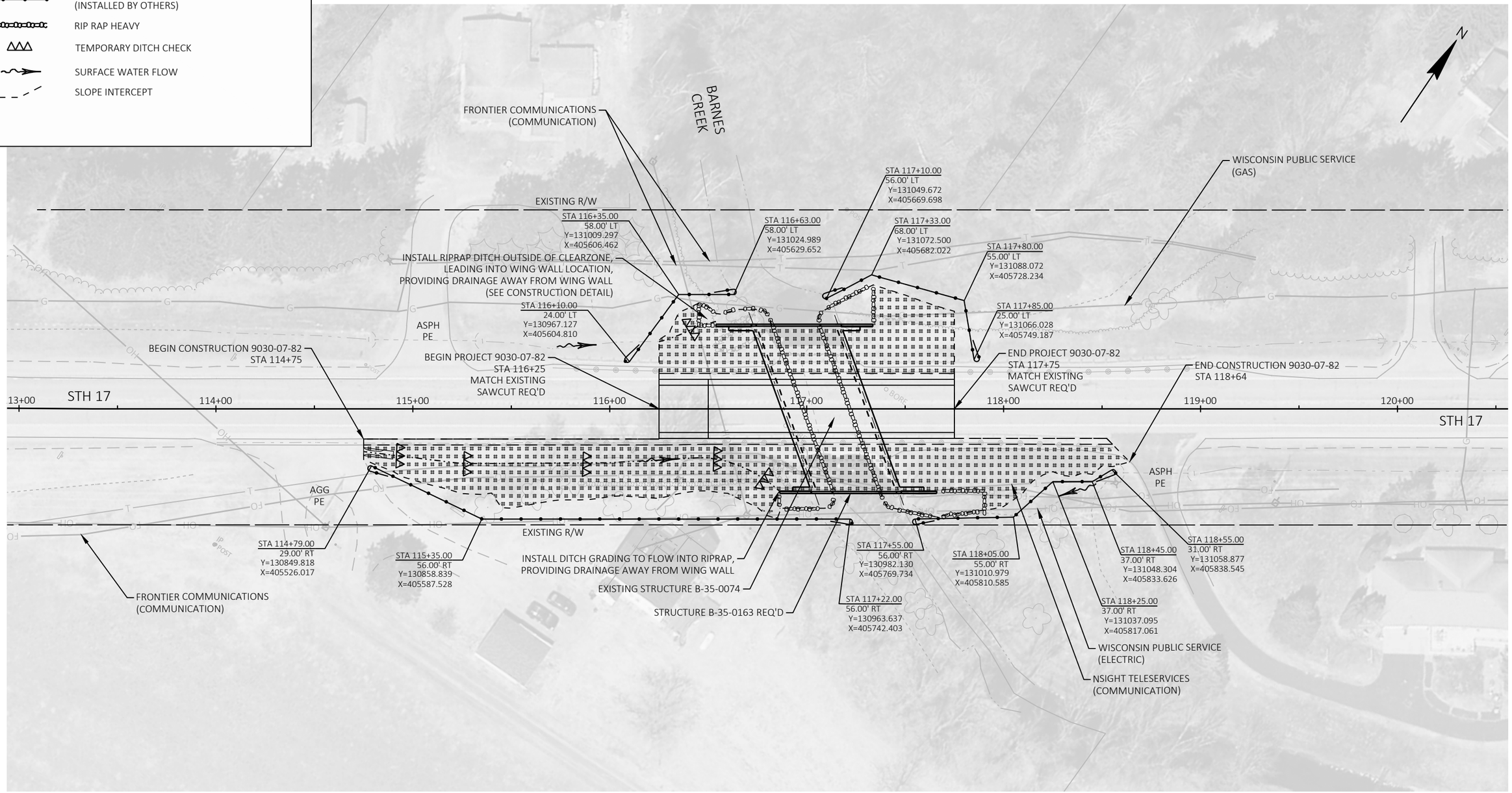
FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\021201-PD-DRIVEWAY-ASPHALTIC-FLUME.DWG
LAYOUT NAME - 1
PLOT DATE : 5/27/2025 2:04 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- CLIMBING TURTLE EXCLUSION FENCE / SILT FENCE (INSTALLED BY OTHERS)
- RIP RAP HEAVY
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- SLOPE INTERCEPT



PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	EROSION CONTROL	SHEET 14	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\022001-EC.DWG
LAYOUT NAME - 1

PLOT DATE : 10/21/2025 4:04 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) SEE "TYPICAL SIDE ROAD APPROACH WARNING DETAIL" ON SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- (B) PLACE FIXED MESSAGE SIGNS (G20-57C) 7 DAYS PRIOR TO BEGINNING CLOSURE AND REMOVE WHEN CLOSURE BEGINS.
- WORK AREA
- DETOUR ROUTE

GENERAL NOTES FOR TRAFFIC CONTROL:

CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL MUTCD AND WISDOT STANDARD DETAIL DRAWING (SDD) GUIDELINES.

BRIDGE OUT
6 MILES AHEAD
R11-3C
60"X24"

SB-01
SB-02
SB-03
SB-04

PRAIRIE DELLS RD

A

NB-08

N

DETOUR
M4-9L
30"X24"

CTH G

SB-05

CTH C

SB-06

NB-07

NB-06

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

NORWEGIAN RD

SCHILLER RD

STH 17

SCHILLER DR

LACELLE RD

SMITH RD

B

DETOUR
M4-9R
30"X24"

BRIDGE OUT
3/4 MILES AHEAD
R11-3C
60"X24"

SB-08

CTH G / E 14TH ST

CTH G

NB-04
NB-03
NB-02
NB-01

SB-07

NB-05

DETAIL B:

HWY 17
ROAD CLOSED
BEGINS XXX-XX
G20-57C
72"X36"

2

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	DETOUR	SHEET 15	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\027001-DT.DWG
LAYOUT NAME - 027001-dt
PLOT DATE : 7/28/2025 9:03 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:0.6 MI
WISDOT/CADDS SHEET 42

2

NB-01

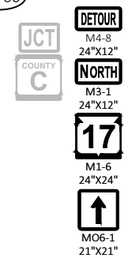
NB-02

NB-03

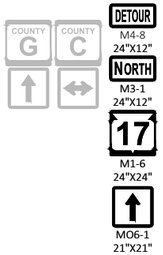
NB-04

NB-05

NB-06



NB-07



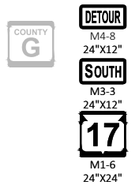
NB-08

SB-01

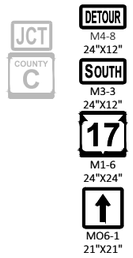
SB-02

SB-03

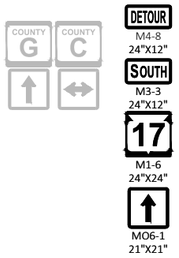
SB-04



SB-05



SB-06



SB-07

SB-08

2

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	DETOUR	SHEET 16	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\027001-DT.DWG
LAYOUT NAME - 027002-dt

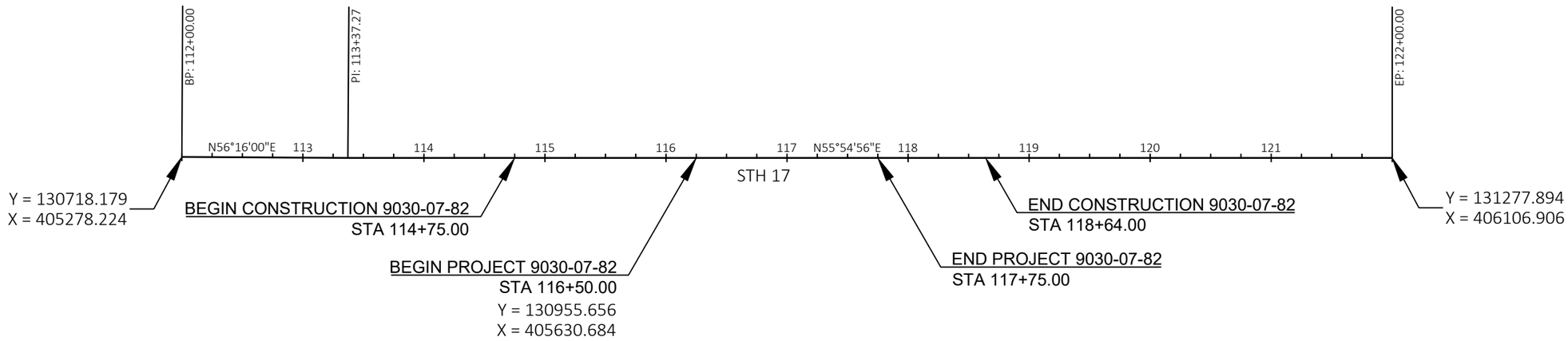
PLOT DATE : 7/28/2025 9:03 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

2

N



PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	ALIGNMENT DIAGRAM	SHEET 17	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\027201-AD.DWG
LAYOUT NAME - 1
PLOT DATE : 5/23/2025 1:31 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

Estimate Of Quantities

9030-07-82

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	3.000	3.000
0004	203.0220	Removing Structure (structure) 01. B-35-0074	EACH	1.000	1.000
0006	204.0110	Removing Asphaltic Surface	SY	160.000	160.000
0008	204.0150	Removing Curb & Gutter	LF	212.000	212.000
0010	204.0165	Removing Guardrail	LF	658.000	658.000
0012	205.0100	Excavation Common	CY	414.000	414.000
0014	206.1001	Excavation for Structures Bridges (structure) 01. B-35-0163	EACH	1.000	1.000
0016	206.5001	Cofferdams (structure) 01. B-35-0163	EACH	1.000	1.000
0018	208.0100	Borrow	CY	165.000	165.000
0020	210.1500	Backfill Structure Type A	TON	1,300.000	1,300.000
0022	210.2500	Backfill Structure Type B	TON	256.000	256.000
0024	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 9030-07-82	EACH	1.000	1.000
0026	213.0100	Finishing Roadway (project) 01. 9030-07-82	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	99.000	99.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	515.000	515.000
0032	455.0605	Tack Coat	GAL	71.000	71.000
0034	465.0105	Asphaltic Surface	TON	157.000	157.000
0036	465.0315	Asphaltic Flumes	SY	10.000	10.000
0038	502.0100	Concrete Masonry Bridges	CY	474.000	474.000
0040	502.3200	Protective Surface Treatment	SY	84.000	84.000
0042	505.0400	Bar Steel Reinforcement HS Structures	LB	12,440.000	12,440.000
0044	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	83,700.000	83,700.000
0046	516.0500	Rubberized Membrane Waterproofing	SY	42.000	42.000
0048	516.0610.S	Sheet Membrane Waterproofing for Buried Structures 01. B-35-0163	SY	457.000	457.000
0050	550.0500	Pile Points	EACH	17.000	17.000
0052	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	2,125.000	2,125.000
0054	606.0300	Riprap Heavy	CY	267.000	267.000
0056	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	260.000	260.000
0058	618.0100	Maintenance and Repair of Haul Roads (project) 01. 9030-07-82	EACH	1.000	1.000
0060	619.1000	Mobilization	EACH	1.000	1.000
0062	624.0100	Water	MGAL	7.000	7.000
0064	625.0100	Topsoil	SY	1,530.000	1,530.000
0066	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0068	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0070	628.2008	Erosion Mat Urban Class I Type B	SY	1,530.000	1,530.000
0072	628.7504	Temporary Ditch Checks	LF	72.000	72.000
0074	629.0210	Fertilizer Type B	CWT	2.100	2.100
0076	630.0130	Seeding Mixture No. 30	LB	73.000	73.000
0078	630.0200	Seeding Temporary	LB	45.000	45.000
0080	630.0500	Seed Water	MGAL	70.000	70.000
0082	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	1.000	1.000
0084	638.2102	Moving Signs Type II	EACH	1.000	1.000
0086	642.5001	Field Office Type B	EACH	1.000	1.000
0088	643.0420	Traffic Control Barricades Type III	DAY	700.000	700.000
0090	643.0705	Traffic Control Warning Lights Type A	DAY	1,000.000	1,000.000
0092	643.0900	Traffic Control Signs	DAY	3,150.000	3,150.000
0094	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0096	643.5000	Traffic Control	EACH	1.000	1.000
0098	645.0111	Geotextile Type DF Schedule A	SY	180.000	180.000

Estimate Of Quantities

9030-07-82

Line	Item	Item Description	Unit	Total	Qty
0100	645.0120	Geotextile Type HR	SY	445.000	445.000
0102	646.2020	Marking Line Epoxy 6-Inch	LF	500.000	500.000
0104	650.4500	Construction Staking Subgrade	LF	125.000	125.000
0106	650.5000	Construction Staking Base	LF	125.000	125.000
0108	650.6501	Construction Staking Structure Layout (structure) 01. B-35-0163	EACH	1.000	1.000
0110	650.9911	Construction Staking Supplemental Control (project) 01. 9030-07-82	EACH	1.000	1.000
0112	650.9920	Construction Staking Slope Stakes	LF	389.000	389.000
0114	690.0150	Sawing Asphalt	LF	371.000	371.000
0116	690.0250	Sawing Concrete	LF	3.000	3.000
0118	715.0502	Incentive Strength Concrete Structures	DOL	2,844.000	2,844.000
0120	999.2105.S	Maintaining Climbing Turtle Exclusion Fence	LF	830.000	830.000
0122	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0124	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000

3

CLEARING AND GRUBBING

STATION	-	STATION	OFFSET	201.0205 GRUBBING STA
116+00	-	118+00	LT/RT	3
PROJECT 9030-07-82 TOTAL				**3**

REMOVING ASPHALTIC SURFACE

STATION	-	STATION	LOCATION	OFFSET	204.0110 REMOVING ASPHALTIC SURFACE SY
116+25	-	116+50	STH 17 MAINLINE	LT & RT	100
117+75	-	118+64	STH 17 SHOULDER	RT	60
PROJECT 9030-07-82 TOTALS					**160**

REMOVING CURB & GUTTER

STATION	-	STATION	OFFSET	204.0150 REMOVING CURB AND GUTTER LF
114+75	-	116+87		212
PROJECT 9030-07-82 TOTAL				**212**

3

REMOVING GUARDRAIL

STATION	-	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
115+71	-	119+00	LT	329
115+26	-	118+55	RT	329
PROJECT 9030-07-82 TOTALS				658

BASE AGGREGATE

STATION	-	STATION	LOCATION	OFFSET	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
114+75	-	116+50	STH 17 GRADING AREA	RT	23	---	---
114+75	-	116+50	STH 17 GRADING AREA (SHOULDER FORESLOPES)	RT	10	55	---
116+25	-	116+50	STH 17 GRADING AREA	LT	4	---	---
116+25	-	116+50	STH 17 GRADING AREA (SHOULDER FORESLOPES)	LT	2	---	---
116+50	-	117+75	STH 17 FULL DEPTH PAVEMENT REPLACEMENT	LT/RT	32	365	---
116+50	-	117+75	STH 17 FULL DEPTH PAVEMENT REPLACEMENT (SHOULDER FORESLOPES)	LT/RT	8	70	---
117+75	-	118+55	STH 17 GRADING AREA	RT	10	---	---
117+75	-	118+55	STH 17 GRADING AREA (SHOULDER FORESLOPES)	RT	5	---	---
UNDISTRIBUTED					5	25	7
PROJECT 9030-07-82 TOTALS					**99**	**515**	**7**

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

3

DIVISION	FROM/TO STATION	LOCATION	COMMON EXCAVATION (1) CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5) FACTOR 1.25	MASS ORDINATE +/- (6)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1											
STH 17-EWK	114+75.00/118+55.38		414	30	384	141	176	208	208	165	
DIVISION 1 SUBTOTAL			414	30	384	141	176	208	208	165	
GRAND TOTAL			414	30	384	141	176	208	208	165	

NOTES:

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

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(5) EXPANDED FILL FACTOR = 1.25

EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR

(6) 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.

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

3

ASPHALTIC ITEMS

STATION	-	STATION	LOCATION	THICKNESS	OFFSET	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
116+25	-	166+50	STH 17 MAINLINE	2"	LT & RT	6	10
116+50	-	117+75	STH 17 MAINLINE	6.25"	LT & RT	50	117
116+50	-	117+75	STH 17 SHOULDERS	6.25"	LT & RT	15	30
PROJECT 9030-07-82 TOTALS						**71**	**157**

ASPHALTIC FLUMES

STATION	-	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY
114+75		114+90	RT	10
PROJECT 9030-07-82 TOTALS				**10**

RIPRAP & GEOTEXTILE

STATION	-	STATION	OFFSET	* 606.0300 RIPRAP HEAVY CY	* 645.0120 GEOTEXTILE TYPE HR SY
116+45	-	116+55	LT	7	19
117+66	-	118+00	RT	20	46
CATEGORY 0010 SUBTOTAL				**27**	**65**
PROJECT 9030-07-82 TOTAL				**267**	**445**

*ADDITIONAL QUANTITIES LISTED ELSEWHERE, SEE STRUCTURE PLANS.

3

EROSION CONTROL MOBILIZATION

PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
9030-07-82	5	5
PROJECT 9030-07-82 TOTALS	**5**	**5**

LANDSCAPING

STATION	-	STATION	OFFSET	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
114+75	-	117+02	RT	610	610	0.8	28	17	27.4
116+25	-	116+80	LT	140	140	0.2	7	4	6.3
117+18	-	117+75	LT	205	205	0.3	10	6	9.2
117+40	-	118+64	RT	270	270	0.4	13	8	12.1
UNDISTRIBUTED				305	305	0.4	15	10	15
PROJECT 9030-07-82 TOTALS				**1,530**	**1,530**	**2.1**	**73**	**45**	**70**

EROSION CONTROL

STATION	-	STATION	OFFSET	628.7504 TEMPORARY DITCH CHECKS LF
114+75	-	117+25	RT	---
	114+95		RT	12
	115+27		RT	12
	115+88		RT	12
116+06	-	116+65	LT	---
	116+38		LT	12
	116+55		RT	12
	116+80		RT	12
117+07	-	117+88	LT	---
117+53	-	118+60	RT	---
SILT FENCE RELIEF - UNDISTRIBUTED				---
PROJECT 9030-07-82 TOTALS				**72**

PERMANENT SIGNING

STATION	OFFSET	634.0612 POSTS WOOD 4X6-INCH 12-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
116+12	RT	1	1
PROJECT 9030-07-82 TOTALS		**1**	**1**

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

3

TRAFFIC CONTROL

LOCATION	DAYS IN SERVICE	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS DAY
PROJECT 9030-07-82 ADVANCED WARNING	7	---	---	---	---	3	21
PROJECT 9030-07-82 CLOSURE & DETOUR	50	14	700	20	1000	63	3150
PROJECT 9030-07-82 TOTALS			**700**		**1,000**		**3,150**

TRAFFIC CONTROL SIGNS FIXED MESSAGE

SIGN CODE	IN	X	IN	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	DESCRIPTION
G20-57C	72	X	36	18	HWY 17 ROAD CLOSED BEGINS XXX-XX
G20-57C	72	X	36	18	HWY 17 ROAD CLOSED BEGINS XXX-XX
PROJECT 9030-07-82 TOTAL				**36**	

3

PAVEMENT MARKING ITEMS

STATION	-	STATION	OFFSET	TYPE	646.2020 MARKING LINE EPOXY 6-INCH YELLOW LF	646.2020 MARKING LINE EPOXY 6-INCH WHITE LF
116+50	-	117+75	LT	EDGELINE (SOLID)	---	125
116+50	-	117+75	CTR	CENTERLINE (DOUBLE SOLID)	250	---
116+50	-	117+75	RT	EDGELINE (SOLID)	---	125
PROJECT 9030-07-82 TOTALS						**500**

CONSTRUCTION STAKING

STATION	-	STATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT B-35-0163 EACH	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 9030-07-82 EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
116+50	-	117+75	125	125	1	1	---
114+75	-	118+64	---	---	---	---	389
PROJECT 9030-07-82 TOTALS			**125**	**125**	**1**	**1**	**389**

SAWING

STATION	-	STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
114+75	-	116+50	240	3
117+75	-	118+64	131	---
PROJECT 9030-07-82 TOTALS			**371**	**3**

MAINTAINING CLIMBING TURTLE EXCLUSION FENCE

STATION	-	STATION	OFFSET	999.2105.S MAINTAINING CLIMBING TURTLE EXCLUSION FENCE LF
114+75	-	117+25	RT	290
116+06	-	116+85	LT	250
117+07	-	117+88	LT	140
117+53	-	118+60	RT	150
PROJECT 9030-07-82 TOTALS				830

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

FILE NAME: \\P:\60548152\900_Work\910_CAD\60548152\SheetsPlan\0302-MQ.pptx PLOT DATE: 10/22/2025 1:49 PM PLOT BY: AECOM PLOT NAME: PLOT SCALE: WISDOT / CADDS SHEET 41

BENCH MARKS AND CONTROL POINTS					
NO.	STATION	X	Y	DESCRIPTION	ELEV.
1001	114+55.92	405523.967	130811.654	60D PP 3107 5E10	1317.34
1002	116+69.52	405697.499	130936.348	RR SPIKE PP 3107 5E8	1313.49
1003	117+36.55	405737.735	130996.496	ALUM DISK NE WWAL	1307.70
1004	119+37.79	405916.227	131091.805	RR SPIKE PP 3107 5E7	1310.45
906	120+42.90	405964.331	131208.280	CP .75RB-CAP	1311.62
924	115+59.40	405563.864	130937.354	CP SPIKE	1310.26
925	116+88.79	405671.421	131009.275	CP SPIKE	1309.04
926	117+44.00	405740.495	131005.718	CP SPIKE	1309.09
927	117+73.14	405797.585	130973.340	CP SPIKE	1298.62
928	117+21.56	405685.383	131047.115	CP SPIKE	1298.64

JONATHAN ARROWOOD
PL
ASPH PE
FRONTIER COMMUNICATIONS (COMMUNICATION)
EXISTING R/W
JEFFREY HANSON
PL
WISCONSIN PUBLIC SERVICE (GAS)
CAUTION
LUIS HILARIO MONTANO
N
STA 116+50.00 SAWCUT REQ'D
BARNES CREEK
CP 928
CP 924
CP 925
CP 906
BARNES CREEK AVE
STH 17
END CONSTRUCTION 9030-07-82 STA 118+64
114
116
118
120
PI: 113+37.27
BEGIN CONSTRUCTION 9030-07-82 STA 114+75
ASPHALTIC FLUME (SEE PLAN DETAIL)
ASPH PE
CP 926
EXISTING R/W
AGG PE
AGG PE
BM 1001
BM 1002
BM 1003
BM 1004
NSIGHT TELESERVICES (COMMUNICATION)
WISCONSIN PUBLIC SERVICE (ELECTRIC)
FRONTIER COMMUNICATIONS (COMMUNICATION)
BEGIN PROJECT 9030-07-82 STA 116+25.00 MATCH EXISTING SAWCUT REQ'D X = 405,630.684 Y = 130,955.656
EXISTING STRUCTURE B-35-0074
CP 927
WARREN YESKIS
STRUCTURE B-35-0163 REQ'D
END PROJECT 9030-07-82 STA 117+75.00 MATCH EXISTING SAW CUT REQ'D
TARA OLLMANN

LEGEND
1 — 6.25" ASPHALTIC SURFACE OVER 13" BASE AGGREGATE DENSE 1 1/4-INCH
2 — 6.25" BASE AGGREGATE DENSE 3/4-INCH OVER 13" BASE AGGREGATE DENSE 1 1/4-INCH
3 — 2" ASPHALTIC SURFACE
SLOPE INTERCEPTS
XXXXXX SAWCUT

VCL = 120.00
K = 147.91
STA 116+25.00 EL 1310.29
STA 116+50.00 EL 1310.17
VPC STA 116+55.00 VPC EL 1310.14
LP STA 117+57.06 LP EL 1309.78
STA 117+75.00 EL 1309.80
PROPOSED DESIGN PROFILE ALONG R/L
-0.49%
-0.63%
EXISTING GROUND ALONG R/L
-2.66%
-0.60%
-0.89%
-2.49%
-4.95%
-1.00%
-0.69%
PROPOSED RT DITCH PROFILE
STA 114+75.00 EL 1310.33
STA 115+25.00 EL 1309.00
STA 116+00.00 EL 1308.55
STA 116+45.00 EL 1308.15
STA 116+25.00 EL 1305.88
STA 116+60.00 EL 1305.64
STA 116+60.00 EL 1307.78
STA 116+86.00 EL 1306.49
STA 116+90.00 EL 1306.45
VPI STA 117+15.00 VPI EL 1309.72
VPT STA 117+75.00 VPT EL 1309.80
PROPOSED LT DITCH PROFILE
EXISTING ELEVATION
PROPOSED ELEVATION
1320
1315
1310
1305
1300
1312.26 1312.11 1311.76 1311.45 1311.13 1310.82 1310.48 1310.17 1310.17 1309.89 1309.89 1309.77 1309.79 1309.86 1310.12 1310.53 1311.07 1311.79 1312.60 1312.90
113 114 115 116 117 118 119 120 120

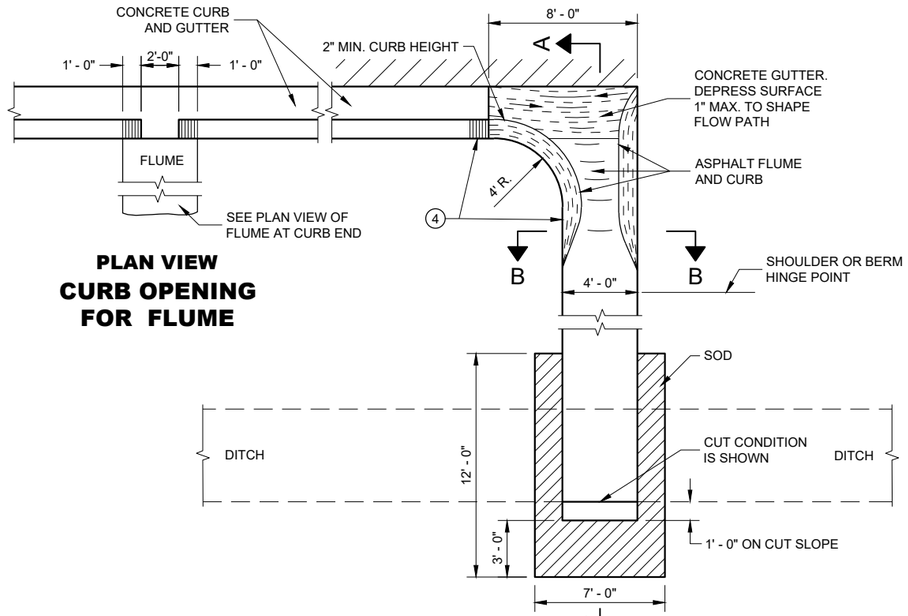
PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	PLAN AND PROFILE	SHEET 24	E

Standard Detail Drawing List

08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
14B29-01	SAFETY EDGE
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
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
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

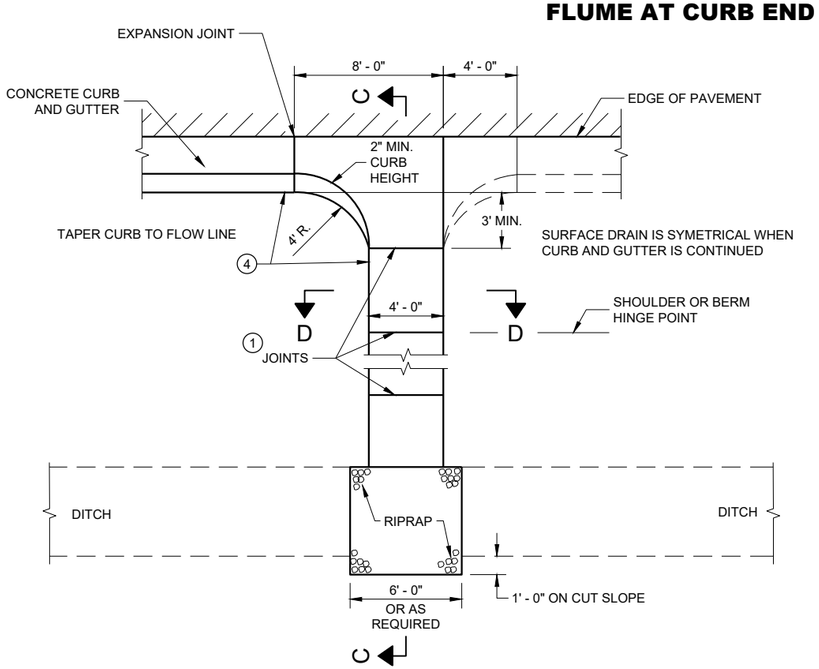
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



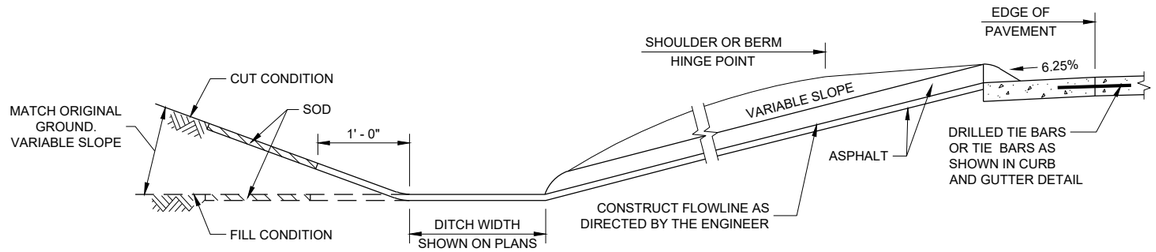
PLAN VIEW
CONCRETE SURFACE DRAIN

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.

