

RHI

PROJECT ID: 6679-02-70

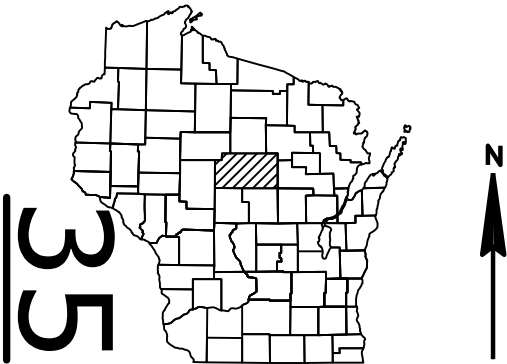
WITH: N/A

COUNTY: MARATHON

FEBRUARY 2025
ORDER OF SHEETS

| | | |
|-------------|---|------------------------------|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details |
| Section No. | 3 | Estimate of Quantities |
| Section No. | 3 | Miscellaneous Quantities |
| Section No. | 4 | Right of Way Plat |
| Section No. | 5 | Plan and Profile |
| Section No. | 6 | Standard Detail Drawings |
| Section No. | 7 | Sign Plates |
| Section No. | 8 | Structure Plans |
| Section No. | 9 | Computer Earthwork Data |
| Section No. | 9 | Cross Sections |

TOTAL SHEETS = 46



DESIGN DESIGNATION 6679-02-00

| | | | |
|--------------|------|---|-------------|
| A.A.D.T. | 2025 | = | 70 |
| A.A.D.T. | 2045 | = | 100 |
| D.H.V. | | = | 9 |
| D.D. | | = | 60/40 |
| T. | | = | 10% ASSUMED |
| DESIGN SPEED | | = | 25 MPH |
| ESALS | | = | 71,200 |

CONVENTIONAL SYMBOLS

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

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

STRUCTURE B-37-0483

BEGIN PROJECT
STA. 10+00.00
Y = 149,434.01
X = 194,129.12

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T CLEVELAND, FAIRVIEW ROAD

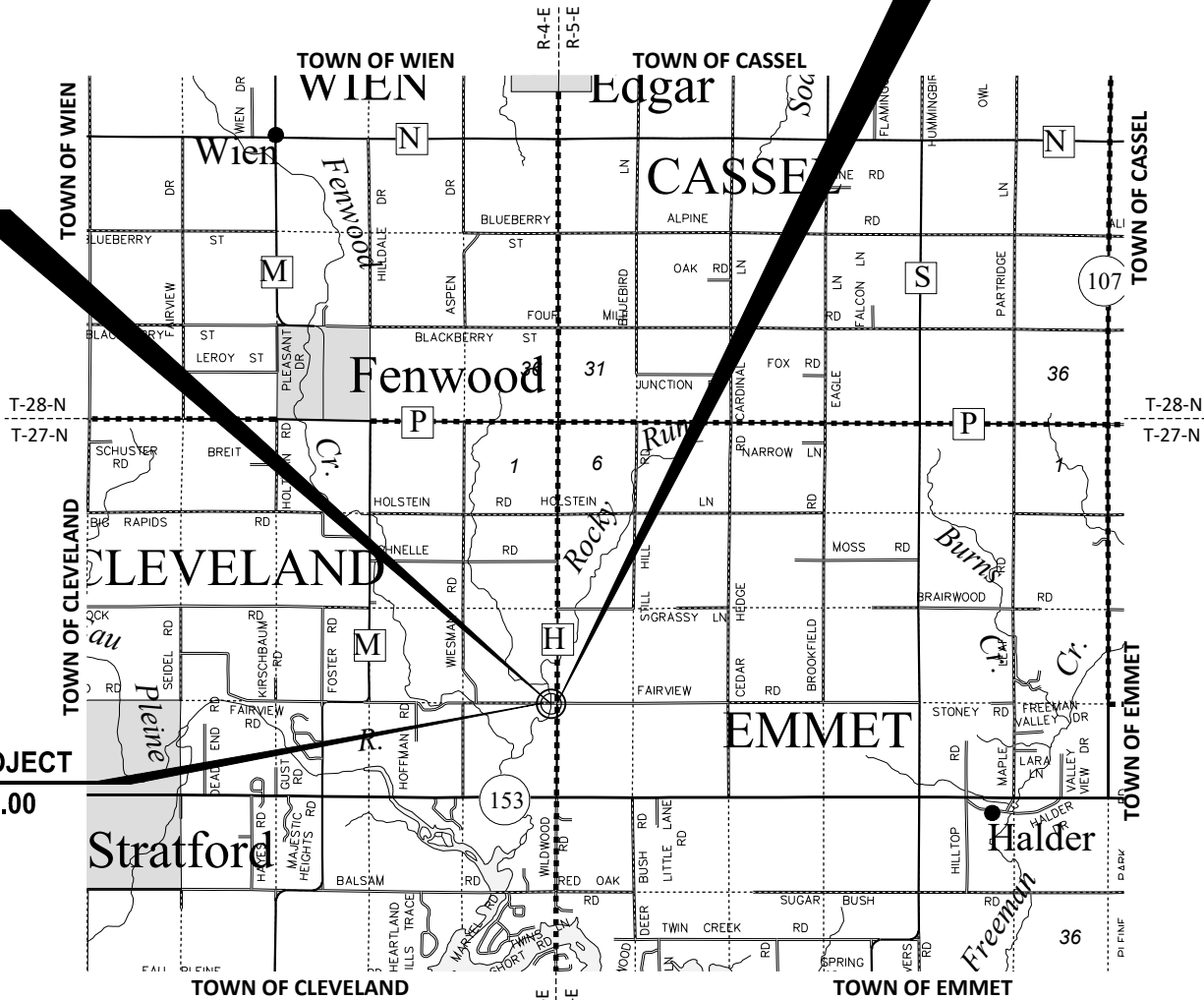
ROCKY RUN BRIDGE, B-37-0483

LOC STR

MARATHON COUNTY

STATE PROJECT NUMBER
6679-02-70

END PROJECT
STA. 14+89.70



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.093 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MARATHON 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.

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 6679-02-70 | WISC 2025329 | 1 |
| | | |
| | | |

ACCEPTED FOR

TOWN of CLEVELAND

10/26/2024 James M. Griesbach
(DATE) (MARATHON CO HIGHWAY COMMISSIONER)

ORIGINAL PLANS PREPARED BY

JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

| | |
|---------------------|------------------------|
| PREPARED BY | |
| Surveyor | JEWELL ASSOCIATES INC. |
| Designer | JEWELL ASSOCIATES INC. |
| Project Manager | MICHAEL GRAGE, PE |
| Regional Examiner | NC REGION |
| Regional Supervisor | DANIEL ERVA, PE |

APPROVED FOR THE DEPARTMENT
DATE: 10/30/2024 (Signature)

E

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

UNLESS SHOWN OTHERWISE, DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 20), AND E-MATTED AS DIRECTED BY THE ENGINEER. ALL POST CONSTRUCTION WET AREAS SHALL BE SEEDED WITH SEEDING MIXTURE NO. 60. DO NOT FERTILIZE WETLAND AREAS.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE BASE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION AND SHALL BE IN PLACE PRIOR TO STRUCTURE REMOVAL.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAW-CUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 112 LB/SY/IN.

ADD TACK COAT AT A RATE OF 0.05 GAL/SY.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT OPERATE EQUIPMENT OR STOCKPILE MATERIALS BEYOND THE EXISTING SLOPE INTERCEPT FROM STA. 11+40 - STA. 11+93 LT, STA. 11+66 - STA. 11+79 RT.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

CONTACTS

WISCONSIN DEPT. OF TRANSPORTATION

WISDOT PROJECT MANAGER
510 HANSON LAKE RD.
RHINELANDER,WI 54501
ATTN: MIKE GRAGE, P.E.
PHONE: (715) 365-5705
EMAIL: MICHAEL.GRAGE@DOT.WI.GOV

DESIGN CONSULTANT:

JEWELL ASSOCIATES ENGINEERS, INC.
1210 PARKWOOD DR, SUITE 100
WISCONSIN RAPIDS, WI 54494
ATTN: NICK PEHLER, P.E.
PHONE: (715) 318-8565
CELL: (715) 459-5665
EMAIL: NICK.PEHLER@JEWELLASSOC.COM

TOWN OF CLEVELAND

MARATHON COUNTY HIGHWAY DEPARTMENT
1430 WEST STREET
WAUSAU, WI 54401
ATTN: JAMES GRIESBACH, COMMISSIONER
PHONE: (715) 261-1801
CELL: (715) 581-4756
EMAIL: JAMES.GRIESBACH@CO.MARATHON.WI.US

DNR LIAISON:

DNR NORTHEAST REGIONAL HEADQUARTERS
2984 SHAWANO AVE.
GREENBAY, WI 54313
ATTN: JAY SCHIEFELBEIN
PHONE: (920) 360-3784
EMAIL: JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

UTILITIES

ELECTRICITY

WISCONSIN PUBLIC SERVICE CORP
ATTN: JESSE PATTEN
P.O. BOX 1166
WAUSAU, WI 54402-1166
PHONE: (715) 848-7405
CELL: (715) 573-0349
EMAIL: JESSE.PATTEN@WISCONSINPUBLICSERVICE.COM

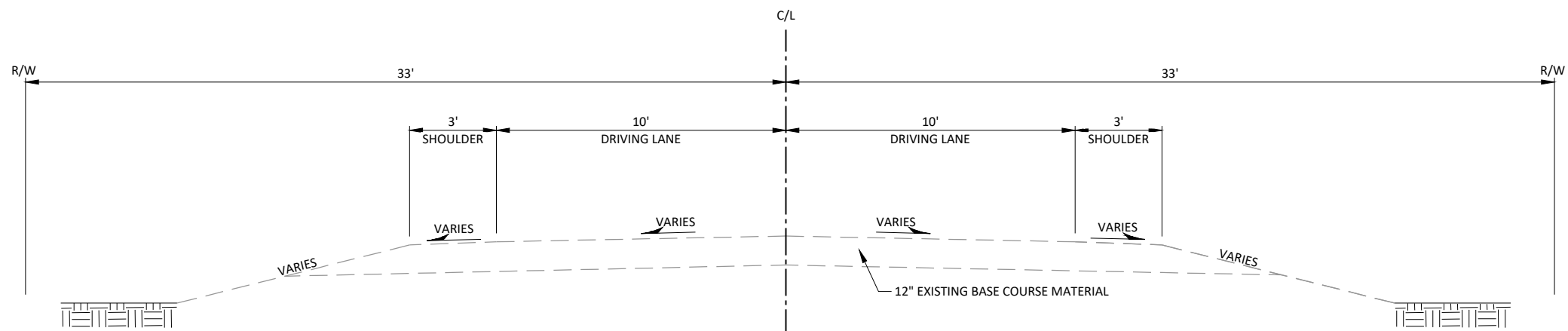


LIST OF STANDARD ABBREVIATIONS

| | | | | | |
|-------------|------------------------------|--------------|-----------------------------|-------------|----------------------------|
| ABUT | Abutment | INV | Invert | RDWY | Roadway |
| AC | Acre | IP | Iron Pipe or Pin | SALV | Salvaged |
| AGG | Aggregate | IRS | Iron Rod Set | SAN S | Sanitary Sewer |
| AH | Ahead | JT | Joint | SEC | Section |
| < | Angle | JCT | Junction | SHLDR | Shoulder |
| ASPH | Asphaltic | LHF | Left-Hand Forward | SHR | Shrinkage |
| AVG | Average | L | Length of Curve | SW | Sidewalk |
| ADT | Average Daily Traffic | LIN FT or LF | Linear Foot | S | South |
| BAD | Base Aggregate Dense | LC | Long Chord of Curve | SQ | Square |
| BK | Back | MH | Manhole | SF or SQ FT | Square Feet |
| BF | Back Face | MB | Mailbox | SY or SQ YD | Square Yard |
| BM | Bench Mark | ML or M/L | Match Line | STD | Standard |
| BR | Bridge | N | North | SDD | Standard Detail Drawings |
| C or C/L | Center Line | Y | North Grid Coordinate | STH | State Trunk Highways |
| CC | Center to Center | O.A.L. | Overall Length | STA | Station |
| CTH | County Trunk Highway | OD | Outside Diameter | SS | Storm Sewer |
| CR | Creek | PLE | Permanent Limited Easement | SG | Subgrade |
| CR | Crushed | PT | Point | SE | Superelevation |
| CY or CU YD | Cubic Yard | PC | Point of Curvature | SL or S/L | Survey Line |
| CP | Culvert Pipe | PI | Point of Intersection | SV | Septic Vent |
| C & G | Curb and Gutter | PRC | Point of Reverse Curvature | T | Tangent |
| D | Degree of Curve | PT | Point of Tangency | TEL | Telephone |
| DHV | Design Hour Volume | POC | Point On Curve | TEMP | Temporary |
| DIA | Diameter | POT | Point on Tangent | TI | Temporary Interest |
| E | East | PVC | Polyvinyl Chloride | TLE | Temporary Limited Easement |
| X | East Grid Coordinate | PCC | Portland Cement Concrete | t | Ton |
| ELEC | Electric (al) | LB | Pound | T or TN | Town |
| EL or ELEV | Elevation | PSI | Pounds Per Square Inch | TRANS | Transition |
| ESALS | Equivalent Single Axle Loads | PE | Private Entrance | TL or T/L | Transit Line |
| EBS | Excavation Below Subgrade | R | Radius | T | Trucks (percent of) |
| ESTR | Existing Sign to Remain | RR | Railroad | TYP | Typical |
| FF | Face to Face | R | Range | UNCL | Unclassified |
| FE | Field Entrance | RL or R/L | Reference Line | UG | Underground Cable |
| F | Fill | RP | Reference Point | USH | United States Highway |
| FG | Finished Grade | RCCP | Reinforced Concrete Culvert | VAR | Variable |
| FL or F/L | Flow Line | | Pipe | V | Velocity or Design Speed |
| FT | Foot | REQ'D | Required | VERT | Vertical |
| FTG | Footing | RES | Residence or Residential | VC | Vertical Curve |
| GN | Grid North | RW | Retaining Wall | VOL | Volume |
| HT | Height | RT | Right | WM | Water Main |
| CWT | Hundredweight | RHF | Right-Hand Forward | WV | Water Valve |
| HYD | Hydrant | R/W | Right-of-Way | W | West |
| INL | Inlet | R | River | WB | Westbound |
| ID | Inside Diameter | RD | Road | YD | Yard |

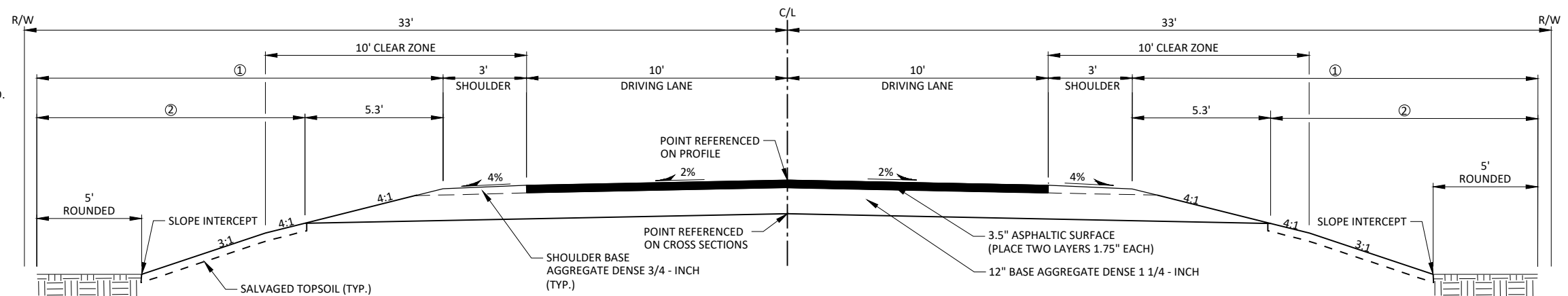
| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|-------------------------|-----------------------|---------|----------|-----------------------|---------|----------|-----------------------|---------|----------|-----------------------|---------|----------|
| | A | | | B | | | C | | | D | | |
| | SLOPE 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 STRIP TURF | .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 SLOPE TURF | | | .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= 1.06 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.14 ACRES

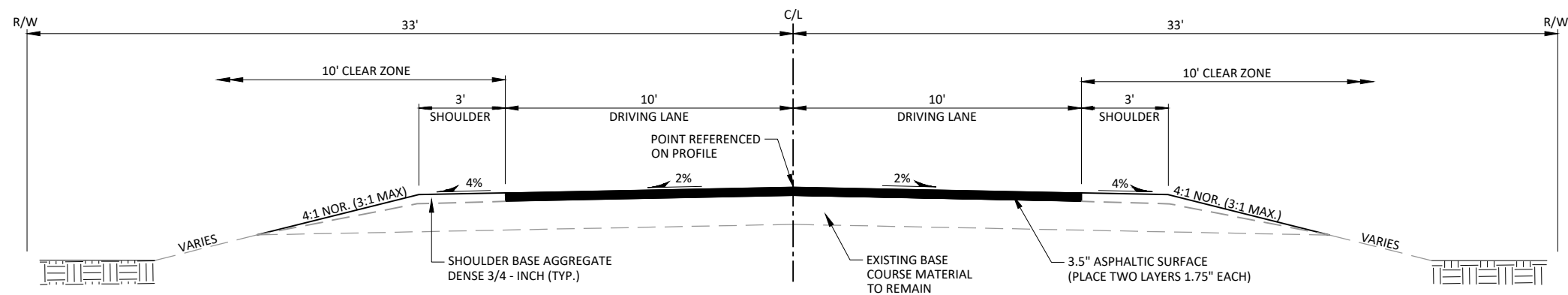
**TYPICAL EXISTING SECTION**

FAIRVIEW ROAD
STA. 10+00.00 - 11+00.00
STA. 11+64.54 - 14+89.70

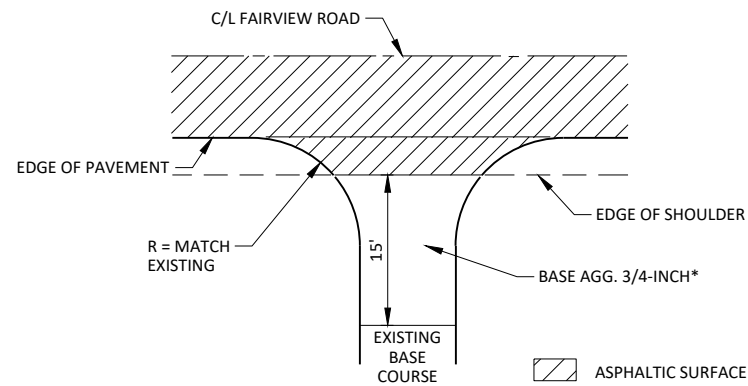
- ① LIMITS OF SEEDING MIXTURE NO. 20, & FERTILIZER TYPE B (AS DIRECTED BY THE ENGINEER)
- ② LIMITS OF SALVAGED TOPSOIL & EROSION MAT URBAN CLASS I TYPE B (AS DIRECTED BY THE ENGINEER)

**TYPICAL RECONSTRUCTION SECTION**

FAIRVIEW ROAD
STA. 10+00.00 - 11+00.00
STA. 11+64.54 - 12+64.54

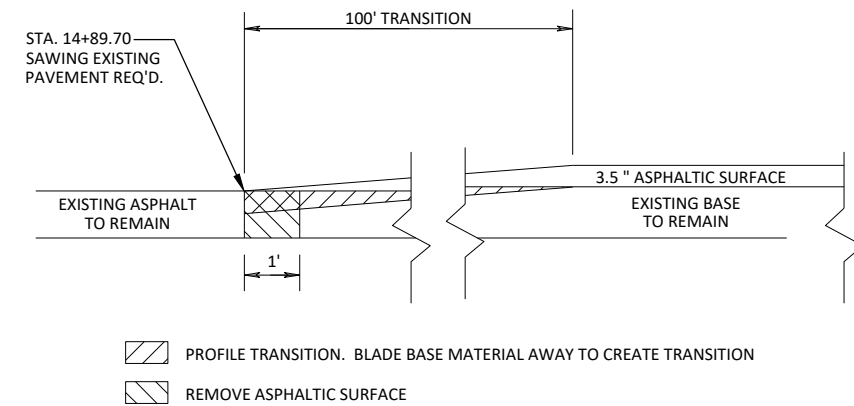
**TYPICAL RECONDITIONING SECTION**

FAIRVIEW ROAD
STA. 12+64.54 - 14+89.70

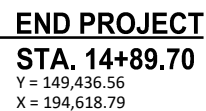


PLAN VIEW

*NOTE: TAPER BASE AGGREGATE DENSE 3/4-INCH TO CREATE A SMOOTH PROFILE TRANSITION FROM THE EDGE OF ASPHALT TO THE EXISTING DRIVEWAY.

RURAL DRIVEWAY INTERSECTION DETAILREMOVING ASPHALTIC SURFACE

STA. 14+89.70



Estimate Of Quantities

6679-02-70

| Line | Item | Item Description | Unit | Total | Qty |
|------|------------|---|------|------------|------------|
| 0002 | 201.0205 | Grubbing | STA | 3.000 | 3.000 |
| 0004 | 203.0260 | Removing Structure Over Waterway Minimal Debris (structure) 01. P-37-0044 | EACH | 1.000 | 1.000 |
| 0006 | 204.0110 | Removing Asphaltic Surface | SY | 6.000 | 6.000 |
| 0008 | 205.0100 | Excavation Common | CY | 420.000 | 420.000 |
| 0010 | 206.1001 | Excavation for Structures Bridges (structure) 01. B-37-0483 | EACH | 1.000 | 1.000 |
| 0012 | 206.5001 | Cofferdams (structure) 01. B-37-0483 | EACH | 1.000 | 1.000 |
| 0014 | 210.1500 | Backfill Structure Type A | TON | 190.000 | 190.000 |
| 0016 | 211.0101 | Prepare Foundation for Asphaltic Paving (project) 01. 6679-02-70 | EACH | 1.000 | 1.000 |
| 0018 | 213.0100 | Finishing Roadway (project) 01. 6679-02-70 | EACH | 1.000 | 1.000 |
| 0020 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 100.000 | 100.000 |
| 0022 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 550.000 | 550.000 |
| 0024 | 455.0600 | Tack Coat | TON | 60.000 | 60.000 |
| 0026 | 465.0105 | Asphaltic Surface | TON | 205.000 | 205.000 |
| 0028 | 465.0315 | Asphaltic Flumes | SY | 8.000 | 8.000 |
| 0030 | 502.0100 | Concrete Masonry Bridges | CY | 214.000 | 214.000 |
| 0032 | 502.3200 | Protective Surface Treatment | SY | 190.000 | 190.000 |
| 0034 | 502.3210 | Pigmented Surface Sealer | SY | 85.000 | 85.000 |
| 0036 | 502.9000.S | Underwater Substructure Inspection (structure) 01. B-37-0483 | EACH | 1.000 | 1.000 |
| 0038 | 505.0400 | Bar Steel Reinforcement HS Structures | LB | 4,830.000 | 4,830.000 |
| 0040 | 505.0600 | Bar Steel Reinforcement HS Coated Structures | LB | 26,770.000 | 26,770.000 |
| 0042 | 516.0500 | Rubberized Membrane Waterproofing | SY | 10.000 | 10.000 |
| 0044 | 550.0500 | Pile Points | EACH | 13.000 | 13.000 |
| 0046 | 550.1120 | Piling Steel HP 12-Inch X 53 Lb | LF | 325.000 | 325.000 |
| 0048 | 606.0300 | Riprap Heavy | CY | 250.000 | 250.000 |
| 0050 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 150.000 | 150.000 |
| 0052 | 618.0100 | Maintenance and Repair of Haul Roads (project) 01. 6679-02-70 | EACH | 1.000 | 1.000 |
| 0054 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0056 | 624.0100 | Water | MGAL | 10.000 | 10.000 |
| 0058 | 625.0500 | Salvaged Topsoil | SY | 590.000 | 590.000 |
| 0060 | 628.1504 | Silt Fence | LF | 635.000 | 635.000 |
| 0062 | 628.1520 | Silt Fence Maintenance | LF | 1,270.000 | 1,270.000 |
| 0064 | 628.1905 | Mobilizations Erosion Control | EACH | 5.000 | 5.000 |
| 0066 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 3.000 | 3.000 |
| 0068 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 590.000 | 590.000 |
| 0070 | 628.6005 | Turbidity Barriers | SY | 240.000 | 240.000 |
| 0072 | 629.0210 | Fertilizer Type B | CWT | 1.000 | 1.000 |
| 0074 | 630.0120 | Seeding Mixture No. 20 | LB | 40.000 | 40.000 |
| 0076 | 630.0500 | Seed Water | MGAL | 18.000 | 18.000 |
| 0078 | 634.0612 | Posts Wood 4x6-Inch X 12-FT | EACH | 4.000 | 4.000 |
| 0080 | 637.2230 | Signs Type II Reflective F | SF | 12.000 | 12.000 |
| 0082 | 638.2602 | Removing Signs Type II | EACH | 7.000 | 7.000 |
| 0084 | 638.3000 | Removing Small Sign Supports | EACH | 7.000 | 7.000 |
| 0086 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0088 | 643.0420 | Traffic Control Barricades Type III | DAY | 1,376.000 | 1,376.000 |
| 0090 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 2,064.000 | 2,064.000 |
| 0092 | 643.0900 | Traffic Control Signs | DAY | 1,032.000 | 1,032.000 |
| 0094 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0096 | 645.0111 | Geotextile Type DF Schedule A | SY | 40.000 | 40.000 |
| 0098 | 645.0120 | Geotextile Type HR | SY | 420.000 | 420.000 |

Estimate Of Quantities

| 6679-02-70 | | | | | |
|------------|------------|--|------|---------|---------|
| Line | Item | Item Description | Unit | Total | Qty |
| 0100 | 650.4500 | Construction Staking Subgrade | LF | 200.000 | 200.000 |
| 0102 | 650.5000 | Construction Staking Base | LF | 200.000 | 200.000 |
| 0104 | 650.6501 | Construction Staking Structure Layout (structure) 01. B-37-0483 | EACH | 1.000 | 1.000 |
| 0106 | 650.8000 | Construction Staking Resurfacing Reference | LF | 225.000 | 225.000 |
| 0108 | 650.9911 | Construction Staking Supplemental Control (project) 01. 6679-02-70 | EACH | 1.000 | 1.000 |
| 0110 | 650.9920 | Construction Staking Slope Stakes | LF | 200.000 | 200.000 |
| 0112 | 690.0150 | Sawing Asphalt | LF | 50.000 | 50.000 |
| 0114 | 715.0502 | Incentive Strength Concrete Structures | DOL | 1.000 | 1.000 |
| 0116 | 999.2005.S | Maintaining Bird Deterrent System (station) 01. 11+32 | EACH | 1.000 | 1.000 |
| 0118 | ASP.1T0A | On-the-Job Training Apprentice at \$5.00/HR | HRS | 300.000 | 300.000 |
| 0120 | ASP.1T0G | On-the-Job Training Graduate at \$5.00/HR | HRS | 600.000 | 600.000 |

3

3

| | | | | | | | | | | EARTHWORK SUMMARY | | | | | | | | | | ALL ITEMS ARE 010 UNLESS OTHERWISE NOTED | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|
| GRUBBING | | | | | REMOVING ASPHALTIC SURFACE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div>201.0205 GRUBBING (STA)</div> <div>STATION-STATION LOCATION</div> <div>10+00 - 12+65 MAINLINE</div> <div>TOTAL = 3</div> <div>NOTE: ROADSIDE BRUSH IS TO BE GRUBBED PRIOR TO FILL</div> | | | | | <div>204.0110 REMOVING ASPHALTIC SURFACE</div> <div>CATEGORY</div> <div>030</div> <div>(SY)</div> <div>14+89 - 14+89.7 MAINLINE</div> <div>TOTALS = 6</div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | <div>FROM/TO STA LOCATION 205.0100 EXCAVATION COMMON AVAILABLE MATERIAL UNEXPANDED EXPANDED (CY) (1) FILL FILL (CY) FACTOR MASS 1.25 (2) +/- (CY) (3)</div> <div>10+00 - 10+75 MAINLINE 283 283 89 111 172</div> <div>11+90 - 12+65 MAINLINE 137 137 71 89 48</div> <div>TOTALS = 420 420 160 200 220</div> <div>NOTES: 1.) AVAILABLE MATERIAL=CUT 2.) EXPANDED FILL FACTOR 1.25: EXPANDED FILL = (UNEXPANDED FILL)*1.25 3.) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.</div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BASE AGGREGATE DENSE | | | | | | | | | | ASPHALTIC SURFACE | | | | | | | | | | ASPHALTIC FLUMES | | | | | | | | | | | | | | | | | | | |
| <div>305.0110 305.0120 BASE AGGREGATE BASE AGGREGATE DENSE 3/4-INCH DENSE 1 1/4-INCH</div> <div>CATEGORY CATEGORY CATEGORY</div> <div>010 030 010</div> <div>(TON) (TON) (TON)</div> <div>STATION - STATION LOCATION</div> <div>10+00 - 11+00 MAINLINE</div> <div>11+65 - 12+65 MAINLINE</div> <div>12+65 - 14+89.7 MAINLINE</div> <div>SUBTOTALS =</div> <div>TOTALS =</div> | | | | | | | | | | <div>211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING PROJECT (6679-02-70)</div> <div>CATEGORY CATEGORY CATEGORY CATEGORY CATEGORY</div> <div>030 010 030 010 030</div> <div>(EACH) (GAL) (GAL) (TON) (TON)</div> <div>10+00 - 11+00 MAINLINE</div> <div>11+65 - 12+65 MAINLINE</div> <div>12+65 - 14+60 MAINLINE</div> <div>14+60 - 14+89.7 MAINLINE</div> <div>SUBTOTALS =</div> <div>TOTALS =</div> | | | | | | | | | | <div>455.0605 465.0105 TACK COAT ASPHALTIC SURFACE</div> <div>CATEGORY CATEGORY CATEGORY CATEGORY CATEGORY</div> <div>010 030 010 030</div> <div>(GAL) (GAL) (TON) (TON)</div> <div>14 - 48 -</div> <div>14 - 48 -</div> <div>- 26 - 90</div> <div>- 6 - 19</div> <div>28 32 96 109</div> <div>60 205</div> | | | | | | | | | | <div>465.0315 ASPHALTIC FLUMES</div> <div>STATION LOCATION (SY)</div> <div>10+86 MAINLINE, LT 4</div> <div>10+90 MAINLINE, RT 4</div> <div>TOTALS = 8</div> | | | | | | | | | |
| WATER | | | | | FINISHING ITEMS | | | | | | | | | | SILT FENCE | | | | | | | | | | | | | | | | | | | | | | | | |
| <div>624.0100 WATER</div> <div>CATEGORY CATEGORY</div> <div>010 030</div> <div>(MGAL) (MGAL)</div> <div>STATION - STATION LOCATION</div> <div>10+00 - 11+00 MAINLINE</div> <div>11+65 - 12+65 MAINLINE</div> <div>12+65 - 14+89.7 MAINLINE</div> <div>SUBTOTALS =</div> <div>TOTALS =</div> | | | | | <div>625.0500 628.2008 629.0210 630.0120 630.0500 SALVAGED EROSION MAT FERTILIZER SEEDING SEED TOPSOIL URBAN CLASS 1 TYPE B MIXTURE WATER NO. 20</div> <div>STATION - STATION LOCATION (SY) (SY) (CWT) (LB) (MGAL)</div> <div>10+00 - 11+00 MAINLINE, RT. 156 156 0.3 10 5</div> <div>10+00 - 11+00 MAINLINE, LT. 150 150 0.3 10 4.5</div> <div>11+65 - 12+65 MAINLINE, RT. 140 140 0.2 10 4</div> <div>11+65 - 12+65 MAINLINE, LT. 144 144 0.2 10 4.5</div> <div>TOTALS 590 590 1 40 18</div> | | | | | | | | | | <div>628.1504 628.1520 SILT FENCE SILT FENCE MAINTENANCE</div> <div>STATION - STATION LOCATION (LF) (LF)</div> <div>10+00 - 11+00 MAINLINE, RT. 167 334</div> <div>10+00 - 11+00 MAINLINE, LT. 159 318</div> <div>11+65 - 12+65 MAINLINE, RT. 138 276</div> <div>11+65 - 12+65 MAINLINE, LT. 171 342</div> <div>TOTALS = 635 1,270</div> | | | | | | | | | | | | | | | | | | | | | | | | |
| MOBILIZATION EROSION CONTROL | | | | | TURBIDITY BARRIER | | | | | PERMANENT SIGNING | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div>628.1905 628.1910 MOBILIZATION MOBILIZATION EMERGENCY EROSION CONTROL EROSION CONTROL</div> <div>PROJECT (EACH) (EACH)</div> <div>6679-02-70 5 3</div> <div>TOTALS = 5 3</div> | | | | | <div>628.6005</div> <div>LOCATION (SY)</div> <div>WEST BANK 115</div> <div>EAST BANK 125</div> <div>TOTALS = 240</div> | | | | | <div>APPROX. LOCATION SIGN SIGN SIGN 634.0612 637.2230 638.2602 638.3000 STATION LOCATION CODE DESCRIPTION SIZE POSTS SIGNS REMOVING REMOVING WOOD 4X6- TYPE II SIGNS SMALL SIGN INCH X 12-FT REFLECTIVE F TYPE II SUPPORTS (EACH) (SF) (EACH) (EACH)</div> <div>10+68 MAINLINE, RT. R12-1 WEIGHT LIMIT 20 TONS 24X30 - - 1 1</div> <div>10+88 MAINLINE, LT. W5-52L BRIDGE HASH MARKS 12X36 1 3.00 - -</div> <div>10+92 MAINLINE, RT. W5-52R BRIDGE HASH MARKS 12X36 1 3.00 - -</div> <div>11+16 MAINLINE, LT. W5-52L BRIDGE HASH MARKS 12X36 - - 1 1</div> <div>11+16 MAINLINE, RT. W5-52R BRIDGE HASH MARKS 12X36 - - 1 1</div> <div>11+69 MAINLINE, LT. W5-52L BRIDGE HASH MARKS 12X36 - - 1 1</div> <div>11+69 MAINLINE, RT. W5-52R BRIDGE HASH MARKS 12X36 - - 1 1</div> <div>11+72 MAINLINE, LT. W5-52L BRIDGE HASH MARKS 12X36 1 3.00 - -</div> <div>11+76 MAINLINE, RT. W5-52R BRIDGE HASH MARKS 12X36 1 3.00 - -</div> <div>11+87 MAINLINE, LT. R12-1 WEIGHT LIMIT 20 TONS 24X30 - - 1 1</div> <div>13+50 MAINLINE, LT. W5-2 NARROW BRIDGE 36X36 - - 1 1</div> <div>TOTALS = 4 12.00 7 7</div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROJECT NO: 6679-02-70 | | | | | HWY: FAIRVIEW ROAD | | | | | COUNTY: MARATHON | | | | | MISCELLANEOUS QUANTITIES | | | | | SHEET | | | | | E | | | | | | | | | | | | | | |

ALL ITEMS ARE 010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL

| | 643.0420 BARRICADES TYPE III (DAY) | 643.0705 WARNING LIGHTS TYPE A (DAY) | 643.0900 SIGNS (DAY) | 643.5000 TRAFFIC CONTROL (EACH) | COMMENT |
|--|---|---|----------------------------|--|-------------------------------------|
| FAIRVIEW RD | - | - | - | 1 | |
| FAIRVIEW RD & WIESMAN RD* | | | | | |
| FAIRVIEW RD, RT. | 86 | 172 | 86 | - | (1) R11-3C |
| FAIRVIEW RD, LT. | - | - | 86 | - | (1) W20-3A |
| FAIRVIEW RD, LT. | 86 | 172 | 86 | - | (1) R11-3C |
| FAIRVIEW RD WEST SIDE OF BRIDGE* | | | | | |
| FAIRVIEW RD | 602 | 860 | 344 | - | (1 EA) W20-3C, W20-3D, & (2) R11-2B |
| FAIRVIEW RD EAST SIDE OF BRIDGE* | | | | | |
| FAIRVIEW RD | 430 | 516 | 86 | - | (1 EA) R11-2 & R11-2B |
| FAIRVIEW RD & CTH H* | | | | | |
| FAIRVIEW RD | 172 | 344 | 86 | - | (1) R11-2B |
| FAIRVIEW RD EAST SIDE OF CTH H** | | | | | |
| FAIRVIEW RD | - | - | 86 | - | (1) W20-3A |
| CTH H NORTH AND SOUTH OF FAIRVIEW RD** | | | | | |
| CTH H | - | - | 172 | - | (2) W20-3A |
| TOTALS = | 1,376 | 2,064 | 1,032 | 1 | |

NOTE:
*FOLLOW STANDARD DETAIL DRAWING FOR BARRICADES AND SIGNS FOR MAINLINE CLOSURES.