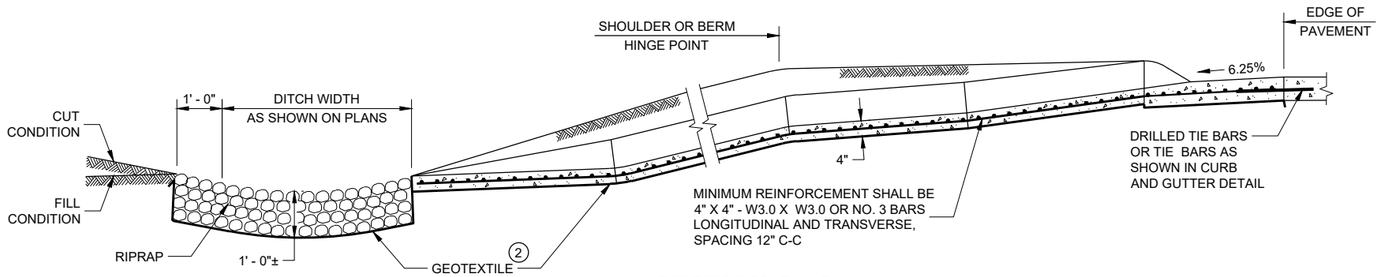
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE 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.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

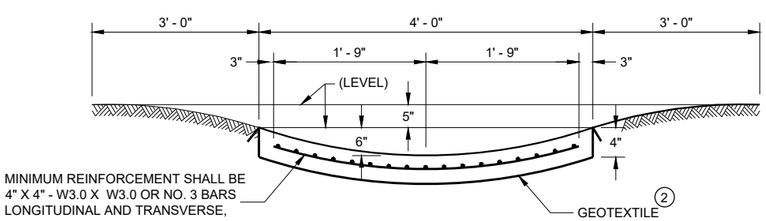


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

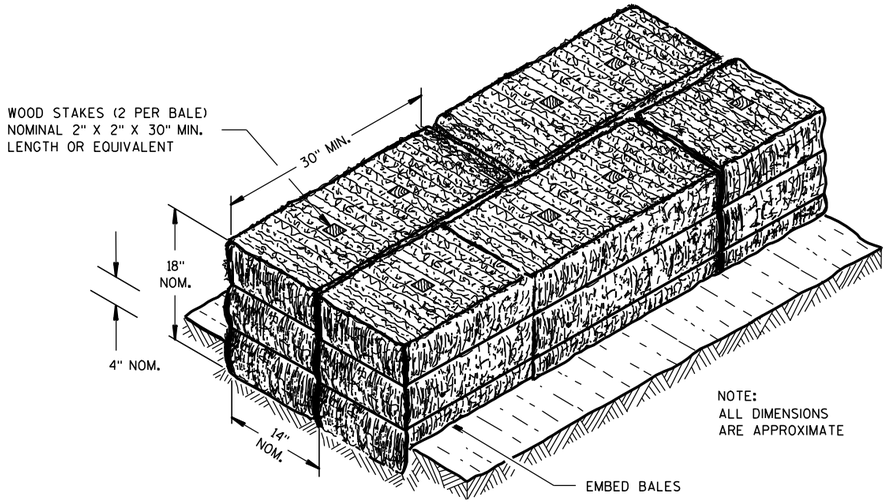
APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

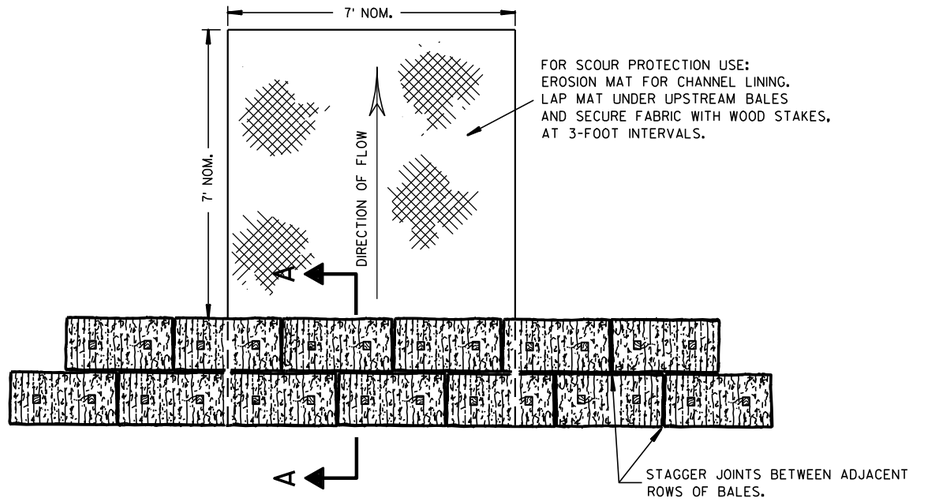
FHWA

6

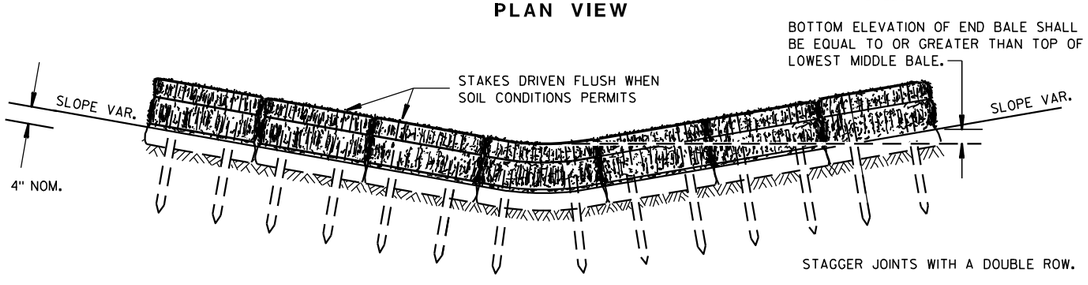
SDD 08D04 - 07



SECTION A-A



PLAN VIEW



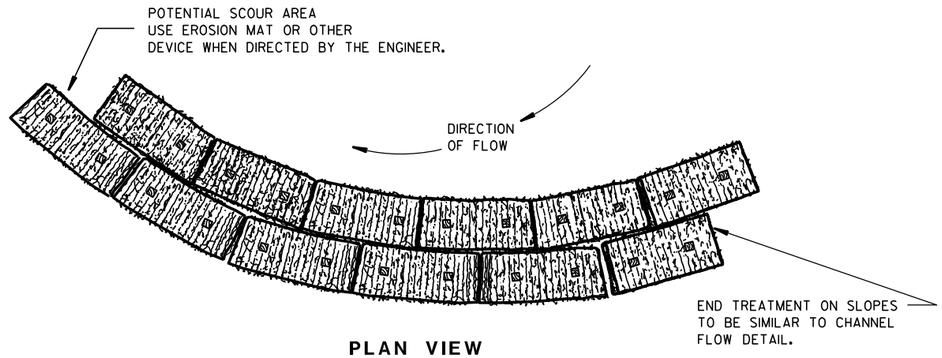
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

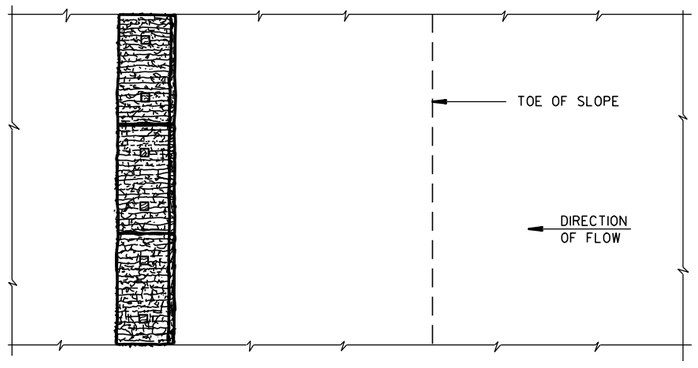
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

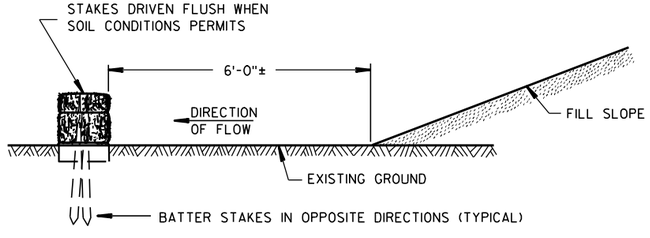


PLAN VIEW

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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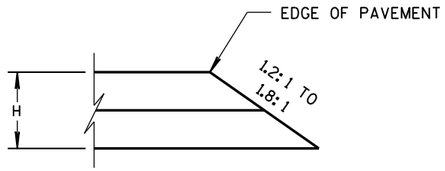
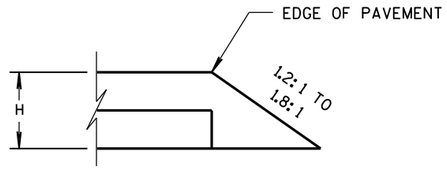
S.D.D. 8 E 8-3



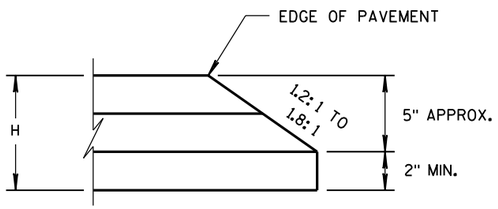
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



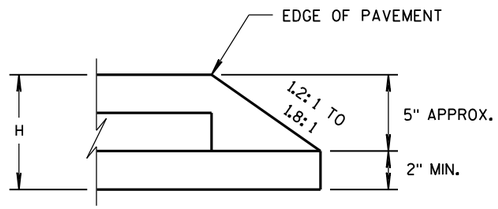
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

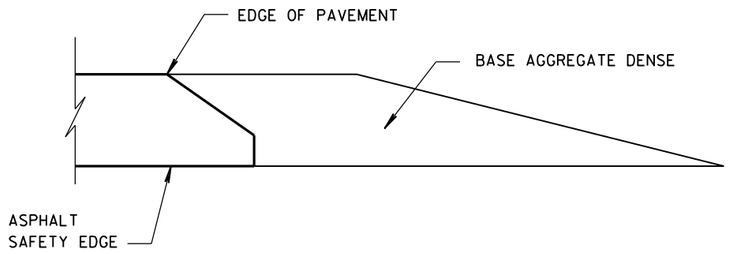
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

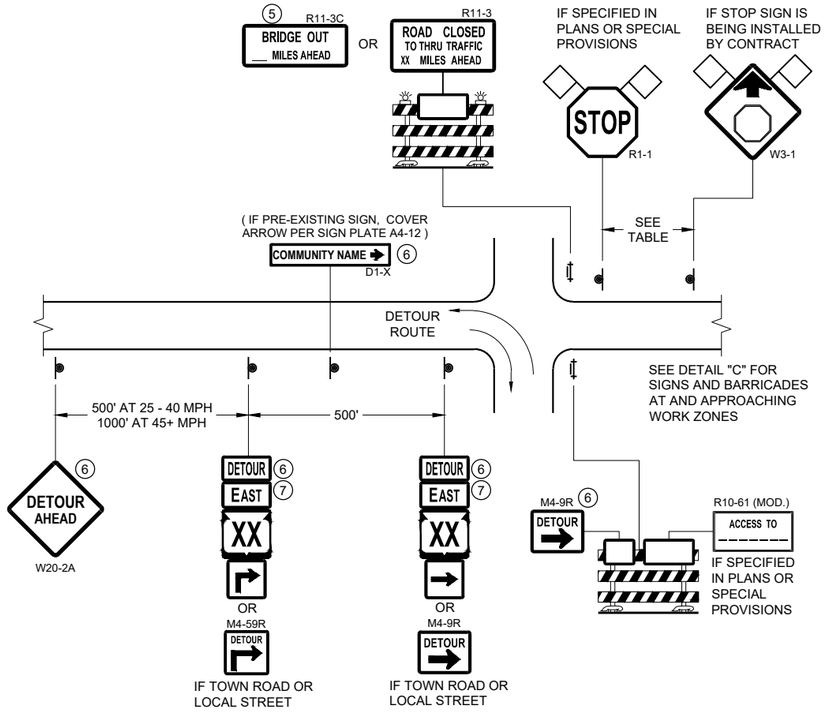
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

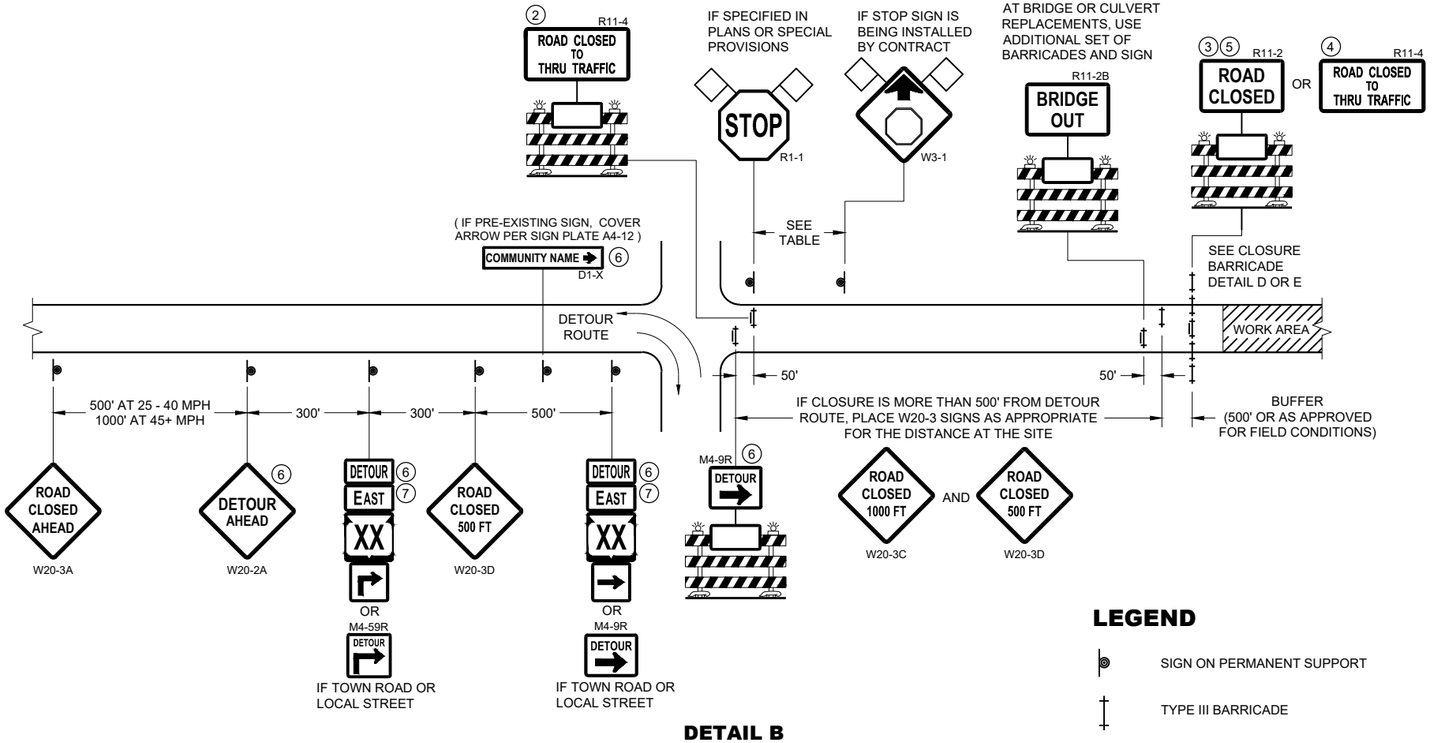
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



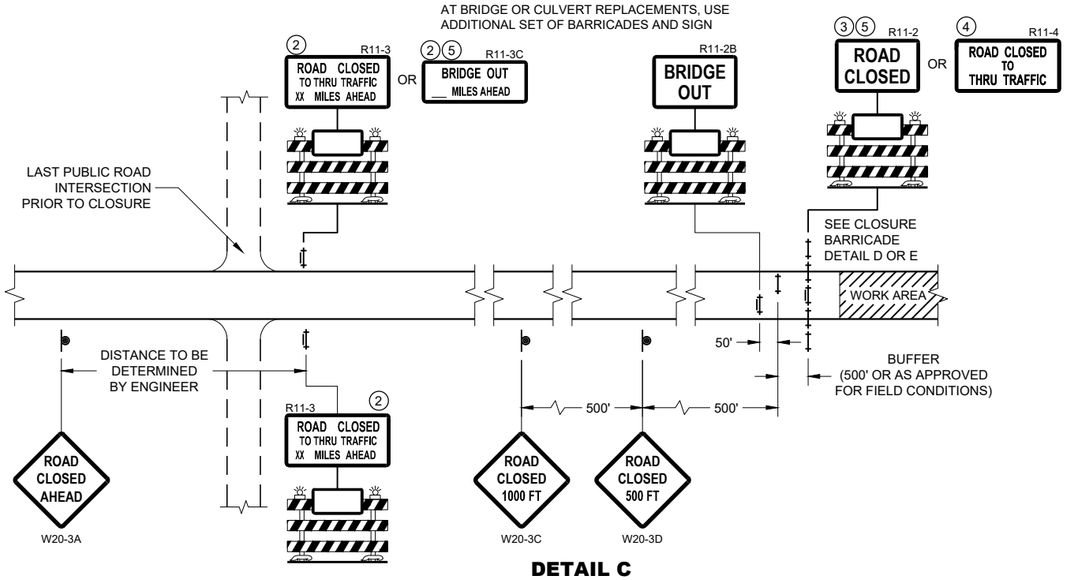
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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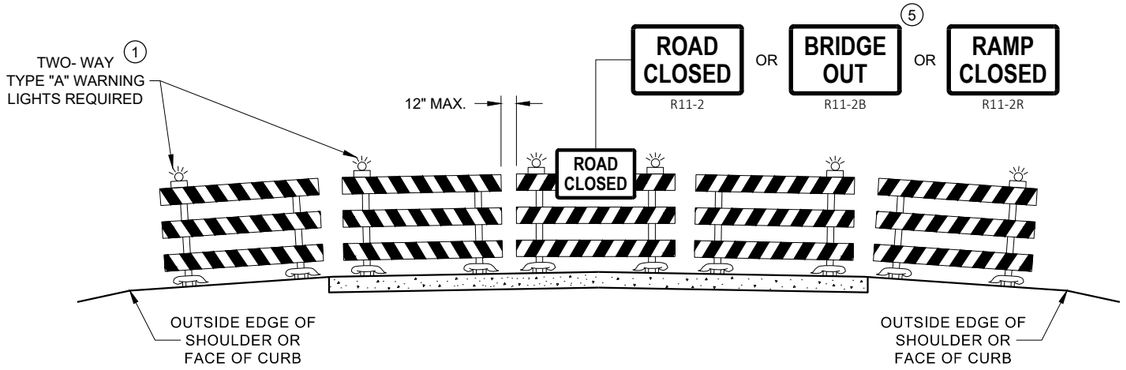
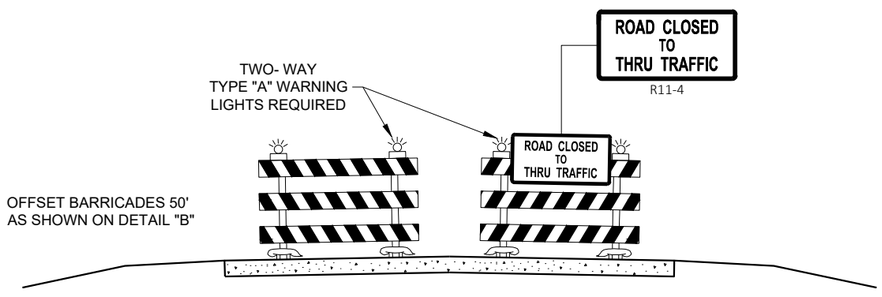
SDD 15C02 - 09a



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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

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SDD 15C02 - 09b

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 / EAST — M4 - 8, M3 - X
- XX — M1 - 4; XX — M1 - 6; COUNTY X — M1 - 5A
- M05 - 1; M06 - 1; 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.

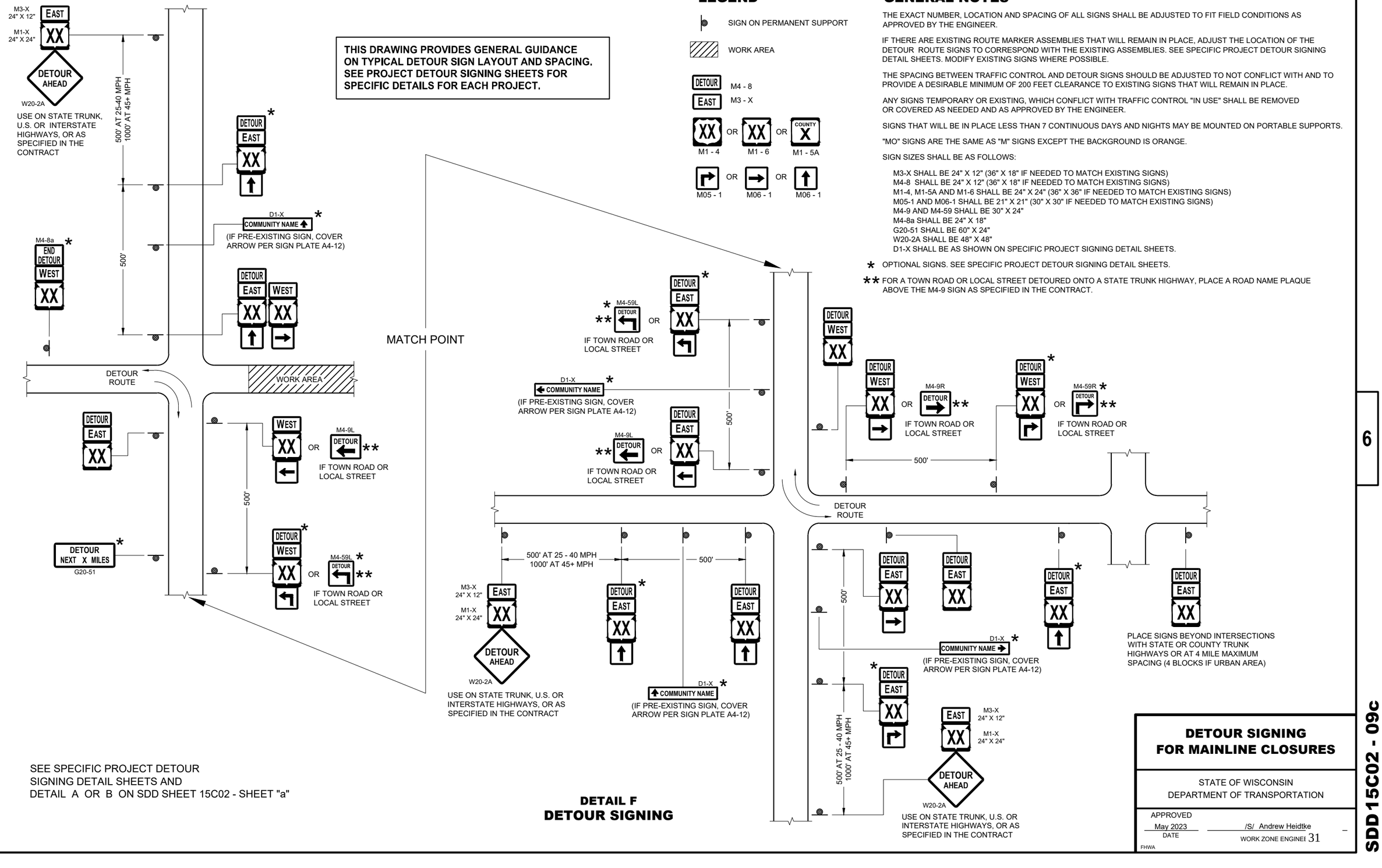
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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" (36" X 36" 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



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
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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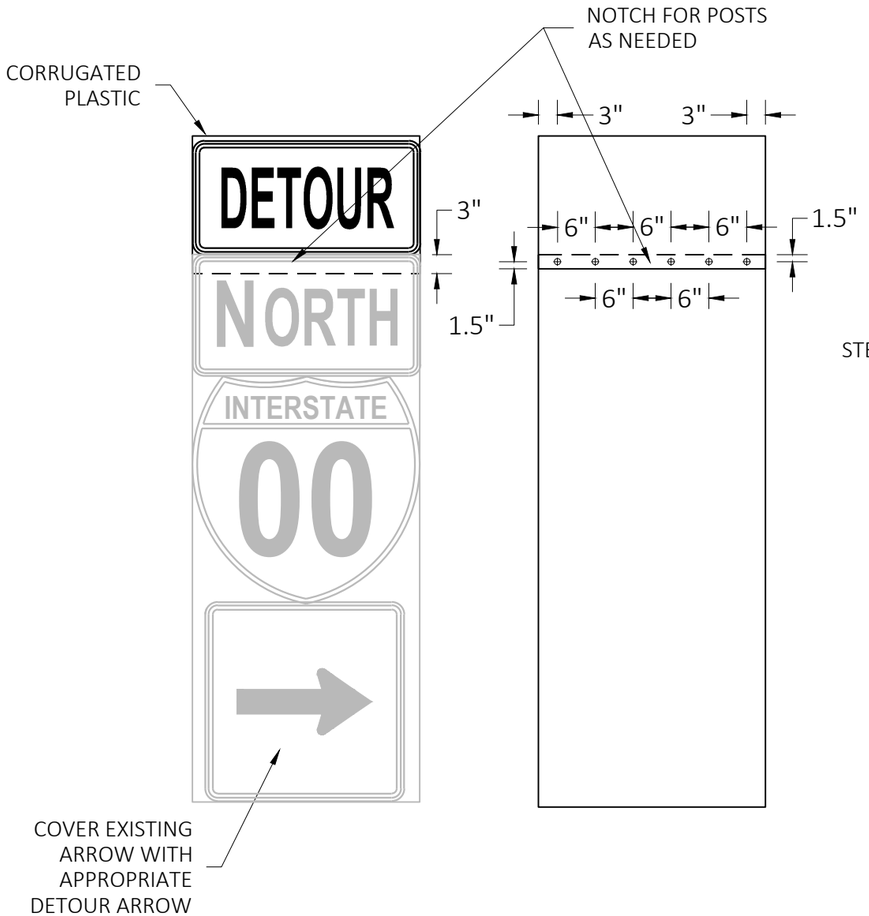
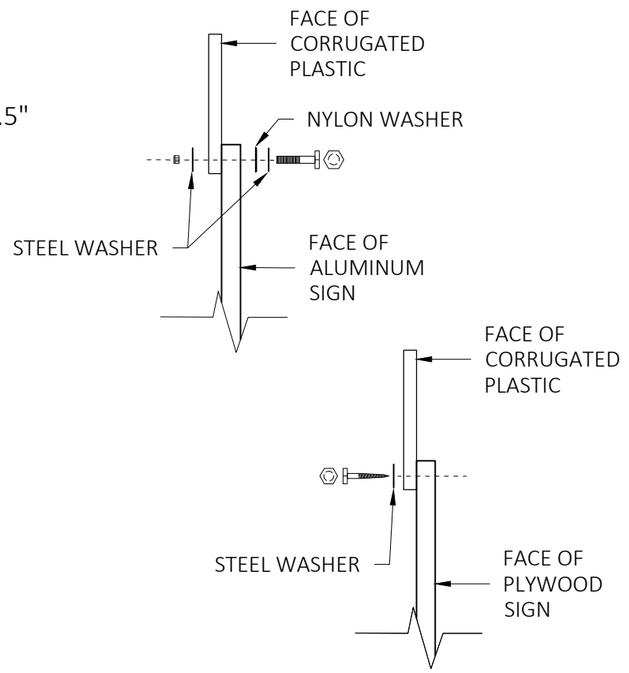
SDD 15C02 - 09c

FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
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

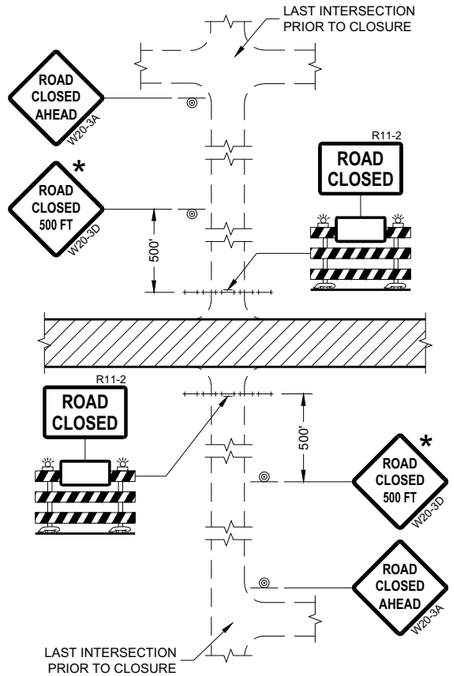
MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

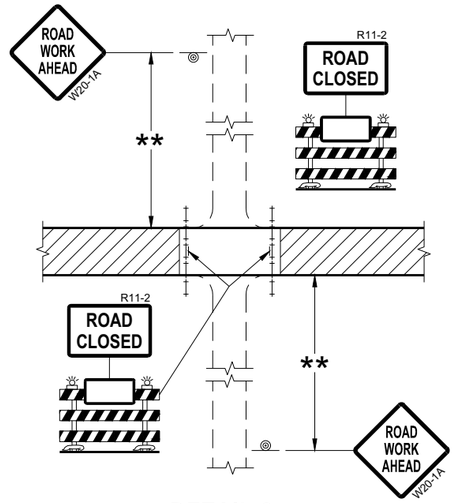
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA

6
SDD 15C02-09h



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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.

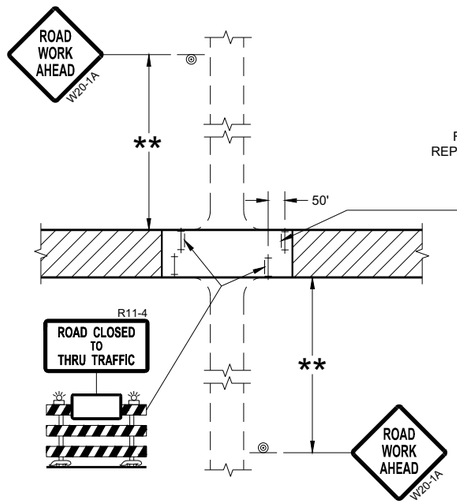
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

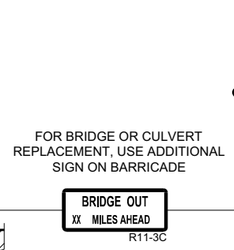
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

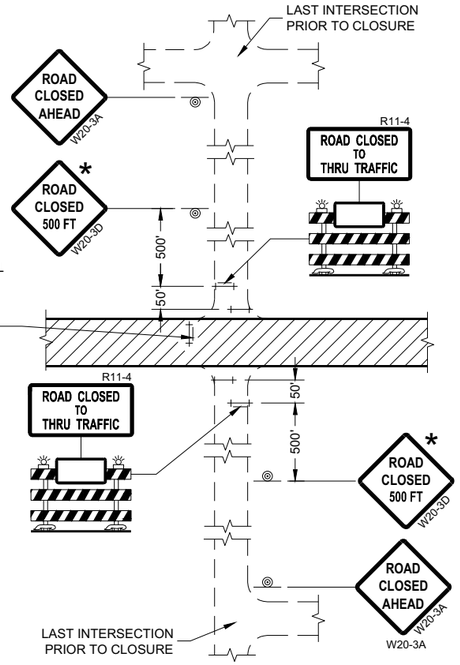
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* 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.







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

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

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

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.