**FOLLOW STANDARD DETAIL DRAWING FOR BARRICADES AND SIGNS FOR SIDEROAD CLOSURES.

CONSTRUCTION STAKING

| STATION-STATION | LOCATION | 650.4500 | 650.5000 | 650.6501 | 650.8000 | 650.9911 | 650.9920 |
|-----------------|----------|-------------|-------------|--------------------|-------------|---------------|-------------|
| | | SUBGRADE | BASE | STRUCTURE | RESURFACING | SUPPLEMENTAL | SLOPES |
| | | CATEGORY | CATEGORY | LAYOUT (B-37-0483) | REFERENCE | CONTROL | STAKES |
| | | 010 (LF) | 010 (LF) | 020 (EACH) | 030 (LF) | 010 (EACH) | 010 (LF) |
| 10+00 - 11+65 | MAINLINE | 100 | 100 | - | - | - | 100 |
| 11+65 - 12+65 | MAINLINE | 100 | 100 | - | - | - | 100 |
| 12+65 - 14+89.7 | MAINLINE | - | - | - | 225 | - | - |
| 6679-02-00 | PROJECT | - | - | 1 | - | 1 | - |
| TOTAL = | | 200 | 200 | 1 | 225 | 1 | 200 |

SAWING ASPHALT

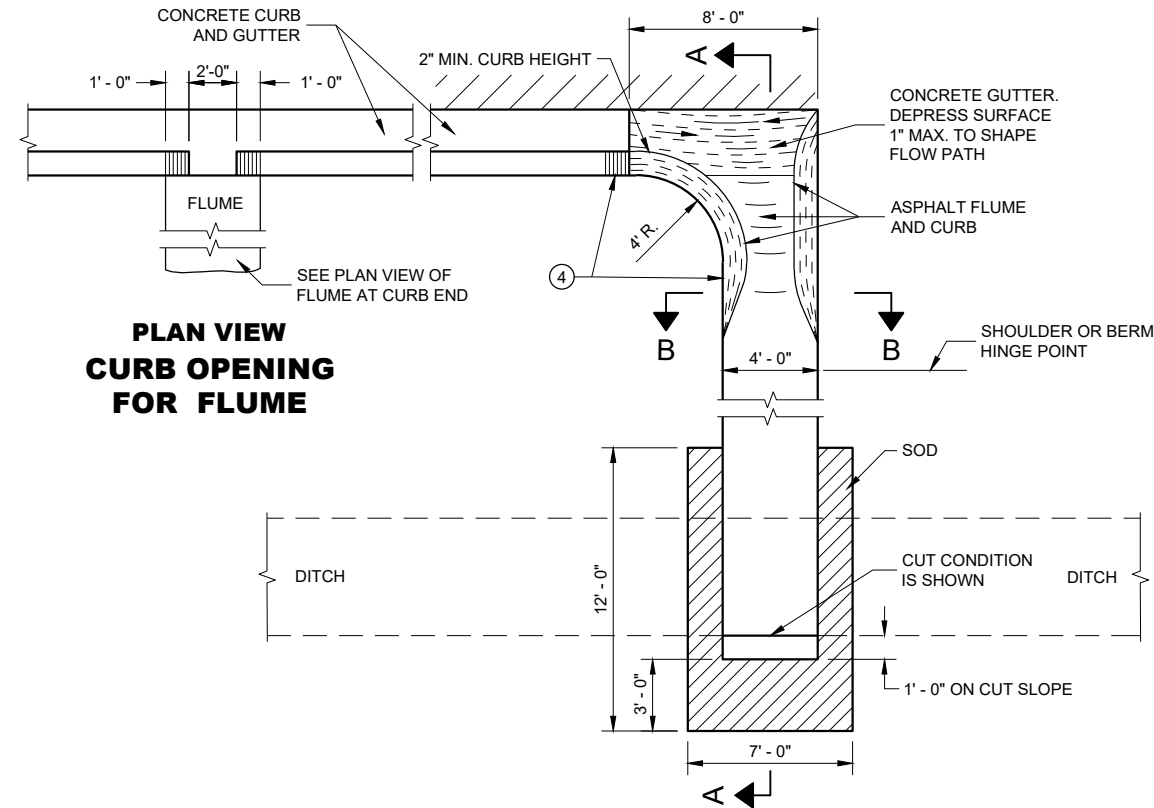
| STATION | LOCATION | 690.0150 |
|---------|----------|----------------------|
| | | CATEGORY 030 (LF) |
| 14+89.7 | MAINLINE | 50 |
| TOTAL = | | 50 |

Standard Detail Drawing List

| | |
|-----------|---|
| 08D04-07 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08E09-06 | SILT FENCE |
| 08E11-02 | TURBIDITY BARRIER |
| 12A03-10 | NAME PLATE (STRUCTURES) |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 15C02-09A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-09B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C03-05 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C06-12 | SIGNING & MARKING FOR TWO LANE BRIDGES |
| 15C11-10B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |

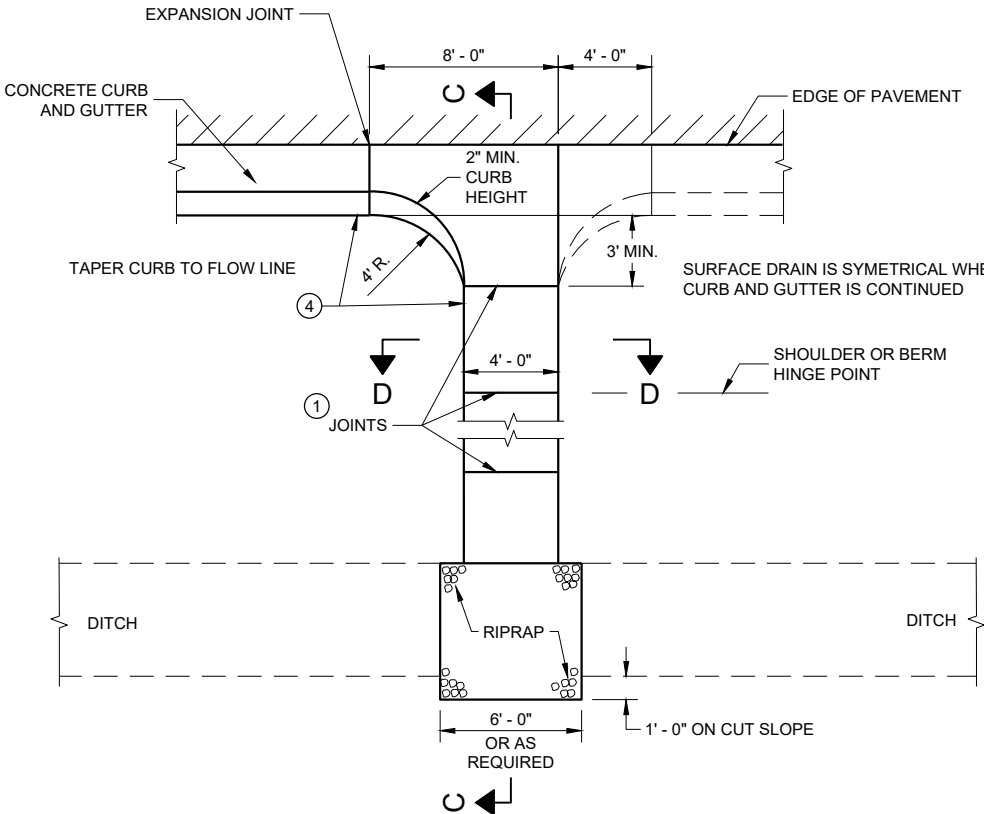
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING
FOR FLUME

PLAN VIEW
FLUME AT CURB END



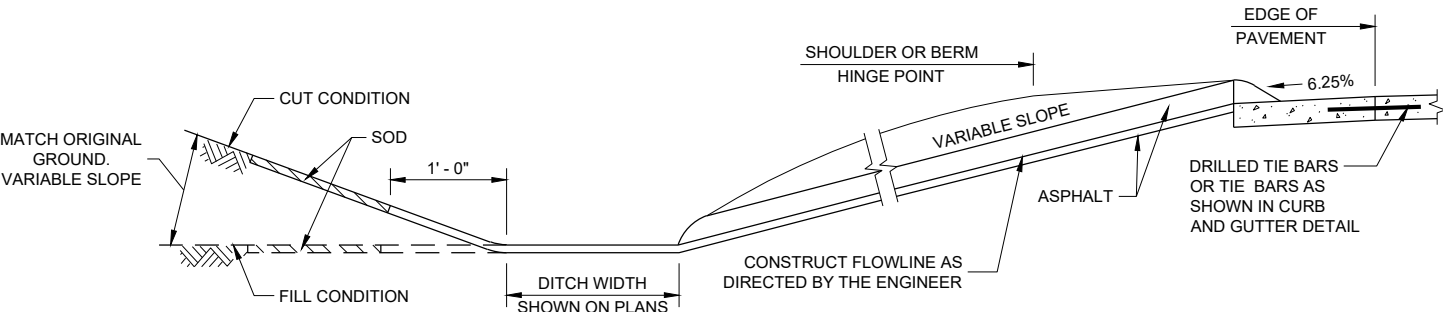
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

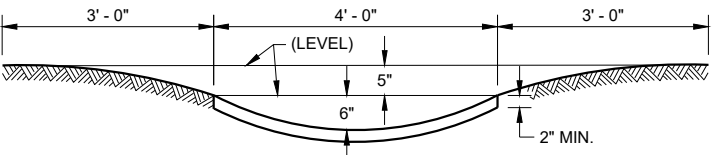
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

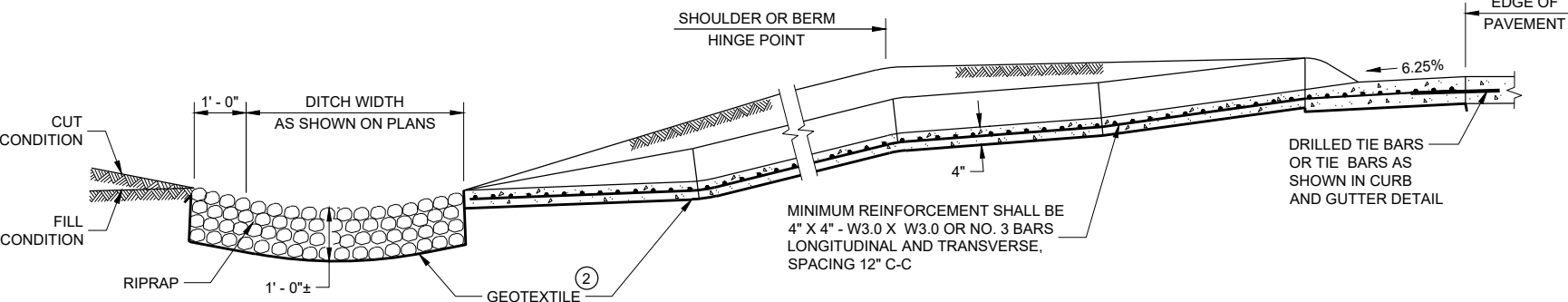
- JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- 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.



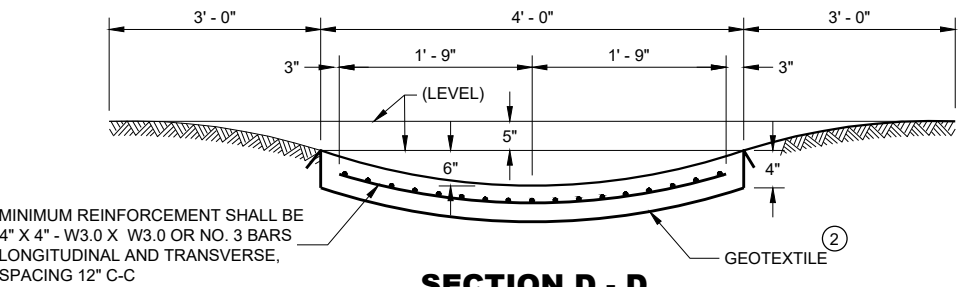
SECTION A - A



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

FHWA

/S/ Rodney Taylor

ROADWAY STANDARDS DEVELOPMENT

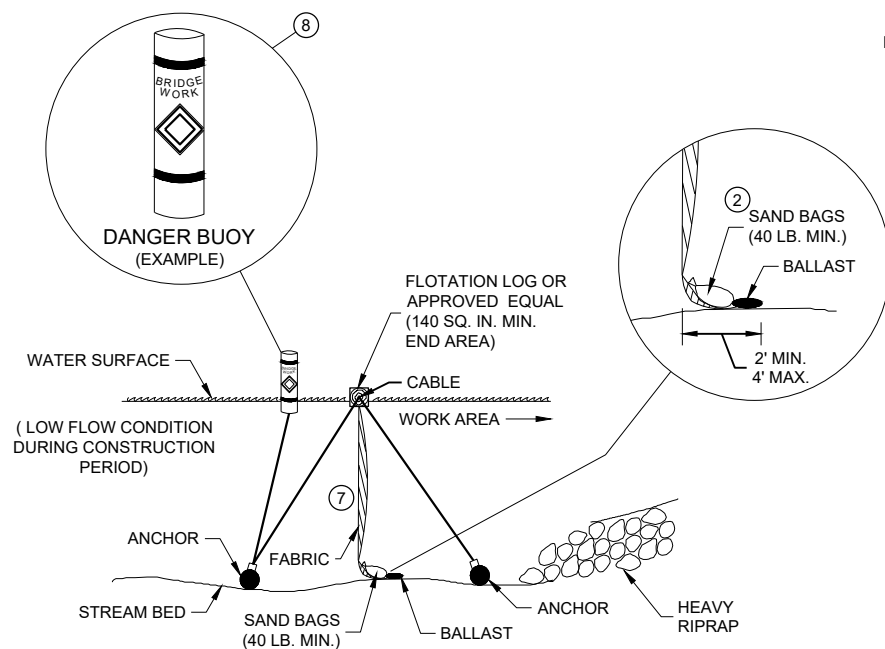
ENGINEER



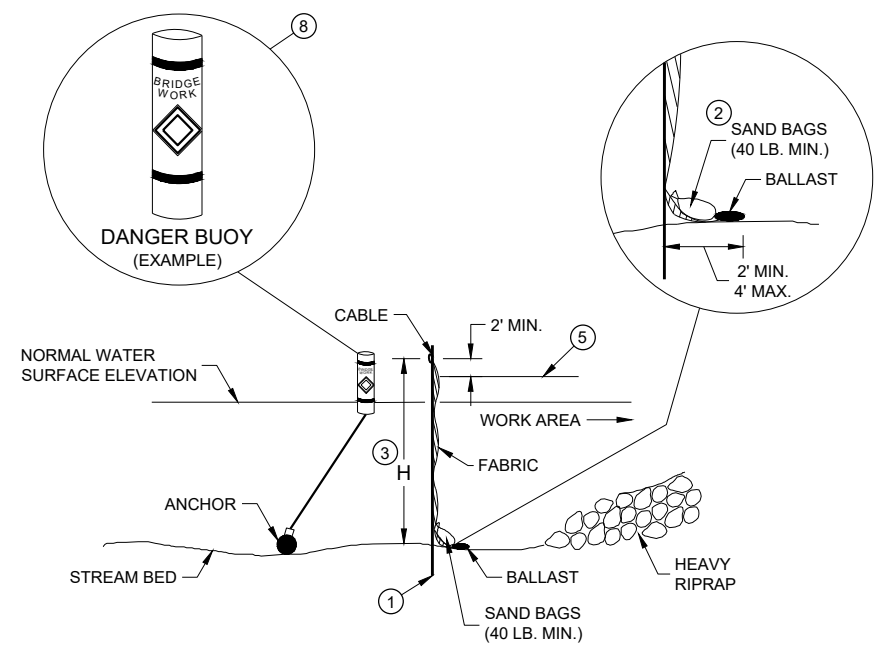
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



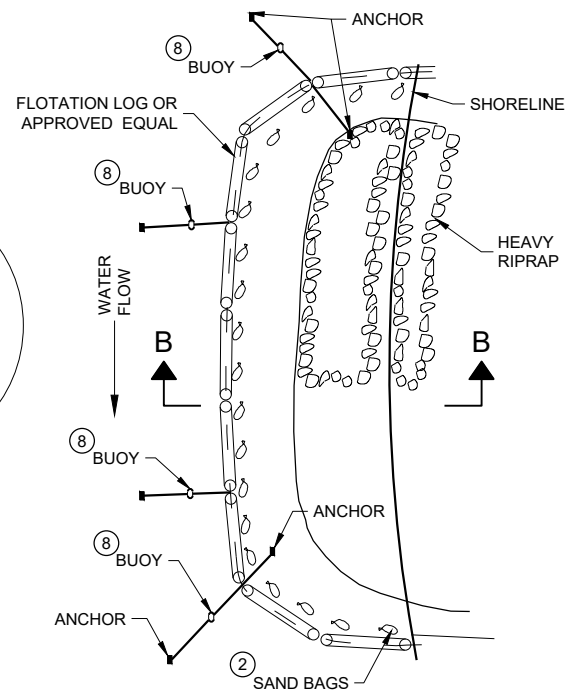
| | |
|--|---|
| <p>SILT FENCE</p> | |
| <p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p> | |
| <p>APPROVED 4-29-05 DATE</p> | <p>/s/ Beth Canestra CHIEF ROADWAY DEVELOPMENT ENGINEER</p> |
| <p>FHWA</p> | |



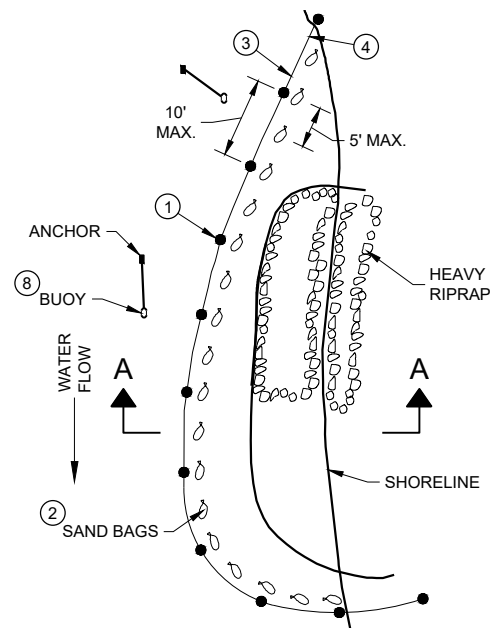
SECTION B - B

**TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6**

SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

PLAN VIEW



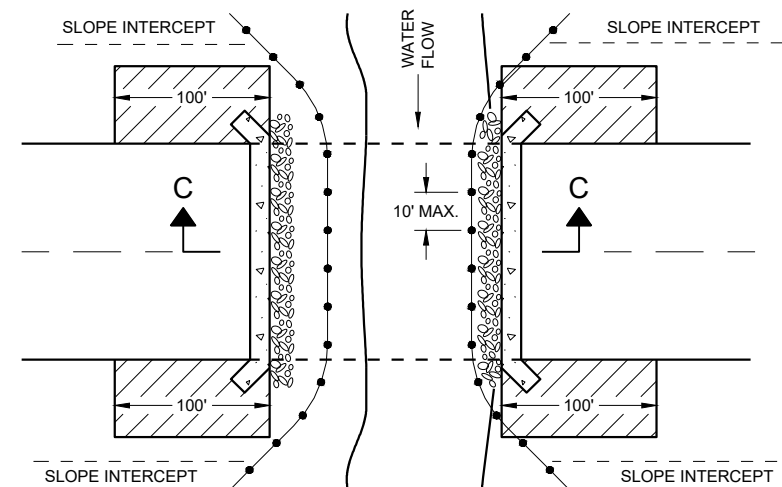
PLAN VIEW

TURBIDITY BARRIER PLACEMENT DETAILS**GENERAL NOTES**

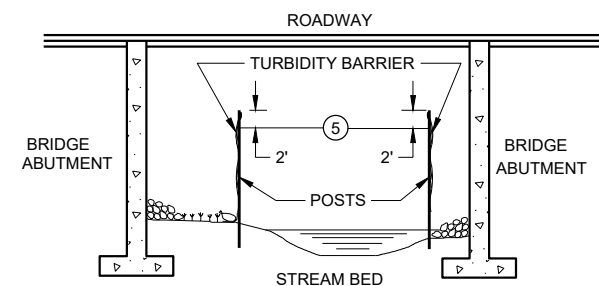
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- 1 DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- 2 SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- 3 WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
- 4 IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- 5 ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- 6 FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.
- 7 ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- 8 USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

**TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES****TURBIDITY BARRIER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/4/02

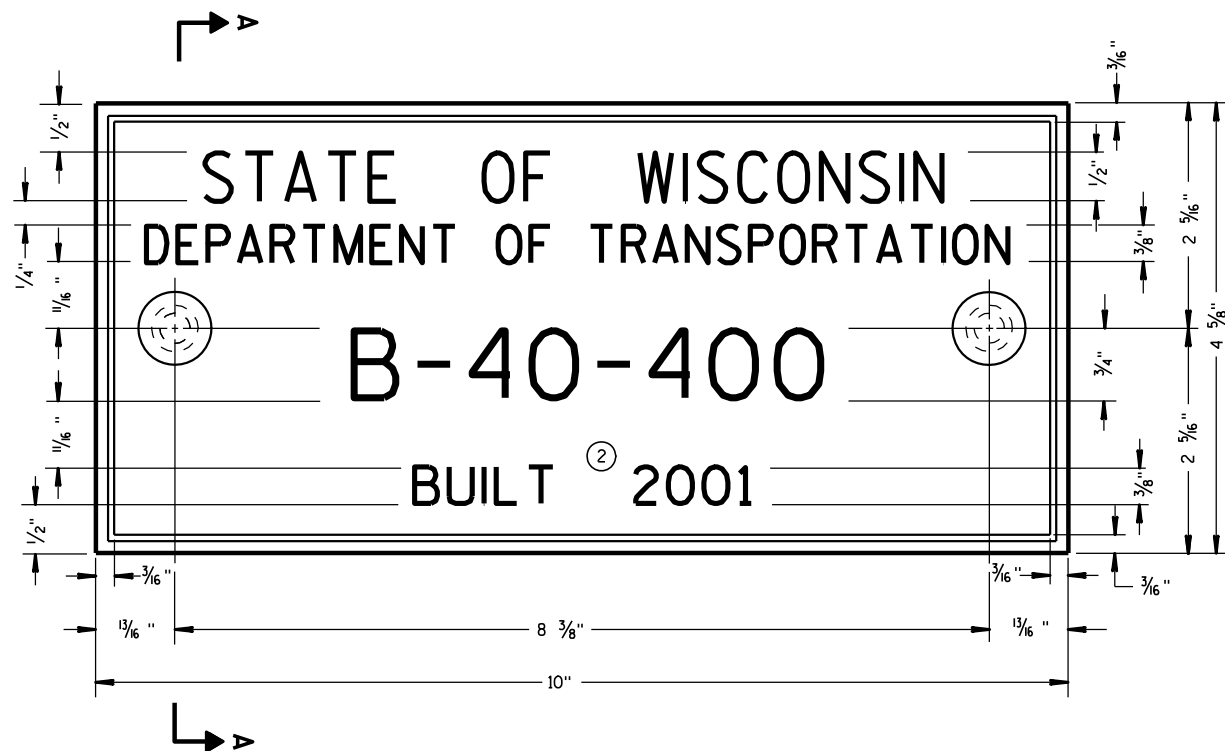
DATE

FHWA

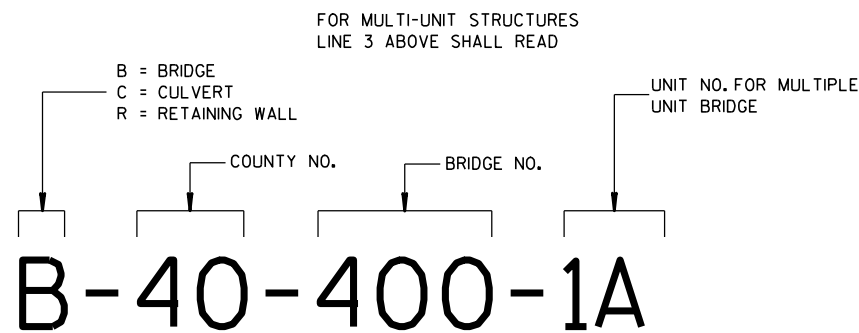
/S/ Beth Canestra

CHIEF ROADWAY DEVELOPMENT

ENGINEER



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



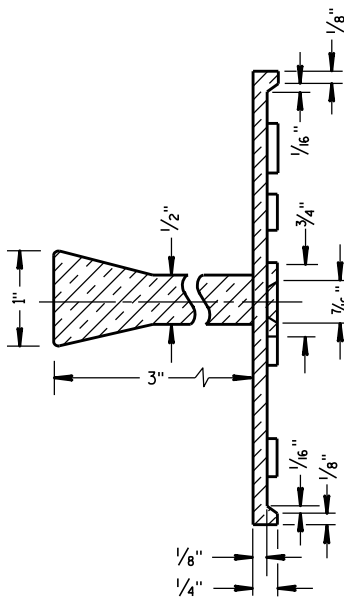
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

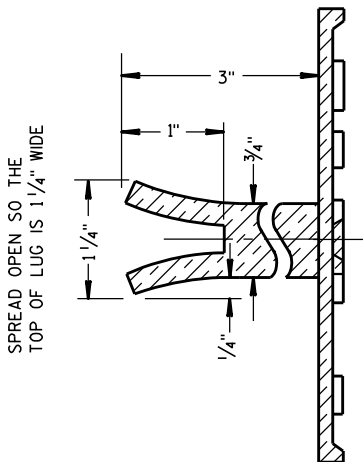
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

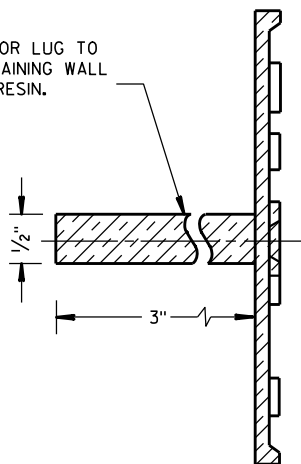


SECTION A-A



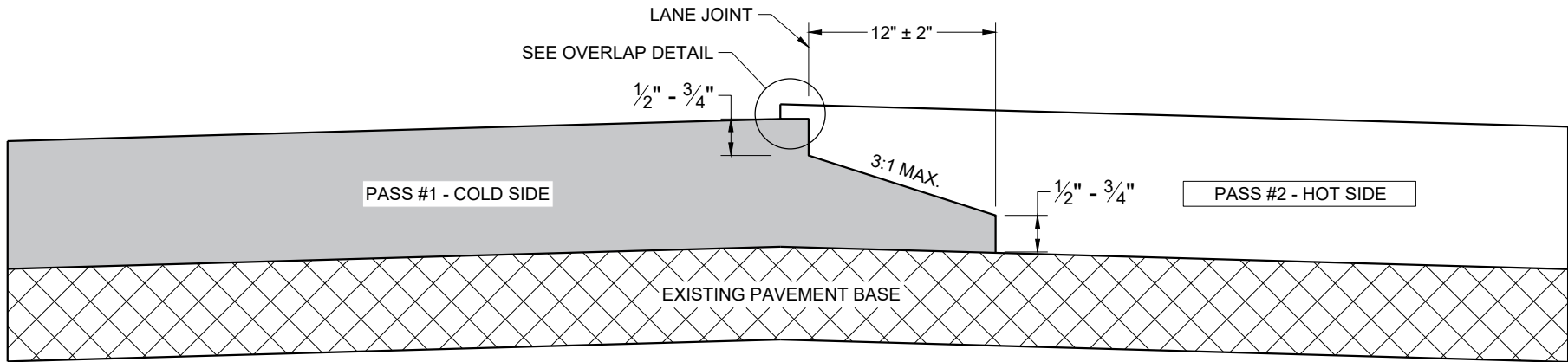
ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.

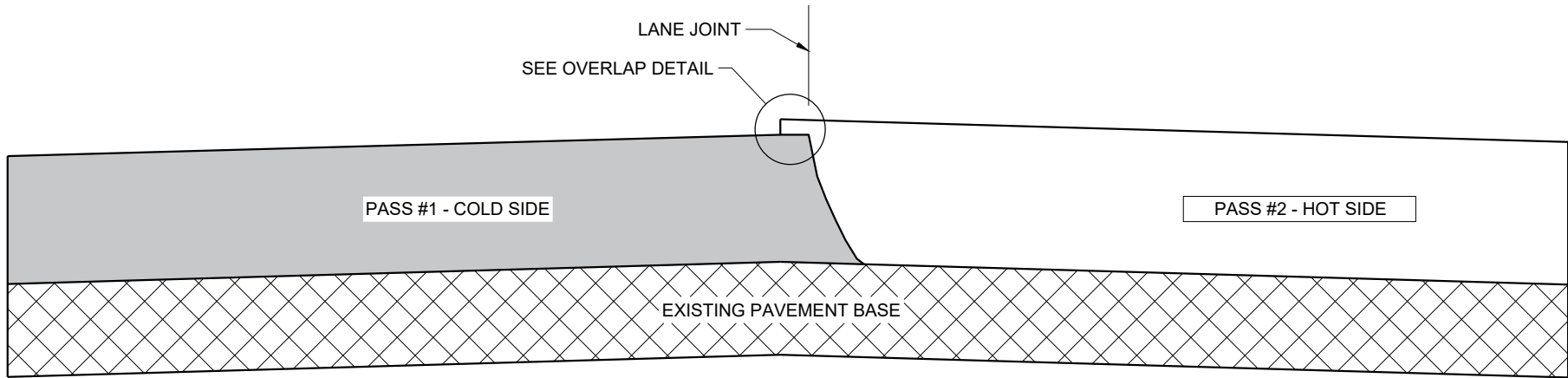


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

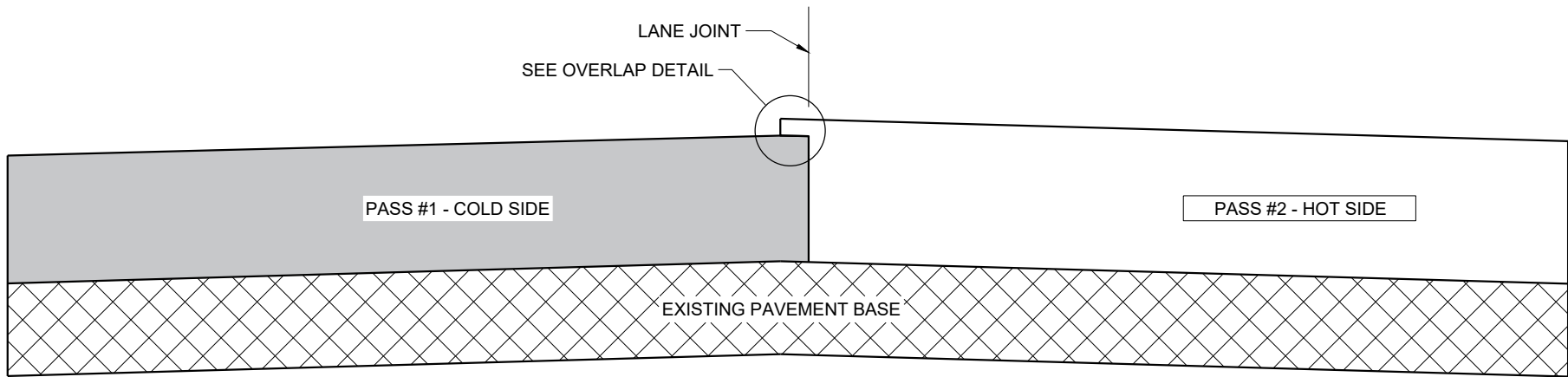
| NAME PLATE (STRUCTURES) | |
|--|--|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 3/26/10 DATE | /S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER |
| FHWA | |



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

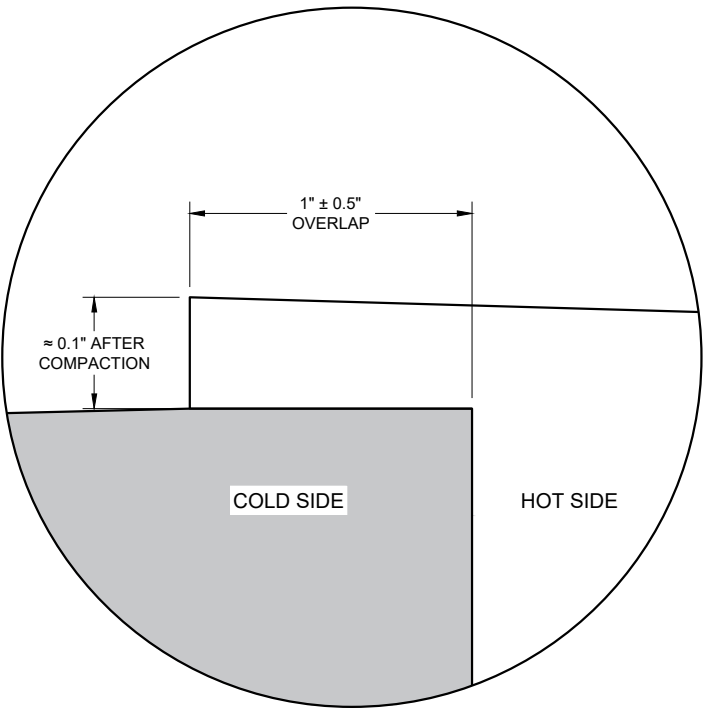
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.

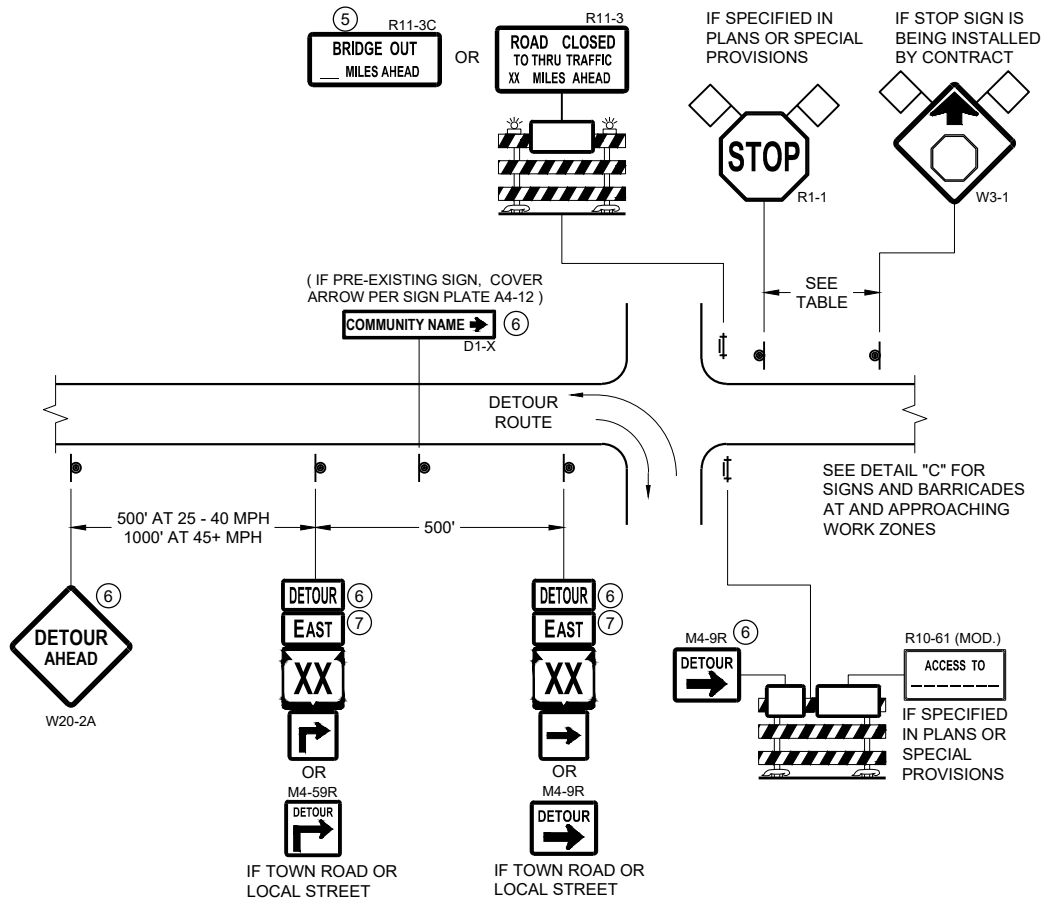


OVERLAP DETAIL (TYPICAL)

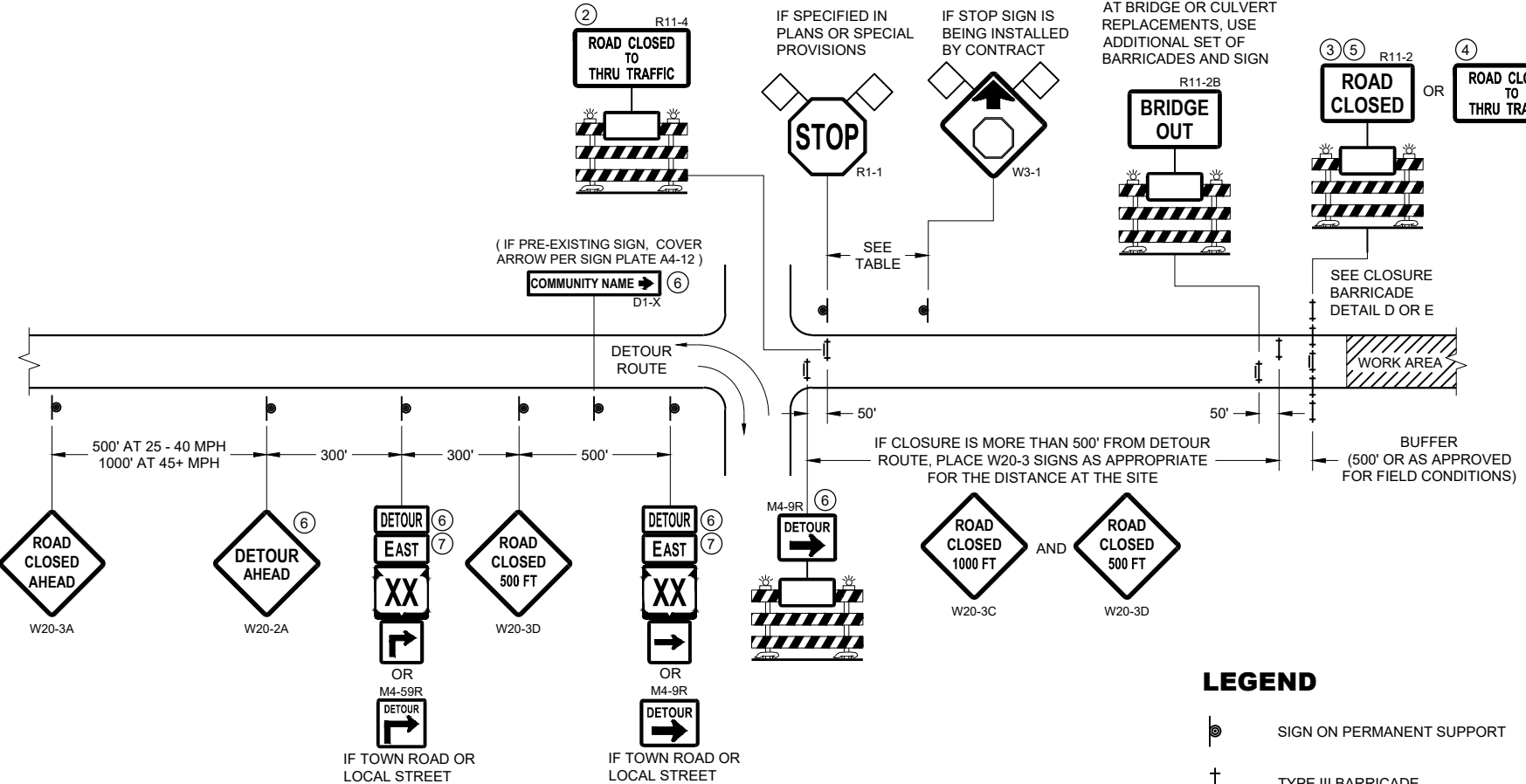
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT 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)



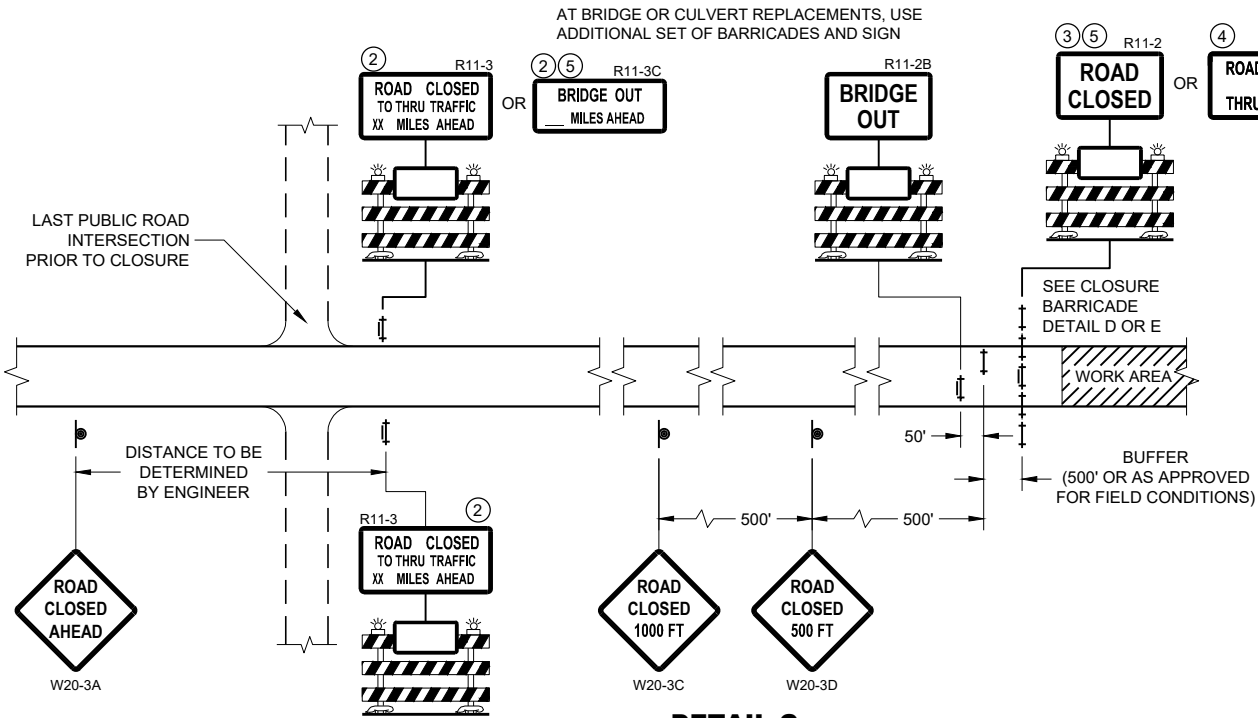
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- 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 M1 - 5A
- OR M05 - 1 OR M06 - 1

| 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



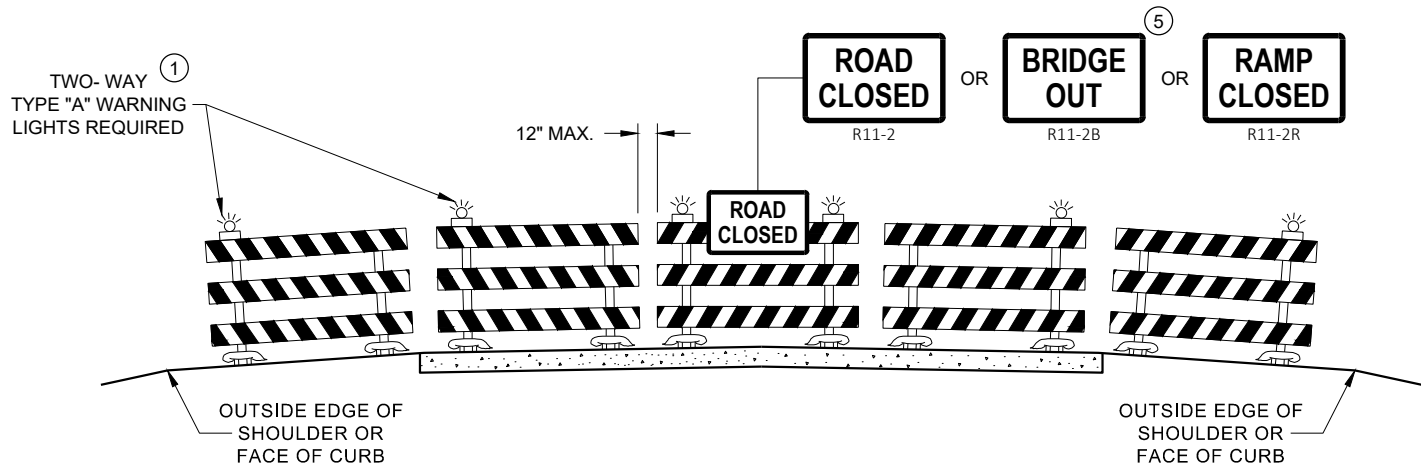
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

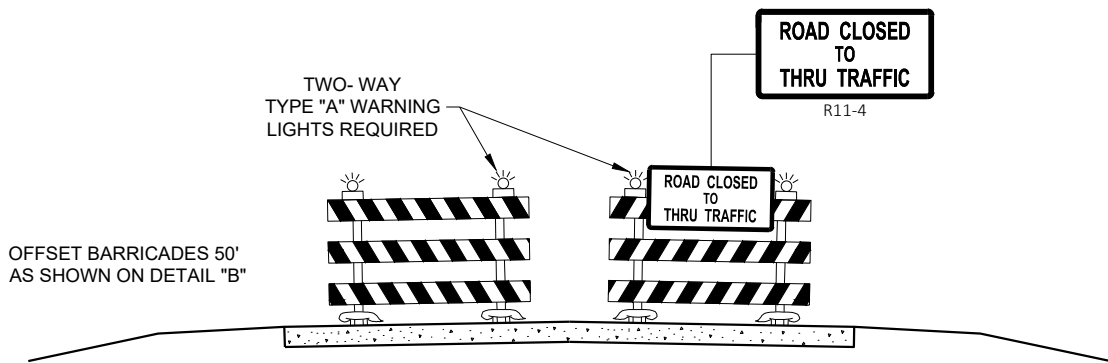
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



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"

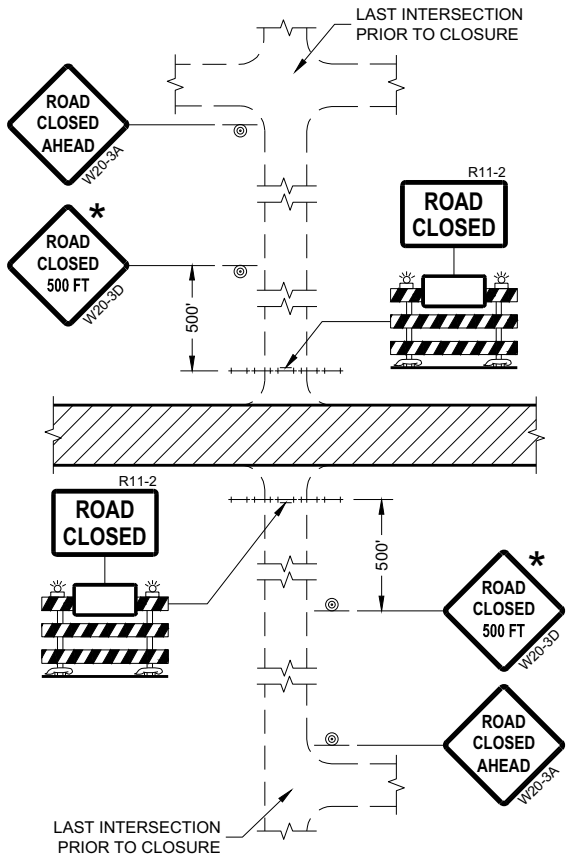
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

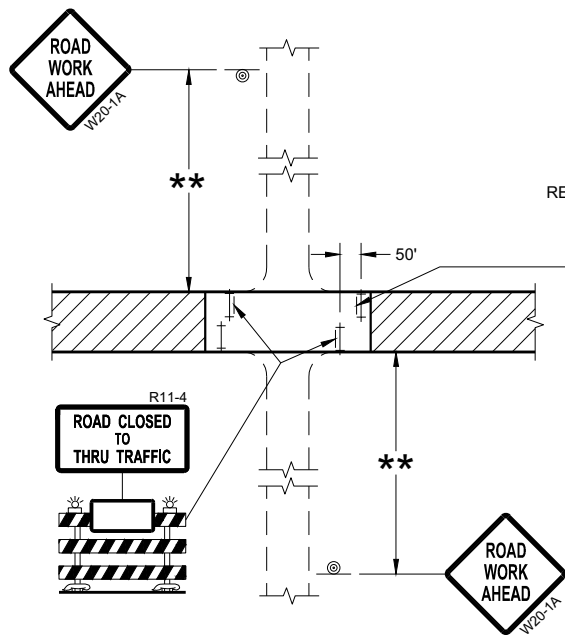
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

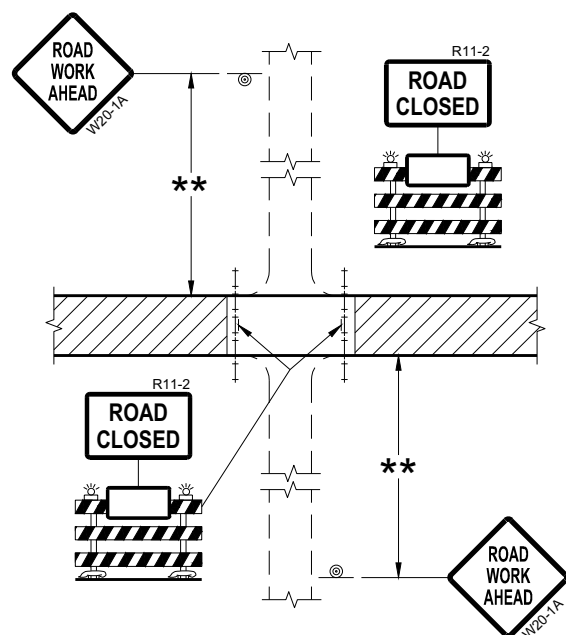
FHWA



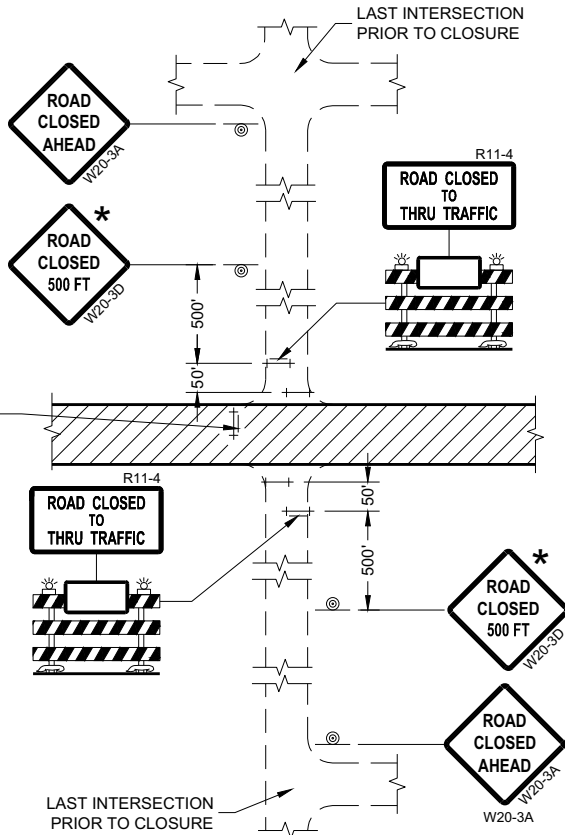
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

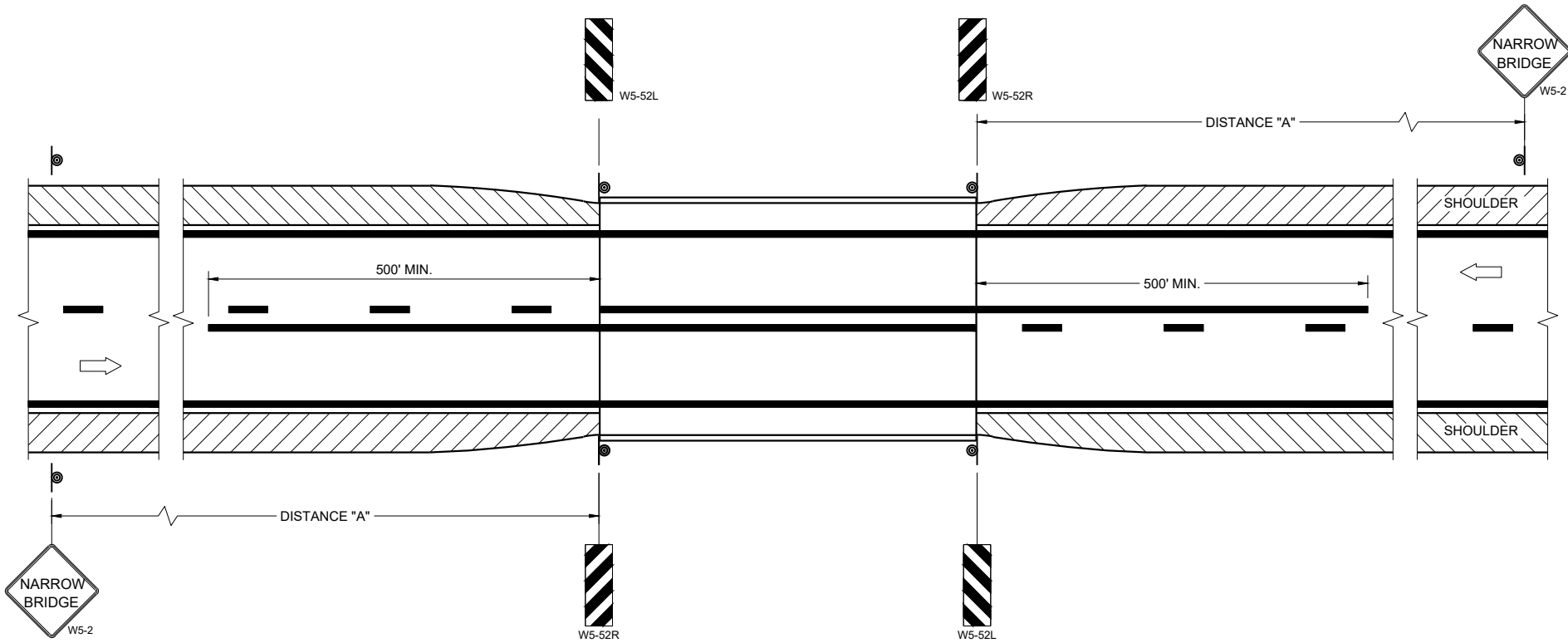
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

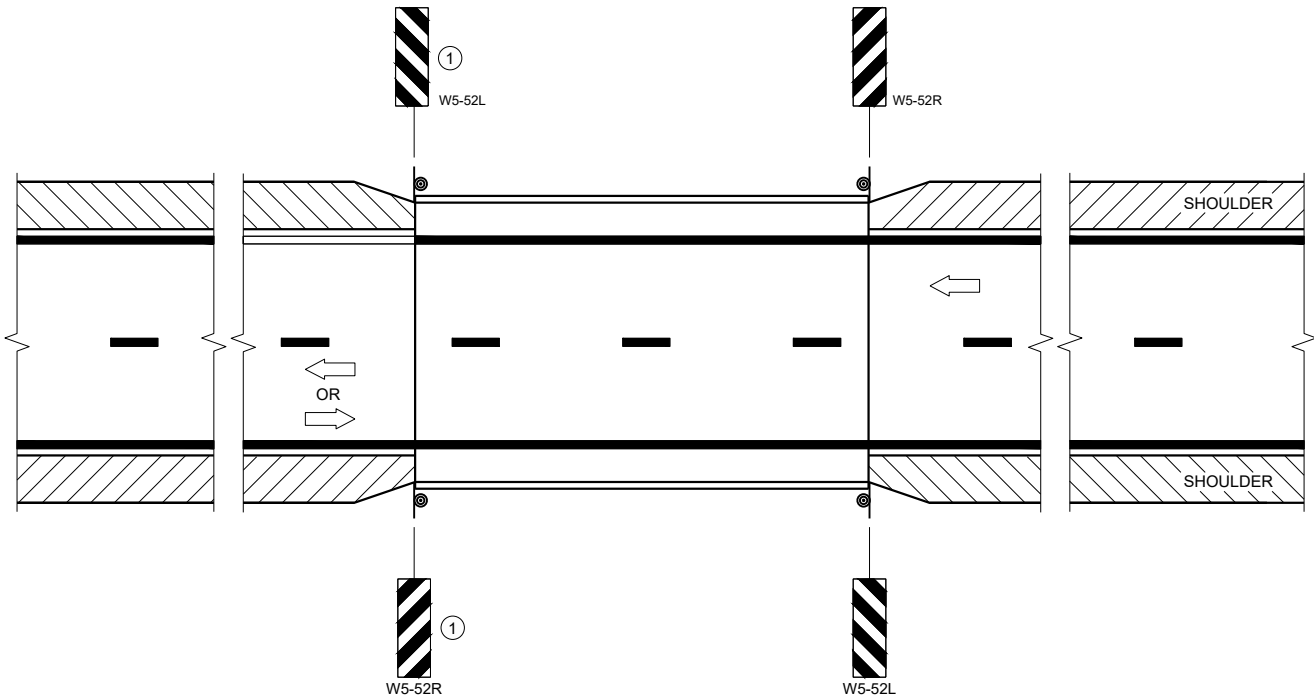
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



SITUATION 1
WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2
WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

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

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

DISTANCE TABLE

| POSTED OR 85TH PERCENTILE SPEED | DISTANCE "A" |
|---------------------------------|--------------|
| 25 | 150' |
| 30 | 200' |
| 35 | 250' |
| 40 | 300' |
| 45 | 400' |
| 50 | 550' |
| 55 | 700' |

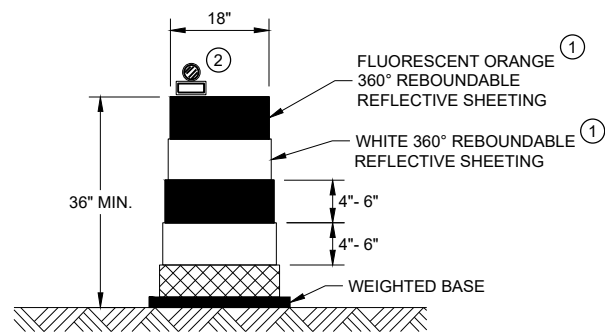
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

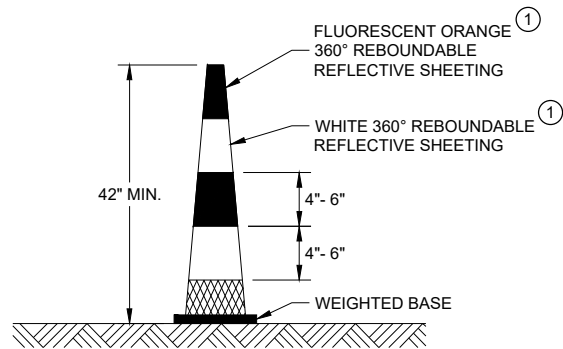
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



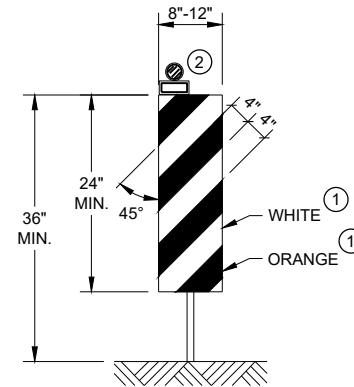
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



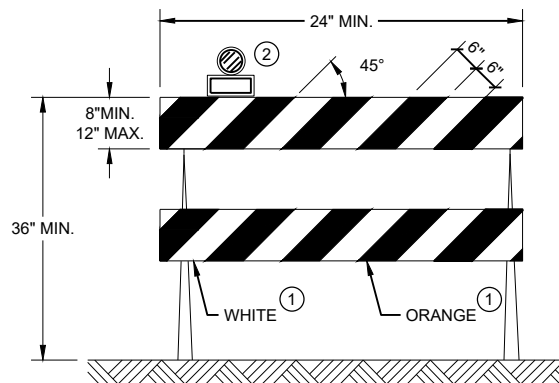
42" CONE

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



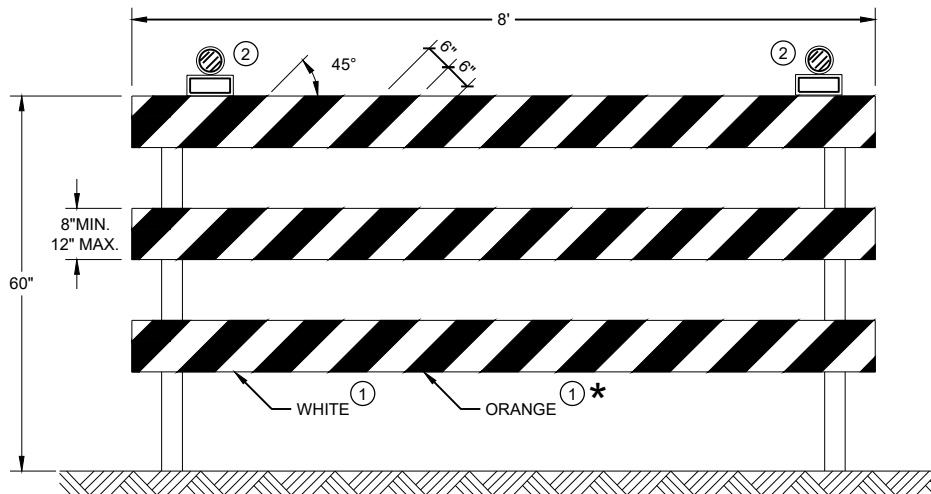
VERTICAL PANEL

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.

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.