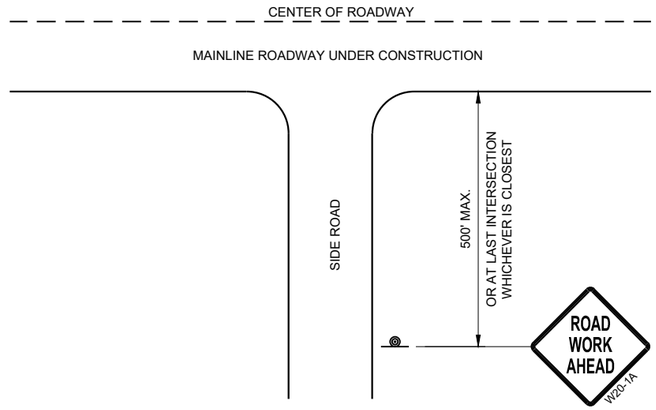
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



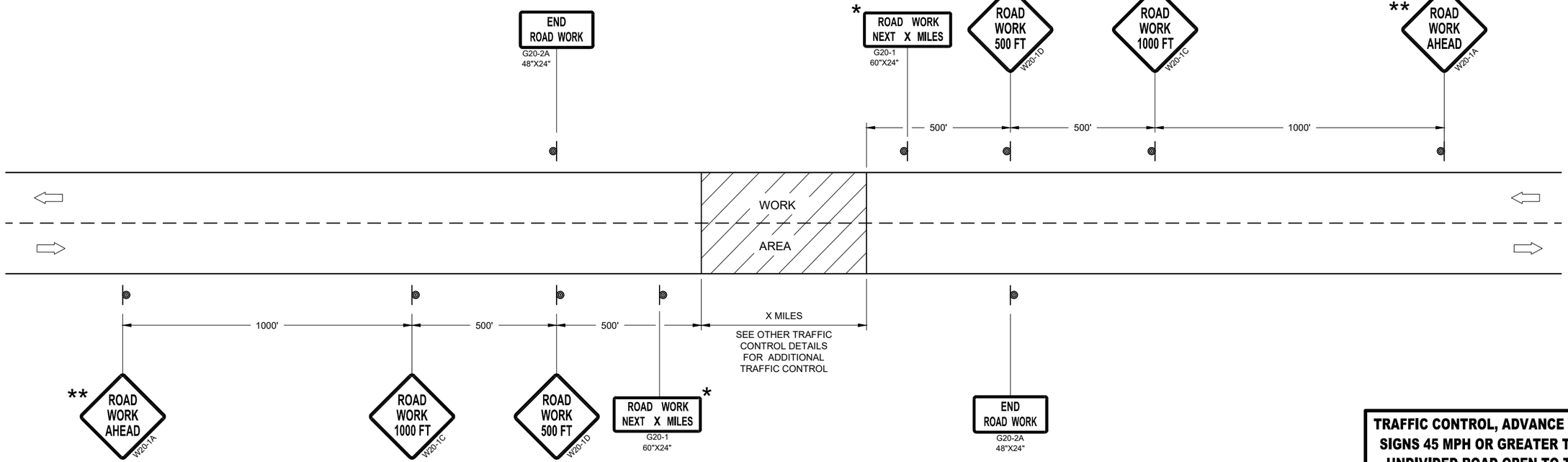
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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 TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

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

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

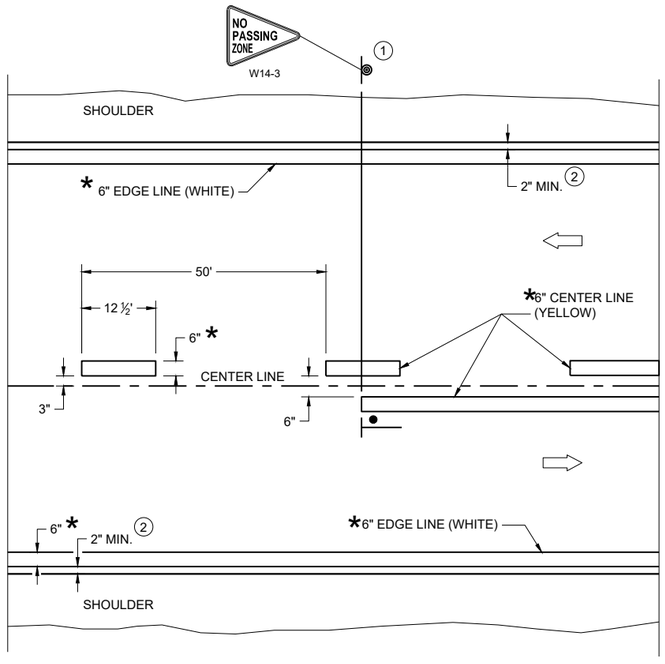
LEGEND

"T" MARKING

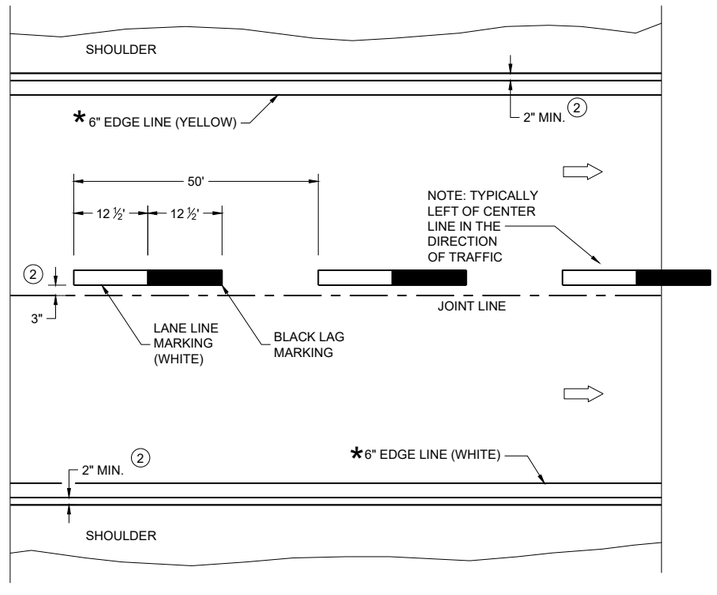
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

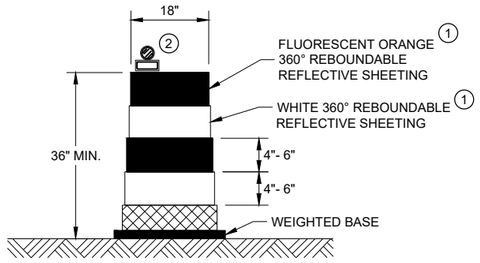
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6
SDD 15C08-24a

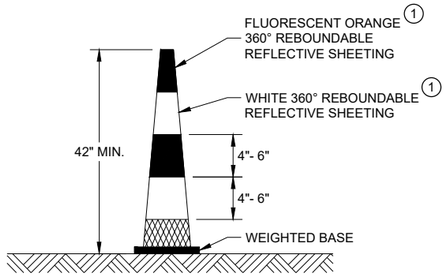
GENERAL NOTES

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

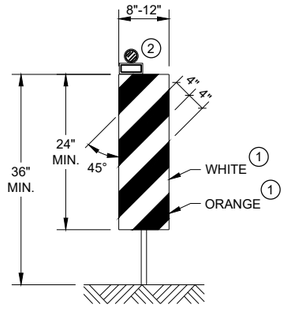
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

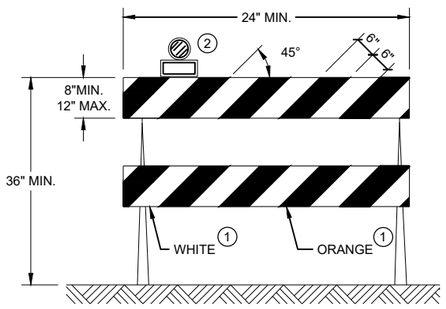
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



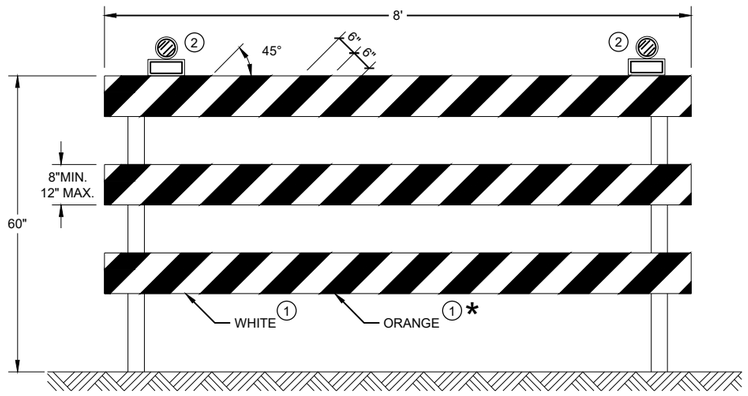
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

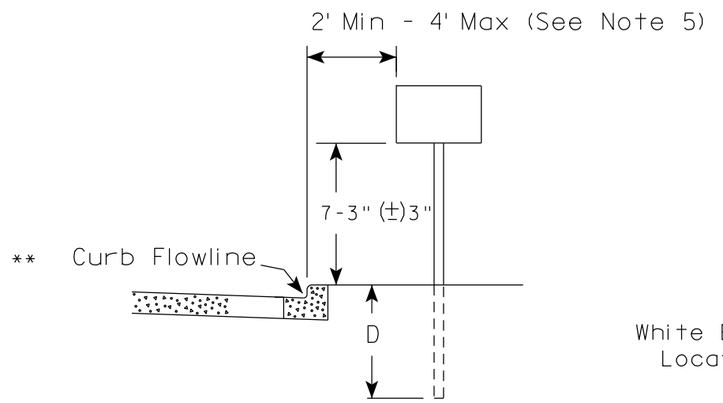
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

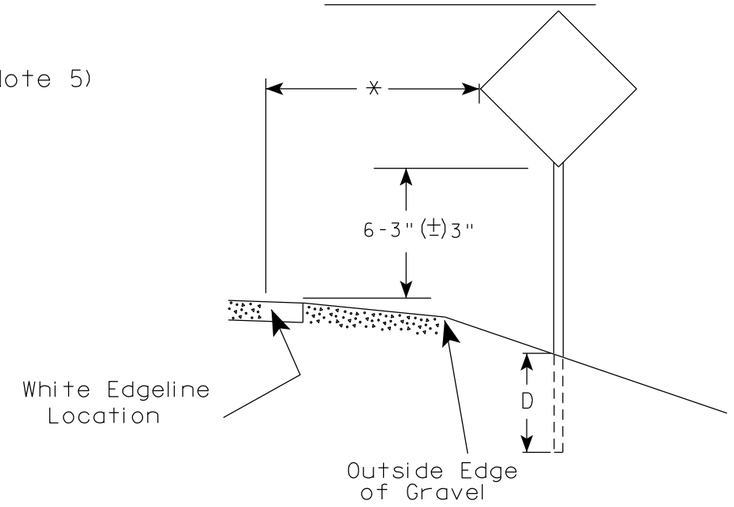
6

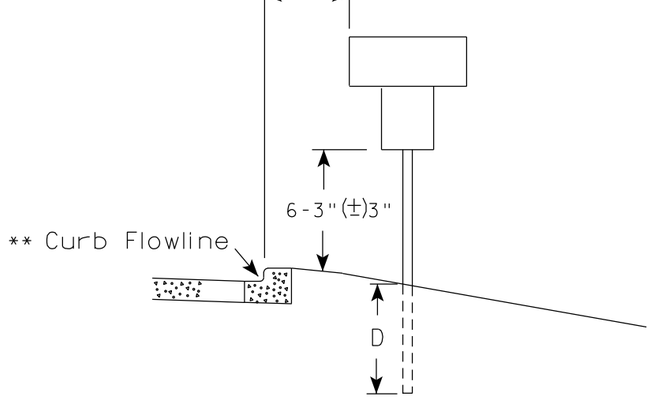
SDD 15C11 - 10b
SDD 15C11 - 10b

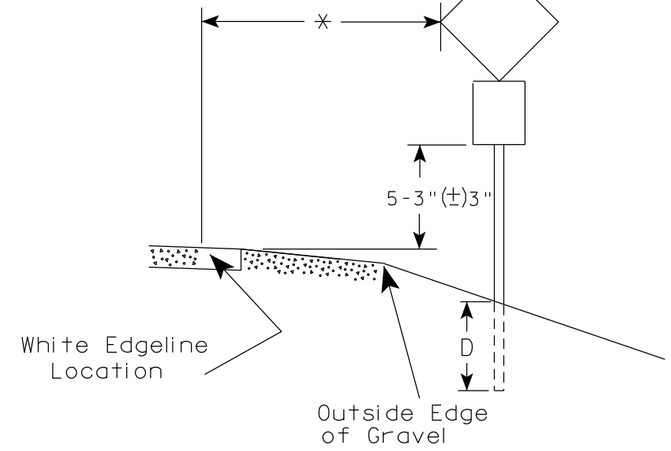
URBAN AREA



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 or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 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" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

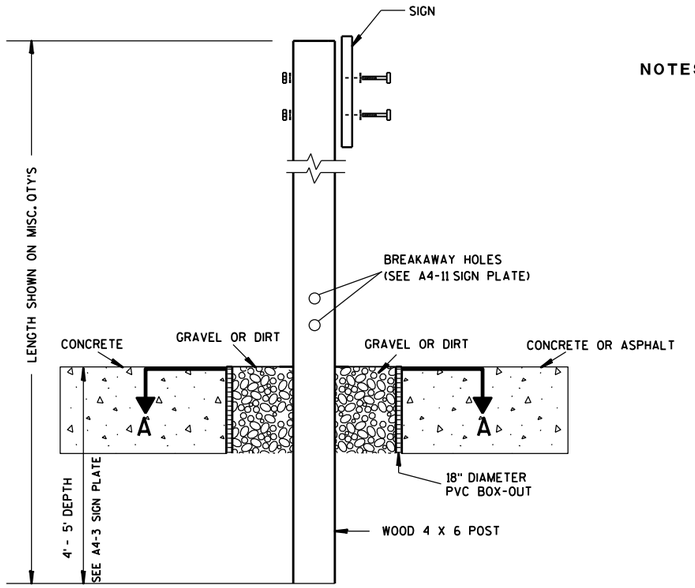
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

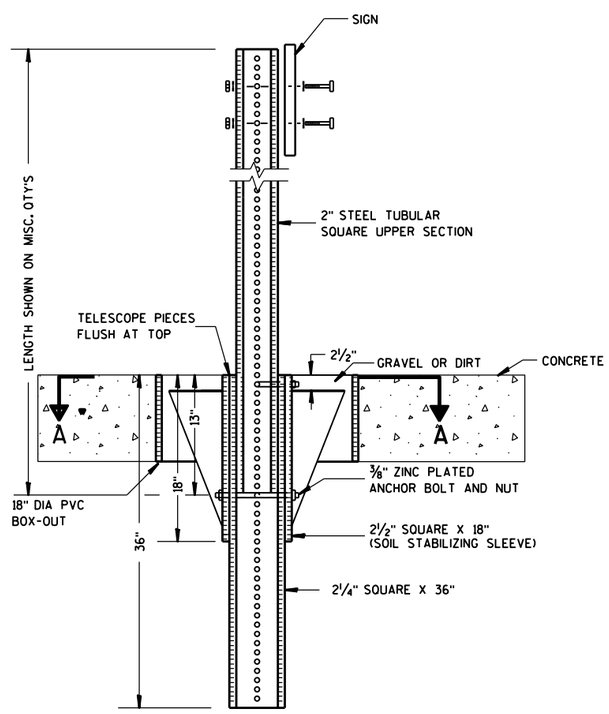
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 37	E



ELEVATION VIEW

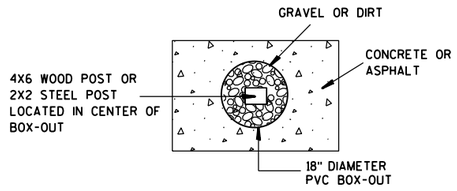
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

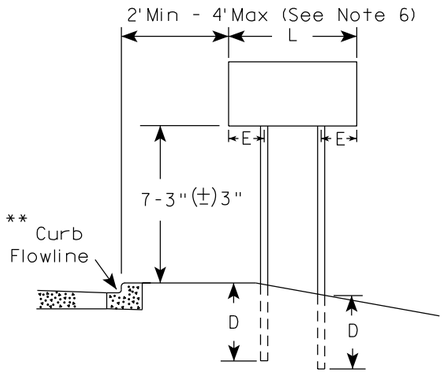
APPROVED Matthew R Rauch
for State Traffic Engineer

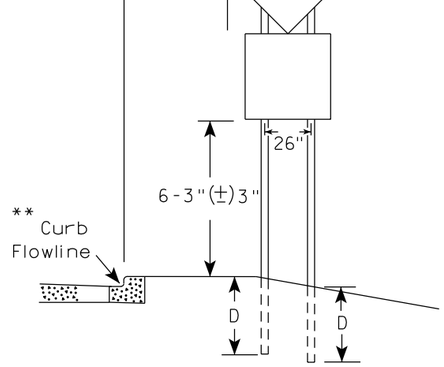
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

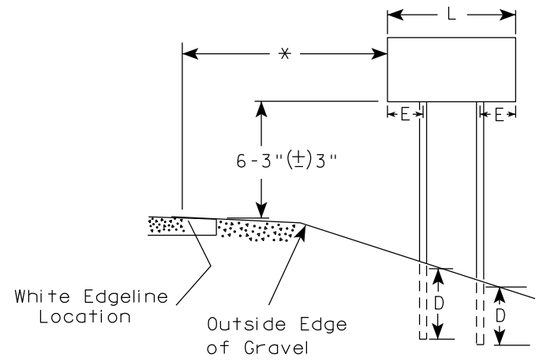
URBAN AREA

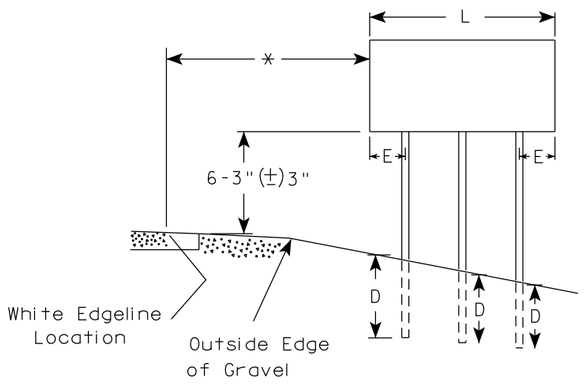


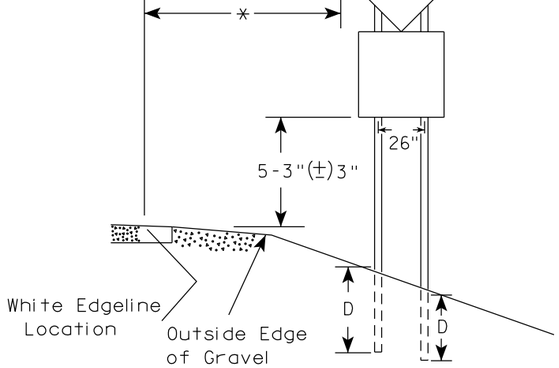


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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'

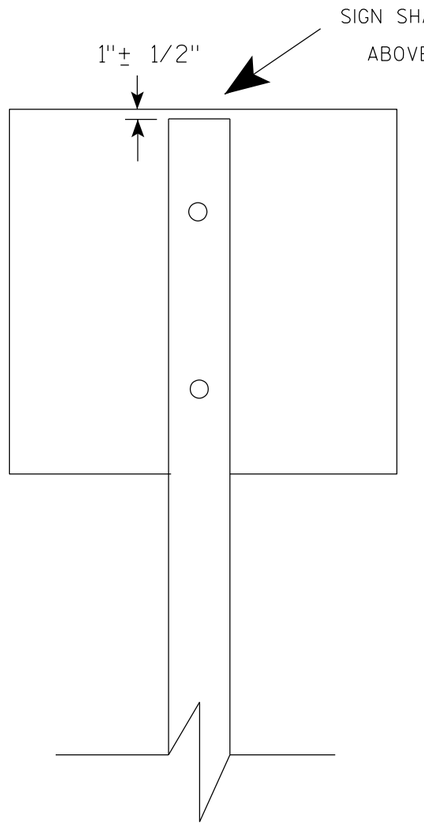
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

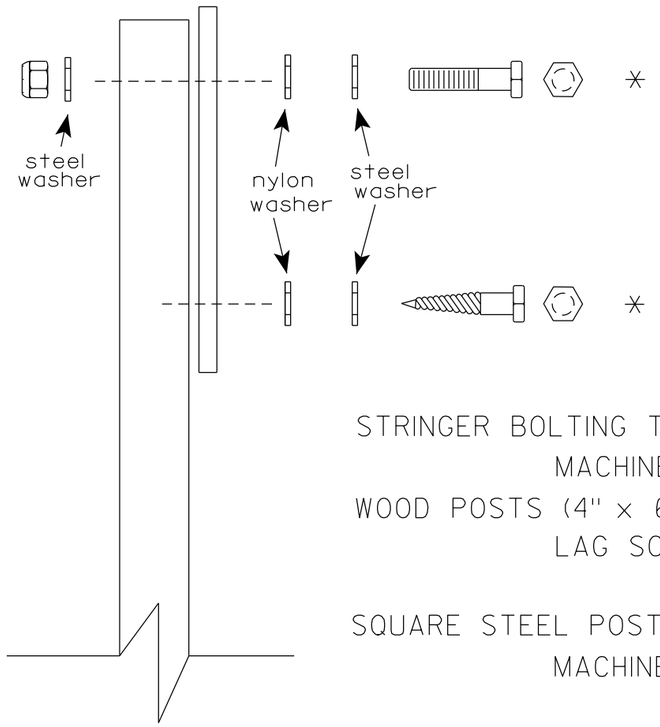
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 39	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 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

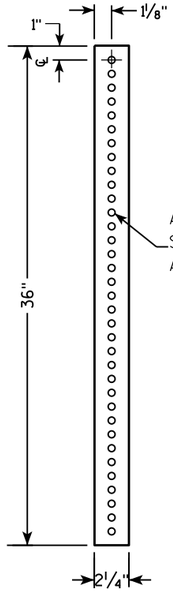
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

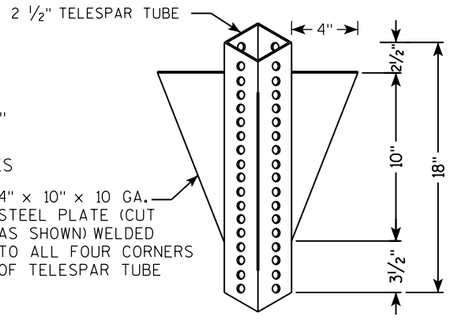
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

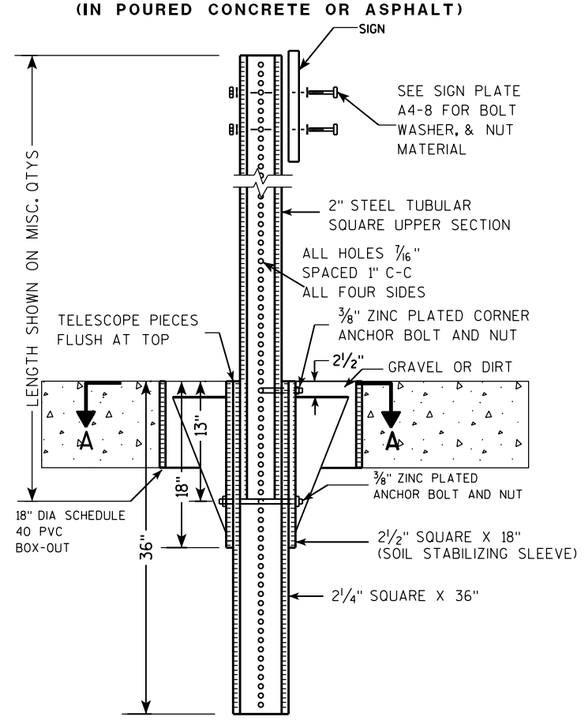
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



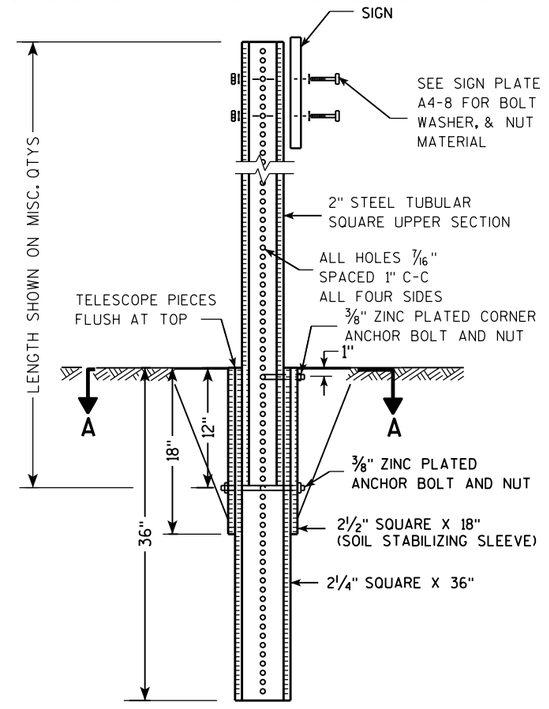
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

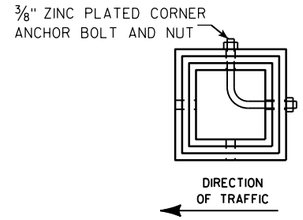


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

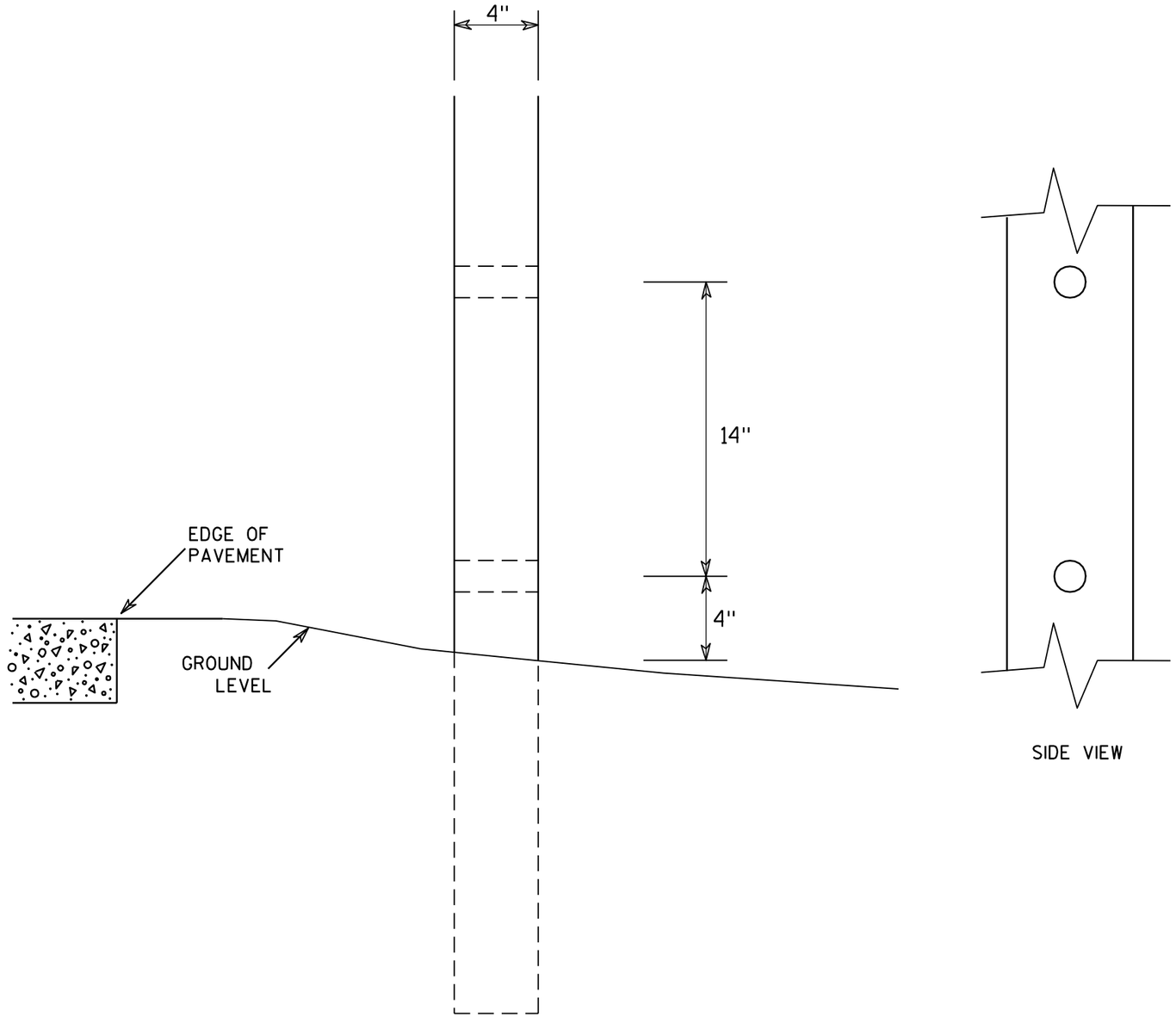
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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

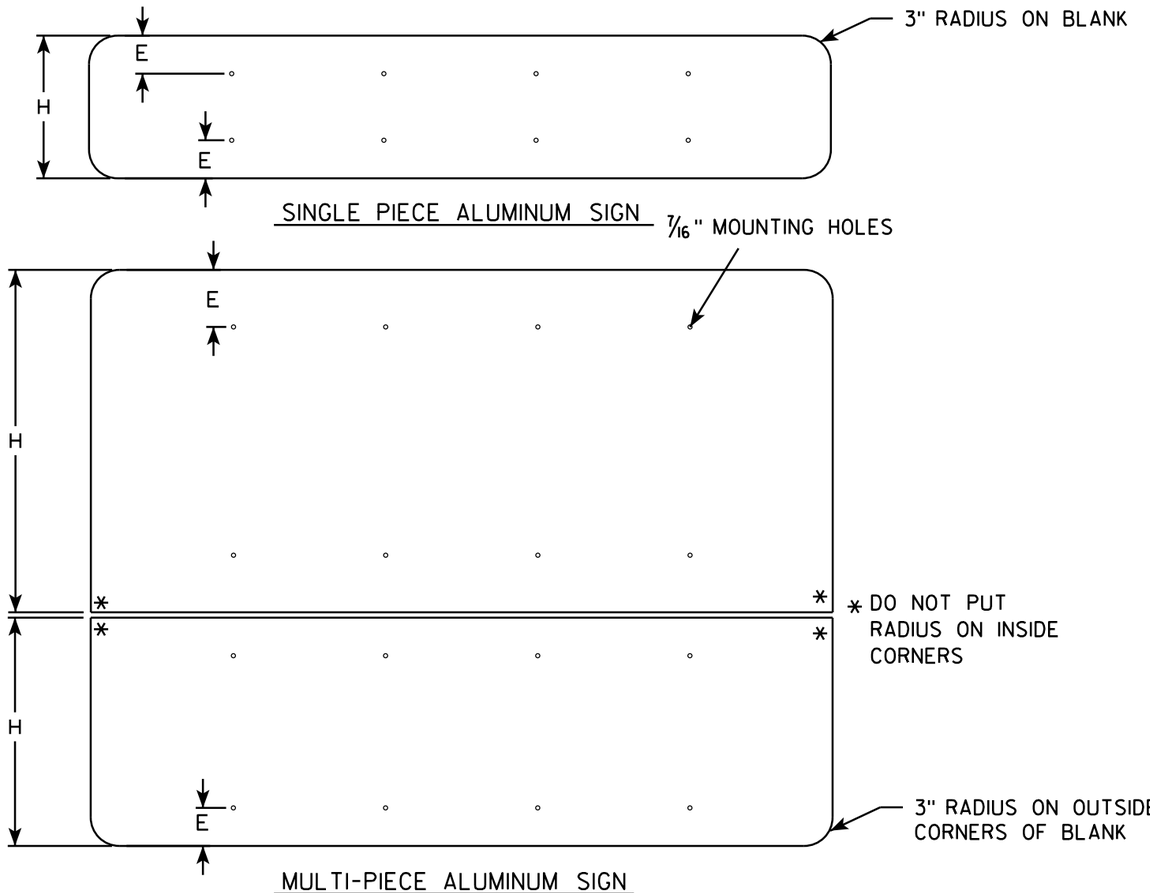
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

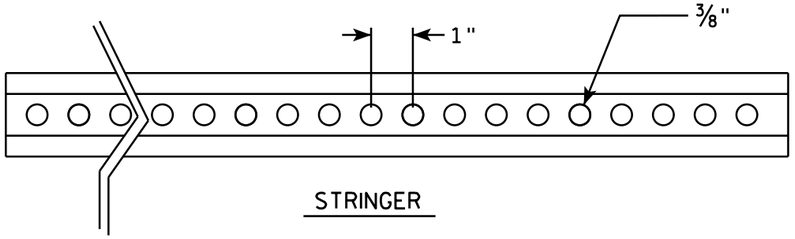
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 42	E



GENERAL NOTES

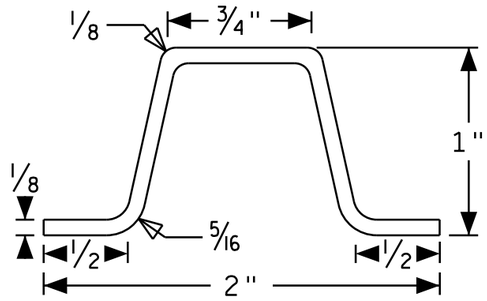
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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"

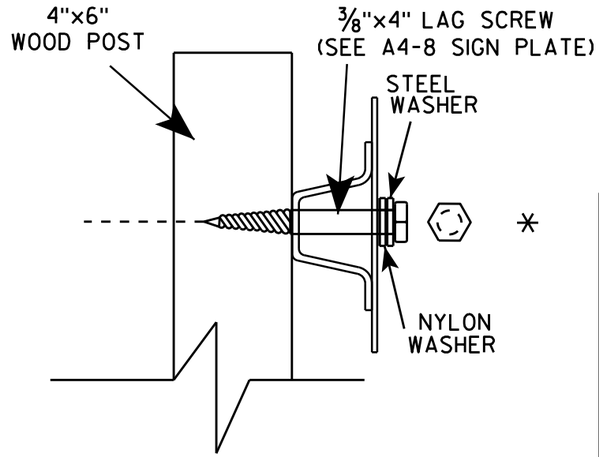


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

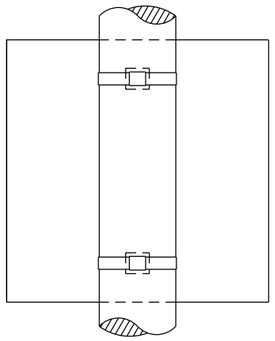
DATE 4/26/16 PLATE NO A4-18.1

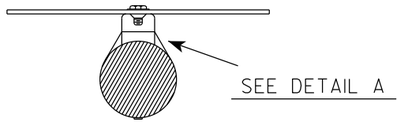
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