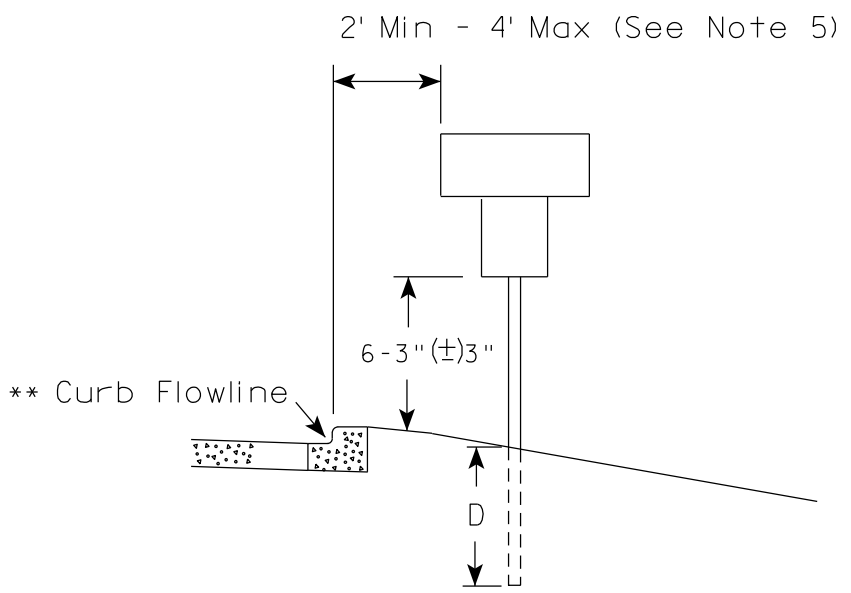
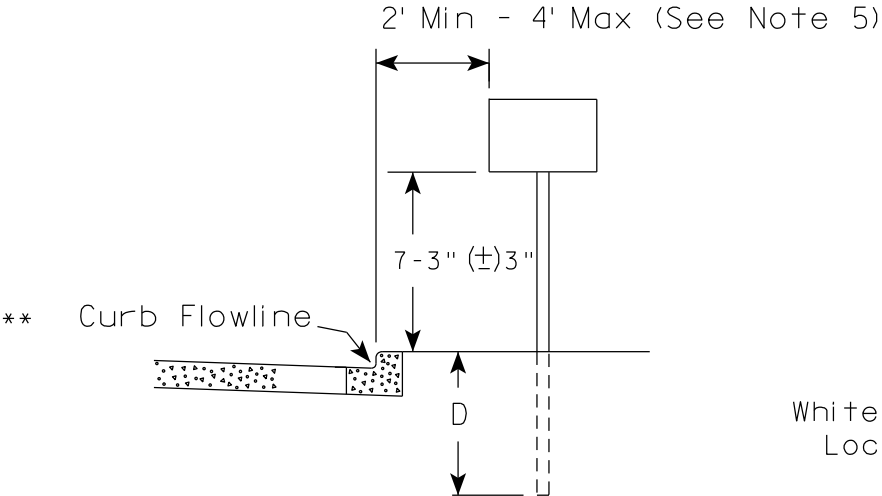
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

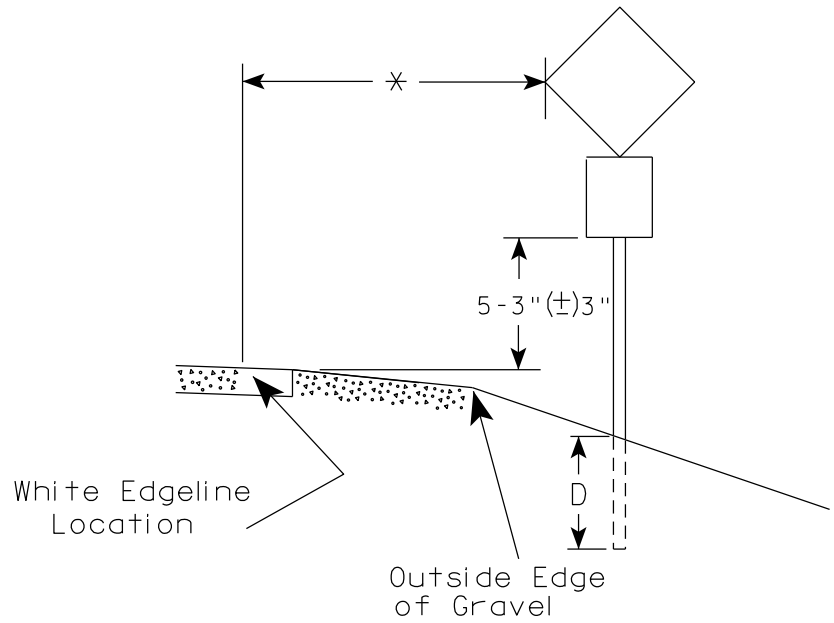
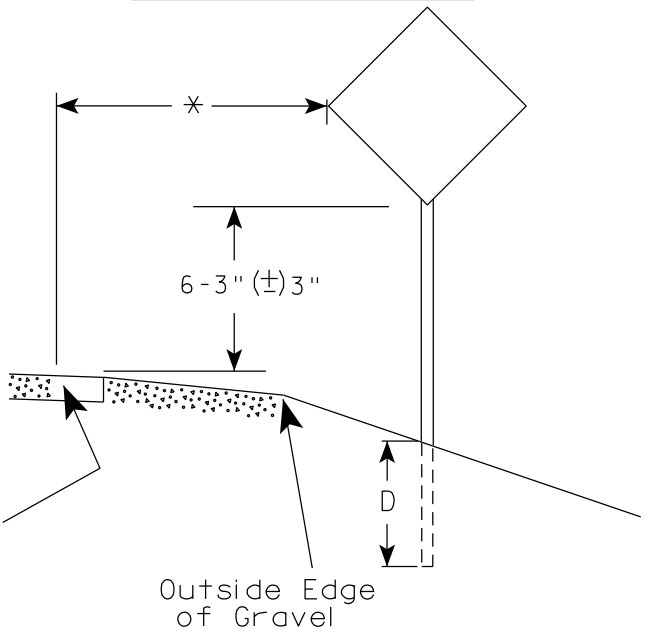
APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



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 directed by the Engineer.

POST EMBEDMENT DEPTH

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

* * 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.

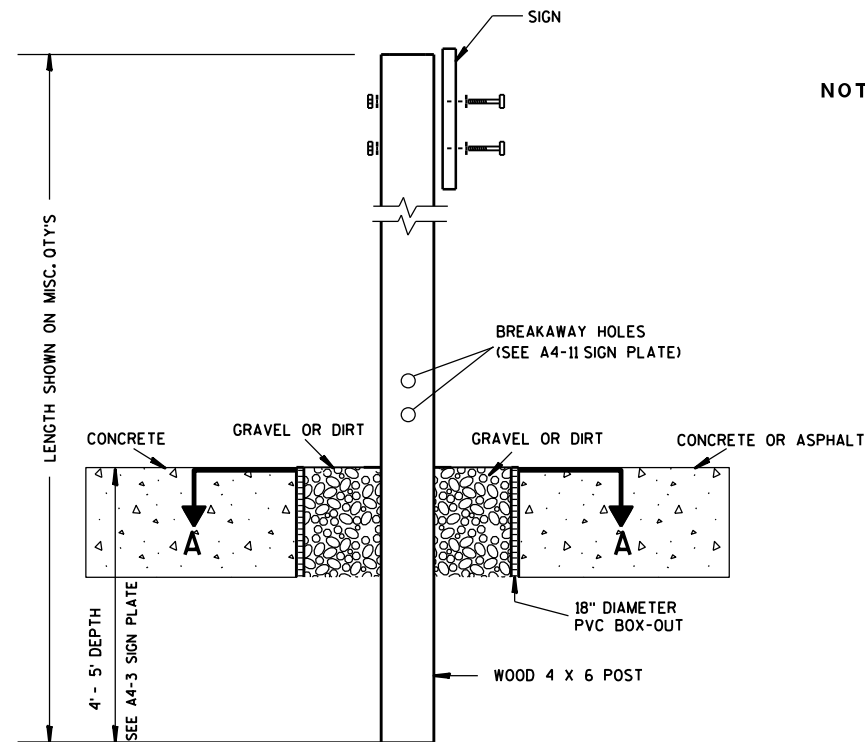
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

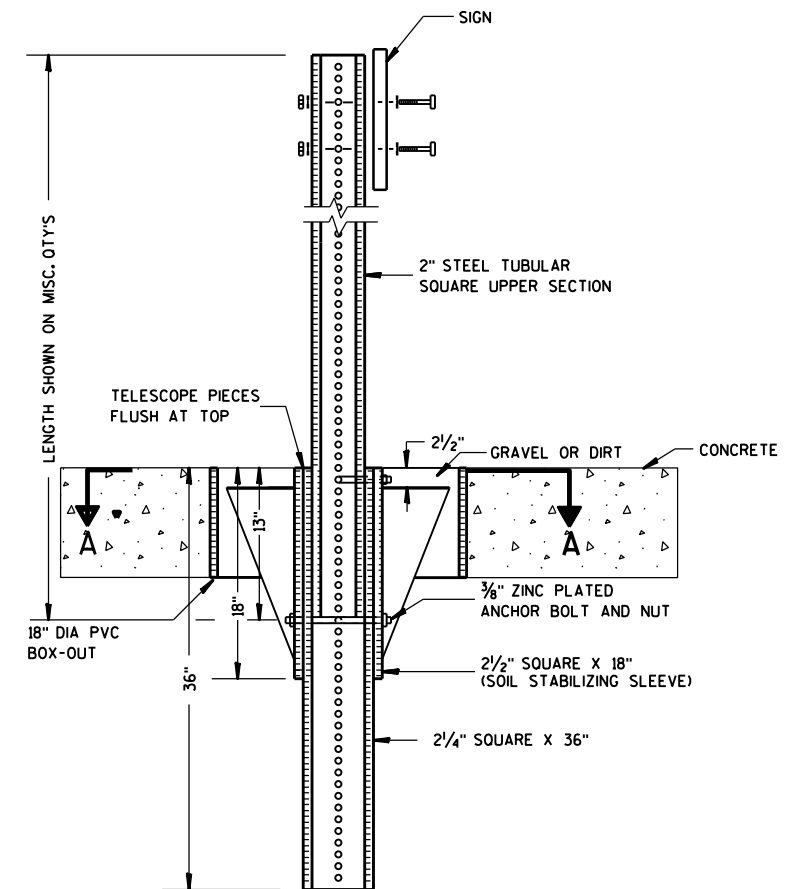
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

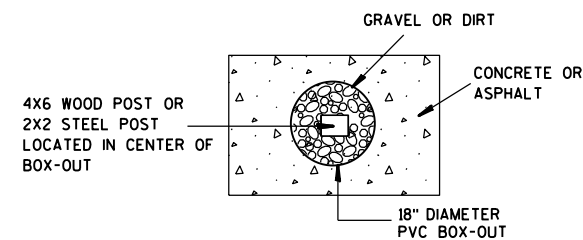
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

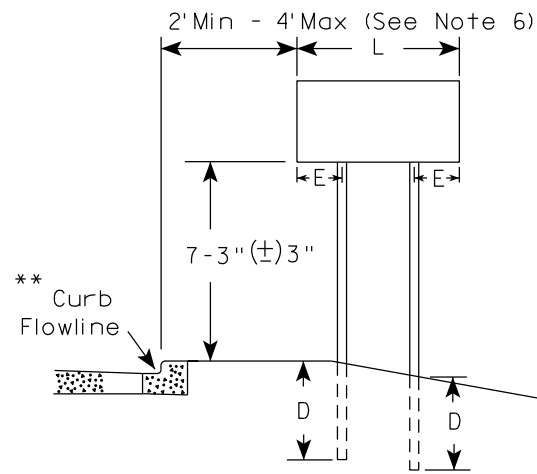
HWY:

COUNTY:

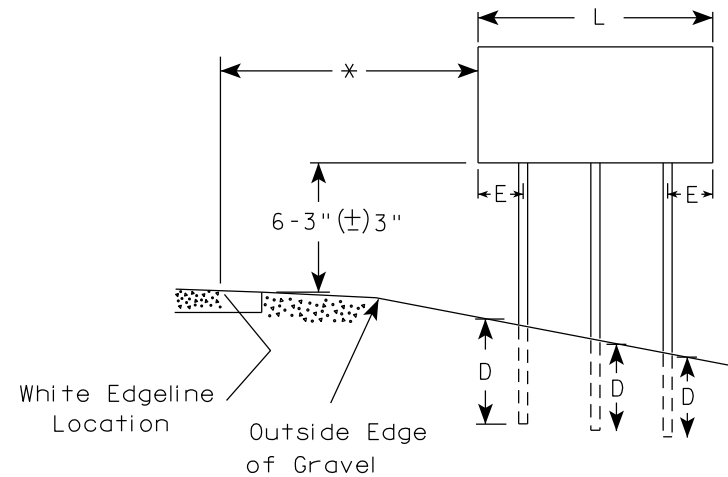
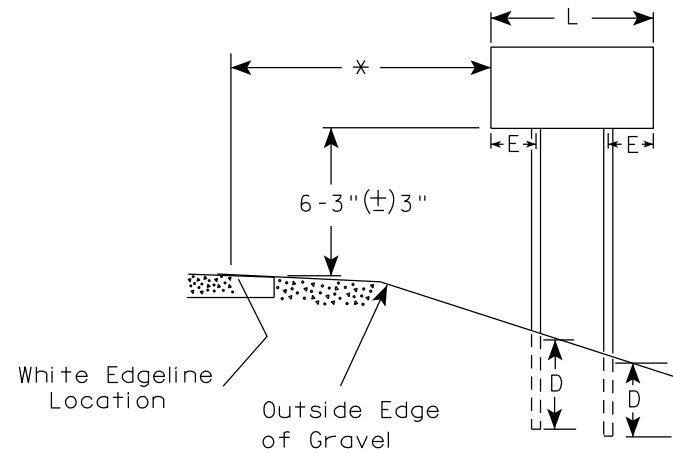
SHEET NO:

E

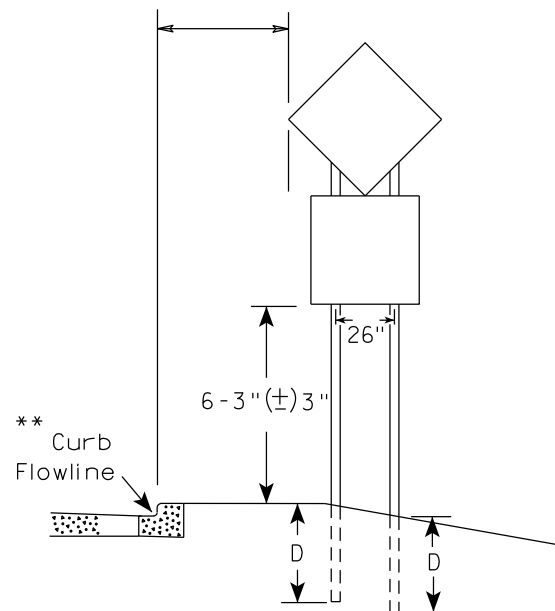
URBAN AREA



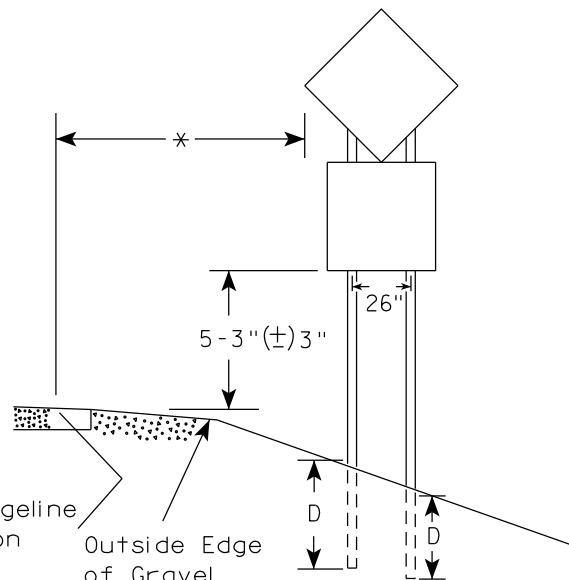
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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.

| 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" |

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

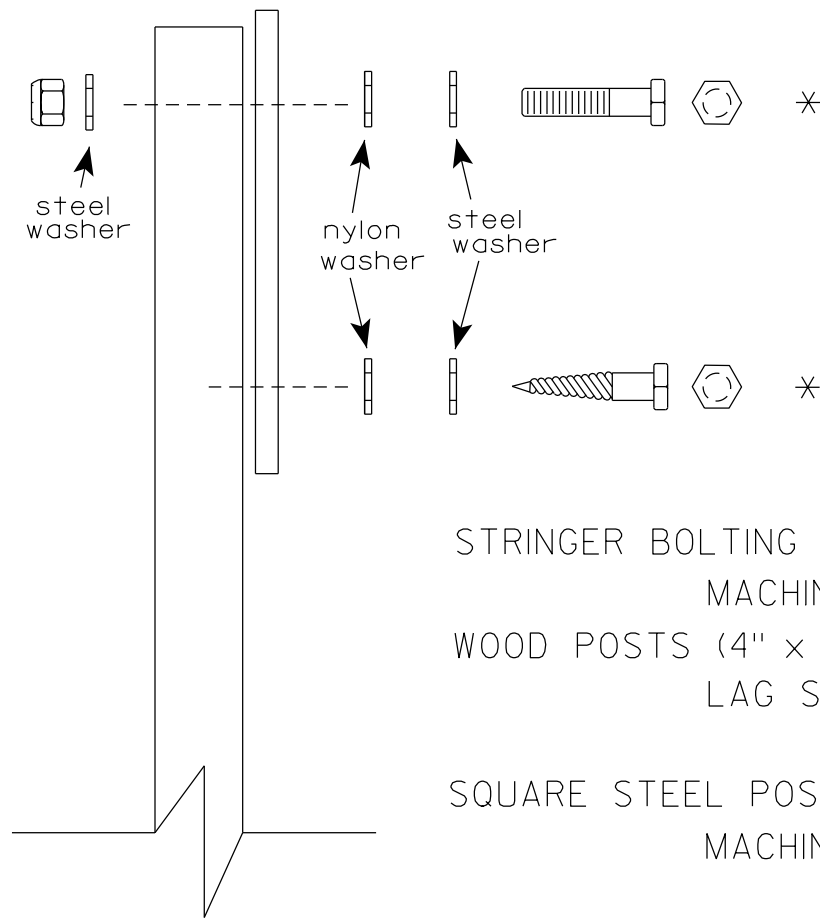
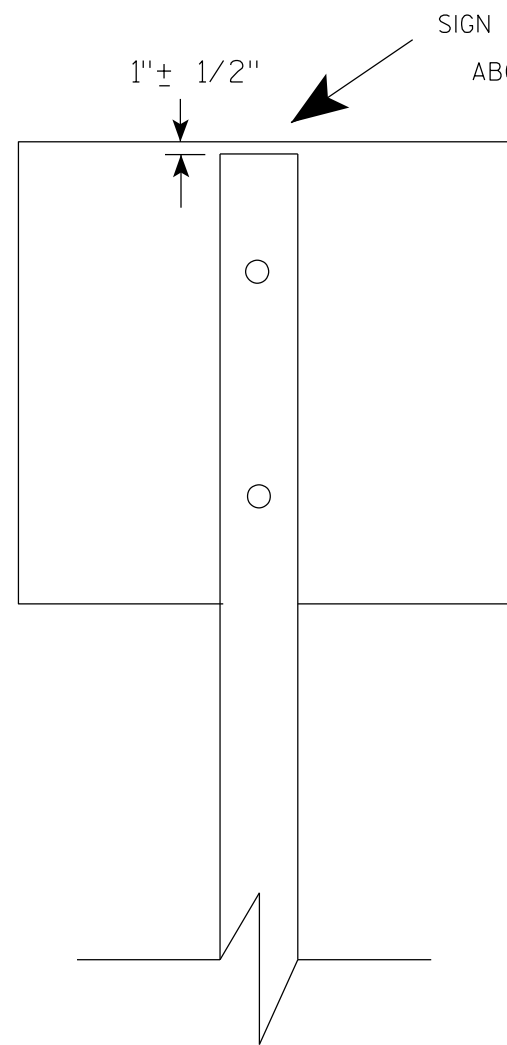
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

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 - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " 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 | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 4/1/2020 | PLATE NO. A4-8.9 |

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**

4" x 10" x 10 GA. ———→
STEEL PLATE (CUT
AS SHOWN) WELDED
TO ALL FOUR CORNERS
OF TELESPAR TUBE

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

2 1/2" TELES PAR TUBE

4" x 10" x 10 GA. STEEL PLATE (CUT AS SHOWN) WELDED TO ALL FOUR CORNERS OF TELES PAR TUBE

4"

2 1/2"

10"

3 1/2"

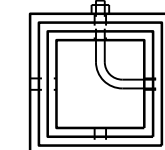
16"

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- Dimensions:**
 - Overall height: LENGTH SHOWN ON MISC. Q'TYS
 - Section A-A: 36" (total), 18" (upper), 12" (lower)
 - Section B-B: 1"
- Components:**
 - SIGN
 - SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 - 2" STEEL TUBULAR SQUARE UPPER SECTION
 - ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C
 - ALL FOUR SIDES
 - $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 - $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 - 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 - 2 1/4" SQUARE X 36"
 - TELESCOPE PIECES FLUSH AT TOP

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



DIRECTION
OF TRAFFIC

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 NO. A4-9.9

PROJECT NO:

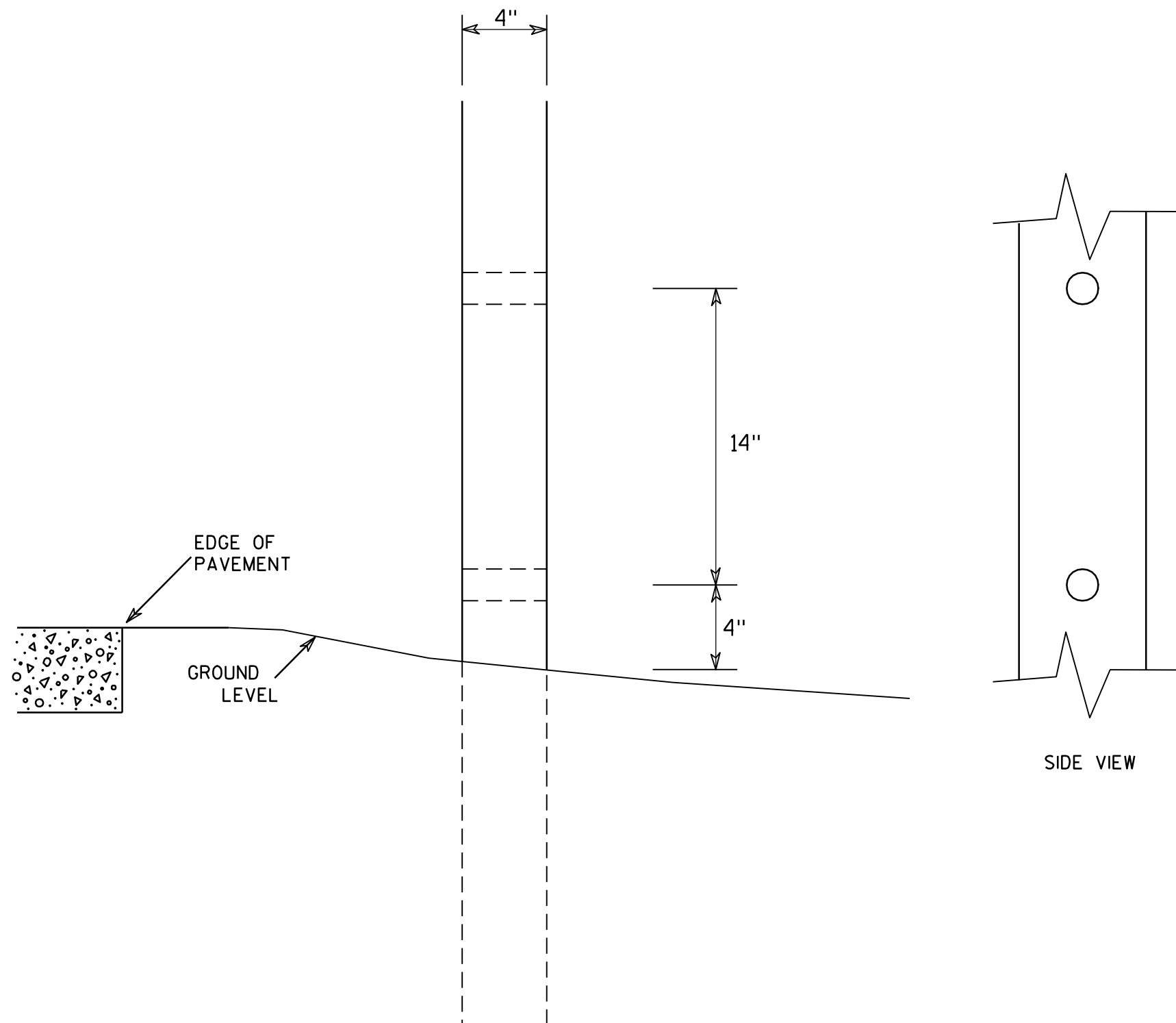
HWY:

COUNTY:

SHEET NO:

T

7



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

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:

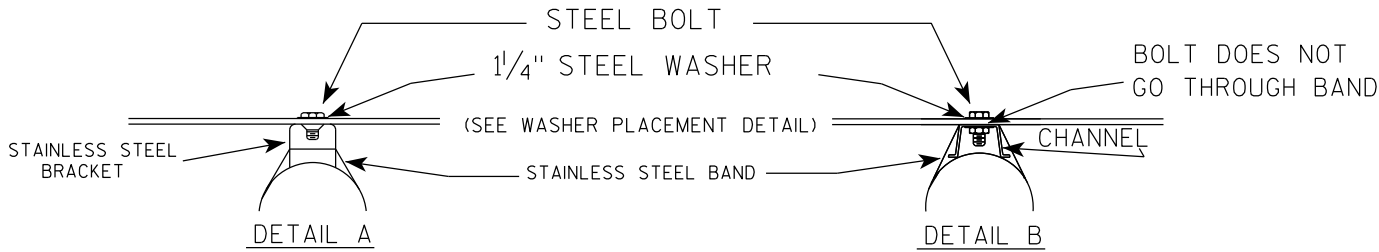
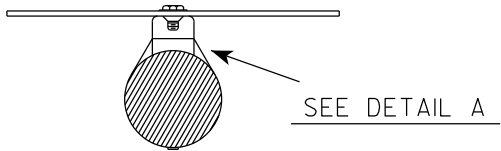
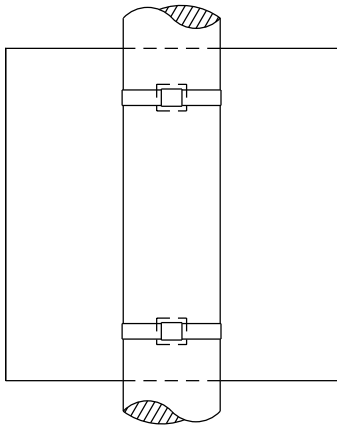
COUNTY:

SHEET NO:

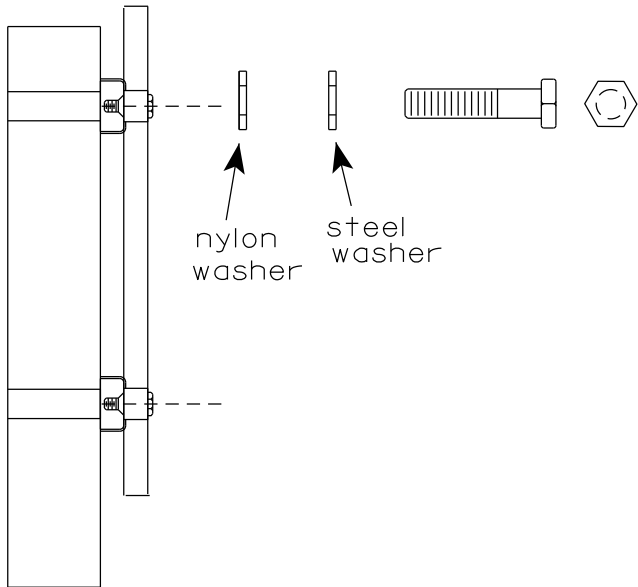
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

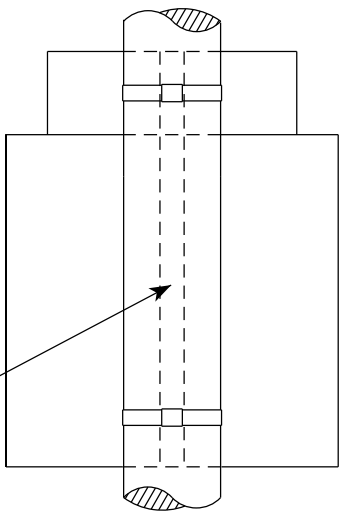


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" 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



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

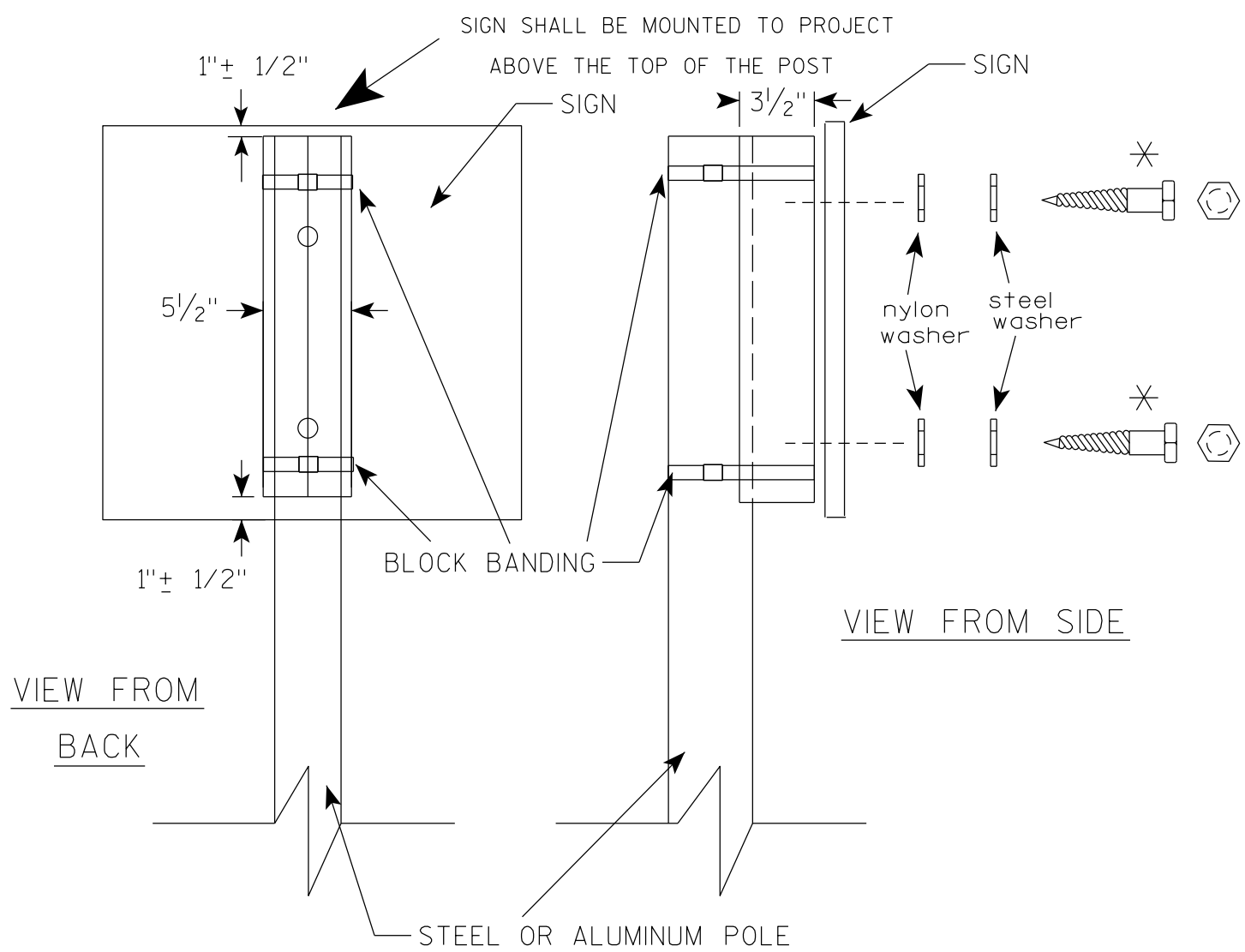
SEE DETAIL B

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

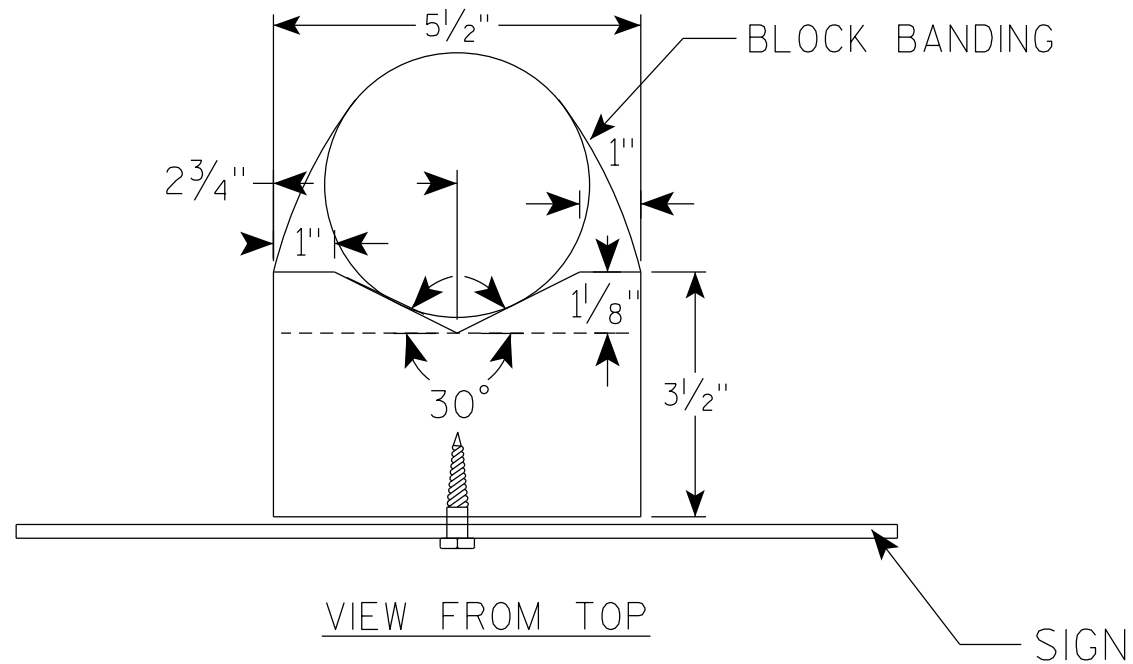
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