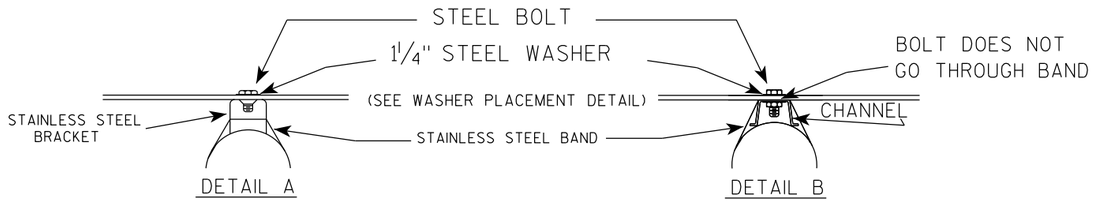
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000

BANDING

SINGLE SIGN



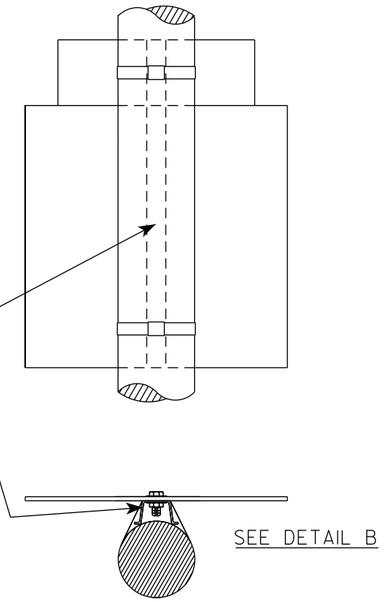




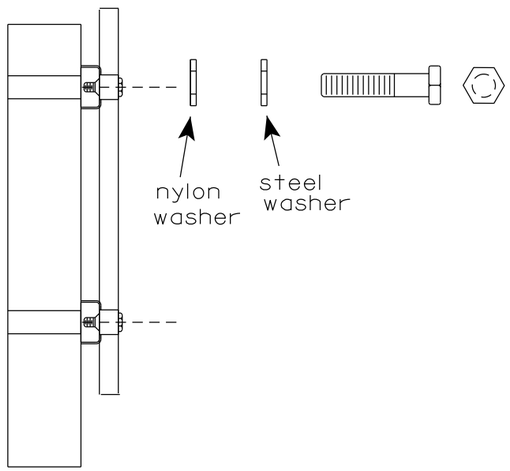
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

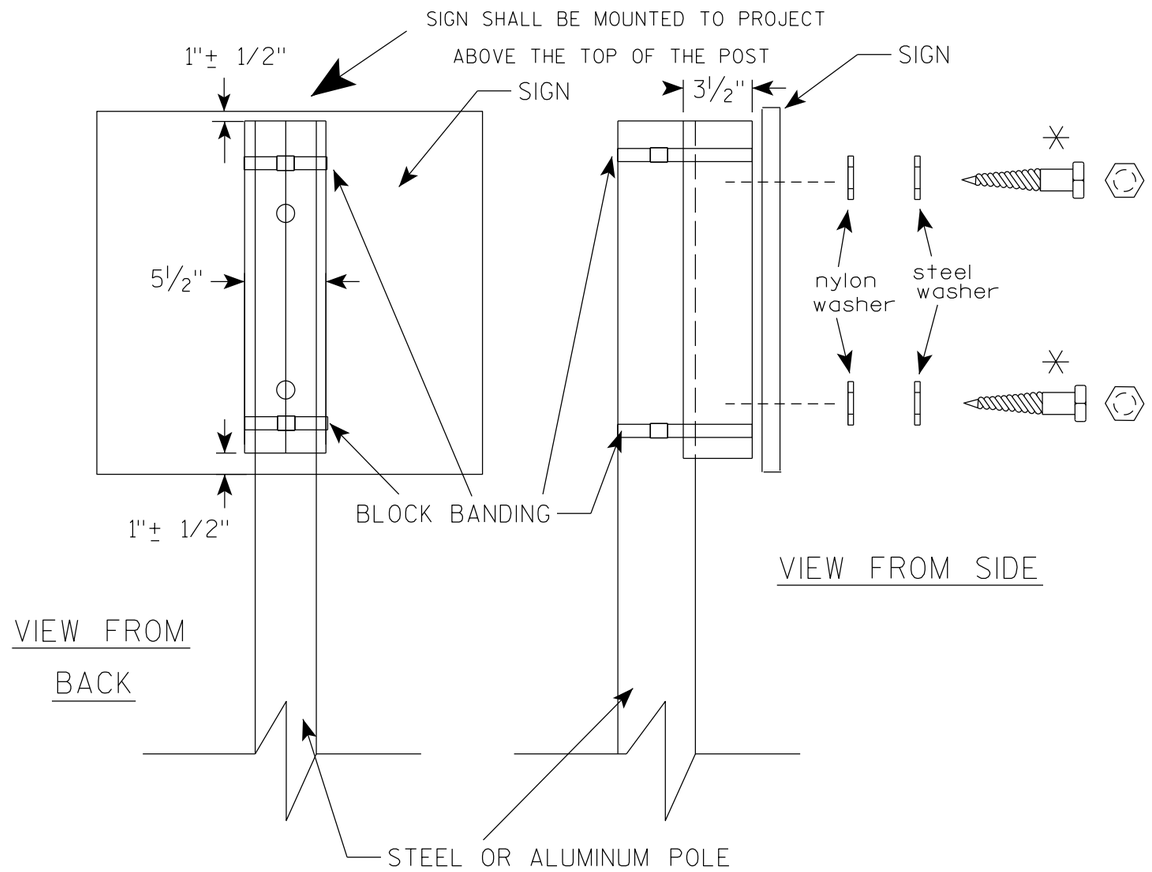
WISCONSIN DEPT OF TRANSPORTATION

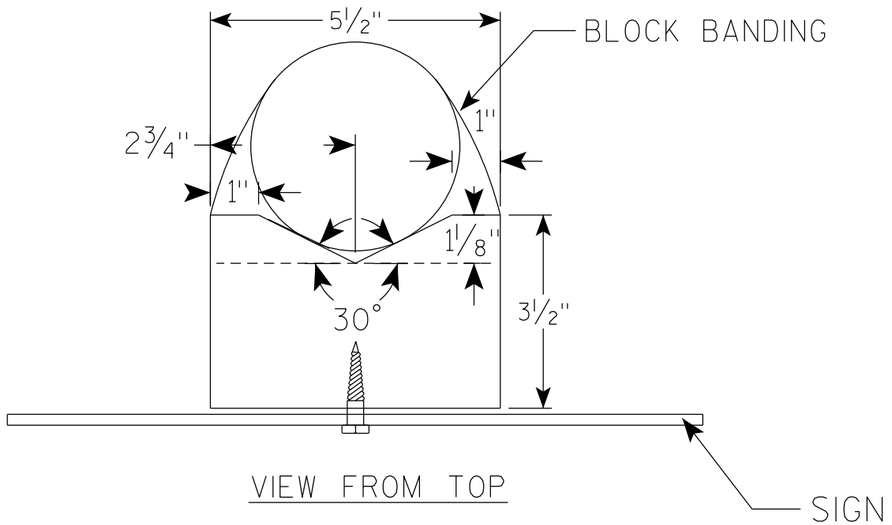
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 44	E

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





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)

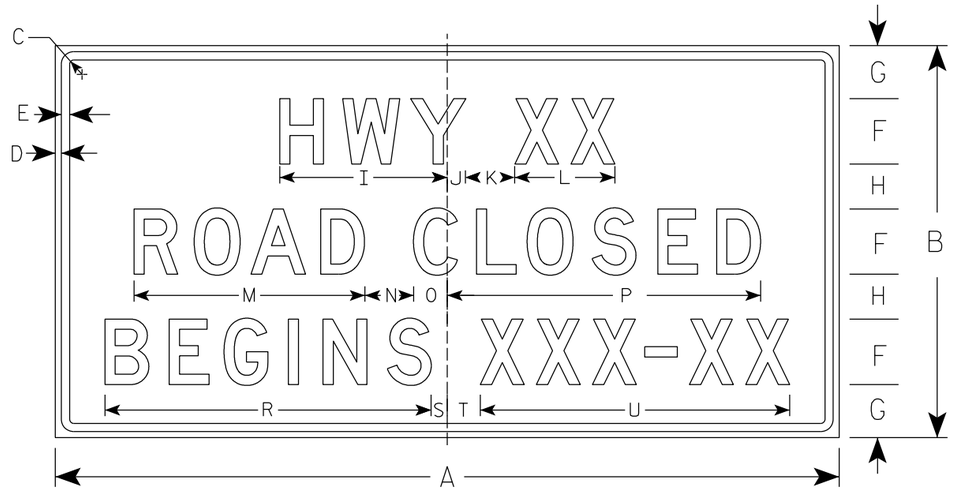
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

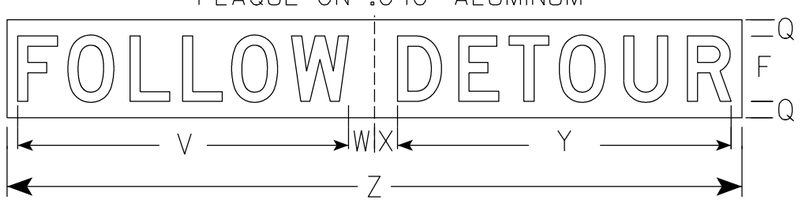
PROJECT NO:

SHEET NO: 45 E



G20-57C

PLAQUE ON .040" ALUMINUM



USE ONLY ONCE WHEN ROAD IS CLOSED

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and 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																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/8	5	2 7/8	29	2	30	1 3/4	3 1/4	28 3/8	40 1/2	2	2	29 3/4	66	18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	6	4 1/8	38 3/8	2	39 7/8	2	4	37 7/8	29 3/4	3 1/8	2 7/8	40 7/8	90	32.0
5																											

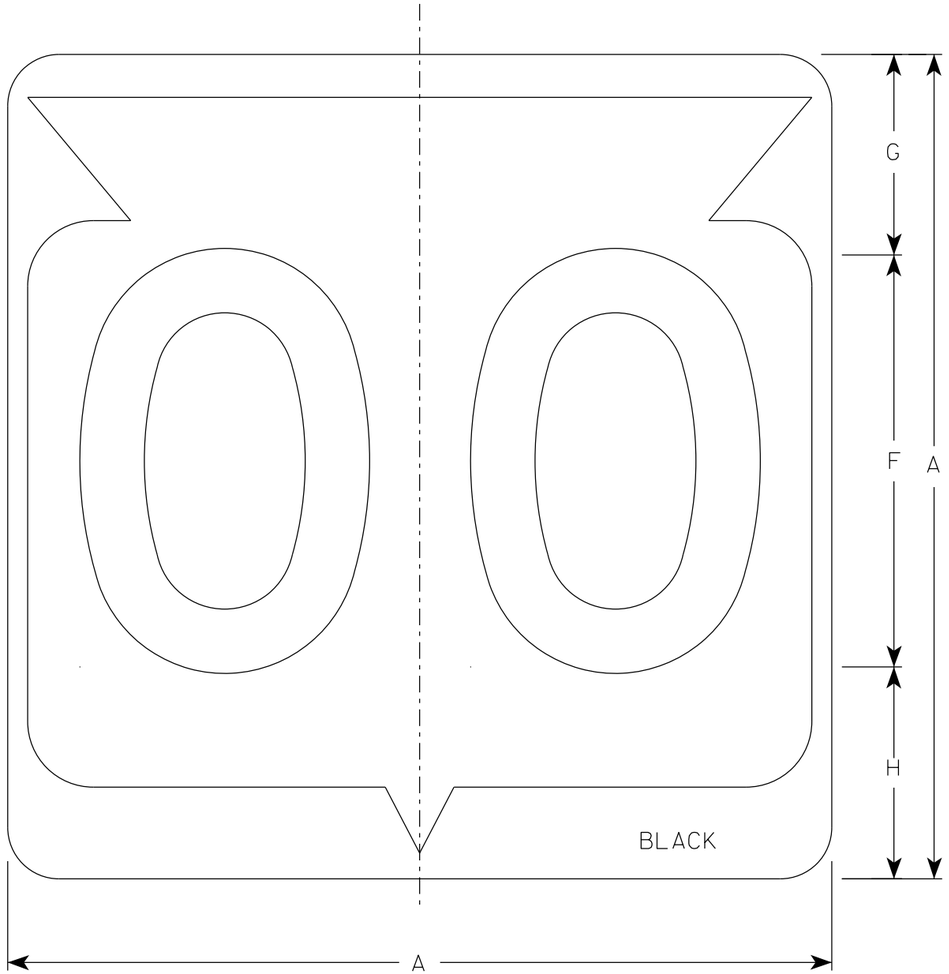
STANDARD SIGN
G20-57C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19 PLATE NO. G20-57C.1

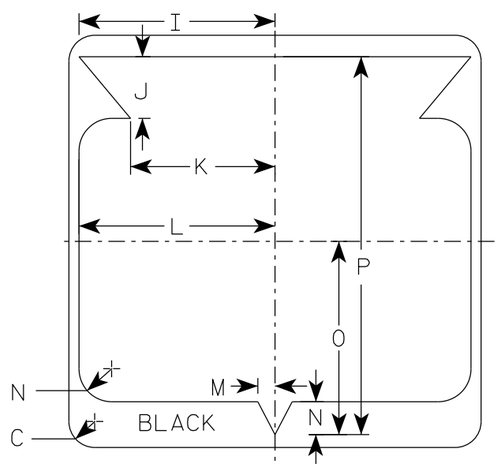
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 46 E



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



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
2M	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

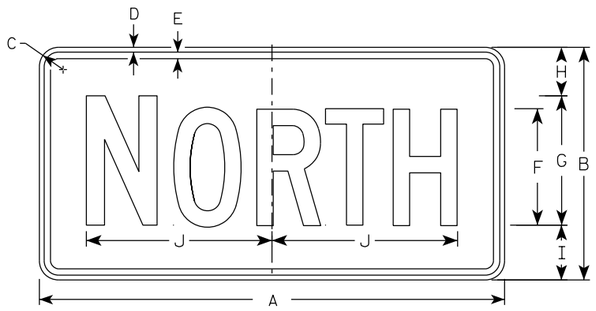
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

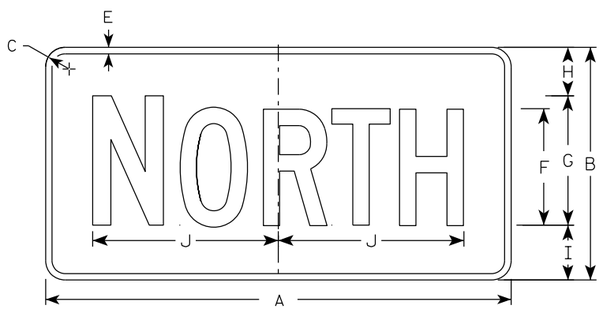
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

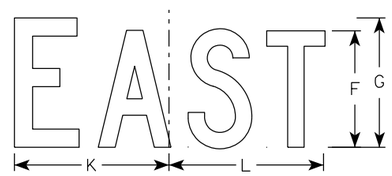
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 47	E



M3-1
MM3-1
MP3-1

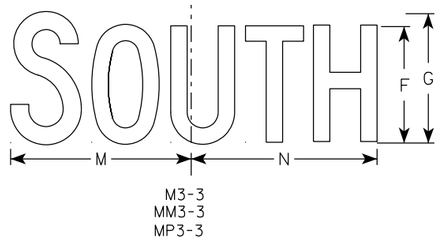


MB3-1
MK3-1
MN3-1

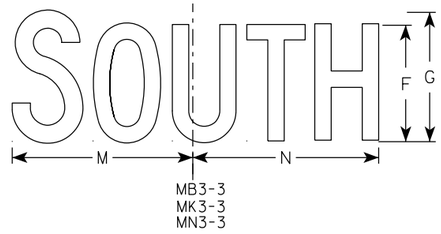


M3-2
MM3-2
MP3-2

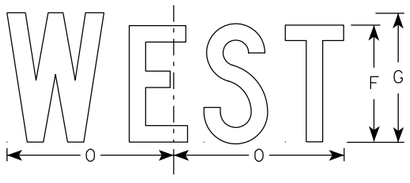
MB3-2
MK3-2
MN3-2



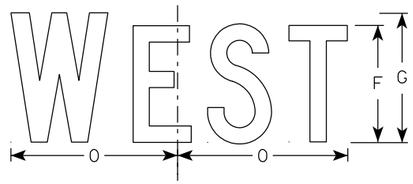
M3-3
MM3-3
MP3-3



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 Reflective
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																											
2S	24	12	1 1/2	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												2.00
2M	24	12	1 1/2	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												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

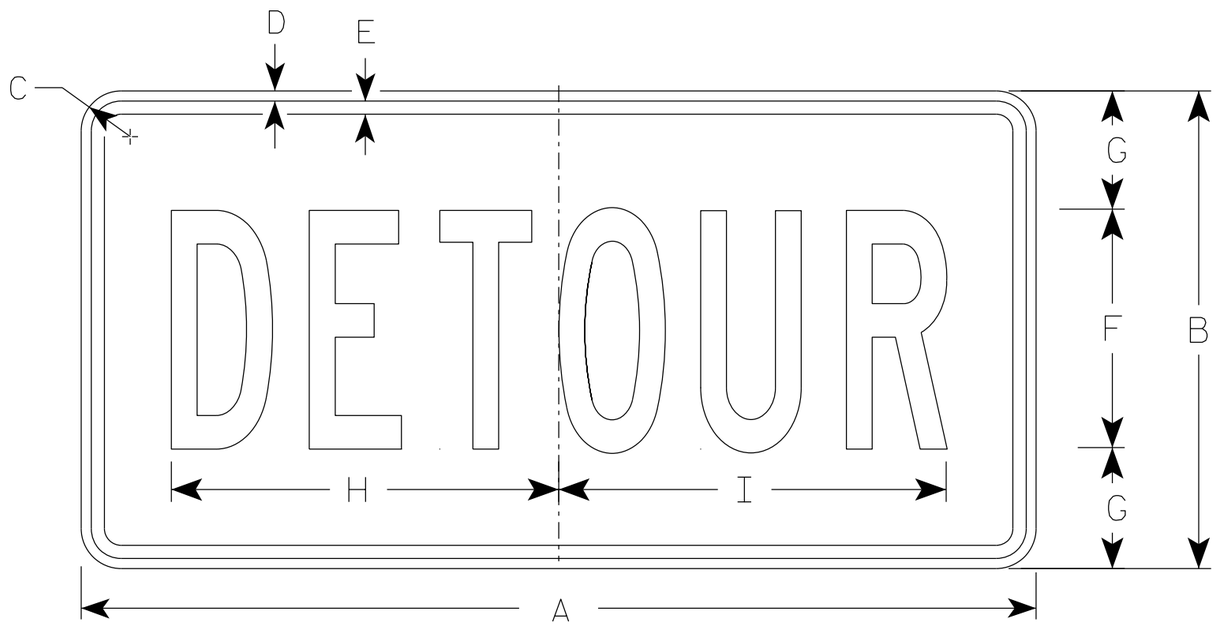
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 48 | E

NOTES

1. Sign is Type II - Type F Reflective
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.



M4-8

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 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

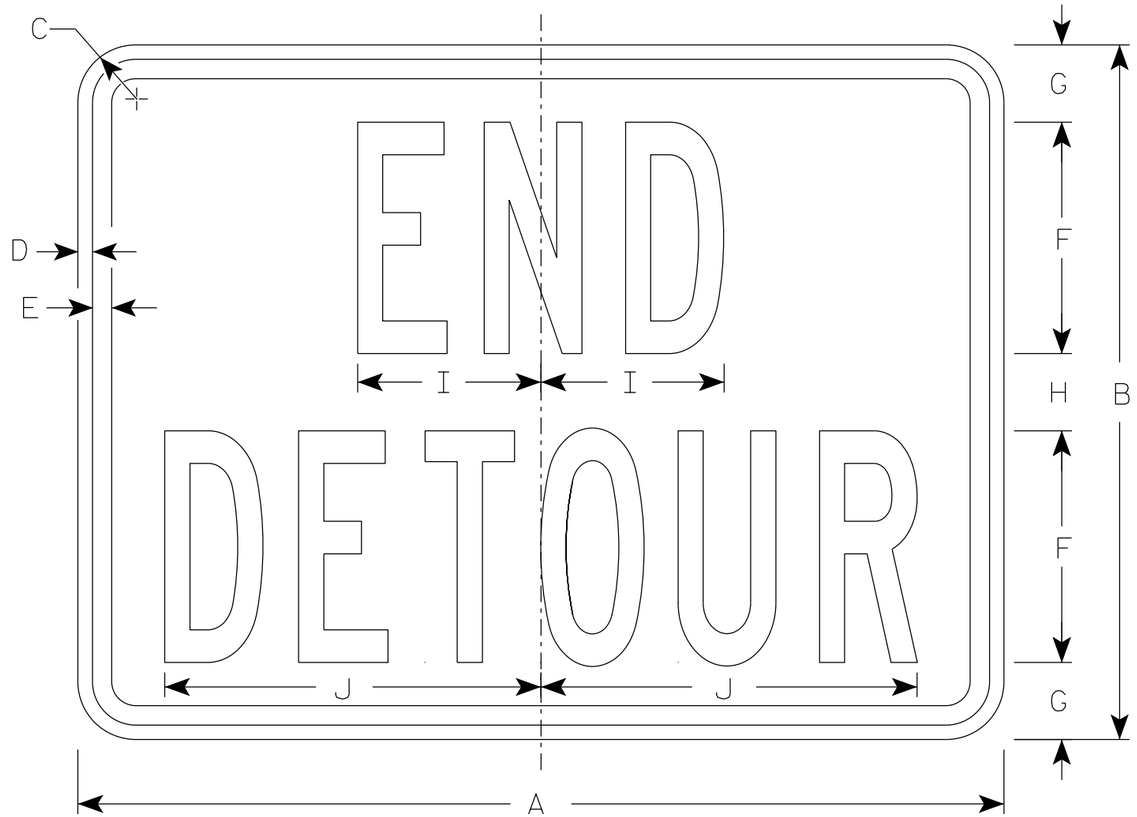
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 49	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
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 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

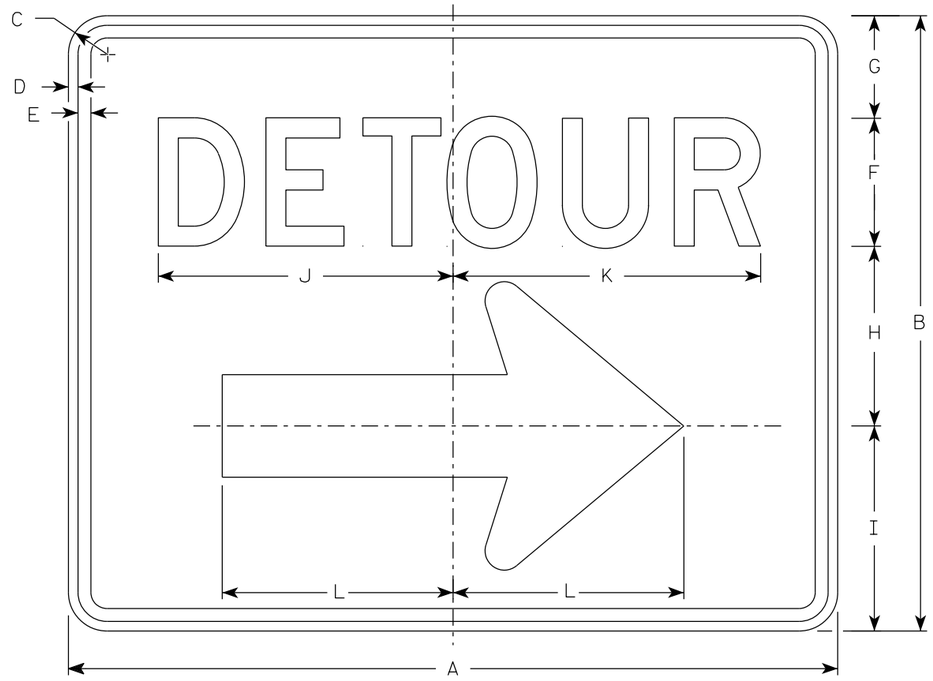
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

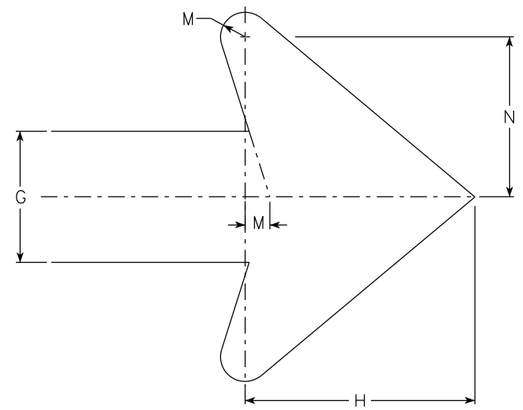
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 50 | E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective
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.
4. 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 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
2M	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 7/8	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 7/8	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

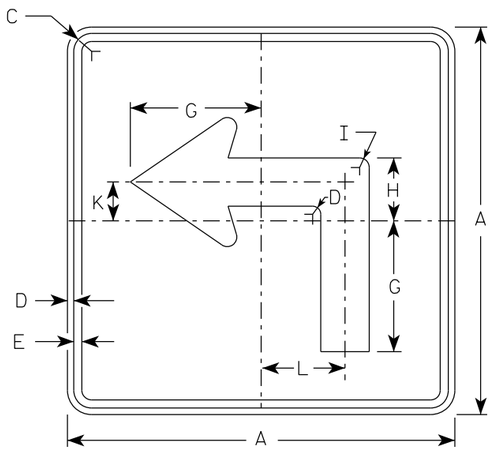
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

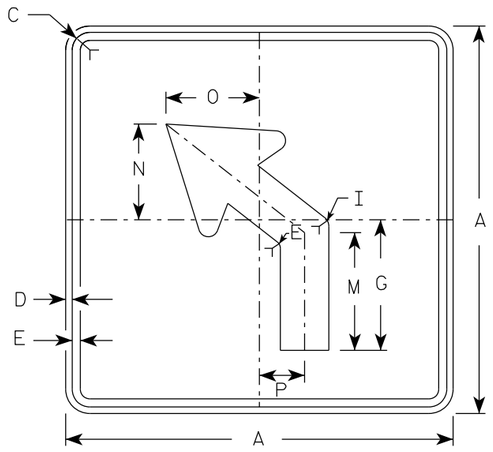
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9R.6

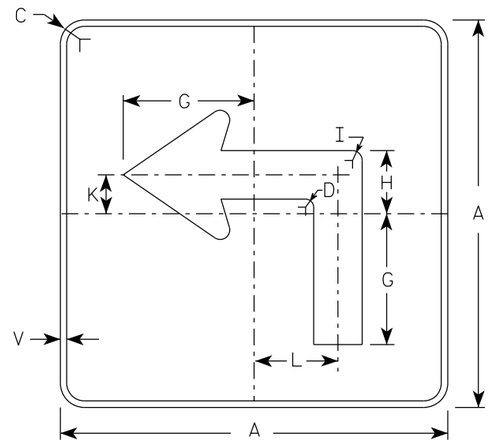
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



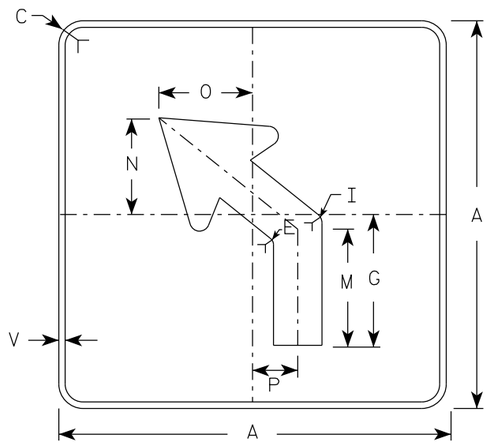
M5-1L
MM5-1L
MO5-1L
MP5-1L



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



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

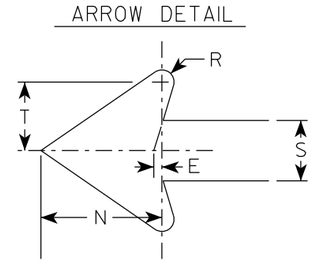


MB5-2L
MK5-2L
MN5-2L
MR5-2L

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
   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.

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	21		1 1/2	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		1/2					3.06
2M	21		1 1/2	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		1/2					3.06
3	30		1 7/8	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		1/2					6.25
4	30		1 7/8	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		1/2					6.25
5	30		1 7/8	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		1/2					6.25

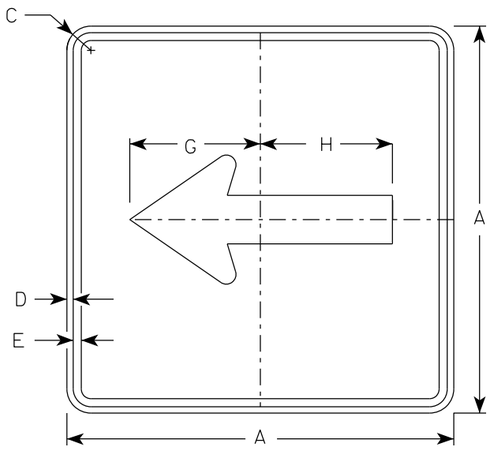
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

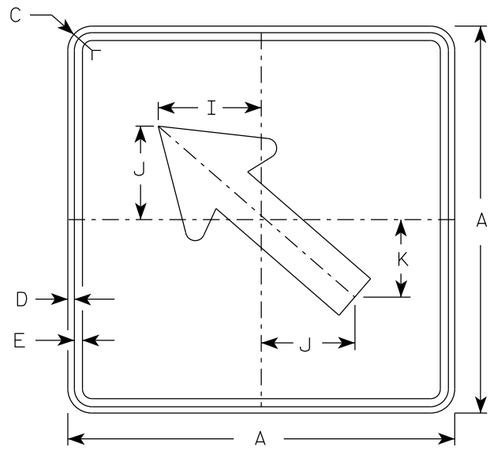
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

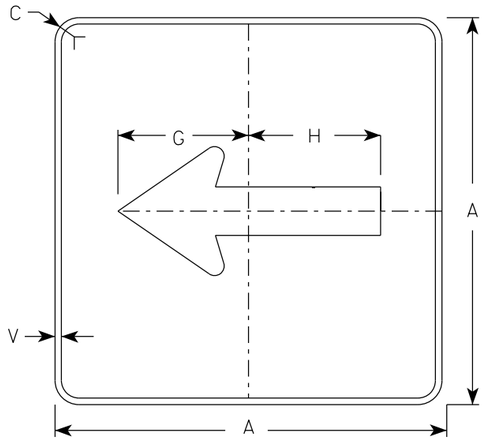
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 52 | E



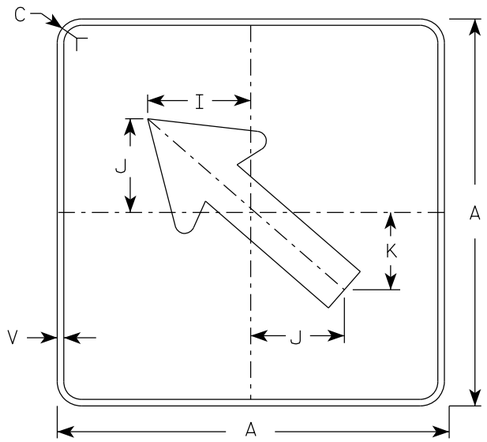
M6-1
MM6-1
MO6-1
MP6-1



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



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

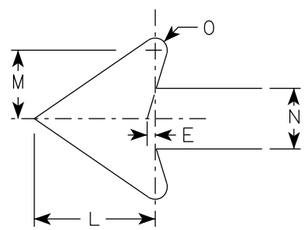


MB6-2
MK6-2
MN6-2
MR6-2

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. 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

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	21		1 1/2	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							1/2					3.06
2M	21		1 1/2	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							1/2					3.06
3	30		1 7/8	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							1/2					6.25
4	30		1 7/8	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							1/2					6.25
5	30		1 7/8	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							1/2					6.25

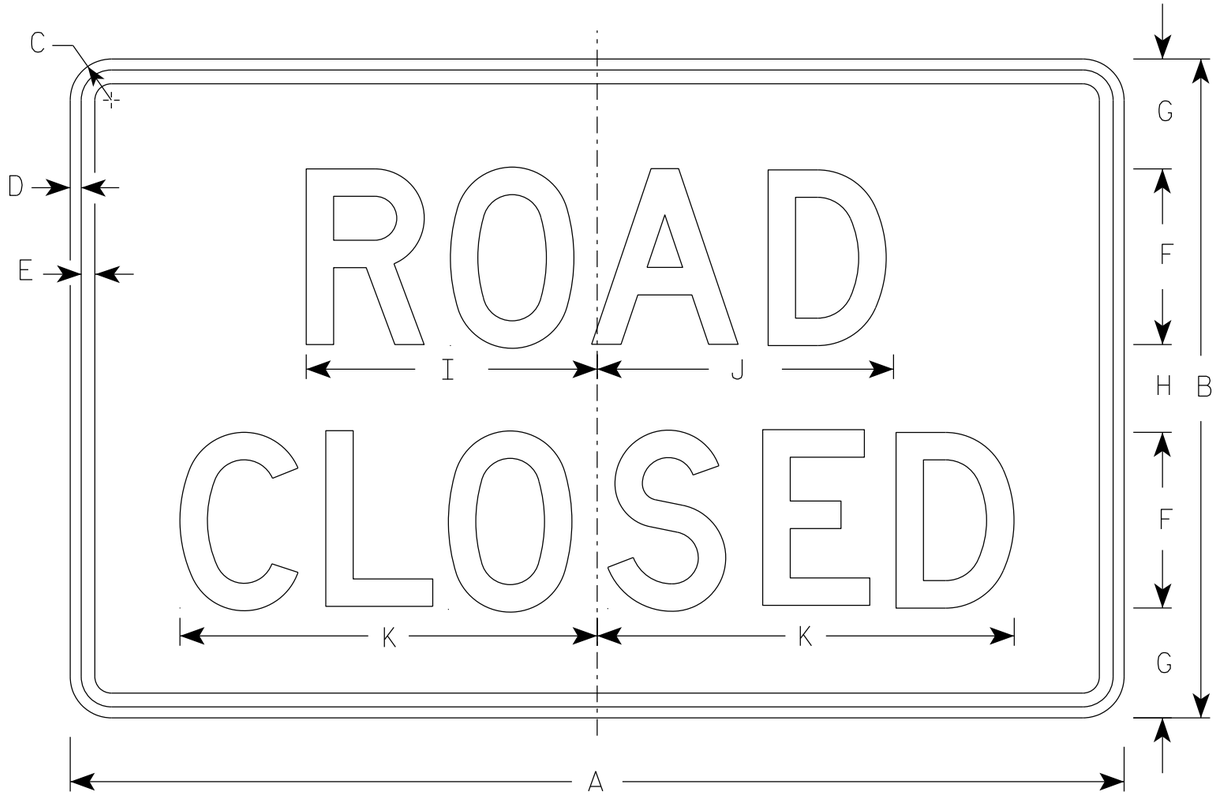
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

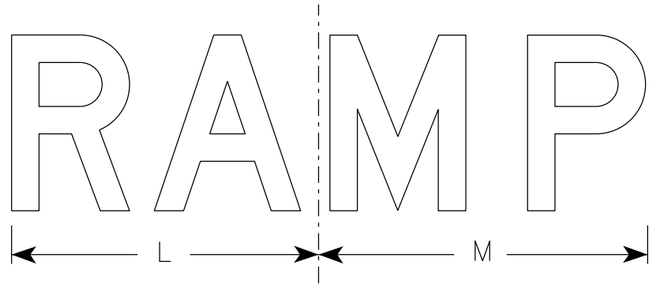
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 53 | E



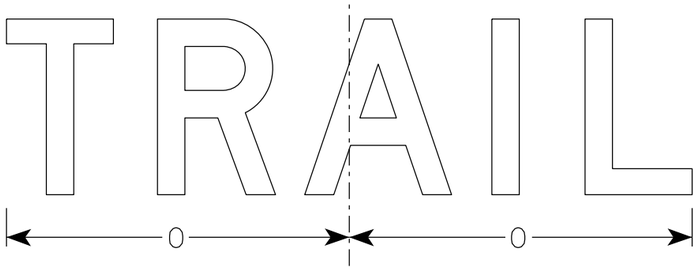
R11-2

NOTES

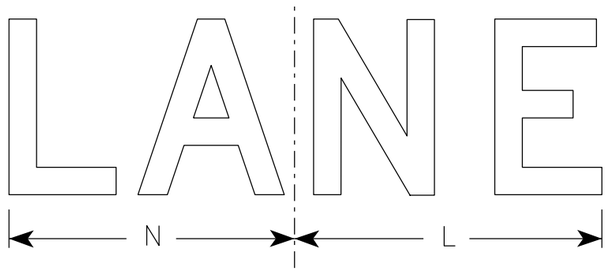
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



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 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

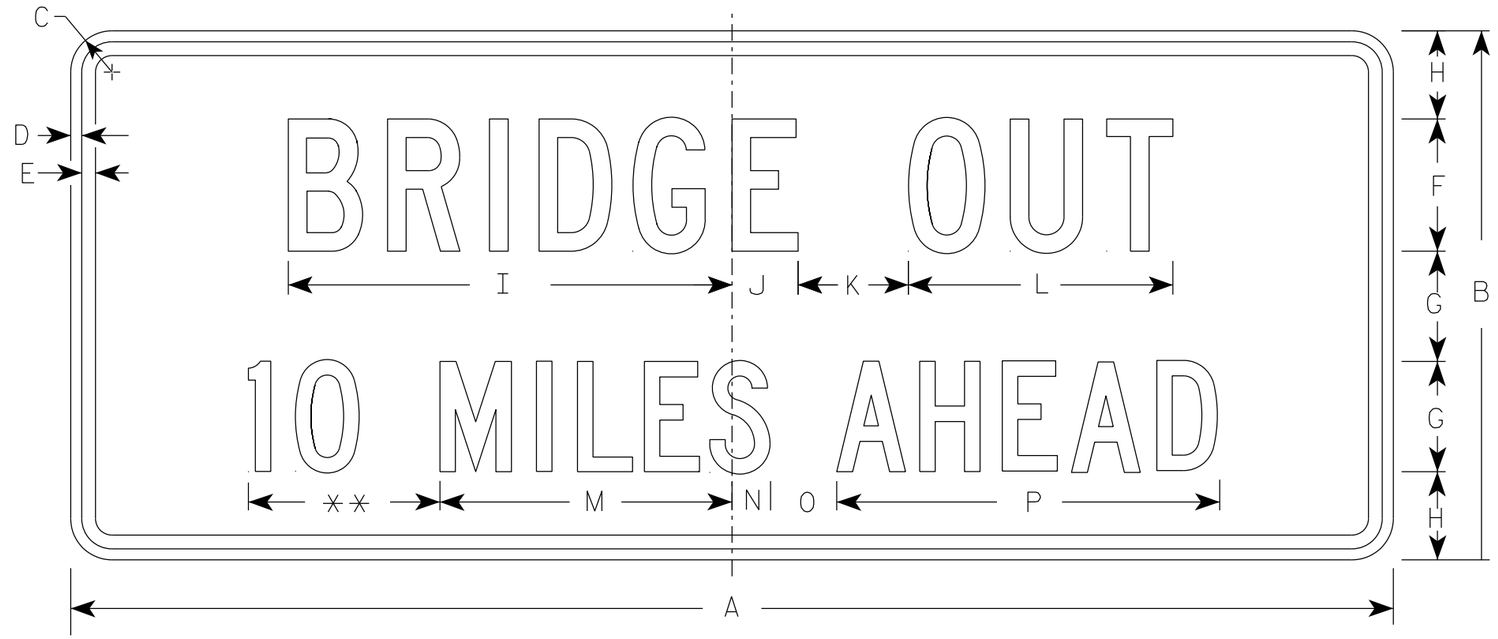
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 5-FEB 2024 2:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

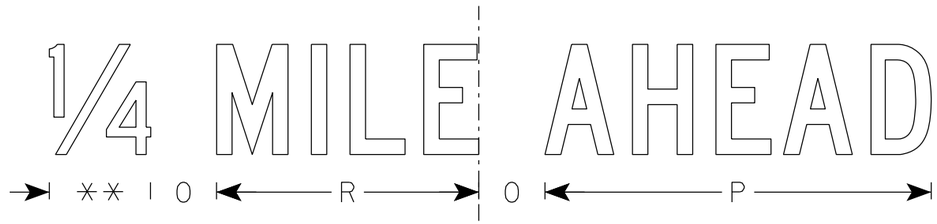
NOTES

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.



R11-3C

** 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	15	1 1/2	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

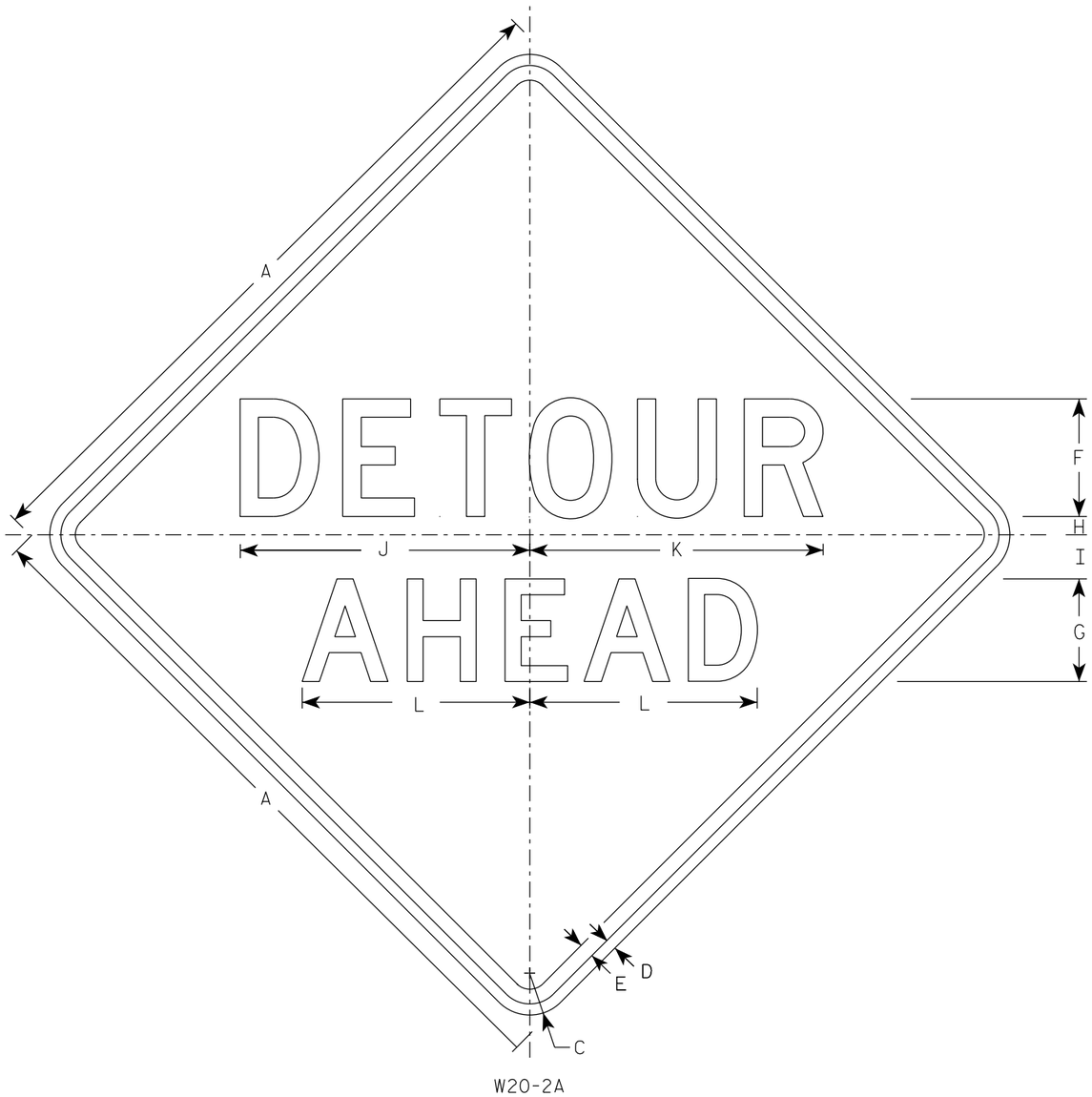
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

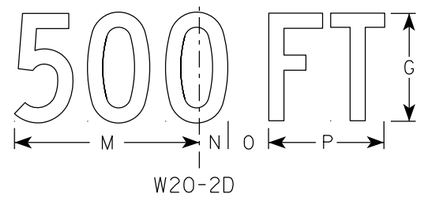
DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO:

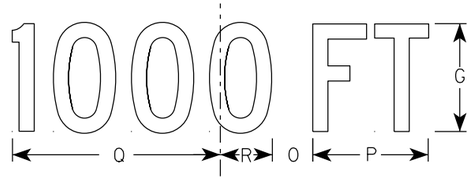
SHEET NO: 55 E



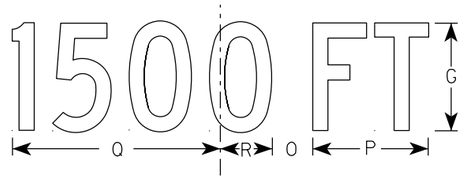
W20-2A



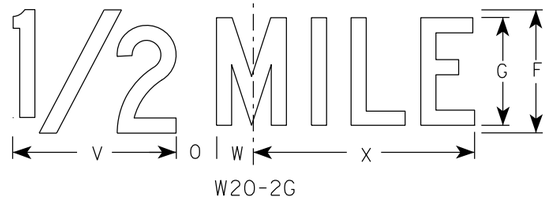
W20-2D



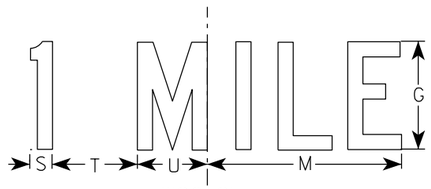
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	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		3	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		3	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		3	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		3	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		3	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

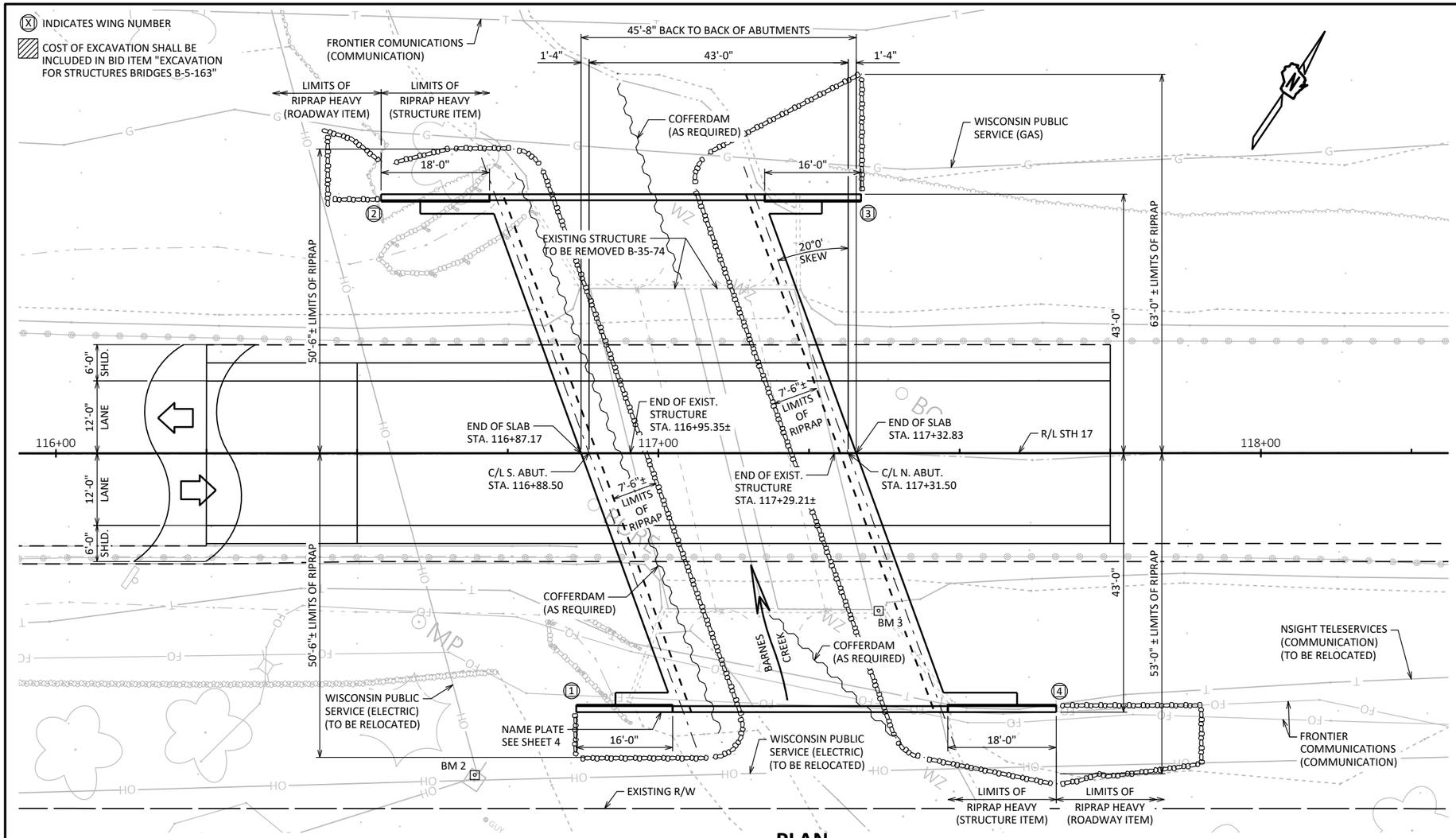
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-2.7

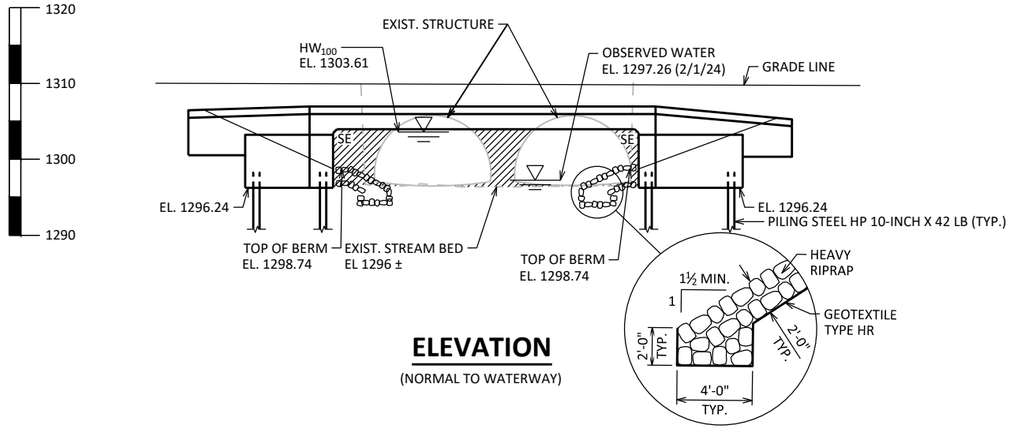
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



PLAN

SINGLE SPAN BURIED CONCRETE FLAT SLAB BRIDGE



ELEVATION

(NORMAL TO WATERWAY)

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
2	116+69.52, 53.44' RT.	RR SPIKE PP 3107 5E8	1313.49
3	117+36.55, 26.17' RT.	ALUM DISK NE WWAL	1307.70

DESIGN DATA

STATE PROJECT NUMBER

9030-07-82

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.45
OPERATING RATING: RF = 1.88
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE — f'_c = 4,000 PSI
ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

EARTH LOAD:

DESIGNED FOR 3.0 FT TO 4.0 FT OF FILL.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH X 42 LB PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 60'-0" LONG AT SOUTH ABUTMENT. PILE POINTS REQUIRED.
ESTIMATED 65'-0" LONG AT NORTH ABUTMENT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100}= 1640 C.F.S.
V_{100}= 8.6 F.P.S.
HW_{100}= EL. 1303.61
WATERWAY AREA = 190.2 SQ. FT.
DRAINAGE AREA = 9.8 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

Q_2= 420 C.F.S.
V_2= 4.2 F.P.S.
HW_2= EL. 1300.09

TRAFFIC DATA

STH 17:

ADT = 2,600 (2026)
ADT = 2,600 (2046)
R.D.S. = 55 MPH

LIST OF DRAWINGS:

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
5/30/2025
PROFESSIONAL ENGINEER

STRUCTURE DESIGN CONTACT:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261

CONSULTANT:
JAMES RHOAD-DROGALIS (608) 828-8166

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-35-163

STH 17 OVER BARNES CREEK

COUNTY	TOWN
LINCOLN	MERRILL

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

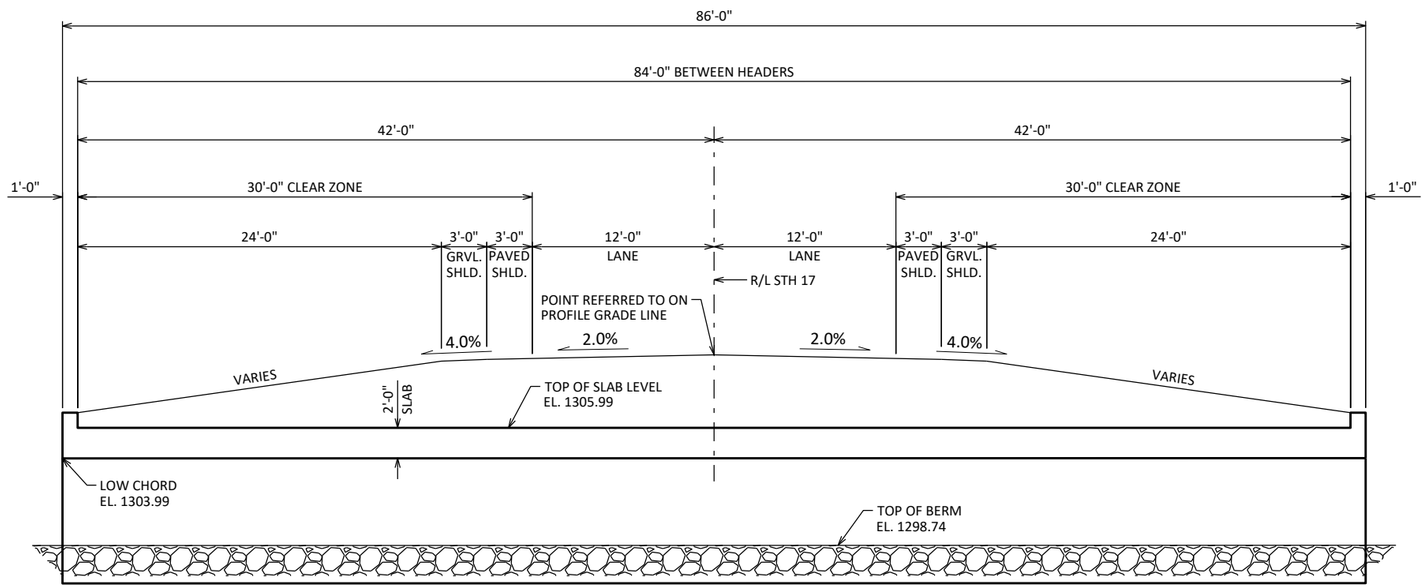
DESIGNED BY	DCH	DESIGN CK'D	JRD	DRAWN BY	DCH	PLANS CK'D	JRD

GENERAL PLAN

SHEET 1 OF 12
57

I.D.

DATE: JUNE 2025



CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

GENERAL 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.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-35-163" SHALL BE 1' ABOVE THE TOP OF THE SLAB. EXCAVATION ABOVE SHALL BE PAID FOR AS COMMON EXCAVATION.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

PLACE SHEET MEMBRANE WATERPROOFING ON ENTIRE TOP SLAB BETWEEN OUTSIDE HEADERS AND EXTEND 1'-0" DOWN AT ABUTMENT ENDS.

THE EXISTING STRUCTURE (B-35-74) IS A TWIN GALVANIZED STEEL CORRUGATED METAL PIPE STRUCTURE. EACH PIPE IS 15.2' WIDE X 9.3' HIGH AND 56.3' LONG.

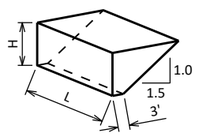
PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF HEADWALL, EDGE OF HEADWALL, THE SIDE OF DECK AND FIRST 1'-0" OF THE BOTTOM OF DECK ADJACENT TO THE EDGE OF DECK, TOP AND EXTERIOR EXPOSED FACE OF WINGS, AND THE END 1'-0" OF THE FRONT FACE OF EXPOSED ABUTMENT.

STATE PROJECT NUMBER

9030-07-82

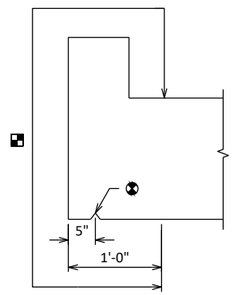
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER.	TOTALS
203.0220	REMOVING STRUCTURE B-35-74	EACH				1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-35-163	EACH				1
206.5001	COFFERDAMS B-35-163	EACH				1
210.1500	BACKFILL STRUCTURE TYPE A	TON	650	650		1,300
210.2500	BACKFILL STRUCTURE TYPE B	TON	57	57	142	256
502.0100	CONCRETE MASONRY BRIDGES	CY	84	84	306	474
502.3200	PROTECTIVE SURFACE TREATMENT	SY	27	27	30	84
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	6,220	6,220		12,440
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,250	2,250	79,200	83,700
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	21	21		42
516.0610.S	SHEET MEMBRANE WATERPROOFING FOR BURIED STRUCTURES B-35-163	SY			457	457
550.0500	PILE POINTS	EACH	17			17
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	1,020	1,105		2,125
606.0300	RIPRAP HEAVY	CY	110	130		240
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	130	130		260
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	90	90		180
645.0120	GEOTEXTILE TYPE HR	SY	170	210		380
	NON-BID ITEMS					
	FILLER	SIZE				½" & ¾"



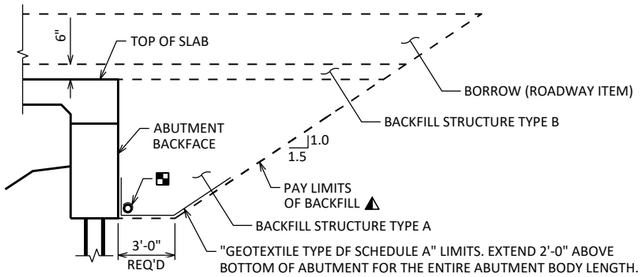
ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)



CROSS SECTION THRU EDGE OF SLAB

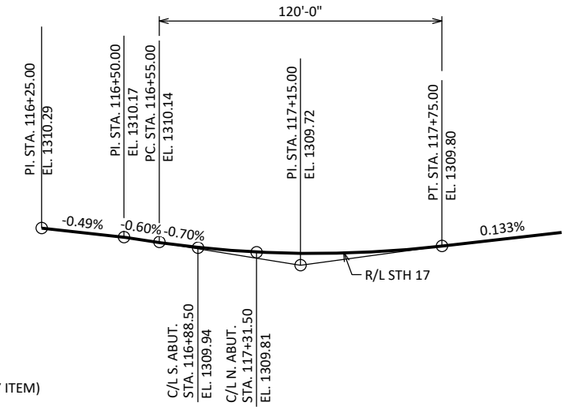
▪ LIMITS OF PROTECTIVE SURFACE TREATMENT
● ¾" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. ABUT. DIAPH.