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, $\frac{3}{4}$ " 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 NORMALLY 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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

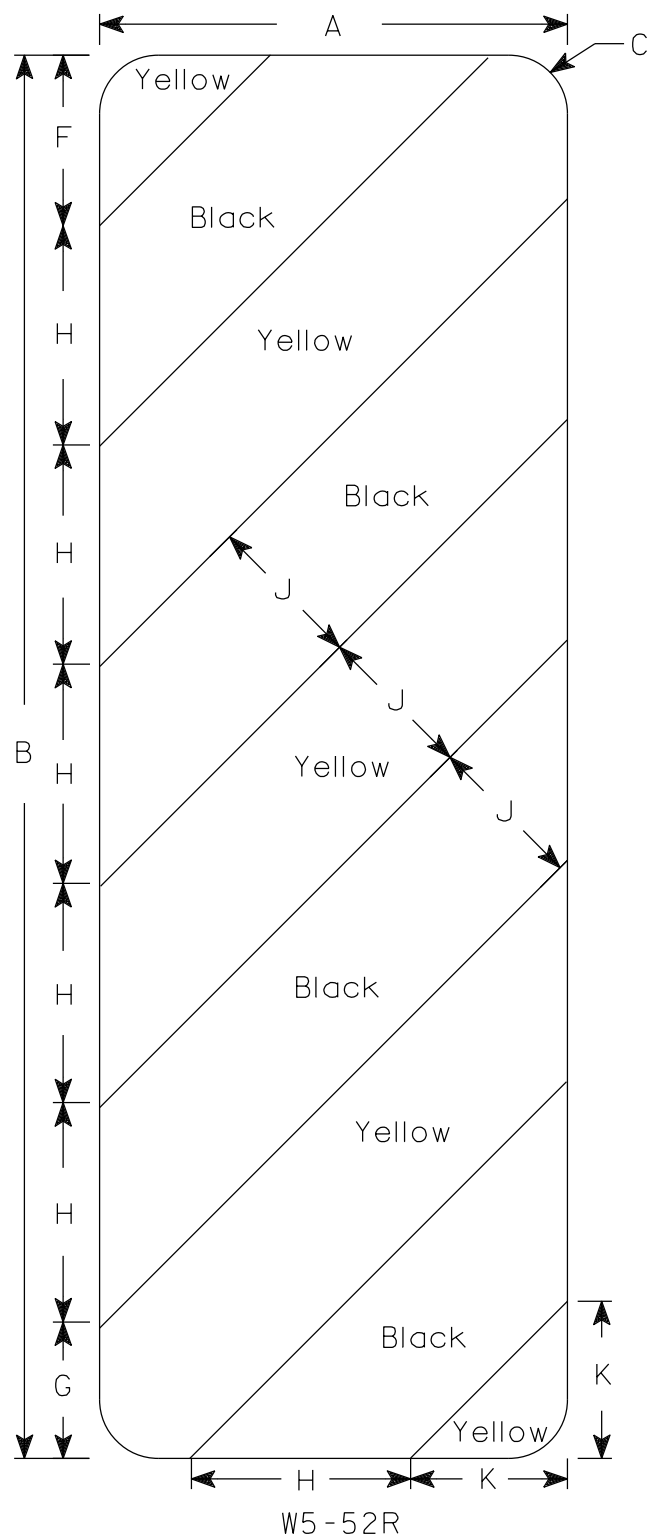
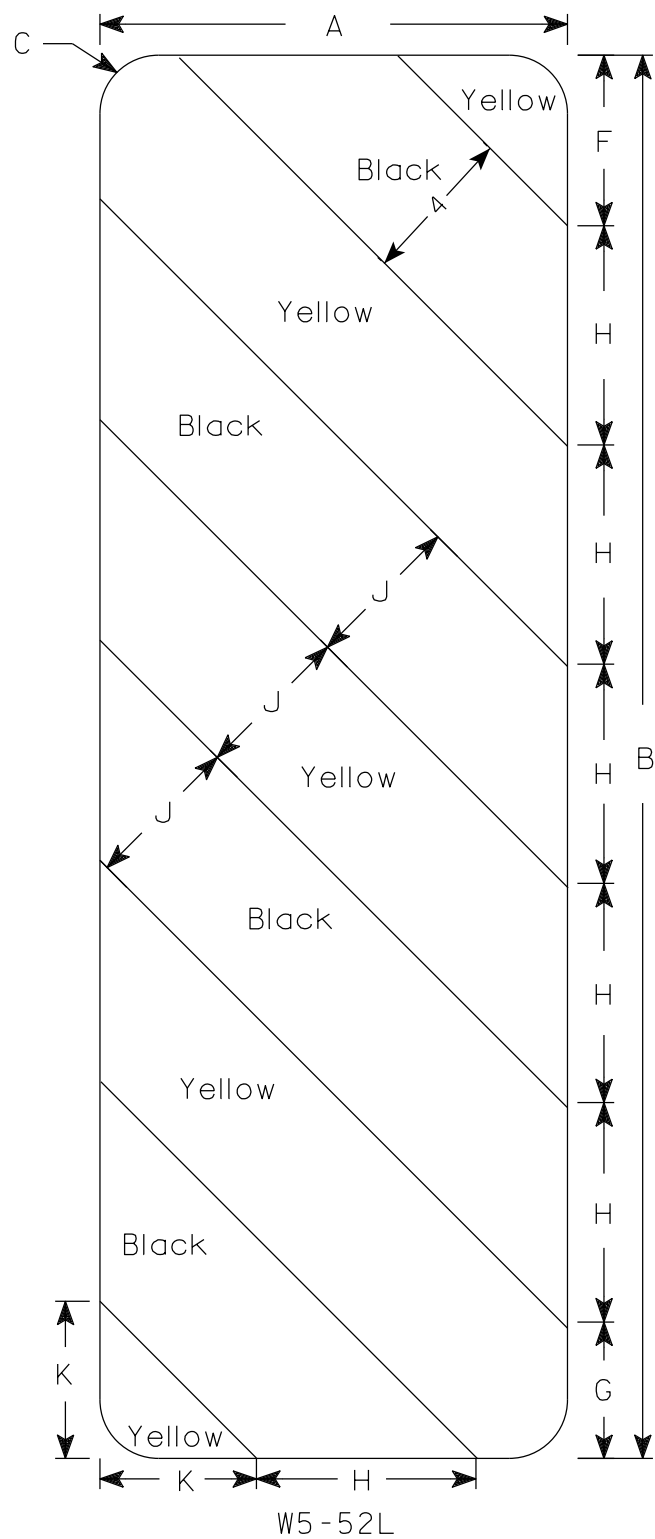
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Yellow
Message - Black
3. Alternate colors of stripes as shown.

| 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 | 12 | 36 | 1 1/2 | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 2M | 12 | 36 | 1 1/2 | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 3 | 18 | 54 | 1 1/2 | | | 6 | 5 1/2 | 8 1/2 | 45° | 6 | 6 9/16 | | | | | | | | | | | | | | | | 6.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

DESIGN DATA

LIVE LOAD:

DESIGN LOADING _____ HL-93
INVENTORY RATING FACTOR _____ RF=1.41
OPERATING RATING FACTOR _____ RF=1.83
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) _____ 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY, SUPERSTRUCTURE _____ f'c = 4,000 P.S.I.
ALL OTHER _____ f'c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL _____
REINFORCEMENT, GRADE 60 _____ fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEP HP 12-INCH X 53 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 25 FT PILE LENGTHS AT BOTH ABUTMENTS. PIER TO BE SUPPORTED ON PILING STEEL HP 12-INCH X 53 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 25 FT PILE LENGTHS AT PIER. PILE POINTS REQUIRED AT ALL LOCATIONS.

**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 DRIVEN PILE CAPACITY.

TRAFFIC DATA

A.D.T. (2025) _____ 70
A.D.T. (2045) _____ 100
DESIGN SPEED _____ 25 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY _____
DRAINAGE AREA _____ 15.5 SQ. MI.
Q₁₀₀ TOTAL _____ 3,480 C.F.S.
THROUGH STRUCTURE _____ 3,480 C.F.S.
OVERTOPPING ROADWAY _____ N/A
VELOCITY - THROUGH STRUCTURE _____ 9.7 F.P.S.
WATERWAY AREA - THROUGH STRUCTURE _____ 360 SQ. FT.
HIGH WATER₁₀₀ ELEVATION _____ 1176.77
SCOUR CRITICAL CODE _____ 5

EROSION CONTROL

Q₂ _____ 820 C.F.S.
VELOCITY₂ _____ 4.46 F.P.S.
HIGH WATER₂ ELEVATION _____ 1,170.61

LIST OF DRAWINGS

GENERAL PLAN _____ 1.
CROSS SECTION AND QUANTITIES _____ 2.
SUBSURFACE EXPLORATION _____ 3.
WEST ABUTMENT _____ 4.
WEST ABUTMENT DETAILS _____ 5.
EAST ABUTMENT _____ 6.
EAST ABUTMENT DETAILS _____ 7.
PIER _____ 8.
SUPERSTRUCTURE _____ 9.
SUPERSTRUCTURE DETAILS _____ 10.
SINGLE SLOPE PARAPET 42SS _____ 11.

RIPRAP HEAVY LAYOUT

| POINT | STATION | OFFSET |
|-------|---------|---------|
| A | 10+88 | 20' LT. |
| B | 10+83 | 20' LT. |
| C | 10+83 | 31' LT. |
| D | 11+12 | 31' LT. |
| E | 11+41 | 31' LT. |
| F | 11+77 | 31' LT. |
| G | 11+77 | 20' LT. |
| H | 11+72 | 20' LT. |
| I | 11+77 | 20' RT. |
| J | 11+82 | 20' RT. |
| K | 11+82 | 31' RT. |
| L | 11+61 | 31' RT. |
| M | 11+19 | 31' RT. |
| N | 10+87 | 31' RT. |
| O | 10+87 | 20' RT. |
| P | 10+92 | 20' RT. |

BENCH MARKS

| NO. | STA. | DESCRIPTION | ELEV. |
|-----|-------|--------------------------------|---------|
| 2 | 8+90 | 3/4" IRON REBAR SET, 13.5' RT. | 1181.48 |
| 3 | 12+71 | 3/4" IRON REBAR SET, 18.3' RT. | 1177.21 |
| 4 | 14+62 | 3/4" IRON REBAR SET, 21.6' RT. | 1178.49 |

PLAN B-37-483

(TWO-SPAN REINFORCED CONCRETE FLAT SLAB STRUCTURE)

INDICATES WING NUMBER

ELEVATION

(NORMAL TO ROCKY RUN)

DESIGN CONSULTANT

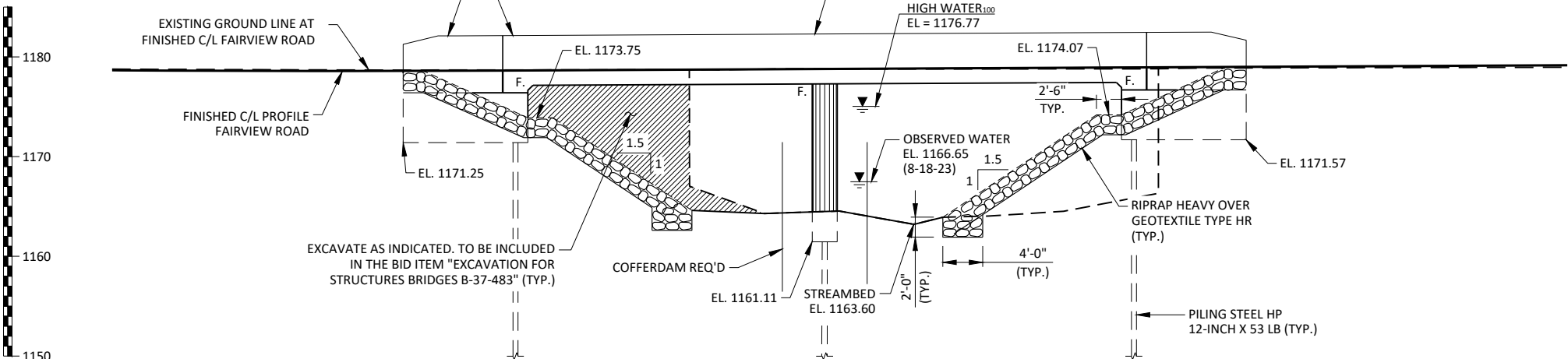
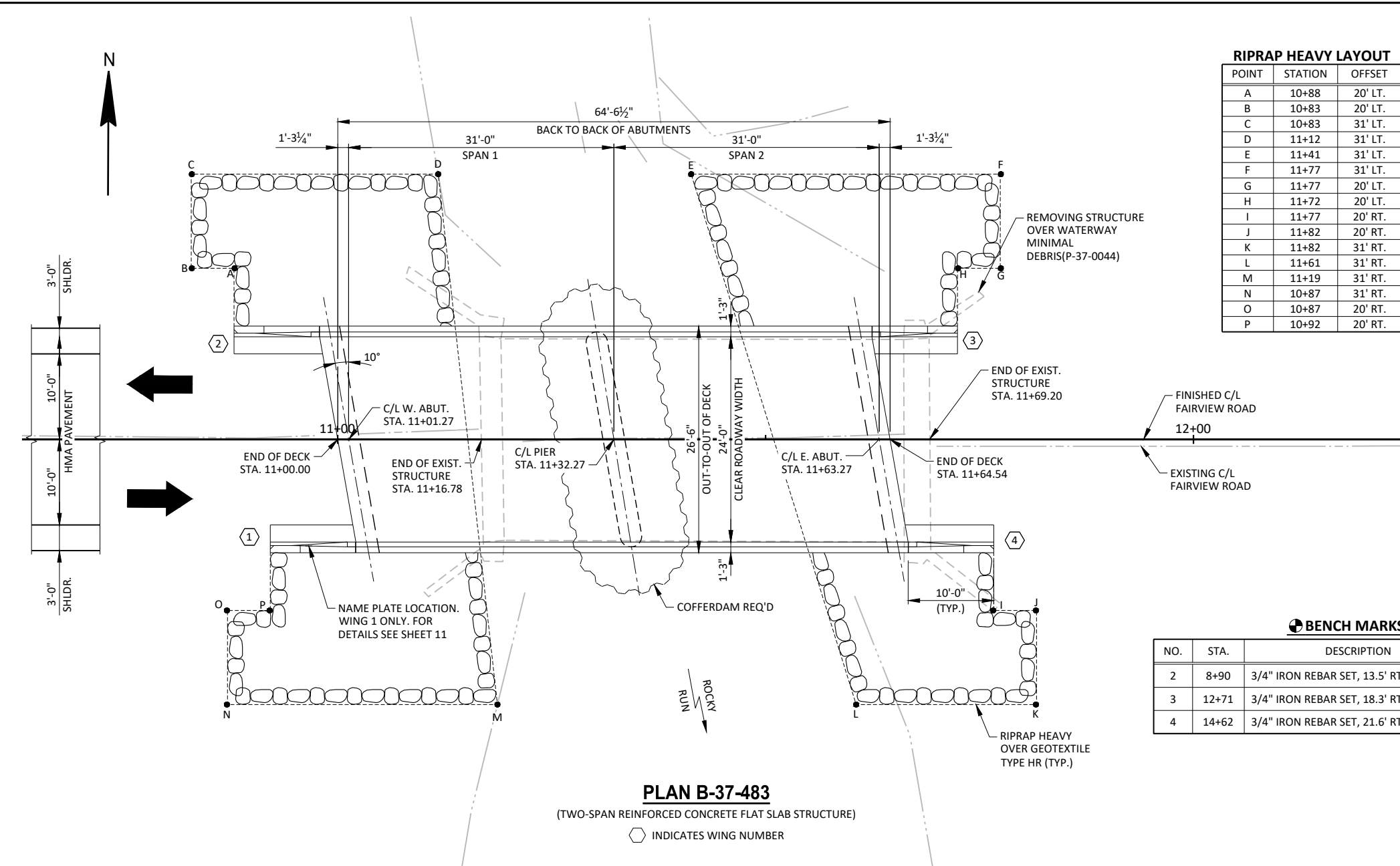
PATRICK BOLAND, PE
(608) 588-7484

BRIDGE OFFICE CONTACT

AARON BONK, PE
(608) 261-0261



| | | | |
|---|--|-------------------|---------------|
| NO. | DATE | REVISION | BY |
| JEWELL 560 SUNRISE DRIVE SPRING GREEN, WI 53588 OFFICE: (608) 588-7484 www.JewellAssoc.com | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | SDR 11/11/24 | | DATE |
| CHIEF STRUCTURES DESIGN ENGINEER | | | |
| STRUCTURE B-37-483 | | | |
| FAIRVIEW ROAD OVER ROCKY RUN | | | |
| COUNTY | MARATHON | TOWN/CITY/VILLAGE | CLEVELAND |
| DESIGN SPEC. | AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS | | |
| DESIGNED BY | ZMF | DESIGN CK'D. | PTB |
| DRAWN BY | ZMF | PLANS CK'D. | PTB |
| GENERAL PLAN | | | SHEET 1 OF 11 |



DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (2012).

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

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

JOINT FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION M153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M213.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

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

ANY EXCAVATION BELOW THE ABUTMENT AND ASSOCIATED ABUTMENT BEDDING MATERIALS REQUIRE THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE DECK (FINISHED AREAS ONLY).

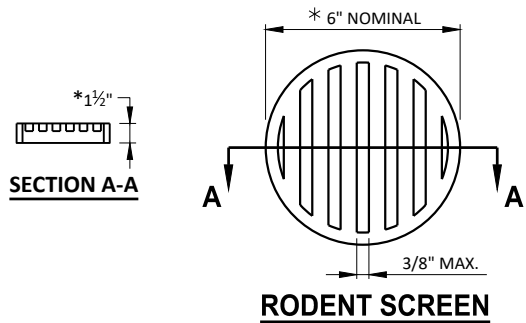
APPLY PIGMENTED SURFACE SEALER TO THE INSIDE, TOP, AND END FACES OF PARAPETS (CONCRETE MATERIAL ONLY).

ALL STATIONS AND ELEVATIONS SHOWN ARE IN FEET

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-37-483" SHALL BE THE EXISTING GROUNDLINE.

THE FIRST DIGIT OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE

THE EXISTING STRUCTURE (P-37-0044) IS A SINGLE SPAN PRECAST BOX GIRDER STRUCTURE WITH CONCRETE ABUTMENTS. THE STRUCTURE HAS A 24' CLEAR BRIDGE WIDTH AND IS 51.6' LONG AND SHALL BE REMOVED.



NOTES:

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SCREEN SO SLOTS ARE VERTICAL.

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

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

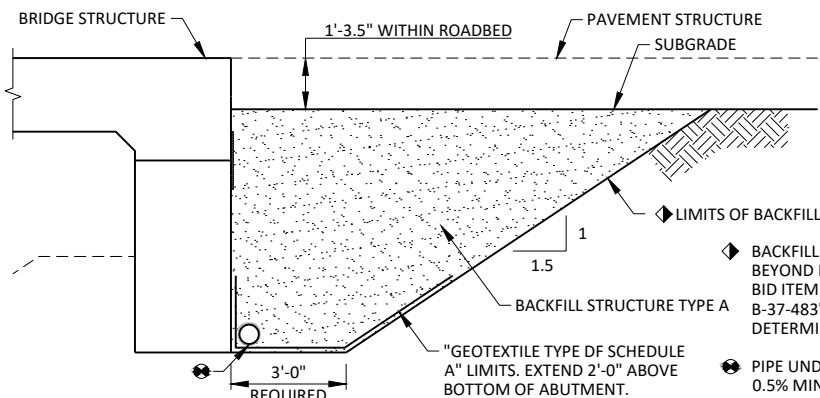
AT ABUTMENT

AT PIER

IN SPAN

PROPOSED CROSS-SECTION THROUGH ROADWAY

LOOKING EAST

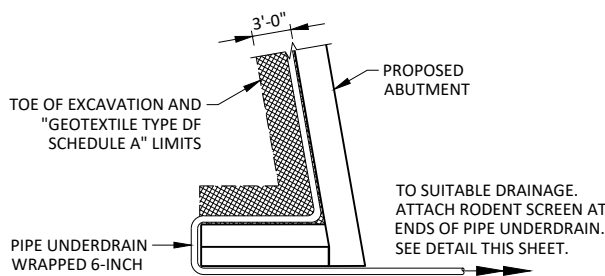


BACKFILL STRUCTURE DETAIL

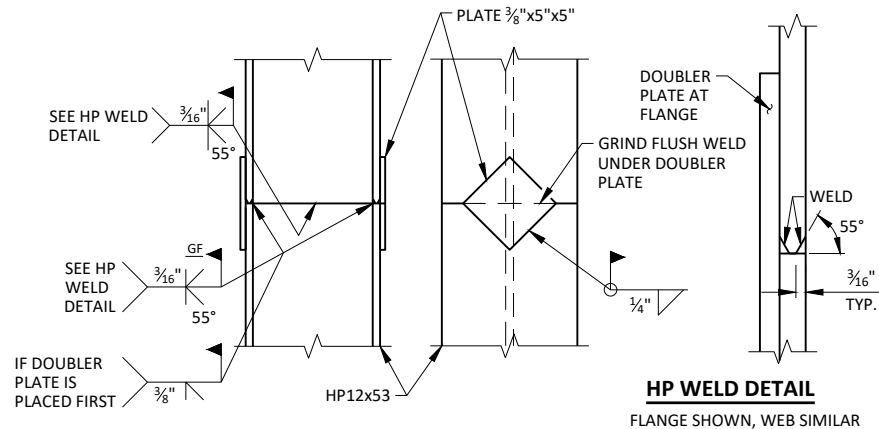
(TYPICAL AT ABUTMENTS. ABUTMENT BODY SHOWN - WING WALLS SIMILAR)

BACKFILL STRUCTURE TYPE A PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES B-37-483". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."



PIPE UNDERDRAIN DETAIL

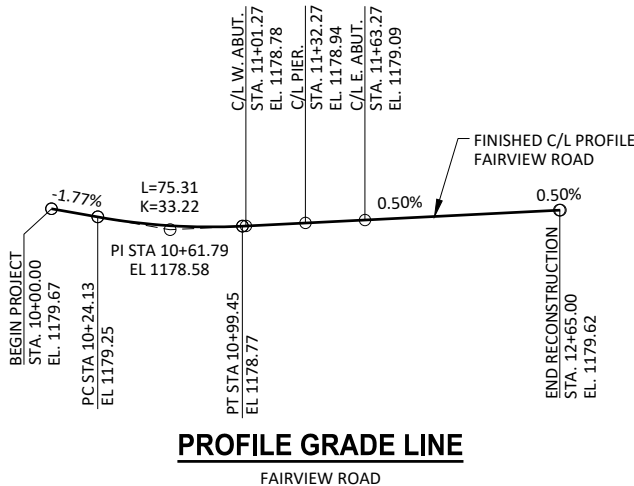


PILE SPLICE DETAIL

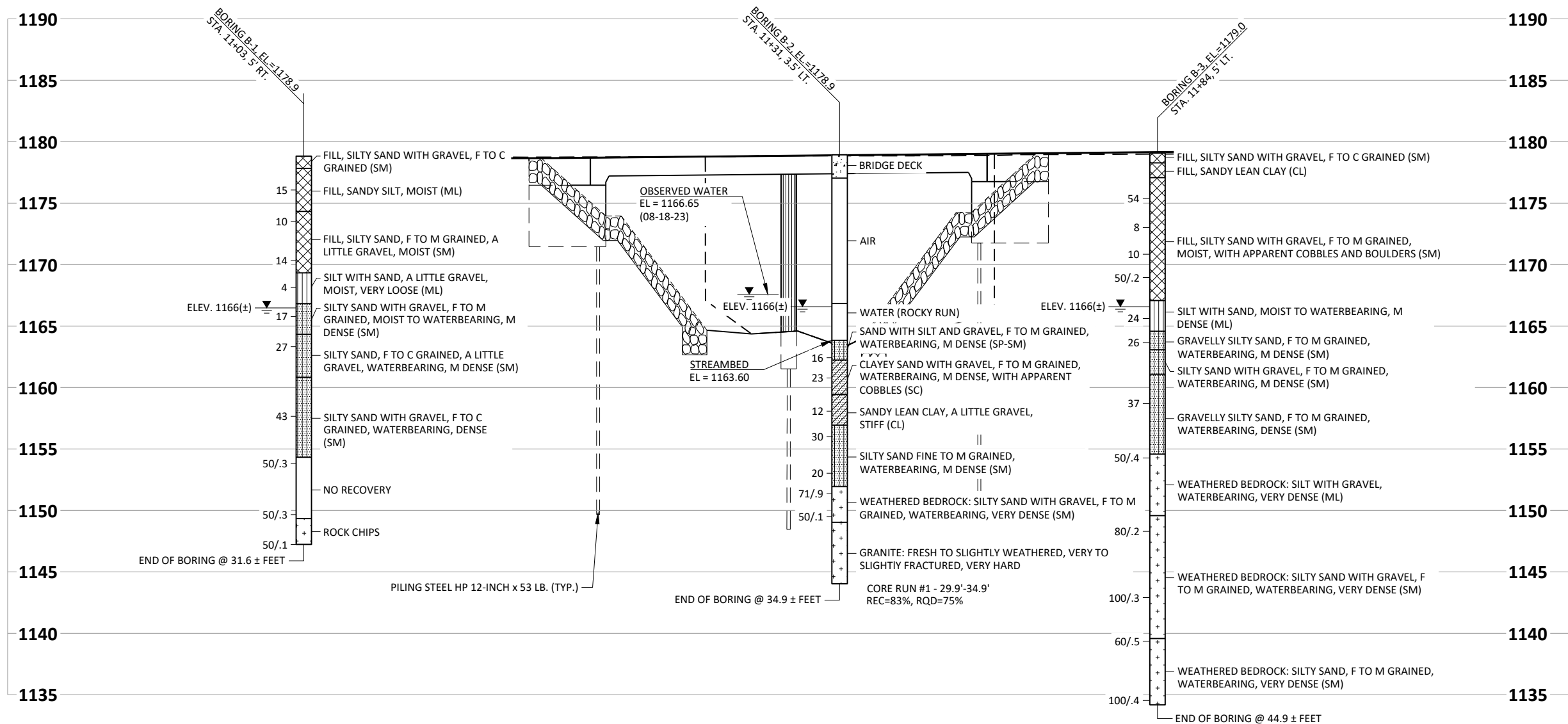
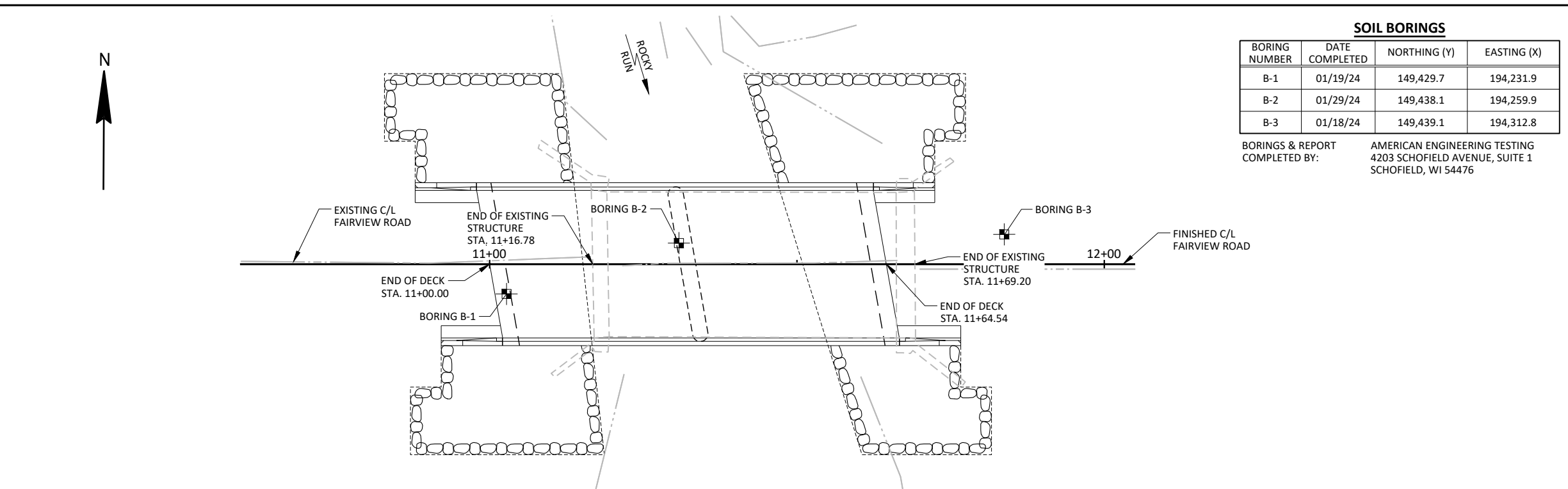
STEEL "HP" PILE MATERIAL SHALL BE ASTM A 572 GRADE 50

TOTAL ESTIMATED QUANTITIES

| ITEM NUMBER | ITEM DESCRIPTION | UNIT | WEST ABUT. | PIER 1 | EAST ABUT. | SUPER | TOTALS |
|---------------|---|------|------------|--------|------------|--------|--------|
| 203.0260 | REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS (P-37-0044) | EACH | -- | -- | -- | -- | 1 |
| 206.1001 | EXCAVATION FOR STRUCTURES BRIDGES B-37-483 | EACH | -- | -- | -- | -- | 1 |
| 206.5001 | COFFERDAMS B-37-483 | EACH | -- | -- | -- | -- | 1 |
| 210.1500 | BACKFILL STRUCTURE TYPE A | TON | 95 | -- | 95 | -- | 190 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 27 | 37.5 | 27 | 122.5 | 214 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | -- | -- | -- | 190 | 190 |
| 502.3210 | PIGMENTED SURFACE SEALER | SY | -- | -- | -- | 85 | 85 |
| 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | 1,580 | 1,670 | 1,580 | -- | 4,830 |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 1,290 | 50 | 1,290 | 24,140 | 26,770 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | 5 | 5 | -- | -- | 10 |
| 550.0500 | PILE POINTS | EACH | 4 | 5 | 4 | -- | 13 |
| 550.1120 | PIILING STEEL HP 12-INCH X 53 LB | LF | 100 | 125 | 100 | -- | 325 |
| 606.0300 | RIPRAP HEAVY | CY | 130 | -- | 120 | -- | 250 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 75 | -- | 75 | -- | 150 |
| 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | 20 | -- | 20 | -- | -- |
| 645.0120 | GEOTEXTILE TYPE HR | SY | 220 | -- | 200 | -- | -- |
| 502.9000.S.01 | UNDERWATER SUBSTRUCTURE INSPECTION B-37-483 | EACH | -- | -- | -- | -- | 1 |
| | NON-BID ITEMS | | | | | | |
| | FILLER | SIZE | | | ½" & ¾" | | |
| | NAME PLATE | | | | | | |



| | | | |
|------------------------------|------|-------------|---------------|
| NO. | DATE | REVISION | BY |
| STRUCTURE B-37-483 | | | |
| | | DRAWN BY | ZMF |
| | | PLANS CK'D. | PTB |
| CROSS SECTION AND QUANTITIES | | | SHEET 2 OF 11 |
| | | | |


















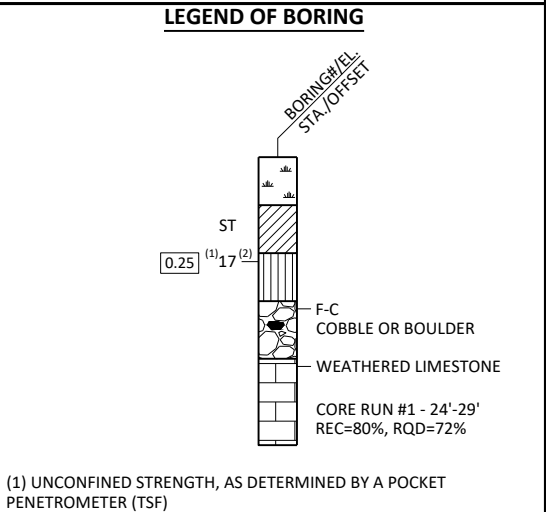
| <u>SOIL BORINGS</u> | | | |
|----------------------------|-----------------------|---------------------|--------------------|
| BORING NUMBER | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
| B-1 | 01/19/24 | 149,429.7 | 194,231.9 |
| B-2 | 01/29/24 | 149,438.1 | 194,259.9 |
| B-3 | 01/18/24 | 149,439.1 | 194,312.8 |

STATE PROJECT NUMBER

6679-02-70


MATERIAL SYMBOLS


| | | |
|---|---|---|
|  <p>Asphalt</p> |  <p>Topsoil</p> |  <p>Peat</p> |
|  <p>Concrete</p> |  <p>Fill</p> |  <p>Gravel</p> |
|  <p>Sand</p> |  <p>Clay</p> |  <p>Silt</p> |
|  <p>Boulders or Cobbles</p> |  <p>Limestone</p> |  <p>Bedrock (unknown)</p> |
|  <p>Shale</p> |  <p>Sandstone</p> |  <p>Igneous/ meta</p> |




(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 ELEVATIONS

AT TIME OF DRILLING

END OF DRILLING

AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COURSE 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-37-483 | | | |
| DRAWN BY | | ZMF | PLANS CK'D. PTB |
| SUBSURFACE EXPLORATION | | SHEET 3 OF 11 | |
| | | | |

NOTES

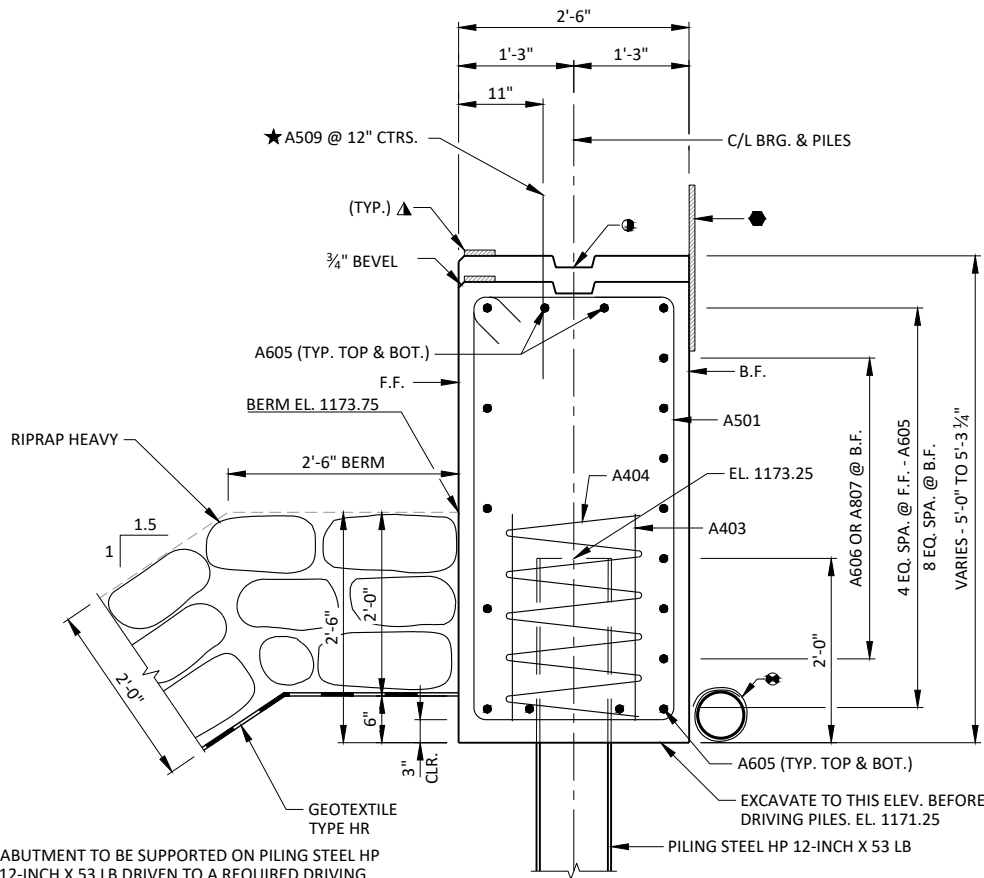
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.

SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING (NEGLECTING THE KEYED CONSTRUCTION JOINT).

SPACE REINFORCEMENT TO MISS PILING

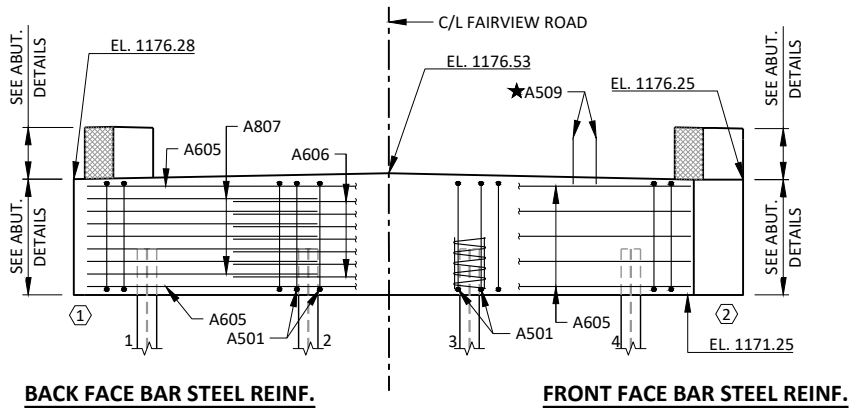
F.F. - FRONT FACE

B.F. - BACK FACE



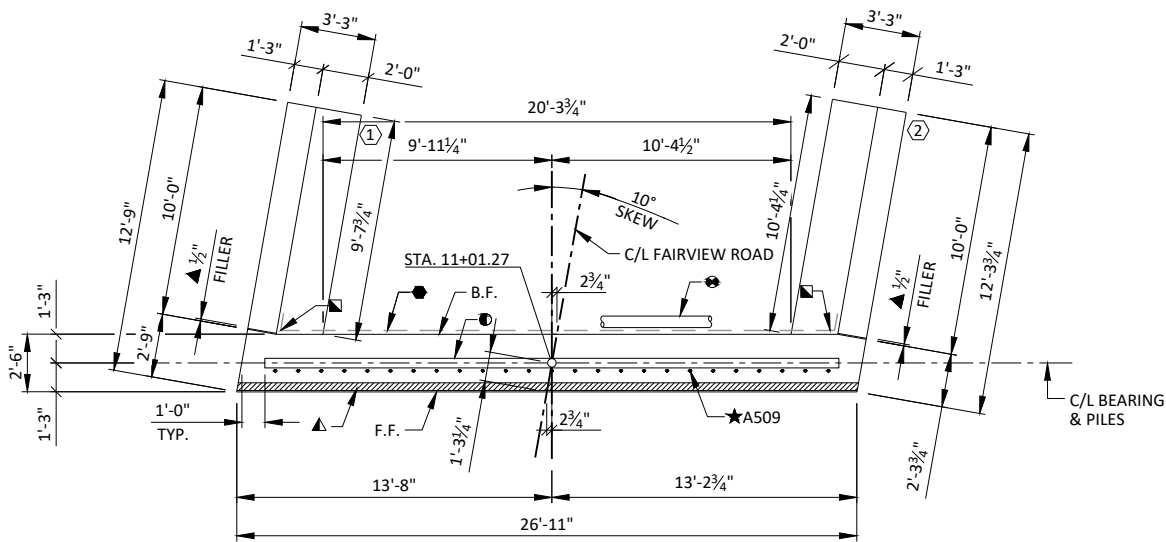
ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 12-INCH X 53 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 25 FT. PILE LENGTHS AT WEST ABUTMENT. PILE POINTS REQUIRED.

TYPICAL SECTION THROUGH ABUTMENT BODY

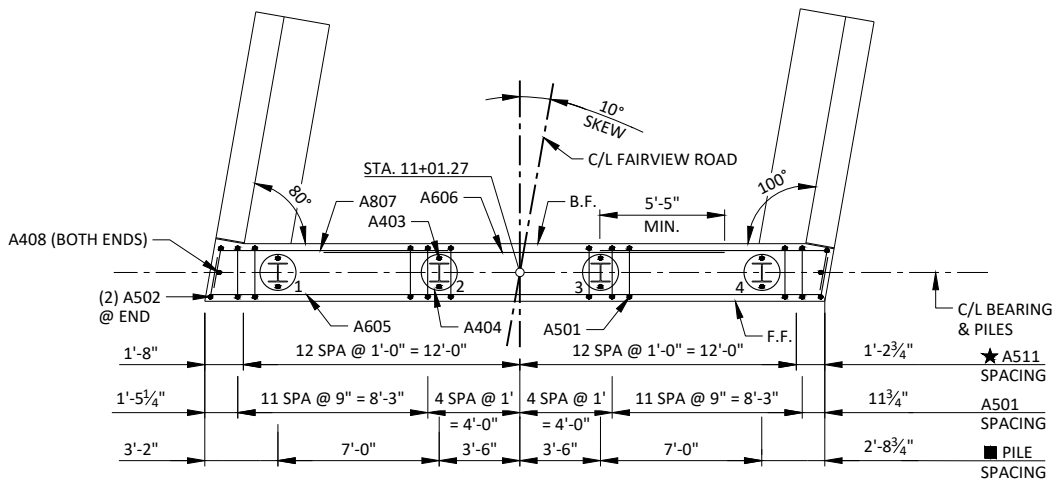


ELEVATION

(WEST ABUTMENT LOOKING WEST)



PLAN



LAYOUT

LEGEND

- KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE)
- 3/4" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- A509 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."
- INDICATES WING NUMBER.

| NO. | DATE | REVISION | BY |
|--|------|----------|-----------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE B-37-483 | | | |
| DRAWN BY | | ZMF | PLANS CK'D. PTB |
| WEST ABUTMENT | | | SHEET 4 OF 11 |

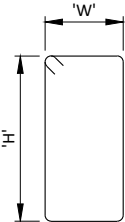
1,290 LB (COATED)
1,580 LB (UNCOATED)

BILL OF BARS
WEST ABUTMENT

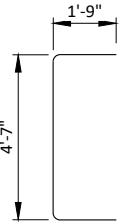
| BAR MARK | NO. REQ'D. | LENGTH | BENT | COAT | LOCATION |
|----------|------------|--------|------|------|-------------------------------------|
| A501 | 31 | 14-2 | X | | BODY - VERT. - STIRRUP |
| A502 | 4 | 7-10 | X | | BODY - VERT. - STIRRUP AT ENDS |
| A403 | 8 | 2-3 | | | BODY - VERT. - 2 PER PILE |
| A404 | 4 | 28-0 | X | | BODY - SPIRAL - 1 PER PILE |
| A605 | 11 | 26-6 | | | BODY - HORIZ. - F.F., BOT & TOP |
| A606 | 7 | 17-4 | | | BODY - HORIZ. - B.F. - CENTER |
| A807 | 14 | 10-0 | | | BODY - HORIZ. - B.F. - BOTH ENDS |
| A408 | 2 | 4-7 | | | BODY - VERT. - END |
| A509 | 25 | 2-0 | | | BODY - VERT. - DOWELS |
| A510 | 10 | 15-8 | X | X | WING 1 - VERT. - STIRRUP |
| A511 | 1 | 4-7 | | X | WING 1 - VERT. - F.F. |
| A512 | 6 | 12-4 | | X | WING 1 - HORIZ. - F.F. |
| A613 | 6 | 11-9 | | X | WING 1 - HORIZ. - B.F. |
| A614 | 2 | 12-0 | | X | WING 1 - HORIZ. - TOP |
| A615 | 13 | 8-9 | X | X | WING 1 - VERT. - TOP |
| A416 | 5 | 9-7 | | X | WING 1 - HORIZ. - F.F. & B.F. - TOP |
| A617 | 2 | 9-7 | | X | WING 1 - HORIZ. - TOP |
| A518 | 10 | 15-8 | X | X | WING 2 - VERT. - STIRRUP |
| A519 | 6 | 12-0 | | X | WING 2 - HORIZ. - F.F. |
| A620 | 6 | 12-6 | | X | WING 2 - HORIZ. - B.F. |
| A621 | 2 | 12-2 | | X | WING 2 - HORIZ. - TOP |
| A622 | 13 | 8-9 | X | X | WING 2 - VERT. - TOP |
| A423 | 5 | 9-7 | | X | WING 2 - HORIZ. - F.F. & B.F. - TOP |
| A624 | 2 | 9-7 | | X | WING 2 - HORIZ. - TOP |

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

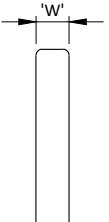
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



A501, A510, A518



A502



A615, A622

| BAR MARK | 'W' | 'H' |
|----------|------|-----|
| A501 | 2-2 | 4-7 |
| A510 | 2-11 | 4-7 |
| A518 | 2-11 | 4-7 |

| BAR MARK | 'W' | 'H' |
|----------|------|-----|
| A615 | 0-11 | 4-1 |
| A622 | 0-11 | 4-1 |

1'-9" DIA.

A404

5-WRAP SPIRAL

NOTES

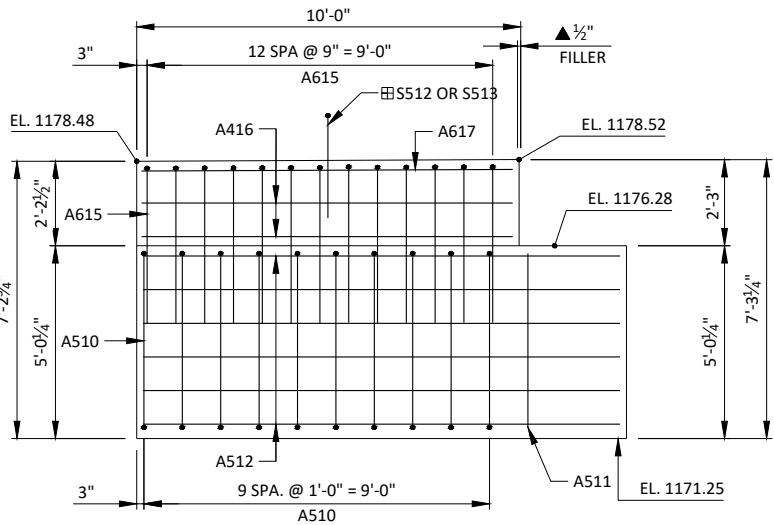
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

SPACE REINFORCEMENT TO MISS PILING

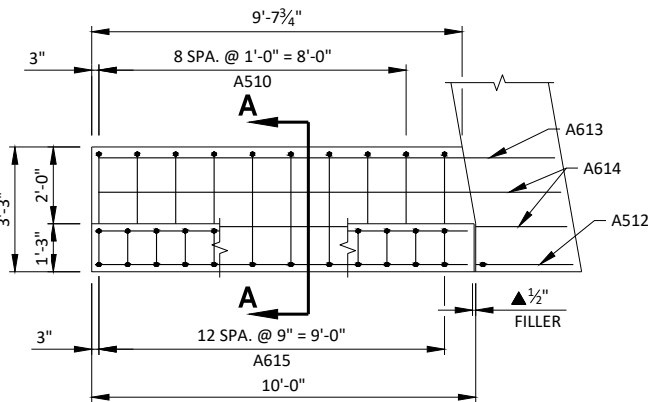
F.F. - FRONT FACE

B.F. - BACK FACE

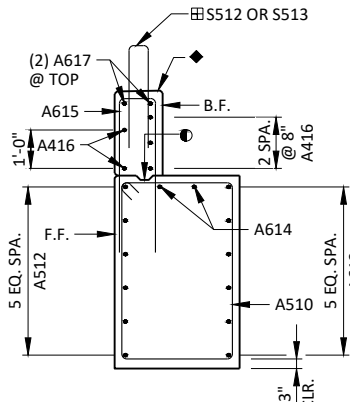
| NO. | DATE | REVISION | BY |
|--|------|--------------------|----|
| | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE B-37-483 | | | |
| DRAWN BY ZMF | | PLANS CK'D. PTB | |
| WEST ABUTMENT DETAILS | | SHEET 5 OF 11 | |



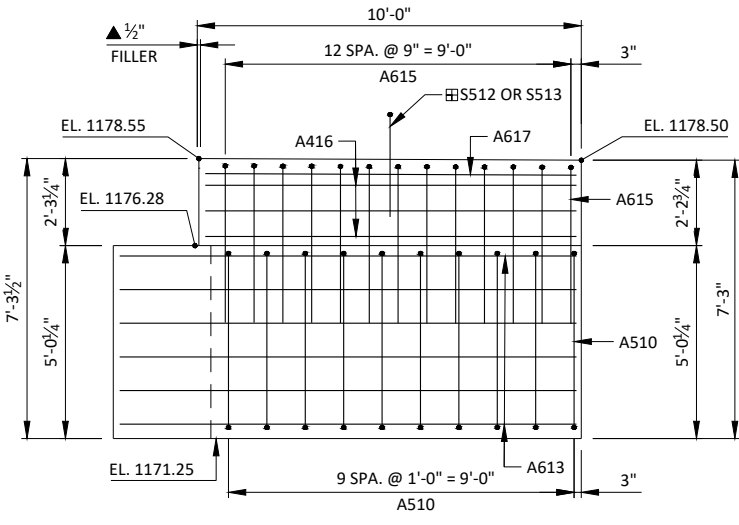
F.F. ELEVATION - WING 1



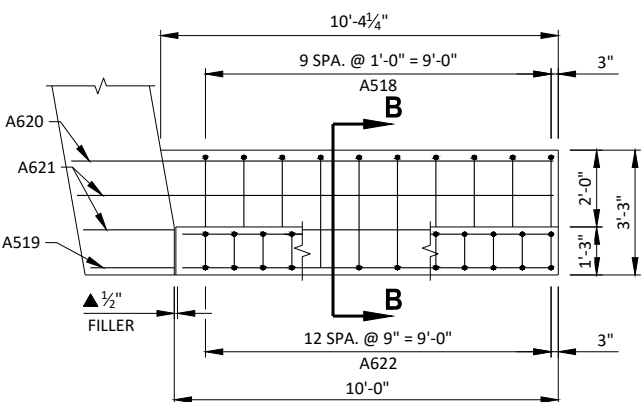
PLAN VIEW - WING 1



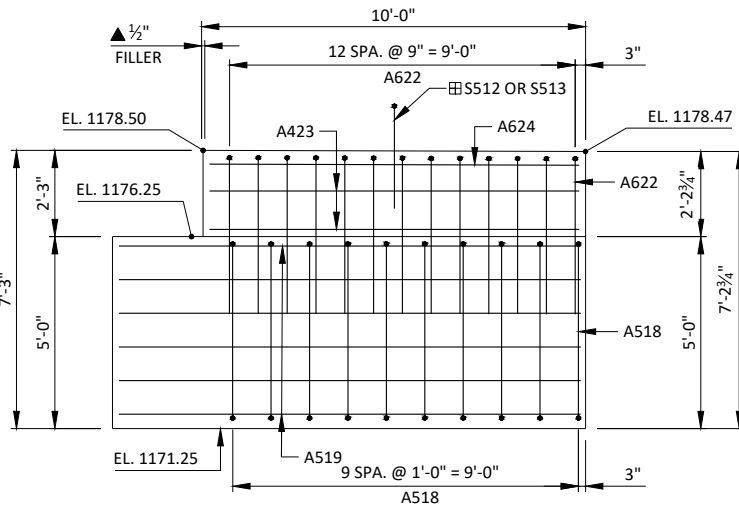
SECTION A-A



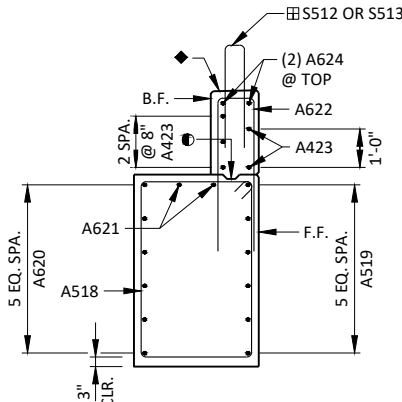
B.F. ELEVATION - WING 1



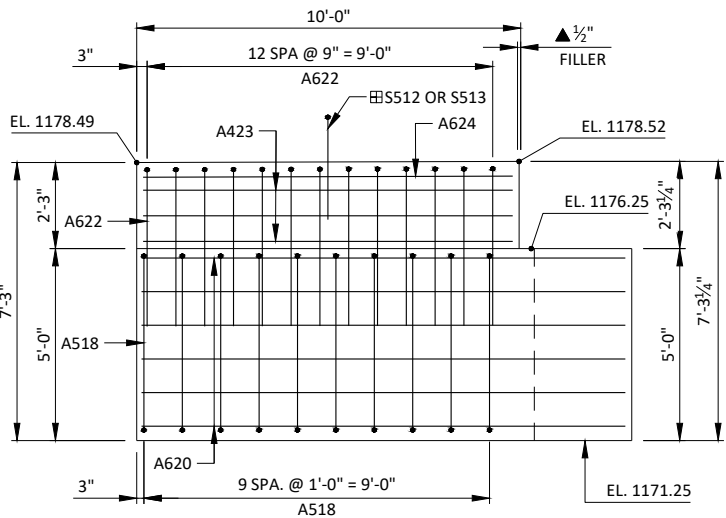
PLAN VIEW - WING 2



F.F. ELEVATION - WING 2



SECTION B-B



B.F. ELEVATION - WING 2

NOTES

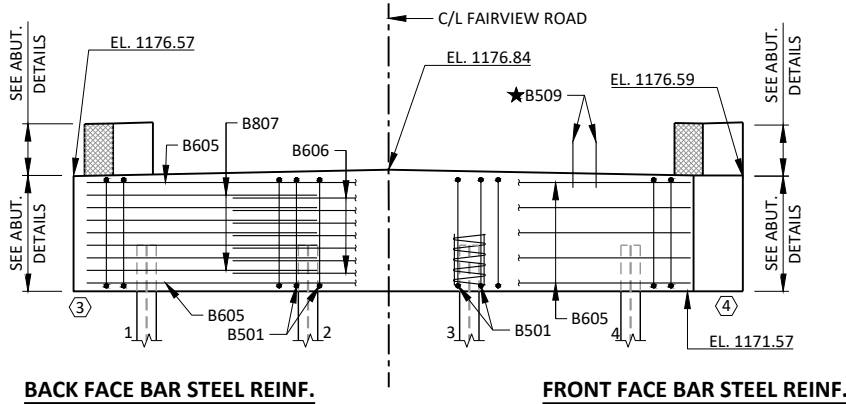
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 7 FOR BILL OF BARS.

SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING (NEGLECTING THE KEYED CONSTRUCTION JOINT).

SPACE REINFORCEMENT TO MISS PILING

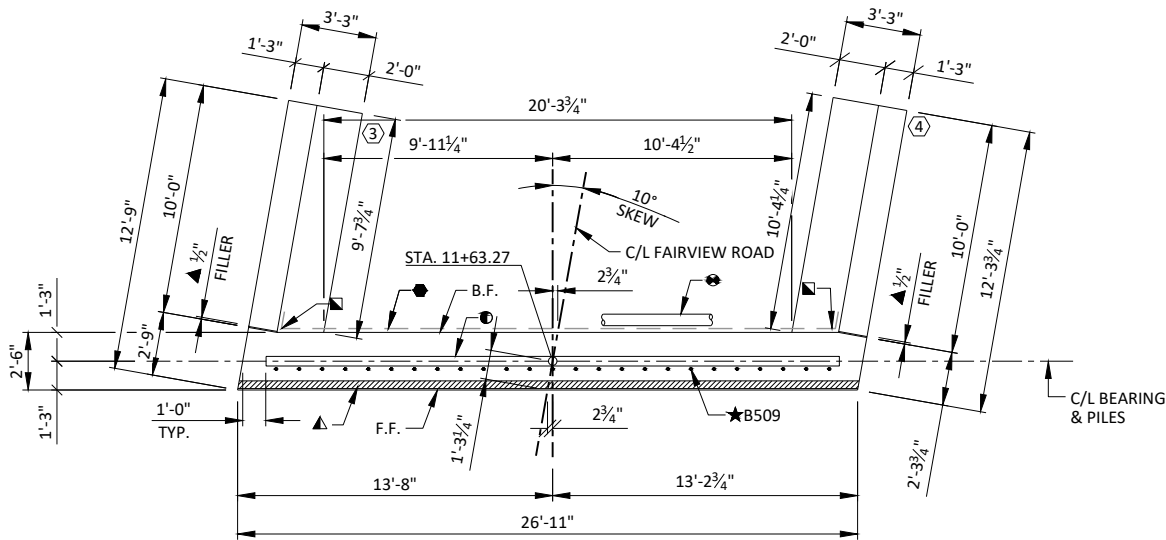
F.F. - FRONT FACE

B.F. - BACK FACE

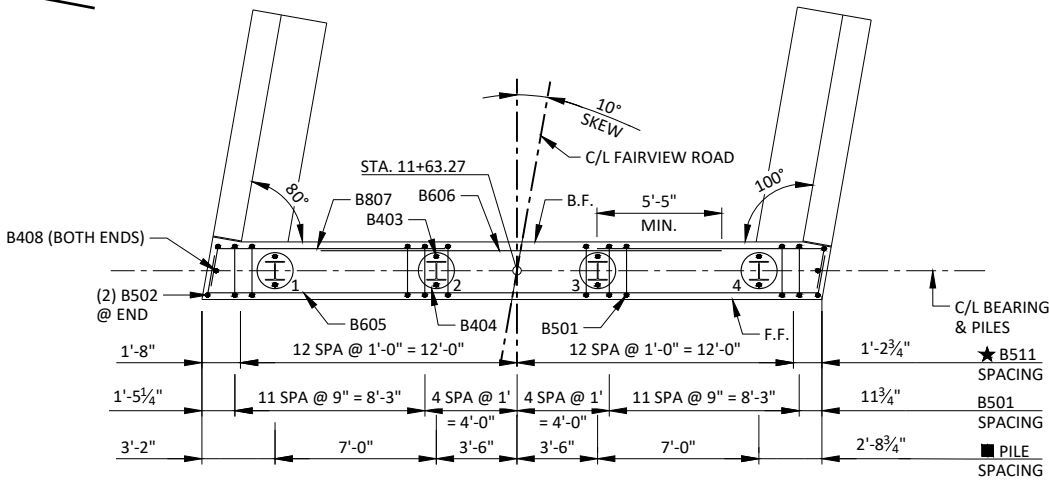


ELEVATION

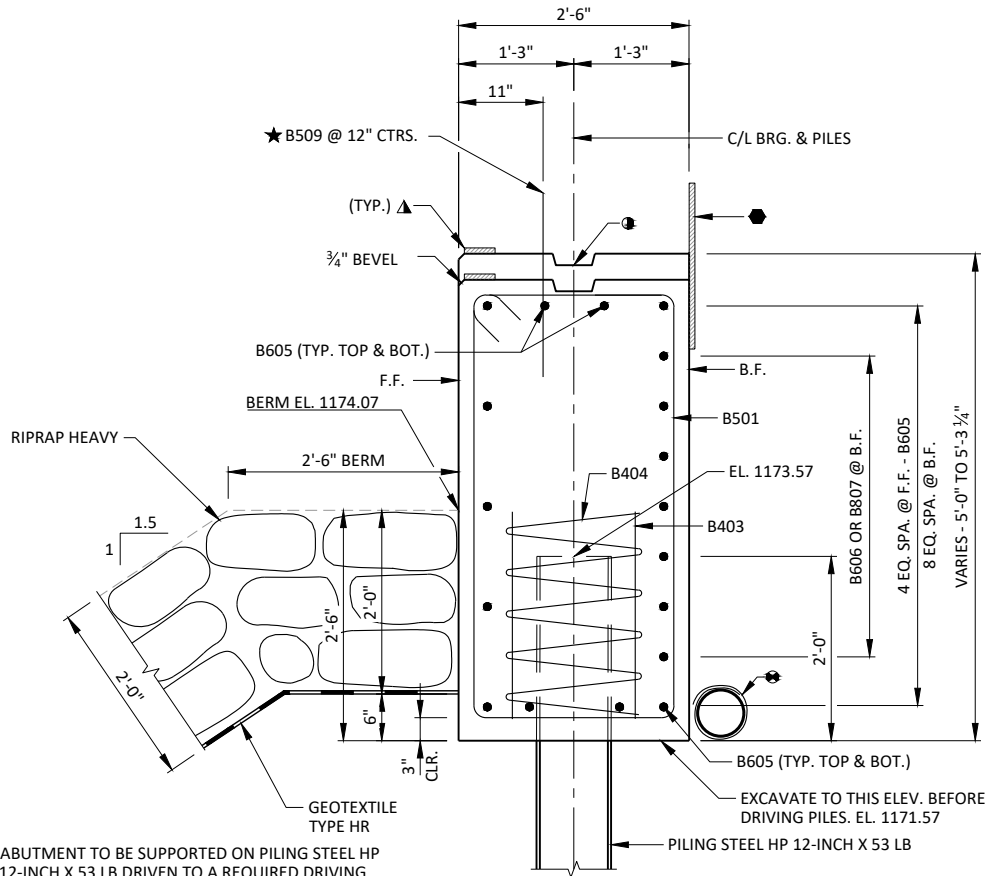
(EAST ABUTMENT LOOKING EAST)



PLAN



LAYOUT



TYPICAL SECTION THROUGH ABUTMENT BODY

LEGEND

- KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE)
- 3/4" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- B509 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."
- INDICATES WING NUMBER.

| NO. | DATE | REVISION | BY |
|--|------|---------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE B-37-483 | | | |
| DRAWN BY | | ZMF | PTB |
| EAST ABUTMENT | | SHEET 6 OF 11 | |

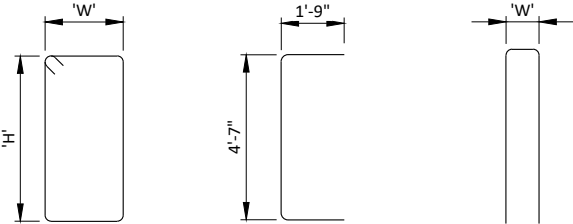
BILL OF BARS
EAST ABUTMENT

1,290 LB (COATED)
1,580 LB (UNCOATED)

| BAR MARK | NO. REQ'D. | LENGTH | BENT | COAT | LOCATION |
|----------|------------|--------|------|------|-------------------------------------|
| B501 | 31 | 14-2 | X | | BODY - VERT. - STIRRUP |
| B502 | 4 | 7-10 | X | | BODY - VERT. - STIRRUP AT ENDS |
| B403 | 8 | 2-3 | | | BODY - VERT. - 2 PER PILE |
| B404 | 4 | 28-0 | X | | BODY - SPIRAL - 1 PER PILE |
| B605 | 11 | 26-6 | | | BODY - HORIZ. - F.F., BOT & TOP |
| B606 | 7 | 17-4 | | | BODY - HORIZ. - B.F. - CENTER |
| B807 | 14 | 10-0 | | | BODY - HORIZ. - B.F. - BOTH ENDS |
| B408 | 2 | 4-7 | | | BODY - VERT. - END |
| B509 | 25 | 2-0 | | X | BODY - VERT. - DOWELS |
| B510 | 10 | 15-8 | X | X | WING 1 - VERT. - STIRRUP |
| B511 | 1 | 4-7 | | X | WING 1 - VERT. - F.F. |
| B512 | 6 | 12-5 | | X | WING 1 - HORIZ. - F.F. |
| B613 | 6 | 11-10 | | X | WING 1 - HORIZ. - B.F. |
| B614 | 2 | 12-0 | | X | WING 1 - HORIZ. - TOP |
| B615 | 13 | 8-9 | X | X | WING 1 - VERT. - TOP |
| B416 | 5 | 9-7 | | X | WING 1 - HORIZ. - F.F. & B.F. - TOP |
| B617 | 2 | 9-7 | | X | WING 1 - HORIZ. - TOP |
| B518 | 10 | 15-8 | X | X | WING 2 - VERT. - STIRRUP |
| B519 | 6 | 12-0 | | X | WING 2 - HORIZ. - F.F. |
| B620 | 6 | 12-6 | | X | WING 2 - HORIZ. - B.F. |
| B621 | 2 | 12-2 | | X | WING 2 - HORIZ. - TOP |
| B622 | 13 | 8-9 | X | X | WING 2 - VERT. - TOP |
| B423 | 5 | 9-7 | | X | WING 2 - HORIZ. - F.F. & B.F. - TOP |
| B624 | 2 | 9-7 | | X | WING 2 - HORIZ. - TOP |

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



B501, B510, B518

B502

B615, B622

| BAR MARK | 'W' | 'H' |
|----------|------|-----|
| B501 | 2-2 | 4-7 |
| B510 | 2-11 | 4-7 |
| B518 | 2-11 | 4-7 |

| BAR MARK | 'W' | 'H' |
|----------|------|-----|
| B615 | 0-11 | 4-1 |
| B622 | 0-11 | 4-1 |

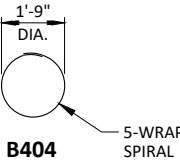
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

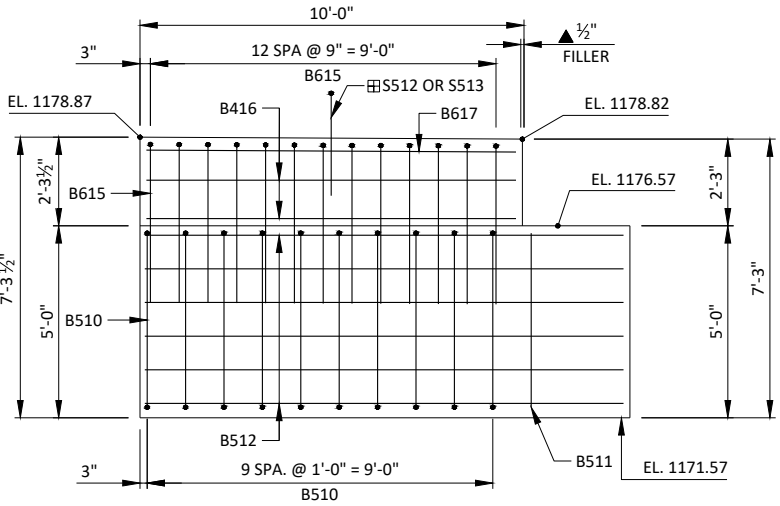
SPACE REINFORCEMENT TO MISS PILING

F.F. - FRONT FACE

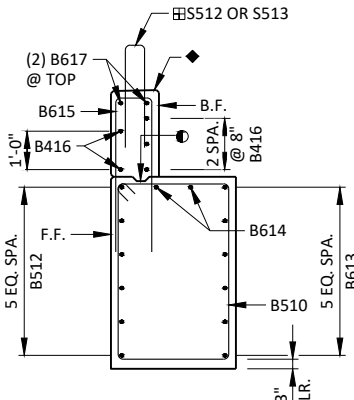
B.F. - BACK FACE



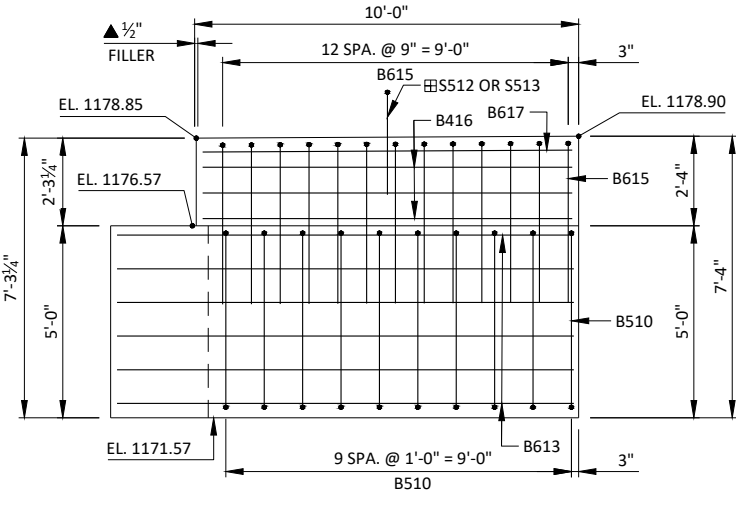
B404



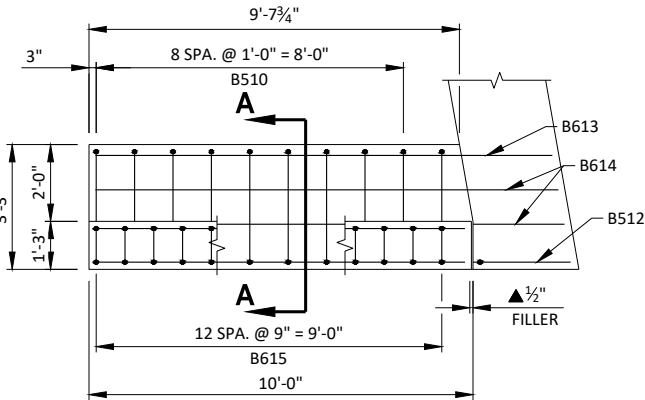
F.F. ELEVATION - WING 3



SECTION A-A



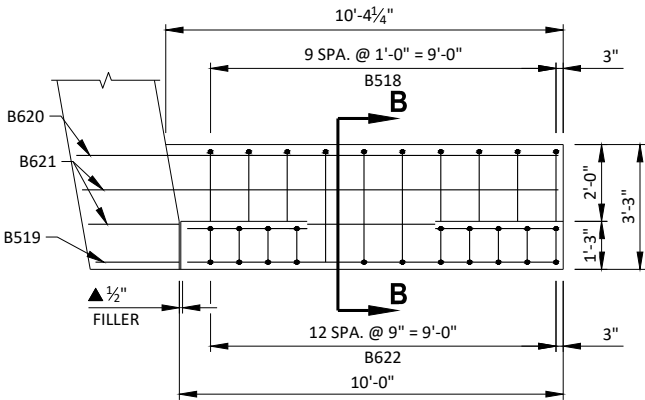
B.F. ELEVATION - WING 3



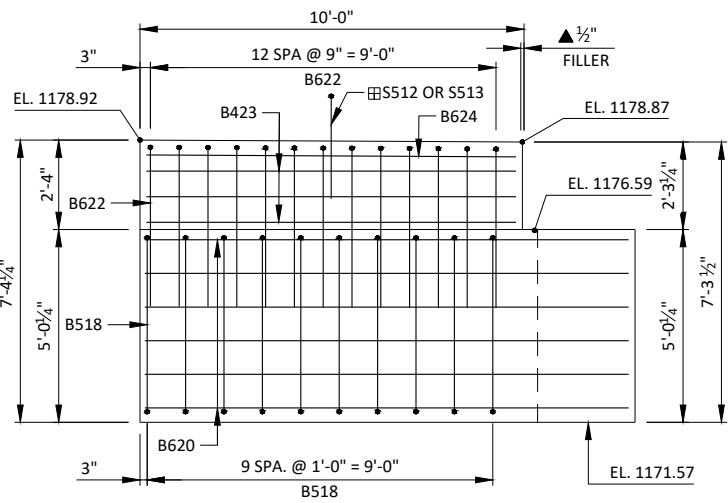
PLAN VIEW - WING 3

LEGEND

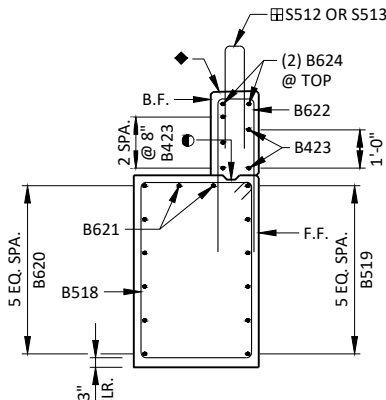
- OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6. 3/4-INCH "V" GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".
- 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 1/2" BELOW SURFACE OF CONCRETE)
- SLOPE SAME AS SUPERSTRUCTURE.
- S512 AND S513 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED. SEE SHEET 11 FOR PLACEMENT.



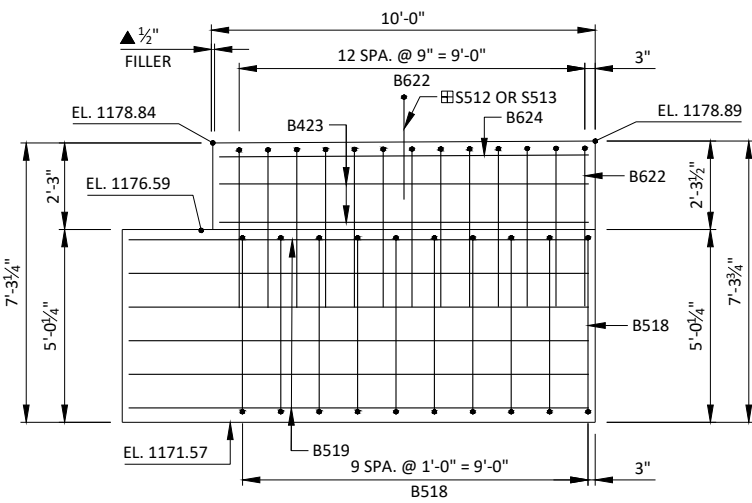
PLAN VIEW - WING 4



B.F. ELEVATION - WING 4



SECTION B-B



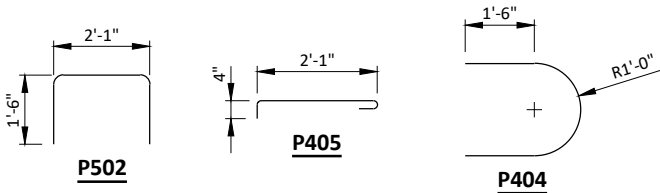
F.F. ELEVATION - WING 4

| NO. | DATE | REVISION | BY |
|--|------|---------------|--------------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE B-37-483 | | | |
| DRAWN BY | | ZMF | PLANS CK'D. PTB |
| EAST ABUTMENT DETAILS | | SHEET 7 OF 11 | |

50 LB (COATED)
1,670 LB (UNCOATED)

| BAR MARK | NO. REQ'D. | LENGTH | BENT | COAT | LOCATION |
|-------------|---------------|--------|------|------|----------------------------|
| P501 | 54 | 15-4 | | | BODY - VERT. - E.F. & ENDS |
| P502 | 12 | 4-10 | X | | BODY - VERT. - TOP |
| P403 | 32 | 23-0 | | | BODY - HORIZ. - E.F. |
| P404 | 32 | 6-2 | X | | BODY - HORIZ. - ENDS |
| P405 | 70 | 2-7 | X | | TIE BARS |
| P506 | 25 | 2-0 | | X | BODY - VERT. - DOWELS |

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



AT PIER, COFFERDAM REQUIRED. CONCRETE POURED UNDERWATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH STANDARD SPEC 502.3.5.3. CONCRETE POURED UNDERWATER SHALL NOT EXCEED 10.0 FEET IN DEPTH, UNLESS APPROVED OTHERWISE.

SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING, NEGLECTING THE KEYED CONSTRUCTION JOINT.

E.F. - EACH FACE

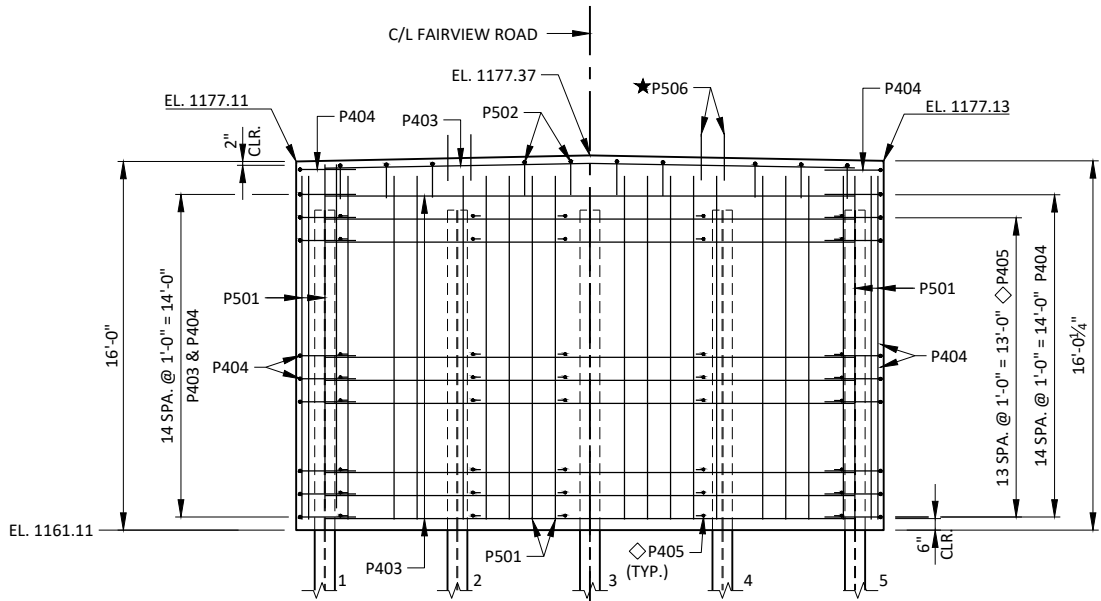
KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6

▲ 3/4"x4" PREFORMED FILLER, EXTEND FULL PERIMETER OF PIER AS SHOWN.

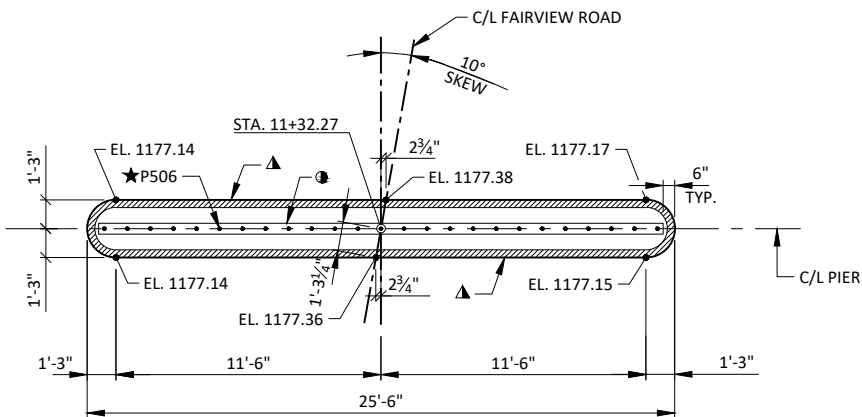
★ P506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".

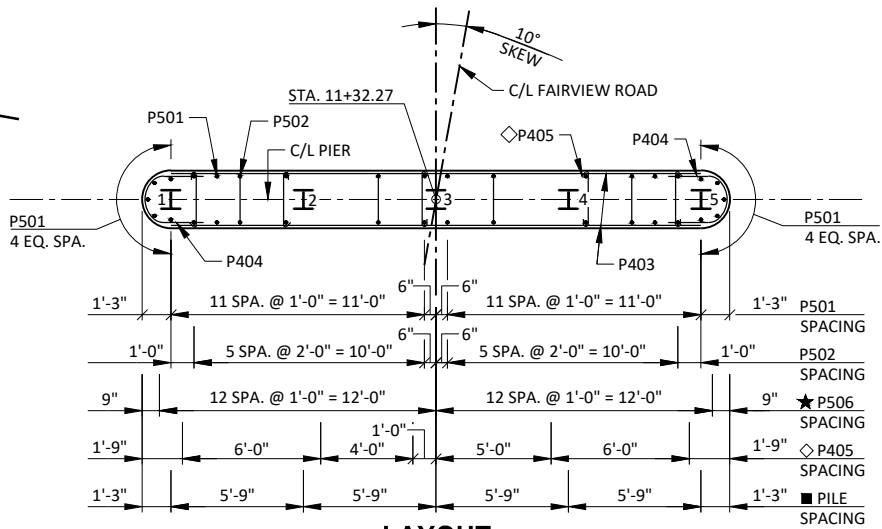
■ PILE SPACING MEASURED AT BASE OF SHAFT.

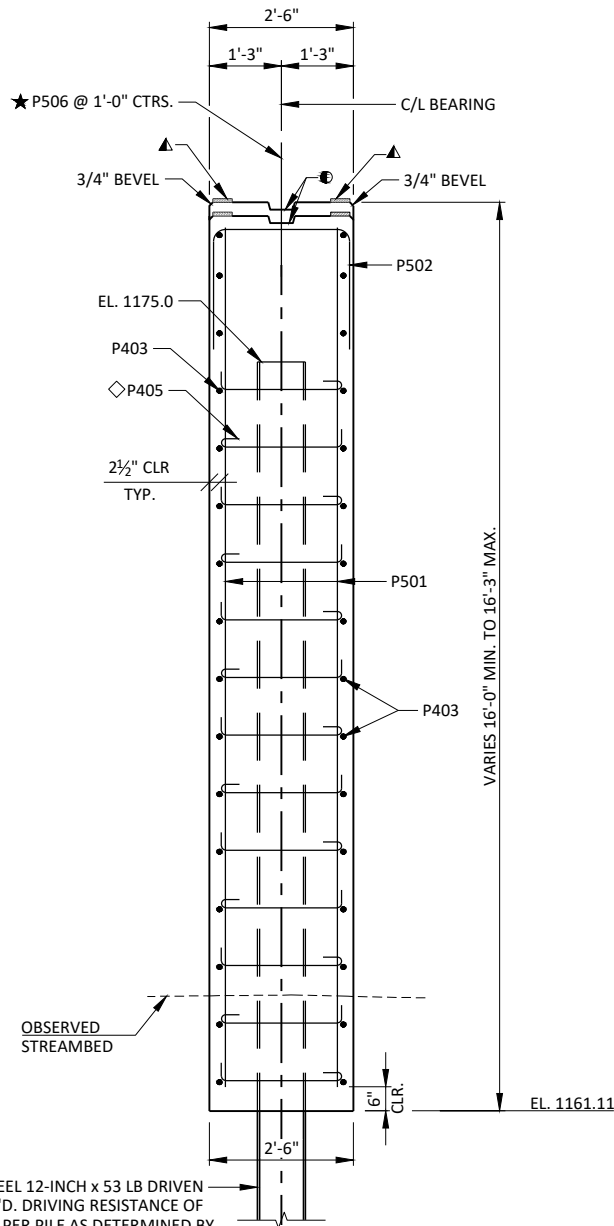
PLACE P405 BARS ADJACENT TO EACH PILE ONLY. TIE TO NEAREST VERTICAL NO. 5 BAR. VERTICAL SPACING @ 1'-0" TO MATCH NO. 4 OUTSIDE BARS FROM BASE OF SHAFT TO TOP OF PILING. ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.



LOOKING EAST







PILING STEEL 12-INCH x 53 LB DRIVEN -
TO A REQ'D. DRIVING RESISTANCE OF
180 TONS PER PILE AS DETERMINED BY
THE MODIFIED GATES DYNAMIC
FORMULA. ESTIMATE 25 FT. PILE
LENGTHS AT THE PIER. PILE POINTS
REQUIRED.

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 10 FOR BILL OF BARS.

SEE SUPERSTRUCTURE DETAILS SHEET (SHEET 10) FOR BAR SPACINGS NOT SHOWN ON THIS SHEET.

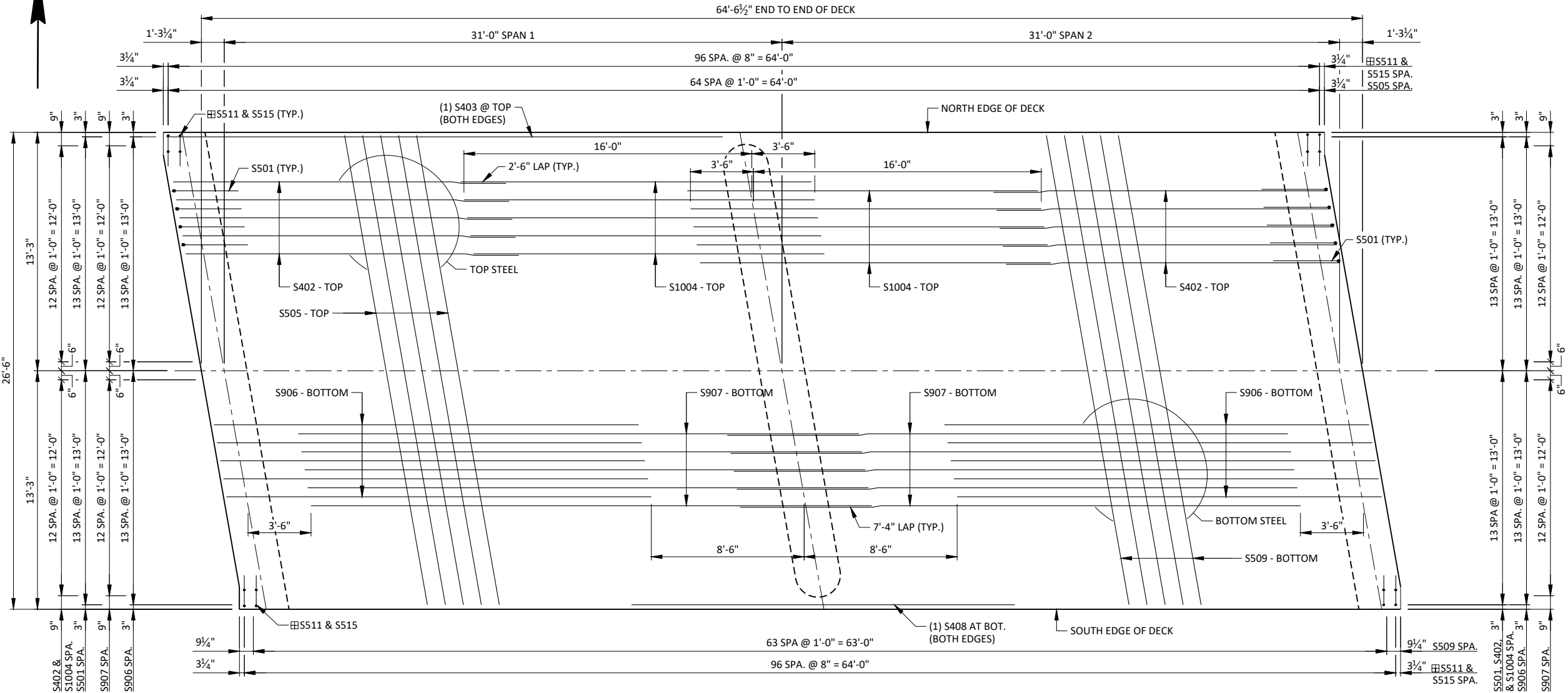
SUPPORT ALTERNATE TOP TRANSVERSE BARS IN SLAB BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS. SUPPORT BOTTOM LONGITUDINAL BARS BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

PLACE TRANSVERSE BARS PARALLEL TO THE CENTERLINE OF SUBSTRUCTURE UNITS.

THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

LEGEND

⊞ S512 AND S513 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED. SEE SHEET 11 FOR PLACEMENT.



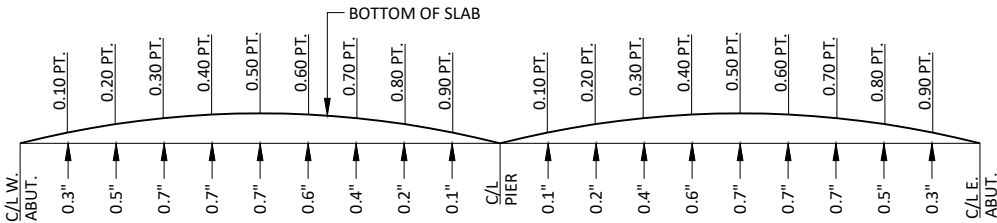
SURVEY TOP OF DECK ELEVATIONS

| | W. ABUT. | 0.50 PT. | E. ABUT. |
|--------------------|----------|----------|----------|
| NORTH EDGE OF DECK | | | |
| CENTER LINE | | | |
| SOUTH EDGE OF DECK | | | |

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE C/L OF THE ABUTMENTS AND AT 0.50 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG THE EDGE OF DECK AND CENTER LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF DECK ELEVATIONS

| | C/L W. ABUT. | 0.10 PNT. | 0.20 PNT. | 0.30 PNT. | 0.40 PNT. | 0.50 PNT. | 0.60 PNT. | 0.70 PNT. | 0.80 PNT. | 0.90 PNT. | C/L PIER | 0.10 PNT. | 0.20 PNT. | 0.30 PNT. | 0.40 PNT. | 0.50 PNT. | 0.60 PNT. | 0.70 PNT. | 0.80 PNT. | 0.90 PNT. | C/L E. ABUT. |
|-----------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| N. EDGE OF DECK | 1178.50 | 1178.52 | 1178.54 | 1178.55 | 1178.57 | 1178.58 | 1178.60 | 1178.61 | 1178.63 | 1178.64 | 1178.66 | 1178.68 | 1178.69 | 1178.71 | 1178.72 | 1178.74 | 1178.75 | 1178.77 | 1178.78 | 1178.80 | 1178.82 |
| C/L | 1178.78 | 1178.80 | 1178.81 | 1178.83 | 1178.84 | 1178.86 | 1178.87 | 1178.89 | 1178.91 | 1178.92 | 1178.94 | 1178.95 | 1178.97 | 1178.98 | 1179.00 | 1179.01 | 1179.03 | 1179.05 | 1179.06 | 1179.08 | 1179.09 |
| S. EDGE OF DECK | 1178.53 | 1178.54 | 1178.56 | 1178.57 | 1178.59 | 1178.61 | 1178.62 | 1178.64 | 1178.65 | 1178.67 | 1178.68 | 1178.70 | 1178.71 | 1178.73 | 1178.75 | 1178.76 | 1178.78 | 1178.79 | 1178.81 | 1178.82 | 1178.84 |



CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPAN AS SHOWN TO PROVIDE FOR THEORETICAL DEADLOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB OR CENTER LINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
-SLAB THICKNESS
+CAMBER
+FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (COMPUTED BY CONTRACTOR)
=TOP OF SLAB FALSEWORK ELEVATION.

| NO. | DATE | REVISION | BY |
|--|------|-------------|---------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE B-37-483 | | | |
| DRAWN BY | | PLANS CK'D. | PTB |
| ZMF | | | |
| SUPERSTRUCTURE | | | SHEET 9 OF 11 |

BILL OF BARS
SUPERSTRUCTURE
24,140 LB (COATED)

| BAR MARK | NO. REQ'D. | LENGTH | BENT | COAT | BAR SERIES | LOCATION |
|----------|------------|--------|------|------|------------|--------------------------------------|
| S501 | 54 | 7-3 | X | X | | ENDS OF DECK |
| S402 | 53 | 18-8 | | X | | SLAB - TOP - LONGIT. AT ABUTMENTS |
| S403 | 2 | 31-2 | | X | | SLAB - TOP - LONGIT. AT EDGES |
| S1004 | 53 | 19-6 | | X | | SLAB - TOP - LONGIT. AT PIER |
| S505 | 65 | 26-6 | | X | | SLAB - TOP - TRANS. |
| S906 | 54 | 23-8 | | X | | SLAB - BOTTOM - LONGIT. AT ABUTMENTS |
| S907 | 54 | 31-2 | | X | | SLAB - BOTTOM - LONGIT. AT PIER |
| S408 | 2 | 22-0 | | X | | SLAB - BOTTOM - LONGIT. AT EDGES |
| S509 | 64 | 26-6 | | X | | SLAB - BOTTOM - TRANS |
| S510 | 6 | 26-6 | | X | | SLAB - TRANS - AT ABUTMENTS |
| S511 | 194 | 4-5 | X | X | | PARAPET - VERT. |
| S512 | 8 | 5-10 | X | X | | PARAPET - VERT. |
| S513 | 68 | 5-7 | X | X | | PARAPET - VERT. |
| S514 | 44 | 3-0 | X | X | | PARAPET - VERT. |
| S515 | 202 | 6-8 | X | X | | PARAPET - VERT. |
| S516 | 24 | 6-6 | X | X | | PARAPET - VERT. |
| S517 | 20 | 6-5 | X | X | | PARAPET - VERT. |
| S518 | 24 | 5-5 | X | X | * | PARAPET - VERT. |
| S519 | 4 | 9-6 | X | X | | PARAPET - HORIZ. |
| S520 | 8 | 9-8 | X | X | | PARAPET - HORIZ. |
| S521 | 20 | 9-6 | | X | | PARAPET - HORIZ. |
| S522 | 32 | 33-8 | | X | | PARAPET - HORIZ. |

NOTES: THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

* LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

| BAR MARK | NO. REQ'D. | LENGTH |
|----------|---------------|------------|
| S518 | 4 SERIES OF 6 | 6-1 TO 4-9 |

BUNDLE AND TAG EACH SERIES SEPARATELY

LEGEND

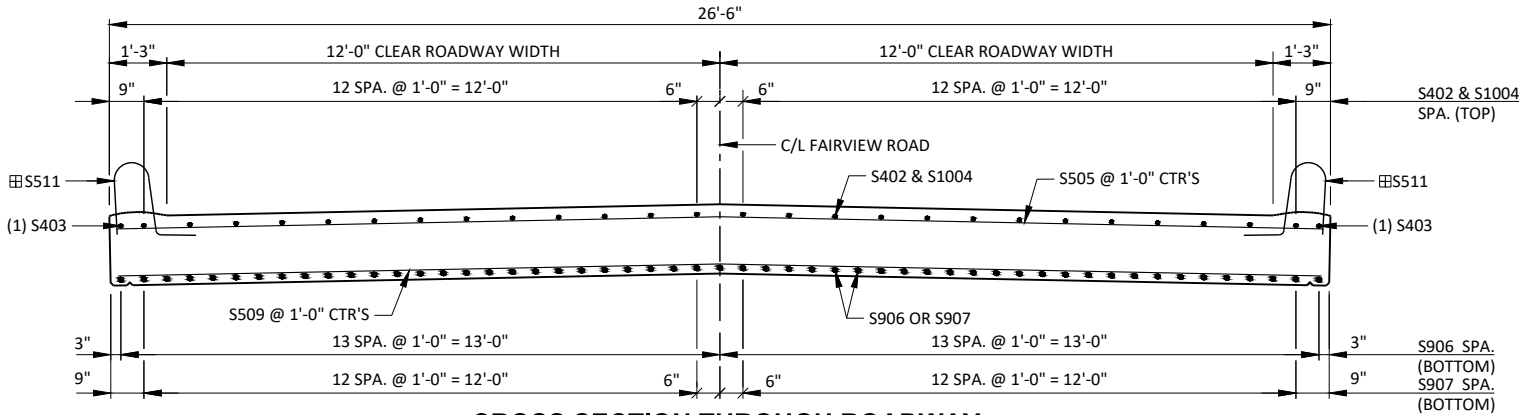
- 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- * DIMENSION IS NORMAL TO THE C/L OF SUBSTRUCTURE UNITS.
- XX SEE SHEETS 4 AND 6 FOR PLACEMENT OF A509 AND B509 BARS.
- ▣ S511 BARS TO BE TIED TO DECK STEEL BEFORE DECK IS POURED

NOTES

SUPPORT ALTERNATE TOP TRANSVERSE BARS IN SLAB BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS. SUPPORT BOTTOM LONGITUDINAL BARS BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

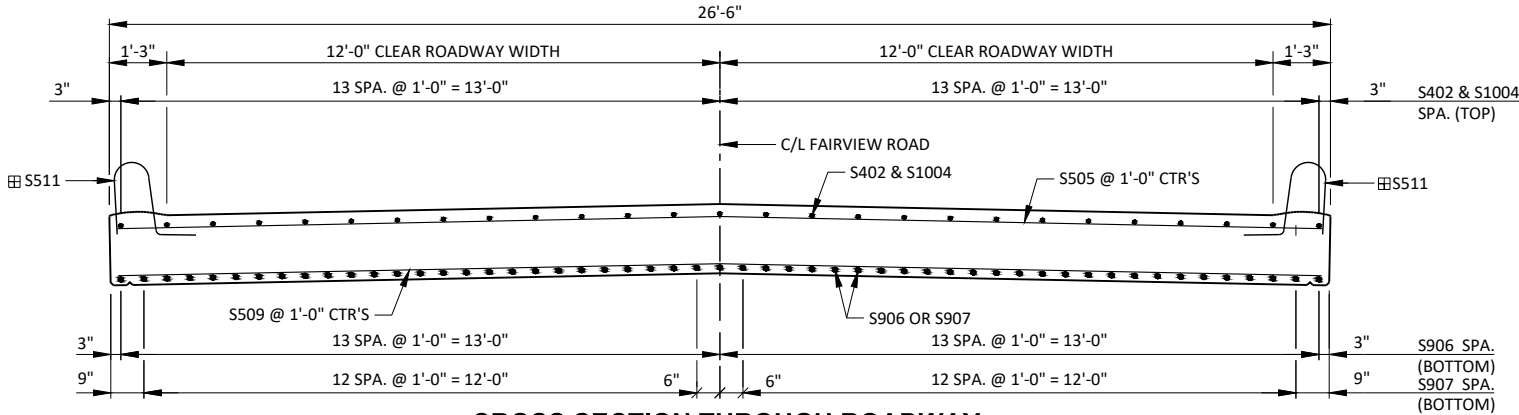
PLACE TRANSVERSE BARS PARALLEL TO THE CENTERLINE OF SUBSTRUCTURE UNITS.

THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).