TYPICAL SECTION THRU ABUTMENT

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

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



PROFILE GRADE LINE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

CROSS SECTION & QUANTITIES

SHEET 2 OF 12
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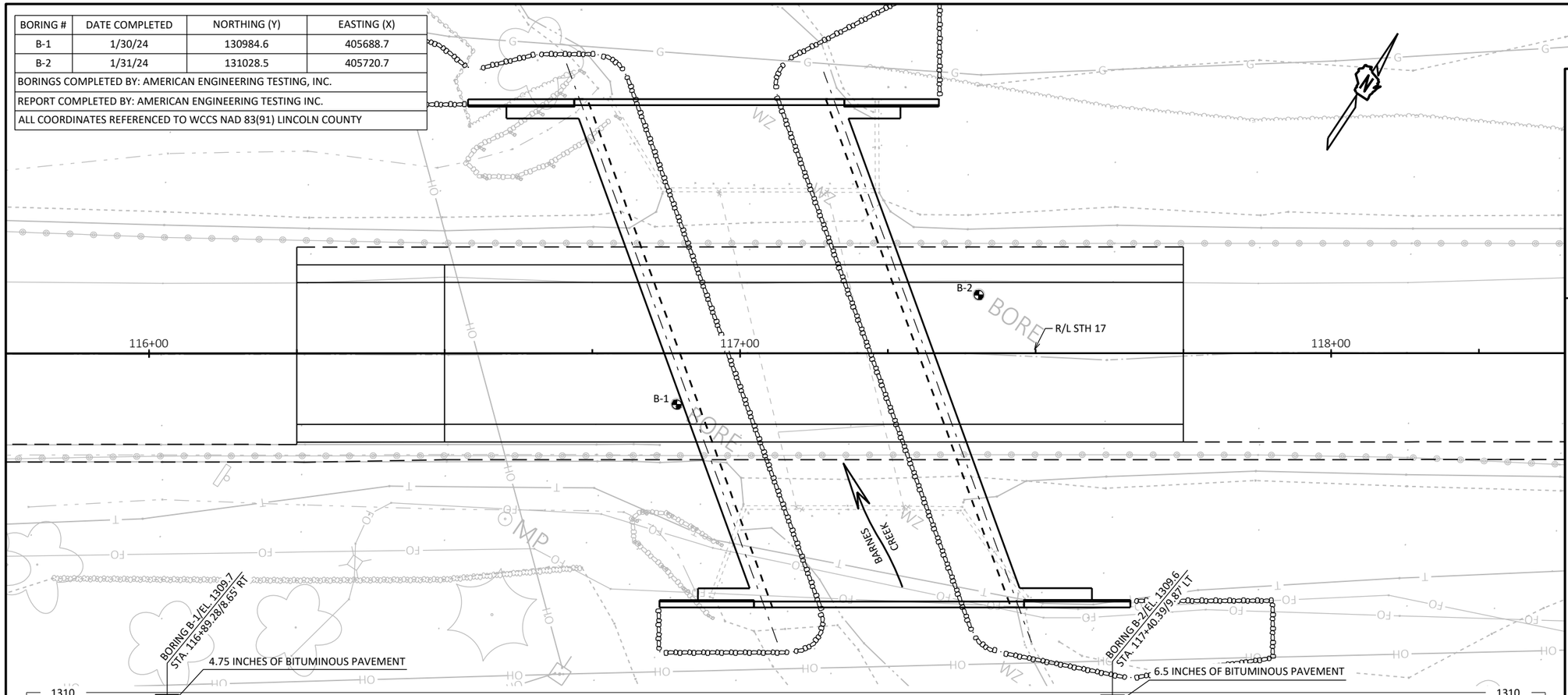
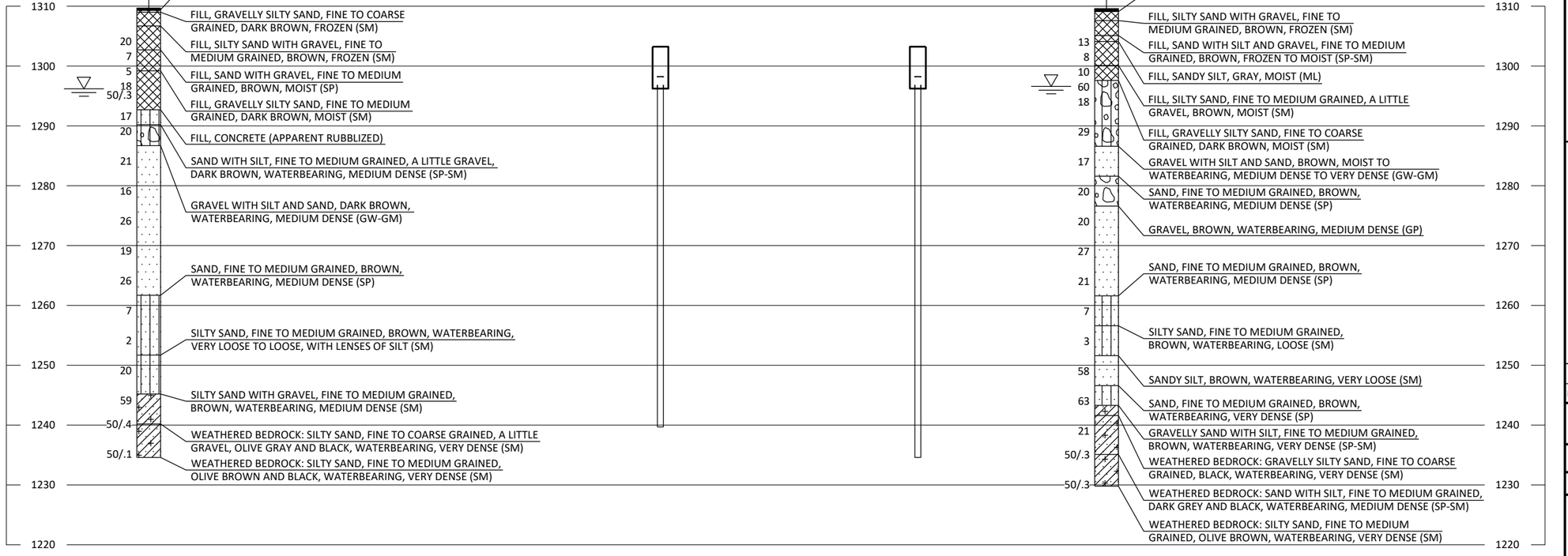
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	1/30/24	130984.6	405688.7
B-2	1/31/24	131028.5	405720.7
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) LINCOLN COUNTY			





STATE PROJECT NUMBER

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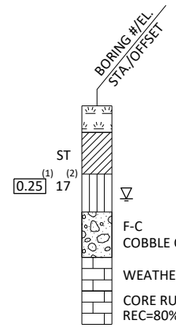
MATERIAL SYMBOLS

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 BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY MEO PLANS CK'D JRD

SUBSURFACE EXPLORATION

SHEET 3 OF 12
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STATE PROJECT NUMBER

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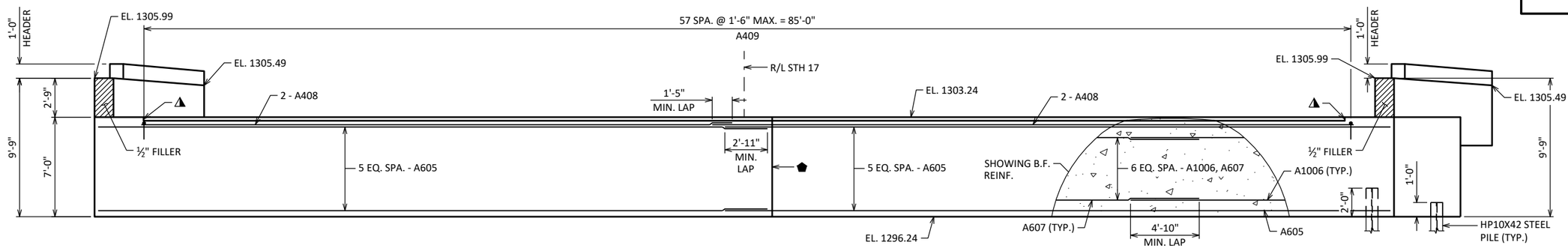
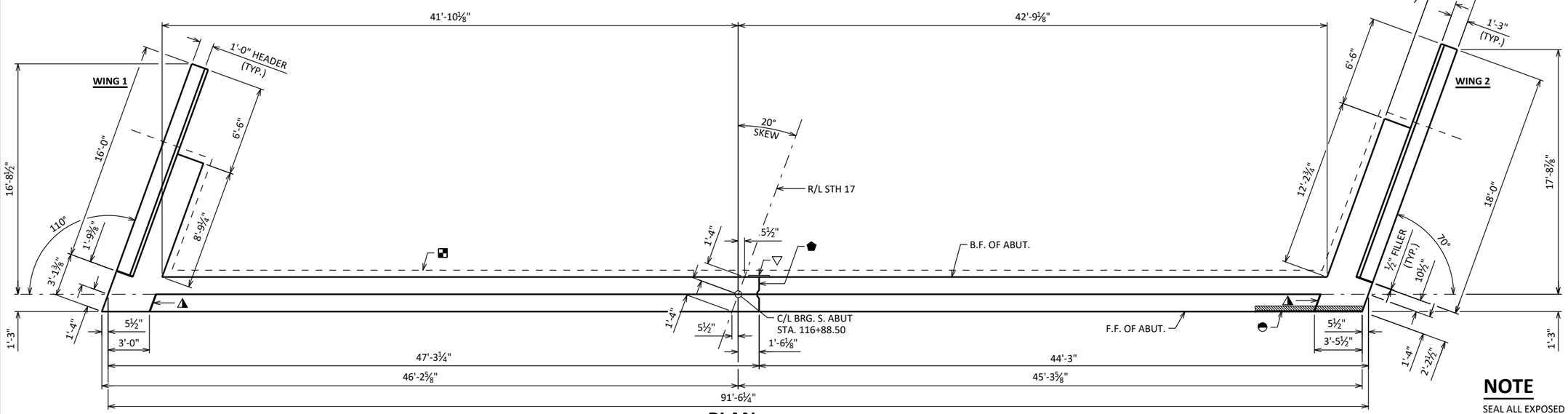
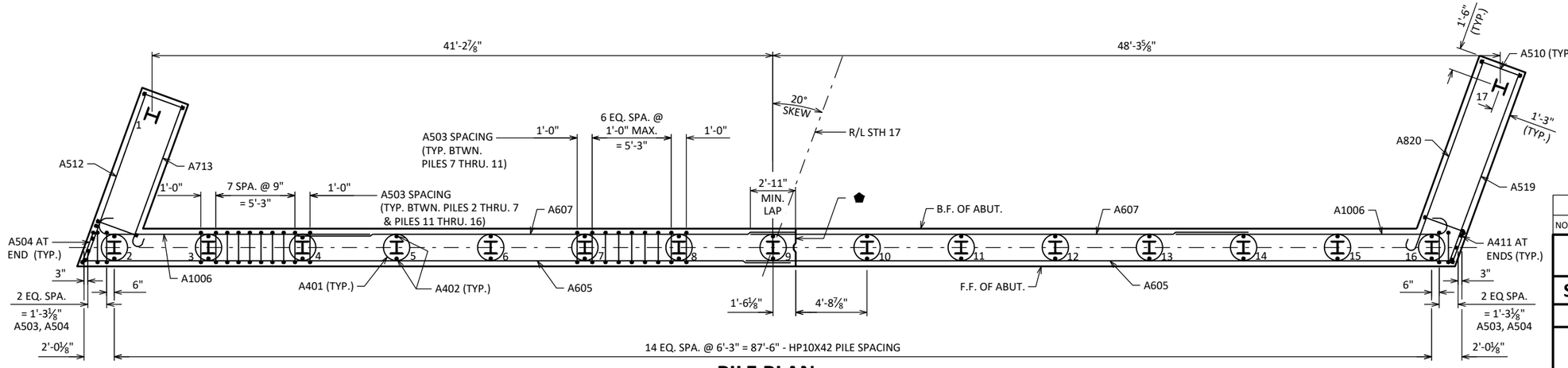


ELEVATION

(LOOKING SOUTH AT SOUTH ABUTMENT)



PLAN



PILE PLAN

NOTE

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

LEGEND

SEE SHEET 6 FOR SYMBOL DESCRIPTIONS.

FOUNDATION DATA

SOUTH ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS. ESTIMATED 60-FEET LONG. PILE POINTS REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

SOUTH ABUTMENT

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STATE PROJECT NUMBER

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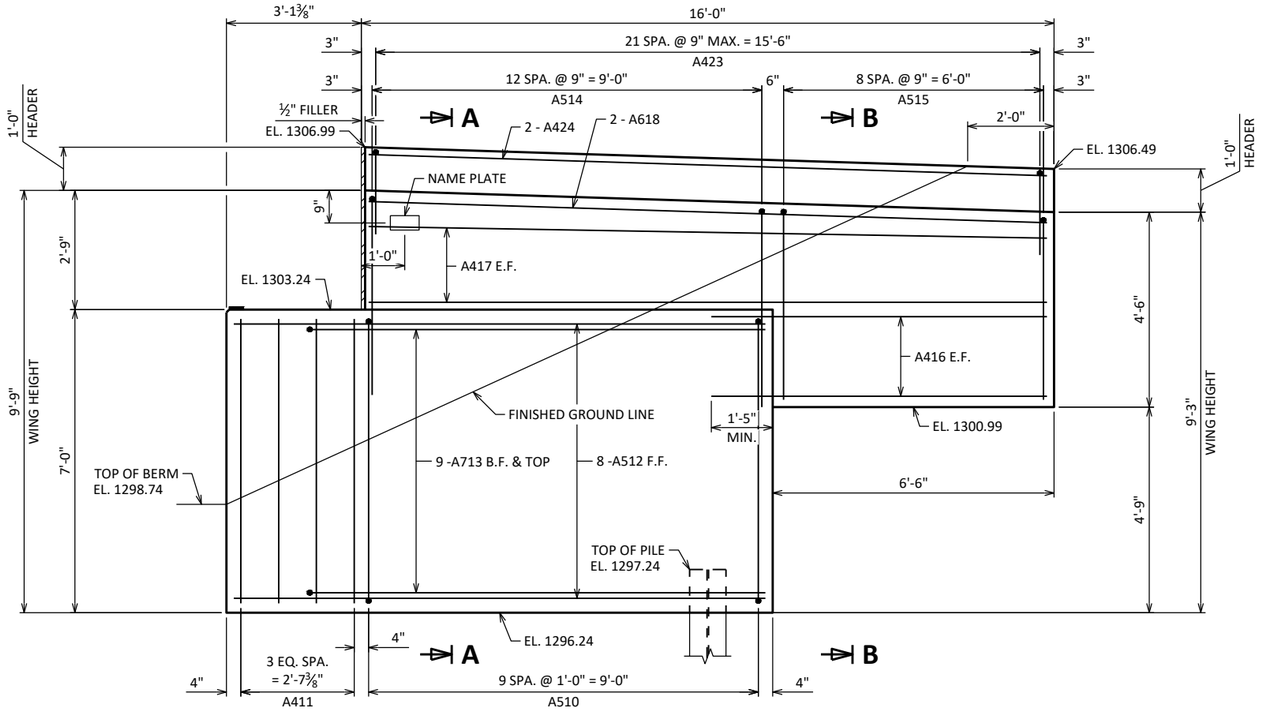
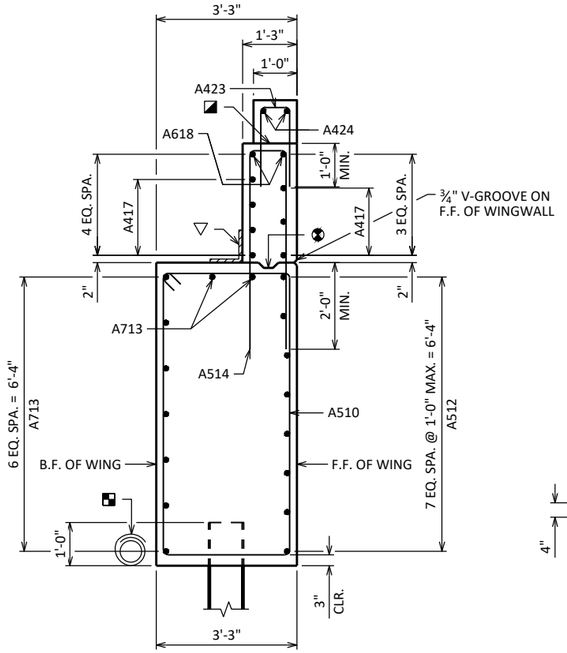
LEGEND

SEE SHEET 6 FOR SYMBOL DESCRIPTIONS.

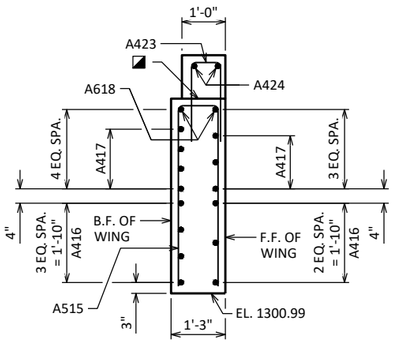


WING 1 ELEVATION

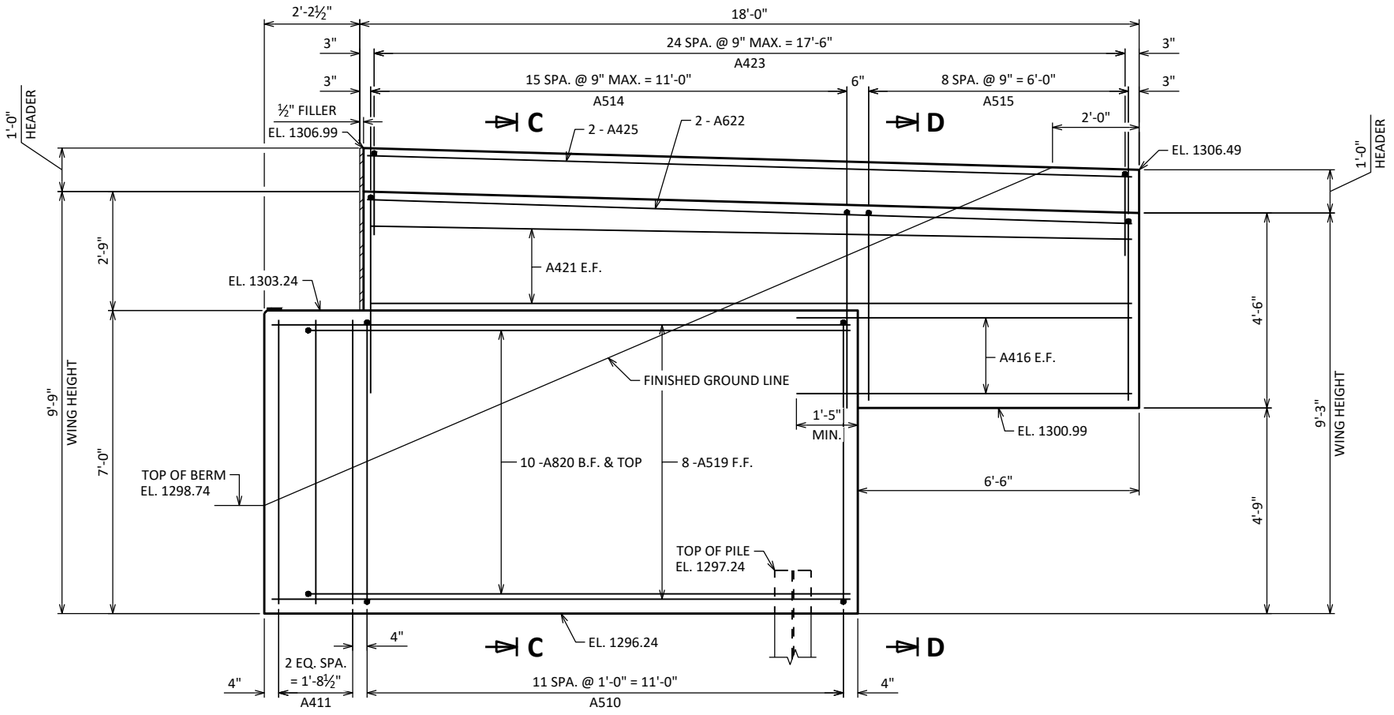
DIMENSIONS MEASURED ALONG F.F. OF WING
(LOOKING AT F.F. OF WING)



SECTION A-A

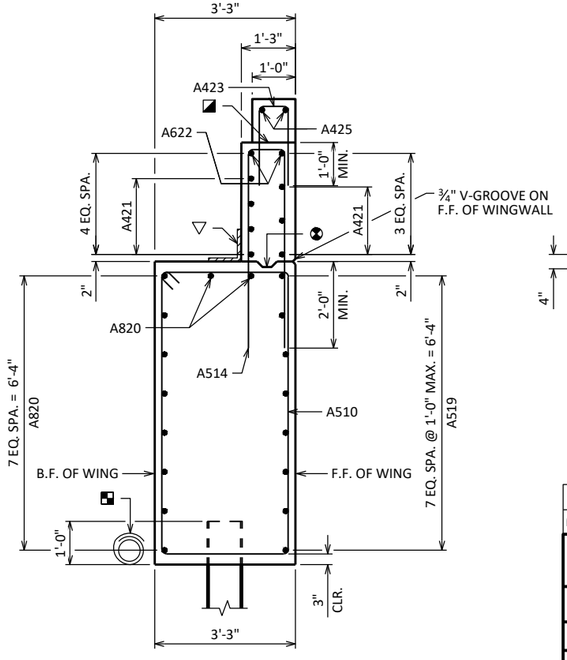


SECTION B-B

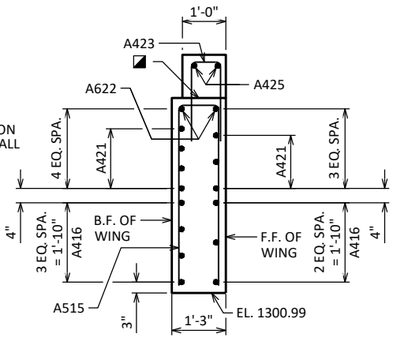


WING 2 ELEVATION

DIMENSIONS MEASURED ALONG F.F. OF WING
(LOOKING AT F.F. OF WING)



SECTION C-C



SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

WINGS 1 & 2

SHEET 5 OF 12

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STATE PROJECT NUMBER

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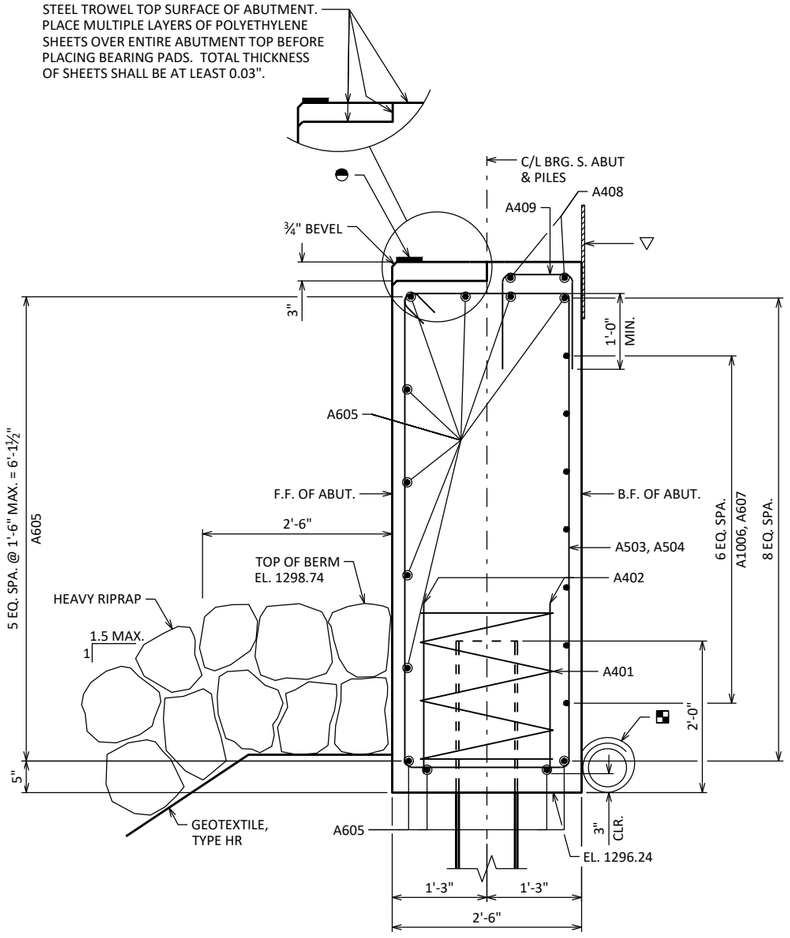


SECTION THRU BODY

BILL OF BARS

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

BAR MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIENT.
NON-COATED BARS						**TOTAL WEIGHT = 6,220 LBS**
A401	15	28'-0"	X		S. ABUT. BODY AT PILES	SPIRAL
A402	30	2'-3"			S. ABUT. BODY DOWELS AT PILES	VERT.
A503	112	17'-6"	X		S. ABUT. BODY STIRRUP	VERT.
A504	2	17'-10"	X		S. ABUT. BODY STIRRUP AT ENDS	VERT.
A605	24	47'-1"			S. ABUT. BODY - FRONT FACE, TOP & BOT.	HORIZ.
A1006	14	19'-5"	X		S. ABUT. BODY - BACK FACE	HORIZ.
A607	14	33'-1"			S. ABUT. BODY - BACK FACE	HORIZ.
A408	4	44'-8"			S. ABUT. BODY - TOP	HORIZ.
A409	58	3'-3"	X		S. ABUT. BODY - TOP	VERT.
COATED BARS						**TOTAL WEIGHT = 2,250 LBS**
A510	22	19'-6"	X		WING 1 & 2 STIRRUP	VERT.
A411	7	6'-8"			WING 1 & 2 - ABUTMENT ENDS	VERT.
A512	8	12'-3"			WING 1 - FRONT FACE	HORIZ.
A713	9	10'-8"	X		WING 1 - BACK FACE & TOP	HORIZ.
A514	29	9'-10"	X		WING 1 & 2 U-BAR	VERT.
A515	18	9'-2"	X	◭	WING 1 & 2 U-BAR	VERT.
A416	14	7'-9"			WING 1 & 2 - EACH FACE	HORIZ.
A417	7	15'-8"			WING 1 - EACH FACE	HORIZ.
A618	2	15'-9"			WING 1 - TOP	HORIZ.
A519	8	13'-4"			WING 2 - FRONT FACE	HORIZ.
A820	10	14'-6"	X		WING 2 - BACK FACE & TOP	HORIZ.
A421	7	17'-7"			WING 2 - EACH FACE	HORIZ.
A622	2	17'-8"			WING 2 - TOP	HORIZ.
A423	47	4'-2"	X		WING 1 & 2 - HEADER	VERT.
A424	2	15'-8"			WING 1 - HEADER	HORIZ.
A425	2	17'-8"			WING 2 - HEADER	HORIZ.

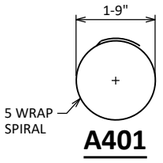
◭ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

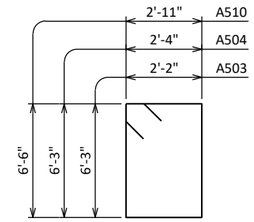
BAR MARK	NO. REQ'D.	LENGTH
A515	2 SETS OF 9	9'-0" TO 9'-4"

LEGEND

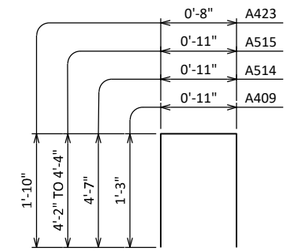
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- 4" X ¾" PREFORMED JOINT FILLER. EXTEND FULL LENGTH OF ABUTMENT.
- ◭ ¾" CORK FILLER ON VERTICAL FACE ONLY.
- VERTICAL CONSTRUCTION JOINT FORMED BY BEVELED 2" X 8".
- OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.
- OPTIONAL CONSTRUCTION JOINT, LEAVE ROUGH.



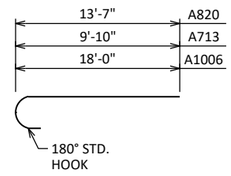
A401



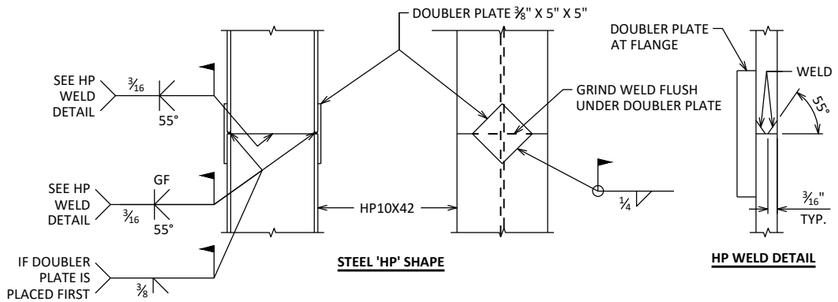
A503, A504, A510



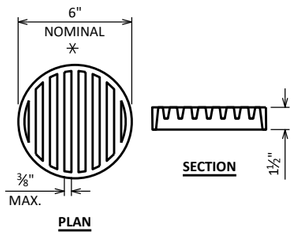
A409, A514, A515, A423



A1006, A713, A820



'HP' PILE DETAILS



RODENT SHIELD DETAIL

⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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 EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

SOUTH ABUTMENT DETAILS

SHEET 6 OF 12

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STATE PROJECT NUMBER

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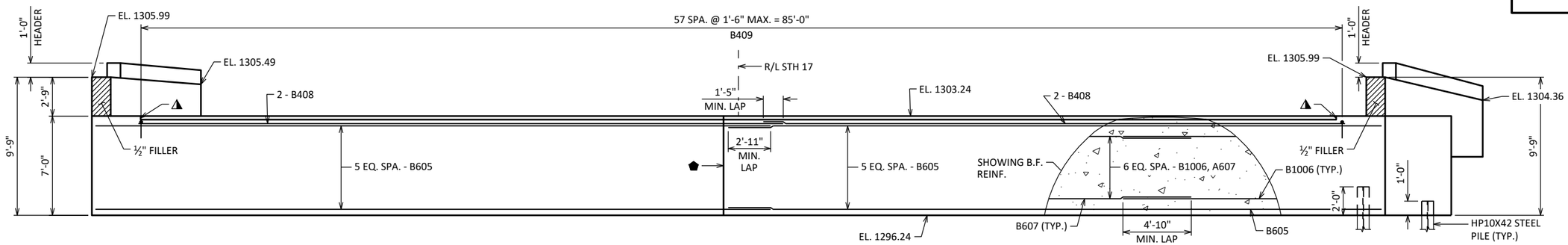
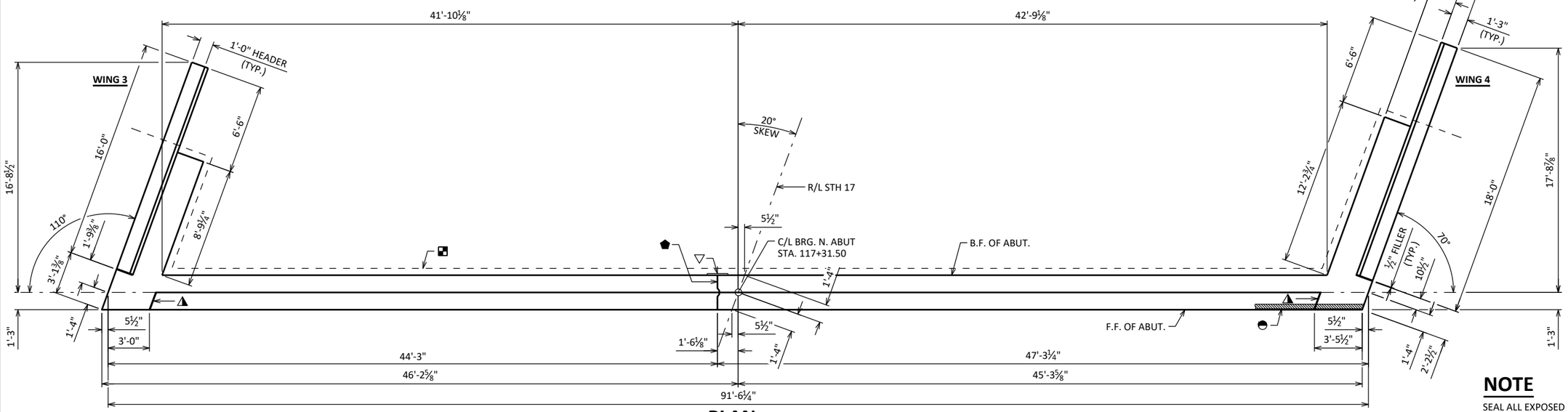
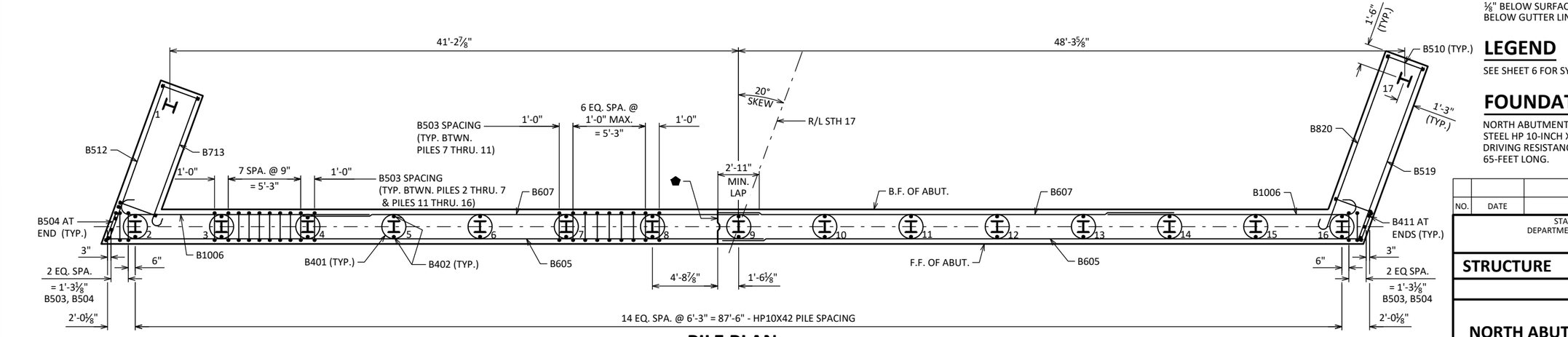


ELEVATION

(LOOKING NORTH AT NORTH ABUTMENT)



PLAN



PILE PLAN

NOTE

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

LEGEND

SEE SHEET 6 FOR SYMBOL DESCRIPTIONS.