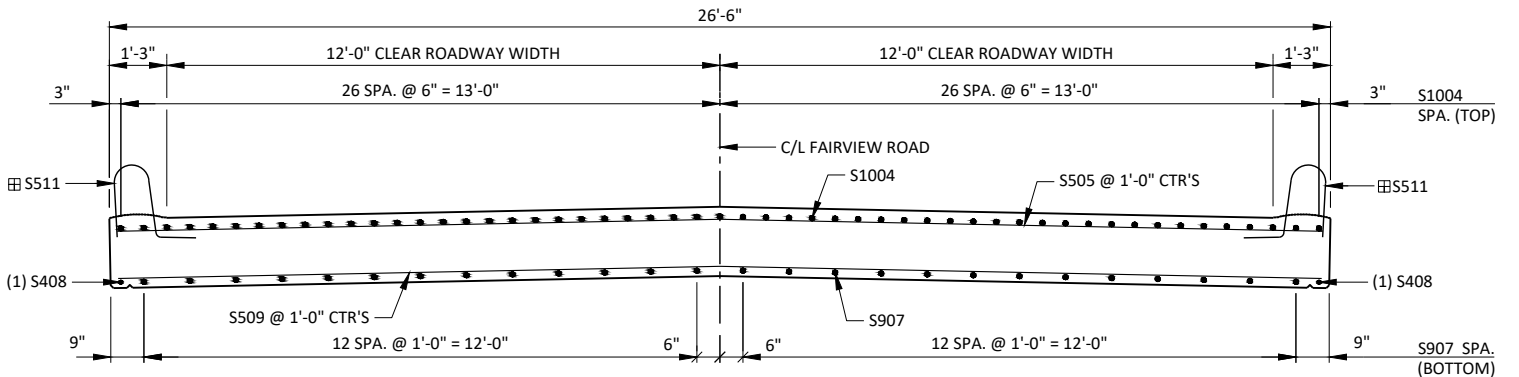
CROSS SECTION THROUGH ROADWAY

AT SPAN 1 - LOOKING EAST



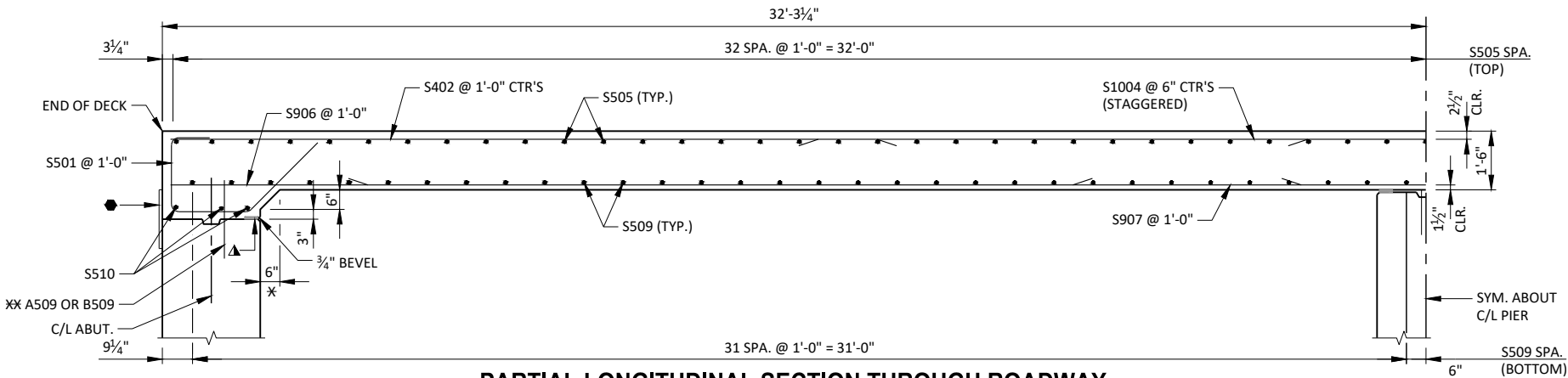
CROSS SECTION THROUGH ROADWAY

AT SPAN 2 - LOOKING EAST

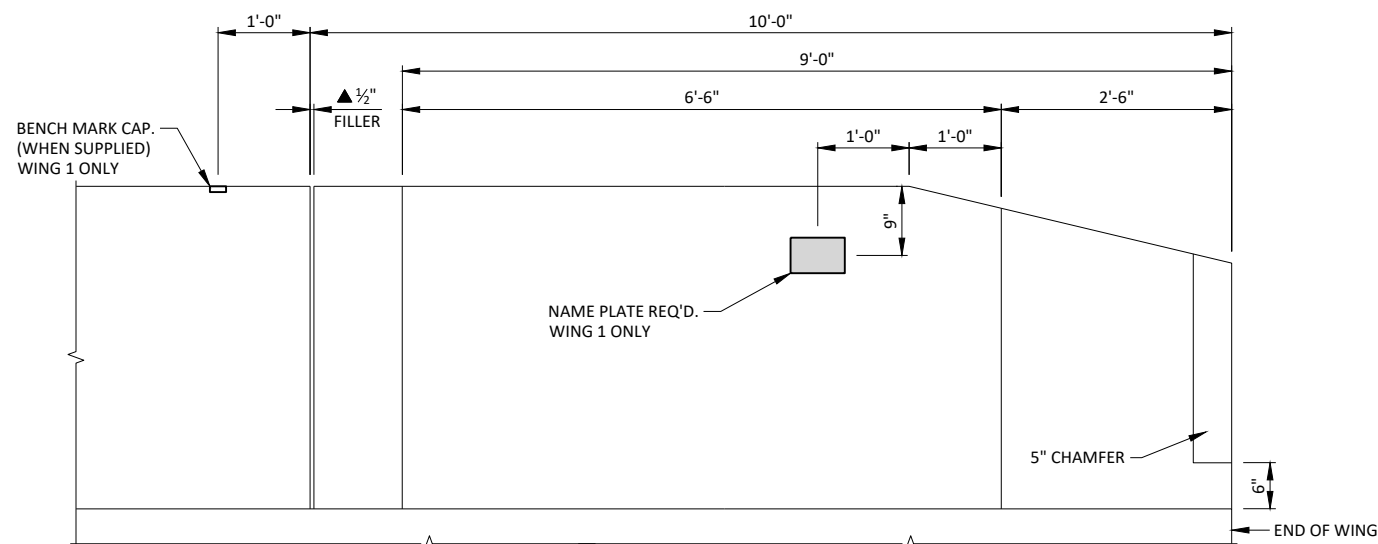


CROSS SECTION THROUGH ROADWAY

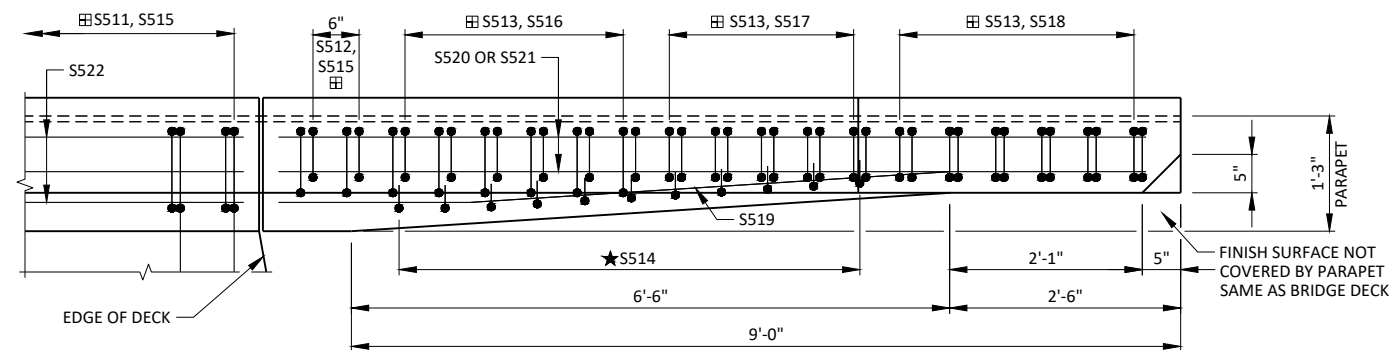
AT PIER - LOOKING EAST



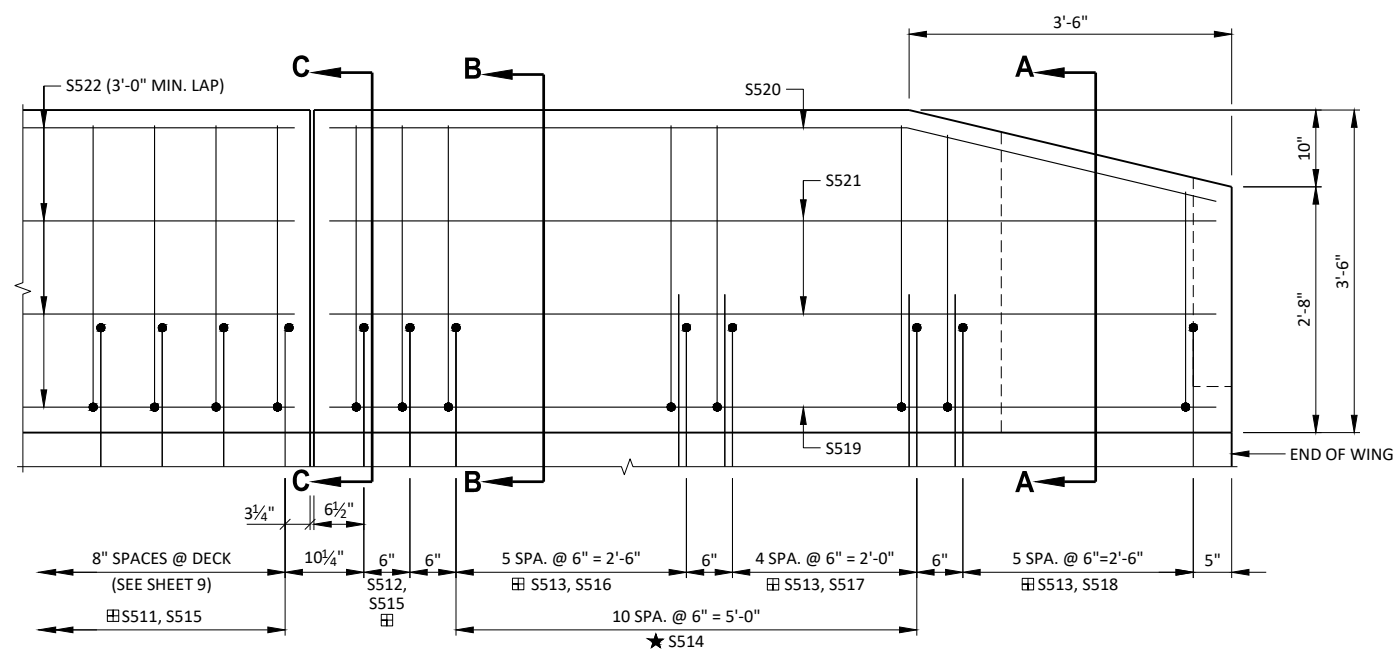
PARTIAL LONGITUDINAL SECTION THROUGH ROADWAY



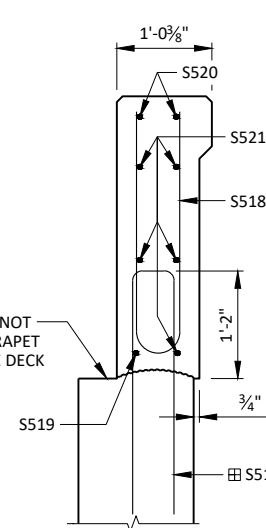
INSIDE ELEVATION



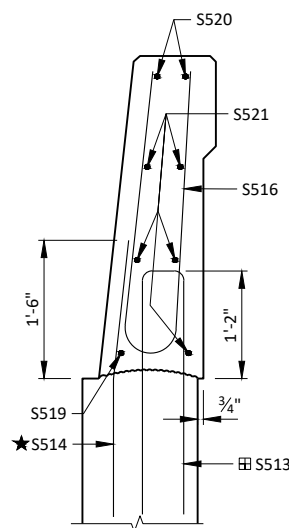
PLAN



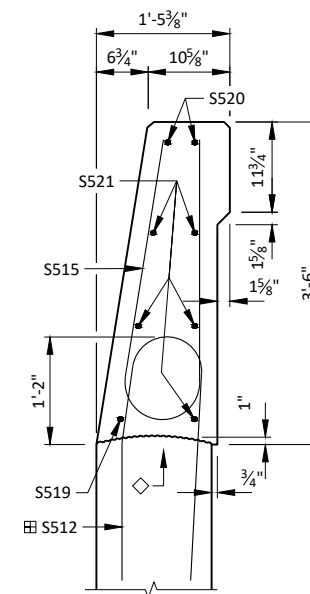
STEEL LAYOUT

FINISH SURFACE NOT
COVERED BY PARAPET
SAME AS BRIDGE DECK

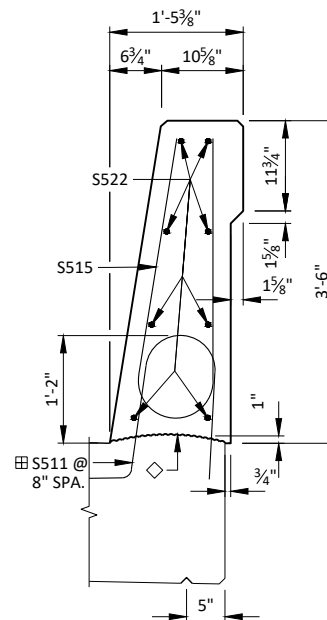
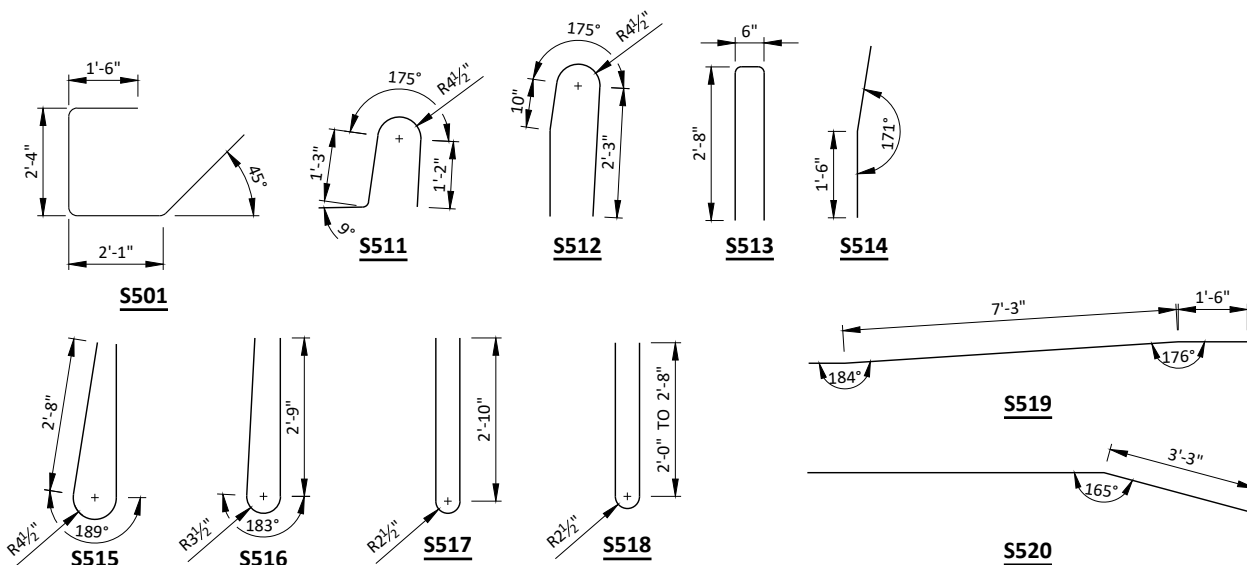
SECTION A



SECTION B



SECTION C

SECTION THROUGH
PARAPET ON BRIDGE

LEGEND

◇ CONSTRUCTION JOINT. STRIKE OFF AS SHOWN.

▲ 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE)

★ S514 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE S512 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▣ S511 AND S512 BARS TO BE TIED TO DECK AND WING STEEL BEFORE EACH IS POURED.

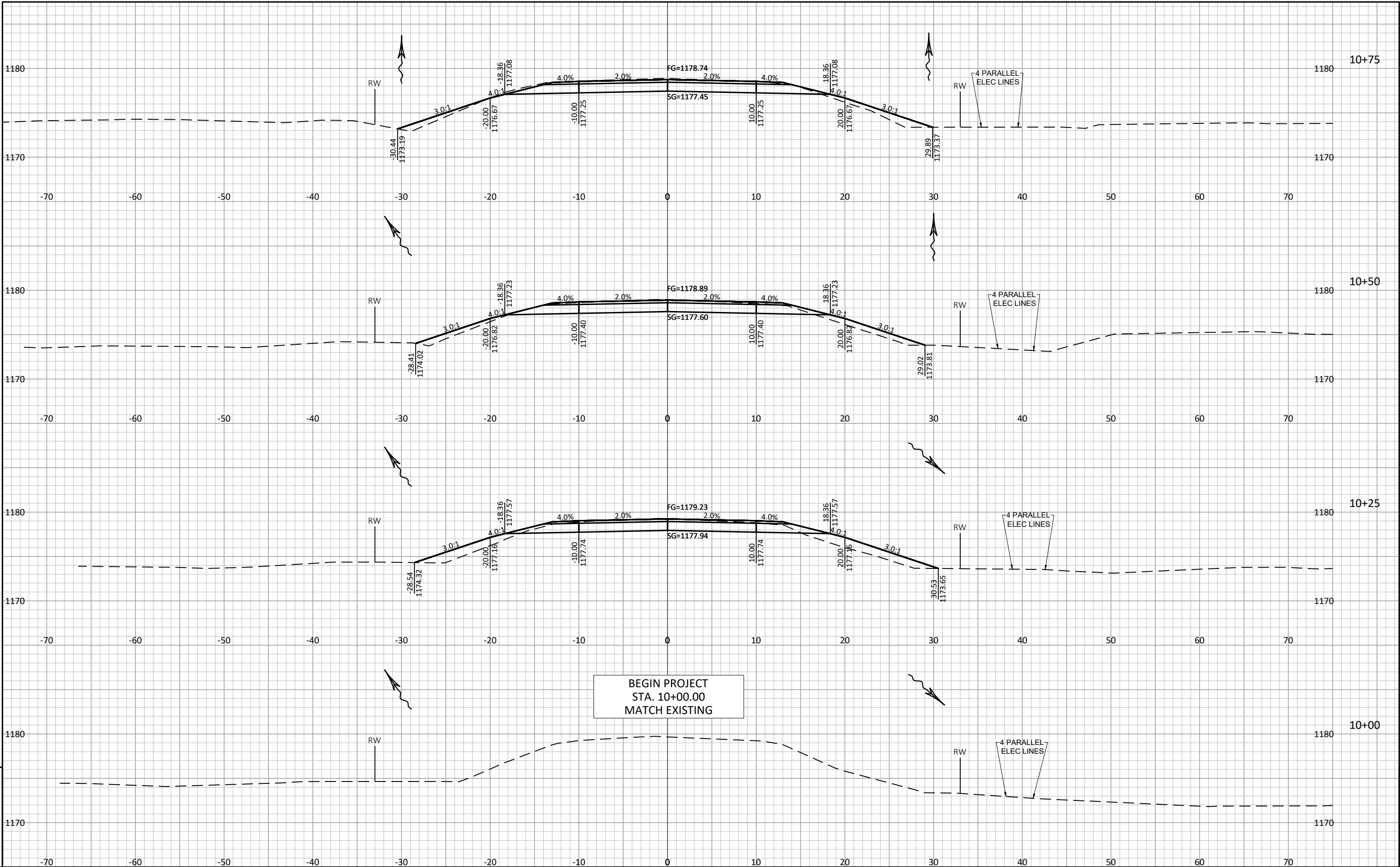
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 10 FOR BILL OF BARS.

| NO. | DATE | REVISION | BY |
|--|------|----------|--------------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE B-37-483 | | | |
| DRAWN BY | | ZMF | PLANS CK'D. PTB |
| SINGLE SLOPE PARAPET 42SS | | | SHEET 11 OF 11 |

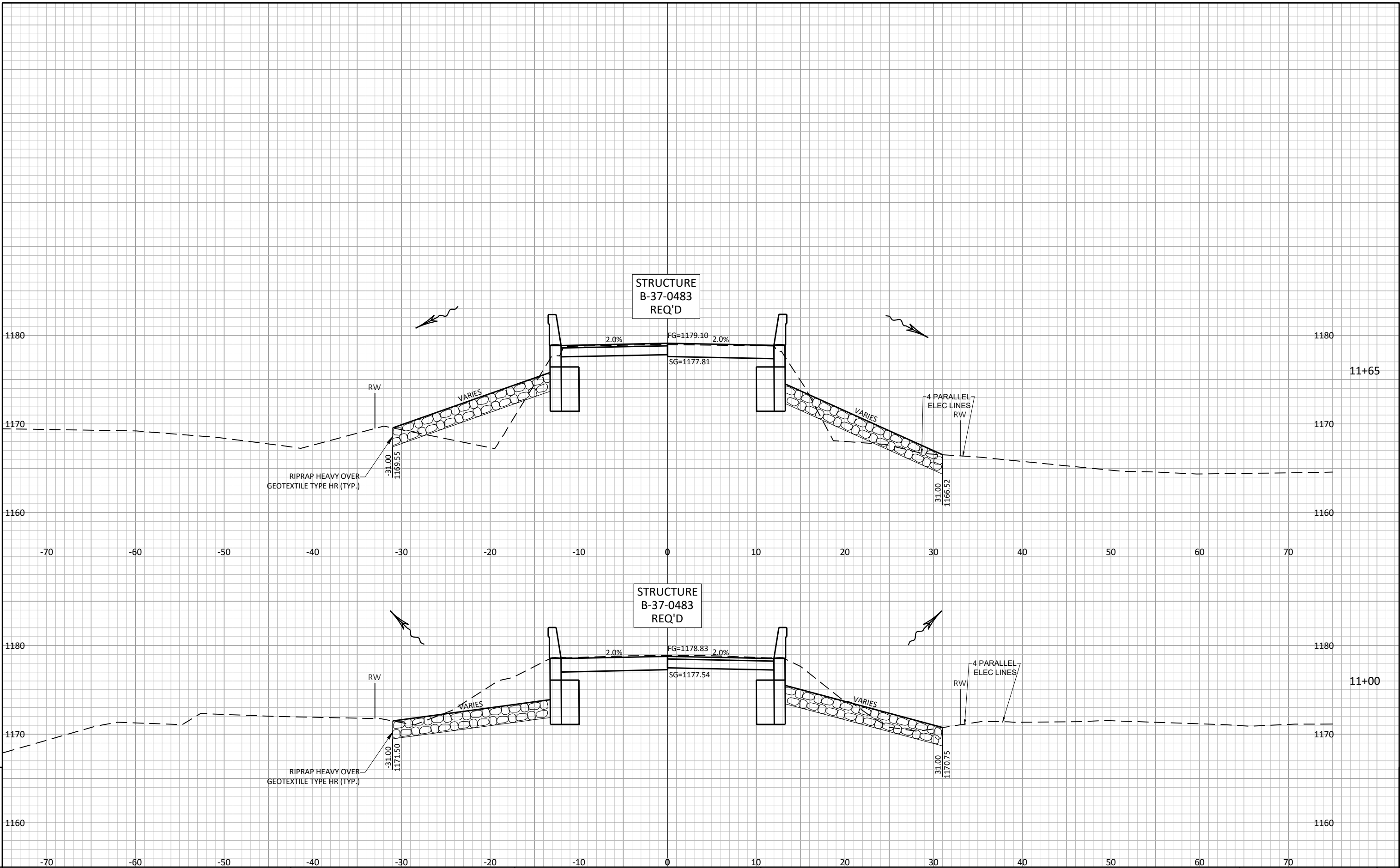
EARTHWORK - MAINLINE

| STATION | AREA (SF) | | INCREMENTAL VOLUME (CY) | | | CUMULATIVE VOLUME (CY) | | | |
|--------------------------|-----------|------|-------------------------|------|----------------|------------------------|------|----------------|------------------|
| | CUT | FILL | CUT | FILL | EXPANDED | CUT (1.0) | FILL | FILL (1.25) | MASS ORDINATE |
| | | | | | FILL (1.25) | | | | |
| 10+00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10+25 | 40 | 25 | 19 | 12 | 15 | 19 | 12 | 15 | 4 |
| 10+50 | 45 | 14 | 39 | 18 | 23 | 58 | 30 | 38 | 21 |
| 10+75 | 50 | 12 | 44 | 12 | 15 | 102 | 42 | 53 | 50 |
| 11+00 | 340 | 90 | 181 | 47 | 59 | 283 | 89 | 111 | 172 |
| BRIDGE START | 0 | 0 | 0 | 0 | 0 | 283 | 89 | 111 | 172 |
| BRIDGE END | 0 | 0 | 0 | 0 | 0 | 283 | 89 | 111 | 172 |
| 11+64.54 | 0 | 123 | 0 | 0 | 0 | 283 | 89 | 111 | 172 |
| 11+75 | 73 | 41 | 14 | 30 | 38 | 297 | 119 | 149 | 148 |
| 12+00 | 40 | 10 | 52 | 24 | 30 | 349 | 143 | 179 | 170 |
| 12+25 | 31 | 8 | 33 | 8 | 10 | 382 | 151 | 189 | 193 |
| 12+50 | 31 | 8 | 29 | 7 | 9 | 411 | 158 | 198 | 214 |
| 12+65 | 0 | 0 | 9 | 2 | 3 | 420 | 160 | 200 | 220 |
| MAINLINE COLUMN TOTALS = | | | 420 | 160 | 200 | 420 | 160 | 200 | 220 |



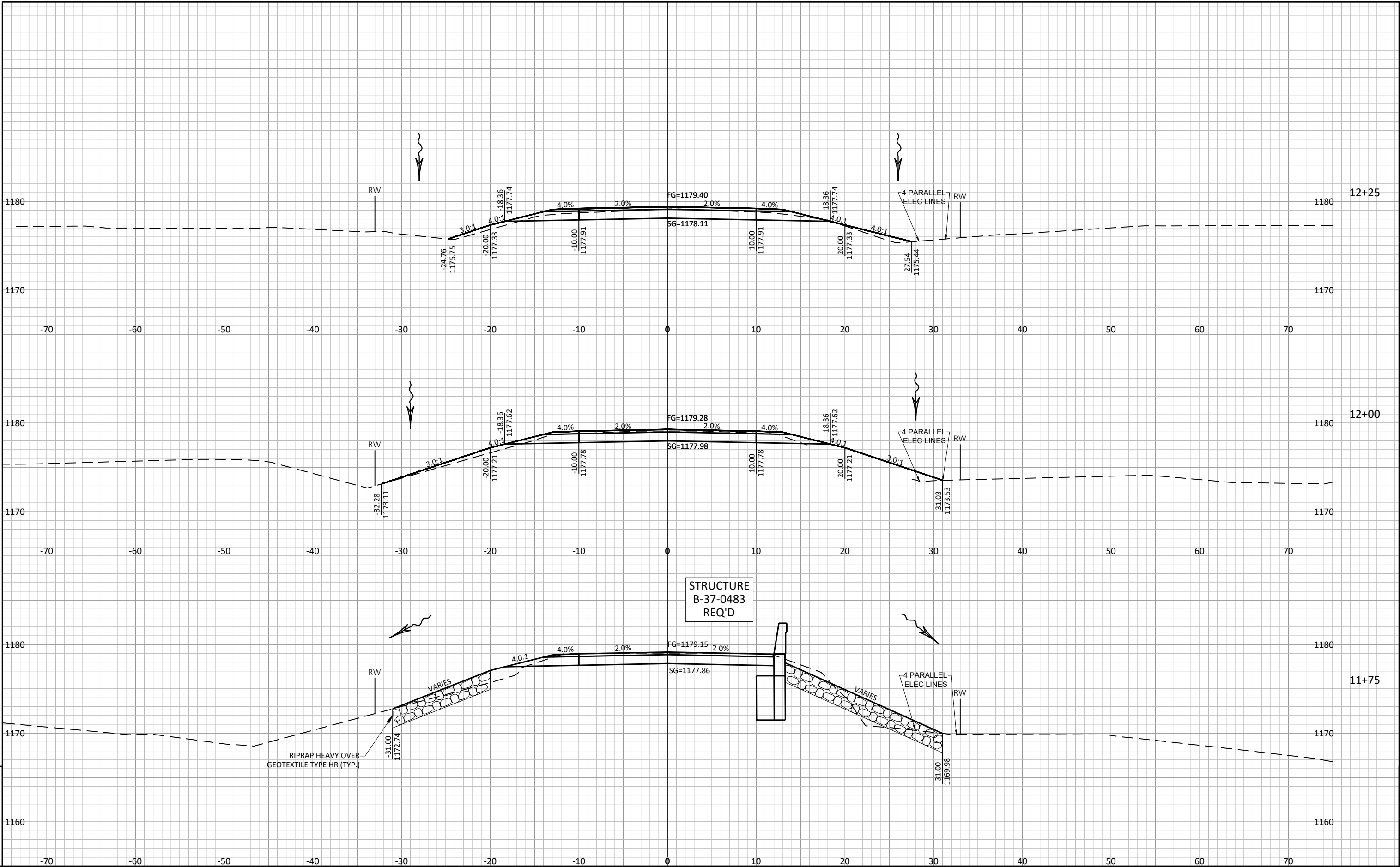
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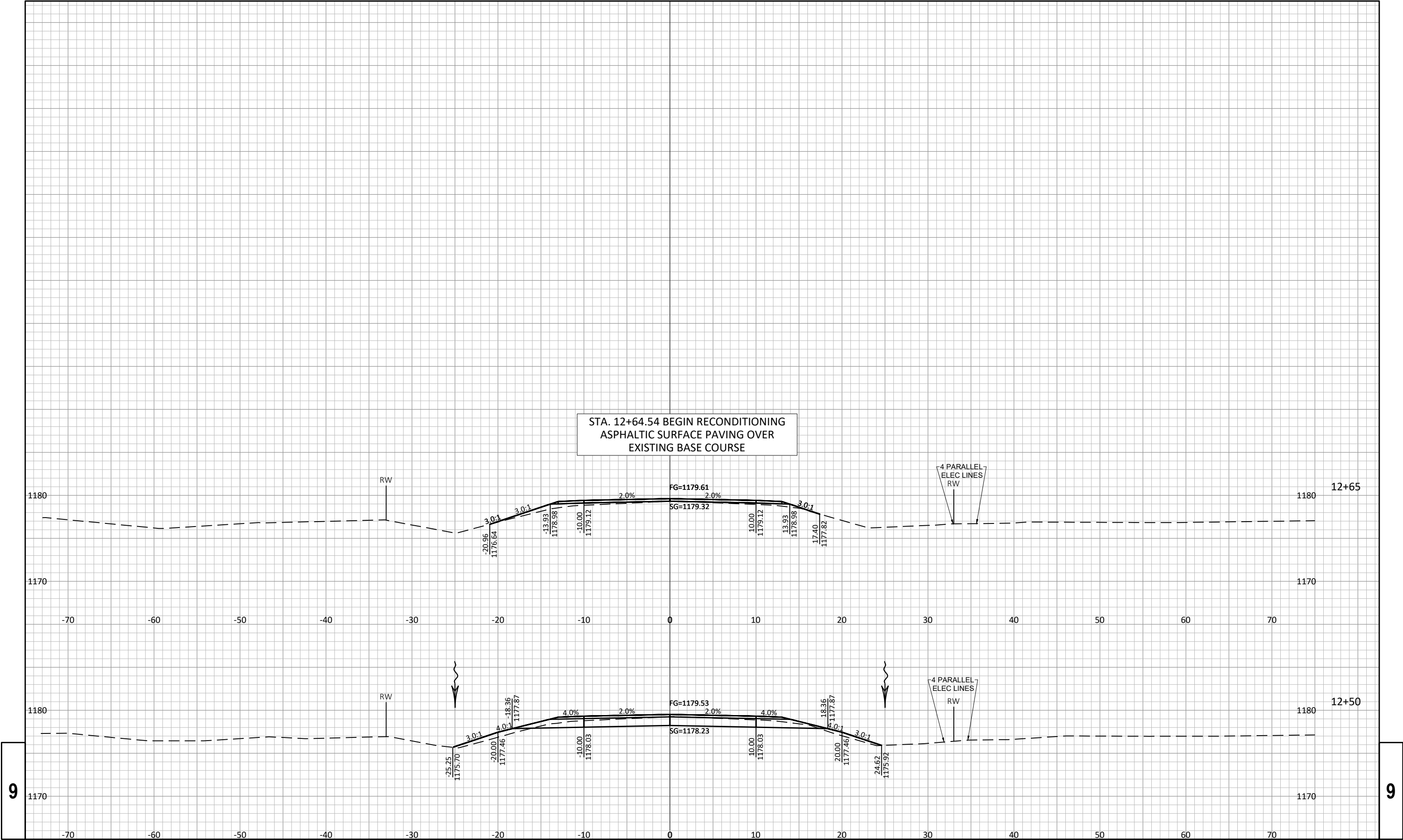
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9



STA. 12+64.54 BEGIN RECONDITIONING
ASPHALTIC SURFACE PAVING OVER
EXISTING BASE COURSE

4 PARALLEL
ELEC LINES
RW

4 PARALLEL
ELEC LINES
RW

9

9

Notes



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