FOUNDATION DATA

NORTH ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS. ESTIMATED 65-FEET LONG.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

NORTH ABUTMENT

SHEET 7 OF 12

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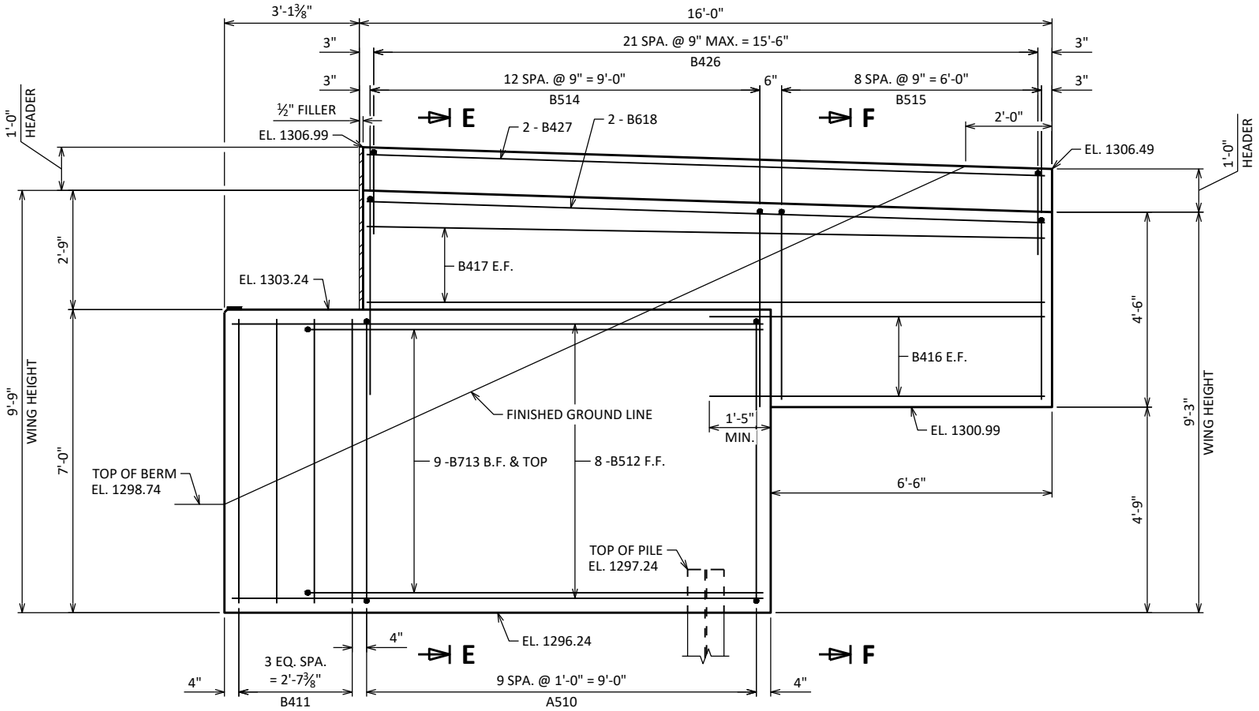
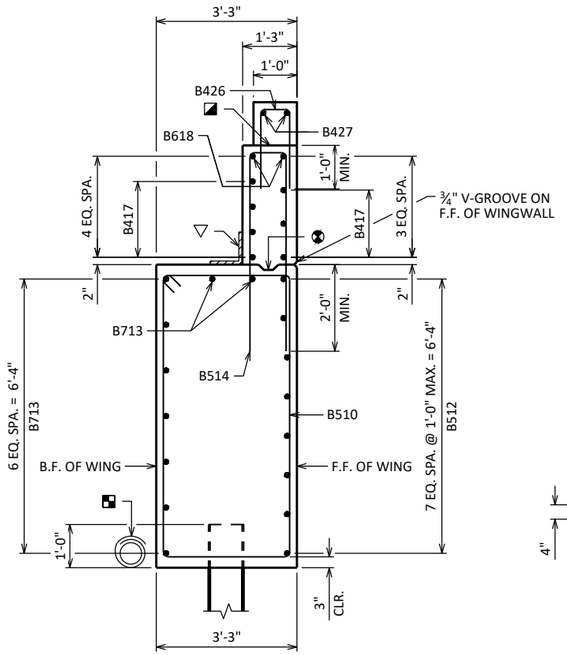
LEGEND

SEE SHEET 6 FOR SYMBOL DESCRIPTIONS.

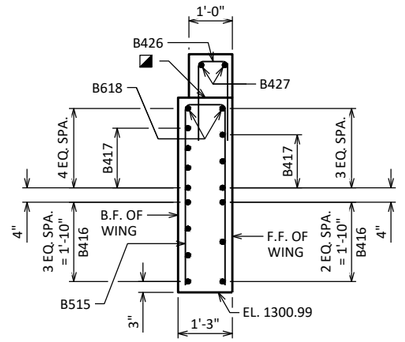


WING 3 ELEVATION

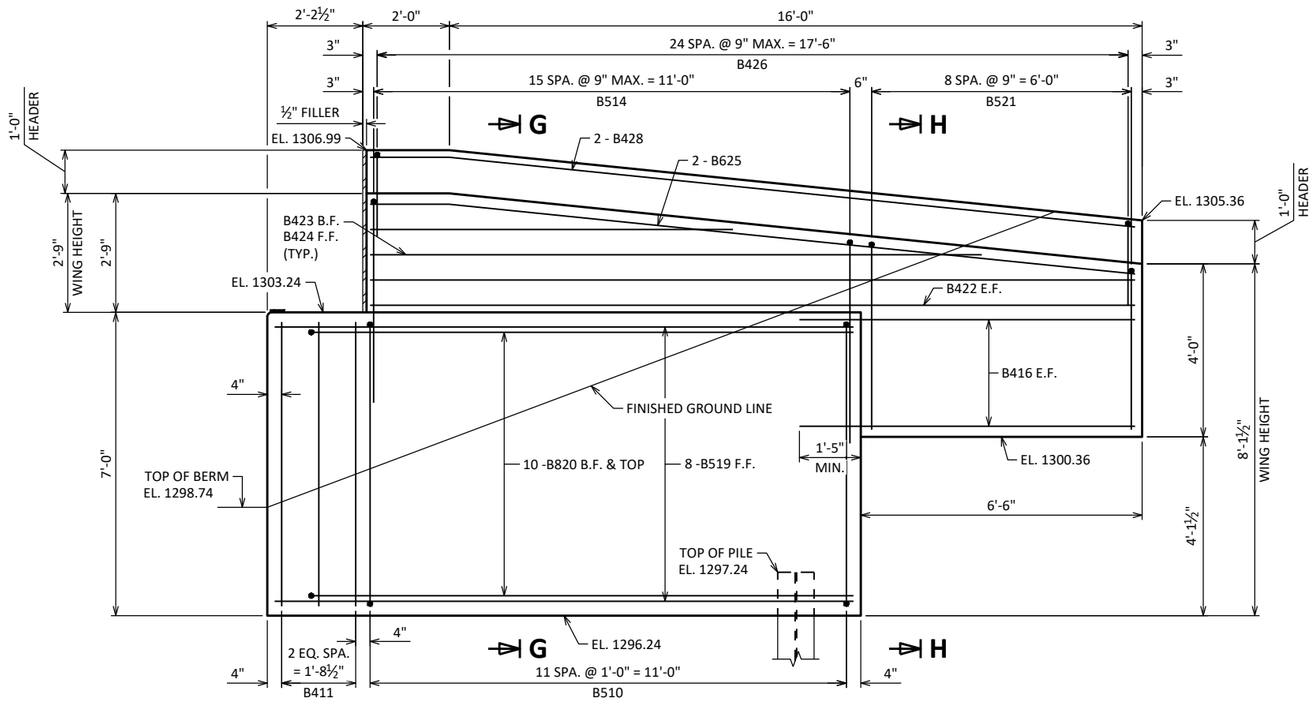
DIMENSIONS MEASURED ALONG F.F. OF WING
(LOOKING AT F.F. OF WING)



SECTION E-E

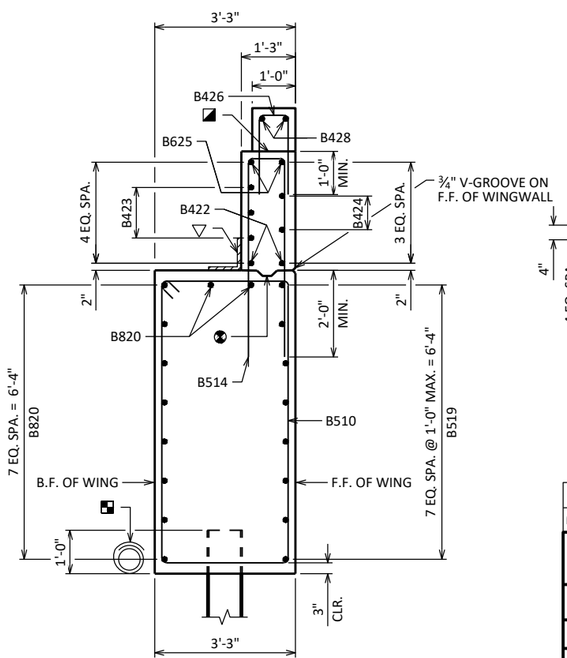


SECTION F-F

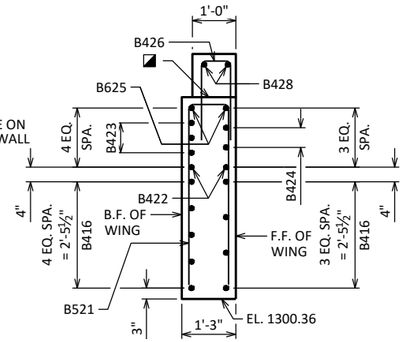


WING 4 ELEVATION

DIMENSIONS MEASURED ALONG F.F. OF WING
(LOOKING AT F.F. OF WING)



SECTION G-G



SECTION H-H

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

WINGS 3 & 4

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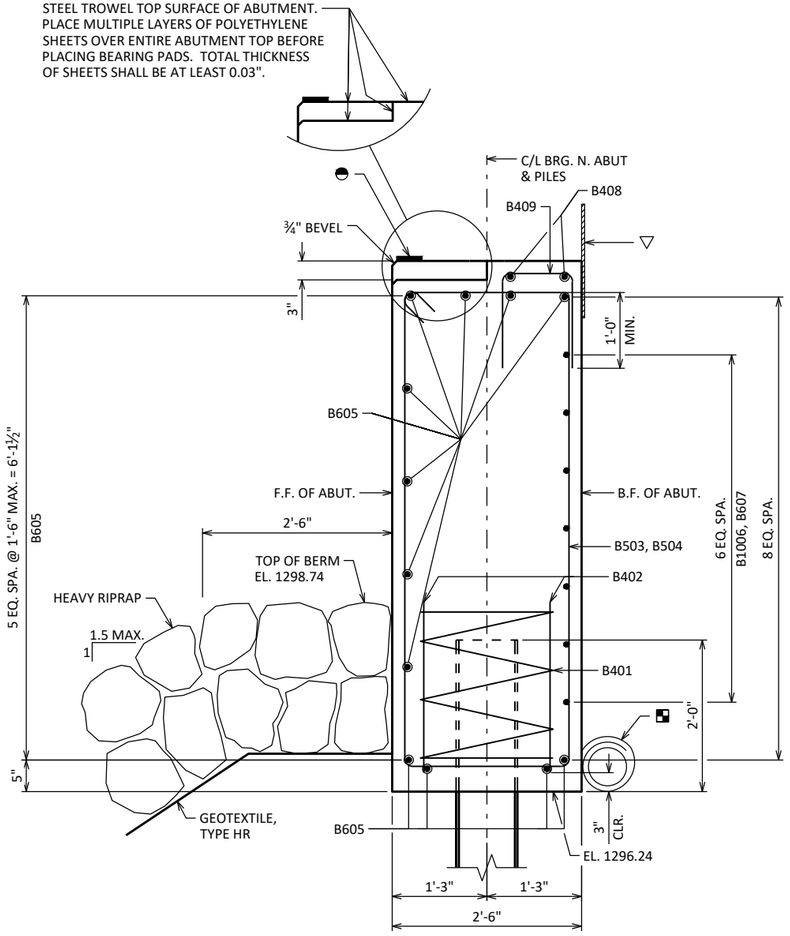
STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".



SECTION THRU BODY

BILL OF BARS

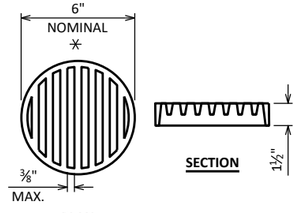
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIENT.
NON-COATED BARS						**TOTAL WEIGHT = 6,220 LBS**
B401	15	28'-0"	X		N. ABUT. BODY AT PILES	SPIRAL
B402	30	2'-3"			N. ABUT. BODY DOWELS AT PILES	VERT.
B503	112	17'-6"	X		N. ABUT. BODY STIRRUP	VERT.
B504	2	17'-10"	X		N. ABUT. BODY STIRRUP AT ENDS	VERT.
B605	24	47'-1"			N. ABUT. BODY - FRONT FACE, TOP & BOT.	HORIZ.
B1006	14	19'-5"	X		N. ABUT. BODY - BACK FACE	HORIZ.
B607	14	33'-1"			N. ABUT. BODY - BACK FACE	HORIZ.
B408	4	44'-8"			N. ABUT. BODY - TOP	HORIZ.
B409	58	3'-3"	X		N. ABUT. BODY - TOP	VERT.
COATED BARS						**TOTAL WEIGHT = 2,250 LBS**
B510	22	19'-6"	X		WING 3 & 4 STIRRUP	VERT.
B411	7	6'-8"			WING 3 & 4 - ABUTMENT ENDS	VERT.
B512	8	12'-3"			WING 3 - FRONT FACE	HORIZ.
B713	9	10'-8"	X		WING 3 - BACK FACE & TOP	HORIZ.
B514	29	9'-10"	X		WING 3 & 4 U-BAR	VERT.
B515	9	9'-2"	X	⚠	WING 3 U-BAR	VERT.
B416	16	7'-9"			WING 3 & 4 - EACH FACE	HORIZ.
B417	7	15'-8"			WING 3 - EACH FACE	HORIZ.
B618	2	15'-9"			WING 3 - TOP	HORIZ.
B519	8	13'-4"			WING 4 - FRONT FACE	HORIZ.
B820	10	14'-6"	X		WING 4 - BACK FACE & TOP	HORIZ.
B521	9	8'-9"	X	⚠	WING 4 U-BAR	VERT.
B422	2	17'-8"			WING 4 - BOTTOM	HORIZ.
B423	3	13'-0"		⚠	WING 4 - BACK FACE	HORIZ.
B424	2	13'-9"		⚠	WING 4 -FRONT FACE	HORIZ.
B625	2	17'-8"	X		WING 4 - TOP	HORIZ.
B426	47	4'-2"	X		WING 3 & 4 - HEADER	VERT.
B427	2	15'-8"			WING 3 - HEADER	HORIZ.
B428	2	17'-9"	X		WING 4 - HEADER	HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B515	1 SET OF 9	9'-0" TO 9'-4"
B521	1 SET OF 9	8'-2" TO 9'-4"
B423	1 SET OF 3	8'-4" TO 17'-8"
B424	1 SET OF 2	9'-10" TO 17'-7"



RODENT SHIELD DETAIL

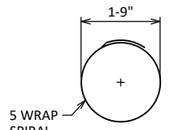
✳ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

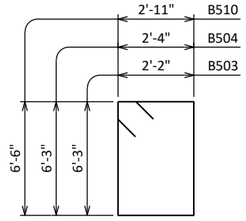
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

LEGEND

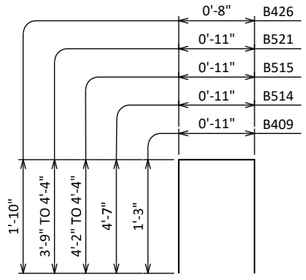
SEE SHEET 6 FOR SYMBOL DESCRIPTIONS.



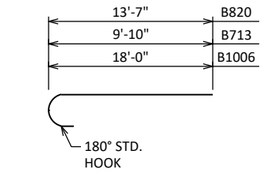
B401



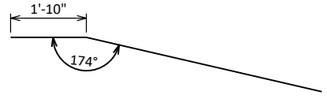
B503, B504, B510



B409, B514, B515, B521, B426



B1006, B713, B820



B625, B428

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

NORTH ABUTMENT DETAILS

SHEET 9 OF 12

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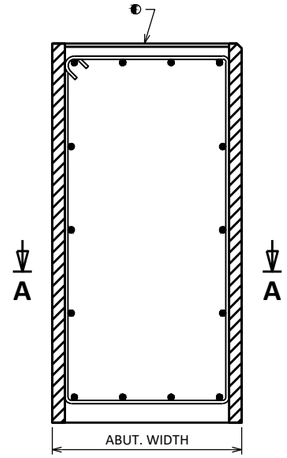
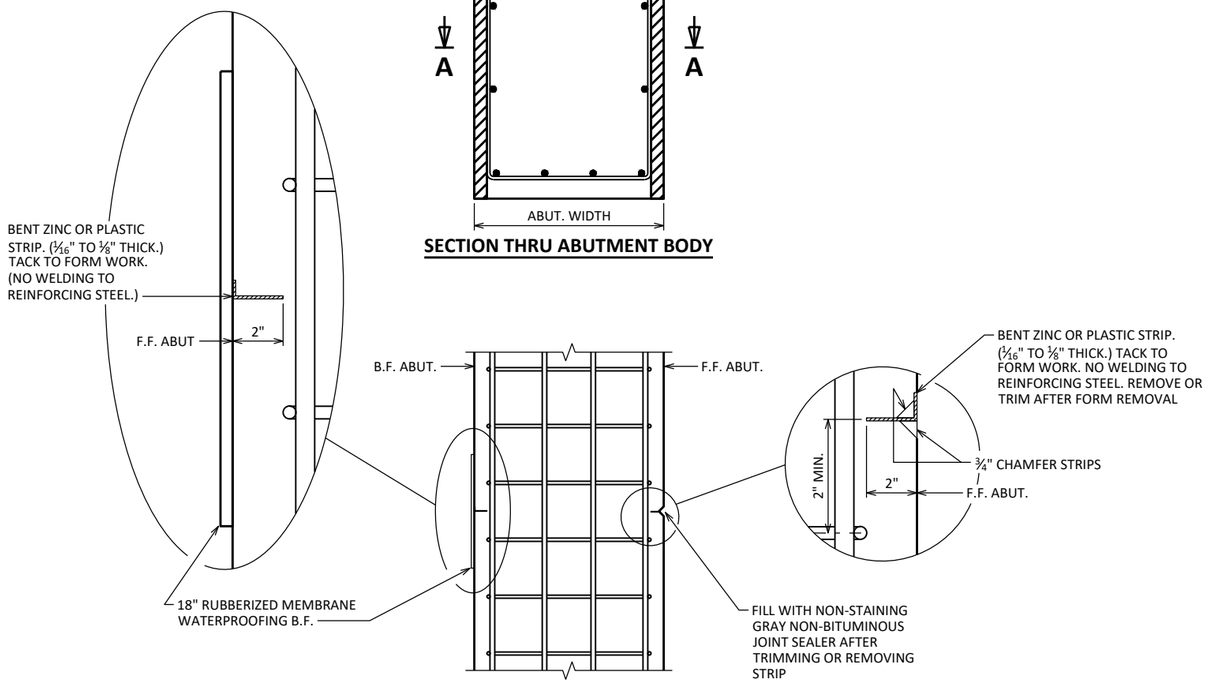


SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATIVE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◐ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

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STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

ALTERNATE CONSTRUCTION JOINT

SHEET 10 OF 12

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SCALE = 2.00

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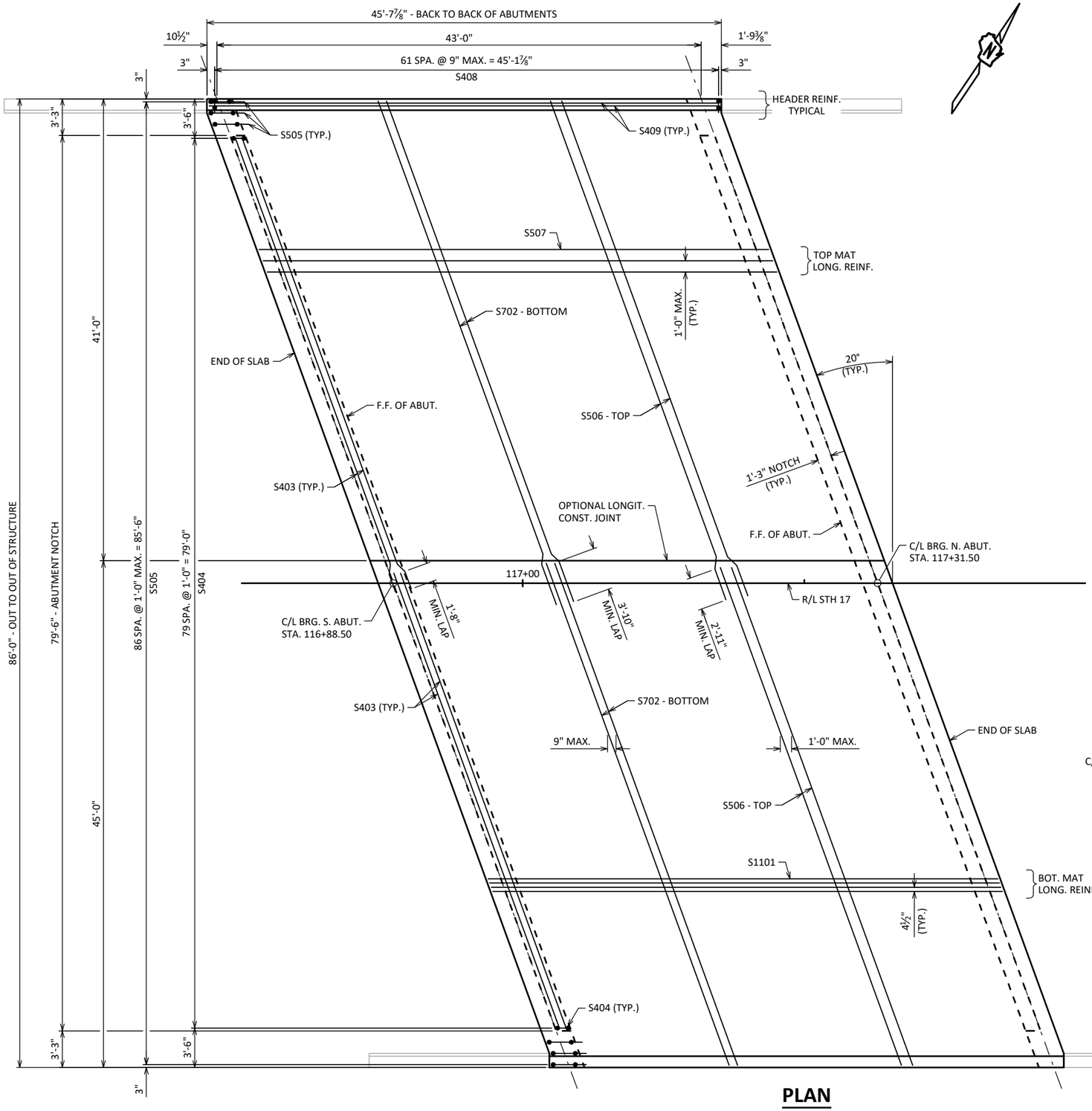


PLAN

NOTES

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE C/L OF SUBSTRUCTURE UNITS.

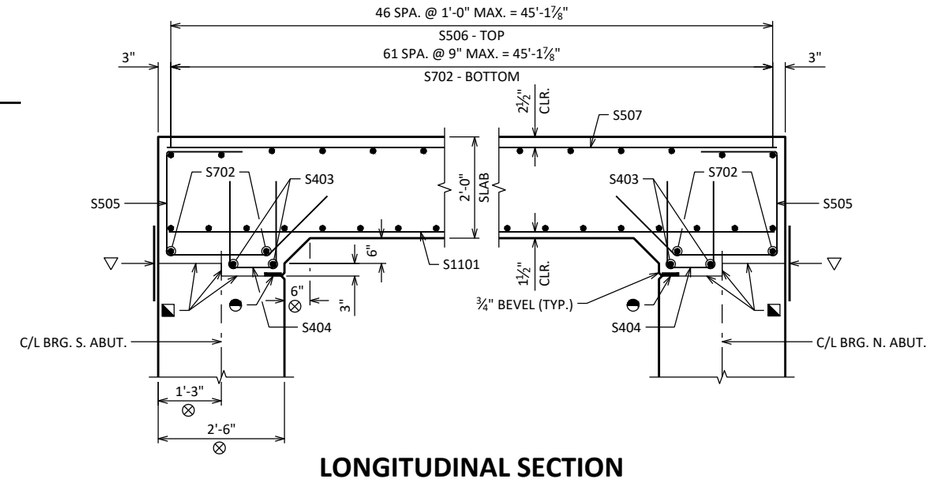
TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, AND AT $\frac{5}{10}$ PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND C/L.

LEGEND

- ◣ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ⊗ MEASURED NORMAL TO THE C/L OF ABUTMENT. DIMENSIONS ARE TYPICAL FOR BOTH ABUTMENTS.
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACK FACE.
- ◓ 4" X ¾" PREFORMED JOINT FILLER. EXTEND FULL LENGTH OF ABUTMENT.



LONGITUDINAL SECTION

DIMENSIONS ARE GIVEN PARALLEL TO ROADWAY UNLESS OTHERWISE NOTED.

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DRAWN BY DCH | PLANS CK'D JRD

SUPERSTRUCTURE

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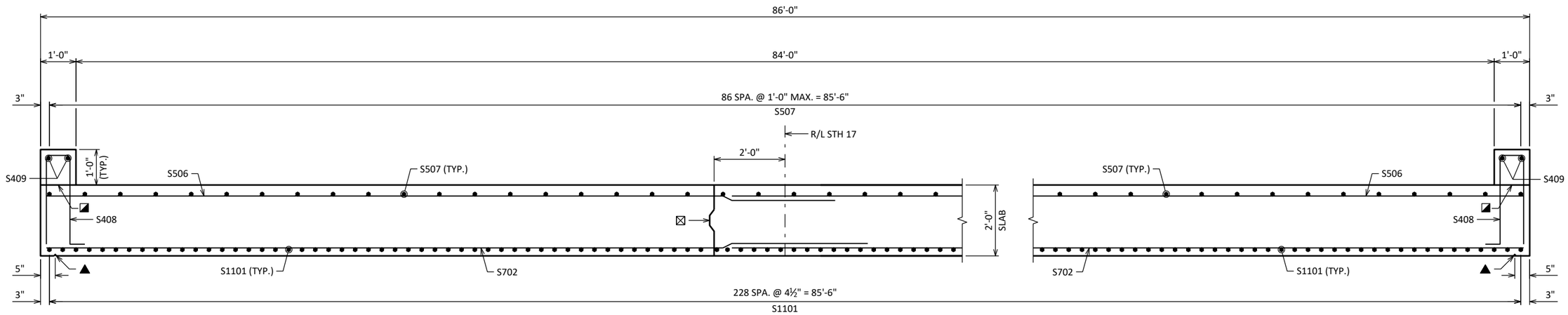
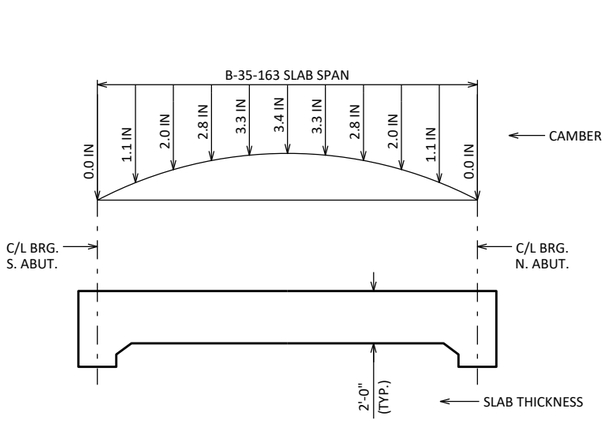


CROSS SECTION THRU ROADWAY

(LOOKING NORTH)



CAMBER AND SLAB THICKNESS DIAGRAM

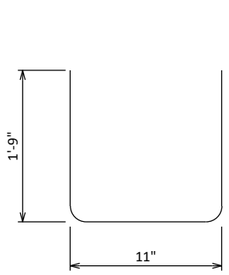
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

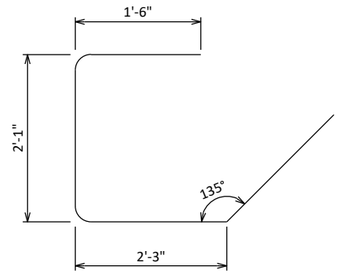
	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	ABUTMENT	5/10 PT.	ABUTMENT
WEST GUTTER			
C/L OF SLAB			
EAST GUTTER			



S404



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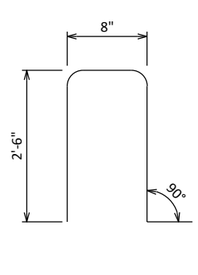
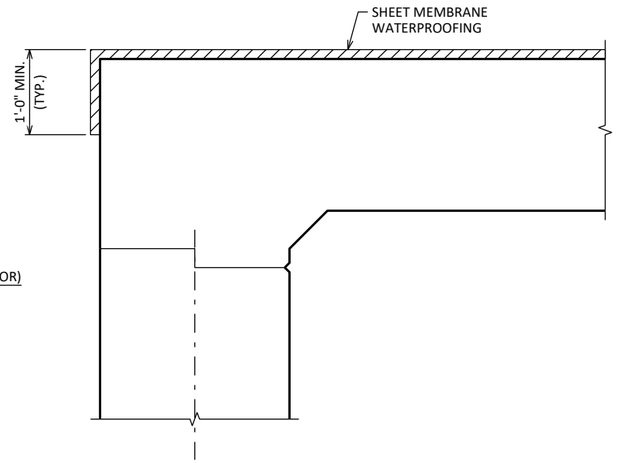
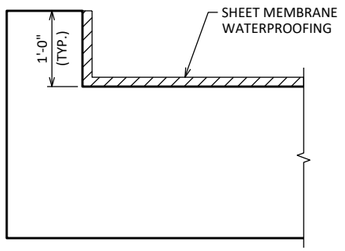


S408



ELEVATION THRU STRUCTURE

SHOWING LIMITS OF SHEET MEMBRANE WATERPROOFING



CROSS SECTION THRU STRUCTURE

SHOWING LIMITS OF SHEET MEMBRANE WATERPROOFING

BILL OF BARS

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

BAR MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIENT.
COATED BARS						TOTAL WEIGHT = 79,200 LBS
S1101	229	45'-3"			SLAB - BOTTOM	LONGIT.
S702	132	47'-6"			SLAB - BOTTOM	TRANSV.
S403	8	43'-0"			SLAB - BOTTOM AT NOTCH	TRANSV.
S404	160	4'-3"	X		SLAB - AT NOTCH	VERT.
S505	174	7'-3"	X		SLAB - AT ABUTMENT	VERT.
S506	94	47'-1"			SLAB - TOP	TRANSV.
S507	87	45'-3"			SLAB - TOP	LONGIT.
S408	124	5'-10"	X		SLAB - HEADER	VERT.
S409	4	45'-3"			SLAB - HEADER	LONGIT.

LEGEND

- ☒ OPTIONAL LONGITUDINAL CONSTRUCTION JOINT KEYWAY FORMED BY A BEVELED 2" X 8".
- ▲ ¾" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM.
- ◪ OPTIONAL CONSTRUCTION JOINT, LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-163

DRAWN BY DCH | PLANS CK'D JRD

SUPERSTRUCTURE DETAILS

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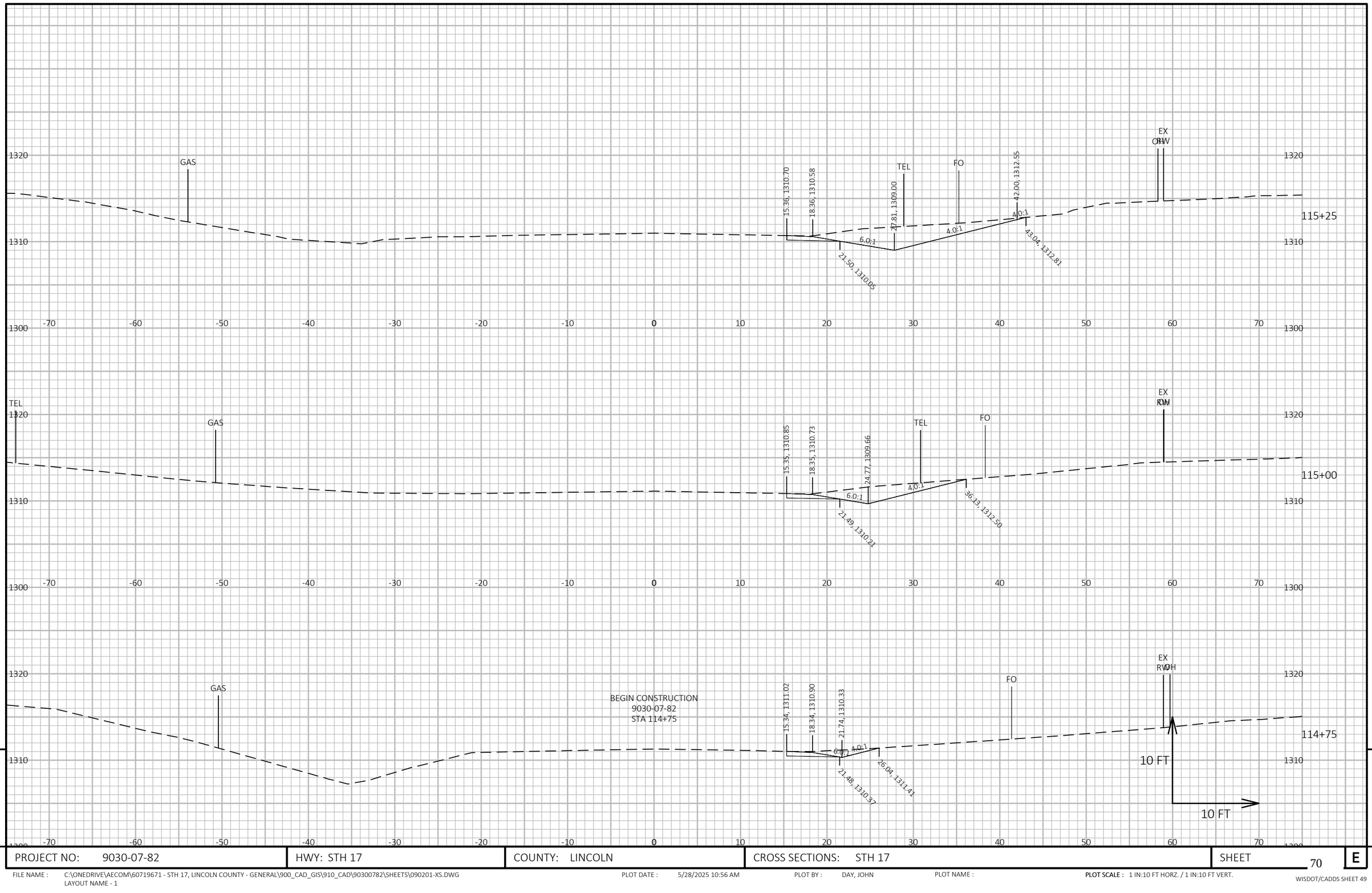
DIVISION 1 - 17-BARNESCREEK

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
114+75.00	11475.00	0.00	5.81	0.00	0.00	0	0	0	0	0	0
115+00.00	11500.00	25.00	19.96	0.00	0.00	12	0	0	12	0	12
115+25.00	11525.00	25.00	36.03	0.00	0.00	26	0	0	38	0	38
115+50.00	11550.00	25.00	35.31	0.00	0.00	33	0	0	71	0	71
115+75.00	11575.00	25.00	40.72	0.00	0.00	35	0	0	106	0	106
116+00.00	11600.00	25.00	39.80	0.00	0.00	37	0	0	143	0	143
116+25.00	11625.00	25.00	47.75	0.00	0.15	41	0	0	184	0	184
116+49.00	11649.00	24.00	52.81	0.00	10.25	45	0	5	229	6	223
116+50.00	11650.00	1.00	91.73	18.84	11.09	3	0	0	232	6	226
116+53.97	11653.97	3.97	89.96	17.39	0.00	13	3	1	245	8	235
116+75.00	11675.00	21.03	69.28	1.71	0.00	62	7	0	307	8	290
116+86.37	11686.37	11.37	16.98	1.63	4.06	18	1	1	325	9	305
117+00.00	11700.00	13.63	0.00	0.10	0.00	4	0	1	329	10	308
117+25.00	11725.00	25.00	0.00	0.10	0.00	0	0	0	329	10	308
117+33.63	11733.63	8.63	17.54	4.77	100.02	3	1	16	332	30	290
117+50.00	11750.00	16.37	17.43	4.84	56.94	11	3	48	343	90	238
117+66.03	11766.03	16.03	76.58	22.05	45.05	28	8	30	371	128	221
117+75.00	11775.00	8.97	67.99	21.80	38.99	24	7	14	395	145	220
117+76.00	11776.00	1.00	4.98	0.00	34.77	1	0	1	396	146	220
118+00.00	11800.00	24.00	6.08	0.00	9.16	5	0	20	401	171	200
118+25.00	11825.00	25.00	6.42	0.00	0.00	6	0	4	407	176	201
118+50.00	11850.00	25.00	6.57	0.00	0.00	6	0	0	413	176	207
118+55.38	11855.38	5.38	6.42	0.00	0.00	1	0	0	414	176	208

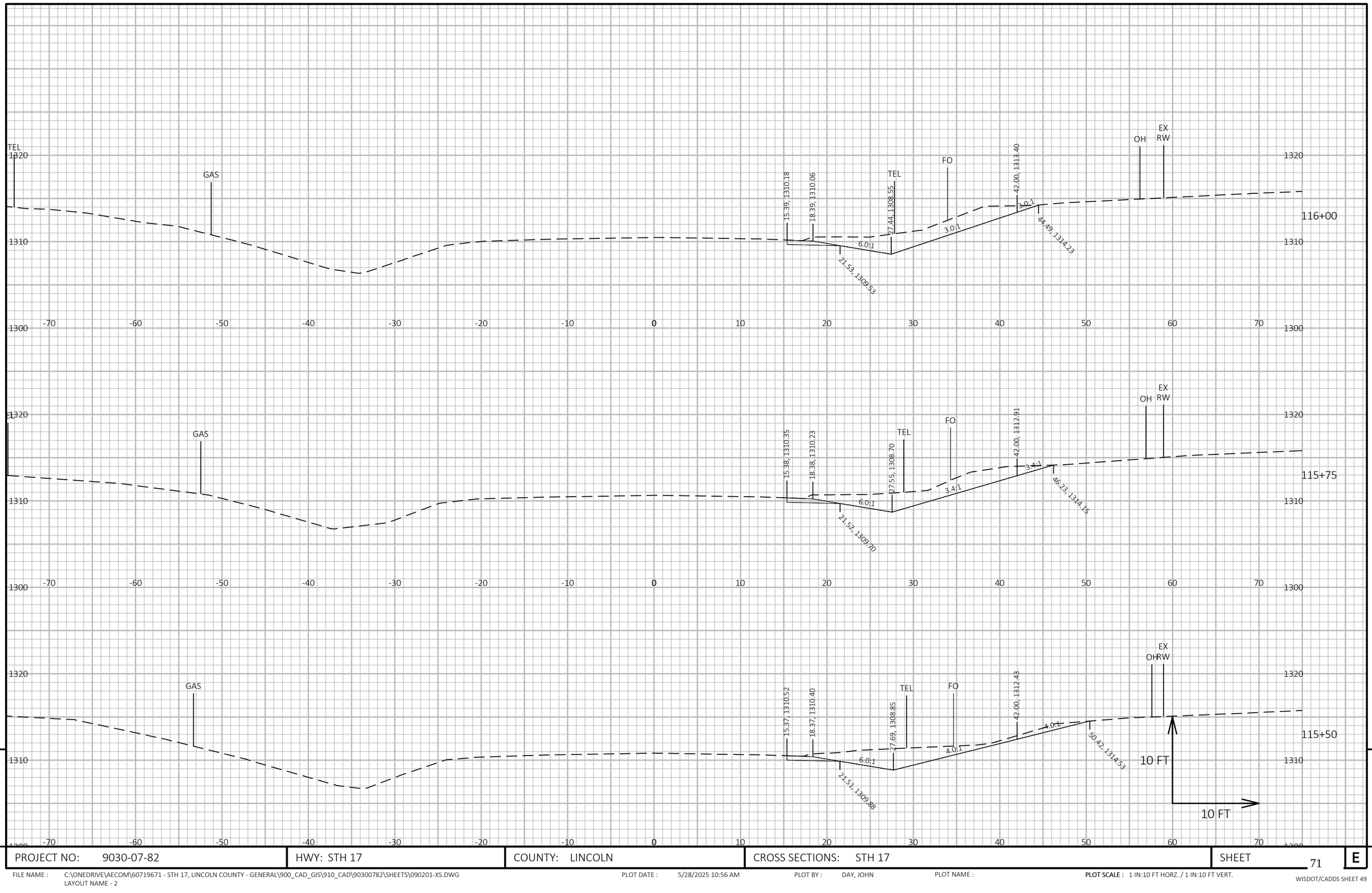


PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 70	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\090201-XS.DWG
LAYOUT NAME - 1

PLOT DATE : 5/28/2025 10:56 AM PLOT BY : DAY, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

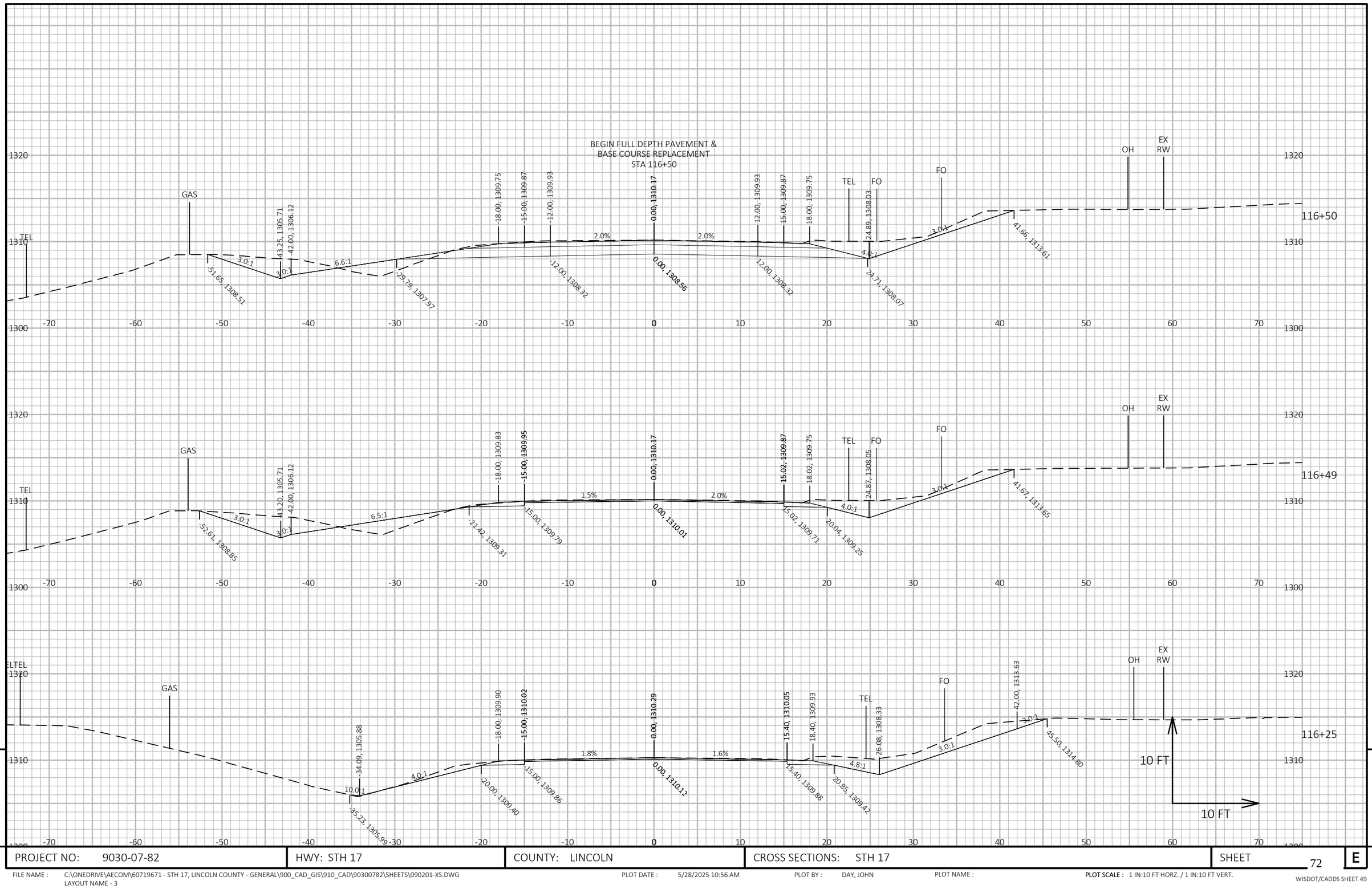
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 71	E



9

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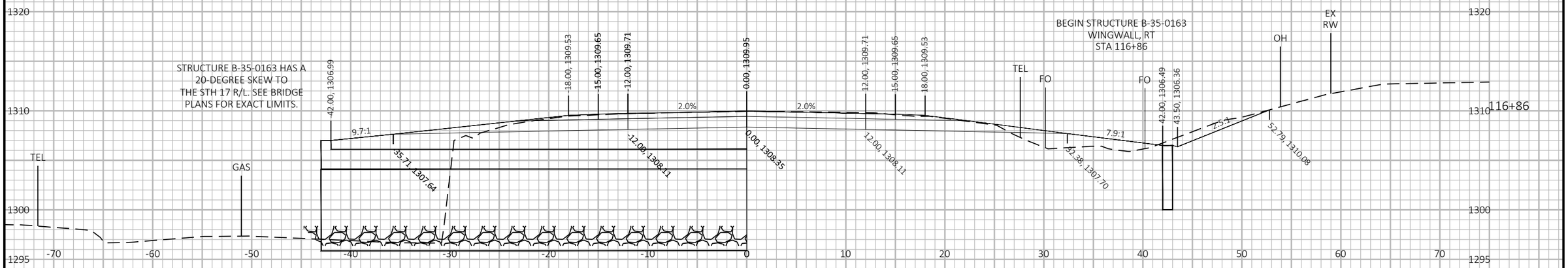
PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 72	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\090201-XS.DWG
LAYOUT NAME - 3

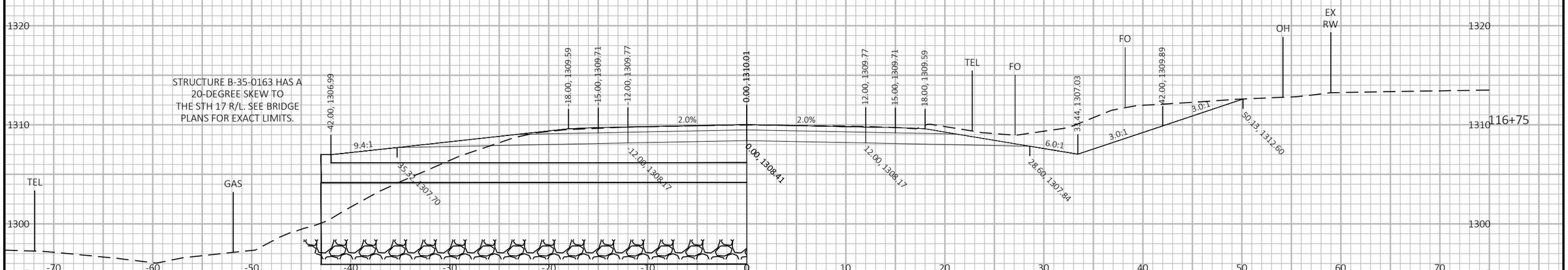
PLOT DATE : 5/28/2025 10:56 AM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

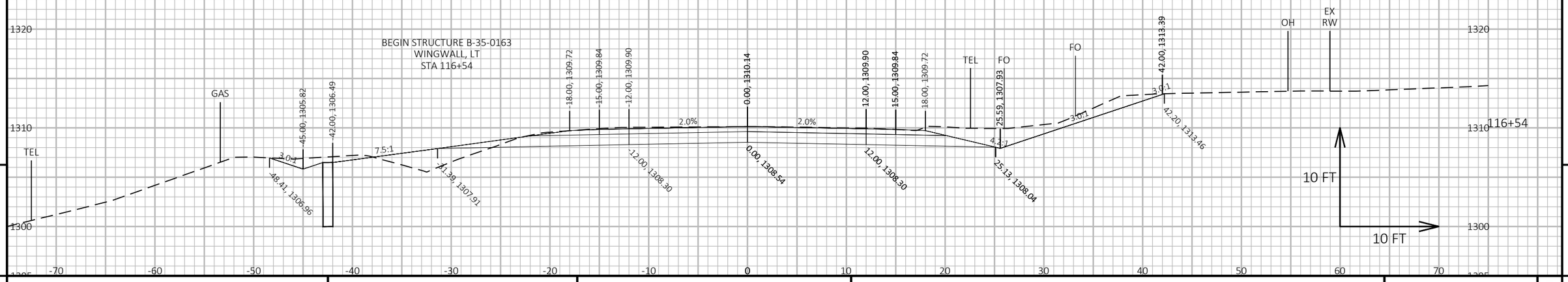
WISDOT/CADDS SHEET 49

STRUCTURE B-35-0163 HAS A 20-DEGREE SKEW TO THE STH 17 R/L. SEE BRIDGE PLANS FOR EXACT LIMITS.



STRUCTURE B-35-0163 HAS A 20-DEGREE SKEW TO THE STH 17 R/L. SEE BRIDGE PLANS FOR EXACT LIMITS.





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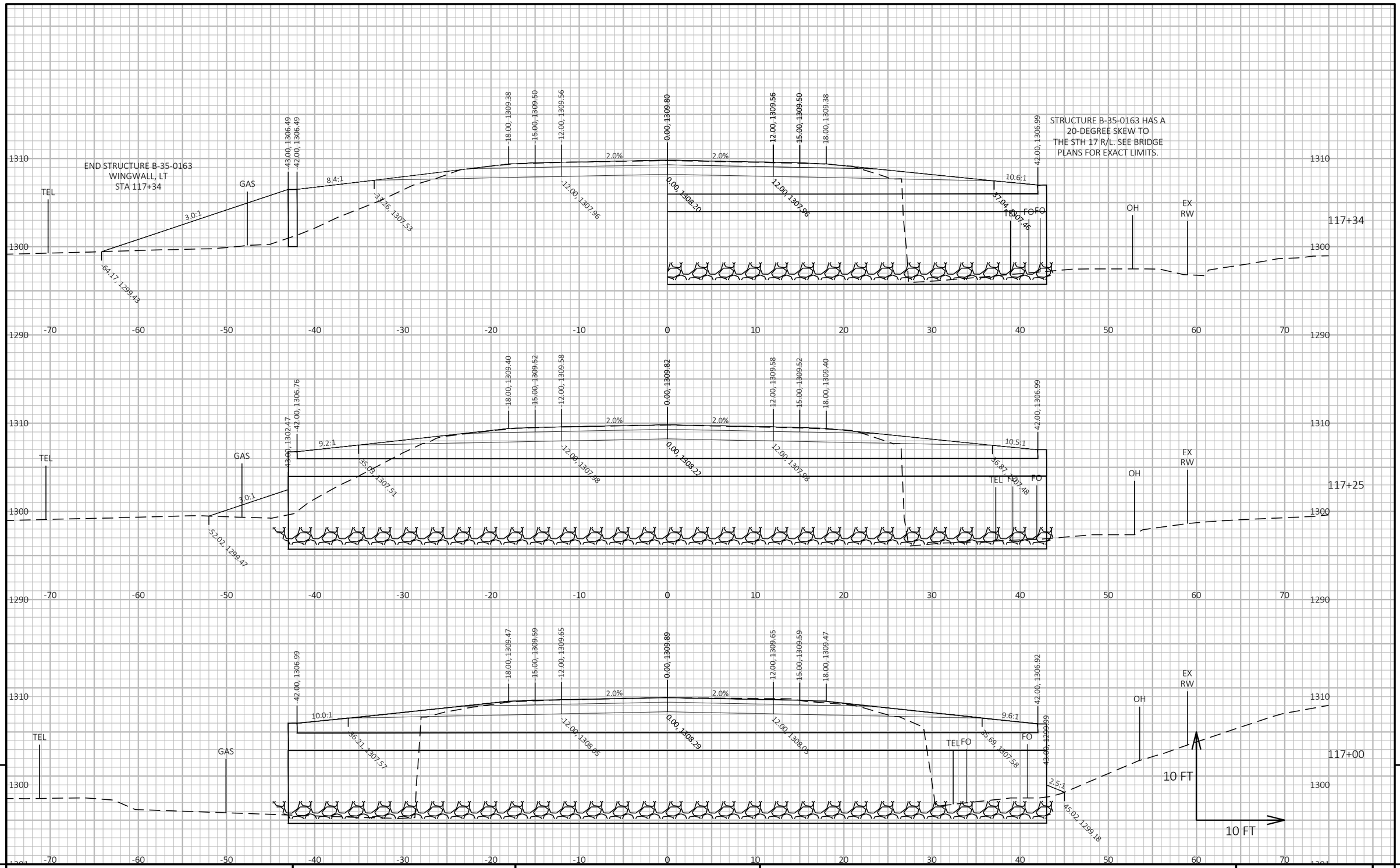
PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 73	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\090201-XS.DWG
LAYOUT NAME - 4

PLOT DATE : 5/28/2025 10:56 AM PLOT BY : DAY, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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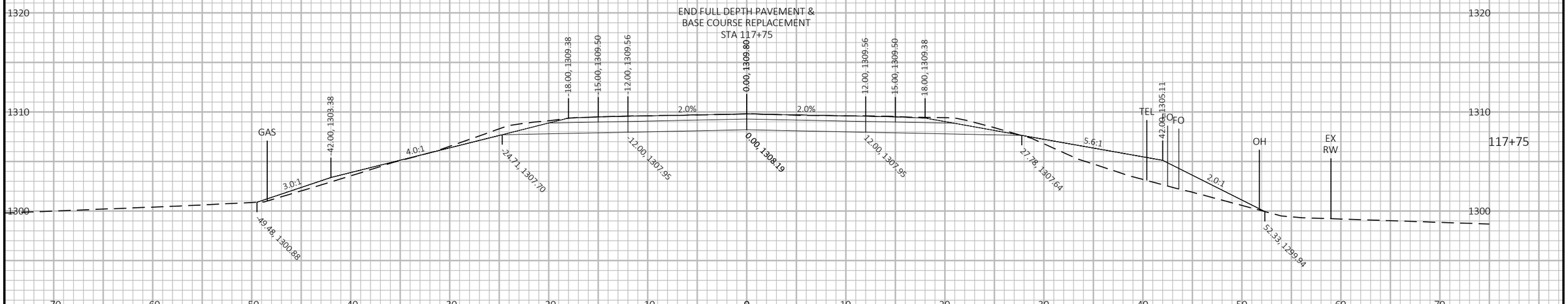
PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 74	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\090201-XS.DWG
LAYOUT NAME - 5

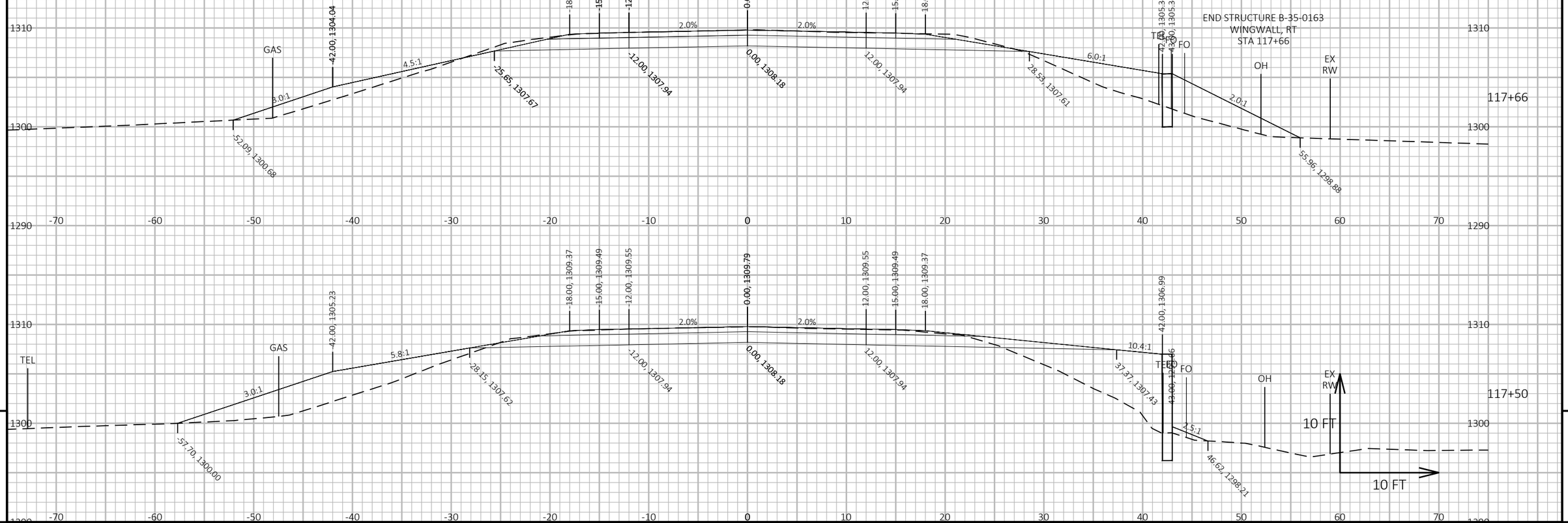
PLOT DATE : 5/28/2025 10:56 AM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

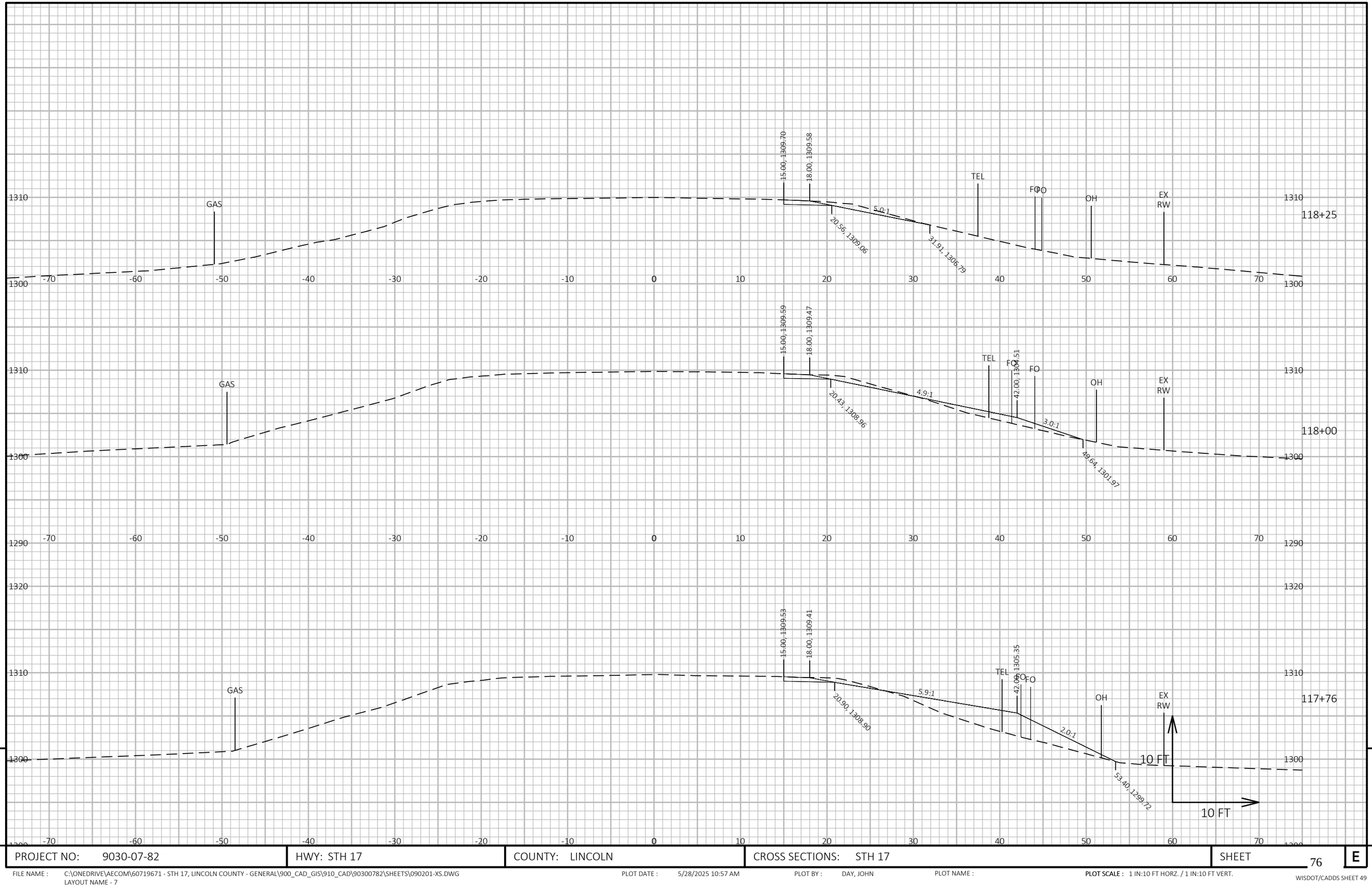
END FULL DEPTH PAVEMENT &
BASE COURSE REPLACEMENT
STA 117+75



END STRUCTURE B-35-0163
WINGWALL, RT
STA 117+66



PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 75 E



9

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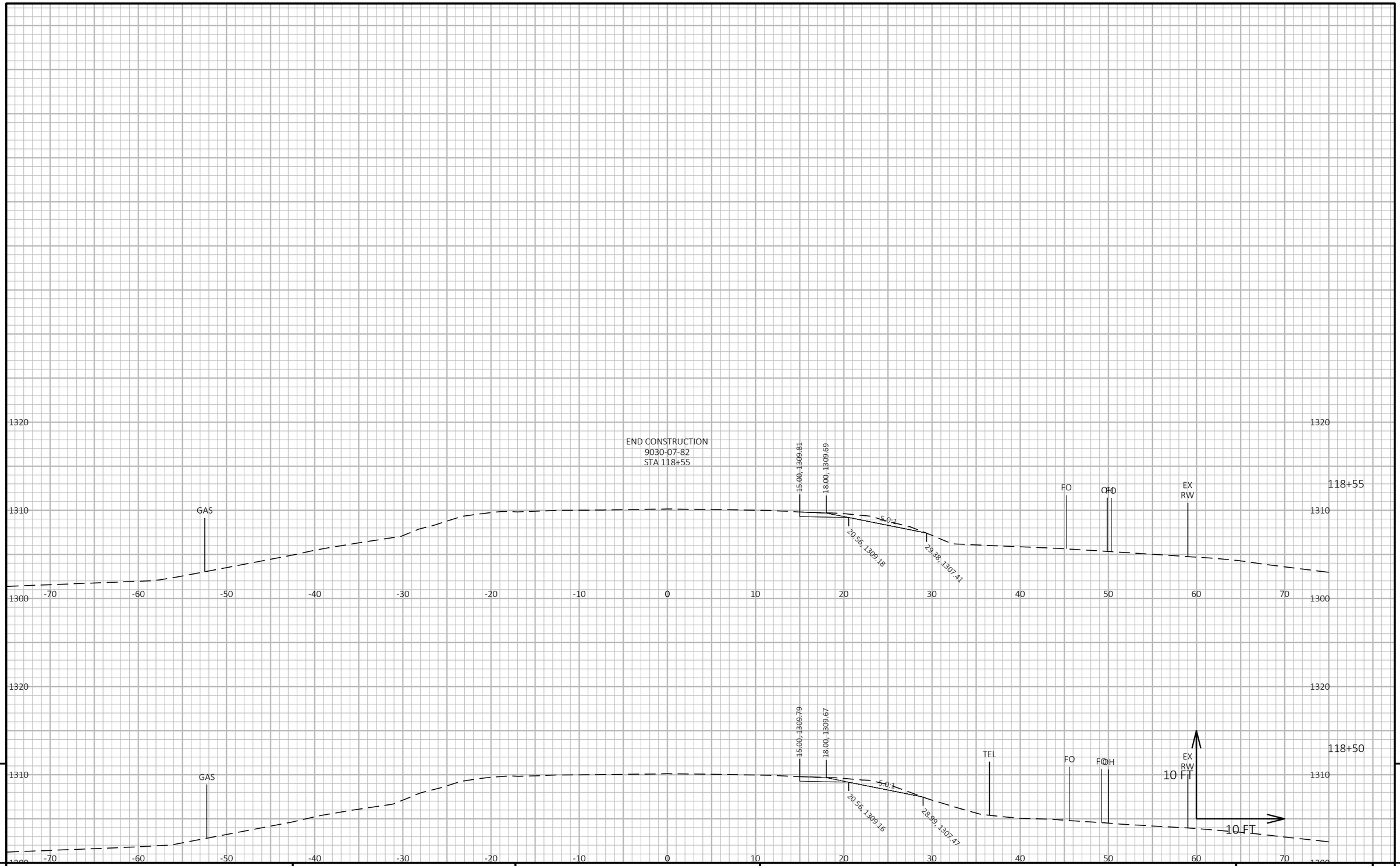
PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 76	E



9

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PROJECT NO: 9030-07-82	HWY: STH 17	COUNTY: LINCOLN	CROSS SECTIONS: STH 17	SHEET 77	E

FILE NAME : C:\ONEDRIVE\AECOM\60719671 - STH 17, LINCOLN COUNTY - GENERAL\900_CAD_GIS\910_CAD\90300782\SHEETS\090201-XS.DWG
LAYOUT NAME - 8

PLOT DATE : 5/28/2025 10:57 AM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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